2022 (453)

Abernathey, R., C. Bladwell, G. Froyland, and K. Sakellariou (2022), Deep Lagrangian Connectivity in the Global Ocean Inferred from Argo Floats, *J. Phys. Oceanogr.*, *52*(5), 951-963, doi: https://doi.org/10.1175/JPO-D-21-0156.1.

Abernathey, R., A. Gnanadesikan, M.-A. Pradal, and M. A. Sundermeyer (2022), Chapter 9 - Isopycnal mixing, in *Ocean Mixing*, edited by M. Meredith and A. Naveira Garabato, pp. 215-256, Elsevier, doi: https://doi.org/10.1016/B978-0-12-821512-8.00016-5.

Abraham, J., L. Cheng, M. E. Mann, K. Trenberth, and K. von Schuckmann (2022), The ocean response to climate change guides both adaptation and mitigation efforts, *Atmospheric and Oceanic Science Letters*, *15*(4), 100221, doi: https://doi.org/10.1016/j.aosl.2022.100221.

Akhter, S., F. Qiao, K. Wu, X. Yin, K. M. A. Chowdhury, M. K. Ahmed, and A. S. M. M. Kamal (2022), Spatiotemporal variations of the thermohaline structure and cyclonic response in the northern Bay of Bengal: The evaluation of a global ocean forecasting system, *Journal of Sea Research*, *182*, 102188, doi: https://doi.org/10.1016/j.seares.2022.102188.

Al-Shehhi, M. R. (2022), Uncertainty in satellite sea surface temperature with respect to air temperature, dust level, wind speed and solar position, *Regional Studies in Marine Science*, *53*, 102385, doi: https://doi.org/10.1016/j.rsma.2022.102385.

Aparna, A. R., and M. S. Girishkumar (2022), Mixed layer heat budget in the eastern equatorial Indian Ocean during the two consecutive positive Indian Ocean dipole events in 2018 and 2019, *Climate Dynamics*, *58*(11), 3297-3315, doi: https://doi.org/10.1007/s00382-021-06099-8.

Arbic, B. K. (2022), Incorporating tides and internal gravity waves within global ocean general circulation models: A review, *Prog. Oceanogr.*, *206*, 102824, doi: https://doi.org/10.1016/j.pocean.2022.102824.

Arostegui, M. C., P. Gaube, P. A. Woodworth-Jefcoats, D. R. Kobayashi, and C. D. Braun (2022), Anticyclonic eddies aggregate pelagic predators in a subtropical gyre, *Nature*, *609*(7927), 535-540, doi: https://doi.org/10.1038/s41586-022-05162-6.

Arteaga, L. A., M. J. Behrenfeld, E. Boss, and T. K. Westberry (2022), Vertical Structure in Phytoplankton Growth and Productivity Inferred From Biogeochemical-Argo Floats and the Carbon-Based Productivity Model, *Glob. Biogeochem. Cycle*, *36*(8), e2022GB007389, doi: https://doi.org/10.1029/2022GB007389.

AS, M. A. A., and S.-Y. Lee (2022), A Combination of Spatial Domain Filters to Detect Surface Ocean Current from Multi-Sensor Remote Sensing Data, *Remote Sensing*, *14*(2), 332, doi: https://doi.org/10.3390/rs14020332.

Athie, G., D. Salas-Monreal, and A. Valle-Levinson (2022), Subinertial flow patterns in a tropical coral reef system of the southwestern gulf of Mexico, *Estuarine, Coastal and Shelf Science*, *275*, 107991, doi: https://doi.org/10.1016/j.ecss.2022.107991.

Baalbaki, H., H. Harb, A. S. K. Rashid, A. Jaber, C. A. Jaoude, C. Zaki, and K. Tout (2022), LOGO: an efficient local and global data collection mechanism for remote underwater monitoring, *EURASIP Journal on Wireless Communications and Networking*, *2022*(1), 7, doi: https://doi.org/10.1186/s13638-022-02086-7.

Baker, C. A., A. P. Martin, A. Yool, and E. Popova (2022), Biological Carbon Pump Sequestration Efficiency in the North Atlantic: A Leaky or a Long-Term Sink?, *Glob. Biogeochem. Cycle*, *36*(6), e2021GB007286, doi: https://doi.org/10.1029/2021GB007286.

Balaguru, K., G. R. Foltz, L. R. Leung, and S. M. Hagos (2022), Impact of Rainfall on Tropical Cyclone-Induced Sea Surface Cooling, *Geophys. Res. Lett.*, *49*(10), e2022GL098187, doi: https://doi.org/10.1029/2022GL098187.

Barbieux, M., et al. (2022), Biological production in two contrasted regions of the Mediterranean Sea during the oligotrophic period: an estimate based on the diel cycle of optical properties measured by BioGeoChemical-Argo profiling floats, *Biogeosciences*, *19*(4), 1165-1194, doi: https://doi.org/10.5194/bg-19-1165-2022.

Bastin, S., M. Claus, P. Brandt, and R. J. Greatbatch (2022), Atlantic Equatorial Deep Jets in Argo Float Data, *J. Phys. Oceanogr.*, *52*(6), 1315-1332, doi: https://doi.org/10.1175/JPO-D-21-0140.1.

Beadling, R. L., J. P. Krasting, S. M. Griffies, W. J. Hurlin, B. Bronselaer, J. L. Russell, G. A. MacGilchrist, J. E. Tesdal, and M. Winton (2022), Importance of the Antarctic Slope Current in the Southern Ocean Response to Ice Sheet Melt and Wind Stress Change, *Journal of Geophysical Research: Oceans*, *127*(5), e2021JC017608, doi: https://doi.org/10.1029/2021JC017608.

Beaton, A. D., et al. (2022), Lab-on-Chip for In Situ Analysis of Nutrients in the Deep Sea, *ACS Sensors*, *7*(1), 89-98, doi: https://doi.org/10.1021/acssensors.1c01685.

Begouen Demeaux, C., and E. Boss (2022), Validation of Remote-Sensing Algorithms for Diffuse Attenuation of Downward Irradiance Using BGC-Argo Floats, *Remote Sensing*, *14*(18), 4500, doi: https://doi.org/10.3390/rs14184500.

Behr, L., N. Luther, S. A. Josey, J. Luterbacher, S. Wagner, and E. Xoplaki (2022), On the Representation of Mediterranean Overflow Waters in Global Climate Models, *J. Phys. Oceanogr.*, *52*(7), 1397-1413, doi: https://doi.org/10.1175/JPO-D-21-0082.1.

Bennani, Y., A. Ayouche, and X. Carton (2022), 3D Structure of the Ras Al Hadd Oceanic Dipole, *Oceans*, *3*(3), 268-288, doi: https://doi.org/10.3390/oceans3030019.

Bennington, V., T. Galjanic, and G. A. McKinley (2022), Explicit Physical Knowledge in Machine Learning for Ocean Carbon Flux Reconstruction: The pCO2-Residual Method, *Journal of Advances in Modeling Earth Systems*, *14*(10), e2021MS002960, doi: https://doi.org/10.1029/2021MS002960.

Benthuysen, J. A., M. J. Emslie, L. M. Currey-Randall, A. J. Cheal, and M. R. Heupel (2022), Oceanographic influences on reef fish assemblages along the Great Barrier Reef, *Prog. Oceanogr.*, *208*, 102901, doi: https://doi.org/10.1016/j.pocean.2022.102901.

Biló, T. C., F. Straneo, J. Holte, and I. A. A. Le Bras (2022), Arrival of New Great Salinity Anomaly Weakens Convection in the Irminger Sea, *Geophys. Res. Lett.*, *49*(11), e2022GL098857, doi: https://doi.org/10.1029/2022GL098857.

Bock, N., M. Cornec, H. Claustre, and S. Duhamel (2022), Biogeographical Classification of the Global Ocean From BGC-Argo Floats, *Glob. Biogeochem. Cycle*, *36*(6), e2021GB007233, doi: https://doi.org/10.1029/2021GB007233.

Bohman, S. M., and A. L. Gordon (2022), Mixed layer evolution in high and low sea level anomaly features in the Bay of Bengal, *Dynamics of Atmospheres and Oceans*, *100*,

101335, doi: https://doi.org/10.1016/j.dynatmoce.2022.101335.
Bonelli, A. G., H. Loisel, D. S. F. Jorge, A. Mangin, O. F. d'Andon, and V. Vantrepotte (2022), A new method to estimate the dissolved organic carbon concentration from remote sensing in the global open ocean, *Remote Sens. Environ.*, *281*, 113227, doi: https://doi.org/10.1016/j.rse.2022.113227.
Bourgeois, T., N. Goris, J. Schwinger, and J. F. Tjiputra (2022), Stratification constrains future heat and carbon uptake in the Southern Ocean between 30°S and 55°S, *Nature Communications*, *13*(1), 340, doi: https://doi.org/10.1038/s41467-022-27979-5.
Bourma, E., et al. (2022), The Hellenic Marine Observing, Forecasting and Technology System—An Integrated Infrastructure for Marine Research, *Journal of Marine Science and Engineering*, *10*(3), 329, doi: https://doi.org/10.3390/jmse10030329.
Bretones, A., K. H. Nisancioglu, M. F. Jensen, A. Brakstad, and S. Yang (2022), Transient Increase in Arctic Deep-Water Formation and Ocean Circulation under Sea Ice Retreat, *J. Clim.*, *35*(1), 109-124, doi: https://doi.org/10.1175/JCLI-D-21-0152.1.
Brewin, R. J. W., G. Dall'Olmo, J. Gittings, X. Sun, P. K. Lange, D. E. Raitsos, H. A. Bouman, I. Hoteit, J. Aiken, and S. Sathyendranath (2022), A Conceptual Approach to Partitioning a Vertical Profile of Phytoplankton Biomass Into Contributions From Two Communities, *Journal of Geophysical Research: Oceans*, *127*(4), e2021JC018195, doi: https://doi.org/10.1029/2021JC018195.
Britten, G. L., C. Padalino, G. Forget, and M. J. Follows (2022), Seasonal Photoacclimation in the North Pacific Transition Zone, *Glob. Biogeochem. Cycle*, *36*(6), e2022GB007324, doi: https://doi.org/10.1029/2022GB007324.
Bruyant, F., et al. (2022), The Green Edge cruise: investigating the marginal ice zone processes during late spring and early summer to understand the fate of the Arctic phytoplankton bloom, *Earth Syst. Sci. Data*, *14*(10), 4607-4642, doi: https://doi.org/10.5194/essd-14-4607-2022.
Budyansky, M. V., S. V. Prants, and M. Y. Uleysky (2022), Odyssey of Aleutian eddies, *Ocean Dyn.*, *72*(6), 455-476, doi: https://doi.org/10.1007/s10236-022-01508-w.
Bueno, L. F., V. S. Costa, G. N. Mill, and A. M. Paiva (2022), Volume and Heat Transports by North Brazil Current Rings, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.831098.
Bushuk, M., et al. (2022), Mechanisms of Regional Arctic Sea Ice Predictability in Two Dynamical Seasonal Forecast Systems, *J. Clim.*, *35*(13), 4207-4231, doi: https://doi.org/10.1175/JCLI-D-21-0544.1.
Cao, A., C. Liu, J. Chen, P. Li, and J. Song (2022), Enhanced turbulent mixing in mesoscale eddies near the critical latitude of the M2 internal tides, *Deep Sea Research Part I: Oceanographic Research Papers*, *185*, 103801, doi: https://doi.org/10.1016/j.dsr.2022.103801.
Cao, Q., C. Dong, Y. Ji, X. Jiang, B. J. Bethel, C. Xia, and C. He (2022), Seamount-induced mixing revealed through idealized experiments and its parameterization in an Oceanic General Circulation Model, *Deep Sea Research Part II: Topical Studies in Oceanography*, *202*, 105144, doi: https://doi.org/10.1016/j.dsr2.2022.105144.
Capet, A., G. Taburet, E. Mason, M. I. Pujol, M. Grégoire, and M.-H. Rio (2022), Using Argo Floats to Characterize Altimetry Products: A Study of Eddy-Induced Subsurface

Oxygen Anomalies in the Black Sea, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.875653.
Carlson, M. C. G., et al. (2022), Viruses affect picocyanobacterial abundance and biogeography in the North Pacific Ocean, *Nature Microbiology*, *7*(4), 570-580, doi: https://doi.org/10.1038/s41564-022-01088-x.
Carter, L., H. Bostock-Lyman, and M. Bowen (2022), Chapter 4 - Water masses, circulation and change in the modern Southern Ocean, in *Antarctic Climate Evolution (Second Edition)*, edited by F. Florindo, M. Siegert, L. D. Santis and T. Naish, pp. 165-197, Elsevier, Amsterdam, doi: https://doi.org/10.1016/B978-0-12-819109-5.00003-7.
Chacko, N., and C. Jayaram (2022), Response of the Bay of Bengal to super cyclone Amphan examined using synergistic satellite and in-situ observations, *Oceanologia*, *64*(1), 131-144, doi: https://doi.org/10.1016/j.oceano.2021.09.006.
Chandler, M., N. V. Zilberman, and J. Sprintall (2022), Seasonal to Decadal Western Boundary Current Variability From Sustained Ocean Observations, *Geophys. Res. Lett.*, *49*(12), e2022GL097834, doi: https://doi.org/10.1029/2022GL097834.
Chang, L., and W. Sun (2022), Consistency analysis of GRACE and GRACE-FO data in the study of global mean sea level change, *Geodesy and Geodynamics*, doi: https://doi.org/10.1016/j.geog.2021.11.005.
Chen, G., X. Chen, and C. Cao (2022), Divergence and Dispersion of Global Eddy Propagation from Satellite Altimetry, *J. Phys. Oceanogr.*, *52*(4), 705-722, doi: https://doi.org/10.1175/JPO-D-21-0122.1.
Chen, G., W. Han, T. Zu, X. Chu, and J. Chen (2022), The Deep-Penetrating South Equatorial Undercurrent in the Tropical South Indian Ocean, *Geophys. Res. Lett.*, *49*(6), e2022GL098163, doi: https://doi.org/10.1029/2022GL098163.
Chen, H., F. A. Haumann, L. D. Talley, K. S. Johnson, and J. L. Sarmiento (2022), The Deep Ocean's Carbon Exhaust, *Glob. Biogeochem. Cycle*, *36*(7), e2021GB007156, doi: https://doi.org/10.1029/2021GB007156.
Chen, J., A. Cazenave, C. Dahle, W. Llovel, I. Panet, J. Pfeffer, and L. Moreira (2022), Applications and Challenges of GRACE and GRACE Follow-On Satellite Gravimetry, *Surveys in Geophysics*, *43*(1), 305-345, doi: https://doi.org/10.1007/s10712-021-09685-x.
Chen, J., X. Gong, X. Guo, X. Xing, K. Lu, H. Gao, and X. Gong (2022), Improved Perceptron of Subsurface Chlorophyll Maxima by a Deep Neural Network: A Case Study with BGC-Argo Float Data in the Northwestern Pacific Ocean, *Remote Sensing*, *14*(3), 632, doi: https://doi.org/10.3390/rs14030632.
Chen, J., H. Yan, S. Bao, X. Cui, C. Bai, and H. Wang (2022), Evaluating the contribution of satellite measurements to the reconstruction of three-dimensional ocean temperature fields in combination with Argo profiles, *Acta Oceanol. Sin.*, *41*(2), 65-79, doi: https://doi.org/10.1007/s13131-021-1858-3.
Chen, J., X.-H. Zhu, M. Wang, H. Zheng, R. Zhao, H. Nakamura, and T. Yamashiro (2022), Incoherent signatures of internal tides in the Tokara Strait modulated by the Kuroshio, *Prog. Oceanogr.*, *206*, 102863, doi: https://doi.org/10.1016/j.pocean.2022.102863.
Chen, L., R.-H. Zhang, and C. Gao (2022), Effects of Temperature and Salinity on Surface

Currents in the Equatorial Pacific, *Journal of Geophysical Research: Oceans*, *127*(4), e2021JC018175, doi: https://doi.org/10.1029/2021JC018175.

Chen, W., Y. Zhang, Y. Liu, L. Ma, H. Wang, K. Ren, and S. Chen (2022), Parametric Model for Eddies-Induced Sound Speed Anomaly in Five Active Mesoscale Eddy Regions, *Journal of Geophysical Research: Oceans*, *127*(8), e2022JC018408, doi: https://doi.org/10.1029/2022JC018408.

Chen, X., C. Wang, H. Li, and Y. He (2022), Improving the Reconstruction of Vertical Temperature Profiles on Account of Oceanic Front Impacts, *Remote Sensing*, *14*(19), 4821, doi: https://doi.org/10.3390/rs14194821.

Chen, X., C. Wang, H. Li, D. Hu, C. Chen, and Y. He (2022), Impact of ocean fronts on the reconstruction of vertical temperature profiles from sea surface measurements, *Deep Sea Research Part I: Oceanographic Research Papers*, *187*, 103833, doi: https://doi.org/10.1016/j.dsr.2022.103833.

Chen, Y., S. Speich, and R. Laxenaire (2022), Formation and Transport of the South Atlantic Subtropical Mode Water in Eddy-Permitting Observations, *Journal of Geophysical Research: Oceans*, *127*(1), e2021JC017767, doi: https://doi.org/10.1029/2021JC017767.

Chen, Z., R. Jin, Q. Li, G. Zhao, C. Xiao, Z. Lei, and Y. Huang (2022), Joint Inversion Algorithm of Sea Surface Temperature From Microwave and Infrared Brightness Temperature, *IEEE Trans. Geosci. Remote Sensing*, *60*, 1-13, doi: https://doi.org/10.1109/TGRS.2022.3168984.

Chenal, J., B. Meyssignac, A. Ribes, and R. Guillaume-Castel (2022), Observational Constraint on the Climate Sensitivity to Atmospheric CO2 Concentrations Changes Derived from the 1971–2017 Global Energy Budget, *J. Clim.*, *35*(14), 4469-4483, doi: https://doi.org/10.1175/JCLI-D-21-0565.1.

Cheng, L., et al. (2022), Another Record: Ocean Warming Continues through 2021 despite La Niña Conditions, *Adv. Atmos. Sci.*, *39*(3), 373-385, doi: https://doi.org/10.1007/s00376-022-1461-3.

Cheng, L., G. Foster, Z. Hausfather, K. E. Trenberth, and J. Abraham (2022), Improved Quantification of the Rate of Ocean Warming, *J. Clim.*, *35*(14), 4827-4840, doi: https://doi.org/10.1175/JCLI-D-21-0895.1.

Cheng, L., et al. (2022), Past and future ocean warming, *Nature Reviews Earth & Environment*, doi: https://doi.org/10.1038/s43017-022-00345-1.

Cheriyan, E., A. R. Rao, and K. V. Sanilkumar (2022), Response of sea surface temperature, chlorophyll and particulate organic carbon to a tropical cyclonic storm over the Arabian Sea, Southwest India, *Dynamics of Atmospheres and Oceans*, *97*, 101287, doi: https://doi.org/10.1016/j.dynatmoce.2022.101287.

Chi, J., T. Qu, Y. Du, J. Qi, and P. Shi (2022), Ocean salinity indices of interannual modes in the tropical Pacific, *Climate Dynamics*, *58*(1), 369-387, doi: https://doi.org/10.1007/s00382-021-05911-9.

Chiswell, S. M., A. Gutiérrez-Rodríguez, M. Gall, K. Safi, R. Strzepek, M. R. Décima, and S. D. Nodder (2022), Seasonal cycles of phytoplankton and net primary production from Biogeochemical Argo float data in the south-west Pacific Ocean, *Deep Sea Research Part I: Oceanographic Research Papers*, *187*, 103834, doi:

https://doi.org/10.1016/j.dsr.2022.103834.
Chow, C.-H., Y.-C. Lin, W. Cheah, and J.-H. Tai (2022), Injection of High Chlorophyll-a Waters by a Branch of Kuroshio Current into the Nutrient-Poor North Pacific Subtropical Gyre, *Remote Sensing*, *14*(7), 1531, doi: https://doi.org/10.3390/rs14071531.
Chowdhury, K. M. A., W. Jiang, C. Bian, G. Liu, M. K. Ahmed, and S. Akhter (2022), Contributions of shortwave radiation to the formation of temperature inversions in the Bay of Bengal and eastern equatorial Indian Ocean: A modeling approach, *Acta Oceanol. Sin.*, *41*(9), 19-37, doi: https://doi.org/10.1007/s13131-022-1998-0.
Chowdhury, K. M. A., W. Jiang, G. Liu, M. K. Ahmed, and S. Akhter (2022), Spatiotemporal variation and mechanisms of temperature inversion in the Bay of Bengal and the eastern equatorial Indian Ocean, *Acta Oceanol. Sin.*, *41*(4), 23-39, doi: https://doi.org/10.1007/s13131-021-1873-4.
Ciliberti, S. A., et al. (2022), The Black Sea Physics Analysis and Forecasting System within the Framework of the Copernicus Marine Service, *Journal of Marine Science and Engineering*, *10*(1), 48, doi: https://doi.org/10.3390/jmse10010048.
Coleman, S., T. Kiffney, K. R. Tanaka, D. Morse, and D. C. Brady (2022), Meta-analysis of growth and mortality rates of net cultured sea scallops across the Northwest Atlantic, *Aquaculture*, *546*, 737392, doi: https://doi.org/10.1016/j.aquaculture.2021.737392.
Cooley, K. M., M. R. Fewings, J. A. Lerczak, L. W. O'Neill, and K. S. Brown (2022), Role of Sea Surface Physical Processes in Mixed-Layer Temperature Changes During Summer Marine Heat Waves in the Chile-Peru Current System, *Journal of Geophysical Research: Oceans*, *127*(7), e2021JC018338, doi: https://doi.org/10.1029/2021JC018338.
Coro, G., P. Bove, and A. Ellenbroek (2022), Habitat distribution change of commercial species in the Adriatic Sea during the COVID-19 pandemic, *Ecological Informatics*, *69*, 101675, doi: https://doi.org/10.1016/j.ecoinf.2022.101675.
Costa, F. B., and C. A. S. Tanajura (2022), On the impact of vertical coordinate choice for innovation when assimilating hydrographic profiles into isopycnal ocean models, *Ocean Model.*, *169*, 101917, doi: https://doi.org/10.1016/j.ocemod.2021.101917.
Cowan, T., M. C. Wheeler, S. Sharmila, S. Narsey, and C. de Burgh-Day (2022), Forecasting Northern Australian Summer Rainfall Bursts Using a Seasonal Prediction System, *Weather and Forecasting*, *37*(1), 23-44, doi: https://doi.org/10.1175/WAF-D-21-0046.1.
Cunjin, X., T. Zhang, Y. Xu, and F. Su (2022), An ocean current-oriented graph-based model for representing Argo trajectories, *Computers & Geosciences*, *166*, 105143, doi: https://doi.org/10.1016/j.cageo.2022.105143.
Da, N. D., and G. R. Foltz (2022), Interannual Variability and Multiyear Trends of Sea Surface Salinity in the Amazon-Orinoco Plume Region From Satellite Observations and an Ocean Reanalysis, *Journal of Geophysical Research: Oceans*, *127*(5), e2021JC018366, doi: https://doi.org/10.1029/2021JC018366.
Das, M., S. K. Ghosh, and S. Bandyopadhyay (2022), A Multilayered Adaptive Recurrent Incremental Network Model for Heterogeneity-Aware Prediction of Derived Remote Sensing Image Time Series, *IEEE Trans. Geosci. Remote Sensing*, *60*, 1-13, doi:

https://doi.org/10.1109/LGRS.2021.3098425.
de Mahiques, M. M., F. J. Lobo, U. Schattner, A. López-Quirós, C. B. Rocha, R. J. S. Dias, I. Montoya-Montes, and A. C. B. Vieira (2022), Geomorphological imprint of opposing ocean bottom currents, a case study from the southeastern Brazilian Atlantic margin, *Marine Geology*, *444*, 106715, doi: https://doi.org/10.1016/j.margeo.2021.106715.
de Toma, V., V. Artale, and C. Yang (2022), Exploring AMOC Regime Change over the Past Four Decades through Ocean Reanalyses, *Climate*, *10*(4), 59, doi: https://doi.org/10.3390/cli10040059.
Demyshev, S. G., and O. A. Dymova (2022), Analysis of the annual mean energy cycle of the Black Sea circulation for the climatic, basin-scale and eddy regimes, *Ocean Dyn.*, *72*(3), 259-278, doi: https://doi.org/10.1007/s10236-022-01504-0.
Demyshev, S. G., N. V. Markova, and O. A. Dymova (2022), Study of Undercurrents in the Black Sea Northeastern Part by Using Numerical Simulation and Observation Data, in *Processes in GeoMedia—Volume V*, edited by T. Chaplina, pp. 93-100, Springer International Publishing, Cham, doi: https://doi.org/10.1007/978-3-030-85851-3_11.
Desbruyères, D. G., E. P. Bravo, V. Thierry, H. Mercier, P. Lherminier, C. Cabanes, T. C. Biló, N. Fried, and M. Femke De Jong (2022), Warming-to-Cooling Reversal of Overflow-Derived Water Masses in the Irminger Sea During 2002–2021, *Geophys. Res. Lett.*, *49*(10), e2022GL098057, doi: https://doi.org/10.1029/2022GL098057.
Dever, M., B. Owens, C. Richards, S. Wijffels, A. Wong, I. Shkvorets, M. Halverson, and G. Johnson (2022), Static and Dynamic Performance of the RBRargo3 CTD, *J. Atmos. Ocean. Technol.*, *39*(10), 1525-1539, doi: https://doi.org/10.1175/JTECH-D-21-0186.1.
Ding, W., C. Zhang, and S. Shang (2022), The early assessment of harmful algal bloom risk in the East China Sea, *Marine Pollution Bulletin*, *178*, 113567, doi: https://doi.org/10.1016/j.marpolbul.2022.113567.
Ding, X., J. Liu, H. Zhang, Z. Ke, J. Li, W. Liu, K. Li, C. Zhao, and Y. Tan (2022), Phytoplankton Community Patterns in the Northeastern South China Sea: Implications of Intensified Kuroshio Intrusion During the 2015/16 El Niño, *Journal of Geophysical Research: Oceans*, *127*(2), e2021JC017998, doi: https://doi.org/10.1029/2021JC017998.
Dong, C., et al. (2022), The near-global ocean mesoscale eddy atmospheric-oceanic-biological interaction observational dataset, *Scientific Data*, *9*(1), 436, doi: https://doi.org/10.1038/s41597-022-01550-9.
Dong, H., M. Zhou, W. O. Smith, B. Li, Z. Hu, S. L. Basedow, F. Gaardsted, Z. Zhang, and Y. Zhong (2022), Dynamical Controls of the Eastward Transport of Overwintering Calanus finmarchicus From the Lofoten Basin to the Continental Slope, *Journal of Geophysical Research: Oceans*, *127*(9), e2022JC018909, doi: https://doi.org/10.1029/2022JC018909.
Dong, J., Z. Jing, B. Fox-Kemper, Y. Wang, H. Cao, and C. Dong (2022), Effects of symmetric instability in the Kuroshio Extension region in winter, *Deep Sea Research Part II: Topical Studies in Oceanography*, *202*, 105142, doi: https://doi.org/10.1016/j.dsr2.2022.105142.
Dong, L., J. Qi, B. Yin, H. Zhi, D. Li, S. Yang, W. Wang, H. Cai, and B. Xie (2022), Reconstruction of Subsurface Salinity Structure in the South China Sea Using Satellite Observations: A LightGBM-Based Deep Forest Method, *Remote Sensing*,

14(14), 3494, doi: https://doi.org/10.3390/rs14143494.
Dove, L. A., D. Balwada, A. F. Thompson, and A. R. Gray (2022), Enhanced Ventilation in Energetic Regions of the Antarctic Circumpolar Current, *Geophys. Res. Lett.*, *49*(13), e2021GL097574, doi: https://doi.org/10.1029/2021GL097574.
Drew, Y., S. Stilian, and H. Tailen (2022), A functional-data approach to the Argo data, *The Annals of Applied Statistics*, *16*(1), 216-246, doi: https://doi.org/10.1214/21-AOAS1477.
Drouin, K. L., M. S. Lozier, F. J. Beron-Vera, P. Miron, and M. J. Olascoaga (2022), Surface Pathways Connecting the South and North Atlantic Oceans, *Geophys. Res. Lett.*, *49*(1), e2021GL096646, doi: https://doi.org/10.1029/2021GL096646.
du Plessis, M. D., S. Swart, L. C. Biddle, I. S. Giddy, P. M. S. Monteiro, C. J. C. Reason, A. F. Thompson, and S. A. Nicholson (2022), The Daily-Resolved Southern Ocean Mixed Layer: Regional Contrasts Assessed Using Glider Observations, *Journal of Geophysical Research: Oceans*, *127*(4), e2021JC017760, doi: https://doi.org/10.1029/2021JC017760.
Du, Y., M. Feng, Z. Xu, B. Yin, and A. J. Hobday (2022), Summer Marine Heatwaves in the Kuroshio-Oyashio Extension Region, *Remote Sensing*, *14*(13), 2980, doi: https://doi.org/10.3390/rs14132980.
Falco, P., P. Castagno, Y. Cotroneo, G. Aulicino, G. Budillon, P. De Ruggiero, G. Fusco, and E. Zambianchi (2022), Measurements for Oceanography, in *Measurement for the Sea: Supporting the Marine Environment and the Blue Economy*, edited by P. Daponte, G. B. Rossi and V. Piscopo, pp. 51-81, Springer International Publishing, Cham, doi: https://doi.org/10.1007/978-3-030-82024-4_3.
Fedele, G., E. Mauri, G. Notarstefano, and P. M. Poulain (2022), Characterization of the Atlantic Water and Levantine Intermediate Water in the Mediterranean Sea using 20 years of Argo data, *Ocean Sci.*, *18*(1), 129-142, doi: https://doi.org/10.5194/os-18-129-2022.
Feng, Y., B. J. Bethel, C. Dong, H. Zhao, Y. Yao, and Y. Yu (2022), Marine heatwave events near Weizhou Island, Beibu Gulf in 2020 and their possible relations to coral bleaching, *Science of The Total Environment*, *823*, 153414, doi: https://doi.org/10.1016/j.scitotenv.2022.153414.
Fernández Castro, B., M. Mazloff, R. G. Williams, and A. C. Naveira Garabato (2022), Subtropical Contribution to Sub-Antarctic Mode Waters, *Geophys. Res. Lett.*, *49*(11), e2021GL097560, doi: https://doi.org/10.1029/2021GL097560.
Ferreira, A., J. Dias, V. Brotas, and A. C. Brito (2022), A perfect storm: An anomalous offshore phytoplankton bloom event in the NE Atlantic (March 2009), *Science of The Total Environment*, *806*, 151253, doi: https://doi.org/10.1016/j.scitotenv.2021.151253.
Fourrier, M., L. Coppola, F. D'Ortenzio, C. Migon, and J.-P. Gattuso (2022), Impact of Intermittent Convection in the Northwestern Mediterranean Sea on Oxygen Content, Nutrients, and the Carbonate System, *Journal of Geophysical Research: Oceans*, *127*(9), e2022JC018615, doi: https://doi.org/10.1029/2022JC018615.
Fox-Kemper, B., L. Johnson, and F. Qiao (2022), Chapter 4 - Ocean near-surface layers, in *Ocean Mixing*, edited by M. Meredith and A. Naveira Garabato, pp. 65-94, Elsevier, doi: https://doi.org/10.1016/B978-0-12-821512-8.00011-6.

Frajka-Williams, E., J. A. Brearley, J. D. Nash, and C. B. Whalen (2022), Chapter 14 - New technological frontiers in ocean mixing, in *Ocean Mixing*, edited by M. Meredith and A. Naveira Garabato, pp. 345-361, Elsevier, doi: https://doi.org/10.1016/B978-0-12-821512-8.00021-9.

Fu, Y., P. Brandt, F. P. Tuchen, J. F. Lübbecke, and C. Wang (2022), Representation of the Mean Atlantic Subtropical Cells in CMIP6 Models, *Journal of Geophysical Research: Oceans*, *127*(3), e2021JC018191, doi: https://doi.org/10.1029/2021JC018191.

Fujiki, T., S. Hosoda, and N. Harada (2022), Phytoplankton blooms in summer and autumn in the northwestern subarctic Pacific detected by the mooring and float systems, *J. Oceanogr.*, *78*(2), 63-72, doi: https://doi.org/10.1007/s10872-021-00628-z.

Galí, M., M. Falls, H. Claustre, O. Aumont, and R. Bernardello (2022), Bridging the gaps between particulate backscattering measurements and modeled particulate organic carbon in the ocean, *Biogeosciences*, *19*(4), 1245-1275, doi: https://doi.org/10.5194/bg-19-1245-2022.

Gao, C., and L. Zhou (2022), Tropical cyclone genesis over the western North Pacific simulated by Coupled Model Intercomparison Project Phase 6 models, *Acta Oceanol. Sin.*, *41*(5), 64-77, doi: https://doi.org/10.1007/s13131-021-1860-9.

Gao, S., S. Han, S. Wang, D. Wu, M. Wang, K. Wu, and L. Liu (2022), The Influence of Typhoon 'Hongxia' on the Intrusion of the Kuroshio Current into the South China Sea, *Journal of Ocean University of China*, doi: https://doi.org/10.1007/s11802-023-5166-8.

Gao, W., Z. Wang, and H. Huang (2022), Variations of the Eco-Hydro-Climatic Environment Response to the 2015/2016 Super El Niño Event in the Mindanao Dome Upwelling System, *Journal of Ocean University of China*, *21*(1), 69-80, doi: https://doi.org/10.1007/s11802-022-4695-x.

Garcia-Jove, M., B. Mourre, N. D. Zarokanellos, P. F. J. Lermusiaux, D. L. Rudnick, and J. Tintoré (2022), Frontal Dynamics in the Alboran Sea: 2. Processes for Vertical Velocities Development, *Journal of Geophysical Research: Oceans*, *127*(3), e2021JC017428, doi: https://doi.org/10.1029/2021JC017428.

Geoffroy, G., and J. Nycander (2022), Global Mapping of the Nonstationary Semidiurnal Internal Tide Using Argo Data, *Journal of Geophysical Research: Oceans*, *127*(4), e2021JC018283, doi: https://doi.org/10.1029/2021JC018283.

George, J. V., R. K. Naik, N. Anilkumar, P. Sabu, S. M. Patil, and R. K. Mishra (2022), Physical control on the inter-annual variability of summer dissolved nutrient concentration and phytoplankton biomass in the Indian sector of the Southern Ocean, *Oceanologia*, *64*(4), 675-693, doi: https://doi.org/10.1016/j.oceano.2022.06.003.

Gillard, L. C., C. Pennelly, H. L. Johnson, and P. G. Myers (2022), The Effects of Atmospheric and Lateral Buoyancy Fluxes on Labrador Sea Mixed Layer Depth, *Ocean Model.*, *171*, 101974, doi: https://doi.org/10.1016/j.ocemod.2022.101974.

Girishkumar, M. S. (2022), Surface chlorophyll blooms in the Southern Bay of Bengal during the extreme positive Indian Ocean dipole, *Climate Dynamics*, *59*(5), 1505-1519, doi: https://doi.org/10.1007/s00382-021-06050-x.

Gloege, L., M. Yan, T. Zheng, and G. A. McKinley (2022), Improved Quantification of Ocean Carbon Uptake by Using Machine Learning to Merge Global Models and pCO2 Data,

Journal of Advances in Modeling Earth Systems, *14*(2), e2021MS002620, doi: https://doi.org/10.1029/2021MS002620.

Grodsky, S. A., N. Reul, A. Bentamy, and D. Vandemark (2022), Eastward propagating surface salinity anomalies in the tropical North Atlantic, *Remote Sensing Letters*, *13*(4), 334-342, doi: https://doi.org/10.1080/2150704X.2022.2032452.

Gu, C., J. Qi, Y. Zhao, W. Yin, and S. Zhu (2022), Estimation of the Mixed Layer Depth in the Indian Ocean from Surface Parameters: A Clustering-Neural Network Method, *Sensors*, *22*(15), 5600, doi: https://doi.org/10.3390/s22155600.

Guan, C., F. Tian, M. J. McPhaden, F. Wang, S. Hu, and R.-H. Zhang (2022), Zonal Structure of Tropical Pacific Surface Salinity Anomalies Affects ENSO Intensity and Asymmetry, *Geophys. Res. Lett.*, *49*(1), e2021GL096197, doi: https://doi.org/10.1029/2021GL096197.

Gunn, K. L., K. McMonigal, L. M. Beal, and S. Elipot (2022), Decadal and Intra-Annual Variability of the Indian Ocean Freshwater Budget, *J. Phys. Oceanogr.*, *52*(10), 2361-2376, doi: https://doi.org/10.1175/JPO-D-22-0057.1.

Guo, M., P. Xiu, and X. Xing (2022), Oceanic Fronts Structure Phytoplankton Distributions in the Central South Indian Ocean, *Journal of Geophysical Research: Oceans*, *127*(1), e2021JC017594, doi: https://doi.org/10.1029/2021JC017594.

Guo, Y., and S. P. Bishop (2022), Surface Divergent Eddy Heat Fluxes and Their Impacts on Mixed Layer Eddy-Mean Flow Interactions, *Journal of Advances in Modeling Earth Systems*, *14*(4), e2021MS002863, doi: https://doi.org/10.1029/2021MS002863.

Hall, K., A. Daley, S. Whitehall, S. Sandiford, and C. L. Gentemann (2022), Validating Salinity from SMAP and HYCOM Data with Saildrone Data during EUREC4A-OA/ATOMIC, *Remote Sensing*, *14*(14), 3375, doi: https://doi.org/10.3390/rs14143375.

Hall, S. B., B. Subrahmanyam, and J. H. Morison (2022), Intercomparison of Salinity Products in the Beaufort Gyre and Arctic Ocean, *Remote Sensing*, *14*(1), 71, doi: https://doi.org/10.3390/rs14010071.

Harrison, M., A. Adcroft, R. Hallberg, and O. Sergienko (2022), Improved Surface Mass Balance Closure in Ocean Hindcast Simulations, *Journal of Advances in Modeling Earth Systems*, *14*(7), e2021MS002888, doi: https://doi.org/10.1029/2021MS002888.

He, Y., J. Wang, F. Wang, and T. Hibiya (2022), Spatial distribution of turbulent diapycnal mixing along the Mindanao current inferred from rapid-sampling Argo floats, *J. Oceanogr.*, *78*(1), 35-48, doi: https://doi.org/10.1007/s10872-021-00624-3.

He, Z., D. Yang, Y. Wang, and B. Yin (2022), Impact of 4D-Var data assimilation on modelling of the East China Sea dynamics, *Ocean Model.*, *176*, 102044, doi: https://doi.org/10.1016/j.ocemod.2022.102044.

Herraiz-Borreguero, L., and A. C. Naveira Garabato (2022), Poleward shift of Circumpolar Deep Water threatens the East Antarctic Ice Sheet, *Nature Climate Change*, *12*(8), 728-734, doi: https://doi.org/10.1038/s41558-022-01424-3.

Herron, A. J., S. M. Bohman, and A. L. Gordon (2022), Freshwater transport by eddies within the Bay of Bengal's central axis, *Deep Sea Research Part I: Oceanographic Research Papers*, *185*, 103770, doi: https://doi.org/10.1016/j.dsr.2022.103770.

Hodges, S., K. E. Erikstad, and T. K. Reiertsen (2022), Predicting the foraging patterns of wintering Auks using a sea surface temperature model for the Barents Sea,

Ecological Solutions and Evidence, *3*(4), e12181, doi: https://doi.org/10.1002/2688-8319.12181.

Holbrook, N. J., V. Hernaman, S. Koshiba, J. Lako, J. B. Kajtar, P. Amosa, and A. Singh (2022), Impacts of marine heatwaves on tropical western and central Pacific Island nations and their communities, *Glob. Planet. Change*, *208*, 103680, doi: https://doi.org/10.1016/j.gloplacha.2021.103680.

Holland, L. P., A. A. Rowden, J. S. Hamilton, M. R. Clark, S. M. Chiswell, and J. P. A. Gardner (2022), Regional-scale genetic differentiation of the stony coral Desmophyllum dianthus in the southwest Pacific Ocean is consistent with regional-scale physico-chemical oceanography, *Deep Sea Research Part I: Oceanographic Research Papers*, *183*, 103739, doi: https://doi.org/10.1016/j.dsr.2022.103739.

Holmes, R. M., T. Sohail, and J. D. Zika (2022), Adiabatic and Diabatic Signatures of Ocean Temperature Variability, *J. Clim.*, *35*(5), 1459-1477, doi: https://doi.org/10.1175/JCLI-D-21-0695.1.

Holser, R. R., T. R. Keates, D. P. Costa, and C. A. Edwards (2022), Extent and Magnitude of Subsurface Anomalies During the Northeast Pacific Blob as Measured by Animal-Borne Sensors, *Journal of Geophysical Research: Oceans*, *127*(7), e2021JC018356, doi: https://doi.org/10.1029/2021JC018356.

Horwath, M., et al. (2022), Global sea-level budget and ocean-mass budget, with a focus on advanced data products and uncertainty characterisation, *Earth Syst. Sci. Data*, *14*(2), 411-447, doi: https://doi.org/10.5194/essd-14-411-2022.

Hsu, P.-C. (2022), Evaluation of Wind and Solar Insolation Influence on Ocean Near-Surface Temperature from In Situ Observations and the Geostationary Himawari-8 Satellite, *Remote Sensing*, *14*(19), 4975, doi: https://doi.org/10.3390/rs14194975.

Hu, Q., X. Chen, X. He, Y. Bai, Q. Zhong, F. Gong, Q. Zhu, and D. Pan (2022), Seasonal Variability of Phytoplankton Biomass Revealed by Satellite and BGC-Argo Data in the Central Tropical Indian Ocean, *Journal of Geophysical Research: Oceans*, *127*(10), e2021JC018227, doi: https://doi.org/10.1029/2021JC018227.

Hu, R., and J. Zhao (2022), Sea surface salinity variability in the western subpolar North Atlantic based on satellite observations, *Remote Sens. Environ.*, *281*, 113257, doi: https://doi.org/10.1016/j.rse.2022.113257.

Hu, Y., W. Shao, J. Li, C. Zhang, L. Cheng, and Q. Ji (2022), Short-Term Variations in Water Temperature of the Antarctic Surface Layer, *Journal of Marine Science and Engineering*, *10*(2), 287, doi: https://doi.org/10.3390/jmse10020287.

Hu, Z., X. Ma, Y. Peng, D. Tian, Q. Meng, D. Zeng, Z. Liu, B. Zhou, H. Li, and F. Zhou (2022), A Large Subsurface Anticyclonic Eddy in the Eastern Equatorial Indian Ocean, *Journal of Geophysical Research: Oceans*, *127*(3), e2021JC018130, doi: https://doi.org/10.1029/2021JC018130.

Huang, B., L. Ge, X. Chen, and G. Chen (2022), Vertical Structure-Based Classification of Oceanic Eddy Using 3-D Convolutional Neural Network, *IEEE Trans. Geosci. Remote Sensing*, *60*, 1-14, doi: https://doi.org/10.1109/TGRS.2021.3103251.

Huang, C., Y. Liu, Y. Luo, Y. Wang, X. Liu, Y. Zhang, Y. Zhuang, and Y. Tian (2022), Improvement and Assessment of Ocean Color Algorithms in the Northwest Pacific Fishing Ground Using Himawari-8, MODIS-Aqua, and VIIRS-SNPP, *Remote Sensing*,

14(15), 3610, doi: https://doi.org/10.3390/rs14153610.
Huang, L., W. Zhuang, Z. Wu, L. Meng, D. Edwing, K. Edwing, L. Wang, and X.-H. Yan (2022), Decadal Cooling Events in the South Indian Ocean During the Argo Era, *Journal of Geophysical Research: Oceans*, *127*(9), e2021JC017949, doi: https://doi.org/10.1029/2021JC017949.
Huang, X., S. Huang, W. Zhao, Z. Zhang, C. Zhou, and J. Tian (2022), Temporal variability of internal solitary waves in the northern South China Sea revealed by long-term mooring observations, *Prog. Oceanogr.*, *201*, 102716, doi: https://doi.org/10.1016/j.pocean.2021.102716.
Huang, Y., A. J. Fassbender, J. S. Long, S. Johannessen, and M. Bernardi Bif (2022), Partitioning the Export of Distinct Biogenic Carbon Pools in the Northeast Pacific Ocean Using a Biogeochemical Profiling Float, *Glob. Biogeochem. Cycle*, *36*(2), e2021GB007178, doi: https://doi.org/10.1029/2021GB007178.
Huguenin, M. F., R. M. Holmes, and M. H. England (2022), Drivers and distribution of global ocean heat uptake over the last half century, *Nature Communications*, *13*(1), 4921, doi: https://doi.org/10.1038/s41467-022-32540-5.
Huthnance, J., et al. (2022), Ocean shelf exchange, NW European shelf seas: Measurements, estimates and comparisons, *Prog. Oceanogr.*, *202*, 102760, doi: https://doi.org/10.1016/j.pocean.2022.102760.
Ienna, F., I. Bashmachnikov, and J. Dias (2022), Meddies and Their Sea Surface Expressions: Observations and Theory, *J. Phys. Oceanogr.*, *52*(11), 2643-2656, doi: https://doi.org/10.1175/JPO-D-22-0081.1.
Ioannou, A., S. Speich, and R. Laxenaire (2022), Characterizing Mesoscale Eddies of Eastern Upwelling Origins in the Atlantic Ocean and Their Role in Offshore Transport, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.835260.
Iskandar, M. R., and T. Suga (2022), Change in Salinity of Indonesian Upper Water in the Southeastern Indian Ocean during Argo Period, *Heliyon*, *8*(9), e10430, doi: https://doi.org/10.1016/j.heliyon.2022.e10430.
Ito, T. (2022), Development of the Regional Carbon Cycle Model in the Central Pacific Sector of the Southern Ocean, *Journal of Advances in Modeling Earth Systems*, *14*(6), e2021MS002757, doi: https://doi.org/10.1029/2021MS002757.
Izett, R. W., L. Castro de la Guardia, M. Chanona, P. G. Myers, S. Waterman, and P. D. Tortell (2022), Impact of Vertical Mixing on Summertime Net Community Production in Canadian Arctic and Subarctic Waters: Insights From In Situ Measurements and Numerical Simulations, *Journal of Geophysical Research: Oceans*, *127*(8), e2021JC018215, doi: https://doi.org/10.1029/2021JC018215.
Jahanbakht, M., W. Xiang, and M. R. Azghadi (2022), Sea Surface Temperature Forecasting With Ensemble of Stacked Deep Neural Networks, *IEEE Geosci. Remote Sens. Lett.*, *19*, 1-5, doi: https://doi.org/10.1109/LGRS.2021.3098425.
Janeković, I., M. D. Rayson, N. L. Jones, P. Watson, and C. Pattiaratchi (2022), 4D-Var data assimilation using satellite sea surface temperature to improve the tidally-driven interior ocean dynamics estimates in the Indo-Australian Basin, *Ocean Model.*, *171*, 101969, doi: https://doi.org/10.1016/j.ocemod.2022.101969.
Jang, E., Y. J. Kim, J. Im, Y.-G. Park, and T. Sung (2022), Global sea surface salinity via the

synergistic use of SMAP satellite and HYCOM data based on machine learning, *Remote Sens. Environ.*, *273*, 112980, doi: https://doi.org/10.1016/j.rse.2022.112980.
Jarugula, S. L., and M. J. McPhaden (2022), Ocean Mixed Layer Response to Two Post-Monsoon Cyclones in the Bay of Bengal in 2018, *Journal of Geophysical Research: Oceans*, *127*(9), e2022JC018874, doi: https://doi.org/10.1029/2022JC018874.
Jawad, G. A. M., A. K. M. Al-Qurabat, and A. K. Idrees (2022), Maximizing the underwater wireless sensor networks' lifespan using BTC and MNP5 compression techniques, *Annals of Telecommunications*, *77*(9), 703-723, doi: https://doi.org/10.1007/s12243-021-00903-6.
Ji, X., H. Yin, L. Jing, Y. Liang, and J. Wang (2022), Modeling and performance analysis of oblique underwater optical communication links considering turbulence effects based on seawater depth layering, *Opt. Express*, *30*(11), 18874-18888, doi: https://doi.org/10.1364/OE.453918.
Jiang, J., J. Shi, and F. Huang (2022), Quasi-Biennial Variability of Indian Ocean Subtropical Mode Water Subduction Driven by Atmospheric Circulation Modes during the Argo Period, *J. Clim.*, *35*(13), 4085-4098, doi: https://doi.org/10.1175/JCLI-D-21-0509.1.
Jiang, W., and W. You (2022), A combined denoising method of empirical mode decomposition and singular spectrum analysis applied to Jason altimeter waveforms: A case of the Caspian Sea, *Geodesy and Geodynamics*, *13*(4), 327-342, doi: https://doi.org/10.1016/j.geog.2021.11.004.
Joh, Y., et al. (2022), Seasonal-to-Decadal Variability and Prediction of the Kuroshio Extension in the GFDL Coupled Ensemble Reanalysis and Forecasting System, *J. Clim.*, *35*(11), 3515-3535, doi: https://doi.org/10.1175/JCLI-D-21-0471.1.
Johnson, G. C. (2022), Antarctic Bottom Water Warming and Circulation Slowdown in the Argentine Basin From Analyses of Deep Argo and Historical Shipboard Temperature Data, *Geophys. Res. Lett.*, *49*(18), e2022GL100526, doi: https://doi.org/10.1029/2022GL100526.
Johnson, G. C., S. Hosoda, S. R. Jayne, P. R. Oke, S. C. Riser, D. Roemmich, T. Suga, V. Thierry, S. E. Wijffels, and J. Xu (2022), Argo—Two Decades: Global Oceanography, Revolutionized, *Annual Review of Marine Science*, *14*(1), 379-403, doi: https://doi.org/10.1146/annurev-marine-022521-102008.
Johnson, G. C., and J. M. Lyman (2022), GOSML: A Global Ocean Surface Mixed Layer Statistical Monthly Climatology: Means, Percentiles, Skewness, and Kurtosis, *Journal of Geophysical Research: Oceans*, *127*(1), e2021JC018219, doi: https://doi.org/10.1029/2021JC018219.
Johnson, G. C., C. B. Whalen, S. G. Purkey, and N. Zilberman (2022), Serendipitous Internal Wave Signals in Deep Argo Data, *Geophys. Res. Lett.*, *49*(7), e2022GL097900, doi: https://doi.org/10.1029/2022GL097900.
Johnson, K. S., et al. (2022), Carbon to Nitrogen Uptake Ratios Observed Across the Southern Ocean by the SOCCOM Profiling Float Array, *Journal of Geophysical Research: Oceans*, *127*(9), e2022JC018859, doi: https://doi.org/10.1029/2022JC018859.
Johnston, T. M. S. (2022), Stirring and Mixing in the Wake of Angaur and Peleliu Islands,

Palau, *Journal of Geophysical Research: Oceans*, *127*(5), e2022JC018544, doi: https://doi.org/10.1029/2022JC018544.
Johnston, T. M. S., and P. L. Colin (2022), Upwelling and Downwelling Driven by the North Equatorial Countercurrent and Internal Waves at Hatohobei Island and Helen Reef, Palau, *Journal of Geophysical Research: Oceans*, *127*(2), e2021JC017606, doi: https://doi.org/10.1029/2021JC017606.
Jonasson, O., A. Ignatov, V. Pryamitsyn, B. Petrenko, and Y. Kihai (2022), JPSS VIIRS SST Reanalysis Version 3, *Remote Sensing*, *14*(14), 3476, doi: https://doi.org/10.3390/rs14143476.
Ju, W.-S., Y. Zhang, and Y. Du (2022), Subsurface Cooling in the Tropical Pacific Under a Warming Climate, *Journal of Geophysical Research: Oceans*, *127*(5), e2021JC018225, doi: https://doi.org/10.1029/2021JC018225.
Jung, Y.-J., B.-J. Choi, K. Kwon, and S.-H. Lee (2022), Modeling surface low-salinity pools formed by heavy precipitation in the Yellow Sea, *Estuarine, Coastal and Shelf Science*, *275*, 107987, doi: https://doi.org/10.1016/j.ecss.2022.107987.
Jyothi, L., S. Joseph, S. P, M. Huber, and L. A. Joseph (2022), Distinct Oceanic Responses at Rapidly Intensified and Weakened Regimes of Tropical Cyclone Ockhi (2017), *Journal of Geophysical Research: Oceans*, *127*(6), e2021JC018212, doi: https://doi.org/10.1029/2021JC018212.
Kajtar, J. B., V. Hernaman, N. J. Holbrook, and P. Petrelli (2022), Tropical western and central Pacific marine heatwave data calculated from gridded sea surface temperature observations and CMIP6, *Data in Brief*, *40*, 107694, doi: https://doi.org/10.1016/j.dib.2021.107694.
Kang, K., and I.-J. Moon (2022), Sea Surface Height Changes due to the Tropical Cyclone-Induced Water Mixing in the Yellow Sea, Korea, *Frontiers in Earth Science*, *10*, doi: https://doi.org/10.3389/feart.2022.826582.
Karnauskas, K. B., and D. Giglio (2022), Argo Reveals the Scales and Provenance of Equatorial Island Upwelling Systems, *Geophys. Res. Lett.*, *49*(16), e2022GL098744, doi: https://doi.org/10.1029/2022GL098744.
Kaundal, M., N. J. Raju, D. Samanta, and M. K. Dash (2022), Seasonal and spatial variations in spice generation in the South Indian Ocean salinity maxima, *Ocean Dyn.*, *72*(5), 313-323, doi: https://doi.org/10.1007/s10236-022-01502-2.
Kawakami, Y., A. Kojima, K. Murakami, T. Nakano, and S. Sugimoto (2022), Temporal variations of net Kuroshio transport based on a repeated hydrographic section along 137°E, *Climate Dynamics*, *59*(5), 1703-1713, doi: https://doi.org/10.1007/s00382-021-06061-8.
Kerry, C. G., and B. S. Powell (2022), Including Tides Improves Subtidal Prediction in a Region of Strong Surface and Internal Tides and Energetic Mesoscale Circulation, *Journal of Geophysical Research: Oceans*, *127*(6), e2021JC018314, doi: https://doi.org/10.1029/2021JC018314.
Ke-xin, L., and Z. Fei (2022), Effects of a freshening trend on upper-ocean stratification over the central tropical Pacific and their representation by CMIP6 models, *Deep Sea Research Part II: Topical Studies in Oceanography*, *195*, 104999, doi: https://doi.org/10.1016/j.dsr2.2021.104999.

Khimchenko, E., A. Ostrovskii, A. Klyuvitkin, and L. Piterbarg (2022), Seasonal Variability of Near-Inertial Internal Waves in the Deep Central Part of the Black Sea, *Journal of Marine Science and Engineering*, *10*(5), 557, doi: https://doi.org/10.3390/jmse10050557.

Kido, S., M. Nonaka, and Y. Miyazawa (2022), JCOPE-FGO: an eddy-resolving quasi-global ocean reanalysis product, *Ocean Dyn.*, *72*(8), 599-619, doi: https://doi.org/10.1007/s10236-022-01521-z.

Kim, J.-S., K.-W. Seo, J. Chen, and C. Wilson (2022), Uncertainty in GRACE/GRACE-follow on global ocean mass change estimates due to mis-modeled glacial isostatic adjustment and geocenter motion, *Scientific Reports*, *12*(1), 6617, doi: https://doi.org/10.1038/s41598-022-10628-8.

Koelling, J., D. Atamanchuk, J. Karstensen, P. Handmann, and D. W. R. Wallace (2022), Oxygen export to the deep ocean following Labrador Sea Water formation, *Biogeosciences*, *19*(2), 437-454, doi: https://doi.org/10.5194/bg-19-437-2022.

Koestner, D., D. Stramski, and R. A. Reynolds (2022), A Multivariable Empirical Algorithm for Estimating Particulate Organic Carbon Concentration in Marine Environments From Optical Backscattering and Chlorophyll-a Measurements, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.941950.

Kolyuchkina, G. A., et al. (2022), Benthic community structure near the margin of the oxic zone: A case study on the Black Sea, *J. Mar. Syst.*, *227*, 103691, doi: https://doi.org/10.1016/j.jmarsys.2021.103691.

Koman, G., W. E. Johns, A. Houk, L. Houpert, and F. Li (2022), Circulation and overturning in the eastern North Atlantic subpolar gyre, *Prog. Oceanogr.*, *208*, 102884, doi: https://doi.org/10.1016/j.pocean.2022.102884.

Koropitan, A. F., M. H. I. Khaldun, and Y. Naulita (2022), Impact of tropical Cyclone Marcus on ocean subsurface and surface layers, *Global Journal of Environmental Science and Management*, *8*(3), 353-368, doi: https://dx.doi.org/10.22034/gjesm.2022.03.05.

Kouketsu, S., A. Murata, and K. Arulananthan (2022), Subsurface Water Property Structures Along 80°E Under the Positive Indian Ocean Dipole Mode in December 2019, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.848756.

Kubryakov, A. A., and S. V. Stanichny (2022), Sinking velocity of small particles in the Black Sea: Vertical distribution and seasonal variability from continuous Bio-Argo measurements of backscattering, *J. Mar. Syst.*, *227*, 103695, doi: https://doi.org/10.1016/j.jmarsys.2021.103695.

LaBrie, R., et al. (2022), Deep ocean microbial communities produce more stable dissolved organic matter through the succession of rare prokaryotes, *Science Advances*, *8*(27), eabn0035, doi: https://www.science.org/doi/abs/10.1126/sciadv.abn0035.

Lamont, T., and T. Toolsee (2022), Spatial and Seasonal Variations of the Island Mass Effect at the Sub-Antarctic Prince Edward Islands Archipelago, *Remote Sensing*, *14*(9), 2140, doi: https://doi.org/10.3390/rs14092140.

Lazaneo, C. Z., P. H. R. Calil, A. Tandon, and I. C. A. da Silveira (2022), Submesoscale Coherent Vortices in the South Atlantic Ocean: A Pathway for Energy Dissipation, *Journal of Geophysical Research: Oceans*, *127*(2), e2020JC017099, doi: https://doi.org/10.1029/2020JC017099.

Lea, D. J., J. While, M. J. Martin, A. Weaver, A. Storto, and M. Chrust (2022), A new global ocean ensemble system at the Met Office: Assessing the impact of hybrid data assimilation and inflation settings, *Q. J. R. Meteorol. Soc.*, *148*(745), 1996-2030, doi: https://doi.org/10.1002/qj.4292.

Lee, D., et al. (2022), Variations in Phytoplankton Primary Production Driven by the Pacific Decadal Oscillation in the East/Japan Sea, *Journal of Geophysical Research: Biogeosciences*, *127*(10), e2022JG007094, doi: https://doi.org/10.1029/2022JG007094.

Li, B., and J. Zhai (2022), A Novel Sound Speed Profile Prediction Method Based on the Convolutional Long-Short Term Memory Network, *Journal of Marine Science and Engineering*, *10*(5), 572, doi: https://doi.org/10.3390/jmse10050572.

Li, K., G. Maze, and H. Mercier (2022), Ekman Transport as the Driver of Extreme Interannual Formation Rates of Eighteen Degree Water, *Journal of Geophysical Research: Oceans*, *127*(1), e2021JC017696, doi: https://doi.org/10.1029/2021JC017696.

Li, L., X. Cheng, Z. Jing, H. Cao, and T. Feng (2022), Submesoscale motions and their seasonality in the northern Bay of Bengal, *Acta Oceanol. Sin.*, *41*(4), 1-13, doi: https://doi.org/10.1007/s13131-021-1847-6.

Li, W.-T., J.-M. Chen, R.-S. Tseng, and T.-L. Lai (2022), Multiple Modulating Processes for Intensive Tropical Cyclone Activity Affecting Taiwan in September 2016, *Asia-Pacific Journal of Atmospheric Sciences*, *58*(1), 145-157, doi: https://doi.org/10.1007/s13143-021-00245-2.

Li, X., Z.-Z. Hu, B. Huang, and C. Stan (2022), Bulk connectivity of global SST and land precipitation variations, *Climate Dynamics*, *58*(1), 195-209, doi: https://doi.org/10.1007/s00382-021-05901-x.

Li, X., Z. Mao, H. Zheng, W. Zhang, D. Yuan, Y. Li, Z. Wang, and Y. Liu (2022), Process-Oriented Estimation of Chlorophyll-a Vertical Profile in the Mediterranean Sea Using MODIS and Oceanographic Float Products, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.933680.

Li, X., Y.-Y. Xu, D. L. Kirchman, and W.-J. Cai (2022), Carbonate Parameter Estimation and Its Application in Revealing Temporal and Spatial Variation in the South and Mid-Atlantic Bight, USA, *Journal of Geophysical Research: Oceans*, *127*(7), e2022JC018811, doi: https://doi.org/10.1029/2022JC018811.

Li, Y., X. Yin, W. Zhou, M. Lin, H. Liu, and Y. Li (2022), Performance Simulation of the Payload IMR and MICAP Onboard the Chinese Ocean Salinity Satellite, *IEEE Trans. Geosci. Remote Sensing*, *60*, 1-16, doi: https://doi.org/10.1109/TGRS.2021.3111026.

Li, Z., and H. Aiki (2022), The 1994 Positive Indian Ocean Dipole Event as Investigated by the Transfer Routes of Oceanic Wave Energy, *J. Phys. Oceanogr.*, *52*(3), 459-473, doi: https://doi.org/10.1175/JPO-D-21-0189.1.

Liao, F., G. Gao, P. Zhan, and Y. Wang (2022), Seasonality and trend of the global upper-ocean vertical velocity over 1998–2017, *Prog. Oceanogr.*, *204*, 102804, doi: https://doi.org/10.1016/j.pocean.2022.102804.

Liao, F., and I. Hoteit (2022), A Comparative Study of the Argo-Era Ocean Heat Content Among Four Different Types of Data Sets, *Earth's Future*, *10*(9), e2021EF002532, doi: https://doi.org/10.1029/2021EF002532.

Liblik, T., G. Väli, K. Salm, J. Laanemets, M. J. Lilover, and U. Lips (2022), Quasi-steady circulation regimes in the Baltic Sea, *Ocean Sci.*, *18*(3), 857-879, doi: https://doi.org/10.5194/os-18-857-2022.

Lilly, L. E., B. D. Cornuelle, and M. D. Ohman (2022), Using a Lagrangian particle tracking model to evaluate impacts of El Niño-related advection on euphausiids in the southern California Current System, *Deep Sea Research Part I: Oceanographic Research Papers*, *187*, 103835, doi: https://doi.org/10.1016/j.dsr.2022.103835.

Lin, F., L. Zhu, B. Zhou, T. Ding, W. Jin, and C. Liang (2022), Observations of strong near-inertial currents induced by the reflection of tropical cyclone-induced near-inertial waves on the continental slope of the northern South China Sea, *Deep Sea Research Part I: Oceanographic Research Papers*, *190*, 103893, doi: https://doi.org/10.1016/j.dsr.2022.103893.

Lin, J., et al. (2022), Current Challenges in Climate and Weather Research and Future Directions, *Atmos.-Ocean*, *60*(3-4), 506-517, doi: https://doi.org/10.1080/07055900.2022.2079473.

Liu, C., D. Huo, Z. Liu, X. Wang, C. Guan, J. Qi, and F. Wang (2022), Turbulent Mixing in the Barrier Layer of the Equatorial Pacific Ocean, *Geophys. Res. Lett.*, *49*(5), e2021GL097690, doi: https://doi.org/10.1029/2021GL097690.

Liu, H., Z. Wei, and X. Nie (2022), Assessing the Relationship between Freshwater Flux and Sea Surface Salinity, *Remote Sensing*, *14*(9), 2149, doi: https://doi.org/10.3390/rs14092149.

Liu, J., D. Wang, T. Zu, K. Huang, and O. Y. W. Zhang (2022), Either IOD leading or ENSO leading triggers extreme thermohaline events in the central tropical Indian Ocean, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-022-06413-y.

Liu, K., S. Gao, and F. Wang (2022), Deviation of the Lagrangian particle tracing method in the evaluation of the Southern Hemisphere annual subduction rate, *Journal of Oceanology and Limnology*, *40*(3), 891-906, doi: https://doi.org/10.1007/s00343-021-1097-7.

Liu, L., Y. Li, and F. Wang (2022), Reduction of Equatorial Obduction by Atmospheric Intraseasonal Oscillations in the Western and Central Pacific Ocean, *Journal of Geophysical Research: Oceans*, *127*(5), e2021JC017901, doi: https://doi.org/10.1029/2021JC017901.

Liu, L., G. Wang, Z. Zhang, and H. Wang (2022), Effects of Drag Coefficients on Surface Heat Flux during Typhoon Kalmaegi (2014), *Adv. Atmos. Sci.*, *39*(9), 1501-1518, doi: https://doi.org/10.1007/s00376-022-1285-1.

Liu, L., and H. Xue (2022), Estimating the Ocean Interior from Satellite Observations in the Kerguelen Area (Southern Ocean): A Combined Investigation Using High-Resolution CTD Data from Animal-Borne Instruments, *J. Phys. Oceanogr.*, *52*(10), 2463-2478, doi: https://doi.org/10.1175/JPO-D-21-0183.1.

Liu, Y., L. Cheng, Y. Pan, Z. Tan, J. Abraham, B. Zhang, J. Zhu, and J. Song (2022), How Well Do CMIP6 and CMIP5 Models Simulate the Climatological Seasonal Variations in Ocean Salinity?, *Adv. Atmos. Sci.*, *39*(10), 1650-1672, doi: https://doi.org/10.1007/s00376-022-1381-2.

Liu, Y., D. G. Desbruyères, H. Mercier, and M. A. Spall (2022), Observation-Based Estimates of

Eulerian-Mean Boundary Downwelling in the Western Subpolar North Atlantic, *Geophys. Res. Lett.*, *49*(8), e2021GL097243, doi: https://doi.org/10.1029/2021GL097243.

Liu, Y., T. Xu, J. Wang, and D. Mu (2022), Multibeam seafloor topography distortion correction based on SVP inversion, *J. Mar. Sci. Technol.*, *27*(1), 467-481, doi: https://doi.org/10.1007/s00773-021-00845-7.

Loeb, N. G., M. Mayer, S. Kato, J. T. Fasullo, H. Zuo, R. Senan, J. M. Lyman, G. C. Johnson, and M. Balmaseda (2022), Evaluating Twenty-Year Trends in Earth's Energy Flows From Observations and Reanalyses, *Journal of Geophysical Research: Atmospheres*, *127*(12), e2022JD036686, doi: https://doi.org/10.1029/2022JD036686.

Lovecchio, E., N. Gruber, M. Münnich, and I. Frenger (2022), On the Processes Sustaining Biological Production in the Offshore Propagating Eddies of the Northern Canary Upwelling System, *Journal of Geophysical Research: Oceans*, *127*(2), e2021JC017691, doi: https://doi.org/10.1029/2021JC017691.

Lu, Y., Y. Li, J. Duan, P. Lin, and F. Wang (2022), Multidecadal Sea Level Rise in the Southeast Indian Ocean: The Role of Ocean Salinity Change, *J. Clim.*, *35*(5), 1479-1496, doi: https://doi.org/10.1175/JCLI-D-21-0288.1.

Luko, C. D., F. Pereira, I. C. A. da Silveira, A. Tandon, and G. R. Flierl (2022), Effects of the seasonality of mesoscale eddies on the planktonic dynamics off eastern Brazil, *Dynamics of Atmospheres and Oceans*, *98*, 101299, doi: https://doi.org/10.1016/j.dynatmoce.2022.101299.

Lv, M., F. Wang, Y. Li, Z. Zhang, and Y. Zhu (2022), Structure of Sea Surface Temperature Anomaly Induced by Mesoscale Eddies in the North Pacific Ocean, *Journal of Geophysical Research: Oceans*, *127*(3), e2021JC017581, doi: https://doi.org/10.1029/2021JC017581.

Ma, J., S. Hu, D. Hu, C. Villanoy, Q. Wang, X. Lu, and X. Yuan (2022), Structure and Variability of the Kuroshio and Luzon Undercurrent Observed by a Mooring Array, *Journal of Geophysical Research: Oceans*, *127*(2), e2021JC017754, doi: https://doi.org/10.1029/2021JC017754.

Ma, X., G. Huang, X. Li, and S. Li (2022), The potential mechanisms of the dominant timescale of AMOC multidecadal variability in CMIP6/CMIP5 preindustrial simulations, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-022-06440-9.

Mandal, S., R. D. Susanto, and B. Ramakrishnan (2022), On Investigating the Dynamical Factors Modulating Surface Chlorophyll-a Variability along the South Java Coast, *Remote Sensing*, *14*(7), 1745, doi: https://doi.org/10.3390/rs14071745.

Manta, G., S. Speich, M. Barreiro, R. Trinchin, C. de Mello, R. Laxenaire, and A. R. Piola (2022), Shelf Water Export at the Brazil-Malvinas Confluence Evidenced From Combined in situ and Satellite Observations, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.857594.

Mao, K., F. Gao, S. Zhang, and C. Liu (2022), An Information Spatial-Temporal Extension Algorithm for Shipborne Predictions Based on Deep Neural Networks with Remote Sensing Observations—Part I: Ocean Temperature, *Remote Sensing*, *14*(8), 1791, doi: https://www.mdpi.com/2072-4292/14/8/1791.

Mao, K., F. Gao, S. Zhang, and C. Liu (2022), An Initial Field Intelligent Correcting Algorithm

for Numerical Forecasting Based on Artificial Neural Networks under the Conditions of Limited Observations: Part I—Focusing on Ocean Temperature, *Journal of Marine Science and Engineering*, *10*(3), 311, doi: https://doi.org/10.3390/jmse10030311.

Markova, N. V., and O. A. Dymova (2022), The Black Sea Undercurrents: Observations and Numerical Simulation Results, Springer International Publishing, Cham.

Marlowe, C., K. Hyder, M. D. J. Sayer, and J. Kaiser (2022), Citizen scientists' dive computers resolve seasonal and interannual temperature variations in the Red Sea, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.976771.

Marti, F., et al. (2022), Monitoring the ocean heat content change and the Earth energy imbalance from space altimetry and space gravimetry, *Earth Syst. Sci. Data*, *14*(1), 229-249, doi: https://doi.org/10.5194/essd-14-229-2022.

Martínez, J., et al. (2022), Improved BEC SMOS Arctic Sea Surface Salinity product v3.1, *Earth Syst. Sci. Data*, *14*(1), 307-323, doi: https://doi.org/10.5194/essd-14-307-2022.

Martín-Gómez, V., E. Mohino, B. Rodríguez-Fonseca, and E. Sánchez-Gómez (2022), Understanding rainfall prediction skill over the Sahel in NMME seasonal forecast, *Climate Dynamics*, *59*(9), 3113-3133, doi: https://doi.org/10.1007/s00382-022-06263-8.

Martins, M. S., and D. Stammer (2022), Interannual Variability of the Congo River Plume-Induced Sea Surface Salinity, *Remote Sensing*, *14*(4), 1013, doi: https://doi.org/10.3390/rs14041013.

Matsumoto, K., T. Tanioka, and M. Gilchrist (2022), Sensitivity of Steady State, Deep Ocean Dissolved Organic Carbon to Surface Boundary Conditions, *Glob. Biogeochem. Cycle*, *36*(1), e2021GB007102, doi: https://doi.org/10.1029/2021GB007102.

McAdam, R., S. Masina, M. Balmaseda, S. Gualdi, R. Senan, and M. Mayer (2022), Seasonal forecast skill of upper-ocean heat content in coupled high-resolution systems, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-021-06101-3.

McMonigal, K., K. L. Gunn, L. M. Beal, S. Elipot, and J. K. Willis (2022), Reduction in Meridional Heat Export Contributes to Recent Indian Ocean Warming, *J. Phys. Oceanogr.*, *52*(3), 329-345, doi: https://doi.org/10.1175/JPO-D-21-0085.1.

Meng, L., C. Yan, W. Zhuang, W. Zhang, X. Geng, and X. H. Yan (2022), Reconstructing High-Resolution Ocean Subsurface and Interior Temperature and Salinity Anomalies From Satellite Observations, *IEEE Trans. Geosci. Remote Sensing*, *60*, 1-14, doi: https://doi.org/10.1109/TGRS.2021.3109979.

Meng, X., F. Yao, J. Zhang, Q. Liu, Q. Liu, L. Shi, and D. Zhang (2022), Impact of dust deposition on phytoplankton biomass in the Northwestern Pacific: A long-term study from 1998 to 2020, *Science of The Total Environment*, *813*, 152536, doi: https://doi.org/10.1016/j.scitotenv.2021.152536.

Meng, Z., L. Zhou, R. Murtugudde, Q. Yang, K. Pujiana, and J. Xi (2022), Tropical oceanic intraseasonal variabilities associated with central Indian Ocean mode, *Climate Dynamics*, *58*(3), 1107-1126, doi: https://doi.org/10.1007/s00382-021-05951-1.

Menna, M., M. Gačić, R. Martellucci, G. Notarstefano, G. Fedele, E. Mauri, R. Gerin, and P.-M. Poulain (2022), Climatic, Decadal, and Interannual Variability in the Upper Layer of the Mediterranean Sea Using Remotely Sensed and In-Situ Data, *Remote Sensing*,

14(6), 1322, doi: https://doi.org/10.3390/rs14061322.
Metzl, N., C. Lo Monaco, C. Leseurre, C. Ridame, J. Fin, C. Mignon, M. Gehlen, and T. T. T. Chau (2022), The impact of the South-East Madagascar Bloom on the oceanic CO2 sink, *Biogeosciences*, *19*(5), 1451-1468, doi: https://doi.org/10.5194/bg-19-1451-2022.
Meunier, T., P. Pérez-Brunius, and A. Bower (2022), Reconstructing the Three-Dimensional Structure of Loop Current Rings from Satellite Altimetry and In Situ Data Using the Gravest Empirical Modes Method, *Remote Sensing*, *14*(17), 4174, doi: https://doi.org/10.3390/rs14174174.
Meuriot, O., C. Lique, and Y. Plancherel (2022), Properties, sensitivity, and stability of the Southern Hemisphere salinity minimum layer in the UKESM1 model, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-022-06304-2.
Mignac, D., M. Martin, E. Fiedler, E. Blockley, and N. Fournier (2022), Improving the Met Office's Forecast Ocean Assimilation Model (FOAM) with the assimilation of satellite-derived sea-ice thickness data from CryoSat-2 and SMOS in the Arctic, *Q. J. R. Meteorol. Soc.*, *148*(744), 1144-1167, doi: https://doi.org/10.1002/qj.4252.
Mignot, A., K. von Schuckmann, P. Landschützer, F. Gasparin, S. van Gennip, C. Perruche, J. Lamouroux, and T. Amm (2022), Decrease in air-sea CO2 fluxes caused by persistent marine heatwaves, *Nature Communications*, *13*(1), 4300, doi: https://doi.org/10.1038/s41467-022-31983-0.
Miracca-Lage, M., C. González-Haro, D. C. Napolitano, J. Isern-Fontanet, and P. S. Polito (2022), Can the Surface Quasi-Geostrophic (SQG) Theory Explain Upper Ocean Dynamics in the South Atlantic?, *Journal of Geophysical Research: Oceans*, *127*(2), e2021JC018001, doi: https://doi.org/10.1029/2021JC018001.
Miron, P., F. J. Beron-Vera, and M. J. Olascoaga (2022), Transition Paths of North Atlantic Deep Water, *J. Atmos. Ocean. Technol.*, *39*(7), 959-971, doi: https://doi.org/10.1175/JTECH-D-22-0022.1.
Miyamoto, A., H. Nakamura, T. Miyasaka, and Y. Kosaka (2022), Wintertime Weakening of Low-Cloud Impacts on the Subtropical High in the South Indian Ocean, *J. Clim.*, *35*(1), 323-334, doi: https://doi.org/10.1175/JCLI-D-21-0178.1.
Mohamed, B., O. Ibrahim, and H. Nagy (2022), Sea Surface Temperature Variability and Marine Heatwaves in the Black Sea, *Remote Sensing*, *14*(10), 2383, doi: https://doi.org/10.3390/rs14102383.
Mohrmann, M., S. Swart, and C. Heuzé (2022), Observed Mixing at the Flanks of Maud Rise in the Weddell Sea, *Geophys. Res. Lett.*, *49*(8), e2022GL098036, doi: https://doi.org/10.1029/2022GL098036.
Morioka, Y., D. Iovino, A. Cipollone, S. Masina, and S. K. Behera (2022), Decadal Sea Ice Prediction in the West Antarctic Seas with Ocean and Sea Ice Initializations, *Communications Earth & Environment*, *3*(1), 189, doi: https://doi.org/10.1038/s43247-022-00529-z.
Moschos, E., A. Barboni, and A. Stegner (2022), Why Do Inverse Eddy Surface Temperature Anomalies Emerge? The Case of the Mediterranean Sea, *Remote Sensing*, *14*(15), 3807, doi: https://doi.org/10.3390/rs14153807.
Moteki, Q. (2022), Validation of satellite-based sea surface temperature products against in

situ observations off the western coast of Sumatra, *Scientific Reports*, *12*(1), 92, doi: https://doi.org/10.1038/s41598-021-04156-0.

Musgrave, R., F. Pollmann, S. Kelly, and M. Nikurashin (2022), Chapter 6 - The lifecycle of topographically-generated internal waves, in *Ocean Mixing*, edited by M. Meredith and A. Naveira Garabato, pp. 117-144, Elsevier, doi: https://doi.org/10.1016/B978-0-12-821512-8.00013-X.

Nagura, M., and S. Osafune (2022), Second Baroclinic Mode Rossby Waves in the South Indian Ocean, *J. Phys. Oceanogr.*, *52*(8), 1749-1773, doi: https://doi.org/10.1175/JPO-D-21-0290.1.

Nakanowatari, T., J. Xie, L. Bertino, M. Matsueda, A. Yamagami, and J. Inoue (2022), Ensemble forecast experiments of summertime sea ice in the Arctic Ocean using the TOPAZ4 ice-ocean data assimilation system, *Environmental Research*, *209*, 112769, doi: https://doi.org/10.1016/j.envres.2022.112769.

Napier, T. J., L. Wörmer, J. Wendt, A. Lückge, N. Rohlfs, and K.-U. Hinrichs (2022), Sub-Annual to Interannual Arabian Sea Upwelling, Sea Surface Temperature, and Indian Monsoon Rainfall Reconstructed Using Congruent Micrometer-Scale Climate Proxies, *Paleoceanography and Paleoclimatology*, *37*(3), e2021PA004355, doi: https://doi.org/10.1029/2021PA004355.

Napolitano, D. C., G. Alory, I. Dadou, Y. Morel, J. Jouanno, and G. Morvan (2022), Influence of the Gulf of Guinea Islands on the Atlantic Equatorial Undercurrent Circulation, *Journal of Geophysical Research: Oceans*, *127*(9), e2021JC017999, doi: https://doi.org/10.1029/2021JC017999.

Ni, J., J. Feng, R. Sun, and Y. Zhang (2022), Assessing Sea Surface Temperatures Estimated from Fused Infrared and Microwave Data, *Water*, *14*(21), 3357, doi: https://doi.org/10.3390/w14213357.

Nickford, S., J. B. Palter, K. Donohue, A. J. Fassbender, A. R. Gray, J. Long, A. J. Sutton, N. R. Bates, and Y. Takeshita (2022), Autonomous Wintertime Observations of Air-Sea Exchange in the Gulf Stream Reveal a Perfect Storm for Ocean CO2 Uptake, *Geophys. Res. Lett.*, *49*(5), e2021GL096805, doi: https://doi.org/10.1029/2021GL096805.

Nie, X., H. Liu, T. Xu, and Z. Wei (2022), Indian Ocean Subtropical Underwater and the Interannual Variability in Its Annual Subduction Rate Associated with the Southern Annular Mode, *J. Phys. Oceanogr.*, *52*(3), 383-397, doi: https://doi.org/10.1175/JPO-D-21-0191.1.

Nyadjro, E. S., B. A. K. Foli, K. A. Agyekum, G. Wiafe, and S. Tsei (2022), Seasonal Variability of Sea Surface Salinity in the NW Gulf of Guinea from SMAP Satellite, *Remote Sensing in Earth Systems Sciences*, *5*(1), 83-94, doi: https://doi.org/10.1007/s41976-021-00061-2.

Nyadjro, E. S., Z. Wang, J. Reagan, J. Cebrian, and J. F. Shriver (2022), Bio-Physical Changes in the Gulf of Mexico During the 2018 Hurricane Michael, *IEEE Geosci. Remote Sens. Lett.*, *19*, 1-5, doi: https://doi.org/10.1109/LGRS.2021.3068600.

O'Brien, T., and E. Boss (2022), Correction of Radiometry Data for Temperature Effect on Dark Current, with Application to Radiometers on Profiling Floats, *Sensors*, *22*(18), 6771, doi: https://doi.org/10.3390/s22186771.

Oke, P. R., T. Rykova, G. S. Pilo, and J. L. Lovell (2022), Estimating Argo Float Trajectories

Under Ice, *Earth and Space Science*, *9*(7), e2022EA002312, doi: https://doi.org/10.1029/2022EA002312.

Olmedo, E., et al. (2022), Increasing stratification as observed by satellite sea surface salinity measurements, *Scientific Reports*, *12*(1), 6279, doi: https://doi.org/10.1038/s41598-022-10265-1.

Osafune, S., S. Kouketsu, T. Doi, N. Sugiura, and S. Masuda (2022), A global ocean state estimation using tidally induced vertical-mixing schemes, *Ocean Model.*, *179*, 102111, doi: https://doi.org/10.1016/j.ocemod.2022.102111.

Osborne, J. J., M. J. Carrier, and H. E. Ngodock (2022), Difficulty with Sea Surface Height Assimilation When Relying on an Unrepresentative Climatology, in *Data Assimilation for Atmospheric, Oceanic and Hydrologic Applications (Vol. IV)*, edited by S. K. Park and L. Xu, pp. 439-464, Springer International Publishing, Cham, doi: https://doi.org/10.1007/978-3-030-77722-7_17.

Owens, W. B., N. Zilberman, K. S. Johnson, H. Claustre, M. Scanderbeg, S. Wijffels, and T. Suga (2022), OneArgo: A New Paradigm for Observing the Global Ocean, *Mar. Technol. Soc. J.*, *56*(3), 84-90, doi: https://doi.org/10.4031/MTSJ.56.3.8.

Panda, S. K., A. K. Mandal, B. P. Shukla, N. Jaiswal, C. M. Kishtawal, and A. K. Varma (2022), A study of rapid intensification of tropical cyclone Ockhi using C-band polarimetric radar, *Meteorology and Atmospheric Physics*, *134*(5), 86, doi: https://doi.org/10.1007/s00703-022-00921-6.

Pandey, R. S., and Y.-A. Liou (2022), Sea surface temperature (SST) and SST anomaly (SSTA) datasets over the last four decades (1977–2016) during typhoon season (May to November) in the entire Global Ocean, North Pacific Ocean, Philippine Sea, South China sea, and Eastern China Sea, *Data in Brief*, *45*, 108646, doi: https://doi.org/10.1016/j.dib.2022.108646.

Pandey, R. S., and Y.-A. Liou (2022), Typhoon strength rising in the past four decades, *Weather and Climate Extremes*, *36*, 100446, doi: https://doi.org/10.1016/j.wace.2022.100446.

Park, M.-S., S. Lee, J.-H. Ahn, S.-J. Lee, J.-K. Choi, and J.-H. Ryu (2022), Decadal Measurements of the First Geostationary Ocean Color Satellite (GOCI) Compared with MODIS and VIIRS Data, *Remote Sensing*, *14*(1), 72, doi: https://doi.org/10.3390/rs14010072.

Patel, S., M. Vithalpura, S. K. Mallick, and S. Ratheesh (2022), Impact of Initial and Boundary Conditions on Coupled Model Simulations for Bay of Bengal, *Mar. Geod.*, *45*(2), 166-193, doi: https://doi.org/10.1080/01490419.2021.2006376.

Pathirana, G., D. Wang, G. Chen, M. K. Abeyratne, and T. Priyadarshana (2022), Effect of seasonal barrier layer on mixed-layer heat budget in the Bay of Bengal, *Acta Oceanol. Sin.*, *41*(9), 38-49, doi: https://doi.org/10.1007/s13131-021-1966-0.

Patrizio, C. R., and D. W. J. Thompson (2022), Understanding the Role of Ocean Dynamics in Midlatitude Sea Surface Temperature Variability Using a Simple Stochastic Climate Model, *J. Clim.*, *35*(11), 3313-3333, doi: https://doi.org/10.1175/JCLI-D-21-0184.1.

Pauthenet, E., L. Bachelot, K. Balem, G. Maze, A. M. Tréguier, F. Roquet, R. Fablet, and P. Tandeo (2022), Four-dimensional temperature, salinity and mixed-layer depth in the Gulf Stream, reconstructed from remote-sensing and in situ observations with neural

networks, *Ocean Sci.*, *18*(4), 1221-1244, doi: https://doi.org/10.5194/os-18-1221-2022.

Peng, Q., S.-P. Xie, D. Wang, X. Huang Rui, G. Chen, Y. Shu, J.-R. Shi, and W. Liu (2022), Surface warming–induced global acceleration of upper ocean currents, *Science Advances*, *8*(16), eabj8394, doi: https://doi.org/10.1126/sciadv.abj8394.

Petit, F., J. Uitz, C. Schmechtig, C. Dimier, J. Ras, A. Poteau, M. Golbol, V. Vellucci, and H. Claustre (2022), Influence of the phytoplankton community composition on the in situ fluorescence signal: Implication for an improved estimation of the chlorophyll-a concentration from BioGeoChemical-Argo profiling floats, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.959131.

Petit, T., V. Thierry, and H. Mercier (2022), Deep through-flow in the Bight Fracture Zone, *Ocean Sci.*, *18*(4), 1055-1071, doi: https://doi.org/10.5194/os-18-1055-2022.

Petrenko, B., V. Pryamitsyn, A. Ignatov, O. Jonasson, and Y. Kihai (2022), AVHRR GAC Sea Surface Temperature Reanalysis Version 2, *Remote Sensing*, *14*(13), 3165, doi: https://doi.org/10.3390/rs14133165.

Picheral, M., et al. (2022), The Underwater Vision Profiler 6: an imaging sensor of particle size spectra and plankton, for autonomous and cabled platforms, *Limnology and Oceanography: Methods*, *20*(2), 115-129, doi: https://doi.org/10.1002/lom3.10475.

Pinault, J.-L. (2022), A Review of the Role of the Oceanic Rossby Waves in Climate Variability, *Journal of Marine Science and Engineering*, *10*(4), 493, doi: https://doi.org/10.3390/jmse10040493.

Prakash, P., S. Prakash, M. Ravichandran, N. A. Kumar, and T. V. S. U. Bhaskar (2022), On anomalously high sub-surface dissolved oxygen in the Indian sector of the Southern Ocean, *J. Oceanogr.*, *78*(5), 369-380, doi: https://doi.org/10.1007/s10872-022-00644-7.

Prasad, S. J., T. M. B. Nair, S. Joseph, and P. C. Mohanty (2022), Simulating the spatial and temporal distribution of oil spill over the coral reef environs along the southeast coast of Mauritius: A case study on MV Wakashio vessel wreckage, August 2020, *Journal of Earth System Science*, *131*(1), 42, doi: https://doi.org/10.1007/s12040-021-01791-z.

Pravallika, M. S., S. Vasavi, and S. P. Vighneshwar (2022), Prediction of temperature anomaly in Indian Ocean based on autoregressive long short-term memory neural network, *Neural Computing and Applications*, *34*(10), 7537-7545, doi: https://doi.org/10.1007/s00521-021-06878-8.

Prend, C. J., A. R. Gray, L. D. Talley, S. T. Gille, F. A. Haumann, K. S. Johnson, S. C. Riser, I. Rosso, J. Sauvé, and J. L. Sarmiento (2022), Indo-Pacific Sector Dominates Southern Ocean Carbon Outgassing, *Glob. Biogeochem. Cycle*, *36*(7), e2021GB007226, doi: https://doi.org/10.1029/2021GB007226.

Prend, C. J., J. M. Hunt, M. R. Mazloff, S. T. Gille, and L. D. Talley (2022), Controls on the Boundary Between Thermally and Non-Thermally Driven pCO2 Regimes in the South Pacific, *Geophys. Res. Lett.*, *49*(9), e2021GL095797, doi: https://doi.org/10.1029/2021GL095797.

Qi, J., C. Liu, J. Chi, D. Li, L. Gao, and B. Yin (2022), An Ensemble-Based Machine Learning Model for Estimation of Subsurface Thermal Structure in the South China Sea,

Remote Sensing, *14*(13), 3207, doi: https://doi.org/10.3390/rs14133207.
Qian, A., S. Yi, F. Li, B. Su, G. Sun, and X. Liu (2022), Evaluation of the Consistency of Three GRACE Gap-Filling Data, *Remote Sensing*, *14*(16), 3916, doi: https://doi.org/10.3390/rs14163916.
Qiao, M., A. Cao, J. Song, Y. Pan, and H. He (2022), Enhanced Turbulent Mixing in the Upper Ocean Induced by Super Typhoon Goni (2015), *Remote Sensing*, *14*(10), 2300, doi: https://doi.org/10.3390/rs14102300.
Qin, Q., Z. Wang, C. Liu, and C. Cheng (2022), Open-Ocean Polynyas in the Cooperation Sea, Antarctica, *J. Phys. Oceanogr.*, *52*(7), 1363-1381, doi: https://doi.org/10.1175/JPO-D-21-0197.1.
Qiu, C., Z. Yi, D. Su, Z. Wu, H. Liu, P. Lin, Y. He, and D. Wang (2022), Cross-Slope Heat and Salt Transport Induced by Slope Intrusion Eddy's Horizontal Asymmetry in the Northern South China Sea, *Journal of Geophysical Research: Oceans*, *127*(9), e2022JC018406, doi: https://doi.org/10.1029/2022JC018406.
Qu, B., A. J. Gabric, and R. Jackson (2022), Modeling contemporary and future dimethylsulfide flux in the eastern China marginal seas, *Cont. Shelf Res.*, *237*, 104677, doi: https://doi.org/10.1016/j.csr.2022.104677.
Qu, K., B. Zou, and J. Zhou (2022), Rapid environmental assessment in the South China Sea: Improved inversion of sound speed profile using remote sensing data, *Acta Oceanol. Sin.*, *41*(7), 78-83, doi: https://doi.org/10.1007/s13131-022-2032-2.
Qu, Y., S. Wang, Z. Jing, H. Wang, and L. Wu (2022), Spatial Structure of Vertical Motions and Associated Heat Flux Induced by Mesoscale Eddies in the Upper Kuroshio-Oyashio Extension, *Journal of Geophysical Research: Oceans*, *127*(10), e2022JC018781, doi: https://doi.org/10.1029/2022JC018781.
Rainville, L., C. M. Lee, K. Arulananthan, S. U. P. Jinadasa, H. J. S. Fernando, W. N. C. Priyadarshani, and H. Wijesekera (2022), Water Mass Exchanges between the Bay of Bengal and Arabian Sea from Multiyear Sampling with Autonomous Gliders, *J. Phys. Oceanogr.*, *52*(10), 2377-2396, doi: https://doi.org/10.1175/JPO-D-21-0279.1.
Reed, E. V., D. M. Thompson, and K. J. Anchukaitis (2022), Coral-Based Sea Surface Salinity Reconstructions and the Role of Observational Uncertainties in Inferred Variability and Trends, *Paleoceanography and Paleoclimatology*, *37*(6), e2021PA004371, doi: https://doi.org/10.1029/2021PA004371.
Reichl, B. G., A. Adcroft, S. M. Griffies, and R. Hallberg (2022), A Potential Energy Analysis of Ocean Surface Mixed Layers, *Journal of Geophysical Research: Oceans*, *127*(7), e2021JC018140, doi: https://doi.org/10.1029/2021JC018140.
Ren, Q., Y.-O. Kwon, J. Yang, R. X. Huang, Y. Li, and F. Wang (2022), Increasing Inhomogeneity of the Global Oceans, *Geophys. Res. Lett.*, *49*(12), e2021GL097598, doi: https://doi.org/10.1029/2021GL097598.
Ren, Q., F. Yu, F. Nan, Y. Li, J. Wang, Y. Liu, and Z. Chen (2022), Effects of mesoscale eddies on intraseasonal variability of intermediate water east of Taiwan, *Scientific Reports*, *12*(1), 9182, doi: https://doi.org/10.1038/s41598-022-13274-2.
Rhomad, H., K. Khalil, R. Neves, J. Sobrinho, J. M. Dias, and K. Elkalay (2022), Three-dimensional hydrodynamic modelling of the Moroccan Atlantic coast: A case study of Agadir bay, *Journal of Sea Research*, *188*, 102272, doi:

https://doi.org/10.1016/j.seares.2022.102272.
Rigual-Hernández, A. S., et al. (2022), Influence of environmental variability and Emiliania huxleyi ecotypes on alkenone-derived temperature reconstructions in the subantarctic Southern Ocean, *Science of The Total Environment*, *812*, 152474, doi: https://doi.org/10.1016/j.scitotenv.2021.152474.
Ringler, A. T., et al. (2022), Achievements and Prospects of Global Broadband Seismographic Networks After 30 Years of Continuous Geophysical Observations, *Reviews of Geophysics*, *60*(3), e2021RG000749, doi: https://doi.org/10.1029/2021RG000749.
Roberts, S. M., P. N. Halpin, and J. S. Clark (2022), Jointly modeling marine species to inform the effects of environmental change on an ecological community in the Northwest Atlantic, *Scientific Reports*, *12*(1), 132, doi: https://doi.org/10.1038/s41598-021-04110-0.
Roemmich, D., W. S. Wilson, W. J. Gould, W. B. Owens, P.-Y. Le Traon, H. J. Freeland, B. A. King, S. Wijffels, P. J. H. Sutton, and N. Zilberman (2022), Chapter 4 - The Argo Program, in *Partnerships in Marine Research*, edited by G. Auad and F. K. Wiese, pp. 53-69, Elsevier, doi: https://doi.org/10.1016/B978-0-323-90427-8.00004-6.
Rossi, G. B., A. Cannata, A. Iengo, M. Migliaccio, G. Nardone, V. Piscopo, and E. Zambianchi (2022), Measurement of Sea Waves, *Sensors*, *22*(1), 78, doi: https://doi.org/10.3390/s22010078.
Roussenov, V. M., R. G. Williams, M. S. Lozier, N. P. Holliday, and D. M. Smith (2022), Historical Reconstruction of Subpolar North Atlantic Overturning and Its Relationship to Density, *Journal of Geophysical Research: Oceans*, *127*(6), e2021JC017732, doi: https://doi.org/10.1029/2021JC017732.
Rudels, B. (2022), Chapter 5 - The circulation and transformations of Atlantic water in the Arctic Mediterranean Sea, in *The Physical Oceanography of the Arctic Mediterranean Sea*, edited by B. Rudels, pp. 211-276, Elsevier, doi: https://doi.org/10.1016/B978-0-12-816930-8.00010-4.
Rykova, T., and P. R. Oke (2022), Stacking of EAC Eddies Observed From Argo, *Journal of Geophysical Research: Oceans*, *127*(8), e2022JC018679, doi: https://doi.org/10.1029/2022JC018679.
Sakamoto, T., M. Takahashi, M.-T. Chung, R. R. Rykaczewski, K. Komatsu, K. Shirai, T. Ishimura, and T. Higuchi (2022), Contrasting life-history responses to climate variability in eastern and western North Pacific sardine populations, *Nature Communications*, *13*(1), 5298, doi: https://doi.org/10.1038/s41467-022-33019-z.
Sambe, F., and T. Suga (2022), Unsupervised Clustering of Argo Temperature and Salinity Profiles in the Mid-Latitude Northwest Pacific Ocean and Revealed Influence of the Kuroshio Extension Variability on the Vertical Structure Distribution, *Journal of Geophysical Research: Oceans*, *127*(3), e2021JC018138, doi: https://doi.org/10.1029/2021JC018138.
Sammartino, M., S. Aronica, R. Santoleri, and B. Buongiorno Nardelli (2022), Retrieving Mediterranean Sea Surface Salinity Distribution and Interannual Trends from Multi-Sensor Satellite and In Situ Data, *Remote Sensing*, *14*(10), 2502, doi: https://doi.org/10.3390/rs14102502.
Sampson, C. R., J. Cummings, J. A. Knaff, M. DeMaria, and E. A. Serra (2022), An Upper Ocean

Thermal Field Metrics Dataset, *Meteorology*, *1*(3), 327-340, doi: https://doi.org/10.3390/meteorology1030021.
Sasaki, H., B. Qiu, P. Klein, M. Nonaka, and Y. Sasai (2022), Interannual Variations of Submesoscale Circulations in the Subtropical Northeastern Pacific, *Geophys. Res. Lett.*, *49*(7), e2021GL097664, doi: https://doi.org/10.1029/2021GL097664.
Sato, T., T. Shiozaki, F. Hashihama, M. Sato, A. Murata, K. Sasaoka, S.-i. Umeda, and K. Takahashi (2022), Low Nitrogen Fixation Related to Shallow Nitracline Across the Eastern Indian Ocean, *Journal of Geophysical Research: Biogeosciences*, *127*(10), e2022JG007104, doi: https://doi.org/10.1029/2022JG007104.
Savita, A., et al. (2022), Quantifying Spread in Spatiotemporal Changes of Upper-Ocean Heat Content Estimates: An Internationally Coordinated Comparison, *J. Clim.*, *35*(2), 851-875, doi: https://doi.org/10.1175/JCLI-D-20-0603.1.
Schaap, D. M. A., A. Novellino, M. Fichaut, and G. M. R. Manzella (2022), Chapter Three - Data management infrastructures and their practices in Europe, in *Ocean Science Data*, edited by G. Manzella and A. Novellino, pp. 131-193, Elsevier, doi: https://doi.org/10.1016/B978-0-12-823427-3.00007-4.
Schallenberg, C., R. F. Strzepek, S. Bestley, B. Wojtasiewicz, and T. W. Trull (2022), Iron Limitation Drives the Globally Extreme Fluorescence/Chlorophyll Ratios of the Southern Ocean, *Geophys. Res. Lett.*, *49*(12), e2021GL097616, doi: https://doi.org/10.1029/2021GL097616.
Schönau, M. C., D. L. Rudnick, G. Gopalakrishnan, B. D. Cornuelle, and B. Qiu (2022), Mean, Annual, and Interannual Circulation and Volume Transport in the Western Tropical North Pacific From the Western Pacific Ocean State Estimates (WPOSE), *Journal of Geophysical Research: Oceans*, *127*(6), e2021JC018213, doi: https://doi.org/10.1029/2021JC018213.
Seelanki, V., T. Nigam, and V. Pant (2022), Inconsistent response of biophysical characteristics in the western Bay of Bengal associated with positive Indian Ocean dipole, *Oceanologia*, *64*(4), 595-614, doi: https://doi.org/10.1016/j.oceano.2022.04.003.
Semper, S., K. Våge, R. S. Pickart, S. Jónsson, and H. Valdimarsson (2022), Evolution and Transformation of the North Icelandic Irminger Current Along the North Iceland Shelf, *Journal of Geophysical Research: Oceans*, *127*(3), e2021JC017700, doi: https://doi.org/10.1029/2021JC017700.
Sen, R., S. Pandey, S. Dandapat, P. A. Francis, and A. Chakraborty (2022), A numerical study on seasonal transport variability of the North Indian Ocean boundary currents using Regional Ocean Modeling System (ROMS), *J. Oper. Oceanogr.*, *15*(1), 32-51, doi: https://doi.org/10.1080/1755876X.2020.1846266.
Senjyu, T. (2022), Changes in Mid-Depth Water Mass Ventilation in the Japan Sea Deduced From Long-Term Spatiotemporal Variations of Warming Trends, *Frontiers in Marine Science*, *8*, doi: https://doi.org/10.3389/fmars.2021.766042.
Sévellec, F., A. C. d. Verdière, and N. Kolodziejczyk (2022), Estimation of Horizontal Turbulent Diffusivity from Deep Argo Float Displacements, *J. Phys. Oceanogr.*, *52*(7), 1509-1529, doi: https://doi.org/10.1175/JPO-D-21-0150.1.
Shen, M., Y. Chen, P. Wang, and W. Zhang (2022), Assimilating satellite SST/SSH and in-situ

T/S profiles with the Localized Weighted Ensemble Kalman Filter, *Acta Oceanol. Sin.*, *41*(2), 26-40, doi: https://doi.org/10.1007/s13131-021-1903-2.

Shi, H. Y., L. Du, and X. B. Ni (2022), Salinity Variability Modes in the Pacific Ocean From the Perspectives of the Interdecadal Pacific Oscillation and Global Warming, *Journal of Geophysical Research: Oceans*, *127*(7), e2021JC018092, doi: https://doi.org/10.1029/2021JC018092.

Shu, C., P. Xiu, X. Xing, G. Qiu, W. Ma, R. J. W. Brewin, and S. Ciavatta (2022), Biogeochemical Model Optimization by Using Satellite-Derived Phytoplankton Functional Type Data and BGC-Argo Observations in the Northern South China Sea, *Remote Sensing*, *14*(5), 1297, doi: https://doi.org/10.3390/rs14051297.

Shulman, I., J. H. Cohen, M. A. Moline, S. Anderson, E. J. Metzger, and C. Rowley (2022), Modeling studies of the bioluminescence potential dynamics in a high Arctic fjord during polar night, *Ocean Dyn.*, *72*(1), 37-48, doi: https://doi.org/10.1007/s10236-021-01491-8.

Silver, A., A. Gangopadhyay, G. Gawarkiewicz, M. Andres, G. Flierl, and J. Clark (2022), Spatial Variability of Movement, Structure, and Formation of Warm Core Rings in the Northwest Atlantic Slope Sea, *Journal of Geophysical Research: Oceans*, *127*(8), e2022JC018737, doi: https://doi.org/10.1029/2022JC018737.

Simanjuntak, F., and T.-H. Lin (2022), Monsoon Effects on Chlorophyll-a, Sea Surface Temperature, and Ekman Dynamics Variability along the Southern Coast of Lesser Sunda Islands and Its Relation to ENSO and IOD Based on Satellite Observations, *Remote Sensing*, *14*(7), 1682, doi: https://doi.org/10.3390/rs14071682.

Simoncelli, S., et al. (2022), Chapter Four - A collaborative framework among data producers, managers, and users, in *Ocean Science Data*, edited by G. Manzella and A. Novellino, pp. 197-280, Elsevier, doi: https://doi.org/10.1016/B978-0-12-823427-3.00001-3.

Singh, V. K., and M. K. Roxy (2022), A review of ocean-atmosphere interactions during tropical cyclones in the north Indian Ocean, *Earth-Science Reviews*, *226*, 103967, doi: https://doi.org/10.1016/j.earscirev.2022.103967.

Skákala, J., et al. (2022), The impact of ocean biogeochemistry on physics and its consequences for modelling shelf seas, *Ocean Model.*, *172*, 101976, doi: https://doi.org/10.1016/j.ocemod.2022.101976.

Small, R. J., F. O. Bryan, and S. P. Bishop (2022), Surface Water Mass Transformation in the Southern Ocean: The Role of Eddies Revisited, *J. Phys. Oceanogr.*, *52*(5), 789-804, doi: https://doi.org/10.1175/JPO-D-21-0087.1.

Smith, G. C., and A.-S. Fortin (2022), Verification of eddy properties in operational oceanographic analysis systems, *Ocean Model.*, *172*, 101982, doi: https://doi.org/10.1016/j.ocemod.2022.101982.

Soares, S. M., S. T. Gille, T. K. Chereskin, E. Firing, J. Hummon, and C. B. Rocha (2022), Transition from Balanced to Unbalanced Motion in the Eastern Tropical Pacific, *J. Phys. Oceanogr.*, *52*(8), 1775-1795, doi: https://doi.org/10.1175/JPO-D-21-0139.1.

Sohail, T., J. D. Zika, D. B. Irving, and J. A. Church (2022), Observed poleward freshwater transport since 1970, *Nature*, *602*(7898), 617-622, doi: https://doi.org/10.1038/s41586-021-04370-w.

Song, T., W. Wei, F. Meng, J. Wang, R. Han, and D. Xu (2022), Inversion of Ocean Subsurface Temperature and Salinity Fields Based on Spatio-Temporal Correlation, *Remote Sensing*, *14*(11), 2587, doi: https://doi.org/10.3390/rs14112587.

Song, Y., J. Yang, C. Wang, and D. Sun (2022), Spatial patterns and environmental associations of deep scattering layers in the northwestern subtropical Pacific Ocean, *Acta Oceanol. Sin.*, *41*(7), 139-152, doi: https://doi.org/10.1007/s13131-021-1973-1.

Sridevi, B., and V. V. S. S. Sarma (2022), Enhanced Atmospheric Pollutants Strengthened Winter Convective Mixing and Phytoplankton Blooms in the Northern Arabian Sea, *Journal of Geophysical Research: Biogeosciences*, *127*(10), e2021JG006527, doi: https://doi.org/10.1029/2021JG006527.

Srinivasan, A., T. M. Chin, E. P. Chassignet, M. Iskandarani, and N. Groves (2022), A Statistical Interpolation Code for Ocean Analysis and Forecasting, *J. Atmos. Ocean. Technol.*, *39*(3), 367-386, doi: https://doi.org/10.1175/JTECH-D-21-0033.1.

Stanev, E. V., K. Wahle, and J. Staneva (2022), The Synergy of Data From Profiling Floats, Machine Learning and Numerical Modeling: Case of the Black Sea Euphotic Zone, *Journal of Geophysical Research: Oceans*, *127*(8), e2021JC018012, doi: https://doi.org/10.1029/2021JC018012.

Steffen, K., et al. (2022), Oceanographic setting influences the prokaryotic community and metabolome in deep-sea sponges, *Scientific Reports*, *12*(1), 3356, doi: https://doi.org/10.1038/s41598-022-07292-3.

Steinberg, J. M., S. T. Cole, K. Drushka, and R. P. Abernathey (2022), Seasonality of the Mesoscale Inverse Cascade as Inferred from Global Scale-Dependent Eddy Energy Observations, *J. Phys. Oceanogr.*, *52*(8), 1677-1691, doi: https://doi.org/10.1175/JPO-D-21-0269.1.

Storto, A., L. Cheng, and C. Yang (2022), Revisiting the 2003–18 Deep Ocean Warming through Multiplatform Analysis of the Global Energy Budget, *J. Clim.*, *35*(14), 4701-4717, doi: https://doi.org/10.1175/JCLI-D-21-0726.1.

Su, H., J. Jiang, A. Wang, W. Zhuang, and X.-H. Yan (2022), Subsurface Temperature Reconstruction for the Global Ocean from 1993 to 2020 Using Satellite Observations and Deep Learning, *Remote Sensing*, *14*(13), 3198, doi: https://doi.org/10.3390/rs14133198.

Su, J., C. Schallenberg, T. Rohr, P. G. Strutton, and H. E. Phillips (2022), New Estimates of Southern Ocean Annual Net Community Production Revealed by BGC-Argo Floats, *Geophys. Res. Lett.*, *49*(15), e2021GL097372, doi: https://doi.org/10.1029/2021GL097372.

Sugimoto, S. (2022), Decreasing Wintertime Mixed-Layer Depth in the Northwestern North Pacific Subtropical Gyre, *Geophys. Res. Lett.*, *49*(2), e2021GL095091, doi: https://doi.org/10.1029/2021GL095091.

Sun, D., M. Yu, and K. Cai (2022), Inversion of ocean sound speed profiles from travel time measurements using a ray-gradient-enhanced surrogate model, *Remote Sensing Letters*, *13*(9), 888-897, doi: https://doi.org/10.1080/2150704X.2022.2104140.

Svishchev, S. V., and A. A. Kubryakov (2022), Impact of Winter Cooling on the Interannual Variability in the Vertical Oxygen Distribution in the Black Sea: Evidence from Bio-Argo Floats, *Oceanology*, *62*(2), 143-154, doi:

https://doi.org/10.1134/S0001437022020163.
Taillandier, V., et al. (2022), Sources of the Levantine Intermediate Water in Winter 2019, *Journal of Geophysical Research: Oceans*, *127*(6), e2021JC017506, doi: https://doi.org/10.1029/2021JC017506.
Tan, S., J. Shi, G. Wang, X. Xing, and H. Lü (2022), A case study of the westward transport of Chorophyll-a entrained by ocean eddies during a tropical cyclone, *Regional Studies in Marine Science*, *52*, 102256, doi: https://doi.org/10.1016/j.rsma.2022.102256.
Tan, Z., B. Zhang, X. Wu, M. Dong, and L. Cheng (2022), Quality control for ocean observations: From present to future, *Sci. China Earth Sci.*, *65*(2), 215-233, doi: https://doi.org/10.1007/s11430-021-9846-7.
Tedesco, P., J. Gula, P. Penven, and C. Ménesguen (2022), Mesoscale Eddy Kinetic Energy Budgets and Transfers between Vertical Modes in the Agulhas Current, *J. Phys. Oceanogr.*, *52*(4), 677-704, doi: https://doi.org/10.1175/JPO-D-21-0110.1.
Tesdal, J.-E., H. W. Ducklow, J. I. Goes, and I. Yashayaev (2022), Recent nutrient enrichment and high biological productivity in the Labrador Sea is tied to enhanced winter convection, *Prog. Oceanogr.*, *206*, 102848, doi: https://doi.org/10.1016/j.pocean.2022.102848.
Thomas, E. E., and M. Müller (2022), Characterizing vertical upper ocean temperature structures in the European Arctic through unsupervised machine learning, *Ocean Model.*, *177*, 102092, doi: https://doi.org/10.1016/j.ocemod.2022.102092.
Thoppil, P. G., A. J. Wallcraft, and T. G. Jensen (2022), Winter Convective Mixing in the Northern Arabian Sea during Contrasting Monsoons, *J. Phys. Oceanogr.*, *52*(3), 313-327, doi: https://doi.org/10.1175/JPO-D-21-0144.1.
Thoral, F., S. Montie, M. S. Thomsen, L. W. Tait, M. H. Pinkerton, and D. R. Schiel (2022), Unravelling seasonal trends in coastal marine heatwave metrics across global biogeographical realms, *Scientific Reports*, *12*(1), 7740, doi: https://doi.org/10.1038/s41598-022-11908-z.
Thorpe, S. E., and E. J. Murphy (2022), Spatial and temporal variability and connectivity of the marine environment of the South Sandwich Islands, Southern Ocean, *Deep Sea Research Part II: Topical Studies in Oceanography*, *198*, 105057, doi: https://doi.org/10.1016/j.dsr2.2022.105057.
Thouvenin-Masson, C., J. Boutin, J.-L. Vergely, G. Reverdin, A. C. H. Martin, S. Guimbard, N. Reul, R. Sabia, R. Catany, and O. Hembise Fanton-d'Andon (2022), Satellite and In Situ Sampling Mismatches: Consequences for the Estimation of Satellite Sea Surface Salinity Uncertainties, *Remote Sensing*, *14*(8), 1878, doi: https://doi.org/10.3390/rs14081878.
Tilliette, C., et al. (2022), Dissolved Iron Patterns Impacted by Shallow Hydrothermal Sources Along a Transect Through the Tonga-Kermadec Arc, *Glob. Biogeochem. Cycle*, *36*(7), e2022GB007363, doi: https://doi.org/10.1029/2022GB007363.
Toualy, E., B. Kouacou, and A. Aman (2022), Influence of Wind and Surface Buoyancy Flux on the Variability of the Oceanic Mixed Layer Depth in the Northern Gulf of Guinea Coastal Upwelling, *Thalassas: An International Journal of Marine Sciences*, *38*(1), 599-608, doi: https://doi.org/10.1007/s41208-021-00358-5.
Trossman, D. S., and R. H. Tyler (2022), A Prototype for Remote Monitoring of Ocean Heat

Content Anomalies, *J. Atmos. Ocean. Technol.*, *39*(5), 667-688, doi: https://doi.org/10.1175/JTECH-D-21-0037.1.

Trossman, D. S., C. B. Whalen, T. W. N. Haine, A. F. Waterhouse, A. T. Nguyen, A. Bigdeli, M. Mazloff, and P. Heimbach (2022), Tracer and observationally derived constraints on diapycnal diffusivities in an ocean state estimate, *Ocean Sci.*, *18*(3), 729-759, doi: https://doi.org/10.5194/os-18-729-2022.

Tuchen, F. P., P. Brandt, J. F. Lübbecke, and R. Hummels (2022), Transports and Pathways of the Tropical AMOC Return Flow From Argo Data and Shipboard Velocity Measurements, *Journal of Geophysical Research: Oceans*, *127*(2), e2021JC018115, doi: https://doi.org/10.1029/2021JC018115.

Ueno, H., M. Oda, K. Yasui, R. Dobashi, and H. Mitsudera (2022), Global Distribution and Interannual Variation in the Winter Halocline, *J. Phys. Oceanogr.*, *52*(4), 665-676, doi: https://doi.org/10.1175/JPO-D-21-0056.1.

Ushijima, Y., and Y. Yoshikawa (2022), Nonlinearly interacting entrainment due to shear and convection in the surface ocean, *Scientific Reports*, *12*(1), 9899, doi: https://doi.org/10.1038/s41598-022-14098-w.

Våge, K., S. Semper, H. Valdimarsson, S. Jónsson, R. S. Pickart, and G. W. K. Moore (2022), Water mass transformation in the Iceland Sea: Contrasting two winters separated by four decades, *Deep Sea Research Part I: Oceanographic Research Papers*, *186*, 103824, doi: https://doi.org/10.1016/j.dsr.2022.103824.

Valsala, V., A. G. Prajeesh, and S. Singh (2022), Numerical Investigation of Tropical Indian Ocean Barrier Layer Variability, *Journal of Geophysical Research: Oceans*, *127*(10), e2022JC018637, doi: https://doi.org/10.1029/2022JC018637.

van der Boog, C. G., H. A. Dijkstra, J. D. Pietrzak, and C. A. Katsman (2022), Spatial Variations of Antarctic Intermediate Water in the Caribbean Sea Due To Vertical Mixing Along Its Path, *Geophys. Res. Lett.*, *49*(3), e2021GL095977, doi: https://doi.org/10.1029/2021GL095977.

van Wijk, E. M., S. R. Rintoul, L. O. Wallace, N. Ribeiro, and L. Herraiz-Borreguero (2022), Vulnerability of Denman Glacier to Ocean Heat Flux Revealed by Profiling Float Observations, *Geophys. Res. Lett.*, *49*(18), e2022GL100460, doi: https://doi.org/10.1029/2022GL100460.

Vargas-Yáñez, M., F. Moya, R. Balbín, R. Santiago, E. Ballesteros, R. F. Sánchez-Leal, P. Romero, and M. C. García-Martínez (2022), Seasonal and Long-Term Variability of the Mixed Layer Depth and its Influence on Ocean Productivity in the Spanish Gulf of Cádiz and Mediterranean Sea, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.901893.

Vincent, F., F. M. Ibarbalz, and C. Bowler (2022), Chapter 15 - Global marine phytoplankton revealed by the Tara Oceans expedition, in *Advances in Phytoplankton Ecology*, edited by L. A. Clementson, R. S. Eriksen and A. Willis, pp. 531-561, Elsevier, doi: https://doi.org/10.1016/B978-0-12-822861-6.00024-8.

von Schuckman, K., and P.-Y. LeTraon (2022), Copernicus Ocean State Report, issue 6, *J. Oper. Oceanogr.*, *15*(sup1), 1-220, doi: https://doi.org/10.1080/1755876X.2022.2095169.

Voronina, N. (2022), Variants of Visualization of the Marine Forecast on the Examples of the

Crimean Basin of the Black Sea, in *Processes in GeoMedia—Volume V*, edited by T. Chaplina, pp. 233-242, Springer International Publishing, Cham, doi: https://doi.org/10.1007/978-3-030-85851-3_26.

Wang, F., Y. Shen, Q. Chen, and J. Geng (2022), Revisiting sea-level budget by considering all potential impact factors for global mean sea-level change estimation, *Scientific Reports*, *12*(1), 10251, doi: https://doi.org/10.1038/s41598-022-14173-2.

Wang, J., Y. Cheng, H. Lu, X. Chen, L. Lin, and J. Zhang (2022), Water Temperature at Different Depths Affects the Distribution of Neon Flying Squid (Ommastrephes bartramii) in the Northwest Pacific Ocean, *Frontiers in Marine Science*, *8*, doi: https://doi.org/10.3389/fmars.2021.741620.

Wang, J., W. Sun, and J. Zhang (2022), Error Characterization of Satellite SSS Products Based on Extended Collocation Analysis, *IEEE Trans. Geosci. Remote Sensing*, *60*, 1-11, doi: https://doi.org/10.1109/TGRS.2021.3107840.

Wang, Q., C. Pang, and C. Dong (2022), Role of submesoscale processes in the isopycnal mixing associated with subthermocline eddies in the Philippine Sea, *Deep Sea Research Part II: Topical Studies in Oceanography*, *202*, 105148, doi: https://doi.org/10.1016/j.dsr2.2022.105148.

Wang, R., F. Nan, F. Yu, and B. Wang (2022), Subantarctic Mode Water Variations in the Three Southern Hemisphere Ocean Basins During 2004–2019, *Journal of Geophysical Research: Oceans*, *127*(7), e2021JC017906, doi: https://doi.org/10.1029/2021JC017906.

Wang, T., F. Chen, S. Zhang, J. Pan, A. T. Devlin, H. Ning, and W. Zeng (2022), Physical and Biochemical Responses to Sequential Tropical Cyclones in the Arabian Sea, *Remote Sensing*, *14*(3), 529, doi: https://doi.org/10.3390/rs14030529.

Wang, T., Y. Du, and M. Wang (2022), Overlooked Current Estimation Biases Arising from the Lagrangian Argo Trajectory Derivation Method, *J. Phys. Oceanogr.*, *52*(1), 3-19, doi: https://doi.org/10.1175/JPO-D-20-0287.1.

Wang, T., H. Zhang, L. Gao, and L. Zhu (2022), Comparison of physical and biological responses to tropical cyclones between the low and middle latitude zones of the western North Pacific, *Regional Studies in Marine Science*, *55*, 102535, doi: https://doi.org/10.1016/j.rsma.2022.102535.

Wang, X., C. Liu, A. Köhl, W. Geng, F. Wang, and D. Stammer (2022), The adjoint-based Two Oceans One Sea State Estimate (TOOSSE), *Journal of Oceanology and Limnology*, *40*(1), 1-21, doi: https://doi.org/10.1007/s00343-021-0439-9.

Wang, Y., K. J. Heywood, D. P. Stevens, and G. M. Damerell (2022), Seasonal extrema of sea surface temperature in CMIP6 models, *Ocean Sci.*, *18*(3), 839-855, doi: https://doi.org/10.5194/os-18-839-2022.

Wang, Y., H. Liu, Z. Yu, P. Lin, and M. Ding (2022), Simulated sea levels during 1948–2009 in a global ocean-sea ice model for OMIP, *Deep Sea Research Part II: Topical Studies in Oceanography*, *199*, 105082, doi: https://doi.org/10.1016/j.dsr2.2022.105082.

Wang, Y., T. Qu, Y. Luo, and R. A. Fine (2022), An Anti-Phase Relationship Between the Subtropical Underwater and Eastern Subtropical Mode Water in the South Pacific During 2004–2020, *Geophys. Res. Lett.*, *49*(2), e2021GL096601, doi: https://doi.org/10.1029/2021GL096601.

Wang, Z., X. Shi, and H. Huang (2022), Observation of physical oceanography at the Y3 seamount (Yap Arc) in winter 2014, *Journal of Oceanology and Limnology*, *40*(4), 1314-1332, doi: https://doi.org/10.1007/s00343-021-1164-0.

Weis, J., C. Schallenberg, Z. Chase, A. R. Bowie, B. Wojtasiewicz, M. M. G. Perron, M. D. Mallet, and P. G. Strutton (2022), Southern Ocean Phytoplankton Stimulated by Wildfire Emissions and Sustained by Iron Recycling, *Geophys. Res. Lett.*, *49*(11), e2021GL097538, doi: https://doi.org/10.1029/2021GL097538.

Wiese, F. K., G. Auad, E. K. Marino, and M. G. Briscoe (2022), Chapter 10 - Lessons learned from nine partnerships in marine research, in *Partnerships in Marine Research*, edited by G. Auad and F. K. Wiese, pp. 167-181, Elsevier, doi: https://doi.org/10.1016/B978-0-323-90427-8.00010-1.

Wu, B., L. Xu, and X. Lin (2022), Decadal to Multidecadal Variability of the Western North Pacific Subtropical Front and Countercurrent, *Journal of Geophysical Research: Oceans*, *127*(2), e2021JC018059, doi: https://doi.org/10.1029/2021JC018059.

Wu, J., J. He, and G. Christakos (2022), Chapter 6 - Modern geostatistics, in *Quantitative Analysis and Modeling of Earth and Environmental Data*, edited by J. Wu, J. He and G. Christakos, pp. 213-266, Elsevier, doi: https://doi.org/10.1016/B978-0-12-816341-2.00013-7.

Wu, J., J. He, and G. Christakos (2022), Chapter 9 - Chronotopologic BME estimation, in *Quantitative Analysis and Modeling of Earth and Environmental Data*, edited by J. Wu, J. He and G. Christakos, pp. 345-383, Elsevier, doi: https://doi.org/10.1016/B978-0-12-816341-2.00015-0.

Wu, K., H. Cao, and G. Liao (2022), Submesoscale frontal waves and instabilities driven by sheared flows, *Deep Sea Research Part II: Topical Studies in Oceanography*, *202*, 105145, doi: https://doi.org/10.1016/j.dsr2.2022.105145.

Wu, R., L. Jia, C. Li, Y. Liu, B. Han, and D. Chen (2022), Impact of Horizontal Resolution (Submesoscale Permitting vs. Mesoscale Resolving) on Ocean Dynamic Features in the South China Sea, *Earth and Space Science*, *9*(10), e2022EA002448, doi: https://doi.org/10.1029/2022EA002448.

Wu, Y., D. C. E. Bakker, E. P. Achterberg, A. N. Silva, D. D. Pickup, X. Li, S. Hartman, D. Stappard, D. Qi, and T. Tyrrell (2022), Integrated analysis of carbon dioxide and oxygen concentrations as a quality control of ocean float data, *Communications Earth & Environment*, *3*(1), 92, doi: https://doi.org/10.1038/s43247-022-00421-w.

Wu, Y., and D. Qi (2022), Inconsistency between ship- and Argo float-based pCO2 at the intense upwelling region of the Drake Passage, Southern Ocean, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.1002398.

Xia, C., X. Ge, H. LÜ, H. Zhang, X. Xing, and Y. Cui (2022), A phytoplankton bloom with a cyclonic eddy enhanced by the tropical cyclone Phethai in eastern Sir Lanka, *Regional Studies in Marine Science*, *51*, 102217, doi: https://doi.org/10.1016/j.rsma.2022.102217.

Xia, Q., C. Dong, Y. He, G. Li, and J. Dong (2022), Lagrangian Study of Several Long-Lived Agulhas Rings, *J. Phys. Oceanogr.*, *52*(6), 1049-1072, doi: https://doi.org/10.1175/JPO-D-21-0079.1.

Xiao, C., X. Tong, D. Li, X. Chen, Q. Yang, X. Xv, H. Lin, and M. Huang (2022), Prediction of

long lead monthly three-dimensional ocean temperature using time series gridded Argo data and a deep learning method, *International Journal of Applied Earth Observation and Geoinformation*, *112*, 102971, doi: https://doi.org/10.1016/j.jag.2022.102971.

Xie, Y., Q. Wang, L. Zeng, J. Chen, and Y. He (2022), Winter–Summer Transition in the Southern South China Sea Western Boundary Current, *J. Phys. Oceanogr.*, *52*(11), 2669-2686, doi: https://doi.org/10.1175/JPO-D-21-0282.1.

Xing, H., W. Wang, D. Wang, and K. Xu (2022), Roles of Equatorial Ocean Currents in Sustaining the Indian Ocean Dipole Peak, *Journal of Ocean University of China*, *21*(3), 622-632, doi: https://doi.org/10.1007/s11802-022-4864-y.

Xing, X., Z. Lee, P. Xiu, S. Chen, and F. Chai (2022), A Dual-Band Model for the Vertical Distribution of Photosynthetically Available Radiation (PAR) in Stratified Waters, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.928807.

Xiong, X., X. Cheng, N. Ou, T. Feng, J. Qin, X. Chen, and R. X. Huang (2022), Dynamics of seasonal and interannual variability of the ocean bottom pressure in the Southern Ocean, *Acta Oceanol. Sin.*, *41*(5), 78-89, doi: https://doi.org/10.1007/s13131-021-1878-z.

Xu, H., Y. Shan, and G. Xu (2022), Performance of SMAP and SMOS Salinity Products under Tropical Cyclones in the Bay of Bengal, *Remote Sensing*, *14*(15), 3733, doi: https://doi.org/10.3390/rs14153733.

Xu, L., K. Wang, and B. Wu (2022), Weakening and Poleward Shifting of the North Pacific Subtropical Fronts from 1980 to 2018, *J. Phys. Oceanogr.*, *52*(3), 399-417, doi: https://doi.org/10.1175/JPO-D-21-0170.1.

Xu, M., Y. Wang, J. Zhang, D. Yang, X. Yin, Y. Gao, G. Wang, and X. Lv (2022), Data assimilation in a regional high-resolution ocean model by using Ensemble Adjustment Kalman Filter and its application during 2020 cold spell event over Asia-Pacific region, *Applied Ocean Research*, *129*, 103375, doi: https://doi.org/10.1016/j.apor.2022.103375.

Xue, T., I. Frenger, A. Oschlies, C. A. Stock, W. Koeve, J. G. John, and A. E. F. Prowe (2022), Mixed Layer Depth Promotes Trophic Amplification on a Seasonal Scale, *Geophys. Res. Lett.*, *49*(12), e2022GL098720, doi: https://doi.org/10.1029/2022GL098720.

Yang, B., S. R. Emerson, and M. F. Cronin (2022), Skin Temperature Correction for Calculations of Air-Sea Oxygen Flux and Annual Net Community Production, *Geophys. Res. Lett.*, *49*(3), e2021GL096103, doi: https://doi.org/10.1029/2021GL096103.

Yang, F., and Z. Wu (2022), On the physical origin of the semiannual component of surface air temperature over oceans, *Climate Dynamics*, *59*(7), 2137-2149, doi: https://doi.org/10.1007/s00382-022-06199-z.

Yang, J., X. Cheng, J. Qin, G. Zhou, and L. Li (2022), The Synoptic and Interannual Variability of Extreme Turbulent Heat Flux Events During Austral Winter in the Southern Indian Ocean, *Journal of Geophysical Research: Atmospheres*, *127*(1), e2021JD035792, doi: https://doi.org/10.1029/2021JD035792.

Yang, L., R. Murtugudde, S. Zheng, P. Liang, W. Tan, L. Wang, B. Feng, and T. Zhang (2022), Seasonal Variability of the Pacific South Equatorial Current during the Argo Era, *J.*

Phys. Oceanogr., *52*(10), 2289-2304, doi: https://doi.org/10.1175/JPO-D-21-0311.1.
Yang, X., G. Han, C. Ma, C. Cao, J. Yang, and G. Chen (2022), Satellite observed shape-based overall rotation—A new aspect in eddy kinematics, *Acta Oceanol. Sin.*, *41*(5), 183-194, doi: https://doi.org/10.1007/s13131-021-1970-4.
Yang, X., P. G. Strutton, A. Cyriac, H. E. Phillips, N. A. Pittman, and C. R. Vives (2022), Physical Drivers of Biogeochemical Variability in the Polar Front Meander, *Journal of Geophysical Research: Oceans*, *127*(6), e2021JC017863, doi: https://doi.org/10.1029/2021JC017863.
Yang, Y., W. Feng, M. Zhong, D. Mu, and Y. Yao (2022), Basin-Scale Sea Level Budget from Satellite Altimetry, Satellite Gravimetry, and Argo Data over 2005 to 2019, *Remote Sensing*, *14*(18), 4637, doi: https://doi.org/10.3390/rs14184637.
Ye, X., J. Liu, M. Lin, J. Ding, B. Zou, Q. Song, and Y. Teng (2022), Evaluation of Sea Surface Temperatures Derived From the HY-1D Satellite, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, *15*, 654-665, doi: https://doi.org/10.1109/JSTARS.2021.3137230.
Yoon, S.-T., and J. Park (2022), Warm bias of cold sea surface temperatures in the East Sea (Japan Sea), *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.965346.
Yu, Y., S. T. Gille, D. T. Sandwell, and J. McAuley (2022), Global Mesoscale Ocean Variability from Multiyear Altimetry: An Analysis of the Influencing Factors, *Artificial Intelligence for the Earth Systems*, *1*(3), e210008, doi: https://doi.org/10.1175/AIES-D-21-0008.1.
Yu, Z., B. Li, H. Li, J. Zhang, and J. Chen (2022), The influence of seasonal calcification depth change on the planktonic foraminiferal stable oxygen isotope signal, *Geochimica et Cosmochimica Acta*, *327*, 34-52, doi: https://doi.org/10.1016/j.gca.2022.04.014.
Yuan, D., et al. (2022), A Maluku Sea intermediate western boundary current connecting Pacific Ocean circulation to the Indonesian Throughflow, *Nature Communications*, *13*(1), 2093, doi: https://doi.org/10.1038/s41467-022-29617-6.
Yunev, O., J. Carstensen, L. Stelmakh, V. Belokopytov, and V. Suslin (2022), Temporal changes of phytoplankton biomass in the western Black Sea shelf waters: Evaluation by satellite data (1998–2018), *Estuarine, Coastal and Shelf Science*, *271*, 107865, doi: https://doi.org/10.1016/j.ecss.2022.107865.
Zarokanellos, N. D., D. L. Rudnick, M. Garcia-Jove, B. Mourre, S. Ruiz, A. Pascual, and J. Tintoré (2022), Frontal Dynamics in the Alboran Sea: 1. Coherent 3D Pathways at the Almeria-Oran Front Using Underwater Glider Observations, *Journal of Geophysical Research: Oceans*, *127*(3), e2021JC017405, doi: https://doi.org/10.1029/2021JC017405.
Zavala-Garay, J., and J. Theiss (2022), Seasonal Instability of the Western Equatorial Indian Ocean, *Journal of Geophysical Research: Oceans*, *127*(1), e2021JC017875, doi: https://doi.org/10.1029/2021JC017875.
Zemskova, V. E., T.-L. He, Z. Wan, and N. Grisouard (2022), A deep-learning estimate of the decadal trends in the Southern Ocean carbon storage, *Nature Communications*, *13*(1), 4056, doi: https://doi.org/10.1038/s41467-022-31560-5.
Zhai, X., and Z. Yang (2022), Eddy-induced meridional transport variability at ocean western boundary, *Ocean Model.*, *171*, 101960, doi:

https://doi.org/10.1016/j.ocemod.2022.101960.
Zhang, C., D. Wang, Z. Liu, S. Lu, C. Sun, Y. Wei, and M. Zhang (2022), Global Gridded Argo Dataset Based on Gradient-Dependent Optimal Interpolation, *Journal of Marine Science and Engineering*, *10*(5), 650, doi: https://doi.org/10.3390/jmse10050650.
Zhang, C., D. Wang, and Z. Wang (2022), Fishery analysis using gradient-dependent optimal interpolation, *Acta Oceanol. Sin.*, *41*(2), 116-126, doi: https://doi.org/10.1007/s13131-021-1895-y.
Zhang, J., Y. Luo, W. Jing, and D. Wu (2022), Volume Budget of Antarctic Intermediate Water in the Southern Ocean from an Eddy-Resolving Ocean Simulation, *Atmos.-Ocean*, 1-11, doi: https://doi.org/10.1080/07055900.2022.2118568.
Zhang, Q., F. Yu, and G. Chen (2022), Site selection for the validation of wide-swath interferometric altimeter in the South China Sea, *Int. J. Remote Sens.*, *43*(2), 549-564, doi: https://doi.org/10.1080/01431161.2021.2020365.
Zhang, W., W. Wang, and H. Xing (2022), Decadal variation and trend of the upper layer salinity in the South China Sea from 1960 to 2010, *Journal of Oceanology and Limnology*, *40*(4), 1333-1348, doi: https://doi.org/10.1007/s00343-021-1161-3.
Zhang, X., J. Li, Q. Dong, Z. Wang, H. Zhang, and X. Liu (2022), Bridging the gap between GRACE and GRACE-FO using a hydrological model, *Science of The Total Environment*, *822*, 153659, doi: https://doi.org/10.1016/j.scitotenv.2022.153659.
Zhang, Y., and Y. Du (2022), Oceanic Rossby Waves Induced Two Types of Ocean–Atmosphere Response and Opposite Indian Ocean Dipole Phases, *J. Clim.*, *35*(12), 3927-3945, doi: https://doi.org/10.1175/JCLI-D-21-0426.1.
Zhang, Y., C. Hu, V. H. Kourafalou, Y. Liu, D. J. McGillicuddy, B. B. Barnes, and J. M. Hummon (2022), Physical Characteristics and Evolution of a Long-Lasting Mesoscale Cyclonic Eddy in the Straits of Florida, *Frontiers in Marine Science*, *9*, doi: https://doi.org/10.3389/fmars.2022.779450.
Zhang, Z., P. Chen, and Z. Mao (2022), SOLS: An Open-Source Spaceborne Oceanic Lidar Simulator, *Remote Sensing*, *14*(8), 1849, doi: https://doi.org/10.3390/rs14081849.
Zhang, Z., Z. Ma, J. Fei, Y. Zheng, and J. Huang (2022), The effects of tropical cyclones on characteristics of barrier layer thickness, *Frontiers in Earth Science*, *10*, doi: https://doi.org/10.3389/feart.2022.962232.
Zhang, Z., J. Wang, and D. Yuan (2022), Mixed Layer Salinity Balance in the Eastern Tropical Indian Ocean, *Journal of Geophysical Research: Oceans*, *127*(6), e2021JC018229, doi: https://doi.org/10.1029/2021JC018229.
Zhao, J., W. Liang, J. Ma, M. Liu, and Y. Li (2022), A Self-Constraint Underwater Positioning Method without the Assistance of Measured Sound Velocity Profile, *Mar. Geod.*, 1-21, doi: https://doi.org/10.1080/01490419.2022.2079778.
Zhao, X., and D. Yuan (2022), Evaluation of intraseasonal wind rectification on recent Indian Ocean dipole events using LICOM, *Climate Dynamics*, *58*(3), 981-998, doi: https://doi.org/10.1007/s00382-021-05943-1.
Zhao, Y., Y. Yang, X. S. Liang, and Y. Zhang (2022), Different mechanisms for the seasonal variations of the mesoscale eddy energy in the South China Sea, *Deep Sea Research Part I: Oceanographic Research Papers*, *179*, 103677, doi: https://doi.org/10.1016/j.dsr.2021.103677.

Zhao, Z., Y. Yan, S. Qi, S. Liu, Z. Chen, and J. Yang (2022), Cyclonic and Anticyclonic Asymmetry of Reef and Atoll Wakes in the Xisha Archipelago, *Atmosphere*, *13*(10), 1740, doi: https://doi.org/10.3390/atmos13101740.

Zheng, H., Y. Ma, J. Huang, J. Yang, D. Su, F. Yang, and X. H. Wang (2022), Deriving vertical profiles of chlorophyll-a concentration in the upper layer of seawaters using ICESat-2 photon-counting lidar, *Opt. Express*, *30*(18), 33320-33336, doi: https://doi.org/10.1364/OE.463622.

Zheng, H., X.-H. Zhu, C. Zhang, R. Zhao, Z.-N. Zhu, Q. Ren, Y. Liu, F. Nan, and F. Yu (2022), Observation of Abyssal Circulation to the West of the Luzon Strait, South China Sea, *J. Phys. Oceanogr.*, *52*(9), 2091-2109, doi: https://doi.org/10.1175/JPO-D-21-0284.1.

Zhi, H., Y. Huang, P. Lin, S. Shi, and M. Dong (2022), Interannual variability of the sea surface salinity and its related freshwater flux in the tropical Pacific: A comparison of CMIP5 and CMIP6, *Atmospheric and Oceanic Science Letters*, 100190, doi: https://doi.org/10.1016/j.aosl.2022.100190.

Zhibing, L., C. Zhongya, L. Zhiqiang, W. Xiaohua, and H. Jianyu (2022), A novel identification method for unrevealed mesoscale eddies with transient and weak features-Capricorn Eddies as an example, *Remote Sens. Environ.*, *274*, 112981, doi: https://doi.org/10.1016/j.rse.2022.112981.

Zhmur, V. V., E. V. Novoselova, and T. V. Belonenko (2022), Peculiarities of Formation of the Density Field in Mesoscale Eddies of the Lofoten Basin: Part 2, *Oceanology*, *62*(3), 289-302, doi: https://doi.org/10.1134/S0001437022030171.

Zhou, G., and R.-H. Zhang (2022), Structure and Evolution of Decadal Spiciness Variability in the North Pacific during 2004–20, Revealed from Argo Observations, *Adv. Atmos. Sci.*, *39*(6), 953-966, doi: https://doi.org/10.1007/s00376-021-1358-6.

Zhou, L., C. Heuzé, and M. Mohrmann (2022), Early Winter Triggering of the Maud Rise Polynya, *Geophys. Res. Lett.*, *49*(2), e2021GL096246, doi: https://doi.org/10.1029/2021GL096246.

Zhou, W., H. Hu, W. Fan, and S. Jin (2022), Impact of Abnormal Climatic Events on the CPUE of Yellowfin Tuna Fishing in the Central and Western Pacific, *Sustainability*, *14*(3), 1217, doi: https://doi.org/10.3390/su14031217.

Zhou, X., Y. Qiu, X. Lin, H. Teng, and C. Aung (2022), An Intrathermocline Eddy Observed in the Northeastern Bay of Bengal, *Geophys. Res. Lett.*, *49*(12), e2022GL099201, doi: https://doi.org/10.1029/2022GL099201.

Zhu, J., Y. Zhang, X. Cheng, X. Wang, Q. Sun, and Y. Du (2022), Effect of mesoscale eddies on the transport of low-salinity water from the Bay of Bengal into the Arabian Sea during winter, *Geosci. Lett.*, *9*(1), 37, doi: https://doi.org/10.1186/s40562-022-00246-7.

Zhu, Y., R.-H. Zhang, and D. Li (2022), An ocean modeling study to quantify wind forcing and oceanic mixing effects on the tropical North Pacific subsurface warm bias in CMIP and OMIP simulations, *Climate Dynamics*, *58*(3), 999-1014, doi: https://doi.org/10.1007/s00382-021-05946-y.

Zou, L., X. Wang, Z. Wen, Z. Yu, and X. Ma (2022), Distribution characteristics of pycnocline in the northern South China Sea based on an improved vertical gradient method, *J. Oceanogr.*, doi: https://doi.org/10.1007/s10872-022-00652-7.

2021 (546)

Abdalla, S., et al. (2021), Altimetry for the future: Building on 25 years of progress, *Advances in Space Research*, *68*(2), 319-363, doi: https://doi.org/10.1016/j.asr.2021.01.022.

Achterberg, E. P., et al. (2021), Trace Element Biogeochemistry in the High-Latitude North Atlantic Ocean: Seasonal Variations and Volcanic Inputs, *Glob. Biogeochem. Cycle*, *35*(3), e2020GB006674, doi: https://doi.org/10.1029/2020GB006674.

Aguedjou, H. M. A., A. Chaigneau, I. Dadou, Y. Morel, C. Pegliasco, C. Y. Da-Allada, and E. Baloïtcha (2021), What Can We Learn From Observed Temperature and Salinity Isopycnal Anomalies at Eddy Generation Sites? Application in the Tropical Atlantic Ocean, *Journal of Geophysical Research: Oceans*, *126*(11), e2021JC017630, doi: https://doi.org/10.1029/2021JC017630.

Allan, E. A., M. H. DiBenedetto, A. C. Lavery, A. F. Govindarajan, and W. G. Zhang (2021), Modeling characterization of the vertical and temporal variability of environmental DNA in the mesopelagic ocean, *Scientific Reports*, *11*(1), 21273, doi: https://doi.org/10.1038/s41598-021-00288-5.

Alraddadi, T. M., M. A. Alsaafani, A. M. Albarakati, and C. P. Abdulla (2021), Seasonal variability of mixed layer depth from Argo floats in the central Red Sea, *Arabian Journal of Geosciences*, *14*(6), 496, doi: https://doi.org/10.1007/s12517-021-06862-5.

Anandh, T. S., B. K. Das, J. Kuttippurath, and A. Chakraborty (2021), A Comparative Analysis of the Bay of Bengal Ocean State Using Standalone and Coupled Numerical Models, *Asia-Pacific Journal of Atmospheric Sciences*, *57*(2), 347-359, doi: https://doi.org/10.1007/s13143-020-00197-z.

Ando, K., et al. (2021), Half-Century of Scientific Advancements Since the Cooperative Study of the Kuroshio and Adjacent Regions (CSK) Programme - Need for a new Kuroshio Research, *Prog. Oceanogr.*, *193*, 102513, doi: https://doi.org/10.1016/j.pocean.2021.102513.

Androulidakis, Y., V. Kourafalou, M. J. Olascoaga, F. J. Beron-Vera, M. Le Hénaff, H. Kang, and N. Ntaganou (2021), Impact of Caribbean Anticyclones on Loop Current variability, *Ocean Dyn.*, *71*(9), 935-956, doi: https://doi.org/10.1007/s10236-021-01474-9.

Artana, C., C. Provost, L. Poli, R. Ferrari, and J.-M. Lellouche (2021), Revisiting the Malvinas Current Upper Circulation and Water Masses Using a High-Resolution Ocean Reanalysis, *Journal of Geophysical Research: Oceans*, *126*(6), e2021JC017271, doi: https://doi.org/10.1029/2021JC017271.

Ashkezari, M. D., N. R. Hagen, M. Denholtz, A. Neang, T. C. Burns, R. L. Morales, C. P. Lee, C. N. Hill, and E. V. Armbrust (2021), Simons Collaborative Marine Atlas Project (Simons CMAP): An open-source portal to share, visualize, and analyze ocean data, *Limnology and Oceanography: Methods*, *19*(7), 488-496, doi: https://doi.org/10.1002/lom3.10439.

Aubone, N., E. D. Palma, and A. R. Piola (2021), The surface salinity maximum of the South Atlantic, *Prog. Oceanogr.*, *191*, 102499, doi: https://doi.org/10.1016/j.pocean.2020.102499.

Auger, P. A., J. P. Bento, S. Hormazabal, C. E. Morales, and A. Bustamante (2021), Mesoscale

Variability in the Boundaries of the Oxygen Minimum Zone in the Eastern South Pacific: Influence of Intrathermocline Eddies, *Journal of Geophysical Research: Oceans*, *126*(2), e2019JC015272, doi: https://doi.org/10.1029/2019JC015272.

Ayouche, A., C. De Marez, M. Morvan, P. L'Hegaret, X. Carton, B. Le Vu, and A. Stegner (2021), Structure and Dynamics of the Ras al Hadd Oceanic Dipole in the Arabian Sea, *Oceans*, *2*(1), doi: https://doi.org/10.3390/oceans2010007.

Azevedo, L., L. Matias, F. Turco, R. Tromm, and Á. Peliz (2021), Geostatistical Seismic Inversion for Temperature and Salinity in the Madeira Abyssal Plain, *Frontiers in Marine Science*, *8*(1096), doi: https://doi.org/10.3389/fmars.2021.685007.

Azminuddin, F., D. Jeon, Y. H. Kim, C. J. Jang, and J. H. Park (2021), A Newly Observed Deep Countercurrent in the Subtropical Northwest Pacific, *Journal of Geophysical Research: Oceans*, *126*(7), e2021JC017272, doi: https://doi.org/10.1029/2021JC017272.

Baaklini, G., L. Issa, M. Fakhri, J. Brajard, G. Fifani, M. Menna, I. Taupier-Letage, A. Bosse, and L. Mortier (2021), Blending drifters and altimetric data to estimate surface currents: Application in the Levantine Mediterranean and objective validation with different data types, *Ocean Model.*, *166*, 101850, doi: https://doi.org/10.1016/j.ocemod.2021.101850.

Baatz, R., et al. (2021), Reanalysis in Earth System Science: Toward Terrestrial Ecosystem Reanalysis, *Reviews of Geophysics*, *59*(3), e2020RG000715, doi: https://doi.org/10.1029/2020RG000715.

Bach, L. T., V. Tamsitt, J. Gower, C. L. Hurd, J. A. Raven, and P. W. Boyd (2021), Testing the climate intervention potential of ocean afforestation using the Great Atlantic Sargassum Belt, *Nature Communications*, *12*(1), 2556, doi: https://doi.org/10.1038/s41467-021-22837-2.

Bagatinsky, V. A., and N. A. Diansky (2021), Variability of the North Atlantic Thermohaline Circulation in Different Phases of the Atlantic Multidecadal Oscillation from Ocean Objective Analyses and Reanalyses, *Izv. Atmos. Ocean. Phys.*, *57*(2), 208-219, doi: https://doi.org/10.1134/S000143382102002X.

Bagnell, A., and T. DeVries (2021), 20th century cooling of the deep ocean contributed to delayed acceleration of Earth's energy imbalance, *Nature Communications*, *12*(1), 4604, doi: https://doi.org/10.1038/s41467-021-24472-3.

Balaguru, K., L. R. Leung, S. M. Hagos, and S. Krishnakumar (2021), An oceanic pathway for Madden–Julian Oscillation influence on Maritime Continent Tropical Cyclones, *npj Climate and Atmospheric Science*, *4*(1), 52, doi: https://doi.org/10.1038/s41612-021-00208-4.

Balaguru, K., L. P. Van Roekel, L. R. Leung, and M. Veneziani (2021), Subtropical Eastern North Pacific SST Bias in Earth System Models, *Journal of Geophysical Research: Oceans*, *126*(8), e2021JC017359, doi: https://doi.org/10.1029/2021JC017359.

Banik, T., V. Thandlam, B. K. De, S. S. Kundu, R. B. Gogoi, P. L. N. Raju, and A. Guha (2021), Understanding dynamics of tropical cyclones in the Bay of Bengal using lightning data, *Meteorology and Atmospheric Physics*, *133*(5), 1505-1522, doi: https://doi.org/10.1007/s00703-021-00824-y.

Bao, S., H. Wang, R. Zhang, H. Yan, J. Chen, and C. Bai (2021), Application of Phenomena-Resolving Assessment Methods to Satellite Sea Surface Salinity

Products, *Earth and Space Science*, *8*(8), e2020EA001410, doi: https://doi.org/10.1029/2020EA001410.
Barkan, R., K. Srinivasan, L. Yang, J. C. McWilliams, J. Gula, and C. Vic (2021), Oceanic Mesoscale Eddy Depletion Catalyzed by Internal Waves, *Geophys. Res. Lett.*, *48*(18), e2021GL094376, doi: https://doi.org/10.1029/2021GL094376.
Barnoud, A., et al. (2021), Contributions of Altimetry and Argo to Non-Closure of the Global Mean Sea Level Budget Since 2016, *Geophys. Res. Lett.*, *48*(14), e2021GL092824, doi: https://doi.org/10.1029/2021GL092824.
Barral, Q.-B., B. Zakardjian, F. Dumas, P. Garreau, P. Testor, and J. Beuvier (2021), Characterization of fronts in the Western Mediterranean with a special focus on the North Balearic Front, *Prog. Oceanogr.*, 102636, doi: https://doi.org/10.1016/j.pocean.2021.102636.
Barton, N., et al. (2021), The Navy's Earth System Prediction Capability: A New Global Coupled Atmosphere-Ocean-Sea Ice Prediction System Designed for Daily to Subseasonal Forecasting, *Earth and Space Science*, *8*(4), e2020EA001199, doi: https://doi.org/10.1029/2020EA001199.
Bashmachnikov, I. L., A. M. Fedorov, P. A. Golubkin, A. V. Vesman, V. V. Selyuzhenok, N. V. Gnatiuk, L. P. Bobylev, K. I. Hodges, and D. S. Dukhovskoy (2021), Mechanisms of interannual variability of deep convection in the Greenland sea, *Deep Sea Research Part I: Oceanographic Research Papers*, *174*, 103557, doi: https://doi.org/10.1016/j.dsr.2021.103557.
Bebieva, Y., and K. Speer (2021), Thermohaline Suppression of Upper Circumpolar Deep Water Eddies in the Ross Gyre, *Geophys. Res. Lett.*, *48*(18), e2021GL094476, doi: https://doi.org/10.1029/2021GL094476.
Becker, M., A. Olsen, and G. Reverdin (2021), In-air one-point calibration of oxygen optodes in underway systems, *Limnology and Oceanography: Methods*, *19*(5), 293-302, doi: https://doi.org/10.1002/lom3.10423.
Behrens, E., A. M. Hogg, M. H. England, and H. Bostock (2021), Seasonal and Interannual Variability of the Subtropical Front in the New Zealand Region, *Journal of Geophysical Research: Oceans*, *126*(2), e2020JC016412, doi: https://doi.org/10.1029/2020JC016412.
Belonenko, T. V., V. A. Zinchenko, A. M. Fedorov, M. V. Budyansky, S. V. Prants, and M. Y. Uleysky (2021), Interaction of the Lofoten Vortex with a Satellite Cyclone, *Pure and Applied Geophysics*, *178*(1), 287-300, doi: https://doi.org/10.1007/s00024-020-02647-1.
Benedetti, F., M. Vogt, U. H. Elizondo, D. Righetti, N. E. Zimmermann, and N. Gruber (2021), Major restructuring of marine plankton assemblages under global warming, *Nature Communications*, *12*(1), 5226, doi: https://doi.org/10.1038/s41467-021-25385-x.
Billheimer, S. J., L. D. Talley, and T. R. Martz (2021), Oxygen Seasonality, Utilization Rate, and Impacts of Vertical Mixing in the Eighteen Degree Water Region of the Sargasso Sea as Observed by Profiling Biogeochemical Floats, *Glob. Biogeochem. Cycle*, *35*(3), e2020GB006824, doi: https://doi.org/10.1029/2020GB006824.
Biló, T. C., W. E. Johns, and J. Zhao (2021), Dynamics of Deep Recirculation Cells Offshore of the Deep Western Boundary Current in the Subtropical North Atlantic (15°–30°N), *J.*

Phys. Oceanogr., *51*(1), 131-145, doi: https://doi.org/10.1175/JPO-D-20-0184.1.
Bingham, F. M., S. Brodnitz, and L. Yu (2021), Sea Surface Salinity Seasonal Variability in the Tropics from Satellites, Gridded In Situ Products and Mooring Observations, *Remote Sensing*, *13*(1), doi: https://doi.org/10.3390/rs13010110.
Bingham, F. M., S. Fournier, S. Brodnitz, K. Ulfsax, and H. Zhang (2021), Matchup Characteristics of Sea Surface Salinity Using a High-Resolution Ocean Model, *Remote Sensing*, *13*(15), doi: https://doi.org/10.3390/rs13152995.
Bisson, K. M., E. Boss, P. J. Werdell, A. Ibrahim, and M. J. Behrenfeld (2021), Particulate Backscattering in the Global Ocean: A Comparison of Independent Assessments, *Geophys. Res. Lett.*, *48*(2), e2020GL090909, doi: https://doi.org/10.1029/2020GL090909.
Bisson, K. M., E. Boss, P. J. Werdell, A. Ibrahim, R. Frouin, and M. J. Behrenfeld (2021), Seasonal bias in global ocean color observations, *Applied Optics*, *60*(23), 6978-6988, doi: https://doi.org/10.1364/AO.426137.
Bisson, K. M., and B. B. Cael (2021), How Are Under Ice Phytoplankton Related to Sea Ice in the Southern Ocean?, *Geophys. Res. Lett.*, *48*(21), e2021GL095051, doi: https://doi.org/10.1029/2021GL095051.
Boland, E. J. D., D. C. Jones, A. J. S. Meijers, G. Forget, and S. A. Josey (2021), Local and Remote Influences on the Heat Content of Southern Ocean Mode Water Formation Regions, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC016585, doi: https://doi.org/10.1029/2020JC016585.
Boutin, J., et al. (2021), Satellite-Based Sea Surface Salinity Designed for Ocean and Climate Studies, *Journal of Geophysical Research: Oceans*, *126*(11), e2021JC017676, doi: https://doi.org/10.1029/2021JC017676.
Boutin, J., J. L. Vergely, E. P. Dinnat, P. Waldteufel, F. D'Amico, N. Reul, A. Supply, and C. Thouvenin-Masson (2021), Correcting Sea Surface Temperature Spurious Effects in Salinity Retrieved From Spaceborne L-Band Radiometer Measurements, *IEEE Trans. Geosci. Remote Sensing*, *59*(9), 7256-7269, doi: https://doi.org/10.1109/TGRS.2020.3030488.
Bouzaiene, M., M. Menna, D. Elhmaidi, A. F. Dilmahamod, and P.-M. Poulain (2021), Spreading of Lagrangian Particles in the Black Sea: A Comparison between Drifters and a High-Resolution Ocean Model, *Remote Sensing*, *13*(13), doi: https://doi.org/10.3390/rs13132603.
Brown, P. J., et al. (2021), Circulation-driven variability of Atlantic anthropogenic carbon transports and uptake, *Nat. Geosci.*, *14*(8), 571-577, doi: https://doi.org/10.1038/s41561-021-00774-5.
Browning, T. J., A. A. Al-Hashem, M. J. Hopwood, A. Engel, I. M. Belkin, E. D. Wakefield, T. Fischer, and E. P. Achterberg (2021), Iron Regulation of North Atlantic Eddy Phytoplankton Productivity, *Geophys. Res. Lett.*, *48*(6), e2020GL091403, doi: https://doi.org/10.1029/2020GL091403.
Bushuk, M., M. Winton, F. A. Haumann, T. Delworth, F. Lu, Y. Zhang, L. Jia, L. Zhang, W. Cooke, and M. Harrison (2021), Seasonal prediction and predictability of regional Antarctic sea ice, *J. Clim.*, 1-68, doi: https://doi.org/10.1175/JCLI-D-20-0965.1.
Camus, L., et al. (2021), Autonomous Surface and Underwater Vehicles as Effective

Ecosystem Monitoring and Research Platforms in the Arctic—The Glider Project, *Sensors*, *21*(20), doi: https://doi.org/10.3390/s21206752.

Carret, A., W. Llovel, T. Penduff, and J.-M. Molines (2021), Atmospherically Forced and Chaotic Interannual Variability of Regional Sea Level and Its Components Over 1993–2015, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC017123, doi: https://doi.org/10.1029/2020JC017123.

Castelão, G. P. (2021), A machine learning approach to quality control oceanographic data, *Computers & Geosciences*, *155*, 104803, doi: https://doi.org/10.1016/j.cageo.2021.104803.

Causio, S., S. A. Ciliberti, E. Clementi, G. Coppini, and P. Lionello (2021), A Modelling Approach for the Assessment of Wave-Currents Interaction in the Black Sea, *Journal of Marine Science and Engineering*, *9*(8), doi: https://doi.org/10.3390/jmse9080893.

Ceroveki, I., and A. J. S. Meijers (2021), Strong Quasi-Stationary Wintertime Atmospheric Surface Pressure Anomalies Drive a Dipole Pattern in the Subantarctic Mode Water Formation, *J. Clim.*, *34*(17), 6989-7004, doi: https://doi.org/10.1175/JCLI-D-20-0593.1.

Chai, F., Y. Wang, X. Xing, Y. Yan, H. Xue, M. Wells, and E. Boss (2021), A limited effect of sub-tropical typhoons on phytoplankton dynamics, *Biogeosciences*, *18*(3), 849-859, doi: https://doi.org/10.5194/bg-18-849-2021.

Chamberlain, M. A., P. R. Oke, G. B. Brassington, P. Sandery, P. Divakaran, and R. A. S. Fiedler (2021), Multiscale data assimilation in the Bluelink ocean reanalysis (BRAN), *Ocean Model.*, *166*, 101849, doi: https://doi.org/10.1016/j.ocemod.2021.101849.

Chandra, A., and S. Kumar (2021), Sea surface temperature and ocean heat content during tropical cyclones Pam (2015) and Winston (2016) in the Southwest Pacific region, *Mon. Weather Rev.*, *149*(4), 1173-1187, doi: https://doi.org/10.1175/MWR-D-20-0025.1.

Chauhan, A., R. P. Singh, P. Dash, and R. Kumar (2021), Impact of tropical cyclone "Fani" on land, ocean, atmospheric and meteorological parameters, *Marine Pollution Bulletin*, *162*, 111844, doi: https://doi.org/10.1016/j.marpolbul.2020.111844.

Chen, G., X. Chen, and B. Huang (2021), Independent Eddy Identification With Profiling Argo as Calibrated by Altimetry, *Journal of Geophysical Research: Oceans*, *126*(1), e2020JC016729, doi: https://doi.org/10.1029/2020JC016729.

Chen, S., M. L. Wells, R. X. Huang, H. Xue, J. Xi, and F. Chai (2021), Episodic subduction patches in the western North Pacific identified from BGC-Argo float data, *Biogeosciences*, *18*(19), 5539-5554, doi: https://doi.org/10.5194/bg-18-5539-2021.

Chen, X., G. Chen, L. Ge, B. Huang, and C. Cao (2021), Global Oceanic Eddy Identification: A Deep Learning Method From Argo Profiles and Altimetry Data, *Frontiers in Marine Science*, *8*(412), doi: https://doi.org/10.3389/fmars.2021.646926.

Chen, X., H. Li, C. Cao, and G. Chen (2021), Eddy-induced pycnocline depth displacement over the global ocean, *J. Mar. Syst.*, *221*, 103577, doi: https://www.sciencedirect.com/science/article/pii/S0924796321000750.

Cheng, L., et al. (2021), Upper Ocean Temperatures Hit Record High in 2020, *Adv. Atmos. Sci.*, *38*(4), 523-530, doi: https://doi.org/10.1007/s00376-021-0447-x.

Chi, J., T. Qu, Y. Du, J. Qi, and P. Shi (2021), Ocean salinity indices of interannual modes in

the tropical Pacific, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-021-05911-9.

Chi, N.-H., R.-C. Lien, and E. A. D'Asaro (2021), The Mixed Layer Salinity Budget in the Central Equatorial Indian Ocean, *Journal of Geophysical Research: Oceans*, *126*(6), e2021JC017280, doi: https://doi.org/10.1029/2021JC017280.

Choo, S.-H., P.-H. Chang, S.-O. Hwang, H. J. Jo, J. Lee, S.-M. Lee, Y.-K. Hyun, and J.-H. Moon (2021), Assessment of Assimilation Impact of Argo Float Observations in Marginal Seas around Korean Peninsula through Observing System Experiments, *Korean Meteorological Society*, *31*(3), 283-294, doi: https://doi.org/10.14191/Atmos.2021.31.3.283.

Chow, C. H., Y.-Y. Shih, Y.-T. Chien, J. Y. Chen, N. Fan, W.-C. Wu, and C.-C. Hung (2021), The Wind Effect on Biogeochemistry in Eddy Cores in the Northern South China Sea, *Frontiers in Marine Science*, *8*(1091), doi: https://doi.org/10.3389/fmars.2021.717576.

Chowdhury, K. M. A., W. Jiang, G. Liu, M. K. Ahmed, and S. Akhter (2021), Dominant physical-biogeochemical drivers for the seasonal variations in the surface chlorophyll-a and subsurface chlorophyll-a maximum in the Bay of Bengal, *Regional Studies in Marine Science*, *48*, 102022, doi: https://doi.org/10.1016/j.rsma.2021.102022.

Ciappa, A. C. (2021), Reverse trajectory study of oil spill risk in Cyclades Islands of the Aegean Sea, *Regional Studies in Marine Science*, *41*, 101580, doi: https://doi.org/10.1016/j.rsma.2020.101580.

Ciliberti, S. A., et al. (2021), Monitoring and Forecasting the Ocean State and Biogeochemical Processes in the Black Sea: Recent Developments in the Copernicus Marine Service, *Journal of Marine Science and Engineering*, *9*(10), doi: https://doi.org/10.3390/jmse9101146.

Cimino, M. A., M. G. Jacox, S. J. Bograd, S. Brodie, G. Carroll, E. L. Hazen, B. E. Lavaniegos, M. M. Morales, E. Satterthwaite, and R. R. Rykaczewski (2021), Anomalous poleward advection facilitates episodic range expansions of pelagic red crabs in the eastern North Pacific, *Limnol. Oceanogr.*, *66*(8), 3176-3189, doi: https://doi.org/10.1002/lno.11870.

Claustre, H., L. Legendre, P. W. Boyd, and M. Levy (2021), The Oceans' Biological Carbon Pumps: Framework for a Research Observational Community Approach, *Frontiers in Marine Science*, *8*, doi: https://doi.org/10.3389/fmars.2021.780052.

Clavel-Henry, M., E. W. North, J. Solé, N. Bahamon, M. Carretón, and J. B. Company (2021), Estimating the spawning locations of the deep-sea red and blue shrimp Aristeus antennatus (Crustacea: Decapoda) in the northwestern Mediterranean Sea with a backtracking larval transport model, *Deep Sea Research Part I: Oceanographic Research Papers*, *174*, 103558, doi: https://www.sciencedirect.com/science/article/pii/S0967063721000972.

Clavel-Henry, M., J. Solé, N. Bahamon, M. Carretón, and J. B. Company (2021), Larval transport of Aristeus antennatus shrimp (Crustacea: Decapoda: Dendrobranchiata: Aristeidae) near the Palamós submarine canyon (NW Mediterranean Sea) linked to the North Balearic Front, *Prog. Oceanogr.*, *192*, 102515, doi: https://doi.org/10.1016/j.pocean.2021.102515.

Clayton, S., H. I. Palevsky, L. Thompson, and P. D. Quay (2021), Synoptic Mesoscale to Basin Scale Variability in Biological Productivity and Chlorophyll in the Kuroshio Extension Region, *Journal of Geophysical Research: Oceans*, *126*(11), e2021JC017782, doi: https://doi.org/10.1029/2021JC017782.

Cliff, E., S. Khatiwala, and A. Schmittner (2021), Glacial deep ocean deoxygenation driven by biologically mediated air–sea disequilibrium, *Nat. Geosci.*, *14*(1), 43-50, doi: https://doi.org/10.1038/s41561-020-00667-z.

Cordeiro, N. G. F., R. Nolasco, E. D. Barton, and J. Dubert (2021), Fixed-point time series, repeat survey and high-resolution modeling reveal event scale responses of the Northwestern Iberian upwelling, *Prog. Oceanogr.*, *190*, 102480, doi: https://doi.org/10.1016/j.pocean.2020.102480.

Cornec, M., H. Claustre, A. Mignot, L. Guidi, L. Lacour, A. Poteau, F. D'Ortenzio, B. Gentili, and C. Schmechtig (2021), Deep Chlorophyll Maxima in the Global Ocean: Occurrences, Drivers and Characteristics, *Glob. Biogeochem. Cycle*, *35*(4), e2020GB006759, doi: https://doi.org/10.1029/2020GB006759.

Cornec, M., R. Laxenaire, S. Speich, and H. Claustre (2021), Impact of Mesoscale Eddies on Deep Chlorophyll Maxima, *Geophys. Res. Lett.*, *48*(15), e2021GL093470, doi: https://doi.org/10.1029/2021GL093470.

Cossarini, G., et al. (2021), High-Resolution Reanalysis of the Mediterranean Sea Biogeochemistry (1999–2019), *Frontiers in Marine Science*, *8*(1537), doi: https://doi.org/10.3389/fmars.2021.741486.

Cui, W., C. Zhou, J. Zhang, and J. Yang (2021), Statistical characteristics and thermohaline properties of mesoscale eddies in the Bay of Bengal, *Acta Oceanol. Sin.*, *40*(4), 10-22, doi: https://doi.org/10.1007/s13131-021-1723-4.

Dai, J., H. Wang, W. Zhang, P. Wang, and T. Luo (2021), Three-dimensional structure of an observed cyclonic mesoscale eddy in the Northwest Pacific and its assimilation experiment, *Acta Oceanol. Sin.*, *40*(5), 1-19, doi: https://doi.org/10.1007/s13131-021-1810-6.

Dandapat, S., A. Chakraborty, J. Kuttippurath, C. Bhagawati, and R. Sen (2021), A numerical study on the role of atmospheric forcing on mixed layer depth variability in the Bay of Bengal using a regional ocean model, *Ocean Dyn.*, *71*(10), 963-979, doi: https://doi.org/10.1007/s10236-021-01475-8.

de Freitas, P. P., A. d. M. Paiva, M. Cirano, G. N. Mill, V. S. da Costa, M. Gabioux, and B. R. L. França (2021), Coastal trapped waves propagation along the Southwestern Atlantic Continental Shelf, *Cont. Shelf Res.*, *226*, 104496, doi: https://doi.org/10.1016/j.csr.2021.104496.

de Paula, T. P., J. A. M. Lima, C. A. S. Tanajura, M. Andrioni, R. P. Martins, and W. Z. Arruda (2021), The impact of ocean data assimilation on the simulation of mesoscale eddies at São Paulo plateau (Brazil) using the regional ocean modeling system, *Ocean Model.*, *167*, 101889, doi: https://doi.org/10.1016/j.ocemod.2021.101889.

Delpech, A., C. Ménesguen, Y. Morel, L. N. Thomas, F. Marin, S. Cravatte, and S. Le Gentil (2021), Intra-Annual Rossby Waves Destabilization as a Potential Driver of Low-Latitude Zonal Jets: Barotropic Dynamics, *J. Phys. Oceanogr.*, *51*(2), 365-384, doi: https://doi.org/10.1175/JPO-D-20-0180.1.

Demyshev, S. G., O. A. Dymova, N. V. Markova, E. A. Korshenko, M. V. Senderov, N. A. Turko, and K. V. Ushakov (2021), Undercurrents in the Northeastern Black Sea Detected on the Basis of Multi-Model Experiments and Observations, *Journal of Marine Science and Engineering*, *9*(9), doi: https://doi.org/10.3390/jmse9090933.

Denvil-Sommer, A., M. Gehlen, and M. Vrac (2021), Observation system simulation experiments in the Atlantic Ocean for enhanced surface ocean pCO2 reconstructions, *Ocean Sci.*, *17*(4), 1011-1030, doi: https://os.copernicus.org/articles/17/1011/2021/.

Desbruyères, D., L. Chafik, and G. Maze (2021), A shift in the ocean circulation has warmed the subpolar North Atlantic Ocean since 2016, *Communications Earth & Environment*, *2*(1), 48, doi: https://doi.org/10.1038/s43247-021-00120-y.

Devana, M. S., W. E. Johns, A. Houk, and S. Zou (2021), Rapid Freshening of Iceland Scotland Overflow Water Driven by Entrainment of a Major Upper Ocean Salinity Anomaly, *Geophys. Res. Lett.*, *48*(22), e2021GL094396, doi: https://doi.org/10.1029/2021GL094396.

Dever, M., D. Nicholson, M. M. Omand, and A. Mahadevan (2021), Size-Differentiated Export Flux in Different Dynamical Regimes in the Ocean, *Glob. Biogeochem. Cycle*, *35*(3), e2020GB006764, doi: https://doi.org/10.1029/2020GB006764.

Di Luca, A., D. Argüeso, S. Sherwood, and J. P. Evans (2021), Evaluating Precipitation Errors Using the Environmentally Conditioned Intensity-Frequency Decomposition Method, *Journal of Advances in Modeling Earth Systems*, *13*(7), e2020MS002447, doi: https://doi.org/10.1029/2020MS002447.

Diaz, B. P., et al. (2021), Seasonal mixed layer depth shapes phytoplankton physiology, viral production, and accumulation in the North Atlantic, *Nature Communications*, *12*(1), 6634, doi: https://doi.org/10.1038/s41467-021-26836-1.

Ding, R., J. Xuan, T. Zhang, L. Zhou, F. Zhou, Q. Meng, and I.-S. Kang (2021), Eddy-Induced Heat Transport in the South China Sea, *J. Phys. Oceanogr.*, *51*(7), 2329-2349, doi: https://doi.org/10.1175/JPO-D-20-0206.1.

Ding, W., C. Zhang, J. Hu, and S. Shang (2021), Unusual Fish Assemblages Associated with Environmental Changes in the East China Sea in February and March 2017, *Remote Sensing*, *13*(9), doi: https://doi.org/10.3390/rs13091768.

Ding, Y., L. Xu, and Y. Zhang (2021), Impact of Anticyclonic Eddies Under Stormy Weather on the Mixed Layer Variability in April South of the Kuroshio Extension, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC016739, doi: https://doi.org/10.1029/2020JC016739.

Doddridge, E. W., J. Marshall, H. Song, J.-M. Campin, and M. Kelley (2021), Southern Ocean Heat Storage, Reemergence, and Winter Sea Ice Decline Induced by Summertime Winds, *J. Clim.*, *34*(4), 1403-1415, doi: https://doi.org/10.1175/JCLI-D-20-0322.1.

Domingues, R., M. Le Hénaff, G. Halliwell, J. A. Zhang, F. Bringas, P. Chardon, H.-S. Kim, J. Morell, and G. Goni (2021), Ocean Conditions and the Intensification of Three Major Atlantic Hurricanes in 2017, *Mon. Weather Rev.*, *149*(5), 1265-1286, doi: https://doi.org/10.1175/MWR-D-20-0100.1.

Dong, B., K. Haines, and M. Martin (2021), Improved High Resolution Ocean Reanalyses Using a Simple Smoother Algorithm, *Journal of Advances in Modeling Earth Systems*,

13(12), e2021MS002626, doi: https://doi.org/10.1029/2021MS002626.
D'Ortenzio, F., et al. (2021), BGC-Argo Floats Observe Nitrate Injection and Spring Phytoplankton Increase in the Surface Layer of Levantine Sea (Eastern Mediterranean), *Geophys. Res. Lett.*, *48*(8), e2020GL091649, doi: https://doi.org/10.1029/2020GL091649.
Dotto, T. S., M. M. Mata, R. Kerr, and C. A. E. Garcia (2021), A novel hydrographic gridded data set for the northern Antarctic Peninsula, *Earth Syst. Sci. Data*, *13*(2), 671-696, doi: https://doi.org/10.5194/essd-13-671-2021.
Dove, L. A., A. F. Thompson, D. Balwada, and A. R. Gray (2021), Observational Evidence of Ventilation Hotspots in the Southern Ocean, *Journal of Geophysical Research: Oceans*, *126*(7), e2021JC017178, doi: https://doi.org/10.1029/2021JC017178.
Drouin, K. L., M. S. Lozier, and W. E. Johns (2021), Variability and Trends of the South Atlantic Subtropical Gyre, *Journal of Geophysical Research: Oceans*, *126*(1), e2020JC016405, doi: https://doi.org/10.1029/2020JC016405.
Du, C., R. He, Z. Liu, T. Huang, L. Wang, Z. Yuan, Y. Xu, Z. Wang, and M. Dai (2021), Climatology of nutrient distributions in the South China Sea based on a large data set derived from a new algorithm, *Prog. Oceanogr.*, *195*, 102586, doi: https://doi.org/10.1016/j.pocean.2021.102586.
Du, M., F. Zheng, J. Zhu, R. Lin, and K. Yi (2021), Comparative Analysis of Two Approaches for Correcting the Systematic Ocean Temperature Bias of CAS-ESM-C, *Journal of Marine Science and Engineering*, *9*(9), doi: https://doi.org/10.3390/jmse9090925.
Duan, W., X. Cheng, X. Zhu, and T. Ma (2021), Variability in upper-ocean salinity stratification in the tropical Pacific Ocean, *Acta Oceanol. Sin.*, *40*(1), 113-125, doi: https://doi.org/10.1007/s13131-020-1597-x.
Eden, C., D. Olbers, and T. Eriksen (2021), A Closure for Lee Wave Drag on the Large-Scale Ocean Circulation, *J. Phys. Oceanogr.*, *51*(12), 3573-3588, doi: https://doi.org/10.1175/JPO-D-20-0230.1.
El Hourany, R., C. Mejia, G. Faour, M. Crépon, and S. Thiria (2021), Evidencing the Impact of Climate Change on the Phytoplankton Community of the Mediterranean Sea Through a Bioregionalization Approach, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC016808, doi: https://doi.org/10.1029/2020JC016808.
El-Geziry, T. M. (2021), Long-term changes in sea surface temperature (SST) within the southern Levantine Basin, *Acta Oceanol. Sin.*, *40*(3), 27-33, doi: https://doi.org/10.1007/s13131-021-1709-2.
Elzahaby, Y., A. Schaeffer, M. Roughan, and S. Delaux (2021), Oceanic Circulation Drives the Deepest and Longest Marine Heatwaves in the East Australian Current System, *Geophys. Res. Lett.*, *48*(17), e2021GL094785, doi: https://doi.org/10.1029/2021GL094785.
Escudier, R., et al. (2021), A High Resolution Reanalysis for the Mediterranean Sea, *Frontiers in Earth Science*, *9*(1060), doi: https://doi.org/10.3389/feart.2021.702285.
Estournel, C., P. Marsaleix, and C. Ulses (2021), A new assessment of the circulation of Atlantic and Intermediate Waters in the Eastern Mediterranean, *Prog. Oceanogr.*, *198*, 102673, doi: https://doi.org/10.1016/j.pocean.2021.102673.
Fach, B. A., H. Orek, E. Yilmaz, D. Tezcan, I. Salihoglu, B. Salihoglu, and M. A. Latif (2021),

Water Mass Variability and Levantine Intermediate Water Formation in the Eastern Mediterranean Between 2015 and 2017, *Journal of Geophysical Research: Oceans*, *126*(2), e2020JC016472, doi: https://doi.org/10.1029/2020JC016472.

Fedorov, A. M., M. V. Budyansky, T. V. Belonenko, S. V. Prants, M. Y. Uleysky, and I. L. Bashmachnikov (2021), Lagrangian modeling of water circulation in the Lofoten Basin, *Dynamics of Atmospheres and Oceans*, *96*, 101258, doi: https://doi.org/10.1016/j.dynatmoce.2021.101258.

Fedorov, A. M., R. P. Raj, T. V. Belonenko, E. V. Novoselova, I. L. Bashmachnikov, J. A. Johannessen, and L. H. Pettersson (2021), Extreme Convective Events in the Lofoten Basin, *Pure and Applied Geophysics*, doi: https://doi.org/10.1007/s00024-021-02749-4.

Feng, M., Y. Zhang, H. H. Hendon, M. J. McPhaden, and A. G. Marshall (2021), Niño 4 West (Niño-4W) Sea Surface Temperature Variability, *Journal of Geophysical Research: Oceans*, *126*(9), e2021JC017591, doi: https://doi.org/10.1029/2021JC017591.

Foppert, A., S. R. Rintoul, S. G. Purkey, N. Zilberman, T. Kobayashi, J.-B. Sallèe, E. M. van Wijk, and L. O. Wallace (2021), Deep Argo Reveals Bottom Water Properties and Pathways in the Australian-Antarctic Basin, *Journal of Geophysical Research: Oceans*, *126*(12), e2021JC017935, doi: https://doi.org/10.1029/2021JC017935.

Ford, D. (2021), Assimilating synthetic Biogeochemical-Argo and ocean colour observations into a global ocean model to inform observing system design, *Biogeosciences*, *18*(2), 509-534, doi: https://doi.org/10.5194/bg-18-509-2021.

Foster, D., D. J. Gagne Ii, and D. B. Whitt (2021), Probabilistic Machine Learning Estimation of Ocean Mixed Layer Depth From Dense Satellite and Sparse In Situ Observations, *Journal of Advances in Modeling Earth Systems*, *13*(12), e2021MS002474, doi: https://doi.org/10.1029/2021MS002474.

Fournier, S., and T. Lee (2021), Seasonal and Interannual Variability of Sea Surface Salinity Near Major River Mouths of the World Ocean Inferred from Gridded Satellite and In-Situ Salinity Products, *Remote Sensing*, *13*(4), doi: https://doi.org/10.3390/rs13040728.

Franco, A. C., et al. (2021), Anthropogenic and Climatic Contributions to Observed Carbon System Trends in the Northeast Pacific, *Glob. Biogeochem. Cycle*, *35*(7), e2020GB006829, doi: https://doi.org/10.1029/2020GB006829.

Frankignoul, C., E. Kestenare, and G. Reverdin (2021), Sea Surface Salinity Reemergence in an Updated North Atlantic In Situ Salinity Dataset, *J. Clim.*, *34*(22), 9007-9023, doi: https://doi.org/10.1175/JCLI-D-20-0840.1.

Frazão, H. C., and J. J. Waniek (2021), Mediterranean Water Properties at the Eastern Limit of the North Atlantic Subtropical Gyre since 1981, *Oceans*, *2*(1), doi: https://doi.org/10.3390/oceans2010016.

Frederikse, T., et al. (2021), Constraining 20th-Century Sea-Level Rise in the South Atlantic Ocean, *Journal of Geophysical Research: Oceans*, *126*(3), e2020JC016970, doi: https://doi.org/10.1029/2020JC016970.

Freilich, M., A. Mignot, G. Flierl, and R. Ferrari (2021), Grazing behavior and winter phytoplankton accumulation, *Biogeosciences*, *18*(20), 5595-5607, doi: https://doi.org/10.5194/bg-18-5595-2021.

Fujii, Y., T. Ishibashi, T. Yasuda, Y. Takaya, C. Kobayashi, and I. Ishikawa (2021), Improvements in tropical precipitation and sea surface air temperature fields in a coupled atmosphere–ocean data assimilation system, *Q. J. R. Meteorol. Soc.*, *147*(735), 1317-1343, doi: https://doi.org/10.1002/qj.3973.

Furue, R., M. Nonaka, and H. Sasaki (2021), On the statistics of the zonal jets in the eastern equatorial Pacific and eastern North Pacific in an ensemble of eddy-resolving ocean general circulation model runs, *Ocean Model.*, *159*, 101761, doi: https://doi.org/10.1016/j.ocemod.2021.101761.

Gadi, R., P. N. Vinayachandran, and D. N. Subramani (2021), Data-driven feature-oriented modeling of Southwest Monsoon Current, *Ocean Model.*, *168*, 101912, doi: https://doi.org/10.1016/j.ocemod.2021.101912.

Galán, A., G. S. Saldías, A. Corredor-Acosta, R. Muñoz, C. Lara, and J. L. Iriarte (2021), Argo Float Reveals Biogeochemical Characteristics Along the Freshwater Gradient Off Western Patagonia, *Frontiers in Marine Science*, *8*(784), doi: https://doi.org/10.3389/fmars.2021.613265.

Ganguly, D., K. Suryanarayana, and M. Raman (2021), Cyclone Ockhi Induced Upwelling and Associated Changes in Biological Productivity in Arabian Sea, *Mar. Geod.*, *44*(1), 70-89, doi: https://doi.org/10.1080/01490419.2020.1838675.

Gao, W., Z. Wang, X. Li, and H. Huang (2021), The increased storage of suspended particulate matter in the upper water of the tropical Western Pacific during the 2015/2016 super El Niño event, *Journal of Oceanology and Limnology*, *39*(5), 1675-1689, doi: https://doi.org/10.1007/s00343-021-0362-0.

Gao, Z., Z. Chen, X. Huang, Z. Xu, H. Yang, Z. Zhao, C. Ren, and L. Wu (2021), Internal Wave Imprints on Temperature Fluctuations as Revealed by Rapid-Sampling Deep Profiling Floats, *Journal of Geophysical Research: Oceans*, *126*(12), e2021JC017878, doi: https://doi.org/10.1029/2021JC017878.

García-Sánchez, G., A. M. Mancho, A. G. Ramos, J. Coca, B. Pérez-Gómez, E. Álvarez-Fanjul, M. G. Sotillo, M. García-León, V. J. García-Garrido, and S. Wiggins (2021), Very High Resolution Tools for the Monitoring and Assessment of Environmental Hazards in Coastal Areas, *Frontiers in Marine Science*, *7*, doi: https://doi.org/10.3389/fmars.2020.605804.

Gasparin, F., S. Cravatte, E. Greiner, C. Perruche, M. Hamon, S. Van Gennip, and J.-M. Lellouche (2021), Excessive productivity and heat content in tropical Pacific analyses: Disentangling the effects of in situ and altimetry assimilation, *Ocean Model.*, *160*, 101768, doi: https://doi.org/10.1016/j.ocemod.2021.101768.

Georgiou, S., S. L. Ypma, N. Brüggemann, J.-M. Sayol, C. G. van der Boog, P. Spence, J. D. Pietrzak, and C. A. Katsman (2021), Direct and Indirect Pathways of Convected Water Masses and Their impacts on the Overturning Dynamics of the Labrador Sea, *Journal of Geophysical Research: Oceans*, *126*(1), e2020JC016654, doi: https://doi.org/10.1029/2020JC016654.

Gibert, F., et al. (2021), Results of the Dragon 4 Project on New Ocean Remote Sensing Data for Operational Applications, *Remote Sensing*, *13*(14), doi: https://doi.org/10.3390/rs13142847.

Girishkumar, M. S., J. Joseph, M. J. McPhaden, and E. Pattabhi Ram Rao (2021), Atmospheric

Cold Pools and Their Influence on Sea Surface Temperature in the Bay of Bengal, *Journal of Geophysical Research: Oceans*, *126*(9), e2021JC017297, doi: https://doi.org/10.1029/2021JC017297.

Gloege, L., et al. (2021), Quantifying Errors in Observationally Based Estimates of Ocean Carbon Sink Variability, *Glob. Biogeochem. Cycle*, *35*(4), e2020GB006788, doi: https://doi.org/10.1029/2020GB006788.

Goldsworth, F. W., D. P. Marshall, and H. L. Johnson (2021), Symmetric instability in cross-equatorial western boundary currents, *J. Phys. Oceanogr.*, *51*(6), 2049-2067, doi: https://doi.org/10.1175/JPO-D-20-0273.1.

Golubeva, E., M. Kraineva, G. Platov, D. Iakshina, and M. Tarkhanova (2021), Marine Heatwaves in Siberian Arctic Seas and Adjacent Region, *Remote Sensing*, *13*(21), doi: https://doi.org/10.3390/rs13214436.

Gomberg, J., K. Ariyoshi, S. Hautala, and H. P. Johnson (2021), The Finicky Nature of Earthquake Shaking-Triggered Submarine Sediment Slope Failures and Sediment Gravity Flows, *Journal of Geophysical Research: Solid Earth*, *126*(10), e2021JB022588, doi: https://doi.org/10.1029/2021JB022588.

Gonaduwage, L. P., G. Chen, T. Priyadarshana, D. Wang, and J. Yao (2021), Interannual variability of summertime eddy-induced heat transport in the Western South China Sea and its formation mechanism, *Climate Dynamics*, *57*(1), 451-468, doi: https://doi.org/10.1007/s00382-021-05719-7.

Gonçalves Neto, A., J. A. Langan, and J. B. Palter (2021), Changes in the Gulf Stream preceded rapid warming of the Northwest Atlantic Shelf, *Communications Earth & Environment*, *2*(1), 74, doi: https://doi.org/10.1038/s43247-021-00143-5.

Gopalakrishnan, G., B. D. Cornuelle, M. R. Mazloff, P. F. Worcester, and M. A. Dzieciuch (2021), State Estimates and Forecasts of the Eddy Field in the Subtropical Countercurrent in the Northern Philippine Sea, *J. Atmos. Ocean. Technol.*, *38*(11), 1889-1911, doi: https://doi.org/10.1175/JTECH-D-20-0083.1.

Gould, W. J., and S. A. Cunningham (2021), Global-scale patterns of observed sea surface salinity intensified since the 1870s, *Communications Earth & Environment*, *2*(1), 76, doi: https://doi.org/10.1038/s43247-021-00161-3.

Grabon, J. S., J. M. Toole, A. T. Nguyen, and R. A. Krishfield (2021), An analysis of Atlantic water in the Arctic Ocean using the Arctic subpolar gyre state estimate and observations, *Prog. Oceanogr.*, *198*, 102685, doi: https://doi.org/10.1016/j.pocean.2021.102685.

Grégoire, M., et al. (2021), A Global Ocean Oxygen Database and Atlas for Assessing and Predicting Deoxygenation and Ocean Health in the Open and Coastal Ocean, *Frontiers in Marine Science*, *8*, doi: https://doi.org/10.3389/fmars.2021.724913.

Gruber, N., P. W. Boyd, T. L. Frölicher, and M. Vogt (2021), Biogeochemical extremes and compound events in the ocean, *Nature*, *600*(7889), 395-407, doi: https://doi.org/10.1038/s41586-021-03981-7.

Guimbard, S., et al. (2021), The Salinity Pilot-Mission Exploitation Platform (Pi-MEP): A Hub for Validation and Exploitation of Satellite Sea Surface Salinity Data, *Remote Sensing*, *13*(22), 4600, doi: https://doi.org/10.3390/rs13224600.

Guinness, J. (2021), Gaussian process learning via Fisher scoring of Vecchia's approximation,

Statistics and Computing, *31*(3), 25, doi: https://doi.org/10.1007/s11222-021-09999-1.
Guo, Y., Y. Li, F. Wang, and Y. Wei (2021), Ocean Salinity Aspects of the Ningaloo Niño, *J. Clim.*, *34*(15), 6141-6161, doi: https://doi.org/10.1175/JCLI-D-20-0890.1.
Haghbin, M., A. Sharafati, D. Motta, N. Al-Ansari, and M. H. M. Noghani (2021), Applications of soft computing models for predicting sea surface temperature: a comprehensive review and assessment, *Prog. in Earth and Planet. Sci.*, *8*(1), 4, doi: https://doi.org/10.1186/s40645-020-00400-9.
Hague, M., and M. Vichi (2021), Southern Ocean Biogeochemical Argo detect under-ice phytoplankton growth before sea ice retreat, *Biogeosciences*, *18*(1), 25-38, doi: https://doi.org/10.5194/bg-18-25-2021.
Haine, T. W. N., R. Gelderloos, M. A. Jimenez-Urias, A. H. Siddiqui, G. Lemson, D. Medvedev, A. Szalay, R. P. Abernathey, M. Almansi, and C. N. Hill (2021), Is Computational Oceanography Coming of Age?, *Bull. Amer. Meteorol. Soc.*, *102*(8), E1481-E1493, doi: https://doi.org/10.1175/BAMS-D-20-0258.1.
Hakuba, M. Z., T. Frederikse, and F. W. Landerer (2021), Earth's Energy Imbalance From the Ocean Perspective (2005–2019), *Geophys. Res. Lett.*, *48*(16), e2021GL093624, doi: https://doi.org/10.1029/2021GL093624.
Ham, Y.-G., Y.-S. Joo, and J.-Y. Park (2021), Mechanism of skillful seasonal surface chlorophyll prediction over the southern Pacific using a global earth system model, *Climate Dynamics*, *56*(1), 45-64, doi: https://doi.org/10.1007/s00382-020-05403-2.
Han, G., F. Tian, C. Ma, and G. Chen (2021), The geometry of mesoscale eddies in the South China Sea: characteristics and implications, *International Journal of Digital Earth*, 1-16, doi: https://doi.org/10.1080/17538947.2020.1842523.
Hátún, H., L. Chafik, and K. M. H. Larsen (2021), The Norwegian Sea Gyre – A Regulator of Iceland-Scotland Ridge Exchanges, *Frontiers in Marine Science*, *8*(1001), doi: https://doi.org/10.3389/fmars.2021.694614.
He, J., and A. Mahadevan (2021), How the Source Depth of Coastal Upwelling Relates to Stratification and Wind, *Journal of Geophysical Research: Oceans*, *126*(12), e2021JC017621, doi: https://doi.org/10.1029/2021JC017621.
He, X., Z. Chen, Y. Lu, W. Zhang, and K. Yu (2021), Spatio-temporal Variations of Sea Surface Wind in Coral Reef Regions over the South China Sea from 1988 to 2017, *Chinese Geographical Science*, *31*(3), 522-538, doi: https://doi.org/10.1007/s11769-021-1208-6.
He, Y., M. Feng, J. Xie, Q. He, J. Liu, J. Xu, Z. Chen, Y. Zhang, and S. Cai (2021), Revisit the Vertical Structure of the Eddies and Eddy-Induced Transport in the Leeuwin Current System, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC016556, doi: https://doi.org/10.1029/2020JC016556.
He, Y., P. Hu, B. Yang, Y. Yin, and Y. Hou (2021), Volume transport in the East Taiwan Channel in response to different tracks of typhoons as revealed by HYCOM data, *Journal of Oceanology and Limnology*, doi: https://doi.org/10.1007/s00343-021-0318-4.
He, Z., X. Wang, X. Wu, Z. Chen, and J. Chen (2021), Projecting Three-Dimensional Ocean Thermohaline Structure in the North Indian Ocean From the Satellite Sea Surface

Data Based on a Variational Method, *Journal of Geophysical Research: Oceans*, *126*(1), e2020JC016759, doi: https://doi.org/10.1029/2020JC016759.

Hendry, K. R., N. Briggs, S. Henson, J. Opher, J. A. Brearley, M. P. Meredith, M. J. Leng, and L. Meire (2021), Tracing Glacial Meltwater From the Greenland Ice Sheet to the Ocean Using Gliders, *Journal of Geophysical Research: Oceans*, *126*(8), e2021JC017274, doi: https://doi.org/10.1029/2021JC017274.

Hernandez-Lasheras, J., B. Mourre, A. Orfila, A. Santana, E. Reyes, and J. Tintoré (2021), Evaluating high-frequency radar data assimilation impact in coastal ocean operational modelling, *Ocean Sci.*, *17*(4), 1157-1175, doi: https://doi.org/10.5194/os-17-1157-2021.

Hobbs, W. R., C. Roach, T. Roy, J.-B. Sallée, and N. Bindoff (2021), Anthropogenic Temperature and Salinity Changes in the Southern Ocean, *J. Clim.*, *34*(1), 215-228, doi: https://doi.org/10.1175/JCLI-D-20-0454.1.

Hole, L. R., V. de Aguiar, K.-F. Dagestad, V. H. Kourafalou, Y. Androulidakis, H. Kang, M. Le Hénaff, and A. Calzada (2021), Long term simulations of potential oil spills around Cuba, *Marine Pollution Bulletin*, *167*, 112285, doi: https://doi.org/10.1016/j.marpolbul.2021.112285.

Hong, Y., Y. Du, X. Xia, L. Xu, Y. Zhang, and S.-P. Xie (2021), Subantarctic Mode Water and Its Long-Term Change in CMIP6 Models, *J. Clim.*, *34*(23), 9385-9400, doi: https://doi.org/10.1175/JCLI-D-21-0133.1.

Hosoda, S., R. Inoue, M. Nonaka, H. Sasaki, Y. Sasai, and M. Hirano (2021), Rapid water parcel transport across the Kuroshio Extension in the lower thermocline from dissolved oxygen measurements by Seaglider, *Prog. in Earth and Planet. Sci.*, *8*(1), 16, doi: https://doi.org/10.1186/s40645-021-00406-x.

Hoteit, I., et al. (2021), Towards an End-to-End Analysis and Prediction System for Weather, Climate, and Marine Applications in the Red Sea, *Bull. Amer. Meteorol. Soc.*, *102*(1), E99-E122, doi: https://doi.org/10.1175/BAMS-D-19-0005.1.

Houndegnonto, O. J., N. Kolodziejczyk, C. Maes, B. Bourlès, C. Y. Da-Allada, and N. Reul (2021), Seasonal Variability of Freshwater Plumes in the Eastern Gulf of Guinea as Inferred From Satellite Measurements, *Journal of Geophysical Research: Oceans*, *126*(5), e2020JC017041, doi: https://doi.org/10.1029/2020JC017041.

Hu, Q., X. Chen, X. He, Y. Bai, F. Gong, Q. Zhu, and D. Pan (2021), Effect of El Niño-Related Warming on Phytoplankton's Vertical Distribution in the Arabian Sea, *Journal of Geophysical Research: Oceans*, *126*(11), e2021JC017882, doi: https://doi.org/10.1029/2021JC017882.

Hu, Y., H. Beggs, and X. H. Wang (2021), Intercomparison of High-Resolution SST Climatologies Over the Australian Region, *Journal of Geophysical Research: Oceans*, *126*(12), e2021JC017221, doi: https://doi.org/10.1029/2021JC017221.

Huang, B., C. Liu, V. Banzon, E. Freeman, G. Graham, B. Hankins, T. Smith, and H.-M. Zhang (2021), Improvements of the daily optimum interpolation sea surface temperature (DOISST) version 2.1, *J. Clim.*, *34*(8), 2923-2939, doi: https://doi.org/10.1175/JCLI-D-20-0166.1.

Huang, B., C. Liu, E. Freeman, G. Graham, T. Smith, and H.-M. Zhang (2021), Assessment and Intercomparison of NOAA Daily Optimum Interpolation Sea Surface Temperature

(DOISST) Version 2.1, *J. Clim.*, *34*(18), 7421-7441, doi: https://doi.org/10.1175/JCLI-D-21-0001.1.

Huang, B., C.-S. Shin, A. Kumar, M. L'Heureux, and M. A. Balmaseda (2021), The relative roles of decadal climate variations and changes in the ocean observing system on seasonal prediction skill of tropical Pacific SST, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-021-05630-1.

Huang, S., Z. Deng, G. Tang, H. Li, and T. Yu (2021), Numerical study on blue mackerel larval transport in East China Sea, *J. Mar. Syst.*, *217*, 103515, doi: https://doi.org/10.1016/j.jmarsys.2021.103515.

Huang, W., et al. (2021), Compounding factors for extreme flooding around Galveston Bay during Hurricane Harvey, *Ocean Model.*, *158*, 101735, doi: https://doi.org/10.1016/j.ocemod.2020.101735.

Iacono, R., E. Napolitano, M. Palma, and G. Sannino (2021), The Tyrrhenian Sea Circulation: A Review of Recent Work, *Sustainability*, *13*(11), doi: https://doi.org/10.3390/su13116371.

Injan, S., A. Wangwongchai, U. Humphries, A. Khan, and A. Yusuf (2021), Reinitializing Sea Surface Temperature in the Ensemble Intermediate Coupled Model for Improved Forecasts, *Axioms*, *10*(3), doi: https://doi.org/10.3390/axioms10030189.

Iskandar, I., M. Nagura, and M. J. McPhaden (2021), Role of the eastern boundary-generated waves on the termination of 1997 Indian Ocean Dipole event, *Geosci. Lett.*, *8*(1), 35, doi: https://doi.org/10.1186/s40562-021-00205-8.

Ivanova, D. P., J. L. McClean, J. Sprintall, and R. Chen (2021), The Oceanic Barrier Layer in the Eastern Indian Ocean as a Predictor for Rainfall Over Indonesia and Australia, *Geophys. Res. Lett.*, *48*(22), e2021GL094519, doi: https://doi.org/10.1029/2021GL094519.

Iyer, S., and K. Drushka (2021), The Influence of Preexisting Stratification and Tropical Rain Modes on the Mixed Layer Salinity Response to Rainfall, *Journal of Geophysical Research: Oceans*, *126*(10), e2021JC017574, doi: https://doi.org/10.1029/2021JC017574.

Jacobs, G., J. M. D'Addezio, H. Ngodock, and I. Souopgui (2021), Observation and model resolution implications to ocean prediction, *Ocean Model.*, *159*, 101760, doi: https://doi.org/10.1016/j.ocemod.2021.101760.

Jain, V., D. Shankar, P. N. Vinayachandran, A. Mukherjee, and P. Amol (2021), Role of ocean dynamics in the evolution of mixed-layer temperature in the Bay of Bengal during the summer monsoon, *Ocean Model.*, *168*, 101895, doi: https://doi.org/10.1016/j.ocemod.2021.101895.

Jang, E., Y. J. Kim, J. Im, and Y.-G. Park (2021), Improvement of SMAP sea surface salinity in river-dominated oceans using machine learning approaches, *GIScience & Remote Sensing*, *58*(1), 138-160, doi: https://doi.org/10.1080/15481603.2021.1872228.

Jayaram, C., T. V. S. U. Bhaskar, N. Chacko, S. Prakash, and K. H. Rao (2021), Spatio-temporal variability of chlorophyll in the northern Indian Ocean: A biogeochemical argo data perspective, *Deep Sea Research Part II: Topical Studies in Oceanography*, *183*, 104928, doi: https://doi.org/10.1016/j.dsr2.2021.104928.

Jayaram, C., J. Pavan Kumar, T. V. S. Udaya Bhaskar, I. V. G. Bhavani, T. D. V. Prasad Rao, and

P. V. Nagamani (2021), Reconstruction of Gap-Free OCM-2 Chlorophyll-a Concentration Using DINEOF, *Journal of the Indian Society of Remote Sensing*, doi: https://doi.org/10.1007/s12524-021-01317-6.

Jemai, A., H. Bünger, R. Henkel, D. Voß, J. Wollschläger, and O. Zielinski (2021), Hyperspectral underwater light field sensing onboard BGC-Argo Floats, paper presented at OCEANS 2021: San Diego – Porto, 20-23 Sept. 2021.

Jemai, A., J. Wollschläger, D. Voß, and O. Zielinski (2021), Radiometry on Argo Floats: From the Multispectral State-of-the-Art on the Step to Hyperspectral Technology, *Frontiers in Marine Science*, *8*(945), doi: https://www.frontiersin.org/article/10.3389/fmars.2021.676537.

Jeon, T. (2021), Impact of Ocean Domain Definition on Sea Level Budget, *Remote Sensing*, *13*(16), doi: https://doi.org/10.3390/rs13163206.

Jeon, T., K.-W. Seo, B.-H. Kim, J.-S. Kim, J. Chen, and C. R. Wilson (2021), Sea level fingerprints and regional sea level change, *Earth and Planetary Science Letters*, *567*, 116985, doi: https://doi.org/10.1016/j.epsl.2021.116985.

Jha, R. K., and T. V. S. Udaya Bhaskar (2021), Optimal parameters for generation of gridded product of Argo temperature and salinity using DIVA, *Journal of Earth System Science*, *130*(3), 170, doi: https://doi.org/10.1007/s12040-021-01675-2.

Ji, H., X. Liu, C. Zhu, J. Yuan, B. Ji, and J. Guo (2021), On performance of CryoSat-2 altimeter data in deriving marine gravity over the Bay of Bengal, *Marine Geophysical Research*, *42*(4), 39, doi: https://doi.org/10.1007/s11001-021-09461-x.

Jiao, S., S. Huang, J. Wang, and X. Lv (2021), Inversion of Initial Field Based on a Temperature Transport Adjoint, *Journal of Marine Science and Engineering*, *9*(7), doi: https://doi.org/10.3390/jmse9070760.

Jing, W., and Y. Luo (2021), Volume Budget of Subantarctic Mode Water in the Southern Ocean From an Ocean General Circulation Model, *Journal of Geophysical Research: Oceans*, *126*(10), e2020JC017040, doi: https://doi.org/10.1029/2020JC017040.

Jing, Z., B. Fox-Kemper, H. Cao, R. Zheng, and Y. Du (2021), Submesoscale Fronts and Their Dynamical Processes Associated with Symmetric Instability in the Northwest Pacific Subtropical Ocean, *J. Phys. Oceanogr.*, *51*(1), 83-100, doi: https://journals.ametsoc.org/view/journals/phoc/51/1/jpo-d-20-0076.1.xml.

Jithin, A. K., and P. A. Francis (2021), Formation of an Intrathermocline Eddy Triggered by the Coastal-Trapped Wave in the Northern Bay of Bengal, *Journal of Geophysical Research: Oceans*, *126*(12), e2021JC017725, doi: https://doi.org/10.1029/2021JC017725.

Johns, W. E., M. Devana, A. Houk, and S. Zou (2021), Moored Observations of the Iceland-Scotland Overflow Plume Along the Eastern Flank of the Reykjanes Ridge, *Journal of Geophysical Research: Oceans*, *126*(8), e2021JC017524, doi: https://doi.org/10.1029/2021JC017524.

Johnson, A. R., and M. M. Omand (2021), Evolution of a Subducted Carbon-Rich Filament on the Edge of the North Atlantic Gyre, *Journal of Geophysical Research: Oceans*, *126*(2), e2020JC016685, doi: https://doi.org/10.1029/2020JC016685.

Johnson, G. C., et al. (2021), Global Oceans, *Bull. Amer. Meteorol. Soc.*, *102*(8), S143-S198, doi: https://doi.org/10.1175/BAMS-D-21-0083.1.

Johnson, G. C., J. Lyman, T. Boyer, L. Cheng, J. Gilson, M. Ishii, R. Killick, and S. Purkey (2021), Ocean heat content in Global Oceans in the State of the Climate in 2020, *Bull. Am. Meteorol. Soc.*, *102*(8), doi: https://doi.org/10.1175/BAMS-D-21-0083.1.

Johnson, G. C., J. Reagan, J. Lyman, T. Boyer, C. Schmid, and R. Locarnini (2021), Salinity in Global Oceans in the State of the Climate in 2020, *Bull. Am. Meteorol. Soc.*, *102*(8), doi: https://doi.org/10.1175/BAMS-D-21-0083.1.

Johnson, K. S., and M. B. Bif (2021), Constraint on net primary productivity of the global ocean by Argo oxygen measurements, *Nat. Geosci.*, *14*(10), 769-774, doi: https://doi.org/10.1038/s41561-021-00807-z.

Jorge, D. S. F., et al. (2021), A three-step semi analytical algorithm (3SAA) for estimating inherent optical properties over oceanic, coastal, and inland waters from remote sensing reflectance, *Remote Sens. Environ.*, *263*, 112537, doi: https://doi.org/10.1016/j.rse.2021.112537.

Jutard, Q., et al. (2021), Correction of Biogeochemical-Argo Radiometry for Sensor Temperature-Dependence and Drift: Protocols for a Delayed-Mode Quality Control, *Sensors*, *21*(18), doi: https://doi.org/10.3390/s21186217.

KASSIS, D., and G. KORRES (2021), Recent hydrological status of the Aegean Sea derived from free drifting profilers, *2021*, *22*(2), 15, doi: https://ejournals.epublishing.ekt.gr/index.php/hcmr-med-mar-sc/article/view/24833.

Kassis, D., and G. Varlas (2021), Hydrographic effects of an intense "medicane" over the central-eastern Mediterranean Sea in 2018, *Dynamics of Atmospheres and Oceans*, *93*, 101185, doi: https://doi.org/10.1016/j.dynatmoce.2020.101185.

Katsura, S., J. Sprintall, and F. M. Bingham (2021), Upper Ocean Stratification in the Eastern Pacific During the SPURS-2 Field Campaign, *Journal of Geophysical Research: Oceans*, *126*(3), e2020JC016591, doi: https://doi.org/10.1029/2020JC016591.

Kawai, Y., and S. Hosoda (2021), Global mapping of 10-day differences of temperature and salinity in the intermediate layer observed with Argo floats, *J. Oceanogr.*, doi: https://doi.org/10.1007/s10872-021-00613-6.

Kawai, Y., S. Hosoda, K. Uehara, and T. Suga (2021), Heat and salinity transport between the permanent pycnocline and the mixed layer due to the obduction process evaluated from a gridded Argo dataset, *J. Oceanogr.*, *77*(1), 75-92, doi: https://doi.org/10.1007/s10872-020-00559-1.

Kelley, D. E., J. Harbin, and C. Richards (2021), argoFloats: An R Package for Analyzing Argo Data, *Frontiers in Marine Science*, *8*(409), doi: https://www.frontiersin.org/article/10.3389/fmars.2021.635922.

Kenigson, J. S., R. Gelderloos, and G. E. Manucharyan (2021), Vertical Structure of the Beaufort Gyre Halocline and the Crucial Role of the Depth-Dependent Eddy Diffusivity, *J. Phys. Oceanogr.*, *51*(3), 845-860, doi: https://doi.org/10.1175/JPO-D-20-0077.1.

Kenigson, J. S., and M.-L. Timmermans (2021), Nordic Seas Hydrography in the Context of Arctic and North Atlantic Ocean Dynamics, *J. Phys. Oceanogr.*, *51*(1), 101-114, doi: https://doi.org/10.1175/JPO-D-20-0071.1.

Kent, E. C., and J. J. Kennedy (2021), Historical Estimates of Surface Marine Temperatures, *Annual Review of Marine Science*, *13*(1), 283-311, doi:

https://doi.org/10.1146/annurev-marine-042120-111807.
Kerns, B. W., and S. S. Chen (2021), Impacts of Precipitation–Evaporation–Salinity coupling on upper ocean stratification and momentum over the tropical pacific prior to onset of the 2018 El Niño, *Ocean Model.*, *168*, 101892, doi: https://doi.org/10.1016/j.ocemod.2021.101892.
Kersalé, M., et al. (2021), Multi-Year Estimates of Daily Heat Transport by the Atlantic Meridional Overturning Circulation at 34.5°S, *Journal of Geophysical Research: Oceans*, *126*(5), e2020JC016947, doi: https://doi.org/10.1029/2020JC016947.
Kido, S., M. Nonaka, and Y. Tanimoto (2021), Impacts of Salinity Variation on the Mixed-Layer Processes and Sea Surface Temperature in the Kuroshio-Oyashio Confluence Region, *Journal of Geophysical Research: Oceans*, *126*(8), e2020JC016914, doi: https://doi.org/10.1029/2020JC016914.
Kido, S., M. Nonaka, and Y. Tanimoto (2021), Sea Surface Temperature–Salinity Covariability and Its Scale-Dependent Characteristics, *Geophys. Res. Lett.*, *48*(24), e2021GL096010, doi: https://doi.org/10.1029/2021GL096010.
Kim, R., L. B. Tremblay, C. Brunette, and R. Newton (2021), A Regional Seasonal Forecast Model of Arctic Minimum Sea Ice Extent: Reflected Solar Radiation versus Late Winter Coastal Divergence, *J. Clim.*, *34*(15), 6097-6113, doi: https://doi.org/10.1175/JCLI-D-20-0846.1.
Kim, S.-Y., Y.-G. Park, Y. H. Kim, S. Seo, H. Jin, G. Pak, and H. J. Lee (2021), Origin, Variability, and Pathways of East Sea Intermediate Water in a High-Resolution Ocean Reanalysis, *Journal of Geophysical Research: Oceans*, *126*(6), e2020JC017158, doi: https://doi.org/10.1029/2020JC017158.
Kitsios, V., P. Sandery, T. J. O'Kane, and R. Fiedler (2021), Ensemble Kalman Filter Parameter Estimation of Ocean Optical Properties for Reduced Biases in a Coupled General Circulation Model, *Journal of Advances in Modeling Earth Systems*, *13*(2), e2020MS002252, doi: https://doi.org/10.1029/2020MS002252.
Kobashi, F., T. Nakano, N. Iwasaka, and T. Ogata (2021), Decadal-scale variability of the North Pacific subtropical mode water and its influence on the pycnocline observed along 137°E, *J. Oceanogr.*, *77*(3), 487-503, doi: https://doi.org/10.1007/s10872-020-00579-x.
Kobayashi, T. (2021), Salinity bias with negative pressure dependency caused by anisotropic deformation of CTD measuring cell under pressure examined with a dual-cylinder cell model, *Deep Sea Research Part I: Oceanographic Research Papers*, *167*, 103420, doi: https://doi.org/10.1016/j.dsr.2020.103420.
Kobayashi, T., K. Sato, and B. A. King (2021), Observed features of salinity bias with negative pressure dependency for measurements by SBE 41CP and SBE 61 CTD sensors on deep profiling floats, *Prog. Oceanogr.*, *198*, 102686, doi: https://doi.org/10.17882/42182#68322.
Koenigk, T., et al. (2021), Deep mixed ocean volume in the Labrador Sea in HighResMIP models, *Climate Dynamics*, *57*, 1895–1918, doi: https://doi.org/10.1007/s00382-021-05785-x.
Kolbe, M., F. Roquet, E. Pauthenet, and D. Nerini (2021), Impact of Thermohaline Variability on Sea Level Changes in the Southern Ocean, *Journal of Geophysical Research:*

Oceans, *126*(9), e2021JC017381, doi: https://doi.org/10.1029/2021JC017381.
Kolodziejczyk, N., M. Hamon, J. Boutin, J.-L. Vergely, G. Reverdin, A. Supply, and N. Reul (2021), Objective Analysis of SMOS and SMAP Sea Surface Salinity to Reduce Large-Scale and Time-Dependent Biases from Low to High Latitudes, *J. Atmos. Ocean. Technol.*, *38*(3), 405-421, doi: https://doi.org/10.1175/JTECH-D-20-0093.1.
Koohestani, K., M. N. Allahdadi, and N. Chaichitehrani (2021), Oceanic Response to Tropical Cyclone Gonu (2007) in the Gulf of Oman and the Northern Arabian Sea: Estimating Depth of the Mixed Layer Using Satellite SST and Climatological Data, *Journal of Marine Science and Engineering*, *9*(11), doi: https://doi.org/10.3390/jmse9111244.
Kostov, Y., H. L. Johnson, D. P. Marshall, P. Heimbach, G. Forget, N. P. Holliday, M. S. Lozier, F. Li, H. R. Pillar, and T. Smith (2021), Distinct sources of interannual subtropical and subpolar Atlantic overturning variability, *Nat. Geosci.*, *14*(7), 491-495, doi: https://doi.org/10.1038/s41561-021-00759-4.
Kouketsu, S. (2021), Inverse estimation of diffusivity coefficients from salinity distributions on isopycnal surfaces using Argo float array data, *J. Oceanogr.*, *77*, 615–630, doi: https://doi.org/10.1007/s10872-021-00595-5.
Kubryakov, A. A., A. S. Mikaelyan, and S. V. Stanichny (2021), Extremely strong coccolithophore blooms in the Black Sea: The decisive role of winter vertical entrainment of deep water, *Deep Sea Research Part I: Oceanographic Research Papers*, *173*, 103554, doi: https://doi.org/10.1016/j.dsr.2021.103554.
Kubryakova, E. A., A. A. Kubryakov, and A. S. Mikaelyan (2021), Winter coccolithophore blooms in the Black Sea: Interannual variability and driving factors, *J. Mar. Syst.*, *213*, 103461, doi: https://doi.org/10.1016/j.jmarsys.2020.103461.
Kuntz, L. B., and D. P. Schrag (2021), Subtropical modulation of the equatorial undercurrent: a mechanism of Pacific variability, *Climate Dynamics*, *56*(5), 1937-1949, doi: https://doi.org/10.1007/s00382-020-05568-w.
Kuo, Y.-N., M.-H. Lo, Y.-C. Liang, Y.-H. Tseng, and C.-W. Hsu (2021), Terrestrial Water Storage Anomalies Emphasize Interannual Variations in Global Mean Sea Level During 1997–1998 and 2015–2016 El Niño Events, *Geophys. Res. Lett.*, *48*(18), e2021GL094104, doi: https://doi.org/10.1029/2021GL094104.
Kurian, J., P. Li, P. Chang, C. M. Patricola, and J. Small (2021), Impact of the Benguela coastal low-level jet on the southeast tropical Atlantic SST bias in a regional ocean model, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-020-05616-5.
Kuroda, H., and T. Setou (2021), Extensive Marine Heatwaves at the Sea Surface in the Northwestern Pacific Ocean in Summer 2021, *Remote Sensing*, *13*(19), doi: https://doi.org/10.3390/rs13193989.
Kuttippurath, J., N. Sunanda, M. V. Martin, and K. Chakraborty (2021), Tropical storms trigger phytoplankton blooms in the deserts of north Indian Ocean, *npj Climate and Atmospheric Science*, *4*(1), 11, doi: https://doi.org/10.1038/s41612-021-00166-x.
Kwiecinski, J. V., and A. R. Babbin (2021), A High-Resolution Atlas of the Eastern Tropical Pacific Oxygen Deficient Zones, *Glob. Biogeochem. Cycle*, *35*(12), e2021GB007001, doi: https://doi.org/10.1029/2021GB007001.
Lan, W.-H., C.-Y. Kuo, L.-C. Lin, and H.-C. Kao (2021), Annual Sea Level Amplitude Analysis over the North Pacific Ocean Coast by Ensemble Empirical Mode Decomposition

Method, *Remote Sensing*, *13*(4), doi: https://doi.org/10.3390/rs13040730.
Lazzari, P., S. Salon, E. Terzić, W. W. Gregg, F. D'Ortenzio, V. Vellucci, E. Organelli, and D. Antoine (2021), Assessment of the spectral downward irradiance at the surface of the Mediterranean Sea using the radiative Ocean-Atmosphere Spectral Irradiance Model (OASIM), *Ocean Sci.*, *17*(3), 675-697, doi: https://os.copernicus.org/articles/17/675/2021/.
Le Bras, I., F. Straneo, M. Muilwijk, L. H. Smedsrud, F. Li, M. S. Lozier, and N. P. Holliday (2021), How Much Arctic Fresh Water Participates in the Subpolar Overturning Circulation?, *J. Phys. Oceanogr.*, *51*(3), 955-973, doi: https://doi.org/10.1175/JPO-D-20-0240.1.
Le Hénaff, M., R. Domingues, G. Halliwell, J. A. Zhang, H.-S. Kim, M. Aristizabal, T. Miles, S. Glenn, and G. Goni (2021), The Role of the Gulf of Mexico Ocean Conditions in the Intensification of Hurricane Michael (2018), *Journal of Geophysical Research: Oceans*, *126*(5), e2020JC016969, doi: https://doi.org/10.1029/2020JC016969.
Lee, E., J.-H. Kim, K.-Y. Heo, and Y.-K. Cho (2021), Advection Fog over the Eastern Yellow Sea: WRF Simulation and Its Verification by Satellite and In Situ Observations, *Remote Sensing*, *13*(8), doi: https://doi.org/10.3390/rs13081480.
Lele, R., S. G. Purkey, J. D. Nash, J. A. MacKinnon, A. M. Thurnherr, C. B. Whalen, S. Mecking, G. Voet, and L. D. Talley (2021), Abyssal Heat Budget in the Southwest Pacific Basin, *J. Phys. Oceanogr.*, *51*(11), 3317-3333, doi: https://doi.org/10.1175/JPO-D-21-0045.1.
Lenetsky, J. E., B. Tremblay, C. Brunette, and G. Meneghello (2021), Subseasonal Predictability of Arctic Ocean Sea Ice Conditions: Bering Strait and Ekman-Driven Ocean Heat Transport, *J. Clim.*, *34*(11), 4449-4462, doi: https://doi.org/10.1175/JCLI-D-20-0544.1.
Lerner, P., A. Romanou, M. Kelley, J. Romanski, R. Ruedy, and G. Russell (2021), Drivers of Air-Sea CO2 Flux Seasonality and its Long-Term Changes in the NASA-GISS Model CMIP6 Submission, *Journal of Advances in Modeling Earth Systems*, *13*(2), e2019MS002028, doi: https://doi.org/10.1029/2019MS002028.
Levin, J., H. G. Arango, B. Laughlin, E. Hunter, J. Wilkin, and A. M. Moore (2021), Observation impacts on the Mid-Atlantic Bight front and cross-shelf transport in 4D-Var ocean state estimates: Part II — The Pioneer Array, *Ocean Model.*, *157*, 101731, doi: https://doi.org/10.1016/j.ocemod.2020.101731.
L'Hégaret, P., C. d. Marez, M. Morvan, T. Meunier, and X. Carton (2021), Spreading and Vertical Structure of the Persian Gulf and Red Sea Outflows in the Northwestern Indian Ocean, *Journal of Geophysical Research: Oceans*, *126*(4), e2019JC015983, doi: https://doi.org/10.1029/2019JC015983.
Li, D., Z. Gao, and D. Song (2021), Analysis of environmental factors affecting the large-scale long-term sequence of green tide outbreaks in the Yellow Sea, *Estuarine, Coastal and Shelf Science*, *260*, 107504, doi: https://doi.org/10.1016/j.ecss.2021.107504.
Li, D., Z. Gao, and F. Xu (2021), Research on the dissipation of green tide and its influencing factors in the Yellow Sea based on Google Earth Engine, *Marine Pollution Bulletin*, *172*, 112801, doi: https://doi.org/10.1016/j.marpolbul.2021.112801.
Li, F., et al. (2021), Subpolar North Atlantic western boundary density anomalies and the Meridional Overturning Circulation, *Nature Communications*, *12*(1), 3002, doi:

https://doi.org/10.1038/s41467-021-23350-2.
Li, F., M. S. Lozier, N. P. Holliday, W. E. Johns, I. A. Le Bras, B. I. Moat, S. A. Cunningham, and M. F. de Jong (2021), Observation-based estimates of heat and freshwater exchanges from the subtropical North Atlantic to the Arctic, *Prog. Oceanogr.*, *197*, 102640, doi: https://doi.org/10.1016/j.pocean.2021.102640.
Li, J., Y. Yang, G. Wang, H. Cheng, and L. Sun (2021), Enhanced Oceanic Environmental Responses and Feedbacks to Super Typhoon Nida (2009) during the Sudden-Turning Stage, *Remote Sensing*, *13*(14), doi: https://doi.org/10.3390/rs13142648.
Li, J., H. Zhang, S. Liu, X. Wang, and L. Sun (2021), The Response and Feedback of Ocean Mesoscale Eddies to Four Sequential Typhoons in 2016 Based on Multiple Satellite Observations and Argo Floats, *Remote Sensing*, *13*(19), doi: https://doi.org/10.3390/rs13193805.
Li, J., Q. Zheng, M. Li, Q. Li, and L. Xie (2021), Spatiotemporal Distributions of Ocean Color Elements in Response to Tropical Cyclone: A Case Study of Typhoon Mangkhut (2018) Past over the Northern South China Sea, *Remote Sensing*, *13*(4), doi: https://doi.org/10.3390/rs13040687.
Li, M., F. Shen, and X. Sun (2021), 2019–2020 Australian bushfire air particulate pollution and impact on the South Pacific Ocean, *Scientific Reports*, *11*(1), 12288, doi: https://doi.org/10.1038/s41598-021-91547-y.
Li, M., et al. (2021), A Strong Sub-Thermocline Intrusion of the North Equatorial Subsurface Current Into the Makassar Strait in 2016–2017, *Geophys. Res. Lett.*, *48*(8), e2021GL092505, doi: https://doi.org/10.1029/2021GL092505.
Li, N., S. Wang, L. Guan, and M. Liu (2021), Assessment of Global FY-3C/VIRR Sea Surface Temperature, *Remote Sensing*, *13*(16), doi: https://doi.org/10.3390/rs13163249.
Li, Q., M. H. England, and A. McC. Hogg (2021), Transient Response of the Southern Ocean to Idealized Wind and Thermal Forcing across Different Model Resolutions, *J. Clim.*, *34*(13), 5477-5496, doi: https://doi.org/10.1175/JCLI-D-20-0981.1.
Li, Q., Q. He, and C. Chen (2021), Retrieval of Daily Mean VIIRS SST Products in China Seas, *Remote Sensing*, *13*(24), doi: https://doi.org/10.3390/rs13245158.
Li, Q., W. Sun, X. Yun, B. Huang, W. Dong, X. L. Wang, P. Zhai, and P. Jones (2021), An updated evaluation of the global mean land surface air temperature and surface temperature trends based on CLSAT and CMST, *Climate Dynamics*, *56*(1), 635-650, doi: https://doi.org/10.1007/s00382-020-05502-0.
Li, W.-T., J.-M. Chen, R.-S. Tseng, and T.-L. Lai (2021), Multiple Modulating Processes for Intensive Tropical Cyclone Activity Affecting Taiwan in September 2016, *Asia-Pacific Journal of Atmospheric Sciences*, doi: https://doi.org/10.1007/s13143-021-00245-2.
Li, Y., W. Sun, J. Zhang, J. Meng, and Y. Zhao (2021), Reconstruction of arctic SST data and generation of multi-source satellite fusion products with high temporal and spatial resolutions, *Remote Sensing Letters*, *12*(7), 695-703, doi: https://doi.org/10.1080/2150704X.2021.1931531.
Li, Z., H. Aiki, M. Nagura, and T. Ogata (2021), The vertical structure of annual wave energy flux in the tropical Indian Ocean, *Prog. in Earth and Planet. Sci.*, *8*(1), 43, doi: https://doi.org/10.1186/s40645-021-00432-9.

Li, Z., M. H. England, S. Groeskamp, I. Cerovečki, and Y. Luo (2021), The Origin and Fate of Subantarctic Mode Water in the Southern Ocean, *J. Phys. Oceanogr.*, *51*(9), 2951-2972, doi: https://doi.org/10.1175/JPO-D-20-0174.1.

Li, Z., S. Huang, X. Zhu, Z. Sun, Y. Long, and H. Xie (2021), Short-term offshore extension of Brahmaputra-Ganges and Irrawaddy freshwater plumes to the central northern Bay of Bengal based on in situ and satellite observations, *Acta Oceanol. Sin.*, *40*(5), 80-93, doi: https://doi.org/10.1007/s13131-021-1729-y.

Li, Z., T. Lian, J. Ying, X.-H. Zhu, F. Papa, H. Xie, and Y. Long (2021), The Cause of an Extremely Low Salinity Anomaly in the Bay of Bengal During 2012 Spring, *Journal of Geophysical Research: Oceans*, *126*(10), e2021JC017361, doi: https://doi.org/10.1029/2021JC017361.

Li, Z., M. S. Lozier, and N. Cassar (2021), Linking Southern Ocean Mixed-Layer Dynamics to Net Community Production on Various Timescales, *Journal of Geophysical Research: Oceans*, *126*(10), e2021JC017537, doi: https://doi.org/10.1029/2021JC017537.

Li, Z., Z. Wang, Y. Li, Y. Zhang, J. Zheng, and S. Gao (2021), Evaluation of global high-resolution reanalysis products based on the Chinese global oceanography forecasting system: 基于中国全球海洋预报系统(CGOFS)的全球高分辨率再分析产品评估, *Atmospheric and Oceanic Science Letters*, 100032, doi: https://doi.org/10.1016/j.aosl.2021.100032.

Lian, Z., Z. Wei, Y. Wang, and X. Wang (2021), Geographical variation and controlling mechanism of eddy-induced vertical temperature anomalies and eddy available potential energy in the South China Sea, *Ocean Dyn.*, doi: https://doi.org/10.1007/s10236-021-01441-4.

Liang, X., C. Liu, R. M. Ponte, and D. P. Chambers (2021), A Comparison of the Variability and Changes in Global Ocean Heat Content from Multiple Objective Analysis Products during the Argo Period, *J. Clim.*, *34*(19), 7875-7895, doi: https://doi.org/10.1175/JCLI-D-20-0794.1.

Lin, I.-I., et al. (2021), A Tale of Two Rapidly Intensifying Supertyphoons: Hagibis (2019) and Haiyan (2013), *Bull. Amer. Meteorol. Soc.*, *102*(9), E1645-E1664, doi: https://doi.org/10.1175/BAMS-D-20-0223.1.

Lin, W., H. Lin, and J. Hu (2021), The Tilt of Mean Dynamic Topography and its Seasonality Along the Coast of the Chinese Mainland, *Journal of Geophysical Research: Oceans*, *126*(2), e2020JC016778, doi: https://doi.org/10.1029/2020JC016778.

Ling, Z., Z. Chen, G. Wang, H. He, and C. Chen (2021), Recovery of Tropical Cyclone Induced SST Cooling Observed by Satellite in the Northwestern Pacific Ocean, *Remote Sensing*, *13*(18), doi: https://doi.org/10.3390/rs13183781.

Liu, B., W. Wan, Z. Guo, R. Ji, T. Wang, G. Tang, Y. Cui, and Y. Hong (2021), First Assessment of CyGNSS-Incorporated SMAP Sea Surface Salinity Retrieval Over Pan-Tropical Ocean, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, *14*, 12163-12173, doi: https://doi.org/10.1109/JSTARS.2021.3128553.

Liu, B., W. Wan, and Y. Hong (2021), Can the Accuracy of Sea Surface Salinity Measurement be Improved by Incorporating Spaceborne GNSS-Reflectometry?, *IEEE Geosci. Remote Sens. Lett.*, *18*(1), 3-7, doi: https://doi.org/10.1109/LGRS.2020.2967472.

Liu, H., S. Li, and Z. Wei (2021), Interannual variability in the subduction of the South Atlantic

subtropical underwater, *Climate Dynamics*, *57*(3), 1061-1077, doi: https://doi.org/10.1007/s00382-021-05758-0.
Liu, H., P. Lin, W. Zheng, Y. Luan, J. Ma, M. Ding, H. Mo, L. Wan, and T. Ling (2021), A global eddy-resolving ocean forecast system in China – LICOM Forecast System (LFS), *J. Oper. Oceanogr.*, 1-13, doi: https://doi.org/10.1080/1755876X.2021.1902680.
Liu, H., and Z. Wei (2021), Intercomparison of Global Sea Surface Salinity from Multiple Datasets over 2011–2018, *Remote Sensing*, *13*(4), doi: https://doi.org/10.3390/rs13040811.
Liu, H., H. Zhou, W. Yang, X. Liu, Y. Li, Y. Yang, X. Chen, and X. Li (2021), A three-dimensional gravest empirical mode determined from hydrographic observations in the western equatorial Pacific Ocean, *J. Mar. Syst.*, *214*, 103487, doi: https://doi.org/10.1016/j.jmarsys.2020.103487.
Liu, L., Y. Li, and F. Wang (2021), MJO-Induced Intraseasonal Mixed Layer Depth Variability in the Equatorial Indian Ocean and Impacts on Subsurface Water Obduction, *J. Phys. Oceanogr.*, *51*(4), 1247-1263, doi: https://doi.org/10.1175/JPO-D-20-0179.1.
Liu, L., J. Wen, Z. Zheng, and H. Su (2021), An improved approach for mining association rules in parallel using Spark Streaming, *International Journal of Circuit Theory and Applications*, *49*(4), 1028-1039, doi: https://doi.org/10.1002/cta.2935.
Liu, S.-B., X.-D. Cui, Y.-N. Li, X. Jin, W. Zhou, H.-X. Dang, and H. Li (2021), Retrieval of sea surface temperature from the scanning microwave radiometer aboard HY-2B, *Int. J. Remote Sens.*, *42*(12), 4621-4643, doi: https://doi.org/10.1080/01431161.2021.1899330.
Liu, X., and N. M. Levine (2021), Ecosystem implications of fine-scale frontal disturbances in the oligotrophic ocean – An idealized modeling approach, *Prog. Oceanogr.*, *192*, 102519, doi: https://doi.org/10.1016/j.pocean.2021.102519.
Liu, X., et al. (2021), Development of Coupled Data Assimilation With the BCC Climate System Model: Highlighting the Role of Sea-Ice Assimilation for Global Analysis, *Journal of Advances in Modeling Earth Systems*, *13*(4), e2020MS002368, doi: https://doi.org/10.1029/2020MS002368.
Liu, Y., H. LÜ, H. Zhang, Y. Cui, and X. Xing (2021), Effects of ocean eddies on the tropical storm Roanu intensity in the Bay of Bengal, *PLOS ONE*, *16*(3), e0247521, doi: https://doi.org/10.1371/journal.pone.0247521.
Lo Monaco, C., N. Metzl, J. Fin, C. Mignon, P. Cuet, E. Douville, M. Gehlen, T. T. T. Chau, and A. Tribollet (2021), Distribution and long-term change of the sea surface carbonate system in the Mozambique Channel (1963–2019), *Deep Sea Research Part II: Topical Studies in Oceanography*, *186-188*, 104936, doi: https://doi.org/10.1016/j.dsr2.2021.104936.
Lockwood, J. W., C. O. Dufour, S. M. Griffies, and M. Winton (2021), On the Role of the Antarctic Slope Front on the Occurrence of the Weddell Sea Polynya under Climate Change, *J. Clim.*, *34*(7), 2529-2548, doi: https://doi.org/10.1175/JCLI-D-20-0069.1.
Loeb, N. G., G. C. Johnson, T. J. Thorsen, J. M. Lyman, F. G. Rose, and S. Kato (2021), Satellite and Ocean Data Reveal Marked Increase in Earth's Heating Rate, *Geophys. Res. Lett.*, *48*(13), e2021GL093047, doi: https://doi.org/10.1029/2021GL093047.
Long, Y., X.-H. Zhu, X. Guo, F. Ji, and Z. Li (2021), Variations of the Kuroshio in the Luzon

Strait Revealed by EOF Analysis of Repeated XBT Data and Sea-Level Anomalies, *Journal of Geophysical Research: Oceans*, *126*(7), e2020JC016849, doi: https://doi.org/10.1029/2020JC016849.

Lovindeer, R., L. J. Ustick, F. Primeau, A. C. Martiny, and K. R. M. Mackey (2021), Modeling Ocean Color Niche Selection by Synechococcus Blue-Green Acclimaters, *Journal of Geophysical Research: Oceans*, *126*(10), e2021JC017434, doi: https://doi.org/10.1029/2021JC017434.

Lü, H., Y. Liu, Y. Wang, Y. Cui, X. Ge, and L. Zhou (2021), Abnormal reverse intrusion of the Kuroshio Branch Current induced by super typhoon soudelor, *Estuarine, Coastal and Shelf Science*, *256*, 107377, doi: https://doi.org/10.1016/j.ecss.2021.107377.

Lu, X., et al. (2021), New Ocean Subsurface Optical Properties From Space Lidars: CALIOP/CALIPSO and ATLAS/ICESat-2, *Earth and Space Science*, *8*(10), e2021EA001839, doi: https://doi.org/10.1029/2021EA001839.

Lu, Y., Q. Liu, and S.-P. Xie (2021), Covariability of Subantarctic Mode Water and the Southern Branch of the Subtropical Indian Ocean Countercurrent in Argo Observations, *Journal of Ocean University of China*, *20*(6), 1316-1324, doi: https://doi.org/10.1007/s11802-021-4677-4.

Ludwigsen, C. A., and O. B. Andersen (2021), Contributions to Arctic sea level from 2003 to 2015, *Advances in Space Research*, *68*(2), 703-710, doi: https://doi.org/10.1016/j.asr.2019.12.027.

Lund, D. C., Z. Chase, K. E. Kohfeld, and E. A. Wilson (2021), Tracking Southern Ocean Sea Ice Extent With Winter Water: A New Method Based on the Oxygen Isotopic Signature of Foraminifera, *Paleoceanography and Paleoclimatology*, *36*(6), e2020PA004095, doi: https://doi.org/10.1029/2020PA004095.

Lyu, K., X. Zhang, and J. A. Church (2021), Projected ocean warming constrained by the ocean observational record, *Nature Climate Change*, *11*(10), 834-839, doi: https://doi.org/10.1038/s41558-021-01151-1.

Ma, C., J. Zhao, B. Ai, S. Sun, G. Zhang, W. Huang, and G. Wang (2021), Assessing responses of phytoplankton to consecutive typhoons by combining Argo, remote sensing and numerical simulation data, *Science of The Total Environment*, *790*, 148086, doi: https://doi.org/10.1016/j.scitotenv.2021.148086.

Ma, W., P. Xiu, F. Chai, L. Ran, M. G. Wiesner, J. Xi, Y. Yan, and E. Fredj (2021), Impact of mesoscale eddies on the source funnel of sediment trap measurements in the South China Sea, *Prog. Oceanogr.*, *194*, 102566, doi: https://doi.org/10.1016/j.pocean.2021.102566.

Ma, Z., H. S. Fok, and L. Zhou (2021), GRACE-Derived Time Lag of Mekong Estuarine Freshwater Transport in the Western South China Sea Validated by Isotopic Tracer Age, *Remote Sensing*, *13*(6), doi: https://doi.org/10.3390/rs13061193.

Mackay, N., and A. Watson (2021), Winter Air-Sea CO2 Fluxes Constructed From Summer Observations of the Polar Southern Ocean Suggest Weak Outgassing, *Journal of Geophysical Research: Oceans*, *126*(5), e2020JC016600, doi: https://doi.org/10.1029/2020JC016600.

Majumder, S., R. M. Castelao, and C. M. Amos (2021), Freshwater Variability and Transport in the Labrador Sea From In Situ and Satellite Observations, *Journal of Geophysical*

Research: Oceans, *126*(4), e2020JC016751, doi: https://doi.org/10.1029/2020JC016751.

Manche, S. S., R. K. Nayak, P. C. Mohanty, M. V. R. Shesasai, and V. K. Dadhwal (2021), Assessment of mass-induced sea level variability in the Tropical Indian Ocean based on GRACE and altimeter observations, *Journal of Geodesy*, *95*(2), 19, doi: https://doi.org/10.1007/s00190-021-01471-2.

Mandal, A. K., A. Chaudhary, N. Agarwal, and R. Sharma (2021), Sub-Surface Ocean Structure from Satellite Surface Observations in the North Indian Ocean, *Mar. Geod.*, *44*(6), 573-592, doi: https://doi.org/10.1080/01490419.2021.1974132.

Maneesha, K., D. H. Prasad, and K. V. K. R. K. Patnaik (2021), Biophysical responses to tropical cyclone Hudhud over the Bay of Bengal, *J. Oper. Oceanogr.*, *14*(2), 87-97, doi: https://doi.org/10.1080/1755876X.2019.1684135.

Maneesha, K., V. S. Prasad, and K. Venkateswararao (2021), Ocean impact on the intensification of cyclone Titli, *Journal of Earth System Science*, *130*(3), 164, doi: https://doi.org/10.1007/s12040-021-01660-9.

Manta, G., et al. (2021), The South Atlantic Meridional Overturning Circulation and Mesoscale Eddies in the First GO-SHIP Section at 34.5°S, *Journal of Geophysical Research: Oceans*, *126*(2), e2020JC016962, doi: https://doi.org/10.1029/2020JC016962.

Marchal, O., and N. Zhao (2021), On the Estimation of Deep Atlantic Ventilation from Fossil Radiocarbon Records. Part I: Modern Reference Estimates, *J. Phys. Oceanogr.*, *51*(6), 1843-1873, doi: https://doi.org/10.1175/JPO-D-20-0153.1.

Marochi, M. Z., T. M. Costa, and L. B. Buckley (2021), Ocean warming is projected to speed development and decrease survival of crab larvae, *Estuarine, Coastal and Shelf Science*, *259*, 107478, doi: https://doi.org/10.1016/j.ecss.2021.107478.

Martínez-Moreno, J., A. M. Hogg, M. H. England, N. C. Constantinou, A. E. Kiss, and A. K. Morrison (2021), Global changes in oceanic mesoscale currents over the satellite altimetry record, *Nature Climate Change*, *11*(5), 397-403, doi: https://doi.org/10.1038/s41558-021-01006-9.

Masuda, S., and S. Osafune (2021), Ocean state estimations for synthesis of ocean-mixing observations, *J. Oceanogr.*, doi: https://doi.org/10.1007/s10872-020-00587-x.

Mathew, T., S. Prakash, L. Shenoy, A. Chatterjee, T. V. S. Udaya Bhaskar, and B. Wojtasiewicz (2021), Observed variability of monsoon blooms in the north-central Arabian Sea and its implication on oxygen concentration: A bio-argo study, *Deep Sea Research Part II: Topical Studies in Oceanography*, *184-185*, 104935, doi: https://doi.org/10.1016/j.dsr2.2021.104935.

Matsumoto, K., Y. Sasai, K. Sasaoka, E. Siswanto, and M. C. Honda (2021), The Formation of Subtropical Phytoplankton Blooms Is Dictated by Water Column Stability During Winter and Spring in the Oligotrophic Northwestern North Pacific, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC016864, doi: https://doi.org/10.1029/2020JC016864.

Maurer, T. L., J. N. Plant, and K. S. Johnson (2021), Delayed-Mode Quality Control of Oxygen, Nitrate, and pH Data on SOCCOM Biogeochemical Profiling Floats, *Frontiers in Marine Science*, *8*(1118), doi: https://doi.org/10.3389/fmars.2021.683207.

McGeady, R., C. Lordan, and A. M. Power (2021), Shift in the larval phenology of a marine ectotherm due to ocean warming with consequences for larval transport, *Limnol. Oceanogr.*, *66*(2), 543-557, doi: https://doi.org/10.1002/lno.11622.

Meccia, V. L., D. Iovino, and A. Bellucci (2021), North Atlantic gyre circulation in PRIMAVERA models, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-021-05686-z.

Memarian Sorkhabi, O., J. Asgari, and A. Amiri-Simkooei (2021), Monitoring of Caspian Sea-level changes using deep learning-based 3D reconstruction of GRACE signal, *Measurement*, *174*, 109004, doi: https://doi.org/10.1016/j.measurement.2021.109004.

Menezes, V. V. (2021), Advective pathways and transit times of the Red Sea Overflow Water in the Arabian Sea from Lagrangian simulations, *Prog. Oceanogr.*, *199*, 102697, doi: https://doi.org/10.1016/j.pocean.2021.102697.

Meng, L., C. Yan, W. Zhuang, W. Zhang, and X.-H. Yan (2021), Reconstruction of Three-Dimensional Temperature and Salinity Fields From Satellite Observations, *Journal of Geophysical Research: Oceans*, *126*(11), e2021JC017605, doi: https://doi.org/10.1029/2021JC017605.

Menna, M., R. Gerin, G. Notarstefano, E. Mauri, A. Bussani, M. Pacciaroni, and P.-M. Poulain (2021), On the Circulation and Thermohaline Properties of the Eastern Mediterranean Sea, *Frontiers in Marine Science*, *8*(903), doi: https://doi.org/10.3389/fmars.2021.671469.

Mensah, V., Y. Nakayama, M. Fujii, Y. Nogi, and K. I. Ohshima (2021), Dense water downslope flow and AABW production in a numerical model: Sensitivity to horizontal and vertical resolution in the region off Cape Darnley polynya, *Ocean Model.*, *165*, 101843, doi: https://doi.org/10.1016/j.ocemod.2021.101843.

Meunier, T., E. Pallás Sanz, C. de Marez, J. Pérez, M. Tenreiro, A. Ruiz Angulo, and A. Bower (2021), The Dynamical Structure of a Warm Core Ring as Inferred from Glider Observations and Along-Track Altimetry, *Remote Sensing*, *13*(13), doi: https://doi.org/10.3390/rs13132456.

Meza-Padilla, R., C. Enriquez, and C. M. Appendini (2021), Rapid assessment tool for oil spill planning and contingencies, *Marine Pollution Bulletin*, *166*, 112196, doi: https://doi.org/10.1016/j.marpolbul.2021.112196.

Miao, M., Z. Zhang, B. Qiu, Z. Liu, X. Zhang, C. Zhou, S. Guan, X. Huang, W. Zhao, and J. Tian (2021), On Contributions of Multiscale Dynamic Processes to the Steric Height in the Northeastern South China Sea as Revealed by Moored Observations, *Geophys. Res. Lett.*, *48*(14), e2021GL093829, doi: https://doi.org/10.1029/2021GL093829.

Mihanović, H., I. Vilibić, J. Šepić, F. Matić, Z. Ljubešić, E. Mauri, R. Gerin, G. Notarstefano, and P.-M. Poulain (2021), Observation, Preconditioning and Recurrence of Exceptionally High Salinities in the Adriatic Sea, *Frontiers in Marine Science*, *8*(834), doi: https://doi.org/10.3389/fmars.2021.672210.

Miyazawa, Y., S. M. Varlamov, T. Miyama, Y. Kurihara, H. Murakami, and M. Kachi (2021), A Nowcast/Forecast System for Japan's Coasts Using Daily Assimilation of Remote Sensing and In Situ Data, *Remote Sensing*, *13*(13), doi: https://doi.org/10.3390/rs13132431.

Mohapatra, S., and C. Gnanaseelan (2021), A new mode of decadal variability in the Tropical

Indian Ocean subsurface temperature and its association with shallow meridional overturning circulation, *Glob. Planet. Change*, *207*, 103656, doi: https://doi.org/10.1016/j.gloplacha.2021.103656.

Moore, A. M., J. Levin, H. G. Arango, and J. Wilkin (2021), Assessing the performance of an ocean observing, analysis and forecast System for the Mid-Atlantic Bight using array modes, *Ocean Model.*, *164*, 101821, doi: https://doi.org/10.1016/j.ocemod.2021.101821.

Moreira, L., A. Cazenave, A. Barnoud, and J. Chen (2021), Sea-Level Fingerprints Due to Present-Day Water Mass Redistribution in Observed Sea-Level Data, *Remote Sensing*, *13*(22), doi.

Moritz, M., K. Jochumsen, D. Kieke, B. Klein, H. Klein, M. Köllner, and M. Rhein (2021), Volume Transport Time Series and Variability of the North Atlantic Eastern Boundary Current at Goban Spur, *Journal of Geophysical Research: Oceans*, *126*(9), e2021JC017393, doi: https://doi.org/10.1029/2021JC017393.

Morrongiello, J. R., P. L. Horn, C. Ó Maolagáin, and P. J. H. Sutton (2021), Synergistic effects of harvest and climate drive synchronous somatic growth within key New Zealand fisheries, *Global Change Biology*, *27*(7), 1470-1484, doi: https://doi.org/10.1111/gcb.15490.

Mulet, S., H. Etienne, M. Ballarotta, Y. Faugere, M. H. Rio, G. Dibarboure, and N. Picot (2021), Synergy between surface drifters and altimetry to increase the accuracy of sea level anomaly and geostrophic current maps in the Gulf of Mexico, *Advances in Space Research*, *68*(2), 420-431, doi: https://doi.org/10.1016/j.asr.2019.12.024.

Mulet, S., et al. (2021), The new CNES-CLS18 global mean dynamic topography, *Ocean Sci.*, *17*(3), 789-808, doi: https://os.copernicus.org/articles/17/789/2021/.

Müller, V., and O. Melnichenko (2021), Meridional Eddy Heat Transport Variability in the Surface Mixed Layer of the Atlantic Ocean, *Journal of Geophysical Research: Oceans*, *126*(12), e2021JC017789, doi: https://doi.org/10.1029/2021JC017789.

Nagura, M. (2021), Spiciness Anomalies of Subantarctic Mode Water in the South Indian Ocean, *J. Clim.*, *34*(10), 3927-3953, doi: https://doi.org/10.1175/JCLI-D-20-0482.1.

Napolitano, D. C., C. B. Rocha, I. C. A. da Silveira, I. T. Simoes-Sousa, and G. R. Flierl (2021), Can the Intermediate Western Boundary Current recirculation trigger the Vitória Eddy formation?, *Ocean Dyn.*, *71*(3), 281-292, doi: https://doi.org/10.1007/s10236-020-01437-6.

Neokye, E. O., S. Dossou, M. Iniga, and B. N. Alabi-Doku (2021), The role of oceanic environmental conditions on catch of Sardinella spp. in Ghana, *Regional Studies in Marine Science*, *44*, 101768, doi: https://doi.org/10.1016/j.rsma.2021.101768.

Nguyen, A. T., H. Pillar, V. Ocaña, A. Bigdeli, T. A. Smith, and P. Heimbach (2021), The Arctic Subpolar Gyre sTate Estimate: Description and Assessment of a Data-Constrained, Dynamically Consistent Ocean-Sea Ice Estimate for 2002–2017, *Journal of Advances in Modeling Earth Systems*, *13*(5), e2020MS002398, doi: https://doi.org/10.1029/2020MS002398.

Ni, Q., X. Zhai, X. Jiang, and D. Chen (2021), Abundant Cold Anticyclonic Eddies and Warm Cyclonic Eddies in the Global Ocean, *J. Phys. Oceanogr.*, *51*(9), 2793-2806, doi: https://doi.org/10.1175/JPO-D-21-0010.1.

Nowitzki, H., M. Rhein, A. Roessler, D. Kieke, and C. Mertens (2021), Trends and Transport Variability of the Circulation in the Subpolar Eastern North Atlantic, *Journal of Geophysical Research: Oceans*, *126*(2), e2020JC016693, doi: https://doi.org/10.1029/2020JC016693.

Nyadjro, E. S. (2021), Impacts of the 2019 Strong IOD and Monsoon Events on Indian Ocean Sea Surface Salinity, *Remote Sensing in Earth Systems Sciences*, *4*(3), 158-171, doi: https://doi.org/10.1007/s41976-021-00054-1.

O'Kane, T. J., P. A. Sandery, V. Kitsios, P. Sakov, M. A. Chamberlain, D. T. Squire, M. A. Collier, C. C. Chapman, R. Fiedler, and D. Harries (2021), CAFE60v1: A 60-year large ensemble climate reanalysis. Part II: Evaluation, *J. Clim.*, *34*(13), 5171-5194, doi: https://doi.org/10.1175/JCLI-D-20-0974.1.

O'Kane, T. J., P. A. Sandery, V. Kitsios, P. Sakov, M. A. Chamberlain, D. T. Squire, M. A. Collier, C. C. Chapman, R. Fiedler, and D. Harries (2021), CAFE60v1: A 60-year large ensemble climate reanalysis. Part II: Evaluation, *J. Clim.*, *34*(13), 5171-5194, doi: https://doi.org/10.1175/JCLI-D-20-0518.1.

Oginni, T. E., S. Li, H. He, H. Yang, and Z. Ling (2021), Ocean Response to Super-Typhoon Haiyan, *Water*, *13*(20), doi: https://doi.org/10.3390/w13202841.

Oka, E., H. Nishikawa, S. Sugimoto, B. Qiu, and N. Schneider (2021), Subtropical Mode Water in a recent persisting Kuroshio large-meander period: part I—formation and advection over the entire distribution region, *J. Oceanogr.*, *77*, 781–795, doi: https://doi.org/10.1007/s10872-021-00608-3.

Oke, P. R., M. A. Chamberlain, R. A. S. Fiedler, H. Bastos de Oliveira, H. M. Beggs, and G. B. Brassington (2021), Combining Argo and Satellite Data Using Model-Derived Covariances: Blue Maps, *Frontiers in Earth Science*, *9*(485), doi: https://doi.org/10.3389/feart.2021.696985.

Olivé Abelló, A., J. L. Pelegrí, F. J. Machín, and I. Vallès-Casanova (2021), The Transfer of Antarctic Circumpolar Waters to the Western South Atlantic Ocean, *Journal of Geophysical Research: Oceans*, *126*(7), e2020JC017025, doi: https://doi.org/10.1029/2020JC017025.

Olmedo, E., C. González-Haro, N. Hoareau, M. Umbert, V. González-Gambau, J. Martínez, C. Gabarró, and A. Turiel (2021), Nine years of SMOS sea surface salinity global maps at the Barcelona Expert Center, *Earth Syst. Sci. Data*, *13*(2), 857-888, doi: https://doi.org/10.5194/essd-13-857-2021.

Organelli, E., E. Leymarie, O. Zielinski, J. Uitz, F. D'Ortenzio, and H. Claustre (2021), Hyperspectral radiometry on Biogeochemical-Argo floats: A bright perspective for phytoplankton diversity, *Frontiers in Ocean Observing: Documenting Ecosystems, Understanding Environmental Changes, Forecasting Hazards. E.S. Kappel, S.K. Juniper, S. Seeyave, E. Smith, and M. Visbeck, eds, A Supplement to Oceanography*, *34*(4), doi: https://doi.org/10.5670/oceanog.2021.supplement.02-33.

Ouyang, Y., Y. Zhang, J. Chi, Q. Sun, and Y. Du (2021), Regional difference of sea surface salinity variations in the western tropical pacific, *J. Oceanogr.*, *77*(4), 647-657, doi: https://doi.org/10.1007/s10872-021-00598-2.

Painter, S. C., B. Sekadende, A. Michael, M. Noyon, S. Shayo, B. Godfrey, M. Mwadini, and M. Kyewalyanga (2021), Evidence of localised upwelling in Pemba Channel (Tanzania)

during the southeast monsoon, *Ocean & Coastal Management*, *200*, 105462, doi: https://doi.org/10.1016/j.ocecoaman.2020.105462.

Pan, Q., X. Zhu, L. Wan, Y. Li, X. Kuang, J. Liu, and H. Yu (2021), Operational forecasting for Sanchi oil spill, *Applied Ocean Research*, *108*, 102548, doi: https://doi.org/10.1016/j.apor.2021.102548.

Patara, L., C. W. Böning, and T. Tanhua (2021), Multidecadal Changes in Southern Ocean Ventilation since the 1960s Driven by Wind and Buoyancy Forcing, *J. Clim.*, *34*(4), 1485-1502, doi: https://doi.org/10.1175/JCLI-D-19-0947.1.

Patrizio, C. R., and D. W. J. Thompson (2021), Quantifying the Role of Ocean Dynamics in Ocean Mixed Layer Temperature Variability, *J. Clim.*, *34*(7), 2567-2589, doi: https://doi.org/10.1175/JCLI-D-20-0476.1.

Paul, N., J. Sukhatme, D. Sengupta, and B. Gayen (2021), Eddy Induced Trapping and Homogenization of Freshwater in the Bay of Bengal, *Journal of Geophysical Research: Oceans*, *126*(6), e2021JC017180, doi: https://doi.org/10.1029/2021JC017180.

Pauthenet, E., J.-B. Sallée, S. Schmidtko, and D. Nerini (2021), Seasonal Variation of the Antarctic Slope Front Occurrence and Position Estimated from an Interpolated Hydrographic Climatology, *J. Phys. Oceanogr.*, *51*(5), 1539-1557, doi: https://doi.org/10.1175/JPO-D-20-0186.1.

Pegler, S. S., and D. J. Ferguson (2021), Rapid heat discharge during deep-sea eruptions generates megaplumes and disperses tephra, *Nature Communications*, *12*(1), 2292, doi: https://doi.org/10.1038/s41467-021-22439-y.

Pennelly, C., and P. G. Myers (2021), Impact of Different Atmospheric Forcing Sets on Modeling Labrador Sea Water Production, *Journal of Geophysical Research: Oceans*, *126*(2), e2020JC016452, doi: https://doi.org/10.1029/2020JC016452.

Perez, E., S. Ryan, M. Andres, G. Gawarkiewicz, C. C. Ummenhofer, J. Bane, and S. Haines (2021), Understanding physical drivers of the 2015/16 marine heatwaves in the Northwest Atlantic, *Scientific Reports*, *11*(1), 17623, doi: https://doi.org/10.1038/s41598-021-97012-0.

Piontkovski, S. A., I. M. Serikova, V. P. Evstigneev, I. Y. Prusova, Y. A. Zagorodnaya, K. A. Al-Hashmi, and N. M. Al-Abri (2021), Seasonal blooms of the dinoflagellate algae Noctiluca scintillans: Regional and global scale aspects, *Regional Studies in Marine Science*, *44*, 101771, doi: https://doi.org/10.1016/j.rsma.2021.101771.

Ponte, R. M., Q. Sun, C. Liu, and X. Liang (2021), How Salty Is the Global Ocean: Weighing It All or Tasting It a Sip at a Time?, *Geophys. Res. Lett.*, *48*(11), e2021GL092935, doi: https://doi.org/10.1029/2021GL092935.

Potter, H., C.-Y. Hsu, and S. F. DiMarco (2021), Rapid dissipation of a Loop Current eddy due to interaction with a severe Gulf of Mexico hurricane, *Ocean Dyn.*, *71*, 911–922, doi: https://doi.org/10.1007/s10236-021-01471-y.

Potter, H., and J. E. Rudzin (2021), Upper-Ocean Temperature Variability in the Gulf of Mexico with Implications for Hurricane Intensity, *J. Phys. Oceanogr.*, *51*(10), 3149-3162, doi: https://doi.org/10.1175/JPO-D-21-0057.1.

Poulain, P.-M., L. Centurioni, T. Özgökmen, D. Tarry, A. Pascual, S. Ruiz, E. Mauri, M. Menna, and G. Notarstefano (2021), On the Structure and Kinematics of an Algerian Eddy in the Southwestern Mediterranean Sea, *Remote Sensing*, *13*(15), 3039, doi:

https://doi.org/10.3390/rs13153039.
Pradhan, M., A. Srivastava, S. A. Rao, D. S. Banerjee, A. Chatterjee, P. A. Francis, O. P. Sreejith, M. Das Gupta, and V. S. Prasad (2021), Are ocean-moored buoys redundant for prediction of Indian monsoon?, *Meteorology and Atmospheric Physics*, *133*(4), 1075-1088, doi: https://doi.org/10.1007/s00703-021-00792-3.
Prakash, K. R., T. Nigam, V. Pant, and N. Chandra (2021), On the interaction of mesoscale eddies and a tropical cyclone in the Bay of Bengal, *Nat Hazards*, doi: https://doi.org/10.1007/s11069-021-04524-z.
Pramanik, S., and S. Sil (2021), Assessment of SCATSat-1 Scatterometer Winds on the Upper Ocean Simulations in the North Indian Ocean, *Journal of Geophysical Research: Oceans*, *126*(6), e2020JC016677, doi: https://doi.org/10.1029/2020JC016677.
Prasanth, R., V. Vijith, V. Thushara, J. V. George, and P. N. Vinayachandran (2021), Processes governing the seasonality of vertical chlorophyll-a distribution in the central Arabian Sea: Bio-Argo observations and ecosystem model simulation, *Deep Sea Research Part II: Topical Studies in Oceanography*, *183*, 104926, doi: https://doi.org/10.1016/j.dsr2.2021.104926.
Pryamitsyn, V., B. Petrenko, A. Ignatov, and Y. Kihai (2021), Metop First Generation AVHRR FRAC SST Reanalysis Version 1, *Remote Sensing*, *13*(20), doi: https://doi.org/10.3390/rs13204046.
Pujiana, K., and M. J. McPhaden (2021), Biweekly Mixed Rossby-Gravity Waves in the Equatorial Indian Ocean, *Journal of Geophysical Research: Oceans*, *126*(5), e2020JC016840, doi: https://doi.org/10.1029/2020JC016840.
Pun, I.-F., J. A. Knaff, and C. R. Sampson (2021), Uncertainty of Tropical Cyclone Wind Radii on Sea Surface Temperature Cooling, *Journal of Geophysical Research: Atmospheres*, *126*(14), e2021JD034857, doi: https://doi.org/10.1029/2021JD034857.
Purba, N. P., W. S. Pranowo, A. B. Ndah, and P. Nanlohy (2021), Seasonal variability of temperature, salinity, and surface currents at 0° latitude section of Indonesia seas, *Regional Studies in Marine Science*, *44*, 101772, doi: https://doi.org/10.1016/j.rsma.2021.101772.
Qi, Y., H. Mao, X. Wang, L. Yu, S. Lian, X. Li, and X. Shang (2021), Suppressed Thermocline Mixing in the Center of Anticyclonic Eddy in the North South China Sea, *Journal of Marine Science and Engineering*, *9*(10), doi: https://doi.org/10.3390/jmse9101149.
Qiu, Y., X. Lin, and C. Jing (2021), Recurrence of wintertime SST anomalies in the Bay of Bengal: characteristics and causes, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-021-05693-0.
Qiu, Z., Z. Wei, X. Nie, and T. Xu (2021), Southeast Indian Subantarctic Mode Water in the CMIP6 Coupled Models, *Journal of Geophysical Research: Oceans*, *126*(7), e2020JC016872, doi: https://doi.org/10.1029/2020JC016872.
Quan, Q., Z. Cai, G. Jin, and Z. Liu (2021), Topographic Rossby Waves in the Abyssal South China Sea, *J. Phys. Oceanogr.*, *51*(6), 1795-1812, doi: https://doi.org/10.1175/JPO-D-20-0187.1.
Quay, P. (2021), Impact of the Elemental Composition of Exported Organic Matter on the Observed Dissolved Nutrient and Trace Element Distributions in the Upper Layer of the Ocean, *Glob. Biogeochem. Cycle*, *35*(10), e2020GB006902, doi:

https://doi.org/10.1029/2020GB006902.
Raimondi, L., T. Tanhua, K. Azetsu-Scott, I. Yashayaev, and D. W. R. Wallace (2021), A 30 -Year Time Series of Transient Tracer-Based Estimates of Anthropogenic Carbon in the Central Labrador Sea, *Journal of Geophysical Research: Oceans*, *126*(5), e2020JC017092, doi: https://doi.org/10.1029/2020JC017092.
Raju, N. J., M. K. Dash, P. K. Bhaskaran, and P. C. Pandey (2021), Numerical Investigation of Bidirectional Mode-1 and Mode-2 Internal Solitary Wave Generation from North and South of Batti Malv Island, Nicobar Islands, India, *J. Phys. Oceanogr.*, *51*(1), 47-62, doi: https://doi.org/10.1175/JPO-D-19-0182.1.
Ranji, Z., and M. Soltanpour (2021), On the effects of Cyclone Ashobaa on sub-inertial oscillations over the Arabian Sea, *Cont. Shelf Res.*, *222*, 104435, doi: https://doi.org/10.1016/j.csr.2021.104435.
Rao, D. R. M., and N. F. Tandon (2021), Mechanism of Interannual Cross-Equatorial Overturning Anomalies in the Pacific Ocean, *Journal of Geophysical Research: Oceans*, *126*(10), e2021JC017509, doi: https://doi.org/10.1029/2021JC017509.
Rathore, S., N. L. Bindoff, C. C. Ummenhofer, H. E. Phillips, M. Feng, and M. Mishra (2021), Improving Australian Rainfall Prediction Using Sea Surface Salinity, *J. Clim.*, *34*(7), 2473-2490, doi: https://doi.org/10.1175/JCLI-D-20-0625.1.
Rayson, M. D., N. L. Jones, G. N. Ivey, and Y. Gong (2021), A Seasonal Harmonic Model for Internal Tide Amplitude Prediction, *Journal of Geophysical Research: Oceans*, *126*(10), e2021JC017570, doi: https://doi.org/10.1029/2021JC017570.
Ren, A. S., and D. L. Rudnick (2021), Temperature and salinity extremes from 2014-2019 in the California Current System and its source waters, *Communications Earth & Environment*, *2*(1), 62, doi: https://doi.org/10.1038/s43247-021-00131-9.
Reul, N., B. Chapron, S. A. Grodsky, S. Guimbard, V. Kudryavtsev, G. R. Foltz, and K. Balaguru (2021), Satellite Observations of the Sea Surface Salinity Response to Tropical Cyclones, *Geophys. Res. Lett.*, *48*(1), e2020GL091478, doi: https://doi.org/10.1029/2020GL091478.
Ricour, F., A. Capet, F. D'Ortenzio, B. Delille, and M. Grégoire (2021), Dynamics of the deep chlorophyll maximum in the Black Sea as depicted by BGC-Argo floats, *Biogeosciences*, *18*(2), 755-774, doi: https://doi.org/10.5194/bg-18-755-2021.
Roch, M., P. Brandt, S. Schmidtko, F. Vaz Velho, and M. Ostrowski (2021), Southeastern Tropical Atlantic Changing From Subtropical to Tropical Conditions, *Frontiers in Marine Science*, *8*(1733), doi: https://doi.org/10.3389/fmars.2021.748383.
Roemmich, D., et al. (2021), The technological, scientific, and sociological revolution of global subsurface ocean observing, *rontiers in Ocean Observing: Documenting Ecosystems, Understanding Environmental Changes, Forecasting Hazards. E.S. Kappel, S.K. Juniper, S. Seeyave, E. Smith, and M. Visbeck, eds, A Supplement to Oceanography*, *34*(4), 2-8, doi: https://doi.org/10.5670/oceanog.2021.supplement.02-02.
Rogachev, K., and N. Shlyk (2021), Record-breaking warming in the Kamchatka Current halocline, *Ocean Dyn.*, *71*(5), 545-557, doi: https://doi.org/10.1007/s10236-021-01445-0.
Romero, E., L. Tenorio-Fernandez, I. Castro, and M. Castro (2021), Filtering method based on cluster analysis to avoid salinity drifts and recover Argo data in less time, *Ocean Sci.*,

17(5), 1273-1284, doi: https://doi.org/10.5194/os-17-1273-2021.
Rousselet, L., P. Cessi, and G. Forget (2021), Coupling of the mid-depth and abyssal components of the global overturning circulation according to a state estimate, *Science Advances*, *7*(21), eabf5478, doi: http://dx.doi.org/10.1126/sciadv.abf5478.
Rudnick, D. L., W. B. Owens, T. M. S. Johnston, K. B. Karnauskas, J. Jakoboski, and R. E. Todd (2021), The Equatorial Current System West of the Galápagos Islands during the 2014–16 El Niño as Observed by Underwater Gliders, *J. Phys. Oceanogr.*, *51*(1), 3-17, doi: https://doi.org/10.1175/JPO-D-20-0064.1.
Rühs, S., E. C. J. Oliver, A. Biastoch, C. W. Böning, M. Dowd, K. Getzlaff, T. Martin, and P. G. Myers (2021), Changing Spatial Patterns of Deep Convection in the Subpolar North Atlantic, *Journal of Geophysical Research: Oceans*, *126*(7), e2021JC017245, doi: https://doi.org/10.1029/2021JC017245.
Ryan, S., C. C. Ummenhofer, G. Gawarkiewicz, P. Wagner, M. Scheinert, A. Biastoch, and C. W. Böning (2021), Depth Structure of Ningaloo Niño/Niña Events and Associated Drivers, *J. Clim.*, *34*(5), 1767-1788, doi: https://doi.org/10.1175/JCLI-D-19-1020.1.
Rydbeck, A. V., T. G. Jensen, and M. K. Flatau (2021), Reciprocity in the Indian Ocean: Intraseasonal Oscillation and Ocean Planetary Waves, *Journal of Geophysical Research: Oceans*, *126*(9), e2021JC017546, doi: https://doi.org/10.1029/2021JC017546.
Rypina, I. I., T. R. Getscher, L. J. Pratt, and B. Mourre (2021), Observing and quantifying ocean flow properties using drifters with drogues at different depths, *J. Phys. Oceanogr.*, doi: https://doi.org/10.1175/JPO-D-20-0291.1.
Sabu, P., M. P. Subeesh, J. V. George, N. P. Anilkumar, and M. Ravichandran (2021), Enhanced subsurface mixing due to near-inertial waves: observation from Seychelles-Chagos Thermocline Ridge, *Ocean Dyn.*, doi: https://doi.org/10.1007/s10236-020-01430-z.
Saha, A., N. Serra, and D. Stammer (2021), Growth and Decay of Northwestern Tropical Atlantic Barrier Layers, *Journal of Geophysical Research: Oceans*, *126*(5), e2020JC016956, doi: https://doi.org/10.1029/2020JC016956.
Sallée, J.-B., V. Pellichero, C. Akhoudas, E. Pauthenet, L. Vignes, S. Schmidtko, A. N. Garabato, P. Sutherland, and M. Kuusela (2021), Summertime increases in upper-ocean stratification and mixed-layer depth, *Nature*, *591*(7851), 592-598, doi: https://doi.org/10.1038/s41586-021-03303-x.
Samanta, D., N. F. Goodkin, and K. B. Karnauskas (2021), Volume and Heat Transport in the South China Sea and Maritime Continent at Present and the End of the 21st Century, *Journal of Geophysical Research: Oceans*, *126*(9), e2020JC016901, doi: https://doi.org/10.1029/2020JC016901.
Santalices, D., S. Briz, A. J. de Castro, and F. López (2021), Bi-Spectral Infrared Algorithm for Cloud Coverage over Oceans by the JEM-EUSO Mission Program, *Sensors*, *21*(19), doi: https://doi.org/10.3390/s21196506.
Santana-Cisneros, M. L., P.-L. Ardisson, Á. F. González, I. Mariño-Tapia, M. Cahuich-López, L. E. Ángeles-González, U. Ordoñez-López, and I. Velázquez-Abunader (2021), Dispersal modeling of octopoda paralarvae in the Gulf of Mexico, *Fish Oceanogr.*, *30*(6), 726-739, doi: https://doi.org/10.1111/fog.12555.

Saraçoğlu, F. A., B. Aydoğan, B. Ayat, and K. E. Saraçoğlu (2021), Spatial and Seasonal Variability of Long-Term Sea Surface Temperature Trends in Aegean and Levantine Basins, *Pure and Applied Geophysics*, *178*(9), 3769-3791, doi: https://doi.org/10.1007/s00024-021-02856-2.

Schindelegger, M., A. A. Harker, R. M. Ponte, H. Dobslaw, and D. A. Salstein (2021), Convergence of Daily GRACE Solutions and Models of Submonthly Ocean Bottom Pressure Variability, *Journal of Geophysical Research: Oceans*, *126*(2), e2020JC017031, doi: https://doi.org/10.1029/2020JC017031.

Schine, C. M. S., A.-C. Alderkamp, G. van Dijken, L. J. A. Gerringa, S. Sergi, P. Laan, H. van Haren, W. H. van de Poll, and K. R. Arrigo (2021), Massive Southern Ocean phytoplankton bloom fed by iron of possible hydrothermal origin, *Nature Communications*, *12*(1), 1211, doi: https://doi.org/10.1038/s41467-021-21339-5.

Schloesser, F., P. R. Thompson, and C. G. Piecuch (2021), Meridional Asymmetry in Recent Decadal Sea-Level Trends in the Subtropical Pacific Ocean, *Geophys. Res. Lett.*, *48*(6), e2020GL091959, doi: https://doi.org/10.1029/2020GL091959.

Seelanki, V., T. Nigam, and V. Pant (2021), Upper-ocean physical and biological features associated with Hudhud cyclone: A bio-physical modelling study, *J. Mar. Syst.*, *215*, 103499, doi: https://doi.org/10.1016/j.jmarsys.2020.103499.

Semmler, T., J. Jungclaus, C. Danek, H. F. Goessling, N. V. Koldunov, T. Rackow, and D. Sidorenko (2021), Ocean Model Formulation Influences Transient Climate Response, *Journal of Geophysical Research: Oceans*, *126*(12), e2021JC017633, doi: https://doi.org/10.1029/2021JC017633.

Shapiro, G. I., J. M. Gonzalez-Ondina, and V. N. Belokopytov (2021), High-resolution stochastic downscaling method for ocean forecasting models and its application to the Red Sea dynamics, *Ocean Sci.*, *17*(4), 891-907, doi: https://os.copernicus.org/articles/17/891/2021/.

Shen, H., L. Li, J. Li, Z. He, and Y. Xia (2021), The Seasonal Variation of the Anomalously High Salinity at Subsurface Salinity Maximum in Northern South China Sea from Argo Data, *Journal of Marine Science and Engineering*, *9*(2), doi: https://doi.org/10.3390/jmse9020227.

Shi, J.-R., L. D. Talley, S.-P. Xie, Q. Peng, and W. Liu (2021), Ocean warming and accelerating Southern Ocean zonal flow, *Nature Climate Change*, *11*(12), 1090-1097, doi: https://doi.org/10.1038/s41558-021-01212-5.

Shi, X., Z. Wang, and H. Huang (2021), Physical oceanography of the Caroline M4 seamount in the tropical western Pacific Ocean in summer 2017, *Journal of Oceanology and Limnology*, *39*(5), 1634-1650, doi: https://doi.org/10.1007/s00343-021-0359-8.

Sil, S., A. Gangopadhyay, G. Gawarkiewicz, and S. Pramanik (2021), Shifting seasonality of cyclones and western boundary current interactions in Bay of Bengal as observed during Amphan and Fani, *Scientific Reports*, *11*(1), 22052, doi: https://doi.org/10.1038/s41598-021-01607-6.

Skákala, J., et al. (2021), Towards a Multi-Platform Assimilative System for North Sea Biogeochemistry, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC016649, doi: https://doi.org/10.1029/2020JC016649.

Small, R. J., A. K. DuVivier, D. B. Whitt, M. C. Long, I. Grooms, and W. G. Large (2021), On the

control of subantarctic stratification by the ocean circulation, *Climate Dynamics*, *56*(1), 299-327, doi: https://doi.org/10.1007/s00382-020-05473-2.

Smith, A. J. R., L. Ratnarajah, T. M. Holmes, K. Wuttig, A. T. Townsend, K. Westwood, M. Cox, E. Bell, S. Nicol, and D. Lannuzel (2021), Circumpolar Deep Water and Shelf Sediments Support Late Summer Microbial Iron Remineralization, *Glob. Biogeochem. Cycle*, *35*(11), e2020GB006921, doi: https://doi.org/10.1029/2020GB006921.

Smith, G. C., et al. (2021), The Regional Ice Ocean Prediction System v2: a pan-Canadian ocean analysis system using an online tidal harmonic analysis, *Geosci. Model Dev.*, *14*(3), 1445-1467, doi: https://doi.org/10.5194/gmd-14-1445-2021.

Sohail, T., D. B. Irving, J. D. Zika, R. M. Holmes, and J. A. Church (2021), Fifty Year Trends in Global Ocean Heat Content Traced to Surface Heat Fluxes in the Sub-Polar Ocean, *Geophys. Res. Lett.*, *48*(8), e2020GL091439, doi: https://doi.org/10.1029/2020GL091439.

Song, H.-J., and J.-Y. Park (2021), Bottom-Up Drivers for Global Fish Catch Assessed with Reconstructed Ocean Biogeochemistry from an Earth System Model, *Climate*, *9*(5), doi: https://doi.org/10.3390/cli9050083.

Sotillo, M. G., F. Campuzano, K. Guihou, P. Lorente, E. Olmedo, A. Matulka, F. Santos, M. A. Amo-Baladrón, and A. Novellino (2021), River Freshwater Contribution in Operational Ocean Models along the European Atlantic Façade: Impact of a New River Discharge Forcing Data on the CMEMS IBI Regional Model Solution, *Journal of Marine Science and Engineering*, *9*(4), doi: https://doi.org/10.3390/jmse9040401.

Stammer, D., M. S. Martins, J. Köhler, and A. Köhl (2021), How well do we know ocean salinity and its changes?, *Prog. Oceanogr.*, *190*, 102478, doi: https://doi.org/10.1016/j.pocean.2020.102478.

Stanev, E. V., and B. Chtirkova (2021), Interannual Change in Mode Waters: Case of the Black Sea, *Journal of Geophysical Research: Oceans*, *126*(2), e2020JC016429, doi: https://doi.org/10.1029/2020JC016429.

Stanev, E. V., B. Chtirkova, and E. Peneva (2021), Geothermal Convection and Double Diffusion Based on Profiling Floats in the Black Sea, *Geophys. Res. Lett.*, *48*(2), 2020GL091788, doi: https://doi.org/10.1029/2020GL091788.

Stegner, A., B. Le Vu, F. Dumas, M. A. Ghannami, A. Nicolle, C. Durand, and Y. Faugere (2021), Cyclone-Anticyclone Asymmetry of Eddy Detection on Gridded Altimetry Product in the Mediterranean Sea, *Journal of Geophysical Research: Oceans*, *126*(9), e2021JC017475, doi: https://doi.org/10.1029/2021JC017475.

Su, H., T. Qin, A. Wang, and W. Lu (2021), Reconstructing Ocean Heat Content for Revisiting Global Ocean Warming from Remote Sensing Perspectives, *Remote Sensing*, *13*(19), doi: https://doi.org/10.3390/rs13193799.

Su, H., A. Wang, T. Zhang, T. Qin, X. Du, and X.-H. Yan (2021), Super-resolution of subsurface temperature field from remote sensing observations based on machine learning, *International Journal of Applied Earth Observation and Geoinformation*, *102*, 102440, doi: https://doi.org/10.1016/j.jag.2021.102440.

Su, H., T. Zhang, M. Lin, W. Lu, and X.-H. Yan (2021), Predicting subsurface thermohaline structure from remote sensing data based on long short-term memory neural networks, *Remote Sens. Environ.*, *260*, 112465, doi:

https://doi.org/10.1016/j.rse.2021.112465.
Su, J., P. G. Strutton, and C. Schallenberg (2021), The subsurface biological structure of Southern Ocean eddies revealed by BGC-Argo floats, *J. Mar. Syst.*, *220*, 103569, doi: https://doi.org/10.1016/j.jmarsys.2021.103569.
Sun, J., G. Vecchi, and B. Soden (2021), Sea Surface Salinity Response to Tropical Cyclones Based on Satellite Observations, *Remote Sensing*, *13*(3), doi: https://doi.org/10.3390/rs13030420.
Sun, J., G. A. Vecchi, and B. J. Soden (2021), Influence of Vertical Wind Shear on the Ocean Response to Tropical Cyclones Based on Satellite Observations, *Geophys. Res. Lett.*, *48*(20), e2021GL095451, doi: https://doi.org/10.1029/2021GL095451.
Sun, Z., W. Shao, W. Wang, W. Zhou, W. Yu, and W. Shen (2021), Analysis of Wave-Induced Stokes Transport Effects on Sea Surface Temperature Simulations in the Western Pacific Ocean, *Journal of Marine Science and Engineering*, *9*(8), doi: https://doi.org/10.3390/jmse9080834.
Sutton, A. J., N. L. Williams, and B. Tilbrook (2021), Constraining Southern Ocean CO2 Flux Uncertainty Using Uncrewed Surface Vehicle Observations, *Geophys. Res. Lett.*, *48*(3), e2020GL091748, doi: https://doi.org/10.1029/2020GL091748.
Swierczek, S., M. R. Mazloff, M. Morzfeld, and J. L. Russell (2021), The Effect of Resolution on Vertical Heat and Carbon Transports in a Regional Ocean Circulation Model of the Argentine Basin, *Journal of Geophysical Research: Oceans*, *126*(7), e2021JC017235, doi: https://doi.org/10.1029/2021JC017235.
Takahashi, N., T. Hayasaka, B. Qiu, and R. Yamaguchi (2021), Observed response of marine boundary layer cloud to the interannual variations of summertime Oyashio extension SST front, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-021-05649-4.
Takahashi, N., K. J. Richards, N. Schneider, H. Annamalai, W.-C. Hsu, and M. Nonaka (2021), Formation Mechanism of Warm SST Anomalies in 2010s Around Hawaii, *Journal of Geophysical Research: Oceans*, *126*(11), e2021JC017763, doi: https://doi.org/10.1029/2021JC017763.
Tall, A. W., E. Machu, V. Echevin, X. Capet, A. Pietri, K. Corréa, S. M. Sall, and A. Lazar (2021), Variability of Dissolved Oxygen in the Bottom Layer of the Southern Senegalese Shelf, *Journal of Geophysical Research: Oceans*, *126*(5), e2020JC016854, doi: https://doi.org/10.1029/2020JC016854.
Tamsitt, V., et al. (2021), Southern Ocean in Antarctica and the Southern Ocean, *Bull. Amer. Meteorol. Soc.*, *102*(8), S317-S356, doi: https://doi.org/10.1175/BAMS-D-21-0081.1.
Tang, W., et al. (2021), Widespread phytoplankton blooms triggered by 2019–2020 Australian wildfires, *Nature*, *597*(7876), 370-375, doi: https://doi.org/10.1038/s41586-021-03805-8.
Teruzzi, A., G. Bolzon, L. Feudale, and G. Cossarini (2021), Deep chlorophyll maximum and nutricline in the Mediterranean Sea: emerging properties from a multi-platform assimilated biogeochemical model experiment, *Biogeosciences*, *18*(23), 6147-6166, doi: https://doi.org/10.5194/bg-18-6147-2021.
Terzić, E., A. Miró, E. Organelli, P. Kowalczuk, F. D'Ortenzio, and P. Lazzari (2021), Radiative Transfer Modeling With Biogeochemical-Argo Float Data in the Mediterranean Sea,

Journal of Geophysical Research: Oceans, *126*(10), e2021JC017690, doi: https://doi.org/10.1029/2021JC017690.

Terzić, E., S. Salon, G. Cossarini, C. Solidoro, A. Teruzzi, A. Miró, and P. Lazzari (2021), Impact of interannually variable diffuse attenuation coefficients for downwelling irradiance on biogeochemical modelling, *Ocean Model.*, *161*, 101793, doi: https://doi.org/10.1016/j.ocemod.2021.101793.

Thompson, P. R., et al. (2021), Sea level variability and change in Global Oceans, *Bull. Am. Meteorol. Soc.*, *102*(8), doi: https://doi.org/10.1175/BAMS-D-21-0083.1.

Thoppil, P. G., et al. (2021), Ensemble forecasting greatly expands the prediction horizon for ocean mesoscale variability, *Communications Earth & Environment*, *2*(1), 89, doi: https://doi.org/10.1038/s43247-021-00151-5.

Tian, F., Q. Mao, Y. Zhang, and G. Chen (2021), i4Ocean: transfer function-based interactive visualization of ocean temperature and salinity volume data, *International Journal of Digital Earth*, 1-23, doi: https://doi.org/10.1080/17538947.2021.1886355.

Torrado, H., B. Mourre, N. Raventos, C. Carreras, J. Tintoré, M. Pascual, and E. Macpherson (2021), Impact of individual early life traits in larval dispersal: A multispecies approach using backtracking models, *Prog. Oceanogr.*, *192*, 102518, doi: https://doi.org/10.1016/j.pocean.2021.102518.

Toyoda, T., N. Kimura, L. S. Urakawa, H. Tsujino, H. Nakano, K. Sakamoto, G. Yamanaka, K. K. Komatsu, Y. Matsumura, and Y. Kawaguchi (2021), Improved representation of Arctic sea ice velocity field in ocean–sea ice models based on satellite observations, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-021-05843-4.

Toyoda, T., H. Nakano, H. Aiki, T. Ogata, Y. Fukutomi, Y. Kanno, L. S. Urakawa, K. Sakamoto, G. Yamanaka, and M. Nagura (2021), Energy flow diagnosis of ENSO from an ocean reanalysis, *J. Clim.*, *34*(10), 4023-4042, doi: https://doi.org/10.1175/JCLI-D-20-0704.1.

Trewin, B., A. Cazenave, S. Howell, M. Huss, K. Isensee, M. D. Palmer, O. Tarasova, and A. Vermeulen (2021), Headline Indicators for Global Climate Monitoring, *Bull. Amer. Meteorol. Soc.*, *102*(1), E20-E37, doi: https://journals.ametsoc.org/view/journals/bams/102/1/BAMS-D-19-0196.1.xml.

Trott, C. B., B. Subrahmanyam, and C. E. Washburn (2021), Investigating the Response of Temperature and Salinity in the Agulhas Current Region to ENSO Events, *Remote Sensing*, *13*(9), doi: https://doi.org/10.3390/rs13091829.

Tseng, K.-C., et al. (2021), Are Multiseasonal Forecasts of Atmospheric Rivers Possible?, *Geophys. Res. Lett.*, *48*(17), e2021GL094000, doi: https://doi.org/10.1029/2021GL094000.

Udaya Bhaskar, T. V. S., V. V. S. S. Sarma, and J. Pavan Kumar (2021), Potential Mechanisms Responsible for Spatial Variability in Intensity and Thickness of Oxygen Minimum Zone in the Bay of Bengal, *Journal of Geophysical Research: Biogeosciences*, *126*(6), e2021JG006341, doi: https://doi.org/10.1029/2021JG006341.

Ulses, C., C. Estournel, M. Fourrier, L. Coppola, F. Kessouri, D. Lefèvre, and P. Marsaleix (2021), Oxygen budget of the north-western Mediterranean deep- convection region, *Biogeosciences*, *18*(3), 937-960, doi: https://doi.org/10.5194/bg-18-937-2021.

Valsala, V., M. G. Sreeush, M. Anju, P. Sreenivas, Y. K. Tiwari, K. Chakraborty, and S. Sijikumar (2021), An observing system simulation experiment for Indian Ocean surface pCO2

measurements, *Prog. Oceanogr.*, *194*, 102570, doi: https://doi.org/10.1016/j.pocean.2021.102570.
van der Boog, C. G., H. A. Dijkstra, J. D. Pietrzak, and C. A. Katsman (2021), Double-diffusive mixing makes a small contribution to the global ocean circulation, *Communications Earth & Environment*, *2*(1), 46, doi: https://doi.org/10.1038/s43247-021-00113-x.
van der Boog, C. G., J. O. Koetsier, H. A. Dijkstra, J. D. Pietrzak, and C. A. Katsman (2021), Global dataset of thermohaline staircases obtained from Argo floats and Ice-Tethered Profilers, *Earth Syst. Sci. Data*, *13*(1), 43-61, doi: https://doi.org/10.5194/essd-13-43-2021.
Vazquez, R., I. Parras-Berrocal, W. Cabos, D. V. Sein, R. Mañanes, and A. Izquierdo (2021), Assessment of the Canary current upwelling system in a regionally coupled climate model, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-021-05890-x.
Vélez-Belchí, P., V. Caínzos, E. Romero, M. Casanova-Masjoan, C. Arumí-Planas, D. Santana-Toscano, A. González-Santana, M. D. Pérez-Hernández, and A. Hernández-Guerra (2021), The Canary Intermediate Poleward Undercurrent: Not Another Poleward Undercurrent in an Eastern Boundary Upwelling System, *J. Phys. Oceanogr.*, *51*(9), 2973-2990, doi: https://doi.org/10.1175/JPO-D-20-0130.1.
Verezemskaya, P., B. Barnier, S. K. Gulev, S. Gladyshev, J.-M. Molines, V. Gladyshev, J.-M. Lellouche, and A. Gavrikov (2021), Assessing Eddying (1/12°) Ocean Reanalysis GLORYS12 Using the 14-yr Instrumental Record From 59.5°N Section in the Atlantic, *Journal of Geophysical Research: Oceans*, *126*(6), e2020JC016317, doi: https://doi.org/10.1029/2020JC016317.
Vidya, P. J., M. Balaji, and R. Mani Murali (2021), Cyclone Hudhud-eddy induced phytoplankton bloom in the northern Bay of Bengal using a coupled model, *Prog. Oceanogr.*, *197*, 102631, doi: https://doi.org/10.1016/j.pocean.2021.102631.
Vijay, A., K. Munnooru, G. Reghu, A. Gera, R. R. Vinjamuri, and M. V. Ramanamurthy (2021), Nutrient dynamics and budgeting in a semi-enclosed coastal hypersaline lagoon, *Environmental Science and Pollution Research*, doi: https://doi.org/10.1007/s11356-021-15334-y.
Vissa, N. K., P. C. Anandh, V. S. Gulakaram, and G. Konda (2021), Role and response of ocean–atmosphere interactions during Amphan (2020) super cyclone, *Acta Geophysica*, *69*(5), 1997-2010, doi: https://doi.org/10.1007/s11600-021-00671-w.
Volkov, D., et al. (2021), Meridional overturning circulation and heat transport in the Atlantic Ocean in Global Oceans in the State of the Climate in 2020, *Bull. Am. Meteorol. Soc.*, *102*(8), doi: https://doi.org/10.1175/BAMS-D-21-0083.1.
von Oppeln-Bronikowski, N., M. Zhou, T. Bahadory, and B. de Young (2021), Overview of a new Ocean Glider Navigation System: OceanGNS, *Frontiers in Marine Science*, *8*, doi: https://doi.org/10.3389/fmars.2021.671103.
von Schuckmann, K., et al. (2021), Copernicus Marine Service Ocean State Report, Issue 5, *J. Oper. Oceanogr.*, *14*(sup1), 1-185, doi: https://doi.org/10.1080/1755876X.2021.1946240.
Vose, R. S., B. Huang, X. Yin, D. Arndt, D. R. Easterling, J. H. Lawrimore, M. J. Menne, A. Sanchez-Lugo, and H. M. Zhang (2021), Implementing Full Spatial Coverage in NOAA's Global Temperature Analysis, *Geophys. Res. Lett.*, *48*(4), e2020GL090873, doi:

https://doi.org/10.1029/2020GL090873.
Wang, B., K. Fennel, and L. Yu (2021), Can assimilation of satellite observations improve subsurface biological properties in a numerical model? A case study for the Gulf of Mexico, *Ocean Sci.*, *17*(4), 1141-1156, doi: https://doi.org/10.5194/os-17-1141-2021.
Wang, F., Y. Shen, Q. Chen, and Y. Sun (2021), Reduced misclosure of global sea-level budget with updated Tongji-Grace2018 solution, *Scientific Reports*, *11*(1), 17667, doi: https://doi.org/10.1038/s41598-021-96880-w.
Wang, H., T. Song, S. Zhu, S. Yang, and L. Feng (2021), Subsurface Temperature Estimation from Sea Surface Data Using Neural Network Models in the Western Pacific Ocean, *Mathematics*, *9*(8), doi: https://doi.org/10.3390/math9080852.
Wang, J., J. A. Church, X. Zhang, and X. Chen (2021), Reconciling global mean and regional sea level change in projections and observations, *Nature Communications*, *12*(1), 990, doi: https://doi.org/10.1038/s41467-021-21265-6.
Wang, L., K. Lyu, W. Zhuang, W. Zhang, S. Makarim, and X.-H. Yan (2021), Recent Shift in the Warming of the Southern Oceans Modulated by Decadal Climate Variability, *Geophys. Res. Lett.*, *48*(3), e2020GL090889, doi: https://doi.org/10.1029/2020GL090889.
Wang, Q., C. Dong, J. Li, J. Yang, and Q. Tian (2021), Numerical study of the seasonal salinity budget of the upper ocean in the Bay of Bengal in 2014, *Journal of Oceanology and Limnology*, *39*(4), 1169-1187, doi: https://doi.org/10.1007/s00343-020-0285-1.
Wang, Q., X. Yuan, D. Hu, and H. Sasaki (2021), Stronger Intraseasonal Variability Observed Below the Seasonal Thermocline in the Kuroshio East of Taiwan During 2014 and 2015, *Journal of Geophysical Research: Oceans*, *126*(7), e2021JC017194, doi: https://doi.org/10.1029/2021JC017194.
Wang, S., and R. Toumi (2021), Recent tropical cyclone changes inferred from ocean surface temperature cold wakes, *Scientific Reports*, *11*(1), 22269, doi: https://doi.org/10.1038/s41598-021-01612-9.
Wang, T., F. Chai, X. Xing, J. Ning, W. Jiang, and S. C. Riser (2021), Influence of multi-scale dynamics on the vertical nitrate distribution around the Kuroshio Extension: An investigation based on BGC-Argo and satellite data, *Prog. Oceanogr.*, *193*, 102543, doi: https://doi.org/10.1016/j.pocean.2021.102543.
Wang, T., S. Zhang, F. Chen, Y. Ma, C. Jiang, and J. Yu (2021), Influence of sequential tropical cyclones on phytoplankton blooms in the northwestern South China Sea, *Journal of Oceanology and Limnology*, *39*(1), 14-25, doi: https://doi.org/10.1007/s00343-020-9266-7.
Wang, X., Y. Du, Y. Zhang, A. Wang, and T. Wang (2021), Influence of Two Eddy Pairs on High-Salinity Water Intrusion in the Northern South China Sea During Fall-Winter 2015/2016, *Journal of Geophysical Research: Oceans*, *126*(6), e2020JC016733, doi: https://doi.org/10.1029/2020JC016733.
Wang, X., S. Zhang, X. Lin, B. Qiu, and L. Yu (2021), Characteristics of 3-Dimensional Structure and Heat Budget of Mesoscale Eddies in the South Atlantic Ocean, *Journal of Geophysical Research: Oceans*, *126*(5), e2020JC016922, doi: https://doi.org/10.1029/2020JC016922.
Wang, X., J. Zhao, T. Hattermann, L. Lin, and P. Chen (2021), Transports and Accumulations

of Greenland Sea Intermediate Waters in the Norwegian Sea, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC016582, doi: https://doi.org/10.1029/2020JC016582.

Wang, Y., R. Tang, Y. Yu, and F. Ji (2021), Variability in the Sea Surface Temperature Gradient and Its Impacts on Chlorophyll-a Concentration in the Kuroshio Extension, *Remote Sensing*, *13*(5), doi: https://doi.org/10.3390/rs13050888.

Watanabe, T. K., T. Watanabe, M. Pfeiffer, H.-M. Hu, C.-C. Shen, and A. Yamazaki (2021), Corals Reveal an Unprecedented Decrease of Arabian Sea Upwelling During the Current Warming Era, *Geophys. Res. Lett.*, *48*(10), e2021GL092432, doi: https://doi.org/10.1029/2021GL092432.

Wilson, C. (2021), Evidence of Episodic Nitrate Injections in the Oligotrophic North Pacific Associated With Surface Chlorophyll Blooms, *Journal of Geophysical Research: Oceans*, *126*(11), e2021JC017169, doi: https://doi.org/10.1029/2021JC017169.

Wimart-Rousseau, C., et al. (2021), Seasonal and Interannual Variability of the CO2 System in the Eastern Mediterranean Sea: A Case Study in the North Western Levantine Basin, *Frontiers in Marine Science*, *8*(475), doi: https://doi.org/10.3389/fmars.2021.649246.

Wimart-Rousseau, C., et al. (2021), Seasonal and Interannual Variability of the CO2 System in the Eastern Mediterranean Sea: A Case Study in the North Western Levantine Basin, *Frontiers in Marine Science*, *8*, doi: https://doi.org/10.3389/fmars.2021.649246.

Wu, B., X. Lin, and L. Yu (2021), Poleward Shift of the Kuroshio Extension Front and Its Impact on the North Pacific Subtropical Mode Water in the Recent Decades, *J. Phys. Oceanogr.*, *51*(2), 457-474, doi: https://doi.org/10.1175/JPO-D-20-0088.1.

Wu, D.-R., Z.-W. Zheng, G. Gopalakrishnan, C.-R. Ho, and Q. Zheng (2021), Barrier Layer Characteristics for Different Temporal Scales and Its Implication to Tropical Cyclone Enhancement in the Western North Pacific, *Sustainability*, *13*(6), 3375, doi: https://doi.org/10.3390/su13063375.

Wu, Y., X.-T. Zheng, Q.-W. Sun, Y. Zhang, Y. Du, and L. Liu (2021), Decadal Variability of the Upper-Ocean Salinity in the Southeast Indian Ocean: Role of Local Ocean–Atmosphere Dynamics, *J. Clim.*, *34*(19), 7927-7942, doi: https://doi.org/10.1175/JCLI-D-21-0122.1.

Xia, R., Y. He, and T. Yang (2021), Simulation and future projection of the mixed layer depth and subduction process in the subtropical Southeast Pacific, *Acta Oceanol. Sin.*, *40*(12), 104-113, doi: https://doi.org/10.1007/s13131-021-1877-0.

Xia, R., B. Li, and C. Chen (2021), Response of the mixed layer depth and subduction rate in the subtropical Northeast Pacific to global warming, *Acta Oceanol. Sin.*, doi: https://doi.org/10.1007/s13131-021-1818-y.

Xing, X., and E. Boss (2021), Chlorophyll-Based Model to Estimate Underwater Photosynthetically Available Radiation for Modeling, In-Situ, and Remote-Sensing Applications, *Geophys. Res. Lett.*, *48*(7), e2020GL092189, doi: https://doi.org/10.1029/2020GL092189.

Xing, X., E. Boss, S. Chen, and F. Chai (2021), Seasonal and Daily-Scale Photoacclimation Modulating the Phytoplankton Chlorophyll-Carbon Coupling Relationship in the Mid-Latitude Northwest Pacific, *Journal of Geophysical Research: Oceans*, *126*(10),

e2021JC017717, doi: https://doi.org/10.1029/2021JC017717.
Xu, A., and X. Chen (2021), A Strong Internal Solitary Wave with Extreme Velocity Captured Northeast of Dong-Sha Atoll in the Northern South China Sea, *Journal of Marine Science and Engineering*, *9*(11), doi: https://doi.org/10.3390/jmse9111277.
Xu, L., Y. Ding, and S.-P. Xie (2021), Buoyancy and Wind Driven Changes in Subantarctic Mode Water During 2004–2019, *Geophys. Res. Lett.*, *48*(8), e2021GL092511, doi: https://doi.org/10.1029/2021GL092511.
Xu, Y., Y. Wu, H. Wang, Z. Zhang, J. Li, and J. Zhang (2021), Seasonal and interannual variabilities of chlorophyll across the eastern equatorial Indian Ocean and Bay of Bengal, *Prog. Oceanogr.*, *198*, 102661, doi: https://doi.org/10.1016/j.pocean.2021.102661.
Yajnik, K. S., and C. K. Devasana (2021), Changing variability of sea surface temperature in the post-WWII era, *Journal of Earth System Science*, *130*(3), 144, doi: https://doi.org/10.1007/s12040-021-01637-8.
Yamazaki, K., S. Aoki, K. Katsumata, D. Hirano, and Y. Nakayama (2021), Multidecadal poleward shift of the southern boundary of the Antarctic Circumpolar Current off East Antarctica, *Science Advances*, *7*(24), eabf8755, doi: http://dx.doi.org/10.1126/sciadv.abf8755.
Yan, H., H. Wang, R. Zhang, S. Bao, J. Chen, and G. Wang (2021), The Inconsistent Pairs Between In Situ Observations of Near Surface Salinity and Multiple Remotely Sensed Salinity Data, *Earth and Space Science*, *8*(5), e2020EA001355, doi: https://doi.org/10.1029/2020EA001355.
Yan, H., R. Zhang, H. Wang, S. Bao, and C. Bai (2021), Practical Dynamical-Statistical Reconstruction of Ocean’s Interior from Satellite Observations, *Remote Sensing*, *13*(24), doi: https://doi.org/10.3390/rs13245085.
Yang, B. (2021), Seasonal Relationship Between Net Primary and Net Community Production in the Subtropical Gyres: Insights From Satellite and Argo Profiling Float Measurements, *Geophys. Res. Lett.*, *48*(17), e2021GL093837, doi: https://doi.org/10.1029/2021GL093837.
Yang, B., J. Fox, M. J. Behrenfeld, E. S. Boss, N. Haëntjens, K. H. Halsey, S. R. Emerson, and S. C. Doney (2021), In Situ Estimates of Net Primary Production in the Western North Atlantic With Argo Profiling Floats, *Journal of Geophysical Research: Biogeosciences*, *126*(2), e2020JG006116, doi: https://doi.org/10.1029/2020JG006116.
Yang, C., F. E. Leonelli, S. Marullo, V. Artale, H. Beggs, B. B. Nardelli, T. M. Chin, V. De Toma, S. Good, and B. Huang (2021), Sea Surface Temperature Intercomparison in the Framework of the Copernicus Climate Change Service (C3S), *J. Clim.*, *34*(13), 5257-5283, doi: https://doi.org/10.1175/JCLI-D-20-0793.1.
Yang, Y., M. Zhong, W. Feng, and D. Mu (2021), Detecting Regional Deep Ocean Warming below 2000 meter Based on Altimetry, GRACE, Argo, and CTD Data, *Adv. Atmos. Sci.*, doi: https://doi.org/10.1007/s00376-021-1049-3.
Yang, Z., X. Zhai, D. P. Marshall, and G. Wang (2021), An Idealized Model Study of Eddy Energetics in the Western Boundary "Graveyard", *J. Phys. Oceanogr.*, *51*(4), 1265-1282, doi: https://doi.org/10.1175/JPO-D-19-0301.1.
Yasunaka, S., H. Mitsudera, F. Whitney, and S.-i. Nakaoka (2021), Nutrient and dissolved

inorganic carbon variability in the North Pacific, *J. Oceanogr.*, *77*(1), 3-16, doi: https://doi.org/10.1007/s10872-020-00561-7.

Yeager, S., F. Castruccio, P. Chang, G. Danabasoglu, E. Maroon, J. Small, H. Wang, L. Wu, and S. Zhang (2021), An outsized role for the Labrador Sea in the multidecadal variability of the Atlantic overturning circulation, *Science Advances*, *7*(41), eabh3592, doi: https://doi.org/10.1126/sciadv.abh3592.

You, J., Z. Xu, Q. Li, R. Robertson, P. Zhang, and B. Yin (2021), Enhanced internal tidal mixing in the Philippine Sea mesoscale environment, *Nonlin. Processes Geophys.*, *28*(2), 271-284, doi: https://doi.org/10.5194/npg-28-271-2021.

Yu, F., Z. Wang, S. Liu, and G. Chen (2021), Inversion of the three-dimensional temperature structure of mesoscale eddies in the Northwest Pacific based on deep learning, *Acta Oceanol. Sin.*, *40*(10), 176-186, doi: https://doi.org/10.1007/s13131-021-1841-z.

Yu, L., F. M. Bingham, T. Lee, E. P. Dinnat, S. Fournier, O. Melnichenko, W. Tang, and S. H. Yueh (2021), Revisiting the Global Patterns of Seasonal Cycle in Sea Surface Salinity, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC016789, doi: https://doi.org/10.1029/2020JC016789.

Yuan, D., P. Chen, Z. Mao, X. Zhang, Z. Zhang, C. Xie, C. Zhong, and Z. Qian (2021), Ocean mixed layer depth estimation using airborne Brillouin scatteringlidar: simulation and model, *Applied Optics*, *60*(36), 11180-11188, doi: https://doi.org/10.1364/AO.442647.

Yuan, D., P. Chen, Z. Mao, and Z. Zhang (2021), Potential of spaceborne Brillouin scattering lidar for global ocean optical profiling, *Opt. Express*, *29*(26), 43049-43067, doi: https://doi.org/10.1364/OE.442376.

Yuan, L., F. Tian, S. Xu, C. Zhou, and J. Chen (2021), Three-dimensional mesoscale eddy identification and tracking algorithm based on pressure anomalies, *Journal of Oceanology and Limnology*, doi: https://doi.org/10.1007/s00343-021-0309-5.

Yuan, M., Z. Song, Z. Li, Z. Jing, P. Chang, B. Sun, H. Wang, X. Liu, S. Zhou, and L. Wu (2021), An Improved Parameterization of Wind-Driven Turbulent Vertical Mixing Based on an Eddy-Resolving Climate Model, *Journal of Advances in Modeling Earth Systems*, *13*(10), e2021MS002630, doi: https://doi.org/10.1029/2021MS002630.

Yuan, X., Q. Wang, J. Feng, and D. Hu (2021), The North Equatorial Current/Undercurrent volume transport and its 40-day variability from a mooring array along 130°E, *Journal of Oceanology and Limnology*, doi: https://doi.org/10.1007/s00343-020-0289-x.

Zang, N., J. Sprintall, R. Ienny, and F. Wang (2021), Seasonality of the Somali Current/Undercurrent system, *Deep Sea Research Part II: Topical Studies in Oceanography*, *191-192*, 104953, doi: https://doi.org/10.1016/j.dsr2.2021.104953.

Zeller, M., S. McGregor, E. van Sebille, A. Capotondi, and P. Spence (2021), Subtropical-tropical pathways of spiciness anomalies and their impact on equatorial Pacific temperature, *Climate Dynamics*, *56*(3), 1131-1144, doi: https://doi.org/10.1007/s00382-020-05524-8.

Zeng, L., E. P. Chassignet, X. Xu, and D. Wang (2021), Multi-decadal changes in the South China Sea mixed layer salinity, *Climate Dynamics*, *57*(1), 435-449, doi: https://doi.org/10.1007/s00382-021-05711-1.

Zhai, Y., J. Yang, and X. Wan (2021), Cross-Equatorial Anti-Symmetry in the Seasonal

Transport of the Western Boundary Current in the Atlantic Ocean, *Journal of Geophysical Research: Oceans*, *126*(5), e2021JC017184, doi: https://doi.org/10.1029/2021JC017184.

Zhai, Y., J. Yang, X. Wan, and S. Zou (2021), The Eastern Atlantic Basin Pathway for the Export of the North Atlantic Deep Waters, *Geophys. Res. Lett.*, *48*(24), e2021GL095615, doi: https://doi.org/10.1029/2021GL095615.

Zhang, B., F. Li, G. Zheng, Y. Wang, Z. Tan, and X. Li (2021), Developing big ocean system in support of Sustainable Development Goals: challenges and countermeasures, *Big Earth Data*, *5*(4), 557-575, doi: https://doi.org/10.1080/20964471.2021.1965371.

Zhang, C., W. Si, and C. Xie (2021), Analysis of T/S characteristics of Sulawesi Sea based on Argo and XBT, *Marine Science Bulletin*, *23*(1), 27-36, doi: https://jglobal.jst.go.jp/en/detail?JGLOBAL_ID=202102286903481565.

Zhang, C.-L., Z.-F. Wang, and Y. Liu (2021), An argo-based experiment providing near-real-time subsurface oceanic environmental information for fishery data, *Fish Oceanogr.*, *30*(1), 85-98, doi: https://doi.org/10.1111/fog.12504.

Zhang, H., and A. Ignatov (2021), A Completeness and Complementarity Analysis of the Data Sources in the NOAA In Situ Sea Surface Temperature Quality Monitor (iQuam) System, *Remote Sensing*, *13*(18), doi: https://doi.org/10.3390/rs13183741.

Zhang, H., A. Ignatov, and D. Hinshaw (2021), Evaluation of the In Situ Sea Surface Temperature Quality Control in the NOAA In Situ SST Quality Monitor (i Quam) System, *J. Atmos. Ocean. Technol.*, *38*(7), 1249-1263, doi: https://doi.org/10.1175/JTECH-D-20-0203.1.

Zhang, H.-R., Y. Wang, P. Xiu, Y. Qi, and F. Chai (2021), Roles of Iron Limitation in Phytoplankton Dynamics in the Western and Eastern Subarctic Pacific, *Frontiers in Marine Science*, *8*(1269), doi: https://doi.org/10.3389/fmars.2021.735826.

Zhang, L., X. Zhang, W. Perrie, C. Guan, B. Dan, C. Sun, X. Wu, K. Liu, and D. Li (2021), Impact of Sea Spray and Sea Surface Roughness on the Upper Ocean Response to Super Typhoon Haitang (2005), *J. Phys. Oceanogr.*, *51*(6), 1929-1945, doi: https://doi.org/10.1175/JPO-D-20-0208.1.

Zhang, R., and M. Thomas (2021), Horizontal circulation across density surfaces contributes substantially to the long-term mean northern Atlantic Meridional Overturning Circulation, *Communications Earth & Environment*, *2*(1), 112, doi: https://doi.org/10.1038/s43247-021-00182-y.

Zhang, S., Z. Yu, X. Gong, Y. Wang, F. Chang, G. Lohmman, Y. Qi, and T. Li (2021), Precession cycles of the El Niño/Southern oscillation-like system controlled by Pacific upper-ocean stratification, *Communications Earth & Environment*, *2*(1), 239, doi: https://doi.org/10.1038/s43247-021-00305-5.

Zhang, T., L. Song, H. Yuan, B. Song, and N. Ebango Ngando (2021), A comparative study on habitat models for adult bigeye tuna in the Indian Ocean based on gridded tuna longline fishery data, *Fish Oceanogr.*, *30*(5), 584-607, doi: https://doi.org/10.1111/fog.12539.

Zhang, Y., Y. Du, M. Feng, and S. Hu (2021), Long-Lasting Marine Heatwaves Instigated by Ocean Planetary Waves in the Tropical Indian Ocean During 2015–2016 and 2019–2020, *Geophys. Res. Lett.*, *48*(21), e2021GL095350, doi:

https://doi.org/10.1029/2021GL095350.
Zhang, Y., Y. Du, T. Qu, Y. Hong, C. M. Domingues, and M. Feng (2021), Changes in the Subantarctic Mode Water Properties and Spiciness in the Southern Indian Ocean based on Argo Observations, *J. Phys. Oceanogr.*, *51*(7), 2203-2221, doi: https://doi.org/10.1175/JPO-D-20-0254.1.
Zhang, Z., X. Zhang, B. Qiu, W. Zhao, C. Zhou, X. Huang, and J. Tian (2021), Submesoscale Currents in the Subtropical Upper Ocean Observed by Long-Term High-Resolution Mooring Arrays, *J. Phys. Oceanogr.*, *51*(1), 187-206, doi: https://doi.org/10.1175/JPO-D-20-0100.1.
Zhang, Z.-L., H. Nakamura, and X.-H. Zhu (2021), Seasonal velocity variations over the entire Kuroshio path part I: data analysis and numerical experiments, *J. Oceanogr.*, *77*(5), 719-744, doi: https://doi.org/10.1007/s10872-021-00604-7.
Zhao, D., L. Gao, and Y. Xu (2021), Quantification of the impact of environmental factors on chlorophyll in the open ocean, *Journal of Oceanology and Limnology*, *39*(2), 447-457, doi: https://doi.org/10.1007/s00343-020-9121-x.
Zhao, D., Y. Xu, X. Zhang, and C. Huang (2021), Global chlorophyll distribution induced by mesoscale eddies, *Remote Sens. Environ.*, *254*, 112245, doi: https://doi.org/10.1016/j.rse.2020.112245.
Zheng, H., C. Zhang, R. Zhao, X.-H. Zhu, Z.-N. Zhu, Z.-J. Liu, and M. Wang (2021), Structure and Variability of Abyssal Current in Northern South China Sea Based on CPIES Observations, *Journal of Geophysical Research: Oceans*, *126*(4), e2020JC016780, doi: https://doi.org/10.1029/2020JC016780.
Zheng, Y., Y. Du, J. Chi, Y. Zhang, and S.-P. Xie (2021), Rapid changes in northeastern tropical Pacific Ocean surface salinity due to trans-basin moisture transport in recent decades, *Climate Dynamics*, doi: https://doi.org/10.1007/s00382-020-05585-9.
Zhi, H., P. Lin, Z. Fang, H. Liu, R.-H. Zhang, and W. Bai (2021), Sea surface salinity-derived indexes for distinguishing two types of El Niño events in the tropical Pacific, *Sci. China Earth Sci.*, *64*(8), 1267-1284, doi: https://doi.org/10.1007/s11430-020-9780-2.
Zhou, H., H. Liu, S. Tan, W. Yang, Y. Li, X. Liu, Q. Ren, and W. K. Dewar (2021), The Observed North Equatorial Countercurrent in the Far Western Pacific Ocean during the 2014–16 El Niño, *J. Phys. Oceanogr.*, *51*(6), 2003-2020, doi: https://doi.org/10.1175/JPO-D-20-0293.1.
Zhou, H., X. Liu, R. Li, Y. Wang, and G. Yang (2021), Intraseasonal Variability of the North Equatorial Current Bifurcation Off the Philippines, *Journal of Geophysical Research: Oceans*, *126*(11), e2021JC017646, doi: https://doi.org/10.1029/2021JC017646.
Zhou, W., J. Li, F. Xu, Y. Shu, and Y. Feng (2021), The impact of ocean data assimilation on seasonal predictions based on the National Climate Center climate system model, *Acta Oceanol. Sin.*, *40*(5), 58-70, doi: https://doi.org/10.1007/s13131-021-1732-3.
Zhou, Y., R. H. Lang, E. P. Dinnat, and D. M. L. Vine (2021), Seawater Debye Model Function at L-Band and Its Impact on Salinity Retrieval From Aquarius Satellite Data, *IEEE Trans. Geosci. Remote Sensing*, *59*(10), 8103-8116, doi: https://doi.org/10.1109/TGRS.2020.3045771.
Zhu, J., et al. (2021), Roles of TAO/TRITON and Argo in Tropical Pacific Observing Systems: An OSSE Study for Multiple Time Scale Variability, *J. Clim.*, *34*(16), 6797-6817, doi:

https://doi.org/10.1175/JCLI-D-20-0951.1.
Zhu, R., Z. Chen, Z. Zhang, H. Yang, and L. Wu (2021), Subthermocline Eddies in the Kuroshio Extension Region Observed by Mooring Arrays, *J. Phys. Oceanogr.*, *51*(2), 439-455, doi: https://doi.org/10.1175/JPO-D-20-0047.1.
Zhu, Y., Y. Li, Z. Zhang, B. Qiu, and F. Wang (2021), The Observed Agulhas Retroflection Behaviors During 1993–2018, *Journal of Geophysical Research: Oceans*, *126*(12), e2021JC017995, doi: https://doi.org/10.1029/2021JC017995.
Zhu, Y., R.-H. Zhang, D. Li, and D. Chen (2021), The Thermocline Biases in the Tropical North Pacific and Their Attributions, *J. Clim.*, *34*(5), 1635-1648, doi: https://doi.org/10.1175/JCLI-D-20-0675.1.
Zhu, Z., J. Wang, G. Zhang, S. Liu, S. Zheng, X. Sun, D. Xu, and M. Zhou (2021), Using triple oxygen isotopes and oxygen-argon ratio to quantify ecosystem production in the mixed layer of northern South China Sea slope region, *Acta Oceanol. Sin.*, doi: https://doi.org/10.1007/s13131-021-1846-7.
Zika, J. D., J. M. Gregory, E. L. McDonagh, A. Marzocchi, and L. Clement (2021), Recent water mass changes reveal mechanisms of ocean warming, *J. Clim.*, *34*(9), 3461-3479, doi: https://doi.org/10.1175/JCLI-D-20-0355.1.

2020 (546)

Aguiar, E., B. Mourre, M. Juza, E. Reyes, J. Hernández-Lasheras, E. Cutolo, E. Mason, and J. Tintoré, 2020: Multi-platform model assessment in the Western Mediterranean Sea: impact of downscaling on the surface circulation and mesoscale activity. *Ocean Dynamics*, **70,** 273-288, https://doi.org/10.1007/s10236-019-01317-8
Agulles, M., G. Jordà, B. Jones, S. Agustí, and C. M. Duarte, 2020: Temporal evolution of temperatures in the Red Sea and the Gulf of Aden based on in situ observations (1958–2017). *Ocean Sci.*, **16,** 149-166, https://doi.org/10.5194/os-16-149-2020
Akhil, V. P., J. Vialard, M. Lengaigne, M. G. Keerthi, J. Boutin, J. L. Vergely, and F. Papa, 2020: Bay of Bengal Sea surface salinity variability using a decade of improved SMOS re-processing. *Remote Sensing of Environment*, **248,** 111964, https://doi.org/10.1016/j.rse.2020.111964
Albert, J. and P. K. Bhaskaran, 2020: Ocean heat content and its role in tropical cyclogenesis for the Bay of Bengal basin. *Climate Dynamics*, **55,** 3343-3362, https://doi.org/10.1007/s00382-020-05450-9
Alford, M. H., 2020: Global Calculations of Local and Remote Near-Inertial-Wave Dissipation. *Journal of Physical Oceanography*, **50,** 3157-3164, https://doi.org/10.1175/JPO-D-20-0106.1
Alford, M. H., 2020: Revisiting Near-Inertial Wind Work: Slab Models, Relative Stress, and Mixed Layer Deepening. *Journal of Physical Oceanography*, **50,** 3141-3156, https://doi.org/10.1175/JPO-D-20-0105.1
Ali, S. A., Z. Mao, J. Wu, X. Chen, Q. Zhu, H. Huang, F. Gong, and T. Wang, 2020: Satellite Evidence of Upper Ocean Responses to Cyclone Nilofar. *Atmosphere-Ocean*, **58,** 13-24, https://doi.org/10.1080/07055900.2019.1700097

Álvarez, M., N. M. Fajar, B. R. Carter, E. F. Guallart, F. F. Pérez, R. J. Woosley, and A. Murata, 2020: Global Ocean Spectrophotometric pH Assessment: Consistent Inconsistencies. *Environmental Science & Technology*, **54,** 10977-10988, https://doi.org/10.1021/acs.est.9b06932

Amaya, D. J., A. J. Miller, S.-P. Xie, and Y. Kosaka, 2020: Physical drivers of the summer 2019 North Pacific marine heatwave. *Nature Communications*, **11,** 1903, https://doi.org/10.1038/s41467-020-15820-w

Amin, H., M. Bagherbandi, and L. E. Sjöberg, 2020: Quantifying barystatic sea-level change from satellite altimetry, GRACE and Argo observations over 2005–2016. *Advances in Space Research*, **65,** 1922-1940, https://doi.org/10.1016/j.asr.2020.01.029

Anandh, T. S., B. K. Das, J. Kuttippurath, and A. Chakraborty, 2020: A Comparative Analysis of the Bay of Bengal Ocean State Using Standalone and Coupled Numerical Models. *Asia-Pacific Journal of Atmospheric Sciences*, https://doi.org/10.1007/s13143-020-00197-z

André, X., P.-Y. Le Traon, S. Le Reste, V. Dutreuil, E. Leymarie, D. Malardé, C. Marec, J. Sagot, M. Amice, M. Babin, H. Claustre, A. David, F. D'Ortenzio, N. Kolodziejczyk, J. L. Lagunas, M. Le Menn, B. Moreau, D. Nogré, C. Penkerc'h, A. Poteau, C. Renaut, C. Schaeffer, V. Taillandier, and V. Thierry, 2020: Preparing the New Phase of Argo: Technological Developments on Profiling Floats in the NAOS Project. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.577446

Andreev, A. G., 2020: Circulation of Waters in the Northwestern Part of the Bering Sea According to Satellite Data. *Izvestiya, Atmospheric and Oceanic Physics*, **56,** 963-969, https://doi.org/10.1134/S0001433820090029

Andreev, A. G., M. V. Budyansky, G. V. Khen, and M. Y. Uleysky, 2020: Water dynamics in the western Bering Sea and its impact on chlorophyll a concentration. *Ocean Dynamics*, **70,** 593-602, https://doi.org/10.1007/s10236-020-01347-7

Andres, M., R. C. Musgrave, D. L. Rudnick, K. L. Zeiden, T. Peacock, and J.-H. Park, 2020: On the Predictability of Sea Surface Height around Palau. *Journal of Physical Oceanography*, **50,** 3267-3294, https://doi.org/10.1175/JPO-D-19-0310.1

Androulidakis, Y., V. Kourafalou, M. Le Hénaff, H. Kang, N. Ntaganou, and C. Hu, 2020: Gulf Stream evolution through the Straits of Florida: the role of eddies and upwelling near Cuba. *Ocean Dynamics*, **70,** 1005-1032, https://doi.org/10.1007/s10236-020-01381-5

Anju, M., M. G. Sreeush, V. Valsala, B. R. Smitha, F. Hamza, G. Bharathi, and C. V. Naidu, 2020: Understanding the Role of Nutrient Limitation on Plankton Biomass Over Arabian Sea Via 1-D Coupled Biogeochemical Model and Bio-Argo Observations. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015502, https://doi.org/10.1029/2019JC015502

Arteaga, L. A., E. Boss, M. J. Behrenfeld, T. K. Westberry, and J. L. Sarmiento, 2020: Seasonal modulation of phytoplankton biomass in the Southern Ocean. *Nature Communications*, **11,** 5364, https://doi.org/10.1038/s41467-020-19157-2

Atamanchuk, D., J. Koelling, U. Send, and D. W. R. Wallace, 2020: Rapid transfer of oxygen to the deep ocean mediated by bubbles. *Nature Geoscience*, **13,** 232-237, https://doi.org/10.1038/s41561-020-0532-2

Baba, Y., 2020: Roles of atmospheric variabilities in the formation of the Indian Ocean Dipole. *Ocean Dynamics*, **70,** 21-39, https://doi.org/10.1007/s10236-019-01318-7

Baetge, N., J. R. Graff, M. J. Behrenfeld, and C. A. Carlson, 2020: Net Community Production, Dissolved Organic Carbon Accumulation, and Vertical Export in the Western North Atlantic. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.00227

Balaguru, K., G. R. Foltz, L. R. Leung, J. Kaplan, W. Xu, N. Reul, and B. Chapron, 2020: Pronounced Impact of Salinity on Rapidly Intensifying Tropical Cyclones. *Bulletin of the American Meteorological Society*, **101,** E1497-E1511, https://doi.org/10.1175/BAMS-D-19-0303.1

Baldry, K., P. G. Strutton, N. A. Hill, and P. W. Boyd, 2020: Subsurface Chlorophyll-a Maxima in the Southern Ocean. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.00671

Barpanda, P. and T. A. Shaw, 2020: Surface Fluxes Modulate the Seasonality of Zonal-Mean Storm Tracks. *Journal of the Atmospheric Sciences*, **77,** 753-779, https://doi.org/10.1175/JAS-D-19-0139.1

Barton, B. I., C. Lique, and Y.-D. Lenn, 2020: Water Mass Properties Derived From Satellite Observations in the Barents Sea. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015449, https://doi.org/10.1029/2019JC015449

Bastin, S., M. Claus, P. Brandt, and R. J. Greatbatch, 2020: Equatorial Deep Jets and Their Influence on the Mean Equatorial Circulation in an Idealized Ocean Model Forced by Intraseasonal Momentum Flux Convergence. *Geophysical Research Letters*, **47,** e2020GL087808, https://doi.org/10.1029/2020GL087808

Beadling, R. L., J. L. Russell, R. J. Stouffer, M. Mazloff, L. D. Talley, P. J. Goodman, J. B. Sallée, H. T. Hewitt, P. Hyder, and A. Pandde, 2020: Representation of Southern Ocean Properties across Coupled Model Intercomparison Project Generations: CMIP3 to CMIP6. *Journal of Climate*, **33,** 6555-6581, https://doi.org/10.1175/JCLI-D-19-0970.1

Beal, L. M., J. Vialard, M. K. Roxy, J. Li, M. Andres, H. Annamalai, M. Feng, W. Han, R. Hood, T. Lee, M. Lengaigne, R. Lumpkin, Y. Masumoto, M. J. McPhaden, M. Ravichandran, T. Shinoda, B. M. Sloyan, P. G. Strutton, A. C. Subramanian, T. Tozuka, C. C. Ummenhofer, A. S. Unnikrishnan, J. Wiggert, L. Yu, L. Cheng, D. G. Desbruyères, and V. Parvathi, 2020: A Road Map to IndOOS-2: Better Observations of the Rapidly Warming Indian Ocean. *Bulletin of the American Meteorological Society*, **101,** E1891-E1913, https://doi.org/10.1175/BAMS-D-19-0209.1

Behera, N., D. Swain, and S. Sil, 2020: Effect of Antarctic sea ice on chlorophyll concentration in the Southern Ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, **178,** 104853, https://doi.org/10.1016/j.dsr2.2020.104853

Behrens, E., J. Williams, O. Morgenstern, P. Sutton, G. Rickard, and M. J. M. Williams, 2020: Local Grid Refinement in New Zealand's Earth System Model: Tasman Sea Ocean Circulation Improvements and Super-Gyre Circulation Implications. *Journal of Advances in Modeling Earth Systems*, **12,** e2019MS001996, https://doi.org/10.1029/2019MS001996

Belonenko, T., A. Frolova, and V. Gnevyshev, 2020: Detection of waveguide for Rossby waves using satellite altimetry in the Antarctic Circumpolar Current. *International Journal of Remote Sensing*, **41,** 6232-6247, https://doi.org/10.1080/01431161.2020.1752955

Bernardo, P. S. and O. T. Sato, 2020: Volumetric Characterization of the South Atlantic Subtropical Mode Water Types. *Geophysical Research Letters*, **47,** e2019GL086653, https://doi.org/10.1029/2019GL086653

Bestley, S., E. van Wijk, M. Rosenberg, R. Eriksen, S. Corney, K. Tattersall, and S. Rintoul, 2020: Ocean circulation and frontal structure near the southern Kerguelen Plateau: The physical context for the Kerguelen Axis ecosystem study. *Deep Sea Research Part II: Topical Studies in Oceanography*, **174**, https://doi.org/10.1016/j.dsr2.2018.07.013

Biló, T. C. and W. E. Johns, 2020: The Deep Western Boundary Current and Adjacent Interior Circulation at 24°–30°N: Mean Structure and Mesoscale Variability. *Journal of Physical Oceanography*, **50,** 2735-2758, https://doi.org/10.1175/JPO-D-20-0094.1

Bishop, S. P., R. J. Small, and F. O. Bryan, 2020: The Global Sink of Available Potential Energy by Mesoscale Air-Sea Interaction. *Journal of Advances in Modeling Earth Systems*, **12,** e2020MS002118, https://doi.org/10.1029/2020MS002118

Bordone, A., F. Pennecchi, G. Raiteri, L. Repetti, and F. Reseghetti, 2020: XBT, ARGO Float and Ship-Based CTD Profiles Intercompared under Strict Space-Time Conditions in the Mediterranean Sea: Assessment of Metrological Comparability. *Journal of Marine Science and Engineering*, **8**, https://doi.org/10.3390/jmse8050313

Boretti, A., 2020: The pattern of sea-level rise across the North Atlantic from long-term-trend tide gauges. *Ocean & Coastal Management*, **196,** 105309, https://doi.org/10.1016/j.ocecoaman.2020.105309

Bousquet, O., M. Dalleau, M. Bocquet, P. Gaspar, S. Bielli, S. Ciccione, E. Remy, and A. Vidard, 2020: Sea Turtles for Ocean Research and Monitoring: Overview and Initial Results of the STORM Project in the Southwest Indian Ocean. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.594080

Boutin, J., J. L. Vergely, E. P. Dinnat, P. Waldteufel, F. D. Amico, N. Reul, A. Supply, and C. Thouvenin-Masson, 2020: Correcting Sea Surface Temperature Spurious Effects in Salinity Retrieved From Spaceborne L-Band Radiometer Measurements. *IEEE Transactions on Geoscience and Remote Sensing***,** 1-14, https://doi.org/10.1109/TGRS.2020.3030488

Briggs, N., G. Dall'Olmo, and H. Claustre, 2020: Major role of particle fragmentation in regulating biological sequestration of CO₂ by the oceans. *Science*, **367,** 791, http://dx.doi.org/10.1126/science.aay1790

Brokaw, R. J., B. Subrahmanyam, C. B. Trott, and A. Chaigneau, 2020: Eddy Surface Characteristics and Vertical Structure in the Gulf of Mexico from Satellite Observations and Model Simulations. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015538, https://doi.org/10.1029/2019JC015538

Bronselaer, B., J. L. Russell, M. Winton, N. L. Williams, R. M. Key, J. P. Dunne, R. A. Feely, K. S. Johnson, and J. L. Sarmiento, 2020: Importance of wind and meltwater for observed chemical and physical changes in the Southern Ocean. *Nature Geoscience*, **13,** 35-42, https://doi.org/10.1038/s41561-019-0502-8

Broomé, S., L. Chafik, and J. Nilsson, 2020: Mechanisms of decadal changes in sea surface height and heat content in the eastern Nordic Seas. *Ocean Sci.*, **16,** 715-728, https://doi.org/10.5194/os-16-715-2020

Bruciaferri, D., G. Shapiro, S. Stanichny, A. Zatsepin, T. Ezer, F. Wobus, X. Francis, and D.

Hilton, 2020: The development of a 3D computational mesh to improve the representation of dynamic processes: The Black Sea test case. *Ocean Modelling*, **146,** 101534, https://doi.org/10.1016/j.ocemod.2019.101534

Bruvik, E. M., I. Fer, K. Våge, and P. M. Haugan, 2020: A revised ocean glider concept to realize Stommel's vision and supplement Argo floats. *Ocean Sci.*, **16,** 291-305, https://doi.org/10.5194/os-16-291-2020

Bryden, H. L., W. E. Johns, B. A. King, G. McCarthy, E. L. McDonagh, B. I. Moat, and D. A. Smeed, 2020: Reduction in Ocean Heat Transport at 26°N since 2008 Cools the Eastern Subpolar Gyre of the North Atlantic Ocean. *Journal of Climate*, **33,** 1677-1689, https://doi.org/10.1175/JCLI-D-19-0323.1

Buckley, J. M., B. Mingels, and A. Tandon, 2020: The impact of lateral advection on SST and SSS in the northern Bay of Bengal during 2015. *Deep Sea Research Part II: Topical Studies in Oceanography*, **172,** 104653, https://doi.org/10.1016/j.dsr2.2019.104653

Buongiorno Nardelli, B., 2020: A Deep Learning Network to Retrieve Ocean Hydrographic Profiles from Combined Satellite and In Situ Measurements. *Remote Sensing*, **12**, https://doi.org/10.3390/rs12193151

Caballero, A., S. Mulet, N. Ayoub, I. Manso-Narvarte, X. Davila, C. Boone, F. Toublanc, and A. Rubio, 2020: Integration of HF Radar Observations for an Enhanced Coastal Mean Dynamic Topography. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.588713

Cai, W.-Y., Z.-Q. Liu, and M.-Y. Zhang, 2020: Trajectory Clustering Based Oceanic Anomaly Detection Using Argo Profile Floats. Cham, Springer International Publishing, 498-508, https://doi.org/10.1007/978-3-030-41114-5_37

Calvert, D., G. Nurser, M. J. Bell, and B. Fox-Kemper, 2020: The impact of a parameterisation of submesoscale mixed layer eddies on mixed layer depths in the NEMO ocean model. *Ocean Modelling*, **154,** 101678, https://doi.org/10.1016/j.ocemod.2020.101678

Camargo, C. M. L., R. E. M. Riva, T. H. J. Hermans, and A. B. A. Slangen, 2020: Exploring Sources of Uncertainty in Steric Sea-Level Change Estimates. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016551, https://doi.org/10.1029/2020JC016551

Carroll, D., D. Menemenlis, J. F. Adkins, K. W. Bowman, H. Brix, S. Dutkiewicz, I. Fenty, M. M. Gierach, C. Hill, O. Jahn, P. Landschützer, J. M. Lauderdale, J. Liu, M. Manizza, J. D. Naviaux, C. Rödenbeck, D. S. Schimel, T. Van der Stocken, and H. Zhang, 2020: The ECCO-Darwin Data-Assimilative Global Ocean Biogeochemistry Model: Estimates of Seasonal to Multidecadal Surface Ocean pCO2 and Air-Sea CO2 Flux. *Journal of Advances in Modeling Earth Systems*, **12,** e2019MS001888, https://doi.org/10.1029/2019MS001888

Castruccio, F. S., A. R. Karspeck, G. Danabasoglu, J. Hendricks, T. Hoar, N. Collins, and J. L. Anderson, 2020: An EnOI-Based Data Assimilation System With DART for a High-Resolution Version of the CESM2 Ocean Component. *Journal of Advances in Modeling Earth Systems*, **12,** e2020MS002176, https://doi.org/10.1029/2020MS002176

Chai, F., K. S. Johnson, H. Claustre, X. Xing, Y. Wang, E. Boss, S. Riser, K. Fennel, O. Schofield, and A. Sutton, 2020: Monitoring ocean biogeochemistry with autonomous

platforms. *Nature Reviews Earth & Environment*, **1,** 315-326, https://doi.org/10.1038/s43017-020-0053-y

Chang, P., S. Zhang, G. Danabasoglu, S. G. Yeager, H. Fu, H. Wang, F. S. Castruccio, Y. Chen, J. Edwards, D. Fu, Y. Jia, L. C. Laurindo, X. Liu, N. Rosenbloom, R. J. Small, G. Xu, Y. Zeng, Q. Zhang, J. Bacmeister, D. A. Bailey, X. Duan, A. K. DuVivier, D. Li, Y. Li, R. Neale, A. Stössel, L. Wang, Y. Zhuang, A. Baker, S. Bates, J. Dennis, X. Diao, B. Gan, A. Gopal, D. Jia, Z. Jing, X. Ma, R. Saravanan, W. G. Strand, J. Tao, H. Yang, X. Wang, Z. Wei, and L. Wu, 2020: An Unprecedented Set of High-Resolution Earth System Simulations for Understanding Multiscale Interactions in Climate Variability and Change. *Journal of Advances in Modeling Earth Systems*, **12,** e2020MS002298, https://doi.org/10.1029/2020MS002298

Chao, G., X. Wu, L. Zhang, H. Fu, K. Liu, and G. Han, 2020: China Ocean ReAnalysis (CORA) version 1.0 products and validation for 2009–18: 2009–18年西北太平洋区域海洋再分析CORA1.0产品研制及检验. *Atmospheric and Oceanic Science Letters***,** 100023, https://doi.org/10.1016/j.aosl.2020.100023

Chen, C., F. Yan, Y. Gao, T. Jin, and Z. Zhou, 2020: Improving reconstruction of sound speed profiles using a self-organizing map method with multi-source observations. *Remote Sensing Letters*, **11,** 572-580, https://doi.org/10.1080/2150704X.2020.1742940

Chen, C., F. Yan, T. Jin, and Z. Zhou, 2020: Investigating acoustic propagation in the Sonic Duct related with subtropical mode water in Northwestern Pacific ocean. *Applied Acoustics*, **169,** 107478, https://doi.org/10.1016/j.apacoust.2020.107478

Chen, D., E. Lian, Y. Shu, S. Yang, Y. Li, C. Li, P. Liu, and N. Su, 2020: Origin of the springtime South China Sea Warm Current in the southwestern Taiwan Strait: Evidence from seawater oxygen isotope. *Science China Earth Sciences*, **63,** 1564-1576, https://doi.org/10.1007/s11430-019-9642-8

Chen, G., W. Han, X. Zhang, L. Liang, H. Xue, K. Huang, Y. He, J. Li, and D. Wang, 2020: Determination of Spatiotemporal Variability of the Indian Equatorial Intermediate Current. *Journal of Physical Oceanography*, **50,** 3095-3108, https://doi.org/10.1175/JPO-D-20-0042.1

Chen, J., H. Liu, C. Bai, H. Yan, K. Lu, S. Bao, and K. Liu, 2020: Identifying Climate Modes Contributing to Sea Surface Salinity Decadal Variation in the North Pacific Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2019JC016011, https://doi.org/10.1029/2019JC016011

Chen, J., B. Tapley, C. Wilson, A. Cazenave, K.-W. Seo, and J.-S. Kim, 2020: Global Ocean Mass Change From GRACE and GRACE Follow-On and Altimeter and Argo Measurements. *Geophysical Research Letters*, **47,** e2020GL090656, https://doi.org/10.1029/2020GL090656

Chen, Y., F. Zhai, and P. Li, 2020: Decadal Variation of the Kuroshio Intrusion Into the South China Sea During 1992–2016. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015699, https://doi.org/10.1029/2019JC015699

Chen, Z., F. Wang, J. Zheng, and Y. Yang, 2020: Seasonal variations of eddy kinetic energy flux in the South Indian Countercurrent region. *Journal of Oceanology and Limnology*, **38,** 1464-1475, https://doi.org/10.1007/s00343-020-0115-5

Chen, Z., X. Wang, and L. Liu, 2020: Reconstruction of Three-Dimensional Ocean Structure

From Sea Surface Data: An Application of isQG Method in the Southwest Indian Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016351, https://doi.org/10.1029/2020JC016351

Cheng, L., J. Abraham, J. Zhu, K. E. Trenberth, J. Fasullo, T. Boyer, R. Locarnini, B. Zhang, F. Yu, L. Wan, X. Chen, X. Song, Y. Liu, and M. E. Mann, 2020: Record-Setting Ocean Warmth Continued in 2019. *Advances in Atmospheric Sciences*, **37,** 137-142, https://doi.org/10.1007/s00376-020-9283-7

Cheng, L., K. E. Trenberth, N. Gruber, J. P. Abraham, J. T. Fasullo, G. Li, M. E. Mann, X. Zhao, and J. Zhu, 2020: Improved Estimates of Changes in Upper Ocean Salinity and the Hydrological Cycle. *Journal of Climate*, **33,** 10357-10381, https://doi.org/10.1175/JCLI-D-20-0366.1

Cherian, D. A., E. L. Shroyer, H. W. Wijesekera, and J. N. Moum, 2020: The Seasonal Cycle of Upper-Ocean Mixing at 8°N in the Bay of Bengal. *Journal of Physical Oceanography*, **50,** 323-342, https://doi.org/10.1175/JPO-D-19-0114.1

Chiswell, S. M. and P. J. H. Sutton, 2020: Relationships between long-term ocean warming, marine heat waves and primary production in the New Zealand region. *New Zealand Journal of Marine and Freshwater Research***,** 1-22, https://doi.org/10.1080/00288330.2020.1713181

Chowdhury, R. R., S. Prasanna Kumar, and A. Chakraborty, 2020: A study on the physical and biogeochemical responses of the Bay of Bengal due to cyclone Madi. *Journal of Operational Oceanography***,** 1-22, https://doi.org/10.1080/1755876X.2020.1817659

Chowdhury, R. R., S. Prasanna Kumar, J. Narvekar, and A. Chakraborty, 2020: Back-to-Back Occurrence of Tropical Cyclones in the Arabian Sea During October–November 2015: Causes and Responses. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015836, https://doi.org/10.1029/2019JC015836

Chu, X., G. Chen, and Y. Qi, 2020: Periodic Mesoscale Eddies in the South China Sea. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015139, https://doi.org/10.1029/2019JC015139

Claustre, H., K. S. Johnson, and Y. Takeshita, 2020: Observing the Global Ocean with Biogeochemical-Argo. *Annual Review of Marine Science*, **12,** 23-48, https://doi.org/10.1146/annurev-marine-010419-010956

Clément, L., E. L. McDonagh, A. Marzocchi, and A. J. G. Nurser, 2020: Signature of Ocean Warming at the Mixed Layer Base. *Geophysical Research Letters*, **47,** e2019GL086269, https://doi.org/10.1029/2019GL086269

Colberg, F., G. B. Brassington, P. Sandery, P. Sakov, and S. Aijaz, 2020: High and medium resolution ocean models for the Great Barrier Reef. *Ocean Modelling*, **145,** 101507, https://doi.org/10.1016/j.ocemod.2019.101507

Correa-Ramirez, M., Á. Rodriguez-Santana, C. Ricaurte-Villota, and J. Paramo, 2020: The Southern Caribbean upwelling system off Colombia: Water masses and mixing processes. *Deep Sea Research Part I: Oceanographic Research Papers*, **155,** 103145, https://doi.org/10.1016/j.dsr.2019.103145

Corredor-Acosta, A., N. Cortés-Chong, A. Acosta, M. Pizarro-Koch, A. Vargas, J. Medellín-Mora, G. S. Saldías, V. Echeverry-Guerra, J. Gutiérrez-Fuentes, and S. Betancur-Turizo, 2020: Spatio-Temporal Variability of Chlorophyll-A and

Environmental Variables in the Panama Bight. *Remote Sensing*, **12**, https://doi.org/10.3390/rs12132150

Courtois, P., Y. Garcia-Quintana, X. Hu, and P. G. Myers, 2020: Kinematic Subduction Rate Of Labrador Sea Water From an Eddy-Permitting Numerical Model. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015475, https://doi.org/10.1029/2019JC015475

Cummins, P. F. and T. Ross, 2020: Secular trends in water properties at Station P in the northeast Pacific: An updated analysis. *Progress in Oceanography*, **186,** 102329, https://doi.org/10.1016/j.pocean.2020.102329

D'Ortenzio, F., V. Taillandier, H. Claustre, L. M. Prieur, E. Leymarie, A. Mignot, A. Poteau, C. Penkerc'h, and C. M. Schmechtig, 2020: Biogeochemical Argo: The Test Case of the NAOS Mediterranean Array. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.00120

Da, N. D., G. R. Foltz, and K. Balaguru, 2020: A Satellite-Derived Upper-Ocean Stratification Data Set for the Tropical North Atlantic With Potential Applications for Hurricane Intensity Prediction. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015980, https://doi.org/10.1029/2019JC015980

Daher, H., L. M. Beal, and F. U. Schwarzkopf, 2020: A New Improved Estimation of Agulhas Leakage Using Observations and Simulations of Lagrangian Floats and Drifters. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015753, https://doi.org/10.1029/2019JC015753

Dai, J., H. Wang, W. Zhang, Y. An, and R. Zhang, 2020: Observed spatiotemporal variation of three-dimensional structure and heat/salt transport of anticyclonic mesoscale eddy in Northwest Pacific. *Journal of Oceanology and Limnology*, https://doi.org/10.1007/s00343-019-9148-z

Dandapat, S., C. Gnanaseelan, and A. Parekh, 2020: Impact of excess and deficit river runoff on Bay of Bengal upper ocean characteristics using an ocean general circulation model. *Deep Sea Research Part II: Topical Studies in Oceanography*, **172,** 104714, https://doi.org/10.1016/j.dsr2.2019.104714

Dañobeitia, J. J., S. Pouliquen, T. Johannessen, A. Basset, M. Cannat, B. G. Pfeil, M. I. Fredella, P. Materia, C. Gourcuff, G. Magnifico, E. Delory, J. del Rio Fernandez, I. Rodero, L. Beranzoli, I. Nardello, D. Iudicone, T. Carval, J. M. Gonzalez Aranda, G. Petihakis, J. Blandin, W. L. Kutsch, J.-M. Rintala, A. R. Gates, and P. Favali, 2020: Toward a Comprehensive and Integrated Strategy of the European Marine Research Infrastructures for Ocean Observations. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.00180

D'Asaro, E., M. Altabet, N. S. Kumar, and M. Ravichandran, 2020: Structure of the Bay of Bengal oxygen deficient zone. *Deep Sea Research Part II: Topical Studies in Oceanography*, **179,** 104650, https://doi.org/10.1016/j.dsr2.2019.104650

de Freitas Assad, L. P., R. Toste, C. S. Böck, D. M. Nehme, L. Sancho, A. E. Soares, and L. Landau, 2020: Ocean climatology at Brazilian Equatorial Margin: A numerical approach. *Journal of Computational Science*, **44,** 101159, https://doi.org/10.1016/j.jocs.2020.101159

de Jong, M. F., L. de Steur, N. Fried, R. Bol, and S. Kritsotalakis, 2020: Year-Round

Measurements of the Irminger Current: Variability of a Two-Core Current System Observed in 2014–2016. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016193, https://doi.org/10.1029/2020JC016193

de Lavergne, C., C. Vic, G. Madec, F. Roquet, A. F. Waterhouse, C. B. Whalen, Y. Cuypers, P. Bouruet-Aubertot, B. Ferron, and T. Hibiya, 2020: A Parameterization of Local and Remote Tidal Mixing. *Journal of Advances in Modeling Earth Systems*, **12,** e2020MS002065, https://doi.org/10.1029/2020MS002065

de Marez, C., X. Carton, P. L'Hégaret, T. Meunier, A. Stegner, B. Le Vu, and M. Morvan, 2020: Oceanic vortex mergers are not isolated but influenced by the β-effect and surrounding eddies. *Scientific Reports*, **10,** 2897, https://doi.org/10.1038/s41598-020-59800-y

de Marez, C., T. Meunier, M. Morvan, P. L'Hégaret, and X. Carton, 2020: Study of the stability of a large realistic cyclonic eddy. *Ocean Modelling*, **146,** 101540, https://doi.org/10.1016/j.ocemod.2019.101540

de Marez, C., T. Meunier, P. Tedesco, P. L'Hégaret, and X. Carton, 2020: Vortex–wall interaction on the β-plane and the generation of deep submesoscale cyclones by internal Kelvin Waves–current interactions. *Geophysical & Astrophysical Fluid Dynamics*, **114,** 588-606, https://doi.org/10.1080/03091929.2020.1772779

De Silva, L. W. A., J. Inoue, H. Yamaguchi, and T. Terui, 2020: Medium range sea ice prediction in support of Japanese research vessel MIRAI's expedition cruise in 2018. *Polar Geography*, **43,** 223-239, https://doi.org/10.1080/1088937X.2019.1707317

de Souza, J. M. A. C., P. Couto, R. Soutelino, and M. Roughan, 2020: Evaluation of four global ocean reanalysis products for New Zealand waters–A guide for regional ocean modelling. *New Zealand Journal of Marine and Freshwater Research***,** 1-24, https://doi.org/10.1080/00288330.2020.1713179

de Winter, N. J., J. Vellekoop, A. J. Clark, P. Stassen, R. P. Speijer, and P. Claeys, 2020: The Giant Marine Gastropod Campanile Giganteum (Lamarck, 1804) as a High-Resolution Archive of Seasonality in the Eocene Greenhouse World. *Geochemistry, Geophysics, Geosystems*, **21,** e2019GC008794, https://doi.org/10.1029/2019GC008794

DeCarlo, T. M., L. Gajdzik, J. Ellis, D. J. Coker, M. B. Roberts, N. M. Hammerman, J. M. Pandolfi, A. A. Monroe, and M. L. Berumen, 2020: Nutrient-supplying ocean currents modulate coral bleaching susceptibility. *Science Advances*, **6,** eabc5493, https://doi.org/10.1126/sciadv.abc5493

Delpech, A., S. Cravatte, F. Marin, C. Ménesguen, and Y. Morel, 2020: Deep Eddy Kinetic Energy in the Tropical Pacific From Lagrangian Floats. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016313, https://doi.org/10.1029/2020JC016313

Delpech, A., S. Cravatte, F. Marin, Y. Morel, E. Gronchi, and E. Kestenare, 2020: Observed Tracer Fields Structuration by Middepth Zonal Jets in the Tropical Pacific. *Journal of Physical Oceanography*, **50,** 281-304, https://doi.org/10.1175/JPO-D-19-0132.1

Demuynck, P., T. Tyrrell, A. Naveira Garabato, M. C. Moore, and A. P. Martin, 2020: Spatial variations in silicate-to-nitrate ratios in Southern Ocean surface waters are controlled in the short term by physics rather than biology. *Biogeosciences*, **17,** 2289-2314, https://doi.org/10.5194/bg-17-2289-2020

Desbruyères, D. G., B. Sinha, E. L. McDonagh, S. A. Josey, N. P. Holliday, D. A. Smeed, A. L. New, A. Megann, and B. I. Moat, 2020: Importance of Boundary Processes for Heat Uptake in the Subpolar North Atlantic. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016366, https://doi.org/10.1029/2020JC016366

Dey, S. P., M. K. Dash, K. Sasmal, S. Jana, and N. J. Raju, 2020: Impact of river runoff on seasonal sea level, Kelvin waves, and East India Coastal Current in the Bay of Bengal : A numerical study using ROMS. *Regional Studies in Marine Science*, **35,** 101214, http://www.sciencedirect.com/science/article/pii/S2352485518302810

Dietze, H., U. Löptien, and J. Getzlaff, 2020: MOMSO 1.0 – an eddying Southern Ocean model configuration with fairly equilibrated natural carbon. *Geosci. Model Dev.*, **13,** 71-97, https://doi.org/10.5194/gmd-13-71-2020

Dilmahamod, A. F., P. Penven, B. Aguiar-González, C. J. C. Reason, and J. C. Hermes, 2020: A Model Investigation of the Influences of the South-East Madagascar Current on the South-East Madagascar Bloom. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015761, https://doi.org/10.1029/2019JC015761

Doi, T., S. K. Behera, and T. Yamagata, 2020: Wintertime Impacts of the 2019 Super IOD on East Asia. *Geophysical Research Letters*, **47,** e2020GL089456, https://doi.org/10.1029/2020GL089456

Doi, T., S. K. Behera, and T. Yamagata, 2020: Predictability of the Super IOD Event in 2019 and Its Link With El Niño Modoki. *Geophysical Research Letters*, **47,** e2019GL086713, https://doi.org/10.1029/2019GL086713

Dong, J., B. Fox-Kemper, H. Zhang, and C. Dong, 2020: The Scale of Submesoscale Baroclinic Instability Globally. *Journal of Physical Oceanography*, **50,** 2649-2667, https://doi.org/10.1175/JPO-D-20-0043.1

Dong, S., H. Lopez, S.-K. Lee, C. S. Meinen, G. Goni, and M. Baringer, 2020: What Caused the Large-Scale Heat Deficit in the Subtropical South Atlantic Ocean During 2009–2012? *Geophysical Research Letters*, **47,** e2020GL088206, https://doi.org/10.1029/2020GL088206

Dorfschäfer, G. S., C. A. S. Tanajura, F. B. Costa, and R. C. Santana, 2020: A New Approach for Estimating Salinity in the Southwest Atlantic and Its Application in a Data Assimilation Evaluation Experiment. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016428, https://doi.org/10.1029/2020JC016428

Dosso, D. and G. Silvello, 2020: Data credit distribution: A new method to estimate databases impact. *Journal of Informetrics*, **14,** 101080, https://doi.org/10.1016/j.joi.2020.101080

Du, M., F. Zheng, J. Zhu, R. Lin, H. Yang, and Q. Chen, 2020: A New Ensemble-Based Approach to Correct the Systematic Ocean Temperature Bias of CAS-ESM-C to Improve Its Simulation and Data Assimilation Abilities. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016406, https://doi.org/10.1029/2020JC016406

Du, Y., Y. Zhang, L.-Y. Zhang, T. Tozuka, B. Ng, and W. Cai, 2020: Thermocline Warming Induced Extreme Indian Ocean Dipole in 2019. *Geophysical Research Letters*, **47,** e2020GL090079, https://doi.org/10.1029/2020GL090079

Duncan, B. N., L. E. Ott, J. B. Abshire, L. Brucker, M. L. Carroll, J. Carton, J. C. Comiso, E. P. Dinnat, B. C. Forbes, A. Gonsamo, W. W. Gregg, D. K. Hall, I. Ialongo, R. Jandt, R. A.

Kahn, A. Karpechko, S. R. Kawa, S. Kato, T. Kumpula, E. Kyrölä, T. V. Loboda, K. C. McDonald, P. M. Montesano, R. Nassar, C. S. R. Neigh, C. L. Parkinson, B. Poulter, J. Pulliainen, K. Rautiainen, B. M. Rogers, C. S. Rousseaux, A. J. Soja, N. Steiner, J. Tamminen, P. C. Taylor, M. A. Tzortziou, H. Virta, J. S. Wang, J. D. Watts, D. M. Winker, and D. L. Wu, 2020: Space-Based Observations for Understanding Changes in the Arctic-Boreal Zone. *Reviews of Geophysics*, **58,** e2019RG000652, https://doi.org/10.1029/2019RG000652

Duran, E. R., H. E. Phillips, R. Furue, P. Spence, and N. L. Bindoff, 2020: Southern Australia Current System based on a gridded hydrography and a high-resolution model. *Progress in Oceanography*, **181,** 102254, https://doi.org/10.1016/j.ocemod.2019.101540

Dutta, D., B. Mani, and M. K. Dash, 2020: Dynamic and thermodynamic upper-ocean response to the passage of Bay of Bengal cyclones 'Phailin' and 'Hudhud': a study using a coupled modelling system. *Environmental Monitoring and Assessment*, **191,** 808, https://doi.org/10.1007/s10661-019-7704-9

Dzwonkowski, B., J. Coogan, S. Fournier, G. Lockridge, K. Park, and T. Lee, 2020: Compounding impact of severe weather events fuels marine heatwave in the coastal ocean. *Nature Communications*, **11,** 4623, https://doi.org/10.1038/s41467-020-18339-2

Echols, R. and S. C. Riser, 2020: Spice and Barrier Layers: An Arabian Sea Case Study. *Journal of Physical Oceanography*, **50,** 695-714, https://doi.org/10.1175/JPO-D-19-0215.1

Echols, R. and S. C. Riser, 2020: The Impact of Barrier Layers on Arabian Sea Surface Temperature Variability. *Geophysical Research Letters*, **47,** e2019GL085290, https://doi.org/10.1029/2019GL085290

Eden, C., F. Pollmann, and D. Olbers, 2020: Towards a Global Spectral Energy Budget for Internal Gravity Waves in the Ocean. *Journal of Physical Oceanography*, **50,** 935-944, https://doi.org/10.1175/JPO-D-19-0022.1

Estella-Perez, V., J. Mignot, E. Guilyardi, D. Swingedouw, and G. Reverdin, 2020: Advances in reconstructing the AMOC using sea surface observations of salinity. *Climate Dynamics*, **55,** 975-992, https://doi.org/10.1007/s00382-020-05304-4

Estrada-Allis, S. N., J. Sheinbaum Pardo, J. M. Azevedo Correia de Souza, C. E. Enríquez Ortiz, I. Mariño Tapia, and J. A. Herrera-Silveira, 2020: Dissolved inorganic nitrogen and particulate organic nitrogen budget in the Yucatán shelf: driving mechanisms through a physical–biogeochemical coupled model. *Biogeosciences*, **17,** 1087-1111, https://doi.org/10.5194/bg-17-1087-2020

Fan, G., Z. Han, W. Ma, S. Chen, F. Chai, M. R. Mazloff, J. Pan, and H. Zhang, 2020: Southern Ocean carbon export efficiency in relation to temperature and primary productivity. *Scientific Reports*, **10,** 13494, https://doi.org/10.1038/s41598-020-70417-z

Fedorov, A. M. and I. L. Bashmachnikov, 2020: Accuracy of the deep convection intensity from a limited number of casts. *Dynamics of Atmospheres and Oceans*, **92,** 101164, https://doi.org/10.1016/j.dynatmoce.2020.101164

Feng, Y., X. Chen, and K.-K. Tung, 2020: ENSO diversity and the recent appearance of Central Pacific ENSO. *Climate Dynamics*, **54,** 413-433, https://doi.org/10.1007/s00382-019-05005-7

Fer, I., A. Bosse, and J. Dugstad, 2020: Norwegian Atlantic Slope Current along the Lofoten Escarpment. *Ocean Sci.*, **16,** 685-701, https://doi.org/10.5194/os-16-685-2020

Fournier, S., T. Lee, X. Wang, T. W. K. Armitage, O. Wang, I. Fukumori, and R. Kwok, 2020: Sea Surface Salinity as a Proxy for Arctic Ocean Freshwater Changes. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016110, https://doi.org/10.1029/2020JC016110

Fourrier, M., L. Coppola, H. Claustre, F. D'Ortenzio, R. Sauzède, and J.-P. Gattuso (2020), A Regional Neural Network Approach to Estimate Water-Column Nutrient Concentrations and Carbonate System Variables in the Mediterranean Sea: CANYON-MED, *Frontiers in Marine Science*, *7*, doi: https://doi.org/10.3389/fmars.2020.00620.

Francis, P. A., A. K. Jithin, J. B. Effy, A. Chatterjee, K. Chakraborty, A. Paul, B. Balaji, S. S. C. Shenoi, P. Biswamoy, A. Mukherjee, P. Singh, B. Deepsankar, S. S. Reddy, P. N. Vinayachandran, M. S. G. Kumar, T. V. S. U. Bhaskar, M. Ravichandran, A. S. Unnikrishnan, D. Shankar, A. Prakash, S. G. Aparna, R. Harikumar, K. Kaviyazhahu, K. Suprit, R. V. Shesu, N. K. Kumar, N. S. Rao, K. Annapurnaiah, R. Venkatesan, A. S. Rao, E. N. Rajagopal, V. S. Prasad, M. D. Gupta, T. M. B. Nair, E. P. R. Rao, and B. V. Satyanarayana, 2020: High-Resolution Operational Ocean Forecast and Reanalysis System for the Indian Ocean. *Bulletin of the American Meteorological Society*, **101,** E1340-E1356, https://doi.org/10.1175/BAMS-D-19-0083.1

Frederikse, T., F. Landerer, L. Caron, S. Adhikari, D. Parkes, V. W. Humphrey, S. Dangendorf, P. Hogarth, L. Zanna, L. Cheng, and Y.-H. Wu, 2020: The causes of sea-level rise since 1900. *Nature*, **584,** 393-397, https://doi.org/10.1038/s41586-020-2591-3

Fu, Y., F. Li, J. Karstensen, and C. Wang, 2020: A stable Atlantic Meridional Overturning Circulation in a changing North Atlantic Ocean since the 1990s. *Science Advances*, **6,** eabc7836, https://doi.org/10.1126/sciadv.abc7836

Fumenia, A., A. Petrenko, H. Loisel, K. Djaoudi, A. deVerneil, and T. Moutin (2020), Optical proxy for particulate organic nitrogen from BGC-Argo floats, *Opt. Express*, *28*(15), 21391-21406, doi: https://doi.org/10.1364/OE.395648.

Gasparin, F., M. Hamon, E. Rémy, and P.-Y. L. Traon, 2020: How Deep Argo Will Improve the Deep Ocean in an Ocean Reanalysis. *Journal of Climate*, **33,** 77-94, https://doi.org/10.1175/JCLI-D-19-0208.1

Geng, W., F. Cheng, Q. Xie, X. Zou, W. He, Z. Wang, Y. Shu, G. Chen, D. Liu, D. Ye, R. Wang, and C. Liu, 2020: Observation system simulation experiments using an ensemble-based method in the northeastern South China Sea. *Journal of Oceanology and Limnology*, **38,** 1729-1745, https://doi.org/10.1007/s00343-019-9119-4

Ghetiya, S. and R. K. Nayak, 2020: Genesis potential parameter using satellite derived daily tropical cyclone heat potential for North Indian ocean. *International Journal of Remote Sensing*, **41,** 8934-8947, https://doi.org/10.1080/01431161.2020.1795299

Goes, M., G. Goni, S. Dong, T. Boyer, and M. Baringer, 2020: The Complementary Value of XBT and Argo Observations to Monitor Ocean Boundary Currents and Meridional Heat and Volume Transports: A Case Study in the Atlantic Ocean. *Journal of Atmospheric and Oceanic Technology*, **37,** 2267-2282,

https://doi.org/10.1175/JTECH-D-20-0027.1
Gonçalves Neto, A., J. B. Palter, A. Bower, H. Furey, and X. Xu, 2020: Labrador Sea Water Transport Across the Charlie-Gibbs Fracture Zone. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016068, https://doi.org/10.1029/2020JC016068
Gopalakrishnan, G., A. C. Subramanian, A. J. Miller, H. Seo, and D. Sengupta, 2020: Estimation and prediction of the upper ocean circulation in the Bay of Bengal. *Deep Sea Research Part II: Topical Studies in Oceanography*, **172,** 104721, https://doi.org/10.1016/j.dsr2.2019.104721
Gopika, S., T. Izumo, J. Vialard, M. Lengaigne, I. Suresh, and M. R. R. Kumar, 2020: Aliasing of the Indian Ocean externally-forced warming spatial pattern by internal climate variability. *Climate Dynamics*, **54,** 1093-1111, https://doi.org/10.1007/s00382-019-05049-9
Gordon, C., K. Fennel, C. Richards, L. K. Shay, and J. K. Brewster, 2020: Can ocean community production and respiration be determined by measuring high-frequency oxygen profiles from autonomous floats? *Biogeosciences*, **17,** 4119-4134, https://doi.org/10.5194/bg-17-4119-2020
Gou, Y., T. Zhang, J. Liu, L. Wei, and J. Cui, 2020: DeepOcean: A General Deep Learning Framework for Spatio-Temporal Ocean Sensing Data Prediction. *IEEE Access*, **8,** 79192-79202, https://doi.org/10.1109/ACCESS.2020.2990939
Gourrion, J., T. Szekely, R. Killick, B. Owens, G. Reverdin, and B. Chapron, 2020: Improved Statistical Method for Quality Control of Hydrographic Observations. *Journal of Atmospheric and Oceanic Technology*, **37,** 789-806, https://doi.org/10.1175/JTECH-D-18-0244.1
Gradone, J. C., M. J. Oliver, A. R. Davies, C. Moffat, and A. Irwin, 2020: Sea Surface Kinetic Energy as a Proxy for Phytoplankton Light Limitation in the Summer Pelagic Southern Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015646, https://doi.org/10.1029/2019JC015646
Gu, Y., X. Cheng, Y. Qi, and G. Wang, 2020: Characterizing the seasonality of vertical chlorophyll-a profiles in the Southwest Indian Ocean from the Bio-Argo floats. *Journal of Marine Systems*, **212,** 103426, https://doi.org/10.1016/j.jmarsys.2020.103426
Guan, C., F. Wang, and S. Hu, 2020: The role of oceanic feedbacks in the 2014–2016 El Niño events as derived from ocean reanalysis data. *Journal of Oceanology and Limnology*, **38,** 1394-1407, https://doi.org/10.1007/s00343-020-0038-1
Guan, S. D. and Y. J. Hou, 2020: Super Typhoon Tembin (2012) induced sea surface cooling and enhanced diapycnal mixing in the northwest Pacific Ocean. *Oceanologia et Limnologia Sinica*, **51,** 1301-1309,
Gulakaram, V. S., N. K. Vissa, and P. K. Bhaskaran, 2020: Characteristics and vertical structure of oceanic mesoscale eddies in the Bay of Bengal. *Dynamics of Atmospheres and Oceans*, **89,** 101131, https://doi.org/10.1016/j.dynatmoce.2020.101131
Gunduz, M., E. Özsoy, and R. Hordoir, 2020: A model of Black Sea circulation with strait exchange (2008–2018). *Geosci. Model Dev.*, **13,** 121-138, https://doi.org/10.5194/gmd-13-121-2020
Gunn, K. L., L. M. Beal, S. Elipot, K. McMonigal, and A. Houk, 2020: Mixing of Subtropical,

Central, and Intermediate Waters Driven by Shifting and Pulsing of the Agulhas Current. *Journal of Physical Oceanography*, **50,** 3545-3560, https://doi.org/10.1175/JPO-D-20-0093.1

Guo, W. Y., Y. Qiu, and X. Y. Lin, 2020: The interannual variability of barrier layer in the Bay of Bengal and its relationship with IOD events. *Haiyang Xuebao*, **42,** 38-49,

Guo, Y., Y. Li, F. Wang, Y. Wei, and Z. Rong, 2020: Processes Controlling Sea Surface Temperature Variability of Ningaloo Niño. *Journal of Climate*, **33,** 4369-4389, https://doi.org/10.1175/JCLI-D-19-0698.1

Gutiérrez-Rodríguez, A., K. Safi, D. Fernández, A. Forcén-Vázquez, P. Gourvil, L. Hoffmann, M. Pinkerton, P. Sutton, and S. D. Nodder, 2020: Decoupling Between Phytoplankton Growth and Microzooplankton Grazing Enhances Productivity in Subantarctic Waters on Campbell Plateau, Southeast of New Zealand. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015550, https://doi.org/10.1029/2019JC015550

Hackert, E., R. M. Kovach, A. Molod, G. Vernieres, A. Borovikov, J. Marshak, and Y. Chang, 2020: Satellite Sea Surface Salinity Observations Impact on El Niño/Southern Oscillation Predictions: Case Studies From the NASA GEOS Seasonal Forecast System. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015788, https://doi.org/10.1029/2019JC015788

Haëntjens, N., A. Della Penna, N. Briggs, L. Karp-Boss, P. Gaube, H. Claustre, and E. Boss, 2020: Detecting Mesopelagic Organisms Using Biogeochemical-Argo Floats. *Geophysical Research Letters*, **47,** e2019GL086088, https://doi.org/10.1029/2019GL086088

Halliwell, G. R., G. J. Goni, M. F. Mehari, V. H. Kourafalou, M. Baringer, and R. Atlas, 2020: OSSE Assessment of Underwater Glider Arrays to Improve Ocean Model Initialization for Tropical Cyclone Prediction. *Journal of Atmospheric and Oceanic Technology*, **37,** 467-487, https://doi.org/10.1175/JTECH-D-18-0195.1

Halliwell, G. R., Jr., G. J. Goni, M. F. Mehari, V. H. Kourafalou, M. Baringer, and R. Atlas, 2020: OSSE Assessment of Underwater Glider Arrays to Improve Ocean Model Initialization for Tropical Cyclone Prediction. *Journal of Atmospheric and Oceanic Technology*, **37,** 467-487, https://doi.org/10.1175/JTECH-D-18-0195.1

Haskell Ii, W. Z., A. J. Fassbender, J. S. Long, and J. N. Plant, 2020: Annual Net Community Production of Particulate and Dissolved Organic Carbon From a Decade of Biogeochemical Profiling Float Observations in the Northeast Pacific. *Global Biogeochemical Cycles*, **34,** e2020GB006599, https://doi.org/10.1029/2020GB006599

Haumann, F. A., N. Gruber, and M. Münnich, 2020: Sea-Ice Induced Southern Ocean Subsurface Warming and Surface Cooling in a Warming Climate. *AGU Advances*, **1,** e2019AV000132, https://doi.org/10.1029/2019AV000132

Haumann, F. A., R. Moorman, S. C. Riser, L. H. Smedsrud, T. Maksym, A. P. S. Wong, E. A. Wilson, R. Drucker, L. D. Talley, K. S. Johnson, R. M. Key, and J. L. Sarmiento, 2020: Supercooled Southern Ocean Waters. *Geophysical Research Letters*, **47,** e2020GL090242, https://doi.org/10.1029/2020GL090242

Hausmann, U., J. B. Sallée, N. C. Jourdain, P. Mathiot, C. Rousset, G. Madec, J. Deshayes, and T. Hattermann, 2020: The Role of Tides in Ocean-Ice Shelf Interactions in the Southwestern Weddell Sea. *Journal of Geophysical Research: Oceans*, **125,**

e2019JC015847, https://doi.org/10.1029/2019JC015847
Hayashida, H., G. Carnat, M. Galí, A. H. Monahan, E. Mortenson, T. Sou, and N. S. Steiner, 2020: Spatiotemporal Variability in Modeled Bottom Ice and Sea Surface Dimethylsulfide Concentrations and Fluxes in the Arctic During 1979–2015. *Global Biogeochemical Cycles*, **34,** e2019GB006456, https://doi.org/10.1029/2019GB006456
He, H., Y. Wang, X. Han, Y. Wei, P. Lin, Z. Qiu, and Y. Wang, 2020: Anomalous distribution of distinctive water masses over the Carlsberg Ridge in May 2012. *Ocean Sci.*, **16,** 895-906, https://doi.org/10.5194/os-16-895-2020
He, M., J. He, and G. Christakos, 2020: Improved space–time sea surface salinity mapping in Western Pacific ocean using contingogram modeling. *Stochastic Environmental Research and Risk Assessment*, https://doi.org/10.1007/s00477-019-01764-1
He, Q., H. Zhan, and S. Cai, 2020: Anticyclonic Eddies Enhance the Winter Barrier Layer and Surface Cooling in the Bay of Bengal. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016524, https://doi.org/10.1029/2020JC016524
Hermans, T. H. J., J. Tinker, M. D. Palmer, C. A. Katsman, B. L. A. Vermeersen, and A. B. A. Slangen, 2020: Improving sea-level projections on the Northwestern European shelf using dynamical downscaling. *Climate Dynamics*, **54,** 1987-2011, https://doi.org/10.1007/s00382-019-05104-5
Holliday, N. P., M. Bersch, B. Berx, L. Chafik, S. Cunningham, C. Florindo-López, H. Hátún, W. Johns, S. A. Josey, K. M. H. Larsen, S. Mulet, M. Oltmanns, G. Reverdin, T. Rossby, V. Thierry, H. Valdimarsson, and I. Yashayaev, 2020: Ocean circulation causes the largest freshening event for 120 years in eastern subpolar North Atlantic. *Nature Communications*, **11,** 585, https://doi.org/10.1038/s41467-020-14474-y
Hong, Y., Y. Du, T. Qu, Y. Zhang, and W. Cai, 2020: Variability of the Subantarctic Mode Water Volume in the South Indian Ocean During 2004–2018. *Geophysical Research Letters*, **47,** e2020GL087830, https://doi.org/10.1029/2020GL087830
Horii, T., I. Ueki, and K. Ando, 2020: Coastal Upwelling Events, Salinity Stratification, and Barrier Layer Observed Along the Southwestern Coast of Sumatra. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016287, https://doi.org/10.1029/2020JC016287
Hou, T.-H., J.-Y. Chang, C.-C. Tsai, and T.-W. Hsu, 2020: Three-Dimensional Simulations of Wind Effects on Green Island Wake. *Water*, **12**, https://doi.org/10.3390/w12113039
Houghton, I. A. and J. D. Wilson, 2020: El Niño Detection Via Unsupervised Clustering of Argo Temperature Profiles. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015947, https://doi.org/10.1029/2019JC015947
Houpert, L., S. Cunningham, N. Fraser, C. Johnson, N. P. Holliday, S. Jones, B. Moat, and D. Rayner, 2020: Observed Variability of the North Atlantic Current in the Rockall Trough From 4 Years of Mooring Measurements. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016403, https://doi.org/10.1029/2020JC016403
Hu, S., L. Liu, C. Guan, L. Zhang, J. Wang, Q. Wang, J. Ma, F. Wang, F. Jia, J. Feng, X. Lu, F. Wang, and D. Hu, 2020: Dynamic features of near-inertial oscillations in the Northwestern Pacific derived from mooring observations from 2015 to 2018. *Journal of Oceanology and Limnology*, **38,** 1092-1107, https://doi.org/10.1007/s00343-020-9332-1

Hu, S., J. Sprintall, C. Guan, D. Hu, F. Wang, X. Lu, and S. Li, 2020: Observed Triple Mode of Salinity Variability in the Thermocline of Tropical Pacific Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016210, https://doi.org/10.1029/2020JC016210

Hu, S., J. Sprintall, C. Guan, M. J. McPhaden, F. Wang, D. Hu, and W. Cai, 2020: Deep-reaching acceleration of global mean ocean circulation over the past two decades. *Science Advances*, **6,** eaax7727, http://dx.doi.org/10.1126/sciadv.aax7727

Huang, B., M. L'Heureux, Z.-Z. Hu, X. Yin, and H.-M. Zhang, 2020: How Significant Was the 1877/78 El Niño? *Journal of Climate*, **33,** 4853-4869, https://doi.org/10.1175/JCLI-D-19-0650.1

Huang, B., M. J. Menne, T. Boyer, E. Freeman, B. E. Gleason, J. H. Lawrimore, C. Liu, J. J. Rennie, C. J. Schreck, F. Sun, R. Vose, C. N. Williams, X. Yin, and H.-M. Zhang, 2020: Uncertainty Estimates for Sea Surface Temperature and Land Surface Air Temperature in NOAAGlobalTemp Version 5. *Journal of Climate*, **33,** 1351-1379, https://doi.org/10.1175/JCLI-D-19-0395.1

Huang, C., M. Wu, X. Huang, J. Cao, J. He, C. Chen, G. Zhai, K. Deng, and X. Lu, 2020: Reconstruction and evaluation of the full-depth sound speed profile with world ocean atlas 2018 for the hydrographic surveying in the deep sea waters. *Applied Ocean Research*, **101,** 102201, https://doi.org/10.1016/j.apor.2020.102201

Huang, J., W. Zhuang, X.-H. Yan, and Z. Wu, 2020: Impacts of the upper-ocean salinity variations on the decadal sea level change in the Southeast Indian Ocean during the Argo era. *Acta Oceanologica Sinica*, **39,** 1-10, https://doi.org/10.1007/s13131-020-1574-4

Hui, Y., L. Zhang, F. Wang, and X. Yan, 2020: Revisit of seasonal variability of subsurface temperature in the tropical Pacific with Argo data. *Journal of Marine Systems*, **204,** 103312, https://doi.org/10.1016/j.jmarsys.2020.103312

Hummels, R., M. Dengler, W. Rath, G. R. Foltz, F. Schütte, T. Fischer, and P. Brandt, 2020: Surface cooling caused by rare but intense near-inertial wave induced mixing in the tropical Atlantic. *Nature Communications*, **11,** 3829, https://doi.org/10.1038/s41467-020-17601-x

Ioannou, A., A. Stegner, T. Dubos, B. Le Vu, and S. Speich, 2020: Generation and Intensification of Mesoscale Anticyclones by Orographic Wind Jets: The Case of Ierapetra Eddies Forced by the Etesians. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015810, https://doi.org/10.1029/2019JC015810

Ioannou, A., A. Stegner, F. Dumas, and B. Le Vu, 2020: Three-Dimensional Evolution of Mesoscale Anticyclones in the Lee of Crete. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.609156

Iqbal, K., S. Piao, and M. Zhang, 2020: Decadal Spatiotemporal Halocline Analysis by ISAS15 Due to Influx of Major Rivers in Oceans and Discrepancies Illustrated Near the Bay of Bengal. *Water*, **12**, https://doi.org/10.3390/w12102886

Iqbal, K., M. Zhang, and S. Piao, 2020: Symmetrical and Asymmetrical Rectifications Employed for Deeper Ocean Extrapolations of In Situ CTD Data and Subsequent Sound Speed Profiles. *Symmetry*, **12,** 1455, https://doi.org/10.3390/sym12091455

Jackson, R. L., A. J. Gabric, M. T. Woodhouse, H. B. Swan, G. B. Jones, R. Cropp, and E. S. M.

Deschaseaux, 2020: Coral Reef Emissions of Atmospheric Dimethylsulfide and the Influence on Marine Aerosols in the Southern Great Barrier Reef, Australia. *Journal of Geophysical Research: Atmospheres*, **125,** e2019JD031837, https://doi.org/10.1029/2019JD031837

Jaeger, G. S., J. A. MacKinnon, A. J. Lucas, E. Shroyer, J. Nash, A. Tandon, J. T. Farrar, and A. Mahadevan, 2020: How Spice is Stirred in the Bay of Bengal. *Journal of Physical Oceanography*, **50,** 2669-2688, https://doi.org/10.1175/JPO-D-19-0077.1

Janeković, I., H. Mihanović, I. Vilibić, B. Grčić, S. Ivatek-Šahdan, M. Tudor, and T. Djakovac, 2020: Using multi-platform 4D-Var data assimilation to improve modeling of Adriatic Sea dynamics. *Ocean Modelling*, **146,** 101538, https://doi.org/10.1016/j.ocemod.2019.101538

Jangir, B., D. Swain, S. K. Ghose, R. Goyal, and T. V. S. U. Bhaskar, 2020: Inter-comparison of model, satellite and in situ tropical cyclone heat potential in the North Indian Ocean. *Natural Hazards*, **102,** 557-574, https://doi.org/10.1007/s11069-019-03756-4

Jena, B., and A. N. Pillai (2020), Satellite observations of unprecedented phytoplankton blooms in the Maud Rise polynya, Southern Ocean, *The Cryosphere*, *14*(4), 1385-1398, doi: https://doi.org/10.5194/tc-14-1385-2020.

Jeong, H., X. S. Asay-Davis, A. K. Turner, D. S. Comeau, S. F. Price, R. P. Abernathey, M. Veneziani, M. R. Petersen, M. J. Hoffman, M. R. Mazloff, and T. D. Ringler, 2020: Impacts of Ice-Shelf Melting on Water-Mass Transformation in the Southern Ocean from E3SM Simulations. *Journal of Climate*, **33,** 5787-5807, https://doi.org/10.1175/JCLI-D-19-0683.1

Jiang, Y., S. Zhang, J. Tian, Z. Zhang, J. Gan, and C.-R. Wu, 2020: An Examination of Circulation Characteristics in the Luzon Strait and the South China Sea Using High-Resolution Regional Atmosphere-Ocean Coupled Models. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016253, https://doi.org/10.1029/2020JC016253

Jing, F., A. Chauhan, R. P Singh, and P. Dash, 2020: Changes in Atmospheric, Meteorological, and Ocean Parameters Associated with the 12 January 2020 Taal Volcanic Eruption. *Remote Sensing*, **12,** 1026, https://doi.org/10.3390/rs12061026

Jithin, A. K. and P. A. Francis, 2020: Role of internal tide mixing in keeping the deep Andaman Sea warmer than the Bay of Bengal. *Scientific Reports*, **10,** 11982, https://doi.org/10.1038/s41598-020-68708-6

Johnson, G. C., 2020: Comments on "Corrections for Pumped SBE 41CP CTDs Determined from Stratified Tank Experiments". *Journal of Atmospheric and Oceanic Technology*, **37,** 351-355, https://doi.org/10.1175/JTECH-D-19-0098.1

Johnson, G. C., C. Cadot, J. M. Lyman, K. E. McTaggart, and E. L. Steffen, 2020: Antarctic Bottom Water Warming in the Brazil Basin: 1990s Through 2020, From WOCE to Deep Argo. *Geophysical Research Letters*, **47,** e2020GL089191, https://doi.org/10.1029/2020GL089191

Johnson, G. C. and J. M. Lyman, 2020: Sea surface salinity in the State of the Climate in 2019. *Bull. Am. Meteorol. Soc.*, **101**, https://doi.org/10.1175/2020BAMSStateoftheClimate.1

Johnson, G. C. and J. M. Lyman, 2020: Warming trends increasingly dominate global ocean. *Nature Climate Change*, **10,** 757-761, https://doi.org/10.1038/s41558-020-0822-0

Johnson, G. C., J. M. Lyman, T. Boyer, L. Cheng, C. M. Domingues, J. Gilson, M. Ishii, R. E. Killick, D. Monselesan, S. G. Purkey, and S. E. Wijffels, 2020: Ocean Heat Content in the State of the Climate in 2019. *Bull. Am. Meteorol. Soc.*, **101**, https://doi.org/10.1175/2020BAMSStateoftheClimate.1

Johnson, K. S., M. B. Bif, S. Bushinsky, A. J. Fassbender, and Y. Takeshita, 2020: BioGeoChemical Argo in the State of the Climate in 2019. *Bull. Am. Meteorol. Soc.*, **101**, https://doi.org/10.1175/2020BAMSStateoftheClimate.1

Jones, D. C., E. Boland, A. J. S. Meijers, G. Forget, S. Josey, J.-B. Sallée, and E. Shuckburgh, 2020: The Sensitivity of Southeast Pacific Heat Distribution to Local and Remote Changes in Ocean Properties. *Journal of Physical Oceanography*, **50,** 773-790, https://doi.org/10.1175/JPO-D-19-0155.1

Kadarusman, H. Y. Sugeha, L. Pouyaud, R. Hocdé, I. B. Hismayasari, E. Gunaisah, S. B. Widiarto, G. Arafat, F. Widyasari, D. Mouillot, and E. Paradis, 2020: A thirteen-million-year divergence between two lineages of Indonesian coelacanths. *Scientific Reports*, **10,** 192, https://doi.org/10.1038/s41598-019-57042-1

Kakatkar, R., C. Gnanaseelan, and J. S. Chowdary, 2020: Asymmetry in the tropical Indian Ocean subsurface temperature variability. *Dynamics of Atmospheres and Oceans*, **90,** 101142, https://doi.org/10.1016/j.dynatmoce.2020.101142

Kang, K., H. J. Jo, and Y. Kim, 2020: Ocean Responses to Typhoon Soulik (1819) around Korea. *Ocean Science Journal*, **55,** 445-457, https://doi.org/10.1007/s12601-020-0030-x

Karmakar, N. and V. Misra, 2020: Differences in Northward Propagation of Convection Over the Arabian Sea and Bay of Bengal During Boreal Summer. *Journal of Geophysical Research: Atmospheres*, **125,** e2019JD031648, https://doi.org/10.1029/2019JD031648

Karnauskas, K. B., J. Jakoboski, T. M. S. Johnston, W. B. Owens, D. L. Rudnick, and R. E. Todd, 2020: The Pacific Equatorial Undercurrent in Three Generations of Global Climate Models and Glider Observations. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016609, https://doi.org/10.1029/2020JC016609

Kassis, D. and G. Korres, 2020: Hydrography of the Eastern Mediterranean basin derived from argo floats profile data. *Deep Sea Research Part II: Topical Studies in Oceanography*, **171,** 104712, https://doi.org/10.1016/j.dsr2.2019.104712

Katsura, S. and J. Sprintall, 2020: Seasonality and Formation of Barrier Layers and Associated Temperature Inversions in the Eastern Tropical North Pacific. *Journal of Physical Oceanography*, **50,** 791-808, https://doi.org/10.1175/JPO-D-19-0194.1

Katsura, S., H. Ueno, H. Mitsudera, and S. Kouketsu, 2020: Spatial Distribution and Seasonality of Halocline Structures in the Subarctic North Pacific. *Journal of Physical Oceanography*, **50,** 95-109, https://doi.org/10.1175/JPO-D-19-0133.1

Kawai, Y., S. Hosoda, K. Uehara, and T. Suga, 2020: Heat and salinity transport between the permanent pycnocline and the mixed layer due to the obduction process evaluated from a gridded Argo dataset. *Journal of Oceanography*, https://doi.org/10.1007/s10872-020-00559-1

Kawakami, Y., Y. Kitamura, T. Nakano, and S. Sugimoto, 2020: Long-Term Thermohaline Variations in the North Pacific Subtropical Gyre From a Repeat Hydrographic Section Along 165°E. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015382,

https://doi.org/10.1029/2019JC015382
Keppler, L., P. Landschützer, N. Gruber, S. K. Lauvset, and I. Stemmler, 2020: Seasonal Carbon Dynamics in the Near-Global Ocean. *Global Biogeochemical Cycles*, **34,** e2020GB006571, https://doi.org/10.1029/2020GB006571
Kerry, C. and M. Roughan, 2020: Downstream Evolution of the East Australian Current System: Mean Flow, Seasonal, and Intra-annual Variability. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015227, https://doi.org/10.1029/2019JC015227
Kerry, C., M. Roughan, and B. Powell, 2020: Predicting the submesoscale circulation inshore of the East Australian Current. *Journal of Marine Systems*, **204,** 103286, https://doi.org/10.1016/j.jmarsys.2019.103286
Kheireddine, M., G. Dall'Olmo, M. Ouhssain, G. Krokos, H. Claustre, C. Schmechtig, A. Poteau, P. Zhan, I. Hoteit, and B. H. Jones (2020), Organic Carbon Export and Loss Rates in the Red Sea, *Glob. Biogeochem. Cycle*, *34*(10), e2020GB006650, doi: https://doi.org/10.1029/2020GB006650.
Kieke, D., K. Bulsiewicz, I. Deschepper, O. Huhn, M. Kastens, A. Kersting, M. Kollner, L. Krisztian, I. Leimann, B. Mirau, M. Moritz, N. Rohlfs, A. Schneehorst, R. Steinfeldt, I. Stendardo, J. Stiehler, and R. Tao, 2020: Long-term observations of the Atlantic Meridional Overturning Circulation, Cruise No. MSM83, May 17 - June 15, 2019, Las Palmas (Spain) - St. John's (Canada). *MERIAN-Berichte*, https://doi.org/10.2312/cr_msm83.
Kim, S.-Y., G. Pak, H. J. Lee, Y.-O. Kwon, and Y. H. Kim, 2020: Late-1980s Regime Shift in the Formation of the North Pacific Subtropical Mode Water. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015700, https://doi.org/10.1029/2019JC015700
King, R. R., D. J. Lea, M. J. Martin, I. Mirouze, and J. Heming, 2020: The impact of Argo observations in a global weakly coupled ocean–atmosphere data assimilation and short-range prediction system. *Quarterly Journal of the Royal Meteorological Society*, **146,** 401-414, https://doi.org/10.1002/qj.3682
Kiss, A. E., A. M. Hogg, N. Hannah, F. Boeira Dias, G. B. Brassington, M. A. Chamberlain, C. Chapman, P. Dobrohotoff, C. M. Domingues, E. R. Duran, M. H. England, R. Fiedler, S. M. Griffies, A. Heerdegen, P. Heil, R. M. Holmes, A. Klocker, S. J. Marsland, A. K. Morrison, J. Munroe, M. Nikurashin, P. R. Oke, G. S. Pilo, O. Richet, A. Savita, P. Spence, K. D. Stewart, M. L. Ward, F. Wu, and X. Zhang, 2020: ACCESS-OM2 v1.0: a global ocean–sea ice model at three resolutions. *Geosci. Model Dev.*, **13,** 401-442, https://doi.org/10.5194/gmd-13-401-2020
Kobashi, F., T. Nakano, N. Iwasaka, and T. Ogata, 2020: Decadal-scale variability of the North Pacific subtropical mode water and its influence on the pycnocline observed along 137°E. *Journal of Oceanography*, https://doi.org/10.1007/s10872-020-00579-x
Kodaira, T., T. Waseda, T. Nose, and J. Inoue, 2020: Record high Pacific Arctic seawater temperatures and delayed sea ice advance in response to episodic atmospheric blocking. *Scientific Reports*, **10,** 20830, https://doi.org/10.1038/s41598-020-77488-y
Kokkini, Z., E. Mauri, R. Gerin, P. M. Poulain, S. Simoncelli, and G. Notarstefano, 2020: On the salinity structure in the South Adriatic as derived from float and glider observations in 2013–2016. *Deep Sea Research Part II: Topical Studies in Oceanography*, **171,** 104625, https://doi.org/10.1016/j.dsr2.2019.07.013

Kolås, E. H., Z. Koenig, I. Fer, F. Nilsen, and M. Marnela, 2020: Structure and Transport of Atlantic Water North of Svalbard From Observations in Summer and Fall 2018. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016174, https://doi.org/10.1029/2020JC016174

Koman, G., W. E. Johns, and A. Houk, 2020: Transport and Evolution of the East Reykjanes Ridge Current. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016377, https://doi.org/10.1029/2020JC016377

Kouketsu, S., D. Sasano, S. Osafune, and M. Aoyama, 2020: Relationships Among Decadal Changes in Nitrate and Salinity in the Eastern and Western North Pacific Ocean After 2000. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015916, https://doi.org/10.1029/2019JC015916

Kovalevsky, D. V., I. L. Bashmachnikov, and G. V. Alekseev, 2020: Formation and decay of a deep convective chimney. *Ocean Modelling*, **148,** 101583, https://doi.org/10.1016/j.ocemod.2020.101583

Kubryakov, A. A., A. S. Mikaelyan, S. V. Stanichny, and E. A. Kubryakova, 2020: Seasonal Stages of Chlorophyll-a Vertical Distribution and Its Relation to the Light Conditions in the Black Sea From Bio-Argo Measurements. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016790, https://doi.org/10.1029/2020JC016790

Kuo, Y.-C. and Y.-H. Tseng, 2020: Impact of ENSO on the South China Sea during ENSO decaying winter–spring modeled by a regional coupled model (a new mesoscale perspective). *Ocean Modelling*, **152,** 101655, https://doi.org/10.1016/j.ocemod.2020.101655

Lacour, L., R. Larouche, and M. Babin (2020), In situ evaluation of spaceborne CALIOP lidar measurements of the upper-ocean particle backscattering coefficient, *Opt. Express*, *28*(18), 26989-26999, doi: https://doi.org/10.1364/OE.397126.

Lakshmi, R. S., A. Chatterjee, S. Prakash, and T. Mathew, 2020: Biophysical Interactions in Driving the Summer Monsoon Chlorophyll Bloom Off the Somalia Coast. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015549, https://doi.org/10.1029/2019JC015549

Lankhorst, M. and U. Send, 2020: Uncertainty of North Atlantic Current observations from altimetry, floats, moorings, and XBT. *Progress in Oceanography*, **187,** 102402, https://doi.org/10.1016/j.pocean.2020.102402

Lara, G., R. Miralles, M. Bou-Cabo, J. A. Esteban, and V. Espinosa, 2020: New Insights into the Design and Application of a Passive Acoustic Monitoring System for the Assessment of the Good Environmental Status in Spanish Marine Waters. *Sensors*, **20,** 5353, https://doi.org/10.3390/s20185353

Larson, S. M. and K. Pegion, 2020: Do asymmetries in ENSO predictability arise from different recharged states? *Climate Dynamics*, **54,** 1507-1522, https://doi.org/10.1007/s00382-019-05069-5

Laxenaire, R., S. Speich, and A. Stegner, 2020: Agulhas Ring Heat Content and Transport in the South Atlantic Estimated by Combining Satellite Altimetry and Argo Profiling Floats Data. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015511, https://doi.org/10.1029/2019JC015511

Le Bras, I. A. A., F. Straneo, J. Holte, M. F. de Jong, and N. P. Holliday, 2020: Rapid Export of

Waters Formed by Convection Near the Irminger Sea's Western Boundary. *Geophysical Research Letters*, **47,** e2019GL085989, https://doi.org/10.1029/2019GL085989

Le Corre, M., J. Gula, and A. M. Tréguier, 2020: Barotropic vorticity balance of the North Atlantic subpolar gyre in an eddy-resolving model. *Ocean Sci.*, **16,** 451-468, https://doi.org/10.5194/os-16-451-2020

Le Paih, N., T. Hattermann, O. Boebel, T. Kanzow, C. Lüpkes, G. Rohardt, V. Strass, and S. Herbette, 2020: Coherent Seasonal Acceleration of the Weddell Sea Boundary Current System Driven by Upstream Winds. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016316, https://doi.org/10.1029/2020JC016316

Le Traon, P.-Y., F. D'Ortenzio, M. Babin, E. Leymarie, C. Marec, S. Pouliquen, V. Thierry, C. Cabanes, H. Claustre, D. Desbruyères, L. Lacour, J.-L. Lagunas, G. Maze, H. Mercier, C. Penkerc'h, N. Poffa, A. Poteau, L. Prieur, V. Racapé, A. Randelhoff, E. Rehm, C. M. Schmechtig, V. Taillandier, T. Wagener, and X. Xing, 2020: Preparing the New Phase of Argo: Scientific Achievements of the NAOS Project. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.577408

Le Vine, D. M. and E. P. Dinnat, 2020: The Multifrequency Future for Remote Sensing of Sea Surface Salinity from Space. *Remote Sensing*, **12**, https://doi.org/10.3390/rs12091381

Lee, J.-H., Y.-S. Chang, and S. Zhang, 2020: Assessment of the JMA Serial Observation Lines in the Northwestern Pacific in OSSE Studies with the GFDL Ensemble Coupled Data Assimilation System. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015686, https://doi.org/10.1029/2019JC015686

Lee, J.-H., J.-H. Moon, and T. Kim, 2020: Typhoon-Triggered Phytoplankton Bloom and Associated Upper-Ocean Conditions in the Northwestern Pacific: Evidence from Satellite Remote Sensing, Argo Profile, and an Ocean Circulation Model. *Journal of Marine Science and Engineering*, **8**,

Leitner, A. B., A. B. Neuheimer, and J. C. Drazen, 2020: Evidence for long-term seamount-induced chlorophyll enhancements. *Scientific Reports*, **10,** 12729, https://doi.org/10.1038/s41598-020-69564-0

Levin, J., H. G. Arango, B. Laughlin, E. Hunter, J. Wilkin, and A. M. Moore, 2020: Observation impacts on the Mid-Atlantic Bight front and cross-shelf transport in 4D-Var ocean state estimates: Part I — Multiplatform analysis. *Ocean Modelling*, **156,** 101721, https://doi.org/10.1016/j.ocemod.2020.101721

Li, G., L. Cheng, J. Zhu, K. E. Trenberth, M. E. Mann, and J. P. Abraham, 2020: Increasing ocean stratification over the past half-century. *Nature Climate Change*, **10,** 1116-1123, https://doi.org/10.1038/s41558-020-00918-2

Li, J., R. S. Pickart, P. Lin, F. Bahr, K. R. Arrigo, L. Juranek, and X.-Y. Yang, 2020: The Atlantic Water Boundary Current in the Chukchi Borderland and Southern Canada Basin. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016197, https://doi.org/10.1029/2020JC016197

Li, L., M. S. Lozier, and M. W. Buckley, 2020: An Investigation of the Ocean's Role in Atlantic Multidecadal Variability. *Journal of Climate*, **33,** 3019-3035, https://doi.org/10.1175/JCLI-D-19-0236.1

Li, M., S. Zhang, L. Wu, X. Lin, P. Chang, G. Danabasoglu, Z. Wei, X. Yu, H. Hu, X. Ma, W. Ma,

D. Jia, X. Liu, H. Zhao, K. Mao, Y. Ma, Y. Jiang, X. Wang, G. Liu, and Y. Chen, 2020: A high-resolution Asia-Pacific regional coupled prediction system with dynamically downscaling coupled data assimilation. *Science Bulletin*, **65,** 1849-1858, https://doi.org/10.1016/j.scib.2020.07.022

Li, M., S. Zhang, L. Wu, X. Lin, P. Chang, G. Danabasoglu, Z. Wei, X. Yu, H. Hu, X. Ma, W. Ma, H. Zhao, D. Jia, X. Liu, K. Mao, Y. Ma, Y. Jiang, X. Wang, G. Liu, and Y. Chen, 2020: An Examination of the Predictability of Tropical Cyclone Genesis in High-Resolution Coupled Models with Dynamically Downscaled Coupled Data Assimilation Initialization. *Advances in Atmospheric Sciences*, **37,** 939-950, https://doi.org/10.1007/s00376-020-9220-9

Li, Q. and M. H. England, 2020: Tropical Indo-Pacific Teleconnections to Southern Ocean Mixed Layer Variability. *Geophysical Research Letters*, **47,** e2020GL088466, https://doi.org/10.1029/2020GL088466

Li, Q., S. Khan, F. Yang, Y. Xu, and K. Zhang, 2020: Compressive Acoustic Sound Speed Profile Estimation in the Arabian Sea. *Marine Geodesy*, **43,** 603-620, https://doi.org/10.1080/01490419.2020.1796861

Li, X., F. Liu, and M. Fang, 2020: Harmonizing models and observations: Data assimilation in Earth system science. *Science China Earth Sciences*, **63,** 1059-1068, https://doi.org/10.1007/s11430-019-9620-x

Li, X., Y. Yang, R. Li, L. Zhang, and D. Yuan, 2020: Structure and dynamics of the Pacific North Equatorial Subsurface Current. *Scientific Reports*, **10,** 11758, https://doi.org/10.1038/s41598-020-68605-y

Li, X. and D. Yuan, 2020: An assessment of the CMIP5 models in simulating the Argo geostrophic meridional transport in the North Pacific Ocean. *Journal of Oceanology and Limnology*, **38,** 1445-1463, https://doi.org/10.1007/s00343-020-0002-0

Li, Y., M. Lin, X. Yin, and W. Zhou, 2020: Analysis of the Antenna Array Orientation Performance of the Interferometric Microwave Radiometer (IMR) Onboard the Chinese Ocean Salinity Satellite. *Sensors*, **20**, https://doi.org/10.3390/s20185396

Li, Y., H. Liu, M. Ding, P. Lin, Z. Yu, Y. Yu, Y. Meng, Y. Li, X. Jian, J. Jiang, K. Chen, Q. Yang, Y. Wang, B. Zhao, J. Wei, J. Ma, W. Zheng, and P. Wang, 2020: Eddy-resolving Simulation of CAS-LICOM3 for Phase 2 of the Ocean Model Intercomparison Project. *Advances in Atmospheric Sciences*, **37,** 1067-1080, https://doi.org/10.1007/s00376-020-0057-z

Li, Z. and H. Aiki, 2020: The Life Cycle of Annual Waves in the Indian Ocean as Identified by Seamless Diagnosis of the Energy Flux. *Geophysical Research Letters*, **47,** e2019GL085670, https://doi.org/10.1029/2019GL085670

Li, Z. L., J. C. Zuo, Q. Y. Ji, and e. al, 2020: Reconstruction of 3D sea temperature field based on Argo profile, SST and SLA data. *Marine Forecast*, **37,** 66-75,

Liang, Y.-C., M.-H. Lo, C.-W. Lan, H. Seo, C. C. Ummenhofer, S. Yeager, R.-J. Wu, and J. D. Steffen, 2020: Amplified seasonal cycle in hydroclimate over the Amazon river basin and its plume region. *Nature Communications*, **11,** 4390, https://doi.org/10.1038/s41467-020-18187-0

Liao, E., L. Resplandy, J. Liu, and K. W. Bowman, 2020: Amplification of the Ocean Carbon Sink During El Niños: Role of Poleward Ekman Transport and Influence on

Atmospheric CO2. *Global Biogeochemical Cycles*, **34,** e2020GB006574, https://doi.org/10.1029/2020GB006574

Liao, X., Y. Du, T. Wang, Q. He, H. Zhan, S. Hu, and G. Wu, 2020: Extreme Phytoplankton Blooms in the Southern Tropical Indian Ocean in 2011. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015649, https://doi.org/10.1029/2019JC015649

Lin, H., W. J. Merryfield, R. Muncaster, G. C. Smith, M. Markovic, F. Dupont, F. Roy, J.-F. o. Lemieux, A. Dirkson, V. V. Kharin, W.-S. Lee, M. Charron, and A. Erfani, 2020: The Canadian Seasonal to Interannual Prediction System Version 2 (CanSIPSv2). *Weather and Forecasting*, **35,** 1317-1343, https://doi.org/10.1175/WAF-D-19-0259.1

Lin, M. and C. Yang, 2020: Ocean Observation Technologies: A Review. *Chinese Journal of Mechanical Engineering*, **33,** 32, https://doi.org/10.1186/s10033-020-00449-z

Lin, P., J. Ma, F. Chai, P. Xiu, and H. Liu, 2020: Decadal variability of nutrients and biomass in the southern region of Kuroshio Extension. *Progress in Oceanography*, **188,** 102441, https://doi.org/10.1016/j.pocean.2020.102441

Lin, P., Z. Yu, H. Liu, Y. Yu, Y. Li, J. Jiang, W. Xue, K. Chen, Q. Yang, B. Zhao, J. Wei, M. Ding, Z. Sun, Y. Wang, Y. Meng, W. Zheng, and J. Ma, 2020: LICOM Model Datasets for the CMIP6 Ocean Model Intercomparison Project. *Advances in Atmospheric Sciences*, **37,** 239-249, https://doi.org/10.1007/s00376-019-9208-5

Liu, C., X. Liang, D. P. Chambers, and R. M. Ponte, 2020: Global Patterns of Spatial and Temporal Variability in Salinity from Multiple Gridded Argo Products. *Journal of Climate*, **33,** 8751-8766, https://doi.org/10.1175/JCLI-D-20-0053.1

Liu, D., F. Wang, J. Zhu, D. Wang, J. Wang, Q. Xie, and Y. Shu, 2020: Impact of Assimilation of Moored Velocity Data on Low-Frequency Current Estimation in Northwestern Tropical Pacific. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015829, https://doi.org/10.1029/2019JC015829

Liu, D. a., J. Sun, and C. Guan, 2020: Inversion of Evaporation and Water Vapor Transport Using HY-2 Multi-Sensor Data. *Journal of Ocean University of China*, **19,** 13-22, https://doi.org/10.1007/s11802-020-4197-7

Liu, H. and T. Qu, 2020: Production and Fate of the South Atlantic Subtropical Underwater. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016309, https://doi.org/10.1029/2020JC016309

Liu, S., J. Li, L. Sun, G. Wang, D. Tang, P. Huang, H. Yan, S. Gao, C. Liu, Z. Gao, Y. Li, and Y. Yang, 2020: Basin-wide responses of the South China Sea environment to Super Typhoon Mangkhut (2018). *Science of The Total Environment*, **731,** 139093, https://doi.org/10.1016/j.scitotenv.2020.139093

Liu, S.-B., E.-B. Wei, Y.-N. Li, H.-X. Dang, and H. Li, 2020: Aquarius semi-theoretical model of sea surface salinity retrieval for foam-covered surface. *International Journal of Remote Sensing*, **41,** 4293-4311, https://doi.org/10.1080/01431161.2020.1714783

Liu, X. and H. Zhou, 2020: Seasonal Variations of the North Equatorial Current Across the Pacific Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015895, https://doi.org/10.1029/2019JC015895

Liu, Y., J. Attema, and W. Hazeleger, 2020: Atmosphere–Ocean Interactions and Their Footprint on Heat Transport Variability in the Northern Hemisphere. *Journal of Climate*, **33,** 3691-3710, https://doi.org/10.1175/JCLI-D-19-0570.1

Liu, Y., D. Tang, S. Tang, E. Morozov, W. Liang, and Y. Sui, 2020: A case study of Chlorophyll a response to tropical cyclone Wind Pump considering Kuroshio invasion and air-sea heat exchange. *Science of The Total Environment*, **741,** 140290, https://doi.org/10.1016/j.scitotenv.2020.140290

Liu, Y., Y. F. Yan, and Z. Ling, 2020: Preliminary analysis on climatological and seasonal variation of barrier layer thickness in the northern Indian Ocean and it's mechanism. *Journal of Tropical Oceanography*, **39,** 98-108,

Liu, Y. P., D. L. Tang, and W. Z. Liang, 2020: Chlorophyll a concentration response to the typhoon "wind pump" and the Kuroshio in the northeastern South China Sea. *Haiyang Xuebao*, **42,** 16-31,

Liu, Z., G. Liao, X. Hu, and B. Zhou, 2020: Aspect Ratio of Eddies Inferred From Argo Floats and Satellite Altimeter Data in the Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015555, https://doi.org/10.1029/2019JC015555

Liubartseva, S., M. Smaoui, G. Coppini, G. Gonzalez, R. Lecci, S. Cretì, and I. Federico, 2020: Model-based reconstruction of the Ulysse-Virginia oil spill, October–November 2018. *Marine Pollution Bulletin*, **154,** 111002, https://doi.org/10.1016/j.marpolbul.2020.111002

Logan, J. M., H. Pethybridge, A. Lorrain, C. J. Somes, V. Allain, N. Bodin, C. A. Choy, L. Duffy, N. Goñi, B. Graham, C. Langlais, F. Ménard, R. Olson, and J. Young, 2020: Global patterns and inferences of tuna movements and trophodynamics from stable isotope analysis. *Deep Sea Research Part II: Topical Studies in Oceanography*, **175,** 104775, https://doi.org/10.1016/j.dsr2.2020.104775

Lorente, P., S. Piedracoba, P. Montero, M. G. Sotillo, M. I. Ruiz, and E. Álvarez-Fanjul, 2020: Comparative Analysis of Summer Upwelling and Downwelling Events in NW Spain: A Model-Observations Approach. *Remote Sensing*, **12**, https://doi.org/10.3390/rs12172762

Lu, F., M. J. Harrison, A. Rosati, T. L. Delworth, X. Yang, W. F. Cooke, L. Jia, C. McHugh, N. C. Johnson, M. Bushuk, Y. Zhang, and A. Adcroft, 2020: GFDL's SPEAR Seasonal Prediction System: Initialization and Ocean Tendency Adjustment (OTA) for Coupled Model Predictions. *Journal of Advances in Modeling Earth Systems*, **12,** e2020MS002149, https://doi.org/10.1029/2020MS002149

Lu, L., S. Zhang, S. G. Yeager, G. Danabasoglu, P. Chang, L. Wu, X. Lin, A. Rosati, and F. Lu, 2020: Impact of Coherent Ocean Stratification on AMOC Reconstruction by Coupled Data Assimilation with a Biased Model. *Journal of Climate*, **33,** 7319-7334, https://doi.org/10.1175/JCLI-D-19-0735.1

Lu, Z., D. Liu, J. Liao, J. Wang, H. Li, and J. Zhang, 2020: Characterizing spatial distribution of chlorophyll a in the Southern Ocean on a circumpolar cruise in summer. *Science of The Total Environment*, **708,** 134833, https://doi.org/10.1016/j.scitotenv.2019.134833

Lu, Z., G. Wang, and X. Shang, 2020: Strength and Spatial Structure of the Perturbation Induced by a Tropical Cyclone to the Underlying Eddies. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016097, https://doi.org/10.1029/2020JC016097

Luo, S., Z. Jing, and Y. Qi, 2020: Submesoscale Flows Associated with Convergent Strain in an Anticyclonic Eddy of the Kuroshio Extension: A High-resolution Numerical Study. *Ocean Science Journal*, **55,** 249-264, https://doi.org/10.1007/s12601-020-0022-x

Lyu, K., X. Zhang, J. A. Church, and Q. Wu, 2020: Processes Responsible for the Southern Hemisphere Ocean Heat Uptake and Redistribution under Anthropogenic Warming. *Journal of Climate*, **33,** 3787-3807, https://doi.org/10.1175/JCLI-D-19-0478.1

Lyu, Y., Y. Li, J. Wang, J. Duan, X. Tang, C. Liu, L. Zhang, Q. Ma, and F. Wang, 2020: Anomalous Upper-Ocean Circulation of the Western Equatorial Pacific following El Niño Events. *Journal of Physical Oceanography*, **50,** 3353-3373, https://doi.org/10.1175/JPO-D-20-0011.1

Ma, C., Z. Gao, S. Li, S. Li, and G. Chen, 2020: An eddy-borne Argo float measurement experiment in the South China Sea. *Ocean Dynamics*, **70,** 1325-1338, https://doi.org/10.1007/s10236-020-01402-3

Ma, T., X. Cheng, Y. Qi, and J. Chen, 2020: Interannual variability in the barrier layer and forcing mechanism in the eastern equatorial Indian Ocean and Bay of Bengal. *Acta Oceanologica Sinica*, **39,** 19-31, https://doi.org/10.1007/s13131-020-1575-3

Macdonald, A. M., S. Yoshida, S. M. Pike, K. O. Buesseler, I. I. Rypina, S. R. Jayne, V. Rossi, J. Kenyon, and J. A. Drysdale, 2020: A Fukushima tracer perspective on four years of North Pacific mode water evolution. *Deep Sea Research Part I: Oceanographic Research Papers*, **166,** 103379, https://doi.org/10.1016/j.dsr.2020.103379

MacGilchrist, G. A., H. L. Johnson, D. P. Marshall, C. Lique, M. Thomas, L. C. Jackson, and R. A. Wood, 2020: Locations and Mechanisms of Ocean Ventilation in the High-Latitude North Atlantic in an Eddy-Permitting Ocean Model. *Journal of Climate*, **33,** 10113-10131, https://doi.org/10.1175/JCLI-D-20-0191.1

Mackay, N., C. Wilson, N. P. Holliday, and J. D. Zika, 2020: The Observation-Based Application of a Regional Thermohaline Inverse Method to Diagnose the Formation and Transformation of Water Masses North of the OSNAP Array from 2013 to 2015. *Journal of Physical Oceanography*, **50,** 1533-1555, https://doi.org/10.1175/JPO-D-19-0188.1

Macovei, V. A., S. E. Hartman, U. Schuster, S. Torres-Valdés, C. M. Moore, and R. J. Sanders, 2020: Impact of physical and biological processes on temporal variations of the ocean carbon sink in the mid-latitude North Atlantic (2002–2016). *Progress in Oceanography*, **180,** 102223, https://doi.org/10.1016/j.pocean.2019.102223

Mallick, S. K., N. Agarwal, R. Sharma, K. V. S. R. Prasad, and S. S. V. S. Ramakrishna, 2020: Thermodynamic Response of a High-Resolution Tropical Indian Ocean Model to TOGA COARE Bulk Air–Sea Flux Parameterization: Case Study for the Bay of Bengal (BoB). *Pure and Applied Geophysics*, **177,** 4025-4044, https://doi.org/10.1007/s00024-020-02448-6

Malysheva, A. A., A. A. Kubryakov, A. V. Koldunov, and T. V. Belonenko, 2020: Estimating Agulhas Leakage by Means of Satellite Altimetry and Argo Data. *Izvestiya, Atmospheric and Oceanic Physics*, **56,** 1581-1589, https://doi.org/10.1134/S0001433820120476

Mansour, S., 2020: Geospatial modeling of environmental hazards to coral reefs in the Oman Sea. *Coral Reefs*, **39,** 555-575, https://doi.org/10.1007/s00338-020-01900-2

Mao, C., R. R. King, R. Reid, M. J. Martin, and S. A. Good, 2020: Assessing the Potential Impact of Changes to the Argo and Moored Buoy Arrays in an Operational Ocean Analysis System. *Frontiers in Marine Science*, **7**,

https://doi.org/10.3389/fmars.2020.588267
March, D., L. Boehme, J. Tintoré, P. J. Vélez-Belchi, and B. J. Godley, 2020: Towards the integration of animal-borne instruments into global ocean observing systems. *Global Change Biology*, **26,** 586-596, https://doi.org/10.1111/gcb.14902
Margirier, F., P. Testor, E. Heslop, K. Mallil, A. Bosse, L. Houpert, L. Mortier, M.-N. Bouin, L. Coppola, F. D'Ortenzio, X. Durrieu de Madron, B. Mourre, L. Prieur, P. Raimbault, and V. Taillandier, 2020: Abrupt warming and salinification of intermediate waters interplays with decline of deep convection in the Northwestern Mediterranean Sea. *Scientific Reports*, **10,** 20923, https://doi.org/10.1038/s41598-020-77859-5
Martin, M. J., E. Remy, B. Tranchant, R. R. King, E. Greiner, and C. Donlon, 2020: Observation impact statement on satellite sea surface salinity data from two operational global ocean forecasting systems. *Journal of Operational Oceanography***,** 1-17, https://doi.org/10.1080/1755876X.2020.1771815
Martinez, E., M. Rodier, M. Pagano, and R. Sauzède, 2020: Plankton spatial variability within the Marquesas archipelago, South Pacific. *Journal of Marine Systems*, **212,** 103432, https://doi.org/10.1016/j.jmarsys.2020.103432
Martini, K. I., D. J. Murphy, R. W. Schmitt, and N. G. Larson, 2020: Reply to "Comments on 'Corrections for Pumped SBE 41CP CTDs Determined from Stratified Tank Experiments'". *Journal of Atmospheric and Oceanic Technology*, **37,** 357-363, https://doi.org/10.1175/JTECH-D-19-0171.1
Masuda, S., 2020: Determining subsurface oceanic changes in the Indian sector of the Southern Ocean using Argo float data. *Polar Science*, **23,** 100498, https://doi.org/10.1016/j.polar.2019.100498
Matano, R. P., V. Combes, E. F. Young, and M. P. Meredith, 2020: Modeling the Impact of Ocean Circulation on Chlorophyll Blooms Around South Georgia, Southern Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016391, https://doi.org/10.1029/2020JC016391
Matano, R. P., V. Combes, E. F. Young, and M. P. Meredith, 2020: Modeling the Impact of Ocean Circulation on Chlorophyll Blooms Around South Georgia, Southern Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016391, https://doi.org/10.1029/2020JC016391
Mauzole, Y. L., H. S. Torres, and L.-L. Fu, 2020: Patterns and Dynamics of SST Fronts in the California Current System. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015499, https://doi.org/10.1029/2019JC015499
Mayot, N., P. A. Matrai, A. Arjona, S. Bélanger, C. Marchese, T. Jaegler, M. Ardyna, and M. Steele, 2020: Springtime Export of Arctic Sea Ice Influences Phytoplankton Production in the Greenland Sea. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015799, https://doi.org/10.1029/2019JC015799
Maze, G., and K. Balem (2020), argopy: A Python library for Argo ocean data analysis, *The Journal of Open Source Software*, *5*(53), doi: https://doi.org/10.21105/joss.02425.
McCarthy, G. D., P. J. Brown, C. N. Flagg, G. Goni, L. Houpert, C. W. Hughes, R. Hummels, M. Inall, K. Jochumsen, K. M. H. Larsen, P. Lherminier, C. S. Meinen, B. I. Moat, D. Rayner, M. Rhein, A. Roessler, C. Schmid, and D. A. Smeed, 2020: Sustainable Observations of the AMOC: Methodology and Technology. *Reviews of Geophysics*, **58,**

e2019RG000654, https://doi.org/10.1029/2019RG000654
McCoy, D., D. Bianchi, and A. L. Stewart, 2020: Global observations of submesoscale coherent vortices in the ocean. *Progress in Oceanography*, **189,** 102452, https://doi.org/10.1016/j.pocean.2020.102452
McMonigal, K., L. M. Beal, S. Elipot, K. L. Gunn, J. Hermes, T. Morris, and A. Houk, 2020: The Impact of Meanders, Deepening and Broadening, and Seasonality on Agulhas Current Temperature Variability. *Journal of Physical Oceanography*, **50,** 3529-3544, https://doi.org/10.1175/JPO-D-20-0018.1
Menezes, V. V., 2020: Statistical Assessment of Sea-Surface Salinity from SMAP: Arabian Sea, Bay of Bengal and a Promising Red Sea Application. *Remote Sensing*, **12,** 447, https://doi.org/10.3390/rs12030447
Meng, L., W. Zhuang, W. Zhang, C. Yan, and X.-H. Yan, 2020: Variability of the Shallow Overturning Circulation in the Indian Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015651, https://doi.org/10.1029/2019JC015651
Menna, M., Y. Cotroneo, P. Falco, E. Zambianchi, R. Di Lemma, P. M. Poulain, G. Fusco, and G. Budillon, 2020: Response of the Pacific Sector of the Southern Ocean to Wind Stress Variability From 1995 to 2017. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015696, https://doi.org/10.1029/2019JC015696
Merchel, M. and W. Walczowski, 2020: Increases in the temperature and salinity of deep and intermediate waters in the West Spitsbergen Current region in 1997–2016. *Oceanologia*, **62,** 501-510, https://doi.org/10.1016/j.oceano.2020.08.001
Meunier, T., J. Sheinbaum, E. Pallàs-Sanz, M. Tenreiro, J. Ochoa, A. Ruiz-Angulo, X. Carton, and C. de Marez, 2020: Heat Content Anomaly and Decay of Warm-Core Rings: the Case of the Gulf of Mexico. *Geophysical Research Letters*, **47,** e2019GL085600, https://doi.org/10.1029/2019GL085600
Mikaelyan, A. S., S. A. Mosharov, A. A. Kubryakov, L. A. Pautova, A. Fedorov, and V. K. Chasovnikov, 2020: The impact of physical processes on taxonomic composition, distribution and growth of phytoplankton in the open Black Sea. *Journal of Marine Systems*, **208,** 103368, https://doi.org/10.1016/j.jmarsys.2020.103368
Miladinova, S., A. Stips, D. Macias Moy, and E. Garcia-Gorriz, 2020: Seasonal and Inter-Annual Variability of the Phytoplankton Dynamics in the Black Sea Inner Basin. *Oceans*, **1**, https://doi.org/10.3390/oceans1040018
Miyazawa, Y., M. Yaremchuk, S. M. Varlamov, T. Miyama, and K. Aoki, 2020: Applying the adjoint-free 4dVar assimilation to modeling the Kuroshio south of Japan. *Ocean Dynamics*, **70,** 1129-1149, https://doi.org/10.1007/s10236-020-01372-6
Molod, A., E. Hackert, Y. Vikhliaev, B. Zhao, D. Barahona, G. Vernieres, A. Borovikov, R. M. Kovach, J. Marshak, S. Schubert, Z. Li, Y.-K. Lim, L. C. Andrews, R. Cullather, R. Koster, D. Achuthavarier, J. Carton, L. Coy, J. L. M. Friere, K. M. Longo, K. Nakada, and S. Pawson, 2020: GEOS-S2S Version 2: The GMAO High-Resolution Coupled Model and Assimilation System for Seasonal Prediction. *Journal of Geophysical Research: Atmospheres*, **125,** e2019JD031767, https://doi.org/10.1029/2019JD031767
Moore, A., J. Zavala-Garay, H. G. Arango, C. A. Edwards, J. Anderson, and T. Hoar, 2020: Regional and basin scale applications of ensemble adjustment Kalman filter and 4D-Var ocean data assimilation systems. *Progress in Oceanography*, **189,** 102450,

https://doi.org/10.1016/j.pocean.2020.102450
Moreau, S., P. W. Boyd, and P. G. Strutton, 2020: Remote assessment of the fate of phytoplankton in the Southern Ocean sea-ice zone. *Nature Communications*, **11,** 3108, https://doi.org/10.1038/s41467-020-16931-0
Morvan, M., X. Carton, P. L'Hégaret, C. de Marez, S. Corréard, and S. Louazel, 2020: On the dynamics of an idealised bottom density current overflowing in a semi-enclosed basin: mesoscale and submesoscale eddies generation. *Geophysical & Astrophysical Fluid Dynamics*, **114,** 607-630, https://doi.org/10.1080/03091929.2020.1747058
Mu, D., T. Xu, and G. Xu, 2020: An investigation of mass changes in the Bohai Sea observed by GRACE. *Journal of Geodesy*, **94,** 79, https://doi.org/10.1007/s00190-020-01408-1
Mugo, R., S.-I. Saitoh, H. Igarashi, T. Toyoda, S. Masuda, T. Awaji, and Y. Ishikawa, 2020: Identification of skipjack tuna (Katsuwonus pelamis) pelagic hotspots applying a satellite remote sensing-driven analysis of ecological niche factors: A short-term run. *PLOS ONE*, **15,** e0237742, https://doi.org/10.1371/journal.pone.0237742
Müller, V. and O. Melnichenko, 2020: Decadal Changes of Meridional Eddy Heat Transport in the Subpolar North Atlantic Derived From Satellite and In Situ Observations. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016081, https://doi.org/10.1029/2020JC016081
Nagura, M., 2020: Variability in Meridional Transport of the Subtropical Circulation in the South Indian Ocean for the Period From 2006 to 2017. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015874, https://doi.org/10.1029/2019JC015874
Nagy, H., K. Lyons, G. Nolan, M. Cure, and T. Dabrowski, 2020: A Regional Operational Model for the North East Atlantic: Model Configuration and Validation. *Journal of Marine Science and Engineering*, **8,** 673, https://doi.org/10.3390/jmse8090673
Nan, F., H. Xue, F. Yu, and R. Wang, 2020: Strengthening and Lengthening of the Hawaiian Lee Countercurrent Driven by the Pacific Trade Wind Acceleration. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016058, https://doi.org/10.1029/2020JC016058
Nezlin, N. P., M. Dever, M. Halverson, J.-M. Leconte, G. Maze, C. Richards, I. Shkvorets, R. Zhang, and G. Johnson, 2020: Accuracy and Long-Term Stability Assessment of Inductive Conductivity Cell Measurements on Argo Floats. *Journal of Atmospheric and Oceanic Technology*, **37,** 2209-2223, https://doi.org/10.1175/JTECH-D-20-0058.1
Nguyen, A. T., P. Heimbach, V. V. Garg, V. Ocaña, C. Lee, and L. Rainville, 2020: Impact of Synthetic Arctic Argo-Type Floats in a Coupled Ocean–Sea Ice State Estimation Framework. *Journal of Atmospheric and Oceanic Technology*, **37,** 1477-1495, https://doi.org/10.1175/JTECH-D-19-0159.1
Nguyen, A. T., R. A. Woodgate, and P. Heimbach, 2020: Elucidating Large-Scale Atmospheric Controls on Bering Strait Throughflow Variability Using a Data-Constrained Ocean Model and Its Adjoint. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016213, https://doi.org/10.1029/2020JC016213
Ni, Q., X. Zhai, G. Wang, and C. W. Hughes, 2020: Widespread Mesoscale Dipoles in the Global Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016479, https://doi.org/10.1029/2020JC016479
Nie, X., Z. Wei, and Y. Li, 2020: Decadal Variability in Salinity of the Indian Ocean Subtropical

Underwater During the Argo Period. *Geophysical Research Letters*, **47,** e2020GL089104, https://doi.org/10.1029/2020GL089104

Nimit, K., N. K. Masuluri, A. M. Berger, R. P. Bright, S. Prakash, U. b. Tvs, S. K. T, P. Rohit, T. A, S. Ghosh, and S. P. Varghese, 2020: Oceanographic preferences of yellowfin tuna (Thunnus albacares) in warm stratified oceans: A remote sensing approach. *International Journal of Remote Sensing*, **41,** 5785-5805, https://doi.org/10.1080/01431161.2019.1707903

Nyadjro, E. S., A. V. Rydbeck, T. G. Jensen, J. G. Richman, and J. F. Shriver, 2020: On the Generation and Salinity Impacts of Intraseasonal Westward Jets in the Equatorial Indian Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016066, https://doi.org/10.1029/2020JC016066

O'Kane, T. J., D. T. Squire, P. A. Sandery, V. Kitsios, R. J. Matear, T. S. Moore, J. S. Risbey, and I. G. Watterson, 2020: Enhanced ENSO Prediction via Augmentation of Multimodel Ensembles with Initial Thermocline Perturbations. *Journal of Climate*, **33,** 2281-2293, https://doi.org/10.1175/JCLI-D-19-0444.1

Oka, E., S. Kouketsu, D. Yanagimoto, D. Ito, Y. Kawai, S. Sugimoto, and B. Qiu, 2020: Formation of Central Mode Water based on two zonal hydrographic sections in spring 2013 and 2016. *Journal of Oceanography*, **76,** 373-388, https://doi.org/10.1007/s10872-020-00551-9

Olbers, D., F. Pollmann, and C. Eden, 2020: On PSI Interactions in Internal Gravity Wave Fields and the Decay of Baroclinic Tides. *Journal of Physical Oceanography*, **50,** 751-771, https://doi.org/10.1175/JPO-D-19-0224.1

Olivier, L., G. Reverdin, A. Hasson, and J. Boutin, 2020: Tropical Instability Waves in the Atlantic Ocean: Investigating the Relative Role of Sea Surface Salinity and Temperature From 2010 to 2018. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016641, https://doi.org/10.1029/2020JC016641

Olmedo, E., et al. (2020), Toward an Enhanced SMOS Level-2 Ocean Salinity Product, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, *13*, 6434-6453, doi: https://doi.org/10.1109/JSTARS.2020.3034432.

Oltmanns, M., J. Karstensen, G. W. K. Moore, and S. A. Josey, 2020: Rapid Cooling and Increased Storminess Triggered by Freshwater in the North Atlantic. *Geophysical Research Letters*, **47,** e2020GL087207, https://doi.org/10.1029/2020GL087207

Omand, M. M., R. Govindarajan, J. He, and A. Mahadevan, 2020: Sinking flux of particulate organic matter in the oceans: Sensitivity to particle characteristics. *Scientific Reports*, **10,** 5582, https://doi.org/10.1038/s41598-020-60424-5

Pabortsava, K. and R. S. Lampitt, 2020: High concentrations of plastic hidden beneath the surface of the Atlantic Ocean. *Nature Communications*, **11,** 4073, https://doi.org/10.1038/s41467-020-17932-9

Painter, S. C., 2020: The biogeochemistry and oceanography of the East African Coastal Current. *Progress in Oceanography*, **186,** 102374, https://doi.org/10.1016/j.pocean.2020.102374

Park, J.-E., K.-A. Park, C.-K. Kang, and G. Kim, 2020: Satellite-Observed Chlorophyll-a Concentration Variability and Its Relation to Physical Environmental Changes in the East Sea (Japan Sea) from 2003 to 2015. *Estuaries and Coasts*, **43,** 630-645,

https://doi.org/10.1007/s12237-019-00671-6
Pasmans, I., A. L. Kurapov, J. A. Barth, P. M. Kosro, and R. K. Shearman, 2020: Ensemble 4DVAR (En4DVar) data assimilation in a coastal ocean circulation model. Part II: Implementation offshore Oregon–Washington, USA. *Ocean Modelling*, **154,** 101681, https://doi.org/10.1016/j.ocemod.2020.101681
Pellichero, V., J. Boutin, H. Claustre, L. Merlivat, J.-B. Sallée, and S. Blain, 2020: Relaxation of Wind Stress Drives the Abrupt Onset of Biological Carbon Uptake in the Kerguelen Bloom: A Multisensor Approach. *Geophysical Research Letters*, **47,** e2019GL085992, https://doi.org/10.1029/2019GL085992
Pessini, F., Y. Cotroneo, A. Olita, R. Sorgente, A. Ribotti, S. Jendersie, and A. Perilli, 2020: Life history of an anticyclonic eddy in the Algerian basin from altimetry data, tracking algorithm and in situ observations. *Journal of Marine Systems*, **207,** 103346, https://doi.org/10.1016/j.jmarsys.2020.103346
Petit, T., M. S. Lozier, S. A. Josey, and S. A. Cunningham, 2020: Atlantic Deep Water Formation Occurs Primarily in the Iceland Basin and Irminger Sea by Local Buoyancy Forcing. *Geophysical Research Letters*, **47,** e2020GL091028, https://doi.org/10.1029/2020GL091028
Petrova, D., J. Ballester, S. J. Koopman, and X. Rodó, 2020: Multiyear Statistical Prediction of ENSO Enhanced by the Tropical Pacific Observing System. *Journal of Climate*, **33,** 163-174, https://doi.org/10.1175/JCLI-D-18-0877.1
Phillips, B. and L. O'Neill, 2020: Observational Analysis of Extratropical Cyclone Interactions with Northeast Pacific Sea Surface Temperature Anomalies. *Journal of Climate*, **33,** 6745-6763, https://doi.org/10.1175/JCLI-D-19-0853.1
Piecuch, C. G. and R. Wadehra, 2020: Dynamic Sea Level Variability Due to Seasonal River Discharge: A Preliminary Global Ocean Model Study. *Geophysical Research Letters*, **47,** e2020GL086984, https://doi.org/10.1029/2020GL086984
Pinker, R. T., A. Bentamy, S. A. Grodsky, and W. Chen, 2020: Annual and seasonal variability of net heat flux in the Northern Indian Ocean. *International Journal of Remote Sensing*, **41,** 6461-6483, https://doi.org/10.1080/01431161.2020.1746858
Pisano, A., S. Marullo, V. Artale, F. Falcini, C. Yang, F. E. Leonelli, R. Santoleri, and B. Buongiorno Nardelli, 2020: New Evidence of Mediterranean Climate Change and Variability from Sea Surface Temperature Observations. *Remote Sensing*, **12,** 132, https://doi.org/10.3390/rs12010132
Pollmann, F., 2020: Global Characterization of the Ocean's Internal Wave Spectrum. *Journal of Physical Oceanography*, **50,** 1871-1891, https://doi.org/10.1175/JPO-D-19-0185.1
Polonskii, A. B. and A. M. Novikova, 2020: Interdecadal Variability of the Black Sea Cold Intermediate Layer and Its Causes. *Russian Meteorology and Hydrology*, **45,** 694-700, https://doi.org/10.3103/S1068373920100039
Portela, E., N. Kolodziejczyk, C. Maes, and V. Thierry, 2020: Interior Water-Mass Variability in the Southern Hemisphere Oceans during the Last Decade. *Journal of Physical Oceanography*, **50,** 361-381, https://doi.org/10.1175/JPO-D-19-0128.1
Portela, E., N. Kolodziejczyk, C. Vic, and V. Thierry, 2020: Physical Mechanisms Driving Oxygen Subduction in the Global Ocean. *Geophysical Research Letters*, **47,** e2020GL089040, https://doi.org/10.1029/2020GL089040

Prakash, P., S. Prakash, M. Ravichandran, T. V. S. U. Bhaskar, and N. A. Kumar, 2020: Seasonal evolution of chlorophyll in the Indian sector of the Southern Ocean: Analyses of Bio-Argo measurements. *Deep Sea Research Part II: Topical Studies in Oceanography*, **178,** 104791, https://doi.org/10.1016/j.dsr2.2020.104791

Pramanik, S., S. Sil, A. Gangopadhyay, M. K. Singh, and N. Behera, 2020: Interannual variability of the Chlorophyll-a concentration over Sri Lankan Dome in the Bay of Bengal. *International Journal of Remote Sensing*, **41,** 5974-5991, https://doi.org/10.1080/01431161.2020.1727057

Prants, S. V., M. V. Budyansky, V. B. Lobanov, A. F. Sergeev, and M. Y. Uleysky, 2020: Observation and Lagrangian Analysis of Quasi-Stationary Kamchatka Trench Eddies. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016187, https://doi.org/10.1029/2020JC016187

Pujiana, K. and M. J. McPhaden, 2020: Intraseasonal Kelvin Waves in the Equatorial Indian Ocean and Their Propagation into the Indonesian Seas. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015839, https://doi.org/10.1029/2019JC015839

Qi, J., T. Qu, B. Yin, and J. Chi, 2020: Variability of the South Pacific Western Subtropical Mode Water and Its Relationship With ENSO During the Argo Period. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016134, https://doi.org/10.1029/2020JC016134

Qi, Y., C. Shang, H. Mao, C. Qiu, C. Liang, L. Yu, J. Yu, and X. Shang, 2020: Spatial structure of turbulent mixing of an anticyclonic mesoscale eddy in the northern South China Sea. *Acta Oceanologica Sinica*, **39,** 69-81, https://doi.org/10.1007/s13131-020-1676-z

Qu, B., A. J. Gabric, L. Jiang, and C. Li, 2020: Comparison Between Early and Late 21stC Phytoplankton Biomass and Dimethylsulfide Flux in the Subantarctic Southern Ocean. *Journal of Ocean University of China*, **19,** 151-160, https://doi.org/10.1007/s11802-020-4235-5

Qu, B., G.-P. Yang, L.-Y. Guo, and L. Zhao, 2020: The satellite derived environmental factors and their relationships with dimethylsulfide in the East Marginal Seas of China. *Journal of Marine Systems*, **204,** 103305, https://doi.org/10.1016/j.jmarsys.2020.103305

Qu, T., S. Gao, and R. A. Fine, 2020: Variability of the Sub-Antarctic Mode Water Subduction Rate During the Argo Period. *Geophysical Research Letters*, **47,** e2020GL088248, https://doi.org/10.1029/2020GL088248

Quay, P., S. Emerson, and H. Palevsky, 2020: Regional Pattern of the Ocean's Biological Pump Based on Geochemical Observations. *Geophysical Research Letters*, **47,** e2020GL088098, https://doi.org/10.1029/2020GL088098

Rahaman, H., U. Srinivasu, S. Panickal, J. V. Durgadoo, S. M. Griffies, M. Ravichandran, A. Bozec, A. Cherchi, A. Voldoire, D. Sidorenko, E. P. Chassignet, G. Danabasoglu, H. Tsujino, K. Getzlaff, M. Ilicak, M. Bentsen, M. C. Long, P. G. Fogli, R. Farneti, S. Danilov, S. J. Marsland, S. Valcke, S. G. Yeager, and Q. Wang, 2020: An assessment of the Indian Ocean mean state and seasonal cycle in a suite of interannual CORE-II simulations. *Ocean Modelling*, **145,** 101503, https://doi.org/10.1016/j.ocemod.2019.101503

Raj, R. P., O. B. Andersen, J. A. Johannessen, B. D. Gutknecht, S. Chatterjee, S. K. Rose, A.

Bonaduce, M. Horwath, H. Ranndal, K. Richter, H. Palanisamy, C. A. Ludwigsen, L. Bertino, J. E. Ø. Nilsen, P. Knudsen, A. Hogg, A. Cazenave, and J. Benveniste, 2020: Arctic Sea Level Budget Assessment during the GRACE/Argo Time Period. *Remote Sensing*, **12,** 2837, https://doi.org/10.3390/rs12172837

Raj, R. P., I. Halo, S. Chatterjee, T. Belonenko, M. Bakhoday-Paskyabi, I. Bashmachnikov, A. Fedorov, and J. Xie, 2020: Interaction Between Mesoscale Eddies and the Gyre Circulation in the Lofoten Basin. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016102, https://doi.org/10.1029/2020JC016102

Rajesh, P. V. and B. N. Goswami, 2020: Four-dimensional structure and sub-seasonal regulation of the Indian summer monsoon multi-decadal mode. *Climate Dynamics*, **55,** 2645-2666, https://doi.org/10.1007/s00382-020-05407-y

Rak, D., W. Walczowski, L. Dzierzbicka-Głowacka, and S. Shchuka, 2020: Dissolved oxygen variability in the southern Baltic Sea in 2013–2018. *Oceanologia*, **62,** 525-537, https://doi.org/10.1016/j.oceano.2020.08.005

Ramos-Musalem, K. and S. E. Allen, 2020: The Impact of Initial Tracer Profile on the Exchange and On-Shelf Distribution of Tracers Induced by a Submarine Canyon. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015785, https://doi.org/10.1029/2019JC015785

Randelhoff, A., J. Holding, M. Janout, M. K. Sejr, M. Babin, J.-É. Tremblay, and M. B. Alkire, 2020: Pan-Arctic Ocean Primary Production Constrained by Turbulent Nitrate Fluxes. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.00150

Randelhoff, A., L. Lacour, C. Marec, E. Leymarie, J. Lagunas, X. Xing, G. Darnis, C. Penkerc'h, M. Sampei, L. Fortier, F. D'Ortenzio, H. Claustre, and M. Babin, 2020: Arctic mid-winter phytoplankton growth revealed by autonomous profilers. *Science Advances*, **6,** eabc2678, https://doi.org/10.1126/sciadv.abc2678

Rasse, R., H. Claustre, and A. Poteau, 2020: The suspended small-particle layer in the oxygen-poor Black Sea: a proxy for delineating the effective N2-yielding section. *Biogeosciences*, **17,** 6491-6505, https://doi.org/10.5194/bg-17-6491-2020

Rathore, S., N. L. Bindoff, H. E. Phillips, and M. Feng, 2020: Recent hemispheric asymmetry in global ocean warming induced by climate change and internal variability. *Nature Communications*, **11,** 2008, https://doi.org/10.1038/s41467-020-15754-3

Receveur, A., E. Kestenare, V. Allain, F. Ménard, S. Cravatte, A. Lebourges-Dhaussy, P. Lehodey, M. Mangeas, N. Smith, M.-H. Radenac, and C. Menkes, 2020: Micronekton distribution in the southwest Pacific (New Caledonia) inferred from shipboard-ADCP backscatter data. *Deep Sea Research Part I: Oceanographic Research Papers*, **159,** 103237, https://doi.org/10.1016/j.dsr.2020.103237

Reid, R., S. Good, and M. J. Martin, 2020: Use of Uncertainty Inflation in OSTIA to Account for Correlated Errors in Satellite-Retrieved Sea Surface Temperature Data. *Remote Sensing*, **12**, https://doi.org/10.3390/rs12071083

Reul, N., S. A. Grodsky, M. Arias, J. Boutin, R. Catany, B. Chapron, F. D'Amico, E. Dinnat, C. Donlon, A. Fore, S. Fournier, S. Guimbard, A. Hasson, N. Kolodziejczyk, G. Lagerloef, T. Lee, D. M. Le Vine, E. Lindstrom, C. Maes, S. Mecklenburg, T. Meissner, E. Olmedo, R. Sabia, J. Tenerelli, C. Thouvenin-Masson, A. Turiel, J. L. Vergely, N. Vinogradova, F. Wentz, and S. Yueh, 2020: Sea surface salinity estimates from spaceborne L-band

radiometers: An overview of the first decade of observation (2010–2019). *Remote Sensing of Environment*, **242,** 111769, https://doi.org/10.1016/j.rse.2020.111769

Richardson, L. E., J. F. Middleton, N. P. James, T. K. Kyser, and B. N. Opdyke, 2020: Upwelling characteristics and nutrient enrichment of the Kangaroo Island upwelling region, South Australia. *Continental Shelf Research*, **200,** 104111, https://doi.org/10.1016/j.csr.2020.104111

Ridge, S. M. and G. A. McKinley, 2020: Advective Controls on the North Atlantic Anthropogenic Carbon Sink. *Global Biogeochemical Cycles*, **34,** e2019GB006457, https://doi.org/10.1029/2019GB006457

Roberts, M. J., L. C. Jackson, C. D. Roberts, V. Meccia, D. Docquier, T. Koenigk, P. Ortega, E. Moreno-Chamarro, A. Bellucci, A. Coward, S. Drijfhout, E. Exarchou, O. Gutjahr, H. Hewitt, D. Iovino, K. Lohmann, D. Putrasahan, R. Schiemann, J. Seddon, L. Terray, X. Xu, Q. Zhang, P. Chang, S. G. Yeager, F. S. Castruccio, S. Zhang, and L. Wu, 2020: Sensitivity of the Atlantic Meridional Overturning Circulation to Model Resolution in CMIP6 HighResMIP Simulations and Implications for Future Changes. *Journal of Advances in Modeling Earth Systems*, **12,** e2019MS002014, https://doi.org/10.1029/2019MS002014

Robson, J., Y. Aksenov, T. J. Bracegirdle, O. Dimdore-Miles, P. T. Griffiths, D. P. Grosvenor, D. L. R. Hodson, J. Keeble, C. MacIntosh, A. Megann, S. Osprey, A. C. Povey, D. Schröder, M. Yang, A. T. Archibald, K. S. Carslaw, L. Gray, C. Jones, B. Kerridge, D. Knappett, T. Kuhlbrodt, M. Russo, A. Sellar, R. Siddans, B. Sinha, R. Sutton, J. Walton, and L. J. Wilcox, 2020: The Evaluation of the North Atlantic Climate System in UKESM1 Historical Simulations for CMIP6. *Journal of Advances in Modeling Earth Systems*, **12,** e2020MS002126, https://doi.org/10.1029/2020MS002126

Roman-Stork, H. L., B. Subrahmanyam, and V. S. N. Murty, 2020: The Role of Salinity in the Southeastern Arabian Sea in Determining Monsoon Onset and Strength. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015592, https://doi.org/10.1029/2019JC015592

Ronge, T. A., D. Nürnberg, and R. Tiedemann, 2020: Plio-Pleistocene Variability of the East Pacific Thermocline and Atmospheric Systems. *Paleoceanography and Paleoclimatology*, **35,** e2019PA003758, https://doi.org/10.1029/2019PA003758

Rosso, I., M. R. Mazloff, L. D. Talley, S. G. Purkey, N. M. Freeman, and G. Maze, 2020: Water Mass and Biogeochemical Variability in the Kerguelen Sector of the Southern Ocean: A Machine Learning Approach for a Mixing Hot Spot. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015877, https://doi.org/10.1029/2019JC015877

Rousselet, L., P. Cessi, and G. Forget, 2020: Routes of the Upper Branch of the Atlantic Meridional Overturning Circulation according to an Ocean State Estimate. *Geophysical Research Letters*, **47,** e2020GL089137, https://doi.org/10.1029/2020GL089137

Royston, S., B. Dutt Vishwakarma, R. Westaway, J. Rougier, Z. Sha, and J. Bamber, 2020: Can We Resolve the Basin-Scale Sea Level Trend Budget From GRACE Ocean Mass? *Journal of Geophysical Research: Oceans*, **125,** e2019JC015535, https://doi.org/10.1029/2019JC015535

Rudzin, J. E., S. Chen, E. R. Sanabia, and S. R. Jayne, 2020: The Air-Sea Response During

Hurricane Irma's (2017) Rapid Intensification Over the Amazon-Orinoco River Plume as Measured by Atmospheric and Oceanic Observations. *Journal of Geophysical Research: Atmospheres*, **125,** e2019JD032368, https://doi.org/10.1029/2019JD032368

Ruhl, H. A., F. L. Bahr, S. A. Henson, W. B. Hosking, B. Espinola, M. Kahru, P. Daniel, P. Drake, and C. A. Edwards, 2020: Understanding the remote influences of ocean weather on the episodic pulses of particulate organic carbon flux. *Deep Sea Research Part II: Topical Studies in Oceanography*, **173,** 104741, https://doi.org/10.1016/j.dsr2.2020.104741

Ruiz-Etcheverry, L. A. and M. Saraceno, 2020: Sea Level Trend and Fronts in the South Atlantic Ocean. *Geosciences*, **10**, https://doi.org/10.3390/geosciences10060218

Ruma, S. and C. Shaji, 2020: Seasonal variability and long-term trends of the surface and subsurface circulation features in the Equatorial Indian Ocean. *Environmental Monitoring and Assessment*, **191,** 810, https://doi.org/10.1007/s10661-019-7707-6

Sabu, P., S. A. Libera, R. Chacko, N. Anilkumar, M. P. Subeesh, and A. P. Thomas, 2020: Winter water variability in the Indian Ocean sector of Southern Ocean during austral summer. *Deep Sea Research Part II: Topical Studies in Oceanography*, **178,** 104852, https://doi.org/10.1016/j.dsr2.2020.104852

Salinger, M. J., H. J. Diamond, E. Behrens, D. Fernandez, B. B. Fitzharris, N. Herold, P. Johnstone, H. Kerckhoffs, A. B. Mullan, A. K. Parker, J. Renwick, C. Scofield, A. Siano, R. O. Smith, P. M. South, P. J. Sutton, E. Teixeira, M. S. Thomsen, and M. C. T. Trought, 2020: Unparalleled coupled ocean-atmosphere summer heatwaves in the New Zealand region: drivers, mechanisms and impacts. *Climatic Change*, **162,** 485-506, https://doi.org/10.1007/s10584-020-02730-5

Sanchez, S. C., N. Westphal, G. H. Haug, H. Cheng, R. L. Edwards, T. Schneider, K. M. Cobb, and C. D. Charles, 2020: A Continuous Record of Central Tropical Pacific Climate Since the Midnineteenth Century Reconstructed From Fanning and Palmyra Island Corals: A Case Study in Coral Data Reanalysis. *Paleoceanography and Paleoclimatology*, **35,** e2020PA003848, https://doi.org/10.1029/2020PA003848

Sandalyuk, N. V., A. Bosse, and T. V. Belonenko, 2020: The 3-D Structure of Mesoscale Eddies in the Lofoten Basin of the Norwegian Sea: A Composite Analysis From Altimetry and In Situ Data. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016331, https://doi.org/10.1029/2020JC016331

Sandery, P. A., T. J. O'Kane, V. Kitsios, and P. Sakov, 2020: Climate Model State Estimation Using Variants of EnKF Coupled Data Assimilation. *Monthly Weather Review*, **148,** 2411-2431, https://doi.org/10.1175/MWR-D-18-0443.1

Santana, R., F. B. Costa, D. Mignac, A. N. Santana, V. F. d. S. Vidal, J. Zhu, and C. A. S. Tanajura, 2020: Model sensitivity experiments on data assimilation, downscaling and tides for the representation of the Cape São Tomé Eddies. *Ocean Dynamics*, **70,** 77-94, https://doi.org/10.1007/s10236-019-01307-w

Sari, Q. W., P. A. Utari, D. Setiabudidaya, I. Yustian, E. Siswanto, and I. Iskandar, 2020: Surface chlorophyll-a variations in the Southeastern Tropical Indian Ocean during various types of the positive Indian Ocean Dipole events. *International Journal of Remote Sensing*, **41,** 171-184, https://doi.org/10.1080/01431161.2019.1637962

Sarma, V. V. S. S., T. V. S. U. Bhaskar, J. P. Kumar, and K. Chakraborty, 2020: Potential

mechanisms responsible for occurrence of core oxygen minimum zone in the north-eastern Arabian Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **165,** 103393, https://doi.org/10.1016/j.dsr.2020.103393

Sasaki, H., B. Qiu, P. Klein, Y. Sasai, and M. Nonaka, 2020: Interannual to Decadal Variations of Submesoscale Motions around the North Pacific Subtropical Countercurrent. *Fluids*, **5,** 116, https://doi.org/10.3390/fluids5030116

Saux Picart, S., A. Marsouin, G. Legendre, H. Roquet, S. Péré, N. Nano-Ascione, and T. Gianelli, 2020: A Sea Surface Temperature data record (2004–2012) from Meteosat Second Generation satellites. *Remote Sensing of Environment*, **240,** 111687, https://doi.org/10.1016/j.rse.2020.111687

Sauzède, R., E. Martinez, C. Maes, O. Pasqueron de Fommervault, A. Poteau, A. Mignot, H. Claustre, J. Uitz, L. Oziel, K. Maamaatuaiahutapu, M. Rodier, C. Schmechtig, and V. Laurent, 2020: Enhancement of phytoplankton biomass leeward of Tahiti as observed by Biogeochemical-Argo floats. *Journal of Marine Systems*, **204,** 103284, https://doi.org/10.1016/j.jmarsys.2019.103284

Scannell, H. A., G. C. Johnson, L. Thompson, J. M. Lyman, and S. C. Riser, 2020: Subsurface Evolution and Persistence of Marine Heatwaves in the Northeast Pacific. *Geophysical Research Letters*, **47,** e2020GL090548, https://doi.org/10.1029/2020GL090548

Schaeffer, A., M. R. Archer, Q. Baumard, M. Roughan, and C. Kerry, 2020: An assessment of the East Australian Current as a renewable energy resource. *Journal of Marine Systems*, **204,** 103285, https://doi.org/10.1016/j.jmarsys.2019.103285

Schiller, A., G. B. Brassington, P. Oke, M. Cahill, P. Divakaran, M. Entel, J. Freeman, D. Griffin, M. Herzfeld, R. Hoeke, X. Huang, E. Jones, E. King, B. Parker, T. Pitman, U. Rosebrock, J. Sweeney, A. Taylor, M. Thatcher, R. Woodham, and A. Zhong, 2020: Bluelink ocean forecasting Australia: 15 years of operational ocean service delivery with societal, economic and environmental benefits. *Journal of Operational Oceanography*, **13,** 1-18, https://doi.org/10.1080/1755876X.2019.1685834

Schmidt, H., R. Czeschel, and M. Visbeck, 2020: Seasonal variability of the Arabian Sea intermediate circulation and its impact on seasonal changes of the upper oxygen minimum zone. *Ocean Sci.*, **16,** 1459-1474, https://doi.org/10.5194/os-16-1459-2020

Séférian, R., S. Berthet, A. Yool, J. Palmiéri, L. Bopp, A. Tagliabue, L. Kwiatkowski, O. Aumont, J. Christian, J. Dunne, M. Gehlen, T. Ilyina, J. G. John, H. Li, M. C. Long, J. Y. Luo, H. Nakano, A. Romanou, J. Schwinger, C. Stock, Y. Santana-Falcón, Y. Takano, J. Tjiputra, H. Tsujino, M. Watanabe, T. Wu, F. Wu, and A. Yamamoto, 2020: Tracking Improvement in Simulated Marine Biogeochemistry Between CMIP5 and CMIP6. *Current Climate Change Reports*, **6,** 95-119, https://doi.org/10.1007/s40641-020-00160-0

Sen, R., S. Pandey, S. Dandapat, P. A. Francis, and A. Chakraborty, 2020: A numerical study on seasonal transport variability of the North Indian Ocean boundary currents using Regional Ocean Modeling System (ROMS). *Journal of Operational Oceanography***,** 1-20, https://doi.org/10.1080/1755876X.2020.1846266

Seo, S., Y.-G. Park, and K. Kim, 2020: Tracking flood debris using satellite-derived ocean color and particle-tracking modeling. *Marine Pollution Bulletin*, **161,** 111828, https://www.sciencedirect.com/science/article/pii/S0025326X20309462

Sérazin, G., F. Marin, L. Gourdeau, S. Cravatte, R. Morrow, and M. L. Dabat, 2020: Scale-dependent analysis of in situ observations in the mesoscale to submesoscale range around New Caledonia. *Ocean Sci.*, **16,** 907-925, https://doi.org/10.5194/os-16-907-2020

Sergi, S., A. Baudena, C. Cotté, M. Ardyna, S. Blain, and F. d'Ovidio, 2020: Interaction of the Antarctic Circumpolar Current With Seamounts Fuels Moderate Blooms but Vast Foraging Grounds for Multiple Marine Predators. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.00416

Shen, J., N. Jiao, M. Dai, H. Wang, G. Qiu, J. Chen, H. Li, S.-J. Kao, J.-Y. T. Yang, P. Cai, K. Zhou, W. Yang, Y. Zhu, Z. Liu, M. Chen, Z. Zuo, B. Gaye, M. G. Wiesner, and Y. Zhang, 2020: Laterally Transported Particles From Margins Serve as a Major Carbon and Energy Source for Dark Ocean Ecosystems. *Geophysical Research Letters*, **47,** e2020GL088971, https://doi.org/10.1029/2020GL088971

Shi, H., X. He, Y. Wu, and J. Huang, 2020: The parameterization of mean dynamic topography based on the Lagrange basis functions. *Advances in Space Research*, **66,** 2122-2140, https://doi.org/10.1016/j.asr.2020.07.042

Shi, H. Y., L. Du, and D. H. Xu, 2020: The robust salinity anomaly event during 2015−2017in the tropical Pacific Ocean. *Haiyang Xuebao*, **42,** 47-58,

Shi, J., Z. Chen, S. Ding, and Y. Lu, 2020: A Hot Blob Eastward of New Zealand in December 2019. *Atmosphere*, **11**, https://doi.org/10.3390/atmos11121267

Shi, J.-R., L. D. Talley, S.-P. Xie, W. Liu, and S. T. Gille, 2020: Effects of Buoyancy and Wind Forcing on Southern Ocean Climate Change. *Journal of Climate*, **33,** 10003-10020, https://doi.org/10.1175/JCLI-D-19-0877.1

Shimura, T., M. Hemer, A. Lenton, M. A. Chamberlain, and D. Monselesan, 2020: Impacts of Ocean Wave-Dependent Momentum Flux on Global Ocean Climate. *Geophysical Research Letters*, **47,** e2020GL089296, https://doi.org/10.1029/2020GL089296

Shroyer, E. L., A. L. Gordon, G. S. Jaeger, M. Freilich, A. F. Waterhouse, J. T. Farrar, V. V. S. S. Sarma, R. Venkatesan, R. A. Weller, J. N. Moum, and A. Mahadevan, 2020: Upper layer thermohaline structure of the Bay of Bengal during the 2013 northeast monsoon. *Deep Sea Research Part II: Topical Studies in Oceanography*, **172,** 104630, https://doi.org/10.1016/j.dsr2.2019.07.018

Shulman, I., M. A. Moline, J. H. Cohen, S. Anderson, E. J. Metzger, and C. Rowley, 2020: Bioluminescence potential modeling during polar night in the Arctic: impact of advection versus local sources. *Ocean Dynamics*, **70,** 1211-1223, https://doi.org/10.1007/s10236-020-01392-2

Siegismund, F., A. Köhl, R. Rummel, and D. Stammer, 2020: Temporal Variations of the Marine Geoid. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016433, https://doi.org/10.1029/2020JC016433

Silvano, A., A. Foppert, S. R. Rintoul, P. R. Holland, T. Tamura, N. Kimura, P. Castagno, P. Falco, G. Budillon, F. A. Haumann, A. C. Naveira Garabato, and A. M. Macdonald, 2020: Recent recovery of Antarctic Bottom Water formation in the Ross Sea driven by climate anomalies. *Nature Geoscience*, **13,** 780-786, https://doi.org/10.1038/s41561-020-00655-3

Siripatana, A., C. Kerry, M. Roughan, J. M. A. C. Souza, and S. Keating, 2020: Assessing the

Impact of Nontraditional Ocean Observations for Prediction of the East Australian Current. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016580, https://doi.org/10.1029/2020JC016580

Siswanto, E., T. Horii, I. Iskandar, J. L. Gaol, R. Y. Setiawan, and R. D. Susanto, 2020: Impacts of climate changes on the phytoplankton biomass of the Indonesian Maritime Continent. *Journal of Marine Systems*, **212,** 103451, https://doi.org/10.1016/j.jmarsys.2020.103451

Skliris, N., R. Marsh, J. V. Mecking, and J. D. Zika, 2020: Changing water cycle and freshwater transports in the Atlantic Ocean in observations and CMIP5 models. *Climate Dynamics*, **54,** 4971-4989, https://doi.org/10.1007/s00382-020-05261-y

Smilenova, A., J. Gula, M. Le Corre, L. Houpert, and Y. Reecht, 2020: A Persistent Deep Anticyclonic Vortex in the Rockall Trough Sustained by Anticyclonic Vortices Shed From the Slope Current and Wintertime Convection. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015905, https://doi.org/10.1029/2019JC015905

Solodoch, A., J. C. McWilliams, A. L. Stewart, J. Gula, and L. Renault, 2020: Why Does the Deep Western Boundary Current "Leak" around Flemish Cap? *Journal of Physical Oceanography*, **50,** 1989-2016, https://doi.org/10.1175/JPO-D-19-0247.1

Song, X., Y. Guo, Y. Chang, F. Zhang, J. Tan, J. Yang, and X. Shi, 2020: A Hybrid Recommendation System for Marine Science Observation Data Based on Content and Literature Filtering. *Sensors*, **20**, https://doi.org/10.3390/s20226414

Sree Lekha, J., A. J. Lucas, J. Sukhatme, J. K. Joseph, M. Ravichandran, N. Suresh Kumar, J. T. Farrar, and D. Sengupta, 2020: Quasi-Biweekly Mode of the Asian Summer Monsoon Revealed in Bay of Bengal Surface Observations. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016271, https://doi.org/10.1029/2020JC016271

Sridevi, B. and V. V. S. S. Sarma, 2020: A revisit to the regulation of oxygen minimum zone in the Bay of Bengal. *Journal of Earth System Science*, **129,** 107, https://doi.org/10.1007/s12040-020-1376-2

Stendardo, I., M. Rhein, and R. Steinfeldt, 2020: The North Atlantic Current and its Volume and Freshwater Transports in the Subpolar North Atlantic, Time Period 1993–2016. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016065, https://doi.org/10.1029/2020JC016065

Sterl, M. F., P. Delandmeter, and E. van Sebille, 2020: Influence of Barotropic Tidal Currents on Transport and Accumulation of Floating Microplastics in the Global Open Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015583, https://doi.org/10.1029/2019JC015583

Stevens, S. W., R. J. Johnson, G. Maze, and N. R. Bates, 2020: A recent decline in North Atlantic subtropical mode water formation. *Nature Climate Change*, https://doi.org/10.1038/s41558-020-0722-3

Storlazzi, C. D., O. M. Cheriton, R. van Hooidonk, Z. Zhao, and R. Brainard, 2020: Internal tides can provide thermal refugia that will buffer some coral reefs from future global warming. *Scientific Reports*, **10,** 13435, https://doi.org/10.1038/s41598-020-70372-9

Su, H., H. Zhang, X. Geng, T. Qin, W. Lu, and X.-H. Yan, 2020: OPEN: A New Estimation of Global Ocean Heat Content for Upper 2000 Meters from Remote Sensing Data. *Remote Sensing*, **12,** 2294, https://doi.org/10.3390/rs12142294

Sugimoto, S., B. Qiu, and A. Kojima, 2020: Marked coastal warming off Tokai attributable to Kuroshio large meander. *Journal of Oceanography*, **76,** 141-154, https://doi.org/10.1007/s10872-019-00531-8

Sugiura, N. and S. Hosoda, 2020: Machine Learning Technique Using the Signature Method for Automated Quality Control of Argo Profiles. *Earth and Space Science*, **7,** e2019EA001019, https://doi.org/10.1029/2019EA001019

Sugiura, N., S. Kouketsu, S. Masuda, S. Osafune, and I. Yasuda, 2020: Estimating the population mean for a vertical profile of energy dissipation rate. *Scientific Reports*, **10,** 20414, https://doi.org/10.1038/s41598-020-77414-2

Sukhatme, J., D. Chaudhuri, J. MacKinnon, S. Shivaprasad, and D. Sengupta, 2020: Near-Surface Ocean Kinetic Energy Spectra and Small-Scale Intermittency from Ship-Based ADCP Data in the Bay of Bengal. *Journal of Physical Oceanography*, **50,** 2037-2052, https://doi.org/10.1175/JPO-D-20-0065.1

Sulpis, O., S. K. Lauvset, and M. Hagens, 2020: Current estimates of K1* and K2* appear inconsistent with measured CO2 system parameters in cold oceanic regions. *Ocean Sci.*, **16,** 847-862, https://doi.org/10.5194/os-16-847-2020

Sun, Y., W. Perrie, F. Qiao, and G. Wang, 2020: Intercomparisons of High-Resolution Global Ocean Analyses: Evaluation of A New Synthesis in Tropical Oceans. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016118, https://doi.org/10.1029/2020JC016118

Supply, A., J. Boutin, J.-L. Vergely, N. Kolodziejczyk, G. Reverdin, N. Reul, and A. Tarasenko, 2020: New insights into SMOS sea surface salinity retrievals in the Arctic Ocean. *Remote Sensing of Environment*, **249,** 112027, https://doi.org/10.1016/j.rse.2020.112027

Tagklis, F., A. Bracco, T. Ito, and R. M. Castelao, 2020: Submesoscale modulation of deep water formation in the Labrador Sea. *Scientific Reports*, **10,** 17489, https://doi.org/10.1038/s41598-020-74345-w

Taillandier, V., L. Prieur, F. D'Ortenzio, M. Ribera d'Alcalà, and E. Pulido-Villena, 2020: Profiling float observation of thermohaline staircases in the western Mediterranean Sea and impact on nutrient fluxes. *Biogeosciences*, **17,** 3343-3366, https://doi.org/10.5194/bg-17-3343-2020

Tamsitt, V., I. Cerovečki, S. A. Josey, S. T. Gille, and E. Schulz, 2020: Mooring Observations of Air–Sea Heat Fluxes in Two Subantarctic Mode Water Formation Regions. *Journal of Climate*, **33,** 2757-2777, https://doi.org/10.1175/JCLI-D-19-0653.1

Tanajura, C. A. S., D. Mignac, A. N. de Santana, F. B. Costa, L. N. Lima, K. P. Belyaev, and J. Zhu, 2020: Observing system experiments over the Atlantic Ocean with the REMO ocean data assimilation system (RODAS) into HYCOM. *Ocean Dynamics*, **70,** 115-138, https://doi.org/10.1007/s10236-019-01309-8

Tandon, N. F., O. A. Saenko, M. A. Cane, and P. J. Kushner, 2020: Interannual Variability of the Global Meridional Overturning Circulation Dominated by Pacific Variability. *Journal of Physical Oceanography*, **50,** 559-574, https://doi.org/10.1175/JPO-D-19-0129.1

Tang, L., J. Li, J. Chen, S.-Y. Wang, R. Wang, and X. Hu, 2020: Seismic Impact of Large Earthquakes on Estimating Global Mean Ocean Mass Change from GRACE. *Remote*

Sensing, **12**, https://doi.org/10.3390/rs12060935
Tchilibou, M., L. Gourdeau, F. Lyard, R. Morrow, A. Koch Larrouy, D. Allain, and B. Djath, 2020: Internal tides in the Solomon Sea in contrasted ENSO conditions. *Ocean Sci.*, **16,** 615-635, https://doi.org/10.5194/os-16-615-2020
Tejas, D. M., C. Gnanaseelan, A. K. Rashmi, and J. S. Deepa, 2020: Indian Ocean Warming Trends and Forcing Mechanism with Emphasis on Northeastern Tropical Indian Ocean. *Journal of Coastal Research*, **89,** 15-19, 5, https://doi.org/10.2112/SI89-003.1
Terrats, L., H. Claustre, M. Cornec, A. Mangin, and G. Neukermans, 2020: Detection of Coccolithophore Blooms With BioGeoChemical-Argo Floats. *Geophysical Research Letters*, **47,** e2020GL090559, https://doi.org/10.1029/2020GL090559
Tesdal, J.-E. and T. W. N. Haine, 2020: Dominant Terms in the Freshwater and Heat Budgets of the Subpolar North Atlantic Ocean and Nordic Seas From 1992 to 2015. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016435, https://doi.org/10.1029/2020JC016435
Thandlam, V., U. B. T.V.S, R. Hasibur, P. D. Luca, E. Sahlée, A. Rutgersson, R. M, and R. S.S.V.S, 2020: A sea-level monopole in the equatorial Indian Ocean. *npj Climate and Atmospheric Science*, **3,** 25, https://doi.org/10.1038/s41612-020-0127-z
Thomas, G., S. G. Purkey, D. Roemmich, A. Foppert, and S. R. Rintoul, 2020: Spatial Variability of Antarctic Bottom Water in the Australian Antarctic Basin From 2018–2020 Captured by Deep Argo. *Geophysical Research Letters*, **47,** e2020GL089467, https://doi.org/10.1029/2020GL089467
Thompson, P. R., M. J. Widlansky, E. Leuliette, W. Sweet, D. P. Chambers, B. D. Hamlington, S. Jevrejeva, J. J. Marra, M. A. Merrifield, G. T. Mitchum, and R. S. nerem, 2020: Sea level variability and change in the State of the Climate in 2019. *Bull. Am. Meteorol. Soc.*, **101**, https://doi.org/10.1175/2020BAMSStateoftheClimate.1
Thushara, V. and P. N. Vinayachandran, 2020: Unprecedented Surface Chlorophyll Blooms in the Southeastern Arabian Sea During an Extreme Negative Indian Ocean Dipole. *Geophysical Research Letters*, **47,** e2019GL085026, https://doi.org/10.1029/2019GL085026
Travis, S. and B. Qiu, 2020: Seasonal Reversal of the Near-Surface Chlorophyll Response to the Presence of Mesoscale Eddies in the South Pacific Subtropical Countercurrent. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015752, https://doi.org/10.1029/2019JC015752
Trenberth, K. E., 2020: Understanding climate change through Earth's energy flows. *Journal of the Royal Society of New Zealand*, **50,** 331-347, https://doi.org/10.1080/03036758.2020.1741404
Tu, Q., and Z. Hao (2020), Validation of Sea Surface Temperature Derived From Himawari-8 by JAXA, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, *13*, 448-459, doi: https://doi.org/10.1109/JSTARS.2019.2963773.
Tuchen, F. P., J. F. Lübbecke, P. Brandt, and Y. Fu, 2020: Observed Transport Variability of the Atlantic Subtropical Cells and Their Connection to Tropical Sea Surface Temperature Variability. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016592, https://doi.org/10.1029/2020JC016592
Tucker, T., D. Giglio, M. Scanderbeg, and S. S. P. Shen, 2020: Argovis: A Web Application for

Fast Delivery, Visualization, and Analysis of Argo Data. *Journal of Atmospheric and Oceanic Technology*, **37,** 401-416, https://doi.org/10.1175/JTECH-D-19-0041.1

Turner, J., M. V. Guarino, J. Arnatt, B. Jena, G. J. Marshall, T. Phillips, C. C. Bajish, K. Clem, Z. Wang, T. Andersson, E. J. Murphy, and R. Cavanagh, 2020: Recent Decrease of Summer Sea Ice in the Weddell Sea, Antarctica. *Geophysical Research Letters*, **47,** e2020GL087127, https://doi.org/10.1029/2020GL087127

Ummenhofer, C. C., S. Ryan, M. H. England, M. Scheinert, P. Wagner, A. Biastoch, and C. W. Böning, 2020: Late 20th Century Indian Ocean Heat Content Gain Masked by Wind Forcing. *Geophysical Research Letters*, **47,** e2020GL088692, https://doi.org/10.1029/2020GL088692

Varlas, G., V. Vervatis, C. Spyrou, E. Papadopoulou, A. Papadopoulos, and P. Katsafados, 2020: Investigating the impact of atmosphere–wave–ocean interactions on a Mediterranean tropical-like cyclone. *Ocean Modelling*, **153,** 101675, https://doi.org/10.1016/j.ocemod.2020.101675

Vidya, P. J., M. Ravichandran, M. P. Subeesh, S. Chatterjee, and N. M, 2020: Global warming hiatus contributed weakening of the Mascarene High in the Southern Indian Ocean. *Scientific Reports*, **10,** 3255, https://doi.org/10.1038/s41598-020-59964-7

Vishwakarma, B. D., S. Royston, R. E. M. Riva, R. M. Westaway, and J. L. Bamber, 2020: Sea Level Budgets Should Account for Ocean Bottom Deformation. *Geophysical Research Letters*, **47,** e2019GL086492, https://doi.org/10.1029/2019GL086492

Volkov, D. L., S.-K. Lee, A. L. Gordon, and M. Rudko, 2020: Unprecedented reduction and quick recovery of the South Indian Ocean heat content and sea level in 2014–2018. *Science Advances*, **6,** eabc1151, https://doi.org/10.1126/sciadv.abc1151

Volkov, D. L., C. S. Meinen, C. Schmid, B. Moat, M. Lankhorst, S. Dong, F. Li, W. Johns, S. Lozier, R. Perez, G. Goni, M. Kersalé, E. Frajka-Williams, M. Baringer, D. Smeed, D. Rayner, A. Sanchez-Franks, and U. Send, 2020: Atlantic meridional overturning circulation and associated heat transport in the State of the Climate in 2019. *Bull. Am. Meteorol. Soc.*, **101**, https://doi.org/10.1175/2020BAMSStateoftheClimate.1

von Berg, L., C. J. Prend, E. C. Campbell, M. R. Mazloff, L. D. Talley, and S. T. Gille, 2020: Weddell Sea Phytoplankton Blooms Modulated by Sea Ice Variability and Polynya Formation. *Geophysical Research Letters*, **47,** e2020GL087954, https://doi.org/10.1029/2020GL087954

von Schuckmann, K., L. Cheng, M. D. Palmer, J. Hansen, C. Tassone, V. Aich, S. Adusumilli, H. Beltrami, T. Boyer, F. J. Cuesta-Valero, D. Desbruyères, C. Domingues, A. García-García, P. Gentine, J. Gilson, M. Gorfer, L. Haimberger, M. Ishii, G. C. Johnson, R. Killick, B. A. King, G. Kirchengast, N. Kolodziejczyk, J. Lyman, B. Marzeion, M. Mayer, M. Monier, D. P. Monselesan, S. Purkey, D. Roemmich, A. Schweiger, S. I. Seneviratne, A. Shepherd, D. A. Slater, A. K. Steiner, F. Straneo, M. L. Timmermans, and S. E. Wijffels, 2020: Heat stored in the Earth system: where does the energy go? *Earth Syst. Sci. Data*, **12,** 2013-2041, https://doi.org/10.5194/essd-12-2013-2020

von Schuckmann, K.and P.-Y. Le Traonand N. Smithand A. Pascualand S. Djavidniaand J.-P. Gattusoand M. Grégoireand G. Nolanand S. Aaboeand E. Á. Fanjuland L. Aoufand R. Aznarand T. H. Badewienand A. Behrensand M. Bertaand L. Bertinoand J. Blackfordand G. Bolzonand F. Borileand M. Bretagnonand R. J. W. Brewinand D.

Canuand P. Cessiand S. Ciavattaand B. Chapronand T. T. Trang Chauand F. Chevallierand B. Chtirkovaand S. Cilibertiand J. R. Clarkand E. Clementiand C. Combotand E. Comermaand A. Conchonand G. Coppiniand L. Corgnatiand G. Cossariniand S. Cravatteand M. de Alfonsoand C. de Boyer Montégutand C. De Lera Fernándezand F. J. de los Santosand A. Denvil-Sommerand Á. de Pascual Collarand P. A. L. Dias Nunesand V. Di Biagioand M. Drudiand O. Emburyand P. Falcoand O. F. d'Andonand L. Ferrerand D. Fordand H. Freundand M. G. Leónand M. G. Sotilloand J. M. García-Valdecasasand P. Garnessonand G. Garricand F. Gasparinand M. Gehlenand A. Genua-Olmedoand G. Geyerand A. Ghermandiand S. A. Goodand J. Gourrionand E. Greinerand A. Griffaand M. Gonzálezand A. Griffaand I. Hernández-Carrascoand S. Isoardand J. J. Kennedyand S. Kayand A. Korosovand K. Laanemäeand P. E. Landand T. Lavergneand P. Lazzariand J.-F. Legeaisand B. Lemieuxand B. Levierand W. Lloveland V. Lyubartsevand P.-Y. Le Traonand V. S. Lienand L. Limaand P. Lorenteand J. Maderand M. G. Magaldiand I. Maljutenkoand A. Manginand C. Mantovaniand V. Marinovaand S. Masinaand E. Mauriand J. Meyerjürgensand A. Mignotand R. McEwanand C. Mejiaand A. Meletand M. Mennaand B. Meyssignacand A. Moucheand B. Mourreand M. Müllerand G. Notarstefanoand A. Orfilaand S. Pardoand E. Penevaand B. Pérez-Gómezand C. Perrucheand M. Peterlinand P.-M. Poulainand N. Pinardiand Y. Quilfenand U. Raudseppand R. Renshawand A. Révelardand E. Reyes-Reyesand M. Rickerand P. Rodríguez-Rubioand P. Rotllánand E. R. Gelabertand A. Rubioand I. Ruiz-Parradoand S. Sathyendranathand J. Sheand K. von Schuckmannand C. Solidoroand E. V. Stanevand J. Stanevaand A. Stortoand J. Suand T. T. Bakhshand G. H. Tilstoneand J. Tintoréand C. Toledanoand J. Tournadreand B. Tranchantand R. Uiboupinand A. Valcarceland N. Valchevaand N. Verbruggeand M. Vracand J. O. Wolffand E. Zambianchiand O. Zielinskiand A.-S. Zinck and S. Zunino, 2020: Copernicus Marine Service Ocean State Report, Issue 4. *Journal of Operational Oceanography*, **13,** S1-S172, https://doi.org/10.1080/1755876X.2020.1785097

Wagawa, T., Y. Kawaguchi, Y. Igeta, N. Honda, T. Okunishi, and I. Yabe, 2020: Observations of oceanic fronts and water-mass properties in the central Japan Sea: Repeated surveys from an underwater glider. *Journal of Marine Systems*, **201,** 103242, https://doi.org/10.1016/j.jmarsys.2019.103242

Walczowski, W., M. Merchel, D. Rak, P. Wieczorek, and I. Goszczko, 2020: Argo floats in the southern Baltic Sea. *Oceanologia*, **62,** 478-488, https://doi.org/10.1016/j.oceano.2020.07.001

Wallace, L. O., E. M. van Wijk, S. R. Rintoul, and B. Hally, 2020: Bathymetry-Constrained Navigation of Argo Floats Under Sea Ice on the Antarctic Continental Shelf. *Geophysical Research Letters*, **47,** e2020GL087019, https://doi.org/10.1029/2020GL087019

Wang, B., K. Fennel, L. Yu, and C. Gordon, 2020: Assessing the value of biogeochemical Argo profiles versus ocean color observations for biogeochemical model optimization in the Gulf of Mexico. *Biogeosciences*, **17,** 4059-4074, https://doi.org/10.5194/bg-17-4059-2020

Wang, D. L. and S. W. Zhang, 2020: Design and application of a real-time temperature and

salinity profile observation system under ice for polar regions. *Chinese Journal of Polar Research*, **32,** 523-532,

Wang, G. and F. Qiao, 2020: Mirror patterns of physical variables in the ocean. *Climate Dynamics*, **54,** 3109-3120, https://doi.org/10.1007/s00382-020-05161-1

Wang, J., R. K. W. Wong, and X. Zhang, 2020: Low-Rank Covariance Function Estimation for Multidimensional Functional Data. *Journal of the American Statistical Association***,** 1-14, https://doi.org/10.1080/01621459.2020.1820344

Wang, J., T. Xu, W. Nie, and X. Yu, 2020: The Construction of Sound Speed Field Based on Back Propagation Neural Network in the Global Ocean. *Marine Geodesy*, **43,** 621-642, https://doi.org/10.1080/01490419.2020.1815912

Wang, J., D. Yuan, X. Li, Y. Li, Z. Wang, X. Hu, X. Zhao, C. Corvianawatie, and D. Surinati, 2020: Moored Observations of the Savu Strait Currents in the Indonesian Seas. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016082, https://doi.org/10.1029/2020JC016082

Wang, P., W. Zhang, H. Wang, H. Dai, and X. Wang, 2020: Assimilation of Middepth Velocities from Argo Floats in the Western South China Sea. *Journal of Atmospheric and Oceanic Technology*, **37,** 141-157, https://doi.org/10.1175/JTECH-D-18-0233.1

Wang, R., X. Cheng, L. Xu, and J. Chen, 2020: Mesoscale Eddy Effects on the Subduction of North Pacific Eastern Subtropical Mode Water. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015641, https://doi.org/10.1029/2019JC015641

Wang, S., E. L. Kenchington, Z. Wang, I. Yashayaev, and A. J. Davies, 2020: 3-D ocean particle tracking modeling reveals extensive vertical movement and downstream interdependence of closed areas in the northwest Atlantic. *Scientific Reports*, **10,** 21421, https://doi.org/10.1038/s41598-020-76617-x

Wang, T., F. Chen, S. Zhang, J. Pan, A. T. Devlin, H. Ning, and W. Zeng, 2020: Remote Sensing and Argo Float Observations Reveal Physical Processes Initiating a Winter-Spring Phytoplankton Bloom South of the Kuroshio Current Near Shikoku. *Remote Sensing*, **12**, https://doi.org/10.3390/rs12244065

Wang, T., S. T. Gille, M. R. Mazloff, N. V. Zilberman, and Y. Du, 2020: Eddy-Induced Acceleration of Argo Floats. *Journal of Geophysical Research: Oceans*, **125,** e2019JC016042, https://doi.org/10.1029/2019JC016042

Wang, Y., C. Li, and Q. Liu, 2020: Observation of an anti-cyclonic mesoscale eddy in the subtropical northwestern Pacific Ocean from altimetry and Argo profiling floats. *Acta Oceanologica Sinica*, **39,** 79-90, https://doi.org/10.1007/s13131-020-1596-y

Wang, Y., Y. Li, and C. Wei, 2020: Subtropical sea surface salinity maxima in the South Indian Ocean. *Journal of Oceanology and Limnology*, **38,** 16-29, https://doi.org/10.1007/s00343-019-8251-5

Wang, Y. and Y. Luo, 2020: Variability of spice injection in the upper ocean of the southeastern Pacific during 1992–2016. *Climate Dynamics*, **54,** 3185-3200, https://doi.org/10.1007/s00382-020-05164-y

Wang, Y., R. Wu, and Y. Jiao, 2020: Upscale feedback of high-frequency winds on seasonal SST change over the tropical western North Pacific during boreal summer. *Climate Dynamics*, **55,** 2439-2451, https://doi.org/10.1007/s00382-020-05391-3

Wang, Z., X. Huang, Y. Yang, Z. Zhang, C. Zhou, W. Zhao, and J. Tian, 2020: Impacts of

subtidal motions and the earth rotation on modal characteristics of the semidiurnal internal tide. *Journal of Oceanography*, **76,** 15-27, https://doi.org/10.1007/s10872-019-00524-7

Wang, Z., Z. Wen, H. Hu, Z. Song, and G. Liu, 2020: The Characteristics of Near-Equatorial North Pacific Low PV Water and Its Possible Influences on the Equatorial Subsurface Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016282, https://doi.org/10.1029/2020JC016282

Wang, Z., Z. Zhang, M. Zhou, H. Liu, Y. Zhong, and X. Wang, 2020: Seasonal linkage of the Southern Hemisphere extratropical climate variability to two types of ENSO. *Acta Oceanologica Sinica*, **39,** 63-73, https://doi.org/10.1007/s13131-019-1528-x

Watanabe, Y. W., B. F. Li, R. Yamasaki, S. Yunoki, K. Imai, S. Hosoda, and Y. Nakano, 2020: Spatiotemporal changes of ocean carbon species in the western North Pacific using parameterization technique. *Journal of Oceanography*, **76,** 155-167, https://doi.org/10.1007/s10872-019-00532-7

Wen, Z., H. Hu, Z. Song, H. Bai, and Z. Wang, 2020: Different Influences of Mesoscale Oceanic Eddies on the North Pacific Subsurface Low Potential Vorticity Water Mass Between Winter and Summer. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015333, https://doi.org/10.1029/2019JC015333

West, B. J., W. Han, L. Zhang, and Y. Li, 2020: The Role of Oceanic Processes in the Initiation of Boreal Winter Intraseasonal Oscillations Over the Indian Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015426, https://doi.org/10.1029/2019JC015426

Wild, M., 2020: The global energy balance as represented in CMIP6 climate models. *Climate Dynamics*, **55,** 553-577, https://doi.org/10.1007/s00382-020-05282-7

Wirasatriya, A., J. D. Setiawan, D. N. Sugianto, I. A. Rosyadi, H. Haryadi, G. Winarso, R. Y. Setiawan, and R. D. Susanto, 2020: Ekman dynamics variability along the southern coast of Java revealed by satellite data. *International Journal of Remote Sensing*, **41,** 8475-8496, https://doi.org/10.1080/01431161.2020.1797215

Wojtasiewicz, B., T. W. Trull, T. V. S. Udaya Bhaskar, M. Gauns, S. Prakash, M. Ravichandran, D. M. Shenoy, D. Slawinski, and N. J. Hardman-Mountford, 2020: Autonomous profiling float observations reveal the dynamics of deep biomass distributions in the denitrifying oxygen minimum zone of the Arabian Sea. *Journal of Marine Systems*, **207,** 103103, https://doi.org/10.1016/j.jmarsys.2018.07.002

Wong, A. P. S., S. E. Wijffels, S. C. Riser, S. Pouliquen, S. Hosoda, D. Roemmich, J. Gilson, G. C. Johnson, K. Martini, D. J. Murphy, M. Scanderbeg, T. V. S. U. Bhaskar, J. J. H. Buck, F. Merceur, T. Carval, G. Maze, C. Cabanes, X. André, N. Poffa, I. Yashayaev, P. M. Barker, S. Guinehut, M. Belbéoch, M. Ignaszewski, M. O. N. Baringer, C. Schmid, J. M. Lyman, K. E. McTaggart, S. G. Purkey, N. Zilberman, M. B. Alkire, D. Swift, W. B. Owens, S. R. Jayne, C. Hersh, P. Robbins, D. West-Mack, F. Bahr, S. Yoshida, P. J. H. Sutton, R. Cancouët, C. Coatanoan, D. Dobbler, A. G. Juan, J. Gourrion, N. Kolodziejczyk, V. Bernard, B. Bourlès, H. Claustre, F. D'Ortenzio, S. Le Reste, P.-Y. Le Traon, J.-P. Rannou, C. Saout-Grit, S. Speich, V. Thierry, N. Verbrugge, I. M. Angel-Benavides, B. Klein, G. Notarstefano, P.-M. Poulain, P. Vélez-Belchí, T. Suga, K. Ando, N. Iwasaska, T. Kobayashi, S. Masuda, E. Oka, K. Sato, T. Nakamura, K. Sato, Y. Takatsuki, T.

Yoshida, R. Cowley, J. L. Lovell, P. R. Oke, E. M. van Wijk, F. Carse, M. Donnelly, W. J. Gould, K. Gowers, B. A. King, S. G. Loch, M. Mowat, J. Turton, E. P. Rama Rao, M. Ravichandran, H. J. Freeland, I. Gaboury, D. Gilbert, B. J. W. Greenan, M. Ouellet, T. Ross, A. Tran, M. Dong, Z. Liu, J. Xu, K. Kang, H. Jo, S.-D. Kim, and H.-M. Park, 2020: Argo Data 1999–2019: Two Million Temperature-Salinity Profiles and Subsurface Velocity Observations From a Global Array of Profiling Floats. *Frontiers in Marine Science*, **7**, https://doi.org/10.3389/fmars.2020.00700

Wu, B., X. Lin, and L. Yu, 2020: North Pacific subtropical mode water is controlled by the Atlantic Multidecadal Variability. *Nature Climate Change*, **10,** 238-243, https://doi.org/10.1038/s41558-020-0692-5

Wu, B., X. Lin, and L. Yu, 2020: Decadal to Multidecadal Variability of the Mixed Layer to the South of the Kuroshio Extension Region. *Journal of Climate*, **33,** 7697-7714, https://doi.org/10.1175/JCLI-D-20-0115.1

Wu, W., Y. Du, Y.-K. Qian, X. Cheng, T. Wang, L. Zhang, and S. Peng, 2020: Structure and Seasonal Variation of the Indian Ocean Tropical Gyre Based on Surface Drifters. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015483, https://doi.org/10.1029/2019JC015483

Wu, W., Z. Zhan, S. Peng, S. Ni, and J. Callies, 2020: Seismic ocean thermometry. *Science*, **369,** 1510-1515, https://doi.org/10.1126/science.abb9519

Wu, X., F. Feddersen, S. N. Giddings, N. Kumar, and G. Gopalakrishnan, 2020: Mechanisms of Mid- to Outer-Shelf Transport of Shoreline-Released Tracers. *Journal of Physical Oceanography*, **50,** 1813-1837, https://doi.org/10.1175/JPO-D-19-0225.1

Wunsch, C., 2020: Is the Ocean Speeding Up? Ocean Surface Energy Trends. *Journal of Physical Oceanography*, **50,** 3205-3217, https://doi.org/10.1175/JPO-D-20-0082.1

Xia, Y., Y. Du, B. Qiu, X. Cheng, T. Wang, and Q. Xie, 2020: The characteristics of the mid-depth striations in the North Indian Ocean. *Deep Sea Research Part I: Oceanographic Research Papers*, **162,** 103307, https://doi.org/10.1016/j.dsr.2020.103307

Xie, T., W. Perrie, C. Wei, and L. Zhao, 2020: Discrimination of open water from sea ice in the Labrador Sea using quad-polarized synthetic aperture radar. *Remote Sensing of Environment*, **247,** 111948, https://doi.org/10.1016/j.rse.2020.111948

Xing, X., E. Boss, J. Zhang, and F. Chai, 2020: Evaluation of Ocean Color Remote Sensing Algorithms for Diffuse Attenuation Coefficients and Optical Depths with Data Collected on BGC-Argo Floats. *Remote Sensing*, **12,** 2367, https://doi.org/10.3390/rs12152367

Xing, X., M. L. Wells, S. Chen, S. Lin, and F. Chai, 2020: Enhanced Winter Carbon Export Observed by BGC-Argo in the Northwest Pacific Ocean. *Geophysical Research Letters*, **47,** e2020GL089847, https://doi.org/10.1029/2020GL089847

Xiu, P. and F. Chai, 2020: Eddies Affect Subsurface Phytoplankton and Oxygen Distributions in the North Pacific Subtropical Gyre. *Geophysical Research Letters*, **47,** e2020GL087037, https://doi.org/10.1029/2020GL087037

Xu, H., R. Yu, D. Tang, Y. Liu, S. Wang, and D. Fu, 2020: Effects of Tropical Cyclones on Sea Surface Salinity in the Bay of Bengal Based on SMAP and Argo Data. *Water*, **12**, https://doi.org/10.3390/w12112975

Yamazaki, K., S. Aoki, K. Shimada, T. Kobayashi, and Y. Kitade, 2020: Structure of the Subpolar Gyre in the Australian-Antarctic Basin Derived From Argo Floats. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015406, https://doi.org/10.1029/2019JC015406

Yan, H., H. Wang, R. Zhang, J. Chen, S. Bao, and G. Wang, 2020: A Dynamical-Statistical Approach to Retrieve the Ocean Interior Structure From Surface Data: SQG-mEOF-R. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015840, https://doi.org/10.1029/2019JC015840

Yang, K., W. Cai, G. Huang, G. Wang, B. Ng, and S. Li, 2020: Oceanic Processes in Ocean Temperature Products Key to a Realistic Presentation of Positive Indian Ocean Dipole Nonlinearity. *Geophysical Research Letters*, **47,** e2020GL089396, https://doi.org/10.1029/2020GL089396

Yang, S., L. Song, Y. Zhang, W. Fan, B. Zhang, Y. Dai, H. Zhang, S. Zhang, and Y. Wu, 2020: The Potential Vertical Distribution of Bigeye Tuna (Thunnus obesus) and Its Influence on the Spatial Distribution of CPUEs in the Tropical Atlantic Ocean. *Journal of Ocean University of China*, **19,** 669-680, https://doi.org/10.1007/s11802-020-4264-0

Yang, X., G. Xu, Y. Liu, W. Sun, C. Xia, and C. Dong, 2020: Multi-Source Data Analysis of Mesoscale Eddies and Their Effects on Surface Chlorophyll in the Bay of Bengal. *Remote Sensing*, **12**, https://doi.org/10.3390/rs12213485

Yang, Y., X. Li, J. Wang, and D. Yuan, 2020: Seasonal Variability and Dynamics of the Pacific North Equatorial Subsurface Current. *Journal of Physical Oceanography*, **50,** 2457-2474, https://doi.org/10.1175/JPO-D-19-0261.1

Yang, Z. and Y. Luo, 2020: Contribution of Mesoscale Eddies to the Subduction and Transport of North Pacific Eastern Subtropical Mode Water. *Journal of Ocean University of China*, **19,** 36-46, https://doi.org/10.1007/s11802-020-4203-0

Yang, B., E. S. Boss, N. Haëntjens, M. C. Long, M. J. Behrenfeld, R. Eveleth, and S. C. Doney (2020), Phytoplankton Phenology in the North Atlantic: Insights From Profiling Float Measurements, *Frontiers in Marine Science*, *7*, doi: https://doi.org/10.3389/fmars.2020.00139.

Yano, M., T. Itoh, Y. Tanaka, D. Matsuoka, and F. Araki, 2020: A comparative visualization tool for ocean data analysis based on mode water regions. *Journal of Visualization*, **23,** 313-329, https://doi.org/10.1007/s12650-020-00629-y

Yearsley, J. M., D. M. Salmanidou, J. Carlsson, D. Burns, and C. L. Van Dover, 2020: Biophysical models of persistent connectivity and barriers on the northern Mid-Atlantic Ridge. *Deep Sea Research Part II: Topical Studies in Oceanography*, **180,** 104819, https://doi.org/10.1016/j.dsr2.2020.104819

Yesubabu, V., V. K. Kattamanchi, N. K. Vissa, H. P. Dasari, and V. B. R. Sarangam, 2020: Impact of ocean mixed-layer depth initialization on the simulation of tropical cyclones over the Bay of Bengal using the WRF-ARW model. *Meteorological Applications*, **27,** e1862, https://doi.org/10.1002/met.1862

Yi, D. L., O. Melnichenko, P. Hacker, and J. Potemra, 2020: Remote Sensing of Sea Surface Salinity Variability in the South China Sea. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016827, https://doi.org/10.1029/2020JC016827

Yin, H., H. Dai, W. Zhang, X. Zhang, and P. Wang, 2020: Demonstration of the refined

three-dimensional structure of mesoscale eddies and computational error estimates via Lagrangian analysis. *Acta Oceanologica Sinica*, **39,** 146-164, https://doi.org/10.1007/s13131-020-1619-8

Ypma, S. L., S. Georgiou, J. S. Dugstad, J. D. Pietrzak, and C. A. Katsman, 2020: Pathways and Water Mass Transformation Along and Across the Mohn-Knipovich Ridge in the Nordic Seas. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016075, https://doi.org/10.1029/2020JC016075

Yu, F., X. Zhang, X. Chen, and G. Chen, 2020: Altimetry-derived ocean thermal structure reconstruction for the Bay of Bengal cyclone season. *Ocean Dynamics*, **70,** 1449-1459, https://doi.org/10.1007/s10236-020-01409-w

Yu, J., B. Gan, Z. Jing, and L. Wu, 2020: Winter Extreme Mixed Layer Depth South of the Kuroshio Extension. *Journal of Climate*, **33,** 10419-10436, https://doi.org/10.1175/JCLI-D-20-0119.1

Yumruktepe, V. Ç., B. Salihoğlu, and S. Neuer, 2020: Controls on carbon export in the subtropical North Atlantic. *Progress in Oceanography*, **187,** 102380, https://doi.org/10.1016/j.pocean.2020.102380

Zaba, K. D., D. L. Rudnick, B. D. Cornuelle, G. Gopalakrishnan, and M. R. Mazloff, 2020: Volume and Heat Budgets in the Coastal California Current System: Means, Annual Cycles, and Interannual Anomalies of 2014–16. *Journal of Physical Oceanography*, **50,** 1435-1453, https://doi.org/10.1175/JPO-D-19-0271.1

Zang, N., F. Wang, and J. Sprintall, 2020: The intermediate water in the Philippine Sea. *Journal of Oceanology and Limnology*, **38,** 1343-1353, https://doi.org/10.1007/s00343-020-0035-4

Zhai, F. and Y. Gu, 2020: Abyssal Circulation in the Philippine Sea. *Journal of Ocean University of China*, **19,** 249-262, https://doi.org/10.1007/s11802-020-4241-7

Zhang, K., X. Geng, and X. Yan, 2020: Prediction of 3-D Ocean Temperature by Multilayer Convolutional LSTM. *IEEE Geoscience and Remote Sensing Letters*, **17,** 1303-1307, https://doi.org/10.1109/LGRS.2019.2947170

Zhang, L., J. Wu, F. Wang, S. Hu, Q. Wang, F. Jia, F. Wang, and D. Hu, 2020: Seasonal and Interannual Variability of the Currents off the New Guinea Coast From Mooring Measurements. *Journal of Geophysical Research: Oceans*, **125,** e2020JC016242, https://doi.org/10.1029/2020JC016242

Zhang, N., G. Liu, Q. Liu, S. Zheng, and W. Perrie, 2020: Spatiotemporal Variations of Mesoscale Eddies in the Southeast Indian Ocean. *Journal of Geophysical Research: Oceans*, **125,** e2019JC015712, https://doi.org/10.1029/2019JC015712

Zhang, Q., F. Yu, and G. Chen, 2020: The Difference of Sea Level Variability by Steric Height and Altimetry in the North Pacific. *Remote Sensing*, **12,** 379, https://doi.org/10.3390/rs12030379

Zhang, X. and W. Han, 2020: Effects of Climate Modes on Interannual Variability of Upwelling in the Tropical Indian Ocean. *Journal of Climate*, **33,** 1547-1573, https://doi.org/10.1175/JCLI-D-19-0386.1

Zhang, X., L. Hu, Y. Xiong, Y. Huot, and D. Gray, 2020: Experimental Estimates of Optical Backscattering Associated With Submicron Particles in Clear Oceanic Waters. *Geophysical Research Letters*, **47,** e2020GL087100,

https://doi.org/10.1029/2020GL087100
Zhang, Y., Y. Du, W. N. D. S. Jayarathna, Q. Sun, Y. Zhang, F. Yao, and M. Feng, 2020: A Prolonged High-Salinity Event in the Northern Arabian Sea during 2014–17. *Journal of Physical Oceanography*, **50,** 849-865, https://doi.org/10.1175/JPO-D-19-0220.1
Zhao, D., L. Gao, and Y. Xu, 2020: Quantification of the impact of environmental factors on chlorophyll in the open ocean. *Journal of Oceanology and Limnology*, https://doi.org/10.1007/s00343-020-9121-x
Zhao, R., H. Nakamura, X.-H. Zhu, J.-H. Park, A. Nishina, C. Zhang, H. Na, C. Jeon, Z.-N. Zhu, and H. S. Min, 2020: Tempo-spatial variations of the Ryukyu Current southeast of Miyakojima Island determined from mooring observations. *Scientific Reports*, **10,** 6656, https://doi.org/10.1038/s41598-020-63836-5
Zhu, C. and Z. Liu, 2020: Weakening Atlantic overturning circulation causes South Atlantic salinity pile-up. *Nature Climate Change*, **10,** 998-1003, https://doi.org/10.1038/s41558-020-0897-7
Zhu, Y., Y. Li, and S. Peng, 2020: The Track and Accompanying Sea Wave Forecasts of the Supertyphoon Mangkhut (2018) by a Real-Time Regional Forecast System. *Journal of Atmospheric and Oceanic Technology*, **37,** 2075-2084, https://doi.org/10.1175/JTECH-D-19-0196.1
Zhu, Y., R.-H. Zhang, and J. Sun, 2020: North Pacific Upper-Ocean Cold Temperature Biases in CMIP6 Simulations and the Role of Regional Vertical Mixing. *Journal of Climate*, **33,** 7523-7538, https://doi.org/10.1175/JCLI-D-19-0654.1
Zika, J. D., J. B. Sallée, A. J. S. Meijers, A. C. Naveira-Garabato, A. J. Watson, M. J. Messias, and B. A. King, 2020: Tracking the spread of a passive tracer through Southern Ocean water masses. *Ocean Sci.*, **16,** 323-336, https://doi.org/10.5194/os-16-323-2020
Zilberman, N. V., D. H. Roemmich, and J. Gilson, 2020: Deep-Ocean Circulation in the Southwest Pacific Ocean Interior: Estimates of the Mean Flow and Variability Using Deep Argo Data. *Geophysical Research Letters*, **47,** e2020GL088342, https://doi.org/10.1029/2020GL088342
Zou, S., M. S. Lozier, F. Li, R. Abernathey, and L. Jackson, 2020: Density-compensated overturning in the Labrador Sea. *Nature Geoscience*, **13,** 121-126, https://doi.org/10.1038/s41561-019-0517-1
Zu, T., D. Wang, Q. Wang, M. Li, J. Wei, B. Geng, Y. He, and J. Chen, 2020: A revisit of the interannual variation of the South China Sea upper layer circulation in summer: correlation between the eastward jet and northward branch. *Climate Dynamics*, **54,** 457-471, https://doi.org/10.1007/s00382-019-05007-5
Zunino, P., H. Mercier, and V. Thierry, 2020: Why did deep convection persist over four consecutive winters (2015–2018) southeast of Cape Farewell? *Ocean Sci.*, **16,** 99-113, https://doi.org/10.5194/os-16-99-2020

2019 (513)

Abdulla, C. P., M. A. Alsaafani, T. M. Alraddadi, and A. M. Albarakati, 2019: Climatology of mixed layer depth in the Gulf of Aden derived from in situ temperature profiles. *Journal of Oceanography*, **75,** 335-347, https://doi.org/10.1007/s10872-019-00506-9

Abe, H., N. Ebuchi, H. Ueno, H. Ishiyama, and Y. Matsumura, 2019: Aquarius reveals eddy stirring after a heavy precipitation event in the subtropical North Pacific. *Journal of Oceanography*, **75,** 37-50, https://doi.org/10.1007/s10872-018-0482-0

Ali, A., K. H. Christensen, Ø. Breivik, M. Malila, R. P. Raj, L. Bertino, E. P. Chassignet, and M. Bakhoday-Paskyabi, 2019: A comparison of Langmuir turbulence parameterizations and key wave effects in a numerical model of the North Atlantic and Arctic Oceans. *Ocean Modelling*, **137,** 76-97, https://doi.org/10.1016/j.ocemod.2019.02.005

Androsov, A., L. Nerger, R. Schnur, J. Schröter, A. Albertella, R. Rummel, R. Savcenko, W. Bosch, S. Skachko, and S. Danilov, 2019: On the assimilation of absolute geodetic dynamic topography in a global ocean model: impact on the deep ocean state. *Journal of Geodesy*, **93,** 141-157, https://doi.org/10.1007/s00190-018-1151-1

Androulidakis, Y., V. Kourafalou, M. Le Hénaff, H. Kang, T. Sutton, S. Chen, C. Hu, and N. Ntaganou, 2019: Offshore Spreading of Mississippi Waters: Pathways and Vertical Structure Under Eddy Influence. *Journal of Geophysical Research: Oceans*, **124,** 5952-5978, https://doi.org/10.1029/2018JC014661

Anutaliya, A., U. Send, J. Sprintall, J. L. McClean, M. Lankhorst, and J. Koelling, 2019: Mooring and Seafloor Pressure End Point Measurements at the Southern Entrance of the Solomon Sea: Subseasonal to Interannual Flow Variability. *Journal of Geophysical Research: Oceans*, **124,** 5085-5104, https://doi.org/10.1029/2019JC015157

Ardyna, M., L. Lacour, S. Sergi, F. d'Ovidio, J.-B. Sallée, M. Rembauville, S. Blain, A. Tagliabue, R. Schlitzer, C. Jeandel, K. R. Arrigo, and H. Claustre, 2019: Hydrothermal vents trigger massive phytoplankton blooms in the Southern Ocean. *Nature Communications*, **10,** 2451, https://doi.org/10.1038/s41467-019-09973-6

Artana, C., C. Provost, J.-M. Lellouche, M.-H. Rio, R. Ferrari, and N. Sennéchael, 2019: The Malvinas Current at the Confluence With the Brazil Current: Inferences From 25 Years of Mercator Ocean Reanalysis. *Journal of Geophysical Research: Oceans*, **124,** 7178-7200, https://doi.org/10.1029/2019JC015289

Arteaga, L. A., M. Pahlow, S. M. Bushinsky, and J. L. Sarmiento, 2019: Nutrient Controls on Export Production in the Southern Ocean. *Global Biogeochemical Cycles*, **33,** 942-956, https://doi.org/10.1029/2019GB006236

Asbjørnsen, H., M. Årthun, Ø. Skagseth, and T. Eldevik, 2019: Mechanisms of Ocean Heat Anomalies in the Norwegian Sea. *Journal of Geophysical Research: Oceans*, **124,** 2908-2923, https://doi.org/10.1029/2018JC014649

Baduru, B., B. Paul, D. S. Banerjee, S. Sanikommu, and A. Paul, 2019: Ensemble based regional ocean data assimilation system for the Indian Ocean: Implementation and evaluation. *Ocean Modelling*, **143,** 101470, https://doi.org/10.1016/j.ocemod.2019.101470

Baek, Y.-H. and I.-J. Moon, 2019: Estimation of Satellite-Based Upper-Ocean Temperature Profile in the Western North Pacific and Its Application to Tropical Cyclone Intensity Predictions. *Journal of Coastal Research*, **90,** 261-266, 6, https://doi.org/10.2112/SI90-032.1

Bao, S., H. Wang, R. Zhang, H. Yan, and J. Chen, 2019: Comparison of Satellite-Derived Sea Surface Salinity Products from SMOS, Aquarius, and SMAP. *Journal of Geophysical Research: Oceans*, **124,** 1932-1944, https://doi.org/10.1029/2019JC014937

Bao, S., R. Zhang, H. Wang, H. Yan, Y. Yu, and J. Chen, 2019: Salinity Profile Estimation in the Pacific Ocean from Satellite Surface Salinity Observations. *Journal of Atmospheric and Oceanic Technology*, **36,** 53-68, https://doi.org/10.1175/JTECH-D-17-0226.1

Barbieux, M., J. Uitz, B. Gentili, O. Pasqueron de Fommervault, A. Mignot, A. Poteau, C. Schmechtig, V. Taillandier, E. Leymarie, C. Penkerc'h, F. D'Ortenzio, H. Claustre, and A. Bricaud, 2019: Bio-optical characterization of subsurface chlorophyll maxima in the Mediterranean Sea from a Biogeochemical-Argo float database. *Biogeosciences*, **16,** 1321-1342, https://doi.org/10.5194/bg-16-1321-2019

Bebieva, Y. and K. Speer, 2019: The Regulation of Sea Ice Thickness by Double-Diffusive Processes in the Ross Gyre. *Journal of Geophysical Research: Oceans*, **124,** 7068-7081, https://doi.org/10.1029/2019JC015247

Bellacicco, M., M. Cornec, E. Organelli, R. J. W. Brewin, G. Neukermans, G. Volpe, M. Barbieux, A. Poteau, C. Schmechtig, F. D'Ortenzio, S. Marullo, H. Claustre, and J. Pitarch, 2019: Global Variability of Optical Backscattering by Non-algal particles From a Biogeochemical-Argo Data Set. *Geophysical Research Letters*, **46,** 9767-9776, https://doi.org/10.1029/2019GL084078

Bellacicco, M., V. Vellucci, M. Scardi, M. Barbieux, S. Marullo, and F. D'Ortenzio, 2019: Quantifying the Impact of Linear Regression Model in Deriving Bio-Optical Relationships: The Implications on Ocean Carbon Estimations. *Sensors*, **19,** 3032, https://doi.org/10.3390/s19133032

Belonenko, T. V. and A. V. Koldunov, 2019: Trends of Steric Sea Level Oscillations in the North Atlantic. *Izvestiya, Atmospheric and Oceanic Physics*, **55,** 1106-1113, https://doi.org/10.1134/S0001433819090081

Benway, H. M., L. Lorenzoni, A. E. White, B. Fiedler, N. M. Levine, D. P. Nicholson, M. D. DeGrandpre, H. M. Sosik, M. J. Church, T. D. O'Brien, M. Leinen, R. A. Weller, D. M. Karl, S. A. Henson, and R. M. Letelier, 2019: Ocean Time Series Observations of Changing Marine Ecosystems: An Era of Integration, Synthesis, and Societal Applications. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00393

Bhowmick, S. A., N. Agarwal, M. M. Ali, C. M. Kishtawal, and R. Sharma, 2019: Role of ocean heat content in boosting post-monsoon tropical storms over Bay of Bengal during La-Niña events. *Climate Dynamics*, **52,** 7225-7234, https://doi.org/10.1007/s00382-016-3428-5

Bif, M. B. and D. A. Hansell, 2019: Seasonality of Dissolved Organic Carbon in the Upper Northeast Pacific Ocean. *Global Biogeochemical Cycles*, **33,** 526-539, https://doi.org/10.1029/2018GB006152

Bif, M. B., L. Siqueira, and D. A. Hansell (2019), Warm Events Induce Loss of Resilience in Organic Carbon Production in the Northeast Pacific Ocean, *Glob. Biogeochem. Cycle*, *33*(9), 1174-1186, doi: https://doi.org/10.1029/2019GB006327.

Bilbao, R. A. F., J. M. Gregory, N. Bouttes, M. D. Palmer, and P. Stott, 2019: Attribution of ocean temperature change to anthropogenic and natural forcings using the temporal, vertical and geographical structure. *Climate Dynamics*, **53,** 5389-5413, https://doi.org/10.1007/s00382-019-04910-1

Biló, T. C. and W. E. Johns, 2019: Interior Pathways of Labrador Sea Water in the North

Atlantic From the Argo Perspective. *Geophysical Research Letters*, **46,** 3340-3348, https://doi.org/10.1029/2018GL081439

Bingham, F. M., 2019: Subfootprint Variability of Sea Surface Salinity Observed during the SPURS-1 and SPURS-2 Field Campaigns. *Remote Sensing*, **11,** 2689, https://doi.org/10.3390/rs11222689

Bingham, F. M., J. J. M. Busecke, and A. L. Gordon, 2019: Variability of the South Pacific Subtropical Surface Salinity Maximum. *Journal of Geophysical Research: Oceans*, **124,** 6050-6066, https://doi.org/10.1029/2018JC014598

Bisson, K. M., E. Boss, T. K. Westberry, and M. J. Behrenfeld (2019), Evaluating satellite estimates of particulate backscatter in the global open ocean using autonomous profiling floats, *Opt. Express*, *27*(21), 30191-30203, doi: https://doi.org/10.1364/OE.27.030191.

Bittig, H. C., T. L. Maurer, J. N. Plant, C. Schmechtig, A. P. S. Wong, H. Claustre, T. W. Trull, T. V. S. Udaya Bhaskar, E. Boss, G. Dall'Olmo, E. Organelli, A. Poteau, K. S. Johnson, C. Hanstein, E. Leymarie, S. Le Reste, S. C. Riser, A. R. Rupan, V. Taillandier, V. Thierry, and X. Xing, 2019: A BGC-Argo Guide: Planning, Deployment, Data Handling and Usage. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00502

Boretti, A., 2019: A realistic expectation of sea level rise in the Mexican Caribbean. *Journal of Ocean Engineering and Science*, **4,** 379-386, https://doi.org/10.1016/j.joes.2019.06.003

Borovikov, A., R. Cullather, R. Kovach, J. Marshak, G. Vernieres, Y. Vikhliaev, B. Zhao, and Z. Li, 2019: GEOS-5 seasonal forecast system. *Climate Dynamics*, **53,** 7335-7361, https://doi.org/10.1007/s00382-017-3835-2

Bourlès, B., M. Araujo, M. J. McPhaden, P. Brandt, G. R. Foltz, R. Lumpkin, H. Giordani, F. Hernandez, N. Lefèvre, P. Nobre, E. Campos, R. Saravanan, J. Trotte-Duhà, M. Dengler, J. Hahn, R. Hummels, J. F. Lübbecke, M. Rouault, L. Cotrim, A. Sutton, M. Jochum, and R. C. Perez, 2019: PIRATA: A Sustained Observing System for Tropical Atlantic Climate Research and Forecasting. *Earth and Space Science*, **6,** 577-616, https://doi.org/10.1029/2018EA000428

Boyd, P. W., H. Claustre, M. Levy, D. A. Siegel, and T. Weber, 2019: Multi-faceted particle pumps drive carbon sequestration in the ocean. *Nature*, **568,** 327-335, https://doi.org/10.1038/s41586-019-1098-2

Brakstad, A., K. Våge, L. Håvik, and G. W. K. Moore, 2019: Water Mass Transformation in the Greenland Sea during the Period 1986–2016. *Journal of Physical Oceanography*, **49,** 121-140, https://doi.org/10.1175/JPO-D-17-0273.1

Buckley, M. W., T. DelSole, M. S. Lozier, and L. Li, 2019: Predictability of North Atlantic Sea Surface Temperature and Upper-Ocean Heat Content. *Journal of Climate*, **32,** 3005-3023, https://doi.org/10.1175/JCLI-D-18-0509.1

Bushinsky, S. M., P. Landschützer, C. Rödenbeck, A. R. Gray, D. Baker, M. R. Mazloff, L. Resplandy, K. S. Johnson, and J. L. Sarmiento, 2019: Reassessing Southern Ocean Air-Sea CO2 Flux Estimates With the Addition of Biogeochemical Float Observations. *Global Biogeochemical Cycles*, **33,** 1370-1388, https://doi.org/10.1029/2019GB006176

Bushinsky, S. M., Y. Takeshita, and N. L. Williams, 2019: Observing Changes in Ocean

Carbonate Chemistry: Our Autonomous Future. *Current Climate Change Reports*, **5,** 207-220, https://doi.org/10.1007/s40641-019-00129-8

Bushuk, M., X. Yang, M. Winton, R. Msadek, M. Harrison, A. Rosati, and R. Gudgel, 2019: The Value of Sustained Ocean Observations for Sea Ice Predictions in the Barents Sea. *Journal of Climate*, **32,** 7017-7035, https://doi.org/10.1175/JCLI-D-19-0179.1

Busireddy, N. K. R., K. Ankur, K. K. Osuri, S. Sivareddy, and D. Niyogi, 2019: The response of ocean parameters to tropical cyclones in the Bay of Bengal. *Quarterly Journal of the Royal Meteorological Society*, **145,** 3320-3332, https://doi.org/10.1002/qj.3622

Caldwell, P. M., A. Mametjanov, Q. Tang, L. P. Van Roekel, J.-C. Golaz, W. Lin, D. C. Bader, N. D. Keen, Y. Feng, R. Jacob, M. E. Maltrud, A. F. Roberts, M. A. Taylor, M. Veneziani, H. Wang, J. D. Wolfe, K. Balaguru, P. Cameron-Smith, L. Dong, S. A. Klein, L. R. Leung, H.-Y. Li, Q. Li, X. Liu, R. B. Neale, M. Pinheiro, Y. Qian, P. A. Ullrich, S. Xie, Y. Yang, Y. Zhang, K. Zhang, and T. Zhou, 2019: The DOE E3SM Coupled Model Version 1: Description and Results at High Resolution. *Journal of Advances in Modeling Earth Systems*, **11,** 4095-4146, https://doi.org/10.1029/2019MS001870

Callieri, C., V. Slabakova, N. Dzhembekova, N. Slabakova, E. Peneva, P. J. Cabello-Yeves, A. Di Cesare, E. M. Eckert, R. Bertoni, G. Corno, M. M. Salcher, L. Kamburska, F. Bertoni, and S. Moncheva, 2019: The mesopelagic anoxic Black Sea as an unexpected habitat for Synechococcus challenges our understanding of global "deep red fluorescence". *The ISME Journal*, **13,** 1676-1687, https://doi.org/10.1038/s41396-019-0378-z

Campbell, E. C., E. A. Wilson, G. W. K. Moore, S. C. Riser, C. E. Brayton, M. R. Mazloff, and L. D. Talley, 2019: Antarctic offshore polynyas linked to Southern Hemisphere climate anomalies. *Nature*, **570,** 319-325, https://doi.org/10.1038/s41586-019-1294-0

Cancet, M., D. Griffin, M. Cahill, B. Chapron, J. Johannessen, and C. Donlon, 2019: Evaluation of GlobCurrent surface ocean current products: A case study in Australia. *Remote Sensing of Environment*, **220,** 71-93, https://doi.org/10.1016/j.rse.2018.10.029

Cao, G., T. Xu, Y. He, L. Wang, D. Wang, Z. Wei, and Y. Zhu, 2019: Seasonality in Intraseasonal Sea Surface Temperature Variability Along the Sumatra-Java Southern Coast. *Journal of Geophysical Research: Oceans*, **124,** 5138-5157, https://doi.org/10.1029/2018JC014853

Cao, K., W. Sun, J. Meng, and J. Zhang, 2019: Assessment and comparison of Sea Surface Salinity data derived from SMAP and SMOS based on Argo measurements. *Advances in Marine Science*, **37,** 574-587,

Caputi, L., Q. Carradec, D. Eveillard, A. Kirilovsky, E. Pelletier, J. J. Pierella Karlusich, F. Rocha Jimenez Vieira, E. Villar, S. Chaffron, S. Malviya, E. Scalco, S. G. Acinas, A. Alberti, J.-M. Aury, A.-S. Benoiston, A. Bertrand, T. Biard, L. Bittner, M. Boccara, J. R. Brum, C. Brunet, G. Busseni, A. Carratalà, H. Claustre, L. P. Coelho, S. Colin, S. D'Aniello, C. Da Silva, M. Del Core, H. Doré, S. Gasparini, F. Kokoszka, J.-L. Jamet, C. Lejeusne, C. Lepoivre, M. Lescot, G. Lima-Mendez, F. Lombard, J. Lukeš, N. Maillet, M.-A. Madoui, E. Martinez, M. G. Mazzocchi, M. B. Néou, J. Paz-Yepes, J. Poulain, S. Ramondenc, J.-B. Romagnan, S. Roux, D. Salvagio Manta, R. Sanges, S. Speich, M. Sprovieri, S. Sunagawa, V. Taillandier, A. Tanaka, L. Tirichine, C. Trottier, J. Uitz, A. Veluchamy, J. Veselá, F. Vincent, S. Yau, S. Kandels-Lewis, S. Searson, C. Dimier, M. Picheral, T. O. Coordinators, P. Bork, E. Boss, C. de Vargas, M. J. Follows, N. Grimsley, L. Guidi, P.

Hingamp, E. Karsenti, P. Sordino, L. Stemmann, M. B. Sullivan, A. Tagliabue, A. Zingone, L. Garczarek, F. d'Ortenzio, P. Testor, F. Not, M. R. d'Alcalà, P. Wincker, C. Bowler, and D. Iudicone, 2019: Community-Level Responses to Iron Availability in Open Ocean Plankton Ecosystems. *Global Biogeochemical Cycles*, **33,** 391-419, https://doi.org/10.1029/2018GB006022

Carton, J. A., S. G. Penny, and E. Kalnay, 2019: Temperature and Salinity Variability in the SODA3, ECCO4r3, and ORAS5 Ocean Reanalyses, 1993–2015. *Journal of Climate*, **32,** 2277-2293, https://doi.org/10.1175/JCLI-D-18-0605.1

Carvalho, J. P. S., F. B. Costa, D. Mignac, and C. A. S. Tanajura, 2019: Assessing the extended-range predictability of the ocean model HYCOM with the REMO ocean data assimilation system (RODAS) in the South Atlantic. *Journal of Operational Oceanography***,** 1-11, https://doi.org/10.1080/1755876X.2019.1606880

Castellanos, P., E. Olmedo, J. L. Pelegrí, A. Turiel, and E. J. D. Campos, 2019: Seasonal Variability of Retroflection Structures and Transports in the Atlantic Ocean as Inferred from Satellite-Derived Salinity Maps. *Remote Sensing*, **11,** 802, https://doi.org/10.3390/rs11070802

Castillo-Trujillo, A. C., D. Partridge, B. Powell, and P. Flament, 2019: Vorticity Balance off the South Shore of Oahu, Hawaii, Derived by High-Frequency Radio Doppler Current Observations. *Journal of Physical Oceanography*, **49,** 211-225, https://doi.org/10.1175/JPO-D-17-0270.1

Cavan, E. L., E. C. Laurenceau-Cornec, M. Bressac, and P. W. Boyd, 2019: Exploring the ecology of the mesopelagic biological pump. *Progress in Oceanography*, **176,** 102125, https://doi.org/10.1016/j.pocean.2019.102125

Cazenave, A., B. Hamlington, M. Horwath, V. R. Barletta, J. Benveniste, D. Chambers, P. Döll, A. E. Hogg, J. F. Legeais, M. Merrifield, B. Meyssignac, G. Mitchum, S. Nerem, R. Pail, H. Palanisamy, F. Paul, K. von Schuckmann, and P. Thompson, 2019: Observational Requirements for Long-Term Monitoring of the Global Mean Sea Level and Its Components Over the Altimetry Era. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00582

Cedarholm, E. R., I. I. Rypina, A. M. Macdonald, and S. Yoshida, 2019: Investigating Subsurface Pathways of Fukushima Cesium in the Northwest Pacific. *Geophysical Research Letters*, **46,** 6821-6829, https://doi.org/10.1029/2019GL082500

Centurioni, L. R., J. Turton, R. Lumpkin, L. Braasch, G. Brassington, Y. Chao, E. Charpentier, Z. Chen, G. Corlett, K. Dohan, C. Donlon, C. Gallage, V. Hormann, A. Ignatov, B. Ingleby, R. Jensen, B. A. Kelly-Gerreyn, I. M. Koszalka, X. Lin, E. Lindstrom, N. Maximenko, C. J. Merchant, P. Minnett, A. O'Carroll, T. Paluszkiewicz, P. Poli, P.-M. Poulain, G. Reverdin, X. Sun, V. Swail, S. Thurston, L. Wu, L. Yu, B. Wang, and D. Zhang, 2019: Global in situ Observations of Essential Climate and Ocean Variables at the Air–Sea Interface. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00419

Cerovečki, I., M. C. Hendershott, and E. Yulaeva, 2019: Strong North Pacific Subtropical Mode Water Volume and Density Decrease in Year 1999. *Journal of Geophysical Research: Oceans*, **124,** 6617-6631, https://doi.org/10.1029/2019JC014956

Cerovečki, I., A. J. S. Meijers, M. R. Mazloff, S. T. Gille, V. M. Tamsitt, and P. R. Holland, 2019: The Effects of Enhanced Sea Ice Export from the Ross Sea on Recent Cooling and

Freshening of the Southeast Pacific. *Journal of Climate*, **32,** 2013-2035, https://doi.org/10.1175/JCLI-D-18-0205.1

Chafik, L. and T. Rossby, 2019: Volume, Heat, and Freshwater Divergences in the Subpolar North Atlantic Suggest the Nordic Seas as Key to the State of the Meridional Overturning Circulation. *Geophysical Research Letters*, **46,** 4799-4808, https://doi.org/10.1029/2019GL082110

Chacko, N. (2019), Differential chlorophyll blooms induced by tropical cyclones and their relation to cyclone characteristics and ocean pre-conditions in the Indian Ocean, *Journal of Earth System Science*, *128*(7), 177, doi: https://doi.org/10.1007/s12040-019-1207-5.

Chakraborty, K., N. Kumar, M. S. Girishkumar, G. V. M. Gupta, J. Ghosh, T. V. S. Udaya Bhaskar, and V. P. Thangaprakash, 2019: Assessment of the impact of spatial resolution on ROMS simulated upper-ocean biogeochemistry of the Arabian Sea from an operational perspective. *Journal of Operational Oceanography***,** 1-27, https://doi.org/10.1080/1755876X.2019.1588697

Chakraborty, K., A. A. Lotliker, S. Majumder, A. Samanta, S. K. Baliarsingh, J. Ghosh, P. P. Madhuri, A. Saravanakumar, N. S. Sarma, B. S. Rao, and P. Shanmugam, 2019: Assessment of model-simulated upper ocean biogeochemical dynamics of the Bay of Bengal. *Journal of Sea Research*, **146,** 63-76, https://doi.org/10.1016/j.seares.2019.01.001

Chang, L., H. Tang, Q. Wang, and W. Sun, 2019: Global thermosteric sea level change contributed by the deep ocean below 2000 m estimated by Argo and CTD data. *Earth and Planetary Science Letters*, **524,** 115727, https://doi.org/10.1016/j.epsl.2019.115727

Chatterjee, A., B. P. Kumar, S. Prakash, and P. Singh, 2019: Annihilation of the Somali upwelling system during summer monsoon. *Scientific Reports*, **9,** 7598, https://doi.org/10.1038/s41598-019-44099-1

Chaudhuri, D., D. Sengupta, E. D'Asaro, R. Venkatesan, and M. Ravichandran, 2019: Response of the Salinity-Stratified Bay of Bengal to Cyclone Phailin. *Journal of Physical Oceanography*, **49,** 1121-1140, https://doi.org/10.1175/JPO-D-18-0051.1

Chen, B., H. Qin, G. Chen, and H. Xue, 2019: Ocean Salinity as a Precursor of Summer Rainfall over the East Asian Monsoon Region. *Journal of Climate*, **32,** 5659-5676, https://doi.org/10.1175/JCLI-D-18-0756.1

Chen, C., Y. Gao, F. Yan, T. Jin, and Z. Zhou, 2019: Delving into the Two-Dimensional Structure of a Cold Eddy East of Taiwan and Its Impact on Acoustic Propagation. *Acoustics Australia*, **47,** 185-193, https://doi.org/10.1007/s40857-019-00160-7

Chen, C., T. Jin, and Z. Zhou, 2019: Effect of eddy on acoustic propagation from the surface duct perspective. *Applied Acoustics*, **150,** 190-197, https://doi.org/10.1016/j.apacoust.2019.02.019

Chen, C., K. Yang, and Y. Ma, 2019: Sensitivity of sound speed fluctuation on acoustic arrival delay of middle range in deep water. *Applied Acoustics*, **149,** 68-73, https://doi.org/10.1016/j.apacoust.2019.01.020

Chen, G. and D. Geng, 2019: A "mirror layer" of temperature and salinity in the ocean. *Climate Dynamics*, **52,** 1-13, https://doi.org/10.1007/s00382-018-4495-6

Chen, J., B. Tapley, K.-W. Seo, C. Wilson, and J. Ries, 2019: Improved Quantification of Global Mean Ocean Mass Change Using GRACE Satellite Gravimetry Measurements. *Geophysical Research Letters*, **46,** 13984-13991, https://doi.org/10.1029/2019GL085519

Chen, S., C. Xue, T. Zhang, L. Hu, G. Chen, and J. Tang, 2019: Analysis of the Optimal Wavelength for Oceanographic Lidar at the Global Scale Based on the Inherent Optical Properties of Water. *Remote Sensing*, **11,** 2705, https://doi.org/10.3390/rs11222705

Chen, X., Z. Liu, H. Wang, D. Xu, and L. Wang, 2019: Significant salinity increase in subsurface waters of the South China Sea during 2016–2017. *Acta Oceanologica Sinica*, **38,** 51-61, https://doi.org/10.1007/s13131-019-1498-z

Cheng, L., J. Abraham, Z. Hausfather, and K. E. Trenberth, 2019: How fast are the oceans warming? *Science*, **363,** 128-129, http://dx.doi.org/10.1126/science.aav7619

Cheng, L., K. E. Trenberth, J. T. Fasullo, M. Mayer, M. Balmaseda, and J. Zhu, 2019: Evolution of Ocean Heat Content Related to ENSO. *Journal of Climate*, **32,** 3529-3556, https://doi.org/10.1175/JCLI-D-18-0607.1

Cheng, L., J. Zhu, J. Abraham, K. E. Trenberth, J. T. Fasullo, B. Zhang, F. Yu, L. Wan, X. Chen, and X. Song, 2019: 2018 Continues Record Global Ocean Warming. *Advances in Atmospheric Sciences*, **36,** 249-252, https://doi.org/10.1007/s00376-019-8276-x

Cheon, W. G. and A. L. Gordon, 2019: Open-ocean polynyas and deep convection in the Southern Ocean. *Scientific Reports*, **9,** 6935, https://doi.org/10.1038/s41598-019-43466-2

Chi, J., Y. Du, Y. Zhang, X. Nie, P. Shi, and T. Qu, 2019: A new perspective of the 2014/15 failed El Niño as seen from ocean salinity. *Scientific Reports*, **9,** 2720, https://doi.org/10.1038/s41598-019-38743-z

Chow, C. H., W. Cheah, J.-H. Tai, and S.-F. Liu, 2019: Anomalous wind triggered the largest phytoplankton bloom in the oligotrophic North Pacific Subtropical Gyre. *Scientific Reports*, **9,** 15550, https://doi.org/10.1038/s41598-019-51989-x

Ciani, D., R. Santoleri, G. L. Liberti, C. Prigent, C. Donlon, and B. Buongiorno Nardelli, 2019: Copernicus Imaging Microwave Radiometer (CIMR) Benefits for the Copernicus Level 4 Sea-Surface Salinity Processing Chain. *Remote Sensing*, **11,** 1818, https://doi.org/10.3390/rs11151818

Ciappa, A., 2019: A study on causes and recurrence of the Mid-Mediterranean Jet from 2003 to 2015 using satellite thermal and altimetry data and CTD casts. *Journal of Operational Oceanography***,** 1-11, https://doi.org/10.1080/1755876X.2019.1632617

Ciavatta, S., S. Kay, R. J. W. Brewin, R. Cox, A. Di Cicco, F. Nencioli, L. Polimene, M. Sammartino, R. Santoleri, J. Skákala, and M. Tsapakis, 2019: Ecoregions in the Mediterranean Sea Through the Reanalysis of Phytoplankton Functional Types and Carbon Fluxes. *Journal of Geophysical Research: Oceans*, **124,** 6737-6759, https://doi.org/10.1029/2019JC015128

Clavel-Henry, M., J. Solé, M. Á. Ahumada-Sempoal, N. Bahamon, F. Briton, G. Rotllant, and J. B. Company, 2019: Influence of the summer deep-sea circulations on passive drifts among the submarine canyons in the northwestern Mediterranean Sea. *Ocean Sci.*, **15,** 1745-1759, https://doi.org/10.5194/os-15-1745-2019

Closset, I., D. Cardinal, T. W. Trull, and F. Fripiat, 2019: New Insights Into Processes Controlling the δ30Si of Sinking Diatoms: A Seasonally Resolved Box Model Approach. *Global Biogeochemical Cycles*, **33,** 957-970, https://doi.org/10.1029/2018GB006115

Cobb, A. and A. Czaja, 2019: Mesoscale Signature of the North Atlantic Oscillation and Its Interaction With the Ocean. *Geophysical Research Letters*, **46,** 5575-5581, https://doi.org/10.1029/2018GL080744

Colin de Verdière, A., T. Meunier, and M. Ollitrault, 2019: Meridional Overturning and Heat Transport From Argo Floats Displacements and the Planetary Geostrophic Method (PGM): Application to the subpolar North Atlantic. *Journal of Geophysical Research: Oceans*, **124,** 6270-6285, https://doi.org/10.1029/2018JC014565

Conchubhair, D. Ó., D. Fitzhenry, A. Lusher, A. L. King, T. van Emmerik, L. Lebreton, C. Ricaurte-Villota, L. Espinosa, and E. O'Rourke, 2019: Joint effort among research infrastructures to quantify the impact of plastic debris in the ocean. *Environmental Research Letters*, **14,** 065001, http://dx.doi.org/10.1088/1748-9326/ab17ed

Cossarini, G., L. Mariotti, L. Feudale, A. Mignot, S. Salon, V. Taillandier, A. Teruzzi, and F. D'Ortenzio, 2019: Towards operational 3D-Var assimilation of chlorophyll Biogeochemical-Argo float data into a biogeochemical model of the Mediterranean Sea. *Ocean Modelling*, **133,** 112-128, https://doi.org/10.1016/j.ocemod.2018.11.005

Cyriac, A., M. J. McPhaden, H. E. Phillips, N. L. Bindoff, and M. Feng, 2019: Seasonal Evolution of the Surface Layer Heat Balance in the Eastern Subtropical Indian Ocean. *Journal of Geophysical Research: Oceans*, **124,** 6459-6477, https://doi.org/10.1029/2018JC014559

Da, N. D., M. Herrmann, R. Morrow, F. Niño, N. M. Huan, and N. Q. Trinh, 2019: Contributions of Wind, Ocean Intrinsic Variability, and ENSO to the Interannual Variability of the South Vietnam Upwelling: A Modeling Study. *Journal of Geophysical Research: Oceans*, **124,** 6545-6574, https://doi.org/10.1029/2018JC014647

D'Addezio, J. M., S. Smith, G. A. Jacobs, R. W. Helber, C. Rowley, I. Souopgui, and M. J. Carrier, 2019: Quantifying wavelengths constrained by simulated SWOT observations in a submesoscale resolving ocean analysis/forecasting system. *Ocean Modelling*, **135,** 40-55, https://doi.org/10.1016/j.ocemod.2019.02.001

Dagestad, K.-F. and J. Röhrs, 2019: Prediction of ocean surface trajectories using satellite derived vs. modeled ocean currents. *Remote Sensing of Environment*, **223,** 130-142, https://doi.org/10.1016/j.rse.2019.01.001

Davidson, F., A. Alvera-Azcárate, A. Barth, G. B. Brassington, E. P. Chassignet, E. Clementi, P. De Mey-Frémaux, P. Divakaran, C. Harris, F. Hernandez, P. Hogan, L. R. Hole, J. Holt, G. Liu, Y. Lu, P. Lorente, J. Maksymczuk, M. Martin, A. Mehra, A. Melsom, H. Mo, A. Moore, P. Oddo, A. Pascual, A.-C. Pequignet, V. Kourafalou, A. Ryan, J. Siddorn, G. Smith, D. Spindler, T. Spindler, E. V. Stanev, J. Staneva, A. Storto, C. Tanajura, P. N. Vinayachandran, L. Wan, H. Wang, Y. Zhang, X. Zhu, and Z. Zu, 2019: Synergies in Operational Oceanography: The Intrinsic Need for Sustained Ocean Observations. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00450

de Marez, C., P. L'Hégaret, M. Morvan, and X. Carton, 2019: On the 3D structure of eddies in

the Arabian Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **150,** 103057, https://doi.org/10.1016/j.dsr.2019.06.003

de Marez, C., P. L'Hégaret, M. Morvan, and X. Carton, 2019: On the 3D structure of eddies in the Arabian Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **150,** 103057, https://doi.org/10.1016/j.dsr.2019.06.003

De Mey-Frémaux, P., N. Ayoub, A. Barth, R. Brewin, G. Charria, F. Campuzano, S. Ciavatta, M. Cirano, C. A. Edwards, I. Federico, S. Gao, I. Garcia Hermosa, M. Garcia Sotillo, H. Hewitt, L. R. Hole, J. Holt, R. King, V. Kourafalou, Y. Lu, B. Mourre, A. Pascual, J. Staneva, E. V. Stanev, H. Wang, and X. Zhu, 2019: Model-Observations Synergy in the Coastal Ocean. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00436

de Souza, M. M., M. Mathis, and T. Pohlmann, 2019: Driving mechanisms of the variability and long-term trend of the Brazil–Malvinas confluence during the 21st century. *Climate Dynamics*, **53,** 6453-6468, https://doi.org/10.1007/s00382-019-04942-7

Delcroix, T., A. Chaigneau, D. Soviadan, J. Boutin, and C. Pegliasco, 2019: Eddy-Induced Salinity Changes in the Tropical Pacific. *Journal of Geophysical Research: Oceans*, **124,** 374-389, https://doi.org/10.1029/2018JC014394

deYoung, B., M. Visbeck, M. C. de Araujo Filho, M. O. N. Baringer, C. Black, E. Buch, G. Canonico, P. Coelho, J. T. Duha, M. Edwards, A. Fischer, J.-S. Fritz, S. Ketelhake, J.-H. Muelbert, P. Monteiro, G. Nolan, E. O'Rourke, M. Ott, P. Y. Le Traon, S. Pouliquen, I. Sousa-Pinto, T. Tanhua, F. V. Velho, and Z. Willis, 2019: An Integrated All-Atlantic Ocean Observing System in 2030. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00428

Diansky, N. A. and V. A. Bagatinsky, 2019: Thermohaline Structure of Waters in the North Atlantic in Different Phases of the Atlantic Multidecadal Oscillation. *Izvestiya, Atmospheric and Oceanic Physics*, **55,** 628-639, https://doi.org/10.1134/S0001433819060021

Dilmahamod, A. F., P. Penven, B. Aguiar-González, C. J. C. Reason, and J. C. Hermes, 2019: A New Definition of the South-East Madagascar Bloom and Analysis of Its Variability. *Journal of Geophysical Research: Oceans*, **124,** 1717-1735, https://doi.org/10.1029/2018JC014582

Dinnat, E. P., D. M. Le Vine, J. Boutin, T. Meissner, and G. Lagerloef, 2019: Remote Sensing of Sea Surface Salinity: Comparison of Satellite and In Situ Observations and Impact of Retrieval Parameters. *Remote Sensing*, **11,** 750, https://dx.doi.org/10.3390/rs11070750

Dodd, E. M. A., K. L. Veal, D. J. Ghent, M. R. van den Broeke, and J. J. Remedios, 2019: Toward a Combined Surface Temperature Data Set for the Arctic From the Along-Track Scanning Radiometers. *Journal of Geophysical Research: Atmospheres*, **124,** 6718-6736, https://doi.org/10.1029/2019JD030262

Doddridge, E. W., J. Marshall, H. Song, J.-M. Campin, M. Kelley, and L. Nazarenko, 2019: Eddy Compensation Dampens Southern Ocean Sea Surface Temperature Response to Westerly Wind Trends. *Geophysical Research Letters*, **46,** 4365-4377, https://doi.org/10.1029/2019GL082758

Domingues, R., A. Kuwano-Yoshida, P. Chardon-Maldonado, R. E. Todd, G. Halliwell, H.-S.

Kim, I.-I. Lin, K. Sato, T. Narazaki, L. K. Shay, T. Miles, S. Glenn, J. A. Zhang, S. R. Jayne, L. Centurioni, M. Le Hénaff, G. R. Foltz, F. Bringas, M. M. Ali, S. F. DiMarco, S. Hosoda, T. Fukuoka, B. LaCour, A. Mehra, E. R. Sanabia, J. R. Gyakum, J. Dong, J. A. Knaff, and G. Goni, 2019: Ocean Observations in Support of Studies and Forecasts of Tropical and Extratropical Cyclones. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00446

Dossa, A. N., C. Y. Da-Allada, G. Herbert, and B. Bourlès, 2019: Seasonal cycle of the salinity barrier layer revealed in the northeastern Gulf of Guinea. *African Journal of Marine Science*, **41,** 163-175, https://doi.org/10.2989/1814232X.2019.1616612

Drushka, K., W. E. Asher, J. Sprintall, S. T. Gille, and C. Hoang, 2019: Global Patterns of Submesoscale Surface Salinity Variability. *Journal of Physical Oceanography*, **49,** 1669-1685, https://doi.org/10.1175/JPO-D-19-0018.1

Du, Y., Y. Zhang, and J. Shi, 2019: Relationship between sea surface salinity and ocean circulation and climate change. *Science China Earth Sciences*, **62,** 771-782, https://doi.org/10.1007/s11430-018-9276-6

Dukhovskoy, D. S., I. Yashayaev, A. Proshutinsky, J. L. Bamber, I. L. Bashmachnikov, E. P. Chassignet, C. M. Lee, and A. J. Tedstone, 2019: Role of Greenland Freshwater Anomaly in the Recent Freshening of the Subpolar North Atlantic. *Journal of Geophysical Research: Oceans*, **124,** 3333-3360, https://doi.org/10.1029/2018JC014686

Dushaw, B. D., 2019: Ocean Acoustic Tomography in the North Atlantic. *Journal of Atmospheric and Oceanic Technology*, **36,** 183-202, https://doi.org/10.1175/JTECH-D-18-0082.1

Dymova, O. A., N. A. Miklashevskaya, and N. V. Markova, 2019: Modeling the Black Sea Deep Circulation with ERA-Interim Forcing in Summer 2013. Cham, Springer International Publishing, 33-40, http://dx.doi.org/10.1007/978-3-030-11533-3_4

Eden, C., F. Pollmann, and D. Olbers, 2019: Numerical Evaluation of Energy Transfers in Internal Gravity Wave Spectra of the Ocean. *Journal of Physical Oceanography*, **49,** 737-749, https://doi.org/10.1175/JPO-D-18-0075.1

Emerson, S., B. Yang, M. White, and M. Cronin, 2019: Air-Sea Gas Transfer: Determining Bubble Fluxes With In Situ N2 Observations. *Journal of Geophysical Research: Oceans*, **124,** 2716-2727, https://doi.org/10.1029/2018JC014786

Etourneau, J., G. Sgubin, X. Crosta, D. Swingedouw, V. Willmott, L. Barbara, M.-N. Houssais, S. Schouten, J. S. S. Damsté, H. Goosse, C. Escutia, J. Crespin, G. Massé, and J.-H. Kim, 2019: Ocean temperature impact on ice shelf extent in the eastern Antarctic Peninsula. *Nature Communications*, **10,** 304, https://doi.org/10.1038/s41467-018-08195-6

Fan, M., H. Wang, W. Zhang, G. Han, and P. Wang, 2019: Evaluation of the China Ocean Reanalysis (CORA) in the South China Sea. *Journal of Oceanology and Limnology*, https://doi.org/10.1007/s00343-019-9146-1

Fennel, K., M. Gehlen, P. Brasseur, C. W. Brown, S. Ciavatta, G. Cossarini, A. Crise, C. A. Edwards, D. Ford, M. A. M. Friedrichs, M. Gregoire, E. Jones, H.-C. Kim, J. Lamouroux, R. Murtugudde, C. Perruche, t. G. O. M. E. A. , and P. T. Team, 2019: Advancing Marine Biogeochemical and Ecosystem Reanalyses and Forecasts as Tools for

Monitoring and Managing Ecosystem Health. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00089

Fernández-Castro, B., M. Álvarez, M. Nieto-Cid, P. Zunino, H. Mercier, and X. A. Álvarez-Salgado, 2019: Dissolved Organic Nitrogen Production and Export by Meridional Overturning in the Eastern Subpolar North Atlantic. *Geophysical Research Letters*, **46,** 3832-3842, https://doi.org/10.1029/2018GL080284

Ferrarin, C., S. Davolio, D. Bellafiore, M. Ghezzo, F. Maicu, W. Mc Kiver, O. Drofa, G. Umgiesser, M. Bajo, F. De Pascalis, P. Malguzzi, L. Zaggia, G. Lorenzetti, and G. Manfè, 2019: Cross-scale operational oceanography in the Adriatic Sea. *Journal of Operational Oceanography***,** 1-18, https://doi.org/10.1080/1755876X.2019.1576275

Ferreira, M. B., O. T. Sato, P. S. Polito, and P. S. Bernardo, 2019: Examining the Subtropical Mode Water in the Southwestern Atlantic From in Situ Observations. *Journal of Geophysical Research: Oceans*, **124,** 2513-2526, https://doi.org/10.1029/2018JC014762

Feucher, C., Y. Garcia-Quintana, I. Yashayaev, X. Hu, and P. G. Myers, 2019: Labrador Sea Water Formation Rate and Its Impact on the Local Meridional Overturning Circulation. *Journal of Geophysical Research: Oceans*, **124,** 5654-5670, https://doi.org/10.1029/2019JC015065

Feucher, C., G. Maze, and H. Mercier, 2019: Subtropical Mode Water and Permanent Pycnocline Properties in the World Ocean. *Journal of Geophysical Research: Oceans*, **124,** 1139-1154, https://doi.org/10.1029/2018JC014526

Fiedler, E. K., C. Mao, S. A. Good, J. Waters, and M. J. Martin, 2019: Improvements to feature resolution in the OSTIA sea surface temperature analysis using the NEMOVAR assimilation scheme. *Quarterly Journal of the Royal Meteorological Society*, **145,** 3609-3625, https://doi.org/10.1002/qj.3644

Fiedler, E. K., A. McLaren, V. Banzon, B. Brasnett, S. Ishizaki, J. Kennedy, N. Rayner, J. Roberts-Jones, G. Corlett, C. J. Merchant, and C. Donlon, 2019: Intercomparison of long-term sea surface temperature analyses using the GHRSST Multi-Product Ensemble (GMPE) system. *Remote Sensing of Environment*, **222,** 18-33, https://doi.org/10.1016/j.rse.2018.12.015

Foltz, G. R., P. Brandt, I. Richter, B. Rodríguez-Fonseca, F. Hernandez, M. Dengler, R. R. Rodrigues, J. O. Schmidt, L. Yu, N. Lefevre, L. C. Da Cunha, M. J. McPhaden, M. Araujo, J. Karstensen, J. Hahn, M. Martín-Rey, C. M. Patricola, P. Poli, P. Zuidema, R. Hummels, R. C. Perez, V. Hatje, J. F. Lübbecke, I. Polo, R. Lumpkin, B. Bourlès, F. E. Asuquo, P. Lehodey, A. Conchon, P. Chang, P. Dandin, C. Schmid, A. Sutton, H. Giordani, Y. Xue, S. Illig, T. Losada, S. A. Grodsky, F. Gasparin, T. Lee, E. Mohino, P. Nobre, R. Wanninkhof, N. Keenlyside, V. Garcon, E. Sánchez-Gómez, H. C. Nnamchi, M. Drévillon, A. Storto, E. Remy, A. Lazar, S. Speich, M. Goes, T. Dorrington, W. E. Johns, J. N. Moum, C. Robinson, C. Perruche, R. B. de Souza, A. T. Gaye, J. López-Parages, P.-A. Monerie, P. Castellanos, N. U. Benson, M. N. Hounkonnou, J. T. Duhá, R. Laxenaire, and N. Reul, 2019: The Tropical Atlantic Observing System. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00206

Fournier, S., T. Lee, W. Tang, M. Steele, and E. Olmedo, 2019: Evaluation and Intercomparison of SMOS, Aquarius, and SMAP Sea Surface Salinity Products in the

Arctic Ocean. *Remote Sensing*, **11,** 3043, https://doi.org/10.3390/rs11243043
Fox-Kemper, B., A. Adcroft, C. W. Böning, E. P. Chassignet, E. Curchitser, G. Danabasoglu, C. Eden, M. H. England, R. Gerdes, R. J. Greatbatch, S. M. Griffies, R. W. Hallberg, E. Hanert, P. Heimbach, H. T. Hewitt, C. N. Hill, Y. Komuro, S. Legg, J. Le Sommer, S. Masina, S. J. Marsland, S. G. Penny, F. Qiao, T. D. Ringler, A. M. Treguier, H. Tsujino, P. Uotila, and S. G. Yeager, 2019: Challenges and Prospects in Ocean Circulation Models. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00065
Frajka-Williams, E., I. J. Ansorge, J. Baehr, H. L. Bryden, M. P. Chidichimo, S. A. Cunningham, G. Danabasoglu, S. Dong, K. A. Donohue, S. Elipot, P. Heimbach, N. P. Holliday, R. Hummels, L. C. Jackson, J. Karstensen, M. Lankhorst, I. A. Le Bras, M. S. Lozier, E. L. McDonagh, C. S. Meinen, H. Mercier, B. I. Moat, R. C. Perez, C. G. Piecuch, M. Rhein, M. A. Srokosz, K. E. Trenberth, S. Bacon, G. Forget, G. Goni, D. Kieke, J. Koelling, T. Lamont, G. D. McCarthy, C. Mertens, U. Send, D. A. Smeed, S. Speich, M. van den Berg, D. Volkov, and C. Wilson, 2019: Atlantic Meridional Overturning Circulation: Observed Transport and Variability. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00260
Freeland, H. and T. Ross, 2019: 'The Blob' - or, how unusual were ocean temperatures in the Northeast Pacific during 2014-2018? *Deep Sea Research Part I: Oceanographic Research Papers*, **150,** 103061, https://doi.org/10.1016/j.dsr.2019.06.007
Freeman, N. M., D. R. Munro, J. Sprintall, M. R. Mazloff, S. Purkey, I. Rosso, C. A. DeRanek, and C. Sweeney, 2019: The Observed Seasonal Cycle of Macronutrients in Drake Passage: Relationship to Fronts and Utility as a Model Metric. *Journal of Geophysical Research: Oceans*, **124,** 4763-4783, https://doi.org/10.1029/2019JC015052
Freilich, M. A. and A. Mahadevan, 2019: Decomposition of Vertical Velocity for Nutrient Transport in the Upper Ocean. *Journal of Physical Oceanography*, **49,** 1561-1575, https://doi.org/10.1175/JPO-D-19-0002.1
Fröb, F., A. Olsen, M. Becker, L. Chafik, T. Johannessen, G. Reverdin, and A. Omar, 2019: Wintertime fCO2 Variability in the Subpolar North Atlantic Since 2004. *Geophysical Research Letters*, **46,** 1580-1590, https://doi.org/10.1029/2018GL080554
Fu, Y., C. Wang, P. Brandt, and R. J. Greatbatch, 2019: Interannual Variability of Antarctic Intermediate Water in the Tropical North Atlantic. *Journal of Geophysical Research: Oceans*, **124,** 4044-4057, https://doi.org/10.1029/2018JC014878
Fuentes-Franco, R. and T. Koenigk, 2019: Sensitivity of the Arctic freshwater content and transport to model resolution. *Climate Dynamics*, **53,** 1765-1781, https://doi.org/10.1007/s00382-019-04735-y
Fujii, Y., E. Rémy, H. Zuo, P. Oke, G. Halliwell, F. Gasparin, M. Benkiran, N. Loose, J. Cummings, J. Xie, Y. Xue, S. Masuda, G. C. Smith, M. Balmaseda, C. Germineaud, D. J. Lea, G. Larnicol, L. Bertino, A. Bonaduce, P. Brasseur, C. Donlon, P. Heimbach, Y. Kim, V. Kourafalou, P.-Y. Le Traon, M. Martin, S. Paturi, B. Tranchant, and N. Usui, 2019: Observing System Evaluation Based on Ocean Data Assimilation and Prediction Systems: On-Going Challenges and a Future Vision for Designing and Supporting Ocean Observational Networks. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00417
Fulton, E. A., A. E. Punt, C. M. Dichmont, C. J. Harvey, and R. Gorton, 2019: Ecosystems say

good management pays off. *Fish and Fisheries*, **20,** 66-96, https://doi.org/10.1111/faf.12324
Furue, R., 2019: The three-dimensional structure of the Leeuwin Current System in density coordinates in an eddy-resolving OGCM. *Ocean Modelling*, **138,** 36-50, https://doi.org/10.1016/j.ocemod.2019.03.001
Futch, V. and A. Allen, 2019: Search and Rescue Applications: On the Need to Improve Ocean Observing Data Systems in Offshore or Remote Locations. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00301
Gao, M., P. Sherman, S. Song, Y. Yu, Z. Wu, and M. B. McElroy, 2019: Seasonal prediction of Indian wintertime aerosol pollution using the ocean memory effect. *Science Advances*, **5,** eaav4157, http://dx.doi.org/10.1126/sciadv.aav4157
Garcia-Eidell, C., J. C. Comiso, E. Dinnat, and L. Brucker, 2019: Sea Surface Salinity Distribution in the Southern Ocean as Observed From Space. *Journal of Geophysical Research: Oceans*, **124,** 3186-3205, https://doi.org/10.1029/2018JC014510
Garcia-Quintana, Y., P. Courtois, X. Hu, C. Pennelly, D. Kieke, and P. G. Myers, 2019: Sensitivity of Labrador Sea Water Formation to Changes in Model Resolution, Atmospheric Forcing, and Freshwater Input. *Journal of Geophysical Research: Oceans*, **124,** 2126-2152, https://doi.org/10.1029/2018JC014459
Gasparin, F., S. Guinehut, C. Mao, I. Mirouze, E. Rémy, R. R. King, M. Hamon, R. Reid, A. Storto, P.-Y. Le Traon, M. J. Martin, and S. Masina, 2019: Requirements for an Integrated in situ Atlantic Ocean Observing System From Coordinated Observing System Simulation Experiments. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00083
Gaube, P., D. J. McGillicuddy Jr., and A. J. Moulin, 2019: Mesoscale Eddies Modulate Mixed Layer Depth Globally. *Geophysical Research Letters*, **46,** 1505-1512, https://doi.org/10.1029/2018GL080006
Geng, M., H. Song, Y. Guan, and Y. Bai, 2019: Analyzing amplitudes of internal solitary waves in the northern South China Sea by use of seismic oceanography data. *Deep Sea Research Part I: Oceanographic Research Papers*, **146,** 1-10, https://doi.org/10.1016/j.dsr.2019.02.005
Germineaud, C., J.-M. Brankart, and P. Brasseur, 2019: An Ensemble-Based Probabilistic Score Approach to Compare Observation Scenarios: An Application to Biogeochemical-Argo Deployments. *Journal of Atmospheric and Oceanic Technology*, **36,** 2307-2326, https://doi.org/10.1175/JTECH-D-19-0002.1
Girishkumar, M. S., V. P. Thangaprakash, T. V. S. Udaya Bhaskar, K. Suprit, N. Sureshkumar, S. K. Baliarsingh, J. Jofia, V. Pant, S. Vishnu, G. George, K. R. Abhilash, and S. Shivaprasad, 2019: Quantifying Tropical Cyclone's Effect on the Biogeochemical Processes Using Profiling Float Observations in the Bay of Bengal. *Journal of Geophysical Research: Oceans*, **124,** 1945-1963, https://doi.org/10.1029/2017JC013629
Gittings, J. A., D. E. Raitsos, M. Kheireddine, M.-F. Racault, H. Claustre, and I. Hoteit, 2019: Evaluating tropical phytoplankton phenology metrics using contemporary tools. *Scientific Reports*, **9,** 674, https://doi.org/10.1038/s41598-018-37370-4
Goes, M., M. Cirano, M. M. Mata, and S. Majumder, 2019: Long-Term Monitoring of the

Brazil Current Transport at 22°S From XBT and Altimetry Data: Seasonal, Interannual, and Extreme Variability. *Journal of Geophysical Research: Oceans*, **124,** 3645-3663, https://doi.org/10.1029/2018JC014809

Gonaduwage, L. P., G. Chen, M. J. McPhaden, T. Priyadarshana, K. Huang, and D. Wang, 2019: Meridional and Zonal Eddy-Induced Heat and Salt Transport in the Bay of Bengal and Their Seasonal Modulation. *Journal of Geophysical Research: Oceans*, **124,** 8079-8101, https://doi.org/10.1029/2019JC015124

Goni, G. J., J. Sprintall, F. Bringas, L. Cheng, M. Cirano, S. Dong, R. Domingues, M. Goes, H. Lopez, R. Morrow, U. Rivero, T. Rossby, R. E. Todd, J. Trinanes, N. Zilberman, M. Baringer, T. Boyer, R. Cowley, C. M. Domingues, K. Hutchinson, M. Kramp, M. M. Mata, F. Reseghetti, C. Sun, U. Bhaskar TVS, and D. Volkov, 2019: More Than 50 Years of Successful Continuous Temperature Section Measurements by the Global Expendable Bathythermograph Network, Its Integrability, Societal Benefits, and Future. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00452

González-Pola, C., P. Fratantoni, K. M. H. Larsen, N. P. Holliday, S. Dye, K. A. Mork, A. Beszczynska-Möller, H. Valdimarsson, A. Trofimov, H. Parner, H. Klein, B. Cisewski, A. Fontán, K. Lyons, N. Kolodziejczyk, R. Graña, J. Linders, T. Wodzinowski, I. Goszczko, and C. Cusack, 2019: The ICES Working Group on Oceanic Hydrography: A Bridge From In-situ Sampling to the Remote Autonomous Observation Era. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00196

Gouretski, V., 2019: A new global ocean hydrographic climatology. *Atmospheric and Oceanic Science Letters***,** 1-4, https://doi.org/10.1080/16742834.2019.1588066

Gouveia, N. A., D. F. M. Gherardi, F. H. Wagner, E. T. Paes, V. J. Coles, and L. E. O. C. Aragão, 2019: The Salinity Structure of the Amazon River Plume Drives Spatiotemporal Variation of Oceanic Primary Productivity. *Journal of Geophysical Research: Biogeosciences*, **124,** 147-165, https://doi.org/10.1029/2018JG004665

Gregor, L., A. D. Lebehot, S. Kok, and P. M. Scheel Monteiro, 2019: A comparative assessment of the uncertainties of global surface ocean CO2 estimates using a machine-learning ensemble (CSIR-ML6 version 2019a) – have we hit the wall? *Geosci. Model Dev.*, **12,** 5113-5136, https://doi.org/10.5194/gmd-12-5113-2019

Grodsky, S. A., N. Reul, A. Bentamy, D. Vandemark, and S. Guimbard, 2019: Eastern Mediterranean salinification observed in satellite salinity from SMAP mission. *Journal of Marine Systems*, **198,** 103190, https://doi.org/10.1016/j.jmarsys.2019.103190

Groom, S., S. Sathyendranath, Y. Ban, S. Bernard, R. Brewin, V. Brotas, C. Brockmann, P. Chauhan, J.-k. Choi, A. Chuprin, S. Ciavatta, P. Cipollini, C. Donlon, B. Franz, X. He, T. Hirata, T. Jackson, M. Kampel, H. Krasemann, S. Lavender, S. Pardo-Martinez, F. Mélin, T. Platt, R. Santoleri, J. Skakala, B. Schaeffer, M. Smith, F. Steinmetz, A. Valente, and M. Wang, 2019: Satellite Ocean Colour: Current Status and Future Perspective. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00485

Guan, C., S. Hu, M. J. McPhaden, F. Wang, S. Gao, and Y. Hou, 2019: Dipole Structure of Mixed Layer Salinity in Response to El Niño-La Niña Asymmetry in the Tropical Pacific. *Geophysical Research Letters*, **46,** 12165-12172, https://doi.org/10.1029/2019GL084817

Guerreiro, C. V., K.-H. Baumann, G.-J. A. Brummer, L. F. Korte, C. Sá, and J.-B. W. Stuut, 2019:

Transatlantic gradients in calcifying phytoplankton (coccolithophore) fluxes. *Progress in Oceanography*, **176,** 102140, https://doi.org/10.1016/j.pocean.2019.102140

Guiavarc'h, C., J. Roberts-Jones, C. Harris, D. J. Lea, A. Ryan, and I. Ascione, 2019: Assessment of ocean analysis and forecast from an atmosphere–ocean coupled data assimilation operational system. *Ocean Sci.*, **15,** 1307-1326, https://doi.org/10.5194/os-15-1307-2019

Guo, J., T. Zhang, C. Xu, and Q. Xie, 2019: Upper ocean response to typhoon Kujira (2015) in the South China Sea by multiple means of observation. *Journal of Oceanology and Limnology*, https://doi.org/10.1007/s00343-019-9059-z

Guo, M., P. Xiu, F. Chai, and H. Xue, 2019: Mesoscale and Submesoscale Contributions to High Sea Surface Chlorophyll in Subtropical Gyres. *Geophysical Research Letters*, **46,** 13217-13226, https://doi.org/10.1029/2019GL085278

Gutjahr, O., D. Putrasahan, K. Lohmann, J. H. Jungclaus, J. S. von Storch, N. Brüggemann, H. Haak, and A. Stössel, 2019: Max Planck Institute Earth System Model (MPI-ESM1.2) for the High-Resolution Model Intercomparison Project (HighResMIP). *Geosci. Model Dev.*, **12,** 3241-3281, https://doi.org/10.5194/gmd-12-3241-2019

Gutknecht, E., G. Reffray, A. Mignot, T. Dabrowski, and M. G. Sotillo, 2019: Modelling the marine ecosystem of Iberia–Biscay–Ireland (IBI) European waters for CMEMS operational applications. *Ocean Sci.*, **15,** 1489-1516, https://doi.org/10.5194/os-15-1489-2019

Haakman, K., J.-M. Sayol, C. G. van der Boog, and C. A. Katsman, 2019: Statistical Characterization of the Observed Cold Wake Induced by North Atlantic Hurricanes. *Remote Sensing*, **11,** 2368, https://doi.org/10.3390/rs11202368

Hackert, E. C., R. M. Kovach, A. J. Busalacchi, and J. Ballabrera-Poy, 2019: Impact of Aquarius and SMAP Satellite Sea Surface Salinity Observations on Coupled El Niño/Southern Oscillation Forecasts. *Journal of Geophysical Research: Oceans*, **124,** 4546-4556, https://doi.org/10.1029/2019JC015130

Ham, S., A.-Y. Lim, S. Kang, H. Jeong, Y. Jeong, B. Wang, B. Xiang, S. Wu, and J. X. Fu, 2019: A newly developed APCC SCoPS and its prediction of East Asia seasonal climate variability. *Climate Dynamics*, **52,** 6391-6410, https://doi.org/10.1007/s00382-018-4516-5

Hamlington, B. D., S. H. Cheon, C. G. Piecuch, K. B. Karnauskas, P. R. Thompson, K.-Y. Kim, J. T. Reager, F. W. Landerer, and T. Frederikse, 2019: The Dominant Global Modes of Recent Internal Sea Level Variability. *Journal of Geophysical Research: Oceans*, **124,** 2750-2768, https://doi.org/10.1029/2018JC014635

Han, M., Y. Feng, X. Zhao, C. Sun, F. Hong, and C. Liu, 2019: A Convolutional Neural Network Using Surface Data to Predict Subsurface Temperatures in the Pacific Ocean. *IEEE Access*, **7,** 172816-172829, https://doi.org/10.1109/ACCESS.2019.2955957

Hayes, D. R., S. Dobricic, H. Gildor, and A. Matsikaris, 2019: Operational assimilation of glider temperature and salinity for an improved description of the Cyprus eddy. *Deep Sea Research Part II: Topical Studies in Oceanography*, **164,** 41-53, https://doi.org/10.1016/j.dsr2.2019.05.015

He, Y., P. Hu, Y. Yin, Z. Liu, Y. Liu, Y. Hou, and Y. Zhang, 2019: Vertical Migration of the Along-Slope Counter-Flow and Its Relation with the Kuroshio Intrusion off

Northeastern Taiwan. *Remote Sensing*, **11,** 2624, https://doi.org/10.3390/rs11222624
Heimbach, P., I. Fukumori, C. N. Hill, R. M. Ponte, D. Stammer, C. Wunsch, J.-M. Campin, B. Cornuelle, I. Fenty, G. Forget, A. Köhl, M. Mazloff, D. Menemenlis, A. T. Nguyen, C. Piecuch, D. Trossman, A. Verdy, O. Wang, and H. Zhang, 2019: Putting It All Together: Adding Value to the Global Ocean and Climate Observing Systems With Complete Self-Consistent Ocean State and Parameter Estimates. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00055
Hennon, T. D., M. H. Alford, and Z. Zhao, 2019: Global Assessment of Semidiurnal Internal Tide Aliasing in Argo Profiles. *Journal of Physical Oceanography*, **49,** 2523-2533, https://doi.org/10.1175/JPO-D-19-0121.1
Hermes, J. C., Y. Masumoto, L. M. Beal, M. K. Roxy, J. Vialard, M. Andres, H. Annamalai, S. Behera, N. D'Adamo, T. Doi, M. Feng, W. Han, N. Hardman-Mountford, H. Hendon, R. Hood, S. Kido, C. Lee, T. Lee, M. Lengaigne, J. Li, R. Lumpkin, K. N. Navaneeth, B. Milligan, M. J. McPhaden, M. Ravichandran, T. Shinoda, A. Singh, B. Sloyan, P. G. Strutton, A. C. Subramanian, S. Thurston, T. Tozuka, C. C. Ummenhofer, A. S. Unnikrishnan, R. Venkatesan, D. Wang, J. Wiggert, L. Yu, and W. Yu, 2019: A Sustained Ocean Observing System in the Indian Ocean for Climate Related Scientific Knowledge and Societal Needs. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00355
Holland, L., A. Rowden, J. Hamilton, M. Clark, S. Chiswell, and J. Gardner, 2019: A Genetic connectivity of deep-sea corals in the New Zealand region. *New Zealand Aquatic Environment & Biodiversity Report, Wellington*,
Holmes, R. M., J. D. Zika, and M. H. England, 2019: Diathermal Heat Transport in a Global Ocean Model. *Journal of Physical Oceanography*, **49,** 141-161, https://doi.org/10.1175/JPO-D-18-0098.1
Hordoir, R., L. Axell, A. Höglund, C. Dieterich, F. Fransner, M. Gröger, Y. Liu, P. Pemberton, S. Schimanke, H. Andersson, P. Ljungemyr, P. Nygren, S. Falahat, A. Nord, A. Jönsson, I. Lake, K. Döös, M. Hieronymus, H. Dietze, U. Löptien, I. Kuznetsov, A. Westerlund, L. Tuomi, and J. Haapala, 2019: Nemo-Nordic 1.0: a NEMO-based ocean model for the Baltic and North seas – research and operational applications. *Geosci. Model Dev.*, **12,** 363-386, https://doi.org/10.5194/gmd-12-363-2019
Hormann, V., L. R. Centurioni, and A. L. Gordon, 2019: Freshwater export pathways from the Bay of Bengal. *Deep Sea Research Part II: Topical Studies in Oceanography*, **168,** 104645, https://doi.org/10.1016/j.dsr2.2019.104645
Hosoda, S., M. Hirano, T. Hashimukai, S. Asai, and N. Kawakami, 2019: New method of temperature and conductivity sensor calibration with improved efficiency for screening SBE41 CTD on Argo floats. *Progress in Earth and Planetary Science*, **6,** 65, https://doi.org/10.1186/s40645-019-0310-1
Hristova, H. G., C. Ladd, and P. J. Stabeno, 2019: Variability and Trends of the Alaska Gyre From Argo and Satellite Altimetry. *Journal of Geophysical Research: Oceans*, **124,** 5870-5887, https://doi.org/10.1029/2019JC015231
Hsu, J.-Y., H. Hendon, M. Feng, and X. Zhou, 2019: Magnitude and Phase of Diurnal SST Variations in the ACCESS-S1 Model During the Suppressed Phase of the MJOs. *Journal of Geophysical Research: Oceans*, **124,** 9553-9571,

https://doi.org/10.1029/2019JC015458
Hu, L., X. Zhang, and M. J. Perry, 2019: Light scattering by pure seawater: Effect of pressure. *Deep Sea Research Part I: Oceanographic Research Papers*, **146,** 103-109, https://doi.org/10.1016/j.dsr.2019.03.009
Hu, S., Y. Zhang, M. Feng, Y. Du, J. Sprintall, F. Wang, D. Hu, Q. Xie, and F. Chai, 2019: Interannual to Decadal Variability of Upper-Ocean Salinity in the Southern Indian Ocean and the Role of the Indonesian Throughflow. *Journal of Climate*, **32,** 6403-6421, https://doi.org/10.1175/JCLI-D-19-0056.1
Hu, Z., Y. Qi, X. He, Y.-H. Wang, D.-P. Wang, X. Cheng, X. Liu, and T. Wang, 2019: Characterizing surface circulation in the Taiwan Strait during NE monsoon from Geostationary Ocean Color Imager. *Remote Sensing of Environment*, **221,** 687-694, https://doi.org/10.1016/j.rse.2018.12.003
Hua, L., D.-Z. Sun, and Y. Yu, 2019: Why do we have El Niño: quantifying a diabatic and nonlinear perspective using observations. *Climate Dynamics*, **52,** 6705-6717, https://doi.org/10.1007/s00382-018-4541-4
Huang, B., C. Liu, G. Ren, H.-M. Zhang, and L. Zhang, 2019: The Role of Buoy and Argo Observations in Two SST Analyses in the Global and Tropical Pacific Oceans. *Journal of Climate*, **32,** 2517-2535, https://doi.org/10.1175/JCLI-D-18-0368.1
Huang, C. and Y. Xu, 2019: Spatial and seasonal variability of global ocean diapycnal transport inferred from Argo profiles. *Journal of Oceanology and Limnology*, **37,** 498-512, https://doi.org/10.1007/s00343-019-7290-2
Irrgang, C., J. Saynisch, and M. Thomas, 2019: Estimating global ocean heat content from tidal magnetic satellite observations. *Scientific Reports*, **9,** 7893, https://doi.org/10.1038/s41598-019-44397-8
Jackson, L. C., C. Dubois, G. Forget, K. Haines, M. Harrison, D. Iovino, A. Köhl, D. Mignac, S. Masina, K. A. Peterson, C. G. Piecuch, C. D. Roberts, J. Robson, A. Storto, T. Toyoda, M. Valdivieso, C. Wilson, Y. Wang, and H. Zuo, 2019: The Mean State and Variability of the North Atlantic Circulation: A Perspective From Ocean Reanalyses. *Journal of Geophysical Research: Oceans*, **124,** 9141-9170, https://doi.org/10.1029/2019JC015210
Jacobs, Z. L., J. P. Grist, R. Marsh, and S. A. Josey, 2019: A Subannual Subsurface Pathway From the Gulf Stream to the Subpolar Gyre and Its Role in Warming and Salinification in the 1990s. *Geophysical Research Letters*, **46,** 7518-7526, https://doi.org/10.1029/2019GL083021
Jayaram, C., T. V. S. Udaya Bhaskar, J. P. Kumar, and D. Swain, 2019: Cyclone Enhanced Chlorophyll in the Bay of Bengal as Evidenced from Satellite and BGC-Argo Float Observations. *Journal of the Indian Society of Remote Sensing*, **47,** 1875-1882, https://doi.org/10.1007/s12524-019-01034-1
Jena, B., M. Ravichandran, and J. Turner, 2019: Recent Reoccurrence of Large Open-Ocean Polynya on the Maud Rise Seamount. *Geophysical Research Letters*, **46,** 4320-4329, https://doi.org/10.1029/2018GL081482
Jeong, Y., J. Hwang, J. Park, C. J. Jang, and Y.-H. Jo, 2019: Reconstructed 3-D Ocean Temperature Derived from Remotely Sensed Sea Surface Measurements for Mixed Layer Depth Analysis. *Remote Sensing*, **11,** 3018, https://doi.org/10.3390/rs11243018

Jiang, M., C. I. Measures, K. A. Barbeau, M. A. Charette, S. T. Gille, M. Hatta, M. Kahru, B. G. Mitchell, A. C. Naveira Garabato, C. Reiss, K. Selph, and M. Zhou, 2019: Fe sources and transport from the Antarctic Peninsula shelf to the southern Scotia Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **150,** 103060, https://doi.org/10.1016/j.dsr.2019.06.006

Jiang, Y., M. Zhao, C. Hu, L. He, H. Bai, and J. Wang, 2019: A parallel FP-growth algorithm on World Ocean Atlas data with multi-core CPU. *The Journal of Supercomputing*, **75,** 732-745, https://doi.org/10.1007/s11227-018-2297-6

Johnson, G. C., J. M. Lyman, T. Boyer, L. Cheng, C. M. Domingues, J. Gilson, M. Ishii, R. Killick, D. Monselesan, S. Purkey, and S. Wijffels, 2019: Global Oceans: Ocean heat content in the State of the Climate in 2018. *Bull. Am. Meteorol. Soc.*, **100,** S74 - S76, https://doi.org/10.1175/2019BAMSStateoftheClimate.1

Johnson, G. C., S. G. Purkey, N. V. Zilberman, and D. Roemmich, 2019: Deep Argo Quantifies Bottom Water Warming Rates in the Southwest Pacific Basin. *Geophysical Research Letters*, **46,** 2662-2669, https://doi.org/10.1029/2018GL081685

Johnson, G. C., J. Reagan, J. M. Lyman, T. Boyer, C. Schmid, and R. Locarnini, 2019: Global Oceans: Salinity in the State of the Climate 2018. *Bull. Am. Meteorol. Soc.*, **100,** S77 - S81, https://doi.org/10.1175/2019BAMSStateoftheClimate.1

Johnson, K. S., S. C. Riser, and M. Ravichandran, 2019: Oxygen Variability Controls Denitrification in the Bay of Bengal Oxygen Minimum Zone. *Geophysical Research Letters*, **46,** 804-811, https://doi.org/10.1029/2018GL079881

Jones, D. C., E. Boland, A. J. S. Meijers, G. Forget, S. A. Josey, J.-B. Sallee, and E. Shuckburgh, 2019: Heat Distribution in the Southeast Pacific Is Only Weakly Sensitive to High-Latitude Heat Flux and Wind Stress. *Journal of Geophysical Research: Oceans*, **124,** 8647-8666, https://doi.org/10.1029/2019JC015460

Jones, D. C., H. J. Holt, A. J. S. Meijers, and E. Shuckburgh, 2019: Unsupervised Clustering of Southern Ocean Argo Float Temperature Profiles. *Journal of Geophysical Research: Oceans*, **124,** 390-402, https://doi.org/10.1029/2018JC014629

Joyce, T. M., Y.-O. Kwon, H. Seo, and C. C. Ummenhofer, 2019: Meridional Gulf Stream Shifts Can Influence Wintertime Variability in the North Atlantic Storm Track and Greenland Blocking. *Geophysical Research Letters*, **46,** 1702-1708, https://doi.org/10.1029/2018GL081087

Jyothi, L., S. Joseph, and S. P, 2019: Surface and Sub-surface Ocean Response to Tropical Cyclone Phailin: Role of Pre-existing Oceanic Features. *Journal of Geophysical Research: Oceans*, **124,** 6515-6530, https://doi.org/10.1029/2019JC015211

Jyoti, J., P. Swapna, R. Krishnan, and C. V. Naidu, 2019: Pacific modulation of accelerated south Indian Ocean sea level rise during the early 21st Century. *Climate Dynamics*, **53,** 4413-4432, https://doi.org/10.1007/s00382-019-04795-0

Kakatkar, R., C. Gnanaseelan, J. S. Chowdary, J. S. Deepa, and A. Parekh, 2019: Biases in the Tropical Indian Ocean subsurface temperature variability in a coupled model. *Climate Dynamics*, **52,** 5325-5344, https://doi.org/10.1007/s00382-018-4455-1

Kalavichchi, K. A. and I. L. Bashmachnikov, 2019: Mechanism of a Positive Feedback in Long-Term Variations of the Convergence of Oceanic and Atmospheric Heat Fluxes and of the Ice Cover in the Barents Sea. *Izvestiya, Atmospheric and Oceanic Physics*,

55, 640-649, https://doi.org/10.1134/S0001433819060173
Kamidaira, Y., H. Kawamura, T. Kobayashi, and Y. Uchiyama, 2019: Development of regional downscaling capability in STEAMER ocean prediction system based on multi-nested ROMS model. *Journal of Nuclear Science and Technology*, **56,** 752-763, https://doi.org/10.1080/00223131.2019.1613269
Kämpf, J. and A. Kavi, 2019: SST variability in the eastern intertropical Indian Ocean – On the search for trigger mechanisms of IOD events. *Deep Sea Research Part II: Topical Studies in Oceanography*, **166,** 64-74, https://doi.org/10.1016/j.dsr2.2018.11.010
Kashem, M., M. K. Ahmed, F. Qiao, M. A. E. Akhter, and K. M. A. Chowdhury, 2019: The response of the upper ocean to tropical cyclone Viyaru over the Bay of Bengal. *Acta Oceanologica Sinica*, **38,** 61-70, https://doi.org/10.1007/s13131-019-1370-1
Kataoka, T., M. Kimoto, M. Watanabe, and H. Tatebe, 2019: Wind–Mixed Layer–SST Feedbacks in a Tropical Air–Sea Coupled System: Application to the Atlantic. *Journal of Climate*, **32,** 3865-3881, https://doi.org/10.1175/JCLI-D-18-0728.1
Kaurkin, M. N. and R. A. Ibrayev, 2019: Study of Sensitivity of the Algorithm for Assimilating Small Amount of Data in the Ocean Dynamics Model. *Physical Oceanography*, **26,** 96-103, http://dx.doi.org/10.22449/1573-160X-2019-2-96-103
Kennedy, J. J., N. A. Rayner, C. P. Atkinson, and R. E. Killick, 2019: An Ensemble Data Set of Sea Surface Temperature Change From 1850: The Met Office Hadley Centre HadSST.4.0.0.0 Data Set. *Journal of Geophysical Research: Atmospheres*, **124,** 7719-7763, https://doi.org/10.1029/2018JD029867
Kent, E. C., N. A. Rayner, D. I. Berry, R. Eastman, V. G. Grigorieva, B. Huang, J. J. Kennedy, S. R. Smith, and K. M. Willett, 2019: Observing Requirements for Long-Term Climate Records at the Ocean Surface. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00441
Keppler, L. and P. Landschützer, 2019: Regional Wind Variability Modulates the Southern Ocean Carbon Sink. *Scientific Reports*, **9,** 7384, https://doi.org/10.1038/s41598-019-43826-y
Kersalé, M., R. C. Perez, S. Speich, C. S. Meinen, T. Lamont, M. Le Hénaff, M. A. van den Berg, S. Majumder, I. J. Ansorge, S. Dong, C. Schmid, T. Terre, and S. L. Garzoli, 2019: Shallow and Deep Eastern Boundary Currents in the South Atlantic at 34.5°S: Mean Structure and Variability. *Journal of Geophysical Research: Oceans*, **124,** 1634-1659, https://doi.org/10.1029/2018JC014554
Kessler, W. S., H. G. Hristova, and R. E. Davis, 2019: Equatorward western boundary transport from the South Pacific: Glider observations, dynamics and consequences. *Progress in Oceanography*, **175,** 208-225, https://doi.org/10.1016/j.pocean.2019.04.005
Kessler, W. S., H. G. Hristova, and R. E. Davis, 2019: Equatorward western boundary transport from the South Pacific: Glider observations, dynamics and consequences. *Progress in Oceanography*, **175,** 208-225, https://doi.org/10.1016/j.pocean.2019.04.005
Khazendar, A., I. G. Fenty, D. Carroll, A. Gardner, C. M. Lee, I. Fukumori, O. Wang, H. Zhang, H. Seroussi, D. Moller, B. P. Y. Noël, M. R. van den Broeke, S. Dinardo, and J. Willis, 2019: Interruption of two decades of Jakobshavn Isbrae acceleration and thinning as regional ocean cools. *Nature Geoscience*, **12,** 277-283, https://doi.org/10.1038/s41561-019-0329-3

Kim, H. J., T.-W. Kim, K. Hyeong, S.-W. Yeh, J.-Y. Park, C. M. Yoo, and J. Hwang, 2019: Suppressed CO2 Outgassing by an Enhanced Biological Pump in the Eastern Tropical Pacific. *Journal of Geophysical Research: Oceans*, **124,** 7962-7973, https://doi.org/10.1029/2019JC015287

Klyuvitkin, A. A., A. G. Ostrovskii, A. P. Lisitzin, and S. K. Konovalov, 2019: The Energy Spectrum of the Current Velocity in the Deep Part of the Black Sea. *Doklady Earth Sciences*, **488,** 1222-1226, https://doi.org/10.1134/S1028334X1910012X

Kobashi, F., H. Doi, and N. Iwasaka, 2019: Sea Surface Cooling Induced by Extratropical Cyclones in the Subtropical North Pacific: Mechanism and Interannual Variability. *Journal of Geophysical Research: Oceans*, **124,** 2179-2195, https://doi.org/10.1029/2018JC014632

Kolodziejczyk, N., W. Llovel, and E. Portela, 2019: Interannual Variability of Upper Ocean Water Masses as Inferred From Argo Array. *Journal of Geophysical Research: Oceans*, **124,** 6067-6085, https://doi.org/10.1029/2018JC014866

Krishnamohan, K. S., J. Vialard, M. Lengaigne, S. Masson, G. Samson, S. Pous, S. Neetu, F. Durand, S. S. C. Shenoi, and G. Madec, 2019: Is there an effect of Bay of Bengal salinity on the northern Indian Ocean climatological rainfall? *Deep Sea Research Part II: Topical Studies in Oceanography*, **166,** 19-33, https://doi.org/10.1016/j.dsr2.2019.04.003

Krokos, G., V. P. Papadopoulos, S. S. Sofianos, H. Ombao, P. Dybczak, and I. Hoteit, 2019: Natural Climate Oscillations may Counteract Red Sea Warming Over the Coming Decades. *Geophysical Research Letters*, **46,** 3454-3461, https://doi.org/10.1029/2018GL081397

Kubin, E., P.-M. Poulain, E. Mauri, M. Menna, and G. Notarstefano, 2019: Levantine Intermediate and Levantine Deep Water Formation: An Argo Float Study from 2001 to 2017. *Water*, **11,** 1781, https://doi.org/10.3390/w11091781

Kubryakov, A. A., A. S. Mikaelyan, and S. V. Stanichny, 2019: Summer and winter coccolithophore blooms in the Black Sea and their impact on production of dissolved organic matter from Bio-Argo data. *Journal of Marine Systems*, **199,** 103220, https://doi.org/10.1016/j.jmarsys.2019.103220

Kubryakov, A. A., A. G. Zatsepin, and S. V. Stanichny, 2019: Anomalous summer-autumn phytoplankton bloom in 2015 in the Black Sea caused by several strong wind events. *Journal of Marine Systems*, **194,** 11-24, https://doi.org/10.1016/j.jmarsys.2019.02.004

Kudryavtsev, V., A. Monzikova, C. Combot, B. Chapron, and N. Reul, 2019: A Simplified Model for the Baroclinic and Barotropic Ocean Response to Moving Tropical Cyclones: 2. Model and Simulations. *Journal of Geophysical Research: Oceans*, **124,** 3462-3485, https://doi.org/10.1029/2018JC014747

Kudryavtsev, V., A. Monzikova, C. Combot, B. Chapron, N. Reul, and Y. Quilfen, 2019: A Simplified Model for the Baroclinic and Barotropic Ocean Response to Moving Tropical Cyclones: 1. Satellite Observations. *Journal of Geophysical Research: Oceans*, **124,** 3446-3461, https://doi.org/10.1029/2018JC014746

Kumar, B. P., E. D'Asaro, N. Suresh kumar, and M. Ravichandran, 2019: Widespread cooling of the Bay of Bengal by tropical storm Roanu. *Deep Sea Research Part II: Topical Studies in Oceanography*, **168,** 104652, https://doi.org/10.1016/j.dsr2.2019.104652

Kutsuwada, K., A. Kakiuchi, Y. Sasai, H. Sasaki, K. Uehara, and R. Tajima, 2019: Wind-driven North Pacific Tropical Gyre using high-resolution simulation outputs. *Journal of Oceanography*, **75,** 81-93, https://doi.org/10.1007/s10872-018-0487-8

Lacour, L., N. Briggs, H. Claustre, M. Ardyna, and G. Dall'Olmo, 2019: The Intraseasonal Dynamics of the Mixed Layer Pump in the Subpolar North Atlantic Ocean: A Biogeochemical-Argo Float Approach. *Global Biogeochemical Cycles*, **33,** 266-281, https://doi.org/10.1029/2018GB005997

Lai, Z., G. Jin, Y. Huang, H. Chen, X. Shang, and X. Xiong, 2019: The Generation of Nonlinear Internal Waves in the South China Sea: A Three-Dimensional, Nonhydrostatic Numerical Study. *Journal of Geophysical Research: Oceans*, **124,** 8949-8968, https://doi.org/10.1029/2019JC015283

Langehaug, H. R., A. B. Sandø, M. Årthun, and M. Ilıcak, 2019: Variability along the Atlantic water pathway in the forced Norwegian Earth System Model. *Climate Dynamics*, **52,** 1211-1230, https://doi.org/10.1007/s00382-018-4184-5

Lara-Lopez, A., I. Hodgson-Johnston, M. Cahill, S. Mancini, P. Blain, and T. Moltmann, 2019: From research to end-users, tracing the path of ocean observations in Australia. *Marine and Freshwater Research***,** -, https://doi.org/10.1071/MF18066

Large, W. G., E. G. Patton, A. K. DuVivier, P. P. Sullivan, and L. Romero, 2019: Similarity Theory in the Surface Layer of Large-Eddy Simulations of the Wind-, Wave-, and Buoyancy-Forced Southern Ocean. *Journal of Physical Oceanography*, **49,** 2165-2187, https://doi.org/10.1175/JPO-D-18-0066.1

Laxenaire, R., S. Speich, and A. Stegner, 2019: Evolution of the Thermohaline Structure of One Agulhas Ring Reconstructed from Satellite Altimetry and Argo Floats. *Journal of Geophysical Research: Oceans*, **124,** 8969-9003, https://doi.org/10.1029/2018JC014426

Le Traon, P. Y., A. Reppucci, E. Alvarez Fanjul, L. Aouf, A. Behrens, M. Belmonte, A. Bentamy, L. Bertino, V. E. Brando, M. B. Kreiner, M. Benkiran, T. Carval, S. A. Ciliberti, H. Claustre, E. Clementi, G. Coppini, G. Cossarini, M. De Alfonso Alonso-Muñoyerro, A. Delamarche, G. Dibarboure, F. Dinessen, M. Drevillon, Y. Drillet, Y. Faugere, V. Fernández, A. Fleming, M. I. Garcia-Hermosa, M. G. Sotillo, G. Garric, F. Gasparin, C. Giordan, M. Gehlen, M. L. Gregoire, S. Guinehut, M. Hamon, C. Harris, F. Hernandez, J. B. Hinkler, J. Hoyer, J. Karvonen, S. Kay, R. King, T. Lavergne, B. Lemieux-Dudon, L. Lima, C. Mao, M. J. Martin, S. Masina, A. Melet, B. Buongiorno Nardelli, G. Nolan, A. Pascual, J. Pistoia, A. Palazov, J. F. Piolle, M. I. Pujol, A. C. Pequignet, E. Peneva, B. Pérez Gómez, L. Petit de la Villeon, N. Pinardi, A. Pisano, S. Pouliquen, R. Reid, E. Remy, R. Santoleri, J. Siddorn, J. She, J. Staneva, A. Stoffelen, M. Tonani, L. Vandenbulcke, K. von Schuckmann, G. Volpe, C. Wettre, and A. Zacharioudaki, 2019: From Observation to Information and Users: The Copernicus Marine Service Perspective. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00234

Lee, C. M., S. Starkweather, H. Eicken, M.-L. Timmermans, J. Wilkinson, S. Sandven, D. Dukhovskoy, S. Gerland, J. Grebmeier, J. M. Intrieri, S.-H. Kang, M. McCammon, A. T. Nguyen, I. Polyakov, B. Rabe, H. Sagen, S. Seeyave, D. Volkov, A. Beszczynska-Möller, L. Chafik, M. Dzieciuch, G. Goni, T. Hamre, A. L. King, A. Olsen, R. P. Raj, T. Rossby, Ø. Skagseth, H. Søiland, and K. Sørensen, 2019: A Framework for the Development,

Design and Implementation of a Sustained Arctic Ocean Observing System. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00451

Lee, E. and S.-Y. Hong, 2019: Impact of the Sea Surface Salinity on Simulated Precipitation in a Global Numerical Weather Prediction Model. *Journal of Geophysical Research: Atmospheres*, **124,** 719-730, https://doi.org/10.1029/2018JD029591

Lee, T., S. Fournier, A. L. Gordon, and J. Sprintall, 2019: Maritime Continent water cycle regulates low-latitude chokepoint of global ocean circulation. *Nature Communications*, **10,** 2103, https://doi.org/10.1038/s41467-019-10109-z

Lenssen, N. J. L., G. A. Schmidt, J. E. Hansen, M. J. Menne, A. Persin, R. Ruedy, and D. Zyss, 2019: Improvements in the GISTEMP Uncertainty Model. *Journal of Geophysical Research: Atmospheres*, **124,** 6307-6326, https://doi.org/10.1029/2018JD029522

Levin, L. A., B. J. Bett, A. R. Gates, P. Heimbach, B. M. Howe, F. Janssen, A. McCurdy, H. A. Ruhl, P. Snelgrove, K. I. Stocks, D. Bailey, S. Baumann-Pickering, C. Beaverson, M. C. Benfield, D. J. Booth, M. Carreiro-Silva, A. Colaço, M. C. Eblé, A. M. Fowler, K. M. Gjerde, D. O. B. Jones, K. Katsumata, D. Kelley, N. Le Bris, A. P. Leonardi, F. Lejzerowicz, P. I. Macreadie, D. McLean, F. Meitz, T. Morato, A. Netburn, J. Pawlowski, C. R. Smith, S. Sun, H. Uchida, M. F. Vardaro, R. Venkatesan, and R. A. Weller, 2019: Global Observing Needs in the Deep Ocean. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00241

Li, B. F., Y. W. Watanabe, S. Hosoda, K. Sato, and Y. Nakano, 2019: Quasi-Real-Time and High-Resolution Spatiotemporal Distribution of Ocean Anthropogenic CO2. *Geophysical Research Letters*, **46,** 4836-4843, https://doi.org/10.1029/2018GL081639

Li, D.-Y. and C.-Y. Huang, 2019: The influences of ocean on intensity of Typhoon Soudelor (2015) as revealed by coupled modeling. *Atmospheric Science Letters*, **20,** e871, https://doi.org/10.1002/asl.871

Li, F., M. S. Lozier, G. Danabasoglu, N. P. Holliday, Y.-O. Kwon, A. Romanou, S. G. Yeager, and R. Zhang, 2019: Local and Downstream Relationships between Labrador Sea Water Volume and North Atlantic Meridional Overturning Circulation Variability. *Journal of Climate*, **32,** 3883-3898, https://doi.org/10.1175/JCLI-D-18-0735.1

Li, F., M. S. Lozier, G. Danabasoglu, N. P. Holliday, Y.-O. Kwon, A. Romanou, S. G. Yeager, and R. Zhang, 2019: Local and Downstream Relationships between Labrador Sea Water Volume and North Atlantic Meridional Overturning Circulation Variability. *Journal of Climate*, **32,** 3883-3898, https://doi.org/10.1175/JCLI-D-18-0735.1

Li, G., Y. Zhang, J. Xiao, X. Song, J. Abraham, L. Cheng, and J. Zhu, 2019: Examining the salinity change in the upper Pacific Ocean during the Argo period. *Climate Dynamics*, **53,** 6055-6074, https://doi.org/10.1007/s00382-019-04912-z

Li, Q., S. Lee, M. H. England, and J. L. McClean, 2019: Seasonal-to-Interannual Response of Southern Ocean Mixed Layer Depth to the Southern Annular Mode from a Global 1/10° Ocean Model. *Journal of Climate*, **32,** 6177-6195, https://doi.org/10.1175/JCLI-D-19-0159.1

Li, Q., B. G. Reichl, B. Fox-Kemper, A. J. Adcroft, S. E. Belcher, G. Danabasoglu, A. L. M. Grant, S. M. Griffies, R. Hallberg, T. Hara, R. R. Harcourt, T. Kukulka, W. G. Large, J. C. McWilliams, B. Pearson, P. P. Sullivan, L. Van Roekel, P. Wang, and Z. Zheng, 2019: Comparing Ocean Surface Boundary Vertical Mixing Schemes Including Langmuir

Turbulence. *Journal of Advances in Modeling Earth Systems*, **11,** 3545-3592, https://doi.org/10.1029/2019MS001810

Li, S., S. Wang, F. Zhang, and Y. Wang, 2019: Constructing the Three-Dimensional Structure of an Anticyclonic Eddy in the South China Sea Using Multiple Underwater Gliders. *Journal of Atmospheric and Oceanic Technology*, **36,** 2449-2470, https://doi.org/10.1175/JTECH-D-19-0006.1

Li, X. and Y.-Y. Luo, 2019: Inter-annual variations of the eastern subtropical mode waters in the Pacific Ocean and their formation mechanisms. *Periodical of Ocean University of China*, **49,** 1-13,

Li, Y., Q. Dong, and Y. Ren, 2019: Aquarius Sea Surface Salinity Gridding Method Based on Dual Quality–Distance Weighting. *Remote Sensing*, **11,** 1131, https://doi.org/10.3390/rs11091131

Li, Z., J. Wang, and L.-L. Fu, 2019: An Observing System Simulation Experiment for Ocean State Estimation to Assess the Performance of the SWOT Mission: Part 1—A Twin Experiment. *Journal of Geophysical Research: Oceans*, **124,** 4838-4855, https://doi.org/10.1029/2018JC014869

Lian, Z., B. Sun, Z. Wei, Y. Wang, and X. Wang, 2019: A study of intra-seasonal variations in the subsurface water temperatures in the South China Sea. *Acta Oceanologica Sinica*, **38,** 97-105, https://doi.org/10.1007/s13131-018-1337-7

Liang, L., H. Xue, and Y. Shu, 2019: The Indonesian Throughflow and the Circulation in the Banda Sea: A Modeling Study. *Journal of Geophysical Research: Oceans*, **124,** 3089-3106, https://doi.org/10.1029/2018JC014926

Liang, X., M. Losch, L. Nerger, L. Mu, Q. Yang, and C. Liu, 2019: Using Sea Surface Temperature Observations to Constrain Upper Ocean Properties in an Arctic Sea Ice-Ocean Data Assimilation System. *Journal of Geophysical Research: Oceans*, **124,** 4727-4743, https://doi.org/10.1029/2019JC015073

Liang, Z., T. Xing, Y. Wang, and L. Zeng, 2019: Mixed Layer Heat Variations in the South China Sea Observed by Argo Float and Reanalysis Data during 2012–2015. *Sustainability*, **11,** 5429, https://doi.org/10.3390/su11195429

Lima, L. N., L. P. Pezzi, S. G. Penny, and C. A. S. Tanajura, 2019: An Investigation of Ocean Model Uncertainties Through Ensemble Forecast Experiments in the Southwest Atlantic Ocean. *Journal of Geophysical Research: Oceans*, **124,** 432-452, https://doi.org/10.1029/2018JC013919

Lin, W., F. Zhai, Y. Gu, and P. Li, 2019: Decadal variations of the North Pacific Tropical Water at 137°E. *Journal of Oceanology and Limnology*, **37,** 1495-1509, https://doi.org/10.1007/s00343-019-8123-z

Lin, X., Y. Qiu, J. Cha, and X. Guo, 2019: Assessment of Aquarius sea surface salinity with Argo in the Bay of Bengal. *International Journal of Remote Sensing*, **40,** 8547-8565, https://doi.org/10.1080/01431161.2019.1615654

Lin, X., Y. Qiu, and D. Sun, 2019: Thermohaline Structures and Heat/Freshwater Transports of Mesoscale Eddies in the Bay of Bengal Observed by Argo and Satellite Data. *Remote Sensing*, **11,** 2989, https://doi.org/10.3390/rs11242989

Liu, C., X. Liang, R. M. Ponte, N. Vinogradova, and O. Wang, 2019: Vertical redistribution of salt and layered changes in global ocean salinity. *Nature Communications*, **10,** 3445,

https://doi.org/10.1038/s41467-019-11436-x
Liu, C., L. Xu, S.-P. Xie, and P. Li, 2019: Effects of Anticyclonic Eddies on the Multicore Structure of the North Pacific Subtropical Mode Water Based on Argo Observations. *Journal of Geophysical Research: Oceans*, **124,** 8400-8413, https://doi.org/10.1029/2019JC015631
Liu, H., X. Lin, and J. Lan, 2019: Salt Sinking in the Upper South Pacific Subtropical Gyre From 2004 to 2016. *Journal of Geophysical Research: Oceans*, **124,** 7011-7029, https://doi.org/10.1029/2019JC015270
Liu, H., L. Yu, and X. Lin, 2019: Recent Decadal Change in the North Atlantic Subtropical Underwater Associated With the Poleward Expansion of the Surface Salinity Maximum. *Journal of Geophysical Research: Oceans*, **124,** 4433-4448, https://doi.org/10.1029/2018JC014508
Liu, W., A. Fedorov, and F. Sévellec, 2019: The Mechanisms of the Atlantic Meridional Overturning Circulation Slowdown Induced by Arctic Sea Ice Decline. *Journal of Climate*, **32,** 977-996, https://doi.org/10.1175/JCLI-D-18-0231.1
Liu, Y. and X. Xing, 2019: An improvement on climatology-based correction method of Argo-observed dissolved oxygen data. *Oceanologia et Limnologia Sinica*, **50,** 994-1001,
Liu, Y. and X. Xing, 2019: Sensor principle and quality control of the dissolved oxygen data observed using Argo floats. *Marine Sciences* **43,** 28-37,
Liu, Z., X. Chen, J. Yu, D. Xu, and C. Sun, 2019: Kuroshio intrusion into the South China Sea with an anticyclonic eddy: evidence from underwater glider observation. *Journal of Oceanology and Limnology*, **37,** 1469-1480, https://doi.org/10.1007/s00343-019-8290-y
Llovel, W., S. Purkey, B. Meyssignac, A. Blazquez, N. Kolodziejczyk, and J. Bamber, 2019: Global ocean freshening, ocean mass increase and global mean sea level rise over 2005–2015. *Scientific Reports*, **9,** 17717, https://doi.org/10.1038/s41598-019-54239-2
Lombard, F., E. Boss, A. M. Waite, M. Vogt, J. Uitz, L. Stemmann, H. M. Sosik, J. Schulz, J.-B. Romagnan, M. Picheral, J. Pearlman, M. D. Ohman, B. Niehoff, K. O. Möller, P. Miloslavich, A. Lara-Lpez, R. Kudela, R. M. Lopes, R. Kiko, L. Karp-Boss, J. S. Jaffe, M. H. Iversen, J.-O. Irisson, K. Fennel, H. Hauss, L. Guidi, G. Gorsky, S. L. C. Giering, P. Gaube, S. Gallager, G. Dubelaar, R. K. Cowen, F. Carlotti, C. Briseño-Avena, L. Berline, K. Benoit-Bird, N. Bax, S. Batten, S. D. Ayata, L. F. Artigas, and W. Appeltans, 2019: Globally Consistent Quantitative Observations of Planktonic Ecosystems. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00196
Lopes, C. L., L. Bastos, M. Caetano, I. Martins, M. M. Santos, and I. Iglesias, 2019: Development of physical modelling tools in support of risk scenarios: A new framework focused on deep-sea mining. *Science of The Total Environment*, **650,** 2294-2306, https://doi.org/10.1016/j.scitotenv.2018.09.351
Lozier, M. S., F. Li, S. Bacon, F. Bahr, A. S. Bower, S. A. Cunningham, M. F. de Jong, L. de Steur, B. deYoung, J. Fischer, S. F. Gary, B. J. W. Greenan, N. P. Holliday, A. Houk, L. Houpert, M. E. Inall, W. E. Johns, H. L. Johnson, C. Johnson, J. Karstensen, G. Koman, I. A. Le Bras, X. Lin, N. Mackay, D. P. Marshall, H. Mercier, M. Oltmanns, R. S. Pickart, A. L. Ramsey, D. Rayner, F. Straneo, V. Thierry, D. J. Torres, R. G. Williams, C. Wilson, J.

Yang, I. Yashayaev, and J. Zhao, 2019: A sea change in our view of overturning in the subpolar North Atlantic. *Science*, **363,** 516-521, http://dx.doi.org/10.1126/science.aau6592

Lu, W., H. Su, X. Yang, and X.-H. Yan, 2019: Subsurface temperature estimation from remote sensing data using a clustering-neural network method. *Remote Sensing of Environment*, **229,** 213-222, https://doi.org/10.1016/j.rse.2019.04.009

Lübbecke, J. F., P. Brandt, M. Dengler, R. Kopte, J. Lüdke, I. Richter, M. Sena Martins, and P. C. M. Tchipalanga, 2019: Causes and evolution of the southeastern tropical Atlantic warm event in early 2016. *Climate Dynamics*, **53,** 261-274, https://doi.org/10.1007/s00382-018-4582-8

Lundrigan, S. and E. Demirov, 2019: Mean and Eddy-Driven Heat Advection in the Ocean Region Adjacent to the Greenland-Scotland Ridge Derived From Satellite Altimetry. *Journal of Geophysical Research: Oceans*, **124,** 2239-2260, https://doi.org/10.1029/2018JC014854

Ma, C., S. Li, A. Wang, J. Yang, and G. Chen, 2019: Altimeter Observation-Based Eddy Nowcasting Using an Improved Conv-LSTM Network. *Remote Sensing*, **11,** 783, https://dx.doi.org/10.3390/rs11070783

Ma, T., Y. Qi, and X. Cheng, 2019: Intraseasonal-semiannual variability of barrier layer thickness in the eastern equatorial Indian Ocean and Bay of Bengal. *Journal of Tropical Oceanography*, **38,** 18-31,

Ma, Y., S. Zhang, Y. Qi, and Z. Jing, 2019: Upper ocean near-inertial response to the passage of two sequential typhoons in the northwestern South China Sea. *Science China Earth Sciences*, **62,** 863-871, https://doi.org/10.1007/s11430-018-9292-3

Macovei, V. A., S. Torres-Valdés, S. E. Hartman, U. Schuster, C. M. Moore, P. J. Brown, D. J. Hydes, and R. J. Sanders, 2019: Temporal Variability in the Nutrient Biogeochemistry of the Surface North Atlantic: 15 Years of Ship of Opportunity Data. *Global Biogeochemical Cycles*, **33,** 1674-1692, https://doi.org/10.1029/2018GB006132

Makarim, S., J. Sprintall, Z. Liu, W. Yu, A. Santoso, X.-H. Yan, and R. D. Susanto, 2019: Previously unidentified Indonesian Throughflow pathways and freshening in the Indian Ocean during recent decades. *Scientific Reports*, **9,** 7364, https://doi.org/10.1038/s41598-019-43841-z

Mallick, S. K., N. Agarwal, R. Sharma, K. V. S. R. Prasad, and R. A. Weller, 2019: Impact of Satellite-Derived Diffuse Attenuation Coefficient on Upper Ocean Simulation Using High-Resolution Numerical Ocean Model: Case Study for the Bay of Bengal. *Marine Geodesy*, **42,** 535-557, https://doi.org/10.1080/01490419.2019.1664677

Maneesha, K., D. H. Prasad, and K. V. K. R. K. Patnaik, 2019: Biophysical responses to tropical cyclone Hudhud over the Bay of Bengal. *Journal of Operational Oceanography***,** 1-11, https://doi.org/10.1080/1755876X.2019.1684135

Manizza, M., D. Menemenlis, H. Zhang, and C. E. Miller, 2019: Modeling the Recent Changes in the Arctic Ocean CO2 Sink (2006–2013). *Global Biogeochemical Cycles*, **33,** 420-438, https://doi.org/10.1029/2018GB006070

Mao, H., M. Feng, H. E. Phillips, and S. Lian, 2019: Mesoscale eddy characteristics in the interior subtropical southeast Indian Ocean, tracked from the Leeuwin Current system. *Deep Sea Research Part II: Topical Studies in Oceanography*, **161,** 52-62,

https://doi.org/10.1016/j.dsr2.2018.07.003
Marchese, C., L. Castro de la Guardia, P. G. Myers, and S. Bélanger, 2019: Regional differences and inter-annual variability in the timing of surface phytoplankton blooms in the Labrador Sea. *Ecological Indicators*, **96,** 81-90, https://doi.org/10.1016/j.ecolind.2018.08.053
Marchi, S., T. Fichefet, H. Goosse, V. Zunz, S. Tietsche, J. J. Day, and E. Hawkins, 2019: Reemergence of Antarctic sea ice predictability and its link to deep ocean mixing in global climate models. *Climate Dynamics*, **52,** 2775-2797, https://doi.org/10.1007/s00382-018-4292-2
Margolskee, A., H. Frenzel, S. Emerson, and C. Deutsch, 2019: Ventilation Pathways for the North Pacific Oxygen Deficient Zone. *Global Biogeochemical Cycles*, **33,** 875-890, https://doi.org/10.1029/2018GB006149
Markova, N. V., O. A. Dymova, and S. G. Demyshev, 2019: Numerical Simulations of the Black Sea Hydrophysical Fields Below the Main Pycnocline: Validation by ARGO Data. Cham, Springer International Publishing, 15-21, http://dx.doi.org/10.1007/978-3-030-11533-3_2
Marta-Almeida, M., G. C. Lessa, A. L. Aguiar, F. N. Amorim, and M. Cirano, 2019: Realistic modelling of shelf-estuary regions. *Ocean Dynamics*, **69,** 1311-1331, https://doi.org/10.1007/s10236-019-01304-z
Martín Míguez, B., A. Novellino, M. Vinci, S. Claus, J.-B. Calewaert, H. Vallius, T. Schmitt, A. Pititto, A. Giorgetti, N. Askew, S. Iona, D. Schaap, N. Pinardi, Q. Harpham, B. J. Kater, J. Populus, J. She, A. V. Palazov, O. McMeel, P. Oset, D. Lear, G. M. R. Manzella, P. Gorringe, S. Simoncelli, K. Larkin, N. Holdsworth, C. D. Arvanitidis, M. E. Molina Jack, M. d. M. Chaves Montero, P. M. J. Herman, and F. Hernandez, 2019: The European Marine Observation and Data Network (EMODnet): Visions and Roles of the Gateway to Marine Data in Europe. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00313
Martin, M. J., R. R. King, J. While, and A. B. Aguiar, 2019: Assimilating satellite sea-surface salinity data from SMOS, Aquarius and SMAP into a global ocean forecasting system. *Quarterly Journal of the Royal Meteorological Society*, **145,** 705-726, https://doi.org/10.1002/qj.3461
Martini, K. I., D. J. Murphy, R. W. Schmitt, and N. G. Larson, 2019: Corrections for Pumped SBE 41CP CTDs Determined from Stratified Tank Experiments. *Journal of Atmospheric and Oceanic Technology*, **36,** 733-744, https://doi.org/10.1175/JTECH-D-18-0050.1
Mattern, J. P. and C. A. Edwards, 2019: A Simple Finite Difference-Based Approximation for Biogeochemical Tangent Linear and Adjoint Models. *Journal of Geophysical Research: Oceans*, **124,** 4-26, https://doi.org/10.1029/2018JC014283
Mauri, E., L. Sitz, R. Gerin, P.-M. Poulain, D. Hayes, and H. Gildor, 2019: On the Variability of the Circulation and Water Mass Properties in the Eastern Levantine Sea between September 2016–August 2017. *Water*, **11,** 1741, https://www.mdpi.com/2073-4441/11/9/1741
McMahon, C. R., M. A. Hindell, J.-B. Charrassin, S. Corney, C. Guinet, R. Harcourt, I. Jonsen, R. Trebilco, G. Williams, and S. Bestley, 2019: Finding mesopelagic prey in a changing Southern Ocean. *Scientific Reports*, **9,** 19013,

https://doi.org/10.1038/s41598-019-55152-4
Meehl, G. A., J. M. Arblaster, C. T. Y. Chung, M. M. Holland, A. DuVivier, L. Thompson, D. Yang, and C. M. Bitz, 2019: Sustained ocean changes contributed to sudden Antarctic sea ice retreat in late 2016. *Nature Communications*, **10,** 14, https://doi.org/10.1038/s41467-018-07865-9
Meijers, A., J. B. Sallee, A. Grey, K. Johnson, K. R. arrigo, S. Swart, B. King, M. P. Meredith, and M. Mazloff, 2019: Antarctica and the Southern Ocean: Southern Ocean in the State of the Climate in 2018. *Bull. Am. Meteorol. Soc.*, **100,** S181-S184, https://doi.org/10.1175/2019BAMSStateoftheClimate.1
Meijers, A. J. S., I. Cerovečki, B. A. King, and V. Tamsitt, 2019: A See-Saw in Pacific Subantarctic Mode Water Formation Driven by Atmospheric Modes. *Geophysical Research Letters*, **46,** 13152-13160, https://doi.org/10.1029/2019GL085280
Meinen, C. S., W. E. Johns, B. I. Moat, R. H. Smith, E. M. Johns, D. Rayner, E. Frajka-Williams, R. F. Garcia, and S. L. Garzoli, 2019: Structure and Variability of the Antilles Current at 26.5°N. *Journal of Geophysical Research: Oceans*, **124,** 3700-3723, https://doi.org/10.1029/2018JC014836
Melzer, B. A., T. G. Jensen, and A. V. Rydbeck, 2019: Evolution of the Great Whirl Using an Altimetry-Based Eddy Tracking Algorithm. *Geophysical Research Letters*, **46,** 4378-4385, https://doi.org/10.1029/2018GL081781
Ménesguen, C., A. Delpech, F. Marin, S. Cravatte, R. Schopp, and Y. Morel, 2019: Observations and Mechanisms for the Formation of Deep Equatorial and Tropical Circulation. *Earth and Space Science*, **6,** 370-386, https://doi.org/10.1029/2018EA000438
Menezes, V. V. and M. L. Vianna, 2019: Quasi-biennial Rossby and Kelvin waves in the South Indian Ocean: Tropical and subtropical modes and the Indian Ocean Dipole. *Deep Sea Research Part II: Topical Studies in Oceanography*, **166,** 43-63, https://doi.org/10.1016/j.dsr2.2019.05.002
Menna, M., P.-M. Poulain, D. Ciani, A. Doglioli, G. Notarstefano, R. Gerin, M.-H. Rio, R. Santoleri, A. Gauci, and A. Drago, 2019: New Insights of the Sicily Channel and Southern Tyrrhenian Sea Variability. *Water*, **11,** 1355, https://doi.org/10.3390/w11071355
Meunier, T., E. P. Sanz, M. Tenreiro, J. Ochoa, A. R. Angulo, and C. Buckingham, 2019: Observations of Layering under a Warm-Core Ring in the Gulf of Mexico. *Journal of Physical Oceanography*, **49,** 3145-3162, https://doi.org/10.1175/JPO-D-18-0138.1
Meyssignac, B., T. Boyer, Z. Zhao, M. Z. Hakuba, F. W. Landerer, D. Stammer, A. Köhl, S. Kato, T. L'Ecuyer, M. Ablain, J. P. Abraham, A. Blazquez, A. Cazenave, J. A. Church, R. Cowley, L. Cheng, C. M. Domingues, D. Giglio, V. Gouretski, M. Ishii, G. C. Johnson, R. E. Killick, D. Legler, W. Llovel, J. Lyman, M. D. Palmer, S. Piotrowicz, S. G. Purkey, D. Roemmich, R. Roca, A. Savita, K. v. Schuckmann, S. Speich, G. Stephens, G. Wang, S. E. Wijffels, and N. Zilberman, 2019: Measuring Global Ocean Heat Content to Estimate the Earth Energy Imbalance. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00432
Meza-Padilla, R., C. Enriquez, Y. Liu, and C. M. Appendini, 2019: Ocean Circulation in the Western Gulf of Mexico Using Self-Organizing Maps. *Journal of Geophysical*

Research: Oceans, **124,** 4152-4167, https://doi.org/10.1029/2018JC014377
Mignot, A., F. D'Ortenzio, V. Taillandier, G. Cossarini, and S. Salon, 2019: Quantifying Observational Errors in Biogeochemical-Argo Oxygen, Nitrate, and Chlorophyll a Concentrations. *Geophysical Research Letters*, **46,** 4330-4337, https://doi.org/10.1029/2018GL080541
Miron, P., F. J. Beron-Vera, M. J. Olascoaga, G. Froyland, P. Pérez-Brunius, and J. Sheinbaum, 2019: Lagrangian Geography of the Deep Gulf of Mexico. *Journal of Physical Oceanography*, **49,** 269-290, https://doi.org/10.1175/JPO-D-18-0073.1
Mittal, T. and B. Delbridge, 2019: Detection of the 2012 Havre submarine eruption plume using Argo floats and its implications for ocean dynamics. *Earth and Planetary Science Letters*, **511,** 105-116, https://doi.org/10.1016/j.epsl.2019.01.035
Miyazawa, Y., A. Kuwano-Yoshida, T. Doi, H. Nishikawa, T. Narazaki, T. Fukuoka, and K. Sato, 2019: Temperature profiling measurements by sea turtles improve ocean state estimation in the Kuroshio-Oyashio Confluence region. *Ocean Dynamics*, **69,** 267-282, https://doi.org/10.1007/s10236-018-1238-5
Moltmann, T., J. Turton, H.-M. Zhang, G. Nolan, C. Gouldman, L. Griesbauer, Z. Willis, Á. M. Piniella, S. Barrell, E. Andersson, C. Gallage, E. Charpentier, M. Belbeoch, P. Poli, A. Rea, E. F. Burger, D. M. Legler, R. Lumpkin, C. Meinig, K. O'Brien, K. Saha, A. Sutton, D. Zhang, and Y. Zhang, 2019: A Global Ocean Observing System (GOOS), Delivered Through Enhanced Collaboration Across Regions, Communities, and New Technologies. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00291
Moore, A. M., M. J. Martin, S. Akella, H. G. Arango, M. Balmaseda, L. Bertino, S. Ciavatta, B. Cornuelle, J. Cummings, S. Frolov, P. Lermusiaux, P. Oddo, P. R. Oke, A. Storto, A. Teruzzi, A. Vidard, and A. T. Weaver, 2019: Synthesis of Ocean Observations Using Data Assimilation for Operational, Real-Time and Reanalysis Systems: A More Complete Picture of the State of the Ocean. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00090
Mork, K. A., Ø. Skagseth, and H. Søiland, 2019: Recent Warming and Freshening of the Norwegian Sea Observed by Argo Data. *Journal of Climate*, **32,** 3695-3705, https://journals.ametsoc.org/doi/abs/10.1175/JCLI-D-18-0591.1
Morris, T., B. Aguiar-González, I. Ansorge, and J. Hermes, 2019: Lagrangian Evolution of Two Madagascar Cyclonic Eddies: Geometric Properties, Vertical Structure, and Fluxes. *Journal of Geophysical Research: Oceans*, **124,** 8193-8218, https://doi.org/10.1029/2019JC015090
Morris, T. and T. Lamont, 2019: Using ocean robots on high-resolution profiling to capture the fast-flowing Agulhas Current. *South African Journal of Science*, **115,** 1-3, http://dx.doi.org/10.17159/sajs.2019/5523
Mu, Z., W. Zhang, P. Wang, H. Wang, and X. Yang, 2019: Assimilation of SMOS Sea Surface Salinity in the Regional Ocean Model for South China Sea. *Remote Sensing*, **11,** 919, https://doi.org/10.3390/rs11080919
Müller, V., D. Kieke, P. G. Myers, C. Pennelly, R. Steinfeldt, and I. Stendardo, 2019: Heat and Freshwater Transport by Mesoscale Eddies in the Southern Subpolar North Atlantic. *Journal of Geophysical Research: Oceans*, **124,** 5565-5585,

https://doi.org/10.1029/2018JC014697
Nan, F., F. Yu, Q. Ren, C. Wei, Y. Liu, and S. Sun, 2019: Isopycnal mixing of interhemispheric intermediate waters by subthermocline eddies east of the Philippines. *Scientific Reports*, **9,** 2957, https://doi.org/10.1038/s41598-019-39596-2
Napolitano, D. C., I. C. A. d. Silveira, C. B. Rocha, G. R. Flierl, P. H. R. Calil, and R. P. Martins, 2019: On the Steadiness and Instability of the Intermediate Western Boundary Current between 24° and 18°S. *Journal of Physical Oceanography*, **49,** 3127-3143, https://doi.org/10.1175/JPO-D-19-0011.1
Napolitano, E., R. Iacono, T. Ciuffardi, F. Reseghetti, P.-M. Poulain, and G. Notarstefano, 2019: The Tyrrhenian Intermediate Water (TIW): Characterization and formation mechanisms. *Progress in Oceanography*, **170,** 53-68, https://doi.org/10.1016/j.pocean.2018.10.017
Newman, L., P. Heil, R. Trebilco, K. Katsumata, A. Constable, E. van Wijk, K. Assmann, J. Beja, P. Bricher, R. Coleman, D. Costa, S. Diggs, R. Farneti, S. Fawcett, S. T. Gille, K. R. Hendry, S. Henley, E. Hofmann, T. Maksym, M. Mazloff, A. Meijers, M. M. Meredith, S. Moreau, B. Ozsoy, R. Robertson, I. Schloss, O. Schofield, J. Shi, E. Sikes, I. J. Smith, S. Swart, A. Wahlin, G. Williams, M. J. M. Williams, L. Herraiz-Borreguero, S. Kern, J. Lieser, R. A. Massom, J. Melbourne-Thomas, P. Miloslavich, and G. Spreen, 2019: Delivering Sustained, Coordinated, and Integrated Observations of the Southern Ocean for Global Impact. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00433
Nichols, R. E. and B. Subrahmanyam, 2019: Estimation of Surface Freshwater Fluxes in the Arctic Ocean Using Satellite-Derived Salinity. *Remote Sensing in Earth Systems Sciences*, **2,** 247-259, https://doi.org/10.1007/s41976-019-00027-5
Nigam, T., K. R. Prakash, and V. Pant, 2019: An assessment of the impact of oceanic initial conditions on the interaction of upper ocean with the tropical cyclones in the Arabian Sea. *Journal of Operational Oceanography***,** 1-17, https://doi.org/10.1080/1755876X.2019.1658567
Ning, J., Q. Xu, T. Feng, H. Zhang, and T. Wang, 2019: Upper Ocean Response to Two Sequential Tropical Cyclones over the Northwestern Pacific Ocean. *Remote Sensing*, **11,** 2431, https://doi.org/10.3390/rs11202431
Ning, J., Q. Xu, H. Zhang, T. Wang, and K. Fan, 2019: Impact of Cyclonic Ocean Eddies on Upper Ocean Thermodynamic Response to Typhoon Soudelor. *Remote Sensing*, **11,** 938, https://doi.org/10.3390/rs11080938
O'Carroll, A. G., E. M. Armstrong, H. M. Beggs, M. Bouali, K. S. Casey, G. K. Corlett, P. Dash, C. J. Donlon, C. L. Gentemann, J. L. Høyer, A. Ignatov, K. Kabobah, M. Kachi, Y. Kurihara, I. Karagali, E. Maturi, C. J. Merchant, S. Marullo, P. J. Minnett, M. Pennybacker, B. Ramakrishnan, R. Ramsankaran, R. Santoleri, S. Sunder, S. Saux Picart, J. Vázquez-Cuervo, and W. Wimmer, 2019: Observational Needs of Sea Surface Temperature. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00420
O'Kane, T. J., P. A. Sandery, D. P. Monselesan, P. Sakov, M. A. Chamberlain, R. J. Matear, M. A. Collier, D. T. Squire, and L. Stevens, 2019: Coupled Data Assimilation and Ensemble Initialization with Application to Multiyear ENSO Prediction. *Journal of Climate*, **32,**

997-1024, https://doi.org/10.1175/JCLI-D-18-0189.1
Ohishi, S., H. Aiki, T. Tozuka, and M. F. Cronin, 2019: Frontolysis by surface heat flux in the eastern Japan Sea: importance of mixed layer depth. *Journal of Oceanography*, **75,** 283-297, https://doi.org/10.1007/s10872-018-0502-0
Ohishi, S., S. Katsura, and H. Aiki, 2019: Salinity frontogenesis/frontolysis in the northeastern subtropical Pacific region. *Climate Dynamics*, **53,** 5927-5943, https://doi.org/10.1007/s00382-019-04907-w
Oke, P. R., G. S. Pilo, K. Ridgway, A. Kiss, and T. Rykova, 2019: A search for the Tasman Front. *Journal of Marine Systems*, **199,** 103217, https://doi.org/10.1016/j.jmarsys.2019.103217
Oke, P. R., M. Roughan, P. Cetina-Heredia, G. S. Pilo, K. R. Ridgway, T. Rykova, M. R. Archer, R. C. Coleman, C. G. Kerry, C. Rocha, A. Schaeffer, and E. Vitarelli, 2019: Revisiting the circulation of the East Australian Current: Its path, separation, and eddy field. *Progress in Oceanography*, **176,** 102139, https://doi.org/10.1016/j.pocean.2019.102139
Olbers, D., C. Eden, E. Becker, F. Pollmann, and J. Jungclaus, 2019: The IDEMIX Model: Parameterization of Internal Gravity Waves for Circulation Models of Ocean and Atmosphere. *Energy Transfers in Atmosphere and Ocean*, C. Eden and A. Iske, Eds., Springer International Publishing, 87-125, https://doi.org/10.1007/978-3-030-05704-6_3.
Onink, V., D. Wichmann, P. Delandmeter, and E. van Sebille, 2019: The Role of Ekman Currents, Geostrophy, and Stokes Drift in the Accumulation of Floating Microplastic. *Journal of Geophysical Research: Oceans*, **124,** 1474-1490, https://doi.org/10.1029/2018JC014547
Organelli, E. and H. Claustre, 2019: Small Phytoplankton Shapes Colored Dissolved Organic Matter Dynamics in the North Atlantic Subtropical Gyre. *Geophysical Research Letters*, **46,** 12183-12191, https://doi.org/10.1029/2019GL084699
Orúe-Echevarría, D., J. L. Pelegrí, F. Machín, A. Hernández-Guerra, and M. Emelianov, 2019: Inverse Modeling the Brazil-Malvinas Confluence. *Journal of Geophysical Research: Oceans*, **124,** 527-554, https://doi.org/10.1029/2018JC014733
Palazov, A., S. Ciliberti, E. Peneva, M. Gregoire, J. Staneva, B. Lemieux-Dudon, S. Masina, N. Pinardi, L. Vandenbulcke, A. Behrens, L. Lima, G. Coppini, V. Marinova, V. Slabakova, R. Lecci, S. Creti, F. Palermo, L. Stefanizzi, N. Valcheva, and P. Agostini, 2019: Black Sea Observing System. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00315
Palmer, M. D., P. J. Durack, M. P. Chidichimo, J. A. Church, S. Cravatte, K. Hill, J. A. Johannessen, J. Karstensen, T. Lee, D. Legler, M. Mazloff, E. Oka, S. Purkey, B. Rabe, J.-B. Sallée, B. M. Sloyan, S. Speich, K. von Schuckmann, J. Willis, and S. Wijffels, 2019: Adequacy of the Ocean Observation System for Quantifying Regional Heat and Freshwater Storage and Change. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00416
Pardo, P. C., B. Tilbrook, E. van Ooijen, A. Passmore, C. Neill, P. Jansen, A. J. Sutton, and T. W. Trull, 2019: Surface ocean carbon dioxide variability in South Pacific boundary currents and Subantarctic waters. *Scientific Reports*, **9,** 7592,

https://doi.org/10.1038/s41598-019-44109-2
Park, J.-E., K.-A. Park, C.-K. Kang, and G. Kim, 2019: Satellite-Observed Chlorophyll-a Concentration Variability and Its Relation to Physical Environmental Changes in the East Sea (Japan Sea) from 2003 to 2015. *Estuaries and Coasts*, https://doi.org/10.1007/s12237-019-00671-6
Park, Y.-H., T. Park, T.-W. Kim, S.-H. Lee, C.-S. Hong, J.-H. Lee, M.-H. Rio, M.-I. Pujol, M. Ballarotta, I. Durand, and C. Provost, 2019: Observations of the Antarctic Circumpolar Current Over the Udintsev Fracture Zone, the Narrowest Choke Point in the Southern Ocean. *Journal of Geophysical Research: Oceans*, **124,** 4511-4528, https://doi.org/10.1029/2019JC015024
Partridge, D., T. Friedrich, and B. S. Powell, 2019: Reanalysis of the PacIOOS Hawaiian Island Ocean Forecast System, an implementation of the Regional Ocean Modeling System v3.6. *Geosci. Model Dev.*, **12,** 195-213, https://doi.org/10.5194/gmd-12-195-2019
Patel, R. S., H. E. Phillips, P. G. Strutton, A. Lenton, and J. Llort, 2019: Meridional Heat and Salt Transport Across the Subantarctic Front by Cold-Core Eddies. *Journal of Geophysical Research: Oceans*, **124,** 981-1004, https://doi.org/10.1029/2018JC014655
Pauthenet, E., F. Roquet, G. Madec, J.-B. Sallée, and D. Nerini, 2019: The Thermohaline Modes of the Global Ocean. *Journal of Physical Oceanography*, **49,** 2535-2552, https://doi.org/10.1175/JPO-D-19-0120.1
Pearlman, J., M. Bushnell, L. Coppola, J. Karstensen, P. L. Buttigieg, F. Pearlman, P. Simpson, M. Barbier, F. E. Muller-Karger, C. Munoz-Mas, P. Pissierssens, C. Chandler, J. Hermes, E. Heslop, R. Jenkyns, E. P. Achterberg, M. Bensi, H. C. Bittig, J. Blandin, J. Bosch, B. Bourles, R. Bozzano, J. J. H. Buck, E. F. Burger, D. Cano, V. Cardin, M. C. Llorens, A. Cianca, H. Chen, C. Cusack, E. Delory, R. Garello, G. Giovanetti, V. Harscoat, S. Hartman, R. Heitsenrether, S. Jirka, A. Lara-Lopez, N. Lantéri, A. Leadbetter, G. Manzella, J. Maso, A. McCurdy, E. Moussat, M. Ntoumas, S. Pensieri, G. Petihakis, N. Pinardi, S. Pouliquen, R. Przeslawski, N. P. Roden, J. Silke, M. N. Tamburri, H. Tang, T. Tanhua, M. Telszewski, P. Testor, J. Thomas, C. Waldmann, and F. Whoriskey, 2019: Evolving and Sustaining Ocean Best Practices and Standards for the Next Decade. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00277
Peng, S., Y. Zhu, Z. Li, Y. Li, Q. Xie, S. Liu, Y. Luo, Y. Tian, and J. Yu, 2019: Improving the Real-time Marine Forecasting of the Northern South China Sea by Assimilation of Glider-observed T/S Profiles. *Scientific Reports*, **9,** 17845, https://doi.org/10.1038/s41598-019-54241-8
Penny, S. G., S. Akella, M. A. Balmaseda, P. Browne, J. A. Carton, M. Chevallier, F. Counillon, C. Domingues, S. Frolov, P. Heimbach, P. Hogan, I. Hoteit, D. Iovino, P. Laloyaux, M. J. Martin, S. Masina, A. M. Moore, P. de Rosnay, D. Schepers, B. M. Sloyan, A. Storto, A. Subramanian, S. Nam, F. Vitart, C. Yang, Y. Fujii, H. Zuo, T. O'Kane, P. Sandery, T. Moore, and C. C. Chapman, 2019: Observational Needs for Improving Ocean and Coupled Reanalysis, S2S Prediction, and Decadal Prediction. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00391
Perez, R. C., G. R. Foltz, R. Lumpkin, and C. Schmid, 2019: Direct Measurements of Upper Ocean Horizontal Velocity and Vertical Shear in the Tropical North Atlantic at 4°N,

23°W. *Journal of Geophysical Research: Oceans*, **124,** 4133-4151, https://doi.org/10.1029/2019JC015064

Petereit, J., J. Saynisch-Wagner, C. Irrgang, and M. Thomas, 2019: Analysis of Ocean Tide-Induced Magnetic Fields Derived From Oceanic In Situ Observations: Climate Trends and the Remarkable Sensitivity of Shelf Regions. *Journal of Geophysical Research: Oceans*, **124,** 8257-8270, https://doi.org/10.1029/2018JC014768

Petersen, M. R., X. S. Asay-Davis, A. S. Berres, Q. Chen, N. Feige, M. J. Hoffman, D. W. Jacobsen, P. W. Jones, M. E. Maltrud, S. F. Price, T. D. Ringler, G. J. Streletz, A. K. Turner, L. P. Van Roekel, M. Veneziani, J. D. Wolfe, P. J. Wolfram, and J. L. Woodring, 2019: An Evaluation of the Ocean and Sea Ice Climate of E3SM Using MPAS and Interannual CORE-II Forcing. *Journal of Advances in Modeling Earth Systems*, **11,** 1438-1458, https://doi.org/10.1029/2018MS001373

Phillipson, L. and R. Toumi, 2019: Assimilation of Satellite Salinity for Modelling the Congo River Plume. *Remote Sensing*, **12,** 11, https://doi.org/10.3390/rs12010011

Piecuch, C. G., P. R. Thompson, R. M. Ponte, M. A. Merrifield, and B. D. Hamlington, 2019: What Caused Recent Shifts in Tropical Pacific Decadal Sea-Level Trends? *Journal of Geophysical Research: Oceans*, **124,** 7575-7590, https://doi.org/10.1029/2019JC015339

Pinardi, N., P. Cessi, F. Borile, and C. L. P. Wolfe, 2019: The Mediterranean Sea Overturning Circulation. *Journal of Physical Oceanography*, **49,** 1699-1721, https://doi.org/10.1175/JPO-D-18-0254.1

Pinardi, N., J. Stander, D. M. Legler, K. O'Brien, T. Boyer, T. Cuff, P. Bahurel, M. Belbeoch, S. Belov, S. Brunner, E. Burger, T. Carval, D. Chang-Seng, E. Charpentier, S. Ciliberti, G. Coppini, A. Fischer, E. Freeman, C. Gallage, H. Garcia, L. Gates, Z. Gong, J. Hermes, E. Heslop, S. Grimes, K. Hill, K. Horsburgh, A. Iona, S. Mancini, N. Moodie, M. Ouellet, P. Pissierssens, P. Poli, R. Proctor, N. Smith, C. Sun, V. Swail, J. Turton, and Y. Xinyang, 2019: The Joint IOC (of UNESCO) and WMO Collaborative Effort for Met-Ocean Services. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00410

Piracha, A., R. Sabia, M. Klockmann, L. Castaldo, and D. Fernández, 2019: Satellite-Driven Estimates of Water Mass Formation and Their Spatio-Temporal Evolution. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00589

Porter, D. F., S. R. Springer, L. Padman, H. A. Fricker, K. J. Tinto, S. C. Riser, R. E. Bell, and t. R.-I. Team, 2019: Evolution of the Seasonal Surface Mixed Layer of the Ross Sea, Antarctica, Observed With Autonomous Profiling Floats. *Journal of Geophysical Research: Oceans*, **124,** 4934-4953, https://doi.org/10.1029/2018JC014683

Potalova, E. Y., T. I. Kleshcheva, and M. S. Permyakov, 2019: A Mesocyclone over the Northern Sea of Japan in February 2013. *Oceanology*, **59,** 814-822, https://doi.org/10.1134/S0001437019060183

Potter, H., S. F. DiMarco, and A. H. Knap, 2019: Tropical Cyclone Heat Potential and the Rapid Intensification of Hurricane Harvey in the Texas Bight. *Journal of Geophysical Research: Oceans*, **124,** 2440-2451, https://doi.org/10.1029/2018JC014776

Pramanik, S., S. Sil, S. Mandal, D. Dey, and A. Shee, 2019: Role of interannual equatorial forcing on the subsurface temperature dipole in the Bay of Bengal during IOD and ENSO events. *Ocean Dynamics*, **69,** 1253-1271,

https://doi.org/10.1007/s10236-019-01303-0
Prants, S. V., A. G. Andreev, M. Y. Uleysky, and M. V. Budyansky, 2019: Lagrangian study of mesoscale circulation in the Alaskan Stream area and the eastern Bering Sea. *Deep Sea Research Part II: Topical Studies in Oceanography*, **169-170,** 104560, https://doi.org/10.1016/j.dsr2.2019.03.005
Prasad C, A. and P. Kumar, 2019: On the Possible Mechanisms for Saltening of the Bay of Bengal. *Defence Science Journal*, **69,** 93-103, https://doi.org/10.14429/dsj.69.12220
Prend, C. J., S. T. Gille, L. D. Talley, B. G. Mitchell, I. Rosso, and M. R. Mazloff, 2019: Physical Drivers of Phytoplankton Bloom Initiation in the Southern Ocean's Scotia Sea. *Journal of Geophysical Research: Oceans*, **124,** 5811-5826, https://doi.org/10.1029/2019JC015162
Prend, C. J., H. Seo, R. A. Weller, and J. T. Farrar, 2019: Impact of freshwater plumes on intraseasonal upper ocean variability in the Bay of Bengal. *Deep Sea Research Part II: Topical Studies in Oceanography*, **161,** 63-71, https://doi.org/10.1016/j.dsr2.2018.09.007
Priyadarshani, W. N. C., L. Ran, M. G. Wiesner, J. Chen, Z. Ling, S. Yu, and Y. Ye, 2019: Seasonal and interannual variability of coccolithophore flux in the northern South China Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **145,** 13-30, https://doi.org/10.1016/j.dsr.2019.01.004
Pun, I.-F., J. C. L. Chan, I.-I. Lin, K. T. F. Chan, J. F. Price, D. S. Ko, C.-C. Lien, Y.-L. Wu, and H.-C. Huang, 2019: Rapid Intensification of Typhoon Hato (2017) over Shallow Water. *Sustainability*, **11,** 3709, https://doi.org/10.3390/su11133709
Qi, J., L. Zhang, T. Qu, B. Yin, Z. Xu, D. Yang, D. Li, and Y. Qin, 2019: Salinity variability in the tropical Pacific during the Central-Pacific and Eastern-Pacific El Niño events. *Journal of Marine Systems*, **199,** 103225, https://doi.org/10.1016/j.jmarsys.2019.103225
Qiao, F., G. Wang, L. Yin, K. Zeng, Y. Zhang, M. Zhang, B. Xiao, S. Jiang, H. Chen, and G. Chen, 2019: Modelling oil trajectories and potentially contaminated areas from the Sanchi oil spill. *Science of The Total Environment*, **685,** 856-866, https://doi.org/10.1016/j.scitotenv.2019.06.255
Qiu, Y., W. Han, X. Lin, B. J. West, Y. Li, W. Xing, X. Zhang, K. Arulananthan, and X. Guo, 2019: Upper-Ocean Response to the Super Tropical Cyclone Phailin (2013) over the Freshwater Region of the Bay of Bengal. *Journal of Physical Oceanography*, **49,** 1201-1228, https://doi.org/10.1175/JPO-D-18-0228.1
Qu, T., I. Fukumori, and R. A. Fine, 2019: Spin-Up of the Southern Hemisphere Super Gyre. *Journal of Geophysical Research: Oceans*, **124,** 154-170, https://doi.org/10.1029/2018JC014391
Qu, T., Z. Lian, X. Nie, and Z. Wei, 2019: Eddy-Induced Meridional Salt Flux and Its Impacts on the Sea Surface Salinity Maxima in the Southern Subtropical Oceans. *Geophysical Research Letters*, **46,** 11292-11300, https://doi.org/10.1029/2019GL084807
Quinn, K. J., R. M. Ponte, P. Heimbach, I. Fukumori, and J. M. Campin, 2019: Ocean angular momentum from a recent global state estimate, with assessment of uncertainties. *Geophysical Journal International*, **216,** 584-597, http://dx.doi.org/10.1093/gji/ggy452
Racapé, V., V. Thierry, H. Mercier, and C. Cabanes, 2019: ISOW Spreading and Mixing as

Revealed by Deep-Argo Floats Launched in the Charlie-Gibbs Fracture Zone. *Journal of Geophysical Research: Oceans*, **124,** 6787-6808, https://doi.org/10.1029/2019JC015040

Rao, S. A., B. N. Goswami, A. K. Sahai, E. N. Rajagopal, P. Mukhopadhyay, M. Rajeevan, S. Nayak, L. S. Rathore, S. S. C. Shenoi, K. J. Ramesh, R. S. Nanjundiah, M. Ravichandran, A. K. Mitra, D. S. Pai, S. K. R. Bhowmik, A. Hazra, S. Mahapatra, S. K. Saha, H. S. Chaudhari, S. Joseph, P. Sreenivas, S. Pokhrel, P. A. Pillai, R. Chattopadhyay, M. Deshpande, R. P. M. Krishna, R. S. Das, V. S. Prasad, S. Abhilash, S. Panickal, R. Krishnan, S. Kumar, D. A. Ramu, S. S. Reddy, A. Arora, T. Goswami, A. Rai, A. Srivastava, M. Pradhan, S. Tirkey, M. Ganai, R. Mandal, A. Dey, S. Sarkar, S. Malviya, A. Dhakate, K. Salunke, and P. Maini, 2019: Monsoon Mission: A Targeted Activity to Improve Monsoon Prediction across Scales. *Bulletin of the American Meteorological Society*, **100,** 2509-2532, https://doi.org/10.1175/BAMS-D-17-0330.1

Rasse, R. and G. Dall'Olmo, 2019: Do Oceanic Hypoxic Regions Act as Barriers for Sinking Particles? A Case Study in the Eastern Tropical North Atlantic. *Global Biogeochemical Cycles*, **33,** 1611-1630, https://doi.org/10.1029/2019GB006305

Reeve, K. A., O. Boebel, V. Strass, T. Kanzow, and R. Gerdes, 2019: Horizontal circulation and volume transports in the Weddell Gyre derived from Argo float data. *Progress in Oceanography*, **175,** 263-283, https://doi.org/10.1016/j.pocean.2019.04.006

Reeves Eyre, J. E. J., L. Van Roekel, X. Zeng, M. A. Brunke, and J.-C. Golaz, 2019: Ocean Barrier Layers in the Energy Exascale Earth System Model. *Geophysical Research Letters*, **46,** 8234-8243, https://doi.org/10.1029/2019GL083591

Reverdin, G., A. R. Friedman, L. Chafik, N. P. Holliday, T. Szekely, H. Valdimarsson, and I. Yashayaev, 2019: North Atlantic extratropical and subpolar gyre variability during the last 120 years: a gridded dataset of surface temperature, salinity, and density. Part 1: dataset validation and RMS variability. *Ocean Dynamics*, **69,** 385-403, https://doi.org/10.1007/s10236-018-1240-y

Rhein, M., C. Mertens, and A. Roessler, 2019: Observed Transport Decline at 47°N, Western Atlantic. *Journal of Geophysical Research: Oceans*, **124,** 4875-4890, https://doi.org/10.1029/2019JC014993

Richardson, L. E., J. F. Middleton, T. K. Kyser, N. P. James, and B. N. Opdyke, 2019: Shallow water masses and their connectivity along the southern Australian continental margin. *Deep Sea Research Part I: Oceanographic Research Papers*, **152,** 103083, https://doi.org/10.1016/j.dsr.2019.103083

Rieck, J. K., C. W. Böning, and K. Getzlaff, 2019: The Nature of Eddy Kinetic Energy in the Labrador Sea: Different Types of Mesoscale Eddies, Their Temporal Variability, and Impact on Deep Convection. *Journal of Physical Oceanography*, **49,** 2075-2094, https://doi.org/10.1175/JPO-D-18-0243.1

Roach, C. J. and K. Speer, 2019: Exchange of Water Between the Ross Gyre and ACC Assessed by Lagrangian Particle Tracking. *Journal of Geophysical Research: Oceans*, **124,** 4631-4643, https://doi.org/10.1029/2018JC014845

Roemmich, D., M. H. Alford, H. Claustre, K. Johnson, B. King, J. Moum, P. Oke, W. B. Owens, S. Pouliquen, S. Purkey, M. Scanderbeg, T. Suga, S. Wijffels, N. Zilberman, D. Bakker, M. Baringer, M. Belbeoch, H. C. Bittig, E. Boss, P. Calil, F. Carse, T. Carval, F. Chai, D. Ó.

Conchubhair, F. d'Ortenzio, G. Dall'Olmo, D. Desbruyeres, K. Fennel, I. Fer, R. Ferrari, G. Forget, H. Freeland, T. Fujiki, M. Gehlen, B. Greenan, R. Hallberg, T. Hibiya, S. Hosoda, S. Jayne, M. Jochum, G. C. Johnson, K. Kang, N. Kolodziejczyk, A. Körtzinger, P.-Y. L. Traon, Y.-D. Lenn, G. Maze, K. A. Mork, T. Morris, T. Nagai, J. Nash, A. N. Garabato, A. Olsen, R. R. Pattabhi, S. Prakash, S. Riser, C. Schmechtig, C. Schmid, E. Shroyer, A. Sterl, P. Sutton, L. Talley, T. Tanhua, V. Thierry, S. Thomalla, J. Toole, A. Troisi, T. W. Trull, J. Turton, P. J. Velez-Belchi, W. Walczowski, H. Wang, R. Wanninkhof, A. F. Waterhouse, S. Waterman, A. Watson, C. Wilson, A. P. S. Wong, J. Xu, and I. Yasuda, 2019: On the Future of Argo: A Global, Full-Depth, Multi-Disciplinary Array. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00439

Roemmich, D., J. T. Sherman, R. E. Davis, K. Grindley, M. McClune, C. J. Parker, D. N. Black, N. Zilberman, S. G. Purkey, P. J. H. Sutton, and J. Gilson, 2019: Deep SOLO: A Full-Depth Profiling Float for the Argo Program. *Journal of Atmospheric and Oceanic Technology*, **36,** 1967-1981, https://doi.org/10.1175/JTECH-D-19-0066.1

Rydbeck, A. V., T. G. Jensen, and M. Flatau, 2019: Characterization of Intraseasonal Kelvin Waves in the Equatorial Pacific Ocean. *Journal of Geophysical Research: Oceans*, **124,** 2028-2053, https://doi.org/10.1029/2018JC014838

Rydbeck, A. V., T. G. Jensen, T. A. Smith, M. K. Flatau, M. A. Janiga, C. A. Reynolds, and J. A. Ridout, 2019: Ocean Heat Content and the Intraseasonal Oscillation. *Geophysical Research Letters*, **46,** 14558-14566, https://doi.org/10.1029/2019GL084974

Rzeznik, A. J., G. R. Flierl, and T. Peacock, 2019: Model investigations of discharge plumes generated by deep-sea nodule mining operations. *Ocean Engineering*, **172,** 684-696, https://doi.org/10.1016/j.oceaneng.2018.12.012

Saldías, G. S., M. Sobarzo, and R. Quiñones, 2019: Freshwater structure and its seasonal variability off western Patagonia. *Progress in Oceanography*, **174,** 143-153, https://doi.org/10.1016/j.pocean.2018.10.014

Salon, S., G. Cossarini, G. Bolzon, L. Feudale, P. Lazzari, A. Teruzzi, C. Solidoro, and A. Crise, 2019: Novel metrics based on Biogeochemical Argo data to improve the model uncertainty evaluation of the CMEMS Mediterranean marine ecosystem forecasts. *Ocean Sci.*, **15,** 997-1022, https://doi.org/10.5194/os-15-997-2019

Sanchez-Franks, A., B. G. M. Webber, B. A. King, P. N. Vinayachandran, A. J. Matthews, P. M. F. Sheehan, A. Behara, and C. P. Neema, 2019: The Railroad Switch Effect of Seasonally Reversing Currents on the Bay of Bengal High-Salinity Core. *Geophysical Research Letters*, **46,** 6005-6014, https://doi.org/10.1029/2019GL082208

Sandery, P., G. Brassington, F. Colberg, P. Sakov, M. Herzfeld, C. Maes, and N. Tuteja, 2019: An ocean reanalysis of the western Coral Sea and Great Barrier Reef. *Ocean Modelling*, **144,** 101495, https://doi.org/10.1016/j.ocemod.2019.101495

Sanikommu, S., D. S. Banerjee, B. Baduru, B. Paul, A. Paul, K. Chakraborty, and I. Hoteit, 2019: Impact of dynamical representational errors on an Indian Ocean ensemble data assimilation system. *Quarterly Journal of the Royal Meteorological Society*, **145,** 3680-3691, https://doi.org/10.1002/qj.3649

Schonau, M. C., H. W. Wijesekera, W. J. Teague, P. L. Colin, G. Gopalakrishnan, D. L. Rudnick, B. Cornuelle, Z. R. Hallock, and D. W. Wang, 2019: The End of an El Nino: A view

from Palau. *Oceanography*, **32,** 32-45, https://doi.org/10.5670/oceanog.2019.409
Sciascia, R., M. G. Magaldi, and A. Vetrano, 2019: Current reversal and associated variability within the Corsica Channel: The 2004 case study. *Deep Sea Research Part I: Oceanographic Research Papers*, **144,** 39-51, https://doi.org/10.1016/j.dsr.2018.12.004
Séférian, R., P. Nabat, M. Michou, D. Saint-Martin, A. Voldoire, J. Colin, B. Decharme, C. Delire, S. Berthet, M. Chevallier, S. Sénési, L. Franchisteguy, J. Vial, M. Mallet, E. Joetzjer, O. Geoffroy, J.-F. Guérémy, M.-P. Moine, R. Msadek, A. Ribes, M. Rocher, R. Roehrig, D. Salas-y-Mélia, E. Sanchez, L. Terray, S. Valcke, R. Waldman, O. Aumont, L. Bopp, J. Deshayes, C. Éthé, and G. Madec, 2019: Evaluation of CNRM Earth System Model, CNRM-ESM2-1: Role of Earth System Processes in Present-Day and Future Climate. *Journal of Advances in Modeling Earth Systems*, **11,** 4182-4227, https://doi.org/10.1029/2019MS001791
Seidov, D., A. Mishonov, J. Reagan, and R. Parsons, 2019: Eddy-Resolving In Situ Ocean Climatologies of Temperature and Salinity in the Northwest Atlantic Ocean. *Journal of Geophysical Research: Oceans*, **124,** 41-58, https://doi.org/10.1029/2018JC014548
Seyfried, L., C. Estournel, P. Marsaleix, and E. Richard, 2019: Dynamics of the North Balearic Front during an autumn tramontane and mistral storm: air–sea coupling processes and stratification budget diagnostic. *Ocean Sci.*, **15,** 179-198, https://doi.org/10.5194/os-15-179-2019
Sharma, N., 2019: Retrieval of sea surface salinity from SMAP L-band radiometer: A novel approach for wind speed correction. *Quarterly Journal of the Royal Meteorological Society*, **145,** 3455-3465, https://doi.org/10.1002/qj.3630
Shee, A., S. Sil, A. Gangopadhyay, G. Gawarkiewicz, and M. Ravichandran, 2019: Seasonal Evolution of Oceanic Upper Layer Processes in the Northern Bay of Bengal Following a Single Argo Float. *Geophysical Research Letters*, **46,** 5369-5377, https://doi.org/10.1029/2019GL082078
Shu, Y., J. Chen, S. Li, Q. Wang, J. Yu, and D. Wang, 2019: Field-observation for an anticyclonic mesoscale eddy consisted of twelve gliders and sixty-two expendable probes in the northern South China Sea during summer 2017. *Science China Earth Sciences*, **62,** 451-458, https://doi.org/10.1007/s11430-018-9239-0
Siiriä, S., P. Roiha, L. Tuomi, T. Purokoski, N. Haavisto, and P. Alenius, 2019: Applying area-locked, shallow water Argo floats in Baltic Sea monitoring. *Journal of Operational Oceanography*, **12**, https://doi.org/10.1080/1755876X.2018.1544783
Silvano, A., S. R. Rintoul, K. Kusahara, B. Peña-Molino, E. van Wijk, D. E. Gwyther, and G. D. Williams, 2019: Seasonality of Warm Water Intrusions Onto the Continental Shelf Near the Totten Glacier. *Journal of Geophysical Research: Oceans*, **124,** 4272-4289, https://doi.org/10.1029/2018JC014634
Skachko, S., M. Buehner, S. Laroche, E. Lapalme, G. Smith, F. Roy, D. Surcel-Colan, J. M. Bélanger, and L. Garand, 2019: Weakly coupled atmosphere–ocean data assimilation in the Canadian global prediction system (v1). *Geosci. Model Dev.*, **12,** 5097-5112, https://doi.org/10.5194/gmd-12-5097-2019
Sloyan, B. M., R. Wanninkhof, M. Kramp, G. C. Johnson, L. D. Talley, T. Tanhua, E. McDonagh, C. Cusack, E. O'Rourke, E. McGovern, K. Katsumata, S. Diggs, J. Hummon, M. Ishii, K.

Azetsu-Scott, E. Boss, I. Ansorge, F. F. Perez, H. Mercier, M. J. M. Williams, L. Anderson, J. H. Lee, A. Murata, S. Kouketsu, E. Jeansson, M. Hoppema, and E. Campos, 2019: The Global Ocean Ship-Based Hydrographic Investigations Program (GO-SHIP): A Platform for Integrated Multidisciplinary Ocean Science. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00445

Smith, G. C., R. Allard, M. Babin, L. Bertino, M. Chevallier, G. Corlett, J. Crout, F. Davidson, B. Delille, S. T. Gille, D. Hebert, P. Hyder, J. Intrieri, J. Lagunas, G. Larnicol, T. Kaminski, B. Kater, F. Kauker, C. Marec, M. Mazloff, E. J. Metzger, C. Mordy, A. O'Carroll, S. M. Olsen, M. Phelps, P. Posey, P. Prandi, E. Rehm, P. Reid, I. Rigor, S. Sandven, M. Shupe, S. Swart, O. M. Smedstad, A. Solomon, A. Storto, P. Thibaut, J. Toole, K. Wood, J. Xie, Q. Yang, and t. W. P. S. G. , 2019: Polar Ocean Observations: A Critical Gap in the Observing System and Its Effect on Environmental Predictions From Hours to a Season. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00429

Smith, N., W. S. Kessler, S. Cravatte, J. Sprintall, S. Wijffels, M. F. Cronin, A. Sutton, Y. L. Serra, B. Dewitte, P. G. Strutton, K. Hill, A. Sen Gupta, X. Lin, K. Takahashi, D. Chen, and S. Brunner, 2019: Tropical Pacific Observing System. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00031

Smith, T. and P. Heimbach, 2019: Atmospheric Origins of Variability in the South Atlantic Meridional Overturning Circulation. *Journal of Climate*, **32,** 1483-1500, https://doi.org/10.1175/JCLI-D-18-0311.1

Snowden, D., V. M. Tsontos, N. O. Handegard, M. Zarate, K. O' Brien, K. S. Casey, N. Smith, H. Sagen, K. Bailey, M. N. Lewis, and S. C. Arms, 2019: Data Interoperability Between Elements of the Global Ocean Observing System. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00442

Soares, S. M., K. J. Richards, F. O. Bryan, and K. Yoneyama, 2019: On the Seasonal Cycle of the Tropical South Indian Ocean. Part I: Mixed Layer Heat and Salt Budgets. *Journal of Climate*, **32,** 1951-1972, https://doi.org/10.1175/JCLI-D-18-0036.1

Somavilla, R., 2019: Draining and Upwelling of Greenland Sea Deep Waters. *Journal of Geophysical Research: Oceans*, **124,** 2842-2860, https://doi.org/10.1029/2018JC014249

Song, B., H. Wang, C. Chen, R. Zhang, and S. Bao, 2019: Observed subsurface eddies near the Vietnam coast of the South China Sea. *Acta Oceanologica Sinica*, **38,** 39-46, https://doi.org/10.1007/s13131-019-1412-8

Sprintall, J., A. L. Gordon, S. E. Wijffels, M. Feng, S. Hu, A. Koch-Larrouy, H. Phillips, D. Nugroho, A. Napitu, K. Pujiana, R. D. Susanto, B. Sloyan, D. Yuan, N. F. Riama, S. Siswanto, A. Kuswardani, Z. Arifin, A. a. J. Wahyudi, H. Zhou, T. Nagai, J. K. Ansong, R. Bourdalle-Badié, J. Chanut, F. Lyard, B. K. Arbic, A. Ramdhani, and A. Setiawan, 2019: Detecting Change in the Indonesian Seas. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00257

Srokosz, M. and C. Banks, 2019: Salinity from space. *Weather*, **74,** 3-8, https://doi.org/10.1002/wea.3161

Stammer, D., A. Bracco, K. AchutaRao, L. Beal, N. L. Bindoff, P. Braconnot, W. Cai, D. Chen, M. Collins, G. Danabasoglu, B. Dewitte, R. Farneti, B. Fox-Kemper, J. Fyfe, S. M. Griffies, S. R. Jayne, A. Lazar, M. Lengaigne, X. Lin, S. Marsland, S. Minobe, P. M. S. Monteiro, W.

Robinson, M. K. Roxy, R. R. Rykaczewski, S. Speich, I. J. Smith, A. Solomon, A. Storto, K. Takahashi, T. Toniazzo, and J. Vialard, 2019: Ocean Climate Observing Requirements in Support of Climate Research and Climate Information. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00444

Stanev, E. V., E. Peneva, and B. Chtirkova, 2019: Climate Change and Regional Ocean Water Mass Disappearance: Case of the Black Sea. *Journal of Geophysical Research: Oceans*, **124,** 4803-4819, https://doi.org/10.1029/2019JC015076

Stensland, A., T. Baumberger, K. A. Mork, M. D. Lilley, I. H. Thorseth, and R. B. Pedersen, 2019: 3He along the ultraslow spreading AMOR in the Norwegian-Greenland Seas. *Deep Sea Research Part I: Oceanographic Research Papers*, **147,** 1-11, https://doi.org/10.1016/j.dsr.2019.04.004

Storto, A., A. Alvera-Azcárate, M. A. Balmaseda, A. Barth, M. Chevallier, F. Counillon, C. M. Domingues, M. Drevillon, Y. Drillet, G. Forget, G. Garric, K. Haines, F. Hernandez, D. Iovino, L. C. Jackson, J.-M. Lellouche, S. Masina, M. Mayer, P. R. Oke, S. G. Penny, K. A. Peterson, C. Yang, and H. Zuo, 2019: Ocean Reanalyses: Recent Advances and Unsolved Challenges. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00418

Storto, A., A. Bonaduce, X. Feng, and C. Yang, 2019: Steric Sea Level Changes from Ocean Reanalyses at Global and Regional Scales. *Water*, **11,** 1987, https://doi.org/10.3390/w11101987

Storto, A., S. Masina, S. Simoncelli, D. Iovino, A. Cipollone, M. Drevillon, Y. Drillet, K. von Schuckman, L. Parent, G. Garric, E. Greiner, C. Desportes, H. Zuo, M. A. Balmaseda, and K. A. Peterson, 2019: The added value of the multi-system spread information for ocean heat content and steric sea level investigations in the CMEMS GREP ensemble reanalysis product. *Climate Dynamics*, **53,** 287-312, https://doi.org/10.1007/s00382-018-4585-5

Su, H., X. Yang, W. Lu, and X.-H. Yan, 2019: Estimating Subsurface Thermohaline Structure of the Global Ocean Using Surface Remote Sensing Observations. *Remote Sensing*, **11,** 1598, https://doi.org/10.3390/rs11131598

Subramanian, A. C., M. A. Balmaseda, L. Centurioni, R. Chattopadhyay, B. D. Cornuelle, C. DeMott, M. Flatau, Y. Fujii, D. Giglio, S. T. Gille, T. M. Hamill, H. Hendon, I. Hoteit, A. Kumar, J.-H. Lee, A. J. Lucas, A. Mahadevan, M. Matsueda, S. Nam, S. Paturi, S. G. Penny, A. Rydbeck, R. Sun, Y. Takaya, A. Tandon, R. E. Todd, F. Vitart, D. Yuan, and C. Zhang, 2019: Ocean Observations to Improve Our Understanding, Modeling, and Forecasting of Subseasonal-to-Seasonal Variability. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00427

Sun, B., C. Liu, and F. Wang, 2019: Global meridional eddy heat transport inferred from Argo and altimetry observations. *Scientific Reports*, **9,** 1345, https://doi.org/10.1038/s41598-018-38069-2

Sun, J., Z. Wei, T. Xu, M. Sun, K. Liu, Y. Yang, L. Chen, H. Zhao, X. Yin, W. Feng, Z. Zhang, and Y. Wang, 2019: Development of a fine-resolution atmosphere-wave-ocean coupled forecasting model for the South China Sea and its adjacent seas. *Acta Oceanologica Sinica*, **38,** 154-166, https://doi.org/10.1007/s13131-019-1419-1

Sun, Q., Y. Du, Y. Zhang, M. Feng, J. S. Chowdary, J. Chi, S. Qiu, and W. Yu, 2019: Evolution of

Sea Surface Salinity Anomalies in the Southwestern Tropical Indian Ocean During 2010–2011 Influenced by a Negative IOD Event. *Journal of Geophysical Research: Oceans*, **124,** 3428-3445, https://doi.org/10.1029/2018JC014580

Sutton, P. J. H. and M. Bowen, 2019: Ocean temperature change around New Zealand over the last 36 years. *New Zealand Journal of Marine and Freshwater Research***,** 1-22, https://doi.org/10.1080/00288330.2018.1562945

Swart, S., S. T. Gille, B. Delille, S. Josey, M. Mazloff, L. Newman, A. F. Thompson, J. Thomson, B. Ward, M. D. du Plessis, E. C. Kent, J. Girton, L. Gregor, P. Heil, P. Hyder, L. P. Pezzi, R. B. de Souza, V. Tamsitt, R. A. Weller, and C. J. Zappa, 2019: Constraining Southern Ocean Air-Sea-Ice Fluxes Through Enhanced Observations. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00421

Szekely, T., J. Gourrion, S. Pouliquen, and G. Reverdin, 2019: The CORA 5.2 dataset for global in situ temperature and salinity measurements: data description and validation. *Ocean Sci.*, **15,** 1601-1614, https://doi.org/10.5194/os-15-1601-2019

Szuts, Z. B., A. S. Bower, K. A. Donohue, J. B. Girton, J. M. Hummon, K. Katsumata, R. Lumpkin, P. B. Ortner, H. E. Phillips, H. T. Rossby, L. K. Shay, C. Sun, and R. E. Todd, 2019: The Scientific and Societal Uses of Global Measurements of Subsurface Velocity. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00358

Talley, L. D., I. Rosso, I. Kamenkovich, M. R. Mazloff, J. Wang, E. Boss, A. R. Gray, K. S. Johnson, R. M. Key, S. C. Riser, N. L. Williams, and J. L. Sarmiento, 2019: Southern Ocean Biogeochemical Float Deployment Strategy, With Example From the Greenwich Meridian Line (GO-SHIP A12). *Journal of Geophysical Research: Oceans*, **124,** 403-431, https://doi.org/10.1029/2018JC014059

Tamsitt, V., L. D. Talley, and M. R. Mazloff, 2019: A Deep Eastern Boundary Current Carrying Indian Deep Water South of Australia. *Journal of Geophysical Research: Oceans*, **124,** 2218-2238, https://doi.org/10.1029/2018JC014569

Tanhua, T., S. Pouliquen, J. Hausman, K. O'Brien, P. Bricher, T. de Bruin, J. J. H. Buck, E. F. Burger, T. Carval, K. S. Casey, S. Diggs, A. Giorgetti, H. Glaves, V. Harscoat, D. Kinkade, J. H. Muelbert, A. Novellino, B. Pfeil, P. L. Pulsifer, A. Van de Putte, E. Robinson, D. Schaap, A. Smirnov, N. Smith, D. Snowden, T. Spears, S. Stall, M. Tacoma, P. Thijsse, S. Tronstad, T. Vandenberghe, M. Wengren, L. Wyborn, and Z. Zhao, 2019: Ocean FAIR Data Services. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00440

Tapley, B. D., M. M. Watkins, F. Flechtner, C. Reigber, S. Bettadpur, M. Rodell, I. Sasgen, J. S. Famiglietti, F. W. Landerer, D. P. Chambers, J. T. Reager, A. S. Gardner, H. Save, E. R. Ivins, S. C. Swenson, C. Boening, C. Dahle, D. N. Wiese, H. Dobslaw, M. E. Tamisiea, and I. Velicogna, 2019: Contributions of GRACE to understanding climate change. *Nature Climate Change*, **9,** 358-369, https://doi.org/10.1038/s41558-019-0456-2

Terzić, E., P. Lazzari, E. Organelli, C. Solidoro, S. Salon, F. D'Ortenzio, and P. Conan, 2019: Merging bio-optical data from Biogeochemical-Argo floats and models in marine biogeochemistry. *Biogeosciences*, **16,** 2527-2542, https://doi.org/10.5194/bg-16-2527-2019

Thompson, B., C. Sanchez, X. Sun, G. Song, J. Liu, X.-Y. Huang, and P. Tkalich, 2019: A high-resolution atmosphere–ocean coupled model for the western Maritime

Continent: development and preliminary assessment. *Climate Dynamics*, **52,** 3951-3981, https://doi.org/10.1007/s00382-018-4367-0

Thompson, P. R., M. J. Widlansky, E. Leuliette, W. Sweet, D. P. Chambers, B. D. Hamlington, S. Jevrejeva, J. J. Marra, M. Merrifield, G. Mitchum, and R. S. Nerem, 2019: Global Oceans: Sea level variability and change in State of the Climate in 2018. *Bull. Am. Meteorol. Soc.*, **100,** S84 - S87, https://doi.org/10.1175/2019BAMSStateoftheClimate.1

Tilbrook, B., E. B. Jewett, M. D. DeGrandpre, J. M. Hernandez-Ayon, R. A. Feely, D. K. Gledhill, L. Hansson, K. Isensee, M. L. Kurz, J. A. Newton, S. A. Siedlecki, F. Chai, S. Dupont, M. Graco, E. Calvo, D. Greeley, L. Kapsenberg, M. Lebrec, C. Pelejero, K. L. Schoo, and M. Telszewski, 2019: An Enhanced Ocean Acidification Observing Network: From People to Technology to Data Synthesis and Information Exchange. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00337

Tintó Prims, O., M. C. Acosta, A. M. Moore, M. Castrillo, K. Serradell, A. Cortés, and F. J. Doblas-Reyes, 2019: How to use mixed precision in ocean models: exploring a potential reduction of numerical precision in NEMO 4.0 and ROMS 3.6. *Geosci. Model Dev.*, **12,** 3135-3148, https://doi.org/10.5194/gmd-12-3135-2019

Tintoré, J.and N. Pinardiand E. Álvarez-Fanjuland E. Aguiarand D. Álvarez-Berasteguiand M. Bajoand R. Balbinand R. Bozzanoand B. B. Nardelliand V. Cardinand B. Casasand M. Charcos-Llorensand J. Chiggiatoand E. Clementiand G. Coppiniand L. Coppolaand G. Cossariniand A. Deidunand S. Deuderoand F. D'Ortenzioand A. Dragoand M. Drudiand G. El Serafyand R. Escudierand P. Farcyand I. Federicoand J. G. Fernándezand C. Ferrarinand C. Fossiand C. Frangoulisand F. Galganiand S. Ganaand J. García Lafuenteand M. G. Sotilloand P. Garreauand I. Gertmanand L. Gómez-Pujoland A. Grandiand D. Hayesand J. Hernández-Lasherasand B. Herutand E. Heslopand K. Hilmiand M. Juzaand G. Kallosand G. Korresand R. Lecciand P. Lazzariand P. Lorenteand S. Liubartsevaand F. Louanchiand V. Malacicand G. Mannariniand D. Marchand S. Marulloand E. Mauriand L. Meszarosand B. Mourreand L. Mortierand C. Muñoz-Masand A. Novellinoand D. Obatonand A. Orfilaand A. Pascualand S. Pensieriand B. Pérez Gómezand S. Pérez Rubioand L. Perivoliotisand G. Petihakisand L. P. de la Villéonand J. Pistoiaand P.-M. Poulainand S. Pouliquenand L. Prietoand P. Raimbaultand P. Regleroand E. Reyesand P. Rotllanand S. Ruizand J. Ruizand I. Ruizand L. F. Ruiz-Orejónand B. Salihogluand S. Salonand S. Sammartinoand A. Sánchez Arcillaand A. Sánchez-Románand G. Sanninoand R. Santoleriand R. Sardáand K. Schroederand S. Simoncelliand S. Sofianosand G. Sylaiosand T. Tanhuaand A. Teruzziand P. Testorand D. Tezcanand M. Tornerand F. Trottaand G. Umgiesserand K. von Schuckmannand G. Verriand I. Vilibicand M. Yuceland M. Zavatarelli and G. Zodiatis, 2019: Challenges for Sustained Observing and Forecasting Systems in the Mediterranean Sea. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00568

Todd, R. E., F. P. Chavez, S. Clayton, S. Cravatte, M. Goes, M. Graco, X. Lin, J. Sprintall, N. V. Zilberman, M. Archer, J. Arístegui, M. Balmaseda, J. M. Bane, M. O. Baringer, J. A. Barth, L. M. Beal, P. Brandt, P. H. R. Calil, E. Campos, L. R. Centurioni, M. P. Chidichimo, M. Cirano, M. F. Cronin, E. N. Curchitser, R. E. Davis, M. Dengler, B.

deYoung, S. Dong, R. Escribano, A. J. Fassbender, S. E. Fawcett, M. Feng, G. J. Goni, A. R. Gray, D. Gutiérrez, D. Hebert, R. Hummels, S.-i. Ito, M. Krug, F. Lacan, L. Laurindo, A. Lazar, C. M. Lee, M. Lengaigne, N. M. Levine, J. Middleton, I. Montes, M. Muglia, T. Nagai, H. I. Palevsky, J. B. Palter, H. E. Phillips, A. Piola, A. J. Plueddemann, B. Qiu, R. R. Rodrigues, M. Roughan, D. L. Rudnick, R. R. Rykaczewski, M. Saraceno, H. Seim, A. S. Gupta, L. Shannon, B. M. Sloyan, A. J. Sutton, L. Thompson, A. K. v. d. Plas, D. Volkov, J. Wilkin, D. Zhang, and L. Zhang, 2019: Global Perspectives on Observing Ocean Boundary Current Systems. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00423

Tomczak, M., 2019: A statistic of water mass intrusions in the south Indian Ocean between 100° E and 110° E. *Ocean Dynamics*, **69,** 301-311, https://doi.org/10.1007/s10236-019-01251-9

Trenberth, K. E. and Y. Zhang, 2019: Observed Interhemispheric Meridional Heat Transports and the Role of the Indonesian Throughflow in the Pacific Ocean. *Journal of Climate*, **32,** 8523-8536, https://doi.org/10.1175/JCLI-D-19-0465.1

Trenberth, K. E., Y. Zhang, J. T. Fasullo, and L. Cheng, 2019: Observation-Based Estimates of Global and Basin Ocean Meridional Heat Transport Time Series. *Journal of Climate*, **32,** 4567-4583, https://doi.org/10.1175/JCLI-D-18-0872.1

Trott, C. B., B. Subrahmanyam, A. Chaigneau, and H. L. Roman-Stork, 2019: Eddy-Induced Temperature and Salinity Variability in the Arabian Sea. *Geophysical Research Letters*, **46,** 2734-2742, https://doi.org/10.1029/2018GL081512

Trott, C. B., B. Subrahmanyam, V. S. N. Murty, and J. F. Shriver, 2019: Large-Scale Fresh and Salt Water Exchanges in the Indian Ocean. *Journal of Geophysical Research: Oceans*, **124,** 6252-6269, https://doi.org/10.1029/2019JC015361

Trott, C. B., B. Subrahmanyam, and E. S. Nyadjro, 2019: Influence of Mesoscale Features on Mixed Layer Dynamics in the Arabian Sea. *Journal of Geophysical Research: Oceans*, **124,** 3361-3377, https://doi.org/10.1029/2019JC014965

Trott, C. B., B. Subrahmanyam, H. L. Roman-Stork, V. S. N. Murty, and C. Gnanaseelan, 2019: Variability of Intraseasonal Oscillations and Synoptic Signals in Sea Surface Salinity in the Bay of Bengal. *Journal of Climate*, **32,** 6703-6728, https://doi.org/10.1175/JCLI-D-19-0178.1

Troupin, C., A. Pascual, S. Ruiz, A. Olita, B. Casas, F. Margirier, P. M. Poulain, G. Notarstefano, M. Torner, J. G. Fernández, M. À. Rújula, C. Muñoz, E. Alou, I. Ruiz, A. Tovar-Sánchez, J. T. Allen, A. Mahadevan, and J. Tintoré, 2019: The AlborEX dataset: sampling of sub-mesoscale features in the Alboran Sea. *Earth Syst. Sci. Data*, **11,** 129-145, https://www.earth-syst-sci-data.net/11/129/2019/

Tuchen, F. P., J. F. Lübbecke, S. Schmidtko, R. Hummels, and C. W. Böning, 2019: The Atlantic Subtropical Cells Inferred from Observations. *Journal of Geophysical Research: Oceans*, **124,** 7591-7605, https://doi.org/10.1029/2019JC015396

Turkington, T., B. Timbal, and R. Rahmat, 2019: The impact of global warming on sea surface temperature based El Niño–Southern Oscillation monitoring indices. *International Journal of Climatology*, **39,** 1092-1103, https://doi.org/10.1002/joc.5864

Uchida, T., D. Balwada, R. Abernathey, G. McKinley, S. Smith, and M. Lévy, 2019: The Contribution of Submesoscale over Mesoscale Eddy Iron Transport in the Open

Southern Ocean. *Journal of Advances in Modeling Earth Systems*, **11,** 3934-3958, https://doi.org/10.1029/2019MS001805

Uchida, T., D. Balwada, R. Abernathey, C. J. Prend, E. Boss, and S. T. Gille, 2019: Southern Ocean Phytoplankton Blooms Observed by Biogeochemical Floats. *Journal of Geophysical Research: Oceans*, **124,** 7328-7343, https://doi.org/10.1029/2019JC015355

Uotila, P., H. Goosse, K. Haines, M. Chevallier, A. Barthélemy, C. Bricaud, J. Carton, N. Fučkar, G. Garric, D. Iovino, F. Kauker, M. Korhonen, V. S. Lien, M. Marnela, F. Massonnet, D. Mignac, K. A. Peterson, R. Sadikni, L. Shi, S. Tietsche, T. Toyoda, J. Xie, and Z. Zhang, 2019: An assessment of ten ocean reanalyses in the polar regions. *Climate Dynamics*, **52,** 1613-1650, https://doi.org/10.1007/s00382-018-4242-z

Ushijima, Y. and Y. Yoshikawa, 2019: Mixed Layer Depth and Sea Surface Warming under Diurnally Cycling Surface Heat Flux in the Heating Season. *Journal of Physical Oceanography*, **49,** 1769-1787, https://doi.org/10.1175/JPO-D-18-0230.1

Valente, A., F. Sousa, and J. Dias, 2019: Decadal changes in temperature and salinity of Central Waters off Western Iberia. *Deep Sea Research Part I: Oceanographic Research Papers*, **151,** 103068, https://doi.org/10.1016/j.dsr.2019.103068

van der Boog, C. G., M. F. de Jong, M. Scheidat, M. F. Leopold, S. C. V. Geelhoed, K. Schulz, H. A. Dijkstra, J. D. Pietrzak, and C. A. Katsman, 2019: Hydrographic and Biological Survey of a Surface-Intensified Anticyclonic Eddy in the Caribbean Sea. *Journal of Geophysical Research: Oceans*, **124,** 6235-6251, https://doi.org/10.1029/2018JC014877

VARLAS, G., P. KATSAFADOS, G. KORRES, and A. PAPADOPOULOS, 2019: Assessing the impact of Argo floats temperature measurements on the numerical weather prediction forecast skill. *2019*, **20,** 11, http://dx.doi.org/10.12681/mms.15423

Vernet, M., W. Geibert, M. Hoppema, P. J. Brown, C. Haas, H. H. Hellmer, W. Jokat, L. Jullion, M. Mazloff, D. C. E. Bakker, J. A. Brearley, P. Croot, T. Hattermann, J. Hauck, C.-D. Hillenbrand, C. J. M. Hoppe, O. Huhn, B. P. Koch, O. J. Lechtenfeld, M. P. Meredith, A. C. Naveira Garabato, E.-M. Nöthig, I. Peeken, M. M. Rutgers van der Loeff, S. Schmidtko, M. Schröder, V. H. Strass, S. Torres-Valdés, and A. Verdy, 2019: The Weddell Gyre, Southern Ocean: Present Knowledge and Future Challenges. *Reviews of Geophysics*, **57,** 623-708, https://doi.org/10.1029/2018RG000604

Vinogradova, N., T. Lee, J. Boutin, K. Drushka, S. Fournier, R. Sabia, D. Stammer, E. Bayler, N. Reul, A. Gordon, O. Melnichenko, L. Li, E. Hackert, M. Martin, N. Kolodziejczyk, A. Hasson, S. Brown, S. Misra, and E. Lindstrom, 2019: Satellite Salinity Observing System: Recent Discoveries and the Way Forward. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00243

Voldoire, A., D. Saint-Martin, S. Sénési, B. Decharme, A. Alias, M. Chevallier, J. Colin, J.-F. Guérémy, M. Michou, M.-P. Moine, P. Nabat, R. Roehrig, D. Salas y Mélia, R. Séférian, S. Valcke, I. Beau, S. Belamari, S. Berthet, C. Cassou, J. Cattiaux, J. Deshayes, H. Douville, C. Ethé, L. Franchistéguy, O. Geoffroy, C. Lévy, G. Madec, Y. Meurdesoif, R. Msadek, A. Ribes, E. Sanchez-Gomez, L. Terray, and R. Waldman, 2019: Evaluation of CMIP6 DECK Experiments With CNRM-CM6-1. *Journal of Advances in Modeling Earth Systems*, **11,** 2177-2213, https://doi.org/10.1029/2019MS001683

Volkov, D. L., M. Baringer, D. Smeed, W. Johns, and F. W. Landerer, 2019: Teleconnection between the Atlantic Meridional Overturning Circulation and Sea Level in the Mediterranean Sea. *Journal of Climate*, **32,** 935-955, https://doi.org/10.1175/JCLI-D-18-0474.1

Volkov, D. L., S.-K. Lee, R. Domingues, H. Zhang, and M. Goes, 2019: Interannual Sea Level Variability Along the Southeastern Seaboard of the United States in Relation to the Gyre-Scale Heat Divergence in the North Atlantic. *Geophysical Research Letters*, **46,** 7481-7490, https://doi.org/10.1029/2019GL083596

von Schuckmann, K.and P.-Y. Le Traonand N. Smithand A. Pascualand S. Djavidniaand J.-P. Gattusoand M. Grégoireand G. Nolanand S. Aaboeand E. Aguiarand E. Álvarez Fanjuland A. Alvera-Azcárateand L. Aoufand R. Barcielaand A. Behrensand M. Belmonte Rivasand S. Ben Ismailand A. Bentamyand M. Borginiand V. E. Brandoand N. Bensoussanand A. Blauwand P. Bryèreand B. Buongiorno Nardelliand A. Caballeroand V. Çağlar Yumruktepeand E. Cebrianand J. Chiggiatoand E. Clementiand L. Corgnatiand M. de Alfonsoand Á. de Pascual Collarand J. Deshayesand E. Di Lorenzoand J.-M. Dominiciand C. Dupouyand M. Drévillonand V. Echevinand M. Eleveldand L. Enserinkand M. García Sotilloand P. Garnessonand J. Garrabouand G. Garricand F. Gasparinand G. Gayerand F. Gohinand A. Grandiand A. Griffaand J. Gourrionand S. Hendricksand C. Heuzéand E. Hollandand D. Iovinoand M. Juzaand D. Kurt Kerstingand S. Kipsonand Z. Kizilkayaand G. Korresand M. Kõutsand P. Lagemaaand T. Lavergneand H. Lavigneand J.-B. Ledouxand J.-F. Legeaisand P. Lehodeyand C. Linaresand Y. Liuand J. Maderand I. Maljutenkoand A. Manginand I. Manso-Narvarteand C. Mantovaniand S. Markagerand E. Masonand A. Mignotand M. Mennaand M. Monierand B. Mourreand M. Müllerand J. W. Nielsenand G. Notarstefanoand O. Ocañaand A. Pascualand B. Pattiand M. R. Payneand M. Peiracheand S. Pardoand B. Pérez Gómezand A. Pisanoand C. Perrucheand K. A. Petersonand M.-I. Pujoland U. Raudseppand M. Ravdasand R. P. Rajand R. Renshawand E. Reyesand R. Rickerand A. Rubioand M. Sammartinoand R. Santoleriand S. Sathyendranathand K. Schroederand J. Sheand S. Sparnocchiaand J. Stanevaand A. Stoffelenand T. Szekelyand G. H. Tilstoneand J. Tinkerand J. Tintoréand B. Tranchantand R. Uiboupinand D. Van der Zandeand K. von Schuckmannand R. Woodand J. Woge Nielsenand M. Zabalaand A. Zacharioudakiand F. Zuberer and H. Zuo, 2019: Copernicus Marine Service Ocean State Report, Issue 3. *Journal of Operational Oceanography*, **12,** S1-S123, https://doi.org/10.1080/1755876X.2019.1633075

Wang, J., W. Sun, and J. Zhang, 2019: Sea Surface Salinity Products Validation Based on Triple Match Method. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **12,** 4361-4366, https://doi.org/10.1109/JSTARS.2019.2945486

Wang, M., Y. Du, B. Qiu, S.-P. Xie, and M. Feng, 2019: Dynamics on Seasonal Variability of EKE Associated with TIWs in the Eastern Equatorial Pacific Ocean. *Journal of Physical Oceanography*, **49,** 1503-1519, https://doi.org/10.1175/JPO-D-18-0163.1

Wang, M., Z. Liu, X. Zhu, X. Yan, Z. Zhang, and R. Zhao, 2019: Origin and formation of the Ryukyu Current revealed by HYCOM reanalysis. *Acta Oceanologica Sinica*, **38,** 1-10, https://doi.org/10.1007/s13131-018-1329-7

Wang, Q., F. Wang, J. Feng, S. Hu, L. Zhang, F. Jia, and D. Hu, 2019: The Equatorial Undercurrent and Its Origin in the Region Between Mindanao and New Guinea. *Journal of Geophysical Research: Oceans*, **124,** 2313-2330, https://doi.org/10.1029/2018JC014842

Wang, T., D. Li, L. Gao, and L. Zhu, 2019: Estimation of biophysical properties of areas in the Western North Pacific with a high frequency of tropical cyclones. *Deep Sea Research Part I: Oceanographic Research Papers*, **147,** 12-21, https://doi.org/10.1016/j.dsr.2019.03.008

Wang, Y., Z. Han, W. Zhou, and Y. Wu, 2019: Quality assessment of the SMAP Sea Surface Salinity in western Pacific Ocean based on Argo buoy data. *Advance in Marine Science*, **37,** 387-397,

Wang, Y., Y. Li, and C. Wei, 2019: Subtropical sea surface salinity maxima in the South Indian Ocean. *Journal of Oceanology and Limnology*, https://doi.org/10.1007/s00343-019-8251-5

Wang, Y., H. Liu, P. Lin, and J. Yin, 2019: Record-low coastal sea levels in the Northeast Pacific during the winter of 2013–2014. *Scientific Reports*, **9,** 3774, https://doi.org/10.1038/s41598-019-40397-w

Wang, Y., R. Wu, and Z. Wen, 2019: Seasonal variations in size and intensity of the Indo-western Pacific warm pool in different sectors. *Journal of Oceanography*, **75,** 423-439, https://doi.org/10.1007/s10872-019-00511-y

Wang, Y., T. Xu, S. Li, R. D. Susanto, T. Agustiadi, M. Trenggono, W. Tan, and Z. Wei, 2019: Seasonal variation of water transport through the Karimata Strait. *Acta Oceanologica Sinica*, **38,** 47-57, https://doi.org/10.1007/s13131-018-1224-2

Wang, Z., D. Brickman, and B. J. W. Greenan, 2019: Characteristic evolution of the Atlantic Meridional Overturning Circulation from 1990 to 2015: An eddy-resolving ocean model study. *Deep Sea Research Part I: Oceanographic Research Papers*, **149,** 103056, https://doi.org/10.1016/j.dsr.2019.06.002

Wang, Z. A., H. Moustahfid, A. V. Mueller, A. P. M. Michel, M. Mowlem, B. T. Glazer, T. A. Mooney, W. Michaels, J. S. McQuillan, J. C. Robidart, J. Churchill, M. Sourisseau, A. Daniel, A. Schaap, S. Monk, K. Friedman, and P. Brehmer, 2019: Advancing Observation of Ocean Biogeochemistry, Biology, and Ecosystems With Cost-Effective in situ Sensing Technologies. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00519

Wei, Y. and H.-L. Ren, 2019: Modulation of ENSO on Fast and Slow MJO Modes during Boreal Winter. *Journal of Climate*, **32,** 7483-7506, https://doi.org/10.1175/JCLI-D-19-0013.1

Weller, R. A., D. J. Baker, M. M. Glackin, S. J. Roberts, R. W. Schmitt, E. S. Twigg, and D. J. Vimont, 2019: The Challenge of Sustaining Ocean Observations. *Frontiers in Marine Science*, **6**, https://doi.org/10.3389/fmars.2019.00105

Whitt, D. B., S. A. Nicholson, and M. M. Carranza, 2019: Global Impacts of Subseasonal (<60 Day) Wind Variability on Ocean Surface Stress, Buoyancy Flux, and Mixed Layer Depth. *Journal of Geophysical Research: Oceans*, **124,** 8798-8831, https://doi.org/10.1029/2019JC015166

Wilson, E. A., S. C. Riser, E. C. Campbell, and A. P. S. Wong, 2019: Winter Upper-Ocean

Stability and Ice–Ocean Feedbacks in the Sea Ice–Covered Southern Ocean. *Journal of Physical Oceanography*, **49,** 1099-1117, https://doi.org/10.1175/JPO-D-18-0184.1

Wu, Q., X. Zhang, J. A. Church, and J. Hu, 2019: ENSO-Related Global Ocean Heat Content Variations. *Journal of Climate*, **32,** 45-68, https://doi.org/10.1175/JCLI-D-17-0861.1

Xiao, F., D. Wang, L. Zeng, Q.-Y. Liu, and W. Zhou, 2019: Contrasting changes in the sea surface temperature and upper ocean heat content in the South China Sea during recent decades. *Climate Dynamics*, **53,** 1597-1612, https://doi.org/10.1007/s00382-019-04697-1

Xu, H., D. Tang, Y. Liu, and Y. Li, 2019: Dissolved oxygen responses to tropical cyclones "Wind Pump" on pre-existing cyclonic and anticyclonic eddies in the Bay of Bengal. *Marine Pollution Bulletin*, **146,** 838-847, https://doi.org/10.1016/j.marpolbul.2019.07.019

Xu, H., D. Tang, J. Sheng, Y. Liu, and Y. Sui, 2019: Study of dissolved oxygen responses to tropical cyclones in the Bay of Bengal based on Argo and satellite observations. *Science of The Total Environment*, **659,** 912-922, https://doi.org/10.1016/j.scitotenv.2018.12.384

Yamaguchi, R. and T. Suga, 2019: Trend and Variability in Global Upper-Ocean Stratification Since the 1960s. *Journal of Geophysical Research: Oceans*, **124,** 8933-8948, https://doi.org/10.1029/2019JC015439

Yamaguchi, R., T. Suga, K. J. Richards, and B. Qiu, 2019: Diagnosing the development of seasonal stratification using the potential energy anomaly in the North Pacific. *Climate Dynamics*, **53,** 4667-4681, https://doi.org/10.1007/s00382-019-04816-y

Yan, H., R. Zhang, G. Wang, H. Wang, J. Chen, and S. Bao, 2019: Improved Multifractal Fusion Method to Blend SMOS Sea Surface Salinity Based on Semiparametric Weight Function. *Journal of Atmospheric and Oceanic Technology*, **36,** 1501-1520, https://doi.org/10.1175/JTECH-D-18-0155.1

Yan, Y., L. Svendsen, C. Wang, N. Keenlyside, and D. Xu, 2019: A North-South Contrast of Subsurface Salinity Anomalies in the Northwestern Pacific From 2002 to 2013. *Journal of Geophysical Research: Oceans*, **124,** 1795-1806, https://doi.org/10.1029/2018JC014656

Yan, Y., G. Wang, H. Xue, and F. Chai, 2019: Buoyancy Effect on the Winter South China Sea Western Boundary Current. *Journal of Geophysical Research: Oceans*, **124,** 6871-6885, https://doi.org/10.1029/2019JC015079

Yang, B., S. R. Emerson, and P. D. Quay, 2019: The Subtropical Ocean's Biological Carbon Pump Determined From O2 and DIC/DI13C Tracers. *Geophysical Research Letters*, **46,** 5361-5368, https://doi.org/10.1029/2018GL081239

Yang, B., Y. Hou, and M. Li, 2019: Response of the western North Pacific subtropical ocean to the slow-moving super typhoon Nanmadol. *Journal of Oceanology and Limnology*, **37,** 938-956, https://doi.org/10.1007/s00343-019-8114-0

Yang, C., A. Storto, and S. Masina, 2019: Quantifying the effects of observational constraints and uncertainty in atmospheric forcing on historical ocean reanalyses. *Climate Dynamics*, **52,** 3321-3342, https://doi.org/10.1007/s00382-018-4331-z

Yang, G.-B., Q. Zheng, X.-J. Xiong, Y. Yuan, Z. Zhuang, Z. Hui, Y.-L. Guo, L. Yu, J. Sun, X. Ju, D.-J. Ma, and X. Hu, 2019: Subsurface Cyclonic Eddies Observed in the Southeastern

Tropical Indian Ocean. *Journal of Geophysical Research: Oceans*, **124,** 7247-7260, https://doi.org/10.1029/2019JC015381

Yang, J., L. Liu, L. Zhang, G. Li, Z. Sun, and H. Song, 2019: Prediction of Marine Pycnocline Based on Kernel Support Vector Machine and Convex Optimization Technology. *Sensors*, **19,** 1562, https://dx.doi.org/10.3390/s19071562

Yang, X., X. Wu, Z. Liu, and C. Yuan, 2019: A preliminary study on an upper ocean heat and salt content of the western Pacific warm pool region. *Acta Oceanologica Sinica*, **38,** 60-71, https://doi.org/10.1007/s13131-019-1399-1

Yang, Y., K. Li, J. Du, Y. Liu, L. Liu, H. Wang, and W. Yu, 2019: Revealing the Subsurface Yellow Sea Cold Water Mass from Satellite Data Associated with Typhoon Muifa. *Journal of Geophysical Research: Oceans*, **124,** 7135-7152, https://doi.org/10.1029/2018JC014727

Yang, Y. and X. S. Liang, 2019: New Perspectives on the Generation and Maintenance of the Kuroshio Large Meander. *Journal of Physical Oceanography*, **49,** 2095-2113, https://doi.org/10.1175/JPO-D-18-0276.1

Yang, Y. and X. S. Liang, 2019: Spatiotemporal Variability of the Global Ocean Internal Processes Inferred from Satellite Observations. *Journal of Physical Oceanography*, **49,** 2147-2164, https://doi.org/10.1175/JPO-D-18-0273.1

Yang, Z., G. Wang, and C. Chen, 2019: Horizontal velocity structure of mesoscale eddies in the South China Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **149,** 103055, https://doi.org/10.1016/j.dsr.2019.06.001

Ye, F., Y. J. Zhang, R. He, Z. Wang, H. V. Wang, and J. Du, 2019: Third-order WENO transport scheme for simulating the baroclinic eddying ocean on an unstructured grid. *Ocean Modelling*, **143,** 101466, https://doi.org/10.1016/j.ocemod.2019.101466

Ye, H., J. Sheng, D. Tang, E. Morozov, M. A. Kalhoro, S. Wang, and H. Xu, 2019: Examining the Impact of Tropical Cyclones on Air-Sea CO2 Exchanges in the Bay of Bengal Based on Satellite Data and In Situ Observations. *Journal of Geophysical Research: Oceans*, **124,** 555-576, https://doi.org/10.1029/2018JC014533

Yin, Y., X. Lin, and Y. Hou, 2019: Seasonality of the Kuroshio intensity east of Taiwan modulated by mesoscale eddies. *Journal of Marine Systems*, **193,** 84-93, https://doi.org/10.1016/j.jmarsys.2019.02.001

Yu, L., K. Fennel, B. Wang, A. Laurent, K. R. Thompson, and L. K. Shay, 2019: Evaluation of nonidentical versus identical twin approaches for observation impact assessments: an ensemble-Kalman-filter-based ocean assimilation application for the Gulf of Mexico. *Ocean Sci.*, **15,** 1801-1814, https://www.ocean-sci.net/15/1801/2019/

Yu, Z., E. J. Metzger, H. E. Hurlburt, and O. M. Smedstad, 2019: What controls the extreme flow through the Kerama Gap: a global HYbrid Coordinate Ocean Model reanalysis point of view. *Ocean Dynamics*, **69,** 899-911, https://doi.org/10.1007/s10236-019-01284-0

Zanowski, H. and G. C. Johnson, 2019: Semiannual Variations in 1,000-dbar Equatorial Indian Ocean Velocity and Isotherm Displacements from Argo Data. *Journal of Geophysical Research: Oceans*, **124,** 9507-9516, https://doi.org/10.1029/2019JC015342

Zanowski, H., G. C. Johnson, and J. M. Lyman, 2019: Equatorial Pacific 1,000-dbar Velocity and Isotherm Displacements From Argo Data: Beyond the Mean and Seasonal Cycle.

Journal of Geophysical Research: Oceans, **124,** 7873-7882, https://doi.org/10.1029/2019JC015032

Zedler, S. E., B. S. Powell, B. Qiu, and D. L. Rudnick, 2019: Energy Transfer in the Western Tropical Pacific. *Oceanography*, **32,** 136-145, https://doi.org/10.5670/oceanog.2019.419

Zeng, L., R. W. Schmitt, L. Li, Q. Wang, and D. Wang, 2019: Forecast of summer precipitation in the Yangtze River Valley based on South China Sea springtime sea surface salinity. *Climate Dynamics*, **53,** 5495-5509, https://doi.org/10.1007/s00382-019-04878-y

Zervakis, V., N. Krauzig, E. Tragou, and E. Kunze, 2019: Estimating vertical mixing in the deep north Aegean Sea using argo data corrected for conductivity sensor drift. *Deep Sea Research Part I: Oceanographic Research Papers*, **154,** 103144, https://doi.org/10.1016/j.dsr.2019.103144

Zhang, R.-H., F. Tian, H. Zhi, and X. Kang, 2019: Observed structural relationships between ocean chlorophyll variability and its heating effects on the ENSO. *Climate Dynamics*, **53,** 5165-5186, https://doi.org/10.1007/s00382-019-04844-8

Zhang, X., X. Wu, W. Li, B. Wang, X. Zhu, K. Liu, C. Shao, C. Sun, G. Chao, and T. Zhang, 2019: A New Multigrid 3D-VAR Optimization Method for Bottom Friction Using HF Radar Current Observation. *Journal of Ocean University of China*, **18,** 1247-1255, https://doi.org/10.1007/s11802-019-4020-5

Zhang, Y., X. Chen, and C. Dong, 2019: Anatomy of a Cyclonic Eddy in the Kuroshio Extension Based on High-Resolution Observations. *Atmosphere*, **10,** 553, https://doi.org/10.3390/atmos10090553

Zhang, Z., L. Liu, and F. Wang, 2019: Oceanic barrier layer variation induced by tropical cyclones in the Northwest Pacific. *Journal of Oceanology and Limnology*, **37,** 375-384, https://doi.org/10.1007/s00343-019-8008-1

Zhang, Z., Z. Liu, K. Richards, G. Shang, W. Zhao, J. Tian, X. Huang, and C. Zhou, 2019: Elevated Diapycnal Mixing by a Subthermocline Eddy in the Western Equatorial Pacific. *Geophysical Research Letters*, **46,** 2628-2636, https://doi.org/10.1029/2018GL081512

Zhi, H., P. Lin, R.-H. Zhang, F. Chai, and H. Liu, 2019: Salinity effects on the 2014 warm "Blob" in the Northeast Pacific. *Acta Oceanologica Sinica*, **38,** 24-34, https://doi.org/10.1007/s13131-019-1450-2

Zhi, H., R.-H. Zhang, P. Lin, and S. Shi, 2019: Effects of Salinity Variability on Recent El Niño Events. *Atmosphere*, **10,** 475, https://doi.org/10.3390/atmos10080475

Zhou, C., J. Zhang, J. Yang, M. Xu, and Q. Zhang, 2019: 4 DVAR assimilation of SST and SSH data in the South China Sea based on ROMS. *Haiyang Xuebao*, **4,** 32-40,

Zhou, H., X. Liu, and P. Xu, 2019: Sensitivity of Sverdrup transport to surface wind products over the tropical North Pacific Ocean. *Ocean Dynamics*, **69,** 529-542, https://doi.org/10.1007/s10236-019-01260-8

Zhu, Y. and R.-H. Zhang, 2019: A Modified Vertical Mixing Parameterization for Its Improved Ocean and Coupled Simulations in the Tropical Pacific. *Journal of Physical Oceanography*, **49,** 21-37, https://doi.org/10.1175/JPO-D-18-0100.1

Zu, T., H. Xue, D. Wang, B. Geng, L. Zeng, Q. Liu, J. Chen, and Y. He, 2019: Interannual variation of the South China Sea circulation during winter: intensified in the southern

basin. *Climate Dynamics*, **52,** 1917-1933, https://doi.org/10.1007/s00382-018-4230-3

Zuo, H., M. A. Balmaseda, S. Tietsche, K. Mogensen, and M. Mayer, 2019: The ECMWF operational ensemble reanalysis–analysis system for ocean and sea ice: a description of the system and assessment. *Ocean Sci.*, **15,** 779-808, https://doi.org/10.5194/os-15-779-2019

2018 (393)

Achterberg, E. P., S. Steigenberger, C. M. Marsay, F. A. C. LeMoigne, S. C. Painter, A. R. Baker, D. P. Connelly, C. M. Moore, A. Tagliabue, and T. Tanhua, 2018: Iron Biogeochemistry in the High Latitude North Atlantic Ocean. *Scientific Reports*, **8,** 1283, https://doi.org/10.1038/s41598-018-19472-1

Aluie, H., M. Hecht, and G. K. Vallis, 2018: Mapping the Energy Cascade in the North Atlantic Ocean: The Coarse-Graining Approach. *Journal of Physical Oceanography*, **48,** 225-244, https://doi.org/10.1175/JPO-D-17-0100.1

Andreev, A. G., 2018: Peculiarities of Water Circulation in the Southern Tatar Strait. *Izvestiya, Atmospheric and Oceanic Physics*, **54,** 1050-1056, https://doi.org/10.1134/S0001433818090037

Andreev, A. G., M. V. Budyansky, M. Y. Uleysky, and S. V. Prants, 2018: Mesoscale dynamics and walleye pollock catches in the Navarin Canyon area of the Bering Sea. *Ocean Dynamics*, **68,** 1503-1514, https://doi.org/10.1007/s10236-018-1208-y

Andres, M., M. Muglia, F. Bahr, and J. Bane, 2018: Continuous Flow of Upper Labrador Sea Water around Cape Hatteras. *Scientific Reports*, **8,** 4494, https://doi.org/10.1038/s41598-018-22758-z

Artana, C., J.-M. Lellouche, Y.-H. Park, G. Garric, Z. Koenig, N. Sennéchael, R. Ferrari, A. R. Piola, M. Saraceno, and C. Provost, 2018: Fronts of the Malvinas Current System: Surface and Subsurface Expressions Revealed by Satellite Altimetry, Argo Floats, and Mercator Operational Model Outputs. *Journal of Geophysical Research: Oceans*, **123,** 5261-5285, https://doi.org/10.1029/2018JC013887

Artana, C., J.-M. Lellouche, N. Sennéchael, and C. Provost, 2018: The Open-Ocean Side of the Malvinas Current in Argo Floats and 24 Years of Mercator Ocean High-Resolution (1/12) Physical Reanalysis. *Journal of Geophysical Research: Oceans*, **123,** 8489-8507, https://doi.org/10.1029/2018JC014528

Arteaga, L., N. Haëntjens, E. Boss, K. S. Johnson, and J. L. Sarmiento, 2018: Assessment of Export Efficiency Equations in the Southern Ocean Applied to Satellite-Based Net Primary Production. *Journal of Geophysical Research: Oceans*, **123,** 2945-2964, https://doi.org/10.1002/2018JC013787

Awo, F. M., G. Alory, C. Y. Da-Allada, T. Delcroix, J. Jouanno, E. Kestenare, and E. Baloïtcha, 2018: Sea Surface Salinity Signature of the Tropical Atlantic Interannual Climatic Modes. *Journal of Geophysical Research: Oceans*, **123,** 7420-7437, https://doi.org/10.1029/2018JC013837

Balaguru, K., S. C. Doney, L. Bianucci, P. J. Rasch, L. R. Leung, J.-H. Yoon, and I. D. Lima, 2018: Linking deep convection and phytoplankton blooms in the northern Labrador Sea in

a changing climate. *PLOS ONE*, **13,** e0191509, https://doi.org/10.1371/journal.pone.0191509

Balaguru, K., G. R. Foltz, and L. R. Leung, 2018: Increasing Magnitude of Hurricane Rapid Intensification in the Central and Eastern Tropical Atlantic. *Geophysical Research Letters*, **45,** 4238-4247, https://doi.org/10.1029/2018GL077597

Balaguru, K., G. R. Foltz, L. R. Leung, S. M. Hagos, and D. R. Judi, 2018: On the Use of Ocean Dynamic Temperature for Hurricane Intensity Forecasting. *Weather and Forecasting*, **33,** 411-418, https://doi.org/10.1175/WAF-D-17-0143.1

Barbieux, M., J. Uitz, A. Bricaud, E. Organelli, A. Poteau, C. Schmechtig, B. Gentili, G. Obolensky, E. Leymarie, C. Penkerc'h, F. D'Ortenzio, and H. Claustre, 2018: Assessing the Variability in the Relationship Between the Particulate Backscattering Coefficient and the Chlorophyll a Concentration From a Global Biogeochemical-Argo Database. *Journal of Geophysical Research: Oceans*, **123,** 1229-1250, https://doi.org/10.1002/2017JC013030

Barbot, S., A. Petrenko, and C. Maes, 2018: Intermediate water flows in the western South Pacific: as revealed by individual Argo floats trajectories and a model re-analysis. *Biogeosciences*, **15,** 4103-4124, https://doi.org/10.5194/bg-15-4103-2018

Barceló-Llull, B., A. Pascual, E. Mason, and S. Mulet, 2018: Comparing a Multivariate Global Ocean State Estimate With High-Resolution in Situ Data: An Anticyclonic Intrathermocline Eddy Near the Canary Islands. *Frontiers in Marine Science*, **5**, https://doi.org/10.3389/fmars.2018.00066

Baringer, M. O., J. Willis, D. A. Smeed, B. I. Moat, S. Dong, W. R. Hobbs, D. Rayner, W. E. Johns, G. Gonil, M. Lankhorst, and U. Send, 2018: Global Oceans: Meridional overturning and oceanic heat transport circulation observations in the North Atlantic Ocean. *Bull. Am. Meteorol. Soc.*, **99,** S91 - S93, https://doi.org/10.1175/2018BAMSStateoftheClimate.1

Barton, B. I., Y.-D. Lenn, and C. Lique, 2018: Observed Atlantification of the Barents Sea Causes the Polar Front to Limit the Expansion of Winter Sea Ice. *Journal of Physical Oceanography*, **48,** 1849-1866, https://doi.org/10.1175/JPO-D-18-0003.1

Bashmachnikov, I., T. Belonenko, P. Kuibin, D. Volkov, and V. Foux, 2018: Pattern of vertical velocity in the Lofoten vortex (the Norwegian Sea). *Ocean Dynamics*, **68,** 1711-1725, https://doi.org/10.1007/s10236-018-1213-1

Belyaev, K., A. Kuleshov, N. Tuchkova, and C. A. S. Tanajura, 2018: An optimal data assimilation method and its application to the numerical simulation of the ocean dynamics. *Mathematical and Computer Modelling of Dynamical Systems*, **24,** 12-25, http://dx.doi.org/10.1080/13873954.2017.1338300

Benthuysen, J. A., E. C. J. Oliver, M. Feng, and A. G. Marshall, 2018: Extreme Marine Warming Across Tropical Australia During Austral Summer 2015–2016. *Journal of Geophysical Research: Oceans*, **123,** 1301-1326, https://doi.org/10.1002/2017JC013326

Berry, D., G. Corlett, O. Embury, and C. Merchant, 2018: Stability Assessment of the (A)ATSR Sea Surface Temperature Climate Dataset from the European Space Agency Climate Change Initiative. *Remote Sensing*, **10,** 126, http://dx.doi.org/10.3390/rs10010126

Bhagawati, C., S. Pandey, S. Dandapat, and A. Chakraborty, 2018: Dynamical significance of tides over the Bay of Bengal. *Dynamics of Atmospheres and Oceans*, **82,** 89-106,

https://doi.org/10.1016/j.dynatmoce.2018.05.002
Bittig, H. C., A. Körtzinger, C. Neill, E. van Ooijen, J. N. Plant, J. Hahn, K. S. Johnson, B. Yang, and S. R. Emerson, 2018: Oxygen Optode Sensors: Principle, Characterization, Calibration, and Application in the Ocean. *Frontiers in Marine Science*, **4**, https://doi.org/10.3389/fmars.2017.00429
Bittig, H. C., T. Steinhoff, H. Claustre, B. Fiedler, N. L. Williams, R. Sauzède, A. Körtzinger, and J.-P. Gattuso, 2018: An Alternative to Static Climatologies: Robust Estimation of Open Ocean CO2 Variables and Nutrient Concentrations From T, S, and O2 Data Using Bayesian Neural Networks. *Frontiers in Marine Science*, **5**, https://doi.org/10.3389/fmars.2018.00328
Boettger, D., R. Robertson, and G. B. Brassington, 2018: Verification of the mixed layer depth in the OceanMAPS operational forecast model for Austral autumn. *Geosci. Model Dev.*, **11,** 3795-3805, https://doi.org/10.5194/gmd-11-3795-2018
Bosse, A., I. Fer, H. Søiland, and T. Rossby, 2018: Atlantic Water Transformation Along Its Poleward Pathway Across the Nordic Seas. *Journal of Geophysical Research: Oceans*, **123,** 6428-6448, https://doi.org/10.1029/2018JC014147
Bouffard, J., M. Naeije, C. J. Banks, F. M. Calafat, P. Cipollini, H. M. Snaith, E. Webb, A. Hall, R. Mannan, P. Féménias, and T. Parrinello, 2018: CryoSat ocean product quality status and future evolution. *Advances in Space Research*, **62,** 1549-1563, https://doi.org/10.1016/j.asr.2017.11.043
Boutin, J., J. L. Vergely, S. Marchand, F. D'Amico, A. Hasson, N. Kolodziejczyk, N. Reul, G. Reverdin, and J. Vialard, 2018: New SMOS Sea Surface Salinity with reduced systematic errors and improved variability. *Remote Sensing of Environment*, **214,** 115-134, https://doi.org/10.1016/j.rse.2018.05.022
Briggs, E. M., T. R. Martz, L. D. Talley, M. R. Mazloff, and K. S. Johnson, 2018: Physical and Biological Drivers of Biogeochemical Tracers Within the Seasonal Sea Ice Zone of the Southern Ocean From Profiling Floats. *Journal of Geophysical Research: Oceans*, **123,** 746-758, https://doi.org/10.1002/2017JC012846
Bronselaer, B., M. Winton, S. M. Griffies, W. J. Hurlin, K. B. Rodgers, O. V. Sergienko, R. J. Stouffer, and J. L. Russell, 2018: Change in future climate due to Antarctic meltwater. *Nature*, **564,** 53-58, https://doi.org/10.1038/s41586-018-0712-z
Burt, W. J. and P. D. Tortell, 2018: Observations of Zooplankton Diel Vertical Migration From High-Resolution Surface Ocean Optical Measurements. *Geophysical Research Letters*, **45,** 13,396-13,404, https://doi.org/10.1029/2018GL079992
Burt, W. J., T. K. Westberry, M. J. Behrenfeld, C. Zeng, R. W. Izett, and P. D. Tortell, 2018: Carbon: Chlorophyll Ratios and Net Primary Productivity of Subarctic Pacific Surface Waters Derived From Autonomous Shipboard Sensors. *Global Biogeochemical Cycles*, **32,** 267-288, https://doi.org/10.1002/2017GB005783
Bushinsky, S. M. and S. R. Emerson, 2018: Biological and physical controls on the oxygen cycle in the Kuroshio Extension from an array of profiling floats. *Deep Sea Research Part I: Oceanographic Research Papers*, **141,** 51-70, https://doi.org/10.1016/j.dsr.2018.09.005
Byju, P., D. Dommenget, and M. A. Alexander, 2018: Widespread Reemergence of Sea Surface Temperature Anomalies in the Global Oceans, Including Tropical Regions

Forced by Reemerging Winds. *Geophysical Research Letters*, **45,** 7683-7691, http://dx.doi.org/10.1029/2018GL079137

Capuano, T. A., S. Speich, X. Carton, and R. Laxenaire, 2018: Indo-Atlantic Exchange, Mesoscale Dynamics, and Antarctic Intermediate Water. *Journal of Geophysical Research: Oceans*, **123,** 3286-3306, https://doi.org/10.1002/2017JC013521

Carranza, M. M., S. T. Gille, P. J. S. Franks, K. S. Johnson, R. Pinkel, and J. B. Girton, 2018: When Mixed Layers Are Not Mixed. Storm-Driven Mixing and Bio-optical Vertical Gradients in Mixed Layers of the Southern Ocean. *Journal of Geophysical Research: Oceans*, **123,** 7264-7289, https://doi.org/10.1029/2018JC014416

Carton, J. A., G. A. Chepurin, and L. Chen, 2018: SODA3: A New Ocean Climate Reanalysis. *Journal of Climate*, **31,** 6967-6983, https://doi.org/10.1175/JCLI-D-18-0149.1

Carton, J. A., G. A. Chepurin, L. Chen, and S. A. Grodsky, 2018: Improved Global Net Surface Heat Flux. *Journal of Geophysical Research: Oceans*, **123,** 3144-3163, https://doi.org/10.1002/2017JC013137

Cazenave, A., H. Palanisamy, and M. Ablain, 2018: Contemporary sea level changes from satellite altimetry: What have we learned? What are the new challenges? *Advances in Space Research*, **62,** 1639-1653, https://doi.org/10.1016/j.asr.2018.07.017

Cazenave A., M. B., Ablain M., Balmaseda M., Bamber J., Barletta V., Beckley B., Benveniste J., Berthier E., Blazquez A., Boyer T., Caceres D., Chambers D., Champollion N., Chao B., Chen J., Cheng L., Church J. A., Chuter S., Cogley J. G., Dangendorf S., Desbruyeres D., Doell P., Domingues C., Falk U., Famiglietti J., Fenoglio-Marc L., Forsberg R., Galassi G., Gardner A., Groh A., Hamlington B., Hogg A., Horwath M., Humphrey V., Husson L., Ishii M., Jaeggi A., Jevrejeva S., Johnson G., Kolodziejczyk N., Kusche J., Lambeck K., Landerer F., Leclercq P., Legresy B., Leuliette E., Llovel W., Longuevergne L., Loomis B. D., Luthcke S. B., Marcos M., Marzeion B., Merchant C., Merrifield M., Milne G., Mitchum G., Mohajerani Y., Monier M., Monselesan D., Nerem S., Palanisamy H., Paul F., Perez B., Piecuch Christopher G., Ponte Rui M., Purkey S. G., Reager J. T., Rietbroek R., Rignot E., Riva R., Roemmich D. H., Sorensen L. S., Sasgen I., Schrama E. J. O., Seneviratne S. I., Shum C. K., Spada G., Stammer D., Van De Wal R., Velicogna I., Von Schuckmann K., Wada Y., Wang Y., Watson C., Wiese D., Wijffels S., Westaway R., Woppelmann G., Wouters B. and W. G. S. L. B. Group, 2018: Global sea-level budget 1993–present. *Earth Syst. Sci. Data*, **10,** 1551-1590, https://doi.org/10.5194/essd-10-1551-2018

Cha, S.-C., J.-H. Moon, and Y. T. Song, 2018: A Recent Shift Toward an El Niño-Like Ocean State in the Tropical Pacific and the Resumption of Ocean Warming. *Geophysical Research Letters*, **45,** 11,885-11,894, https://doi.org/10.1029/2018GL080651

Chacko, N., 2018: Insights into the haline variability induced by cyclone Vardah in the Bay of Bengal using SMAP salinity observations. *Remote Sensing Letters*, **9,** 1205-1213, https://doi.org/10.1080/2150704X.2018.1519271

Chakraborty, K., V. Valsala, G. V. M. Gupta, and V. V. S. S. Sarma, 2018: Dominant Biological Control Over Upwelling on pCO2 in Sea East of Sri Lanka. *Journal of Geophysical Research: Biogeosciences*, **123,** 3250-3261, https://doi.org/10.1029/2018JG004446

Chamberlain, P. M., L. D. Talley, M. R. Mazloff, S. C. Riser, K. Speer, A. R. Gray, and A. Schwartzman, 2018: Observing the Ice-Covered Weddell Gyre With Profiling Floats:

Position Uncertainties and Correlation Statistics. *Journal of Geophysical Research: Oceans*, **123,** 8383-8410, https://doi.org/10.1029/2017JC012990

Chang, Y.-S., S. Zhang, A. Rosati, G. A. Vecchi, and X. Yang, 2018: An OSSE Study for Deep Argo Array using the GFDL Ensemble Coupled Data Assimilation System. *Ocean Science Journal*, **53,** 179-189, https://doi.org/10.1007/s12601-018-0007-1

Charpentier, E., 2018: Managing Meteorological and Oceanographic In Situ Data in the WMO Framework. *Observing the Oceans in Real Time*, R. Venkatesan, A. Tandon, E. D'Asaro, and M. A. Atmanand, Eds., Springer International Publishing, 281-300, https://doi.org/10.1007/978-3-319-66493-4_14.

Chatterjee, S., R. P. Raj, L. Bertino, Ø. Skagseth, M. Ravichandran, and O. M. Johannessen, 2018: Role of Greenland Sea Gyre Circulation on Atlantic Water Temperature Variability in the Fram Strait. *Geophysical Research Letters*, **45,** 8399-8406, https://doi.org/10.1029/2018GL079174

Chen, C., Y. Ma, and Y. Liu, 2018: Reconstructing Sound speed profiles worldwide with Sea surface data. *Applied Ocean Research*, **77,** 26-33, https://doi.org/10.1016/j.apor.2018.05.002

Chen, G., L. Peng, and C. Ma, 2018: Climatology and seasonality of upper ocean salinity: a three-dimensional view from argo floats. *Climate Dynamics*, **50,** 2169-2182, https://doi.org/10.1007/s00382-017-3742-6

Chen, J., B. Tapley, H. Save, M. E. Tamisiea, S. Bettadpur, and J. Ries, 2018: Quantification of Ocean Mass Change Using Gravity Recovery and Climate Experiment, Satellite Altimeter, and Argo Floats Observations. *Journal of Geophysical Research: Solid Earth*, **123,** 10,212-10,225, https://doi.org/10.1029/2018JB016095

Chen, S., F. Qiao, C. Huang, and Z. Song, 2018: Effects of the Non-breaking Surface Wave-induced Vertical Mixing on Winter Mixed Layer Depth in Subtropical Regions. *Journal of Geophysical Research: Oceans*, **123,** 2934-2944, https://doi.org/10.1002/2017JC013038

Chen, X., S. Liu, Y. Cai, and S. Zhang, 2018: Potential effects of subduction rate in the key ocean on global warming hiatus. *Acta Oceanologica Sinica*, **37,** 63-68, https://doi.org/10.1007/s13131-017-1130-z

Chen, X. and K.-K. Tung, 2018: Global surface warming enhanced by weak Atlantic overturning circulation. *Nature*, **559,** 387-391, https://doi.org/10.1038/s41586-018-0320-y

Chen, Y., Z. Wu, and Q. P. Li, 2018: Temporal Change of Export Production at Xisha of the Northern South China Sea. *Journal of Geophysical Research: Oceans*, **123,** 9305-9319, https://doi.org/10.1029/2017JC013619

Chen, Y., F. Zhang, B. W. Green, and X. Yu, 2018: Impacts of Ocean Cooling and Reduced Wind Drag on Hurricane Katrina (2005) Based on Numerical Simulations. *Monthly Weather Review*, **146,** 287-306, https://doi.org/10.1175/MWR-D-17-0170.1

Cheng, L. and G. Gao, 2018: Evaluation of spatial distribution of turbulent mixing in the central Pacific. *Journal of Oceanography*, **74,** 471-483, https://doi.org/10.1007/s10872-018-0473-1

Cheng, L., G. Wang, J. Abraham, and G. Huang, 2018: Decadal Ocean Heat Redistribution Since the Late 1990s and Its Association with Key Climate Modes. *Climate*, **6,** 91,

https://doi.org/10.3390/cli6040091
Cheng, L. and J. Zhu, 2018: 2017 was the warmest year on record for the global ocean. *Advances in Atmospheric Sciences*, **35,** 261-263, https://doi.org/10.1007/s00376-018-8011-z
Cheng, X., J. P. McCreary, B. Qiu, Y. Qi, Y. Du, and X. Chen, 2018: Dynamics of Eddy Generation in the Central Bay of Bengal. *Journal of Geophysical Research: Oceans*, **123,** 6861-6875, https://doi.org/10.1029/2018JC014100
Chiang, T.-L., Y.-C. Hsin, and C.-R. Wu, 2018: Multidecadal Changes of Upper-Ocean Thermal Conditions in the Tropical Northwest Pacific Ocean versus South China Sea during 1960–2015. *Journal of Climate*, **31,** 3999-4016, https://doi.org/10.1175/JCLI-D-17-0394.1
Chu, P. C., T. Margolina, D. Rodriguez, C. Fan, and L. M. Ivanov, 2018: Spatial and temporal variability of the California Current identified from the synoptic monthly gridded World Ocean Database (WOD). *Deep Sea Research Part II: Topical Studies in Oceanography*, **151,** 37-48, https://doi.org/10.1016/j.dsr2.2018.05.019
Claret, M., E. D. Galbraith, J. B. Palter, D. Bianchi, K. Fennel, D. Gilbert, and J. P. Dunne, 2018: Rapid coastal deoxygenation due to ocean circulation shift in the northwest Atlantic. *Nature Climate Change*, **8,** 868-872, https://doi.org/10.1038/s41558-018-0263-1
Colin de Verdière, A., T. Huck, S. Pogossian, and M. Ollitrault, 2018: Available Potential Energy in Density Coordinates. *Journal of Physical Oceanography*, **48,** 1867-1883, https://doi.org/10.1175/JPO-D-17-0272.1
Conan, P., P. Testor, C. Estournel, F. D'Ortenzio, M. Pujo-Pay, and X. Durrieu de Madron, 2018: Preface to the Special Section: Dense Water Formations in the Northwestern Mediterranean: From the Physical Forcings to the Biogeochemical Consequences. *Journal of Geophysical Research: Oceans*, **123,** 6983-6995, https://doi.org/10.1029/2018JC014301
Cummins, P. F. and D. Masson, 2018: Low-frequency isopycnal variability in the Alaska Gyre from Argo. *Progress in Oceanography*, **168,** 310-324, https://doi.org/10.1016/j.pocean.2018.09.014
Czeschel, R., F. Schütte, R. A. Weller, and L. Stramma, 2018: Transport, properties, and life cycles of mesoscale eddies in the eastern tropical South Pacific. *Ocean Sci.*, **14,** 731-750, https://doi.org/10.5194/os-14-731-2018
D'Addezio, J. M. and B. Subrahmanyam, 2018: Evidence of organized intraseasonal convection linked to ocean dynamics in the Seychelles–Chagos thermocline ridge. *Climate Dynamics*, **51,** 3405-3420, https://doi.org/10.1007/s00382-018-4087-5
Damien, P., O. Pasqueron de Fommervault, J. Sheinbaum, J. Jouanno, V. F. Camacho-Ibar, and O. Duteil, 2018: Partitioning of the Open Waters of the Gulf of Mexico Based on the Seasonal and Interannual Variability of Chlorophyll Concentration. *Journal of Geophysical Research: Oceans*, **123,** 2592-2614, https://doi.org/10.1002/2017JC013456
Dandapat, S., A. Chakraborty, and J. Kuttippurath, 2018: Interannual variability and characteristics of the East India Coastal Current associated with Indian Ocean Dipole events using a high resolution regional ocean model. *Ocean Dynamics*, **68,** 1321-1334, https://doi.org/10.1007/s10236-018-1201-5

Dassié, E. P., A. Hasson, M. Khodri, N. Lebas, and B. K. Linsley, 2018: Spatiotemporal Variability of the South Pacific Convergence Zone Fresh Pool Eastern Front from Coral-Derived Surface Salinity Data. *Journal of Climate*, **31,** 3265-3288, https://doi.org/10.1175/JCLI-D-17-0071.1

Davis, R. E., L. D. Talley, D. Roemmich, W. B. Owens, D. L. Rudnick, J. Toole, R. Weller, M. J. McPhaden, and J. A. Barth, 2018: 100 Years of Progress in Ocean Observing Systems. *Meteorological Monographs*, **59,** 3.1-3.46, https://doi.org/10.1175/AMSMONOGRAPHS-D-18-0014.1

Dawson, H. R. S., P. G. Strutton, and P. Gaube, 2018: The Unusual Surface Chlorophyll Signatures of Southern Ocean Eddies. *Journal of Geophysical Research: Oceans*, **123,** 6053-6069, https://doi.org/10.1029/2017JC013628

de Boisséson, E., M. A. Balmaseda, and M. Mayer, 2018: Ocean heat content variability in an ensemble of twentieth century ocean reanalyses. *Climate Dynamics*, **50,** 3783-3798, https://doi.org/10.1007/s00382-017-3845-0

de Jong, M. F., H. Søiland, A. S. Bower, and H. H. Furey, 2018: The subsurface circulation of the Iceland Sea observed with RAFOS floats. *Deep Sea Research Part I: Oceanographic Research Papers*, **141,** 1-10, https://doi.org/10.1016/j.dsr.2018.07.008

de Souza, A. G. Q., R. Kerr, and J. L. L. d. Azevedo, 2018: On the influence of Subtropical Mode Water on the South Atlantic Ocean. *Journal of Marine Systems*, **185,** 13-24, https://doi.org/10.1016/j.jmarsys.2018.04.006

Deb, P., M. K. Dash, and P. C. Pandey, 2018: Barrier layer characteristics of the Indian Ocean sector of the Southern Ocean during austral summer and autumn. *Polar Science*, **18,** 176-182, https://doi.org/10.1016/j.polar.2018.04.007

Dilmahamod, A. F., B. Aguiar-González, P. Penven, C. J. C. Reason, W. P. M. De Ruijter, N. Malan, and J. C. Hermes, 2018: SIDDIES Corridor: A Major East-West Pathway of Long-Lived Surface and Subsurface Eddies Crossing the Subtropical South Indian Ocean. *Journal of Geophysical Research: Oceans*, **123,** 5406-5425, https://doi.org/10.1029/2018JC013828

Ding, Y., Z. Yao, L. Zhou, M. Bao, and Z. Zang, 2018: Numerical modeling of the seasonal circulation in the coastal ocean of the Northern South China Sea. *Frontiers of Earth Science*, https://doi.org/10.1007/s11707-018-0741-9

Doddridge, E. W. and D. P. Marshall, 2018: Implications of Eddy Cancellation for Nutrient Distribution Within Subtropical Gyres. *Journal of Geophysical Research: Oceans*, **123,** 6720-6735, https://doi.org/10.1029/2018JC013842

Doorga, J. R. S., O. Gooroochurn, B. A. Motah, V. Ramchandur, and S. Sunassee, 2018: A novel modelling approach to the identification of optimum sites for the placement of ocean thermal energy conversion (OTEC) power plant: application to the tropical island climate of Mauritius. *International Journal of Energy and Environmental Engineering*, **9,** 363-382, https://doi.org/10.1007/s40095-018-0278-4

Droghei, R., B. Buongiorno Nardelli, and R. Santoleri, 2018: A New Global Sea Surface Salinity and Density Dataset From Multivariate Observations (1993–2016). *Frontiers in Marine Science*, **5**, https://doi.org/10.3389/fmars.2018.00084

DuVivier, A. K., W. G. Large, and R. J. Small, 2018: Argo Observations of the Deep Mixing Band in the Southern Ocean: A Salinity Modeling Challenge. *Journal of Geophysical*

Research: Oceans, **123,** 7599-7617, https://doi.org/10.1029/2018JC014275
Dwivedi, S., A. Srivastava, and A. K. Mishra, 2018: Upper Ocean Four-Dimensional Variational Data Assimilation in the Arabian Sea and Bay of Bengal. *Marine Geodesy*, **41,** 230-257, https://doi.org/10.1080/01490419.2017.1405128
Fawcett, S. E., K. S. Johnson, S. C. Riser, N. Van Oostende, and D. M. Sigman, 2018: Low-nutrient organic matter in the Sargasso Sea thermocline: A hypothesis for its role, identity, and carbon cycle implications. *Marine Chemistry*, **207,** 108-123, https://doi.org/10.1016/j.marchem.2018.10.008
Fay, A. R., N. S. Lovenduski, G. A. McKinley, D. R. Munro, C. Sweeney, A. R. Gray, P. Landschützer, B. B. Stephens, T. Takahashi, and N. Williams, 2018: Utilizing the Drake Passage Time-series to understand variability and change in subpolar Southern Ocean pCO2. *Biogeosciences*, **15,** 3841-3855, https://doi.org/10.5194/bg-15-3841-2018
Feng, J., D. Hu, F.-f. Jin, F. Jia, Q. Wang, and S. Guan, 2018: The different relationship of Pacific interior subtropical cells and two types of ENSO. *Journal of Oceanography*, **74,** 523-539, https://doi.org/10.1007/s10872-018-0478-9
Fenwick, L. and P. D. Tortell, 2018: Methane and nitrous oxide distributions in coastal and open ocean waters of the Northeast Subarctic Pacific during 2015–2016. *Marine Chemistry*, **200,** 45-56, https://doi.org/10.1016/j.marchem.2018.01.008
Ferster, B. S. and B. Subrahmanyam, 2018: A Comparison of Satellite-Derived Sea Surface Salinity and Salt Fluxes in the Southern Ocean. *Remote Sensing in Earth Systems Sciences*, **1,** 1-13, https://doi.org/10.1007/s41976-018-0001-5
Ferster, B. S., B. Subrahmanyam, I. Fukumori, and E. S. Nyadjro, 2018: Variability of Southern Ocean Transports. *Journal of Physical Oceanography*, **48,** 2667-2688, https://doi.org/10.1175/JPO-D-18-0055.1
Filyushkin, B. N., M. A. Sokolovskiy, and K. V. Lebedev, 2018: Evolution of an Intrathermocline Lens over the Lofoten Basin. *The Ocean in Motion: Circulation, Waves, Polar Oceanography*, M. G. Velarde, R. Y. Tarakanov, and A. V. Marchenko, Eds., Springer International Publishing, 333-347, https://doi.org/10.1007/978-3-319-71934-4_21.
Fischer, J., J. Karstensen, M. Oltmanns, and S. Schmidtko, 2018: Mean circulation and EKE distribution in the Labrador Sea Water level of the subpolar North Atlantic. *Ocean Sci.*, **14,** 1167-1183, https://doi.org/10.5194/os-14-1167-2018
Foltz, G. R., C. Schmid, and R. Lumpkin, 2018: An Enhanced PIRATA Dataset for Tropical Atlantic Ocean–Atmosphere Research. *Journal of Climate*, **31,** 1499-1524, https://doi.org/10.1175/JCLI-D-16-0816.1
Fraser, C. I., A. K. Morrison, A. M. Hogg, E. C. Macaya, E. van Sebille, P. G. Ryan, A. Padovan, C. Jack, N. Valdivia, and J. M. Waters, 2018: Antarctica's ecological isolation will be broken by storm-driven dispersal and warming. *Nature Climate Change*, **8,** 704-708, https://doi.org/10.1038/s41558-018-0209-7
French-McCay, D. P., M. Horn, Z. Li, K. Jayko, M. L. Spaulding, D. Crowley, and D. Mendelsohn, 2018: Chapter 31 - Modeling Distribution, Fate, and Concentrations of Deepwater Horizon Oil in Subsurface Waters of the Gulf of Mexico A2 - Stout, Scott A. *Oil Spill Environmental Forensics Case Studies*, Z. Wang, Ed.,

Butterworth-Heinemann, 683-735, https://doi.org/10.1016/B978-0-12-804434-6.00031-8.

Fresnay, S., A. L. Ponte, S. L. Gentil, and J. L. Sommer, 2018: Reconstruction of the 3-D Dynamics From Surface Variables in a High-Resolution Simulation of North Atlantic. *Journal of Geophysical Research: Oceans*, **123,** 1612-1630, https://doi.org/10.1002/2017JC013400

Fu, L.-L. and D. Roemmich, 2018: Monitoring Global Sea Level Change from Spaceborne and In Situ Observing Systems. *The Bridge (National Academy of Engineering)*, **48**, https://www.nae.edu/Publications/Bridge/195218/195285.aspx

Fukumori, I., P. Heimbach, R. M. Ponte, and C. Wunsch, 2018: A Dynamically Consistent, Multivariable Ocean Climatology. *Bulletin of the American Meteorological Society*, **99,** 2107-2128, https://doi.org/10.1175/BAMS-D-17-0213.1

Furue, R., K. Takatama, H. Sasaki, N. Schneider, M. Nonaka, and B. Taguchi, 2018: Impacts of sea-surface salinity in an eddy-resolving semi-global OGCM. *Ocean Modelling*, **122,** 36-56, https://doi.org/10.1016/j.ocemod.2017.11.004

Gao, L., S. R. Rintoul, and W. Yu, 2018: Recent wind-driven change in Subantarctic Mode Water and its impact on ocean heat storage. *Nature Climate Change*, **8,** 58-63, https://doi.org/10.1038/s41558-017-0022-8

Garreau, P., F. Dumas, S. Louazel, A. Stegner, and B. Le Vu, 2018: High-Resolution Observations and Tracking of a Dual-Core Anticyclonic Eddy in the Algerian Basin. *Journal of Geophysical Research: Oceans*, **123,** 9320-9339, https://doi.org/10.1029/2017JC013667

Gasparin, F., E. Greiner, J.-M. Lellouche, O. Legalloudec, G. Garric, Y. Drillet, R. Bourdallé-Badie, P.-Y. L. Traon, E. Rémy, and M. Drévillon, 2018: A large-scale view of oceanic variability from 2007 to 2015 in the global high resolution monitoring and forecasting system at Mercator Océan. *Journal of Marine Systems*, **187,** 260-276, https://doi.org/10.1016/j.jmarsys.2018.06.015

Gaube, P., C. D. Braun, G. L. Lawson, D. J. McGillicuddy, A. D. Penna, G. B. Skomal, C. Fischer, and S. R. Thorrold, 2018: Mesoscale eddies influence the movements of mature female white sharks in the Gulf Stream and Sargasso Sea. *Scientific Reports*, **8,** 7363, https://doi.org/10.1038/s41598-018-25565-8

Geng, Y., Q. Wang, and M. Mu, 2018: Effect of the Decadal Kuroshio Extension Variability on the Seasonal Changes of the Mixed-Layer Salinity Anomalies in the Kuroshio-Oyashio Confluence Region. *Journal of Geophysical Research: Oceans*, **123,** 8849-8861, https://doi.org/10.1029/2018JC014139

Gentile, V., S. Pierini, P. de Ruggiero, and L. Pietranera, 2018: Ocean modelling and altimeter data reveal the possible occurrence of intrinsic low-frequency variability of the Kuroshio Extension. *Ocean Modelling*, **131,** 24-39, https://doi.org/10.1016/j.ocemod.2018.08.006

Germe, A., F. Sévellec, J. Mignot, A. Fedorov, S. Nguyen, and D. Swingedouw, 2018: The impacts of oceanic deep temperature perturbations in the North Atlantic on decadal climate variability and predictability. *Climate Dynamics*, **51,** 2341-2357, https://doi.org/10.1007/s00382-017-4016-z

Ghosh, S., S. Hazra, S. Nandy, P. P. Mondal, T. Watham, and S. P. S. Kushwaha, 2018: Trends

of sea level in the Bay of Bengal using altimetry and other complementary techniques. *Journal of Spatial Science*, **63,** 49-62, http://dx.doi.org/10.1080/14498596.2017.1348309

Giglio, D., V. Lyubchich, and M. R. Mazloff, 2018: Estimating Oxygen in the Southern Ocean Using Argo Temperature and Salinity. *Journal of Geophysical Research: Oceans*, **123,** 4280-4297, https://doi.org/10.1029/2017JC013404

Goes, M., J. Christophersen, S. Dong, G. Goni, and M. O. Baringer, 2018: An Updated Estimate of Salinity for the Atlantic Ocean Sector Using Temperature–Salinity Relationships. *Journal of Atmospheric and Oceanic Technology*, **35,** 1771-1784, https://doi.org/10.1175/JTECH-D-18-0029.1

Gouretski, V., 2018: World Ocean Circulation Experiment – Argo Global Hydrographic Climatology. *Ocean Sci.*, **14,** 1127-1146, https://doi.org/10.5194/os-14-1127-2018

Grados, C., A. Chaigneau, V. Echevin, and N. Dominguez, 2018: Upper ocean hydrology of the Northern Humboldt Current System at seasonal, interannual and interdecadal scales. *Progress in Oceanography*, **165,** 123-144, https://doi.org/10.1016/j.pocean.2018.05.005

Gray, A. R., K. S. Johnson, S. M. Bushinsky, S. C. Riser, J. L. Russell, L. D. Talley, R. Wanninkhof, N. L. Williams, and J. L. Sarmiento, 2018: Autonomous Biogeochemical Floats Detect Significant Carbon Dioxide Outgassing in the High-Latitude Southern Ocean. *Geophysical Research Letters*, **45,** 9049-9057, https://doi.org/10.1029/2018GL078013

Grodsky, S. A. and J. A. Carton, 2018: Delayed and Quasi-Synchronous Response of Tropical Atlantic Surface Salinity to Rainfall. *Journal of Geophysical Research: Oceans*, **123,** 5971-5985, https://doi.org/10.1029/2018JC013915

Grodsky, S. A., D. Vandemark, and H. Feng, 2018: Assessing Coastal SMAP Surface Salinity Accuracy and Its Application to Monitoring Gulf of Maine Circulation Dynamics. *Remote Sensing*, **10,** 1232, https://doi.org/10.3390/rs10081232

Guerra, L. A. A., A. M. Paiva, and E. P. Chassignet, 2018: On the translation of Agulhas rings to the western South Atlantic Ocean. *Deep Sea Research Part I: Oceanographic Research Papers*, **139,** 104-113, https://doi.org/10.1016/j.dsr.2018.08.005

Guest, P., P. O. G. Persson, S. Wang, M. Jordan, Y. Jin, B. Blomquist, and C. Fairall, 2018: Low-Level Baroclinic Jets Over the New Arctic Ocean. *Journal of Geophysical Research: Oceans*, **123,** 4074-4091, https://doi.org/10.1002/2018JC013778

Guieu, C., S. Bonnet, A. Petrenko, C. Menkes, V. Chavagnac, K. Desboeufs, C. Maes, and T. Moutin, 2018: Iron from a submarine source impacts the productive layer of the Western Tropical South Pacific (WTSP). *Scientific Reports*, **8,** 9075, https://doi.org/10.1038/s41598-018-27407-z

Gulakaram, V. S., N. K. Vissa, and P. K. Bhaskaran, 2018: Role of mesoscale eddies on atmospheric convection during summer monsoon season over the Bay of Bengal: A case study. *Journal of Ocean Engineering and Science*, **3,** 343-354, https://doi.org/10.1016/j.joes.2018.11.002

Guo, Y., X. Lin, M. Wei, C. Liu, and G. Men, 2018: Decadal Variability of North Pacific Eastern Subtropical Mode Water. *Journal of Geophysical Research: Oceans*, **123,** 6189-6206, https://doi.org/10.1029/2018JC013890

Haavisto, N., L. Tuomi, P. Roiha, S.-M. Siiriä, P. Alenius, and T. Purokoski, 2018: Argo Floats as

a Novel Part of the Monitoring the Hydrography of the Bothnian Sea. *Frontiers in Marine Science*, **5**, https://doi.org/10.3389/fmars.2018.00324

Hamilton, P., R. Leben, A. Bower, H. Furey, and P. Pérez-Brunius, 2018: Hydrography of the Gulf of Mexico Using Autonomous Floats. *Journal of Physical Oceanography*, **48,** 773-794, https://doi.org/10.1175/JPO-D-17-0205.1

Handmann, P., J. Fischer, M. Visbeck, J. Karstensen, A. Biastoch, C. Böning, and L. Patara, 2018: The Deep Western Boundary Current in the Labrador Sea From Observations and a High-Resolution Model. *Journal of Geophysical Research: Oceans*, **123,** 2829-2850, https://doi.org/10.1002/2017JC013702

Hart-Davis, M. G., B. C. Backeberg, I. Halo, E. van Sebille, and J. A. Johannessen, 2018: Assessing the accuracy of satellite derived ocean currents by comparing observed and virtual buoys in the Greater Agulhas Region. *Remote Sensing of Environment*, **216,** 735-746, https://doi.org/10.1016/j.rse.2018.03.040

Hasson, A., M. Puy, J. Boutin, E. Guilyardi, and R. Morrow, 2018: Northward Pathway Across the Tropical North Pacific Ocean Revealed by Surface Salinity: How do El Niño Anomalies Reach Hawaii? *Journal of Geophysical Research: Oceans*, **123,** 2697-2715, https://doi.org/10.1002/2017JC013423

Hautala, S. L., 2018: The abyssal and deep circulation of the Northeast Pacific Basin. *Progress in Oceanography*, **160,** 68-82, https://doi.org/10.1016/j.pocean.2017.11.011

He, Q., H. Zhan, S. Cai, Y. He, G. Huang, and W. Zhan, 2018: A New Assessment of Mesoscale Eddies in the South China Sea: Surface Features, Three-Dimensional Structures, and Thermohaline Transports. *Journal of Geophysical Research: Oceans*, **123,** 4906-4929, https://doi.org/10.1029/2018JC014054

Hernandez-Lasheras, J. and B. Mourre, 2018: Dense CTD survey versus glider fleet sampling: comparing data assimilation performance in a regional ocean model west of Sardinia. *Ocean Sci.*, **14,** 1069-1084, https://doi.org/10.5194/os-14-1069-2018

Hong, J.-S., J.-H. Moon, T. Kim, and J.-H. Lee, 2018: Impact of ocean–wave coupling on typhoon-induced waves and surge levels around the Korean Peninsula: a case study of Typhoon Bolaven. *Ocean Dynamics*, **68,** 1543-1557, https://doi.org/10.1007/s10236-018-1218-9

Horii, T., I. Ueki, and K. Ando, 2018: Coastal upwelling events along the southern coast of Java during the 2008 positive Indian Ocean Dipole. *Journal of Oceanography*, **74,** 499-508, https://doi.org/10.1007/s10872-018-0475-z

Hou, H., F. Yu, F. Nan, B. Yang, S. Guan, and Y. Zhang, 2018: Observation of Near-Inertial Oscillations Induced by Energy Transformation during Typhoons. *Energies*, **12,** 99, https://dx.doi.org/10.3390/en12010099

Hu, Q., K. Qu, H. Gao, Z. Cui, Y. Gao, and X. Yao, 2018: Large Increases in Primary Trimethylaminium and Secondary Dimethylaminium in Atmospheric Particles Associated With Cyclonic Eddies in the Northwest Pacific Ocean. *Journal of Geophysical Research: Atmospheres*, **123,** 12,133-12,146, https://doi.org/10.1029/2018JD028836

Hu, S., J. Sprintall, C. Guan, B. Sun, F. Wang, G. Yang, F. Jia, J. Wang, D. Hu, and F. Chai, 2018: Spatiotemporal Features of Intraseasonal Oceanic Variability in the Philippine Sea From Mooring Observations and Numerical Simulations. *Journal of Geophysical*

Research: Oceans, **123,** 4874-4887, https://doi.org/10.1029/2017JC013653
Huang, B., W. Angel, T. Boyer, L. Cheng, G. Chepurin, E. Freeman, C. Liu, and H.-M. Zhang, 2018: Evaluating SST Analyses with Independent Ocean Profile Observations. *Journal of Climate*, **31,** 5015-5030, https://doi.org/10.1175/JCLI-D-17-0824.1
Huang, B., J. Kennedy, Y. Xue, and H.-M. Zhang, 2018: Global Oceans: Sea surface temperatures in the State of the Climate in 2017. *Bull. Am. Meteorol. Soc.*, **99,** S69 - S72, https://doi.org/10.1175/2018BAMSStateoftheClimate.1
Huang, J. and F. Xu, 2018: Observational Evidence of Subsurface Chlorophyll Response to Mesoscale Eddies in the North Pacific. *Geophysical Research Letters*, **45,** 8462-8470, https://doi.org/10.1029/2018GL078408
Huang, Z., W. Zhuang, H. Liu, and J. Hu, 2018: Subduction of a low-salinity water mass around the Xisha Islands in the South China Sea. *Scientific Reports*, **8,** 3074, https://doi.org/10.1038/s41598-018-21364-3
Izett, R. W., C. C. Manning, R. C. Hamme, and P. D. Tortell, 2018: Refined Estimates of Net Community Production in the Subarctic Northeast Pacific Derived From ΔO2/Ar Measurements With N2O-Based Corrections for Vertical Mixing. *Global Biogeochemical Cycles*, **32,** 326-350, https://doi.org/10.1002/2017GB005792
Jackson, J. M., G. C. Johnson, H. V. Dosser, and T. Ross, 2018: Warming From Recent Marine Heatwave Lingers in Deep British Columbia Fjord. *Geophysical Research Letters*, **45,** 9757-9764, https://doi.org/10.1029/2018GL078971
Jeon, C., J.-H. Park, D. G. Kim, E. Kim, and D. Jeon, 2018: Comparison of Measurements from Pressure-recording Inverted Echo Sounders and Satellite Altimetry in the North Equatorial Current Region of the Western Pacific. *Ocean Science Journal*, **53,** 207-213, https://doi.org/10.1007/s12601-018-0012-4
Ji, J., C. Dong, B. Zhang, Y. Liu, B. Zou, G. P. King, G. Xu, and D. Chen, 2018: Oceanic Eddy Characteristics and Generation Mechanisms in the Kuroshio Extension Region. *Journal of Geophysical Research: Oceans*, **123,** 8548-8567, https://doi.org/10.1029/2018JC014196
Jin, X., Y.-O. Kwon, C. C. Ummenhofer, H. Seo, F. U. Schwarzkopf, A. Biastoch, C. W. Böning, and J. S. Wright, 2018: Influences of Pacific Climate Variability on Decadal Subsurface Ocean Heat Content Variations in the Indian Ocean. *Journal of Climate*, **31,** 4157-4174, https://doi.org/10.1175/JCLI-D-17-0654.1
Johnson, G. C., J. M. Lyman, T. Boyer, L. Cheng, C. M. Domingues, J. Gilson, M. Ishii, R. Killick, D. Monselesan, S. G. Purkey, and S. Wijffels, 2018: Global Oceans: Ocean heat content in State of the Climate in 2017. *Bull. Am. Meteorol. Soc.*, **99,** S72 - S77, https://doi.org/10.1175/2018BAMSStateoftheClimate.1
Johnson, G. C., J. Reagan, J. M. Lyman, T. Boyer, C. Schmid, and R. Locarnini, 2018: Global Oceans: Salinity in the State of the Climate in 2017. *Bull. Am. Meteorol. Soc.*, **99,** S77 - https://doi.org/10.1175/2018BAMSStateoftheClimate.1
Jones, D. C., G. Forget, B. Sinha, S. A. Josey, E. J. D. Boland, A. J. S. Meijers, and E. Shuckburgh, 2018: Local and Remote Influences on the Heat Content of the Labrador Sea: An Adjoint Sensitivity Study. *Journal of Geophysical Research: Oceans*, **123,** 2646-2667, https://doi.org/10.1002/2018JC013774
Josey, S. A., J. J. M. Hirschi, B. Sinha, A. Duchez, J. P. Grist, and R. Marsh (2018), The Recent

Atlantic Cold Anomaly: Causes, Consequences, and Related Phenomena, *Annual Review of Marine Science*, *10*(1), 475-501, doi: https://doi.org/10.1146/annurev-marine-121916-063102.

Kakatkar, R., C. Gnanaseelan, J. S. Chowdary, A. Parekh, and J. S. Deepa, 2018: Indian summer monsoon rainfall variability during 2014 and 2015 and associated Indo-Pacific upper ocean temperature patterns. *Theoretical and Applied Climatology*, **131,** 1235-1247, https://doi.org/10.1007/s00704-017-2046-4

Kakatkar, R., C. Gnanaseelan, J. S. Deepa, J. Chowdary, and A. Parekh, 2018: Role of ocean-atmosphere interactions in modulating the 2016 La Niña like pattern over the tropical Pacific. *Dynamics of Atmospheres and Oceans*, **83,** 100-110, https://doi.org/10.1016/j.dynatmoce.2018.07.003

Kamidaira, Y., Y. Uchiyama, H. Kawamura, T. Kobayashi, and A. Furuno, 2018: Submesoscale Mixing on Initial Dilution of Radionuclides Released From the Fukushima Daiichi Nuclear Power Plant. *Journal of Geophysical Research: Oceans*, **123,** 2808-2828, https://doi.org/10.1002/2017JC013359

Kao, H.-Y., G. S. E. Lagerloef, T. Lee, O. Melnichenko, T. Meissner, and P. Hacker, 2018: Assessment of Aquarius Sea Surface Salinity. *Remote Sensing*, **10,** 1341, https://doi.org/10.3390/rs10091341

Karmakar, A., A. Parekh, J. S. Chowdary, and C. Gnanaseelan, 2018: Inter comparison of Tropical Indian Ocean features in different ocean reanalysis products. *Climate Dynamics*, **51,** 119-141, https://doi.org/10.1007/s00382-017-3910-8

Katsura, S., 2018: Properties, formation, and dissipation of the North Pacific Eastern Subtropical Mode Water and its impact on interannual spiciness anomalies. *Progress in Oceanography*, **162,** 120-131, https://doi.org/10.1016/j.pocean.2018.02.023

Kaurkin, M. N., R. A. Ibrayev, and K. P. Belyaev, 2018: Assimilation of the AVISO Altimetry Data into the Ocean Dynamics Model with a High Spatial Resolution Using Ensemble Optimal Interpolation (EnOI). *Izvestiya, Atmospheric and Oceanic Physics*, **54,** 56-64, https://doi.org/10.1134/S0001433818010073

Keppler, L., S. Cravatte, A. Chaigneau, C. Pegliasco, L. Gourdeau, and A. Singh, 2018: Observed Characteristics and Vertical Structure of Mesoscale Eddies in the Southwest Tropical Pacific. *Journal of Geophysical Research: Oceans*, **123,** 2731-2756, https://doi.org/10.1002/2017JC013712

Kerry, C., M. Roughan, and B. Powell, 2018: Observation Impact in a Regional Reanalysis of the East Australian Current System. *Journal of Geophysical Research: Oceans*, **123,** 7511-7528, https://doi.org/10.1029/2017JC013685

Kim, H., Y. B. Son, and Y.-H. Jo, 2018: Hourly Observed Internal Waves by Geostationary Ocean Color Imagery in the East/Japan Sea. *Journal of Atmospheric and Oceanic Technology*, **35,** 609-617, https://doi.org/10.1175/JTECH-D-17-0049.1

King, R. R., J. While, M. J. Martin, D. J. Lea, B. Lemieux-Dudon, J. Waters, and E. O'Dea, 2018: Improving the initialisation of the Met Office operational shelf-seas model. *Ocean Modelling*, **130,** 1-14, https://doi.org/10.1016/j.ocemod.2018.07.004

Kobayashi, T., 2018: Rapid volume reduction in Antarctic Bottom Water off the Adélie/George V Land coast observed by deep floats. *Deep Sea Research Part I: Oceanographic Research Papers*, **140,** 95-117,

https://doi.org/10.1016/j.dsr.2018.07.014
Köhler, J., N. Serra, F. O. Bryan, B. K. Johnson, and D. Stammer, 2018: Mechanisms of Mixed-Layer Salinity Seasonal Variability in the Indian Ocean. *Journal of Geophysical Research: Oceans*, **123,** 466-496, https://doi.org/10.1002/2017JC013640
Kolodziejczyk, N., P. Testor, A. Lazar, V. Echevin, G. Krahmann, A. Chaigneau, C. Gourcuff, M. Wade, S. Faye, P. Estrade, X. Capet, L. Mortier, P. Brehmer, F. Schütte, and J. Karstensen, 2018: Subsurface Fine-Scale Patterns in an Anticyclonic Eddy Off Cap-Vert Peninsula Observed From Glider Measurements. *Journal of Geophysical Research: Oceans*, **123,** 6312-6329, https://doi.org/10.1029/2018JC014135
Kouketsu, S., 2018: Spatial Distribution of Diffusivity Coefficients and the Effects on Water Mass Modification in the North Pacific. *Journal of Geophysical Research: Oceans*, **123,** 4373-4387, https://doi.org/10.1029/2018JC013860
Koul, V., A. Parekh, G. Srinivas, R. Kakatkar, J. S. Chowdary, and C. Gnanaseelan, 2018: Role of Ocean Initial Conditions to Diminish Dry Bias in the Seasonal Prediction of Indian Summer Monsoon Rainfall: A Case Study Using Climate Forecast System. *Journal of Advances in Modeling Earth Systems*, **10,** 603-616, https://doi.org/10.1002/2017MS001129
Kubryakov, A. A., A. V. Bagaev, S. V. Stanichny, and V. N. Belokopytov, 2018: Thermohaline structure, transport and evolution of the Black Sea eddies from hydrological and satellite data. *Progress in Oceanography*, **167,** 44-63, https://doi.org/10.1016/j.pocean.2018.07.007
Kuntz, L. B. and D. P. Schrag, 2018: Hemispheric Asymmetry in the Ventilated Thermocline of the Tropical Pacific. *Journal of Climate*, **31,** 1281-1288, https://doi.org/10.1175/JCLI-D-17-0686.1
Laloyaux, P., E. de Boisseson, M. Balmaseda, J.-R. Bidlot, S. Broennimann, R. Buizza, P. Dalhgren, D. Dee, L. Haimberger, H. Hersbach, Y. Kosaka, M. Martin, P. Poli, N. Rayner, E. Rustemeier, and D. Schepers, 2018: CERA-20C: A Coupled Reanalysis of the Twentieth Century. *Journal of Advances in Modeling Earth Systems*, **10,** 1172-1195, https://doi.org/10.1029/2018MS001273
Lange, P. K., R. J. W. Brewin, G. Dall'Olmo, G. A. Tarran, S. Sathyendranath, M. Zubkov, and H. A. Bouman, 2018: Scratching Beneath the Surface: A Model to Predict the Vertical Distribution of Prochlorococcus Using Remote Sensing. *Remote Sensing*, **10,** 847, https://doi.org/10.3390/rs10060847
Lauvset, S. K., A. Brakstad, K. Våge, A. Olsen, E. Jeansson, and K. A. Mork, 2018: Continued warming, salinification and oxygenation of the Greenland Sea gyre. *Tellus A: Dynamic Meteorology and Oceanography*, **70,** 1-9, https://doi.org/10.1080/16000870.2018.1476434
Le Vine, D., E. Dinnat, T. Meissner, F. Wentz, H.-Y. Kao, G. Lagerloef, and T. Lee, 2018: Status of Aquarius and Salinity Continuity. *Remote Sensing*, **10,** 1585, https://doi.org/10.3390/rs10101585
Lebedev, K. V., 2018: Modeling Study of the Antarctic Circumpolar Current Variability Based on Argo Data. *The Ocean in Motion: Circulation, Waves, Polar Oceanography*, M. G. Velarde, R. Y. Tarakanov, and A. V. Marchenko, Eds., Springer International Publishing, 487-493, https://doi.org/10.1007/978-3-319-71934-4_30.

Lellouche, J. M., E. Greiner, O. Le Galloudec, G. Garric, C. Regnier, M. Drevillon, M. Benkiran, C. E. Testut, R. Bourdalle-Badie, F. Gasparin, O. Hernandez, B. Levier, Y. Drillet, E. Remy, and P. Y. Le Traon, 2018: Recent updates to the Copernicus Marine Service global ocean monitoring and forecasting real-time 1⁄12° high-resolution system. *Ocean Sci.*, **14,** 1093-1126, https://doi.org/10.5194/os-14-1093-2018

Lewis, N. and J. Curry, 2018: The Impact of Recent Forcing and Ocean Heat Uptake Data on Estimates of Climate Sensitivity. *Journal of Climate*, **31,** 6051-6071, https://doi.org/10.1175/JCLI-D-17-0667.1

Leymarie, E., C. Penkerc'h, V. Vellucci, C. Lerebourg, D. Antoine, E. Boss, M. R. Lewis, F. D'Ortenzio, and H. Claustre, 2018: ProVal: A New Autonomous Profiling Float for High Quality Radiometric Measurements. *Frontiers in Marine Science*, **5**, https://doi.org/10.3389/fmars.2018.00437

Li, B., D. Yuan, and H. Zhou, 2018: Water masses in the far western equatorial Pacific during the winters of 2010 and 2012. *Journal of Oceanology and Limnology*, **36,** 1459-1474, https://doi.org/10.1007/s00343-018-6068-2

Li, D., M. Zhou, Z. Zhang, Y. Zhong, Y. Zhu, C. Yang, M. Xu, D. Xu, and Z. Hu, 2018: Intrusions of Kuroshio and Shelf Waters on Northern Slope of South China Sea in Summer 2015. *Journal of Ocean University of China*, **17,** 477-486, https://doi.org/10.1007/s11802-018-3384-2

Li, F. and M. S. Lozier, 2018: On the Linkage between Labrador Sea Water Volume and Overturning Circulation in the Labrador Sea: A Case Study on Proxies. *Journal of Climate*, **31,** 5225-5241, https://doi.org/10.1175/JCLI-D-17-0692.1

Li, J., C. Liang, Y. Tang, X. Liu, T. Lian, Z. Shen, and X. Li, 2018: Impacts of the IOD-associated temperature and salinity anomalies on the intermittent equatorial undercurrent anomalies. *Climate Dynamics*, **51,** 1391-1409, https://doi.org/10.1007/s00382-017-3961-x

Li, L., R. W. Schmitt, and C. C. Ummenhofer, 2018: The role of the subtropical North Atlantic water cycle in recent US extreme precipitation events. *Climate Dynamics*, **50,** 1291-1305, https://doi.org/10.1007/s00382-017-3685-y

Li, Q., S. Lee, and M. Mazloff, 2018: Evidence of Jet-Scale Overturning Ocean Circulations in Argo Float Trajectories. *Geophysical Research Letters*, **45,** 11,866-11,874, https://doi.org/10.1029/2018GL078950

Li, Y., W. Han, A. Hu, G. A. Meehl, and F. Wang, 2018: Multidecadal Changes of the Upper Indian Ocean Heat Content during 1965–2016. *Journal of Climate*, **31,** 7863-7884, https://doi.org/10.1175/JCLI-D-18-0116.1

Li, Y., W. Han, W. Wang, L. Zhang, and M. Ravichandran, 2018: The Indian Summer Monsoon Intraseasonal Oscillations in CFSv2 Forecasts: Biases and Importance of Improving Air–Sea Interaction Processes. *Journal of Climate*, **31,** 5351-5370, https://doi.org/10.1175/JCLI-D-17-0623.1

Li, Y., H. Liu, and P. Lin, 2018: Interannual and decadal variability of the North Equatorial Undercurrents in an eddy-resolving ocean model. *Scientific Reports*, **8,** 17112, https://doi.org/10.1038/s41598-018-35469-2

Liang, Y.-C., M. R. Mazloff, I. Rosso, S.-W. Fang, and J.-Y. Yu, 2018: A Multivariate Empirical Orthogonal Function Method to Construct Nitrate Maps in the Southern Ocean.

Journal of Atmospheric and Oceanic Technology, **35,** 1505-1519, https://doi.org/10.1175/JTECH-D-18-0018.1

Liang, Z., Q. Xie, L. Zeng, and D. Wang, 2018: Role of wind forcing and eddy activity in the intraseasonal variability of the barrier layer in the South China Sea. *Ocean Dynamics*, **68,** 363-375, https://doi.org/10.1007/s10236-018-1137-9

Liu, D., J. Zhu, Y. Shu, D. Wang, W. Wang, C. Yan, and W. Zhou, 2018: Targeted observation analysis of a Northwestern Tropical Pacific Ocean mooring array using an ensemble-based method. *Ocean Dynamics*, **68,** 1109-1119, https://doi.org/10.1007/s10236-018-1188-y

Liu, F. and S. Tang, 2018: Influence of the Interaction Between Typhoons and Oceanic Mesoscale Eddies on Phytoplankton Blooms. *Journal of Geophysical Research: Oceans*, **123,** 2785-2794, https://doi.org/10.1029/2017JC013225

Liu, J., T. Zhang, G. Han, and Y. Gou, 2018: TD-LSTM: Temporal Dependence-Based LSTM Networks for Marine Temperature Prediction. *Sensors*, **18,** 3797, https://doi.org/10.3390/s18113797

Liu, L., R. X. Huang, and F. Wang, 2018: Ventilation of a Monsoon-Dominated Ocean: Subduction and Obduction in the North Indian Ocean. *Journal of Geophysical Research: Oceans*, **123,** 4449-4463, https://doi.org/10.1029/2017JC013719

Liu, T., R. W. Schmitt, and L. Li, 2018: Global Search for Autumn-Lead Sea Surface Salinity Predictors of Winter Precipitation in Southwestern United States. *Geophysical Research Letters*, **45,** 8445-8454, https://doi.org/10.1029/2018GL079293

Liu, Y., K. Li, C. Ning, Y. Yang, H. Wang, J. Liu, S. Skhokiattiwong, and W. Yu, 2018: Observed Seasonal Variations of the Upper Ocean Structure and Air-Sea Interactions in the Andaman Sea. *Journal of Geophysical Research: Oceans*, **123,** 922-938, https://doi.org/10.1002/2017JC013367

Liu, Y., W. Wang, and A. Kumar, 2018: Multiweek Prediction Skill Assessment of Arctic Sea Ice Variability in the CFSv2. *Weather and Forecasting*, **33,** 1453-1476, https://doi.org/10.1175/WAF-D-18-0046.1

Llanillo, P. J., J. L. Pelegrí, L. D. Talley, J. Peña-Izquierdo, and R. R. Cordero, 2018: Oxygen Pathways and Budget for the Eastern South Pacific Oxygen Minimum Zone. *Journal of Geophysical Research: Oceans*, **123,** 1722-1744, https://doi.org/10.1002/2017JC013509

Llort, J., C. Langlais, R. Matear, S. Moreau, A. Lenton, and P. G. Strutton, 2018: Evaluating Southern Ocean Carbon Eddy-Pump From Biogeochemical-Argo Floats. *Journal of Geophysical Research: Oceans*, **123,** 971-984, https://doi.org/10.1002/2017JC012861

Loeb, N. G., D. R. Doelling, H. Wang, W. Su, C. Nguyen, J. G. Corbett, L. Liang, C. Mitrescu, F. G. Rose, and S. Kato, 2018: Clouds and the Earth's Radiant Energy System (CERES) Energy Balanced and Filled (EBAF) Top-of-Atmosphere (TOA) Edition-4.0 Data Product. *Journal of Climate*, **31,** 895-918, https://doi.org/10.1175/JCLI-D-17-0208.1

Lotliker, A. A., S. K. Baliarsingh, V. L. Trainer, M. L. Wells, C. Wilson, T. V. S. Udaya Bhaskar, A. Samanta, and S. R. Shahimol, 2018: Characterization of oceanic Noctiluca blooms not associated with hypoxia in the Northeastern Arabian Sea. *Harmful Algae*, **74,** 46-57, https://doi.org/10.1016/j.hal.2018.03.008

Lund, D. C., E. I. Seeley, P. D. Asimow, M. J. Lewis, S. E. McCart, and A. A. Mudahy, 2018:

Anomalous Pacific-Antarctic Ridge Volcanism Precedes Glacial Termination 2. *Geochemistry, Geophysics, Geosystems*, **19,** 2478-2491, https://doi.org/10.1029/2017GC007341

Mackay, N., C. Wilson, J. Zika, and N. P. Holliday, 2018: A Regional Thermohaline Inverse Method for Estimating Circulation and Mixing in the Arctic and Subpolar North Atlantic. *Journal of Atmospheric and Oceanic Technology*, **35,** 2383-2403, https://doi.org/10.1175/JTECH-D-17-0198.1

Maher, N., M. H. England, A. S. Gupta, and P. Spence, 2018: Role of Pacific trade winds in driving ocean temperatures during the recent slowdown and projections under a wind trend reversal. *Climate Dynamics*, **51,** 321-336, https://doi.org/10.1007/s00382-017-3923-3

Majumder, S. and C. Schmid, 2018: A study of the variability in the Benguela Current volume transport. *Ocean Sci.*, **14,** 273-283, https://doi.org/10.5194/os-14-273-2018

Mandal, S., S. Sil, A. Shee, and R. Venkatesan, 2018: Upper Ocean and Subsurface Variability in the Bay of Bengal During Cyclone ROANU: A Synergistic View Using In Situ and Satellite Observations. *Pure and Applied Geophysics*, **175,** 4605-4624, https://doi.org/10.1007/s00024-018-1932-8

Marini, S., L. Corgnati, C. Mantovani, M. Bastianini, E. Ottaviani, E. Fanelli, J. Aguzzi, A. Griffa, and P.-M. Poulain, 2018: Automated estimate of fish abundance through the autonomous imaging device GUARD1. *Measurement*, **126,** 72-75, https://doi.org/10.1016/j.measurement.2018.05.035

Marsh, R., G. Bigg, Y. Zhao, M. J. Martin, J. R. Blundell, S. A. Josey, E. Hanna, and V. Ivchenko, 2018: Prospects for seasonal forecasting of iceberg distributions in the North Atlantic. *Natural Hazards*, **91,** 447-471, https://doi.org/10.1007/s11069-017-3136-4

Martínez-García, S., R. R. Bidigare, D. A. del Valle, L. W. Juranek, D. P. Nicholson, D. A. Viviani, S. T. Wilson, and M. J. Church, 2018: Control of net community production by microbial community respiration at Station ALOHA. *Journal of Marine Systems*, **184,** 28-35, https://doi.org/10.1016/j.jmarsys.2018.03.007

Masich, J., M. R. Mazloff, and T. K. Chereskin, 2018: Interfacial Form Stress in the Southern Ocean State Estimate. *Journal of Geophysical Research: Oceans*, **123,** 3368-3385, https://doi.org/10.1029/2018JC013844

Masuda, S., S. Osafune, and T. Hemmi, 2018: Deep-float salinity data synthesis for deep ocean state estimation: method and impact. *Progress in Earth and Planetary Science*, **5,** 89, https://doi.org/10.1186/s40645-018-0247-9

Mauch, M., S. M. Durski, and A. L. Kurapov, 2018: Connectivity of the Aleutian North Slope Current and Bering Sea Basin Waters at the Level of the Subsurface Temperature Maximum: A Modeling Study. *Journal of Geophysical Research: Oceans*, **123,** 8608-8623, https://doi.org/10.1029/2018JC014097

Mayer, M., M. A. Balmaseda, and L. Haimberger, 2018: Unprecedented 2015/2016 Indo-Pacific Heat Transfer Speeds Up Tropical Pacific Heat Recharge. *Geophysical Research Letters*, **45,** 3274-3284, https://doi.org/10.1002/2018GL077106

Mayot, N., P. Matrai, I. H. Ellingsen, M. Steele, K. Johnson, S. C. Riser, and D. Swift, 2018: Assessing Phytoplankton Activities in the Seasonal Ice Zone of the Greenland Sea Over an Annual Cycle. *Journal of Geophysical Research: Oceans*, **123,** 8004-8025,

https://doi.org/10.1029/2018JC014271
Mazloff, M. R., B. D. Cornuelle, S. T. Gille, and A. Verdy, 2018: Correlation Lengths for Estimating the Large-Scale Carbon and Heat Content of the Southern Ocean. *Journal of Geophysical Research: Oceans*, **123,** 883-901, https://doi.org/10.1002/2017JC013408
McMonigal, K., L. M. Beal, and J. K. Willis, 2018: The Seasonal Cycle of the South Indian Ocean Subtropical Gyre Circulation as Revealed by Argo and Satellite Data. *Geophysical Research Letters*, **45,** 9034-9041, https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2018GL078420
Meissner, T., F. J. Wentz, and D. M. Le Vine, 2018: The Salinity Retrieval Algorithms for the NASA Aquarius Version 5 and SMAP Version 3 Releases. *Remote Sensing*, **10,** 1121, https://doi.org/10.3390/rs10071121
Menary, M. B. and L. Hermanson, 2018: Limits on determining the skill of North Atlantic Ocean decadal predictions. *Nature Communications*, **9,** 1694, https://doi.org/10.1038/s41467-018-04043-9
Merrifield, S., M. Otero, and E. Terrill, 2018: Observations of Shelf Exchange and High-Frequency Variability in an Alaskan Fjord. *Journal of Geophysical Research: Oceans*, **123,** 4720-4734, https://doi.org/10.1029/2018JC013931
Meunier, T., E. Pallás-Sanz, M. Tenreiro, E. Portela, J. Ochoa, A. Ruiz-Angulo, and S. Cusí, 2018: The Vertical Structure of a Loop Current Eddy. *Journal of Geophysical Research: Oceans*, **123,** 6070-6090, https://doi.org/10.1029/2018JC013801
Mignac, D., D. Ferreira, and K. Haines, 2018: South Atlantic meridional transports from NEMO-based simulations and reanalyses. *Ocean Sci.*, **14,** 53-68, https://doi.org/10.5194/os-14-53-2018, 2018
Mignot, A., R. Ferrari, and H. Claustre, 2018: Floats with bio-optical sensors reveal what processes trigger the North Atlantic bloom. *Nature Communications*, **9,** 190, https://doi.org/10.1038/s41467-017-02143-6
Miloslavich, P., S. Seeyave, F. Muller-Karger, N. Bax, E. Ali, C. Delgado, H. Evers-King, B. Loveday, V. Lutz, J. Newton, G. Nolan, A. C. Peralta Brichtova, C. Traeger-Chatterjee, and E. Urban, 2018: Challenges for global ocean observation: the need for increased human capacity. *Journal of Operational Oceanography***,** 1-20, https://doi.org/10.1080/1755876X.2018.1526463
Misra, T., R. Sharma, R. Kumar, and P. K. Pal, 2018: Ocean Remote Sensing: Concept to Realization for Physical Oceanographic Studies. *Observing the Oceans in Real Time*, R. Venkatesan, A. Tandon, E. D'Asaro, and M. A. Atmanand, Eds., Springer International Publishing, 165-202, https://doi.org/10.1007/978-3-319-66493-4_9.
Mohamed, K. S., K. K. Sajikumar, N. Ragesh, T. V. Ambrose, J. Jayasankar, K. P. Said Koya, and G. Sasikumar, 2018: Relating abundance of purpleback flying squid Sthenoteuthis oualaniensis (Cephalopoda: Ommastrephidae) to environmental parameters using GIS and GAM in south-eastern Arabian Sea. *Journal of Natural History*, **52,** 1869-1882, https://doi.org/10.1080/00222933.2018.1497721
Murphy, D. and C. Janzen, 2018: Advances in In-Situ Ocean Measurements. *Observing the Oceans in Real Time*, R. Venkatesan, A. Tandon, E. D'Asaro, and M. A. Atmanand, Eds., Springer International Publishing, 141-162,

https://doi.org/10.1007/978-3-319-66493-4_8.
Nagura, M., 2018: Annual Rossby Waves Below the Pycnocline in the Indian Ocean. *Journal of Geophysical Research: Oceans*, **123,** 9405-9415, https://doi.org/10.1029/2018JC014362
Nagura, M. and S. Kouketsu, 2018: Spiciness Anomalies in the Upper South Indian Ocean. *Journal of Physical Oceanography*, **48,** 2081-2101, https://doi.org/10.1175/JPO-D-18-0050.1
Nagura, M. and M. J. McPhaden, 2018: The Shallow Overturning Circulation in the Indian Ocean. *Journal of Physical Oceanography*, **48,** 413-434, https://doi.org/10.1175/JPO-D-17-0127.1
Nakano, H., H. Tsujino, K. Sakamoto, S. Urakawa, T. Toyoda, and G. Yamanaka, 2018: Identification of the fronts from the Kuroshio Extension to the Subarctic Current using absolute dynamic topographies in satellite altimetry products. *Journal of Oceanography*, **74,** 393-420, https://doi.org/10.1007/s10872-018-0470-4
Nardelli, B. B., S. Mulet, and D. Iudicone, 2018: Three-Dimensional Ageostrophic Motion and Water Mass Subduction in the Southern Ocean. *Journal of Geophysical Research: Oceans*, **123,** 1533-1562, https://doi.org/10.1002/2017JC013316
Nencioli, F., G. Dall'Olmo, and G. D. Quartly, 2018: Agulhas Ring Transport Efficiency From Combined Satellite Altimetry and Argo Profiles. *Journal of Geophysical Research: Oceans*, **123,** 5874-5888, https://doi.org/10.1029/2018JC013909
Nielsen-Englyst, P., J. L. Høyer, L. Toudal Pedersen, C. L. Gentemann, E. Alerskans, T. Block, and C. Donlon, 2018: Optimal Estimation of Sea Surface Temperature from AMSR-E. *Remote Sensing*, **10,** 229, http://dx.doi.org/10.3390/rs10020229
Nogueira Neto, A. V., H. Giordani, G. Caniaux, and M. Araujo, 2018: Seasonal and Interannual Mixed-Layer Heat Budget Variability in the Western Tropical Atlantic From Argo Floats (2007–2012). *Journal of Geophysical Research: Oceans*, **123,** 5298-5322, https://doi.org/10.1029/2017JC013436
Ogle, S. E., V. Tamsitt, S. A. Josey, S. T. Gille, I. Cerovečki, L. D. Talley, and R. A. Weller, 2018: Episodic Southern Ocean Heat Loss and Its Mixed Layer Impacts Revealed by the Farthest South Multiyear Surface Flux Mooring. *Geophysical Research Letters*, **45,** 5002-5010, https://doi.org/10.1029/2017GL076909
Oka, E., M. Ishii, T. Nakano, T. Suga, S. Kouketsu, M. Miyamoto, H. Nakano, B. Qiu, S. Sugimoto, and Y. Takatani, 2018: Fifty years of the 137°E repeat hydrographic section in the western North Pacific Ocean. *Journal of Oceanography*, https://doi.org/10.1007/s10872-017-0461-x
Oke, P. R., D. A. Griffin, T. Rykova, and H. B. de Oliveira, 2018: Ocean circulation in the Great Australian Bight in an eddy-resolving ocean reanalysis: The eddy field, seasonal and interannual variability. *Deep Sea Research Part II: Topical Studies in Oceanography*, **157-158,** 11-26, https://doi.org/10.1016/j.dsr2.2018.09.012
Olmedo, E., C. Gabarró, V. González-Gambau, J. Martínez, J. Ballabrera-Poy, A. Turiel, M. Portabella, S. Fournier, and T. Lee, 2018: Seven Years of SMOS Sea Surface Salinity at High Latitudes: Variability in Arctic and Sub-Arctic Regions. *Remote Sensing*, **10,** 1772, https://dx.doi.org/10.3390/rs10111772
Olmedo, E., I. Taupier-Letage, A. Turiel, and A. Alvera-Azcárate, 2018: Improving SMOS Sea

Surface Salinity in the Western Mediterranean Sea through Multivariate and Multifractal Analysis. *Remote Sensing*, **10,** 485, https://doi.org/10.3390/rs10030485

Oltmanns, M., J. Karstensen, and J. Fischer, 2018: Increased risk of a shutdown of ocean convection posed by warm North Atlantic summers. *Nature Climate Change*, **8,** 300-304, https://doi.org/10.1038/s41558-018-0105-1

Ospina-Alvarez, A., N. Weidberg, C. M. Aiken, and S. A. Navarrete, 2018: Larval transport in the upwelling ecosystem of central Chile: The effects of vertical migration, developmental time and coastal topography on recruitment. *Progress in Oceanography*, **168,** 82-99, https://doi.org/10.1016/j.pocean.2018.09.016

Oyinlola, M. A., G. Reygondeau, C. C. C. Wabnitz, M. Troell, and W. W. L. Cheung, 2018: Global estimation of areas with suitable environmental conditions for mariculture species. *PLOS ONE*, **13,** e0191086, https://doi.org/10.1371/journal.pone.0191086

Pan, L., Y. Zhong, H. Liu, L. Zhou, Z. Zhang, and M. Zhou, 2018: Seasonal Variation of Barrier Layer in the Southern Ocean. *Journal of Geophysical Research: Oceans*, **123,** 2238-2253, https://doi.org/10.1002/2017JC013382

Panassa, E., C. Völker, D. Wolf-Gladrow, and J. Hauck, 2018: Drivers of Interannual Variability of Summer Mixed Layer Depth in the Southern Ocean Between 2002 and 2011. *Journal of Geophysical Research: Oceans*, **123,** 5077-5090, https://doi.org/10.1029/2018JC013901

Panteleev, G. G., M. Yaremchuk, V. Luchin, and O. Francis, 2018: The Bering Sea Regional Data Assimilation System: From Climate Variability to Short Term Hindcasting. *The Ocean in Motion: Circulation, Waves, Polar Oceanography*, M. G. Velarde, R. Y. Tarakanov, and A. V. Marchenko, Eds., Springer International Publishing, 501-517, https://doi.org/10.1007/978-3-319-71934-4_32.

Paris, M. L., B. Subrahmanyam, C. B. Trott, and V. S. N. Murty, 2018: Influence of ENSO Events on the Agulhas Leakage Region. *Remote Sensing in Earth Systems Sciences*, **1,** 79-88, https://doi.org/10.1007/s41976-018-0007-z

Park, J. and B. Lim, 2018: A new perspective on origin of the East Sea Intermediate Water: Observations of Argo floats. *Progress in Oceanography*, **160,** 213-224, https://doi.org/10.1016/j.pocean.2017.10.015

Park, J. Y., C. A. Stock, X. Yang, J. P. Dunne, A. Rosati, J. John, and S. Zhang, 2018: Modeling Global Ocean Biogeochemistry With Physical Data Assimilation: A Pragmatic Solution to the Equatorial Instability. *Journal of Advances in Modeling Earth Systems*, **10,** 891-906, https://doi.org/10.1002/2017MS001223

Pattabhi Rama Rao, E., T. V. S. Bhaskar, R. V. Seshu, N. S. Rao, K. Suprit, and G. Geetha, 2018: Marine Data Services at National Oceanographic Data Centre-India. *Data Science Journal*, **17,** 11, http://doi.org/10.5334/dsj-2018-011

Pauthenet, E., F. Roquet, G. Madec, C. Guinet, M. Hindell, C. R. McMahon, R. Harcourt, and D. Nerini, 2018: Seasonal Meandering of the Polar Front Upstream of the Kerguelen Plateau. *Geophysical Research Letters*, **45,** 9774-9781, https://doi.org/10.1029/2018GL079614

Pellichero, V., J.-B. Sallée, C. C. Chapman, and S. M. Downes, 2018: The southern ocean meridional overturning in the sea-ice sector is driven by freshwater fluxes. *Nature Communications*, **9,** 1789, https://doi.org/10.1038/s41467-018-04101-2

Petihakis, G., L. Perivoliotis, G. Korres, D. Ballas, C. Frangoulis, P. Pagonis, M. Ntoumas, M. Pettas, A. Chalkiopoulos, M. Sotiropoulou, M. Bekiari, A. Kalampokis, M. Ravdas, E. Bourma, S. Christodoulaki, A. Zacharioudaki, D. Kassis, E. Potiris, G. Triantafyllou, K. Tsiaras, E. Krasakopoulou, S. Velanas, and N. Zisis, 2018: An integrated open-coastal biogeochemistry, ecosystem and biodiversity observatory of the eastern Mediterranean – the Cretan Sea component of the POSEIDON system. *Ocean Sci.*, **14,** 1223-1245, https://doi.org/10.5194/os-14-1223-2018

Pfeffer, J., P. Tregoning, A. Purcell, and M. Sambridge, 2018: Multitechnique Assessment of the Interannual to Multidecadal Variability in Steric Sea Levels: A Comparative Analysis of Climate Mode Fingerprints. *Journal of Climate*, **31,** 7583-7597, https://doi.org/10.1175/JCLI-D-17-0679.1

Pilo, G. S., P. R. Oke, R. Coleman, T. Rykova, and K. Ridgway, 2018: Impact of data assimilation on vertical velocities in an eddy resolving ocean model. *Ocean Modelling*, **131,** 71-85, https://doi.org/10.1016/j.ocemod.2018.09.003

Piola, A. R., E. D. Palma, A. A. Bianchi, B. M. Castro, M. Dottori, R. A. Guerrero, M. Marrari, R. P. Matano, O. O. Möller, and M. Saraceno, 2018: Physical Oceanography of the SW Atlantic Shelf: A Review. *Plankton Ecology of the Southwestern Atlantic: From the Subtropical to the Subantarctic Realm*, M. S. Hoffmeyer, M. E. Sabatini, F. P. Brandini, D. L. Calliari, and N. H. Santinelli, Eds., Springer International Publishing, 37-56, https://doi.org/10.1007/978-3-319-77869-3_2.

Planton, Y., A. Voldoire, H. Giordani, and G. Caniaux, 2018: Main processes of the Atlantic cold tongue interannual variability. *Climate Dynamics*, **50,** 1495-1512, https://doi.org/10.1007/s00382-017-3701-2

Ponte, R. M. and C. G. Piecuch, 2018: Mechanisms Controlling Global Mean Sea Surface Temperature Determined From a State Estimate. *Geophysical Research Letters*, **45,** 3221-3227, https://doi.org/10.1002/2017GL076821

Ponte, R. M., K. J. Quinn, and C. G. Piecuch, 2018: Accounting for Gravitational Attraction and Loading Effects from Land Ice on Absolute Sea Level. *Journal of Atmospheric and Oceanic Technology*, **35,** 405-410, https://doi.org/10.1175/JTECH-D-17-0092.1

Portela, E., M. Tenreiro, E. Pallàs-Sanz, T. Meunier, A. Ruiz-Angulo, R. Sosa-Gutiérrez, and S. Cusí, 2018: Hydrography of the Central and Western Gulf of Mexico. *Journal of Geophysical Research: Oceans*, **123,** 5134-5149, https://doi.org/10.1029/2018JC013813

Prants, S. V., M. V. Budyansky, and M. Y. Uleysky, 2018: How Eddies Gain, Retain, and Release Water: A Case Study of a Hokkaido Anticyclone. *Journal of Geophysical Research: Oceans*, **123,** 2081-2096, https://doi.org/10.1002/2017JC013610

Prants, S. V., M. Y. Uleysky, and M. V. Budyansky, 2018: Lagrangian study of transport of subarctic water across the Subpolar Front in the Japan Sea. *Ocean Dynamics*, **68,** 701-712, https://doi.org/10.1007/s10236-018-1155-7

Pujiana, K., J. N. Moum, and W. D. Smyth, 2018: The Role of Turbulence in Redistributing Upper-Ocean Heat, Freshwater, and Momentum in Response to the MJO in the Equatorial Indian Ocean. *Journal of Physical Oceanography*, **48,** 197-220, https://doi.org/10.1175/JPO-D-17-0146.1

Pun, I.-F., I.-I. Lin, C.-C. Lien, and C.-C. Wu, 2018: Influence of the Size of Supertyphoon Megi

(2010) on SST Cooling. *Monthly Weather Review*, **146,** 661-677, https://doi.org/10.1175/MWR-D-17-0044.1

Purich, A., M. H. England, W. Cai, A. Sullivan, and P. J. Durack, 2018: Impacts of Broad-Scale Surface Freshening of the Southern Ocean in a Coupled Climate Model. *Journal of Climate*, **31,** 2613-2632, https://doi.org/10.1175/JCLI-D-17-0092.1

Qin, H., C. Wang, Y. Jiang, Z. Deng, and W. Zhang, 2018: Trend prediction of the 3D thermocline's lateral boundary based on the SVR method. *EURASIP Journal on Wireless Communications and Networking*, **2018,** 252, https://doi.org/10.1186/s13638-018-1271-6

Raapoto, H., E. Martinez, A. Petrenko, A. M. Doglioli, and C. Maes, 2018: Modeling the Wake of the Marquesas Archipelago. *Journal of Geophysical Research: Oceans*, **123,** 1213-1228, https://doi.org/10.1002/2017JC013285

Raj, R. P., J. E. Ø. Nilsen, J. A. Johannessen, T. Furevik, O. B. Andersen, and L. Bertino, 2018: Quantifying Atlantic Water transport to the Nordic Seas by remote sensing. *Remote Sensing of Environment*, **216,** 758-769, https://doi.org/10.1016/j.rse.2018.04.055

Ramanantsoa, J. D., P. Penven, M. Krug, J. Gula, and M. Rouault, 2018: Uncovering a New Current: The Southwest MAdagascar Coastal Current. *Geophysical Research Letters*, **45,** 1930-1938, https://doi.org/10.1002/2017GL075900

Ravichandran, M. and M. S. Girishkumar, 2018: Applications of Ocean In-situ Observations and Its Societal Relevance. *Observing the Oceans in Real Time*, R. Venkatesan, A. Tandon, E. D'Asaro, and M. A. Atmanand, Eds., Springer International Publishing, 303-313, https://doi.org/10.1007/978-3-319-66493-4_15.

Reagan, J., D. Seidov, and T. Boyer, 2018: Water Vapor Transfer and Near-Surface Salinity Contrasts in the North Atlantic Ocean. *Scientific Reports*, **8,** 8830, https://doi.org/10.1038/s41598-018-27052-6

Reseghetti, F., L. Cheng, M. Borghini, I. M. Yashayaev, G. Raiteri, and J. Zhu, 2018: Assessment of Quality and Reliability of Measurements with XBT Sippican T5 and T5/20. *Journal of Atmospheric and Oceanic Technology*, **35,** 1935-1960, https://doi.org/10.1175/JTECH-D-18-0043.1

Ridgway, K. R., J. A. Benthuysen, and C. Steinberg, 2018: Closing the Gap Between the Coral Sea and the Equator: Direct Observations of the North Australian Western Boundary Currents. *Journal of Geophysical Research: Oceans*, **123,** 9212-9231, https://doi.org/10.1029/2018JC014269

Rintoul, S. R., 2018: The global influence of localized dynamics in the Southern Ocean. *Nature*, **558,** 209-218, https://doi.org/10.1038/s41586-018-0182-3

Riser, S. C., D. Swift, and R. Drucker, 2018: Profiling Floats in SOCCOM: Technical Capabilities for Studying the Southern Ocean. *Journal of Geophysical Research: Oceans*, **123,** 4055-4073, https://doi.org/10.1002/2017JC013419

Roach, C. J., D. Balwada, and K. Speer, 2018: Global Observations of Horizontal Mixing from Argo Float and Surface Drifter Trajectories. *Journal of Geophysical Research: Oceans*, **123,** 4560-4575, https://doi.org/10.1029/2018JC013750

Robson, J., R. T. Sutton, A. Archibald, F. Cooper, M. Christensen, L. J. Gray, N. P. Holliday, C. Macintosh, M. McMillan, B. Moat, M. Russo, R. Tilling, K. Carslaw, D. Desbruyères, O. Embury, D. L. Feltham, D. P. Grosvenor, S. Josey, B. King, A. Lewis, G. D. McCarthy, C.

Merchant, A. L. New, C. H. O'Reilly, S. M. Osprey, K. Read, A. Scaife, A. Shepherd, B. Sinha, D. Smeed, D. Smith, A. Ridout, T. Woollings, and M. Yang, 2018: Recent multivariate changes in the North Atlantic climate system, with a focus on 2005–2016. *International Journal of Climatology*, **38,** 5050-5076, https://doi.org/10.1002/joc.5815

Rogachev, K. A. and N. V. Shlyk, 2018: The Role of the Aleutian Eddies in the Kamchatka Current Warming. *Russian Meteorology and Hydrology*, **43,** 43-48, https://doi.org/10.3103/S1068373918010065

Rogachev, K. A. and N. V. Shlyk, 2018: Salinity Variations of the Intermediate Oyashio Waters and Their Relation with the Lunar Nodal Cycle. *Oceanology*, **58,** 1-7, https://doi.org/10.1134/S0001437018010113

Roiha, P., S.-M. Siiriä, N. Haavisto, P. Alenius, A. Westerlund, and T. Purokoski, 2018: Estimating Currents From Argo Trajectories in the Bothnian Sea, Baltic Sea. *Frontiers in Marine Science*, **5**, https://doi.org/10.3389/fmars.2018.00308

Russell, J. L., I. Kamenkovich, C. Bitz, R. Ferrari, S. T. Gille, P. J. Goodman, R. Hallberg, K. Johnson, K. Khazmutdinova, I. Marinov, M. Mazloff, S. Riser, J. L. Sarmiento, K. Speer, L. D. Talley, and R. Wanninkhof, 2018: Metrics for the Evaluation of the Southern Ocean in Coupled Climate Models and Earth System Models. *Journal of Geophysical Research: Oceans*, **123,** 3120-3143, https://doi.org/10.1002/2017JC013461

Sammartino, M., S. Marullo, R. Santoleri, and M. Scardi, 2018: Modelling the Vertical Distribution of Phytoplankton Biomass in the Mediterranean Sea from Satellite Data: A Neural Network Approach. *Remote Sensing*, **10,** 1666, https://doi.org/10.3390/rs10101666

Sandeep, K. K. and V. Pant, 2018: Evaluation of Interannual Simulations and Indian Ocean Dipole Events During 2000–2014 from a Basin Scale General Circulation Model. *Pure and Applied Geophysics*, **175,** 4579-4603, https://doi.org/10.1007/s00024-018-1915-9

Sandery, P., 2018: Data assimilation cycle length and observation impact in mesoscale ocean forecasting. *Geosci. Model Dev.*, **11,** 4011-4019, https://doi.org/10.5194/gmd-11-4011-2018

Santhanam, H. and T. Natarajan, 2018: Short-term desalination of Pulicat lagoon (Southeast India) due to the 2015 extreme flood event: insights from Land-Ocean Interactions in Coastal Zone (LOICZ) models. *Ecological Processes*, **7,** 10, https://doi.org/10.1186/s13717-018-0119-7

Sarangi, R. K., S. K. Shrinidhi, P. Chauhan, and B. R. Raghavan, 2018: Remote sensing and in situ platform based study on impact of Bay of Bengal cyclones (Phailin, Helen, Lehar, and Madi) on ocean chlorophyll and associated physical parameters. *Natural Hazards*, **93,** 413-451, https://doi.org/10.1007/s11069-018-3307-y

Sarma, V. V. S. S. and T. V. S. Udaya Bhaskar, 2018: Ventilation of Oxygen to Oxygen Minimum Zone Due to Anticyclonic Eddies in the Bay of Bengal. *Journal of Geophysical Research: Biogeosciences*, **123,** 2145-2153, https://doi.org/10.1029/2018JG004447

Scannell, H. A. and M. J. McPhaden, 2018: Seasonal Mixed Layer Temperature Balance in the Southeastern Tropical Atlantic. *Journal of Geophysical Research: Oceans*, **123,**

5557-5570, https://doi.org/10.1029/2018JC014099
Schmid, C. and S. Majumder, 2018: Transport variability of the Brazil Current from observations and a data assimilation model. *Ocean Sci.*, **14,** 417-436, https://doi.org/10.5194/os-14-417-2018
Scott, K. A., C. Chen, and P. G. Myers, 2018: Assimilation of Argo Temperature and Salinity Profiles Using a Bias-Aware EnOI Scheme for the Labrador Sea. *Journal of Atmospheric and Oceanic Technology*, **35,** 1819-1834, https://doi.org/10.1175/JTECH-D-17-0222.1
Seelanki, V., P. Sreenivas, and K. V. S. R. Prasad, 2018: Impact of Aquarius Sea-Surface Salinity Assimilation in Improving the Ocean Analysis Over Indian Ocean. *Marine Geodesy*, **41,** 144-158, https://doi.org/10.1080/01490419.2017.1422817
Seiki, A., Y. N. Takayabu, T. Hasegawa, and K. Yoneyama, 2018: Lack of Westerly Wind Bursts in Unmaterialized El Niño Years. *Journal of Climate*, **31,** 593-612, https://doi.org/10.1175/JCLI-D-17-0291.1
Sévellec, F., H. A. Dijkstra, S. S. Drijfhout, and A. Germe, 2018: Dynamical attribution of oceanic prediction uncertainty in the North Atlantic: application to the design of optimal monitoring systems. *Climate Dynamics*, **51,** 1517-1535, https://doi.org/10.1007/s00382-017-3969-2
Sherin, V. R., F. Durand, V. V. Gopalkrishna, S. Anuvinda, A. V. S. Chaitanya, R. Bourdallé-Badie, and F. Papa, 2018: Signature of Indian Ocean Dipole on the western boundary current of the Bay of Bengal. *Deep Sea Research Part I: Oceanographic Research Papers*, **136,** 91-106, https://doi.org/10.1016/j.dsr.2018.04.002
Shi, J., X. Yin, Q. Shu, B. Xiao, and F. Qiao, 2018: Evaluation on data assimilation of a global high resolution wave-tide-circulation coupled model using the tropical Pacific TAO buoy observations. *Acta Oceanologica Sinica*, **37,** 8-20, https://doi.org/10.1007/s13131-018-1196-2
Shi, J.-R., S.-P. Xie, and L. D. Talley, 2018: Evolving Relative Importance of the Southern Ocean and North Atlantic in Anthropogenic Ocean Heat Uptake. *Journal of Climate*, **31,** 7459-7479, https://doi.org/10.1175/JCLI-D-18-0170.1
Shroyer, E. L., J. D. Nash, A. F. Waterhouse, and J. N. Moum, 2018: Measuring Ocean Turbulence. *Observing the Oceans in Real Time*, R. Venkatesan, A. Tandon, E. D'Asaro, and M. A. Atmanand, Eds., Springer International Publishing, 99-122, https://doi.org/10.1007/978-3-319-66493-4_6.
Shulman, I., R. W. Gould, S. Frolov, S. McCarthy, B. Penta, S. Anderson, and P. Sakalaukus, 2018: Bio-Optical Data Assimilation With Observational Error Covariance Derived From an Ensemble of Satellite Images. *Journal of Geophysical Research: Oceans*, **123,** 1801-1813, https://doi.org/10.1002/2017JC013171
Siswanto, E., Y. Xu, and J. Ishizaka, 2018: A Rare Dispersion of Low-Salinity, High-Gelbstoff, High-Primary Production Water in the East China Sea During the Summer of 2010: Possible Influence of the ENSO. *Journal of Geophysical Research: Oceans*, **123,** 2757-2767, https://doi.org/10.1002/2017JC013319
Smith, G. C., J.-M. Bélanger, F. Roy, P. Pellerin, H. Ritchie, K. Onu, M. Roch, A. Zadra, D. S. Colan, B. Winter, J.-S. Fontecilla, and D. Deacu, 2018: Impact of Coupling with an Ice–Ocean Model on Global Medium-Range NWP Forecast Skill. *Monthly Weather*

Review, **146,** 1157-1180, https://doi.org/10.1175/MWR-D-17-0157.1
Smith, T. M., P. H. York, B. R. Broitman, M. Thiel, G. C. Hays, E. van Sebille, N. F. Putman, P. I. Macreadie, and C. D. H. Sherman, 2018: Rare long-distance dispersal of a marine angiosperm across the Pacific Ocean. *Global Ecology and Biogeography*, **27,** 487-496, https://doi.org/10.1111/geb.12713
Somot, S., L. Houpert, F. Sevault, P. Testor, A. Bosse, I. Taupier-Letage, M.-N. Bouin, R. Waldman, C. Cassou, E. Sanchez-Gomez, X. Durrieu de Madron, F. Adloff, P. Nabat, and M. Herrmann, 2018: Characterizing, modelling and understanding the climate variability of the deep water formation in the North-Western Mediterranean Sea. *Climate Dynamics*, **51,** 1179-1210, https://doi.org/10.1007/s00382-016-3295-0
Sree Lekha, J., J. M. Buckley, A. Tandon, and D. Sengupta, 2018: Subseasonal Dispersal of Freshwater in the Northern Bay of Bengal in the 2013 Summer Monsoon Season. *Journal of Geophysical Research: Oceans*, **123,** 6330-6348, https://doi.org/10.1029/2018JC014181
Srinivas, G., J. S. Chowdary, C. Gnanaseelan, K. V. S. R. Prasad, A. Karmakar, and A. Parekh, 2018: Association between mean and interannual equatorial Indian Ocean subsurface temperature bias in a coupled model. *Climate Dynamics*, **50,** 1659-1673, https://doi.org/10.1007/s00382-017-3713-y
Stanev, E. V., P. M. Poulain, S. Grayek, K. S. Johnson, H. Claustre, and J. W. Murray, 2018: Understanding the Dynamics of the Oxic-Anoxic Interface in the Black Sea. *Geophysical Research Letters*, **45,** 864-871, https://doi.org/10.1002/2017GL076206
Steffen, J. and M. Bourassa, 2018: Barrier Layer Development Local to Tropical Cyclones based on Argo Float Observations. *Journal of Physical Oceanography*, **48,** 1951-1968, https://doi.org/10.1175/JPO-D-17-0262.1
Storto, A., P. Oddo, A. Cipollone, I. Mirouze, and B. Lemieux-Dudon, 2018: Extending an oceanographic variational scheme to allow for affordable hybrid and four-dimensional data assimilation. *Ocean Modelling*, **128,** 67-86, https://doi.org/10.1016/j.ocemod.2018.06.005
Strobach, E., A. Molod, G. Forget, J.-M. Campin, C. Hill, D. Menemenlis, and P. Heimbach, 2018: Consequences of different air-sea feedbacks on ocean using MITgcm and MERRA-2 forcing: Implications for coupled data assimilation systems. *Ocean Modelling*, **132,** 91-111, https://doi.org/10.1016/j.ocemod.2018.10.006
Stupnikova, A. N., R. Y. Tarakanov, D. N. Kulagin, and A. L. Vereshchaka, 2018: Factors maintaining the identity of mesoplankton communities: cool evidence from the Drake Passage. *Hydrobiologia*, **809,** 221-232, https://doi.org/10.1007/s10750-017-3474-y
Su, H., L. Huang, W. Li, X. Yang, and X.-H. Yan, 2018: Retrieving Ocean Subsurface Temperature Using a Satellite-Based Geographically Weighted Regression Model. *Journal of Geophysical Research: Oceans*, **123,** 5180-5193, https://doi.org/10.1029/2018JC014246
Su, H., W. Li, and X. H. Yan, 2018: Retrieving Temperature Anomaly in the Global Subsurface and Deeper Ocean From Satellite Observations. *Journal of Geophysical Research: Oceans*, **123,** 399-410, https://doi.org/10.1002/2017JC013631
Sun, Q., B. Wu, T.-J. Zhou, and Z.-X. Yan, 2018: ENSO hindcast skill of the IAP-DecPreS

near-term climate prediction system: comparison of full-field and anomaly initialization. *Atmospheric and Oceanic Science Letters*, **11,** 54-62, https://doi.org/10.1080/16742834.2018.1411753

Sun, W., C. Dong, W. Tan, Y. Liu, Y. He, and J. Wang, 2018: Vertical Structure Anomalies of Oceanic Eddies and Eddy-Induced Transports in the South China Sea. *Remote Sensing*, **10,** 795, https://doi.org/10.3390/rs10050795

Sun, W., J. Wang, J. Zhang, Y. Ma, J. Meng, L. Yang, and J. Miao, 2018: A new global gridded sea surface temperature product constructed from infrared and microwave radiometer data using the optimum interpolation method. *Acta Oceanologica Sinica*, **37,** 41-49, https://doi.org/10.1007/s13131-018-1206-4

Swart, N. C., S. T. Gille, J. C. Fyfe, and N. P. Gillett, 2018: Recent Southern Ocean warming and freshening driven by greenhouse gas emissions and ozone depletion. *Nature Geoscience*, **11,** 836-841, https://doi.org/10.1038/s41561-018-0226-1

Swart, S., K. Johnson, M. R. Mazloff, A. Meijers, M. P. Meredith, L. Newman, and J. B. Sallee, 2018: Antarctica: Southern Ocean in State of the Climate in 2017. *Bull. Am. Meteorol. Soc.*, **99,** S185 - S188, https://doi.org/10.1175/2018BAMSStateoftheClimate.1

Taillandier, V., T. Wagener, F. D'Ortenzio, N. Mayot, H. Legoff, J. Ras, L. Coppola, O. Pasqueron de Fommervault, C. Schmechtig, E. Diamond, H. Bittig, D. Lefevre, E. Leymarie, A. Poteau, and L. Prieur, 2018: Hydrography and biogeochemistry dedicated to the Mediterranean BGC-Argo network during a cruise with RV Tethys 2 in May 2015. *Earth Syst. Sci. Data*, **10,** 627-641, https://doi.org/10.5194/essd-10-627-2018

Takeshita, Y., K. S. Johnson, T. R. Martz, J. N. Plant, and J. L. Sarmiento, 2018: Assessment of Autonomous pH Measurements for Determining Surface Seawater Partial Pressure of CO2. *Journal of Geophysical Research: Oceans*, **123,** 4003-4013, https://doi.org/10.1029/2017JC013387

Tamsitt, V., R. P. Abernathey, M. R. Mazloff, J. Wang, and L. D. Talley, 2018: Transformation of Deep Water Masses Along Lagrangian Upwelling Pathways in the Southern Ocean. *Journal of Geophysical Research: Oceans*, **123,** 1994-2017, https://doi.org/10.1002/2017JC013409

Tang, W., S. Yueh, D. Yang, A. Fore, A. Hayashi, T. Lee, S. Fournier, and B. Holt, 2018: The Potential and Challenges of Using Soil Moisture Active Passive (SMAP) Sea Surface Salinity to Monitor Arctic Ocean Freshwater Changes. *Remote Sensing*, **10,** 869, https://doi.org/10.3390/rs10060869

Tchipalanga, P., M. Dengler, P. Brandt, R. Kopte, M. Macuéria, P. Coelho, M. Ostrowski, and N. S. Keenlyside, 2018: Eastern Boundary Circulation and Hydrography Off Angola: Building Angolan Oceanographic Capacities. *Bulletin of the American Meteorological Society*, **99,** 1589-1605, https://doi.org/10.1175/BAMS-D-17-0197.1

Tesdal, J.-E., R. P. Abernathey, J. I. Goes, A. L. Gordon, and T. W. N. Haine, 2018: Salinity Trends within the Upper Layers of the Subpolar North Atlantic. *Journal of Climate*, **31,** 2675-2698, https://doi.org/10.1175/JCLI-D-17-0532.1

Testor, P., A. Bosse, L. Houpert, F. Margirier, L. Mortier, H. Legoff, D. Dausse, M. Labaste, J. Karstensen, D. Hayes, A. Olita, A. Ribotti, K. Schroeder, J. Chiggiato, R. Onken, E.

Heslop, B. Mourre, F. D'ortenzio, N. Mayot, H. Lavigne, O. d. Fommervault, L. Coppola, L. Prieur, V. Taillandier, X. D. d. Madron, F. Bourrin, G. Many, P. Damien, C. Estournel, P. Marsaleix, I. Taupier-Letage, P. Raimbault, R. Waldman, M. N. Bouin, H. Giordani, G. Caniaux, S. Somot, V. Ducrocq, and P. Conan, 2018: Multiscale Observations of Deep Convection in the Northwestern Mediterranean Sea During Winter 2012–2013 Using Multiple Platforms. *Journal of Geophysical Research: Oceans*, **123,** 1745-1776, https://doi.org/10.1002/2016JC012671

Thompson, P. R., M. A. Merrifield, E. Leuliette, W. Sweet, D. P. Chambers, B. D. Hamlington, S. Jevrejeva, J. J. Marra, G. T. Mitchum, R. S. Nerem, and M. J. Widlansky, 2018: Global Oceans: Sea level variability and change. *Bull. Am. Meteorol. Soc.*, **99,** S84 - S87, https://doi.org/10.1175/2018BAMSStateoftheClimate.1

Tozuka, T., S. Ohishi, and M. F. Cronin, 2018: A metric for surface heat flux effect on horizontal sea surface temperature gradients. *Climate Dynamics*, **51,** 547-561, https://doi.org/10.1007/s00382-017-3940-2

Trenberth, K. E., L. Cheng, P. Jacobs, Y. Zhang, and J. Fasullo, 2018: Hurricane Harvey Links to Ocean Heat Content and Climate Change Adaptation. *Earth's Future*, **6,** 730-744, https://doi.org/10.1029/2018EF000825

Tung, K.-K. and X. Chen, 2018: Understanding the Recent Global Surface Warming Slowdown: A Review. *Climate*, **6,** 82, https://doi.org/10.3390/cli6040082

Tyagi, G., K. N. Babu, A. K. Mathur, and H. A. Solanki, 2018: INSAT-3D and MODIS retrieved sea surface temperature validation and assessment over waters surrounding the Indian subcontinent. *International Journal of Remote Sensing*, **39,** 1575-1592, https://doi.org/10.1080/01431161.2017.1407051

Uchiyama, Y., R. Kanki, A. Takano, H. Yamazaki, and Y. Miyazawa, 2018: Mesoscale Reproducibility in Regional Ocean Modelling with a Three-Dimensional Stratification Estimate Based on Aviso-Argo Data. *Atmosphere-Ocean*, **56,** 212-229, https://doi.org/10.1080/07055900.2017.1399858

Uchiyama, Y., S. Odani, M. Kashima, Y. Kamidaira, and S. Mitarai, 2018: Influences of the Kuroshio on Interisland Remote Connectivity of Corals Across the Nansei Archipelago in the East China Sea. *Journal of Geophysical Research: Oceans*, **123,** 9245-9265, https://doi.org/10.1029/2018JC014017

Valla, D., A. R. Piola, C. S. Meinen, and E. Campos, 2018: Strong Mixing and Recirculation in the Northwestern Argentine Basin. *Journal of Geophysical Research: Oceans*, **123,** 4624-4648, https://doi.org/10.1029/2018JC013907

Valsala, V., S. Singh, and S. Balasubramanian, 2018: A Modeling Study of Interannual Variability of Bay of Bengal Mixing and Barrier Layer Formation. *Journal of Geophysical Research: Oceans*, **123,** 3962-3981, https://doi.org/10.1029/2017JC013637

van Sebille, E., S. M. Griffies, R. Abernathey, T. P. Adams, P. Berloff, A. Biastoch, B. Blanke, E. P. Chassignet, Y. Cheng, C. J. Cotter, E. Deleersnijder, K. Döös, H. F. Drake, S. Drijfhout, S. F. Gary, A. W. Heemink, J. Kjellsson, I. M. Koszalka, M. Lange, C. Lique, G. A. MacGilchrist, R. Marsh, C. G. Mayorga Adame, R. McAdam, F. Nencioli, C. B. Paris, M. D. Piggott, J. A. Polton, S. Rühs, S. H. A. M. Shah, M. D. Thomas, J. Wang, P. J. Wolfram, L. Zanna, and J. D. Zika, 2018: Lagrangian ocean analysis: Fundamentals

and practices. *Ocean Modelling*, **121,** 49-75, https://doi.org/10.1016/j.ocemod.2017.11.008

Varela, R., X. Costoya, C. Enriquez, F. Santos, and M. Gómez-Gesteira, 2018: Differences in coastal and oceanic SST trends north of Yucatan Peninsula. *Journal of Marine Systems*, **182,** 46-55, https://doi.org/10.1016/j.jmarsys.2018.03.006

Vasile, R., K. Hartmann, A. J. Hobday, E. Oliver, and S. Tracey, 2018: Evaluation of hydrodynamic ocean models as a first step in larval dispersal modelling. *Continental Shelf Research*, **152,** 38-49, https://doi.org/10.1016/j.csr.2017.11.001

Vazquez-Cuervo, J., S. Fournier, B. Dzwonkowski, and J. Reager, 2018: Intercomparison of In-Situ and Remote Sensing Salinity Products in the Gulf of Mexico, a River-Influenced System. *Remote Sensing*, **10,** 1590, https://doi.org/10.3390/rs10101590

Venkatesan, R., A. Tandon, D. Sengupta, and K. N. Navaneeth, 2018: Recent Trends in Ocean Observations. *Observing the Oceans in Real Time*, R. Venkatesan, A. Tandon, E. D'Asaro, and M. A. Atmanand, Eds., Springer International Publishing, 3-13, https://doi.org/10.1007/978-3-319-66493-4_1.

Verri, G., N. Pinardi, P. Oddo, S. A. Ciliberti, and G. Coppini, 2018: River runoff influences on the Central Mediterranean overturning circulation. *Climate Dynamics*, **50,** 1675-1703, https://doi.org/10.1007/s00382-017-3715-9

Vic, C., J. Gula, G. Roullet, and F. Pradillon, 2018: Dispersion of deep-sea hydrothermal vent effluents and larvae by submesoscale and tidal currents. *Deep Sea Research Part I: Oceanographic Research Papers*, **133,** 1-18, https://doi.org/10.1016/j.dsr.2018.01.001

Vidya, P. J. and S. Kurian, 2018: Impact of 2015–2016 ENSO on the winter bloom and associated phytoplankton community shift in the northeastern Arabian Sea. *Journal of Marine Systems*, **186,** 96-104, https://doi.org/10.1016/j.jmarsys.2018.06.005

Vigo, M. I., D. García-García, M. D. Sempere, and B. F. Chao, 2018: 3D Geostrophy and Volume Transport in the Southern Ocean. *Remote Sensing*, **10,** 715, https://doi.org/10.3390/rs10050715

Vilibić, I., H. Mihanović, I. Janeković, C. Denamiel, P. M. Poulain, M. Orlić, N. Dunić, V. Dadić, M. Pasarić, S. Muslim, R. Gerin, F. Matić, J. Šepić, E. Mauri, Z. Kokkini, M. Tudor, Ž. Kovač, and T. Džoić, 2018: Wintertime dynamics in the coastal northeastern Adriatic Sea: the NAdEx 2015 experiment. *Ocean Sci.*, **14,** 237-258, https://doi.org/10.5194/os-14-237-2018

Vinayachandran, P. N., A. J. Matthews, K. V. Kumar, A. Sanchez-Franks, V. Thushara, J. George, V. Vijith, B. G. M. Webber, B. Y. Queste, R. Roy, A. Sarkar, D. B. Baranowski, G. S. Bhat, N. P. Klingaman, S. C. Peatman, C. Parida, K. J. Heywood, R. Hall, B. King, E. C. Kent, A. A. Nayak, C. P. Neema, P. Amol, A. Lotliker, A. Kankonkar, D. G. Gracias, S. Vernekar, A. C. D'Souza, G. Valluvan, S. M. Pargaonkar, K. Dinesh, J. Giddings, and M. Joshi, 2018: BoBBLE: Ocean–Atmosphere Interaction and Its Impact on the South Asian Monsoon. *Bulletin of the American Meteorological Society*, **99,** 1569-1587, https://doi.org/10.1175/BAMS-D-16-0230.1

von Schuckmann, K.and P.-Y. Le Traonand N. Smithand A. Pascualand P. Brasseurand K. Fenneland S. Djavidniaand S. Aaboeand E. A. Fanjuland E. Autretand L. Axelland R. Aznarand M. Benincasaand A. Bentamyand F. Bobergand R. Bourdallé-Badieand B. B.

Nardelliand V. E. Brandoand C. Bricaudand L.-A. Breivikand R. J. W. Brewinand A. Capetand A. Ceschinand S. Cilibertiand G. Cossariniand M. de Alfonsoand A. de Pascual Collarand J. de Kloeand J. Deshayesand C. Desportesand M. Drévillonand Y. Drilletand R. Drogheiand C. Duboisand O. Emburyand H. Etienneand C. Fratianniand J. G. Lafuenteand M. G. Sotilloand G. Garricand F. Gasparinand R. Gerinand S. Goodand J. Gourrionand M. Grégoireand E. Greinerand S. Guinehutand E. Gutknechtand F. Hernandezand O. Hernandezand J. Høyerand L. Jacksonand S. Jandtand S. Joseyand M. Juzaand J. Kennedyand Z. Kokkiniand G. Korresand M. Kõutsand P. Lagemaaand T. Lavergneand B. le Cannand J.-F. Legeaisand B. Lemieux-Dudonand B. Levierand V. Lienand I. Maljutenkoand F. Manzanoand M. Marcosand V. Marinovaand S. Masinaand E. Mauriand M. Mayerand A. Meletand F. Mélinand B. Meyssignacand M. Monierand M. Müllerand S. Muletand C. Naranjoand G. Notarstefanoand A. Paulmierand B. P. Gomezand I. P. Gonzalezand E. Penevaand C. Perrucheand K. Andrew Petersonand N. Pinardiand A. Pisanoand S. Pardoand P.-M. Poulainand R. P. Rajand U. Raudseppand M. Ravdasand R. Reidand M.-H. Rioand S. Salonand A. Samuelsenand M. Sammartinoand S. Sammartinoand A. B. Sandøand R. Santoleriand S. Sathyendranathand J. Sheand S. Simoncelliand C. Solidoroand A. Stoffelenand A. Stortoand T. Szerkelyand S. Tammand S. Tietscheand J. Tinkerand J. Tintoreand A. Trindadeand D. van Zantenand L. Vandenbulckeand A. Verhoefand N. Verbruggeand L. Viktorssonand K. von Schuckmannand S. L. Wakelinand A. Zacharioudaki and H. Zuo, 2018: Copernicus Marine Service Ocean State Report. *Journal of Operational Oceanography*, **11,** S1-S142, https://doi.org/10.1080/1755876X.2018.1489208

Wan, L.-Y., Y. Liu, and T.-J. Ling, 2018: Development of a global high-resolution marine dynamic environmental forecasting system. *Atmospheric and Oceanic Science Letters*, **11,** 379-387, https://doi.org/10.1080/16742834.2018.1501261

Wang, G., L. Cheng, J. Abraham, and C. Li, 2018: Consensuses and discrepancies of basin-scale ocean heat content changes in different ocean analyses. *Climate Dynamics*, **50,** 2471-2487, https://doi.org/10.1007/s00382-017-3751-5

Wang, G., B. Zhao, F. Qiao, and C. Zhao, 2018: Rapid intensification of Super Typhoon Haiyan: the important role of a warm-core ocean eddy. *Ocean Dynamics*, **68,** 1649-1661, https://doi.org/10.1007/s10236-018-1217-x

Wang, H., J. L. McClean, L. D. Talley, and S. Yeager, 2018: Seasonal Cycle and Annual Reversal of the Somali Current in an Eddy-Resolving Global Ocean Model. *Journal of Geophysical Research: Oceans*, **123,** 6562-6580, https://doi.org/10.1029/2018JC013975

Wang, J. and X. Chen, 2018: Intercomparison of the Extended Reconstructed Sea Surface Temperature v4 and v3b Datasets. *Journal of Ocean University of China*, **17,** 209-218, https://doi.org/10.1007/s11802-018-3347-7

Wang, J., M. Li, X. S. Liang, X. Wang, F. Xue, M. Peng, and C. Miao, 2018: Regional Characteristics of Typhoon-Induced Ocean Eddies in the East China Sea. *Advances in Atmospheric Sciences*, **35,** 826-838, https://doi.org/10.1007/s00376-017-7173-4

Wang, L. and F. Xu, 2018: Decadal variability and trends of oceanic barrier layers in tropical Pacific. *Ocean Dynamics*, **68,** 1155-1168, https://doi.org/10.1007/s10236-018-1191-3

Wang, S., G. Li, M. Iskandarani, M. Le Hénaff, and O. M. Knio, 2018: Verifying and assessing the performance of the perturbation strategy in polynomial chaos ensemble forecasts of the circulation in the Gulf of Mexico. *Ocean Modelling*, **131,** 59-70, https://doi.org/10.1016/j.ocemod.2018.09.002

Wang, T., S. T. Gille, M. R. Mazloff, N. V. Zilberman, and Y. Du, 2018: Numerical Simulations to Project Argo Float Positions in the Middepth and Deep Southwest Pacific. *Journal of Atmospheric and Oceanic Technology*, **35,** 1425-1440, https://doi.org/10.1175/JTECH-D-17-0214.1

Wang, W., A. Pan, K. Edi, H. Muh, and S. Deny, 2018: North-south difference of water mass properties across the Lembeh Strait, North Sulawesi, Indonesia. *Acta Oceanologica Sinica*, **37,** 1-8, https://doi.org/10.1007/s13131-018-1282-5

Wang, X., X. Wang, and P. C. Chu, 2018: Air-sea interactions during rapid intensification of typhoon Fengshen (2008). *Deep Sea Research Part I: Oceanographic Research Papers*, **140,** 63-77, https://doi.org/10.1016/j.dsr.2018.08.009

Wang, X., W. Zhang, P. Wang, J. Yang, and H. Wang, 2018: Research on mid-depth current of basin scale in the South China Sea based on historical Argo observations. *Haiyang Xuebao*, **40,** 1-14,

Weatherhead, E. C., B. A. Wielicki, V. Ramaswamy, M. Abbott, T. P. Ackerman, R. Atlas, G. Brasseur, L. Bruhwiler, A. J. Busalacchi, J. H. Butler, C. T. M. Clack, R. Cooke, L. Cucurull, S. M. Davis, J. M. English, D. W. Fahey, S. S. Fine, J. K. Lazo, S. Liang, N. G. Loeb, E. Rignot, B. Soden, D. Stanitski, G. Stephens, B. D. Tapley, A. M. Thompson, K. E. Trenberth, and D. Wuebbles, 2018: Designing the Climate Observing System of the Future. *Earth's Future*, **6,** 80-102, https://doi.org/10.1002/2017EF000627

Webber, B. G. M., A. J. Matthews, P. N. Vinayachandran, C. P. Neema, A. Sanchez-Franks, V. Vijith, P. Amol, and D. B. Baranowski, 2018: The Dynamics of the Southwest Monsoon Current in 2016 from High-Resolution In Situ Observations and Models. *Journal of Physical Oceanography*, **48,** 2259-2282, https://doi.org/10.1175/JPO-D-17-0215.1

Wei, T., J. Li, X. Rong, W. Dong, B. Wu, and M. Ding, 2018: Arctic Climate Changes Based on Historical Simulations (1900–2013) with the CAMS-CSM. *Journal of Meteorological Research*, **32,** 881-895, https://doi.org/10.1007/s13351-018-7188-5

West, B. J., W. Han, and Y. Li, 2018: The Role of Oceanic Processes in the Initiation of Indian Summer Monsoon Intraseasonal Oscillations Over the Indian Ocean. *Journal of Geophysical Research: Oceans*, **123,** 3685-3704, https://doi.org/10.1029/2017JC013564

Whalen, C. B., J. A. MacKinnon, and L. D. Talley, 2018: Large-scale impacts of the mesoscale environment on mixing from wind-driven internal waves. *Nature Geoscience*, **11,** 842-847, https://doi.org/10.1038/s41561-018-0213-6

Wijeratne, S., C. Pattiaratchi, and R. Proctor, 2018: Estimates of Surface and Subsurface Boundary Current Transport Around Australia. *Journal of Geophysical Research: Oceans*, **123,** 3444-3466, https://doi.org/10.1029/2017JC013221

Williams, N. L., L. W. Juranek, R. A. Feely, J. L. Russell, K. S. Johnson, and B. Hales, 2018: Assessment of the Carbonate Chemistry Seasonal Cycles in the Southern Ocean From Persistent Observational Platforms. *Journal of Geophysical Research: Oceans*,

123, 4833-4852, https://doi.org/10.1029/2017JC012917
Wojtasiewicz, B., N. J. Hardman-Mountford, D. Antoine, F. Dufois, D. Slawinski, and T. W. Trull, 2018: Use of bio-optical profiling float data in validation of ocean colour satellite products in a remote ocean region. *Remote Sensing of Environment*, **209,** 275-290, https://doi.org/10.1016/j.rse.2018.02.057
Wojtasiewicz, B., I. D. Walsh, D. Antoine, D. Slawinski, and N. J. Hardman-Mountford, 2018: Inferring and Removing a Spurious Response in the Optical Backscattering Signal from an Autonomous Profiling Float. *Journal of Atmospheric and Oceanic Technology*, **35,** 2137-2146, https://doi.org/10.1175/JTECH-D-18-0027.1
Wolf, M. K., R. C. Hamme, D. Gilbert, I. Yashayaev, and V. Thierry, 2018: Oxygen Saturation Surrounding Deep Water Formation Events in the Labrador Sea From Argo-O2 Data. *Global Biogeochemical Cycles*, **32,** 635-653, https://doi.org/10.1002/2017GB005829
Wu, B., T. Zhou, and F. Zheng, 2018: EnOI-IAU Initialization Scheme Designed for Decadal Climate Prediction System IAP-DecPreS. *Journal of Advances in Modeling Earth Systems*, **10,** 342-356, https://doi.org/10.1002/2017MS001132
Wu, R. and C. Li, 2018: Upper ocean response to the passage of two sequential typhoons. *Deep Sea Research Part I: Oceanographic Research Papers*, **132,** 68-79, https://doi.org/10.1016/j.dsr.2017.12.006
Wu, R., H. Zhang, D. Chen, C. Li, and J. Lin, 2018: Impact of Typhoon Kalmaegi (2014) on the South China Sea: Simulations using a fully coupled atmosphere-ocean-wave model. *Ocean Modelling*, **131,** 132-151, https://doi.org/10.1016/j.ocemod.2018.08.004
Xia, R., C. Liu, and C. Cheng, 2018: On the subtropical Northeast Pacific mixed layer depth and its influence on the subduction. *Acta Oceanologica Sinica*, **37,** 51-62, https://doi.org/10.1007/s13131-017-1102-3
Xing, X., N. Briggs, E. Boss, and H. Claustre, 2018: Improved correction for non-photochemical quenching of in situ chlorophyll fluorescence based on a synchronous irradiance profile. *Optics Express*, **26,** 24734-24751, https://doi.org/10.1364/OE.26.024734
Xing, X.-G., H. Claustre, E. Boss, and F. Chai, 2018: Toward deeper development of Biogeochemical-Argo floats. *Atmospheric and Oceanic Science Letters*, **11,** 287-290, https://doi.org/10.1080/16742834.2018.1457932
Xu, J. and L. Gao, 2018: The temporal-spatial features of evaporation and precipitation and the effect on sea surface salinity in the tropical Indian Ocean. *Haiyang Xuebao*, **40,** 90-102,
Yang, H., B. Qiu, P. Chang, L. Wu, S. Wang, Z. Chen, and Y. Yang, 2018: Decadal Variability of Eddy Characteristics and Energetics in the Kuroshio Extension: Unstable Versus Stable States. *Journal of Geophysical Research: Oceans*, **123,** 6653-6669, https://doi.org/10.1029/2018JC014081
Yang, L., L. Zhou, S. Li, and Z. Wei, 2018: Spreading of the South Pacific Tropical Water and Antarctic Intermediate Water Over the Maritime Continent. *Journal of Geophysical Research: Oceans*, **123,** 4423-4446, https://doi.org/10.1029/2018JC013831
Yin, J., J. Overpeck, C. Peyser, and R. Stouffer, 2018: Big Jump of Record Warm Global Mean Surface Temperature in 2014–2016 Related to Unusually Large Oceanic Heat Releases. *Geophysical Research Letters*, **45,** 1069-1078,

https://doi.org/10.1002/2017GL076500
Yin, X., J. Shi, and F. Qiao, 2018: Evaluation on surface current observing network of high frequency ground wave radars in the Gulf of Thailand. *Ocean Dynamics*, **68,** 575-587, https://doi.org/10.1007/s10236-018-1149-5
Yu, J.-Y. and S.-W. Fang, 2018: The Distinct Contributions of the Seasonal Footprinting and Charged-Discharged Mechanisms to ENSO Complexity. *Geophysical Research Letters*, **45,** 6611-6618, http://dx.doi.org/10.1029/2018GL077664
Yu, L., X. Jin, and H. Liu, 2018: Poleward Shift in Ventilation of the North Atlantic Subtropical Underwater. *Geophysical Research Letters*, **45,** 258-266, http://dx.doi.org/10.1002/2017GL075772
Yu, Y., B. F. Chao, D. García-García, and Z. Luo, 2018: Variations of the Argentine Gyre Observed in the GRACE Time-Variable Gravity and Ocean Altimetry Measurements. *Journal of Geophysical Research: Oceans*, **123,** 5375-5387, https://doi.org/10.1029/2018JC014189
Yuan, X., M. Salama, and Z. Su, 2018: An Observational Perspective of Sea Surface Salinity in the Southwestern Indian Ocean and Its Role in the South Asia Summer Monsoon. *Remote Sensing*, **10,** 1930, https://dx.doi.org/10.3390/rs10121930
Yue, X., B. Zhang, G. Liu, X. Li, H. Zhang, and Y. He, 2018: Upper Ocean Response to Typhoon Kalmaegi and Sarika in the South China Sea from Multiple-Satellite Observations and Numerical Simulations. *Remote Sensing*, **10,** 348, https://doi.org/10.3390/rs10020348
Zaba, K. D., D. L. Rudnick, B. D. Cornuelle, G. Gopalakrishnan, and M. R. Mazloff, 2018: Annual and Interannual Variability in the California Current System: Comparison of an Ocean State Estimate with a Network of Underwater Gliders. *Journal of Physical Oceanography*, **48,** 2965-2988, https://doi.org/10.1175/JPO-D-18-0037.1
Zeng, L., E. P. Chassignet, R. W. Schmitt, X. Xu, and D. Wang, 2018: Salinification in the South China Sea Since Late 2012: A Reversal of the Freshening Since the 1990s. *Geophysical Research Letters*, **45,** 2744-2751, https://doi.org/10.1002/2017GL076574
Zhang, L., Y. Du, and W. Cai, 2018: Low-Frequency Variability and the Unusual Indian Ocean Dipole Events in 2015 and 2016. *Geophysical Research Letters*, **45,** 1040-1048, https://doi.org/10.1002/2017GL076003
Zhang, L., W. Han, Y. Li, and E. D. Maloney, 2018: Role of North Indian Ocean Air–Sea Interaction in Summer Monsoon Intraseasonal Oscillation. *Journal of Climate*, **31,** 7885-7908, https://doi.org/10.1175/JCLI-D-17-0691.1
Zhang, M., Z. Wu, and F. Qiao, 2018: Deep Atlantic Ocean Warming Facilitated by the Deep Western Boundary Current and Equatorial Kelvin Waves. *Journal of Climate*, **31,** 8541-8555, https://doi.org/10.1175/JCLI-D-18-0255.1
Zhang, M., Y. Zhang, Q. Shu, C. Zhao, G. Wang, Z. Wu, and F. Qiao, 2018: Spatiotemporal evolution of the chlorophyll a trend in the North Atlantic Ocean. *Science of The Total Environment*, **612,** 1141-1148, https://doi.org/10.1016/j.scitotenv.2017.08.303
Zhang, W.-Z., Q. Ni, and H. Xue, 2018: Composite eddy structures on both sides of the Luzon Strait and influence factors. *Ocean Dynamics*, **68,** 1527-1541, https://doi.org/10.1007/s10236-018-1207-z
Zhang, X., P. C. Chu, W. Li, C. Liu, L. Zhang, C. Shao, X. Zhang, G. Chao, and Y. Zhao, 2018:

Impact of Langmuir Turbulence on the Thermal Response of the Ocean Surface Mixed Layer to Supertyphoon Haitang (2005). *Journal of Physical Oceanography*, **48,** 1651-1674, https://doi.org/10.1175/JPO-D-17-0132.1

Zhang, Y., Y. Du, and M. Feng, 2018: Multiple Time Scale Variability of the Sea Surface Salinity Dipole Mode in the Tropical Indian Ocean. *Journal of Climate*, **31,** 283-296, https://doi.org/10.1175/JCLI-D-17-0271.1

Zhang, Y., M. Feng, Y. Du, H. E. Phillips, N. L. Bindoff, and M. J. McPhaden, 2018: Strengthened Indonesian Throughflow Drives Decadal Warming in the Southern Indian Ocean. *Geophysical Research Letters*, **45,** 6167-6175, https://doi.org/10.1029/2018GL078265

Zhang, Y., H. Xu, F. Qiao, and C. Dong, 2018: Seasonal variation of the global mixed layer depth: comparison between Argo data and FIO-ESM. *Frontiers of Earth Science*, **12,** 24-36, https://doi.org/10.1007/s11707-017-0631-6

Zhang, Z., B. Qiu, J. Tian, W. Zhao, and X. Huang, 2018: Latitude-dependent finescale turbulent shear generations in the Pacific tropical-extratropical upper ocean. *Nature Communications*, **9,** 4086, https://doi.org/10.1038/s41467-018-06260-8

Zhang, Z., P. Uotila, A. Stössel, T. Vihma, H. Liu, and Y. Zhong, 2018: Seasonal southern hemisphere multi-variable reflection of the southern annular mode in atmosphere and ocean reanalyses. *Climate Dynamics*, **50,** 1451-1470, https://doi.org/10.1007/s00382-017-3698-6

Zhao, R., X.-H. Zhu, J.-H. Park, and Q. Li, 2018: Internal tides in the northwestern South China Sea observed by pressure-recording inverted echo sounders. *Progress in Oceanography*, **168,** 112-122, https://doi.org/10.1016/j.pocean.2018.09.019

Zhao, X., F. Gui, V. S. Mantravadi, and L. Wang, 2018: Salinity Variations over Zhejiang Province Waters, China. *Open Access Library Journal*, **Vol.05,** 12, https://doi.org/10.4236/oalib.1104562

Zhou, C., X. Ding, J. Zhang, J. Yang, and Q. Ma, 2018: An evaluation of sea surface height assimilation using along-track and gridded products based on the Regional Ocean Modeling System (ROMS) and the four-dimensional variational data assimilation. *Acta Oceanologica Sinica*, **37,** 50-58, https://doi.org/10.1007/s13131-018-1225-1

Zhou, H., D. Yuan, L. Yang, X. Li, and W. Dewar, 2018: Decadal Variability of the Meridional Geostrophic Transport in the Upper Tropical North Pacific Ocean. *Journal of Climate*, **31,** 5891-5910, https://doi.org/10.1175/JCLI-D-17-0639.1

Zhu, Y. and R.-H. Zhang, 2018: Scaling wind stirring effects in an oceanic bulk mixed layer model with application to an OGCM of the tropical Pacific. *Climate Dynamics*, **51,** 1927-1946, https://doi.org/10.1007/s00382-017-3990-5

Zhu, Y. and R. H. Zhang, 2018: An Argo-Derived Background Diffusivity Parameterization for Improved Ocean Simulations in the Tropical Pacific. *Geophysical Research Letters*, **45,** 1509-1517, https://doi.org/10.1002/2017GL076269

Zilberman, N. V., D. H. Roemmich, S. T. Gille, and J. Gilson, 2018: Estimating the Velocity and Transport of Western Boundary Current Systems: A Case Study of the East Australian Current near Brisbane. *Journal of Atmospheric and Oceanic Technology*, **35,** 1313-1329, https://doi.org/10.1175/JTECH-D-17-0153.1

2017 (419)

Ablain, M., J. F. Legeais, P. Prandi, M. Marcos, L. Fenoglio-Marc, H. B. Dieng, J. Benveniste, and A. Cazenave, 2017: Satellite Altimetry-Based Sea Level at Global and Regional Scales. *Surveys in Geophysics*, **38,** 7-31, http://dx.doi.org/10.1007/s10712-016-9389-8

Akbari, E., S. K. Alavipanah, M. Jeihouni, M. Hajeb, D. Haase, and S. Alavipanah, 2017: A Review of Ocean/Sea Subsurface Water Temperature Studies from Remote Sensing and Non-Remote Sensing Methods. *Water*, **9,** 936, https://doi.org/10.3390/w9120936

Akpinar, A., B. A. Fach, and T. Oguz, 2017: Observing the subsurface thermal signature of the Black Sea cold intermediate layer with Argo profiling floats. *Deep Sea Research Part I: Oceanographic Research Papers*, **124,** 140-152, http://dx.doi.org/10.1016/j.dsr.2017.04.002

Alberty, M. S., J. Sprintall, J. MacKinnon, A. Ganachaud, S. Cravatte, G. Eldin, C. Germineaud, and A. Melet, 2017: Spatial patterns of mixing in the Solomon Sea. *Journal of Geophysical Research: Oceans*, **122,** 4021-4039, http://dx.doi.org/10.1002/2016JC012666

Amores, A., O. Melnichenko, and N. Maximenko, 2017: Coherent mesoscale eddies in the North Atlantic subtropical gyre: 3-D structure and transport with application to the salinity maximum. *Journal of Geophysical Research: Oceans*, **122,** 23-41, http://dx.doi.org/10.1002/2016JC012256

Amstrup, S. C. and F. Lehner, 2017: Anthropogenic Ocean Change: The Consummate Threat to Marine Mammal Welfare. *Marine Mammal Welfare: Human Induced Change in the Marine Environment and its Impacts on Marine Mammal Welfare*, A. Butterworth, Ed., Springer International Publishing, 9-26, https://doi.org/10.1007/978-3-319-46994-2_2.

Ando, K., Y. Kuroda, Y. Fujii, T. Fukuda, T. Hasegawa, T. Horii, Y. Ishihara, Y. Kashino, Y. Masumoto, K. Mizuno, M. Nagura, and I. Ueki, 2017: Fifteen years progress of the TRITON array in the Western Pacific and Eastern Indian Oceans. *Journal of Oceanography*, **73,** 403-426, https://doi.org/10.1007/s10872-017-0414-4

Annamalai, H., B. Taguchi, J. P. McCreary, M. Nagura, and T. Miyama, 2017: Systematic Errors in South Asian Monsoon Simulation: Importance of Equatorial Indian Ocean Processes. *Journal of Climate*, **30,** 8159-8178, https://doi.org/10.1175/JCLI-D-16-0573.1

Anutaliya, A., U. Send, J. L. McClean, J. Sprintall, L. Rainville, C. M. Lee, S. U. P. Jinadasa, A. J. Wallcraft, and E. J. Metzger, 2017: An undercurrent off the east coast of Sri Lanka. *Ocean Sci.*, **13,** 1035-1044, https://doi.org/10.5194/os-13-1035-2017

Arrigo, K. R., G. L. van Dijken, R. M. Castelao, H. Luo, Å. K. Rennermalm, M. Tedesco, T. L. Mote, H. Oliver, and P. L. Yager, 2017: Melting glaciers stimulate large summer phytoplankton blooms in southwest Greenland waters. *Geophysical Research Letters*, **44,** 6278-6285, http://dx.doi.org/10.1002/2017GL073583

Athanasiadis, P. J., A. Bellucci, A. A. Scaife, L. Hermanson, S. Materia, A. Sanna, A. Borrelli, C. MacLachlan, and S. Gualdi, 2017: A Multisystem View of Wintertime NAO Seasonal

Predictions. *Journal of Climate*, **30,** 1461-1475, http://dx.doi.org/10.1175/jcli-d-16-0153.1

Bachman, S. D., J. R. Taylor, K. A. Adams, and P. J. Hosegood, 2017: Mesoscale and Submesoscale Effects on Mixed Layer Depth in the Southern Ocean. *Journal of Physical Oceanography*, **47,** 2173-2188, https://doi.org/10.1175/JPO-D-17-0034.1

Bai, X., X. Li, K. G. Lamb, and J. Hu, 2017: Internal Solitary Wave Reflection Near Dongsha Atoll, the South China Sea. *Journal of Geophysical Research: Oceans*, **122,** 7978-7991, http://dx.doi.org/10.1002/2017JC012880

Bai, Y., H. Song, Y. Guan, and S. Yang, 2017: Estimating depth of polarity conversion of shoaling internal solitary waves in the northeastern South China Sea. *Continental Shelf Research*, **143,** 9-17, http://dx.doi.org/10.1016/j.csr.2017.05.014

Baringer, M. O., D. A. Smeed, J. Willis, M. Lankhorst, W. R. Hobbs, S. Dong, G. D. McCarthy, D. Rayner, W. E. Johns, G. Goni, and U. Send, 2017: Meridional overturning and oceanic heat transport circulation observations in the North Atlantic Ocean in the State of the Climate in 2016. *Bull. Am. Meteorol. Soc.*, **98,** S84-S87, https://doi.org/10.1175/2017BAMSStateoftheClimate.1

Bellenger, H., K. Drushka, W. Asher, G. Reverdin, M. Katsumata, and M. Watanabe, 2017: Extension of the prognostic model of sea surface temperature to rain-induced cool and fresh lenses. *Journal of Geophysical Research: Oceans*, **122,** 484-507, http://dx.doi.org/10.1002/2016JC012429

Bettencourt, J. H., V. Rossi, E. Hernández-García, M. Marta-Almeida, and C. López, 2017: Characterization of the structure and cross-shore transport properties of a coastal upwelling filament using three-dimensional finite-size Lyapunov exponents. *Journal of Geophysical Research: Oceans*, **122,** 7433-7448, http://dx.doi.org/10.1002/2017JC012700

Bhaskar, T. V. S., R. Venkat Shesu, T. P. Boyer, and E. Pattabhi Rama Rao, 2017: Quality control of oceanographic in situ data from Argo floats using climatological convex hulls. *MethodsX*, **4,** 469-479, https://doi.org/10.1016/j.mex.2017.11.007

Bingham, F. M. and T. Lee, 2017: Space and time scales of sea surface salinity and freshwater forcing variability in the global ocean (60°S–60°N). *Journal of Geophysical Research: Oceans*, **122,** 2909-2922, http://dx.doi.org/10.1002/2016JC012216

Bittig, H. C. and A. Körtzinger, 2017: Technical note: Update on response times, in-air measurements, and in situ drift for oxygen optodes on profiling platforms. *Ocean Science*, **13,** 1-11, http://dx.doi.org/10.5194/os-13-1-2017

Borovikov, A., R. Cullather, R. Kovach, J. Marshak, G. Vernieres, Y. Vikhliaev, B. Zhao, and Z. Li, 2017: GEOS-5 seasonal forecast system. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3835-2

Bowen, M., J. Markham, P. Sutton, X. Zhang, Q. Wu, N. T. Shears, and D. Fernandez, 2017: Interannual Variability of Sea Surface Temperature in the Southwest Pacific and the Role of Ocean Dynamics. *Journal of Climate*, **30,** 7481-7492, https://doi.org/10.1175/JCLI-D-16-0852.1

Breckenfelder, T., M. Rhein, A. Roessler, C. W. Böning, A. Biastoch, E. Behrens, and C. Mertens, 2017: Flow paths and variability of the North Atlantic Current: A comparison of observations and a high-resolution model. *Journal of Geophysical*

Research: Oceans, **122,** 2686-2708, http://dx.doi.org/10.1002/2016JC012444
Buehner, M., L. Bertino, A. Caya, P. Heimbach, and G. Smith, 2017: Sea Ice Analysis and Forecasting: Towards an Increased Reliance on Automated Prediction Systems. T. Carrieres, M. Buehner, J. F. Lemieux, and L. T. Pedersen, Eds., Cambridge University Press, 109-143, https://doi.org/10.1017/9781108277600.
Buongiorno Nardelli, B., S. Guinehut, N. Verbrugge, Y. Cotroneo, E. Zambianchi, and D. Iudicone, 2017: Southern Ocean Mixed-Layer Seasonal and Interannual Variations From Combined Satellite and In Situ Data. *Journal of Geophysical Research: Oceans*, **122,** 10042-10060, http://dx.doi.org/10.1002/2017JC013314
Burns, J. M., B. Subrahmanyam, and V. S. N. Murty, 2017: On the dynamics of the Sri Lanka Dome in the Bay of Bengal. *Journal of Geophysical Research: Oceans*, **122,** 7737-7750, http://dx.doi.org/10.1002/2017JC012986
Busecke, J., R. P. Abernathey, and A. L. Gordon, 2017: Lateral Eddy Mixing in the Subtropical Salinity Maxima of the Global Ocean. *Journal of Physical Oceanography*, **47,** 737-754, http://dx.doi.org/10.1175/jpo-d-16-0215.1
Bushinsky, S. M., A. R. Gray, K. S. Johnson, and J. L. Sarmiento, 2017: Oxygen in the Southern Ocean From Argo Floats: Determination of Processes Driving Air-Sea Fluxes. *Journal of Geophysical Research: Oceans*, **122,** 8661-8682, http://dx.doi.org/10.1002/2017JC012923
Bushuk, M., R. Msadek, M. Winton, G. A. Vecchi, R. Gudgel, A. Rosati, and X. Yang, 2017: Skillful regional prediction of Arctic sea ice on seasonal timescales. *Geophysical Research Letters*, **44,** 4953-4964, http://dx.doi.org/10.1002/2017GL073155
Calafat, F. M., P. Cipollini, J. Bouffard, H. Snaith, and P. Féménias, 2017: Evaluation of new CryoSat-2 products over the ocean. *Remote Sensing of Environment*, **191,** 131-144, http://doi.org/10.1016/j.rse.2017.01.009
Caniaux, G., L. Prieur, H. Giordani, and J. L. Redelsperger, 2017: An inverse method to derive surface fluxes from the closure of oceanic heat and water budgets: Application to the north-western Mediterranean Sea. *Journal of Geophysical Research: Oceans*, **122,** 2884-2908, http://dx.doi.org/10.1002/2016JC012167
Carret, A., J. A. Johannessen, O. B. Andersen, M. Ablain, P. Prandi, A. Blazquez, and A. Cazenave, 2017: Arctic Sea Level During the Satellite Altimetry Era. *Surveys in Geophysics*, **38,** 251-275, http://dx.doi.org/10.1007/s10712-016-9390-2
Carrieres, T., A. Caya, P. Posey, E. J. Metzger, L. Bertino, A. Melsom, G. Smith, M. Sigmond, V. Kharin, and A. Tivy, 2017: Sea Ice Analysis and Forecasting: Towards an Increased Reliance on Automated Prediction Systems. T. Carrieres, M. Buehner, J. F. Lemieux, and L. T. Pedersen, Eds., Cambridge University Press, 144-173, https://doi.org/10.1017/9781108277600.
Castellanos, P., E. J. D. Campos, J. Piera, O. T. Sato, and M. A. F. S. Dias, 2017: Impacts of Agulhas Leakage on the Tropical Atlantic Western Boundary Systems. *Journal of Climate*, **30,** 6645-6659, https://doi.org/10.1175/JCLI-D-15-0878.1
Chacko, N., 2017: Chlorophyll bloom in response to tropical cyclone Hudhud in the Bay of Bengal: Bio-Argo subsurface observations. *Deep Sea Research Part I: Oceanographic Research Papers*, **124,** 66-72, http://dx.doi.org/10.1016/j.dsr.2017.04.010
Chakraborty, K., N. Kumar, and G. V. M. Gupta, 2017: Getting the right wind-forcing for an

ecosystem model: A case study from the eastern Arabian Sea. *Journal of Operational Oceanography*, **10,** 176-190, http://dx.doi.org/10.1080/1755876X.2017.1354686

Chambers, D. P., A. Cazenave, N. Champollion, H. Dieng, W. Llovel, R. Forsberg, K. von Schuckmann, and Y. Wada, 2017: Evaluation of the Global Mean Sea Level Budget between 1993 and 2014. *Surveys in Geophysics*, **38,** 309-327, http://dx.doi.org/10.1007/s10712-016-9381-3

Chand, C. P., M. V. Rao, B. Prasad Kumar, and K. H. Rao, 2017: Influence of cyclone Phailin on the Upper Ocean over Bay of Bengal. *International Journal of Applied Environmental Sciences*, **12,** 717-729, http://www.ripublication.com/ijaes17/ijaesv12n5_01.pdf

Chandanpurkar, H. A., J. T. Reager, J. S. Famiglietti, and T. H. Syed, 2017: Satellite- and Reanalysis-Based Mass Balance Estimates of Global Continental Discharge (1993–2015). *Journal of Climate*, **30,** 8481-8495, https://doi.org/10.1175/JCLI-D-16-0708.1

Chao, Y., J. D. Farrara, E. Bjorkstedt, F. Chai, F. Chavez, D. L. Rudnick, W. Enright, J. L. Fisher, W. T. Peterson, G. F. Welch, C. O. Davis, R. C. Dugdale, F. P. Wilkerson, H. Zhang, Y. Zhang, and E. Ateljevich, 2017: The origins of the anomalous warming in the California coastal ocean and San Francisco Bay during 2014–2016. *Journal of Geophysical Research: Oceans*, **122,** 7537-7557, http://dx.doi.org/10.1002/2017JC013120

Chapman, C. and A. A. Charantonis, 2017: Reconstruction of Subsurface Velocities From Satellite Observations Using Iterative Self-Organizing Maps. *IEEE Geoscience and Remote Sensing Letters*, **14,** 617-620, http://dx.doi.org/10.1109/LGRS.2017.2665603

Chapman, C. and J.-B. Sallée, 2017: Isopycnal Mixing Suppression by the Antarctic Circumpolar Current and the Southern Ocean Meridional Overturning Circulation. *Journal of Physical Oceanography*, **47,** 2023-2045, https://doi.org/10.1175/JPO-D-16-0263.1

Chapman, C. and J.-B. Sallée, 2017: Can we reconstruct mean and eddy fluxes from Argo floats? *Ocean Modelling*, **120,** 83-100, http://www.sciencedirect.com/science/article/pii/S1463500317301488

Charria, G., S. Theetten, F. Vandermeirsch, Ö. Yelekçi, and N. Audiffren, 2017: Interannual evolution of (sub)mesoscale dynamics in the Bay of Biscay. *Ocean Sci.*, **13,** 777-797, https://doi.org/10.5194/os-13-777-2017

Chassignet, E. P. and X. Xu, 2017: Impact of Horizontal Resolution (1/12° to 1/50°) on Gulf Stream Separation, Penetration, and Variability. *Journal of Physical Oceanography*, **47,** 1999-2021, https://doi.org/10.1175/JPO-D-17-0031.1

Chen, G., L. Peng, and C. Ma, 2017: Climatology and seasonality of upper ocean salinity: a three-dimensional view from argo floats. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3742-6

Chen, J., X. You, Y. Xiao, R. Zhang, G. Wang, and S. Bao, 2017: A performance evaluation of remotely sensed sea surface salinity products in combination with other surface measurements in reconstructing three-dimensional salinity fields. *Acta Oceanologica Sinica*, **36,** 15-31, https://doi.org/10.1007/s13131-017-1079-y

Chen, J. L., C. R. Wilson, B. D. Tapley, H. Save, and J.-F. Cretaux, 2017: Long-term and seasonal Caspian Sea level change from satellite gravity and altimeter

measurements. *Journal of Geophysical Research: Solid Earth*, **122,** 2274-2290, http://dx.doi.org/10.1002/2016JB013595

Chen, S., J. A. Cummings, J. M. Schmidt, E. R. Sanabia, and S. R. Jayne, 2017: Targeted ocean sampling guidance for tropical cyclones. *Journal of Geophysical Research: Oceans*, **122,** 3505-3518, http://dx.doi.org/10.1002/2017JC012727

Chen, X., Z. Liu, C. Sun, and H. Wang, 2017: Comparison of TMI and AMSR-E sea surface temperatures with Argo near-surface temperatures over the global oceans. *Acta Oceanologica Sinica*, **36,** 52-59, http://dx.doi.org/10.1007/s13131-017-1040-0

Chen, X., X. Zhang, J. A. Church, C. S. Watson, M. A. King, D. Monselesan, B. Legresy, and C. Harig, 2017: The increasing rate of global mean sea-level rise during 1993-2014. *Nature Clim. Change*, **7,** 492-495, http://dx.doi.org/10.1038/nclimate3325

Cheng, L., K. E. Trenberth, J. Fasullo, T. Boyer, J. Abraham, and J. Zhu, 2017: Improved estimates of ocean heat content from 1960 to 2015. *Science Advances*, **3**, http://dx.doi.org/10.1126/sciadv.1601545

Chen, Y., K. Yu, C. Dong, Z. He, Y. Yan, and D. Wang, 2017: Evaluation of Satellite-Altimetry-Derived Pycnocline Depth Products in the South China Sea. *Remote Sensing*, **9,** 822, https://doi.org/10.3390/rs9080822

Cheng, Y.-H., C.-R. Ho, Q. Zheng, B. Qiu, J. Hu, and N.-J. Kuo, 2017: Statistical features of eddies approaching the Kuroshio east of Taiwan Island and Luzon Island. *Journal of Oceanography*, **73,** 427-438, https://doi.org/10.1007/s10872-017-0411-7

Chi, J., P. Shi, W. Zhuang, X. Lin, X. Cheng, and Y. Du, 2017: Heat budget of the western Pacific warm pool and the contribution of eddy heat transport diagnosed from HYCOM assimilation. *Journal of Oceanography*, **73,** 193-203, http://dx.doi.org/10.1007/s10872-016-0396-7

Chow, C. H., W. Cheah, and J.-H. Tai, 2017: A rare and extensive summer bloom enhanced by ocean eddies in the oligotrophic western North Pacific Subtropical Gyre. *Scientific Reports*, **7,** 6199, https://dx.doi.org/10.1038%2Fs41598-017-06584-3

Chow, C. H., Y.-h. Tseng, H.-H. Hsu, and C.-C. Young, 2017: Interannual variability of the subtropical countercurrent eddies in the North Pacific associated with the Western-Pacific teleconnection pattern. *Continental Shelf Research*, **143,** 175-184, http://dx.doi.org/10.1016/j.csr.2016.08.006

Chu, X., C. Dong, and Y. Qi, 2017: The influence of ENSO on an oceanic eddy pair in the South China Sea. *Journal of Geophysical Research: Oceans*, **122,** 1643-1652, http://dx.doi.org/10.1002/2016JC012642

Cipollone, A., S. Masina, A. Storto, and D. Iovino, 2017: Benchmarking the mesoscale variability in global ocean eddy-permitting numerical systems. *Ocean Dynamics*, **67,** 1313-1333, https://doi.org/10.1007/s10236-017-1089-5

Clementi, E., P. Oddo, M. Drudi, N. Pinardi, G. Korres, and A. Grandi, 2017: Coupling hydrodynamic and wave models: first step and sensitivity experiments in the Mediterranean Sea. *Ocean Dynamics*, **67,** 1293-1312, https://doi.org/10.1007/s10236-017-1087-7

Conroy, J. L., D. M. Thompson, K. M. Cobb, D. Noone, S. Rea, and A. N. Legrande, 2017: Spatiotemporal variability in the δ18O-salinity relationship of seawater across the tropical Pacific Ocean. *Paleoceanography*, **32,** 484-497,

http://dx.doi.org/10.1002/2016PA003073
Coppola, L., L. Prieur, I. Taupier-Letage, C. Estournel, P. Testor, D. Lefevre, S. Belamari, S. LeReste, and V. Taillandier, 2017: Observation of oxygen ventilation into deep waters through targeted deployment of multiple Argo-O2 floats in the north-western Mediterranean Sea in 2013. *Journal of Geophysical Research: Oceans*, **122,** 6325-6341, http://dx.doi.org/10.1002/2016JC012594
Corbett, C. M., B. Subrahmanyam, and B. S. Giese, 2017: A comparison of sea surface salinity in the equatorial Pacific Ocean during the 1997–1998, 2012–2013, and 2014–2015 ENSO events. *Climate Dynamics*, **49,** 3513-3526, https://doi.org/10.1007/s00382-017-3527-y
Costa, V. S., G. N. Mill, M. Gabioux, G. S. Grossmann-Matheson, and A. M. Paiva, 2017: The recirculation of the intermediate western boundary current at the Tubarão Bight – Brazil. *Deep Sea Research Part I: Oceanographic Research Papers*, **120,** 48-60, http://doi.org/10.1016/j.dsr.2016.12.001
Courtois, P., X. Hu, C. Pennelly, P. Spence, and P. G. Myers, 2017: Mixed layer depth calculation in deep convection regions in ocean numerical models. *Ocean Modelling*, **120,** 60-78, https://doi.org/10.1016/j.ocemod.2017.10.007
Craig, P. M., D. Ferreira, and J. Methven, 2017: The contrast between Atlantic and Pacific surface water fluxes. *Tellus A: Dynamic Meteorology and Oceanography*, **69,** 1330454, http://dx.doi.org/10.1080/16000870.2017.1330454
Cravatte, S., E. Kestenare, F. Marin, P. Dutrieux, and E. Firing, 2017: Subthermocline and Intermediate Zonal Currents in the Tropical Pacific Ocean: Paths and Vertical Structure. *Journal of Physical Oceanography*, **47,** 2305-2324, https://doi.org/10.1175/JPO-D-17-0043.1
Daneshgar Asl, S., D. S. Dukhovskoy, M. Bourassa, and I. R. MacDonald, 2017: Hindcast modeling of oil slick persistence from natural seeps. *Remote Sensing of Environment*, **189,** 96-107, http://doi.org/10.1016/j.rse.2016.11.003
de Boisséson, E., M. A. Balmaseda, and M. Mayer, 2017: Ocean heat content variability in an ensemble of twentieth century ocean reanalyses. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3845-0
Desbruyères, D., E. L. McDonagh, B. A. King, and V. Thierry, 2017: Global and Full-Depth Ocean Temperature Trends during the Early Twenty-First Century from Argo and Repeat Hydrography. *Journal of Climate*, **30,** 1985-1997, http://dx.doi.org/10.1175/jcli-d-16-0396.1
Dieng, H. B., A. Cazenave, B. Meyssignac, and M. Ablain, 2017: New estimate of the current rate of sea level rise from a sea level budget approach. *Geophysical Research Letters*, **44,** 3744-3751, http://dx.doi.org/10.1002/2017GL073308
Dieng, H. B., A. Cazenave, B. Meyssignac, K. von Schuckmann, and H. Palanisamy, 2017: Sea and land surface temperatures, ocean heat content, Earth's energy imbalance and net radiative forcing over the recent years. *International Journal of Climatology*, **37,** 218-229, http://dx.doi.org/10.1002/joc.4996
Doi, T., A. Storto, S. K. Behera, A. Navarra, and T. Yamagata, 2017: Improved Prediction of the Indian Ocean Dipole Mode by Use of Subsurface Ocean Observations. *Journal of Climate*, **30,** 7953-7970, https://doi.org/10.1175/JCLI-D-16-0915.1

Dong, D., P. Brandt, P. Chang, F. Schütte, X. Yang, J. Yan, and J. Zeng, 2017: Mesoscale Eddies in the Northwestern Pacific Ocean: Three-Dimensional Eddy Structures and Heat/Salt Transports. *Journal of Geophysical Research: Oceans*, **122,** 9795-9813, http://dx.doi.org/10.1002/2017JC013303

Dong, J., R. Domingues, G. Goni, G. Halliwell, H.-S. Kim, S.-K. Lee, M. Mehari, F. Bringas, J. Morell, and L. Pomales, 2017: Impact of Assimilating Underwater Glider Data on Hurricane Gonzalo (2014) Forecasts. *Weather and Forecasting*, **32,** 1143-1159, http://dx.doi.org/10.1175/waf-d-16-0182.1

Dong, S., D. Volkov, G. Goni, R. Lumpkin, and G. R. Foltz, 2017: Near-surface salinity and temperature structure observed with dual-sensor drifters in the subtropical South Pacific. *Journal of Geophysical Research: Oceans*, **122,** 5952-5969, http://dx.doi.org/10.1002/2017JC012894

Dorofeev, V. L. and L. I. Sukhikh, 2017: Study of long-term variability of Black Sea dynamics on the basis of circulation model assimilation of remote measurements. *Izvestiya, Atmospheric and Oceanic Physics*, **53,** 224-232, https://doi.org/10.1134/S0001433817020025

Dufois, F., N. J. Hardman-Mountford, M. Fernandes, B. Wojtasiewicz, D. Shenoy, D. Slawinski, M. Gauns, J. Greenwood, and R. Toresen, 2017: Observational insights into chlorophyll distributions of subtropical South Indian Ocean eddies. *Geophysical Research Letters*, **44,** 3255-3264, http://dx.doi.org/10.1002/2016GL072371

Dunphy, M., A. L. Ponte, P. Klein, and S. L. Gentil, 2017: Low-Mode Internal Tide Propagation in a Turbulent Eddy Field. *Journal of Physical Oceanography*, **47,** 649-665, http://dx.doi.org/10.1175/jpo-d-16-0099.1

Durski, S. M., J. A. Barth, J. C. McWilliams, H. Frenzel, and C. Deutsch, 2017: The influence of variable slope-water characteristics on dissolved oxygen levels in the northern California Current System. *Journal of Geophysical Research: Oceans*, **122,** 7674-7697, http://dx.doi.org/10.1002/2017JC013089

Evans, D. G., J. Toole, G. Forget, J. D. Zika, A. C. N. Garabato, A. J. G. Nurser, and L. Yu, 2017: Recent Wind-Driven Variability in Atlantic Water Mass Distribution and Meridional Overturning Circulation. *Journal of Physical Oceanography*, **47,** 633-647, http://dx.doi.org/10.1175/jpo-d-16-0089.1

Eveleth, R., N. Cassar, S. C. Doney, D. R. Munro, and C. Sweeney, 2017: Biological and physical controls on O2/Ar, Ar and pCO2 variability at the Western Antarctic Peninsula and in the Drake Passage. *Deep Sea Research Part II: Topical Studies in Oceanography*, **139,** 77-88, http://dx.doi.org/10.1016/j.dsr2.2016.05.002

Falina, A., A. Sarafanov, E. Özsoy, and U. Utku Turunçoğlu, 2017: Observed basin-wide propagation of Mediterranean water in the Black Sea. *Journal of Geophysical Research: Oceans*, **122,** 3141-3151, http://dx.doi.org/10.1002/2017JC012729

Fasullo, J. T. and P. R. Gent, 2017: On the Relationship between Regional Ocean Heat Content and Sea Surface Height. *Journal of Climate*, **30,** 9195-9211, https://doi.org/10.1175/JCLI-D-16-0920.1

Fathrio, I., S. Iizuka, A. Manda, Y.-M. Kodama, S. Ishida, Q. Moteki, H. Yamada, and Y. Tachibana, 2017: Assessment of western Indian Ocean SST bias of CMIP5 models. *Journal of Geophysical Research: Oceans*, **122,** 3123-3140,

http://dx.doi.org/10.1002/2016JC012443
Fenty, I., D. Menemenlis, and H. Zhang, 2017: Global coupled sea ice-ocean state estimation. *Climate Dynamics*, **49,** 931-956, https://doi.org/10.1007/s00382-015-2796-6
Fernandez, D., P. Sutton, and M. Bowen, 2017: Variability of the subtropical mode water in the Southwest Pacific. *Journal of Geophysical Research: Oceans*, **122,** 7163-7180, http://dx.doi.org/10.1002/2017JC013011
Filyushkin, B. N., K. V. Lebedev, and N. G. Kozhelupova, 2017: Detection of Intermediate Mediterranean Waters in the Atlantic Ocean by ARGO Floats Data. *Oceanology*, **57,** 763-771, https://doi.org/10.1134/S0001437017060042
Flynn, K. R., M. R. Fewings, C. Gotschalk, and K. Lombardo, 2017: Large-scale anomalies in sea-surface temperature and air-sea fluxes during wind relaxation events off the United States West Coast in summer. *Journal of Geophysical Research: Oceans*, **122,** 2574-2594, http://dx.doi.org/10.1002/2016JC012613
Foppert, A., K. A. Donohue, D. R. Watts, and K. L. Tracey, 2017: Eddy heat flux across the Antarctic Circumpolar Current estimated from sea surface height standard deviation. *Journal of Geophysical Research: Oceans*, **122,** 6947-6964, http://dx.doi.org/10.1002/2017JC012837
Fournier, S., D. Vandemark, L. Gaultier, T. Lee, B. Jonsson, and M. M. Gierach, 2017: Interannual Variation in Offshore Advection of Amazon-Orinoco Plume Waters: Observations, Forcing Mechanisms, and Impacts. *Journal of Geophysical Research: Oceans*, **122,** 8966-8982, http://dx.doi.org/10.1002/2017JC013103
Fournier, S., J. Vialard, M. Lengaigne, T. Lee, M. M. Gierach, and A. V. S. Chaitanya, 2017: Modulation of the Ganges-Brahmaputra River Plume by the Indian Ocean Dipole and Eddies Inferred From Satellite Observations. *Journal of Geophysical Research: Oceans*, **122,** 9591-9604, http://dx.doi.org/10.1002/2017JC013333
Frajka-Williams, E., C. Beaulieu, and A. Duchez, 2017: Emerging negative Atlantic Multidecadal Oscillation index in spite of warm subtropics. *Scientific Reports*, **7,** 11224, https://doi.org/10.1038/s41598-017-11046-x
Friedman, A. R., G. Reverdin, M. Khodri, and G. Gastineau, 2017: A new record of Atlantic sea surface salinity from 1896 to 2013 reveals the signatures of climate variability and long-term trends. *Geophysical Research Letters*, **44,** 1866-1876, http://dx.doi.org/10.1002/2017GL072582
Fujii, Y., H. Tsujino, T. Toyoda, and H. Nakano (2017), Enhancement of the southward return flow of the Atlantic Meridional Overturning Circulation by data assimilation and its influence in an assimilative ocean simulation forced by CORE-II atmospheric forcing, *Climate Dynamics*, *49*(3), 869-889, doi: https://doi.org/10.1007/s00382-015-2780-1.
Furue, R., K. Guerreiro, H. E. Phillips, J. Julian P. McCreary, and N. L. Bindoff, 2017: On the Leeuwin Current System and Its Linkage to Zonal Flows in the South Indian Ocean as Inferred from a Gridded Hydrography. *Journal of Physical Oceanography*, **47,** 583-602, http://dx.doi.org/10.1175/jpo-d-16-0170.1
Gao, C. and R.-H. Zhang, 2017: The roles of atmospheric wind and entrained water temperature (Te) in the second-year cooling of the 2010–12 La Niña event. *Climate Dynamics*, **48,** 597-617, http://dx.doi.org/10.1007/s00382-016-3097-4
Garcia-Eidell, C., J. C. Comiso, E. Dinnat, and L. Brucker, 2017: Satellite observed salinity

distributions at high latitudes in the Northern Hemisphere: A comparison of four products. *Journal of Geophysical Research: Oceans*, **122,** 7717-7736, http://dx.doi.org/10.1002/2017JC013184

García-Ladona, E., 2017: Currents in the Western Mediterranean Basin. *Atlas of Bedforms in the Western Mediterranean*, J. Guillén, J. Acosta, F. L. Chiocci, and A. Palanques, Eds., Springer International Publishing, 41-47, https://doi.org/10.1007/978-3-319-33940-5_8.

Gasparin, F. and D. Roemmich, 2017: The seasonal march of the equatorial Pacific upper-ocean and its El Niño variability. *Progress in Oceanography*, **156,** 1-16, http://dx.doi.org/10.1016/j.pocean.2017.05.010

Gasser, M., J. L. Pelegrí, M. Emelianov, M. Bruno, E. Gràcia, M. Pastor, H. Peters, Á. Rodríguez-Santana, J. Salvador, and R. F. Sánchez-Leal, 2017: Tracking the Mediterranean outflow in the Gulf of Cadiz. *Progress in Oceanography*, **157,** 47-71, https://doi.org/10.1016/j.pocean.2017.05.015

Germe, A., F. Sévellec, J. Mignot, D. Swingedouw, and S. Nguyen, 2017: On the robustness of near term climate predictability regarding initial state uncertainties. *Climate Dynamics*, **48,** 353-366, http://dx.doi.org/10.1007/s00382-016-3078-7

Giglio, D. and G. C. Johnson, 2017: Middepth decadal warming and freshening in the South Atlantic. *Journal of Geophysical Research: Oceans*, **122,** 973-979, http://dx.doi.org/10.1002/2016JC012246

Giordani, H., C. Lebeaupin-Brossier, F. Léger, and G. Caniaux, 2017: A PV-approach for dense water formation along fronts: Application to the Northwestern Mediterranean. *Journal of Geophysical Research: Oceans*, **122,** 995-1015, http://dx.doi.org/10.1002/2016JC012019

González-Gambau, V., E. Olmedo, J. Martínez, A. Turiel, and I. Durán, 2017: Improvements on Calibration and Image Reconstruction of SMOS for Salinity Retrievals in Coastal Regions. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **PP,** 1-15, https://doi.org/10.1109/JSTARS.2017.2685690

Good, S. A., 2017: The impact of observational sampling on time series of global 0–700 m ocean average temperature: a case study. *International Journal of Climatology*, **37,** 2260-2268, http://dx.doi.org/10.1002/joc.4654

Gordon, A. L., E. Shroyer, and V. S. N. Murty, 2017: An Intrathermocline Eddy and a tropical cyclone in the Bay of Bengal. *Scientific Reports*, **7,** 46218, http://dx.doi.org/10.1038/srep46218

Grodsky, S. A., N. Reul, B. Chapron, J. A. Carton, and F. O. Bryan, 2017: Interannual surface salinity on Northwest Atlantic shelf. *Journal of Geophysical Research: Oceans*, **122,** 3638-3659, http://dx.doi.org/10.1002/2016JC012580

Groeskamp, S., B. M. Sloyan, J. D. Zika, and T. J. McDougall, 2017: Mixing Inferred from an Ocean Climatology and Surface Fluxes. *Journal of Physical Oceanography*, **47,** 667-687, http://dx.doi.org/10.1175/jpo-d-16-0125.1

Guan, S., Z. Liu, J. Song, Y. Hou, and L. Feng, 2017: Upper ocean response to Super Typhoon Tembin (2012) explored using multiplatform satellites and Argo float observations. *International Journal of Remote Sensing*, **38,** 5150-5167, http://dx.doi.org/10.1080/01431161.2017.1335911

Guimbard, S., N. Reul, B. Chapron, M. Umbert, and C. Maes, 2017: Seasonal and interannual variability of the Eastern Tropical Pacific Fresh Pool. *Journal of Geophysical Research: Oceans*, **122,** 1749-1771, http://dx.doi.org/10.1002/2016JC012130

Guo, L., P. Xiu, F. Chai, H. Xue, D. Wang, and J. Sun, 2017: Enhanced Chlorophyll Concentrations Induced by Kuroshio Intrusion Fronts in the Northern South China Sea. *Geophysical Research Letters*, **44,** 11,565-11,572, http://dx.doi.org/10.1002/2017GL075336

Haëntjens, N., E. Boss, and L. D. Talley, 2017: Revisiting Ocean Color algorithms for chlorophyll a and particulate organic carbon in the Southern Ocean using biogeochemical floats. *Journal of Geophysical Research: Oceans*, **122,** 6583-6593, http://dx.doi.org/10.1002/2017JC012844

Hahn, J., P. Brandt, S. Schmidtko, and G. Krahmann, 2017: Decadal oxygen change in the eastern tropical North Atlantic. *Ocean Sci.*, **13,** 551-576, https://www.ocean-sci.net/13/551/2017/

Halliwell, G. R., M. Mehari, L. K. Shay, V. H. Kourafalou, H. Kang, H. S. Kim, J. Dong, and R. Atlas, 2017: OSSE quantitative assessment of rapid-response prestorm ocean surveys to improve coupled tropical cyclone prediction. *Journal of Geophysical Research: Oceans*, **122,** 5729-5748, http://dx.doi.org/10.1002/2017JC012760

Halliwell, G. R., M. F. Mehari, M. Le Hénaff, V. H. Kourafalou, I. S. Androulidakis, H. S. Kang, and R. Atlas, 2017: North Atlantic Ocean OSSE system: Evaluation of operational ocean observing system components and supplemental seasonal observations for potentially improving tropical cyclone prediction in coupled systems. *Journal of Operational Oceanography*, **10,** 154-175, http://dx.doi.org/10.1080/1755876X.2017.1322770

Hausfather, Z., K. Cowtan, D. C. Clarke, P. Jacobs, M. Richardson, and R. Rohde, 2017: Assessing recent warming using instrumentally homogeneous sea surface temperature records. *Science Advances*, **3**, http://dx.doi.org/10.1126/sciadv.1601207

Hausmann, U., D. J. McGillicuddy, and J. Marshall, 2017: Observed mesoscale eddy signatures in Southern Ocean surface mixed-layer depth. *Journal of Geophysical Research: Oceans*, **122,** 617-635, http://dx.doi.org/10.1002/2016JC012225

Hedemann, C., T. Mauritsen, J. Jungclaus, and J. Marotzke, 2017: The subtle origins of surface-warming hiatuses. *Nature Clim. Change*, **7,** 336-339, http://dx.doi.org/10.1038/nclimate3274

Hernawan, U. E., K.-j. van Dijk, G. A. Kendrick, M. Feng, E. Biffin, P. S. Lavery, and K. McMahon, 2017: Historical processes and contemporary ocean currents drive genetic structure in the seagrass Thalassia hemprichii in the Indo-Australian Archipelago. *Molecular Ecology*, **26,** 1008-1021, https://doi.org/10.1111/mec.13966

Holte, J. and F. Straneo, 2017: Seasonal Overturning of the Labrador Sea as Observed by Argo Floats. *Journal of Physical Oceanography*, **47,** 2531-2543, https://doi.org/10.1175/JPO-D-17-0051.1

Holte, J., L. D. Talley, J. Gilson, and D. Roemmich, 2017: An Argo mixed layer climatology and database. *Geophysical Research Letters*, **44,** 5618-5626, http://dx.doi.org/10.1002/2017GL073426

Honda, M. C., M. Wakita, K. Matsumoto, T. Fujiki, E. Siswanto, K. Sasaoka, H. Kawakami, Y.

Mino, C. Sukigara, M. Kitamura, Y. Sasai, S. L. Smith, T. Hashioka, C. Yoshikawa, K. Kimoto, S. Watanabe, T. Kobari, T. Nagata, K. Hamasaki, R. Kaneko, M. Uchimiya, H. Fukuda, O. Abe, and T. Saino, 2017: Comparison of carbon cycle between the western Pacific subarctic and subtropical time-series stations: highlights of the K2S1 project. *Journal of Oceanography*, **73,** 647-667, https://doi.org/10.1007/s10872-017-0423-3

Horvat, C., D. R. Jones, S. Iams, D. Schroeder, D. Flocco, and D. Feltham, 2017: The frequency and extent of sub-ice phytoplankton blooms in the Arctic Ocean. *Science Advances*, **3**, http://dx.doi.org/10.1126/sciadv.1601191

Houssard, P., A. Lorrain, L. Tremblay-Boyer, V. Allain, B. S. Graham, C. E. Menkes, H. Pethybridge, L. I. E. Couturier, D. Point, B. Leroy, A. Receveur, B. P. V. Hunt, E. Vourey, S. Bonnet, M. Rodier, P. Raimbault, E. Feunteun, P. M. Kuhnert, J.-M. Munaron, B. Lebreton, T. Otake, and Y. Letourneur, 2017: Trophic position increases with thermocline depth in yellowfin and bigeye tuna across the Western and Central Pacific Ocean. *Progress in Oceanography*, **154,** 49-63, http://dx.doi.org/10.1016/j.pocean.2017.04.008

Hsu, C.-W. and I. Velicogna, 2017: Detection of sea level fingerprints derived from GRACE gravity data. *Geophysical Research Letters*, **44,** 8953-8961, http://dx.doi.org/10.1002/2017GL074070

Hu, S. and J. Sprintall, 2017: Observed strengthening of interbasin exchange via the Indonesian seas due to rainfall intensification. *Geophysical Research Letters*, **44,** 1448-1456, http://dx.doi.org/10.1002/2016GL072494

Huang, A., H. Li, R. L. Sriver, A. V. Fedorov, and C. M. Brierley, 2017: Regional variations in the ocean response to tropical cyclones: Ocean mixing versus low cloud suppression. *Geophysical Research Letters*, **44,** 1947-1955, http://dx.doi.org/10.1002/2016GL072023

Huang, B., P. W. Thorne, V. F. Banzon, T. Boyer, G. Chepurin, J. H. Lawrimore, M. J. Menne, T. M. Smith, R. S. Vose, and H.-M. Zhang, 2017: Extended Reconstructed Sea Surface Temperature, Version 5 (ERSSTv5): Upgrades, Validations, and Intercomparisons. *Journal of Climate*, **30,** 8179-8205, https://doi.org/10.1175/JCLI-D-16-0836.1

Huang, H.-C., J. Boucharel, I. I. Lin, F.-F. Jin, C.-C. Lien, and I.-F. Pun, 2017: Air-sea fluxes for Hurricane Patricia (2015): Comparison with supertyphoon Haiyan (2013) and under different ENSO conditions. *Journal of Geophysical Research: Oceans*, **122,** 6076-6089, http://dx.doi.org/10.1002/2017JC012741

Huang, L., H. Zhao, J. Pan, and A. Devlin, 2017: Remote sensing observations of phytoplankton increases triggered by successive typhoons. *Frontiers of Earth Science*, **11,** 601-608, https://doi.org/10.1007/s11707-016-0608-x

Huang, X., Z. Zhang, X. Zhang, H. Qian, W. Zhao, and J. Tian, 2017: Impacts of a Mesoscale Eddy Pair on Internal Solitary Waves in the Northern South China Sea revealed by Mooring Array Observations. *Journal of Physical Oceanography*, **47,** 1539-1554, http://dx.doi.org/10.1175/jpo-d-16-0111.1

Igarashi, H., T. Ichii, M. Sakai, Y. Ishikawa, T. Toyoda, S. Masuda, N. Sugiura, K. Mahapatra, and T. Awaji, 2017: Possible link between interannual variation of neon flying squid (Ommastrephes bartramii) abundance in the North Pacific and the climate phase

shift in 1998/1999. *Progress in Oceanography*, **150,** 20-34, http://doi.org/10.1016/j.pocean.2015.03.008

Inoue, R., M. Watanabe, and S. Osafune, 2017: Wind-Induced Mixing in the North Pacific. *Journal of Physical Oceanography*, **47,** 1587-1603, http://dx.doi.org/10.1175/jpo-d-16-0218.1

Ishii, M., Y. Fukuda, S. Hirahara, S. Yasui, T. Suzuki, and K. Sato, 2017: Accuracy of Global Upper Ocean Heat Content Estimation Expected from Present Observational Data Sets. *SOLA*, **13,** 163-167, https://doi.org/10.2151/sola.2017-030

Jain, V., D. Shankar, P. N. Vinayachandran, A. Kankonkar, A. Chatterjee, P. Amol, A. M. Almeida, G. S. Michael, A. Mukherjee, M. Chatterjee, R. Fernandes, R. Luis, A. Kamble, A. K. Hegde, S. Chatterjee, U. Das, and C. P. Neema, 2017: Evidence for the existence of Persian Gulf Water and Red Sea Water in the Bay of Bengal. *Climate Dynamics*, **48,** 3207-3226, https://doi.org/10.1007/s00382-016-3259-4

Janeiro, J., A. Neves, F. Martins, and P. Relvas, 2017: Integrating technologies for oil spill response in the SW Iberian coast. *Journal of Marine Systems*, **173,** 31-42, https://doi.org/10.1016/j.jmarsys.2017.04.005

Jangid, B. P., S. Prakash, M. T. Bushair, and R. Kumar, 2017: Adding value to INSAT-3D sea surface temperature fields using MODIS data over the tropical Indian Ocean. *Remote Sensing Letters*, **8,** 458-467, http://dx.doi.org/10.1080/2150704X.2017.1280201

Jayne, S. R., D. Roemmich, N. V. Zilberman, S. C. Riser, K. S. Johnson, G. C. Johnson, and S. R. Piotrowicz, 2017: The Argo Program: Present and Future. *Oceanography*, **30,** 18-28, http://dx.doi.org/10.5670/oceanog.2017.213

Jia, F., D. Hu, S. Hu, and J. Feng, 2017: Niño4 as a Key Region for the Interannual Variability of the Western Pacific Warm Pool. *Journal of Geophysical Research: Oceans*, **122,** 9299-9314, http://dx.doi.org/10.1002/2017JC013208

Jiang, Y., Y. Gou, T. Zhang, K. Wang, and C. Hu, 2017: A Machine Learning Approach to Argo Data Analysis in a Thermocline. *Sensors*, **17,** 2225, https://doi.org/10.3390/s17102225

Johnson, G. C. and A. N. Birnbaum, 2017: As El Niño builds, Pacific Warm Pool expands, ocean gains more heat. *Geophysical Research Letters*, **44,** 438-445, http://dx.doi.org/10.1002/2016GL071767

Johnson, G. C. and J. M. Lyman, 2017: Global Ocean: Sea Surface Salinity in the State of the Climate in 2016. *Bull. Am. Meteorol. Soc.*, **98,** S71-S72, https://doi.org/10.1175/2017BAMSStateoftheClimate.1

Johnson, G. C., J. M. Lyman, T. Boyer, C. M. Domingues, J. Gilson, M. Ishii, R. Killick, D. Monselesan, and S. Wijffels, 2017: Global Oceans: Ocean heat content in State of the Climate in 2016. *Bull. Am. Meteorol. Soc.*, **98,** S66-S69, https://doi.org/10.1175/2017BAMSStateoftheClimate.1

Johnson, G. C., J. Reagan, J. M. Lyman, T. Boyer, C. Schmid, and R. Locarnini, 2017: Global Ocean: Salinity in the State of the Climate in 2016. *Bull. Am. Meteorol. Soc.*, **98,** S69-S71, https://doi.org/10.1175/2017BAMSStateoftheClimate.1

Johnson, G. C. and P. J. Stabeno, 2017: Deep Bering Sea Circulation and Variability, 2001–2016, From Argo Data. *Journal of Geophysical Research: Oceans*, **122,** 9765-9779, http://dx.doi.org/10.1002/2017JC013425

Johnson, K. S., 2017: Developing chemical sensors to observe the health of the global ocean. *2017 19th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS)*, 10-15, https://doi.org/10.1109/TRANSDUCERS.2017.7993975

Johnson, K. S., J. N. Plant, L. J. Coletti, H. W. Jannasch, C. M. Sakamoto, S. C. Riser, D. D. Swift, N. L. Williams, E. Boss, N. Haëntjens, L. D. Talley, and J. L. Sarmiento, 2017: Biogeochemical sensor performance in the SOCCOM profiling float array. *Journal of Geophysical Research: Oceans*, **122,** 6416-6436, http://dx.doi.org/10.1002/2017JC012838

Johnson, K. S., J. N. Plant, J. P. Dunne, L. D. Talley, and J. L. Sarmiento, 2017: Annual nitrate drawdown observed by SOCCOM profiling floats and the relationship to annual net community production. *Journal of Geophysical Research: Oceans*, **122,** 6668-6683, http://dx.doi.org/10.1002/2017JC012839

Johnson, S. J., A. Turner, S. Woolnough, G. Martin, and C. MacLachlan, 2017: An assessment of Indian monsoon seasonal forecasts and mechanisms underlying monsoon interannual variability in the Met Office GloSea5-GC2 system. *Climate Dynamics*, **48,** 1447-1465, http://dx.doi.org/10.1007/s00382-016-3151-2

Jordà, G., K. Von Schuckmann, S. A. Josey, G. Caniaux, J. García-Lafuente, S. Sammartino, E. Özsoy, J. Polcher, G. Notarstefano, P. M. Poulain, F. Adloff, J. Salat, C. Naranjo, K. Schroeder, J. Chiggiato, G. Sannino, and D. Macías, 2017: The Mediterranean Sea heat and mass budgets: Estimates, uncertainties and perspectives. *Progress in Oceanography*, **156,** 174-208, https://doi.org/10.1016/j.pocean.2017.07.001

Kakatkar, R., C. Gnanaseelan, J. S. Chowdary, A. Parekh, and J. S. Deepa, 2017: Indian summer monsoon rainfall variability during 2014 and 2015 and associated Indo-Pacific upper ocean temperature patterns. *Theoretical and Applied Climatology*, https://doi.org/10.1007/s00704-017-2046-4

Kamenkovich, I., A. Haza, A. R. Gray, C. O. Dufour, and Z. Garraffo, 2017: Observing System Simulation Experiments for an array of autonomous biogeochemical profiling floats in the Southern Ocean. *Journal of Geophysical Research: Oceans*, **122,** 7595-7611, http://dx.doi.org/10.1002/2017JC012819

Kamidaira, Y., Y. Uchiyama, and S. Mitarai, 2017: Eddy-induced transport of the Kuroshio warm water around the Ryukyu Islands in the East China Sea. *Continental Shelf Research*, **143,** 206-218, http://dx.doi.org/10.1016/j.csr.2016.07.004

Karmakar, A., A. Parekh, J. S. Chowdary, and C. Gnanaseelan, 2017: Inter comparison of Tropical Indian Ocean features in different ocean reanalysis products. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3910-8

Karnauskas, K. B., G. C. Johnson, and R. Murtugudde, 2017: On the climate impacts of atolls in the central equatorial Pacific. *International Journal of Climatology*, **37,** 197-203, http://dx.doi.org/10.1002/joc.4697

Karspeck, A. R., D. Stammer, A. Köhl, G. Danabasoglu, M. Balmaseda, D. M. Smith, Y. Fujii, S. Zhang, B. Giese, H. Tsujino, and A. Rosati, 2017: Comparison of the Atlantic meridional overturning circulation between 1960 and 2007 in six ocean reanalysis products. *Climate Dynamics*, **49,** 957-982, https://doi.org/10.1007/s00382-015-2787-7

Karstensen, J., F. Schütte, A. Pietri, G. Krahmann, B. Fiedler, D. Grundle, H. Hauss, A. Körtzinger, C. R. Löscher, P. Testor, N. Vieira, and M. Visbeck, 2017: Upwelling and isolation in oxygen-depleted anticyclonic modewater eddies and implications for nitrate cycling. *Biogeosciences*, **14,** 2167-2181, https://doi.org/10.5194/bg-14-2167-2017

KASSIS, D., G. KORRES, A. KONSTANTINIDOU, and L. PERIVOLIOTIS, 2017: Comparison of high resolution hydrodynamic model outputs with in-situ Argo profiles in the Ionian Sea. *Mediterranean Marine Science*, **18,** 16, http://dx.doi.org/10.12681/mms.1753

Katsumata, K., 2017: Eddies Observed by Argo Floats. Part II: Form Stress and Streamline Length in the Southern Ocean. *Journal of Physical Oceanography*, **47,** 2237-2250, https://doi.org/10.1175/JPO-D-17-0072.1

Keerthi, M. G., M. Lengaigne, M. Levy, J. Vialard, V. Parvathi, C. de Boyer Montégut, C. Ethé, O. Aumont, I. Suresh, V. P. Akhil, and P. M. Muraleedharan, 2017: Physical control of interannual variations of the winter chlorophyll bloom in the northern Arabian Sea. *Biogeosciences*, **14,** 3615-3632, https://doi.org/10.5194/bg-14-3615-2017

Kenchington, E., I. Yashayaev, O. S. Tendal, and H. Jørgensbye, 2017: Water mass characteristics and associated fauna of a recently discovered Lophelia pertusa (Scleractinia: Anthozoa) reef in Greenlandic waters. *Polar Biology*, **40,** 321-337, http://dx.doi.org/10.1007/s00300-016-1957-3

Kent, E. C., J. J. Kennedy, T. M. Smith, S. Hirahara, B. Huang, A. Kaplan, D. E. Parker, C. P. Atkinson, D. I. Berry, G. Carella, Y. Fukuda, M. Ishii, P. D. Jones, F. Lindgren, C. J. Merchant, S. Morak-Bozzo, N. A. Rayner, V. Venema, S. Yasui, and H.-M. Zhang, 2017: A Call for New Approaches to Quantifying Biases in Observations of Sea Surface Temperature. *Bulletin of the American Meteorological Society*, **98,** 1601-1616, https://doi.org/10.1175/BAMS-D-15-00251.1

Kessouri, F., C. Ulses, C. Estournel, P. Marsaleix, T. Severin, M. Pujo-Pay, J. Caparros, P. Raimbault, O. Pasqueron de Fommervault, F. D'Ortenzio, V. Taillandier, P. Testor, and P. Conan, 2017: Nitrogen and Phosphorus Budgets in the Northwestern Mediterranean Deep Convection Region. *Journal of Geophysical Research: Oceans*, **122,** 9429-9454, http://dx.doi.org/10.1002/2016JC012665

Kido, S. and T. Tozuka, 2017: Salinity Variability Associated with the Positive Indian Ocean Dipole and Its Impact on the Upper Ocean Temperature. *Journal of Climate*, **30,** 7885-7907, https://doi.org/10.1175/JCLI-D-17-0133.1

Kidwell, A., L. Han, Y.-H. Jo, and X.-H. Yan, 2017: Decadal Western Pacific Warm Pool Variability: A Centroid and Heat Content Study. *Scientific Reports*, **7,** 13141, https://doi.org/10.1038/s41598-017-13351-x

Kim, D., Y. Choi, T.-W. Kim, and G.-H. Park, 2017: Recent increase in surface fCO2 in the western subtropical North Pacific. *Ocean Science Journal*, **52,** 329-335, https://doi.org/10.1007/s12601-017-0030-7

Kim, D., J.-H. Jeong, T.-W. Kim, J. H. Noh, H. J. Kim, D. H. Choi, E. Kim, and D. Jeon, 2017: The reduction in the biomass of cyanobacterial N(2) fixer and the biological pump in the Northwestern Pacific Ocean. *Scientific Reports*, **7,** 41810, http://dx.doi.org/10.1038/srep41810

Kleinherenbrink, M., R. Riva, T. Frederikse, M. Merrifield, and Y. Wada, 2017: Trends and

interannual variability of mass and steric sea level in the Tropical Asian Seas. *Journal of Geophysical Research: Oceans*, **122,** 6254-6276, http://dx.doi.org/10.1002/2017JC012792

Kobayashi, T., H. Kawamura, K. Fujii, and Y. Kamidaira, 2017: Development of a short-term emergency assessment system of the marine environmental radioactivity around Japan. *Journal of Nuclear Science and Technology*, **54,** 609-616, http://dx.doi.org/10.1080/00223131.2017.1286272

Koelling, J., D. W. R. Wallace, U. Send, and J. Karstensen, 2017: Intense oceanic uptake of oxygen during 2014–2015 winter convection in the Labrador Sea. *Geophysical Research Letters*, **44,** 7855-7864, http://dx.doi.org/10.1002/2017GL073933

KOKKINI, Z., R. GERIN, P. M. POULAIN, E. MAURI, Z. PASARIĆ, I. JANEKOVIĆ, M. PASARIĆ, H. MIHANOVIĆ, and I. VILIBIĆ, 2017: A multiplatform investigation of Istrian Front dynamics (north Adriatic Sea) in winter 2015. *Mediterranean Marine Science*, **18,** 11, http://dx.doi.org/10.12681/mms.1895

Kouketsu, S., S. Osafune, Y. Kumamoto, and H. Uchida, 2017: Eastward salinity anomaly propagation in the intermediate layer of the North Pacific. *Journal of Geophysical Research: Oceans*, **122,** 1590-1607, http://dx.doi.org/10.1002/2016JC012118

Krishnamurti, T. N., S. Jana, R. Krishnamurti, V. Kumar, R. Deepa, F. Papa, M. A. Bourassa, and M. M. Ali, 2017: Monsoonal intraseasonal oscillations in the ocean heat content over the surface layers of the Bay of Bengal. *Journal of Marine Systems*, **167,** 19-32, http://doi.org/10.1016/j.jmarsys.2016.11.002

Kumar, A., C. Wen, Y. Xue, and H. Wang, 2017: Sensitivity of Subsurface Ocean Temperature Variability to Specification of Surface Observations in the Context of ENSO. *Monthly Weather Review*, **145,** 1437-1446, http://dx.doi.org/10.1175/mwr-d-16-0432.1

Kunze, E., 2017: Internal-Wave-Driven Mixing: Global Geography and Budgets. *Journal of Physical Oceanography*, **47,** 1325-1345, http://dx.doi.org/10.1175/jpo-d-16-0141.1

Kuo, Y.-C., Z.-W. Zheng, Q. Zheng, G. Gopalakrishnan, C.-Y. Lee, S.-W. Chern, and Y.-H. Chao, 2017: Typhoon induced summer cold shock advected by Kuroshio off eastern Taiwan. *Ocean Modelling*, **109,** 1-10, http://dx.doi.org/10.1016/j.ocemod.2016.11.003

Kurapov, A. L., N. A. Pelland, and D. L. Rudnick, 2017: Seasonal and interannual variability in along-slope oceanic properties off the US West Coast: Inferences from a high-resolution regional model. *Journal of Geophysical Research: Oceans*, **122,** 5237-5259, http://dx.doi.org/10.1002/2017JC012721

L'Heureux, M. L., K. Takahashi, A. B. Watkins, A. G. Barnston, E. J. Becker, T. E. D. Liberto, F. Gamble, J. Gottschalck, M. S. Halpert, B. Huang, K. Mosquera-Vásquez, and A. T. Wittenberg, 2017: Observing and Predicting the 2015/16 El Niño. *Bulletin of the American Meteorological Society*, **98,** 1363-1382, https://doi.org/10.1175/BAMS-D-16-0009.1

Lacour, L., M. Ardyna, K. F. Stec, H. Claustre, L. Prieur, A. Poteau, M. R. D'Alcala, and D. Iudicone, 2017: Unexpected winter phytoplankton blooms in the North Atlantic subpolar gyre. *Nature Geoscience*, **10,** 836, http://dx.doi.org/10.1038/ngeo3035

Langlais, C. E., A. Lenton, R. Matear, D. Monselesan, B. Legresy, E. Cougnon, and S. Rintoul, 2017: Stationary Rossby waves dominate subduction of anthropogenic carbon in the Southern Ocean. *Scientific Reports*, **7,** 17076,

https://doi.org/10.1038/s41598-017-17292-3
Le Bras, I. A., I. Yashayaev, and J. M. Toole, 2017: Tracking Labrador Sea Water property signals along the Deep Western Boundary Current. *Journal of Geophysical Research: Oceans*, **122,** 5348-5366, http://dx.doi.org/10.1002/2017JC012921
Lebeaupin Brossier, C., F. Léger, H. Giordani, J. Beuvier, M.-N. Bouin, V. Ducrocq, and N. Fourrié, 2017: Dense water formation in the north-western Mediterranean area during HyMeX-SOP2 in 1/36° ocean simulations: Ocean-atmosphere coupling impact. *Journal of Geophysical Research: Oceans*, **122,** 5749-5773, http://dx.doi.org/10.1002/2016JC012526
Lecomte, O., H. Goosse, T. Fichefet, C. de Lavergne, A. Barthélemy, and V. Zunz, 2017: Vertical ocean heat redistribution sustaining sea-ice concentration trends in the Ross Sea. *Nature Communications*, **8,** 258, https://doi.org/10.1038/s41467-017-00347-4
Lehahn, Y., I. Koren, S. Sharoni, F. d'Ovidio, A. Vardi, and E. Boss, 2017: Dispersion/dilution enhances phytoplankton blooms in low-nutrient waters. *Nature Communications*, **8,** 14868, http://dx.doi.org/10.1038/ncomms14868
Li, C., Z. Zhang, W. Zhao, and J. Tian, 2017: A statistical study on the subthermocline submesoscale eddies in the northwestern Pacific Ocean based on Argo data. *Journal of Geophysical Research: Oceans*, **122,** 3586-3598, http://dx.doi.org/10.1002/2016JC012561
Li, D., T.-L. Chiang, S.-J. Kao, Y.-C. Hsin, L.-W. Zheng, J.-Y. T. Yang, S.-C. Hsu, C.-R. Wu, and M. Dai, 2017: Circulation and oxygenation of the glacial South China Sea. *Journal of Asian Earth Sciences*, **138,** 387-398, http://doi.org/10.1016/j.jseaes.2017.02.017
Li, F., M. S. Lozier, and W. E. Johns, 2017: Calculating the Meridional Volume, Heat, and Freshwater Transports from an Observing System in the Subpolar North Atlantic: Observing System Simulation Experiment. *Journal of Atmospheric and Oceanic Technology*, **34,** 1483-1500, http://dx.doi.org/10.1175/jtech-d-16-0247.1
Li, H., F. Xu, W. Zhou, D. Wang, J. S. Wright, Z. Liu, and Y. Lin, 2017: Development of a global gridded Argo data set with Barnes successive corrections. *Journal of Geophysical Research: Oceans*, **122,** 866-889, http://dx.doi.org/10.1002/2016JC012285
Li, L., R. W. Schmitt, and C. C. Ummenhofer, 2017: The role of the subtropical North Atlantic water cycle in recent US extreme precipitation events. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3685-y
Li, Q. and B. Fox-Kemper, 2017: Assessing the Effects of Langmuir Turbulence on the Entrainment Buoyancy Flux in the Ocean Surface Boundary Layer. *Journal of Physical Oceanography*, **47,** 2863-2886, https://doi.org/10.1175/JPO-D-17-0085.1
Li, Q., B. Fox-Kemper, Ø. Breivik, and A. Webb, 2017: Statistical models of global Langmuir mixing. *Ocean Modelling*, **113,** 95-114, http://doi.org/10.1016/j.ocemod.2017.03.016
Li, Q. and S. Lee, 2017: A Mechanism of Mixed Layer Formation in the Indo–Western Pacific Southern Ocean: Preconditioning by an Eddy-Driven Jet-Scale Overturning Circulation. *Journal of Physical Oceanography*, **47,** 2755-2772, https://doi.org/10.1175/JPO-D-17-0006.1
Li, Y., W. Han, M. Ravichandran, W. Wang, T. Shinoda, and T. Lee, 2017: Bay of Bengal salinity stratification and Indian summer monsoon intraseasonal oscillation: 1. Intraseasonal variability and causes. *Journal of Geophysical Research: Oceans*, **122,** 4291-4311,

http://dx.doi.org/10.1002/2017JC012691
Li, Y., W. Han, W. Wang, M. Ravichandran, T. Lee, and T. Shinoda, 2017: Bay of Bengal salinity stratification and Indian summer monsoon intraseasonal oscillation: 2. Impact on SST and convection. *Journal of Geophysical Research: Oceans*, **122,** 4312-4328, http://dx.doi.org/10.1002/2017JC012692
Li, Y. and R. Toumi, 2017: A balanced Kalman filter ocean data assimilation system with application to the South Australian Sea. *Ocean Modelling*, **116,** 159-172, http://dx.doi.org/10.1016/j.ocemod.2017.06.007
Li, Z.-L. and P. Wen, 2017: Comparison between the response of the Northwest Pacific Ocean and the South China Sea to Typhoon Megi (2010). *Advances in Atmospheric Sciences*, **34,** 79-87, http://dx.doi.org/10.1007/s00376-016-6027-9
Liang, X., C. G. Piecuch, R. M. Ponte, G. Forget, C. Wunsch, and P. Heimbach, 2017: Change of the Global Ocean Vertical Heat Transport over 1993–2010. *Journal of Climate*, **30,** 5319-5327, https://doi.org/10.1175/JCLI-D-16-0569.1
Liang, X., M. Spall, and C. Wunsch, 2017: Global Ocean Vertical Velocity From a Dynamically Consistent Ocean State Estimate. *Journal of Geophysical Research: Oceans*, **122,** 8208-8224, http://dx.doi.org/10.1002/2017JC012985
Liao, X., Y. Du, H. Zhan, T. Wang, and M. Feng, 2017: Wintertime Phytoplankton Blooms in the Western Equatorial Indian Ocean Associated With the Madden-Julian Oscillation. *Journal of Geophysical Research: Oceans*, **122,** 9855-9869, http://dx.doi.org/10.1002/2017JC013203
Lim, Y.-K., R. M. Kovach, S. Pawson, and G. Vernieres, 2017: The 2015/16 El Niño Event in Context of the MERRA-2 Reanalysis: A Comparison of the Tropical Pacific with 1982/83 and 1997/98. *Journal of Climate*, **30,** 4819-4842, http://dx.doi.org/10.1175/jcli-d-16-0800.1
Lin, S., W.-Z. Zhang, S.-P. Shang, and H.-S. Hong, 2017: Ocean response to typhoons in the western North Pacific: Composite results from Argo data. *Deep Sea Research Part I: Oceanographic Research Papers*, **123,** 62-74, http://dx.doi.org/10.1016/j.dsr.2017.03.007
Liu, C., S.-P. Xie, P. Li, L. Xu, and W. Gao, 2017: Climatology and decadal variations in multicore structure of the North Pacific subtropical mode water. *Journal of Geophysical Research: Oceans*, **122,** 7506-7520, http://dx.doi.org/10.1002/2017JC013071
Liu, L., S. Peng, and R. X. Huang, 2017: Reconstruction of ocean's interior from observed sea surface information. *Journal of Geophysical Research: Oceans*, **122,** 1042-1056, http://dx.doi.org/10.1002/2016JC011927
Liu, S.-S., L. Sun, Q. Wu, and Y.-J. Yang, 2017: The responses of cyclonic and anticyclonic eddies to typhoon forcing: The vertical temperature-salinity structure changes associated with the horizontal convergence/divergence. *Journal of Geophysical Research: Oceans*, **122,** 4974-4989, http://dx.doi.org/10.1002/2017JC012814
Liu, X., T. Wu, S. Yang, T. Li, W. Jie, L. Zhang, Z. Wang, X. Liang, Q. Li, Y. Cheng, H. Ren, Y. Fang, and S. Nie, 2017: MJO prediction using the sub-seasonal to seasonal forecast model of Beijing Climate Center. *Climate Dynamics*, **48,** 3283-3307, http://dx.doi.org/10.1007/s00382-016-3264-7

Liu, Z., X. Chen, C. Sun, X. Wu, and S. Lu, 2017: A comparison of Argo nominal surface and near-surface temperature for validation of AMSR-E SST. *Chinese Journal of Oceanology and Limnology*, **35,** 712-721, http://dx.doi.org/10.1007/s00343-017-5330-3

Liu, Z., Q. Lian, F. Zhang, L. Wang, M. Li, X. Bai, J. Wang, and F. Wang, 2017: Weak Thermocline Mixing in the North Pacific Low-Latitude Western Boundary Current System. *Geophysical Research Letters*, **44,** 10,530-10,539, http://dx.doi.org/10.1002/2017GL075210

Liu, Z., X. Wu, J. Xu, H. Li, S. Lu, C. Sun, and M. Cao, 2017: China Argo project: progress in China Argo ocean observations and data applications. *Acta Oceanologica Sinica***,** 1-11, http://dx.doi.org/10.1007/s13131-017-1035-x

Logan, P. D. and G. C. Johnson, 2017: Zonal evolution of Alaskan Stream structure and transport quantified with Argo data. *Journal of Geophysical Research: Oceans*, **122,** 821-833, http://dx.doi.org/10.1002/2016JC012302

Lopez, H., G. Goni, and S. Dong, 2017: A reconstructed South Atlantic Meridional Overturning Circulation time series since 1870. *Geophysical Research Letters*, **44,** 3309-3318, http://dx.doi.org/10.1002/2017GL073227

Lozier, M. S., S. Bacon, A. S. Bower, S. A. Cunningham, M. F. d. Jong, L. d. Steur, B. deYoung, J. Fischer, S. F. Gary, B. J. W. Greenan, P. Heimbach, N. P. Holliday, L. Houpert, M. E. Inall, W. E. Johns, H. L. Johnson, J. Karstensen, F. Li, X. Lin, N. Mackay, D. P. Marshall, H. Mercier, P. G. Myers, R. S. Pickart, H. R. Pillar, F. Straneo, V. Thierry, R. A. Weller, R. G. Williams, C. Wilson, J. Yang, J. Zhao, and J. D. Zika, 2017: Overturning in the Subpolar North Atlantic Program: A New International Ocean Observing System. *Bulletin of the American Meteorological Society*, **98,** 737-752, http://dx.doi.org/10.1175/bams-d-16-0057.1

Lu, W., X.-H. Yan, L. Han, and Y. Jiang, 2017: One-dimensional ocean model with three types of vertical velocities: a case study in the South China Sea. *Ocean Dynamics*, **67,** 253-262, http://dx.doi.org/10.1007/s10236-016-1029-9

Luecke, C. A., B. K. Arbic, S. L. Bassette, J. G. Richman, J. F. Shriver, M. H. Alford, O. M. Smedstad, P. G. Timko, D. S. Trossman, and A. J. Wallcraft, 2017: The Global Mesoscale Eddy Available Potential Energy Field in Models and Observations. *Journal of Geophysical Research: Oceans*, **122,** 9126-9143, http://dx.doi.org/10.1002/2017JC013136

Lyu, K., X. Zhang, J. A. Church, J. Hu, and J.-Y. Yu, 2017: Distinguishing the Quasi-Decadal and Multidecadal Sea Level and Climate Variations in the Pacific: Implications for the ENSO-Like Low-Frequency Variability. *Journal of Climate*, **30,** 5097-5117, https://doi.org/10.1175/JCLI-D-17-0004.1

MacIntosh, C. R., C. J. Merchant, and K. von Schuckmann, 2017: Uncertainties in Steric Sea Level Change Estimation During the Satellite Altimeter Era: Concepts and Practices. *Surveys in Geophysics*, **38,** 59-87, http://dx.doi.org/10.1007/s10712-016-9387-x

MacKinnon, J. A., Z. Zhao, C. B. Whalen, A. F. Waterhouse, D. S. Trossman, O. M. Sun, L. C. S. Laurent, H. L. Simmons, K. Polzin, R. Pinkel, A. Pickering, N. J. Norton, J. D. Nash, R. Musgrave, L. M. Merchant, A. V. Melet, B. Mater, S. Legg, W. G. Large, E. Kunze, J. M. Klymak, M. Jochum, S. R. Jayne, R. W. Hallberg, S. M. Griffies, S. Diggs, G.

Danabasoglu, E. P. Chassignet, M. C. Buijsman, F. O. Bryan, B. P. Briegleb, A. Barna, B. K. Arbic, J. K. Ansong, and M. H. Alford, 2017: Climate Process Team on Internal Wave–Driven Ocean Mixing. *Bulletin of the American Meteorological Society*, **98,** 2429-2454, https://doi.org/10.1175/BAMS-D-16-0030.1

Magalhães, F. C., J. L. L. Azevedo, and L. R. Oliveira, 2017: Energetics of eddy-mean flow interactions in the Brazil current between 20°S and 36°S. *Journal of Geophysical Research: Oceans*, **122,** 6129-6146, http://dx.doi.org/10.1002/2016JC012609

Mahapatra, D. K. and A. D. Rao, 2017: Redistribution of low-salinity pools off east coast of India during southwest monsoon season. *Estuarine, Coastal and Shelf Science*, **184,** 21-29, http://dx.doi.org/10.1016/j.ecss.2016.10.037

Mancero-Mosquera, I., P. M. Poulain, R. Gerin, E. Mauri, D. Hayes, P. Testor, and L. Mortier, 2017: Analysis of frequency content of temperature glider data via Fourier and wavelet transforms. *Bollettino di Geofisica Teorica ed Applicata*, **58,** 137-156,

Marsh, R., I. D. Haigh, S. A. Cunningham, M. E. Inall, M. Porter, and B. I. Moat, 2017: Large-scale forcing of the European Slope Current and associated inflows to the North Sea. *Ocean Science*, **13,** 315-335, https://doi.org/10.5194/os-13-315-2017

Masina, S., A. Storto, N. Ferry, M. Valdivieso, K. Haines, M. Balmaseda, H. Zuo, M. Drevillon, and L. Parent, 2017: An ensemble of eddy-permitting global ocean reanalyses from the MyOcean project. *Climate Dynamics*, **49,** 813-841, https://doi.org/10.1007/s00382-015-2728-5

Mason, E., A. Pascual, P. Gaube, S. Ruiz, J. L. Pelegrí, and A. Delepoulle, 2017: Subregional characterization of mesoscale eddies across the Brazil-Malvinas Confluence. *Journal of Geophysical Research: Oceans*, **122,** 3329-3357, http://dx.doi.org/10.1002/2016JC012611

Mastropole, D., R. S. Pickart, H. Valdimarsson, K. Våge, K. Jochumsen, and J. Girton, 2017: On the hydrography of Denmark Strait. *Journal of Geophysical Research: Oceans*, **122,** 306-321, http://dx.doi.org/10.1002/2016JC012007

Maúre, E. R., J. Ishizaka, C. Sukigara, Y. Mino, H. Aiki, T. Matsuno, H. Tomita, J. I. Goes, and H. R. Gomes, 2017: Mesoscale Eddies Control the Timing of Spring Phytoplankton Blooms: A Case Study in the Japan Sea. *Geophysical Research Letters*, **44,** 11,115-11,124, http://dx.doi.org/10.1002/2017GL074359

Mayot, N., F. D'Ortenzio, V. Taillandier, L. Prieur, O. P. de Fommervault, H. Claustre, A. Bosse, P. Testor, and P. Conan, 2017: Physical and Biogeochemical Controls of the Phytoplankton Blooms in North Western Mediterranean Sea: A Multiplatform Approach Over a Complete Annual Cycle (2012–2013 DEWEX Experiment). *Journal of Geophysical Research: Oceans*, **122,** 9999-10019, http://dx.doi.org/10.1002/2016JC012052

Mayot, N., F. D'Ortenzio, J. Uitz, B. Gentili, J. Ras, V. Vellucci, M. Golbol, D. Antoine, and H. Claustre, 2017: Influence of the Phytoplankton Community Structure on the Spring and Annual Primary Production in the Northwestern Mediterranean Sea. *Journal of Geophysical Research: Oceans*, **122,** 9918-9936, http://dx.doi.org/10.1002/2016JC012668

Maze, G., H. Mercier, R. Fablet, P. Tandeo, M. Lopez Radcenco, P. Lenca, C. Feucher, and C. Le Goff, 2017: Coherent heat patterns revealed by unsupervised classification of

Argo temperature profiles in the North Atlantic Ocean. *Progress in Oceanography*, **151,** 275-292, http://doi.org/10.1016/j.pocean.2016.12.008

Mecking, J. V., S. S. Drijfhout, L. C. Jackson, and M. B. Andrews, 2017: The effect of model bias on Atlantic freshwater transport and implications for AMOC bi-stability. *Tellus A: Dynamic Meteorology and Oceanography*, **69,** 1299910, http://dx.doi.org/10.1080/16000870.2017.1299910

Medhaug, I., M. B. Stolpe, E. M. Fischer, and R. Knutti, 2017: Reconciling controversies about the 'global warming hiatus'. *Nature*, **545,** 41-47, http://dx.doi.org/10.1038/nature22315

Meinen, C. S., S. L. Garzoli, R. C. Perez, E. Campos, A. R. Piola, M. P. Chidichimo, S. Dong, and O. T. Sato, 2017: Characteristics and causes of Deep Western Boundary Current transport variability at 34.5° S during 2009–2014. *Ocean Science*, **13,** 175-194, https://doi.org/10.5194/os-13-175-2017

Meissner, T., L. Ricciardulli, and F. J. Wentz, 2017: Capability of the SMAP Mission to Measure Ocean Surface Winds in Storms. *Bulletin of the American Meteorological Society*, **98,** 1660-1677, https://doi.org/10.1175/BAMS-D-16-0052.1

Melzer, B. A. and B. Subrahmanyam, 2017: Decadal changes in salinity in the oceanic subtropical gyres. *Journal of Geophysical Research: Oceans*, **122,** 336-354, http://dx.doi.org/10.1002/2016JC012243

Melzer, B. A. and B. Subrahmanyam, 2017: Evaluation of GRACE Mascon Gravity Solution in Relation to Interannual Oceanic Water Mass Variations. *IEEE Transactions on Geoscience and Remote Sensing*, **55,** 907-914, http://dx.doi.org/10.1109/TGRS.2016.2616760

Meredith, M. P., J. L. Sarmiento, K. S. Johnson, and E. L. McDonagh, 2017: Advances in Understanding the Souther Ocean's Role in Global Climate: The Orchestra and SOCCOM Programs in the State of the Climate in 2016. *Bull. Am. Meteorol. Soc.*, **98,** S168-S169, https://doi.org/10.1175/2017BAMSStateoftheClimate.1

Meyer, I., L. Braby, M. Krug, and B. Backeberg, 2017: Mapping the Ocean Current Strength and Persistence in the Agulhas to Inform Marine Energy Development. *Marine Renewable Energy: Resource Characterization and Physical Effects*, Z. Yang and A. Copping, Eds., Springer International Publishing, 179-215, https://doi.org/10.1007/978-3-319-53536-4_8.

Meyssignac, B., C. G. Piecuch, C. J. Merchant, M.-F. Racault, H. Palanisamy, C. MacIntosh, S. Sathyendranath, and R. Brewin, 2017: Causes of the Regional Variability in Observed Sea Level, Sea Surface Temperature and Ocean Colour Over the Period 1993–2011. *Surveys in Geophysics*, **38,** 187-215, http://dx.doi.org/10.1007/s10712-016-9383-1

Mikaelyan, A. S., V. K. Chasovnikov, A. A. Kubryakov, and S. V. Stanichny, 2017: Phenology and drivers of the winter–spring phytoplankton bloom in the open Black Sea: The application of Sverdrup's hypothesis and its refinements. *Progress in Oceanography*, **151,** 163-176, http://doi.org/10.1016/j.pocean.2016.12.006

Mogensen, K. S., L. Magnusson, and J.-R. Bidlot, 2017: Tropical cyclone sensitivity to ocean coupling in the ECMWF coupled model. *Journal of Geophysical Research: Oceans*, **122,** 4392-4412, http://dx.doi.org/10.1002/2017JC012753

Mogollón, R. and P. H. R. Calil, 2017: On the effects of ENSO on ocean biogeochemistry in

the Northern Humboldt Current System (NHCS): A modeling study. *Journal of Marine Systems*, **172,** 137-159, https://doi.org/10.1016/j.jmarsys.2017.03.011

Monerie, P.-A., L. Coquart, É. Maisonnave, M.-P. Moine, L. Terray, and S. Valcke, 2017: Decadal prediction skill using a high-resolution climate model. *Climate Dynamics*, **49,** 3527-3550, https://doi.org/10.1007/s00382-017-3528-x

Moore, A. M., M. G. Jacox, W. J. Crawford, B. Laughlin, C. A. Edwards, and J. Fiechter, 2017: The impact of the ocean observing system on estimates of the California current circulation spanning three decades. *Progress in Oceanography*, **156,** 41-60, http://dx.doi.org/10.1016/j.pocean.2017.05.009

Morris, T., J. Hermes, L. Beal, M. du Plessis, C. Duncombe Rae, M. Gulekana, T. Lamont, S. Speich, M. Roberts, and I. ansorge, 2017: The importance of monitoring the Greater Agulhas Current and its inter-ocean exchanges using large mooring arrays. *South African Journal of Science*, **113**, http://dx.doi.org/10.17159/sajs.2017/20160330

Morrow, R. and E. Kestenare, 2017: 22-year surface salinity changes in the Seasonal Ice Zone near 140°E off Antarctica. *Journal of Marine Systems*, **175,** 46-62, https://doi.org/10.1016/j.jmarsys.2017.07.003

Mukhopadhyay, S., D. Shankar, S. G. Aparna, and A. Mukherjee, 2017: Observations of the sub-inertial, near-surface East India Coastal Current. *Continental Shelf Research*, **148,** 159-177, https://doi.org/10.1016/j.csr.2017.08.020

Nagano, A., T. Hasegawa, I. Ueki, and K. Ando, 2017: El Niño–Southern Oscillation-time scale covariation of sea surface salinity and freshwater flux in the western tropical and northern subtropical Pacific. *Geophysical Research Letters*, **44,** 6895-6903, http://dx.doi.org/10.1002/2017GL073573

Narvekar, J., J. R. D'Mello, S. Prasanna Kumar, P. Banerjee, V. Sharma, and P. Shenai-Tirodkar, 2017: Winter-time variability of the eastern Arabian Sea: A comparison between 2003 and 2013. *Geophysical Research Letters*, **44,** 6269-6277, http://dx.doi.org/10.1002/2017GL072965

Ngodock, H., M. Carrier, S. Smith, and I. Souopgui, 2017: Weak and Strong Constraints Variational Data Assimilation with the NCOM-4DVAR in the Agulhas Region Using the Representer Method. *Monthly Weather Review*, **145,** 1755-1764, http://dx.doi.org/10.1175/mwr-d-16-0264.1

Ohishi, S., T. Tozuka, and M. F. Cronin, 2017: Frontogenesis in the Agulhas Return Current Region Simulated by a High-Resolution CGCM. *Journal of Physical Oceanography*, **47,** 2691-2710, https://doi.org/10.1175/JPO-D-17-0038.1

Ok, H., Y. Noh, and Y. Choi, 2017: Influence of Pycnocline Smoothing and Subgrid-Scale Variability of Density Profiles on the Determination of Mixed Layer Depth. *Journal of Atmospheric and Oceanic Technology*, **34,** 2083-2101, https://doi.org/10.1175/JTECH-D-17-0016.1

Oka, E., S. Katsura, H. Inoue, A. Kojima, M. Kitamoto, T. Nakano, and T. Suga, 2017: Long-term change and variation of salinity in the western North Pacific subtropical gyre revealed by 50-year long observations along 137°E. *Journal of Oceanography*, **73,** 479-490, https://doi.org/10.1007/s10872-017-0416-2

Olita, A., A. Capet, M. Claret, A. Mahadevan, P. M. Poulain, A. Ribotti, S. Ruiz, J. Tintoré, A. Tovar-Sánchez, and A. Pascual, 2017: Frontal dynamics boost primary production in

the summer stratified Mediterranean sea. *Ocean Dynamics*, **67,** 767-782, https://doi.org/10.1007/s10236-017-1058-z

Oliver, E. C. J., J. A. Benthuysen, N. L. Bindoff, A. J. Hobday, N. J. Holbrook, C. N. Mundy, and S. E. Perkins-Kirkpatrick, 2017: The unprecedented 2015/16 Tasman Sea marine heatwave. *Nat Commun*, **8,** 16101, http://dx.doi.org/10.1038/ncomms16101

Olmedo, E., J. Martínez, A. Turiel, J. Ballabrera-Poy, and M. Portabella, 2017: Debiased non-Bayesian retrieval: A novel approach to SMOS Sea Surface Salinity. *Remote Sensing of Environment*, **193,** 103-126, http://dx.doi.org/10.1016/j.rse.2017.02.023

Olsen, A., 2017: Autonomous observing platform CO2 data shed new light on the Southern Ocean carbon cycle. *Global Biogeochemical Cycles*, **31,** 1032-1035, http://dx.doi.org/10.1002/2017GB005676

Organelli, E., M. Barbieux, H. Claustre, C. Schmechtig, A. Poteau, A. Bricaud, E. Boss, N. Briggs, G. Dall'Olmo, F. D'Ortenzio, E. Leymarie, A. Mangin, G. Obolensky, C. Penkerc'h, L. Prieur, C. Roesler, R. Serra, J. Uitz, and X. Xing, 2017: Two databases derived from BGC-Argo float measurements for marine biogeochemical and bio-optical applications. *Earth Syst. Sci. Data*, **9,** 861-880, https://doi.org/10.5194/essd-9-861-2017

Organelli, E., H. Claustre, A. Bricaud, M. Barbieux, J. Uitz, F. D'Ortenzio, and G. Dall'Olmo, 2017: Bio-optical anomalies in the world's oceans: An investigation on the diffuse attenuation coefficients for downward irradiance derived from Biogeochemical Argo float measurements. *Journal of Geophysical Research: Oceans*, **122,** 3543-3564, http://dx.doi.org/10.1002/2016JC012629

Ortega, P., E. Guilyardi, D. Swingedouw, J. Mignot, and S. Nguyen, 2017: Reconstructing extreme AMOC events through nudging of the ocean surface: a perfect model approach. *Climate Dynamics*, **49,** 3425-3441, https://doi.org/10.1007/s00382-017-3521-4

Oruba, L., S. Planes, G. Siu, Y. Chancerelle, and E. Dormy, 2017: Rapid Oceanic Response to Tropical Cyclone Oli (2010) over the South Pacific. *Journal of Physical Oceanography*, **47,** 471-483, http://dx.doi.org/10.1175/jpo-d-16-0205.1

Pabortsava, K., R. S. Lampitt, J. Benson, C. Crowe, R. McLachlan, F. A. C. Le Moigne, C. Mark Moore, C. Pebody, P. Provost, A. P. Rees, G. H. Tilstone, and E. M. S. Woodward, 2017: Carbon sequestration in the deep Atlantic enhanced by Saharan dust. *Nature Geosci*, **10,** 189-194, http://dx.doi.org/10.1038/ngeo2899

Paiva, P. M., J. Lugon Junior, A. N. Barreto, J. A. F. Silva, and A. J. Silva Neto, 2017: Comparing 3d and 2d computational modeling of an oil well blowout using MOHID platform - A case study in the Campos Basin. *Science of The Total Environment*, **595,** 633-641, http://dx.doi.org/10.1016/j.scitotenv.2017.04.007

Palmer, M. D., 2017: Reconciling Estimates of Ocean Heating and Earth's Radiation Budget. *Current Climate Change Reports*, **3,** 78-86, http://dx.doi.org/10.1007/s40641-016-0053-7

Palmer, M. D., C. D. Roberts, M. Balmaseda, Y.-S. Chang, G. Chepurin, N. Ferry, Y. Fujii, S. A. Good, S. Guinehut, K. Haines, F. Hernandez, A. Köhl, T. Lee, M. J. Martin, S. Masina, S. Masuda, K. A. Peterson, A. Storto, T. Toyoda, M. Valdivieso, G. Vernieres, O. Wang, and Y. Xue, 2017: Ocean heat content variability and change in an ensemble of

ocean reanalyses. *Climate Dynamics*, **49,** 909-930, https://doi.org/10.1007/s00382-015-2801-0

Pan, C., M. Jiang, F. R. Dalgleish, and J. K. Reed, 2017: Modeling the impacts of the Loop Current on circulation and water properties over the Pulley Ridge region on the Southwest Florida shelf. *Ocean Modelling*, **112,** 48-64, http://doi.org/10.1016/j.ocemod.2017.02.009

Pascual, A., S. Ruiz, A. Olita, C. Troupin, M. Claret, B. Casas, B. Mourre, P.-M. Poulain, A. Tovar-Sanchez, A. Capet, E. Mason, J. T. Allen, A. Mahadevan, and J. Tintoré, 2017: A Multiplatform Experiment to Unravel Meso- and Submesoscale Processes in an Intense Front (AlborEx). *Frontiers in Marine Science*, **4**, http://dx.doi.org/10.3389/fmars.2017.00039

Patil, K. and M. C. Deo, 2017: Prediction of daily sea surface temperature using efficient neural networks. *Ocean Dynamics*, **67,** 357-368, http://dx.doi.org/10.1007/s10236-017-1032-9

Pauthenet, E., F. Roquet, G. Madec, and D. Nerini, 2017: A Linear Decomposition of the Southern Ocean Thermohaline Structure. *Journal of Physical Oceanography*, **47,** 29-47, http://dx.doi.org/10.1175/JPO-D-16-0083.1

Pearson, B., B. Fox-Kemper, S. Bachman, and F. Bryan, 2017: Evaluation of scale-aware subgrid mesoscale eddy models in a global eddy-rich model. *Ocean Modelling*, **115,** 42-58, http://dx.doi.org/10.1016/j.ocemod.2017.05.007

Pellichero, V., J.-B. Sallée, S. Schmidtko, F. Roquet, and J.-B. Charrassin, 2017: The ocean mixed layer under Southern Ocean sea-ice: Seasonal cycle and forcing. *Journal of Geophysical Research: Oceans*, **122,** 1608-1633, http://dx.doi.org/10.1002/2016JC011970

Peterson, I., B. Greenan, D. Gilbert, and D. Hebert, 2017: Variability and wind forcing of ocean temperature and thermal fronts in the Slope Water region of the Northwest Atlantic. *Journal of Geophysical Research: Oceans*, **122,** 7325-7343, http://dx.doi.org/10.1002/2017JC012788

Phillipson, L. and R. Toumi, 2017: Impact of data assimilation on ocean current forecasts in the Angola Basin. *Ocean Modelling*, **114,** 45-58, http://dx.doi.org/10.1016/j.ocemod.2017.04.006

Piecuch, C. G., R. M. Ponte, C. M. Little, M. W. Buckley, and I. Fukumori, 2017: Mechanisms underlying recent decadal changes in subpolar North Atlantic Ocean heat content. *Journal of Geophysical Research: Oceans*, **122,** 7181-7197, http://dx.doi.org/10.1002/2017JC012845

Piron, A., V. Thierry, H. Mercier, and G. Caniaux, 2017: Gyre-scale deep convection in the subpolar North Atlantic Ocean during winter 2014–2015. *Geophysical Research Letters*, **44,** 1439-1447, http://dx.doi.org/10.1002/2016GL071895

Planton, Y., A. Voldoire, H. Giordani, and G. Caniaux, 2017: Main processes of the Atlantic cold tongue interannual variability. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3701-2

Pollmann, F., C. Eden, and D. Olbers, 2017: Evaluating the Global Internal Wave Model IDEMIX Using Finestructure Methods. *Journal of Physical Oceanography*, **47,** 2267-2289, https://doi.org/10.1175/JPO-D-16-0204.1

Poteau, A., E. Boss, and H. Claustre, 2017: Particulate concentration and seasonal dynamics in the mesopelagic ocean based on the backscattering coefficient measured with Biogeochemical-Argo floats. *Geophysical Research Letters*, **44,** 6933-6939, http://dx.doi.org/10.1002/2017GL073949

Pothapakula, P. K., K. K. Osuri, S. Pattanayak, U. C. Mohanty, S. Sil, and R. Nadimpalli, 2017: Observational perspective of SST changes during life cycle of tropical cyclones over Bay of Bengal. *Natural Hazards*, **88,** 1769-1787, https://doi.org/10.1007/s11069-017-2945-9

Powell, B. S., 2017: Quantifying How Observations Inform a Numerical Reanalysis of Hawaii. *Journal of Geophysical Research: Oceans*, **122,** 8427-8444, http://dx.doi.org/10.1002/2017JC012854

Pozo Buil, M. and E. Di Lorenzo, 2017: Decadal dynamics and predictability of oxygen and subsurface tracers in the California Current System. *Geophysical Research Letters*, **44,** 4204-4213, http://dx.doi.org/10.1002/2017GL072931

Prants, S. V., M. V. Budyansky, and M. Y. Uleysky, 2017: Lagrangian simulation and tracking of the mesoscale eddies contaminated by Fukushima-derived radionuclides. *Ocean Science*, **13,** 453-463, https://doi.org/10.5194/os-13-453-2017

Prants, S. V., M. Y. Uleysky, and M. V. Budyansky, 2017: Oceans from the Space and Operational Oceanography. *Lagrangian Oceanography: Large-scale Transport and Mixing in the Ocean*, Springer International Publishing, 83-94, https://doi.org/10.1007/978-3-319-53022-2_3.

Qu, T. and S. Gao, 2017: Resurfacing of South Pacific Tropical Water in the Equatorial Pacific and Its Variability Associated with ENSO. *Journal of Physical Oceanography*, **47,** 1095-1106, http://dx.doi.org/10.1175/jpo-d-16-0078.1

Raj, R. P., 2017: Surface velocity estimates of the North Indian Ocean from satellite gravity and altimeter missions. *International Journal of Remote Sensing*, **38,** 296-313, http://dx.doi.org/10.1080/01431161.2016.1266106

Rao, J. and R. Ren, 2017: Parallel comparison of the 1982/83, 1997/98 and 2015/16 super El Niños and their effects on the extratropical stratosphere. *Advances in Atmospheric Sciences*, **34,** 1121-1133, https://doi.org/10.1007/s00376-017-6260-x

Rao, R. R. and S. S. V. S. Ramakrishna, 2017: Observed seasonal and interannual variability of the near-surface thermal structure of the Arabian Sea Warm Pool. *Dynamics of Atmospheres and Oceans*, **78,** 121-136, http://dx.doi.org/10.1016/j.dynatmoce.2017.03.001

Reale, M., S. Salon, A. Crise, R. Farneti, R. Mosetti, and G. Sannino, 2017: Unexpected Covariant Behavior of the Aegean and Ionian Seas in the Period 1987–2008 by Means of a Nondimensional Sea Surface Height Index. *Journal of Geophysical Research: Oceans*, **122,** 8020-8033, http://dx.doi.org/10.1002/2017JC012983

Reddy, L. S., S. P. Vighneshwar, and B. Ravikiran, 2017: PSNM: An Algorithm for Detecting Duplicates in Oceanographic Data. *Computer Communication, Networking and Internet Security: Proceedings of IC3T 2016*, S. C. Satapathy, V. Bhateja, K. S. Raju, and B. Janakiramaiah, Eds., Springer Singapore, 291-297, https://doi.org/10.1007/978-981-10-3226-4_29.

Rembauville, M., N. Briggs, M. Ardyna, J. Uitz, P. Catala, C. Penkerc'h, A. Poteau, H. Claustre,

and S. Blain, 2017: Plankton Assemblage Estimated with BGC-Argo Floats in the Southern Ocean: Implications for Seasonal Successions and Particle Export. *Journal of Geophysical Research: Oceans*, **122,** 8278-8292, http://dx.doi.org/10.1002/2017JC013067

Rhein, M., R. Steinfeldt, D. Kieke, I. Stendardo, and I. Yashayaev, 2017: Ventilation variability of Labrador Sea Water and its impact on oxygen and anthropogenic carbon: a review. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **375**, http://dx.doi.org/10.1098/rsta.2016.0321

Roberts, C. D., M. D. Palmer, R. P. Allan, D. G. Desbruyeres, P. Hyder, C. Liu, and D. Smith, 2017: Surface flux and ocean heat transport convergence contributions to seasonal and interannual variations of ocean heat content. *Journal of Geophysical Research: Oceans*, **122,** 726-744, http://dx.doi.org/10.1002/2016JC012278

Roesler, C., J. Uitz, H. Claustre, E. Boss, X. Xing, E. Organelli, N. Briggs, A. Bricaud, C. Schmechtig, A. Poteau, F. D'Ortenzio, J. Ras, S. Drapeau, N. Haëntjens, and M. Barbieux, 2017: Recommendations for obtaining unbiased chlorophyll estimates from in situ chlorophyll fluorometers: A global analysis of WET Labs ECO sensors. *Limnology and Oceanography: Methods*, **15,** 572-585, https://doi.org/10.1002/lom3.10185

Rossby, T., G. Reverdin, L. Chafik, and H. Søiland, 2017: A direct estimate of poleward volume, heat, and freshwater fluxes at 59.5°N between Greenland and Scotland. *Journal of Geophysical Research: Oceans*, **122,** 5870-5887, http://dx.doi.org/10.1002/2017JC012835

Rosso, I., M. R. Mazloff, A. Verdy, and L. D. Talley, 2017: Space and time variability of the Southern Ocean carbon budget. *Journal of Geophysical Research: Oceans*, **122,** 7407-7432, http://dx.doi.org/10.1002/2016JC012646

Rudzin, J. E., L. K. Shay, B. Jaimes, and J. K. Brewster, 2017: Upper ocean observations in eastern Caribbean Sea reveal barrier layer within a warm core eddy. *Journal of Geophysical Research: Oceans*, **122,** 1057-1071, http://dx.doi.org/10.1002/2016JC012339

Rykova, T., P. R. Oke, and D. A. Griffin, 2017: A comparison of the structure, properties, and water mass composition of quasi-isotropic eddies in western boundary currents in an eddy-resolving ocean model. *Ocean Modelling*, **114,** 1-13, http://dx.doi.org/10.1016/j.ocemod.2017.03.013

Sakov, P. and P. Sandery, 2017: An adaptive quality control procedure for data assimilation. *Tellus A: Dynamic Meteorology and Oceanography*, **69,** 1318031, http://dx.doi.org/10.1080/16000870.2017.1318031

Sánchez-Román, A., S. Ruiz, A. Pascual, B. Mourre, and S. Guinehut, 2017: On the mesoscale monitoring capability of Argo floats in the Mediterranean Sea. *Ocean Science*, **13,** 223-234, http://dx.doi.org/10.5194/os-13-223-2017

Sandery, P. A. and P. Sakov, 2017: Ocean forecasting of mesoscale features can deteriorate by increasing model resolution towards the submesoscale. *Nature Communications*, **8,** 1566, https://doi.org/10.1038/s41467-017-01595-0

Satyanarayana Raju, T., T. V. S. Udaya Bhaskar, J. Pavan Kumar, and K. S. Deepthi, 2017: Detecting and Correcting the Degradations of Sensors on Argo Floats Using Artificial

Neural Networks. Singapore, Springer Singapore, 299-308, https://doi.org/10.1007/978-981-10-3226-4_30

Sauzède, R., H. C. Bittig, H. Claustre, O. Pasqueron de Fommervault, J.-P. Gattuso, L. Legendre, and K. S. Johnson, 2017: Estimates of Water-Column Nutrient Concentrations and Carbonate System Parameters in the Global Ocean: A Novel Approach Based on Neural Networks. *Frontiers in Marine Science*, **4**, https://doi.org/10.3389/fmars.2017.00128

Schallenberg, C., A. R. S. Ross, A. B. Davidson, G. M. Stewart, and J. T. Cullen, 2017: Temporal variability of dissolved iron species in the mesopelagic zone at Ocean Station PAPA. *Journal of Marine Systems*, **172,** 128-136, http://doi.org/10.1016/j.jmarsys.2017.03.006

Scharffenberg, M. G., A. Köhl, and D. Stammer, 2017: Testing the Quality of Sea-Level Data Using the GECCO Adjoint Assimilation Approach. *Surveys in Geophysics*, **38,** 349-383, http://dx.doi.org/10.1007/s10712-016-9401-3

Schemm, S., A. Nummelin, N. G. Kvamstø, and Ø. Breivik, 2017: The Ocean Version of the Lagrangian Analysis Tool LAGRANTO. *Journal of Atmospheric and Oceanic Technology*, **34,** 1723-1741, https://doi.org/10.1175/JTECH-D-16-0198.1

Schönau, M. C. and D. L. Rudnick, 2017: Mindanao Current and Undercurrent: Thermohaline Structure and Transport from Repeat Glider Observations. *Journal of Physical Oceanography*, **47,** 2055-2075, https://doi.org/10.1175/JPO-D-16-0274.1

Seidov, D., A. Mishonov, J. Reagan, and R. Parsons, 2017: Multidecadal variability and climate shift in the North Atlantic Ocean. *Geophysical Research Letters*, **44,** 4985-4993, http://dx.doi.org/10.1002/2017GL073644

Sérazin, G., A. Jaymond, S. Leroux, T. Penduff, L. Bessières, W. Llovel, B. Barnier, J.-M. Molines, and L. Terray, 2017: A global probabilistic study of the ocean heat content low-frequency variability: Atmospheric forcing versus oceanic chaos. *Geophysical Research Letters*, **44,** 5580-5589, http://dx.doi.org/10.1002/2017GL073026

Sévellec, F. and A. V. Fedorov, 2017: Predictability and Decadal Variability of the North Atlantic Ocean State Evaluated from a Realistic Ocean Model. *Journal of Climate*, **30,** 477-498, http://dx.doi.org/10.1175/JCLI-D-16-0323.1

Sévellec, F., A. C. d. Verdiére, and M. Ollitrault, 2017: Evolution of Intermediate Water Masses Based on Argo Float Displacements. *Journal of Physical Oceanography*, **47,** 1569-1586, http://dx.doi.org/10.1175/jpo-d-16-0182.1

Seyfried, L., P. Marsaleix, E. Richard, and C. Estournel, 2017: Modelling deep-water formation in the north-west Mediterranean Sea with a new air–sea coupled model: sensitivity to turbulent flux parameterizations. *Ocean Sci.*, **13,** 1093-1112, https://doi.org/10.5194/os-13-1093-2017

Sgubin, G., D. Swingedouw, S. Drijfhout, Y. Mary, and A. Bennabi, 2017: Abrupt cooling over the North Atlantic in modern climate models. *Nat Commun*, **8**, http://dx.doi.org/10.1038/ncomms14375

Shaffrey, L. C., et al. (2017), Decadal predictions with the HiGEM high resolution global coupled climate model: description and basic evaluation, *Climate Dynamics*, *48*(1), 297-311, doi: https://doi.org/10.1007/s00382-016-3075-x.

Shan, H. X. and C. M. Dong, 2017: The SST–Wind Coupling Pattern in the East China Sea

Based on a Regional Coupled Ocean–Atmosphere Model. *Atmosphere-Ocean*, **55,** 230-246, https://doi.org/10.1080/07055900.2017.1349646

Shen, S. S. P., G. P. Behm, Y. T. Song, and T. Qu, 2017: A Dynamically Consistent Reconstruction of Ocean Temperature. *Journal of Atmospheric and Oceanic Technology*, **34,** 1061-1082, http://dx.doi.org/10.1175/jtech-d-16-0133.1

Shi, L., O. Alves, R. Wedd, M. A. Balmaseda, Y. Chang, G. Chepurin, N. Ferry, Y. Fujii, F. Gaillard, S. A. Good, S. Guinehut, K. Haines, F. Hernandez, T. Lee, M. Palmer, K. A. Peterson, S. Masuda, A. Storto, T. Toyoda, M. Valdivieso, G. Vernieres, X. Wang, and Y. Yin, 2017: An assessment of upper ocean salinity content from the Ocean Reanalyses Inter-comparison Project (ORA-IP). *Climate Dynamics*, **49,** 1009-1029, https://doi.org/10.1007/s00382-015-2868-7

Shimada, K., S. Aoki, and K. I. Ohshima, 2017: Creation of a Gridded Dataset for the Southern Ocean with a Topographic Constraint Scheme. *Journal of Atmospheric and Oceanic Technology*, **34,** 511-532, http://dx.doi.org/10.1175/jtech-d-16-0075.1

Sivareddy, S., A. Paul, T. Sluka, M. Ravichandran, and E. Kalnay, 2017: The pre-Argo ocean reanalyses may be seriously affected by the spatial coverage of moored buoys. *Sci. Rep.*, **7,** 46685, http://dx.doi.org/10.1038/srep46685

Slangen, A. B. A., B. Meyssignac, C. Agosta, N. Champollion, J. A. Church, X. Fettweis, S. R. M. Ligtenberg, B. Marzeion, A. Melet, M. D. Palmer, K. Richter, C. D. Roberts, and G. Spada, 2017: Evaluating Model Simulations of Twentieth-Century Sea Level Rise. Part I: Global Mean Sea Level Change. *Journal of Climate*, **30,** 8539-8563, https://doi.org/10.1175/JCLI-D-17-0110.1

Smith, S., H. Ngodock, M. Carrier, J. Shriver, P. Muscarella, and I. Souopgui, 2017: Validation and Operational Implementation of the Navy Coastal Ocean Model Four Dimensional Variational Data Assimilation System (NCOM 4DVAR) in the Okinawa Trough. *Data Assimilation for Atmospheric, Oceanic and Hydrologic Applications (Vol. III)*, S. K. Park and L. Xu, Eds., Springer International Publishing, 405-427, https://doi.org/10.1007/978-3-319-43415-5_18.

Somavilla, R., C. González-Pola, and J. Fernández-Diaz, 2017: The warmer the ocean surface, the shallower the mixed layer. How much of this is true? *Journal of Geophysical Research: Oceans*, **122,** 7698-7716, http://dx.doi.org/10.1002/2017JC013125

Song, X. and L. Yu, 2017: Air-sea heat flux climatologies in the Mediterranean Sea: Surface energy balance and its consistency with ocean heat storage. *Journal of Geophysical Research: Oceans*, **122,** 4068-4087, http://dx.doi.org/10.1002/2016JC012254

Souopgui, I., H. Ngodock, M. Carrier, and S. Smith, 2017: A comparison of two preconditioner algorithms within the representer-based four-dimensional variational data assimilation system for the Navy coastal ocean model. *Journal of Operational Oceanography*, **10,** 127-134, http://dx.doi.org/10.1080/1755876X.2017.1306376

Srinivasu, U., M. Ravichandran, W. Han, S. Sivareddy, H. Rahman, Y. Li, and S. Nayak, 2017: Causes for the reversal of North Indian Ocean decadal sea level trend in recent two decades. *Climate Dynamics*, **49,** 3887-3904, https://doi.org/10.1007/s00382-017-3551-y

Stanev, E. V., S. Grashorn, and Y. J. Zhang, 2017: Cascading ocean basins: numerical simulations of the circulation and interbasin exchange in the

Azov-Black-Marmara-Mediterranean Seas system. *Ocean Dynamics*, **67,** 1003-1025, https://doi.org/10.1007/s10236-017-1071-2

Stanev, E. V., S. Grayek, H. Claustre, C. Schmechtig, and A. Poteau, 2017: Water intrusions and particle signatures in the Black Sea: a Biogeochemical-Argo float investigation. *Ocean Dynamics*, **67,** 119-1136, https://doi.org/10.1007/s10236-017-1077-9

Stewart, K. D., T. W. N. Haine, A. M. Hogg, and F. Roquet, 2017: On Cabbeling and Thermobaricity in the Surface Mixed Layer. *Journal of Physical Oceanography*, **47,** 1775-1787, http://dx.doi.org/10.1175/jpo-d-17-0025.1

Storto, A. and S. Masina, 2017: Objectively estimating the temporal evolution of accuracy and skill in a global ocean reanalysis. *Meteorological Applications*, **24,** 101-113, http://dx.doi.org/10.1002/met.1609

Storto, A., S. Masina, M. Balmaseda, S. Guinehut, Y. Xue, T. Szekely, I. Fukumori, G. Forget, Y.-S. Chang, S. A. Good, A. Köhl, G. Vernieres, N. Ferry, K. A. Peterson, D. Behringer, M. Ishii, S. Masuda, Y. Fujii, T. Toyoda, Y. Yin, M. Valdivieso, B. Barnier, T. Boyer, T. Lee, J. Gourrion, O. Wang, P. Heimback, A. Rosati, R. Kovach, F. Hernandez, M. J. Martin, M. Kamachi, T. Kuragano, K. Mogensen, O. Alves, K. Haines, and X. Wang, 2017: Steric sea level variability (1993–2010) in an ensemble of ocean reanalyses and objective analyses. *Climate Dynamics*, **49,** 709-729, https://doi.org/10.1007/s00382-015-2554-9

Storto, A., C. Yang, and S. Masina, 2017: Constraining the Global Ocean Heat Content Through Assimilation of CERES-Derived TOA Energy Imbalance Estimates. *Geophysical Research Letters*, **44,** 10,520-10,529, http://dx.doi.org/10.1002/2017GL075396

Strass, V. H., H. Leach, H. Prandke, M. Donnelly, A. U. Bracher, and D. A. Wolf-Gladrow, 2017: The physical environmental conditions for biogeochemical differences along the Antarctic Circumpolar Current in the Atlantic Sector during late austral summer 2012. *Deep Sea Research Part II: Topical Studies in Oceanography*, **138,** 6-25, https://doi.org/10.1016/j.dsr2.2016.05.018

Stukel, M. R. and H. W. Ducklow, 2017: Stirring Up the Biological Pump: Vertical Mixing and Carbon Export in the Southern Ocean. *Global Biogeochemical Cycles*, **31,** 1420-1434, https://doi.org/10.1002/2017GB005652

Su, H., X. Wu, W. Lu, W. Zhang, and X.-H. Yan, 2017: Inconsistent Subsurface and Deeper Ocean Warming Signals During Recent Global Warming and Hiatus. *Journal of Geophysical Research: Oceans*, **122,** 8182-8195, http://dx.doi.org/10.1002/2016JC012481

Sugimoto, S., K. Hanawa, T. Watanabe, T. Suga, and S.-P. Xie, 2017: Enhanced warming of the subtropical mode water in the North Pacific and North Atlantic. *Nature Climate Change*, **7,** 656, http://dx.doi.org/10.1038/nclimate3371

Sun, D., T. Ito, and A. Bracco, 2017: Oceanic Uptake of Oxygen During Deep Convection Events Through Diffusive and Bubble-Mediated Gas Exchange. *Global Biogeochemical Cycles*, **31,** 1579-1591, http://dx.doi.org/10.1002/2017GB005716

Sun, W., C. Dong, R. Wang, Y. Liu, and K. Yu, 2017: Vertical structure anomalies of oceanic eddies in the Kuroshio Extension region. *Journal of Geophysical Research: Oceans*, **122,** 1476-1496, http://dx.doi.org/10.1002/2016JC012226

Szuts, Z. B. and C. S. Meinen, 2017: Florida Current Salinity and Salinity Transport: Mean and Decadal Changes. *Geophysical Research Letters*, **44,** 10,495-10,503, http://dx.doi.org/10.1002/2017GL074538

Taguchi, B., N. Schneider, M. Nonaka, and H. Sasaki, 2017: Decadal Variability of Upper-Ocean Heat Content Associated with Meridional Shifts of Western Boundary Current Extensions in the North Pacific. *Journal of Climate*, **30,** 6247-6264, https://doi.org/10.1175/JCLI-D-16-0779.1

Tang, W., A. Fore, S. Yueh, T. Lee, A. Hayashi, A. Sanchez-Franks, J. Martinez, B. King, and D. Baranowski, 2017: Validating SMAP SSS with in situ measurements. *Remote Sensing of Environment*, **200,** 326-340, https://doi.org/10.1016/j.rse.2017.08.021

Thompson, P. R., M. Merrifield, E. Leuliette, W. Sweet, D. Chambers, B. D. Hamlington, S. Jevrejeva, J. J. Marra, G. Mitchum, and R. S. nerem, 2017: Sea level variability and change in the State of the Climate in 2016. *Bull. Am. Meteorol. Soc.*, **98,** S79-S81, https://doi.org/10.1175/2017BAMSStateoftheClimate.1

Tommasi, D., C. A. Stock, A. J. Hobday, R. Methot, I. C. Kaplan, J. P. Eveson, K. Holsman, T. J. Miller, S. Gaichas, M. Gehlen, A. Pershing, G. A. Vecchi, R. Msadek, T. Delworth, C. M. Eakin, M. A. Haltuch, R. Séférian, C. M. Spillman, J. R. Hartog, S. Siedlecki, J. F. Samhouri, B. Muhling, R. G. Asch, M. L. Pinsky, V. S. Saba, S. B. Kapnick, C. F. Gaitan, R. R. Rykaczewski, M. A. Alexander, Y. Xue, K. V. Pegion, P. Lynch, M. R. Payne, T. Kristiansen, P. Lehodey, and F. E. Werner, 2017: Managing living marine resources in a dynamic environment: The role of seasonal to decadal climate forecasts. *Progress in Oceanography*, **152,** 15-49, http://doi.org/10.1016/j.pocean.2016.12.011

Toye, H., P. Zhan, G. Gopalakrishnan, A. R. Kartadikaria, H. Huang, O. Knio, and I. Hoteit, 2017: Ensemble data assimilation in the Red Sea: sensitivity to ensemble selection and atmospheric forcing. *Ocean Dynamics*, **67,** 915-933, https://doi.org/10.1007/s10236-017-1064-1

Toyoda, T., Y. Fujii, T. Kuragano, M. Kamachi, Y. Ishikawa, S. Masuda, K. Sato, T. Awaji, F. Hernandez, N. Ferry, S. Guinehut, M. J. Martin, K. A. Peterson, S. A. Good, M. Valdivieso, K. Haines, A. Storto, S. Masina, A. Köhl, H. Zuo, M. Balmaseda, Y. Yin, L. Shi, O. Alves, G. Smith, Y.-S. Chang, G. Vernieres, X. Wang, G. Forget, P. Heimbach, O. Wang, I. Fukumori, and T. Lee, 2017: Intercomparison and validation of the mixed layer depth fields of global ocean syntheses. *Climate Dynamics*, **49,** 753-773, https://doi.org/10.1007/s00382-015-2637-7

Toyoda, T., Y. Fujii, T. Kuragano, N. Kosugi, D. Sasano, M. Kamachi, Y. Ishikawa, S. Masuda, K. Sato, T. Awaji, F. Hernandez, N. Ferry, S. Guinehut, M. Martin, K. Andrew Peterson, S. A. Good, M. Valdivieso, K. Haines, A. Storto, S. Masina, A. Köhl, Y. Yin, L. Shi, O. Alves, G. Smith, Y.-S. Chang, G. Vernieres, X. Wang, G. Forget, P. Heimbach, O. Wang, I. Fukumori, T. Lee, H. Zuo, and M. Balmaseda, 2017: Interannual-decadal variability of wintertime mixed layer depths in the North Pacific detected by an ensemble of ocean syntheses. *Climate Dynamics*, **49,** 891-907, https://doi.org/10.1007/s00382-015-2762-3

Toyoda, T. and S. Okamoto, 2017: Physical forcing of late summer chlorophyll a blooms in the oligotrophic eastern North Pacific. *Journal of Geophysical Research: Oceans*, **122,** 1849-1861, http://dx.doi.org/10.1002/2016JC012423

Tozuka, T., M. F. Cronin, and H. Tomita, 2017: Surface frontogenesis by surface heat fluxes in the upstream Kuroshio Extension region. *Scientific Reports*, **7,** 10258, https://doi.org/10.1038/s41598-017-10268-3

Tozuka, T., S. Ohishi, and M. F. Cronin, 2017: A metric for surface heat flux effect on horizontal sea surface temperature gradients. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3940-2

Travis, S. and B. Qiu, 2017: Decadal Variability in the South Pacific Subtropical Countercurrent and Regional Mesoscale Eddy Activity. *Journal of Physical Oceanography*, **47,** 499-512, http://dx.doi.org/10.1175/jpo-d-16-0217.1

Turuncoglu, U. U. and G. Sannino, 2017: Validation of newly designed regional earth system model (RegESM) for Mediterranean Basin. *Climate Dynamics*, **48,** 2919-2947, https://doi.org/10.1007/s00382-016-3241-1

Uchiyama, Y., Y. Suzue, and H. Yamazaki, 2017: Eddy-driven nutrient transport and associated upper-ocean primary production along the Kuroshio. *Journal of Geophysical Research: Oceans*, **122,** 5046-5062, http://dx.doi.org/10.1002/2017JC012847

Usui, N., T. Wakamatsu, Y. Tanaka, N. Hirose, T. Toyoda, S. Nishikawa, Y. Fujii, Y. Takatsuki, H. Igarashi, H. Nishikawa, Y. Ishikawa, T. Kuragano, and M. Kamachi, 2017: Four-dimensional variational ocean reanalysis: a 30-year high-resolution dataset in the western North Pacific (FORA-WNP30). *Journal of Oceanography*, **73,** 205-233, http://dx.doi.org/10.1007/s10872-016-0398-5

Valdivieso, M., K. Haines, M. Balmaseda, Y.-S. Chang, M. Drevillon, N. Ferry, Y. Fujii, A. Köhl, A. Storto, T. Toyoda, X. Wang, J. Waters, Y. Xue, Y. Yin, B. Barnier, F. Hernandez, A. Kumar, T. Lee, S. Masina, and K. Andrew Peterson, 2017: An assessment of air–sea heat fluxes from ocean and coupled reanalyses. *Climate Dynamics*, **49,** 983-1008, https://doi.org/10.1007/s00382-015-2843-3

VanZwieten, J. H., L. T. Rauchenstein, and L. Lee, 2017: An assessment of Florida's ocean thermal energy conversion (OTEC) resource. *Renewable and Sustainable Energy Reviews*, **75,** 683-691, http://dx.doi.org/10.1016/j.rser.2016.11.043

Verdy, A., B. Cornuelle, M. R. Mazloff, and D. L. Rudnick, 2017: Estimation of the Tropical Pacific Ocean State 2010–13. *Journal of Atmospheric and Oceanic Technology*, **34,** 1501-1517, http://dx.doi.org/10.1175/jtech-d-16-0223.1

Verdy, A. and M. R. Mazloff, 2017: A data assimilating model for estimating Southern Ocean biogeochemistry. *Journal of Geophysical Research: Oceans*, **122,** 6968-6988, http://dx.doi.org/10.1002/2016JC012650

Vergara, O., B. Dewitte, M. Ramos, and O. Pizarro, 2017: Vertical energy flux at ENSO time scales in the subthermocline of the Southeastern Pacific. *Journal of Geophysical Research: Oceans*, **122,** 6011-6038, http://dx.doi.org/10.1002/2016JC012614

Verri, G., N. Pinardi, P. Oddo, S. A. Ciliberti, and G. Coppini, 2017: River runoff influences on the Central Mediterranean overturning circulation. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3715-9

Verrier, S., P. Y. Le Traon, and E. Remy, 2017: Assessing the impact of multiple altimeter missions and Argo in a global eddy-permitting data assimilation system. *Ocean Sci.*, **13,** 1077-1092, https://doi.org/10.5194/os-13-1077-2017

Vianello, P., I. J. Ansorge, M. Rouault, and M. Ostrowski, 2017: Transport and transformation of surface water masses across the Mascarene Plateau during the Northeast Monsoon season. *African Journal of Marine Science*, **39,** 453-466, https://doi.org/10.2989/1814232X.2017.1400999

Vinogradova, N. T. and R. M. Ponte, 2017: In Search of Fingerprints of the Recent Intensification of the Ocean Water Cycle. *Journal of Climate*, **30,** 5513-5528, http://dx.doi.org/10.1175/jcli-d-16-0626.1

Vitale, S. S., S. F. DiMarco, H. F. Seidel, and Z. Wang, 2017: Circulation analysis in the northwest Indian Ocean using ARGO floats and surface drifter observations, and SODA reanalysis output. *Dynamics of Atmospheres and Oceans*, **78,** 57-70, http://doi.org/10.1016/j.dynatmoce.2017.02.002

Volkov, D. L., S.-K. Lee, F. W. Landerer, and R. Lumpkin, 2017: Decade-long deep-ocean warming detected in the subtropical South Pacific. *Geophysical Research Letters*, **44,** 927-936, http://dx.doi.org/10.1002/2016GL071661

Waldman, R., M. Herrmann, S. Somot, T. Arsouze, R. Benshila, A. Bosse, J. Chanut, H. Giordani, F. Sevault, and P. Testor, 2017: Impact of the Mesoscale Dynamics on Ocean Deep Convection: The 2012–2013 Case Study in the Northwestern Mediterranean Sea. *Journal of Geophysical Research: Oceans*, **122,** 8813-8840, http://dx.doi.org/10.1002/2016JC012587

Waldman, R., S. Somot, M. Herrmann, A. Bosse, G. Caniaux, C. Estournel, L. Houpert, L. Prieur, F. Sevault, and P. Testor, 2017: Modeling the intense 2012–2013 dense water formation event in the northwestern Mediterranean Sea: Evaluation with an ensemble simulation approach. *Journal of Geophysical Research: Oceans*, **122,** 1297-1324, http://dx.doi.org/10.1002/2016JC012437

Wang, G., L. Cheng, J. Abraham, and C. Li, 2017: Consensuses and discrepancies of basin-scale ocean heat content changes in different ocean analyses. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3751-5

Wang, G., L. Cheng, T. Boyer, and C. Li, 2017: Halosteric Sea Level Changes during the Argo Era. *Water*, **9,** 484, http://dx.doi.org/10.3390/w9070484

Wang, J., 2017: Observational bifurcation of Wyrtki Jets and its influence on the salinity balance in the eastern Indian Ocean. *Atmospheric and Oceanic Science Letters*, **10,** 36-43, http://dx.doi.org/10.1080/16742834.2017.1239506

Wang, T. Y., Y. Du, and X. Liao, 2017: The regime shift in the 1960s and associated atmospheric change over the southern Indian Ocean. *Acta Oceanologica Sinica*, **1,** 1-8, http://dx.doi.org/10.1007/s13131-017-0987-1

Wang, Y. and M. J. McPhaden, 2017: Seasonal cycle of cross-equatorial flow in the central Indian Ocean. *Journal of Geophysical Research: Oceans*, **122,** 3817-3827, http://dx.doi.org/10.1002/2016JC012537

Wang, Z., A. Storto, N. Pinardi, G. Liu, and H. Wang, 2017: Data assimilation of Argo profiles in a northwestern Pacific model. *Nat. Hazards Earth Syst. Sci.*, **17,** 17-30, http://dx.doi.org/10.5194/nhess-17-17-2017

Watanabe, M. and M. Kawamiya, 2017: Remote effects of mixed layer development on ocean acidification in the subsurface layers of the North Pacific. *Journal of Oceanography*, **73,** 771-784, https://doi.org/10.1007/s10872-017-0431-3

Watelet, S., J.-M. Beckers, and A. Barth, 2017: Reconstruction of the Gulf Stream from 1940 to the Present and Correlation with the North Atlantic Oscillation. *Journal of Physical Oceanography*, **47,** 2741-2754, https://doi.org/10.1175/JPO-D-17-0064.1

Wen, C., Y. Xue, A. Kumar, D. Behringer, and L. Yu, 2017: How do uncertainties in NCEP R2 and CFSR surface fluxes impact tropical ocean simulations? *Climate Dynamics*, **49,** 3327-3344, https://doi.org/10.1007/s00382-016-3516-6

While, J., C. Mao, M. J. Martin, J. Roberts-Jones, P. A. Sykes, S. A. Good, and A. J. McLaren, 2017: An operational analysis system for the global diurnal cycle of sea surface temperature: implementation and validation. *Quarterly Journal of the Royal Meteorological Society*, **143,** 1787-1803, http://dx.doi.org/10.1002/qj.3036

Williams, N. L., L. W. Juranek, R. A. Feely, K. S. Johnson, J. L. Sarmiento, L. D. Talley, A. G. Dickson, A. R. Gray, R. Wanninkhof, J. L. Russell, S. C. Riser, and Y. Takeshita, 2017: Calculating surface ocean pCO2 from biogeochemical Argo floats equipped with pH: An uncertainty analysis. *Global Biogeochemical Cycles*, **31,** 591-604, http://dx.doi.org/10.1002/2016GB005541

Woodworth, P. L., M. Á. Morales Maqueda, W. R. Gehrels, V. M. Roussenov, R. G. Williams, and C. W. Hughes, 2017: Variations in the difference between mean sea level measured either side of Cape Hatteras and their relation to the North Atlantic Oscillation. *Climate Dynamics*, **49,** 2451-2469, https://doi.org/10.1007/s00382-016-3464-1

Wu, Q., X. Zhang, J. A. Church, and J. Hu, 2017: Variability and change of sea level and its components in the Indo-Pacific region during the altimetry era. *Journal of Geophysical Research: Oceans*, **122,** 1862-1881, http://dx.doi.org/10.1002/2016JC012345

Xie, J., L. Bertino, F. Counillon, K. A. Lisæter, and P. Sakov, 2017: Quality assessment of the TOPAZ4 reanalysis in the Arctic over the period 1991–2013. *Ocean Sci.*, **13,** 123-144, http://dx.doi.org/10.5194/os-13-123-2017

Xie, S.-P. and Y. Kosaka, 2017: What Caused the Global Surface Warming Hiatus of 1998–2013? *Current Climate Change Reports*, **3,** 128-140, https://doi.org/10.1007/s40641-017-0063-0

Xing, X., H. Claustre, E. Boss, C. Roesler, E. Organelli, A. Poteau, M. Barbieux, and F. D'Ortenzio, 2017: Correction of profiles of in-situ chlorophyll fluorometry for the contribution of fluorescence originating from non-algal matter. *Limnology and Oceanography: Methods*, **15,** 80-93, http://dx.doi.org/10.1002/lom3.10144

Xu, F., Y. Yao, L. Oey, and Y. Lin, 2017: Impacts of pre-existing ocean cyclonic circulation on sea surface chlorophyll-a concentrations off northeastern Taiwan following episodic typhoon passages. *Journal of Geophysical Research: Oceans*, **122,** 6482-6497, http://dx.doi.org/10.1002/2016JC012625

Xu, L., S.-P. Xie, Z. Jing, L. Wu, Q. Liu, P. Li, and Y. Du, 2017: Observing subsurface changes of two anticyclonic eddies passing over the Izu-Ogasawara Ridge. *Geophysical Research Letters*, **44,** 1857-1865, http://dx.doi.org/10.1002/2016GL072163

Xu, L., S.-P. Xie, Q. Liu, C. Liu, P. Li, and X. Lin, 2017: Evolution of the North Pacific Subtropical Mode Water in Anticyclonic Eddies. *Journal of Geophysical Research: Oceans*, **122,** 10118-10130, http://dx.doi.org/10.1002/2017JC013450

Xue, Y. and A. Kumar, 2017: Evolution of the 2015/16 El Niño and historical perspective since 1979. *Science China Earth Sciences*, **60,** 1572-1588, https://doi.org/10.1007/s11430-016-0106-9

Xue, Y., C. Wen, A. Kumar, M. Balmaseda, Y. Fujii, O. Alves, M. Martin, X. Yang, G. Vernieres, C. Desportes, T. Lee, I. Ascione, R. Gudgel, and I. Ishikawa, 2017: A real-time ocean reanalyses intercomparison project in the context of tropical pacific observing system and ENSO monitoring. *Climate Dynamics*, **49,** 3647-3672, https://doi.org/10.1007/s00382-017-3535-y

Xue, Y., C. Wen, X. Yang, D. Behringer, A. Kumar, G. Vecchi, A. Rosati, and R. Gudgel, 2017: Evaluation of tropical Pacific observing systems using NCEP and GFDL ocean data assimilation systems. *Climate Dynamics*, **49,** 843-868, https://doi.org/10.1007/s00382-015-2743-6

Yan, Y., A. Barth, J. M. Beckers, J. M. Brankart, P. Brasseur, and G. Candille, 2017: Comparison of different incremental analysis update schemes in a realistic assimilation system with Ensemble Kalman Filter. *Ocean Modelling*, **115,** 27-41, http://dx.doi.org/10.1016/j.ocemod.2017.05.002

Yan, Y., D. Xu, K. Yu, and Y. Qi, 2017: Propagation of the subsurface freshening water and its major source in the northwestern Pacific. *Journal of Geophysical Research: Oceans*, **122,** 6857-6871, http://dx.doi.org/10.1002/2017JC013033

Yang, B., S. R. Emerson, and S. M. Bushinsky, 2017: Annual net community production in the subtropical Pacific Ocean from in situ oxygen measurements on profiling floats. *Global Biogeochemical Cycles*, **31,** 728-744, http://dx.doi.org/10.1002/2016GB005545

Yang, C., S. Masina, and A. Storto, 2017: Historical ocean reanalyses (1900–2010) using different data assimilation strategies. *Quarterly Journal of the Royal Meteorological Society*, **143,** 479-493, http://dx.doi.org/10.1002/qj.2936

Yao, W. and J. Shi, 2017: Pacific-Indian interocean circulation of the Antarctic Intermediate Water around South Australia. *Acta Oceanologica Sinica*, **36,** 4-14, https://doi.org/10.1007/s13131-017-1078-z

Yao, W., J. Shi, and X. Zhao, 2017: Freshening of Antarctic Intermediate Water in the South Atlantic Ocean in 2005–2014. *Ocean Sci.*, **13,** 521-530, https://doi.org/10.5194/os-13-521-2017

Yashayaev, I. and J. W. Loder, 2017: Further intensification of deep convection in the Labrador Sea in 2016. *Geophysical Research Letters*, **44,** 1429-1438, http://dx.doi.org/10.1002/2016GL071668

Ye, H., J. Sheng, D. Tang, E. Siswanto, M. Ali Kalhoro, and Y. Sui, 2017: Storm-induced changes in pCO2 at the sea surface over the northern South China Sea during Typhoon Wutip. *Journal of Geophysical Research: Oceans*, **122,** 4761-4778, http://dx.doi.org/10.1002/2016JC012643

Yi, S., K. Heki, and A. Qian, 2017: Acceleration in the Global Mean Sea Level Rise: 2005–2015. *Geophysical Research Letters*, **44,** 11,905-11,913, http://dx.doi.org/10.1002/2017GL076129

Yin, Y., X. Lin, R. He, and Y. Hou, 2017: Impact of mesoscale eddies on Kuroshio intrusion variability northeast of Taiwan. *Journal of Geophysical Research: Oceans*, **122,**

3021-3040, http://dx.doi.org/10.1002/2016JC012263
Yu, L., X. Jin, S. A. Josey, T. Lee, A. Kumar, C. Wen, and Y. Xue, 2017: The Global Ocean Water Cycle in Atmospheric Reanalysis, Satellite, and Ocean Salinity. *Journal of Climate*, **30,** 3829-3852, http://dx.doi.org/10.1175/jcli-d-16-0479.1
Yu, W., X. Chen, C. Chen, and Y. Zhang, 2017: Impacts of oceanographic factors on interannual variability of the winter-spring cohort of neon flying squid abundance in the Northwest Pacific Ocean. *Acta Oceanologica Sinica*, **36,** 48-59, https://doi.org/10.1007/s13131-017-1069-0
Zang, Z., Z. G. Xue, N. Bi, Z. Yao, X. Wu, Q. Ge, and H. Wang, 2017: Seasonal and intra-seasonal variations of suspended-sediment distribution in the Yellow Sea. *Continental Shelf Research*, **148,** 116-129, https://doi.org/10.1016/j.csr.2017.08.016
Zaron, E. D. and R. D. Ray, 2017: Using an altimeter-derived internal tide model to remove tides from in situ data. *Geophysical Research Letters*, **44,** 4241-4245, http://dx.doi.org/10.1002/2017GL072950
Zeng, L. and D. Wang, 2017: Seasonal variations in the barrier layer in the South China Sea: characteristics, mechanisms and impact of warming. *Climate Dynamics*, **48,** 1911-1930, http://dx.doi.org/10.1007/s00382-016-3182-8
Zhang, C., Y. Ding, X. Bao, C. Bi, R. Li, C. Zhang, B. Shen, and K. Wan, 2017: A numerical study of the South China Sea Warm Current during winter monsoon relaxation. *Chinese Journal of Oceanology and Limnology*, https://doi.org/10.1007/s00343-018-6302-y
Zhang, L., T. L. Delworth, X. Yang, R. G. Gudgel, L. Jia, G. A. Vecchi, and F. Zeng, 2017: Estimating Decadal Predictability for the Southern Ocean Using the GFDL CM2.1 Model. *Journal of Climate*, **30,** 5187-5203, http://dx.doi.org/10.1175/jcli-d-16-0840.1
Zhang, L., T. L. Delworth, and F. Zeng, 2017: The impact of multidecadal Atlantic meridional overturning circulation variations on the Southern Ocean. *Climate Dynamics*, **48,** 2065-2085, http://dx.doi.org/10.1007/s00382-016-3190-8
Zhang, L., F. J. Wang, Q. Wang, S. Hu, F. Wang, and D. Hu, 2017: Structure and Variability of the North Equatorial Current/Undercurrent from Mooring Measurements at 130°E in the Western Pacific. *Sci. Rep.*, **7,** 46310, http://dx.doi.org/10.1038/srep46310
Zhang, M. and H. von Storch, 2017: Toward downscaling oceanic hydrodynamics – suitability of a high-resolution OGCM for describing regional ocean variability in the South China Sea. *Oceanologia*, **59,** 166-176, http://dx.doi.org/10.1016/j.oceano.2017.01.001
Zhang, R. and C. Gao, 2017: Processes involved in the second-year warming of the 2015 El Niño event as derived from an intermediate ocean model. *Science China Earth Sciences*, **60,** 1601-1613, https://doi.org/10.1007/s11430-016-0201-9
Zhang, W. and X.-H. Yan, 2017: The Subpolar North Atlantic Ocean Heat Content Variability and its Decomposition. *Scientific Reports*, **7,** 13748, https://doi.org/10.1038/s41598-017-14158-6
Zhang, X., C. Sun, C. Liu, L. Zhang, C. Shao, X. Zhang, and Y. Zhao, 2017: Evaluation of the Impact of Argo Data on Ocean Reanalysis in the Pacific Region. *Advances in Meteorology*, **2017,** 12, https://doi.org/10.1155/2017/7314106
Zhang, Y., J. Chen, and Y. Du, 2017: Role of barrier layer in the developing phase of "Category 6" super typhoon Haiyan. *Satellite Oceanography and Meteorology*, **12**,

http://dx.doi.org/10.18063/SOM.2016.02.001
Zhang, Y., H. Xu, F. Qiao, and C. Dong, 2017: Seasonal variation of the global mixed layer depth: comparison between Argo data and FIO-ESM. *Frontiers of Earth Science*, https://doi.org/10.1007/s11707-017-0631-6
Zhang, Z., P. Uotila, A. Stössel, T. Vihma, H. Liu, and Y. Zhong, 2017: Seasonal southern hemisphere multi-variable reflection of the southern annular mode in atmosphere and ocean reanalyses. *Climate Dynamics*, https://doi.org/10.1007/s00382-017-3698-6
Zhang, Z., H. Xue, F. Chai, and Y. Chao, 2017: Variability of the Pacific North Equatorial Current from 1993 to 2012 based on a 1/8° Pacific model simulation. *Journal of Geophysical Research: Oceans*, **122,** 2382-2400, http://dx.doi.org/10.1002/2016JC012143
Zhang, Z., Y. Zhang, and W. Wang, 2017: Three-compartment structure of subsurface-intensified mesoscale eddies in the ocean. *Journal of Geophysical Research: Oceans*, **122,** 1653-1664, http://dx.doi.org/10.1002/2016JC012376
Zhang, Z., W. Zhao, B. Qiu, and J. Tian, 2017: Anticyclonic Eddy Sheddings from Kuroshio Loop and the Accompanying Cyclonic Eddy in the Northeastern South China Sea. *Journal of Physical Oceanography*, **47,** 1243-1259, http://dx.doi.org/10.1175/jpo-d-16-0185.1
Zhao, R., X.-H. Zhu, and X. Guo, 2017: The impact of monsoon winds and mesoscale eddies on thermohaline structures and circulation patterns in the northern South China Sea. *Continental Shelf Research*, **143,** 240-256, http://dx.doi.org/10.1016/j.csr.2016.06.009
Zheng, Z.-W., Q. Zheng, G. Gopalakrishnan, Y.-C. Kuo, and T.-K. Yeh, 2017: Response of upper ocean cooling off northeastern Taiwan to typhoon passages. *Ocean Modelling*, **115,** 105-118, https://doi.org/10.1016/j.ocemod.2017.05.008
Zhou, C., X. Ding, J. Zhang, J. Yang, and Q. Ma, 2017: An objective algorithm for reconstructing the three-dimensional ocean temperature field based on Argo profiles and SST data. *Ocean Dynamics*, **67,** 1523-1533, https://doi.org/10.1007/s10236-017-1104-x
Zilberman, N. V., 2017: Deep Argo: Sampling the Total Ocean Volume in State of the Climate in 2016. *Bull. Am. Meteorol. Soc.*, **98,** S73-S74, https://doi.org/10.1175/2017BAMSStateoftheClimate.1
Zilberman, N. V., D. H. Roemmich, and S. T. Gille, 2017: The East Pacific Rise current: Topographic enhancement of the interior flow in the South Pacific Ocean. *Geophysical Research Letters*, **44,** 277-285, http://dx.doi.org/10.1002/2016GL069039
Zuo, H., M. A. Balmaseda, and K. Mogensen, 2017: The new eddy-permitting ORAP5 ocean reanalysis: description, evaluation and uncertainties in climate signals. *Climate Dynamics*, **49,** 791-811, https://doi.org/10.1007/s00382-015-2675-1

2016 (407)

Abernathey, R. P., I. Cerovecki, P. R. Holland, E. Newsom, M. Mazloff, and L. D. Talley, 2016: Water-mass transformation by sea ice in the upper branch of the Southern Ocean overturning. *Nature Geosci*, **9,** 596-601, http://dx.doi.org/10.1038/ngeo2749

Aguiar-González, B., L. Ponsoni, H. Ridderinkhof, H. M. van Aken, W. P. M. de Ruijter, and L. R. M. Maas, 2016: Seasonal variation of the South Indian tropical gyre. *Deep Sea Research Part I: Oceanographic Research Papers*, **110,** 123-140, http://dx.doi.org/10.1016/j.dsr.2016.02.004

Akhil, V. P., M. Lengaigne, F. Durand, J. Vialard, A. V. S. Chaitanya, M. G. Keerthi, V. V. Gopalakrishna, J. Boutin, and C. de Boyer Montégut, 2016: Assessment of seasonal and year-to-year surface salinity signals retrieved from SMOS and Aquarius missions in the Bay of Bengal. *International Journal of Remote Sensing*, **37,** 1089-1114, http://dx.doi.org/10.1080/01431161.2016.1145362

Akhil, V. P., M. Lengaigne, J. Vialard, F. Durand, M. G. Keerthi, A. V. S. Chaitanya, F. Papa, V. V. Gopalakrishna, and C. de Boyer Montégut, 2016: A modeling study of processes controlling the Bay of Bengal sea surface salinity interannual variability. *Journal of Geophysical Research: Oceans*, **121,** 8471-8495, http://dx.doi.org/10.1002/2016JC011662

Alexeev, V. A., V. V. Ivanov, I. A. Repina, O. Y. Lavrova, and S. V. Stanichny, 2016: Convective structures in the Lofoten Basin based on satellite and Argo data. *Izvestiya, Atmospheric and Oceanic Physics*, **52,** 1064-1077, http://dx.doi.org/10.1134/S0001433816090036

Alvera-Azcárate, A., A. Barth, G. Parard, and J.-M. Beckers, 2016: Analysis of SMOS sea surface salinity data using DINEOF. *Remote Sensing of Environment*, **180,** 137-145, http://dx.doi.org/10.1016/j.rse.2016.02.044

Androulidakis, Y., V. Kourafalou, G. Halliwell, M. Le Hénaff, H. Kang, M. Mehari, and R. Atlas, 2016: Hurricane interaction with the upper ocean in the Amazon-Orinoco plume region. *Ocean Dynamics***,** 1-30, http://dx.doi.org/10.1007/s10236-016-0997-0

Appen, W.-J. v., U. Schauer, T. Hattermann, and A. Beszczynska-Möller, 2016: Seasonal Cycle of Mesoscale Instability of the West Spitsbergen Current. *Journal of Physical Oceanography*, **46,** 1231-1254, http://dx.doi.org/10.1175/JPO-D-15-0184.1

Artana, C., R. Ferrari, Z. Koenig, M. Saraceno, A. R. Piola, and C. Provost, 2016: Malvinas Current variability from Argo floats and satellite altimetry. *Journal of Geophysical Research: Oceans*, **121,** 4854-4872, http://dx.doi.org/10.1002/2016JC011889

Arzel, O. and A. C. d. Verdière, 2016: Can We Infer Diapycnal Mixing Rates from the World Ocean Temperature–Salinity Distribution? *Journal of Physical Oceanography*, **46,** 3751-3775, http://dx.doi.org/10.1175/jpo-d-16-0152.1

Aydoğdu, A., N. Pinardi, J. Pistoia, M. Martinelli, A. Belardinelli, and S. Sparnocchia, 2016: Assimilation experiments for the Fishery Observing System in the Adriatic Sea. *Journal of Marine Systems*, **162,** 126-136, http://doi.org/10.1016/j.jmarsys.2016.03.002

Aznar, R., M. G. Sotillo, S. Cailleau, P. Lorente, B. Levier, A. Amo-Baladrón, G. Reffray, and E. Álvarez-Fanjul, 2016: Strengths and weaknesses of the CMEMS forecasted and reanalyzed solutions for the Iberia–Biscay–Ireland (IBI) waters. *Journal of Marine Systems*, **159,** 1-14, http://dx.doi.org/10.1016/j.jmarsys.2016.02.007

Bachèlery, M.-L., S. Illig, and I. Dadou, 2016: Interannual variability in the South-East Atlantic Ocean, focusing on the Benguela Upwelling System: Remote versus local forcing. *Journal of Geophysical Research: Oceans*, **121,** 284-310,

http://dx.doi.org/10.1002/2015JC011168
Bai, P., Y. Gu, P. Li, and K. Wu, 2016: Modelling the upwelling offthe east Hainan Island coast in summer 2010. *Chinese Journal of Oceanology and Limnology*, **34,** 1358-1373, http://dx.doi.org/10.1007/s00343-016-5147-5
Barceló-Llull, B., E. Mason, A. Capet, and A. Pascual, 2016: Impact of vertical and horizontal advection on nutrient distribution in the southeast Pacific. *Ocean Science*, **12,** 1003-1011, http://dx.doi.org/10.5194/os-12-1003-2016
Baringer, M. O., M. Lankhorst, D. Volkov, S. Garzoli, S. Dong, U. Send, and C. S. Meinen, 2016: Global Oceans: Meridional overturning circulation observations in the North Atlantic Ocean. *Bulletin of the American Meteorological Society*, **97,** S84 - S87, http://dx.doi.org/10.1175/2016BAMSStateoftheClimate.1
Bartsev, S. I. and J. I. Gitelson, 2016: A mathematical model of the global processes of plastic degradation in the World Ocean with account for the surface temperature distribution. *Doklady Earth Sciences*, **466,** 153-156, http://dx.doi.org/10.1134/S1028334X16020033
Belonenko, T. V., A. A. Kubrjakov, and S. V. Stanichny, 2016: Spectral characteristics of Rossby waves in the Northwestern Pacific based on satellite altimetry. *Izvestiya, Atmospheric and Oceanic Physics*, **52,** 920-928, http://dx.doi.org/10.1134/S0001433816090073
Bender, M. L. and B. Jönsson, 2016: Is seasonal net community production in the South Pacific Subtropical Gyre anomalously low? *Geophysical Research Letters*, **43,** 9757-9763, http://dx.doi.org/10.1002/2016GL070220
Bender, M. L., B. Tilbrook, N. Cassar, B. Jonsson, A. Poisson, and T. W. Trull, 2016: Ocean productivity south of Australia during spring and summer. *Deep Sea Research Part I: Oceanographic Research Papers*, **112,** 68-78, http://dx.doi.org/10.1016/j.dsr.2016.02.018
Bensi, M., D. Velaoras, V. L. Meccia, and V. Cardin, 2016: Effects of the Eastern Mediterranean Sea circulation on the thermohaline properties as recorded by fixed deep-ocean observatories. *Deep Sea Research Part I: Oceanographic Research Papers*, **112,** 1-13, http://dx.doi.org/10.1016/j.dsr.2016.02.015
Bhaskar, T. V. S. and D. Swain, 2016: Relation between Sonic Layer and Mixed layer depth in the Arabian Sea. *Indian Journal of Geo-Marine Sciences*, **45,** 1264-1271, http://nopr.niscair.res.in/handle/123456789/35711
Bhaskar, T. V. S. U., C. Jayaram, P. R. R. E, and K. H. Rao, 2016: Spatio-temporal evolution of chlorophyll-a in the Bay of Bengal: a remote sensing and bio-argo perspective. *Proc. SPIE 9878, Remote Sensing of the Oceans and Inland Waters: Techniques, Applications, and Challenges*, 98780Z-98780Z-6, http://dx.doi.org/10.1117/12.2223880
Bhowmick, S. A., N. Agarwal, M. M. Ali, C. M. Kishtawal, and R. Sharma, 2016: Role of ocean heat content in boosting post-monsoon tropical storms over Bay of Bengal during La-Niña events. *Climate Dynamics*, https://doi.org/10.1007/s00382-016-3428-5
Billheimer, S. and L. D. Talley, 2016: Extraordinarily Weak Eighteen Degree Water Production Concurs with Strongly Positive North Atlantic Oscillation in Late Winter 2014/15, In State of the Climate in 2015. *Bulletin of the American Meteorological Society*, **97,** S78

- S79, http://dx.doi.org/10.1175/2016BAMSStateoftheClimate.1
Billheimer, S. and L. D. Talley, 2016: Annual cycle and destruction of Eighteen Degree Water. *Journal of Geophysical Research: Oceans*, **121,** 6604-6617, http://dx.doi.org/10.1002/2016JC011799
Bosse, A., P. Testor, L. Houpert, P. Damien, L. Prieur, D. Hayes, V. Taillandier, X. Durrieu de Madron, F. d'Ortenzio, L. Coppola, J. Karstensen, and L. Mortier, 2016: Scales and dynamics of Submesoscale Coherent Vortices formed by deep convection in the northwestern Mediterranean Sea. *Journal of Geophysical Research: Oceans*, **121,** 7716-7742, http://dx.doi.org/10.1002/2016JC012144
Boucharel, J., F.-F. Jin, M. H. England, B. Dewitte, I. I. Lin, H.-C. Huang, and M. A. Balmaseda, 2016: Influence of Oceanic Intraseasonal Kelvin Waves on Eastern Pacific Hurricane Activity. *Journal of Climate*, **29,** 7941-7955, http://dx.doi.org/10.1175/JCLI-D-16-0112.1
Boutin, J., Y. Chao, W. E. Asher, T. Delcroix, R. Drucker, K. Drushka, N. Kolodziejczyk, T. Lee, N. Reul, G. Reverdin, J. Schanze, A. Soloviev, L. Yu, J. Anderson, L. Brucker, E. Dinnat, A. Santos-Garcia, W. L. Jones, C. Maes, T. Meissner, W. Tang, N. Vinogradova, and B. Ward, 2016: Satellite and In Situ Salinity: Understanding Near-Surface Stratification and Subfootprint Variability. *Bulletin of the American Meteorological Society*, **97,** 1391-1407, http://dx.doi.org/10.1175/BAMS-D-15-00032.1
Boutin, J., N. Martin, N. Kolodziejczyk, and G. Reverdin, 2016: Interannual anomalies of SMOS sea surface salinity. *Remote Sensing of Environment*, **180,** 128-136, http://dx.doi.org/10.1016/j.rse.2016.02.053
Boyer, T., C. M. Domingues, S. A. Good, G. C. Johnson, J. M. Lyman, M. Ishii, V. Gouretski, J. K. Willis, J. Antonov, S. Wijffels, J. A. Church, R. Cowley, and N. L. Bindoff, 2016: Sensitivity of Global Upper-Ocean Heat Content Estimates to Mapping Methods, XBT Bias Corrections, and Baseline Climatologies. *Journal of Climate*, **29,** 4817-4842, http://dx.doi.org/10.1175/JCLI-D-15-0801.1
Brasnett, B. and D. S. Colan, 2016: Assimilating Retrievals of Sea Surface Temperature from VIIRS and AMSR2. *Journal of Atmospheric and Oceanic Technology*, **33,** 361-375, http://dx.doi.org/10.1175/JTECH-D-15-0093.1
Brennan, C. E., L. Bianucci, and K. Fennel, 2016: Sensitivity of Northwest North Atlantic Shelf Circulation to Surface and Boundary Forcing: A Regional Model Assessment. *Atmosphere-Ocean*, **54,** 230-247, http://dx.doi.org/10.1080/07055900.2016.1147416
Brodeau, L. and T. Koenigk, 2016: Extinction of the northern oceanic deep convection in an ensemble of climate model simulations of the 20th and 21st centuries. *Climate Dynamics*, **46,** 2863-2882, http://dx.doi.org/10.1007/s00382-015-2736-5
Buckley, M. W. and J. Marshall, 2016: Observations, inferences, and mechanisms of the Atlantic Meridional Overturning Circulation: A review. *Reviews of Geophysics*, **54,** 5-63, http://dx.doi.org/10.1002/2015RG000493
Buijsman, M. C., J. K. Ansong, B. K. Arbic, J. G. Richman, J. F. Shriver, P. G. Timko, A. J. Wallcraft, C. B. Whalen, and Z. Zhao, 2016: Impact of Parameterized Internal Wave Drag on the Semidiurnal Energy Balance in a Global Ocean Circulation Model. *Journal of Physical Oceanography*, **46,** 1399-1419, http://dx.doi.org/10.1175/JPO-D-15-0074.1

Buongiorno Nardelli, B., R. Droghei, and R. Santoleri, 2016: Multi-dimensional interpolation of SMOS sea surface salinity with surface temperature and in situ salinity data. *Remote Sensing of Environment*, **180,** 392-402, http://dx.doi.org/10.1016/j.rse.2015.12.052

Burmeister, K., P. Brandt, and J. F. Lübbecke, 2016: Revisiting the Cause of the Eastern Equatorial Atlantic Cold Event in 2009. *Journal of Geophysical Research: Oceans*, **121,** 4777-4789, http://dx.doi.org/10.1002/2016JC011719

Burns, J. M. and B. Subrahmanyam, 2016: Variability of the Seychelles-Chagos Thermocline Ridge Dynamics in Connection With ENSO and Indian Ocean Dipole. *IEEE Geoscience and Remote Sensing Letters*, **13,** 2019-2023, http://dx.doi.org/10.1109/LGRS.2016.2621353

Burns, J. M., B. Subrahmanyam, E. S. Nyadjro, and V. S. N. Murty, 2016: Tropical cyclone activity over the Southwest Tropical Indian Ocean. *Journal of Geophysical Research: Oceans*, **121,** 6389-6402, http://dx.doi.org/10.1002/2016JC011992

Bushinsky, S. M., S. R. Emerson, S. C. Riser, and D. D. Swift, 2016: Accurate oxygen measurements on modified Argo floats using in situ air calibrations. *Limnology and Oceanography: Methods***,** 491-505, http://dx.doi.org/10.1002/lom3.10107

Cabanes, C., V. Thierry, and C. Lagadec, 2016: Improvement of bias detection in Argo float conductivity sensors and its application in the North Atlantic. *Deep Sea Research Part I: Oceanographic Research Papers*, **114,** 128-136, http://dx.doi.org/10.1016/j.dsr.2016.05.007

Caldeira, R., X. Couvelard, R. Vieira, C. Lucas, I. Sala, and I. V. Casanova, 2016: Challenges of building an operational ocean forecasting system for small island regions: regional to local. *Journal of Operational Oceanography*, **9,** 1-12, https://doi.org/10.1080/1755876X.2016.1205304

Capet, A., E. V. Stanev, J. M. Beckers, J. W. Murray, and M. Grégoire, 2016: Decline of the Black Sea oxygen inventory. *Biogeosciences*, **13,** 1287-1297, http://dx.doi.org/10.5194/bg-13-1287-2016

Capet, X., G. Roullet, P. Klein, and G. Maze, 2016: Intensification of Upper-Ocean Submesoscale Turbulence through Charney Baroclinic Instability. *Journal of Physical Oceanography*, **46,** 3365-3384, http://dx.doi.org/10.1175/JPO-D-16-0050.1

Capó, E., A. Orfila, J. M. Sayol, M. Juza, M. G. Sotillo, D. Conti, G. Simarro, B. Mourre, L. Gómez-Pujol, and J. Tintoré, 2016: Assessment of operational models in the Balearic Sea during a MEDESS-4MS experiment. *Deep Sea Research Part II: Topical Studies in Oceanography*, **133,** 118-131, http://dx.doi.org/10.1016/j.dsr2.2016.03.009

Carrassi, A., V. Guemas, F. J. Doblas-Reyes, D. Volpi, and M. Asif, 2016: Sources of skill in near-term climate prediction: generating initial conditions. *Climate Dynamics*, **47,** 3693-3712, http://dx.doi.org/10.1007/s00382-016-3036-4

Carrier, M. J., H. E. Ngodock, S. R. Smith, I. Souopgui, and B. Bartels, 2016: Examining the Potential Impact of SWOT Observations in an Ocean Analysis–Forecasting System. *Monthly Weather Review*, **144,** 3767-3782, http://dx.doi.org/10.1175/MWR-D-15-0361.1

Castellanos, P., E. J. D. Campos, I. Giddy, and W. Santis, 2016: Inter-comparison studies between high-resolution HYCOM simulation and observational data: The South

Atlantic and the Agulhas leakage system. *Journal of Marine Systems*, **159,** 76-88, http://dx.doi.org/10.1016/j.jmarsys.2016.02.010

Cerovečki, I. and D. Giglio, 2016: North Pacific Subtropical Mode Water Volume Decrease in 2006–09 Estimated from Argo Observations: Influence of Surface Formation and Basin-Scale Oceanic Variability. *Journal of Climate*, **29,** 2177-2199, http://dx.doi.org/10.1175/JCLI-D-15-0179.1

Cerovečki, I. and M. R. Mazloff, 2016: The Spatiotemporal Structure of Diabatic Processes Governing the Evolution of Subantarctic Mode Water in the Southern Ocean. *Journal of Physical Oceanography*, **46,** 683-710, http://dx.doi.org/10.1175/JPO-D-14-0243.1

Chakraborty, A. and A. Gangopadhyay, 2016: Development of a High-Resolution Multiscale Modeling and Prediction System for the Bay of Bengal, Part I: Climatology-Based Simulations. *Open Journal of Marine Science*, **6,** 145-176, http://dx.doi.org/10.4236/ojms.2016.61013

Chen, C., B. Lei, Y.-L. Ma, and R. Duan, 2016: Investigating sound speed profile assimilation: An experiment in the Philippine Sea. *Ocean Engineering*, **124,** 135-140, http://dx.doi.org/10.1016/j.oceaneng.2016.07.062

Chen, G. and X. Wang, 2016: Vertical Structure of Upper-Ocean Seasonality: Annual and Semiannual Cycles with Oceanographic Implications. *Journal of Climate*, **29,** 37-59, http://dx.doi.org/10.1175/JCLI-D-14-00855.1

Chen, G., X. Wang, and C. Qian, 2016: Vertical Structure of Upper-Ocean Seasonality: Extratropical Spiral versus Tropical Phase Lock. *Journal of Climate*, **29,** 4021-4030, http://dx.doi.org/10.1175/JCLI-D-15-0805.1

Chen, H., X. Yin, Y. Bao, and F. Qiao, 2016: Ocean satellite data assimilation experiments in FIO-ESM using ensemble adjustment Kalman filter. *Science China Earth Sciences*, **59,** 484-494, http://dx.doi.org/10.1007/s11430-015-5187-2

Cheng, L., K. E. Trenberth, M. D. Palmer, J. Zhu, and J. P. Abraham, 2016: Observed and simulated full-depth ocean heat-content changes for 1970–2005. *Ocean Science*, **12,** 925-935, https://doi.org/10.5194/os-12-925-2016

Cheng, L. and J. Zhu, 2016: Benefits of CMIP5 Multimodel Ensemble in Reconstructing Historical Ocean Subsurface Temperature Variations. *Journal of Climate*, **29,** 5393-5416, http://dx.doi.org/10.1175/JCLI-D-15-0730.1

Cheng, Y., D. Putrasahan, L. Beal, and B. Kirtman, 2016: Quantifying Agulhas Leakage in a High-Resolution Climate Model. *Journal of Climate*, **29,** 6881-6892, http://dx.doi.org/10.1175/JCLI-D-15-0568.1

Chi, J., P. Shi, W. Zhuang, X. Lin, X. Cheng, and Y. Du, 2016: Heat budget of the western Pacific warm pool and the contribution of eddy heat transport diagnosed from HYCOM assimilation. *Journal of Oceanography***,** 1-11, http://dx.doi.org/10.1007/s10872-016-0396-7

Chiswell, S. M., 2016: Mean Velocity Decomposition and Vertical Eddy Diffusivity of the Pacific Ocean from Surface GDP Drifters and 1000-m Argo Floats. *Journal of Physical Oceanography*, **46,** 1751-1768, http://dx.doi.org/10.1175/JPO-D-15-0189.1

Chowdary, J. S., G. Srinivas, T. S. Fousiya, A. Parekh, C. Gnanaseelan, H. Seo, and J. MacKinnon, 2016: Representation of Bay of Bengal upper-ocean salinity in general circulation models. *Oceanography*, **29,** 38-49,

http://dx.doi.org/10.5670/oceanog.2016.37
Ciuffardi, T., E. Napolitano, R. Iacono, F. Reseghetti, G. Raiteri, and A. Bordone, 2016: Analysis of surface circulation structures along a frequently repeated XBT transect crossing the Ligurian and Tyrrhenian Seas. *Ocean Dynamics*, **66,** 767-783, http://dx.doi.org/10.1007/s10236-016-0954-y
Corbett, C. M. and B. Subrahmanyam, 2016: Validation of Satellite-Derived Salinity in the Equatorial Pacific With Specific Emphasis on the 2014-15 ENSO Event. *Ieee Geoscience and Remote Sensing Letters*, **13,** 1979-1983, https://doi.org/10.1109/LGRS.2016.2619980
Cornejo D'Ottone, M., L. Bravo, M. Ramos, O. Pizarro, J. Karstensen, M. Gallegos, M. Correa-Ramirez, N. Silva, L. Farias, and L. Karp-Boss, 2016: Biogeochemical characteristics of a long-lived anticyclonic eddy in the eastern South Pacific Ocean. *Biogeosciences*, **13,** 2971-2979, http://dx.doi.org/10.5194/bg-13-2971-2016
Cornuelle, B., G. Gopalakrishnan, M. Mazloff, P. F. Worcester, and M. A. Dzieciuch, 2016: Ray travel times in the northern Philippine Sea circulation from state estimates. *The Journal of the Acoustical Society of America*, **139,** 2026-2026, http://dx.doi.org/10.1121/1.4949976
Cummins, P. F., D. Masson, and O. A. Saenko, 2016: Vertical heat flux in the ocean: Estimates from observations and from a coupled general circulation model. *Journal of Geophysical Research: Oceans*, **121,** 3790-3802, http://dx.doi.org/10.1002/2016JC011647
Cyr, F., H. van Haren, F. Mienis, G. Duineveld, and D. Bourgault, 2016: On the influence of cold-water coral mound size on flow hydrodynamics, and vice versa. *Geophysical Research Letters*, **43,** 775-783, http://dx.doi.org/10.1002/2015GL067038
da Rocha Fragoso, M., G. V. de Carvalho, F. L. M. Soares, D. G. Faller, L. P. de Freitas Assad, R. Toste, L. M. B. Sancho, E. N. Passos, C. S. Böck, B. Reis, L. Landau, H. G. Arango, and A. M. Moore, 2016: A 4D-variational ocean data assimilation application for Santos Basin, Brazil. *Ocean Dynamics*, **66,** 419-434, http://dx.doi.org/10.1007/s10236-016-0931-5
D'Addezio, J. M. and B. Subrahmanyam, 2016: Sea surface salinity variability in the Agulhas Current region inferred from SMOS and Aquarius. *Remote Sensing of Environment*, **180,** 440-452, http://dx.doi.org/10.1016/j.rse.2016.02.006
D'Addezio, J. M. and B. Subrahmanyam, 2016: The role of salinity on the interannual variability of the Seychelles-Chagos thermocline ridge. *Remote Sensing of Environment*, **180,** 178-192, http://dx.doi.org/10.1016/j.rse.2016.02.051
Dall'Olmo, G., J. Dingle, L. Polimene, R. J. W. Brewin, and H. Claustre, 2016: Substantial energy input to the mesopelagic ecosystem from the seasonal mixed-layer pump. *Nature Geosci*, **9**, 820-823, http://dx.doi.org/10.1038/ngeo2818
Damerell, G. M., K. J. Heywood, A. F. Thompson, U. Binetti, and J. Kaiser, 2016: The vertical structure of upper ocean variability at the Porcupine Abyssal Plain during 2012–2013. *Journal of Geophysical Research: Oceans*, **121,** 3075-3089, http://dx.doi.org/10.1002/2015JC011423
Danabasoglu, G., S. G. Yeager, W. M. Kim, E. Behrens, M. Bentsen, D. Bi, A. Biastoch, R. Bleck, C. Böning, A. Bozec, V. M. Canuto, C. Cassou, E. Chassignet, A. C. Coward, S. Danilov,

N. Diansky, H. Drange, R. Farneti, E. Fernandez, P. G. Fogli, G. Forget, Y. Fujii, S. M. Griffies, A. Gusev, P. Heimbach, A. Howard, M. Ilicak, T. Jung, A. R. Karspeck, M. Kelley, W. G. Large, A. Leboissetier, J. Lu, G. Madec, S. J. Marsland, S. Masina, A. Navarra, A. J. G. Nurser, A. Pirani, A. Romanou, D. Salas y Mélia, B. L. Samuels, M. Scheinert, D. Sidorenko, S. Sun, A.-M. Treguier, H. Tsujino, P. Uotila, S. Valcke, A. Voldoire, Q. Wang, and I. Yashayaev, 2016: North Atlantic simulations in Coordinated Ocean-ice Reference Experiments phase II (CORE-II). Part II: Inter-annual to decadal variability. *Ocean Modelling*, **97,** 65-90, http://dx.doi.org/10.1016/j.ocemod.2015.11.007

Dandapat, S. and A. Chakraborty, 2016: Mesoscale Eddies in the Western Bay of Bengal as Observed From Satellite Altimetry in 1993-2014: Statistical Characteristics, Variability and Three-Dimensional Properties. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **9,** 5044-5054, http://dx.doi.org/10.1109/JSTARS.2016.2585179

de Jong, M. F. and L. de Steur, 2016: Strong winter cooling over the Irminger Sea in winter 2014-2015, exceptional deep convection, and the emergence of anomalously low SST. *Geophysical Research Letters*, **43,** 7106-7113, http://dx.doi.org/10.1002/2016GL069596

de Lavergne, C., G. Madec, X. Capet, G. Maze, and F. Roquet, 2016: Getting to the bottom of the ocean. *Nature Geosci*, **9,** 857-858, http://dx.doi.org/10.1038/ngeo2850

Declerck, A., Y. Ourmières, and A. Molcard, 2016: Assessment of the coastal dynamics in a nested zoom and feedback on the boundary current: the North-Western Mediterranean Sea case. *Ocean Dynamics*, **66,** 1529-1542, http://dx.doi.org/10.1007/s10236-016-0985-4

Deng, Z. a., G. Wei, T. Yu, H. Wei, L. Kang, and L. Han, 2016: The diapycnal mixing in the upper Pacific estimated from GTSPP observations. *Acta Oceanologica Sinica*, **35,** 46-52, http://dx.doi.org/10.1007/s13131-016-0795-z

Desbruyères, D., E. L. McDonagh, and B. A. King, 2016: Observational Advances in Estimates of Oceanic Heating. *Current Climate Change Reports***,** 1-8, http://dx.doi.org/10.1007/s40641-016-0037-7

Dolinar, E. K., X. Dong, and B. Xi, 2016: Evaluation and intercomparison of clouds, precipitation, and radiation budgets in recent reanalyses using satellite-surface observations. *Climate Dynamics*, **46,** 2123-2144, http://dx.doi.org/10.1007/s00382-015-2693-z

Dong, D., X. Yang, X. Li, and Z. Li, 2016: SAR Observation of Eddy-Induced Mode-2 Internal Solitary Waves in the South China Sea. *Ieee Transactions on Geoscience and Remote Sensing*, **54,** 6674-6686, http://dx.doi.org/10.1109/TGRS.2016.2587752

Donohue, K. A., D. R. Watts, P. Hamilton, R. Leben, M. Kennelly, and A. Lugo-Fernández, 2016: Gulf of Mexico Loop Current path variability. *Dynamics of Atmospheres and Oceans*, **76, Part 2,** 174-194, http://doi.org/10.1016/j.dynatmoce.2015.12.003

Donohue, S. M. and M. W. Stacey, 2016: Simulation of the 2014 Anomalous Warming in the Northeast Pacific. *Atmosphere-Ocean*, **54,** 457-468, http://dx.doi.org/10.1080/07055900.2016.1197096

Droghei, R., B. B. Nardelli, and R. Santoleri, 2016: Combining In Situ and Satellite

Observations to Retrieve Salinity and Density at the Ocean Surface. *Journal of Atmospheric and Oceanic Technology*, **33,** 1211-1223, http://dx.doi.org/10.1175/JTECH-D-15-0194.1

Drucker, R. and S. C. Riser, 2016: In situ phase-domain calibration of oxygen Optodes on profiling floats. *Methods in Oceanography*, **17,** 296-318, https://doi.org/10.1016/j.mio.2016.09.007

Drushka, K., W. E. Asher, B. Ward, and K. Walesby, 2016: Understanding the formation and evolution of rain-formed fresh lenses at the ocean surface. *Journal of Geophysical Research: Oceans*, **121,** 2673-2689, http://dx.doi.org/10.1002/2015JC011527

Dufois, F., N. J. Hardman-Mountford, J. Greenwood, A. J. Richardson, M. Feng, and R. J. Matear, 2016: Anticyclonic eddies are more productive than cyclonic eddies in subtropical gyres because of winter mixing. *Science Advances*, **2**, http://dx.doi.org/10.1126/sciadv.1600282

Dukhovskoy, D. S., P. G. Myers, G. Platov, M.-L. Timmermans, B. Curry, A. Proshutinsky, J. L. Bamber, E. Chassignet, X. Hu, C. M. Lee, and R. Somavilla, 2016: Greenland freshwater pathways in the sub-Arctic Seas from model experiments with passive tracers. *Journal of Geophysical Research: Oceans*, **121,** 877-907, http://dx.doi.org/10.1002/2015JC011290

Durack, P. J., T. Lee, N. T. Vinogradova, and D. Stammer, 2016: Keeping the lights on for global ocean salinity observation. *Nature Clim. Change*, **6,** 228-231, http://dx.doi.org/10.1038/nclimate2946

Durski, S. M., A. Kurapov, J. Zhang, and G. G. Panteleev, 2016: Circulation in the Eastern Bering Sea: Inferences from a 2-km-resolution model. *Deep Sea Research Part II: Topical Studies in Oceanography*, **134,** 48-64, http://dx.doi.org/10.1016/j.dsr2.2015.02.002

Erickson, Z. K., A. F. Thompson, N. Cassar, J. Sprintall, and M. R. Mazloff, 2016: An advective mechanism for deep chlorophyll maxima formation in southern Drake Passage. *Geophysical Research Letters*, **43,** 10,846-10,855, http://dx.doi.org/10.1002/2016GL070565

Estournel, C., P. Testor, P. Damien, F. D'Ortenzio, P. Marsaleix, P. Conan, F. Kessouri, X. Durrieu de Madron, L. Coppola, J.-M. Lellouche, S. Belamari, L. Mortier, C. Ulses, M.-N. Bouin, and L. Prieur, 2016: High resolution modeling of dense water formation in the north-western Mediterranean during winter 2012–2013: Processes and budget. *Journal of Geophysical Research: Oceans*, **121,** 5367-5392, http://dx.doi.org/10.1002/2016JC011935

Feucher, C., G. Maze, and H. Mercier, 2016: Mean Structure of the North Atlantic Subtropical Permanent Pycnocline from In Situ Observations. *Journal of Atmospheric and Oceanic Technology*, **33,** 1285-1308, http://dx.doi.org/10.1175/JTECH-D-15-0192.1

Fiedler, B., D. S. Grundle, F. Schütte, J. Karstensen, C. R. Löscher, H. Hauss, H. Wagner, A. Loginova, R. Kiko, P. Silva, T. Tanhua, and A. Körtzinger, 2016: Oxygen utilization and downward carbon flux in an oxygen-depleted eddy in the eastern tropical North Atlantic. *Biogeosciences*, **13,** 5633-5647, http://dx.doi.org/10.5194/bg-13-5633-2016

Fore, A. G., S. H. Yueh, W. Tang, B. W. Stiles, and A. K. Hayashi, 2016: Combined Active/Passive Retrievals of Ocean Vector Wind and Sea Surface Salinity With SMAP.

IEEE Transactions on Geoscience and Remote Sensing, **54,** 7396-7404, http://dx.doi.org/10.1109/TGRS.2016.2601486

Fousiya, T. S., A. Parekh, and C. Gnanaseelan, 2016: Interannual variability of upper ocean stratification in Bay of Bengal: observational and modeling aspects. *Theoretical and Applied Climatology*, **126,** 285-301, http://dx.doi.org/10.1007/s00704-015-1574-z

Franz, G. A. S., P. Leitao, A. dos Santos, M. Juliano, and R. Neves, 2016: From regional to local scale modelling on the south-eastern Brazilian shelf: case study of Paranaguá estuarine system. *Brazilian Journal of Oceanography*, **64,** 277-293, http://dx.doi.org/10.1590/S1679-875920161195806403

Fratianni, C., N. Pinardi, F. Lalli, S. Simoncelli, G. Coppini, V. Pesarino, A. Bruschi, M. L. Cassese, and M. Drudi, 2016: Operational oceanography for the Marine Strategy Framework Directive: the case of the mixing indicator. *Journal of Operational Oceanography*, **9,** s223-s233, http://dx.doi.org/10.1080/1755876X.2015.1115634

Frederikse, T., R. Riva, M. Kleinherenbrink, Y. Wada, M. van den Broeke, and B. Marzeion, 2016: Closing the sea level budget on a regional scale: Trends and variability on the Northwestern European continental shelf. *Geophysical Research Letters*, **43,** 10,864-10,872, http://dx.doi.org/10.1002/2016GL070750

Fröb, F., A. Olsen, K. Våge, G. W. K. Moore, I. Yashayaev, E. Jeansson, and B. Rajasakaren, 2016: Irminger Sea deep convection injects oxygen and anthropogenic carbon to the ocean interior. *Nature Communications*, **7,** 13244, http://dx.doi.org/10.1038/ncomms13244

Fu, D., H. Luan, D. Pan, Y. Zhang, L. a. Wang, D. Liu, Y. Ding, and X. Li, 2016: Impact of two typhoons on the marine environment in the Yellow Sea and East China Sea. *Chinese Journal of Oceanology and Limnology*, **34,** 871-884, http://dx.doi.org/10.1007/s00343-016-5049-6

Fu, L.-L., 2016: On the decadal trend of global mean sea level and its implication on ocean heat content change. *Frontiers in Marine Science*, **3**, http://dx.doi.org/10.3389/fmars.2016.00037

Gaillard, F., T. Reynaud, V. Thierry, N. Kolodziejczyk, and K. v. Schuckmann, 2016: In Situ–Based Reanalysis of the Global Ocean Temperature and Salinity with ISAS: Variability of the Heat Content and Steric Height. *Journal of Climate*, **29,** 1305-1323, http://dx.doi.org/10.1175/JCLI-D-15-0028.1

Gao, W., P. Li, S.-P. Xie, L. Xu, and C. Liu, 2016: Multicore structure of the North Pacific subtropical mode water from enhanced Argo observations. *Geophysical Research Letters*, **43,** 1249-1255, http://dx.doi.org/10.1002/2015GL067495

Garraffo, Z. D., H.-C. Kim, A. Mehra, T. Spindler, I. Rivin, and H. L. Tolman, 2016: Modeling of137Cs as a Tracer in a Regional Model for the Western Pacific, after the Fukushima–Daiichi Nuclear Power Plant Accident of March 2011. *Weather and Forecasting*, **31,** 553-579, http://dx.doi.org/10.1175/WAF-D-13-00101.1

Gasparin, F. and D. Roemmich, 2016: The strong freshwater anomaly during the onset of the 2015/2016 El Niño. *Geophysical Research Letters*, **43,** 6452-6460, http://dx.doi.org/10.1002/2016GL069542

Germineaud, C., A. Ganachaud, J. Sprintall, S. Cravatte, G. Eldin, M. S. Alberty, and E. Privat, 2016: Pathways and Water Mass Properties of the Thermocline and Intermediate

Waters in the Solomon Sea. *Journal of Physical Oceanography*, **46,** 3031-3049, http://dx.doi.org/10.1175/JPO-D-16-0107.1

Giese, B. S., H. F. Seidel, G. P. Compo, and P. D. Sardeshmukh, 2016: An ensemble of ocean reanalyses for 1815–2013 with sparse observational input. *Journal of Geophysical Research: Oceans*, **121,** 6891-6910, http://dx.doi.org/10.1002/2016JC012079

Giglio, D. and G. C. Johnson, 2016: Subantarctic and Polar Fronts of the Antarctic Circumpolar Current and Southern Ocean Heat and Freshwater Content Variability: A View from Argo. *Journal of Physical Oceanography*, **46,** 749-768, http://dx.doi.org/10.1175/JPO-D-15-0131.1

Gladyshev, S. V., V. S. Gladyshev, A. S. Falina, and A. A. Sarafanov, 2016: Winter convection in the Irminger Sea in 2004–2014. *Oceanology*, **56,** 326-335, http://dx.doi.org/10.1134/S0001437016030073

Gleckler, P. J., P. J. Durack, R. J. Stouffer, G. C. Johnson, and C. E. Forest, 2016: Industrial-era global ocean heat uptake doubles in recent decades. *Nature Clim. Change*, **6,** 394-398, http://dx.doi.org/10.1038/nclimate2915

González-Gambau, V., E. Olmedo, A. Turiel, J. Martínez, J. Ballabrera-Poy, M. Portabella, and M. Piles, 2016: Enhancing SMOS brightness temperatures over the ocean using the nodal sampling image reconstruction technique. *Remote Sensing of Environment*, **180,** 205-220, http://dx.doi.org/10.1016/j.rse.2015.12.032

Gordon, A. L., E. Shroyer, A. Mahadevan, D. Sengupta, and M. Freilich, 2016: Bay of Bengal: 2013 northeast monsoon upper-ocean circulation. *Oceanography*, **29,** 82-91, http://dx.doi.org/10.5670/oceanog.2016.41

Grist, J. P., S. A. Josey, Z. L. Jacobs, R. Marsh, B. Sinha, and E. Van Sebille, 2016: Extreme air–sea interaction over the North Atlantic subpolar gyre during the winter of 2013–2014 and its sub-surface legacy. *Climate Dynamics*, **46,** 4027-4045, http://dx.doi.org/10.1007/s00382-015-2819-3

Grist, J. P., S. A. Josey, J. D. Zika, D. G. Evans, and N. Skliris, 2016: Assessing recent air-sea freshwater flux changes using a surface temperature-salinity space framework. *Journal of Geophysical Research: Oceans*, **121,** 8787-8806, http://dx.doi.org/10.1002/2016JC012091

Groeskamp, S., R. P. Abernathey, and A. Klocker, 2016: Water mass transformation by cabbeling and thermobaricity. *Geophysical Research Letters*, **43,** 10,835-10,845, http://dx.doi.org/10.1002/2016GL070860

Häkkinen, S., P. B. Rhines, and D. L. Worthen, 2016: Warming of the Global Ocean: Spatial Structure and Water-Mass Trends. *Journal of Climate*, **29,** 4949-4963, http://dx.doi.org/10.1175/JCLI-D-15-0607.1

Hamon, M., J. Beuvier, S. Somot, J. M. Lellouche, E. Greiner, G. Jordà, M. N. Bouin, T. Arsouze, K. Béranger, F. Sevault, C. Dubois, M. Drevillon, and Y. Drillet, 2016: Design and validation of MEDRYS, a Mediterranean Sea reanalysis over the period 1992–2013. *Ocean Science*, **12,** 577-599, https://doi.org/10.5194/os-12-577-2016

Han, S., N. Hirose, N. Usui, and Y. Miyazawa, 2016: Multi-model ensemble estimation of volume transport through the straits of the East/Japan Sea. *Ocean Dynamics*, **66,** 59-76, http://dx.doi.org/10.1007/s10236-015-0896-9

Hátún, H., K. Lohmann, D. Matei, J. H. Jungclaus, S. Pacariz, M. Bersch, A. Gislason, J.

Ólafsson, and P. C. Reid, 2016: An inflated subpolar gyre blows life toward the northeastern Atlantic. *Progress in Oceanography*, **147,** 49-66, http://dx.doi.org/10.1016/j.pocean.2016.07.009

Hausmann, U., A. Czaja, and J. Marshall, 2016: Estimates of Air–Sea Feedbacks on Sea Surface Temperature Anomalies in the Southern Ocean. *Journal of Climate*, **29,** 439-454, http://dx.doi.org/10.1175/JCLI-D-15-0015.1

Hauss, H., S. Christiansen, F. Schütte, R. Kiko, M. Edvam Lima, E. Rodrigues, J. Karstensen, C. R. Löscher, A. Körtzinger, and B. Fiedler, 2016: Dead zone or oasis in the open ocean? Zooplankton distribution and migration in low-oxygen modewater eddies. *Biogeosciences*, **13,** 1977-1989, http://dx.doi.org/10.5194/bg-13-1977-2016

He, Q., H. Zhan, S. Cai, and Z. Li, 2016: Eddy effects on surface chlorophyll in the northern South China Sea: Mechanism investigation and temporal variability analysis. *Deep Sea Research Part I: Oceanographic Research Papers*, **112,** 25-36, http://dx.doi.org/10.1016/j.dsr.2016.03.004

He, Q., H. Zhan, S. Cai, and G. Zha, 2016: On the asymmetry of eddy-induced surface chlorophyll anomalies in the southeastern Pacific: The role of eddy-Ekman pumping. *Progress in Oceanography*, **141,** 202-211, http://dx.doi.org/10.1016/j.pocean.2015.12.012

Hennon, T. D., S. C. Riser, and S. Mecking, 2016: Profiling float-based observations of net respiration beneath the mixed layer. *Global Biogeochemical Cycles*, **30,** 920-932, http://dx.doi.org/10.1002/2016GB005380

Hernandez, O., J. Jouanno, and F. Durand, 2016: Do the Amazon and Orinoco freshwater plumes really matter for hurricane-induced ocean surface cooling? *Journal of Geophysical Research: Oceans*, **121,** 2119-2141, http://dx.doi.org/10.1002/2015JC011021

Hernández-Guerra, A. and L. D. Talley, 2016: Meridional overturning transports at 30°S in the Indian and Pacific Oceans in 2002–2003 and 2009. *Progress in Oceanography*, **146,** 89-120, http://dx.doi.org/10.1016/j.pocean.2016.06.005

Hernández-Molina, F. J., A. Wåhlin, M. Bruno, G. Ercilla, E. Llave, N. Serra, G. Rosón, P. Puig, M. Rebesco, D. Van Rooij, D. Roque, C. González-Pola, F. Sánchez, M. Gómez, B. Preu, T. Schwenk, T. J. J. Hanebuth, R. F. Sánchez Leal, J. García-Lafuente, R. E. Brackenridge, C. Juan, D. A. V. Stow, and J. M. Sánchez-González, 2016: Oceanographic processes and morphosedimentary products along the Iberian margins: A new multidisciplinary approach. *Marine Geology*, **378,** 127-156, http://dx.doi.org/10.1016/j.margeo.2015.12.008

Hiraike, Y., Y. Tanaka, and H. Hasumi, 2016: Subduction of Pacific Antarctic Intermediate Water in an eddy-resolving model. *Journal of Geophysical Research: Oceans*, **121,** 133-147, http://dx.doi.org/10.1002/2015JC010802

Horii, T., I. Ueki, K. Ando, T. Hasegawa, K. Mizuno, and A. Seiki, 2016: Impact of intraseasonal salinity variations on sea surface temperature in the eastern equatorial Indian Ocean. *Journal of Oceanography*, **72,** 313-326, http://dx.doi.org/10.1007/s10872-015-0337-x

Horii, T., I. Ueki, F. Syamsudin, I. Sofian, and K. Ando, 2016: Intraseasonal coastal upwelling signal along the southern coast of Java observed using Indonesian tidal station data. *Journal of Geophysical Research: Oceans*, **121,** 2690-2708,

http://dx.doi.org/10.1002/2015JC010886
Hosoda, S., M. Nonaka, T. Tomita, B. Taguchi, H. Tomita, and N. Iwasaka, 2016: Impact of downward heat penetration below the shallow seasonal thermocline on the sea surface temperature. *"Hot Spots" in the Climate System: New Developments in the Extratropical Ocean-Atmosphere Interaction Research*, H. Nakamura, A. Isobe, S. Minobe, H. Mitsudera, M. Nonaka, and T. Suga, Eds., Springer Japan, 73-89, http://dx.doi.org/10.1007/978-4-431-56053-1_5.
Hosoda, K. and F. Sakaida, 2016: Global Daily High-Resolution Satellite-Based Foundation Sea Surface Temperature Dataset: Development and Validation against Two Definitions of Foundation SST. *Remote Sensing*, **8,** 962, https://doi.org/10.3390/rs8110962
Houpert, L., X. Durrieu de Madron, P. Testor, A. Bosse, F. D'Ortenzio, M. N. Bouin, D. Dausse, H. Le Goff, S. Kunesch, M. Labaste, L. Coppola, L. Mortier, and P. Raimbault, 2016: Observations of open-ocean deep convection in the northwestern Mediterranean Sea: Seasonal and interannual variability of mixing and deep water masses for the 2007-2013 Period. *Journal of Geophysical Research: Oceans*, **121,** 8139-8171, http://dx.doi.org/10.1002/2016JC011857
Hsin, Y.-C., 2016: Trends of the Pathways and Intensities of Surface Equatorial Current System in the North Pacific Ocean. *Journal of Climate*, **29,** 6693-6710, http://dx.doi.org/10.1175/JCLI-D-15-0850.1
Hsu, P. C., C. C. Lin, S. J. Huang, and C. R. Ho, 2016: Effects of Cold Eddy on Kuroshio Meander and Its Surface Properties, East of Taiwan. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **9,** 5055-5063, http://dx.doi.org/10.1109/JSTARS.2016.2524698
Hu, S., D. Hu, C. Guan, F. Wang, L. Zhang, F. Wang, and Q. Wang, 2016: Interannual Variability of the Mindanao Current/Undercurrent in Direct Observations and Numerical Simulations. *Journal of Physical Oceanography*, **46,** 483-499, http://dx.doi.org/10.1175/JPO-D-15-0092.1
Hu, S. and J. Sprintall, 2016: Interannual variability of the Indonesian Throughflow: The salinity effect. *Journal of Geophysical Research: Oceans*, **121,** 2596-2615, http://dx.doi.org/10.1002/2015JC011495
Hu, Z.-Z., A. Kumar, and B. Huang, 2016: Spatial distribution and the interdecadal change of leading modes of heat budget of the mixed-layer in the tropical Pacific and the association with ENSO. *Climate Dynamics*, **46,** 1753-1768, http://dx.doi.org/10.1007/s00382-015-2672-4
Huang, X., Z. Chen, W. Zhao, Z. Zhang, C. Zhou, Q. Yang, and J. Tian, 2016: An extreme internal solitary wave event observed in the northern South China Sea. *Scientific Reports*, **6,** 30041, http://dx.doi.org/10.1038/srep30041
Hutchinson, K., S. Swart, A. Meijers, I. Ansorge, and S. Speich, 2016: Decadal-scale thermohaline variability in the Atlantic sector of the Southern Ocean. *Journal of Geophysical Research: Oceans*, **121,** 3171-3189, http://dx.doi.org/10.1002/2015JC011491
Iakovlev, N. G., E. M. Volodin, and A. S. Gritsun, 2016: Simulation of the spatiotemporal variability of the World Ocean sea surface hight by the INM climate models.

Izvestiya, Atmospheric and Oceanic Physics, **52,** 376-385, http://dx.doi.org/10.1134/S0001433816040125

Ignatov, A., X. Zhou, B. Petrenko, X. Liang, Y. Kihai, P. Dash, J. Stroup, J. Sapper, and P. DiGiacomo, 2016: AVGRR GAC SST Reanalysis Version 1 (RAN1). *Remote Sensing* **8**, http://dx.doi.org/10.3390/rs8040315

Inoue, R., V. Faure, and S. Kouketsu, 2016: Float observations of an anticyclonic eddy off Hokkaido. *Journal of Geophysical Research: Oceans*, **121,** 6103-6120, http://dx.doi.org/10.1002/2016JC011698

Inoue, R., M. C. Honda, T. Fujiki, K. Matsumoto, S. Kouketsu, T. Suga, and T. Saino, 2016: Western North Pacific Integrated Physical-Biogeochemical Ocean Observation Experiment (INBOX): Part 2. Biogeochemical responses to eddies and typhoons revealed from the S1 mooring and shipboard measurements. *Journal of Marine Research*, **74,** 71-99, https://doi.org/10.1357/002224016819257335

Inoue, R., M. Kitamura, and T. Fujiki, 2016: Diel vertical migration of zooplankton at the S1 biogeochemical mooring revealed from acoustic backscattering strength. *Journal of Geophysical Research: Oceans*, **121,** 1031-1050, http://dx.doi.org/10.1002/2015JC011352

Inoue, R. and S. Kouketsu, 2016: Physical oceanographic conditions around the S1 mooring site. *Journal of Oceanography*, **72,** 453-464, http://dx.doi.org/10.1007/s10872-015-0342-0

Inoue, R., T. Suga, S. Kouketsu, T. Kita, S. Hosoda, Y. Kobayashi, K. Sato, H. Nakajima, and T. Kawano, 2016: Western North Pacific Integrated Physical-Biogeochemical Ocean Observation Experiment (INBOX): Part 1. Specifications and chronology of the S1-INBOX floats. *Journal of Marine Research*, **74,** 43-69, http://dx.doi.org/10.1357/002224016819257344

Isern-Fontanet, J., E. Olmedo, A. Turiel, J. Ballabrera-Poy, and E. García-Ladona, 2016: Retrieval of eddy dynamics from SMOS sea surface salinity measurements in the Algerian Basin (Mediterranean Sea). *Geophysical Research Letters*, **43,** 6427-6434, http://dx.doi.org/10.1002/2016GL069595

Jena, B., 2016: Satellite remote sensing of the island mass effect on the Sub-Antarctic Kerguelen Plateau, Southern Ocean. *Frontiers of Earth Science*, **10,** 479-486, http://dx.doi.org/10.1007/s11707-016-0561-8

Jia, W., D. Wang, N. Pinardi, S. Simoncelli, A. Storto, and S. Masina, 2016: A Quality Control Procedure for Climatological Studies Using Argo Data in the North Pacific Western Boundary Current Region. *Journal of Atmospheric and Oceanic Technology*, **33,** 2717-2733, http://dx.doi.org/10.1175/JTECH-D-15-0140.1

Jochumsen, K., S. M. Schnurr, and D. Quadfasel, 2016: Bottom temperature and salinity distribution and its variability around Iceland. *Deep Sea Research Part I: Oceanographic Research Papers*, **111,** 79-90, http://dx.doi.org/10.1016/j.dsr.2016.02.009

Johnson, B. K., F. O. Bryan, S. A. Grodsky, and J. A. Carton, 2016: Climatological Annual Cycle of the Salinity Budgets of the Subtropical Maxima. *Journal of Physical Oceanography*, **46,** 2981-2994, http://dx.doi.org/10.1175/JPO-D-15-0202.1

Johnson, G. C. and A. N. Birnbaum, 2016: Equatorial Pacific Thermostad response to El Niño.

Journal of Geophysical Research: Oceans, **121,** 8368-8378, http://dx.doi.org/10.1002/2016JC012304

Johnson, G. C. and J. M. Lyman, 2016: Global Oceans: Sea Surface Salinity, In State of the Climate in 2015. *Bulletin of the American Meteorological Society*, **97,** S71 - S72, http://dx.doi.org/10.1175/2016BAMSStateoftheClimate.1

Johnson, G. C., J. M. Lyman, T. Boyer, C. M. Domingues, M. Ishii, R. Killick, D. Monselesan, and S. E. Wijffels, 2016: Global Oceans: Ocean heat content, In State of the Climate in 2015. *Bulletin of the American Meteorological Society*, **97,** S66 - S70, http://dx.doi.org/10.1175/2016BAMSStateoftheClimate.1

Johnson, G. C., J. M. Lyman, and N. G. Loeb, 2016: Improving estimates of Earth's energy imbalance. *Nature Clim. Change*, **6,** 639-640, http://dx.doi.org/10.1038/nclimate3043

Johnson, K. S. and H. Claustre, 2016: Bringing Biogeochemistry into the Argo Age. *Eos*, **97**, https://doi.org/10.1029/2016EO062427

Johnson, L., C. M. Lee, and E. A. D'Asaro, 2016: Global Estimates of Lateral Springtime Restratification. *Journal of Physical Oceanography*, **46,** 1555-1573, http://dx.doi.org/10.1175/JPO-D-15-0163.1

Jones, D. C., A. J. S. Meijers, E. Shuckburgh, J.-B. Sallée, P. Haynes, E. K. McAufield, and M. R. Mazloff, 2016: How does Subantarctic Mode Water ventilate the Southern Hemisphere subtropics? *Journal of Geophysical Research: Oceans*, **121,** 6558-6582, http://dx.doi.org/10.1002/2016JC011680

Juza, M., B. Mourre, L. Renault, S. Gómara, K. Sebastián, S. Lora, J. P. Beltran, B. Frontera, B. Garau, C. Troupin, M. Torner, E. Heslop, B. Casas, R. Escudier, G. Vizoso, and J. Tintoré, 2016: SOCIB operational ocean forecasting system and multi-platform validation in the Western Mediterranean Sea. *Journal of Operational Oceanography*, **9,** s155-s166, http://dx.doi.org/10.1080/1755876X.2015.1117764

Kaeriyama, H., Y. Shimizu, T. Setou, Y. Kumamoto, M. Okazaki, D. Ambe, and T. Ono, 2016: Intrusion of Fukushima-derived radiocaesium into subsurface water due to formation of mode waters in the North Pacific. *Scientific Reports*, **6,** 22010, http://dx.doi.org/10.1038/srep22010

Kang, S. K., Y. H. Seung, J. J. Park, J.-H. Park, J. H. Lee, E. J. Kim, Y. H. Kim, and M.-S. Suk, 2016: Seasonal Variability in Middepth Gyral Circulation Patterns in the Central East/Japan Sea as Revealed by Long-Term Argo Data. *Journal of Physical Oceanography*, **46,** 937-946, http://dx.doi.org/10.1175/JPO-D-15-0157.1

Karspeck, A. R., 2016: An Ensemble Approach for the Estimation of Observational Error Illustrated for a Nominal 1° Global Ocean Model. *Monthly Weather Review*, **144,** 1713-1728, http://dx.doi.org/10.1175/MWR-D-14-00336.1

Kassis, D., E. Krasakopoulou, G. Korres, G. Petihakis, and G. S. Triantafyllou, 2016: Hydrodynamic features of the South Aegean Sea as derived from Argo T/S and dissolved oxygen profiles in the area. *Ocean Dynamics*, **66,** 1449-1466, http://dx.doi.org/10.1007/s10236-016-0987-2

Katavouta, A. and K. R. Thompson, 2016: Downscaling ocean conditions with application to the Gulf of Maine, Scotian Shelf and adjacent deep ocean. *Ocean Modelling*, **104,** 54-72, http://dx.doi.org/10.1016/j.ocemod.2016.05.007

Kato, S., K.-M. Xu, T. Wong, N. G. Loeb, F. G. Rose, K. E. Trenberth, and T. J. Thorsen, 2016:

Investigation of the Residual in Column-Integrated Atmospheric Energy Balance Using Cloud Objects. *Journal of Climate*, **29,** 7435-7452, http://dx.doi.org/10.1175/JCLI-D-15-0782.1

Katsumata, K., 2016: Eddies Observed by Argo Floats. Part I: Eddy Transport in the Upper 1000 dbar. *Journal of Physical Oceanography*, **46,** 3471-3486, http://dx.doi.org/10.1175/JPO-D-16-0150.1

Kaurkin, M. N., R. A. Ibrayev, and K. P. Belyaev, 2016: Data assimilation in the ocean circulation model of high spatial resolution using the methods of parallel programming. *Russian Meteorology and Hydrology*, **41,** 479-486, http://dx.doi.org/10.3103/S1068373916070050

Kaurkin, M. N., R. A. Ibrayev, and K. P. Belyaev, 2016: ARGO data assimilation into the ocean dynamics model with high spatial resolution using Ensemble Optimal Interpolation (EnOI). *Oceanology*, **56,** 774-781, http://dx.doi.org/10.1134/S0001437016060059

Kawakami, Y., S. Sugimoto, and T. Suga, 2016: Inter-annual zonal shift of the formation region of the lighter variety of the North Pacific Central Mode Water. *Journal of Oceanography*, **72,** 225-234, http://dx.doi.org/10.1007/s10872-015-0325-1

Keerthi, M. G., M. Lengaigne, K. Drushka, J. Vialard, C. Boyer Montegut, S. Pous, M. Levy, and P. M. Muraleedharan, 2016: Intraseasonal variability of mixed layer depth in the tropical Indian Ocean. *Climate Dynamics*, **46,** 2633-2655, http://dx.doi.org/10.1007/s00382-015-2721-z

Kelly, K. A., K. Drushka, L. Thompson, D. Le Bars, and E. L. McDonagh, 2016: Impact of slowdown of Atlantic overturning circulation on heat and freshwater transports. *Geophysical Research Letters*, **43,** 7625-7631, http://dx.doi.org/10.1002/2016GL069789

Ker, S., Y. Le Gonidec, and L. Marié, 2016: Multifrequency seismic detectability of seasonal thermoclines assessed from ARGO data. *Journal of Geophysical Research: Oceans*, **121,** 6035-6060, http://dx.doi.org/10.1002/2016JC011793

Kerry, C., B. Powell, M. Roughan, and P. Oke, 2016: Development and evaluation of a high-resolution reanalysis of the East Australian Current region using the Regional Ocean Modelling System (ROMS 3.4) and Incremental Strong-Constraint 4-Dimensional Variational (IS4D-Var) data assimilation. *Geosci. Model Dev.*, **9,** 3779-3801, http://www.geosci-model-dev.net/9/3779/2016/

Kitamura, T., T. Nakano, and S. Sugimoto, 2016: Decadal variations in mixed layer salinity in the Kuroshio Extension recirculation gyre region: influence of precipitation during the warm season. *Journal of Oceanography*, **72,** 167-175, http://dx.doi.org/10.1007/s10872-015-0317-1

Kleinherenbrink, M., R. Riva, and Y. Sun, 2016: Sub-basin-scale sea level budgets from satellite altimetry, Argo floats and satellite gravimetry: a case study in the North Atlantic Ocean. *Ocean Science*, **12,** 1179-1203, http://dx.doi.org/10.5194/os-12-1179-2016

Kolodziejczyk, N., J. Boutin, J.-L. Vergely, S. Marchand, N. Martin, and G. Reverdin, 2016: Mitigation of systematic errors in SMOS sea surface salinity. *Remote Sensing of Environment*, **180,** 164-177, http://dx.doi.org/10.1016/j.rse.2016.02.061

Korotaev, G. K., P. N. Lishaev, and V. V. Knysh, 2016: Reconstruction of the

three-dimensional salinity and temperature fields of the Black Sea on the basis of satellite altimetry measurements. *Izvestiya, Atmospheric and Oceanic Physics*, **52,** 961-973, http://dx.doi.org/10.1134/S0001433816090152

Korotaev, G. K., Y. B. Ratner, M. V. Ivanchik, A. L. Kholod, and A. M. Ivanchik, 2016: Operational system for diagnosis and forecast of hydrophysical characteristics of the Black Sea. *Izvestiya, Atmospheric and Oceanic Physics*, **52,** 542-549, http://dx.doi.org/10.1134/S0001433816050078

Korotaev, G. K., A. S. Sarkisyan, V. V. Knysh, and P. N. Lishaev, 2016: Reanalysis of seasonal and interannual variability of Black Sea fields for 1993–2012. *Izvestiya, Atmospheric and Oceanic Physics*, **52,** 418-430, http://dx.doi.org/10.1134/S0001433816040071

Kosempa, M. and D. P. Chambers, 2016: Mapping error in Southern Ocean transport computed from satellite altimetry and argo. *Journal of Geophysical Research: Oceans*, **121,** 8063-8076, http://dx.doi.org/10.1002/2016JC011956

Kouketsu, S., R. Inoue, and T. Suga, 2016: Western North Pacific Integrated Physical-Biogeochemical Ocean Observation Experiment (INBOX): Part 3. Mesoscale variability of dissolved oxygen concentrations observed by multiple floats during S1-INBOX. *Journal of Marine Research*, **74,** 101-131, http://dx.doi.org/10.1357/002224016819257326

Kouketsu, S., H. Kaneko, T. Okunishi, K. Sasaoka, S. Itoh, R. Inoue, and H. Ueno, 2016: Mesoscale eddy effects on temporal variability of surface chlorophyll a in the Kuroshio Extension. *Journal of Oceanography*, **72,** 439-451, http://dx.doi.org/10.1007/s10872-015-0286-4

Kourafalou, V. H., Y. S. Androulidakis, G. R. Halliwell Jr, H. Kang, M. M. Mehari, M. Le Hénaff, R. Atlas, and R. Lumpkin, 2016: North Atlantic Ocean OSSE system development: Nature Run evaluation and application to hurricane interaction with the Gulf Stream. *Progress in Oceanography*, **148,** 1-25, http://dx.doi.org/10.1016/j.pocean.2016.09.001

Kumar, A. and C. Wen, 2016: An Oceanic Heat Content–Based Definition for the Pacific Decadal Oscillation. *Monthly Weather Review*, **144,** 3977-3984, http://dx.doi.org/10.1175/MWR-D-16-0080.1

Kusche, J., B. Uebbing, R. Rietbroek, C. K. Shum, and Z. H. Khan, 2016: Sea level budget in the Bay of Bengal (2002–2014) from GRACE and altimetry. *Journal of Geophysical Research: Oceans*, **121,** 1194-1217, http://dx.doi.org/10.1002/2015JC011471

Lago, V., S. E. Wijffels, P. J. Durack, J. A. Church, N. L. Bindoff, and S. J. Marsland, 2016: Simulating the Role of Surface Forcing on Observed Multidecadal Upper-Ocean Salinity Changes. *Journal of Climate*, **29,** 5575-5588, http://dx.doi.org/10.1175/JCLI-D-15-0519.1

Laiolo, L., A. S. McInnes, R. Matear, and M. A. Doblin, 2016: Key Drivers of Seasonal Plankton Dynamics in Cyclonic and Anticyclonic Eddies off East Australia. *Frontiers in Marine Science*, **3**, https://doi.org/10.3389/fmars.2016.00155

Laloyaux, P., J.-N. Thépaut, and D. Dee, 2016: Impact of Scatterometer Surface Wind Data in the ECMWF Coupled Assimilation System. *Monthly Weather Review*, **144,** 1203-1217, http://dx.doi.org/10.1175/MWR-D-15-0084.1

Lambert, E., D. Le Bars, and W. P. M. de Ruijter, 2016: The connection of the Indonesian

Throughflow, South Indian Ocean Countercurrent and the Leeuwin Current. *Ocean Science*, **12,** 771-780, http://dx.doi.org/10.5194/os-12-771-2016

Latarius, K. and D. Quadfasel, 2016: Water mass transformation in the deep basins of the Nordic Seas: Analyses of heat and freshwater budgets. *Deep Sea Research Part I: Oceanographic Research Papers*, **114,** 23-42, http://dx.doi.org/10.1016/j.dsr.2016.04.012

Le Hénaff, M. and V. H. Kourafalou, 2016: Mississippi waters reaching South Florida reefs under no flood conditions: synthesis of observing and modeling system findings. *Ocean Dynamics*, **66,** 435-459, http://dx.doi.org/10.1007/s10236-016-0932-4

Le Reste, S., V. Dutreuil, X. André, V. Thierry, C. Renaut, P.-Y. L. Traon, and G. Maze, 2016: "Deep-Arvor": A New Profiling Float to Extend the Argo Observations Down to 4000-m Depth. *Journal of Atmospheric and Oceanic Technology*, **33,** 1039-1055, http://dx.doi.org/10.1175/JTECH-D-15-0214.1

Lebedev, K. V., 2016: An argo-based model for investigation of the Global Ocean (AMIGO). *Oceanology*, **56,** 172-181, http://dx.doi.org/10.1134/S0001437016020144

Lebedev, K. V., A. S. Sarkisyan, and O. P. Nikitin, 2016: Comparative analysis of the North Atlantic surface circulation reproduced by three different methods. *Izvestiya, Atmospheric and Oceanic Physics*, **52,** 410-417, http://dx.doi.org/10.1134/S0001433816040083

Lee, T., 2016: Consistency of Aquarius sea surface salinity with Argo products on various spatial and temporal scales. *Geophysical Research Letters*, **43,** 3857-3864, http://dx.doi.org/10.1002/2016GL068822

Legeais, J. F., P. Prandi, and S. Guinehut, 2016: Analyses of altimetry errors using Argo and GRACE data. *Ocean Science*, **12,** 647-662, http://dx.doi.org/10.5194/os-12-647-2016

Léger, F., C. Lebeaupin Brossier, H. Giordani, T. Arsouze, J. Beuvier, M.-N. Bouin, É. Bresson, V. Ducrocq, N. Fourrié, and M. Nuret, 2016: Dense water formation in the north-western Mediterranean area during HyMeX-SOP2 in 1/36° ocean simulations: Sensitivity to initial conditions. *Journal of Geophysical Research: Oceans*, **121,** 5549-5569, http://dx.doi.org/10.1002/2015JC011542

Lemieux, J.-F., C. Beaudoin, F. Dupont, F. Roy, G. C. Smith, A. Shlyaeva, M. Buehner, A. Caya, J. Chen, T. Carrieres, L. Pogson, P. DeRepentigny, A. Plante, P. Pestieau, P. Pellerin, H. Ritchie, G. Garric, and N. Ferry, 2016: The Regional Ice Prediction System (RIPS): verification of forecast sea ice concentration. *Quarterly Journal of the Royal Meteorological Society*, **142,** 632-643, http://dx.doi.org/10.1002/qj.2526

L'Hégaret, P., X. Carton, S. Louazel, and G. Boutin, 2016: Mesoscale eddies and submesoscale structures of Persian Gulf Water off the Omani coast in spring 2011. *Ocean Science*, **12,** 687-701, http://dx.doi.org/10.5194/os-12-687-2016

Li, B., Y. W. Watanabe, and A. Yamaguchi, 2016: Spatiotemporal distribution of seawater pH in the North Pacific subpolar region by using the parameterization technique. *Journal of Geophysical Research: Oceans*, **121,** 3435-3449, http://dx.doi.org/10.1002/2015JC011615

Li, C. J., H. Zhao, H. P. Li, and K. B. Lv, 2016: Statistical Models of Sea Surface Salinity in the South China Sea Based on SMOS Satellite Data. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **9,** 2658-2664,

http://dx.doi.org/10.1109/jstars.2016.2537318
Li, F., Y.-H. Jo, X.-H. Yan, and W. T. Liu, 2016: Climate Signals in the Mid- to High-Latitude North Atlantic from Altimeter Observations. *Journal of Climate*, **29,** 4905-4925, http://dx.doi.org/10.1175/JCLI-D-12-00670.1
Li, J., C. Liang, Y. Tang, C. Dong, D. Chen, X. Liu, and W. Jin, 2016: A new dipole index of the salinity anomalies of the tropical Indian Ocean. *Scientific Reports*, **6,** 24260, http://dx.doi.org/10.1038/srep24260
Li, L., R. W. Schmitt, C. C. Ummenhofer, and K. B. Karnauskas, 2016: Implications of North Atlantic Sea Surface Salinity for Summer Precipitation over the U.S. Midwest: Mechanisms and Predictive Value. *Journal of Climate*, **29,** 3143-3159, http://dx.doi.org/10.1175/JCLI-D-15-0520.1
Li, L., R. W. Schmitt, C. C. Ummenhofer, and K. B. Karnauskas, 2016: North Atlantic salinity as a predictor of Sahel rainfall. *Science Advances*, **2,** e1501588, http://dx.doi.org/10.1126/sciadv.1501588
Li, Q., B. Wang, X. Chen, X. Chen, and J.-H. Park, 2016: Variability of nonlinear internal waves in the South China Sea affected by the Kuroshio and mesoscale eddies. *Journal of Geophysical Research: Oceans*, **121,** 2098-2118, http://dx.doi.org/10.1002/2015JC011134
Li, Q., A. Webb, B. Fox-Kemper, A. Craig, G. Danabasoglu, W. G. Large, and M. Vertenstein, 2016: Langmuir mixing effects on global climate: WAVEWATCH III in CESM. *Ocean Modelling*, **103,** 145-160, http://dx.doi.org/10.1016/j.ocemod.2015.07.020
Li, Y. and W. Han, 2016: Causes for intraseasonal sea surface salinity variability in the western tropical Pacific Ocean and its seasonality. *Journal of Geophysical Research: Oceans*, **121,** 85-103, http://dx.doi.org/10.1002/2015JC011413
Li, Y., W. Han, W. Wang, and M. Ravichandran, 2016: Intraseasonal Variability of SST and Precipitation in the Arabian Sea during the Indian Summer Monsoon: Impact of Ocean Mixed Layer Depth. *Journal of Climate*, **29,** 7889-7910, https://doi.org/10.1175/JCLI-D-16-0238.1
Li, Y., X. Li, J. Wang, and S. Peng, 2016: Dynamical analysis of a satellite-observed anticyclonic eddy in the northern Bering Sea. *Journal of Geophysical Research: Oceans*, **121,** 3517-3531, http://dx.doi.org/10.1002/2015JC011586
Li, Z. and N. Cassar, 2016: Satellite estimates of net community production based on O2/Ar observations and comparison to other estimates. *Global Biogeochemical Cycles*, **30,** 735-752, http://dx.doi.org/10.1002/2015GB005314
Liang, X. and L. Yu, 2016: Variations of the Global Net Air–Sea Heat Flux during the "Hiatus" Period (2001–10). *Journal of Climate*, **29,** 3647-3660, http://dx.doi.org/10.1175/JCLI-D-15-0626.1
Liblik, T., J. Karstensen, P. Testor, P. Alenius, D. Hayes, S. Ruiz, K. J. Heywood, S. Pouliquen, L. Mortier, and E. Mauri, 2016: Potential for an underwater glider component as part of the Global Ocean Observing System. *Methods in Oceanography*, **17,** 50-82, http://dx.doi.org/10.1016/j.mio.2016.05.001
Lien, V. S., S. S. Hjøllo, M. D. Skogen, E. Svendsen, H. Wehde, L. Bertino, F. Counillon, M. Chevallier, and G. Garric, 2016: An assessment of the added value from data assimilation on modelled Nordic Seas hydrography and ocean transports. *Ocean*

Modelling, **99,** 43-59, http://dx.doi.org/10.1016/j.ocemod.2015.12.010
Lima, M. O., M. Cirano, M. M. Mata, M. Goes, G. Goni, and M. Baringer, 2016: An assessment of the Brazil Current baroclinic structure and variability near 22° S in Distinct Ocean Forecasting and Analysis Systems. *Ocean Dynamics*, **66,** 893-916, http://dx.doi.org/10.1007/s10236-016-0959-6
Lin, Y. C. and L. Y. Oey, 2016: Rainfall-enhanced blooming in typhoon wakes. *Scientific Reports*, **6,** 31310, http://dx.doi.org/10.1038/srep31310
Lin, Y.-C., L.-Y. Oey, J. Wang, and K.-K. Liu, 2016: Rossby Waves and Eddies Observed at a Temperature Mooring in Northern South China Sea. *Journal of Physical Oceanography*, **46,** 517-535, http://dx.doi.org/10.1175/JPO-D-15-0094.1
Liu, C., A. Kohl, Z. Liu, F. Wang, and D. Stammer, 2016: Deep-reaching thermocline mixing in the equatorial pacific cold tongue. *Nat Commun*, **7**, http://dx.doi.org/10.1038/ncomms11576
Liu, H., X. M. Li, and H. Guo, 2016: The Dynamic Processes of Sea Ice on the East Coast of Antarctica: A Case Study Based on Spaceborne Synthetic Aperture Radar Data from TerraSAR-X. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **9,** 1187-1198, http://dx.doi.org/10.1109/JSTARS.2015.2497355
Liu, L., R. Huang, and F. Wang, 2016: Subduction/obduction rate in the North Pacific diagnosed by an eddy-resolving model. *Chinese Journal of Oceanology and Limnology*, **34,** 835-846, http://dx.doi.org/10.1007/s00343-016-5036-y
Liu, Q. and Y. Lu, 2016: Role of horizontal density advection in seasonal deepening of the mixed layer in the subtropical Southeast Pacific. *Advances in Atmospheric Sciences*, **33,** 442-451, http://dx.doi.org/10.1007/s00376-015-5111-x
Liu, W., S.-P. Xie, and J. Lu, 2016: Tracking ocean heat uptake during the surface warming hiatus. *Nat Commun*, **7**, http://dx.doi.org/10.1038/ncomms10926
Liu, X., A. Köhl, D. Stammer, S. Masuda, Y. Ishikawa, and T. Mochizuki, 2016: Impact of in-consistency between the climate model and its initial conditions on climate prediction. *Climate Dynamics***,** 1-15, http://dx.doi.org/10.1007/s00382-016-3194-4
Liu, Y., G. Chen, M. Sun, S. Liu, and F. Tian, 2016: A Parallel SLA-Based Algorithm for Global Mesoscale Eddy Identification. *Journal of Atmospheric and Oceanic Technology*, **33,** 2743-2754, http://dx.doi.org/10.1175/jtech-d-16-0033.1
Llovel, W. and L. Terray, 2016: Observed southern upper-ocean warming over 2005–2014 and associated mechanisms. *Environmental Research Letters*, **11,** 124023, http://dx.doi.org/10.1088/1748-9326/11/12/124023
Lopez, H., S. Dong, S.-K. Lee, and G. Goni, 2016: Decadal Modulations of Interhemispheric Global Atmospheric Circulations and Monsoons by the South Atlantic Meridional Overturning Circulation. *Journal of Climate*, **29,** 1831-1851, http://dx.doi.org/10.1175/JCLI-D-15-0491.1
Lorkowski, P. and T. Brinkhoff, 2016: COMPRESSION AND PROGRESSIVE RETRIEVAL OF MULTI-DIMENSIONAL SENSOR DATA. *Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci.*, **XLI-B2,** 27-33, http://dx.doi.org/10.5194/isprs-archives-XLI-B2-27-2016
Lu, Z., L. Cheng, J. Zhu, and R. Lin, 2016: The complementary role of SMOS sea surface salinity observations for estimating global ocean salinity state. *Journal of Geophysical Research: Oceans*, **121,** 3672-3691, http://dx.doi.org/10.1002/2015JC011480

Luo, H., R. M. Castelao, A. K. Rennermalm, M. Tedesco, A. Bracco, P. L. Yager, and T. L. Mote, 2016: Oceanic transport of surface meltwater from the southern Greenland ice sheet. *Nature Geosci*, **9,** 528-532, http://dx.doi.org/10.1038/ngeo2708

Ma, X. and C. Sun, 2016: Equatorward shift of annual Rossby waves in the Equatorial Pacific Ocean. *Chinese Journal of Oceanology and Limnology*, **34,** 212-218, http://dx.doi.org/10.1007/s00343-015-4405-2

Macdonald, H. S., M. Roughan, M. E. Baird, and J. Wilkin, 2016: The formation of a cold-core eddy in the East Australian Current. *Continental Shelf Research*, **114,** 72-84, http://dx.doi.org/10.1016/j.csr.2016.01.002

Machín, F. J. E. and J. L. Pelegrí, 2016: Interaction of Mediterranean Water lenses with Antarctic Intermediate Water off Northwest Africa. *Scientia Marina*, **80,** 10, http://dx.doi.org/10.3989/scimar.04289.06A

Maes, C., B. Blanke, and E. Martinez, 2016: Origin and fate of surface drift in the oceanic convergence zones of the eastern Pacific. *Geophysical Research Letters*, **43,** 3398-3405, http://dx.doi.org/10.1002/2016GL068217

Majumder, S., C. Schmid, and G. Halliwell, 2016: An observations and model-based analysis of meridional transports in the South Atlantic. *Journal of Geophysical Research: Oceans*, **121,** 5622-5638, http://dx.doi.org/10.1002/2016JC011693

Mannshardt, E., K. Sucic, M. Fuentes, and F. M. Bingham, 2016: Comparison of Distributional Statistics of Aquarius and Argo Sea Surface Salinity Measurements. *Journal of Atmospheric and Oceanic Technology*, **33,** 103-118, http://dx.doi.org/10.1175/JTECH-D-15-0068.1

Marini, C., I. Polkova, A. Köhl, and D. Stammer, 2016: A Comparison of Two Ensemble Generation Methods Using Oceanic Singular Vectors and Atmospheric Lagged Initialization for Decadal Climate Prediction. *Monthly Weather Review*, **144,** 2719-2738, http://dx.doi.org/10.1175/MWR-D-15-0350.1

Marnela, M., B. Rudels, I. Goszczko, A. Beszczynska-Möller, and U. Schauer, 2016: Fram Strait and Greenland Sea transports, water masses, and water mass transformations 1999–2010 (and beyond). *Journal of Geophysical Research: Oceans*, **121,** 2314-2346, http://dx.doi.org/10.1002/2015JC011312

Martin, M. J., 2016: Suitability of satellite sea surface salinity data for use in assessing and correcting ocean forecasts. *Remote Sensing of Environment*, **180,** 305-319, http://dx.doi.org/10.1016/j.rse.2016.02.004

Matsuoka, A., M. Babin, and E. C. Devred, 2016: A new algorithm for discriminating water sources from space: A case study for the southern Beaufort Sea using MODIS ocean color and SMOS salinity data. *Remote Sensing of Environment*, **184,** 124-138, http://dx.doi.org/10.1016/j.rse.2016.05.006

Mayer, M., J. T. Fasullo, K. E. Trenberth, and L. Haimberger, 2016: ENSO-driven energy budget perturbations in observations and CMIP models. *Climate Dynamics*, **47,** 4009-4029, http://dx.doi.org/10.1007/s00382-016-3057-z

McCaskill, C., L. K. Shay, J. K. Brewster, and P. C. Meyers, 2016: Development and Assessment of the Systematically Merged Pacific Ocean Regional Temperature and Salinity (SPORTS) Climatology for Ocean Heat Content Estimations. *Journal of Atmospheric and Oceanic Technology*, **33,** 2259-2272,

http://dx.doi.org/10.1175/JTECH-D-15-0168.1
McKinnon, K. A. and P. Huybers, 2016: Seasonal constraints on inferred planetary heat content. *Geophysical Research Letters*, **43,** 10,955-10,964, http://dx.doi.org/10.1002/2016GL071055
Meccia, V. L., S. Simoncelli, and S. Sparnocchia, 2016: Decadal variability of the Turner Angle in the Mediterranean Sea and its implications for double diffusion. *Deep Sea Research Part I: Oceanographic Research Papers*, **114,** 64-77, http://dx.doi.org/10.1016/j.dsr.2016.04.001
Mecklenburg, S., M. Drusch, L. Kaleschke, N. Rodriguez-Fernandez, N. Reul, Y. Kerr, J. Font, M. Martin-Neira, R. Oliva, E. Daganzo-Eusebio, J. P. Grant, R. Sabia, G. Macelloni, K. Rautiainen, J. Fauste, P. de Rosnay, J. Munoz-Sabater, N. Verhoest, H. Lievens, S. Delwart, R. Crapolicchio, A. de la Fuente, and M. Kornberg, 2016: ESA's Soil Moisture and Ocean Salinity mission: From science to operational applications. *Remote Sensing of Environment*, **180,** 3-18, http://dx.doi.org/10.1016/j.rse.2015.12.025
Meissner, T., F. J. Wentz, J. Scott, and J. Vazquez-Cuervo, 2016: Sensitivity of Ocean Surface Salinity Measurements From Spaceborne L-Band Radiometers to Ancillary Sea Surface Temperature. *IEEE Transactions on Geoscience and Remote Sensing*, **54,** 7105-7111, http://dx.doi.org/10.1109/TGRS.2016.2596100
Melnichenko, O., P. Hacker, N. Maximenko, G. Lagerloef, and J. Potemra, 2016: Optimum interpolation analysis of Aquarius sea surface salinity. *Journal of Geophysical Research: Oceans*, **121,** 602-616, http://dx.doi.org/10.1002/2015JC011343
Menary, M. B., L. Hermanson, and N. J. Dunstone, 2016: The impact of Labrador Sea temperature and salinity variability on density and the subpolar AMOC in a decadal prediction system. *Geophysical Research Letters*, **43,** 12,217-12,227, http://dx.doi.org/10.1002/2016GL070906
Menezes, V. V., H. E. Phillips, M. L. Vianna, and N. L. Bindoff, 2016: Interannual variability of the South Indian Countercurrent. *Journal of Geophysical Research: Oceans*, **121,** 3465-3487, http://dx.doi.org/10.1002/2015JC011417
Menkes, C. E., M. Lengaigne, M. Lévy, C. Ethé, L. Bopp, O. Aumont, E. Vincent, J. Vialard, and S. Jullien, 2016: Global impact of tropical cyclones on primary production. *Global Biogeochemical Cycles*, **30,** 767-786, http://dx.doi.org/10.1002/2015GB005214
Mensah, V., M. Andres, R.-C. Lien, B. Ma, C. M. Lee, and S. Jan, 2016: Combining Observations from Multiple Platforms across the Kuroshio Northeast of Luzon: A Highlight on PIES Data. *Journal of Atmospheric and Oceanic Technology*, **33,** 2185-2203, http://dx.doi.org/10.1175/JTECH-D-16-0095.1
Mignot, A., R. Ferrari, and K. A. Mork, 2016: Spring bloom onset in the Nordic Seas. *Biogeosciences*, **13,** 3485-3502, http://dx.doi.org/10.5194/bg-13-3485-2016
Miles, B. W. J., C. R. Stokes, and S. S. R. Jamieson, 2016: Pan–ice-sheet glacier terminus change in East Antarctica reveals sensitivity of Wilkes Land to sea-ice changes. *Science Advances*, **2**, http://dx.doi.org/10.1126/sciadv.1501350
Mitarai, S., H. Watanabe, Y. Nakajima, A. F. Shchepetkin, and J. C. McWilliams, 2016: Quantifying dispersal from hydrothermal vent fields in the western Pacific Ocean. *Proceedings of the National Academy of Sciences*, **113,** 2976-2981, http://dx.doi.org/10.1073/pnas.1518395113

Mochizuki, T., S. Masuda, Y. Ishikawa, and T. Awaji, 2016: Multiyear climate prediction with initialization based on 4D-Var data assimilation. *Geophysical Research Letters*, **43,** 3903-3910, http://dx.doi.org/10.1002/2016GL067895

Momin, I. M., A. K. Mitra, D. K. Mahapatra, and E. N. Rajagopal, 2016: A review of recent evaluation of satellite estimates sea surface salinity in the tropical Indian Ocean. *Proc. SPIE 9882, Remote Sensing and Modeling of the Atmosphere, Oceans, and Interactions VI*, 98821I-98821I-9, http://dx.doi.org/10.1117/12.2223571

Muni Krishna, K., 2016: Observational study of upper ocean cooling due to Phet super cyclone in the Arabian Sea. *Advances in Space Research*, **57,** 2115-2120, http://dx.doi.org/10.1016/j.asr.2016.02.024

Nagamani, P. V., M. M. Ali, G. J. Goni, T. V. S. Udaya Bhaskar, J. P. McCreary, R. A. Weller, M. Rajeevan, V. V. Gopala Krishna, and J. C. Pezzullo, 2016: Heat content of the Arabian Sea Mini Warm Pool is increasing. *Atmospheric Science Letters*, **17,** 39-42, http://dx.doi.org/10.1002/asl.596

Nagano, A., S. Kizu, K. Hanawa, and D. Roemmich, 2016: Heat transport variation due to change of North Pacific subtropical gyre interior flow during 1993–2012. *Ocean Dynamics*, **66,** 1637-1649, http://dx.doi.org/10.1007/s10236-016-1007-2

Nagano, A., M. Wakita, and S. Watanabe, 2016: Dichothermal layer deepening in relation with halocline depth change associated with northward shrinkage of North Pacific western subarctic gyre in early 2000s. *Ocean Dynamics*, **66,** 163-172, http://dx.doi.org/10.1007/s10236-015-0917-8

Nagura, M. and M. J. McPhaden, 2016: Zonal Propagation of Near-Surface Zonal Currents in Relation to Surface Wind Forcing in the Equatorial Indian Ocean. *Journal of Physical Oceanography*, **46,** 3623-3638, http://dx.doi.org/10.1175/jpo-d-16-0157.1

Nan, F., F. Yu, H. Xue, L. Zeng, D. Wang, S. Yang, and K.-C. Nguyen, 2016: Freshening of the upper ocean in the South China Sea since the early 1990s. *Deep Sea Research Part I: Oceanographic Research Papers*, **118,** 20-29, http://dx.doi.org/10.1016/j.dsr.2016.10.010

Neveu, E., A. M. Moore, C. A. Edwards, J. Fiechter, P. Drake, W. J. Crawford, M. G. Jacox, and E. Nuss, 2016: An historical analysis of the California Current circulation using ROMS 4D-Var: System configuration and diagnostics. *Ocean Modelling*, **99,** 133-151, http://dx.doi.org/10.1016/j.ocemod.2015.11.012

Nicholson, S.-A., M. Lévy, J. Llort, S. Swart, and P. M. S. Monteiro, 2016: Investigation into the impact of storms on sustaining summer primary productivity in the Sub-Antarctic Ocean. *Geophysical Research Letters*, **43,** 9192-9199, http://dx.doi.org/10.1002/2016GL069973

Ninove, F., P. Y. Le Traon, E. Remy, and S. Guinehut, 2016: Spatial scales of temperature and salinity variability estimated from Argo observations. *Ocean Science*, **12,** 1-7, http://dx.doi.org/10.5194/os-12-1-2016

Noh, Y., H. Ok, E. Lee, T. Toyoda, and N. Hirose, 2016: Parameterization of Langmuir Circulation in the Ocean Mixed Layer Model Using LES and Its Application to the OGCM. *Journal of Physical Oceanography*, **46,** 57-78, http://dx.doi.org/10.1175/JPO-D-14-0137.1

Nyadjro, E. S. and B. Subrahmanyam, 2016: Spatial and temporal variability of central Indian

Ocean salinity fronts observed by SMOS. *Remote Sensing of Environment*, **180,** 146-153, http://dx.doi.org/10.1016/j.rse.2016.02.049

Ohishi, S., T. Tozuka, and N. Komori, 2016: Frontolysis by surface heat flux in the Agulhas Return Current region with a focus on mixed layer processes: observation and a high-resolution CGCM. *Climate Dynamics*, **47,** 3993-4007, http://dx.doi.org/10.1007/s00382-016-3056-0

O'Kane, T. J., D. P. Monselesan, and C. Maes, 2016: On the stability and spatiotemporal variance distribution of salinity in the upper ocean. *Journal of Geophysical Research: Oceans*, **121,** 4128-4148, http://dx.doi.org/10.1002/2015JC011523

Oke, P. R., R. Proctor, U. Rosebrock, R. Brinkman, M. L. Cahill, I. Coghlan, P. Divakaran, J. Freeman, C. Pattiaratchi, M. Roughan, P. A. Sandery, A. Schaeffer, and S. Wijeratne, 2016: The Marine Virtual Laboratory (version 2.1): enabling efficient ocean model configuration. *Geosci. Model Dev.*, **9,** 3297-3307, https://doi.org/10.5194/gmd-9-3297-2016

Olmedo, E., J. Martínez, M. Umbert, N. Hoareau, M. Portabella, J. Ballabrera-Poy, and A. Turiel, 2016: Improving time and space resolution of SMOS salinity maps using multifractal fusion. *Remote Sensing of Environment*, **180,** 246-263, http://dx.doi.org/10.1016/j.rse.2016.02.038

Organelli, E., H. Claustre, A. Bricaud, C. Schmechtig, A. Poteau, X. Xing, L. Prieur, F. D'Ortenzio, G. Dall'Olmo, and V. Vellucci, 2016: A Novel Near-Real-Time Quality-Control Procedure for Radiometric Profiles Measured by Bio-Argo Floats: Protocols and Performances. *Journal of Atmospheric and Oceanic Technology*, **33,** 937-951, http://dx.doi.org/10.1175/JTECH-D-15-0193.1

Pallàs-Sanz, E., J. Candela, J. Sheinbaum, J. Ochoa, and J. Jouanno, 2016: Trapping of the near-inertial wave wakes of two consecutive hurricanes in the Loop Current. *Journal of Geophysical Research: Oceans*, **121,** 7431-7454, http://dx.doi.org/10.1002/2015JC011592

Palmer, M. D., S. Wijffels, and J. C. Church, 2016: Ocean heat content increase reveals unabated global warming. *WMO Statement on the Status of the Global Climate in 2015*, World Meteorological Organization, http://library.wmo.int/pmb_ged/wmo_1167_en.pdf.

Palter, J. B., C.-A. Caron, K. L. Law, J. K. Willis, D. S. Trossman, I. M. Yashayaev, and D. Gilbert, 2016: Variability of the directly observed, middepth subpolar North Atlantic circulation. *Geophysical Research Letters*, **43,** 2700-2708, http://dx.doi.org/10.1002/2015GL067235

Parker, A. and C. D. Ollier, 2016: There is no real evidence for a diminishing trend of the Atlantic meridional overturning circulation. *Journal of Ocean Engineering and Science*, **1,** 30-35, http://dx.doi.org/10.1016/j.joes.2015.12.007

Pelland, N. A., C. C. Eriksen, and M. F. Cronin, 2016: Seaglider surveys at Ocean Station Papa: Circulation and water mass properties in a meander of the North Pacific Current. *Journal of Geophysical Research: Oceans*, **121,** 6816-6846, http://dx.doi.org/10.1002/2016JC011920

Pidcock, R. E. M., A. P. Martin, S. C. Painter, J. T. Allen, M. A. Srokosz, A. Forryan, M. Stinchcombe, and D. A. Smeed, 2016: Quantifying mesoscale-driven nitrate supply: A

case study. *Global Biogeochemical Cycles*, **30,** 1206-1223, http://dx.doi.org/10.1002/2016GB005383

Piecuch, C. G. and K. J. Quinn, 2016: El Niño, La Niña, and the global sea level budget. *Ocean Science*, **12,** 1165-1177, https://doi.org/10.5194/os-12-1165-2016

Piontkovski, S. A. and B. Y. Queste, 2016: Decadal changes of the Western Arabian sea ecosystem. *International Aquatic Research*, **8,** 49-64, http://dx.doi.org/10.1007/s40071-016-0124-3

Piron, A., V. Thierry, H. Mercier, and G. Caniaux, 2016: Argo float observations of basin-scale deep convection in the Irminger sea during winter 2011–2012. *Deep Sea Research Part I: Oceanographic Research Papers*, **109,** 76-90, http://dx.doi.org/10.1016/j.dsr.2015.12.012

Pisano, A., B. Buongiorno Nardelli, C. Tronconi, and R. Santoleri, 2016: The new Mediterranean optimally interpolated pathfinder AVHRR SST Dataset (1982–2012). *Remote Sensing of Environment*, **176,** 107-116, http://dx.doi.org/10.1016/j.rse.2016.01.019

Plant, J. N., K. S. Johnson, C. M. Sakamoto, H. W. Jannasch, L. J. Coletti, S. C. Riser, and D. D. Swift, 2016: Net community production at Ocean Station Papa observed with nitrate and oxygen sensors on profiling floats. *Global Biogeochemical Cycles*, **30,** 859-879, http://dx.doi.org/10.1002/2015GB005349

Pookkandy, B., D. Dommenget, N. Klingaman, S. Wales, C. Chung, C. Frauen, and H. Wolff, 2016: The role of local atmospheric forcing on the modulation of the ocean mixed layer depth in reanalyses and a coupled single column ocean model. *Climate Dynamics*, **47,** 2991-3010, http://dx.doi.org/10.1007/s00382-016-3009-7

Prants, S. V., 2016: A Lagrangian study of eddies in the ocean. *Regular and Chaotic Dynamics*, **21,** 335-350, http://dx.doi.org/10.1134/S1560354716030060

Prants, S. V., V. B. Lobanov, M. V. Budyansky, and M. Y. Uleysky, 2016: Lagrangian analysis of formation, structure, evolution and splitting of anticyclonic Kuril eddies. *Deep Sea Research Part I: Oceanographic Research Papers*, **109,** 61-75, http://dx.doi.org/10.1016/j.dsr.2016.01.003

Pujol, M. I., Y. Faugère, G. Taburet, S. Dupuy, C. Pelloquin, M. Ablain, and N. Picot, 2016: DUACS DT2014: the new multi-mission altimeter data set reprocessed over 20 years. *Ocean Science*, **12,** 1067-1090, https://doi.org/10.5194/os-12-1067-2016

Pun, I.-F., J. F. Price, and S. R. Jayne, 2016: Satellite-Derived Ocean Thermal Structure for the North Atlantic Hurricane Season. *Monthly Weather Review*, **144,** 877-896, http://dx.doi.org/10.1175/MWR-D-15-0275.1

Qian, J.-g. and Y.-l. Han, 2016: A New Method to Obtain Deep Ocean Current Velocity from Argo Floats. *International Conference on Oriental Thinking and Fuzzy Logic: Celebration of the 50th Anniversary in the era of Complex Systems and Big Data*, B.-Y. Cao, P.-Z. Wang, Z.-L. Liu, and Y.-B. Zhong, Eds., Springer International Publishing, 519-531, http://dx.doi.org/10.1007/978-3-319-30874-6_48.

Qin, H., R. X. Huang, W. Wang, and H. Xue, 2016: Regulation of South China Sea throughflow by pressure difference. *Journal of Geophysical Research: Oceans*, **121,** 4077-4096, http://dx.doi.org/10.1002/2015JC011177

Qiu, C., J. Chen, M. Shangguan, and H. Mao, 2016: Seasonal variations of sea level anomaly

in the subtropical front zone based on satellite-derived data from 2003–2009. *Aquatic Ecosystem Health & Management*, **19,** 270-275, http://dx.doi.org/10.1080/14634988.2016.1210451

Qu, T., L. Zhang, and N. Schneider, 2016: North Atlantic Subtropical Underwater and Its Year-to-Year Variability in Annual Subduction Rate during the Argo Period. *Journal of Physical Oceanography*, **46,** 1901-1916, http://dx.doi.org/10.1175/JPO-D-15-0246.1

Querin, S., M. Bensi, V. Cardin, C. Solidoro, S. Bacer, L. Mariotti, F. Stel, and V. Malačič, 2016: Saw-tooth modulation of the deep-water thermohaline properties in the southern Adriatic Sea. *Journal of Geophysical Research: Oceans*, **121,** 4585-4600, http://dx.doi.org/10.1002/2015JC011522

Raes, E. J., L. Bodrossy, J. Van de Kamp, B. Holmes, N. J. Hardman-Mountford, P. A. Thompson, A. S. McInnes, and A. M. Waite, 2016: Reduction of the Powerful Greenhouse Gas N2O in the South-Eastern Indian Ocean. *PLoS ONE*, **11**, http://dx.doi.org/10.1371/journal.pone.0145996

Raj, R. P., J. A. Johannessen, T. Eldevik, J. E. Ø. Nilsen, and I. Halo, 2016: Quantifying mesoscale eddies in the Lofoten Basin. *Journal of Geophysical Research: Oceans*, **121,** 4503-4521, http://dx.doi.org/10.1002/2016JC011637

Renault, L., M. J. Molemaker, J. Gula, S. Masson, and J. C. McWilliams, 2016: Control and Stabilization of the Gulf Stream by Oceanic Current Interaction with the Atmosphere. *Journal of Physical Oceanography*, **46,** 3439-3453, http://dx.doi.org/10.1175/JPO-D-16-0115.1

Riser, S. C., H. J. Freeland, D. Roemmich, S. Wijffels, A. Troisi, M. Belbeoch, D. Gilbert, J. Xu, S. Pouliquen, A. Thresher, P.-Y. Le Traon, G. Maze, B. Klein, M. Ravichandran, F. Grant, P.-M. Poulain, T. Suga, B. Lim, A. Sterl, P. Sutton, K.-A. Mork, P. J. Velez-Belchi, I. Ansorge, B. King, J. Turton, M. Baringer, and S. R. Jayne, 2016: Fifteen years of ocean observations with the global Argo array. *Nature Clim. Change*, **6,** 145-153, http://dx.doi.org/10.1038/nclimate2872

Roach, C. J., D. Balwada, and K. Speer, 2016: Horizontal mixing in the Southern Ocean from Argo float trajectories. *Journal of Geophysical Research: Oceans*, **121,** 5570-5586, http://dx.doi.org/10.1002/2015JC011440

Roberts-Jones, J., K. Bovis, M. J. Martin, and A. McLaren, 2016: Estimating background error covariance parameters and assessing their impact in the OSTIA system. *Remote Sensing of Environment*, **176,** 117-138, http://dx.doi.org/10.1016/j.rse.2015.12.006

Rocha, C. B., T. K. Chereskin, S. T. Gille, and D. Menemenlis, 2016: Mesoscale to Submesoscale Wavenumber Spectra in Drake Passage. *Journal of Physical Oceanography*, **46,** 601-620, http://dx.doi.org/10.1175/JPO-D-15-0087.1

Rocha, C. B., S. T. Gille, T. K. Chereskin, and D. Menemenlis, 2016: Seasonality of submesoscale dynamics in the Kuroshio Extension. *Geophysical Research Letters*, **43,** 11,304-11,311, http://dx.doi.org/10.1002/2016GL071349

Rodriguez, A. R., M. R. Mazloff, and S. T. Gille, 2016: An oceanic heat transport pathway to the Amundsen Sea Embayment. *Journal of Geophysical Research: Oceans*, **121,** 3337-3349, http://dx.doi.org/10.1002/2015JC011402

Rodríguez-Cabello, C., C. González-Pola, and F. Sánchez, 2016: Migration and diving

behavior of Centrophorus squamosus in the NE Atlantic. Combining electronic tagging and Argo hydrography to infer deep ocean trajectories. *Deep Sea Research Part I: Oceanographic Research Papers*, **115,** 48-62, http://dx.doi.org/10.1016/j.dsr.2016.05.009

Roemmich, D., J. Gilson, P. Sutton, and N. Zilberman, 2016: Multidecadal Change of the South Pacific Gyre Circulation. *Journal of Physical Oceanography*, **46,** 1871-1883, http://dx.doi.org/10.1175/JPO-D-15-0237.1

Rosburg, K. C., K. A. Donohue, and E. P. Chassignet, 2016: Three-dimensional model-observation comparison in the Loop Current region. *Dynamics of Atmospheres and Oceans*, **76, Part 2,** 283-305, http://doi.org/10.1016/j.dynatmoce.2016.05.001

Rousselet, L., A. M. Doglioli, C. Maes, B. Blanke, and A. A. Petrenko, 2016: Impacts of mesoscale activity on the water masses and circulation in the Coral Sea. *Journal of Geophysical Research: Oceans*, **121,** 7277-7289, http://dx.doi.org/10.1002/2016JC011861

Roxy, M. K., A. Modi, R. Murtugudde, V. Valsala, S. Panickal, S. Prasanna Kumar, M. Ravichandran, M. Vichi, and M. Lévy, 2016: A reduction in marine primary productivity driven by rapid warming over the tropical Indian Ocean. *Geophysical Research Letters*, **43,** 826-833, http://dx.doi.org/10.1002/2015GL066979

Ryan, S., M. Schröder, O. Huhn, and R. Timmermann, 2016: On the warm inflow at the eastern boundary of the Weddell Gyre. *Deep Sea Research Part I: Oceanographic Research Papers*, **107,** 70-81, http://dx.doi.org/10.1016/j.dsr.2015.11.002

Sagen, H., B. D. Dushaw, E. K. Skarsoulis, D. Dumont, M. A. Dzieciuch, and A. Beszczynska-Möller, 2016: Time series of temperature in Fram Strait determined from the 2008–2009 DAMOCLES acoustic tomography measurements and an ocean model. *Journal of Geophysical Research: Oceans*, **121,** 4601-4617, http://dx.doi.org/10.1002/2015JC011591

Sala, I., C. S. Harrison, and R. M. A. Caldeira, 2016: The role of the Azores Archipelago in capturing and retaining incoming particles. *Journal of Marine Systems*, **154, Part B,** 146-156, http://dx.doi.org/10.1016/j.jmarsys.2015.10.001

Salehipour, H., W. R. Peltier, C. B. Whalen, and J. A. MacKinnon, 2016: A new characterization of the turbulent diapycnal diffusivities of mass and momentum in the ocean. *Geophysical Research Letters*, **43,** 3370-3379, http://dx.doi.org/10.1002/2016GL068184

Sallée, J.-B., M. Mazloff, M. P. Meredith, C. W. Hughes, S. Rintoul, R. Gomez, N. Metzl, C. L. Monaco, S. Schmidtko, M. M. Mata, A. Wåhlin, S. Swart, M. J. M. Williams, A. C. Naveria-Garabata, and P. Monteiro, 2016: Antarctica: Southern Ocean, In State of the Climate in 2015. *Bulletin of the American Meteorological Society*, **97,** S166 - S168, http://dx.doi.org/10.1175/2016BAMSStateoftheClimate.1

Santos-Garcia, A., M. M. Jacob, and W. L. Jones, 2016: SMOS Near-Surface Salinity Stratification Under Rainy Conditions. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **9,** 2493-2499, http://dx.doi.org/10.1109/JSTARS.2016.2527038

Sarkisyan, A. S., 2016: Main directions in the simulation of physical characteristics of the

World Ocean and seas. *Izvestiya, Atmospheric and Oceanic Physics*, **52,** 335-340, http://dx.doi.org/10.1134/S0001433816040101

Sarkisyan, A. S., O. P. Nikitin, and K. V. Lebedev, 2016: Physical characteristics of the Gulf Stream as an indicator of the quality of large-scale circulation modeling. *Doklady Earth Sciences*, **471,** 1288-1291, http://dx.doi.org/10.1134/S1028334X16120138

Sauzède, R., H. Claustre, J. Uitz, C. Jamet, G. Dall'Olmo, F. D'Ortenzio, B. Gentili, A. Poteau, and C. Schmechtig, 2016: A neural network-based method for merging ocean color and Argo data to extend surface bio-optical properties to depth: Retrieval of the particulate backscattering coefficient. *Journal of Geophysical Research: Oceans*, **121,** 2552-2571, http://dx.doi.org/10.1002/2015JC011408

Schabetsberger, R., M. J. Miller, G. Dall'Olmo, R. Kaiser, F. Økland, S. Watanabe, K. Aarestrup, and K. Tsukamoto, 2016: Hydrographic features of anguillid spawning areas: potential signposts for migrating eels. *Marine Ecology Progress Series*, **554,** 141-155, http://dx.doi.org/10.3354/meps11824

Schulze, L. M., R. S. Pickart, and G. W. K. Moore, 2016: Atmospheric forcing during active convection in the Labrador Sea and its impact on mixed-layer depth. *Journal of Geophysical Research: Oceans*, **121,** 6978-6992, http://dx.doi.org/10.1002/2015JC011607

Schütte, F., P. Brandt, and J. Karstensen, 2016: Occurrence and characteristics of mesoscale eddies in the tropical northeastern Atlantic Ocean. *Ocean Science*, **12,** 663-685, http://dx.doi.org/10.5194/os-12-663-2016

Schütte, F., J. Karstensen, G. Krahmann, H. Hauss, B. Fiedler, P. Brandt, M. Visbeck, and A. Körtzinger, 2016: Characterization of "dead-zone" eddies in the eastern tropical North Atlantic. *Biogeosciences*, **13,** 5865-5881, http://dx.doi.org/10.5194/bg-13-5865-2016

Sedigh Marvasti, S., A. Gnanadesikan, A. A. Bidokhti, J. P. Dunne, and S. Ghader, 2016: Challenges in modeling spatiotemporally varying phytoplankton blooms in the Northwestern Arabian Sea and Gulf of Oman. *Biogeosciences*, **13,** 1049-1069, http://dx.doi.org/10.5194/bg-13-1049-2016

Sharma, R., N. agarwal, A. Chakraborty, S. Mallick, J. Buckley, V. Shesu, and A. Tandon, 2016: Large-scale air-sea coupling processes in the Bay of Bengal using space-borne observations. *Oceanography*, **29,** 192-201, http://dx.doi.org/10.5670/oceanog.2016.51

Siedlecki, S. A., I. C. Kaplan, A. J. Hermann, T. T. Nguyen, N. A. Bond, J. A. Newton, G. D. Williams, W. T. Peterson, S. R. Alin, and R. A. Feely, 2016: Experiments with Seasonal Forecasts of ocean conditions for the Northern region of the California Current upwelling system. *Scientific Reports*, **6,** 27203, http://dx.doi.org/10.1038/srep27203

Siswanto, E., M. C. Honda, K. Matsumoto, Y. Sasai, T. Fujiki, K. Sasaoka, and T. Saino, 2016: Sixteen-year phytoplankton biomass trends in the northwestern Pacific Ocean observed by the SeaWiFS and MODIS ocean color sensors. *Journal of Oceanography*, **72,** 479-489, http://dx.doi.org/10.1007/s10872-016-0357-1

Siswanto, E., M. C. Honda, Y. Sasai, K. Sasaoka, and T. Saino, 2016: Meridional and seasonal footprints of the Pacific Decadal Oscillation on phytoplankton biomass in the northwestern Pacific Ocean. *Journal of Oceanography*, **72,** 465-477,

http://dx.doi.org/10.1007/s10872-016-0367-z
Smith, G. C., F. Roy, M. Reszka, D. Surcel Colan, Z. He, D. Deacu, J.-M. Belanger, S. Skachko, Y. Liu, F. Dupont, J.-F. Lemieux, C. Beaudoin, B. Tranchant, M. Drévillon, G. Garric, C.-E. Testut, J.-M. Lellouche, P. Pellerin, H. Ritchie, Y. Lu, F. Davidson, M. Buehner, A. Caya, and M. Lajoie, 2016: Sea ice forecast verification in the Canadian Global Ice Ocean Prediction System. *Quarterly Journal of the Royal Meteorological Society*, **142,** 659-671, http://dx.doi.org/10.1002/qj.2555
Sokolovskiy, M. A., X. J. Carton, B. N. Filyushkin, and O. I. Yakovenko, 2016: Interaction between a surface jet and subsurface vortices in a three-layer quasi-geostrophic model. *Geophysical & Astrophysical Fluid Dynamics*, **110,** 201-223, http://dx.doi.org/10.1080/03091929.2016.1164148
Somavilla, R., C. González-Pola, U. Schauer, and G. Budéus, 2016: Mid-2000s North Atlantic shift: Heat budget and circulation changes. *Geophysical Research Letters*, **43,** 2059-2068, http://dx.doi.org/10.1002/2015GL067254
Soppa, M. A., C. Völker, and A. Bracher, 2016: Diatom Phenology in the Southern Ocean: Mean Patterns, Trends and the Role of Climate Oscillations. *Remote Sensing*, **8,** 420, https://doi.org/10.3390/rs8050420
Song, H., C. A. Edwards, A. M. Moore, and J. Fiechter, 2016: Data assimilation in a coupled physical-biogeochemical model of the California Current System using an incremental lognormal 4-dimensional variational approach: Part 2—Joint physical and biological data assimilation twin experiments. *Ocean Modelling*, **106,** 146-158, http://dx.doi.org/10.1016/j.ocemod.2016.09.003
Stabeno, P. J., N. A. Bond, N. B. Kachel, C. Ladd, C. W. Mordy, and S. L. Strom, 2016: Southeast Alaskan shelf from southern tip of Baranof Island to Kayak Island: Currents, mixing and chlorophyll-a. *Deep Sea Research Part II: Topical Studies in Oceanography*, **132,** 6-23, http://doi.org/10.1016/j.dsr2.2015.06.018
Stammer, D., M. Balmaseda, P. Heimbach, A. Kohl, and A. Weaver, 2016: Ocean Data Assimilation in Support of Climate Applications: Status and Perspectives. *Annual Review of Marine Science*, **8**, http://dx.doi.org/10.1146/annurev-marine-122414-034113
Stanev, E. V., J. Schulz-Stellenfleth, J. Staneva, S. Grayek, S. Grashorn, A. Behrens, W. Koch, and J. Pein, 2016: Ocean forecasting for the German Bight: from regional to coastal scales. *Ocean Science*, **12,** 1105-1136, https://doi.org/10.5194/os-12-1105-2016
Stendardo, I., M. Rhein, and R. Hollmann, 2016: A high resolution salinity time series 1993–2012 in the North Atlantic from Argo and Altimeter data. *Journal of Geophysical Research: Oceans*, **121,** 2523-2551, http://dx.doi.org/10.1002/2015JC011439
Stepanov, V. N., D. Iovino, S. Masina, A. Storto, and A. Cipollone, 2016: The impact of horizontal resolution of density field on the calculation of the Atlantic meridional overturning circulation at 34°S. *Journal of Geophysical Research: Oceans*, **121,** 4323-4340, http://dx.doi.org/10.1002/2015JC011505
Stepanov, V. N., D. Iovino, S. Masina, A. Storto, and A. Cipollone, 2016: Observed and simulated variability of the Atlantic Meridional Overturning Circulation at 41°N. *Journal of Marine Systems*, **164,** 42-52,

http://dx.doi.org/10.1016/j.jmarsys.2016.08.004
Stephens, G. L., M. Z. Hakuba, M. Hawcroft, J. M. Haywood, A. Behrangi, J. E. Kay, and P. J. Webster, 2016: The Curious Nature of the Hemispheric Symmetry of the Earth's Water and Energy Balances. *Current Climate Change Reports*, **2,** 135-147, http://dx.doi.org/10.1007/s40641-016-0043-9
Stewart, K. D. and T. W. N. Haine, 2016: Thermobaricity in the Transition Zones between Alpha and Beta Oceans. *Journal of Physical Oceanography*, **46,** 1805-1821, http://dx.doi.org/10.1175/JPO-D-16-0017.1
Storto, A., 2016: Variational quality control of hydrographic profile data with non-Gaussian errors for global ocean variational data assimilation systems. *Ocean Modelling*, **104,** 226-241, http://dx.doi.org/10.1016/j.ocemod.2016.06.011
Storto, A., C. Yang, and S. Masina, 2016: Sensitivity of global ocean heat content from reanalyses to the atmospheric reanalysis forcing: A comparative study. *Geophysical Research Letters*, **43,** 5261-5270, http://dx.doi.org/10.1002/2016GL068605
Stramma, L., R. Czeschel, T. Tanhua, P. Brandt, M. Visbeck, and B. S. Giese, 2016: The flow field of the upper hypoxic eastern tropical North Atlantic oxygen minimum zone. *Ocean Science*, **12,** 153-167, http://dx.doi.org/10.5194/os-12-153-2016
Sugimoto, S. and S. i. Kako, 2016: Decadal Variation in Winter Mixed Layer Depth South of the Kuroshio Extension and Its Influence on Winter Mixed Layer Temperature. *Journal of Climate*, **29,** 1237-1252, http://dx.doi.org/10.1175/JCLI-D-15-0206.1
Sun, C. and X. Ma, 2016: Estimating thermohaline variability of the equatorial Pacific Ocean from satellite altimetry. *Science China Earth Sciences*, **59,** 2213-2222, http://dx.doi.org/10.1007/s11430-016-0048-2
Sun, R., G. Wang, and C. Chen, 2016: The Kuroshio bifurcation associated with islands at the Luzon Strait. *Geophysical Research Letters*, **43,** 5768-5774, http://dx.doi.org/10.1002/2016GL069652
Syamsuddin, M., S.-I. Saitoh, T. Hirawake, F. Syamsudin, and M. Zainuddin, 2016: Interannual variation of bigeye tuna (Thunnus obesus) hotspots in the eastern Indian Ocean off Java. *International Journal of Remote Sensing***,** 1-14, http://dx.doi.org/10.1080/01431161.2015.1136451
Tamsitt, V., L. D. Talley, M. R. Mazloff, and I. Cerovečki, 2016: Zonal Variations in the Southern Ocean Heat Budget. *Journal of Climate*, **29,** 6563-6579, http://dx.doi.org/10.1175/JCLI-D-15-0630.1
Tanajura, C. A. S., L. N. Lima, and K. Belyaev, 2016: Impact on oceanic dynamics from assimilation of satellite surface height anomaly data into the Hybrid Coordinate Ocean Model Ocean Model (HYCOM) over the Atlantic Ocean. *Oceanology*, **56,** 509-514, http://dx.doi.org/10.1134/S000143701603022X
Tanzil, J. T. I., J. N. Lee, B. E. Brown, R. Quax, J. A. Kaandorp, J. M. Lough, and P. A. Todd, 2016: Luminescence and density banding patterns in massive Porites corals around the Thai-Malay Peninsula, Southeast Asia. *Limnology and Oceanography*, **61,** 2003-2026, http://dx.doi.org/10.1002/lno.10350
Tel, E., R. Balbin, J. M. Cabanas, M. J. Garcia, M. C. Garcia-Martinez, C. Gonzalez-Pola, A. Lavin, J. L. Lopez-Jurado, C. Rodriguez, M. Ruiz-Villarreal, R. F. Sánchez-Leal, M. Vargas-Yáñez, and P. Vélez-Belchí, 2016: IEOOS: the Spanish Institute of

Oceanography Observing System. *Ocean Science*, **12,** 345-353, http://dx.doi.org/10.5194/os-12-345-2016

Thadathil, P., I. Suresh, S. Gautham, S. Prasanna Kumar, M. Lengaigne, R. R. Rao, S. Neetu, and A. Hegde, 2016: Surface layer temperature inversion in the Bay of Bengal: Main characteristics and related mechanisms. *Journal of Geophysical Research: Oceans*, **121,** 5682-5696, http://dx.doi.org/10.1002/2016JC011674

Thoppil, P. G., E. J. Metzger, H. E. Hurlburt, O. M. Smedstad, and H. Ichikawa, 2016: The current system east of the Ryukyu Islands as revealed by a global ocean reanalysis. *Progress in Oceanography*, **141,** 239-258, http://dx.doi.org/10.1016/j.pocean.2015.12.013

Timmermans, M.-L. and S. R. Jayne, 2016: The Arctic Ocean Spices Up. *Journal of Physical Oceanography*, **46,** 1277-1284, http://dx.doi.org/10.1175/JPO-D-16-0027.1

Tödter, J., P. Kirchgessner, L. Nerger, and B. Ahrens, 2016: Assessment of a Nonlinear Ensemble Transform Filter for High-Dimensional Data Assimilation. *Monthly Weather Review*, **144,** 409-427, http://dx.doi.org/10.1175/MWR-D-15-0073.1

Tranchant, B., G. Reffray, E. Greiner, D. Nugroho, A. Koch-Larrouy, and P. Gaspar, 2016: Evaluation of an operational ocean model configuration at 1/12° spatial resolution for the Indonesian seas (NEMO2.3/INDO12) – Part 1: Ocean physics. *Geoscientific Model Development*, **9,** 1037-1064, http://dx.doi.org/10.5194/gmd-9-1037-2016

Trenberth, K. E., J. T. Fasullo, K. v. Schuckmann, and L. Cheng, 2016: Insights into Earth's Energy Imbalance from Multiple Sources. *Journal of Climate*, **29,** 7495-7505, http://dx.doi.org/10.1175/JCLI-D-16-0339.1

Turiel, A., M. Piles, V. González-Gambau, J. Ballabrera-Poy, C. Gabarró, J. Martinez, E. Olmedo, M. Portabella, F. Pérez, and J. Solé, 2016: 2000 days of SMOS at the Barcelona Expert Centre: a tribute to the work of Jordi Font. *Scientia Marina*, **80,** 21, http://dx.doi.org/10.3989/scimar.04291.15A

Turpin, V., E. Remy, and P. Y. Le Traon, 2016: How essential are Argo observations to constrain a global ocean data assimilation system? *Ocean Science*, **12,** 257-274, http://dx.doi.org/10.5194/os-12-257-2016

Turuncoglu, U. U. and G. Sannino, 2016: Validation of newly designed regional earth system model (RegESM) for Mediterranean Basin. *Climate Dynamics***,** 1-29, http://dx.doi.org/10.1007/s00382-016-3241-1

Ulses, C., P. A. Auger, K. Soetaert, P. Marsaleix, F. Diaz, L. Coppola, M. J. Herrmann, F. Kessouri, and C. Estournel, 2016: Budget of organic carbon in the North-Western Mediterranean open sea over the period 2004–2008 using 3-D coupled physical-biogeochemical modeling. *Journal of Geophysical Research: Oceans*, **121,** 7026-7055, http://dx.doi.org/10.1002/2016JC011818

Verdière, A. C. d. and M. Ollitrault, 2016: A Direct Determination of the World Ocean Barotropic Circulation. *Journal of Physical Oceanography*, **46,** 255-273, http://dx.doi.org/10.1175/JPO-D-15-0046.1

Viglione, G. A. and A. F. Thompson, 2016: Lagrangian pathways of upwelling in the Southern Ocean. *Journal of Geophysical Research: Oceans*, **121,** 6295-6309, http://dx.doi.org/10.1002/2016JC011773

Visinelli, L., S. Masina, M. Vichi, A. Storto, and T. Lovato, 2016: Impacts of data assimilation

on the global ocean carbonate system. *Journal of Marine Systems*, **158,** 106-119, http://dx.doi.org/10.1016/j.jmarsys.2016.02.011

von Appen, W.-J., U. Schauer, T. Hattermann, and A. Beszczynska-Möller, 2016: Seasonal Cycle of Mesoscale Instability of the West Spitsbergen Current. *Journal of Physical Oceanography*, **46,** 1231-1254, http://dx.doi.org/10.1175/JPO-D-15-0184.1

von Schuckmann, K., P.-Y. Le Traon, E. Alvarez-Fanjul, L. Axell, M. Balmaseda, L.-A. Breivik, R. J. W. Brewin, C. Bricaud, M. Drevillon, Y. Drillet, C. Dubois, O. Embury, H. Etienne, M. G. Sotillo, G. Garric, F. Gasparin, E. Gutknecht, S. Guinehut, F. Hernandez, M. Juza, B. Karlson, G. Korres, J.-F. Legeais, B. Levier, V. S. Lien, R. Morrow, G. Notarstefano, L. Parent, Á. Pascual, B. Pérez-Gómez, C. Perruche, N. Pinardi, A. Pisano, P.-M. Poulain, I. M. Pujol, R. P. Raj, U. Raudsepp, H. Roquet, A. Samuelsen, S. Sathyendranath, J. She, S. Simoncelli, C. Solidoro, J. Tinker, J. Tintoré, L. Viktorsson, M. Ablain, E. Almroth-Rosell, A. Bonaduce, E. Clementi, G. Cossarini, Q. Dagneaux, C. Desportes, S. Dye, C. Fratianni, S. Good, E. Greiner, J. Gourrion, M. Hamon, J. Holt, P. Hyder, J. Kennedy, F. Manzano-Muñoz, A. Melet, B. Meyssignac, S. Mulet, B. Buongiorno Nardelli, E. O'Dea, E. Olason, A. Paulmier, I. Pérez-González, R. Reid, M.-F. Racault, D. E. Raitsos, A. Ramos, P. Sykes, T. Szekely, and N. Verbrugge, 2016: The Copernicus Marine Environment Monitoring Service Ocean State Report. *Journal of Operational Oceanography*, **9,** s235-s320, http://dx.doi.org/10.1080/1755876X.2016.1273446

von Schuckmann, K., M. D. Palmer, K. E. Trenberth, A. Cazenave, D. Chambers, N. Champollion, J. Hansen, S. A. Josey, N. Loeb, P. P. Mathieu, B. Meyssignac, and M. Wild, 2016: An imperative to monitor Earth's energy imbalance. *Nature Clim. Change*, **6,** 138-144, http://dx.doi.org/10.1038/nclimate2876

Wakita, M., M. C. Honda, K. Matsumoto, T. Fujiki, H. Kawakami, S. Yasunaka, Y. Sasai, C. Sukigara, M. Uchimiya, M. Kitamura, T. Kobari, Y. Mino, A. Nagano, S. Watanabe, and T. Saino, 2016: Biological organic carbon export estimated from the annual carbon budget observed in the surface waters of the western subarctic and subtropical North Pacific Ocean from 2004 to 2013. *Journal of Oceanography***,** 1-21, http://dx.doi.org/10.1007/s10872-016-0379-8

Wang, F., J. Wang, C. Guan, Q. Ma, and D. Zhang, 2016: Mooring observations of equatorial currents in the upper 1000 m of the western Pacific Ocean during 2014. *Journal of Geophysical Research: Oceans*, **121,** 3730-3740, http://dx.doi.org/10.1002/2015JC011510

Wang, G., L. Wu, N. C. Johnson, and Z. Ling, 2016: Observed three-dimensional structure of ocean cooling induced by Pacific tropical cyclones. *Geophysical Research Letters*, **43,** 7632-7638, http://dx.doi.org/10.1002/2016GL069605

Wang, G., C. Zhao, J. Xu, F. Qiao, and C. Xia, 2016: Verification of an operational ocean circulation-surface wave coupled forecasting system for the China's seas. *Acta Oceanologica Sinica*, **35,** 19-28, http://dx.doi.org/10.1007/s13131-016-0810-4

Wang, S., Z. Liu, C. Pang, and H. Liu, 2016: The decadally modulating eddy field in the upstream Kuroshio Extension and its related mechanisms. *Acta Oceanologica Sinica*, **35,** 9-17, http://dx.doi.org/10.1007/s13131-015-0741-5

Wang, X. and H. Liu, 2016: Seasonal-to-interannual variability of the barrier layer in the western Pacific warm pool associated with ENSO. *Climate Dynamics*, **47,** 375-392,

http://dx.doi.org/10.1007/s00382-015-2842-4
Wang, Z., D. Brickman, B. J. W. Greenan, and I. Yashayaev, 2016: An abrupt shift in the Labrador Current System in relation to winter NAO events. *Journal of Geophysical Research: Oceans*, **121,** 5338-5349, http://dx.doi.org/10.1002/2016JC011721
Wells, N. C., 2016: The North Atlantic Ocean and climate change in the UK and northern Europe. *Weather*, **71,** 3-6, http://dx.doi.org/10.1002/wea.2558
Westberry, T. K., P. Schultz, M. J. Behrenfeld, J. P. Dunne, M. R. Hiscock, S. Maritorena, J. L. Sarmiento, and D. A. Siegel, 2016: Annual cycles of phytoplankton biomass in the subarctic Atlantic and Pacific Ocean. *Global Biogeochemical Cycles*, **30,** 175-190, http://dx.doi.org/10.1002/2015GB005276
Westerlund, A. and L. Tuomi, 2016: Vertical temperature dynamics in the Northern Baltic Sea based on 3D modelling and data from shallow-water Argo floats. *Journal of Marine Systems*, **158,** 34-44, http://dx.doi.org/10.1016/j.jmarsys.2016.01.006
Wijesekera, H. W., E. Shroyer, A. Tandon, M. Ravichandran, D. Sengupta, S. U. P. Jinadasa, H. J. S. Fernando, N. Agrawal, K. Arulananthan, G. S. Bhat, M. Baumgartner, J. Buckley, L. Centurioni, P. Conry, J. T. Farrar, A. L. Gordon, V. Hormann, E. Jarosz, T. G. Jensen, S. Johnston, M. Lankhorst, C. M. Lee, L. S. Leo, I. Lozovatsky, A. J. Lucas, J. Mackinnon, A. Mahadevan, J. Nash, M. M. Omand, H. Pham, R. Pinkel, L. Rainville, S. Ramachandran, D. L. Rudnick, S. Sarkar, U. Send, R. Sharma, H. Simmons, K. M. Stafford, L. S. Laurent, K. Venayagamoorthy, R. Venkatesan, W. J. Teague, D. W. Wang, A. F. Waterhouse, R. Weller, and C. B. Whalen, 2016: ASIRI: An Ocean–Atmosphere Initiative for Bay of Bengal. *Bulletin of the American Meteorological Society*, **97,** 1859-1884, https://doi.org/10.1175/BAMS-D-14-00197.1
Wijffels, S., D. Roemmich, D. Monselesan, J. Church, and J. Gilson, 2016: Ocean temperatures chronicle the ongoing warming of Earth. *Nature Clim. Change*, **6,** 116-118, http://dx.doi.org/10.1038/nclimate2924
Williams, N. L., L. W. Juranek, K. S. Johnson, R. A. Feely, S. C. Riser, L. D. Talley, J. L. Russell, J. L. Sarmiento, and R. Wanninkhof, 2016: Empirical algorithms to estimate water column pH in the Southern Ocean. *Geophysical Research Letters*, **43,** 3415-3422, http://dx.doi.org/10.1002/2016GL068539
Wilson, E. A. and S. C. Riser, 2016: An Assessment of the Seasonal Salinity Budget for the Upper Bay of Bengal. *Journal of Physical Oceanography*, **46,** 1361-1376, http://dx.doi.org/10.1175/JPO-D-15-0147.1
Wu, G., F. Zhai, and D. Hu, 2016: Interannual variations of North Equatorial Current transport in the Pacific Ocean during two types of El Niño. *Chinese Journal of Oceanology and Limnology*, **34,** 585-596, http://dx.doi.org/10.1007/s00343-015-4352-y
Wunsch, C. (2016), Global Ocean Integrals and Means, with Trend Implications, *Annual Review of Marine Science*, *8*(1), 1-33, doi: https://doi.org/10.1146/annurev-marine-122414-034040.
Xia, S., C. Ke, X. Zhou, and J. Zhang, 2016: Assessment and adjustment of sea surface salinity products from Aquarius in the southeast Indian Ocean based on in situ measurement and MyOcean modeled data. *Acta Oceanologica Sinica*, **35,** 54-62, http://dx.doi.org/10.1007/s13131-016-0818-9
Xiao, J., Q. Xie, D. Wang, L. Yang, Y. Shu, C. Liu, J. Chen, J. Yao, and G. Chen, 2016: On the

near-inertial variations of meridional overturning circulation in the South China Sea. *Ocean Science*, **12,** 335-344, http://dx.doi.org/10.5194/os-12-335-2016

Xu, F. and A. Ignatov, 2016: Error characterization in iQuam SSTs using triple collocations with satellite measurements. *Geophysical Research Letters*, **43,** 10,826-10,834, http://dx.doi.org/10.1002/2016GL070287

Xu, L., P. Li, S.-P. Xie, Q. Liu, C. Liu, and W. Gao, 2016: Observing mesoscale eddy effects on mode-water subduction and transport in the North Pacific. *Nat Commun*, **7**, http://dx.doi.org/10.1038/ncomms10505

Yan, X.-H., T. Boyer, K. Trenberth, T. R. Karl, S.-P. Xie, V. Nieves, K.-K. Tung, and D. Roemmich, 2016: The global warming hiatus: Slowdown or redistribution? *Earth's Future*, **4,** 472-482, http://dx.doi.org/10.1002/2016EF000417

Yang, C., S. Masina, A. Bellucci, and A. Storto, 2016: The Rapid Warming of the North Atlantic Ocean in the Mid-1990s in an Eddy-Permitting Ocean Reanalysis (1982–2013). *Journal of Climate*, **29,** 5417-5430, http://dx.doi.org/10.1175/JCLI-D-15-0438.1

Yang, L. and D. Yuan, 2016: Absolute geostrophic currents in global tropical oceans. *Chinese Journal of Oceanology and Limnology*, **34,** 1383-1393, http://dx.doi.org/10.1007/s00343-016-5092-3

Yang, L. and D. Yuan, 2016: Heat and salt transport throughout the North Pacific Ocean. *Chinese Journal of Oceanology and Limnology*, **34,** 1347-1357, http://dx.doi.org/10.1007/s00343-016-5125-y

Yashayaev, I. and J. W. Loder, 2016: Recurrent replenishment of Labrador Sea Water and associated decadal-scale variability. *Journal of Geophysical Research: Oceans*, **121,** 8095-8114, http://dx.doi.org/10.1002/2016JC012046

Yasunaka, S., T. Ono, Y. Nojiri, F. A. Whitney, C. Wada, A. Murata, S. Nakaoka, and S. Hosoda, 2016: Long-term variability of surface nutrient concentrations in the North Pacific. *Geophysical Research Letters*, **43,** 3389-3397, http://dx.doi.org/10.1002/2016GL068097

Yin, X., J. Boutin, E. Dinnat, Q. Song, and A. Martin, 2016: Roughness and foam signature on SMOS-MIRAS brightness temperatures: A semi-theoretical approach. *Remote Sensing of Environment*, **180,** 221-233, http://dx.doi.org/10.1016/j.rse.2016.02.005

Zeng, L., D. Wang, J. Chen, W. Wang, and R. Chen, 2016: SCSPOD14, a South China Sea physical oceanographic dataset derived from in situ measurements during 1919–2014. *Scientific Data*, **3,** 160029, http://dx.doi.org/10.1038/sdata.2016.29

Zhang, N., M. Feng, Y. Du, J. Lan, and S. E. Wijffels, 2016: Seasonal and interannual variations of mixed layer salinity in the southeast tropical Indian Ocean. *Journal of Geophysical Research: Oceans*, **121,** 4716-4731, http://dx.doi.org/10.1002/2016JC011854

Zhang, R., S.-P. Xie, L. Xu, and Q. Liu, 2016: Changes in mixed layer depth and spring bloom in the Kuroshio extension under global warming. *Advances in Atmospheric Sciences*, **33,** 452-461, http://dx.doi.org/10.1007/s00376-015-5113-8

Zhang, Y., C. Chen, R. C. Beardsley, G. Gao, Z. Lai, B. Curry, C. M. Lee, H. Lin, J. Qi, and Q. Xu, 2016: Studies of the Canadian Arctic Archipelago water transport and its relationship to basin-local forcings: Results from AO-FVCOM. *Journal of Geophysical Research: Oceans*, **121,** 4392-4415, http://dx.doi.org/10.1002/2016JC011634

Zhang, Y., Y. Du, and T. Qu, 2016: A sea surface salinity dipole mode in the tropical Indian Ocean. *Climate Dynamics*, **1**-13, http://dx.doi.org/10.1007/s00382-016-2984-z

Zhang, Z., J. Tian, B. Qiu, W. Zhao, P. Chang, D. Wu, and X. Wan, 2016: Observed 3D Structure, Generation, and Dissipation of Oceanic Mesoscale Eddies in the South China Sea. *Scientific Reports*, **6,** 24349, http://dx.doi.org/10.1038/srep24349

Zhao, H., C. Li, H. Li, K. Lv, and Q. Zhao, 2016: Retrieve sea surface salinity using principal component regression model based on SMOS satellite data. *Journal of Ocean University of China*, **15,** 399-406, http://dx.doi.org/10.1007/s11802-016-2817-z

Zhao, M., H. H. Hendon, Y. Yin, and O. Alves, 2016: Variations of Upper-Ocean Salinity Associated with ENSO from PEODAS Reanalyses. *Journal of Climate*, **29,** 2077-2094, http://dx.doi.org/10.1175/JCLI-D-15-0650.1

Zhao, Z., 2016: Using CryoSat-2 altimeter data to evaluate M2 internal tides observed from multisatellite altimetry. *Journal of Geophysical Research: Oceans*, **121,** 5164-5180, http://dx.doi.org/10.1002/2016JC011805

Zhao, Z., 2016: Internal tide oceanic tomography. *Geophysical Research Letters*, **43,** 9157-9164, http://dx.doi.org/10.1002/2016GL070567

Zhao, Y., C. Zhao, R. Sun, and Z. Wang, 2016: A Multiple Linear Regression Model for Tropical Cyclone Intensity Estimation from Satellite Infrared Images. *Atmosphere*, **7,** 40, https://doi.org/10.3390/atmos7030040

Zhi, H., R.-H. Zhang, F. Zheng, P. Lin, L. Wang, and P. Yu, 2016: Assessment of interannual sea surface salinity variability and its effects on the barrier layer in the equatorial Pacific using BNU-ESM. *Advances in Atmospheric Sciences*, **33,** 339-351, http://dx.doi.org/10.1007/s00376-015-5163-y

Zhou, W., M. Chen, W. Zhuang, F. Xu, F. Zheng, T. Wu, and X. Wang, 2016: Evaluation of the tropical variability from the Beijing Climate Center's real-time operational global Ocean Data Assimilation System. *Advances in Atmospheric Sciences*, **33,** 208-220, http://dx.doi.org/10.1007/s00376-015-4282-9

2015 (392)

Abernathey, R. and C. Wortham, 2015: Phase Speed Cross Spectra of Eddy Heat Fluxes in the Eastern Pacific. *Journal of Physical Oceanography*, **45,** 1285-1301, http://dx.doi.org/10.1175/JPO-D-14-0160.1

Ablain, M., A. Cazenave, G. Larnicol, M. Balmaseda, P. Cipollini, Y. Faugère, M. J. Fernandes, O. Henry, J. A. Johannessen, P. Knudsen, O. Andersen, J. Legeais, B. Meyssignac, N. Picot, M. Roca, S. Rudenko, M. G. Scharffenberg, D. Stammer, G. Timms, and J. Benveniste, 2015: Improved sea level record over the satellite altimetry era (1993–2010) from the Climate Change Initiative project. *Ocean Science*, **11,** 67-82, http://dx.doi.org/10.5194/os-11-67-2015

Alory, G., T. Delcroix, P. Téchiné, D. Diverrès, D. Varillon, S. Cravatte, Y. Gouriou, J. Grelet, S. Jacquin, E. Kestenare, C. Maes, R. Morrow, J. Perrier, G. Reverdin, and F. Roubaud, 2015: The French contribution to the voluntary observing ships network of sea surface salinity. *Deep Sea Research Part I: Oceanographic Research Papers*, **105,** 1-18, http://dx.doi.org/10.1016/j.dsr.2015.08.005

Amaya, D. J., S.-P. Xie, A. J. Miller, and M. J. McPhaden, 2015: Seasonality of tropical Pacific decadal trends associated with the 21st century global warming hiatus. *Journal of Geophysical Research: Oceans*, **120,** 6782-6798, http://dx.doi.org/10.1002/2015JC010906

André, X., B. Moreau, and S. Le Reste, 2015: Argos-3 Satellite Communication System: Implementation on the Arvor Oceanographic Profiling Floats. *Journal of Atmospheric and Oceanic Technology*, **32,** 1902-1914, http://dx.doi.org/10.1175/JTECH-D-14-00219.1

Anilkumar, N., J. V. George, R. Chacko, N. Nuncio, and P. Sabu, 2015: Variability of fronts, fresh water input and chlorophyll in the Indian Ocean sector of the Southern Ocean. *New Zealand Journal of Marine and Freshwater Research*, **49,** 20-40, http://dx.doi.org/10.1080/00288330.2014.924972

Ansorge, I. J., J. M. Jackson, K. Reid, J. V. Durgadoo, S. Swart, and S. Eberenz, 2015: Evidence of a southward eddy corridor in the South-West Indian ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, **119,** 69-76, http://dx.doi.org/10.1016/j.dsr2.2014.05.012

Aoki, S., G. Mizuta, H. Sasaki, Y. Sasai, S. Rintoul, and N. Bindoff, 2015: Atlantic–Pacific asymmetry of subsurface temperature change and frontal response of the Antarctic Circumpolar Current for the recent three decades. *Journal of Oceanography*, **71,** 623-636, http://dx.doi.org/10.1007/s10872-015-0284-6

Ascani, F., E. Firing, J. P. McCreary, P. Brandt, and R. J. Greatbatch, 2015: The Deep Equatorial Ocean Circulation in Wind-Forced Numerical Solutions. *Journal of Physical Oceanography*, **45,** 1709-1734, http://dx.doi.org/10.1175/JPO-D-14-0171.1

Azevedo Correia de Souza, J. M., B. Powell, A. C. Castillo-Trujillo, and P. Flament, 2015: The Vorticity Balance of the Ocean Surface in Hawaii from a Regional Reanalysis. *Journal of Physical Oceanography*, **45,** 424-440, http://dx.doi.org/10.1175/JPO-D-14-0074.1

Balaguru, K., G. R. Foltz, L. R. Leung, E. D. Asaro, K. A. Emanuel, H. Liu, and S. E. Zedler, 2015: Dynamic Potential Intensity: An improved representation of the ocean's impact on tropical cyclones. *Geophysical Research Letters*, **42,** 6739-6746, http://dx.doi.org/10.1002/2015GL064822

Balmaseda, M. A., F. Hernandez, A. Storto, M. D. Palmer, O. Alves, L. Shi, G. C. Smith, T. Toyoda, M. Valdivieso, B. Barnier, D. Behringer, T. Boyer, Y. S. Chang, G. A. Chepurin, N. Ferry, G. Forget, Y. Fujii, S. Good, S. Guinehut, K. Haines, Y. Ishikawa, S. Keeley, A. Köhl, T. Lee, M. J. Martin, S. Masina, S. Masuda, B. Meyssignac, K. Mogensen, L. Parent, K. A. Peterson, Y. M. Tang, Y. Yin, G. Vernieres, X. Wang, J. Waters, R. Wedd, O. Wang, Y. Xue, M. Chevallier, J. F. Lemieux, F. Dupont, T. Kuragano, M. Kamachi, T. Awaji, A. Caltabiano, K. Wilmer-Becker, and F. Gaillard, 2015: The Ocean Reanalyses Intercomparison Project (ORA-IP). *Journal of Operational Oceanography*, **8,** s80-s97, http://dx.doi.org/10.1080/1755876X.2015.1022329

Baringer, M. O., W. E. Johns, W. R. Hobbs, S. Garzoli, S. Dong, and J. Willis, 2015: Global Oceans: Meridional oceanic heat transport in the Atlantic Ocean, In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96,** S81-S82, http://dx.doi.org/10.1175/2015BAMSStateoftheClimate.1

Baringer, M. O., G. D. McCarthy, J. K. Willis, D. A. Smeed, D. Rayner, W. E. Johns, C. S. Meinen,

M. Lankhorst, U. Send, S. A. Cunningham, and T. O. Kanzow, 2015: Global Oceans: Meridional overturning circulation observations in the North Atlantic Ocean, In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96,** S78 - S80, http://dx.doi.org/10.1175/2015BAMSStateoftheClimate.1

Barthélemy, A., T. Fichefet, H. Goosse, and G. Madec, 2015: Modeling the interplay between sea ice formation and the oceanic mixed layer: Limitations of simple brine rejection parameterizations. *Ocean Modelling*, **86,** 141-152, http://dx.doi.org/10.1016/j.ocemod.2014.12.009

Barton, A. D., M. S. Lozier, and R. G. Williams, 2015: Physical controls of variability in North Atlantic phytoplankton communities. *Limnology and Oceanography*, **60,** 181-197, http://dx.doi.org/10.1002/lno.10011

Bashmachnikov, I., Â. Nascimento, F. Neves, T. Menezes, and N. V. Koldunov, 2015: Distribution of intermediate water masses in the subtropical northeast Atlantic. *Ocean Science*, **11,** 803-827, http://dx.doi.org/10.5194/os-11-803-2015

Bashmachnikov, I., F. Neves, T. Calheiros, and X. Carton, 2015: Properties and pathways of Mediterranean water eddies in the Atlantic. *Progress in Oceanography*, **137, Part A,** 149-172, http://dx.doi.org/10.1016/j.pocean.2015.06.001

Bashmachnikov, I., F. Neves, Â. Nascimento, J. Medeiros, I. Ambar, J. Dias, and X. Carton, 2015: Temperature–salinity distribution in the northeastern Atlantic from ship and Argo vertical casts. *Ocean Science*, **11,** 215-236, http://dx.doi.org/10.5194/os-11-215-2015

Beal, L. M., S. Elipot, A. Houk, and G. M. Leber, 2015: Capturing the Transport Variability of a Western Boundary Jet: Results from the Agulhas Current Time-Series Experiment (ACT). *Journal of Physical Oceanography*, **45,** 1302-1324, http://dx.doi.org/10.1175/JPO-D-14-0119.1

Beazley, L., E. Kenchington, I. Yashayaev, and F. J. Murillo, 2015: Drivers of epibenthic megafaunal composition in the sponge grounds of the Sackville Spur, northwest Atlantic. *Deep Sea Research Part I: Oceanographic Research Papers*, **98,** 102-114, http://dx.doi.org/10.1016/j.dsr.2014.11.016

Bell, M. J., A. Schiller, P. Y. Le Traon, N. R. Smith, E. Dombrowsky, and K. Wilmer-Becker, 2015: An introduction to GODAE OceanView. *Journal of Operational Oceanography*, **8,** s2-s11, http://dx.doi.org/10.1080/1755876X.2015.1022041

Berelson, W. M., W. Z. Haskell Ii, M. Prokopenko, A. N. Knapp, D. E. Hammond, N. Rollins, and D. G. Capone, 2015: Biogenic particle flux and benthic remineralization in the Eastern Tropical South Pacific. *Deep Sea Research Part I: Oceanographic Research Papers*, **99,** 23-34, http://dx.doi.org/10.1016/j.dsr.2014.12.006

Bhaskar, T. V. S., N. S. Kumar, M. Ravichandran, and K. D. A. Kumar, 2015: On the Possible Use of Satellite Fixed Positions for Argo Float Profiles in Case of Wrong Fixes by GPS. *International Journal of Earth Science and Engineering*, **8,** 710-715,

Bhaskar, T. V. S. U. and C. Jayaram, 2015: Evaluation of Aquarius Sea Surface Salinity With Argo Sea Surface Salinity in the Tropical Indian Ocean. *Ieee Geoscience and Remote Sensing Letters*, **12,** 1292-1296, https://doi.org/10.1109/LGRS.2015.2393894

Bingham, F. M., P. Li, Z. Li, Q. Vu, and Y. Chao, 2015: Data management support for the SPURS Atlantic field campaign. *Oceanography*, **28,** 46-55,

http://dx.doi.org/10.5670/oceanog.2015.13
Bittig, H. C. and A. Körtzinger, 2015: Tackling Oxygen Optode Drift: Near-Surface and In-Air Oxygen Optode Measurements on a Float Provide an Accurate in Situ Reference. *Journal of Atmospheric and Oceanic Technology*, **32,** 1536-1543, http://dx.doi.org/10.1175/JTECH-D-14-00162.1
Blanke, B., S. Speich, and E. Rusciano, 2015: Lagrangian water mass tracing from pseudo-Argo, model-derived salinity, tracer and velocity data: An application to Antarctic Intermediate Water in the South Atlantic Ocean. *Ocean Modelling*, **85,** 56-67, http://dx.doi.org/10.1016/j.ocemod.2014.11.004
Bond, N. A., M. F. Cronin, and H. Freeland, 2015: The Blob: An extream warm anomaly in the northeast Pacific - 2015. *Bulletin of the American Meteorological Society*, **96**, http://dx.doi.org/10.1175/2015BAMSStateoftheClimate.1
Bond, N. A., M. F. Cronin, H. Freeland, and N. Mantua, 2015: Causes and impacts of the 2014 warm anomaly in the NE Pacific. *Geophysical Research Letters*, **42,** 3414-3420, http://dx.doi.org/10.1002/2015GL063306
Bosse, A., P. Testor, L. Mortier, L. Prieur, V. Taillandier, F. d'Ortenzio, and L. Coppola, 2015: Spreading of Levantine Intermediate Waters by submesoscale coherent vortices in the northwestern Mediterranean Sea as observed with gliders. *Journal of Geophysical Research: Oceans*, **120,** 1599-1622, http://dx.doi.org/10.1002/2014JC010263
Bowie, A. R., P. van der Merwe, F. Quéroué, T. Trull, M. Fourquez, F. Planchon, G. Sarthou, F. Chever, A. T. Townsend, I. Obernosterer, J. B. Sallée, and S. Blain, 2015: Iron budgets for three distinct biogeochemical sites around the Kerguelen Archipelago (Southern Ocean) during the natural fertilisation study, KEOPS-2. *Biogeosciences*, **12,** 4421-4445, http://dx.doi.org/10.5194/bg-12-4421-2015
Boyer, T., J. Antonov, J. Reagan, C. Schmid, and R. Locarnini, 2015: Global Oceans: Subsurface Salinity, In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96,** S74-S76, http://dx.doi.org/10.1175/2015BAMSStateoftheClimate.1
Brannigan, L., D. P. Marshall, A. Naveira-Garabato, and A. J. George Nurser, 2015: The seasonal cycle of submesoscale flows. *Ocean Modelling*, **92,** 69-84, http://dx.doi.org/10.1016/j.ocemod.2015.05.002
Brewin, R. J. W., S. Sathyendranath, T. Jackson, R. Barlow, V. Brotas, R. Airs, and T. Lamont, 2015: Influence of light in the mixed-layer on the parameters of a three-component model of phytoplankton size class. *Remote Sensing of Environment*, **168,** 437-450, http://dx.doi.org/10.1016/j.rse.2015.07.004
Brix, H., D. Menemenlis, C. Hill, S. Dutkiewicz, O. Jahn, D. Wang, K. Bowman, and H. Zhang, 2015: Using Green's Functions to initialize and adjust a global, eddying ocean biogeochemistry general circulation model. *Ocean Modelling*, **95,** 1-14, http://dx.doi.org/10.1016/j.ocemod.2015.07.008
Brodeau, L. and T. Koenigk, 2015: Extinction of the northern oceanic deep convection in an ensemble of climate model simulations of the 20th and 21st centuries. *Climate Dynamics***,** 1-20, http://dx.doi.org/10.1007/s00382-015-2736-5
Brossier, C. L., S. Bastin, K. Béranger, and P. Drobinski, 2015: Regional mesoscale air–sea coupling impacts and extreme meteorological events role on the Mediterranean Sea

water budget. *Climate Dynamics*, **44,** 1029-1051, http://dx.doi.org/10.1007/s00382-014-2252-z

Brune, S., L. Nerger, and J. Baehr, 2015: Assimilation of oceanic observations in a global coupled Earth system model with the SEIK filter. *Ocean Modelling*, **96, Part 2,** 254-264, http://dx.doi.org/10.1016/j.ocemod.2015.09.011

Bryan, F. and S. Bachman, 2015: Isohaline Salinity Budget of the North Atlantic Salinity Maximum. *Journal of Physical Oceanography*, **45,** 724-736, http://dx.doi.org/10.1175/JPO-D-14-0172.1

Bushinsky, S. M. and S. Emerson, 2015: Marine biological production from in situ oxygen measurements on a profiling float in the subarctic Pacific Ocean. *Global Biogeochemical Cycles*, **29,** 2050-2060, http://dx.doi.org/10.1002/2015GB005251

Camara, I., N. Kolodziejczyk, J. Mignot, A. Lazar, and A. T. Gaye, 2015: On the seasonal variations of salinity of the tropical Atlantic mixed layer. *Journal of Geophysical Research: Oceans*, **120,** 4441-4462, http://dx.doi.org/10.1002/2015JC010865

Candille, G., J. M. Brankart, and P. Brasseur, 2015: Assessment of an ensemble system that assimilates Jason-1/Envisat altimeter data in a probabilistic model of the North Atlantic ocean circulation. *Ocean Science*, **11,** 425-438, http://dx.doi.org/10.5194/os-11-425-2015

Canepa, E., S. Pensieri, R. Bozzano, M. Faimali, P. Traverso, and L. Cavaleri, 2015: The ODAS Italia 1 buoy: More than forty years of activity in the Ligurian Sea. *Progress in Oceanography*, **135,** 48-63, http://dx.doi.org/10.1016/j.pocean.2015.04.005

Cao, Z. and R. Hu, 2015: Research on the interannual variability of the great whirl and the related mechanisms. *Journal of Ocean University of China*, **14,** 17-26, http://dx.doi.org/10.1007/s11802-015-2392-8

Carranza, M. M. and S. T. Gille, 2015: Southern Ocean wind-driven entrainment enhances satellite chlorophyll-a through the summer. *Journal of Geophysical Research: Oceans*, **120,** 304-323, http://dx.doi.org/10.1002/2014JC010203

Carse, F., M. J. Martin, A. Sellar, and E. W. Blockley, 2015: Impact of assimilating temperature and salinity measurements by animal-borne sensors on FOAM ocean model fields. *Quarterly Journal of the Royal Meteorological Society*, **141,** 2934-2943, http://dx.doi.org/10.1002/qj.2613

Castellanos, P., J. L. Pelegrí, E. J. D. Campos, M. Rosell-Fieschi, and M. Gasser, 2015: Response of the surface tropical Atlantic Ocean to wind forcing. *Progress in Oceanography*, **134,** 271-292, http://dx.doi.org/10.1016/j.pocean.2015.02.005

Chacko, N., D. Dutta, M. M. Ali, J. R. Sharma, and V. K. Dadhwal, 2015: Near-Real-Time Availability of Ocean Heat Content Over the North Indian Ocean. *Ieee Geoscience and Remote Sensing Letters*, **12,** 1033-1036, https://doi.org/10.1109/LGRS.2014.2375196

Chaitanya, A. V. S., F. Durand, S. Mathew, V. Gopalakrishna, F. Papa, M. Lengaigne, J. Vialard, C. Kranthikumar, and R. Venkatesan, 2015: Observed year-to-year sea surface salinity variability in the Bay of Bengal during the 2009–2014 period. *Ocean Dynamics*, **65,** 173-186, http://dx.doi.org/10.1007/s10236-014-0802-x

Chakraborty, A., R. Kumar, S. Basu, and R. Sharma, 2015: Improving Ocean State by Assimilating SARAL/AltiKa Derived Sea Level and Other Satellite-Derived Data in

MITGCM. *Marine Geodesy*, **38,** 328-338, http://dx.doi.org/10.1080/01490419.2014.1002142
Chakraborty, A., R. Sharma, R. Kumar, and S. Basu, 2015: Joint assimilation of Aquarius-derived sea surface salinity and AVHRR-derived sea surface temperature in an ocean general circulation model using SEEK filter: Implication for mixed layer depth and barrier layer thickness. *Journal of Geophysical Research: Oceans*, **120,** 6927-6942, http://dx.doi.org/10.1002/2015JC010934
Chao, Y., J. D. Farrara, G. Schumann, K. M. Andreadis, and D. Moller, 2015: Sea surface salinity variability in response to the Congo river discharge. *Continental Shelf Research*, **99,** 35-45, http://dx.doi.org/10.1016/j.csr.2015.03.005
Chen, G. and H. Chen, 2015: Interannual Modality of Upper-Ocean Temperature: 4D Structure Revealed by Argo Data. *Journal of Climate*, **28,** 3441-3452, http://dx.doi.org/10.1175/JCLI-D-14-00351.1
Chen, G. and F. Yu, 2015: An objective algorithm for estimating maximum oceanic mixed layer depth using seasonality indices derived from Argo temperature/salinity profiles. *Journal of Geophysical Research: Oceans*, **120,** 582-595, http://dx.doi.org/10.1002/2014JC010383
Chen, K. and R. He, 2015: Mean circulation in the coastal ocean off northeastern North America from a regional-scale ocean model. *Ocean Science*, **11,** 503-517, http://dx.doi.org/10.5194/os-11-503-2015
Chen, Z., L. Wu, B. Qiu, L. Li, D. Hu, C. Liu, F. Jia, and X. Liang, 2015: Strengthening Kuroshio observed at its origin during November 2010 to October 2012. *Journal of Geophysical Research: Oceans*, **120,** 2460-2470, http://dx.doi.org/10.1002/2014JC010590
Cheng, L., F. Zheng, and J. Zhu, 2015: Distinctive ocean interior changes during the recent warming slowdown. *Scientific Reports*, **5,** 14346, http://dx.doi.org/10.1038/srep14346
Cheng, L. and J. Zhu, 2015: Influences of the Choice of Climatology on Ocean Heat Content Estimation. *Journal of Atmospheric and Oceanic Technology*, **32,** 388-394, http://dx.doi.org/10.1175/JTECH-D-14-00169.1
Cheng, L., J. Zhu, and R. L. Sriver, 2015: Global representation of tropical cyclone-induced short-term ocean thermal changes using Argo data. *Ocean Science*, **11,** 719-741, http://dx.doi.org/10.5194/os-11-719-2015
Chiswell, S. M., H. C. Bostock, P. J. H. Sutton, and M. J. M. Williams, 2015: Physical oceanography of the deep seas around New Zealand: a review. *New Zealand Journal of Marine and Freshwater Research*, **49,** 286-317, http://dx.doi.org/10.1080/00288330.2014.992918
Chiswell, S. M. and P. J. H. Sutton, 2015: Drifter- and float-derived mean circulation at the surface and 1000 m in the New Zealand region. *New Zealand Journal of Marine and Freshwater Research*, **49,** 259-277, http://dx.doi.org/10.1080/00288330.2015.1008522
Choi, Y., 2015: Comparative simulation study of effects of eddy-topography interaction in the East/Japan Sea deep circulation. *Acta Oceanologica Sinica*, **34,** 1-18, http://dx.doi.org/10.1007/s13131-015-0693-1
Chu, P. C., R. T. Tokmakian, C. Fan, and L. C. Sun, 2015: Optimal Spectral Decomposition

(OSD) for Ocean Data Assimilation. *Journal of Atmospheric and Oceanic Technology*, **32,** 828-841, http://dx.doi.org/10.1175/JTECH-D-14-00079.1

Closset, I., D. Cardinal, S. G. Bray, F. Thil, I. Djouraev, A. S. Rigual-Hernández, and T. W. Trull, 2015: Seasonal variations, origin, and fate of settling diatoms in the Southern Ocean tracked by silicon isotope records in deep sediment traps. *Global Biogeochemical Cycles*, **29,** 1495-1510, http://dx.doi.org/10.1002/2015GB005180

Cole, H. S., S. Henson, A. P. Martin, and A. Yool, 2015: Basin-wide mechanisms for spring bloom initiation: how typical is the North Atlantic? *ICES Journal of Marine Science: Journal du Conseil*, **72,** 2029-2040, http://dx.doi.org/10.1093/icesjms/fsu239

Cole, S. T., C. Wortham, E. Kunze, and W. B. Owens, 2015: Eddy stirring and horizontal diffusivity from Argo float observations: Geographic and depth variability. *Geophysical Research Letters*, **42,** 3989-3997, http://dx.doi.org/10.1002/2015GL063827

Costa, F. B. and C. A. S. Tanajura, 2015: Assimilation of sea-level anomalies and Argo data into HYCOM and its impact on the 24 hour forecasts in the western tropical and South Atlantic. *Journal of Operational Oceanography*, **8,** 52-62, http://dx.doi.org/10.1080/1755876X.2015.1014646

Couhert, A., L. Cerri, J.-F. Legeais, M. Ablain, N. P. Zelensky, B. J. Haines, F. G. Lemoine, W. I. Bertiger, S. D. Desai, and M. Otten, 2015: Towards the 1mm/y stability of the radial orbit error at regional scales. *Advances in Space Research*, **55,** 2-23, http://dx.doi.org/10.1016/j.asr.2014.06.041

Cravatte, S., E. Kestenare, G. Eldin, A. Ganachaud, J. Lefèvre, F. Marin, C. Menkes, and J. Aucan, 2015: Regional circulation around New Caledonia from two decades of observations. *Journal of Marine Systems*, **148,** 249-271, http://dx.doi.org/10.1016/j.jmarsys.2015.03.004

Cronin, M. F., N. A. Pelland, S. R. Emerson, and W. R. Crawford, 2015: Estimating diffusivity from the mixed layer heat and salt balances in the North Pacific. *Journal of Geophysical Research: Oceans*, **120,** 7346-7362, http://dx.doi.org/10.1002/2015JC011010

Czeschel, R., L. Stramma, R. A. Weller, and T. Fischer, 2015: Circulation, eddies, oxygen, and nutrient changes in the eastern tropical South Pacific Ocean. *Ocean Science*, **11,** 455-470, http://dx.doi.org/10.5194/os-11-455-2015

D'Addezio, J. M., B. Subrahmanyam, E. S. Nyadjro, and V. S. N. Murty, 2015: Seasonal Variability of Salinity and Salt Transport in the Northern Indian Ocean. *Journal of Physical Oceanography*, **45,** 1947-1966, http://dx.doi.org/10.1175/JPO-D-14-0210.1

Da-Allada, C. Y., F. Gaillard, and N. Kolodziejczyk, 2015: Mixed-layer salinity budget in the tropical Indian Ocean: seasonal cycle based only on observations. *Ocean Dynamics*, **65,** 845-857, http://dx.doi.org/10.1007/s10236-015-0837-7

DeMott, C. A., N. P. Klingaman, and S. J. Woolnough, 2015: Atmosphere-ocean coupled processes in the Madden-Julian oscillation. *Reviews of Geophysics*, **53,** 1099-1154, http://dx.doi.org/10.1002/2014RG000478

Dieng, H. B., A. Cazenave, K. von Schuckmann, M. Ablain, and B. Meyssignac, 2015: Sea level budget over 2005–2013: missing contributions and data errors. *Ocean Science*, **11,** 789-802, http://dx.doi.org/10.5194/os-11-789-2015

Dieng, H. B., H. Palanisamy, A. Cazenave, B. Meyssignac, and K. von Schuckmann, 2015: The Sea Level Budget Since 2003: Inference on the Deep Ocean Heat Content. *Surveys in Geophysics*, **36,** 209-229, http://dx.doi.org/10.1007/s10712-015-9314-6

Divakaran, P., G. B. Brassington, A. G. Ryan, C. Regnier, T. Spindler, A. Mehra, F. Hernandez, G. C. Smith, Y. Liu, and F. Davidson, 2015: GODAE OceanView Inter-comparison for the Australian Region. *Journal of Operational Oceanography*, **8,** s112-s126, http://dx.doi.org/10.1080/1755876X.2015.1022333

Dobricic, S., C. K. Wikle, R. F. Milliff, N. Pinardi, and L. M. Berliner, 2015: Assimilation of oceanographic observations with estimates of vertical background-error covariances by a Bayesian hierarchical model. *Quarterly Journal of the Royal Meteorological Society*, **141,** 182-194, http://dx.doi.org/10.1002/qj.2348

Dohan, K., H.-Y. Kao, and G. S. E. Lagerloef, 2015: The freshwater balance over the North Atlantic SPURS domain from Aquarius satellite salinity, OSCAR satellite surface currents and some simplified approaches. *Oceanography*, **28,** 86-95, http://dx.doi.org/10.5670/oceanog.2015.07

Doi, T., S. Osafune, N. Sugiura, S. Kouketsu, A. Murata, S. Masuda, and T. Toyoda, 2015: Multidecadal change in the dissolved inorganic carbon in a long-term ocean state estimation. *Journal of Advances in Modeling Earth Systems*, **7,** 1885-1900, http://dx.doi.org/10.1002/2015MS000462

Dong, S., G. Goni, and F. Bringas, 2015: Temporal variability of the South Atlantic Meridional Overturning Circulation between 20°S and 35°S. *Geophysical Research Letters*, **42,** 7655-7662, http://dx.doi.org/10.1002/2015GL065603

Dong, S., G. Goni, and R. Lumpkin, 2015: Mixed-layer salinity budget in the SPURS region on seasonal to interannual time scales. *Oceanography*, **28,** 78-85, http://dx.doi.org/10.5670/oceanog.2015.05

d'Ovidio, F., A. Della Penna, T. W. Trull, F. Nencioli, M. I. Pujol, M. H. Rio, Y. H. Park, C. Cotté, M. Zhou, and S. Blain, 2015: The biogeochemical structuring role of horizontal stirring: Lagrangian perspectives on iron delivery downstream of the Kerguelen Plateau. *Biogeosciences*, **12,** 5567-5581, http://dx.doi.org/10.5194/bg-12-5567-2015

Du, Y. and Y. Zhang, 2015: Satellite and Argo Observed Surface Salinity Variations in the Tropical Indian Ocean and Their Association with the Indian Ocean Dipole Mode. *Journal of Climate*, **28,** 695-713, http://dx.doi.org/10.1175/JCLI-D-14-00435.1

Du, Y., Y. Zhang, M. Feng, T. Wang, N. Zhang, and S. Wijffels, 2015: Decadal trends of the upper ocean salinity in the tropical Indo-Pacific since mid-1990s. *Scientific Reports*, **5,** 16050, http://dx.doi.org/10.1038/srep16050

Dupont, F., S. Higginson, R. Bourdallé-Badie, Y. Lu, F. Roy, G. C. Smith, J. F. Lemieux, G. Garric, and F. Davidson, 2015: A high-resolution ocean and sea-ice modelling system for the Arctic and North Atlantic oceans. *Geoscientific Model Development*, **8,** 1577-1594, http://dx.doi.org/10.5194/gmd-8-1577-2015

Durack, P. J., 2015: Ocean salinity and the global water cycle. *Oceanography*, **28,** 20-31, http://dx.doi.org/10.5670/oceanog.2015.03

Durski, S. M., A. L. Kurapov, J. S. Allen, P. M. Kosro, G. D. Egbert, R. K. Shearman, and J. A. Barth, 2015: Coastal ocean variability in the US Pacific Northwest region: seasonal patterns, winter circulation, and the influence of the 2009–2010 El Niño. *Ocean*

Dynamics, **65,** 1643-1663, http://dx.doi.org/10.1007/s10236-015-0891-1
Dylmer, C. V., J. Giraudeau, V. Hanquiez, and K. Husum, 2015: The coccolithophores Emiliania huxleyi and Coccolithus pelagicus: Extant populations from the Norwegian–Iceland Seas and Fram Strait. *Deep Sea Research Part I: Oceanographic Research Papers*, **98,** 1-9, http://dx.doi.org/10.1016/j.dsr.2014.11.012
Estapa, M. L., D. A. Siegel, K. O. Buesseler, R. H. R. Stanley, M. W. Lomas, and N. B. Nelson, 2015: Decoupling of net community and export production on submesoscales in the Sargasso Sea. *Global Biogeochemical Cycles*, **29,** 1266-1282, http://dx.doi.org/10.1002/2014GB004913
Evans, K., J. N. Brown, A. Sen Gupta, S. J. Nicol, S. Hoyle, R. Matear, and H. Arrizabalaga, 2015: When 1+1 can be > 2: Uncertainties compound when simulating climate, fisheries and marine ecosystems. *Deep Sea Research Part II: Topical Studies in Oceanography*, **113,** 312-322, http://dx.doi.org/10.1016/j.dsr2.2014.04.006
Farmer, G. T., 2015: Status of Climate Change Research. *Modern Climate Change Science*, Springer International Publishing, 43-99, http://dx.doi.org/10.1007/978-3-319-09222-5_2.
Farrar, J. T., L. Rainville, A. J. Plueddemann, W. Kessler, C. Lee, B. A. Hodges, R. W. Schmitt, J. B. Edson, S. C. Riser, C. C. Eriksen, and D. M. Fratantoni, 2015: Salinity and temperature balances at the SPURS central moring during fall and winter. *Oceanography*, **28,** 56-65, http://dx.doi.org/10.5670/oceanog.2015.06
Faure, V. and Y. Kawai, 2015: Heat and salt budgets of the mixed layer around the Subarctic Front of the North Pacific Ocean. *Journal of Oceanography*, **71,** 527-539, http://dx.doi.org/10.1007/s10872-015-0318-0
Feng, M., J. Benthuysen, N. Zhang, and D. Slawinski, 2015: Freshening anomalies in the Indonesian throughflow and impacts on the Leeuwin Current during 2010–2011. *Geophysical Research Letters*, **42,** 8555-8562, http://dx.doi.org/10.1002/2015GL065848
Feng, W. and M. Zhong, 2015: Global sea level variations from altimetry, GRACE and Argo data over 2005–2014. *Geodesy and Geodynamics*, **6,** 274-279, http://dx.doi.org/10.1016/j.geog.2015.07.001
Feng, Y., X. Chen, Q. Wang, and Y. Yuan, 2015: Mesoscale characteristics of Antarctic Intermediate Water in the South Pacific. *Acta Oceanologica Sinica*, **34,** 92-101, http://dx.doi.org/10.1007/s13131-015-0752-2
Fenty, I., D. Menemenlis, and H. Zhang, 2015: Global coupled sea ice-ocean state estimation. *Climate Dynamics***,** 1-26, http://dx.doi.org/10.1007/s00382-015-2796-6
Ferrari, R., S. T. Merrifield, and J. R. Taylor, 2015: Shutdown of convection triggers increase of surface chlorophyll. *Journal of Marine Systems*, **147,** 116-122, http://dx.doi.org/10.1016/j.jmarsys.2014.02.009
Foltz, G. R., K. Balaguru, and L. R. Leung, 2015: A reassessment of the integrated impact of tropical cyclones on surface chlorophyll in the western subtropical North Atlantic. *Geophysical Research Letters*, **42,** 1158-1164, http://dx.doi.org/10.1002/2015GL063222
Foltz, G. R., C. Schmid, and R. Lumpkin, 2015: Transport of Surface Freshwater from the Equatorial to the Subtropical North Atlantic Ocean. *Journal of Physical*

Oceanography, **45,** 1086-1102, http://dx.doi.org/10.1175/JPO-D-14-0189.1
Forget, G., J. M. Campin, P. Heimbach, C. N. Hill, R. M. Ponte, and C. Wunsch, 2015: ECCO version 4: an integrated framework for non-linear inverse modeling and global ocean state estimation. *Geosci. Model Dev.*, **8,** 3071-3104, http://dx.doi.org/10.5194/gmd-8-3071-2015
Forget, G., D. Ferreira, and X. Liang, 2015: On the observability of turbulent transport rates by Argo: supporting evidence from an inversion experiment. *Ocean Science*, **11,** 839-853, http://dx.doi.org/10.5194/os-11-839-2015
Frenger, I., M. Münnich, N. Gruber, and R. Knutti, 2015: Southern Ocean eddy phenomenology. *Journal of Geophysical Research: Oceans*, **120,** 7413-7449, http://dx.doi.org/10.1002/2015JC011047
Frigstad, H., S. A. Henson, S. E. Hartman, A. M. Omar, E. Jeansson, H. Cole, C. Pebody, and R. S. Lampitt, 2015: Links between surface productivity and deep ocean particle flux at the Porcupine Abyssal Plain sustained observatory. *Biogeosciences*, **12,** 5885-5897, http://dx.doi.org/10.5194/bg-12-5885-2015
Fripiat, F., M. Elskens, T. W. Trull, S. Blain, A. J. Cavagna, C. Fernandez, D. Fonseca-Batista, F. Planchon, P. Raimbault, A. Roukaerts, and F. Dehairs, 2015: Significant mixed layer nitrification in a natural iron-fertilized bloom of the Southern Ocean. *Global Biogeochemical Cycles*, **29,** 1929-1943, http://dx.doi.org/10.1002/2014GB005051
Fujii, Y., K. Ogawa, G. B. Brassington, K. Ando, T. Yasuda, and T. Kuragano, 2015: Evaluating the impacts of the tropical Pacific observing system on the ocean analysis fields in the global ocean data assimilation system for operational seasonal forecasts in JMA. *Journal of Operational Oceanography*, **8,** 25-39, http://dx.doi.org/10.1080/1755876X.2015.1014640
Furue, R., Y. Jia, J. P. McCreary, N. Schneider, K. J. Richards, P. Müller, B. D. Cornuelle, N. M. Avellaneda, D. Stammer, C. Liu, and A. Köhl, 2015: Impacts of regional mixing on the temperature structure of the equatorial Pacific Ocean. Part 1: Vertically uniform vertical diffusion. *Ocean Modelling*, **91,** 91-111, http://dx.doi.org/10.1016/j.ocemod.2014.10.002
Fujii, Y., et al. (2015), Evaluation of the Tropical Pacific Observing System from the ocean data assimilation perspective, *Q. J. R. Meteorol. Soc.*, *141*(692), 2481-2496, doi: https://doi.org/10.1002/qj.2579.
Gaillard, F., D. Diverres, S. Jacquin, Y. Gouriou, J. Grelet, M. Le Menn, J. Tassel, and G. Reverdin, 2015: Sea surface temperature and salinity from French research vessels, 2001–2013. *Scientific Data*, **2,** 150054, http://dx.doi.org/10.1038/sdata.2015.54
Galí, M., E. Devred, M. Levasseur, S.-J. Royer, and M. Babin, 2015: A remote sensing algorithm for planktonic dimethylsulfoniopropionate (DMSP) and an analysis of global patterns. *Remote Sensing of Environment*, **171,** 171-184, http://dx.doi.org/10.1016/j.rse.2015.10.012
Ganias, K., S. K. Lowerre-Barbieri, and W. Cooper, 2015: Understanding the determinate–indeterminate fecundity dichotomy in fish populations using a temperature dependent oocyte growth model. *Journal of Sea Research*, **96,** 1-10, http://dx.doi.org/10.1016/j.seares.2014.10.018
García-Lafuente, J., C. Naranjo, R. Sánchez-Leal, S. Sammartino, M. J. Bellanco, J. C.

Sánchez-Garrido, and J. Soto-Navarro, 2015: On the origin of the seasonal and interannual T–S variability of the inflow through the Strait of Gibraltar. *Deep Sea Research Part I: Oceanographic Research Papers*, **101,** 38-53, http://dx.doi.org/10.1016/j.dsr.2015.03.005

Garzoli, S. L., S. Dong, R. Fine, C. S. Meinen, R. C. Perez, C. Schmid, E. van Sebille, and Q. Yao, 2015: The fate of the Deep Western Boundary Current in the South Atlantic. *Deep Sea Research Part I: Oceanographic Research Papers*, **103,** 125-136, http://dx.doi.org/10.1016/j.dsr.2015.05.008

Gasparin, F., D. Roemmich, J. Gilson, and B. Cornuelle, 2015: Assessment of the Upper-Ocean Observing System in the Equatorial Pacific: The Role of Argo in Resolving Intraseasonal to Interannual Variability. *Journal of Atmospheric and Oceanic Technology*, **32,** 1668-1688, http://dx.doi.org/10.1175/JTECH-D-14-00218.1

Goes, M., M. Baringer, and G. Goni, 2015: The impact of historical biases on the XBT-derived meridional overturning circulation estimates at 34°S. *Geophysical Research Letters*, **42,** 1848-1855, http://dx.doi.org/10.1002/2014GL061802

Goes, M., G. Goni, and S. Dong, 2015: An optimal XBT-based monitoring system for the South Atlantic meridional overturning circulation at 34°S. *Journal of Geophysical Research: Oceans*, **120,** 161-181, http://dx.doi.org/10.1002/2014JC010202

Gordon, A. L., C. F. Giulivi, J. Busecke, and F. M. Bingham, 2015: Differences among subtropical surface salinity patterns. *Oceanography*, **28,** 32-39, http://dx.doi.org/10.5670/oceanog.2015.02

Grand, M. M., C. I. Measures, M. Hatta, W. T. Hiscock, C. S. Buck, and W. M. Landing, 2015: Dust deposition in the eastern Indian Ocean: The ocean perspective from Antarctica to the Bay of Bengal. *Global Biogeochemical Cycles*, **29,** 357-374, http://dx.doi.org/10.1002/2014GB004898

Gray, A. R. and S. C. Riser, 2015: A method for multiscale optimal analysis with application to Argo data. *Journal of Geophysical Research: Oceans*, **120,** 4340-4356, http://dx.doi.org/10.1002/2014JC010208

Grayek, S., E. Stanev, and J. Schulz-Stellenfleth, 2015: Assessment of the Black Sea observing system. A focus on 2005-2012 Argo campaigns. *Ocean Dynamics***,** 1-20, http://dx.doi.org/10.1007/s10236-015-0889-8

Grenier, M., A. Della Penna, and T. W. Trull, 2015: Autonomous profiling float observations of the high-biomass plume downstream of the Kerguelen Plateau in the Southern Ocean. *Biogeosciences*, **12,** 2707-2735, http://dx.doi.org/10.5194/bg-12-2707-2015

Grist, J. P., S. A. Josey, Z. L. Jacobs, R. Marsh, B. Sinha, and E. Van Sebille, 2015: Extreme air–sea interaction over the North Atlantic subpolar gyre during the winter of 2013–2014 and its sub-surface legacy. *Climate Dynamics***,** 1-19, http://dx.doi.org/10.1007/s00382-015-2819-3

Große, F., C. Lindemann, J. Pätsch, and J. O. Backhaus, 2015: The influence of winter convection on primary production: A parameterisation using a hydrostatic three-dimensional biogeochemical model. *Journal of Marine Systems*, **147,** 138-152, http://dx.doi.org/10.1016/j.jmarsys.2014.07.002

Ha, J., S. Shin, W. Chung, Y. Choi, B. Hong, and N. Koo, 2015: A proposal of seismic oceanography for temperature model inversion of the East Sea, Korea. *Geosystem*

Engineering, **18,** 312-337, http://dx.doi.org/10.1080/12269328.2015.1071208
Halpern, D., D. Menemenlis, and X. Wang, 2015: Impact of Data Assimilation on ECCO2 Equatorial Undercurrent and North Equatorial Countercurrent in the Pacific Ocean. *Journal of Atmospheric and Oceanic Technology*, **32,** 131-143, http://dx.doi.org/10.1175/JTECH-D-14-00025.1
Hanan, D. S. M. M., 2015: Impacts of 2009 Typhoons on Seawater Properties and Top Layer Ocean's Structure in the Northwest Pacific Ocean. *Sains Malaysiana*, **44,** 167-173, http://www.ukm.my/jsm/english_journals/vol44num2_2015/vol44num2_2015p167-173.html
Hartman, S. E., Z. P. Jiang, D. Turk, R. S. Lampitt, H. Frigstad, C. Ostle, and U. Schuster, 2015: Biogeochemical variations at the Porcupine Abyssal Plain sustained Observatory in the northeast Atlantic Ocean, from weekly to inter-annual timescales. *Biogeosciences*, **12,** 845-853, http://dx.doi.org/10.5194/bg-12-845-2015
Hauser, T., E. Demirov, J. Zhu, and I. Yashayaev, 2015: North Atlantic atmospheric and ocean inter-annual variability over the past fifty years – Dominant patterns and decadal shifts. *Progress in Oceanography*, **132,** 197-219, http://dx.doi.org/10.1016/j.pocean.2014.10.008
He, Z., M. Feng, D. Wang, and D. Slawinski, 2015: Contribution of the Karimata Strait transport to the Indonesian Throughflow as seen from a data assimilation model. *Continental Shelf Research*, **92,** 16-22, http://dx.doi.org/10.1016/j.csr.2014.10.007
Hebert, D. A., R. A. Allard, E. J. Metzger, P. G. Posey, R. H. Preller, A. J. Wallcraft, M. W. Phelps, and O. M. Smedstad, 2015: Short-term sea ice forecasting: An assessment of ice concentration and ice drift forecasts using the U.S. Navy's Arctic Cap Nowcast/Forecast System. *Journal of Geophysical Research: Oceans*, **120,** 8327-8345, http://dx.doi.org/10.1002/2015JC011283
Heuzé, C., F. Vivier, J. Le Sommer, J. M. Molines, and T. Penduff, 2015: Can we map the interannual variability of the whole upper Southern Ocean with the current database of hydrographic observations? *Journal of Geophysical Research: Oceans*, **120,** 7960-7978, http://dx.doi.org/10.1002/2015JC011115
Hochet, A., T. Huck, and A. Colin de Verdière, 2015: Large-Scale Baroclinic Instability of the Mean Oceanic Circulation: A Local Approach. *Journal of Physical Oceanography*, **45,** 2738-2754, http://dx.doi.org/10.1175/JPO-D-15-0084.1
Holdsworth, A. M. and P. G. Myers, 2015: The Influence of High-Frequency Atmospheric Forcing on the Circulation and Deep Convection of the Labrador Sea. *Journal of Climate*, **28,** 4980-4996, http://dx.doi.org/10.1175/JCLI-D-14-00564.1
Hormann, V., L. R. Centurioni, and G. Reverdin, 2015: Evaluation of Drifter Salinities in the Subtropical North Atlantic. *Journal of Atmospheric and Oceanic Technology*, **32,** 185-192, http://dx.doi.org/10.1175/JTECH-D-14-00179.1
Hosoda, S., M. Nonaka, Y. Sasai, and H. Sasaki, 2015: Early summertime interannual variability in surface and subsurface temperature in the North Pacific. *Journal of Oceanography*, **71,** 557-573, http://dx.doi.org/10.1007/s10872-015-0307-3
Hosoda, S., M. Nonaka, T. Tomita, B. Taguchi, H. Tomita, and N. Iwasaka, 2015: Impact of downward heat penetration below the shallow seasonal thermocline on the sea surface temperature. *Journal of Oceanography*, **71,** 541-556,

http://dx.doi.org/10.1007/s10872-015-0275-7
Houpert, L., P. Testor, X. Durrieu de Madron, S. Somot, F. D'Ortenzio, C. Estournel, and H. Lavigne, 2015: Seasonal cycle of the mixed layer, the seasonal thermocline and the upper-ocean heat storage rate in the Mediterranean Sea derived from observations. *Progress in Oceanography*, **132,** 333-352, http://dx.doi.org/10.1016/j.pocean.2014.11.004
Hsin, Y.-C., 2015: Multidecadal variations of the surface Kuroshio between 1950s and 2000s and its impacts on surrounding waters. *Journal of Geophysical Research: Oceans*, **120,** 1792-1808, http://dx.doi.org/10.1002/2014JC010582
Hu, Z.-Z. and A. Kumar, 2015: Influence of availability of TAO data on NCEP ocean data assimilation systems along the equatorial Pacific. *Journal of Geophysical Research: Oceans*, **120,** 5534-5544, http://dx.doi.org/10.1002/2015JC010913
Hu, Z.-Z., A. Kumar, and B. Huang, 2015: Spatial distribution and the interdecadal change of leading modes of heat budget of the mixed-layer in the tropical Pacific and the association with ENSO. *Climate Dynamics***,** 1-16, http://dx.doi.org/10.1007/s00382-015-2672-4
Hummels, R., P. Brandt, M. Dengler, J. Fischer, M. Araujo, D. Veleda, and J. V. Durgadoo, 2015: Interannual to decadal changes in the western boundary circulation in the Atlantic at 11°S. *Geophysical Research Letters*, **42,** 7615-7622, http://dx.doi.org/10.1002/2015GL065254
Ito, K., T. Kuroda, K. Saito, and A. Wada, 2015: Forecasting a Large Number of Tropical Cyclone Intensities around Japan Using a High-Resolution Atmosphere–Ocean Coupled Model. *Weather and Forecasting*, **30,** 793-808, http://dx.doi.org/10.1175/WAF-D-14-00034.1
Itoh, S., I. Yasuda, H. Saito, A. Tsuda, and K. Komatsu, 2015: Mixed layer depth and chlorophyll a: Profiling float observations in the Kuroshio-Oyashio Extension region. *Journal of Marine Systems*, **151,** 1-14, http://dx.doi.org/10.1016/j.jmarsys.2015.06.004
Jacox, M. G., J. Fiechter, A. M. Moore, and C. A. Edwards, 2015: ENSO and the California Current coastal upwelling response. *Journal of Geophysical Research: Oceans*, **120,** 1691-1702, http://dx.doi.org/10.1002/2014JC010650
Jaimes, B., L. K. Shay, and E. W. Uhlhorn, 2015: Enthalpy and Momentum Fluxes during Hurricane Earl Relative to Underlying Ocean Features. *Monthly Weather Review*, **143,** 111-131, http://dx.doi.org/10.1175/MWR-D-13-00277.1
Jana, S., A. Gangopadhyay, and A. Chakraborty, 2015: Impact of seasonal river input on the Bay of Bengal simulation. *Continental Shelf Research*, **104,** 45-62, http://dx.doi.org/10.1016/j.csr.2015.05.001
Johnson, G. C., J. M. Lyman, J. Antonov, N. L. Bindoff, T. Boyer, C. M. Domingues, S. A. Good, M. Ishii, and J. K. Willis, 2015: Global Oceans: Ocean heat content, In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96,** S64-S66, http://dx.doi.org/10.1175/2015BAMSStateoftheClimate.1
Johnson, G. C., J. M. Lyman, G. S. E. Lagerloef, and H.-Y. Kao, 2015: Global Oceans: Sea surface salinity, In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96,** S71-S74,

http://dx.doi.org/doi:10.1175/2015BAMSStateoftheClimate.1
Johnson, G. C., J. M. Lyman, and S. G. Purkey, 2015: Informing Deep Argo Array Design Using Argo and Full-Depth Hydrographic Section Data. *Journal of Atmospheric and Oceanic Technology*, **32,** 2187-2198, http://dx.doi.org/10.1175/JTECH-D-15-0139.1
Johnson, K. S., J. N. Plant, S. C. Riser, and D. Gilbert, 2015: Air Oxygen Calibration of Oxygen Optodes on a Profiling Float Array. *Journal of Atmospheric and Oceanic Technology*, **32,** 2160-2172, http://dx.doi.org/10.1175/JTECH-D-15-0101.1
Jonsson, B. F., S. Doney, J. Dunne, and M. L. Bender, 2015: Evaluating Southern Ocean biological production in two ocean biogeochemical models on daily to seasonal timescales using satellite chlorophyll and O2 / Ar observations. *Biogeosciences*, **12,** 681-695, http://dx.doi.org/10.5194/bg-12-681-2015
Josey, S. A., J. Grist, D. Kieke, I. Yashayaev, and L. Yu, 2015: Extraordinary Ocean Cooling and New Dense Water Formation in the North Atlantic, In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96,** S67-S68, http://dx.doi.org/doi:10.1175/2015BAMSStateoftheClimate.1
Juza, M., B. Mourre, J.-M. Lellouche, M. Tonani, and J. Tintoré, 2015: From basin to sub-basin scale assessment and intercomparison of numerical simulations in the Western Mediterranean Sea. *Journal of Marine Systems*, **149,** 36-49, http://dx.doi.org/10.1016/j.jmarsys.2015.04.010
Kaneko, H., S. Itoh, S. Kouketsu, T. Okunishi, S. Hosoda, and T. Suga, 2015: Evolution and modulation of a poleward-propagating anticyclonic eddy along the Japan and Kuril-Kamchatka trenches. *Journal of Geophysical Research: Oceans*, **120,** 4418-4440, http://dx.doi.org/10.1002/2014JC010693
Kao, H.-Y. and G. S. E. Lagerloef, 2015: Salinity fronts in the tropical Pacific Ocean. *Journal of Geophysical Research: Oceans*, **120,** 1096-1106, http://dx.doi.org/10.1002/2014JC010114
Karspeck, A. R., D. Stammer, A. Köhl, G. Danabasoglu, M. Balmaseda, D. M. Smith, Y. Fujii, S. Zhang, B. Giese, H. Tsujino, and A. Rosati, 2015: Comparison of the Atlantic meridional overturning circulation between 1960 and 2007 in six ocean reanalysis products. *Climate Dynamics***,** 1-26, http://dx.doi.org/10.1007/s00382-015-2787-7
Karstensen, J., B. Fiedler, F. Schütte, P. Brandt, A. Körtzinger, G. Fischer, R. Zantopp, J. Hahn, M. Visbeck, and D. Wallace, 2015: Open ocean dead zones in the tropical North Atlantic Ocean. *Biogeosciences*, **12,** 2597-2605, http://dx.doi.org/10.5194/bg-12-2597-2015
Kassis, D., G. Korres, G. Petihakis, and L. Perivoliotis, 2015: Hydrodynamic variability of the Cretan Sea derived from Argo float profiles and multi-parametric buoy measurements during 2010–2012. *Ocean Dynamics***,** 1-17, http://dx.doi.org/10.1007/s10236-015-0892-0
Katsura, S., E. Oka, and K. Sato, 2015: Formation Mechanism of Barrier Layer in the Subtropical Pacific. *Journal of Physical Oceanography*, **45,** 2790-2805, http://dx.doi.org/10.1175/JPO-D-15-0028.1
Keating, S. R. and K. S. Smith, 2015: Upper ocean flow statistics estimated from superresolved sea-surface temperature images. *Journal of Geophysical Research: Oceans*, **120,** 1197-1214, http://dx.doi.org/10.1002/2014JC010357

Kieke, D. and I. Yashayaev, 2015: Studies of Labrador Sea Water formation and variability in the subpolar North Atlantic in the light of international partnership and collaboration. *Progress in Oceanography*, **132,** 220-232, http://dx.doi.org/10.1016/j.pocean.2014.12.010

Kilbourne, B. F. and J. B. Girton, 2015: Quantifying High-Frequency Wind Energy Flux into Near-Inertial Motions in the Southeast Pacific. *Journal of Physical Oceanography*, **45,** 369-386, http://dx.doi.org/10.1175/JPO-D-14-0076.1

Kilbourne, B. F. and J. B. Girton, 2015: Surface boundary layer evolution and near-inertial wind power input. *Journal of Geophysical Research: Oceans*, **120,** 7506-7520, http://dx.doi.org/10.1002/2015JC011213

Kim, H., J. Kim, and D.-G. Paeng, 2015: Analysis of Surface Sound Channel by Low Salinity Water and Its Mid-frequency Acoustic Characteristics in the East China Sea and the Gulf of Guinea. *The Journal of the Acoustical Society of Korea*, **34,** 1-11, http://dx.doi.org/10.7776/ASK.2015.34.1.001

Kim, H.-J. and J.-B. Ahn, 2015: Improvement in Prediction of the Arctic Oscillation with a Realistic Ocean Initial Condition in a CGCM. *Journal of Climate*, **28,** 8951-8967, http://dx.doi.org/10.1175/JCLI-D-14-00457.1

Kim, J. H., H.-M. Eom, J.-K. Choi, S.-M. Lee, Y.-H. Kim, and P.-H. Chang, 2015: Impacts of OSTIA Sea Surface Temperature in Regional Ocean Data Assimilation System. *The Sea*, **20,** 1-15, http://dx.doi.org/10.7850/jkso.2015.20.1.1

Kim, Y. H., C. Hwang, and B.-J. Choi, 2015: An assessment of ocean climate reanalysis by the data assimilation system of KIOST from 1947 to 2012. *Ocean Modelling*, **91,** 1-22, http://dx.doi.org/10.1016/j.ocemod.2015.02.006

Kimizuka, M., F. Kobashi, A. Kubokawa, and N. Iwasaka, 2015: Vertical and horizontal structures of the North Pacific subtropical gyre axis. *Journal of Oceanography*, **71,** 409-425, http://dx.doi.org/10.1007/s10872-015-0301-9

Kjellsson, J., P. R. Holland, G. J. Marshall, P. Mathiot, Y. Aksenov, A. C. Coward, S. Bacon, A. P. Megann, and J. Ridley, 2015: Model sensitivity of the Weddell and Ross seas, Antarctica, to vertical mixing and freshwater forcing. *Ocean Modelling*, **94,** 141-152, http://dx.doi.org/10.1016/j.ocemod.2015.08.003

Kodama, T., T. Setou, M. Masujima, M. Okazaki, and T. Ichikawa, 2015: Intrusions of excess nitrate in the Kuroshio subsurface layer. *Continental Shelf Research*, **110,** 191-200, http://dx.doi.org/10.1016/j.csr.2015.10.012

Köhl, A., 2015: Evaluation of the GECCO2 ocean synthesis: transports of volume, heat and freshwater in the Atlantic. *Quarterly Journal of the Royal Meteorological Society*, **141,** 166-181, http://dx.doi.org/10.1002/qj.2347

Köhler, J., M. Sena Martins, N. Serra, and D. Stammer, 2015: Quality assessment of spaceborne sea surface salinity observations over the northern North Atlantic. *Journal of Geophysical Research: Oceans*, **120,** 94-112, http://dx.doi.org/10.1002/2014JC010067

Kok, P. H., M. F. Akhir, and F. T. Tangang, 2015: Thermal frontal zone along the east coast of Peninsular Malaysia. *Continental Shelf Research*, **110,** 1-15, http://dx.doi.org/10.1016/j.csr.2015.09.010

Kolodziejczyk, N., O. Hernandez, J. Boutin, and G. Reverdin, 2015: SMOS salinity in the

subtropical North Atlantic salinity maximum: 2. Two-dimensional horizontal thermohaline variability. *Journal of Geophysical Research: Oceans*, **120,** 972-987, http://dx.doi.org/10.1002/2014JC010103

Kolodziejczyk, N., G. Reverdin, J. Boutin, and O. Hernandez, 2015: Observation of the surface horizontal thermohaline variability at mesoscale to submesoscale in the north-eastern subtropical Atlantic Ocean. *Journal of Geophysical Research: Oceans*, **120,** 2588-2600, http://dx.doi.org/10.1002/2014JC010455

Kolodziejczyk, N., G. Reverdin, and A. Lazar, 2015: Interannual Variability of the Mixed Layer Winter Convection and Spice Injection in the Eastern Subtropical North Atlantic. *Journal of Physical Oceanography*, **45,** 504-525, http://dx.doi.org/10.1175/JPO-D-14-0042.1

Koslow, J. A. and J. Couture, 2015: Pacific Ocean observation programs: Gaps in ecological time series. *Marine Policy*, **51,** 408-414, http://dx.doi.org/10.1016/j.marpol.2014.09.003

Kouketsu, S., H. Kaneko, T. Okunishi, K. Sasaoka, S. Itoh, R. Inoue, and H. Ueno, 2015: Mesoscale eddy effects on temporal variability of surface chlorophyll a in the Kuroshio Extension. *Journal of Oceanography***,** 1-13, http://dx.doi.org/10.1007/s10872-015-0286-4

Kovačević, V., L. Ursella, M. Gacic, G. notarstefano, M. Menna, M. Bensi, and P. M. Poulain, 2015: On the Ionian thermohaline properties and circulation in 2010-2013 as measured by Argo floats. *Acta Adriatica*, **56,** 97-114, http://jadran.izor.hr/acta/eng/redirect.htm?folder=56_1_pdf&file=56_1_5

Kumar, A., M. Chen, Y. Xue, and D. Behringer, 2015: An Analysis of the Temporal Evolution of ENSO Prediction Skill in the Context of the Equatorial Pacific Ocean Observing System. *Monthly Weather Review*, **143,** 3204-3213, http://dx.doi.org/10.1175/MWR-D-15-0035.1

Kunze, E., J. M. Klymak, R. C. Lien, R. Ferrari, C. M. Lee, M. A. Sundermeyer, and L. Goodman, 2015: Submesoscale Water-Mass Spectra in the Sargasso Sea. *Journal of Physical Oceanography*, **45,** 1325-1338, http://dx.doi.org/10.1175/JPO-D-14-0108.1

Kuragano, T., Y. Fujii, and M. Kamachi, 2015: Evaluation of the Argo network using statistical space-time scales derived from satellite altimetry data. *Journal of Geophysical Research: Oceans*, **120,** 4534-4551, http://dx.doi.org/10.1002/2015JC010730

Kwon, Y.-O., J.-J. Park, S. F. Gary, and M. S. Lozier, 2015: Year-to-Year Reoutcropping of Eighteen Degree Water in an Eddy-Resolving Ocean Simulation. *Journal of Physical Oceanography*, **45,** 1189-1204, http://dx.doi.org/10.1175/JPO-D-14-0122.1

Labrousse, S., J. Vacquié-Garcia, K. Heerah, C. Guinet, J.-B. Sallée, M. Authier, B. Picard, F. Roquet, F. Bailleul, M. Hindell, and J.-B. Charrassin, 2015: Winter use of sea ice and ocean water mass habitat by southern elephant seals: The length and breadth of the mystery. *Progress in Oceanography*, **137, Part A,** 52-68, http://dx.doi.org/10.1016/j.pocean.2015.05.023

Lacour, L., H. Claustre, L. Prieur, and F. D'Ortenzio, 2015: Phytoplankton biomass cycles in the North Atlantic subpolar gyre: A similar mechanism for two different blooms in the Labrador Sea. *Geophysical Research Letters*, **42,** 5403-5410, http://dx.doi.org/10.1002/2015GL064540

Lavigne, H., F. D'Ortenzio, M. Ribera D'Alcalà, H. Claustre, R. Sauzède, and M. Gacic, 2015: On the vertical distribution of the chlorophyll a concentration in the Mediterranean Sea: a basin-scale and seasonal approach. *Biogeosciences*, **12,** 5021-5039, http://dx.doi.org/10.5194/bg-12-5021-2015

Le Traon, P. Y., D. Antoine, A. Bentamy, H. Bonekamp, L. A. Breivik, B. Chapron, G. Corlett, G. Dibarboure, P. DiGiacomo, C. Donlon, Y. Faugère, J. Font, F. Girard-Ardhuin, F. Gohin, J. A. Johannessen, M. Kamachi, G. Lagerloef, J. Lambin, G. Larnicol, P. Le Borgne, E. Leuliette, E. Lindstrom, M. J. Martin, E. Maturi, L. Miller, L. Mingsen, R. Morrow, N. Reul, M. H. Rio, H. Roquet, R. Santoleri, and J. Wilkin, 2015: Use of satellite observations for operational oceanography: recent achievements and future prospects. *Journal of Operational Oceanography*, **8,** s12-s27, http://dx.doi.org/10.1080/1755876X.2015.1022050

Lea, D. J., I. Mirouze, M. J. Martin, R. R. King, A. Hines, D. Walters, and M. Thurlow, 2015: Assessing a New Coupled Data Assimilation System Based on the Met Office Coupled Atmosphere–Land–Ocean–Sea Ice Model. *Monthly Weather Review*, **143,** 4678-4694, http://dx.doi.org/10.1175/MWR-D-15-0174.1

Lee, E., Y. Noh, B. Qiu, and S.-W. Yeh, 2015: Seasonal variation of the upper ocean responding to surface heating in the North Pacific. *Journal of Geophysical Research: Oceans*, **120,** 5631-5647, http://dx.doi.org/10.1002/2015JC010800

Legler, D. M., H. J. Freeland, R. Lumpkin, G. Ball, M. J. McPhaden, S. North, R. Crowley, G. J. Goni, U. Send, and M. A. Merrifield, 2015: The current status of the real-time in situ Global Ocean Observing System for operational oceanography. *Journal of Operational Oceanography*, **8,** s189-s200, http://dx.doi.org/10.1080/1755876X.2015.1049883

Leuliette, E. W., 2015: The Balancing of the Sea-Level Budget. *Current Climate Change Reports***,** 1-7, http://dx.doi.org/10.1007/s40641-015-0012-8

L'Hégaret, P., R. Duarte, X. Carton, C. Vic, D. Ciani, R. Baraille, and S. Corréard, 2015: Mesoscale variability in the Arabian Sea from HYCOM model results and observations: impact on the Persian Gulf Water path. *Ocean Science*, **11,** 667-693, http://dx.doi.org/10.5194/os-11-667-2015

Li, F., Y.-H. Jo, X.-H. Yan, and W. Timothy Liu, 2015: Varying temperature and heat content signatures in the central Labrador Sea at different layers and timescales. *Deep Sea Research Part I: Oceanographic Research Papers*, **103,** 114-124, http://dx.doi.org/10.1016/j.dsr.2015.04.012

Li, J., Z. Jing, S. Jiang, D. Wang, and T. Yan, 2015: An observed cyclonic eddy associated with boundary current in the northwestern South China Sea. *Aquatic Ecosystem Health & Management*, **18,** 454-461, http://dx.doi.org/10.1080/14634988.2015.1100959

Li, Q. P., Y. Wang, Y. Dong, and J. Gan, 2015: Modeling long-term change of planktonic ecosystems in the northern South China Sea and the upstream Kuroshio Current. *Journal of Geophysical Research: Oceans*, **120,** 3913-3936, http://dx.doi.org/10.1002/2014JC010609

Li, Y., W. Han, and T. Lee, 2015: Intraseasonal sea surface salinity variability in the equatorial Indo-Pacific Ocean induced by Madden-Julian oscillations. *Journal of Geophysical Research: Oceans*, **120,** 2233-2258, http://dx.doi.org/10.1002/2014JC010647

Li, Y., R. He, K. Chen, and D. J. McGillicuddy, 2015: Variational data assimilative modeling of the Gulf of Maine in spring and summer 2010. *Journal of Geophysical Research: Oceans*, **120,** 3522-3541, http://dx.doi.org/10.1002/2014JC010492

Li, Y. and F. Wang, 2015: Thermocline spiciness variations in the tropical Indian Ocean observed during 2003–2014. *Deep Sea Research Part I: Oceanographic Research Papers*, **97,** 52-66, http://dx.doi.org/10.1016/j.dsr.2014.12.004

Li, Z., J. C. McWilliams, K. Ide, and J. D. Farrara, 2015: Coastal ocean data assimilation using a multi-scale three-dimensional variational scheme. *Ocean Dynamics*, **65,** 1001-1015, http://dx.doi.org/10.1007/s10236-015-0850-x

Liang, X., C. Wunsch, P. Heimbach, and G. Forget, 2015: Vertical Redistribution of Oceanic Heat Content. *Journal of Climate*, **28,** 3821-3833, http://dx.doi.org/10.1175/JCLI-D-14-00550.1

Lindstrom, E., F. Bryan, and R. Schmitt, 2015: Salinity Processes in the Upper-ocean Regional Study - The North Atlantic Experiement. *Oceanography*, **28,** 14-19, http://dx.doi.org/10.5670/oceanog.2015.01

Liu, Q.-Y., M. Feng, D. Wang, and S. Wijffels, 2015: Interannual variability of the Indonesian Throughflow transport: A revisit based on 30 year expendable bathythermograph data. *Journal of Geophysical Research: Oceans*, **120,** 8270-8282, http://dx.doi.org/10.1002/2015JC011351

Liu, X. and J. Wei, 2015: Understanding surface and subsurface temperature changes induced by tropical cyclones in the Kuroshio. *Ocean Dynamics*, **65,** 1017-1027, http://dx.doi.org/10.1007/s10236-015-0851-9

Liu, Y. and P. J. Minnett, 2015: Evidence linking satellite-derived sea-surface temperature signals to changes in the Atlantic meridional overturning circulation. *Remote Sensing of Environment*, **169,** 150-162, http://dx.doi.org/10.1016/j.rse.2015.08.014

Liu, Z., Y. Hou, and Q. Xie, 2015: Eddy formation and surface flow field in the Luzon Strait area during the summer of 2009. *Chinese Journal of Oceanology and Limnology*, **33,** 1320-1333, http://dx.doi.org/10.1007/s00343-015-4397-y

Llovel, W. and T. Lee, 2015: Importance and origin of halosteric contribution to sea level change in the southeast Indian Ocean during 2005–2013. *Geophysical Research Letters*, **42,** 1148-1157, http://dx.doi.org/10.1002/2014GL062611

Loder, J. W., A. van der Baaren, and I. Yashayaev, 2015: Climate Comparisons and Change Projections for the Northwest Atlantic from Six CMIP5 Models. *Atmosphere-Ocean*, **53**, http://dx.doi.org/10.1080/07055900.2015.1087836

Lyman, J. M. and G. C. Johnson, 2015: Anomalous eddy heat and freshwater transport in the Gulf of Alaska. *Journal of Geophysical Research: Oceans*, **120,** 1397-1408, http://dx.doi.org/10.1002/2014JC010252

Ma, X. and C. Sun, 2015: Water mass characteristics in the western North Pacific based on a streamfunction projection. *Science China Earth Sciences*, **58,** 2067-2077, http://dx.doi.org/10.1007/s11430-015-5100-z

Ma, X. and C. Sun, 2015: Equatorward shift of annual Rossby waves in the Equatorial Pacific Ocean. *Chinese Journal of Oceanology and Limnology***,** 1-7, http://dx.doi.org/10.1007/s00343-015-4405-2

MacLachlan, C., A. Arribas, K. A. Peterson, A. Maidens, D. Fereday, A. A. Scaife, M. Gordon, M.

Vellinga, A. Williams, R. E. Comer, J. Camp, P. Xavier, and G. Madec, 2015: Global Seasonal forecast system version 5 (GloSea5): a high-resolution seasonal forecast system. *Quarterly Journal of the Royal Meteorological Society*, **141,** 1072-1084, http://dx.doi.org/10.1002/qj.2396

Martin, M. J., M. Balmaseda, L. Bertino, P. Brasseur, G. Brassington, J. Cummings, Y. Fujii, D. J. Lea, J. M. Lellouche, K. Mogensen, P. R. Oke, G. C. Smith, C. E. Testut, G. A. Waagbø, J. Waters, and A. T. Weaver, 2015: Status and future of data assimilation in operational oceanography. *Journal of Operational Oceanography*, **8,** s28-s48, http://dx.doi.org/10.1080/1755876X.2015.1022055

Martin, M. V. and C. Shaji, 2015: On the eastward shift of winter surface chlorophyll-a bloom peak in the Bay of Bengal. *Journal of Geophysical Research: Oceans*, **120,** 2193-2211, http://dx.doi.org/10.1002/2014JC010162

Masich, J., T. K. Chereskin, and M. R. Mazloff, 2015: Topographic form stress in the Southern Ocean State Estimate. *Journal of Geophysical Research: Oceans*, **120,** 7919-7933, http://dx.doi.org/10.1002/2015JC011143

Masina, S., A. Storto, N. Ferry, M. Valdivieso, K. Haines, M. Balmaseda, H. Zuo, M. Drevillon, and L. Parent, 2015: An ensemble of eddy-permitting global ocean reanalyses from the MyOcean project. *Climate Dynamics***,** 1-29, http://dx.doi.org/10.1007/s00382-015-2728-5

Masuda, S., J. Philip Matthews, Y. Ishikawa, T. Mochizuki, Y. Tanaka, and T. Awaji, 2015: A new Approach to El Niño Prediction beyond the Spring Season. *Scientific Reports*, **5,** 16782, http://dx.doi.org/10.1038/srep16782

McCaffrey, K., B. Fox-Kemper, and G. Forget, 2015: Estimates of Ocean Macroturbulence: Structure Function and Spectral Slope from Argo Profiling Floats. *Journal of Physical Oceanography*, **45,** 1773-1793, http://dx.doi.org/10.1175/JPO-D-14-0023.1

McCarthy, G. D., D. A. Smeed, W. E. Johns, E. Frajka-Williams, B. I. Moat, D. Rayner, M. O. Baringer, C. S. Meinen, J. Collins, and H. L. Bryden, 2015: Measuring the Atlantic Meridional Overturning Circulation at 26°N. *Progress in Oceanography*, **130,** 91-111, http://dx.doi.org/10.1016/j.pocean.2014.10.006

McDonagh, E. L., B. A. King, H. L. Bryden, P. Courtois, Z. Szuts, M. Baringer, S. A. Cunningham, C. Atkinson, and G. McCarthy, 2015: Continuous Estimate of Atlantic Oceanic Freshwater Flux at 26.5°N. *Journal of Climate*, **28,** 8888-8906, http://dx.doi.org/10.1175/JCLI-D-14-00519.1

McKiver, W. J., M. Vichi, T. Lovato, A. Storto, and S. Masina, 2015: Impact of increased grid resolution on global marine biogeochemistry. *Journal of Marine Systems*, **147,** 153-168, http://dx.doi.org/10.1016/j.jmarsys.2014.10.003

McPhaden, M. J., Y. Wang, and M. Ravichandran, 2015: Volume transports of the Wyrtki jets and their relationship to the Indian Ocean Dipole. *Journal of Geophysical Research: Oceans*, **120,** 5302-5317, http://dx.doi.org/10.1002/2015JC010901

Melbourne-Thomas, J., S. Wotherspoon, S. Corney, E. Molina-Balari, O. Marini, and A. Constable, 2015: Optimal control and system limitation in a Southern Ocean ecosystem model. *Deep Sea Research Part II: Topical Studies in Oceanography*, **114,** 64-73, http://dx.doi.org/10.1016/j.dsr2.2013.02.017

Melzer, B. A. and B. Subrahmanyam, 2015: Investigating decadal changes in sea surface

salinity in oceanic subtropical gyres. *Geophysical Research Letters*, **42,** 7631-7638, http://dx.doi.org/10.1002/2015GL065636

Men, W., J. He, F. Wang, Y. Wen, Y. Li, J. Huang, and X. Yu, 2015: Radioactive status of seawater in the northwest Pacific more than one year after the Fukushima nuclear accident. *Sci. Rep.*, **5**, http://dx.doi.org/10.1038/srep07757

Mensah, V., S. Jan, M.-H. Chang, and Y.-J. Yang, 2015: Intraseasonal to seasonal variability of the intermediate waters along the Kuroshio path east of Taiwan. *Journal of Geophysical Research: Oceans*, **120,** 5473-5489, http://dx.doi.org/10.1002/2015JC010768

Mercier, H., P. Lherminier, A. Sarafanov, F. Gaillard, N. Daniault, D. Desbruyères, A. Falina, B. Ferron, C. Gourcuff, T. Huck, and V. Thierry, 2015: Variability of the meridional overturning circulation at the Greenland–Portugal OVIDE section from 1993 to 2010. *Progress in Oceanography*, **132,** 250-261, http://dx.doi.org/10.1016/j.pocean.2013.11.001

Meredith, M. P., M. R. Mazloff, J. B. Sallee, L. newman, A. Wahlin, M. J. M. Williams, A. C. N. Garabato, S. Swart, P. Monteiro, M. M. Mata, and S. Schmidtko, 2015: Antarctica: The Southern Ocean Observing System, In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96,** S159, http://dx.doi.org/10.1175/2015BAMSStateoftheClimate.1

Meredith, M. P., M. R. Mazloff, J. B. Sallee, L. newman, A. Wahlin, M. J. M. Williams, A. C. naveira Garabato, S. Swart, P. Monteiro, M. M. Mata, and S. Schmidtko, 2015: Antarctica: Southern Ocean, In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96,** S157-S160, http://dx.doi.org/10.1175/2015BAMSStateoftheClimate.1

Meredith, M. P., A. S. Meijers, A. C. Naveira Garabato, P. J. Brown, H. J. Venables, E. P. Abrahamsen, L. Jullion, and M.-J. Messias, 2015: Circulation, retention, and mixing of waters within the Weddell-Scotia Confluence, Southern Ocean: The role of stratified Taylor columns. *Journal of Geophysical Research: Oceans*, **120,** 547-562, http://dx.doi.org/10.1002/2014JC010462

Merlivat, L., J. Boutin, and D. Antoine, 2015: Roles of biological and physical processes in driving seasonal air–sea CO2 flux in the Southern Ocean: New insights from CARIOCA pCO2. *Journal of Marine Systems*, **147,** 9-20, http://dx.doi.org/10.1016/j.jmarsys.2014.04.015

Merrifield, M., P. Thompson, E. Leuliette, G. T. Mitchum, D. P. Chambers, S. Jevrejeva, R. S. Nerem, M. Menedez, W. Sweet, B. D. Hamlington, and J. J. Marra, 2015: Global Oceans: Sea level variability and change, In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96,** S82-S85, http://www.dx.doi.org/10.1175/2015BAMSStateoftheClimate.1

Mignac, D., C. A. S. Tanajura, A. N. Santana, L. N. Lima, and J. Xie, 2015: Argo data assimilation into HYCOM with an EnOI method in the Atlantic Ocean. *Ocean Science*, **11,** 195-213, http://dx.doi.org/10.5194/os-11-195-2015

Miller, A. J., H. Song, and A. C. Subramanian, 2015: The physical oceanographic environment during the CCE-LTER Years: Changes in climate and concepts. *Deep Sea Research Part II: Topical Studies in Oceanography*, **112,** 6-17,

http://dx.doi.org/10.1016/j.dsr2.2014.01.003
Momin, I. M., A. K. Mitra, S. Prakash, D. K. Mahapatra, A. Gera, and E. N. Rajagopal, 2015: Variability of sea surface salinity in the tropical Indian Ocean as inferred from Aquarius and in situ data sets. *International Journal of Remote Sensing*, **36,** 1907-1920, http://dx.doi.org/10.1080/01431161.2015.1030045
Morrison, A. K., M. H. England, and A. M. Hogg, 2015: Response of Southern Ocean Convection and Abyssal Overturning to Surface Buoyancy Perturbations. *Journal of Climate*, **28,** 4263-4278, http://dx.doi.org/10.1175/JCLI-D-14-00110.1
Muni Krishna, K. and G. Song, 2015: Physical and biological changes in the south Bay of Bengal due to the Baaz cyclone. *Advances in Space Research*, **56,** 1658-1666, http://dx.doi.org/10.1016/j.asr.2015.07.025
Muscarella, P., M. J. Carrier, H. Ngodock, S. Smith, B. L. Lipphardt, A. D. Kirwan, and H. S. Huntley, 2015: Do Assimilated Drifter Velocities Improve Lagrangian Predictability in an Operational Ocean Model? *Monthly Weather Review*, **143,** 1822-1832, http://dx.doi.org/10.1175/MWR-D-14-00164.1
Nagura, M., T. Terao, and M. Hashizume, 2015: The Role of Temperature Inversions in the Generation of Seasonal and Interannual SST Variability in the Far Northern Bay of Bengal. *Journal of Climate*, **28,** 3671-3693, http://dx.doi.org/10.1175/JCLI-D-14-00553.1
Nakanowatari, T., H. Mitsudera, T. Motoi, I. Ishikawa, K. I. Ohshima, and M. Wakatsuchi, 2015: Multidecadal-Scale Freshening at the Salinity Minimum in the Western Part of North Pacific: Importance of Wind-Driven Cross-Gyre Transport of Subarctic Water to the Subtropical Gyre. *Journal of Physical Oceanography*, **45,** 988-1008, http://dx.doi.org/10.1175/JPO-D-13-0274.1
Nakanowatari, T., T. Nakamura, K. Uchimoto, H. Uehara, H. Mitsudera, K. I. Ohshima, H. Hasumi, and M. Wakatsuchi, 2015: Causes of the Multidecadal-Scale Warming of the Intermediate Water in the Okhotsk Sea and Western Subarctic North Pacific. *Journal of Climate*, **28,** 714-736, http://dx.doi.org/10.1175/JCLI-D-14-00172.1
Nan, F., F. Yu, H. Xue, R. Wang, and G. Si, 2015: Ocean salinity changes in the northwest Pacific subtropical gyre: The quasi-decadal oscillation and the freshening trend. *Journal of Geophysical Research: Oceans*, **120,** 2179-2192, http://dx.doi.org/10.1002/2014JC010536
Newinger, C. and R. Toumi, 2015: Potential impact of the colored Amazon and Orinoco plume on tropical cyclone intensity. *Journal of Geophysical Research: Oceans*, **120,** 1296-1317, http://dx.doi.org/10.1002/2014JC010533
Nieves, V., J. K. Willis, and W. C. Patzert, 2015: Recent hiatus caused by decadal shift in Indo-Pacific heating. *Science*, http://dx.doi.org/10.1126/science.aaa4521
Nishikawa, S., Y. Ishikawa, S. Masuda, Y. Hiyoshi, Y. Sasaki, and H. Igarashi, 2015: Argo data assimilation and its effect on climate state estimation and forecasting in the western North Pacific using a coupled model. *Journal of Geophysical Research: Oceans*, **120,** 2636-2654, http://dx.doi.org/10.1002/2014JC010095
Ohde, T., B. Fiedler, and A. Körtzinger, 2015: Spatio-temporal distribution and transport of particulate matter in the eastern tropical North Atlantic observed by Argo floats. *Deep Sea Research Part I: Oceanographic Research Papers*, **102,** 26-42,

http://dx.doi.org/10.1016/j.dsr.2015.04.007
Oka, E., B. Qiu, Y. Takatani, K. Enyo, D. Sasano, N. Kosugi, M. Ishii, T. Nakano, and T. Suga, 2015: Decadal variability of Subtropical Mode Water subduction and its impact on biogeochemistry. *Journal of Oceanography*, **71,** 389-400, http://dx.doi.org/10.1007/s10872-015-0300-x
Oke, P. R., G. Larnicol, Y. Fujii, G. C. Smith, D. J. Lea, S. Guinehut, E. Remy, M. A. Balmaseda, T. Rykova, D. Surcel-Colan, M. J. Martin, A. A. Sellar, S. Mulet, and V. Turpin, 2015: Assessing the impact of observations on ocean forecasts and reanalyses: Part 1, Global studies. *Journal of Operational Oceanography*, **8,** s49-s62, http://dx.doi.org/10.1080/1755876X.2015.1022067
Oke, P. R., G. Larnicol, E. M. Jones, V. Kourafalou, A. K. Sperrevik, F. Carse, C. A. S. Tanajura, B. Mourre, M. Tonani, G. B. Brassington, M. Le Henaff, G. R. Halliwell, R. Atlas, A. M. Moore, C. A. Edwards, M. J. Martin, A. A. Sellar, A. Alvarez, P. De Mey, and M. Iskandarani, 2015: Assessing the impact of observations on ocean forecasts and reanalyses: Part 2, Regional applications. *Journal of Operational Oceanography*, **8,** s63-s79, http://dx.doi.org/10.1080/1755876X.2015.1022080
Ono, S., H. Matsuyama, K. i. Fukui, and S. Hosoda, 2015: Error detection of oceanic observation data using sequential labeling. *2015 IEEE International Conference on Data Science and Advanced Analytics (DSAA)*, 1-8, https://doi.org/10.1109/DSAA.2015.7344896
Ono, S., H. Matsuyama, K.-i. Fukui, and S. Hosoda, 2015: A Preliminary Study on Quality Control of Oceanic Observation Data by Machine Learning Methods. *Proceedings of the 18th Asia Pacific Symposium on Intelligent and Evolutionary Systems, Volume 1*, H. Handa, H. Ishibuchi, Y.-S. Ong, and K. C. Tan, Eds., Springer International Publishing, 679-693, http://dx.doi.org/10.1007/978-3-319-13359-1_52.
Osafune, S., S. Masuda, N. Sugiura, and T. Doi, 2015: Evaluation of the applicability of the Estimated State of the Global Ocean for Climate Research (ESTOC) data set. *Geophysical Research Letters*, **42,** 4903-4911, http://dx.doi.org/10.1002/2015GL064538
Ott, L. E., S. Pawson, G. J. Collatz, W. W. Gregg, D. Menemenlis, H. Brix, C. S. Rousseaux, K. W. Bowman, J. Liu, A. Eldering, M. R. Gunson, and S. R. Kawa, 2015: Assessing the magnitude of CO2 flux uncertainty in atmospheric CO2 records using products from NASA's Carbon Monitoring Flux Pilot Project. *Journal of Geophysical Research: Atmospheres*, **120,** 2014JD022411, http://dx.doi.org/10.1002/2014JD022411
Palanisamy, H., A. Cazenave, T. Delcroix, and B. Meyssignac, 2015: Spatial trend patterns in the Pacific Ocean sea level during the altimetry era: the contribution of thermocline depth change and internal climate variability. *Ocean Dynamics*, **65,** 341-356, http://dx.doi.org/10.1007/s10236-014-0805-7
Palanisamy, H., A. Cazenave, O. Henry, P. Prandi, and B. Meyssignac, 2015: Sea-Level Variations Measured by the New Altimetry Mission SARAL/AltiKa and its Validation Based on Spatial Patterns and Temporal Curves Using Jason-2, Tide Gauge Data and an Overview of the Annual Sea Level Budget. *Marine Geodesy*, **38,** 339-353, http://dx.doi.org/10.1080/01490419.2014.1000469
Palmer, M. D., C. D. Roberts, M. Balmaseda, Y. S. Chang, G. Chepurin, N. Ferry, Y. Fujii, S. A.

Good, S. Guinehut, K. Haines, F. Hernandez, A. Köhl, T. Lee, M. J. Martin, S. Masina, S. Masuda, K. A. Peterson, A. Storto, T. Toyoda, M. Valdivieso, G. Vernieres, O. Wang, and Y. Xue, 2015: Ocean heat content variability and change in an ensemble of ocean reanalyses. *Climate Dynamics***,** 1-22, http://dx.doi.org/10.1007/s00382-015-2801-0

Pant, V., M. S. Girishkumar, T. V. S. U. Bhaskar, M. Ravichandran, F. Papa, and V. P. Thangaprakash, 2015: Observed interannual variability of near-surface salinity in the Bay of Bengal. *Journal of Geophysical Research: Oceans*, **120,** 3315-3329, http://dx.doi.org/10.1002/2014JC010340

Park, K.-S., K.-Y. Heo, K. Jun, J.-I. Kwon, J. Kim, J.-Y. Choi, K.-H. Cho, B.-J. Choi, S.-N. Seo, Y. Kim, S.-D. Kim, C.-S. Yang, J.-C. Lee, S.-I. Kim, S. Kim, J.-W. Choi, and S.-H. Jeong, 2015: Development of the Operational Oceanographic System of Korea. *Ocean Science Journal*, **50,** 353-369, http://dx.doi.org/10.1007/s12601-015-0033-1

Park, Y., H.-R. Shin, J.-H. Yoon, C.-H. Kim, and Y. Yoshikawa, 2015: Simulation of eddy-driven deep circulation in the East/Japan Sea by using a three-layer model with wind, throughflow and deep water formation forcings. *Journal of Marine Systems*, **150,** 41-55, http://dx.doi.org/10.1016/j.jmarsys.2015.05.006

Pascual, A., S. Ruiz, B. Buongiorno Nardelli, S. Guinehut, D. Iudicone, and J. Tintoré, 2015: Net primary production in the Gulf Stream sustained by quasi-geostrophic vertical exchanges. *Geophysical Research Letters*, **42,** 2014GL062569, http://dx.doi.org/10.1002/2014GL062569

Pasqueron de Fommervault, O., F. D'Ortenzio, A. Mangin, R. Serra, C. Migon, H. Claustre, H. Lavigne, M. Ribera d'Alcalà, L. Prieur, V. Taillandier, C. Schmechtig, A. Poteau, E. Leymarie, A. Dufour, F. Besson, and G. Obolensky, 2015: Seasonal variability of nutrient concentrations in the Mediterranean Sea: Contribution of Bio-Argo floats. *Journal of Geophysical Research: Oceans*, **120,** 8528-8550, http://dx.doi.org/10.1002/2015JC011103

Pegliasco, C., A. Chaigneau, and R. Morrow, 2015: Main eddy vertical structures observed in the four major Eastern Boundary Upwelling Systems. *Journal of Geophysical Research: Oceans*, **120,** 6008-6033, http://dx.doi.org/10.1002/2015JC010950

Pei, Y. H., R. H. Zhang, and D. K. Chen, 2015: Upper ocean response to tropical cyclone wind forcing: A case study of typhoon Rammasun (2008). *Science China Earth Sciences***,** 1-10, http://dx.doi.org/10.1007/s11430-015-5127-1

Peña-Izquierdo, J., E. van Sebille, J. L. Pelegrí, J. Sprintall, E. Mason, P. J. Llanillo, and F. Machín, 2015: Water mass pathways to the North Atlantic oxygen minimum zone. *Journal of Geophysical Research: Oceans*, **120,** 3350-3372, http://dx.doi.org/10.1002/2014JC010557

Pérez-Hernández, M. D., G. D. McCarthy, P. Vélez-Belchí, D. A. Smeed, E. Fraile-Nuez, and A. Hernández-Guerra, 2015: The Canary Basin contribution to the seasonal cycle of the Atlantic Meridional Overturning Circulation at 26°N. *Journal of Geophysical Research: Oceans*, **120,** 7237-7252, http://dx.doi.org/10.1002/2015JC010969

Pilcher, D. J., S. R. Brody, L. Johnson, and B. Bronselaer, 2015: Assessing the abilities of CMIP5 models to represent the seasonal cycle of surface ocean pCO2. *Journal of Geophysical Research: Oceans*, **120,** 4625-4637,

http://dx.doi.org/10.1002/2015JC010759
Pinardi, N., M. Zavatarelli, M. Adani, G. Coppini, C. Fratianni, P. Oddo, S. Simoncelli, M. Tonani, V. Lyubartsev, S. Dobricic, and A. Bonaduce, 2015: Mediterranean Sea large-scale low-frequency ocean variability and water mass formation rates from 1987 to 2007: A retrospective analysis. *Progress in Oceanography*, **132,** 318-332, http://dx.doi.org/10.1016/j.pocean.2013.11.003
Ponsoni, L., B. Aguiar-González, L. R. M. Maas, H. M. van Aken, and H. Ridderinkhof, 2015: Long-term observations of the East Madagascar Undercurrent. *Deep Sea Research Part I: Oceanographic Research Papers*, **100,** 64-78, http://dx.doi.org/10.1016/j.dsr.2015.02.004
Prieto, E., C. González-Pola, A. Lavín, and N. P. Holliday, 2015: Interannual variability of the northwestern Iberia deep ocean: Response to large-scale North Atlantic forcing. *Journal of Geophysical Research: Oceans*, **120,** 832-847, http://dx.doi.org/10.1002/2014JC010436
Qian, H., Y. Li, R. He, and D. B. Eggleston, 2015: Connectivity in the Intra-American Seas and implications for potential larval transport. *Coral Reefs*, **34,** 403-417, http://dx.doi.org/10.1007/s00338-014-1244-0
Qing-quan, L. I., Z. Ren-he, and L. I. U. Yi-min, 2015: IMPROVEMENT OF OCEAN DATA ASSIMILATION SYSTEM AND CLIMATE PREDICTION BY ASSIMILATING ARGO DATA. *Journal of Tropical Meteorology*, **21,** 171-184, http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=102419363&site=ehost-live
Qiu, B., S. Chen, D. L. Rudnick, and Y. Kashino, 2015: A New Paradigm for the North Pacific Subthermocline Low-Latitude Western Boundary Current System. *Journal of Physical Oceanography*, **45,** 2407-2423, http://dx.doi.org/10.1175/JPO-D-15-0035.1
Raghukumar, K., C. A. Edwards, N. L. Goebel, G. Broquet, M. Veneziani, A. M. Moore, and J. P. Zehr, 2015: Impact of assimilating physical oceanographic data on modeled ecosystem dynamics in the California Current System. *Progress in Oceanography*, **138, Part B,** 546-558, http://dx.doi.org/10.1016/j.pocean.2015.01.004
Ran, L., J. Chen, M. G. Wiesner, Z. Ling, N. Lahajnar, Z. Yang, H. Li, Q. Hao, and K. Wang, 2015: Variability in the abundance and species composition of diatoms in sinking particles in the northern South China Sea: Results from time-series moored sediment traps. *Deep Sea Research Part II: Topical Studies in Oceanography*, **122,** 15-24, http://dx.doi.org/10.1016/j.dsr2.2015.07.004
Rao, R. R., V. Jitendra, M. S. GirishKumar, M. Ravichandran, and S. S. V. S. Ramakrishna, 2015: Interannual variability of the Arabian Sea Warm Pool: observations and governing mechanisms. *Climate Dynamics*, **44,** 2119-2136, http://dx.doi.org/10.1007/s00382-014-2243-0
Ratheesh, S., R. Sharma, K. V. S. R. Prasad, and S. Basu, 2015: Impact of SARAL/AltiKa-Derived Sea Level Anomaly in a Data Assimilative Ocean Prediction System for the Indian Ocean. *Marine Geodesy*, **38,** 354-364, http://dx.doi.org/10.1080/01490419.2014.988833
Reverdin, G., S. Morisset, L. Marie, D. Bourras, G. Sutherland, B. Ward, J. Salvador, J. Font, Y. Cuypers, L. Centurioni, V. Hormann, N. Koldziejczyk, J. Boutin, F. D'Ovidio, F. Nencioli,

N. Martin, D. Diverrès, G. Alory, and R. Lumpkin, 2015: Surface salinity in the North Atlantic subtropical gyre during the STRASSE/SPURS summer 2012 cruise. *Oceanography*, **28,** 114-123, http://dx.doi.org/10.5670/oceanog.2015.09

Riquelme-Bugueño, R., M. Correa-Ramírez, R. Escribano, S. Núñez, and S. Hormazábal, 2015: Mesoscale variability in the habitat of the Humboldt Current krill, spring 2007. *Journal of Geophysical Research: Oceans*, **120,** 2769-2783, http://dx.doi.org/10.1002/2014JC010460

Riser, S. C., J. Anderson, A. Shcherbina, and E. D'Asaro, 2015: Variability in near-surface salinity from hours to decades in the eastern North Atlantic. *Oceanography*, **28,** 66-77, http://dx.doi.org/10.5670/oceanog.2015.11

Roemmich, D., J. Church, J. Gilson, D. Monselesan, P. Sutton, and S. Wijffels, 2015: Unabated planetary warming and its ocean structure since 2006. *Nature Clim. Change*, **5,** 240-245, http://dx.doi.org/10.1038/nclimate2513

Roessler, A., M. Rhein, D. Kieke, and C. Mertens, 2015: Long-term observations of North Atlantic Current transport at the gateway between western and eastern Atlantic. *Journal of Geophysical Research: Oceans*, **120,** 4003-4027, http://dx.doi.org/10.1002/2014JC010662

Rogé, M., R. Morrow, and G. Dencausse, 2015: Altimetric Lagrangian advection to reconstruct Pacific Ocean fine-scale surface tracer fields. *Ocean Dynamics*, **65,** 1249-1268, http://dx.doi.org/10.1007/s10236-015-0872-4

Rosell-Fieschi, M., J. L. Pelegrí, and J. Gourrion, 2015: Zonal jets in the equatorial Atlantic Ocean. *Progress in Oceanography*, **130,** 1-18, http://dx.doi.org/10.1016/j.pocean.2014.08.008

Ryan, A. G., C. Regnier, P. Divakaran, T. Spindler, A. Mehra, G. C. Smith, F. Davidson, F. Hernandez, J. Maksymczuk, and Y. Liu, 2015: GODAE OceanView Class 4 forecast verification framework: global ocean inter-comparison. *Journal of Operational Oceanography*, **8,** s98-s111, http://dx.doi.org/10.1080/1755876X.2015.1022330

Rykova, T. and P. R. Oke, 2015: Recent freshening of the East Australian Current and its eddies. *Geophysical Research Letters*, **42,** 9369-9378, http://dx.doi.org/10.1002/2015GL066050

Sabu, P., J. V. George, N. Anilkumar, R. Chacko, V. Valsala, and C. T. Achuthankutty, 2015: Observations of watermass modification by mesoscale eddies in the subtropical frontal region of the Indian ocean sector of southern ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, **118, Part B,** 152-161, http://dx.doi.org/10.1016/j.dsr2.2015.04.010

Sakov, P. and P. A. Sandery, 2015: Comparison of EnOI and EnKF regional ocean reanalysis systems. *Ocean Modelling*, **89,** 45-60, http://dx.doi.org/10.1016/j.ocemod.2015.02.003

Sauzède, R., H. Claustre, C. Jamet, J. Uitz, J. Ras, A. Mignot, and F. D'Ortenzio, 2015: Retrieving the vertical distribution of chlorophyll a concentration and phytoplankton community composition from in situ fluorescence profiles: A method based on a neural network with potential for global-scale applications. *Journal of Geophysical Research: Oceans*, **120,** 451-470, http://dx.doi.org/10.1002/2014JC010355

Sauzède, R., H. Lavigne, H. Claustre, J. Uitz, C. Schmechtig, F. D'Ortenzio, C. Guinet, and S.

Pesant, 2015: Vertical distribution of chlorophyll a concentration and phytoplankton community composition from in situ fluorescence profiles: a first database for the global ocean. *Earth System Science Data*, **7,** 261-273, http://dx.doi.org/10.5194/essd-7-261-2015

Schabetsberger, R., O. F, K. D, S. U, T. M, A. K, G. C, S. J, B. B, J. R, D. O. G, M. MJ, S. A, K. R, and Q. G, 2015: Genetic and migratory evidence for sympatric spawning of tropical Pacific eels from Vanuatu. *Marine Ecology Progress Series*, **521,** 171-187, http://dx.doi.org/10.3354/meps11138

Schiller, A., M. Herzfeld, R. Brinkman, F. Rizwi, and J. Andrewartha, 2015: Cross-shelf exchanges between the Coral Sea and the Great Barrier Reef lagoon determined from a regional-scale numerical model. *Continental Shelf Research*, **109,** 150-163, http://dx.doi.org/10.1016/j.csr.2015.09.011

Schiller, A. and P. R. Oke, 2015: Dynamics of ocean surface mixed layer variability in the Indian Ocean. *Journal of Geophysical Research: Oceans*, **120,** 4162-4186, http://dx.doi.org/10.1002/2014JC010538

Schneider, L., D. Kieke, K. Jochumsen, E. Colbourne, I. Yashayaev, R. Steinfeldt, E. Varotsou, N. Serra, and M. Rhein, 2015: Variability of Labrador Sea Water transported through Flemish Pass during 1993–2013. *Journal of Geophysical Research: Oceans*, **120,** 5514-5533, http://dx.doi.org/10.1002/2015JC010939

Schönau, M. C. and D. L. Rudnick, 2015: Glider observations of the North Equatorial Current in the western tropical Pacific. *Journal of Geophysical Research: Oceans*, **120,** 3586-3605, http://dx.doi.org/10.1002/2014JC010595

Sena Martins, M., N. Serra, and D. Stammer, 2015: Spatial and temporal scales of sea surface salinity variability in the Atlantic Ocean. *Journal of Geophysical Research: Oceans*, **120,** 4306-4323, http://dx.doi.org/10.1002/2014JC010649

Sena Martins, M. and D. Stammer, 2015: Pacific Ocean surface freshwater variability underneath the double ITCZ as seen by satellite sea surface salinity retrievals. *Journal of Geophysical Research: Oceans*, **120,** 5870-5885, http://dx.doi.org/10.1002/2015JC010895

Seo, G.-H., B.-J. Choi, Y.-K. Cho, Y. H. Kim, and S. Kim, 2015: Evaluation of a regional ocean reanalysis system for the East Asian Marginal Seas based on the ensemble Kalman filter. *Ocean Science Journal*, **50,** 29-48, http://dx.doi.org/10.1007/s12601-015-0003-7

Shcherbina, A. Y., E. A. D'Asaro, S. C. Riser, and W. Kessler, 2015: Variability and interleaving of upper-ocean water masses surrounding the North Atlantic salinity maximum. *Oceanography*, **28,** 106-113, http://dx.doi.org/10.5670/oceanog.2015.12

Shetye, S. S., R. Mohan, S. Patil, B. Jena, R. Chacko, J. V. George, S. Noronha, N. Singh, L. Priya, and M. Sudhakar, 2015: Oceanic pCO2 in the Indian sector of the Southern Ocean during the austral summer–winter transition phase. *Deep Sea Research Part II: Topical Studies in Oceanography*, **118, Part B,** 250-260, http://dx.doi.org/10.1016/j.dsr2.2015.05.017

Shi, L., O. Alves, R. Wedd, M. A. Balmaseda, Y. Chang, G. Chepurin, N. Ferry, Y. Fujii, F. Gaillard, S. A. Good, S. Guinehut, K. Haines, F. Hernandez, T. Lee, M. Palmer, K. A. Peterson, S. Masuda, A. Storto, T. Toyoda, M. Valdivieso, G. Vernieres, X. Wang, and

Y. Yin, 2015: An assessment of upper ocean salinity content from the Ocean Reanalyses Inter-comparison Project (ORA-IP). *Climate Dynamics*, **49,** 1009-1029, http://dx.doi.org/10.1007/s00382-015-2868-7

Shiozaki, T., S. Takeda, S. Itoh, T. Kodama, X. Liu, F. Hashihama, and K. Furuya, 2015: Why is Trichodesmium abundant in the Kuroshio? *Biogeosciences*, **12,** 6931-6943, http://dx.doi.org/10.5194/bg-12-6931-2015

Siswanto, E., K. Matsumoto, M. C. Honda, T. Fujiki, K. Sasaoka, and T. Saino, 2015: Reappraisal of meridional differences of factors controlling phytoplankton biomass and initial increase preceding seasonal bloom in the northwestern Pacific Ocean. *Remote Sensing of Environment*, **159,** 44-56, http://dx.doi.org/10.1016/j.rse.2014.11.028

Sivareddy, S., M. Ravichandran, M. Girishkumar, and K. Prasad, 2015: Assessing the impact of various wind forcing on INCOIS-GODAS simulated ocean currents in the equatorial Indian Ocean. *Ocean Dynamics*, **65,** 1235-1247, http://dx.doi.org/10.1007/s10236-015-0870-6

Sloyan, B. M. and T. J. O'Kane, 2015: Drivers of decadal variability in the Tasman Sea. *Journal of Geophysical Research: Oceans*, **120,** 3193-3210, http://dx.doi.org/10.1002/2014JC010550

Smith, D. M., R. P. Allan, A. C. Coward, R. Eade, P. Hyder, C. Liu, N. G. Loeb, M. D. Palmer, C. D. Roberts, and A. A. Scaife, 2015: Earth's energy imbalance since 1960 in observations and CMIP5 models. *Geophysical Research Letters*, **42,** 1205-1213, http://dx.doi.org/10.1002/2014GL062669

Song, Y. T., T. Lee, J.-H. Moon, T. Qu, and S. Yueh, 2015: Modeling skin-layer salinity with an extended surface-salinity layer. *Journal of Geophysical Research: Oceans*, **120,** 1079-1095, http://dx.doi.org/10.1002/2014JC010346

Sotillo, M. G., S. Cailleau, P. Lorente, B. Levier, R. Aznar, G. Reffray, A. Amo-Baladrón, J. Chanut, M. Benkiran, and E. Alvarez-Fanjul, 2015: The MyOcean IBI Ocean Forecast and Reanalysis Systems: operational products and roadmap to the future Copernicus Service. *Journal of Operational Oceanography*, **8,** 63-79, http://dx.doi.org/10.1080/1755876X.2015.1014663

Sreejith, O. P., S. Panickal, S. Pai, and M. Rajeevan, 2015: An Indian Ocean precursor for Indian summer monsoon rainfall variability. *Geophysical Research Letters*, **42,** 9345-9354, http://dx.doi.org/10.1002/2015GL065950

Srokosz, M. A. and H. L. Bryden, 2015: OCEAN CIRCULATION. Observing the Atlantic Meridional Overturning Circulation yields a decade of inevitable surprises. *Science*, **348,** 1255575, http://dx.doi.org/10.1126/science.1255575

Stanfield, R. E., X. Dong, B. Xi, A. D. Del Genio, P. Minnis, D. Doelling, and N. Loeb, 2015: Assessment of NASA GISS CMIP5 and Post-CMIP5 Simulated Clouds and TOA Radiation Budgets Using Satellite Observations. Part II: TOA Radiation Budget and CREs. *Journal of Climate*, **28,** 1842-1864, http://dx.doi.org/10.1175/JCLI-D-14-00249.1

Storto, A., S. Masina, M. Balmaseda, S. Guinehut, Y. Xue, T. Szekely, I. Fukumori, G. Forget, Y.-S. Chang, S. Good, A. Köhl, G. Vernieres, N. Ferry, K. A. Peterson, D. Behringer, M. Ishii, S. Masuda, Y. Fujii, T. Toyoda, Y. Yin, M. Valdivieso, B. Barnier, T. Boyer, T. Lee, J.

Gourrion, O. Wang, P. Heimback, A. Rosati, R. Kovach, F. Hernandez, M. Martin, M. Kamachi, T. Kuragano, K. Mogensen, O. Alves, K. Haines, and X. Wang, 2015: Steric sea level variability (1993–2010) in an ensemble of ocean reanalyses and objective analyses. *Climate Dynamics*, **49,** 709-729, http://dx.doi.org/10.1007/s00382-015-2554-9

Stramska, M. and A. Cieszyńska, 2015: Ocean colour estimates of particulate organic carbon reservoirs in the global ocean – revisited. *International Journal of Remote Sensing*, **36,** 3675-3700, http://dx.doi.org/10.1080/01431161.2015.1049380

Strutton, P. G., V. J. Coles, R. R. Hood, R. J. Matear, M. J. McPhaden, and H. E. Phillips, 2015: Biogeochemical variability in the central equatorial Indian Ocean during the monsoon transition. *Biogeosciences*, **12,** 2367-2382, http://dx.doi.org/10.5194/bg-12-2367-2015

Su, H., X. Wu, X.-H. Yan, and A. Kidwell, 2015: Estimation of subsurface temperature anomaly in the Indian Ocean during recent global surface warming hiatus from satellite measurements: A support vector machine approach. *Remote Sensing of Environment*, **160,** 63-71, http://dx.doi.org/10.1016/j.rse.2015.01.001

Sukresno, B., A. Hartoko, B. Sulistyo, and Subiyanto, 2015: Empirical Cumulative Distribution Function (ECDF) Analysis of Thunnus.sp Using ARGO Float Sub-surface Multilayer Temperature Data in Indian Ocean South of Java. *Procedia Environmental Sciences*, **23,** 358-367, http://dx.doi.org/10.1016/j.proenv.2015.01.052

Sun, C., X. Wang, X. Cui, X. Zhang, L. Zhang, C. Shao, X. Wu, H. Fu, and W. Li, 2015: Satellite derived upper ocean thermal structure and its application to tropical cyclone intensity forecasting in the Indian Ocean. *Chinese Journal of Oceanology and Limnology*, **33,** 1219-1232, http://dx.doi.org/10.1007/s00343-015-4114-x

Sun, J. and L.-Y. Oey, 2015: The Influence of the Ocean on Typhoon Nuri (2008). *Monthly Weather Review*, **143,** 4493-4513, http://dx.doi.org/10.1175/MWR-D-15-0029.1

Sun, J., L.-Y. Oey, R. Chang, F. Xu, and S.-M. Huang, 2015: Ocean response to typhoon Nuri (2008) in western Pacific and South China Sea. *Ocean Dynamics*, **65,** 735-749, http://dx.doi.org/10.1007/s10236-015-0823-0

Syed, N. A. and S. G. Ahmed, 2015: Study of impact of climatic variability on the sea surface temperature and Chlorophyll-a concentration using Statistical analysis on Satellite derived data for the Arabian Sea. *International Journal of Marine Science*, **5**, http://dx.doi.org/10.5376/ijms.2015.05.0002

Tanajura, C. A. S., L. N. Lima, and K. P. Belyaev, 2015: Assimilation of satellite surface-height anomalies data into a Hybrid Coordinate Ocean Model (HYCOM) over the Atlantic Ocean. *Oceanology*, **55,** 667-678, http://dx.doi.org/10.1134/S0001437015050161

Tchilibou, M., T. Delcroix, G. Alory, S. Arnault, and G. Reverdin, 2015: Variations of the tropical Atlantic and Pacific SSS minimum zones and their relations to the ITCZ and SPCZ rain bands (1979–2009). *Journal of Geophysical Research: Oceans*, **120,** 5090-5100, http://dx.doi.org/10.1002/2015JC010836

Thomas, M. D., A.-M. Tréguier, B. Blanke, J. Deshayes, and A. Voldoire, 2015: A Lagrangian Method to Isolate the Impacts of Mixed Layer Subduction on the Meridional Overturning Circulation in a Numerical Model. *Journal of Climate*, **28,** 7503-7517, http://dx.doi.org/10.1175/JCLI-D-14-00631.1

Tonani, M., M. Balmaseda, L. Bertino, E. Blockley, G. Brassington, F. Davidson, Y. Drillet, P. Hogan, T. Kuragano, T. Lee, A. Mehra, F. Paranathara, C. A. S. Tanajura, and H. Wang, 2015: Status and future of global and regional ocean prediction systems. *Journal of Operational Oceanography*, **8,** s201-s220, http://dx.doi.org/10.1080/1755876X.2015.1049892

Tong, X., Z. Wang, and Q. Li, 2015: A method for correcting regional bias in SMOS global salinity products. *Chinese Journal of Oceanology and Limnology*, **33,** 1072-1084, http://dx.doi.org/10.1007/s00343-015-4196-5

Tortell, P. D., H. C. Bittig, A. Körtzinger, E. M. Jones, and M. Hoppema, 2015: Biological and physical controls on N2, O2, and CO2 distributions in contrasting Southern Ocean surface waters. *Global Biogeochemical Cycles*, **29,** 994-1013, http://dx.doi.org/10.1002/2014GB004975

Toyama, K., A. Iwasaki, and T. Suga, 2015: Interannual Variation of Annual Subduction Rate in the North Pacific Estimated from a Gridded Argo Product. *Journal of Physical Oceanography*, **45,** 2276-2293, http://dx.doi.org/10.1175/JPO-D-14-0223.1

Toyoda, T., Y. Fujii, T. Kuragano, M. Kamachi, Y. Ishikawa, S. Masuda, K. Sato, T. Awaji, F. Hernandez, N. Ferry, S. Guinehut, M. Martin, K. A. Peterson, S. Good, M. Valdivieso, K. Haines, A. Storto, S. Masina, A. Köhl, H. Zuo, M. Balmaseda, Y. Yin, L. Shi, O. Alves, G. Smith, Y.-S. Chang, G. Vernieres, X. Wang, G. Forget, P. Heimbach, O. Wang, I. Fukumori, and T. Lee, 2015: Intercomparison and validation of the mixed layer depth fields of global ocean syntheses. *Climate Dynamics*, **49,** 753-773, http://dx.doi.org/10.1007/s00382-015-2637-7

Toyoda, T., Y. Fujii, T. Kuragano, N. Kosugi, D. Sasano, M. Kamachi, Y. Ishikawa, S. Masuda, K. Sato, T. Awaji, F. Hernandez, N. Ferry, S. Guinehut, M. Martin, K. Andrew Peterson, S. Good, M. Valdivieso, K. Haines, A. Storto, S. Masina, A. Köhl, Y. Yin, L. Shi, O. Alves, G. Smith, Y.-S. Chang, G. Vernieres, X. Wang, G. Forget, P. Heimbach, O. Wang, I. Fukumori, T. Lee, H. Zuo, and M. Balmaseda, 2015: Interannual-decadal variability of wintertime mixed layer depths in the North Pacific detected by an ensemble of ocean syntheses. *Climate Dynamics*, **49,** 891-907, http://dx.doi.org/10.1007/s00382-015-2762-3

Tsai, C.-J., M. Andres, S. Jan, V. Mensah, T. B. Sanford, R.-C. Lien, and C. M. Lee, 2015: Eddy-Kuroshio interaction processes revealed by mooring observations off Taiwan and Luzon. *Geophysical Research Letters*, **42,** 8098-8105, http://dx.doi.org/10.1002/2015GL065814

Tu, Q., D. Pan, and Z. Hao, 2015: Validation of S-NPP VIIRS Sea Surface Temperature Retrieved from NAVO. *Remote Sensing*, **7,** 17234-17245, https://doi.org/10.3390/rs71215881

Udaya Naresh, V. V. B., 2015: Geoprocessing Desktop Application for INCOIS Web Services. *Asian Journal of Multidisciplinary Studies*, **3**, http://www.ajms.co.in/sites/ajms2015/index.php/ajms/article/view/1294

Våge, K., G. W. K. Moore, S. Jónsson, and H. Valdimarsson, 2015: Water mass transformation in the Iceland Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **101,** 98-109, http://dx.doi.org/10.1016/j.dsr.2015.04.001

Vandenbulcke, L. and A. Barth, 2015: A stochastic operational forecasting system of the

Black Sea: Technique and validation. *Ocean Modelling*, **93,** 7-21, http://dx.doi.org/10.1016/j.ocemod.2015.07.010

Villar, E., G. K. Farrant, M. Follows, L. Garczarek, S. Speich, S. Audic, L. Bittner, B. Blanke, J. R. Brum, C. Brunet, R. Casotti, A. Chase, J. R. Dolan, F. d'Ortenzio, J.-P. Gattuso, N. Grima, L. Guidi, C. N. Hill, O. Jahn, J.-L. Jamet, H. Le Goff, C. Lepoivre, S. Malviya, E. Pelletier, J.-B. Romagnan, S. Roux, S. Santini, E. Scalco, S. M. Schwenck, A. Tanaka, P. Testor, T. Vannier, F. Vincent, A. Zingone, C. Dimier, M. Picheral, S. Searson, S. Kandels-Lewis, T. O. Coordinators, S. G. Acinas, P. Bork, E. Boss, C. de Vargas, G. Gorsky, H. Ogata, S. Pesant, M. B. Sullivan, S. Sunagawa, P. Wincker, E. Karsenti, C. Bowler, F. Not, P. Hingamp, and D. Iudicone, 2015: Environmental characteristics of Agulhas rings affect interocean plankton transport. *Science*, **348**, http://dx.doi.org/10.1126/science.1261447

Volkov, D. L., A. A. Kubryakov, and R. Lumpkin, 2015: Formation and variability of the Lofoten basin vortex in a high-resolution ocean model. *Deep Sea Research Part I: Oceanographic Research Papers*, **105,** 142-157, http://dx.doi.org/10.1016/j.dsr.2015.09.001

Wada, A., 2015: Utilization of tropical cyclone heat potential for improving tropical cycle intensity. *RSMC Tokyo-Typhoon Center Technical REview*, **17**,

Wada, A., 2015: Unusually rapid intensification of Typhoon Man-yi in 2013 under preexisting warm-water conditions near the Kuroshio front south of Japan. *Journal of Oceanography*, **71,** 597-622, http://dx.doi.org/10.1007/s10872-015-0273-9

Wada, A., 2015: Verification of tropical cyclone heat potential for tropical cyclone intensity forecasting in the Western North Pacific. *Journal of Oceanography*, **71,** 373-387, http://dx.doi.org/10.1007/s10872-015-0298-0

Walker Brown, C., J. Boutin, and L. Merlivat, 2015: New insights into fCO2 variability in the tropical eastern Pacific Ocean using SMOS SSS. *Biogeosciences*, **12,** 7315-7329, http://dx.doi.org/10.5194/bg-12-7315-2015

Wang, A., Y. Du, W. Zhuang, and Y. Qi, 2015: Correlation between subsurface high-salinity water in the northern South China Sea and the North Equatorial Current–Kuroshio circulation system from HYCOM simulations. *Ocean Science*, **11,** 305-312, http://dx.doi.org/10.5194/os-11-305-2015

Wang, F., N. Zang, Y. Li, and D. Hu, 2015: On the subsurface countercurrents in the Philippine Sea. *Journal of Geophysical Research: Oceans*, **120,** 131-144, http://dx.doi.org/10.1002/2013JC009690

Wang, H., K. Fan, J. Sun, S. Li, Z. Lin, G. Zhou, L. Chen, X. Lang, F. Li, Y. Zhu, H. Chen, and F. Zheng, 2015: A review of seasonal climate prediction research in China. *Advances in Atmospheric Sciences*, **32,** 149-168, http://dx.doi.org/10.1007/s00376-014-0016-7

Wang, R., F. Yu, and F. Nan, 2015: Weakening of subduction in the Subtropical Mode Water formation region observed during 2003–2013. *Journal of Geophysical Research: Oceans*, **120,** 7271-7281, http://dx.doi.org/10.1002/2015JC010967

Wang, T., Y. Du, W. Zhuang, and J. Wang, 2015: Connection of sea level variability between the tropical western Pacific and the southern Indian Ocean during recent two decades. *Science China Earth Sciences*, **58,** 1387-1396, http://dx.doi.org/10.1007/s11430-014-5048-4

Wang, X., V. Bhatt, and Y.-J. Sun, 2015: Seasonal and inter-annual variability of western subtropical mode water in the South Pacific Ocean. *Ocean Dynamics*, **65,** 143-154, http://dx.doi.org/10.1007/s10236-014-0792-8

Wang, X. and H. Liu, 2015: Seasonal-to-interannual variability of the barrier layer in the western Pacific warm pool associated with ENSO. *Climate Dynamics*, **47,** 375-392, http://dx.doi.org/10.1007/s00382-015-2842-4

Wang, Z., I. Yashayaev, and B. Greenan, 2015: Seasonality of the inshore Labrador current over the Newfoundland shelf. *Continental Shelf Research*, **100,** 1-10, https://doi.org/10.1016/j.csr.2015.03.010

Wedd, R., M. Stringer, and K. Haines, 2015: Argo real-time quality control intercomparison. *Journal of Operational Oceanography*, **8,** 108-122, http://dx.doi.org/10.1080/1755876X.2015.1087186

Whalen, C. B., J. A. MacKinnon, L. D. Talley, and A. F. Waterhouse, 2015: Estimating the Mean Diapycnal Mixing Using a Finescale Strain Parameterization. *Journal of Physical Oceanography*, **45,** 1174-1188, http://dx.doi.org/10.1175/JPO-D-14-0167.1

White, R. H., 2015: Using multiple passive tracers to identify the importance of the North Brazil undercurrent for Atlantic cold tongue variability. *Quarterly Journal of the Royal Meteorological Society*, **141,** 2505-2517, http://dx.doi.org/10.1002/qj.2536

Wijesekera, H. W., T. G. Jensen, E. Jarosz, W. J. Teague, E. J. Metzger, D. W. Wang, S. U. P. Jinadasa, K. Arulananthan, L. R. Centurioni, and H. J. S. Fernando, 2015: Southern Bay of Bengal currents and salinity intrusions during the northeast monsoon. *Journal of Geophysical Research: Oceans*, **120,** 6897-6913, http://dx.doi.org/10.1002/2015JC010744

Williams, R. G., V. Roussenov, M. S. Lozier, and D. Smith, 2015: Mechanisms of Heat Content and Thermocline Change in the Subtropical and Subpolar North Atlantic. *Journal of Climate*, **28,** 9803-9815, http://dx.doi.org/10.1175/JCLI-D-15-0097.1

Wilson, S. T., B. Barone, F. Ascani, R. R. Bidigare, M. J. Church, D. A. del Valle, S. T. Dyhrman, S. Ferrón, J. N. Fitzsimmons, L. W. Juranek, Z. S. Kolber, R. M. Letelier, S. Martínez-García, D. P. Nicholson, K. J. Richards, Y. M. Rii, M. Rouco, D. A. Viviani, A. E. White, J. P. Zehr, and D. M. Karl, 2015: Short-term variability in euphotic zone biogeochemistry and primary productivity at Station ALOHA: A case study of summer 2012. *Global Biogeochemical Cycles*, **29,** 1145-1164, http://dx.doi.org/10.1002/2015GB005141

Woodham, R. H., O. Alves, G. B. Brassington, R. Robertson, and A. Kiss, 2015: Evaluation of ocean forecast performance for Royal Australian Navy exercise areas in the Tasman Sea. *Journal of Operational Oceanography*, **8,** 147-161, https://doi.org/10.1080/1755876X.2015.1087187

Woolfe, K. F., S. Lani, K. G. Sabra, and W. A. Kuperman, 2015: Monitoring deep-ocean temperatures using acoustic ambient noise. *Geophysical Research Letters*, **42,** 2878-2884, http://dx.doi.org/10.1002/2015GL063438

Wu, X., Z. Liu, G. Liao, and L. Wu, 2015: Variation of Indo-Pacific upper ocean heat content during 2001-2012 revealed by Argo. *Acta Oceanologica Sinica*, **34,** 29-38, http://dx.doi.org/10.1007/s13131-015-0664-1

Xia, R., Q. Liu, L. Xu, and Y. Lu, 2015: North Pacific Eastern Subtropical Mode Water

simulation and future projection. *Acta Oceanologica Sinica*, **34,** 25-30, http://dx.doi.org/10.1007/s13131-015-0630-y

Xu, F.-H. and L.-Y. Oey, 2015: Seasonal SSH Variability of the Northern South China Sea. *Journal of Physical Oceanography*, **45,** 1595-1609, http://dx.doi.org/10.1175/JPO-D-14-0193.1

Xue, Y., C. Wen, X. Yang, D. Behringer, A. Kumar, G. Vecchi, A. Rosati, and R. Gudgel, 2015: Evaluation of tropical Pacific observing systems using NCEP and GFDL ocean data assimilation systems. *Climate Dynamics*, **49,** 843-868, http://dx.doi.org/10.1007/s00382-015-2743-6

Yan, C., J. Zhu, and C. A. S. Tanajura, 2015: Impacts of mean dynamic topography on a regional ocean assimilation system. *Ocean Science*, **11,** 829-837, http://dx.doi.org/10.5194/os-11-829-2015

Yan, C., J. Zhu, and J. Xie, 2015: An ocean data assimilation system in the Indian Ocean and west Pacific Ocean. *Advances in Atmospheric Sciences*, **32,** 1460-1472, http://dx.doi.org/10.1007/s00376-015-4121-z

Yan, X. and C. Sun, 2015: An altimetric transport index for Kuroshio inflow northeast of Taiwan Island. *Science China Earth Sciences*, **58,** 697-706, http://dx.doi.org/10.1007/s11430-014-5024-z

Yan, Y., A. Barth, J. M. Beckers, G. Candille, J. M. Brankart, and P. Brasseur, 2015: Ensemble assimilation of ARGO temperature profile, sea surface temperature, and altimetric satellite data into an eddy permitting primitive equation model of the North Atlantic Ocean. *Journal of Geophysical Research: Oceans*, **120,** 5134-5157, http://dx.doi.org/10.1002/2014JC010349

Yan, Y., G. Wang, C. Wang, and J. Su, 2015: Low-salinity water off West Luzon Island in summer. *Journal of Geophysical Research: Oceans*, **120,** 3011-3021, http://dx.doi.org/10.1002/2014JC010465

Yang, G., W. Yu, Y. Yuan, X. Zhao, F. Wang, G. Chen, L. Liu, and Y. Duan, 2015: Characteristics, vertical structures, and heat/salt transports of mesoscale eddies in the southeastern tropical Indian Ocean. *Journal of Geophysical Research: Oceans*, **120,** 6733-6750, http://dx.doi.org/10.1002/2015JC011130

Yang, J., S. C. Riser, J. A. Nystuen, W. E. Asher, and A. T. Jessup, 2015: Regional rainfall measurements using the Passive Aquatic Listnere during the SPURS field campaign. *Oceanography*, **28,** 124-133, http://dx.doi.org/10.5670/oceanog.2015.10

Yang, T., Z. Chen, and Y. He, 2015: A new method to retrieve salinity profiles from sea surface salinity observed by SMOS satellite. *Acta Oceanologica Sinica*, **34,** 85-93, http://dx.doi.org/10.1007/s13131-015-0735-3

Yang, T. and Y. Xu, 2015: Estimation of the time series of the meridional heat transport across 15°N in the Pacific Ocean from Argo and satellite data. *Journal of Geophysical Research: Oceans*, **120,** 3043-3060, http://dx.doi.org/10.1002/2015JC010752

Yashayaev, I., D. Seidov, and E. Demirov, 2015: A new collective view of oceanography of the Arctic and North Atlantic basins. *Progress in Oceanography*, **132,** 1-21, http://dx.doi.org/10.1016/j.pocean.2014.12.012

Yi, S., W. Sun, K. Heki, and A. Qian, 2015: An increase in the rate of global mean sea level rise since 2010. *Geophysical Research Letters*, **42,** 3998-4006,

http://dx.doi.org/10.1002/2015GL063902
Yoshida, S., A. M. Macdonald, S. R. Jayne, I. I. Rypina, and K. O. Buesseler, 2015: Observed eastward progression of the Fukushima 134Cs signal across the North Pacific. *Geophysical Research Letters*, **42,** 7139-7147, http://dx.doi.org/10.1002/2015GL065259
Yoshikawa, Y., 2015: Scaling Surface Mixing/Mixed Layer Depth under Stabilizing Buoyancy Flux. *Journal of Physical Oceanography*, **45,** 247-258, http://dx.doi.org/10.1175/JPO-D-13-0190.1
Youngs, M. K. and G. C. Johnson, 2015: Basin-Wavelength Equatorial Deep Jet Signals across Three Oceans. *Journal of Physical Oceanography*, **45,** 2134-2148, http://dx.doi.org/10.1175/JPO-D-14-0181.1
Yu, K., T. Qu, C. Dong, and Y. Yan, 2015: Effect of subtropical mode water on the decadal variability of the subsurface transport through the Luzon Strait in the western Pacific Ocean. *Journal of Geophysical Research: Oceans*, **120,** 6829-6842, http://dx.doi.org/10.1002/2015JC011016
Yu, L., 2015: Sea-surface salinity fronts and associated salinity-minimum zones in the tropical ocean. *Journal of Geophysical Research: Oceans*, **120,** 4205-4225, http://dx.doi.org/10.1002/2015JC010790
Zaron, E. D., P. J. Fitzpatrick, S. L. Cross, J. M. Harding, F. L. Bub, J. D. Wiggert, D. S. Ko, Y. Lau, K. Woodard, and C. N. K. Mooers, 2015: Initial evaluations of a Gulf of Mexico/Caribbean ocean forecast system in the context of the Deepwater Horizon disaster. *Frontiers of Earth Science*, **9,** 605-636, http://dx.doi.org/10.1007/s11707-014-0508-x
Zhang, L. and T. Qu, 2015: Low-Frequency Variability of the South Pacific Subtropical Gyre as Seen from Satellite Altimetry and Argo. *Journal of Physical Oceanography*, **45,** 3083-3098, http://dx.doi.org/10.1175/JPO-D-15-0026.1
Zhang, R.-H., C. Gao, X. Kang, H. Zhi, Z. Wang, and L. Feng, 2015: ENSO Modulations due to Interannual Variability of Freshwater Forcing and Ocean Biology-induced Heating in the Tropical Pacific. *Scientific Reports*, **5,** 18506, http://dx.doi.org/10.1038/srep18506
Zhang, W.-Z., H. Xue, F. Chai, and Q. Ni, 2015: Dynamical processes within an anticyclonic eddy revealed from Argo floats. *Geophysical Research Letters*, **42,** 2342-2350, http://dx.doi.org/10.1002/2015GL063120
Zhang, X. and A. J. Clarke, 2015: Observations of Interannual Equatorial Freshwater Jets in the Western Pacific. *Journal of Physical Oceanography*, **45,** 2848-2865, http://dx.doi.org/10.1175/JPO-D-14-0245.1
Zhang, X., X. Wang, Y. Cao, L. Zhang, C. Shao, C. Sun, X. Wu, H. Fu, and L. Xuan, 2015: Climate modulation on sea surface height in China seas. *Chinese Journal of Oceanology and Limnology*, **33,** 1245-1255, http://dx.doi.org/10.1007/s00343-015-4120-z
Zhang, Z., P. Li, L. Xu, C. Li, W. Zhao, J. Tian, and T. Qu, 2015: Subthermocline eddies observed by rapid-sampling Argo floats in the subtropical northwestern Pacific Ocean in Spring 2014. *Geophysical Research Letters*, **42,** 6438-6445, http://dx.doi.org/10.1002/2015GL064601
Zhao, M. S. N., 2015: A Simulation MOdel of Seawater Vertical Temperature by Using

Back-Propagation Neural Network. *Polish Maritime Research*, **22,** 82-88, http://dx.doi.org/10.1515/pomr-2015-0037

Zheng, F., H. Wang, and L. Wan, 2015: Effects of interannual salinity variability on the dynamic height in the western equatorial Pacific as diagnosed by Argo. *Acta Oceanologica Sinica*, **34,** 22-28, http://dx.doi.org/10.1007/s13131-015-0663-2

Zheng, F. and R.-H. Zhang, 2015: Interannually varying salinity effects on ENSO in the tropical pacific: a diagnostic analysis from Argo. *Ocean Dynamics*, **65,** 691-705, http://dx.doi.org/10.1007/s10236-015-0829-7

Zhi, H., R.-H. Zhang, P. Lin, and L. Wang, 2015: Simulation of salinity variability and the related freshwater flux forcing in the tropical Pacific: An evaluation using the Beijing normal university earth system model (BNU-ESM). *Advances in Atmospheric Sciences*, **32,** 1551-1564, http://dx.doi.org/10.1007/s00376-015-4240-6

Zhi, H., R.-H. Zhang, P. Lin, and L. Wang, 2015: Quantitative analysis of the feedback induced by the freshwater flux in the tropical Pacific using CMIP5. *Advances in Atmospheric Sciences*, **32,** 1341-1353, http://dx.doi.org/10.1007/s00376-015-5064-0

Zhu, J., A. Kumar, and B. Huang, 2015: The relationship between thermocline depth and SST anomalies in the eastern equatorial Pacific: Seasonality and decadal variations. *Geophysical Research Letters*, **42,** 4507-4515, http://dx.doi.org/10.1002/2015GL064220

Zhu, X.-H., R. Zhao, X. Guo, Y. Long, Y.-L. Ma, and X. Fan, 2015: A long-term volume transport time series estimated by combining in situ observation and satellite altimeter data in the northern South China Sea. *Journal of Oceanography*, **71,** 663-673, http://dx.doi.org/10.1007/s10872-015-0305-5

Zika, J. D., N. Skliris, A. J. G. Nurser, S. A. Josey, L. Mudryk, F. Laliberté, and R. Marsh, 2015: Maintenance and Broadening of the Ocean's Salinity Distribution by the Water Cycle. *Journal of Climate*, **28,** 9550-9560, http://dx.doi.org/10.1175/JCLI-D-15-0273.1

Zuo, H., M. Balmaseda, and K. Mogensen, 2015: The new eddy-permitting ORAP5 ocean reanalysis: description, evaluation and uncertainties in climate signals. *Climate Dynamics*, **49,** 791-811, http://dx.doi.org/10.1007/s00382-015-2675-1

2014 (359)

Abe, H. and N. Ebuchi, 2014: Evaluation of sea-surface salinity observed by Aquarius. *Journal of Geophysical Research: Oceans*, **119,** 8109-8121, http://dx.doi.org/10.1002/2014JC010094

Akhil, V. P., F. Durand, M. Lengaigne, J. Vialard, M. G. Keerthi, V. V. Gopalakrishna, C. Deltel, F. Papa, and C. de Boyer Montégut, 2014: A modeling study of the processes of surface salinity seasonal cycle in the Bay of Bengal. *Journal of Geophysical Research: Oceans*, **119,** 3926-3947, http://dx.doi.org/10.1002/2013JC009632

Allan, R. P., C. Liu, N. G. Loeb, M. D. Palmer, M. Roberts, D. Smith, and P.-L. Vidale, 2014: Changes in global net radiative imbalance 1985–2012. *Geophysical Research Letters*, **41,** 5588-5597, http://dx.doi.org/10.1002/2014GL060962

Anderson, J. E. and S. C. Riser, 2014: Near-surface variability of temperature and salinity in the near-tropical ocean: Observations from profiling floats. *Journal of Geophysical*

Research: Oceans, **119,** 7433-7448, http://dx.doi.org/10.1002/2014JC010112
Anilkumar, N., J. V. George, R. Chacko, N. Nuncio, and P. Sabu, 2014: Variability of fronts, fresh water input and chlorophyll in the Indian Ocean sector of the Southern Ocean. *New Zealand Journal of Marine and Freshwater Research*, **49,** 20-40, http://dx.doi.org/10.1080/00288330.2014.924972
Atkinson, C. P., N. A. Rayner, J. J. Kennedy, and S. A. Good, 2014: An integrated database of ocean temperature and salinity observations. *Journal of Geophysical Research: Oceans*, **119,** 7139-7163, http://dx.doi.org/10.1002/2014JC010053
Auger, P. A., C. Ulses, C. Estournel, L. Stemmann, S. Somot, and F. Diaz, 2014: Interannual control of plankton communities by deep winter mixing and prey/predator interactions in the NW Mediterranean: Results from a 30-year 3D modeling study. *Progress in Oceanography*, **124,** 12-27, http://dx.doi.org/10.1016/j.pocean.2014.04.004
Azaneu, M., R. Kerr, and M. M. Mata, 2014: Assessment of the representation of Antarctic Bottom Water properties in the ECCO2 reanalysis. *Ocean Science*, **10,** 923-946, http://dx.doi.org/10.5194/os-10-923-2014
Backeberg, B. C., F. Counillon, J. A. Johannessen, and M. I. Pujol, 2014: Assimilating along-track SLA data using the EnOI in an eddy resolving model of the Agulhas system. *Ocean Dynamics*, **64,** 1121-1136, http://dx.doi.org/10.1007/s10236-014-0717-6
Banerjee, P. and S. Prasanna Kumar, 2014: Dust-induced episodic phytoplankton blooms in the Arabian Sea during winter monsoon. *Journal of Geophysical Research: Oceans*, **119,** 7123-7138, http://dx.doi.org/10.1002/2014JC010304
Baranowski, D. B., P. J. Flatau, S. Chen, and P. G. Black, 2014: Upper ocean response to the passage of two sequential typhoons. *Ocean Science*, **10,** 559-570, http://dx.doi.org/10.5194/os-10-559-2014
Baringer, M., G. D. McCarthy, J. Willis, M. Lankhorst, D. A. Smeed, U. Send, D. Rayner, W. E. Johns, C. S. Meinen, S. A. Cunningham, T. Kanzow, E. Frajka-Williams, and J. Marotzke, 2014: Meridional overturning circulation observations in the North Atlantic Ocean in State of the Climate in 2013. *Bulletin of the American Meteorological Society*, **95,** S1-S279, http://dx.doi.org/10.1175/2014BAMSStateoftheClimate.1
Barth, A., J. M. Beckers, C. Troupin, A. Alvera-Azcárate, and L. Vandenbulcke, 2014: divand-1.0: n-dimensional variational data analysis for ocean observations. *Geosci. Model Dev.*, **7,** 225-241, https://doi.org/10.5194/gmd-7-225-2014
Benetti, M., G. Reverdin, C. Pierre, L. Merlivat, C. Risi, H. C. Steen-Larsen, and F. Vimeux, 2014: Deuterium excess in marine water vapor: Dependency on relative humidity and surface wind speed during evaporation. *Journal of Geophysical Research: Atmospheres*, **119,** 584-593, http://dx.doi.org/10.1002/2013JD020535
Benshila, R., F. Durand, S. Masson, R. Bourdallé-Badie, C. de Boyer Montégut, F. Papa, and G. Madec, 2014: The upper Bay of Bengal salinity structure in a high-resolution model. *Ocean Modelling*, **74,** 36-52, http://dx.doi.org/10.1016/j.ocemod.2013.12.001
Benthuysen, J., M. Feng, and L. Zhong, 2014: Spatial patterns of warming off Western Australia during the 2011 Ningaloo Niño: Quantifying impacts of remote and local

forcing. *Continental Shelf Research*, **91,** 232-246, http://dx.doi.org/10.1016/j.csr.2014.09.014

Bingham, F. M., J. Busecke, A. L. Gordon, C. F. Giulivi, and Z. Li, 2014: The North Atlantic subtropical surface salinity maximum as observed by Aquarius. *Journal of Geophysical Research: Oceans*, **119,** 7741-7755, http://dx.doi.org/10.1002/2014JC009825

Bittig, H. C., B. Fiedler, R. Scholz, G. Krahmann, and A. Körtzinger, 2014: Time response of oxygen optodes on profiling platforms and its dependence on flow speed and temperature. *Limnology and Oceanography: Methods*, **12,** 617-636, http://dx.doi.org/10.4319/lom.2014.12.617

Blockley, E. W., M. J. Martin, A. J. McLaren, A. G. Ryan, J. Waters, D. J. Lea, I. Mirouze, K. A. Peterson, A. Sellar, and D. Storkey, 2014: Recent development of the Met Office operational ocean forecasting system: an overview and assessment of the new Global FOAM forecasts. *Geosci. Model Dev.*, **7,** 2613-2638, http://www.geosci-model-dev.net/7/2613/2014/

Boutin, J., N. Martin, G. Reverdin, S. Morisset, X. Yin, L. Centurioni, and N. Reul, 2014: Sea surface salinity under rain cells: SMOS satellite and in situ drifters observations. *Journal of Geophysical Research: Oceans*, **119,** 5533-5545, http://dx.doi.org/10.1002/2014JC010070

Bowen, M., P. Sutton, and D. Roemmich, 2014: Estimating mean dynamic topography in boundary currents and the use of Argo trajectories. *Journal of Geophysical Research: Oceans*, **119,** 8422-8437, http://dx.doi.org/10.1002/2014JC010281

Boyer, T., J. antonov, J. R. Reagan, C. Schmid, and R. A. Locarnini, 2014: Subsurface salinity in State of the Climate in 2013, Blunden, Jessica and Arndt, Derek S. Eds. *Bulletin of the American Meteorological Society*, **95,** S1-S279, http://dx.doi.org/10.1175/2014BAMSStateoftheClimate.1

Bryden, H. L., B. A. King, G. D. McCarthy, and E. L. McDonagh, 2014: Impact of a 30% reduction in Atlantic meridional overturning during 2009–2010. *Ocean Science*, **10,** 683-691, http://dx.doi.org/10.5194/os-10-683-2014

Buckingham, C. E., P. C. Cornillon, F. Schloesser, and K. M. Obenour, 2014: Global observations of quasi-zonal bands in microwave sea surface temperature. *Journal of Geophysical Research: Oceans*, **119,** 4840-4866, http://dx.doi.org/10.1002/2014JC010088

Buckley, M. W., R. M. Ponte, G. Forget, and P. Heimbach, 2014: Low-Frequency SST and Upper-Ocean Heat Content Variability in the North Atlantic. *Journal of Climate*, **27,** 4996-5018, http://dx.doi.org/10.1175/JCLI-D-13-00316.1

Busecke, J., A. L. Gordon, Z. Li, F. M. Bingham, and J. Font, 2014: Subtropical surface layer salinity budget and the role of mesoscale turbulence. *Journal of Geophysical Research: Oceans*, **119,** 4124-4140, http://dx.doi.org/10.1002/2013JC009715

Carrier, M. J., H. Ngodock, S. Smith, G. Jacobs, P. Muscarella, T. Ozgokmen, B. Haus, and B. Lipphardt, 2014: Impact of Assimilating Ocean Velocity Observations Inferred from Lagrangian Drifter Data Using the NCOM-4DVAR. *Monthly Weather Review*, **142,** 1509-1524, http://dx.doi.org/10.1175/MWR-D-13-00236.1

Castelao, R. M., 2014: Mesoscale eddies in the South Atlantic Bight and the Gulf Stream

Recirculation region: Vertical structure. *Journal of Geophysical Research: Oceans*, **119,** 2048-2065, http://dx.doi.org/10.1002/2014JC009796

Castro, S. L., G. A. Wick, and J. J. H. Buck, 2014: Comparison of diurnal warming estimates from unpumped Argo data and SEVIRI satellite observations. *Remote Sensing of Environment*, **140,** 789-799, http://dx.doi.org/10.1016/j.rse.2013.08.042

Cazenave, A., H.-B. Dieng, B. Meyssignac, K. von Schuckmann, B. Decharme, and E. Berthier, 2014: The rate of sea-level rise. *Nature Clim. Change*, **4,** 358-361, http://dx.doi.org/10.1038/nclimate2159

Chaitanya, A. V. S., M. Lengaigne, J. Vialard, V. V. Gopalakrishna, F. Durand, C. Kranthikumar, S. Amritash, V. Suneel, F. Papa, and M. Ravichandran, 2014: Salinity Measurements Collected by Fishermen Reveal a "River in the Sea" Flowing Along the Eastern Coast of India. *Bulletin of the American Meteorological Society*, **95,** 1897-1908, http://dx.doi.org/10.1175/BAMS-D-12-00243.1

Chakraborty, A., R. Sharma, R. Kumar, and S. Basu, 2014: A SEEK filter assimilation of sea surface salinity from Aquarius in an OGCM: Implication for surface dynamics and thermohaline structure. *Journal of Geophysical Research: Oceans*, **119,** 4777-4796, http://dx.doi.org/10.1002/2014JC009984

Chang, C. H., N. C. Johnson, and N. Cassar, 2014: Neural network-based estimates of Southern Ocean net community production from in situ O2 / Ar and satellite observation: a methodological study. *Biogeosciences*, **11,** 3279-3297, http://dx.doi.org/10.5194/bg-11-3279-2014

Chang, Y.-S., 2014: Basin patterns of upper ocean warming for 1993–2009. *Ocean Dynamics*, **64,** 823-832, http://dx.doi.org/10.1007/s10236-014-0722-9

Chang, Y.-S., G. A. Vecchi, A. Rosati, S. Zhang, and X. Yang, 2014: Comparison of global objective analyzed T-S fields of the upper ocean for 2008–2011. *Journal of Marine Systems*, **137,** 13-20, http://dx.doi.org/10.1016/j.jmarsys.2014.04.001

Chen, G., H. Zhang, and X. Wang, 2014: Annual amphidromic columns of sea temperature in global oceans from Argo data. *Geophysical Research Letters*, **41,** 2014GL059430, http://dx.doi.org/10.1002/2014GL059430

Chen, J., R. Zhang, H. Wang, Y. An, L. Wang, and G. Wang, 2014: An analysis on the error structure and mechanism of soil moisture and ocean salinity remotely sensed sea surface salinity products. *Acta Oceanologica Sinica*, **33,** 48-55, http://dx.doi.org/10.1007/s13131-014-0427-4

Chen, J., R. Zhang, H. Wang, J. Li, M. Hong, and X. Li, 2014: Decadal modes of sea surface salinity and the water cycle in the tropical Pacific Ocean: The anomalous late 1990s. *Deep Sea Research Part I: Oceanographic Research Papers*, **84,** 38-49, http://dx.doi.org/10.1016/j.dsr.2013.10.005

Chen, K., R. He, B. S. Powell, G. G. Gawarkiewicz, A. M. Moore, and H. G. Arango, 2014: Data assimilative modeling investigation of Gulf Stream Warm Core Ring interaction with continental shelf and slope circulation. *Journal of Geophysical Research: Oceans*, **119,** 5968-5991, http://dx.doi.org/10.1002/2014JC009898

Cheng, L. and J. Zhu, 2014: Uncertainties of the Ocean Heat Content Estimation Induced by Insufficient Vertical Resolution of Historical Ocean Subsurface Observations. *Journal of Atmospheric and Oceanic Technology*, **31,** 1383-1396,

http://dx.doi.org/10.1175/JTECH-D-13-00220.1
Cheng, L. and J. Zhu, 2014: Artifacts in variations of ocean heat content induced by the observation system changes. *Geophysical Research Letters*, **41,** 2014GL061881, http://dx.doi.org/10.1002/2014GL061881
Cheng, L., J. Zhu, R. Cowley, T. Boyer, and S. Wijffels, 2014: Time, Probe Type, and Temperature Variable Bias Corrections to Historical Expendable Bathythermograph Observations. *Journal of Atmospheric and Oceanic Technology*, **31,** 1793-1825, http://dx.doi.org/10.1175/JTECH-D-13-00197.1
Chérubin, L. M., 2014: High-resolution simulation of the circulation in the Bahamas and Turks and Caicos Archipelagos. *Progress in Oceanography*, **127,** 21-46, http://dx.doi.org/10.1016/j.pocean.2014.05.006
Chidichimo, M. P., K. A. Donohue, D. R. Watts, and K. L. Tracey, 2014: Baroclinic Transport Time Series of the Antarctic Circumpolar Current Measured in Drake Passage. *Journal of Physical Oceanography*, **44,** 1829-1853, http://dx.doi.org/10.1175/JPO-D-13-071.1
Chiswell, S. M. and G. J. Rickard, 2014: Evaluation of Bluelink hindcast BRAN 3.5 at surface and 1000m. *Ocean Modelling*, **83,** 63-81, http://dx.doi.org/10.1016/j.ocemod.2014.08.002
Chu, X., H. Xue, Y. Qi, G. Chen, Q. Mao, D. Wang, and F. Chai, 2014: An exceptional anticyclonic eddy in the South China Sea in 2010. *Journal of Geophysical Research: Oceans*, **119,** 881-897, http://dx.doi.org/10.1002/2013JC009314
Cochran, J. K., 2014: Oceanographic Sampling and Measurements. *Reference Module in Earth Systems and Environmental Sciences*, Elsevier, https://doi.org/10.1016/B978-0-12-409548-9.09149-1.
Costoya, X., M. deCastro, and M. Gómez-Gesteira, 2014: Thermohaline trends in the Bay of Biscay from Argo floats over the decade 2004–2013. *Journal of Marine Systems*, **139,** 159-165, http://dx.doi.org/10.1016/j.jmarsys.2014.06.001
Cummings, J. A. and O. M. Smedstad, 2014: Ocean Data Impacts in Global HYCOM. *Journal of Atmospheric and Oceanic Technology*, **31,** 1771-1791, http://dx.doi.org/10.1175/JTECH-D-14-00011.1
Da-Allada, C. Y., G. Alory, Y. du Penhoat, J. Jouanno, M. N. Hounkonnou, and E. Kestenare, 2014: Causes for the recent increase in sea surface salinity in the north-eastern Gulf of Guinea. *African Journal of Marine Science*, **36,** 197-205, http://dx.doi.org/10.2989/1814232X.2014.927398
Da-Allada, C. Y., Y. du Penhoat, J. Jouanno, G. Alory, and N. M. Hounkonnou, 2014: Modeled mixed-layer salinity balance in the Gulf of Guinea: seasonal and interannual variability. *Ocean Dynamics*, **64,** 1783-1802, http://dx.doi.org/10.1007/s10236-014-0775-9
D'Addezio, J. M. and F. M. Bingham, 2014: A subtropical North Atlantic regional atmospheric moisture budget. *Journal of Geophysical Research: Oceans*, **119,** 8731-8748, http://dx.doi.org/10.1002/2014JC010300
Dall'Olmo, G. and K. A. Mork, 2014: Carbon export by small particles in the Norwegian Sea. *Geophysical Research Letters*, **41,** 2921-2927, http://dx.doi.org/10.1002/2014GL059244

Danielson, S. L., T. J. Weingartner, K. S. Hedstrom, K. Aagaard, R. Woodgate, E. Curchitser, and P. J. Stabeno, 2014: Coupled wind-forced controls of the Bering–Chukchi shelf circulation and the Bering Strait throughflow: Ekman transport, continental shelf waves, and variations of the Pacific–Arctic sea surface height gradient. *Progress in Oceanography*, **125,** 40-61, http://dx.doi.org/10.1016/j.pocean.2014.04.006

D'Asaro, E. A., P. G. Black, L. R. Centurioni, Y. T. Chang, S. S. Chen, R. C. Foster, H. C. Graber, P. Harr, V. Hormann, R. C. Lien, I. I. Lin, T. B. Sanford, T. Y. Tang, and C. C. Wu, 2014: Impact of Typhoons on the Ocean in the Pacific. *Bulletin of the American Meteorological Society*, **95,** 1405-1418, http://dx.doi.org/10.1175/BAMS-D-12-00104.1

D'Asaro, E. A., J. Thomson, A. Y. Shcherbina, R. R. Harcourt, M. F. Cronin, M. A. Hemer, and B. Fox-Kemper, 2014: Quantifying upper ocean turbulence driven by surface waves. *Geophysical Research Letters*, **41,** 102-107, http://dx.doi.org/10.1002/2013GL058193

de Boyer Montégut, C., F. Durand, R. Bourdallé-Badie, and B. Blanke, 2014: Role of fronts in the formation of Arabian Sea barrier layers during summer monsoon. *Ocean Dynamics*, **64,** 809-822, http://dx.doi.org/10.1007/s10236-014-0716-7

Delcroix, T., M.-H. Radenac, S. Cravatte, G. Alory, L. Gourdeau, F. Léger, A. Singh, and D. Varillon, 2014: Sea surface temperature and salinity seasonal changes in the western Solomon and Bismarck Seas. *Journal of Geophysical Research: Oceans*, **119,** 2642-2657, http://dx.doi.org/10.1002/2013JC009733

Dencausse, G., R. Morrow, M. Rogé, and S. Fleury, 2014: Lateral stirring of large-scale tracer fields by altimetry. *Ocean Dynamics*, **64,** 61-78, http://dx.doi.org/10.1007/s10236-013-0671-8

Deng, Z., 2014: The Dependence of Global Ocean Modeling on Background Diapycnal Mixing. *The Scientific World Journal*, **2014,** 7, http://dx.doi.org/10.1155/2014/838701

Deng, Z. and T. Yu, 2014: Application of Argo-derived background diapycnal mixing in HYCOM. *Journal of Marine Systems*, **137,** 1-12, http://dx.doi.org/10.1016/j.jmarsys.2014.04.005

Deng, Z., T. Yu, S. Shi, J. Jin, and K. Wu, 2014: The Global Distribution of Diapycnal Mixing and Mixing Coefficient Tensor in the Upper 2000m Ocean from Argo Observations. *Marine Geodesy*, **37,** 337-353, http://dx.doi.org/10.1080/01490419.2013.873099

Desbruyères, D. G., E. L. McDonagh, B. A. King, F. K. Garry, A. T. Blaker, B. I. Moat, and H. Mercier, 2014: Full-depth temperature trends in the northeastern Atlantic through the early 21st century. *Geophysical Research Letters*, **41,** 7971-7979, http://dx.doi.org/10.1002/2014GL061844

Dieng, H. B., A. Cazenave, B. Meyssignac, O. Henry, K. von Schuckmann, H. Palanisamy, and J.-M. Lemoine, 2014: Effect of La Nina on The Global Mean Sea Level And North Pacific Ocean Mass Over 2005-2011. *Journal of Geodetic Science*, **4**, http://dx.doi.org/10.2478/jogs-2014-0003

Domingues, R., G. Goni, S. Swart, and S. Dong, 2014: Wind forced variability of the Antarctic Circumpolar Current south of Africa between 1993 and 2010. *Journal of Geophysical Research: Oceans*, **119,** 1123-1145, http://dx.doi.org/10.1002/2013JC008908

Dong, C., J. C. McWilliams, Y. Liu, and D. Chen, 2014: Global heat and salt transports by eddy movement. *Nat Commun*, **5**, http://dx.doi.org/10.1038/ncomms4294

Dong, S., M. O. Baringer, G. J. Goni, C. S. Meinen, and S. L. Garzoli (2014), Seasonal variations in the South Atlantic Meridional Overturning Circulation from observations and numerical models, *Geophys. Res. Lett.*, *41*(13), 4611-4618, doi: https://doi.org/10.1002/2014GL060428.

D'Ortenzio, F., H. Lavigne, F. Besson, H. Claustre, L. Coppola, N. Garcia, A. Laës-Huon, S. Le Reste, D. Malardé, C. Migon, P. Morin, L. Mortier, A. Poteau, L. Prieur, P. Raimbault, and P. Testor, 2014: Observing mixed layer depth, nitrate and chlorophyll concentrations in the northwestern Mediterranean: A combined satellite and NO3 profiling floats experiment. *Geophysical Research Letters*, **41,** 2014GL061020, http://dx.doi.org/10.1002/2014GL061020

Dotto, T. S., R. Kerr, M. M. Mata, M. Azaneu, I. Wainer, E. Fahrbach, and G. Rohardt, 2014: Assessment of the structure and variability of Weddell Sea water masses in distinct ocean reanalysis products. *Ocean Science*, **10,** 523-546, http://dx.doi.org/10.5194/os-10-523-2014

Drobinski, P., V. Ducrocq, P. Alpert, E. Anagnostou, K. Béranger, M. Borga, I. Braud, A. Chanzy, S. Davolio, G. Delrieu, C. Estournel, N. F. Boubrahmi, J. Font, V. Grubišić, S. Gualdi, V. Homar, B. Ivančan-Picek, C. Kottmeier, V. Kotroni, K. Lagouvardos, P. Lionello, M. C. Llasat, W. Ludwig, C. Lutoff, A. Mariotti, E. Richard, R. Romero, R. Rotunno, O. Roussot, I. Ruin, S. Somot, I. Taupier-Letage, J. Tintore, R. Uijlenhoet, and H. Wernli, 2014: HyMeX: A 10-Year Multidisciplinary Program on the Mediterranean Water Cycle. *Bulletin of the American Meteorological Society*, **95,** 1063-1082, http://dx.doi.org/10.1175/BAMS-D-12-00242.1

Drucker, R. and S. C. Riser, 2014: Validation of Aquarius sea surface salinity with Argo: Analysis of error due to depth of measurement and vertical salinity stratification. *Journal of Geophysical Research: Oceans*, **119,** 4626-4637, http://dx.doi.org/10.1002/2014JC010045

Drushka, K., S. T. Gille, and J. Sprintall, 2014: The diurnal salinity cycle in the tropics. *Journal of Geophysical Research: Oceans*, **119,** 5874-5890, http://dx.doi.org/10.1002/2014JC009924

Drushka, K., J. Sprintall, and S. T. Gille, 2014: Subseasonal variations in salinity and barrier-layer thickness in the eastern equatorial Indian Ocean. *Journal of Geophysical Research: Oceans*, **119,** 805-823, http://dx.doi.org/10.1002/2013JC009422

Dufois, F., N. J. Hardman-Mountford, J. Greenwood, A. J. Richardson, M. Feng, S. Herbette, and R. Matear, 2014: Impact of eddies on surface chlorophyll in the South Indian Ocean. *Journal of Geophysical Research: Oceans*, **119,** 8061-8077, http://dx.doi.org/10.1002/2014JC010164

Durack, P. J., P. J. Gleckler, F. W. Landerer, and K. E. Taylor, 2014: Quantifying underestimates of long-term upper-ocean warming. *Nature Clim. Change*, **4,** 999-1005, http://dx.doi.org/10.1038/nclimate2389

Dushaw, B. D. and D. Menemenlis, 2014: Antipodal acoustic thermometry: 1960, 2004. *Deep Sea Research Part I: Oceanographic Research Papers*, **86,** 1-20, http://dx.doi.org/10.1016/j.dsr.2013.12.008

Elipot, S., E. Frajka-Williams, C. W. Hughes, and J. K. Willis, 2014: The Observed North Atlantic Meridional Overturning Circulation: Its Meridional Coherence and Ocean

Bottom Pressure. *Journal of Physical Oceanography*, **44,** 517-537, http://dx.doi.org/10.1175/JPO-D-13-026.1

Emerson, S. R. and S. Bushinsky, 2014: Oxygen Concentrations and Biological Fluxes in the Open Ocean. *Oceanography*, **27,** 168-171, http://dx.doi.org/10.5670/oceanog.2014.20

Evans, D. G., J. D. Zika, A. C. Naveira Garabato, and A. J. G. Nurser, 2014: The imprint of Southern Ocean overturning on seasonal water mass variability in Drake Passage. *Journal of Geophysical Research: Oceans*, **119,** 7987-8010, http://dx.doi.org/10.1002/2014JC010097

Everett, J. D., M. E. Baird, M. Roughan, I. M. Suthers, and M. A. Doblin, 2014: Relative impact of seasonal and oceanographic drivers on surface chlorophyll a along a Western Boundary Current. *Progress in Oceanography*, **120,** 340-351, http://dx.doi.org/10.1016/j.pocean.2013.10.016

Fay, A. R. and G. A. McKinley, 2014: Global open-ocean biomes: mean and temporal variability. *Earth Syst. Sci. Data*, **6,** 273-284, http://dx.doi.org/10.5194/essd-6-273-2014

Felton, C. S., B. Subrahmanyam, V. S. N. Murty, and J. F. Shriver, 2014: Estimation of the barrier layer thickness in the Indian Ocean using Aquarius Salinity. *Journal of Geophysical Research: Oceans*, **119,** 4200-4213, http://dx.doi.org/10.1002/2013JC009759

Filyushkin, B. N., M. A. Sokolovskiy, N. G. Kozhelupova, and I. M. Vagina, 2014: Lagrangian methods for observation of intrathermocline eddies in ocean. *Oceanology*, **54,** 688-694, http://dx.doi.org/10.1134/S0001437014050051

Firing, Y. L., T. K. Chereskin, D. R. Watts, K. L. Tracey, and C. Provost, 2014: Computation of Geostrophic Streamfunction, Its Derivatives, and Error Estimates from an Array of CPIES in Drake Passage. *Journal of Atmospheric and Oceanic Technology*, **31,** 656-680, http://dx.doi.org/10.1175/JTECH-D-13-00142.1

Frajka-Williams, E., P. B. Rhines, and C. C. Eriksen, 2014: Horizontal Stratification during Deep Convection in the Labrador Sea. *Journal of Physical Oceanography*, **44,** 220-228, http://dx.doi.org/10.1175/JPO-D-13-069.1

Friedrich, J., F. Janssen, D. Aleynik, H. W. Bange, N. Boltacheva, M. N. Çagatay, A. W. Dale, G. Etiope, Z. Erdem, M. Geraga, A. Gilli, M. T. Gomoiu, P. O. J. Hall, D. Hansson, Y. He, M. Holtappels, M. K. Kirf, M. Kononets, S. Konovalov, A. Lichtschlag, D. M. Livingstone, G. Marinaro, S. Mazlumyan, S. Naeher, R. P. North, G. Papatheodorou, O. Pfannkuche, R. Prien, G. Rehder, C. J. Schubert, T. Soltwedel, S. Sommer, H. Stahl, E. V. Stanev, A. Teaca, A. Tengberg, C. Waldmann, B. Wehrli, and F. Wenzhöfer, 2014: Investigating hypoxia in aquatic environments: diverse approaches to addressing a complex phenomenon. *Biogeosciences*, **11,** 1215-1259, http://dx.doi.org/10.5194/bg-11-1215-2014

Fu, H., W. Li, X. Zhang, G. Han, X. Wang, X. Wu, and L. Zhang, 2014: A study of transport and impact strength of Fukushima nuclear pollutants in the north pacific surface. *Journal of Ocean University of China*, **13,** 183-190, http://dx.doi.org/10.1007/s11802-014-1942-9

Fu, H., X. Wang, P. C. Chu, X. Zhang, G. Han, and W. Li, 2014: Tropical cyclone footprint in

the ocean mixed layer observed by Argo in the Northwest Pacific. *Journal of Geophysical Research: Oceans*, **119,** 8078-8092, http://dx.doi.org/10.1002/2014JC010316

Gačić, M., G. Civitarese, V. Kovačević, L. Ursella, M. Bensi, M. Menna, V. Cardin, P. M. Poulain, S. Cosoli, G. Notarstefano, and C. Pizzi, 2014: Extreme winter 2012 in the Adriatic: an example of climatic effect on the BiOS rhythm. *Ocean Science*, **10,** 513-522, http://dx.doi.org/10.5194/os-10-513-2014

Ganachaud, A., S. Cravatte, A. Melet, A. Schiller, N. J. Holbrook, B. M. Sloyan, M. J. Widlansky, M. Bowen, J. Verron, P. Wiles, K. Ridgway, P. Sutton, J. Sprintall, C. Steinberg, G. Brassington, W. Cai, R. Davis, F. Gasparin, L. Gourdeau, T. Hasegawa, W. Kessler, C. Maes, K. Takahashi, K. J. Richards, and U. Send, 2014: The Southwest Pacific Ocean circulation and climate experiment (SPICE). *Journal of Geophysical Research: Oceans*, **119,** 7660-7686, http://dx.doi.org/10.1002/2013JC009678

Gao, L., W. Yu, T. Li, T. R. Adi, S. Budi, Triyono, and M. Salvienty, 2014: Rainfall asymmetry in the southeast Indian Ocean between positive and negative IODs and its local impact. *Atmospheric Science Letters*, **15,** 127-133, http://dx.doi.org/10.1002/asl2.479

Gao, S., T. Qu, and X. Nie, 2014: Mixed layer salinity budget in the tropical Pacific Ocean estimated by a global GCM. *Journal of Geophysical Research: Oceans*, **119,** 8255-8270, http://dx.doi.org/10.1002/2014JC010336

Gary, S. F., M. S. Lozier, Y. O. Kwon, and J. J. Park, 2014: The Fate of North Atlantic Subtropical Mode Water in the FLAME Model. *Journal of Physical Oceanography*, **44,** 1354-1371, http://dx.doi.org/10.1175/JPO-D-13-0202.1

Giglio, D. and D. Roemmich, 2014: Climatological monthly heat and freshwater flux estimates on a global scale from Argo. *Journal of Geophysical Research: Oceans*, **119,** 6884-6899, http://dx.doi.org/10.1002/2014JC010083

Girishkumar, M. S., K. Suprit, J. Chiranjivi, T. V. S. Udaya Bhaskar, M. Ravichandran, R. V. Shesu, and E. Pattabhi Rama Rao, 2014: Observed oceanic response to tropical cyclone Jal from a moored buoy in the south-western Bay of Bengal. *Ocean Dynamics*, **64,** 325-335, http://dx.doi.org/10.1007/s10236-014-0689-6

Gnanadesikan, A., J. P. Dunne, and R. Msadek, 2014: Connecting Atlantic temperature variability and biological cycling in two earth system models. *Journal of Marine Systems*, **133,** 39-54, http://dx.doi.org/10.1016/j.jmarsys.2013.10.003

Goes, M., I. Wainer, and N. Signorelli, 2014: Investigation of the causes of historical changes in the subsurface salinity minimum of the South Atlantic. *Journal of Geophysical Research: Oceans*, **119,** 5654-5675, http://dx.doi.org/10.1002/2014JC009812

Gordon, A. L. and C. F. Giulivi, 2014: Ocean eddy freshwater flux convergence into the North Atlantic subtropics. *Journal of Geophysical Research: Oceans*, **119,** 3327-3335, http://dx.doi.org/10.1002/2013JC009596

Gray, A. R. and S. C. Riser, 2014: A Global Analysis of Sverdrup Balance Using Absolute Geostrophic Velocities from Argo. *Journal of Physical Oceanography*, **44,** 1213-1229, http://dx.doi.org/10.1175/JPO-D-12-0206.1

Grenier, M., C. Jeandel, and S. Cravatte, 2014: From the subtropics to the equator in the Southwest Pacific: Continental material fluxes quantified using neodymium data along modeled thermocline water pathways. *Journal of Geophysical Research:*

Oceans, **119,** 3948-3966, http://dx.doi.org/10.1002/2013JC009670

Griffies, S. M., J. Yin, P. J. Durack, P. Goddard, S. C. Bates, E. Behrens, M. Bentsen, D. Bi, A. Biastoch, C. W. Böning, A. Bozec, E. Chassignet, G. Danabasoglu, S. Danilov, C. M. Domingues, H. Drange, R. Farneti, E. Fernandez, R. J. Greatbatch, D. M. Holland, M. Ilicak, W. G. Large, K. Lorbacher, J. Lu, S. J. Marsland, A. Mishra, A. J. George Nurser, D. Salas y Mélia, J. B. Palter, B. L. Samuels, J. Schröter, F. U. Schwarzkopf, D. Sidorenko, A. M. Treguier, Y.-h. Tseng, H. Tsujino, P. Uotila, S. Valcke, A. Voldoire, Q. Wang, M. Winton, and X. Zhang, 2014: An assessment of global and regional sea level for years 1993–2007 in a suite of interannual CORE-II simulations. *Ocean Modelling*, **78,** 35-89, http://dx.doi.org/10.1016/j.ocemod.2014.03.004

Grist, J. P., S. A. Josey, L. Boehme, M. P. Meredith, K. L. Laidre, M. P. Heide-Jørgensen, K. M. Kovacs, C. Lydersen, F. J. M. Davidson, G. B. Stenson, M. O. Hammill, R. Marsh, and A. C. Coward, 2014: Seasonal variability of the warm Atlantic water layer in the vicinity of the Greenland shelf break. *Geophysical Research Letters*, **41,** 2014GL062051, http://dx.doi.org/10.1002/2014GL062051

Grist, J. P., S. A. Josey, R. Marsh, Y.-O. Kwon, R. J. Bingham, and A. T. Blaker, 2014: The Surface-Forced Overturning of the North Atlantic: Estimates from Modern Era Atmospheric Reanalysis Datasets. *Journal of Climate*, **27,** 3596-3618, http://dx.doi.org/10.1175/JCLI-D-13-00070.1

Grodsky, S. A., J. A. Carton, and F. O. Bryan, 2014: A curious local surface salinity maximum in the northwestern tropical Atlantic. *Journal of Geophysical Research: Oceans*, **119,** 484-495, http://dx.doi.org/10.1002/2013JC009450

Guan, B., T. Lee, D. J. Halkides, and D. E. Waliser, 2014: Aquarius surface salinity and the Madden-Julian Oscillation: The role of salinity in surface layer density and potential energy. *Geophysical Research Letters*, **41,** 2858-2869, http://dx.doi.org/10.1002/2014GL059704

Guerrero, R. A., A. R. Piola, H. Fenco, R. P. Matano, V. Combes, Y. Chao, C. James, E. D. Palma, M. Saraceno, and P. T. Strub, 2014: The salinity signature of the cross-shelf exchanges in the Southwestern Atlantic Ocean: Satellite observations. *Journal of Geophysical Research: Oceans*, **119,** 7794-7810, http://dx.doi.org/10.1002/2014JC010113

Gueye, M. B., A. Niang, S. Arnault, S. Thiria, and M. Crépon, 2014: Neural approach to inverting complex system: Application to ocean salinity profile estimation from surface parameters. *Computers & Geosciences*, **72,** 201-209, http://dx.doi.org/10.1016/j.cageo.2014.07.012

Hackert, E., A. J. Busalacchi, and J. Ballabrera-Poy, 2014: Impact of Aquarius sea surface salinity observations on coupled forecasts for the tropical Indo-Pacific Ocean. *Journal of Geophysical Research: Oceans*, **119,** 4045-4067, http://dx.doi.org/10.1002/2013JC009697

Halo, I., P. Penven, B. Backeberg, I. Ansorge, F. Shillington, and R. Roman, 2014: Mesoscale eddy variability in the southern extension of the East Madagascar Current: Seasonal cycle, energy conversion terms, and eddy mean properties. *Journal of Geophysical Research: Oceans*, **119,** 7324-7356, http://dx.doi.org/10.1002/2014JC009820

Ham, Y.-G., M. M. Rienecker, M. J. Suarez, Y. Vikhliaev, B. Zhao, J. Marshak, G. Vernieres, and

S. D. Schubert, 2014: Decadal prediction skill in the GEOS-5 forecast system. *Climate Dynamics*, **42,** 1-20, http://dx.doi.org/10.1007/s00382-013-1858-x

Ham, Y.-G., S. Schubert, Y. Vikhliaev, and M. J. Suarez, 2014: An assessment of the ENSO forecast skill of GEOS-5 system. *Climate Dynamics*, **43,** 2415-2430, http://dx.doi.org/10.1007/s00382-014-2063-2

Hartman, S. E., M. C. Hartman, D. J. Hydes, Z.-P. Jiang, D. Smythe-Wright, and C. González-Pola, 2014: Seasonal and inter-annual variability in nutrient supply in relation to mixing in the Bay of Biscay. *Deep Sea Research Part II: Topical Studies in Oceanography*, **106,** 68-75, http://dx.doi.org/10.1016/j.dsr2.2013.09.032

Hasson, A., T. Delcroix, J. Boutin, R. Dussin, and J. Ballabrera-Poy, 2014: Analyzing the 2010–2011 La Niña signature in the tropical Pacific sea surface salinity using in situ data, SMOS observations, and a numerical simulation. *Journal of Geophysical Research: Oceans*, **119,** 3855-3867, http://dx.doi.org/10.1002/2013JC009388

Hautala, S. L., E. A. Solomon, H. P. Johnson, R. N. Harris, and U. K. Miller, 2014: Dissociation of Cascadia margin gas hydrates in response to contemporary ocean warming. *Geophysical Research Letters*, **41,** 8486-8494, http://dx.doi.org/10.1002/2014GL061606

He, Z., K. R. Thompson, H. Ritchie, Y. Lu, and F. Dupont, 2014: Reducing Drift and Bias of a Global Ocean Model by Frequency-Dependent Nudging. *Atmosphere-Ocean*, **52,** 242-255, http://dx.doi.org/10.1080/07055900.2014.922240

Hennon, T. D., S. C. Riser, and M. H. Alford, 2014: Observations of Internal Gravity Waves by Argo Floats. *Journal of Physical Oceanography*, **44,** 2370-2386, http://dx.doi.org/10.1175/JPO-D-13-0222.1

Hernandez, O., J. Boutin, N. Kolodziejczyk, G. Reverdin, N. Martin, F. Gaillard, N. Reul, and J. L. Vergely, 2014: SMOS salinity in the subtropical North Atlantic salinity maximum: 1. Comparison with Aquarius and in situ salinity. *Journal of Geophysical Research: Oceans*, **119,** 8878-8896, http://dx.doi.org/10.1002/2013JC009610

Hjelmervik, K. and K. Hjelmervik, 2014: Time-calibrated estimates of oceanographic profiles using empirical orthogonal functions and clustering. *Ocean Dynamics*, **64,** 655-665, http://dx.doi.org/10.1007/s10236-014-0704-y

Hoareau, N., M. Umbert, J. Martínez, A. Turiel, and J. Ballabrera-Poy, 2014: On the potential of data assimilation to generate SMOS-Level 4 maps of sea surface salinity. *Remote Sensing of Environment*, **146,** 188-200, http://dx.doi.org/10.1016/j.rse.2013.10.005

Holte, J., F. Straneo, J. T. Farrar, and R. A. Weller, 2014: Heat and salinity budgets at the Stratus mooring in the southeast Pacific. *Journal of Geophysical Research: Oceans*, **119,** 8162-8176, http://dx.doi.org/10.1002/2014JC010256

Huang, C. J., F. Qiao, and D. Dai, 2014: Evaluating CMIP5 simulations of mixed layer depth during summer. *Journal of Geophysical Research: Oceans*, **119,** 2568-2582, http://dx.doi.org/10.1002/2013JC009535

Hummels, R., M. Dengler, P. Brandt, and M. Schlundt, 2014: Diapycnal heat flux and mixed layer heat budget within the Atlantic Cold Tongue. *Climate Dynamics*, **43,** 3179-3199, http://dx.doi.org/10.1007/s00382-014-2339-6

Ilıcak, M., A. J. Adcroft, and S. Legg, 2014: A framework for parameterization of heterogeneous ocean convection. *Ocean Modelling*, **82,** 1-14,

http://dx.doi.org/10.1016/j.ocemod.2014.07.002
Illig, S., B. Dewitte, K. Goubanova, G. Cambon, J. Boucharel, F. Monetti, C. Romero, S. Purca, and R. Flores, 2014: Forcing mechanisms of intraseasonal SST variability off central Peru in 2000–2008. *Journal of Geophysical Research: Oceans*, **119,** 3548-3573, http://dx.doi.org/10.1002/2013JC009779
Isachsen, P. E., S. R. Sørlie, C. Mauritzen, C. Lydersen, P. Dodd, and K. M. Kovacs, 2014: Upper-ocean hydrography of the Nordic Seas during the International Polar Year (2007–2008) as observed by instrumented seals and Argo floats. *Deep Sea Research Part I: Oceanographic Research Papers*, **93,** 41-59, http://dx.doi.org/10.1016/j.dsr.2014.06.012
Isern-Fontanet, J., M. Shinde, and C. González-Haro, 2014: On the Transfer Function between Surface Fields and the Geostrophic Stream Function in the Mediterranean Sea. *Journal of Physical Oceanography*, **44,** 1406-1423, http://dx.doi.org/10.1175/JPO-D-13-0186.1
Itoh, S., I. Yasuda, H. Ueno, T. Suga, and S. Kakehi, 2014: Regeneration of a warm anticyclonic ring by cold water masses within the western subarctic gyre of the North Pacific. *Journal of Oceanography*, **70,** 211-223, http://dx.doi.org/10.1007/s10872-014-0225-9
Ivanov, V. A. and A. V. Bagaiev, 2014: Oscillation of hydrophysical fields on the shelf and continental slope caused by nonstationary wind. *Izvestiya, Atmospheric and Oceanic Physics*, **50,** 648-656, http://dx.doi.org/10.1134/S0001433814060097
Jacox, M. G., A. M. Moore, C. A. Edwards, and J. Fiechter, 2014: Spatially resolved upwelling in the California Current System and its connections to climate variability. *Geophysical Research Letters*, **41,** 3189-3196, http://dx.doi.org/10.1002/2014GL059589
Jeon, C., J.-H. Park, S. M. Varlamov, J.-H. Yoon, Y. H. Kim, S. Seo, Y.-G. Park, H. S. Min, J. H. Lee, and C.-H. Kim, 2014: Seasonal variation of semidiurnal internal tides in the East/Japan Sea. *Journal of Geophysical Research: Oceans*, **119,** 2843-2859, http://dx.doi.org/10.1002/2014JC009864
Jiang, C., S. T. Gille, J. Sprintall, and C. Sweeney, 2014: Drake Passage Oceanic pCO2: Evaluating CMIP5 Coupled Carbon–Climate Models Using in situ Observations. *Journal of Climate*, **27,** 76-100, http://dx.doi.org/10.1175/JCLI-D-12-00571.1
Jing, Z., L. Wu, D. Wu, and B. Qiu, 2014: Enhanced 2-h–8-day Oscillations Associated with Tropical Instability Waves. *Journal of Physical Oceanography*, **44,** 1908-1918, http://dx.doi.org/10.1175/JPO-D-13-0189.1
Johannessen, J. A., B. Chapron, F. Collard, and B. Backeberg, 2014: Use of SAR data to Monitor the Greater Agulhas Current. *Remote Sensing of the African Seas*, V. Barale and M. Gade, Eds., Springer Netherlands, 251-262, http://dx.doi.org/10.1007/978-94-017-8008-7_13.
Johns, W. E., P. Brandt, B. Bourlès, A. Tantet, A. Papapostolou, and A. Houk, 2014: Zonal structure and seasonal variability of the Atlantic Equatorial Undercurrent. *Climate Dynamics*, **43,** 3047-3069, http://dx.doi.org/10.1007/s00382-014-2136-2
Johnson, G. C. and J. M. Lyman, 2014: Oceanography: Where's the heat? *Nature Clim. Change*, **4,** 956-957, http://dx.doi.org/10.1038/nclimate2409

Johnson, G. C., J. M. Lyman, G. Lagerloef, and H.-Y. Kao, 2014: Sea surface salinity in State of the Climate in 2013, Blunden, Jessica and Arndt, Derek S. Eds. *Bulletin of the American Meteorological Society*, **95,** S1-S279, http://dx.doi.org/10.1175/2014BAMSStateoftheClimate.1

Johnson, G. C., J. M. Lyman, J. K. Willis, T. Boyer, J. Antonov, S. A. Good, C. M. Domingues, and N. L. Bindoff, 2014: Ocean Heat Content in State of the Climate in 2013, Blunden, Jessica and Arndt, Derek S. Eds. *Bulletin of the American Meteorological Society*, **95,** S1-S279, http://dx.doi.org/10.1175/2014BAMSStateoftheClimate.1

Jones, D. C., T. Ito, Y. Takano, and W.-C. Hsu, 2014: Spatial and seasonal variability of the air-sea equilibration timescale of carbon dioxide. *Global Biogeochemical Cycles*, **28,** 1163-1178, http://dx.doi.org/10.1002/2014GB004813

Joseph, P. V., 2014: Role of Ocean in the Variability of Indian Summer Monsoon Rainfall. *Surveys in Geophysics*, **35,** 723-738, http://dx.doi.org/10.1007/s10712-013-9274-7

Jourdain, N. C., B. Barnier, N. Ferry, J. Vialard, C. E. Menkes, M. Lengaigne, and L. Parent, 2014: Tropical cyclones in two atmospheric (re)analyses and their response in two oceanic reanalyses. *Ocean Modelling*, **73,** 108-122, https://doi.org/10.1016/j.ocemod.2013.10.007

Kaeriyama, H., Y. Shimizu, D. Ambe, M. Masujima, Y. Shigenobu, K. Fujimoto, T. Ono, K. Nishiuchi, T. Taneda, H. Kurogi, T. Setou, H. Sugisaki, T. Ichikawa, K. Hidaka, Y. Hiroe, A. Kusaka, T. Kodama, M. Kuriyama, H. Morita, K. Nakata, K. Morinaga, T. Morita, and T. Watanabe, 2014: Southwest Intrusion of 134Cs and 137Cs Derived from the Fukushima Dai-ichi Nuclear Power Plant Accident in the Western North Pacific. *Environmental Science & Technology*, **48,** 3120-3127, http://dx.doi.org/10.1021/es403686v

Kelly, K. A., L. Thompson, and J. Lyman, 2014: The Coherence and Impact of Meridional Heat Transport Anomalies in the Atlantic Ocean Inferred from Observations*. *Journal of Climate*, **27,** 1469-1487, http://dx.doi.org/10.1175/JCLI-D-12-00131.1

Kennedy, J. J., 2014: A review of uncertainty in in situ measurements and data sets of sea surface temperature. *Reviews of Geophysics*, **52,** 1-32, http://dx.doi.org/10.1002/2013RG000434

Keppenne, C. L., 2014: An ensemble recentering Kalman filter with an application to Argo temperature data assimilation into the NASA GEOS-5 coupled model. *Ocean Modelling*, **77,** 50-55, http://dx.doi.org/10.1016/j.ocemod.2014.03.001

Kim, Y. S. and A. H. Orsi, 2014: On the Variability of Antarctic Circumpolar Current Fronts Inferred from 1992–2011 Altimetry. *Journal of Physical Oceanography*, **44,** 3054-3071, http://dx.doi.org/10.1175/JPO-D-13-0217.1

Kitade, Y., K. Shimada, T. Tamura, G. D. Williams, S. Aoki, Y. Fukamachi, F. Roquet, M. Hindell, S. Ushio, and K. I. Ohshima, 2014: Antarctic Bottom Water production from the Vincennes Bay Polynya, East Antarctica. *Geophysical Research Letters*, **41,** 3528-3534, http://dx.doi.org/10.1002/2014GL059971

Klemas, V. and X.-H. Yan, 2014: Subsurface and deeper ocean remote sensing from satellites: An overview and new results. *Progress in Oceanography*, **122,** 1-9, http://dx.doi.org/10.1016/j.pocean.2013.11.010

Koenig, Z., C. Provost, R. Ferrari, N. Sennéchael, and M.-H. Rio, 2014: Volume transport of

the Antarctic Circumpolar Current: Production and validation of a 20 year long time series obtained from in situ and satellite observations. *Journal of Geophysical Research: Oceans*, **119,** 5407-5433, http://dx.doi.org/10.1002/2014JC009966

Köhl, A., 2014: Detecting Processes Contributing to Interannual Halosteric and Thermosteric Sea Level Variability. *Journal of Climate*, **27,** 2417-2426, http://dx.doi.org/10.1175/JCLI-D-13-00412.1

Köhl, A., M. S. Martins, and D. Stammer, 2014: Impact of assimilating surface salinity from SMOS on ocean circulation estimates. *Journal of Geophysical Research: Oceans*, **119,** 5449-5464, http://dx.doi.org/10.1002/2014JC010040

Kolodziejczyk, N., F. Marin, B. Bourlès, Y. Gouriou, and H. Berger, 2014: Seasonal variability of the equatorial undercurrent termination and associated salinity maximum in the Gulf of Guinea. *Climate Dynamics*, **43,** 3025-3046, http://dx.doi.org/10.1007/s00382-014-2107-7

Kolodziejczyk, N., G. Reverdin, F. Gaillard, and A. Lazar, 2014: Low-frequency thermohaline variability in the Subtropical South Atlantic pycnocline during 2002–2013. *Geophysical Research Letters*, **41,** 6468-6475, http://dx.doi.org/10.1002/2014GL061160

Korres, G., M. Ntoumas, M. Potiris, and G. Petihakis, 2014: Assimilating Ferry Box data into the Aegean Sea model. *Journal of Marine Systems*, **140, Part A,** 59-72, http://dx.doi.org/10.1016/j.jmarsys.2014.03.013

Kosempa, M. and D. P. Chambers, 2014: Southern Ocean velocity and geostrophic transport fields estimated by combining Jason altimetry and Argo data. *Journal of Geophysical Research: Oceans*, **119,** 4761-4776, http://dx.doi.org/10.1002/2014JC009853

Krokos, G., D. Velaoras, G. Korres, L. Perivoliotis, and A. Theocharis, 2014: On the continuous functioning of an internal mechanism that drives the Eastern Mediterranean thermohaline circulation: The recent activation of the Aegean Sea as a dense water source area. *Journal of Marine Systems*, **129,** 484-489, http://dx.doi.org/10.1016/j.jmarsys.2013.10.002

Krüger, J. and S. L. Pohler, 2014: Modification of the Shape of Pacific Islands by Submarine Landslides: Banaba, Nauru, and Niue. *Submarine Mass Movements and Their Consequences*, S. Krastel, J.-H. Behrmann, D. Völker, M. Stipp, C. Berndt, R. Urgeles, J. Chaytor, K. Huhn, M. Strasser, and C. B. Harbitz, Eds., Springer International Publishing, 423-432, http://dx.doi.org/10.1007/978-3-319-00972-8_38.

Kumar, A. and Z.-Z. Hu, 2014: Interannual and interdecadal variability of ocean temperature along the equatorial Pacific in conjunction with ENSO. *Climate Dynamics*, **42,** 1243-1258, http://dx.doi.org/10.1007/s00382-013-1721-0

Kumar, A., H. Wang, Y. Xue, and W. Wang, 2014: How Much of Monthly Subsurface Temperature Variability in the Equatorial Pacific Can Be Recovered by the Specification of Sea Surface Temperatures? *Journal of Climate*, **27,** 1559-1577, http://dx.doi.org/10.1175/JCLI-D-13-00258.1

Kumar, P. B., J. Vialard, M. Lengaigne, V. S. N. Murty, G. R. Foltz, M. J. McPhaden, S. Pous, and C. de Boyer Montégut, 2014: Processes of interannual mixed layer temperature variability in the thermocline ridge of the Indian Ocean. *Climate Dynamics*, **43,** 2377-2397, http://dx.doi.org/10.1007/s00382-014-2059-y

Kuragano, T., Y. Fujii, T. Toyoda, N. Usui, K. Ogawa, and M. Kamachi, 2014: Seasonal barotropic sea surface height fluctuation in relation to regional ocean mass variation. *Journal of Oceanography*, **70,** 45-62, http://dx.doi.org/10.1007/s10872-013-0211-7

Kurnosova, M. O. and K. V. Lebedev, 2014: Study of transport variations in the Kuroshio extension system at 35° N, 147° E based on the data of Argo floats and satellite altimetry. *Doklady Earth Sciences*, **458,** 1154-1157, http://dx.doi.org/10.1134/S1028334X14090177

Lacorata, G., L. Palatella, and R. Santoleri, 2014: Lagrangian predictability characteristics of an Ocean Model. *Journal of Geophysical Research: Oceans*, **119,** 8029-8038, http://dx.doi.org/10.1002/2014JC010313

Ladd, C., 2014: Seasonal and interannual variability of the Bering Slope Current. *Deep Sea Research Part II: Topical Studies in Oceanography*, **109,** 5-13, http://dx.doi.org/10.1016/j.dsr2.2013.12.005

Le Vine, D. M., E. P. Dinnat, G. S. E. Lagerloef, P. de Matthaeis, S. Abraham, C. Utku, and H. Kao, 2014: Aquarius: Status and recent results. *Radio Science*, **49,** 709-720, http://dx.doi.org/10.1002/2014RS005505

Lea, D. J., M. J. Martin, and P. R. Oke, 2014: Demonstrating the complementarity of observations in an operational ocean forecasting system. *Quarterly Journal of the Royal Meteorological Society*, **140,** 2037-2049, http://dx.doi.org/10.1002/qj.2281

Lebeaupin Brossier, C., T. Arsouze, K. Béranger, M.-N. Bouin, E. Bresson, V. Ducrocq, H. Giordani, M. Nuret, R. Rainaud, and I. Taupier-Letage, 2014: Ocean Mixed Layer responses to intense meteorological events during HyMeX-SOP1 from a high-resolution ocean simulation. *Ocean Modelling*, **84,** 84-103, http://dx.doi.org/10.1016/j.ocemod.2014.09.009

Lee, T., G. Lagerloef, H.-Y. Kao, M. J. McPhaden, J. Willis, and M. M. Gierach, 2014: The influence of salinity on tropical Atlantic instability waves. *Journal of Geophysical Research: Oceans*, **119,** 8375-8394, http://dx.doi.org/10.1002/2014JC010100

Lehahn, Y., I. Koren, D. Schatz, M. Frada, U. Sheyn, E. Boss, S. Efrati, Y. Rudich, M. Trainic, S. Sharoni, C. Laber, Giacomo R. DiTullio, Marco J. L. Coolen, Ana M. Martins, Benjamin A. S. Van Mooy, Kay D. Bidle, and A. Vardi, 2014: Decoupling Physical from Biological Processes to Assess the Impact of Viruses on a Mesoscale Algal Bloom. *Current Biology*, **24,** 2041-2046, http://dx.doi.org/10.1016/j.cub.2014.07.046

Li, M., L. Xie, Q. Yang, and J. Tian, 2014: Impact of eddies on ocean diapycnal mixing in Gulf Stream region. *Science China Earth Sciences*, **57,** 1407-1414, http://dx.doi.org/10.1007/s11430-013-4708-0

Li, Y., W. Han, T. Shinoda, C. Wang, M. Ravichandran, and J.-W. Wang, 2014: Revisiting the Wintertime Intraseasonal SST Variability in the Tropical South Indian Ocean: Impact of the Ocean Interannual Variation. *Journal of Physical Oceanography*, **44,** 1886-1907, http://dx.doi.org/10.1175/JPO-D-13-0238.1

Li, Y., R. He, and J. P. Manning, 2014: Coastal connectivity in the Gulf of Maine in spring and summer of 2004–2009. *Deep Sea Research Part II: Topical Studies in Oceanography*, **103,** 199-209, http://dx.doi.org/10.1016/j.dsr2.2013.01.037

Li, Y. N., S. Q. Peng, J. Wang, and J. Yan, 2014: Impacts of nonbreaking

wave-stirring-induced mixing on the upper ocean thermal structure and typhoon intensity in the South China Sea. *Journal of Geophysical Research: Oceans*, **119,** 5052-5070, http://dx.doi.org/10.1002/2014JC009956

Liang, H., W. Zhao, D. Dai, and J. Zhang, 2014: Estimation of vertical diffusion coefficient based on a one-dimensional temperature diffusion equation with an inverse method. *Acta Oceanologica Sinica*, **33,** 28-36, http://dx.doi.org/10.1007/s13131-014-0472-z

Liao, X., Y. Du, H. Zhan, P. Shi, and J. Wang, 2014: Summertime phytoplankton blooms and surface cooling in the western south equatorial Indian Ocean. *Journal of Geophysical Research: Oceans*, **119,** 7687-7704, http://dx.doi.org/10.1002/2014JC010195

Lin, H., K. R. Thompson, and J. Hu, 2014: A Frequency-Dependent Description of Propagating Sea Level Signals in the Kuroshio Extension Region. *Journal of Physical Oceanography*, **44,** 1614-1635, http://dx.doi.org/10.1175/JPO-D-13-0185.1

Lin, I. I., I.-F. Pun, and C.-C. Lien, 2014: "Category-6" supertyphoon Haiyan in global warming hiatus: Contribution from subsurface ocean warming. *Geophysical Research Letters*, **41,** 2014GL061281, http://dx.doi.org/10.1002/2014GL061281

Liu, L., S. Peng, J. Wang, and R. X. Huang, 2014: Retrieving density and velocity fields of the ocean's interior from surface data. *Journal of Geophysical Research: Oceans*, **119,** 8512-8529, http://dx.doi.org/10.1002/2014JC010221

Liu, Y., R. H. Weisberg, S. Vignudelli, and G. T. Mitchum, 2014: Evaluation of altimetry-derived surface current products using Lagrangian drifter trajectories in the eastern Gulf of Mexico. *Journal of Geophysical Research: Oceans*, **119,** 2827-2842, http://dx.doi.org/10.1002/2013JC009710

Liu, Z., J. Xu, C. Sun, and X. Wu, 2014: An upper ocean response to Typhoon Bolaven analyzed with Argo profiling floats. *Acta Oceanologica Sinica*, **33,** 90-101, http://dx.doi.org/10.1007/s13131-014-0558-7

Llovel, W., J. K. Willis, F. W. Landerer, and I. Fukumori, 2014: Deep-ocean contribution to sea level and energy budget not detectable over the past decade. *Nature Clim. Change*, **4,** 1031-1035, http://dx.doi.org/10.1038/nclimate2387

Lu, S., Z. Liu, and Z. Lihong, 2014: Improvement of Argo salinity data delayed mode quality control method. *Journal of PLA University of Sci and Tech*, **15,** 598-606,

Lübbecke, J. F. and M. J. McPhaden, 2014: Assessing the Twenty-First-Century Shift in ENSO Variability in Terms of the Bjerknes Stability Index*. *Journal of Climate*, **27,** 2577-2587, http://dx.doi.org/10.1175/JCLI-D-13-00438.1

Luo, H., A. Bracco, and F. Zhang, 2014: The Seasonality of Convective Events in the Labrador Sea. *Journal of Climate*, **27,** 6456-6471, http://dx.doi.org/10.1175/JCLI-D-14-00009.1

Luo, Y. W., I. D. Lima, D. M. Karl, C. A. Deutsch, and S. C. Doney, 2014: Data-based assessment of environmental controls on global marine nitrogen fixation. *Biogeosciences*, **11,** 691-708, http://dx.doi.org/10.5194/bg-11-691-2014

Lyman, J. M. and G. C. Johnson, 2014: Estimating Global Ocean Heat Content Changes in the Upper 1800 m since 1950 and the Influence of Climatology Choice. *Journal of Climate*, **27,** 1945-1957, http://dx.doi.org/10.1175/JCLI-D-12-00752.1

Lyu, G., H. Wang, J. Zhu, D. Wang, J. Xie, and G. Liu, 2014: Assimilating the along-track sea level anomaly into the regional ocean modeling system using the ensemble optimal

interpolation. *Acta Oceanologica Sinica*, **33,** 72-82, http://dx.doi.org/10.1007/s13131-014-0469-7

Ma, W., X. Yang, G. Liu, S. Ma, Y. Yu, Z. Li, and Y. Liu, 2014: An Improved Model for L-Band Brightness Temperature Estimation Over Foam-Covered Seas Under Low and Moderate Winds. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **7,** 3784-3793, http://dx.doi.org/10.1109/JSTARS.2014.2318432

Maes, C. and T. J. O'Kane, 2014: Seasonal variations of the upper ocean salinity stratification in the Tropics. *Journal of Geophysical Research: Oceans*, **119,** 1706-1722, http://dx.doi.org/10.1002/2013JC009366

Maes, C., N. Reul, D. Behringer, and T. O'Kane, 2014: The salinity signature of the equatorial Pacific cold tongue as revealed by the satellite SMOS mission. *Geoscience Letters*, **1,** 1-7, http://dx.doi.org/10.1186/s40562-014-0017-5

Mahongo, S. B. and Y. Shaghude, 2014: Modelling the dynamics of the Tanzanian coastal waters. *Journal of Oceanography and Marine Science*, **5,** 1-7, http://dx.doi.org/10.5897/JOMS2013.0100

Marcinko, C. L. J., A. P. Martin, and J. T. Allen, 2014: Modelling dinoflagellates as an approach to the seasonal forecasting of bioluminescence in the North Atlantic. *Journal of Marine Systems*, **139,** 261-275, http://dx.doi.org/10.1016/j.jmarsys.2014.06.014

Marullo, S., R. Santoleri, D. Ciani, P. Le Borgne, S. Péré, N. Pinardi, M. Tonani, and G. Nardone, 2014: Combining model and geostationary satellite data to reconstruct hourly SST field over the Mediterranean Sea. *Remote Sensing of Environment*, **146,** 11-23, http://dx.doi.org/10.1016/j.rse.2013.11.001

Masuda, S. and S. Hosoda, 2014: Effective Design of Profiling Float Network for Oceanic Heat-Content Monitoring. *The Scientific World Journal*, **2014,** 6, http://dx.doi.org/10.1155/2014/340518

Masuda, S., N. Sugiura, S. Osafune, and T. Doi, 2014: Improvement of Ocean State Estimation by Assimilating Mapped Argo Drift Data. *The Scientific World Journal*, **2014,** 6, http://dx.doi.org/10.1155/2014/975618

McClatchie, S., 2014: Oceanography of the Southern California Current System Relevant to Fisheries. *Regional Fisheries Oceanography of the California Current System*, Springer Netherlands, 13-60, http://dx.doi.org/10.1007/978-94-007-7223-6_2.

McPhaden, M. J. and M. Nagura, 2014: Indian Ocean dipole interpreted in terms of recharge oscillator theory. *Climate Dynamics*, **42,** 1569-1586, http://dx.doi.org/10.1007/s00382-013-1765-1

Meissner, T., F. Wentz, L. Ricciardulli, K. Hilburn, and J. Scott, 2014: The Aquarius salinity retrieval algorithm recent progress and remaining challenges. *Microwave Radiometry and Remote Sensing of the Environment (MicroRad), 2014 13th Specialist Meeting on*, 49-54, http://dx.doi.org/10.1109/MicroRad.2014.6878906

Melnichenko, O., P. Hacker, N. Maximenko, G. Lagerloef, and J. Potemra, 2014: Spatial Optimal Interpolation of Aquarius Sea Surface Salinity: Algorithms and Implementation in the North Atlantic. *Journal of Atmospheric and Oceanic Technology*, **31,** 1583-1600, http://dx.doi.org/10.1175/JTECH-D-13-00241.1

Menezes, V. V., H. E. Phillips, A. Schiller, N. L. Bindoff, C. M. Domingues, and M. L. Vianna,

2014: South Indian Countercurrent and associated fronts. *Journal of Geophysical Research: Oceans*, **119,** 6763-6791, http://dx.doi.org/10.1002/2014JC010076

Menezes, V. V., M. L. Vianna, and H. E. Phillips, 2014: Aquarius sea surface salinity in the South Indian Ocean: Revealing annual-period planetary waves. *Journal of Geophysical Research: Oceans*, **119,** 3883-3908, http://dx.doi.org/10.1002/2014JC009935

Menkes, C. E., M. Lengaigne, J. Vialard, M. Puy, P. Marchesiello, S. Cravatte, and G. Cambon, 2014: About the role of Westerly Wind Events in the possible development of an El Niño in 2014. *Geophysical Research Letters*, **41,** 6476-6483, http://dx.doi.org/10.1002/2014GL061186

Mensah, V., S. Jan, M.-D. Chiou, T. H. Kuo, and R.-C. Lien, 2014: Evolution of the Kuroshio Tropical Water from the Luzon Strait to the east of Taiwan. *Deep Sea Research Part I: Oceanographic Research Papers*, **86,** 68-81, http://dx.doi.org/10.1016/j.dsr.2014.01.005

Meyers, P. C., L. K. Shay, and J. K. Brewster, 2014: Development and Analysis of the Systematically Merged Atlantic Regional Temperature and Salinity Climatology for Oceanic Heat Content Estimates. *Journal of Atmospheric and Oceanic Technology*, **31,** 131-149, http://dx.doi.org/10.1175/JTECH-D-13-00100.1

Mignot, A., H. Claustre, J. Uitz, A. Poteau, F. D'Ortenzio, and X. Xing, 2014: Understanding the seasonal dynamics of phytoplankton biomass and the deep chlorophyll maximum in oligotrophic environments: A Bio-Argo float investigation. *Global Biogeochemical Cycles*, **28,** 856-876, http://dx.doi.org/10.1002/2013GB004781

Miles, E. R., C. M. Spillman, J. A. Church, and P. C. McIntosh, 2014: Seasonal prediction of global sea level anomalies using an ocean–atmosphere dynamical model. *Climate Dynamics*, **43,** 2131-2145, http://dx.doi.org/10.1007/s00382-013-2039-7

Moon, J.-H. and Y. T. Song, 2014: Seasonal salinity stratifications in the near-surface layer from Aquarius, Argo, and an ocean model: Focusing on the tropical Atlantic/Indian Oceans. *Journal of Geophysical Research: Oceans*, **119,** 6066-6077, http://dx.doi.org/10.1002/2014JC009969

Moore, G. W. K., R. S. Pickart, I. A. Renfrew, and K. Våge, 2014: What causes the location of the air-sea turbulent heat flux maximum over the Labrador Sea? *Geophysical Research Letters*, **41,** 3628-3635, http://dx.doi.org/10.1002/2014GL059940

Mork, K. A., Ø. Skagseth, V. Ivshin, V. Ozhigin, S. L. Hughes, and H. Valdimarsson, 2014: Advective and atmospheric forced changes in heat and fresh water content in the Norwegian Sea, 1951–2010. *Geophysical Research Letters*, **41,** 2014GL061038, http://dx.doi.org/10.1002/2014GL061038

Morrow, R. and E. Kestenare, 2014: Nineteen-year changes in surface salinity in the Southern Ocean south of Australia. *Journal of Marine Systems*, **129,** 472-483, http://dx.doi.org/10.1016/j.jmarsys.2013.09.011

Msadek, R., T. L. Delworth, A. Rosati, W. Anderson, G. Vecchi, Y. S. Chang, K. Dixon, R. G. Gudgel, W. Stern, A. Wittenberg, X. Yang, F. Zeng, R. Zhang, and S. Zhang, 2014: Predicting a Decadal Shift in North Atlantic Climate Variability Using the GFDL Forecast System. *Journal of Climate*, **27,** 6472-6496, http://dx.doi.org/10.1175/JCLI-D-13-00476.1

Msadek, R., G. A. Vecchi, M. Winton, and R. G. Gudgel, 2014: Importance of initial conditions in seasonal predictions of Arctic sea ice extent. *Geophysical Research Letters*, **41,** 5208-5215, http://dx.doi.org/10.1002/2014GL060799

Murase, H., T. Hakamada, K. Matsuoka, S. Nishiwaki, D. Inagake, M. Okazaki, N. Tojo, and T. Kitakado, 2014: Distribution of sei whales (Balaenoptera borealis) in the subarctic–subtropical transition area of the western North Pacific in relation to oceanic fronts. *Deep Sea Research Part II: Topical Studies in Oceanography*, **107,** 22-28, http://dx.doi.org/10.1016/j.dsr2.2014.05.002

Muscarella, P. A., M. J. Carrier, and H. E. Ngodock, 2014: An examination of a multi-scale three-dimensional variational data assimilation scheme in the Kuroshio Extension using the naval coastal ocean model. *Continental Shelf Research*, **73,** 41-48, http://dx.doi.org/10.1016/j.csr.2013.11.009

Na, H., M. Wimbush, J.-H. Park, H. Nakamura, and A. Nishina, 2014: Observations of flow variability through the Kerama Gap between the East China Sea and the Northwestern Pacific. *Journal of Geophysical Research: Oceans*, **119,** 689-703, http://dx.doi.org/10.1002/2013JC008899

Nagano, A., K. Uehara, T. Suga, Y. Kawai, H. Ichikawa, and M. F. Cronin, 2014: Origin of near-surface high-salinity water observed in the Kuroshio Extension region. *Journal of Oceanography*, **70,** 389-403, http://dx.doi.org/10.1007/s10872-014-0237-5

Nagura, M. and M. J. McPhaden, 2014: Zonal momentum budget along the equator in the Indian Ocean from a high-resolution ocean general circulation model. *Journal of Geophysical Research: Oceans*, **119,** 4444-4461, http://dx.doi.org/10.1002/2014JC009895

Narvekar, J. and S. Prasanna Kumar, 2014: Mixed layer variability and chlorophyll a biomass in the Bay of Bengal. *Biogeosciences*, **11,** 3819-3843, http://dx.doi.org/10.5194/bg-11-3819-2014

Nieves, V., J. Wang, and J. K. Willis, 2014: A conceptual model of ocean freshwater flux derived from sea surface salinity. *Geophysical Research Letters*, **41,** 6452-6458, http://dx.doi.org/10.1002/2014GL061365

Nyadjro, E. S. and B. Subrahmanyam, 2014: SMOS Mission Reveals the Salinity Structure of the Indian Ocean Dipole. *Ieee Geoscience and Remote Sensing Letters*, **11,** 1564-1568, https://doi.org/10.1109/LGRS.2014.2301594

Oka, E., K. Uehara, T. Nakano, T. Suga, D. Yanagimoto, S. Kouketsu, S. Itoh, S. Katsura, and L. Talley, 2014: Synoptic observation of Central Mode Water in its formation region in spring 2003. *Journal of Oceanography*, **70,** 521-534, http://dx.doi.org/10.1007/s10872-014-0248-2

O'Kane, T. J., R. J. Matear, M. A. Chamberlain, and P. R. Oke, 2014: ENSO regimes and the late 1970's climate shift: The role of synoptic weather and South Pacific ocean spiciness. *Journal of Computational Physics*, **271,** 19-38, http://dx.doi.org/10.1016/j.jcp.2013.10.058

O'Kane, T. J., R. J. Matear, M. A. Chamberlain, E. C. J. Oliver, and N. J. Holbrook, 2014: Storm tracks in the Southern Hemisphere subtropical oceans. *Journal of Geophysical Research: Oceans*, **119,** 6078-6100, http://dx.doi.org/10.1002/2014JC009990

Okuro, A., M. Kubota, H. Tomita, and T. Hihara, 2014: Inter-comparison of various global sea

surface temperature products. *International Journal of Remote Sensing*, **35,** 5394-5410, http://dx.doi.org/10.1080/01431161.2014.926415

Oliver, E. C. J. and N. J. Holbrook, 2014: Extending our understanding of South Pacific gyre "spin-up": Modeling the East Australian Current in a future climate. *Journal of Geophysical Research: Oceans*, **119,** 2788-2805, http://dx.doi.org/10.1002/2013JC009591

Ollitrault, M. and A. Colin de Verdière, 2014: The Ocean General Circulation near 1000-m Depth. *Journal of Physical Oceanography*, **44,** 384-409, http://dx.doi.org/10.1175/JPO-D-13-030.1

Osafune, S., S. Masuda, and N. Sugiura, 2014: Role of the oceanic bridge in linking the 18.6 year modulation of tidal mixing and long-term SST change in the North Pacific. *Geophysical Research Letters*, **41,** 7284-7290, http://dx.doi.org/10.1002/2014GL061737

Painter, S. C., S. A. Henson, A. Forryan, S. Steigenberger, J. Klar, M. C. Stinchcombe, N. Rogan, A. R. Baker, E. P. Achterberg, and C. M. Moore, 2014: An assessment of the vertical diffusive flux of iron and other nutrients to the surface waters of the subpolar North Atlantic Ocean. *Biogeosciences*, **11,** 2113-2130, http://dx.doi.org/10.5194/bg-11-2113-2014

Pan, X., E. P. Achterberg, R. Sanders, A. J. Poulton, K. I. C. Oliver, and C. Robinson, 2014: Dissolved organic carbon and apparent oxygen utilization in the Atlantic Ocean. *Deep Sea Research Part I: Oceanographic Research Papers*, **85,** 80-87, http://dx.doi.org/10.1016/j.dsr.2013.12.003

Pandey, V. K. and P. Kurtakoti, 2014: Evaluation of GODAS Using RAMA Mooring Observations from the Indian Ocean. *Marine Geodesy*, **37,** 14-31, http://dx.doi.org/10.1080/01490419.2013.859642

Parard, G., J. Boutin, Y. Cuypers, P. Bouruet-Aubertot, and G. Caniaux, 2014: On the physical and biogeochemical processes driving the high frequency variability of CO2 fugacity at 6°S, 10°W: Potential role of the internal waves. *Journal of Geophysical Research: Oceans*, **119,** 8357-8374, http://dx.doi.org/10.1002/2014JC009965

Park, Y.-H., I. Durand, E. Kestenare, G. Rougier, M. Zhou, F. d'Ovidio, C. Cotté, and J.-H. Lee, 2014: Polar Front around the Kerguelen Islands: An up-to-date determination and associated circulation of surface/subsurface waters. *Journal of Geophysical Research: Oceans*, **119,** 6575-6592, http://dx.doi.org/10.1002/2014JC010061

Parker, A., 2014: Present contributions to sea level rise by thermal expansion and ice melting and implication on coastal management. *Ocean & Coastal Management*, **98,** 202-211, http://dx.doi.org/10.1016/j.ocecoaman.2014.05.026

Peña-Molino, B., S. R. Rintoul, and M. R. Mazloff, 2014: Barotropic and baroclinic contributions to along-stream and across-stream transport in the Antarctic Circumpolar Current. *Journal of Geophysical Research: Oceans*, **119,** 8011-8028, http://dx.doi.org/10.1002/2014JC010020

Perez, R. C., V. Hormann, R. Lumpkin, P. Brandt, W. E. Johns, F. Hernandez, C. Schmid, and B. Bourlès, 2014: Mean meridional currents in the central and eastern equatorial Atlantic. *Climate Dynamics*, **43,** 2943-2962, http://dx.doi.org/10.1007/s00382-013-1968-5

Piecuch, C. G. and R. M. Ponte, 2014: Mechanisms of Global-Mean Steric Sea Level Change. *Journal of Climate*, **27,** 824-834, http://dx.doi.org/10.1175/JCLI-D-13-00373.1

Pingree, R. D. and C. Garcia-Soto, 2014: Plankton blooms, ocean circulation and the European slope current: Response to weather and climate in the Bay of Biscay and W English Channel (NE Atlantic). *Deep Sea Research Part II: Topical Studies in Oceanography*, **106,** 5-22, http://dx.doi.org/10.1016/j.dsr2.2014.07.008

Plotkin, D. A., J. Weare, and D. S. Abbot, 2014: Distinguishing meanders of the Kuroshio using machine learning. *Journal of Geophysical Research: Oceans*, **119,** 6593-6604, http://dx.doi.org/10.1002/2014JC010128

Pous, S., P. Lazure, G. André, F. Dumas, I. Halo, and P. Penven, 2014: Circulation around La Réunion and Mauritius islands in the south-western Indian Ocean: A modeling perspective. *Journal of Geophysical Research: Oceans*, **119,** 1957-1976, http://dx.doi.org/10.1002/2013JC009704

Pun, I.-F., I. I. Lin, and D. S. Ko, 2014: New generation of satellite-derived ocean thermal structure for the western north pacific typhoon intensity forecasting. *Progress in Oceanography*, **121,** 109-124, http://dx.doi.org/10.1016/j.pocean.2013.10.004

Qiu, B., S. Chen, P. Klein, H. Sasaki, and Y. Sasai, 2014: Seasonal Mesoscale and Submesoscale Eddy Variability along the North Pacific Subtropical Countercurrent. *Journal of Physical Oceanography*, **44,** 3079-3098, http://dx.doi.org/10.1175/JPO-D-14-0071.1

Qu, T., Y. T. Song, and C. Maes, 2014: Sea surface salinity and barrier layer variability in the equatorial Pacific as seen from Aquarius and Argo. *Journal of Geophysical Research: Oceans*, **119,** 15-29, http://dx.doi.org/10.1002/2013JC009375

Qu, T. and J.-Y. Yu, 2014: ENSO indices from sea surface salinity observed by Aquarius and Argo. *Journal of Oceanography*, **70,** 367-375, http://dx.doi.org/10.1007/s10872-014-0238-4

Racapé, V., N. Metzl, C. Pierre, G. Reverdin, P. D. Quay, and S. R. Olafsdottir, 2014: The seasonal cycle of δ3CDIC in the North Atlantic subpolar gyre. *Biogeosciences*, **11,** 1683-1692, http://dx.doi.org/10.5194/bg-11-1683-2014

Rainville, L., S. R. Jayne, and M. F. Cronin, 2014: Variations of the North Pacific Subtropical Mode Water from Direct Observations. *Journal of Climate*, **27,** 2842-2860, http://dx.doi.org/10.1175/JCLI-D-13-00227.1

Rajapaksha, J. K., 2014: Multispectral Satellite Data on Ocean Surface to Predict its Vertical Temperature Profiles, A Simple Model. *Asian Journal of Geoinformatics*, **14**, http://www.geoinfo.ait.ac.th/ajg/index.php/journal/article/view/199

Ramachandran, S., A. Tandon, and A. Mahadevan, 2014: Enhancement in vertical fluxes at a front by mesoscale-submesoscale coupling. *Journal of Geophysical Research: Oceans*, **119,** 8495-8511, http://dx.doi.org/10.1002/2014JC010211

Rao, R. R., V. Jitendra, M. S. GirishKumar, M. Ravichandran, and S. S. V. S. Ramakrishna, 2014: Interannual variability of the Arabian Sea Warm Pool: observations and governing mechanisms. *Climate Dynamics*, **44,** 2119-2136, http://dx.doi.org/10.1007/s00382-014-2243-0

Ratheesh, S., R. Sharma, and S. Basu, 2014: An EnOI Assimilation of Satellite Data in an Indian Ocean Circulation Model. *IEEE Transactions on Geoscience and Remote*

Sensing, **52,** 4106-4111, http://dx.doi.org/10.1109/TGRS.2013.2279606
Ratheesh, S., R. Sharma, R. Sikhakolli, R. Kumar, and S. Basu, 2014: Assessing Sea Surface Salinity Derived by Aquarius in the Indian Ocean. *Ieee Geoscience and Remote Sensing Letters*, **11,** 719-722, https://doi.org/10.1109/LGRS.2013.2277391
Reagan, J., T. Boyer, J. Antonov, and M. Zweng, 2014: Comparison analysis between Aquarius sea surface salinity and World Ocean Database in situ analyzed sea surface salinity. *Journal of Geophysical Research: Oceans*, **119,** 8122-8140, http://dx.doi.org/10.1002/2014JC009961
Reboreda, R., R. Nolasco, C. G. Castro, X. A. Álvarez-Salgado, N. G. F. Cordeiro, H. Queiroga, and J. Dubert, 2014: Seasonal cycle of plankton production in the Iberian margin based on a high resolution ocean model. *Journal of Marine Systems*, **139,** 396-408, http://dx.doi.org/10.1016/j.jmarsys.2014.08.004
Ren, L., E. Hackert, P. Arkin, and A. J. Busalacchi, 2014: Estimating the global oceanic net freshwater flux from Argo and comparing it with satellite-based freshwater flux products. *Journal of Geophysical Research: Oceans*, **119,** 7869-7881, http://dx.doi.org/10.1002/2013JC009620
Resplandy, L., J. Boutin, and L. Merlivat, 2014: Observed small spatial scale and seasonal variability of the CO2 system in the Southern Ocean. *Biogeosciences*, **11,** 75-90, http://dx.doi.org/10.5194/bg-11-75-2014
Reul, N., S. Fournier, J. Boutin, O. Hernandez, C. Maes, B. Chapron, G. Alory, Y. Quilfen, J. Tenerelli, S. Morisset, Y. Kerr, S. Mecklenburg, and S. Delwart, 2014: Sea Surface Salinity Observations from Space with the SMOS Satellite: A New Means to Monitor the Marine Branch of the Water Cycle. *Surveys in Geophysics*, **35,** 681-722, http://dx.doi.org/10.1007/s10712-013-9244-0
Reul, N., Y. Quilfen, B. Chapron, S. Fournier, V. Kudryavtsev, and R. Sabia, 2014: Multisensor observations of the Amazon-Orinoco river plume interactions with hurricanes. *Journal of Geophysical Research: Oceans*, **119,** 8271-8295, http://dx.doi.org/10.1002/2014JC010107
Reverdin, G., S. Morisset, J. Boutin, N. Martin, M. Sena-Martins, F. Gaillard, P. Blouch, J. Rolland, J. Font, J. Salvador, P. Fernández, and D. Stammer, 2014: Validation of Salinity Data from Surface Drifters. *Journal of Atmospheric and Oceanic Technology*, **31,** 967-983, http://dx.doi.org/10.1175/JTECH-D-13-00158.1
Rio, M. H., S. Mulet, and N. Picot, 2014: Beyond GOCE for the ocean circulation estimate: Synergetic use of altimetry, gravimetry, and in situ data provides new insight into geostrophic and Ekman currents. *Geophysical Research Letters*, **41,** 8918-8925, http://dx.doi.org/10.1002/2014GL061773
Rio, M. H., A. Pascual, P. M. Poulain, M. Menna, B. Barceló, and J. Tintoré, 2014: Computation of a new mean dynamic topography for the Mediterranean Sea from model outputs, altimeter measurements and oceanographic in situ data. *Ocean Science*, **10,** 731-744, http://dx.doi.org/10.5194/os-10-731-2014
Rodgers, K. B., O. Aumont, S. E. Mikaloff Fletcher, Y. Plancherel, L. Bopp, C. de Boyer Montégut, D. Iudicone, R. F. Keeling, G. Madec, and R. Wanninkhof, 2014: Strong sensitivity of Southern Ocean carbon uptake and nutrient cycling to wind stirring. *Biogeosciences*, **11,** 4077-4098, http://dx.doi.org/10.5194/bg-11-4077-2014

Rossby, T., 2014: On the structure and distribution of thin anticyclonic lenses in the southeast Pacific Ocean. *Journal of Marine Research*, **72,** 383-403, http://dx.doi.org/10.1357/002224014815540651

Roullet, G., X. Capet, and G. Maze, 2014: Global interior eddy available potential energy diagnosed from Argo floats. *Geophysical Research Letters*, **41,** 1651-1656, http://dx.doi.org/10.1002/2013GL059004

Sabia, R., M. Klockmann, D. Fernández-Prieto, and C. Donlon, 2014: A first estimation of SMOS-based ocean surface T-S diagrams. *Journal of Geophysical Research: Oceans*, **119,** 7357-7371, http://dx.doi.org/10.1002/2014JC010120

Saenko, O. A., F. Dupont, D. Yang, P. G. Myers, I. Yashayaev, and G. C. Smith, 2014: Role of Resolved and Parameterized Eddies in the Labrador Sea Balance of Heat and Buoyancy. *Journal of Physical Oceanography*, **44,** 3008-3032, http://dx.doi.org/10.1175/JPO-D-14-0041.1

Sandery, P. A. and T. J. O'Kane, 2014: Coupled initialization in an ocean–atmosphere tropical cyclone prediction system. *Quarterly Journal of the Royal Meteorological Society*, **140,** 82-95, https://doi.org/10.1002/qj.2117

Sandery, P. A., P. Sakov, and L. Majewski, 2014: The impact of open boundary forcing on forecasting the East Australian Current using ensemble data assimilation. *Ocean Modelling*, **84,** 1-11, http://dx.doi.org/10.1016/j.ocemod.2014.09.005

Santos-Garcia, A., M. M. Jacob, W. L. Jones, W. E. Asher, Y. Hejazin, H. Ebrahimi, and M. Rabolli, 2014: Investigation of rain effects on Aquarius Sea Surface Salinity measurements. *Journal of Geophysical Research: Oceans*, **119,** 7605-7624, http://dx.doi.org/10.1002/2014JC010137

Sato, O. T. and P. S. Polito, 2014: Observation of South Atlantic subtropical mode waters with Argo profiling float data. *Journal of Geophysical Research: Oceans*, **119,** 2860-2881, http://dx.doi.org/10.1002/2013JC009438

Sayantani, O., C. Gnanaseelan, and J. S. Chowdary, 2014: The role of Arabian Sea in the evolution of Indian Ocean Dipole. *International Journal of Climatology*, **34,** 1845-1859, http://dx.doi.org/10.1002/joc.3805

Schlundt, M., P. Brandt, M. Dengler, R. Hummels, T. Fischer, K. Bumke, G. Krahmann, and J. Karstensen, 2014: Mixed layer heat and salinity budgets during the onset of the 2011 Atlantic cold tongue. *Journal of Geophysical Research: Oceans*, **119,** 7882-7910, http://dx.doi.org/10.1002/2014JC010021

Schmid, C., 2014: Mean vertical and horizontal structure of the subtropical circulation in the South Atlantic from three-dimensional observed velocity fields. *Deep Sea Research Part I: Oceanographic Research Papers*, **91,** 50-71, http://dx.doi.org/10.1016/j.dsr.2014.04.015

Schmidtko, S., K. J. Heywood, A. F. Thompson, and S. Aoki, 2014: Multidecadal warming of Antarctic waters. *Science*, **346,** 1227-1231, http://dx.doi.org/10.1126/science.1256117

Seo, G.-H., Y.-K. Cho, and B.-J. Choi, 2014: Variations of heat transport in the northwestern Pacific marginal seas inferred from high-resolution reanalysis. *Progress in Oceanography*, **121,** 98-108, http://dx.doi.org/10.1016/j.pocean.2013.10.005

Seo, Y., S. Sugimoto, and K. Hanawa, 2014: Long-Term Variations of the Kuroshio Extension

Path in Winter: Meridional Movement and Path State Change. *Journal of Climate*, **27,** 5929-5940, http://dx.doi.org/10.1175/JCLI-D-13-00641.1

Shan, H., Y. Guan, and J. Huang, 2014: Investigating different bio-responses of the upper ocean to Typhoon Haitang using Argo and satellite data. *Chinese Science Bulletin*, **59,** 785-794, http://dx.doi.org/10.1007/s11434-013-0101-9

Shiozaki, T., M. Ijichi, T. Kodama, S. Takeda, and K. Furuya, 2014: Heterotrophic bacteria as major nitrogen fixers in the euphotic zone of the Indian Ocean. *Global Biogeochemical Cycles*, **28,** 1096-1110, http://dx.doi.org/10.1002/2014GB004886

Shiozaki, T., S.-I. Ito, K. Takahashi, H. Saito, T. Nagata, and K. Furuya, 2014: Regional variability of factors controlling the onset timing and magnitude of spring algal blooms in the northwestern North Pacific. *Journal of Geophysical Research: Oceans*, **119,** 253-265, http://dx.doi.org/10.1002/2013JC009187

Shiozaki, T., T. Kodama, and K. Furuya, 2014: Large-scale impact of the island mass effect through nitrogen fixation in the western South Pacific Ocean. *Geophysical Research Letters*, **41,** 2907-2913, http://dx.doi.org/10.1002/2014GL059835

Sil, S., A. Chakraborty, S. K. Basu, and P. C. Pandey, 2014: Response of OceanSat II scatterometer winds in the Bay of Bengal circulation. *International Journal of Remote Sensing*, **35,** 5315-5327, http://dx.doi.org/10.1080/01431161.2014.926423

Skliris, N., R. Marsh, S. Josey, S. Good, C. Liu, and R. Allan, 2014: Salinity changes in the World Ocean since 1950 in relation to changing surface freshwater fluxes. *Climate Dynamics*, **43,** 709-736, http://dx.doi.org/10.1007/s00382-014-2131-7

Souza, J. M. A. C., B. Chapron, and E. Autret, 2014: The surface thermal signature and air–sea coupling over the Agulhas rings propagating in the South Atlantic Ocean interior. *Ocean Science*, **10,** 633-644, http://dx.doi.org/10.5194/os-10-633-2014

Sreenivas, P. and C. Gnanaseelan, 2014: Impact of Oceanic Processes on the Life Cycle of Severe Cyclonic Storm "Jal". *Geoscience and Remote Sensing Letters, IEEE*, **11,** 519-523, http://dx.doi.org/10.1109/LGRS.2013.2271512

Stanev, E. V., Y. He, J. Staneva, and E. Yakushev, 2014: Mixing in the Black Sea detected from the temporal and spatial variability of oxygen and sulfide - Argo float observations and numerical modelling. *Biogeosciences*, **11,** 5707-5732, http://dx.doi.org/10.5194/bg-11-5707-2014

Storto, A., S. Masina, and S. Dobricic, 2014: Estimation and Impact of Nonuniform Horizontal Correlation Length Scales for Global Ocean Physical Analyses. *Journal of Atmospheric and Oceanic Technology*, **31,** 2330-2349, http://dx.doi.org/10.1175/JTECH-D-14-00042.1

Stramma, L., R. A. Weller, R. Czeschel, and S. Bigorre, 2014: Eddies and an extreme water mass anomaly observed in the eastern south Pacific at the Stratus mooring. *Journal of Geophysical Research: Oceans*, **119,** 1068-1083, http://dx.doi.org/10.1002/2013JC009470

Sugimoto, S., 2014: Influence of SST Anomalies on Winter Turbulent Heat Fluxes in the Eastern Kuroshio–Oyashio Confluence Region. *Journal of Climate*, **27,** 9349-9358, http://dx.doi.org/10.1175/JCLI-D-14-00195.1

Sugimoto, S. and K. Hanawa, 2014: Influence of Kuroshio Path Variation South of Japan on Formation of Subtropical Mode Water. *Journal of Physical Oceanography*, **44,**

1065-1077, http://dx.doi.org/10.1175/JPO-D-13-0114.1
Sugimoto, S., N. Kobayashi, and K. Hanawa, 2014: Quasi-Decadal Variation in Intensity of the Western Part of the Winter Subarctic SST Front in the Western North Pacific: The Influence of Kuroshio Extension Path State. *Journal of Physical Oceanography*, **44,** 2753-2762, http://dx.doi.org/10.1175/JPO-D-13-0265.1
Sun, L., Y.-X. Li, Y.-J. Yang, Q. Wu, X.-T. Chen, Q.-Y. Li, Y.-B. Li, and T. Xian, 2014: Effects of super typhoons on cyclonic ocean eddies in the western North Pacific: A satellite data-based evaluation between 2000 and 2008. *Journal of Geophysical Research: Oceans*, **119,** 5585-5598, http://dx.doi.org/10.1002/2013JC009575
Sutton, P. J. H. and M. Bowen, 2014: Flows in the Tasman Front south of Norfolk Island. *Journal of Geophysical Research: Oceans*, **119,** 3041-3053, http://dx.doi.org/10.1002/2013JC009543
Tagliabue, A., J.-B. Sallee, A. R. Bowie, M. Levy, S. Swart, and P. W. Boyd, 2014: Surface-water iron supplies in the Southern Ocean sustained by deep winter mixing. *Nature Geoscience*, **7,** 314-320, http://dx.doi.org/10.1038/ngeo2101
Talandier, C., J. Deshayes, A. M. Treguier, X. Capet, R. Benshila, L. Debreu, R. Dussin, J. M. Molines, and G. Madec, 2014: Improvements of simulated Western North Atlantic current system and impacts on the AMOC. *Ocean Modelling*, **76,** 1-19, http://dx.doi.org/10.1016/j.ocemod.2013.12.007
Tang, W., S. H. Yueh, A. G. Fore, and A. Hayashi, 2014: Validation of Aquarius sea surface salinity with in situ measurements from Argo floats and moored buoys. *Journal of Geophysical Research: Oceans*, **119,** 6171-6189, http://dx.doi.org/10.1002/2014JC010101
Tang, W., S. H. Yueh, A. G. Fore, A. Hayashi, T. Lee, and G. Lagerloef, 2014: Uncertainty of Aquarius sea surface salinity retrieved under rainy conditions and its implication on the water cycle study. *Journal of Geophysical Research: Oceans*, **119,** 4821-4839, http://dx.doi.org/10.1002/2014JC009834
Tang, Y., Z. Deng, K. K. Manoj, and D. Chen, 2014: A practical scheme of the sigma-point Kalman filter for high-dimensional systems. *Journal of Advances in Modeling Earth Systems*, **6,** 21-37, http://dx.doi.org/10.1002/2013MS000255
Tarakanov, R. Y., 2014: Jets of the Antarctic Circumpolar Current in the central part of the Drake Passage based on the survey data in October–November of 2008. *Oceanology*, **54,** 1-7, http://dx.doi.org/10.1134/S000143701401010X
Tarakanov, R. Y. and A. M. Gritsenko, 2014: The frontal and jet structure south of Africa based on the data of the SR02 section in December of 2009. *Oceanology*, **54,** 401-413, http://dx.doi.org/10.1134/S0001437014030138
Thomas, M. D., A. M. De Boer, H. L. Johnson, and D. P. Stevens, 2014: Spatial and Temporal Scales of Sverdrup Balance. *Journal of Physical Oceanography*, **44,** 2644-2660, http://dx.doi.org/10.1175/JPO-D-13-0192.1
Tozuka, T. and M. F. Cronin, 2014: Role of mixed layer depth in surface frontogenesis: The Agulhas Return Current front. *Geophysical Research Letters*, **41,** 2447-2453, http://dx.doi.org/10.1002/2014GL059624
Trani, M., P. Falco, E. Zambianchi, and J. B. Sallée, 2014: Aspects of the Antarctic Circumpolar Current dynamics investigated with drifter data. *Progress in Oceanography*, **125,**

1-15, http://dx.doi.org/10.1016/j.pocean.2014.05.001
Tréguer, P., E. Goberville, N. Barrier, S. L'Helguen, P. Morin, Y. Bozec, P. Rimmelin-Maury, M. Czamanski, E. Grossteffan, T. Cariou, M. Répécaud, and L. Quéméner, 2014: Large and local-scale influences on physical and chemical characteristics of coastal waters of Western Europe during winter. *Journal of Marine Systems*, **139,** 79-90, http://dx.doi.org/10.1016/j.jmarsys.2014.05.019
Trenberth, K. E., J. T. Fasullo, and M. A. Balmaseda, 2014: Earth's Energy Imbalance. *Journal of Climate*, **27,** 3129-3144, http://dx.doi.org/10.1175/JCLI-D-13-00294.1
Umbert, M., N. Hoareau, A. Turiel, and J. Ballabrera-Poy, 2014: New blending algorithm to synergize ocean variables: The case of SMOS sea surface salinity maps. *Remote Sensing of Environment*, **146,** 172-187, http://dx.doi.org/10.1016/j.rse.2013.09.018
Valdivieso, M., K. Haines, H. Zuo, and D. Lea, 2014: Freshwater and heat transports from global ocean synthesis. *Journal of Geophysical Research: Oceans*, **119,** 394-409, http://dx.doi.org/10.1002/2013JC009357
Velaoras, D., G. Krokos, K. Nittis, and A. Theocharis, 2014: Dense intermediate water outflow from the Cretan Sea: A salinity driven, recurrent phenomenon, connected to thermohaline circulation changes. *Journal of Geophysical Research: Oceans*, **119,** 4797-4820, http://dx.doi.org/10.1002/2014JC009937
Veneziani, M., A. Griffa, Z. Garraffo, and J. A. Mensa, 2014: Barrier Layers in the Tropical South Atlantic: Mean Dynamics and Submesoscale Effects*. *Journal of Physical Oceanography*, **44,** 265-288, http://dx.doi.org/10.1175/JPO-D-13-064.1
Vergely, J.-L., P. Waldteufel, J. Boutin, X. Yin, P. Spurgeon, and S. Delwart, 2014: New total electron content retrieval improves SMOS sea surface salinity. *Journal of Geophysical Research: Oceans*, **119,** 7295-7307, http://dx.doi.org/10.1002/2014JC010150
Vernieres, G., R. Kovach, C. Keppenne, S. Akella, L. Brucker, and E. Dinnat, 2014: The impact of the assimilation of Aquarius sea surface salinity data in the GEOS ocean data assimilation system. *Journal of Geophysical Research: Oceans*, **119,** 6974-6987, http://dx.doi.org/10.1002/2014JC010006
Vinogradova, N. T., R. M. Ponte, I. Fukumori, and O. Wang, 2014: Estimating satellite salinity errors for assimilation of Aquarius and SMOS data into climate models. *Journal of Geophysical Research: Oceans*, **119,** 4732-4744, http://dx.doi.org/10.1002/2014JC009906
von Schuckmann, K., J. B. Sallée, D. Chambers, P. Y. Le Traon, C. Cabanes, F. Gaillard, S. Speich, and M. Hamon, 2014: Consistency of the current global ocean observing systems from an Argo perspective. *Ocean Science*, **10,** 547-557, http://dx.doi.org/10.5194/os-10-547-2014
Wada, A., T. Uehara, and S. Ishizaki, 2014: Typhoon-induced sea surface cooling during the 2011 and 2012 typhoon seasons: observational evidence and numerical investigations of the sea surface cooling effect using typhoon simulations. *Progress in Earth and Planetary Science*, **1,** 11, http://dx.doi.org/10.1186/2197-4284-1-11
Wagawa, T., S.-I. Ito, Y. Shimizu, S. Kakehi, and D. Ambe, 2014: Currents Associated with the Quasi-Stationary Jet Separated from the Kuroshio Extension. *Journal of Physical Oceanography*, **44,** 1636-1653, http://dx.doi.org/10.1175/JPO-D-12-0192.1
Wahlberg, M., H. Westerberg, K. Aarestrup, E. Feunteun, P. Gargan, and D. Righton, 2014:

Evidence of marine mammal predation of the European eel (Anguilla anguilla L.) on its marine migration. *Deep Sea Research Part I: Oceanographic Research Papers*, **86,** 32-38, http://dx.doi.org/10.1016/j.dsr.2014.01.003

Wang, J., M. R. Mazloff, and S. T. Gille, 2014: Pathways of the Agulhas waters poleward of 29°S. *Journal of Geophysical Research: Oceans*, **119,** 4234-4250, http://dx.doi.org/10.1002/2014JC010049

Wang, X., C. Wang, G. Han, W. Li, and X. Wu, 2014: Effects of tropical cyclones on large-scale circulation and ocean heat transport in the South China Sea. *Climate Dynamics*, **43,** 3351-3366, http://dx.doi.org/10.1007/s00382-014-2109-5

Wang, Z., S. F. DiMarco, S. Ingle, L. Belabbassi, and L. H. Al-Kharusi, 2014: Seasonal and annual variability of vertically migrating scattering layers in the northern Arabian Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **90,** 152-165, http://dx.doi.org/10.1016/j.dsr.2014.05.008

Wang, Z., X. Tong, and H. Lu, 2014: New sea surface salinity retrieval methods based on SMOS data. *International Journal of Remote Sensing*, **35,** 4371-4382, http://dx.doi.org/10.1080/01431161.2014.916448

Waterhouse, A. F., J. A. MacKinnon, J. D. Nash, M. H. Alford, E. Kunze, H. L. Simmons, K. L. Polzin, L. C. St. Laurent, O. M. Sun, R. Pinkel, L. D. Talley, C. B. Whalen, T. N. Huussen, G. S. Carter, I. Fer, S. Waterman, A. C. Naveira Garabato, T. B. Sanford, and C. M. Lee, 2014: Global Patterns of Diapycnal Mixing from Measurements of the Turbulent Dissipation Rate. *Journal of Physical Oceanography*, **44,** 1854-1872, http://dx.doi.org/10.1175/JPO-D-13-0104.1

Webber, B. G. M., A. J. Matthews, K. J. Heywood, J. Kaiser, and S. Schmidtko, 2014: Seaglider observations of equatorial Indian Ocean Rossby waves associated with the Madden-Julian Oscillation. *Journal of Geophysical Research: Oceans*, **119,** 3714-3731, http://dx.doi.org/10.1002/2013JC009657

Weeding, B. and T. W. Trull, 2014: Hourly oxygen and total gas tension measurements at the Southern Ocean Time Series site reveal winter ventilation and spring net community production. *Journal of Geophysical Research: Oceans*, **119,** 348-358, http://dx.doi.org/10.1002/2013JC009302

Wei, M., C. Rowley, P. Martin, C. N. Barron, and G. Jacobs, 2014: The US Navy's RELO ensemble prediction system and its performance in the Gulf of Mexico. *Quarterly Journal of the Royal Meteorological Society*, **140,** 1129-1149, http://dx.doi.org/10.1002/qj.2199

Wen, C., A. Kumar, Y. Xue, and M. J. McPhaden, 2014: Changes in Tropical Pacific Thermocline Depth and Their Relationship to ENSO after 1999. *Journal of Climate*, **27,** 7230-7249, http://dx.doi.org/10.1175/JCLI-D-13-00518.1

White, R. H. and R. Toumi, 2014: River flow and ocean temperatures: The Congo River. *Journal of Geophysical Research: Oceans*, **119,** 2501-2517, http://dx.doi.org/10.1002/2014JC009836

Williams, R. G., V. Roussenov, D. Smith, and M. S. Lozier, 2014: Decadal Evolution of Ocean Thermal Anomalies in the North Atlantic: The Effects of Ekman, Overturning, and Horizontal Transport. *Journal of Climate*, **27,** 698-719, http://dx.doi.org/10.1175/JCLI-D-12-00234.1

Wu, Q., J. Zhao, J. Zhang, W. Shi, and C. Liu, 2014: The bimodality of the Luzon Strait deep water. *Acta Oceanologica Sinica*, **33,** 17-27, http://dx.doi.org/10.1007/s13131-014-0475-9

Wu, X., Q. Zhang, and Z. Liu, 2014: Annual and interannual variations of the Western Pacific Warm Pool volume and sources of warm water revealed by Argo data. *Science China Earth Sciences*, **57,** 2269-2280, http://dx.doi.org/10.1007/s11430-014-4893-5

Wunsch, C. and P. Heimbach, 2014: Bidecadal Thermal Changes in the Abyssal Ocean. *Journal of Physical Oceanography*, **44,** 2013-2030, http://dx.doi.org/10.1175/JPO-D-13-096.1

Xie, P., T. Boyer, E. Bayler, Y. Xue, D. Byrne, J. Reagan, R. Locarnini, F. Sun, R. Joyce, and A. Kumar, 2014: An in situ-satellite blended analysis of global sea surface salinity. *Journal of Geophysical Research: Oceans*, **119,** 6140-6160, http://dx.doi.org/10.1002/2014JC010046

Xing, X., H. Claustre, J. Uitz, A. Mignot, A. Poteau, and H. Wang, 2014: Seasonal variations of bio-optical properties and their interrelationships observed by Bio-Argo floats in the subpolar North Atlantic. *Journal of Geophysical Research: Oceans*, **119,** 7372-7388, http://dx.doi.org/10.1002/2014JC010189

Xing, X., H. Claustre, H. Wang, A. Poteau, and F. D'Ortenzio, 2014: Seasonal dynamics in colored dissolved organic matter in the Mediterranean Sea: Patterns and drivers. *Deep Sea Research Part I: Oceanographic Research Papers*, **83,** 93-101, http://dx.doi.org/10.1016/j.dsr.2013.09.008

Xu, F.-H. and L.-Y. Oey, 2014: State analysis using the Local Ensemble Transform Kalman Filter (LETKF) and the three-layer circulation structure of the Luzon Strait and the South China Sea. *Ocean Dynamics*, **64,** 905-923, http://dx.doi.org/10.1007/s10236-014-0720-y

Xu, L., S.-P. Xie, J. L. McClean, Q. Liu, and H. Sasaki, 2014: Mesoscale eddy effects on the subduction of North Pacific mode waters. *Journal of Geophysical Research: Oceans*, **119,** 4867-4886, http://dx.doi.org/10.1002/2014JC009861

Xu, X., E. P. Chassignet, W. E. Johns, W. J. Schmitz, and E. J. Metzger, 2014: Intraseasonal to interannual variability of the Atlantic meridional overturning circulation from eddy-resolving simulations and observations. *Journal of Geophysical Research: Oceans*, **119,** 5140-5159, http://dx.doi.org/10.1002/2014JC009994

Yang, X.-Y. and Z. He, 2014: Decadal change of Antarctic Intermediate Water in the region of Brazil and Malvinas confluence. *Deep Sea Research Part I: Oceanographic Research Papers*, **88,** 1-7, http://dx.doi.org/10.1016/j.dsr.2014.02.007

Yasunaka, S., Y. Nojiri, S.-i. Nakaoka, T. Ono, F. A. Whitney, and M. Telszewski, 2014: Mapping of sea surface nutrients in the North Pacific: Basin-wide distribution and seasonal to interannual variability. *Journal of Geophysical Research: Oceans*, **119,** 7756-7771, http://dx.doi.org/10.1002/2014JC010318

Yin, X., J. Boutin, N. Martin, P. Spurgeon, J.-L. Vergely, and F. Gaillard, 2014: Errors in SMOS Sea Surface Salinity and their dependency on a priori wind speed. *Remote Sensing of Environment*, **146,** 159-171, http://dx.doi.org/10.1016/j.rse.2013.09.008

Yin, X., J. Boutin, G. Reverdin, T. Lee, S. Arnault, and N. Martin, 2014: SMOSSea Surface Salinity signals of tropical instability waves. *Journal of Geophysical Research: Oceans*,

119, 7811-7826, http://dx.doi.org/10.1002/2014JC009960
Yu, L., 2014: Coherent evidence from Aquarius and Argo for the existence of a shallow low-salinity convergence zone beneath the Pacific ITCZ. *Journal of Geophysical Research: Oceans*, **119,** 7625-7644, http://dx.doi.org/10.1002/2014JC010030
Yuan, D., Z. Zhang, P. C. Chu, and W. K. Dewar, 2014: Geostrophic Circulation in the Tropical North Pacific Ocean Based on Argo Profiles. *Journal of Physical Oceanography*, **44,** 558-575, http://dx.doi.org/10.1175/JPO-D-12-0230.1
Yuan, Y., G. Liao, C. Yang, Z. Liu, H. Chen, and Z.-G. Wang, 2014: Summer Kuroshio Intrusion through the Luzon Strait confirmed from observations and a diagnostic model in summer 2009. *Progress in Oceanography*, **121,** 44-59, http://dx.doi.org/10.1016/j.pocean.2013.10.003
Yuan, Y., Y.-H. Tseng, C. Yang, G. Liao, C. H. Chow, Z. Liu, X.-H. Zhu, and H. Chen, 2014: Variation in the Kuroshio intrusion: Modeling and interpretation of observations collected around the Luzon Strait from July 2009 to March 2011. *Journal of Geophysical Research: Oceans*, **119,** 3447-3463, http://dx.doi.org/10.1002/2013JC009776
Yueh, S., W. Tang, A. Fore, A. Hayashi, Y. T. Song, and G. Lagerloef, 2014: Aquarius geophysical model function and combined active passive algorithm for ocean surface salinity and wind retrieval. *Journal of Geophysical Research: Oceans*, **119,** 5360-5379, http://dx.doi.org/10.1002/2014JC009939
Zambon, J. B., R. He, and J. C. Warner, 2014: Investigation of hurricane Ivan using the coupled ocean–atmosphere–wave–sediment transport (COAWST) model. *Ocean Dynamics*, **64,** 1535-1554, http://dx.doi.org/10.1007/s10236-014-0777-7
Zeng, L., W. Timothy Liu, H. Xue, P. Xiu, and D. Wang, 2014: Freshening in the South China Sea during 2012 revealed by Aquarius and in situ data. *Journal of Geophysical Research: Oceans*, **119,** 8296-8314, http://dx.doi.org/10.1002/2014JC010108
Zeng, X., S. Peng, Z. Li, Y. Qi, and R. Chen, 2014: A reanalysis dataset of the South China Sea. *Scientific Data*, **1**, http://dx.doi.org/10.1038/sdata.2014.52
Zhai, F., Q. Wang, F. Wang, and D. Hu, 2014: Variation of the North Equatorial Current, Mindanao Current, and Kuroshio Current in a high-resolution data assimilation during 2008–2012. *Advances in Atmospheric Sciences*, **31,** 1445-1459, http://dx.doi.org/10.1007/s00376-014-3241-1
Zhang, D., M. J. McPhaden, and T. Lee, 2014: Observed interannual variability of zonal currents in the equatorial Indian Ocean thermocline and their relation to Indian Ocean Dipole. *Geophysical Research Letters*, **41,** 7933-7941, http://dx.doi.org/10.1002/2014GL061449
Zhang, L., D. Hu, S. Hu, F. Wang, F. Wang, and D. Yuan, 2014: Mindanao Current/Undercurrent measured by a subsurface mooring. *Journal of Geophysical Research: Oceans*, **119,** 3617-3628, http://dx.doi.org/10.1002/2013JC009693
Zhang, L. and T. Qu, 2014: Low-frequency variability of South Pacific Tropical Water from Argo. *Geophysical Research Letters*, **41,** 2441-2446, http://dx.doi.org/10.1002/2014GL059490
Zhang, S., Y. S. Chang, X. Yang, and A. Rosati, 2014: Balanced and Coherent Climate Estimation by Combining Data with a Biased Coupled Model. *Journal of Climate*, **27,**

1302-1314, http://dx.doi.org/10.1175/JCLI-D-13-00260.1
Zhang, W. and X.-H. Yan, 2014: Lateral Heat Exchange after the Labrador Sea Deep Convection in 2008. *Journal of Physical Oceanography*, **44,** 2991-3007, http://dx.doi.org/10.1175/JPO-D-13-0198.1
Zhang, Z., W. Wang, and B. Qiu, 2014: Oceanic mass transport by mesoscale eddies. *Science*, **345,** 322-324, http://dx.doi.org/10.1126/science.1252418
Zhang, Z., Y. Zhong, J. Tian, Q. Yang, and W. Zhao, 2014: Estimation of eddy heat transport in the global ocean from Argo data. *Acta Oceanologica Sinica*, **33,** 42-47, http://dx.doi.org/10.1007/s13131-014-0421-x
Zhao, M., H. Hendon, O. Alves, and Y. Yin, 2014: Impact of improved assimilation of temperature and salinity for coupled model seasonal forecasts. *Climate Dynamics*, **42,** 2565-2583, http://dx.doi.org/10.1007/s00382-014-2081-0
Zhao, Y., J. Zhu, M. Lin, C. Chen, X. Huang, H. Wang, Y. Zhang, and H. Peng, 2014: Assessment of the initial sea surface temperature product of the scanning microwave radiometer aboard on HY-2 satellite. *Acta Oceanologica Sinica*, **33,** 109-113, http://dx.doi.org/10.1007/s13131-014-0402-0
Zheng, F., R.-H. Zhang, and J. Zhu, 2014: Effects of interannual salinity variability on the barrier layer in the western-central equatorial Pacific: A diagnostic analysis from Argo. *Advances in Atmospheric Sciences*, **31,** 532-542, http://dx.doi.org/10.1007/s00376-013-3061-8
Zheng, Z.-W. and Q. Zheng, 2014: Variability of island-induced ocean vortex trains, in the Kuroshio region southeast of Taiwan Island. *Continental Shelf Research*, **81,** 1-6, http://dx.doi.org/10.1016/j.csr.2014.02.010
Zheng, Z.-W., Q. Zheng, C.-Y. Lee, and G. Gopalakrishnan, 2014: Transient modulation of Kuroshio upper layer flow by directly impinging typhoon Morakot in east of Taiwan in 2009. *Journal of Geophysical Research: Oceans*, **119,** 4462-4473, http://dx.doi.org/10.1002/2014JC010090
Zhu, J., B. Huang, R.-H. Zhang, Z.-Z. Hu, A. Kumar, M. A. Balmaseda, L. Marx, and J. L. Kinter Iii, 2014: Salinity anomaly as a trigger for ENSO events. *Scientific Reports*, **4**, http://dx.doi.org/10.1038/srep06821
Zilberman, N. V., D. H. Roemmich, and S. T. Gille, 2014: Meridional volume transport in the South Pacific: Mean and SAM-related variability. *Journal of Geophysical Research: Oceans*, **119,** 2658-2678, http://dx.doi.org/10.1002/2013JC009688

2013 (302)

Abe, H., K. Hanawa, and N. Ebuchi, 2013: Interannual variations in the Hawaiian Lee Countercurrent. *Journal of Oceanography*, **69,** 191-202, http://dx.doi.org/10.1007/s10872-012-0166-0
Abraham, J. P., M. Baringer, N. L. Bindoff, T. Boyer, L. J. Cheng, J. A. Church, J. L. Conroy, C. M. Domingues, J. T. Fasullo, J. Gilson, G. Goni, S. A. Good, J. M. Gorman, V. Gouretski, M. Ishii, G. C. Johnson, S. Kizu, J. M. Lyman, A. M. Macdonald, W. J. Minkowycz, S. E. Moffitt, M. D. Palmer, A. R. Piola, F. Reseghetti, K. Schuckmann, K. E. Trenberth, I. Velicogna, and J. K. Willis, 2013: A review of global ocean temperature observations:

Implications for ocean heat content estimates and climate change. *Reviews of Geophysics*, **51,** 450-483, http://dx.doi.org/10.1002/rog.20022

Amorim, F. N., M. Cirano, M. Marta-Almeida, J. F. Middleton, and E. J. D. Campos, 2013: The seasonal circulation of the Eastern Brazilian shelf between 10°S and 16°S: A modelling approach. *Continental Shelf Research*, **65,** 121-140, http://dx.doi.org/10.1016/j.csr.2013.06.008

Anav, A., P. Friedlingstein, M. Kidston, L. Bopp, P. Ciais, P. Cox, C. Jones, M. Jung, R. Myneni, and Z. Zhu, 2013: Evaluating the Land and Ocean Components of the Global Carbon Cycle in the CMIP5 Earth System Models. *Journal of Climate*, **26,** 6801-6843, http://dx.doi.org/10.1175/JCLI-D-12-00417.1

Aoyama, M., M. Uematsu, D. Tsumune, and Y. Hamajima, 2013: Surface pathway of radioactive plume of TEPCO Fukushima NPP1 released 134Cs and 137Cs. *Biogeosciences*, **10,** 3067-3078, https://doi.org/10.5194/bg-10-3067-2013

Atkinson, C. P., N. A. Rayner, J. Roberts-Jones, and R. O. Smith, 2013: Assessing the quality of sea surface temperature observations from drifting buoys and ships on a platform-by-platform basis. *Journal of Geophysical Research: Oceans*, **118,** 3507-3529, http://dx.doi.org/10.1002/jgrc.20257

Azaneu, M., R. Kerr, M. M. Mata, and C. A. E. Garcia, 2013: Trends in the deep Southern Ocean (1958–2010): Implications for Antarctic Bottom Water properties and volume export. *Journal of Geophysical Research: Oceans*, **118,** 4213-4227, http://dx.doi.org/10.1002/jgrc.20303

Badin, G., R. G. Williams, Z. Jing, and L. Wu, 2013: Water Mass Transformations in the Southern Ocean Diagnosed from Observations: Contrasting Effects of Air–Sea Fluxes and Diapycnal Mixing. *Journal of Physical Oceanography*, **43,** 1472-1484, http://dx.doi.org/10.1175/JPO-D-12-0216.1

Ballent, A., S. Pando, A. Purser, M. F. Juliano, and L. Thomsen, 2013: Modelled transport of benthic marine microplastic pollution in the Nazaré Canyon. *Biogeosciences*, **10,** 7957-7970, http://dx.doi.org/10.5194/bg-10-7957-2013

Balmaseda, M., K. Mogensen, and A. T. Weaver, 2013: Evaluation of the ECMWF ocean reanalysis system ORAS4. *Quarterly Journal of the Royal Meteorological Society*, **139,** 1132-1161, http://dx.doi.org/10.1002/qj.2063

Balmaseda, M., K. E. Trenberth, and E. Källén, 2013: Distinctive climate signals in reanalysis of global ocean heat content. *Geophysical Research Letters*, **40,** 1754-1759, http://dx.doi.org/10.1002/grl.50382

Bashmachnikov, I., D. Boutov, and J. Dias, 2013: Manifestation of two meddies in altimetry and sea-surface temperature. *Ocean Science*, **9,** 249-259, http://dx.doi.org/10.5194/os-9-249-2013

Behnisch, M., A. Macrander, O. Boebel, J. O. Wolff, and J. Schröter, 2013: Barotropic and deep-referenced baroclinic SSH variability derived from Pressure Inverted Echo Sounders (PIES) south of Africa. *Journal of Geophysical Research: Oceans*, **118,** 3046-3058, http://dx.doi.org/10.1002/jgrc.20195

Belmadani, A., N. A. Maximenko, J. P. McCreary, R. Furue, O. V. Melnichenko, N. Schneider, and E. D. Lorenzo, 2013: Linear Wind-Forced Beta Plumes with Application to the Hawaiian Lee Countercurrent*. *Journal of Physical Oceanography*, **43,** 2071-2094,

http://dx.doi.org/10.1175/JPO-D-12-0194.1
Bensi, M., V. Cardin, A. Rubino, G. Notarstefano, and P. M. Poulain, 2013: Effects of winter convection on the deep layer of the Southern Adriatic Sea in 2012. *Journal of Geophysical Research: Oceans*, **118,** 6064-6075, http://dx.doi.org/10.1002/2013JC009432
Bessières, L., M. H. Rio, C. Dufau, C. Boone, and M. I. Pujol, 2013: Ocean state indicators from MyOcean altimeter products. *Ocean Science*, **9,** 545-560, http://dx.doi.org/10.5194/os-9-545-2013
Bhaskar, T. V. S., E. P. R. Rao, V. Reddem, and R. Devender, 2013: *A note on three way quality control of Argo temperature and salinity profiles - A semi-automated approach at INCOIS*. Vol. 5, 1510-1514 pp.
Bhaskar, T. V. S. U., C. Jayaram, and E. P. Rama Rao, 2013: Comparison between Argo-derived sea surface temperature and microwave sea surface temperature in tropical Indian Ocean. *Remote Sensing Letters*, **4,** 141-150, http://dx.doi.org/10.1080/2150704X.2012.711955
Bhaskar, T. V. S. U., R. V. Seshu, E. P. R. Rao, and R. Devender, 2013: GUI based interactive system for Visual Quality Control of Argo data. *Indian Journal of Geo-Marine Sciences*, **42,** 580-586, http://nopr.niscair.res.in/handle/123456789/24791
Billheimer, S. and L. D. Talley, 2013: Near cessation of Eighteen Degree Water renewal in the western North Atlantic in the warm winter of 2011–2012. *Journal of Geophysical Research: Oceans*, **118,** 6838-6853, http://dx.doi.org/10.1002/2013JC009024
Bogucki, D. J. and G. Spiers, 2013: What percentage of the oceanic mixed layer is accessible to marine lidar? Global and the Gulf of Mexico prospective. *Optics Express*, **21,** 23997-24014, http://dx.doi.org/10.1364/OE.21.023997
Bostock, H. C., P. J. Sutton, M. J. M. Williams, and B. N. Opdyke, 2013: Reviewing the circulation and mixing of Antarctic Intermediate Water in the South Pacific using evidence from geochemical tracers and Argo float trajectories. *Deep Sea Research Part I: Oceanographic Research Papers*, **73,** 84-98, http://dx.doi.org/10.1016/j.dsr.2012.11.007
Boutin, J., N. Martin, G. Reverdin, X. Yin, and F. Gaillard, 2013: Sea surface freshening inferred from SMOS and ARGO salinity: impact of rain. *Ocean Science*, **9,** 183-192, http://dx.doi.org/10.5194/os-9-183-2013
Boyer, T., S. Levitus, J. antonov, J. R. Reagan, C. Schmid, and R. A. Locarnini, 2013: Sub-surface salinity. State of the Climate in 2012, Global Oceans. *Bulletin of the American Meteorological Society*, **94**, http://dx.doi.org/10.1175/2013BAMSStateoftheClimate.1
Brankart, J.-M., 2013: Impact of uncertainties in the horizontal density gradient upon low resolution global ocean modelling. *Ocean Modelling*, **66,** 64-76, http://dx.doi.org/10.1016/j.ocemod.2013.02.004
Brassington, G. B., 2013: Multicycle ensemble forecasting of sea surface temperature. *Geophysical Research Letters*, **40,** 2013GL057752, http://dx.doi.org/10.1002/2013GL057752
Buckingham, C. E. and P. C. Cornillon, 2013: The contribution of eddies to striations in absolute dynamic topography. *Journal of Geophysical Research: Oceans*, **118,**

448-461, http://dx.doi.org/10.1029/2012JC008231
Cabanes, C., A. Grouazel, K. von Schuckmann, M. Hamon, V. Turpin, C. Coatanoan, F. Paris, S. Guinehut, C. Boone, N. Ferry, C. de Boyer Montégut, T. Carval, G. Reverdin, S. Pouliquen, and P. Y. Le Traon, 2013: The CORA dataset: validation and diagnostics of in-situ ocean temperature and salinity measurements. *Ocean Science*, **9,** 1-18, http://dx.doi.org/10.5194/os-9-1-2013
Cai, W. and Y. Qiu, 2013: An Observation-Based Assessment of Nonlinear Feedback Processes Associated with the Indian Ocean Dipole. *Journal of Climate*, **26,** 2880-2890, http://dx.doi.org/10.1175/JCLI-D-12-00483.1
Callies, J. and R. Ferrari, 2013: Interpreting Energy and Tracer Spectra of Upper-Ocean Turbulence in the Submesoscale Range (1–200 km). *Journal of Physical Oceanography*, **43,** 2456-2474, http://dx.doi.org/10.1175/JPO-D-13-063.1
Carton, X., B. Le Cann, A. Serpette, and J. Dubert, 2013: Interactions of surface and deep anticyclonic eddies in the Bay of Biscay. *Journal of Marine Systems*, **109–110, Supplement,** S45-S59, http://dx.doi.org/10.1016/j.jmarsys.2011.09.014
Cerovečki, I., L. D. Talley, M. R. Mazloff, and G. Maze, 2013: Subantarctic Mode Water Formation, Destruction, and Export in the Eddy-Permitting Southern Ocean State Estimate. *Journal of Physical Oceanography*, **43,** 1485-1511, http://dx.doi.org/10.1175/JPO-D-12-0121.1
Chang, Y.-S., S. Zhang, A. Rosati, T. L. Delworth, and W. F. Stern, 2013: An assessment of oceanic variability for 1960–2010 from the GFDL ensemble coupled data assimilation. *Climate Dynamics*, **40,** 775-803, http://dx.doi.org/10.1007/s00382-012-1412-2
Chang, Y.-T., L. Du, S.-W. Zhang, and P.-F. Huang, 2013: Sea level variations in the tropical Pacific Ocean during two types of recent El Niño events. *Global and Planetary Change*, **108,** 119-127, http://dx.doi.org/10.1016/j.gloplacha.2013.06.001
Chen, G., H. Xue, D. Wang, and Q. Xie, 2013: Observed near-inertial kinetic energy in the northwestern South China Sea. *Journal of Geophysical Research: Oceans*, **118,** 4965-4977, http://dx.doi.org/10.1002/jgrc.20371
Chen, J. L., C. R. Wilson, and B. D. Tapley, 2013: Contribution of ice sheet and mountain glacier melt to recent sea level rise. *Nature Geosci*, **6,** 549-552, http://dx.doi.org/10.1038/ngeo1829
Chen, X., D. Pan, Y. Bai, X. He, C.-T. A. Chen, and Z. Hao, 2013: Episodic phytoplankton bloom events in the Bay of Bengal triggered by multiple forcings. *Deep Sea Research Part I: Oceanographic Research Papers*, **73,** 17-30, http://dx.doi.org/10.1016/j.dsr.2012.11.011
Chen, X., Y. Yan, X. Cheng, and Y. Qi, 2013: Performances of seven datasets in presenting the upper ocean heat content in the South China Sea. *Advances in Atmospheric Sciences*, **30,** 1331-1342, http://dx.doi.org/10.1007/s00376-013-2132-1
Chen, X., Y. Zhang, M. Zhang, Y. Feng, Z. Wu, F. Qiao, and N. E. Huang, 2013: Intercomparison between observed and simulated variability in global ocean heat content using empirical mode decomposition, part I: modulated annual cycle. *Climate Dynamics*, **41,** 2797-2815, http://dx.doi.org/10.1007/s00382-012-1554-2
Chiswell, S. M., 2013: Lagrangian Time Scales and Eddy Diffusivity at 1000 m Compared to

the Surface in the South Pacific and Indian Oceans. *Journal of Physical Oceanography*, **43,** 2718-2732, http://dx.doi.org/10.1175/JPO-D-13-044.1

Chiswell, S. M., J. Bradford-Grieve, M. G. Hadfield, and S. C. Kennan, 2013: Climatology of surface chlorophyll a, autumn-winter and spring blooms in the southwest Pacific Ocean. *Journal of Geophysical Research: Oceans*, **118,** 1003-1018, http://dx.doi.org/10.1002/jgrc.20088

Close, S. E., A. C. Naveira Garabato, E. L. McDonagh, B. A. King, M. Biuw, and L. Boehme, 2013: Control of Mode and Intermediate Water Mass Properties in Drake Passage by the Amundsen Sea Low. *Journal of Climate*, **26,** 5102-5123, http://dx.doi.org/10.1175/JCLI-D-12-00346.1

Cornuelle, B., G. Gopalakrishnan, M. Dzieciuch, and P. Worcester, 2013: Deep water acoustic propagation in the northern Philippine Sea: Comparison of observed ray travel times with a non-acoustic state estimate. *The Journal of the Acoustical Society of America*, **134,** 3982-3982, http://dx.doi.org/10.1121/1.4830509

Couldrey, M. P., L. Jullion, A. C. Naveira Garabato, C. Rye, L. Herráiz-Borreguero, P. J. Brown, M. P. Meredith, and K. L. Speer, 2013: Remotely induced warming of Antarctic Bottom Water in the eastern Weddell gyre. *Geophysical Research Letters*, **40,** 2755-2760, http://dx.doi.org/10.1002/grl.50526

Cronin, M., N. A. Bond, J. Thomas Farrar, H. Ichikawa, S. R. Jayne, Y. Kawai, M. Konda, B. Qiu, L. Rainville, and H. Tomita, 2013: Formation and erosion of the seasonal thermocline in the Kuroshio Extension Recirculation Gyre. *Deep Sea Research Part II: Topical Studies in Oceanography*, **85,** 62-74, http://dx.doi.org/10.1016/j.dsr2.2012.07.018

Cummings, J. A. and O. M. Smedstad, 2013: Variational Data Assimilation for the Global Ocean. *Data Assimilation for Atmospheric, Oceanic and Hydrologic Applications (Vol. II)*, S. K. Park and L. Xu, Eds., Springer Berlin Heidelberg, 303-343, http://dx.doi.org/10.1007/978-3-642-35088-7_13.

Cunningham, S. A., C. D. Roberts, E. Frajka-Williams, W. E. Johns, W. Hobbs, M. D. Palmer, D. Rayner, D. A. Smeed, and G. McCarthy, 2013: Atlantic Meridional Overturning Circulation slowdown cooled the subtropical ocean. *Geophysical Research Letters*, **40,** 2013GL058464, http://dx.doi.org/10.1002/2013GL058464

Da-Allada, C. Y., G. Alory, Y. du Penhoat, E. Kestenare, F. Durand, and N. M. Hounkonnou, 2013: Seasonal mixed-layer salinity balance in the tropical Atlantic Ocean: Mean state and seasonal cycle. *Journal of Geophysical Research: Oceans*, **118,** 332-345, http://dx.doi.org/10.1029/2012JC008357

De Souza, J. M. A. C., A. De Moraes Paiva, and K. Von Schuckmann, 2013: New estimates for the heat flux across the Polar Front: spatial and temporal variability in recent years. *Antarctic Science*, **25,** 433-444, http://dx.doi.org/10.1017/S0954102012001113

Deng, Z., J. Jin, F. Ji, F. Zhang, X. Jiang, W. Wang, and L. Kang, 2013: Estimating the Isoneutral Slope and Tracer Diffusion from Argo Observations. *Marine Geodesy*, **36,** 109-122, http://dx.doi.org/10.1080/01490419.2012.699504

Dietze, H. and U. Loeptien, 2013: Revisiting "nutrient trapping" in global coupled biogeochemical ocean circulation models. *Global Biogeochemical Cycles*, **27,** 265-284, http://dx.doi.org/10.1002/gbc.20029

Dobricic, S., 2013: An Application of Sequential Variational Method without Tangent Linear

and Adjoint Model Integrations. *Monthly Weather Review*, **141,** 307-323, http://dx.doi.org/10.1175/MWR-D-11-00012.1

Doi, T., S. K. Behera, and T. Yamagata, 2013: Predictability of the Ningaloo Nino/Nina. *Sci. Rep.*, **3**, http://dx.doi.org/10.1038/srep02892

Dong, S. and K. A. Kelly, 2013: How Well Do Climate Models Reproduce North Atlantic Subtropical Mode Water? *Journal of Physical Oceanography*, **43,** 2230-2244, http://dx.doi.org/10.1175/JPO-D-12-0215.1

Drévillon, M., E. Greiner, D. Paradis, C. Payan, J.-M. Lellouche, G. Reffray, E. Durand, S. Law-Chune, and S. Cailleau, 2013: A strategy for producing refined currents in the Equatorial Atlantic in the context of the search of the AF447 wreckage. *Ocean Dynamics*, **63,** 63-82, http://dx.doi.org/10.1007/s10236-012-0580-2

Duan, Y., Y. Hou, H. Liu, and Y. Liu, 2013: The water mass variability and southward shift of the Southern Hemisphere mid-depth supergyre. *Acta Oceanologica Sinica*, **32,** 74-81, http://dx.doi.org/10.1007/s13131-013-0380-7

Durack, P. J., S. Wijffels, and T. Boyer, 2013: Long-term Salinity Changes and Implications for the Global Water Cycle. *Ocean Circulation and Climate*, G. Siedler, S. M. Griffies, J. Gould, and J. A. Church, Eds., Academic Press,

Durand, F., G. Alory, R. Dussin, and N. Reul, 2013: SMOS reveals the signature of Indian Ocean Dipole events. *Ocean Dynamics*, **63,** 1203-1212, http://dx.doi.org/10.1007/s10236-013-0660-y

Dushaw, B. D., P. F. Worcester, M. A. Dzieciuch, and D. Menemenlis, 2013: On the time-mean state of ocean models and the properties of long range acoustic propagation. *Journal of Geophysical Research: Oceans*, **118,** 4346-4362, http://dx.doi.org/10.1002/jgrc.20325

Enomoto, T., T. Miyoshi, Q. Moteki, J. Inoue, M. Hattori, A. Kuwano-Yoshida, N. Komori, and S. Yamane, 2013: Observing-System Research and Ensemble Data Assimilation at JAMSTEC. *Data Assimilation for Atmospheric, Oceanic and Hydrologic Applications (Vol. II)*, S. K. Park and L. Xu, Eds., Springer Berlin Heidelberg, 509-526, http://dx.doi.org/10.1007/978-3-642-35088-7_21.

Estapa, M. L., K. Buesseler, E. Boss, and G. Gerbi, 2013: Autonomous, high-resolution observations of particle flux in the oligotrophic ocean. *Biogeosciences*, **10,** 5517-5531, http://dx.doi10.5194/bg-10-5517-2013

Fan, X., U. Send, P. Testor, J. Karstensen, and P. Lherminier, 2013: Observations of Irminger Sea Anticyclonic Eddies. *Journal of Physical Oceanography*, **43,** 805-823, http://dx.doi.org/10.1175/JPO-D-11-0155.1

Farrara, J. D., Y. Chao, Z. Li, X. Wang, X. Jin, H. Zhang, P. Li, Q. Vu, P. Q. Olsson, G. C. Schoch, M. Halverson, M. A. Moline, C. Ohlmann, M. Johnson, J. C. McWilliams, and F. A. Colas, 2013: A data-assimilative ocean forecasting system for the Prince William sound and an evaluation of its performance during sound Predictions 2009. *Continental Shelf Research*, **63, Supplement,** S193-S208, http://dx.doi.org/10.1016/j.csr.2012.11.008

Fedak, M. A., 2013: The impact of animal platforms on polar ocean observation. *Deep Sea Research Part II: Topical Studies in Oceanography*, **88–89,** 7-13, http://dx.doi.org/10.1016/j.dsr2.2012.07.007

Feng, G., S. Jin, and J. M. S. Reales, 2013: Antarctic circumpolar current from satellite gravimetric models ITG-GRACE2010, GOCE-TIM3 and satellite altimetry. *Journal of Geodynamics*, **72,** 72-80, http://dx.doi.org/10.1016/j.jog.2013.08.005

Feng, M., M. J. McPhaden, S.-P. Xie, and J. Hafner, 2013: La Niña forces unprecedented Leeuwin Current warming in 2011. *Sci. Rep.*, **3**, http://dx.doi.org/10.1038/srep01277

Fennel, K., J. Hu, A. Laurent, M. Marta-Almeida, and R. Hetland, 2013: Sensitivity of hypoxia predictions for the northern Gulf of Mexico to sediment oxygen consumption and model nesting. *Journal of Geophysical Research: Oceans*, **118,** 990-1002, http://dx.doi.org/10.1002/jgrc.20077

Fiedler, B., P. Fietzek, N. Vieira, P. Silva, H. C. Bittig, and A. Körtzinger, 2013: In Situ CO2 and O2 Measurements on a Profiling Float. *Journal of Atmospheric and Oceanic Technology*, **30,** 112-126, http://dx.doi.org/10.1175/JTECH-D-12-00043.1

Foltz, G. R., C. Schmid, and R. Lumpkin, 2013: Seasonal Cycle of the Mixed Layer Heat Budget in the Northeastern Tropical Atlantic Ocean. *Journal of Climate*, **26,** 8169-8188, http://dx.doi.org/10.1175/JCLI-D-13-00037.1

Font, J., J. Boutin, N. Reul, P. Spurgeon, J. Ballabrera-Poy, A. Chuprin, C. Gabarró, J. Gourrion, S. Guimbard, C. Hénocq, S. Lavender, N. Martin, J. Martínez, M. McCulloch, I. Meirold-Mautner, C. Mugerin, F. Petitcolin, M. Portabella, R. Sabia, M. Talone, J. Tenerelli, A. Turiel, J.-L. Vergely, P. Waldteufel, X. Yin, S. Zine, and S. Delwart, 2013: SMOS first data analysis for sea surface salinity determination. *International Journal of Remote Sensing*, **34,** 3654-3670, http://dx.doi.org/10.1080/01431161.2012.716541

Freeland, H. J., 2013: Vertical velocity estimates in the North Pacific using Argo floats. *Deep Sea Research Part II: Topical Studies in Oceanography*, **85,** 75-80, http://dx.doi.org/10.1016/j.dsr2.2012.07.019

Freeland, H. J., 2013: Evidence of Change in the Winter Mixed Layer in the Northeast Pacific Ocean: A Problem Revisited. *Atmosphere-Ocean*, **51,** 126-133, http://dx.doi.org/10.1080/07055900.2012.754330

Fu, H., P. C. Chu, G. Han, Z. He, W. Li, and X. Zhang, 2013: Improvement of short-term forecasting in the northwest Pacific through assimilating Argo data into initial fields. *Acta Oceanologica Sinica*, **32,** 57-65, http://dx.doi.org/10.1007/s13131-013-0332-2

Garzoli, S. L., M. O. Baringer, S. Dong, R. C. Perez, and Q. Yao, 2013: South Atlantic meridional fluxes. *Deep Sea Research Part I: Oceanographic Research Papers*, **71,** 21-32, http://dx.doi.org/10.1016/j.dsr.2012.09.003

Gaube, P., D. B. Chelton, P. G. Strutton, and M. J. Behrenfeld, 2013: Satellite observations of chlorophyll, phytoplankton biomass, and Ekman pumping in nonlinear mesoscale eddies. *Journal of Geophysical Research: Oceans*, **118,** 6349-6370, http://dx.doi.org/10.1002/2013JC009027

Gelderloos, R., C. A. Katsman, and K. Våge, 2013: Detecting Labrador Sea Water formation from space. *Journal of Geophysical Research: Oceans*, **118,** 2074-2086, http://dx.doi.org/10.1002/jgrc.20176

Giglio, D., D. Roemmich, and B. Cornuelle, 2013: Understanding the annual cycle in global steric height. *Geophysical Research Letters*, **40,** 4349-4354, http://dx.doi.org/10.1002/grl.50774

Girishkumar, M. S., M. Ravichandran, and M. J. McPhaden, 2013: Temperature inversions and

their influence on the mixed layer heat budget during the winters of 2006–2007 and 2007–2008 in the Bay of Bengal. *Journal of Geophysical Research: Oceans*, **118,** 2426-2437, http://dx.doi.org/10.1002/jgrc.20192

Goes, M., G. Goni, V. Hormann, and R. C. Perez, 2013: Variability of the Atlantic off-equatorial eastward currents during 1993–2010 using a synthetic method. *Journal of Geophysical Research: Oceans*, **118,** 3026-3045, http://dx.doi.org/10.1002/jgrc.20186

Gómez Martín, J. C., A. S. Mahajan, T. D. Hay, C. Prados-Román, C. Ordóñez, S. M. MacDonald, J. M. C. Plane, M. Sorribas, M. Gil, J. F. Paredes Mora, M. V. Agama Reyes, D. E. Oram, E. Leedham, and A. Saiz-Lopez, 2013: Iodine chemistry in the eastern Pacific marine boundary layer. *Journal of Geophysical Research: Atmospheres*, **118,** 887-904, http://dx.doi.org/10.1002/jgrd.50132

Good, S. A., M. J. Martin, and N. A. Rayner, 2013: EN4: Quality controlled ocean temperature and salinity profiles and monthly objective analyses with uncertainty estimates. *Journal of Geophysical Research: Oceans*, **118,** 6704-6716, http://dx.doi.org/10.1002/2013JC009067

Gouretski, V., J. H. Jungclaus, and H. Haak, 2013: Revisiting the Meteor 1925–1927 hydrographic dataset reveals centennial full-depth changes in the Atlantic Ocean. *Geophysical Research Letters*, **40,** 2236-2241, http://dx.doi.org/10.1002/grl.50503

Graham, R. M. and A. M. De Boer, 2013: The Dynamical Subtropical Front. *Journal of Geophysical Research: Oceans*, **118,** 5676-5685, http://dx.doi.org/10.1002/jgrc.20408

Gregory, J. M., D. Bi, M. A. Collier, M. R. Dix, A. C. Hirst, A. Hu, M. Huber, R. Knutti, S. J. Marsland, M. Meinshausen, H. A. Rashid, L. D. Rotstayn, A. Schurer, and J. A. Church, 2013: Climate models without preindustrial volcanic forcing underestimate historical ocean thermal expansion. *Geophysical Research Letters*, **40,** 1600-1604, http://dx.doi.org/10.1002/grl.50339

Griffa, A., A. Haza, T. M. Özgökmen, A. Molcard, V. Taillandier, K. Schroeder, Y. Chang, and P. M. Poulain, 2013: Investigating transport pathways in the ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, **85,** 81-95, http://dx.doi.org/10.1016/j.dsr2.2012.07.031

Grunseich, G., B. Subrahmanyam, and B. Wang, 2013: The Madden-Julian oscillation detected in Aquarius salinity observations. *Geophysical Research Letters*, **40,** 5461-5466, http://dx.doi.org/10.1002/2013GL058173

Guo, F., Q. Liu, X.-T. Zheng, and S. Sun, 2013: The role of barrier layer in southeastern Arabian Sea during the development of positive Indian Ocean Dipole events. *Journal of Ocean University of China*, **12,** 245-252, http://dx.doi.org/10.1007/s11802-013-2170-4

Han, G., H. Fu, X. Zhang, W. Li, X. Wu, X. Wang, and L. Zhang, 2013: A global ocean reanalysis product in the China Ocean Reanalysis (CORA) project. *Advances in Atmospheric Sciences*, **30,** 1621-1631, http://dx.doi.org/10.1007/s00376-013-2198-9

Han, G., W. Li, X. Zhang, X. Wang, X. Wu, H. Fu, X. Zhang, L. Zhang, and D. Li, 2013: A new version of regional ocean reanalysis for coastal waters of China and adjacent seas. *Advances in Atmospheric Sciences*, **30,** 974-982, http://dx.doi.org/10.1007/s00376-012-2195-4

Harrison, D. E. and M. Carson, 2013: Recent sea level and upper ocean temperature variability and trends; cook islands regional results and perspective. *Climatic Change*, **119,** 37-48, http://dx.doi.org/10.1007/s10584-012-0580-8

Hasegawa, T., K. Ando, I. Ueki, K. Mizuno, and S. Hosoda, 2013: Upper-Ocean Salinity Variability in the Tropical Pacific: Case Study for Quasi-Decadal Shift during the 2000s Using TRITON Buoys and Argo Floats. *Journal of Climate*, **26,** 8126-8138, http://dx.doi.org/10.1175/JCLI-D-12-00187.1

Hasson, A., T. Delcroix, and J. Boutin, 2013: Formation and variability of the South Pacific Sea Surface Salinity maximum in recent decades. *Journal of Geophysical Research: Oceans*, **118,** 5109-5116, http://dx.doi.org/10.1002/jgrc.20367

Hasson, A., T. Delcroix, and R. Dussin, 2013: An assessment of the mixed layer salinity budget in the tropical Pacific Ocean. Observations and modelling (1990–2009). *Ocean Dynamics*, **63,** 179-194, http://dx.doi.org/10.1007/s10236-013-0596-2

Henson, S. A., S. C. Painter, N. Penny Holliday, M. C. Stinchcombe, and S. L. C. Giering, 2013: Unusual subpolar North Atlantic phytoplankton bloom in 2010: Volcanic fertilization or North Atlantic Oscillation? *Journal of Geophysical Research: Oceans*, **118,** 4771-4780, http://dx.doi.org/10.1002/jgrc.20363

Hjelmervik, K. T. and K. Hjelmervik, 2013: Estimating temperature and salinity profiles using empirical orthogonal functions and clustering on historical measurements. *Ocean Dynamics*, **63,** 809-821, http://dx.doi.org/10.1007/s10236-013-0623-3

Hobbs, W. R. and J. K. Willis, 2013: Detection of an observed 135 year ocean temperature change from limited data. *Geophysical Research Letters*, **40,** 2252-2258, http://dx.doi.org/10.1002/grl.50370

Holte, J., F. Straneo, C. Moffat, R. Weller, and J. T. Farrar, 2013: Structure and surface properties of eddies in the southeast Pacific Ocean. *Journal of Geophysical Research: Oceans*, **118,** 2295-2309, http://dx.doi.org/10.1002/jgrc.20175

Holte, J., L. D. Talley, T. K. Chereskin, and B. M. Sloyan, 2013: Subantarctic mode water in the southeast Pacific: Effect of exchange across the Subantarctic Front. *Journal of Geophysical Research: Oceans*, **118,** 2052-2066, http://dx.doi.org/10.1002/jgrc.20144

Hopkins, J., M. Lucas, C. Dufau, M. Sutton, J. Stum, O. Lauret, and C. Channelliere, 2013: Detection and variability of the Congo River plume from satellite derived sea surface temperature, salinity, ocean colour and sea level. *Remote Sensing of Environment*, **139,** 365-385, http://dx.doi.org/10.1016/j.rse.2013.08.015

Horii, T., K. Mizuno, M. Nagura, T. Miyama, and K. Ando, 2013: Seasonal and interannual variation in the cross-equatorial meridional currents observed in the eastern Indian Ocean. *Journal of Geophysical Research: Oceans*, **118,** 6658-6671, http://dx.doi.org/10.1002/2013JC009291

Horii, T., I. Ueki, K. Ando, and K. Mizuno, 2013: Eastern Indian Ocean warming associated with the negative Indian Ocean dipole: A case study of the 2010 event. *Journal of Geophysical Research: Oceans*, **118,** 536-549, http://dx.doi.org/10.1002/jgrc.20071

Hu, D., S. Hu, L. Wu, L. Li, L. Zhang, X. Diao, Z. Chen, Y. Li, F. Wang, and D. Yuan, 2013: Direct Measurements of the Luzon Undercurrent. *Journal of Physical Oceanography*, **43,** 1417-1425, http://dx.doi.org/10.1175/JPO-D-12-0165.1

Hu, R. and M. Wei, 2013: Intraseasonal oscillation in global ocean temperature inferred from

Argo. *Advances in Atmospheric Sciences*, **30,** 29-40, http://dx.doi.org/10.1007/s00376-012-2045-4

Hu, Z.-Z., A. Kumar, B. Huang, and J. Zhu, 2013: Leading Modes of the Upper-Ocean Temperature Interannual Variability along the Equatorial Atlantic Ocean in NCEP GODAS. *Journal of Climate*, **26,** 4649-4663, http://dx.doi.org/10.1175/JCLI-D-12-00629.1

Hu, Z.-Z., A. Kumar, H.-L. Ren, H. Wang, M. L'Heureux, and F.-F. Jin, 2013: Weakened Interannual Variability in the Tropical Pacific Ocean since 2000. *Journal of Climate*, **26,** 2601-2613, http://dx.doi.org/10.1175/JCLI-D-12-00265.1

Hummels, R., M. Dengler, and B. Bourlès, 2013: Seasonal and regional variability of upper ocean diapycnal heat flux in the Atlantic cold tongue. *Progress in Oceanography*, **111,** 52-74, http://dx.doi.org/10.1016/j.pocean.2012.11.001

Iskandar, I., M. Irfan, and F. Saymsuddin, 2013: Why was the 2008 Indian Ocean Dipole a short-lived event? *Ocean Science Journal*, **48,** 149-160, http://dx.doi.org/10.1007/s12601-013-0012-3

Jaffres, J. B. D., 2013: Mixed Layer Depth Seasonality within the Coral Sea Based on Argo Data. *PLoS ONE*, **8**, http://dx.doi.org/10.1371/journal.pone.0060985

Jensen, L., R. Rietbroek, and J. Kusche, 2013: Land water contribution to sea level from GRACE and Jason-1measurements. *Journal of Geophysical Research: Oceans*, **118,** 212-226, http://dx.doi.org/10.1002/jgrc.20058

Jiang, Z.-P., D. J. Hydes, T. Tyrrell, S. E. Hartman, M. C. Hartman, C. Dumousseaud, X. A. Padin, I. Skjelvan, and C. González-Pola, 2013: Key controls on the seasonal and interannual variations of the carbonate system and air-sea CO2 flux in the Northeast Atlantic (Bay of Biscay). *Journal of Geophysical Research: Oceans*, **118,** 785-800, http://dx.doi.org/10.1002/jgrc.20087

Jin, S., T. van Dam, and S. Wdowinski, 2013: Observing and understanding the Earth system variations from space geodesy. *Journal of Geodynamics*, **72,** 1-10, http://dx.doi.org/10.1016/j.jog.2013.08.001

Johnson, C., M. Inall, and S. Häkkinen, 2013: Declining nutrient concentrations in the northeast Atlantic as a result of a weakening Subpolar Gyre. *Deep Sea Research Part I: Oceanographic Research Papers*, **82,** 95-107, http://dx.doi.org/10.1016/j.dsr.2013.08.007

Johnson, G. C., J. M. Lyman, G. Lagerloef, and H.-Y. Kao, 2013: Global Oceans: Sea Surface Salinity. In State of the Climate in 2012, Blunden, J. and D.S. Ardnt, Eds. *Bulletin of the American Meteorological Society*, **94,** S57-S60, http://dx.doi.org/10.1175/2013BAMSStateoftheClimate.1

Johnson, G. C., J. M. Lyman, J. K. Willis, S. Levitus, T. Boyer, J. Antonov, S. A. Good, C. M. Domingues, S. Wijffels, and N. L. Bindoff, 2013: Global Oceans: Ocean Heat Content. In State of the Climate in 2012, Blunden, J. and D. S. Arndt, Eds. *Bulletin of the American Meteorological Society*, **94,** S50-S53, http://dx.doi.org/10.1175/2013BAMSStateoftheClimate.1

Jordà, G. and D. Gomis, 2013: Reliability of the steric and mass components of Mediterranean sea level as estimated from hydrographic gridded products. *Geophysical Research Letters*, **40,** 3655-3660, http://dx.doi.org/10.1002/grl.50718

Jourdain, N. C., M. Lengaigne, J. Vialard, G. Madec, C. E. Menkes, E. M. Vincent, S. Jullien, and B. Barnier, 2013: Observation-Based Estimates of Surface Cooling Inhibition by Heavy Rainfall under Tropical Cyclones. *Journal of Physical Oceanography*, **43,** 205-221, http://dx.doi.org/10.1175/JPO-D-12-085.1

Juza, M., L. Renault, S. Ruiz, and J. Tintoré, 2013: Origin and pathways of Winter Intermediate Water in the Northwestern Mediterranean Sea using observations and numerical simulation. *Journal of Geophysical Research: Oceans*, **118,** 6621-6633, http://dx.doi.org/10.1002/2013JC009231

Karspeck, A. R., S. Yeager, G. Danabasoglu, T. Hoar, N. Collins, K. Raeder, J. Anderson, and J. Tribbia, 2013: An Ensemble Adjustment Kalman Filter for the CCSM4 Ocean Component. *Journal of Climate*, **26,** 7392-7413, http://dx.doi.org/10.1175/JCLI-D-12-00402.1

Kashino, Y., 2013: Observational discovery of an eastward undercurrent below the North Equatorial Current. *OHM*, **100,** 96,

Katsumata, K. and S. Masuda, 2013: Variability in Southern Hemisphere Ocean Circulation from the 1980s to the 2000s. *Journal of Physical Oceanography*, **43,** 1981-2007, http://dx.doi.org/10.1175/JPO-D-12-0209.1

Katsumata, K., B. M. Sloyan, and S. Masuda, 2013: Diapycnal and Isopycnal Transports in the Southern Ocean Estimated by a Box Inverse Model. *Journal of Physical Oceanography*, **43,** 2270-2287, http://dx.doi.org/10.1175/JPO-D-12-0210.1

Katsura, S., E. Oka, B. Qiu, and N. Schneider, 2013: Formation and Subduction of North Pacific Tropical Water and Their Interannual Variability. *Journal of Physical Oceanography*, **43,** 2400-2415, http://dx.doi.org/10.1175/JPO-D-13-031.1

Keerthi, M. G., M. Lengaigne, J. Vialard, C. Boyer Montégut, and P. M. Muraleedharan, 2013: Interannual variability of the Tropical Indian Ocean mixed layer depth. *Climate Dynamics*, **40,** 743-759, http://dx.doi.org/10.1007/s00382-012-1295-2

Kelly, K. A. and S. Dong, 2013: The contributions of atmosphere and ocean to North Atlantic Subtropical Mode Water volume anomalies. *Deep Sea Research Part II: Topical Studies in Oceanography*, **91,** 111-127, http://dx.doi.org/10.1016/j.dsr2.2013.02.020

Kessler, W. S. and S. Cravatte, 2013: ENSO and Short-Term Variability of the South Equatorial Current Entering the Coral Sea. *Journal of Physical Oceanography*, **43,** 956-969, http://dx.doi.org/10.1175/JPO-D-12-0113.1

Kessler, W. S. and S. Cravatte, 2013: Mean circulation of the Coral Sea. *Journal of Geophysical Research: Oceans*, **118,** 6385-6410, http://dx.doi.org/10.1002/2013JC009117

Kim, E., D. Jeon, C. J. Jang, and J.-H. Park, 2013: Typhoon Rammasun-Induced Near-Inertial Oscillations Observed in the Tropical Northwestern Pacific Ocean. *Terrestrial Atmospheric and Oceanic Sciences*, **24,** 761-772, http://dx.doi.org/10.3319/TAO.2013.03.28.01(Oc)

Knaff, J. A., M. DeMaria, C. R. Sampson, J. E. Peak, J. Cummings, and W. H. Schubert, 2013: Upper Oceanic Energy Response to Tropical Cyclone Passage. *Journal of Climate*, **26,** 2631-2650, http://dx.doi.org/10.1175/JCLI-D-12-00038.1

Kobashi, F. and S.-P. Xie, 2013: Interannual variability of the North Pacific Subtropical Countercurrent: role of local ocean–atmosphere interaction. *New Developments in*

Mode-Water Research, A. Kubokawa, S.-P. Xie, F. Kobashi, and H. Mitsudera, Eds., Springer Japan, 121-134, http://dx.doi.org/10.1007/978-4-431-54162-2_9.

Kobayashi, T., 2013: Deep NINJA collects profiles down to 4,000 meters. *Sea Technology*, **54,** 41-44, https://www.sea-technology.com/features/2013/0213/deep_ninja.php

Kobayashi, T., 2013: A realization of a profiling float for deep ocean observation. *Engineering Materials*, **61,** 67-70,

Kobayashi, T. and M. Tachikawa, 2013: An introduction of a domestic deep float, DEEP NINJA, and its deep/bottom layer observations in the Southern Ocean. *JOS News Letter*, **3**,

Kolodziejczyk, N. and F. Gaillard, 2013: Variability of the Heat and Salt Budget in the Subtropical Southeastern Pacific Mixed Layer between 2004 and 2010: Spice Injection Mechanism. *Journal of Physical Oceanography*, **43,** 1880-1898, http://dx.doi.org/10.1175/JPO-D-13-04.1

Kouketsu, S., H. Tomita, E. Oka, S. Hosoda, T. Kobayashi, and K. Sato, 2013: The role of meso-scale eddies in mixed layer deepening and mode water formation in the western North Pacific. *New Developments in Mode-Water Research*, A. Kubokawa, S.-P. Xie, F. Kobashi, and H. Mitsudera, Eds., Springer Japan, 59-73, http://dx.doi.org/10.1007/978-4-431-54162-2_5.

Krishnamurti, T. N., L. Stefanova, and V. Misra, 2013: Hurricane Observations. *Tropical Meteorology*, Springer New York, 317-330, http://dx.doi.org/10.1007/978-1-4614-7409-8_15.

Kumar, A. and Z.-Z. Hu, 2013: Interannual and interdecadal variability of ocean temperature along the equatorial Pacific in conjunction with ENSO. *Climate Dynamics*, **42,** 1243-1258, http://dx.doi.org/10.1007/s00382-013-1721-0

L'Hégaret, P., L. Lacour, X. Carton, G. Roullet, R. Baraille, and S. Corréard, 2013: A seasonal dipolar eddy near Ras Al Hamra (Sea of Oman). *Ocean Dynamics*, **63,** 633-659, http://dx.doi.org/10.1007/s10236-013-0616-2

Lauvset, S. K., M. Chierici, F. Counillon, A. Omar, G. Nondal, T. Johannessen, and A. Olsen, 2013: Annual and seasonal fCO2 and air–sea CO2 fluxes in the Barents Sea. *Journal of Marine Systems*, **113–114,** 62-74, http://dx.doi.org/10.1016/j.jmarsys.2012.12.011

Lavigne, H., F. D'Ortenzio, C. Migon, H. Claustre, P. Testor, M. R. d'Alcalà, R. Lavezza, L. Houpert, and L. Prieur, 2013: Enhancing the comprehension of mixed layer depth control on the Mediterranean phytoplankton phenology. *Journal of Geophysical Research: Oceans*, **118,** 3416-3430, http://dx.doi.org/10.1002/jgrc.20251

Le Traon, P. Y., 2013: From satellite altimetry to Argo and operational oceanography: three revolutions in oceanography. *Ocean Science*, **9,** 901-915, http://dx.doi.org/10.5194/os-9-901-2013

Lellouche, J. M., O. Le Galloudec, M. Drévillon, C. Régnier, E. Greiner, G. Garric, N. Ferry, C. Desportes, C. E. Testut, C. Bricaud, R. Bourdallé-Badie, B. Tranchant, M. Benkiran, Y. Drillet, A. Daudin, and C. De Nicola, 2013: Evaluation of global monitoring and forecasting systems at Mercator Océan. *Ocean Science*, **9,** 57-81, http://dx.doi.org/10.5194/os-9-57-2013

Levy, M., L. Bopp, P. Karleskind, L. Resplandy, C. Ethe, and F. Pinsard, 2013: Physical pathways for carbon transfers between the surface mixed layer and the ocean

interior. *Global Biogeochemical Cycles*, **27,** 1001-1012, http://dx.doi.org/10.1002/gbc.20092

Li, M., L. Xie, Q. Yang, and J. Tian, 2013: Impact of eddies on ocean diapycnal mixing in Gulf Stream region. *Science China Earth Sciences*, **57,** 1407-1414, http://dx.doi.org/10.1007/s11430-013-4708-0

Li, Y., W. Han, T. Shinoda, C. Wang, R.-C. Lien, J. N. Moum, and J.-W. Wang, 2013: Effects of the diurnal cycle in solar radiation on the tropical Indian Ocean mixed layer variability during wintertime Madden-Julian Oscillations. *Journal of Geophysical Research: Oceans*, **118,** 4945-4964, http://dx.doi.org/10.1002/jgrc.20395

Li, Y. and F. Wang, 2013: Thermohaline intrusions in the thermocline of the western tropical Pacific Ocean. *Acta Oceanologica Sinica*, **32,** 47-56, http://dx.doi.org/10.1007/s13131-013-0331-3

Li, Y., F. Wang, and W. Han, 2013: Interannual sea surface salinity variations observed in the tropical North Pacific Ocean. *Geophysical Research Letters*, **40,** 2194-2199, http://dx.doi.org/10.1002/grl.50429

Lin, I. I., P. Black, J. F. Price, C. Y. Yang, S. S. Chen, C. C. Lien, P. Harr, N. H. Chi, C. C. Wu, and E. A. D'Asaro, 2013: An ocean coupling potential intensity index for tropical cyclones. *Geophysical Research Letters*, **40,** 1878-1882, http://dx.doi.org/10.1002/grl.50091

Lin, I. I., G. J. Goni, J. A. Knaff, C. Forbes, and M. M. Ali, 2013: Ocean heat content for tropical cyclone intensity forecasting and its impact on storm surge. *Natural Hazards*, **66,** 1481-1500, http://dx.doi.org/10.1007/s11069-012-0214-5

Lindenthal, A., B. Langmann, J. Pätsch, I. Lorkowski, and M. Hort, 2013: The ocean response to volcanic iron fertilisation after the eruption of Kasatochi volcano: a regional-scale biogeochemical ocean model study. *Biogeosciences*, **10,** 3715-3729, http://dx.doi.org/10.5194/bg-10-3715-2013

Liu, C., Y. Du, W. Zhuang, H. Xia, and Q. Xie, 2013: Evolution and propagation of a mesoscale eddy in the northern South China Sea during winter. *Acta Oceanologica Sinica*, **32,** 1-7, http://dx.doi.org/10.1007/s13131-013-0325-1

Liu, C. and P. Li, 2013: The impact of meso-scale eddies on the Subtropical Mode Water in the western North Pacific. *Journal of Ocean University of China*, **12,** 230-236, http://dx.doi.org/10.1007/s11802-013-2223-8

Macdonald, H. S., M. Roughan, M. E. Baird, and J. Wilkin, 2013: A numerical modeling study of the East Australian Current encircling and overwashing a warm-core eddy. *Journal of Geophysical Research: Oceans*, **118,** 301-315, http://dx.doi.org/10.1029/2012JC008386

Maes, C., B. Dewitte, J. Sudre, V. Garçon, and D. Varillon, 2013: Small-scale features of temperature and salinity surface fields in the Coral Sea. *Journal of Geophysical Research: Oceans*, **118,** 5426-5438, http://dx.doi.org/10.1002/jgrc.20344

Magnusson, L., M. Alonso-Balmaseda, S. Corti, F. Molteni, and T. Stockdale, 2013: Evaluation of forecast strategies for seasonal and decadal forecasts in presence of systematic model errors. *Climate Dynamics*, **41,** 2393-2409, http://dx.doi.org/10.1007/s00382-012-1599-2

Malan, N., C. J. C. Reason, and B. R. Loveday, 2013: Variability in tropical cyclone heat potential over the Southwest Indian Ocean. *Journal of Geophysical Research: Oceans*,

118, 6734-6746, http://dx.doi.org/10.1002/2013JC008958

Maraldi, C., J. Chanut, B. Levier, N. Ayoub, P. De Mey, G. Reffray, F. Lyard, S. Cailleau, M. Drévillon, E. A. Fanjul, M. G. Sotillo, P. Marsaleix, and T. M. R. a. D. Team, 2013: NEMO on the shelf: assessment of the Iberia-Biscay-Ireland configuration. *Ocean Science*, **9,** 745-771, http://dx.doi.org/10.5194/os-9-745-2013

Marta-Almeida, M., R. D. Hetland, and X. Zhang, 2013: Evaluation of model nesting performance on the Texas-Louisiana continental shelf. *Journal of Geophysical Research: Oceans*, **118,** 2476-2491, http://dx.doi.org/10.1002/jgrc.20163

Marta-Almeida, M., M. Ruiz-Villarreal, J. Pereira, P. Otero, M. Cirano, X. Zhang, and R. D. Hetland, 2013: Efficient tools for marine operational forecast and oil spill tracking. *Marine Pollution Bulletin*, **71,** 139-151, http://dx.doi.org/10.1016/j.marpolbul.2013.03.022

Martin, P., M. R. van der Loeff, N. Cassar, P. Vandromme, F. d'Ovidio, L. Stemmann, R. Rengarajan, M. Soares, H. E. González, F. Ebersbach, R. S. Lampitt, R. Sanders, B. A. Barnett, V. Smetacek, and S. W. A. Naqvi, 2013: Iron fertilization enhanced net community production but not downward particle flux during the Southern Ocean iron fertilization experiment LOHAFEX. *Global Biogeochemical Cycles*, **27,** 871-881, http://dx.doi.org/10.1002/gbc.20077

Matear, R. J., M. A. Chamberlain, C. Sun, and M. Feng, 2013: Climate change projection of the Tasman Sea from an Eddy-resolving Ocean Model. *Journal of Geophysical Research: Oceans*, **118,** 2961-2976, http://dx.doi.org/10.1002/jgrc.20202

Maze, G., J. Deshayes, J. Marshall, A.-M. Tréguier, A. Chronis, and L. Vollmer, 2013: Surface vertical PV fluxes and subtropical mode water formation in an eddy-resolving numerical simulation. *Deep Sea Research Part II: Topical Studies in Oceanography*, **91,** 128-138, http://dx.doi.org/10.1016/j.dsr2.2013.02.026

Mazloff, M. R., R. Ferrari, and T. Schneider, 2013: The Force Balance of the Southern Ocean Meridional Overturning Circulation. *Journal of Physical Oceanography*, **43,** 1193-1208, http://dx.doi.org/10.1175/JPO-D-12-069.1

McPhaden, M. J. and M. Nagura, 2013: Indian Ocean dipole interpreted in terms of recharge oscillator theory. *Climate Dynamics*, **42,** 1569-1586, http://dx.doi.org/10.1007/s00382-013-1765-1

Meinen, C. S., W. E. Johns, S. L. Garzoli, E. van Sebille, D. Rayner, T. Kanzow, and M. O. Baringer, 2013: Variability of the Deep Western Boundary Current at 26.5°N during 2004–2009. *Deep Sea Research Part II: Topical Studies in Oceanography*, **85,** 154-168, http://dx.doi.org/10.1016/j.dsr2.2012.07.036

Meinen, C. S., S. Speich, R. C. Perez, S. Dong, A. R. Piola, S. L. Garzoli, M. O. Baringer, S. Gladyshev, and E. J. D. Campos, 2013: Temporal variability of the meridional overturning circulation at 34.5°S: Results from two pilot boundary arrays in the South Atlantic. *Journal of Geophysical Research: Oceans*, **118,** 6461-6478, http://dx.doi.org/10.1002/2013JC009228

Mello, R. M., A. Freitas, L. Russo, J. Oliveira, and J. Alvarenga, 2013: Ocean Forecasts in the Southwestern Atlantic: Impact of Different Sources of Sea Surface Height in Data Assimilation. *Brazilian Journal of Geophysics*, **31**, http://dx.doi.org/10.1590/rbgf.v31i2.292

Menezes, V. V., H. E. Phillips, A. Schiller, C. M. Domingues, and N. L. Bindoff, 2013: Salinity dominance on the Indian Ocean Eastern Gyral current. *Geophysical Research Letters*, **40,** 5716-5721, http://dx.doi.org/10.1002/2013GL057887

Mielke, C., E. Frajka-Williams, and J. Baehr, 2013: Observed and simulated variability of the AMOC at 26°N and 41°N. *Geophysical Research Letters*, **40,** 1159-1164, http://dx.doi.org/10.1002/grl.50233

Mihanović, H., I. Vilibić, S. Carniel, M. Tudor, A. Russo, A. Bergamasco, N. Bubić, Z. Ljubešić, D. Viličić, A. Boldrin, V. Malačič, M. Celio, C. Comici, and F. Raicich, 2013: Exceptional dense water formation on the Adriatic shelf in the winter of 2012. *Ocean Science*, **9,** 561-572, http://dx.doi.org/10.5194/os-9-561-2013

Moore, A. M., C. A. Edwards, J. Fiechter, P. Drake, E. Neveu, H. G. Arango, S. Gürol, and A. T. Weaver, 2013: A 4D-Var Analysis System for the California Current: A Prototype for an Operational Regional Ocean Data Assimilation System. *Data Assimilation for Atmospheric, Oceanic and Hydrologic Applications (Vol. II)*, S. K. Park and L. Xu, Eds., Springer Berlin Heidelberg, 345-366, http://dx.doi.org/10.1007/978-3-642-35088-7_14.

Moore, J. C., A. Grinsted, T. Zwinger, and S. Jevrejeva, 2013: Semiempirical and process-based global sea level projections. *Reviews of Geophysics*, **51,** 484-522, http://dx.doi.org/10.1002/rog.20015

Morioka, Y., J. V. Ratnam, W. Sasaki, and Y. Masumoto, 2013: Generation Mechanism of the South Pacific Subtropical Dipole. *Journal of Climate*, **26,** 6033-6045, http://dx.doi.org/10.1175/JCLI-D-12-00648.1

Mrvaljevic, R. K., P. G. Black, L. R. Centurioni, Y.-T. Chang, E. A. D'Asaro, S. R. Jayne, C. M. Lee, R.-C. Lien, I. I. Lin, J. Morzel, P. P. Niiler, L. Rainville, and T. B. Sanford, 2013: Observations of the cold wake of Typhoon Fanapi (2010). *Geophysical Research Letters*, **40,** 316-321, http://dx.doi.org/10.1029/2012GL054282

Nakamura, H., A. Nishina, Z. Liu, F. Tanaka, M. Wimbush, and J.-H. Park, 2013: Intermediate and deep water formation in the Okinawa Trough. *Journal of Geophysical Research: Oceans*, **118,** 6881-6893, http://dx.doi.org/10.1002/2013JC009326

Nan, F., H. Xue, F. Chai, D. Wang, F. Yu, M. Shi, P. Guo, and P. Xiu, 2013: Weakening of the Kuroshio Intrusion into the South China Sea over the Past Two Decades. *Journal of Climate*, **26,** 8097-8110, http://dx.doi.org/10.1175/JCLI-D-12-00315.1

Nardelli, B. B., 2013: Vortex waves and vertical motion in a mesoscale cyclonic eddy. *Journal of Geophysical Research: Oceans*, **118,** 5609-5624, http://dx.doi.org/10.1002/jgrc.20345

Nishikawa, S., H. Tsujino, K. Sakamoto, and H. Nakano, 2013: Diagnosis of water mass transformation and formation rates in a high-resolution GCM of the North Pacific. *Journal of Geophysical Research: Oceans*, **118,** 1051-1069, http://dx.doi.org/10.1029/2012JC008116

Nishina, K., Y. Ishikawa, and T. Awaji, 2013: Simultaneous assimilation of surface drifter data, satellite and in situ observations for improved estimates of meso-scale variability in the Kuroshio Extension Region. *Journal of Oceanography*, **69,** 175-190, http://dx.doi.org/10.1007/s10872-012-0163-3

Nurujjaman, M., A. Apte, and P. Vinayachandran, 2013: Data assimilation using Ensemble

Transform Kalman Filter (ETKF) in ROMS model for Indian Ocean. *The European Physical Journal Special Topics*, **222,** 875-883, http://dx.doi.org/10.1140/epjst/e2013-01890-3

Nyadjro, E. S., B. Subrahmanyam, and B. S. Giese, 2013: Variability of salt flux in the Indian Ocean during 1960–2008. *Remote Sensing of Environment*, **134,** 175-193, http://dx.doi.org/10.1016/j.rse.2013.03.005

Oka, E. and B. Qiu, 2013: Progress of North Pacific mode water research in the past decade. *New Developments in Mode-Water Research*, A. Kubokawa, S.-P. Xie, F. Kobashi, and H. Mitsudera, Eds., Springer Japan, 1-16, http://dx.doi.org/10.1007/978-4-431-54162-2_1.

Oke, P. R., D. A. Griffin, A. Schiller, R. J. Matear, R. Fiedler, J. Mansbridge, A. Lenton, M. Cahill, M. A. Chamberlain, and K. Ridgway, 2013: Evaluation of a near-global eddy-resolving ocean model. *Geoscientific Model Development*, **6,** 591-615, http://dx.doi.org/10.5194/gmd-6-591-2013

Oke, P. R., P. Sakov, M. L. Cahill, J. R. Dunn, R. Fiedler, D. A. Griffin, J. V. Mansbridge, K. R. Ridgway, and A. Schiller, 2013: Towards a dynamically balanced eddy-resolving ocean reanalysis: BRAN3. *Ocean Modelling*, **67,** 52-70, http://dx.doi.org/10.1016/j.ocemod.2013.03.008

Ollitrault, M. and J.-P. Rannou, 2013: ANDRO: An Argo-Based Deep Displacement Dataset. *Journal of Atmospheric and Oceanic Technology*, **30,** 759-788, http://dx.doi.org/10.1175/JTECH-D-12-00073.1

Otto, A., F. E. L. Otto, O. Boucher, J. Church, G. Hegerl, P. M. Forster, N. P. Gillett, J. Gregory, G. C. Johnson, R. Knutti, N. Lewis, U. Lohmann, J. Marotzke, G. Myhre, D. Shindell, B. Stevens, and M. R. Allen, 2013: Energy budget constraints on climate response. *Nature Geosci*, **6,** 415-416, http://dx.doi.org/10.1038/ngeo1836

Painter, S. C., M. D. Patey, A. Forryan, and S. Torres-Valdes, 2013: Evaluating the balance between vertical diffusive nitrate supply and nitrogen fixation with reference to nitrate uptake in the eastern subtropical North Atlantic Ocean. *Journal of Geophysical Research: Oceans*, **118,** 5732-5749, http://dx.doi.org/10.1002/jgrc.20416

Palevsky, H. I., F. Ribalet, J. E. Swalwell, C. E. Cosca, E. D. Cokelet, R. A. Feely, E. V. Armbrust, and P. D. Quay, 2013: The influence of net community production and phytoplankton community structure on CO2 uptake in the Gulf of Alaska. *Global Biogeochemical Cycles*, **27,** 664-676, http://dx.doi.org/10.1002/gbc.20058

Palter, J. B., I. Marinov, J. L. Sarmiento, and N. Gruber, 2013: Large-Scale, Persistent Nutrient Fronts of the World Ocean: Impacts on Biogeochemistry. *The Handbook of Environmental Chemistry*, Springer Berlin Heidelberg, 1-38, http://dx.doi.org/10.1007/698_2013_241.

Pan, J. and Y. Sun, 2013: Estimate of Ocean Mixed Layer Deepening after a Typhoon Passage over the South China Sea by Using Satellite Data. *Journal of Physical Oceanography*, **43,** 498-506, http://dx.doi.org/10.1175/JPO-D-12-01.1

Park, J.-H. and D. Farmer, 2013: Effects of Kuroshio intrusions on nonlinear internal waves in the South China Sea during winter. *Journal of Geophysical Research: Oceans*, **118,** 7081-7094, http://dx.doi.org/10.1002/2013JC008983

Park, J. J. and K. Kim, 2013: Deep currents obtained from Argo float trajectories in the

Japan/East Sea. *Deep Sea Research Part II: Topical Studies in Oceanography*, **85,** 169-181, http://dx.doi.org/10.1016/j.dsr2.2012.07.032

Perez, R. C., V. Hormann, R. Lumpkin, P. Brandt, W. E. Johns, F. Hernandez, C. Schmid, and B. Bourlès, 2013: Mean meridional currents in the central and eastern equatorial Atlantic. *Climate Dynamics*, **43,** 2943-2962, http://dx.doi.org/10.1007/s00382-013-1968-5

Piété, H., L. Marié, B. Marsset, Y. Thomas, and M.-A. Gutscher, 2013: Seismic reflection imaging of shallow oceanographic structures. *Journal of Geophysical Research: Oceans*, **118,** 2329-2344, http://dx.doi.org/10.1002/jgrc.20156

Ponte, A. L., P. Klein, X. Capet, P.-Y. Le Traon, B. Chapron, and P. Lherminier, 2013: Diagnosing Surface Mixed Layer Dynamics from High-Resolution Satellite Observations: Numerical Insights. *Journal of Physical Oceanography*, **43,** 1345-1355, http://dx.doi.org/10.1175/JPO-D-12-0136.1

Ponte, R. M., 2013: Heat Content and Temperature of the Ocean. *Earth System Monitoring*, J. Orcutt, Ed., Springer New York, 153-180, http://dx.doi.org/10.1007/978-1-4614-5684-1_8.

Prakash, S., R. M. Gairola, and P. K. Thapliyal, 2013: Sea Surface Salinity Estimation in the Bay of Bengal Using Multisatellite Measurements. *Geoscience and Remote Sensing Letters, IEEE*, **10,** 525-527, http://dx.doi.org/10.1109/lgrs.2012.2212176

Prakash, S., P. Prakash, and M. Ravichandran, 2013: Can oxycline depth be estimated using sea level anomaly (SLA) in the northern Indian Ocean? *Remote Sensing Letters*, **4,** 1097-1106, http://dx.doi.org/10.1080/2150704X.2013.842284

Prants, S. V., A. G. Andreev, M. V. Budyansky, and M. Y. Uleysky, 2013: Impact of mesoscale eddies on surface flow between the Pacific Ocean and the Bering Sea across the Near Strait. *Ocean Modelling*, **72,** 143-152, http://dx.doi.org/10.1016/j.ocemod.2013.09.003

Priede, I. G., D. S. M. Billett, A. S. Brierley, A. R. Hoelzel, M. Inall, P. I. Miller, N. J. Cousins, M. A. Shields, and T. Fujii, 2013: The ecosystem of the Mid-Atlantic Ridge at the sub-polar front and Charlie–Gibbs Fracture Zone; ECO-MAR project strategy and description of the sampling programme 2007–2010. *Deep Sea Research Part II: Topical Studies in Oceanography*, **98, Part B,** 220-230, http://dx.doi.org/10.1016/j.dsr2.2013.06.012

Prieto, E., C. González-Pola, A. Lavin, R. F. Sánchez, and M. Ruiz-Villarreal, 2013: Seasonality of intermediate waters hydrography west of the Iberian Peninsula from an 8 yr semiannual time series of an oceanographic section. *Ocean Science*, **9,** 411-429, http://dx.doi.org/10.5194/os-9-411-2013

Pun, I.-F., I. I. Lin, and M.-H. Lo, 2013: Recent increase in high tropical cyclone heat potential area in the Western North Pacific Ocean. *Geophysical Research Letters*, **40,** 4680-4684, http://dx.doi.org/10.1002/grl.50548

Purokoski, T., E. Aro, and A. Nummelin, 2013: First Long-Term Deployment Of Argo Float in Baltic Sea Argo's Inaugural Operation in Shallow, Low-Salinity Water. *Sea Technology*, **54,** 41-44, https://www.sea-technology.com/features/2013/1013/7.php

Qiu, B. and S. Chen, 2013: Concurrent Decadal Mesoscale Eddy Modulations in the Western North Pacific Subtropical Gyre. *Journal of Physical Oceanography*, **43,** 344-358,

http://dx.doi.org/10.1175/JPO-D-12-0133.1
Qiu, B., S. Chen, and H. Sasaki, 2013: Generation of the North Equatorial Undercurrent Jets by Triad Baroclinic Rossby Wave Interactions. *Journal of Physical Oceanography*, **43,** 2682-2698, http://dx.doi.org/10.1175/JPO-D-13-099.1
Qiu, B., D. L. Rudnick, S. Chen, and Y. Kashino, 2013: Quasi-stationary North Equatorial Undercurrent jets across the tropical North Pacific Ocean. *Geophysical Research Letters*, **40,** 2183-2187, http://dx.doi.org/10.1002/grl.50394
Radenac, M.-H., M. Messié, F. Léger, and C. Bosc, 2013: A very oligotrophic zone observed from space in the equatorial Pacific warm pool. *Remote Sensing of Environment*, **134,** 224-233, http://dx.doi.org/10.1016/j.rse.2013.03.007
Ranith, R., L. Senthilnathan, M. Machendiranathan, T. Thangaradjou, and A. Saravanakumar, 2013: Seasonal and inter-annual variability of the sea surface temperature and mixed layer depth in the southern Bay of Bengal. *Advances in Oceanography and Limnology*, **4,** 70-81, http://dx.doi.org/10.1080/19475721.2013.793741
Ratheesh, S., B. Mankad, S. Basu, R. Kumar, and R. Sharma, 2013: Assessment of Satellite-Derived Sea Surface Salinity in the Indian Ocean. *Ieee Geoscience and Remote Sensing Letters*, **10,** 428-431, https://doi.org/10.1109/LGRS.2012.2207943
Ravichandran, M., D. Behringer, S. Sivareddy, M. S. Girishkumar, N. Chacko, and R. Harikumar, 2013: Evaluation of the Global Ocean Data Assimilation System at INCOIS: The Tropical Indian Ocean. *Ocean Modelling*, **69,** 123-135, http://dx.doi.org/10.1016/j.ocemod.2013.05.003
Rehm, E. and C. D. Mobley, 2013: Estimation of hyperspectral inherent optical properties from in-water radiometry: error analysis and application to in situ data. *Applied Optics*, **52,** 795-817, https://doi.org/10.1364/AO.52.000795
Ren, Z., H. Zhi-song, L. I. Jia-xun, and L. I. U. Wei, 2013: Interpolation technique for Sparse Data Based on Information Diffusion Principle - Ellipse Model. *Journal of Tropical Oceanography*, **19,** 59-66,
Reul, N., S. Fournier, J. Boutin, O. Hernandez, C. Maes, B. Chapron, G. Alory, Y. Quilfen, J. Tenerelli, S. Morisset, Y. Kerr, S. Mecklenburg, and S. Delwart, 2013: Sea Surface Salinity Observations from Space with the SMOS Satellite: A New Means to Monitor the Marine Branch of the Water Cycle. *Surveys in Geophysics*, **35,** 681-722, http://dx.doi.org/10.1007/s10712-013-9244-0
Reverdin, G., L. Marié, P. Lazure, F. d'Ovidio, J. Boutin, P. Testor, N. Martin, A. Lourenco, F. Gaillard, A. Lavin, C. Rodriguez, R. Somavilla, J. Mader, A. Rubio, P. Blouch, J. Rolland, Y. Bozec, G. Charria, F. Batifoulier, F. Dumas, S. Louazel, and J. Chanut, 2013: Freshwater from the Bay of Biscay shelves in 2009. *Journal of Marine Systems*, **109–110, Supplement,** S134-S143, http://dx.doi.org/10.1016/j.jmarsys.2011.09.017
Rintoul, S. R. and N. Garabato, 2013: Dyanmics of the Southern Ocean Circulation. *Ocean Circulation and Climate - a 21st Century Perspective*, G. Siedler, S. M. Griffies, J. Gould, and J. A. Church, Eds., Elsevier BV, 471-492, http://dx.doi.org/10.1016/B978-0-12-391851-2.00018-0.
Riser, S. C. and M. S. Lozier, 2013: Rethinking the Gulf Stream. *Scientific American*, **308,** 50-55, http://dx.doi.org/10.1038/scientificamerican0213-50
Roberts, C. D., F. K. Garry, and L. C. Jackson, 2013: A Multimodel Study of Sea Surface

Temperature and Subsurface Density Fingerprints of the Atlantic Meridional Overturning Circulation. *Journal of Climate*, **26,** 9155-9174, http://dx.doi.org/10.1175/JCLI-D-12-00762.1

Roquet, F., C. Wunsch, G. Forget, P. Heimbach, C. Guinet, G. Reverdin, J.-B. Charrassin, F. Bailleul, D. P. Costa, L. A. Huckstadt, K. T. Goetz, K. M. Kovacs, C. Lydersen, M. Biuw, O. A. Nøst, H. Bornemann, J. Ploetz, M. N. Bester, T. McIntyre, M. C. Muelbert, M. A. Hindell, C. R. McMahon, G. Williams, R. Harcourt, I. C. Field, L. Chafik, K. W. Nicholls, L. Boehme, and M. A. Fedak, 2013: Estimates of the Southern Ocean general circulation improved by animal-borne instruments. *Geophysical Research Letters*, **40,** 6176-6180, http://dx.doi.org/10.1002/2013GL058304

Rosell-Fieschi, M., S. R. Rintoul, J. Gourrion, and J. L. Pelegrí, 2013: Tasman Leakage of intermediate waters as inferred from Argo floats. *Geophysical Research Letters*, **40,** 5456-5460, http://dx.doi.org/10.1002/2013GL057797

Rypina, I. I., S. R. Jayne, S. Yoshida, A. M. Macdonald, E. Douglass, and K. Buesseler, 2013: Short-term dispersal of Fukushima-derived radionuclides off Japan: modeling efforts and model-data intercomparison. *Biogeosciences*, **10,** 4973-4990, http://dx.doi.org/10.5194/bg-10-4973-2013

Sala, I., R. M. A. Caldeira, S. N. Estrada-Allis, E. Froufe, and X. Couvelard, 2013: Lagrangian transport pathways in the northeast Atlantic and their environmental impact. *Limnology and Oceanography: Fluids & Environments*, **3,** 40-60, http://dx.doi.org/10.1215/21573689-2152611

Sallée, J. B., E. Shuckburgh, N. Bruneau, A. J. S. Meijers, T. J. Bracegirdle, and Z. Wang, 2013: Assessment of Southern Ocean mixed-layer depths in CMIP5 models: Historical bias and forcing response. *Journal of Geophysical Research: Oceans*, **118,** 1845-1862, http://dx.doi.org/10.1002/jgrc.20157

Sasaki, H., S.-P. Xie, B. Taguchi, M. Nonaka, S. Hosoda, and Y. Masumoto, 2013: Interannual variations of the Hawaiian Lee Countercurrent induced by potential vorticity variability in the subsurface. *New Developments in Mode-Water Research*, A. Kubokawa, S.-P. Xie, F. Kobashi, and H. Mitsudera, Eds., Springer Japan, 89-107, http://dx.doi.org/10.1007/978-4-431-54162-2_7.

Schiller, A., T. Lee, and S. Masuda, 2013: Methods and Applications of Ocean State Estimation and Data Assimilation in Climate Research. *Ocean Circulation and Climate - Observing and MOdelling the Global Ocean*, G. Siedler, S. M. Griffies, J. Gould, and J. A. Church, Eds., Academic Press,

Schiller, A., R. J. Matear, R. Fiedler, M. Chamberlain, and J. V. Mansbridge, 2013: Comments on the parameterization of barotropic tide-induced bottom friction mixing in ocean circulation models. *Ocean Modelling*, **69,** 108-122, http://dx.doi.org/10.1016/j.ocemod.2013.06.005

Schiller, A. and K. R. Ridgway, 2013: Seasonal mixed-layer dynamics in an eddy-resolving ocean circulation model. *Journal of Geophysical Research: Oceans*, **118,** 3387-3405, http://dx.doi.org/10.1002/jgrc.20250

Schmidtko, S., G. C. Johnson, and J. M. Lyman, 2013: MIMOC: A global monthly isopycnal upper-ocean climatology with mixed layers. *Journal of Geophysical Research: Oceans*, **118,** 1658-1672, http://dx.doi.org/10.1002/jgrc.20122

Schofield, O., S. Glenn, and M. Moline, 2013: The Robot Ocean Network. *American Scientist*, **101,** 434-441, https://doi.org/10.1511/2013.105.434

Schroeder, K., C. Millot, L. Bengara, S. Ben Ismail, M. Bensi, M. Borghini, G. Budillon, V. Cardin, L. Coppola, C. Curtil, A. Drago, B. El Moumni, J. Font, J. L. Fuda, J. García-Lafuente, G. P. Gasparini, H. Kontoyiannis, D. Lefevre, P. Puig, P. Raimbault, G. Rougier, J. Salat, C. Sammari, J. C. Sánchez Garrido, A. Sanchez-Roman, S. Sparnocchia, C. Tamburini, I. Taupier-Letage, A. Theocharis, M. Vargas-Yáñez, and A. Vetrano, 2013: Long-term monitoring programme of the hydrological variability in the Mediterranean Sea: a first overview of the HYDROCHANGES network. *Ocean Science*, **9,** 301-324, http://dx.doi.org/10.5194/os-9-301-2013

Séférian, R., L. Bopp, M. Gehlen, J. Orr, C. Ethé, P. Cadule, O. Aumont, D. Salas y Mélia, A. Voldoire, and G. Madec, 2013: Skill assessment of three earth system models with common marine biogeochemistry. *Climate Dynamics*, **40,** 2549-2573, http://dx.doi.org/10.1007/s00382-012-1362-8

Seiki, A., M. Katsumata, T. Horii, T. Hasegawa, K. J. Richards, K. Yoneyama, and R. Shirooka, 2013: Abrupt cooling associated with the oceanic Rossby wave and lateral advection during CINDY2011. *Journal of Geophysical Research: Oceans*, **118,** 5523-5535, http://dx.doi.org/10.1002/jgrc.20381

Sengupta, S., A. Parekh, S. Chakraborty, K. Ravi Kumar, and T. Bose, 2013: Vertical variation of oxygen isotope in Bay of Bengal and its relationships with water masses. *Journal of Geophysical Research: Oceans*, **118,** 6411-6424, http://dx.doi.org/10.1002/2013JC008973

Shao, A. E., S. Mecking, L. Thompson, and R. E. Sonnerup, 2013: Mixed layer saturations of CFC-11, CFC-12, and SF6 in a global isopycnal model. *Journal of Geophysical Research: Oceans*, **118,** 4978-4988, http://dx.doi.org/10.1002/jgrc.20370

Shiozaki, T. and Y.-I. L. Chen, 2013: Different mechanisms controlling interannual phytoplankton variation in the South China Sea and the western North Pacific subtropical gyre: A satellite study. *Advances in Space Research*, **52,** 668-676, http://dx.doi.org/10.1016/j.asr.2013.05.005

Shu, Q., F. Qiao, Z. Song, and X. Yin, 2013: A comparison of two global ocean-ice coupled models with different horizontal resolutions. *Acta Oceanologica Sinica*, **32,** 1-11, http://dx.doi.org/10.1007/s13131-013-0335-z

Shulman, I., S. Frolov, S. Anderson, B. Penta, R. Gould, P. Sakalaukus, and S. Ladner, 2013: Impact of bio-optical data assimilation on short-term coupled physical, bio-optical model predictions. *Journal of Geophysical Research: Oceans*, **118,** 2215-2230, http://dx.doi.org/10.1002/jgrc.20177

Shulman, I., S. R. Ramp, S. Anderson, E. J. Metzger, and P. Sakalaukus, 2013: Impact of remote forcing, model resolution and bathymetry on predictions of currents on the shelf. *Dynamics of Atmospheres and Oceans*, **61–62,** 35-45, http://dx.doi.org/10.1016/j.dynatmoce.2013.03.001

Song, D. and X. H. Wang, 2013: Suspended sediment transport in the Deepwater Navigation Channel, Yangtze River Estuary, China, in the dry season 2009: 2. Numerical simulations. *Journal of Geophysical Research: Oceans*, **118,** 5568-5590, http://dx.doi.org/10.1002/jgrc.20411

Sonnewald, M., J. J. M. Hirschi, R. Marsh, E. L. McDonagh, and B. A. King, 2013: Atlantic meridional ocean heat transport at 26° N: impact on subtropical ocean heat content variability. *Ocean Science*, **9,** 1057-1069, http://dx.doi.org/10.5194/os-9-1057-2013

Speer, K. and G. Forget, 2013: Chapter 9 - Global Distribution and Formation of Mode Waters. *International Geophysics*, S. M. G. J. G. Gerold Siedler and A. C. John, Eds., Academic Press, 211-226, http://dx.doi.org/10.1016/B978-0-12-391851-2.00009-X.

Stanev, E. V., Y. He, S. Grayek, and A. Boetius, 2013: Oxygen dynamics in the Black Sea as seen by Argo profiling floats. *Geophysical Research Letters*, **40,** 3085-3090, http://dx.doi.org/10.1002/grl.50606

Stanev, E. V. and X. Lu, 2013: European Semi-enclosed Seas: Basic Physical Processes and Their Numerical Modelling. *Preventive Methods for Coastal Protection*, T. Soomere and E. Quak, Eds., Springer International Publishing, 131-179, http://dx.doi.org/10.1007/978-3-319-00440-2_5.

Storto, A., S. Masina, and S. Dobricic, 2013: Ensemble spread-based assessment of observation impact: application to a global ocean analysis system. *Quarterly Journal of the Royal Meteorological Society*, **139,** 1842-1862, http://dx.doi.org/10.1002/qj.2071

Sturges, W. and A. Bozec, 2013: A Puzzling Disagreement between Observations and Numerical Models in the Central Gulf of Mexico. *Journal of Physical Oceanography*, **43,** 2673-2681, http://dx.doi.org/10.1175/JPO-D-13-081.1

Subrahmanyam, B., G. Grunseich, and E. S. Nyadjro, 2013: Preliminary SMOS Salinity Measurements and Validation in the Indian Ocean. *Ieee Transactions on Geoscience and Remote Sensing*, **51,** 19-27, https://doi.org/10.1109/TGRS.2012.2199122

Sudre, J., C. Maes, and V. Garcon, 2013: On the global estimates of geostrophic and Ekman surface currents. *Limnology and Oceanography: Fluids & Environments*, **3,** 1-20, http://dx.doi.org/10.1215/21573689-2071927

Sugimoto, S., N. Takahashi, and K. Hanawa, 2013: Marked freshening of North Pacific subtropical mode water in 2009 and 2010: Influence of freshwater supply in the 2008 warm season. *Geophysical Research Letters*, **40,** 3102-3105, http://dx.doi.org/10.1002/grl.50600

Takeshita, Y., T. R. Martz, K. S. Johnson, J. N. Plant, D. Gilbert, S. C. Riser, C. Neill, and B. Tilbrook, 2013: A climatology-based quality control procedure for profiling float oxygen data. *Journal of Geophysical Research: Oceans*, **118,** 5640-5650, http://dx.doi.org/10.1002/jgrc.20399

Timothy, D. A., C. S. Wong, J. E. Barwell-Clarke, J. S. Page, L. A. White, and R. W. Macdonald, 2013: Climatology of sediment flux and composition in the subarctic Northeast Pacific Ocean with biogeochemical implications. *Progress in Oceanography*, **116,** 95-129, http://dx.doi.org/10.1016/j.pocean.2013.06.017

Toyama, K. and T. Suga, 2013: Roles of mode waters in the formation and maintenance of central water in the North Pacific. *New Developments in Mode-Water Research*, A. Kubokawa, S.-P. Xie, F. Kobashi, and H. Mitsudera, Eds., Springer Japan, 75-88, http://dx.doi.org/10.1007/978-4-431-54162-2_6.

Trenary, L. L. and W. Han, 2013: Local and remote forcing of decadal sea level and

thermocline depth variability in the South Indian Ocean. *Journal of Geophysical Research: Oceans*, **118,** 381-398, http://dx.doi.org/10.1029/2012JC008317

Tsimplis, M. N., F. M. Calafat, M. Marcos, G. Jordà, D. Gomis, L. Fenoglio-Marc, M. V. Struglia, S. A. Josey, and D. P. Chambers, 2013: The effect of the NAO on sea level and on mass changes in the Mediterranean Sea. *Journal of Geophysical Research: Oceans*, **118,** 944-952, http://dx.doi.org/10.1002/jgrc.20078

Ueno, H., 2013: Decadal variation of temperature inversions along Line P. *Journal of Oceanography*, **69,** 277-283, http://dx.doi.org/10.1007/s10872-013-0172-x

Våge, K., R. S. Pickart, M. A. Spall, G. W. K. Moore, H. Valdimarsson, D. J. Torres, S. Y. Erofeeva, and J. E. Ø. Nilsen, 2013: Revised circulation scheme north of the Denmark Strait. *Deep Sea Research Part I: Oceanographic Research Papers*, **79,** 20-39, http://dx.doi.org/10.1016/j.dsr.2013.05.007

van Kooten, G. C., 2013: Weather and the Instrumental Record. *Climate Change, Climate Science and Economics*, Springer Netherlands, 15-57, http://dx.doi.org/10.1007/978-94-007-4988-7_2.

van Sebille, E., P. Spence, M. R. Mazloff, M. H. England, S. R. Rintoul, and O. A. Saenko, 2013: Abyssal connections of Antarctic Bottom Water in a Southern Ocean State Estimate. *Geophysical Research Letters*, **40,** 2177-2182, http://dx.doi.org/10.1002/grl.50483

Vecchi, G. A., R. Msadek, W. Anderson, Y.-S. Chang, T. Delworth, K. Dixon, R. Gudgel, A. Rosati, B. Stern, G. Villarini, A. Wittenberg, X. Yang, F. Zeng, R. Zhang, and S. Zhang, 2013: Multiyear Predictions of North Atlantic Hurricane Frequency: Promise and Limitations. *Journal of Climate*, **26,** 5337-5357, http://dx.doi.org/10.1175/JCLI-D-12-00464.1

Vialard, J., K. Drushka, H. Bellenger, M. Lengaigne, S. Pous, and J. P. Duvel, 2013: Understanding Madden-Julian-Induced sea surface temperature variations in the North Western Australian Basin. *Climate Dynamics*, **41,** 3203-3218, http://dx.doi.org/10.1007/s00382-012-1541-7

Vilibić, I. and H. Mihanović, 2013: Observing the bottom density current over a shelf using an Argo profiling float. *Geophysical Research Letters*, **40,** 910-915, http://dx.doi.org/10.1002/grl.50215

Vinayachandran, P. N., D. Shankar, S. Vernekar, K. K. Sandeep, P. Amol, C. P. Neema, and A. Chatterjee, 2013: A summer monsoon pump to keep the Bay of Bengal salty. *Geophysical Research Letters*, **40,** 1777-1782, http://dx.doi.org/10.1002/grl.50274

Vinogradova, N. T. and R. M. Ponte, 2013: Clarifying the link between surface salinity and freshwater fluxes on monthly to interannual time scales. *Journal of Geophysical Research: Oceans*, **118,** 3190-3201, http://dx.doi.org/10.1002/jgrc.20200

Vinogradova, N. T. and R. M. Ponte, 2013: Small-Scale Variability in Sea Surface Salinity and Implications for Satellite-Derived Measurements. *Journal of Atmospheric and Oceanic Technology*, **30,** 2689-2694, http://dx.doi.org/10.1175/JTECH-D-13-00110.1

Vissa, N. K., A. N. V. Satyanarayana, and B. P. Kumar, 2013: Response of upper ocean and impact of barrier layer on Sidr cyclone induced sea surface cooling. *Ocean Science Journal*, **48,** 279-288, http://dx.doi.org/10.1007/s12601-013-0026-x

Vissa, N. K., A. N. V. Satyanarayana, and B. Prasad Kumar, 2013: Intensity of tropical cyclones during pre- and post-monsoon seasons in relation to accumulated tropical cyclone

heat potential over Bay of Bengal. *Natural Hazards*, **68,** 351-371, http://dx.doi.org/10.1007/s11069-013-0625-y

Vissa, N. K., A. N. V. Satyanarayana, and B. Prasad Kumar, 2013: Comparison of mixed layer depth and barrier layer thickness for the Indian Ocean using two different climatologies. *International Journal of Climatology*, **33,** 2855-2870, http://dx.doi.org/10.1002/joc.3635

Waite, A. M., V. Rossi, M. Roughan, B. Tilbrook, P. A. Thompson, M. Feng, A. S. J. Wyatt, and E. J. Raes, 2013: Formation and maintenance of high-nitrate, low pH layers in the eastern Indian Ocean and the role of nitrogen fixation. *Biogeosciences*, **10,** 5691-5702, http://dx.doi.org/10.5194/bg-10-5691-2013

Wakita, M., S. Watanabe, M. Honda, A. Nagano, K. Kimoto, K. Matsumoto, M. Kitamura, K. Sasaki, H. Kawakami, T. Fujiki, K. Sasaoka, Y. Nakano, and A. Murata, 2013: Ocean acidification from 1997 to 2011 in the subarctic western North Pacific Ocean. *Biogeosciences*, **10,** 7817-7827, http://dx.doi.org/10.5194/bg-10-7817-2013

Wang, C. and L. Zhang, 2013: Multidecadal Ocean Temperature and Salinity Variability in the Tropical North Atlantic: Linking with the AMO, AMOC, and Subtropical Cell. *Journal of Climate*, **26,** 6137-6162, http://dx.doi.org/10.1175/JCLI-D-12-00721.1

Wang, C., L. Zhang, and S.-K. Lee, 2013: Response of Freshwater Flux and Sea Surface Salinity to Variability of the Atlantic Warm Pool. *Journal of Climate*, **26,** 1249-1267, http://dx.doi.org/10.1175/JCLI-D-12-00284.1

Wang, F., Y. Li, Y. Zhang, and D. Hu, 2013: The subsurface water in the North Pacific tropical gyre. *Deep Sea Research Part I: Oceanographic Research Papers*, **75,** 78-92, http://dx.doi.org/10.1016/j.dsr.2013.01.002

Wang, L.-C. and C.-R. Wu, 2013: Contrasting the Flow Patterns in the Equatorial Pacific Between Two Types of El Niño. *Atmosphere-Ocean*, **51,** 60-74, http://dx.doi.org/10.1080/07055900.2012.744294

Wang, X., V. Bhatt, and Y.-J. Sun, 2013: Study of seasonal variability and heat budget of the East Australian Current using two eddy-resolving ocean circulation models. *Ocean Dynamics*, **63,** 549-563, http://dx.doi.org/10.1007/s10236-013-0605-5

Wang, X., G. Han, W. Li, X. Wu, and X. Zhang, 2013: Salinity drift of global Argo profiles and recent halosteric sea level variation. *Global and Planetary Change*, **108,** 42-55, http://dx.doi.org/10.1016/j.gloplacha.2013.06.005

Wang, Z., S. F. DiMarco, A. E. Jochens, and S. Ingle, 2013: High salinity events in the northern Arabian Sea and Sea of Oman. *Deep Sea Research Part I: Oceanographic Research Papers*, **74,** 14-24, http://dx.doi.org/10.1016/j.dsr.2012.12.004

Watanabe, M. and T. Hibiya, 2013: Assessment of mixed layer models embedded in an ocean general circulation model. *Journal of Oceanography*, **69,** 329-338, http://dx.doi.org/10.1007/s10872-013-0176-6

White, A. E., R. A. Foster, C. R. Benitez-Nelson, P. Masqué, E. Verdeny, B. N. Popp, K. E. Arthur, and F. G. Prahl, 2013: Nitrogen fixation in the Gulf of California and the Eastern Tropical North Pacific. *Progress in Oceanography*, **109,** 1-17, http://dx.doi.org/10.1016/j.pocean.2012.09.002

Wienberg, C., P. Wintersteller, L. Beuck, and D. Hebbeln, 2013: Coral Patch seamount (NE Atlantic) - a sedimentological and megafaunal reconnaissance based on video and

hydroacoustic surveys. *Biogeosciences*, **10,** 3421-3443, http://dx.doi.org/10.5194/bg-10-3421-2013

Wilkin, J. L. and E. J. Hunter, 2013: An assessment of the skill of real-time models of Mid-Atlantic Bight continental shelf circulation. *Journal of Geophysical Research: Oceans*, **118,** 2919-2933, http://dx.doi.org/10.1002/jgrc.20223

Wilson, C., T. A. Villareal, M. A. Brzezinski, J. W. Krause, and A. Y. Shcherbina, 2013: Chlorophyll bloom development and the subtropical front in the North Pacific. *Journal of Geophysical Research: Oceans*, **118,** 1473-1488, http://dx.doi.org/10.1002/jgrc.20143

Wong, A. P. S. and S. C. Riser, 2013: Modified shelf water on the continental slope north of Mac Robertson Land, East Antarctica. *Geophysical Research Letters*, **40,** 6186-6190, http://dx.doi.org/10.1002/2013GL058125

Woodham, R., G. B. Brassington, R. Robertson, and O. Alves, 2013: Propagation characteristics of coastally trapped waves on the Australian Continental Shelf. *Journal of Geophysical Research: Oceans*, **118,** 4461-4473, http://dx.doi.org/10.1002/jgrc.20317

Woolfe, K. F., S. Lani, and K. G. Sabra, 2013: Passive acoustic thermometry of the deep water sound channel using ambient noise. *The Journal of the Acoustical Society of America*, **134,** 3983-3983, http://dx.doi.org/10.1121/1.4830512

Wouters, B., W. Hazeleger, S. Drijfhout, G. J. van Oldenborgh, and V. Guemas, 2013: Multiyear predictability of the North Atlantic subpolar gyre. *Geophysical Research Letters*, **40,** 3080-3084, http://dx.doi.org/10.1002/grl.50585

Wu, C.-R. and L.-C. Wang, 2013: Contrasting the evolution between two types of El Niño in a data assimilation model. *Ocean Dynamics*, **63,** 577-587, http://dx.doi.org/10.1007/s10236-013-0610-8

Wunsch, C., 2013: Covariances and linear predictability of the Atlantic Ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, **85,** 228-243, http://dx.doi.org/10.1016/j.dsr2.2012.07.015

Xie, S.-P., 2013: Advancing climate dynamics toward reliable regional climate projections. *Journal of Ocean University of China*, **12,** 191-200, http://dx.doi.org/10.1007/s11802-013-2277-7

Yan, Y., E. P. Chassignet, Y. Qi, and W. K. Dewar, 2013: Freshening of Subsurface Waters in the Northwest Pacific Subtropical Gyre: Observations and Dynamics. *Journal of Physical Oceanography*, **43,** 2733-2751, http://dx.doi.org/10.1175/JPO-D-13-03.1

Yang, G., F. Wang, Y. Li, and P. Lin, 2013: Mesoscale eddies in the northwestern subtropical Pacific Ocean: Statistical characteristics and three-dimensional structures. *Journal of Geophysical Research: Oceans*, **118,** 1906-1925, http://dx.doi.org/10.1002/jgrc.20164

Yasunaka, S., Y. Nojiri, S.-i. Nakaoka, T. Ono, H. Mukai, and N. Usui, 2013: Monthly maps of sea surface dissolved inorganic carbon in the North Pacific: Basin-wide distribution and seasonal variation. *Journal of Geophysical Research: Oceans*, **118,** 3843-3850, http://dx.doi.org/10.1002/jgrc.20279

Yoneyama, K., C. Zhang, and C. Long, 2013: Tracking Pulses of the Madden–Julian Oscillation. *Bulletin of the American Meteorological Society*, **94,** 1871-1891, http://dx.doi.org/10.1175/BAMS-D-12-00157.1

Yuhong, Z., D. Yan, Z. Shaojun, Y. Yali, and C. Xuhua, 2013: Impact of Indian Ocean Dipole on the salinity budget in the equatorial Indian Ocean. *Journal of Geophysical Research: Oceans*, **118**, http://dx.doi.org/10.1002/jgrc.20392

Zakharova, N. B., V. I. Agoshkov, and E. I. Parmuzin, 2013: A new interpolation method for observation data obtained from Argo buoys system. *Russian Journal of Numerical Analysis and Mathematical Modelling*, **28,** 67-84, http://dx.doi.org/10.1515/rnam-2013-0005

Zhang, C., J. Xu, X. Bao, and Z. Wang, 2013: An effective method for improving the accuracy of Argo objective analysis. *Acta Oceanologica Sinica*, **32,** 66-77, http://dx.doi.org/10.1007/s13131-013-0333-1

Zhang, H., G. Chen, C. Qian, and H. Jiang, 2013: Assessment of Two SMOS Sea Surface Salinity Level 3 Products Against Argo Upper Salinity Measurements. *Ieee Geoscience and Remote Sensing Letters*, **10,** 1434-1438, https://doi.org/10.1109/LGRS.2013.2259792

Zhang, R., Z.-s. Huang, L. I. Jia-xun, and L. I. U. Wei, 2013: INTERPOLATION TECHNIQUE FOR SPARSE DATA BASED ON INFORMATION DIFFUSION PRINCIPLE-ELLIPSE MODEL. *Journal of Tropical Meteorology*, **19,** 59-66, http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=84924633&site=ehost-live

Zhang, R.-H., F. Zheng, J. Zhu, and Z. Wang, 2013: A successful real-time forecast of the 2010–11 La Niña event. *Scientific Reports*, **3**, http://dx.doi.org/10.1038/srep01108

Zhang, Z., D. Yuan, and P. C. Chu, 2013: Geostrophic meridional transport in tropical Northwest Pacific based on Argo profiles. *Chinese Journal of Oceanology and Limnology*, **31,** 656-664, http://dx.doi.org/10.1007/s00343-013-2169-0

Zhang, Z., Y. Zhang, W. Wang, and R. X. Huang, 2013: Universal structure of mesoscale eddies in the ocean. *Geophysical Research Letters*, **40,** 3677-3681, http://dx.doi.org/10.1002/grl.50736

Zhang, Z., W. Zhao, J. Tian, and X. Liang, 2013: A mesoscale eddy pair southwest of Taiwan and its influence on deep circulation. *Journal of Geophysical Research: Oceans*, **118,** 6479-6494, http://dx.doi.org/10.1002/2013JC008994

Zhu, J., B. Huang, M. Balmaseda, J. Kinter, III, P. Peng, Z.-Z. Hu, and L. Marx, 2013: Improved reliability of ENSO hindcasts with multi-ocean analyses ensemble initialization. *Climate Dynamics*, **41,** 2785-2795, http://dx.doi.org/10.1007/s00382-013-1965-8

Zhuang, W., M. Feng, Y. Du, A. Schiller, and D. Wang, 2013: Low-frequency sea level variability in the southern Indian Ocean and its impacts on the oceanic meridional transports. *Journal of Geophysical Research: Oceans*, **118,** 1302-1315, http://dx.doi.org/10.1002/jgrc.20129

Zilberman, N. V., D. H. Roemmich, and S. T. Gille, 2013: The Mean and the Time Variability of the Shallow Meridional Overturning Circulation in the Tropical South Pacific Ocean. *Journal of Climate*, **26,** 4069-4087, http://dx.doi.org/10.1175/JCLI-D-12-00120.1

Zu, T., D. Wang, C. Yan, I. Belkin, W. Zhuang, and J. Chen, 2013: Evolution of an anticyclonic eddy southwest of Taiwan. *Ocean Dynamics*, **63,** 519-531, http://dx.doi.org/10.1007/s10236-013-0612-6

2012 (260)

Agarwal, N., R. Sharma, A. Parekh, S. Basu, A. Sarkar, and V. K. Agarwal, 2012: Argo observations of barrier layer in the tropical Indian Ocean. *Advances in Space Research*, **50,** 642-654, http://dx.doi.org/10.1016/j.asr.2012.05.021

Agoshkov, V. I. and V. B. Zalesny, 2012: Variational Data Assimilation Technique in Mathematical Modeling of Ocean Dynamics. *Pure and Applied Geophysics*, **169,** 555-578, http://dx.doi.org/10.1007/s00024-011-0372-5

Baird, M. E. and K. R. Ridgway, 2012: The southward transport of sub-mesoscale lenses of Bass Strait Water in the centre of anti-cyclonic mesoscale eddies. *Geophysical Research Letters*, **39,** L02603, http://dx.doi.org/10.1029/2011GL050643

Banks, C. J., C. P. Gommenginger, M. A. Srokosz, and H. M. Snaith, 2012: Validating SMOS Ocean Surface Salinity in the Atlantic With Argo and Operational Ocean Model Data. *Ieee Transactions on Geoscience and Remote Sensing*, **50,** 1688-1702, https://doi.org/10.1109/TGRS.2011.2167340

Belyaev, K. P., C. A. S. Tanajura, and N. P. Tuchkova, 2012: Comparison of methods for argo drifters data assimilation into a hydrodynamical model of the ocean. *Oceanology*, **52,** 593-603, http://dx.doi.org/10.1134/S0001437012050025

Bernardello, R., J. G. Cardoso, N. Bahamon, D. Donis, I. Marinov, and A. Cruzado, 2012: Factors controlling interannual variability of vertical organic matter export and phytoplankton bloom dynamics – a numerical case-study for the NW Mediterranean Sea. *Biogeosciences*, **9,** 4233-4245, http://dx.doi.org/10.5194/bg-9-4233-2012

Bhaskar, T. V. S. U., D. Swain, and M. Ravichandran, 2012: Determination of Sonic Layer Depth from XBT Profiles and Climatological Salinities in the Arabian Sea. *International Journal of Earth Sciences and Engineering*, **5,** 35-43,

Bingham, F. M., G. R. Foltz, and M. J. McPhaden, 2012: Characteristics of the seasonal cycle of surface layer salinity in the global ocean. *Ocean Science*, **8,** 915-929, http://dx.doi.org/10.5194/os-8-915-2012

Boening, C., J. K. Willis, F. W. Landerer, R. S. Nerem, and J. Fasullo, 2012: The 2011 La Niña: So strong, the oceans fell. *Geophysical Research Letters*, **39,** L19602, http://dx.doi.org/10.1029/2012GL053055

Boutin, J., N. Martin, X. Yin, J. Font, N. Reul, and P. Spurgeon, 2012: First Assessment of SMOS Data Over Open Ocean: Part II: 2014;Sea Surface Salinity. *Ieee Transactions on Geoscience and Remote Sensing*, **50,** 1662-1675, https://doi.org/10.1109/TGRS.2012.2184546

Boyer, T., S. Levitus, J. Antonov, J. R. Reagan, C. Schmid, and R. A. Locarnini, 2012: Subsurface Salinity. In State of the Climate 2011. Blunden, J. and D. S. Arndt, Eds. *Bulletin of the American Meteorological Society***,** S72-S75, http://dx.doi.org/10.1175/2012BAMSStateoftheClimate.1

Buongiorno Nardelli, B., S. Guinehut, A. Pascual, Y. Drillet, S. Ruiz, and S. Mulet, 2012: Towards high resolution mapping of 3-D mesoscale dynamics from observations. *Ocean Science*, **8,** 885-901, http://dx.doi.org/10.5194/os-8-885-2012

Calafat, F. M., G. Jordà, M. Marcos, and D. Gomis, 2012: Comparison of Mediterranean sea level variability as given by three baroclinic models. *Journal of Geophysical Research:*

Oceans, **117,** C02009, http://dx.doi.org/10.1029/2011JC007277
Camps, A., J. Font, I. Corbella, M. Vall-Llossera, M. Portabella, J. Ballabrera-Poy, V. González, M. Piles, A. Aguasca, R. Acevo, X. Bosch, N. Duffo, P. Fernández, C. Gabarró, J. Gourrion, S. Guimbard, A. Marín, J. Martínez, A. Monerris, B. Mourre, F. Pérez, N. Rodríguez, J. Salvador, R. Sabia, M. Talone, F. Torres, M. Pablos, A. Turiel, E. Valencia, J. Martínez-Fernández, N. Sánchez, C. Pérez-Gutiérrez, G. Baroncini-Turricchia, A. Rius, and S. Ribó, 2012: Review of the CALIMAS Team Contributions to European Space Agency's Soil Moisture and Ocean Salinity Mission Calibration and Validation. *Remote Sensing*, **4,** 1272-1309, https://doi.org/10.3390/rs4051272
Carton, J. A., H. F. Seidel, and B. S. Giese, 2012: Detecting historical ocean climate variability. *Journal of Geophysical Research: Oceans*, **117,** C02023, http://dx.doi.org/10.1029/2011JC007401
Carton, X., P. L'Hegaret, and R. Baraille, 2012: Mesoscale variability of water masses in the Arabian Sea as revealed by ARGO floats. *Ocean Science*, **8,** 227-248, http://dx.doi.org/10.5194/os-8-227-2012
Castro-Morales, K. and J. Kaiser, 2012: Using dissolved oxygen concentrations to determine mixed layer depths in the Bellingshausen Sea. *Ocean Science*, **8**, http://dx.doi.org/10.5194/os-8-1-2012
Chacko, N., M. Ravichandran, R. R. Rao, and S. S. C. Shenoi, 2012: An anomalous cooling event observed in the Bay of Bengal during June 2009. *Ocean Dynamics*, **62,** 671-681, http://dx.doi.org/10.1007/s10236-012-0525-9
Chang, Y.-S. and H.-R. Shin, 2012: Objective analysis of monthly temperature and salinity around the southwestern East Sea (Japan Sea) on a 0.1° grid. *Continental Shelf Research*, **45,** 54-64, http://dx.doi.org/10.1016/j.csr.2012.06.001
Chatterjee, A., D. Shankar, S. S. C. Shenoi, G. V. Reddy, G. S. Michael, M. Ravichandran, V. V. Gopalakrishna, E. P. Rama Rao, T. V. S. U. Bhaskar, and V. N. Sanjeevan, 2012: A new atlas of temperature and salinity for the North Indian Ocean. *Journal of Earth System Science*, **121,** 559-593, http://dx.doi.org/10.1007/s12040-012-0191-9
Chen, C., R. Limeburner, G. Gao, Q. Xu, J. Qi, P. Xue, Z. Lai, H. Lin, R. Beardsley, B. Owens, and B. Carlson, 2012: FVCOM model estimate of the location of Air France 447. *Ocean Dynamics*, **62,** 943-952, http://dx.doi.org/10.1007/s10236-012-0537-5
Chen, G., J. Gan, Q. Xie, X. Chu, D. Wang, and Y. Hou, 2012: Eddy heat and salt transports in the South China Sea and their seasonal modulations. *Journal of Geophysical Research: Oceans*, **117,** C05021, http://dx.doi.org/10.1029/2011JC007724
Chen, G., D. Wang, and Y. Hou, 2012: The features and interannual variability mechanism of mesoscale eddies in the Bay of Bengal. *Continental Shelf Research*, **47,** 178-185, http://dx.doi.org/10.1016/j.csr.2012.07.011
Chen, J., R. Zhang, H. Wang, Y. An, P. Peng, and W. Zhang, 2012: Isolation of sea surface salinity maps on various timescales in the tropical Pacific Ocean. *Journal of Oceanography*, **68,** 687-701, http://dx.doi.org/10.1007/s10872-012-0126-8
Chen, X., D. Pan, X. He, Y. Bai, and D. Wang, 2012: Upper ocean responses to category 5 typhoon Megi in the western north Pacific. *Acta Oceanologica Sinica*, **31,** 51-58, http://dx.doi.org/10.1007/s13131-012-0175-2
Chen, X., Y. Zhang, M. Zhang, Y. Feng, Z. Wu, F. Qiao, and N. E. Huang, 2012:

Intercomparison between observed and simulated variability in global ocean heat content using empirical mode decomposition, part I: modulated annual cycle. *Climate Dynamics*, **41,** 2797-2815, http://dx.doi.org/10.1007/s00382-012-1554-2

Chierici, M., S. R. Signorini, M. Mattsdotter-Björk, A. Fransson, and A. Olsen, 2012: Surface water fCO2 algorithms for the high-latitude Pacific sector of the Southern Ocean. *Remote Sensing of Environment*, **119,** 184-196, http://dx.doi.org/10.1016/j.rse.2011.12.020

Cho, K.-H., H. V. Wang, J. Shen, A. Valle-Levinson, and Y.-c. Teng, 2012: A modeling study on the response of Chesapeake Bay to hurricane events of Floyd and Isabel. *Ocean Modelling*, **49–50,** 22-46, http://dx.doi.org/10.1016/j.ocemod.2012.02.005

Cléroux, C., M. Debret, E. Cortijo, J.-C. Duplessy, F. Dewilde, J. Reijmer, and N. Massei, 2012: High-resolution sea surface reconstructions off Cape Hatteras over the last 10 ka. *Paleoceanography*, **27,** PA1205, http://dx.doi.org/10.1029/2011PA002184

Close, S. E. and A. C. Naveira Garabato, 2012: Baroclinic adjustment in Drake Passage driven by tropical Pacific forcing. *Geophysical Research Letters*, **39,** L19610, http://dx.doi.org/10.1029/2012GL053402

Collins, M. A., G. Stowasser, S. Fielding, R. Shreeve, J. C. Xavier, H. J. Venables, P. Enderlein, Y. Cherel, and A. Van de Putte, 2012: Latitudinal and bathymetric patterns in the distribution and abundance of mesopelagic fish in the Scotia Sea. *Deep Sea Research Part II: Topical Studies in Oceanography*, **59-60,** 189-198, http://dx.doi.org/10.1016/j.dsr2.2011.07.003

Cravatte, S., W. S. Kessler, and F. Marin, 2012: Intermediate Zonal Jets in the Tropical Pacific Ocean Observed by Argo Floats. *Journal of Physical Oceanography*, **42,** 1475-1485, http://dx.doi.org/10.1175/JPO-D-11-0206.1

Czeschel, R., L. Stramma, and G. C. Johnson, 2012: Oxygen decreases and variability in the eastern equatorial Pacific. *Journal of Geophysical Research: Oceans*, **117,** C11019, http://dx.doi.org/10.1029/2012JC008043

Davis, R. E., W. S. Kessler, and J. T. Sherman, 2012: Gliders Measure Western Boundary Current Transport from the South Pacific to the Equator. *Journal of Physical Oceanography*, **42,** 2001-2013, http://dx.doi.org/10.1175/JPO-D-12-022.1

Demidov, A. N., B. N. Filyushkin, and N. G. Kozhelupova, 2012: Detection of Mediterranean lenses in the Atlantic ocean by profilers of the Argo project. *Oceanology*, **52,** 171-180, http://dx.doi.org/10.1134/S0001437012020038

Deng, Z., Y. Tang, D. Chen, and G. Wang, 2012: A Time-Averaged Covariance Method in the EnKF for Argo Data Assimilation. *Atmosphere-Ocean*, **50,** 129-145, http://dx.doi.org/10.1080/07055900.2012.719823

Dietze, H. and I. Kriest, 2012: 137Cs off Fukushima Dai-ichi, Japan - model based estimates of dilution and fate. *Ocean Science*, **8,** 319-332, http://dx.doi.org/10.5194/os-8-319-2012

Dobricic, S., C. Dufau, P. Oddo, N. Pinardi, I. Pujol, and M. H. Rio, 2012: Assimilation of SLA along track observations in the Mediterranean with an oceanographic model forced by atmospheric pressure. *Ocean Science*, **8,** 787-795, http://dx.doi.org/10.5194/os-8-787-2012

Douglass, D. H. and R. S. Knox, 2012: Ocean heat content and Earth's radiation imbalance. II.

Relation to climate shifts. *Physics Letters A*, **376,** 1226-1229, http://dx.doi.org/10.1016/j.physleta.2012.02.027

Drushka, K., J. Sprintall, S. T. Gille, and S. Wijffels, 2012: In Situ Observations of Madden–Julian Oscillation Mixed Layer Dynamics in the Indian and Western Pacific Oceans. *Journal of Climate*, **25,** 2306-2328, http://dx.doi.org/10.1175/JCLI-D-11-00203.1

Durack, P. J., S. E. Wijffels, and R. J. Matear, 2012: Ocean Salinities Reveal Strong Global Water Cycle Intensification During 1950 to 2000. *Science*, **336,** 455-458, http://dx.doi.org/10.1126/science.1212222

Ebuchi, N. and H. abe, 2012: Evaluation of sea surface salinity observed by Aquarius. *Proceedings of IGARSS 2012*, 5767-5769,

Everett, J. D., M. E. Baird, P. R. Oke, and I. M. Suthers, 2012: An avenue of eddies: Quantifying the biophysical properties of mesoscale eddies in the Tasman Sea. *Geophysical Research Letters*, **39,** L16608, http://dx.doi.org/10.1029/2012GL053091

Featherstone, W. E. and M. S. Filmer, 2012: The north-south tilt in the Australian Height Datum is explained by the ocean's mean dynamic topography. *Journal of Geophysical Research: Oceans*, **117,** C08035, http://dx.doi.org/10.1029/2012JC007974

Femke de Jong, M., H. M. van Aken, K. Våge, and R. S. Pickart, 2012: Convective mixing in the central Irminger Sea: 2002–2010. *Deep Sea Research Part I: Oceanographic Research Papers*, **63,** 36-51, http://dx.doi.org/10.1016/j.dsr.2012.01.003

Fenoglio-Marc, L., R. Rietbroek, S. Grayek, M. Becker, J. Kusche, and E. Stanev, 2012: Water mass variation in the Mediterranean and Black Seas. *Journal of Geodynamics*, **59–60,** 168-182, http://dx.doi.org/10.1016/j.jog.2012.04.001

Foltz, G. R., M. J. McPhaden, and R. Lumpkin, 2012: A Strong Atlantic Meridional Mode Event in 2009: The Role of Mixed Layer Dynamics. *Journal of Climate*, **25,** 363-380, http://dx.doi.org/10.1175/JCLI-D-11-00150.1

Forryan, A., A. P. Martin, M. A. Srokosz, E. E. Popova, S. C. Painter, and M. C. Stinchcombe, 2012: Turbulent nutrient fluxes in the Iceland Basin. *Deep Sea Research Part I: Oceanographic Research Papers*, **63,** 20-35, http://dx.doi.org/10.1016/j.dsr.2011.12.006

Fu, W., 2012: Altimetric data assimilation by EnOI and 3DVAR in a tropical pacific model: Impact on the simulation of variability. *Advances in Atmospheric Sciences*, **29,** 823-837, http://dx.doi.org/10.1007/s00376-011-1022-7

Fujii, Y., M. Kamachi, S. Matsumoto, and S. Ishizaki, 2012: Barrier Layer and Relevant Variability of the Salinity Field in the Equatorial Pacific Estimated in an Ocean Reanalysis Experiment. *Pure and Applied Geophysics*, **169,** 579-594, http://dx.doi.org/10.1007/s00024-011-0387-y

Gary, S. F., M. S. Lozier, A. Biastoch, and C. W. Böning, 2012: Reconciling tracer and float observations of the export pathways of Labrador Sea Water. *Geophysical Research Letters*, **39,** L24606, http://dx.doi.org/10.1029/2012GL053978

Giglio, D., D. Roemmich, and S. T. Gille, 2012: Wind-Driven Variability of the Subtropical North Pacific Ocean. *Journal of Physical Oceanography*, **42,** 2089-2100, http://dx.doi.org/10.1175/JPO-D-12-029.1

Gille, S. T., 2012: Diurnal variability of upper ocean temperatures from microwave satellite measurements and Argo profiles. *Journal of Geophysical Research: Oceans*, **117,** C11027, http://dx.doi.org/10.1029/2012JC007883

Gleckler, P. J., B. D. Santer, C. M. Domingues, D. W. Pierce, T. P. Barnett, J. A. Church, K. E. Taylor, K. M. AchutaRao, T. P. Boyer, M. Ishii, and P. M. Caldwell, 2012: Human-induced global ocean warming on multidecadal timescales. *Nature Climate Change*, **2,** 524-529, http://dx.doi.org/10.1038/nclimate1553

Gouretski, V., J. Kennedy, T. Boyer, and A. Köhl, 2012: Consistent near-surface ocean warming since 1900 in two largely independent observing networks. *Geophysical Research Letters*, **39,** L19606, http://dx.doi.org/10.1029/2012GL052975

Greatbatch, R. J., P. Brandt, M. Claus, S. H. Didwischus, and Y. Fu, 2012: On the Width of the Equatorial Deep Jets. *Journal of Physical Oceanography*, **42,** 1729-1740, http://dx.doi.org/10.1175/JPO-D-11-0238.1

Gregory, J. M., N. J. White, J. A. Church, M. F. P. Bierkens, J. E. Box, M. R. van den Broeke, J. G. Cogley, X. Fettweis, E. Hanna, P. Huybrechts, L. F. Konikow, P. W. Leclercq, B. Marzeion, J. Oerlemans, M. E. Tamisiea, Y. Wada, L. M. Wake, and R. S. W. van de Wal, 2012: Twentieth-Century Global-Mean Sea Level Rise: Is the Whole Greater than the Sum of the Parts? *Journal of Climate*, **26,** 4476-4499, http://dx.doi.org/10.1175/JCLI-D-12-00319.1

Griesel, A., M. R. Mazloff, and S. T. Gille, 2012: Mean dynamic topography in the Southern Ocean: Evaluating Antarctic Circumpolar Current transport. *Journal of Geophysical Research: Oceans*, **117,** C01020, http://dx.doi.org/10.1029/2011JC007573

Grodsky, S. A., N. Reul, G. Lagerloef, G. Reverdin, J. A. Carton, B. Chapron, Y. Quilfen, V. N. Kudryavtsev, and H.-Y. Kao, 2012: Haline hurricane wake in the Amazon/Orinoco plume: AQUARIUS/SACD and SMOS observations. *Geophysical Research Letters*, **39,** L20603, http://dx.doi.org/10.1029/2012GL053335

Guinehut, S., A. L. Dhomps, G. Larnicol, and P. Y. Le Traon, 2012: High resolution 3-D temperature and salinity fields derived from in situ and satellite observations. *Ocean Science*, **8,** 845-857, http://dx.doi.org/10.5194/os-8-845-2012

Haines, K., M. Valdivieso, H. Zuo, and V. N. Stepanov, 2012: Transports and budgets in a 1/4 ° global ocean reanalysis 1989–2010. *Ocean Science*, **8,** 333-344, http://dx.doi.org/10.5194/os-8-333-2012

Hamon, M., G. Reverdin, and P. Y. Le Traon, 2012: Empirical Correction of XBT Data. *Journal of Atmospheric and Oceanic Technology*, **29,** 960-973, http://dx.doi.org/10.1175/JTECH-D-11-00129.1

Hartman, S. E., R. S. Lampitt, K. E. Larkin, M. Pagnani, J. Campbell, T. Gkritzalis, Z.-P. Jiang, C. A. Pebody, H. A. Ruhl, A. J. Gooday, B. J. Bett, D. S. M. Billett, P. Provost, R. McLachlan, J. D. Turton, and S. Lankester, 2012: The Porcupine Abyssal Plain fixed-point sustained observatory (PAP-SO): variations and trends from the Northeast Atlantic fixed-point time-series. *ICES Journal of Marine Science: Journal du Conseil*, **69,** 776-783, http://dx.doi.org/10.1093/icesjms/fss077

Hasson, A., A. Koch-Larrouy, R. Morrow, M. Juza, and T. Penduff, 2012: The origin and fate of mode water in the southern Pacific Ocean. *Ocean Dynamics*, **62,** 335-354, http://dx.doi.org/10.1007/s10236-011-0507-3

He, J., Y. He, and S. Cai, 2012: Assessing the Application of Argo Profiling Float Data to the Study of the Seasonal Variation of the Hydrological Parameters and the Current Field East of Luzon Strait. *Atmosphere-Ocean*, **50,** 77-91, http://dx.doi.org/10.1080/07055900.2012.719822

Helber, R. W., A. B. Kara, J. G. Richman, M. R. Carnes, C. N. Barron, H. E. Hurlburt, and T. Boyer, 2012: Temperature versus salinity gradients below the ocean mixed layer. *Journal of Geophysical Research: Oceans*, **117,** C05006, http://dx.doi.org/10.1029/2011JC007382

Henry, O., P. Prandi, W. Llovel, A. Cazenave, S. Jevrejeva, D. Stammer, B. Meyssignac, and N. Koldunov, 2012: Tide gauge-based sea level variations since 1950 along the Norwegian and Russian coasts of the Arctic Ocean: Contribution of the steric and mass components. *Journal of Geophysical Research: Oceans*, **117,** C06023, http://dx.doi.org/10.1029/2011JC007706

Hobbs, W. R. and J. K. Willis, 2012: Midlatitude North Atlantic heat transport: A time series based on satellite and drifter data. *J. Geophys. Res.*, **117,** C01008, http://dx.doi.org/10.1029/2011JC007039

Holte, J. W., L. D. Talley, T. K. Chereskin, and B. M. Sloyan, 2012: The role of air-sea fluxes in Subantarctic Mode Water formation. *Journal of Geophysical Research: Oceans*, **117,** C03040, http://dx.doi.org/10.1029/2011JC007798

Hu, J., Q. Zheng, Z. Sun, and C.-K. Tai, 2012: Penetration of nonlinear Rossby eddies into South China Sea evidenced by cruise data. *Journal of Geophysical Research: Oceans*, **117,** C03010, http://dx.doi.org/10.1029/2011JC007525

Hu, S. and D. Hu, 2012: Heat center of the western Pacific warm pool. *Chinese Journal of Oceanology and Limnology*, **30,** 169-176, http://dx.doi.org/10.1007/s00343-012-1193-9

Huang, B., Y. Xue, A. Kumar, and D. W. Behringer, 2012: AMOC variations in 1979–2008 simulated by NCEP operational ocean data assimilation system. *Climate Dynamics*, **38,** 513-525, http://dx.doi.org/10.1007/s00382-011-1035-z

Huang, C. J., F. Qiao, Q. Shu, and Z. Song, 2012: Evaluating austral summer mixed-layer response to surface wave–induced mixing in the Southern Ocean. *Journal of Geophysical Research: Oceans*, **117,** C00J18, http://dx.doi.org/10.1029/2012JC007892

Isobe, A., S. i. Kako, X. Guo, and H. Takeoka, 2012: Ensemble numerical forecasts of the sporadic Kuroshio water intrusion (kyucho) into shelf and coastal waters. *Ocean Dynamics*, **62,** 633-644, http://dx.doi.org/10.1007/s10236-011-0519-z

Janeiro, J., F. Martins, and P. Relvas, 2012: Towards the development of an operational tool for oil spills management in the Algarve coast. *Journal of Coastal Conservation*, **16,** 449-460, http://dx.doi.org/10.1007/s11852-012-0201-8

Janjić, T., J. Schröter, R. Savcenko, W. Bosch, A. Albertella, R. Rummel, and O. Klatt, 2012: Impact of combining GRACE and GOCE gravity data on ocean circulation estimates. *Ocean Science*, **8,** 65-79, http://dx.doi.org/10.5194/os-8-65-2012

Jena, B., D. Swain, and K. Avinash, 2012: Investigation of the biophysical processes over the oligotrophic waters of South Indian Ocean subtropical gyre, triggered by cyclone Edzani. *International Journal of Applied Earth Observation and Geoinformation*, **18,** 49-56, http://dx.doi.org/10.1016/j.jag.2012.01.006

Johnson, G. C. and J. M. Lyman, 2012: Sea Surface Salinity. In State of the Climate in 2011. Blunden, J. and D. S. Arndt, Eds. *Bulletin of the American Meteorological Society*, S68-S69, http://dx.doi.org/10.1175/2012BAMSStateoftheClimate.1

Johnson, G. C., J. M. Lyman, J. K. Willis, S. Levitus, T. Boyer, J. Antonov, and S. A. Good, 2012: Global Oceans: Ocean Heat Content. In State of the Climate in 2011. Blunden, J. and D. S. Arndt, Eds. *Bulletin of the American Meteorological Society*, S62-S65, http://dx.doi.org/10.1175/2012BAMSStateoftheClimate.1

Johnson, G. C., S. Schmidtko, and J. M. Lyman, 2012: Relative contributions of temperature and salinity to seasonal mixed layer density changes and horizontal density gradients. *Journal of Geophysical Research: Oceans*, **117,** C04015, http://dx.doi.org/10.1029/2011JC007651

Joyce, T. M., 2012: New perspectives on eighteen-degree water formation in the North Atlantic. *Journal of Oceanography*, **68,** 45-52, http://dx.doi.org/10.1007/s10872-011-0029-0

Jury, M. R., 2012: Physical Oceanographic Influences on Central Benguela Fish Catch. *Earth Interactions*, **16,** 1-15, http://dx.doi.org/10.1175/2012EI421.1

Juza, M., T. Penduff, J. M. Brankart, and B. Barnier, 2012: Estimating the distortion of mixed layer property distributions induced by the Argo sampling. *Journal of Operational Oceanography*, **5,** 45-58, http://dx.doi.org/10.1080/1755876X.2012.11020131

Kobashi, F. and A. Kubokawa, 2012: Review on North Pacific Subtropical Countercurrents and Subtropical Fronts: role of mode waters in ocean circulation and climate. *Journal of Oceanography*, **68,** 21-43, http://dx.doi.org/10.1007/s10872-011-0083-7

Kobashi, F. and S.-P. Xie, 2012: Interannual variability of the North Pacific Subtropical Countercurrent: role of local ocean–atmosphere interaction. *Journal of Oceanography*, **68,** 113-126, http://dx.doi.org/10.1007/s10872-011-0048-x

Kobayashi, T., K. Mizuno, and T. Suga, 2012: Long-term variations of surface and intermediate waters in the southern Indian Ocean along 32°S. *Journal of Oceanography*, **68,** 243-265, http://dx.doi.org/10.1007/s10872-011-0093-5

Köhl, A., F. Siegismund, and D. Stammer, 2012: Impact of assimilating bottom pressure anomalies from GRACE on ocean circulation estimates. *Journal of Geophysical Research: Oceans*, **117,** C04032, http://dx.doi.org/10.1029/2011JC007623

Kolodziejczyk, N. and F. Gaillard, 2012: Observation of spiciness interannual variability in the Pacific pycnocline. *Journal of Geophysical Research: Oceans*, **117,** C12018, http://dx.doi.org/10.1029/2012JC008365

Kouketsu, S., H. Tomita, E. Oka, S. Hosoda, T. Kobayashi, and K. Sato, 2012: The role of meso-scale eddies in mixed layer deepening and mode water formation in the western North Pacific. *Journal of Oceanography*, **68,** 63-77, http://dx.doi.org/10.1007/s10872-011-0049-9

Kovačević, V., B. B. Manca, L. Ursella, K. Schroeder, S. Cozzi, M. Burca, E. Mauri, R. Gerin, G. Notarstefano, and D. Deponte, 2012: Water mass properties and dynamic conditions of the Eastern Mediterranean in June 2007. *Progress in Oceanography*, **104,** 59-79, http://dx.doi.org/10.1016/j.pocean.2012.05.006

Lagerloef, G., F. Wentz, S. Yueh, H.-Y. Kao, G. C. Johnson, and J. M. Lyman, 2012: Aquarius Satellite Mission Provides New, Detailed View of Sea Surface Salinity. In State of the

Climate in 2011. Blunden, J. and D. S. Arndt, Eds. *Bulletin of the American Meteorological Society*, S70-S71, http://dx.doi.org/10.1175/2012BAMSStateoftheClimate.1

Lau, W. K. M., D. E. Waliser, and W. S. Kessler, 2012: The oceans. *Intraseasonal Variability in the Atmosphere-Ocean Climate System*, Springer Berlin Heidelberg, 199-246, http://dx.doi.org/10.1007/978-3-642-13914-7_6.

Lavigne, H., F. D'Ortenzio, H. Claustre, and A. Poteau, 2012: Towards a merged satellite and in situ fluorescence ocean chlorophyll product. *Biogeosciences*, **9,** 2111-2125, http://dx.doi.org/10.5194/bg-9-2111-2012

Lefevre, N. and L. Merlivat, 2012: Carbon and oxygen net community production in the eastern tropical Atlantic estimated from a moored buoy. *Global Biogeochemical Cycles*, **26,** GB1009, http://dx.doi.org/10.1029/2010GB004018

Lemarie, F., J. Kurian, A. F. Shchepetkin, M. Jeroen Molemaker, F. Colas, and J. C. McWilliams, 2012: Are there inescapable issues prohibiting the use of terrain-following coordinates in climate models? *Ocean Modelling*, **42,** 57-79, http://dx.doi.org/10.1016/j.ocemod.2011.11.007

Levitus, S., J. I. Antonov, T. P. Boyer, O. K. Baranova, H. E. Garcia, R. A. Locarnini, A. V. Mishonov, J. R. Reagan, D. Seidov, E. S. Yarosh, and M. M. Zweng, 2012: World ocean heat content and thermosteric sea level change (0–2000 m), 1955–2010. *Geophysical Research Letters*, **39,** L10603, http://dx.doi.org/10.1029/2012GL051106

Levitus, S., T. Boyer, J. Antonov, and S. A. Good, 2012: Ocean Heat Content. In the State of the Climate in 2011. Blunden, J. and D. S. Arndt, Eds. *Bulletin of the American Meteorological Society*, S62-S65, http://dx.doi.org/10.1175/2012BAMSStateoftheClimate.1

Li, Y. and F. Wang, 2012: Spreading and salinity change of North Pacific Tropical Water in the Philippine Sea. *Journal of Oceanography*, **68,** 439-452, http://dx.doi.org/10.1007/s10872-012-0110-3

Li, Y., F. Wang, and Y. Sun, 2012: Low-frequency spiciness variations in the tropical Pacific Ocean observed during 2003–2012. *Geophysical Research Letters*, **39,** L23601, http://dx.doi.org/10.1029/2012GL053971

Li, Y., F. Wang, and F. Zhai, 2012: Interannual Variations of Subsurface Spiciness in the Philippine Sea: Observations and Mechanism. *Journal of Physical Oceanography*, **42,** 1022-1038, http://dx.doi.org/10.1175/JPO-D-12-06.1

Li, Z., 2012: Interannual and decadal variability of the subtropical mode water formation in the South Pacific Ocean. *Ocean Modelling*, **47,** 96-112, http://dx.doi.org/10.1016/j.ocemod.2012.02.001

Liao, G., Y. Yuan, C. Yang, H. Chen, H. Wang, and W. Huang, 2012: Current Observations of Internal Tides and Parametric Subharmonic Instability in Luzon Strait. *Atmosphere-Ocean*, **50,** 59-76, http://dx.doi.org/10.1080/07055900.2012.742007

Lim, S., C. J. Jang, I. S. Oh, and J. Park, 2012: Climatology of the mixed layer depth in the East/Japan Sea. *Journal of Marine Systems*, **96–97,** 1-14, http://dx.doi.org/10.1016/j.jmarsys.2012.01.003

Lin, I. I., 2012: Typhoon-induced phytoplankton blooms and primary productivity increase in the western North Pacific subtropical ocean. *Journal of Geophysical Research:*

Oceans, **117,** C03039, http://dx.doi.org/10.1029/2011JC007626
Liu, C., A. Köhl, and D. Stammer, 2012: Adjoint-Based Estimation of Eddy-Induced Tracer Mixing Parameters in the Global Ocean. *Journal of Physical Oceanography*, **42,** 1186-1206, http://dx.doi.org/10.1175/JPO-D-11-0162.1
Liu, Y., C. Dong, Y. Guan, D. Chen, J. McWilliams, and F. Nencioli, 2012: Eddy analysis in the subtropical zonal band of the North Pacific Ocean. *Deep Sea Research Part I: Oceanographic Research Papers*, **68,** 54-67, http://dx.doi.org/10.1016/j.dsr.2012.06.001
Loeb, N. G., J. M. Lyman, G. C. Johnson, R. P. Allan, D. R. Doelling, T. Wong, B. J. Soden, and G. L. Stephens, 2012: Observed changes in top-of-the-atmosphere radiation and upper-ocean heating consistent within uncertainty. *Nature Geosci*, **5,** 110-113, http://dx.doi.org/10.1038/ngeo1375
Luo, H., A. Bracco, I. Yashayaev, and E. Di Lorenzo, 2012: The interannual variability of potential temperature in the central Labrador Sea. *Journal of Geophysical Research: Oceans*, **117,** C10016, http://dx.doi.org/10.1029/2012JC007988
Lyman, J. M., 2012: Estimating Global Energy Flow from the Global Upper Ocean. *Surveys in Geophysics*, **33,** 387-393, http://dx.doi.org/10.1007/s10712-011-9167-6
Mahadevan, A., E. D'Asaro, C. Lee, and M. J. Perry, 2012: Eddy-Driven Stratification Initiates North Atlantic Spring Phytoplankton Blooms. *Science*, **337,** 54-58, http://dx.doi.org/10.1126/science.1218740
Maneesha, K., V. S. N. Murty, M. Ravichandran, T. Lee, W. Yu, and M. J. McPhaden, 2012: Upper ocean variability in the Bay of Bengal during the tropical cyclones Nargis and Laila. *Progress in Oceanography*, **106,** 49-61, http://dx.doi.org/10.1016/j.pocean.2012.06.006
Mankad, B. M., R. Sharma, S. Basu, and P. K. Pal, 2012: Altimeter data assimilation in the tropical Indian Ocean using water property conserving scheme. *Journal of Earth System Science*, **121,** 251-262, http://dx.doi.org/10.1007/s12040-012-0149-y
Mankad, B. M., R. Sharma, P. K. Pal, and S. Basu, 2012: Estimating depth of the 20°C isotherm from sea level in the Arabian Sea. *Remote Sensing Letters*, **3,** 413-421, http://dx.doi.org/10.1080/01431161.2011.610377
Marchuk, G. I. and V. B. Zalesny, 2012: Modeling of the World Ocean circulation with the four-dimensional assimilation of temperature and salinity fields. *Izvestiya Atmospheric and Oceanic Physics*, **48,** 15-29, http://dx.doi.org/10.1134/S0001433812010070
Martin, M., P. Dash, A. Ignatov, V. Banzon, H. Beggs, B. Brasnett, J.-F. Cayula, J. Cummings, C. Donlon, C. Gentemann, R. Grumbine, S. Ishizaki, E. Maturi, R. W. Reynolds, and J. Roberts-Jones, 2012: Group for High Resolution Sea Surface temperature (GHRSST) analysis fields inter-comparisons. Part 1: A GHRSST multi-product ensemble (GMPE). *Deep Sea Research Part II: Topical Studies in Oceanography*, **77–80,** 21-30, http://dx.doi.org/10.1016/j.dsr2.2012.04.013
Mateus, M., G. Riflet, P. Chambel, L. Fernandes, R. Fernandes, M. Juliano, F. Campuzano, H. de Pablo, and R. Neves, 2012: An operational model for the West Iberian coast: products and services. *Ocean Science*, **8,** 713-732, http://dx.doi.org/10.5194/os-8-713-2012

Matthews, D., B. S. Powell, and I. Janeković, 2012: Analysis of four-dimensional variational state estimation of the Hawaiian waters. *Journal of Geophysical Research: Oceans*, **117,** C03013, http://dx.doi.org/10.1029/2011JC007575

McCarthy, G. D., B. A. King, P. Cipollini, E. L. McDonagh, J. R. Blundell, and A. Biastoch, 2012: On the sub-decadal variability of South Atlantic Antarctic Intermediate Water. *Geophysical Research Letters*, **39,** L10605, http://dx.doi.org/10.1029/2012GL051270

McPhaden, M. J., 2012: A 21st century shift in the relationship between ENSO SST and warm water volume anomalies. *Geophysical Research Letters*, **39,** L09706, http://dx.doi.org/10.1029/2012GL051826

Mecklenburg, S., M. Drusch, Y. H. Kerr, J. Font, M. Martin-Neira, S. Delwart, G. Buenadicha, N. Reul, E. Daganzo-Eusebio, R. Oliva, and R. Crapolicchio, 2012: ESA's Soil Moisture and Ocean Salinity Mission: Mission Performance and Operations. *Ieee Transactions on Geoscience and Remote Sensing*, **50,** 1354-1366, http://dx.doi.org/10.1109/tgrs.2012.2187666

Meinen, C. S., A. R. Piola, R. C. Perez, and S. L. Garzoli, 2012: Deep Western Boundary Current transport variability in the South Atlantic: preliminary results from a pilot array at 34.5° S. *Ocean Science*, **8,** 1041-1054, http://dx.doi.org/10.5194/os-8-1041-2012

Melsom, A., F. Counillon, J. H. LaCasce, and L. Bertino, 2012: Forecasting search areas using ensemble ocean circulation modeling. *Ocean Dynamics*, **62,** 1245-1257, http://dx.doi.org/10.1007/s10236-012-0561-5

Ménesguen, C., B. L. Hua, X. Carton, F. Klingelhoefer, P. Schnürle, and C. Reichert, 2012: Arms winding around a meddy seen in seismic reflection data close to the Morocco coastline. *Geophysical Research Letters*, **39,** L05604, http://dx.doi.org/10.1029/2011GL050798

Merchant, C. J., O. Embury, N. A. Rayner, D. I. Berry, G. K. Corlett, K. Lean, K. L. Veal, E. C. Kent, D. T. Llewellyn-Jones, J. J. Remedios, and R. Saunders, 2012: A 20 year independent record of sea surface temperature for climate from Along-Track Scanning Radiometers. *Journal of Geophysical Research: Oceans*, **117,** C12013, http://dx.doi.org/10.1029/2012JC008400

Merrifield, M., P. Thompson, D. P. Chambers, G. Mitchum, M. Menendez, R. S. Nerem, E. W. Leuliette, L. Miller, S. Holgate, J. J. Marra, and W. V. Sweet, 2012: Sea level variability and change. In the State of the Climate in 2011. Blunden, J. and D. S. Arndt, Eds. *Bulletin of the American Meteorological Society***,** S81-S83, http://dx.doi.org/10.1175/2012BAMSStateoftheClimate.1

Messager, C. and V. Faure, 2012: Validation of remote sensing and weather model forecasts in the Agulhas ocean area to 57S by ship observations. *South African Journal of Science*, **108**, http://dx.doi.org/10.4102/sajs.v108i3/4.735

Meyssignac, B. and A. Cazenave, 2012: Sea level: A review of present-day and recent-past changes and variability. *Journal of Geodynamics*, **58,** 96-109, http://dx.doi.org/10.1016/j.jog.2012.03.005

Mignot, J., A. Lazar, and M. Lacarra, 2012: On the formation of barrier layers and associated vertical temperature inversions: A focus on the northwestern tropical Atlantic. *Journal of Geophysical Research: Oceans*, **117,** C02010, http://dx.doi.org/10.1029/2011JC007435

Moore, A. M., H. G. Arango, and G. Broquet, 2012: Estimates of Analysis and Forecast Error Variances Derived from the Adjoint of 4D-Var. *Monthly Weather Review*, **140,** 3183-3203, http://dx.doi.org/10.1175/MWR-D-11-00141.1

Mulet, S., M. H. Rio, A. Mignot, S. Guinehut, and R. Morrow, 2012: A new estimate of the global 3D geostrophic ocean circulation based on satellite data and in-situ measurements. *Deep Sea Research Part II: Topical Studies in Oceanography*, **77–80,** 70-81, http://dx.doi.org/10.1016/j.dsr2.2012.04.012

Nagai, T., A. Tandon, H. Yamazaki, M. J. Doubell, and S. Gallager, 2012: Direct observations of microscale turbulence and thermohaline structure in the Kuroshio Front. *Journal of Geophysical Research: Oceans*, **117,** C08013, http://dx.doi.org/10.1029/2011JC007228

Nagamani, P. V., M. M. Ali, G. J. Goni, D. N. Pedro, J. C. Pezzullo, T. V. S. Udaya Bhaskar, V. V. Gopalakrishna, and N. Kurian, 2012: Validation of satellite-derived tropical cyclone heat potential with in situ observations in the North Indian Ocean. *Remote Sensing Letters*, **3,** 615-620, http://dx.doi.org/10.1080/01431161.2011.640959

Nagano, A., H. Ichikawa, Y. Yoshikawa, S. Kizu, and K. Hanawa, 2012: Variation of the southward interior flow of the North Pacific subtropical gyre, as revealed by a repeat hydrographic survey. *Journal of Oceanography*, **68,** 361-368, http://dx.doi.org/10.1007/s10872-012-0102-3

Nagura, M. and M. J. McPhaden, 2012: The dynamics of wind-driven intraseasonal variability in the equatorial Indian Ocean. *Journal of Geophysical Research: Oceans*, **117,** C02001, http://dx.doi.org/10.1029/2011JC007405

Nakano, M. and P. P. Povinec, 2012: Long-term simulations of the 137Cs dispersion from the Fukushima accident in the world ocean. *Journal of Environmental Radioactivity*, **111,** 109-115, http://dx.doi.org/10.1016/j.jenvrad.2011.12.001

Nam, S., D.-j. Kim, and W. Moon, 2012: Observed impact of mesoscale circulation on oceanic response to Typhoon Man-Yi (2007). *Ocean Dynamics*, **62,** 1-12, http://dx.doi.org/10.1007/s10236-011-0490-8

Nardelli, B. B., 2012: A Novel Approach for the High-Resolution Interpolation of In Situ Sea Surface Salinity. *Journal of Atmospheric and Oceanic Technology*, **29,** 867-879, http://dx.doi.org/10.1175/JTECH-D-11-00099.1

Neetu, S., M. Lengaigne, E. M. Vincent, J. Vialard, G. Madec, G. Samson, M. R. Ramesh Kumar, and F. Durand, 2012: Influence of upper-ocean stratification on tropical cyclone-induced surface cooling in the Bay of Bengal. *Journal of Geophysical Research: Oceans*, **117,** C12020, http://dx.doi.org/10.1029/2012JC008433

Nilsson, J. A. U., S. Dobricic, N. Pinardi, P. M. Poulain, and D. Pettenuzzo, 2012: Variational assimilation of Lagrangian trajectories in the Mediterranean ocean Forecasting System. *Ocean Science*, **8,** 249-259, http://dx.doi.org/10.5194/os-8-249-2012

Nyadjro, E. S., B. Subrahmanyam, V. S. N. Murty, and J. F. Shriver, 2012: The role of salinity on the dynamics of the Arabian Sea mini warm pool. *Journal of Geophysical Research: Oceans*, **117,** C09002, http://dx.doi.org/10.1029/2012JC007978

Oka, E. and B. Qiu, 2012: Progress of North Pacific mode water research in the past decade. *Journal of Oceanography*, **68,** 5-20, http://dx.doi.org/10.1007/s10872-011-0032-5

Oka, E., B. Qiu, S. Kouketsu, K. Uehara, and T. Suga, 2012: Decadal seesaw of the Central and

Subtropical Mode Water formation associated with the Kuroshio Extension variability. *Journal of Oceanography*, **68,** 355-360, http://dx.doi.org/10.1007/s10872-011-0098-0

Oke, P. R., G. B. Brassington, J. Cummings, M. Martin, and F. Hernandez, 2012: GODAE inter-comparisons in the Tasman and Coral Seas. *Journal of Operational Oceanography*, **5,** 11-24, http://dx.doi.org/10.1080/1755876X.2012.11020135

Oke, P. R. and P. Sakov, 2012: Assessing the footprint of a regional ocean observing system. *Journal of Marine Systems*, **105–108,** 30-51, http://dx.doi.org/10.1016/j.jmarsys.2012.05.009

Ollivier, A., Y. Faugere, N. Picot, M. Ablain, P. Femenias, and J. Benveniste, 2012: Envisat Ocean Altimeter Becoming Relevant for Mean Sea Level Trend Studies. *Marine Geodesy*, **35,** 118-136, http://dx.doi.org/10.1080/01490419.2012.721632

Panteleev, G., M. Yaremchuk, V. Luchin, D. Nechaev, and T. Kukuchi, 2012: Variability of the Bering Sea circulation in the period 1992–2010. *Journal of Oceanography*, **68,** 485-496, http://dx.doi.org/10.1007/s10872-012-0113-0

Park, G.-H. and R. Wanninkhof, 2012: A large increase of the CO2 sink in the western tropical North Atlantic from 2002 to 2009. *Journal of Geophysical Research: Oceans*, **117,** C08029, http://dx.doi.org/10.1029/2011JC007803

Parmuzin, E. I., 2012: The study and numerical solution to the inverse problem of salinity fluxes in the ocean dynamics model based on ARGO buoys data. *Russian Journal of Numerical Analysis and Mathematical Modelling*, **27,** 261-288, http://dx.doi.org/10.1515/rnam-2012-0015

Pérez-Hernández, M. D., A. Hernández-Guerra, T. M. Joyce, and P. Vélez-Belchí, 2012: Wind-Driven Cross-Equatorial Flow in the Indian Ocean. *Journal of Physical Oceanography*, **42,** 2234-2253, http://dx.doi.org/10.1175/JPO-D-12-033.1

Piecuch, C. G. and R. M. Ponte, 2012: Importance of Circulation Changes to Atlantic Heat Storage Rates on Seasonal and Interannual Time Scales. *Journal of Climate*, **25,** 350-362, http://dx.doi.org/10.1175/JCLI-D-11-00123.1

Piecuch, C. G. and R. M. Ponte, 2012: Buoyancy-driven interannual sea level changes in the southeast tropical Pacific. *Geophysical Research Letters*, **39,** L05607, http://dx.doi.org/10.1029/2012GL051130

Plaza, M. A. S., J. L. Pelegrí, F. Machin, and V. B. Barrios, 2012: Inter-decadal changes in stratification and double diffusion in a transatlantic section along 7.5 degrees N. *Scientia Marina*, **76,** 189-207, http://dx.doi.org/10.3989/scimar.03616.19G

Ponte, R. M., 2012: Heat Content ocean/oceanic heat content and Temperature ocean/oceanic temperature of the Ocean ocean/oceanic. *Encyclopedia of Sustainability Science and Technology*, R. Meyers, Ed., Springer New York, 4909-4928, http://dx.doi.org/10.1007/978-1-4419-0851-3_485.

Potemra, J. T., 2012: Numerical modeling with application to tracking marine debris. *Marine Pollution Bulletin*, **65,** 42-50, http://dx.doi.org/10.1016/j.marpolbul.2011.06.026

Prakash, P., S. Prakash, H. Rahaman, M. Ravichandran, and S. Nayak, 2012: Is the trend in chlorophyll-a in the Arabian Sea decreasing? *Geophysical Research Letters*, **39,** L23605, http://dx.doi.org/10.1029/2012GL054187

Prakash, S., C. Mahesh, and R. M. Gairola, 2012: Observational Study of the Oceanic Surface

Parameters in the Eastern Indian Ocean During Two Contrasting Dipole Years 2005 and 2006. *Ieee Geoscience and Remote Sensing Letters*, **9,** 906-909, http://dx.doi.org/10.1109/lgrs.2012.2182987

Prakash, S., C. Mahesh, and R. M. Gairola, 2012: Observed Relationships between Surface Freshwater Flux and Salinity in the North Indian Ocean. *Atmospheric and Oceanic Science Letters*, **5,** 163-169, http://dx.doi.org/10.1080/16742834.2012.11446984

Prakash, S., T. M. B. Nair, T. V. S. U. Bhaskar, P. Prakash, and D. Gilbert, 2012: Oxycline variability in the central Arabian Sea: An Argo-oxygen study. *Journal of Sea Research*, **71,** 1-8, http://dx.doi.org/10.1016/j.seares.2012.03.003

Putman, N. F., R. Scott, P. Verley, R. Marsh, and G. C. Hays, 2012: Natal site and offshore swimming influence fitness and long-distance ocean transport in young sea turtles. *Marine Biology*, **159,** 2117-2126, http://dx.doi.org/10.1007/s00227-012-1995-5

Qiu, Y., W. Cai, L. Li, and X. Guo, 2012: Argo profiles variability of barrier layer in the tropical Indian Ocean and its relationship with the Indian Ocean Dipole. *Geophysical Research Letters*, **39,** L08605, http://dx.doi.org/10.1029/2012GL051441

Quay, P., J. Stutsman, and T. Steinhoff, 2012: Primary production and carbon export rates across the subpolar N. Atlantic Ocean basin based on triple oxygen isotope and dissolved O2 and Ar gas measurements. *Global Biogeochemical Cycles*, **26,** GB2003, http://dx.doi.org/10.1029/2010GB004003

Radenac, M.-H., F. Léger, A. Singh, and T. Delcroix, 2012: Sea surface chlorophyll signature in the tropical Pacific during eastern and central Pacific ENSO events. *Journal of Geophysical Research: Oceans*, **117,** C04007, http://dx.doi.org/10.1029/2011JC007841

Ratheesh, S., R. Sharma, and S. Basu, 2012: Projection-Based Assimilation of Satellite-Derived Surface Data in an Indian Ocean Circulation Model. *Marine Geodesy*, **35,** 175-187, http://dx.doi.org/10.1080/01490419.2011.637855

Ravichandran, M., M. S. Girishkumar, and S. Riser, 2012: Observed variability of chlorophyll-a using Argo profiling floats in the southeastern Arabian Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **65,** 15-25, http://dx.doi.org/10.1016/j.dsr.2012.03.003

Rayson, M. D., N. L. Jones, and G. N. Ivey, 2012: Temporal variability of the standing internal tide in the Browse Basin, Western Australia. *Journal of Geophysical Research: Oceans*, **117,** C06013, http://dx.doi.org/10.1029/2011JC007523

Reul, N., J. Tenerelli, J. Boutin, B. Chapron, F. Paul, E. Brion, F. Gaillard, and O. Archer, 2012: Overview of the First SMOS Sea Surface Salinity Products. Part I: Quality Assessment for the Second Half of 2010. *Ieee Transactions on Geoscience and Remote Sensing*, **50,** 1636-1647, http://dx.doi.org/10.1109/tgrs.2012.2188408

Reverdin, G., S. Morisset, J. Boutin, and N. Martin, 2012: Rain-induced variability of near sea-surface T and S from drifter data. *Journal of Geophysical Research: Oceans*, **117,** C02032, http://dx.doi.org/10.1029/2011JC007549

Rimaud, J., S. Speich, B. Blanke, and N. Grima, 2012: The exchange of Intermediate Water in the southeast Atlantic: Water mass transformations diagnosed from the Lagrangian analysis of a regional ocean model. *Journal of Geophysical Research: Oceans*, **117,** C08034, http://dx.doi.org/10.1029/2012JC008059

Rintoul, S., M. P. Meredith, O. Schofield, and L. Newman, 2012: The Southern Ocean Observing System. *Oceanography*, **25,** 68-69, http://dx.doi.org/10.5670/oceanog.2012.76#sthash.lyNnKDUU.dpuf

Roberts-Jones, J., E. K. Fiedler, and M. J. Martin, 2012: Daily, Global, High-Resolution SST and Sea Ice Reanalysis for 1985–2007 Using the OSTIA System. *Journal of Climate*, **25,** 6215-6232, http://dx.doi.org/10.1175/JCLI-D-11-00648.1

Roemmich, D., W. J. Gould, and J. Gilson, 2012: 135 years of global ocean warming between the Challenger expedition and the Argo Programme. *Nature Clim. Change*, **2,** 425-428, http://dx.doi.org/10.1038/nclimate1461

Rousseaux, C. S. G., R. Lowe, M. Feng, A. M. Waite, and P. A. Thompson, 2012: The role of the Leeuwin Current and mixed layer depth on the autumn phytoplankton bloom off Ningaloo Reef, Western Australia. *Continental Shelf Research*, **32,** 22-35, http://dx.doi.org/10.1016/j.csr.2011.10.010

Rusciano, E., S. Speich, and M. Ollitrault, 2012: Interocean exchanges and the spreading of Antarctic Intermediate Water south of Africa. *Journal of Geophysical Research: Oceans*, **117,** C10010, http://dx.doi.org/10.1029/2012JC008266

Sadhuram, Y., K. Maneesha, and T. V. Ramana Murty, 2012: Intensification of Aila (May 2009) due to a warm core eddy in the north Bay of Bengal. *Natural Hazards*, **63,** 1515-1525, http://dx.doi.org/10.1007/s11069-011-9837-1

Sakov, P., F. Counillon, L. Bertino, K. A. Lisæter, P. R. Oke, and A. Korablev, 2012: TOPAZ4: an ocean-sea ice data assimilation system for the North Atlantic and Arctic. *Ocean Science*, **8,** 633-656, http://dx.doi.org/10.5194/os-8-633-2012

Salim, M., R. Nayak, D. Swain, and V. Dadhwal, 2012: Sea Surface Height Variability in the Tropical Indian Ocean: Steric Contribution. *Journal of the Indian Society of Remote Sensing*, **40,** 679-688, http://dx.doi.org/10.1007/s12524-011-0188-x

Sallee, J. B., R. J. Matear, S. R. Rintoul, and A. Lenton, 2012: Localized subduction of anthropogenic carbon dioxide in the Southern Hemisphere oceans. *Nature Geoscience*, **5,** 579-584, http://dx.doi.org/10.1038/ngeo1523

Sasaki, H., S.-P. Xie, B. Taguchi, M. Nonaka, S. Hosoda, and Y. Masumoto, 2012: Interannual variations of the Hawaiian Lee Countercurrent induced by potential vorticity variability in the subsurface. *Journal of Oceanography*, **68,** 93-111, http://dx.doi.org/10.1007/s10872-011-0074-8

Schmidtko, S. and G. C. Johnson, 2012: Multidecadal Warming and Shoaling of Antarctic Intermediate Water. *Journal of Climate*, **25,** 207-221, http://dx.doi.org/10.1175/JCLI-D-11-00021.1

Scott, R. B., N. Ferry, M. Drévillon, C. Barron, N. Jourdain, J.-M. Lellouche, E. Metzger, M.-H. Rio, and O. Smedstad, 2012: Estimates of surface drifter trajectories in the equatorial Atlantic: a multi-model ensemble approach. *Ocean Dynamics*, **62,** 1091-1109, http://dx.doi.org/10.1007/s10236-012-0548-2

Sharma, R., B. Mankad, N. Agarwal, R. Kumar, and S. Basu, 2012: An assessment of two different satellite-derived precipitation products in relation to simulation of sea surface salinity in the tropical Indian Ocean. *Journal of Geophysical Research: Oceans*, **117,** C07001, http://dx.doi.org/10.1029/2012JC008078

Sil, S. and A. Chakraborty, 2012: The Mechanism of the 20°C Isotherm Depth Oscillations for

the Bay of Bengal. *Marine Geodesy*, **35,** 233-245, http://dx.doi.org/10.1080/01490419.2011.637865

Simav, M., H. Yildiz, A. Türkezer, O. Lenk, and E. Özsoy, 2012: Sea level variability at Antalya and Menteş tide gauges in Turkey: atmospheric, steric and land motion contributions. *Studia Geophysica et Geodaetica*, **56,** 215-230, http://dx.doi.org/10.1007/s11200-010-0067-x

Skagseth, Ø. and K. A. Mork, 2012: Heat content in the Norwegian Sea, 1995–2010. *ICES Journal of Marine Science: Journal du Conseil*, **69,** 826-832, http://dx.doi.org/10.1093/icesjms/fss026

Smith, D. M., A. A. Scaife, and B. P. Kirtman, 2012: What is the current state of scientific knowledge with regard to seasonal and decadal forecasting? *Environmental Research Letters*, **7,** 015602, http://dx.doi.org/10.1088/1748-9326/7/1/015602

Smith, H. E. K., T. Tyrrell, A. Charalampopoulou, C. Dumousseaud, O. J. Legge, S. Birchenough, L. R. Pettit, R. Garley, S. E. Hartman, M. C. Hartman, N. Sagoo, C. J. Daniels, E. P. Achterberg, and D. J. Hydes, 2012: Predominance of heavily calcified coccolithophores at low CaCO3 saturation during winter in the Bay of Biscay. *Proceedings of the National Academy of Sciences*, **109,** 8845-8849, http://dx.doi.org/10.1073/pnas.1117508109

Søiland, H. and G. Huse, 2012: Using RAFOS floats to simulate overwinter transport of Calanus finmarchicus in the Norwegian Sea. *Marine Biology Research*, **8,** 502-507, http://dx.doi.org/10.1080/17451000.2011.639780

Song, H., A. J. Miller, S. McClatchie, E. D. Weber, K. M. Nieto, and D. M. Checkley, 2012: Application of a data-assimilation model to variability of Pacific sardine spawning and survivor habitats with ENSO in the California Current System. *Journal of Geophysical Research: Oceans*, **117,** C03009, http://dx.doi.org/10.1029/2011JC007302

Soto-Mendoza, S., C. Parada, L. Castro, F. Colas, and W. Schneider, 2012: Modeling transport and survival of anchoveta eggs and yolk-sac larvae in the coastal zone off central-southern Chile: Assessing spatial and temporal spawning parameters. *Progress in Oceanography*, **92-95,** 178-191, http://dx.doi.org/10.1016/j.pocean.2011.07.001

Soto-Navarro, J., F. Criado-Aldeanueva, J. C. S·nchez-Garrido, and J. GarcÌa-Lafuente, 2012: Recent thermohaline trends of the Atlantic waters inflowing to the Mediterranean Sea. *Geophysical Research Letters*, **39,** L01604, http://dx.doi.org/10.1029/2011GL049907

Srokosz, M., M. Baringer, H. Bryden, S. Cunningham, T. Delworth, S. Lozier, J. Marotzke, and R. Sutton, 2012: Past, Present, and Future Changes in the Atlantic Meridional Overturning Circulation. *Bulletin of the American Meteorological Society*, **93,** 1663-1676, http://dx.doi.org/10.1175/BAMS-D-11-00151.1

Steiner, N. S., M. Robert, M. Arychuk, M. L. Levasseur, A. Merzouk, M. A. Peña, W. A. Richardson, and P. D. Tortell, 2012: Evaluating DMS measurements and model results in the Northeast subarctic Pacific from 1996–2010. *Biogeochemistry*, **110,** 269-285, http://dx.doi.org/10.1007/s10533-011-9669-9

Stepanov, V. N., K. Haines, and G. C. Smith, 2012: Assimilation of RAPID array observations

into an ocean model. *Quarterly Journal of the Royal Meteorological Society*, **138,** 2105-2117, http://dx.doi.org/10.1002/qj.1945

Stephens, G. L., J. Li, M. Wild, C. A. Clayson, N. Loeb, S. Kato, T. L'Ecuyer, P. W. Stackhouse, M. Lebsock, and T. Andrews, 2012: An update on Earth's energy balance in light of the latest global observations. *Nature Geoscience*, **5,** 691-696, http://dx.doi.org/10.1038/ngeo1580

Sterl, A., R. Bintanja, L. Brodeau, E. Gleeson, T. Koenigk, T. Schmith, T. Semmler, C. Severijns, K. Wyser, and S. Yang, 2012: A look at the ocean in the EC-Earth climate model. *Climate Dynamics*, **39,** 2631-2657, http://dx.doi.org/10.1007/s00382-011-1239-2

Sun, C., M. Feng, R. J. Matear, M. A. Chamberlain, P. Craig, K. R. Ridgway, and A. Schiller, 2012: Marine Downscaling of a Future Climate Scenario for Australian Boundary Currents. *Journal of Climate*, **25,** 2947-2962, http://dx.doi.org/10.1175/JCLI-D-11-00159.1

Sun, L., Y.-J. Yang, T. Xian, Y. Wang, and Y.-F. Fu, 2012: Ocean Responses to Typhoon Namtheun Explored with Argo Floats and Multiplatform Satellites. *Atmosphere-Ocean*, **50,** 15-26, http://dx.doi.org/10.1080/07055900.2012.742420

Taguchi, B., R. Furue, N. Komori, A. Kuwano-Yoshida, M. Nonaka, H. Sasaki, and W. Ohfuchi, 2012: Deep oceanic zonal jets constrained by fine-scale wind stress curls in the South Pacific Ocean: A high-resolution coupled GCM study. *Geophysical Research Letters*, **39,** L08602, http://dx.doi.org/10.1029/2012GL051248

Taylor, K. E., R. J. Stouffer, and G. A. Meehl, 2012: An Overview of CMIP5 and the Experiment Design. *Bulletin of the American Meteorological Society*, **93,** 485-498, http://dx.doi.org/10.1175/BAMS-D-11-00094.1

Terray, L., L. Corre, S. Cravatte, T. Delcroix, G. Reverdin, and A. Ribes, 2012: Near-Surface Salinity as Nature's Rain Gauge to Detect Human Influence on the Tropical Water Cycle. *Journal of Climate*, **25,** 958-977, http://dx.doi.org/10.1175/JCLI-D-10-05025.1

Thadathil, P., C. C. Bajish, S. Behera, and V. V. Gopalakrishna, 2012: Drift in Salinity Data from Argo Profiling Floats in the Sea of Japan. *Journal of Atmospheric and Oceanic Technology*, **29,** 129-138, http://dx.doi.org/10.1175/JTECH-D-11-00018.1

Torres, R. R. and M. N. Tsimplis, 2012: Seasonal sea level cycle in the Caribbean Sea. *Journal of Geophysical Research: Oceans*, **117,** C07011, http://dx.doi.org/10.1029/2012JC008159

Toyama, K. and T. Suga, 2012: Roles of mode waters in the formation and maintenance of central water in the North Pacific. *Journal of Oceanography*, **68,** 79-92, http://dx.doi.org/10.1007/s10872-011-0040-5

Trenary, L. L. and W. Han, 2012: Intraseasonal-to-Interannual Variability of South Indian Ocean Sea Level and Thermocline: Remote versus Local Forcing. *Journal of Physical Oceanography*, **42,** 602-627, http://dx.doi.org/10.1175/JPO-D-11-084.1

Turner, A. G., M. Joshi, E. S. Robertson, and S. J. Woolnough, 2012: The effect of Arabian Sea optical properties on SST biases and the South Asian summer monsoon in a coupled GCM. *Climate Dynamics*, **39,** 811-826, http://dx.doi.org/10.1007/s00382-011-1254-3

Ueno, H., I. Yasuda, S. Itoh, H. Onishi, Y. Hiroe, T. Suga, and E. Oka, 2012: Modification of a Kenai eddy along the Alaskan Stream. *Journal of Geophysical Research: Oceans*, **117,** C08032, http://dx.doi.org/10.1029/2011JC007506

Ullgren, J. E. and M. White, 2012: Observations of mesoscale variability in the Rockall Trough. *Deep Sea Research Part I: Oceanographic Research Papers*, **64,** 1-8, http://dx.doi.org/10.1016/j.dsr.2012.01.015

Valladeau, G., J. F. Legeais, M. Ablain, S. Guinehut, and N. Picot, 2012: Comparing Altimetry with Tide Gauges and Argo Profiling Floats for Data Quality Assessment and Mean Sea Level Studies. *Marine Geodesy*, **35,** 42-60, http://dx.doi.org/10.1080/01490419.2012.718226

Van Roekel, L. P., B. Fox-Kemper, P. P. Sullivan, P. E. Hamlington, and S. R. Haney, 2012: The form and orientation of Langmuir cells for misaligned winds and waves. *Journal of Geophysical Research: Oceans*, **117,** C05001, http://dx.doi.org/10.1029/2011JC007516

Venables, H., M. P. Meredith, A. Atkinson, and P. Ward, 2012: Fronts and habitat zones in the Scotia Sea. *Deep Sea Research Part II: Topical Studies in Oceanography*, **59-60,** 14-24, http://dx.doi.org/10.1016/j.dsr2.2011.08.012

Vialard, J., K. Drushka, H. Bellenger, M. Lengaigne, S. Pous, and J. P. Duvel, 2012: Understanding Madden-Julian-Induced sea surface temperature variations in the North Western Australian Basin. *Climate Dynamics*, **41,** 3203-3218, http://dx.doi.org/10.1007/s00382-012-1541-7

Vidal-Vijande, E., A. Pascual, B. Barnier, J. M. Molines, N. Ferry, and J. Tintore, 2012: Multiparametric analysis and validation in the western Mediterranean of three global OGCM hindcasts. *2012*, **76,** 18, https://doi.org/10.3989/scimar.03613.19D

Vincent, E. M., M. Lengaigne, G. Madec, J. Vialard, G. Samson, N. C. Jourdain, C. E. Menkes, and S. Jullien, 2012: Processes setting the characteristics of sea surface cooling induced by tropical cyclones. *Journal of Geophysical Research: Oceans*, **117,** C02020, http://dx.doi.org/10.1029/2011JC007396

Vinogradova, N. T. and R. M. Ponte, 2012: Assessing Temporal Aliasing in Satellite-Based Surface Salinity Measurements. *Journal of Atmospheric and Oceanic Technology*, **29,** 1391-1400, http://dx.doi.org/10.1175/JTECH-D-11-00055.1

Vissa, N. K., A. N. V. Satyanarayana, and B. Prasad Kumar, 2012: Response of Upper Ocean during passage of MALA cyclone utilizing ARGO data. *International Journal of Applied Earth Observation and Geoinformation*, **14,** 149-159, http://dx.doi.org/10.1016/j.jag.2011.08.015

Volpe, G., B. B. Nardelli, P. Cipollini, R. Santoleri, and I. S. Robinson, 2012: Seasonal to interannual phytoplankton response to physical processes in the Mediterranean Sea from satellite observations. *Remote Sensing of Environment*, **117,** 223-235, http://dx.doi.org/10.1016/j.rse.2011.09.020

Wada, A., N. Usui, and K. Sato, 2012: Relationship of maximum tropical cyclone intensity to sea surface temperature and tropical cyclone heat potential in the North Pacific Ocean. *Journal of Geophysical Research: Atmospheres*, **117,** D11118, http://dx.doi.org/10.1029/2012JD017583

Wagawa, T., Y. Yoshikawa, Y. Isoda, E. Oka, K. Uehara, T. Nakano, K. Kuma, and S. Takagi, 2012: Flow fields around the Emperor Seamounts detected from current data. *Journal of Geophysical Research: Oceans*, **117,** C06006, http://dx.doi.org/10.1029/2011JC007530

Wang, C., D. Wilson, T. Haack, P. Clark, H. Lean, and R. Marshall, 2012: Effects of Initial and Boundary Conditions of Mesoscale Models on Simulated Atmospheric Refractivity. *Journal of Applied Meteorology and Climatology*, **51,** 115-132, http://dx.doi.org/10.1175/JAMC-D-11-012.1

Wang, D. X., Y. H. Qin, X. J. Xiao, Z. Q. Zhang, and F. M. Wu, 2012: Preliminary results of a new global ocean reanalysis. *Chinese Science Bulletin*, **57,** 3509-3517, http://dx.doi.org/10.1007/s11434-012-5232-x

Wang, G., D. Wang, and T. Zhou, 2012: Upper layer circulation in the Luzon Strait. *Aquatic Ecosystem Health & Management*, **15,** 39-45, http://dx.doi.org/10.1080/14634988.2012.649241

Wang, H., G. Wang, D. Chen, and R. Zhang, 2012: Reconstruction of Three-Dimensional Pacific Temperature with Argo and Satellite Observations. *Atmosphere-Ocean*, **50,** 116-128, http://dx.doi.org/10.1080/07055900.2012.742421

Wang, H., Z. Wang, X. Zhu, D. Wang, and G. Liu, 2012: Numerical study and prediction of nuclear contaminant transport from Fukushima Daiichi nuclear power plant in the North Pacific Ocean. *Chinese Science Bulletin*, **57,** 3518-3524, http://dx.doi.org/10.1007/s11434-012-5171-6

Wang, H., Y. Yuan, W. Guan, C. Yang, G. Liao, and Z. Cao, 2012: Circulation Around Luzon Strait in September as Inferred from CTD, Argos and Argo Measurements and a Generalized Topography-Following Ocean Model. *Atmosphere-Ocean*, **50,** 40-58, http://dx.doi.org/10.1080/07055900.2012.741563

Wang, H. Z. and R. Zhang, 2012: Freshwater flux product reconstruction based on Argo data and mixed layer model. *Acta Physica Sinica*, **61**,

Wang, H. Z., R. Zhang, G. H. Wang, Y. Z. An, and B. G. Jin, 2012: Quality control of Argo temperature and salinity observation profiles. *Chinese Journal of Geophysics-Chinese Edition*, **5,** 577-588,

Wang, L. and T.-J. Zhou, 2012: Assessing the Quality of Regional Ocean Reanalysis Data from ENSO Signals. *Atmospheric and Oceanic Science Letters*, **5,** 55-61, http://dx.doi.org/10.1080/16742834.2012.11446965

Wang, X., W. Li, Y. Qi, and G. Han, 2012: Heat, salt and volume transports by eddies in the vicinity of the Luzon Strait. *Deep Sea Research Part I: Oceanographic Research Papers*, **61,** 21-33, http://dx.doi.org/10.1016/j.dsr.2011.11.006

Wang, Z., S. F. DiMarco, M. M. Stössel, X. Zhang, M. K. Howard, and K. du Vall, 2012: Oscillation responses to tropical Cyclone Gonu in northern Arabian Sea from a moored observing system. *Deep Sea Research Part I: Oceanographic Research Papers*, **64,** 129-145, http://dx.doi.org/10.1016/j.dsr.2012.02.005

Ward, P., A. Atkinson, H. J. Venables, G. A. Tarling, M. J. Whitehouse, S. Fielding, M. A. Collins, R. Korb, A. Black, G. Stowasser, K. Schmidt, S. E. Thorpe, and P. Enderlein, 2012: Food web structure and bioregions in the Scotia Sea: A seasonal synthesis. *Deep Sea Research Part II: Topical Studies in Oceanography*, **59-60,** 253-266, http://dx.doi.org/10.1016/j.dsr2.2011.08.005

Wen, C., Y. Xue, and A. Kumar, 2012: Seasonal Prediction of North Pacific SSTs and PDO in the NCEP CFS Hindcasts. *Journal of Climate*, **25,** 5689-5710, http://dx.doi.org/10.1175/JCLI-D-11-00556.1

Wen, C., Y. Xue, and A. Kumar, 2012: Ocean–Atmosphere Characteristics of Tropical Instability Waves Simulated in the NCEP Climate Forecast System Reanalysis. *Journal of Climate*, **25,** 6409-6425, http://dx.doi.org/10.1175/JCLI-D-11-00477.1

Whalen, C. B., L. D. Talley, and J. A. MacKinnon, 2012: Spatial and temporal variability of global ocean mixing inferred from Argo profiles. *Geophysical Research Letters*, **39,** L18612, http://dx.doi.org/10.1029/2012GL053196

Wu, B. and T. Zhou, 2012: Prediction of decadal variability of sea surface temperature by a coupled global climate model FGOALS_gl developed in LASG/IAP. *Chinese Science Bulletin*, **57,** 2453-2459, http://dx.doi.org/10.1007/s11434-012-5134-y

Wu, L., W. Cai, L. Zhang, H. Nakamura, A. Timmermann, T. Joyce, M. J. McPhaden, M. Alexander, B. Qiu, M. Visbeck, P. Chang, and B. Giese, 2012: Enhanced warming over the global subtropical western boundary currents. *Nature Climate Change*, **2,** 161-166, http://dx.doi.org/10.1038/nclimate1353

Wu, Q. and D. Chen, 2012: Typhoon-Induced Variability of the Oceanic Surface Mixed Layer Observed by Argo Floats in the Western North Pacific Ocean. *Atmosphere-Ocean*, **50,** 4-14, http://dx.doi.org/10.1080/07055900.2012.712913

Wu, X., X.-H. Yan, Y.-H. Jo, and W. T. Liu, 2012: Estimation of Subsurface Temperature Anomaly in the North Atlantic Using a Self-Organizing Map Neural Network. *Journal of Atmospheric and Oceanic Technology*, **29,** 1675-1688, http://dx.doi.org/10.1175/JTECH-D-12-00013.1

Wu, Y., C. Tang, and C. Hannah, 2012: The circulation of eastern Canadian seas. *Progress in Oceanography*, **106,** 28-48, http://dx.doi.org/10.1016/j.pocean.2012.06.005

Xing, X., A. Morel, H. Claustre, F. D'Ortenzio, and A. Poteau, 2012: Combined processing and mutual interpretation of radiometry and fluorometry from autonomous profiling Bio-Argo floats: 2. Colored dissolved organic matter absorption retrieval. *Journal of Geophysical Research: Oceans*, **117,** C04022, http://dx.doi.org/10.1029/2011JC007632

Xu, L., S.-P. Xie, and Q. Liu, 2012: Mode water ventilation and subtropical countercurrent over the North Pacific in CMIP5 simulations and future projections. *Journal of Geophysical Research: Oceans*, **117,** C12009, http://dx.doi.org/10.1029/2012JC008377

Xu, X., W. J. Schmitz, H. E. Hurlburt, and P. J. Hogan, 2012: Mean Atlantic meridional overturning circulation across 26.5°N from eddy-resolving simulations compared to observations. *Journal of Geophysical Research: Oceans*, **117,** C03042, http://dx.doi.org/10.1029/2011JC007586

Xue, Y., M. A. Balmaseda, T. Boyer, N. Ferry, S. Good, I. Ishikawa, A. Kumar, M. Rienecker, A. J. Rosati, and Y. Yin, 2012: A Comparative Analysis of Upper-Ocean Heat Content Variability from an Ensemble of Operational Ocean Reanalyses. *Journal of Climate*, **25,** 6905-6929, http://dx.doi.org/10.1175/JCLI-D-11-00542.1

Yan, Y., D. Xu, Y. Qi, and Z. Gan, 2012: Observations of Freshening in the Northwest Pacific Subtropical Gyre near Luzon Strait. *Atmosphere-Ocean*, **50,** 92-102, http://dx.doi.org/10.1080/07055900.2012.715078

Yang, Y.-J., L. Sun, A.-M. Duan, Y.-B. Li, Y.-F. Fu, Y.-F. Yan, Z.-Q. Wang, and T. Xian, 2012: Impacts of the binary typhoons on upper ocean environments in November 2007.

Journal of Applied Remote Sensing, **6,** 063583, http://dx.doi.org/10.1117/1.JRS.6.063583

Yin, X., J. Boutin, N. Martin, and P. Spurgeon, 2012: Optimization of L-Band Sea Surface Emissivity Models Deduced From SMOS Data. *Ieee Transactions on Geoscience and Remote Sensing*, **50,** 1414-1426, https://doi.org/10.1109/TGRS.2012.2184547

Yin, X., J. Boutin, and P. Spurgeon, 2012: First Assessment of SMOS Data Over Open Ocean: Part I-Pacific Ocean. *IEEE Transactions on Geoscience and Remote Sensing*, **50,** 1648-1661, http://dx.doi.org/10.1109/tgrs.2012.2188407

Yin, X., F. Qiao, Y. Yang, C. Xia, and X. Chen, 2012: Argo data assimilation in ocean general circulation model of Northwest Pacific Ocean. *Ocean Dynamics*, **62,** 1059-1071, http://dx.doi.org/10.1007/s10236-012-0549-1

Yu, T., Z. Deng, G. Han, X. Wu, H. Fu, and K. Wu, 2012: The Reanalysis of Currents and Throughflow Volume Transport in the Taiwan Strait. *Marine Geodesy*, **35,** 16-31, http://dx.doi.org/10.1080/01490419.2011.572765

Yuan, Y., G. Liao, C. Yang, Z. Liu, and H. Chen, 2012: Currents in Luzon Strait Obtained from CTD and Argo Observations and a Diagnostic Model in October 2008. *Atmosphere-Ocean*, **50,** 27-39, http://dx.doi.org/10.1080/07055900.2012.712914

Zavala-Garay, J., J. L. Wilkin, and H. G. Arango, 2012: Predictability of Mesoscale Variability in the East Australian Current Given Strong-Constraint Data Assimilation. *Journal of Physical Oceanography*, **42,** 1402-1420, http://dx.doi.org/10.1175/JPO-D-11-0168.1

Zhai, X. and L. Sheldon, 2012: On the North Atlantic Ocean Heat Content Change between 1955–70 and 1980–95. *Journal of Climate*, **25,** 3619-3628, http://dx.doi.org/10.1175/JCLI-D-11-00187.1

Zhang, L. and C. Wang, 2012: Remote influences on freshwater flux variability in the Atlantic warm pool region. *Geophysical Research Letters*, **39,** L19714, http://dx.doi.org/10.1029/2012GL053530

Zhang, Q., H. Liu, H. Zhou, and D. Zheng, 2012: Variation Features of the Mindanao Eddy from Argo Data. *Atmosphere-Ocean*, **50,** 103-115, http://dx.doi.org/10.1080/07055900.2012.742855

Zhang, Q., H. Zhou, and H. Liu, 2012: Interannual variability in the Mindanao Eddy and its impact on thermohaline structure pattern. *Acta Oceanologica Sinica*, **31,** 56-65, http://dx.doi.org/10.1007/s13131-012-0247-3

Zhang, X., R. D. Hetland, M. Marta-Almeida, and S. F. DiMarco, 2012: A numerical investigation of the Mississippi and Atchafalaya freshwater transport, filling and flushing times on the Texas-Louisiana Shelf. *Journal of Geophysical Research: Oceans*, **117,** C11009, http://dx.doi.org/10.1029/2012JC008108

Zhang, Y. and Y. Du, 2012: Seasonal variability of salinity budget and water exchange in the northern Indian Ocean from HYCOM assimilation. *Chinese Journal of Oceanology and Limnology*, **30,** 1082-1092, http://dx.doi.org/10.1007/s00343-012-1284-7

Zheng, F., L. Y. Wan, and H. Wang, 2012: Distinguished Effects of Interannual Salinity Variability on the Development of the Central-Pacific El Nino Events. *Atmospheric and Oceanic Science Letters*, **5,** 123-127, http://dx.doi.org/10.1080/16742834.2012.11446977

Zheng, F. and R.-H. Zhang, 2012: Effects of interannual salinity variability and freshwater flux

forcing on the development of the 2007/08 La Niña event diagnosed from Argo and satellite data. *Dynamics of Atmospheres and Oceans*, **57,** 45-57, http://dx.doi.org/10.1016/j.dynatmoce.2012.06.002

Zhu, J., B. Huang, and M. A. Balmaseda, 2012: An ensemble estimation of the variability of upper-ocean heat content over the tropical Atlantic Ocean with multi-ocean reanalysis products. *Climate Dynamics*, **39,** 1001-1020, http://dx.doi.org/10.1007/s00382-011-1189-8

Zuo, H., A. C. Naveira Garabato, A. L. New, and A. Oschlies, 2012: Mechanisms of subantarctic mode water upwelling in a hybrid-coordinate global GCM. *Ocean Modelling*, **45–46,** 59-80, http://dx.doi.org/10.1016/j.ocemod.2011.12.006

2011 (229)

Adani, M., S. Dobricic, and N. Pinardi, 2011: Quality Assessment of a 1985-2007 Mediterranean Sea Reanalysis. *Journal of Atmospheric and Oceanic Technology*, **28,** 569-589, http://dx.doi.org/10.1175/2010JTECHO798.1

Agoshkov, V. I., N. B. Zakharova, and E. I. Parmuzin, 2011: The study and numerical solution of the inverse problem of heat flows in the ocean dynamics model based on ARGO buoys data. *Russian Journal of Numerical Analysis and Mathematical Modelling*, **26,** 231-261, http://dx.doi.org/10.1515/rjnamm.2011.013

Alessandri, A., A. Borrelli, S. Gualdi, E. Scoccimarro, and S. Masina, 2011: Tropical Cyclone Count Forecasting Using a Dynamical Seasonal Prediction System: Sensitivity to Improved Ocean Initialization. *Journal of Climate*, **24,** 2963-2982, http://dx.doi.org/10.1175/2010JCLI3585.1

Alves, O., D. Hudson, M. Balmaseda, and L. Shi, 2011: Seasonal and Decadal Prediction. *Operational Oceanography in the 21st Century*, A. Schiller and G. Brassington, Eds., Springer Netherlands, 513-542, http://dx.doi.org/10.1007/978-94-007-0332-2_20.

Annapurnaiah, K., T. V. S. U. Bhaskar, and T. M. B. Nair, 2011: Validation of mixed layer depth derived using satellite data and wave model with in-situ observations. *International Journal of Oceans and Oceanography*, **5,** 23-34,

Arango, H. G., J. C. Levin, E. N. Curchitser, B. Zhang, A. M. Moore, W. Q. Han, A. L. Gordon, C. M. Lee, and J. B. Girton, 2011: Development of a Hindcast/Forecast Model for the Philippine Archipelago. *Oceanography*, **24,** 58-69, http://dx.doi.org/10.5670/oceanog.2011.04

Arhan, M., S. Speich, C. Messager, G. Dencausse, R. Fine, and M. Boye, 2011: Anticyclonic and cyclonic eddies of subtropical origin in the subantarctic zone south of Africa. *J. Geophys. Res.*, **116,** C11004, http://dx.doi.org/10.1029/2011JC007140

Arnault, S., I. Pujol, and J. L. Melice, 2011: In Situ Validation of Jason-1 and Jason-2 Altimetry Missions in the Tropical Atlantic Ocean. *Marine Geodesy*, **34,** 319-339, http://dx.doi.org/10.1080/01490419.2011.584833

Auad, G., D. Roemmich, and J. Gilson, 2011: The California Current System in relation to the Northeast Pacific Ocean circulation. *Progress in Oceanography*, **91,** 576-592, https://doi.org/10.1016/j.pocean.2011.09.004

Baird, M. E., J. D. Everett, and I. M. Suthers, 2011: Analysis of southeast Australian

zooplankton observations of 1938-42 using synoptic oceanographic conditions. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 699-711, http://dx.doi.org/10.1016/j.dsr2.2010.06.002

Baird, M. E., I. M. Suthers, D. A. Griffin, B. Hollings, C. Pattiaratchi, J. D. Everett, M. Roughan, K. Oubelkheir, and M. Doblin, 2011: The effect of surface flooding on the physical-biogeochemical dynamics of a warm-core eddy off southeast Australia. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 592-605, http://dx.doi.org/10.1016/j.dsr2.2010.10.002

Barbero, L., J. Boutin, L. Merlivat, N. Martin, T. Takahashi, S. C. Sutherland, and R. Wanninkhof, 2011: Importance of water mass formation regions for the air-sea CO2 flux estimate in the Southern Ocean. *Global Biogeochemical Cycles*, **25**, http://dx.doi.org/10.1029/2010GB003818

Barker, P. M., J. R. Dunn, C. M. Domingues, and S. E. Wijffels, 2011: Pressure Sensor Drifts in Argo and Their Impacts. *Journal of Atmospheric and Oceanic Technology*, **28,** 1036-1049, http://dx.doi.org/10.1175/2011JTECHO831.1

Barre, N., C. Provost, A. Renault, and N. Senneael, 2011: Fronts, meanders and eddies in Drake Passage during the ANT-XXIII/3 cruise in January-February 2006: A satellite perspective. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 2533-2554, http://dx.doi.org/10.1016/j.dsr2.2011.01.003

Behrendt, A., E. Fahrbach, M. Hoppema, G. Rohardt, O. Boebel, O. Klatt, A. Wisotzki, and H. Witte, 2011: Variations of Winter Water properties and sea ice along the Greenwich meridian on decadal time scales. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 2524-2532, http://dx.doi.org/10.1016/j.dsr2.2011.07.001

Belokopytov, V. N., 2011: Interannual variations of the renewal of waters of the cold intermediate layer in the Black Sea for the last decades. *Physical Oceanography*, **20,** 347-355, http://dx.doi.org/10.1007/s11110-011-9090-x

Biancamaria, S., A. Cazenave, N. M. Mognard, W. Llovel, and F. Frappart, 2011: Satellite-based high latitude snow volume trend, variability and contribution to sea level over 1989/2006. *Global and Planetary Change*, **75,** 99-107, http://dx.doi.org/10.1016/j.gloplacha.2010.10.011

Brandt, P., A. Funk, V. Hormann, M. Dengler, R. J. Greatbatch, and J. M. Toole, 2011: Interannual atmospheric variability forced by the deep equatorial Atlantic Ocean. *Nature*, **473,** 497-500, http://dx.doi.org/10.1038/nature10013

Brassington, G. B., 2011: System Design for Operational Ocean Forecasting. *Operational Oceanography in the 21st Century*, A. Schiller and G. Brassington, Eds., Springer Netherlands, 441-486, http://dx.doi.org/10.1007/978-94-007-0332-2_18.

Brassington, G. B., N. Summons, and R. Lumpkin, 2011: Observed and simulated Lagrangian and eddy characteristics of the East Australian Current and the Tasman Sea. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 559-573, http://dx.doi.org/10.1016/j.dsr2.2010.10.001

Broquet, G., A. M. Moore, H. G. Arango, and C. A. Edwards, 2011: Corrections to ocean surface forcing in the California Current System using 4D variational data assimilation. *Ocean Modelling*, **36,** 116-132, http://dx.doi.org/10.1016/j.ocemod.2010.10.005

Byju, P. and S. Prasanna Kumar, 2011: Physical and biological response of the Arabian Sea to tropical cyclone Phyan and its implications. *Marine Environmental Research*, **71,** 325-330, http://dx.doi.org/10.1016/j.marenvres.2011.02.008

Chaigneau, A., M. Le Texier, G. Eldin, C. Grados, and O. Pizarro, 2011: Vertical structure of mesoscale eddies in the eastern South Pacific Ocean: A composite analysis from altimetry and Argo profiling floats. *J. Geophys. Res.*, **116,** C11025, http://dx.doi.org/10.1029/2011JC007134

Chambers, D. P., 2011: ENSO-correlated fluctuations in the ocean bottom pressure and wind-stress curl in the North Pacific. *Ocean Science*, **7,** 685-692, http://dx.doi.org/10.5194/os-7-685-2011

Chambers, D. P. and J. Schroter, 2011: Measuring ocean mass variability from satellite gravimetry. *Journal of Geodynamics*, **52,** 333-343, http://dx.doi.org/10.1016/j.jog.2011.04.004

Chang, P.-H., C.-H. Cho, and S.-B. Ryoo, 2011: Recent changes of Mixed Layer Depth in the East/Japan Sea: 1994–2007. *Asia-Pacific Journal of Atmospheric Sciences*, **47,** 497-501, http://dx.doi.org/10.1007/s13143-011-0034-7

Chang, Y.-S., A. Rosati, and S. Zhang, 2011: A construction of pseudo salinity profiles for the global ocean: Method and evaluation. *J. Geophys. Res.*, **116,** C02002, http://dx.doi.org/10.1029/2010JC006386

Chang, Y.-S., S. Zhang, and A. Rosati, 2011: Improvement of salinity representation in an ensemble coupled data assimilation system using pseudo salinity profiles. *Geophysical Research Letters*, **38,** L13609, http://dx.doi.org/10.1029/2011GL048064

Chassignet, E. P., 2011: Isopycnic and Hybrid Ocean Modeling in the Context of GODAE. *Operational Oceanography in the 21st Century*, A. Schiller and G. Brassington, Eds., Springer Netherlands, 263-293, http://dx.doi.org/10.1007/978-94-007-0332-2_11.

Chen, D. K., Y. H. Pei, and X. M. Zhang, 2011: Luzon Strait Argo experiments. *A Collection of Argo research papers*, Ocean Press, 39-56,

Chen, G., Y. Hou, and X. Chu, 2011: Mesoscale eddies in the South China Sea: Mean properties, spatiotemporal variability, and impact on thermohaline structure. *J. Geophys. Res.*, **116,** C06018, http://dx.doi.org/10.1029/2010JC006716

Chen, S., D. Wang, and Z. X. Zhang, 2011: Comparison of PFL Data from WOD09 and Argo Data. *Ocean Technology*, **4,** 21-32,

Christoffersen, P., R. I. Mugford, K. J. Heywood, I. Joughin, J. A. Dowdeswell, J. P. M. Syvitski, A. Luckman, and T. J. Benham, 2011: Warming of waters in an East Greenland fjord prior to glacier retreat: mechanisms and connection to large-scale atmospheric conditions. *Cryosphere*, **5,** 701-714, http://dx.doi.org/10.5194/tc-5-701-2011

Chu, P. C., 2011: Global upper ocean heat content and climate variability. *Ocean Dynamics*, **61,** 1189-1204, http://dx.doi.org/10.1007/s10236-011-0411-x

Church, J. A., N. J. White, L. F. Konikow, C. M. Domingues, J. G. Cogley, E. Rignot, J. M. Gregory, M. R. van den Broeke, A. J. Monaghan, and I. Velicogna, 2011: Revisiting the Earth's sea-level and energy budgets from 1961 to 2008. *Geophysical Research Letters*, **38,** L18601, http://dx.doi.org/10.1029/2011GL048794

Ciasto, L. M., M. A. Alexander, C. Deser, and M. H. England, 2011: On the Persistence of Cold-Season SST Anomalies Associated with the Annular Modes. *Journal of Climate*,

24, 2500-2515, http://dx.doi.org/10.1175/2010JCLI3535.1
Cummings, J. A., 2011: Ocean Data Quality Control. *Operational Oceanography in the 21st Century*, A. Schiller and G. Brassington, Eds., Springer Netherlands, 91-121, http://dx.doi.org/10.1007/978-94-007-0332-2_4.
Czeschel, R., L. Stramma, F. U. Schwarzkopf, B. S. Giese, A. Funk, and J. Karstensen, 2011: Middepth circulation of the eastern tropical South Pacific and its link to the oxygen minimum zone. *J. Geophys. Res.*, **116,** C01015, http://dx.doi.org/10.1029/2010JC006565
David, D. T., S. P. Kumar, P. Byju, M. S. S. Sarma, A. Suryanarayana, and V. S. N. Murty, 2011: Observational evidence of lower-frequency Yanai waves in the central equatorial Indian Ocean. *J. Geophys. Res.*, **116,** C06009, http://dx.doi.org/10.1029/2010JC006603
Delcroix, T., G. Alory, S. Cravatte, T. Correge, and M. J. McPhaden, 2011: A gridded sea surface salinity data set for the tropical Pacific with sample applications (1950-2008). *Deep Sea Research Part I: Oceanographic Research Papers*, **58,** 38-48, http://dx.doi.org/10.1016/j.dsr.2010.11.002
Deng, Z., Y. Tang, and H. J. Freeland, 2011: Evaluation of several model error schemes in the EnKF assimilation: Applied to Argo profiles in the Pacific Ocean. *J. Geophys. Res.*, **116,** C09027, http://dx.doi.org/10.1029/2011JC006942
Despres, A., G. Reverdin, and F. d'Ovidio, 2011: Summertime modification of surface fronts in the North Atlantic subpolar gyre. *J. Geophys. Res.*, **116,** C10003, http://dx.doi.org/10.1029/2011JC006950
Dessler, A. E., 2011: Cloud variations and the Earth's energy budget. *Geophysical Research Letters*, **38,** L19701, http://dx.doi.org/10.1029/2011GL049236
Dhomps, A. L., S. Guinehut, P. Y. Le Traon, and G. Larnicol, 2011: A global comparison of Argo and satellite altimetry observations. *Ocean Science*, **7,** 175-183, https://doi.org/10.5194/os-7-175-2011
Divakaran, P. and G. B. Brassington, 2011: Arterial ocean circulation of the southeast Indian Ocean. *Geophysical Research Letters*, **38,** L01802, http://dx.doi.org/10.1029/2010GL045574
Dong, S., M. Baringer, G. Goni, and S. Garzoli, 2011: Importance of the assimilation of Argo float measurements on the Meridional Overturning Circulation in the South Atlantic. *Geophysical Research Letters*, **38,** L18603, http://dx.doi.org/10.1029/2011GL048982
Donohue, S. M. and M. W. Stacey, 2011: Rossby Waves and the Variability of the North Pacific Current during 2002-03. *Journal of Physical Oceanography*, **41,** 1708-1719, http://dx.doi.org/10.1175/2011JPO4463.1
Downes, S. M., A. Gnanadesikan, S. M. Griffies, and J. L. Sarmiento, 2011: Water Mass Exchange in the Southern Ocean in Coupled Climate Models. *Journal of Physical Oceanography*, **41,** 1756-1771, http://dx.doi.org/10.1175/2011JPO4586.1
Fahrbach, E., M. Hoppema, G. Rohardt, O. Boebel, O. Klatt, and A. Wisotzki, 2011: Warming of deep and abyssal water masses along the Greenwich meridian on decadal time scales: The Weddell gyre as a heat buffer. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 2509-2523, http://dx.doi.org/10.1016/j.dsr2.2011.06.007
Fauchereau, N., A. Tagliabue, L. Bopp, and P. M. S. Monteiro, 2011: The response of

phytoplankton biomass to transient mixing events in the Southern Ocean. *Geophysical Research Letters*, **38,** L17601, http://dx.doi.org/10.1029/2011GL048498

Faure, V., M. Arhan, S. Speich, and S. Gladyshev, 2011: Heat budget of the surface mixed layer south of Africa. *Ocean Dynamics*, **61,** 1441-1458, http://dx.doi.org/10.1007/s10236-011-0444-1

Feng, M., C. Boning, A. Biastoch, E. Behrens, E. Weller, and Y. Masumoto, 2011: The reversal of the multi-decadal trends of the equatorial Pacific easterly winds, and the Indonesian Throughflow and Leeuwin Current transports. *Geophysical Research Letters*, **38,** L11604, http://dx.doi.org/10.1029/2011GL047291

Ferron, B., 2011: A 4D-variational approach applied to an eddy-permitting North Atlantic configuration: Synthetic and real data assimilation of altimeter observations. *Ocean Modelling*, **39,** 370-385, http://dx.doi.org/10.1016/j.ocemod.2011.06.001

Fiorino, S. T., R. M. Randall, R. J. Bartell, A. D. Downs, P. C. Chu, and C. W. Fan, 2011: Climate Change: Anticipated Effects on High-Energy Laser Weapon Systems in Maritime Environments. *Journal of Applied Meteorology and Climatology*, **50,** 153-166, http://dx.doi.org/10.1175/2010JAMC2482.1

Forget, G., G. Maze, M. Buckley, and J. Marshall, 2011: Estimated Seasonal Cycle of North Atlantic Eighteen Degree Water Volume. *Journal of Physical Oceanography*, **41,** 269-286, http://dx.doi.org/10.1175/2010JPO4257.1

Fox-Kemper, B., G. Danabasoglu, R. Ferrari, S. M. Griffies, R. W. Hallberg, M. M. Holland, M. E. Maltrud, S. Peacock, and B. L. Samuels, 2011: Parameterization of mixed layer eddies. III: Implementation and impact in global ocean climate simulations. *Ocean Modelling*, **39,** 61-78, http://dx.doi.org/10.1016/j.ocemod.2010.09.002

Fu, W., J. L. Hoyer, and J. She, 2011: Assessment of the three dimensional temperature and salinity observational networks in the Baltic Sea and North Sea. *Ocean Science*, **7,** 75-90, http://dx.doi.org/10.5194/os-7-75-2011

Fu, W. and J. Zhu, 2011: Effects of Sea Level Data Assimilation by Ensemble Optimal Interpolation and 3D Variational Data Assimilation on the Simulation of Variability in a Tropical Pacific Model. *Journal of Atmospheric and Oceanic Technology*, **28,** 1624-1640, http://dx.doi.org/10.1175/JTECH-D-11-00044.1

Fujii, Y., M. Kamachi, S. Matsumoto, and S. Ishizaki, 2011: Barrier Layer and Relevant Variability of the Salinity Field in the Equatorial Pacific Estimated in an Ocean Reanalysis Experiment. *Pure and Applied Geophysics*, **169,** 579-594, http://dx.doi.org/10.1007/s00024-011-0387-y

Garcia-Lafuente, J., A. Sanchez-Roman, C. Naranjo, and J. C. Sanchez-Garrido, 2011: The very first transformation of the Mediterranean outflow in the Strait of Gibraltar. *J. Geophys. Res.*, **116,** C07010, http://dx.doi.org/10.1029/2011JC006967

Garzoli, S. L. and R. Matano, 2011: The South Atlantic and the Atlantic Meridional Overturning Circulation. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 1837-1847, http://dx.doi.org/10.1016/j.dsr2.2010.10.063

Gasparin, F., A. Ganachaud, and C. Maes, 2011: A western boundary current east of New Caledonia: Observed characteristics. *Deep Sea Research Part I: Oceanographic Research Papers*, **58,** 956-969, http://dx.doi.org/10.1016/j.dsr.2011.05.007

Geetha, G., T. V. S. U. Bhaskar, and E. P. R. Rao, 2011: Argo data and products of Indian

Ocean for low bandwidth users. *International Journal of Oceans and Oceanography*, **5,** 1-8,

George, S., R. Sharma, N. Agarwal, S. Basu, and A. Sarkar, 2011: Dynamic height anomaly from Argo profiles and sea-level anomaly from satellite altimetry: a comparative study in the Indian Ocean. *International Journal of Remote Sensing*, **32,** 5105-5113, http://dx.doi.org/10.1080/01431161.2010.494638

Girishkumar, M. S., M. Ravichandran, M. J. McPhaden, and R. R. Rao, 2011: Intraseasonal variability in barrier layer thickness in the south central Bay of Bengal. *Journal of Geophysical Research-Oceans*, **116,** C03009, http://dx.doi.org/10.1029/2010JC006657

Grist, J. P., S. A. Josey, L. Boehme, M. P. Meredith, F. J. M. Davidson, G. B. Stenson, and M. O. Hammill, 2011: Temperature signature of high latitude Atlantic boundary currents revealed by marine mammal-borne sensor and Argo data. *Geophysical Research Letters*, **38,** L15601, http://dx.doi.org/10.1029/2011GL048204

Grunseich, G., B. Subrahmanyam, V. S. N. Murty, and B. S. Giese, 2011: Sea surface salinity variability during the Indian Ocean Dipole and ENSO events in the tropical Indian Ocean. *J. Geophys. Res.*, **116,** C11013, http://dx.doi.org/10.1029/2011JC007456

Hackert, E., J. Ballabrera-Poy, A. J. Busalacchi, R.-H. Zhang, and R. Murtugudde, 2011: Impact of sea surface salinity assimilation on coupled forecasts in the tropical Pacific. *Journal of Geophysical Research-Oceans*, **116,** C05009, http://dx.doi.org/10.1029/2010JC006708

Haines, K., J. A. Johannessen, P. Knudsen, D. Lea, M. H. Rio, L. Bertino, F. Davidson, and F. Hernandez, 2011: An ocean modelling and assimilation guide to using GOCE geoid products. *Ocean Science*, **7,** 151-164, http://dx.doi.org/10.5194/os-7-151-2011

Halkides, D. and T. Lee, 2011: Mechanisms controlling seasonal mixed layer temperature and salinity in the Southwestern Tropical Indian Ocean. *Dynamics of Atmospheres and Oceans*, **51,** 77-93, http://dx.doi.org/10.1016/j.dynatmoce.2011.03.002

Han, G., W. Li, X. F. Zhang, D. Li, Z. J. He, X. D. Wang, X. R. Wu, T. Yu, and J. R. Ma, 2011: A Regional Ocean Reanalysis System for Coastal Waters of China and Adjacent Seas. *Advances in Atmospheric Sciences*, **28,** 682-690, http://dx.doi.org/10.1007/s00376-010-9184-2

Hansen, J., M. Sato, P. Kharecha, and K. von Schuckmann, 2011: Earth's energy imbalance and implications. *Atmospheric Chemistry and Physics* **11,** 13421-13449, http://dx.doi.org/10.5194/acpd-11-27031-2011

He, Z. J., H. L. Fu, and G. J. Han, 2011: The impact of Argo data on the forecast accuracy of temperature and salinity in the China coastal waters and adjacent seas. *A Collection of Argo research papers*, Ocean Press, 72-81,

Herraiz-Borreguero, L. and S. R. Rintoul, 2011: Subantarctic mode water: distribution and circulation. *Ocean Dynamics*, **61,** 103-126, http://dx.doi.org/10.1007/s10236-010-0352-9

Herraiz-Borreguero, L. and S. R. Rintoul, 2011: Regional circulation and its impact on upper ocean variability south of Tasmania. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 2071-2081, http://dx.doi.org/10.1016/j.dsr2.2011.05.022

Higginson, S., K. R. Thompson, J. Huang, M. Veronneau, and D. G. Wright, 2011: The mean

surface circulation of the North Atlantic subpolar gyre: A comparison of estimates derived from new gravity and oceanographic measurements. *J. Geophys. Res.*, **116,** C08016, http://dx.doi.org/10.1029/2010JC006877

Hobday, A. J., J. R. Hartog, C. M. Spillman, and O. Alves, 2011: Seasonal forecasting of tuna habitat for dynamic spatial management. *Canadian Journal of Fisheries and Aquatic Sciences*, **68,** 898-911, http://dx.doi.org/10.1139/f2011-031

Holt, T., J. Cummings, C. Bishop, J. Doyle, X. Hong, S. Chen, and Y. Jin, 2011: Development and testing of a coupled ocean-atmosphere mesoscale ensemble prediction system. *Ocean Dynamics*, **61,** 1937-1954, http://dx.doi.org/10.1007/s10236-011-0449-9

Horton, T. W., R. N. Holdaway, A. N. Zerbini, N. Hauser, C. Garrigue, A. Andriolo, and P. J. Clapham, 2011: Straight as an arrow: humpback whales swim constant course tracks during long-distance migration. *Biology Letters*, **7,** 674-679, http://rsbl.royalsocietypublishing.org/content/early/2011/04/14/rsbl.2011.0279.abstract

Hosoda, S. and T. Suga, 2011: Argo Programme : Real Time Global Ocean Observing System for Monitoring Climate Variability and Change. *Bulletin of the Society of Sea Water Science, Japan*, **65,** 29-34, http://dx.doi.org/10.11457/swsj.65.29

Hu, R. J., S. S. Sun, and Q. Y. Liu, 2011: Characteristcs of the intraseasonal oscillations of temperature in the tropical Indian Ocean. *A Collection of Argo research papers*, Ocean Press, 82-95,

Huang, B., Y. Xue, A. Kumar, and D. Behringer, 2011: AMOC variations in 1979-2008 simulated by NCEP operational ocean data assimilation system. *Climate Dynamics*, **38,** 513-525, http://dx.doi.org/10.1007/s00382-011-1035-z

Iskandar, I. and M. J. McPhaden, 2011: Dynamics of wind-forced intraseasonal zonal current variations in the equatorial Indian Ocean. *Journal of Geophysical Research-Oceans*, **116,** C06019, http://dx.doi.org/10.1029/2010JC006864

Itoh, S., T. Saruwatari, H. Nishikawa, I. Yasuda, K. Komatsu, A. Tsuda, T. Setou, and M. Shimizu, 2011: Environmental variability and growth histories of larval Japanese sardine (Sardinops melanostictus) and Japanese anchovy (Engraulis japonicus) near the frontal area of the Kuroshio. *Fisheries Oceanography*, **20,** 114-124, http://dx.doi.org/10.1111/j.1365-2419.2011.00572.x

Johannessen, O., A. Korablev, V. Miles, M. Miles, and K. Solberg, 2011: Interaction Between the Warm Subsurface Atlantic Water in the Sermilik Fjord and Helheim Glacier in Southeast Greenland. *Surveys in Geophysics*, **32,** 387-396, http://dx.doi.org/10.1007/s10712-011-9130-6

Johnson, G. C., 2011: Deep Signatures of Southern Tropical Indian Ocean Annual Rossby Waves*. *Journal of Physical Oceanography*, **41,** 1958-1964, http://dx.doi.org/10.1175/JPO-D-11-029.1

Johnson, G. C. and J. M. Lyman, 2011: Global Oceans: Sea Surface Salinity. In the State of the Climate in 2010. Blunden, J., D. S. Arndt, and M. O. Barringer, Eds. *Bulletin of the American Meteorological Society*, **92,** S86-S88, http://dx.doi.org/10.1175/1520-0477-92.6.S1

Johnson, G. C., J. M. Lyman, J. K. Willis, S. Levitus, T. Boyer, J. I. Antonov, and S. A. Good, 2011: Ocean heat content. In State of the Climate in 2010. Blunden, J., D. S.

Arndt, and M. O. Barringer, Eds. *Bulletin of the American Meteorological Society*, **92,** S81-S86, http://dx.doi.org/10.1175/JPO-D-11-029.1

Johnson, G. C. and S. Wijffels, 2011: Ocean density change contributions to sea level rise. *Oceanography*, **24,** 112-121, http://dx.doi.org/10.5670/oceanog.2011.31

Joyce, T. M., 2011: New perspectives on eighteen-degree water formation in the North Atlantic. *Journal of Oceanography*, **68,** 45-52, http://dx.doi.org/10.1007/s10872-011-0029-0

Juranek, L. W., R. A. Feely, D. Gilbert, H. Freeland, and L. A. Miller, 2011: Real-time estimation of pH and aragonite saturation state from Argo profiling floats: Prospects for an autonomous carbon observing strategy. *Geophysical Research Letters*, **38,** L17603, http://dx.doi.org/10.1029/2011GL048580

Jury, M. R. and E. Rodriguez, 2011: Caribbean hurricanes: interannual variability and prediction. *Theoretical and Applied Climatology*, **106,** 105-115, http://dx.doi.org/10.1007/s00704-011-0422-z

Kamenkovich, I., W. Cheng, C. Schmid, and D. E. Harrison, 2011: Effects of eddies on an ocean observing system with profiling floats: Idealized simulations of the Argo array. *J. Geophys. Res.*, **116,** C06003, http://dx.doi.org/10.1029/2010JC006910

Kashino, Y., A. Ishida, and S. Hosoda, 2011: Observed Ocean Variability in the Mindanao Dome Region. *Journal of Physical Oceanography*, **41,** 287-302, http://dx.doi.org/10.1175/2010JPO4329.1

Kimizuka, M., F. Kobashi, and N. Iwasaka, 2011: Water characteristics and temporal variations of the warm core ring of Sanriku of Japan observed by Argo floats. *Oceanography in Japan*, **20,** 149-165,

Klingaman, N. P., S. J. Woolnough, H. Weller, and J. M. Slingo, 2011: The Impact of Finer-Resolution Air-Sea Coupling on the Intraseasonal Oscillation of the Indian Monsoon. *Journal of Climate*, **24,** 2451-2468, http://dx.doi.org/10.1175/2010JCLI3868.1

Kobashi, F. and S.-P. Xie, 2011: Interannual variability of the North Pacific Subtropical Countercurrent: role of local ocean-atmosphere interaction. *Journal of Oceanography*, **68,** 113-126, http://dx.doi.org/10.1007/s10872-011-0048-x

Kobayashi, T., K. Amaike, K. Watanabe, T. Ino, K. Asakawa, T. Suga, T. Kawano, and T. Hyakudome, 2011: Deep NINJA: A new float for deep ocean observation developed in Japan. *Proc. International Symposium on Underwater Technology 2011 and International Workshop on Scientific Use of Submarine Cables & Related Technologies*,

Lachkar, Z. and N. Gruber, 2011: What controls biological production in coastal upwelling systems? Insights from a comparative modeling study. *Biogeosciences*, **8,** 2961-2976, http://dx.doi.org/10.5194/bg-8-2961-2011

Langlais, C., S. Rintoul, and A. Schiller, 2011: Variability and mesoscale activity of the Southern Ocean fronts: Identification of a circumpolar coordinate system. *Ocean Modelling*, **39,** 79-96, http://dx.doi.org/10.1016/j.ocemod.2011.04.010

Lee, H. J., J.-H. Park, M. Wimbush, K. T. Jung, C. J. Jang, Y.-K. Cho, Y.-K. Seo, and J. H. Nam, 2011: Tidal Effects on Intermediate Waters: A Case Study in the East/Japan Sea. *Journal of Physical Oceanography*, **41,** 234-240,

http://dx.doi.org/10.1175/2010JPO4510.1
Lee, M.-M., A. J. G. Nurser, I. Stevens, and J.-B. Sallee, 2011: Subduction over the Southern Indian Ocean in a High-Resolution Atmosphere-Ocean Coupled Model. *Journal of Climate*, **24,** 3830-3849, http://dx.doi.org/10.1175/2011JCLI3888.1
Leuliette, E. W. and J. K. Willis, 2011: Balancing the sea level budget. *Oceanography*, **24,** 122-129, http://dx.doi.org/10.5670/oceanog.2011.32
Levitus, S., J. antonov, T. Boyer, J. R. Reagan, and C. Schmid, 2011: Sub-surface salinity. State of the Climate in 2010, Global Oceans. *Bulletin of the American Meteorological Society*, **92,** S88-S92, http://dx.doi.org/10.1175/1520-0477-92.6.S1
Li, H. and J. P. Xu, 2011: Development of data assimilation and its application in ocean science. *Marine Science Bulletin*, **30,** 463-472,
Li, W., G. J. Han, and Q. Li, 2011: Impact of Argo data on the regional ocean reanalysis for China coastal waters and adjacent seas. *A Collection of Argo research papers*, Ocean Press, 96-105,
Lique, C., G. Garric, A.-M. Treguier, B. Barnier, N. Ferry, C.-E. Testut, and F. Girard-Ardhuin, 2011: Evolution of the Arctic Ocean Salinity, 2007-08: Contrast between the Canadian and the Eurasian Basins. *Journal of Climate*, **24,** 1705-1717, http://dx.doi.org/10.1175/2010JCLI3762.1
Liu, H., Q. Zhang, Y. Duan, and Y. Hou, 2011: The three-dimensional structure and seasonal variation of the North Pacific meridional overturning circulation. *Acta Oceanologica Sinica*, **30,** 33-42, http://dx.doi.org/10.1007/s13131-011-0117-4
Liu, Q., M. Feng, and D. Wang, 2011: ENSO-induced interannual variability in the southeastern South China Sea. *Journal of Oceanography*, **67,** 127-133, http://dx.doi.org/10.1007/s10872-011-0002-y
Liu, Y. and Y. L. Zhao, 2011: Assimilation of temperature and salinity using isotropic and anisotropic recursive filters in Tropic Pacific. *Acta Oceanologica Sinica*, **30,** 15-23, http://dx.doi.org/10.1007/s13131-011-0086-7
Liu, Z.-H., J. P. Xu, and C. H. Sun, 2011: *Combining sea surface height and temperature profile data to estimate global upper ocean heat content anomaly*. . *A Collection of Argo research papers*, Ocean press.
Liu, Z.-H., J. P. Xu, C. H. Sun, and B. K. Zhu, 2011: The Characteristics of water mass distribution and its seasonal variation near the Luzon Strait. *Journal of Tropical Oceanography*, **30,** 11-19, http://www.jto.ac.cn/EN/Y2011/V30/I1/11
Llovel, W., M. Becker, A. Cazenave, S. Jevrejeva, R. Alkama, B. Decharme, H. Douville, M. Ablain, and B. Beckley, 2011: Terrestrial waters and sea level variations on interannual time scale. *Global and Planetary Change*, **75,** 76-82, http://dx.doi.org/10.1016/j.gloplacha.2010.10.008
Llovel, W., B. Meyssignac, and A. Cazenave, 2011: Steric sea level variations over 2004-2010 as a function of region and depth: Inference on the mass component variability in the North Atlantic Ocean. *Geophysical Research Letters*, **38,** L15608, http://dx.doi.org/10.1029/2011GL047411
Lloyd, I. D. and G. A. Vecchi, 2011: Observational Evidence for Oceanic Controls on Hurricane Intensity. *Journal of Climate*, **24,** 1138-1153, http://dx.doi.org/10.1175/2010JCLI3763.1

Lozier, M. S., A. C. Dave, J. B. Palter, L. M. Gerber, and R. T. Barber, 2011: On the relationship between stratification and primary productivity in the North Atlantic. *Geophysical Research Letters*, **38,** L18609, http://dx.doi.org/10.1029/2011GL049414

Mahajan, S., R. Zhang, T. L. Delworth, S. Zhang, A. J. Rosati, and Y.-S. Chang, 2011: Predicting Atlantic meridional overturning circulation (AMOC) variations using subsurface and surface fingerprints. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 1895-1903, http://dx.doi.org/10.1016/j.dsr2.2010.10.067

Marcos, M., F. M. Calafat, W. Llovel, D. Gomis, and B. Meyssignac, 2011: Regional distribution of steric and mass contributions to sea level changes. *Global and Planetary Change*, **76,** 206-218, http://dx.doi.org/10.1016/j.dsr2.2010.10.067

Martinez, E., D. Antoine, F. D'Ortenzio, and C. de Boyer Montégut, 2011: Phytoplankton spring and fall blooms in the North Atlantic in the 1980s and 2000s. *Journal of Geophysical Research: Oceans*, **116,** C11029, http://dx.doi.org/10.1029/2010JC006836

Masina, S., P. Di Pietro, A. Storto, and A. Navarra, 2011: Global ocean re-analyses for climate applications. *Dynamics of Atmospheres and Oceans*, **52,** 341-366, http://dx.doi.org/10.1016/j.dynatmoce.2011.03.006

Matthews, D., B. Powell, and R. Milliff, 2011: Dominant spatial variability scales from observations around the Hawaiian Islands. *Deep Sea Research Part I: Oceanographic Research Papers*, **58,** 979-987, http://dx.doi.org/10.1016/j.dsr.2011.07.004

Mauritzen, C., E. Hansen, M. Andersson, B. Berx, A. Beszczynska-Moller, I. Burud, K. H. Christensen, J. Debernard, L. de Steur, P. Dodd, S. Gerland, O. Godoy, B. Hansen, S. Hudson, F. Hoydalsvik, R. Ingvaldsen, P. E. Isachsen, Y. Kasajima, I. Koszalka, K. M. Kovacs, M. Koltzow, J. LaCasce, C. M. Lee, T. Lavergne, C. Lydersen, M. Nicolaus, F. Nilsen, O. A. Nost, K. A. Orvik, M. Reigstad, H. Schyberg, L. Seuthe, O. Skagseth, J. Skardhamar, R. Skogseth, A. Sperrevik, C. Svensen, H. Soiland, S. H. Teigen, V. Tverberg, and C. W. Riser, 2011: Closing the loop - Approaches to monitoring the state of the Arctic Mediterranean during the International Polar Year 2007-2008. *Progress in Oceanography*, **90,** 62-89, http://dx.doi.org/10.1016/j.pocean.2011.02.010

Maze, G. and J. Marshall, 2011: Diagnosing the Observed Seasonal Cycle of Atlantic Subtropical Mode Water Using Potential Vorticity and Its Attendant Theorems. *Journal of Physical Oceanography*, **41,** 1986-1999, http://dx.doi.org/10.1175/2011JPO4576.1

McCarthy, G. D., E. McDonagh, and B. King, 2011: Decadal Variability of Thermocline and Intermediate Waters at 24 degrees S in the South Atlantic. *Journal of Physical Oceanography*, **41,** 157-165, http://dx.doi.org/10.1175/2010JPO4467.1

McPhaden, M. J., T. Lee, and D. McClurg, 2011: El Nino and its relationship to changing background conditions in the tropical Pacific Ocean. *Geophysical Research Letters*, **38,** L15709, http://dx.doi.org/10.1029/2011GL048275

Mehta, V., G. Meehl, L. Goddard, J. Knight, A. Kumar, M. Latif, T. Lee, A. Rosati, and D. Stammer, 2011: Decadal Climate Predictability and Prediction: Where Are We? *Bulletin of the American Meteorological Society*, **92,** 637-640, http://dx.doi.org/10.1175/2010BAMS3025.1

Meijers, A. J. S., N. L. Bindoff, and S. R. Rintoul, 2011: Estimating the Four-Dimensional Structure of the Southern Ocean Using Satellite Altimetry. *Journal of Atmospheric and Oceanic Technology*, **28,** 548-568, http://dx.doi.org/10.1175/2010JTECHO790.1

Meijers, A. J. S., N. L. Bindoff, and S. R. Rintoul, 2011: Frontal movements and property fluxes: Contributions to heat and freshwater trends in the Southern Ocean. *J. Geophys. Res.*, **116,** C08024, http://dx.doi.org/10.1029/2010JC006832

Mongin, M., R. Matear, and M. Chamberlain, 2011: Seasonal and spatial variability of remotely sensed chlorophyll and physical fields in the SAZ-Sense region. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 2082-2093, http:/dx.doi.org/10.1016/j.dsr2.2011.06.002

Moore, A. M., H. G. Arango, G. Broquet, C. Edwards, M. Veneziani, B. Powell, D. Foley, J. D. Doyle, D. Costa, and P. Robinson, 2011: The Regional Ocean Modeling System (ROMS) 4-dimensional variational data assimilation systems: Part III - Observation impact and observation sensitivity in the California Current System. *Progress in Oceanography*, **91,** 74-94, http://dx.doi.org/10.1016/j.pocean.2011.05.005

Moore, A. M., H. G. Arango, G. Broquet, C. Edwards, M. Veneziani, B. Powell, D. Foley, J. D. Doyle, D. Costa, and P. Robinson, 2011: The Regional Ocean Modeling System (ROMS) 4-dimensional variational data assimilation systems: Part II - Performance and application to the California Current System. *Progress in Oceanography*, **91,** 50-73, http://dx.doi.org/10.1016/j.pocean.2011.05.003

Moore, A. M., A. Schiller, and G. B. Brassington, 2011: Adjoint Data Assimilation Methods. *Operational Oceanography in the 21st Century*, A. Schiller and G. Brassington, Eds., Springer Netherlands, 351-379, http://dx.doi.org/10.1007/978-94-007-0332-2_14.

Nam, S., D.-j. Kim, and W. Moon, 2011: Observed impact of mesoscale circulation on oceanic response to Typhoon Man-Yi (2007). *Ocean Dynamics*, **62,** 1-12, http://dx.doi.org/10.1007/s10236-011-0490-8

Nilsson, J. A. U., S. Dobricic, N. Pinardi, V. Taillandier, and P.-M. Poulain, 2011: On the assessment of Argo float trajectory assimilation in the Mediterranean Forecasting System. *Ocean Dynamics*, **61,** 1475-1490, http://dx.doi.org/10.1007/s10236-011-0437-0

Nost, O. A., M. Biuw, V. Tverberg, C. Lydersen, T. Hattermann, Q. Zhou, L. H. Smedsrud, and K. M. Kovacs, 2011: Eddy overturning of the Antarctic Slope Front controls glacial melting in the Eastern Weddell Sea. *J. Geophys. Res.*, **116,** C11014, http://dx.doi.org/10.1029/2011JC006965

Nudds, S. H. and J. A. Shore, 2011: Simulated eddy induced vertical velocities in a Gulf of Alaska model. *Deep Sea Research Part I: Oceanographic Research Papers*, **58,** 1060-1068, http://dx.doi.org/10.1016/j.dsr.2011.08.010

Nuncio, M., A. J. Luis, and X. Yuan, 2011: Topographic meandering of Antarctic Circumpolar Current and Antarctic Circumpolar Wave in the ice-ocean-atmosphere system. *Geophysical Research Letters*, **38,** L13708, http://dx.doi.org/10.1029/2011GL046898

Oka, E., S. Kouketsu, K. Toyama, K. Uehara, T. Kobayashi, S. Hosoda, and T. Suga, 2011: Formation and Subduction of Central Mode Water Based on Profiling Float Data, 2003-08. *Journal of Physical Oceanography*, **41,** 113-129, http://dx.doi.org/10.1175/2010JPO4419.1

Oka, E., T. Suga, C. Sukigara, K. Toyama, K. Shimada, and J. Yoshida, 2011: "Eddy Resolving" Observation of the North Pacific Subtropical Mode Water. *Journal of Physical Oceanography*, **41,** 666-681, http://dx.doi.org/10.1175/2011JPO4501.1

O'Kane, T. J., P. R. Oke, and P. A. Sandery, 2011: Predicting the East Australian Current. *Ocean Modelling*, **38,** 251-266, http://dx.doi.org/10.1016/j.ocemod.2011.04.003

Oke, P. R. and D. A. Griffin, 2011: The cold-core eddy and strong upwelling off the coast of New South Wales in early 2007. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 574-591, http://dx.doi.org/10.1016/j.dsr2.2010.06.006

Oke, P. R. and T. J. O'Kane, 2011: Observing System Design and Assessment. *Operational Oceanography in the 21st Century*, A. Schiller and G. Brassington, Eds., Springer Netherlands, 123-151, http://dx.doi.org/10.1007/978-94-007-0332-2_5.

Palmer, M. D. and P. Brohan, 2011: Estimating sampling uncertainty in fixed-depth and fixed-isotherm estimates of ocean warming. *International Journal of Climatology*, **31,** 980-986, http://dx.doi.org/10.1002/joc.2224

Pan, A. J. and X. F. Wan, 2011: Interannual variability of the Kuroshio Extension and its impacts on the formation locality of the North Pacific Central Mode Water. *A Collection of Argo research papers*, Ocean Press,

Panteleev, G., M. Yaremchuk, P. J. Stabeno, V. Luchin, D. A. Nechaev, and T. Kikuchi, 2011: Dynamic topography of the Bering Sea. *Journal of Geophysical Research-Oceans*, **116,** C05017, http://dx.doi.org/10.1029/2010JC006354

Park, J. J., Y.-O. Kwon, and J. F. Price, 2011: Argo array observation of ocean heat content changes induced by tropical cyclones in the north Pacific. *J. Geophys. Res.*, **116,** C12025, http://dx.doi.org/10.1029/2011JC007165

Passaro, M. and F. Seitz, 2011: Steric sea level variations in the central-eastern Mediterranean Sea from Argo observations. *Bollettino di Geofisica Teorica ed Applicata*, **52,** 131-147, http://www3.ogs.trieste.it/bgta/provapage.php?id_articolo=505

Perivoliotis, L., G. Krokos, K. Nittis, and G. Korres, 2011: The Aegean sea marine security decision support system. *Ocean Science*, **7,** 671-683, http://dx.doi.org/10.5194/os-7-671-2011

Piecuch, C. G. and R. M. Ponte, 2011: Mechanisms of interannual steric sea level variability. *Geophysical Research Letters*, **38,** L15605, http://dx.doi.org/10.1029/2011GL048440

Podymov, O., E. Yakushev, and A. Kostyleva, 2011: On Interannual Variability of Chemical Characteristics of Redox Layer and Cold Intermediate Layer of the Black Sea. *The Handbook of Environmental Chemistry*, Springer Berlin / Heidelberg, 1-15, http://dx.doi.org/10.1007/698_2011_122.

Qiu, B. and S. Chen, 2011: Effect of Decadal Kuroshio Extension Jet and Eddy Variability on the Modification of North Pacific Intermediate Water. *Journal of Physical Oceanography*, **41,** 503-515, http://dx.doi.org/10.1175/2010JPO4575.1

Quinn, K. J. and R. M. Ponte, 2011: Estimating high frequency ocean bottom pressure variability. *Geophysical Research Letters*, **38,** L08611, http://dx.doi.org/10.1029/2010GL046537

Rabe, B., M. Karcher, U. Schauer, J. M. Toole, R. A. Krishfield, S. Pisarev, F. Kauker, R. Gerdes, and T. Kikuchi, 2011: An assessment of Arctic Ocean freshwater content changes

from the 1990s to the 2006-2008 period. *Deep Sea Research Part I: Oceanographic Research Papers*, **58,** 173-185, http://dx.doi.org/10.1016/j.dsr.2010.12.002

Ravichandran, M., 2011: In-Situ Ocean Observing System. *Operational Oceanography in the 21st Century*, A. Schiller and G. Brassington, Eds., Springer Netherlands, 55-90, http://dx.doi.org/10.1007/978-94-007-0332-2_3.

Ren, L., K. Speer, and E. P. Chassignet, 2011: The mixed layer salinity budget and sea ice in the Southern Ocean. *J. Geophys. Res.*, **116,** C08031, http://dx.doi.org/10.1029/2010JC006634

Rhein, M., D. Kieke, S. Huttl-Kabus, A. Roessler, C. Mertens, R. Meissner, B. Klein, C. W. Boning, and I. Yashayaev, 2011: Deep water formation, the subpolar gyre, and the meridional overturning circulation in the subpolar North Atlantic. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 1819-1832, http://dx.doi.org/10.1016/j.dsr2.2010.10.061

Rio, M. H., S. Guinehut, and G. Larnicol, 2011: New CNES-CLS09 global mean dynamic topography computed from the combination of GRACE data, altimetry, and in situ measurements. *Journal of Geophysical Research-Oceans*, **116,** C07018, http://dx.doi.org/10.1029/2010JC006505

Rivas, D. and R. M. Samelson, 2011: A Numerical Modeling Study of the Upwelling Source Waters along the Oregon Coast during 2005. *Journal of Physical Oceanography*, **41,** 88-112, http://dx.doi.org/10.1175/2010JPO4327.1

Rixen, T., P. Ramachandran, L. Lehnhoff, D. Dasbach, B. Gaye, B. Urban, R. Ramachandran, and V. Ittekkot, 2011: Impact of monsoon-driven surface ocean processes on a coral off Port Blair on the Andaman Islands and their link to North Atlantic climate variations. *Global and Planetary Change*, **75,** 1-13, http://dx.doi.org/10.1016/j.gloplacha.2010.09.005

Roemmich, D. and J. Gilson, 2011: The global ocean imprint of ENSO. *Geophysical Research Letters*, **38,** L13606, http://dx.doi.org/10.1029/2011GL047992

Roughan, M., H. S. Macdonald, M. E. Baird, and T. M. Glasby, 2011: Modelling coastal connectivity in a Western Boundary Current: Seasonal and inter-annual variability. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 628-644, http://dx.doi.org/10.1016/j.dsr2.2010.06.004

Ruescas, A. B., M. Arbelo, J. A. Sobrino, and C. Mattar, 2011: Examining the Effects of Dust Aerosols on Satellite Sea Surface Temperatures in the Mediterranean Sea Using the Medspiration Matchup Database. *Journal of Atmospheric and Oceanic Technology*, **28,** 684-697, http://dx.doi.org/10.1175/2010JTECHA1450.1

Ruhl, H. A., M. Andre, L. Beranzoli, M. N. Cagatay, A. Colaco, M. Cannat, J. J. Danobeitia, P. Favali, L. Geli, M. Gillooly, J. Greinert, P. O. J. Hall, R. Huber, J. Karstensen, R. S. Lampitt, K. E. Larkin, V. Lykousis, J. Mienert, J. Miguel Miranda, R. Person, I. G. Priede, I. Puillat, L. Thomsen, and C. Waldmann, 2011: Societal need for improved understanding of climate change, anthropogenic impacts, and geo-hazard warning drive development of ocean observatories in European Seas. *Progress in Oceanography*, **91,** 1-33, http://dx.doi.org/10.1016/j.pocean.2011.05.001

Saito, H., T. Suga, K. Hanawa, and N. Shikama, 2011: The Transition Region Mode Water of the North Pacific and Its Rapid Modification. *Journal of Physical Oceanography*, **41,**

1639-1658, http://dx.doi.org/10.1175/2011JPO4346.1
Salisbury, J., D. Vandemark, J. Campbell, C. Hunt, D. Wisser, N. Reul, and B. Chapron, 2011: Spatial and temporal coherence between Amazon River discharge, salinity, and light absorption by colored organic carbon in western tropical Atlantic surface waters. *J. Geophys. Res.*, **116,** C00H02, http://dx.doi.org/10.1029/2011JC006989
Sallee, J. B. and S. R. Rintoul, 2011: Parameterization of eddy-induced subduction in the Southern Ocean surface-layer. *Ocean Modelling*, **39,** 146-153, http://dx.doi.org/10.1016/j.ocemod.2011.04.001
Sandery, P. A., G. B. Brassington, and J. Freeman, 2011: Adaptive nonlinear dynamical initialization. *Journal of Geophysical Research-Oceans*, **116,** C01021, http://dx.doi.org/10.1029/2010JC006260
Sasaki, Y. N. and N. Schneider, 2011: Decadal Shifts of the Kuroshio Extension Jet: Application of Thin-Jet Theory. *Journal of Physical Oceanography*, **41,** 979-993, http://dx.doi.org/10.1175/2011JPO4550.1
Schiller, A., 2011: Ocean circulation on the North Australian Shelf. *Continental Shelf Research*, **31,** 1087-1095, http://dx.doi.org/10.1016/j.csr.2011.03.013
Scott, R. B., J. A. Goff, A. C. Naveira Garabato, and A. J. G. Nurser, 2011: Global rate and spectral characteristics of internal gravity wave generation by geostrophic flow over topography. *J. Geophys. Res.*, **116,** C09029, http://dx.doi.org/10.1029/2011JC007005
Seale, A., P. Christoffersen, R. I. Mugford, and M. O'Leary, 2011: Ocean forcing of the Greenland Ice Sheet: Calving fronts and patterns of retreat identified by automatic satellite monitoring of eastern outlet glaciers. *J. Geophys. Res.*, **116,** F03013, http://dx.doi.org/10.1029/2010JF001847
Shen, M.-L., Y.-H. Tseng, and S. Jan, 2011: The formation and dynamics of the cold-dome off northeastern Taiwan. *Journal of Marine Systems*, **86,** 10-27, http://dx.doi.org/10.1016/j.jmarsys.2011.01.002
Shi, W. and M. Wang, 2011: Satellite observations of asymmetrical physical and biological responses to Hurricane Earl. *Geophysical Research Letters*, **38,** L04607, http://dx.doi.org/10.1029/2010GL046574
Shu, Q., F. Qiao, Z. Song, C. Xia, and Y. Yang, 2011: Improvement of MOM4 by including surface wave-induced vertical mixing. *Ocean Modelling*, **40,** 42-51, http://dx.doi.org/10.1016/j.ocemod.2011.07.005
Siegismund, F., V. Romanova, A. Kohl, and D. Stammer, 2011: Ocean bottom pressure variations estimated from gravity, nonsteric sea surface height and hydrodynamic model simulations. *J. Geophys. Res.*, **116,** C07021, http://dx.doi.org/10.1029/2010JC006727
Simav, M., H. Yildiz, A. Turkezer, O. Lenk, and E. Ozsoy, 2011: Sea level variability at Antalya and Menteş tide gauges in Turkey: atmospheric, steric and land motion contributions. *Studia Geophysica et Geodaetica*, **56,** 215-230, http://dx.doi.org/10.1007/s11200-010-0067-x
Singh, A. and T. Delcroix, 2011: Estimating the effects of ENSO upon the observed freshening trends of the western tropical Pacific Ocean. *Geophysical Research Letters*, **38,** L21607, http://dx.doi.org/10.1029/2011GL049636
Singh, A., T. Delcroix, and S. Cravatte, 2011: Contrasting the flavors of El Nino-Southern

Oscillation using sea surface salinity observations. *J. Geophys. Res.*, **116,** C06016, http://dx.doi.org/10.1029/2010JC006862

Song, J., H. Xue, X. Bao, D. Wu, F. Chai, L. Shi, Z. Yao, Y. Wang, F. Nan, and K. Wan, 2011: A spectral mixture model analysis of the Kuroshio variability and the water exchange between the Kuroshio and the East China Sea. *Chinese Journal of Oceanology and Limnology*, **29,** 446-459, http://dx.doi.org/10.1007/s00343-011-0114-7

Souza, J. M. A. C., C. de Boyer Montegut, C. Cabanes, and P. Klein, 2011: Estimation of the Agulhas ring impacts on meridional heat fluxes and transport using ARGO floats and satellite data. *Geophysical Research Letters*, **38,** L21602, http://dx.doi.org/10.1029/2011GL049359

Stockdale, T., D. Anderson, M. Balmaseda, F. Doblas-Reyes, L. Ferranti, K. Mogensen, T. Palmer, F. Molteni, and F. Vitart, 2011: ECMWF seasonal forecast system 3 and its prediction of sea surface temperature. *Climate Dynamics*, **37,** 455-471, http://dx.doi.org/10.1007/s00382-010-0947-3

Storto, A., S. Dobricic, S. Masina, and P. Di Pietro, 2011: Assimilating Along-Track Altimetric Observations through Local Hydrostatic Adjustment in a Global Ocean Variational Assimilation System. *Monthly Weather Review*, **139,** 738-754, http://dx.doi.org/10.1175/2010MWR3350.1

Strutton, P. G., T. R. Martz, M. D. DeGrandpre, W. R. McGillis, W. M. Drennan, and E. Boss, 2011: Bio-optical observations of the 2004 Labrador Sea phytoplankton bloom. *J. Geophys. Res.*, **116,** C11037, http://dx.doi.org/10.1029/2010JC006872

Subrahmanyam, B., V. S. N. Murty, and D. M. Heffner, 2011: Sea surface salinity variability in the tropical Indian Ocean. *Remote Sensing of Environment*, **115,** 944-956, http://dx.doi.org/10.1016/j.rse.2010.12.004

Sukigara, C., T. Suga, T. Saino, K. Toyama, D. Yanagimoto, K. Hanawa, and N. Shikama, 2011: Biogeochemical evidence of large diapycnal diffusivity associated with the subtropical mode water of the North Pacific. *Journal of Oceanography*, **67,** 77-85, http://dx.doi.org/10.1007/s10872-011-0008-5

Sun, L., Y. J. Yang, T. Xian, and Y. F. Fu, 2011: The ocean response to typhoon Namtheun explored by Argo floats. *A Collection of Argo research papers*, Ocean Press, 126-139,

Sutton, P. J. H. and D. Roemmich, 2011: Decadal steric and sea surface height changes in the Southern Hemisphere. *Geophysical Research Letters*, **38,** L08604, http://dx.doi.org/10.1029/2011GL046802

Sydeman, W. J., S. A. Thompson, J. C. Field, W. T. Peterson, R. W. Tanasichuk, H. J. Freeland, S. J. Bograd, and R. R. Rykaczewski, 2011: Does positioning of the North Pacific Current affect downstream ecosystem productivity? *Geophysical Research Letters*, **38,** L12606, http://dx.doi.org/10.1029/2011GL047212

Tang, Q. and C. Zheng, 2011: Thermohaline structures across the Luzon Strait from seismic reflection data. *Dynamics of Atmospheres and Oceans*, **51,** 94-108, http://dx.doi.org/10.1016/j.dynatmoce.2011.02.001

Tarakanov, R., 2011: Southern Jets of the Antarctic Circumpolar Current in the Eastern Pacific Antarctic. *Oceanology*, **51,** 588-598, http://dx.doi.org/10.1134/S0001437011040175

Taws, S. L., R. Marsh, N. C. Wells, and J. Hirschi, 2011: Re-emerging ocean temperature anomalies in late-2010 associated with a repeat negative NAO. *Geophysical Research*

Letters, **38,** L20601, http://dx.doi.org/10.1029/2011GL048978
Thomalla, S. J., N. Fauchereau, S. Swart, and P. M. S. Monteiro, 2011: Regional scale characteristics of the seasonal cycle of chlorophyll in the Southern Ocean. *Biogeosciences*, **8,** 2849-2866, http://dx.doi.org/10.5194/bg-8-2849-2011
Thoppil, P. G., J. G. Richman, and P. J. Hogan, 2011: Energetics of a global ocean circulation model compared to observations. *Geophysical Research Letters*, **38,** L15607, http://dx.doi.org/10.1029/2011GL048347
Todd, R. E., D. L. Rudnick, M. R. Mazloff, R. E. Davis, and B. D. Cornuelle, 2011: Poleward flows in the southern California Current System: Glider observations and numerical simulation. *J. Geophys. Res.*, **116,** C02026, http://dx.doi.org/10.1029/2010JC006536
Tomita, H., S. Kouketsu, E. Oka, and M. Kubota, 2011: Locally enhanced wintertime air-sea interaction and deep oceanic mixed layer formation associated with the subarctic front in the North Pacific. *Geophysical Research Letters*, **38,** L24607, http://dx.doi.org/10.1029/2011GL049902
Toyama, K. and T. Suga, 2011: Roles of mode waters in the formation and maintenance of central water in the North Pacific. *Journal of Oceanography*, **68,** 79-92, http://dx.doi.org/10.1007/s10872-011-0040-5
Tulloch, R., J. Marshall, C. Hill, and K. S. Smith, 2011: Scales, Growth Rates, and Spectral Fluxes of Baroclinic Instability in the Ocean. *Journal of Physical Oceanography*, **41,** 1057-1076, http://dx.doi.org/10.1175/2011JPO4404.1
Valsala, V., S. Maksyutov, and R. Murtugudde, 2011: Interannual to Interdecadal Variabilities of the Indonesian Throughflow Source Water Pathways in the Pacific Ocean. *Journal of Physical Oceanography*, **41,** 1921-1940, http://dx.doi.org/10.1175/2011JPO4561.1
van Aken, H. M., M. Femke de Jong, and I. Yashayaev, 2011: Decadal and multi-decadal variability of Labrador Sea Water in the north-western North Atlantic Ocean derived from tracer distributions: Heat budget, ventilation, and advection. *Deep Sea Research Part I: Oceanographic Research Papers*, **58,** 505-523, http://dx.doi.org/10.1016/j.dsr.2011.02.008
van Sebille, E., I. Kamenkovich, and J. K. Willis, 2011: Quasi-zonal jets in 3-D Argo data of the northeast Atlantic. *Geophysical Research Letters*, **38**, http://dx.doi.org/10.1029/2010gl046267
von Schuckmann, K. and P. Y. Le Traon, 2011: How well can we derive Global Ocean Indicators from Argo data? *Ocean Science*, **7,** 783-791, http://dx.doi.org/10.5194/os-7-783-2011
Wade, M., G. Caniaux, and Y. du Penhoat, 2011: Variability of the mixed layer heat budget in the eastern equatorial Atlantic during 2005-2007 as inferred using Argo floats. *Journal of Geophysical Research-Oceans*, **116,** C08006, http://dx.doi.org/10.1029/2010JC006683
Wang, X., G. Han, Y. Qi, and W. Li, 2011: Impact of barrier layer on typhoon-induced sea surface cooling. *Dynamics of Atmospheres and Oceans*, **52,** 367-385, http://dx.doi.org/10.1016/j.dynatmoce.2011.05.002
Wang, X. D., G. J. Han, P. C. Chu, and W. Li, 2011: Formation and variability of barrier layer during typhoon passage. *A Collection of Argo research papers*, Ocean Press, 140-151,
Williams, A., F. Althaus, M. R. Clark, and K. Gowlett-Holmes, 2011: Composition and

distribution of deep-sea benthic invertebrate megafauna on the Lord Howe Rise and Norfolk Ridge, southwest Pacific Ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 948-958, http://dx.doi.org/10.1016/j.dsr2.2010.10.050

Williams, G. D., A. J. S. Meijers, A. Poole, P. Mathiot, T. Tamura, and A. Klocker, 2011: Late winter oceanography off the Sabrina and BANZARE coast (117-128 degrees E), East Antarctica. *Deep Sea Research Part II: Topical Studies in Oceanography*, **58,** 1194-1210, http://dx.doi.org/10.1016/j.dsr2.2010.10.035

Wilson, C., 2011: Chlorophyll anomalies along the critical latitude at 30N in the NE Pacific. *Geophysical Research Letters*, **38,** L15603, http://dx.doi.org/10.1029/2011GL048210

Wong, A. P. S. and S. C. Riser, 2011: Profiling Float Observations of the Upper Ocean Under Sea Ice off the Wilkes Land Coast of Antarctica. *Journal of Physical Oceanography*, **41,** 1102-1115, http://dx.doi.org/10.1175/2011JPO4516.1

Wu, L., Z. Jing, S. Riser, and M. Visbeck, 2011: Seasonal and spatial variations of Southern Ocean diapycnal mixing from Argo profiling floats. *Nature Geoscience*, **4,** 363-366, http://dx.doi.org/10.1038/ngeo1156

Wu, X. F., J. P. Xu, Q. L. Zhang, and Z.-H. Liu, 2011: A preliminary study on the upper ocean heat content of the tropical western Pacific. *A Collection of Argo research papers*, Ocean Press, 152-165,

Wu, X. F., J. P. Xu, Q. L. Zhang, and Z.-H. Liu, 2011: A Preliminary Study on Upper Ocean Heat Content of Tropical Western Pacific. *Marine Forecast* **28,** 76-85,

Wu, X. F., J. P. Xu, Q. L. Zhang, and Z.-H. Liu, 2011: Analysis of the Upper Ocean Heat Content over Tropical Western Pacific. *Journal of Tropical Oceanography*, **30,** 37-46, http://www.jto.ac.cn/EN/Y2011/V30/I6/37

Wu, X. F., J. P. Xu, Q. L. Zhang, and Z. H. Sun, 2011: A preliminary study on upper ocean heat content of tropical Western Pacific. *Marine Forecasts*, **4**, http://en.cnki.com.cn/Article_en/CJFDTOTAL-HYYB201104013.htm

Xie, J. P., F. Counillion, J. Zhu, and L. Bertino, 2011: An eddy resolving tidal-driven model of the South China Sea assimilating along-track SLA data using the EnOI. *Ocean Science*, **7,** 609-627, http://dx.doi.org/10.5194/os-7-609-2011

Xie, L., J. Tian, S. Zhang, Y. Zhang, and Q. Yang, 2011: An anticyclonic eddy in the intermediate layer of the Luzon Strait in Autumn 2005. *Journal of Oceanography*, **67,** 37-46, http://dx.doi.org/10.1007/s10872-011-0004-9

Xing, X., A. Morel, H. Claustre, D. Antoine, F. D'Ortenzio, A. Poteau, A. Mignot, Z. Lee, S. Shang, and C. Hu, 2011: Combined processing and mutual interpretation of radiometry and fluorimetry from autonomous profiling Bio Argo floats: Chlorophyll a retrieval. *J. Geophys. Res*, **116,** C06020, http://dx.doi.org/10.1029/2010JC006899

Yearsley, J. M. and J. D. Sigwart, 2011: Larval Transport Modeling of Deep-Sea Invertebrates Can Aid the Search for Undiscovered Populations. *PLoS ONE*, **6,** e23063, http://dx.doi.org/10.1371%2Fjournal.pone.0023063

Yin, X., F. Qiao, and Q. Shu, 2011: Using ensemble adjustment Kalman filter to assimilate Argo profiles in a global OGCM. *Ocean Dynamics*, **61,** 1017-1031, http://dx.doi.org/10.1007/s10236-011-0419-2

Yin, Y., O. Alves, and P. R. Oke, 2011: An Ensemble Ocean Data Assimilation System for Seasonal Prediction. *Monthly Weather Review*, **139,** 786-808,

http://dx.doi.org/10.1175/2010MWR3419.1
Yu, L. and M. J. McPhaden, 2011: Ocean Preconditioning of Cyclone Nargis in the Bay of Bengal: Interaction between Rossby Waves, Surface Fresh Waters, and Sea Surface Temperatures. *Journal of Physical Oceanography*, **41,** 1741-1755, http://dx.doi.org/10.1175/2011JPO4437.1
Yu, T., G. J. Han, and W. Li, 2011: The thermohaline structure of Southern Ocean eddies: a case study using Argo floats. *A Collection of Argo research papers*, Ocean Press, 166-175,
Zalesny, V. B., N. B. Zakharova, and A. V. Gusev, 2011: Four-dimensional problem of variational initialization of hydrophysical fields of the World Ocean. *Russian Journal of Numerical Analysis and Mathematical Modelling*, **26,** 209-229, http://dx.doi.org/10.1515/RJNAMM.2011.012
Zhang, Q. L., H. W. Liu, H. Zhou, and D. M. Zheng, 2011: Variation features of the Mindanao Eddy from Argo data. *A Collection of Argo research papers*, Ocean Press, 176-189,
Zhang, X., B. Cornuelle, and D. Roemmich, 2011: Adjoint Sensitivity of the Nino-3 Surface Temperature to Wind Forcing. *Journal of Climate*, **24,** 4480-4493, http://dx.doi.org/10.1175/2011JCLI3917.1
Zhang, X. F., G. J. Han, W. Li, X. R. Wu, and T. Yu, 2011: Evaluation of the effect of Argo data assimilation on the oceanic reanalysis in the Pacific Ocean. *A Collection of Argo research papers*, Ocean Press, 190-199,
Zheng, Y., T. Shinoda, J.-L. Lin, and G. N. Kiladis, 2011: Sea Surface Temperature Biases under the Stratus Cloud Deck in the Southeast Pacific Ocean in 19 IPCC AR4 Coupled General Circulation Models. *Journal of Climate*, **24,** 4139-4164, http://dx.doi.org/10.1175/2011JCLI4172.1
Zhu, J., 2011: Overview of Regional and Coastal Systems. *Operational Oceanography in the 21st Century*, A. Schiller and G. Brassington, Eds., Springer Netherlands, 413-439, http://dx.doi.org/10.1007/978-94-007-0332-2_17.
Zhu, J., B. Huang, and M. Balmaseda, 2011: An ensemble estimation of the variability of upper-ocean heat content over the tropical Atlantic Ocean with multi-ocean reanalysis products. *Climate Dynamics*, **39,** 1001-1020, http://dx.doi.org/10.1007/s00382-011-1189-8
Zhu, J. and J. C. Kang, 2011: Relationship between Sea Temperature Change and Tropical Cyclones Based on Argo. *Advanced Building Materials, Pts 1-4*, **250-253,** 2782-2786, http://dx.doi.org/10.4028/www.scientific.net/AMR.250-253.2782

2010 (227)

Abernathey, R., J. Marshall, M. Mazloff, and E. Shuckburgh, 2010: Enhancement of Mesoscale Eddy Stirring at Steering Levels in the Southern Ocean. *Journal of Physical Oceanography*, **40,** 170-184, http://dx.doi.org/10.1175%2F2009JPO4201.1
Agoshkov, V. I., V. M. Ipatova, V. B. Zalesnyi, E. I. Parmuzin, and V. P. Shutyaev, 2010: Problems of variational assimilation of observational data for ocean general circulation models and methods for their solution. *Izvestiya Atmospheric and Oceanic Physics*, **46,** 677-712, http://dx.doi.org/10.1134/s0001433810060034

Alessandri, A., A. Borrelli, S. Masina, A. Cherchi, S. Gualdi, A. Navarra, P. Di Pietro, and A. F. Carril, 2010: The INGV-CMCC Seasonal Prediction System: Improved Ocean Initial Conditions. *Monthly Weather Review*, **138,** 2930-2952, http://dx.doi.org/10.1175/2010MWR3178.1

Annoni, A., M. Craglia, A. Roo, and J. San-Miguel, 2010: Earth Observations and Dynamic Mapping: Key Assets for Risk Management. *Geographic Information and Cartography for Risk and Crisis Management*, 3-21, http://dx.doi.org/10.1007/978-3-642-03442-8_1.

Aoki, S., Y. Sasai, H. Sasaki, H. Mitsudera, and G. Williams, 2010: The cyclonic circulation in the Australian-Antarctic basin simulated by an eddy-resolving general circulation model. *Ocean Dynamics*, **60,** 743-757, http://dx.doi.org/10.1007/s10236-009-0261-y

Ascani, F., E. Firing, P. Dutrieux, J. P. McCreary, and A. Ishida, 2010: Deep Equatorial Ocean Circulation Induced by a Forced-Dissipated Yanai Beam. *Journal of Physical Oceanography*, **40,** 1118-1142, http://dx.doi.org/10.1175/2010JPO4356.1

Baehr, J., 2010: Influence of the 26 degrees N RAPID-MOCHA Array and Florida Current Cable Observations on the ECCO-GODAE State Estimate. *Journal of Physical Oceanography*, **40,** 865-879, http://dx.doi.org/10.1175/2009jpo4118.1

Balmaseda, M. and co-authors, 2010: Initialization for Seasonal and Decadal Forecasts. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.02.

Balmaseda, M., Y. Fujii, O. Alves, T. Lee, M. Rienecker, A. Rosati, D. Stammer, Y. Xue, H. J. Freeland, M. J. McPhaden, L. Goddard, and C. Coelho, 2010: Role of the Ocean Observing System in an End-to-End Seasonal Forecasting System. *In Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, WPP-306, http://dx.doi.org/10.5270/OceanObs09.pp.03

Becker, M., W. Llovel, A. Cazenave, A. Guntner, and J.-F. Cretaux, 2010: Recent hydrological behavior of the East African great lakes region inferred from GRACE, satellite altimetry and rainfall observations. *Comptes Rendus Geoscience*, **342,** 223-233, https://doi.org/10.1016/j.crte.2009.12.010

Belbeoch, M. and co-authors, 2010: The JCOMM In Situ Observing Platform Support Centre: A Decade of Progress and Remaining Challenges. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.04.

Belmadani, A., B. Dewitte, and S.-I. An, 2010: ENSO Feedbacks and Associated Time Scales of Variability in a Multimodel Ensemble. *Journal of Climate*, **23,** 3181-3204, http://dx.doi.org/10.1175/2010JCLI2830.1

Bhaskar, T. V. S. U., D. Swain, and M. Ravichandran, 2010: Sonic Layer Depth variability in the Arabian Sea. *International Journal of Oceans and Oceanography*, **4,** 17-28,

Bhaskaran, P. K., R. R. Kumar, R. Barman, and R. Muthalagu, 2010: A new approach for deriving temperature and salinity fields in the Indian Ocean using artificial neural networks. *Journal of Marine Science and Technology*, **15,** 160-175, http://dx.doi.org/10.1007/s00773-009-0081-2

Bindoff, N. L., D. Stammer, P. Y. Le Traon, K. Trenberth, C. Mauritzen, J. A. Church, N. Smith, T. Malone, T. Suga, J. Tintoré, and S. Wilson, 2010: Capabilities of Global Ocean Programmes to Inform Climate Services. *Procedia Environmental Sciences*, **1,** 342-353, http://dx.doi.org/10.1016/j.proenv.2010.09.022

Bingham, F. M., G. R. Foltz, and M. J. McPhaden, 2010: Seasonal cycles of surface layer salinity in the Pacific Ocean. *Ocean Science*, **6,** 775-787, http://dx.doi.org/10.5194/os-6-775-2010

Boss, E. and M. Behrenfeld, 2010: In situ evaluation of the initiation of the North Atlantic phytoplankton bloom. *Geophysical Research Letters*, **37,** L18603, http://dx.doi.org/10.1029/2010GL044174

Brassington, G. B., 2010: Estimating Surface Divergence of Ocean Eddies Using Observed Trajectories from a Surface Drifting Buoy. *Journal of Atmospheric and Oceanic Technology*, **27,** 705-720, http://dx.doi.org/10.1175/2009JTECHO651.1

Byun, S.-S., J. J. Park, K.-I. Chang, and R. W. Schmitt, 2010: Observation of near-inertial wave reflections within the thermostad layer of an anticyclonic mesoscale eddy. *Geophysical Research Letters*, **37,** L01606, http://dx.doi.org/10.1029/2009GL041601

Calafat, F. M., M. Marcos, and D. Gomis, 2010: Mass contribution to Mediterranean Sea level variability for the period 1948-2000. *Global and Planetary Change*, **73,** 193-201, http://dx.doi.org/10.1016/j.gloplacha.2010.06.002

Chambers, D. P. and J. K. Willis, 2010: A Global Evaluation of Ocean Bottom Pressure from GRACE, OMCT, and Steric-Corrected Altimetry. *Journal of Atmospheric and Oceanic Technology*, **27,** 1395-1402, http://dx.doi.org/10.1175/2010JTECHO738.1

Chang, Y.-S., A. J. Rosati, and G. A. Vecchi, 2010: Basin patterns of global sea level changes for 2004-2007. *Journal of Marine Systems*, **80,** 115-124, http://dx.doi.org/10.1016/j.jmarsys.2009.11.003

Chen, G., Y. Hou, Q. Zhang, and X. Chu, 2010: The eddy pair off eastern Vietnam: Interannual variability and impact on thermohaline structure. *Continental Shelf Research*, **30,** 715-723, http://dx.doi.org/10.1016/j.csr.2009.11.013

Chen, G. X., Y. J. Hou, X. Q. Chu, and P. Qi, 2010: Vertical structure and evolution of the Luzon Warm Eddy. *Chinese Journal of Oceanology and Limnology*, **28,** 955-961, http://dx.doi.org/10.1007/s00343-010-9040-3

Chi, J. J., C. N. Sun, and Y. J. Luo, 2010: The research on satellite remote sensing SSH data in describing the vertical distributing in the underwater (in Chinese). *Marine Forecasts*, **27,** 59-61,

Chiodi, A. M. and D. E. Harrison, 2010: The Annual Range of Southern Hemisphere SST: Comparison with Surface Heating and Possible Reasons for the High-Latitude Falloff. *Journal of Climate*, **23,** 1994-2009, http://dx.doi.org/10.1175/2009JCLI3154.1

Choi, Y. J. and J. H. Yoon, 2010: Structure and Seasonal Variability of the Deep Mean Circulation of the East Sea (Sea of Japan). *Journal of Oceanography*, **66,** 349-361, http://dx.doi.org/10.1007/s10872-010-0031-y

Church, J. A., D. Roemmich, C. M. Domingues, J. K. Willis, N. J. White, J. E. Gilson, D. Stammer, A. Kohl, D. P. Chambers, F. W. Landerer, J. Marotzke, J. M. Gregory, T. Suzuki, A. Cazenave, and P. Y. Le Traon, 2010: Ocean Temperature and Salinity Contributions to Global and Regional Sea-Level Change. *Understanding sea level rise*

and variability, J. A. Church, P. Woodworth, T. Aarup, and W. S. Wilson, Eds., 143-168, http://dx.doi.org/10.1002/9781444323276.ch6.

Clark, M. R., F. Althaus, A. Williams, E. Niklitschek, G. M. Menezes, N.-R. Hareide, P. Sutton, and C. O'Donnell, 2010: Are deep-sea demersal fish assemblages globally homogenous? Insights from seamounts. *Marine Ecology*, **31,** 39-51, http://dx.doi.org/10.1111/j.1439-0485.2010.00384.x

Claustre, H., J. Bishop, E. Boss, B. Stewart, J.-F. Berthon, C. Coatanoan, K. Johnson, A. Lotiker, O. Ulloa, M. J. Perry, F. D'Ortenzio, O. Hembise Fanton D'Andon, and J. Utiz, 2010: Bio-Optical Profiling Floats as New Observational Tools for Biogeochemical and Ecosystem Studies: Potential Synergies with Ocean Color Remote Sensing. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.17

Claustre, H. and co-authors, 2010: Bio-optical Profiling Floats as New Observational Tools for Biogeochemical and Ecosystem Studies. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society* J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.17.

Corre, L., L. Terray, M. Balmaseda, A. Ribes, and A. Weaver, 2010: Can oceanic reanalyses be used to assess recent anthropogenic changes and low-frequency internal variability of upper ocean temperature? *Climate Dynamics*, **38,** 877-896, http://dx.doi.org/10.1007/s00382-010-0950-8

Cronin, M. and co-authors, 2010: Monitoring Ocean-Atmosphere Interactions in Western Boundary Current Extensions. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.20.

de Boisseson, E., V. Thierry, H. Mercier, and G. Caniaux, 2010: Mixed layer heat budget in the Iceland Basin from Argo. *Journal of Geophysical Research* **115,** C10055, http://dx.doi.org/10.1029/2010JC006283

Dencausse, G., M. Arhan, and S. Speich, 2010: Routes of Agulhas rings in the southeastern Cape Basin. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 1406-1421, http://dx.doi.org/10.1016/j.dsr.2010.07.008

Deng, Z. W., Y. M. Tang, and G. H. Wang, 2010: Assimilation of Argo temperature and salinity profiles using a bias-aware localized EnKF system for the Pacific Ocean. *Ocean Modelling*, **35,** 187-205, http://dx.doi.org/10.1016/j.ocemod.2010.07.007

DiNezio, P. N. and G. J. Goni, 2010: Identifying and Estimating Biases between XBT and Argo Observations Using Satellite Altimetry. *Journal of Atmospheric and Oceanic Technology*, **27,** 226-240, http://dx.doi.org/10.1175%2F2009JTECHO711.1

Dobricic, S., N. Pinardi, P. Testor, and U. Send, 2010: Impact of data assimilation of glider observations in the Ionian Sea (Eastern Mediterranean). *Dynamics of Atmospheres and Oceans*, **50,** 78-92, http://dx.doi.org/10.1016/j.dynatmoce.2010.01.001

Doi, T., T. Tozuka, and T. Yamagata, 2010: The Atlantic Meridional Mode and Its Coupled Variability with the Guinea Dome. *Journal of Climate*, **23,** 455-475, http://dx.doi.org/10.1175%2F2009JCLI3198.1

Donlon, C., K. Casey, C. Gentemann, R. Le Borgne, I. Robinson, R. Reynolds, C. J. Merchant, D.

T. Llewellyn-Jones, P. Minnett, J. Piolle, P. C. Cornillon, N. Rayner, T. Brandon, J. Vazquez, E. Armstrong, H. Beggs, I. Barton, G. A. Wick, S. L. Castro, J. Hoeyer, D. May, O. Arino, D. Poulter, R. H. Evans, C. Mutlow, A. Bingham, and A. Harris, 2010: Successes and Challenges for the Modern Sea Surface Temperature Observing System. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.24.

Donohue, K. A., D. R. Watts, K. L. Tracey, A. D. Greene, and M. Kennelly, 2010: Mapping Circulation in the Kuroshio Extension with an Array of Current and Pressure Recording Inverted Echo Sounders. *Journal of Atmospheric and Oceanic Technology*, **27,** 507-527, http://dx.doi.org/10.1175/2009JTECHO686.1

Douglass, E., D. Roemmich, and D. Stammer, 2010: Interannual variability in North Pacific heat and freshwater budgets. *Deep Sea Research Part II: Topical Studies in Oceanography*, **57,** 1127-1140, http://dx.doi.org/10.1016/j.dsr2.2010.01.001

Drushka, K., J. Sprintall, S. T. Gille, and I. Brodjonegoro, 2010: Vertical Structure of Kelvin Waves in the Indonesian Throughflow Exit Passages. *Journal of Physical Oceanography*, **40,** 1965-1987, http://dx.doi.org/10.1175/2010JPO4380.1

Dumousseaud, C., E. P. Achterberg, T. Tyrrell, A. Charalampopoulou, U. Schuster, M. Hartman, and D. J. Hydes, 2010: Contrasting effects of temperature and winter mixing on the seasonal and inter-annual variability of the carbonate system in the Northeast Atlantic Ocean. *Biogeosciences*, **7,** 1481-1492, https://doi.org/10.5194/bg-7-1481-2010

Dunstone, N. J. and D. M. Smith, 2010: Impact of atmosphere and sub-surface ocean data on decadal climate prediction. *Geophysical Research Letters*, **37**, http://dx.doi.org/10.1029/2009GL041609

Durack, P. J. and S. E. Wijffels, 2010: Fifty-Year Trends in Global Ocean Salinities and Their Relationship to Broad-Scale Warming. *Journal of Climate*, **23,** 4342-4362, http://dx.doi.org/10.1175/2010JCLI3377.1

Fan, C. H., J. J. Wang, and J. B. Song, 2010: Factors influencing the climatological mixed layer depth in the South China Sea: numerical simulations. *Chinese Journal of Oceanology and Limnology*, **28,** 1112-1118, http://dx.doi.org/10.1007/s00343-010-0002-6

Feng, J. Q., X. Z. Bai, Y. L. Chen, and D. X. Hu, 2010: Effect of low-frequency Rossby wave on thermal structure of the upper southwestern tropical Indian Ocean. *Chinese Journal of Oceanology and Limnology*, **28,** 344-353, http://dx.doi.org/10.1007/s00343-010-9264-2

Flechtner, F. M., T. Gruber, A. Guntner, M. Mandea, M. Rothacher, T. Schone, J. Wickert, F. Richter, D. Sidorenko, S. Danilov, and J. Schroter, 2010: Using ARGO, GRACE and Altimetry Data to Assess the Quasi Stationary North Atlantic Circulation. *System Earth via Geodetic-Geophysical Space Techniques*, L. Stroink, V. Mosbrugger, and G. Wefer, Eds., Springer Berlin Heidelberg, 351-358, http://dx.doi.org/10.1007/978-3-642-10228-8_29.

Foltz, G. R., J. Vialard, B. Praveen Kumar, and M. J. McPhaden, 2010: Seasonal Mixed Layer Heat Balance of the Southwestern Tropical Indian Ocean. *Journal of Climate*, **23,** 947-965, http://dx.doi.org/10.1175/2009JCLI3268.1

Forget, G., 2010: Mapping Ocean Observations in a Dynamical Framework: A 2004-06 Ocean Atlas. *Journal of Physical Oceanography*, **40,** 1201-1221, http://dx.doi.org/10.1175/2009JPO4043.1

Frajka-Williams, E. and P. B. Rhines, 2010: Physical controls and interannual variability of the Labrador Sea spring phytoplankton bloom in distinct regions. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 541-552, http://dx.doi.org/10.1016/j.dsr.2010.01.003

Fratantoni, P. S. and M. S. McCartney, 2010: Freshwater export from the Labrador Current to the North Atlantic Current at the Tail of the Grand Banks of Newfoundland. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 258-283, http://dx.doi.org/10.1016/j.dsr.2009.11.006

Freeland, H. J., D. Roemmich, S. L. Garzoli, P. Y. Le Traon, M. Ravichandran, S. Riser, V. Thierry, S. Wijffels, M. Belbeoch, J. Gould, F. Grant, M. Ignazewski, B. King, B. Klein, K. A. MORK, B. Owens, S. Pouliquen, A. Sterl, T. Suga, M. S. Suk, P. Sutton, A. Troisi, P. Velez-Belchi, and J. Xu, 2010: Argo - A Decade of Progress. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publications, http://dx.doi.org/10.5270/OceanObs09.cwp.32.

Ganachaud, A., A. Vega, M. Rodier, C. Dupouy, C. Maes, P. Marchesiello, G. Eldin, K. Ridgway, and R. Le Borgne, 2010: Observed impact of upwelling events on water properties and biological activity off the southwest coast of New Caledonia. *Marine Pollution Bulletin*, **61,** 449-464, http://dx.doi.org/10.1016/j.marpolbul.2010.06.042

Garcia-Garcia, D., B. F. Chao, and J. P. Boy, 2010: Steric and mass-induced sea level variations in the Mediterranean Sea revisited. *J. Geophys. Res.*, **115,** C12016, http://dx.doi.org/10.1029/2009JC005928

George, M. S., L. Bertino, O. M. Johannessen, and A. Samuelsen, 2010: Validation of a hybrid coordinate ocean model for the Indian Ocean. *Journal of Operational Oceanography*, **3,** 25-38,

Gille, S. T., 2010: Climate science: Asymmetric response. *Nature Geoscience*, **3,** 227-228, http://dx.doi.org/10.1038/ngeo821

Grist, J. P., S. Josey, R. Marsh, S. Good, A. Coward, B. de Cuevas, S. Alderson, A. New, and G. Madec, 2010: The roles of surface heat flux and ocean heat transport convergence in determining Atlantic Ocean temperature variability. *Ocean Dynamics*, **60,** 771-790, http://dx.doi.org/10.1007/s10236-010-0292-4

Gruber, N., S. Doney, S. R. Emerson, D. Gilbert, T. Kobayashi, A. Kortzinger, G. C. Johnson, K. Johnson, S. Riser, and O. Ulloa, 2010: Addition Oxygen to Argo: Developing a Global In Situ Observatory for Ocean Deoxygenation and Biogeochemistry. *Proceedings of Oceanobs'09: Sustained Ocean Observations and Information for Society*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.39

Gruber, N., A. Körtzinger, A. Borges, H. Claustre, S. C. Doney, R. A. Feely, M. Hood, M. Ishii, A. Kozyr, and P. Monteiro, 2010: Towards an integrated observing system for ocean carbon and biogeochemistry at a time of change. *Proceedings of the "OceanObs'09: Sustained Ocean Observations and Information for Society" Conference, Venice, Italy,*

21-25 September 2009, J. Hall, Harrison D.E. and Stammer, D., ESA Publication WPP-306, http://dx.doi.org/10.5270/OceanObs09.cwp.39

Hartman, S. E., K. E. Larkin, R. S. Lampitt, M. Lankhorst, and D. J. Hydes, 2010: Seasonal and inter-annual biogeochemical variations in the Porcupine Abyssal Plain 2003-2005 associated with winter mixing and surface circulation. *Deep Sea Research Part II: Topical Studies in Oceanography*, **57,** 1303-1312, http://dx.doi.org/10.1016/j.dsr2.2010.01.007

Hartoko, A., 2010: SPATIAL DISTRIBUTION OF Thunnus. sp, VERTICAL AND HORIZONTAL SUB-SURFACE MULTILAYER TEMPERATURE PROFILES OF IN-SITU AGRO FLOAT DATA IN INDIAN OCEAN. *Journal of Coastal Development*, **14,** 61-74, http://ejournal.undip.ac.id/index.php/coastdev/article/view/950

He, Y. W., F. Z. Su, Y. Y. Du, and R. L. Xiao, 2010: Web-based spatiotemporal visualization of marine environment data. *Chinese Journal of Oceanology and Limnology*, **28,** 1086-1094, http://dx.doi.org/10.1007/s00343-010-0029-8

Heimbach, P., G. Forget, R. M. Ponte, C. Wunsch, M. Balmaseda, T. Awaji, J. Baehr, D. Behringer, J. A. Carton, N. Ferry, A. S. Fischer, I. Fukumori, B. S. Giese, K. Haines, E. Harrison, F. Hernandez, M. Kamachi, C. Keppenne, A. Kohl, T. Lee, D. Menemenlis, P. Oke, E. Remy, M. Rienecker, A. Rosati, D. M. Smith, K. Speer, D. Stammer, and A. Weaver, 2010: Observational Requirements for Global-Scale Ocean Climate Analysis: Lessons from Ocean State Estimation. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.42.

Helber, R. W., J. F. Shriver, C. N. Barron, and O. M. Smedstad, 2010: Evaluating the Impact of the Number of Satellite Altimeters Used in an Assimilative Ocean Prediction System. *Journal of Atmospheric and Oceanic Technology*, **27,** 528-546, http://dx.doi.org/10.1175/2009JTECHO683.1

Helm, K. P., N. L. Bindoff, and J. A. Church, 2010: Changes in the global hydrological-cycle inferred from ocean salinity. *Geophysical Research Letters*, **37,** L18701, http://dx.doi.org/10.1029/2010GL044222

Henocq, C., J. Boutin, F. Petitcolin, G. Reverdin, S. Arnault, and P. Lattes, 2010: Vertical Variability of Near-Surface Salinity in the Tropics: Consequences for L-Band Radiometer Calibration and Validation. *Journal of Atmospheric and Oceanic Technology*, **27,** 192-209, http://dx.doi.org/10.1175%2F2009JTECHO670.1

Hernandez-Guerra, A., T. M. Joyce, E. Fraile-Nuez, and P. Velez-Belchi, 2010: Using Argo data to investigate the Meridional Overturning Circulation in the North Atlantic. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 29-36, http://dx.doi.org/10.1016/j.dsr.2009.10.003

Hosoda, S., 2010: Argo program: A new observing system for ocean research and real time monitoring. *Blue Earth*, **22,** 12-13,

Hosoda, S., 2010: Surface layer salinity change in the global ocean - hydrological cycle change detected by Argo. *Kaiyo Monthly*, **42,** 621-627,

Hosoda, S. and M. Hirano, 2010: Argo float maintenance and checking at JAMSTEC. *Blue Earth*, **Special Issue 2010,** 22-23,

Hosoda, S., T. Ohira, K. Sato, and T. Suga, 2010: Improved Description of Global Mixed-Layer

Depth Using Argo Profiling Floats. *Journal of Oceanography*, **66,** 773-787, http://dx.doi.org/10.1007/s10872-010-0063-3

Hosoda, S., T. Suga, N. Shikama, and K. Mizuno, 2010: Recent Change in Global Sea Surface Layer Salinity Deteced by Argo Float Array. *In Proceedings of Ocean Obs'09: Sustained Ocean Observations and Information for Society (Annex)*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, http://dx.doi.org/10.5270/OceanObs09

Hoteit, I., B. Cornuelle, and P. Heimbach, 2010: An eddy-permitting, dynamically consistent adjoint-based assimilation system for the tropical Pacific: Hindcast experiments in 2000. *Journal of Geophysical Research: Oceans*, **115,** 23, http://dx.doi.org/10.1029/2009jc005437

Howell, E., P. Dutton, J. Polovina, H. Bailey, D. Parker, and G. Balazs, 2010: Oceanographic influences on the dive behavior of juvenile loggerhead turtles (Caretta caretta) in the North Pacific Ocean. *Marine Biology*, **157,** 1011-1026, http://dx.doi.org/10.1007/s00227-009-1381-0

Huang, B., Y. Xue, D. Zhang, A. Kumar, and M. J. McPhaden, 2010: The NCEP GODAS Ocean Analysis of the Tropical Pacific Mixed Layer Heat Budget on Seasonal to Interannual Time Scales. *Journal of Climate*, **23,** 4901-4925, http://dx.doi.org/10.1175/2010JCLI3373.1

Ishii, M., 2010: Argo and historical ocean heat content changes. *Kaiyo Monthly*, **42,** 614-620,

Ito, S. I., Y. Shimizu, S. Kakehi, T. Wagawa, and M. Sato, 2010: Current status of underwater glider observations. *Kaiyo Monthly*, **42,** 658-667,

Itoh, S. and I. Yasuda, 2010: Water Mass Structure of Warm and Cold Anticyclonic Eddies in the Western Boundary Region of the Subarctic North Pacific. *Journal of Physical Oceanography*, **40,** 2624-2642, http://dx.doi.org/10.1175/2010JPO4475.1

Ivanov, L. M., C. A. Collins, T. M. Margolina, and V. N. Eremeev, 2010: Nonlinear Rossby waves off California. *Geophysical Research Letters*, **37,** L13602, http://dx.doi.org/10.1029/2010GL043708

Ivchenko, V. O., N. C. Wells, D. L. Aleynik, and A. G. P. Shaw, 2010: Variability of heat and salinity content in the North Atlantic in the last decade. *Ocean Science*, **6,** 719-735, https://doi.org/10.5194/os-6-719-2010

Jin, G. D., Z. Tao, and X. M. Liu, 2010: Analysis of temperature and salinity of sea based on Argo data (in Chinese). *Marine Environmental Science*, **29,** 415-419,

Johnson, G. C. and J. M. Lyman, 2010: Global Oceans: Sea Surface Salinity. In State of the Climate 2009. *Bulletin of the American Meteorological Society*, **91,** S63-S64, http://dx.doi.org/10.1175/BAMS-91-7-StateoftheClimate

Johnson, G. C., J. M. Lyman, J. Willis, S. Levitus, T. Boyer, J. I. Antonov, M. D. Palmer, and S. A. Good, 2010: Global Oceans: Ocean Heat Content. In State of the Climate in 2009. *Bulletin of the American Meteorological Society*, **91,** S56-S59, http://dx.doi.org/10.1175/BAMS-91-7-StateoftheClimate

Johnson, G. C. and K. E. McTaggart, 2010: Equatorial Pacific 13 degree C Water Eddies in the Eastern Subtropical South Pacific Ocean. *Journal of Physical Oceanography*, **40,** 226-236, http://dx.doi.org/10.1175%2F2009JPO4287.1

Johnson, K. S., S. C. Riser, and D. M. Karl, 2010: Nitrate supply from deep to near-surface

waters of the North Pacific subtropical gyre. *Nature*, **465,** 1062-1065, http://dx.doi.org/10.1038/nature09170

Jorda, G. and D. Gomis, 2010: Toward SMOS L4 SSS Products: Improving L3 SSS With Auxiliary SSS Data. *Ieee Transactions on Geoscience and Remote Sensing*, **48,** 2204-2214, https://doi.org/10.1109/TGRS.2009.2037899

Kara, A. B., R. W. Helber, and A. J. Wallcraft, 2010: Evaluations of threshold and curvature mixed layer depths by various mixing schemes in the Mediterranean Sea. *Ocean Modelling*, **34,** 166-184, http://dx.doi.org/10.1016/j.ocemod.2010.05.006

Katsumata, K. and H. Yoshinari, 2010: Uncertainties in global mapping of Argo drift data at the parking level. *Journal of Oceanography*, **66,** 553-569, http://dx.doi.org/10.1007/s10872-010-0046-4

Katsumata, K. and H. Yoshinari, 2010: Grid data of intermediate-depth velocity estimated from Argo drift: G-YoMaHa. *Kaiyo Monthly*, **42,** 709-714,

Kawai, Y., 2010: New-surface temperature and salinity observations by Argo for air-sea interaction research. *Kaiyo Monthly*, **42,** 678-693,

Kawamiya, M., 2010: Suggestions from a biogeochemical-modling point of view. *Kaiyo Monthly*, **42,** 702-708,

Kihm, C. and A. Kortzinger, 2010: Air-sea gas transfer velocity for oxygen derived from float data. *J. Geophys. Res.*, **115,** C12003, http://dx.doi.org/10.1029/2009JC006077

Kikuchi, T., O. Klatt, and E. Fahrbach, 2010: Application of Argo profiling float for the Polar Ocean Monitoring. *Kaiyo Monthly*, **42,** 671-677,

Kim, E. J., S. K. Kang, S.-T. Jang, J. H. Lee, Y. H. Kim, H.-W. Kang, Y. Y. Kwon, and Y. H. Seung, 2010: Satellite-derived SST validation based on in-situ data during summer in the East China Sea and western North Pacific. *Ocean Science Journal*, **45,** 159-170, http://dx.doi.org/10.1007/s12601-010-0014-3

Kobayashi, T., 2010: Development of a profiling float for deep ocean observation. *Kaiyo Monthly*, **42**,

Kobayashi, T., K. Mizuno, and T. Suga, 2010: Long-term variations of Subantarctic Mode Water at 32 S in the Indian Ocean. *In Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society Conference (Annex)*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, http://dx.doi.org/10.5270/OceanObs09

Kobayashi, T., T. Nakamura, N. Ogita, and H. Nakajima, 2010: Quality control of Argo surface trajectory data considering position errors fixed by Argos system. *In Proceeding of OceanObs'09: Sustained Ocean Observations and Information for Society Conference (Annex)*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, http://dx.doi.org/10.5270/OceanObs09

Koch-Larrouy, A., R. Morrow, T. Penduff, and M. Juza, 2010: Origin and mechanism of Subantarctic Mode Water formation and transformation in the Southern Indian Ocean. *Ocean Dynamics*, **60,** 563-583, http://dx.doi.org/10.1007/s10236-010-0276-4

Korres, G., K. Nitti, L. Perivoliotis, K. Tsiaras, A. Papadopoulos, G. Triantafyllou, and I. Hoteit, 2010: Forecasting the Aegean Sea hydrodynamics within the POSEIDON-II operational system. *Journal of Operational Oceanography*, **3,** 37-49, http://dx.doi.org/10.1080/1755876X.2010.11020112

Kumar, B. P., R. Barman, S. K. Dube, P. C. Pandey, M. Ravichandran, and S. Nayak, 2010: Development of a New Comprehensive Ocean Atlas for Indian Ocean utilizing ARGO Data. *International Journal of Climatology*, **30,** 185-196, http://dx.doi.org/10.1002/joc.1885

Kumar, M. R. R. and P. Byju, 2010: A multi-sensor study of conditions leading to the formation of a cyclone over the Arabian Sea during 5-9 May 2004. *International Journal of Remote Sensing*, **31,** 4683-4697, http://dx.doi.org/10.1080/01431161.2010.485214

Lagerloef, G., J. Boutin, Y. Chao, T. Delcroix, J. Font, P. P. Niiler, N. Reul, S. Riser, R. W. Schmitt, D. Stammer, and F. Wentz, 2010: Resolving the Global Surface Salinity Field and Variations by Blending Satellite and In Situ Observations. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.51.

Latarius, K. and D. Quadfasel, 2010: Seasonal to inter-annual variability of temperature and salinity in the Greenland Sea Gyre: heat and freshwater budgets. *Tellus A*, **62,** 497-515, http://dx.doi.org/10.1111/j.1600-0870.2010.00453.x

Le Traon, P. Y., M. J. Bell, E. Dombrowsky, A. Schiller, and K. Wilmer-Becker, 2010: GODAE OceanView: From an Experiment Towards a Long-term Ocean Analysis and Forecasting International Program. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.57.

Lee, T., T. Awaji, M. Balmaseda, N. Ferry, Y. Fujii, I. Fukumori, B. Giese, P. Heimbach, A. Kohl, S. Masina, E. Remy, A. Rosati, M. Schodlok, D. Stammer, and A. Weaver, 2010: Consistency and fidelity of Indonesian-throughflow total volume transport estimated by 14 ocean data assimilation products. *Dynamics of Atmospheres and Oceans*, **50,** 201-223, http://dx.doi.org.10.1016/j.dynatmoce.2009.12.004

Lee, T., D. Stammer, T. Awaji, M. Balmaseda, D. Behringer, J. A. Carton, N. Ferry, A. S. Fischer, I. Fukumori, B. S. Giese, K. Haines, E. Harrison, P. Heimbach, M. Kamachi, C. Keppenne, A. Kohl, S. Masina, D. Menemenlis, R. M. Ponte, E. Remy, M. Rienecker, A. Rosati, J. Schroeter, D. M. Smith, A. Weaver, C. Wunsch, and Y. Xue, 2010: Ocean State Estimation for Climate Research. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.55.

Liu, Y., J. A. T. Bye, Y. You, X. Bao, and D. Wu, 2010: The flushing and exchange of the South China Sea derived from salt and mass conservation. *Deep Sea Research Part II: Topical Studies in Oceanography*, **57,** 1212-1220, http://dx.doi.org/10.1016/j.dsr2.2009.12.010

Liu, Y. and C. Yan, 2010: Application of a recursive filter to a three-dimensional variational ocean data assimilation system. *Advances in Atmospheric Sciences*, **27,** 293-302, http://dx.doi.org/10.1007/s00376-009-8112-9

Liu, Z.-H., T. Zhang, and B. K. Zhu, 2010: A method to extend the lifetime of APEX Argo profiler (in Chinese). *Ocean Technology*, **29,** 115-118,

Llovel, W., S. Guinehut, and A. Cazenave, 2010: Regional and interannual variability in sea

level over 2002-2009 based on satellite altimetry, Argo float data and GRACE ocean mass. *Ocean Dynamics*, **60,** 1193-1204, http://dx.doi.org/10.1007/s10236-010-0324-0

Lyman, J. M., S. A. Good, V. V. Gouretski, M. Ishii, G. C. Johnson, M. D. Palmer, D. M. Smith, and J. K. Willis, 2010: Robust warming of the global upper ocean. *Nature*, **465,** 334-337, http://dx.doi.org/10.1038/nature09043

MacKinnon, J., M. H. Alford, P. Bouruet-Aubertot, N. L. Bindoff, S. Elipot, S. T. Gille, J. B. Girton, M. C. Gregg, R. W. Hallberg, E. Kunze, A. Naviera Garabato, H. E. Phillips, R. Pinkel, K. Polzin, T. B. Sanford, H. Simmons, and K. Speer, 2010: Using global arrays to investigate internal-waves and mixing. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.58.

Marullo, S., R. Santoleri, V. Banzon, R. H. Evans, and M. Guarracino, 2010: A diurnal-cycle resolving sea surface temperature product for the tropical Atlantic. *J. Geophys. Res.*, **115,** C05011, http://dx.doi.org/10.1029/2009JC005466

Masuda, S., T. Awaji, N. Sugiura, J. P. Matthews, T. Toyoda, Y. Kawai, T. Doi, S. Kouketsu, H. Igarashi, K. Katsumata, H. Uchida, T. Kawano, and M. Fukasawa, 2010: Simulated Rapid Warming of Abyssal North Pacific Waters. *Science*, **329,** 319-322, http://dx.doi.org/10.1126/science.1188703

Matthews, A. J., P. Singhruck, and K. J. Heywood, 2010: Ocean temperature and salinity components of the Madden-Julian oscillation observed by Argo floats. *Climate Dynamics*, **35,** 1149-1168, http://dx.doi.org/10.1007/s00382-009-0631-7

Mazloff, M. R., P. Heimbach, and C. Wunsch, 2010: An Eddy-Permitting Southern Ocean State Estimate. *Journal of Physical Oceanography*, **40,** 880-899, http://dx.doi.org/10.1175/2009jpo4236.1

Menna, M. and P. M. Poulain, 2010: Mediterranean intermediate circulation estimated from Argo data in 2003-2010. *Ocean Science*, **6,** 331-343, http://dx.doi.org/10.5194/os-6-331-2010

Merrifield, M., S. Gill, E. W. Leuliette, L. Miller, G. Mitchum, R. S. Nerem, and P. Woodworth, 2010: Global Oceans: Sea level variations. In State of the Climate 2009. *Bulletin of the American Meteorological Society*, **91,** S69-S70, http://dx.doi.org/10.1175/BAMS-91-7-StateoftheClimate

Mizuno, K., 2010: Argo Chronicle. *Kaiyo Monthly*, **42,** 715-721,

Molleri, G. S. F., E. M. L. d. M. Novo, and M. Kampel, 2010: Space-time variability of the Amazon River plume based on satellite ocean color. *Continental Shelf Research*, **30,** 342-352, http://dx.doi.org/10.1016/j.csr.2009.11.015

Mooers, C. N. K., 2010: Quasi-Operational Coastal Ocean Nowcast/Forecast Systems. *Terrestrial Atmospheric and Oceanic Sciences*, **21,** 181-193, http://dx.doi.org/10.3319/TAO.2009.06.08.04(IWNOP)

Morel, A., H. Claustre, and B. Gentili, 2010: The most oligotrophic subtropical zones of the global ocean: similarities and differences in terms of chlorophyll and yellow substance. *Biogeosciences*, **7,** 3139-3151, http://dx.doi.org/10.5194/bg-7-3139-2010

Nagura, M. and M. J. McPhaden, 2010: Dynamics of zonal current variations associated with the Indian Ocean dipole. *Journal of Geophysical Research-Oceans*, **115,** C11026,

http://dx.doi.org/10.1029/2010JC006423
Nairn, R., S. Bateman, and R. H. Woodham, 2010: Oceanography and Force 2030: harnessing Australian marine science as a force multiplier. *Australian Defence Force Journal*, **182,** 5-15, http://www.adfjournal.adc.edu.au/UserFiles/issues/182%202010%20Jul_Aug.pdf
Nakano, Y., T. Fuhuki, and S. Watanabe, 2010: Observation of seawater carbonate species by in situ sensor. *Kaiyo Monthly*, **42,** 684-688,
Nerem, R. S., D. P. Chambers, E. W. Leuliette, G. Mitchum, M. Merrifield, and J. Willis, 2010: Observations of Sea Level Change: What Have We Learned and What are the Remaining Challenges? *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.65.
Nonaka, M. and co-authors, 2010: A revisit of the reason why the properties of the Central Mode Water in the North Pacific changed in regime shifts. *In Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Annex)*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, http://dx.doi.org/10.5270/OceanObs09
Ohshima, K. I., T. Nakanowatari, S. Riser, and M. Wakatsuchi, 2010: Seasonal variation in the in- and outflow of the Okhotsk Sea with the North Pacific. *Deep Sea Research Part II: Topical Studies in Oceanography*, **57,** 1247-1256, http://dx.doi.org/10.1016/j.dsr2.2009.12.012
Ohshima, K. I., T. Nakanowatari, S. Riser, and M. Wakatsuchi, 2010: Float observations in the ice-covered Sea of Okhotsk. *Kaiyo Monthly*, **42,** 643-653,
Oka, E., 2010: Seasonal and Interannual Variation of North Pacific Subtropical Mode Water in 2003-2006. *In Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Annex)*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, http://dx.doi.org/10.5270/OceanObs09
Oka, E., 2010: Mode Waters in the North Pacific Ocean. *Aquabiology*, **32,** 205-210,
Oka, E., 2010: New aspects on the circulation of Subtropical and Central Mode Waters in the North Pacific Ocean. *Kaiyo Monthly*, **42,** 628-637,
Okamoto, S., T. Hirawake, and S.-I. Saitoh, 2010: Interannual variability in the magnitude and timing of the spring bloom in the Oyashio region. *Deep Sea Research Part II: Topical Studies in Oceanography*, **57,** 1608-1617, http://dx.doi.org/10.1016/j.dsr2.2010.03.005
Oke, P. R., M. Balmaseda, M. Benkiran, J. Cummings, E. Dombrowsky, Y. Fujii, S. Guinehut, G. Larnicol, P. Y. Le Traon, and M. Martin, 2010: Observational Requirements of GODAE Systems. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.67.
Oke, P. R., G. B. Brassington, D. A. Griffin, and A. Schiller, 2010: Ocean data assimilation: a case for ensemble optimal interpolation. *Australian Meteorological and Oceanographic Journal*, **59,** 67-76, http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.442.1356&rep=rep1&type=pdf

Osafune, S. and I. Yasuda, 2010: Bidecadal variability in the Bering Sea and the relation with 18.6 year period nodal tidal cycle. *J. Geophys. Res.*, **115,** C02014, http://dx.doi.org/10.1029/2008JC005110

Palmer, M. D., J. Antonov, P. Barker, N. L. Bindoff, T. Boyer, M. Carson, C. M. Domingues, S. Gille, P. J. Gleckler, S. A. Good, V. Gouretski, S. Guinehut, K. Haines, D. E. Harrison, M. Ishii, G. C. Johnson, S. Levitus, M. S. Lozier, J. M. Lyman, A. J. S. Meijers, K. von Schuckmann, D. M. Smith, S. Wijffels, and J. Willis, 2010: Future Observations for Monitoring Global Ocean Heat Content. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.68.

Parampil, S. R., A. Gera, M. Ravichandran, and D. Sengupta, 2010: Intraseasonal response of mixed layer temperature and salinity in the Bay of Bengal to heat and freshwater flux. *J. Geophys. Res.*, **115,** C05002, http://dx.doi.org/10.1029/2009JC005790

Park, Y.-G., A. Choi, Y. H. Kim, H. S. Min, J. H. Hwang, and S. H. Choi, 2010: Direct flows from the Ulleung Basin into the Yamato Basin in the East/Japan Sea. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 731-738, http://dx.doi.org/10.1016/j.dsr.2010.03.006

Pinardi, N. and G. Coppini, 2010: Operational oceanography in the Mediterranean Sea: the second stage of development Preface. *Ocean Science*, **6,** 263-267, http://dx.doi.org/10.5194/os-6-263-2010

Pouliquen, S., C. Schmid, A. Wong, S. Guinehut, and M. Belbeoch, 2010: Argo Data Management. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.70.

Pujol, M.-I., S. Dobricic, N. Pinardi, and M. Adani, 2010: Impact of Multialtimeter Sea Level Assimilation in the Mediterranean Forecasting Model. *Journal of Atmospheric and Oceanic Technology*, **27,** 2065-2082, http://dx.doi.org/10.1175/2010JTECHO715.1

Qiu, B. and S. Chen, 2010: Interannual Variability of the North Pacific Subtropical Countercurrent and Its Associated Mesoscale Eddy Field. *Journal of Physical Oceanography*, **40,** 213-225, http://dx.doi.org/10.1175%2F2009JPO4285.1

Read, J. F., R. T. Pollard, P. I. Miller, and A. C. Dale, 2010: Circulation and variability of the North Atlantic Current in the vicinity of the Mid-Atlantic Ridge. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 307-318, http://dx.doi.org/10.1016/j.dsr.2009.11.010

Ren, L. and S. C. Riser, 2010: Observations of decadal time scale salinity changes in the subtropical thermocline of the North Pacific Ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, **57,** 1161-1170, http://dx.doi.org/10.1016/j.dsr2.2009.12.005

Resnyanskii, Y., M. Tsyrulnikov, B. Strukov, and A. Zelenko, 2010: Statistical structure of spatial variability of the ocean thermohaline fields from argo profiling data, 2005-2007. *Oceanology*, **50,** 149-165, http://dx.doi.org/10.1134/S0001437010020013

Richter, F., D. Sidorenko, S. Danilov, J. Schroter, F. M. Flechtner, T. Gruber, A. Guntner, M. Mandea, M. Rothacher, T. Schone, and J. Wickert, 2010: Using ARGO, GRACE and

Altimetry Data to Assess the Quasi Stationary North Atlantic Circulation System Earth via Geodetic-Geophysical Space Techniques. *Advanced Technologies in Earth Sciences*, L. Stroink, V. Mosbrugger, and G. Wefer, Eds., Springer Berlin Heidelberg, 351-358, http://dx.doi.org/10.1007/978-3-642-10228-8_29.

Ridgway, K. R. and J. R. Dunn, 2010: Using satellite altimetry to correct mean temperature and salinity fields derived from Argo floats in the ocean regions around Australia. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 1137-1151, http://dx.doi.org/10.1016/j.dsr.2010.05.010

Rintoul, S., K. Speer, M. Sparrow, M. P. Meredith, E. Hofmann, E. Fahrbach, C. Summerhayes, A. Worby, M. H. England, R. Bellerby, S. Speich, D. Costa, J. Hall, M. Hildell, G. Hosie, K. Stanfield, Y. Fukamachi, T. de Bruin, A. C. Naveira Garabato, K. Alverson, V. Ryabinin, H. Shin, and S. Gladyshev, 2010: Southern Ocean Observing System (SOOS): Rationale and Strategy for Sustained Observations of the Southern Ocean. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.74.

Roemmich, D., L. Boehme, H. Claustre, H. Freeland, M. Fukasawa, G. Goni, W. J. Gould, N. Gruber, M. Hood, E. Kent, R. Lumpkin, S. Smith, and P. Testor, 2010: Integrating the Ocean Observing System: Mobile Platforms. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, http://dx.doi.org/10.5270/OceanObs09.pp.33

Rogachev, K. and N. Shlyk, 2010: The increased radius of the Aleutian eddies and their long-term evolution. *Russian Meteorology and Hydrology*, **35,** 206-210, http://dx.doi.org/10.3103/S1068373910030076

Royer, S.-J., M. Levasseur, M. Lizotte, M. Arychuk, M. G. Scarratt, C. S. Wong, C. Lovejoy, M. Robert, K. Johnson, A. Peña, S. Michaud, and R. P. Kiened, 2010: Microbial dimethylsulfoniopropionate (DMSP) dynamics along a natural iron gradient in the northeast subarctic Pacific. *Limnology and Oceanography*, **55,** 1614-1626, http://dx.doi.org/10.4319/lo.2010.55.4.1614

Saha, S., S. Moorthi, H.-L. Pan, X. Wu, J. Wang, S. Nadiga, P. Tripp, R. Kistler, J. Woollen, D. Behringer, H. Liu, D. Stokes, R. Grumbine, G. Gayno, J. Wang, Y.-T. Hou, H.-Y. Chuang, H.-M. H. Juang, J. Sela, M. Iredell, R. Treadon, D. Kleist, P. Van Delst, D. Keyser, J. Derber, M. Ek, J. Meng, H. Wei, R. Yang, S. Lord, H. Van Den Dool, A. Kumar, W. Wang, C. Long, M. Chelliah, Y. Xue, B. Huang, J.-K. Schemm, W. Ebisuzaki, R. Lin, P. Xie, M. Chen, S. Zhou, W. Higgins, C.-Z. Zou, Q. Liu, Y. Chen, Y. Han, L. Cucurull, R. W. Reynolds, G. Rutledge, and M. Goldberg, 2010: The NCEP Climate Forecast System Reanalysis. *Bulletin of the American Meteorological Society*, **91,** 1015-1057, http://dx.doi.org/10.1175/2010BAMS3001.1

Sallee, J. B., K. Speer, S. Rintoul, and S. Wijffels, 2010: Southern Ocean Thermocline Ventilation. *Journal of Physical Oceanography*, **40,** 509-529, http://dx.doi.org/10.1175/2009jpo4291.1

Sallee, J. B., K. G. Speer, and S. R. Rintoul, 2010: Zonally asymmetric response of the Southern Ocean mixed-layer depth to the Southern Annular Mode. *Nature*

Geoscience, **3,** 273-279, http://dx.doi.org/10.1038/ngeo812
Sandery, P. A., G. B. Brassington, A. Craig, and T. Pugh, 2010: Impacts of Ocean-Atmosphere Coupling on Tropical Cyclone Intensity Change and Ocean Prediction in the Australian Region. *Monthly Weather Review*, **138,** 2074-2091, http://dx.doi.org/10.1175/2010MWR3101.1
Santoso, A., A. Sen Gupta, and M. H. England, 2010: Genesis of Indian Ocean Mixed Layer Temperature Anomalies: A Heat Budget Analysis. *Journal of Climate*, **23,** 5375-5403, http://dx.doi.org/10.1175/2010JCLI3072.1
Sarmiento, J. L., R. D. Slater, J. Dunne, A. Gnanadesikan, and M. R. Hiscock, 2010: Efficiency of small scale carbon mitigation by patch iron fertilization. *Biogeosciences*, **7,** 3593-3624, http://dx.doi.org/10.5194/bg-7-3593-2010
Sasaki, Y. N., N. Schneider, N. Maximenko, and K. Lebedev, 2010: Observational evidence for propagation of decadal spiciness anomalies in the North Pacific. *Geophysical Research Letters*, **37,** L07708, http://dx.doi.org/10.1029/2010GL042716
Sato, N., K. Yoneyama, Y. N. Takayabu, R. Shirooka, and M. Yoshizaki, 2010: Variability of the oceanic surface and subsurface layers in the warm pool associated with the atmospheric northward-propagating intraseasonal variability. *Deep Sea Research Part II: Topical Studies in Oceanography*, **57,** 1201-1211, http://dx.doi.org/10.1016/j.dsr2.2009.12.009
Schiller, A., S. E. Wijffels, J. Sprintall, R. Molcard, and P. R. Oke, 2010: Pathways of intraseasonal variability in the Indonesian Throughflow region. *Dynamics of Atmospheres and Oceans*, **50,** 174-200, http://dx.doi.org/10.1016/j.dynatmoce.2010.02.003
Sekiguchi, H. and N. Inoue, 2010: Larval recruitment and fisheries of the spiny lobster Panulirus japonicas coupling with the Kuroshio subgyre circulation in the western North Pacific: a review. *Journal of the marine biology association of India*, **52,** 195-207,
Sharma, R., N. Agarwal, I. M. Momin, and V. K. Agarwal, 2010: Mixed Layer Depth and its Variability in the Eastern Equatorial Indian Ocean as Revealed by Observations and Model Simulations. *Marine Geodesy*, **33,** 154-163, http://dx.doi.org/10.1080/01490419.2010.492281
Sharma, R., N. Agarwal, I. M. Momin, S. Basu, and V. K. Agarwal, 2010: Simulated Sea Surface Salinity Variability in the Tropical Indian Ocean. *Journal of Climate*, **23,** 6542-6554, http://dx.doi.org/10.1175/2010jcli3721.1
Sloyan, B. M., L. D. Talley, T. K. Chereskin, R. Fine, and J. Holte, 2010: Antarctic Intermediate Water and Subantarctic Mode Water Formation in the Southeast Pacific: The Role of Turbulent Mixing. *Journal of Physical Oceanography*, **40,** 1558-1574, http://dx.doi.org/10.1175/2010jpo4114.1
Smith, G. C., K. Haines, T. Kanzow, and S. Cunningham, 2010: Impact of hydrographic data assimilation on the modelled Atlantic meridional overturning circulation. *Ocean Science*, **6,** 761-774, http://dx.doi.org/10.5194/os-6-761-2010
Snowden, D., M. Belbeoch, B. Burnett, T. Carval, J. Graybeal, T. Habermann, H. M. Snaith, H. Viola, and S. Woodruff, 2010: Metadata Management in Global Distributed Ocean Observation Networks. *Proceedings of OceanObs'09: Sustained Ocean Observations*

and Information for Society, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.84.

Steinhoff, T., T. Friedrich, S. E. Hartman, A. Oschlies, D. W. R. Wallace, and A. Körtzinger, 2010: Estimating mixed layer nitrate in the North Atlantic Ocean. *Biogeosciences*, **7,** 795-807, http://dx.doi.org/10.5194/bg-7-795-2010

Su, J., R. Zhang, T. Li, X. Rong, J.-S. Kug, and C.-C. Hong, 2010: Causes of the El Nino and La Nina Amplitude Asymmetry in the Equatorial Eastern Pacific. *Journal of Climate*, **23,** 605-617, http://dx.doi.org/10.1175%2F2009JCLI2894.1

Suga, T., 2010: Argo: Its Accomplishment and Potential. *Tenki*, **57,** 762-767,

Suga, T., 2010: Influence of subtropical mode waters on primary production. *Aquabiology*, **32,** 218-225,

Suga, T., 2010: Overview of OceanObs'09 and the future of Argo. *Kaiyo Monthly*, **42,** 609-613,

Suga, T., 2010: Strategic Ocean Monitoring Research: An Approach to Expanding Argo. *Kaiyo Monthly*, **42,** 654-657,

Suga, T., C. Sukigara, T. Saino, K. Toyama, D. Yanagimoto, K. Hanawa, and N. Shikama, 2010: Physical-Biogeochemical Study Using a Profiling Float: Subsurface Primary Production in the Subtropical North Pacific. *In Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Annex)*, Venice, Italy, J. Hall, D. E. Harrison, and D. Stammer, ESA Publication, http://dx.doi.org/10.5270/OceanObs09

Sugimoto, S. and K. Hanawa, 2010: Impact of Aleutian Low activity on the STMW formation in the Kuroshio recirculation gyre region. *Geophysical Research Letters*, **37,** L03606, http://dx.doi.org/10.1029/2009GL041795

Sukigara, C., K. Toyama, and T. Suga, 2010: Physical processes from biogeochemical data observed by an Argo float. *Kaiyo Monthly*, **42,** 638-642,

Sun, C., A. Thresher, R. Keeley, N. Hall, M. Hamilton, P. Chinn, A. Tran, G. Goni, L. Petit de la Villeon, T. Carval, L. Cowen, G. M. R. Manzella, V. V. Gopalakrishna, R. Guerro, F. Reseghetti, Y. Kanno, B. Klein, L. Rickards, A. Baldoni, S. Lin, F. Ji, and Y. Nagaya, 2010: The Data Management System for the Global Temperature and Salinity Profile Programme. *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society*, J. Hall, D. E. Harrison, and D. Stammer, Eds., ESA Publication, http://dx.doi.org/10.5270/OceanObs09.cwp.86.

Swart, S. and S. Speich, 2010: An altimetry-based gravest empirical mode south of Africa: 2. Dynamic nature of the Antarctic Circumpolar Current fronts. *Journal of Geophysical Research: Oceans*, **115,** C03003, http://dx.doi.org/10.1029/2009JC005300

Swart, S., S. Speich, I. J. Ansorge, and J. R. E. Lutjeharms, 2010: An altimetry-based gravest empirical mode south of Africa: 1. Development and validation. *Journal of Geophysical Research: Oceans*, **115,** C03002, http://dx.doi.org/10.1029/2009JC005299

Taillandier, V., S. Dobricic, P. Testor, N. Pinardi, A. Griffa, L. Mortier, and G. P. Gasparini, 2010: Integration of Argo trajectories in the Mediterranean Forecasting System and impact on the regional analysis of the western Mediterranean circulation. *Journal of Geophysical Research: Oceans*, **115,** 17, http://dx.doi.org/10.1029/2008jc005251

Talone, M., R. Sabia, A. Camps, M. Vall-llossera, C. Gabarru, and J. Font, 2010: Sea surface salinity retrievals from HUT-2D L-band radiometric measurements. *Remote Sensing of Environment*, **114,** 1756-1764, http://dx.doi.org/10.1016/j.rse.2010.03.006

Tanguy, Y., S. Arnault, and P. Lattes, 2010: Isothermal, mixed, and barrier layers in the subtropical and tropical Atlantic Ocean during the ARAMIS experiment. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 501-517, http://dx.doi.org/10.1016/j.dsr.2009.12.012

Thresher, R. E., N. C. Wilson, C. M. MacRae, and H. Neil, 2010: Temperature effects on the calcite skeletal composition of deep-water gorgonians (Isididae). *Geochimica et Cosmochimica Acta*, **74,** 4655-4670, http://dx.doi.org/10.1016/j.gca.2010.05.024

Tomita, H., S. i. Kako, M. F. Cronin, and M. Kubota, 2010: Preconditioning of the wintertime mixed layer at the Kuroshio Extension Observatory. *J. Geophys. Res.*, **115,** C12053, http://dx.doi.org/10.1029/2010JC006373

Toyama, K. and T. Suga, 2010: Vertical structure of North Pacific mode waters. *Deep Sea Research Part II: Topical Studies in Oceanography*, **57,** 1152-1160, http://dx.doi.org/10.1016/j.dsr2.2009.12.004

Tsubouchi, T., T. Suga, and K. Hanawa, 2010: Indian Ocean Subtropical Mode Water: its water characteristics and spatial distribution. *Ocean Science*, **6,** 41-50, http://dx.doi.org/10.5194/os-6-41-2010

Ullgren, J. E. and M. White, 2010: Water mass interaction at intermediate depths in the southern Rockall Trough, northeastern North Atlantic. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 248-257, http://dx.doi.org/10.1016/j.dsr.2009.11.005

van Wijk, E. M., S. R. Rintoul, B. M. Ronai, and G. D. Williams, 2010: Regional circulation around Heard and McDonald Islands and through the Fawn Trough, central Kerguelen Plateau. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 653-669, http://dx.doi.org/10.1016/j.dsr.2010.03.001

Velez-Belchi, P., A. Hernandez-Guerra, E. Fraile-Nuez, and V. Benitez-Barrios, 2010: Changes in Temperature and Salinity Tendencies of the Upper Subtropical North Atlantic Ocean at 24.5 degrees N. *Journal of Physical Oceanography*, **40,** 2546-2555, http://dx.doi.org/10.1175/2010jpo4410.1

Venables, H. and C. M. Moore, 2010: Phytoplankton and light limitation in the Southern Ocean: Learning from high-nutrient, high-chlorophyll areas. *J. Geophys. Res.*, **115,** C02015, http://dx.doi.org/10.1029/2009JC005361

Vianna, M. L., V. V. Menezes, A. B. Pezza, and I. Simmonds, 2010: Interactions between Hurricane Catarina (2004) and warm core rings in the South Atlantic Ocean. *Journal of Geophysical Research: Oceans*, **115,** 19, http://dx.doi.org/10.1029/2009jc005974

Vivier, F., D. Iudicone, F. Busdraghi, and Y.-H. Park, 2010: Dynamics of sea-surface temperature anomalies in the Southern Ocean diagnosed from a 2D mixed-layer model. *Climate Dynamics*, **34,** 153-184, http://dx.doi.org/10.1007/s00382-009-0724-3

Voet, G., D. Quadfasel, K. A. Mork, and H. Soiland, 2010: The mid-depth circulation of the Nordic Seas derived from profiling float observations. *Tellus Series a-Dynamic Meteorology and Oceanography*, **62,** 516-529,

http://dx.doi.org/10.1111/j.1600-0870.2010.00444.x
Walsh, K. J. E., P. Sandery, G. B. Brassington, M. Entel, C. Siegenthaler-LeDrian, J. D. Kepert, and R. Darbyshire, 2010: Constraints on drag and exchange coefficients at extreme wind speeds. *Journal of Geophysical Research: Oceans*, **115**, https://doi.org/10.1029/2009JC005876
Wan, L. Y., L. Bertino, and J. Zhu, 2010: Assimilating Altimetry Data into a HYCOM Model of the Pacific: Ensemble Optimal Interpolation versus Ensemble Kalman Filter. *Journal of Atmospheric and Oceanic Technology*, **27,** 753-765, http://dx.doi.org/10.1175/2009jtecho626.1
Wang, W., M. Chen, and A. Kumar, 2010: An Assessment of the CFS Real-Time Seasonal Forecasts. *Weather and Forecasting*, **25,** 950-969, http://dx.doi.org/10.1175/2010WAF2222345.1
Williams, A., F. Althaus, P. K. Dunstan, G. C. B. Poore, N. J. Bax, R. J. Kloser, and F. R. McEnnulty, 2010: Scales of habitat heterogeneity and megabenthos biodiversity on an extensive Australian continental margin (100-1100 m depths). *Marine Ecology-an Evolutionary Perspective*, **31,** 222-236, http://dx.doi.org/10.1111/j.1439-0485.2009.00355.x
Willis, J. K., 2010: Can in situ floats and satellite altimeters detect long-term changes in Atlantic Ocean overturning? *Geophysical Research Letters*, **37,** L06602, http://dx.doi.org/10.1029/2010GL042372
Willis, J. K., D. P. Chambers, C. Y. Kuo, and C. K. Shum, 2010: Global Sea Level Rise RECENT PROGRESS AND CHALLENGES FOR THE DECADE TO COME. *Oceanography*, **23,** 26-35, http://dx.doi.org/10.5670/oceanog.2010.03
Wu, X. F. and J. P. Xu, 2010: A summary of upper ocean heat content in the tropical western Pacific and its distribution features, variations and observations (in Chinese). *Journal of Marine Science*, **28,** 46-54,
Wunsch, C., 2010: Variability of the Indo-Pacific Ocean exchanges. *Dynamics of Atmospheres and Oceans*, **50,** 157-173, http://dx.doi.org/10.1016/j.dynatmoce.2009.12.001
Xie, J. P. and J. Zhu, 2010: Ensemble optimal interpolation schemes for assimilating Argo profiles into a hybrid coordinate ocean model. *Ocean Modelling*, **33,** 283-298, http://dx.doi.org/10.1016/j.ocemod.2010.03.002
Xu, J. P., 2010: A Collection of Papers on the Observation and Application of Argo profiling floats in the West Pacific Ocean (in Chinese). *Ocean Press***,** 344,
Xu, L., P. Zhang, J. Xu, S. Wu, G. Han, and D. Xu, 2010: Conflict Analysis of Multi-source SST Distribution. *High Performance Computing and Applications*, 479-484, http://dx.doi.org/10.1007/978-3-642-11842-5_66.
Xu, X. H., G. H. Liao, and D. F. Xu, 2010: Analysis of the Anticyclone eddy in the Northwest Pacific with Argo Drifter Data (in Chinese). *Journal of Marine Science* **28,** 1-13,
Xue, Y., B. Huang, Z.-Z. Hu, A. Kumar, C. Wen, D. Behringer, and S. Nadiga, 2010: An assessment of oceanic variability in the NCEP climate forecast system reanalysis. *Climate Dynamics*, **37,** 2511-2539, http://dx.doi.org/10.1007/s00382-010-0954-4
Yan, Y., Y. Qi, and W. Zhou, 2010: Interannual heat content variability in the South China Sea and its response to ENSO. *Dynamics of Atmospheres and Oceans*, **50,** 400-414, http://dx.doi.org/10.1016/j.dynatmoce.2010.07.002

Yang, S.-C., M. Rienecker, and C. Keppenne, 2010: The Impact of Ocean Data Assimilation on Seasonal-to-Interannual Forecasts: A Case Study of the 2006 El Nino Event. *Journal of Climate*, **23,** 4080-4095, http://dx.doi.org/10.1175/2010JCLI3319.1

Yang, S. L., G. F. Zhou, and W. F. Zhou, 2010: The relationship between skipjack Katsuwonus pelamis catch and water temperature and surface salinity in the west-central Pacific Ocean based on Argo data (in Chinese). *Journal of Dalian Fisheries University*, **25,** 34-40,

Yang, Y. J., Y. F. Fu, and L. Sun, 2010: Responses of the upper ocean to Typhoon Tingting observed from multiplatform satellites and Argo float (in Chinese). *Journal of university of science and technology of China*, **40,** 1-7,

Yang, Y. J., L. A. Sun, Q. Liu, T. Xian, and Y. F. Fu, 2010: The biophysical responses of the upper ocean to the typhoons Namtheun and Malou in 2004. *International Journal of Remote Sensing*, **31,** 4559-4568, http://dx.doi.org/10.1080/01431161.2010.485140

Yin, X., F. Qiao, Y. Yang, and C. Xia, 2010: An ensemble adjustment Kalman filter study for Argo data. *Chinese Journal of Oceanology and Limnology*, **28,** 626-635, http://dx.doi.org/10.1007/s00343-010-9017-2

Yin, X. Q., F. L. Qiao, and C. S. Xia, 2010: The Compare of the Temperature in Gulf of Aden between model forecast and Argo Profiling Data (in Chinese). *Advance in Marine Science*, **28,** 42-48,

You, Y., 2010: Thermocline circulation and ventilation of the Japan/East Sea, part II: A source water-mass mixing (SWAM) model. *Deep Sea Research Part I: Oceanographic Research Papers*, **57,** 1049-1078, http://dx.doi.org/10.1016/j.dsr.2010.05.001

You, Y., K.-I. Chang, J.-Y. Yun, and K.-R. Kim, 2010: Thermocline circulation and ventilation of the East/Japan Sea, part I: Water-mass characteristics and transports. *Deep Sea Research Part II: Topical Studies in Oceanography*, **57,** 1221-1246, http://dx.doi.org/10.1016/j.dsr2.2009.12.011

Yu, T., G. J. Han, C. L. Guan, and Z. G. Deng, 2010: Several Important Issues in Salinity Quality Control of Argo Float. *Marine Geodesy*, **33,** 424-436, http://dx.doi.org/10.1080/01490419.2010.518496

Zeng, L. L., D. X. Wang, Y. Du, and P. Shi, 2010: Mesoscale structure of the central South China Sea detected by SCSMEX Buoy and Argo float. *Chinese Journal of Oceanology and Limnology*, **28,** 1102-1111, http://dx.doi.org/10.1007/s00343-010-0146-4

Zhang, S. and A. Rosati, 2010: An Inflated Ensemble Filter for Ocean Data Assimilation with a Biased Coupled GCM. *Monthly Weather Review*, **138,** 3905-3931, http://dx.doi.org/10.1175/2010MWR3326.1

Zhang, S., A. Rosati, and T. Delworth, 2010: The Adequacy of Observing Systems in Monitoring the Atlantic Meridional Overturning Circulation and North Atlantic Climate. *Journal of Climate*, **23,** 5311-5324, http://dx.doi.org/10.1175/2010jcli3677.1

Zhang, S. M., Y. M. Wu, and S. L. Yang, 2010: Analysis of Spatial Distribution and Change about Argo Floats Observation Numbers (in Chinese). *Ocean Technology*, **29,** 108-114,

Zhang, X. and M. J. McPhaden, 2010: Surface Layer Heat Balance in the Eastern Equatorial Pacific Ocean on Interannual Time Scales: Influence of Local versus Remote Wind Forcing. *Journal of Climate*, **23,** 4375-4394,

http://dx.doi.org/10.1175/2010JCLI3469.1
Zheng, Y., T. Shinoda, G. N. Kiladis, J. Lin, E. J. Metzger, H. E. Hurlburt, and B. S. Giese, 2010: Upper-Ocean Processes under the Stratus Cloud Deck in the Southeast Pacific Ocean. *Journal of Physical Oceanography*, **40,** 103-120, http://dx.doi.org/10.1175%2F2009JPO4213.1
Zhou, H., D. L. Yuan, P. F. Guo, M. C. Shi, and Q. L. Zhang, 2010: Meso-scale circulation at the intermediate-depth east of Mindanao observed by Argo profiling floats. *Science China-Earth Sciences*, **53,** 432-440, http://dx.doi.org/10.1007/s11430-009-0196-7
Zhou, H., D. L. Yuan, R. X. Li, and L. He, 2010: The western South China Sea currents from measurements by Argo profiling floats during October to December 2007. *Chinese Journal of Oceanology and Limnology*, **28,** 398-406, http://dx.doi.org/10.1007/s00343-010-9052-z
Zika, J. D., T. J. McDougall, and B. M. Sloyan, 2010: Weak Mixing in the Eastern North Atlantic: An Application of the Tracer-Contour Inverse Method. *Journal of Physical Oceanography*, **40,** 1881-1893, http://dx.doi.org/10.1175/2010JPO4360.1

2009 (121)

Aarestrup, K., F. Økland, M. M. Hansen, D. Righton, P. Gargan, M. Castonguay, L. Bernatchez, P. Howey, H. Sparholt, M. I. Pedersen, and R. S. McKinley, 2009: Oceanic Spawning Migration of the European Eel (Anguilla anguilla). *Science*, **325,** 1660, http://dx.doi.org/10.1126/science.1178120
Baehr, J., S. Cunnningham, H. Haak, P. Heimbach, T. Kanzow, and J. Marotzke, 2009: Observed and simulated estimates of the meridional overturning circulation at 26.5 N in the Atlantic. *Ocean Science*, **5,** 575-589, http://dx.doi.org/10.5194/os-5-575-2009
Ballabrera-Poy, J., B. Mourre, E. Garcia-Ladona, A. Turiel, and J. Font, 2009: Linear and non-linear T–S models for the eastern North Atlantic from Argo data: Role of surface salinity observations. *Deep Sea Research Part I: Oceanographic Research Papers*, **56,** 1605-1614, https://doi.org/10.1016/j.dsr.2009.05.017
Balmaseda, M. and D. Anderson, 2009: Impact of initialization strategies and observations on seasonal forecast skill. *Geophysical Research Letters*, **36**, http://dx.doi.org/10.1029/2008gl035561
Bell, M. J., M. Lefebvre, P. Y. Le Traon, N. Smith, and K. Wilmer-Becker, 2009: GODAE The Global Ocean Data Assimilation Experiment. *Oceanography*, **22,** 14-21, http://dx.doi.org/10.5670/oceanog.2009.62
Bhaskar, T. V. S. U., S. H. Rahman, I. D. Pavan, M. Ravichandran, and S. Nayak, 2009: Comparison of AMSR-E and TMI sea surface temperature with Argo near-surface temperature over the Indian Ocean. *International Journal of Remote Sensing*, **30,** 2669-2684, http://dx.doi.org/10.1080/01431160802555796
Bishop, J. K. B., 2009: Autonomous Observations of the Ocean Biological Carbon Pump. *Oceanography*, **22,** 182-193, http://dx.doi.org/10.5670/oceanog.2009.48
Bishop, J. K. B. and T. J. Wood, 2009: Year-round observations of carbon biomass and flux variability in the Southern Ocean. *Global Biogeochemical Cycles*, **23**,

http://dx.doi.org/10.1029/2008GB003206
Bosc, C., T. Delcroix, and C. Maes, 2009: Barrier layer variability in the western Pacific warm pool from 2000 to 2007. *Journal of Geophysical Research: Oceans*, **114,** 14, http://dx.doi.org/10.1029/2008jc005187
Boutin, J. and L. Merlivat, 2009: New in situ estimates of carbon biological production rates in the Southern Ocean from CARIOCA drifter measurements. *Geophysical Research Letters*, **36,** 6, http://dx.doi/org/10.1029/2009gl038307
Brasseur, P., N. Gruber, R. Barciela, K. Brander, M. Doron, A. El Moussaoui, A. J. Hobday, M. Huret, A. S. Kremeur, P. Lehodey, R. Matear, C. Moulin, R. Murtugudde, I. Senina, and E. Svendsen, 2009: Integrating Biogeochemistry and Ecology Into Ocean Data Assimilation Systems. *Oceanography*, **22,** 206-215, http://dx.doi.org/10.5670/oceanog.2009.80
Brassington, G. B. and P. Divakaran, 2009: The theoretical impact of remotely sensed sea surface salinity observations in a multi-variate assimilation system. *Ocean Modelling*, **27,** 70-81, http://dx.doi.org/10.1016/j.ocemod.2008.12.005
Cazenave, A., and W. Llovel (2009), Contemporary Sea Level Rise, *Annual Review of Marine Science*, *2*(1), 145-173, doi: https://doi.org/10.1146/annurev-marine-120308-081105.
Cai, W., A. Pan, D. Roemmich, T. Cowan, and X. Guo, 2009: Argo profiles a rare occurrence of three consecutive positive Indian Ocean Dipole events, 2006-2008. *Geophysical Research Letters*, **36**, http://dx.doi.org/10.1029/2008gl037038
Cazenave, A., K. Dominh, S. Guinehut, E. Berthier, W. Llovel, G. Ramillien, M. Ablain, and G. Larnicol, 2009: Sea level budget over 2003-2008: A reevaluation from GRACE space gravimetry, satellite altimetry and Argo. *Global and Planetary Change*, **65,** 83-88, http://dx.doi.org/10.1016/j.gloplacha.2008.10.004
Chang, Y.-S., A. J. Rosati, S. Zhang, and M. J. Harrison, 2009: Objective analysis of monthly temperature and salinity for the world ocean in the 21st century: Comparison with World Ocean Atlas and application to assimilation validation. *Journal of Geophysical Research: Oceans*, **114**, http://dx.doi.org/10.1029/2008jc004970
Chowdary, J. S., C. Gnanaseelan, and S. P. Xie, 2009: Westward propagation of barrier layer formation in the 2006-07 Rossby wave event over the tropical southwest Indian Ocean. *Geophysical Research Letters*, **36**, http://dx.doi.org/10.1029/2008gl036642
Ciasto, L. M. and D. W. J. Thompson, 2009: Observational Evidence of Reemergence in the Extratropical Southern Hemisphere. *Journal of Climate*, **22,** 1446-1453, http://dx.doi.org/10.1175/2008jcli2545.1
Clark, C. and S. Wilson, 2009: An Overview of Global Observing Systems Relevant to GODAE. *Oceanography*, **22,** 22-33, http://dx.doi.org/10.5670/oceanog.2009.63
Cravatte, S., T. Delcroix, D. Zhang, M. McPhaden, and J. Leloup, 2009: Observed freshening and warming of the western Pacific Warm Pool. *Climate Dynamics*, **33,** 565-589, http://dx.doi.org/10.1007/s00382-009-0526-7
Cummings, J. A., L. Bertino, P. Brasseur, I. Fukumori, M. Kamachi, M. J. Martin, K. Mogensen, P. Oke, C. E. Testut, J. Verron, and A. Weaver, 2009: OCEAN DATA ASSIMILATION SYSTEMS FOR GODAE. *Oceanography*, **22,** 96-109, http://dx.doi.org/10.5670/oceanog.2009.69
Daget, N., A. T. Weaver, and M. A. Balmaseda, 2009: Ensemble estimation of

background-error variances in a three-dimensional variational data assimilation system for the global ocean. *Quarterly Journal of the Royal Meteorological Society*, **135,** 1071-1094, http://dx.doi.org/10.1002/qj.412

Di Iorio, D. and C. Sloan, 2009: Upper ocean heat content in the Nordic seas. *Journal of Geophysical Research: Oceans*, **114**, http://dx.doi.org/10.1029/2007jc004674

Dobricic, S., 2009: A Sequential Variational Algorithm for Data Assimilation in Oceanography and Meteorology. *Monthly Weather Review*, **137,** 269-287, http://dx.doi.org/10.1175/2008mwr2500.1

Dombrowsky, E., L. Bertino, G. B. Brassington, E. P. Chassignet, F. Davidson, H. E. Hurlburt, M. Kamachi, T. Lee, M. J. Martin, S. Mei, and M. Tonani, 2009: GODAE Systems in Operation. *Oceanography*, **22,** 80-95, http://dx.doi.org/10.5670/oceanog.2009.68

Dong, S., S. L. Garzoli, and M. Baringer, 2009: An assessment of the seasonal mixed layer salinity budget in the Southern Ocean. *J. Geophys. Res.*, **114,** C12001, http://dx.doi.org/10.1029/2008JC005258

Douglass, D. H. and R. S. Knox, 2009: Ocean heat content and Earth's radiation imbalance. *Physics Letters A*, **373,** 3296-3300, http://dx.doi.org/10.1016/j.physleta.2009.07.023

Douglass, E., D. Roemmich, and D. Stammer, 2009: Data Sensitivity of the ECCO State Estimate in a Regional Setting. *Journal of Atmospheric and Oceanic Technology*, **26,** 2420-2443, http://dx.doi.org/10.1175/2009jtecho641.1

Downes, S. M., N. L. Bindoff, and S. R. Rintoul, 2009: Impacts of Climate Change on the Subduction of Mode and Intermediate Water Masses in the Southern Ocean. *Journal of Climate*, **22,** 3289-3302, http://dx.doi.org/10.1175/2008JCLI2653.1

Duncan, B. and W. Han, 2009: Indian Ocean intraseasonal sea surface temperature variability during boreal summer: Madden-Julian Oscillation versus submonthly forcing and processes. *J. Geophys. Res.*, **114**, http://dx.doi.org/10.1029/2008JC004958

Dunn, M. R., G. J. Rickard, P. J. H. Sutton, and I. J. Doonan, 2009: Nursery grounds of the orange roughy around New Zealand. *ICES Journal of Marine Science: Journal du Conseil*, **66,** 871-885, http://dx.doi.org/10.1093/icesjms/fsp093

Dushaw, B. D., P. F. Worcester, W. H. Munk, R. C. Spindel, J. A. Mercer, B. M. Howe, K. Metzger, T. G. Birdsall, R. K. Andrew, M. A. Dzieciuch, B. D. Cornuelle, and D. Menemenlis, 2009: A decade of acoustic thermometry in the North Pacific Ocean. *Journal of Geophysical Research-Oceans*, **114**, http://dx.doi.org/10.1029/2008JC005124

Freeland, H. J. and D. Gilbert, 2009: Estimate of the Steric Contribution to Global Sea Level Rise from a Comparison of the WOCE One-Time Survey with 2006-2008 Argo Observations. *Atmosphere-Ocean*, **47,** 292-298, http://dx.doi.org/10.3137/oc312.2009

Friedrich, T. and A. Oschlies, 2009: Basin-scale pCO(2) maps estimated from ARGO float data: A model study. *Journal of Geophysical Research: Oceans*, **114,** 9, http://dx.doi.org/10.1029/2009jc005322

Funk, A., P. Brandt, and T. Fischer, 2009: Eddy diffusivities estimated from observations in the Labrador Sea. *Journal of Geophysical Research: Oceans*, **114,** 11, http://dx.doi.org/10.1029/2008jc005098

Gaillard, F., E. Autret, V. Thierry, P. Galaup, C. Coatanoan, and T. Loubrieu, 2009: Quality

Control of Large Argo Datasets. *Journal of Atmospheric and Oceanic Technology*, **26,** 337-351, http://dx.doi.org/10.1175/2008jtecho552.1

Gemmell, A. L., G. C. Smith, K. Haines, and J. D. Blower, 2009: Validation of ocean model syntheses against hydrography using a new web application. *Journal of Operational Oceanography*, **2,** 29-41, http://www.ingentaconnect.com/content/tandf/joo/2009/00000002/00000002/art00003

Guinehut, S., C. Coatanoan, A. L. Dhomps, P. Y. Le Traon, and G. Larnicol, 2009: On the Use of Satellite Altimeter Data in Argo Quality Control. *Journal of Atmospheric and Oceanic Technology*, **26,** 395-402, http://dx.doi.org/10.1175/2008jtecho648.1

Henson, S. A., J. P. Dunne, and J. L. Sarmiento, 2009: Decadal variability in North Atlantic phytoplankton blooms. *J. Geophys. Res.*, **114**, http://dx.doi.org/10.1029/2008JC005139

Higginson, S., K. R. Thompson, and Y. Liu, 2009: Estimating ocean climatologies for short periods: A simple technique for removing the effect of eddies from temperature and salinity profiles. *Geophysical Research Letters*, **36,** 4, http://dx.doi.org/10.1029/2009gl039647

Holte, J. and L. Talley, 2009: A New Algorithm for Finding Mixed Layer Depths with Applications to Argo Data and Subantarctic Mode Water Formation. *Journal of Atmospheric and Oceanic Technology*, **26,** 1920-1939, http://dx.doi.org/10.1175/2009jtecho543.1

Hosoda, S., T. Suga, N. Shikama, and K. Mizuno, 2009: Global Surface Layer Salinity Change Detected by Argo and Its Implication for Hydrological Cycle Intensification. *Journal of Oceanography*, **65,** 579-586, http://dx.doi.org/10.1007/s10872-009-0049-1

Hurlburt, H. E., G. B. Brassington, Y. Drillet, M. Kamachi, M. Benkiran, R. Bourdalle-Badie, E. P. Chassignet, G. A. Jacobs, O. Le Galloudec, J. M. Lellouche, E. J. Metzger, P. R. Oke, T. F. Pugh, A. Schiller, O. M. Smedstad, B. Tranchant, H. Tsujino, N. Usui, and A. J. Wallcraft, 2009: High-Resolution Global and Basin-Scale Ocean Analyses and Forecasts. *Oceanography*, **22,** 110-127, http://dx.doi.org/10.5670/oceanog.2009.70

Ishii, M. and M. Kimoto, 2009: Reevaluation of historical ocean heat content variations with time-varying XBT and MBT depth bias corrections. *Journal of Oceanography*, **65,** 287-299, http://dx.doi.org/10.1007/s10872-009-0027-7

Jackson, J. M., P. G. Myers, and D. Ianson, 2009: An Examination of Mixed Layer Sensitivity in the Northeast Pacific Ocean from July 2001-July 2005 Using the General Ocean Turbulence Model and Argo Data. *Atmosphere-Ocean*, **47,** 139-153, http://dx.doi.org/10.3137/oc308.2009

Janout, M. A., T. J. Weingartner, S. R. Okkonen, T. E. Whitledge, and D. L. Musgrave, 2009: Some characteristics of Yakutat Eddies propagating along the continental slope of the northern Gulf of Alaska. *Deep Sea Research Part Ii: Topical Studies in Oceanography*, **56,** 2444-2459, http://dx.doi.org/10.1016/j.dsr2.2009.02.006

Jayne, S. R., N. G. Hogg, S. N. Waterman, L. Rainville, K. A. Donohue, D. R. Watts, K. L. Tracey, J. L. McClean, M. E. Maltrud, B. Qiu, S. M. Chen, and P. Hacker, 2009: The Kuroshio Extension and its recirculation gyres. *Deep Sea Research Part I: Oceanographic Research Papers*, **56,** 2088-2099, http://dx.doi.org/10.1016/j.dsr.2009.08.006

Johnson, G. C. and K. A. Kearney, 2009: Ocean climate change fingerprints attenuated by salt fingering? *Geophysical Research Letters*, **36**, http://dx.doi.org/10.1029/2009GL040697

Johnson, G. C. and J. M. Lyman, 2009: Global Oceans: Sea Surface Salinity. In State of the Climate in 2008. *Bulletin of the American Meteorological Society*, **90,** S1-S196, http://dx.doi.org/10.1175/BAMS-90-8-StateoftheClimate

Johnson, G. C., J. M. Lyman, J. Willis, S. Levitus, T. P. Boyer, J. I. Antonov, C. Schmid, and G. J. Goni, 2009: Global Oceans: Ocean Heat Content. In the State of the Climate in 2008. *Bulletin of the American Meteorological Society*, **90,** S1-S196, http://dx.doi.org/10.1175/BAMS-90-8-StateoftheClimate

Johnson, K. S., W. M. Berelson, E. S. Boss, Z. Chase, H. Claustre, S. R. Emerson, N. Gruber, A. Kortzinger, M. J. Perry, and S. C. Riser, 2009: Observing Biogeochemical Cycles at Global Scales with Profiling Floats and Gliders Prospects for a Global Array. *Oceanography*, **22,** 216-225, http://dx.doi.org/10.5670/oceanog.2009.81

Kamenkovich, I., W. Cheng, E. S. Sarachik, and D. E. Harrison, 2009: Simulation of the Argo observing system in an ocean general circulation model. *Journal of Geophysical Research: Oceans*, **114,** 16, http://dx.doi.org/10.1029/2008jc005184

Kara, A. B., R. W. Helber, T. P. Boyer, and J. B. Elsner, 2009: Mixed layer depth in the Aegean, Marmara, Black and Azov Seas: Part I: General features. *Journal of Marine Systems*, **78,** S169-S180, http://dx.doi.org/10.1016/j.jmarsys.2009.01.022

Kieke, D., B. Klein, L. Stramma, M. Rhein, and K. P. Koltermann, 2009: Variability and propagation of Labrador Sea Water in the southern subpolar North Atlantic. *Deep Sea Research Part I: Oceanographic Research Papers*, **56,** 1656-1674, http://dx.doi.org/10.1016/j.dsr.2009.05.010

Kim, Y. H., K.-I. Chang, J. J. Park, S. K. Park, S.-H. Lee, Y.-G. Kim, K. T. Jung, and K. Kim, 2009: Comparison between a reanalyzed product by 3-dimensional variational assimilation technique and observations in the Ulleung Basin of the East/Japan Sea. *Journal of Marine Systems*, **78,** 249-264, http://dx.doi.org/10.1016/j.jmarsys.2009.02.017

Kirchner, K., M. Rhein, S. Huttl-Kabus, and C. W. Boning, 2009: On the spreading of South Atlantic Water into the Northern Hemisphere. *Journal of Geophysical Research: Oceans*, **114,** 12, http://dx.doi.org/10.1029/2008jc005165

Kobayashi, T., B. King, and N. Shikama, 2009: An estimation of the average lifetime of the latest model of APEX floats. *Journal of Oceanography*, **65,** 81-89, http://dx.doi.org/10.1007/s10872-009-0008-x

Kobayashi, T., T. Namakura, S. Minato, and N. Shikama, 2009: The problem of pressure bias of Argo data and its effect. *Oceanography in Japan*, **18,** 351-391,

Korres, G., K. Nittis, I. Hoteit, and G. Triantafyllou, 2009: A high resolution data assimilation system for the Aegean Sea hydrodynamics. *Journal of Marine Systems*, **77,** 325-340, http://dx.doi.org/10.1016/j.jmarsys.2007.12.014

Lankhorst, M., D. Fratantoni, M. Ollitrault, P. Richardson, U. Send, and W. Zenk, 2009: The mid-depth circulation of the northwestern tropical Atlantic observed by floats. *Deep Sea Research Part I: Oceanographic Research Papers*, **56,** 1615-1632, http://dx.doi.org/10.1016/j.dsr.2009.06.002

Le Hénaff, M., P. De Mey, and P. Marsaleix, 2009: Assessment of observational networks with

the Representer Matrix Spectra method-application to a 3D coastal model of the Bay of Biscay. *Ocean Dynamics*, **59,** 3-20, http://dx.doi.org/10.1007/s10236-008-0144-7

Le Traon, P. Y., G. Larnicol, S. Guinehut, S. Pouliquen, A. Bentamy, D. Roemmich, C. Donlon, H. Roquet, G. Jacobs, D. Griffin, F. Bonjean, N. Hoepffner, and L. A. Breivik, 2009: DATA ASSEMBLY AND PROCESSING FOR Operational Oceanography 10 YEARS OF ACHIEVEMENTS. *Oceanography*, **22,** 56-69, http://dx.doi.org/10.5670/oceanog.2009.66

Lehmann, M. K., K. Fennel, and R. He, 2009: Statistical validation of a 3-D bio-physical model of the western North Atlantic. *Biogeosciences*, **6,** 1961-1974, https://doi.org/10.5194/bg-6-1961-2009

Leuliette, E. W. and L. Miller, 2009: Closing the sea level rise budget with altimetry, Argo, and GRACE. *Geophysical Research Letters*, **36**, http://dx.doi.org/10.1029/2008gl036010

Levitus, S., J. I. Antonov, T. P. Boyer, R. A. Locarnini, H. E. Garcia, and A. V. Mishonov, 2009: Global ocean heat content 1955-2008 in light of recently revealed instrumentation problems. *Geophysical Research Letters*, **36**, http://dx.doi.org/10.1029/2008gl037155

Lin, I. I., I. F. Pun, and C. C. Wu, 2009: Upper-Ocean Thermal Structure and the Western North Pacific Category 5 Typhoons. Part II: Dependence on Translation Speed. *Monthly Weather Review*, **137,** 3744-3757, http://dx.doi.org/10.1175/2009mwr2713.1

Liu, Y. M. and K. R. Thompson, 2009: Predicting Mesoscale Variability of the North Atlantic Using a Physically Motivated Scheme for Assimilating Altimeter and Argo Observations. *Monthly Weather Review*, **137,** 2223-2237, http://dx.doi.org/10.1175/2008mwr2625.1

Maze, G., G. Forget, M. Buckley, J. Marshall, and I. Cerovecki, 2009: Using Transformation and Formation Maps to Study the Role of Air-Sea Heat Fluxes in North Atlantic Eighteen Degree Water Formation. *Journal of Physical Oceanography*, **39,** 1818-1835, http://dx.doi.org/10.1175%2F2009JPO3985.1

McPhaden, M. J., G. R. Foltz, T. Lee, V. S. N. Murty, M. Ravichandran, G. A. Vecchi, J. Vialard, J. D. Wiggert, and L. Yu, 2009: Ocean-Atmosphere Interactions During Cyclone Nargis. *EOS*, **90**, http://dx.doi.org/10.1029/2009EO070001

Mertens, C., M. Rhein, M. Walter, and K. Kirchner, 2009: Modulation of the inflow into the Caribbean Sea by North Brazil Current rings. *Deep Sea Research Part I: Oceanographic Research Papers*, **56,** 1057-1076, http://dx.doi.org/10.1016/j.dsr.2009.03.002

Mignot, J., C. de Boyer Montegut, and M. Tomczak, 2009: On the porosity of barrier layers. *Ocean Science*, **5,** 379-387, http://dx.doi.org/10.5194/os-5-379-2009

Naveira Garabato, A. C., L. Jullion, D. P. Stevens, K. J. Heywood, and B. A. King, 2009: Variability of Subantarctic Mode Water and Antarctic Intermediate Water in the Drake Passage during the Late-Twentieth and Early-Twenty-First Centuries. *Journal of Climate*, **22,** 3661-3688, http://dx.doi.org/10.1175%2F2009JCLI2621.1

Nisha, K., S. A. Rao, V. V. Gopalakrishna, R. R. Rao, M. S. Girishkumar, T. Pankajakshan, M. Ravichandran, S. Rajesh, K. Girish, Z. Johnson, M. Anuradha, S. S. M. Gavaskar, V. Suneel, and S. M. Krishna, 2009: Reduced Near-Surface Thermal Inversions in

2005-06 in the Southeastern Arabian Sea (Lakshadweep Sea). *Journal of Physical Oceanography*, **39,** 1184-1199, http://dx.doi.org/10.1175/2008jpo3879.1

Oddo, P., M. Adani, N. Pinardi, C. Fratianni, M. Tonani, and D. Pettenuzzo, 2009: A nested Atlantic-Mediterranean Sea general circulation model for operational forecasting. *Ocean Science*, **5,** 461-473, http://dx.doi.org/10.5194/os-5-461-2009

Ohno, Y., N. Iwasaka, F. Kobashi, and Y. Sato, 2009: Mixed layer depth climatology of the North Pacific based on Argo observations. *Journal of Oceanography*, **65,** 1-16, http://dx.doi.org/10.1007/s10872-009-0001-4

Oka, E., 2009: Seasonal and interannual variation of North Pacific Subtropical Mode Water in 2003-2006. *Journal of Oceanography*, **65,** 151-164, http://dx.doi.org/10.1007/s10872-009-0015-y

Oka, E., K. Toyama, and T. Suga, 2009: Subduction of North Pacific central mode water associated with subsurface mesoscale eddy. *Geophysical Research Letters*, **36,** 4, http://dx.doi.org/10.1029/2009gl037540

Oke, P. R., M. A. Balmaseda, M. Benkiran, J. A. Cummings, E. Dombrowsky, Y. Fujii, S. Guinehut, G. Larnicol, P. Y. Le Traon, and M. J. Martin, 2009: Observing System Evaluations Using Godae Systems. *Oceanography*, **22,** 144-153, http://dx.doi.org/10.5670/oceanog.2009.72

Oke, P. R., P. Sakov, and E. Schulz, 2009: A comparison of shelf observation platforms for assimilation in an eddy-resolving ocean model. *Dynamics of Atmospheres and Oceans*, **48,** 121-142, http://dx.doi.org/10.1016/j.dynatmoce.2009.04.002

Owens, W. B. and A. P. S. Wong, 2009: An improved calibration method for the drift of the conductivity sensor on autonomous CTD profiling floats by theta-S climatology. *Deep Sea Research Part I: Oceanographic Research Papers*, **56,** 450-457, http://dx.doi.org/10.1016/j.dsr.2008.09.008

Palmer, M. D. and K. Haines, 2009: Estimating Oceanic Heat Content Change Using Isotherms. *Journal of Climate*, **22,** 4953-4969, http://dx.doi.org/10.1175/2009jcli2823.1

Prasad, S., T. Aung, and A. Singh, 2009: Analysis of Water Properties and Geostrophic Currents in Fiji Waters Before and After Tropical Cyclone Gene. *American Journal of Environmental Sciences*, **5,** 455-460, http://dx.doi.org/10.3844/ajessp.2009.455.460

Price, J. F., 2009: Metrics of hurricane-ocean interaction: vertically-integrated or vertically-averaged ocean temperature? *Ocean Science*, **5,** 351-368, http://dx.doi.org/10.5194/os-5-351-2009

Rao, A. D., M. Joshi, and M. Ravichandran, 2009: Observed low-salinity plume off Gulf of Khambhat, India, during post-monsoon period. *Geophysical Research Letters*, **36**, http://dx.doi.org/10.1029/2008gl036091

Reddy, N., T. Aung, and A. Singh, 2009: Effect of the 2004 'Boxing Day' Tsunami on Water Properties and Currents in the Bay of Bengal. *American Journal of Environmental Sciences*, **5,** 247-255, http://dx.doi.org/10.3844/ajessp.2009.247.255

Ren, L. and S. C. Riser, 2009: Seasonal salt budget in the northeast Pacific Ocean. *Journal of Geophysical Research: Oceans*, **114,** 11, http://dx.doi.org/10.1029/2009jc005307

Resplandy, L., M. Levy, F. d'Ovidio, and L. Merlivat, 2009: Impact of submesoscale variability in estimating the air-sea CO2 exchange: Results from a model study of the POMME

experiment. *Global Biogeochemical Cycles*, **23,** 19, http://dx.doi.org/10.1029/2008gb003239

Roemmich, D. and J. Gilson, 2009: The 2004-2008 mean and annual cycle of temperature, salinity, and steric height in the global ocean from the Argo Program. *Progress in Oceanography*, **82,** 81-100, http://dx.doi.org/10.1016/j.pocean.2009.03.004

Roemmich, D., G. C. Johnson, S. Riser, R. Davis, J. Gilson, W. B. Owens, S. L. Garzoli, C. Schmid, and M. Ignaszewski, 2009: The Argo Program: Observing the global oceans with profiling floats. *Oceanography*, **22,** 24-33, http://dx.doi.org/10.5670/oceanog.2009.36

Roemmich, D. and A. S. Team, 2009: Argo: The Challenge of Continuing 10 Years of Progress. *Oceanography*, **22**, http://dx.doi.org/10.5670/oceanog.2009.65

Roquet, F., Y. H. Park, C. Guinet, F. Bailleul, and J. B. Charrassin, 2009: Observations of the Fawn Trough Current over the Kerguelen Plateau from instrumented elephant seals. *Journal of Marine Systems*, **78,** 377-393, http://dx.doi.org/10.1016/j.jmarsys.2008.11.017

Salon, S., P. M. Poulain, E. Mauri, R. Gerin, D. Adami, and F. Davoli, 2009: Remote Oceanographic Instrumentation Integreated in a GRID Environment. *Computational Methods in Science and Technology*, **15,** 49-55, http://dx.doi.org/10.12921/cmst.2009.15.01.49-55

Saraceno, M., C. Provost, and U. Zajaczkovski, 2009: Long-term variation in the anticyclonic ocean circulation over the Zapiola Rise as observed by satellite altimetry: Evidence of possible collapses. *Deep Sea Research Part I: Oceanographic Research Papers*, **56,** 1077-1092, http://dx.doi.org/10.1016/j.dsr.2009.03.005

Sato, K. and T. Suga, 2009: Structure and Modification of the South Pacific Eastern Subtropical Mode Water. *Journal of Physical Oceanography*, **39,** 1700-1714, http://dx.doi.org/10.1175/2008jpo3940.1

Schmid, C. and S. L. Garzoli, 2009: New observations of the spreading and variability of the Antarctic Intermediate Water in the Atlantic. *Journal of Marine Research*, **67,** 815-843, http://dx.doi.org/10.1357/002224009792006151

Shimizu, Y., K. Takahashi, S. I. Ito, S. Kakehi, H. Tatebe, I. Yasuda, A. Kusaka, and T. Nakayama, 2009: Transport of subarctic large copepods from the Oyashio area to the mixed water region by the coastal Oyashio intrusion. *Fisheries Oceanography*, **18,** 312-327, http://dx.doi.org/10.1111/j.1365-2419.2009.00513.x

Skachko, S., J. M. Brankart, B. F. Castruccio, P. Brasseur, and J. Verron, 2009: Improved Turbulent Air-Sea Flux Bulk Parameters for Controlling the Response of the Ocean Mixed Layer: A Sequential Data Assimilation Approach. *Journal of Atmospheric and Oceanic Technology*, **26,** 538-555, http://dx.doi.org/10.1175/2008jtecho603.1

Smith, G. C. and K. Haines, 2009: Evaluation of the S(T) assimilation method with the Argo dataset. *Quarterly Journal of the Royal Meteorological Society*, **135,** 739-756, http://dx.doi.org/10.1002/qj.395

Sokolov, S. and S. R. Rintoul, 2009: Circumpolar structure and distribution of the Antarctic Circumpolar Current fronts: 1. Mean circumpolar paths. *Journal of Geophysical Research: Oceans*, **114,** 19, http://dx.doi.org/10.1029/2008jc005108

Somavilla, R., C. Gonzalez-Pola, C. Rodriguez, S. A. Josey, R. F. Sanchez, and A. Lavin, 2009:

Large changes in the hydrographic structure of the Bay of Biscay after the extreme mixing of winter 2005. *J. Geophys. Res.*, **114**, http://dx.doi.org/10.1029/2008JC004974

Srinivasan, A., Z. Garraffo, and M. Iskandarani, 2009: Abyssal circulation in the Indian Ocean from a 1/12o resolution global hindcast. *Deep Sea Research Part I: Oceanographic Research Papers*, **56,** 1907-1926, http://dx.doi.org/10.1016/j.dsr.2009.07.001

Sun, L., Y.-J. Yang, and Y.-F. Fu, 2009: Impacts of Typhoons on Kuroshio Large Meander: Observation Evidences. *Atmospheric and Oceanic Science Letters*, **2,** 45-50, http://dx.doi.org/10.1080/16742834.2009.11446772

Sweet, W. V., J. M. Morrison, Y. Liu, D. Kamykowski, B. A. Schaeffer, L. Xie, and S. Banks, 2009: Tropical instability wave interactions within the Galapagos Archipelago. *Deep Sea Research Part I: Oceanographic Research Papers*, **56,** 1217-1229, http://dx.doi.org/10.1016/j.dsr.2009.02.005

Takano, A., H. Yamazaki, T. Nagai, and O. Honda, 2009: A Method to Estimate Three-Dimensional Thermal Structure from Satellite Altimetry Data. *Journal of Atmospheric and Oceanic Technology*, **26,** 2655-2664, http://dx.doi.org/10.1175/2009jtecho669.1

Talone, M., A. Camps, B. Mourre, R. Sabia, M. Vall-Ilossera, J. Gourrion, C. Gabarro, and J. Font, 2009: Simulated SMOS Levels 2 and 3 Products: The Effect of Introducing ARGO Data in the Processing Chain and Its Impact on the Error Induced by the Vicinity of the Coast. *Ieee Transactions on Geoscience and Remote Sensing*, **47,** 3041-3050, http://dx.doi.org/10.1109/tgrs.2008.2011618

Telszewski, M., A. Chazottes, U. Schuster, A. J. Watson, C. Moulin, D. C. E. Bakker, M. González-Dávila, T. Johannessen, A. Körtzinger, H. Lüger, A. Olsen, A. Omar, X. A. Padin, A. F. Ríos, T. Steinhoff, M. Santana-Casiano, D. W. R. Wallace, and R. Wanninkhof, 2009: Estimating the monthly pCO2 distribution in the North Atlantic using a self-organizing neural network. *Biogeosciences*, **6,** 1405-1421, http://dx.doi.org/10.5194/bg-6-1405-2009

Thomson, R. E. and I. V. Fine, 2009: A Diagnostic Model for Mixed Layer Depth Estimation with Application to Ocean Station P in the Northeast Pacific. *Journal of Physical Oceanography*, **39,** 1399-1415, http://dx.doi.org/10.1175%2F2008JPO3984.1

Tonani, M., N. Pinardi, C. Fratianni, J. Pistoia, S. Dobricic, S. Pensieri, M. de Alfonso, and K. Nittis, 2009: Mediterranean Forecasting System: forecast and analysis assessment through skill scores. *Ocean Science*, **5,** 649-660, http://dx.doi.org/10.5194/os-5-649-2009

Trossman, D. S., L. Thompson, K. A. Kelly, and Y. O. Kwon, 2009: Estimates of North Atlantic Ventilation and Mode Water Formation for Winters 2002-06. *Journal of Physical Oceanography*, **39,** 2600-2617, http://dx.doi.org/10.1175/2009jpo3930.1

Tummala, S. K., R. S. Mupparthy, M. N. Kumar, and S. R. Nayak, 2009: Phytoplankton bloom due to Cyclone Sidr in the central Bay of Bengal. *Journal of Applied Remote Sensing*, **3,** 14, http://dx.doi.org/10.1117/1.3238329

Ueno, H., H. J. Freeland, W. R. Crawford, H. Onishi, E. Oka, K. Sato, and T. Suga, 2009: Anticyclonic Eddies in the Alaskan Stream. *Journal of Physical Oceanography*, **39,** 934-951, http://dx.doi.org/10.1175/2008jpo3948.1

Vage, K., R. S. Pickart, V. Thierry, G. Reverdin, C. M. Lee, B. Petrie, T. A. Agnew, A. Wong, and M. H. Ribergaard, 2009: Surprising return of deep convection to the subpolar North Atlantic Ocean in winter 2007-2008. *Nature Geoscience*, **2,** 67-72, http://dx.doi.org/10.1038/ngeo382

Vialard, J., J. P. Duvel, M. J. McPhaden, P. Bouruet-Aubertot, B. Ward, E. Key, D. Bourras, R. Weller, P. Minnett, A. Weill, C. Cassou, L. Eymard, T. Fristedt, C. Basdevant, Y. Dandonneau, O. Duteil, T. Izumo, C. D. Montegut, S. Masson, F. Marsac, C. Menkes, and S. Kennan, 2009: CIRENE Air-Sea Interactions in the Seychelles-Chagos Thermocline Ridge Region. *Bulletin of the American Meteorological Society*, **90,** 45-61, http://dx.doi.org/10.1175/2008bams2499.1

von Schuckmann, K., F. Gaillard, and P. Y. Le Traon, 2009: Global hydrographic variability patterns during 2003-2008. *Journal of Geophysical Research: Oceans*, **114,** 17, http://dx.doi.org/10.1029/2008jc005237

Wan, L. Y., J. Zhu, H. Wang, C. X. Yan, and L. Bertino, 2009: A "Dressed" Ensemble Kalman Filter Using the Hybrid Coordinate Ocean Model in the Pacific. *Advances in Atmospheric Sciences*, **26,** 1042-1052, http://dx.doi.org/10.1007/s00376-009-7208-6

Wells, N. C., S. A. Josey, and R. E. Hadfield, 2009: Towards closure of regional heat budgets in the North Atlantic using Argo floats and surface flux datasets. *Ocean Science*, **5,** 59-72, http://dx.doi.org/10.5194/os-5-59-2009

Willis, J. K., J. M. Lyman, G. C. Johnson, and J. Gilson, 2009: In Situ Data Biases and Recent Ocean Heat Content Variability. *Journal of Atmospheric and Oceanic Technology*, **26,** 846-852, http://dx.doi.org/10.1175/2008jtecho608.1

Xie, J. P., J. Zhu, 2009: A Dataset of Global Ocean Surface Currents for 1999-2007 Derived from Argo Float Trajectories: A Comparison with Surface Drifter and TAO Measurements. *Atmospheric and Oceanic Science Letters*, **2,** 97-102, http://dx.doi.org/10.1080/16742834.2009.11446780

Yang, S.-C., C. Keppenne, M. Rienecker, and E. Kalnay, 2009: Application of Coupled Bred Vectors to Seasonal-to-Interannual Forecasting and Ocean Data Assimilation. *Journal of Climate*, **22,** 2850-2870, http://dx.doi.org/10.1175%2F2008JCLI2427.1

Yashayaev, I. and J. W. Loder, 2009: Enhanced production of Labrador Sea Water in 2008. *Geophysical Research Letters*, **36**, http://dx.doi.org/10.1029/2008gl036162

Zhang, S., A. Rosati, and M. J. Harrison, 2009: Detection of multidecadal oceanic variability by ocean data assimilation in the context of a "perfect" coupled model. *Journal of Geophysical Research: Oceans*, **114**, http://dx.doi.org/10.1029/2008jc005261

2008 (104)

Agarwal, N., R. Sharma, S. Basu, and V. K. Agarwal, 2008: Assimilation of sub-surface temperature profiles from Argo floats in the Indian Ocean in an Ocean General Circulation Model. *Current Science*, **95,** 495-501, http://www.currentscience.ac.in/php/show_article.php?volume=095&issue=04&titleid=id_095_04_0495_0501_0&page=0495

Anitha, G., M. Ravichandran, and R. Sayanna, 2008: Surface buoyancy flux in Bay of Bengal and Arabian Sea. *Annales Geophysicae*, **26,** 395-400,

http://dx.doi.org/10.5194/angeo-26-395-2008
Aoki, S., N. Fujii, S. Ushio, Y. Yoshikawa, S. Watanabe, G. Mizuta, Y. Fukamachi, and M. Wakatsuchi, 2008: Deep western boundary current and southern frontal systems of the Antarctic Circumpolar Current southeast of the Kerguelen Plateau. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2007jc004627
Balmaseda, M., A. Vidard, and D. L. T. Anderson, 2008: The ECMWF ocean analysis system: ORA-S3. *Monthly Weather Review*, **136,** 3018-3034, http://dx.doi.org/10.1175/2008mwr2433.1
Barre, N., C. Provost, N. Sennechael, and J. H. Lee, 2008: Circulation in the Ona Basin, southern Drake Passage. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2007jc004549
Benkiran, M. and E. Greiner, 2008: Impact of the Incremental Analysis Updates on a Real-Time System of the North Atlantic Ocean. *Journal of Atmospheric and Oceanic Technology*, **25,** 2055-2073, http://dx.doi.org/10.1175/2008jtecho537.1
Bhaskar, T. V. S. U., D. Swain, and M. Ravichandran, 2008: Seasonal Variability of Sonic Layer Depth in the Central Arabian Sea. *Ocean Science Journal*, **43,** 147-152, http://dx.doi.org/10.1007/BF03020695
Boehme, L., M. P. Meredith, S. E. Thorpe, M. Biuw, and M. Fedak, 2008: Antarctic Circumpolar Current frontal system in the South Atlantic: Monitoring using merged Argo and animal-borne sensor data. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2007jc004647
Boning, C. W., A. Dispert, M. Visbeck, S. R. Rintoul, and F. U. Schwarzkopf, 2008: The response of the Antarctic Circumpolar Current to recent climate change. *Nature Geoscience*, **1,** 864-869, http://dx.doi.org/10.1038/ngeo362
Bork, K., J. Karstensen, M. Visbeck, and A. Zimmermann, 2008: The legal regulation of floats and gliders - In quest of a new regime? *Ocean Development and International Law*, **39,** 298-328, http://dx.doi.org/10.1080/00908320802235338
Boss, E., M. J. Perry, D. Swift, P. Brickley, R. Zaneveld, and S. Riser, 2008: Three Years of Ocean Data from a Bio-optical Profiling Float. *EOS*, **88**, http://dx.doi.org/10.1029/2008EO230001
Boss, E., D. Swift, L. Taylor, P. Brickley, R. Zaneveld, S. Riser, M. J. Perry, and P. G. Strutton, 2008: Observations of pigment and particle distributions in the western North Atlantic from an autonomous float and ocean color satellite. *Limnology and Oceanography*, **53,** 2112-2122, http://dx.doi.org/10.4319/lo.2008.53.5_part_2.2112
Boutin, J., L. Merlivat, C. Henocq, N. Martin, and J. B. Sallee, 2008: Air-sea CO2 flux variability in frontal regions of the Southern Ocean from CARbon Interface OCean Atmosphere drifters. *Limnology and Oceanography*, **53,** 2062-2079, http://dx.doi.org/10.4319/lo.2008.53.5_part_2.2062
Campbell, R. W., 2008: Overwintering habitat of Calanus finmarchicus in the North Atlantic inferred from autonomous profiling floats. *Deep Sea Research Part I: Oceanographic Research Papers*, **55,** 630-645, http://dx.doi.org/10.1016/j.dsr.2008.02.009
Carton, J. A. and B. S. Giese, 2008: A reanalysis of ocean climate using Simple Ocean Data Assimilation (SODA). *Monthly Weather Review*, **136,** 2999-3017, http://dx.doi.org/10.1175/2007mwr1978.1

Carton, J. A., S. A. Grodsky, and H. Liu, 2008: Variability of the oceanic mixed layer, 1960-2004. *Journal of Climate*, **21,** 1029-1047, http://dx.doi.org/10.1175/2007jcli1798.1

Cazes-Boezio, G., D. Menemenlis, and C. R. Mechoso, 2008: Impact of ECCO ocean-state estimates on the initialization of seasonal climate forecasts. *Journal of Climate*, **21,** 1929-1947, http://dx.doi.org/10.1175/2007JCLI1574.1

Chambers, D. P. and J. K. Willis, 2008: Analysis of large-scale ocean bottom pressure variability in the North Pacific. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2008jc004930

Cheng, X., Y. Qi, and W. Zhou, 2008: Trends of sea level variations in the Indo-Pacific warm pool. *Global and Planetary Change*, **63,** 57-66, http://dx.doi.org/10.1016/j.gloplacha.2008.06.001

Chiggiato, J. and P. Oddo, 2008: Operational ocean models in the Adriatic Sea: a skill assessment. *Ocean Science*, **4,** 61-71, http://dx.doi.org/10.5194/os-4-61-2008

Chiswell, S. M. and G. J. Rickard, 2008: Eulerian and Lagrangian statistics in the Bluelink numerical model and AVISO altimetry: Validation of model eddy kinetics. *Journal of Geophysical Research: Oceans*, **113**, https://doi.org/10.1029/2007JC004673

Chu, P. C., L. M. Ivanov, O. V. Melnichenko, and R. Li, 2008: Argo floats revealing bimodality of large-scale mid-depth circulation in the North Atlantic. *Acta Oceanologica Sinica*, **27,** 1-10,

Church, J. A., N. White, T. Aarup, W. Wilson, P. Woodworth, C. Domingues, J. Hunter, and K. Lambeck, 2008: Understanding global sea levels: past, present and future. *Sustainability Science*, **3,** 9-22, http://dx.doi.org/10.1007/s11625-008-0042-4

Couvelard, X., P. Marchesiello, L. Gourdeau, and J. Lefevre, 2008: Barotropic zonal jets induced by islands in the southwest Pacific. *Journal of Physical Oceanography*, **38,** 2185-2204, http://dx.doi.org/10.1175/2008jpo3903.1

Crosnier, L., M. Drevillon, S. R. Buarque, and F. Soulat, 2008: Three ocean state indices implemented in the Mercator-Ocean operational suite. *ICES Journal of Marine Science: Journal du Conseil*, **65,** 1504-1507, http://www.dx.doi.org/10.1093/icesjms/fsn122

Dickey, J. O., S. L. Marcus, and J. K. Willis, 2008: Ocean cooling: Constraints from changes in Earth's dynamic oblateness (J(2)) and altimetry. *Geophysical Research Letters*, **35**, http://dx.doi.org/10.1029/2008gl035115

Dobricic, S. and N. Pinardi, 2008: An oceanographic three-dimensional variational data assimilation scheme. *Ocean Modelling*, **22,** 89-105, http://dx.doi.org/10.1016/j.ocemod.2008.01.004

Domingues, C. M., J. A. Church, N. J. White, P. J. Gleckler, S. E. Wijffels, P. M. Barker, and J. R. Dunn, 2008: Improved estimates of upper-ocean warming and multi-decadal sea-level rise. *Nature*, **453,** 1090-1093, http://dx.doi.org/10.1038/nature07080

Dong, S., J. Sprintall, S. T. Gille, and L. Talley, 2008: Southern Ocean mixed-layer depth from Argo float profiles. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2006jc004051

Fischer, J., V. Hormann, P. Brandt, F. A. Schott, B. Rabe, and A. Funk, 2008: South equatorial undercurrent in the western to central tropical Atlantic. *Geophysical Research Letters*,

L21601 (5 pp.), http://dx.doi.org/10.1029/2008gl035753
Forget, G., B. Ferron, and H. Mercier, 2008: Combining Argo profiles with a general circulation model in the North Atlantic. Part 1: Estimation of hydrographic and circulation anomalies from synthetic profiles, over a year. *Ocean Modelling*, **20,** 1-16, http://dx.doi.org/10.1016/j.ocemod.2007.06.001
Forget, G., H. Mercier, and B. Ferron, 2008: Combining Argo profiles with a general circulation model in the North Atlantic. Part 2: Realistic transports and improved hydrography, between spring 2002 and spring 2003. *Ocean Modelling*, **20,** 17-34, http://dx.doi.org/10.1016/j.ocemod.2007.06.002
Fujii, Y., T. Yasuda, S. Matsumoto, M. Makachi, and K. Ando, 2008: Observing System Evaluation (OSE) using the El Nino forecasting system in Japan Meteorological Agency. *Proceedings of the oceanographic society of Japan fall meeting*,
Ganachaud, A., L. Gourdeau, and W. Kessler, 2008: Bifurcation of the subtropical south equatorial current against New Caledonia in December 2004 from a hydrographic inverse box model. *Journal of Physical Oceanography*, **38,** 2072-2084, http://dx.doi.org/10.1175/2008jpo3901.1
Gascard, J. C. and K. A. Mork, 2008: Climatic Importance of Large Scale and Mesoscale Circulation in the Lofoten Basin deduced from Lagrangian Observation. *Defining the Role of the Northern Seas in Climate*, R. R. Dickson, J. Meincke, and P. Rhines, Eds., Springer, 131-143, http://www.springer.com/us/book/9781402067730.
Gille, S. T., 2008: Decadal-scale temperature trends in the Southern Hemisphere ocean. *Journal of Climate*, **21,** 4749-4765, http://dx.doi.org/10.1175/2008jcli2131.1
Gopalakrishna, V. V., R. R. Rao, K. Nisha, M. S. Girishkumar, T. Pankajakshan, M. Ravichandran, Z. Johnson, K. Girish, N. Aneeshkumar, M. Srinath, S. Rajesh, and C. K. Rajan, 2008: Observed anomalous upwelling in the Lakshadweep Sea during the summer monsoon season of 2005. *Journal of Geophysical Research: Oceans***,** C05001 (12 pp.), http://dx.doi.org/10.1029/2007jc004240
Gourdeau, L., W. S. Kessler, R. E. Davis, J. Sherman, C. Maes, and E. Kestenare, 2008: Zonal jets entering the coral sea. *Journal of Physical Oceanography*, **38,** 715-725, http://dx.doi.org/10.1175/2007jpo3780.1
Gronell, A. and S. E. Wijffels, 2008: A semiautomated approach for quality controlling large historical ocean temperature archives. *Journal of Atmospheric and Oceanic Technology*, **25,** 990-1003, http://dx.doi.org/10.1175/jtecho539.1
Harrison, M. J. and R. W. Hallberg, 2008: Pacific subtropical cell response to reduced equatorial dissipation. *Journal of Physical Oceanography*, **38,** 1894-1912, http://dx.doi.org/10.1175/2008jpo3708.1
Heffner, D. M., B. Subrahmanyam, and J. F. Shriver, 2008: Indian Ocean Rossby waves detected in HYCOM sea surface salinity. *Geophysical Research Letters*, **35**, http://dx.doi.org/10.1029/2007gl032760
Henocq, C., J. Boutin, F. Petitcolin, S. Arnault, and P. Lattes, 2008: Vertical variability of sea surface salinity and influence on L-band brightness temperature. *2007 IEEE International Geoscience and Remote Sensing Symposium, IGARSS 2007***,** 990-3,
Huang, B., Y. Xue, and D. W. Behringer, 2008: Impacts of argo salinity in NCEP global ocean data assimilation system: The tropical Indian ocean. *Journal of Geophysical Research:*

Oceans, **113**, http://dx.doi.org/10.1029/2007jc004388
Huang, Y. P., L. J. Kao, and F. E. Sandnes, 2008: Efficient mining of salinity and temperature association rules from ARGO data. *Expert Systems with Applications*, **35,** 59-68, http://dx.doi.org/10.1016/j.eswa.2007.06.007
Hydes, D. J., M. C. Hartman, C. P. Bargeron, J. M. Campbell, M. S. Cure, and D. K. Woolf, 2008: A study of gas exchange during the transition from deep winter mixing to spring bloom in the Bay of Biscay measured by continuous observation from a ship of opportunity. *Journal of Operational Oceanography*, **1,** 41-50,
Ivchenko, V. O., S. Danilov, D. Sidorenko, J. Schroter, M. Wenzel, and D. L. Aleynik, 2008: Steric height variability in the Northern Atlantic on seasonal and interannual scales. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2008jc004836
Izumo, T., C. D. Montegut, J. J. Luo, S. K. Behera, S. Masson, and T. Yamagata, 2008: The Role of the Western Arabian Sea Upwelling in Indian Monsoon Rainfall Variability. *Journal of Climate*, **21,** 5603-5623, http://dx.doi.org/10.1175/2008jcli2158.1
Johnson, G. C. and J. M. Lyman, 2008: Global Oceans: Sea Surface Salinity. . *Bulletin of the American Meteorological Society*, **89,** S45-S47, http://dx.doi.org/10.1175/BAMS-89-7-StateoftheClimate
Johnson, G. C., J. M. Lyman, and J. K. Willis, 2008: Global Oceans: Ocean Heat Content. *Bulletin of the American Meteorological Society*, **89,** S39-S41, http://dx.doi.org/10.1175/BAMS-89-7-StateoftheClimate.
Kamykowski, D., 2008: Estimating upper ocean phosphate concentrations using ARGO float temperature profiles. *Deep Sea Research Part I: Oceanographic Research Papers*, **55,** 1580-1589, http://dx.doi.org/10.1016/j.dsr.2008.05.017
Kohl, A. and D. Stammer, 2008: Decadal sea level changes in the 50-year GECCO ocean synthesis. *Journal of Climate*, **21,** 1876-1890, http://dx.doi.org/10.1175/2007jcli2081.1
Law, C. S., 2008: Predicting and monitoring the effects of large-scale ocean iron fertilization on marine trace gas emissions. *Marine Ecology Progress Series*, **364,** 283-288, http://dx.doi.org/10.3354/meps07549
Li, W., Y. F. Xie, Z. J. He, G. J. Han, K. X. Liu, J. R. Ma, and D. Li, 2008: Application of the Multigrid Data Assimilation Scheme to the China Seas' Temperature Forecast. *Journal of Atmospheric and Oceanic Technology*, **25,** 2106-2116, http://dx.doi.org/10.1175/2008jtecho510.1
Liu, Z.-H., J. P. Xu, and B. K. Zhu, 2008: Observing process of an Argo profiling float and discussion on its data application. *Journal of Tropical Oceanography*, **27,** 66-72,
Lumpkin, R., K. G. Speer, and K. P. Koltermann, 2008: Transport across 48 degrees N in the Atlantic Ocean. *Journal of Physical Oceanography*, **38,** 733-752, http://dx.doi.org/10.1175/2007jpo3636.1
Lyman, J. M. and G. C. Johnson, 2008: Estimating Annual Global Upper-Ocean Heat Content Anomalies despite Irregular In Situ Ocean Sampling. *Journal of Climate*, **21,** 5629-5641, http://dx.doi.org/10.1175/2008jcli2259.1
Maes, C., 2008: On the ocean salinity stratification observed at the eastern edge of the equatorial Pacific warm pool. *Journal of Geophysical Research: Oceans***,** C03027 (15

pp.), http://dx.doi.org/10.1029/2007jc004297
Martz, T. R., K. S. Johnson, and S. C. Riser, 2008: Ocean metabolism observed with oxygen sensors on profiling floats in the South Pacific. *Limnology and Oceanography*, **53,** 2094-2111, http://dx.doi.org/10.4319/lo.2008.53.5_part_2.2094
Maximenko, N. A., O. V. Melnichenko, P. P. Niiler, and H. Sasaki, 2008: Stationary mesoscale jet-like features in the ocean. *Geophysical Research Letters***,** L08603 (6 pp.), http://dx.doi.org/10.1029/2008gl033267
McDonagh, E. L., H. L. Bryden, B. A. King, and R. J. Sanders, 2008: The circulation of the Indian Ocean at 32 degrees S. *Progress in Oceanography*, **79,** 20-36, http://dx.doi.org/10.1016/j.pocean.2008.07.001
Mourre, B., J. Ballabrera-Poy, E. Garcia-Ladona, and J. Font, 2008: Surface salinity response to changes in the model parameters and forcings in a climatological simulation of the eastern North-Atlantic Ocean. *Ocean Modelling*, **23,** 21-32, http://dx.doi.org/10.1016/j.ocemod.2008.03.002
Oke, P. R., G. B. Brassington, D. A. Griffin, and A. Schiller, 2008: The Bluelink ocean data assimilation system (BODAS). *Ocean Modelling*, **21,** 46-70, http://dx.doi.org/10.1016/j.ocemod.2007.11.002
Oke, P. R. and P. Sakov, 2008: Representation error of oceanic observations for data assimilation. *Journal of Atmospheric and Oceanic Technology*, **25,** 1004-1017, http://dx.doi.org/10.1175/2007jtecho558.1
Olsen, A., K. R. Brown, M. Chierici, T. Johannessen, and C. Neill, 2008: Sea-surface CO2 fugacity in the subpolar North Atlantic. *Biogeosciences*, **5,** 535-547, http://dx.doi.org/10.5194/bg-5-535-2008
Ono, J., K. I. Ishima, G. Mizuta, Y. Fukainachi, and M. Wakatsuchi, 2008: Diurnal coastal-trapped waves on the eastern shelf of Sakhalin in the Sea of Okhotsk and their modification by sea ice. *Continental Shelf Research*, **28,** 697-709, http://dx.doi.org/10.1016/j.csr.2007.11.008
Park, J., M. S. Suk, S. Yoon, and S. Yoo, 2008: Variability of surface chlorophyll concentration in the Northwest Pacific Ocean. *Ocean and Polar Research*, **30,** 277-287, http://dx.doi.org/10.4217/OPR.2008.30.3.277
Park, J. J., K. Kim, and J. Y. Yang, 2008: Aspiration and outflow of the intermediate water in the East/Japan Sea through the Tsugaru Strait. *Geophysical Research Letters*, **35,** 6, http://dx.doi.org/10.1029/2007gl032981
Park, Y.-H., F. Roquet, I. Durand, and J.-L. Fuda, 2008: Large-scale circulation over and around the Northern Kerguelen Plateau. *Deep Sea Research Part II: Topical Studies in Oceanography*, **55,** 566-581, http://dx.doi.org/10.1016/j.dsr2.2007.12.030
Qiu, B., S. Chen, P. Hacker, N. G. Hogg, S. R. Jayne, and H. Sasaki, 2008: The Kuroshio Extension northern recirculation gyre: Profiling float measurements and forcing mechanism. *Journal of Physical Oceanography*, **38,** 1764-1779, http://dx.doi.org/10.1175/2008jpo3921.1
Qu, T. D., S. Gao, I. Fukumori, R. A. Fine, and E. J. Lindstrom, 2008: Subduction of South Pacific waters. *Geophysical Research Letters*, **35**, http://dx.doi.org/10.1029/2007gl032605
Rao, A. D., M. Joshi, and M. Ravichandran, 2008: Oceanic upwelling and downwelling

processes in waters off the west coast of India. *Ocean Dynamics*, **58,** 213-226, http://dx.doi.org/10.1007/s10236-008-0147-4

Rao, R. R., M. S. G. Kumar, M. Ravichandran, V. V. Gopalakrishna, and P. Thadathil, 2008: A cold pool south of Indo-Sri-Lanka channel and its intrusion into the Southeastern Arabian Sea during winter. *Deep Sea Research Part I: Oceanographic Research Papers*, **55,** 1009-1020, http://dx.doi.org/10.1016/j.dsr.2008.04.006

Riser, S. C. and K. S. Johnson, 2008: Net production of oxygen in the subtropical ocean. *Nature*, **451,** 323-5, http://dx.doi.org/10.1038/nature06441

Riser, S. C., J. Nystuen, and A. Rogers, 2008: Monsoon effects in the Bay of Bengal inferred from profiling float-based measurements of wind speed and rainfall. *Limnology and Oceanography*, **53,** 2080-2093, http://dx.doi.org/10.4319/lo.2008.53.5_part_2.2080

Riser, S. C., L. Ren, and A. Wong, 2008: Salinity in Argo: A Modern View of a Changing Ocean. *Oceanography*, **21,** 56-67, http://dx.doi.org/10.5670/oceanog.2008.67

Sahu, S. K. and P. Challenor, 2008: A space-time model for joint modeling of ocean temperature and salinity levels as measured by Argo floats. *Environmetrics*, **19,** 509-528, http://dx.doi.org/10.1002/env.895

Sallee, J. B., R. Morrow, and K. Speer, 2008: Eddy heat diffusion and Subantarctic Mode Water formation. *Geophysical Research Letters*, **35**, http://dx.doi.org/10.1029/2007GL032827

Sallee, J. B., K. Speer, and R. Morrow, 2008: Response of the Antarctic Circumpolar Current to atmospheric variability. *Journal of Climate*, **21,** 3020-3039, http://dx.doi.org/10.1175/2007jcli1702.1

Schiller, A., P. R. Oke, G. Brassington, M. Entel, R. Fiedler, D. A. Griffin, and J. V. Mansbridge, 2008: Eddy-resolving ocean circulation in the Asian-Australian region inferred from an ocean reanalysis effort. *Progress in Oceanography*, **76,** 334-365, http://dx.doi.org/10.1016/j.pocean.2008.01.003

Schroeder, K., V. Taillandier, A. Vetrano, and G. P. Gasparini, 2008: The circulation of the western Mediterranean Sea in spring 2005 as inferred from observations and from model outputs. *Deep Sea Research Part I: Oceanographic Research Papers*, **55,** 947-965, http://dx.doi.org/10.1016/j.dsr.2008.04.003

Siswanto, E., J. Ishizaka, A. Morimoto, K. Tanaka, K. Okamura, A. Kristijono, and T. Saino, 2008: Ocean physical and biogeochemical responses to the passage of Typhoon Meari in the East China Sea observed from Argo float and multiplatform satellites. *Geophysical Research Letters*, **35**, http://dx.doi.org/10.1029/2008gl035040

Smith, R. O., H. L. Bryden, and K. Stansfield, 2008: Observations of new western Mediterranean deep water formation using Argo floats 2004-2006. *Ocean Science*, **4,** 133-149, http://dx.doi.org/10.5194/os-4-133-2008

Sreenivas, P., K. V. K. R. K. Patnaik, and K. V. S. R. Prasad, 2008: Monthly variability of mixed layer over Arabian Sea using ARGO data. *Marine Geodesy*, **31,** 17-38, http://dx.doi.org/10.1080/01490410701812311

Stramma, L., P. Brandt, J. Schafstall, F. Schott, J. Fischer, and A. Kortzinger, 2008: Oxygen minimum zone in the North Atlantic south and east of the Cape Verde Islands. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2007jc004369

Stramma, L., G. C. Johnson, J. Sprintall, and V. Mohrholz, 2008: Expanding oxygen-minimum zones in the tropical oceans. *Science*, **320,** 655-658, http://dx.doi.org/10.1126/science.1153847

Thacker, W. C., 2008: Estimating salinity between 25 degrees and 45 degrees S in the Atlantic Ocean using local regressionle. *Journal of Atmospheric and Oceanic Technology*, **25,** 114-130, http://dx.doi.org/10.1175/2007jtecho530.1

Thadathil, P., P. Thoppil, R. R. Rao, P. M. Muraleedharan, Y. K. Somayajulu, V. V. Gopalakrishna, R. Murthugudde, G. V. Reddy, and C. Revichandran, 2008: Seasonal variability of the observed barrier layer in the Arabian sea. *Journal of Physical Oceanography*, **38,** 624-638, http://dx.doi.org/10.1175/2007jpo3798.1

Thierry, V., E. de Boisseson, and H. Mercier, 2008: Interannual variability of the Subpolar Mode Water properties over the Reykjanes Ridge during 1990-2006. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2007jc004443

Tonani, M., N. Pinardi, S. Dobricic, I. Pujol, and C. Fratianni, 2008: A high-resolution free-surface model of the Mediterranean Sea. *Ocean Science*, **4,** 1-14, http://dx.doi.org/10.5194/os-4-1-2008

Tranchant, B., C. E. Testut, L. Renault, N. Ferry, F. Birol, and P. Brasseur, 2008: Expected impact of the future SMOS and Aquarius Ocean surface salinity missions in the Mercator Ocean operational systems: New perspectives to monitor ocean circulation. *Remote Sensing of Environment*, **112,** 1476-1487, http://dx.doi.org/10.1016/j.rse.2007.06.023

Uchida, H. and S. Imawaki, 2008: Estimation of the sea level trend south of Japan by combining satellite altimeter data with in situ hydrographic data. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2008jc004796

Uchida, H., T. Kawano, and M. Fukasava, 2008: In situ calibration of moored CTDs used for monitoring abyssal water. *Journal of Atmospheric and Oceanic Technology*, **25,** 1695-1702, http://dx.doi.org/10.1175/2008jtecho581.1

Vialard, J., G. R. Foltz, M. J. McPhaden, J. P. Duvel, and C. de Boyer Montegut, 2008: Strong Indian Ocean sea surface temperature signals associated with the Madden-Julian Oscillation in late 2007 and early 2008. *Geophysical Research Letters*, **35**, http://dx.doi.org/10.1029/2008GL035238

Vinayachandran, P. N. and N. H. Saji, 2008: Mechanisms of South Indian Ocean intraseasonal cooling. *Geophysical Research Letters*, **35**, http://dx.doi.org/10.1029/2008gl035733

Vinogradov, S. V., R. M. Ponte, P. Heimbach, and C. Wunsch, 2008: The mean seasonal cycle in sea level estimated from a data-constrained general circulation model. *J. Geophys. Res.*, **113**, http://dx.doi.org/10.1029/2007JC004496

Wijffels, S. E., J. Willis, C. M. Domingues, P. Barker, N. J. White, A. Gronell, K. Ridgway, and J. A. Church, 2008: Changing Expendable Bathythermograph Fall Rates and Their Impact on Estimates of Thermosteric Sea Level Rise. *Journal of Climate*, **21,** 5657-5672, http://dx.doi.org/10.1175/2008jcli2290.1

Willis, J. K., D. P. Chambers, and R. S. Nerem, 2008: Assessing the globally averaged sea level budget on seasonal to interannual timescales. *Journal of Geophysical Research: Oceans*, **113,** 9, http://dx.doi.org/10.1029/2007jc004517

Willis, J. K. and L. L. Fu, 2008: Combining altimeter and subsurface float data to estimate the

time-averaged circulation in the upper ocean. *Journal of Geophysical Research: Oceans*, **113**, http://dx.doi.org/10.1029/2007jc004690

Wunsch, C. and P. Heimbach, 2008: Decadal changes in the North Atlantic and pacific meridional overturning circulation and heat flux - Reply. *Journal of Physical Oceanography*, **38,** 2108-2110, http://dx.doi.org/10.1175/2008jpo3936.1

Xie, J. P. and J. Zhu, 2008: Estimation of the surface and mid-depth currents from Argo floats in the Pacific and error analysis. *Journal of Marine Systems*, **73,** 61-75, http://dx.doi.org/10.1016/j.jmarsys.2007.09.001

Xie, J. P., J. Zhu, and Y. Li, 2008: Assessment and inter-comparison of five high-resolution sea surface temperature products in the shelf and coastal seas around China. *Continental Shelf Research*, **28,** 1286-1293, http://dx.doi.org/10.1016/j.csr.2008.02.020

Yoneyama, K., K. Katsumata, K. Mizuno, M. yoshizaki, R. Shirooka, K. Yasunaga, H. Yamada, N. Sato, T. Ushiyama, Q. Moteki, A. Sieki, M. Fujita, K. ando, H. Hase, I. Ueki, T. Horii, Y. Masumoto, T. Kuroda, Y. N. Takayabu, A. Shareef, Y. Fujiyoshi, M. J. McPhaden, V. S. N. Murty, C. Yokoyama, and T. Miyakawa, 2008: Mismo Field Experiment in the Equatorial Indian Ocean*. *Bulletin of the American Meteorological Society*, **89,** 1889-1903, http://dx.doi.org/10.1175/2008BAMS2519.1

Zhang, Y. H., X. L. Yu, and F. Wang, 2008: Origins and pathways of the subsurface and intermediate water masses of the Indonesian Throughflow derived from historical and Argo data. *Acta Oceanologica Sinica*, **27,** 17-25,

Zheng, Z. W., C. R. Ho, and N. J. Kuo, 2008: Importance of pre-existing oceanic conditions to upper ocean response induced by Super Typhoon Hai-Tang. *Geophysical Research Letters*, **35**, http://dx.doi.org/10.1029/2008gl035524

2007 (93)

AchutaRao, K. M., M. Ishii, B. D. Santer, P. J. Gleckler, K. E. Taylor, T. P. Barnett, D. W. Pierce, R. J. Stouffer, and T. M. L. Wigley, 2007: Simulated and observed variability in ocean temperature and heat content. *Proceedings of the National Academy of Sciences of the United States of America*, **104,** 10768-10773, http://dx.doi.org/10.1073/pnas.0611375104

Acreman, D. M. and C. D. Jeffery, 2007: The use of Argo for validation and tuning of mixed layer models. *Ocean Modelling*, **19,** 53-69, http://dx.doi.org/10.1016/j.ocemod.2007.06.005

Agarwal, N., R. Sharma, S. Basu, and V. K. Agarwal, 2007: Derivation of Salinity Profiles in the Indian Ocean from Satellite Surface Observations. *IEEE Geoscience and Remote Sensing Letters*, **4,** 322-325, https://doi.org/10.1109/LGRS.2007.894163

Aoki, S., M. Hariyama, H. Mitsudera, H. Sasaki, and Y. Sasai, 2007: Formation regions of Subantarctic Mode Water detected by OFES and Argo profiling floats. *Geophysical Research Letters*, **34,** 5, http://dx.doi.org/10.1029/2007gl029828

Balmaseda, M., D. Anderson, and A. Vidard, 2007: Impact of Argo on analyses of the global ocean. *Geophysical Research Letters*, **34,** 6, http://dx.doi.org/10.1029/2007gl030452

Baringer, M. and S. L. Garzoll, 2007: Meridional heat transport determined with expendable

bathythermographs - Part 1: Error estimates from model and hydrographic data. *Deep Sea Research Part I: Oceanographic Research Papers*, **54,** 1390-1401, http://dx.doi.org/10.1016/j.dsr.2007.03.011

Batten, S. D. and H. J. Freeland, 2007: Plankton populations at the bifurcation of the North Pacific Current. *Fisheries Oceanography*, **16,** 536-546, http://dx.doi.org/10.1111/j.1365-2419.2007.00448.x

Bhaskar, T. V. S. U., D. Swain, and M. Ravichandran, 2007: Mixed layer variability in Northern Arabian Sea as detected by an Argo float. *Ocean Science Journal*, **42,** 241-246, http://dx.doi.org/10.1007/BF03020915

Carmack, E. C., 2007: The alpha/beta ocean distinction: A perspective on freshwater fluxes, convection, nutrients and productivity in high-latitude seas. *Deep Sea Research Part II: Topical Studies in Oceanography*, **54,** 2578-2598, http://dx.doi.org/10.1016/j.dsr2.2007.08.018

Chassignet, E. P., H. E. Hurlburt, O. M. Smedstad, G. R. Halliwell, P. J. Hogan, A. J. Wallcraft, R. Baraille, and R. Bleck, 2007: The HYCOM (HYbrid Coordinate Ocean Model) data assimilative system. *Journal of Marine Systems*, **65,** 60-83, http://dx.doi.org/10.1016/j.jmarsys.2005.09.016

Chen, S. M., B. Qiu, and P. Hacker, 2007: Profiling float measurements of the recirculation gyre south of the Kuroshio Extension in May to November 2004. *Journal of Geophysical Research: Oceans*, **112,** 10, http://dx.doi.org/10.1029/2006jc004005

Chinn, B. S. and S. T. Gille, 2007: Estimating eddy heat flux from float data in the North Atlantic: The impact of temporal sampling interval. *Journal of Atmospheric and Oceanic Technology*, **24,** 923-934, http://dx.doi.org/10.1175/jtech2057.1

Chu, P. C., L. M. Ivanov, O. V. Melnichenko, and N. C. Wells, 2007: On long baroclinic Rossby waves in the tropical North Atlantic observed from profiling floats. *Journal of Geophysical Research: Oceans*, **112,** 24, http://dx.doi.org/10.1029/2006jc003698

Crawford, W., P. J. Brickley, and A. C. Thomas, 2007: Mesoscale eddies dominate surface phytoplankton in northern Gulf of Alaska. *Progress in Oceanography*, **75,** 287-303, http://dx.doi.org/10.1016/j.pocean.2007.08.016

Crawford, W., J. Galbraith, and N. Bolingbroke, 2007: Line P ocean temperature and salinity, 1956-2005. *Progress in Oceanography*, **75,** 161-178, http://dx.doi.org/10.1016/j.pocean.2007.08.017

Crosnier, L. and C. Le Provost, 2007: Inter-comparing five forecast operational systems in the North Atlantic and Mediterranean basins: The MERSEA-strand1 methodology. *Journal of Marine Systems*, **65,** 354-375, http://dx.doi.org/10.1016/j.jmarsys.2005.01.003

Cummins, P. F. and H. J. Freeland, 2007: Variability of the North Pacific current and its bifurcation. *Progress in Oceanography*, **75,** 253-265, http://dx.doi.org/10.1016/j.pocean.2007.08.006

de Boyer Montegut, C., J. Mignot, A. Lazar, and S. Cravatte, 2007: Control of salinity on the mixed layer depth in the world ocean. 1. General description. *Journal of Geophysical Research: Oceans***,** 1-12, http://dx.doi.org/10.1029/2006jc003953

de Boyer Montegut, C., J. Vialard, S. S. C. Shenoi, D. Shankar, F. Durand, C. Ethe, and G. Madec, 2007: Simulated Seasonal and Interannual Variability of the Mixed Layer

Heat Budget in the Northern Indian Ocean. *Journal of Climate*, **20,** 3249-3268, http://dx.doi.org/10.1175%2FJCLI4148.1

Dobricic, S., N. Pinardi, M. Adani, M. Tonani, C. Fratianni, A. Bonazzi, and V. Fernandez, 2007: Daily oceanographic analyses by Mediterranean Forecasting System at the basin scale. *Ocean Science*, **3,** 149-157, http://dx.doi.org/10.5194/os-3-149-2007

Dong, S., S. T. Gille, and J. Sprintall, 2007: An assessment of the Southern Ocean mixed layer heat budget. *Journal of Climate***,** 4425-42, http://dx.doi.org/10.1175/jcli4259.1

Durand, F., D. Shankar, C. D. B. Montegut, S. S. C. Shenoi, B. Blanke, and G. Madec, 2007: Modeling the barrier-layer formation in the southeastern Arabian Sea. *Journal of Climate*, **20,** 2109-2120, http://dx.doi.org/10.1175/jcli4112.1

Forget, G. and C. Wunsch, 2007: Estimated global hydrographic variability. *Journal of Physical Oceanography*, **37,** 1997-2008, http://dx.doi.org/10.1175/jpo3072.1

Freeland, H. J., D. Roemmich, W. J. Gould, and M. Belbeoch, 2007: Argo - a global ocean observing system for the 21st century. *The Full Picture*, **Group on Earth Observations (GEO),** 67-71, https://www.earthobservations.org/documents/the_full_picture.pdf

Garzoli, S. L. and M. O. Baringer, 2007: Meridional heat transport determined with expandable bathythermographs - Part II: South Atlantic transport. *Deep Sea Research Part I: Oceanographic Research Papers*, **54,** 1402-1420, http://dx.doi.org/10.1016/j.dsr.2007.04.013

Hackert, E., J. Ballabrera-Poy, A. J. Busalacchi, R. H. Zhang, and R. Murtugudde, 2007: Comparison between 1997 and 2002 El Nino events: Role of initial state versus forcing. *Journal of Geophysical Research: Oceans*, **112,** 20, http://dx.doi.org/10.1029/2006jc003724

Hadfield, R. E., N. C. Wells, S. A. Josey, and J. J. M. Hirschi, 2007: On the accuracy of North Atlantic temperature and heat storage fields from Argo. *Journal of Geophysical Research: Oceans*, **112,** 17, http://dx.doi.org/10.1029/2006jc003825

Hu, H., Q. Liu, X. Lin, and W. Liu, 2007: The South Pacific Subtropical Mode Water in the Tasman Sea. *Journal of Ocean University of China*, **6,** 107-116, http://dx.doi.org/10.1007/s11802-007-0107-5

Huang, Y. P., L. J. Kao, and F. E. Sandnes, 2007: Predicting ocean salinity and temperature variations using data mining and fuzzy inference. *International Journal of Fuzzy Systems*, **9,** 143-151,

Hyrenbach, K. D., R. R. Veit, H. Weimerskirch, N. Metzl, and G. L. Hunt Jr, 2007: Community structure across a large-scale ocean productivity gradient: Marine bird assemblages of the Southern Indian Ocean. *Deep Sea Research Part I: Oceanographic Research Papers*, **54,** 1129-1145, http://dx.doi.org/10.1016/j.dsr.2007.05.002

Ingleby, B. and M. Huddleston, 2007: Quality control of ocean temperature and salinity profiles - Historical and real-time data. *Journal of Marine Systems*, **65,** 158-175, http://dx.doi.org/10.1016/j.jmarsys.2005.11.019

Iudicone, D., K. B. Rodgers, R. Schopp, and G. Madec, 2007: An exchange window for the injection of Antarctic Intermediate Water into the South Pacific. *Journal of Physical Oceanography*, **37,** 31-49, http://dx.doi.org/10.1175/JPO2985.1

Ivchenko, V. O., S. D. Danilov, D. V. Sidorenko, J. Schroter, M. Wenzel, and D. L. Aleynik,

2007: Comparing the steric height in the Northern Atlantic with satellite altimetry. *Ocean Science*, **3,** 485-490, http://dx.doi.org/10.5194/os-3-485-2007

Johnson, G. C. and J. M. Lyman, 2007: Global Oceans: Sea Surface Salinity. *Bulletin of the American Meteorological Society*, **88,** S34-S35, http://dx.doi.org/10.1175/BAMS-88-6-StateoftheClimate

Johnson, G. C., J. M. Lyman, and J. K. Willis, 2007: Global Oceans: Heat Content. *Bulletin of the American Meteorological Society*, **88,** S31-S33, http://dx.doi.org/10.1175/BAMS-88-6-StateoftheClimate

Johnson, G. C., J. M. Toole, and N. G. Larson, 2007: Sensor corrections for sea-bird SBE-41CP and SBE-41 CTDs. *Journal of Atmospheric and Oceanic Technology*, **24,** 1117-1130, http://dx.doi.org/10.1175/jtech2016.1

Kako, S. and M. Kubota, 2007: Variability of mixed layer depth in Kuroshio/Oyashio Extension region: 2005-2006. *Geophysical Research Letters*, **34,** 4, http://dx.doi.org/10.1029/2007gl030362

Kikuchi, T., J. Inoue, and D. Langevin, 2007: Argo-type profiling float observations under the Arctic multiyear ice. *Deep Sea Research Part I: Oceanographic Research Papers*, **54,** 1675-1686, http://dx.doi.org/10.1016/j.dsr.2007.05.011

Klatt, O., O. Boebel, and E. Fahrbach, 2007: A profiling float's sense of ice. *Journal of Atmospheric and Oceanic Technology*, **24,** 1301-1308, http://dx.doi.org/10.1175/JTECH2026.1

Kohl, A., D. Stammer, and B. Cornuelle, 2007: Interannual to decadal changes in the ECCO global synthesis. *Journal of Physical Oceanography*, **37,** 313-337, http://dx.doi.org/10.1175/jpo3014.1

Krishnamurti, T. N., A. Chakraborty, R. Krishnamurti, W. K. Dewar, and C. A. Clayson, 2007: Passage of intraseasonal waves in the subsurface oceans. *Geophysical Research Letters*, **34,** 5, http://dx.doi.org/10.1029/2007gl030496

Lebedev, K. V., H. Yoshinari, N. A. Maximenko, and P. Hacker, 2007: YoMaHa'07: Velocity data assessed from trajectories of Argo floats at parking level and at the sea surface. *IPRC Technical Note*, **4**, http://apdrc.soest.hawaii.edu/projects/yomaha/yomaha07/YoMaHa070612.pdf

Liu, Z., J. Xu, B. Zhu, C. Sun, and L. Zhang, 2007: The upper ocean response to tropical cyclones in the northwestern Pacific analyzed with Argo data. *Chinese Journal of Oceanology and Limnology*, **25,** 123-131, http://dx.doi.org/10.1007/s00343-007-0123-8

Mackas, D. L., S. Batten, and M. Trudel, 2007: Effects on zooplankton of a warmer ocean: Recent evidence from the Northeast Pacific. *Progress in Oceanography*, **75,** 223-252, http://dx.doi.org/10.1016/j.pocean.2007.08.010

Maes, C., L. Gourdeau, X. Couvelard, and A. Ganachaud, 2007: What are the origins of the Antarctic intermediate waters transported by the North Caledonian Jet? *Geophysical Research Letters***,** L21608-1-5, http://dx.doi.org/10.1029/2007gl031546

Martin, A. J., A. Hines, and M. J. Bell, 2007: Data assimilation in the FOAM operational short-range ocean forecasting system: A description of the scheme and its impact. *Quarterly Journal of the Royal Meteorological Society*, **133,** 981-995, http://dx.doi.org/10.1002/qj.74

Marullo, S., B. Buongiorno Nardelli, M. Guarracino, and R. Santoleri, 2007: Observing the Mediterranean Sea from space: 21 years of Pathfinder-AVHRR sea surface temperatures (1985 to 2005): re-analysis and validation. *Ocean Science*, **3,** 299-310, http://dx.doi.org/10.5194/os-3-299-2007

Matthews, A. J., P. Singhruck, and K. J. Heywood, 2007: Deep ocean impact of a Madden-Julian Oscillation observed by Argo floats. *Science*, **318,** 1765-1769, http://dx.doi.org/10.1126/science.1147312

Mignot, J., C. D. Montegut, A. Lazar, and S. Cravatte, 2007: Control of salinity on the mixed layer depth in the world ocean: 2. Tropical areas. *Journal of Geophysical Research: Oceans*, **112**, http://dx.doi.org/10.1029/2006jc003954

Muraleedharan, K. R., P. Jasmine, C. T. Achuthankutty, C. Revichandran, P. K. Dinesh Kumar, P. Anand, and G. Rejomon, 2007: Influence of basin-scale and mesoscale physical processes on biological productivity in the Bay of Bengal during the summer monsoon. *Progress in Oceanography*, **72,** 364-383, http://dx.doi.org/10.1016/j.pocean.2006.09.012

Nanjundiah, R. S. and T. N. Krishnamurti, 2007: Intraseasonal oscillation of tropical convergence zones: Theory and prediction. *Current Science*, **93,** 173-181, http://www.currentscience.ac.in/php/show_article.php?volume=093&issue=02&titleid=id_093_02_0173_0181_0&page=0173

Nittis, K., C. Tziavos, R. Bozzano, V. Cardin, Y. Thanos, G. Petihakis, M. E. Schiano, and F. Zanon, 2007: The M3A multi-sensor buoy network of the Mediterranean Sea. *Ocean Science*, **3,** 229-243, http://dx.doi.org/10.5194/os-3-229-2007

Oka, E., L. D. Talley, and T. Suga, 2007: Temporal variability of winter mixed layer in the mid- to high-latitude North Pacific. *Journal of Oceanography*, **63,** 293-307, http://dx.doi.org/10.1007/s10872-007-0029-2

Oke, P. R. and A. Schiller, 2007: Impact of Argo, SST, and altimeter data on an eddy-resolving ocean reanalysis. *Geophysical Research Letters*, **34**, http://dx.doi.org/10.1029/2007gl031549

Oke, P. R. and A. Schiller, 2007: A model-based assessment and design of a tropical Indian Ocean mooring array. *Journal of Climate*, **20,** 3269-3283, http://dx.doi.org/10.1175/jcli4170.1

Palmer, M. D., K. Haines, S. F. B. Tett, and T. J. Ansell, 2007: Isolating the signal of ocean global warming. *Geophysical Research Letters*, http://dx.doi.org/10.1029/2007GL031712

Park, J. J. and K. Kim, 2007: Evaluation of calibrated salinity from profiling floats with high resolution conductivity-temperature-depth data in the East/Japan Sea. *Journal of Geophysical Research: Oceans*, **112,** 9, http://dx.doi.org/10.1029/2006jc003869

Pizzigalli, C. and V. Rupolo, 2007: Simulations of ARGO profilers and of surface floating objects: applications in MFSTEP. *Ocean Science*, **3,** 205-222, http://dx.doi.org/10.5194/os-3-205-2007

Pollard, R. T., H. J. Venables, J. F. Read, and J. T. Allen, 2007: Large-scale circulation around the Crozet Plateau controls an annual phytoplankton bloom in the Crozet Basin. *Deep Sea Research Part Ii: Topical Studies in Oceanography*, **54,** 1915-1929, http://dx.doi.org/10.1016/j.dsr2.2007.06.012

Poulain, P. M., R. Barbanti, J. Font, A. Cruzado, C. Millot, I. Gertman, A. Griffa, A. Molcard, V. Rupolo, S. Le Bras, and L. P. de la Villeon, 2007: MedArgo: a drifting profiler program in the Mediterranean Sea. *Ocean Science*, **3,** 379-395, http://dx.doi.org/10.5194/os-3-379-2007

Power, S. B., N. Plummer, and P. Alford, 2007: Making climate model forecasts more useful. *Australian Journal of Agricultural Research*, **58,** 945-951, http://dx.doi.org/10.1071/ar06196

Pun, I.-F., Lin, II, C. R. Wu, D. H. Ko, and W. T. Liu, 2007: Validation and application of altimetry-derived upper ocean thermal structure in the western North Pacific Ocean for typhoon-intensity forecast. *Ieee Transactions on Geoscience and Remote Sensing*, **45,** 1616-1630, http://dx.doi.org/10.1109/tgrs.2007.895950

Qiu, B., S. M. Chen, and P. Hacker, 2007: Effect of mesoscale eddies on subtropical mode water variability from the Kuroshio Extension System Study (KESS). *Journal of Physical Oceanography*, **37,** 982-1000, http://dx.doi.org/10.1175/jpo3097.1

Reverdin, G., P. Blouch, J. Boutin, P. P. Niiler, J. Rolland, W. Scuba, A. Lourenco, and A. F. Rios, 2007: Surface salinity measurements - COSMOS 2005 experiment in the Bay of Biscay. *Journal of Atmospheric and Oceanic Technology*, **24,** 1643-1654, http://dx.doi.org/10.1175/jtech2079.1

Roemmich, D., 2007: Physical oceanography - Super spin in the southern seas. *Nature*, **449,** 34-35, http://dx.doi.org/10.1038/449034a

Roemmich, D., J. Gilson, R. Davis, P. Sutton, S. Wijffels, and S. Riser, 2007: Decadal spinup of the South Pacific subtropical gyre. *Journal of Physical Oceanography*, **37,** 162-173, http://dx.doi.org/10.1175/jpo3004.1

Rogachev, K., N. Shlyk, and E. Carmack, 2007: The shedding of mesoscale anticyclonic eddies from the Alaskan Stream and westward transport of warm water. *Deep Sea Research Part Ii: Topical Studies in Oceanography*, **54,** 2643-2656, http://dx.doi.org/10.1016/j.dsr2.2007.08.017

Rong, Z., Y. Liu, H. Zong, and Y. Cheng, 2007: Interannual sea level variability in the South China Sea and its response to ENSO. *Global and Planetary Change*, **55,** 257-272, http://dx.doi.org/10.1016/j.gloplacha.2006.08.001

Ruiz, S., D. Gomis, and J. Font, 2007: Recovery of North-East Atlantic temperature fields from profiling floats: Determination of the optimal float number from sampling and instrumental error analysis. *Journal of Marine Systems*, **65,** 212-223, http://dx.doi.org/10.1016/j.jmarsys.2005.04.012

Schiermeier, Q., 2007: Earth monitoring: Observing the ocean from within. *Nature*, **450,** 780-781, http://dx.doi.org/10.1038/450780a

Schmid, C., R. L. Molinari, R. Sabina, Y. H. Daneshzadeh, X. D. Xia, E. Forteza, and H. Q. Yang, 2007: The real-time data management system for argo profiling float observations. *Journal of Atmospheric and Oceanic Technology*, **24,** 1608-1628, http://dx.doi.org/10.1175/jtech2070.1

Schneider, W., M. Fukasawa, J. Garces-Vargas, L. Bravo, H. Uchida, T. Kawano, and R. Fuenzalida, 2007: Spin-up of South Pacific subtropical gyre freshens and cools the upper layer of the eastern South Pacific Ocean. *Geophysical Research Letters*, **34**, http://dx.doi.org/10.1029/2007gl031933

Sloyan, B. M. and I. V. Kamenkovich, 2007: Simulation of Subantarctic Mode and Antarctic Intermediate Waters in climate models. *Journal of Climate*, **20,** 5061-5080, http://dx.doi.org/10.1175/jcli4295.1

Smith, D. M. and J. M. Murphy, 2007: An objective ocean temperature and salinity analysis using covariances from a global climate model. *Journal of Geophysical Research: Oceans*, **112,** 19, http://dx.doi.org/10.1029/2005jc003172

Stammer, D., A. Kohl, and C. Wunsch, 2007: Impact of accurate geoid fields on estimates of the ocean circulation. *Journal of Atmospheric and Oceanic Technology*, **24,** 1464-1478, http://dx.doi.org/10.1175/jtech2044.1

Sugimoto, S. and K. Hanawa, 2007: Further evidence for non-reemergence of winter SST anomalies in the North Pacific eastern subtropical mode water area. *Journal of Oceanography*, **63,** 625-635, http://dx.doi.org/10.1007/s10872-007-0055-0

Thadathil, P., P. M. Muraleedharan, R. R. Rao, Y. K. Somayajulu, G. V. Reddy, and C. Revichandran, 2007: Observed seasonal variability of barrier layer in the Bay of Bengal. *Journal of Geophysical Research: Oceans*, **112,** 18, http://dx.doi.org/10.1029/2006jc003651

Tomczak, M., 2007: Variability of antarctic intermediate water properties in the south pacific ocean. *Ocean Science*, **3,** 363-377, http://dx.doi.org/10.5194/os-3-363-2007

Ueno, H., E. Oka, T. Suga, H. Onishi, and D. Roemmich, 2007: Formation and variation of temperature inversions in the eastern subarctic North Pacific. *Geophysical Research Letters*, **34,** 4, http://dx.doi.org/10.1029/2006gl028715

Uz, B. M., 2007: What causes the sporadic phytoplankton bloom southeast of Madagascar? *Journal of Geophysical Research: Oceans*, **112**, http://dx.doi.org/10.1029/2006jc003685

Vecchi, G. A. and M. J. Harrison, 2007: An observing system simulation experiment for the Indian Ocean. *Journal of Climate*, **20,** 3300-3319, http://dx.doi.org/10.1175/jcli4147.1

Venables, H., R. T. Pollard, and E. E. Popova, 2007: Physical conditions controlling the development of a regular phytoplankton bloom north of the Crozet Plateau, Southern Ocean. *Deep Sea Research Part Ii: Topical Studies in Oceanography*, **54,** 1949-1965, http://dx.doi.org/10.1016/j.dsr2.2007.06.014

Vidard, A., D. L. T. Anderson, and M. Balmaseda, 2007: Impact of ocean observation systems on ocean analysis and seasonal forecasts. *Monthly Weather Review*, **135,** 409-429, http://dx.doi.org/10.1175/mwr3310.1

Wajsowicz, R. C., 2007: Seasonal-to-interannual forecasting of tropical Indian Ocean sea surface temperature anomalies: Potential predictability and barriers. *Journal of Climate*, **20,** 3320-3343, http://dx.doi.org/10.1175/jcli4162.1

Whitney, F. A., H. J. Freeland, and M. Robert, 2007: Persistently declining oxygen levels in the interior waters of the eastern subarctic Pacific. *Progress in Oceanography*, **75,** 179-199, http://dx.doi.org/10.1016/j.pocean.2007.08.007

Willis, J. K., J. M. Lyman, G. C. Johnson, and J. Gilson, 2007: Correction to Recent cooling of the upper ocean. *Geophysical Research Letters*, **34**, http://dx.doi.org/10.1029/2007GL030323

Wunsch, C. and P. Heimbach, 2007: Practical global oceanic state estimation. *Physica D-Nonlinear Phenomena*, **230,** 197-208,

http://dx.doi.org/10.1016/j.physd.2006.09.040
Wunsch, C., R. M. Ponte, and P. Heimbach, 2007: Decadal trends in sea level patterns: 1993-2004. *Journal of Climate*, **20,** 5889-5911, http://dx.doi.org/10.1175/2007jcli1840.1
Yan, C. X., J. Zhu, and G. Q. Zhou, 2007: Impacts of XBT, TAO, altimetry and ARGO observations on the tropical Pacific Ocean data assimilation. *Advances in Atmospheric Sciences*, **24,** 383-398, http://dx.doi.org/10.1007/s00376-007-0383-4
Yasuda, I. and T. Watanabe, 2007: Chlorophyll a variation in the Kuroshio Extension revealed with a mixed-layer tracking float: implication on the long-term change of Pacific saury (Cololabis saira). *Fisheries Oceanography*, **16,** 482-488, http://dx.doi.org/10.1111/j.1365-2419.2007.00457.x
Yeager, S. G. and W. G. Large, 2007: Observational evidence of winter spice injection. *Journal of Physical Oceanography*, **37,** 2895-2919, http://dx.doi.org/10.1175/2007jpo3629.1
Zhang, S., M. J. Harrison, A. Rosati, and A. Wittenberg, 2007: System design and evaluation of coupled ensemble data assimilation for global oceanic climate studies. *Monthly Weather Review*, **135,** 3541-3564, http://dx.doi.org/10.1175/mwr3466.1
Zhou, H., P. F. Guo, J. P. Xu, and M. C. Shi, 2007: Direct measurements of surface and mid-depth circulation in the Shikoku Basin by Argo profiling floats. *Acta Oceanologica Sinica*, **26,** 1-11,

2006 (82)

Aagaard, K., T. J. Weingartner, S. L. Danielson, R. A. Woodgate, G. C. Johnson, and T. E. Whitledge, 2006: Some controls on flow and salinity in Bering Strait. *Geophysical Research Letters*, **33**, http://dx.doi.org/10.1029/2006GL026612
Agarwal, N., R. Sharma, S. Basu, and V. K. Agarwal, 2006: Impact of Argo data assimilation in an Ocean General Circulation Model - art. no. 64040Z. *Remote Sensing and Modeling of the Atmosphere, Oceans, and Interactions*, **6404,** Z4040-Z4040, http://dx.doi.org/10.1117/12.693674
Alverson, K. and D. J. Baker, 2006: Taking the pulse of the oceans. *Science*, **314,** 1657-1657, http://dx.doi.org/10.1126/science.1135358
Avsic, T., J. Karstensen, U. Send, and J. Fischer, 2006: Internal variability of newly formed Labrador Sea Water from 1994-2005. *Geophysical Research Letters*, **33,** 1-6, http://dx.doi.org/10.1029/2006gl026913
Batten, S. D., K. David Hyrenbach, W. J. Sydeman, K. H. Morgan, M. F. Henry, P. P. Y. Yen, and D. W. Welch, 2006: Characterising meso-marine ecosystems of the North Pacific. *Deep Sea Research Part II: Topical Studies in Oceanography*, **53,** 270-290, https://doi.org/10.1016/j.dsr2.2006.01.004
Bhaskar, T. V. S. U., D. Swain, and M. Ravichandran, 2006: Inferring mixed-layer depth variability from Argo observations in the western Indian Ocean. *Journal of Marine Research*, **64,** 393-406, https://doi.org/10.1357/002224006778189572
Bingham, F. M. and T. Suga, 2006: Distributions of mixed layer properties in North Pacific water mass formation areas: comparison of Argo floats and World Ocean Atlas 2001. *Ocean Science*, **2,** 61-70, http://dx.doi.org/10.5194/os-2-61-2006

Boutin, J. and N. Martin, 2006: ARGO upper salinity measurements: perspectives for L-band radiometers calibration and retrieved sea surface salinity validation. *Ieee Geoscience and Remote Sensing Letters*, **3,** 202-206, https://doi.org/10.1109/LGRS.2005.861930

Che, Y., R. Zheng, G. R. Jiang, and e. al, 2006: The type judge and characteristic analyses of the thermocline in the Pacific Ocean. Collection of Argo Application Papers *China Ocean Press***,** 204-214,

Chen, Y., R. Zheng, and G. R. Jiang, 2006: Evaluation and analysis of Mid-Depth currents of the equatorial Pacific using Argo float position information. *Marine Forecasts*, **23,** 37-46,

Chen, Y., R. Zheng, and G. R. Jiang, 2006: A diagnostic analyses on the mid-depth currents of the equatorial Pacific. Collection of Argo Application Papers. *China Ocean Press***,** 128-138,

Emelianov, M., J. Font, A. Turiel, C. Millot, J. Sole, P. M. Poulain, A. Julia, and M. R. Vitria, 2006: Transformation of Levantine Intermediate Water tracked by MEDARGO floats in the Western Mediterranean. *Ocean Science*, **2,** 281-290, https://doi.org/10.5194/os-2-281-2006

Emery, W. J., P. Brandt, A. Funk, and C. Boning, 2006: A comparison of sea surface temperatures from microwave remote sensing of the Labrador Sea with in situ measurements and model simulations. *J. Geophys. Res.*, **111**, http://dx.doi.org/10.1029/2006JC003578

Fengying, J. and F. Wang, 2006: A calibration method of Argo floats based on multiple regression analysis. *Chinese Journal of Oceanology and Limnology*, **24,** 118-124, http://dx.doi.org/10.1007/BF02842809

Fraile-Nuez, E. and A. Hernandez-Guerra, 2006: Wind-driven circulation for the eastern North Atlantic Subtropical Gyre from Argo data. *Geophysical Research Letters*, **33,** 4, http://dx.doi.org/10.1029/2005gl025122

Freeland, H. J., 2006: What proportion of the North Pacific Current finds its way into the Gulf of Alaska? *Atmosphere-Ocean*, **44,** 321-330, http://dx.doi.org/10.3137/ao.440401

Gould, W. J., 2006: Argo - a revolution in observing the oceans' interior. *World Maritime Technology Conference*, Queen Elizabeth Conference Centre, London,

Gould, W. J. and J. Turton, 2006: Argo -Sounding the oceans. *Weather*, **61,** 17-21, http://dx.doi.org/10.1256/wea.56.05

Griffa, A., A. Molcard, F. Raicich, and V. Rupolo, 2006: Assessment of the impact of TS assimilation from ARGO floats in the Mediterranean Sea. *Ocean Science*, **2,** 237-248, https://doi.org/10.5194/os-2-237-2006

Guinehut, S., P.-Y. Le Traon, and G. Larnicol, 2006: What can we learn from Global Altimetry/Hydrography comparisons? *Geophysical Research Letters*, **33**, http://dx.doi.org/10.1029/2005GL025551

Guo, J., J. P. Xie, and J. Zhu, 2006: Estimation of the surface and mid-depth currents of the equatorial Pacific. Collection of Argo Application Papers. *China Ocean Press***,** 111-127,

Haines, K., J. D. Blower, J.-P. Drecourt, C. Liu, A. Vidard, I. Astin, and X. Zhou, 2006: Salinity Assimilation Using S(T): Covariance Relationships. *Monthly Weather Review*, **134,** 759-771, http://dx.doi.org/10.1175%2FMWR3089.1

He, Z. J., Y. F. Xie, and W. Li, 2006: Application of sequential 3 dimensional variation on assimilating Argo in a global ocean model. Collection of Argo Application papers. *China Ocean Press*,

Hosoda, S., S. Minato, and N. Shikama, 2006: Seasonal temperature variation below the thermocline detected by Argo floats. *Geophysical Research Letters*, **33,** 5, http://dx.doi.org/10.1029/2006gl026070

Isoguchi, O., H. Kawamura, and E. Oka, 2006: Quasi-stationary jets transporting surface warm waters across the transition zone between the subtropical and the subarctic gyres in the North Pacific. *J. Geophys. Res.*, **111**, http://dx.doi.org/10.1029/2005JC003402

Ivchenko, V. O., N. C. Wells, and D. L. Aleynik, 2006: Anomaly of heat content in the northern Atlantic in the last 7 years: Is the ocean warming or cooling? *Geophysical Research Letters*, **33,** 6, http://dx.doi.org/10.1029/2006gl027691

Iwasaka, N., F. Kobashi, Y. Kinoshita, and Y. Ohno, 2006: Seasonal variations of the upper ocean in the western North Pacific observed by an Argo float. *Journal of Oceanography*, **62,** 481-492, http://dx.doi.org/10.1007/s10872-006-0070-6

Jackson, J. M., P. G. Myers, and D. Ianson, 2006: An examination of advection in the northeast Pacific Ocean, 2001-2005. *Geophysical Research Letters*, **33,** 5, http://dx.doi.org/10.1029/2006gl026278

Jayne, S. R., 2006: Circulation of the North Atlantic Ocean from altimetry and the Gravity Recovery and Climate Experiment geoid. *J. Geophys. Res.*, **111**, http://dx.doi.org/10.1029/2005JC003128

Johns, T. C., C. F. Durman, H. T. Banks, M. J. Roberts, A. J. McLaren, J. K. Ridley, C. A. Senior, K. D. Williams, A. Jones, G. J. Rickard, S. Cusack, W. J. Ingram, M. Crucifix, D. M. H. Sexton, M. M. Joshi, B.-W. Dong, H. Spencer, R. S. R. Hill, J. M. Gregory, A. B. Keen, A. K. Pardaens, J. A. Lowe, A. Bodas-Salcedo, S. Stark, and Y. Searl, 2006: The New Hadley Centre Climate Model (HadGEM1): Evaluation of Coupled Simulations. *Journal of Climate*, **19,** 1327-1353, http://dx.doi.org/10.1175%2FJCLI3712.1

Johnson, G. C., 2006: Generation and initial evolution of a mode water theta-S anomaly. *Journal of Physical Oceanography*, **36,** 739-751, http://dx.doi.org/10.1175/JPO2895.1

Johnson, G. C., J. M. Lyman, and J. K. Willis, 2006: Global Oceans: Heat Content *Bulletin of the American Meteorological Society*, **87,** s23-s24, http://dx.doi.org/10.1175%2FBAMS-87-6-shein

Jordi, A., G. Basterretxea, A. Orfila, and J. Tintore, 2006: Analysis of the circulation and shelf-slope exchanges in the continental margin of the northwestern Mediterranean. *Ocean Science*, **2,** 173-181, https://doi.org/10.5194/os-2-173-2006

Karstensen, J., T. Avsic, J. Fischer, and U. Send, 2006: Subsurface temperature maxima in the Labrador Sea and the subpolar North Atlantic. *Geophysical Research Letters*, **33,** 1-6, http://dx.doi.org/10.1029/2006gl026613

Kieke, D., M. Rhein, L. Stramma, W. M. Smethie, D. A. LeBel, and W. Zenk, 2006: Changes in the CFC inventories and formation rates of Upper Labrador Sea Water, 1997-2001. *Journal of Physical Oceanography*, **36,** 64-86, http://dx.doi.org/10.1175/JPO2814.1

Kim, E., Y. J. Ro, and Y. H. Youn, 2006: Structure of the Temperature and Salinity in 2003-2005 Profiled by the Argo Floats around the Ulleung-do area in the East Sea.

Journal of the Korean Society of Oceanography, **11,** 21-30,
Kington, J. A. and F. Selinger, 2006: The development and use of weather buoys 1940-2005. *Weather*, **61,** 164-166, http://dx.doi.org/10.1256/wea.247.05
Kobayashi, T. and T. Suga, 2006: The Indian Ocean HydroBase: A high-quality climatological dataset for the Indian Ocean. *Progress in Oceanography*, **68,** 75-114, http://dx.doi.org/10.1016/j.pocean.2005.07.001
Korotaev, G., T. Oguz, and S. Riser, 2006: Intermediate and deep currents of the Black Sea obtained from autonomous profiling floats. *Deep Sea Research Part II: Topical Studies in Oceanography*, **53,** 1901-1910, https://doi.org/10.1016/j.dsr2.2006.04.017
Lankhorst, M. and W. Zenk, 2006: Lagrangian Observations of the Middepth and Deep Velocity Fields of the Northeastern Atlantic Ocean. *Journal of Physical Oceanography*, **36,** 43-63, http://dx.doi.org/10.1175%2FJPO2869.1
Liu, Y., R. Zheng, and Y. H. Yin, 2006: The application of Argo data to a global 4-dimensional ocean data assimilation system. Collection of Argo Application papers. *China Ocean Press***,** 139-150,
Liu, Z.-H., J. P. Xu, and Y. R. Xiu, 2006: The effect of reference dataset on calibration of Argo profiling float salinity data. . *Marine Forecasts*, **23,** 1-12,
Liu, Z.-H., J. P. Xu, and B. K. Zhu, 2006: Upper ocean response to the tropical cyclones in the northwestern Pacific by Argo data. Collection of Argo Application papers. *China Ocean Press***,** 88-99,
Liu, Z.-H., J. P. Xu, and B. K. Zhu, 2006: Calibration of Argo profiling Float salinity data using historical hydrographic data. Collection of Argo Application papers. *China Ocean Press***,** 223-240,
Lyman, J. M., J. K. Willis, and G. C. Johnson, 2006: Recent cooling of the upper ocean. *Geophysical Research Letters*, **33**, http://dx.doi.org/10.1029/2006GL027033
Machin, F., U. Send, and W. Zenk, 2006: Intercomparing drifts from RAFOS and profiling floats in the Deep Western Boundary Current along the Mid-Atlantic Ridge. *Scientia Marina*, **70,** 1-8, http://dx.doi.org/10.3989/scimar.2006.70n11
MacKenzie, A., 2006: Charting the Deep Ocean Currents: The Argo Programme. *e.nz magazine*, **7,** 36-39, http://search.informit.com.au/documentSummary;dn=928636688904665;res=IELENG
Maes, C., K. Ando, T. Delcroix, W. S. Kessler, M. J. McPhaden, and D. Roemmich, 2006: Observed correlation of surface salinity, temperature and barrier layer at the eastern edge of the western Pacific warm pool. *Geophysical Research Letters*, **33,** 4 pp., http://dx.doi.org/10.1029/2005gl024772
Narvekar, J. and S. Prasanna Kumar, 2006: Seasonal variability of the mixed layer in the central Bay of Bengal and associated changes in nutrients and chlorophyll. *Deep Sea Research Part I: Oceanographic Research Papers*, **53,** 820-835, https://doi.org/10.1016/j.dsr.2006.01.012
Ollitrault, M., M. Lankhorst, D. Fratantoni, P. Richardson, and W. Zenk, 2006: Zonal intermediate currents in the equatorial Atlantic Ocean. *Geophysical Research Letters*, **33,** 4, http://dx.doi.org/10.1029/2005gl025368
Pan, A. and X. G. Guo, 2006: A preliminary study of the formation zone of the North Pacific

subtropical mode water. Collection of Argo Application papers. *China Ocean Press***,** 62-71,

Panteleev, G. G., P. Stabeno, V. A. Luchin, D. A. Nechaev, and M. Ikeda, 2006: Summer transport estimates of the Kamchatka Current derived as a variational inverse of hydrophysical and surface drifter data. *Geophysical Research Letters*, **33,** 5, http://dx.doi.org/10.1029/2005gl024974

Peng, G., E. P. Chassignet, Y. O. Kwon, and S. C. Riser, 2006: Investigation of variability of the North Atlantic Subtropical Mode Water using profiling float data and numerical model output. *Ocean Modelling*, **13,** 65-85, http://dx.doi.org/10.1016/j.ocemod.2005.07.001

Qiu, B. and S. Chen, 2006: Decadal Variability in the Formation of the North Pacific Subtropical Mode Water: Oceanic versus Atmospheric Control. *Journal of Physical Oceanography*, **36,** 1365-1380, http://dx.doi.org/10.1175%2FJPO2918.1

Qiu, B., P. Hacker, S. M. Chen, K. A. Donohue, D. R. Watts, H. Mitsudera, N. G. Hogg, and S. R. Jayne, 2006: Observations of the subtropical mode water evolution from the Kuroshio Extension System Study. *Journal of Physical Oceanography*, **36,** 457-473, http://dx.doi.org/10.1175/JPO2849.1

Raicich, F., 2006: The assessment of temperature and salinity sampling strategies in the Mediterranean Sea: idealized and real cases. *Ocean Science*, **2,** 97-112, https://doi.org/10.5194/os-2-97-2006

Saha, S., S. Nadiga, C. Thiaw, J. Wang, W. Wang, Q. Zhang, H. M. Van den Dool, H.-L. Pan, S. Moorthi, D. Behringer, D. Stokes, M. Pena, S. Lord, G. White, W. Ebisuzaki, P. Peng, and P. Xie, 2006: The NCEP Climate Forecast System. *Journal of Climate*, **19,** 3483-3517, http://dx.doi.org/10.1175%2FJCLI3812.1

Sallee, J. B., N. Wienders, K. Speer, and R. Morrow, 2006: Formation of subantarctic mode water in the southeastern Indian Ocean. *Ocean Dynamics*, **56,** 525-542, http://dx.doi.org/10.1007/s10236-005-0054-x

Sato, K., T. Suga, and K. Hanawa, 2006: Barrier layers in the subtropical gyres of the world's oceans. *Geophysical Research Letters*, **33,** 4, http://dx.doi.org/10.1029/2005gl025631

Sato, N., H. Tokinaga, R. Shirooka, and N. Suginohara, 2006: Influence of mechanical mixing on a low summertime SST in the western North Pacific ITCZ region. *Geophysical Research Letters*, **33,** 5, http://dx.doi.org/10.1029/2006gl025997

Schneider, W. and L. Bravo, 2006: Argo profiling floats document Subantarctic Mode Water formation west of Drake Passage. *Geophysical Research Letters*, **33,** 4, http://dx.doi.org/10.1029/2006gl026463

She, X., W. Fan, and X. D. Chen, 2006: Application of Argo floats datum to analysis longline bigeye tuna fishing grounds in the eastern and central Pacific Ocean. Collection of Argo Application papers. *China Ocean Press***,** 215-222,

Steiner, N., K. Denman, N. McFarlane, and L. Solheim, 2006: Simulating the coupling between atmosphere-ocean processes and the planktonic ecosystem during SERIES. *Deep Sea Research Part II: Topical Studies in Oceanography*, **53,** 2434-2454, https://doi.org/10.1016/j.dsr2.2006.05.030

Straneo, F., 2006: Heat and freshwater transport through the central Labrador Sea. *Journal of Physical Oceanography*, **36,** 606-628, http://dx.doi.org/10.1175/JPO2875.1

Taillandier, V. and A. Griffa, 2006: Implementation of position assimilation for ARGO floats in a realistic Mediterranean Sea OPA model and twin experiment testing. *Ocean Science*, **2,** 223-236, https://doi.org/10.5194/os-2-223-2006

Taillandier, V., A. Griffa, and A. Molcard, 2006: A variational approach for the reconstruction of regional scale Eulerian velocity fields from Lagrangian data. *Ocean Modelling*, **13,** 1-24, https://doi.org/10.1016/j.ocemod.2005.09.002

Taillandier, V., A. Griffa, P. M. Poulain, and K. Beranger, 2006: Assimilation of Argo float positions in the north western Mediterranean Sea and impact on ocean circulation simulations. *Geophysical Research Letters*, **33,** 5, http://dx.doi.org/10.1029/2005gl025552

Teng, J., Z.-H. Liu, and M. X. Sun, 2006: Development of Online Argo Data Service Platform Based on GIS. *The Proceedings of IGARSS2006*, Denver, USA,

Tengberg, A., J. Hovdenes, H. J. Andersson, O. Brocandel, R. Diaz, D. Hebert, T. Arnerich, C. Huber, A. Körtzinger, A. Khripounoff, F. Rey, C. Rönning, J. Schimanski, S. Sommer, and A. Stangelmayer, 2006: Evaluation of a lifetime-based optode to measure oxygen in aquatic systems. *Limnology and Oceanography: Methods*, **4,** 7-17, http://dx.doi.org/10.4319/lom.2006.4.7

Thompson, B., C. Gnanaseelan, and P. S. Salvekar, 2006: Seasonal evolution of temperature inversions in the north Indian Ocean. *Current Science*, **90,** 697-704, http://www.currentscience.ac.in/php/show_article.php?volume=090&issue=05&titleid=id_090_05_0697_0704_0&page=0697

Wang, G., Z.-H. Liu, and J. P. Xu, 2006: Three dimensional Pacific temperature, salinity and circulation reconstructions with Argo data. Collection of Argo Application papers. *China Ocean Press***,** 16-26,

Wunsch, C. and P. Heimbach, 2006: Estimated Decadal Changes in the North Atlantic Meridional Overturning Circulation and Heat Flux 1993-2004. *Journal of Physical Oceanography*, **36,** 2012-2024, http://dx.doi.org/10.1175%2FJPO2957.1

Xu, D., Z.-H. Liu, and X. H. Xu, 2006: The influence of typhoon on the surface layer salinity in the Western Pacific Warm Pool. Collection of Argo Application papers. *China Ocean Press***,** 100-110,

Ying, Y. H., R. H. Zhang, and T. Niu, 2006: Using an intermediate complex model to simulate the annual variation of SST in the tropical Indian Ocean and its assimilation experiment. Collection of Argo Application papers. *China Ocean Press***,** 162-181,

Yoshida, T. and M. Hoshimoto, 2006: Heat content change in the surface isothermal layer of a warm core ring in the sea east of Japan. *Journal of Oceanography*, **62,** 283-287, http://dx.doi.org/10.1007/s10872-006-0052-8

Zhang, D. and M. J. McPhaden, 2006: Decadal variability of the shallow Pacific meridional overturning circulation: Relation to tropical sea surface temperatures in observations and climate change models. *Ocean Modelling*, **15,** 250-273, http://dx.doi.org/10.1016/j.ocemod.2005.12.005

Zhang, R. H., Y. H. Ying, and Q. Q. Li, 2006: Utilizing Argo Data to Improve the Prediction of ENSO and Short-term Climate Prediction of Summer Rainfall in China. . *Journal of Applied Meteorological Science*, **17**,

Zhong, M., H. Yan, X. Wu, J. Duan, and Y. Zhu, 2006: Non-tidal oceanic contribution to polar

wobble estimated from two oceanic assimilation data sets. *Journal of Geodynamics*, **41,** 147-154, https://doi.org/10.1016/j.jog.2005.10.011

Zhou, H., P. F. Guo, and J. P. Xu, 2006: The characteristics of the Kuroshio and eddies east of Taiwan Island. Collection of Argo Application papers. *China Ocean Press***,** 47-61,

Zhou, H., J. P. Xu, and P. F. Guo, 2006: Study of an anticyclonic eddy observed by Argo profiling float in the southeast off Philippine. Collection of Argo Application papers. *China Ocean Press***,** 36-46,

Zhu, J., C. X. Yan, and L. Y. Wang, 2006: Application of Argo data to the Pacific Ocean data assimilation. Collection of Argo Assimilation papers. *China Ocean Press***,** 151-161,

Zhu, J., G. Q. Zhou, C. X. Yan, W. W. Fu, and X. B. You, 2006: A three-dimensional variational ocean data assimilation system: Scheme and preliminary results. *Science in China Series D-Earth Sciences*, **49,** 1212-1222, http://dx.doi.org/10.1007/s11430-006-1212-9

2005 (54)

Alderson, S. G. and P. D. Killworth, 2005: A preoperational scheme for calculating sea surface height by Bernoulli inverse of Argo float data in the North Atlantic. *Journal of Atmospheric and Oceanic Technology*, **22,** 1416-1422, http://dx.doi.org/10.1175/JTECH1787.1

Bohme, L. and U. Send, 2005: Objective analyses of hydrographic data for referencing profiling float salinities in highly variable environments. *Deep Sea Research Part Ii: Topical Studies in Oceanography*, **52,** 651-664, http://dx.doi.org/10.1016/j.dsr2.2004.12.014

Bouruet-Aubertot, P., H. Mercier, F. Gaillard, and P. Lherminier, 2005: Evidence of strong inertia-gravity wave activity during the POMME experiment. *J. Geophys. Res.*, **110**, http://dx.doi.org/10.1029/2004JC002747

Crawford, W., P. Sutherland, and P. van Hardenberg, 2005: Cold water intrusion in the eastern Gulf of Alaska in 2002. *Atmosphere-Ocean*, **43,** 119-128, http://dx.doi.org/10.3137/ao.430201

Davis, R. E., 2005: Intermediate-Depth Circulation of the Indian and South Pacific Oceans Measured by Autonomous Floats. *Journal of Physical Oceanography*, **35,** 683-707, http://dx.doi.org/10.1175%2FJPO2702.1

Durand, F. and G. Reverdin, 2005: A statistical method for correcting salinity observations from autonomous profiling floats: An ARGO perspective. *Journal of Atmospheric and Oceanic Technology*, **22,** 292-301, http://dx.doi.org/10.1175/JTECH1693.1

Eugenio, F., J. Marcello, A. Hernandez-Guerra, and E. Rovaris, 2005: Regional optimization of an atmospheric correction algorithm for the retrieval of sea surface temperature from the Canary Islands - Azores - Gibraltar area using NOAA/AVHRR data. *International Journal of Remote Sensing*, **26,** 1799-1814, http://dx.doi.org/10.1080/01431160582000298341

Faure, V. and K. Speer, 2005: Labrador Sea Water circulation in the Northern North Atlantic Ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, **52,** 565-581, https://doi.org/10.1016/j.dsr2.2004.12.004

Freeland, H. J. and P. F. Cummins, 2005: Argo: A new tool for environmental monitoring and assessment of the world's oceans, an example from the NE Pacific. *Progress in Oceanography*, **64,** 31-44, http://dx.doi.org/10.1016/j.pocean.2004.11.002

Gaillard, F., H. Mercier, and C. Kermabon, 2005: A synthesis of the POMME physical data set: One year monitoring of the upper layer. *J. Geophys. Res.*, **110**, http://dx.doi.org/10.1029/2004JC002764

Gould, W. J., 2005: From Swallow floats to Argo - the development of neutrally buoyant floats. *Deep Sea Research Part Ii: Topical Studies in Oceanography*, **52,** 529-543, http://dx.doi.org/10.1016/j.dsr2.2004.12.005

Hansen, J., L. Nazarenko, R. Ruedy, M. Sato, J. Willis, A. Del Genio, D. Koch, A. Lacis, K. Lo, S. Menon, T. Novakov, J. Perlwitz, G. Russell, G. A. Schmidt, and N. Tausnev, 2005: Earth's Energy Imbalance: Confirmation and Implications. *Science*, **308,** 1431-1435, http://www.sciencemag.org/cgi/content/abstract/308/5727/1431

Joseph, S. and H. J. Freeland, 2005: Salinity variability in the Arabian Sea. *Geophysical Research Letters*, **32,** 4, http://dx.doi.org/10.1029/2005gl022972

King, B. A. and E. L. McDonagh, 2005: Decadal changes in ocean properties revealed by ARGO floats. *Geophysical Research Letters*, **32,** 4, http://dx.doi.org/10.1029/2005gl023145

Kobayashi, T. and S. Minato, 2005: What observation scheme should we use for profiling floats to achieve the argo goal for salinity measurement accuracy? - Suggestions from software calibration. *Journal of Atmospheric and Oceanic Technology*, **22,** 1588-1601, http://dx.doi.org/10.1175/JTECH1798.1

Kobayashi, T. and S. Minato, 2005: Importance of reference dataset improvements for Argo delayed-mode quality control. *Journal of Oceanography*, **61,** 995-1009, http://dx.doi.org/10.1007/s10872-006-0016-z

Kortzinger, A., J. Schimanski, and U. Send, 2005: High Quality Oxygen Measurements from Profiling Floats: A Promising New Technique. *Journal of Atmospheric and Oceanic Technology*, **22,** 302-308, http://dx.doi.org/10.1175%2FJTECH1701.1

Kwon, Y.-O. and S. C. Riser, 2005: General circulation of the western subtropical North Atlantic observed using profiling floats. *J. Geophys. Res.*, **110**, http://dx.doi.org/10.1029/2005JC002909

Lavender, K. L., W. Brechner Owens, and R. E. Davis, 2005: The mid-depth circulation of the subpolar North Atlantic Ocean as measured by subsurface floats. *Deep Sea Research Part I: Oceanographic Research Papers*, **52,** 767-785, https://doi.org/10.1016/j.dsr.2004.12.007

Le Cann, B., M. Assenbaum, J. C. Gascard, and G. Reverdin, 2005: Observed mean and mesoscale upper ocean circulation in the midlatitude northeast Atlantic. *Journal of Geophysical Research: Oceans*, **110,** 28 pp., http://dx.doi.org/10.1029/2004jc002768

Li, M., P. G. Myers, and H. Freeland, 2005: An examination of historical mixed layer depths along Line P in the Gulf of Alaska. *Geophysical Research Letters*, **32**, http://dx.doi.org/10.1029/2004GL021911

Lopez-Jurado, J. L., C. Gonzalez-Pola, and P. Velez-Belchi, 2005: Observation of an abrupt disruption of the long-term warming trend at the Balearic Sea, western Mediterranean Sea, in summer 2005. *Geophysical Research Letters*, **32**,

http://dx.doi.org/10.1029/2005GL024430
McMahon, C. R., E. Autret, J. D. R. Houghton, P. Lovell, A. E. Myers, and G. C. Hays, 2005: Animal-borne sensors successfully capture the real-time thermal properties of ocean basins. *Limnology and Oceanography-Methods*, **3,** 392-398, http://dx.doi.org/10.4319/lom.2005.3.392
Molcard, A., A. Griffa, and T. M. Ozgokmen, 2005: Lagrangian Data Assimilation in Multilayer Primitive Equation Ocean Models. *Journal of Atmospheric and Oceanic Technology*, **22,** 70-83, http://dx.doi.org/10.1175%2FJTECH-1686.1
Mooers, C. N. K., I. Bang, and F. J. Sandoval, 2005: Comparisons between observations and numerical simulations of Japan (East) Sea flow and mass fields in 1999 through 2001. *Deep Sea Research Part II: Topical Studies in Oceanography*, **52,** 1639-1661, https://doi.org/10.1016/j.dsr2.2004.10.003
Nunez-Riboni, I., O. Boebel, M. Ollitrault, Y. You, P. L. Richardson, and R. Davis, 2005: Lagrangian circulation of Antarctic Intermediate Water in the subtropical South Atlantic. *Deep Sea Research Part II: Topical Studies in Oceanography*, **52,** 545-564, https://doi.org/10.1016/j.dsr2.2004.12.006
Ohshima, K. I., S. C. Riser, and M. Wakatsuchi, 2005: Mixed layer evolution in the Sea of Okhotsk observed with profiling floats and its relation to sea ice formation. *Geophysical Research Letters*, **32,** 4, http://dx.doi.org/10.1029/2004gl021823
Oka, E., 2005: Long-term sensor drift found in recovered Argo profiling floats. *Journal of Oceanography*, **61,** 775-781, http://dx.doi.org/10.1007/s10872-005-0083-6
Oke, P. R., A. Schiller, D. A. Griffin, and G. B. Brassington, 2005: Ensemble data assimilation for an eddy-resolving ocean model of the Australian region. *Quarterly Journal of the Royal Meteorological Society*, **131,** 3301-3311, https://doi.org/10.1256/qj.05.95
Pan, A. J. and Q. Y. Liu, 2005: Mesoscale eddy effects on the wintertime vertical mixing in the formation region of the North Pacific Subtropical Mode Water. *Chinese Science Bulletin*, **50,** 1949-1956, http://dx.doi.org/10.1360/982004-757
Park, J. J., K. Kim, and B. A. King, 2005: Global statistics of inertial motions. *Geophysical Research Letters*, **32,** 5, http://dx.doi.org/10.1029/2005gl023258
Park, J. J., K. Kim, B. A. King, and S. C. Riser, 2005: An advanced method to estimate deep currents from profiling floats. *Journal of Atmospheric and Oceanic Technology*, **22,** 1294-1304, http://dx.doi.org/10.1175/JTECH1748.1
Park, Y.-G., K.-H. Oh, K.-I. Chang, and M. S. Suk, 2005: Water masses and flow fields of the Southern Ocean measured by autonomous profiling floats (Argo floats). *Ocean and Polar Research*, **27,** 183, http://dx.doi.org/10.4217/OPR.2005.27.2.183
Phillips, H. E., S. E. Wijffels, and M. Feng, 2005: Interannual variability in the freshwater content of the Indonesian-Australian Basin. *Geophysical Research Letters*, **32,** 5, http://dx.doi.org/10.1029/2004gl021755
Qiu, B. and S. M. Chen, 2005: Eddy-induced heat transport in the subtropical North Pacific from Argo, TMI, and altimetry measurements. *Journal of Physical Oceanography*, **35,** 458-473, http://dx.doi.org/10.1175/JPO2696.1
Qu, T. D. and G. Meyers, 2005: Seasonal variation of barrier layer in the southeastern tropical Indian Ocean. *Journal of Geophysical Research: Oceans*, **110,** 13, http://dx.doi.org/10.1029/2004jc002816

Ramesh, K. V. and R. Krishnan, 2005: Coupling of mixed layer processes and thermocline variations in the Arabian Sea. *Journal of Geophysical Research: Oceans*, **110,** 17, http://dx.doi.org/10.1029/2004jc002515

Sanders, R., L. Brown, S. Henson, and M. Lucas, 2005: New production in the Irminger Basin during 2002. *Journal of Marine Systems*, **55,** 291-310, http://dx.doi.org/10.1016/j.jmarsys.2004.09.002

Sato, N., 2005: Influences of intraseasonal disturbances on the oceanic mixed layer in the western North Pacific ITCZ region. *Geophysical Research Letters*, **32,** 4, http://dx.doi.org/10.1029/2005gl023577

Schmid, C., 2005: Impact of Combining Temperature Profiles from Different Instruments on an Analysis of Mixed Layer Properties. *Journal of Atmospheric and Oceanic Technology*, **22,** 1571-1587, http://dx.doi.org/10.1175%2FJTECH1785.1

Testor, P., U. Send, J. C. Gascard, C. Millot, I. Taupier-Letage, and K. Beranger, 2005: The mean circulation of the southwestern Mediterranean Sea: Algerian gyres. *Journal of Geophysical Research: Oceans*, **110,** 14 pp., http://dx.doi.org/10.1029/2004jc002861

Ueno, H., E. Oka, T. Suga, and H. Onishi, 2005: Seasonal and interannual variability of temperature inversions in the subarctic North Pacific. *Geophysical Research Letters*, **32**, http://dx.doi.org/10.1029/2005GL023948

Ueno, H. and I. Yasuda, 2005: Temperature inversions in the subarctic North Pacific. *Journal of Physical Oceanography*, **35,** 2444-2456, http://dx.doi.org/10.1175/JPO2829.1

Vargas-Yanez, M., G. Parrilla, A. Lavin, P. Velez-Belchi, C. Gonzalez-Pola, and A. Hernandez-Guerra, 2005: Eddy-induced variability in a transatlantic section: Argo observing system-gyroscope 0302 cruise comparison. *Journal of Atmospheric and Oceanic Technology*, **22,** 1069-1079, http://dx.doi.org/10.1175/JTECH1761.1

Vidard, A., D. L. T. Anderson, and M. Balmaseda, 2005: Impact of ocean observation systems on ocean analysis and seasonal forecasts. *ECMWF, Technical Memorandum*, **460,** 32,

Vinayachandran, P. N., T. Kagimoto, Y. Masumoto, P. Chauhan, S. R. Nayak, and T. Yamagata, 2005: Bifurcation of the East India Coastal Current east of Sri Lanka. *Geophysical Research Letters*, **32,** 4, http://dx.doi.org/10.1029/2005gl022864

Wirts, A. E. and G. C. Johnson, 2005: Recent interannual upper ocean variability in the deep southeastern Bering Sea. *Journal of Marine Research*, **63,** 381-405, https://doi.org/10.1357/0022240053693725

Wong, A. P. S., 2005: Subantarctic Mode Water and Antarctic Intermediate Water in the South Indian Ocean based on profiling float data 2000-2004. *Journal of Marine Research*, **63,** 789-812, https://doi.org/10.1357/0022240054663196

Xie, J. P., J. Zhu, L. Xu, and P. W. Guo, 2005: Evaluation of mid-depth currents of NCEP reanalysis data in the tropical Pacific using ARGO float position information. *Advances in Atmospheric Sciences*, **22,** 677-684, http://dx.doi.org/10.1007/BF02918711

Xu, D., Z.-H. Liu, G. Liao, and J. P. Xu, 2005: The influence of typhoon on the sea surface salinity in the warm pool of the western Pacific. *Acta Meteorological Sinica***,** 1-7, http://caod.oriprobe.com/articles/9435411/The_influence_of_typhoon_on_the_sea_surface_salinity_in_the_warm_pool_.htm

Yimin, L., W. Li, and P. Zhang, 2005: NCC 4-Dimensional Ocean Data Assimilation System

and the Studies on its Results in the Middle Pacific. *Acta Oceanologica Sinica*, **27,** 27-35,

Yimin, L., R. H. Zhang, Y. H. Yin, and T. Niu, 2005: The Application of Argo Data to the Global Ocean Data Assimilation Operational System of NCC. *Acta Meteorological Sinica***,** 355-365, http://caod.oriprobe.com/articles/8849058/The_Application_of_ARGO_Data_to_the_Global_Ocean_Data_Assimilation_Ope.htm

Youn, Y. H., H. Lee, Y. S. Chang, and P. Thadathil, 2005: Validation of Salinity Data from Argo floats: Comparison between the older Argo floats and that of later deployments. *Journal of Korean Earth Science Society*, **26,** 129-136,

Zhang, S., M. J. Harrison, A. T. Wittenberg, A. Rosati, J. L. Anderson, and V. Balaji, 2005: Initialization of an ENSO Forecast System Using a Parallelized Ensemble Filter. *Monthly Weather Review*, **133,** 3176-3201, http://dx.doi.org/10.1175%2FMWR3024.1

2004 (26)

Centurioni, L. R. and W. J. Gould, 2004: Winter conditions in the Irminger Sea observed with profiling floats. *Journal of Marine Research*, **62,** 313-336, https://doi.org/10.1357/0022240041446209

de Boyer Montegut, C., G. Madec, A. S. Fischer, A. Lazar, and D. Iudicone, 2004: Mixed layer depth over the global ocean: An examination of profile data and a profile-based climatology. *J. Geophys. Res.*, **109**, http://dx.doi.org/10.1029/2004JC002378

Endoh, T., H. Mitsudera, S.-P. Xie, and B. Qiu, 2004: Thermohaline Structure in the Subarctic North Pacific Simulated in a General Circulation Model. *Journal of Physical Oceanography*, **34,** 360-371, http://dx.doi.org/10.1175%2F1520-0485%282004%29034%3C0360%3ATSITSN%3E2.0.CO%3B2

Fischer, J., F. A. Schott, and M. Dengler, 2004: Boundary Circulation at the Exit of the Labrador Sea. *Journal of Physical Oceanography*, **34,** 1548-1570, http://dx.doi.org/10.1175%2F1520-0485%282004%29034%3C1548%3ABCATEO%3E2.0.CO%3B2

Gould, W. J., 2004: Argo Profiling Floats Bring New Era of In Situ Ocean Observations. *EOS*, **85**, http://dx.doi.org/10.1029/2004EO190002

Guinehut, S., P. Y. Le Traon, G. Larnicol, and S. Philipps, 2004: Combining Argo and remote-sensing data to estimate the ocean three-dimensional temperature fields - a first approach based on simulated observations. *Journal of Marine Systems*, **46,** 85-98, http://dx.doi.org/10.1016/j.jmarsys.2003.11.022

Homan, L., T. H. Kim, J. H. Kim, J. W. Seo, and Y. H. Youn, 2004: Mean flow and variability in the upper portion of the East Sea proper water in the southwestern East Sea with APEX floats. *Journal of Environmental Sciences*, **13,** 135-141,

Hu, C., E. T. Montgomery, R. W. Schmitt, and F. E. Muller-Karger, 2004: The dispersal of the Amazon and Orinoco River water in the tropical Atlantic and Caribbean Sea: Observation from space and S-PALACE floats. *Deep Sea Research Part II: Topical Studies in Oceanography*, **51,** 1151-1171,

http://dx.doi.org/10.1016/j.dsr2.2004.04.001
Iwasaka, N., T. Okumura, E. Oka, and K. Takeuchi, 2004: A simulation of Argo float distribution in the South Pacific. *Report of Japan Marine Science and Technology Center*, **49,** 43-50,
Johnson, G. C., P. J. Stabeno, and S. C. Riser, 2004: The Bering Slope Current system revisited. *Journal of Physical Oceanography*, **34,** 384-398, http://dx.doi.org/10.1175/1520-0485(2004)034%3C0384:TBSCSR%3E2.0.CO;2
McCulloch, M. E., J. O. S. Alves, and M. J. Bell, 2004: Modelling shallow mixed layers in the northeast Atlantic. *Journal of Marine Systems*, **52,** 107-119, http://dx.doi.org/10.1016/j.jmarsys.2004.03.001
Molinari, R. L., 2004: Annual and decadal variability in the western subtropical North Atlantic: signal characteristics and sampling methodologies. *Progress in Oceanography*, **62,** 33-66, http://dx.doi.org/10.1016/j.pocean.2004.07.002
Ohno, Y., T. Kobayashi, N. Iwasaka, and T. Suga, 2004: The mixed layer depth in the North Pacific as detected by the Argo floats. *Geophysical Research Letters*, **31,** 4, http://dx.doi.org/10.1029/2004gl019576
Ohshima, K. I., D. Simizu, M. Itoh, G. Mizuta, Y. Fukamachi, S. C. Riser, and M. Wakatsuchi, 2004: Sverdrup Balance and the Cyclonic Gyre in the Sea of Okhotsk. *Journal of Physical Oceanography*, **34,** 513-525, http://dx.doi.org/10.1175%2F1520-0485%282004%29034%3C0513%3ASBATCG%3E2.0.CO%3B2
Oka, E. and K. Ando, 2004: Stability of temperature and conductivity sensors of argo profiling floats. *Journal of Oceanography*, **60,** 253-258, http://dx.doi.org/10.1023/B:JOCE.0000038331.10108.79
Park, J. J., K. Kim, and W. R. Crawford, 2004: Inertial currents estimated from surface trajectories of ARGO floats. *Geophysical Research Letters*, **31,** 4, http://dx.doi.org/10.1029/2004gl020191
Park, Y.-G., K.-H. Oh, K.-I. Chang, and M.-S. Suk, 2004: Intermediate level circulation of the southwestern part of the East/Japan Sea estimated from autonomous isobaric profiling floats. *Geophysical Research Letters*, **31**, http://dx.doi.org/10.1029/2004GL020424
Ravichandran, M., P. N. Vinayachandran, S. Joseph, and K. Radhakrishnan, 2004: Results from the first Argo float deployed by India. *Current Science*, **86,** 651-659, http://www.currentscience.ac.in/php/show_article.php?volume=086&issue=05&titleid=id_086_05_0651_0659_0&page=0651
Roemmich, D., S. Riser, R. Davis, and Y. Desaubies, 2004: Autonomous profiling floats: Workhorse for broad-scale ocean observations. *Marine Technology Society Journal*, **38,** 21-29, https://doi.org/10.4031/002533204787522802
Sato, K., T. Suga, and K. Hanawa, 2004: Barrier layer in the North Pacific subtropical gyre. *Geophysical Research Letters*, **31,** 4, http://dx.doi.org/10.1029/2003gl018590
Schiller, A., S. E. Wijffels, and G. A. Meyers, 2004: Design requirements for an Argo float array in the Indian Ocean inferred from observing system simulation experiments. *Journal of Atmospheric and Oceanic Technology*, **21,** 1598-1620, http://dx.doi.org/10.1175/1520-0426(2004)021%3C1598:DRFAAF%3E2.0.CO;2

Shimizu, Y., T. Iwao, I. Yasuda, S. I. Ito, T. Watanabe, K. Uehara, N. Shikama, and T. Nakano, 2004: Formation process of North Pacific intermediate water revealed by profiling floats set to drift on 26.7 sigma(theta) isopycnal surface. *Journal of Oceanography*, **60,** 453-462, http://dx.doi.org/10.1023/B:JOCE.0000038061.55914.eb

Thadathil, P., P. M. Muraleedharan, V. V. Gopalakrishna, G. V. Reddy, L. Ratnakaran, C. Revichandran, and V. S. N. Murthy, 2004: Validation of ARGO data in the Indian Ocean. *Gayana*, **68,** 456-458, http://dx.doi.org/10.4067/S0717-65382004000300025

Vargas-Yanez, M., G. Parrilla, A. Lavin, P. Velez-Belchi, and C. Gonzalez-Pola, 2004: Temperature and salinity increase in the eastern North Atlantic along the 24.5 degree N in the last ten years. *Geophysical Research Letters*, **31**, http://dx.doi.org/10.1029/2003GL019308

Vinayachandran, P. N., 2004: Summer cooling of the Arabian Sea during contrasting monsoons. *Geophysical Research Letters*, **31,** 4, http://dx.doi.org/10.1029/2004gl019961

Willis, J. K., D. Roemmich, and B. Cornuelle, 2004: Interannual variability in upper ocean heat content, temperature, and thermosteric expansion on global scales. *Journal of Geophysical Research: Oceans*, **109,** 13, http://dx.doi.org/10.1029/2003jc002260

2003 (21)

Bacon, S., W. J. Gould, and Y. Jia, 2003: Open-ocean convection in the Irminger Sea. *Geophysical Research Letters*, **30**, http://dx.doi.org/10.1029/2002GL016271

Chapman, P., S. F. D. Marco, R. E. Davis, and A. C. Coward, 2003: Flow at intermediate depths around Madagascar based on ALACE float trajectories. *Deep Sea Research Part II: Topical Studies in Oceanography*, **50,** 1957-1986, http://dx.doi.org/10.1016/S0967-0645(03)00040-7

Gille, S. T., 2003: Float observations of the Southern Ocean. Part I: Estimating mean fields, bottom velocities, and topographic steering. *Journal of Physical Oceanography*, **33,** 1167-1181, http://dx.doi.org/10.1175/1520-0485(2003)033%3C1167:FOOTSO%3E2.0.CO;2

Gille, S. T., 2003: Float observations of the Southern Ocean. Part II: Eddy fluxes. *Journal of Physical Oceanography*, **33,** 1182-1196, http://dx.doi.org/10.1175/1520-0485(2003)033%3C1182:FOOTSO%3E2.0.CO;2

Gille, S. T. and L. Romero, 2003: Statistical behavior of ALACE floats at the surface of the Southern Ocean. *Journal of Atmospheric and Oceanic Technology*, **20,** 1633-1640, http://dx.doi.org/10.1175/1520-0426(2003)020%3C1633:SBOAFA%3E2.0.CO;2

Henson, S. A., R. Sanders, J. T. Allen, I. S. Robinson, and L. Brown, 2003: Seasonal constraints on the estimation of new production from space using temperature-nitrate relationships. *Geophysical Research Letters*, **30,** 4, http://dx.doi.org/10.1029/2003gl017982

Iwao, T., M. Endoh, N. Shikama, and T. Nakano, 2003: Intermediate Circulation in the Northwestern North Pacific Derived from Subsurface Floats. *Journal of Oceanography*, **59,** 893-904, http://dx.doi.org/10.1023/B:JOCE.0000009579.86413.eb

Iwasaka, N., T. Suga, K. Takeuchi, K. Mizuno, Y. Takatsuki, K. Ando, T. Kobayashi, E. Oka, Y.

Ichikawa, M. Miyazaki, H. Matsuura, K. Izawa, C. S. Yang, and N. Shikama, 2003: Pre-Japan-ARGO: Experimental observation of upper and middle layers south of the Kuroshio Extension region using profiling floats. *Journal of Oceanography*, **59,** 119-127, http://dx.doi.org/10.1023/A:1022880809737

Lilly, J. M., P. B. Rhines, F. Schott, K. Lavender, J. Lazier, U. Send, and E. D'Asaro, 2003: Observations of the Labrador Sea eddy field. *Progress in Oceanography*, **59,** 75-176, http://dx.doi.org/10.1016/j.pocean.2003.08.013

Oka, E. and T. Suga, 2003: Formation region of North Pacific subtropical mode water in the late winter of 2003. *Geophysical Research Letters*, **30,** 4, http://dx.doi.org/10.1029/2003gl018581

Roemmich, D. and J. Gould, 2003: The future of climate observations in the global ocean. *Sea Technology*, **44,** 10-15,

Schmid, C., Z. D. Garraffo, E. Johns, and S. L. Garzoli, 2003: Pathways and variability at intermediate depths in the tropical Atlantic. *Interhemispheric Water Exchange in the Atlantic Ocean*, G. J. Goni and P. Malanotte-Rizzoli, Eds., Elsevier Oceanography Series, 233-268, http://store.elsevier.com/Interhemispheric-Water-Exchange-in-the-Atlantic-Ocean/isbn-9780080534893/.

Straneo, F., R. S. Pickart, and K. Lavender, 2003: Spreading of Labrador sea water: an advective-diffusive study based on Lagrangian data. *Deep Sea Research Part I: Oceanographic Research Papers*, **50,** 701-719, http://dx.doi.org/10.1016/S0967-0637(03)00057-8

Thomson, R. E. and H. J. Freeland, 2003: Topographic steering of a mid-depth drifter in an eddy-like circulation region south and east of the Hawaiian Ridge. *Journal of Geophysical Research: Oceans*, **108,** 7, http://dx.doi.org/10.1029/2002jc001715

Treguier, A. M., N. G. Hogg, M. Maltrud, K. Speer, and V. Thierry, 2003: The Origin of Deep Zonal Flows in the Brazil Basin. *Journal of Physical Oceanography*, **33,** 580-599, http://dx.doi.org/10.1175%2F1520-0485%282003%29033%3C0580%3ATOODZF%3E2.0.CO%3B2

Turton, J., 2003: Argo: An array of free-drifting profiling floats - Progress towards establishing a global array of 3,000 floats for observing the world's oceans. *Sea Technology*, **44,** 33-36,

Uehara, H., T. Suga, K. Hanawa, and N. Shikama, 2003: A role of eddies in formation and transport of North Pacific Subtropical mode water. *Geophysical Research Letters*, **30,** 4, http://dx.doi.org/10.1029/2003gl017542

Willis, J. K., D. Roemmich, and B. Cornuelle, 2003: Combining altimetric height with broadscale profile data to estimate steric height, heat storage, subsurface temperature, and sea-surface temperature variability. *J. Geophys. Res.*, **108**, http://dx.doi.org/10.1029/2002JC001755

Wong, A. P. S. and G. C. Johnson, 2003: South Pacific Eastern Subtropical Mode Water. *Journal of Physical Oceanography*, **33,** 1493-1509, http://dx.doi.org/10.1175/1520-0485(2003)033%3C1493:SPESMW%3E2.0.CO;2

Wong, A. P. S., G. C. Johnson, and W. B. Owens, 2003: Delayed-mode calibration of autonomous CTD profiling float salinity data by theta-S climatology. *Journal of*

Atmospheric and Oceanic Technology, **20,** 308-318, http://dx.doi.org/10.1175/1520-0426(2003)020%3C0308:DMCOAC%3E2.0.CO;2
Yanagimoto, D. and K. Taira, 2003: Current Measurements of the Japan Sea Proper Water and the Intermediate Water by ALACE Floats. *Journal of Oceanography*, **59,** 359-368, http://dx.doi.org/10.1023/A:1025572112019

2002 (20)

Bishop, J. K. B., R. E. Davis, and J. T. Sherman, 2002: Robotic Observations of Dust Storm Enhancement of Carbon Biomass in the North Pacific. *Science*, **298,** 817-821, http://dx.doi.org/10.1126/science.1074961
Bower, A. S., B. Le Cann, T. Rossby, W. Zenk, J. Gould, K. Speer, P. L. Richardson, M. D. Prater, and H. M. Zhang, 2002: Directly measured mid-depth circulation in the northeastern North Atlantic Ocean. *Nature*, **419,** 603-607, http://dx.doi.org/10.1038/nature01078
Chapman, P. and J. Gould, 2002: The role of technology developments in WOCE. *International WOCE Newsletter* 21-23.
Cuny, J., P. B. Rhines, P. P. Niiler, and S. Bacon, 2002: Labrador Sea Boundary Currents and the Fate of the Irminger Sea Water. *Journal of Physical Oceanography*, **32,** 627-647, http://dx.doi.org/10.1175%2F1520-0485%282002%29032%3C0627%3ALSBCAT%3E2.0.CO%3B2
Dalton, R., 2002: Oceanography: Voyage of the argonauts. *Nature*, **415,** 954-955, http://dx.doi.org/10.1038/415954a
Feng, M. and S. Wijffels, 2002: Intraseasonal variability in the south equatorial current of the east Indian Ocean. *Journal of Physical Oceanography*, **32,** 265-277, http://dx.doi.org/10.1175/1520-0485(2002)032%3C0265:IVITSE%3E2.0.CO;2
Fischer, J. and F. A. Schott, 2002: Labrador Sea water tracked by profiling floats - From the boundary current into the open North Atlantic. *Journal of Physical Oceanography*, **32,** 573-584, http://dx.doi.org/10.1175/1520-0485(2002)032%3C0573:LSWTBP%3E2.0.CO;2
Gascard, J. C., A. J. Watson, M.-J. Messias, K. A. Olsson, T. Johannessen, and K. Simonsen, 2002: Long-lived vortices as a mode of deep ventilation in the Greenland Sea. *Nature*, **416,** 525-527, http://dx.doi.org/10.1038/416525a
Gille, S. T., 2002: Warming of the Southern Ocean Since the 1950s. *Science*, **295,** 1275-1277, http://dx.doi.org/10.1126/science.1065863
Guinehut, S., G. Larnicol, and P. Y. Le Traon, 2002: Design of an array of profiling floats in the North Atlantic from model simulations. *Journal of Marine Systems*, **35,** 1-9, http://dx.doi.org/10.1016/S0924-7963(02)00042-8
Kobayashi, T., H. Nakajima, T. Suga, K. Mizuno, N. Shikama, and K. Takeuchi, 2002: High quality climatological dataset for the Indian Ocean (Indian HydroBase). *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **46,** 11-27,
Lavender, K. L., R. E. Davis, and W. B. Owens, 2002: Observations of open-ocean deep convection in the Labrador Sea from subsurface floats. *Journal of Physical Oceanography*, **32,** 511-526, http://dx.doi.org/10.1175/1520-0485(2002)032%3C0511:OOOODC%3E2.0.CO;2

Liu, Z.-H., J. P. Xu, B. K. Zhu, and M. Guo, 2002: The test and deployment of Argo profiling float. *Ocean Technology*, **21,** 35-40,

Lumpkin, R., A. M. Treguier, and K. Speer, 2002: Lagrangian eddy scales in the Northern Atlantic Ocean. *Journal of Physical Oceanography*, **32,** 2425-2440, http://dx.doi.org/10.1175/1520-0485%282002%29032%3C2425%3ALESITN%3E2.0.CO%3B2

Marchand, P. and J. Servain, 2002: NOR-50: Fast research vessel for operational oceanography - Implementing PIRATA & Argo programs in the Tropical & South Atlantic in a practical, economic way. *Sea Technology*, **43,** 49-54,

Oka, E., K. Izawa, J. Inoue, K. Ando, N. Shikama, K. Mizuno, K. Suehiro, and K. Takeuchi, 2002: Is retrieve of Argo floats possible? *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **46**,

Pingree, R., 2002: Ocean structure and climate (Eastern North Atlantic): in situ measurement and remote sensing (altimeter). *Journal of the Marine Biological Association of the UK*, **82,** 681-707, http://dx.doi.org/10.1017/S0025315402006082

Rhein, M., J. Fischer, W. M. Smethie, D. Smythe-Wright, R. F. Weiss, C. Mertens, D. H. Min, U. Fleischmann, and A. Putzka, 2002: Labrador Sea Water: Pathways, CFC inventory, and formation rates. *Journal of Physical Oceanography*, **32,** 648-665, http://dx.doi.org/10.1175/1520-0485(2002)032%3C0648:LSWPCI%3E2.0.CO;2

Riser, S. C., 2002: Studying the global ocean circulation with profiling floats. *Argos Forum*, **59,** 4-7,

Yang, C. S., A. Ishida, and N. Iwasaka, 2002: On Prediction of the Argo Floats Drifted Ashore after Termination. *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **46,** 107-122,

2001 (16)

Bacon, S., L. R. Centurioni, and W. J. Gould, 2001: The evaluation of salinity measurements from PALACE floats. *Journal of Atmospheric and Oceanic Technology*, **18,** 1258-1266, http://dx.doi.org/10.1175/1520-0426(2001)018%3C1258:TEOSMF%3E2.0.CO;2

Caniaux, G., H. Giordani, L. Prieur, and F. Hernandez, 2001: Observations of an intense anticyclonic warm eddy in the Newfoundland Basin. *Geophysical Research Letters*, **28,** 2649-2652, http://dx.doi.org/10.1029/2001GL012838

Davis, R. E., J. T. Sherman, and J. Dufour, 2001: Profiling ALACEs and other advances in autonomous subsurface floats. *Journal of Atmospheric and Oceanic Technology*, **18,** 982-993, http://dx.doi.org/10.1175/1520-0426(2001)018%3C0982:PAAOAI%3E2.0.CO;2

Gille, S. T., 2001: Southern Ocean ALACE float temperatures are warmer than historic temperatures. *CLIVAR Exchanges*, 22.

Griffiths, G., R. Davis, C. C. Eriksen, D. Frye, P. Marchand, and T. Dickey, 2001: Towards new platform technology for sustained application. *Observing the Oceans in the 21st Century*, C. Koblinksy and N. R. Smith, Eds., GODAE Project Office, 324-338,

Ichikawa, Y., K. Takahashi, K. Mizuno, N. Shikama, and K. Takeuchi, 2001: Estimation of drifting velocity and error at parking depth for Argo float. *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **44,** 81-89,

Inoue, A., M. Miyazaki, K. Izawa, K. Ando, Y. Takatsuki, and K. Mizuno, 2001: Stability of Water Temperature in the conductivity and temperature calibration system and result of calibration experiment. *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **44,** 1-8,

Izawa, K., K. Mizuno, M. Miyazaki, A. Inoue, K. Ando, Y. Takatsuki, T. Kobayashi, and K. Takeuchi, 2001: On the weight adjustment of profiling float. *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **44,** 181-196,

Kobayashi, T., Y. Ichikawa, Y. Takatsuki, T. Suga, N. Iwasaka, K. Ando, K. Mizuno, N. Shikama, and K. Takeuchi, 2001: Correcting method of Argo data based on HydroBase 1 - Introduction of Potential Conductivity. *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **44,** 115-124,

Kobayashi, T., Y. Ichikawa, Y. Takatsuki, T. Suga, N. Iwasaka, K. Ando, K. Mizuno, N. Shikama, and K. Takeuchi, 2001: Quality control of Argo data based on high quality climatological data set (HydroBase) *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **44,** 101-114,

Oka, E., 2001: A simulation for deployment of Argo floats. *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **44,** 9-16,

Pingree, R. and B. Sinha, 2001: Westward moving waves or eddies (Storms) on the Subtropical/Azores Front near 32.5N? Interpretation of the Eulerian currents and temperature records at moorings 155 (35.5W) and 156 (34.4W). *Journal of Marine Systems*, **29,** 239-276, http://dx.doi.org/10.1016/S0924-7963(01)00019-7

Richardson, P. L. and H. S. John, 2001: Drifters And Floats. *Encyclopedia of Ocean Sciences*, Academic Press, 767-774, https://doi.org/10.1006/rwos.2001.0305.

Schmid, C., R. L. Molinari, and S. L. Garzoli, 2001: New observations of the intermediate depth circulation in the tropical Atlantic. *Journal of Marine Research*, **59,** 281-312, http://dx.doi.org/10.1357/002224001762882664

Takatsuki, Y., Y. Ichikawa, T. Kobayashi, K. Mizuno, and K. Takeuchi, 2001: Construction of the automated data processing and delayed-mode quality control system for profiling floats. *Kaiyo Kagaku Gijutsu Senta Shiken Kenkyu Hokoku*, **44,** 17-27,

Wijffels, S. E., J. M. Toole, and R. Davis, 2001: Revisiting the South Pacific subtropical circulation: A synthesis of World Ocean Circulation Experiment observations along 32°S. *J. Geophys. Res.*, **106**, http://dx.doi.org/10.1029/1999JC000118

2000 (8)

Feder, T., 2000: Argo begins systematic global probing of the upper oceans. *Physics Today*, **53,** 50-51,

Freeland, H. J., 2000: Project Argo. *PICES Press*, **8,** 9,27, http://meetings.pices.int/publications/pices-press/volume8/issue2/Newsletter_May_00.pdf

Guinehut, S., G. Larnicol, and P. Y. Le Traon, 2000: Design of an array of profiling floats in the North Atlantic from model simulations - preliminary results. *CLIVAR Exchanges*, 6-8.

Lavender, K. L., R. E. Davis, and W. B. Owens, 2000: Mid-depth recirculation observed in the interior Labrador and Irminger seas by direct velocity measurements. *Nature*, **407,**

66-69, http://dx.doi.org/10.1038/35024048
Molinari, R. L. and J. F. Festa, 2000: Effect of subjective choices on the objective analysis of sea surface temperature data in the tropical Atlantic and Pacific oceans. *Oceanologica Acta*, **23,** 3-14, http://dx.doi.org/10.1016/S0399-1784(00)00108-0
Roemmich, D. and W. B. Owens, 2000: The Argo Project: global ocean observations for the understanding and prediction of climate variability. *Oceanography*, **13,** 45-50, http://dx.doi.org/10.5670/oceanog.2000.33
Turton, J. and H. Cattle, 2000: The UK contribution to Argo. *Marine Observer*, **70,** 173-175,
Wilson, S., 2000: Launching the Argo Armada. *Oceanus*, **42,** 17-19, http://www.whoi.edu/oceanus/feature/launching-the-argo-armada

1999 (4)

Bacon, S., L. R. Centurioni, and J. Gould, 1999: Profiling ALACE float salinity measurements. *International WOCE Newsletter*, 28-29.
Molinari, R. L., S. L. Garzoli, and R. W. Schmitt, 1999: Equatorial currents at 1000 m in the Atlantic Ocean. *Geophysical Research Letters*, **26,** 361-363, http://dx.doi.org/10.1029/1998GL900284
Speer, K. G., J. Gould, and J. LaCasce, 1999: Year-long float trajectories in the Labrador Sea Water of the eastern North Atlantic Ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, **46,** 165-179, http://dx.doi.org/10.1016/S0967-0645(98)00103-9
Thomson, R. E. and H. J. Freeland, 1999: Lagrangian Measurement of Mid-Depth Currents in the Eastern Tropical Pacific. *Geophysical Research Letters*, **26**, http://dx.doi.org/10.1029/1999GL002322

1998 (4)
Argo_Steering_Team, 1998: On the design and Implementation of Argo - an initial plan for the global array of profiling floats. *International CLIVAR Project Office Report*, **21,** 32,
Bacon, S., L. R. Centurioni, and J. Gould, 1998: Evaluation of profiling ALACE float performance. *Southampton Oceanography Centre Internal Document*, 72.
Davis, R. E., 1998: Preliminary results from directly measuring middepth circulation in the tropical and South Pacific. *Journal of Geophysical Research-Oceans*, **103,** 24619-24639, http://dx.doi.org/10.1029/98JC01913
Davis, R. E., 1998: Autonomous floats in WOCE. *International WOCE Newsletter*, 3-6.

1997 (1)

Freeland, H. J., 1997: Calibration of the conductivity cells on P-ALACE floats. *US WOCE Implementation Report*, **9,** 37-38,

1996 (2)

Davis, R. E., 1996: ALACEs return data on mean circulation in the western South Pacific. *US WOCE Implementation Report*, **8,** 7-10,

Davis, R. E., P. D. Killworth, and J. R. Blundell, 1996: Comparison of Autonomous Lagrangian Circulation Explorer and fine resolution Antarctic model results in the South Atlantic. *J. Geophys. Res.*, **101**, http://dx.doi.org/10.1029/95JC02538

1995 (1)

Davis, R. E., 1995: ALACE tracks subsurface ocean currents with Argos. *Argos Newsletter*, **49,** 5,7,

1992 (1)

Davis, R. E., D. C. Webb, L. A. Regier, and J. Dufour, 1992: The Autonomous Lagrangian Circulation Explorer (ALACE). *Journal of Atmospheric and Oceanic Technology*, **9,** 264-285, http://dx.doi.org/10.1175%2F1520-0426%281992%29009%3C0264%3ATALCE%3E2.0.CO%3B2

1991 (2)

Davis, R. E., 1991: OBSERVING THE GENERAL-CIRCULATION WITH FLOATS. *Deep Sea Research Part I: Oceanographic Research Papers*, **38,** S531-S571, http://dx.doi.org/10.1016/S0198-0149(12)80023-9

Davis, R. E., 1991: LAGRANGIAN OCEAN STUDIES. *Annual Review of Fluid Mechanics*, **23,** 43-64,