

# Status of the Deep SOLO profiling float in Deep Argo regional pilot arrays

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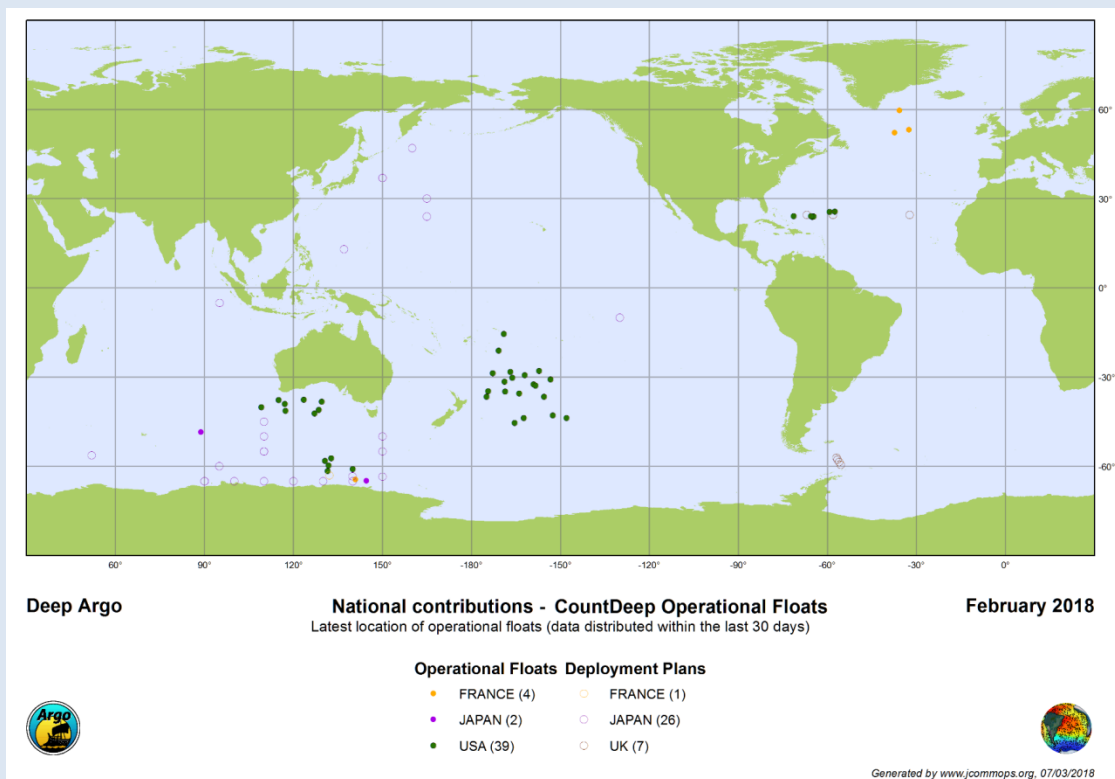
<http://sio-argo.ucsd.edu>

# Deep SOLO deployments and status

Array	Date of deployment and vessel	Number of Deep SOLO floats	S/N's	Present status
SW Pacific Basin	Jan-Feb 2016 Kaharoa	7	6004, 6005, 6006, 6007, 6009, 6010, 6011	All operational except 6005 (recovered)
	June 2016 Investigator	2	6012, 6013	All operational
	Jul-Aug 2016 Kaharoa	3	6008, 6014, 6015	All operational; large salinity drift in 6008, 6015
	Aug 2017 Palmer	3	6030, 6031, 6032	All operational
	Oct-Dec 2017 Kaharoa	5	6033, 6034, 6035, 6036, 6037	All operational
S. Australian Basin	Oct 2016 Kaharoa	8	6016, 6017, 6018, 6019, 6020, 6022, 6023, 6024	All operational
Australian Antarctic Basin	Jan-Feb 2018 Investigator	5	6038, 6039, 6040, 6041, 6042	All operational
W. North Atlantic	Mar 2017 James Cook	6	6021, 6025, 6026, 6027, 6028, 6029	All operational except failed CTD on 6028
Total	Jan 2016 – Feb 2018	39	See above	38 operational 1 recovered

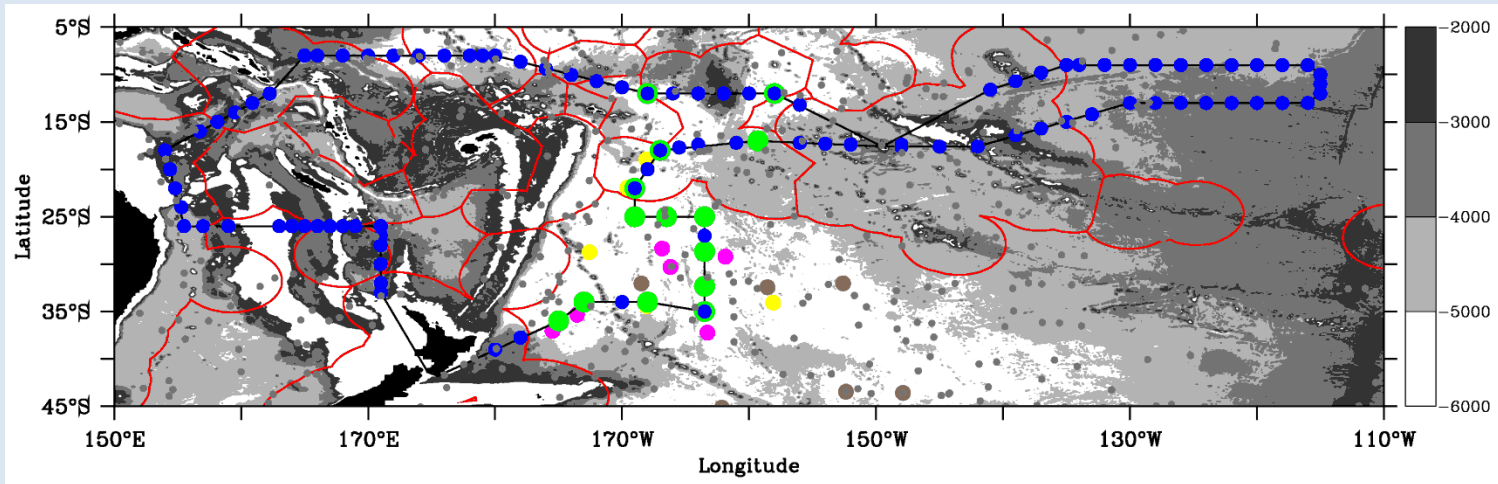
## Deep SOLO technical notes:

1. **First deployment** (Jan-Feb 2016 Kaharoa) seven floats had an impedance mismatch between the float controller and CTD, causing occasional salinity truncations and unplanned “vacations”. Five of the seven floats were recovered (with one antenna breakage, 6005) and four redeployed with modified firmware.
2. **Batteries:** Deployments prior to 2017 had Electrochem primary lithium batteries, and are capable of only about 100 cycles. Later deployments have Tadiran hybrid lithium batteries, and those with 5 battery packs are capable of > 200 cycles. See <http://sio-argo.ucsd.edu>
3. **Ice avoidance and sampling on ascent** options were added to Deep SOLO firmware for deployments beginning with Jan-Feb 2018 Investigator.



JCOMMOPS static map of operational and planned locations of Deep Argo floats. US plans are in preparation.

# Deployment plans



Green dots: 10  
Deep SOLOs, Jul-  
Aug 2018

Red dots: 5  
Deep SOLOs,  
Mar – Apr 2019,  
pending  
shipping  
arrangements

Suggestions welcome for these  
or later deployments

