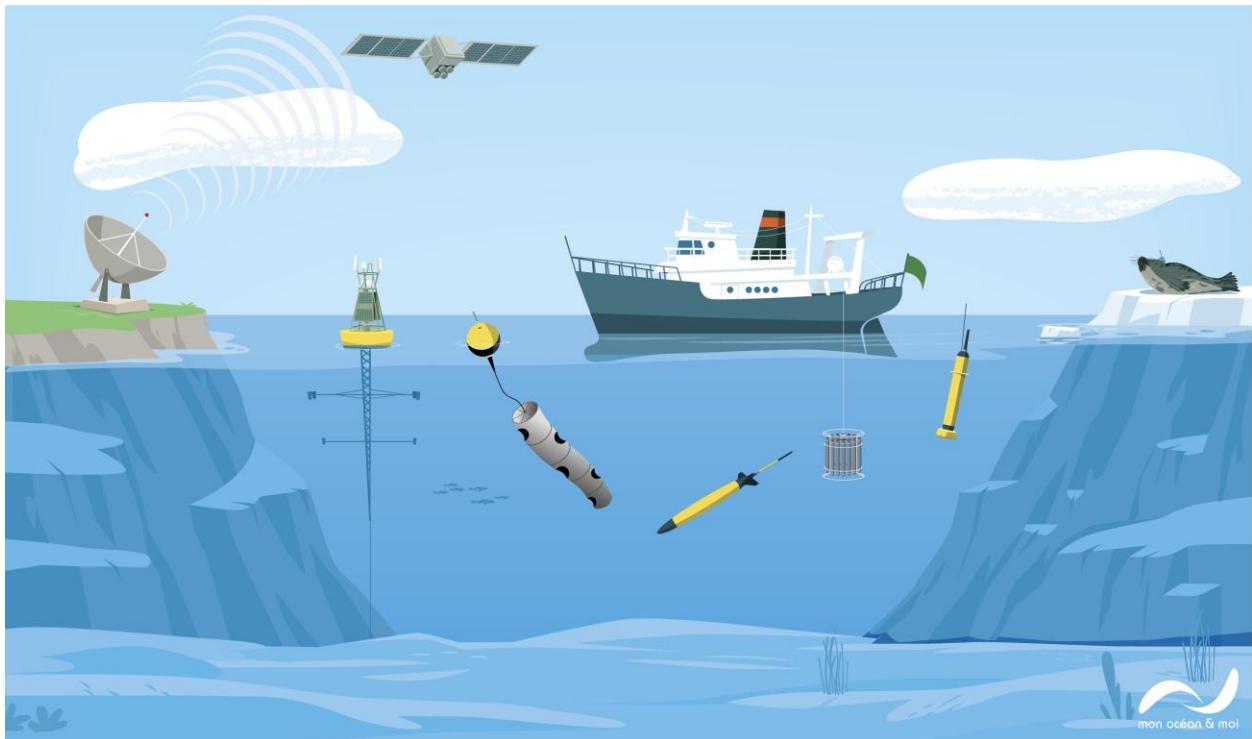


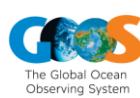
1st Ocean Observers Workshop



13-14 June 2017, Océanopolis Aquarium, Brest



"An educational workshop to bring together ocean scientists, educators, sailing community and marine communicators who are willing to share and gather experiences on ocean observing educational activities"



The Global Ocean
Observing System



International
Oceanographic
Data and Information
Exchange



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1st Ocean Observers Workshop

Tuesday, 13 June 2017 – 9:00am to Wednesday, 14 June 2017 – 6:00pm

Abstract

The Ocean is one of the most important components of the climate system and observing the ocean is necessary to predict the climate evolution of our planet. In today's society there is a need for a bigger effort to disseminate the importance of observing and preserving the ocean. Marine science vulgarization and outreach are becoming more and more important to raise awareness among the communities that a healthy ocean is vital for the well-being of generations to come.

The Ocean Observers workshop will bring together ocean scientists, educational authorities and teachers, marine communicators, sailing community and other stakeholders (public, policy-makers, and etc.), who are willing to share marine science educational resources and experiences for exploring the possibilities to establish new international collaborative activities. A key focus of the initiative is to gather and share experience on educational activities related to *in situ* ocean observations, to be able in the longer term, to assemble all educational materials in a unique repository under the UNESCO auspices. The repository, *e.g.* OceanTeacher Global Academy, will be free and will help to build a global ocean observations learning platform.

What is the global ocean circulation and how it impacts our life? Why do we observe the oceans? How do we do *in situ* measurements of physical and biogeochemical ocean properties? What educators, NGOs, public and private sectors worldwide do to explain and disseminate the importance of the *in situ* ocean observations? These are just a few of the questions that will be addressed through this interactive 2-days workshop.

Ocean Observers workshop is jointly organized by the Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology in-situ Observations Programme Support Centre (JCOMMOPS) and the European contribution to the Argo Program (EuroArgo ERIC), in collaboration with the Argo Project Office, the IOC/UNESCO and the International Oceanographic Data and Information Exchange (IODE) Office.

DETAILS:

Venue: Océanopolis Aquarium, Brest (France)

Language: English and French (simultaneous translation available)

Possibility to participate to the workshop remotely via videoconference.

Contacts:

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1^{er} Atelier *Ocean Observers*

mardi 13 Juin 2017, 09:00 - mercredi 14 Juin 2017, 18:00

Résumé

L'océan est une des composantes principales du système climatique mondial et observer l'océan est nécessaire pour prévoir l'évolution climatique de notre planète. Le besoin d'intensifier les efforts afin de diffuser l'importance d'observer et préserver l'océan est devenu capital au vu des changements actuels observés. La vulgarisation des sciences de la mer est un enjeu essentiel pour la prise de conscience des populations de la nécessité de veiller à l'équilibre de l'océan pour le bien-être des générations futures.

L'atelier *Ocean Observers* réunira des spécialistes des sciences de la mer, des représentants des instances éducatives, des enseignants, des personnes du domaine de la communication marine, des représentants du monde de la voile et d'autres intervenants (grand public, décideurs politiques, etc.) ayant la volonté de partager les ressources et les expériences éducatives en sciences de la mer pour explorer les possibilités d'établir des collaborations internationales sur le sujet. L'un des principaux objectifs de cette initiative est de rassembler et de partager des expériences sur les activités éducatives liées aux observations océaniques *in situ*, afin de pouvoir, à plus long terme, rassembler tout le matériel éducatif dans un répertoire unique et libre d'accès sous l'égide de l'UNESCO (e.g. *OceanTeacher Global Academy*), qui contribuera au développement d'une plate-forme mondiale d'apprentissage sur le thème des observations océaniques.

Quel est le rôle de la circulation océanique dans notre système climatique et comment influence-t-elle notre vie? Pourquoi observons-nous l'océan? Comment effectuons-nous des mesures *in situ* des propriétés physiques et biogéochimiques de l'océan? Que font les éducateurs, les ONG, les secteurs public et privé dans le monde pour expliquer et diffuser l'importance des observations océaniques *in situ*? Ce sont quelques-unes des questions qui seront abordées dans cet atelier interactif de deux jours.

L'atelier *Ocean Observers* est co-organisé par le centre de coordination et de surveillance du système mondial d'observation de l'océan (JCOMMOPS) qui dépend à la fois de la Commission Océanographique Intergouvernementale (COI) de l'UNESCO et de l'Organisation Météorologique Mondiale, et la contribution européenne au programme Argo (Euro-Argo ERIC), en collaboration avec le projet Argo, la COI de l'UNESCO et l'Office International d'Echange de Données et d'Informations Océanographiques (IODE).

DÉTAILS

Lieu : Océanopolis, Aquarium de Brest (France)

Langue : Français et Anglais (traduction simultanée)

Possibilité de participer à l'atelier par vidéoconférence.

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AGENDA

DAY 1: June 13th 2017

OPENING SESSION (*chair: Mathieu Belbéoch, JCOMMOPS*)

09:00 *Opening – welcoming addresses*

- **Stéphane Maby (Océanopolis Director)** and **Céline Liret (Océanopolis Cultural and Scientific Director)**
- **Pierre Karleskind (Vice-President of Brittany Region, Vice-President of Brest city and Brest Technopôle President)**
- **Mathieu Belbéoch (JCOMMOPS)**: Presentation of Workshop Objectives

SCIENCE SESSION (*chair: Sabrina Speich, Professor LMD-IPSL École Normale Supérieure de Paris*)

The first part of this session aims at presenting in situ ocean observations and their importance for ocean and climate research. During the second part of the session, examples of educational projects based on ocean observations and proposed by scientific teams will be presented.

09:30 *The Ocean and its impact on our life*

- **Sabrina Speich (École Normale Supérieure de Paris, France)**: The Ocean at the heart of Climate Change
- **Guillaume Maze (Ifremer, Brest, France)**: *In situ* ocean observations

10:30 -11:00 *Conference group picture & Coffee break*

- **Christophe Guinet (Centre d'Etudes Biologiques de Chizé/CNRS, La Rochelle, France)**: Marine mammals ocean observations
- **Marc Le Garrec (Météo-France, Brest, France)**: Meteorological observations at sea

12:00-14:00 Lunch

14:00 Scientific initiatives for Ocean Observing outreach (chair: Mathieu Belbéoch, JCOMMOPS)

- **Emily Smith (NOAA, Washington, USA):** Adopt a drifter program
- **Danielle de Staerke (CNES, Toulouse, France):** Argonautica project
- **Carolyn Scheurle (Observatoire Océanologique de Villefranche-sur-Mer, France):** Adopt a float initiative
- **Dimitris Kassis (Hellenic Centre for Marine Research, Greece):** Greek Argo educational and outreach activities
- **Toshio Suga (Japan Agency for Marine-Earth Science and Technology, Japan):** Argo educational activities in Japan

15:30-16:00 Coffee break

- **Joaquín Tintoré (Balearic Islands Coastal Observing and Forecasting System, Spain):** MedCLIC and Adopt a glider projects
- **Thomas Mtontsi (South African Environmental Observation Network, South Africa):** Argo educational projects in South Africa
- **Greta Shum (Southern Ocean Carbon and Climate Observations and Modeling, Princeton, USA):** SOCCOM observations outreach activities
- **Carol Young (Scientific Educational Resources and Experience Associated with the Deployment of Argo profiling floats in the South Pacific Ocean, New Zealand):** SEREAD project

17:15 Wrapping up the day's program (chair: Mathieu Belbéoch, JCOMMOPS)

17:30 - 18:30 VISIT OF THE AQUARIUM

18:30 - 19:30 COCKTAIL

EDUCATIONAL and LARGE PUBLIC SESSION (*chair: Grigor Obolensky, Euro-Argo ERIC*)

The goal of this session is to present examples of activities conducted with schools, to discuss what exists and how the dissemination of knowledge in ocean science towards schools and general public could benefit from better collaboration between educational stakeholders, associations, ocean scientists and research institutes, aquariums, etc.

09:00 School activities

- **Marie-Pascale Zugaj-Benteo (Board of Education, Nice, France)**: A success story: ocean observations activities with students and future perspectives
- **Carol Brieseman (Primary school, New Zealand)**: Integrating Argo in the school curriculum
- **Anne Rognant (Océanopolis, Brest, France)**: Océanopolis Aquarium activities with students and future perspectives on ocean observations
- **Carole Saout-Grit (Glazeo, Nantes, France)**: Connected Oceans Project

10:30-11:00 Coffee break

11:00 Civil society involvement

- **Olivier Dufourneaud (Monaco Aquarium, France)**: Monaco Aquarium activities with large public and future perspectives on ocean observations
- **Cédric Courson (Astrolabe Expeditions, France)**: Ocean Science for sailors
- **Caroline Nérot (Petits Débrouillards, France)**: Ocean observing science activities with large public

12:00-14:00 Lunch

- **Jade Burdallet (Ifremer, Brest, France)**: How to share scientific and technical knowledge

HANDS-ON SESSION (*chair: Grigor Obolensky, Euro-Argo ERIC*)

Doctorate students will present their specific doctorate project using simple and alternative ways of communication such as PechaKucha 20x20 or games and quizzes. The outreach materials developed by the students will be promoted around scientific and outreach communities. The second part of the hands-on session will focus on examples of ocean data discovering tools.

14:30-15:30 Ocean Science Outreach Challenge

- **Marines Sciences PhD students**

15:30-16:00 Coffee break

16:00-17:00 In situ Ocean Data Discovering

- **Thomas Jessin (Laboratoire d'Océanographie de Villefranche-sur-Mer, France)**: A digital video globe: a new way to display and outreach ocean data
- **Megan Scanderbeg (SCRIPPS, San Diego, USA)**: Overview of Educational resources available for Argo and toolbox to discover ocean data

DISCUSSION and CONCLUSIONS (*chair: Mathieu Belbéoch, JCOMMOPS*)

- **Francesca Santoro (IOC/Unesco, Venice, Italy)**: Ocean Literacy activities and ocean observations
- **Mathieu Belbéoch (JCOMMOPS, France)**: Ocean observing learning platform