

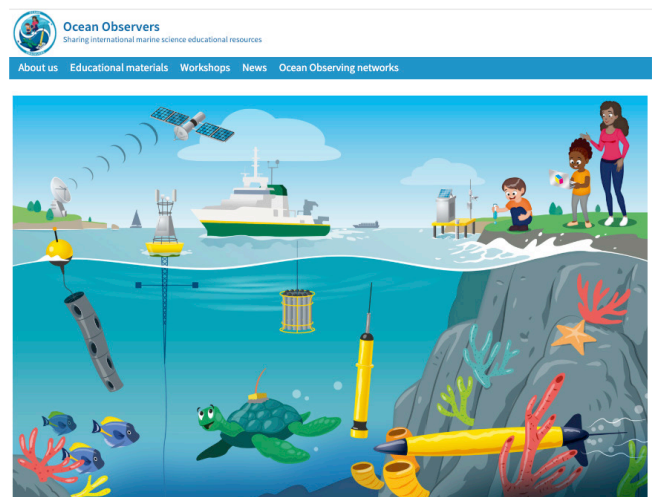
Ocean literacy: empowering people to take direct and sustainable action

The Argo floats and the ocean observing system provide an unprecedented opportunity to raise public awareness about our seas and the crises they endure.

As deputy head of the EMODnet secretariat, the European Marine Observation and Data Network, Kate Larkin knows too well how our ocean has been changing in recent years. Last year though, one particular map caught Kate Larkin's attention. "When our network compared data before and during the Covid-19 pandemic, we were shocked: we really saw how much human activities like fishing or other vessel traffic had stopped or slowed," says Kate Larkin. "If a pandemic can reduce human activities and their negative impact on our seas, we, as a society, should be able to find sustainable ways to reduce these activities." Ocean literacy, i.e., empowering people to better understand how the ocean influences our life and how we influence the ocean, is one pillar of the United Nations (UN) Decade of Ocean Science for Sustainable Development and the UN Sustainable Development Goals (SDG). Joint initiatives such as the EU4Ocean Coalition for Ocean Literacy connect diverse organizations, projects and people contributing to foster ocean literacy and the sustainable management of the ocean. The initiative is funded by the European Union and includes three communities representing professional stakeholders (Platform), Youth (Forum) and Schools (Educational Network).

Since 2017, Euro-Argo, the European contribution to the international Argo program, and OceanOps, an international organization of the UN that coordinates, monitors and helps the implementation of the Global Ocean Observing System, have been working together on the Ocean Observers Initiative.

"We bring together stakeholders, scientists, and communicators involved in marine sciences and science-based outreach activities as well as teachers from all around the world to share experiences on educational activities related to in-situ ocean observations, and thus federate them in an international educational network around a well coordinated initiative," explains Emanuela Rusciano, OceanOps' science and communications coordinator. Together with the Euro-Argo officers Marine Bollard and Claire Gourcuff, Emanuela Rusciano has organized workshops and created a website to assemble educational materials and activities on a global ocean observation learning platform.



The Ocean Observers website: www.oceanobservers.org



Young students adopted and signed floats on board research vessel SA Agulhas II in Saint Denis (La Réunion) (above) and in Victoria (Seychelles) (below). The latter has been signed by H.S.H. Prince Albert II of Monaco and ministers of the Seychelles in order to attest their support to ocean education. © Thomas Jessin/LOV

We bring together stakeholders, scientists, and communicators involved in marine sciences and science-based outreach activities as well as teachers from all around the world to share experiences on educational activities related to in-situ ocean observations, and thus federate them in an international educational network around a well coordinated program,” explains Emanuela Rusciano, OceanOps’ science and communications coordinator. Together with the Euro-Argo officers Marine Bollard and Claire Gourcuff, Emanuela Rusciano has organized workshops and created a website to assemble educational materials and activities on a global ocean observation learning platform.

According to Emanuela Rusciano, in-situ observing instruments like Argo floats are ideal education tools helping to humanize ocean observations. “Speaking to the public at large and raising awareness about physical oceanography is still a complicated matter and requires experience and expertise”, she notes. “Bringing actual instruments into classrooms allows us to more easily explain to students the importance of these tools and why they should care about ocean data, which supports scientific knowledge and essential services needed by all sectors of society.”



© Didier Théron/Explorations de Monaco

Introducing floats to classrooms is exactly what the *adopt a float program* is about. “As a researcher, I’ve always thought that it is important to reach out to the young public and, in this way, give something directly back to the taxpayers who pay for my salary,” says Hervé Claustre, a senior scientist member of Euro-Argo.

When he's not doing research with Argo, he and his colleague Carolyn Scheurle are fully invested in the international adopt a float program. With the help of a science mediation team and accompanied by science mentors, classrooms of all school levels literally adopt profiling floats. The students give a name to it, draw a logo and can familiarize themselves with Argo technology and science. Moreover, they are able to track it in real-time on an interactive map. Thanks to interactions with scientists, working with these observational tools then opens to complementary ocean topics and ocean sciences. And, sometimes, the sailor and/or the scientific team in charge of the float deployment also shares onboard experiences with the students. "As scientists, and as one of our missions, we need to prepare society for the long-term future," says Hervé Claustre. "Informing kids and teens, training them on scientific approaches and raising awareness among these future voters who will decide political directions is just as important as doing good quality research." On her end, Carolyn Scheurle recently won a CNRS medal, an award in science communication, for her work leading the adopt a float educational program.

A key communication tool for the ocean is the European Atlas of the Seas. "We select the most societally relevant maps from EMODnet, Copernicus, Eurostat, etc., and we provide stories and abstracts explaining why this data is important," explains Kate Larkin. Recently, Kate Larkin and her colleagues have also worked with professional educators to create teaching resources, such as quizzes and activities for different age groups. For Kate Larkin, it's crucial to find positive ways to engage and inspire people. "If you offer a map where, for instance, they can check the status of either a beach where they like to go surfing or a coast where they like to sail, they may realize how much they depend on it and value it," she says. "And if they value it, they will take steps to make some significant changes."



© Stéphane Delebarre



Kate Larkin

Deputy Head of the EMODnet Secretariat



Emanuela Rusciano

Science and Communications Coordinator,
OceanOPS



Hervé Claustre

Oceanographer, CNRS

This article is part of the EU4OceanObs Ocean Observing Awareness Campaign | Part 1: Euro-Argo
www.eu4oceanobs.eu/oceanobserving_awareness/ocean-observing-awareness-euro-argo

