



Partnership for Observation of the Global Ocean



www.ocean-partners.org

What is POGO?

POGO was founded in 1999 by directors of oceanographic institutions around the world as a forum to promote and advance the observation of the global ocean. POGO's membership includes most of the world's leading ocean science and technology institutions.

POGO's vision is to have, by 2030, world-wide cooperation for a sustainable, state-of-the-art global ocean observing system that serves the needs of science and society.



Leading innovation and development of the crucial components of the ocean observing system

POGO members agree on ocean observing priorities, identify gaps and needs and plan joint initiatives to respond to these. The first priorities of POGO were to promote the world expansion of Argo and the establishment of OceanSITES. More recently, POGO has highlighted biological observations as well as observations in the Arctic and deep ocean as highest priorities, and the need to progress the required technological developments.



Identifying and contributing to the development of the key skills, capabilities and capacities needed to achieve the vision

In 2001, POGO drew attention to the world imbalance between Northern and Southern Hemispheres in the capacity to observe the ocean, and set up training initiatives for young scientists, mainly from developing countries to address this issue. To date, POGO has trained over 800 early-career scientists from around 80 countries.



Working with governments, foundations and industry, to articulate the benefits to society and required funding to build and sustain the system

One of POGO's goals is to inform the general public about the importance of ocean observations by providing examples of their many benefits for society. POGO also aims to inform policy through leadership of the "Oceans and Society: Blue Planet" initiative within the intergovernmental Group on Earth Observations (GEO), which operates at the Ministerial level.



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POGO Activities

Priorities identified by POGO members for collective support over the years have included:

- ◆ **Argo programme:** Argo is a network of over 3,700 drifting floats that measure temperature and salinity down to 2,000 m depth, around the world ocean. This network is a vital component of the Global Ocean Observing System (GOOS). Because the members of POGO are directors with the power to commit resources and influence decision makers, a resolution to accord full support to Argo had immediate effect. See www.argo.ucsd.edu.
- ◆ **OceanSITES network:** OceanSITES is a worldwide system of long-term, deep-water reference stations measuring dozens of variables and monitoring the full depth of the ocean. The OceanSITES moorings are integral to GOOS. The network complements satellite imagery and other in-situ observation data by extending the dimensions of time and depth. POGO has contributed funding and, through its members, sensors to equip more sites within the network. See www.oceansites.org.
- ◆ **Southern Ocean observations:** POGO has been supporting the development of the Southern Ocean Observing System (SOOS), launched in 2011 to coordinate and expand international efforts to collect and disseminate sustained observations from the Southern Ocean, to address key scientific and societal issues, such as climate change, sea-level rise, and the impacts of global change on marine ecosystems. See www.soos.aq.
- ◆ **Continuous Plankton Recorder:** the CPR is an instrument that is towed behind ships and collects plankton on a band of silk. The data collected by these instruments since their invention in 1931 constitutes the longest and most geographically extensive marine biological survey in the world. POGO has been supporting the development of the Global Alliance of CPR Surveys since its inception in 2011, particularly through professional training. See www.globalcpr.org.
- ◆ **International Quiet Ocean Experiment:** The IQOE is a joint initiative with SCOR that received seed funding from the Sloan Foundation, Rockefeller and Monmouth Universities. It is an international programme aimed at characterising sound in the ocean, including its man-made and natural components, and at assessing the effects of man-made sound on marine organisms. See www.iqoe.org.
- ◆ **SMART Subsea Cables for Observing the Global Ocean:** This Joint Task Force sponsored by 3 UN agencies (IOC, ITU, WMO) aims to integrate sensors into the repeaters of future trans-oceanic telecommunications cable systems. Sensors would “piggyback” on the existing power and communications infrastructure, with the potential for global coverage at modest incremental cost. Initial sensors would be temperature, pressure, and acceleration. See <https://www.itu.int/en/ITU-T/climatechange/task-force-sc/Pages/default.aspx>

Current priorities and activities:

Support is provided to projects proposed by POGO members, which aim to identify and fill gaps in global ocean observation, while at the same time strengthening the ties of the POGO network. Working Groups and Task Forces provide a platform for the members to discuss and produce recommendations for addressing key issues. They may also focus on solutions for improving ocean observations, such as new technologies, novel partnerships and funding sources, and improving data access and visualisation.

Projects supported to date are:

- ◆ **POGO Working Groups:**
 - 2018: - Planning the implementation of a global long-term observing and data sharing strategy for macroalgal communities
 - Earth Observation for Ecology & Epidemiology of Water-associated Diseases
 - 2016: - POGO Industry Liaison Council (PILC)
 - Observing and Understanding the Ocean below Antarctic Sea Ice and Ice Shelves (OASIIS)
 - 2015: - International Quiet Ocean Experiment (IQOE)-POGO Working Group
 - Observing and Modelling the Meridional Overturning Circulation in the South Atlantic (SAMOC)
- ◆ **POGO Projects:**
 - 2018: - OpenMODs (Open Access Marine Observation Devices)
 - ◆ **POGO Task Forces:**
 - 2017: - POGO Biological Observations Task Force
 - POGO Industry Liaison Council (PILC)



POGO Partners

POGO works with relevant partner organisations in the marine field, such as the Scientific Committee on Oceanic Research (SCOR), the Group on Earth Observations (GEO), and the Intergovernmental Oceanographic Commission (IOC) and its projects, the Global Ocean Observing System (GOOS) and the International Oceanographic Data and Information Exchange (IODE).

POGO and its partners collaborate in the areas of international science/observations coordination, professional training, and advocacy.

POGO is a founding member and lead organisation in the collaborative GEO Initiative “**Oceans and Society: Blue Planet**”, which facilitates coordination within and across the numerous and diverse communities of ocean data providers and end users, working to advance the value chain from *ocean observations to data to products to information to knowledge*. Within this, POGO leads a Working Group on “Developing Capacity and Societal Awareness”. See www.geoblueplanet.com.

