GEO Blue Planet is a global initiative to ensure the sustained development and use of coastal and ocean observations for the benefit of society.

Third Quarter 2019 Newsletter

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Call for Host of 5th GEO Blue Planet Symposium

The Group on Earth Observations (GEO) Blue Planet Initiative invites government agencies, research institutions and NGOs to submit an expression of interest to host the 5th GEO Blue Planet Symposium.

Submission Deadline: November 1, 2019

- Coordinate with the GEO Blue Planet Secretariat on development of the program
- Provide local organizing support
- Support linkages with local stakeholders

Selection Criteria

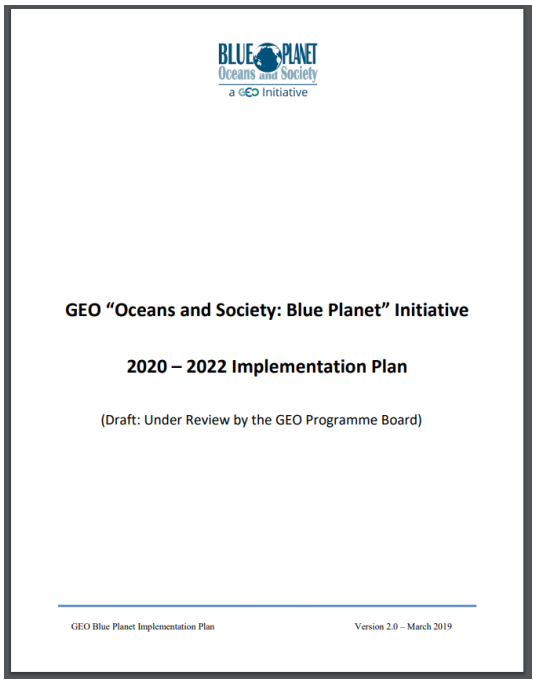
- Geographic location (Africa or Asia preferred)
- Capacity to provide local organizing staff support.
- Ability to provide funds for the venue, logistics and speaker travel or to seek and manage funding from financial sponsors.

Expressions of interest should be sent to info@geoblueplanet.org by November 1, 2019.

Submit a Proposal to Host

2020 - 2022 Implementation Plan

The GEO Program Board favorably reviewed the GEO Blue Planet 2020 - 2022 implementation plan. Recommendations from the GEO Programme Board included a recommendation for GEO Blue Planet to consider becoming a Flagship, considering the accomplishments to date and the engagement with governments and policy setting institutions such as UNEP on SDG 14.1. The Secretariat has requested additional information on requirements for flagship status.



Click here to view the most up to date draft of the 2020 - 2022 GEO Blue Planet Implementation Plan.

Click here for additional information

GEO Work Program.

Supplemental Issue

• The introductory paper on GEO Blue Planet for the Supplemental Issue in the Journal of Operational Oceanography is now available online.
• The full supplemental issue is in press.

Steering Committee Updates

We would like to welcome the new members to the GEO Blue Planet Steering Committee!

- **Kwame Adu Agyekum**, Lecturer & Earth Observation Scientist, Department of Marine and Fisheries Sciences, Global Monitoring for Environment & Security – Africa, University of Ghana, Ghana.
- **Elham Mahmoud Ali**, Head, Department of Environmental Science, Suez University, Egypt.
- **Eric Chassignet**, Director, Center for Ocean-Atmospheric Prediction Studies, Florida State University; Co-Chair, GODAE OceanView, USA.
- **Bart De Lathouwer**, President, Open Geospatial Consortium, Belgium.
- **Anton Ellenbrock**, Consultant – Fisheries information systems development, Food and Agriculture Organization of the United Nations, Italy.
- **Aimee Gonzales**, Partnerships in Environmental Management for the Seas of East Asia, Philippines.
- **Michael Jones**, President, the Maritime Alliance, USA.
- **Andiswa Mlisa**, Managing Director Earth Observation, South African National Space Agency, South Africa.
- **Christo Rautenbach,** Chief Scientist, South African Weather Service, South Africa.
- **Martin Visbeck**, Head of Physical Oceanography Unit, GEOMAR, Germany.
- **Christoph Waldmann**, Senior Scientist, University of Breman – Center for Marine Environmental Sciences-Geosciences, Germany.

Department of Aquatic Environment. She received her Masters of Philosophy and PhD from the National Oceanography Center in Southampton, UK. She serves as an expert for many national and international environmental agencies such as CEDARE, EPA (Kuwait), GISCON, World Bank, and NARSS. She is currently the PI for NAfCOAST, which focuses on the African Northern Coast a project funded by the African European Union.

Eric Chassinet's research emphasis is on the role and predictability of the ocean in the earth system from the complementary perspectives of earth system modeling and observations. He is especially interested in the study of western boundary currents, associated eddies, the thermohaline circulation, and their impact on the world ocean circulation.

Mr. Bart De Lathouwer is OGC's President. In this role, he manages the consortium, provides oversight and direction to the Consortium’s strategy, budget, outreach & marketing, and membership recruitment goals, in close collaboration with the CEO. With a technical background, he managed Earth Observation projects for GEO.

Aimee T. Gonzales is currently the Executive Director of Partnerships in Environmental Management for the Seas of East Asia (PEMSEA). Before that she worked in various analytical and advocacy capacities on trade, economics and sustainable development interface with WWF International for 20 years. She served as Head Executive Assistant to two Cabinet Secretaries of the Philippine Department of Environment and

Evaluation from the National University of Singapore and the London School of Economics respectively.

Michael Jones is President of TMA BlueTech™ (formerly The Maritime Alliance), which is an organized non-profit cluster founded in 2007. Its Mission Statement is “Promoting Sustainable, Science-Based Ocean & Water Industries”. Originally focused on San Diego – the largest U.S. BlueTech (ocean and water tech) cluster – it has a growing number of members in the U.S. and abroad. Michael received his undergraduate degree from the University of Arizona and an MA from Johns Hopkins University “School of Advanced International Studies” (SAIS). His graduate studies included a year in Bologna, Italy; a year at the Catholic University in Lima, Peru; and an internship at the European Community headquarters in Brussels.

Dr Christo Rautenbach is an Applied Mathematician who turned into a Physical Oceanographer. Current field of research includes regional and local wave and storm surge modelling and the associated coastal vulnerability assessments.

Professor Dr. Martin Visbeck's research interests

observation and ocean sustainable development. As the speaker of the network "Future Ocean" in Kiel, he is involved in integrated marine sciences bringing together different disciplines to work on marine issues. He is leading the AtlantOS Program on sustained ocean observing in the Atlantic. He serves on a number of national and international advisory committees including the Governing Board of the International Science Council (ISC), Joint Scientific Committee of the World Climate Research Programme (WCRP) and Executive Planning Group for the UN "Ocean Science Decade for Sustainable Development 2021-2030".

Dr. Christoph Waldmann's research focuses on the development and operation of deep sea instruments and methods since he received my diploma degree from the Physics Department at Kiel University in 1981. During the last couple of years he contributed to the establishment of a European ocean observatory network as part of the EU funded projects ESONET, HYPOX and EMSO. He am currently a member of the WMO/IOC expert group IPET-MOIS that aims at defining certification criteria for ocean data centers.

Collaborator Profile

MONOCLE

MONOCLE

MONOCLE, or Multiscale Observation Network for Optical monitoring of Coastal waters, Lakes and Estuaries, is an EU H2020 funded project that brings together 12 partners from across Europe to create sustainable in situ

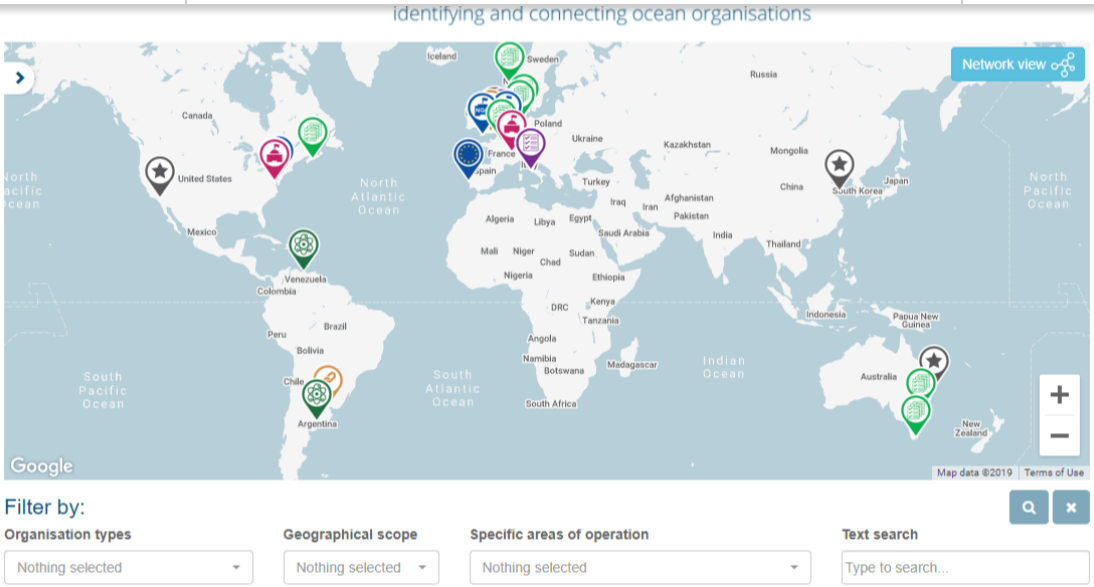
By lowering the cost of collecting and sharing in situ observations, MONOCLE improves sustainability of integrated satellite and in situ water quality services. This is achieved by improved automation of highly accurate reference sensors, complemented with low-cost devices that could be operated by non-experts. The innovations include improved sensors to record water colour from moving and non-moving platforms as well as remotely piloted aircraft (drones) and using smartphone extensions. It also includes in-water sensors to observe vertical transparency and algal pigment concentration. Standardized data formats are then used to ensure wide and sustainable use in near real-time and in future. The project further researches methods to combine observations taken by high-end and low-cost devices and to automate quality control of individual sensors.

The project has already delivered prototype sensors for water colour radiometry and identified solutions to lower the operational cost of in situ observation through automation and by facilitating participation of non-experts. In 2019 MONOCLE had its first publication from the project's PhD Student Olivier Burggraaff who developed a standardized methodology and database (SPECTACLE) for spectral and radiometric calibrations of consumer cameras. This work has been published - O. Burggraaff, N. Schmidt, J. Zamorano, K. Pauly, S. Pascual, C. Tapia, E. Spyrakos, and F. Snik, "Standardized spectral and radiometric calibration of consumer cameras," Opt. Express 27, 19075-19101 (2019).

To ensure future sustainability of the sensors and data networks, MONOCLE widely uses open-source development approaches and provides training materials for independent use and capacity building.

Visit their website www.monocle-h2020.eu for on-going updates, project factsheets or to join our mailing list.

Project and Working Group Updates



Oceanscape Portal Project

GEO Blue Planet and the Partnership for Ocean Global Observing (POGO) are excited to announce the launch of Oceanscape!

Oceanscape is an effort of the GEO Blue Planet Initiative to identify the numerous organisations (including projects, programmes, and other structures) working in the "ocean space", and to clarify the connections between them (as well as identifying opportunities to make connections where none exist).

The Partnership for Observation of the Global Ocean (POGO), a founding member of GEO Blue Planet, is leading the development of the Oceanscape portal. This portal, to be launched during Ocean Obs'19 in September 2019, is a community effort that aims to serve a variety of stakeholders:

- the scientific community, who may not be aware of all the initiatives taking place in the "ocean space", and who could benefit from identifying synergies, new collaborations and avoiding overlap or duplication;
- NGOs, as well as the private sector, who may be looking for suitable organisations for collaboration;
- governments and funding agencies, who may not have a clear picture of the "oceanscape" of organisations, what they are each doing and how they differ from one another.

Check out the portal here!

More information about how to add your organization can be found here!



Early Warning System for Marine Flooding of Reef-lined Islands

The Wave-driven Flood Forecast of Reef-lined Coasts (WaveFORCE) Early Warning System (EWS) methodology has been successfully tested in a case study at Roi-Namur, Kwajalein Atoll, RMI. The project has received letters of support and interest from the Republic of the Marshall Islands and the island nation of Samoa.

The EWS team have therefore demonstrated that a relatively simple EWS methodology does work well and is therefore ready to implement as a global EWS. It will be demonstrated at upcoming meetings including the GEO Week Ministerial Summit in Canberra.

SDG 14.1.1 Support Efforts

- IEEE/OES and the GEO Blue Planet Secretariat are continuing to develop a white paper on a "Global data platform for monitoring marine litter and information action". This paper will be used as a starting point for the development of the platform. UN Environment currently has ~$200,000 to support implementation of the platform.
- GEO Blue Planet and Esri efforts to support the development of the methodology for eutrophication monitoring in support of SDG 14.1.1 were presented as a case study at the SDG side event at OceanObs'19

Multi-hazard Information and Forecasting System for the Wider Caribbean

- The sargassum project will begin collaborating with AtlantOS on developing a basin wide scale of this project and discuss future implementation of an informational service and project website.
- The oil spill project has had discussions about collaborations and training with the NOAA Oil Spill Monitoring Desk and RAC/REMPEITC group in Curacao. There is interest in creating both a monitoring system for the wider Caribbean region and also to generate a GIS based database for past oil spill events in the region.

Ocean Economy

Blue Planet is contributing to drafting the High Level Panel for Sustainable Ocean Economy (http://oceanpanel.org) Blue Paper on National Accounting for the Ocean & Ocean Economy. The High Level Panel (HLP) brings together leaders of 14 countries committed to catalyzing bold, pragmatic solutions for ocean health and wealth that support the SDGs and build a better future for people and planet. The Blue paper will be an integral part of the HLP final Report, to be completed in 2020 which will highlight how the protection and sustainable use of the ocean will generate higher value creation that will help meet some of humanity's most urgent needs.

OceanObs'19 Highlights and Outcomes

- OceanObs'19, a once in a Decade conference, was held this past September in Honolulu, HI with over 1,500 participants from the Ocean Observing Community, including a number of GEO Blue Planet members who organized, spoke during, and attended various side events and breakout sessions.
- The GEO Blue Planet Secretariat helped to organize a session on the role of Ocean Observing and the UN Sustainable Development Goals. Discussions and interactions from this session led to the following outcomes: **1)** Increase capacity building for students and early career professionals to understand the 2030 Agenda; **2)** Increase the capacity of developing countries to produce continued observations; **3)** Enforce

- Blue Planet had representation across dozens of sessions and events covering a wide range of topics including (but not limited to) capacity development, marine debris, ocean, weather and climate forecasting, community building, the UN Decade of Ocean Science for Sustainable Development, integrated ocean observing, and ocean best practices.
- For more information on outcomes and presentations, see the OceanObs'19 Website Archives

Community Announcements

- The 11th annual BlueTech Week will take place Nov. 18-22, 2019 in San Diego. The theme is “UN 2030 Agenda for Sustainable Development, Clusters & the Triple Helix” with emphasis on SDG 6 (Clean Water & Sanitation), SDG 14 (Life below Water) and SDG 17 (Partnerships for the Goals). BTW 2019 is expecting 700+ attendees across 7 events over 5 days from 18-20 countries including representatives of 14-18 clusters and clusters-in-formation and 160+ companies. Tuesday, Nov. 19 co-hosted by SIO and TMA BlueTech (formerly The Maritime Alliance) is “The UN Decade of Ocean Science: Promoting Academic, Government and Industry Collaboration”
- The Workshop on Coastal Climate and Earth Observation Services for Small Island States will take place Nov 13-15, 2019. This workshop will focus on the following areas: Have the climate and observation service developers focusing on the unique challenges faced by the small islands; Co-identify the gaps and needs for coastal climate and observation services for small island states; Co-develop strategies in response to the needs of coastal climate and observation services for adaptation of small island communities; Co-establish a platform or networks for the development and sharing of coastal climate and observation services for small island states.

Upcoming Events

- The GEO Week 2019 Ministerial Summit will be held from 4-9 November in Canberra, Australia

- Project partners will be attending an upcoming "Sarg'Expo" in Guadeloupe from 24-26 October.

Have an announcement for our next newsletter?

Send your update to daniel.takaki@noaa.gov.

geoblueplanet.org info@geoblueplanet.org @GEOBluePlanet