

Newsletter of the Global Ocean Acidification Observing Network (GOA-ON)

Issue 12, August 2020

GOA-ON news

GOA-ON contributing to virtual international ocean acidification events

Over recent months, GOA-ON has contributed to a number of virtual events to showcase ocean acidification research efforts to its members as well as new audiences. The <u>GOA-ON NE Atlantic Hub</u> moderated a 'Deep Dive' focused on Ocean Acidification and Climate-Ocean Impacts during the first-ever completely virtual global conference for ocean action, the <u>Virtual Ocean Dialogues</u>, held in June 2020 and organized by the World Economic Forum and Friends of Ocean Action. The 'Deep Dive' explored innovative and inclusive

actions to help local communities, industry partners, and governments find solutions for addressing and adapting to impacts of ocean acidification. The event was hosted by the International Alliance to Combat Ocean Acidification together with Plymouth Marine Laboratory, UN Peace Boat and UK Department for Environment Food & Rural Affairs. A recording of the event can be found here.



In addition, GOA-ON participated in a virtual

side-event at the <u>United Nations High Level Political Forum</u>, held on 8 July, focused on "Developing capacity to address ocean acidification for a sustainable ocean future". Several GOA-ON members contributed to the panel, which highlighted success stories working to achieve SDG target 14.3 to minimize impacts of ocean acidification through collaborations and capacity building, including GOA-ON, the OA-Mediterranean Hub, the International Atomic Energy Agency, the International Alliance to Combat Ocean Acidification, and the

UN Decade of Ocean Science for Sustainable Development. A recording of the event can be found here.

















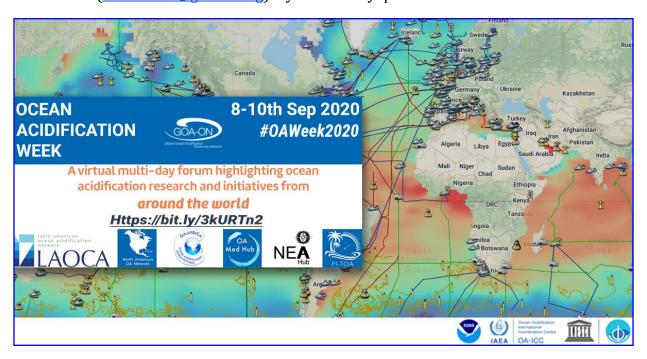
GOA-ON leading virtual Ocean Acidification Week

The coronavirus pandemic has led to the postponement of many workshops, conferences and symposia worldwide this year. Among these is the 5th International Symposium on the Ocean in a High CO2 World, which was scheduled to take place in Lima, Peru, this September. This Symposium would have brought together researchers, decision makers, and other stakeholders to share cutting-edge science in a rapidly developing frontier of research, dealing with the science of ocean acidification and related emerging stressors. The Symposium is now scheduled to take place in 2021.

In order to maintain momentum around the upcoming 5th International Symposium on the Ocean in a High CO2 World, and share progress on GOA-ON's three High-level Goals, GOA-ON and its organizing partners will be hosting a virtual Ocean Acidification Week on 8-10 September 2020.

The Ocean Acidification Week will engage the ocean acidification and broader oceanographic communities by raising awareness to global efforts related to monitoring, research, capacity building, stakeholder involvement, and education. Ocean Acidification Week will also serve as the official kick-off of a new GOA-ON Webinar Series, which will provide regular opportunities for GOA-ON's more than 730 members to connect and collaborate. Sessions will highlight the research being conducted across the GOA-ON regional hubs and how that work reflects GOA-ON's three High-level Goals.

To stay up-to-date on the Ocean Acidification Week, make sure to follow GOA-ON on <u>Twitter</u> and <u>Facebook</u>. Additionally, please check out the <u>Ocean Acidification Week webpage</u> for more information and updates about the OA Week schedule, speakers, presentation topics, and links to each webinar session. Please contact the GOA-ON Secretariat (<u>secretariat@goa-on.org</u>) if you have any questions.















Ocean Acidification International Coordination Centre



SOCAT Version 2020 now available on GOA-ON Data Portal

The new Surface Ocean CO_2 Atlas (SOCAT) Version 2020 was released on 16 June 2020, and it is now available on the GOA-ON Data Portal under "Layers". SOCAT is a synthesis activity for quality-controlled, surface ocean fCO_2 (fugacity of carbon dioxide) observations by the international marine carbon research community (>100 contributors). This new version includes 28.2 million quality-controlled surface ocean fCO_2 measurements from 1957 to 2020.

GLODAPv2.2020 now available

GLODAP is a publicly available database of quality-controlled surface to deep biogeochemical measurements including ocean CO₂ system parameters. This updated version was released on 23 June 2020 and contains data from more than 1.2 million water samples collected on 946 cruises. The data are available through the GLODAP website. Over the next few week, the GLODAP data will also be added to the GOA-ON Data Portal.

GOA-ON EXPLORER << Lat Terrain Map Products GLODAP Aragonite Saturation (0 m) Aragonite Saturation (50 m) Platform: Aragonite Saturation (200 m) pH (0 m) pH (50 m) pH (200 m) Total CO2 (0 m) Regions Total CO2 (50 m) CO2 Total CO2 (200 m) CO2 Weighted Fugacity Legend SOCAT 336 384 CO2 Weighted Fugacity (annual) fCO2 (µatm) CO2 Weighted Fugacity (decadal) 16 November 2019 1:00 pm PST Q Q 2015 2016 2017 2018 2019 N D J F M A M J J A S O N D J















In the spotlight: GOA-ON Executive Council member Benjamin Pfeil



Benjamin Pfeil, Bjerknes Centre

Ocean observations generate a lot of data, and ocean acidification observations are certainly no exception. GOA-ON Executive Council member Benjamin Pfeil is an expert in data management for marine biogeochemistry at the Bjerknes Centre for Climate Research, University of Bergen, and supports the global efforts to collect high quality ocean carbon data to detect and understand ocean acidification. Together with other experts from GOA-ON, Benjamin Pfeil was involved in the development of the Sustainable Development Goal

(SDG) 14.3.1 Indicator Methodology, under the custodianship of IOC-UNESCO, which calls for the 'Average marine acidity (pH) measured at agreed suite of representative sampling stations.' The team at the Bjerknes Centre continues to facilitate access to ocean acidification data through their work on the SDG 14.3.1 Data Portal, together with IODE, and their close collaborations with other international and European ocean carbon data projects, providing an essential service to the scientific community.

Covid-19's impact on the Global Ocean Observing System

The COVID-19 pandemic has had a dramatic impact on the scientific community's ability to observe the global ocean, according to the results of a survey launched by the <u>Global Ocean Observing System (GOOS)</u> in April 2020. As oceanographic research cruises came to a halt and moorings and other systems could not be maintained, gaps in ocean observations and data became critical. The oceanographic data gathered through research cruises, Ships of Opportunity, as well as a global network of floats, buoys, moorings and autonomous systems, is necessary for reliable marine and weather forecasts and to understand and predict climate change, including ocean acidification, as detailed in the current <u>report by GOOS</u>, based on the latest survey results.

Request for data providers to update GOA-ON Data Portal platforms

The GOA-ON Data Portal includes over 700 assets monitoring ocean acidification parameters throughout the world's oceans. Fifty-seven of these assets have data that are accessible directly on the Portal, and 282 assets have links to externally accessible data. It is important for data providers to update their assets in order for this portal to include accurate metadata and links to data. If your assets need to be updated, or if you would like to add a new platform, please fill out this short survey. For any questions, please contact the GOA-ON Secretariat (secretariat@goa-on.org).















Regional updates

Research on ocean acidification in Latin America: progress and challenges

On 25 June 2020, researchers across Latin America virtually assembled for an international conversation about ocean acidification at an event called, "Research on ocean acidification in Latin America: progress and challenges". This event was organized by Pedro Ruiz Gallo de Lambayeque National University in Peru, The Latin American Network on Ocean

Acidification (LAOCA), and the Coastal Marine Research Network (REMARCO). The aim of this event was to describe the impacts of ocean acidification in the Latin American and the Caribbean regions. This event also served to disseminate the progress of OA research in Latin America, in the context of Latin American countries' efforts to contribute to the UN Sustainable Development Goal 14.3. Over 280 individuals tuned into the Facebook Live event, and since then, the recording has been viewed over 3500 times.



Announcements/Reminders

American Geophysical Union (AGU) Virtual Fall Meeting, 7-11 December 2020:

Human Health and the Ocean Symposium, Monaco, 2-4 December 2020

Call for manuscripts: Special issue "Effects of ocean acidification on marine ecosystems", deadline: 15 October 2020

Join the OA Info Exchange (OAIE): The OA Information Exchange (OAIE) is a website for the ocean acidification community to share ideas and resources, ask questions, and interact with people in a variety of disciplines around the world. Scientists, citizen scientists,

educators, NGO and government employees, resource managers, concerned citizens, and others are all welcome to take part in the OA Information Exchange.



Subscribe to the OA-ICC news stream for daily posts with new OA publications, media coverage, upcoming events, job postings, etc.















- **Use the** OA-ICC portal for ocean acidification biological response data to access over 1000 data sets.
- Access over 6,300 ocean acidification publications from the <u>OA-ICC bibliographic</u> database.



GOA-ON is a network comprised of 750 members from 100 countries! A full list of GOA-ON members is available online on the <u>GOA-ON website</u>. If you wish to change your affiliation as it is presented online, please email the GOA-ON Secretariat (<u>secretariat@goa-on.org</u>).

Are you involved in OA work that you would like to have included in future newsletters? Contact the GOA-ON Secretariat: secretariat@goa-on.org

GOA-ON Secretariat

Michael Acquafredda, NOAA Ocean Acidification Program Marine Lebrec, IAEA Ocean Acidification International Coordination Centre Katherina Schoo, Intergovernmental Oceanographic Commission of UNESCO



















