International Science Council
SCOR
Scientific Committee on Oceanic Research

SCOR Newsletter

October 2018 • #38

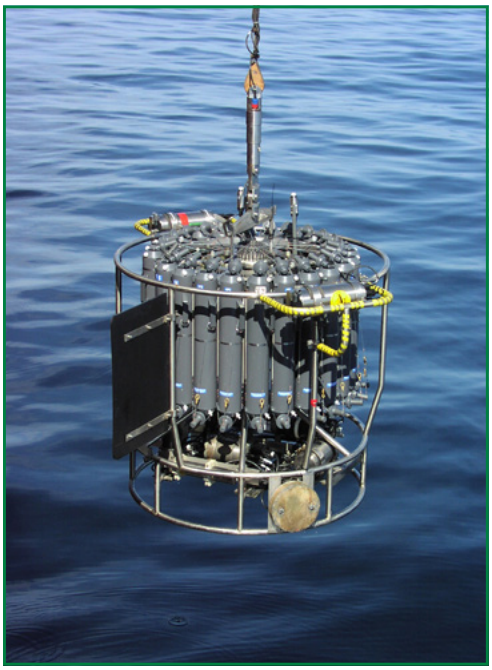
2018 SCOR Annual Meeting Participants

Twitter: @SCOR_Int **Website: www.scor-int.org**

News from 2018 SCOR Annual Meeting

Two new SCOR Working Groups were approved for start in 2019:

WG 156 on Active Chlorophyll fluorescence for autonomous measurements of global marine primary productivity will compare active Chl a induction measurements across instruments and approaches, identifying key aspects of instrument configuration, deployment and parameter acquisition that may introduce variability in data obtained. This approach will make it possible to develop, implement and document internationally agreed best practices for data acquisition and processing, standardized output formats and archiving approaches. A new synthesis of parallel ^{14}C and active Chl a induction measurements will be used to examine the relationship between these two productivity metrics under a range of field conditions. A global database will be developed for hosting quality-controlled active Chl a induction measurements, creating standards for data and meta-data collection, submission, and archiving. This will help in the use of in situ active Chl a induction data to validate and refine relevant remote sensing measurements (e.g., sun-induced fluorescence yields). David Suggett (Australia) and Philippe Tortell (Canada) are co-chairing the group (see https://scor-int.org/group/156/).



WG 157: Toward a new global view of marine zooplankton biodiversity based on DNA metabarcoding and reference DNA sequence databases (MetaZooGene) will facilitate global cooperation, ensure open access to data and direct comparison of results from different studies, encourage standardization of methods for applied uses in ocean assessment, and accelerate progress using novel DNA-based approaches to understand biodiversity and roles of zooplankton in ocean ecosystems. The group is chaired by Ann Bucklin (USA); Katja Peijnenburg (Netherlands) and Ksenia Kosobokova (Russia) are serving as vice-chairs (see https://scor-int.org/group/157/).

Hauling in a MOCNESS trawl (P.H. Wiebe, WHOI)

Change to SCOR Constitution: Potential changes in the SCOR Constitution were discussed, but it was decided that additional modifications would need to be made before a formal vote is taken regarding the text of the Constitution. However, representatives of the national SCOR committees and Affiliated Organizations (IABO, IAMAS, IAPSO) did approve an Appendix II of the Constitution, which will make it possible for countries not sending a representative to SCOR Annual Meetings to vote by email on future changes to the SCOR Constitution. Until now, only representatives present at SCOR Annual Meetings were eligible to vote.

SCOR Finance Committee: The ad hoc SCOR Finance Committee for the meeting (Paul Myers, Annalisa Griffa, and Isabelle Ansorge) examined the independent audit of the 2017 SCOR financial statements, potential changes to the 2018 budget, and the proposed 2019 budget and recommended approval of these items. Meeting participants approved changes to the 2018 SCOR budget and a budget for 2019, as well as a 3% increase in SCOR dues for 2020.

Offer accepted for 2021 SCOR Annual Meeting: The SCOR Executive Committee accepted an offer to hold the 2021 SCOR Annual Meeting in Korea, probably in Busan. Meeting dates will be announced later.

SCOR Website: The redesigned SCOR Website was launched just prior to the SCOR meeting (see www.scor-int.org). Thanks to Castle Builder Design (https://castlebuilder.com/) for creating a clean, modern site for SCOR!

Major Meetings of SCOR-Sponsored Projects on the Horizon

Information

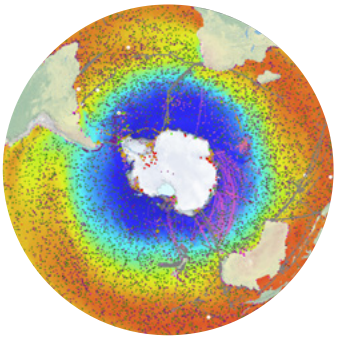
SCOR-InterRidge Meeting on Mid-Ocean Ridges and Other Geological Features of the Indian Ocean
14–16 November 2018
Goa, India
Information

GEOTRACES-PAGES Synthesis workshop:
Trace Element and Isotope Proxies in Paleoceanography
3–5 December 2018
Aix-Marseille, France

Information

Information

Southern Ocean Observing System (SOOS)



SOOSmap

SOOSmap is a new portal for finding circumpolar, internationally curated datasets of observations, developed by the Southern Ocean Observing System, a group sponsored by SCOR and the Scientific Committee on Antarctic Research (SCAR). In SOOSmap, you can find data and metadata from global programs such as Argo floats, long-term moorings, CTD profiles, and MEOP seal data, as well as Antarctic-specific datasets like the SOOS-endorsed NECKLACE program (observing basal melt rates from ice shelves), the Southern Ocean Continuous Plankton Recorder project, and the hundreds of moorings in the SOOS Southern Ocean Mooring Network.

In coming weeks and months, many new layers will be added to SOOSmap. As it continues to grow, SOOSmap will host data from all kinds of Southern Ocean platforms and observing projects—including physical, chemical, and biological ocean sciences. Data that are suitable for publication through SOOSmap are circumpolar in extent and include data from all or most of the nations collecting those kinds of observations. For data types that change frequently (e.g., Argo floats), SOOSmap delivers live feeds from the relevant central data repositories

(e.g., JCOMMOPS). For data types that update less frequently and are not already available through online servers, they will be published as static layers.

Developers at EMODnet Physics are constructing SOOSmap for SOOS as part of their mission to support regional ocean observing systems. If your favorite kind of ocean data are not available through SOOSmap yet, please contact the SOOS data officer, Pip Bricher (data[at]soos.aq), to discuss how to get it published.

You can access SOOSmap from the SOOS homepage http://www.soos.aq or directly at http://www.soos.aq/soosmap.

SOOS
SOUTHERN OCEAN OBSERVING SYSTEM

EMODnet
European Marine Observation and Data Network

DUE SOUTH
DATABASE OF UPCOMING EXPEDITIONS TO THE SOUTHERN OCEAN

DueSouth—the Database of Upcoming Expeditions to the Southern Ocean—is live and ready for you to discover upcoming cruises and research projects.

Find out which ships are heading to the part of the Southern Ocean where you need to collect observations. Find potential collaborators who are solving similar problems in other parts of the Southern Ocean. While you are exploring, please share your own field plans so that other potential collaborators can find you too. You can append your project details to any voyages already in the database, and if you know about a voyage that our community has not yet uploaded to DueSouth, you can add the voyage yourself, before appending your project details.

DueSouth will be particularly valuable to research groups that regularly work across national boundaries, who need information on the field plans of multiple National Antarctic Programs. But the system will also make it possible for researchers who work in more restricted geographic areas to reach out to potential collaborators who are asking similar questions in different geographic and temporal ranges.

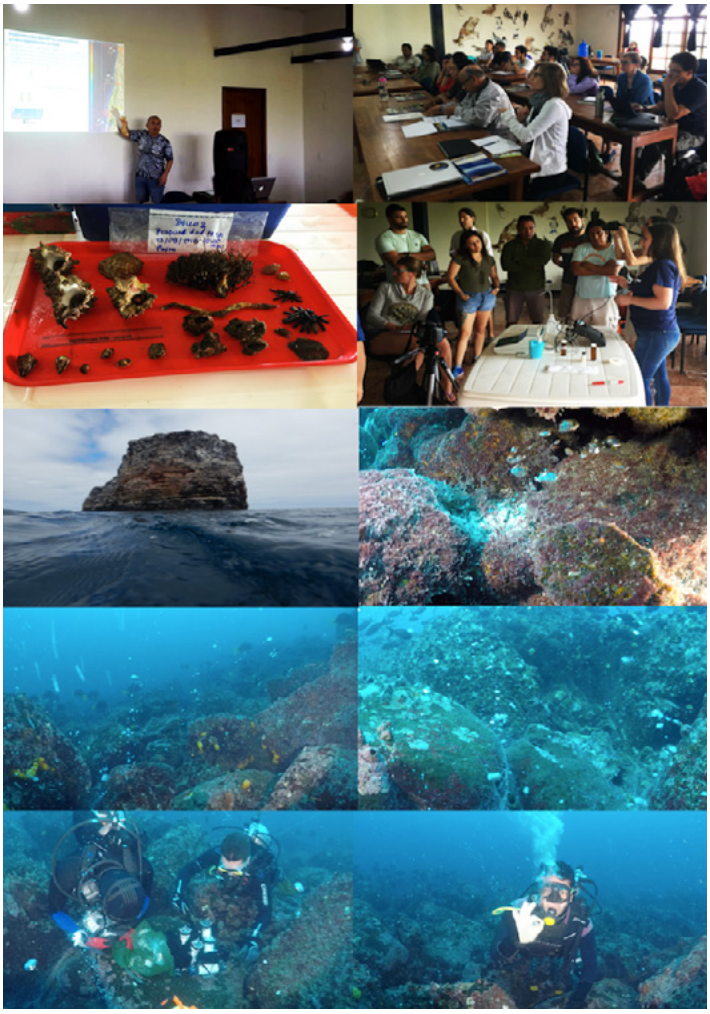
DueSouth was developed and is hosted by the Australian Antarctic Data Centre for the Southern Ocean Observing System (SOOS). You can access DueSouth from the SOOS homepage (http://www.soos.aq). If you have any questions about DueSouth, please contact the SOOS data officer, Pip Bricher (data[at]soos.aq).

Australian Government

SOOS
SOUTHERN OCEAN OBSERVING SYSTEM

2018 SCOR Visiting Scholars

Cristian A. Vargas Gálvez (Chile) co-taught a course with Rafael Bermudez (Ecuador) on ocean acidification at the Charles Darwin Research Station in the Galapagos on 19–28 August 2018 (see photos below). His SCOR Visiting Scholarship was supported by the Intergovernmental Oceanographic Commission. Roca Redonda, north of Isabela Island, features CO_2-emitting vents that provide a natural laboratory setting. Twelve individuals from 7 Latin American countries participated in the course.



SCOR Working Groups

SCOR WG 143 on Dissolved N_2O and CH_4 measurements: Working towards a global network of ocean time series measurements of N_2O and CH_4 recently published a paper reporting on their intercalibration studies for methane and nitrous oxide:

Wilson, S.T., H.W. Bange, D.L. Arévalo-Martínez, J. Barnes, A.V. Borges, I. Brown, J.L. Bullister, M. Burgos, D.W. Capelle, M. Casso, M. de la Paz, L. Farías, L. Fenwick, S. Ferrón, G. Garcia, M. Glockzin, D.M. Karl, A. Kock, S. Laperriere, C.S. Law, C.C. Manning, A. Marriner, J.-P. Myllykangas, J.W. Pohlman, A.P. Rees, A.E. Santoro, M. Torres, P.D. Tortell, R.C. Upstill-Goddard, D.P. Wisegarver, G.L. Zhang, and G.

Rehder. 2018. An intercomparison of oceanic methane and nitrous oxide measurements. Biogeosciences, 15, 5891–5907. https://doi.org/10.5194/bg-15-5891-2018

SCOR WG 148 on International Quality Controlled Ocean Database: Subsurface temperature profiles (IQuOD) met on 16-18 April in Oostende, Belgium (see report of meeting). The group recently published a paper that provides an algorithm for assigning instrument type and manufacturer to expendable bathythermograph (XBT) data from the World Ocean Database (WOD) where instrument type and manufacturer were unknown. This is an important development because instrument type can introduce known biases into the temperature data in the WOD. XBT biases can affect estimates of the variability of ocean temperature over time and space, as well as estimates of ocean heat content changes and data needed to initialize climate models.

Palmer, M.D. T. Boyer, R. Cowley, S. Kizu, F. Reseghetti, T. Suzuki, and A. Thresher. 2018. An Algorithm for Classifying Unknown Expendable Bathythermograph (XBT) Instruments Based on Existing Metadata. Journal of Atmospheric and Oceanic Technology 35:429-440.

SCOR WG 152 on Measuring Essential Climate Variables in Sea Ice (ECV-Ice) held its second meeting in Davos, Switzerland, on 17 June 2018. A major focus of the meeting was discussion about recently completed ECV-Ice inter-comparison experiments for sea ice biogeochemistry. These included (1) an intercomparison for nutrients in Saroma-ko, Japan in March 2016; (2) an inter-comparison of processing and procedures for trace metal corers in the Southern Ocean in Austral winter, 2017; and (3) an intercomparison of sea ice primary production measurements in in Saroma-ko, Japan, in March 2018. Discussion also focused on organizing and drafting synthesis papers about the current knowledge and discrepancies between methods for sea ice biogeochemistry, including a compilation of air-sea ice CO_2 flux data and of sea ice primary production data. Meeting participants also discussed activities to be carried out over the next 2–3 years to accomplish the group's terms of reference. These activities include preparation for an inter-comparison experiment for gases in sea ice at the Roland von Glasgow Sea ice chamber at the University of East Anglia (UK) in Fall 2019 and field studies on sea ice primary production, gas exchanges, and ancillary parameters (e.g., biomass, nutrients) proposed for Cambridge Bay, Canada, in spring 2021.

SCOR and Social Media

If you received this newsletter directly from SCOR, you are on the email list. Anyone not yet on the list can join by clicking the link below.

Join SCOR Email List

Future SCOR Annual Meetings

2019— The 2019 SCOR Annual Meeting will be held in Toyama, Japan on 23–25 September 2019. The meeting will be preceded by a public lecture and followed by the annual meeting of the Japan Oceanography Society.

2021— The 2021 SCOR Annual Meeting will be held in Busan, Korea.

For additional information about SCOR activities, please see the SCOR Web site: http://www.scor-int.org. To reach Secretariat staff, please send an email to Ed Urban (Ed.Urban@scor-int.org).

ACRONYMS

EMODnet	European Marine Observation and Data Network
IABO	International Association of Biological Oceanography
IAPSO	International Association of the Physical Sciences of the Ocean
IAMAS	International Association of Meteorology and Atmospheric Sciences
iCACGP	Commission on Atmospheric Chemistry and Global Pollution
IMBeR	Integrated Marine Biosphere Research project (co-sponsored by SCOR and Future Earth)
IOC	Intergovernmental Oceanographic Commission
JCOMMOPS	WMO-IOC Joint Technical Commission for Oceanography and Marine Meteorology in-situ Observing Programmes Support Centre
SCAR	Scientific Committee on Antarctic Research
SCOR	Scientific Committee on Oceanic Research
SOLAS	Surface Ocean – Lower Atmosphere Study (co-sponsored by SCOR, Future Earth, WCRP, and iCACGP)
WCRP	World Climate Research Programme
WG	working group
WMO	World Meteorological Organization
WOD	World Ocean Database
XBT	expendable bathythermograph