



The Scientific Committee on Oceanic Research (SCOR)

Update for Ocean Studies Board Meeting

1 May 2025

Emily Twigg, Executive Director



**International
Science Council**

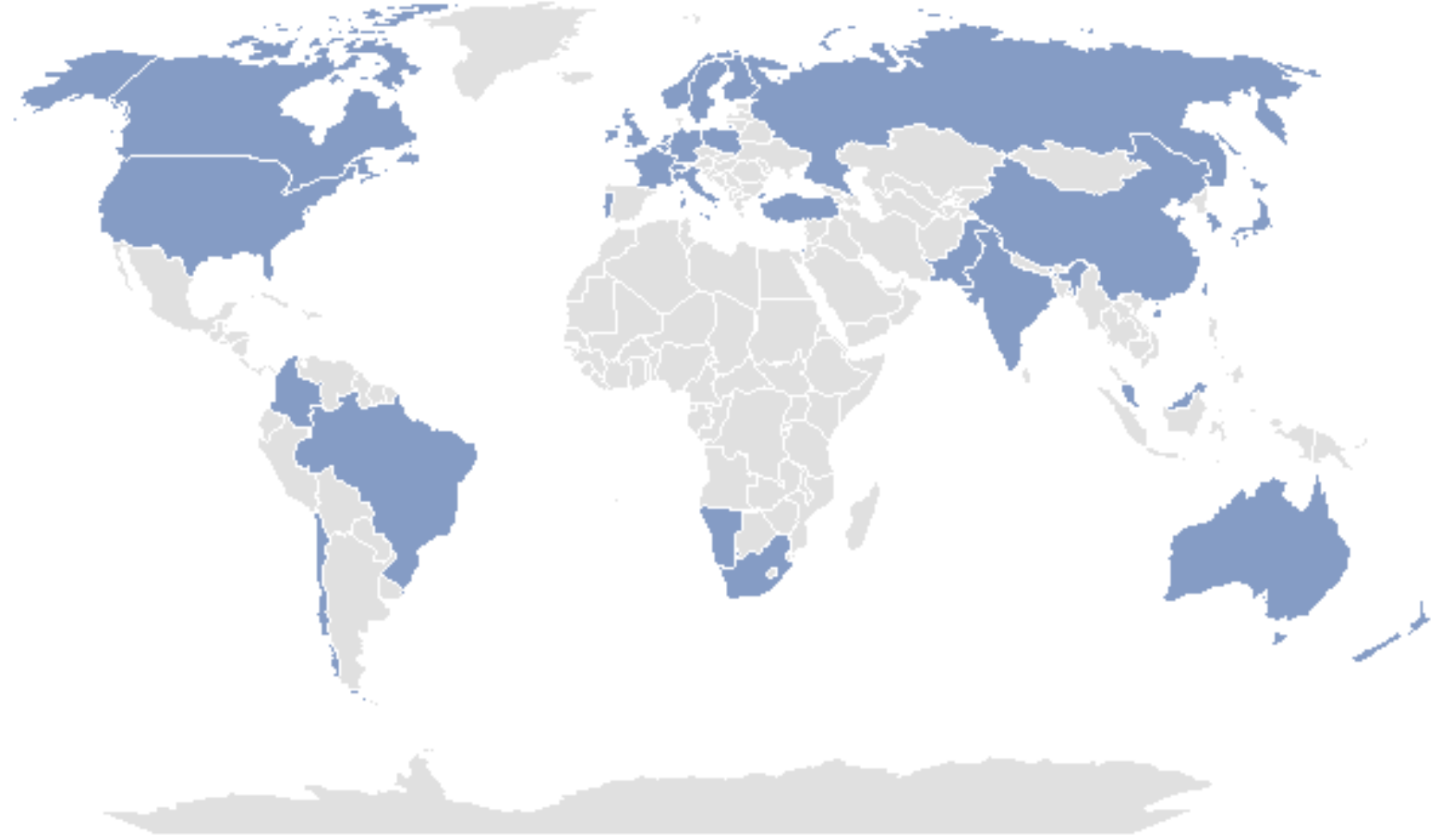
Developing capacity and advancing ocean sciences through international cooperation since 1957



Mission

- Address **global and interdisciplinary ocean issues**
 - Plan and facilitate **research** – working groups and projects
 - Solve **methodological and conceptual problems**
 - **Develop capacity** - visiting scholars, fellowships, travel support
 - Encourage and support involvement of **students** and **early-career** scientists
-
- **Non-governmental, non-profit organization**
 - **Established in 1957 under the International Council for Scientific Unions, now the International Science Council**
 - **Funded by membership contributions of national SCOR committees and from national and international agencies and organizations, including host institutions for the project IPOs.**

32 SCOR National Committees



Australia	Korea
Belgium	Malaysia
Brazil	Namibia
Canada	Netherlands
Chile	New Zealand
China-Beijing	Norway
China-Taipei	Pakistan
Colombia	Poland
Finland	Portugal
France	Russia
Germany	South Africa
India	Sweden
Ireland	Switzerland
Israel	Turkey
Italy	United Kingdom
Japan	United States

Powered by Bing

© Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, Open Places, OpenStreetMap, TomTom, Zenrin

SCOR National Committees

- Fund SCOR through national dues
- Be composed of scientists reflective of the diversity of institutions and expertise of the country
- Conduct annual review of working group proposals
 - Including suggestions for additional members
- Send representative (in person or online) to annual SCOR meeting
 - Provide oversight to ongoing SCOR activities
- Nominate Executive Committee members, ad hoc finance committee members, nominating committee members
- Disseminate news and opportunities about SCOR nationally
- Host SCOR annual meetings
- Nominated members serve as point of contact with SCOR

Executive Committee 2024-2026

President



Paul Myers
Canada

Past-President



Sinjae Yoo
Korea

Secretary



Peter Croot
Ireland

The Vice-Presidents



Yukio Masumoto
Japan



Ilka Peeken
Germany



Constanza Ricaurte
Colombia

The scientific organizations – Ex-officio



Judith Gobin
Trinidad and Tobago, IABO



Andrea Flossmann
France, IAMAS



Hans van Haren
The Netherlands, IAPSO

The co-opted members



Kai Deng
China



Hilkka Ndjaula
Namibia

Capacity Development Committee



Chair: Rebecca Zitoun (Australia)

- Sanae Chiba (Canada)
- Mauro Cirano (Brazil)
- Ebenezer Nyadjro (USA)
- Nubi Olubunmi Ayoola (Nigeria)
- Moagabo Ragoasha (South Africa)
- Sazlina Salleh (Malaysia)
- Viena Puigcorbé (Spain)
- Paula Sierra (Colombia)
- Dale Webber (Jamaica)
- Sun Xiaoxia (China-Beijing)

Secretariat:

➤ **Hosted by University of Delaware CEOE since 2007**

- **Executive Director:** Emily Twigg
- **Financial Consultant:** Ed Urban (former Executive Director)

2025 Annual Meeting

- Santa Marta, Colombia
- 29-31 October 2025
- 28 October: Event with Colombian early-career scientists
- *More information available soon*



SCOR Activities



SCOR Working Groups

<https://scor-int.org/work/groups/>

Physical oceanography



WG-160: ATOMIX (2020)

Analysing ocean turbulence observations to quantify mixing

WG-172: SALTWATER (2024)

Oceanic Salt Intrusion into Tidal Freshwater Rivers

Chemical oceanography



WG-167: RUSTED (2022)

Reducing Uncertainty in Soluble aerosol Trace Element Deposition

WG-171: MASIS (2024)

Towards best practices for Measuring and Archiving Stable Isotopes in Seawater

Biological oceanography



WG-158: C-GRASS (2019)

Coordinated Global Research Assessment of Seagrass System

WG-164: CoNCENSUS (2021)

Advancing standardisation of COastal and Nearshore demersal fish visual CENSUS techniques

WG-165: MixONET (2021)

Mixotrophy in the Oceans – Novel Experimental designs and Tools for a new trophic paradigm

WG-169 GLUBS (2023)

Global Library of Underwater Biological Sounds

WG-170 PRIMO (2023)

Physiology and Rates in Microbial Oceanography

Biogeochemical oceanography



WG-161: ReMO (2020)

Respiration in the Mesopelagic Ocean: Reconciling ecological, biogeochemical and model estimates

WG-163: Clce2Clouds (2021)

Coupling of ocean-ice-atmosphere processes: from sea-ice biogeochemistry to aerosols and Clouds

WG-166: DMS-PRO (2022)

Developing resources for the study of Methylated Sulfur compound cycling PROCesses in the ocean

WG-168 4D-BGC (2023)

Coordinating the development of gridded four-dimensional data products from biogeochemical-Argo observations



- **Mechanisms for international cooperation around a focused topic**
- **\$45k USD over a duration of 3-4 years**
- **10 Full and 10 Associate members**
- **Must be geographically balanced and include early-career researchers**
- **Proposals due annually in April/May**



Call for New SCOR Working Group Proposals



WG 157 MetaZooGene 2024 Meeting

Working groups receive funding from SCOR to support international cooperation to address a focused topic in the ocean sciences.

**Submit proposals by
16 May 2025**

[SCOR Working Group Proposal Template](#) REVISED February 2025

[SCOR Working Group Proposal Instructions and Frequently Asked Questions](#) REVISED February 2025

Working Group Proposal Review

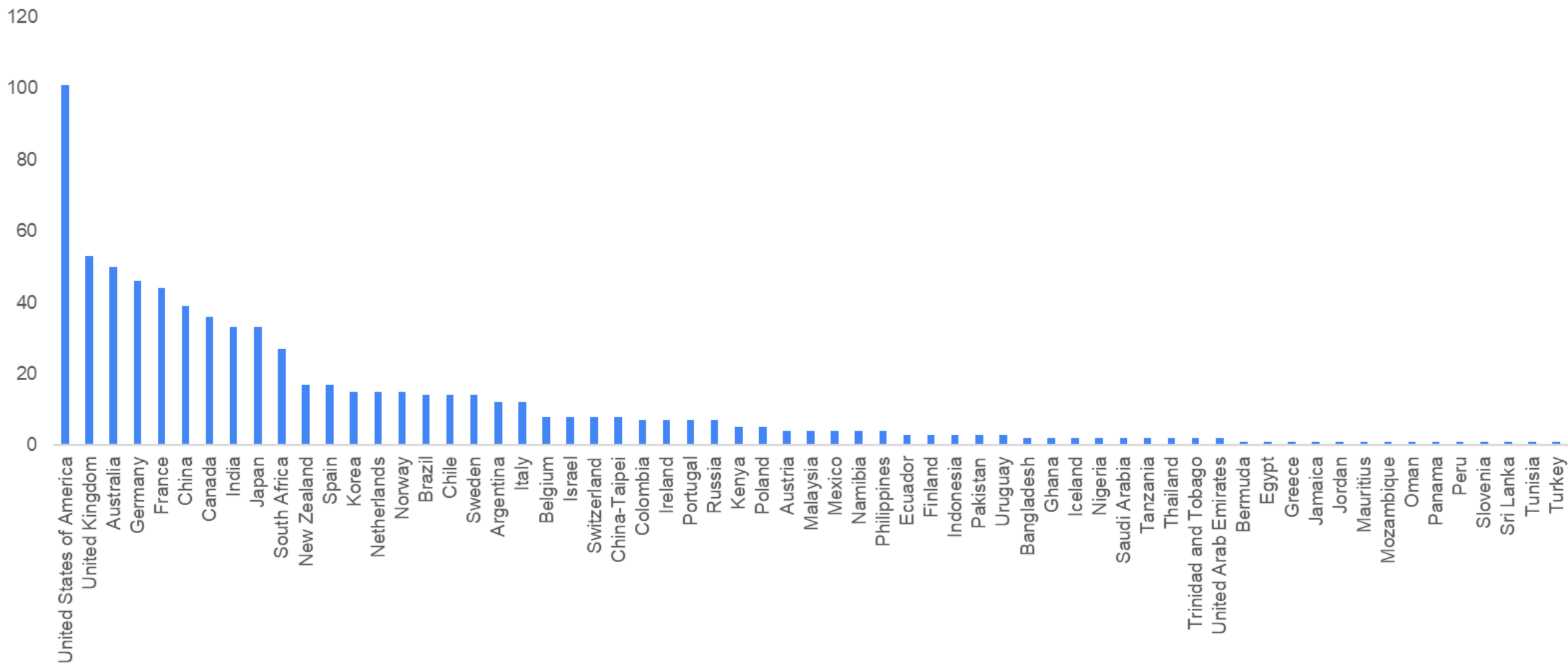
- Timeliness
 - Priority for ocean science and SCOR
 - Appropriateness for SCOR
 - Appropriateness of Terms of Reference (objectives)
 - Appropriateness of Membership
 - Other comments
1. Rating: “Must Fund” (max 3), “May Fund,” “Do Not Fund”
 2. Ranking

Opportunities to be Involved with SCOR

- Scientists can be involved in SCOR activities regardless of national membership
- Propose a new working group
- Apply for capacity development opportunities
- Engage with projects and working groups
 - Join project Scientific Steering Committee or subcommittees (early career, technical)
 - Join national networks
 - Participate in webinars, workshops, open science meetings
 - Subscribe to email lists to learn about specific opportunities
- Apply for 2-year early-career member position on SCOR Executive Committee
 - New selections in even-numbered years

Scientist Involvement in SCOR by Country- 2024

Data from Feb 2025



WG 153 FOTSAM: Floating Litter and its Oceanic Transport Analysis and Modelling: Concluded April 2024



- **Chair:** Stefano Aliani (Italy)
- **Vice Chairs:** Nikolai Maximenko (USA), Kara Lavender Law (USA), and Erik van Sebille (Netherlands)
- <http://scor-flotsam.it/>
- 8 publications acknowledging SCOR
- Contributed to creation of the Integrated Marine Debris Observing System
- Contributed to Intergovernmental Negotiating Committee on Plastic Pollution

Toward the Integrated Marine Debris Observing System

International Science Council
About Our work Members News and publications


ISC Delegation and Community at the INC-4

Chief Conservation and Science Officer Monterey Bay Aquarium	Environmental Epidemiologist Associate Professor at Lead City University	Science Director, Institute of Marine Science of the National Council of Italy Vice-President and Senior Scientist at the Scientific Committee on Oceanic Research (SCOR)	Associate Professor and Director of the Institute of Sustainability Research, Centre, School of Engineering, Universidad del Desarrollo, Chile Member of the Global Young Academy	Associate Professor of Urban Environment, Chinese Academy of Sciences	Professor of Marine Biology and Head of the Department of Life Sciences, The University of the West Indies Ex-officio member of the Scientific Committee on Oceanic Research (SCOR) Executive Committee
Adjunct Professor of Environmental	Research Professor of	Professor of Environmental Engineering at	Science Officer International Science Council		

WG 157 MetaZooGene: Toward a new global view of marine zooplankton biodiversity based on DNA metabarcoding and reference DNA sequence databases:

Concluded Nov 2024

- **Chair:** Ann Bucklin (USA)
- www.metazoogene.org
- 16 publications acknowledging SCOR
- Early-career scientist network
- UN Ocean Decade Project



MetaZooGene Atlas & Database

A collaborative product of [SCOR WG157](#) (MetaZooGene) and Todd O'Brien.

The first Term of Reference for SCOR WG157 (MetaZooGene) was to create an open-access web portal for DNA barcodes of marine zooplankton. This portal was to include a reference database (containing a compilation of quality-checked, marine zooplankton COI barcodes) and a barcode atlas (summarizing available species COI barcoding coverage for all the major zooplankton taxonomic groups, reported by ocean or region).

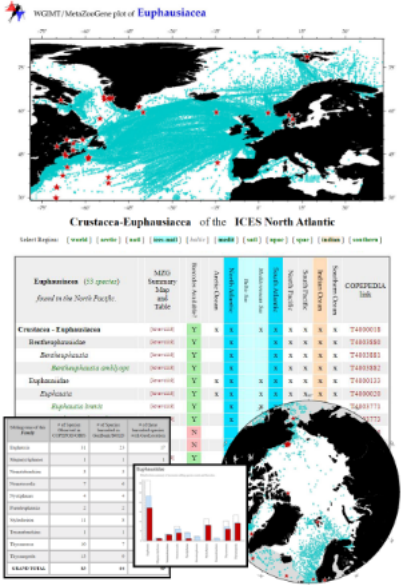
The MetaZooGene "Reference Database" and "Barcode Atlas" were later joined together into a single online product called the *MetaZooGene Atlas and Database*, or **MZGdb**. The biological content of MZGdb has been expanded and now includes zooplankton, benthic invertebrates, fish, marine mammals, and phytoplankton (*aka* microbes and protists). The molecular content has also been expanded, and now includes COI, 12S, 16S, 18S, and 28S.

The MZGdb summarizes the presence and barcoding status of major marine fauna and flora groups and species, reported-by geographic regions, oceans, and seas (e.g., "North Atlantic pteropods", "Arctic pinnipeds", "Mediterranean Sea decapods"). The MZGdb also lets the user download data from any of these taxonomic/geographic subsets, which can help reduce sequence matching and processing times. For example, why use a massive global reference database containing two million+ sequences from "all" organisms (trees and butterflies) when you need to identifying marine plankton or perhaps only "North Sea copepods"?

Click here (or on the image above-right) to go to the

MZGdb Interface

[Quick Links](#): : [About \(current page\)](#) | [Methods](#) | [Atlas](#) | [Data](#)




WG 162: Developing an Observing Air-Sea Interactions Strategy: Concluded March 2025

- **Chairs:** Meghan Cronin (USA), Sebastiaan Swart (Sweden), Christa Marandino (Germany)
- <https://airseaobs.org/>
- 4 publications acknowledging SCOR
- Harmonization of ideas from OceanObs'19
- UN Ocean Decade Programme

Uncrewed surface vehicles in the Global Ocean Observing System: a new frontier for observing and monitoring at the air-sea interface

Ruth G. Patterson^{1,2*} Meghan F. Cronin³ Sebastiaan Swart^{4,5} Joana Beja⁶ Johan M. Edholm^{4,1}
Jason McKenna^{7,8} Isma B. Balta⁹ Alex Barber^{10,11} Charles I. Addey^{12,13} Winter Boone⁶



Developing an Observing Air–Sea Interactions Strategy (OASIS) for the global ocean

M F Cronin , S Swart, C A Marandino, C Anderson, P Browne, S Chen, W R Joubert, U Schuster, R Venkatesan, C I Addey ... Show more


Author Notes



Projects






Join us in our next webinar!


MAY 7th
4:00 PM CET (10:00 AM ET)

- Boosting Data Sharing in the Ocean Decade
- The **GEOTRACES** experience with data sharing

Register using the link in the description [🔗](#)



Synthesis Preparation Workshop

3-4 July 2025
Hybrid
HWK, Delmenhorst (Germany) and online





 **Workshop Announcement**
 **GEOTRACES Synthesis Preparation Workshop**
 **3-4 July 2025**
 **Format: Hybrid (On-site + Remote access)**
 **Location: Hanse-Wissenschaftskolleg, Institute for Advanced Study (HWK), Delmenhorst (Germany) and online**



IMBeR Synthesis and Future Planning Conference

FUTURE OCEANS 3

2025.05.13 - 16

Hybrid - Shanghai, China & Online


Navigating a future ocean: Inward, outward, and forward













OCEAN:ICE - RECORD OF WATER MASS AGE AND MELT-WATER FRACTIONS, WEDDELL SEA
 Latitude: -75.39
 Longitude: -28.67
 DOI: [10.5281/zenodo.11096232](https://doi.org/10.5281/zenodo.11096232)

OCEAN:ICE - RECORD OF WATER MASS AG...
 This dataset presents trace gas measurements and derived variab...

OCEAN:ICE

Abstract Citation Search

This dataset presents trace gas measurements and derived variables such as basal glacial meltwater (GMW) fractions and water mass ages from the RV POLARSTERN expedition P5124 in the southern Weddell Sea in austral summer 2021. The trace gases comprise the lighter noble gases, i.e., total helium (He) and the excess above solubility equilibrium ΔHe , the $3\text{He}/4\text{He}$ ratio reported as $\delta^3\text{He}$, total neon (Ne) and the excess ΔNe , and the deviation from the equilibrium He/Ne ratio $\Delta(\text{He}/\text{Ne})$, as well as the transient anthropogenic trace gases chlorofluorocarbon (CFC-12) and sulphur hexafluoride (SF6) concentrations. From these noble gases (He and Ne) we derived glacial meltwater fractions. From the transient tracers we computed SF6-concentration ages, CFC-12/SF6 ratio ages and TTD (Transit Time Distribution) mean ages.

[Link to source](#) [Link to original metadata](#) [DOI](#)

Join the SOOS Data Management Team



Social presence: Share SCOR Opportunities and Amplify News from WGs, Projects, Partners



UPCOMING SCOR 2024
MEETING

16-18 October 2024

Past Annual Meetings

WHAT'S HAPPENING

IIOE-2 Newsletter Volume-8,
Issue-9, September, 2024

IMBeR Newsletter September
2024 No.45

SOLAS Newsletter September
2024

Calendar

WHO WE ARE

History

About

Executive Committee

National Committees

Partner Organizations

Affiliated Projects

WHAT WE DO

Working Groups

Research Projects

Infrastructural Projects

Capacity Development

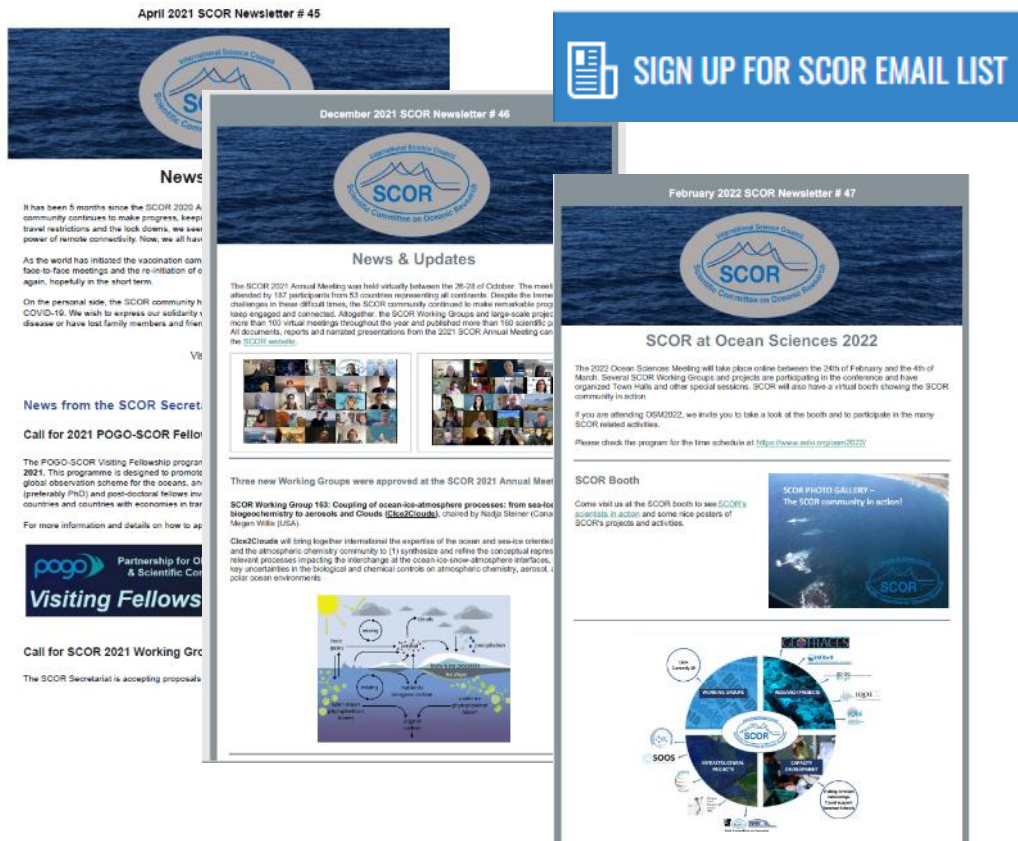
SCOR and the UN Ocean Decade

Achievements

GETTING INVOLVED

Opportunities

Email: 3 Newsletters/year + news



Website: +2000 visits and +4000 views / month

<https://scor-int.org/>

X (Twitter): @SCOR_Int ~1,165 followers

Facebook Public Group: ~2,200 members

LinkedIn: >300 followers (since December)

NEW Bluesky: @scor-int.bsky.social

Thank You!



**<https://scor-int.org/>
secretariat@scor-int.org**