

CANADIAN OCEAN SCIENCE NEWSLETTER
LE BULLETIN CANADIEN DES SCIENCES DE L'OcéAN

Newsletter Number 135, March 2024
Bulletin numéro 135, mars 2024

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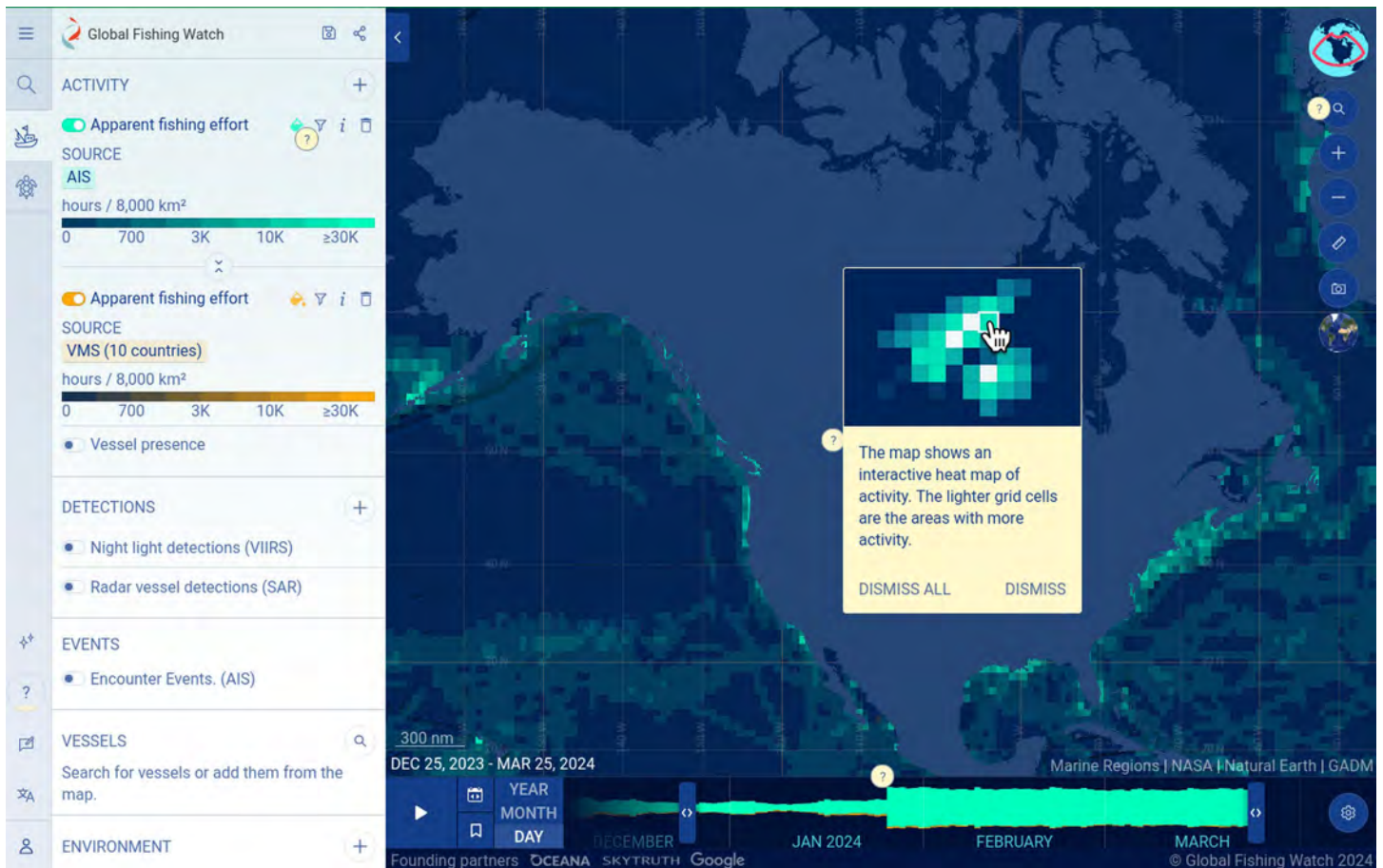


Global Fishing Watch - Open Ocean Project

[Global Fishing Watch](#) was founded in 2015 through a collaboration between three partners: Oceana, an international ocean conservation organization; SkyTruth, a technology firm that uses satellite imagery and data to protect the environment; and Google, whose tools and contributions help process big data.

Global Fishing Watch seeks to advance ocean governance through increased transparency of human activity at sea. By creating and publicly sharing map visualizations, data and analysis tools, we enable scientific research and drive a transformation in how we manage our ocean.

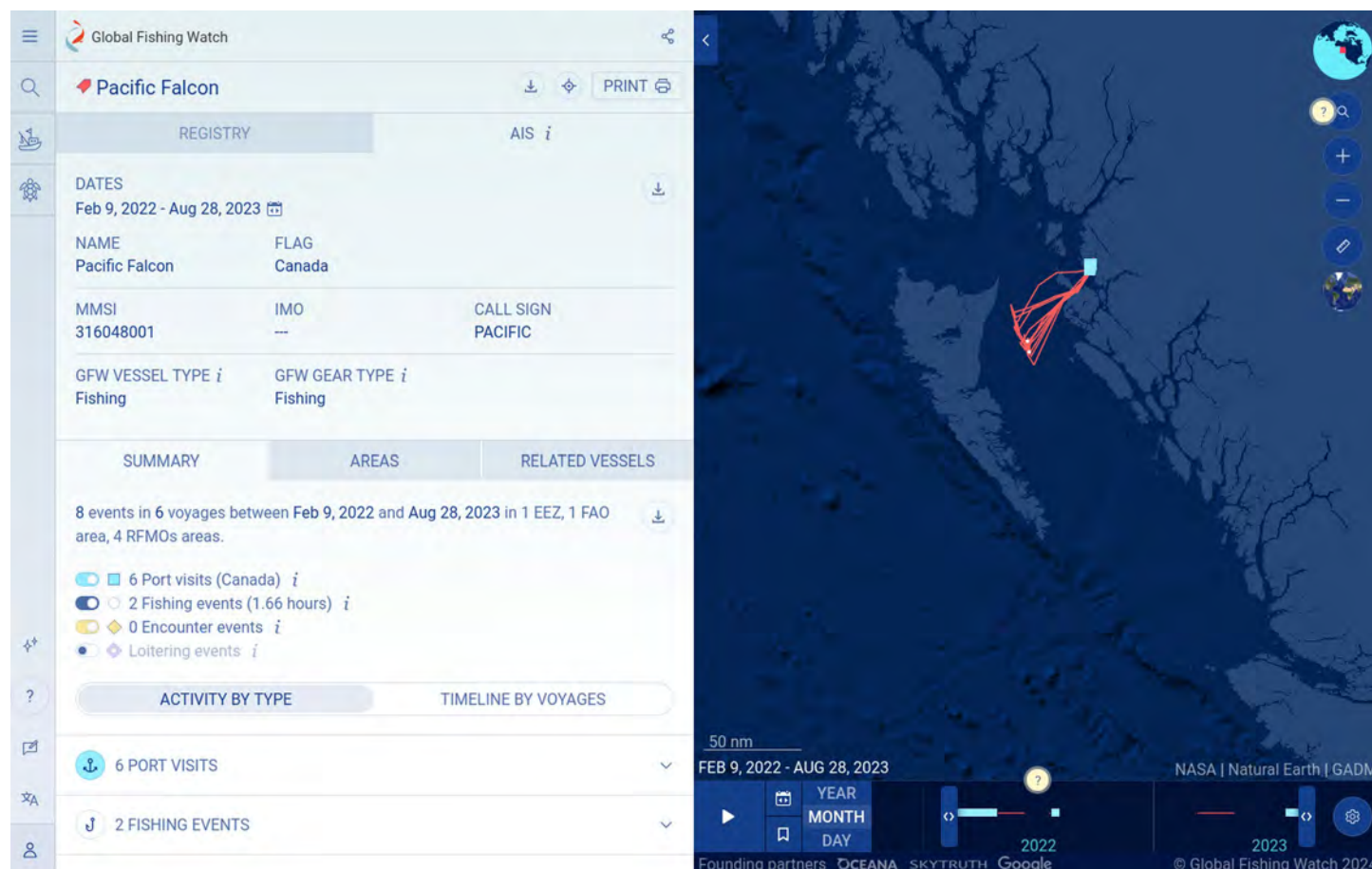
The [Open Ocean Project](#) -Making the Invisible Visible:



An explosion in artificial intelligence and the availability of satellite data are making it possible to map the ocean like never before. The number of remote-sensing satellites continues to dramatically grow each year, providing imagery of even the most remote parts of the ocean in near-real time. Advances in machine learning and cloud computing allow us to translate these billions of data points into understandable information. This exciting technology offers the opportunity to create a “digital ocean”—an interactive online map that publicly reveals all

industrial human activity at sea. We call it the open ocean project and it has the power to transform how we view the ocean—and protect it.

The data can be refined down to the individual fishing vessel:



Science Citoyenne avec #eCapelan

Avez-vous vu du capelan frayer sur les côtes du Québec ou des provinces de l'Atlantique? Le site



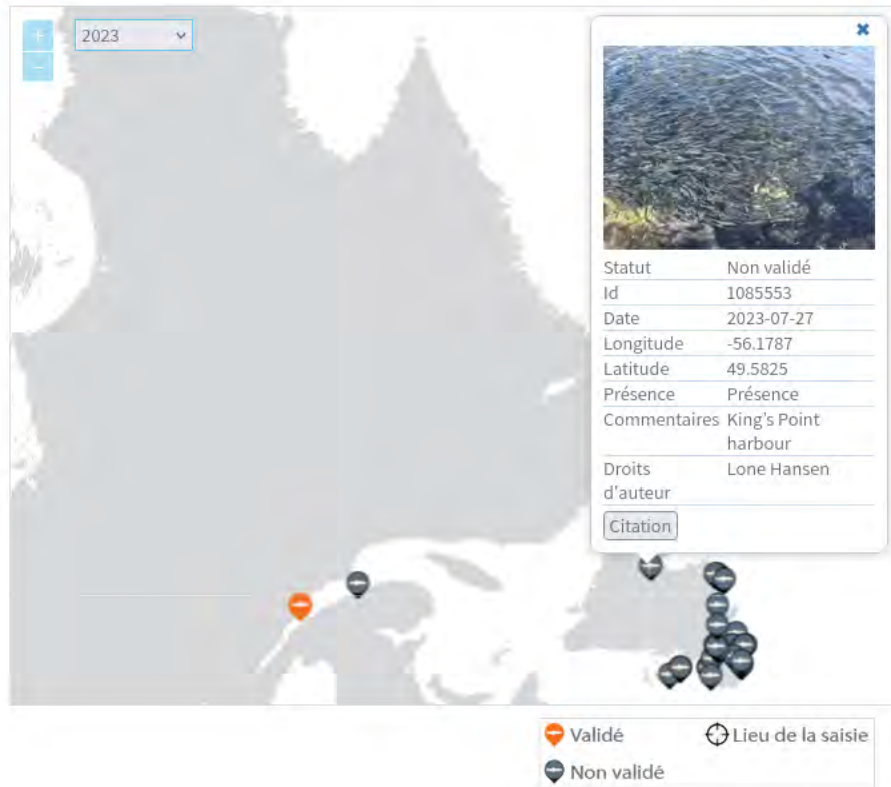
Capture d'écran de la vidéo.

[#ecapelan](#) est prêt pour la saison 2024.

C'est le fruit d'une large collaboration comme expliqué dans une courte [vidéo](#).



Résultats pour 2023.



Le Réseau d'observation du capelan - ROC et l'Observatoire global du Saint-Laurent - OGSL remercient le Fonds mondial pour la nature (WWF-Canada) pour leur contribution à ce projet.



[English site](#)

This section of your newsletter provides an opportunity to highlight your research programs to the Ocean Science Community.

*Your are invited to send contributions to David Greenberg,
davidgreenberg@alumni.uwaterloo.ca*

Mettez en valeur vos programmes de recherche en publiant un article dans cette première section de votre bulletin.

*Faites parvenir vos contributions à David Greenberg,
davidgreenberg@alumni.uwaterloo.ca*

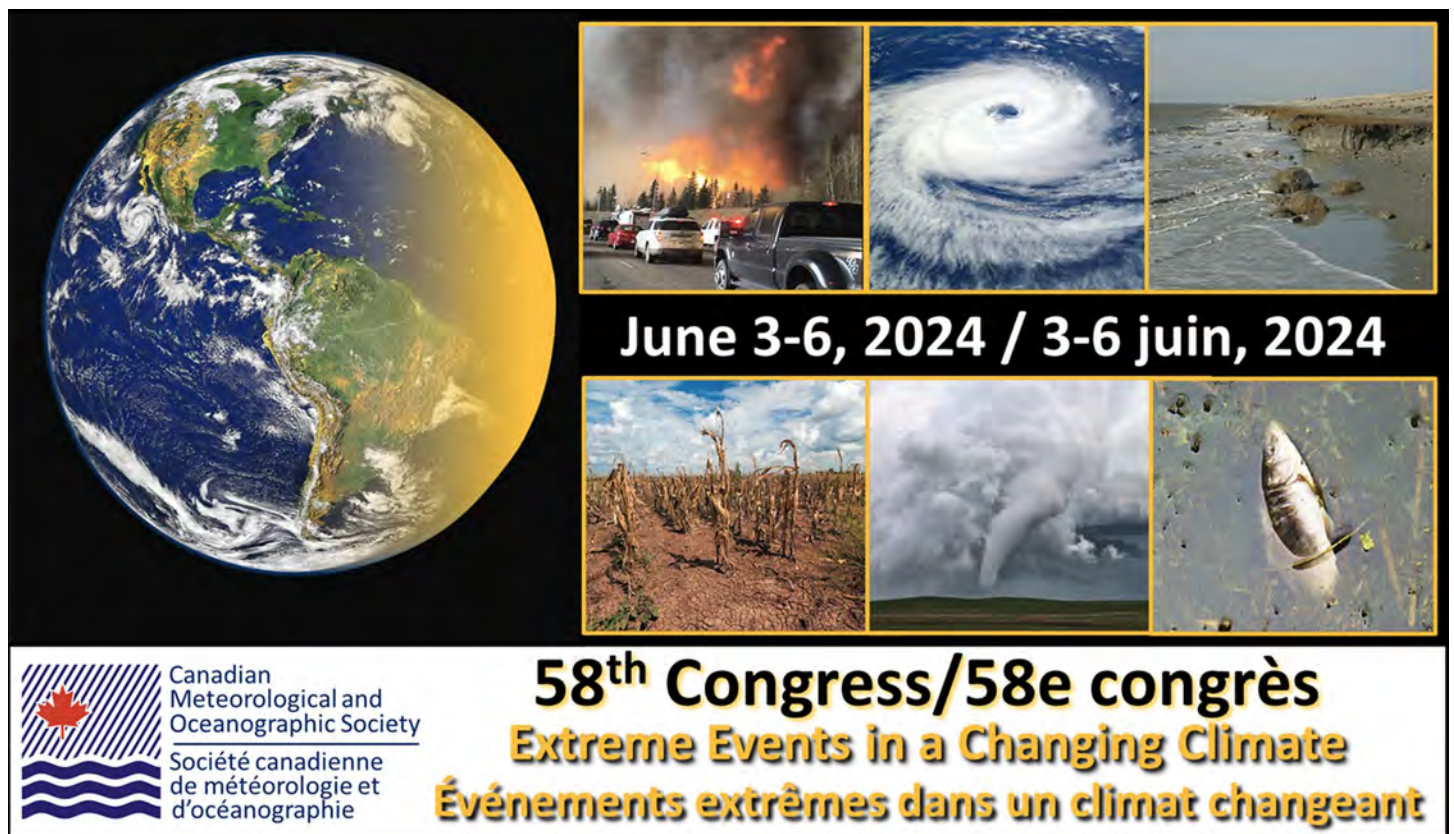
MEETINGS

CMOS Congress 2024

Online, June 3-6, 2024


[CMOS's](#) premier event is the annual scientific congress attracting hundreds of participants from across Canada and from around the world.

The [58th Congress](#) will be June 3-6, 2024 in a virtual-only format. The overall theme of the congress is "Extreme Events in a Changing Climate". The Congress will bring together a wide range of scientists and other professionals with a focus on topics in climate, atmosphere, ocean, hydrology, and earth sciences and their application as services to our society.



June 3-6, 2024 / 3-6 juin, 2024

58th Congress/58^e congrès
Extreme Events in a Changing Climate
Événements extrêmes dans un climat changeant

 Canadian Meteorological and Oceanographic Society
Société canadienne de météorologie et d'océanographie

[Registration is now open!](#) The **deadline** for early registration at a discounted price is **April 30, 2024**.

Versions françaises: [SCMO](#), [Congrès](#), [Inscription](#)

20th International Symposium on Geodynamics and Earth Tides

August 25-30, 2024, University of Strasbourg, France

The international symposium on Geodynamics and Earth Tides (G-ETS) addresses the entire range of tidal phenomena and dynamics of the Earth, both on the theoretical as well as on the observational level. The Earth tide affects many types of high precision instrumentation, be it measurements of position, deformation, potential field or acceleration. The G-ETS focus on Earth tides and non-tidal loading, such as atmospheric, oceanic and hydrological loading, Earth's variable rotation, geodetic monitoring of reservoirs and volcanoes. Accent is also put on geodetic monitoring of surface deformation and mass redistributions by space techniques (GNSS, GRACE and GRACE-FollowOn, InSAR) as well as to innovative techniques and instruments (for instance cold-atom gravimeters) and their applications to the Earth's dynamics.



An early-career scientist prize will be awarded to a scientist being a researcher within 10 years of receiving a PhD. Candidates will have to [declare themselves](#) during abstract submission process. You must have a (free) [Sciencesconf account](#) to register and submit an abstract.

[Details](#)

Abstract deadline April 19

Early bird Registration ends May 17

Registration deadline July 15

25th Meeting of the International Ice Charting Working Group

September 9-13, 2024, Monterey, California, USA

On behalf of the IICWG Co-Chairs, I invite your participation in the 25th annual meeting of the International Ice Charting Working Group (IICWG-XXV) to be held at the Naval Postgraduate School in Monterey, California, from September 9 to 13, 2024. The United States National Ice Center (USNIC) and the International Ice Patrol (IIP) will be our hosts. This will be a face-to-face meeting with most sessions being planned to allow for remote participation. We expect to be using the MS Teams application for the meeting. Since 1999, the IICWG has successfully worked as a forum for the operational ice services and helped them to better meet the needs of their national and international maritime clients through coordination and cooperation in data sharing, standards, training, product development, and research activities. The annual meeting has proven to be a valuable opportunity for the national ice services to meet, along with their partners and clients, to discuss issues facing operational ice monitoring, forecasting, and services today and in the years to come. The IICWG acts as an advisory body to the WMO and its subsidiary bodies and coordinates its activities with the WMO Executive Council Panel on Polar and High Mountain Observations, Research, and Services.



[Details](#)

Registration **deadline** for in-person participation will be **May 9th**.

*Please send meeting announcements to
David Greenberg,
davidgreenberg@alumni.uwaterloo.ca*

*SVP faites parvenir vos annonces de réunion à
David Greenberg,
davidgreenberg@alumni.uwaterloo.ca*

POSITIONS AVAILABLE

Océanographie avec spécialisation en modélisation

ISMER de l'Université du Québec à Rimouski

L'Institut des sciences de la mer (ISMER) de l'Université du Québec à Rimouski, est à la recherche d'une nouvelle professeure ou d'un nouveau professeur régulier (poste menant à la permanence) en océanographie avec spécialisation en modélisation.

Il s'agit d'une chaire de recherche financée par le programme Transformer l'action pour le climat du Fonds d'excellence en recherche Apogée Canada (<https://www.uqar.ca/tac>). Les activités de la chaire devront s'inscrire dans la stratégie scientifique du programme, qui vise la réduction des incertitudes quant au rôle de l'océan dans le cycle du carbone et l'évolution du climat.

La personne choisie devra être spécialisée en dynamique du climat, en physique océanique, en modélisation et observation des cycles biogéochimiques, et/ou en assimilation des données. Les domaines d'expertise recherchés sont le rôle de l'océan dans le système climatique ainsi que l'influence de la dynamique océanique et des cycles biogéochimiques sur les flux de chaleur et de carbone entre l'atmosphère et l'océan.

[Détails](#)

L'analyse des candidatures débutera le 15 avril 2024 et se poursuivra jusqu'à ce que le poste soit pourvu.

Postdoctoral Researcher, predictability of coastal sea levels

University of Hawaii Sea Level Center, Honolulu, USA

PRIMARY QUALIFICATIONS:

EDUCATION: PhD from an accredited college or university in Physical Oceanography, Climate, Atmospheric or related physical sciences or in the Computing Sciences.

EXPERIENCE: Up to three (0-3) years of postdoctoral experience performing oceanographic or climate research involving data analysis or modeling, including experience working with large data sets in a research capacity, or computer science research involving data analysis or modeling using machine and deep learning methods.

KNOWLEDGE: Extensive programming knowledge in at least one scientific programming/scripting language (e.g., MATLAB, Python). Proficiency in the command-line environment of UNIX-based operating systems. Working knowledge of the application of mathematics and statistics for data analysis and modeling. Working knowledge of common data formats (NetCDF, CSV, XML, JSON, etc.) and methods of data exchange (FTP, OPeNDAP, Globus, etc.).

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[Details](#) (Search for "UHSLC Postdoctoral Researcher")

Closing date - 04-15-2024



Postdoc Position in Satellite-based Kelp Mapping

Remote Sensing Lab, University of Victoria

Applications are being accepted for a postdoc position in Satellite-based Kelp Mapping (SkeMa): development of a software framework for First Nations in British Columbia, in the SPECTRAL Remote Sensing Lab, Geography and Computer Science, at the University of Victoria. The postdoc will be based in Victoria, Vancouver Island, Canada, and will work under the supervision of Dr. Maycira Costa and Dr. Neil Ernst from UVic. This project is funded by the Canadian Space Agency and in partnership with First Nations, VERTEX Resource Group, and the Hakai Institute.

This project aims to develop a software-based analysis framework to facilitate the use of Sentinel 2 and SuperDove satellites to retrieve floating kelp extent in BC and support First Nations marine planning. We expect that the outcomes of this research will allow First Nations to more independently and effectively use Space-based Earth Observation (SBEO) for tasks such as tracking kelp changes in relationship to environmental conditions (e.g., ocean temperature, return of sea otters) and overseeing the status of cultural and economically important kelp wild harvesting in their marine Traditional Territories.



[Details](#)

Start date: As soon as possible

PhD position Lagrangian particle tracking, high-res and unstructured meshes

GEOMAR, Kiel Germany

GEOMAR Helmholtz Centre for Ocean Research Kiel is looking for a PhD candidate who will contribute to the evaluation and interpretation of ocean models and our understanding of particle pathways in the oceanic circulation. In particular, the focus is on particle paths in the Atlantic and how these depend on different ocean models and their ability to accurately represent physical processes and regimes. Data from three state-of-the-art ocean models will be used, namely ICON, FESOM, and NEMO. The PhD candidate will use the Lagrangian Ocean Analysis Toolbox Parcels to compute the particle paths based on such model data, conceptualize new adjustments to the toolbox, support the implementation and test new options. This work is part of the research project "Enabling Lagrangian Particle Tracking for High-resolution and unstructurEd meshes (ELPHE)"



Qualification

- Completed (master's) studies in oceanography, climate science, physics, applied mathematics, or another related field
- Experience in programming (e.g. FORTRAN, Python) and in analyzing and interpreting data sets
- Ability to work in a team, open-mindedness, creativity and determination
- Very good command of English in speech and writing

...

[Details](#)

[Online application](#) to be submitted by **April 28 2024**

Looking for work? Try the CMOS site ([click](#)).

Vous recherchez un emploi? Visitez le site SCMO ([click](#)).

GENERAL

The 2024 Call for SCOR Working Groups is Open!

SCOR working groups are intended to address scientific issues that are impeding the advancement of contemporary ocean science. These include conceptual and methodological issues identified by oceanographic communities at large. As an international organization espousing ocean science, SCOR does not provide funds for research itself, i.e., producing data, observation, salary, etc. By facilitating international networking, SCOR aims to add value to outcomes from national activities.



Working groups are formed of not more than 10 Full Members and 10 Associate Members, to deliberate on a narrowly focused topic and develop a peer-reviewed publication and/or some other product that will advance the topic on which the working group is focused. The group's work is intended to be completed in 4 years or less.

The SCOR Secretariat invites proposals for new working groups to commence activities in late 2024. Deadline for submission: **17 May 2024**.

Instructions, guidelines, and a template to help prepare the proposals can be found [here](#).

The selection of the new SCOR working groups will take place at the 2024 SCOR Annual Meeting scheduled to take place in Qingdao, China on **16-18 October 2024**.

For more information, read the [full call](#).

Call for Applications: POGO-SCOR Fellowship Programme 2024

This programme is jointly funded by POGO and the [Scientific Committee on Oceanic Research \(SCOR\)](#) and is designed to promote training and capacity building leading towards a global observation scheme for the oceans. The Programme has been a success for around 20 years, with 190 fellowships awarded since 2001.

The fellowship program is open to scientists, technicians, postgraduate students (preferably of PhD level) and post-doctoral fellows of developing countries and countries with economies in transition and involved in oceanographic work. Applicants must be citizens of developing countries or economies in transition, as defined by the Development Assistance Committee (DAC) of the OECD. List of eligible countries is available in the right hand menu. The main purpose of the program is to advance sustained ocean observations and their applications. Priority is given to applicants in early stages of career development. This fellowship is intended to support training in oceanographic observations, not to learn research techniques. Its main purpose is to advance sustained ocean observations and their applications; it offers the opportunity to visit other oceanographic centres for a short period (1 to 3 months) for training on any aspect of oceanographic observations, analyses, and interpretation.



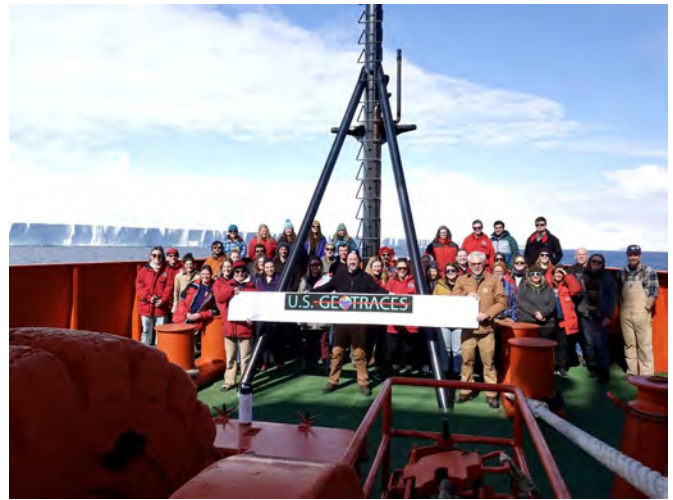
[Details](#)

The **deadline** for applications is **30 April 2024 (23:59 CET)**.

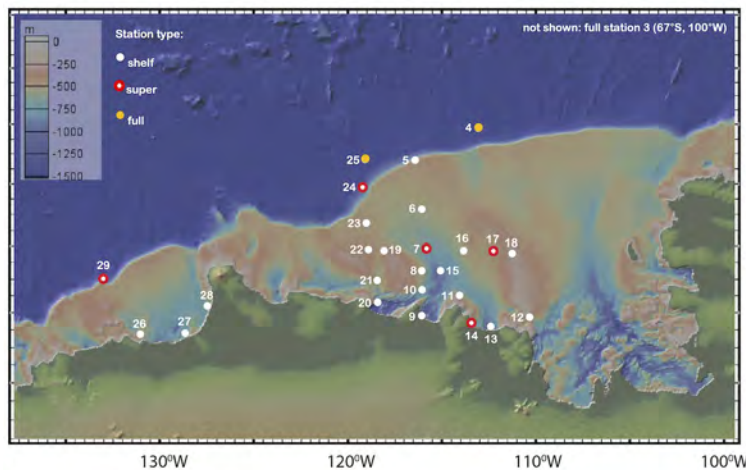
US GEOTRACES cruise in the Southern Ocean successfully completed

From the **GEOTRACES website**, posted 7 February 2024

The R/VIB *Nathaniel B. Palmer* arrived in Lyttelton, New Zealand on the evening of January 28, 2024, marking the completion of GEOTRACES cruise **GP17-ANT**, almost two months after departing from Punta Arenas, Chile. The cruise sampled 21 stations over the Amundsen Sea continental shelf, 3 stations over the continental slope, and 3 off-shelf stations, including one deep-ocean station that provides a crossover with the preceding companion cruise, **GP17-OCE**. All GP17-ANT stations included the collection of samples with a near-surface towfish, a conventional CTD-rosette, a trace-metal clean CTD-rosette, and McLane in-situ pumps. Additional sampling activities included collection of aerosols, precipitation, sea ice and snow, as well as sediment cores for pore-fluid extraction, and high-volume pumped seawater samples for radium isotopes and beryllium-7. Although most of the GP17-ANT science goals were achieved, large expanses of heavy sea ice surrounding the Amundsen Sea Polynya prevented access to several planned sampling locations, including the Thwaites Ice Shelf, Pine Island Bay, and the eastern portion of the outer Amundsen Sea shelf. Nevertheless, the cruise provided exciting opportunities to collect samples from stations adjacent to the Dotson and Getz Ice Shelves, as well as on- and off-shelf stations impacted by melting sea ice, polynya stations where phytoplankton biomass was extraordinarily high, and a station adjacent to fast ice with near-zero chlorophyll fluorescence. With support from the U.S. National Science Foundation, samples were collected for 23 separate science projects,



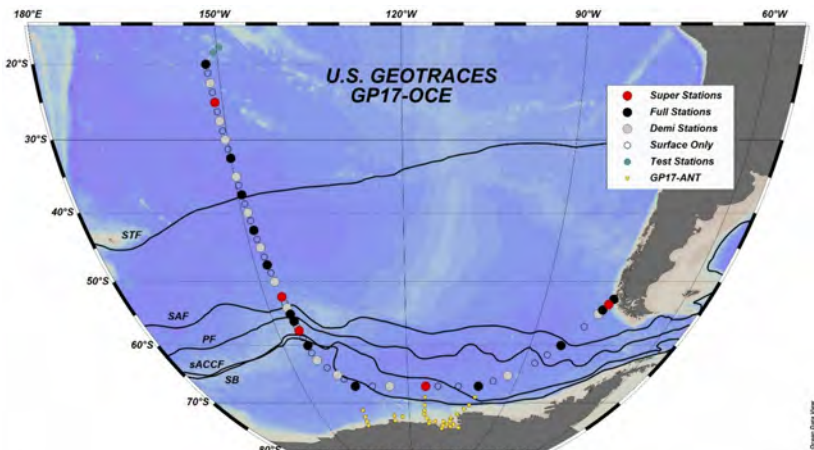
US GEOTRACES GP17-ANT cruise participants



GP17-ANT Cruise Track

which together will encompass measurements of nearly all of the GEOTRACES key trace elements and isotopes.

The cruise tracks of the preceding cruise, GP17-OCE, is shown on the right.



Canadian Ocean Science Newsletter Le Bulletin Canadien des Sciences de l'Océan

Previous [newsletters](#) may be found on the [CNC-SCOR](#) web site. The CNC-SCOR website is hosted by [CMOS](#).

Newsletter # **136** will be distributed in **May 2024**.

Please send contributions to David Greenberg
davidgreenberg@alumni.uwaterloo.ca

Subscribing and Unsubscribing

If you wish to subscribe to this newsletter or cancel your subscription, please visit the website:

<http://www.mailman.srv.ualberta.ca/mailman/listinfo/cnc-scor>

Les [bulletins](#) antérieurs se retrouvent sur le site web du [CNC-SCOR](#). Le site du CNC-SCOR est hébergé par le [SCMO](#).

Le Bulletin # **136** sera distribué en **mai 2024**.

Veillez faire parvenir vos contributions à David Greenberg, davidgreenberg@alumni.uwaterloo.ca

Abonnement et désabonnement

Si vous souhaitez vous abonner à cette newsletter ou annuler votre inscription, veuillez visiter le site web:

<http://www.mailman.srv.ualberta.ca/mailman/listinfo/cnc-scor>

CNC-SCOR

Members/ Membres

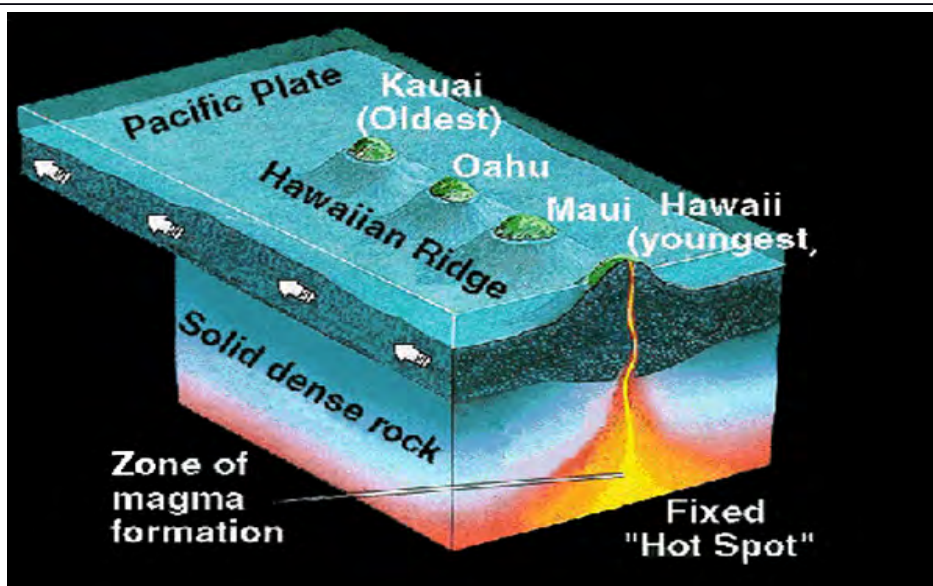
Paul Myers – Chair (U Alberta)
David Greenberg – Secretary (DFO-BIO)
Michael Scarratt (DFO-IML)
Paul Snelgrove (Memorial)
Stephanie Waterman (UBC)
David Fissel (ASL)
Lisa Miller (DFO)
Erin Bertrand (Dalhousie)

Le Comité national canadien du Comité scientifique de la recherche océanographique (SCOR) favorise et facilite la coopération internationale. Il reflète la nature multidisciplinaire de la science océanique et de la technologie marine.

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Steve Mihaly (ONC)
Martine Lizotte (SOLAS)

The Canadian National Committee of the Scientific Committee for Oceanic Research (CNC-SCOR) fosters and facilitates international cooperation. It is a non-governmental body that reflects the multi-disciplinary nature of ocean science and marine technology.



WWW.CNCSCOR.CA