

This email contains HTML, if you don't see it properly, view it online



News from the

Scientific Committee on Antarctic Research

April 2017

In this issue:

[SCAR News](#)

- Julian Gutt shares his Biodiversity policy work; SCAR Fellows Rosier and Cleeland report on the impact of their SCAR Fellowships; a workshop report on Antarctic sea ice variability; reminders of deadlines for the PhD Opportunity using SCAR archives, Tinker-Muse Prize nominations, and the 2017 Visiting Professor; and an update on biodiversity in Antarctica from President Chown.

[Get to Know SCAR](#)

- Geodetic Infrastructure of Antarctica (GIANT) Expert Group
- biodiversity.aq

[Featured Member Country](#) - Germany

[Research Highlights](#)

- Personal care product compounds found in Antarctic waters; an analysis of Antarctic protected area distribution; the First Antarctic shelf seabed drilling; and new insights on the source of iron to the Southern Ocean

[Educational Resources](#) - Polar Educators International

[Community News and Updates](#)

- Research Data Summer School and Workshops, a new 3-D view of Antarctica, Antarctic Geology online course, and a call for proposals from the Antarctic Wildlife Research Fund

[Upcoming Events](#)

SCAR News

[Q and A with SCAR AnT-ERA Chief Officer Dr Julian Gutt on his role in the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services \(IPBES\)](#)

Julian, you have been one of the lead-authors of the IPBES for six months, what is IPBES?

[IPBES is the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services](#), an intergovernmental body of the United Nations established in 2012, its secretariat is hosted by the German government. Under IPBES 126 governments assess the state of global biodiversity and ecosystem services it provides to society. The mission is to strengthen the science-policy interface for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development (Info video here: <https://www.youtube.com/watch?v=zeZScdbBz-M>).



For the non-specialists out there, what is meant by biodiversity and ecosystem services and why should we care?

Already in the Rio climate conference in 1992 scientists and politicians agreed on a definition. 'Biological diversity' means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

"Nature's Contributions to People" (NCP) include the most important ecosystem services (including goods), which are the provision of food and other biological products (e.g. medicine), sustaining a healthy environment, oxygen production, and CO₂ uptake, the two latter being especially important within the climate change problem. But NCP also includes negative impacts on people such as dangerous animals, parasites and diseases.

Read More

[Deadline for 2017 Tinker-Muse Prize nominations - 17 May](#)

The "Tinker-Muse Prize for Science and Policy in Antarctica" is a USD \$100,000 unrestricted award presented to an individual in the fields of Antarctic science and/or policy who has demonstrated potential for sustained and significant contributions that will enhance the understanding and/or preservation of Antarctica.

The Prize is inspired by Martha T. Muse's passion for Antarctica and is a legacy of the International Polar Year 2007-2008. A website with further details, including the process of nomination, closing date and criteria for selecting the prize recipients, is available at www.museprize.org.



Nominations close on **17 May 2017**.

Read More

[Deadline approaching for 2017 SCAR Visiting Professor applications](#)

There are just over 7 weeks remaining to the deadline for applications for the [2017 SCAR Visiting Professor Scheme](#).

The Visiting Professorship is for mid- to late-career stage scientists and academics (at least 5 years after completing their PhD) who are involved in Antarctic research, providing the opportunity for them to undertake a short-term visit (1 to 4 weeks) to an institute(s) in another SCAR member country, to provide training and mentoring. The ultimate goal of the scheme is to strengthen the research capacity of countries with smaller or less well-developed Antarctic research programmes, promoting capacity building in the host country and developing long-term links and partnerships which will lead to advances in Antarctic research.



The deadline for applications is **31 May 2017**.

Read More

[Deadline Extended: PhD Student Opportunity Examining SCAR's History](#)

SCAR is the international organization tasked with coordinating research in Antarctica and as part of its 60yr Anniversary celebration, has decided to open its archives for a comprehensive study. This is SCAR's veritable legacy of sixty years of research coordination at the bottom of the world. We are [looking for an enthusiastic and bright PhD Student](#) to examine the archival documents in order to better understand SCAR's role in the shaping of Antarctic science and geopolitics as well as to use the historical evidence to cast new light on Antarctica's present and future.



The application deadline has been extended to 30 April 2017. Interviews are expected to take place in May, with the successful candidate beginning in the post in October.

The researcher will be employed at the Centre for the History of Science, Technology and Medicine (CHSTM), University of Manchester, where she/he will receive further training on research methods as well as working space. The PhD student will travel regularly to Cambridge to visit the SCAR archive. SCAR will contribute the office space and incidentals needed by the student to complete the project, as well as some travel costs. SCAR will also provide in-kind assistance to the student while in Cambridge. The investigator may also have the opportunity to attend one of the Antarctic Treaty Meetings to familiarize with the system of scientific governance existing in Antarctica.

For more information please read the full position advertisement: <https://www.findaphd.com/search/ProjectDetails.aspx?PJID=84356&LID=1020>

[SCAR Fellow, Sebastian Rosier reports on his collaborative work with Gateway Antarctica, New Zealand](#)

2015 SCAR Fellow Sebastian Rosier tested ice shelf modelling with ground and satellite data. Mr Rosier is a PhD student at the [British Antarctic Survey](#) (BAS) in Cambridge, UK, and travelled to work with Dr Wolfgang Rack at [Gateway Antarctica](#), Christchurch, New Zealand.



The SCAR Fellowship allowed Sebastian to test model assumptions of ice shelf behaviour in a unique manner. This combined both the nature of the model used and the use of an extensive test dataset. Model assumptions of the type investigated are made frequently in a variety of applications, including e.g. ice sheet mass balance estimates, so it is crucial to evaluate how suitable they are in each case and highlight where they might not be valid. Results demonstrated that interpreting modelling results of ice shelf flexure requires caution before conclusions on ice rheology can be confidently asserted.

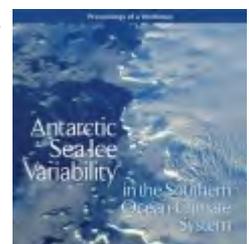
Sebastian reflected "The SCAR Fellowship scheme provided me with a unique opportunity to work abroad with a fantastic group of researchers. Being able to work on new research ideas together has allowed me to grow in confidence as a scientist and opened up a new and enduring collaboration with my hosts."

The [full report](#) is available on the [Fellows webpages](#) together with the full list of SCAR Fellows and available Reports.

Read More

[Workshop report released on Antarctic sea ice variability and its links to climate research](#)

The extent and concentration of Antarctic sea ice has been observed to increase from the late 1970's until 2015. However climate models generally simulated decreases over the same period, in line with predictions and observations for Arctic sea ice. In January 2016 a workshop was held in Boulder, Colorado, USA, to bring together scientists with different sets of expertise and perspectives to look at what was driving recent Antarctic sea ice variability. The workshop looked at ways to advance the understanding of Antarctic sea ice and its relationship to the broader ocean-climate system.



Outcomes included identifying key observations, model improvements and new research required to understand the processes controlling the observed variability. The importance of process studies and focusing on regions of particular geographical interest were also emphasized.



The [workshop report](#), which summarises the presentations and discussions from the workshop, has recently been published by the [Polar Research Board](#) of the [US National Academies of Sciences, Engineering, and Medicine](#). Over 40 scientists attended and a further 16 participated via webcast, exploring potential mechanisms driving the evolution of recent Antarctic sea ice variability and discussing ways to advance understanding.

The workshop included participation of many SCAR scientists, including Science Group Chief Officers David Bromwich ([Physical Sciences](#)) and Berry Lyons ([Geosciences](#), to 2016). Support was also provided through the planning process, and also travel funding for individuals, from the SCAR [Antarctic Sea-ice Processes and Climate](#) (ASPeCt) Expert Group.

[“Antarctic Sea Ice Variability in the Southern Ocean-Climate System”](#) Washington, DC: National Academies Press (2017). DOI: <https://doi.org/10.17226/24696> ISBN: 978-0-309-45600-5

[Study finds poor outlook for biodiversity in Antarctica](#)

An international study, led by SCAR President Professor Steven Chown, has questioned the widely held view that Antarctica and the Southern Ocean are in a much better environmental shape than the rest of the world. [The study](#), published today in [PLoS Biology](#) and involving an interdisciplinary group of 23 researchers compared the position of Antarctic biodiversity and its management with that globally using the [Convention on Biological Diversity’s](#) (CBD) [Aichi targets](#).



It follows a meeting of biodiversity, legal and policy experts held in June 2015 to assess Antarctic and Southern Ocean biodiversity and its conservation status in the context of the [Strategic Plan for Biodiversity 2011 to 2020](#), developed under the aegis of the CBD and broadly adopted. The meeting was organized by SCAR in partnership with the government of the Principality of Monaco and Monash University and resulted in the publication in 2015 of the [Monaco Assessment](#).

The study published today presents the full assessment, along with comprehensive evidence underpinning the assessment.

“The results have been truly surprising,” said Professor Chown. “While in some areas, such as invasive species management, the Antarctic region is doing relatively well, in others, such as protected area management and regulation of bioprospecting, it is lagging behind,” he said.

Read More

[SCAR Fellow, Jaimie Cleeland reports on the impact of her experience at the British Antarctic Survey](#)

2014 SCAR Fellow Jaimie Cleeland investigated the population drivers for a community of Southern Ocean albatrosses. Ms Cleeland is a PhD student at the [Institute for Marine and Antarctic Studies \(IMAS\)](#), University of Tasmania, Australia, and worked with Dr Richard Phillips at the [British Antarctic Survey \(BAS\)](#) in Cambridge, UK.



The SCAR Fellowship enabled Jaimie to diversify her analytical skills from foraging ecology to become proficient in demographic modelling and population analysis. These skills were applied to the albatross communities on Sub-Antarctic Macquarie Island. An unexpected result was that heavy grazing by invasive rabbits, and climate driven extreme rainfall events played a considerable role in regulating albatross breeding. Jaimie shared her experience through remote educational activities with schools in Australia while at BAS and upon her return has supported fellow postgraduates at IMAS with tutorials on the skills acquired during her Fellowship as well as a presentation on what SCAR is and tips for applying for the Fellowship.

Jaimie reported “Not only did the SCAR Fellowship connect me with world leaders in Antarctic Science, but also an invaluable network of early career scientists that will one day be world leaders.”

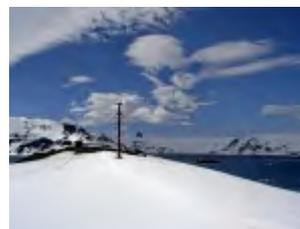
The [full report](#) is available on the [Fellows webpages](#) together with the full list of SCAR Fellows and available Reports.

Read More

Get to Know SCAR

[Geodetic Infrastructure of Antarctica \(GIANT\) Expert Group](#)

As interest in earth sciences and the effects of change within Antarctica has grown over the years the need for earth monitoring observatories has also increased. [Geodetic Infrastructure of Antarctica \(GIANT\) Expert Group](#) is an expert group established to oversee the development of geodetic infrastructure across the Antarctic Continent to facilitate the monitoring of its physical processes. The group has acted as an advisory committee to help coordinate various infrastructure associated with earth monitoring techniques such as GNSS, gravity meters as well as the installation of tide gauges to monitor sea level change.



GIANT has several working groups dedicated to permanent observatories, crustal movement from GNSS observations, gravity field, and tide gauge data.

This month GIANT will be sponsoring a workshop on [Airborne Geodesy and Geophysics with Focus on Polar Application](#) in Dresden, Germany.

[Biodiversity.aq](#)

[biodiversity.aq](#) provides access to both marine and terrestrial Antarctic biodiversity data.

Antarctic marine and terrestrial biodiversity data is widely scattered, patchy and often not readily accessible. In many cases the data is in danger of being irretrievably lost. Biodiversity.aq establishes and supports a distributed system of interoperable databases, giving easy access through a single [internet portal](#) to a set of resources relevant to research, conservation and management pertaining to Antarctic biodiversity.



For further information see www.biodiversity.aq

SCAR Featured Member Country - Germany

[Germany](#)

Germany has a long and involved history in Antarctica from the expedition led by [Eduard Dallman](#) in 1873-74, through the Heroic Age with expeditions into the Weddell Sea (Erich von Drygalski 1901-1903 and Filchner 1911-1912). During the last four decades, Germany developed a strong Antarctic programme and is now at the forefront of modern research in Antarctica.



Germany is a signatory nation to the Antarctic Treaty with the former East Germany (DDR) signing in 1974 and the former West Germany signing in 1979 and both joined SCAR in 1981 (BRD) and 1982 (DDR). The German national SCAR committee was established in 1978 by the German Research Foundation (DFG), which is the official member of SCAR. Within the Treaty, Germany is a consultative party with voting rights able to make decisions about Antarctica. Germany held the XVIII SCAR Delegates meeting in Bremerhaven in 1984 and twenty years later the XXVIII SCAR Delegates meeting and first Open Science Conference in the same location.

[Read More](#)

Research Features

[Discovery of Fragrance Materials in the seawater of Terra Nova Bay, Antarctica](#)

A [recent study](#) has reported the first detection of Fragrance Materials (FM) in the Antarctic environment. The measurements were made of FM concentrations in the surface seawater of Terra Nova Bay in the Ross Sea. The discovery was made as part of a wider program of measurements of Personal Care Products (PCPs), pollutants whose distribution in the Antarctic is still largely unknown. While some of the FMs were identified in the treated discharges from the Italian research station [Mario Zucchelli](#), the total concentration of FMs were found to vary during the seasonal melting of the sea ice.



The authors suggest that variability in emissions and distribution as well as atmospheric transport processes may play a role in the variations of FM concentration. They point to the need for future studies to investigate the environmental fate of the substances and transport processes to ensure protection of the fragile Antarctic marine ecosystem. Studying how next-generation contaminants will affect Antarctic and Southern Ocean ecosystems was identified as high priority during the [SCAR Horizon Scan](#).

Marco Vecchiato, Elena Gregoris, Elena Barbaro, Carlo Barbante, Rossano Piazza, Andrea Gambaro, "[Fragrances in the seawater of Terra Nova Bay, Antarctica](#)", Science of the Total Environment, 593-594, 2017. <http://dx.doi.org/10.1016/j.scitotenv.2017.03.197>

[Analysis of the distribution of Antarctic protected areas](#)

A [recent study](#) has analysed the [Antarctic protected areas system](#) (APAS) and found that it remains largely unsystematic and underdeveloped. APAS is legislated through the [Protocol on Environmental Protection to the Antarctic Treaty](#) and the [Convention on the Conservation of Marine Living Resources](#) (CCAMLR). The system has operated for over 50 years through multi-national agreement by consensus but the rate of protected area designation has almost halved in the past 10 years. The authors suggest that the early engagement of Parties in collaborative area protection may strengthen APAS and help safeguard the continent's values for the future. They note that insights from the APAS could translate to area protection for regions as diverse as the high seas and outer space.



Kevin A. Hughes and Susie M. Grant, "[The spatial distribution of Antarctica's protected areas: A product of pragmatism, geopolitics or conservation need?](#)", Environmental Science & Policy, 72, 2017. <http://dx.doi.org/10.1016/j.envsci.2017.02.009>

[First Antarctic shelf seabed drilling: drill cores from the Amundsen Sea Embayment](#)

- contributed by [Karsten Gohl](#), PAIS Steering Committee member

The Amundsen Sea Embayment is currently undergoing a large and rapid ice mass loss that could trigger a partial or full collapse of the West Antarctic Ice Sheet. Is this ice sheet retreat a phenomenon that always happened in this region at warm times in the geological past?



For the first time in Antarctic waters, a seabed drill – [the MeBo70](#) – was used on RV Polarstern [expedition PS104](#). From February to mid-March 2017, drill cores of sediments and sedimentary rocks were collected from up to 36 m below the sea floor at various sites on the Amundsen Sea shelf. The samples will help reveal the ice sheet history from early glaciation to retreat since the last glacial maximum and, thereby, will provide answers to many of the SCAR priority questions concerning Antarctic ice sheets and sea level.

In addition to collecting drill samples, this expedition provided valuable experience on using a seabed drill device in Antarctica's specific ice, weather and lithological conditions. This project is directly linked to the SCAR Scientific Research Programme [Past Antarctic Ice Sheet Dynamics](#) (PAIS).

Read More**[Iron from surface glacial meltwater - more important for Southern Ocean productivity than previously thought](#)**

Iron is a limiting nutrient for phytoplankton and is the base of the marine food chain. In the Southern Ocean around Antarctica, icebergs are thought to be the dominant source of glacial iron and provide local fertilization that stimulates phytoplankton blooms.



A [recent study](#) by Hodson et al. in Nature Communications however shows that surface runoff from glaciers on 3 small islands export more iron than that from icebergs. As the climate warms, these meltwater streams and their iron export could become even more influential on the productivity of Antarctic marine ecosystems.

Andy Hodson, Aga Nowak, Marie Sabacka, Anne Jungblut, Francisco Navarro, David Pearce, María Luisa Ávila-Jiménez, Peter Convey & Gonçalo Vieira, "[Climatically sensitive transfer of iron to maritime Antarctic ecosystems by surface runoff.](#)" Nat. Commun. 8, 14499 (2017). doi: 10.1038/ncomms14499

Educational Resources**[Polar Educators International](#)**

For the past few months our colleagues in [Polar Educators International \(PEI\)](#) have been contributing helpful resources that scientists can use in classrooms and other venues when sharing information about their Antarctic research. This month PEI is hosting their [International Conference in Rovereto, Italy](#) so we thought it would be a good time to give them a break and tell you more about PEI.



PEI is a vibrant network promoting polar education and research to a global community. By fostering dialogue and collaboration between educators and researchers, PEI aims to highlight and share the global relevance of the polar regions with the broader community.

PEI is looking for scientists to work with, so take a few minutes and learn more about this important partner. <http://www.polareducator.org>

Community News and Updates**[Upcoming deadline for Research Data Summer School and Workshops](#)**

A series of [Committee on Data for Science and Technology \(CODATA\)](#) meetings to be held in July 2017 have upcoming deadlines to request participation of 25 April. Two of the meetings are being held in collaboration with the [Research Data Alliance](#) (RDA):



The [CODATA-RDA Research Data Science Summer School](#) will take place from 10-21 July 2017 at the [International Centre for Theoretical Physics](#), Trieste, Italy.

The [CODATA-RDA Research Data Science Applied Workshops on Extreme Sources of Data, Bioinformatics and IoT/Big-Data Analytics](#) will take place from 24-28 July 2017 at the International Centre for Theoretical Physics, Trieste, Italy.

The [CODATA International Training Workshop in Open Data for Better Science](#), will take place from 16-29 July 2017 in Beijing, China. For this meeting financial support is available for successful applicants thanks to a grant from the [Chinese Academy of Sciences](#) (CAS).

[A new 3-D view of Antarctica](#)

A [new digital model of Antarctic ice elevation](#) is being made available, based on 250 million measurements taken by the [European Space Agency CryoSat](#) satellite. The model provides a unique 3-D view of Antarctica, offering a snapshot of the undulating surface of the vast ice sheet. This new view of Antarctica can be used for a wide range of applications as showing the surface of Antarctica in such detail means it can be used for planning fieldwork to detailed modelling the ice sheet.



CryoSat's radar altimeter detects tiny variations in the height of the ice across the entire continent, including on the steeper continental margins where the vast majority of ice losses occur.

Read More

[Online course introducing Antarctic geology and history starts 15 April](#)

A free, five week course has been developed that will help you learn about and explore more than 500 million years of geological history and 250 years of geographical discovery from Antarctica. Available as a Massive Open Online Course (MOOC), "[Antarctica: From Geology to Human History](#)" launches on April 15 2017 on the [edX open education platform](#).



The course has been produced by the [Victoria University of Wellington](#) and with support from [Antarctica New Zealand](#), Dr Rebecca Priestley and Dr Cliff Atkins visited Antarctica in 2014 to film lectures on location on Ross Island, in the McMurdo Dry Valleys and the Transantarctic Mountains.

Dr Priestley, a science historian and writer, visits historically important places and talks to some of the people who are part of shaping today's Antarctica. Dr Atkins, an Antarctic veteran with 12 seasons on the ice, introduces some of the planet's most remarkable landscapes and the stories they tell about the past and future of the world's climate.

For more information and to sign up for the course visit: <http://tinyurl.com/ice101x>

[Call for research proposals to the Antarctic Wildlife Research Fund](#)

The 3rd call for proposals to the [The Antarctic Wildlife Research Fund](#) (AWR) is now open. AWR wishes to contribute to and support the work of and the [Convention on the Conservation of Marine Living Resources](#) (CCAMLR) so that the Antarctic krill fishery is managed in a sustainable manner consistent with the precautionary approach detailed in the Convention text. The aims of the call have therefore been developed to be consistent with the work of CCAMLR.



In supporting the development of a feedback management approach for the krill fishery, the AWR wishes to fund work that will increase understanding about how the Antarctic marine ecosystem operates and how it might be characterised as a set of indicators for use by managers.

AWR note that critical knowledge gaps that might be preferred in the 3rd Call for project proposals could include:

- The use of acoustic data collected from non-traditional scientific research platform.
- The role of flying birds in the krill-centric food web.
- The role of fish in the krill-centric food web.

CLOSING DATE 23 JUNE 2017

For further details and to apply please see: <http://www.antarcticfund.org/>

Upcoming Events

Reminders:

Unlocking SCAR's Archives PhD Position Deadline: 30 April
PAIS Symposium Abstract Deadline: 30 April
#GreatAntarcticClimateHack Registration Deadline: 15 May
Tinker-Muse Prize Nomination Deadline: 17 May
Visiting Professor Awards Deadline: 31 May
SCAR Fellowship Applications Deadline: 1 July

April 2017

[BEPSII - Biogeochemical exchange processes at Sea Ice Interfaces Meeting](#)
[2017 Polar Technology Conference](#)
[3rd International Workshop of Polar Educators International \(PEI\)](#)
[Airborne Geodesy and Geophysics with Focus on Polar Application](#)
[EGU General Assembly](#)
[IPICS Session at EGU](#)

May 2017

[Past Global Changes \(PAGES\) Open Science Meeting](#)
[Summer School on Antarctic Climate Variability and Ice Dynamics](#)
[SOOS West Antarctic Peninsula Regional Working Group Workshop](#)
[23rd International Symposium on Polar Sciences](#)
[International Conference on High Latitude Dust 2017](#)
[ATCM XL - CEP XX](#)

June 2017

[Year of Polar Predictions \(YOPP\) Special Session](#)
[SOOS Scientific Steering Committee Meeting](#)
[2017 Glacial Seismology Training School](#)
[Forum for Research into Ice Shelf Processes \(FRISP\) Workshop](#)
[27th International Ocean and Polar Engineering Conference](#)
[12th Workshop on Antarctic Meteorology and Climate](#)
[Year of Polar Prediction in the Southern Hemisphere \(YOPP-SH\) Meeting](#)
[Southern Ocean Regional Panel \(SORP\) Meeting](#)

July 2017

[2nd Asian Conference on Permafrost \(ACOP2017\)](#)
[2017 HASSEG/History Groups Biennial Conference](#)
[Workshop on Priority Threat Management for Antarctica](#)
[SCAR Biology Symposium](#)
[Conference on Regional Sea-level Changes and Coastal Impacts](#)
[Climate Impacts on Glaciers and Biosphere in Fuego-Patagonia / Antarctica](#)
[SCAR Astronomy & Astrophysics from Antarctica \(AAA\) Meeting 2017](#)

August 2017

[The future of biogeochemical cycling in the polar regions \(session at Goldschmidt Conference\)](#)
[XXXII International Union of Radio Science \(URSI\) General Assembly & Scientific Symposium](#)
[GEOTRACES Summer School](#)

September 2017

[International Association of Geodesy/SCAR SERCE Workshop on "Glacial isostatic adjustment and elastic deformation"](#)
[2nd World Symposium on Climate Change Adaptation \(WSCCA- 2017\)](#)
[7th International Conference on Polar & Alpine Microbiology](#)
[Past Antarctic Ice Sheet Dynamics \(PAIS\) Conference 2017](#)
[The cryosphere and its interactions with meteorology and the climate system at EMS 2017](#)
[Summer School on Ice Sheets and Glaciers in the Climate System](#)
[Workshop on Cryosphere and Hydrosphere for Global Change Studies](#)

[Ice Core Analysis and Techniques \(*ICAT*\) PhD school](#)

October 2017

[IX Congreso Latinoamericano de Ciencia Antártica / IX Latin American Congress on Antarctic Science](#)
[1st International ANTPAS Workshop on Antarctic permafrost, periglacial processes and soils](#)
[CODATA 2017 Conference. "Global Challenges and Data-Driven Science"](#)
[The #GreatAntarcticClimateHack](#)
[Polar-CORDEX Meeting](#)
[32nd ICSU General Assembly](#)

January 2018

[NSF Advanced Training Program in Antarctica for Early-Career Scientists](#)

February 2018

[2018 Ocean Sciences Meeting](#)

March 2018

[International Symposium on the Cryosphere and Biosphere](#)

April 2018

[International Conference on Marine Ecosystem Assessment for the Southern Ocean](#)

June 2018

[POLAR2018 - XXXV SCAR Meetings and SCAR/IASC Open Science Conference](#)
[5th European Conference On Permafrost \(EUCOP5\)](#)

© The Scientific Committee on Antarctic Research (SCAR) 2017
SCAR is an Interdisciplinary Body of the [International Council for Science](#)
Registered UK Company Number 6564642; Registered UK Charity Number 1124840
The SCAR Newsletter is Registered as ISSN 2307-275X.

<http://www.scar.org>

