Future Antarctic Science Challenges

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Working Paper submitted by SCAR

Summary

The Scientific Committee on Antarctic Research (SCAR) is an interdisciplinary body of the International Council for Science charged with the initiation and international coordination of Antarctic and Southern Ocean research beneficial to global society. SCAR’s Strategic Plan 2017-2022 continues to identify the delivery of independent scientific advice to the Antarctic Treaty Consultative Meetings as one of its key objectives. During discussions of Future Antarctic Science Challenges and how these might be prioritised, SCAR, as the leading organization that promotes, facilitates, and delivers research and evidence-based policy advice on globally significant issues in, from and about Antarctica and the Southern Ocean, stands ready to assist the ATCM.

The Scientific Committee on Antarctic Research

1. SCAR is an interdisciplinary body of the International Council for Science (ICSU).
2. SCAR’s mission is to advance Antarctic research, including observations from Antarctica, and to promote scientific knowledge, understanding and education on any aspect of the Antarctic region.
3. SCAR’s vision is to be an engaged, active, forward-looking organization that promotes, facilitates, and delivers scientific excellence and evidence-based policy advice on globally significant issues in, from and about Antarctica and the Southern Ocean.
4. SCAR’s work in the next five years will focus on five key objectives:
5. Amplify its leadership in Antarctic research facilitation by further strengthening and expanding high-quality collaborative and visionary Antarctic research, including observations from Antarctica;
6. Offer independent scientific advice to Antarctic Treaty Consultative Meetings and other bodies dealing with Antarctic and Southern Ocean matters;
7. Enhance and grow research capacity in SCAR member countries;
8. Enhance public awareness and understanding of Antarctic issues through communication of Antarctic research results in a timely and accessible manner;
9. Facilitate unrestricted and free access to Antarctic research data.

Future Research Challenges

1. SCAR recently completed, in collaboration with researchers, policy makers and operational experts from many countries, the 1st Antarctic and Southern Ocean Science Horizon Scan.
2. In combination with outcomes from its groups and current scientific research programmes, and in collaboration with its members, SCAR will use the priorities identified by the Horizon Scan to guide delivery of its Mission over the next six years.
3. In doing so, SCAR recognizes the fast-paced nature of modern scientific discoveries and the growing scope of environmental change, and will retain flexibility to facilitate responses to new challenges.
4. As a body of ICSU, SCAR recognizes and responds to, and is a conduit for interacting with, global developments which depend on and influence science priorities and outcomes in and about Antarctica and the Southern Ocean, including international aspirations such as the Sustainable Development Goals.

SCAR and the ATS

1. SCAR has a long history of providing advice to the Antarctic Treaty System on a range of matters, including, among others, science priorities, science policy, environmental matters and the outcomes of global science that are relevant to Antarctica and the Southern Ocean.
2. SCAR’s Strategic Plan 2017-2022 continues to identify the delivery of independent scientific advice to the Antarctic Treaty Consultative Meetings as one of its key objectives.

Recommendations

During discussions of Future Antarctic Science Challenges and how these might be prioritised, SCAR encourages the ATCM and Parties to:

1. Draw on SCAR’s considerable efficacy in
2. identifying emerging science priorities;
3. developing, facilitating and coordinating international research in, from and about Antarctica and the Southern Ocean;
4. enabling complex interdisciplinary research;
5. distilling research outcomes into policy-ready evidence;
6. growing research capacity;
7. enhancing awareness of the value of research in, from and about Antarctica and the Southern Ocean;
8. facilitating interactions with other international science-based agreements.
9. Continue to recognize the value of SCAR and its science advisory role in the Antarctic Treaty System, including by encouraging national adhering bodies and scientists to grow their support of and participation in SCAR’s activities.