

IMPLEMENTATION OF THE SCAR REVIEW

Contents

	page
Introduction	1
I Structure of SCAR Groups	2
II Procedure for the Development and Approval of a SCAR Research Programme	6
III Standing Committees	8
IV Structure of SCAR Meetings	10
V XXVII SCAR	12
Appendix List of Acronyms and Abbreviations	13

At XXVI SCAR in Tokyo, Japan, July 2000, the SCAR Delegates received the Report of the ad hoc Group on SCAR Organization and Strategy entitled Scientific Committee on Antarctic Research: preparing SCAR for 21st Century science in Antarctica. The Delegates also adopted in principle all of the 20 Recommendations made in the report.

An ad hoc Group on Transition was established to provide detail on the implementation of the recommendations where these needed further elaboration. The ad hoc Group on Transition met in Amsterdam, The Netherlands, August 2001, and submitted a report to the SCAR Executive Committee.

The SCAR Executive Committee received that report and has now issued a set of guidelines for implementing the provisions of the Review, with specific reference to Recommendations 4, 5, 9 and 10 or aspects of them.

Chief Officers should be reassured that all existing groups, subcommittees or programmes, are expected to be assimilated into the new structure; the only closures are those that might occur in the routine biennial review of the Working Groups and Groups of Specialists.

Implementation of the SCAR Review

Introduction

The purpose of this paper is to provide SCAR National Committees, Delegates and Chief Officers with guidelines for implementing the provisions of the SCAR review in the period leading to XXVII SCAR in Shanghai, China 15–26 July 2002, during XXVII SCAR, and into the future. The re-structuring of any organization will undoubtedly have teething problems and SCAR is unlikely to be an exception. However, the SCAR Executive Committee has approved the structure and procedure in the following pages as the basis on which to proceed.

I. Structure of SCAR Groups

The following table and the text below show how the existing Working Groups and Groups of Specialists will be incorporated into the proposed new structure of Standing Scientific Groups, Standing Committees and Scientific Programme Groups.

The tables below are meant to be illustrative of the amalgamations that might happen in Shanghai; they are not meant to be prescriptive or restrictive in any way.

Standing Scientific Groups			Standing Committees
GEOSCIENCES	PHYSICAL SCIENCES	LIFE SCIENCES	INFRASTRUCTURE and OUTREACH
ANTEC ANTOSTRAT	GLOCHANT Astronomy Climate Change Oceanography	Seals Bird Biology Evolutionary Biology Human Biology	ATS (GOSEAC) Data (JCADM) Finance (Finance)
MAGMAP, BEDMAP ADD, Place-names GIANT, AGEANT	AGONET READER	EVOLANTA EASIZ RiSCC	Note: Existing subsidiary groups are shown in bold

Scientific Programme Planning Groups

Scientific Programme Groups				
ANTIME	ASPeCt ISMAL ITASE PICE	APIS	ANTEC	SALE

The descriptions of the SSGs given below are examples of how the existing Working Groups may fold into the new SSGs., Some subgroups of scientists within an existing Working Group may wish to move to a different SSG from the rest of their former colleagues. For example, some glaciologists may prefer to move into the Geosciences SSG rather than the Physical Sciences SSG.

The **Standing Scientific Groups** comprise the existing Working Groups as follows:

Implementation of the SCAR Review

GEOSCIENCES	Geodesy and Geographic Information, Geosciences (formerly Geology and Solid-Earth Geophysics) plus GoS ANTEC
PHYSICAL SCIENCES	Glaciology, Physics and Chemistry of the Atmosphere, Solar-Terrestrial and Astrophysical Research plus GoS GLOCHANT
LIFE SCIENCES	Biology, Human Biology and Medicine plus GoS Seals

The Working Groups will take with them their existing sub-committees and programmes. The current disciplinary Groups of Specialists are also included in the structure above. The Groups of Specialists on Subglacial Antarctic Lake Exploration and on Global Change and the Antarctic will continue as Scientific Programme Planning Groups (SPPGs) subject to review.

Action Groups may be established by the SSGs, either individually or jointly, to address specific scientific topics. For example, under Physical Sciences three possible new subgroups are shown that might become **Action Groups**.

The **Standing Committees** shall include the current Finance Committee, an equivalent of JCADM and an equivalent or successor to GOSEAC. (The last group will advise SCAR on issues for the Antarctic Treaty and much of the time these will likely centre on environmental matters, specifically management plans for protected areas.) Other **Standing Committees** may be appointed as required.

A **Scientific Programme Planning Group** will be a temporary group established by one or more **Standing Scientific Groups** to prepare and propose a new SCAR programme to the relevant SSG or SSGs. If the proposal is approved by the SSG(s) it will be forwarded to the SCAR Executive Committee for review prior to submission to the next Delegates Meeting. If the proposal is approved by the Delegates, the SCAR Executive Committee, in consultation with the relevant SSG(s) will appoint a small **Scientific Programme Group**, to include members of the **Scientific Programme Planning Group**, to develop the **Scientific Research Programme**.

Scientific Programme Groups (SPGs) will be appointed by the SCAR Executive, in consultation with the relevant SSGs and approved by the Delegates, to direct the approved **Scientific Research Programmes**. The **Scientific Programme Groups** will be responsible for all aspects of their research programme including reporting to the Executive on progress, and the delivery of agreed scientific outcomes.

The programmes of the current Groups of Specialists will become **Scientific Research Programmes** and will continue to XXVIII SCAR (2004) when they may expect to be terminated. Meanwhile, the SSGs are encouraged to consider proposals for research programmes to present to the SCAR Executive Committee at its meeting in July 2003 for review prior to submission to the XXVIII Delegates Meeting.

The **Standing Scientific Groups**, the **Standing Committees** and the **Scientific Programme Groups** report annually to the SCAR Delegates and the SCAR Executive Committee.

Standing Scientific Groups

1. There shall be three **Standing Scientific Groups** on **Geosciences**, **Life Sciences** and **Physical Sciences**;

Implementation of the SCAR Review

2. Each **Standing Scientific Group** shall elect a Chief Officer, Deputy Chief Officer and a Secretary from among its members.

Terms of Reference

The Terms of Reference for a **Standing Scientific Group** will be:

- to share information on disciplinary scientific research being conducted by national Antarctic programmes;
- to identify research areas or fields where current research is lacking;
- to coordinate proposals for future research by national Antarctic programmes to achieve maximum scientific and logistic effectiveness;
- to ensure appropriate cross-disciplinary awareness and linkages with the other SCAR SSGs;
- to identify research areas or fields that might be best investigated by a SCAR **Scientific Research Programme** and establishing a **Scientific Programme Planning Group** to develop a formal proposal to the SSG;
- to establish **Action Groups**, either individually or jointly with either or both other SSGs, to address specific scientific topics;
- to make funding requests for SCAR support of SSG activities (eg symposia, workshops, etc);
- to provide scientific advice to the Executive Committee as required.

Membership

The membership of a **Standing Scientific Group** will be:

- (a) the nominated representatives of SCAR National Committees;
- (b) the nominated representatives of other eligible organizations with a specific Antarctic research interest in the work of the **Standing Scientific Group**;

National Committees may nominate up to four representatives to a **Standing Scientific Group**, one of whom will be identified as the leader, who holds the vote of the National Committee, and another identified as the alternate leader. Both the identified leader and alternate leader will be eligible for election to office but only one may be proposed at one election.

Scientific Programme Planning Groups

It is proposed to establish a small number of **Scientific Research Programmes** (SRPs): major, 5–10 year international efforts coordinated by SCAR, either alone or jointly with other international research bodies, to address major, priority scientific issues of global or fundamental importance requiring field work and/or observations in the Antarctic. The SRPs will be proposed and developed by **Scientific Programme Planning Groups** (SPPGs) fostered by one or more of SCAR's **Standing Scientific Groups**.

Terms of Reference

The Terms of Reference for a **Scientific Programme Planning Group** will be:

- to formulate a science plan with explicit, clear and feasible scientific aims and outcomes;

Implementation of the SCAR Review

- to formulate an implementation plan indicating the activities, equipment, infrastructure, logistics and national involvement required, showing clearly the contributions of each to the successful achievement of the science outcomes.
- to indicate clearly the value added by the proposed programme being coordinated by SCAR;
- to indicate clearly the scientific quality, importance and relevance in the context of Earth System Science generally and Antarctic science specifically.

Membership

The membership of a **Scientific Programme Planning Group** will be:

- (a) open to any scientist with an interest in the Antarctic who wishes to propose or join such a group;
- (b) fostered by one or more of the SCAR **Standing Scientific Groups**;
- (c) for the duration of the proposal process.

Scientific Programme Groups

Approved **Scientific Research Programmes** will be directed by **Scientific Programme Groups** (SPGs) appointed by the SCAR Executive in consultation with the relevant SSGs and approved by the Delegates. The **Scientific Programme Groups** will be responsible for all aspects of their research programme including reporting to the Executive on progress, and the delivery of agreed scientific outcomes.

Terms of Reference

The Terms of Reference for a **Scientific Programme Group** will be:

- to oversee and guide the development and execution of the programme's implementation activities, adjusting and optimizing the science and implementation plans in the light of events and progress.
- to actively seek support of the programme's implementation through national and international mechanisms
- to ensure the delivery of agreed/approved scientific outcomes, including synthesis activities and public/policy outreach
- to respond to requests for expert advice/support from the SCAR Executive in a timely and effective manner
- to ensure appropriate exchange and archival of data generated as a result of the programme
- to establish scientific liaison and logistic cooperation with other Antarctic activities as appropriate
- to advise the SCAR Executive on progress and on the use of funds provided

Membership

The membership of a **Scientific Programme Group** will be:

- explicit

Implementation of the SCAR Review

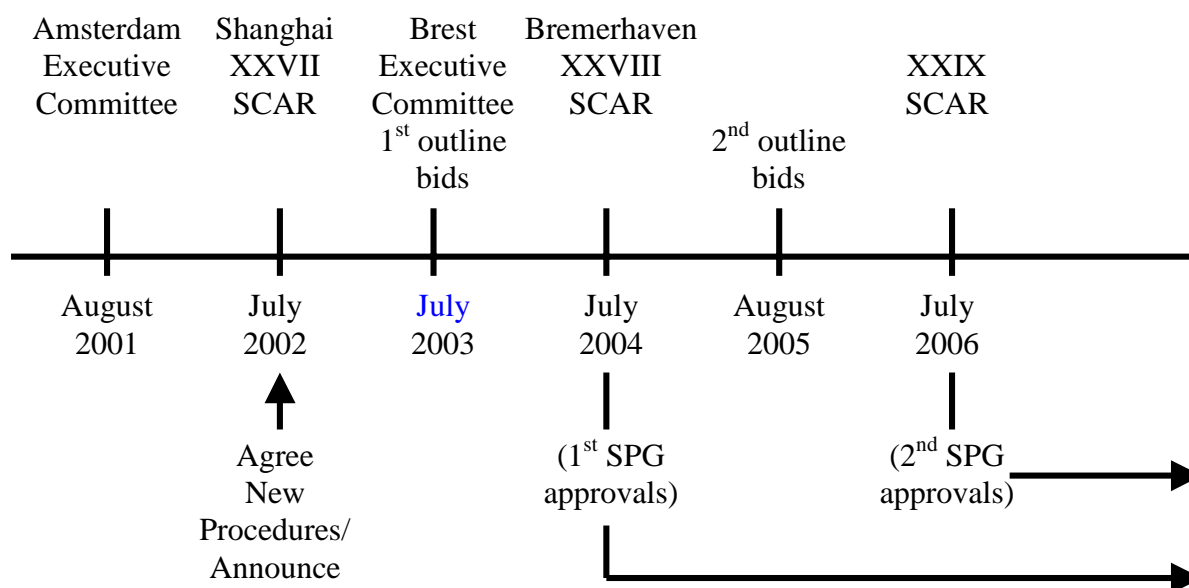
- appointed by Executive **in consultation with the SSG or SSGs** and with the approval of the Delegates
- based primarily on internationally recognized scientific expertise fulfilling required mix of skills and experience with national and gender mix taken fully into consideration
- for a 3-year term with the possibility of extension depending on contribution/performance
- phased rotation scheme

II. Procedure for the Development and Approval of a SCAR Research Programme

1. **SCAR Standing Scientific Groups**, either alone or jointly may establish a **Scientific Programme Planning Group** that will propose:
 - a title for the **Scientific Research Programme**;
 - a leader for the **Scientific Programme Planning Group**;
 - an initial “core” membership for the **Scientific Programme Planning Group** as a result of networking and workshop(s)
2. **Scientific Programme Planning Group** will produce an outline bid for submission to the SSG(s) for approval and forwarding to the SCAR Executive Committee for review.
3. The outline bid will consist of:
 - science aims/outcomes plus rationale for their quality, importance, feasibility (“So what?” “Why SCAR?” “Why now?”)
 - general approach to implementation
 - anticipated degree of national/international involvement
 - time-scale, milestones
 - logistic requirements
 - Costs
 - any other relevant facts
 - a maximum of 6 pages of text and 4 pages of tables/figures
 - with a deadline 6 weeks prior to the Executive Committee meeting in non-delegate body years.
4. Executive Committee and Chief Officers of **Standing Scientific Groups** and **Scientific Programme Groups** will review and select/reject outline bids using the following criteria:
 - science quality/proposal quality
 - science importance/relevance/timeliness
 - “fit” to current SCAR science strategy as determined by the SCAR Delegates
 - operational and technical feasibility

Implementation of the SCAR Review

- degree of international involvement/likely commitment
 - public/policy profile
 - value added by SCAR involvement
5. The review process will obtain additional expert comments and advice as deemed necessary. Approved outline bids will be developed into full science and implementation plans (100 pages maximum) to be submitted to SCAR Secretariat 8 weeks prior to the biennial SCAR meeting.
 6. The Executive Committee will select and appoint the members of the **Scientific Programme Group** in consultation with the SSG or SSGs and with the approval of the Delegates.
 7. Timeline



III. Standing Committees

1. There will be three **Standing Committees** as follows:
 - **Antarctic Treaty Standing Committee**
 - **Data Standing Committee**
 - **Finance Standing Committee**
2. The **Standing Committees** report to the SCAR Executive Committee and may also report to the SCAR Delegates Meeting.

Implementation of the SCAR Review

Antarctic Treaty Standing Committee

Terms of Reference

1. To provide independent scientific advice and information to SCAR on scientific and technical matters relevant to the implementation of the Madrid Protocol:
 - CEP environmental issues (conservation, protected species, protected areas, review of the Protocol annexes);
 - scientific environmental research;
 - Interaction between tourism activities and field research;
 - Living resources;
2. Prepare documents or technical reports at the request of the Executive Committee on scientific and technical matters, such as listed on 1;
3. Identify upcoming issues on the agendas of the ATCM and CEP
 - other AT bodies;
 - pertinent international organizations.
4. [Report to the SCAR Delegates or the Executive Committee as appropriate.](#)

Membership

1. The **Antarctic Treaty Standing Committee** shall have three members appointed by the Executive Committee and approved by the Delegates.
2. Two of the members will be appointed Chief Officer and Deputy Chief Officer by the Executive Committee.
3. With the approval of the Executive Committee, the Chief Officer may co-opt additional members to a meeting where the expertise of the additional members will be relevant to the issues for discussion.

Data Standing Committee

Terms of Reference

1. To advise SCAR on all matters relating to the cataloguing, archiving and accessing of Antarctic scientific data.
2. To provide advice to National Antarctic Data Centres as required.

Membership

1. The **Data Standing Committee** shall have three members appointed by the Executive Committee and approved by the Delegates.
2. Two of the members will be appointed Chief Officer and Deputy Chief Officer by the Executive Committee.
3. With the approval of the Executive Committee, the Chief Officer may co-opt additional members to a meeting where the expertise of the additional members will be relevant to the issues for discussion.

Implementation of the SCAR Review

Finance Standing Committee

Terms of Reference

1. To advise SCAR on all financial matters.
2. To prepare annual statements of SCAR income and expenditure.
3. To prepare annual balanced budgets of SCAR income and expenditure based on SCAR's operational needs and applications for funds from Chief Officers.

Membership

1. The **Finance Standing Committee** shall have three members appointed by the Executive Committee and approved by the Delegates.
2. Two of the members will be appointed Chief Officer and Deputy Chief Officer by the Executive Committee.
3. Prior to the SCAR Delegates meeting, and with the approval of the Executive Committee, the Chief Officer will co-opt two additional members to form the SCAR Finance Committee for the immediately following SCAR Delegates Meeting.

IV. Structure of SCAR Meetings

A new structure of SCAR meetings will be implemented in which the Delegates Meeting will take place approximately three months after the **SCAR Science Meeting** that will be held in conjunction/parallel with COMNAP and SCALOP during even numbered years. The objectives of this structure will be:

- To create an open forum to which SCAR scientists will be attracted in order to participate in cooperative scientific activity such as workshops and symposia in the fields of interest of the **Standing Scientific Groups** and **Scientific Programme Groups**.
- To focus of one aspect of Antarctic science by organizing a one-day multidisciplinary Symposium on a topic of special interest. This Symposium will be a flagship activity of the SCAR meeting and is expected to be a vehicle through which scientists can present papers which define the current state of knowledge in a chosen field of multidisciplinary activity, and through which the activities of SCAR can be publicized and brought to the attention of politicians, the media and the public.
- To provide a set of keynote addresses in which scientific matters of strong current interest will be described and reviews by invited speakers, so that the community can be informed about progress in a wide variety of SCAR scientific activities.
- To provide an opportunity for **Standing Scientific Groups** and **Scientific Programme Groups** to hold business sessions and plan future activities.

Implementation of the SCAR Review

- To provide a three month period in which the proposals of **Standing Scientific Groups** can be properly prepared for presentation to the Meeting of Delegates.
- The **SCAR Science Meeting** will take place every two years during a one-week period in June or July at a place to be determined by the invitation of the host countries.

The proposed structure of the **SCAR Science Meeting** and the week's activities are shown in the diagram below.

Monday	Tuesday	Wednesday	Thursday	Friday
Standing Scientific Groups Scientific Programme Groups		Symposium on a Selected Theme	Keynote Addresses SSGs SPGs	SSGs SPGs
Scientific and Poster Sessions				Business Sessions
Workshops				Report Preparation
Science Planning Sessions				

If **Standing Scientific Groups** need a longer planning period, the sessions may start in the previous week and extend through Monday and Tuesday of the following week. The increase in size of the SCAR meeting implies that it will need to be funded through registration fees for participants not being formally nominated representatives of **Standing Scientific Groups** or formally appointed members of **Scientific Programme Groups** and **Standing Committees**. The meeting may also be funded by other fund-raising activities.

The members of the SCAR Executive Committee will attend the **SCAR Science Meeting**. This will allow the members to attend the symposium and working sessions as required and provide the opportunity for Chief Officers to meet formally with the Executive Committee. COMNAP will meet in parallel with the **SCAR Science Meeting** and the two Executive Committees will hold a joint meeting.

The SCAR Delegates Meeting will take place approximately three months later in late September or in early October. Chief Officers of **Standing Scientific Groups** will attend the Delegates Meeting to present and discuss their reports and proposals. It will take place over a short time, possibly including a weekend, at a place chosen to minimize the overall cost of attendance. It is expected that Delegates, who as Antarctic scientists are likely to have attended the **SCAR Science Meeting** and who will have received the papers in advance, will be well-prepared to make decisions over a shorter period of time than is currently needed.

At the SCAR Delegates Meeting there will be two **Delegate Committees**. One **Delegate Committee** will consider matters concerning two of the **Standing Scientific Groups**, the other **Delegate Committee** will consider matters concerning the third **Standing Scientific Group** and the **Standing Committees**. Two Vice-Presidents will be assigned to each Delegate Committee as most appropriate to the two agendas. The Delegate and Alternate Delegate representing each National Committee will decide who will attend each Delegate Committee.

Implementation of the SCAR Review

At the SCAR Delegates Meeting, each **Delegate Committee** will examine the reports and other documents submitted by the **Standing Scientific Groups, Scientific Programme Groups, Scientific Programme Planning Groups** and the **Standing Committees**. The SCAR Executive Committee may also assign additional tasks to the **Delegate Committees** as appropriate. Both **Delegate Committees** will report to the plenary session of the SCAR Delegates Meeting that will make decisions and recommendations based on the reports of the **Delegate Committees**.

At the end of the SCAR Delegates Meeting, the Executive Committee may assign other tasks to the **Delegate Committees** to be progressed intersessionally. The SCAR Vice-Presidents leading the **Delegate Committees** will report to the SCAR Executive Committee at its meeting in odd-numbered, non-SCAR years. At that meeting, the Executive Committee may assign further tasks to the **Delegate Committees** and the Vice-Presidents will report to the Executive Committee at its meeting during the **SCAR Science Meeting**.

V. XXVII SCAR

Shanghai, China, 15–26 July 2002

Week One

At XXVII SCAR two of the major changes to the structure and organization of SCAR will be implemented:

1. the re-organization of the existing Working Groups and Groups of Specialists into the new **Standing Scientific Groups** and **Standing Committees**;
2. the establishment of the **Delegate Committees**.

The first two days of the first week of XXVII SCAR will begin as a traditional SCAR meeting. The existing Working Groups will meet as normal and should discuss the integration of the Working Group into the new SSG. The third day of the first week will be a symposium on the biological and physical aspects of the Antarctic sea ice zone, followed by a couple of talks on the Cybercartographic Atlas and the Teachers Experiencing Antarctica and the Arctic (TEA) initiative. In the early evening there will be an interdisciplinary poster session on "Climate, ice sheets and geodynamics". For the last two days of the first week the Working Groups and Groups of Specialists will reform into the three new **Standing Scientific Groups** under the acting chairmanship of a SCAR Vice-President. The first task in each new **Standing Scientific Group** will be to elect a new Chief Officer, a Deputy Chief Officer and a Secretary.

Each group will then review the former subcommittees and programmes to decide which **Action Groups** will be necessary to continue those activities. Each group may also need to establish some new **Actions Groups** to cover those former Groups of Specialists and other specific activities that no longer have a formal structure. Each **Action Group** must have a Chairman and two other formal members who will constitute the contact point and core membership for the activities of the group. There will be no formal limit to the membership of an **Action Group**.

Implementation of the SCAR Review

It is recognized that the present Working Groups may need more than the first three days of the first week to complete their normal business. Our Chinese hosts have agreed that space for extra meeting time can be made available during the weekend of 13 and 14 July 2002. Similarly, meeting rooms will also be available for those groups that frequently meet in the week preceding the formal SCAR meeting (notably the Group of Specialists on Seals and the Bird Biology Subcommittee).

Working Groups should complete their business by the end of Wednesday 17 July and submit their reports to the Executive Secretary by 1800 on Saturday 20 July. The Chief Officer of the new **Standing Scientific Groups** should submit a brief report of activities to the Executive Secretary by 1800 on Sunday 21 July. This report will show the internal structure of the **Standing Scientific Group**, listing the new officers of the group, the **Action Groups** established with the names of their Chairmen and core members.

Provisional applications for SCAR funding should, as far as possible, be submitted to the SCAR Secretariat and the Chairman of the Finance Committee, Dr R Schlich, by 15 June 2002. Revised applications must be submitted no later than 1800 on Saturday 20 July.

All current Chief Officers and the new Chief Officers of the **Standing Scientific Groups** are invited to attend the SCAR Delegates Meeting, 22–26 July 2002.

Week Two

The meeting will open with plenary sessions on Monday morning 22 July. The Delegate Committees will meet on Monday afternoon, Tuesday and Wednesday to receive the presentations of the Chief Officers, including funding applications, and will discuss related matters. Thursday will be a plenary session to receive the reports and recommendations of the Delegate Committees and to elect a new President and two Vice-Presidents. Friday morning will be a plenary session to adopt the report of the Delegates Meeting. The meeting will close at lunchtime on Friday, 26 July, and the new Executive Committee will hold a short meeting after lunch.

Prior to XXVII SCAR

Chief Officers should discuss the implementation of these proposals with the members of their groups to determine how they will conduct their business and close their existing groups. Chief Officers should also have preliminary discussions with other Chief Officers on the procedures to be followed during the last two days of the first week when their groups come together as the new **Standing Scientific Groups**

The Executive Committee is well aware that there are still details missing from these guidelines but to cover every eventuality would be too prescriptive and practically impossible. The President proposes to speak to all current Chief Officers on Sunday 14 July and to the entire company of SCAR on Monday morning, 15 July. The exact timetable of events will be circulated in due course.

Implementation of the SCAR Review

Appendix

List of Acronyms and Abbreviations

ADD	Antarctic Digital Database
AGEANT	Age, Growth and Evolution of Antarctica
AGONET	Antarctic Geospace Observatory Network
ANTEC	Group of Specialists on Antarctic Neotectonics
ANTIME	Late Quaternary Antarctic Sedimentary Record of Ice Margin Evolution
ANTOSTRAT	Antarctic Off-shore Stratigraphy Programme
APIS	Antarctic Pack Ice Seals
ASPeCt	Antarctic Sea-Ice Processes and Climate
AT	Antarctic Treaty
ATCM	Antarctic Treaty Consultative Meeting
ATS	Antarctic Treaty System
BEDMAP	Antarctic Bedrock Mapping Project
CEP	Committee for Environmental Protection
COMNAP	Council of Managers of National Antarctic Programmes
EASIZ	Ecology of the Antarctic Sea-Ice Zone
EVOLANTA	Evolution in Antarctica
GIANT	Geodetic Infrastructure for Antarctica
GOSEAC	Group of Specialists on Environmental Affairs and Conservation
ISMAS	Ice Sheet Mass Balance and Sea Level
ITASE	International Trans-Antarctic Scientific Expedition
JCADM	Joint Committee on Antarctic Data Management
MAGMAP	Magnetic Anomaly Map
PICE	Palaeoenvironments from Ice Cores
READER	Reference Antarctic Data for Environmental Research
RiSCC	Regional Sensitivity to Climate Change in Antarctic Ecosystems
SALE	Group of Specialists on Subglacial Antarctic Lake Exploration
SCALOP	Standing Committee on Antarctic Logistics and Operations
SCAR	Scientific Committee on Antarctic Research
SPG	Scientific Programme Group
SPPG	Scientific Programme Planning Groups
SRP	Scientific Research Programmes
SSG	Standing Scientific Group
TEA	Teachers Experiencing Antarctica and the Arctic