



Paper No: 23 Agenda item: 6.2
Standing SC-ATS
Committee

Person Responsible:

Susie Grant

XXXVII SCAR Delegates Meeting

India, September 2022

Standing Committee on the Antarctic Treaty System 2020-22 Report

Summary

Report Author(s)

Susie Grant (UK)

Summary of activities from 2020-22

During 2020-22, the SCAR Standing Committee on the Antarctic Treaty System (SCATS) continued to provide independent, evidence-based, scientific advice to the Antarctic Treaty System (ATCM, CEP and CCAMLR) and other organisations (e.g., UNFCCC), across a wide range of fields, particularly relating to environmental and conservation matters. In developing its advice, SC-ATS has consulted with SCAR experts and groups to compile information and to formulate recommendations on issues relevant to policy and management. This has included i) responses to direct requests for information or advice, and ii) proactive advice drawing attention to emerging issues. Advice has been delivered to the annual meetings of Antarctic Treaty System bodies (both in person and online) as well as being communicated throughout the year as required.

Highlights from this period have included updates on current understanding and future projections of climate change, including the major <u>Antarctic Climate Change and the Environment Decadal Synopsis</u> report, advice on special protection and conservation status of the emperor penguin, establishment of an Environmental Code of Conduct for Geosciences Field Research Activities, development of closer links between SC-ATS and the <u>Antarctic Environments Portal</u>, and a mini-Symposium jointly convened by Ant-ICON and SC-ATS on "<u>How SCAR informs and quides Antarctic policy and conservation</u>" during the SCAR Open Science Conference.

Recognising the high regard in which SCAR's contributions to the ATCM, CEP and CCAMLR are held, SC-ATS recommends that the SCAR Delegates approve the funding request below, to allow SC-ATS to continue its engagement with scientists, policymakers and bodies of the Antarctic Treaty System.

Summary Budget 2021 to 2024

	2021	2022	2023	2024
	Spent	Allocated	Request	Request
(US\$)	10,822.24	20,000	20,000	20,000

Future Plans

In the coming year, SC-ATS will work closely with SCAR groups to develop new policy-relevant scientific advice to the ATS, to facilitate the involvement of interested researchers in the development of this advice, and to effectively communicate ATS priorities and research needs to the SCAR community. In particular, SC-ATS will engage with Ant-ICON, AntClim^{Now} and INSTANT on the strategic development of inputs to the ATS, given the focus of the SRPs on policy-relevant science, and high-priority topics for the ATS. In addition, SC-ATS will further develop a Fellowship to allow the participation of early-career researchers in policy meetings (ATCM and CCAMLR), in collaboration with Ant-ICON and other SCAR groups as appropriate.

Information and advice has been specifically requested from SCAR by the ATCM and CEP on the following topics:

- Climate change information relevant to science needs identified in the CEP Climate Change Response Work Programme (including through the Antarctic Environments Portal), and further updates to the Antarctic Climate Change and the Environment (ACCE) report;
- Non-native species information on existing mechanisms to assist with the identification of non-native species, and available biodiversity databases to help Parties establish which native species are present at Antarctic sites;
- Tourism advice on potential design of an environmental monitoring programme to assess the impacts of tourism;
- Designation of the emperor penguin as a Specially Protected Species;
- Environmental Impact Assessment guidance on how to conduct environmental baseline condition surveys;
- Chemical contamination advice on systematic sampling and data collection;
- Important Bird Areas advice on potential use of identified IBAs in consideration areas that may merit designation as Antarctic Specially Protected Areas:
- Seismic activity update to ATCM on current seismic research activities and risk areas (in collaboration with COMNAP); and
- SCAR Lecture invitation to contribute a lecture on scientific issues relevant to ATCM XLV (2023).

Advice provided to CCAMLR in 2022 will focus on climate change in the Southern Ocean, including presentation of the ACCE Decadal Synopsis report, and an invited SCAR Lecture on this topic. Updates will also be provided on outputs from the SCAR Krill Action Group (SKAG) and on work to identify Key Biodiversity Areas (KBAs) in the Southern Ocean.

SC-ATS will also continue to work closely with the Editor of the Antarctic Environments Portal to develop Information Summaries on topics relevant to the CEP and to SC-CAMLR.

Budget

Planned use of funds for 2022 to 2024

Year (YYYY)	Purpose/Activity	Amount (in USD)	Contact Name	Contact Email
2024	SC-ATS related travel, incl. to ATCM, CCAMLR and SCAR OSC	12,000	Susie Grant	suan@bas. ac.uk
2024	Workshop (topic to be advised)	7,000	Susie Grant	ш
2024	Publications and outreach	3,000	Susie Grant	
	SC-ATS related travel, incl. to ATCM and CCAMLR	10,000	Susie Grant	"
2023	Workshop (topic to be advised)	7,000	Susie Grant	"
2023	Publications and outreach	3,000	Susie Grant	"

Additional detail on funds usage and desired results/outcomes

The funds will be used to support:

- 1. International workshops on topics directly relevant to the delivery of requested advice to the ATS (online/hybrid where possible).
- 2. SC-ATS related travel airfares, accommodation and meals for SC-ATS members to attend SCAR Open Science Conferences, and travel to relevant ATCM, CEP, CCAMLR or other ATS related meetings to facilitate the development and provision of policy-relevant advice.
- 3. Publications, outreach and dissemination, e.g., related to dissemination of ACCE report and other products.

Percentage of the budget to be used for support of early-career researchers

2022: 25% 2023: 25% 2024: 25%

Percentage of the budget to be used for support of researchers from countries with developing Antarctic programmes

2022: 10% 2023: 10% 2024: 10%

Membership

Leadership

Role	First Name	Last Name	Affiliation	Country	Primary Language	Email	Date Started
Chief Officer	Susie	Grant	BAS	UK	English	suan@bas.ac.uk	2020
Deputy Chief	Cassandra	Brooks	University of Colorado,	USA	English	cassandra.brooks@col	2018
Officer			Boulder			orado.edu	

(Please identify early-career researchers with * in first column)

Other members

First Name	Last Name	Affiliation	Country	Email
Tom ¹	Bracegirdle	BAS	UK	tjbra@bas.ac.uk
Mary-Anne	Lea	University of Tasmania	Australia	maryanne.lea@utas.edu.au
Daniela	Liggett	University of Canterbury	New Zealand	daniela.liggett@canterbury.ac.nz
Bettina	Meyer	AWI	Germany	bettina.meyer@awi.de
Chandrika	Nath	SCAR Secretariat	UK	chandrika@scar.org
Luis*	Pertierra	Universidad Rey Juan Carlos	Spain	luis.pertierra@gmail.com
Marilyn ¹	Raphael	University of California, Los Angeles	USA	raphael@geog.ucla.edu
Marcelo	Reguero	Museo de La Plata	Argentina	regui@fcnym.unlp.edu.ar
Keith	Reid	Antarctic Environments Portal	Australia	editor@environments.aq
Yan	Ropert-Coudert	CNRS	France	docyaounde@gmail.com
Akinori	Takahashi	NIPR	Japan	atak@nipr.ac.jp
Anton	Van de Putte	Universite Libre de Bruxelles	Belgium	antonarctica@gmail.com
George	Watters	NOAA	USA	george.watters@noaa.gov

(Please identify early-career researchers with * in first column)

SC-ATS membership consists of prescribed members (e.g., representatives of the Scientific Groups, SCADM and EG-BAMM) and members specifically chosen for their relevant expertise. Terms for members are usually for four years, with a possible second four-year term. ¹Tom Bracegirdle will step down as Physical Sciences representative from August 2022, to be replaced by Marilyn Raphael. Replacements for other long-serving members will be considered this year and next year as required.

Additional information (optional)

Detailed information on activities to date

1. ATCM and CEP

Following the cancellation of the ATCM in 2020 due to the pandemic, the 2021 meeting (ATCM XLIII-CEP XXIII) was held online (hosted in Paris, France). SCAR participated in its capacity as an Observer to the ATCM¹, and presented papers on topics including climate change, ocean acidification, emperor penguin conservation status, code of conduct for geosciences field research, bioprospecting, persistent organic chemicals, and risk of Covid-19 in Antarctic wildlife (see Appendix 2 for full details). SCAR contributions to the ATCM and CEP were well received, with many Parties commenting on the high quality of scientific input provided to the meetings. The Paris Declaration was adopted by the Parties to mark the 60th Anniversary of the entry into force of the Antarctic Treaty and the 30th Anniversary of the signing of the Madrid Protocol. The Declaration reinforces the value of the engagement of SCAR in providing scientific advice to the ATCM.

The 2022 meeting (ATCM XLIV-CEP XXIV) was held in person in Berlin, Germany (also with some online participation). The SCAR delegation² presented papers on topics including climate change, tourism, the Antarctic Environments Portal and a summary of SCAR-affiliated research activities relevant to the climate change science needs identified by the CEP (see Appendix 4 for full details). SCAR also provided advice on other topics under discussion by the Parties such as special protection for emperor penguins, chemical contamination, and environmental monitoring. The Antarctic Climate Change and the Environment (ACCE) Decadal Synopsis report (see below) was strongly welcomed by Parties and referred to throughout the meeting. Hard copies of the report were provided to delegates, and large infographic banners were displayed in the meeting exhibition space. Prof Dr Hans-Otto Pörtner (Alfred Wegener Institute) delivered the SCAR Lecture on "Antarctic Climate Change and the Environment – a synopsis and recommendations for action", summarising the ACCE report and its scientific basis in the findings of recent Intergovernmental Panel on Climate Change (IPCC) reports.

2. CCAMLR

The CCAMLR meetings were held online in 2020 and 2021. SCAR participated in both meetings as an official Observer³, contributing papers on climate change, ocean acidification, outcomes from the Retrospective Analysis of Antarctic Tracking Data (RAATD) project, and Important Marine Mammal Areas in the Southern Ocean (see Appendices 1 and 3 for full details). SCAR also attended the CCAMLR Scientific Committee Symposium in February 2022, which developed a new 5-year strategic plan for the work of SC-CAMLR.

3. SCAR Open Science Conference 2022

SC-ATS and Ant-ICON jointly convened a mini-Symposium on 'How SCAR guides and informs Antarctic policy and conservation" during the OSC, with the aim of

¹ SCAR delegation to ATCM XLIII: Yeadong Kim, Susie Grant, Chuck Kennicutt, Chandrika Nath,

² SCAR delegation to ATCM XLIV: Yeadong Kim, Susie Grant, Steven Chown, Johanna Grabow, Sebin Lee, Daniela Liggett, Hanne Nielsen (online), Keith Reid.

³ SCAR delegations to CCAMLR-39 and CCAMLR-40: Cassandra Brooks, Susie Grant, Mary-Anne Lea, Chandrika Nath.

empowering early to mid-career Antarctic researchers to create policy impact through their research and providing practical information on how SCAR interacts with the Antarctic Treaty System.

Major Outcomes

1. Antarctic Climate Change and the Environment Decadal Synopsis report

SCAR published its first Antarctic Climate Change and the Environment (ACCE) Report in 2009 and has provided regular update reports to the Treaty Parties since then. The ACCE Decadal Synopsis: A Decadal Synopsis and Recommendations for Action (Chown et al., 2022) 4 was developed in response to a specific request from the Parties for a synopsis update on current understanding of climate change and its impacts. The report was led by Prof. Steven Chown, with co-authors from across SCAR groups, as well as a large number of reviewers both from within SCAR and externally. It is based on the findings of the most recent reports by the IPCC and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), as well as research priorities identified by the SCAR Horizon Scan and the new Scientific Research Programs. The key message for the Antarctic Treaty Parties is on the urgency of action in response to climate change. The report includes policy recommendations on priority actions for the ATCM and CEP, and the importance of communication with governments, supporting research and addressing management and logistics challenges, as well as research recommendations setting out priorities for reducing uncertainty. The report was published via the SCAR website in May 2022 with accompanying news stories and social media from SCAR and co-authors' institutions.

The ACCE report was presented to the ATCM in 2022 and will also be presented to CCAMLR later this year. Several actions were agreed by the ATCM in response to the report (see also Major Impacts section below), including a full-day joint session of the ATCM and the CEP on climate change to be held in 2023, focused on practical implementation of the report's recommendations. The CEP also decided to plan for a joint workshop on climate change and monitoring with SCAR and SC-CAMLR.

2. Emperor penguins – proposed designation as Specially Protected Species

Following recent research highlighting the vulnerability of emperor penguins to projected warming and habitat loss, several Parties and SCAR submitted a joint paper to the CEP in 2019 calling for further international collaboration to inform species-related conservation planning. An emperor penguin expert sub-group was subsequently established under the Expert Group on Birds and Marine Mammals, with the aim of reviewing the conservation status of the species. SCAR presented the outcomes of this review in a paper to the CEP and the ATCM in 2021, advising that the emperor penguin was considered Vulnerable, and concluding that designation as a Specially Protected Species (SPS) is warranted. On the basis of this advice, the CEP agreed to develop a draft Action Plan, and SCAR contributed to the Intersessional Contact Group discussions during 2021-22 to prepare and revise this document. The proposal to designate a SPS was discussed extensively at the CEP

⁴ Chown, S.L., Leihy, R.I., Naish, T.R., Brooks, C.M., Convey, P., Henley, B.J., Mackintosh, A.N., Phillips, L.M., Kennicutt, M.C. II & Grant, S.M. (Eds.) (2022) Antarctic Climate Change and the Environment: A Decadal Synopsis and Recommendations for Action. Scientific Committee on Antarctic Research, Cambridge, United Kingdom. www.scar.org

and ATCM in 2022, however despite broad agreement that SCAR experts had provided a scientifically robust assessment of the conservation status of the emperor penguin, based on the best available information, consensus agreement on its designation as a SPS could not be reached. SCAR will continue to provide information to the CEP and ATCM as further research becomes available.

3. Cooperation with the Antarctic Environments Portal

The Antarctic Environments Portal has been managed by SCAR since January 2020. It is designed to support the work of the Antarctic Treaty System by providing accurate and up-to-date information on issues of relevance to the policy community. SCAR submitted papers to the CEP in 2021 and 2022, and to CCAMLR in 2021, highlighting the new Portal website, providing examples of how Information Summaries published in the Portal link directly to issues of priority interest to the SC-CAMLR and CEP agendas, and encouraging Parties to support the further development of the Portal. The CEP and SC-CAMLR have also been encouraged to identify any additional Information Summaries that would be useful to their interests, and work is ongoing to further this dialogue. The CEP has acknowledged the Portal as a high-quality source of the best available science to support decision-making, and particularly acknowledged its value in relation to science needs identified by the CEP Climate Change Response Work Programme. SC-ATS has continued to work closely with the Portal editors, and Keith Reid was invited to join SC-ATS on his appointment as editor in 2022.

Major Products

- 1. SC-CAMLR-39 (2020) 4 Background Papers (see Appendix 1).
- 2. ATCM XLIII CEP XXIII (2021) 8 Working Papers and 10 Background Papers (see Appendix 2).
- 3. SC-CAMLR-40 (2021) 1 Working Paper and 7 Background Papers (see Appendix 3).
- **4. ATCM XLIV CEP XXIV (2022)** 4 Working Papers, 6 Information Papers and 1 Background Paper (see Appendix 4).

Copies of papers submitted by SCAR to the ATCM can be found on the <u>SCAR</u> website.

Major Impacts

1. Codes of conduct for activity in Antarctica

In 2021, the ATCM endorsed the SCAR Environmental Code of Conduct for Geosciences Field Research Activities in Antarctica (ATCM Decision 1, 2021), developed by the SCAR Action Group on Geoheritage and Geoconservation.

2. Climate change actions by the ATCM

In 2021, the ATCM agreed a Resolution on Antarctica in a Changing Climate (ATCM Resolution 8, 2021). The Resolution "welcomed the regular updates by SCAR of its Antarctic Climate Change and the Environment report and looking forward to

receiving further advice in due course emanating from SCAR's three new climate change focused Scientific Research Programmes, namely INSTANT, AntClim^{now} and Ant-ICON". It recommended that governments "support their National Antarctic Programmes and SCAR in their ongoing efforts to undertake research about climate change and its impacts, and to communicate the implications for Antarctica, both within the Antarctic Treaty System and internationally."

In 2022, in response to the ACCE Decadal Synopsis report and its recommendations, the ATCM agreed several actions related to climate change, including a Resolution and a Decision on climate change (to be published with the finalised ATCM report).

Direct support from outside organisations received for your activities

- 1. Monash University in-kind support for preparation of the Antarctic Climate Change and the Environment Decadal Synopsis report, and direct cash support (AU\$8,500) for design of the final published report.
- 2. Prince Albert II Foundation support for Susie Grant's attendance at the Monaco Polar Symposium (February 2022)
- 3. British Antarctic Survey in-kind support for Susie Grant's time as Chief Officer (20% full time). In-kind support from other institutions for time contributed by other SC-ATS members is also substantial, particularly during the preparation of papers for the ATCM.

Major collaborations your group has with other SCAR groups and with organisations/groups beyond SCAR

Within SCAR

SC-ATS has worked closely with the following groups in the preparation of submissions for the ATCM, CEP and CCAMLR:

- 1. AntClimNow
- 2. Ant-ICON
- 3. Ant-TAG
- 4. EG-BAMM
- 5. AG-Geoconservation
- 6. ICED
- 7. ImPACT
- 8. INSTANT
- 9. SC-HASS
- 10. SKAG
- 11. SOOS

Outside SCAR

- 1. CEP subsidiary groups (Subsidiary Group on Climate Change Response; Subsidiary Group on Management Plans) and Intersessional Contact Groups
- 2. CCAMLR
- 3. International Cryosphere Climate Initiative (ICCI)
- 4. Council of Managers of National Antarctic Programmes (COMNAP)

- 5. International Association of Antarctica Tour Operators (IAATO) SCAR/IAATO systematic conservation planning project
- 6. International Union for Conservation of Nature (IUCN) Important Marine Mammal Areas
- 7. Prince Albert II Foundation Monaco Polar Symposium
- 8. Alfred Wegener Institute and IPCC SCAR lecture to ATCM XXLIV
- 9. Monash University, Australia ACCE report and SCAR/IAATO systematic conservation planning project
- 10. WMO State of the Global Climate reports in 2020 and 2021.

Outreach, communication and capacity building activities

- SC-ATS has continued to work on improving SCAR communication with policy makers, and the success of this has been acknowledged at recent CCAMLR and CEP meetings.
- 2. The publication of the ACCE Decadal Synopsis report in May 2022 was accompanied by media releases, news stories and social media engagement. The structure and content of the report was strongly welcomed by the Treaty Parties. It included infographics developed by Laura Phillips (Monash University) which were also used in other outreach and display materials, and which were widely praised for their effectiveness In communicating key messages to policymakers.
- 3. The SCAR Lecture to the 2022 ATCM (Prof Dr Hans-Otto Pörtner) provided a summary of
- 4. Prof Steven Chown will deliver an invited SCAR presentation on the ACCE report to the opening plenary of the 2022 CCAMLR meeting.
- 5. The SC-ATS/Ant-ICON mini-Symposium on science-policy
- 6. SC-ATS involves early-to-mid career researchers in its initiatives wherever possible to assist with capacity building. Hanne Nielsen (SC-HASS) coauthored a paper on Ant-TAG activities and attended ATCM remotely as part of the SCAR delegation. Natasha Gardiner (Ant-ICON) co-convened the science-policy mini-symposium.

Contributions to equality, diversity, and inclusion (EDI)

SC-ATS continues to make efforts to ensure diverse representation in its membership and work, including in the authorship of papers. The work of SCAR's Equality, Diversity and Inclusion Action Group was highlighted to the Antarctic Treaty Parties in SCAR's annual report to the ATCM.

SCAR Fellowship Reviewers

First Name	Last Name	Email	Principal Expertise
Susie	Grant	suan@bas.ac.uk	Marine conservation, spatial management, benthic ecology
Daniela	Liggett	Daniela.liggett@canterbury.ac.nz	Human engagement with the Antarctic; tourism; environmental governance
Akinori	Takahashi	atak@nipr.ac.jp	Birds and Marine Mammals
Mary- Anne	Lea	MaryAnne.Lea@utas.edu.au	Bird and mammal ecology, behaviour and conservation
Luis R.	Pertierra	Luis.pertierra@gmail,com	Macroecology & Biogeography, Conservation, Global Change

Appendices

Appendix 1 - SCAR submissions to CCAMLR-39 (2020)

Appendix 2 - SCAR submissions to ATCM XLIII - CEP XXIII (2021)

Appendix 3 - SCAR submissions to CCAMLR-40 (2021)

Appendix 4 - SCAR submissions to ATCM XLIV - CEP XXIV (2022)

Appendix 1

SCAR submissions to CCAMLR-39 (2020)

Item	Title	Proponents
BG21	SCAR Annual Report 2019/20	SCAR
BG22	Climate change and CCAMLR – update on recent research	SCAR
BG23	The Retrospective Analysis of Antarctic Tracking Data (RAATD) identifies areas of ecological significance in the Southern Ocean	SCAR
BG24	Successful ecosystem-based management of Antarctic krill should address uncertainties in krill recruitment, behavior and ecological adaptation	SCAR (on behalf of SKAG co-authors)

Appendix 2

SCAR submissions to ATCM XLIII – CEP XXIII (2021)

Item	Title	Proponents
WP016	Antarctic Bioprospecting: SCAR Survey of Member Countries	SCAR
WP017	Antarctic and Southern Ocean Climate Change in a Global Context	SCAR
WP019	Antarctic Environments Portal Update	SCAR
WP033	Code of Conduct for Geosciences Field Research	SCAR
WP034	Systematic identification of globally important geological sites in Antarctica	SCAR
WP036	Ocean Acidification in the Southern Ocean	SCAR
WP037	Projections of future population decline emphasise the need to designate the emperor penguin as an Antarctic Specially Protected Species	SCAR
WP063	COVID-19 and Antarctica	New Zealand, Argentina, Australia, Chile, Norway, United Kingdom and SCAR
IP012	Antarctic Bioprospecting: SCAR Survey of Member Countries (further detail in support of WP016)	SCAR
IP022	Emperor penguins – Specially Protected Species (further detail in support of WP037)	SCAR
IP024 (rev 1)	Important Marine Mammal Areas (IMMAs)	IUCN and SCAR
IP029	The Scientific Committee on Antarctic Research Annual Report 2021 to the Antarctic Treaty Consultative Meeting XLIII	SCAR
IP135	Development of draft Antarctic Terrestrial and Underwater Archaeology Best Practice guidelines	SCAR
IP136	The Southern Ocean contribution to the United Nations Decade of Ocean Science for Sustainable Development	SCAR
IP137	Persistent Organic Chemicals in Antarctica: A horizon scan of priority challenges	SCAR
IP049 (Rev 1)	Retrospective Analysis of Antarctic Tracking Data (RAATD)	SCAR
IP055	Risks of COVID-19 to Antarctic wildlife	SCAR
IP060	State of Antarctic Penguins Report	SCAR
(Rev 1)		

Appendix 3

SCAR submissions to CCAMLR-40 (2021)

Item	Title	Proponents
WP09	Update on the emperor penguin – vulnerable to	UK and SCAR
	projected rates of warming and sea ice loss	
BG15	SCAR Annual Report 2020/21	SCAR
BG14	Antarctic Environments Portal	SCAR
BG12	Antarctic and Southern Ocean climate change in a	SCAR
	global context	
BG13	Ocean acidification	SCAR
BG07	The SCAR Antarctic Biodiversity Portal	Belgium and SCAR
BG06	The UN Decade of Ocean Science for Sustainable	Belgium and SOOS
	Development and the Southern Ocean, an update	
BG09	Important Marine Mammal Areas (IMMAS) in the	SCAR and IUCN
	Southern Ocean: An international collaboration to	
	inform habitat-related conservation decision-	
	making and spatial conservation measures for	
	marine mammal species	

Appendix 4

SCAR submissions to ATCM XLIV – CEP XXIV (2022)

Item	Title	Proponents
WP010	Antarctic Environments Portal	SCAR
WP029	Antarctica in a Changing Climate – implementing ATCM Resolution 8 (2021)	UK, Australia, Belgium, Finland, France, Germany, Netherlands, Norway, Sweden,
		US, SCAR, ASOC
WP030 rev.1	Antarctic Climate Change and the Environment: A Decadal Synopsis. Findings and Policy Recommendations	SCAR
WP031	Antarctic Climate Change and the Environment: A	SCAR
rev.1	Decadal Synopsis. Research Imperatives	
IP005	Early career opportunities: Antarctic Fellowships and Scholarships	COMNAP, CCAMLR, IAATO, SCAR
IP016	The Scientific Committee on Antarctic Research Annual Report 2022 to the XLIV Antarctic Treaty Consultative Meeting	SCAR
IP072	Antarctic Climate Change and the Environment: A Decadal Synopsis and Recommendations for Action	SCAR
IP072	SCAR Tourism Action Group (Ant-TAG)	SCAR
IP081	Mapping SCAR affiliated research to climate change related science needs identified by the CEP	SCAR
IP107 rev.1	The Southern Ocean contribution to the United Nations Decade of Ocean Science for Sustainable Development	SCAR, Belgium, IAATO, Netherlands, WMP
BP014	State of Antarctic Penguins 2022 Report	SCAR