

SCAR Sub-Group

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ACA

Person Responsible:

Tom Lachlan-Cope



SCAR Delegates Report 2020

Antarctic Clouds and Aerosols Action Group 2018-2020 Report

Summary

Report Author(s)

Tom Lachlan-Cope (UK)

Summary of activities from 2018-20

The Antarctic Cloud and Aerosol group normally meets at EGU in Vienna. In 2019 this happened – and was reported in the last report to SCAR – and at that meeting it was agreed that we should pursue the development of a database of cloud, aerosol and precipitation observations, initially as metadata. In 2020 EGU was a virtual conference and so the annual meeting of the action group was also held virtually. This was successful and will probably lead to more meeting of the group being held during the year.

Progress with the development of the database has been slow – a plan to use a summer student at the British Antarctic Survey fell through. We plan to have another virtual meeting in the next couple of months to discuss this project and at the same time look for some funding to employ a student for a short period to get the first phase of the project underway.

One of the main objectives of the group is to encourage collaboration between different Antarctic groups. Already several groups are in close collaboration and a discussion was held at the recent meeting as to how we can collaborate further particularly in the Peninsula. Also it the importance of surface radiation observations were emphasised and is hoped that SCAR could reinforce this recommendation.

Finally it proposed that a review paper is written concentrating on Antarctic precipitation – Irina Gorodetskaya is taking the lead on this.

Summary Budget 2019 to 2022

	2019	2020	2021	2022
	Spent	Allocated	Request	Request
(US\$)			2000	2000

Progress to date

Sub-group Outcomes Summary

(Summarize the above and in each case provide your sub-group name in left hand column to assist Science Group COs in compiling their reports)

Sub-group	Activity/Outcome/Benefit/Achievement		

Sub-group Cash Flow

(From previous Delegates meeting to date)

Sub-group	Allocation	Amount 2018	2020

Future plans

Planned activities in 2020 to 2022

Sub-group	Planned activity
ACA	Aerosol Cloud and Precipitation data base
ACA	Review paper – Antarctic Precipitation

Planned use of funds for 2020 to 2022

Year (YYYY)	Purpose/Activity	Amount (in USD)	Contact Name	Contact Email
2021	Development of database	2000	Tom Lachlan- Cope	tlc@bas.ac.uk
2022	Development of Database	2000	Tom Lachlan- Cope	tlc@bas.ac.uk
Total				

Any additional detail on funds usage and desired results/outcomes

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

2020:

2021:100 (it is proposed to use the money to employ a student/early career

researcher to develop database)

2022:100

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

2020:

2021:

2022:

Membership

Leadership

Role	First Name	Last Name	Affiliation	Country	Email	Date Started	Date Term is to End
Chair	Tom	Lachlan- Cope	BAS	UK	tlc@bas.ac.uk		
Sec	Penny	Rowe	NWRA	USA	prowe@harbornet.com		

Please identify early-career researchers with * in first column

Other members

Other members					
First Name	Last Name	Affiliation	Country	Email	
Irina	Gorodetskaya	Univ. of Aveiro	Portugal	Irina.Gorodetskaya@ua.pt	
Greg	McFarquhar	U. Oklahoma	USA	mcfarq@ou.edu	
Christophe	Genthon	DML(Paris)	France	Christophe.genthon@cnrs .fr	
Etienne*	Vignon	EPFL	Switzerland	Etienne.vignon@epfl.ch	
Alexis	Berne	EPFL	Switzerland	Alexis.berne@epfl.ch	
Georgia*	Sotiropoulou	EPFL	Swizerland	Georgia.sotiropoulou@epf I.ch	
Luis	Suarez	Geophysical institute	Peru	Isuarez@igp.gop.pe	
Simon	Alexander	AAD	Australia	Simon.alexander@aad.go v.au	

Please identify early-career researchers with * in first column

ACA: 2018-2020 Report, cont.

Additional information (optional)

Please add any more detail here that you wish, on your subgroup activities, papers published, etc.

Notable Papers

(Five to ten most notable papers – see the example below, which includes a brief statement (shaded) indicating the link to the group)

1. Moore, K.A., Smythe, P.H. & Hui, C.W., et al. 2017. Remote sensing using remotely piloted aircraft systems in Antarctica. *Frontiers in Remote Sensing* **62**, 102-136.

This work provides a comprehensive overview of developments in remote sensing based on RPAS in the Antarctic region. It was the outcome of the AG-Remote Sensing's meeting in Kuala Lumpur, October 2016.

Direct support from outside organisations received for your activities (Numbered list with values indicated if direct cash support. Please restrict in-kind support to substantive in-kind support only)

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

(Numbered list of substantive collaborations)

Within	SCAR
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1. X

Outside SCAR

1. X

Outreach, communication and capacity-building activities

Brief highlights of any activities undertaken since the SCAR Delegates meeting in 2018.

SCAR fellowship reviewers

Please list one or more people (name and email address) from your group who would be willing to serve as reviewers for the next few years, along with 1-3 keywords on their principal expertise.

First Name	Last Name	Email	Principal Expertise