



**XXXV SCAR Biennial Meetings**  
**Arctic Science Summit Week 2018 & IASC Business Meetings**  
**SCAR/IASC Open Science Conference**  
**2018 Arctic Observing Summit**

## **Introduction**

At the XXXIII SCAR Biennial Meetings in Auckland (New Zealand) in August/September 2014, Switzerland submitted a proposal to host the XXXV SCAR Biennial Meetings in 2018 in Davos, Switzerland. The proposal was submitted by the Swiss Federal Institute for Forest, Snow and Landscape Research WSL under the patronage of the Swiss Committee on Polar and High Altitude Research, and presented by the Swiss Delegate Konrad Steffen and the Swiss Alternate Delegate Martin Schneebeli. The proposal was accepted, and it was decided that the WSL-Institute for Snow and Avalanche Research SLF will be organizing the event.

Soon after, the possibility arose to include the yearly ASSW from IASC (International Arctic Science Committee) into the upcoming conference. A new name had to be found to represent both poles: POLAR2018. The last time SCAR and IASC had had a joint meeting was in 2008 in St Petersburg (Russia), where the Open Science Conference brought together the two organisations. For POLAR2018 it was decided that not only the scientific part should be held at the same place, but also the business and satellite meetings.

Over the next 18 months, further meetings were added:

- COMNAP: The yearly COMNAP AGM 2018 was held in Garmisch-Partenkirchen (Germany). As Switzerland is only an observer to COMNAP, it could not be held in Davos. The COMNAP Open Sessions were part of POLAR2018 in Davos and took place on the first day of the SCAR/IASC Open Science Conference, on 19 June 2018.
- Arctic Observing Summit AOS: The yearly Arctic Observing Summit was held as part of POLAR2018 immediately after the SCAR/IASC Open Science Conference and in parallel with the SCAR Delegates Meetings from 24-26 June 2018.

## **Organisation**

The organisation started immediately after the positive evaluation of Switzerland's proposal. A Local Organizing Committee LOC and an International Scientific Organizing Committee ISOC were founded; and a conference manager was hired. The organizing committees met at irregular intervals but quite frequently to ensure sufficient information exchange between all parties involved. Only a few meetings were in person, the majority was web-based to keep costs and travel times low.

### **Local Organizing Committee LOC (active members)**

- Michi Lehning (Chair)  
WSL Institute for Snow and Avalanche Research SLF, Switzerland and CRYOS School of Architecture, Civil and Environmental Engineering, Ecole Polytechnique Fédérale de Lausanne, Davos, Switzerland
- Eoghan Griffin\*  
Executive Officer, Scientific Committee on Antarctic Research SCAR, Cambridge, United Kingdom

- Allen Pope\*\*  
Executive Secretary International Arctic Science Committee IASC, Akureyri, Iceland
- Volker Rachold\*\*  
Head of German Arctic Office, Potsdam, Germany
- Martin Schneebeli (Chair International Scientific Organizing Committee)  
WSL Institute for Snow and Avalanche Research SLF, Davos, Switzerland
- Anja Schilling Hoyle (Conference Manager)  
WSL Institute for Snow and Avalanche Research SLF, Davos, Switzerland
- Pierre Dèzes  
Geosciences, Platform of the Swiss Academy of Sciences SCNAT, Bern, Switzerland
- Hubertus Fischer  
University of Bern, Swiss Committee on Polar and High Altitude Research, Bern, Switzerland
- Heini Wernli  
Institute for Atmospheric and Climate Science, ETH Zurich, Switzerland

\*Due to changes in the SCAR leadership, early cooperation was with Mike Sparrow, then with Jenny Baeseman.

\*\*Due to changes in the IASC leadership, early cooperation was with Volker Rachold, who stayed on the committee as the head of the German Arctic Office.

### **Local Organizing Committee LOC (advisory board)**

- Urs Baltensperger  
Head of laboratory of Atmospheric Chemistry, PSI, Villigen, Switzerland
- Margit Schwikowski  
Head of research group Analytical Chemistry, PSI, Villigen Switzerland
- Konrad Steffen  
Director Swiss Federal Institute for Forest, Snow and Landscape Research WSL
- Thomas Stocker  
Professor of Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland
- Andreas Vieli  
Head of Glaciology and Geomorphodynamics Group, University of Zurich, Switzerland

### **International Scientific Organizing Committee ISOC**

- Martin Schneebeli (Chair International Scientific Organizing Committee)  
WSL Institute for Snow and Avalanche Research SLF, Davos, Switzerland
- Karin Lochte (Co-Chair International Scientific Organizing Committee ISOC)  
(Former) Director Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung, Bremerhaven, Germany
- Huigen Yang (Co-Chair International Scientific Organizing Committee ISOC)  
Executive Director Polar Research Institute of China PRIC
- Eoghan Griffin  
Executive Officer, Scientific Committee on Antarctic Research SCAR, Cambridge, United Kingdom
- Allen Pope  
Executive Secretary International Arctic Science Committee IASC, Akureyri, Iceland
- Volker Rachold  
Head of German Arctic Office, Potsdam, Germany
- Anja Schilling Hoyle (Conference Manager)  
WSL Institute for Snow and Avalanche Research SLF, Davos, Switzerland
- Ruth Vingerhagen (Representative for the Association of Polar Early Career Scientists APECS)  
University of Cambridge, United Kingdom

## **Conference location, dates, PCO services**

As already defined in the proposal, the conference venue was the Davos Congress Centre. The facilities have a capacity of up to 5000 people, a large variety of rooms, covering the whole range of spaces from 8 – 1800 people. We made a provisional booking as soon as the proposal had been accepted. The dates were chosen based on trying to accommodate field seasons for both poles as well as availability of the congress centre and holiday season times to ensure that enough hotel rooms, hostels and apartments would be available at a reasonable price.

Davos Congress also offers PCO services, covering a range of tasks from participant registration to accommodation bookings. The organisation decided to book some of those services directly from Davos Congress as well. With this, Davos Congress was in charge of finding and offering a sufficient number of hotel and hostel rooms as well as apartments.

## **Development of the programme for the Open Science Conference**

### **Call for sessions**

For the development of the scientific programme, we chose a bottom-up approach. To begin the process, an open call for sessions was published in early September 2016 (see document POLAR2018\_Call-for-Sessions\_Sept2016). Possible session conveners were encouraged to submit a session proposal until 30 November 2016. From the beginning, we clearly stated that session topics should best encapsulate research conducted in both the Arctic and Antarctic as well as the high mountains. The aim of this was to avoid segregated sessions and to encourage the scientific exchange between Arctic and Antarctic, as well as the “third pole”, the high alpine areas, true to the conference claim “Where the Poles come together”. The call also specified the tasks of session conveners (including review, detailed program development and session chairing), and gave a timeline for the programme development up until the acceptance notification for orals and posters in January 2018.

Feedback was extremely positive and by early December 2016, more than 180 session proposals had been submitted. The first step was to identify sessions that could easily be merged, as some topics were very similar. A next step was to define 12 categories to improve overview: Astrophysics and Astronomy; Atmosphere, Climate; Biology, Ecology, Ecosystems, Biodiversity; Cryosphere; Environment; Geology, Geophysics, Solid Earth; Medicine; Outreach and Communications; Ocean, Sea Ice; Social Sciences and Humanities; Observation Systems; Technology, Engineering. In close collaboration with the conveners and with ISOC, and in an intense iteration process, the final 65 sessions within the 12 categories were developed and communicated in their final form to the conveners in early summer 2017.

### **Call for abstracts, submission and handling**

On 1 September 2017 the call for abstracts was published and the submission platform opened, presenters were asked to submit one or several abstracts, choosing one of the 65 sessions (see document Call-for-Abstracts\_POLAR2018). The submission deadline was set to 1 November 2017, with an (unpublished) extension deadline on 12 November 2017. For each abstract, a submission fee of 30 CHF was charged. While this was very controversial in the beginning, it proved a useful tool to increase the quality of submissions and to cover some of the high abstract handling costs.

The abstract management system was developed with the German company pharmaSERVICE (a business unit of documediaS GmbH).

The number of submissions until the extended deadline was unexpectedly high and reached 2617 abstracts. It was decided that late submissions would not be possible, as capacity had been reached already. Nonetheless, more than 300 requests for late submissions were received over the next few months; they had to be declined.

A few days after the extended deadline, the system was opened for review, and the conveners took over the organisation of the review of their respective sessions, choosing which contributions to keep as oral or poster and which ones to decline or to shift to another session topic. With a very tight time-line and excellent cooperation with the conveners, the review could be finished towards the end of January 2018.

### **OSC schedule development**

In a next step, the 65 sessions with between 8 and 114 abstracts each had to be combined into a session schedule of 5 days, with capacity for 1080 oral presentations of 15 min each, distributed into 180 session slots of 90 min each. It was decided that a maximum of 12 sessions should be held in parallel in rooms with a capacity between 100 – 165 seats. A priority was to avoid similar topics running in parallel, which could be achieved for most sessions. All abstract submissions that were accepted but did not fit into the oral sessions anymore, were offered poster presentations. Four days of the OSC included poster sessions, the posters were sorted into the daily poster sessions to match the oral sessions of the day.

On 31 January 2018 the acceptance notification with the final session schedule could be sent to the abstract authors and was published online.

### **Further OSC programme contributions**

In accordance with previous SCAR and IASC events, a number of special contributions were included into the OSC programme, such as four mini-symposia, morning plenaries with keynote lectures, public evening lectures, opening and closing ceremonies with keynote speakers ([link to the online program](#)).

### **Registration POLAR2018**

Early-bird registration opened immediately after the abstract submission deadline and was available until the end of March 2018, two months after the publication of the final OSC schedule and acceptance notifications. After that, the tariffs went up in small steps. The total number of registrations (including on-site) was:

|      |  |
|------|--|
| 2515 | Total number of participants for the different meeting parts |
| 1014 | Participants at the pre-meetings (15-18 June 2018)           |
| 2244 | Participants at the OSC (19-23 June 2018)                    |

The registration platform was developed together with Davos Congress, payment was mostly done with credit card, a few participants preferred to pay by bill, which was charged with an administrative fee. The system worked reliably with a few crashes that could be fixed within reasonable time.

However, layout and flexibility of the system were perceived as insufficient, another system would have to be found for a next time.

### **Registration fees pre-meetings (SCAR and IASC/ASSW business & satellite meetings, 15 – 18 June 2018)**

|                                      |        |                  |
|--------------------------------------|--------|------------------|
| SCAR business meetings only          | 30 CHF | paid for by SCAR |
| ASSW or other meetings and workshops | 30 CHF |                  |
| Both                                 | 30 CHF |                  |

### **Registration fees Open Science Conference OSC (19 – 23 June 2018)**

|              |         |  |
|--------------|---------|--|
| Early bird   | 550 CHF | 1 November 2017 – 31 March 2018                |
| Regular      | 630 CHF | 1 April – 25 May 2018                          |
| Late/on-site | 730 CHF | 26 May 2018 and on-site                        |
| Student      | 330 CHF | Enrolled at a tertiary educational institution |
| Day pass     | 280 CHF | on-site only                                   |

### **Registration fees 2018 Arctic Observing Summit (24 – 26 June 2018)**

|         |   |
|---------|---|
| 220 CHF | Registration for only the AOS, without OSC registration |
| 180 CHF | Registration in connection with an OSC registration     |

### **SCAR Delegates Meetings (24 – 26 June 2018)**

No fees apply.

## **SCAR and IASC side meetings**

Both SCAR and IASC/ASSW have a large number of working group and business meetings, workshops, seminars and project-related side meetings, lasting from a few hours to several days, that are part of the biennial (SCAR) and annual (IASC/ASSW) meetings. To be able to accommodate all meeting requests, SCAR and IASC first collaborated to schedule their standard meetings during the pre-meetings from 15-18 June 2018. In a second step, the community was invited to request space for a side meeting, either during the pre-meetings or in lunch or evening slots during the OSC. Those meetings were then scheduled around the already existing SCAR and IASC meetings. In total, 141 meetings were hosted, 85 of which during the pre-meetings, 56 during the OSC. The organizers for the side meetings were given the opportunity to order catering for their meetings, which was later billed directly to the organizers. The rooms came free of charge, however, all meeting participants had to be registered for POLAR2018, either for the pre-meetings or for the OSC, depending on when the meeting took place.

## **Sponsoring and communications**

POLAR2018 managed to attract several sponsors. Their logos and further information was displayed in the program booklet, on the still screens in each lecture room and on the website, a lanyard sponsor produced the lanyards with the company name, and another sponsor brought an arctic vehicle for display in front of the congress centre. Feedback from sponsors was positive throughout, they were extremely happy about the exposure, of course also due to the very large participant numbers.

The website was the main instrument of communications with participants. Contact with the session conveners and the side meeting organizers was very frequent and mostly by email. To be able to distribute news efficiently, a facebook and a twitter profile proved extremely useful. We avoided mass mailings, but frequently announced milestones through a number of lists and through the contact databases of the organizations involved.

The electronic abstract proceedings were finalized in the days before the start of POLAR2018 and were published with an ISBN number on the website.

Media communications was handled through the communications team at SLF/WSL. A large number of media representatives both from Switzerland and abroad made use of the free media registration and attended the conference. There was significant coverage of the event in local, regional, national and international media, including interviews on the main Swiss TV channel (SRF Tagesschau). The keynote lectures were recorded and distributed with webcasting through our facebook profile. A group of young video bloggers produced a daily video, capturing atmosphere and short statements throughout the OSC, those can also be found on facebook and on our website. Two photographers were employed for the whole duration of POLAR2018, all photos can be found on our website.

## **Finances**

As with most conferences, there is no initial money to begin work. The only income will be the registration fees and any sponsoring contributions that might come. Based on this, we developed a budget, aiming to avoid a deficit. The registration fees had to be set in a range comparable to similar conferences, while being sufficient to cover the costs. Initial estimates ranged at about 1500 to maximum 1800 participants. The overwhelming numbers, both in abstract submissions and later in registrations, lead to some costs rising in parallel, but helped to keep the budget straight. The final budget is still being worked-out.

## **Final comments**

The synergies gained from bringing together the communities of the Arctic and Antarctic, as well as a significant number of participants working on the “third pole”, were remarkable; participant feedback was very clear on that. While it was rewarding and rather straightforward to bring together the science from both poles, it was not equally simple to combine the cultures and habits of the two very different organizations, SCAR and IASC. Several changes in the leadership of the organizations brought further issues to solve. As already remarked upon in earlier SCAR meeting reports, the financial burden, put on the host for the SCAR meetings, is substantial. While the policy of IASC/ASSW is to charge a registration fee also for the business and satellite meetings, this is not the case for SCAR side meetings nor for the SCAR Delegates Meetings. As it is not possible to charge one group, yet not the other for the same services at the same conference and venue, lengthy discussions resulted to find a feasible method. It would be helpful for future hosts of SCAR meetings, if some fees or direct contributions could be made from SCAR, especially, if the meeting was to be combined again with another organisation.