

IASC Atmosphere Working Group Meeting Summary

Aarhus, Denmark, 25-26 March 2026

Xin Yang, Liam Kelleher (UK representatives)

The hybrid meeting was attended by around 20 representatives (49% of 41 members) from 15 countries (60% of 25 nations). Both UK representatives, *Liam Kelleher* (University of Birmingham) and *Xin Yang* (British Antarctic Survey), attended in person. The Steering Group was presented by the chair, *Gijs de Boer* [USA]; vice-chair, *Maria Sand* [Norway]; *Guðrún Nina Petersen* [Iceland]; and secretary, *Sonja Murto* [Sweden]. Six new representatives included *Nina Maherndl* (new 2nd representative) for the Netherlands; *Susanna Winkelbauer* (replacing Michael Mayer) for Austria; *Erhan Arslan* (new national representative) for Turkey; *Liam Kelleher* and *Xin Yang* (replacing Stephen Arnold and Jo Browns) for the UK; and *Gunilla Svensson* (replacing Thomas Kuhn) for Sweden. Two new AWG fellows are *Julia Andreasen* from the US and *Julia Kojoj* from Sweden. Current AWG members' primary focus is on foundational research in atmospheric physics and chemistry. Some focus on atmospheric dynamics, instrumentation, model development, and climate.

Core Scientific Foci:

- Arctic Energy Budget, clouds, and surface fluxes
- Arctic Air Pollution
- Atmosphere coupling within the Arctic system
- Arctic Weather extremes
- Role of the Arctic in the global climate system

Overarching Pillars:

- Atmosphere in the coupled Arctic System
- Arctic Climate, Weather and Predictability
- Arctic Pollution, Socio-Economic and Environmental Change

Discussion on how the strategic plan should be updated to reflect current priorities, the ramp-up to IPY-5, and ICARP-IV outcomes that were recently released

(<https://icarp.iasc.info/publications/publications-icarp-iv>).

Summary of AWG activities in 2025:

1. In 2025, the AWG supported the following activities:
 - *Workshop: Early Career Researcher Workshop for the Synoptic Arctic Survey 2*
 - *Workshop: Arctic Glacier Hazards*
 - *Workshop: Arctic-Subarctic Ocean Fluxes (ASOF) Workshop 2025*
 - *Conference: Climate and Cryosphere Open Science Conference: The Changing Cryosphere: Science, Impacts and Adaptation*
 - *Workshop: Science Under Pressure? - Reflecting on conditions, practices and institutional structures for sustainable polar research towards IPY-5*
 - *Summer School: CIce2Clouds Sea Ice Field School*
 - *Workshop: Arctic Transportation Futures: Reconciling Local Needs and Global Drivers*
 - *Conference: Arctic System Science Conference*
 - *Activity: AWG Implementation Workshop*
2. An AWG "implementation plan" was formalized in 2024. Over the past year, there was specific focus on the following topics:
 - **Proposal Review:** We were able to review all proposals with 3-4 members. New electronic form was used to collect input, streamlining and standardizing evaluation process.
 - **Coordination of Regular Scientific Updates to the AWG:** We included scientific updates in all AWG meetings. It does take volunteers! Are we looking for more?
 - **Advancing our Understanding of the value of the AWG to members and IASC nations:** We conducted a survey of the AWG membership to understand the views of our national representatives. The insight from this survey has been summarized in a report, which was provided to IASC leadership. More on this in the closed meeting this afternoon.
 - **Developing a plan for inter-WG communication:** We kicked-off an IASC AWG quarterly newsletter. This newsletter is shared with leadership of other WGs as well as with IASC

leadership. Additionally, we (almost) were able to coordinate stickers on WG member badges to help identify IASC WG members during ASSW!

- **Organizing social events to improve AWG member connections:** There are multiple social events scheduled for this meeting, including dinner tonight and a walking tour on Friday. Additional events are under development for larger community meetings (e.g., EGU).
- 3. Member Engagement Survey
 - **Core implementation tasks under this activity were to:**
 - Conduct survey of AWG to improve understanding of value of IASC AWG to them and their nation, and to optimise meeting structure to their interests and needs
 - Implement recommendations from the survey, reshaping IASC AWG meetings to maximise interest and value to the broader Arctic atmospheric science community
 - The committee: Guðrún Nína Petersen (Iceland), Gijs de Boer (USA), Stefano Decesari (Italy), Laurens Ganzeveld (The Netherlands) & Dörthe Handorf (Germany)
 - The survey was sent to all AWG members, including fellows.
 - A few reminders and finally a personal email to the remaining members, resulting in 31 total responses
 - Responses from 21 out of 24 AWG IASC countries, including responses from Europe (23/31), Asia (6/8) and North America (2/4)

AWG 2026 Research Priorities:

- **Support the Arctic atmospheric science community**, particularly in connection with planning IPY-5.
- **Revisit the AWG work plan** to ensure that it is aligned with current international research priorities (including those outlined in the ICARP-IV process).
- Continue to evaluate and enhance the value proposition of AWG activities to **increase AWG member engagement**.
- **Identify the next generation of AWG leadership.**
- **Provide support for activities that:**
 - Advance understanding of the Arctic system in alignment with AWG priorities
 - Develop a new generation of Arctic atmospheric scientists
 - Foster international coordination and cooperation, and advance collaboration across national boundaries
 - Foster a collaborative environment that involves **all AWG nations**

The AWG implementation plan:

For 2026, the AWG is looking toward several new implementation activities. These activities are distributed across the primary actions identified in our implementation plan as follows:

1. **Advancement of Arctic Atmospheric Science:**
 - Enable understanding of the role of the atmosphere in interdisciplinary science by supporting interdisciplinary coordination and planning proposals
 - Identify new flagship activities to support over longer timescales
 - Provide expert guidance and input to activities focused on climate intervention
2. **Advancement of Arctic Atmospheric Science Researchers and Networks:**
 - Provide opportunities for early career engagement through development of an AWG mentorship network
 - Advance AWG connections with indigenous scholars through development of an engagement plan
 - Continue to facilitate information sharing between nations through regular scientific updates
3. **Advancement of IASC as an Organization:**
 - Support the IASC Action Group Towards Ethical Recommendations for Climate Interventions Research and Evidence-based Information (ERCI)
 - Build a stronger AWG through regular social networking and communication activities
4. **Advancement of Ethical Research Practices in Arctic Atmospheric Science**