

IASC AWG Implementation Plan Summary

Overview

In recent years, the International Arctic Science Committee (IASC) Atmosphere Working Group (AWG) worked to develop a Strategic Plan. That Strategic Plan provides a high-level overview of research topics and questions that the AWG works to support to help address current and emerging research questions about the Arctic atmosphere. Within the Strategic Plan five core science topics and three pillars help define the areas of scientific research of greatest interest to the AWG, though it should not be considered exhaustive. Additionally, the Strategic Plan includes four primary goals to help advance science and science infrastructure to meet the needs associated with answering pressing questions related to the atmospheric science topics identified in the Strategic Plan.

These goals include:

1. **Advancement of Arctic Atmospheric Science:** *Identify and enable support for priority topics and activities to advance understanding of the Arctic atmosphere and its role in the Earth system.*
2. **Advancement of Arctic Atmospheric Science Researchers and Networks:** *Enable development of research networks that foster linkages across career stages, disciplines, and backgrounds to advance scientific productivity, and help advance the abilities of early career and Arctic resident researchers.*
3. **Advancement of IASC as an organization:** *Actively engage the atmospheric science community to implement the IASC Strategic Plan and enhance the visibility and effectiveness of IASC.*
4. **Advancement of Ethical Research Practices in Arctic Atmospheric Science:** *Facilitate practices in Arctic atmospheric science to foster ethical and fair research practices and outcomes.*

To support consistent progress towards the above goals, and to help track progress on the effectiveness of the AWG in advancing activities to support these goals, the working group has developed this document as an Implementation Plan. The Implementation Plan will help the AWG to keep a consistent focus when making decisions on the allocation of limited resources or when transitioning leadership and membership. This plan will be consulted by the group when evaluating proposals and activities to be funded, endorsed, or otherwise undertaken by the AWG. Additionally, the Implementation Plan will help support engagement with outside entities, including other IASC working groups, IASC Council, and the public.

The Implementation Plan includes guidance on actions and specific tasks, which are tangible, measurable, and easily communicated actions that foster and demonstrate progress. These tasks are organized, developed, and in some instances funded and implemented by the AWG membership. In other instances, the tasks are supported or endorsed by the AWG and carried out by the broader Arctic atmospheric science community in recognition of their potential to help the AWG meet critical needs associated with stated goals. This first AWG Implementation Plan will be implemented starting in spring 2024, based on AWG membership and outside contributions.

Implementation Actions:

Here we outline actions connected with each AWG goal. For each action, the full implementation plan includes specific tasks not included in this summary. It is anticipated that only a limited number of tasks will be undertaken each year, depending on identified needs and the perceived effectiveness of a given task. Specific actions include:

- **Advancement of Arctic Atmospheric Science:**
 - *Facilitate discussion between member countries on key scientific topics and priority activities*
 - *Foster development of and prioritization of large international research initiatives, and identify “Flagship” activities¹ to prioritize for longer term AWG support*

¹ “Flagship” activities are defined as major, collaborative international activities that allow for engagement across IASC nations. Such activities will be identified and endorsed by the AWG and should be exceptionally well aligned with the AWG’s strategic plan

- *Enable efforts to advance understanding of the role of the atmosphere in interdisciplinary science*
- *Provide expert guidance and enable white papers/reports on key issues in Arctic atmospheric science*
- ***Advancement of Arctic Atmospheric Science Researchers and Networks:***
 - *Advance and support development of an international scientific network*
 - *Provide opportunities for early career researcher engagement*
 - *Identify and foster opportunities for engaging indigenous and other Arctic populations*
 - *Facilitate information sharing between nations regarding Arctic atmospheric initiatives and strategic planning*
- ***Advancement of IASC as an organization:***
 - *Offer direct support of atmosphere-related IASC-led initiatives*
 - *Ensure a healthy AWG ecosystem to bolster regular participation by the membership and international sharing of information*
 - *Serve as conduit between the Arctic atmospheric science community and IASC leadership to transfer knowledge to policy and decision makers, as appropriate*
 - *Support interdisciplinary scientific endeavors*
- ***Advancement of Ethical Research Practices in Arctic Atmospheric Science:***
 - *Ensure transparent and fair review of proposals submitted to the AWG*
 - *Ensure scientific openness and collaboration in Arctic atmospheric science*
 - *To the extent possible, reduce the environmental footprint associated with Arctic atmospheric science*
 - *Advance diversity and inclusion in Arctic atmospheric science*

Plan Revision and Reporting

This Implementation Plan serves as a “living” document to ensure that the AWG is responsive to current research needs and priorities in the Arctic atmospheric research community. A critical task associated with ensuring such responsiveness is the regular review of both the Implementation and Strategic Plans, which will be conducted annually prior the AWG in-person meeting at the Arctic Science Summit Week (ASSW). The Arctic atmospheric science community may recommend changes to either document through the national representatives to the IASC AWG, and any recommended or requested updates will be discussed during the ASSW meeting. Annual reviews will include the development of a brief report that helps to address a variety of questions, including:

- How did tasks undertaken in the last year help make progress on the AWGs goals and priority science areas?
- What was the primary outcome of the tasks undertaken?
- Should the activity connected with a particular task be considered as a “Flagship” AWG activity?
- Were there specific challenges or obstacles to successful completion of tasks?
- Did the task help to identify shortcomings of the AWG Strategic Plan or Implementation Plan that require updating of these documents?

Acknowledgment of IASC AWG Support, Funding, or Endorsement

Projects receiving significant support from the AWG are requested to publicly acknowledge this support. Acknowledgement should include placing the IASC logo on meeting presentations and reports as part of acknowledgment sections. Additionally, publications or reports associated with activities that have received IASC AWG funding or endorsement, entities are requested to include the following text in the acknowledgments: “The current work has benefited from support from the Atmosphere Working Group of the International Arctic Science Committee”.
