A Unique Perspective on the Arctic Observing Network Through the Lens of Program Support and Coordination



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Overview

The National Science Foundation's Arctic Observing Network (AON) is a system of land-, atmosphere-, and ocean-based observing systems in the Far North. While AON-based observations of Arctic change are intended to be long-term, specific projects and collaborations can be more ephemeral in nature. For nearly two decades, the Arctic Research Consortium of the United States (ARCUS) has provided support to the community of AON researchers. This has provided ARCUS with a novel perspective on the trajectory of these efforts. Over the years, the AON community has developed numerous reports and recommendations for advancing a coordinated and sustained observing network. ARCUS has supported this work through event planning and organization, coordination of programs and strategic planning, and networking with the broader Arctic research community. Here we share a review of these community-generated efforts, with interactive links to serve as a resource on the history of guidance offered by the AON community.



Synthesis

A review of the reports identified some common themes and recommendations (number of reports):

- 1. Better coordination among agencies and international partners (8)
- 2. Community prioritization of research topics (6)
- 3. Consistent data and measurement standards across AON projects (6)
- 4. Need for sustained funding (5)
- 5. Improved stakeholder engagement (5)
- 6. Stronger AON governance structure (3)
- 7. More relevant spatial and temporal scales for research (3)

In addition, several of the reports offered actionable recommendations for implementing pilot projects or specific approaches.

Challenges and Achievements

These reports identified challenges that the community gathered to address through a progression of coordinating entities, including the <u>Observing Change Panel</u>, <u>Arctic Observing Working Group</u>, <u>Design and Implementation Task Force</u>, and several workshops and conferences. Research coordination—both internationally and across national programs—was identified as a top priority.

We encourage anyone engaged in planning for Arctic observing to reference these reports to learn more about the recommendations that have already emerged from the research community.

Current discussions relevant to strategic planning are being held by the open <u>IARPC Arctic Observing Systems Sub-team</u>, <u>Sustaining Arctic Observing Networks</u>, and others.

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