



NATIONAL SCIENCE FOUNDATION
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NSF 23-052

Dear Colleague Letter: Supporting Workshops to Develop a Strategy for the NSF Arctic Observing Network (AON) Program

February 2, 2023

Dear Colleagues:

Through this Dear Colleague Letter (DCL), the National Science Foundation's (NSF) Section for Arctic Sciences (ARC) of the Office of Polar Programs (OPP) announces plans to support workshops to identify key science drivers as well as critical infrastructure and technology needs to strengthen the NSF Arctic Observing Network (AON) Program. Such workshops are typically identified as conferences in the NSF Proposal & Award Policies & Procedures Guide ([PAPPG](#)) and will hereafter be referred to as conferences.

The Nation's ability to detect and understand atmospheric, marine, societal, and terrestrial changes, and their implications for the rest of the planet, is limited by data gaps and insufficient observations across the Arctic. Hence, a high-level, strategic planning initiative needs to be mounted to assist NSF's AON Program in identifying and prioritizing the key components for maintaining and strengthening a sustainable Arctic observing network. This planning also needs to include strategies to "hand off" mature data streams to willing partners and to introduce new and better technologies into the observing network in such a way that the value of existing data is not compromised and so that new data can be collected more efficiently and at a lower cost.

This DCL strongly encourages proposals for conferences that may include multiple goals including but not limited to:

- Identifying key science drivers and priorities for the next 10 years of NSF's AON Program;
- Providing an opportunity for understanding the current NSF AON Program portfolio, including its disciplinary breadth and geographic focus, as well as its strengths and weaknesses;
- Identifying the infrastructural, logistical, and technology needs for Arctic observing; and describing notional deployment strategies (including for aircraft, vessels, and other

platforms);

- Developing an outline or plan for improving existing AON data management systems;
- Forging a path for strengthening future international collaboration and coordination for Arctic modeling and observational syntheses; and
- Developing criteria for sunseting or transferring AON projects that have shifted their focus to long-term monitoring efforts and are no longer driven by emerging science objectives.

Strategic planning for the NSF AON Program aligns with national plans and policies on Arctic research including the 2022-2026 Interagency Arctic Research Policy Committee (IARPC) Arctic Research Plan (ARP). For example, the ARP mobilizes federal agencies to engage in Monitoring, Observing, Modeling, and Prediction (MOMP) as a foundational activity that crosscuts research priority areas that include Community Resilience and Health, Arctic System Interactions, Sustainable Economies and Livelihoods, and Risk Management and Hazard Mitigation. Similarly, a White House Office of Science and Technology Policy (OSTP) report to Congress provides strong justification and recommends "the need to establish and maintain a sustained Arctic observing network." Together, such research plans and reports emphasize the importance of detecting and understanding changes in the Arctic and the need for improving scientific observations and observing platforms across the Arctic. Thus, outcomes from successful conference proposals will inform and build on national efforts led by NSF and the interagency US Arctic Observing Network ([US AON](#)) Board, co-chaired by NSF.

To ensure conference concepts are within scope, please reach out to AON Program Directors before submitting your proposal. Proposals to NSF should be directed to the [Arctic Research Opportunities](#) solicitation and must follow the guidelines for the preparation and submission of Conference proposals specified in the PAPPG.

For questions and more information, or to discuss ideas for conference goals and proposals, please contact Dr. Roberto Delgado, (robdelga@nsf.gov) and Dr. Olivia Lee, (olee@nsf.gov).

Sincerely,

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