

US Arctic Observing Network

BIENNIAL ACCOMPLISHMENTS REPORT 2024



Photo by Monica Nuñez (PolarTREC 2019). Courtesy of ARCUS



OVERVIEW

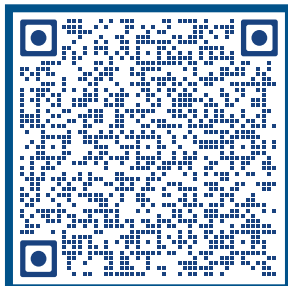
Arctic observations play a crucial role in adapting and responding to conditions in the Arctic and understanding the ripple effects felt throughout the globe. The Arctic is one of the most rapidly changing regions on the planet, yet too often, existing Arctic observations fall short of the needs of Arctic communities, researchers, and policymakers. The US Arctic Observing Network (US AON) is a collaborative initiative, guided by a federal board with representatives from a range of agencies, aimed at improving the Arctic observing system. US AON is a recognized sub-body of the Interagency Arctic Research Policy Committee (IARPC).

REPORT TO CONGRESS

In 2022, US AON's federal board responded to a request from Congress through its report "On the Need to Establish and Maintain a Sustained Arctic Observing Network." In addition to articulating issues with the current state of Arctic observing, the board put forward a vision for more effective and inclusive observing and data systems. The report recommends:

1. Supporting coordinated, integrated, and sustained critical observations and infrastructure;
2. Furthering the development of a shared data management system;
3. Prioritizing human and technological capacity building;
4. Closing gaps in observations with a focus on supporting decision-making around climate resilience and national security.

The report recognizes that developing and implementing an observing network must advance the capacity for equitable engagement of Indigenous communities and Indigenous Knowledge. The document also highlights exemplary programs that agencies can look towards as models and puts forward recommended policy drivers. This report was an important step in aligning federal agencies with a common set of objectives. It lays the foundation for more significant joint efforts by the US AON Board in FY24.



[Read the report](#)

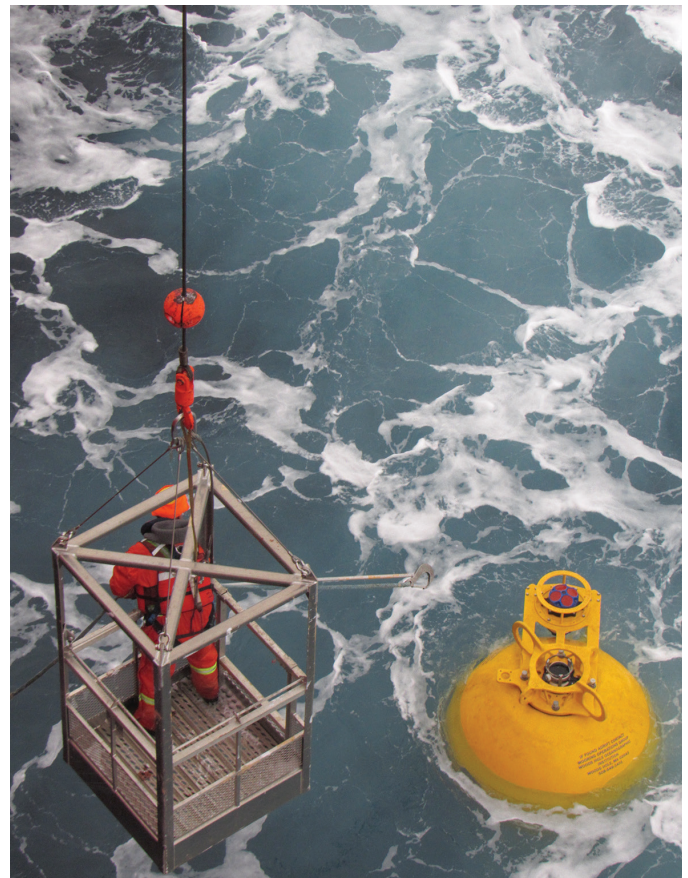
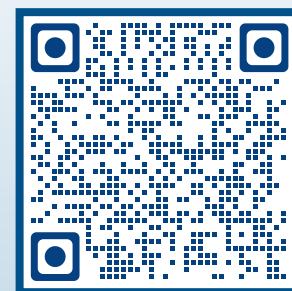
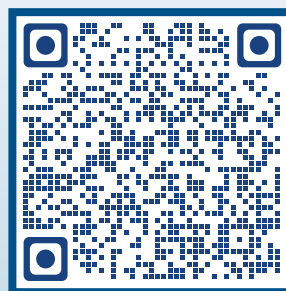


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EVALUATING OBSERVATIONS TO SUPPORT RISK MANAGEMENT AND HAZARD MITIGATION

To support a more effective observing system, the US Arctic Observing Network (US AON) team has begun scoping a series of case studies focused on observing gaps impacting risk management and hazard mitigation in the State of Alaska. This objective was called for in the IARPC Biennial Implementation Plan. Nearly 100 people from partner organizations have engaged in the scoping process so far.



Learn more about our
Risks and Hazards work

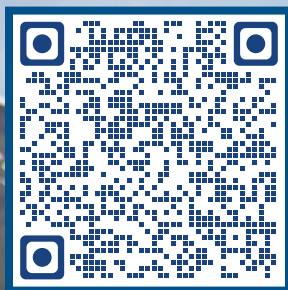




ESTABLISHING AN EXPERT COMMITTEE TO ADVANCE US AON'S METHODS AND BENEFIT TOOL

To make strategic investments in Arctic observing, decision-makers need to understand how the current system works and to identify gaps and opportunities within it. To that end, US AON is developing an online tool - the Benefit Tool - to assess connections and gaps in the interwoven system of Arctic observations, data products, tools, and processes that must work together to yield societal benefit. Through this tool, users can discover new data sources, share information about needs, and understand where investments have the potential to provide benefits for a variety of users. By gathering structured input from experts who live and work in the Arctic, the Benefit Tool systematically links observational inputs to the data products, applications, and societal benefits they support. The Benefit Tool represents an important US contribution for assessing shared benefits within the international Sustaining Arctic Observing Network's planning process - Arctic ROADS.

US AON staff and board recognized the need to engage a more diverse group to help shape this methodology. US AON established an Expert Committee on Methods with about a dozen members with a range of relevant experience and expertise, including Indigenous research principles, data and metadata management, social science methods, and communications. The Committee has given feedback at every level of the Benefit Tool, leading US AON into greater conversation with the FAIR and CARE Principles for data management and creating rigor and visibility for the Benefit Tool along the way. They continue to provide vital input to improve US AON processes and tools to better serve the needs of Arctic residents and researchers.



Learn more about
the Benefit Tool