



Photo: Allyson Woodard (PolarTREC 2019), courtesy of ARCUS

Biennial Accomplishments Report 2020-2021

The [US Arctic Observing Network](#) (US AON), a recognized sub-body of the Interagency Arctic Research Policy Committee (IARPC), is a strategic and collaborative initiative that works to advance partnerships and systematic and equitable planning approaches to Arctic observing in support of broad societal benefits. US AON operates through open community discussions hosted by IARPC's [observing team](#), structured planning exercises with US AON Task Teams, and capacity-building events. The US AON Board, composed of representatives from IARPC's federal agencies, guides its progress.

US AON is maturing as a set of collaborative activities. In addition to the accomplishments below, we are pleased to share the finalized [US AON Terms of Reference](#), an [IARPC-wide webinar](#) about US AON, and a [public page on the IARPC website](#) detailing US AON's structure.

Get Involved

Join [IARPC's Arctic Observing Systems Sub-team \(AOSST\)](#)

Contact the US AON Executive Director: sandy.starkweather@noaa.gov

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Fostering broad leadership of and support for the SAON ROADS process

US AON supports the goals of Sustaining Arctic Observing Networks (SAON), an international initiative that fosters improved observing and data systems across the Arctic, through convening the national committee for SAON as a biannual IARPC Collaborations meeting. SAON is currently focused on developing a comprehensive Roadmap for Arctic Observing and Data Systems (ROADS process), which will assemble and advance high-level observing frameworks that already guide much of Arctic observing into a comprehensive whole to reveal strategic opportunities and mobilize partnerships to act on them.

US AON continues to be a proven leader in advancing the ROADS process.

- Early vision and planning work by the US AON Board greatly informed the principles and tools used in the ROADS process. For example, planning tools like Value Tree Analysis using Societal Benefit Frameworks were first advanced by the US to drive coherence across international efforts.
- Through IARPC Collaborations dialog, US AON contributed to the first US pilot of the ROADS process. Drawing on assessment, modeling, and observing system design approaches, the NSF-supported [Research Networking Activity on Sustained Coordinated Observations of Arctic Change](#) (Co-Obs RNA) aims to lay the foundation for a system of observing actions (integration and development) that would enhance food security in the Pacific Arctic Sector. Alaska Indigenous scholars and community members are central participants in the work.
- The US AON facilitated cohesive multi-agency review and input on the [Arctic Science Ministerial's 2021 joint statement](#). The final statement reflected strong support for the SAON ROADS process.

Promoting co-production of knowledge

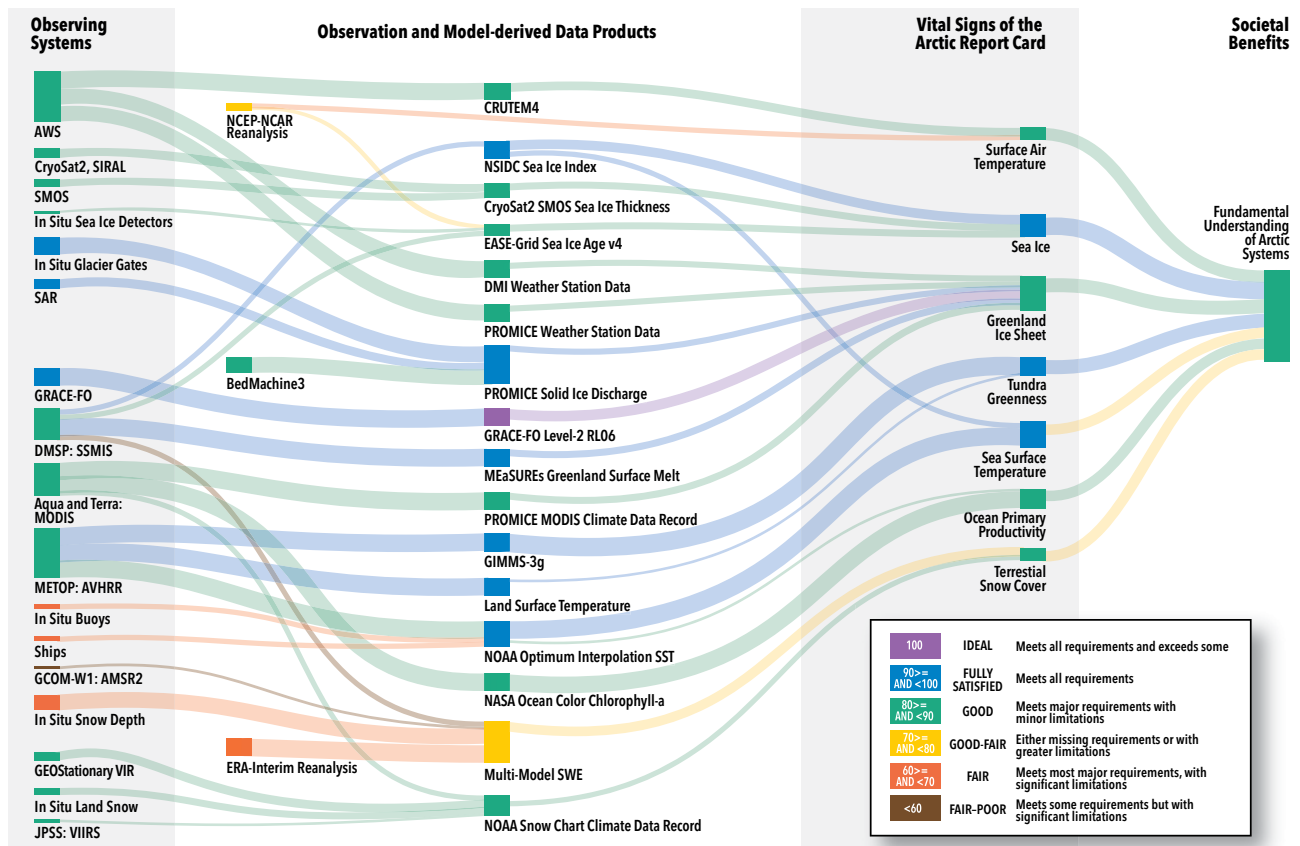
US AON values the direct engagement of Indigenous organizations and communities in its planning efforts and seeks to support the Arctic research community, often educated in only western science approaches, to develop effective and equitable partnerships with Indigenous-led efforts. To that end, US AON sponsored a two-day workshop for its partners, including: members of the interagency US AON Board, principal investigators of NOAA's Arctic Research Program and investigators from the newly initiated CoObs RNA. The workshop, led by Kawerak, Inc., provided an overview of the cultural and historical context of Alaskan communities and presented an introduction into Indigenous knowledge systems and co-production of knowledge practices, which have been identified by communities as a preferred methodology for collaboration with western science.



Photo: Amy Clapp (TREC 2005), courtesy of ARCUS

Partnering with the Arctic Report Card

Under its Task Team model, US AON partnered with the Arctic Report Card (ARC) for a [special submission to the 15th anniversary edition of the ARC](#). Applying its Value Tree Analysis methodology, US AON established a Task Team of lead authors to rate the performance of the Arctic observing network over the past 15 years. The analysis focused on the seven Vital Signs that have been the centerpiece of the ARC’s annual publication, for example showing that the overall performance score rose from 61 in 2007 to a score of 81, or from “Poor” to “Good”. Important gaps in the observing system, for example, sea conditions in the coastal zone, were also identified. In addition, US AON and the Arctic Data Center (ADC) launched a [data portal](#) for the products that form the basis of the ARC. This effort is focused on increasing transparency in scientific assessment.



This figure illustrates key findings from the US AON value tree assessment as reported in the [2020 Arctic Report Card](#).

What is next for US AON

US AON will build upon its contributions to the SAON ROADS process by increasing engagement through the US national committee to SAON and advancing US AON Value Tree Analysis methodologies with Task Teams. US AON will continue to support co-production and Indigenous-led activities within IARPC Collaborations and under SAON ROADS through partnership development. Additionally, US AON is actively aligning its strategy and priorities with IARPC’s [2022-2026 Arctic Research Plan](#).