Editors announce a special issue of *Arctic*, titled “Observing for Action”. As Arctic environmental change continues unabated and at a rapid pace, sustained observations that enable us to track, understand, and project this change are essential. These observations are necessary to guide adaptation and mitigation responses from local to global scales.

For this special issue, editors invite manuscripts that will serve to highlight important needs or gaps, explore emerging opportunities, address current and future challenges, and present new initiatives or technologies that can contribute to Arctic observing. Authors are especially encouraged to submit manuscripts that address the defined themes and call to action from the recently concluded 2020 Arctic Observing Summit:

- Design, Optimization and Implementation of the Observing System
- Observing in Support of Adaptation and Mitigation
- Observing in Support of Indigenous Food Security and Related Needs
- Data Interoperability and Federated Search
- Arctic Observations in the context of Global Observing initiatives

These themes were broadly defined to encompass diverse perspectives and topical areas. Authors of white papers and short statements submitted in advance of AOS 2020 are encouraged to expand on their papers, and where appropriate combine their submissions to build on the cross-disciplinary, synthesizing aspects of the summit.

Articles collected for this special issue will provide insight into possible directions in which the Arctic observing system might evolve, and the challenges it might face in getting there.

**Manuscript Submission**

Authors are requested to mention in their cover letter that the submitted manuscript is for consideration in the AOS 2020 special issue. Authors should adhere to the submission guidelines available at [https://arctic.ucalgary.ca/guide-authors](https://arctic.ucalgary.ca/guide-authors)

The deadline for submissions is **October 01, 2020**. Targeted publication date will be Spring 2021. Submitted manuscripts should not have been published previously, nor be under consideration for publication elsewhere, except conference proceedings papers. All manuscripts are refereed through a peer-review process.

Guest Editors: Hajo Eicken (University of Alaska Fairbanks), Maribeth Murray (University of Calgary) and Peter Schlosser (Arizona State University).

For additional information, please email us at aos@arcticobserving.com

The Arctic Observing Summit (AOS) was initiated in 2013 as a high-level international forum to provide community-driven, science-based guidance for the design and implementation of a sustained, comprehensive, and integrated Arctic observing system. The Arctic Observing Summit (AOS) is an international, biennial forum of scientists, managers, stakeholders, agencies, Arctic community members, and the private sector. The purpose of the AOS is to engage all sectors from local to international levels and coordinate the design, development, and implementation of a sustained, comprehensive, and iterative circumarctic observing system. The AOS is a Sustaining Arctic Observing Networks (SAON) task led by the International Study of Arctic Change (ISAC).