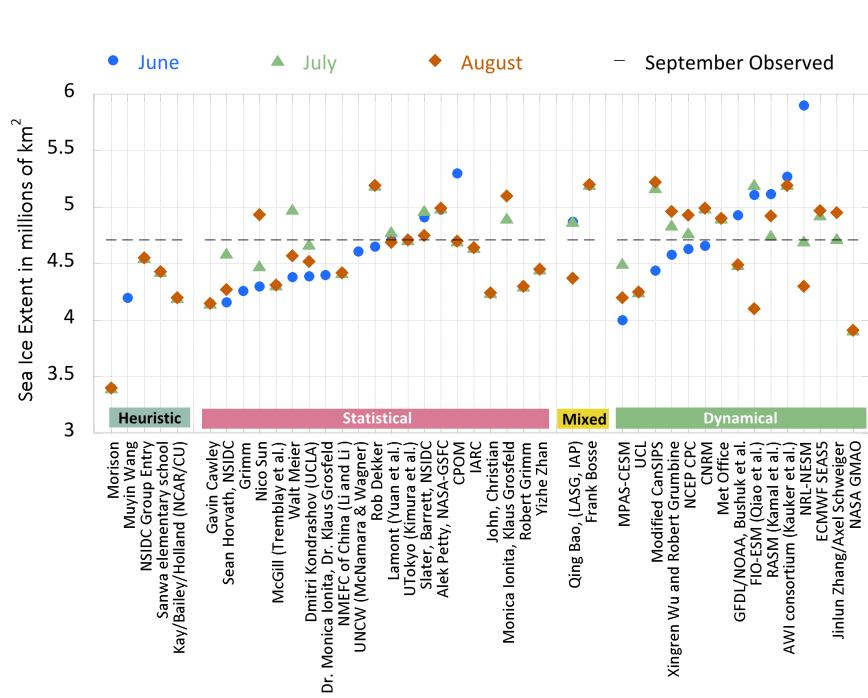
Sea Ice Prediction Network — Phase 2 (SIPN2) 2018 - 2022

A Multi-disciplinary Approach to Improve Sea Ice Predictions

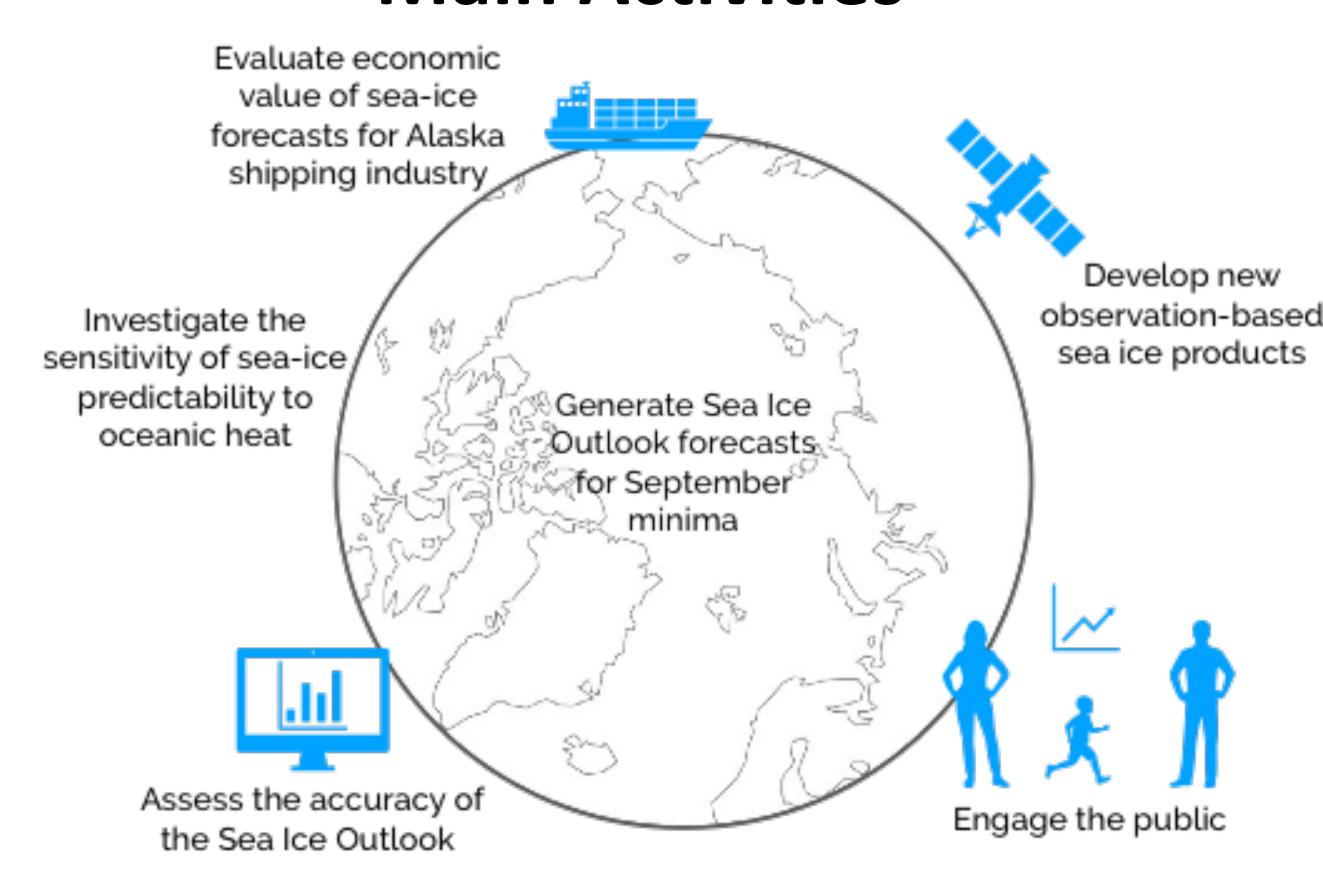
SEA ICE PREDICTION NETWORK WWW.ARCUS.ORG/SIPN

Sea Ice Outlook Analysis



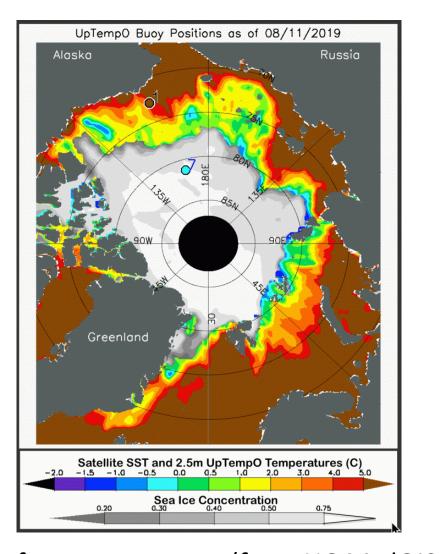
2018 Outlook contributions by group for June (blue dot), July (green triangle), and August (orange diamond) are organized by general type of method. The 2018 observed September

Main Activities



sea ice minimum is shown by dotted grey line.

Investigating Influence of Ocean Heat



Sea surface temperature (from NOAA dOISST) and ice concentration (NSIDC NRT passive microwave) for Sunday, 11 August 2019. The locations of two UpTempO drifting buoys are marked as 1 (top left in map) and 7 (center-left in map). Image sourced from NOAA dOISST, NSIDC Near-Real-Time (NRT) passive microwave, and UpTempO data.

Sea Ice Forecasts for Alaska Marine Shipping Industry

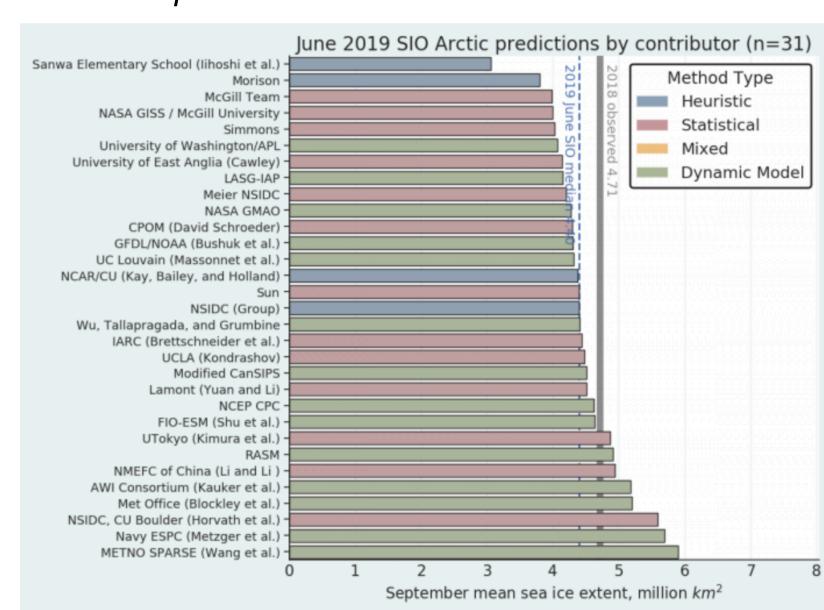
Initialization Time: 2018-03-01-00:00

Valid Time: 2018-03-29-00:00

Long-range (4 weeks) prediction of location of sea ice edge on March 29, 2018 from several models that are part of SIPN cluster of models featured in the SIPN forecast data portal.

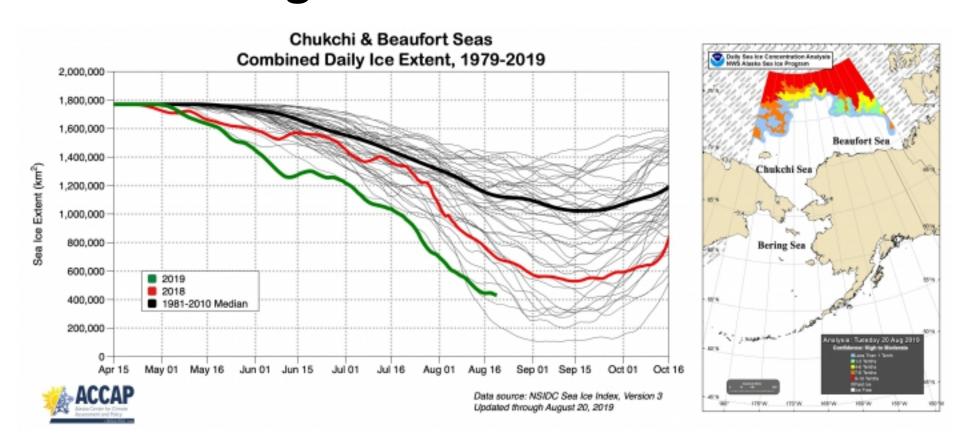
Sea Ice Outlook

Since 2008, the annual Sea Ice Outlook (SIO) has provided an open process to share ideas about the September minimum sea ice extent.



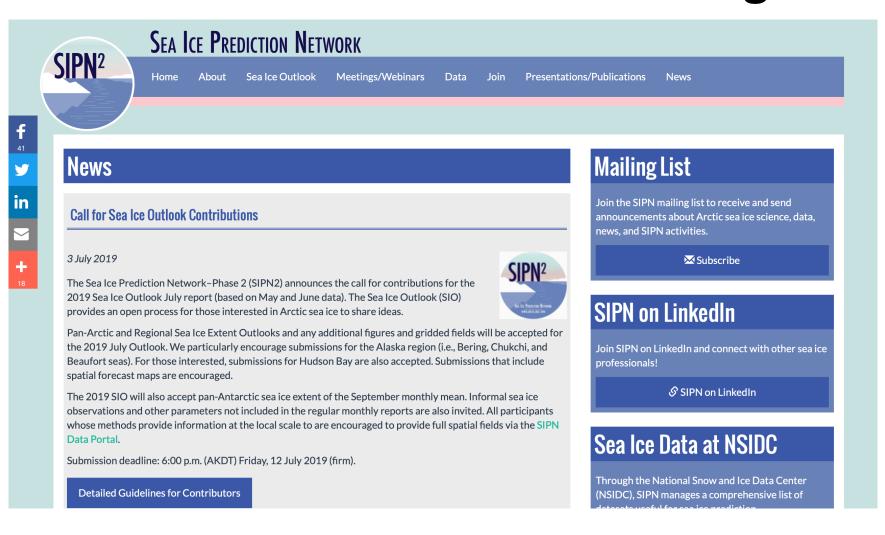
Distribution of SIO contributions for June estimates of September 2019 pan-Arctic sea ice extent. Public/citizen contributions include: Simmons, Nico Sun, and Sanwa Elementary School. Image courtesy of Bruce Wallin and Molly Hardman, NSIDC.

Regional Sea Ice Extent



Annual cycle of sea-ice extent in the Chukchi and Beaufort seas for 1981–2017 (grey), 2018 (red), 2019 (green), and 1981–2010 median (black) (left). Sea-ice concentration for the Bering, Chukchi, and Beaufort seas up to 20 August 2019.

Communications & Networking



Join a webinar — Attend a workshop — Contribute to the Sea Ice Outlook Join or initiate an Action Team — Join the mailing list —Connect via social media

Interdisciplinary Collaborations—Lessons Learned

- 1. Successful collaboration requires skillsets & knowledge from a variety of disciplines.
- 2. There are many different, valid collaboration models & identifying the type of collaboration best for your goals is important
- 3. Successful collaborations require well-designed processes & unique leadership skills.
- 4. Successful collaboration takes time & it is easy to underestimate the time, funding, & other resources needed.
- 5. Tensions that exist between diverse perspectives, cultures, & goals require attention, sensitivity, & consideration to manage effectively.

SIPN2 is a collaborative project, primarily funded by NSF with contributions from other agencies.

SIPN2 is led and managed by 20-member team from several universities and organizations, with an expanded network of collaborators, participants, and partners. https://www.arcus.org/sipn

If you would like to collaborate and become part of the SIPN2 network, please contact Betsy Turner-Bogren (betsy@arcus.org)











