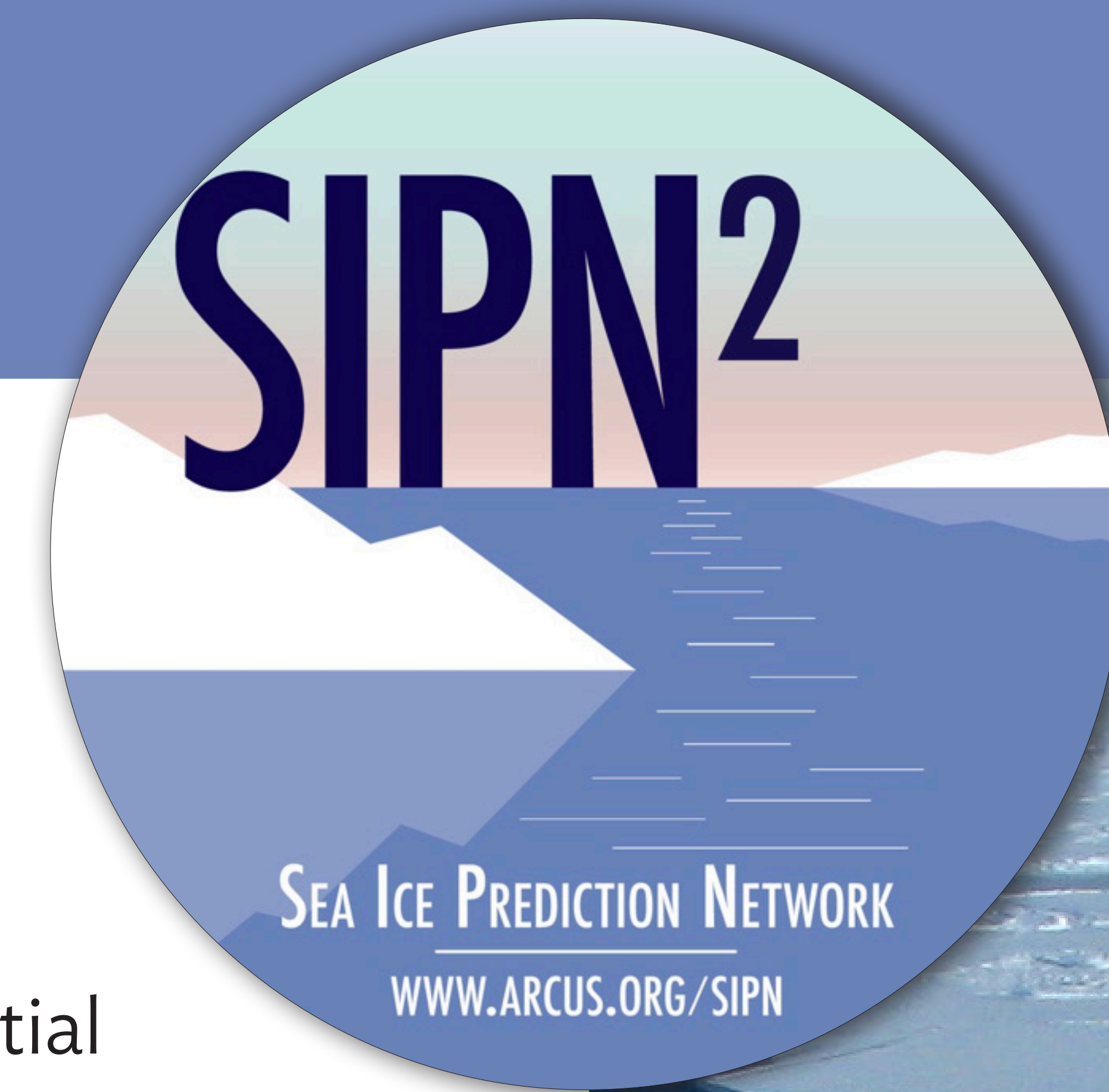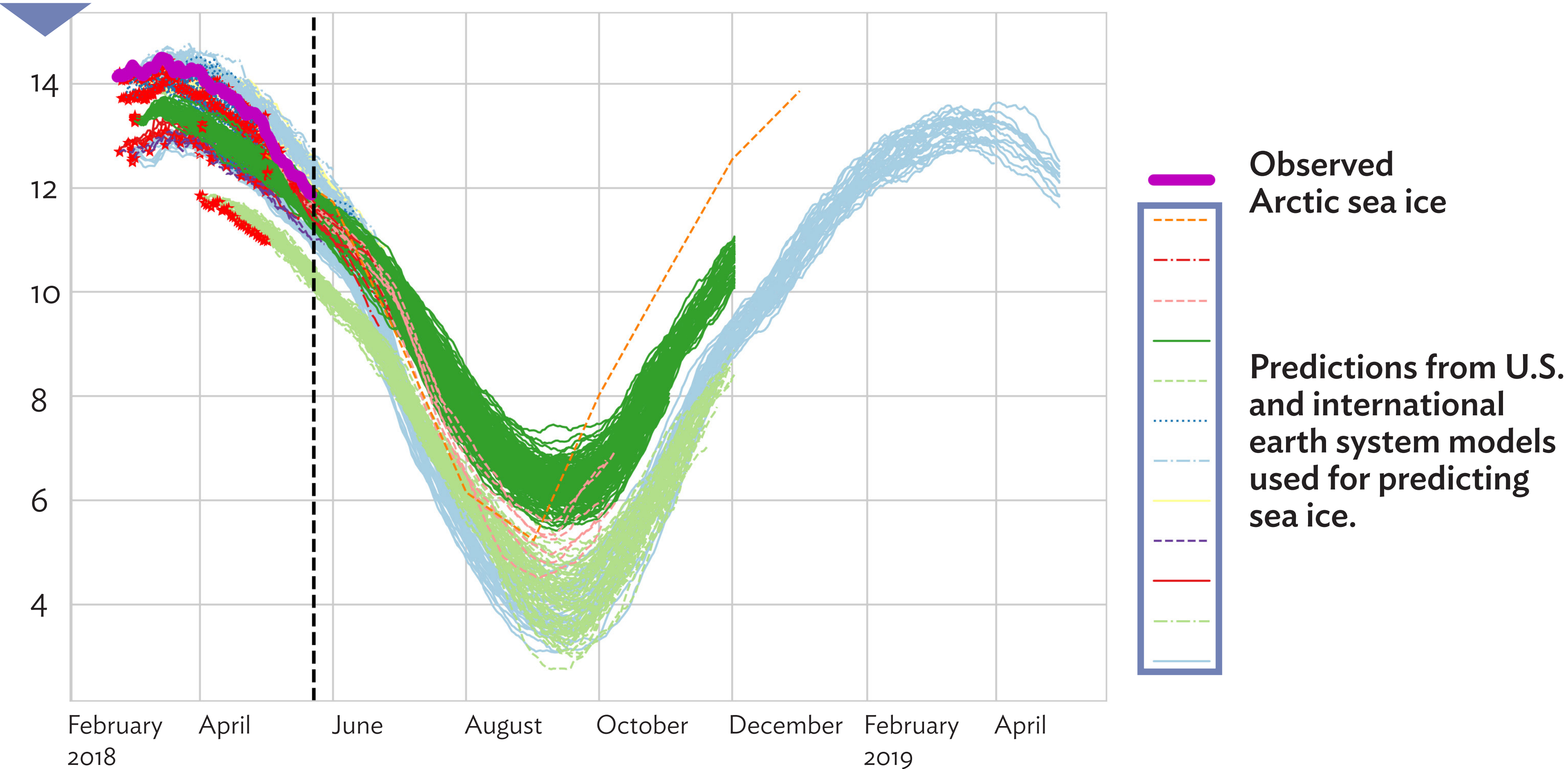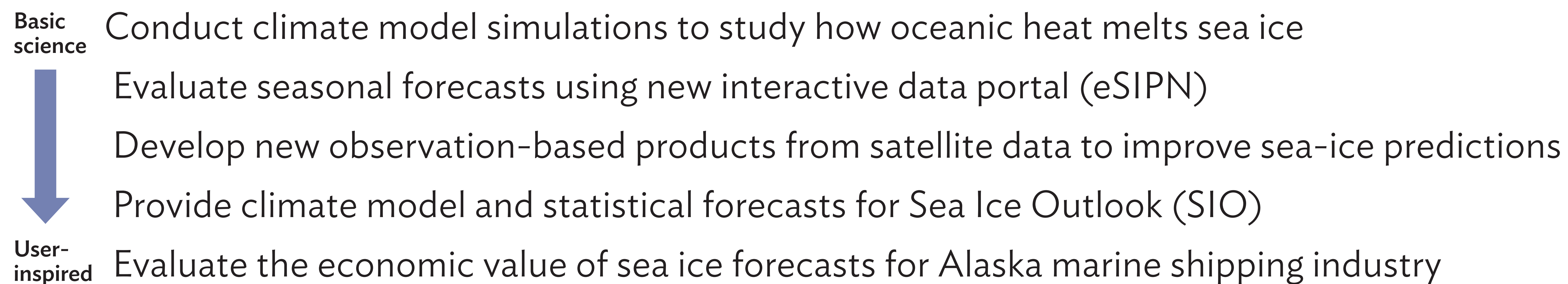# Seasonal Sea Ice Predictions

A network linking scientists and stakeholders

Sea Ice is changing and many different groups need reliable forecasts of sea ice conditions for timeframes ranging from the next two days to six months from now. The Sea Ice Prediction Network (SIPN²) takes the best science available based on computer model forecasts to make products that are useful for Alaska stakeholders. It also contributes to scientific advances needed to make more reliable and useful forecasts of sea ice. Communication between scientists and stakeholders is essential to identify products that meet needs and are possible based on the available science.

Arctic sea ice extent in millions of kilometers

February 2018 — April — June — August — October — December — February 2019 — April

Observed Arctic sea ice

Predictions from U.S. and international earth system models used for predicting sea ice.

Sea ice in Bering Sea hit a record low in 2018 as shown in this April photo

©Ann Fienup-Riordan

SPIN² does basic science to user-inspired research

Basic science

Conduct climate model simulations to study how oceanic heat melts sea ice

Evaluate seasonal forecasts using new interactive data portal (eSIPN)

Develop new observation-based products from satellite data to improve sea-ice predictions

Provide climate model and statistical forecasts for Sea Ice Outlook (SIO)

User-inspired

Evaluate the economic value of sea ice forecasts for Alaska marine shipping industry

Collaboration

UNIVERSITY OF ALASKA FAIRBANKS · NASA · UCL Université catholique de Louvain · YOPP YEAR OF POLAR PREDICTION · Funded by the Horizon 2020 Framework Programme of the European Union · NATURAL ENVIRONMENT RESEARCH COUNCIL · NSF · U.S. DEPARTMENT OF ENERGY | Office of Science · Office of Naval Research Science & Technology