Arctic Sea Ice Predictability & the Sea Ice Prediction Network (SIPN)

Decline in the extent and thickness of Arctic sea ice is an active area of scientific effort and one with significant implications for ecosystems and communities. Forecasting for seasonal timescales (i.e., the summer and into fall) is of particular interest to many stakeholders. However, seasonal forecasting is challenging due to the variable nature of weather and ocean behavior over that timescale as well as current limits to data and modeling capabilities.

The Sea Ice Prediction Network (SIPN), funded in 2013, is developing a collaborative network of scientists and stakeholders to advance research on sea ice prediction and communicate sea ice knowledge and tools.

Project Background

- Decline in the extent and thickness of Arctic sea ice is an active area of scientific effort and one with significant implications for ecosystems and communities.
- Forecasting for seasonal timescales (i.e., the summer and into fall) is of particular interest to many stakeholders.
- However, seasonal forecasting is challenging due to the variable nature of weather and ocean behavior over that timescale as well as current limits to data and modeling capabilities.
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Current Project Highlights

The 2015 Sea Ice Outlook (SIO):
SIO provides online reports during the summer melt season that synthesize different projections of the Arctic sea ice minimum at both pan-arctic and regional scales. Monthly reports in June, July, and August include a summary of those predictions and discussion about the range of predictive methods, concurrent Arctic sea ice and weather conditions, and other variables that affect sea ice. The 2015 SIO received 105 submissions from June through August focused on pan-Arctic conditions and a total of three regional submissions. The August median Outlook for September Arctic sea ice extent was 4.8 million square kilometers (M km²). The observed September sea ice extent was 4.63 M km² according to National Snow and Ice Data Center estimates.

Join the Network!

Project collaborators and network participants of all disciplines and interests are invited to join the network. Ways to participate range from simply signing up for the mailing list to joining a SIPN Action Team, which are small groups convened to develop a specific product or task.

Sign up for the SIPN mailing list or send in an interest form for joining the network through the website: [http://www.arcus.org/sipn](http://www.arcus.org/sipn)

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