

Navigating Sea Ice

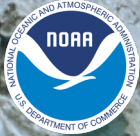
An aerial photograph showing a dark blue ship, the R/V Norseman II, moving through a vast expanse of sea ice. The ice consists of numerous small, irregular floes of varying sizes, creating a textured, light blue and white surface. The ship's wake is visible as a dark line of water trailing behind it. The overall scene is a high-angle view of the ship's path through the ice pack.

On June 04, 2024 the R/V Norseman II and its crew of more than 20 people became trapped in sea ice off the coast of Alaska during a scientific expedition. For two weeks, forecasters at the Alaskan Sea Ice Program monitored the ship's condition and location in the ice. Using a tool developed by NOAA's Cooperative Institute for Meteorological Satellite Studies, forecasters were able to help safely navigate the ship through the dangerous ice pack.



AMSR2

Satellite-based sea ice detection



NOAA's Cooperative Institute for Meteorological Satellite Studies developed a satellite-based sea ice detection algorithm using Advanced Microwave Scanning Radiometer data to provide forecasters with high-resolution images of changing sea ice conditions.

- Near-real-time images are used by forecasters and ice analysts at the Alaska Sea Ice Program and US National Ice Center.
- Provides visibility of sea ice even during cloudy conditions when conventional tracking tools become unavailable.
- Future developments will provide critical enhancements to improve how we track ice motion and sea ice concentration.

Innovative research and development at the Cooperative Institute for Meteorological Satellite Studies supports NOAA's mission to save lives and protect property