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Weather
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Improve
Arctic

Improving situational awareness is a critical element in supporting planning and emergency response efforts to environmental marine hazards in the Arctic. However, several factors complicate planning and emergency responses to maritime hazards in the Arctic; including the remote location of disasters, limited local response assets, and infrastructure. While some tools provide information on environmental conditions in the Arctic, there is a need to improve decision support tools in manners that better serve operators. To address this need, the research team on this project developed a decision support tool, grounded in stakeholder interactions, to support weather and sea ice-sensitive decision-making related to marine environmental hazards in the Arctic. The project was focused on the waters surrounding Utqiagvik, Alaska.

This research project aims to improve USCG and other DHS Arctic maritime operator situational awareness. The forecasting tools developed from this project will improve crisis response by enhancing the support for planning an emergency response to meteorological and environmental marine hazards in the Arctic. Researchers will develop a decision support tool, grounded in stakeholder interactions, to support weather and sea ice-sensitive decision making. This includes facilitated and deliberate interactions among University of Alaska researchers, USCG emergency responders, NOAA forecasters, and marine operators in the Arctic. Researchers will focus investigation on the waters surrounding Utqiagvik (Barrow), Alaska; a sub region of the North Slope located on the north coast of Alaska between the Chukchi and Beaufort Seas.

