

Completion of 7th Consecutive Year of Sea Ice Analysis from the Chukchi Sea

Tom Weingartner of the University of Alaska's College of Fisheries and Ocean Sciences and ASL are wrapping up the analysis of the 2014-15 ice draft, ice drift and current data from the Chukchi Sea Environmental Studies Program (CSESP - <u>www.chukchiscience.com</u>) through funding from BOEM (Bureau of Ocean Energy Management). The completion of this analysis marks a milestone in a series of collaborations to better understand the Chukchi Sea.

Two of the sites being analyzed have been observed since Shell Exploration and Production first started making measurements in the Chukchi Sea in 2008. Since those first deployments, a total of 23 annual data sets were collected from 6 sites. Most of those measurements were done for Shell under the direction of Olgoonik-Fairweather, who assembled a dedicated team of scientists and engineers from a variety of fields in both academia and the private sector. The science team was supported by the Inupiat communities of the North Slope Borough. In addition to providing skilled marine mammal observers with a keen eye and traditional knowledge, they also provided excellent logistical support to the program.

In 2015 Shell abandoned its plans for production in the Chukchi Sea. To carry on its legacy of investigations in the Chukchi, Shell made all of the data it had gathered in the Chukchi and Beaufort Seas publicly available. The analysis funded by BOEM will allow the time-series of ice drift and ice draft to be extended another year (Figure 1). The results will be published in peer-reviewed papers and a 2018 final report for the Bureau of Ocean Energy Management funded study "Characterization of the Circulation on the Continental Shelf Areas of the Northeast Chukchi and Western Beaufort Seas", Cooperative Agreement # M12AC00008.



Figure 1: Sample vector average ice drifts for different years for the January to March period.