Successful Deployment and Recovery of ASL's Acoustic Zooplankton Fish Profilers in the Chukchi Sea of the Arctic Ocean

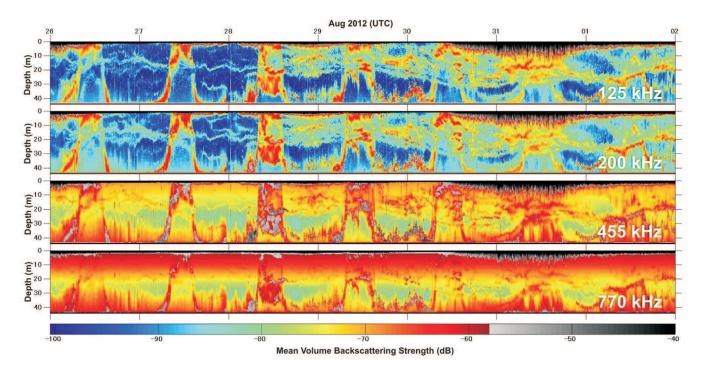
Dr. Takashi Kikuchi of the Japanese Agency for Marine-Earth Science and Technology (JAMSTEC), who is one of the principal investigators of GRENE Arctic Climate Change Research Project JAPAN(*), and his colleagues purchased 2 internally recording, internally powered, multiple-frequency scientific echo-sounders (AZFPs) from ASL Environmental Sciences Inc, Canada in March 2012.

The first AZFP was deployed on July 16th 2012 from the CCGS S.W. Laurier at a biological hotspot in the southern Chukchi Sea of the Arctic Ocean. The instrument was placed at 43m water depth in 50m of water. It was successfully recovered on October 2nd 2012 from the Japanese oceanographic research vessel, R/V Mirai by JAMSTEC. Dr. Kikuchi and his colleagues have confirmed that the collected data is good. Also preliminary results using plankton net data analyzed by Dr. Minoru Kitamura (JAMSTEC) show that copepod was dominant in that area. The research project science team will be analyzing the 4-frequency data in the coming months.

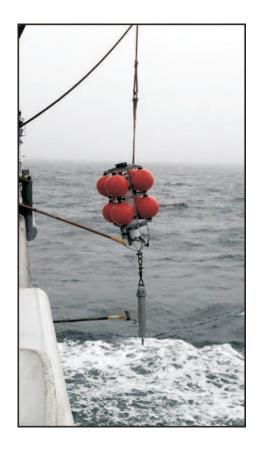
During the R/V Mirai cruise, the second AZFP was deployed on October 2nd 2012 to collect data over the winter season and will be recovered in the coming summer 2013. The data will show changes of zooplankton and fish activities related to seasonal change of sea ice cover in the Chukchi Sea of the Arctic Ocean.

(*) GRENE Arctic Climate Research Project

To understand the mechanism of warming amplification of the Arctic, understand the Arctic system for global climate and future change, evaluate of the impacts of Arctic change on weather and climate in Japan, marine ecosystem and fisheries, and predict sea ice distribution for the Arctic sea routes, GRENE Arctic Climate Research Project was initiated in FY2011. The project is funded by the Ministry of Education, Culture, Sports, Science and Technology-Japan (MEXT) for 5 years (2011-2015) and mainly managed by the National Institute of Polar Research, JAPAN (NIPR). Detailed information is shown in the following web site, http://www.nipr.ac.jp/grene/e/index.html



One week echogram from Acoustic Zooplankton Fish Profiler (AZFP) attached on SCH-12 between August 26 and September 2, 2012.



AZFP recovery from the Chukchi Sea in October 2012 during R/V Mirai Arctic cruise.

R/V Mirai Arctic Cruise

