

OCCI Grant Leads to NSF Funding to investigate the marine margins of Greenland's glaciers

A WHOI-led study of the Sarqardliup Glacier in West Greenland will continue with a grant from NSF's [Office of Polar Programs, Arctic Division](#). WHOI Associate Scientists [Fiamma Straneo](#), [Sarah Das](#), [Hanu Singh](#), and Senior Scientist [Al Plueddeman](#) will analyze data collected at the margins of the glacier in 2012 and 2013. The field portion was funded in part by OCCI's [Arctic Research Initiative](#) through two projects: [Seasonal Fluxes Across Submarine Ice Sheet Margins](#) and [Autonomous CTD Profiling at the Edge of Calving Glaciers](#). Data collected from these projects was leveraged to win the NSF grant. The team, led by Plueddeman and WHOI Senior Engineering Assistant Amy Kukulya, used a [REMUS 100](#) autonomous underwater vehicle, a Jetyak, a helicopter and small boats to collect data at the edge of the glacier. The Jetyak, a new autonomous surface vehicle developed by Singh, is a modified kayak powered by remote control that can carry a suite of instruments, including multibeam sonar and a variety of sensors. The project has led to some of the first measurements within tens of meters of the glacier's edge. These measurements will help in understanding the exchange of heat and freshwater between the glacier and the ocean.