**Snow Accumulation Results from Airborne Radar in the Gulf of Alaska**

Snow accumulation is a critical parameter to constrain for estimating glacier mass balance and modeling glacier dynamics to predict their response to climate change. The rugged terrain and vast area of glaciers in the Gulf of Alaska region inherently leads to difficulty in measuring snow accumulation on glaciers. However, in-situ observations are difficult to perform, and satellite-based methods are generally inaccurate and need validation. It is proposed to analyze data acquired as part of NASA’s Operation IceBridge by airborne radar developed and operated by the University of Kansas Center for Remote Sensing of Ice Sheets (KU CReSIS). This data was collected over glaciers in the Gulf of Alaska in May 2018 and May 2021 and has yet to be analyzed. The KU CReSIS data exhibit reflectors meters below the surface, sometimes with multiple reflectors. The exact meaning of these reflectors is uncertain, though it is thought that they are showing yearly (single reflector) and multiyear (multiple reflectors) snow accumulation on glaciers. The reflectors will be mapped out and the depths compared with other snow measurement techniques in the area including ice cores and satellite measurements. Comparisons with satellite measurements has the possibility of opening the door to improving algorithms for satellite-based measurements. Through analyzing radar of snow measurements, the snow accumulation on glaciers will be better measured. An accurate measurement of snow on glaciers will aid in glacier modeling and predicting future impacts worldwide caused from melting glaciers.