

PROJECT SUMMARY

Overview: The National Science Foundation Division of Polar Programs (NSF-DPP) has been funding substantial scientific activities at the location now known as Summit Station for nearly 30 years. Currently, Summit Station (72 N, 38 W, 3250 m.a.s.l.) hosts the Greenland Environmental Observatory, a cooperation between the NSF and National Oceanic and Atmospheric Administration with permission from the Danish Commission for Scientific Research in Greenland to provide long-term environmental measurements. Summit is the only year-round, high-elevation, free-tropospheric, inland environmental observatory in the Arctic, and fills a unique niche in the international scientific community's global measurement capability.

In 1999 the NSF Research Support and Logistics program (RSL) funded the formation of a Science Coordination Office (SCO) for Summit to provide guidance on operations, planning, and management and to facilitate cooperation amongst investigators using the station for research. Since 2016 the SCO has also assisted in planning support for projects throughout central Greenland, particularly those making oversnow traverses.

Intellectual Merit: The SCO is an advisory body, serving the scientific community, RSL, and the Arctic Logistics Contractor. We make recommendations about ways to accommodate or mitigate conflicting requests from different science teams, and suggest ways projects might reduce their logistical footprint. SCO also advocates on behalf of the community, suggesting science-based priorities for capital investments by RSL at Summit that enhance capability while keeping the station financially sustainable.

The SCO provides an important, independent, voice for the scientific community; providing input of community concerns and needs during planning for management of the facility, and relaying information regarding how CPS and RSL respond back out to the researchers. The SCO strives to develop a true community of Summit users through open communication and by encouraging shared use of resources and key data sets. The SCO also endeavors to focus the Summit community on the transformative questions identified in "Sustaining the Science Impact of Summit Station, Greenland" and encourages the community to synthesize available data to identify innovative approaches to address these knowledge gaps.

Broader Impacts : SCO efforts to increase the sustainability of Summit Station help to ensure the availability of this unique asset for research and education. Summit serves as a stopping point for educational groups from high school to post-graduate. These groups depend on input from the SCO to determine appropriate use and timing of these visits.

The SCO advances discovery and understanding while promoting teaching, training, and learning primarily through our website. New features of our website aimed specifically at new Principal Investigators will serve double-duty as rich web content for interested students and the general public. The ability to quickly link to our content will enable outreach programs by Summit researchers to increase their impact.

Finally, much effort in this project will be placed towards encouraging broad dissemination of results to enhance scientific and technical understanding. From the basics of providing a clearinghouse for accessing Summit data, to our extensive Summit bibliography, to our detailed activities in planning to avoid duplicate collection of data at Summit, many of our efforts are charged with the goal of disseminating existing data more fully.