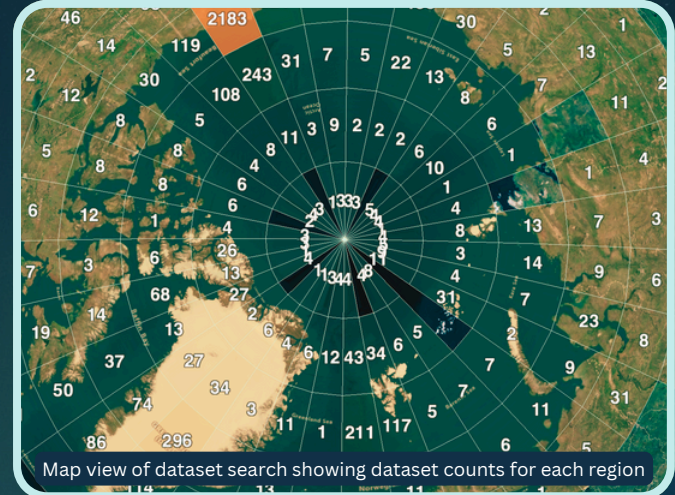# Arctic Data Center

Promoting National Security, Prosperity, and Welfare

By supporting science-based decisions in the strategically vital Arctic, the Arctic Data Center advances U.S. national security, economic prosperity, and environmental resilience. It preserves and provides access to multidisciplinary datasets that support science-based decisions for defense, resource management, resilience of Alaskan and Arctic communities, infrastructure planning, environmental stewardship, and economic policy in a region of rapid change.

Map view of dataset search showing dataset counts for each region

The Impact of the Arctic Data Center

Hazards

Given the remoteness of many Alaskan communities, understanding surrounding landscapes is vital for infrastructure planning and disaster preparedness. The Center hosts numerous hazard-related datasets, including wildfire risk indices from satellite-based vegetation classification[1], AI-detected landslides from satellite data[2], and those developed with local communities[3]—all of which can directly inform policies and actions to protect Alaskan communities.

Resources

The Center also holds a significant collection of data from other key Arctic regions, including hundreds of datasets from Greenland and Norway. Many of these datasets, specifically those related to freshwater, geology, and permafrost[4], can inform both infrastructure planning and the potential for resource exploration in areas with existing and future oil and gas resources.

Defense

The Arctic Data Center stores and provides access to key datasets ranging from hydrographic measurements in the Bering Sea[5] to acoustic data in the Bering Strait[6]. Continued preservation of these datasets could provide important information for the Department of Defense conducting research and operations in the region.