

Alaska Fellows Program position description

Alaska Climate Adaptation Science Center (AK CASC) Geohazard Visualization and Communication fellow

Anchorage, AK

This position is part of the [Alaska Fellows Program](#). All fellows live together, “in community,” in their respective host site. Each host site is unique and remarkable.

Fellows receive housing, a \$1200 monthly living stipend and a \$750 relocation stipend. The fellowship includes facilitated and funded opening and closing retreats.

For other questions about the application process, email applications@alaskafellows.org.

Work Term: Sept 1, 2026 - May 31, 2027

Host: Alaska Climate Adaptation Science Center (AK CASC)

Location: Anchorage, AK

Contact: Kristin Timm, University Director, AK CASC, kmtimm@alaska.edu

Title: Geohazard Visualization and Communication fellow

Organization Description:

Established in 2010 as a partnership between the University of Alaska and the United States Geological Survey, the [Alaska Climate Adaptation Science Center \(AK CASC\)](#) is Congressionally mandated to meet state, federal, and Tribal science needs around climate impacts, adaptation, and resilience.

Hosted by UAF’s International Arctic Research Center with a USGS-hosted office in Anchorage, the Alaska CASC provides scientific information, tools, and techniques that managers and others interested in land, water, wildlife, and cultural resources can use to adapt to the impacts of climate change.

Position Description:

Alaska faces a growing geohazard crisis—landslides, glacial lake outburst floods (GLOFs), avalanches, and coastal inundation are increasing in frequency and severity as the climate changes. Responding effectively requires not only rigorous science, but the tools and communication strategies to make that science accessible, actionable, and trustworthy for the communities most at risk.

This 9-month fellowship will focus on one or more interconnected areas of need: (1) building a foundational database for statewide geohazard analysis; (2) developing compelling, science-grounded data visualizations and animations to communicate hazard dynamics to diverse audiences; and (3) synthesizing social and behavioral science literature to improve how geohazard risk is communicated to Tribes, rural communities, and local decision-makers.

The fellow will contribute to ongoing applied research while developing durable tools and products with long-term value for the AK CASC and the communities and Tribes we serve. Depending on the fellow's background and interests, the position can be weighted toward one or two of these areas, though all three are considered priorities.

Background and Context:

Alaska's geohazard landscape is rapidly changing. Retreating glaciers are destabilizing slopes and forming new proglacial lakes prone to sudden outburst floods. Coastal communities face accelerating erosion and inundation from storms once considered rare. In this environment, the scientific and communication infrastructure needed to support community decision-making has struggled to keep pace.

A key infrastructure gap is the absence of a flexible, well-structured database aggregating the variables needed for statewide geohazard analysis—one capable of supporting research questions such as where future tsunamigenic landslides are most likely to occur, or which glaciers are at highest risk of catastrophic collapse. Building this geodatabase is a foundational step for multiple future studies.

Equally urgent is the challenge of communicating hazard information to communities in ways that are timely and sensitive to the deeply personal decisions involved. The AK CASC is currently engaged with several communities navigating these questions, including work in Unalakleet, where residents face long-term decisions about voluntary retreat from areas at risk of severe inundation. This work illustrates the stakes of getting risk communication right—and the real costs of getting it wrong.

Finally, there is a recognized need for high-quality scientific visualizations and animations that can convey hazard dynamics—wave action during storms, time-lapsed glacier melt, atmospheric river movement—to audiences who may have limited exposure to the underlying science.

Core Focus Areas

Focus Area 1: Geohazard Database Development

The fellow will work directly with AK CASC staff to design and populate a database structured to support geospatial analysis of statewide geohazard risk. This includes identifying and integrating relevant data layers, developing documentation and metadata standards, and contributing to the methodological groundwork for future hazard studies.

Focus Area 2: Scientific Data Visualization and Animation

The fellow will develop a small portfolio of data-driven visualizations and animations designed to communicate geohazard dynamics to non-specialist audiences. Products might include animated storm surge simulations, time-lapsed glacier melt sequences, or visual representations of atmospheric river movement and associated hazard triggers. These products require close collaboration with scientists to ensure accuracy and interpretive integrity.

Focus Area 3: Social Science Synthesis and Risk Communication Guidance

The fellow will synthesize existing literature on geohazard risk communication and risk perception, with particular attention to frameworks applicable in Alaska's Tribal and rural contexts. The goal is to develop practical guidance materials that can support agency staff and community partners in communicating hazard information more effectively, including in situations involving difficult, emotionally charged decisions.

Qualifications:

- This position is designed for a fellow who brings genuine breadth—someone comfortable working across technical and humanistic domains—or who has deep expertise in one area and strong curiosity about the others. The fellow should be self-directed, collaborative, and motivated by work with communities and decision makers.
- Background in geoscience, geography, GIS, environmental science, or a related technical field, AND/OR social science, risk communication, or science communication
- Interest in or experience working with geospatial data
- Interest in or experience with scientific visualization, data animation, or graphic communication of complex data
- Interest in or experience with behavioral or social science frameworks related to risk, trust, or decision-making
- Strong writing skills and comfort producing materials for both technical and non-specialist audiences
- Interest in Indigenous and rural Alaska contexts; experience with or commitment to community-centered approaches

Work Authorization: This host organization is currently unable to sponsor visas but can work with applicants who have the option of OPT or OPT-STEM extensions on their student visas.

Application Materials: A complete application should include:

- Cover letter – please share which one or more of the focus areas you are most interested in or best equipped to help us address
- Resume
- Two references
- Two sample work products

Contact Information: Kristin Timm, University Director, AK CASC, kmtimm@alaska.edu

To Apply: Please complete the google form linked [HERE](#) including submitting all requested application materials.