

**GEOPHYSICAL SOCIETY OF ALASKA
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TITLE

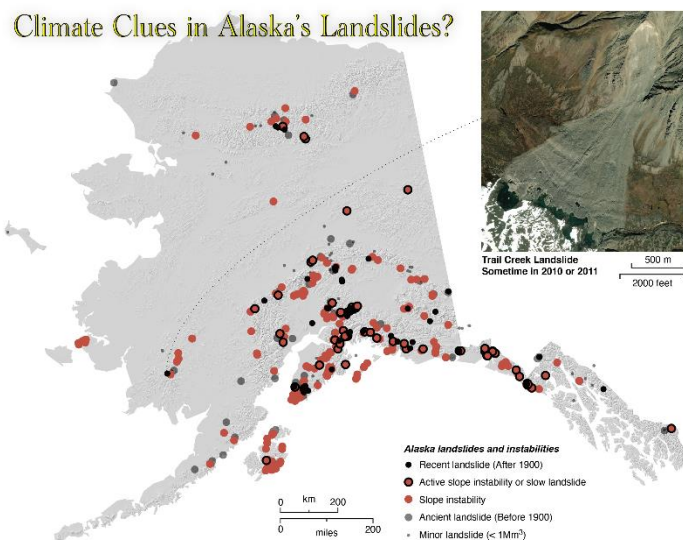
Climate Clues in Alaska's Landslides?

SPEAKER

Bretwood Higman

ABSTRACT

Over the past year and a half I've built a preliminary inventory of landslides and unstable slopes in Alaska, and I'd like to share what I have so far. My presentation will use this inventory to explore two questions: What previously overlooked instabilities might pose a hazard to Alaskans? Is there evidence that climate change is increasing landslide hazards? The inventory currently includes nearly 400 entries describing landslides or unstable slopes over one million cubic meters in volume. It includes a number of slopes that are actively deforming within the past few decades, typically above thinning glaciers or in areas where permafrost warming may be a factor. Catastrophic landslides, especially common over the past few decades, typically originate high in the mountains and flow onto glaciers or interior valley floors. The spatial distribution of instabilities and landslides is very patchy; this likely in part reflects inconsistencies in data collection, but some of this patchiness appears to be real. My primary data sources to build this inventory have included a variety of public remote-sensed datasets, as well as a number of eyewitness accounts from pilots and adventurers.



BIOGRAPHY

Hig (Bretwood Higman) received a PhD at the University of Washington, where he studied the geologic records of tsunamis. He now lives in his home-town of Seldovia, Alaska, where he splits time between his family, the study of geologic and climate hazards, trail building, and science education amongst other things. He has helped study several sites where there is a history of or potential for landslide-generated tsunamis including Taan Fiord in Icy Bay, Grewingk Lake near Homer, and Barry Arm in Prince William Sound.