



The Arctic Institute of North America presents the

Arctic Speaker Series

Earthscope, USArray and Related Earthquake Studies in NW Canada

Who: Mike Schmidt

Date: Monday, March 7, 2016

Time: 11:00 am – 12:00 pm

Location: University of Calgary; ES-702



The US National Science Foundation (NSF) has provided funding for a large collaborative research project known as EarthScope with three major components: USArray, Plate Boundary Observatory (PBO), and SAFOD, (San Andreas Fault Observatory at Depth). The USArray component of Earthscope utilizes a Transportable Array (TA) of seismometers to record earthquakes, local and distal. Starting in 2004 approximately 1,700 sites were instrumented in the lower 48, as well as in eastern Canada with each block of sites occupied for approximately 2 years. This data has been openly distributed to researchers worldwide to study the building blocks of the North American continent. A wealth of data and stunning image renderings and videos have been produced over the last 12 years. The PBO, consisting of over 1,500 permanent GPS installations in the lower 48 and Alaska, along with the strainmeter network has similarly provided unparalleled data sets for the scientific community as well as pushing the technological envelope as has SAFOD.

With the TA deployment in the lower 48 complete, the TA is transitioning to Alaska, Yukon, NWT, and northern BC with 36 new sites planned for the Canadian portion complementing approx. 30 sites already operated by Canadian agencies and researchers. The first TA sites installed in Canada was at Eagle Plains (2012) with another two installed in the NWT in 2013. In 2015 an additional 6 sites were deployed in Yukon. The Arctic Institute of North America at the University of Calgary has been actively involved in the TA project in NW Canada since 2014 as well as related projects through the Yukon Geological Survey and Colorado State University. This seminar will provide a general overview of these projects and also briefly discuss some opportunities for new collaborative research projects.

Biography: Mike Schmidt studied Geomatics Engineering at the University of Calgary. He is a registered Professional Engineer who has had a long and decorated career with the Geological Survey of Canada. In 1992, he led the Royal Canadian Geographic Society's expedition to measure the height of Mount Logan. He currently serves as the Science Coordinator for the Kluane Lake Research Station.