

### Description of ASM3 Webinar, Theme 2: Understand

The next webinar of the 3<sup>rd</sup> Arctic Science Ministerial (ASM3) Webinar Series will focus on Theme 2: Understand. An overview of progress in enhancing our understanding and predictive capabilities since ASM2 will be shared as well as new projects and activities on the horizon. This will be followed by a series of short presentations highlighting a few observation projects submitted by ASM3 participating countries and organizations. Recommended Actions to increase understanding of the Arctic and international collaboration will be presented. A short Q&A will follow.

#### Theme 2: Understand Webinar

**17 February 2021, 13:00 UTC**

#### DRAFT PROGRAM

Housekeeping remarks, brief update on ASM3 process and Arctic Land Rights Acknowledgement

Overview of Theme 2: Understand – Progress since ASM2 and Upcoming Projects

*[Mia Bennett, ASM3 Science Advisory Board Member]*

Highlighted Projects from Theme 1: Observe

PROJecTing sEa-level rise: from iCe sheets to local implicaTions – PROTECT

*[Speaker: Gaël Durand, CNRS – IGE, Project Lead]*

ARCPATH: Arctic Climate Predictions: Pathways to Resilient, Sustainable Societies

*[Speaker: Prof. Brynhildur Davíðsdóttir, University of Iceland]*

Linkage between Arctic, climate change, and marine debris

*[Speaker: Dr. Suchana Apple Chavanich, Chulalongkorn University]*

NUNATARYUK: co-designed adaptation and mitigation strategies for thawing permafrost and coastal erosion in Northern Canada

*[Speaker: Prof. Dr. Hugues Lantuit, Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Project Lead]*

CHARTER: GLObal effort (CHina, Russia, Canada, Iceland, etc.) to understand how climate and biodiversity changes will impact arctic communities and their adaptive capacity

*[Speaker: Bruce Forbes, Arctic Centre, University of Lapland, Project Lead]*

Recommended Actions to Increase International Observations and Data Sharing

*[Henry Burgess, ASM3 Science Advisory Board Member]*

Question and Answer Session

Wrap-up and Announcement of Upcoming Webinars

**End: 14:00 UTC**

## Background

### **Theme 2: Understand**

*Enhance understanding and prediction capability on Arctic environmental and social systems and its global impact*

The interconnected effects of both globalization and global climate change are impacting Arctic communities and the environment. It is increasingly understood that the Arctic environment is not only a very complex system on its own, but it is connected to the global weather and climate system as well as the global socio-economic system. The people who call the Arctic home also depend inextricably on the Arctic environment and its living and non-living resources. The changes in the natural environment in the Arctic will have cascading impacts on the social environment, affecting the rest of the world as well. We must understand the structure and dynamics of this complex system. Reliable predictions are essential for developing effective planning for mitigation and adaptation measures and processes. To enable informative predictions, our understanding of Arctic change needs to improve significantly.