

## Applied Earth Observations Innovation Partnership Webinar Series

December 8, 1:00-2:30 pm (Eastern)

**In this webinar, Dr. Thomas Neumann, Project Scientist for the ICESat-2 mission, will provide science and applications highlights, an overview of the access and discovery tools available for ICESat-2, and discuss product updates relevant to the land management community. His talk will be followed by a feature presentation from Dr. Laura Duncanson, University of Maryland.**

The launch of NASA's Global Ecosystem Dynamics Investigation (GEDI) and Ice Cloud and Elevation Satellite (ICESat-2) in 2018 have provided a key opportunity to collect data across the full boreal domain. To date, limited satellite data have been available that are sensitive to Aboveground Biomass Density (AGBD). Common approaches that have generated biomass maps using various combinations of passive optical data (e.g. Landsat), regional zones, sparse spaceborne lidar, and airborne lidar transects often do not resolve relevant spatial variation in forest biomass. Those using first generation ICESat GLAS data require updating to reflect changes in forested systems over the past decade. This talk will highlight progress and results from research focused on generating a [NASA ABoVE-wide](#) AGBD map with ICESat-2 data, and extension of this product across the entire boreal system. It will also introduce the [Biomass Earthdata Dashboard](#), an experimental biomass harmonization activity, where the new (still in development) ICESat-2 Boreal data for 2020 can be accessed. Feedback from the AEOIP community to help improve the Dashboard is encouraged and welcomed.



**Laura Duncanson** is a remote sensing scientist and Assistant Professor at the University of Maryland, College Park in the Department of Geographical Sciences. She completed her PhD at UMD, followed by a postdoctoral fellowship at NASA Goddard Space Flight Center, focused on using lidar for forest structure mapping and monitoring. She is currently co-lead of the NASA GEDI mission's Footprint-level forest aboveground biomass product, co-lead of the CEOS WGCV LPV Biomass Focus Area, Project Scientist for the NASA-ESA Multi Mission Algorithm and Analysis Platform (MAAP), and a member of several NASA science teams (GEDI, ICESat-2, ABoVE, CMS). Her current research interests focus on applying satellite lidar for biomass mapping and monitoring, with an emphasis on reducing uncertainties in the global carbon cycle and informing forest management toward climate mitigation.