

Please join us at the **AOS Applications Seminar Series** talk:

**The NASA EVS-3 project Investigation of Microphysics and Precipitation in Atlantic Coast-Threatening Snowstorms (IMPACTS): Relevance to AOS**

**Invited Speaker:** Lynn McMurdie (University of Washington)

**Thursday, August 18, 2022**  
12:00PM-1:00PM Eastern Time

**Abstract:** The Investigation of Microphysics and Precipitation for Atlantic Coast-Threatening Snowstorms (IMPACTS) is a NASA funded EVS-3 project to study Northeast United States snowstorms. The goals of IMPACTS are to improve the understanding of snowfall processes, remote sensing of snow, and the prediction of banded structure and evolution. The primary observing platforms for IMPACTS are two research aircraft: the “satellite-simulating” ER-2, which flies high above the storms equipped with passive and active remote sensing instruments relevant to both the AOS inclined and polar projects and the “storm-penetrating” P-3, which flies within clouds equipped with microphysical probes and environmental measuring instrumentation. These two aircraft sample in coordinated flight legs so that the remote sensing measurements by the ER-2 are directly related to the microphysical measurements by the P-3. These coordinated datasets can be used to create and test AOS cloud and precipitation algorithms, especially the estimation of microphysical properties from remote sensors. This presentation will highlight the measurements taken so far in the 2020 and 2022 deployments and present preliminary results from select storm systems sampled.

**About Our Speaker**



Dr. McMurdie is a Research Associate Professor at the department of Atmospheric Sciences, University of Washington (UW). She received her PhD from UW under Prof. Kristina Katsaros studying integrated water vapor patterns in oceanic midlatitude cyclones derived from satellite microwave radiometers. She was a postdoctoral scholar at the Cooperative Institute for Meteorology Satellite Studies at the University of Wisconsin and then returned to UW first as a senior lecturer teaching synoptic meteorology and then as a Research Professor. She is an expert in precipitation processes in wintertime midlatitude cyclones, focusing on orographic precipitation and on east coast snowstorms. She is currently the Principal Investigator for the IMPACTS EVS-3 project.