

Measuring the Tropospheric Polar Vortex

Spatial documentation of Arctic atmospheric circulation, particularly upper air soundings, has been a major scientific lack going back to the first International Polar Year in 1883. The purpose of the first IPY was to coordinate scientific research across multiple locations for Arctic phenomena. We propose a NOAA P3 aircraft dropsonde Arctic expedition for January 2026 operating out of Fairbanks and Thule. Goals are understanding of the structure and dynamics for the spatial propagation of the tropospheric polar vortex and to validate reanalyzed products.