



Dr. Claire Pettersen working on NASA supplied instrumentation at the Mid-Mountain site (Colorado).

[S2noClIME Field Catalog](#)



Screenshot of the online and publicly available S2noClIME Field Catalog. Users can look at instrument data and receive field status reports.

“When you have snowfall happening at the top of the mountain and in the cloud, you are getting actual in situ information about the cloud and precipitation microphysics while using these instruments, which we then can use down the line to support and enhance retrievals for GPM’s DPR data products,”
 - Claire Pettersen, U. of Michigan

Early Career Researcher and PMM Science Team member, Dr. Claire Pettersen, takes GPM GV Instruments into the Field

- GPM Infrastructure
- Application Solutions
- Public Societal Benefits

GPM Ground Validation Instruments were deployed to support the NSF-funded S2noClIME 2024/ 2025 Winter Field Campaign near Storm Peak Lab that sits atop Mt. Werner, Colorado. Lead PI is Dr. Pettersen.

GPM GV-provided sensors: disdrometers, which measure snowflake size and rate; precipitation gauges, which track precipitation accumulation; and profiling radars, which help scientists understand snowfall event evolution.

The integration and use of instruments over an entire winter helps further improve understanding of snowfall processes during storms in mountainous terrain and GPM DPR retrievals.

The vast amount of data collected provides the necessary support to improve snowfall forecasts and more accurately predict snowpack that influences water resource management efforts in the western U.S. mountains.