

## Isotopic instruments at your request



NCAR maintains two flight-ready Picarro water vapor isotopic analyzers for community request. These analyzers pull 0.5 L/min and sample with

5 Hz frequency, reducing hysteresis and increasing sensitivity to atmospheric variations on 30-40 m horizontal spatial scales.

More than airborne platforms, the NSF/NCAR aircraft carry in situ and remote-sensing instruments for

- atmospheric state variables
- radiation
- trace gases and aerosols
- cloud particles, and more.

Any researcher eligible for NSF funding may request these airborne laboratories.

## Water vapor and cloud particle sampling

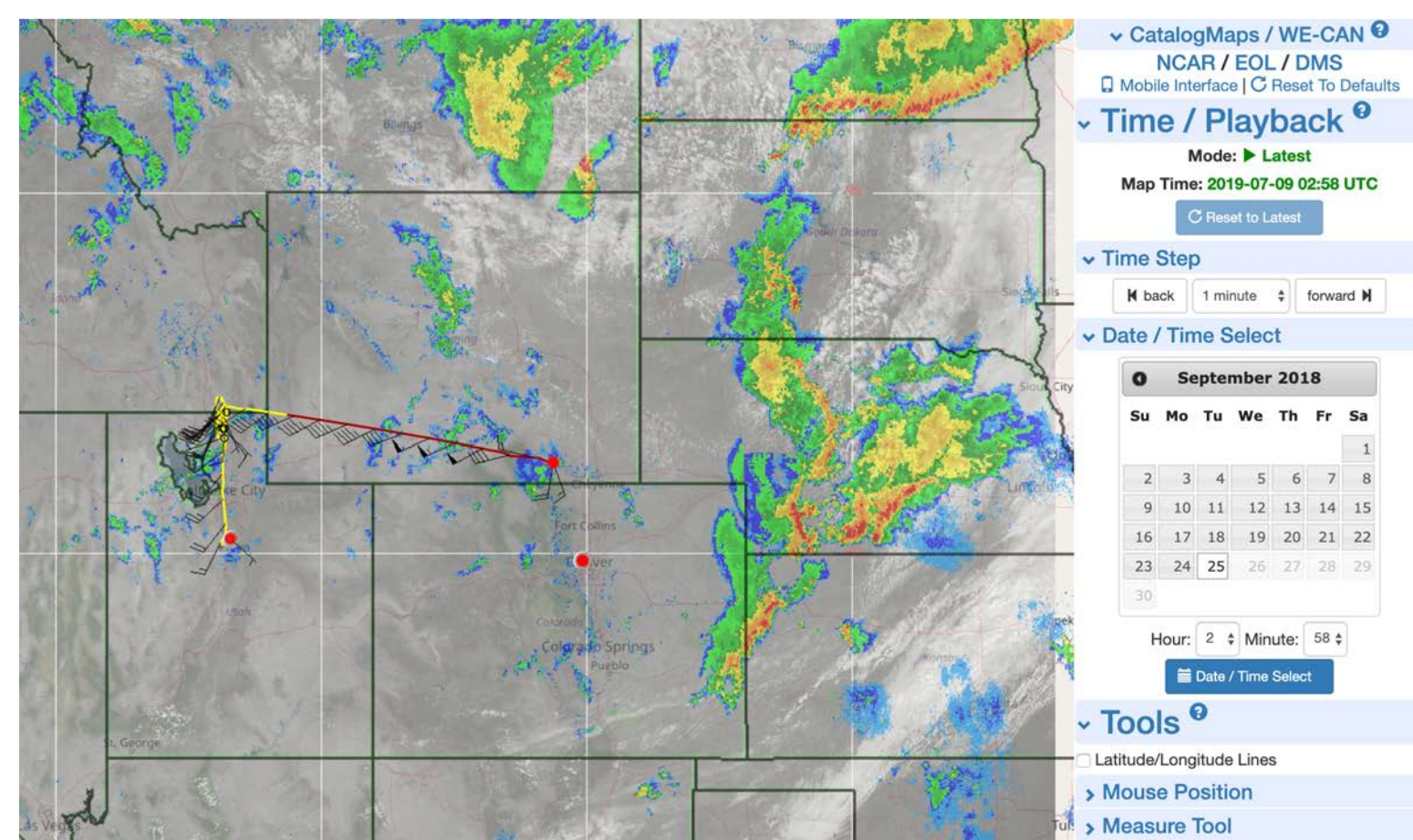


Specially fabricated inlets allow targeted sampling of water in its gas and condensed forms. The Counterflow Virtual Impactor

(pictured here) uses a forced dry air flow to push away gas molecules and selectively send cloud droplets and ice crystals to the analyzers onboard.

## Data visualization tools and archiving

All NCAR-supported airborne missions benefit from the EOL Field Catalog offering real-time and post-flight data visualization, as well as long-term data archiving services for NSF-supported projects. These tools are supported by EOL's data managers and software engineers.



Request documentation depends on the size of the mission but is generally submitted 2-to-3 years out and reviewed for merit and feasibility.

Learn more about requesting our facilities at [eol.ucar.edu](http://eol.ucar.edu) or talk to us at the NCAR/EOL Research Aviation Facility.

## A team of experts to support you

**Scientists and technicians** help with sampling design, installation, and data quality.

**Pilots** help with flight planning.



**Project managers** help guide mission planning, oversee logistics, and assure data quality.