Title: LANL Meteorology Program

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LANL Meteorology Program

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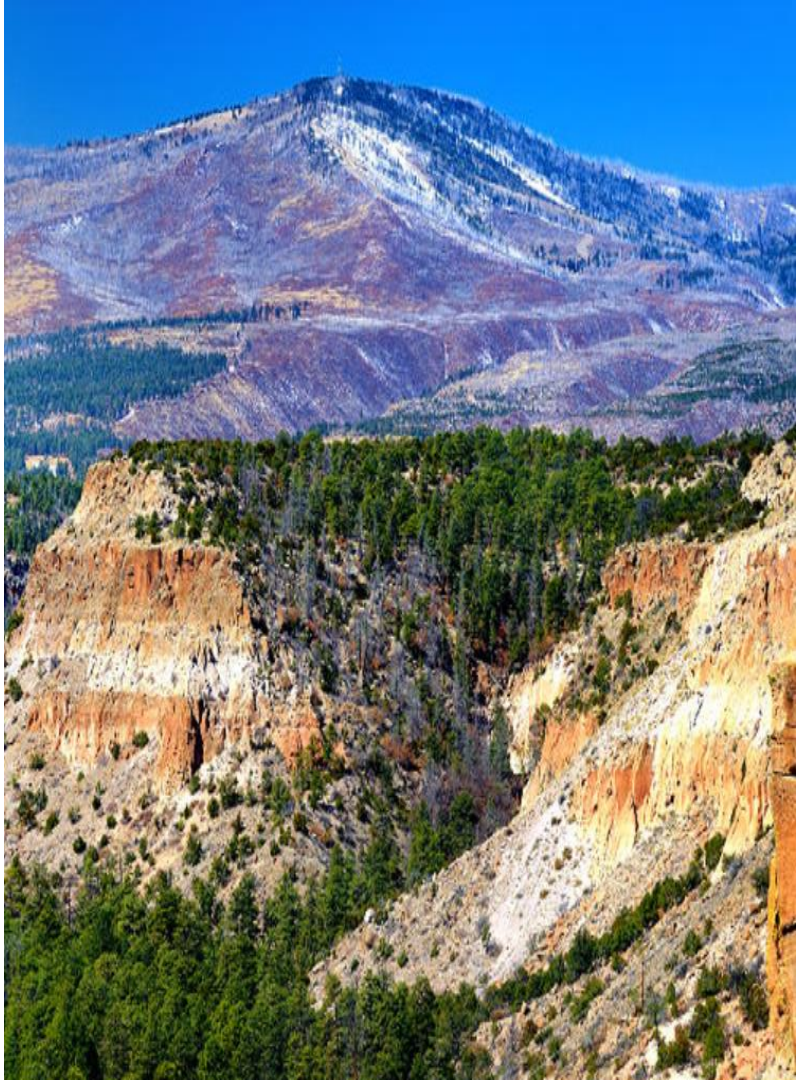
April 14, 2021

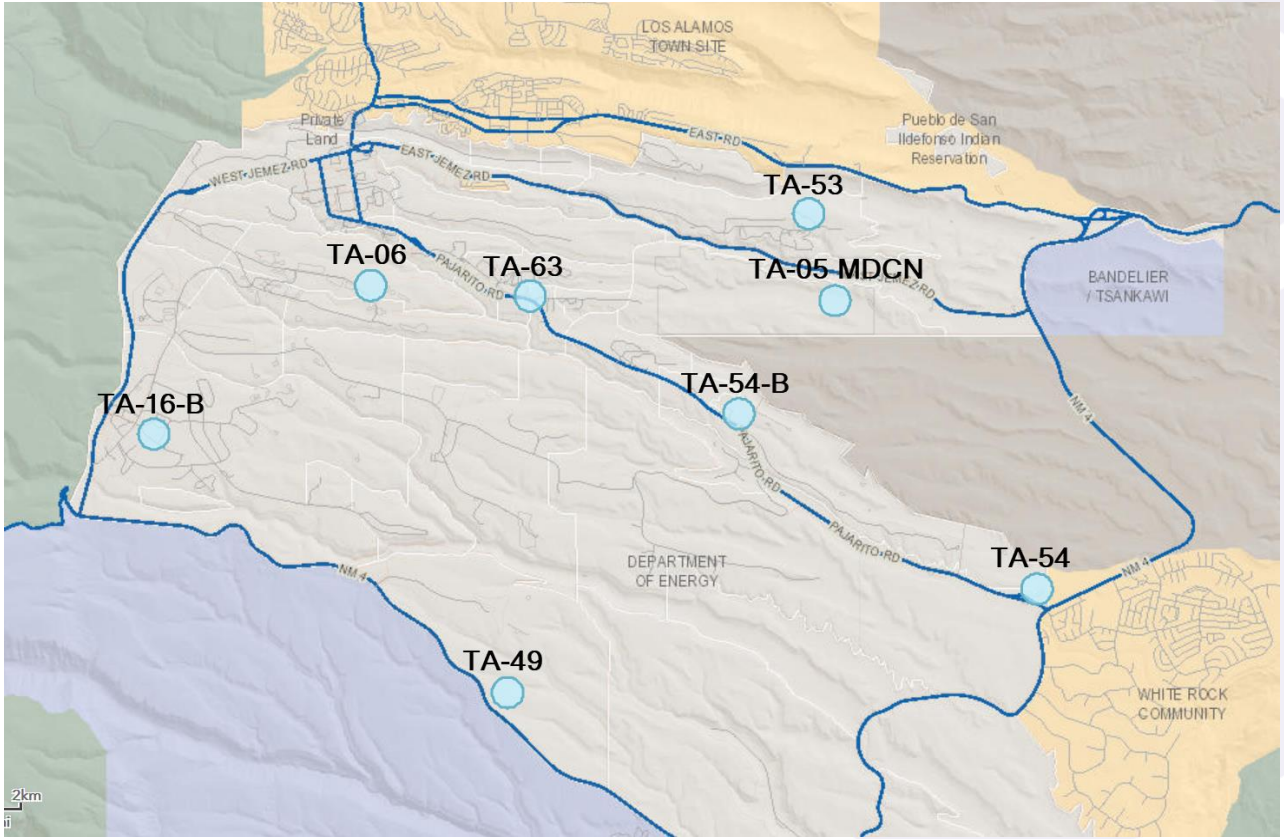
About Us

- Staff
  - 2 meteorologists
  - 1.5 instrument technicians
  - Data steward
  - Minimal IT support
  - Part work from home

- Customers
  - Emergency Operations Center
  - Safety Basis
  - High Explosives
  - Utilities & Infrastructure
  - Various projects



Meteorological Tower Locations



Meteorological Towers

- 8 towers
  - 4 mesa, 3 new mesa
  - 1 canyon

- 10, 46, and 92 m towers

- Wind and temperature on 1, 3, or 4 levels

Surface Instruments

Tipping Bucket Rain Gauge

All Weather Inc 6021-A

Snow Depth

Campbell Scientific SR50

Sodar

Scintec Flat Array XFAS with RASS

Coming Soon

Laser Snow Depth

Lufft SHM31

Radiometer

Radiometrics MP-3000A

2 Trailer Towers

Aluma TM-12

New Towers

New Tower Instruments

Horizontal Wind

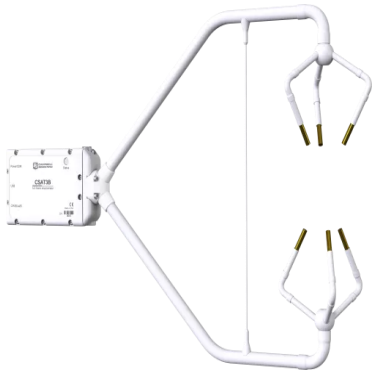
RM Young 05305

Vertical Wind

Gill 27106T

3-D Sonic

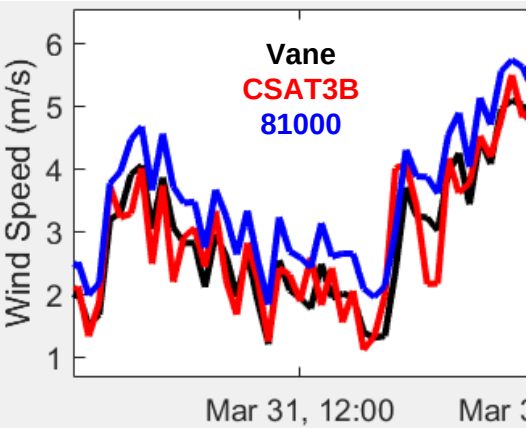
RM Young 81000

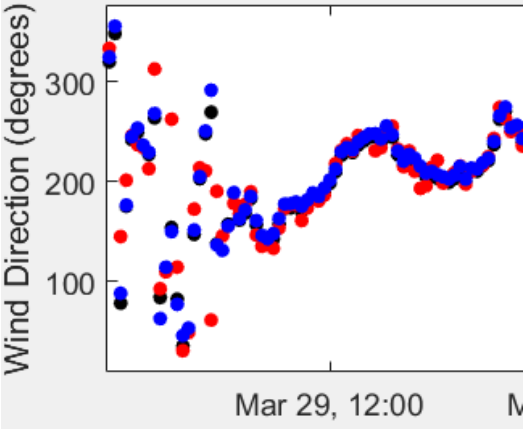


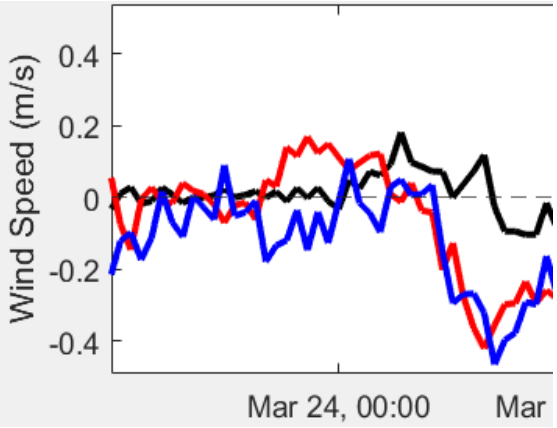
3-D Sonic

Campbell Scientific CSAT3B

Early Results







Wind Speed

RM Young sonic higher than CSI sonic and vane over 98% of the time

Wind Direction

RM Young sonic measures closer to vane, more variance with CSI sonic

Vertical Speed

No trends