Colorado Atmospheric Observatory (CAO) Tall-Tower

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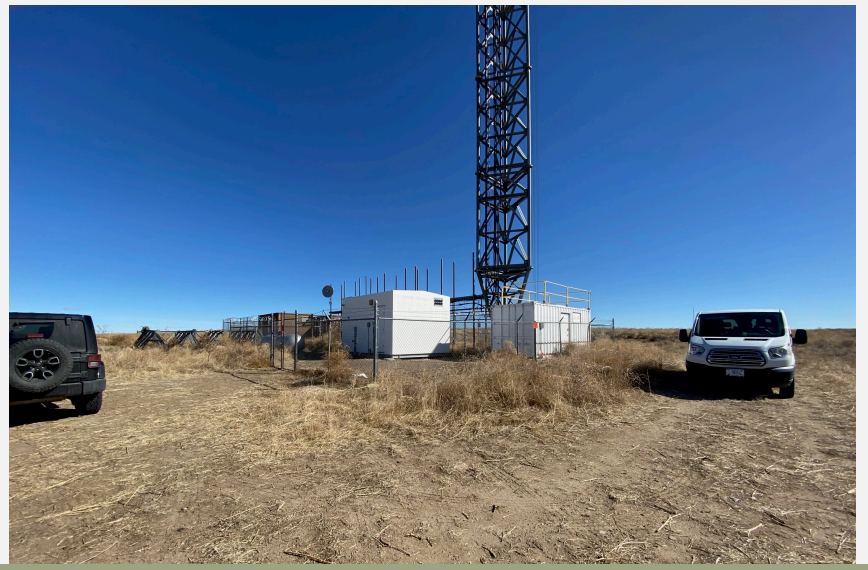
SITE SELECTION

- **Site Infrastructure**
  - Frequent site access
  - Space for science deployments
  - Communication with tower owners

- **Site Specifics**
  - 600 meter tall-tower; Byers, Colorado;
  - Regionally representative
  - Homogeneous landscape
  - “Background” air sampling (not influenced by local pollutants)
  - Study boundary-layer dynamics



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SITE PREP

- **Tower and Ground Infrastructure**
  - Establish Power, Data Utility Services
- **Site Support & Maintenance**
  - Landscape/Accessibility
  - Concrete pads for equipment stability, conex
  - Security/Safety of the site; Remote, rural locations
- **Instrument Communications**
  - Tower Data Acquisition; Prep for future installations

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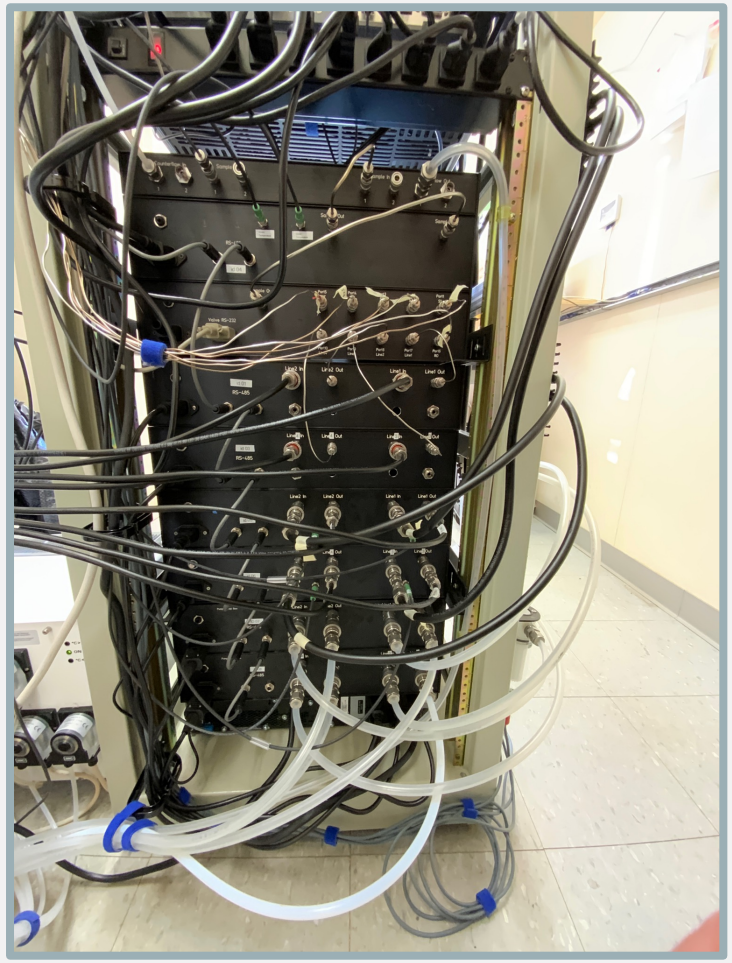
INSTRUMENT INSTALLATION

- **Instrumentation**
  - Picarro (CO, CO2, CH4, H2O): Feb. 15, 2024
  - Programmable Flask Package (PFF): Dec. 7, 2023
  - NextGen Sampling System: Feb. 29, 2024



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SUPERSITE FUTURE

- Future Partnerships
  - OAR cross-collaborations
  - ABO partnership model
- Meteorological Equipment
  - 3-levels
  - Temp, RH, Wind, Pressure
- Aircraft Profiles
  - Co-location
- Surface Flux Equipment
  - Additional 10m tower
- UAS Flights
- And more…

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