

Test Support & Instrumentation

Advanced MET Capabilities

Forecasting & Research

Highest Resolution Meteorology Capabilities in the World

Nationally Recognized for Superior On-range and Off-site Test Support:

- Sensor deployment
- Forecasting during intensive operating periods
- Test program databases and websites

State-of-the-art Instrumentation:

- 31 permanent 10-meter Surface Atmospheric Measurement System (SAMS) stations
- 51 permanent mini-SAMS stations
- Over 100 2-meter portable towers
- Six 32-meter fixed towers with multiple sensing levels
- Over 60 3D sonic anemometers
- Portable Vaisala Radiosonde and Tethersonde systems



Remote Sensing:

- Portable X-band Doppler radar
- Fixed C-band Doppler radar
- Vertically-oriented S-band boundary layer radar (FM/CW)
- Portable wind profilers with RASS
- 3 solar-powered SODARs
- 12-station lightning mapping array
- 4 laser ceilometers (12k-30k feet)
- Night & day whole sky imager

Dispersion Modeling:

- Leader in atmospheric dispersion modeling, especially chem/bio downwind hazard predictions
- Pre-test modeling for set-up, pre-trial, safety & environmental needs
- Near real-time modeling before testing uses current conditions and models path of simulant cloud
- Post-test modeling compares predicted concentrations and dosages with sampler data and cloud dimensions
- Jack Rabbit large-scale dense gas study for DHS Transportation Security Administration

Weather Forecasting:

- Advanced modeling and support system collaboratively developed with the National Center for Atmospheric Research (NCAR)
- Operational mesoscale 30-member ensemble system
- ARMADA data warehouse for instrumentation data archival

Meteorological Research:

- Granite Mountain Atmospheric Sciences Testbed (GMAST) studies of airflow over and downwind of complex terrain
- MATERHORN mountain meteorology study
- SLTest study to analyze winds over extremely smooth terrain
- Urban dispersion and data fusion studies

Contact:



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Time/Date