



Atmospheric Science Center (ASC)

BACKGROUND

Uncertainty about the current and future state of the atmosphere impacts a wide range of Army operations over a significant span of spatial and temporal scales. The future Army cannot afford to neglect the lower levels of the atmosphere called the atmospheric boundary layer (ABL) and its impact on the Warfighter, our equipment and our adversary. The Atmospheric Science Center (ASC) will bring together industry, academia and other government laboratories to advance atmospheric science and its application to critical defense technologies through a collaborative, innovative research ecosystem.

PARTICIPANTS

Open to national and defense labs, universities and industry.

CONCEPT OF OPERATION

The ASC will utilize CRADAs, MOUs and/or Cooperative Agreements to define the extent of collaboration under the center, the disposition of intellectual property, and the sharing of research outcomes and laboratory resources.

COLLABORATIVE FOCUS

- Develop novel methods to incorporate uncertainty and its impacts into decision support tools for the mission planner and the Warfighter.
- Create and refine modeling techniques to simulate the ABL in settings that are especially challenging, such as the dense urban environments.
- Exploit new methods and technologies to characterize and sense the atmospheric state at an unprecedented level of detail.

BENEFITS

- Collaborate with subject matter experts in meso/microscale atmospheric models, complex boundary layer physics and dynamic processes, aerosol characterization and effects
- Access to the Meteorological Sensor Array suite of meteorological sensors and DoD Defense Shared Resource Centers (DSRC)

UNIQUE FACILITIES

- Meteorological Sensor Array
- DoD Defense Shared Resource Centers (DSRC)
- Atmospheric Propagation Lab
- Next-Gen Atmospheric Modeling Lab
- Acoustic & Electro-Optic Propagation Range
- Remote Sensing Lab

POINT OF CONTACT

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