The next deployment of the third ARM Mobile Facility will be in the Southeastern United States.
Breakout Session 3: AMF3 Southeast United States Deployment (SEUS)

• First time ARM, ASR, and a Site Science Team (SST) are working together for an AMF deployment in this manner.

• There is no typical AMF3 deployment
  • 5 year deployment.
  • SST are ambassadors, not gatekeepers.
  • Our SST proposal was funded, in part, because of Land-Atmosphere Interaction strengths (terrestrial focus).
  • Distributed Networks.
  • Emerging measurement opportunities?

• Siting and instrument prioritization of the AMF3 will be informed by community feedback.
Challenges – Issues – Needs: Convective Clouds WG

Initial Team Activities & Needs: “Science Traceability Matrices”
- Science Driver $\Rightarrow$ Prioritized Questions $\Rightarrow$ Required Measurements
- Measurements $\Rightarrow$ Instruments (prioritized) $\Rightarrow$ Operational Requirements

SNL working on ArcGIS online viewer:
- Map layer generation (suggestions?)
- Example map layer: “surface-forced” shallow to deep convective locations within 100 km of a surveillance precipitation radar.

- March 2023: Site Operational
- Sept. 2021: Site Identified
- March 2021: Site Shortlist
"What factors regulate the nature of convective updrafts or the size of thermals within cumulus updrafts above the PBL?"

- Multiple scanning radars (3+), solid coverage at higher altitudes (multi-Doppler retrievals).
- Rapid scanning and RHI modes; Potential emerging technologies / IOPs (decadal vision)?
- Distributed networks – PBL moisture/wind capabilities, supplemental sites.
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email list: seis@arm.gov, seusteam@arm.gov

webpage: https://www.arm.gov/capabilities/observatories/amf/locations/seus