

# Relocation of the 3rd ARM Mobile Facility to the Southeast United States

JIM MATHER

ARM/ASR Joint Meeting

6/25/2020





## Relocating the 3<sup>rd</sup> Mobile Facility

- ► AMF3 intended for mid-length deployments of ~5 years
- ► Oliktok deployment began in 2013 → time to consider relocation
- ► Workshop held in 2018 in part to identify candidates for a new location for AMF3
- Main options discussed:
  - Southeast United States
  - High latitude regions
  - Maritime regions
  - Mountainous regions/complex topography
  - Regions with organized deep convection





#### **Motivation for Moving AMF3 to Southeast US**

- Opportunity to study convection in environment where local forcing is prevalent
- Strong coupling of convection with the surface
- Significant sources of biogenic aerosols and scattered urban sources
- ➤ The preliminary science objectives for the deployment brings these elements together





## Goals for the Southeast U.S. Deployment

- Support broad range of science themes
- Develop creative strategy for addressing spatial heterogeneity
- Develop collaborations with other communities
- ► Develop site into an attractor for interdisciplinary research
- Accomplish significant advances across science themes





# **Next (first) Steps**

- ► Engage with the broader community to identify
- Identify priorities for measurements and siting

