VHF Lightning Mapping Arrays and space-based optical lightning detectors (TRMM/LIS, GOES-R/GLM) have advanced total lightning mapping capabilities and have opened a range of new applications. Deployment plans for a new LMA in West Texas (the WTLMA) will be discussed. Data from the WTLMA will be delivered to regional and national operational testbeds such as the GOES-R GLM Proving Ground. When linked with the Oklahoma LMA, this system will provide extensive 2D and 3D total mapping coverage, suitable for examination of time evolution long-track supercells and extensive mesoscale convective systems. Research is planned in the distinguishing characteristics of storm charge structure and flashes in convective and stratiform regions of storms. Convective / stratiform discrimination is important in microwave and infrared precipitation estimation methods, and results of work in this area will be shown.

Supplementary URL:

See more of: Recent Advances in Lightning Technology and Transfer of that Technology from Research to Operations II
See more of: Fifth Conference on the Meteorological Applications of Lightning Data