

# AMS-NWA – Memphis Chapter

Meeting Minutes

January 19, 2021

## Opening

The virtual business meeting of the AMS-NWA – Memphis Chapter was called to order at 7:05pm on January 19, 2021 by President Dorian Burnette.

## New Business

- Members were welcomed to the first chapter meeting since early 2020 (due to COVID-19) and officers for 2020-2021 were introduced.
- The NWA has made a call for abstracts for the 2021 Annual Meeting (Tulsa, OK - August 21-26) if anyone is interested in participating.
- The Treasurer's Report was given by Erik Proseus. The scholarship fund balance is \$737.28. The general checking account balance is \$1,005.05.
- A motion was made, and unanimously approved, for the chapter to make a donation of \$50 to charity in memory of longtime member Elizabeth Secrist.

## Presentation

NWS-Memphis Science and Operations Officer Tom Salem presented findings of a study conducted by his office, with the assistance of Jackson State University student volunteer JaNia Dunbar, on "Lightning Data during Tornado Events."

In the study, total lightning data from the GOES-16 Lightning Mapper (GLM) was used to analyze flash extent density (FED) prior to and during four tornado events in the NWS-Memphis county warning area: March 9, 2019; April 13, 2019; December 16, 2019; and March 28, 2020. The four events produced a total of eight tornadoes, rated EF-0 to EF-3. The results, as detailed in the presentation, generally show a marked increase in lightning FED before tornadoes touched down, but not in every case. Lead time of those that did produce a "lightning jump" was generally 15-25 minutes prior to the tornadic event. One tornado, an EF-3 in Jonesboro, AR that spun up rapidly in the cool season event of 2019, had very little evidence of much lightning at all. It was noted in the study that GLM data could help identify stronger updrafts in storms, which may provide clues on the most favorable cells for tornado production.

## Adjournment

Meeting was adjourned at 7:45pm by President Dorian Burnette. The next virtual business meeting is tentatively slated for 7:00pm on March 23.

Minutes submitted by: Erik Proseus, Secretary

Approved by: Dorian Burnette, President