

AMS/NWA MEMPHIS CHAPTER 6 DEC 2016 MEETING MINUTES

1. The President welcomed and thanked everyone for attending the late fall 2016 meeting.
2. A call for dues of \$10.00; if you haven't already paid. Please pay our treasurer Jim Branda, and as always donations for the scholarship fund are welcomed.
3. The treasurer's report was given.
4. The upcoming annual AMS meeting will take place this coming January in Seattle. Please see the president if you are planning to attend for more details.
5. Introduction to tonight's speaker William Churchill, an intern meteorologist with the National Weather Service in Memphis, TN. William's presentation was titled "Discrimination of the Formation and Intensity of Progressive Derechos based on the Environmental conditions of Simulated Events." He first started with the definition of Derecho with a breakdown of mild, moderate and high intensities in the study. In addition, the derechos were broken down into the "Serial" type, which are generated in the spring and fall seasons due to the increased shear, and the "Progressive" type seen during the summer months with greater thermodynamics. His maps indicated the progressive type was seen more often east of the Rockies with a max generated in the northern Ozarks. He indicated that these cool-pool driven wind storms from 1986 to 2003 produced 88% of the tornado deaths during the same time. He took several of these cases and plugged the pre-storm environmental conditions back into the Weather Research Forecasting model with a 4km resolution to see if the model would generate a derecho. 46 out of 69 cases did in fact generate derechos, and from this he was able to measure the probabilities based off of deep layer shear amounts and Convective Available Potential Energy. A few questions and discussions were then generated relating to the "Hurricane Elvis" Derecho that rolled through Memphis in July 2003 (one of William's events).
6. The president gave a final thanks to William and for those who attended, wishing everyone Happy Holidays and a reminder of our next meeting in late January.

Jim Branda, Secretary

Approved,

Tom Salem, President