SPoRT Total Lightning Activities and Updates

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SPoRT and Total Lightning

- Supporting real-time use since 2003
- Working with several data providers
- Core SPoRT activity with the GOES-R Proving Ground

Transitioning unique NASA data and research technologies to operations
AWIPS II Availability

- Successful transition in 2011 to Huntsville
- Houston and SMG followed shortly thereafter
- WFO Boulder successful yesterday
- SPoRT working to baseline the plug-in
- Discussing with NOAA on using plug-in to support Earth Networks data visualization
- Will provide greater flexibility than current AWIPS I display
Shifting from Sources to Flashes

- Flashes are used in scientific literature (e.g., lightning jump)
- Now have capability to reassemble sources into flashes in real-time
- Flashes are “normalized” and have less issues with detection efficiency, particularly at range
- Flashes more intuitive than sources
- Evaluating with WFO Huntsville the effort needed to shift from source density to flash extent density
Another Product Concept

• Based on conversations with WFO Melbourne
• Interest in keeping 1 min time resolution
  • Issue is that 1 min data can look noisy
• Concept based on the previous 30 min maximum density product
  • 30 min max density displayed the largest value for each grid box over the past 30 min
  • Instead will use a 2 min summation updating every minute
  • Use the current observation with the previous observation
  • Need to evaluate if this provides the same level of information as other products
Total Lightning in N-AWIPS

- National Centers using the PGLM mosaic
- Merges all available LMAs into one product
- Includes range rings and network status bars
- Demonstrates the demo product for the Geostationary Lightning Mapper as part of the GOES-R Proving Ground