New GLM Lightning Products Released this Week

New Geostationary Lightning Mapper (GLM) products were released to all National Weather Service Weather Forecast Offices on July 16. The base Level 2 products produced by the GOES Ground System (GS) includes GLM events, groups, and flashes:

- **GLM Event**: occurrence of a single pixel exceeding the detection threshold during a single ~2 ms frame;
- **GLM Group**: one or more simultaneous GLM Events observed in adjacent (neighboring/diagonal) pixels; and
- **GLM Flash**: 1+ sequential GLM Groups separated by less than 330 ms and 16.5 km.

GLM Flash rates are most closely tied to updraft and storm evolution, Event locations best depict the spatial extent, and Groups are most similar to ground-based network strokes/pulses. Detailed information about this produces is available at the GLM VLab Community website: [https://go.usa.gov/xU96A](https://go.usa.gov/xU96A).
As part of our announcement, SCSB Scientist Scott Rudlosky was interviewed twice on the Weather Channel:

Rudlosky Weather Channel Interview - 7/16/18 - AM - https://youtu.be/cqeEt7kk1Cw
Rudlosky Weather Channel Interview - 7/16/18 - PM - https://youtu.be/vjakmL9i2OM

The interviews replayed several times and helped spread the word to the NWS.

*Importance*: The GLM products are vital to NWS to improve short term weather forecasting. *POC*: S. Rudlosky

- **Dust from the Sahara to the United States:**
  This week, CICS-MD Scientist and GOES/JPSS Satellite Liaison Michael Folmer reported on long-range transport of dust as seen by GOES-R/GOES-16 in the Satellite Liaisons Blog. It shows African dust crossing the Atlantic, some of which made it as far west as Houston and Oklahoma City. Hurricane Beryl and Hurricane Chris helped to move the dust up the East Coast.

Folmer is part of a larger project to test many different soil moisture and dust products to determine the best tools to monitor the Saharan Air Layer (SAL). The frame shown above is an enhanced color version of the GOES-16 Dust RGB product. To see a comparison of these two products and full animations of the July 5-11 dust event, go to:


*Importance* NOAA satellite liaisons demonstrate new capabilities that are useful for NWS operations.: *POC*: M. Folmer