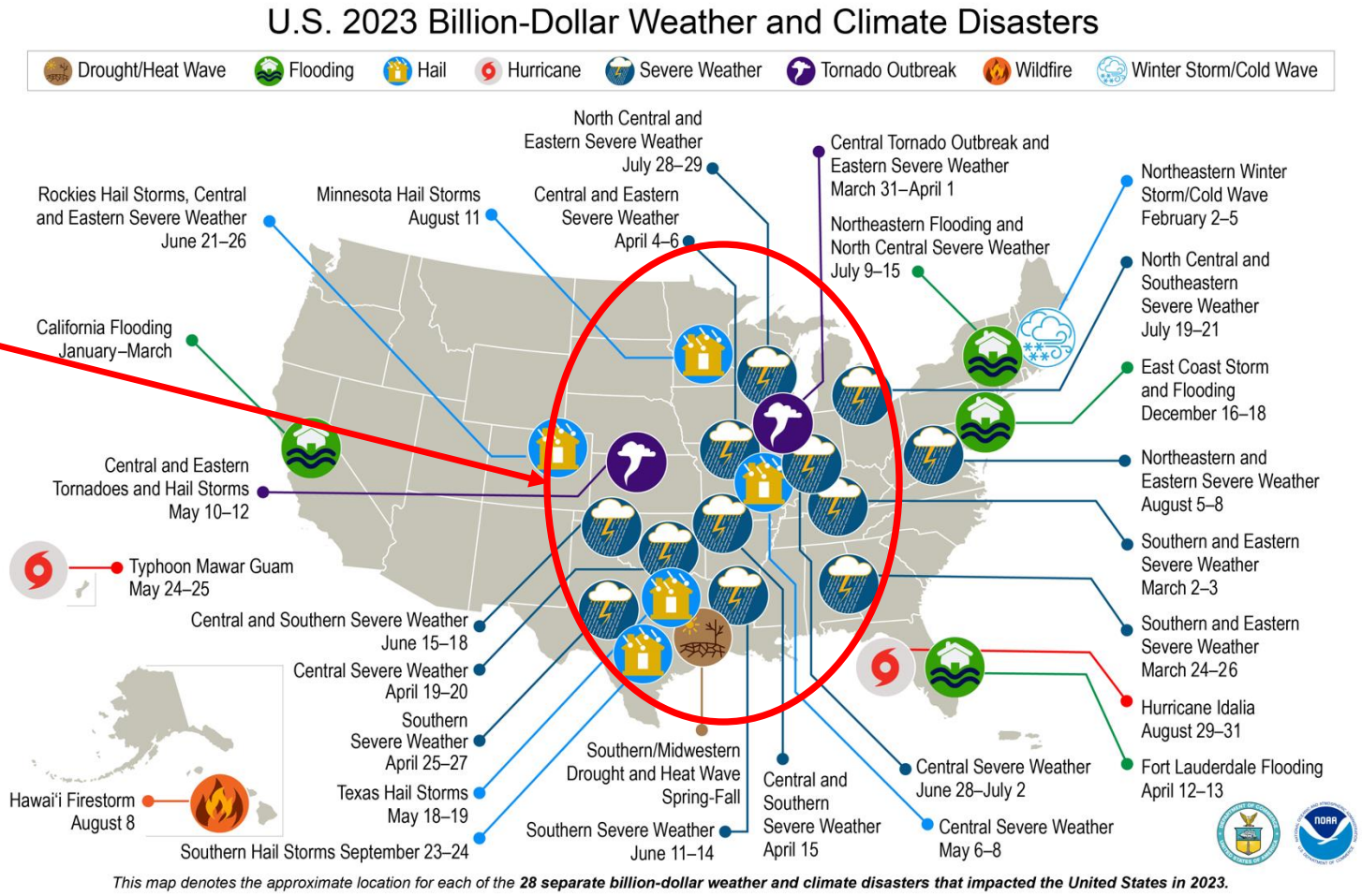
Harnessing-the-Heartland

Livelihoods – Lives – and the Weather

Nose height to Satellite Interactive Panel:



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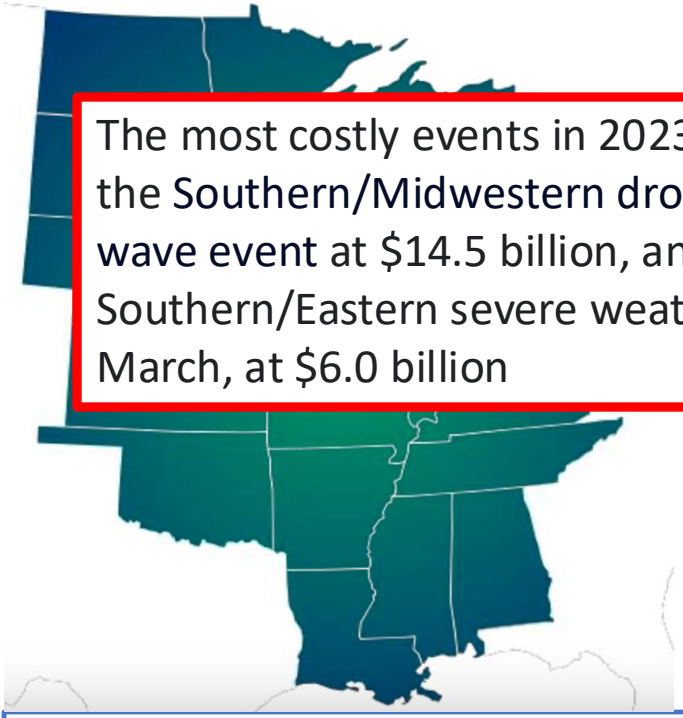
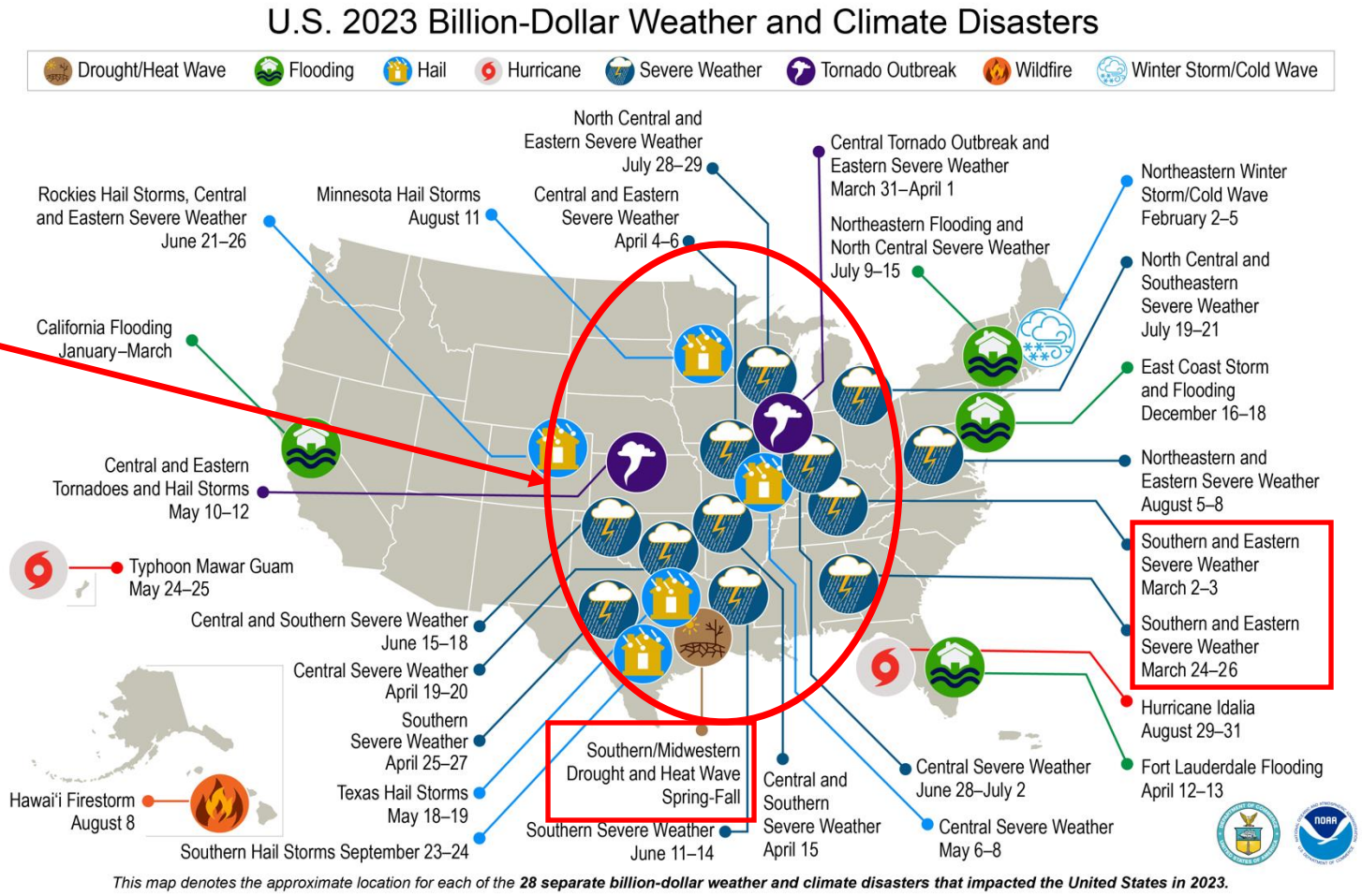


The most costly events in 2023 were the Southern/Midwestern drought and heat wave event at $14.5 billion, and the Southern/Eastern severe weather event in early March, at $6.0 billion



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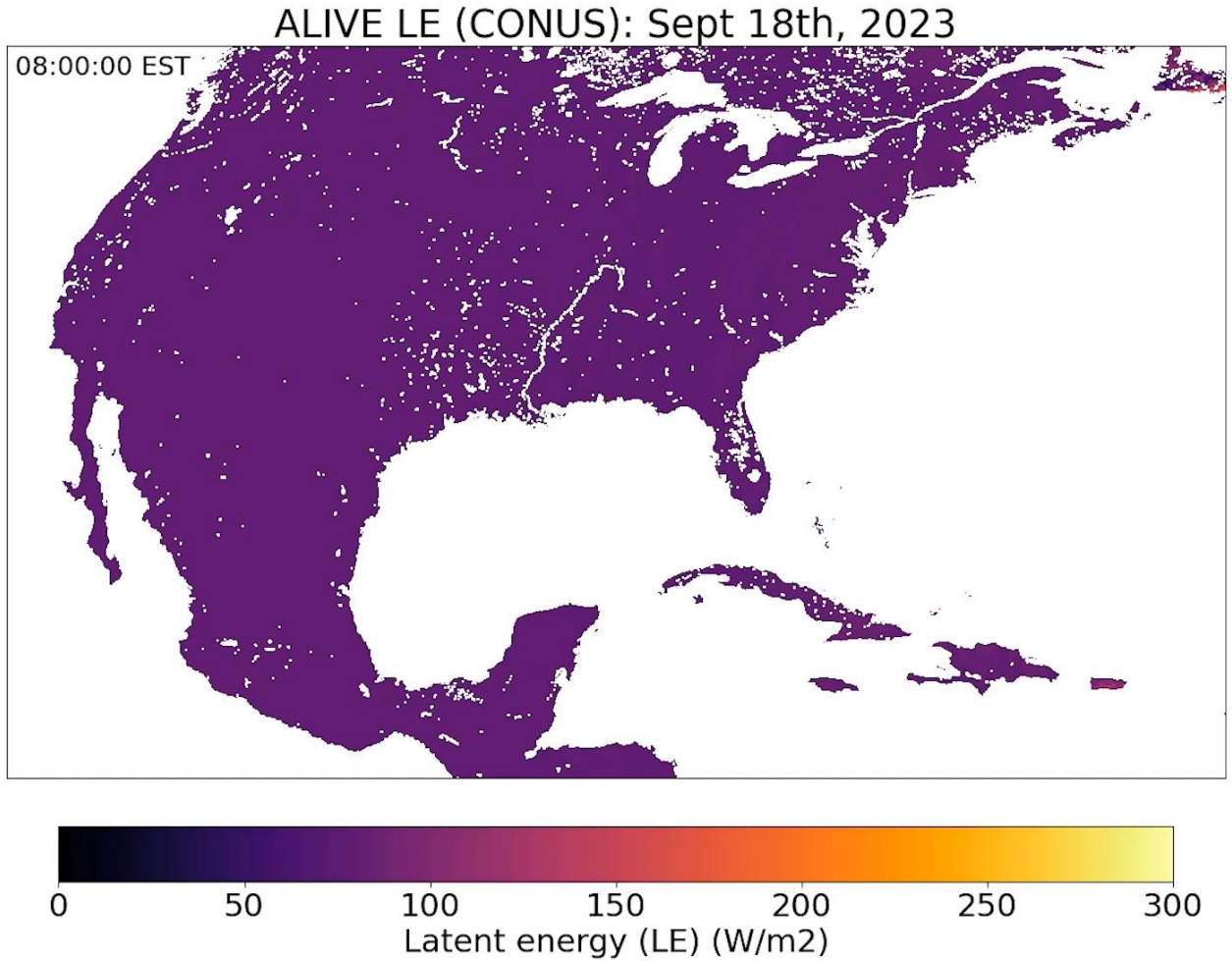
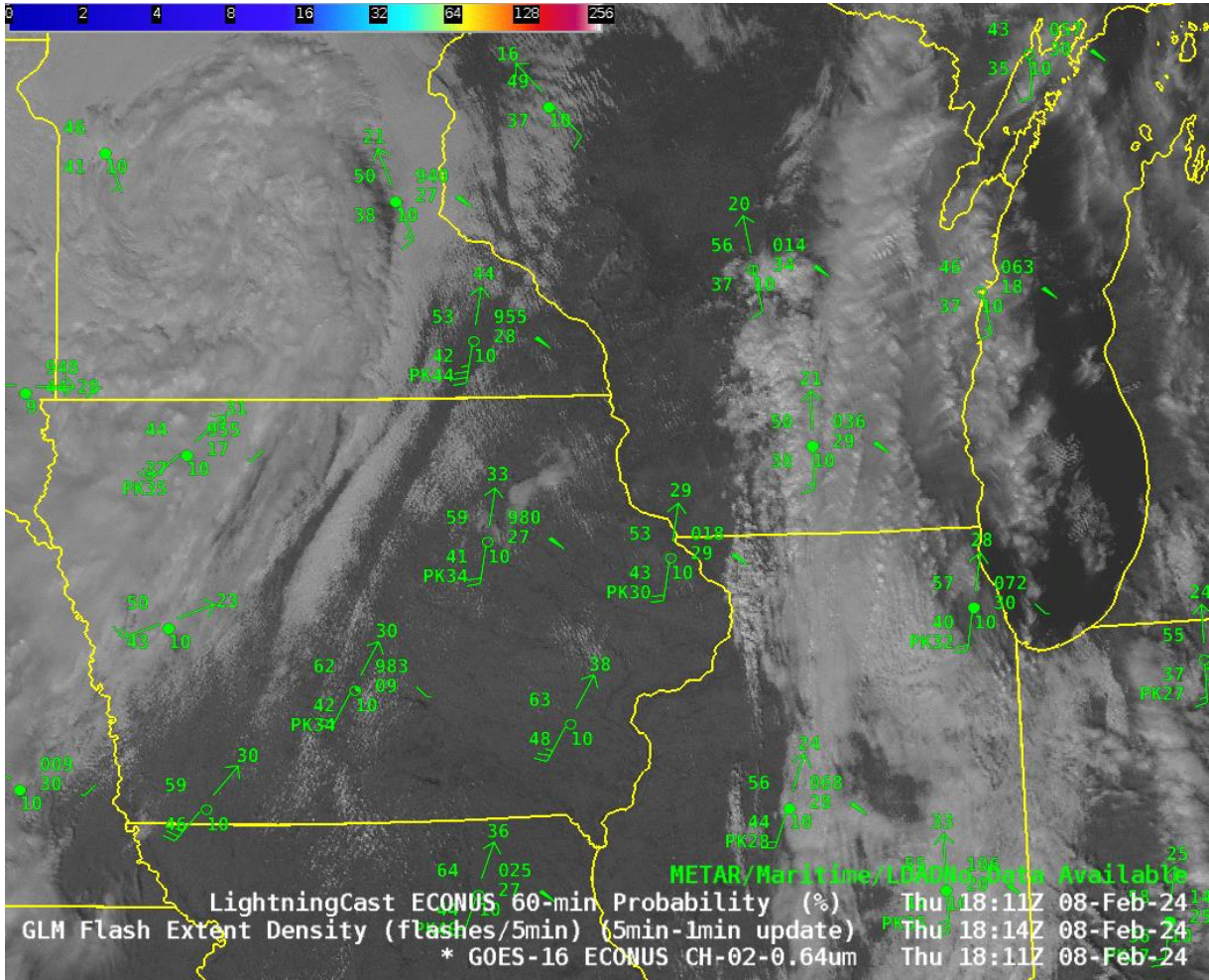
Advanced Baseline Imager Live Imaging of Vegetated Ecosystems (ALIVE) – Paul Stoy (UW Madison)

ABI Machine Learning model trained on Water and Carbon fluxes from Ameriflux and NEON, Inc. eddy covariance towers across the conterminous United States.



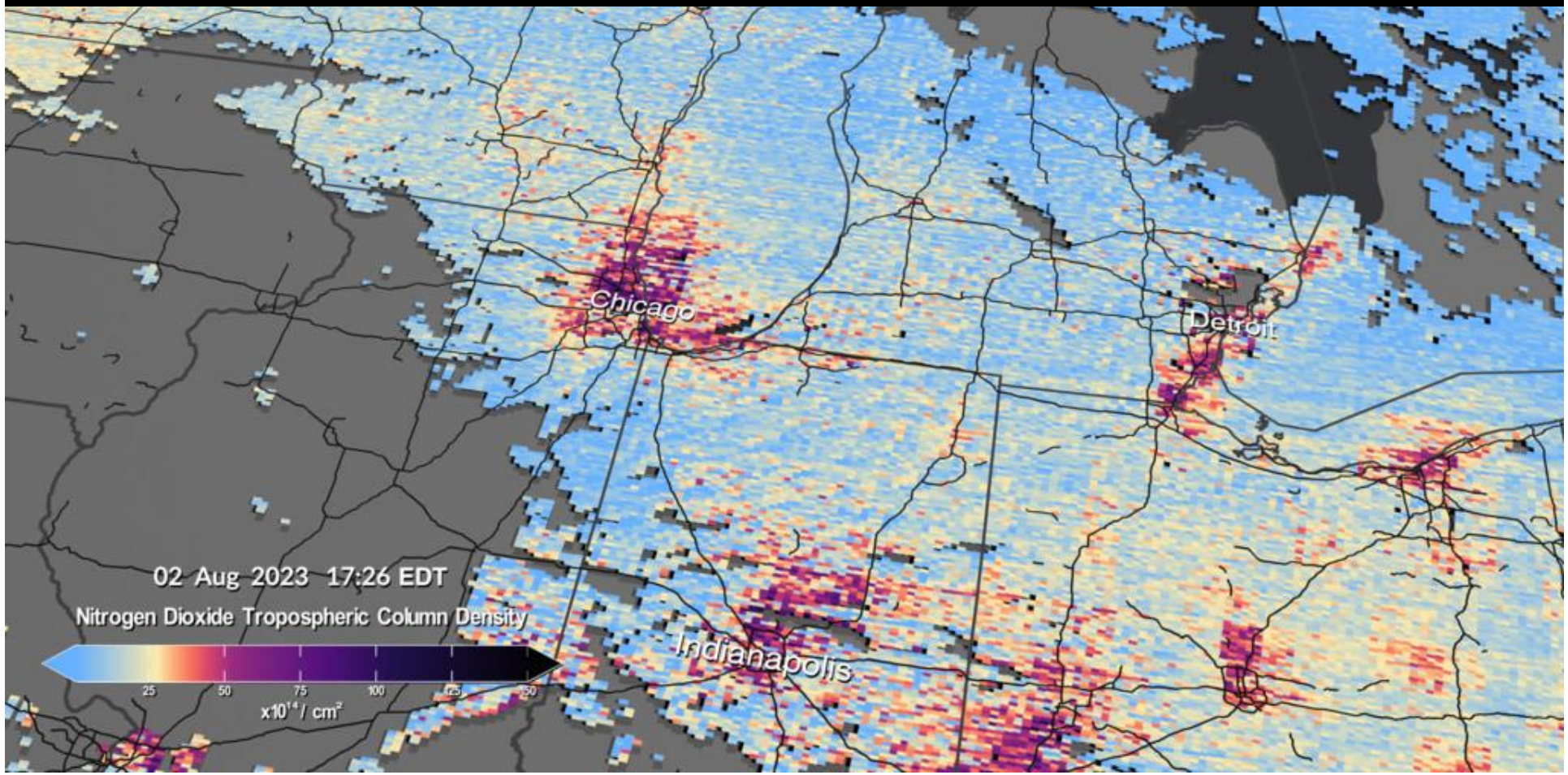
Advanced Baseline Imager ProbSevere LightningCast – John Cintineo (SSEC/CIMSS)

ABI machine learning model trained on, radar and Geostationary Lightning Mappe to predict next-hour lightning probability



TEMPO First Light: August 2nd 2023

The Tropospheric Emissions: Monitoring of Pollution (TEMPO) instrument collected its "first light" measurements of nitrogen dioxide air pollution over North America on August 2, 2023.



- TEMPO is a precursor to the Atmospheric Composition instrument (ACX), part of the GeoXO satellite system.
- Also measures formaldehyde, which is an indirect indicator of biogenic activity
- May also be able to measure chlorophyll induced fluorescence, a direct indicator of biogenic activity