

2023 GLM Science Meeting Agenda (Links to Presentation Recordings)

*Session recordings are available on Vimeo via the links below.
Each presentation title links to the appropriate spot in each session recording.*

Monday, 13 November

10 am - 12 pm – Plenary Session - Program, Instrument, Science (Chair: Steve Goodman)

	Presenter	Title
10:00	Scott Rudlosky, Chris Schultz, and Steve Goodman	Welcome and Meeting Logistics
10:10	Dan Lindsey, NOAA/NESDIS/GOES-R	GOES-R Program Update
10:20	Feroli/Superczynski, NOAA/NESDIS/GOES-R	GOES-R Ground System Gridded Product Status
10:30	Rafal/Heath, GOES-R/Lockheed	Status of GOES-U
10:40	Andrew Heidinger, NESDIS	GeoXO Status and Plans
10:50	Bartolomeo Viticchie, EUMETSAT	MTG LI Commissioning Status
11:00	Bruning/Bitzer, TTU/UAH	Characterizing GLM Data Quality
11:10	Tim Lang, NASA/MSFC	The ALOFT Airborne Campaign: Relevance to Spaceborne Lightning Sensor Validation and Science Applications
11:20	Geoffrey Stano, GHRC DAAC	Cloud-based User Services for Lightning Data at GHRC DAAC
11:30	Group Discussion	
12:00	Lunch Break	

2 - 4 pm – GLM Validation Studies (Chair: William Koshak)

	Presenter	Title
2:00	Eric Bruning, TTU	Optical, VHF, and Slow Antenna Measurements Alongside Rapid-Scanning Polarimetric Radars
2:10	Michael Peterson, LANL	A 30 Minute Lightning Flash? Clustering and Counting Flashes in Very High Flash Rate Thunderstorms
2:20	Katrina Virts, UAH	Bayesian Absolute Detection Efficiency of the Geostationary Lightning Mappers
2:30	Monte Bateman, UAH	Recent Val Analyses for GLM16 and GLM18
2:40	Sven-Erik Enno, EUMETSAT	MTG LI performance assessment
2:50	Daile Zhang, UMD/CISESS	Applications of a Raspberry Pi-based Camera Network
3:00	Yanan Zhu, AEM/Earth Networks	Continuing Current Observed by the GLM and High-Speed Video Cameras
3:10	Erin Lay, LANL	Radio Frequency Sensor: 1.5 years of RF lightning detection from GEO
3:20	Guangyang Fang, UMD/CISESS	Update on the Development and Performance of the Mid-Atlantic Lightning Mapping Array (MALMA)
3:30	Group Discussion	
4:00	Adjourn	

Tuesday, 14 November

10 am - 12 pm – Operational Uses of GLM Part 1 (Chair: Chris Schultz)

	Presenter	Title
10:00	Kevin Thiel, CIWRO/SPC	Characterizing GLM First Flash Events: A Bulk Study Perspective
10:10	Joseph Patton, UMD/CISESS	GLM Training Update
10:20	Charlie Woodrum, NOAA/NWS	Moved to Session 6
10:30	Larissa Sperk, KSU	Expanding Aviation Applications for the GLM
10:40	Steve Goodman, GeoXO/TGA	WMO GCOS Task Team for Lightning Observations and Climate Applications
10:50	Jeffrey C. Smith, SETI Institute	Advancements in Detecting Bolides in GLM
11:00	Marion Mittermaier, UKMet	Aspects of Using Lightning Observations for Lightning Forecast Verification
11:10	Chris Schultz, NASA/MSFC	GLM Observations during the 15 January 2022 Eruption at Tonga's Hunga Volcano
11:20	Kelley Murphy, NASA/SPoRT	NASA SPoRT's New Lightning Viewer and its Capabilities
11:30	Group Discussion	
12:00	Lunch Break	

2 - 4 pm – Operational Uses of GLM Part 2 (Chair: Joseph Patton)

	Presenter	Title
2:00	Scott Rudlosky, NOAA/NESDIS	Characterizing the Relation between Lightning and Wildfires in the Western United States
2:10	White/Ravenscraft/ Heidelberger/Magee, NWS/HUN	GLM utilization for warning decision-making during the March 31-Apr 1 severe weather event at NWS Huntsville
2:20	Levi Boggs, GTRI	Automated Pipeline for Detecting Gigantic Jets
2:30	Michael Stock, CIWRO	Comparisons between GLM and the Long Wavelength Array
2:40	Jonathan Wynn Smith, NOAA/OAR/GFDL	Flash Frequency Parameterization Insights from the Geostationary Lightning Mapper
2:50	Rong Kong, CAPS/OU	Direct Assimilation of GOES-R Geostationary Lightning Mapper (GLM) Data within JEDI LETKF and Hybrid System for Operational UFS Convection-Allowing Predictions
3:00	Amanda Back, NOAA/GSL	Assimilation of GLM Flash Extent Density for Operational Numerical Weather Prediction
3:10	Federico Cutraro, NMS Argentina	Development of a Forward Operator for Lightning Data Assimilation
3:20	TBD	Planning Next Steps for Lightning Data Assimilation
3:30	Group Discussion	
4:00	Adjourn	

Wednesday, 15 November

10 am - 12 pm – Science and Applications Part 1 (Chair: Scott Rudlosky)

	Presenter	Title
10:00	Phillip Bitzer, UAH	The Variety of Optical Pulses from Lightning
10:10	Kristin Calhoun, NSSL	Lightning and Radar Characteristics of Tornadoic Cells in Landfalling Tropical Cyclones
10:20	Earle Williams, MIT	Impact of Cold Air Outbreaks on GLM Lightning
10:30	Stephanie Weiss, TTU	Comparison of WTLMA Lightning Climatology to GLM Climatology for the West Texas Region
10:40	Mason Quick, NASA/MSFC	FEGS Measurements During the 2023 ALOFT Campaign
10:50	Patrick Gatlin, NASA/MSFC	Efforts Towards Developing a New Low-Earth Orbiting Lightning Mapper
11:00		Withdrawn
11:10	John Trostel, Georgia Tech	Use of GLM Data During the LEE Field Project
11:20	Doug Mach, NASA/USRA	The Impact of Single Group Flashes on GLM Detection Efficiency and False Alarm Rate Values
11:30	Group Discussion	
12:00	Lunch Break	

2 - 4 pm – Science and Applications Part 2 (Chair: Eric Bruning)

	Presenter	Title
2:00	William Koshak, NASA/MSFC	Ongoing GLM16/NLDN National Climate Assessment Analyses
2:20	Randolph Longenbaugh, Sandia	Utility of Using Geostationary Lightning Mapper (GLM) Level 0 Data Products for Meter-size and Larger Impactors
2:30	Thom R. Edwards, Sandia	Initial Findings from the Sandia 1600 FEGS channel
2:40	Charlie Woodrum, NOAA/NWS	Applications for GLM with NOAA's Lightning Safety Toolkits
2:50	Samantha Edgington, Lockheed	Lightning: A Secondary Mission for a New Bolide Sensing Instrument
3:00	Robert Holzworth, UW	Arctic Lightning in Hottest Year on Record
3:10	Chris Slocum, NOAA/NESDIS	Lightning-Based Tropical Cyclone Rapid Intensification Guidance
3:20	Megan Mark, FIT/LANL	Optical Signatures of Cloud-to-Ground Strokes Observed by High-Speed Video Camera and the GLM
3:30	TBD	TBD
3:40	Group Discussion	
4:00	Adjourn	