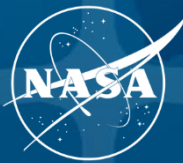




# Lightning Dashboard

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# What Is The Lightning Dashboard?



- **One-Year NASA Marshall Directed Funding**

- Create a tool to support the lightning community
- Began in February 2022
- Needed a minimum viable product by October 2022
- Based on NASA's COVID-19 dashboard

<https://ghrc.earthdata.nasa.gov/lightdash/index.html>

# Timeline of Activities



## Preparations

Evaluate COVID-19 dashboard  
Web map file server

## First Examples

Cloud optimized geoTIFFs  
Deployed to Amazon Web Server

## Intercomparisons

Opacity slider  
Dynamic comparison slide of different datasets

## MVP Status

Optical Transient Detector added  
Deployed to NGAP GHRC Services  
UAT Amazon account

FEB 2022

MAR 2022

APR 2022

May 2022

JUN 2022

JUL 2022

AUG/SEP 2022

## Data Selection

Tropical Rainfall Measuring Mission  
Lightning Imaging Sensor (TRMM LIS)

## Lightning Mapping Arrays

LMA Tools for gridded data  
Dynamic timeline display

## Data Access

Data DOI links  
Global hotspots  
Data histograms  
Image slideshow  
Demo to NASA Marshall

# Current and Planned Activities



## • October 2022

- Deployed to NGAP GHRC Services Production Amazon account
- Generating International Space Station Lightning Imaging Sensor cloud optimized geoTIFFs
- Layer manager menu

## • Upcoming

- Various lightning instruments from GHRC campaign archives
- Python script to handle different instrument data formats
- Add ground and airborne instruments
- Enable cross-platform comparisons
- Contribute to Pangeo Forge to extend usability
- Add special cases or hotspots



# Lightning Dashboard Demonstration

