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From: Daniel Roman, Acting Chief
 Severe, Fire, Public and Winter Weather Services

Subject: Lightning Climatology across the Contiguous United States
(CONUS) Will Become Operational: Effective September 21, 2022

Lightning Climatology imagery and graphics hosted by the Storm Prediction Center will become operational effective September 21, 2022.

Based on feedback, location-based climatology information about lightning is beneficial to those potentially impacted by thunderstorms. In order to provide robust visualizations of lightning climatology across the country for specific locations, this product displays lightning flash "heatmaps," which are matrix-style displays, time series and planview. These data are derived from 25 years of archived Vaisala's National Lightning Detection Network (NLDN) CG flash data and are intended to inform interested users on their spatial and temporal lightning climatology risk.

This product provides an update to the first version of the lightning climatology that was launched experimentally in August 2019. This operational version includes an analysis technique that provides a normalization of the lightning data so that the grid point locations in closer spatial proximity can be compared properly.

This product also provides an option to view the lightning climatology in 1-hourly, 4-hourly, and daily time increments with visualizations available in map planview, time series at grid-point-specific locations and the heatmap option from the initial version.

Please see the NWS Product Description Document (PDD) for more details:

https://nws.weather.gov/products/PDD/PDD_OplLightningClimatology_2022.pdf

The lightning climatology can be accessed at the following link:

<https://www.spc.noaa.gov/climo/dataviewer/>

This replaces Version 1 of the experimental product that will be discontinued and was available at the following link:

<https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=1f94af1948914f4a8c4600cb427f2982&mobileBreakPoint=250>

On average, 26 people are killed and nearly 250 people are injured annually from cloud-to-ground (CG) lightning flashes across the United States. Each year, CG lightning also aids in initiating wildfires that account for around 3.8 million acres of land burned, which is around 35 percent more acres burned than human-caused wildfires. Additionally, thunderstorms can contribute to substantial delays for commercial flights across the U.S. National Airspace System. Lightning can also threaten people attending outdoor events and other recreational activities.

If you have questions or comments regarding the Lightning Climatology, please contact:

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