

Vaisala 2018 Annual Lightning Report



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THE FOLLOWING ANNUAL LIGHTNING REPORT HAS BEEN PREPARED BY VAISALA.

The data are provided from the Vaisala NLDN US National Lightning Detection Network and the Vaisala GLD360 global lightning detection network, that monitor total lightning activity, 24 hours a day, 365 days a year. The NLDN is the most scientifically accurate and reliable precision-lightning network, and the GLD360 the most scientifically accurate and reliable global-lightning network.

Data analyses provided by Ronald Holle and William Brooks.

For more information, visit **vaisala.com/lightning**

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2018 Top 10 States with the Most Cloud-to-Ground Flashes

Top Ten 2018 Cloud-to-Ground Flashes by State

1	Texas	2,483,805
2	Florida	1,385,710
3	Oklahoma	958,925
4	Kansas	928,760
5	Nebraska	889,019
6	Louisiana	854,871
7	Arkansas	768,168
8	Missouri	711,222
9	New Mexico	699,719
10	Georgia	693,776



2018 Top Ten States by Cloud-to-Ground Flash Density

Top Ten 2018 States — Flash Density per square km

1	Florida	9.34
2	Louisiana	7.13
3	Arkansas	5.65
4	Mississippi	5.50
5	Oklahoma	5.30
6	Alabama	4.71
7	Georgia	4.54
8	Iowa	4.46
9	Nebraska	4.45
10	Kansas	4.37



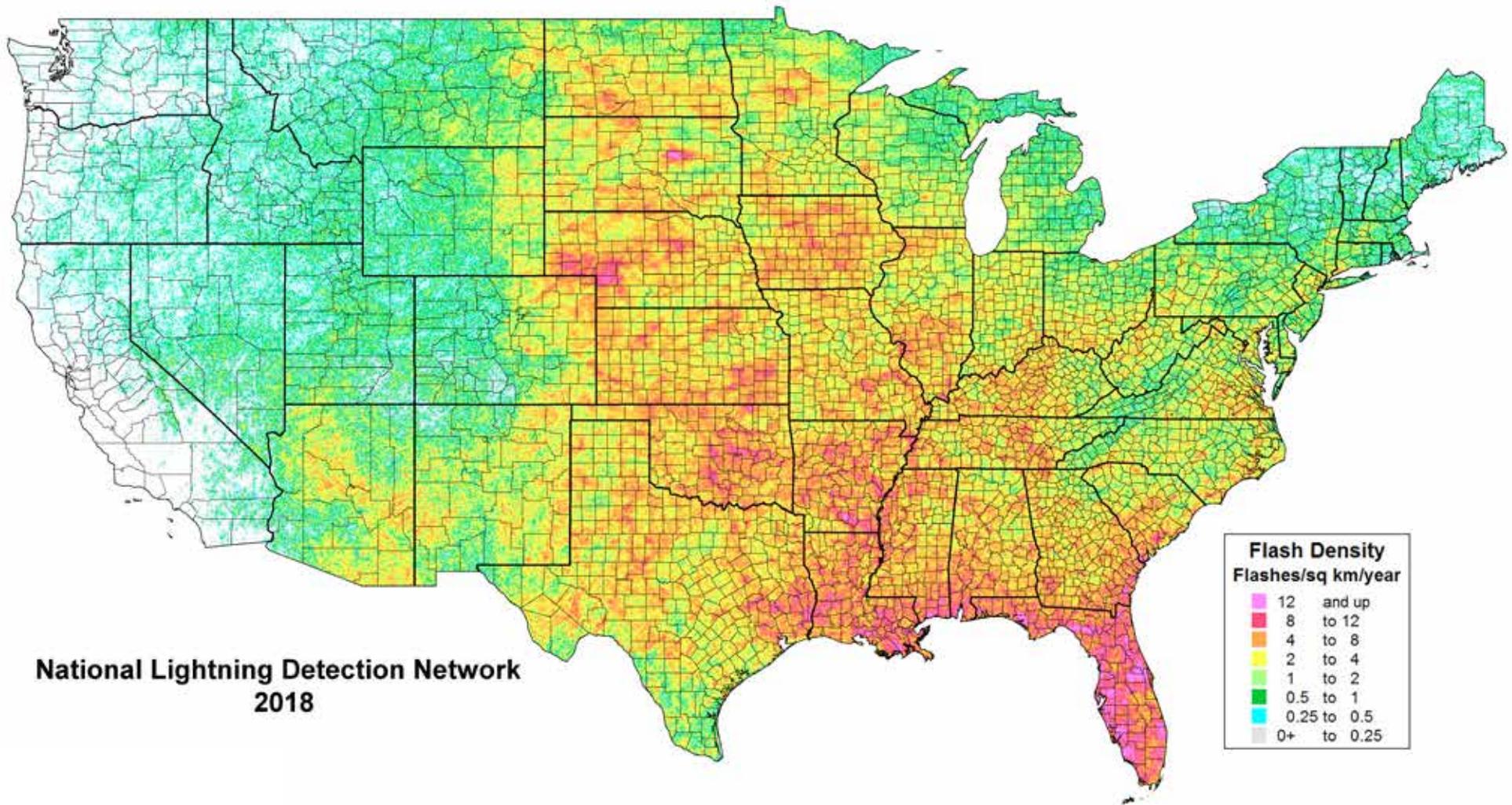
2018 Top 10 Dates for Cloud-to-Ground Flashes

Top Ten 2018 Days: Cloud-to-Ground Flashes

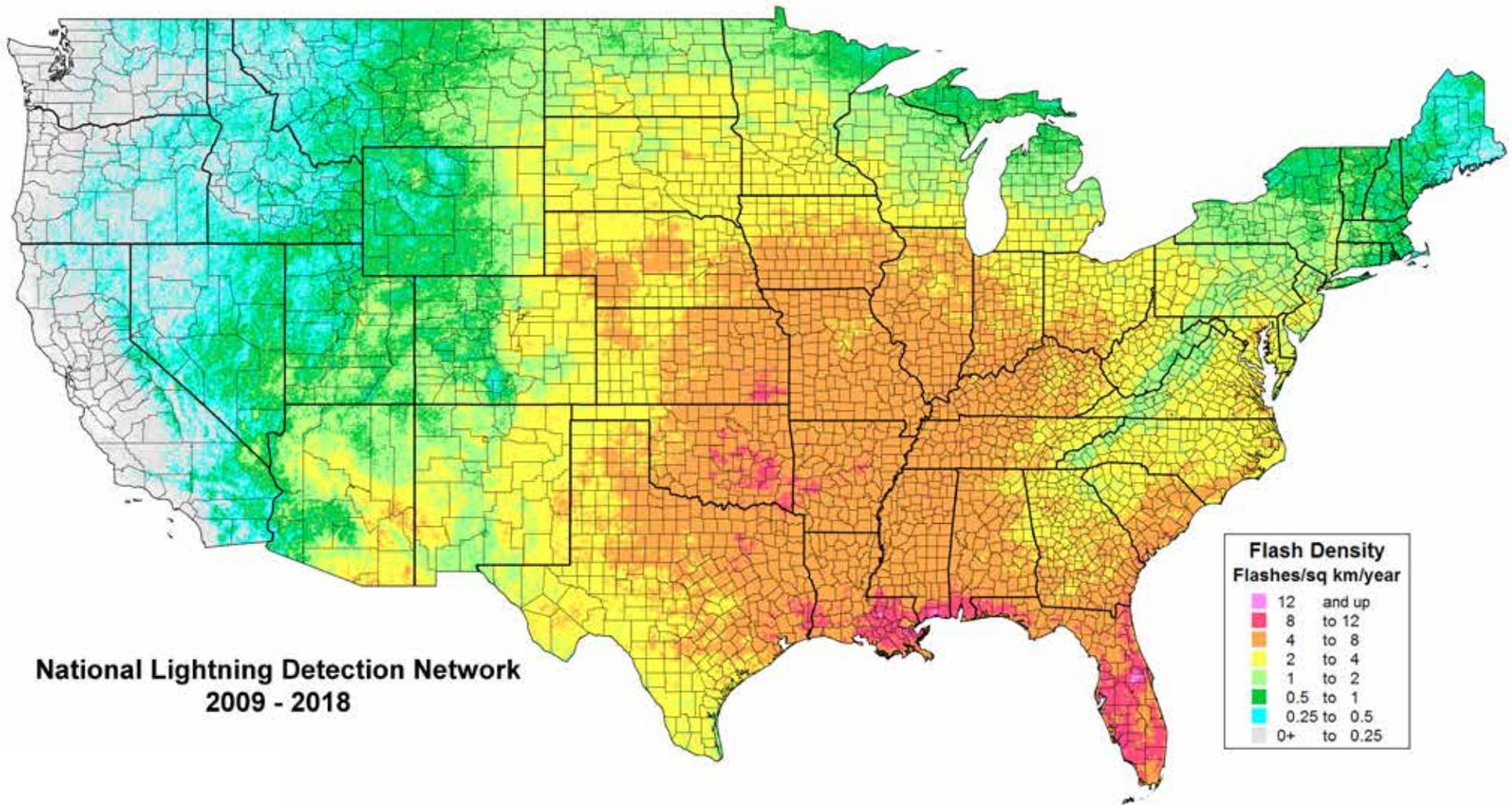
1	June 24	242,949
2	July 21	229,238
3	June 28	228,522
4	July 3	215,087
5	July 6	210,826
6	June 26	210,252
7	August 7	205,598
8	July 4	203,049
9	July 15	202,887
10	July 17	201,106



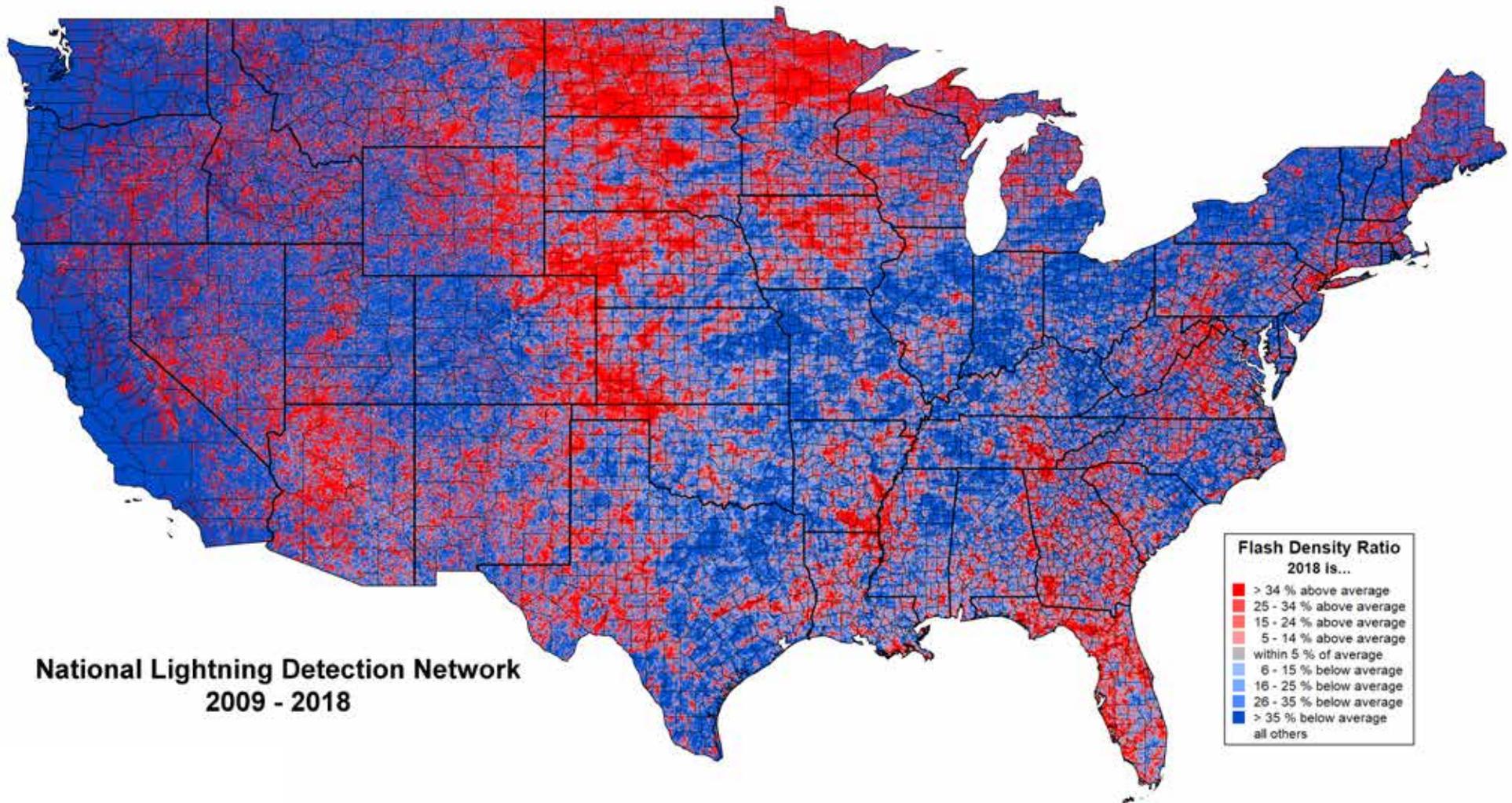
U.S. Cloud-to-Ground Flash Density Map, 2018



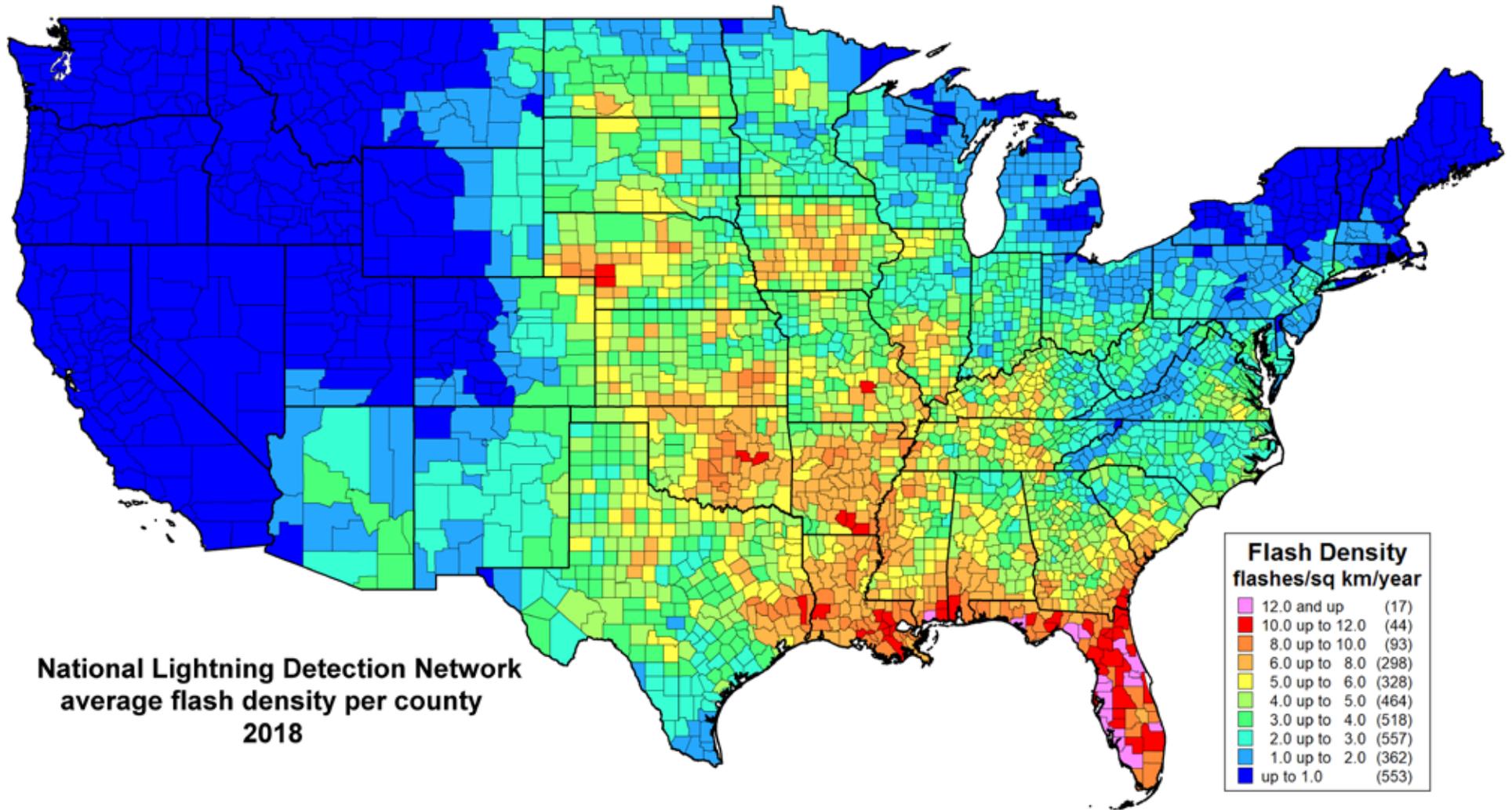
U.S. Cloud-to-Ground Flash Density Map, 2009–2018



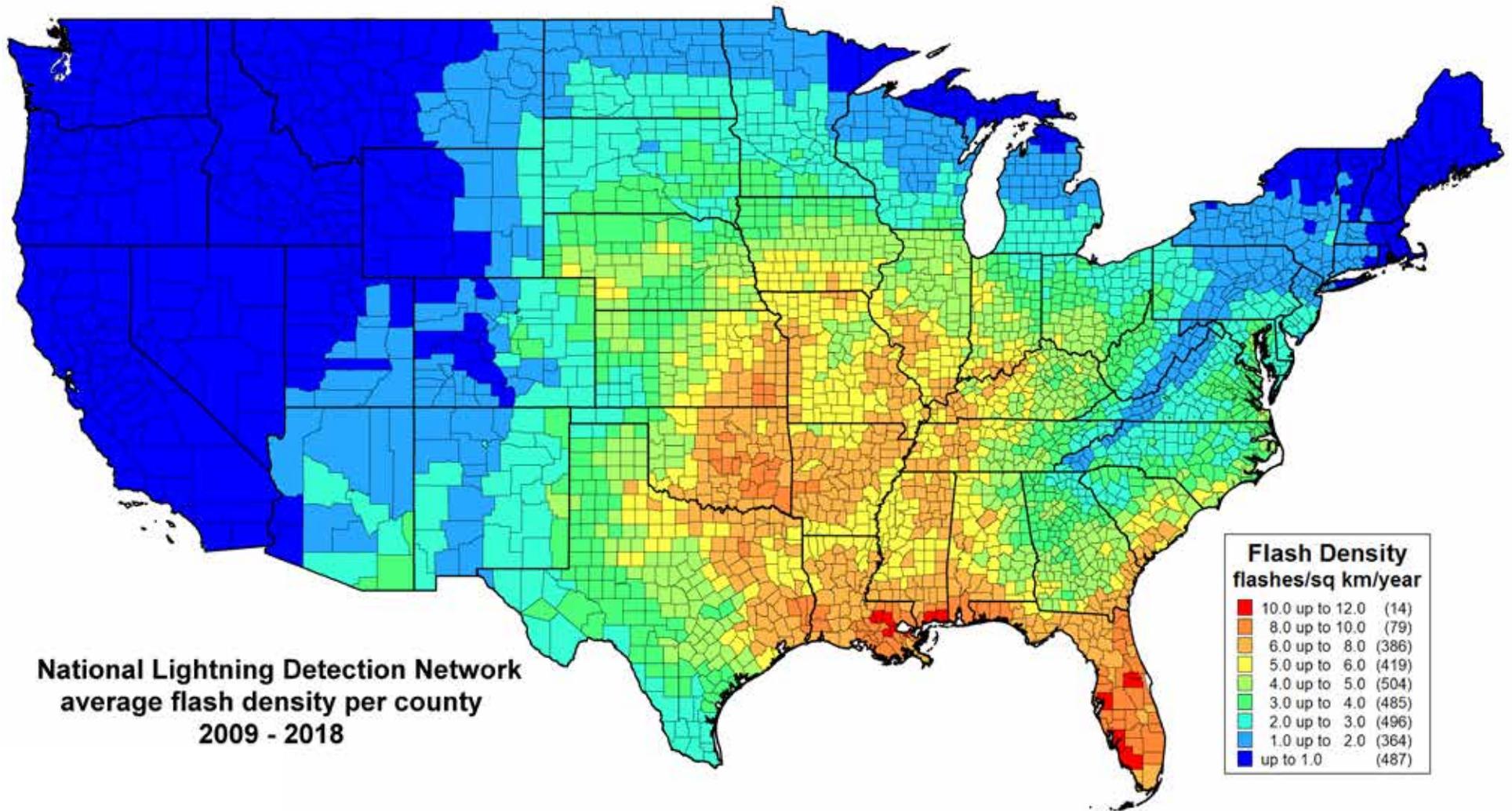
U.S. Cloud-to-Ground Flash Density Ratio Map, 2018 compared to 10-year average



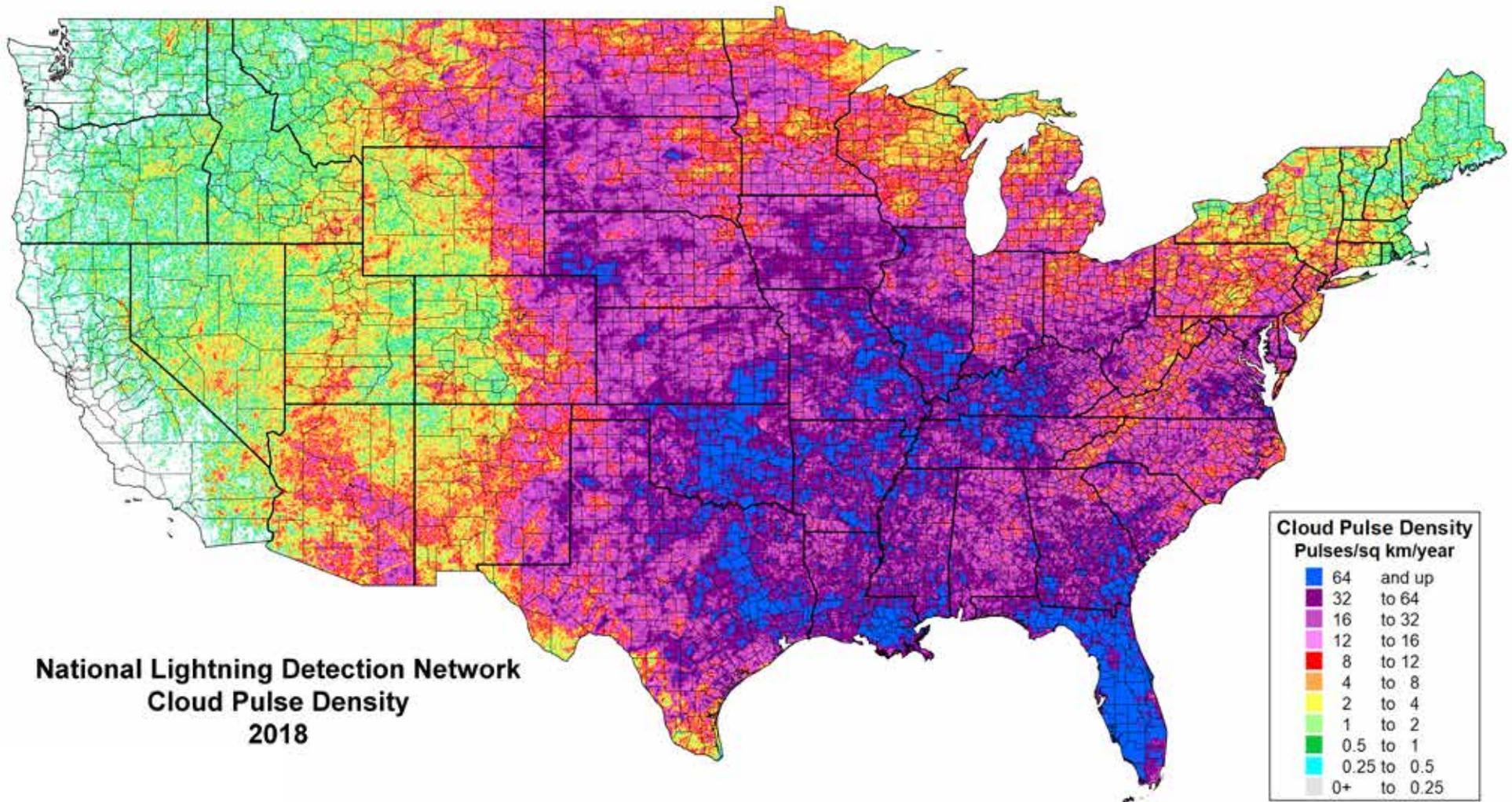
U.S. Average Cloud-to-Ground Flash Density per County, 2018



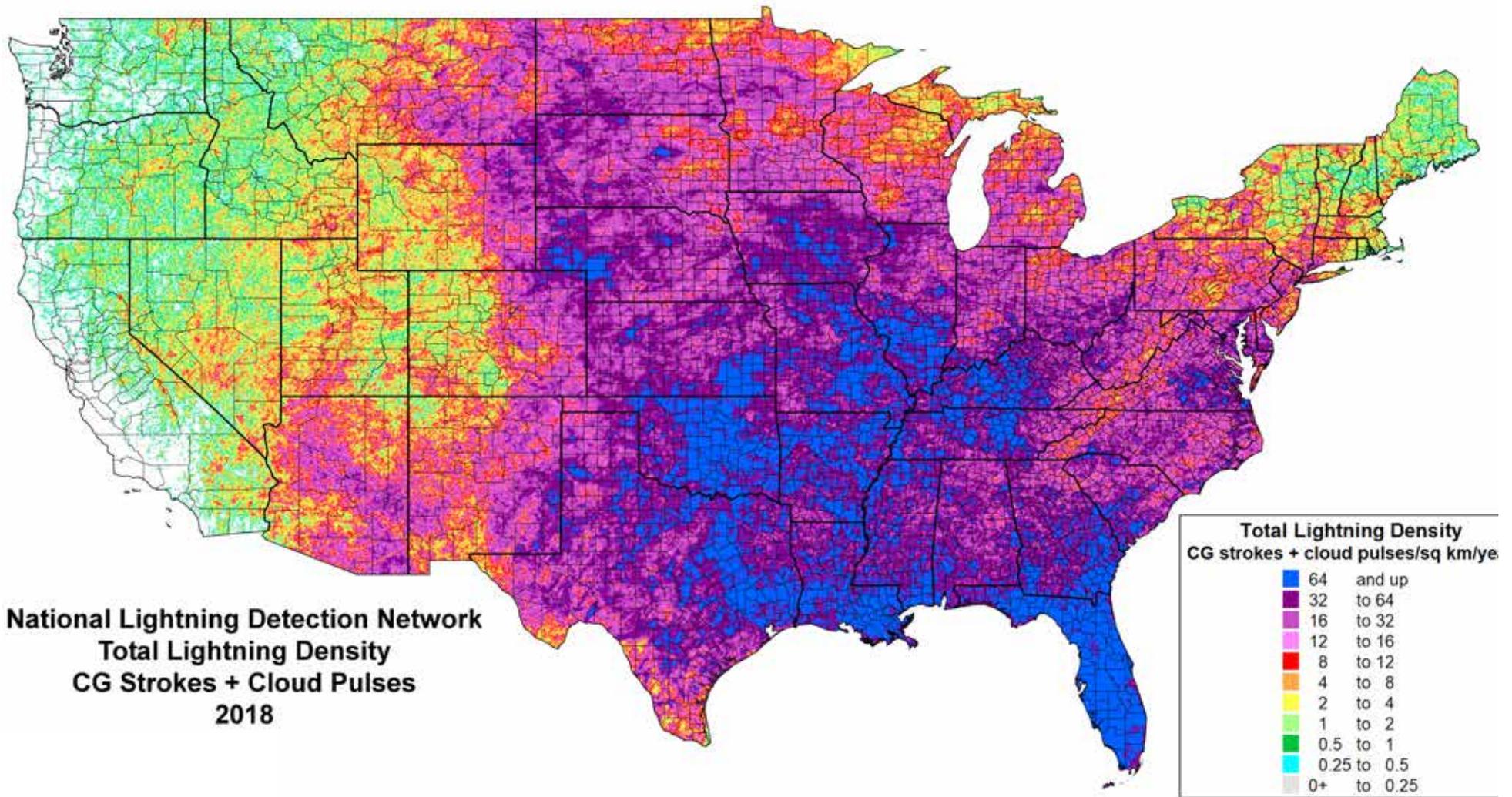
U.S. Average Cloud-to-Ground Flash Density per County, 2009–2018



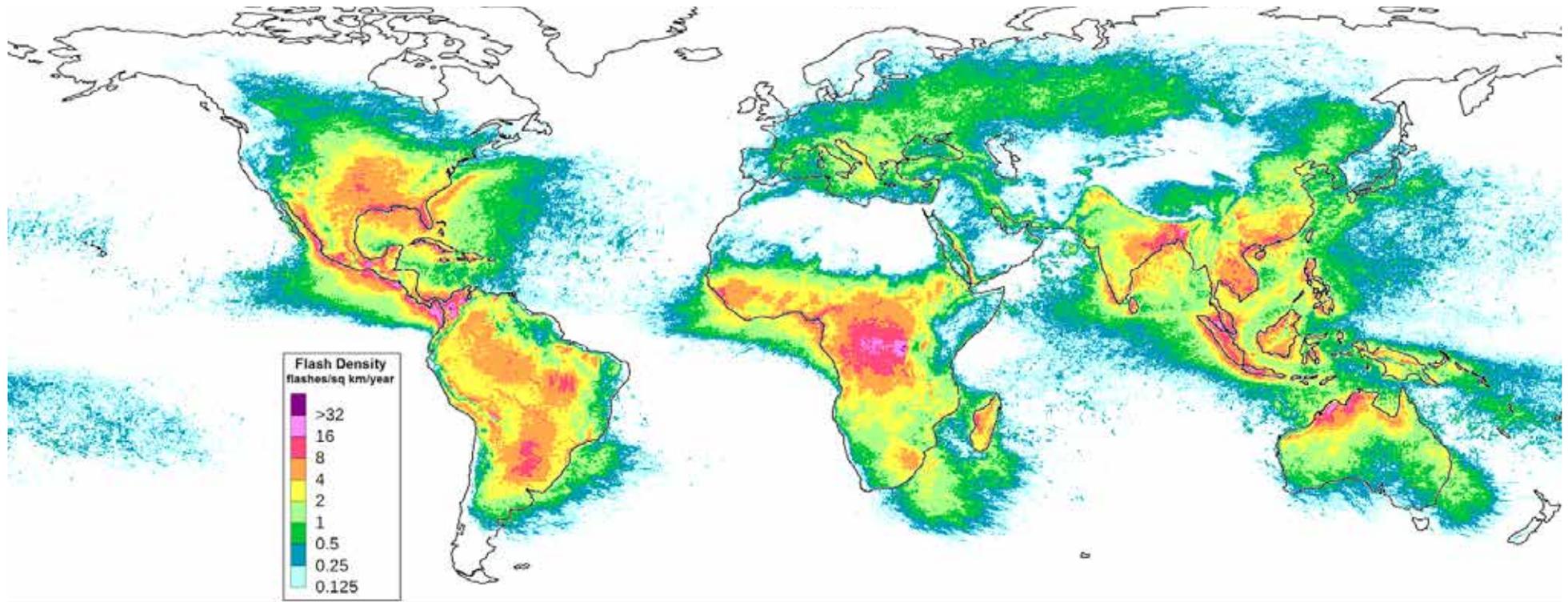
U.S. Cloud Pulse Density Map 2018



U.S. Total Lightning Density 2018



Global Cloud-to-Ground Flash Density, Last 5 Years



GLD360 5-year lightning flash density*

*Data have been filtered to remove all flashes weaker than 13 kA

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