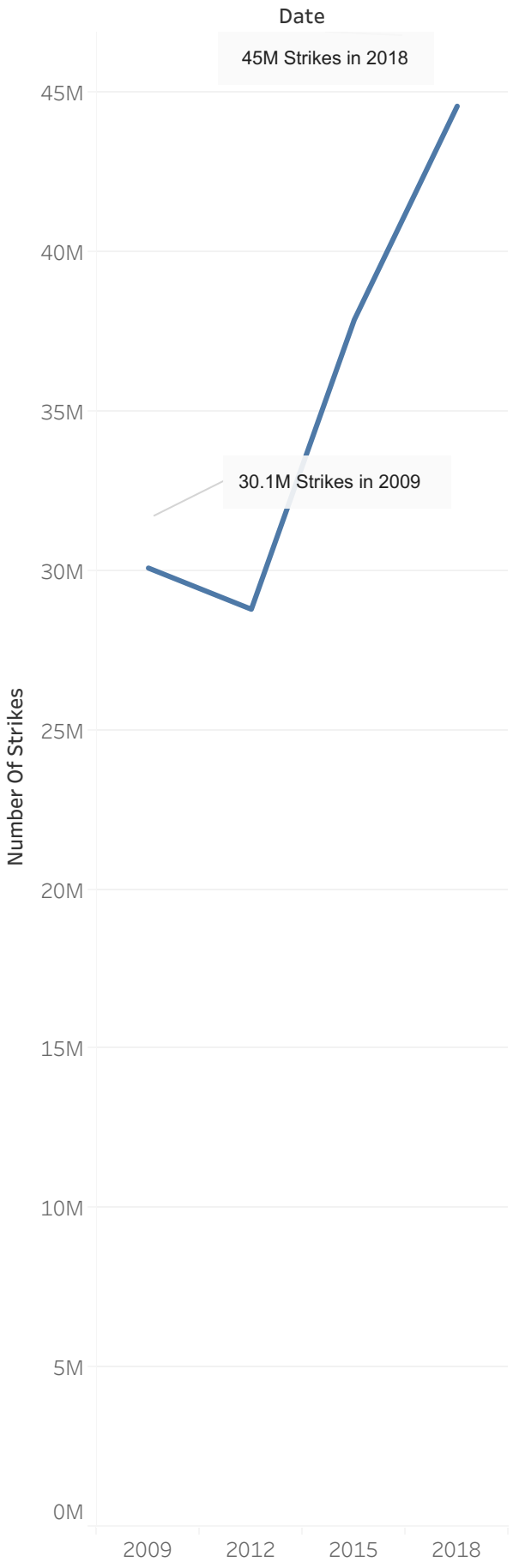
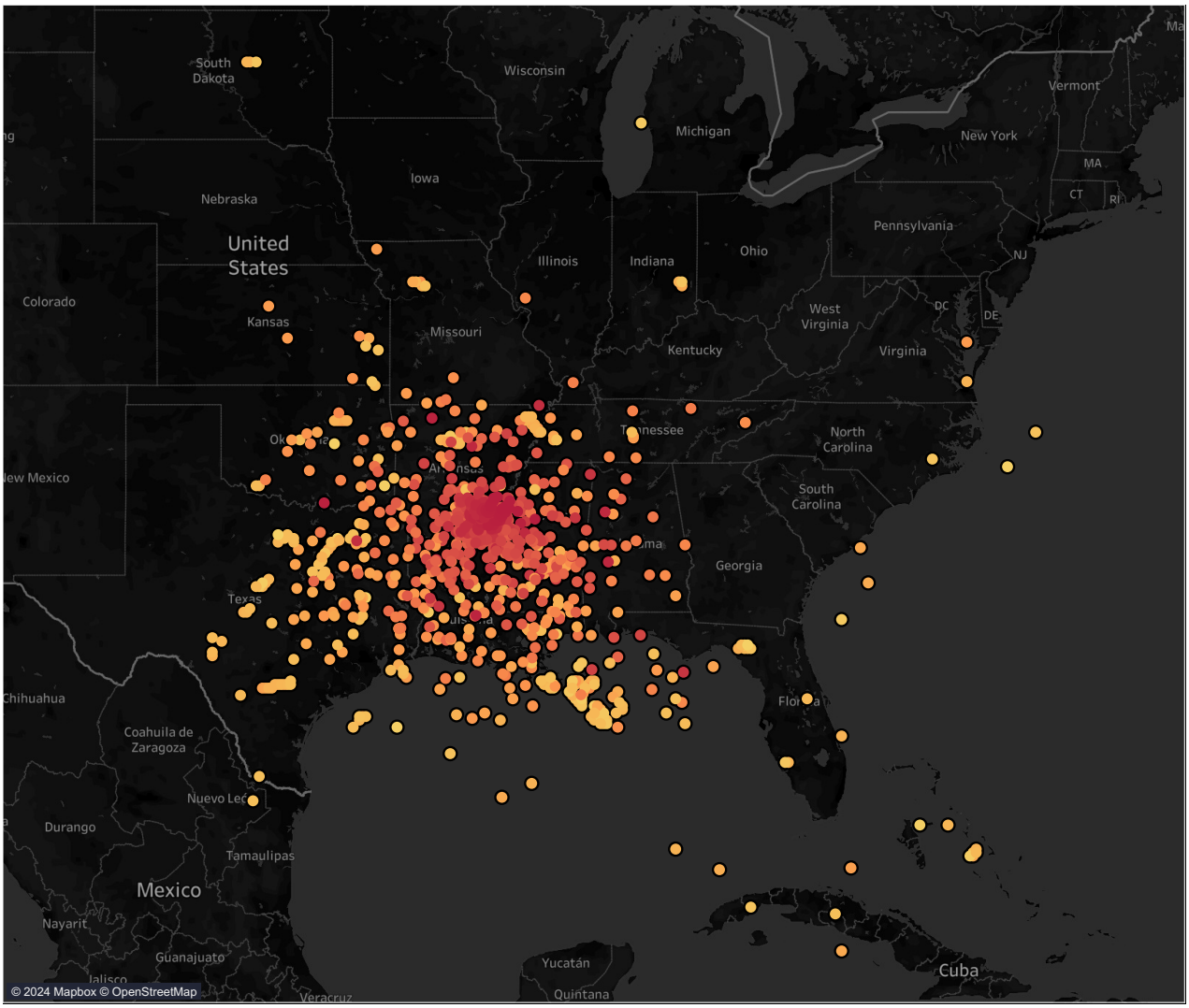
Line graph


Date
45M Strikes in 2018
30.1M Strikes in 2009
Number Of Strikes
45M
40M
35M
30M
25M
20M
15M
10M
5M
0M
2009
2012
2015
2018

USAmap - 2018



Number Of Strikes

- 357
- 403
- 405
- 411
- 414
- 419
- 424
- 428
- 429
- 432
- 434
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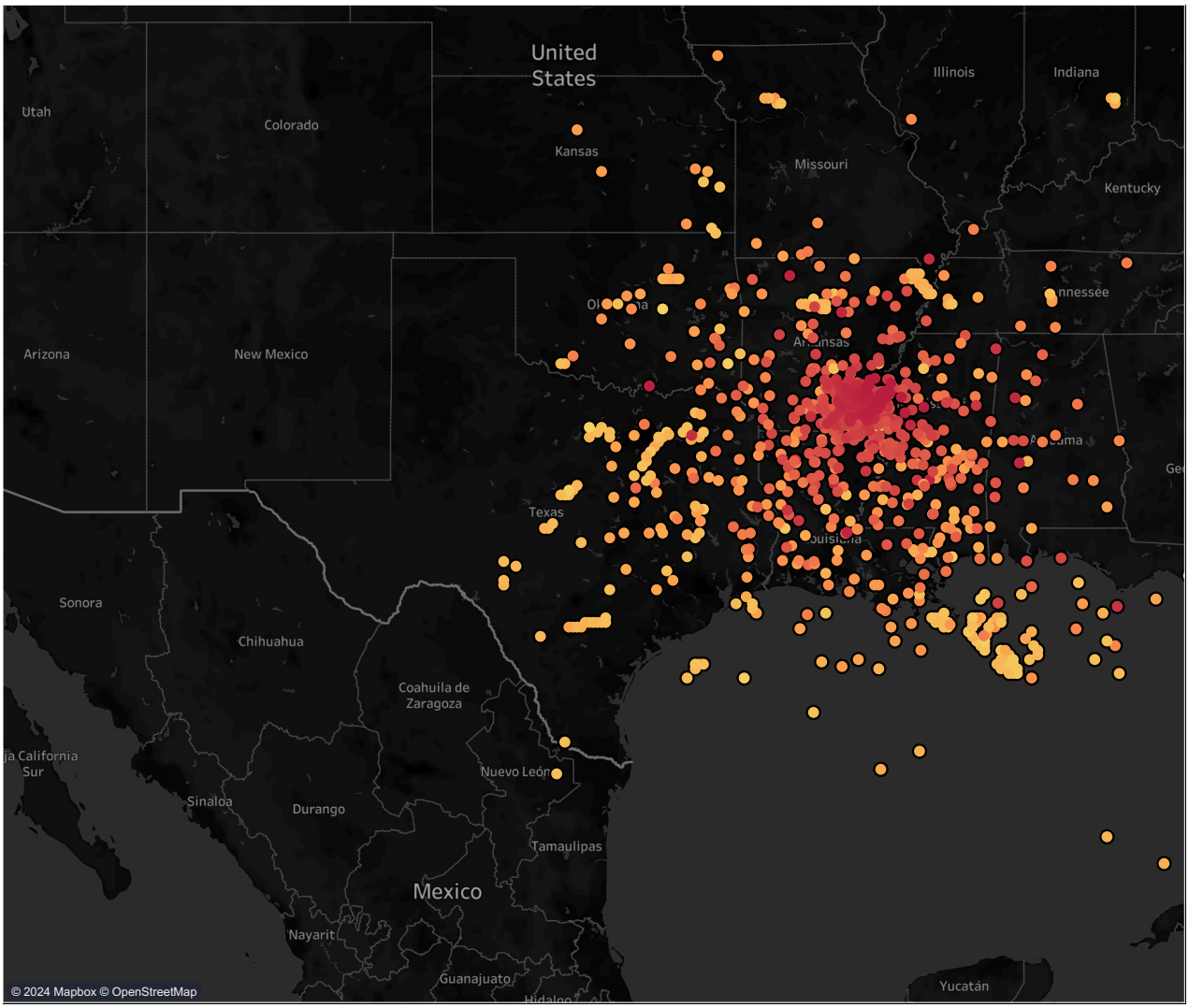
Texas



Number Of Strikes

- 484
- 491
- 502
- 511
- 518
- 538
- 539
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- 556
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- 559
- 571
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- 577
- 578
- 580
- 581
- 584
- 586
- 587
- 590
- 598
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- 604
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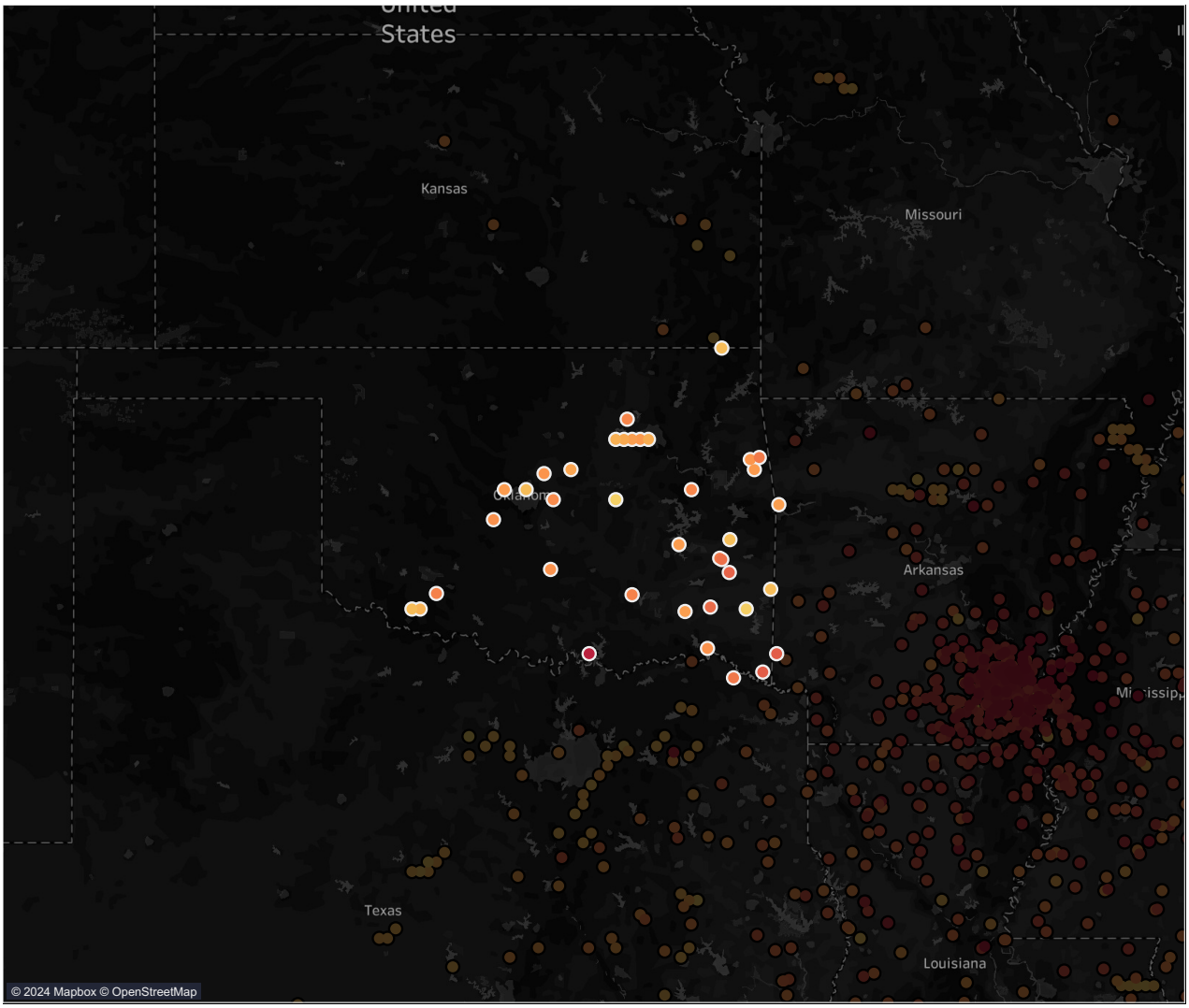
- 622
- 625
- 626
- 628
- 632
- 637
- 640
- 646
- 650
- 652
- 659
- 665
- 676
- 679
- 682
- 694
- 697
- 698
- 700
- 701
- 704
- 706
- 712
- 713
- 721
- 727
- 736
- 743
- 745
- 752
- 753
- 757
- 761
- 779
- 782
- 787
- 790
- 799
- 803
- 805
- 806
- 809
- 814
- 821
- 830
- 831
- 834
- 838

Oklahoma



Number Of Strikes
484
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834
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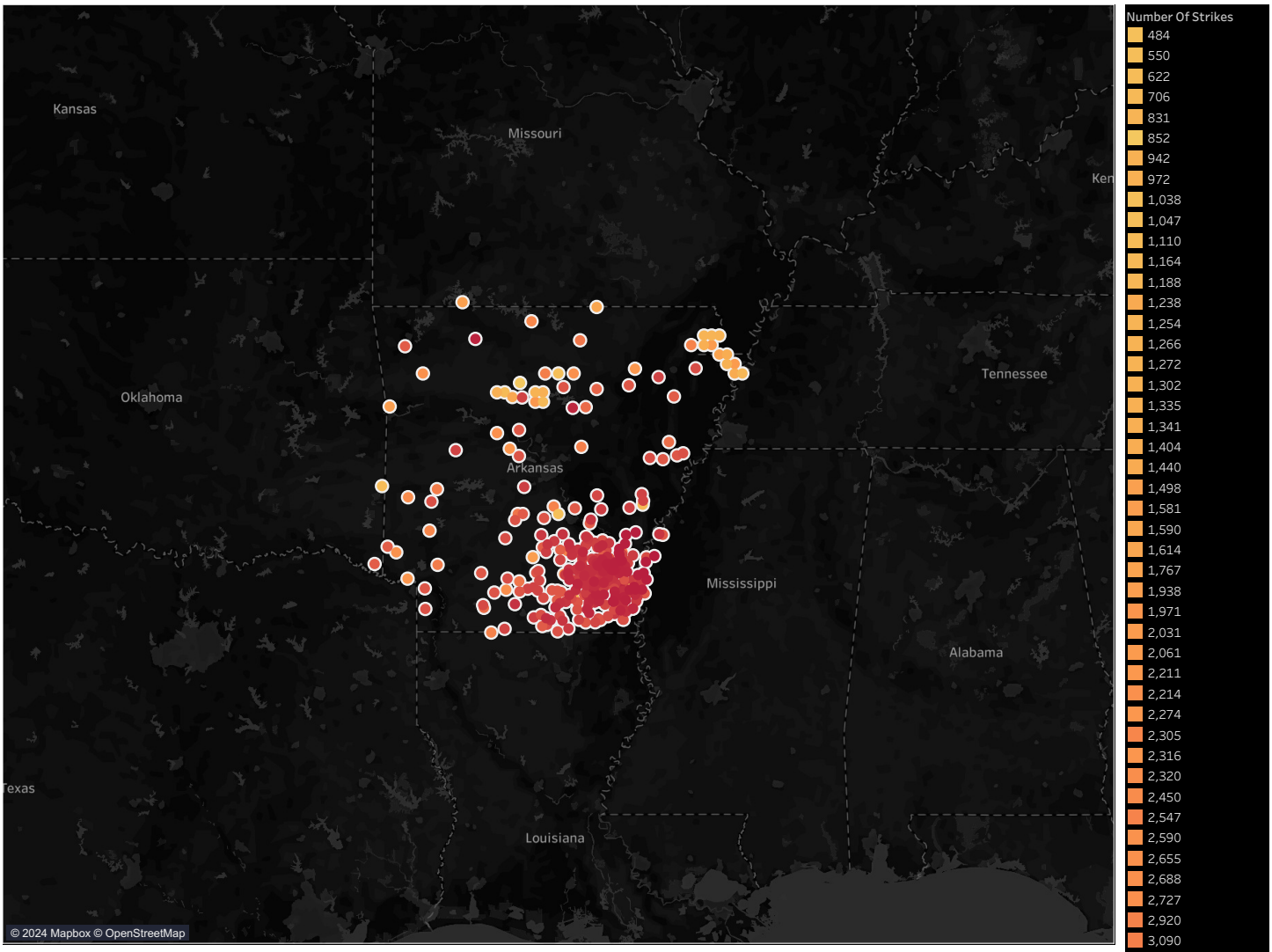
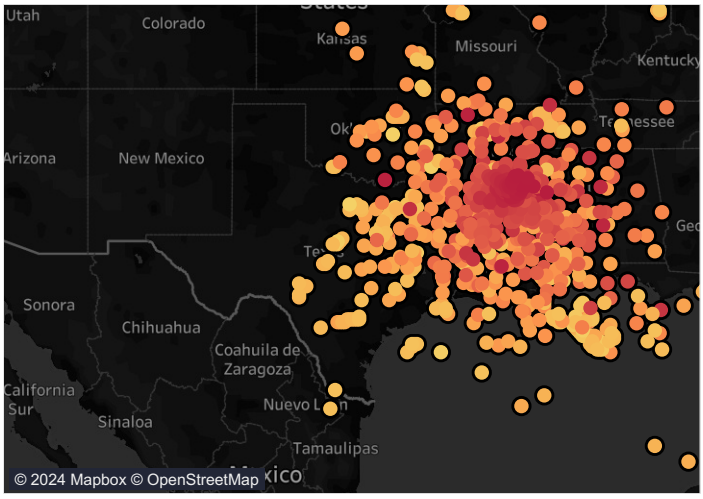
Kansas



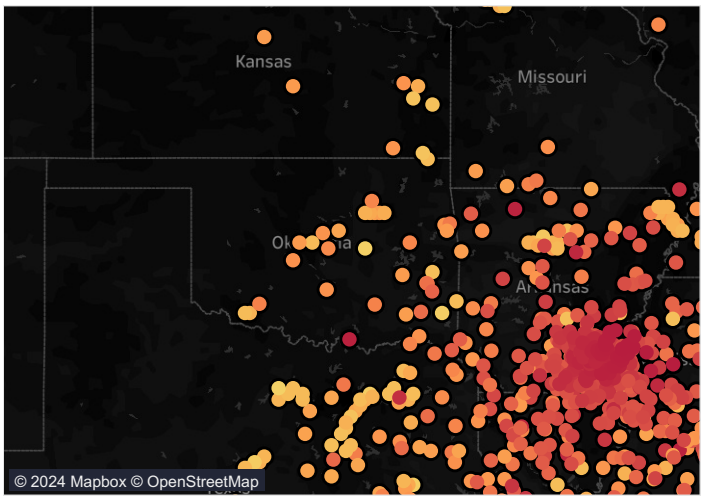
Number Of Strikes

- 484
- 550
- 622
- 706
- 831
- 852
- 942
- 972
- 1,038
- 1,047
- 1,110
- 1,164
- 1,188
- 1,238
- 1,254
- 1,266
- 1,272
- 1,302
- 1,335
- 1,341
- 1,404
- 1,440
- 1,498
- 1,581
- 1,590
- 1,614
- 1,767
- 1,938
- 1,971
- 2,031
- 2,061
- 2,211
- 2,214
- 2,274
- 2,305
- 2,316
- 2,320
- 2,450
- 2,547
- 2,590
- 2,655
- 2,688
- 2,727
- 2,920
- 3,090
- 3,176
- 3,312
- 3,654
- 3,710
- 3,720
- 4,137
- 4,345
- 4,536
- 4,557
- 4,680
- 4,690
- 5,115
- 5,211
- 5,392
- 5,440
- 5,500
- 5,634
- 5,678
- 5,967
- 5,984
- 6,204
- 6,420
- 6,426
- 6,864
- 6,897
- 6,903
- 6,942
- 7,194
- 7,636
- 7,749
- 8,007
- 8,415
- 8,580
- 8,772

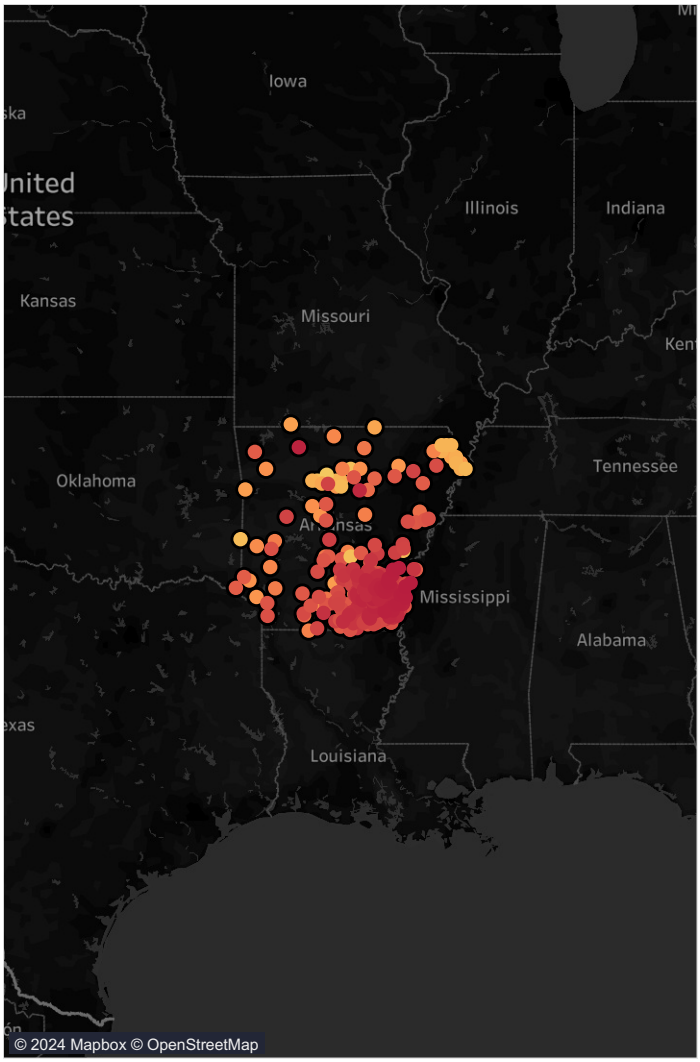
Texas



Oklahoma

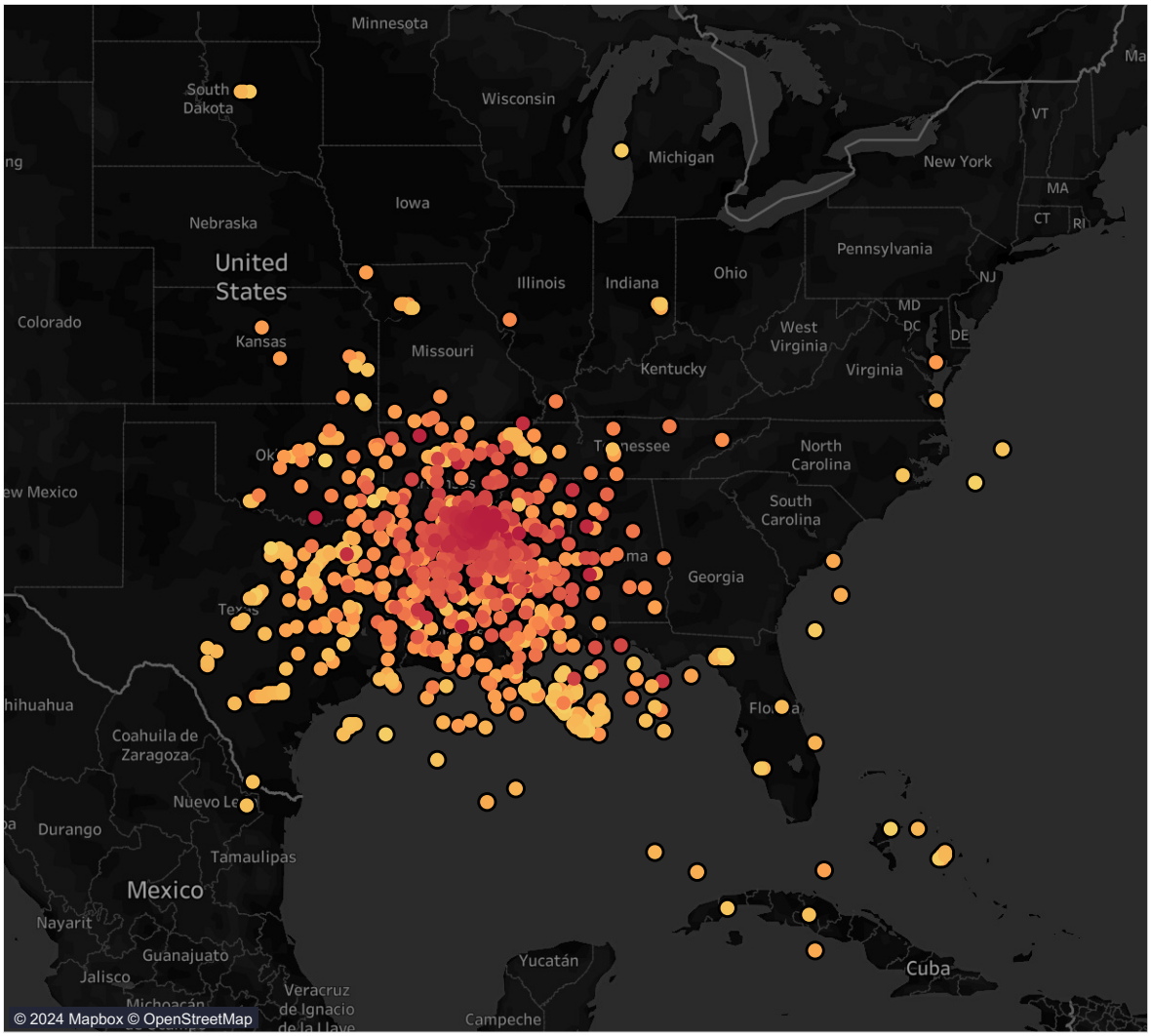


Kansas



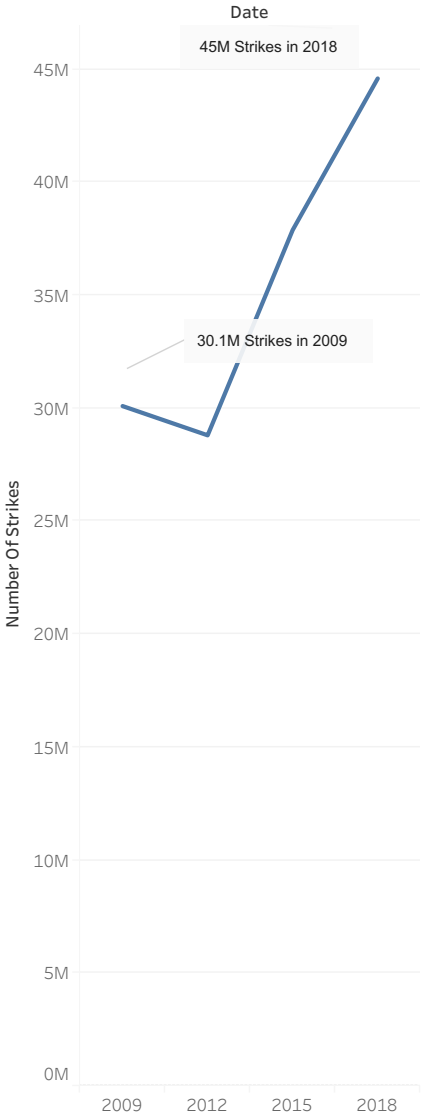
USAmap - 2018

Year of Date
2018
Show history



Story 1

Lightning strikes in the U.S. have increased 50% over the last decade.	Lightning strikes have moved from the East Coast to the Central Mainlands over the last decade	Most number of lightning strikes in 2018 happened in densely populated household areas



Story 1

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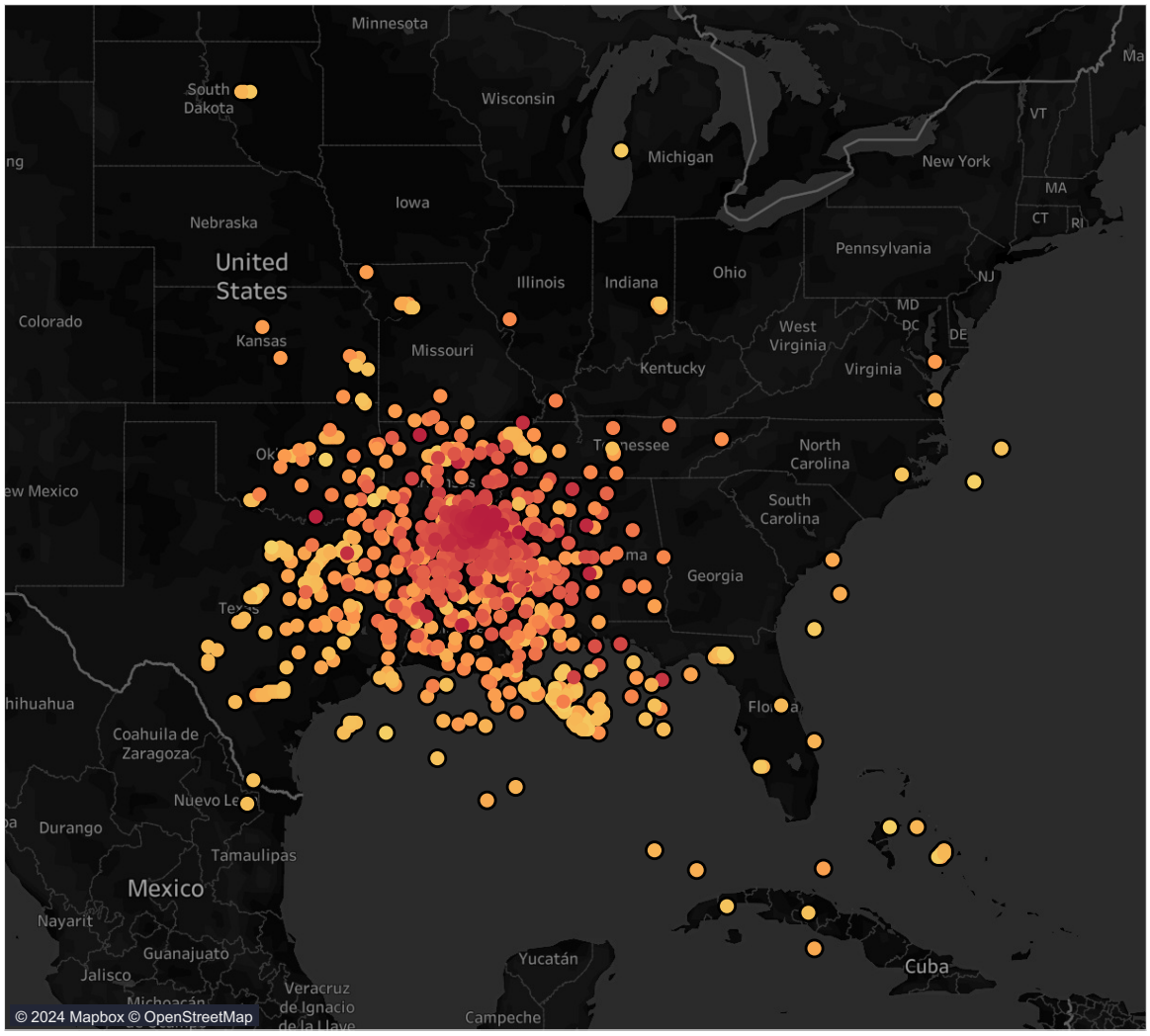
USAmap - 2018



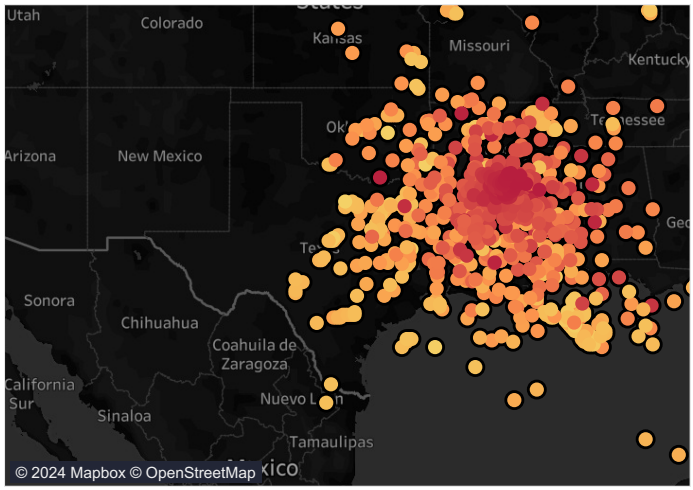
Year of Date
2018

☐ Show history

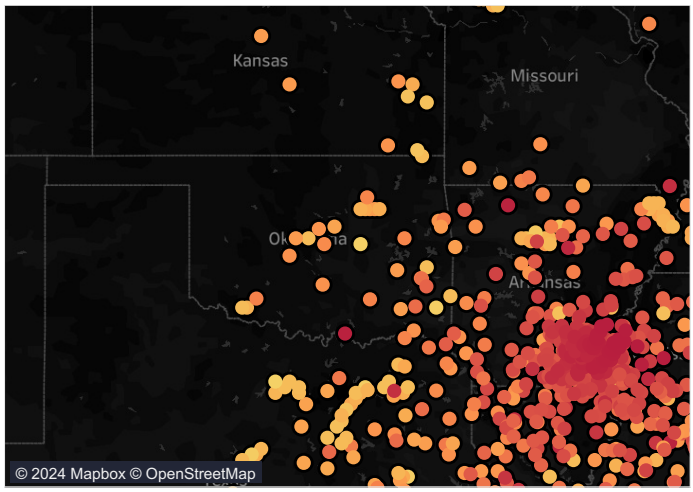
Story 1

Lightning strikes in the U.S. have increased 50% over the last decade.	Lightning strikes have moved from the East Coast to the Central Mainlands over the last decade	Most number of lightning strikes in 2018 happened in densely populated household areas

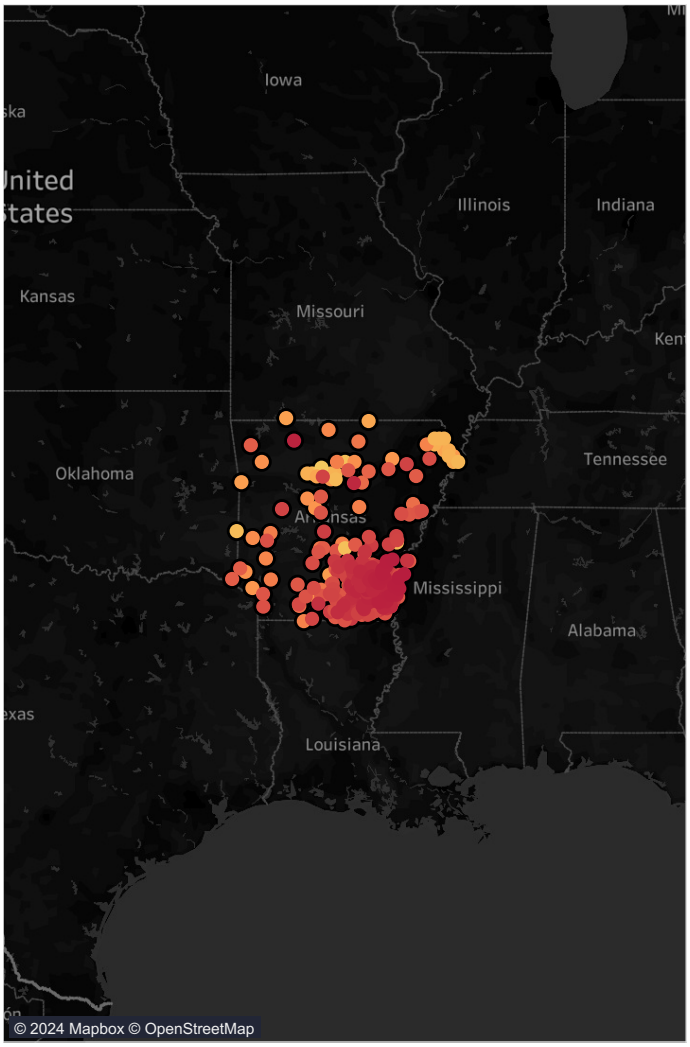
Texas



Oklahoma



Kansas



Story 2

The analysis of NOAA's lightning strike data using Tableau reveals several key insights that have significant implications across various sectors. Let's explore each finding in detail and discuss its potential impacts:

1. **50% Increase in Lightning Strikes Over the Last Decade**
- **Implications**:
  - This substantial increase suggests potential changes in atmospheric or climatic conditions. Factors such as rising global temperatures, altered precipitation patterns, and increased storm activity due to climate change could be contributing to this rise.
  - The increase in lightning activity could lead to higher risks of wildfires, especially in regions that are already prone to dry conditions.
- **Actionable Insights**:
  - Improved **disaster preparedness** and resource allocation in regions with increasing lightning activity.
  - **Public awareness campaigns** about lightning safety, especially during peak seasons.
  - Further **research** to investigate potential correlations between lightning activity and climate change, which can inform future climate models.

2. **Shift from the East Coast to the Central Mainlands**
- **Implications**:
  - This geographic shift in lightning activity may indicate changes in regional weather patterns, possibly due to variations in humidity, temperature, or prevailing wind patterns.
  - The Central U.S. includes vast agricultural lands and numerous rural communities. Increased lightning activity here could pose greater risks to crops, livestock, and critical infrastructure.
- **Actionable Insights**:
  - **Infrastructure upgrades** in Central U.S. regions, such as better lightning protection systems for buildings, communication towers, and power lines, to mitigate potential damages.
  - **Enhanced monitoring and forecasting** systems in the Central U.S., allowing more accurate prediction and quicker response to lightning-related events.
  - **Targeted research** into the specific environmental changes driving this shift, which could contribute to improved regional weather forecasting.

3. **High Number of Strikes in Densely Populated Areas in 2018**
- **Implications**:
  - The concentration of lightning strikes in densely populated areas poses an increased threat to human life and property. Urban areas with high-rise buildings and complex infrastructure systems are particularly vulnerable.
  - Insurance claims and damages could escalate in urban areas due to potential power outages, fires, and structural damage caused by lightning strikes.
- **Actionable Insights**:
  - **Urban planning** should incorporate advanced lightning protection measures, such as lightning rods and grounding systems in buildings, especially in areas identified as hotspots.
  - **Preparedness initiatives** focused on densely populated areas, ensuring that communities are educated about lightning risks and know how to stay safe.
  - **Emergency response protocols** could be optimized for faster reaction in urban lightning hotspots, helping to reduce casualties and damage in future incidents.

Next Steps for Further Analysis
- **Trend Analysis**: Investigate whether the observed trends continue into recent years, and explore seasonality to determine specific times of heightened risk.
- **Correlational Studies**: Analyze other environmental and social data (e.g., climate change indicators, urban growth) alongside lightning d..