

Clustering to extract information: Analyze 30 years of tornadoes

Clustering allows you to visually extract meaningful information from a dataset that has many points. Clustering is applied dynamically at multiple scales, and you can adjust the number of point features grouped into clusters using the provided slider.

The Weather Channel is doing a segment on tornadoes and has asked for an interactive map of the past 30 years of tornadoes within the US.

Build skills in these areas

- Configuring clustering on a point layer
- Configuring clustering pop-up

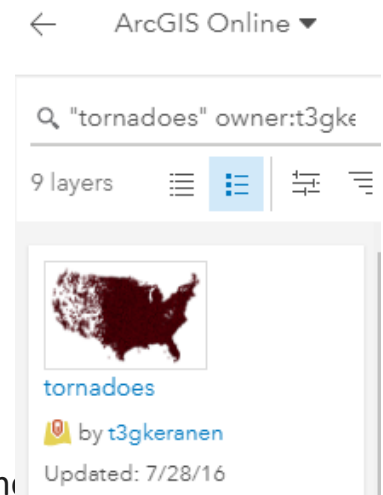
What you need

- Account required
- Estimated time: under 30 minutes

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Open a web map and search for data

1. Sign into your [ArcGIS Online organizational account](#).
2. Click on Map to open the Map Viewer.
3. Click Add >>Search for layers>>in ArcGIS Online.
4. ArcGIS Online.
Type “tornadoes” owner:t3gkeranen in the search pane.



5. Add tornadoes to the map.
6. Click the back arrow to go back to the Content Pane.
7. On the top ribbon, click Save As and save the map with the metadata:
 - a. Title: Sixty Years of Tornadoes_yourinitials.
 - b. Tags: remove the tags and add individualized tags
 - c. Summary: Sixty years of tornadoes in the United States
8. SAVE MAP.
9. Click the table icon below tornadoes.

Q1 How many tornadoes are shown?

Q2 How many years of data do the tornadoes represent?

9. Close the table by click the X in the upper right corner.

This map has too many points and points on top of points, so individual states cannot be seen.

10. Click the Clustering icon below the tornadoes layer.
11. Use the slider to decide how much clustering you want to use. Less clustering yields more dots on the map, and more clustering yields fewer. Clustering is multiscalable so the clusters update as you zoom in and out.

In this lesson you have used clustering to help visualize large point datasets.



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