



Map styling

Every layer and the basemap under it can look the way you want. Change colors, contours, wind and point readouts on each layer, restyle the map itself, and add your own shapes and placefiles.

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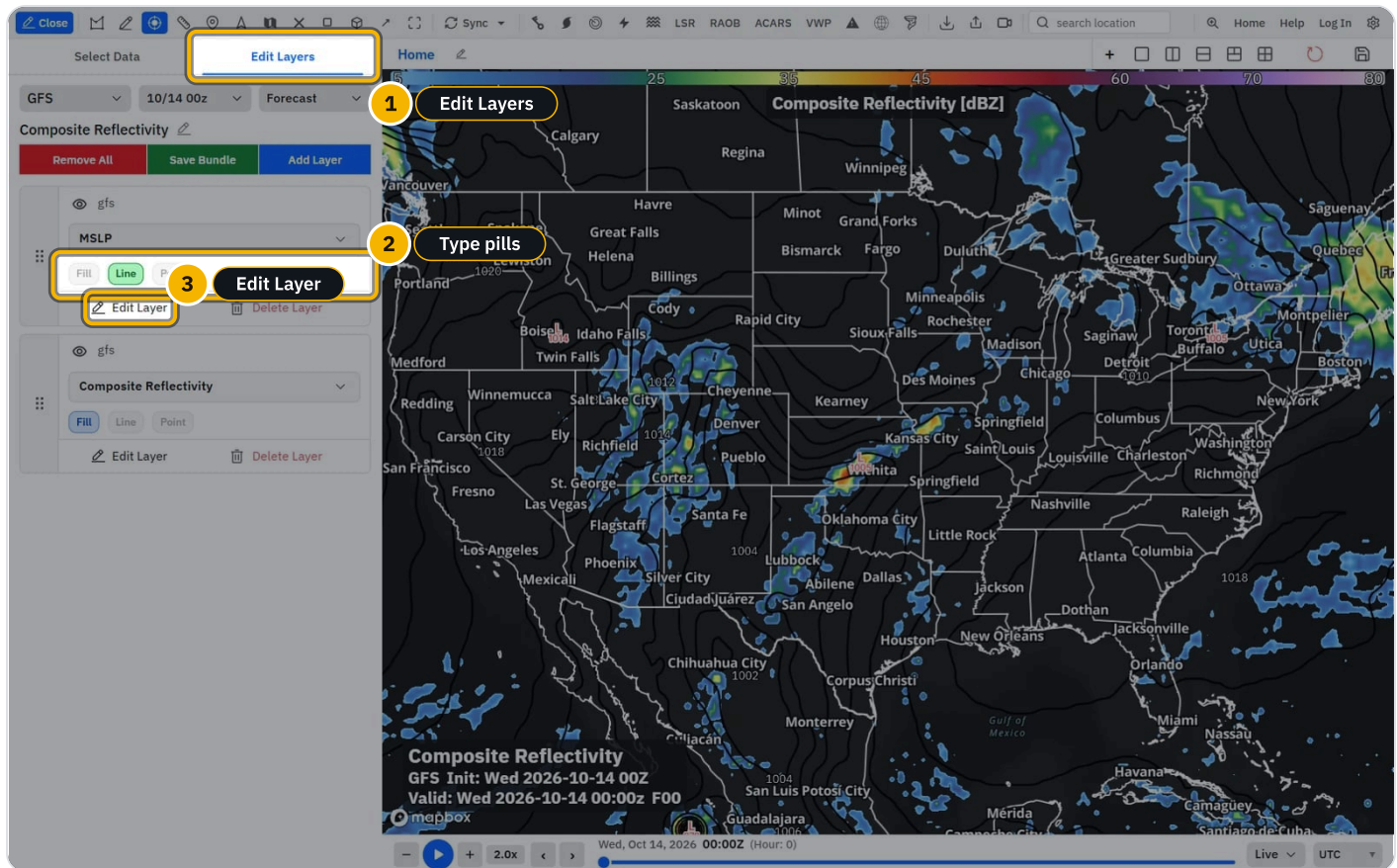
BEFORE YOU START

- Layer styles live in the sidebar: open **Edit Layers** and click **Edit Layer** on a row.
- The basemap lives behind the **Map style** button on the toolbar.
- To change how a variable looks in every bundle, use **Settings** → **Data** instead.
- Most styling works on every plan. Custom Mapbox styles, highlight areas, custom layers and placefiles need Professional.

01 Open a layer's style settings

Each layer can draw as a fill, lines, point values or wind symbols. You turn each one on and style it from the layer's Edit Layer panel.

- 1 In the sidebar, click **Edit Layers**.
- 2 On a layer row, click the **Fill**, **Line**, **Point**, **Barb** or **Vector** pills to turn each drawing type on or off.
- 3 Click **Edit Layer** on the row to open its settings.
- 4 Pick a tab such as **Fill**, **Line** or **Point**. Its switch must read **Enabled** for the style controls to show.
- 5 Click **Back to Bundle Layers** when you are done.



The Edit Layers tab, a layer's type pills and its Edit Layer button.

TIPS

- **Reset to Defaults** at the bottom of a tab undoes your changes on that tab.
- Save the bundle afterwards to keep the new look.

02 Custom colormaps

Set your own breakpoints, colors and opacity at each stop, with smooth or hard steps. You can also import .pal files.

- 1 Click **Edit Layer** on a layer, then the **Fill** tab (or **Line** for contour colors).
- 2 Set **Colormap Type** to **custom colormap**.
- 3 Click a color swatch to change its color.
- 4 Click a breakpoint number to change its value, set its **Opacity** or remove it.
- 5 To add a stop, type a value in the field under the stops and click **Add**.

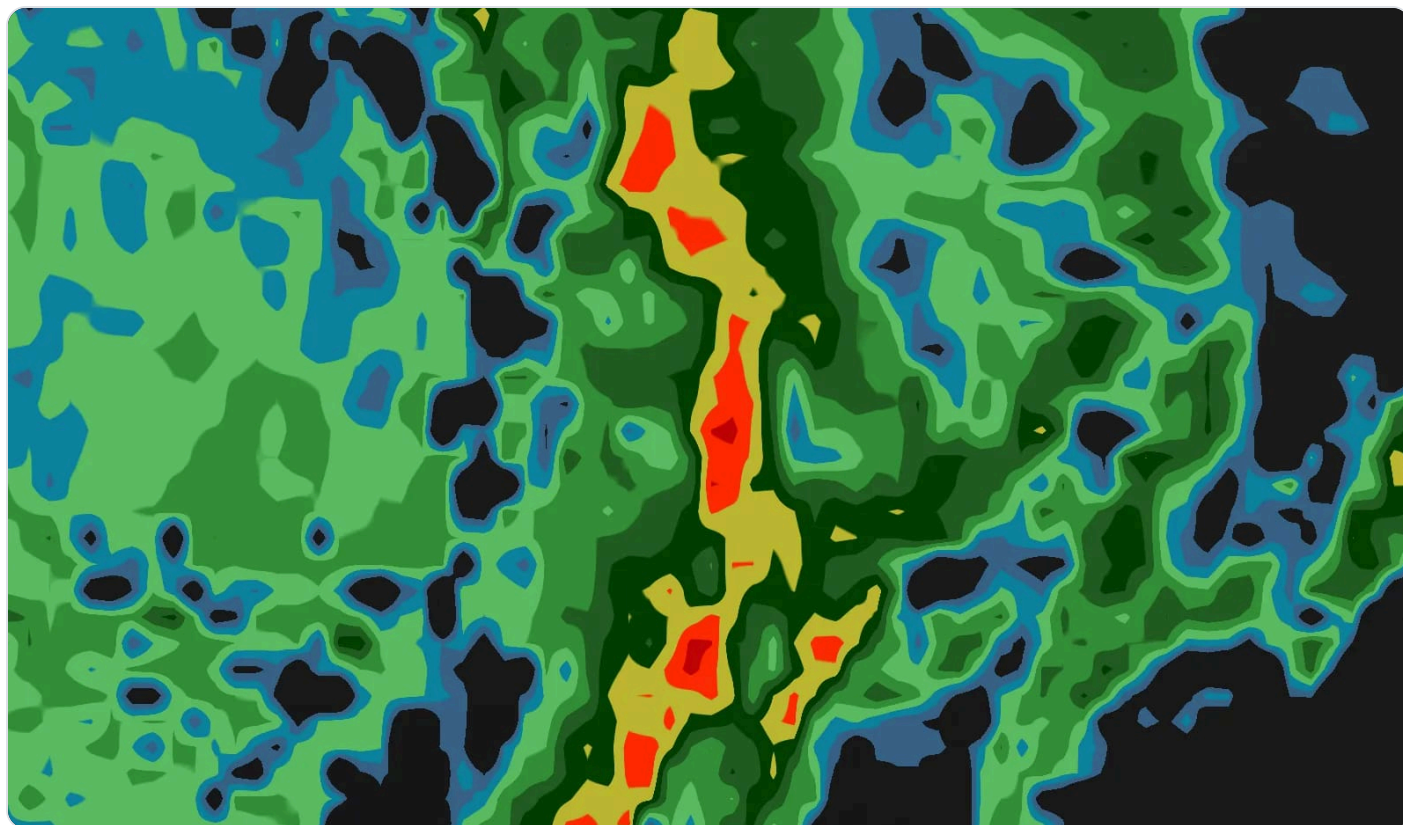
- 6 Turn **Interpolate Colors** off for hard color steps, or on for smooth blending.
- 7 Click **Save Colormap** to keep it, or **Set as default colormap** to use it whenever this variable loads.

To import a palette, click **Load Colormap**, open **Import .pal file**, then click **Choose .pal file** or paste the text and click **Apply .pal**. Color tables shared from Wx Tools open from their link and apply to the matching radar product.

TIPS

- The **Opacity** control under the stops can change every stop at once, or only those above, below or between values you set.
- In **Settings** → **Data**, switch the list to **Colormap groups** to change one palette for every variable that shares it.

Sign in to save colormaps. .pal import isn't shown on phones.

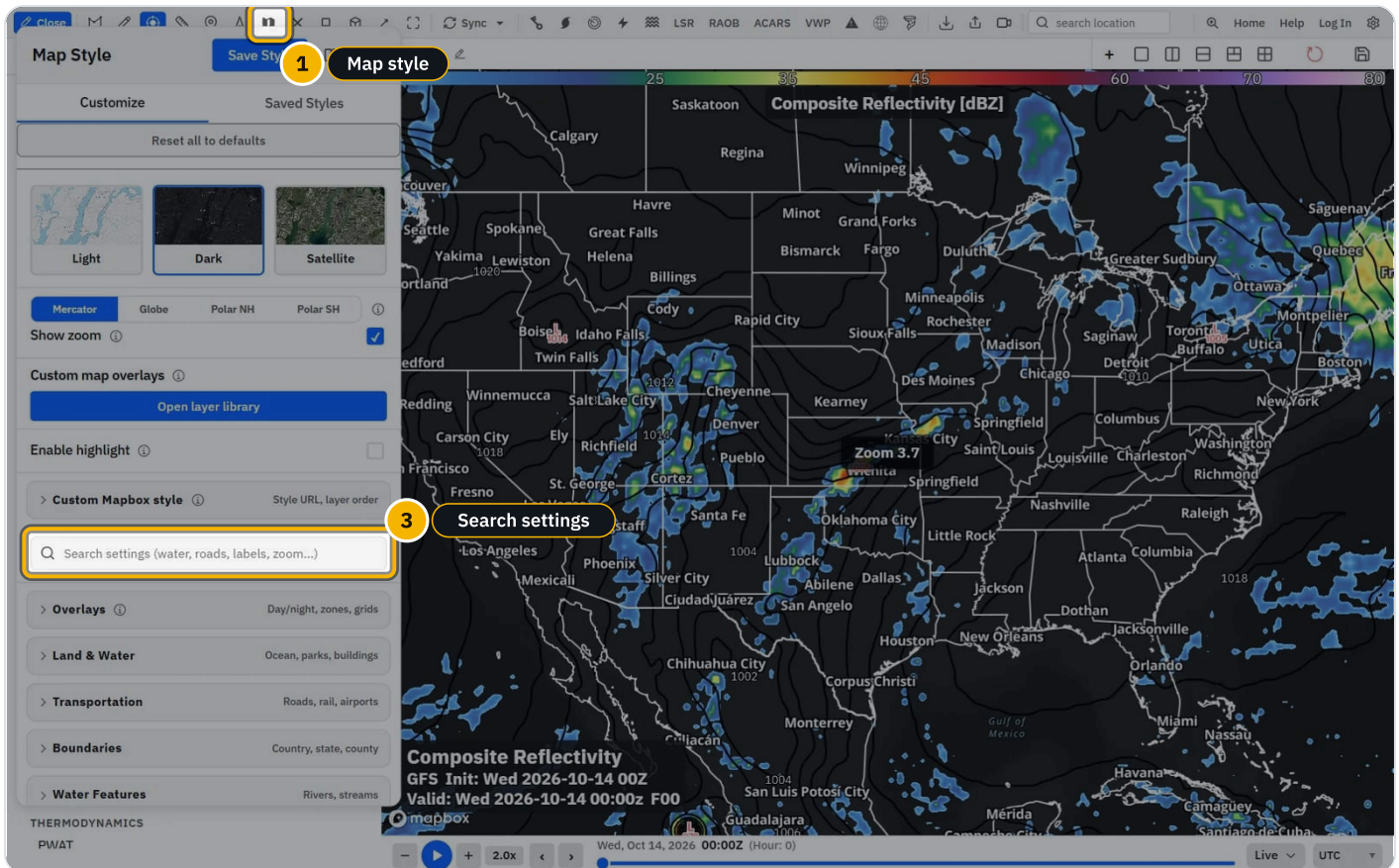


A hard-step colormap on a model precipitation field.

03 Map styles

Choose a light, dark or satellite basemap, then decide which roads, borders, labels, terrain and buildings show and at which zoom levels.

- 1 Click the **Map style** button on the toolbar.
- 2 On the **Customize** tab, pick a basemap: **Light**, **Dark** or **Satellite**.
- 3 Open a section such as **Labels**, **Boundaries**, **Transportation**, **Land & Water** or **Terrain**, or type in the search box to find a setting.
- 4 Change what you need. The map updates as you go.
- 5 Click **Save Style**, enter a **Style Name** and save it. Reload it later from the **Saved Styles** tab.



The Map style button and the settings search in the Map Style window.

TIPS

- County names are under **Labels** → **County Labels**. Lat/lon lines and the day/night shading are under **Overlays**. Hillshade and 3D terrain are under **Terrain**, and 3D buildings under **Land & Water**.
- Many features have a **Zoom range** with **Min** and **Max**, so they only show at the zoom levels you want.
- Turn off **Private map style?** when saving to let others find the style. Search public styles under **Saved Styles** → **Advanced**.

Sign in to save styles. Free saves 1 map style; Enthusiast and up save as many as you like.



NEXRAD reflectivity on a custom basemap with 3D building outlines.

04 Point readouts

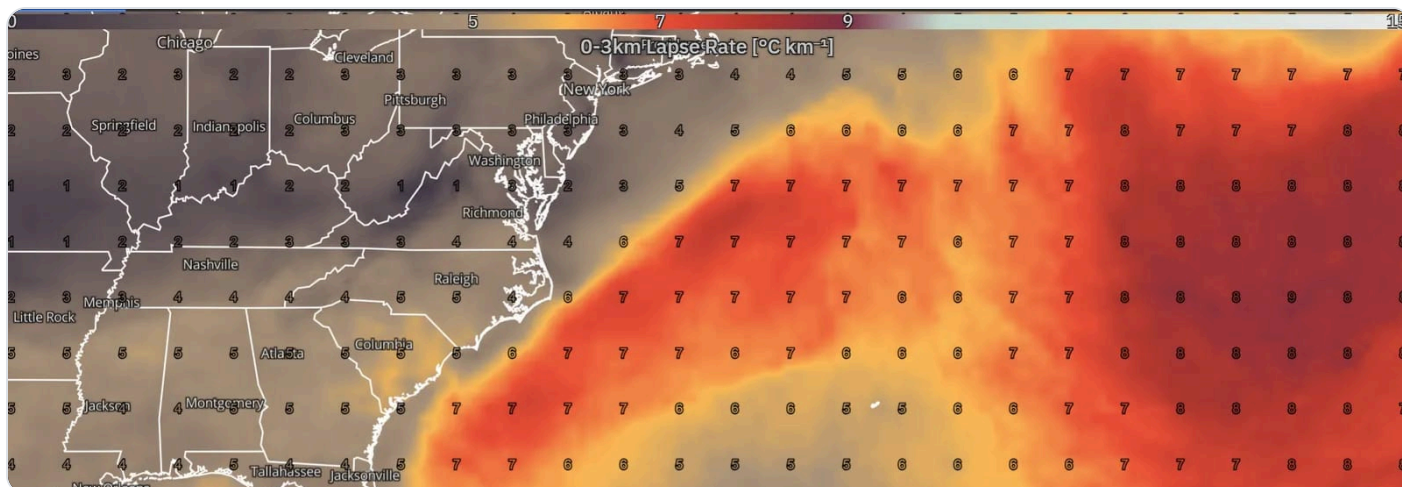
Print values on the map on a regular grid or at cities, with your choice of font, decimals, units and background.

- 1 In **Edit Layers**, turn on the **Point** pill for the layer.

- 2 Click **Edit Layer**, then the **Point** tab.
- 3 Set **Font**, **Font Size** and **Decimal Places**. Turn on **Show units on readouts** to add units.
- 4 Add **Stroke**, **Background** or **Drop shadow** so the numbers stand out.
- 5 Under **Readout Type**, click **Switch to City** for values at cities, or **Switch to Grid** for a grid. **Point Distance** sets the grid spacing.

TIPS

- To show the highest and lowest value in view, open **Select Data** → **Layout** and turn on **Show viewport min/max**.
- Upload your own fonts in **Settings** → **Fonts** (Professional) to use them in readouts.



0–3 km lapse rates with grid point values.

05 Barbs, vectors, particles and streamlines

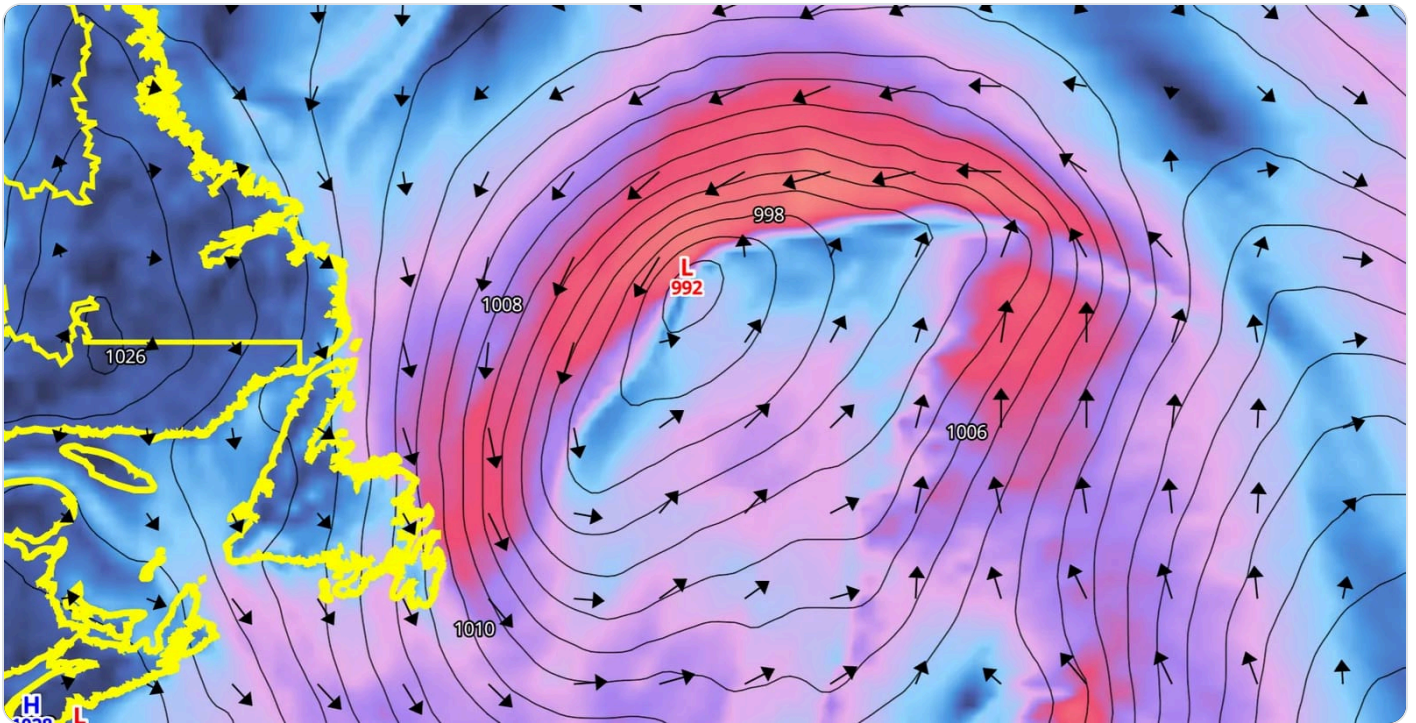
Draw wind as barbs or vectors on a grid or at cities, or animate it as particles or streamlines.

- 1 In **Edit Layers**, click **Edit Layer** on a wind layer, then the **Barb** or **Vector** tab.
- 2 In **Wind display**, choose **Barbs**, **Vectors**, **Streamlines** or **Particles**.
- 3 For barbs and vectors, set the size and distance sliders. Under **Readout Type**, click **Switch to City** to plot at cities.
- 4 For particles, adjust **Particle density**, **Particle length**, **Particle speed** and **Speed exaggeration**.

- 5 To reuse particle or streamline settings, click **Save as wind display default**.

TIPS

- **Settings** → **Data** → **Wind display** sets one display for every bundle you load. **Bundle/Variable** keeps each layer's own choice.



Wind vectors around a North Atlantic low.

06 Contours and line labels

Draw any field as contours with your own interval, line style and label font.

- 1 In **Edit Layers**, turn on the **Line** pill for the layer.
- 2 Click **Edit Layer**, then the **Line** tab.
- 3 Under **Contour intervals**, choose **Uniform step** and set **Step between isolines**, or choose **Custom levels**, type values in **Isoline values** and click **Apply**.
- 4 Set **Width** and **Line Style: Solid, Dashed, Dotted or Dash-Dot**.
- 5 Turn on **Show isoline labels**, then set **Font Size, Font, Outline and Label color**.

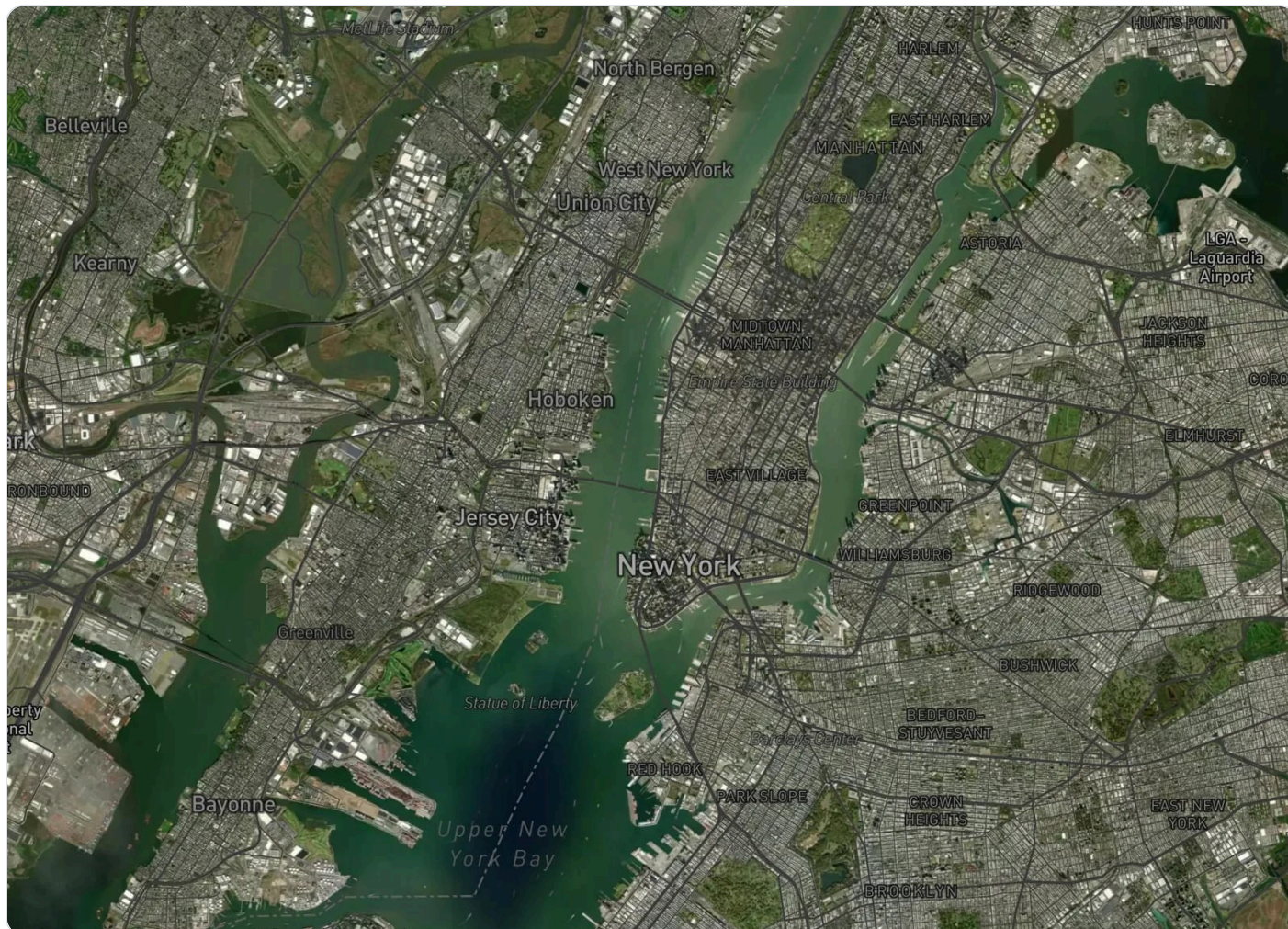
TIPS

- Sea-level pressure also has **Show Highs/Lows**, with its own font and colors.
- **Settings** → **Data** → **Layer styles** → **Contours** sets line and label defaults for every bundle.

07 Satellite basemap

Put satellite imagery under your data and tune how strong it looks.

- 1 Click the **Map style** button on the toolbar.
- 2 On the **Customize** tab, click the **Satellite** basemap card.
- 3 Open the **Satellite imagery** section.
- 4 Drag **Saturation** and **Contrast**. Use **Shadow lift** and **Highlight ceiling** to brighten or darken the imagery.

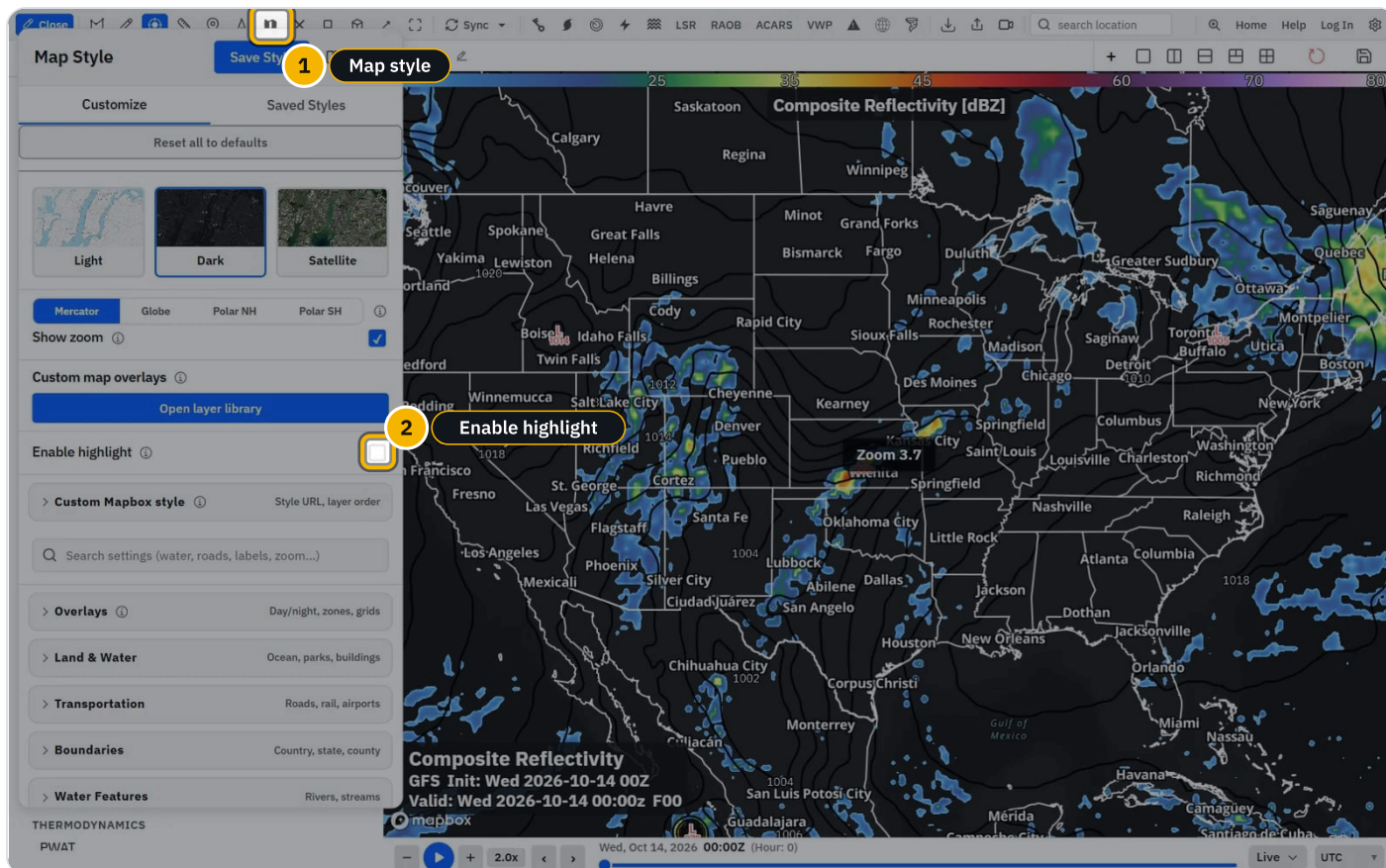


Satellite imagery basemap over New York City.

08 Highlight areas PROFESSIONAL

Pick countries, states or counties to keep bright and tint everything else, with an optional drop shadow on the outline.

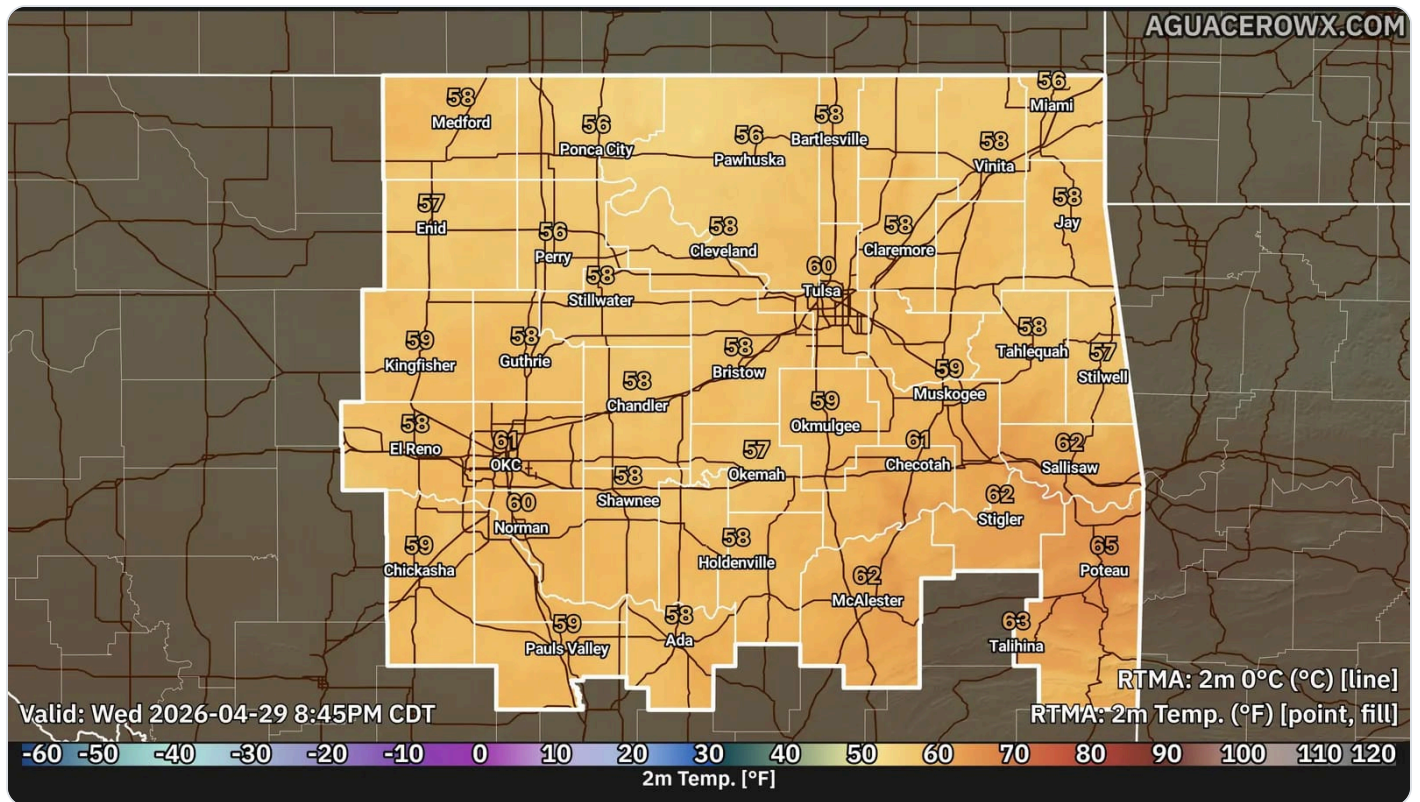
- 1 Click the **Map style** button on the toolbar.
- 2 On the **Customize** tab, turn on **Enable highlight**.
- 3 Under **Boundary level**, choose **Countries**, **States / provinces** or **Counties (US)**.
- 4 Click **Tap map to add/remove** and click areas on the map, or search for them by name.
- 5 Set **Outside tint color** and **Outside tint opacity**, and turn on **Outline drop shadow** if you want one.
- 6 Turn on **Hide labels outside highlight** to drop city labels, markers and point readouts outside the area.



The Enable highlight switch in the Map Style window.

TIPS

- Type a name under **Save highlight** and click **Save to layer library** to reuse the selection.



RTMA 2 m temperature with Oklahoma highlighted and county values plotted.

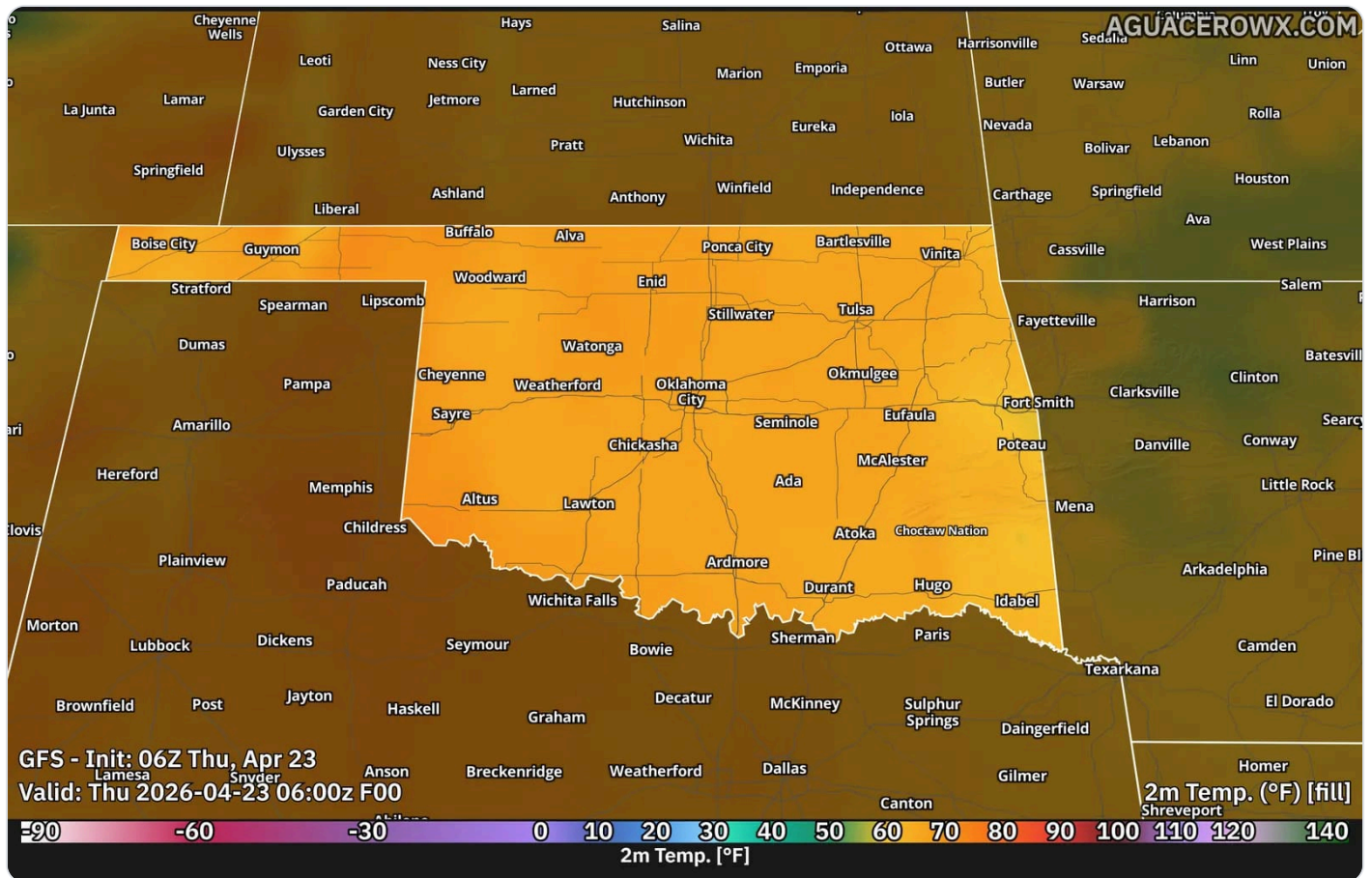
09 Custom layers PROFESSIONAL

Add your own GeoJSON or shapefile shapes, uploaded once or kept current from a URL.

- 1 In **Edit Layers**, click **Add Layer** and choose **Custom Layer**. The **Custom layer library** opens.
- 2 On **Upload file**, drop a GeoJSON file, a zipped shapefile, or a .shp with its .dbf.
- 3 Or, on **Live link**, paste the file's URL and click **Continue**.
- 4 Enter a name in **Name this layer**. For a live link, choose how often to **Download again**.
- 5 Click **Save & Load**.
- 6 Click **Edit Layer** on the new row to style its colors, outline and labels.

TIPS

- To put a layer on the basemap instead, open **Map style** and use **Open layer library** under **Custom map overlays**.
- Rename or delete saved files in **Settings** → **Custom layers**.



GFS 2 m temperature with a custom Oklahoma layer.

10 Placefiles PROFESSIONAL

Load GRLevelX-style placefiles, such as spotter feeds, as map layers from a file or a live URL.

- 1 In **Edit Layers**, click **Add Layer** and choose **Custom Layer**.
- 2 Upload a .txt or .plr placefile on **Upload file**, or paste a placefile URL on **Live link** and click **Continue**.
- 3 Name it and click **Save & Load**.
- 4 Click **Edit Layer** on its row to set **Opacity**, **Icon size** and **Text size**, and to turn **Show icons** or **Show text** on or off.
- 5 For a live placefile, choose a **Refresh** interval, or click **Refresh now**.

TIPS

- Saved placefiles carry a **Placefile** badge in the layer library.

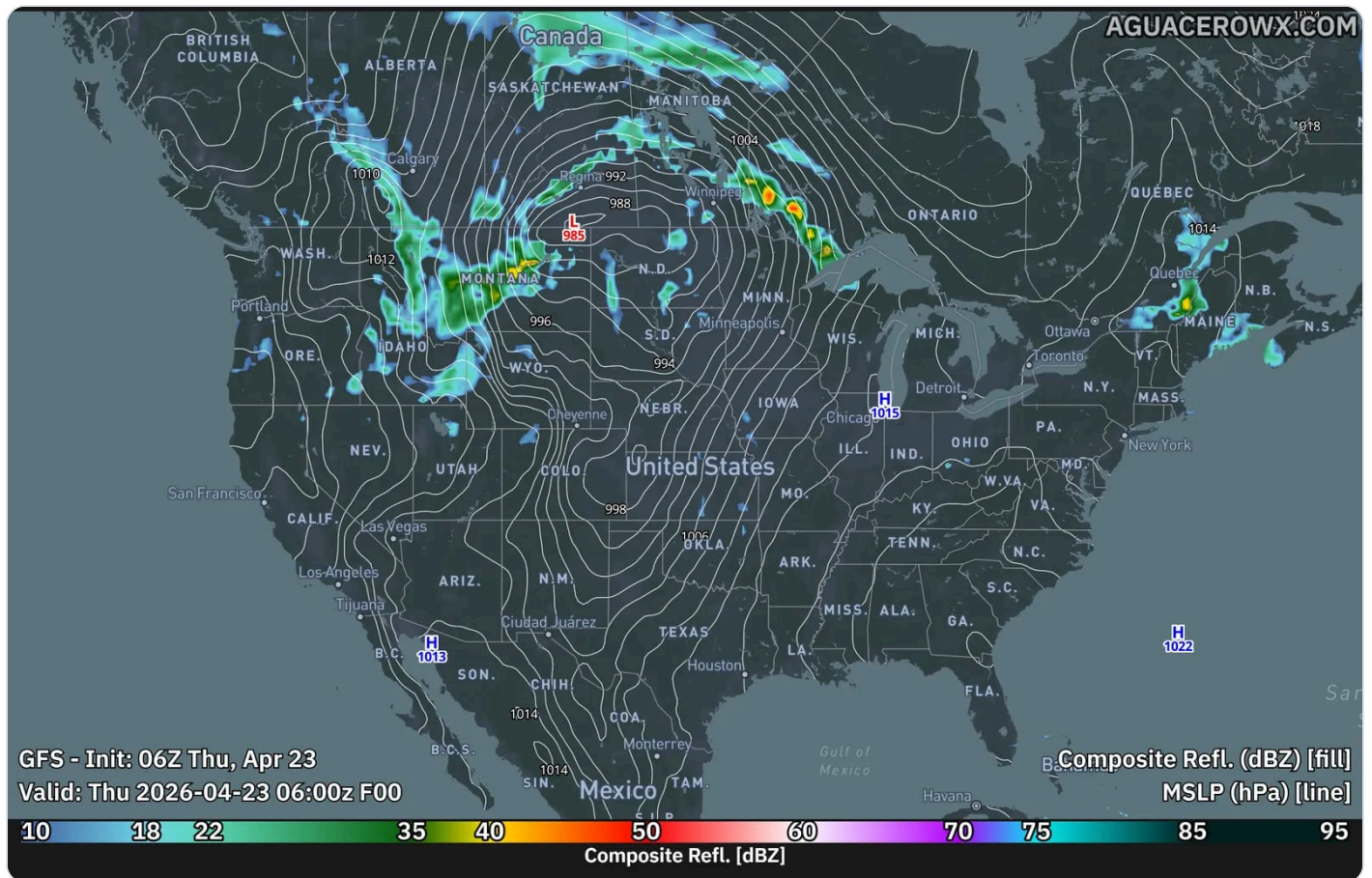
11 Custom Mapbox styles PROFESSIONAL

Use a style you designed in Mapbox Studio as the basemap under your data.

- 1 In Mapbox Studio, copy your style's URL. It starts with `mapbox://styles/`.
- 2 Click the **Map style** button on the toolbar.
- 3 On the **Customize** tab, open **Custom Mapbox style**.
- 4 Paste the URL. If the style needs one, add your **Mapbox access token**.
- 5 Click **Load style**.

TIPS

- Click **Save Style** to keep the custom basemap in a saved map style.
- Click **Clear custom style** to go back to the built-in basemaps.



GFS reflectivity and pressure on a custom Mapbox basemap.