AGUACEROWX USER GUIDE

Forecast models

The model picker has 119 entries: global, regional, convection-allowing, ensemble, AI, ocean, air-quality and seasonal guidance. Each map panel shows one model and run, and you add its fields as layers.

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BEFORE YOU START

- The model and run menus sit near the top of the sidebar on both **Select Data** and **Edit Layers**. Press `F1` to open or close the sidebar.
- Fields come from **Add Layer** on the **Edit Layers** tab. The list shows the fields of the model on the panel.
- Free has 30 models, including HRRR, GFS, ECMWF, GDPS, RAP and RRFS. Models with an **E** badge need Enthusiast or higher.
- On ensembles, **Field Options** under a layer's variable turns the field into a mean, percentile, spread, probability or timing map.

01 Pick a model and run

Choose a model, then a run. New runs appear in the run list as they arrive.

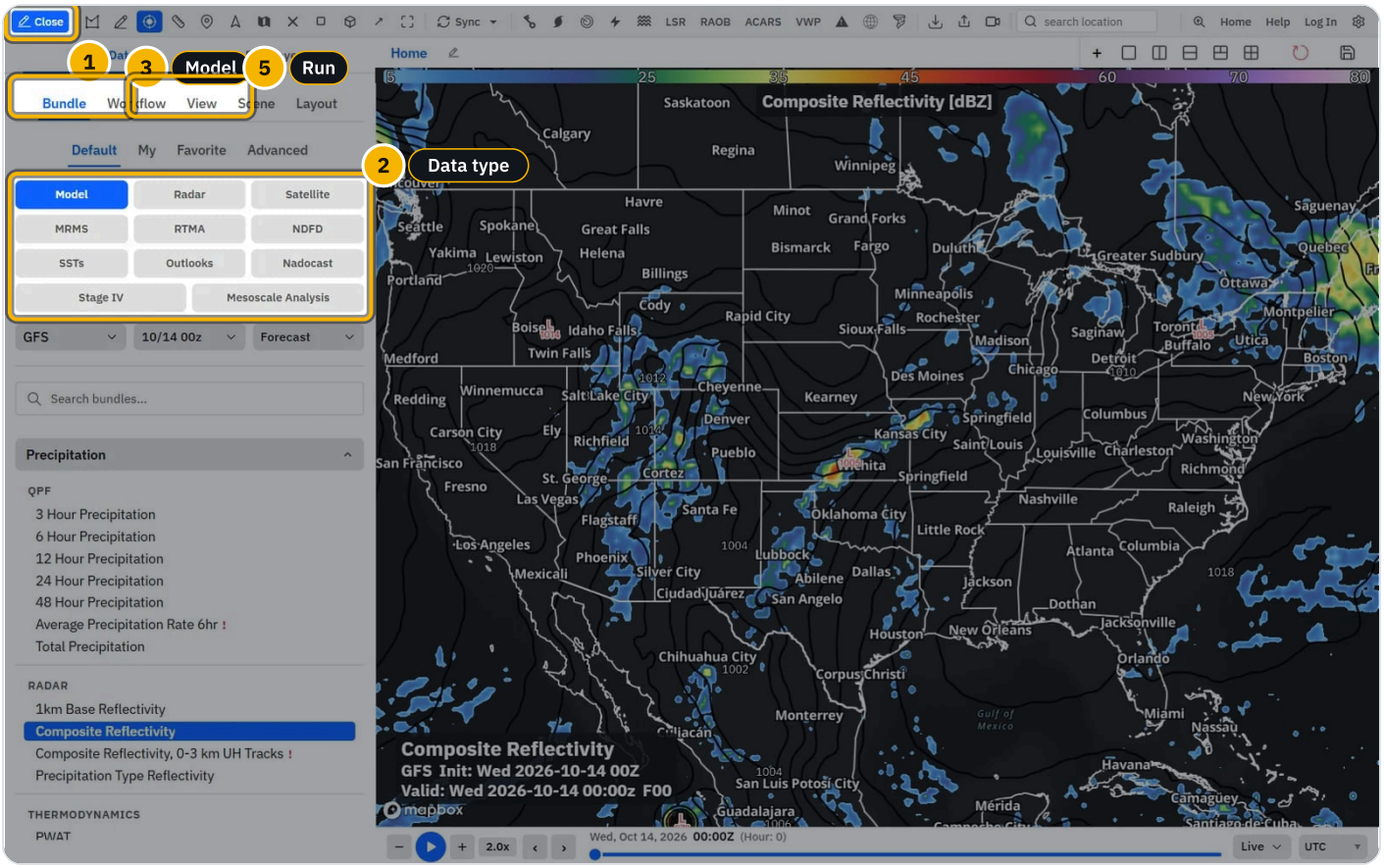
1. Open the sidebar with **Edit** on the toolbar, or press `F1`.
2. On **Select Data**, click **Model** in the data type filter and click a bundle to load it.
3. Click the model name near the top of the sidebar to open the model menu.
4. Click a category, such as **Global** or **Mesoscale**, then click a model.
5. Pick a run in the run menu next to it.

TIPS

- Each model in the menu shows its latest run and a bar for how far that run has processed.
- Click the info icon next to a model for its operator, resolution, timesteps, run times and domain.

SHORTCUTS

[/]	Step to the previous or next run

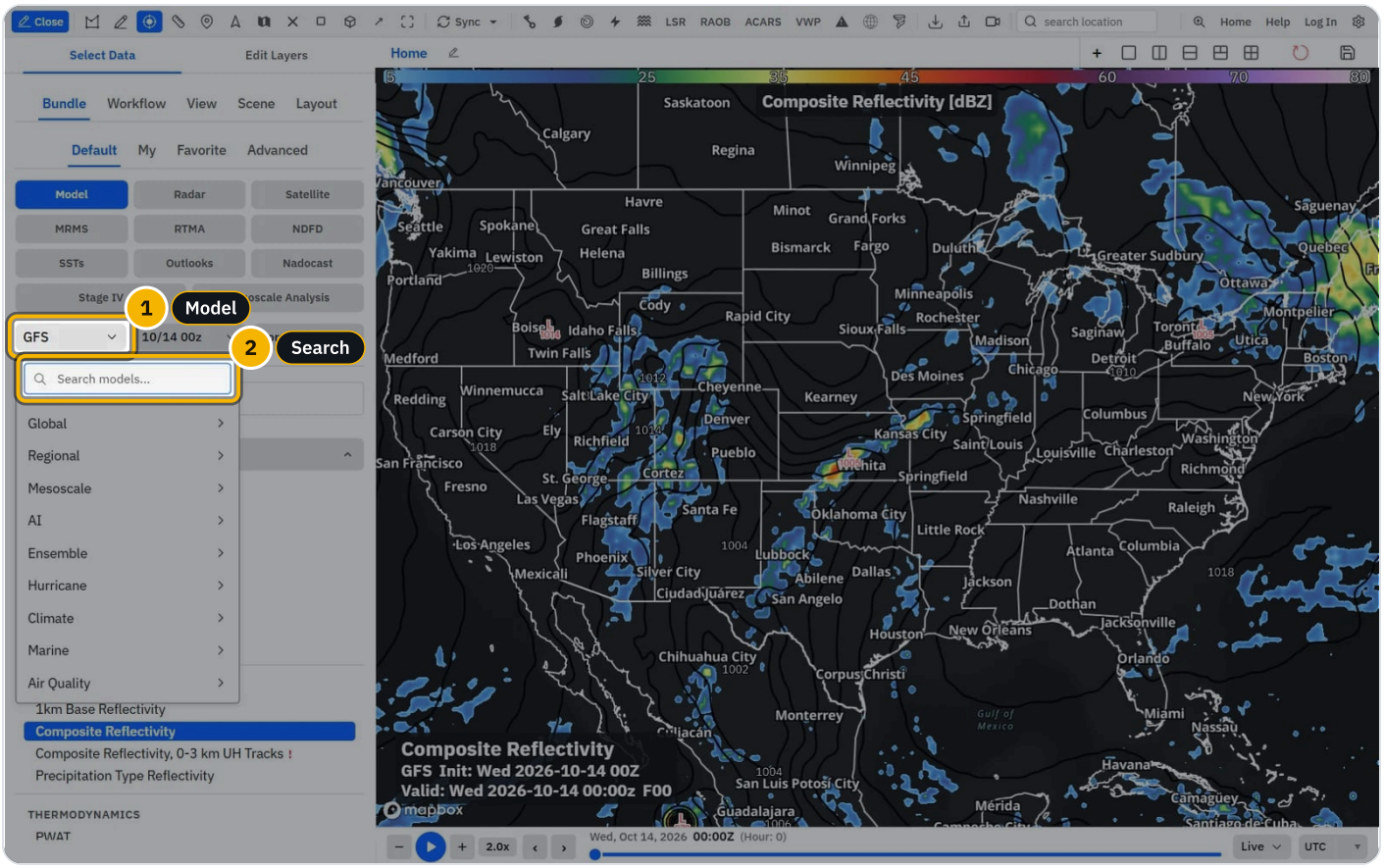


The Edit button, the data type filter, and the model and run menus.

02 Search models and read the availability dots

Type a model name, id or category to find a model fast. Colored dots show which models can draw the layers in your bundle.

1. Click the model name near the top of the sidebar.
2. Type a name, model id or category in **Search models...**.
3. Check the dot next to each result. Green means the model has all of your bundle's layers, yellow some and red none.
4. Click a result to switch the panel to that model.



The model menu with its search box.

03 Add a model field

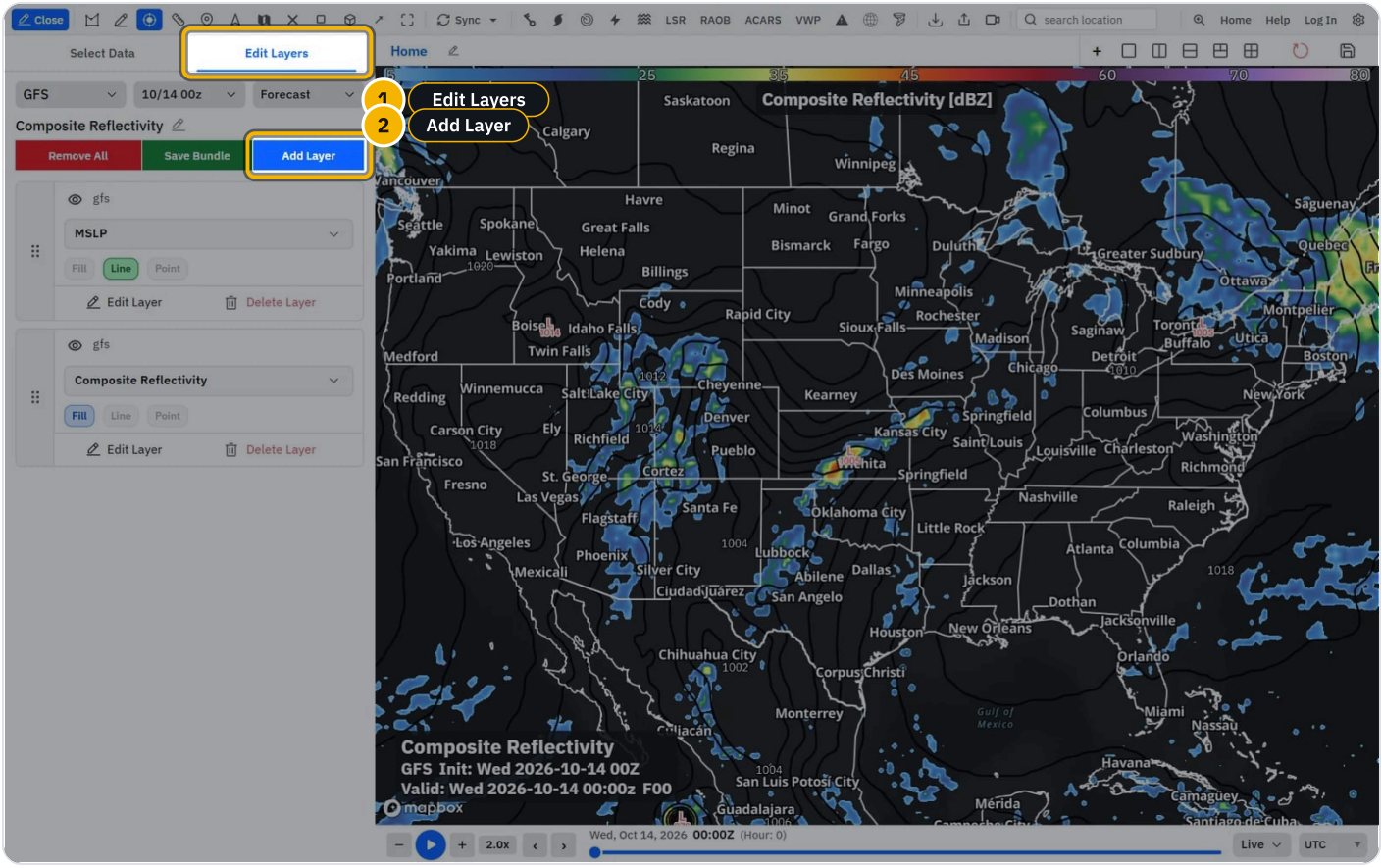
Put any field from the current model on the map, from temperature to CAPE.

1. Click the **Edit Layers** tab in the sidebar.
2. Click **Add Layer**.
3. Click **Model**, then a category, then a field.
4. Or type part of the name in **Search variables...** and click the result.

TIPS

- If a field is missing, the model on the panel does not have it. Switch models and look again.
- To see which models carry a field, open **Settings**, choose **Data**, then **Model**, and click the field.

A bundle holds up to 8 data layers.



The Edit Layers tab and the Add Layer button.

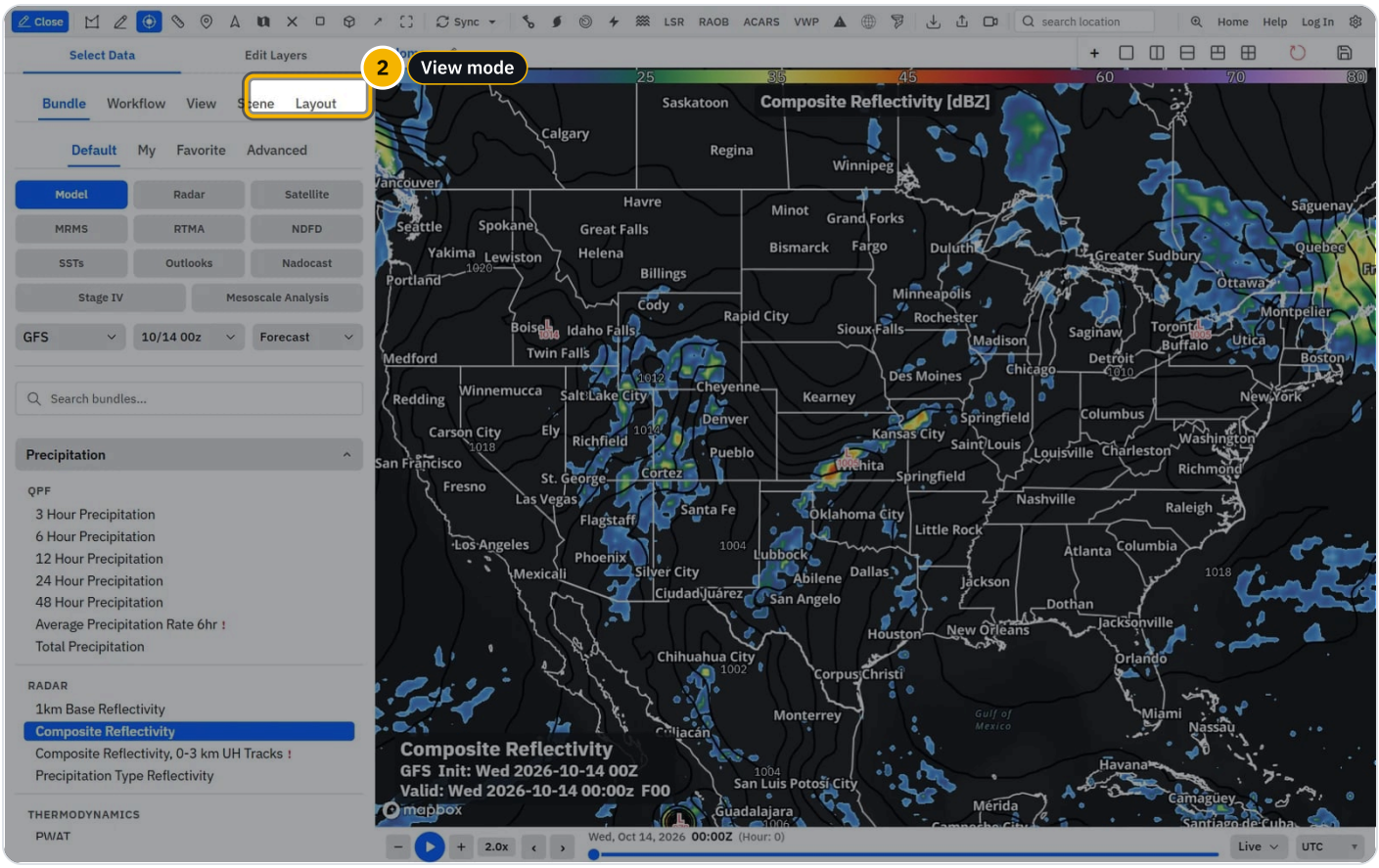
04 Trend and Compare modes

Trend keeps one valid time and steps through runs, so you can see how the forecast changed. Compare keeps one time and steps through models.

1. Load a model bundle and move the time bar to the valid time you want.
2. Open the view mode menu that reads **Forecast**, next to the run menu, and choose **Trend**.
3. Drag the time bar, or use its step buttons, to move from run to run.
4. For Compare, choose **Compare** in the same menu.
5. Tick at least two models in **Compare Models** and click **Start Comparison**.
6. Move the time bar to step from model to model. Choose **Forecast** to go back.

TIPS

- Compare lists only the models that have the current run time and forecast hour.



The view mode menu for Forecast, Trend and Compare.

05 Convection-allowing models

High-resolution models that draw individual storms: HRRR and RRFS (sub-hourly too), HRDPS, NSSL MPAS, ICON-D2, AROME and more.

1. Click the model name near the top of the sidebar.
2. Click **Mesoscale**.
3. Pick a model. US models are under **USA**, the sub-hourly HRRR and RRFS under **Sub-Hourly**, and European models under **European**.

Free includes HRRR, HRRR Sub-Hour, RRFS, RRFS Sub-Hour and RRFS NA.

06 Global and regional models

GFS, ECMWF, ICON, UKMET, GDPS, ARPEGE and NAVGEM cover the world. Regional models such as RAP, RGEM, ICON-EU and ETA-CPTEC cover smaller areas. WOOF-NAM is an experimental re-run of the retired NAM.

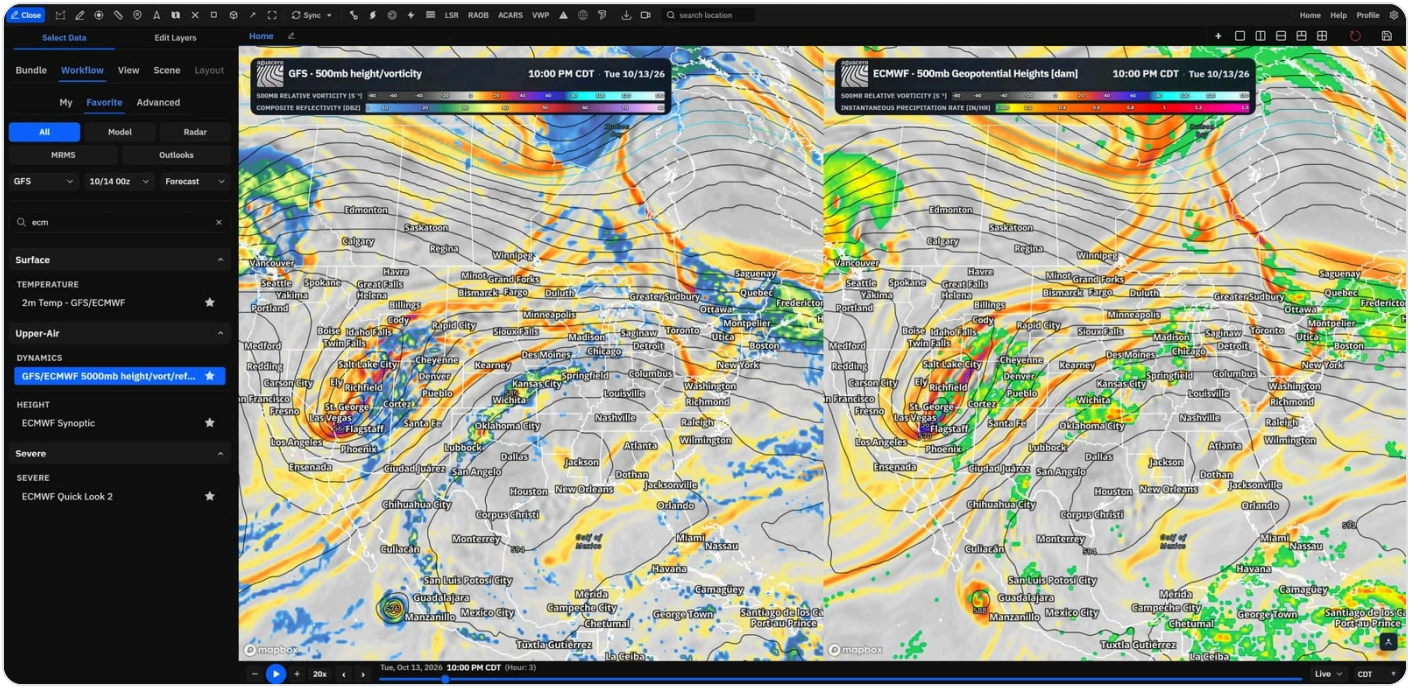
1. Click the model name near the top of the sidebar.
2. Click **Global** for worldwide models or **Regional** for limited-area models.
3. Pick a model, then a run.

TIPS

- High-resolution European models such as UKV, HARMONIE and AROME-Arctic are under **Mesoscale**. MEPS is under **Ensemble**.

Free includes GFS, ECMWF, GDPS, RGEM, NAVGEM, RAP, WOOF-NAM, ICON-EU and ARPEGE EU. ICON and UKMET need Enthusiast or higher.

WOOF-NAM is Recast's GPU port of the NAM that NOAA retired on 3 November 2026, run by Pirate Weather. It is experimental and not an official NWS forecast: cycles arrive hours late, some are skipped, and it has fewer fields than the old NAM (no CAPE, precipitation type or gusts). Credit: WOOF-NAM by Recast Systems (Apache-2.0), run by Pirate Weather.



GFS and ECMWF 500 mb height and vorticity side by side.

07 AI models

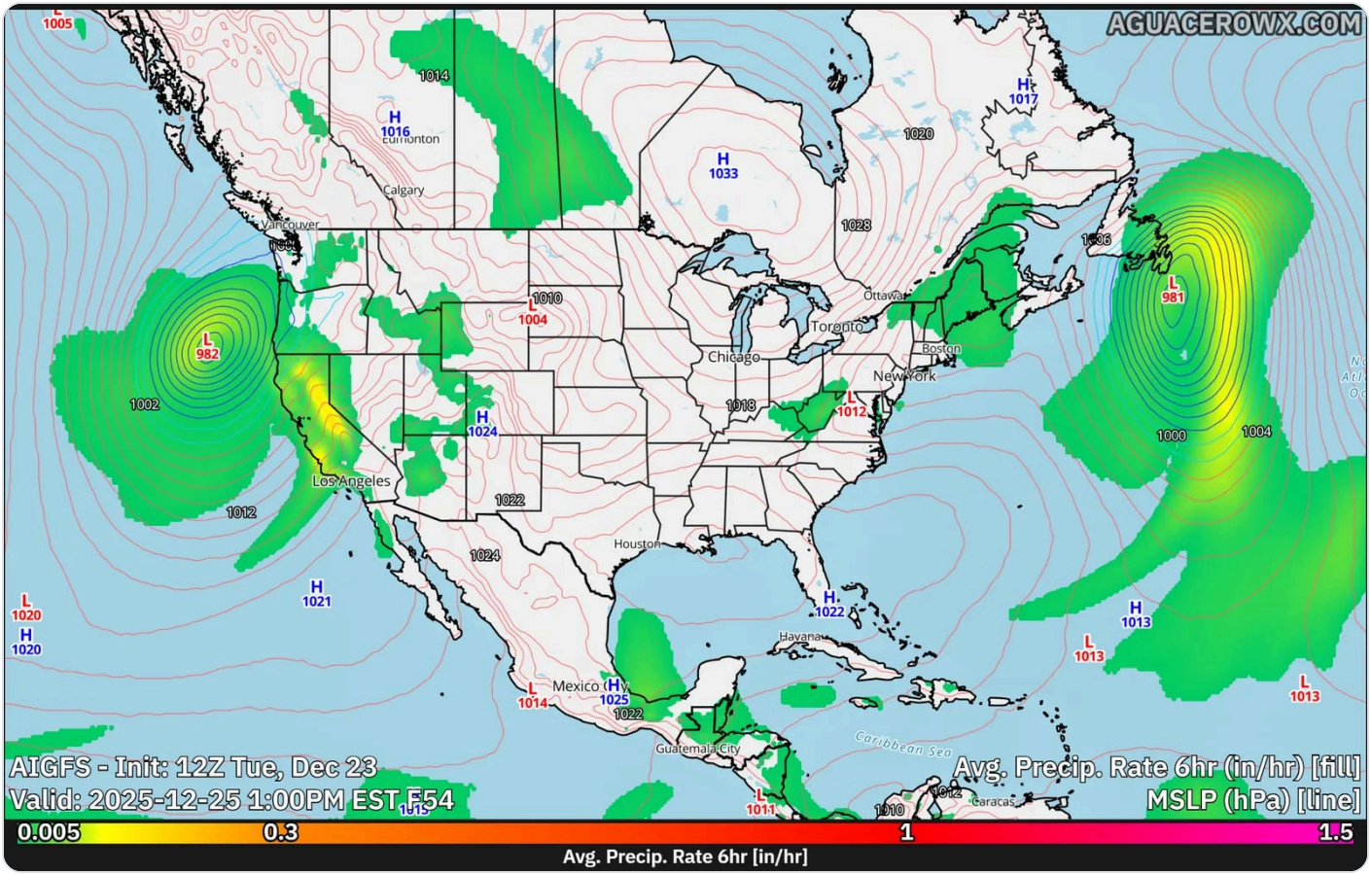
Machine-learning forecasts: ECMWF-AIFS, WeatherNext 2, AI GFS, AI GEFS, AI ICON, GEM-L, Aurora and Pangu-Weather. Several include precipitation type and snowfall.

1. Click the model name near the top of the sidebar.
2. Click **AI**.
3. Pick a single-run model under **Global** or an ensemble under **Ensemble**.

TIPS

- HRRR Cast is under **Mesoscale** in the same menu.

AI GFS, AI GEFS and Hybrid GEFS are on the Free plan. The other AI models need Enthusiast or higher.



AI-GFS 6-hour precipitation rate and sea-level pressure over North America.

08 Ensembles

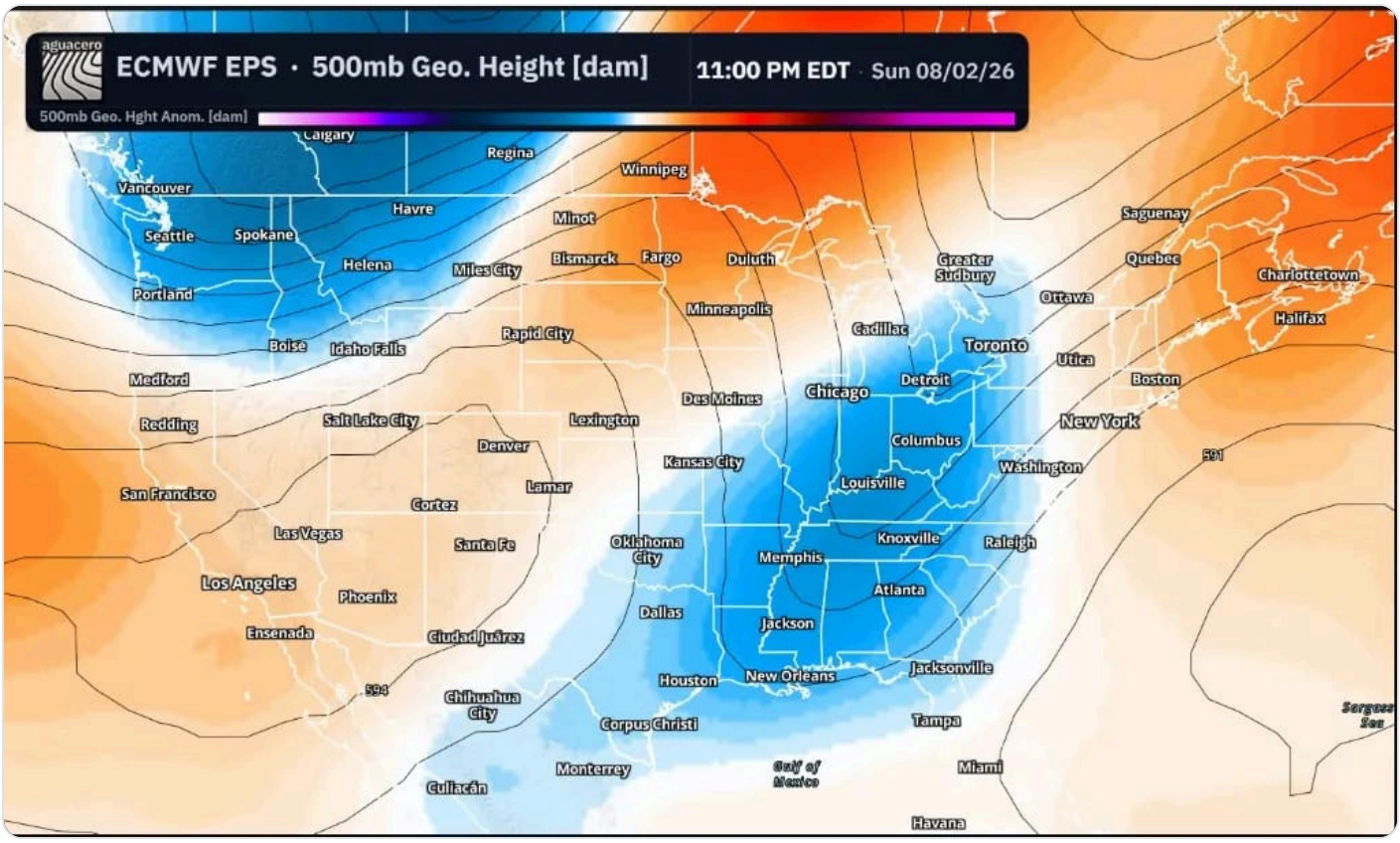
GEFS, GEPS, ECMWF EPS, ICON-EPS, NAEFS, MOGREPS, REFS, REPS and more. Most of them can draw any field as a statistic, spread, probability or timing map.

1. Click the model name near the top of the sidebar.
2. Click **Ensemble**. Global ensembles are under **Global**, and short-range ones such as REFS and the NBM under **Mesoscale**.
3. Pick an ensemble and a run.
4. On **Edit Layers**, click **Add Layer** and add a field, such as 2m Temperature or 24 Hour Precipitation. It draws as the ensemble mean.
5. Use **Field Options** on the layer card to change what the map shows. The sections below cover each choice.

TIPS

- ECMWF AIFS EPS and AI GEFS are in the **AI** menu, under **Ensemble**.
- **Field Options** is on GEFS, GEPS, ECMWF EPS, ECMWF AIFS EPS, AI GEFS, ICON-EPS, ICON-EU-EPS, REPS, REFS and the NBM, and on P-ETSS and P-Surge.
- Field Options are saved with your bundles and workflows.

GEFS, GEPS, AI GEFS, REFS and the NBM are on the Free plan. The other ensembles need Enthusiast or higher.



ECMWF EPS 500 mb height anomaly over North America.

09 Ensemble mean, median and percentiles

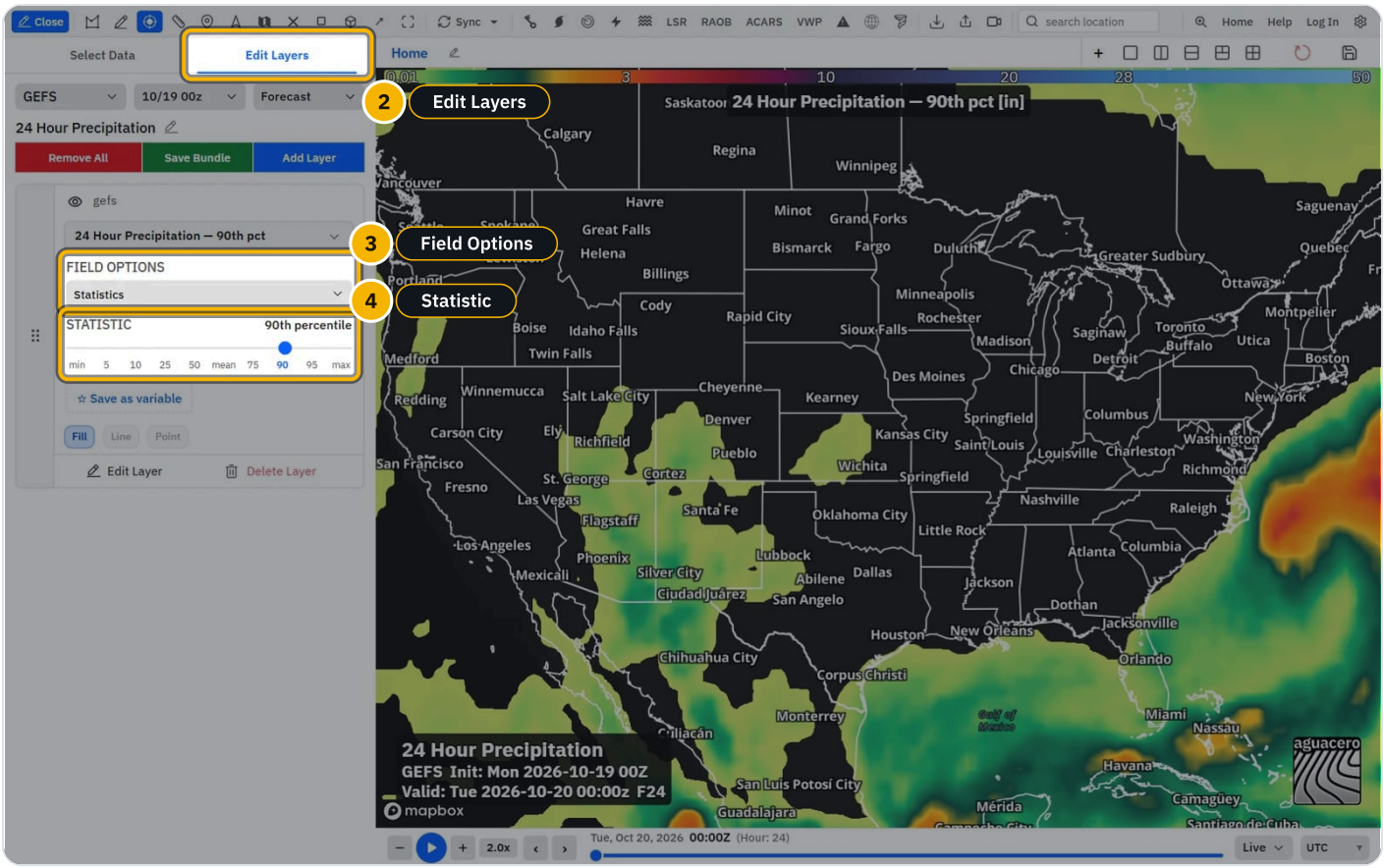
Draw an ensemble field as its mean, median, any percentile from the 5th to the 95th, or the lowest or highest member.

1. Switch the panel to an ensemble, such as GEFS, and add a field.

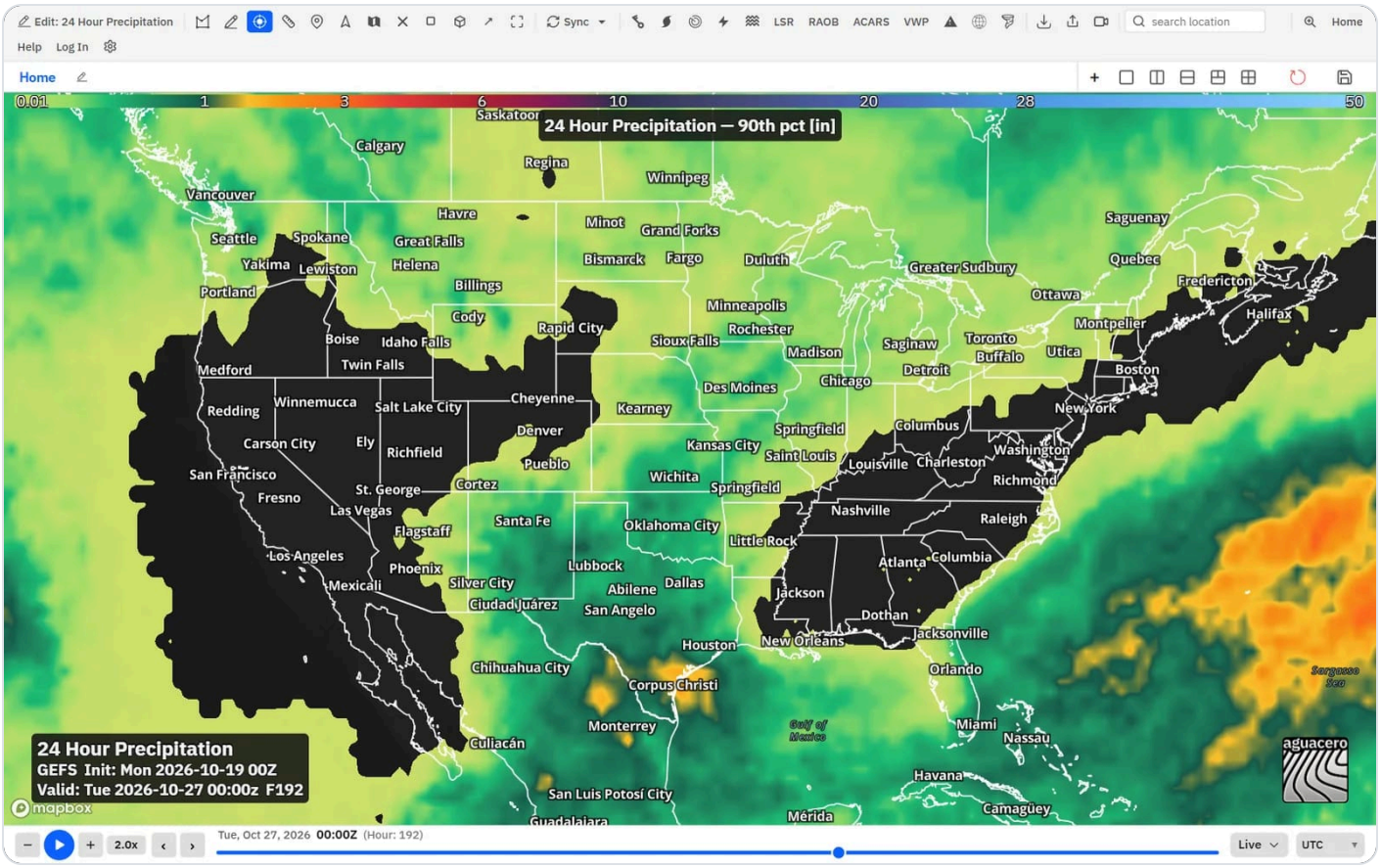
2. Click the **Edit Layers** tab and find the layer's card.
3. Under **Field Options**, keep **Statistics**.
4. Drag the **Statistic** slider, or click a stop: **min**, **5**, **10**, **25**, **50**, **mean**, **75**, **90**, **95** or **max**.
5. Let go to redraw the map. The legend names the statistic, such as "24 Hour Precipitation — 90th pct".

TIPS

- **50** is the median and **mean** the ensemble mean. They differ most for precipitation, where a few wet members pull the mean up.
- A high percentile of precipitation or snow shows a reasonable worst case; a low one, what nearly every member agrees on.



Field Options on a GEFS layer, set to the 90th percentile.



GEFS 90th percentile 24-hour precipitation eight days out. Black areas are where at least 9 in 10 members stay dry.

10 Percentile ranges at points

Print two percentiles at each point, such as 10th | 90th, over the statistic you shade.

1. On an ensemble layer, keep **Statistics** under **Field Options** and pick the statistic to shade, such as the median.
2. Turn on the **Point** type on the layer card.
3. Under **Point Labels**, pick **10th | 90th percentile**, **25th | 75th percentile**, **5th | 95th percentile** or **Min | Max**.
4. Read each point as low | high. The title adds the pair, such as “points 10|90th pct”.

TIPS

- Pick **Plotted statistic** to go back to one value per point.

11 Ensemble spread

Map where the members disagree: standard deviation, variance, normalized spread, the full range, or the spread between two percentiles.

1. On an ensemble layer, open **Field Options** and pick **Spread**.
2. Under **Spread**, pick **Standard deviation**, **Variance**, **Normalized spread**, **Range (max–min)** or **Percentile range**.
3. For **Percentile range**, pick the lower and upper percentiles under **Percentiles**, such as 10 to 90.

TIPS

- 25 to 75 is the interquartile range (IQR), the middle half of the members.
- **Normalized spread** divides the spread by the usual spread for that latitude and hour. 1 is typical, and above 1 is more uncertain than usual.

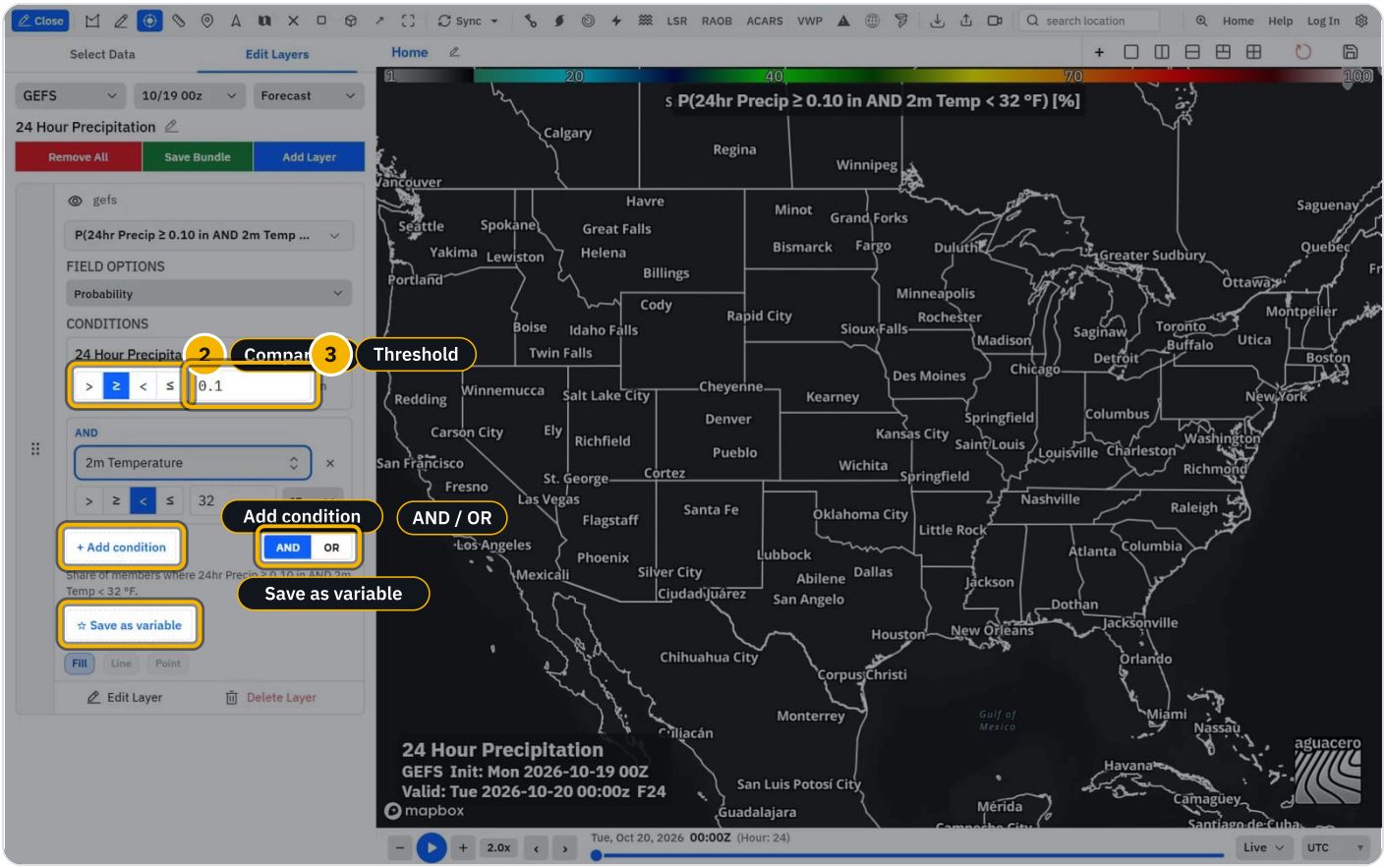
12 Ensemble probabilities

The share of members above or below a threshold, such as 24-hour precipitation of an inch or more, or temperatures below freezing.

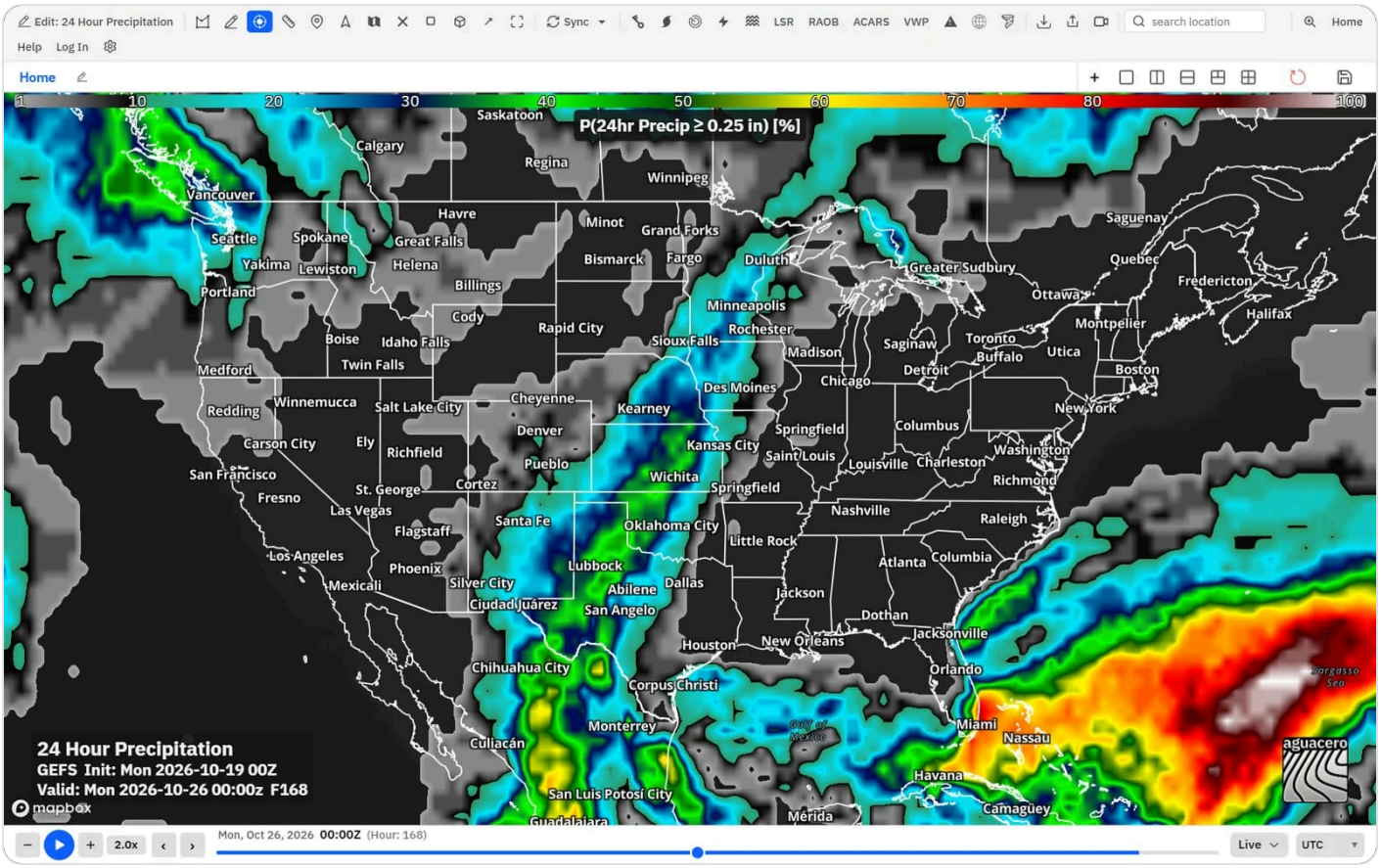
1. On an ensemble layer, open **Field Options** and pick **Probability**.
2. Under **Conditions**, click a comparison: **>**, **≥**, **<** or **≤**.
3. Type a threshold in the layer's units. The map redraws when you stop typing or press `Enter`.
4. Read the map as the percent of members that meet the condition.

TIPS

- The first condition uses the layer's own field. For another window, such as 6-hour instead of 24-hour precipitation, change the layer's variable first.
- Temperatures start at below freezing and precipitation at 0.10 in or more, so you can begin from there.
- On the NBM, chances come from its published percentiles, so it takes one condition.
- On REFS, Field Options replaces the old ready-made probability layers. NOAA's own MLCAPE, MLCIN, reflectivity, 2-5 km updraft helicity and 80 m gust probabilities are one variable each in **Add Layer**, with a threshold slider on the layer card. The 1-hour snowfall probabilities (>1 in and >3 in) are still two separate variables.



A GEFS probability with two conditions joined by AND.



GEFS chance of 0.25 in or more of rain in 24 hours, a week out, along a front across the Plains.

13 Joint probabilities (AND / OR)

Combine up to four conditions, such as below freezing AND precipitating, for the share of members that meet all of them, or any of them.

1. Set up a **Probability** layer.
2. Click **+ Add condition**.
3. Click the new row's variable and search for a field, such as Total Precipitation or 10m Wind Speed.
4. Set its comparison and threshold.
5. Pick **AND** for members that meet every condition, or **OR** for members that meet any of them.
6. Click **×** on a row to remove it.

TIPS

- Each member is checked on its own, so “2m Temp < 32 °F AND Total Precip ≥ 0.10 in” counts the members that are both cold and wet at the same time.
- Conditions on fields a model doesn’t have are dimmed and left out, and come back when you switch to a model that has them.

Up to 4 conditions. The NBM, P-ETSS and P-Surge take one.

14 Change a probability’s threshold

NOAA publishes some probabilities at a few fixed thresholds. **Add Layer** lists each set as one variable, and a slider on the layer card picks the threshold.

1. On the NBM, add **Prob. Ceiling** or **Prob. Visibility**. On REFS, add **MLCape Probability**, **MLCIN Probability**, **Reflectivity Probability**, **2-5km Max Updraft Helicity Probability** or **1 Hour 80m Max Wind Gust Probability**.
2. On the **Edit Layers** tab, find the slider under the layer’s variable, such as **Ceiling below** or **MLCAPE above**.
3. Drag it, or click a number under it, and let go. The layer switches to that threshold and keeps its colors.

TIPS

- **Prob. Ceiling** goes from 500 to 6600 ft and starts at 1000 ft. **Prob. Visibility** goes from 1 to 5 mi and starts at 3 mi.
- The beside the NBM sliders says how far into the forecast each threshold runs. The 2000 and 6600 ft ceiling and 2 mi visibility chances stop at hour 36.
- A bundle still under its built-in name, such as Prob. Ceiling, is renamed to the new threshold so the on-map name stays right.
- For any threshold you like, use **Probability** under **Field Options** on an ensemble field instead.

15 When a threshold is first reached

Timing maps the earliest forecast hour when the chance of a condition reaches the level you set, such as the first hour with a 50% chance of freezing.

1. On an ensemble layer, open **Field Options** and pick **Timing**.
2. Set the **Conditions** the same way as for a probability.
3. Drag **Probability level** to the chance you want, from 10% to 90%.
4. Read the map in hours after the run started. Hover a point for its hour.

TIPS

- Places that never reach the level are left blank.
- Lower levels show when an event becomes possible, and higher ones when it becomes likely.

16 Save Field Options as a variable

Name a statistic, spread, probability or timing setup and pick it from **Add Layer** later, on any ensemble that can draw it.

1. Set up **Field Options** the way you want, such as a joint probability.
2. Click ☆ **Save as variable**.
3. Type a **Variable name**, and pick or type a **Category** and **Subcategory**.
4. Click **Save variable**.
5. Later, click **Add Layer** > **Model** and open that category. Your variable reads ★ and its name. You can also search for it.

TIPS

- If you change a saved layer's options, click **Update "name"** to save the change, or ☆ **Save as variable** to keep both.
- **Edit** renames or moves a saved variable. **Delete** removes it after a second click.
- A saved variable shows only on models whose members have every field it uses.

Saving needs an account. You can keep up to 100 variables.

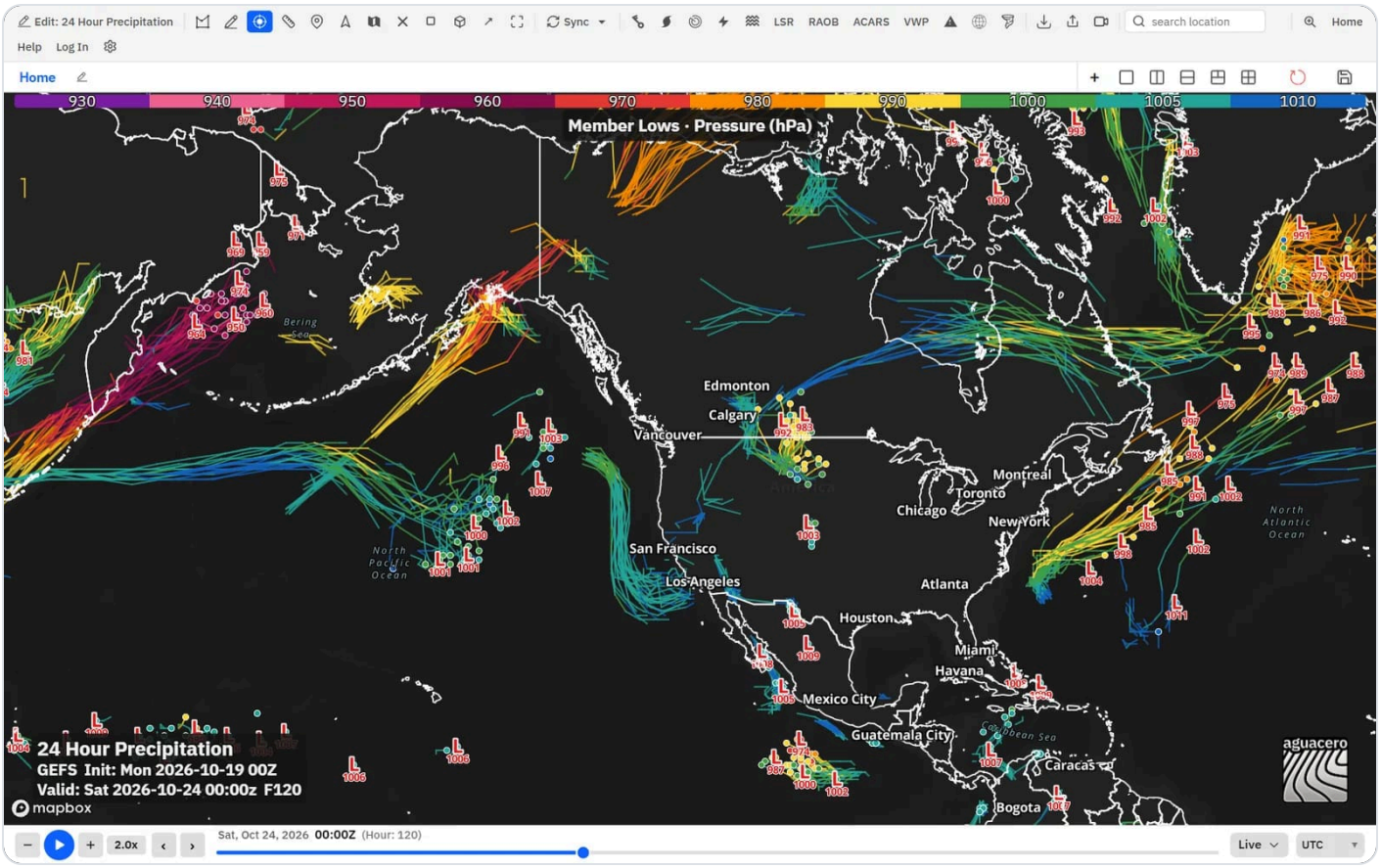
17 Member low centers and tracks

Every member's surface lows as an L with its pressure, and their tracks up to the time on the slider.

1. Switch the panel to GEFS, AI GEFS, GEPS, ECMWF EPS, ECMWF AIFS EPS or REFS.
2. On **Edit Layers**, click **Add Layer** > **Model** > **Surface**, then **Member Low Centers & Tracks** under **Mean Sea Level Pressure**.
3. Step through time. Each member's track grows up to the slider time, with an L and the central pressure where its low is now.
4. Click **Edit Layer** on the card to change what's drawn.

TIPS

- Turn **Tracks**, **Centers** and **Dots** on or off.
- Under **Color by**, pick **Pressure (MSLP)**, **Wind intensity**, **Lead time (hours)** or **By member**. Or pick **Solid color** under **Color style**.
- **Max pressure** hides weak lows, and **Min track length** hides short-lived ones.
- Search **Add Layer** for Member Low to find it fast.
- The Default library bundle **Member Low Centers & Tracks** also draws the ensemble-mean MSLP anomaly as a fill and the mean MSLP as black contours under the lows.



GEFS member low tracks over the first five days, colored by central pressure.

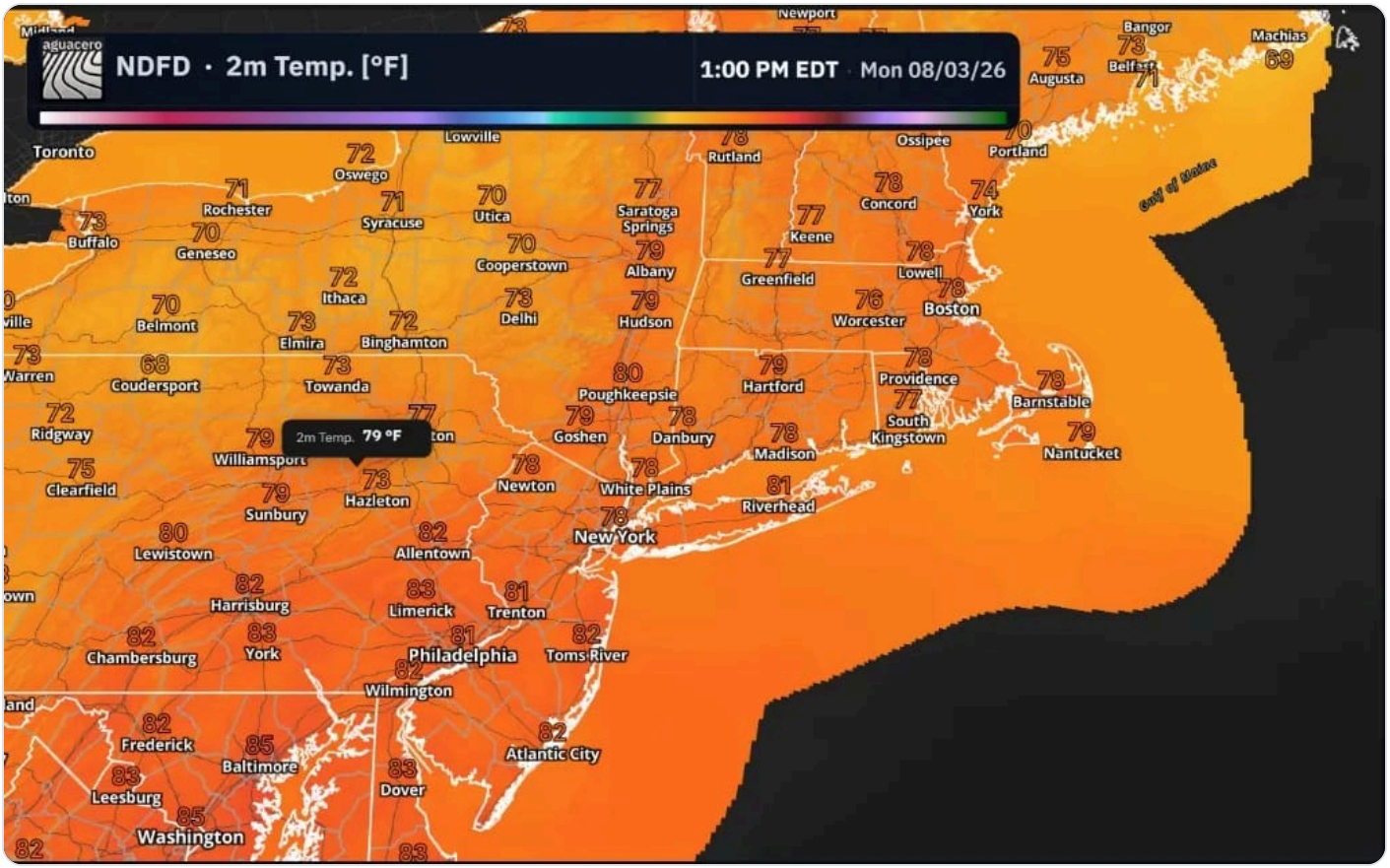
18 NBM and NDFD

The National Blend of Models every hour, and the official NWS NDFD forecast grids at 2.5 km.

1. For the NBM, click the model name near the top of the sidebar, click **Ensemble** and pick NBM.
2. For NDFD, click **NDFD** in the data type filter on **Select Data**.
3. Click an NDFD bundle to load it.
4. Pick the issuance in the **NDFD** run menu under the model menu.

TIPS

- You can also add NDFD fields from **Add Layer** > **NDFD**.
- On NBM temperature, dew point, humidity, wind, gust and 6- to 48-hour precipitation, **Field Options** reads the NBM's published percentiles. The **Blend** stop is the regular NBM, and **Probability** gives the chance of one condition.
- NBM snowfall, 6-hour FRAM ice, snow ratio, snow level, CAPE and PWAT have percentiles from each run too. On 1- and 6-hour snowfall, 6-hour ice and snow depth, **Probability** shows NOAA's own chances at its fixed thresholds, picked from a list.
- NBM percentiles come from the 00, 06, 12 and 18z runs, about 6 hours after the run. Newer runs use the latest one valid at the same time.



NDFD 2 m temperature forecast over the Northeast with city values.

19 NBM winter and aviation fields

Snow-to-liquid ratio, FRAM ice, precipitation-type chances, snow level and depth, plus ceiling, cloud base and layers, sky cover, visibility, low-level wind shear and ceiling and visibility chances.

1. Switch the panel to the NBM: click the model name, click **Ensemble** and pick NBM under **Mesoscale**.
2. On **Edit Layers**, click **Add Layer** and type a name in **Search variables...**, such as Snow Liquid Ratio, FRAM, Chance of Snow, Snow Level, Snow Depth, Ceiling, Cloud Layer, Visibility or LLWS. Aviation fields are also under **Model** > **Aviation**.
3. Click a field to add it.
4. On fields with **Field Options**, pick a percentile, or **Probability** for NOAA's chances.

TIPS

- Snow Liquid Ratio, Snow Level and 6 Hour Freezing Rain [FRAM] have a percentile slider from the 5th to the 95th. 6-hour ice, 1- and 6-hour snowfall and snow depth chances use NOAA's thresholds: pick one from the list, and the comparison is always **>**.
- **Prob. Ceiling** and **Prob. Visibility** are one variable each, with a threshold slider on the layer card.
- 1-hour snow and ice run through hour 48. Snowfall and ice percentiles and the 6-hour chances run to about hour 54, and snow ratio and snow level percentiles and snow depth to hour 48; the 01, 07, 13 and 19z runs carry them further. Ceiling and visibility run hourly to hour 36, then every 3 hours to about hour 75 to 82. Cloud layers, low-level wind shear and high cloud stop at hour 36.
- Chance of Rain, Chance of Freezing Rain, Chance of Snow and Chance of Sleet are the NBM's chance of each type at the hour, for the whole run.

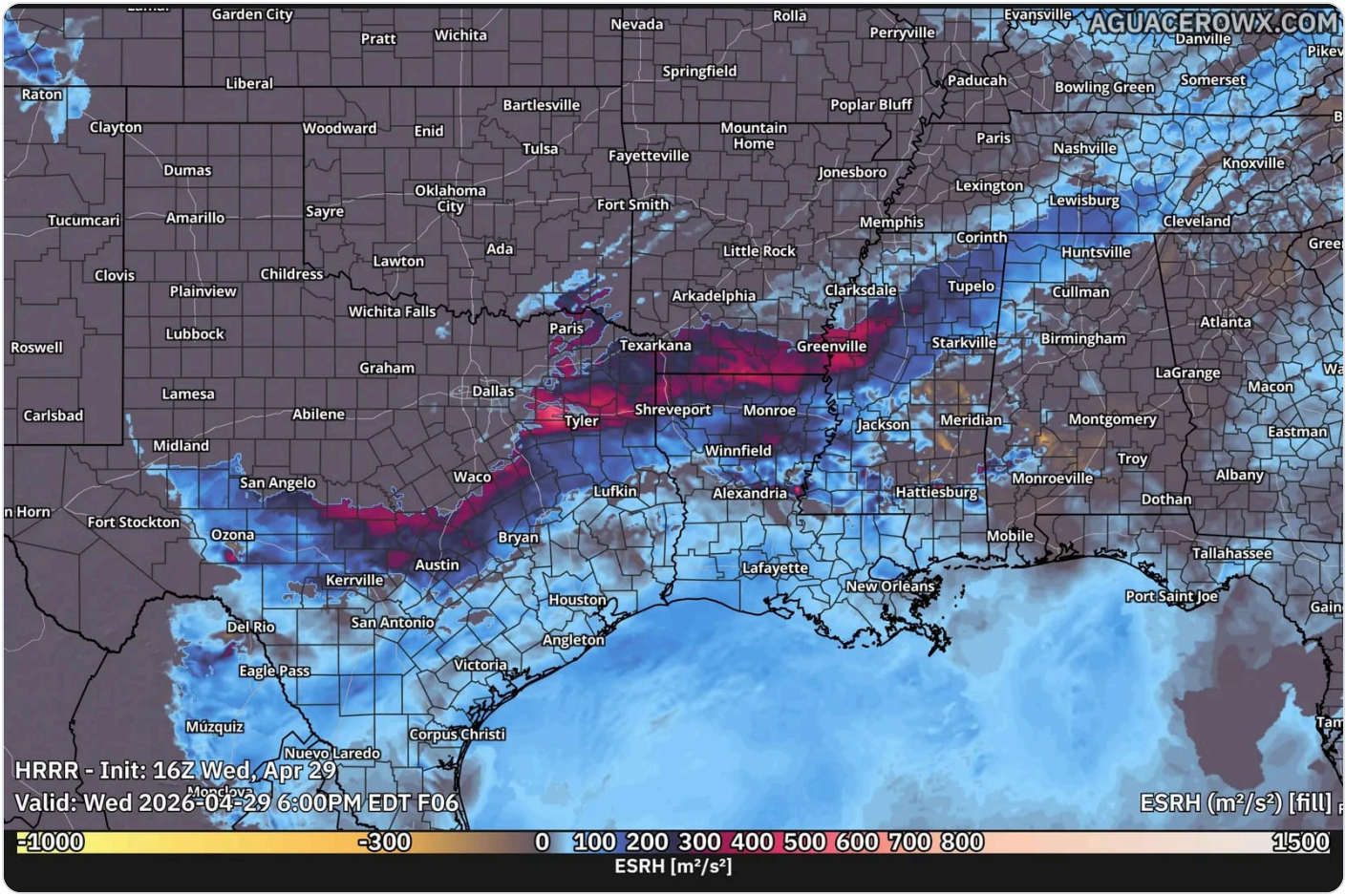
The NBM is on the Free plan.

20 Severe weather parameters

Effective SRH, SHERBE, the Violent Tornado Parameter, the Non-Supercell Tornado Parameter, downdraft CAPE, the Microburst Composite and hail fields, on the models that carry them.

1. Switch the panel to a model with severe fields, such as the HRRR, RRFS or RAP.

2. Click the **Edit Layers** tab, then **Add Layer**.
3. Type a name in **Search variables...**, such as SHERBE, Violent Tornado, Microburst or Downdraft.
4. Click the field to add it.



HRRR effective storm-relative helicity across the southern Plains.

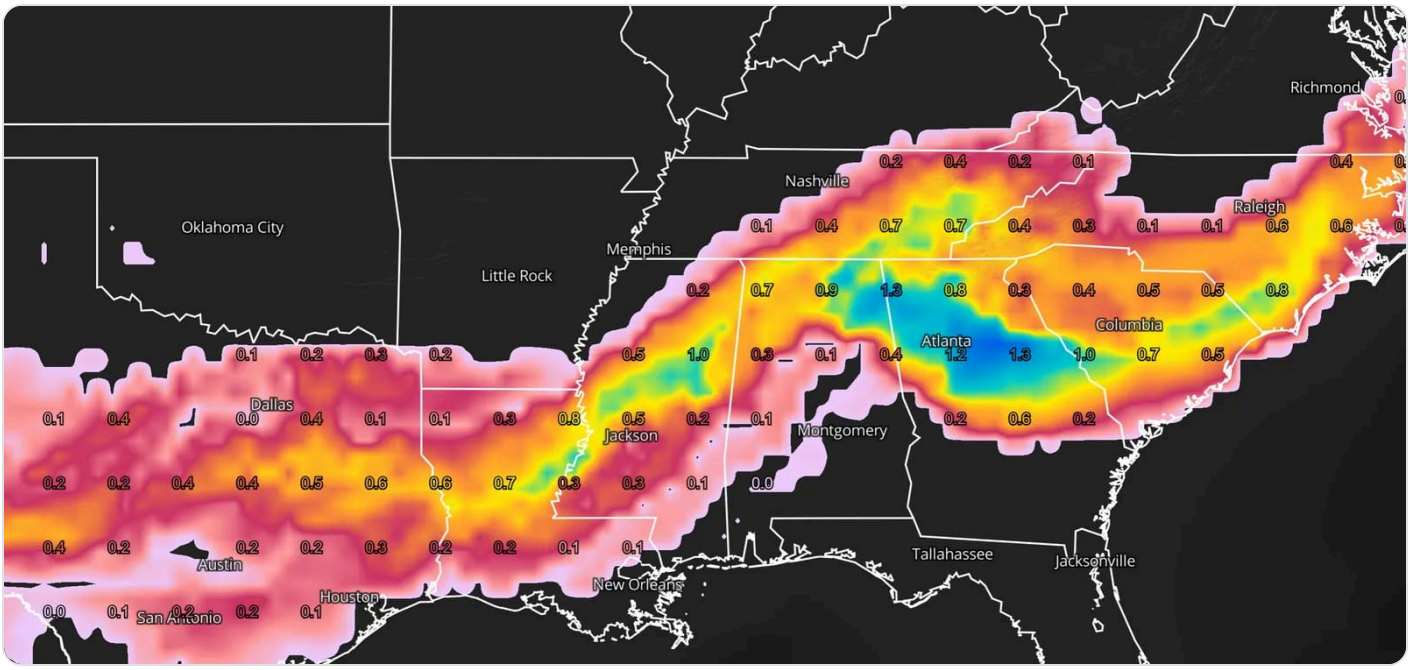
21 Winter weather fields

FRAM ice accumulation, precipitation-type reflectivity, snow depth change and dendritic growth zone depth.

1. Switch the panel to a model with winter fields, such as the HRRR or RRFS.
2. Click the **Edit Layers** tab, then **Add Layer**.
3. Search for FRAM, Precipitation Type, Snow Depth Change or Dendritic.
4. Click the field to add it.

TIPS

- Dendritic growth zone depth is on the GFS.



FRAM ice accumulation with point values across the Southeast.

22 Fire weather fields

The Hot-Dry-Windy Index and its anomaly, the Red Flag Threat Index and vapor pressure deficit.

1. Switch the panel to a model with fire fields, such as the HRRR, RRFS, RAP or GFS.
2. Click the **Edit Layers** tab, then **Add Layer**.
3. Search for Windy, Red Flag or Vapor Pressure.
4. Click the field to add it.

23 Dynamics and isentropic analysis

Vorticity, Q-vectors, theta-e advection and moisture transport, plus wind, relative humidity and potential vorticity on the 290–330 K surfaces.

1. Click the **Edit Layers** tab, then **Add Layer**.

2. Search for Vorticity, Q-Vector, Theta-E Advection or Moisture Transport.
3. For isentropic fields, switch to the GFS and search for a surface, such as 290K.
4. Click a field to add it.

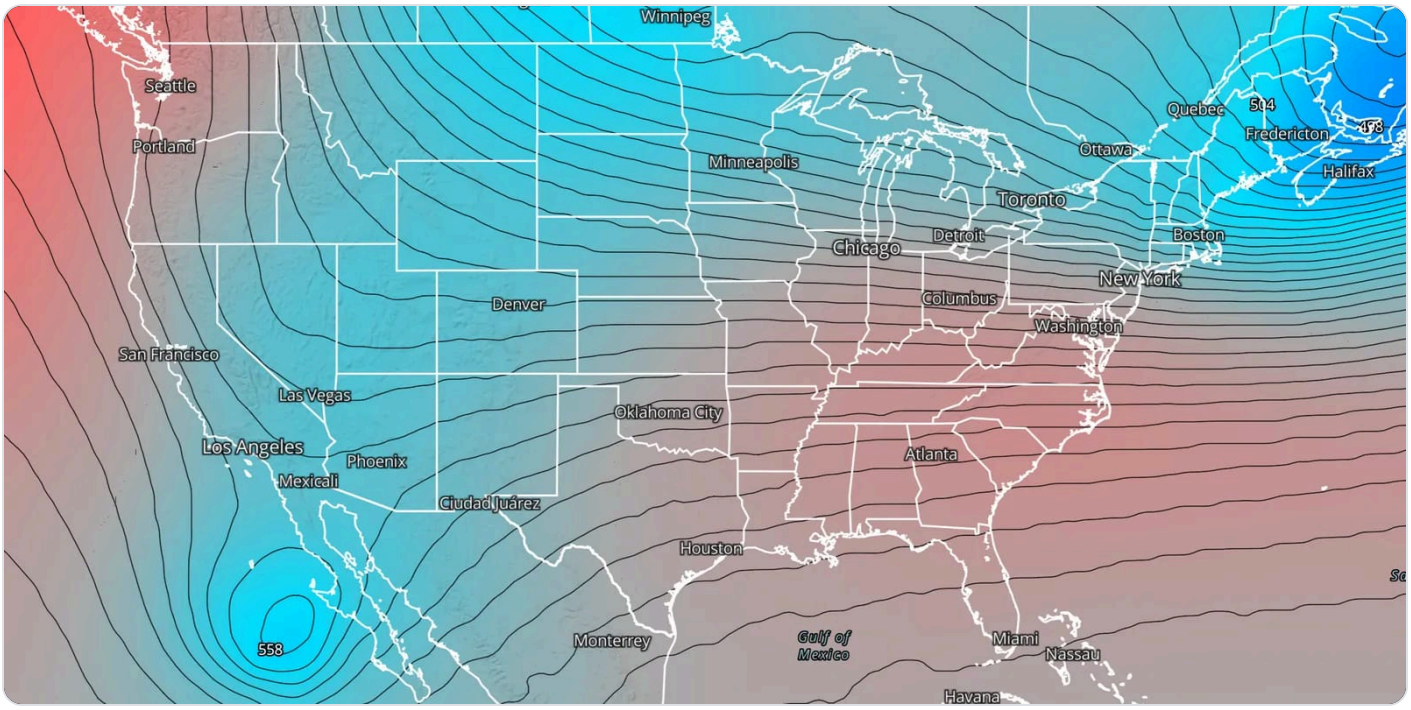
24 Anomalies

2 m temperature, 500 mb height, precipitable water and sea-level pressure anomalies against the 1990–2019 ERA5 climatology, as a departure, in standard deviations, as a climate percentile or relative to normal.

1. Click the **Edit Layers** tab, then **Add Layer**.
2. Type Anomaly in **Search variables...**.
3. Click a field, such as 2m Temperature Anomaly or MSLP Anomaly.
4. Under **Anomaly Type** on the layer card, pick **Anomaly**, **Standardized (σ)**, **Climo Percentile** or **Relative Anomaly**.

TIPS

- **Standardized (σ)** shows how many standard deviations a value is from normal, so a departure counts for more where and when that field usually varies little.
- **Climo Percentile** ranks the value against 1990–2019 ERA5 for that date and hour: 99 means warmer, wetter or higher than 99% of past cases.
- **Anomaly Type** lists only the types a field has. Monthly and seasonal models, reanalyses and ocean analyses don’t offer **Standardized (σ)** or **Climo Percentile**.



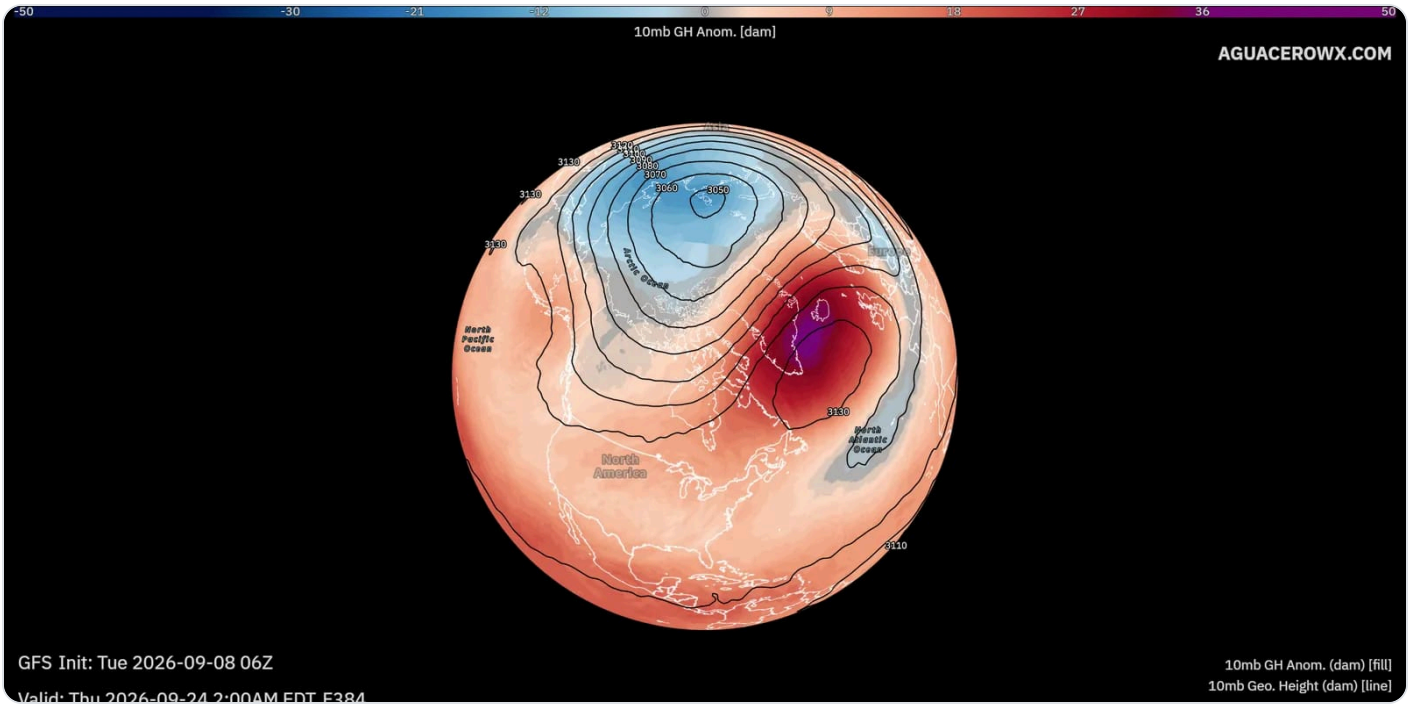
A model anomaly field with contours over North America.

25 Stratospheric fields

10, 50 and 100 mb temperature, height and wind on global models, with anomalies, for watching the polar vortex.

1. Switch the panel to a global model with stratospheric fields, such as the GFS or ECMWF.
2. Click the **Edit Layers** tab, then **Add Layer**.
3. Search for 10mb, 50mb or 100mb.
4. Click a height, temperature or wind field to add it.

Stratospheric anomalies are measured against 1990–2019 ERA5.



GFS 10 mb geopotential height anomaly centered on the North Pole.

26 Air quality and smoke

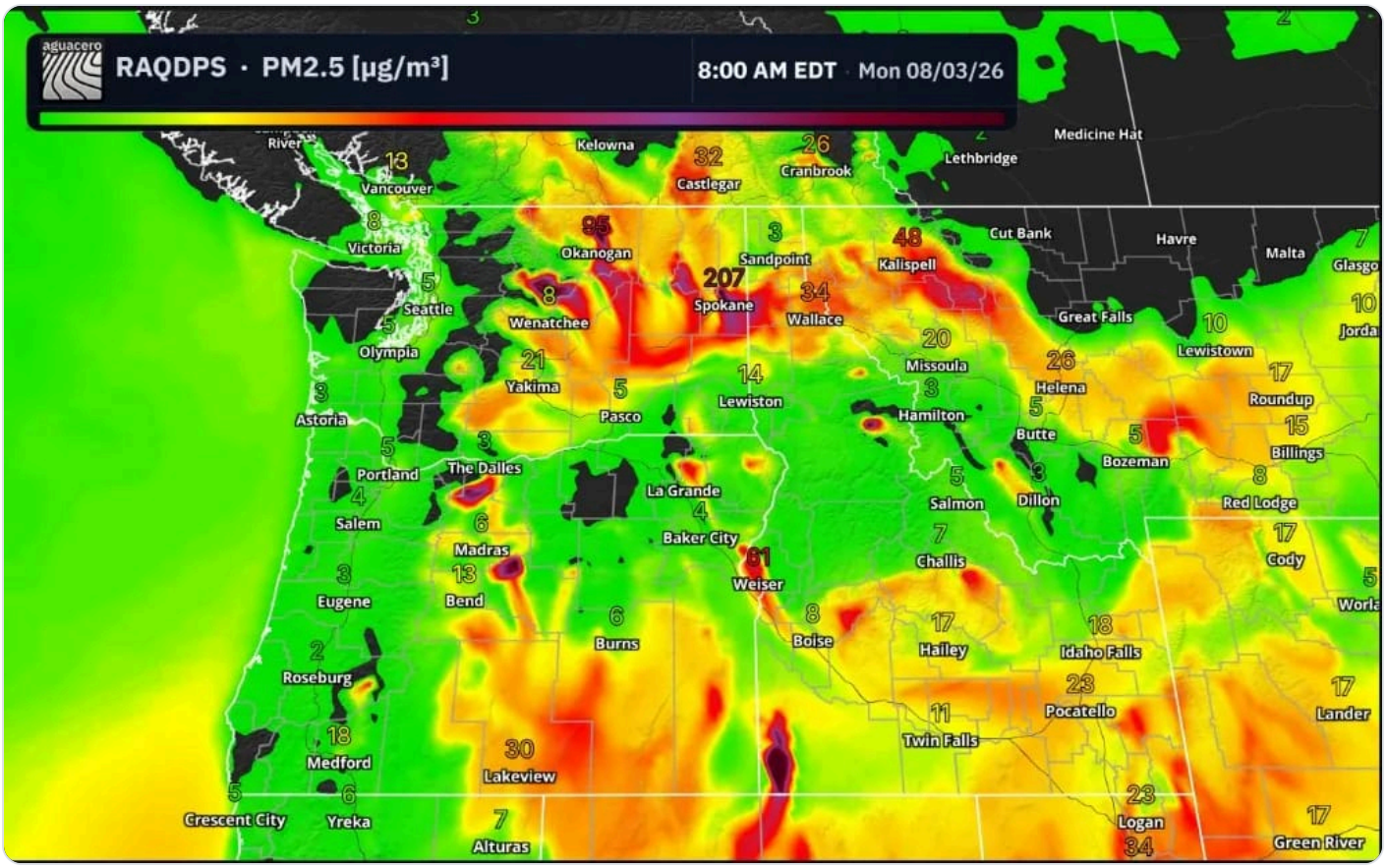
AQM, RAQDPS, CAMS Global and Regional, ICON-ART, GEFS-Aerosols, SILAM, HYSPLIT-Dust and WRF-Chem, plus smoke on supported models.

1. Click the model name near the top of the sidebar.
2. Click **Air Quality** and pick a model.
3. On **Edit Layers**, click **Add Layer** and add a field such as PM2.5.

TIPS

- For smoke on the HRRR or RAP, search **Add Layer** for Smoke.

AQM (AirNow) is on the Free plan.



RAQDPS PM2.5 smoke forecast over the Pacific Northwest.

27 Ocean, wave and surge models

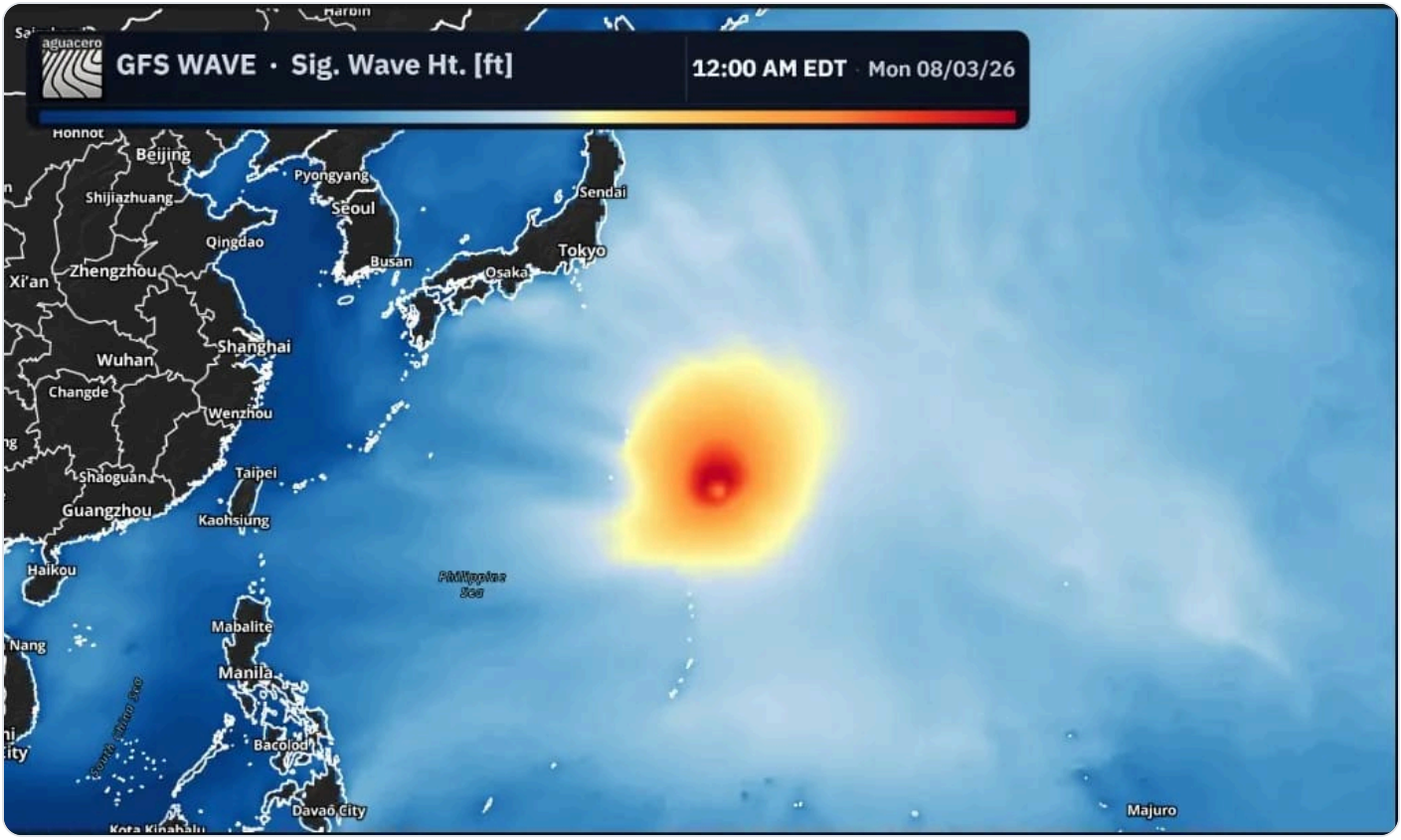
GFS Wave, ECWAM, AIFS Wave, GLWU and RTOFS, plus ETSS, P-Surge and STOFS storm surge guidance.

1. Click the model name near the top of the sidebar.
2. Click **Marine**.
3. Pick a model under **Waves**, **Storm Surge** or **Ocean**.
4. Add a field such as Significant Wave Height or Storm Surge from **Add Layer**.

TIPS

- On P-ETSS and P-Surge, **Field Options** shows NOAA's storm tide and inundation statistics, the chance of exceeding a height, and when it is first reached.

GFS Wave is on the Free plan.



GFS Wave significant wave height around a western Pacific typhoon.

28 Seasonal and subseasonal

CFS, CanSIPS, NMME and ECMWF SEAS5 for monthly-lead outlooks.

1. Click the model name near the top of the sidebar.
2. Click **Climate**.
3. Pick CFS, CFS Monthly, CanSIPS, NMME or SEAS5, then a run.

CFS Monthly is on the Free plan.

29 Common questions

Answers to the questions we hear most about forecast models.

When do new model runs show up?

Each forecast hour shows up as soon as it’s processed, and the app checks for new data every minute while it’s open. In the model menu, each model shows its newest run, such as 12z, and the last forecast hour that’s in, with a bar that fills as the run comes in. The **Model data status** page at aguacerowx.com/data-status shows every model’s progress hour by hour.

Why does the time bar stop partway through the run?

That run is still coming in, and the time bar grows as each hour arrives. By default the app opens the newest run even while its later hours are processing. To open the newest complete run instead, sign in, go to **Settings** > **Data** > **Model** and set **Run option** to **Latest fully completed run**. It applies when you switch models or load a bundle, workflow or scene.

A new run is out. Why does my map still show the old one?

A panel stays on the run you picked. New runs are added to the run menu next to the model name as they arrive, so pick the newest one there.

Why does this run end sooner than the last one?

Many models run longer on some cycles. The HRRR goes out 48 hours on its 00z, 06z, 12z and 18z runs and 18 hours on the rest, and the ECMWF goes out 360 hours on 00z and 12z and 144 hours on 06z and 18z. Click the info icon next to a model in the model menu to see its **Forecast length**.

Which models are free?

Free includes the HRRR, HRRR Sub-Hour, RRFS, RRFS Sub-Hour, RRFS NA, RAP, WOOF-NAM, GFS, NAVGEM, ICON-EU, ARPEGE EU, AI GFS, AI GEFS, Hybrid GEFS, GEFS, GEPS, REFS, GFS Wave, AQM (AirNow) and CFS Monthly, plus the WeatherNext and ATCF hurricane tracks. On Free, the other models have an **E** badge, and clicking one opens the upgrade window. Enthusiast and up include every model.

Why does a layer say Not available for this model?

The model on the panel doesn't have that field. The layer stays in your bundle and draws again when you switch to a model that has it. In the model menu, a green dot means a model has all of your bundle's layers, yellow some and red none. To see which models carry a field, open **Settings** > **Data** > **Model** and click the field.

Why is part of the map blank?

Regional and high-resolution models cover only part of the world, so the map is empty outside their area. When you switch to one whose area is off screen, the map flies to it. Click the info icon next to a model to see its **Domain**. Global models, such as the GFS and ECMWF, cover the whole map.

Why does 24 Hour Precipitation start at hour 24?

It's a 24-hour total, so it needs 24 hours of forecast. 6 Hour Precipitation starts at hour 6, and Total Precipitation adds up from the start of the run. Max Hail Size and the updraft helicity maximums have nothing at hour 0. On the ECMWF, output is every 3 hours to hour 144 and every 6 hours after, so 3 Hour Precipitation stops at hour 144. Other layers on the panel keep those hours on the time bar, and these fields are blank there.

Why is the map slow to load or play?

Each forecast hour downloads the first time you show it. The filled part of the time bar shows the hours that are ready, and the handle can't go past them until the next hour loads. Playback waits up to 3 seconds for an hour that's still loading, then moves on. Long runs, high-resolution models and extra layers take longer.

How do I compare two models side by side?

On Enthusiast and up, click **Split into two vertical panels** next to the board tabs and pick a different model on each panel. In the **Sync** menu on the toolbar, leave **Sync Models** off and keep **Sync Maps** on so both maps pan together. To flip between models on one panel, choose **Compare** in the view mode menu that reads **Forecast**. To see how one model changed from run to run, choose **Trend**.

Why does Compare say No compatible models found?

Compare lists only models that have the same run as your panel, the forecast hour you're on and every model field in your bundle. Pick a run most models share, such as 00z or 12z, move to an hour most models output, such as a multiple of 6, or try a bundle with fewer fields.

How do I switch between °F and °C?

Sign in, open **Settings** > **Data** and set **Units** under **All datasets** to **Imperial** or **Metric**. **Bundle/Variable** keeps each layer's own choice. To change one layer, click **Edit Layer** on its card and pick from **Units**.

What time zone does the time bar use?

UTC, until you pick another zone or your local time in the time zone menu on the time bar. That changes the times on the bar and in the map readouts, and it's saved to your account when you're signed in. Run names such as 12z are always in UTC.

Why is there no Field Options on my ensemble layer?

Field Options is on GEFS, GEPS, ECMWF EPS, ECMWF AIFS EPS, AI GEFS, ICON-EPS, ICON-EU-EPS, REPS, REFS and the NBM, and on P-ETSS and P-Surge. Other ensembles, such as NAEFS and MOGREPS-G, draw the ensemble mean. It also shows only on fields the members carry. On the NBM, that's temperature, dew point, humidity, wind, gust, 6- to 48-hour precipitation, snowfall, 6-hour FRAM ice, snow ratio, snow level, snow depth, CAPE and PWAT.

How do I see an older run?

The run menu lists the runs still on the server for that model. For older HRRR and GFS runs, open the menu on the time bar that reads **Live**, choose **Archive** and click the **Models** tab. HRRR runs go back to August 2014 and GFS runs to 2021. The Archive guide covers the plan limits.