

# ENcast® Forecast Products



## KEY APPLICATIONS

- **Energy utilities:** Production forecasting, outage modeling, and grid management
- **Transportation:** Route planning and delivery schedule optimization
- **Energy trading:** Energy supply / demand predictions and trading models
- **Water resource management:** Water supply planning, flood control, and irrigation scheduling



## FLEXIBLE DATA ACCESS

Easily interact with forecast data through a web-based interface or integrate data into your applications with our ENcast API.

## Accurate forecasts – anywhere on the globe

Short-, medium-, and long-range forecasts are critical to the bottom line of businesses across a variety of sectors. Decisions guided by inaccurate predictive weather data can often lead to operational disruptions, financial losses, and a decrease in customer trust.

AEM solves the biggest industry forecast challenges by delivering the most accurate and comprehensive numerical forecast data for any point on the globe. Our proprietary ENcast forecast engine uses the largest array of high-definition forecast models and infuses hyperlocal real-time weather information to create AI-driven weather predictions and better short-term weather forecasts.



Sensor forecast



Location forecast



City forecast

## Benefits:



Anticipate weather-related disruptions and proactively adjust operations to avoid delays and improve customer satisfaction.



Support energy supply and demand planning, production forecasting, and outage models with location-specific predictive weather data.



Minimize downtime, financial losses, and staffing shortages due to unforeseen inclement weather.

# The standard for accurate numerical forecasts

ENcast analyzes hundreds of global, regional, and local models along with real-time data from our unique observational network and the Earth Networks Total Lightning Network®. The ENcast forecast engine refines this data using cutting-edge machine learning algorithms to reach the most accurate forecast outcomes.

- High-resolution model output including ECMWF, UKMET, GFS and ensembles
- Hourly updates (15 minute for ENcast City)
- AI and machine learning multimodel

## Our ENcast forecast solutions



### SENSOR FORECAST

Use the power of real-time, hyperlocal sensor data to refine forecasts to the highest level of accuracy.

15-day hourly forecast

Updated hourly 0-6 Days; 2x per day after 144 hours



### LATITUDE-LONGITUDE (LAT-LON) FORECAST

Highly accurate forecasts provided for any latitude/longitude in the world - no sensor required.

15-day hourly forecast

Updated hourly 0-6 Days; 2x per day after 144 hours

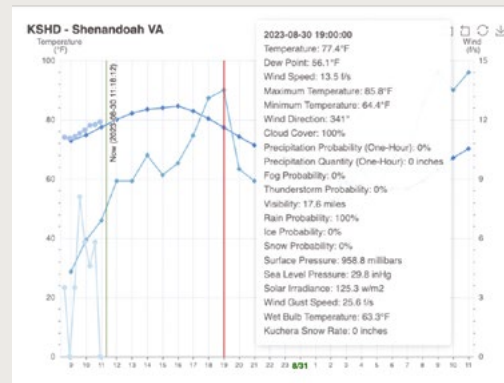


### CITY FORECAST

Forecasts for consumer audiences generated for 2.6 M+ cities around the world.

10-day day/night and hourly forecast

Updated hourly (144 hours) and 15 min (0-3 hours)



## AEM difference:

- **High-resolution ensembles:** Better numerical weather predictions generated using at least nine models for any point on the globe.
- **AI-powered multimodel:** Machine learning models that use current weather observations to continuously improve forecast precision.
- **Hyperlocal:** Fueled by real-time observations from proprietary AEM networks and unique sites.
- **Lowest forecast error:** ENcast FEC (Forward Error Correction) plus bias correction that delivers unmatched, real-time forecast accuracy.



### ASK ABOUT: FORECAST RAINFALL

Accurately predict short-term rainfall at different locations across a basin in near real time with a Gauge-Adjusted Radar Rainfall (GARR) forecast.