

Vaisala
Press release
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Vaisala launches Xweather to turn weather and environmental data into climate action

Vaisala launches Xweather, a suite of services providing real-time and hyperlocal weather and environmental data to predict and solve challenges from lightning-triggered wildfires to weather-related car accidents. With advanced machine learning models and intelligent sensors, Xweather helps a broad range of industries and developers with new levels of data accuracy and actionable environmental insight.

Vaisala, a global leader in weather, environmental, and industrial measurements, has announced the launch of Xweather. Xweather is a leading forecast and observation suite of services using a combination of intelligent hardware and software, utilizing the latest artificial intelligence and machine learning technologies. Xweather services provide an unprecedented amount of environmental information from road conditions and air quality to heat wave detection and lightning strikes.

Xweather brings a new level of accuracy to forecasting by combining massive amounts of weather and environmental data from several sources. “Until now, the lack of real-time, local data has been a major source for error in weather and environment forecasting. With Xweather, businesses and developers can utilize data about the environment in real time from a hyperlocal location that is relevant for them,” says **Samuli Hänninen**, Head of Xweather at Vaisala.

Xweather comprises a wide portfolio of data services and solutions. It is a suite of observation enhanced SaaS (Solution as a Service) and DaaS (Data as a Service) services created for businesses and developers whose products, operations, or customers depend on high quality weather and environmental information.

Xweather includes solutions from predicting lightning and availability of renewable energy to increased driving safety and air quality monitoring. Xweather for example helps energy grid operators and energy companies with accurate predictions on the availability of wind and solar power and provides customers like BMW, Volkswagen Group, and Mercedes-Benz with road and weather data affecting traffic conditions. Furthermore, Xweather can detect where and when lightning strikes happen. With this knowledge, the right infrastructure and rescue services can be mobilized quickly to manage a potential fire and thus protect homes and lives.

“For over 85 years, Vaisala has helped people and companies across the globe – with products even in space – to understand climate and weather. Understanding is not enough: we need to take action. We want to help organizations not only think and plan, but to act. The data and insight are available now, let’s together put that data to work,” Samuli Hänninen concludes.

Full list of data products included in Xweather delivered as API or enterprise package:

- MapsGL – The future of weather mapping. A variety of easy-to-use tools to customize and integrate high-quality, vector-based weather data, imagery, and visualizations into your application, providing an unprecedented user experience.
- Automotive – Weather, road weather, and air quality information for infotainment, navigation, advanced driver assistance, and autonomous driving.
- Lightning – Real-time lightning data, including classification of strikes and their damage potential.
- Renewable energy – Historic data sets and forecasted wind and solar data.
- AerisWeather Weather API provides a broad range of hyperlocal environmental data: minutely forecasts, and unique data endpoints like severe weather alerts, tropical storms, air quality, lightning strikes, and wildfires.
- AerisWeather Maps API – Flexible weather mapping platform giving you exactly the imagery and map overlay tiles you need.
- Air quality – Air Quality Index and a hyperlocal Air Quality Forecast service connected to local sensors for street level AQ information and forecasts.

Full list of solutions for businesses included in Xweather

- Wx Beacon – Solution for observation enhanced microscale weather connected to AtmoCast sensor.
- Thunderstorm Manager – Web-based worldwide thunderstorm tracking with the most accurate lightning detection including up-to-the-second lightning data and real-time lightning alerts based on Vaisala's proprietary global lightning detection network.
- Wx Horizon – Solution for road weather and road winter maintenance decision support, connected to GroundCast and TempCast sensors.
- RoadAI – Solution for road pavement condition mapping through an automated road survey utilizing computer vision and AI.

More information about our products at xweather.vaisala.com.

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VAISALA

Vaisala is a global leader in weather, environmental, and industrial measurements. Building on over 85 years of experience, Vaisala provides observations for a better world, with space-proof technology even exploring Mars and beyond. We are a reliable partner for customers around the world, offering a comprehensive range of innovative observation and measurement products and services. Headquartered in Finland, Vaisala employs over 2,000 professionals worldwide and is listed on the Nasdaq Helsinki stock exchange. vaisala.com twitter.com/VaisalaGroup linkedin.com/vaisala