Thunderstorm Manager

"Monitoring lightning in real-time and projecting storm cell trajectories is essential for protecting people and property in safety-critical industries such as aviation, maritime, energy, and mining."
Hans Loewenheath, Product Manager, Vaisala

With severe weather becoming more frequent, Thunderstorm Manager — part of the Vaisala Xweather family of environmental data services — offers a reliable, comprehensive, and streamlined way for businesses to protect personnel, improve operational resilience, and manage risks from lightning, tropical cyclones, and severe storms.

When downtime costs thousands of dollars per minute, a fast and accurate assessment of severe weather risks is critical for maximizing operational efficiency while ensuring worker safety.

Thunderstorm Manager delivers an all-in-one solution for lightning risk management, real-time storm monitoring, and lightning alert automation for any location worldwide. Cloud-based convenience and an intuitive interface let you monitor threats and alerts from any computer or mobile device with an Internet connection.

KEY BENEFITS

Maximize safety, minimize downtime
Improve your situational awareness and make safety decisions with confidence with multichannel alerts, all-clear notifications, and API connectivity to your safety systems.

Real-time alerts for any location
Vaisala's high-precision lighting detection networks provide real-time coverage for every location — including oceans, mountain peaks, and other areas not covered by radar.

All-in-one solution with no capital costs
Monitor nearby storms and get real-time lightning alerts for your sites on any device without the need to buy, install, or maintain your own lightning detection equipment.

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VAISALA Xweather

Storm monitoring and lightning alerts

KEY FEATURES

Create site-specific alerts to meet or exceed industry standards for safety and compliance. Thunderstorm Manager supports three levels of alerts (information, warning, and alarm), custom trigger distances, custom alert areas, and a choice of triggering criteria.

Send alerts and all-clear notifications to multiple email addresses, SMS phone numbers, and IoT warning systems. Replay recent storm activity with timeline animation and review the 30-day alert history.

Connect Thunderstorm Manager to on-site systems to warn personnel with flashing lights, sirens, and on-screen displays. Use the secure alerting API to integrate alerts into your systems and processes to get the right alert to the right people at the right time.

Lightning Threat Zone shows you if storms are moving toward or away from your sites. It visualizes storm cell trajectories and risk areas in 10-minute intervals up to 60 minutes in advance.

Versatile display options let you see what matters most. Map layers include lightning (cloud-to-ground and in-cloud with a color-coded time stamp), satellite infrared, radar, temperature, wind, tropical cyclones, meteorological service alerts, and more.
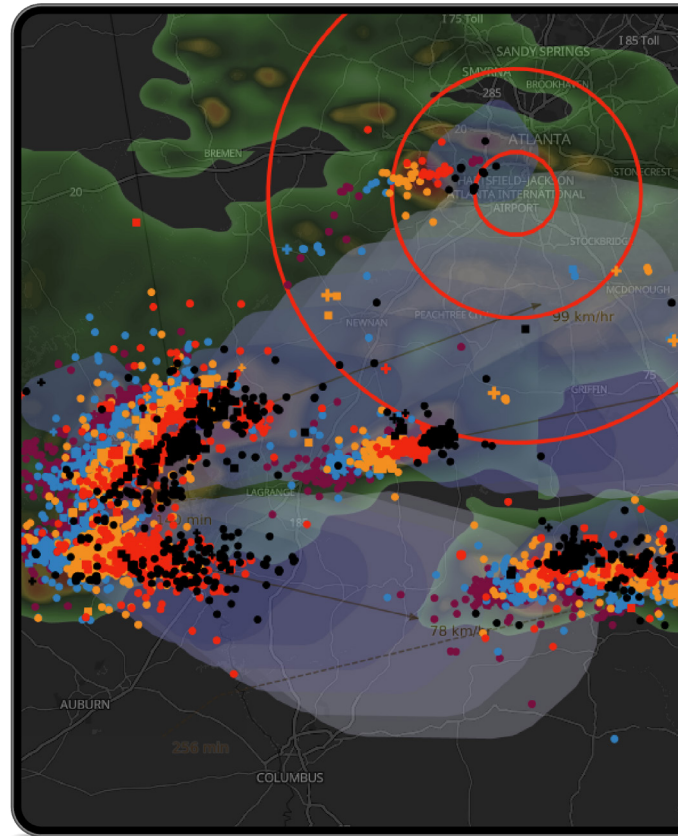
APPLICATIONS

Maximize worker safety at airports with automated alerts while monitoring nearby lightning events in real time to minimize operational downtime and delayed departures.

Monitor and track rapidly developing storms and tropical cyclones to improve maritime safety, protect offshore assets, and keep operations running.

Automatically warn mine workers with flashing beacons, sirens, and display screens to stop work and seek shelter. Send all-clear notifications when it is safe to resume work.

XWEATHER DELIVERS

No one captures more lightning
Vaisala detects 99.9% of thunderstorms worldwide, recording more than two billion lightning events every year with unmatched detection efficiency and locational accuracy.

Quality you can count on
With real-time delivery from strike to alert in 30 seconds or less and 99.99% availability, Vaisala delivers accurate, reliable lightning data wherever and whenever you need it.

Trusted and dependable
Vaisala is the primary source of lightning data for the U.S. Armed Forces, National Weather Service, Federal Aviation Administration, and many international commercial organizations.

Don't leave lightning to chance — start your free 30-day trial today with real-time lightning data and alerts for your site locations.

Start your free trial →

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