

Lightning Threat Zone API

VAISALA

Product Spotlight

Easy-to-integrate global nowcasts for urban and industrial safety

When a storm is coming, people need to know when lightning is nearby and if it's time to take cover. From industrial operations to office buildings and parks, safety management professionals depend on local and accurate lightning information to make the right decisions that minimize disruptions and keep people safe.



Key benefits

Simple API query that can easily integrate into your weather systems and platforms, without the need for other weather inputs.

Incremental forecasting capabilities on thunderstorm cells up to 60 minutes out in 10-minute increments.

The highest quality lightning data powered by the most comprehensive, reliable lightning detection networks in the world – available 99.99+% of the time to cover all of your users, everywhere.

Additional lightning information layer that includes forecast polygons and velocity vector data for each identified storm so users can better predict their lightning risk.

Hyperlocal, actionable data that can be utilized to make well-informed immediate operational decisions and for establishing individual site and broad organizational safety policies.

Why Vaisala?

As the global leader in weather and environmental measurements, Vaisala empowers businesses and community leaders to build resilience to climate change and extreme weather events. Our 85+ years of expertise is grounded in science, innovation and our unwavering commitment to constantly evolving.

We boldly demonstrate that a culture of resilience and a connection to nature can create new ways of smarter, resilient living. We are champions for smarter, safer and more sustainable urban communities.

Bring thunderstorm forecasting clarity to your weather platforms. Vaisala Lightning Threat Zone API boosts the thunderstorm nowcasting and alert information that software developers can easily leverage within their situational awareness platforms. This provides local, actionable insights for decision-makers when people's safety depends on their action – from buildings and outdoor recreation activities to worker safety and risk management for fires and explosions.

Lightning Threat Zone API starts with data from the world's largest lightning detection networks and analyzes them with a sophisticated algorithm to deliver simple, effective forecast visualizations in real time. This enables effective planning for safe industrial operations through localized forecasting, earlier warnings, and greater understanding of how a storm is behaving. It can work with severe weather forecasting systems and weather tools—without the need for other weather inputs—to help users determine whether a thunderstorm may risk safety and when people can resume activities.

Applications:

- Visualize and understand the level of threat a storm poses, whether it is approaching, moving away, or is currently overhead triggering lightning alarms
- Integrate real-time lightning nowcast data to localize thunderstorm forecasts with global coverage that does not depend on other weather inputs
- Build localized warnings into existing weather applications to provide accurate, relevant information for industrial operations, buildings or outdoor activities
- Determine more accurate risk thresholds to minimize costly downtime and protect workers from injury or death

