VAISALA

Vaisala Lightning Integrator

High-quality, accurate historical lightning data API to support your incident analysis tools





Vaisala Lightning Integrator delivers quick and easy access to the most trustworthy real-time and historical lightning data for incorporation into your weather investigation systems through an easy-to-use API. Adding quick, easy, seamless access to the ever-expanding repository of current and historical Vaisala lightning data improves investigation efficiency, and enhances your report credibility for management, legal teams, external audiences.

Incorporating Lightning Integrator into your analysis and reporting tools will ensure you'll have confidence in your results. Our highly accurate, precise data helps you justify downtime, review operational procedures, identify potential damage to assets, justify investigation and repair projects, and, in the case of accidents, show there has not been negligence with respect to worker safety. It is the dependable data boost most power utilities, renewable energy organizations, airports and airlines, mining companies, ports, oil and gas terminals, and maritime operations need to improve safety, forecast models, operational efficiency, and asset reliability.

Key benefits

Reduced operational downtime

Lightning Integrator lets you analyze detailed storm information in near real time, even when your asset may have just been compromised. You can make better-informed decisions to maximize productivity by dispatching people to the right asset at the right time.

Greater protection from liability

Dependable data about lightning type, location, and intensity can help determine the cause of a particular incident and help in designing a preventative plan of action.

Increased asset reliability

Lightning Integrator gives you access to extensive storm data near your assets — even those spread across multiple geographic regions — to improve your emergency, maintenance and operational asset management.

A single source for data

Vaisala has the largest, most sophisticated, and most accurate lightning detection networks in the world that capture detailed lightning data wherever you or your assets are, and Lightning Integrator makes this information easily accessible for your system.

Enhanced reporting

The more accurate and comprehensive the lightning data you input into your system, the better analysis your incident report delivers.

Lightning Integrator at a glance

Applications

- Incorporate comprehensive lightning information into safety and planning systems to help improve asset management before, during or after a weather threat or incident.
- Review potential risks for lightning damage to enhance the effectiveness of asset protection and maintenance planning.
- Support power generation and transmission asset reliability by integrating accurate and complete lightning data into forecast models, GIS tools, and asset management systems.
- Build robust incident reporting through a simple, easy-to-query API that allows access to highly accurate lightning information for use in incident assessment, reporting or even displaying in an app.
- Evaluate asset damage or failure through the lens of near real-time and historical hazardous strike information.

Kev features

Dependable data with easy access to all the lightning events that occurred within your specified area and time period, with identified lightning characteristics that are accurate and reliable.

Simple API integration lets you seamlessly feed comprehensive real-time (1 minute behind) and historical lightning data (back to 2016) into your analysis platform.

Extensive lightning information including event type, cloud-to-ground stroke or intra-cloud pulse event, date and time (UTC with milliseconds accuracy), precise

event, date and time (UTC with milliseconds accuracy), precise latitude and longitude, peak current (kA), polarity (+/-) and much more.

Reprocessed historical data option for improved quality data
over the US back to 2016 to train
machine learning models or perform
forensic analysis.

Comprehensive data access without the need for lightning detection sensors — saving real estate, time, maintenance and operational costs.

Includes Strike Damage Potential, providing accurate data on the particular lightning strikes that have greater potential to cause damage or start a wildfire.

Why Vaisala?

No other company captures more data on lightning events than Vaisala

Vaisala delivers the most accurate and reliable lightning information wherever and whenever you need it.

No matter how you use lightning information, your decisions and evaluations demand the best data possible. Vaisala is the clear leader in lightning detection, and no other company comes close in terms of quality, accuracy, or coverage of lightning data.

Support and services you can count on

Look to Vaisala for dependable support, project capabilities, and training so you can get the most from your system. With decades of experience providing the best technologies and the finest support, Vaisala's philosophy of partnership is unmatched in the industry.





