

Real-Time Lightning Data Feed

High-quality, accurate real-time lightning data to support your weather monitoring systems



Lightning is a unique weather danger because it takes place very quickly, often unpredictably, and can cause immediate and catastrophic damage to life and property. Weather monitoring platforms need up-to-the-second lightning information to issue thunderstorm warnings, provide accurate forecasts, and operate safely and efficiently.

Vaisala's Real-Time Lightning Data Feed provides the best total lightning data available, drawn from our National Lightning Detection Network (NLDN) and Global Lightning Detection Network (GLD360). This allows customers to save, store, or visualize the lightning information in the way that best suits them. Using a secure data "tunnel" from Vaisala's server to the user's server, the feed ensures optimal data integrity and extremely low latency — enabling organizations to react quickly, operate efficiently, and ensure people are safe.

Key benefits

Available today at no capital costs

Providing real-time data for you, without the need to purchase, install, or maintain any sensor equipment or processing systems, and available to you almost immediately.

Real-time situational awareness, anywhere

The data feed provides exceptional data quality, security, and availability (99.99%), with extremely low latency and the highest global coverage attainable. This empowers leaders in many industries to ensure public safety, avoid physical storm damage, keep workers safe, and much more.

The confidence of the best lightning data

Vaisala owns and operates the NLDN and GLD360 lightning detection networks, and our lightning data is trusted by the most demanding users, including U.S. federal agencies, the biggest power utilities, and the world's largest airlines.

Operational efficiency and response effectiveness

The data feed allows for more effective alerting, response operations, forecasting, and proactive resource allocation.

Agencies and organizations are able to mitigate lightning damages and preserve operational continuity while minimizing the costs of downtime.

Real-Time Lightning Data Feed at a glance

Key features

Extensive lightning information for each cloud-to-ground (CG) stroke or intra-cloud (IC) pulse event, including date and time (UTC within milliseconds of accuracy), precise latitude and longitude, peak current (kA), polarity (+/-), and much more.

Fully customizable geography that serves stakeholders anywhere in the world, providing just the data they need.

High uniformity of coverage and standardization for simpler integrations and more consistent analyses.

Secure fast data from the cloud delivering a near instantaneous real-time data stream for lightning as it occurs.

Trusted by the most demanding users

- U.S. federal agencies
- The biggest power utilities
- The world's largest airlines

Why Vaisala?

No other company captures more data on lightning events

Vaisala is the recognized leader in global lightning detection. Our data feed provides the best data quality and the flexibility needed by companies and agencies around the world.

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.



Trusted weather observations for a sustainable future



