Vaisala Lightning Integrator for Wind Energy

Product Spotlight

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

Vaisala Lightning Integrator, part of our Xweather family of subscription based products, 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, and external audiences.

Key benefits

Dependable data with easy access to all local lightning events, with identified lightning characteristics that are accurate and reliable.

Simple API integration lets you seamlessly feed comprehensive real-time and historical lightning data 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 latitude and longitude, peak current (kA), polarity (+/-), and much more.

API service offers access to lightning data from 2016 to as recent as 1 minute behind the present time.

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?

We are innovators, scientists, and discoverers who are helping fundamentally change how the world is powered. Vaisala elevates wind and solar customers around the globe so they can meet the greatest energy challenges of our time. Our pioneering approach reflects our priorities of thoughtful evolution in a time of change and extending our legacy of leadership.

Vaisala is the only company to offer 360° of weather intelligence for smarter renewable energy, nearly anywhere on the planet. Every solution benefits from our 85+ years of experience, deployments in 170+ countries, and unrivaled thought leadership.

Our innovation story, like the renewable energy story, continues.

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 and investigation or repair projects, review operational procedures, and identify potential damage to wind farm assets. It is the dependable data boost most renewable energy organizations need to improve safety, forecast models, efficiency, and their asset reliability.

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 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