

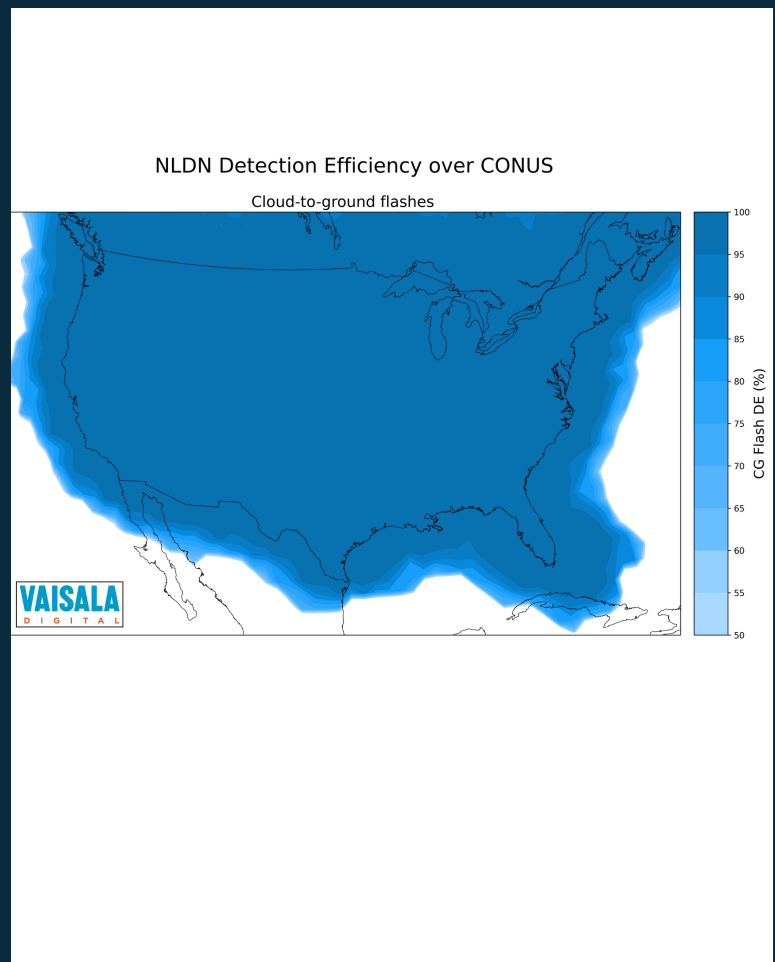
Vaisala National Lightning Detection Network (NLDN)

VAISALA

Product Spotlight

Providing trusted weather observations for a sustainable future

A powerful force of nature, lightning can cause serious harm or damage in an instant. Vaisala National Lightning Detection Network (NLDN) prepares organizations before lightning strikes near them by delivering scientifically accurate total lightning data from across the United States in real time. Equipped with best-in-class information about the location, time, and type of lightning, organizations can make better decisions to safeguard personnel, protect assets, deploy resources, and minimize downtime.



Key benefits

Around the clock detection with superior accuracy, NLDN detection efficiency for cloud-to-ground flashes is greater than 95%, with overall classification accuracy of 95% and median location accuracy of better than 100m.

Comprehensive data without installing or maintaining a single sensor, decreasing real estate and operational costs.

A 30-year history of the highest quality lightning detection, creating a historical record or lightning data for meteorological or operational purposes.

Why Vaisala?

As the global leader in weather and environmental measurements, Vaisala provides trusted weather observations for a sustainable future. With over 85 years of experience and customers in 170+ countries, from the North and South Poles to Mars, we help provide the most reliable and accurate weather and climate information for better and safer daily lives.

Our instruments and intelligence are known as the gold standard for precision and reliability. As a sustainability leader we enable meteorology professionals to better understand, forecast and explain climate change. We continue to channel our curiosity into climate action and new ways of enabling a better planet for all.

Unique in its superior ability to differentiate between cloud-to-ground and in-cloud events, Vaisala NLDN thunderstorm detection efficiency rate is near 100%, with an event location accuracy better than 150m and timing down to the microsecond. This high level of precision and accuracy gives organizations the information they need to quickly assess risk, issue hazardous weather warnings, prepare for potential power outages, or investigate the cause of fire damage – all without maintaining a detection system or hardware of their own.

Applications:

- Earlier and more accurate detection of hazardous weather conditions to inform decisions regarding airport and other outside personnel to maximize safety while minimizing costly downtime
- Support meteorological agencies and organizations by providing critical input data for models and severe weather forecasting
- Better prepare for storm-related power outages by rerouting power transmission earlier or preemptively deploy personnel to strategic locations
- Aid reliability of the power grid by providing utilities with precision lightning information to ensure networks are sufficiently robust and comply with regulatory standards
- Create lightning alerts to inform people about severe weather and lightning risks
- Enable investigation of lightning as the cause of property damage or fire

