

### TOTAL LIGHTNING NETWORK



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Earth Networks lightning technology and real-time data services have enabled us to rapidly expand and enhance the Australia Total Lightning Network (ATLN). Earth Networks has continued to evolve and enhance both hardware and software to enable us to provide a comprehensive solution to organizations and business right across Australia. This service is now trusted by both large government and commercial enterprises.



**Martin Palmer,** Managing Director, Weatherzone

### BE READY BEFORE LIGHTNING STRIKES

Earth Networks Total Lightning Network® delivers the most reliable and precise lightning detection in the world, so you can make better decisions, protect property, minimize downtime, and safeguard lives when and where it matters most.

### **SOLUTION OVERVIEW**

At Earth Networks, we pioneered total lightning detection as the first innovator to accurately detect and classify both in-cloud and cloud-to-ground lightning. That legacy of innovation continues in our network today with proprietary algorithms and technology that deliver exceptional location accuracy and detection efficiency across the globe. Our expansive network provides the most reliable, high-quality data in real time to help you quickly evaluate risk and take action when dangerous weather threatens.

### **BENEFITS**



**Precise Data in Moments that Matter:** Innovative technology and machine learning models deliver more precise lightning data to inform critical decisions and safeguard lives when it matters most.



**Robust Coverage Where It Counts:** Expansive, proprietary network ensures exceptional location accuracy and detection efficiency almost anywhere you operate in over 100 countries worldwide.



**Intelligence to Minimize Financial Risk:** Powerful data helps you know when lightning threatens to impact operations so you can minimize disruptions, adjust processes, optimize emergency response time, and minimize financial risk.



**Immediate, Reliable Information:** Innovative platform ensures uninterrupted and timely access to current or historical data when you need it, with maximum up-time.



### **KEY APPLICATIONS:**

- Accurately detect lightning and severe weather to communicate timely alerts to people on your site and maximize safety
- Access critical, real-time weather information required to guide decisions, plan for business disruptions, and minimize costly downtime
- Quickly detect and verify lightning strikes to pinpoint fire ignitions or damage to assets and know where to focus emergency response
- Use precise, high-quality data to enhance and improve meteorological applications and research for more precise modeling and weather forecasting

# WHY EARTH NETWORKS TOTAL LIGHTNING DETECTION

Be ready before lightning strikes with the most reliable and precise lightning network in the world.



## **Exceptional Location Accuracy and Detection Efficiency**

- Sophisticated algorithms deliver superior location accuracy of <100m and detection efficiency of 95%</li>
- Advanced machine learning models filter out inaccurate location data to maintain low false alarm rate



### **Superior Lightning Classification**

 Most accurate global in-cloud and cloud-to-ground total lightning detection with classification accuracy of 90%



### **Expansive Global Coverage**

 Dense sensor deployment with 1800+ sensors in 100+ countries worldwide provides comprehensive, consistent data anywhere global companies operate



### **Maximum Up-Time and Immediate Access**

• Efficient and reliable technology platform with maximum up-time of **99.9%** and fast data delivery in under 15 seconds



### **Flexible Delivery Options**

- Access lightning data without delay via various feeds and file types to be integrated into your systems for analysis
- Directly accessible within our suite of weather monitoring and alerting solutions to track severe weather in real-time



### Complete, Insightful Data – Either Real-time or Historical

- Inform better decision making and emergency response planning when dangerous weather threatens
- Support more accurate predictive modeling and severe weather forecasting in meteorological applications

