

Keeping ports & terminals safe: Effective lightning monitoring

Balancing safety and the bottom line

Shipping ports and terminals are major industrial complexes involving potentially explosive materials, towering cranes, and human lives. However, a single flash of lightning can completely shut them down. A modern weather monitoring system makes it possible to keep everyone safe while minimizing losses from costly operational downtime.

The high cost of not doing business

An informal poll with our customers revealed that:



\$1K/min

Loss for oil & gas terminal shutdown



\$20K/hr

Loss for LNG terminal shutdown

Effective thunderstorm detection



Detection efficiency

The greater percentage of total lightning events you can capture in real time, the more accurately you can determine your best course of action.



Location accuracy

Knowing where lightning is and where it isn't lets you effectively decide if or when you need to halt operations and when it's safe to start up again.



Approaching storm detection

Knowing the speed, direction, and intensity of a storm is essential for formulating a precise threat assessment to your operations.

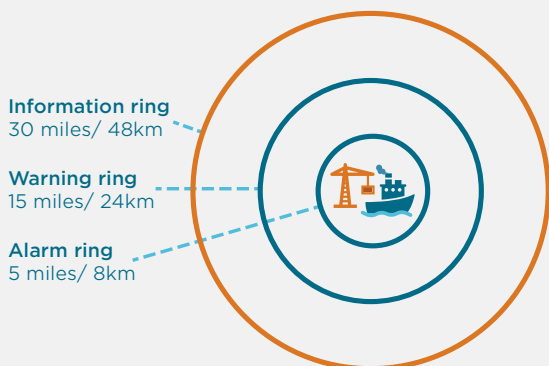


Key lightning data

When detecting lightning, you should know the type, intensity, duration, frequency, and chronology of all strikes in a storm.

Your warning system

Most systems embrace a concentric circle monitoring model that includes an informational or watch ring, a warning ring, and an alarm ring. A notification or alarm is raised at each interval, so people can take proper action based on real-time lightning data.



Three key factors for determining warning distances:

- Time it will take to notify staff
- Time it will take to safely stop operations
- Time it will take to get everyone to safety

Automated notifications & alerts

When lightning approaches your operations, it's essential that information and instructions are communicated clearly and effectively.



On screen



Text



Email



Sirens

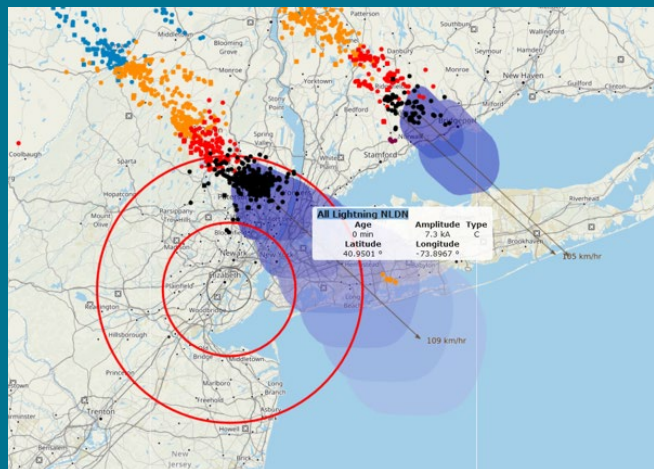


Flashing Beacons

Vaisala Thunderstorm Manager in action

Port Newark, New Jersey, USA

This shows a close call at the Port of Newark when a pair of thunderstorms moved across the New Jersey and New York coastlines. Because lightning was never detected inside the closest warning perimeter, these storms didn't warrant initiation of any danger alerts or a shutdown of operations.



Make weather emergencies less of an emergency when you know exactly when and where they'll hit.

For more than 30 years, the maritime industry has trusted Vaisala to deliver industry-leading lightning detection solutions that drive safe, productive port and terminal operations. Seeing potential lightning threats as they happen, anywhere in the world, will help you protect your people and your productivity.