



VAISALA

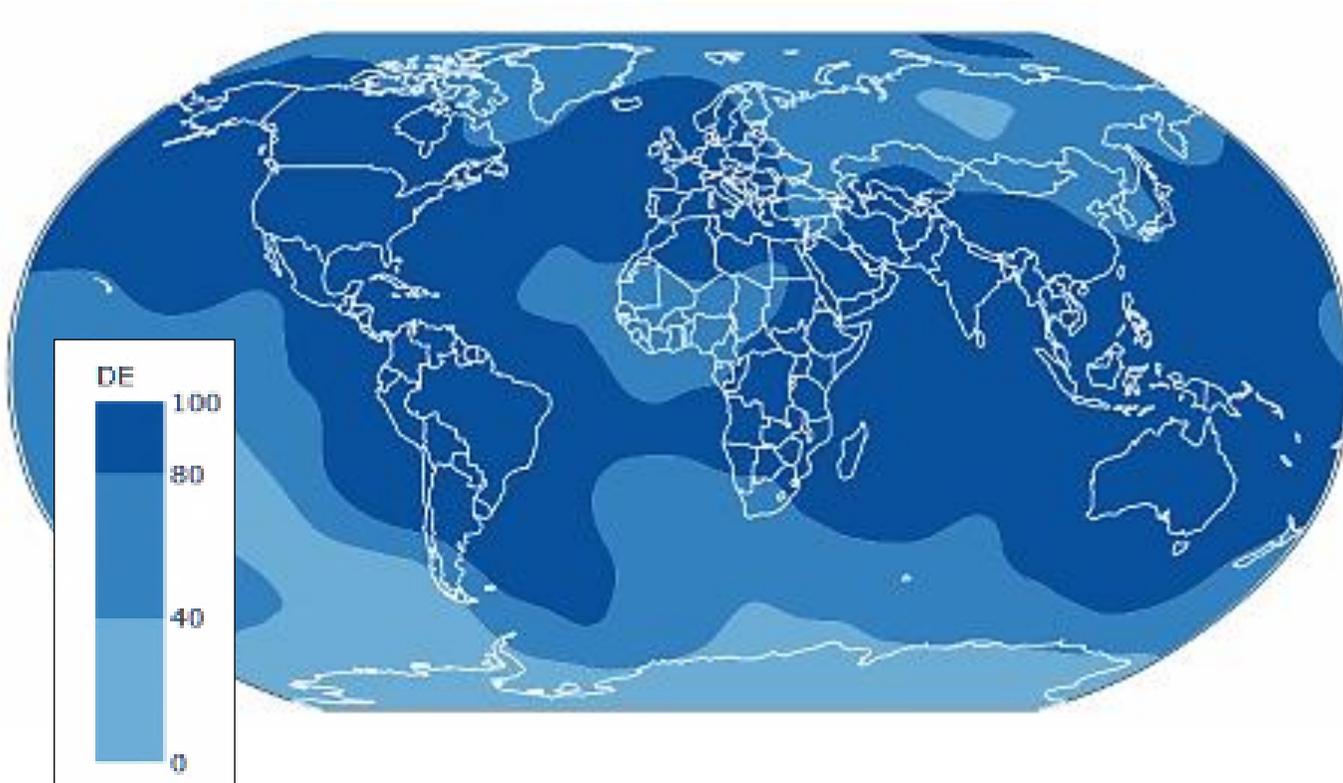
The GLD360 Lightning Network, Covering the Caribbean Today

Brooke Pearson

May 2021

CMO/WMO Symposium on Lightning and
Lightning Safety Awareness

Perfect for your Meteorological and Storm-readiness Needs

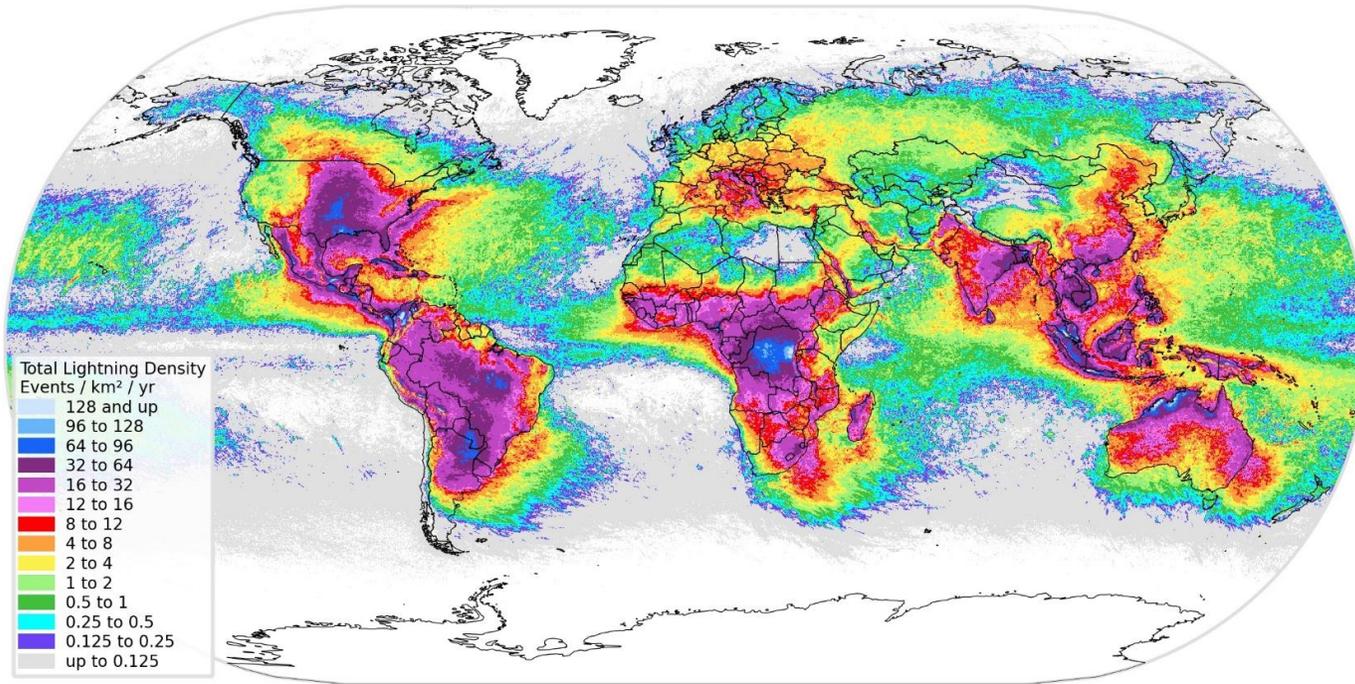


GLD360 is the leading global lightning data service, by Vaisala.

Excellent quality over the Caribbean, and is available today.

And is affordable!

The GLD360 is a Single Network Covering Continents and Oceans



2+ billion lightning events in last 12 months.

1 km accuracy, detecting 100% of thunderstorms.

5 times more lightning than any other global lightning network.

Perfect for Your Meteorological and Storm-readiness Needs.



80% of national meteorological agencies, who use lightning data, use Vaisala lightning data.

Ideal Where Operational Down-time Needs to be Minimized, Safely!



Power grid reliability – to support storm preparedness.

Commercial safety – for airport, shipping terminal and mine personnel.

Essential Safety Information for Aviation Operations

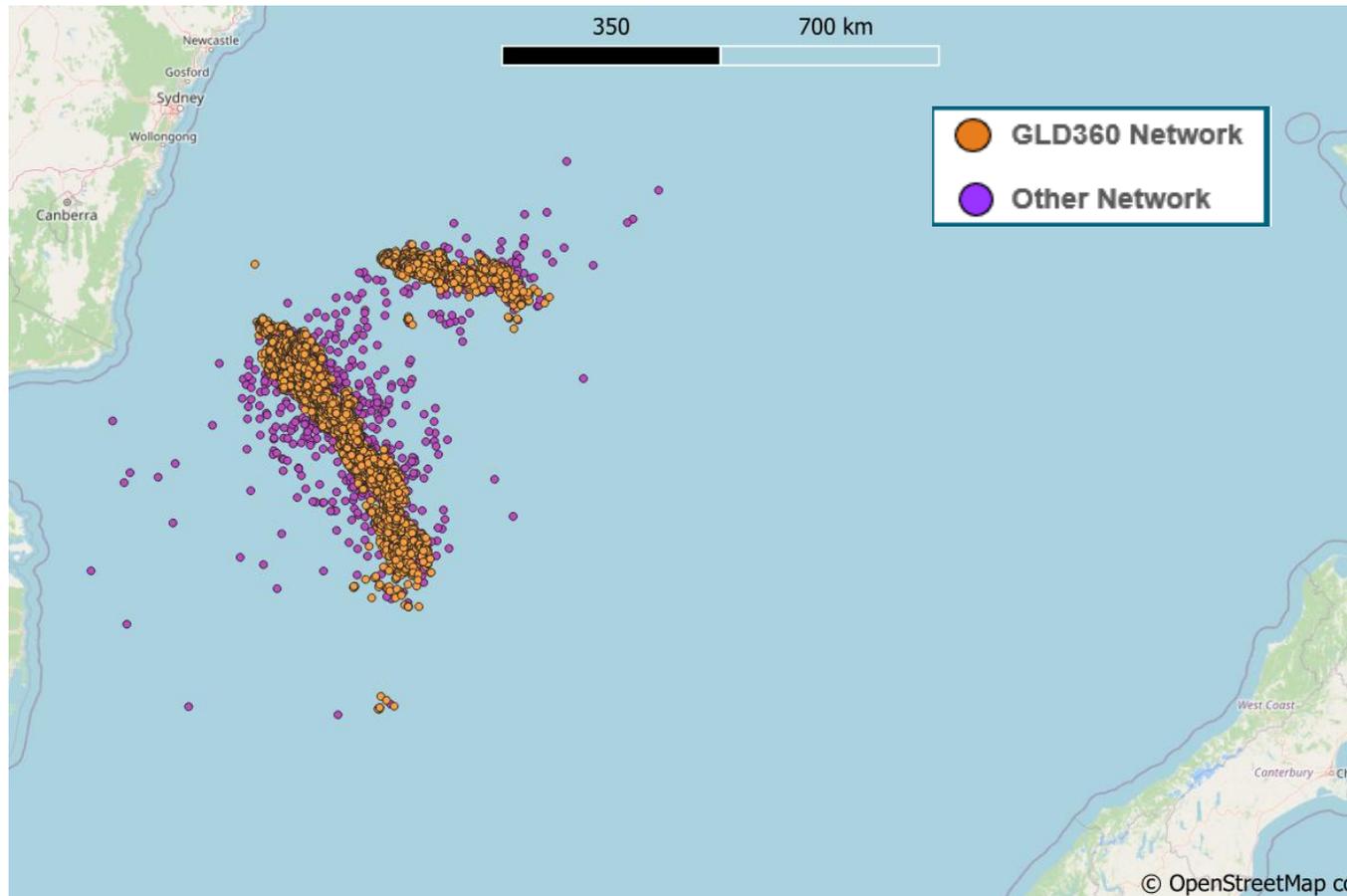


The Guardian 2009, Photograph: Brazilian Navy/AFP/Getty Images

Potential icing means thunderstorms must be avoided.

Turbulence is a significant issue, too.

Accurate Location Identifies the Spatial Extent of a Storm, Critical for Safe Travel



- GLD360 shows good “clustering”, correctly showing the limits of the storm.
- The other data could have negatively impacted flight operations between Australia and New Zealand, with incorrect information.
- There is also 10-times more GLD360 data.

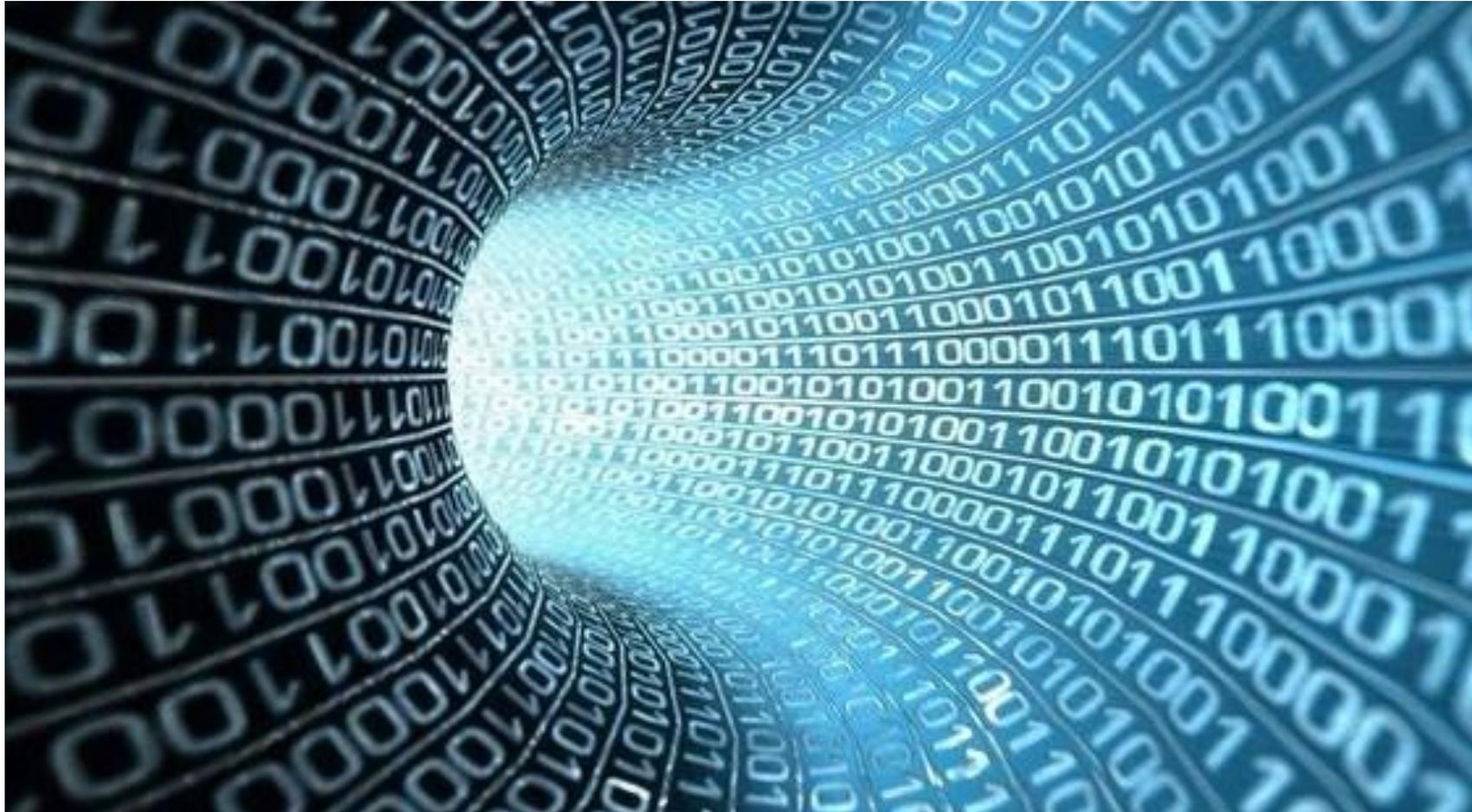
Available To You, Today



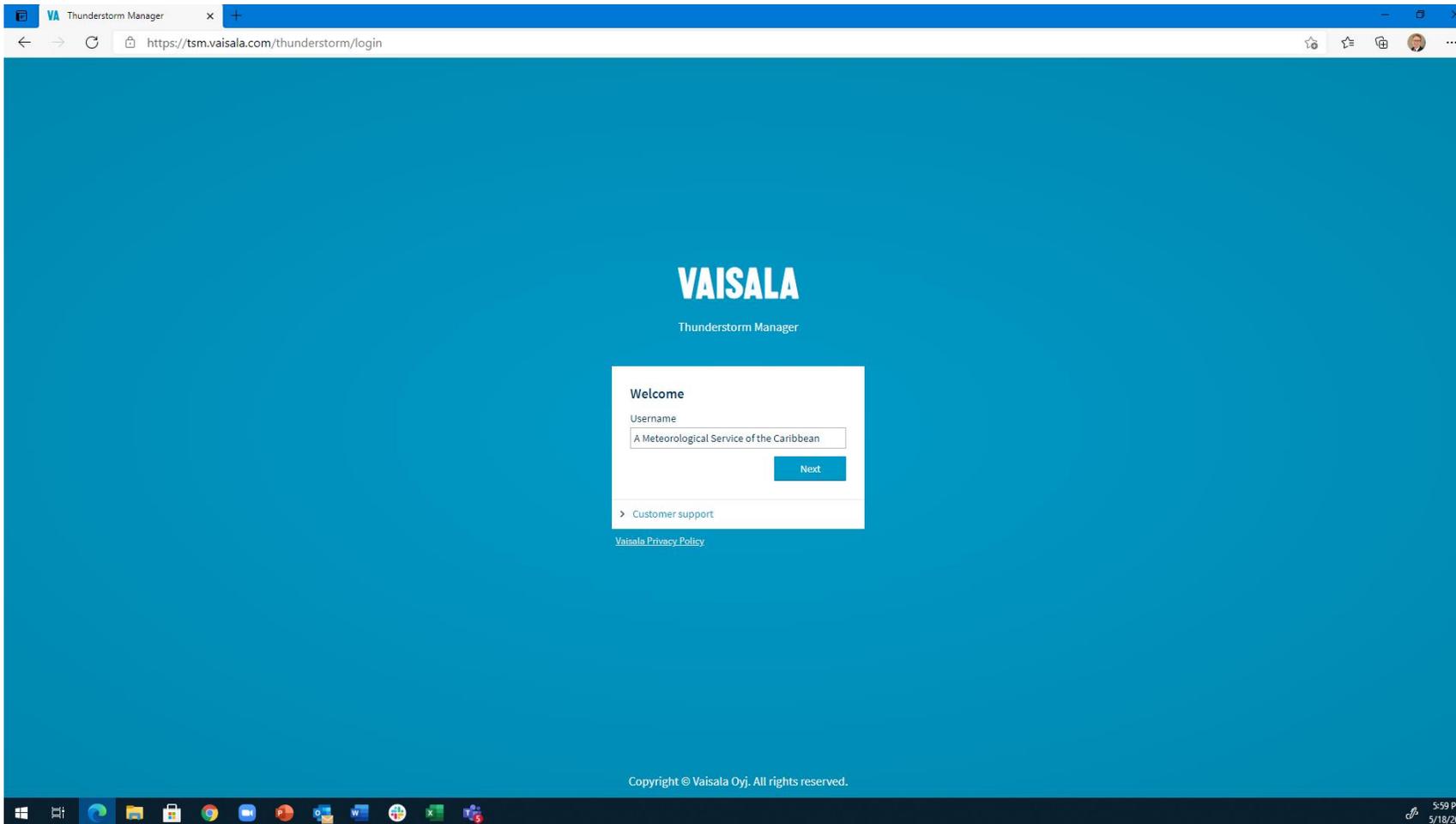
The benefits of a lightning network without the problems.

You focus on what's important, while we deliver 99.99% uptime!

Real-time Data-stream for Your Forecast Applications



Plus, Thunderstorm Manger, an Easy-to-Use, Web-based Application, Hosted in the AWS Cloud





Time span 1/2 Hour Animation speed Normal Start Pause





Excellent situational awareness locally and across the Caribbean Sea, Atlantic and Gulf of Mexico

Layers

Lightning

Layer: All Lightning

Opacity: 10 40 70 100

- 0 min to 15 min
- 15 min to 30 min
- 30 min to 60 min
- 60 min to 90 min
- 90 min to 120 min

Storm Intensity

Opacity: 10 40 70 100

Forecast Time

- Current Risk Area
- Cell Tracking
- Low density
- Medium density
- High density

Lightning Threat Zone

Opacity: 10 40 70 100

Forecast Time

- 10min Risk Area
- 20min Risk Area
- 30min Risk Area
- 40min Risk Area
- 50min Risk Area
- 60min Risk Area
- Cell Trajectory and Speed
- Cell Tracking

METAR

Weather Hazards

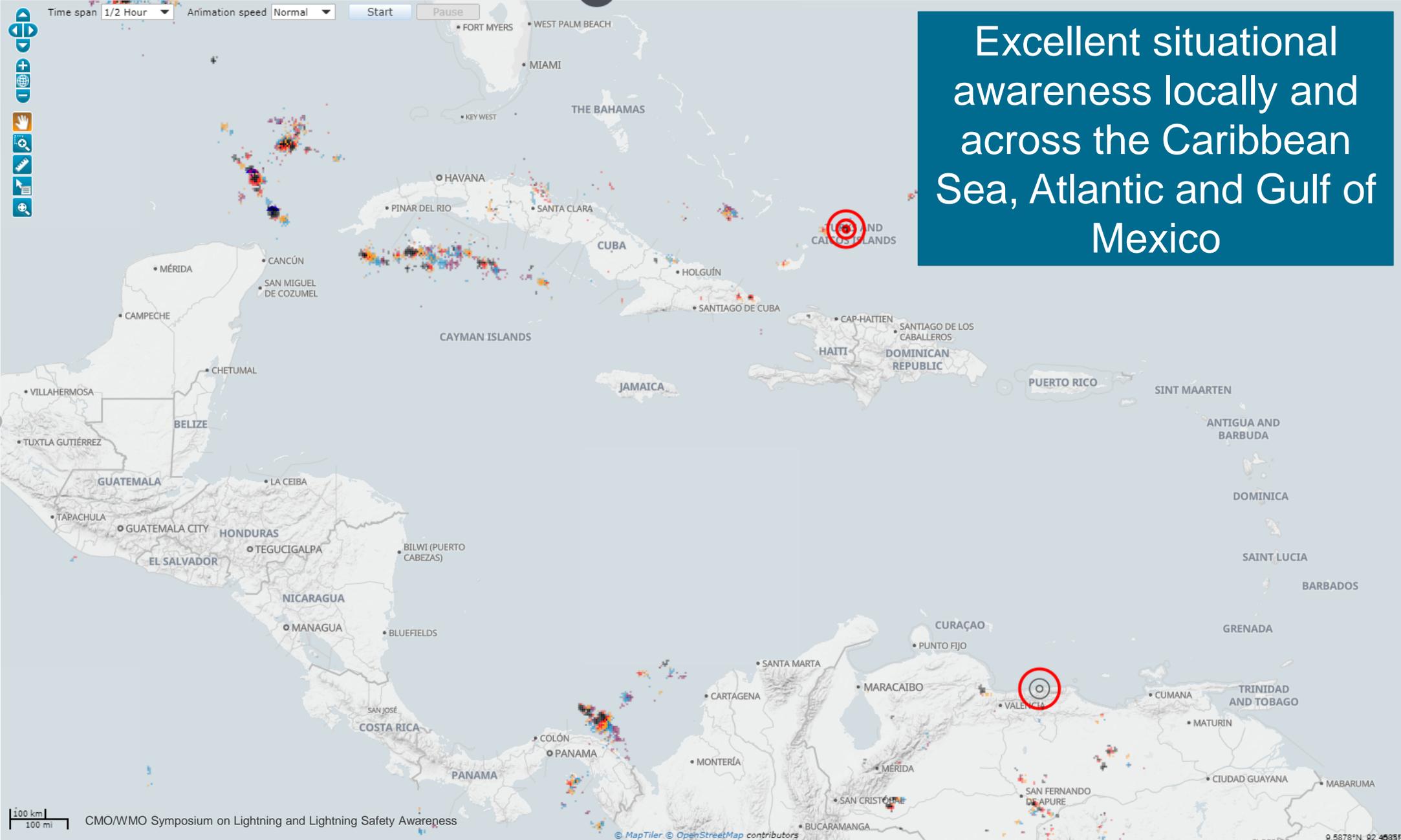
US Radar

Foreca Radar

Satellite

12 5/20/2021

Basemap



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+ Positive
 ■ Negative
 ● Cloud

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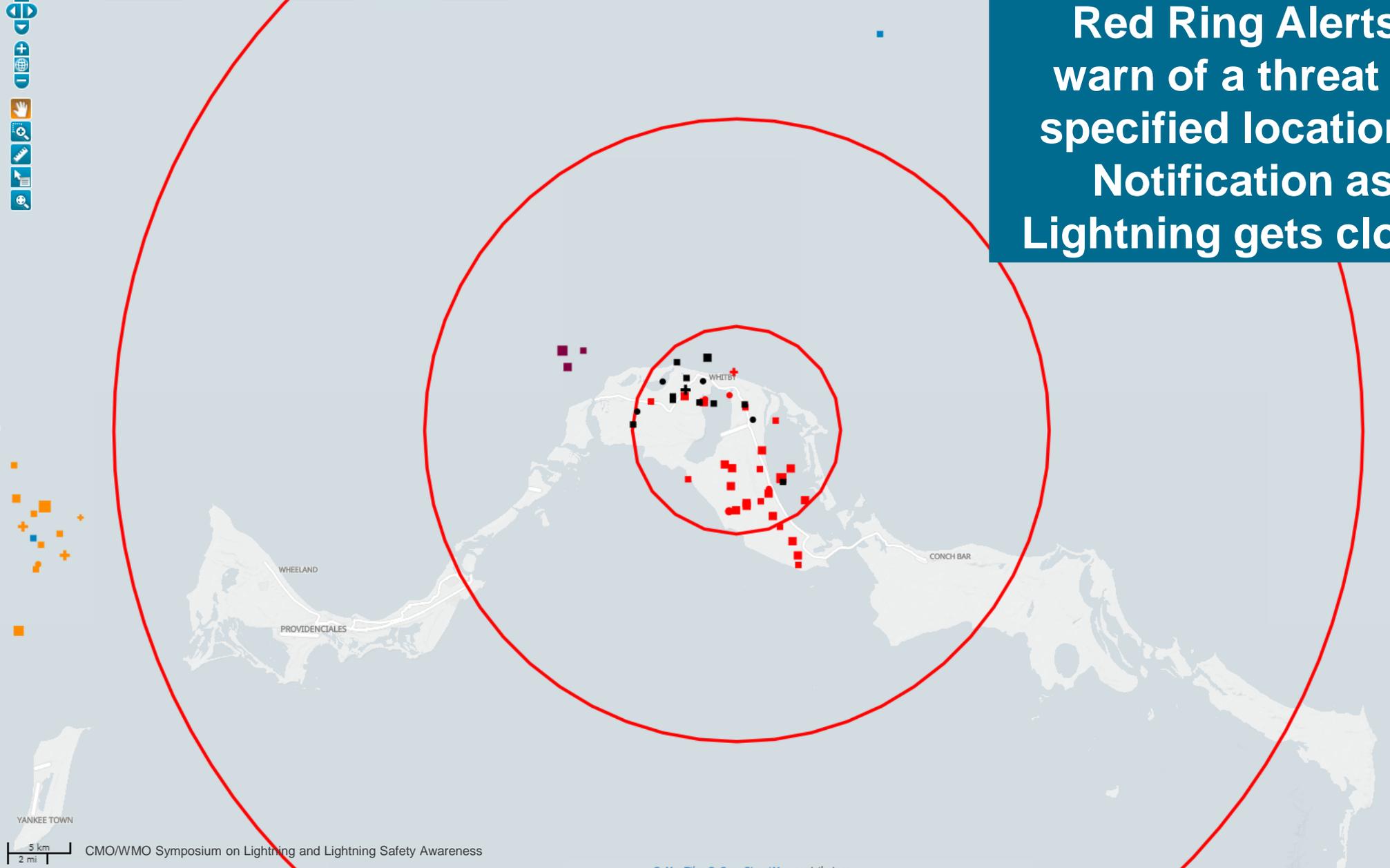
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Red Ring Alerts:
 warn of a threat to
 specified locations.
 Notification as
 Lightning gets closer

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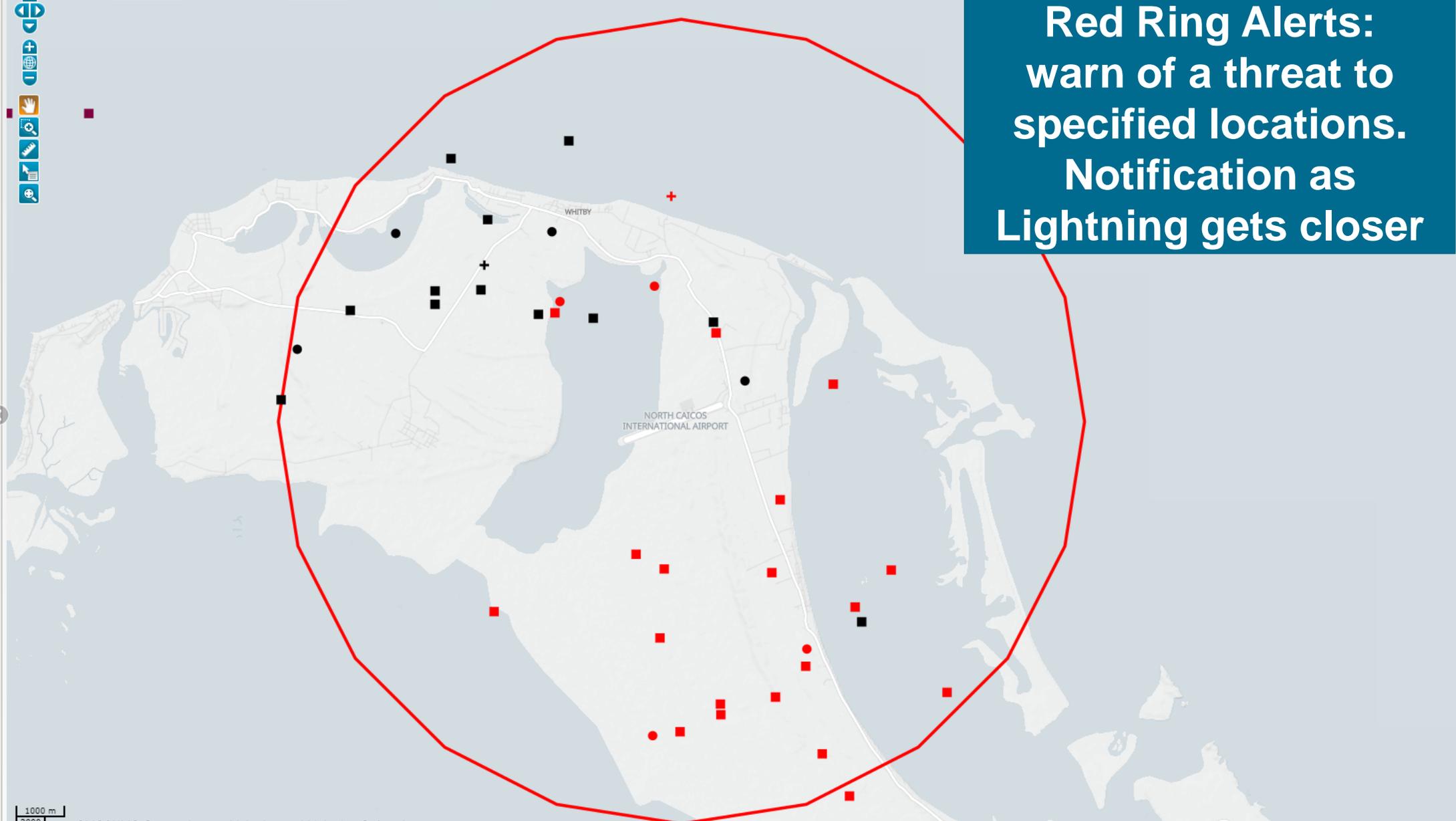
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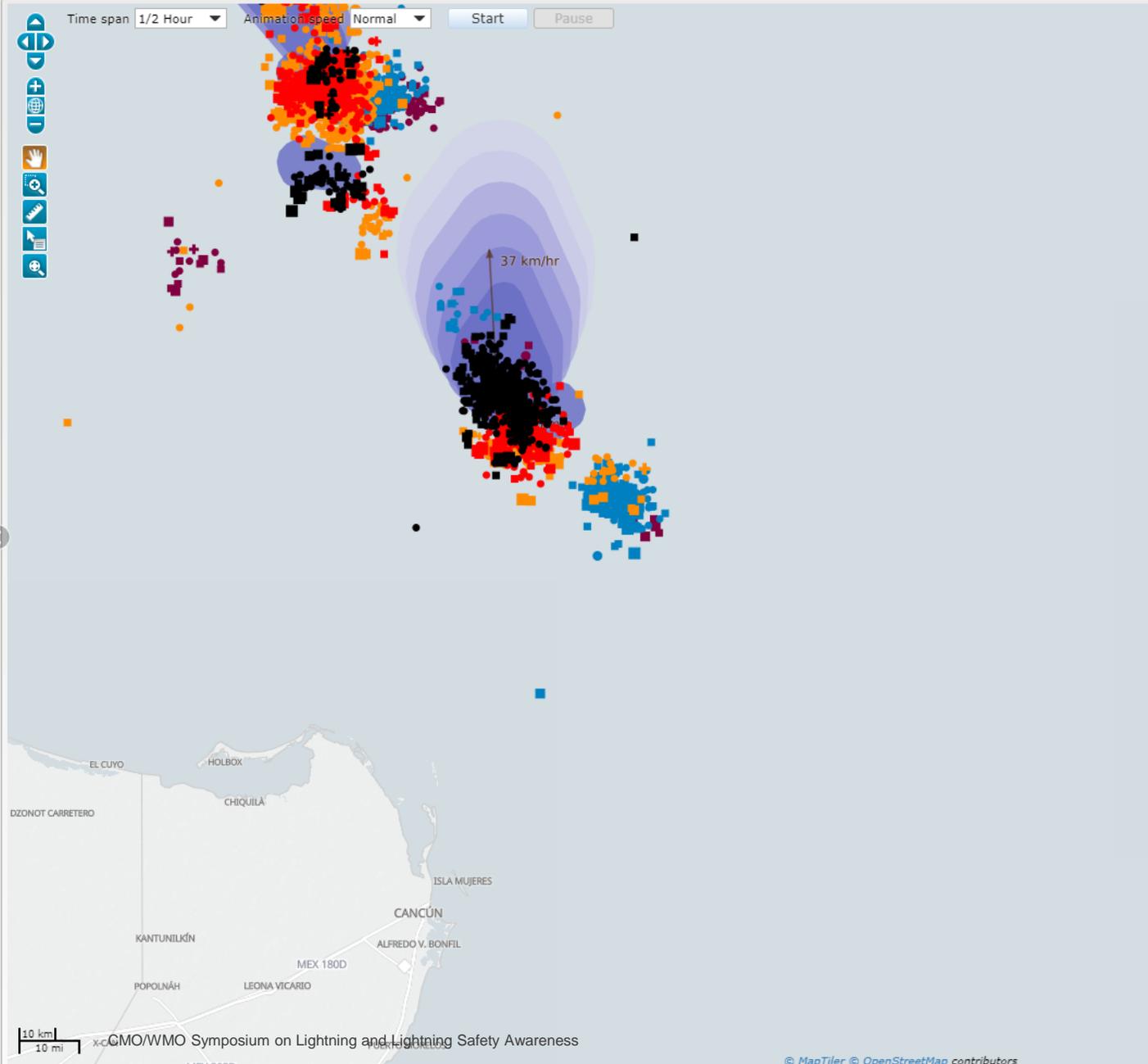
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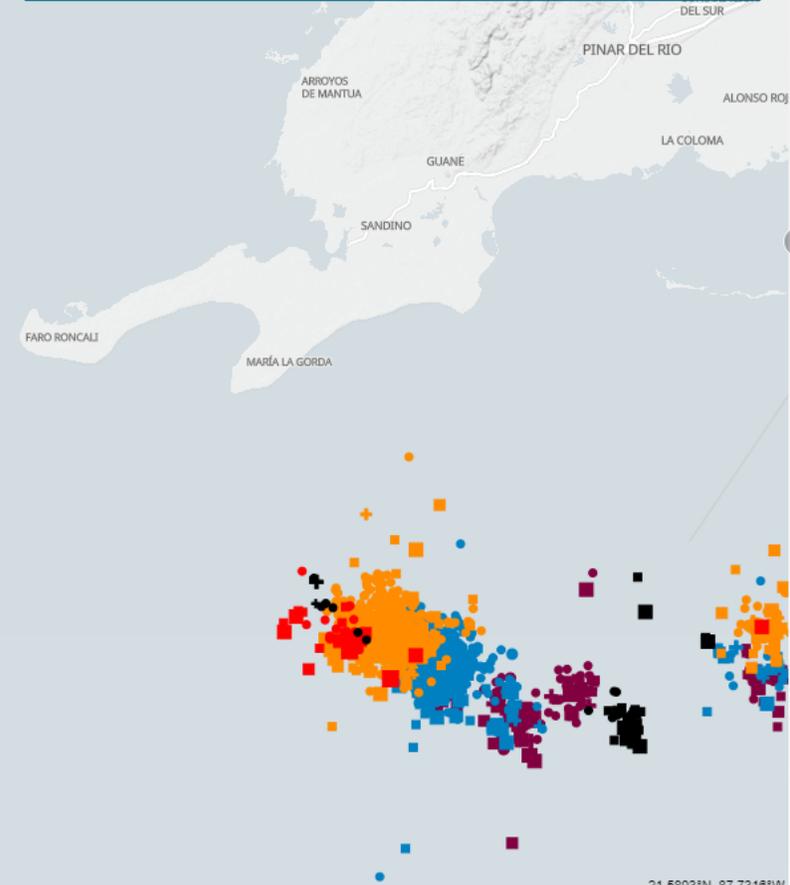
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Basemap



**Lightning Threat Zone:
forecast of lightning
and storm threat**



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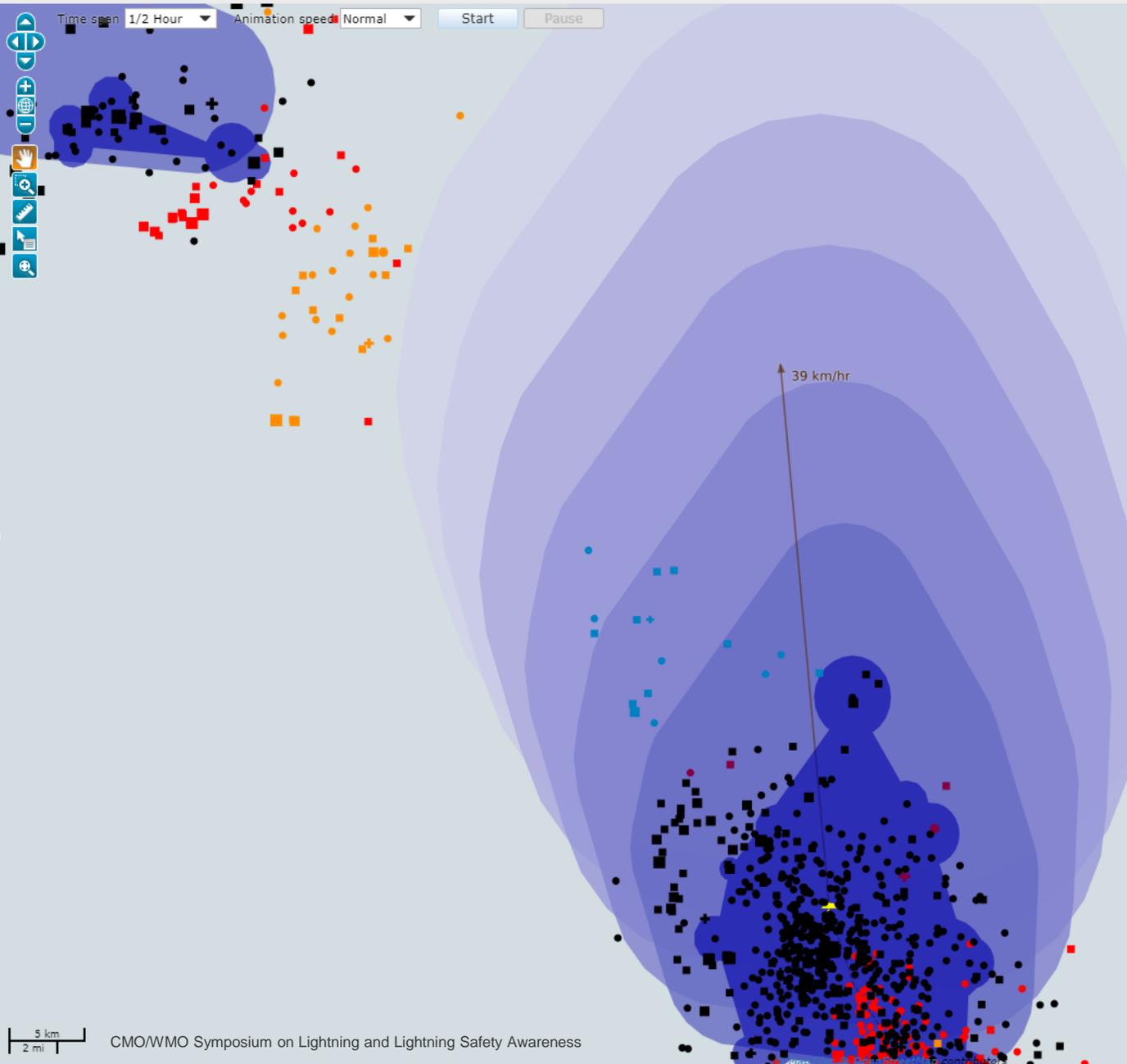
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**Lightning Threat Zone:
forecast of lightning
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For More Information

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