

Future Applications

AviCast, CheckTime, Mobile Sensors

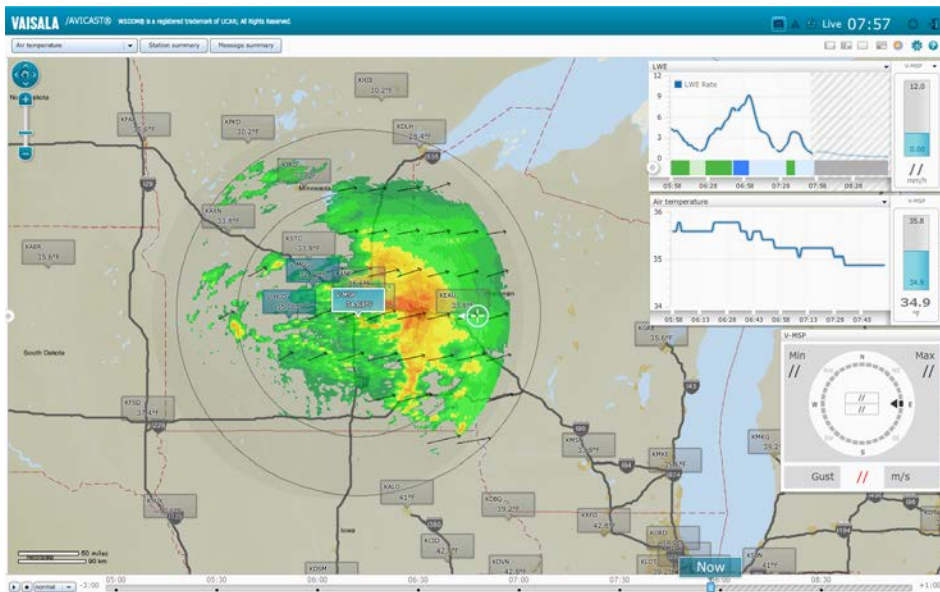
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VAISALA

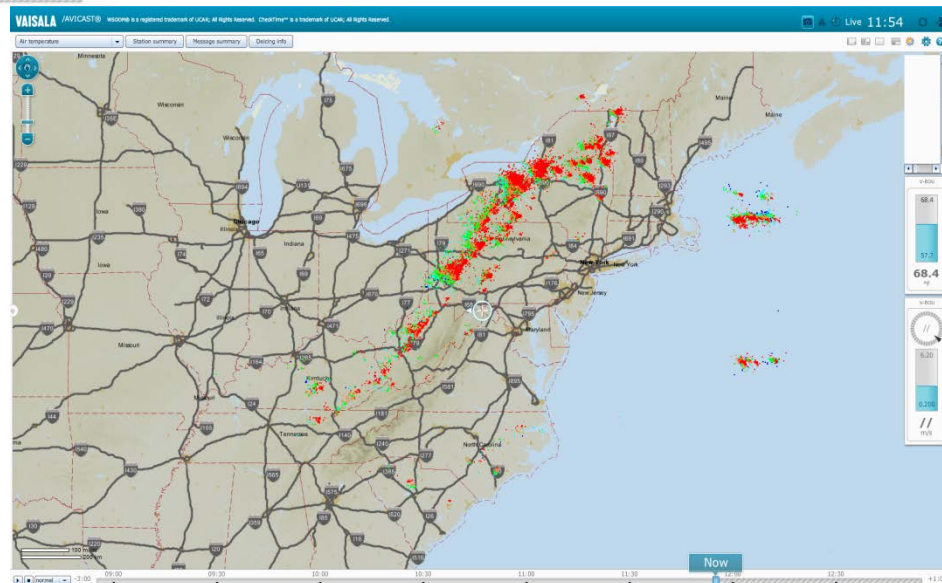
What is AVICAST?

- Aviation Decision Support System
- Based on NCAR WSDDM – Winter Weather Support to Deicing Decision Making
- Uses a combination of Vaisala ground stations and NOAA port information (Radars, METARS, winter weather warnings)
- Vaisala incorporates the NLDN and GLD360 Lightning data for year round use.
- Annual Data Subscription



Radar, LWE, METARS,
Vaisala Avicaster Stations

Lightning Data



CheckTime

- CheckTime is an NCAR algorithm developed to improve aircraft safety beyond the current snow visibility tables used for generating a HoldOver Time
- Uses actual/reported Liquid Water Equivalent (LWE) information.
- CheckTime evaluates all parameters in the previous 2 hours, to provide the last time an aircraft could have been de-iced, for a specific fluid, to provide de-icing protection of critical aircraft surfaces.
- **Advantages over HoldOver Time -**
 - How much liquid water has been absorbed by the deicing fluid over the past 2 hours?
 - Has the precipitation intensity changed? (Light – Moderate - Heavy)
 - Has the temperature changed?
 - Are we in rain/snow mix?
 - Has wind speed changed?

Mobile Surface Sensors



Mobile sensors have enabled Airport users determine what contaminates are on the runway (or other critical areas), reported surface conditions include snow, ice, and water thickness.