

Vaisala Wx Horizon Updates

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Thermal Profile History – Customer Value

- Road authorities globally had difficulty in understanding variation in road surface temperatures across a network for winter operations.
- Road Weather Stations (coupled with forecasts) helped alleviate this issue by providing observed and forecast data at specific points on the network to aid with decision-making.
- However, this could potentially lead to over/under treatment of the network due to a lack of knowledge of what was happening on the network away from these stations.
- Thermal Profiling helped identify temperature variations across the network which could then be related to the observed/forecast data at the stations to provide a network wide “map” of expected road surface temperatures under specific conditions at during winter at night-time.

Why change and why now?

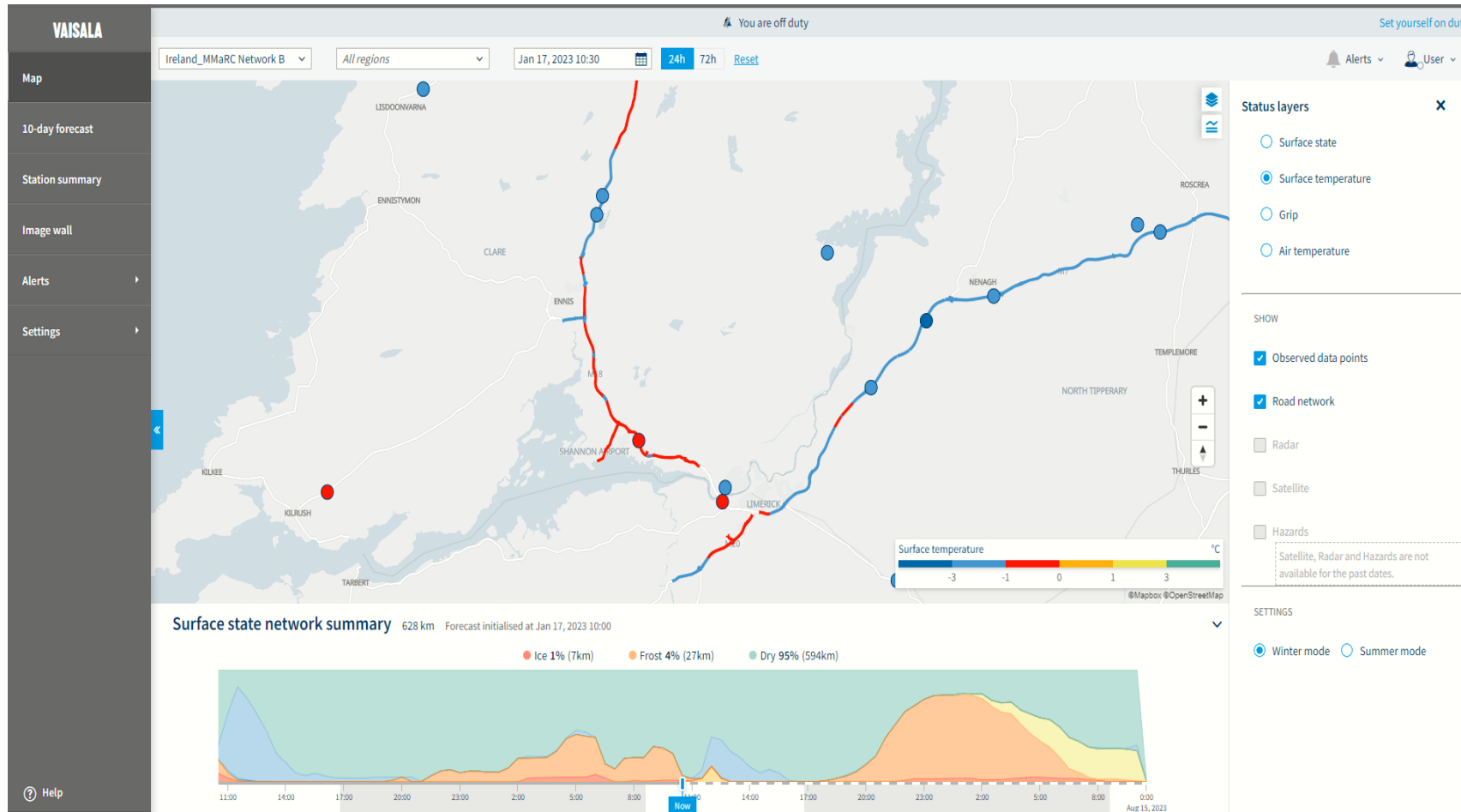
Why Change

- In the last few years, forecasting resolution and accuracy has improved exponentially
- The ability to forecast for all elements of road weather (grip, road surface temperature, surface state etc.) at a very high resolution is now commonplace.
- Moving from night-time network forecasting to 24-hour network forecasting is more applicable from a global perspective
- The requirement of non-winter (flooding etc.) forecasting is more prevalent in these times
- Road authorities have access to multiple observed data sets (IoT, Mobile Sensing, Connected Car data etc.) to help identify current conditions on their network

Why Now

- Wx Horizon Premium with Network Assessment will be available next year
- Network Assessment will address all the above requirements

Wx Horizon Premium Offering



- Network assessment provides high resolution road segment forecasts
- 24-hour network wide forecasting
- Network Assessment uses available data sets to compliment forecasting
- Forecasts include road network surface state
- Initial feedback from pilot customers positive
- Scalable to Enterprise (treatment recommendations etc) with Network Assessment
- Installing Cast Sensors on individual treatment routes would bring added value