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NIWA Outage Forecaster and Maintenance Planning Tool

Presentation to the Electrical Engineers Association

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Slide 1

AC1 Alison Chick, 22/11/2021

Introduction

- Initial presentation of NIWA capabilities to lines company representatives at Electricity Networks Assn. quarterly meeting
- Data Science: Hindcast analysis of geo located weather-related outage data; thresholds established for lines assets
- Tool forecasts future outage events out to 5 days for various weather elements using NIWA NZCSM 1.5 km resolution forecast data updating 4x per day
- Next phase: auto ingest of outage data in near real time with application of M/L to continually narrow error bands
- Deterministic to Probabilistic Forecasting – 18 members
- Auto reporting for ComCom

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NIWA Outage Forecast & Maintenance Planning Tool

Agenda:

Run through Key Features

Live demo

Questions

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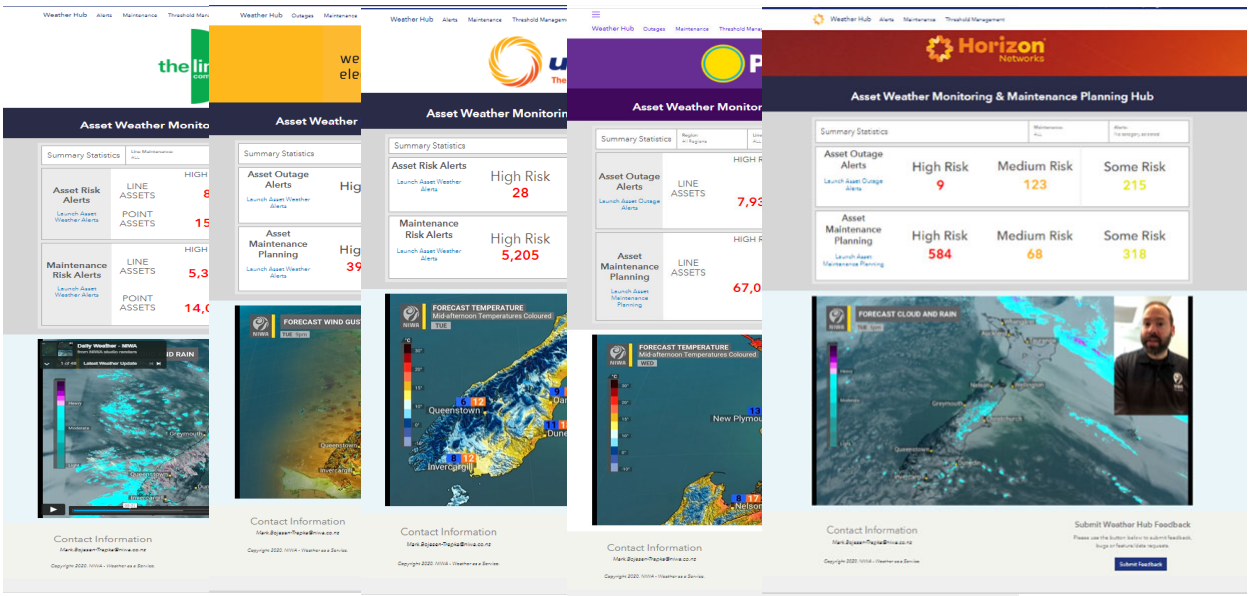

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Dashboards

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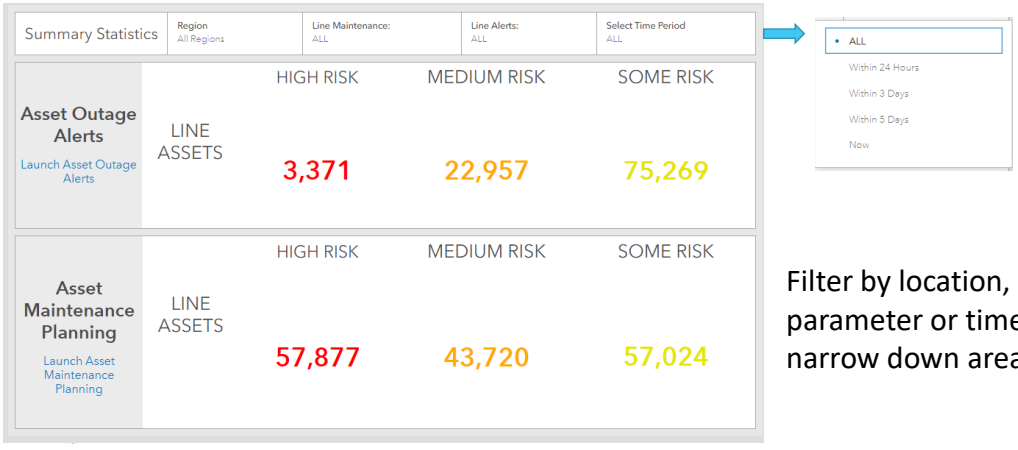
Dashboard Details

- Outage alerts – potential risk to assets
- Maintenance planning – impact on crews in the field



Filter by location, weather parameter or time period to narrow down areas of interest

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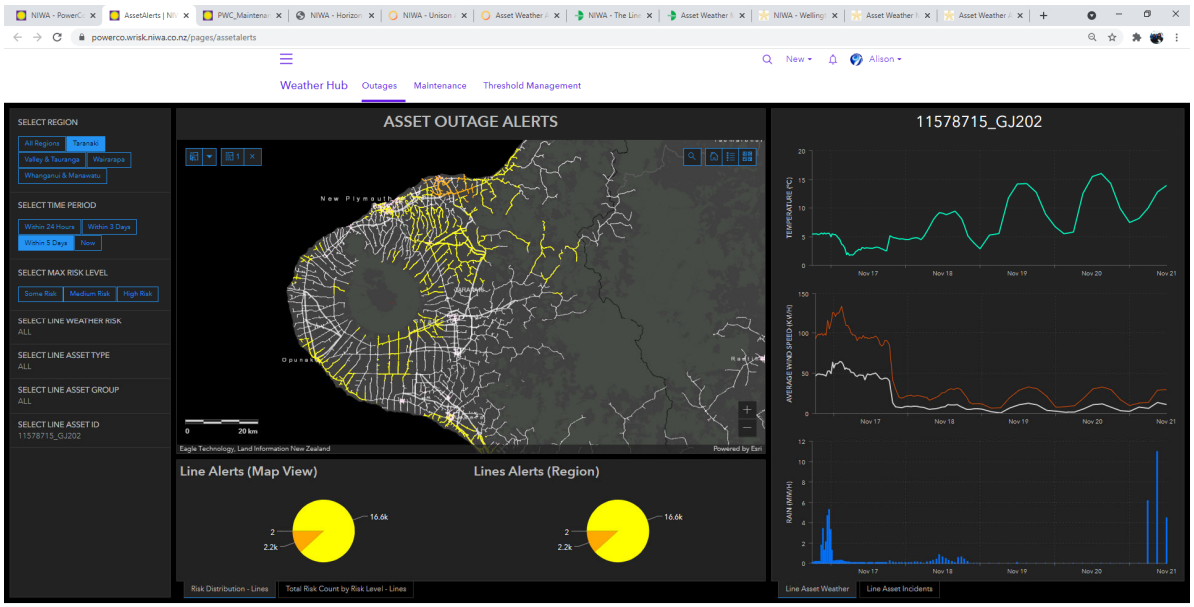
Outage Alerts



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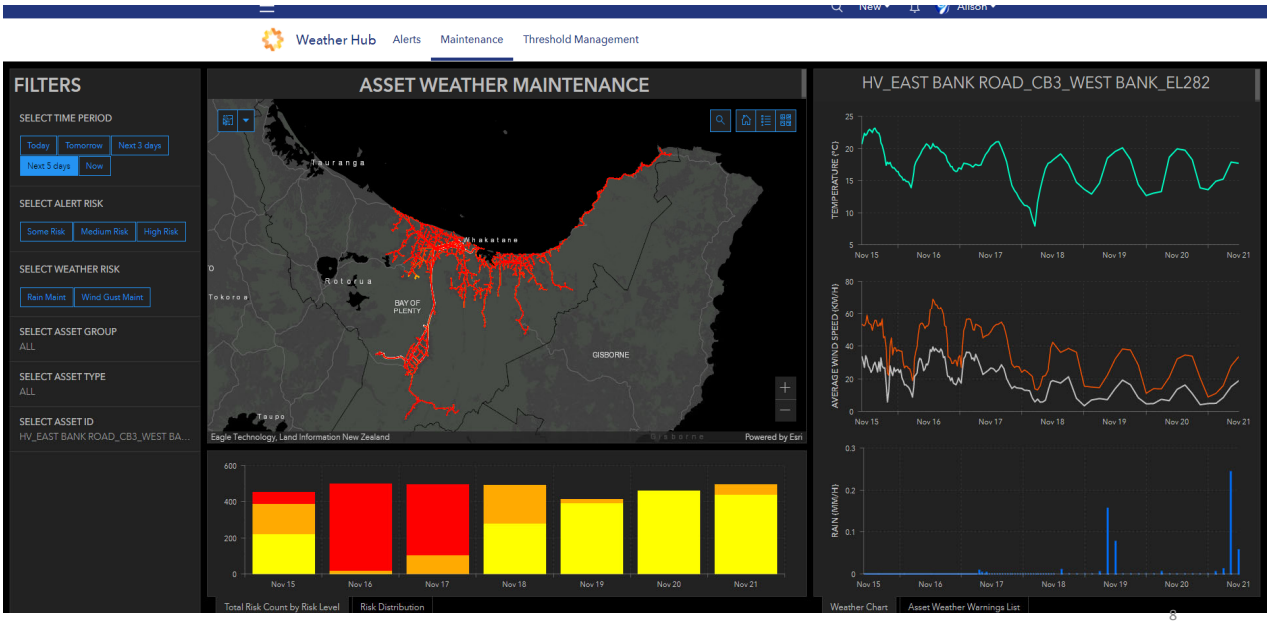
Maintenance planning



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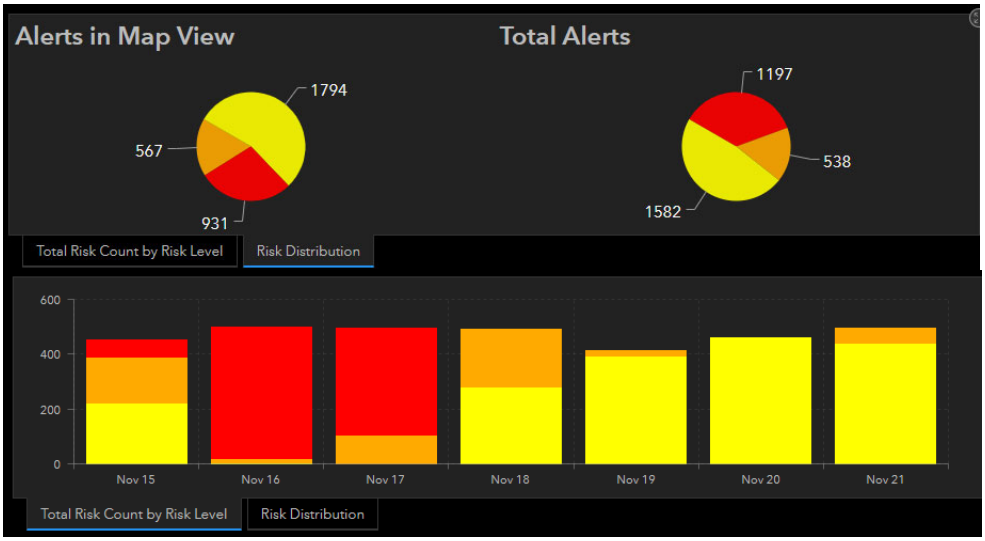
Alert statistics by location and time



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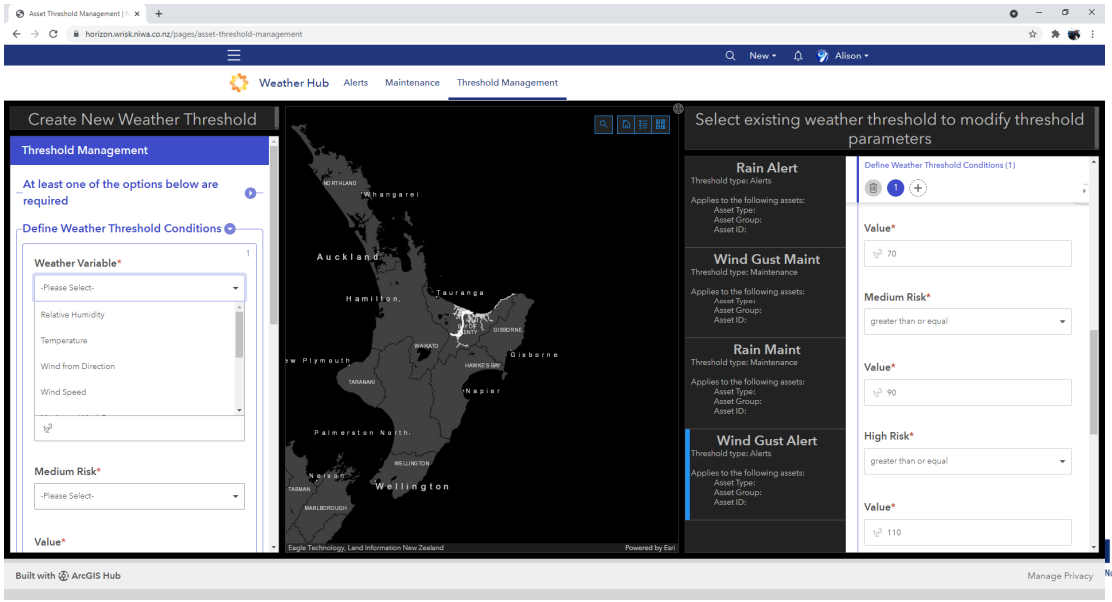
Threshold Setting



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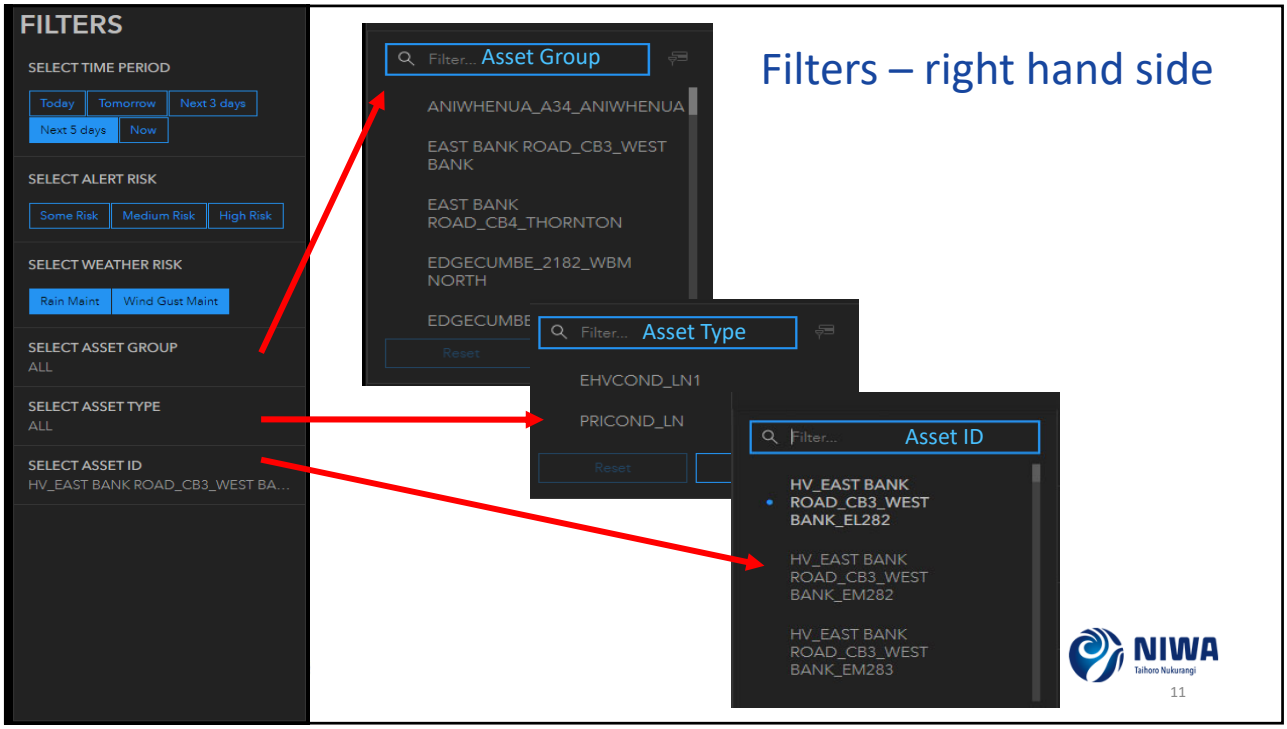

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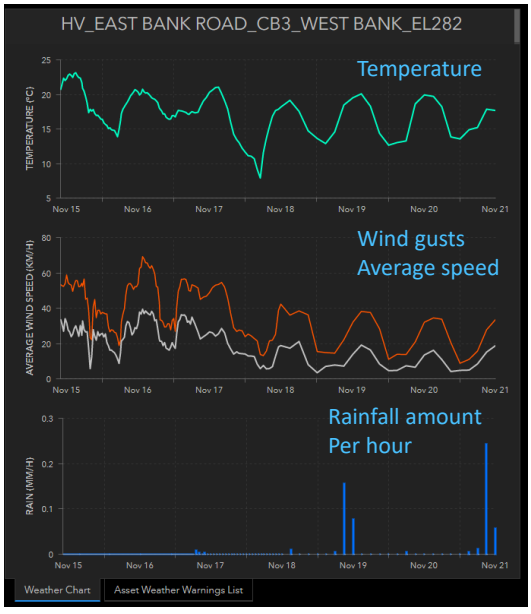
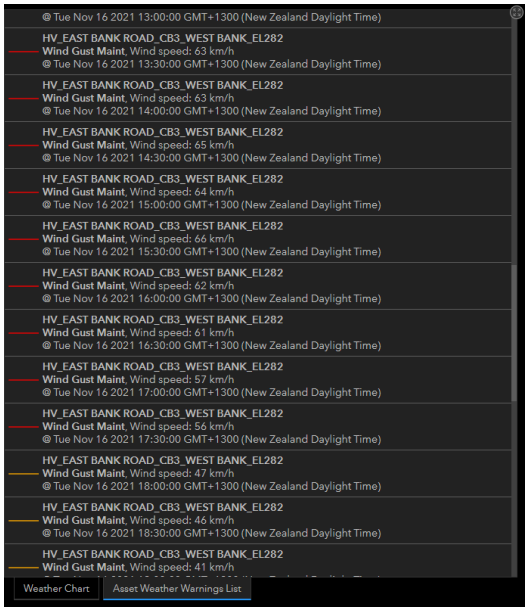
Timeseries forecasts – event details





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Live demo

Alison Chick – NIWA Senior Project Manager

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Thanks You

Questions ?

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