

Annual Power Engineering Exchange (APEX)

So, how's the weather?

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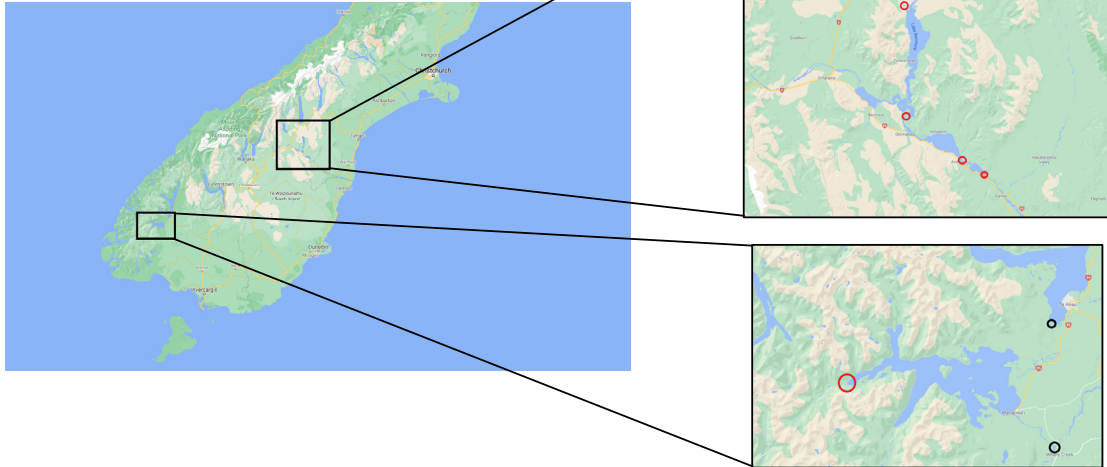
Overview

- Measure how weather affects plant operation.
- Monitor how climate change affects generation output.
- Aid projects through data analysis.



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Meridian hydro schemes



MetSENS600

	Temperature	Humidity	Pressure
Range	-40 to 70°C	0 to 100%	300 to 1100hPa
Accuracy	±0.3°C	±2% at 20°C	±0.5hPa at 25°C
	Wind Speed	Wind Direction	Rainfall
Range	0.01 to 60 ms ⁻¹	0 to 359°	0 to 300mmh ⁻¹
Accuracy	±3%	±3°	±3%



Weather analysis

- Compare weather and station events.
- Currently no method of onsite weather measurement.
- Historical data analysis for weather patterns.
- Unpredictability of New Zealand weather.



Project analysis

- Data for current and future project specs.
- Extract data files on desired parameters for analysis.
- Any employee can access data.



Effects of climate change

- Compare yearly changes of data patterns.
- Evaluate how weather patterns have changed over time.
- Predict how weather may change our generation.



Questions?

