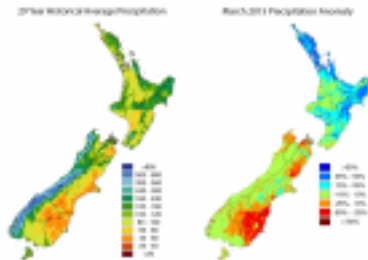


# Operational scope for new forecasting tool

Gavin Evans - Fri, 13 Mar 2015

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A new weather forecasting tool has the frequency and granularity to become an operational tool for the country's energy retailers and distributors, its developers say.

Hamilton-based CLIMsystems is currently promoting its new ExtendWeather product among lines companies, generators and retailers.

Managing director Peter Urich says the system, which is run off the Climate Forecast System - version 2 - developed by the US National Centers for Environmental Prediction in 2011, provides forecasts nine months out.

But he says its big advantage is in the sub-seasonal forecasts it generates - two weeks to two months - every 10 days for areas down to five kilometres on the ground.

That makes it ideal for more accurately forecasting localised demand, hydro production and wind conditions. Its frequency means firms can optimise scheduled maintenance and other programmes that involve weather risk or to minimise the cost of plant downtime based on expected market conditions.

## Capability

[ExtendWeather](#) produces models for wind speed, temperature, solar and precipitation anomalies. They can also be customised for clients who can download the data into their own modelling systems.

"Temperature is very predictable. Those models are very good," Urich

says. "What people are most worried about is precipitation." CLIMsystems was born out of work carried out in the 1990s by the International Global Change Institute at the University of Waikato. The company has eight staff in Hamilton and another 18 worldwide.

Urich says the firm spent almost three years developing its models from the CSF systems. The initiative was driven by demand from Waikato Regional Council for more accurate tools to help manage its catchments.

He says CLIMsystems' advantage over other forecast providers was that it was not tied to big legacy systems so it could make the investment required.

Urich says the models perform slightly better than forecasts based on the European Centre for Medium-Range Weather Forecasts.

### **Accuracy**

As an example, month-ahead forecast rainfall for Hawke's Bay last month was very close to what resulted. February rainfall in 12 out of 14 cities last month was within the range forecast.

Urich says that, while the country has had some recent rain "April and May are looking dry again". South Island temperatures are also expected to be higher than usual.

Energy Risk Solutions director Ashley Wall is introducing CLIMsystems to the energy sector. He says the product has great potential for asset owners, retailers and investors.

The packages, which range in cost from \$400 to \$700 a month, could be a "leveller" in the hedge market where investors and users have always been under-resourced compared with the weather forecasting teams of the major generators, he says.

Wall says this summer has illustrated how important a better understanding of local wind and solar production, water supplies and irrigation demand will become to networks and retailers in many parts of the country.

Thermal generators, faced with reduced demand for their units, also need a better understanding of the variable generation they will increasingly be competing with.

"Wind is the base-load stealer," he says.