

## Wild weather lashes North Island

Sat, 28 Feb 2009 TV3



The Bay of Plenty and the Coromandel were worst hit by a storm front that now has Nelson and Marlborough in its sights.

While there was torrential rain and gale force winds, people heeded weather warnings and stayed at home limiting the damage caused.

One driver was lucky to escape unharmed after his truck carrying dangerous chemicals overturned north of Tirau. While it is not known whether high winds caused the accident, in nearby Te Aroha winds of up to 110km/h smashed windows and downed power lines.

On the Coromandel Peninsula torrential rain made driving hazardous, while 8,000 customers in Auckland faced power cuts for part of today, and for the first time in its history the Ellerslie racecourse had to postpone the \$2.2 million derby day race. (Abridged)

## Storm causes flap in tent town

02.03.2009 by Annette Lambly. Northern Advocate



*Farmers of NZ Kaipara district chairman Hugh Rose packs up. Picture/John Stone*

The Northland Agricultural Field Days committee's worst fears have been realised - the event had to be cancelled for the first time in its 25-year history due to rain.

On Friday night when the predicted storm weather hit the vulnerable "tent town" hard, high winds caused damage to about 40 per cent of the sites.

Committee member Pam Rope said although "tent teams" worked hard to keep everything up, they were fighting a losing battle.

With further damage early on Saturday morning preventing further attempts to clear damage, he said organisers were left with no option but to cancel the event because of health and safety considerations.

Following Thursday's record day all hopes had been pinned on the predicted bad weather not eventuating. Early Friday the weather looked ominous but then

improved and, while numbers were initially well down, by midmorning the crowds began pouring through the gates resulting in a crowd of 6100, only slightly down on last year. (Abridged)

## **Secret 3d Model Helped Kiwis To Yachting Gold**

**Tuesday, 3 March 2009 Press Release: Yachting New Zealand**



*Leslie Egnot of Yachting New Zealand surveys the secret 3D model that helped Kiwis win Gold at the Olympics, with (from left) Martin Brewer, Grant Beck and Peter Dawson)*

**A secret behind New Zealand's Gold Medal-winning yachting performance at the Beijing Olympics has been revealed -- a three-dimensional model of the land and undersea terrain that gave sailors knowledge of what to expect from wind and currents.**

**In the unique conditions off the Olympic yachting venue at Qingdao in China, the heavy pollution and haze in the air meant sailors were often sailing "blind", unable to see land or get a bearing from landmarks. Plus, the course was made complex by major variations in seabed depth, "crazy" currents and light winds.**

**However the three-dimensional model gave the New Zealand sailors an intimate knowledge of the depth of water under them at any part of the course, the expected tide directions and the current speed.**

**These readings were based on detailed research done before constructing the model in Auckland, and proved to be significantly better than the "official" tidal information given to competitors by the Chinese administrators.**

**It is also believed that no other team had any technology as advanced as the Kiwis' model.**

The idea was born in a meeting between Leslie Egnot, Olympic Operations Manager for Yachting NZ, and sailing enthusiast Peter Dawson, director of Albany-based printing company 3D Print Ltd.

Peter and his co-director Martin Brewer were Supreme Finalists in the Innovation Category at the New Zealand Pride in Print Awards in 2007 for combining print technology to three-dimensional modelling. CAD files from architects, engineers and designers are transformed into solid objects using ink-jet printer technology.

Leslie Egnot – herself an Olympic Silver Medalist in the 470s with Jan Shearer at the 1992 Barcelona games and helm for the all-women's Mighty Mary campaign at the 1995 Americas Cup – saw the benefit in creating a model of the area off Qingdao where the five yachting courses would be positioned.

“It involved software modeling prepared by Dave Johnson, of Met Oceans Solutions in Raglan who has a business wave modeling for oil rigs. Hydrographic and GIS data was obtained for the undersea and land terrain. Google earth satellite data was then used for overlaying the shore photography,” said Peter.

Sally Garrett of the New Zealand Defence Force and Marine Scientist Mark Orams were seconded to go to the venue to help gather the tidal data from the site. This was assembled into tide charts overlaying the model and into a handbook used out on the race course by coaches showing current direction and strength for every 15 minutes. This data revealed glaring differences from the official data given out by local Chinese administrators.

New Zealand's most successful yachting coach, Grant Beck, says the model was a major help in preparing for the Olympic campaign which ended with Tom Ashley as Gold Medalist in the RSX board sailing and the majority of Kiwi sailors finishing in the top ten of their class.

“When you can't see the shore or reference points, and the currents are so difficult, you need all the help you can get. This model helped the sailors reconcile where they were on the course and know what was under them. It had a major impact on our planning, particularly at the Pre-Olympics where the sailors first came to grips with the course and the pollution,” said Grant.

The story was kept secret for a time until after the Olympics, and the model has only recently been shipped back to New Zealand. (Abridged)

## **Farmers revel in rain**

By TIM CRONSHAW - The Press 5 mar 2009



**DON SCOTT**

***WET WONDER: Beef farmer Ian Joyce, of North Loburn, says yesterday's rain has eased his worries***

Farmers on the edge of drought have welcomed long awaited rain in North Canterbury with outstretched arms. The wet southerly carried on all day yesterday on many properties and may have done just enough to prevent a drought in some areas. Some farmers last saw rain of this magnitude last September.

"It will definitely stave off the drought which was impending," said Federated Farmers North Canterbury president Chris Sundstrum. "It would have been a drought if we did not have this rain."

Sundstrum said 13 millimetres to 20mm of rainfall was no miracle cure, but might prevent pastures from drying out completely.

Federated Farmers Meat and Fibre chairman Bruce Willis said steady rain was widespread throughout the country yesterday, but seemed to have bypassed Hawke's Bay. (Abridged)

## **Reports of minor damage after stormy night**

Friday March 06, 2009 Newstalk ZB/ONE News



***Reuters: Waves crash over onto the footpath during a storm in Auckland***

The storm which has whipped across the upper North Island has brought down power lines, ripped out trees and torn roofs from homes.

Winds reached 150 kilometres an hour at Cape Reinga overnight, and 93 kilometres an hour across Auckland Harbour.

Heavy rain drenched Northland with almost 100 millimetres falling in Kaikohe over the past 24 hours.

The Fire Service was called to 15 minor weather incidents in the northern region, including flooding at a home in Whangarei.

The weather also caused power outages to some homes on Auckland's west coast. Ten properties at Bethells Beach on Auckland's west coast are being told their electricity will be restored later on Friday morning. Overnight, power was restored to all but 10 of the 13,000 homes which lost power for a short time yesterday as high winds brought down trees and lines in several areas of the North Shore.

MetService spokesman Jeff Sanders says the rain is moving into the Coromandel and western parts of the Bay of Plenty, where severe weather warnings are in force.

## Challenge of the wild waves

Friday Mar 06, 2009 By Isaac Davison, NZ Herald



*When the storm-driven seas are raging around the Murrays Bay wharf, what better time to go for a swim? Photo / Paul Estcourt*

Hurricane-force winds that lifted roof tiles and uprooted trees in the North Island yesterday will ease today, but heavy rain will replace them until midday at least. Civil Defence issued a severe weather warning yesterday morning for the Auckland region, and said heavy rain was expected to continue until midday today. Staff had to batten down the hatches on the opening day of the Auckland International Boat Show yesterday. Show spokeswoman Helen Manson said "signs were blowing everywhere ... A few sections were closed and we had to take down a lot of tents."

Power was cut to 13,000 homes north of Auckland when winds downed power lines. The MetService warned that strong winds and heavy rain in most of the central and upper North Island would make driving hazardous and swell rivers and streams.

The Far North was the worst-hit area yesterday. At Cape Reinga, winds gusted up to 155km/h, and Weatherwatch head analyst Philip Duncan said the average windspeed of 110km/h was strong enough to uproot trees. He said yesterday "was not a day to be driving to Cape Reinga. Gusts that strong can blow cars off roads." (Anridged)

## Rare cloud formation fills the sky

7 March 2009 By AL WILLIAMS - The Timaru Herald



**EYES TO THE SKY:** An unusual cloud formation appeared above Geraldine this week, known as mammatus, which is quite unusual.

Geraldine residents had only to look to the sky for inspiration this week.

This unusual cloud formation appeared above their heads for a brief spell but didn't go unnoticed. The Herald received a photograph from Jane Macfarlane-Barnett, at Stewart's Panel & Paint.

The formation is called mammatus and is quite rare, according to Met Service staff.

Forecaster Robert Kerr said this week's formation was an excellent example.

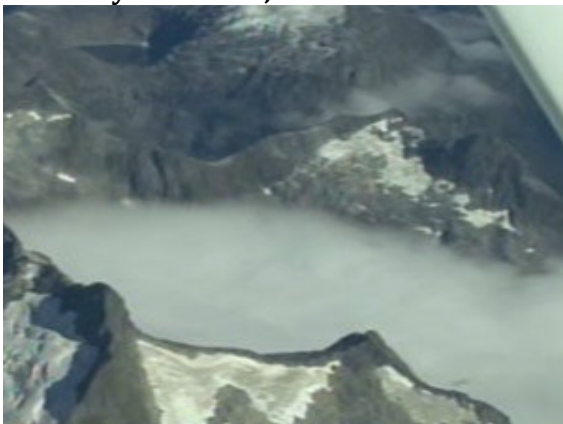
Mammatus forms on the underside of cirrus clouds and is caused by downward motion of air in the cloud.

It is usually associated with thunderstorm clouds, but in this instance the cloud was a wave cloud generated as the upper air flowed over the Southern Alps.

The upper flow was from north to south yesterday morning, and as it flowed over the South Island, a wave cloud formed in the wake of the ridge as the rising air cooled.

## **Glaciers reveal global warming effects**

Saturday March 07, 2009 ONE News



There is more grim news for South Island glaciers as scientists take to the skies to gauge their health.

Glaciers give a good reading of regional climate change and early indications are that they are still shrinking after another warm year.

Glaciologist Trevor Chinn says the glaciers "know exactly what the climate's doing".

"Where a thermometer shifts one-tenth of a millimetre, a glacier shifts tens of metres and you can see the change," he says.

Chinn discovered, by accident, that a simple snapshot of the snowline at the end of summer, before any new winter snow, can provide a weather picture for the whole year.

"If the snowline's above [a certain] height, then we're getting warmer and if it's below that height, we're getting cooler."

NIWA scientists cover 50 glaciers at 10,000 feet. Using GPS they take photographs from the same position to compare with 30 years of data.

"They've been sort of sitting more or less the same and now you can see there's bare ice sitting everywhere with hardly any new snow," Chinn says.

"So the prognosis is the glaciers are starting to look a little bit sick."

## Severe weather sees 40,000 lose power

Sunday Mar 08, 2009 Lia Nicholls NZ Herald + Bay of Plenty Times (9 Mar)



*Storms and high tides flooded Tauranga's historic village. Photo / Barnes Family*  
About 40,000 homes were without power yesterday evening as severe weather struck the east of the North Island.

Lightning strikes and flash floods struck the eastern Bay of Plenty, the western side of East Cape and northern Hawke's Bay just after 5pm.

Thunderstorms peaked at 750 lightning strikes an hour around 6.45pm.

WeatherWatch's head weather analyst Philip Duncan said it was a dangerous area to be in. "They weren't normal thunderstorms, they were very big and very violent. We saw thunderstorms and flash flooding throughout the area. This is the sort of weather you see in America sometimes."

The unstable weather pattern was caused when hot and humid conditions that characterised Friday night collided with cooler air yesterday.

Transpower said several substations were hit, cutting power to homes and businesses in Papamoa, Greerton, Tauranga and Rotorua. Power was cut to

74,000 homes and businesses, phone lines went down, and traffic lights failed at intersections after the Western Bay took a battering from Saturday's storm. The MetService said rainfall recorded at Tauranga Airport on Friday was 42.4mm and 4.6mm on Saturday.

On The Strand, bars and restaurants used candles to light their premises.

## Blast of winter on way

10 March 2009 The Dominion Post



**DASHING BETWEEN  
THE RAIN DROPS**

PHIL REID/The Dominion Post

*DOWNPOUR: A pedestrian darts through heavy rain in Victoria St, Wellington, this morning.*

A wintry blast is due to hit the country today, with gales likely to break branches and bring down powerlines.

Northwest gales were likely to hit New Zealand's east coast from Hastings to Kaikoura this afternoon, before southwest gusts brought up to 10 centimetres of snow to parts of the South Island, MetService spokesman Bob McDavitt said.

The unseasonal weather was the result of a patch of cold air moving north from the Southern Ocean.

The Wairarapa coast would bear the brunt of the wild weather in the Wellington region, but the capital should avoid the worst of the cold southwest front, which would mainly affect Southland and Otago.

Mr McDavitt said the bad weather did not signal the end of summer. "It's not the end of the golden weather yet. People should brace themselves for a few days of cold and can look forward to the air warming back to normal by the weekend."

## **MetService website set for upgrade**

March 10, 2009, NZPA

The MetService plans to redesign its award-winning website.

"It's about time to refresh it," the weather bureau's chief information officer, Russell Turner told NZPA.

The website was set up with over 400 pages on the site -- 95 percent of them being dynamically rebuilt every five minutes. Mr Turner said he was looking for a new format for displaying more than 1000 pieces of data feeding into the site.

"It's necessary to constantly re-refresh these things to keep people coming to them," he said.

Design workers were looking at issues including usability.

The MetService has a back-up for its core forecasting computer work -- such as modelling weather systems -- in Auckland, in case the Wellington head office was knocked out by an earthquake or similar emergency, and he said it now had an opportunity to also back up its website.

Weather-watchers had been blocked from the main MetService website as huge surges of internet traffic have caused it to "crash".

The Government-owned weather bureau has switched to a newly configured computer server which it said gives it a 60 percent lift in capacity, using that one server alone. It became obvious a year ago that the website was having increasing difficulty coping with big number of people trying to use it at the same time, typically when severe weather such as rainstorms, gales and snow were forecast.

## **Why Some People Don't Heed Tornado And Other Severe Weather Warnings**

ScienceDaily (Mar. 11, 2009) — NOAA's National Weather Service has issued a report that analyzes forecasting performance and public response during the second deadliest tornado outbreak in U.S. history. The report, Service Assessment of the Super Tuesday Tornado Outbreak of February 5-6, 2008, also addresses a key area of concern: why some people take cover while others ride out severe weather.

Dubbed the “Super Tuesday” tornado outbreak due to the presidential primary elections held that day, 82 tornadoes raked nine states throughout the South, killing 57 people, injuring 350 others and causing \$400 million in property damage.

Jack Hayes, director of NOAA’s National Weather Service, included a researcher from the National Center for Atmospheric Research Societal Impacts Program on the assessment team to examine why many people did not take action to protect themselves.

In reviewing the public response, the team found that two-thirds of the victims were in mobile homes, and 60 percent did not have access to safe shelter (i.e., a basement or storm cellar). The majority of the survivors interviewed for the assessment sought shelter in the best location available to them, but most of them also did not have access to a safe shelter. Some indicated they thought the threat was minimal because February is not within traditional tornado season. Several of those interviewed said they spent time seeking confirmation and went to a safe location only after they saw a tornado. Many people minimized the threat of personal risk through “optimism bias,” the belief that such bad things only happen to other people.

“Protecting life and property is not as simple as issuing a forecast,” Hayes said. “A number of barriers often deter people from making risk-averse decisions, and we want to learn all we can to determine if there is more the National Weather Service can do to change this.”

On forecasting performance, the assessment team found that the National Weather Service issued warnings 17 minutes, on average, in advance of all the deadly tornadoes. The agency’s Storm Prediction Center had been monitoring the tornado threat for several days. Local forecast offices forewarned communities by issuing hazardous weather outlooks days in advance.

After interviewing local media and citizens in the stricken areas, the assessment team determined that local communities had received the warnings and were aware of the dangerous weather threat. People reported receiving tornado warning information through multiple sources, such as television news stations, sirens, NOAA Weather Radio All Hazards or by word of mouth. People indicated overall satisfaction with National Weather Service performance in forecasting the tornadoes and communicating the danger.

According to the assessment team’s recommendation, the National Weather Service will improve wording and call-to-action statements to more effectively convey the urgency and danger of the message. The agency also will continue using social science research in future service assessments to further understand people’s interpretation of and response to severe weather situations, and to improve public response to severe weather communication.

Use of societal impact studies is useful for weather phenomena other than tornadoes. In September 2008 dozens of people died when Hurricane Ike struck Galveston, Texas, even after the weather forecast office in Houston issued a dire warning to residents to heed evacuation orders.

The National Weather Service routinely conducts assessments of agency performance during severe weather events in an effort to improve operations and determine best practices. Within days after the weather event, the agency sends a team into the field to interview citizens, emergency managers, the media, and others in affected areas. The team then compiles all findings and develops an

assessment report, which contains analyses of the local Weather Service forecast office's performance in forecasting the weather and communicating the public safety threat. Best practices and recommendations are shared throughout the agency to improve performance during future severe weather events.

## Winter falls early as temperatures drop

By BEN HEATHER - The Southland Times 12 March 2009



BEN HEATHER/139115

*SLIPPERY SLOPE: Czech Madous Kolatek contemplates tricky driving down the Remarkables near Queenstown after his car spun out on the fresh snow.*



*Snowy Queenstown*

Winter popped in a little early yesterday, lashing the Queenstown Lakes district, Otago and part of Southland with snow down to 600m.

The ski season is still at least three months away but Coronet Peak and the Remarkables ski-fields were whiteouts.

Several excited tourist braved the road up to the Remarkables but were forced back by icy conditions.

Czech couple Madous and Jana Kolatek's car slid out of control on a tight corner, thankfully spinning away from a steep drop.

"We've got summer tyres; the car is not going to be good going down," Mr Madous said, as the snow continued to fall.

Temperatures overnight dropped to 4 degrees Celsius in Queenstown and 6C in Invercargill.

The MetService issued snow warning for the Lindis Pass yesterday morning, with about 1cm of snow expected.

MetService weather ambassador Bob McDavitt said the wintry weather was just a blip, with fine conditions likely to return tomorrow.

"The days are still long and the soil is still warm so the snow won't hang around for long."

At least one flight into Queenstown was diverted to Invercargill yesterday, with another cancelled because of low cloud.

## **Couple lucky to be out of truck when tree falls**

By JOANNE CARROLL - The Southland Times 13/03/2009



JOANNE CARROLL

*BY GUM: This large gum tree fell and wrecked the front of Michelle Sweeney's truck in Alexandra, just moments after locking their car.*

A Wanaka couple had a lucky escape after a large gum tree fell and wrecked the front of their truck in Alexandra just moments after locking their ute.

Michelle Sweeney said she and her husband had parked their four-wheel-drive at Pioneer Park to go across the road into PGG Wrightsons shop before 1pm.

Just as they got into the shop their car alarm went off.

The MetService issued a severe weather warning for areas of Otago yesterday.

MetService forecaster Gerard Barrow said severe southwest gales were expected about hilltops and exposed areas of the Clutha, Dunedin districts and areas east of the Rock and Pillar Range.

Central Otago Mayor Malcolm Macpherson said Australian gum trees were notoriously prone to falling over because of their surface roots.

"This one has obviously succumbed to a violent blast at midday," he said.

"It was a beautiful healthy snow gum and was lit up at night and looked quite architectural so it's a bit of a loss," he said.

He was thankful no one had been in the vehicle at the time. (Abridged)

## **City rain storm 'too small' for warning**

18.03.2009 Bay of Plenty Times

MetService has described Tauranga's torrential downpour yesterday as an unusual event occurring over too small an area for a heavy rain warning to be issued.

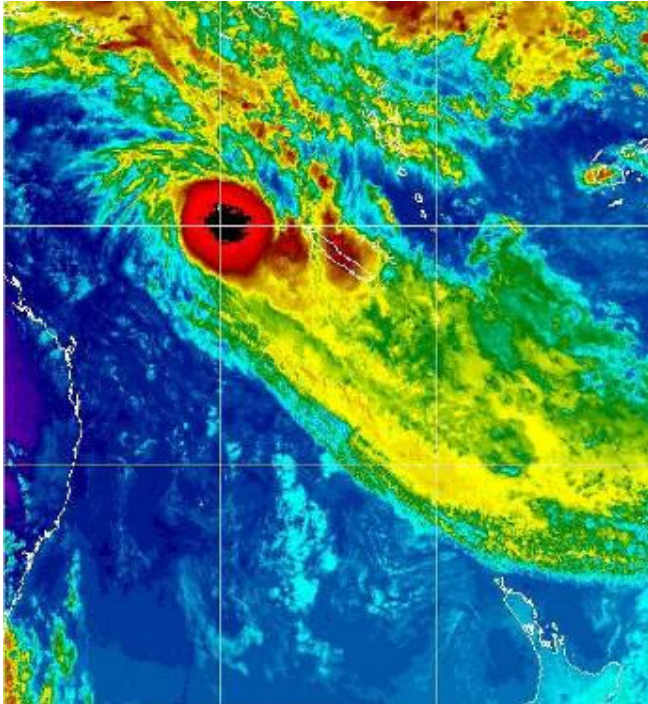
Between 9am and 6pm yesterday the MetService said 72 millimetres of rain fell on the city, with the greatest deluge of 19mm falling between 1pm and 2pm. Meanwhile about 40km away in Kati kati, weather-watcher Tim Suckling said not a drop of rain fell during the day with just 9.3mm arriving after 10.30pm last night. On the other side of Tauranga, Rob Marsh, who lives 10km out of Te Puke, recorded only 30mm between 7.30am yesterday and the same time today. Metservice forecaster Geoff Sanders said an anticyclone over New Zealand yesterday meant MetService was expecting settled weather. Tauranga bucked the trend however when some very moist air combined with a low-level convergence zone, where winds from different directions meet. ``This caused the extreme convection which became slow moving over Tauranga in the afternoon,' said Mr Sanders. He said there was no heavy rain warning issued because the rain fell in such a small area. At his Greerton property, Len Parry recorded rainfall of 159mm between 9am yesterday and the same time today. At Pyes Pa, Brian Heywood collected 117mm, which he said mostly fell between 7.45am and 5.40pm yesterday. At Memorial Park the rain gauge read 140mm for the period from midnight Monday to midnight Tuesday, with 90.8mm recorded over the same period at the Chapel St waste water treatment plant. Today Tauranga woke up to a gloomy morning with cloudy periods, scattered showers and light winds forecast.

## **Frosts blown away from vines**

24 March 2009 By JOANNE CARROLL in Alexandra - The Southland Times  
Southern winegrowers were able to fight off the weekend's frosty snap with the help of wind machines and helicopters. The machines turn on automatically when the air reaches 0.5 degrees Celsius to draw warm air across the vineyard to fight frost. MetService spokesman Bob McDavitt said Wanaka had 3C frosts on Saturday and Sunday nights. Queenstown had an overnight frost of 2C overnight on Sunday. He thought there would be a few more frosts to come before harvest time. "There are frosts on the forecast. They are light frosts but a sign our days are getting shorter," he said.

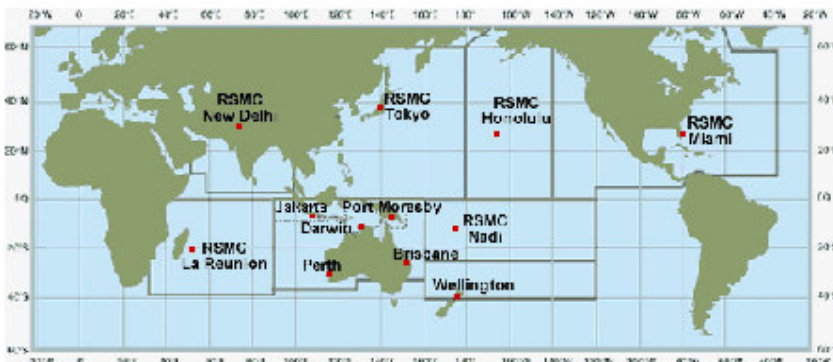
## **Jasper does U-turn**

Friday March 27, 2009 at <http://www.weatherwatch.co.nz/newstalk>  
Philip Duncan of Radio Network's Weather Centre writes in his NZ Herald Blog: Tropical Cyclone Jasper was downgraded Wednesday to a tropical depression and just like Hamish he's doing a U'ey and tracking north west. The forecasts for this cyclone were, in my view, pretty bad. I've found Australia's Bureau of Meteorology (BOM) to be bang on with their forecasts but they got this one wrong - and worse still was the coverage from Fiji.



**At its peak. Image: Jasper looking stunning Tuesday night shortly after a rapid intensification. Image/MTSAT NOAA**

Firstly, the storm surprised everyone by exploding into life as a Category 2 cyclone. It was predicted to remain a weak category 1 cyclone for a couple of days but within hours of forming it was already Cat 2 with winds gusting to 130km/h. At the time that the cyclone was peaking another frustrating thing happened - Australia stopped forecasting its track. Why? Because it was crossing out of their territory and into Fijis. If it had dipped a little furth south it would've been New Zealands. It's one of those unfortunate things for New Zealanders and those living in New Caledonia. If you look at the map above you can clearly see the boundaries that define which Government looks after the official forecasting for cyclones. They all come together in the area that's north west of NZ - usually an area we watch closely for storms like this that can come our way. From a news reporting point of view - and from the public's point of view - it makes things confusing and messy.



**Shown above: A map of international tropical cyclone warning centres. Graphic / Bureau of Meteorology**

Now to be fair and balanced I have to admit that New Zealand sees only about 1 tropical cyclone come down our way each year and even rarer for one to actually make landfall. Australia should only be focusing on Australia and Fiji looks after many of the Fiji Islands. I think MetService would do a far better job than Nadi - it's a shame that we don't have Wellington covering the entire Nadi area too. Fiji's weather updates this time around were slow and out of date - and at one stage they had completely conflicting information on their site. Granted this cyclone was then dying and I guess all lost interest in it...but still, not professional in my eyes.

I guess I'm venting a bit here... as usually these organisations do a good job but this just highlights the messiness of having 3 zones cover our one area. If you look at America you can see that Miami covers ALL of North America and northern parts of Central America - plus all the Caribbean. This means ANY hurricane that forms in the Atlantic or eastern Pacific Ocean will be monitored by these guys pretty much. Canada, which has some regions at the same distance from the equator as New Zealand, falls under America if any Atlantic storm comes up the east coast. In NZ we need to rely on two organisations before MetService finally take controls. Once MetService has it it's fine - the information is detailed and trustworthy. Having one organisation covering it all means the news media - and weather news websites like the Weather Watch Centre - can go to one single source for all of the information. It's reliable and most of all consistent.

Going back to my fair and balanced line before - lets be honest where those borders all meet up in the north Tasman Sea/southern Coral Sea there is no real land mass. New Caledonia is the closest. I suppose you also have to draw the line somewhere...although to me drawing it east of NZ instead of just west of us would make a lot more sense. (Abridged)

*Philip Duncan*