



SATELLITE PICTURE

This satellite picture for the 10 of April this year was taken just before the Memorial Service at Seatoun Beach in Wellington for the victims of the sinking of the inter-island ferry *Wahine* 25 years ago.

A small low centre can be seen just to the southeast of Cape Palliser. This low developed in a cold air mass near the poleward exit of a wind maximum in the high altitude jet-stream.

It caused gale force southerly winds in Wellington with rain and a temperature of 10°C at the time of the Memorial Service.

The photo also shows a number of other interesting features. The parallel lines of cloud over Southern Hawkes Bay (near 40 S 177 E) have formed in the crests of lee waves

set up in the atmosphere by strong westerly winds blowing across the Ruahine Ranges.

There are also cumulus cloud streets aligned parallel with the westerlies in eastern Bay of Plenty (near 38 S 177 E).

The clear skies over western coastal areas of the South Island are caused by the sheltering effect of the Southern Alps in the southerly airstream.

The active cumulonimbus clouds west of Auckland had cloud top temperatures of minus 37°C indicating a vertical extent of about 8500 metres. They produced showers in Auckland several hours after the time of the picture.

The other cumulus clouds west of Auckland are arranged in a pattern known as open cell. This is characterised by large areas of clear sky, where the air is subsiding, surrounded by

cumulus cloud caused by convection initiated as cold air moves over warmer ocean. According to a drifting buoy in the area the air temperature at this time was 13°C and the sea surface temperature was 18°C.

Finally there is a dramatic gap in the low-level stratocumulus cloud west of Fiordland. This is of no great significance for forecasting

and is in a sense a 'fossil' cloud feature created because two cloud sheets formed several days before have been moved close together by differences in the low-level wind pattern.

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