



Satellite picture

New Zealand's undulating terrain frequently causes satellite imagery of New Zealand to portray spectacular wave cloud patterns. In a stable atmosphere, waves, resulting from air being forced up and over mountain ranges, appear on satellite imagery as a series of cloud lines parallel to the mountain range.

This visible image from the NOAA 9 satellite, portrays a variety of wavecloud patterns produced by a northwest flow over New Zealand.

When air flows over a single peak, the resultant wave pattern that is seen is termed a "bow-wave" or "ship wave", due to its similarity to the wake of a boat. This is clearly illustrated here, by the cloud downstream from Mt. Egmont, and in a slightly distorted fashion, by the cloud downstream from Mt. Ruapehu.

The "föhn gap" wave-cloud phenomena is illustrated by the high cloud over the South Island. A break, or gap (north-south) is apparent in the high cloud east of the main ranges and is due to New Zealand's orography. Low level wave cloud banding can also be seen through this break in the high cloud.

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