Rules of Thumb

Here are our top tips.

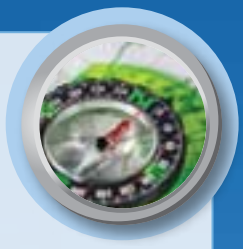
QNH Changes

Rapid decreases in QNH, either actual or forecast, normally mean strong winds and possibly bad weather on the way.

Similarly, a significant QNH difference between two near locations, normally means strong winds.

Pilot Reports

Pilot reports are a very useful but underutilised report. If you come across weather that is different from forecast (better or worse) give a report over the FISCOM frequency – you could benefit from another's report. Typically they include information on hazardous condition like windshear or turbulence.

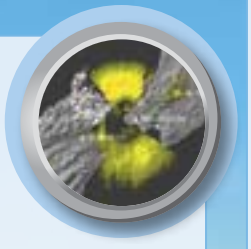


True or Magnetic

Make sure you know which reports use degrees true, and which use magnetic to report wind direction. Anything provided directly by an air traffic controller will be in magnetic (ATIS, SPAR, or landing report), everything else is in true.

2000 ft Wind

The 2000 foot wind is a good indicator of the gradient flow. A significant difference between the surface wind and the 2000 foot wind can indicate local wind effects, possible turbulence and/or windshear.



Rain Radar

This rain radar picture seems to show rain in Cook Strait, but no, this is sea spray being whipped up by the fresh northerly funnelling through the Strait. Some of the clues that identify this phenomenon are the straight edges and the shadow behind Kapiti Island.

Cruising Altitude

A general rule of thumb is that winds at higher altitudes (7000 feet or more) are from the westerly quarter.

In fine weather:

» Heading south – fly low (2500 feet and below). This keeps you out of any strong headwinds, and you may pick up a tailwind.

» Heading north – fly high (as high as airspace, aircraft, and cloud cover permit).

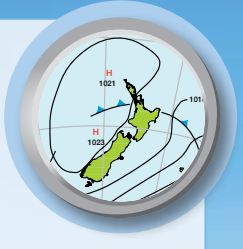
Local Winds

New Zealand meteorology is strongly dominated by local wind effects, for example anabatic winds (uphill), katabatic winds (downhill), sea and lake breezes, and venturi effects. Try and understand any effect that enhances a katabatic or anabatic wind, for example a sea or lake breeze.

Monitor the surface wind – you never know when you might need to land into it!

Temperature–Dew Point Split

The temperature–dew point difference (split) is an indication of the amount of water vapour in the air. When they are the same or close, it normally means either low cloud, fog, or precipitation. The smaller the split, the lower the cloud base. Pay particular attention late in the day when temperatures can drop rapidly, especially in winter.



Forecast Accuracy

A forecast is just that – it is **not** a guarantee. Apply some common sense and a margin to the forecast. The conditions could be better or worse than forecast.

If the forecast indicates bad weather is on the way, the issue may be one of timing rather than severity. Don't plan on arriving ten minutes before a forecast change – you could easily get caught out because the change happened 30 minutes early.