

► Definitions and terminology

Wind direction is given in 8 compass points for forecasts and 16 for observations and is the direction the wind is coming from.

Wave height is the vertical distance between the top of crest and bottom of trough.

Wind speed refers to the average speed over a 10-minute period at a height of 10 metres above the surface and is given in knots. A knot (kn) is equal to a speed of one nautical mile per hour. Note: 10 knots = 18.5 km/h and 10 km/h = 5.4 knots.

Gusts may be up to 40 per cent stronger than the average speed.

A **squall** is an abrupt and large increase of wind speed with a duration of the order of minutes which diminishes rather suddenly.

Sea and swell heights are described in terms of significant wave height which represents the average of the highest one-third of the waves. Some waves will be higher and some lower than the significant wave height. Typically one in 2000 waves will be twice this height.

King/Freak/Rogue waves occur when wind waves and/or a combination of swell waves join to produce a very high wave. These waves can be much larger than the significant wave height.

UTC (Coordinated Universal Time) time references in forecasts/warnings for high seas are given in UTC. Eastern Standard Time is UTC+10 hrs.

► Wind and warning categories

Category	Speed	Beaufort Force
Strong wind ¹	25 to 33 kn	6–7
Gale	34 to 47 kn	8–9
Storm	>47 kn	10–11
Hurricane ²	>63 kn	12

Note: wind speed is a ten-minute average and gusts may be up to 40% stronger

¹ Strong Wind Warnings: coastal waters area only

² Hurricane Warnings: tropical high seas area only

► Coastal reports

Weather observations from coastal stations report local wind speed and direction and may include sea and swell, general weather and visibility. Reports are broadcast after forecasts. Reports are also available via fax and phone.

Regular monitoring of reports is advised

► Forecast and warning delivery systems

HF and VHF marine radio

See inside pages.

Radiofax VMC/VMW

A range of weather and marine charts are broadcast by radiofax. Schedule available

from our web site.

Phone (77* cents/min.)

1900 969 923—all QLD waters
1900 926115—SE QLD waters

Fax poll-fax 1800 630 100 for a free directory of fax services.

Internet

Information is available from the Bureau's web site at <http://www.bom.gov.au>

** Includes GST; more from mobile and public phones*

mini-guide to BUREAU OF METEOROLOGY ► MARINE WEATHER SERVICES

QUEENSLAND

Routine marine forecasts

Routine coastal waters forecasts and observation reports for areas within 60 nautical miles of the coast are issued several times daily. Coastal warnings are issued whenever strong winds, gales, storm-force or greater winds are expected, and are renewed every 6 hours.

Routine high seas forecasts are issued twice daily for the areas beyond the coastal waters surrounding Australia. High Seas warnings are issued whenever gale, storm-force or greater winds are expected, and are renewed every 6 hours.

QLD



HF Radio frequencies

Warnings, Forecasts and Coastal and offshore Weather Observations are broadcast from VMC and VMW on the following HF Radio frequencies:

VMC Broadcasts on Frequencies (kHz)

Daytime (7am–6pm) EST
4426, 8176, 12365, 16546

Night-time (6pm–7am) EST
2201, 6507, 8176, 12365

VMW Broadcasts on Frequencies (kHz)

Daytime (9am–8pm) WST
4149, 8113, 12362, 16528

Night-time (8pm–9am) WST
2056, 6230, 8113, 12362

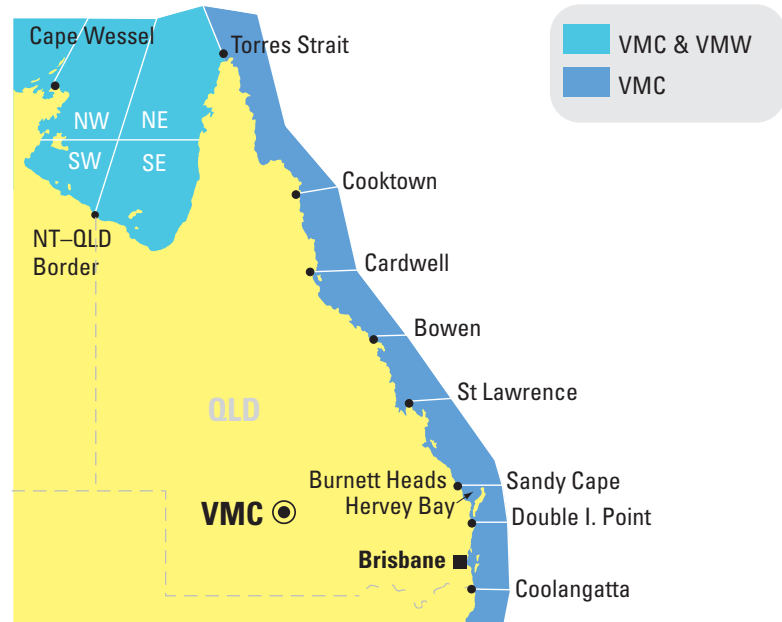
Coastal Water & High Seas broadcast schedules

Location	Forecasts and Observations	Station
Eastern Gulf & QLD East Coastal Waters	0330, 0730, 1130, 1530, 1930, 2330*	VMC
NE High Seas	0030, 0430, 0830, 1230, 1630, 2030*	VMC
Eastern Gulf Waters	0030, 0430, 0830, 1230, 1630, 2030*	VMW

* Eastern Standard Time

Warnings
Every hour
commencing
0000 EST

Queensland Coastal Water zones



Bureau VHF radio

VHF Radio Services operate from the Bureau's Cairns, Townsville, Mackay and Rockhampton Offices. The broadcasts include Coastal Waters Forecasts, Warnings and Observations for the areas covered. A listening watch is maintained on VHF Channel 16 in Cairns.

Location and coverage	VHF Channels	Broadcast times*
Cairns—for waters between Cooktown and Cardwell	16#, 81	Every 2 hours 0545 to 1745
Townsville- for waters between Cardwell to Bowen	16#, 72, 80	0815, 1215, 1715
Mackay—for waters between Bowen and St Lawrence	16#, 21, 80	0615, 1215, 1645
Rockhampton—for waters between St Lawrence and Burnett Heads and Keppel Bay	21 82	0520, 0705, 0920, 1205, 1705 0540, 0650, 1150, 1650

* Eastern Standard Time

An initial announcement is made on Channel 16 prior to broadcast on other channels

For further details contact the Meteorological Offices in:

Cairns	(07) 4035 9777	Mackay	(07) 4955 1355
Townsville	(07) 4779 5998	Rockhampton	(07) 4922 3597



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