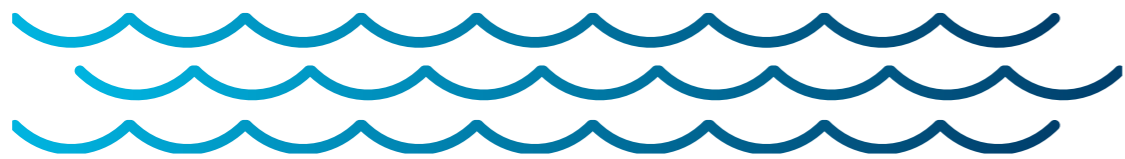




# AT A GLANCE

## MARINE WEATHER SERVICES



The Bureau of Meteorology provides warnings, forecasts, and other information for the coastal waters and the high seas around Australia. Local forecasts for some bays, harbours and inland lakes are also available. This information is of key importance for the marine industry and recreational boaters and fishers.

## 5 VITAL WEATHER SAFETY CHECKS

There are five vital weather safety checks that can assist boaters to make safer decisions:

- ✓ Have any warnings been issued?
- ✓ What weather conditions are expected?
- ✓ What is the wind forecast?
- ✓ What is the wave forecast?
- ✓ When is low and high tide expected?

### WARNINGS

#### Marine wind warnings

These are issued whenever strong, gale, storm or hurricane-force winds are expected. They provide up to 42 hours' notice and are updated every six hours.



### 6 THINGS TO KNOW ABOUT WIND WARNINGS



These icons show which **formats** you can access the information in and where to find out more.



Text



Graph



More information



Table



Map

### FORECASTS

#### MetEye

This forecast tool allows you to pan and zoom to any coastal waters location and visualise the weather forecast.

MetEye displays forecasts, in three-hourly blocks, for:

- wind speed and direction;
- total wave height;
- swell height and direction; and
- wind wave height.

These forecasts are updated twice daily.



#### Marine text forecasts

We issue three types of marine text forecasts:

- **local waters forecasts**—for bays, harbours and inland waters where boating activity is common;
- **coastal waters forecasts**—for areas within 60 nautical miles of the coast; and
- **high seas forecasts**—for the open ocean, which are part of an international service for shipping.

These forecasts are issued at least twice daily. If a wind warning is current, they may be updated more often.

All forecasts contain information about wind, waves and weather.



#### Tide predictions

We predict the height and time of tides, up to two years ahead, at more than 380 locations around Australia, Antarctica and the South Pacific.

On our website, you can view and print data for seven days at a time.



#### Sea temperature and currents

Seven-day forecasts are available of sea surface temperature (SST), and ocean current directions and speeds for the waters surrounding Australia, and Lord Howe, Norfolk, Macquarie, Christmas and the Cocos (Keeling) islands.



Specific SST information is also available for monitoring the potential for coral bleaching in the Great Barrier Reef.



#### Computer model weather and wave forecasts

The interactive map viewer displays computer-generated weather forecasts from the Bureau's weather and wave model. Pressure, temperature, swell and wind maps can be viewed.

Forecasts from this website should always be used in conjunction with official Bureau marine weather forecasts (such as local waters, coastal and high seas forecasts, and those displayed in MetEye). Computer model forecasts sometimes differ from official Bureau forecasts, as forecasters use their expertise and additional information (such as forecasts from other computer models) to generate the official forecast.



#### UV and sun protection

Our UV (ultraviolet) service includes the times of the day when sun protection measures are recommended. This is when UV levels are expected to be moderate or above.



### CURRENT AND PAST WEATHER

#### Official weather observations

We collect weather measurements from different types of weather observing stations. These include observations taken by weather observers, automatic weather stations, satellites, ships, and ocean and wave buoys.

We operate a network of automatic weather stations, providing near real-time observations. Observations include temperature, humidity, pressure, rainfall, and wind speed, direction and gust strength.

You can view current and recent conditions at weather stations near or on the coast.



Refer to this map for State information →

#### Sea temperature

We provide local and global maps of surface and sub-surface ocean temperature for the past days, weeks, and months.



#### Weather Observations Website

The Weather Observations Website (WOW) hosts an online weather community in Australia where everyone can share information about the weather.

WOW lets you view and contribute historical, real-time or automated weather observations, sightings and photos.



#### Cloud cover

Our satellite web viewer shows near real-time imagery from Himawari-8—a geostationary weather satellite operated by the Japan Meteorological Agency.

Images are updated every ten minutes. Several types of images are available, including visible, infrared, greyscale and 'true colour' images.



#### Radar

We operate a nationwide network of weather watch radars. These detect rainfall and in some locations can estimate wind speed and direction.



#### Climate data

We collect and store historical records of many types of weather observations relevant to marine users. Averages and trends of the following records can be viewed:

- air temperature, rainfall and wind;
- sea surface temperature; and
- distribution of tropical cyclones.



### SPECIALISED WARNING SERVICES

#### Tropical cyclone warnings

Tropical low pressure systems become tropical cyclones when winds associated with them exceed gale force strength.

Our tropical cyclone warning service includes ocean wind warnings, and warnings and watches for affected land areas.

A tropical cyclone forecast track map is issued six-hourly when a tropical cyclone watch is current, and more frequently when a tropical cyclone warning is current. These show the recent and forecast path of the cyclone.



#### Tsunami warnings

The Bureau and Geoscience Australia operate the Joint Australian Tsunami Warning Centre.

This centre detects, monitors, and warns of any tsunami threat to the coastline of Australia or its offshore territories.

The service includes tsunami watches and warnings.



#### Find out more

- ➕ **Marine warnings, forecasts and information**
- ➕ **MarineLite**—text-only version of our marine website for satellite internet users
- ➕ **Take the weather forecast with you**—when on the water, get your weather information on VHF or HF radio. Inmarsat satellite services also provide global access to high seas and some coastal waters forecasts.