## 6. Weather information

## 6.1 General

The prevailing winds tend to be easterly to south easterly. Although calmer conditions occur during the winter months, they may become very difficult during the summer months when the sea breeze augments the prevailing south easterlies.

Weather charts, satellite images, warnings and reports may be polled by fax from 1800 630 100 and from the <u>Bureau of Meteorology</u>.

Coastwatch is a website with useful nautical information links.

From the commencement of the yellow cyclone alert the Skardon River Cyclone Control Centre, located at Metro Mining Office will monitor VHF channel 16.

The Skardon River Cyclone Control Centre will relay messages from the Regional Harbour Master (Cairns) and act as the coordination and control centre.

Once in position all small craft are to contact the Skardon River Cyclone Control Centre and advise them of the area in which they are moored and how many people will be remaining on board. If a vessel is to be left unattended, its owners are to advise the Skardon River Cyclone Control Centre of their contact telephone numbers.

The Regional Harbour Master's requirements for clearing the port of large vessels will generally be:

- Wind speeds must not have reached 30 knots.
- Ships must be able to sail, for example machinery working, crew on board and a suitable trim.
- The ship's draft must give suitable clearance when sailing.
- Tugs must be available.

# **6.2** Tidal information

Skardon River is a standard port in the **Queensland Tide Tables**.

Skardon River has a diurnal tide range, which is a tide which has a period or cycle of approximately one tidal day (about 25 hours). Diurnal tides usually have one high and one low tide each day. When the wind has been constantly blowing from the Southeast it is not uncommon for the tides to be 25 to 30 centimeters (cm) below prediction.

#### 6.2.1 Tidal streams

South-Easterly winds tend to decrease in strength from October to December. The flood tidal stream in Albatross Bay flows to the North-East, and the ebb to the South-West, attaining a maximum velocity in the middle of the bay of 1.5 knots.

Tide boards/gauges to be established by Metro Mining

### 6.2.2 Tidal information – tsunami effects

The North, West and East coasts of Australia are bordered by active tectonic plates which are capable of generating a tsunami that could reach the coastline within two to

four hours. The resultant change in swell height could have an adverse effect on a vessel with a minimum under keel clearance navigating within or close to port areas.

The <u>Joint Australian Tsunami Warning Centre</u> (JATWC) has been established to monitor earthquake activity that may lead to a tsunami forming.

Mariners are advised to take heed of such warnings, plan their bar crossings and tend their mooring or anchorages accordingly.

# 6.3 Water density

Sea water is usually 1025 kilograms per cubic metre but may vary during the summer months after periods of heavy rain.