

What Timing!!!

TC Veronica is presently tracking towards Pilbara coast. It is scheduled to arrive on Sunday, which is the HIGHEST tide day of the year for semi-diurnal locations. At Port Hedland, predicted tide is 7.43m CD, which is 0.6m above MHWS.

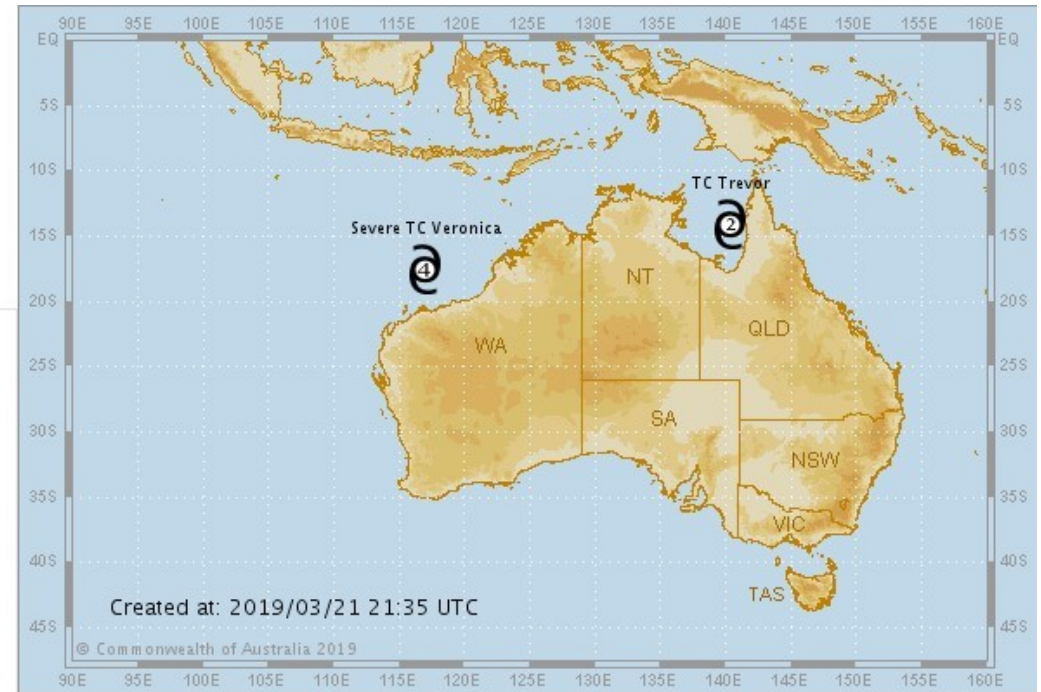
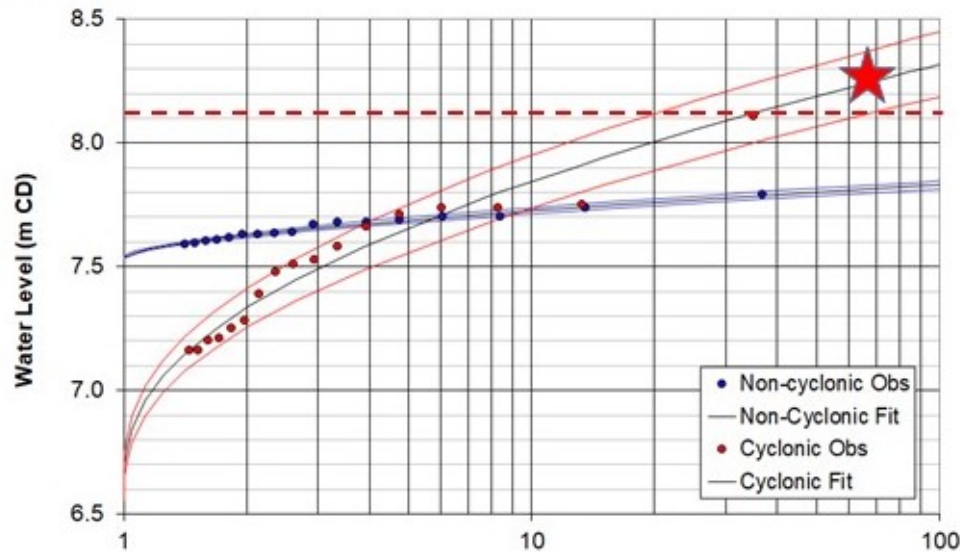


Image from Australian Bureau of Meteorology

A record high WL at Port Hedland!

As the highest water level on record, the recurrence interval associated with TC Veronica is statistically undefined. However, curve fitting previously undertaken for the Port Hedland 1988-2008 tide gauge data suggests it has around a 65 year average recurrence interval (ARI). As a check, the 8.1m CD level has been exceeded 4 times in modern history, in 1939, 1956, 1999 and 2019. The last such case was TC Vance in March 1999, also coincident with the annual tidal maximum!



Updated Sun 24th Mar 2019 13:30hrs

Recorded Tide:

8.26mCD

Metres to LAT Port Headland

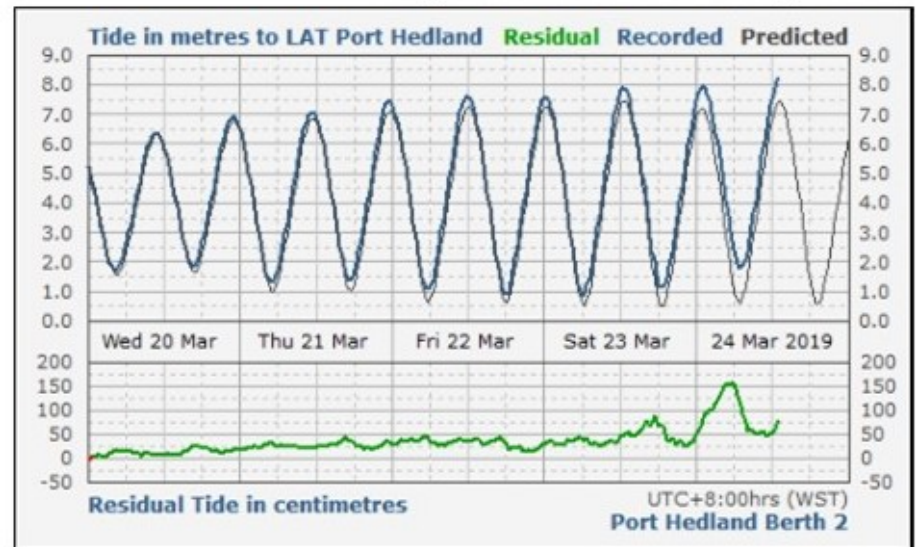
Residual: **88cm**

Predicted: **7.38m**

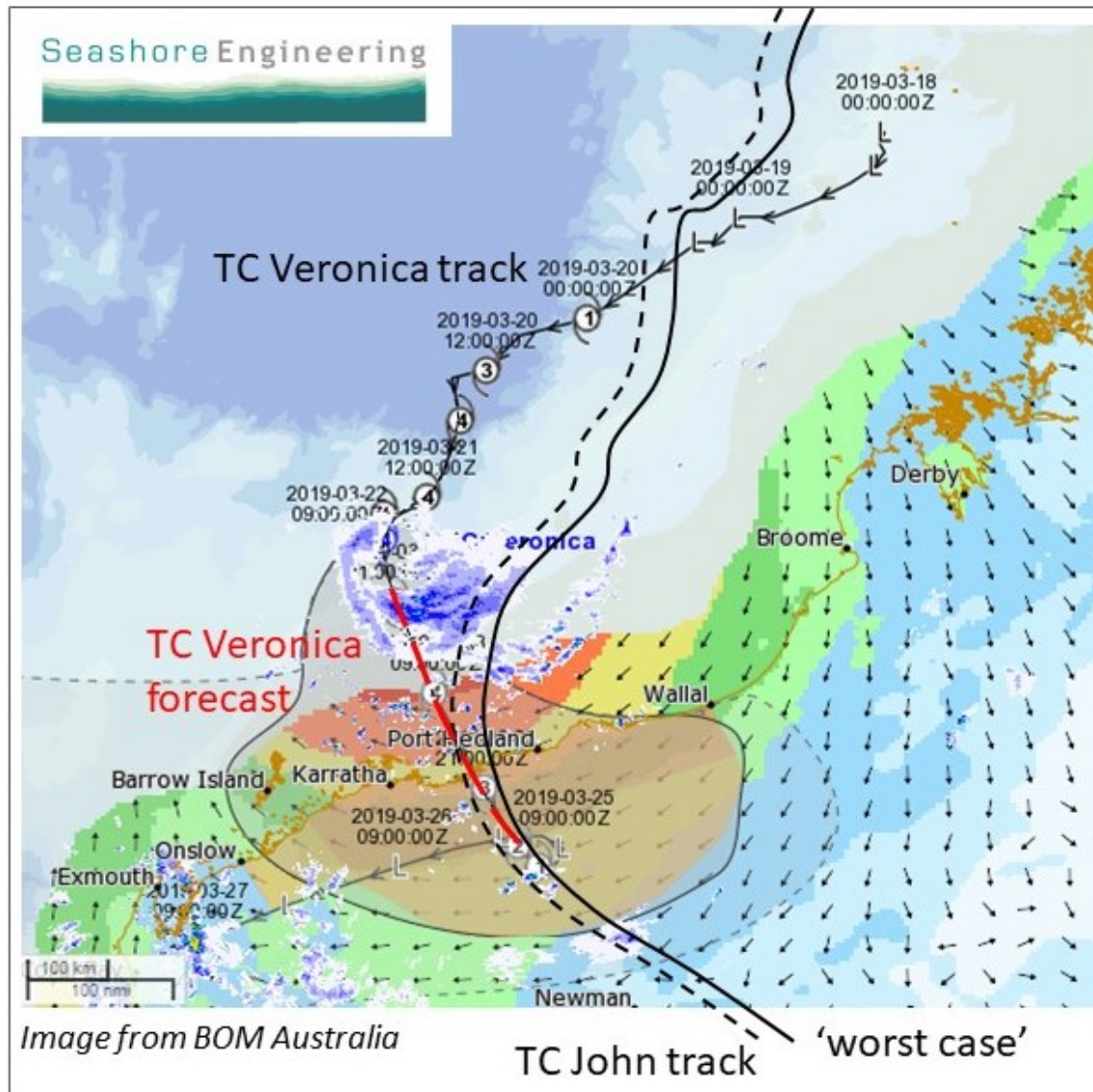
Next:	Time:	Height:
Low	19:10	0.59
High	01:26	6.97

Predicted Tides (Metres)

Although TC Veronica approached the coast near to predicted high tide, this was not the highest tidal residual. Tide-surge interaction was apparent in the record, with larger residuals on falling tide.



Data and summary from Department of Transport (WA)



TC John (Dec 1999) produced a +2.5m tidal residual.

The track of TC John was used in the determination of Port Hedland design storm (Seashore 2018). The storm track was shifted closer to Port Hedland to increase the severity of onshore winds, as a first-pass estimate of 100 to 500 year coastal flooding conditions.

TC Veronica forecast track gives landfall between that of TC John and the track-shifted design storm.

The large daily tide range predicted over the next 48 hours is likely to reduce the tidal residual due to tide-surge interaction, but extreme coastal flooding is looking very likely.