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# Verification of the 28 day TC forecast



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## Long Range (4 week) Tropical Cyclone Outlook 105°E to 130°E

Issue Time: 1500 WST Fri 30 Mar 2018 Next Issue: 1500 WST Tue 03 Apr 2018

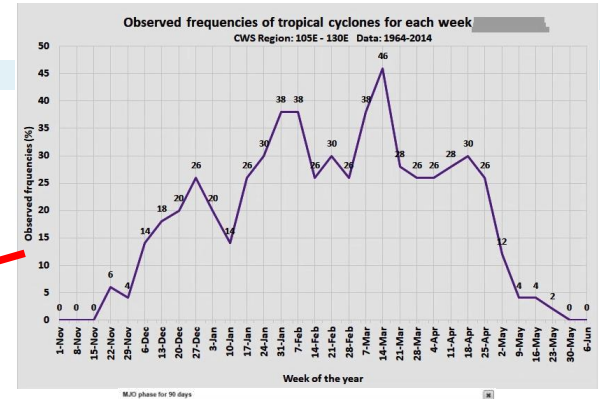
Issued By Pete Clegg Contact Phone 08 9263 2205

### The April tropical cyclone risk is Low.

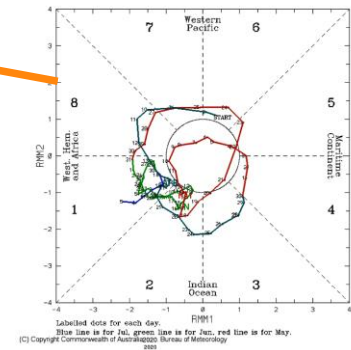
There is a Very Low tropical cyclone risk during the first week as there is no model guidance developing a system in the region.

The Madden Julian Oscillation (MJO) is strengthening as it moves from the Western Pacific into the Western Hemisphere which typically coincides with a period of suppressed tropical activity for the region. It is likely to maintain an easterly track for the next fortnight, suggesting conditions will remain less favourable for tropical activity across Australia and the Maritime Continent during that period. Towards the end of the month guidance indicates the MJO is likely to be weakening and becoming indiscernable which would also suggest less risk of enhanced thunderstorm and tropical activity.

For Week 2 through to Week 4 longer term model guidance shows that the risk of a TC in the region is around normal for this time of year. A normal risk for April is Low, dropping into the lower bounds of Low later in the month. Without any strong signal to deviate from normal, the risk is set at Low.

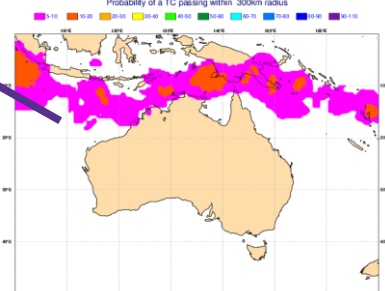


(RMM1, RMM2) phase space for 7-Apr-2020 to 5-Jul-2020



Forecast Date	105°E-130°E
Next Week Mon 02 - Sun 08	<b>Very Low Risk</b> No significant tropical systems within the region and none expected to develop in the next seven days.
Week 2 Mon 09 - Sun 15	<b>Low Risk</b> No strong signal in the guidance suggesting the normal risk for this time of year which is Low.
Week 3 Mon 16 - Sun 22	<b>Low Risk</b> No strong signal in the guidance suggesting the normal risk for this time of year which is Low.
Week 4 Mon 23 - Sun 29	<b>Low Risk</b> No strong signal in the guidance suggesting the normal risk for this time of year which is in the lower bounds of Low (5-10%).

Weekly Mean Tropical Cyclone Strike Probability, Date: 20201109 0 UTC 14-1504-672



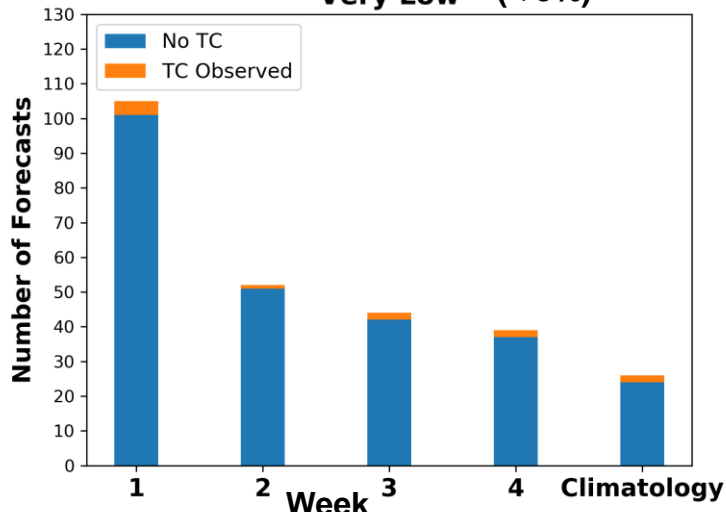


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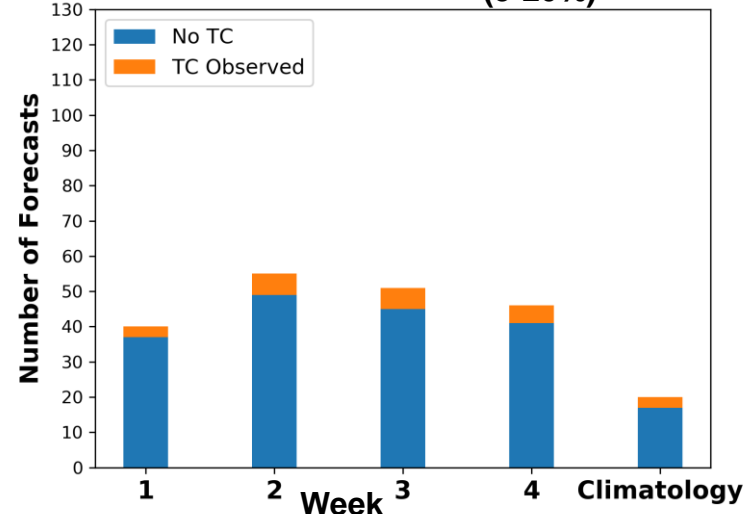
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# Categorical Ratings

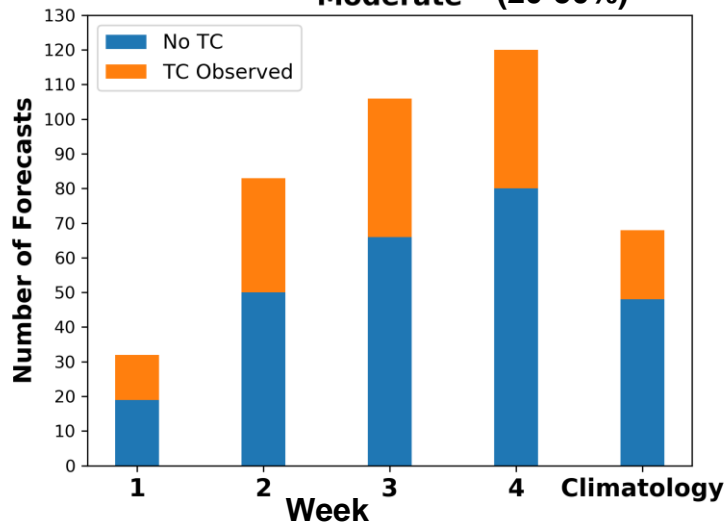
### Very Low (< 5%)



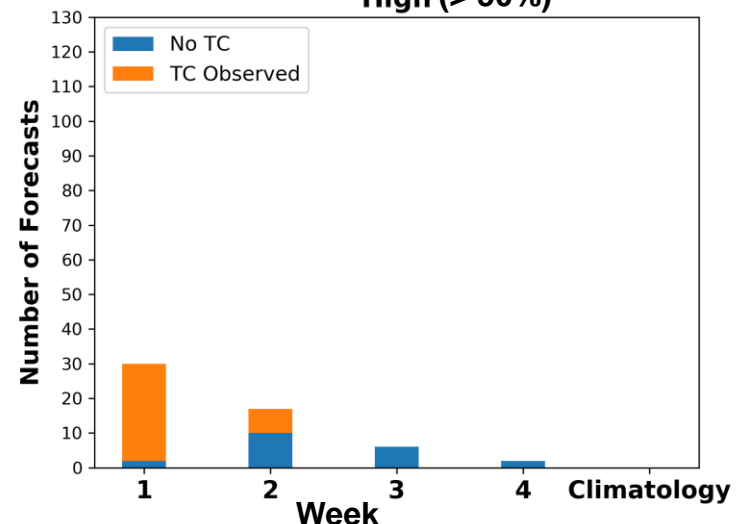
### Low (5-20%)



### Moderate (20-50%)

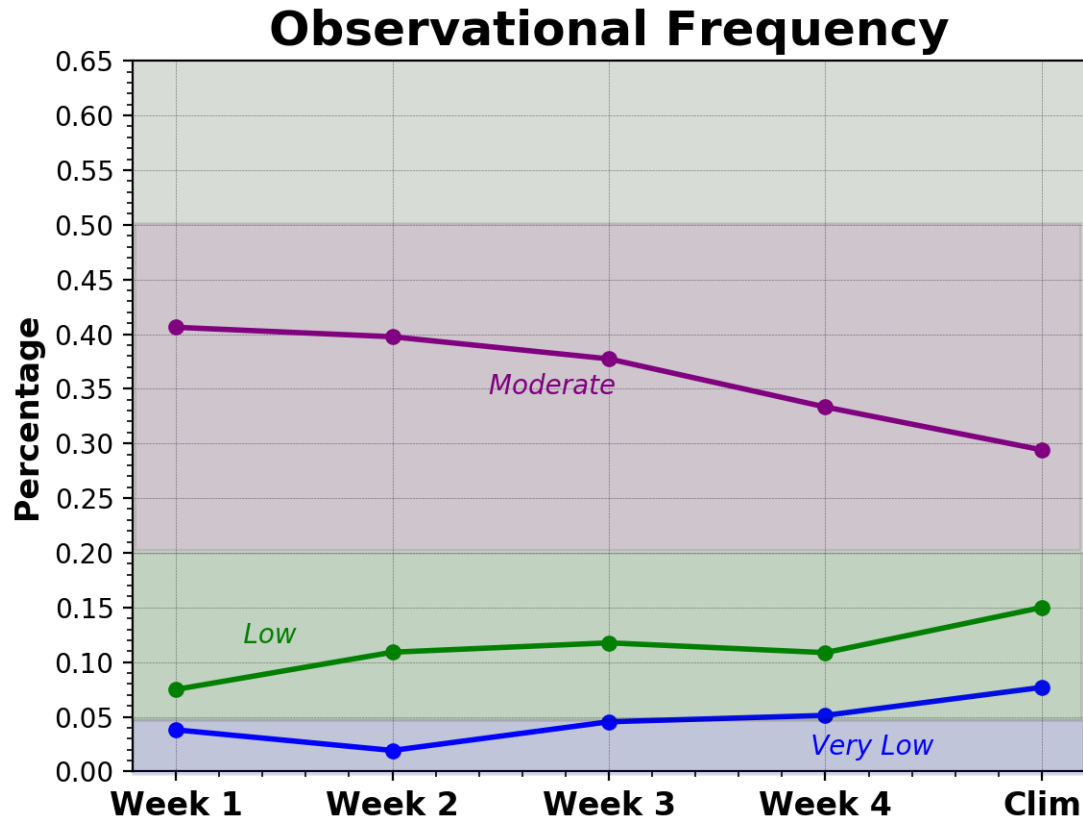


### High (> 50%)





# Observational frequency of the Categorical Ratings





# How can we use the Categorical TC forecasts?

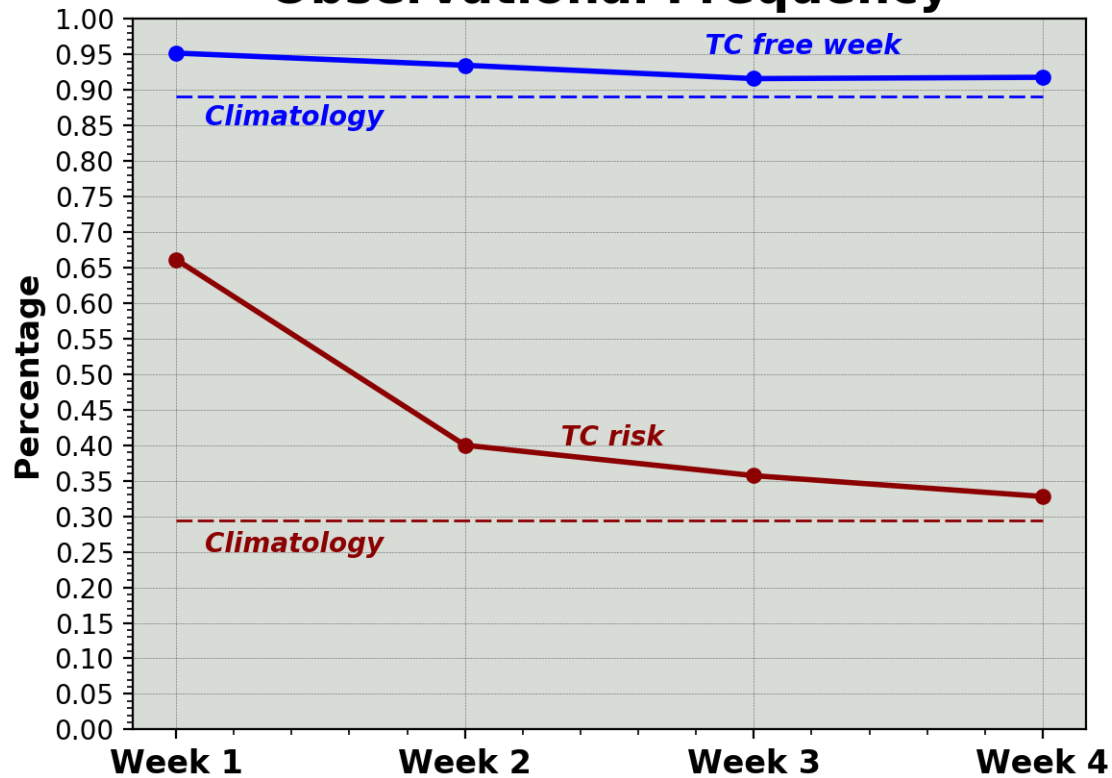
		TC Observed	
		YES	NO
TC Forecast Moderate or High	YES	<i>hits</i>	<i>False alarms</i>
	NO	<i>misses</i>	<i>correct negatives</i>
TC Risk	<i>hits</i>	Moderate or high forecast and TC observed	
	<i>misses</i>	Low or Very Low forecast and TC observed	
TC free weeks	<i>hits</i>	Low or Very Low forecast and TC NOT observed	
	<i>misses</i>	Moderate or High forecast and TC NOT observed	
		TC Observed	
		NO	YES
TC Forecast Low or Very Low	YES	<i>hits</i>	<i>False alarms</i>
	NO	<i>misses</i>	<i>correct negatives</i>

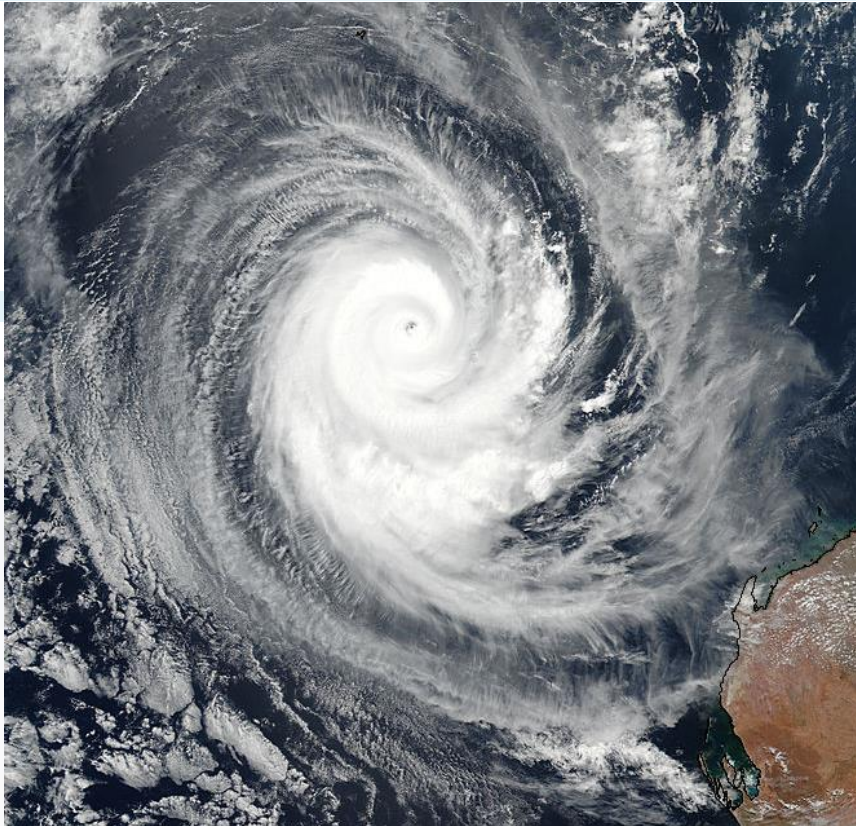


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## Observational Frequency





- **There is skill**
- **Limited Verification**
- **Probabilistic vs Categorical forecasts**
- **Questions?**

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