



TROPICAL CYCLONE SEASON OUTLOOK 2020 - UPDATE North West Pacific Region

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SUMMARY:

The NW Pacific Region Seasonal Outlook issued in April expected the forecast number of tropical cyclones (TC) over the NW Pacific region in the 2020 season to be in the range 22-30 TC, with Accumulated Cyclone Energy (ACE) 109% of the long-term average. Due to the slow start to the current season, the eventual number TC's is likely to be closer to the lower (22-26 TC) end of the forecast range. ACE also is likely to be lower than forecast, and probably below average.

The forecast total number of tropical cyclones expected to affect the South China Sea remains unchanged with the systems that form are expected to be of above average intensity when compared to the long-term average (ACE above normal).

Discussion:

The monthly value of the NINO3.4 anomaly for August was -0.6°C , at the cool end of the neutral range. The NINO3.4 region has seen a general cooling trend since April and below-average temperatures for at least the past six weeks. Dynamic models suggest further cooling in the NINO3.4 region during the next 2 to 3 months with a number of models surpassing the La Niña thresholds, that is SSTs cooler than normal by greater than 0.8 degrees (Australian Bureau of Meteorology definition).

The NINO3.4 anomalies are tracking reasonably closely to that forecast in the April outlook (see figure 2) with the closest of the analogue years being 1995, followed by 1970 and 2005.

So far this season we have seen 9 systems reach Tropical Cyclone (TC) strength of which 4 have become Typhoons. 3 systems have entered the South China Sea and two have made landfall in SE China (see Figure 1). The number of systems and ACE are both below average to date. No systems reached Typhoon strength in July, the first time this has occurred in the Satellite era. In 1995 both ACE and the number of systems ended up a little below average.

Sea temperatures across most of the basin are 1 to 2 degrees above average (a notable exception being an area west and south of Japan where the recent Typhoons have tracked, cooling the sea surface temperatures). This would indicate systems that form under favorable atmospheric conditions are likely to be more intense than would otherwise be the case.



At this stage, with proportionally more systems affecting the South China Sea in the latter part of the season, the forecast for the eventual number of systems affecting the South China Sea is still likely to be near average while ACE may be still end up a little above average due to the extra energy available to systems from the high sea surface temperatures.

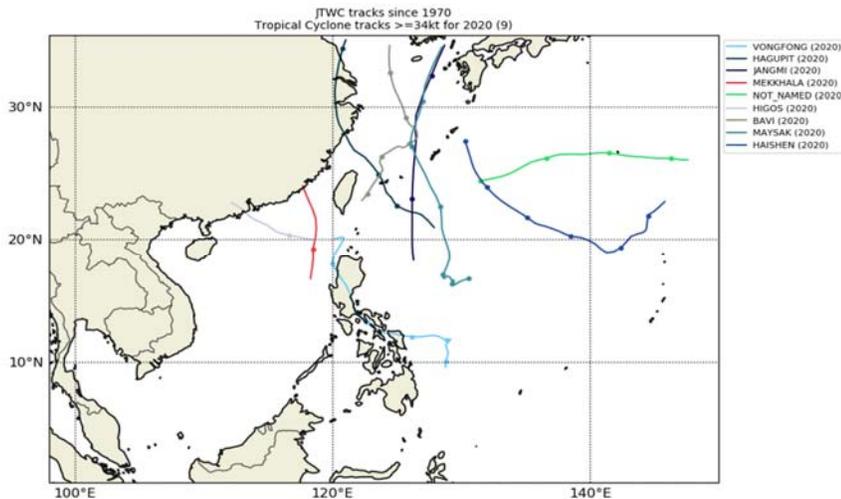


Figure 1: TC tracks for the 2020 season to date (Sept 9th)

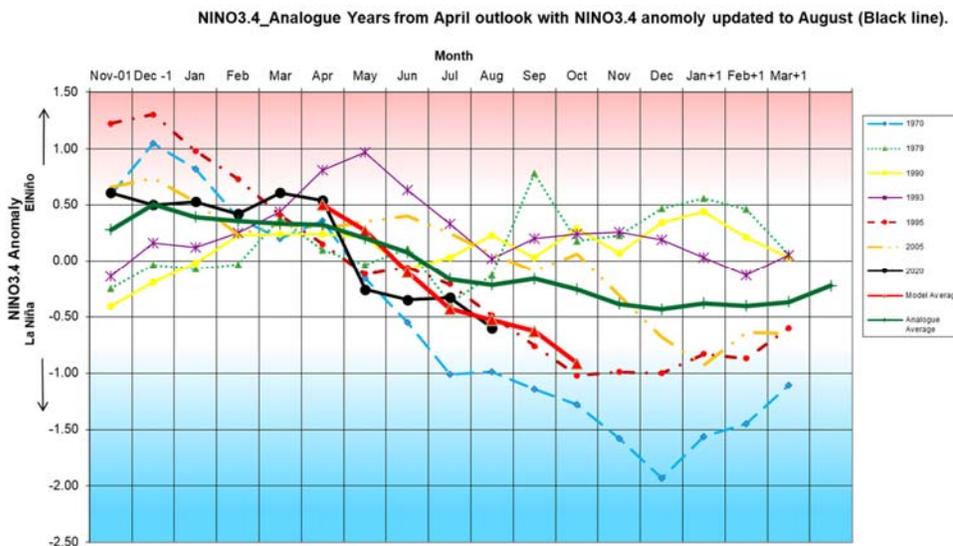


Figure 2: Analogue years and model average forecast from April with latest NINO3.4 anomaly to August.