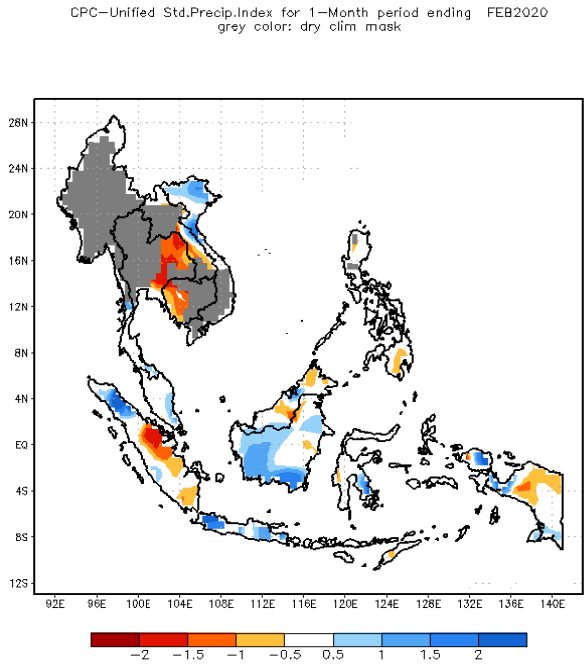
Climate Monitoring Node – WMO-RCC-SEA – DOST-PAGASA / No. 02

CLIMATE WATCH FOR RAINFALL DEFICIENCY

Area Concerned: Thailand, Cambodia **Date Issue: March 2020**

Areas of *moderate* to *severe* rainfall deficiencies have been observed in some parts of Southeast Asia region, in particular over Thailand and Cambodia, as shown by the the 1-month Standard Precipitation Index (SPI). This dry condition was consistent with 3-month below-normal rainfall being experienced for the period December 2019 – February 2020 (see attached 3-month SPI). Other parts of Southeast Asia recorded *moderate* rainfall deficiencies, but these were not as extensive.



Sea surface temperatures observed for the month were near average over most of the tropical Pacific Ocean, however, the Niño 4 region showed a warmer SST (~0.5 - 1ºC SST anomaly) extending up to eastern Indonesia. Likewise, SSTs near Malaysia, Singapore Brunei, and the Philippines were mostly near average.

Neutral values of the Indian Ocean Dipole (IOD) were observed in January. SST anomaly over most of the western and eastern equatorial Indian Ocean were slightly warmer than average (~0.5 to 1.0 °C).

Inactive phase of the Madden–Julian Oscillation (MJO) in Maritime Continent in February. Characterize with suppressed precipitation in most areas of the region.

OUTLOOK:

Drier conditions are forecasted to persist over Cambodia for the next week (16-22 Mar), with a lower probability of extending to Week 4 (23-31 Mar) of between 40% and 50%. The forecast for eastern and northern Thailand is for climatological probabilities (equal chance above-, near-, and below-normal rainfall).

The MJO pulse is expected to weaken in the coming days. Some models forecast the renewed development of an MJO in the Indian Ocean next week, which can bring more rainfall to Cambodia and Thailand (as well as other parts of Southeast Asia).

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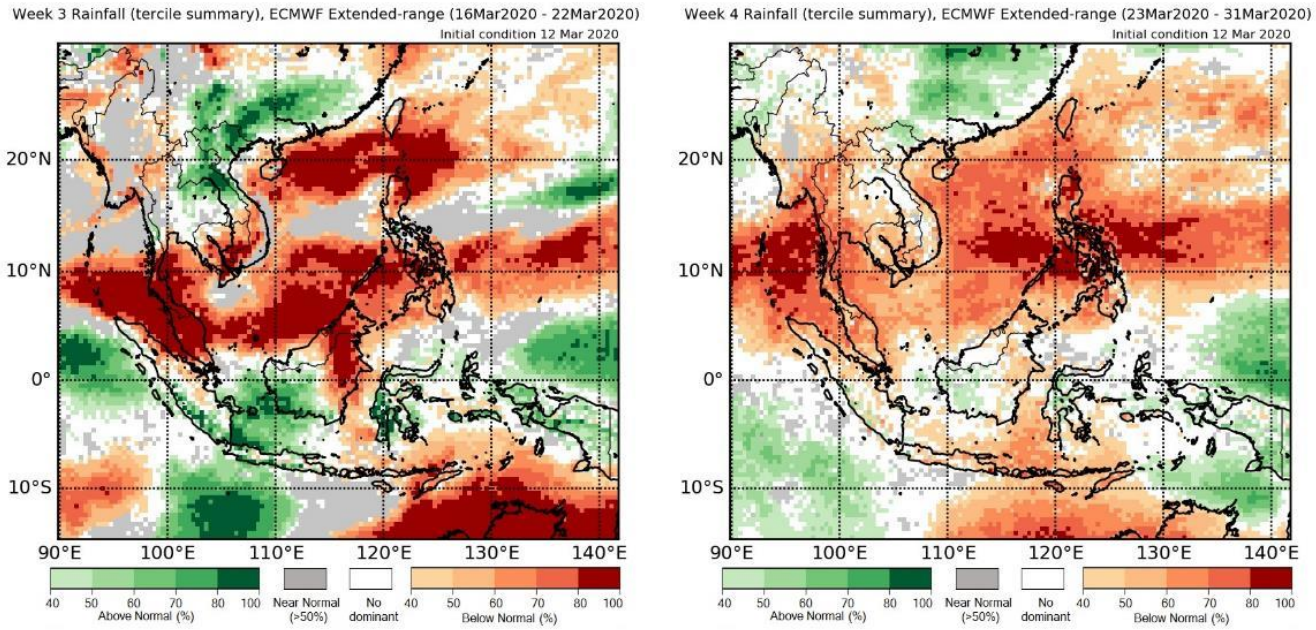

Figure 2 Rainfall tercile summary for the 16-22 Mar 2020 (right) and for the 23-31 Mar 2020 (left). The forecasts are based on the ECMWF run from the 12th Mar 2020.

Next issuance will be on April 2020.

ATTACHMENTS

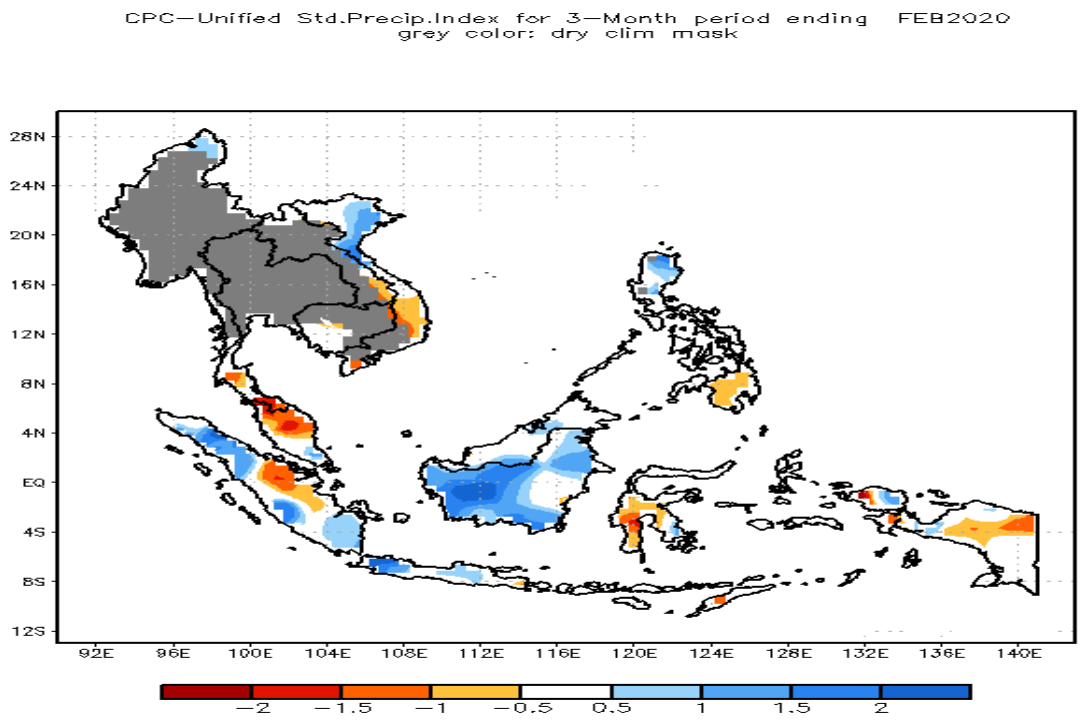

Table 1: McKee and others (1993) SPI value-classification table as recommended in World Meteorological Organization, 2012: Standardized Precipitation Index User Guide (M. Svoboda, M. Hayes and D. Wood). (WMO-No. 1090), Geneva.

Table 1. SPI values

2.0+	extremely wet
1.5 to 1.99	very wet
1.0 to 1.49	moderately wet
-.99 to .99	near normal
-1.0 to -1.49	moderately dry
-1.5 to -1.99	severely dry
-2 and less	extremely dry