



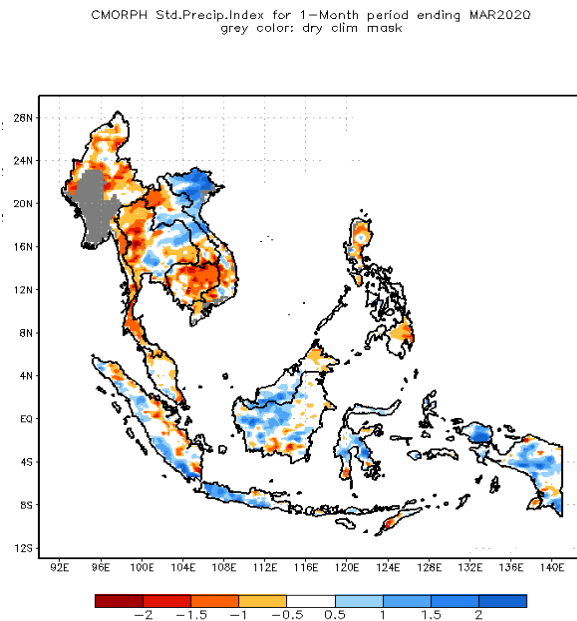
Climate Monitoring Node – WMO-RCC-SEA – DOST-PAGASA / No. 03

CLIMATE WATCH FOR RAINFALL DEFICIENCY

Area Concerned: Cambodia, Myanmar, Philippines

Date Issue: April 2020

Areas of *moderate* to *severe* rainfall deficiencies have been observed in some parts of Southeast Asia region, particularly Cambodia, Myanmar and Philippines as shown by the 1-month Standard Precipitation Index (SPI). This dry condition was consistent with 3-month below-normal rainfall being experienced for the period January – March 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 ($\sim 0.5 - 1^{\circ}\text{C}$ SST anomaly) extending up to eastern Indonesia. Likewise, SSTs in most parts of the region are slightly above average.

Neutral values of the Indian Ocean Dipole (IOD) were observed in March. SST anomaly over most of the western and eastern equatorial Indian Ocean are near average.

Inactive/non-convective phase of the Madden-Julian Oscillation (MJO) in most parts of the Maritime Continent in March. However, towards the end of the month, the MJO entered Phase 3, bringing more rainfall to the western Maritime Continent.

OUTLOOK:

Drier conditions are forecasted to persist over Thailand and Cambodia for Week 3 (16/04-22/04), with a 40%-60% chance of drier conditions continuing over Cambodia and 30-50% chance over most of Thailand in Week 4 (23/04-30/04).

For the Philippines, near- to above-normal rainfall is forecasted for Week 3 (16/04-22/04). In Week 4 (23/04-30/04), there is an increased chance of drier conditions again, likely associated with the MJO activity.

An MJO is currently present over Africa and is expected to propagate eastward through the Indian Ocean during Week 3 and Week 4 (16/04-30/04). A few models forecast the signal to weaken towards the end of April. However, if the MJO signal does not weaken and reaches the eastern Indian Ocean (phase 3), this phase tends to bring drier conditions to Thailand, Cambodia, and Philippines at this time of the year.

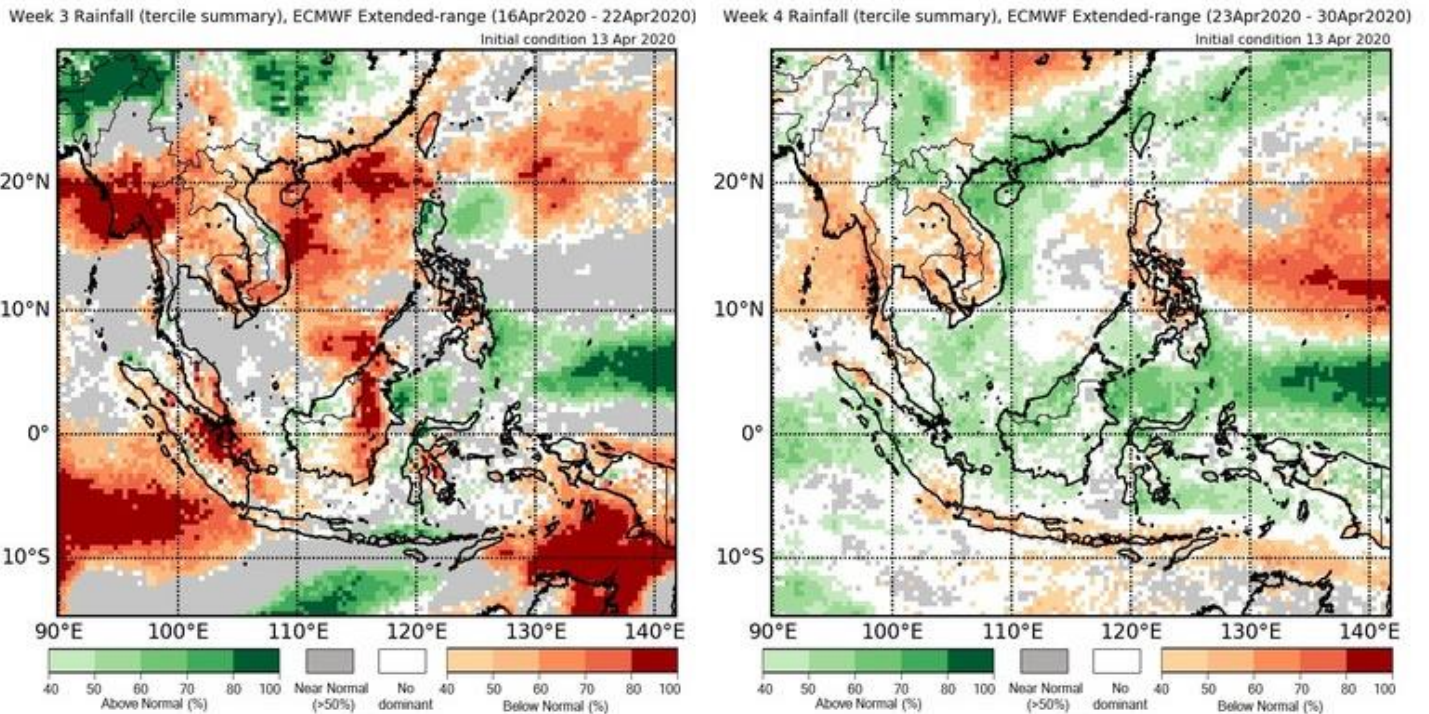


Figure 2 Rainfall tercile summary for the 16-22 Apr 2020 (left) and 23-30 Apr (right). The forecasts are based on the ECMWF run from the 13th April 2020.

Next issuance will be on May 2020.

ATTACHMENTS

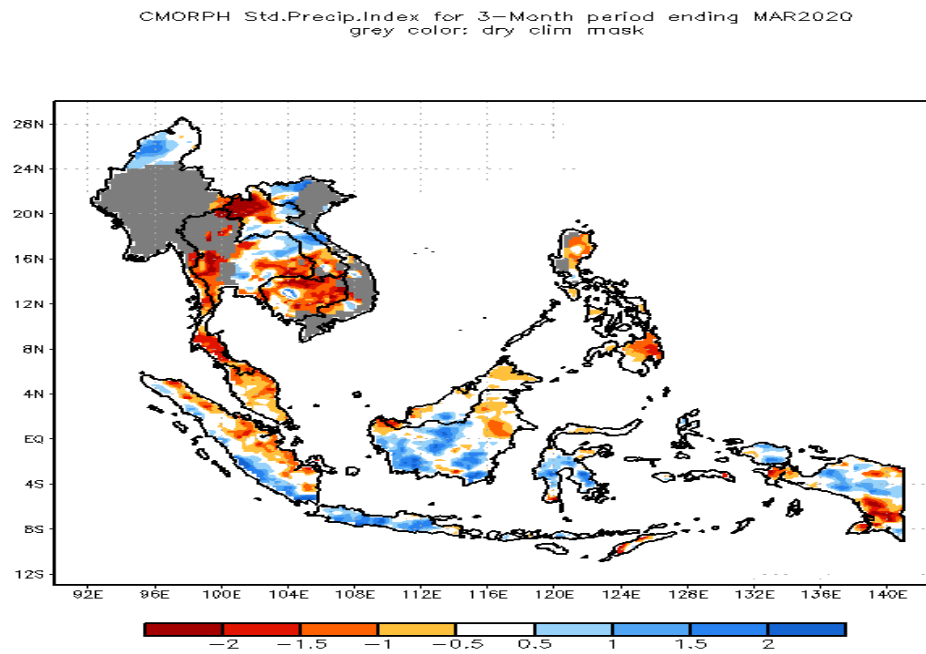
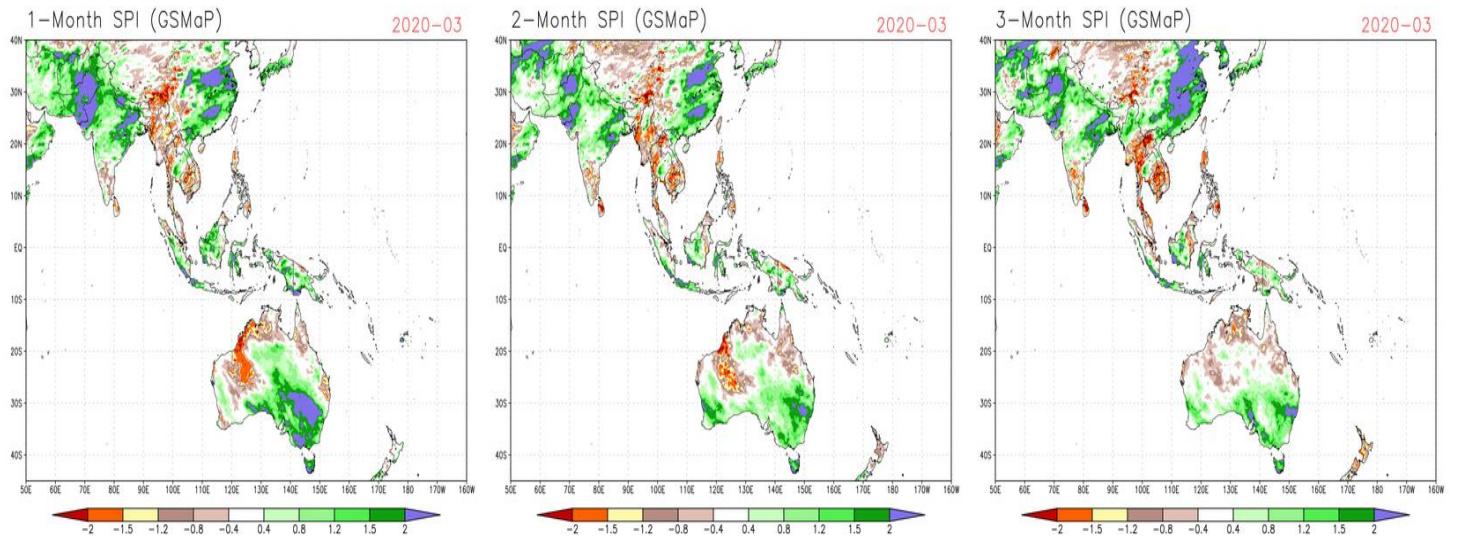


Table 1: McKee and others (1993) SPI value-classification table as recommended in World Meteorological Organization, 2012: Standardized Precipitation Index User Guide (M. Svoboda, M. Hayes and D. Wood). (WMO-No. 1090), Geneva.

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



GSMaP SPI Analysis for March 2020