

UPDATE OF REGIONAL WEATHER AND SMOKE HAZE July 2016

1. Review of Regional Weather Conditions in June 2016

1.1 The Southwest Monsoon season onset in June 2016 with prevailing winds over the region blowing mostly from the southeast or southwest. Showers affected most parts of the region southern ASEAN region, particularly over Java and its surrounding areas.

1.2 While shower activities affected many parts of the ASEAN region in the first three weeks of June 2016, dry weather conditions were experienced, in particular over the southern ASEAN region in the last week of June 2016.

1.3 For June 2016, most parts of the northern ASEAN region except Cambodia and Lao PDR received near-normal to above-normal rainfall. In the southern ASEAN region, above-normal rainfall was received over Peninsular Malaysia, Kalimantan and Java. The regional rainfall distribution for June 2016 is shown in Figure 1A.

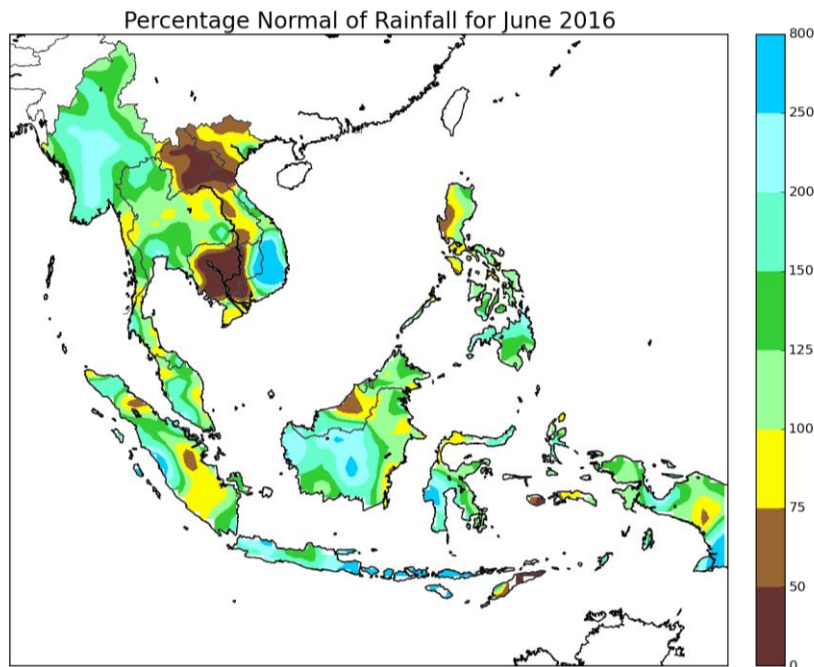


Figure 1A: Percentage of Normal Rainfall for June 2016

2. Review of Land/Forest Fires and Smoke Haze Situation

2.1 In June 2016, hotspot activities remained largely subdued in both northern and southern ASEAN regions due to persistent wet weather conditions. In the last week of June 2016, the dry weather conditions experienced in the region contributed to a slight increase in hotspot activities in Sumatra. There was no occurrence of transboundary smoke haze in June 2016. Satellite images in Figure 2A – 2E show shower activities over various parts of the ASEAN region in June 2016.

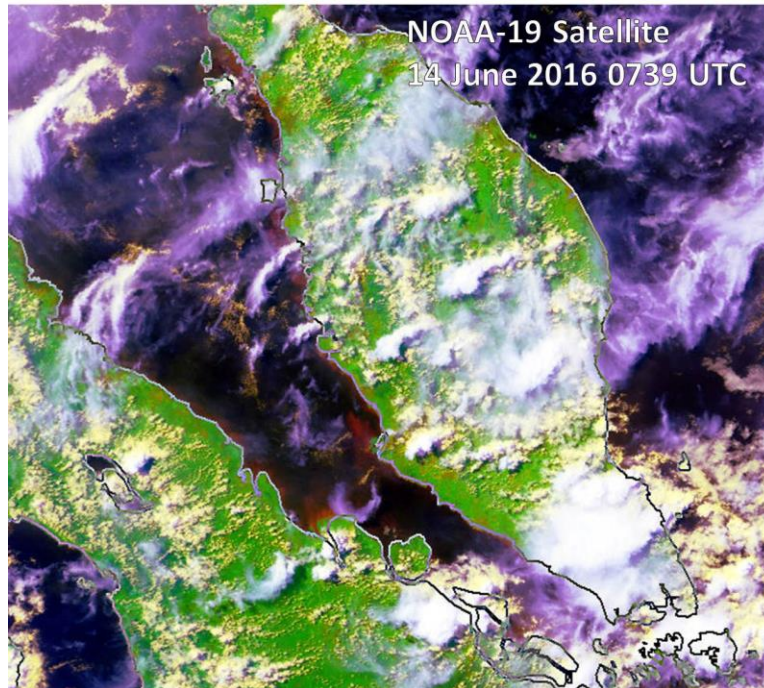


Figure 2A: NOAA-19 satellite image on 14 June 2016 shows shower activities over central and southern parts of Peninsular Malaysia.

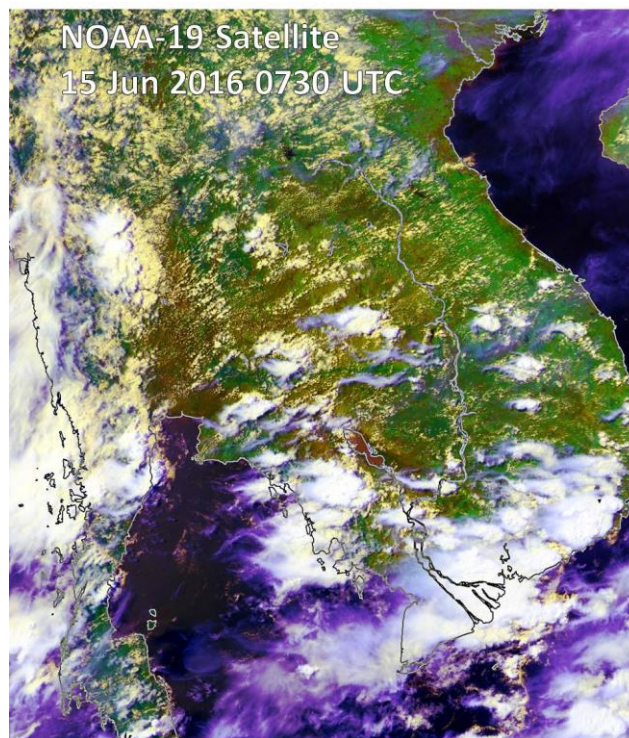


Figure 2B: NOAA-19 satellite image on 15 June 2016 shows shower activities over parts of the northern ASEAN region.

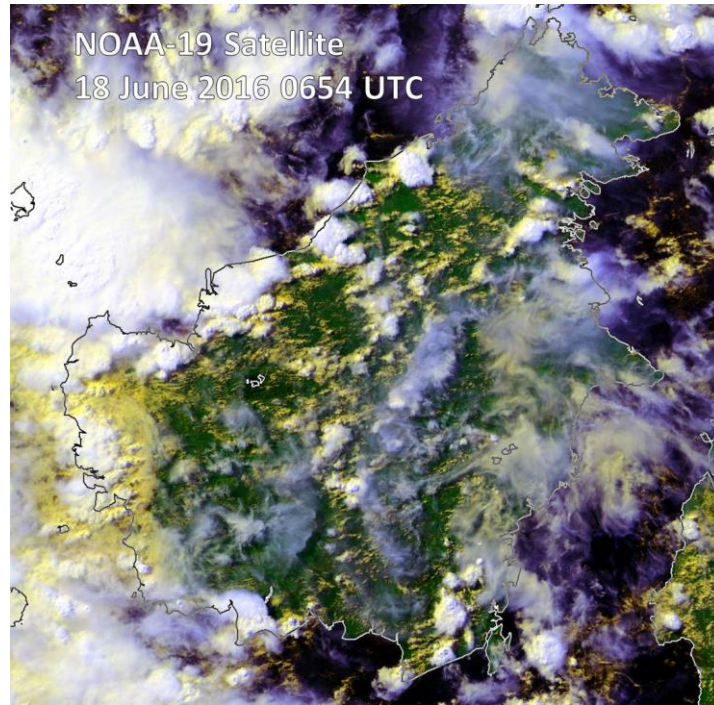


Figure 2C: NOAA-19 satellite image on 18 June 2016 shows shower activities over Sarawak and parts of Kalimantan.

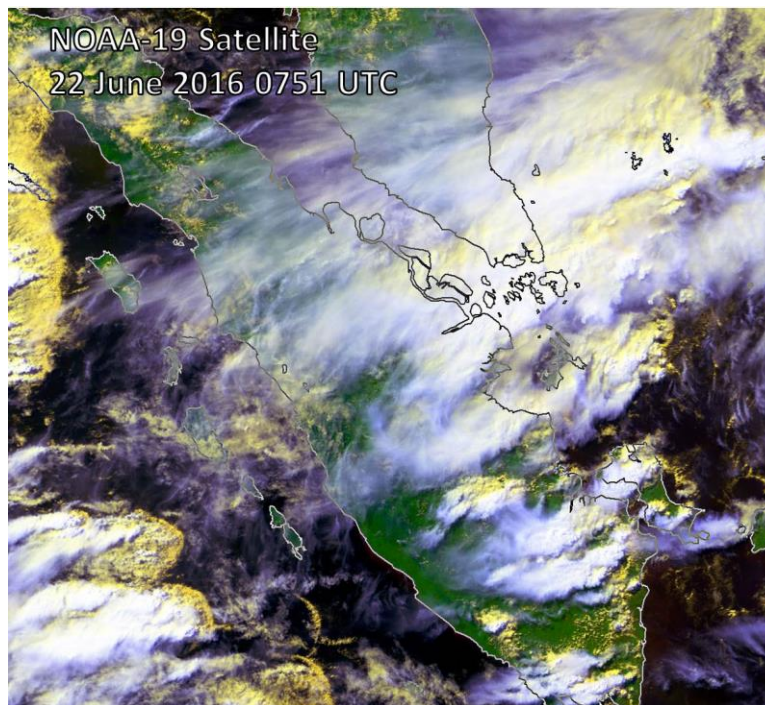


Figure 2D: NOAA-19 satellite image on 22 June 2016 shows shower activities over the southern parts of Sumatra.

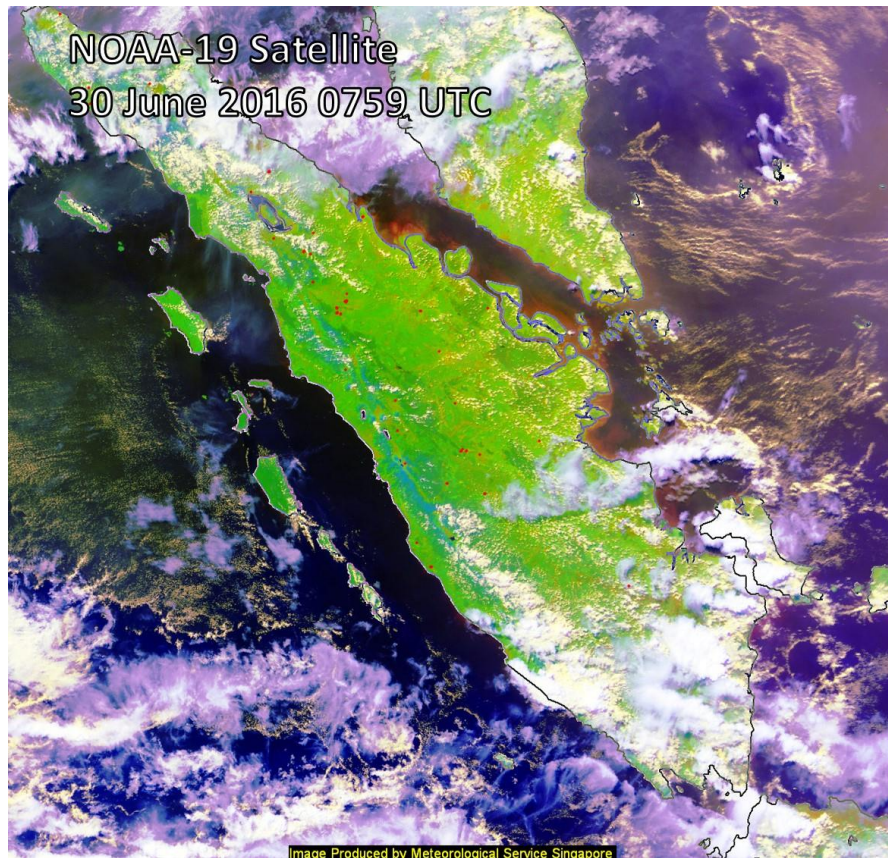


Figure 2E: NOAA-19 satellite image on 30 June 2016 shows isolated hotspots in central Sumatra.

2.2 The hotspot charts for June 2016 for

- a) Cambodia, Myanmar, Thailand, Lao PDR and Vietnam;
- b) Sumatra, Borneo and Peninsular Malaysia;

are shown in Figures 2F to 2G respectively.

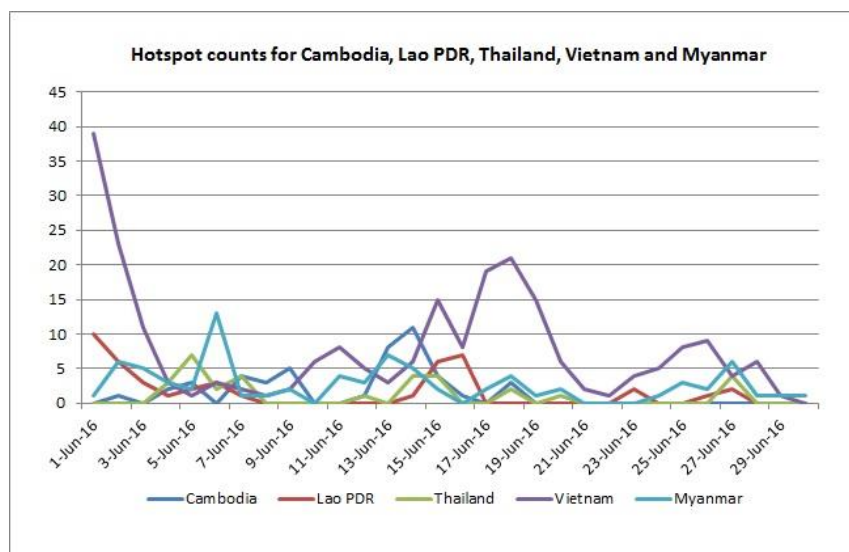


Figure 2F: Hotspot Counts in Cambodia, Lao PDR, Thailand, Vietnam, Myanmar for June 2016

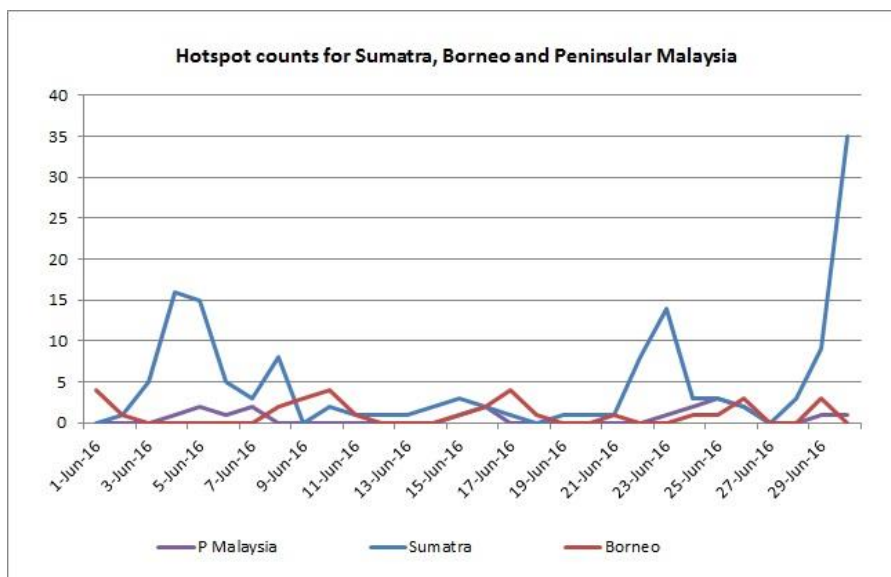


Fig 2G: Hotspot Counts in Sumatra, Borneo and Peninsular Malaysia for June 2016

3. Status of El Niño/La Niña

3.1 In June 2016, Niño3.4 sea-surface temperature (SST) readings were near zero, indicating Neutral (neither El Niño nor La Niña) conditions. Other atmospheric variables such as cloudiness and rainfall patterns in the central and eastern equatorial Pacific also indicate Neutral conditions.

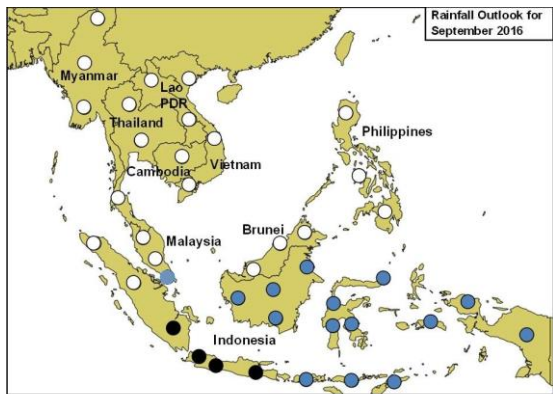
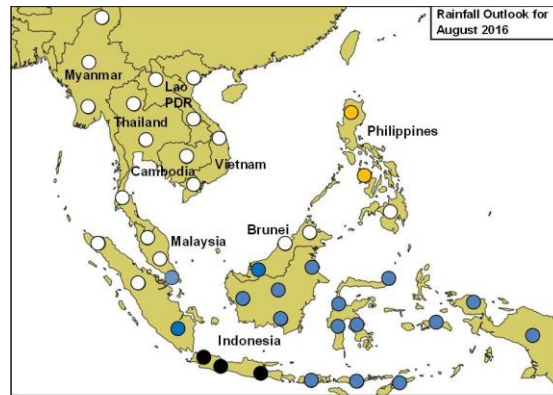
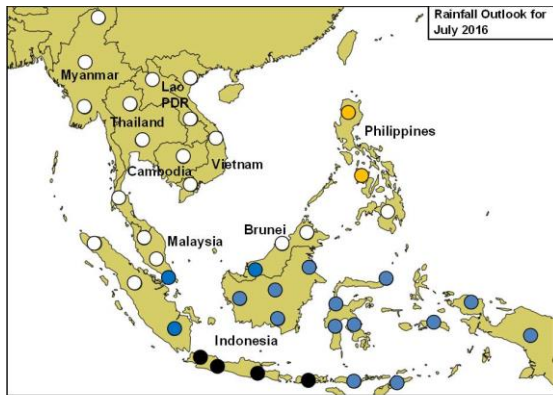
3.2 Most international climate models and expert assessments project the Neutral condition to persist, with increasing possibility of La Niña conditions in the second-half of 2016. However, the possibility of Neutral conditions to persist for the rest of year 2016 cannot be ruled out.

3.3 The ASEAN region is currently in the Southwest Monsoon season (June-September/early October), where the La-Niña is known to have considerable impact (wetness) on the western part of the Maritime Continent.

4. Outlook

4.1 During the Southwest Monsoon season, the prevailing winds in the ASEAN region are expected to blow mostly from the southeast or southwest. While La Niña conditions are favored over Neutral conditions in the second half of 2016, there may still be extended periods of dry weather conditions. This could lead to an escalation in hotspot activities in the fire-prone provinces of Sumatra and Kalimantan.

4.2 For the upcoming July-August-September season, slightly above to above-normal rainfall is expected for most parts of the Indonesian Archipelago, except for central and northern Sumatra where rainfall is expected to be near-normal. In the northern ASEAN region, near-normal rainfall is expected. The rainfall outlook for the ASEAN region for July 2016, August 2016 and September 2016 is shown in Figures 4A – 4C.



- - Above Normal (67th to 100th percentile)
- - Slightly Above Normal (50th to 83rd percentile)
- - Normal (33rd to 67th percentile)
- - Slightly Below Normal (17th to 50th percentile)
- - Below Normal (0 to 33rd percentile)

Figure 4: Rainfall Outlooks for the ASEAN Region – July 2016 (top left), August 2016 (top right), and September 2016 (bottom left)