

## Probabilistic Rainfall Forecast for June 2019

The probabilistic rainfall forecast for June 2019 for Sri Lanka as given below.

Figure 1 represents the consensus forecast for month of June 2019. Below-normal rainfall is likely over the Southwestern coast while above-normal rainfall is likely to be expected over Uva provinces and Hambantota districts during June 2019.

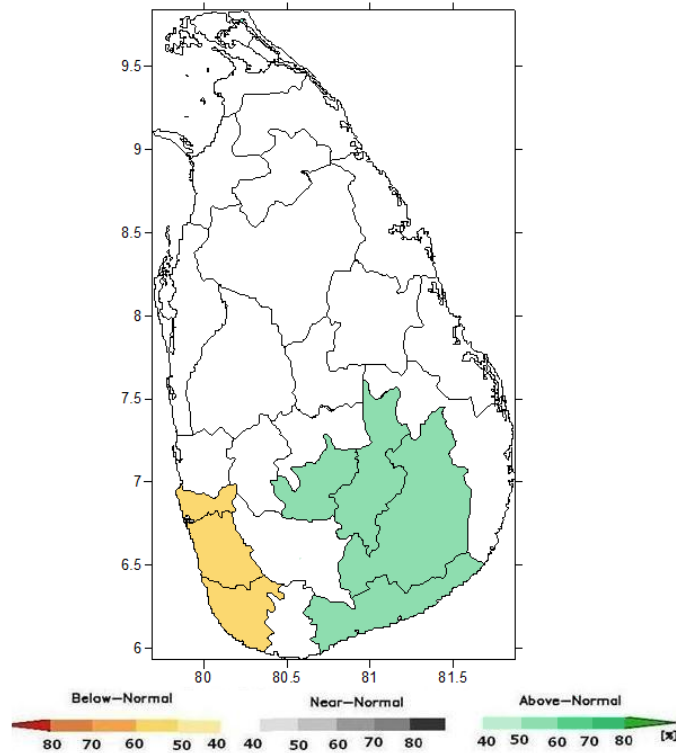


Fig 1.Consensus Probabilistic rainfall forecast for June 2019

Figure 2 represents the weekly rainfall anomaly forecast for June 2019 from Japanese Meteorological Administration (JMA) model. Below normal rainfall can be expected over northern part during the first two weeks. In the third week northern, north central and eastern provinces can be expected below normal rainfall and other areas can be expected above normal rainfall. During the fourth week above normal rainfall is likely all over the Island (Fig 2). According to the monthly rainfall anomaly forecast for June 2019 from Japanese Meteorological Administration (JMA) model (Fig. 3), below normal rainfall can be expected in northern parts of the country and above normal rainfall can be expected in southern parts of the country.

Figure 4 represents the multi-model ensemble probabilistic rainfall forecast for June 2019 from Forecast Customization System (FOCUS) for Sri Lanka, developed by Regional Integrated Multi-Hazard Early Warning System (RIMES). According to the FOCUS, there is a higher probability of receiving below normal rainfall in wet zone, inintermediate zone and dry zone for the month of June 2019.

The district wise average rainfall is given in the column 2 of the table 1. Chance (probability) of receiving below/about/above average is given in the columns 3, 4, and 5 respectively in the table 1.

The probabilistic rainfall forecast for June 2019 for Sri Lanka as given below.

District	Average rainfall (mm) –(June)	Probability %		
		Below	Normal	Above
Colombo	247.6	50	25	25
Kalutara	350.8	55	20	25
Galle	290.5	55	20	25
Matara	241.1	40	25	35
Hambantota	52.0	25	20	55
Ampara	24.4	30	30	40
Batticaloa	25.5	30	30	40
Trincomalee	22.6	35	30	35
Mullaithivu	12.5	40	30	30
Jaffna	13.7	35	25	40
Killinochchi	9.4	40	30	30
Mannar	7.2	35	30	35
Puttalam	46.6	35	30	35
Gampaha	212.8	40	30	30
Kegalle	372.7	40	30	30
Ratnapura	277.3	30	30	40
Monaragala	24.8	25	25	50
Badulla	35.4	20	25	55
Pollonnaruwa	18.0	30	20	40
Vavuniya	10.6	40	20	40
Anuradapura	11.4	35	25	40
Kurunegala	86.3	35	25	40
Matale	44.0	30	30	40
Kandy	172.6	30	30	40
Nuwaraeliya	270.1	25	25	50

Table 1

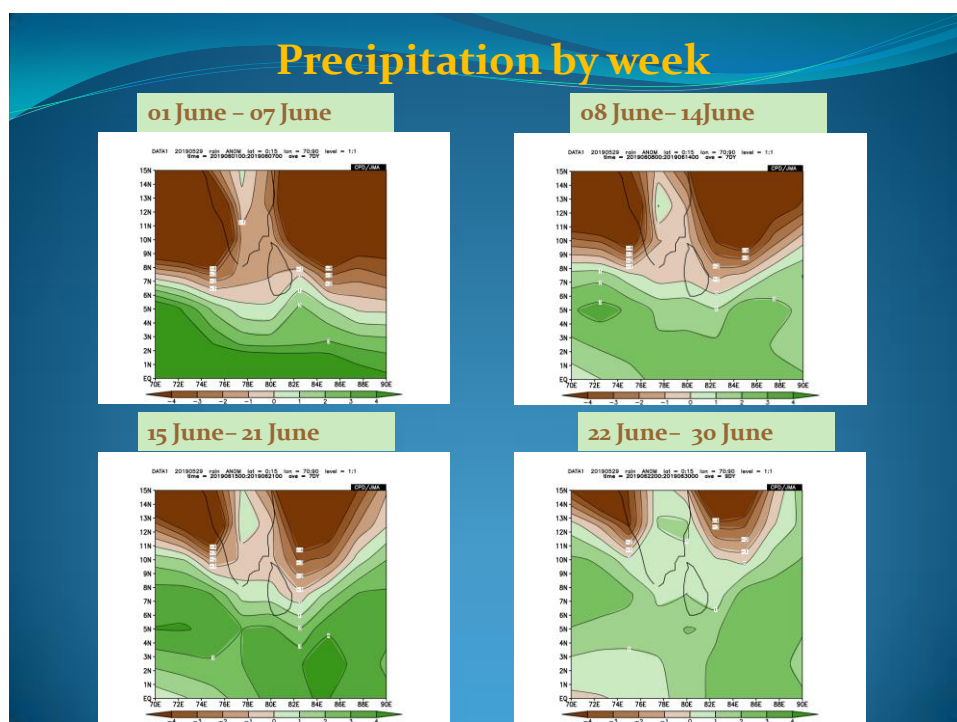


Fig 2. Weekly Rainfall anomaly forecast for June2019 (01June – 07June, Upper left), (08June –14June, Upper right), (15June – 21June Lower left) and (22June–30June, Lower right)from JMA model.

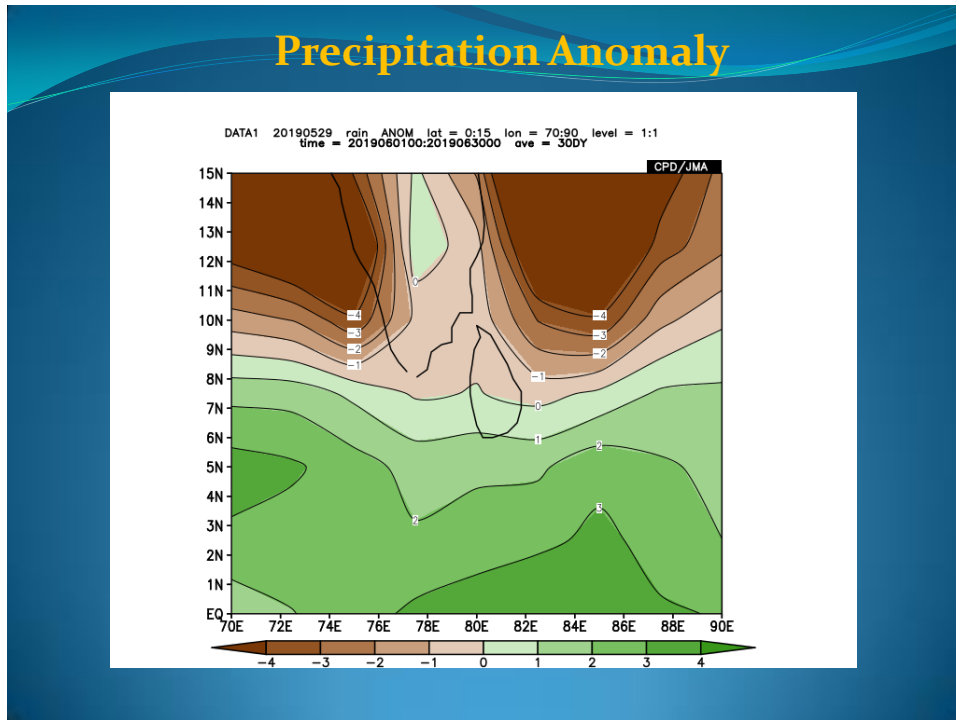


Fig 3. Rainfall anomaly forecast for June 2019 (mm/day) from JMA model

Figure 5 represents the probabilistic rainfall forecast from Climate Predictability tool (CPT) for June 2019. According to the CPT above normal rainfall can be expected in Badulla, Nuwaraeliya, Monaragala and Hambantota districts. Below normal rainfall can be expected in Colombo, Kaluthara, Galle Districts. There is no signal for remaining districts for the month of June 2019. It indicates that below normal, about normal or above normal rainfall can be expected in those districts during the June 2019.

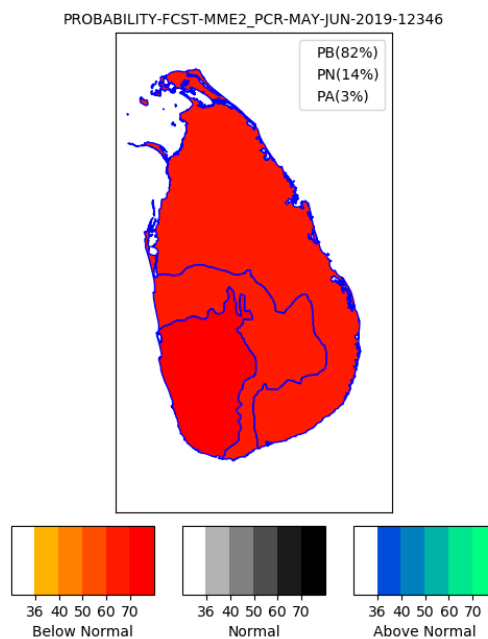


Fig 4. Multi-model ensemble probabilistic forecast for June 2019 from RIMES Forecast Customization System (FOCUS).

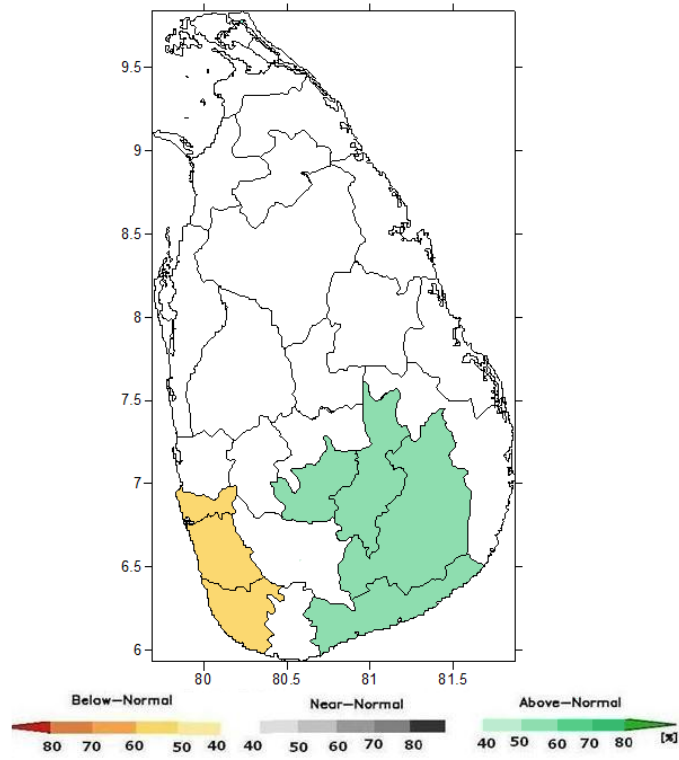


Fig 5. Probabilistic rainfall forecast using Climate predictability tool for June 2019