

Probabilistic Rainfall Forecast for April 2019

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

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.

Figure 1 represents the consensus forecast for month of April 2019. Below normal rainfall is likely to be expected in districts located in Southwest quarter namely Gampaha, Colombo, Kalutara, Galle, Matara, Ratnapura, Kegalle, Kandy and NuwaraEliya districts during April 2019.

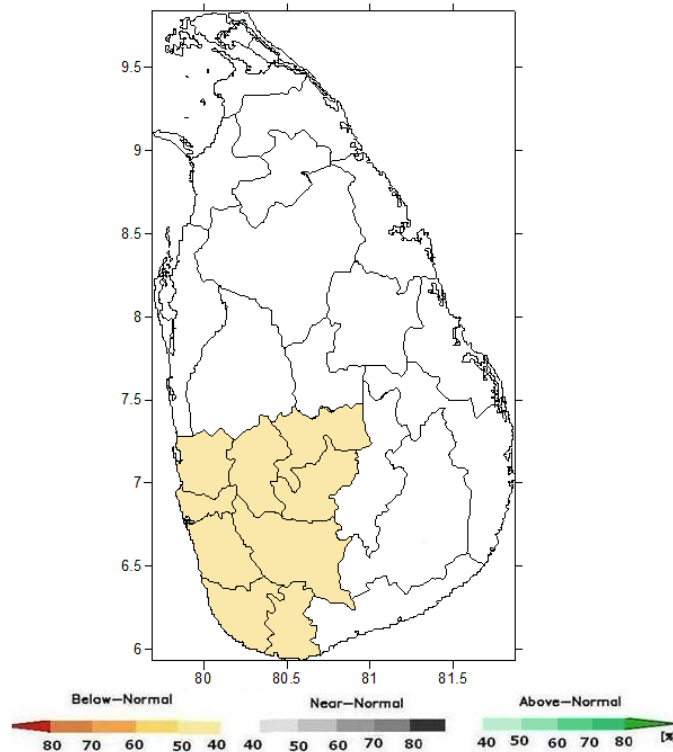


Fig 1. Consensus Probabilistic rainfall forecast for April 2019

Figure 2 represents the weekly rainfall anomaly forecast for April 2019 from Japanese Meteorological Administration (JMA) model. Below normal rainfall can be expected over the island during the first two weeks and slightly above normal rainfall can be expected during last two weeks of April 2019 (Fig 2). According to the monthly rainfall anomaly forecast for April 2019 from Japanese Meteorological Administration (JMA) model (Fig. 3), slightly below normal rainfall can be expected all the parts of the Island for April 2019.

Figure 4 represents the multi-model ensemble probabilistic rainfall forecast for April 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 near normal rainfall in wet zone. There is no signal for intermediate zone. There is a higher probability of receiving above normal rainfall in dry zone for the month of April 2019.

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

District	Average rainfall (mm) –(April)	Probability %		
		Below	Normal	Above
Colombo	281.6	45	30	25
Kalutara	356.2	50	30	20
Galle	305.6	50	30	20
Matara	221.5	30	30	40
Hambantota	105.6	20	30	50
Ampara	83.8	30	35	35
Batticaloa	61.2	35	35	30
Trincomalee	62.0	35	35	30
Mullaithivu	78.5	35	35	30
Jaffna	38.5	45	30	25
Killinochchi	61.4	45	30	25
Mannar	100.8	40	30	30
Puttalam	155.0	50	30	20
Gampaha	249.7	50	30	20
Kegalle	350.9	40	30	30
Ratnapura	307.1	35	30	35
Monaragala	163.4	20	30	50
Badulla	211.4	30	30	40
Pollonnaruwa	109.0	30	30	40
Vavuniya	110.2	35	30	35
Anuradapura	127.6	30	30	40
Kurunegala	204.4	45	30	25
Matale	168.8	30	30	40
Kandy	211.3	25	30	45
Nuwaraeliya	238.7	25	30	45

Table 1

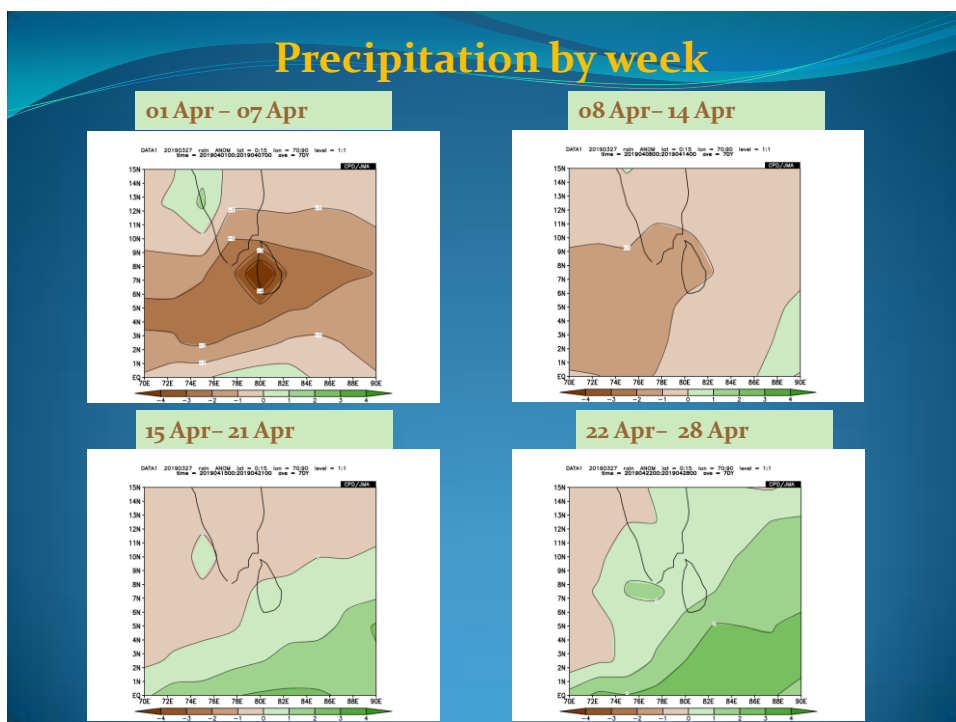


Fig 2. Weekly Rainfall anomaly forecast for April 2019 (01 April – 07 April, Upper left), (08 April – 14 April, Upper right), (15 April – 21 April Lower left) and (22 April – 28 April, Lower right) from JMA model.

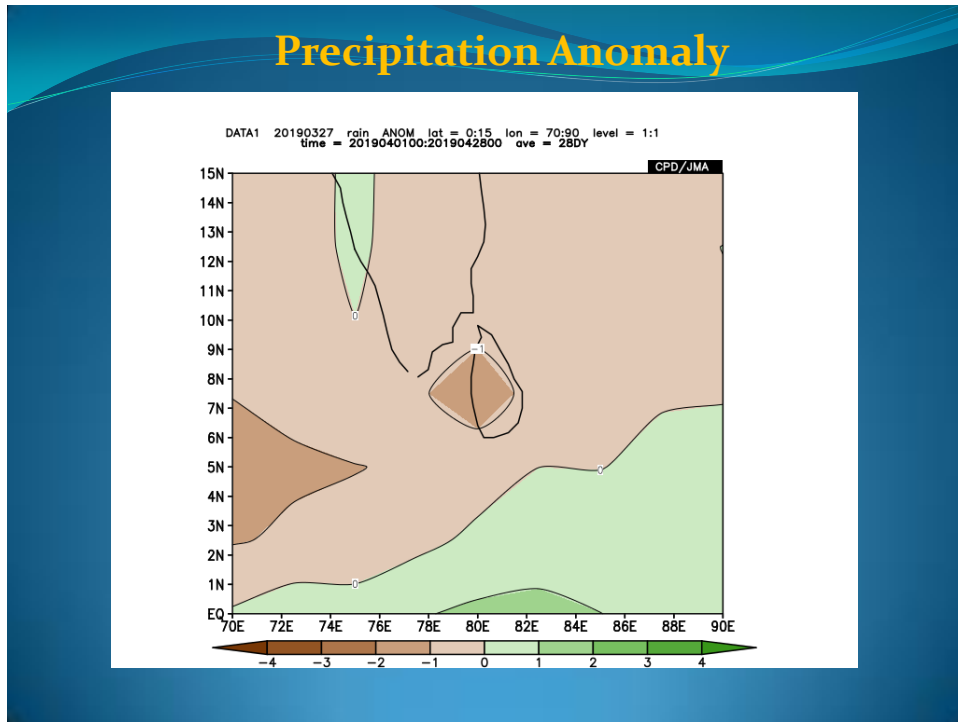


Fig 3. Rainfall anomaly forecast for April 2019 (mm/day) from JMA model

Figure 5 represents the probabilistic rainfall forecast from Climate Predictability tool (CPT) for April 2019. According to the CPT below normal rainfall can be expected in Puttalam, Kurunegala, Gampaha, Colombo, Kalutara and Gall districts. And above normal rainfall can be expected in Hambantota, Monaragla, Kandy and Nuwaraeliya districts. There is no signal for remaining districts for the month of April. It indicates that below normal, about normal or above normal rainfall can be expected in those districts during the April 2019.

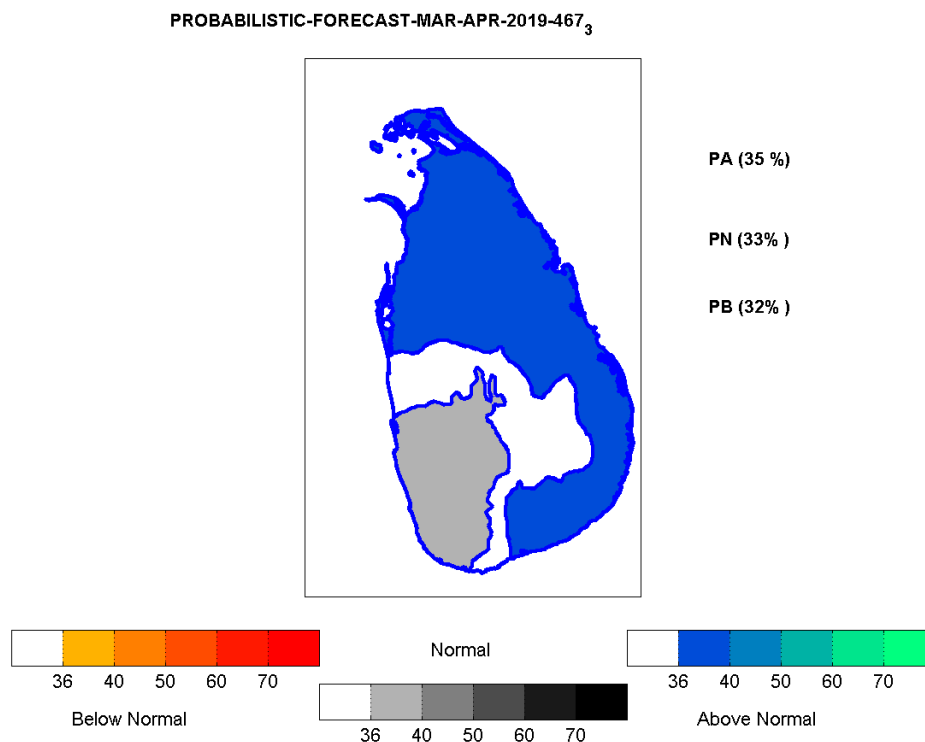


Fig 4. Multi-model ensemble probabilistic forecast for April 2019 from RIMES Forecast Customization System (FOCUS).

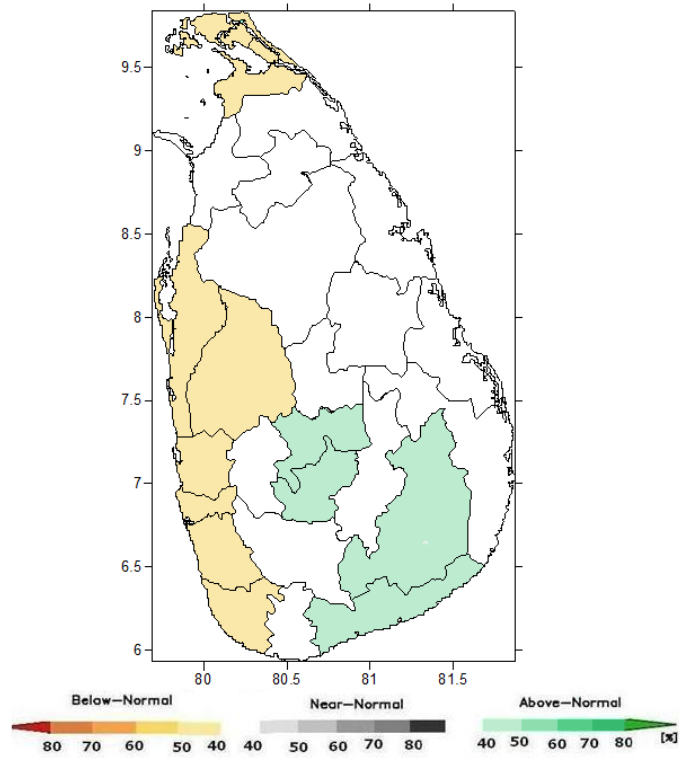


Fig 5. Probabilistic rainfall forecast using Climate predictability tool for April 2019