

Probabilistic Rainfall Forecast for March 2019

The probabilistic rainfall forecast for March 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 March 2019. Below normal rainfall can be expected in districts located in Northwestern, Western, Central, and Southern part of Sri Lanka during March 2019. There is no signal for remaining districts for March 2019.

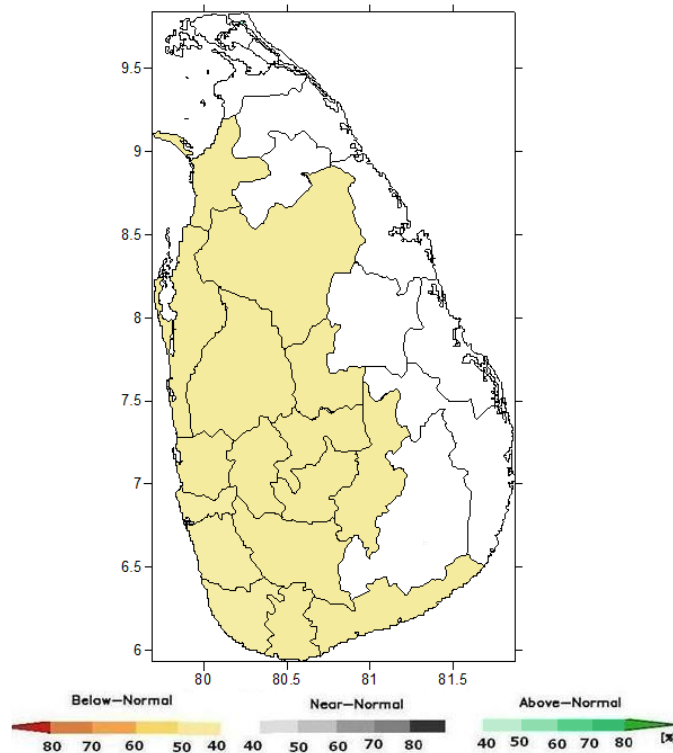


Fig 1. Consensus Probabilistic rainfall forecast for March 2019

Figure 2 represents the weekly rainfall anomaly forecast for March 2019 from Japanese Meteorological Administration (JMA) model. Below normal rainfall can be expected over the island during the first week, second week and third week of March 2019 (Fig 2). During the fourth week it can be expected above normal rainfall over the Island. According to the monthly rainfall anomaly forecast for March 2019 from Japanese Meteorological Administration (JMA) model (Fig. 3), slightly below normal rainfall can be expected all the parts of the island for March 2019.

Figure 4 represents the multi-model ensemble probabilistic rainfall forecast for March 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 dry zone and intermediate zone. There is no signal for wet zone. It indicates that there are equal chances of receiving below normal, near normal and above normal rainfall in wet zone for the month of March 2019.

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

District	Average rainfall (mm) –(March)	Probability %		
		Below	Normal	Above
Colombo	169.5	40	30	30
Kalutara	219.6	50	30	20
Galle	210.1	40	30	30
Matara	173.1	50	30	20
Hambantota	85.9	40	30	30
Ampara	101.8	35	30	35
Batticaloa	83.0	35	30	35
Trincomalee	54.8	35	30	35
Mullaithivu	40.5	35	30	35
Jaffna	22.2	35	30	35
Killinochchi	30.2	35	30	35
Mannar	46.2	50	30	20
Puttalam	70.7	50	30	20
Gampaha	147.8	50	30	20
Kegalle	198.0	50	30	20
Ratnapura	219.0	50	30	20
Monaragala	115.7	35	30	35
Badulla	137.8	35	30	35
Pollonnaruwa	85.3	35	30	35
Vavuniya	48.9	35	30	35
Anuradapura	61.6	50	30	20
Kurunegala	95.2	45	30	25
Matale	104.3	50	30	20
Kandy	119.3	40	30	30
Nuwaraeliya	132.1	50	30	20

Table 1

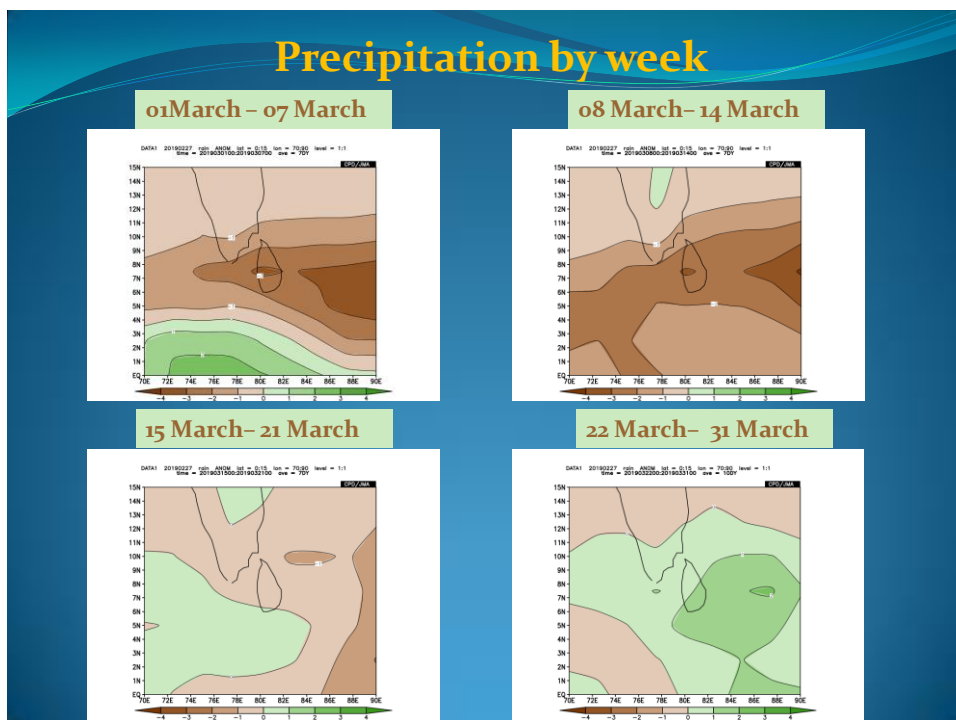


Fig 2. Weekly Rainfall anomaly forecast for March2019 (01March – 07March, Upper left), (08March – 14March, Upper right), (15March – 21March Lower left) and (22March–31March, Lower right) from JMA model.

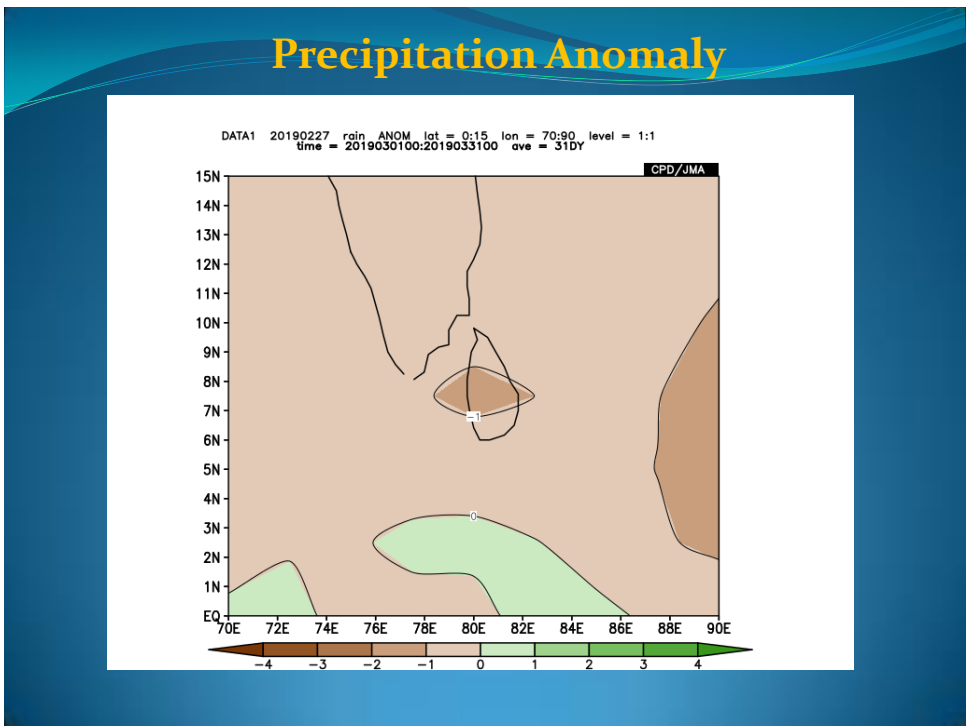


Fig 3. Rainfall anomaly forecast for March2019 (mm/day) from JMA model

Figure 5 represents the probabilistic rainfall forecast from Climate Predictability tool (CPT) for March 2019. According to the CPT above normal rainfall can be expected in most of the districts in northern, northeastern, eastern and southern parts. There is no signal in the districts Mannar, Vavuniya, Anuradhapura, Puttalam, Gampaha, Colombo, Kaluthara and Gall for the month of March 2019. It indicates that below normal, about normal or above normal rainfall can be expected during the March 2019.

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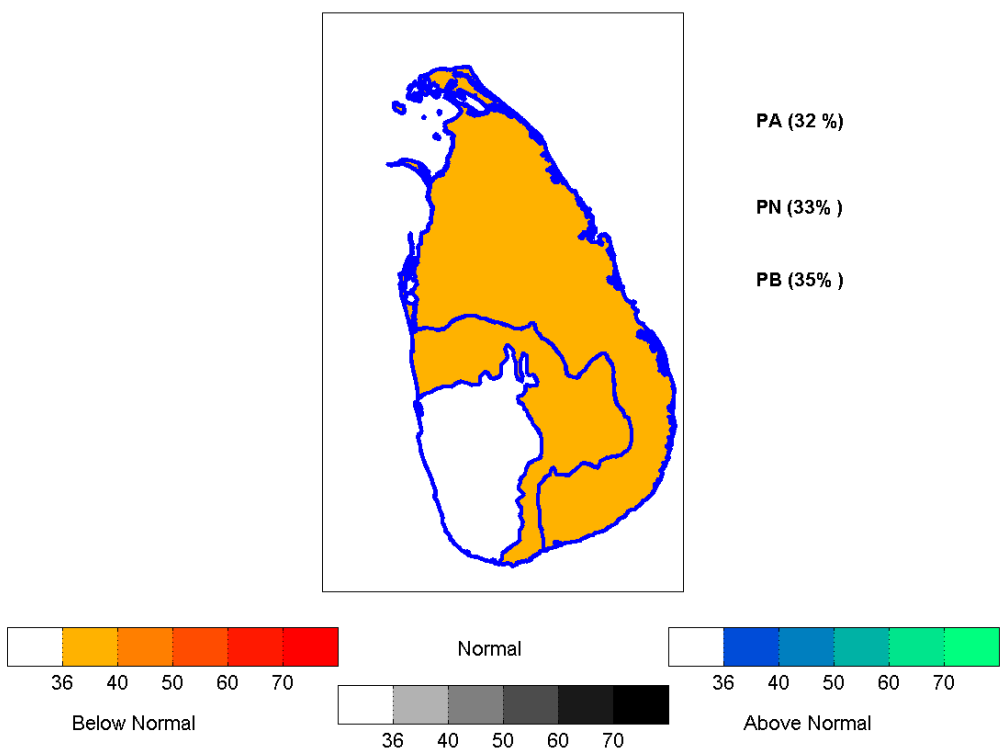


Fig 4. Multi-model ensemble probabilistic forecast for March 2019 from RIMES Forecast Customization System (FOCUS).

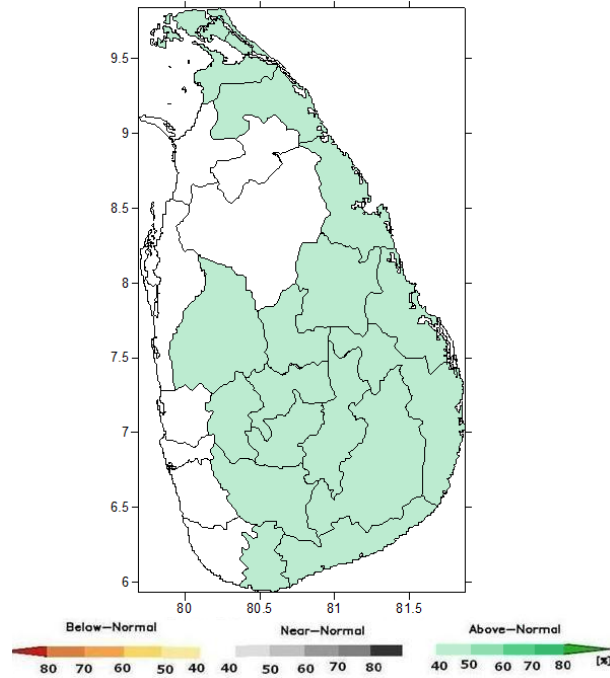


Fig 5. Probabilistic rainfall forecast using Climate predictability tool for March 2019