

Probabilistic Rainfall Forecast for May 2019

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

Figure 1 represents the consensus forecast for month of May 2019. Above normal rainfall is likely during May 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.

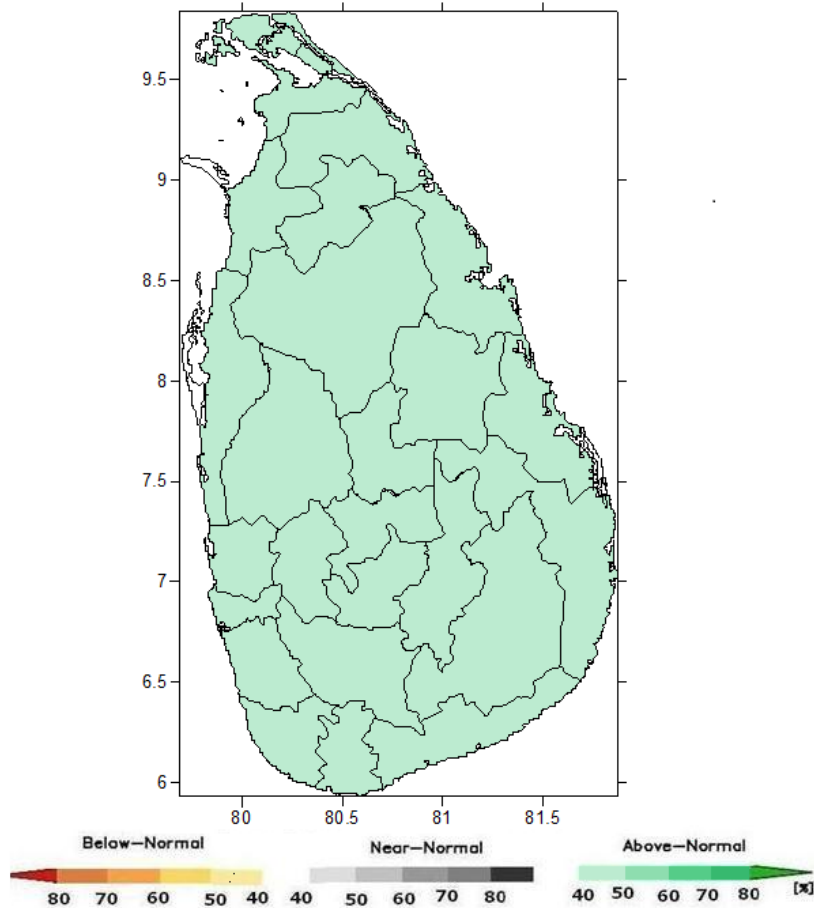


Fig 1.Consensus Probabilistic rainfall forecast for May 2019

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

District	Average rainfall (mm) –(May)	Probability %		
		Below	Normal	Above
Colombo	413.3	35	20	45
Kalutara	526.9	30	30	40
Galle	423.5	30	25	45
Matara	301.3	30	25	45
Hambantota	88.2	30	25	45
Ampara	59.6	30	30	40
Batticaloa	57.3	35	20	45
Trincomalee	60.2	35	20	45
Mullaithivu	59.7	30	25	45
Jaffna	46.3	30	30	40
Killinochchi	50.9	35	20	45
Mannar	58.3	35	20	45
Puttalam	112.5	30	30	40
Gampaha	342.2	30	25	45
Kegalle	419.1	30	25	45
Ratnapura	354.8	30	30	40
Monaragala	93.6	25	20	55
Badulla	113.9	35	20	45
Pollonnaruwa	70.8	35	20	45
Vavuniya	67.1	30	25	45
Anuradapura	74.8	30	30	40
Kurunegala	143.5	30	25	45
Matale	101.2	30	30	40
Kandy	177.1	25	20	55
Nuwaraeliya	267.3	30	30	40

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

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

Figure 5 represents the probabilistic rainfall forecast from Climate Predictability tool (CPT) for May 2019. According to the CPT above normal rainfall can be expected in Kalutara, Galle, Matara, Rathnapura and Nuwaraeliya districts. There is no signal for remaining districts for the month of May. It indicates that below normal, about normal or above normal rainfall can be expected in those districts during the May 2019.

Figure 6 represents the calibrated multi model ensemble probabilistic forecast for South Asia region. According to this forecast above normal rainfall can be expected over Sri Lanka for the month of May 2019.

Table 1

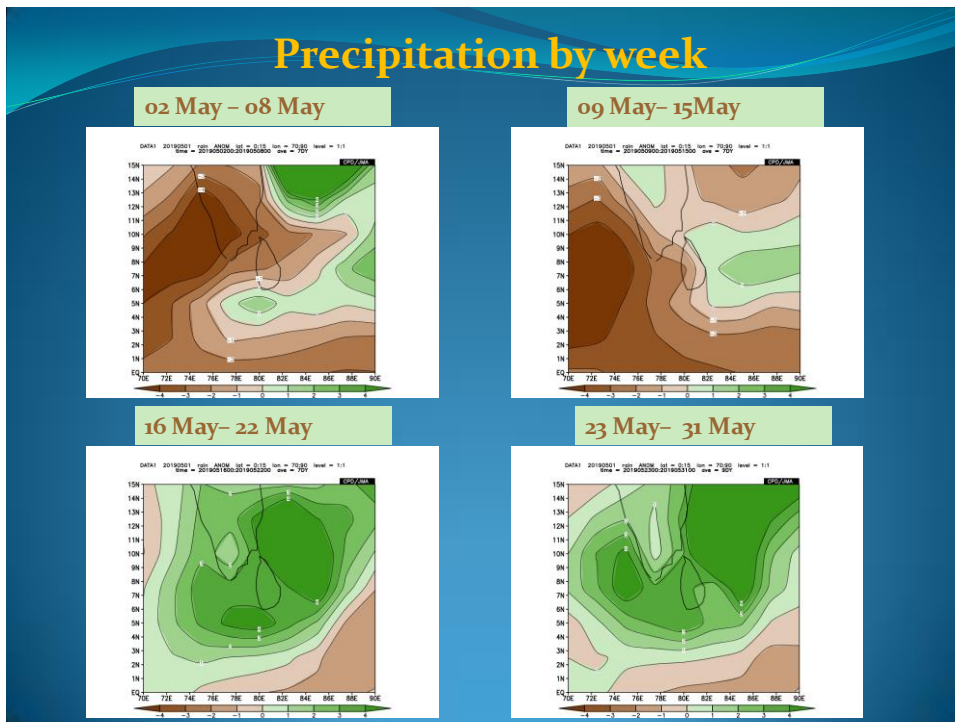


Fig 2. Weekly Rainfall anomaly forecast for May 2019 (02May – 08May, Upper left), (09May – 15May, Upper right), (16May – 22May Lower left) and (23May–31May, Lower right)from JMA model.

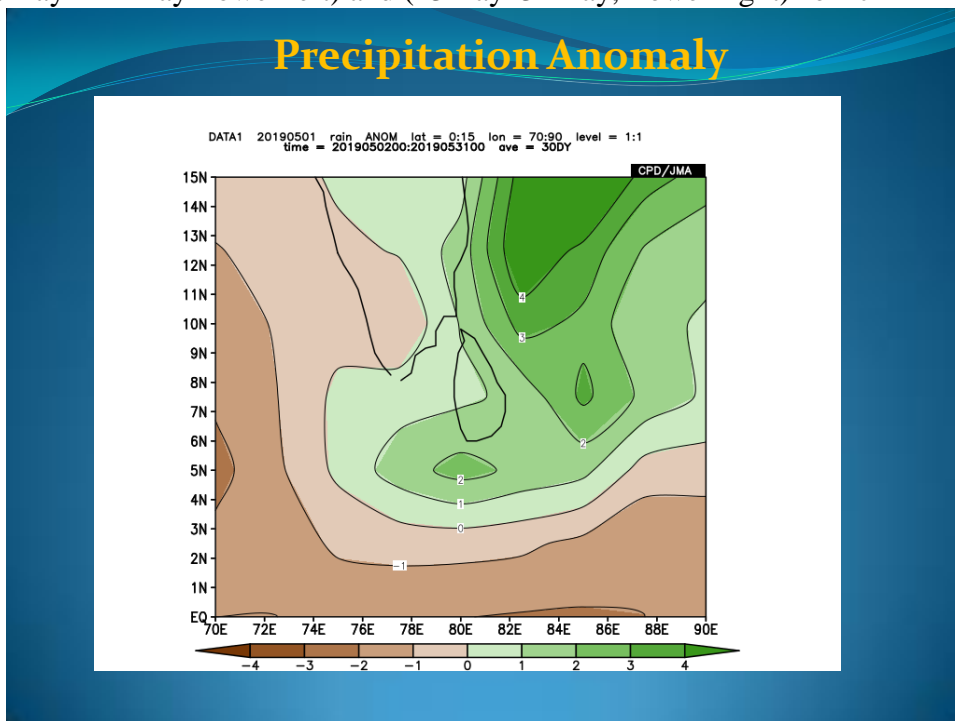


Fig 3. Rainfall anomaly forecast for May 2019 (mm/day) from JMA model

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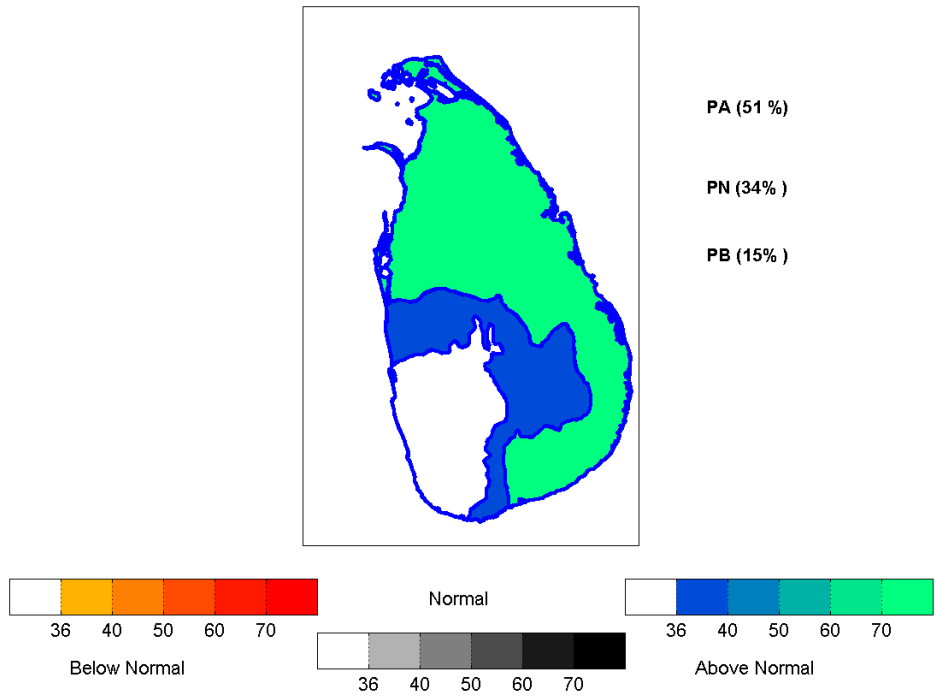


Fig 4. Multi-model ensemble probabilistic forecast for May2019 from RIMES Forecast Customization System (FOCUS).

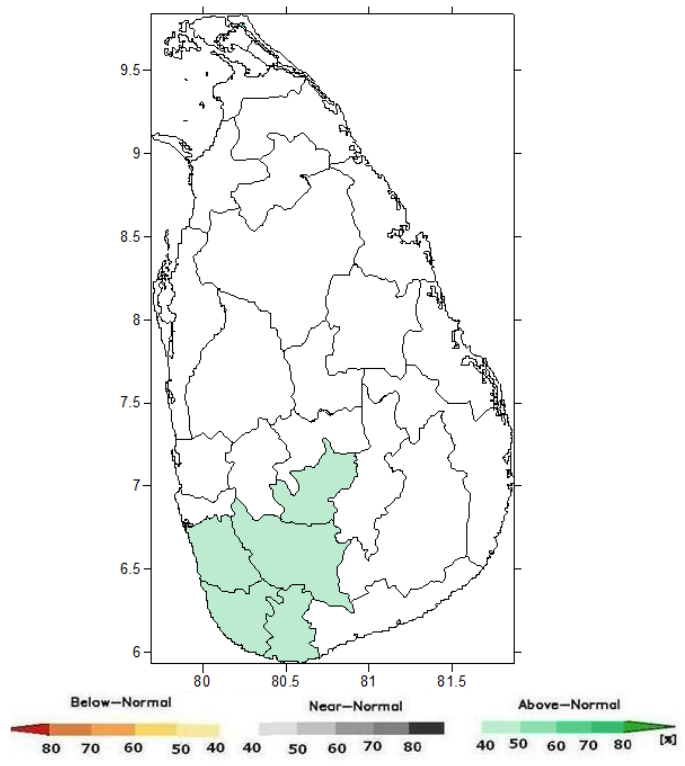


Fig 5. Probabilistic rainfall forecast using Climate predictability tool for May2019

Skill wtd MM probabilities: May 2019- initialised: April
CFSS,CFSP,CMCS,CMCP,CCMS,CCMP,ECS,ECP

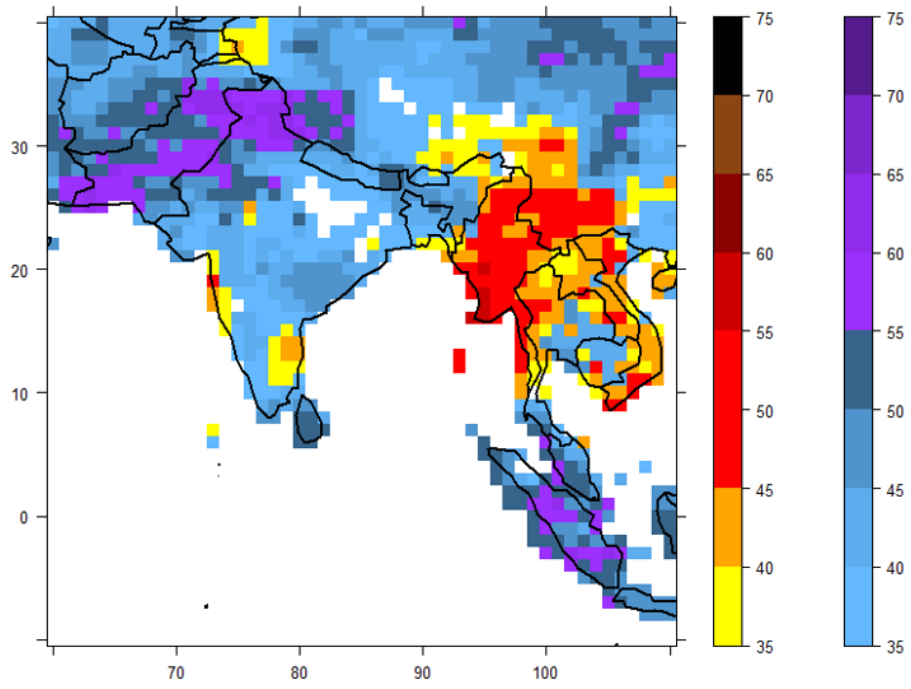


Fig 6. Calibrated Multi Model Ensemble Probabilistic Forecast for South Asia Region.