

Probabilistic Rainfall Forecast for March 2020

The probabilistic rainfall forecast for March 2020 for Sri Lanka as given below.

Figure 1 represents the consensus forecast for month of March 2020. Below normal rainfall is likely over most parts of the Island during the month of March 2020.

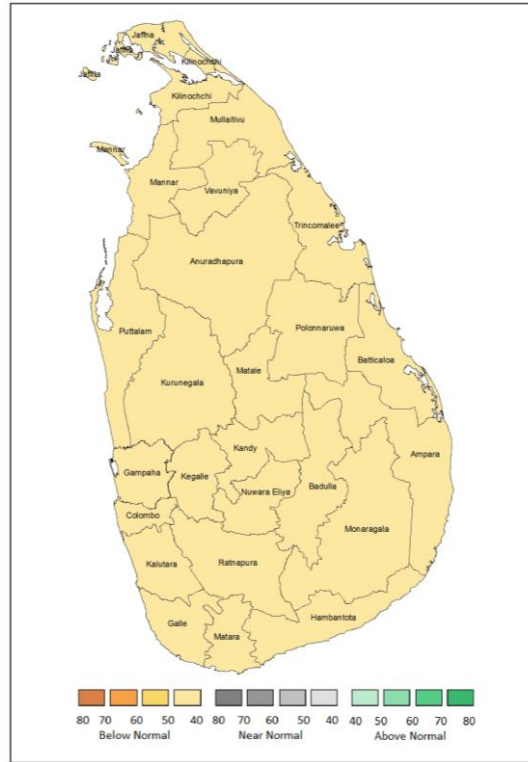


Fig 1.Consensus Probabilistic rainfall forecast for March 2020

Figure 2 represents the weekly rainfall anomaly forecast for March 2020 from Japanese Meteorological Administration (JMA) model. According to the model it is expected below normal rainfall anomaly during all 4 weeks (Fig 2) as well as during the month of March 2020 (Fig. 3).

Fig.4 represents the weekly precipitation anomaly forecast of ECMWF EPS monthly precipitation forecasting system. According to the figure, below normal rainfall is likely over the Island during all four weeks of March 2020.

Figure 5 represents the multi-model ensemble probabilistic rainfall forecast for March 2020 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 over the Island during the month of March 2020.

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 March 2020 for Sri Lanka as given below.

Table 1

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

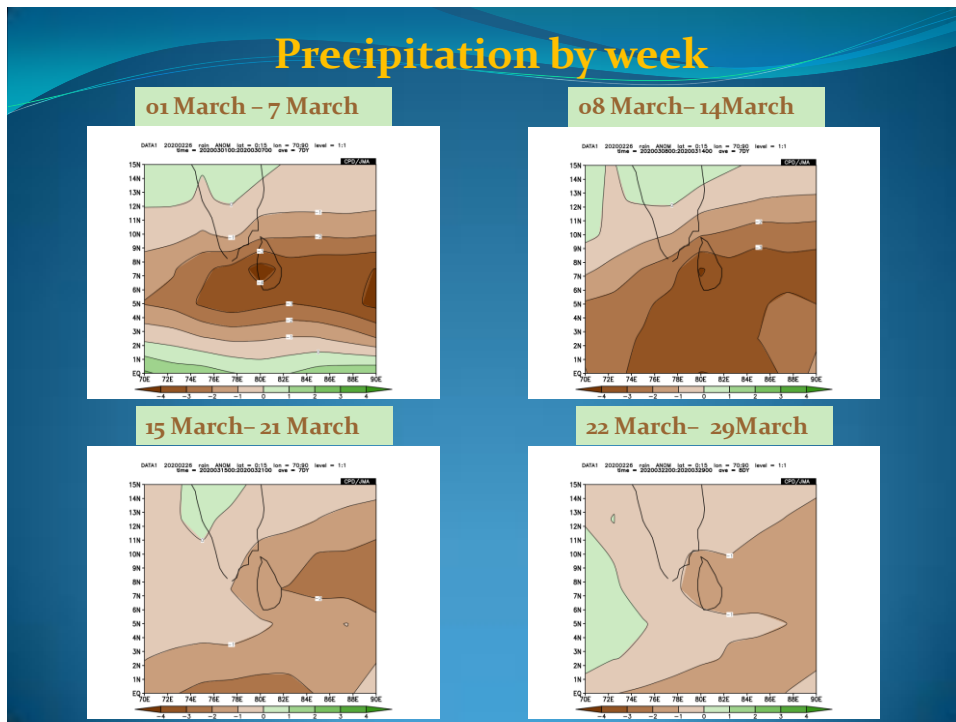


Fig 2. Weekly Rainfall anomaly forecast for March2020 (01 March –07 March, Upper left), (08 March –14 March, Upper right), (15 March – 21 March Lower left) and (22 March–29 March, Lower right) from JMA model.

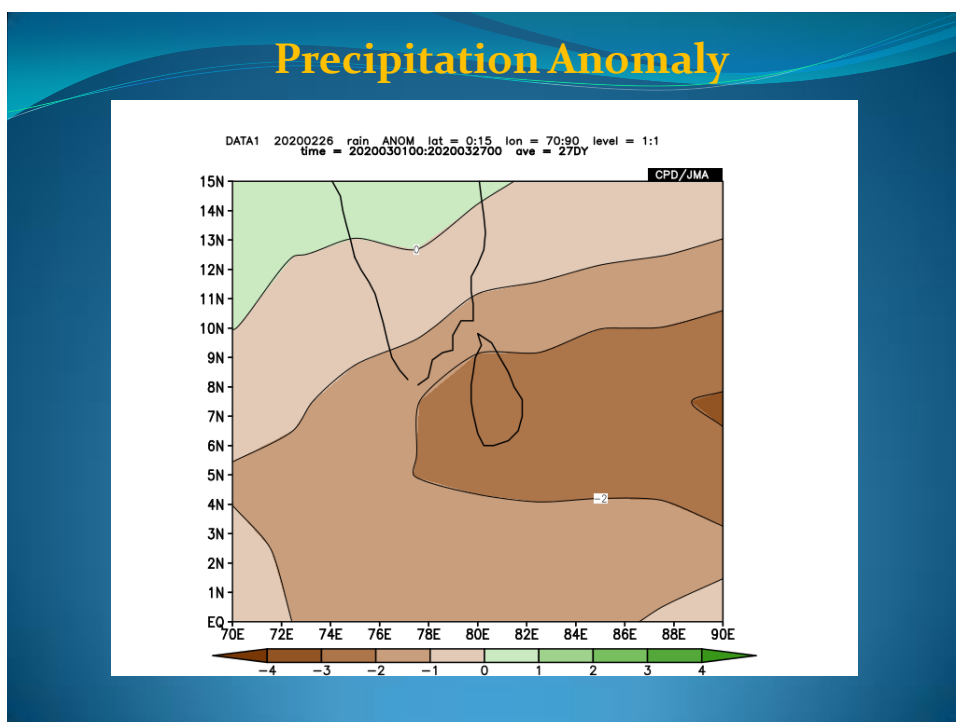


Fig 3. Rainfall anomaly forecast for March 2020 (mm/day) from JMA model

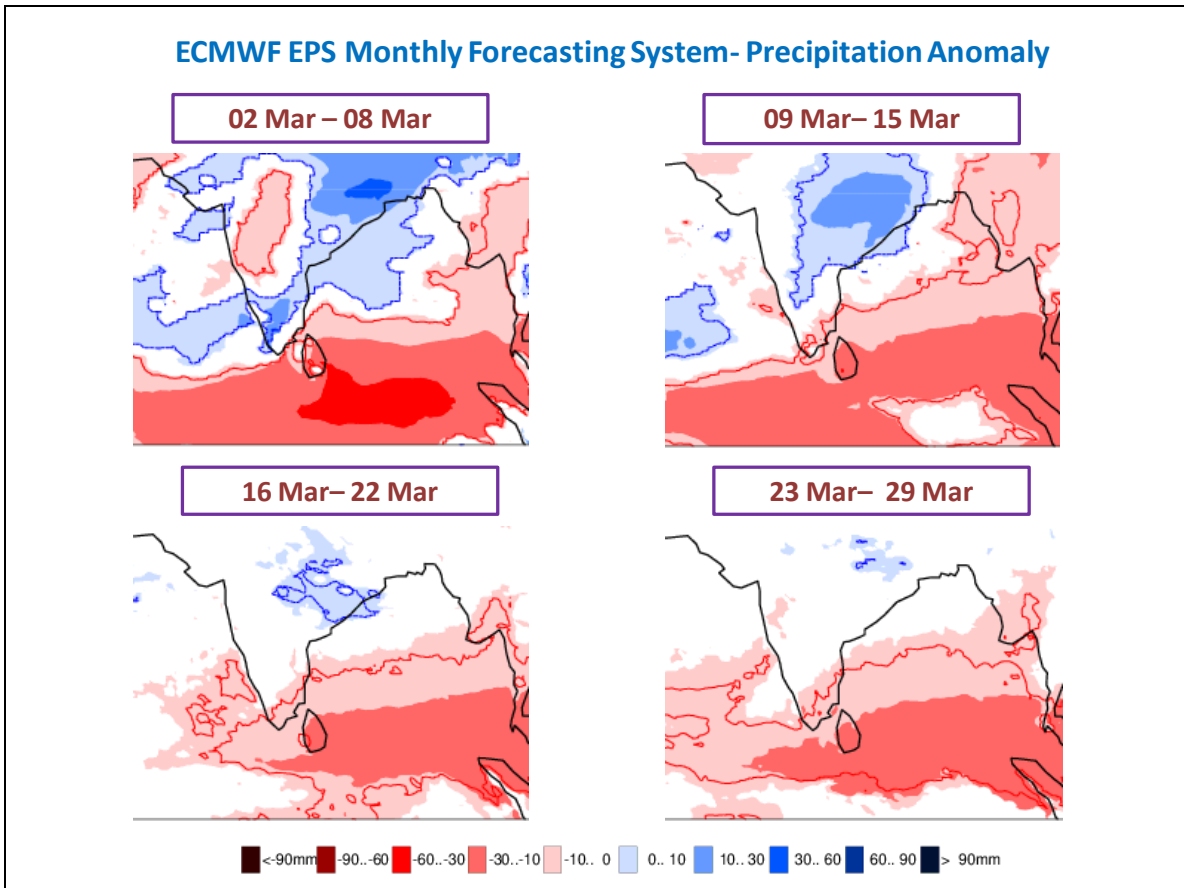


Fig 4. ECMWF EPS monthly precipitation forecast for March 2020

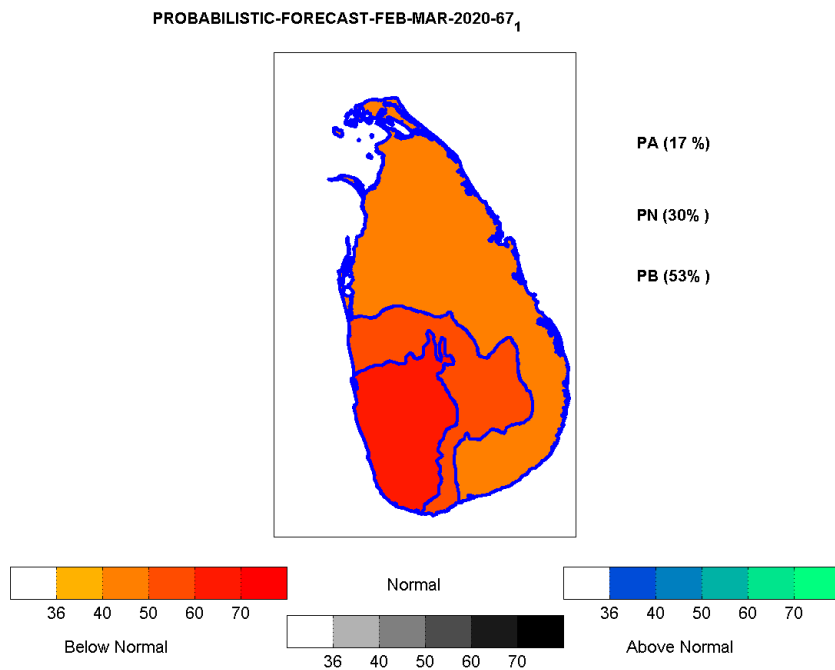


Fig 5. Multi-model ensemble probabilistic forecast for March 2020 from RIMES Forecast Customization System (FOCUS).