



**Government of India
Earth System Science Organization
Ministry of Earth Sciences
India Meteorological Department**

Press: Dated: 19 May, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(19 May-1 June 2022)**

1. Salient Features for week ending on 18 May 2022

- Movement of a Western Disturbances during 16-18 May had caused fairly widespread to widespread rainfall/thunderstorm activity over western Himalayan region and isolated light rainfall/thunderstorm activity over adjoining plains during the period. Heat wave to severe heat wave spell which was prevailing over West Rajasthan and West Madhya Pradesh from 7th May was further extended to east Rajasthan, Uttar Pradesh, East Madhya Pradesh and Jammu & Kashmir Punjab, Haryana and Delhi during 12-15 May. It was abated by 16 May due to above WD.
- Under the influence of a north-south trough from Central India to extreme south Peninsula in the lower tropospheric levels and formation of a cyclonic circulation over Lakshadweep area and neighbourhood in the lower/mid tropospheric levels and its subsequent movement over to extreme south peninsula, fairly widespread to widespread rainfall/thunderstorm activity had occurred over Kerala & Mahe and adjoining areas of Karnataka and over Lakshadweep Islands on four to five days during the week; these systems had also caused isolated to scattered rainfall activity over remaining parts of Peninsular India on a few days; under their influence, isolated heavy / very heavy rainfall activity had occurred over parts of Peninsular India on three to four days and isolated extremely heavy rainfall had occurred over Kerala & Mahe on a single day during the week.
- Convergence of strong southerlies /southwesterlies from Bay of Bengal causing moisture incursion over the region and an east –west trough in lower tropospheric levels which lay extending from plains of Northwest India to Northeast India on most of the days had caused fairly widespread to widespread rainfall/thunderstorm activity over Northeast India and adjoining areas of East India throughout the week; under their influence, isolated extremely heavy rainfall had been reported over Assam & Meghalaya on all the days of the week whereas isolated heavy/very heavy rainfall activity reported from remaining parts of Northeast India and Sub Himalayan West Bengal & Sikkim on most of the days of the week.
- The highest maximum temperature of **49.0°C** had been recorded at **Banda (East Uttar Pradesh)** on **15th May 2022** and the lowest minimum temperature of **20.2°C** had been recorded at **Seoni (East Madhya Pradesh), Shantiniketan (Gangetic West Bengal) and Tiruppattur (Tamil Nadu,**

Puducherry & Karaikkal) on **13th, 15th and 16th May 2022** respectively over the plains of the country during the week.

➤ **Weekly overall Rainfall distribution during the current week ending on 18 May 2022 Pre-monsoon Season's Rainfall Scenario (01 March to 18 May, 2022):** During the week ending on 18 May 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) was +122% with weekly cumulative over northwest India as -64%, while all India cumulative rainfall during this year's **Pre-monsoon Season's Rainfall Scenario (01 March to 18 May, 2022)** is below LPA by -5% and over northwest India, it is above LPA by -77%. Details of the rainfall distribution over the four broad geographical regions of India are given in **Table 1** and Meteorological sub-division-wise rainfall both for week and season are given in Annex I and II respectively.

Table 1: Rainfall status (Week and season)

| Region | WEEK | | | SEASON | | |
|-------------------------|--------------------------|--------|-------|--------------------------|--------|-------|
| | 12.05.2022 TO 18.05.2022 | | | 01.03.2022 TO 18.05.2022 | | |
| | Actual | Normal | % Dep | Actual | Normal | % Dep |
| EAST & NORTH-EAST INDIA | 126.4 | 40.5 | +212 | 371.8 | 287.9 | +29 |
| NORTH-WEST INDIA | 2.8 | 7.9 | -64 | 22.9 | 99.5 | -77 |
| CENTRAL INDIA | 1.7 | 4.9 | -65 | 11.9 | 27.9 | -57 |
| SOUTH PENINSULA | 49.3 | 18.1 | +173 | 142.7 | 87.2 | +64 |
| Country as a whole | 31.3 | 14.1 | +122 | 98.3 | 103.0 | -5 |

2. Large scale features

➤ Currently, La Niña conditions are prevailing over the equatorial Pacific region. The latest Monsoon Mission Climate Forecasting System (MMCFS) forecast indicates that La Niña conditions are likely to continue throughout the Month. Other climate models are also indicating enhanced probability for La Niña conditions likely during summer season. At present, neutral Indian Ocean Dipole (IOD) conditions are present over the Indian Ocean and the latest MMCFS forecast indicates that the

neutral IOD conditions are likely to continue during summer season. As the changes in the sea surface temperature (SST) conditions over the Pacific and the Indian Oceans are known to influence the Indian climate, IMD is carefully monitoring the evolution of sea surface conditions over these Ocean basins.

➤ The Madden Julian Oscillation Index (MJO) currently lies in phase 6 with amplitude more than 1. It would move eastwards to phase 7 during later part of week 1 and would continue in same phase during rest part of the forecast period. Hence, MJO will not support any convective activity over the North Indian Ocean (NIO) including the Bay of Bengal (BoB) and the Arabian Sea (AS) during entire forecast period.

3. Forecast for next two week

[Weather systems & associated Precipitation during Week 1 \(19 to 25 May, 2022\) and Week 2 \(26 May to 01 June, 2022\)](#)

Forecast for week 1 (19 to 25 May, 2022):

Southwest Monsoon:

- The Northern Limit of Southwest Monsoon passes through 5°N/80°E, 8°N/85°E, 12.5°N/90°E and 16.0°N/94.5°E.
- **Conditions are favourable for further advance of Southwest Monsoon into some more parts of South & Central Bay of Bengal and some parts of South Arabian Sea during next 2 days. Conditions will continue to be favourable for further progress leading to onset of Southwest Monsoon over Kerala towards end of the week**

Weather Forecast

- **Due to strong cross equatorial flow from Bay of Bengal to Andaman Sea in lower tropospheric levels;** fairly widespread to widespread rainfall with isolated heavy falls & thunderstorm/lightning/gusty winds very likely over Andaman & Nicobar Islands during the week.
- A cyclonic circulation lay over Gulf of Martaban & adjoining Myanmar extended upto middle-tropospheric levels. **Under its influence, a Low Pressure Area has formed over the same region on the evening of today, the 19th May. It is likely to be more marked and move northeast-wards towards Myanmar during next 24 hours.** Under its influence; squally weather with wind speed reaching 40-50 kmph gusting to 60 kmph likely over north Andaman Sea and adjoining eastcentral Bay of Bengal during 1st half of the week.

- **A Western Disturbance as a cyclonic circulation lies over Afghanistan & neighbourhood at 3.1 Km above mean sea level. It is very likely to move slowly eastwards over North Pakistan & neighbourhood by tomorrow, the 20th May, 2022 and then east-northeastwards across western Himalayan region during subsequent 3-4 days. Under its influence:**
 - ❖ Fairly widespread to widespread light/moderate rainfall with isolated thunderstorm/lightning/gusty winds & hailstorm very likely over Jammu-Kashmir, Himachal Pradesh & Uttarakhand during 1st half of the week.
 - ❖ Isolated to scattered light rainfall with thunderstorm/lightning/gusty winds very likely over Punjab, Haryana, North Rajasthan and Uttar Pradesh during 20th to 24th May with scattered to fairly widespread light rainfall over the region on 23rd May, 2022.
 - ❖ Duststorm/Thunderstorm at isolated places very likely over Uttar Pradesh on 20th and over Rajasthan on 21st & 22nd May.
 - ❖ Strong Surface Winds with wind speed reaching 25-35 kmph over Rajasthan on 20th & 21st and over Punjab, Haryana & Uttar Pradesh on 22nd & 23rd May.
- **A cyclonic circulation lies over north interior Tamilnadu & neighbourhood extending upto middle tropospheric levels. It is likely to move northwards during next 2 days and become less marked thereafter. A north-south trough runs from central Madhya Pradesh to interior Tamilnadu in lower tropospheric levels. Under the influence of these systems:**
 - ❖ Fairly widespread to widespread light/moderate rainfall with isolated thunderstorm/lightning/gusty winds very likely over Kerala-Mahe and Karnataka during most days of the week. **Isolated extremely heavy falls is very likely over Coastal & South Interior Karnataka today** and **isolated heavy** rainfall on 20th May. **Heavy to very heavy rainfall** at isolated places likely over Kerala-Mahe 19th & 20th and **isolated heavy rainfall** rest days of the week.
 - ❖ Scattered to fairly widespread light/moderate rainfall with isolated thunderstorm/lightning very likely over Tamilnadu & Rayalaseema and isolated rainfall/thunderstorm over rest parts of the Peninsular India during the week. Isolated heavy falls is also very likely over Tamilnadu & Rayalaseema on today, the 19th May, 2022.

- **Due to strong southwesterly winds from Bay of Bengal to northeast & adjoining East India at lower tropospheric levels;**
- ❖ Widespread light/moderate rainfall with **isolated heavy to very heavy falls** very likely over Arunachal Pradesh on 19th to 21st; over Assam-Meghalaya and Sub-Himalayan West Bengal & Sikkim during 19th to 22nd May. **Isolated extremely heavy falls very likely over Meghalaya on 19th & 21st May, 2022. Rainfall activity is very likely to decrease thereafter.**
- ❖ Isolated to scattered light rainfall with isolated thunderstorm/lightning/gusty winds likely over Bihar, Jharkhand, Gangetic West Bengal and Odisha during most days of the week.
- Light isolated rainfall/thunderstorm is also likely over central parts of the country during 2nd half of the week.
- No significant weather likely over remaining parts of the country during the week.

Rainfall for week 2 (26 May to 01 June, 2022):

- **Decrease in rainfall/thunderstorm activity over northeast India as compared to week 1.**
- Due to strong westerly flow from Arabian Sea and trough over south Peninsula India, light/moderate fairly widespread to widespread rainfall activity likely over southwest Peninsular India and isolated to scattered rainfall over rest peninsular India. **Isolated heavy rainfall is also likely over Kerala, Coastal & South Interior Karnataka during many days of the week.**
- **Overall, rainfall activity is likely to be normal to above normal over south Peninsular and central India; near normal over east & northeast India and below normal over northwest India during the week.**

Maximum Temperatures for week 1(19 to 25 May, 2022) and week 2(26 May to 01 June, 2022)

Maximum Temperatures for Week 1(19 to 25 May, 2022):

- **Maximum Temperatures (as on 18/05/2022)** were appreciably above normal (3.1°C to 5.0°C) at a few places over Bihar and East Uttar Pradesh; above normal (1.6°C to 3.0°C) at

many places over Jharkhand and West Uttar Pradesh; at a few places over Jammu & Kashmir, Himachal Pradesh, East Rajasthan, East Madhya Pradesh and Saurashtra & Kutch.

- No significant change in maximum temperatures during next 2 days over Northwest, Central India and Gujarat State and fall by 2-4°C thereafter.
- **Heat wave conditions** in many places with severe heat wave conditions in isolated pockets over West Rajasthan on 20th with heat wave conditions in some parts on 19th May.
- **Heat wave conditions** in isolated pockets very likely over East Rajasthan, Madhya Pradesh, Uttar Pradesh, south Punjab and south Haryana on 19th & 20th May; 2022.

Maximum Temperatures for week 2 (26 May to 01 June, 2022):

- **Maximum temperatures likely to fall over most parts of northwest & adjoining central India as compared to week 1.**
- These are likely to be above normal by 1-3°C over most parts of Western Himalayan Region, Odisha & adjoining Coastal Andhra Pradesh. It is likely to be below normal to near normal over rest parts of India.
- **No significant heat wave is likely over any part of the country.** Refer Annex V)

4. Cyclogenesis forecast for North Indian Ocean during next 2 weeks

Refer

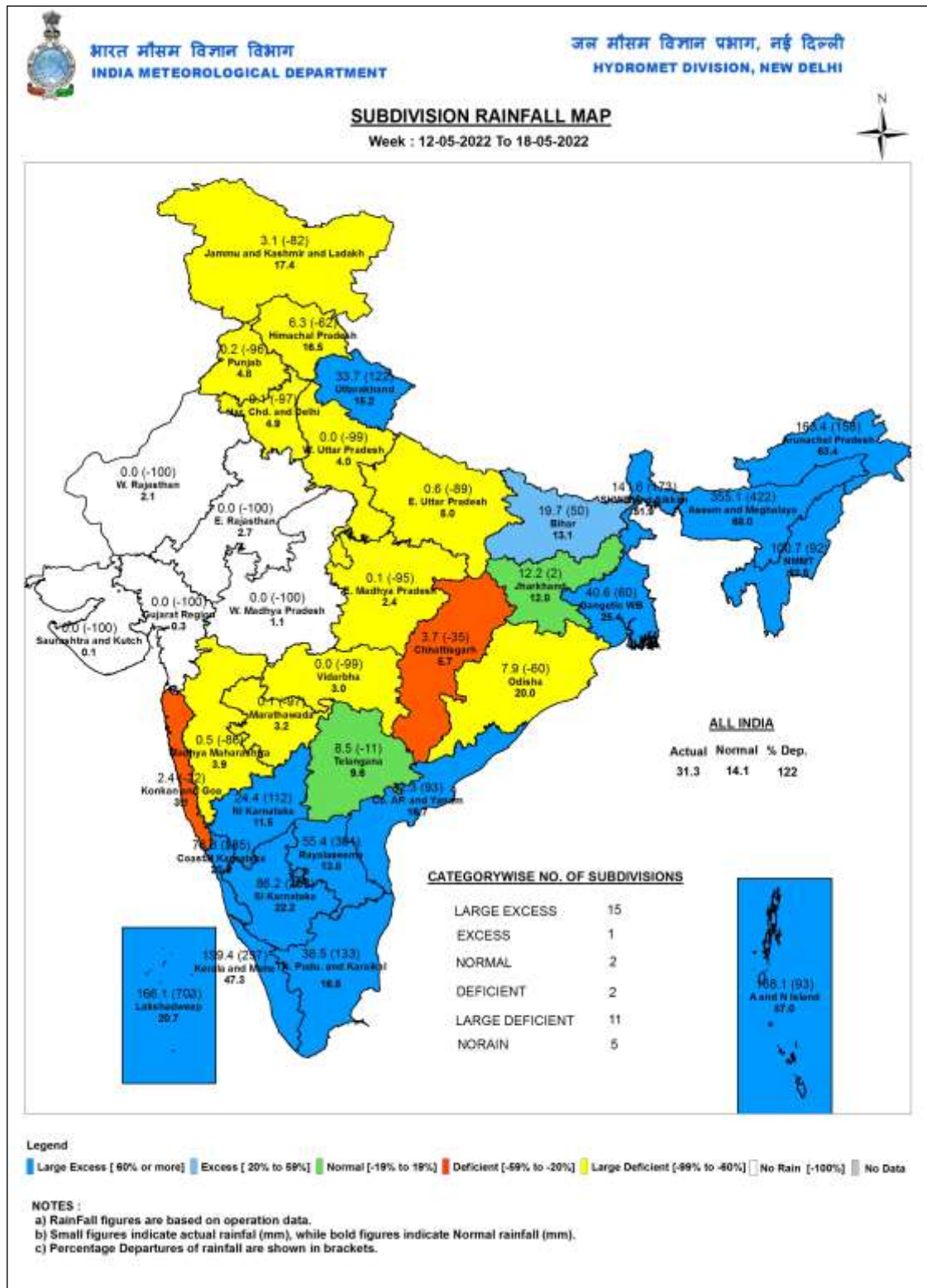
https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_5d2d9e_Extended%20Range%20Outlook_12052022.pdf

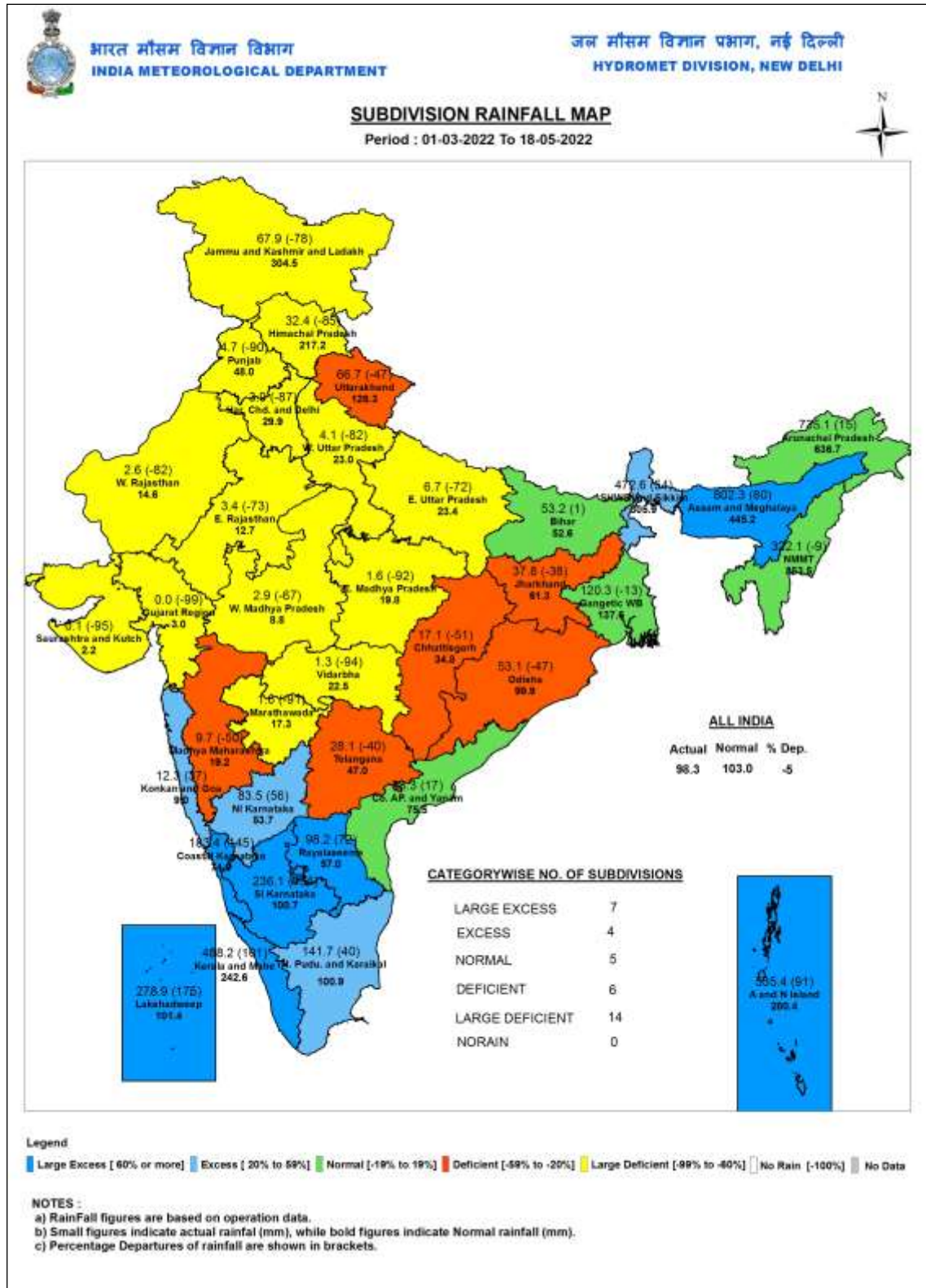
Next weekly update will be issued on next Thursday i.e. 26 May April 2022

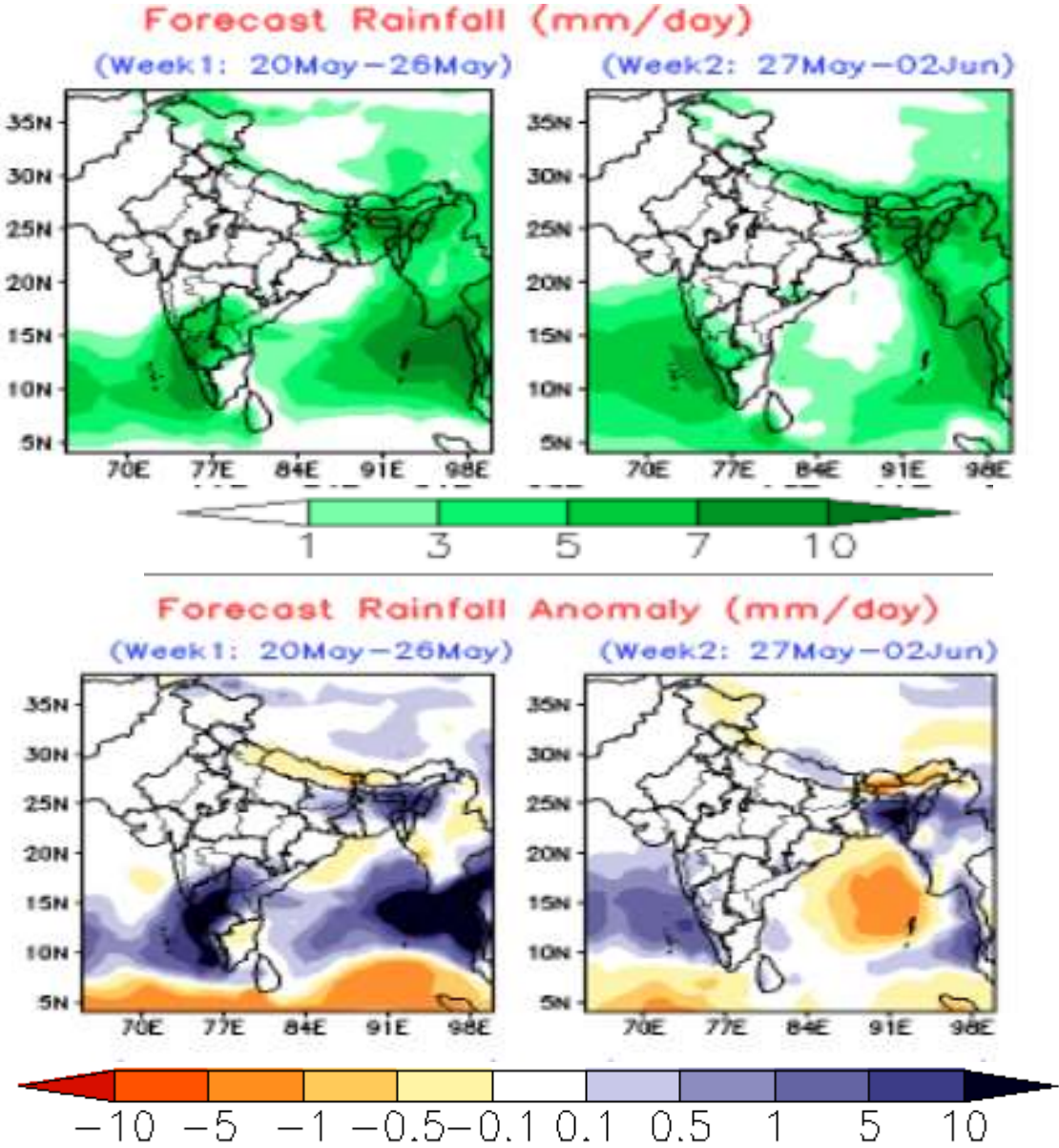
Legends: Heavy Rain: 64.5 to 115.5 mm Very Heavy Rain: 115.6 to 204.4 mm, Extremely Heavy Rain > 204.4 mm

| SPATIAL DISTRIBUTION (% of Stations reporting) | | | |
|---|--------------------------------------|------------|-------------------------------|
| % Stations | Category | % Stations | Category |
| 76-100 | Widespread (WS/ Most Places) | 26-50 | Scattered (SCT/ A Few Places) |
| 51-75 | Fairly Widespread (FWS/ Many Places) | 1-25 | Isolated (ISOL) |

| Probabilistic Forecast | |
|-------------------------------|-------------------------------|
| Terms | Probability of Occurrence (%) |
| Unlikely | < 25 |
| Likely | 25 - 50 |
| Very Likely | 50 - 75 |
| Most Likely | > 75 |



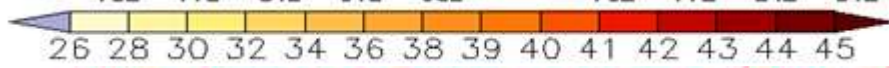
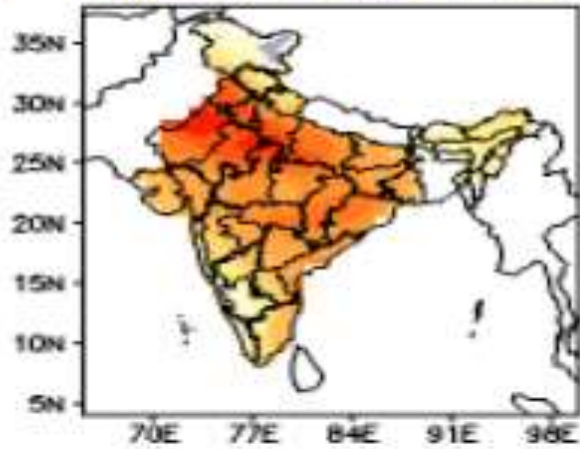
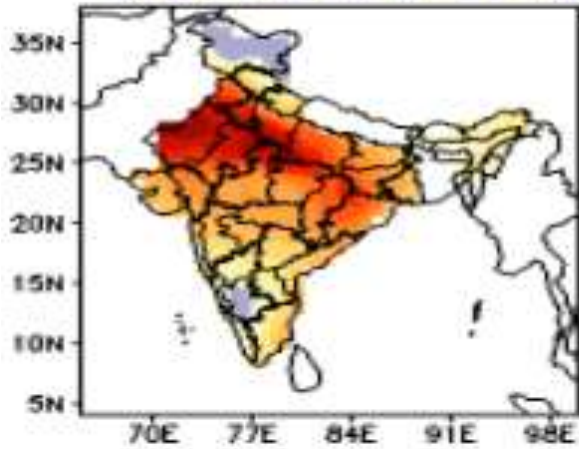




MME Bias corrected forecast Tmax (Deg)

(Week1: 20May-26May)

(Week2: 27May-02Jun)



MME forecast Tmax anomaly (Deg C)

(Week1: 20May-26May)

(Week2: 27May-02Jun)

