



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

Press: Dated: 2 June, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(2-15 June 2022)**

1. Salient Observed Features for week ending on 1 June 2022

- **The Southwest Monsoon had set in over Kerala on 29th May, 2022 against the normal date of 01st June (3 days ahead of normal date).** On 31st May 2022, it had further advanced into some parts of Central Arabian Sea, some parts of Karnataka, entire Kerala, some more parts of Tamil Nadu, entire Southeast Bay of Bengal, some more parts of Southwest Bay of Bengal, most parts of Eastcentral Bay of Bengal, some parts of Westcentral and Northeast Bay of Bengal; the Northern Limit of Monsoon (NLM) passed through Lat. 15°N/ Long. 60°E, Lat. 15°N/ Long. 70°E, Karwar, Chikmangaluru, Bengaluru, Dharmapuri, Lat. 10°N/Long. 80°E, Lat. 11.0°N/ Long. 83°E, Lat.14.0°N/Long.86°E, Lat.20.0°N/Long.91°E and Lat.22.0°N/Long.93°E on that day and remained the same till the end of the week.
- Movement of two Western Disturbances(28-31 May and 30 May-1 June) across northwest and adjoining plains of India with induced cyclonic circulation and persistence easterly wind pattern at lower levels across Indo-Gangetic plains at lower level in the region, had caused scattered to fairly widespread rainfall/thunderstorm activity over western Himalayan region and isolated at adjoining plains of India during the period.
- **As a result, No heat wave was observed over any parts of India**
- **Weekly overall Rainfall distribution during the current week ending on 1 June 2022 Pre-monsoon Season's Rainfall Scenario (01 March to 31 May, 2022):** During the week ending on 1 June 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) was -41% with weekly cumulative over northwest India as -36%, while all India cumulative rainfall during this year's **Pre-monsoon Season's Rainfall Scenario (01 March to 31 May,**

2022) is near to LPA by -1% and over northwest India, it is below LPA by -63%. 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		
	26.05.2022 TO 01.06.2022			01.03.2022 TO 31.05.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	26.7	52.7	-49%	445.1	376.8	18%
NORTH-WEST INDIA	4.5	7.1	-36%	42.3	114.4	-63%
CENTRAL INDIA	3.2	6.5	-50%	22.8	37.5	-39%
SOUTH PENINSULA	15.6	20.1	-23%	198.2	121.3	63%
Country as a whole	9.8	16.7	-41%	130.6	131.7	-1%

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 7 with amplitude more than 1. It would move to phase 8 with amplitude remaining more than 1 from 3rd June and would continue in same phase during remaining 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 the entire forecast period.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (02 to 08 June, 2022) and Week 2 (09 to 15 June, 2022)

Advancement of Southwest Monsoon:

- Southwest Monsoon has further advanced into some parts of northwest Bay of Bengal, some more parts of northeast & eastcentral Bay of Bengal and most parts of Mizoram & Manipur and some parts of Nagaland. The Northern Limit of Monsoon (NLM) now passes through Lat. 15°N/Long.60°E, Lat.15°N/Long.70°E, Karwar, Chikmagaluru, Bengaluru, Dharmapuri, Lat.10°N/ Long. 80°E, Lat. 11.0°N/ Long. 83°E, Lat.14.0°N/ Long.86°E, Lat.21.0°N/91°E, Aizwal, Kohima and 26.50°N/95°E(**Annexure-I**).
- **Conditions are favourable for further advance of Southwest monsoon into some more parts of Central & North Bay of Bengal, remaining parts of northeastern states and some parts of Sub- Himalayan West Bengal & Sikkim during next 2 days.**

Forecast for week 1 (02 to 08 June, 2022):

- **Due to east- west trough from Southeast Uttar Pradesh to Nagaland, north- south trough roughly along Long.88°E & to north of Lat.20°N and strong southwesterly winds from Bay of Bengal to Northeast India at lower tropospheric levels:**
 - ✓ Fairly widespread/ widespread light/moderate rainfall with isolated **heavy falls** very likely over Northeast India and Sub-Himalayan West Bengal & Sikkim during the week.
 - ✓ Isolated **heavy to very heavy rainfall** very likely over Assam & Meghalaya during 02nd to 04th and over Sub-Himalayan West Bengal & Sikkim during 03rd to 06th June. Isolated **extremely heavy falls** also likely over Meghalaya on 02nd & 03rd June.
 - ✓ Isolated/scattered rainfall with thunderstorm/lightning/gusty winds very likely over Bihar, Jharkhand, Odisha and Gangetic West Bengal during the week.

○ **Under the influence of monsoonal westerly winds from Arabian Sea over the south peninsular India and shear zone runs along Lat.10°N across South Peninsular India in lower tropospheric levels:**

- ✓ Fairly widespread/ widespread light/moderate rainfall with thunderstorm/lightning very likely over Coastal Karnataka, South Interior Karnataka, Kerala & Mahe and Lakshadweep and isolated to scattered over Andhra Pradesh, Telangana, North Interior Karnataka & Tamilnadu, Puducherry & Karaikal during the week. **Isolated heavy rainfall also likely over Tamilnadu & South Interior Karnataka during 02nd to 04th and over Kerala & Mahe on 02nd to 06th June, 2022.**
- ✓ Fairly widespread/ widespread light/moderate rainfall with **isolated heavy falls** is also likely over Andaman & Nicobar Islands during the week.
- ✓ Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over southeast Arabian Sea, Lakshadweep area, off Kerala coast on 02nd; southeast Bay of Bengal and adjoining Andaman Sea on 0^{2nd} & 0^{3rd}; southeast Bay of Bengal on 0^{4th}; southwest Bay of Bengal and adjoining westcentral Bay of Bengal on 0^{6th} June, 2022. Strong Winds (wind speed 40-50 kmph gusting to 60 kmph) over southwest Arabian Sea, Comorin area, gulf of Mannar, south Tamil Nadu coast and south Andaman sea on 0^{2nd} & 0^{3rd}; southwest Arabian Sea during most days of the week. Fishermen are advised not to venture into these areas.
- No significant weather likely over remaining parts of the country during the week.

Rainfall for week 2 (09 to 15 June, 2022):

- Due to southwesterly winds from Bay of Bengal to northeastern states at lower tropospheric levels, light/moderate fairly widespread to widespread rainfall activity with isolated heavy falls likely over northeast India during most days of the week.
- Due to westerly flow from Arabian Sea 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.
- **Southwest monsoon is likely to advance over some more parts of south peninsular India.**
- **Overall, rainfall activity is likely to be above normal over northeast India; near normal**

over many parts of south Peninsular India and below normal over rest parts of the country.

Maximum Temperatures for week 1(02 to 08 June, 2022) and week 2(09 to 15 June, 2022)

Maximum Temperatures for Week 1(02 to 08 June, 2022):

- **Maximum Temperature Departures (as on 01-06-2022):** Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Coastal Andhra Pradesh & Yanam; above normal (1.6°C to 3.0°C) at most places over Punjab and West Rajasthan; at a few places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Gujarat Region, Madhya Pradesh, Odisha and Andaman & Nicobar Island and at isolated places over West Uttar Pradesh and Tamilnadu, Puducherry & Karaikal. These are near normal or below normal over rest parts of the country.
- Gradual rise in maximum temperatures by about 2°C very likely over most parts of Northwest India during next 2 days and thereafter fall by 2-3°C.
- No significant change in maximum temperatures very likely over rest parts of the country during the week.
- **Heat wave conditions in isolated places very likely over Rajasthan on 2nd & 03rd; over south Punjab, south Haryana, south Uttar Pradesh & north Madhya Pradesh on 03rd & 04th and over Vidarbha during 02nd-05th June, 2022.**

Maximum Temperatures for week 2 (09 to 15 June, 2022):

- **Maximum temperatures are likely to be above normal over East India and Uttar Pradesh and below to near normal over the rest parts of the country.**
- **Heat wave conditions likely to occur over isolated pockets of Uttar Pradesh and East India during some days of the week.** Refer Annex V)

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

Refer:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_01fc08_Extended%20Range%20Outlook_02062022.pdf

- MJO phase and Analysis of all Model forecast products (IMD GFS, NCEP GFS, ECMWF, NCUM, NEPS, GEFS and IMD MME CFS (V2) etc.) are indicating no

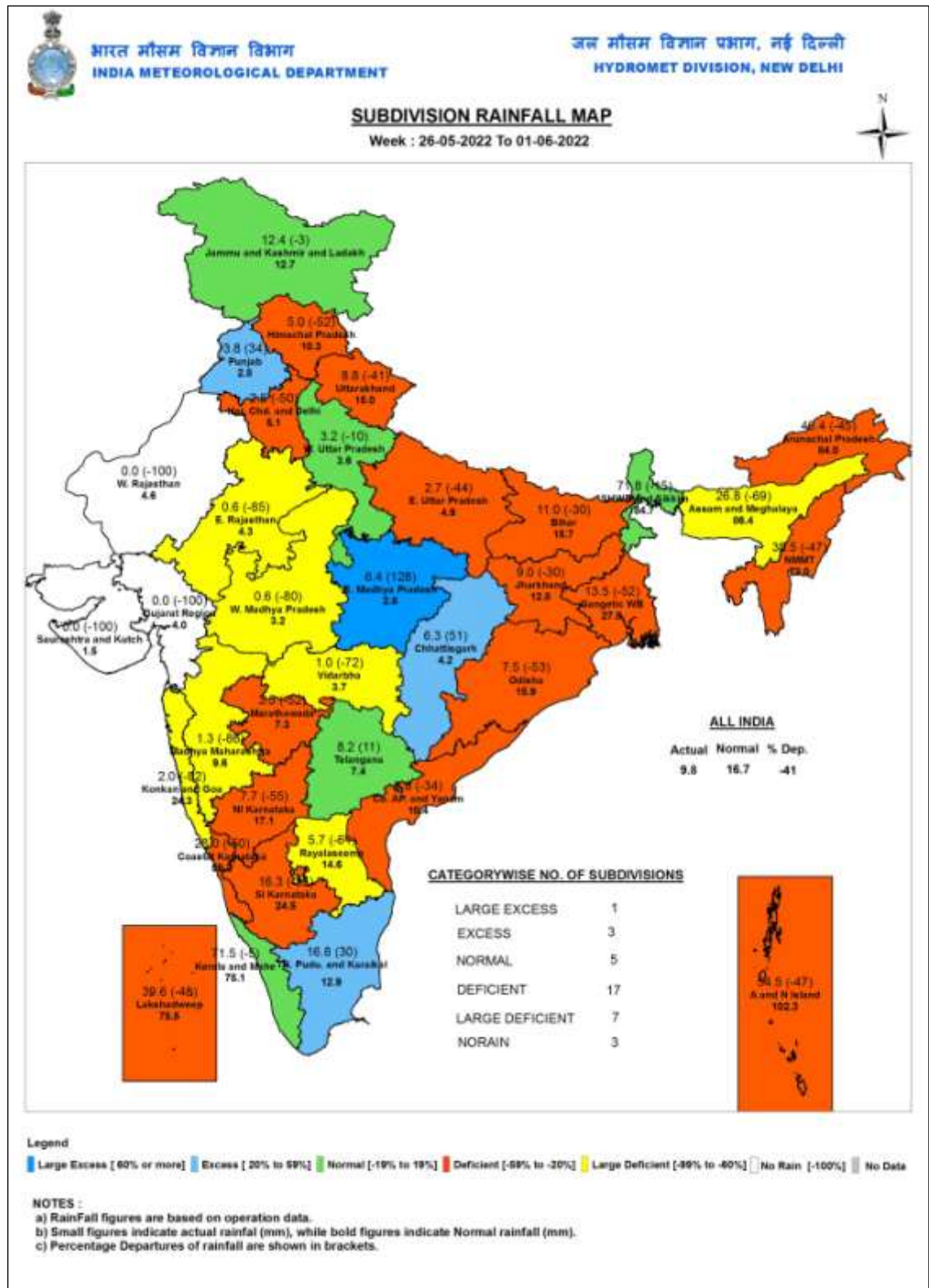
cyclogenesis over the region.

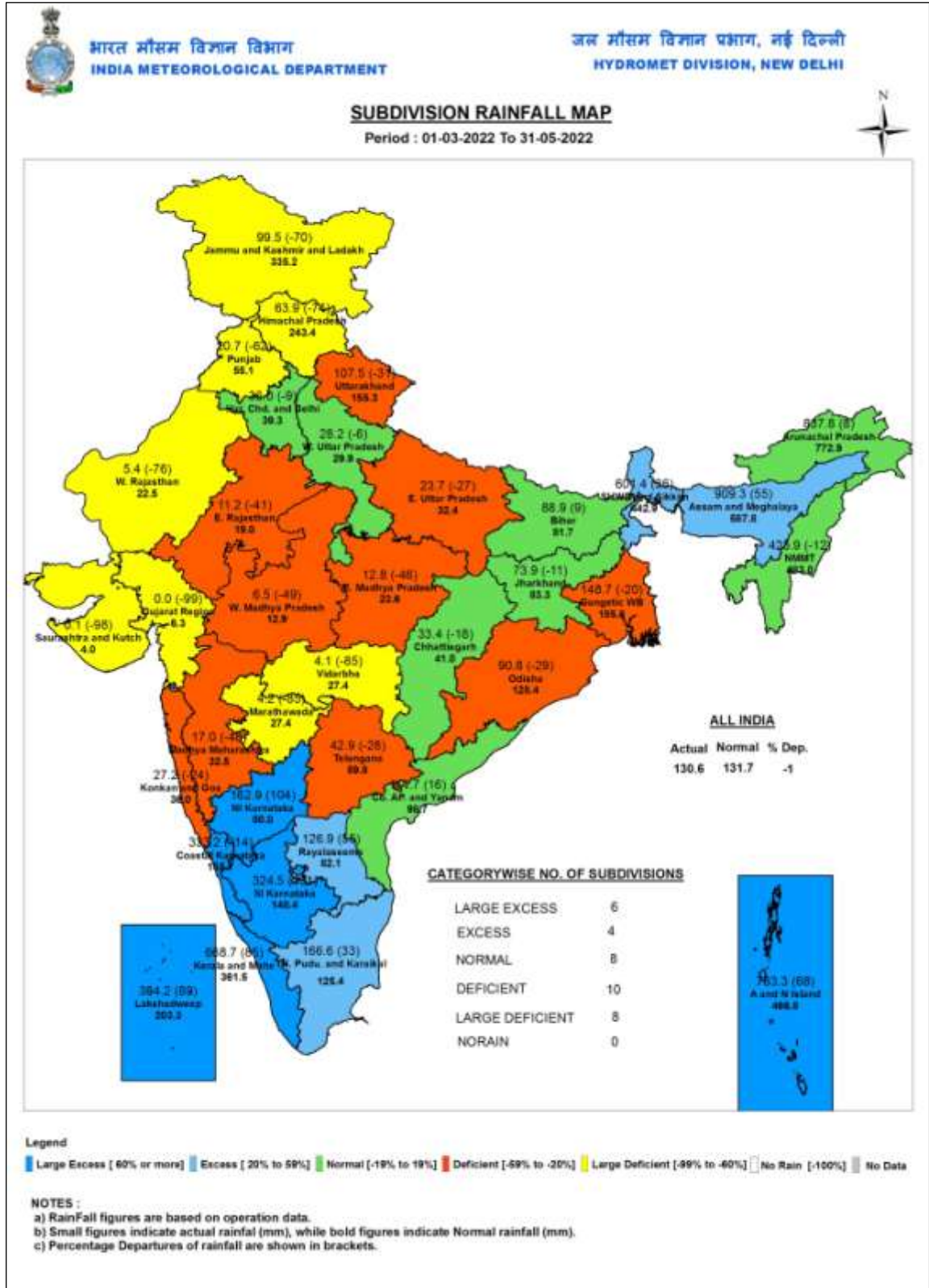
Next weekly update will be issued on next Thursday i.e. 9 June 2022

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

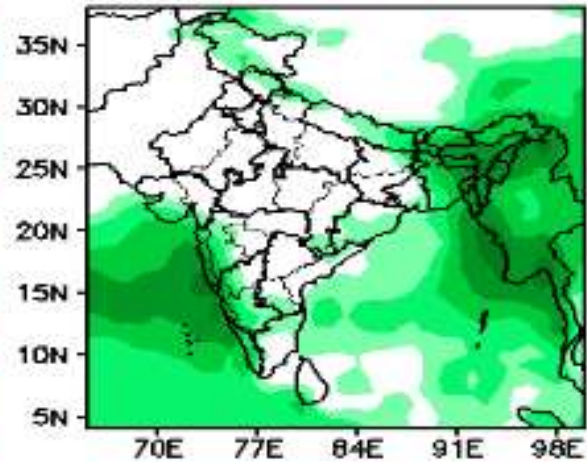
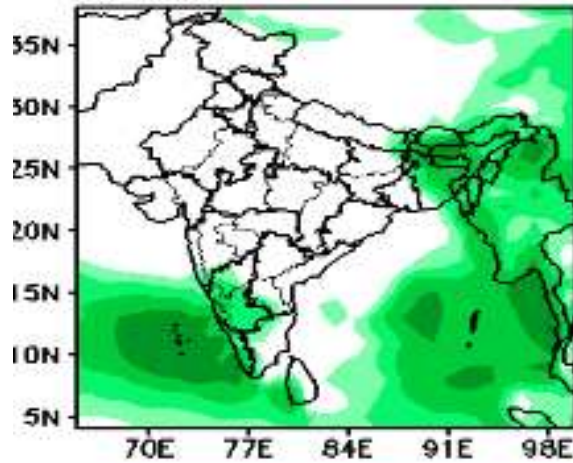




Forecast Rainfall (mm/day)

(Week1: 03Jun-09Jun)

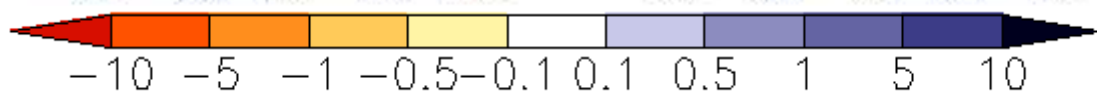
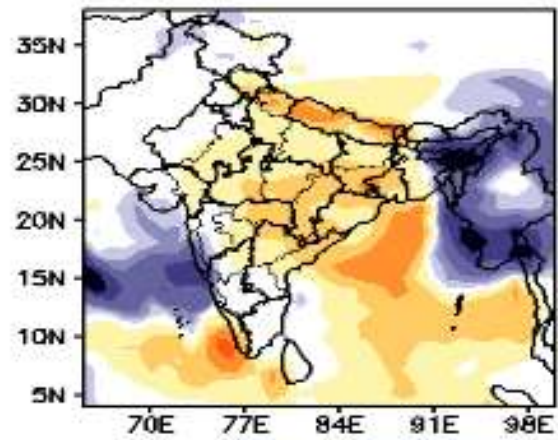
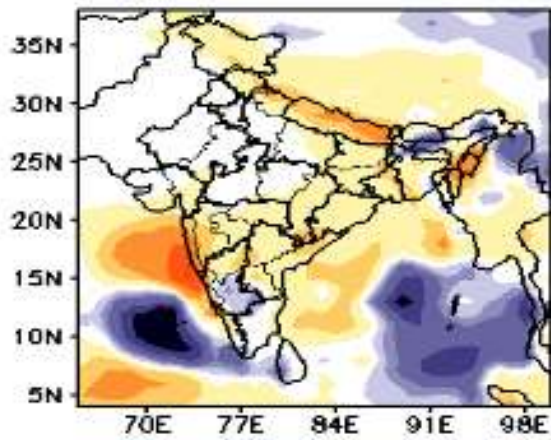
(Week2: 10Jun-16Jun)



Forecast Rainfall Anomaly (mm/day)

(Week1: 03Jun-09Jun)

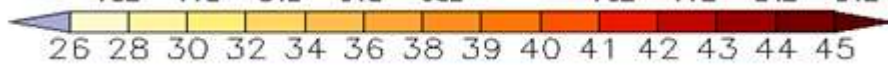
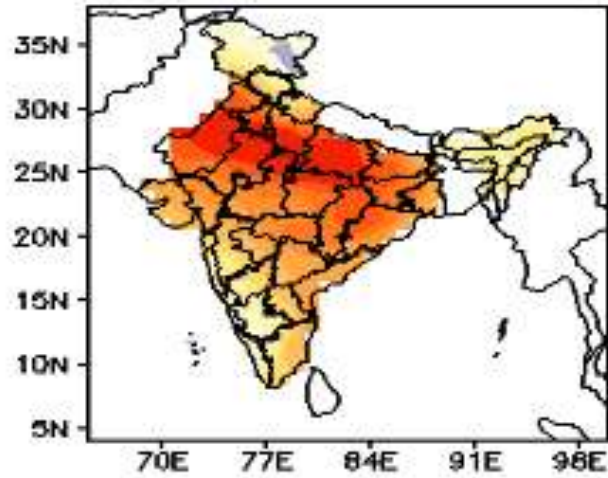
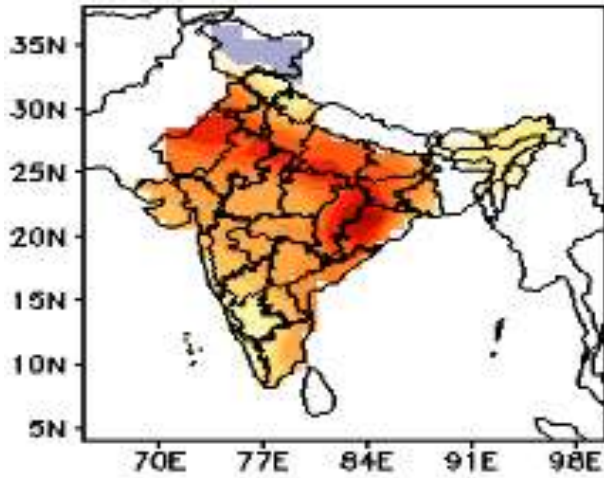
(Week2: 10Jun-16Jun)



MME Bias corrected forecast Tmax (Deg)

(Week1: 03Jun-09Jun)

(Week2: 10Jun-16Jun)



MME forecast Tmax anomaly (Deg C)

(Week1: 03Jun-09Jun)

(Week2: 10Jun-16Jun)

