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

Press: Dated: 25th May, 2023

Subject: Current Weather Status and Extended range Forecast for next two weeks (25 May-7 June 2023)

1. Salient Observed Features for week of 18-24 May 2023

- As predicted, movement of an active Western Disturbances and induced cyclonic circulation, to northwest India from night of 23rd May, had caused scattered to fairly widespread rainfall/thunderstorm activity over both Western Himalayan Region and over plains of Northwest India during 23-25 May 2023; under its influence, isolated squall and hailstorm activity had been reported in the region and isolated dust storm activity had been reported over Rajasthan on 23 and 24 May. Eastern India including Bihar also reported wet spell and thunderstorm and lightning activities during the same period due to supporting synoptic systems and lower levels easterly/ south-easterly winds to the north of the region supported with moisture incursion from Bay of Bengal. As a result of which, Heat wave conditions which was developed and remained in the isolated pockets over these various met Sub-Divisions and over north Madhya Pradesh and Jharkhand during 21-23 May, was abated from 24 May
- Heavy Rainfall: Heavy to very heavy rainfall had occurred at isolated places over Assam & Meghalaya on two days and over Arunachal Pradesh and South Interior Karnataka on one day each during the week. Heavy rainfall had occurred at isolated places over Bihar, Tamil Nadu, Puducherry & Karaikkal and Kerala & Mahe on two days each and over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Sub Himalayan West Bengal & Sikkim, Jharkhand, Uttarakhand, Rayalaseema and South Interior Karnataka on one day each during the week.

- The highest maximum temperature of **46.5°C** had been recorded at **Jhansi (West Uttar Pradesh)** on **22nd May 2023** and the lowest minimum temperature of **15.5°C** had been recorded at **Motihari (Bihar)** on **23rd May 2023** over **t**he plains of the country during the week.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 24 May 2023 and Pre-monsoon Season's Rainfall Scenario (1 March-24 May 2023):** It shows for the country as a whole, the weekly cumulative All India Rainfall in % departure from its long period average (LPA) till week ending on 24 May 2023 was -24%, over south Peninsula as -18%, central India as -15% and northwest India had -19% while all India Seasonal cumulative rainfall % departure during this year's **Pre-monsoon Season's Rainfall** during **1 March-24 May 2023** is +11% and over northwest India, it is +10%. 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		
	11.05.2023 TO 24.05.2023			01.03.2023 TO 24.05.2023		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	30.3	44.3	-32%	212.9	320.9	-34%
NORTH-WEST INDIA	6.5	8	-19%	117.1	106.6	+10%
CENTRAL INDIA	3.3	3.9	-15%	78.1	30	+160%
SOUTH PENINSULA	13	15.8	-18%	151.4	101.2	+50%
Country as a whole	10.5	13.9	-24%	126	113.9	+11%

2. Large scale features

- Currently, ENSO-neutral conditions prevailing over the equatorial Pacific region. Also, neutral IOD conditions are present over the Indian Ocean and the latest MMCFS forecast indicates that the neutral

IOD conditions are likely to continue during the remaining period of the pre-monsoon season.

- The Madden Julian Oscillation (MJO) Index is currently in Phase 7 with amplitude less than 1. It would move across phases 7 and 8 during week 1. Thereafter, it will move across phase 1 during beginning of week 2 and across phase 2 from 5th May onwards.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (25 to 31 May, 2023) and Week 2 (1-7 June, 2023)

Forecast for week 1 (25-31 May, 2023):

Significant Meteorological features:

- A cyclonic circulation lies over north Pakistan & adjoining Punjab in lower tropospheric levels.
- A Trough runs from northwest Uttar Pradesh to south Bangladesh in lower tropospheric levels.
- These systems are likely to move across Northwest India till 26th May.
- It will be accompanied by moisture supply from Arabian Sea to northwest India during the same period.
- A trough runs from southeast Madhya Pradesh to Coastal Karnataka in lower tropospheric levels.
- A fresh **Western Disturbance** is very likely to affect northwest India from 29th May night.
- Strong southwesterly winds from Bay of Bengal to northeast India are prevailing at lower tropospheric levels.

Rainfall Forecast and warning over the country during next 1 week(25-31 May):

Northwest India:

- Light/moderate rainfall at most places with thunderstorm, lightning & occasional gusty winds/squall very likely over Western Himalayan Region and rainfall at many places with thunderstorm, lightning & occasional gusty winds/squall very likely over plains of Northwest India till 26th May with maximum intensity on 25th May.
- **Thundersquall/Gusty Wind speed reaching 50-60 kmph** likely at isolated places over Uttarakhand, Punjab, Haryana-Chandigarh, Uttar Pradesh and north Rajasthan on 25th May.
- **Moderate to heavy rainfall** very likely at isolated places over Himachal Pradesh, Uttarakhand, Punjab and north Rajasthan on 25th May.
- **Hailstorm** very likely at isolated places over Jammu division, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh, Uttar Pradesh and north Rajasthan on 25th May.
- Under the influence of a Western Disturbance, a fresh spell of rainfall/thunderstorm is likely over northwest India from 29th Night.

Northeast India:

- ❖ Light/moderate scattered to fairly widespread rainfall with thunderstorm/lightning/gusty winds very likely to continue over Assam & Meghalaya and Mizoram & Tripura during next 2 days.
- ❖ **Heavy rainfall** at isolated places over Assam & Meghalaya and Mizoram & Tripura on 26th May, 2023.

East India:

- ❖ Light/moderate scattered to fairly widespread rainfall with thunderstorm/lightning/gusty winds very likely over West Bengal & Sikkim, Bihar and Jharkhand during next 2 days.
- ❖ **Heavy rainfall** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim on 25th & 26th May.
- ❖ **Hailstorm** very likely at isolated places over West Bengal & Sikkim on 25th May.
- ❖ **Thundersquall/Gusty Wind speed reaching 50-60 kmph** likely at isolated places over Gangetic West Bengal on 25th May.

Central India:

- ❖ Light/moderate isolated light rainfall with thunderstorm/lightning/gusty winds very likely over Madhya Pradesh, Vidarbha & Chhattisgarh on 26-28 May, 2023 and then on 30 and 31 May.

South India:

- ❖ Light/moderate isolated light rainfall with thunderstorm/lightning/gusty winds very likely at isolated places over Karnataka, Kerala, Andhra Pradesh and Interior parts of Tamil Nadu. **Increase in rainfall activities over Kerala and adjoining parts of Peninsular India from 30-31 May 2023**

Rainfall for week 2 (1-7 June, 2023):

- ✓ In association with Western Disturbance, light to moderate isolated to fairly widespread rainfall/thunderstorm is likely over northwest & adjoining central India mainly 2 June and the reduction thereafter.
- ✓ Light to moderate scattered/fairly widespread rainfall/thunderstorm is likely over northeast India during many days of the week.
- ✓ Light to moderate isolated/scattered rainfall/thunderstorm is also likely over south Peninsular India during the week.
- ✓ No significant weather likely over rest parts of the country.
- ✓ **Overall, rainfall activity is likely to be normal to above normal over northwest & adjoining parts of central India and below normal over west coast and eastern and northeast parts of India. It is likely to be normal over rest parts of the country**

Maximum Temperatures and its forecast during Week 1 (25-31 May, 2023) and Week 2 (1-7 June, 2023):

Observed day Maximum temperatures 24 May:

- o Yesterday, Maximum Temperatures were in the range of 40-43°C over many parts of Vidarbha, south Madhya Pradesh, Chhattisgarh, Odisha, Telangana, Rayalaseema; some parts of Gujarat stare,

Southeast Rajasthan, southeast Uttar Pradesh, Jharkhand, Coastal Andhra Pradesh and below 40°C over rest parts of the country.

- Maximum Temperatures were below normal by 3-5°C over parts of Western Himalayan Region & adjoining plains of Northwest India, West Bengal, Bihar and below normal by 2-3°C over parts of north Odisha and near normal over rest parts of the country.

Maximum Temperature Forecast for week 1 (25-31 May, 2023):

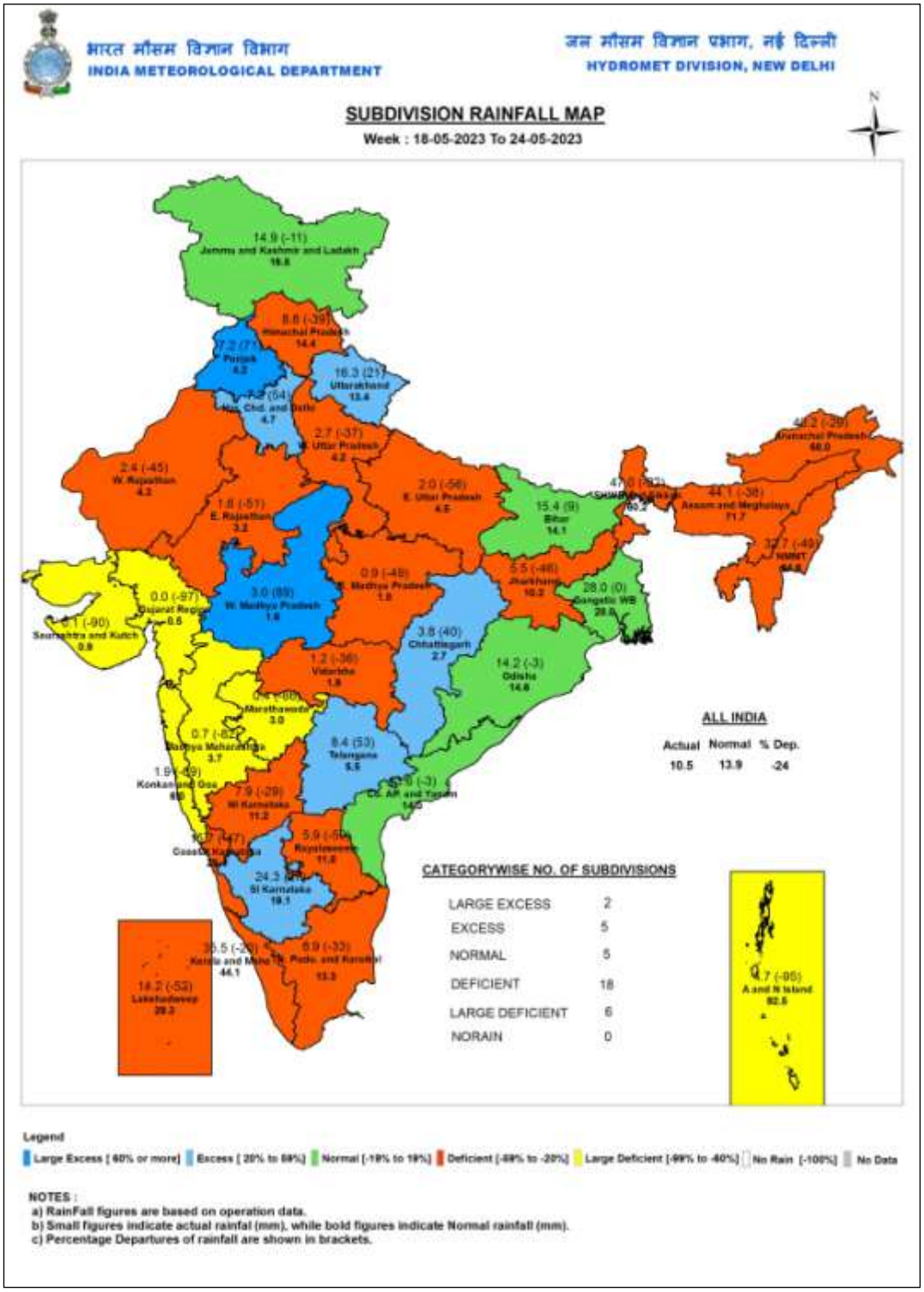
- No significant change in maximum temperatures very likely over northwest India during next 2 days with rise of 2-3degC thereafter. No significant change in maximum temperature very likely over rest parts of the country during next 5 days.
- Due to humid air & high temperature, **Hot and Discomfort weather** is very likely over west Odisha, Chhattisgarh and East Madhya Pradesh on 25th & 26th May, 2023.

Maximum Temperature for week 2 (1-7 June, 2023):

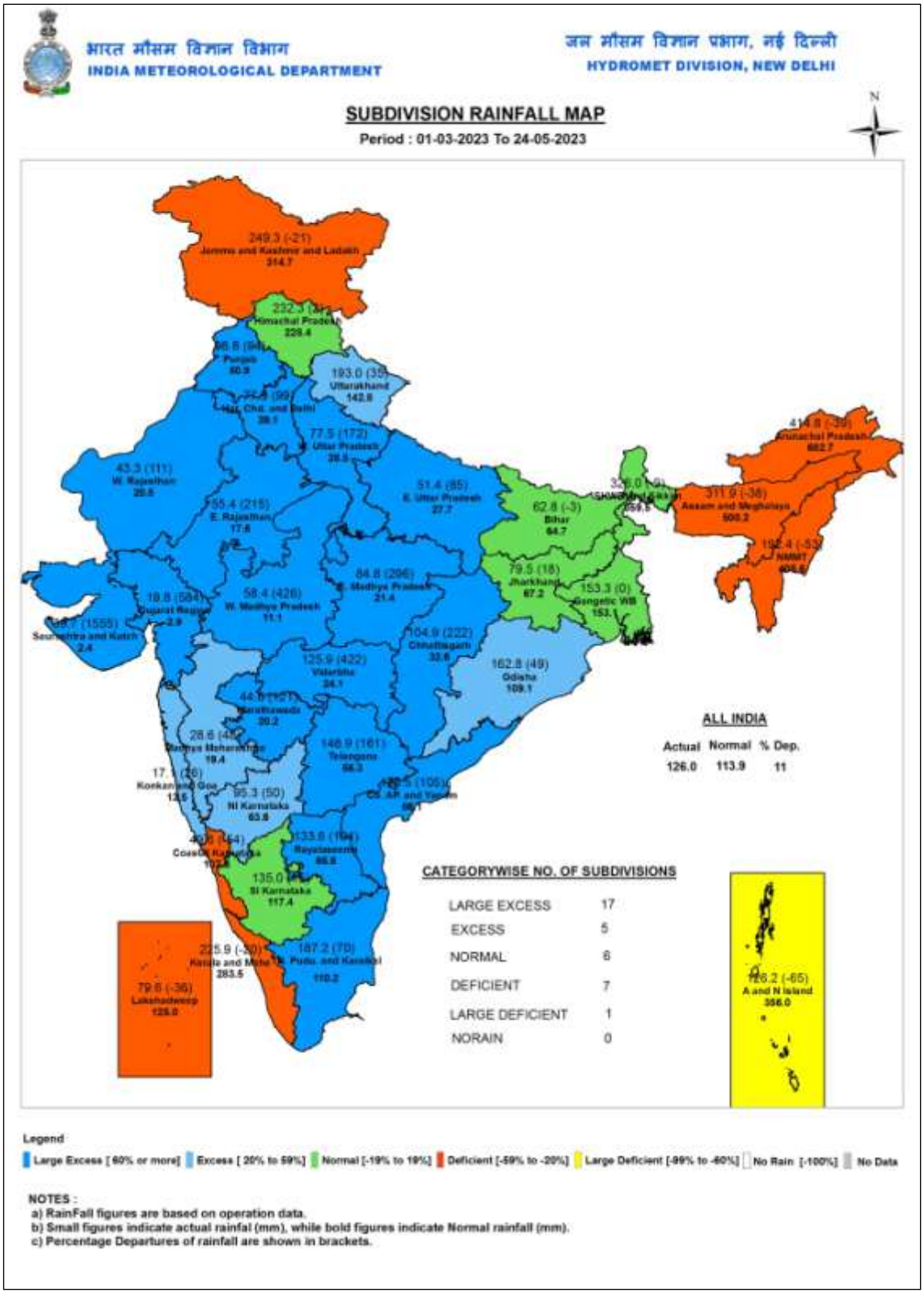
- Maximum temperatures likely to be near normal or below normal over most parts of India outside East and Northeast India, Coastal Andhra Pradesh, Tamilnadu, Coastal Karnataka and Konkan & Goa, where it is likely to be above normal by 2-3°C.
- **Heat wave conditions likely to occur over isolated pockets over East India during some days of the week.**

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

Annex: I


भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT
जल मौसम विज्ञान प्रभाग, नई दिल्ली
HYDROMET DIVISION, NEW DELHI
SUBDIVISION RAINFALL MAP
Week : 18-05-2023 To 24-05-2023
N
14.9 (-11)
Jammu and Kashmir and Ladakh
18.8
8.8 (-39)
Himachal Pradesh
14.4
7.2 (71)
Punjab
4.2
16.3 (21)
Uttarakhand
13.4
Hry. Chd. and Delhi
4.7
2.7 (-37)
Uttar Pradesh
4.2
2.4 (-45)
W. Rajasthan
4.2
1.8 (-51)
E. Rajasthan
3.2
2.0 (-56)
E. Uttar Pradesh
4.6
15.4 (9)
Bihar
14.1
44.1 (-36)
Assam and Meghalaya
71.7
0.0 (-97)
Gujarat Region
0.6
3.0 (89)
W. Madhya Pradesh
1.6
0.9 (-48)
E. Madhya Pradesh
1.8
5.5 (-46)
Jharkhand
10.2
28.0 (0)
Gangetic WB
28.0
0.1 (-90)
Saurashtra and Kutch
0.9
3.8 (40)
Chhattisgarh
2.7
1.2 (-36)
Vidarbha
1.9
14.2 (-3)
Odisha
14.6
0.7 (-82)
Madhya Maharashtra
3.7
8.4 (53)
Telangana
5.5
1.9 (-49)
Konkan and Goa
3.7
7.9 (-29)
W. Karnataka
11.2
5.9 (-58)
Rayalaseema
11.8
24.3 (
S. Karnataka
19.1
14.2 (-53)
Lakshadweep
29.3
8.9 (-33)
Tamil Nadu and Karaikal
13.3
4.7 (-95)
A and N Island
92.8
ALL INDIA
Actual Normal % Dep.
10.5 13.9 -24
CATEGORYWISE NO. OF SUBDIVISIONS
LARGE EXCESS 2
EXCESS 5
NORMAL 5
DEFICIENT 18
LARGE DEFICIENT 6
NORAIN 0
Legend
Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -60%] No Rain [-100%] No Data
NOTES :
a) RainFall figures are based on operation data.
b) Small figures indicate actual rainfal (mm), while bold figures indicate Normal rainfall (mm).
c) Percentage Departures of rainfall are shown in brackets.

Annex II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INDIA METEOROLOGICAL DEPARTMENT
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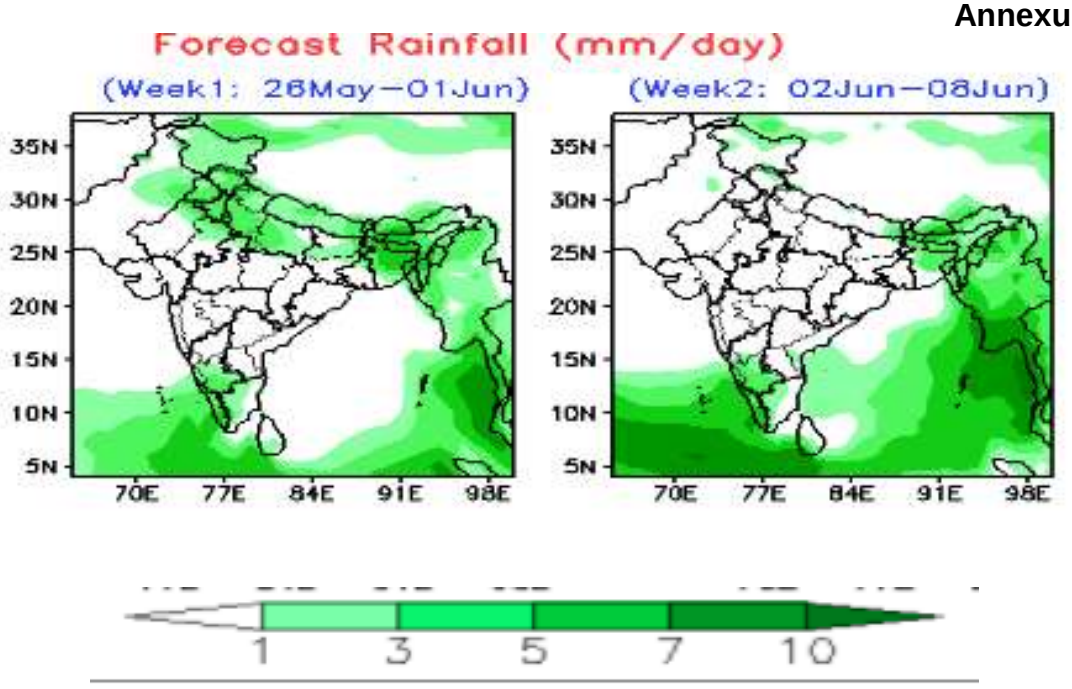
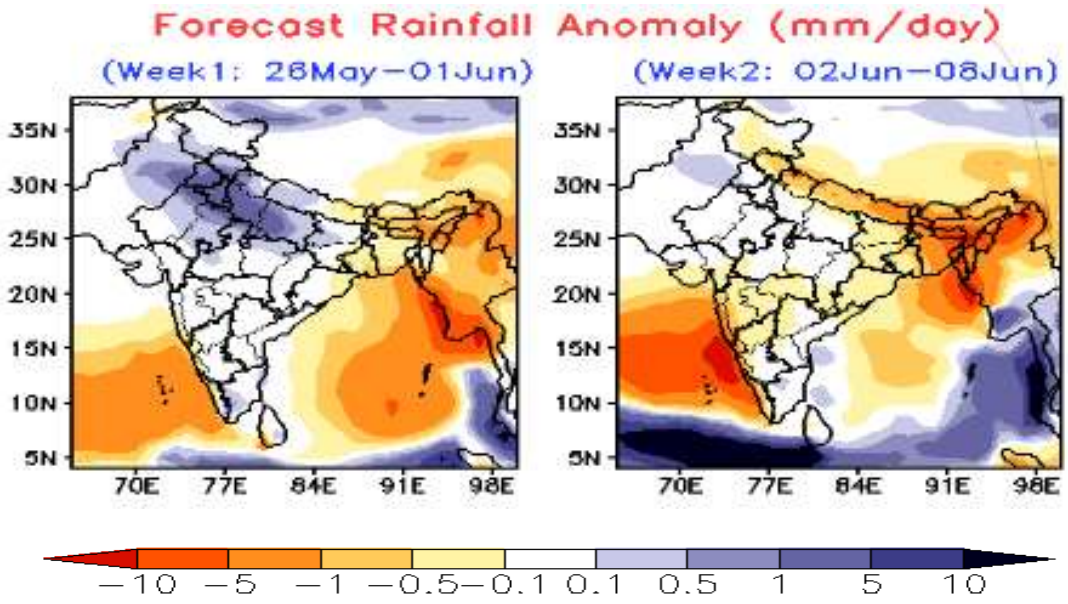
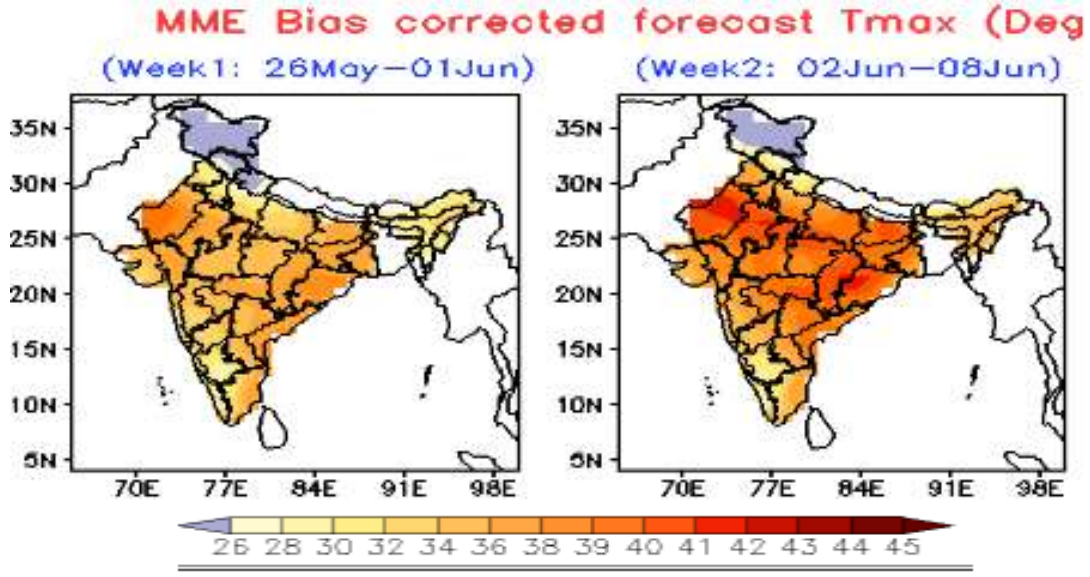
HYDROMET DIVISION, NEW DELHI
SUBDIVISION RAINFALL MAP
Period : 01-03-2023 To 24-05-2023
N
249.3 (-21)
Jammu and Kashmir and Ladakh
314.7
232.3 (-1)
Himachal Pradesh
329.4
193.0 (35)
Uttarakhand
142.8
77.5 (172)
Uttar Pradesh
28.5
43.3 (111)
W. Rajasthan
20.5
55.4 (215)
E. Rajasthan
17.6
51.4 (85)
E. Uttar Pradesh
27.7
62.8 (-3)
Bihar
64.7
311.9 (-36)
Assam and Meghalaya
500.2
79.5 (18)
Jharkhand
67.2
153.3 (0)
Gangetic WB
153.1
84.8 (296)
E. Madhya Pradesh
21.4
58.4 (426)
W. Madhya Pradesh
11.1
18.8 (584)
Gujarat Region
2.9
104.9 (222)
Chhattisgarh
33.6
125.9 (422)
Vidarbha
24.1
162.8 (49)
Odisha
109.1
146.9 (161)
Telangana
56.3
95.3 (50)
NI Karnataka
63.8
133.8 (194)
Rayalaseema
86.8
135.0
SI Karnataka
117.4
225.9 (-20)
Kerala and Mahe
283.5
187.2 (70)
Tamil Nadu and Karaikal
110.2
79.6 (-36)
Lakshadweep
125.0
126.2 (-65)
A and N Island
358.0
ALL INDIA
Actual Normal % Dep.
126.0 113.9 11
CATEGORYWISE NO. OF SUBDIVISIONS
LARGE EXCESS 17
EXCESS 5
NORMAL 6
DEFICIENT 7
LARGE DEFICIENT 1
NORAIN 0
Legend
Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -60%] No Rain [-100%] No Data
NOTES :
a) RainFall figures are based on operation data.
b) Small figures indicate actual rainfal (mm), while bold figures indicate Normal rainfall (mm).
c) Percentage Departures of rainfall are shown in brackets.

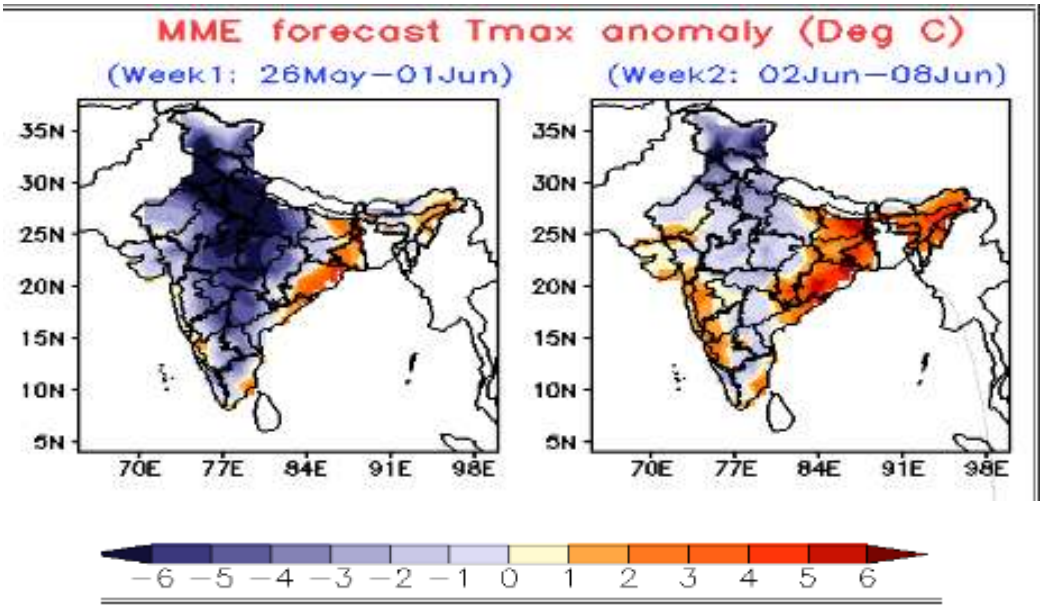
Annexure III





Annexure IV


MME Bias corrected forecast Tmax (Deg
(Week1: 26May–01Jun)
(Week2: 02Jun–08Jun)
35N
30N
25N
20N
15N
10N
5N
70E
77E
84E
91E
98E
26 28 30 32 34 36 38 39 40 41 42 43 44 45


MME forecast Tmax anomaly (Deg C)
(Week1: 26May–01Jun)
(Week2: 02Jun–08Jun)
35N
30N
25N
20N
15N
10N
5N
70E
77E
84E
91E
98E
−6 −5 −4 −3 −2 −1 0 1 2 3 4 5 6