



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

Press: Dated: 3 August, 2023

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(3-16 August 2023)**

1. Salient Observed Features for week ending 2 August 2023

- Formation and west-northward movement of a Deep Depression from northeast Bay of Bengal to Jharkhand during 1 to 2 August had caused extremely heavy rainfall at isolated places over Odisha and Heavy to very heavy rainfall at isolated places over Jharkhand and East Madhya Pradesh and Chhattisgarh on 1 Aug and then exceptionally heavy rainfall over Odisha with stations such Boudhgarh (dist Boudhgarh) 39 cm in Odisha reported on 2 Aug. It also caused Heavy to very heavy rainfall at isolated places over Chhattisgarh, Madhya Pradesh during the same date. Due to impact from this system, the airport station at Bhubaneswar reported 26cm on 1 Aug 2023. All these extreme rainfall activity had caused flash floods and riverine floods at some areas in these region.
- Movement of last week's Well Marked Low Pressure Area to south Odisha and adjoining north Andhra Pradesh & neighbourhood and presence of east-west shear zone along Lat. 18° N between 3.1 km & 7.6 km above mean sea level tilting southwards with heights, had caused exceptionally heavy rainfall over Telangana with stations such as Laxmidevipeta in Mulugu dist: 65 cm, Chityal (dist J. Bhupalpally) :62 cm and Regonda (dist J. Bhupalpally) 47 cm reported on 27th July. Presence of both systems also caused Heavy to very heavy rainfall with extremely heavy rainfall at isolated places over Konkan & Goa and Telangana on two days (27 and 28 July) and over Chhattisgarh on 28 July, during beginning of the week.

- **Analysis of Weekly overall Rainfall distribution during the week ending on 2 Aug 2023 and monsoon Season's Rainfall Scenario (1 June-2 Aug 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 2 Aug 2023 was -4%, over south Peninsula, it was 2%, central India as 10% while over northwest India had -19 % and east & northeast India had got -19%. All India Seasonal cumulative rainfall % departure during this year's **monsoon Season's Rainfall** during **1 June to 2 Aug 2023** is 4% and over northwest India, it is 26%. 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 II and III respectively.

Table 1: Rainfall status (Week and season)

Region	WEEK			SEASON		
	27.07.2023 TO 02.08.2023			01.06.2023 TO 02.08.2023		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	68.4	84.3	-19%	589.1	774.1	-24%
NORTH-WEST INDIA	43	52.9	-19%	382.1	302.5	+26%
CENTRAL INDIA	83.8	76.1	+10%	580.8	513	+13%
SOUTH PENINSULA	47.1	46.1	+2%	387.8	379.2	+2%
Country as a whole	61.6	64.4	-4%	483.1	463.6	+4%

2. Large scale features

- Currently, weak El Niño conditions are prevailing over the equatorial Pacific region. The latest MMCFS and other climate forecasts indicate that the El Niño conditions are likely to further intensity and continue upto early next year. In addition to ENSO conditions over the Pacific, other factors such as the Indian Ocean Sea Surface Temperatures (SSTs) also influence on Indian monsoon. At present neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean and the

latest climate model forecast indicates that positive IOD conditions are likely to develop during remaining part of the monsoon season.

- The Madden–Julian Oscillation (MJO) Index is currently in Phase 1 with amplitude less than 1. It is likely to be in same phase during entire forecast period. Hence MJO is not likely to support any cyclogenesis over the North Indian Ocean.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (03 to 09 August, 2023) and Week 2 (10 to 16 August, 2023)

Weather systems & associated Precipitation during Week 1 (03 to 09 August, 2023)

Significant Weather features:

- ❖ **Depression over north Chhattisgarh & neighbourhood:** A **Depression lies** over north Chhattisgarh & neighbourhood at 0830 hours IST of 03rd August, 2023 about 40 km north-northwest of Ambikapur (Chhattisgarh). It is likely to move west-northwestwards towards northeast Madhya Pradesh & adjoining southeast Uttar Pradesh and weaken into a **Well Marked Low Pressure Area** during next 12 hours.
- ❖ The Western end of the Monsoon Trough lies north of its normal position. However, its eastern end lies south of its normal Position. The eastern end of monsoon trough likely to shift gradually northwards during next 3-4 days.

Weather Forecast and Warning associated with Depression:

Rainfall warning:

East Madhya Pradesh: Light to moderate rainfall at most places with **heavy to very heavy rainfall at a few places on 3rd & 4th and isolated extremely heavy rainfall on 3rd August.** Heavy rainfall at isolated places is likely on 5th August.

West Madhya Pradesh: Light to moderate rainfall at most places with heavy to extremely heavy rainfall at isolated places on 3rd August. Heavy rainfall at isolated places is likely on 4th August.

Chhattisgarh: Light to moderate rainfall at most places with isolated heavy to very heavy rainfall over north Chhattisgarh on 3rd and heavy rainfall at isolated places on 4th August.

South Uttar Pradesh: Light to moderate rainfall at most places with isolated heavy rainfall during 3rd to 6th August.

Vidarbha: Light to moderate rainfall at most places with isolated heavy rainfall on 3rd August.

Weather Forecast and Warning for remaining parts of the country:

Northwest India: Light/moderate scattered to fairly widespread rainfall with isolated **heavy rainfall** is very likely over Uttarakhand, Himachal Pradesh, Uttar Pradesh during 03rd-09th August; Punjab on 04th & 05th; Haryana and East Rajasthan during 03rd - 05th August, 2023. Light to moderate isolated/scattered rainfall is likely over rest parts of northwest India during the week.

Isolated very heavy rainfall is also likely over West Uttar Pradesh on 05th and over Uttarakhand on 06th August.

Northeast India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya during the week and over Tripura on 03rd & 04th August.

West India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely to continue over Konkan & Goa and ghat areas of Madhya Maharashtra during next 2 days and Gujarat Region on 03rd August. Isolated **very heavy rainfall** is also likely over Madhya Maharashtra on 03rd August. Light to moderate isolated/scattered rainfall is likely over rest parts of West India during the week.

South India: Subdued rainfall activity over the region during the week.

Hot and humid weather conditions very likely to prevail over Tamil Nadu on 03rd and 04th August.

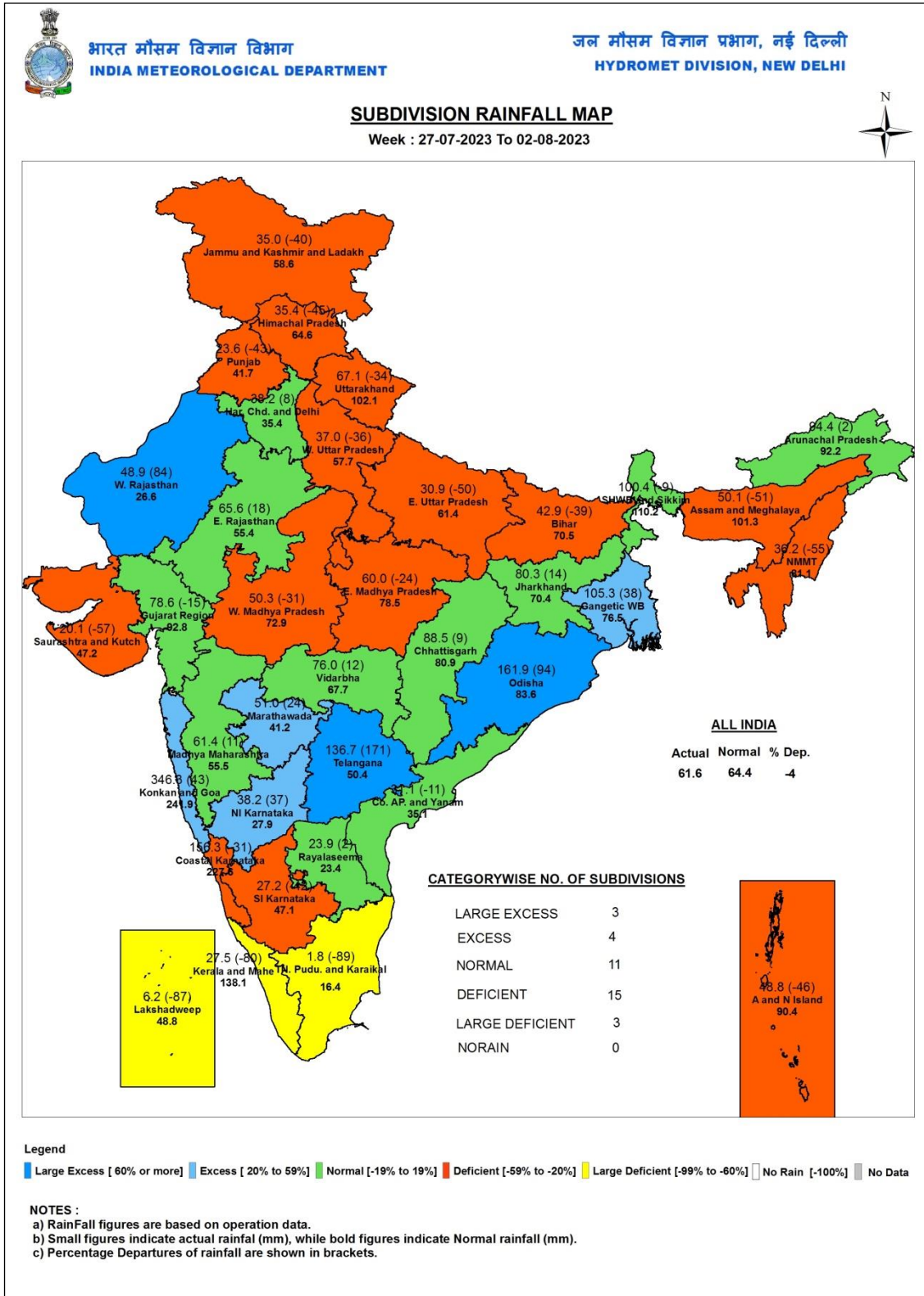
Rainfall for week 2 (10 to 16 August, 2023):

- ✓ Monsoon trough is likely to be north of its normal position during most days of the week.
- ✓ Strong westerly/southwesterly winds are likely along west coast during many days of the week.
- ✓ Under above scenario

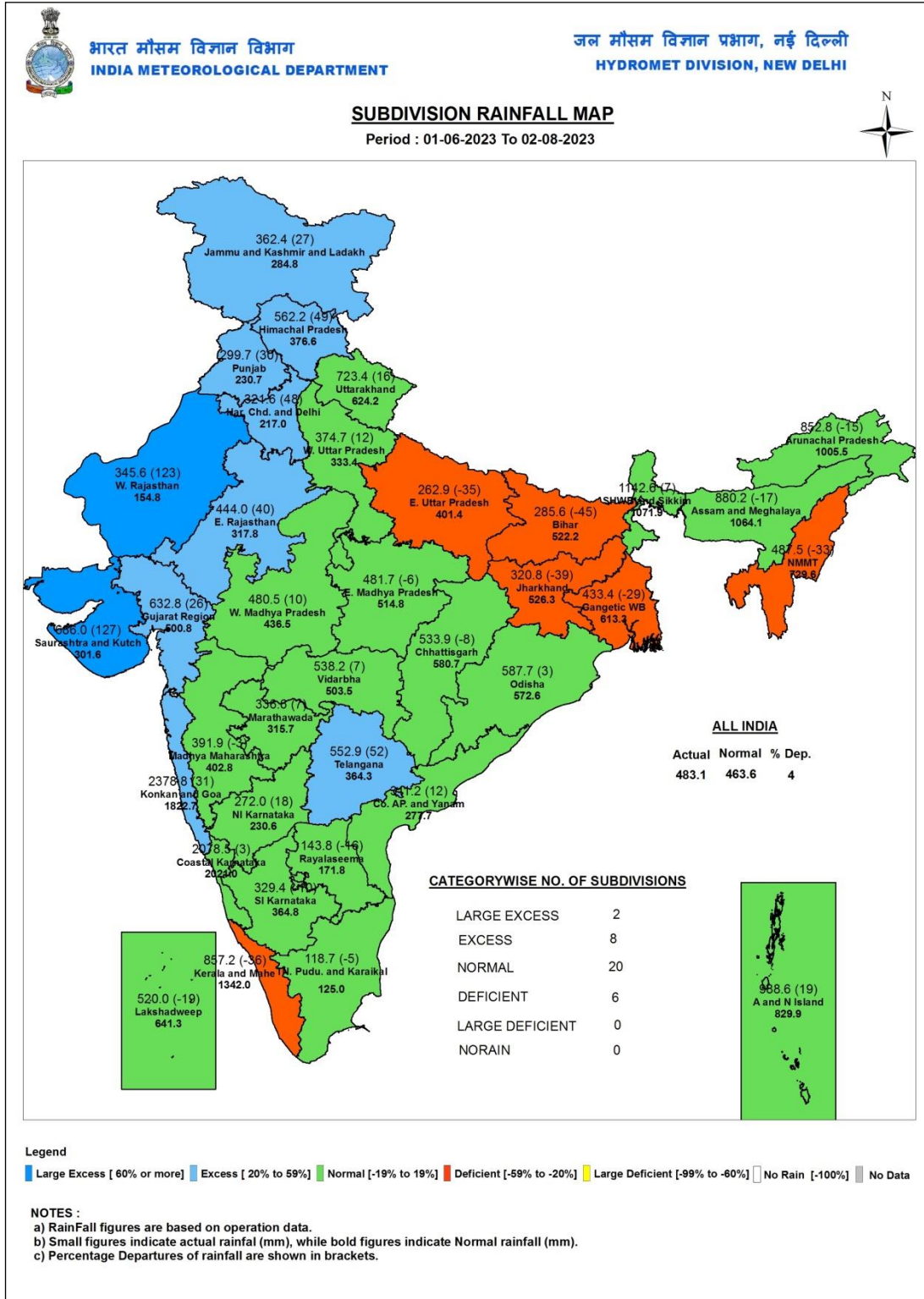
- Light to moderate fairly widespread to widespread rainfall activity with isolated heavy falls are likely over northeast & eastcentral India and along the west coast.
- Light to moderate scattered/fairly widespread rainfall/thunderstorm is likely over rest parts of the country outside many parts of south Peninsular India and plains of northwest India, where light to moderate isolated/scattered rainfall is likely.
- **Overall, rainfall activity is likely to be normal to above normal over northeast & eastcentral India and along the west coast of India; below over many parts of south Peninsular India and plains of northwest India during 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



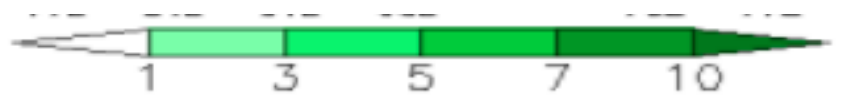
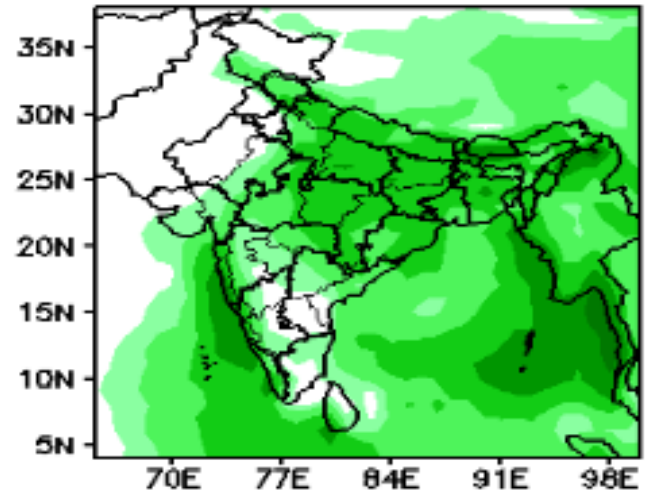
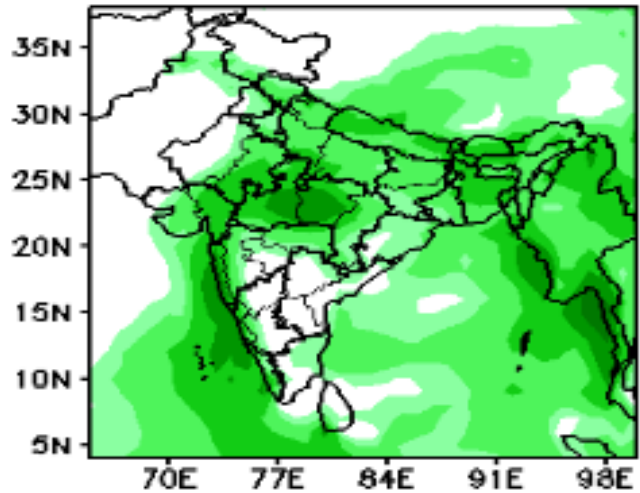
Annex II



Forecast Rainfall (mm/day)

(Week1: 04Aug-10Aug)

(Week2: 11Aug-17Aug)



Forecast Rainfall Anomaly (mm/day)

(Week1: 04Aug-10Aug)

(Week2: 11Aug-17Aug)

