



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

Press: Dated: 17 August, 2023

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(17-30 August 2023)**

1. Salient Observed Features for week ending 16 August 2023

- Weak monsoon conditions prevailed over most parts of India during the week till 16 Aug 2023 and it was mainly observed over plains of northwest India, central and Peninsular India (see Weekly cumulative rainfall map in Annex1). This was mainly due to absence of major synoptic systems and also the monsoon trough was seen north of its normal position or at foot hills of Himalayas with prevailing of westerly winds across plains of north India at lower levels in most dates during the week.
- During 13-14 Aug, 2023, Himachal Pradesh and Uttarakhand over western Himalayan region, experienced extremely heavy rainfall event, due to passage of a WD during the period and incursion of fresh lower level moistures from Arabian Sea form a highly supported wind pattern at lower levels to this region, during the same period. This has caused multiple landslides and flash floods and then riverine floods in the region which severely impacted these states.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 16 Aug 2023 and monsoon Season's Rainfall Scenario (1 June-16 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 16 Aug 2023 was -58%, over south Peninsula, it was -58%, central India as -85% while over northwest India had -43% and east & northeast India had got -27%. All India Seasonal cumulative rainfall % departure during this year's **monsoon Season's Rainfall** during **1 June to**

16 Aug 2023 is -6% 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		
	10.08.2023 TO 16.08.2023			01.06.2023 TO 16.08.2023		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	61.5	83.8	-27%	747	927.6	-19%
NORTH-WEST INDIA	28.7	50.7	-43%	442.8	402.5	+10%
CENTRAL INDIA	10.6	69	-85%	647	665.2	-3%
SOUTH PENINSULA	19.2	45.5	-58%	415.5	470.6	-12%
Country as a whole	26	61.1	-58%	554.7	588	-6%

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 intensify 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 8 with amplitude less than 1. It would continue in same phase during first half of week 1. Thereafter, it is likely to move to phase 1 with amplitude remaining less than 1 during week 2. Hence MJO is not likely to support any cyclogenesis over the North Indian Ocean during entire forecast period.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (17 to 23 August, 2023) and Week 2 (24 to 30 August, 2023)

Weather systems & associated Precipitation during Week 1 (17 to 23 August, 2023)

Significant Weather features:

- ❖ The western end of the Monsoon Trough runs close to the foothills of the Himalayas and its eastern end runs south of its normal position. The western end is likely to runs close to the foothills of the Himalayas or north of its normal position and its eastern end is likely to be south of its normal position during most days of the week.
- ❖ A Low pressure area formed over northwest Bay of Bengal & neighborhood on 17th August. It is very likely to move west-northwestwards towards north Chhattisgarh during next 3-4 days and its remnant cyclonic circulation to move east-northeastwards thereafter for subsequent 3 days over eastern India.

Weather Forecast and Warning for remaining parts of the country:

Northwest India: Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** likely over Uttarakhand, East Uttar Pradesh on 17th, 18th & 21st to 23rd August and West Uttar Pradesh on 21st to 23rd August, 2023.

Light to moderate isolated/scattered rainfall is likely over rest parts of northwest India during the week.

East India: Light/moderate scattered to fairly widespread rainfall with **isolated heavy rainfall** activity very likely over Gangetic West Bengal on 17th; over Odisha during 17th to 19th & 21st; over Jharkhand on 17th & 18th; Bihar on 17th & 21st to 23rd and Sub-Himalayan West Bengal & Sikkim on 21st to 23rd August, 2023.

Isolated extremely heavy falls is also likely over Odisha on 17th and isolated very heavy rainfall on 18th August.

Light to moderate scattered/fairly widespread rainfall is likely over rest parts of east India during the week.

Northeast India: Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** activity very likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 17th to 23rd August and Arunachal Pradesh during 19th to 23rd August, 2023.

South Peninsular India: Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** activity very likely over Coastal Andhra Pradesh on 17th & 18th and Telangana on 18th & 19th August.

Light to moderate scattered/fairly widespread rainfall is likely over rest parts of South Peninsular India during the week.

Central India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** activity very likely over Chhattisgarh during 17th to

19th; over East Madhya Pradesh on 18th, 19th, 22nd & 23rd and over Vidarbha on 18th & 19th; West Madhya Pradesh on 19th August, 2023.

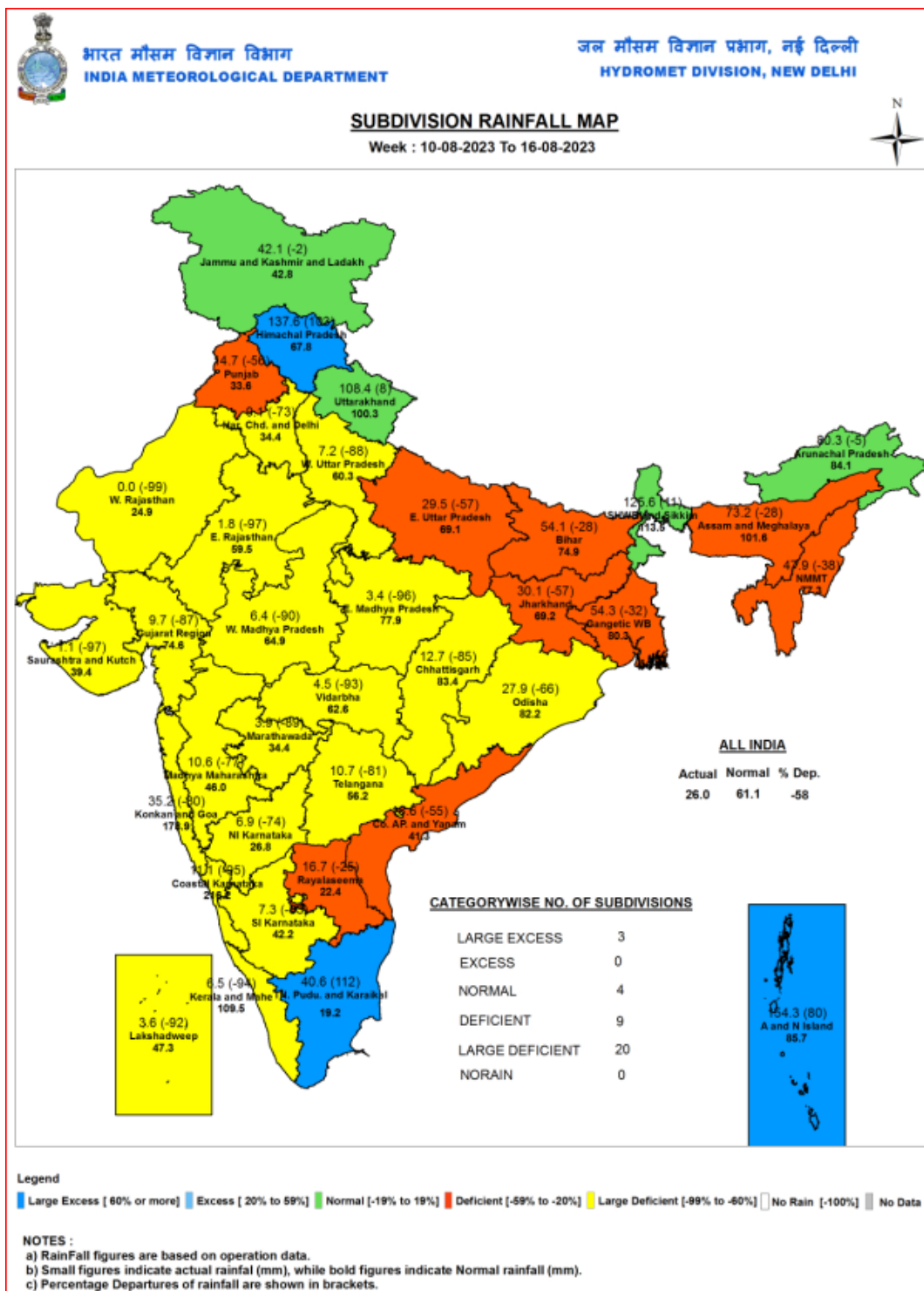
Light to moderate scattered/fairly widespread rainfall is likely over rest parts of central India during the week.

Rainfall for week 2 (24 to 30 August, 2023):

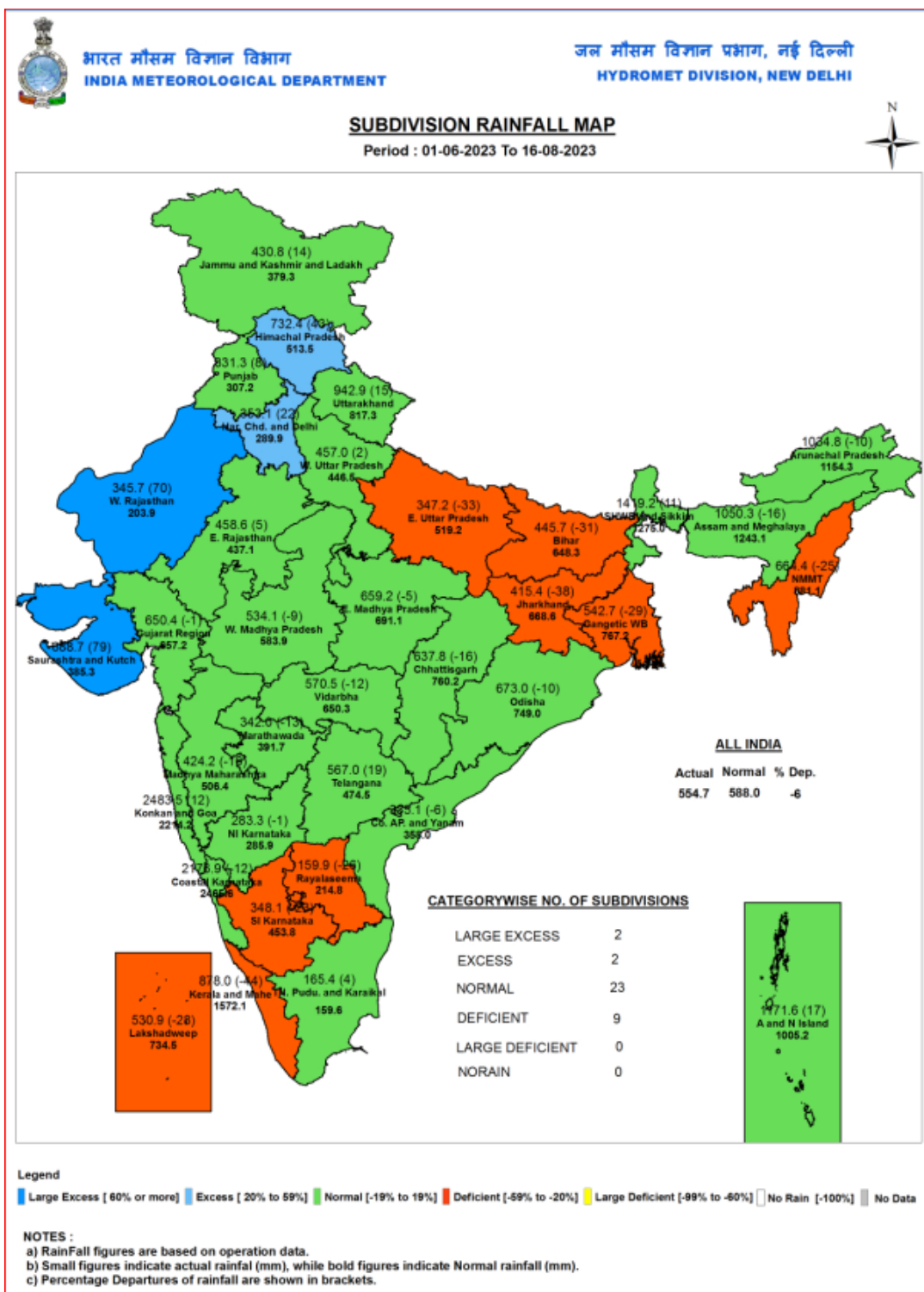
- The western end of monsoon trough is likely to be north of its normal position and its eastern end to the south of its normal or near normal position during most days of the week.
- ✓ Light to moderate fairly widespread to widespread rainfall activity with isolated heavy to very heavy falls are likely over most parts of east & northeast India and many parts of eastcentral India during the week.
- ✓ **Overall, rainfall activity is likely to be above normal over East India; near normal over northeast and central India and below normal over northwest and south Peninsular India during the week.**

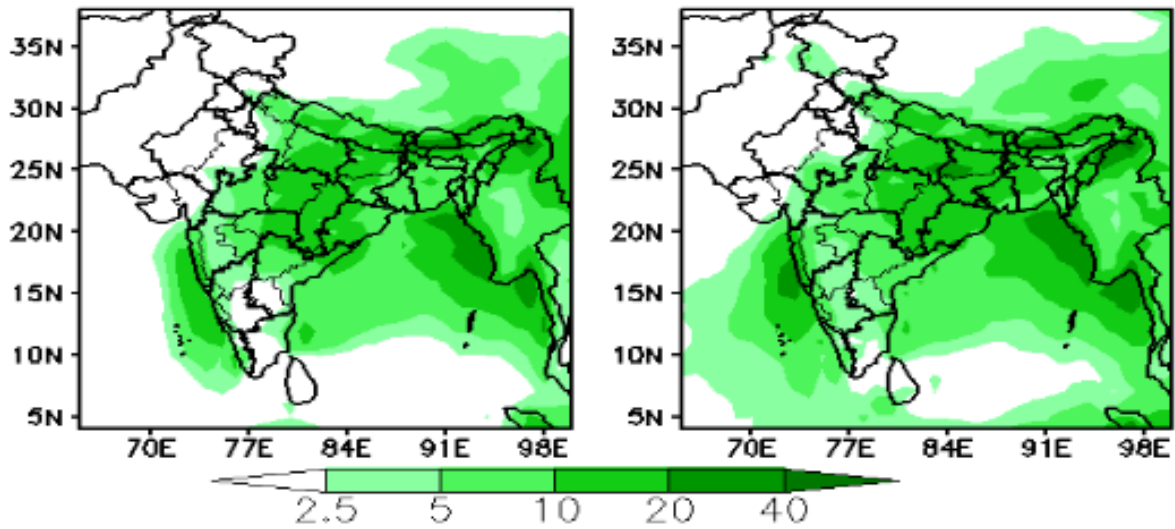
Legends: Heavy Rain: 64.5 to 115.5 mm Very Heavy Rain: 115.6 to 204.4 mm, Extremely Heavy Rain> 204.4 mm

Annex: I



Annex II



Forecast Rainfall (mm/day)**(Week1: 18Aug–24Aug)****(Week2: 25Aug–31Aug)****Forecast Rainfall Anomaly (mm/day)****(Week1: 18Aug–24Aug)****(Week2: 25Aug–31Aug)**