



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

**Press: Dated: 14 Sept, 2023**

**Subject: Current Weather Status and Extended range Forecast for next two weeks  
(14-27 Sept 2023)**

**1. Salient Observed Features for week ending 13 Sept 2023**

- As predicted, active monsoon conditions continued to prevail over most parts of Central India and adjoining areas of Peninsular India during most dates in the week with the monsoon trough at mean sea level remained south of its normal position during the week(see cumulative rainfall map of the week ending on 13 Sept given in Annex 1).
- This was mainly due to slow west-northwestwards movement of two systems along the monsoon trough: 1)Remnant of last week's low pressure area which was cyclonic circulation extended upto 7.6 km above mean sea level from south interior Odisha on 7 Sept moved over to to northwest Madhya Pradesh & neighbourhood during 8-12 Sept and 2)Formation of a fresh low pressure area over Northwest & adjoining Westcentral Bay of Bengal on 13 Sept, which then also moved west northwestwards to Northwest Bay of Bengal & adjoining North Odisha-West Bengal coasts as a Well Marked Low Pressure Area on 14 Sept.
- As a result of these systems, Extremely heavy rainfall also reported mainly over Konkan on 8 and 9 Sept; Uttar Pradesh on 11 and 12 Sept and Odisha on 12 to 14 Sept and isolated heavy to very heavy rainfall reported over most states of central and adjoining Peninsular India and east Rajasthan.
- **Analysis of Weekly overall Rainfall distribution during the week ending on 13 Sept 2023 and monsoon Season's Rainfall Scenario (1 June-13 Sept 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 13 Sept 2023 was +16%, over south Peninsula, it was +4%, central India as +51% while over northwest India had +22% and east & northeast India had got -33%. All India Seasonal cumulative rainfall % departure during this year's **monsoon Season's Rainfall** during **1 June to 13 Sept 2023** is -10% and over northwest India, it is -1%. 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		
	07.09.2023 TO 13.09.2023			01.06.2023 TO 13.09.2023		
	Actual	Normal	% Dep	Actual	Normal	% Dep
<b>EAST &amp; NORTH-EAST INDIA</b>	<b>46.2</b>	<b>68.9</b>	<b>-33%</b>	<b>977.5</b>	<b>1213.2</b>	<b>-19%</b>
<b>NORTH-WEST INDIA</b>	<b>36.9</b>	<b>30.2</b>	<b>+22%</b>	<b>542.6</b>	<b>545.8</b>	<b>-1%</b>
<b>CENTRAL INDIA</b>	<b>70.9</b>	<b>46.9</b>	<b>+51%</b>	<b>815.9</b>	<b>894.7</b>	<b>-9%</b>
<b>SOUTH PENINSULA</b>	<b>35.4</b>	<b>34.1</b>	<b>+4%</b>	<b>559</b>	<b>620.7</b>	<b>-10%</b>
<b>Country as a whole</b>	<b>49.5</b>	<b>42.7</b>	<b>+16%</b>	<b>707.1</b>	<b>784.3</b>	<b>-10%</b>

## 2. Large scale features

- Currently, weak El Niño conditions are prevailing over the equatorial Pacific region. The latest forecast of MMCFS and other global model forecasts indicate that the El Niño conditions are likely to further intensity and continue up to early next year.
- In addition to ENSO conditions over Pacific, other factors such as the Indian Ocean Sea Surface Temperatures (SSTs) also have some influence on Indian monsoon. At present the border line positive IOD conditions are prevailing over the Indian Ocean and the latest MMCFS and other global model forecast indicate positive IOD conditions are likely to strengthen during the upcoming months.
- Most of the models are indicating that currently, MJO is in phase 2 with amplitude less than 1. It

would continue in phase 2 during week 1 and thereafter move across phase 3 during week 2 with amplitude remaining less than 1. Thus, MJO is conducive for enhancement of convective activity over the Arabian Sea during week 1 and over the Bay of Bengal (BoB) during entire forecast period.

### 3. Forecast for next two week

#### [Weather systems & associated Precipitation during Week 1 \(14 to 20 September, 2023\) and Week 2 \(21 to 27 September, 2023\)](#)

#### [Weather systems & associated Precipitation during Week 1 \(14 to 20 September, 2023\)](#)

##### **Main Synaptic Systems:**

- ❖ A Well Marked Low Pressure Area lies over Northwest Bay of Bengal & adjoining North Odisha-West Bengal coasts. It is likely to move across Odisha, Chhattisgarh and East Madhya Pradesh during next 2-3 days. It is likely to emerge into northeast & adjoining eastcentral Arabian Sea off Gujarat coast towards the end of week 1. It is likely to intensify marginally into a Depression (low probability) over the same region and move westwards away from Indian coast.
- ❖ A trough runs from northeast Rajasthan to center of Well Marked Low Pressure Area over Northwest Bay of Bengal & adjoining North Odisha-West Bengal coasts across northwest Madhya Pradesh, southeast Uttar Pradesh and Jharkhand in lower tropospheric levels.
- ❖ A cyclonic circulation over southeast Uttar Pradesh & adjoining northeast Madhya Pradesh in lower tropospheric levels.
- ❖ The Monsoon Trough lies to the south of its normal position.
- ❖ **Overall monsoon rainfall is likely to be above normal over India as a whole.**

##### **Weather Forecast and Warning for the country during week 1:**

**East India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Odisha on 14<sup>th</sup>, 15<sup>th</sup>, 18<sup>th</sup> to 20<sup>th</sup>; Jharkhand on 14<sup>th</sup> & 15<sup>th</sup>; over Gangetic West Bengal on 14<sup>th</sup> and over Andaman & Nicobar Islands during 14<sup>th</sup> -18<sup>th</sup> September.

**Isolated extremely heavy rainfall is also very likely over Odisha on 14<sup>th</sup> September.**

Light to moderate scattered to fairly widespread rainfall is very likely over the region during rest

days of the week.

**Central India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Madhya Pradesh, Vidarbha during 14<sup>th</sup>-17<sup>th</sup> and Chhattisgarh during 14<sup>th</sup>-16<sup>th</sup> September.

**Isolated very heavy rainfall is also very likely over Chhattisgarh, East Madhya Pradesh on 14<sup>th</sup> & 15<sup>th</sup>; West Madhya Pradesh during 15<sup>th</sup>-17<sup>th</sup>; Vidarbha on 15<sup>th</sup> & 16<sup>th</sup> September.**

Light to moderate isolated/scattered rainfall is very likely over the region during rest days of the week.

**Northwest India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm with isolated **heavy falls** very likely over Uttarakhand during 14<sup>th</sup>-16<sup>th</sup>; Jammu division on 14<sup>th</sup>; southwest Uttar Pradesh on 15<sup>th</sup> and East Rajasthan during 14<sup>th</sup>-17<sup>th</sup> September.

**Isolated very heavy rainfall is also very likely over East Rajasthan on 16<sup>th</sup> September.** No significant rainfall likely over the region during rest days of the week.

**West India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Konkan & Goa, ghat areas of Madhya Maharashtra during 15<sup>th</sup>-19<sup>th</sup> and Marathawada during 14<sup>th</sup>-17<sup>th</sup> September; Gujarat Region during 16<sup>th</sup>-19<sup>th</sup> and Saurashtra on 17<sup>th</sup> & 18<sup>th</sup> September.

**Isolated very heavy rainfall is very likely over Konkan & Goa, ghat areas of Madhya Maharashtra, Gujarat Region during 16<sup>th</sup>-18<sup>th</sup> and Marathawada on 16<sup>th</sup> September.**

Light to moderate scattered/fairly widespread rainfall is very likely over the region during rest days of the week.

**South India:** Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over Telangana on 14<sup>th</sup> & 15<sup>th</sup> and Kerala on 14<sup>th</sup> September.

**Isolated very heavy rainfall is also very likely over Telangana on 14<sup>th</sup> September.**

Light to moderate scattered/fairly widespread rainfall is very likely over the region during rest days of the week.

**Northeast India:** Light/moderate scattered to fairly widespread rainfall/thunderstorm with isolated **heavy rainfall** activity very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 14<sup>th</sup>, 19<sup>th</sup> & 20<sup>th</sup> September.

Light to moderate scattered to fairly widespread rainfall is very likely over the region during rest days of the week.

## Weather systems & associated Precipitation during Week 2 (21 to 27 September, 2023)

### Main Synoptic Systems

- ✓ There is a likelihood of formation of another cyclonic circulation over eastcentral Bay of Bengal during later part of week 1 which is likely to move west-northwestwards towards North Bay of Bengal in the beginning of this week 2.

(refer:[https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24\\_95218dExtended%20Range%20Outlook14%20September%202023.pdf](https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_95218dExtended%20Range%20Outlook14%20September%202023.pdf))

- ✓ The Monsoon Trough is likely to be near normal or south of its normal position during most days of the week. Under such conditions:

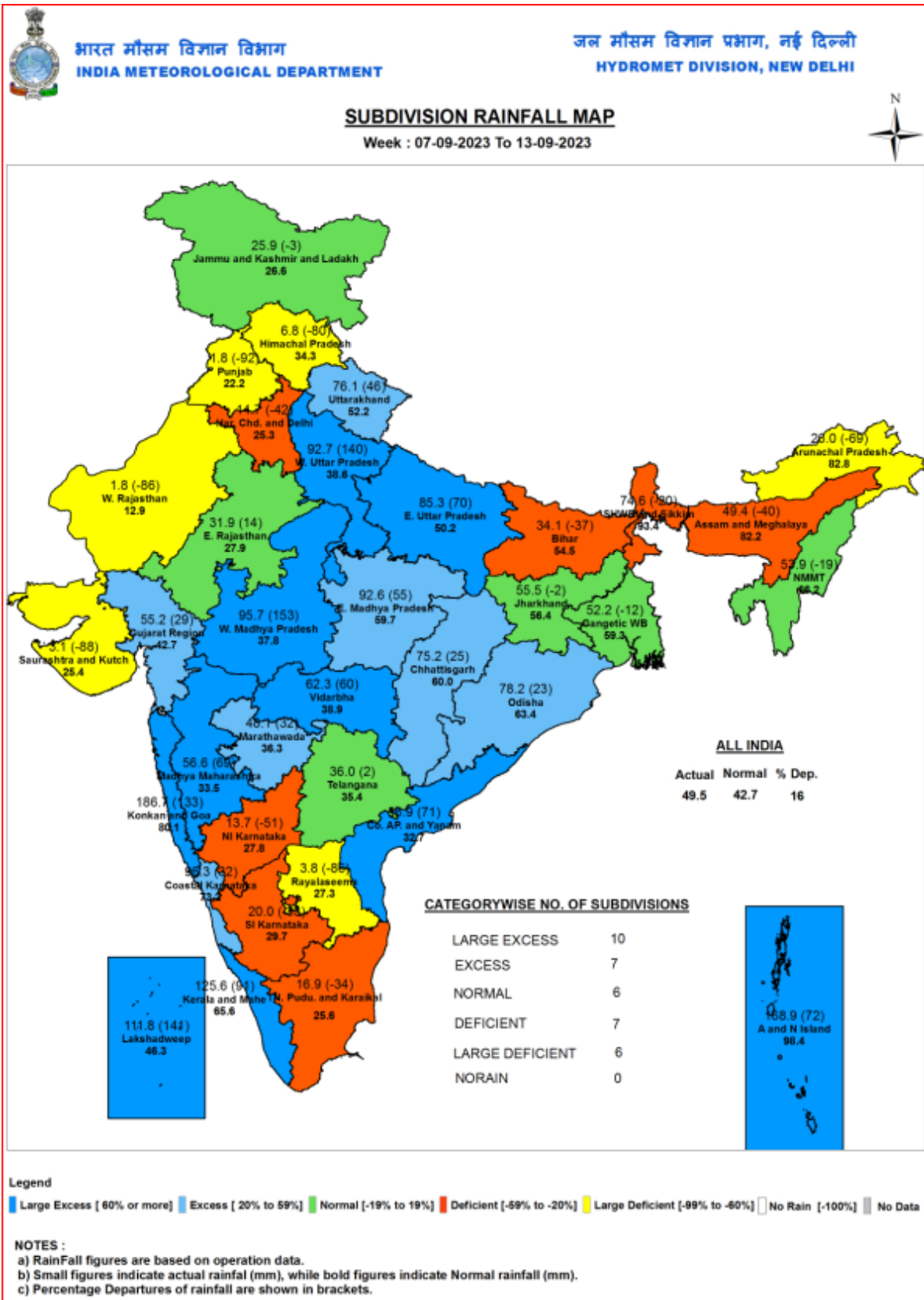
### **Weather Forecast for the country during week 2**

- ✓ Light to moderate fairly widespread to widespread rainfall activity with **isolated heavy to very heavy falls** are likely over most parts of central, east & northeast India during the week.
- ✓ Rainfall activity is likely to be **above normal** over central, east & northeast India; normal to above normal over northwest and south Peninsular India during the week.

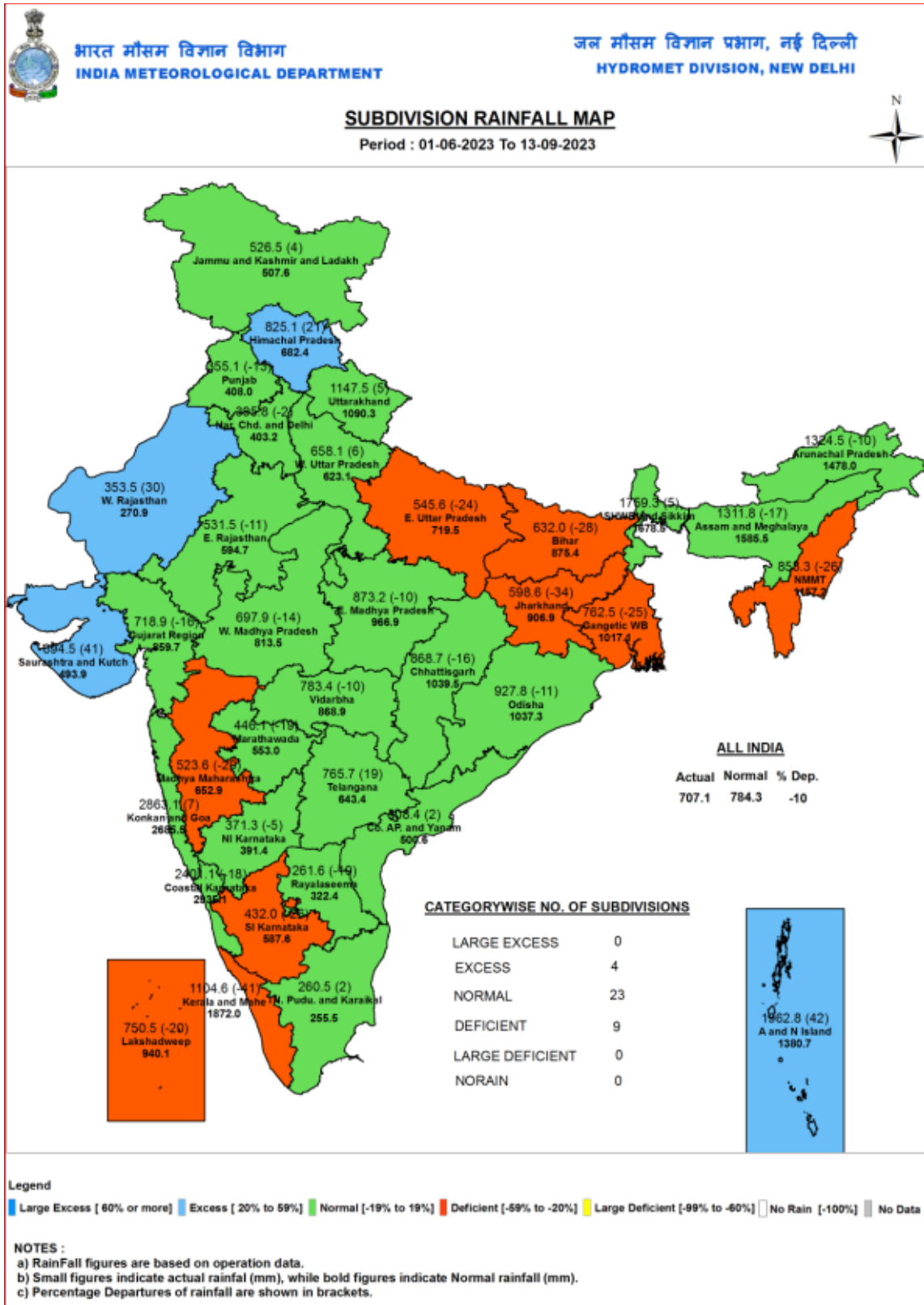
**Overall, above normal rainfall activity is likely over country as a whole during next 2 weeks.**

**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



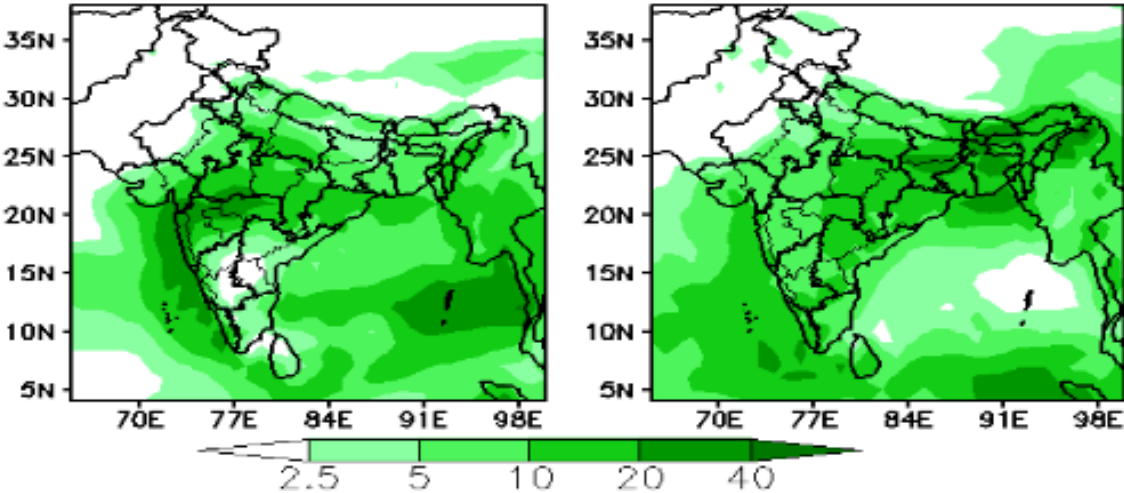
Annex II



**Forecast Rainfall (mm/day)**

(Week1: 15Sep-21Sep)

(Week2: 22Sep-28Sep)



**Forecast Rainfall Anomaly (mm/day)**

(Week1: 15Sep-21Sep)

(Week2: 22Sep-28Sep)

