



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

**Press: Dated: 15 Sept, 2022**

**Subject: Current Weather Status and Extended range Forecast for next two weeks  
(15-28 Sept 2022)**

**1. Salient Observed Features for week ending on 15 Sept 2022**

- Monsoon trough was south of its normal position in most dates during the week
- Active to Vigorous monsoon spell over parts of central and adjoining east coast of India covering Odisha during 10-12 Sept, coastal Andhra Pradesh and Telengana during 10-14 Sept, over Madhya Pradesh and Gujarat during 11-15 Sept, over parts of Uttar Pradesh during 14-15 with isolated heavy to very heavy over these areas during respective periods. It was mainly due to formation of a Low Pressure Area over Westcentral & adjoining Eastcentral Bay of Bengal on 8<sup>th</sup> September 2022 which moved west-northwestwards became a well marked low pressure area on 10<sup>th</sup> and concentrated into a Depression in the early morning hours of 11<sup>th</sup> September 2022 and lay over south coastal Odisha and neighbourhood and then moved over to south Chhattisgarh in the evening of that day, and weakened into a Well Marked Low pressure area in the morning of 12<sup>th</sup> over southeast Madhya Pradesh & neighbourhood. It then moved over to central parts of Madhya Pradesh on 13<sup>th</sup> and over northwest Madhya Pradesh & neighbourhood from the early morning of 14<sup>th</sup> September 2022. It persisted over the same areas till evening of 15 Sept. Isolated heavy to very heavy also was observed over parts of Maharashtra during 10-14 Sept.
- **Analysis of Weekly overall Rainfall distribution during the current week ending on 8 Sept 2022 and Monsoon Season's Rainfall Scenario (01 June-14 Sept, 2022):** It shows for the country as a whole, the weekly cumulative All India Rainfall departure till week ending

on 14 Sept 2022, from its long period average (LPA) was 34 %, with **over east and northeast India as -9%** while all India Seasonal cumulative rainfall % departure during this year's **monsoon Season Rainfall during 01 June till 14 Sept 2022** is +6%. 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		
	08.09.2022 TO 14.09.2022			01.06.2022 TO 14.09.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
<b>EAST &amp; NORTH-EAST INDIA</b>	<b>63.5</b>	<b>70</b>	<b>-9%</b>	<b>1018.9</b>	<b>1223.7</b>	<b>-17%</b>
<b>NORTH-WEST INDIA</b>	<b>13.9</b>	<b>28.8</b>	<b>-52%</b>	<b>507.5</b>	<b>549.3</b>	<b>-8%</b>
<b>CENTRAL INDIA</b>	<b>86.2</b>	<b>44.8</b>	<b>+92%</b>	<b>1066.3</b>	<b>900.7</b>	<b>+18%</b>
<b>SOUTH PENINSULA</b>	<b>63.8</b>	<b>33.9</b>	<b>+88%</b>	<b>831.9</b>	<b>625.8</b>	<b>+33%</b>
<b>Country as a whole</b>	<b>56</b>	<b>41.8</b>	<b>+34%</b>	<b>840.9</b>	<b>790.1</b>	<b>+6%</b>

## 2. Large scale features

- Currently, the sea surface temperatures (SSTs) as well as the atmospheric conditions over Equatorial Pacific Ocean indicate La Niña conditions. The latest forecasts from MMCFS and other global models indicate that La Niña conditions are likely to continue during remaining part of the monsoon season. 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. Currently, the SST conditions over Equatorial Indian Ocean are very close to the threshold level for negative Indian Ocean Dipole (IOD) conditions. The latest forecasts from MMCFS and other global models indicate negative IOD conditions are likely to develop during remaining part of the monsoon season.
- The Madden Julian Oscillation Index (MJO) currently lies in phase 1 with amplitude less than

1 and would continue in same phase during first half of week 1. Thereafter, it will move across phases 2,3, 4 & 5 with negligibly small amplitude during remaining part of the forecast period. Thus, MJO would support cyclogenesis over the Bay of Bengal (BoB) from second half of the week 1.

### 3. Forecast for next two week

#### Forecast for next two week

#### Weather systems & associated Precipitation during Week 1 (15 to 21 September, 2022) and Week 2 (22 to 28 September, 2022)

##### **Forecast for week 1 (15 to 21 September, 2022):**

- A Western Disturbance as a trough in mid-tropospheric westerlies runs roughly along Long.70°E to the north of Lat. 27°N.
- A **Well Marked Low Pressure Area** lies over northwest Madhya Pradesh & neighbourhood. Due to its likely interaction with the trough in middle latitude westerlies associated with Western Disturbance, the system is likely to re-curve gradually north-northeastwards towards East Uttar Pradesh during next 72 hours.
- The monsoon trough is south of its normal position, it is likely to shift northwards from its normal position during 2<sup>nd</sup> half of the week.
- An upper air cyclonic circulation is likely to form over North Bay of Bengal along & off north Odisha- west Bengal coasts around 18<sup>th</sup> September, 2022. It is very likely to move west-northwest during subsequent 3-4 days.
- **Under above favorable meteorological conditions:**
  - Fairly widespread/ widespread light/moderate rainfall with **heavy to very heavy rainfall & thunderstorm/lightning very likely over Uttarakhand & Uttar Pradesh during 15<sup>th</sup>-17<sup>th</sup> and over West Madhya Pradesh on 15<sup>th</sup> September, 2022. Isolated heavy to very heavy rainfall with extremely heavy falls also likely over Uttarakhand & West Uttar Pradesh on 17<sup>th</sup> September, 2022. Isolated heavy falls** likely over East Madhya Pradesh on 15<sup>th</sup> September, 2022
  - Fairly widespread/ widespread light/moderate rainfall with isolated **heavy falls and thunderstorm/lightning** very likely over south Haryana & East Rajasthan on 15<sup>th</sup> September, 2022.

- Fairly widespread/ widespread light/moderate rainfall with **isolated heavy falls & thunderstorm/lightning** very likely over Saurashtra & Kutch on 15<sup>th</sup>; Bihar, Sub-Himalayan West Bengal & Sikkim and Gujarat Region on 15<sup>th</sup> & 16<sup>th</sup>; Odisha on 18<sup>th</sup> to 21<sup>st</sup>; Chhattisgarh and Vidharbha on 20<sup>th</sup> & 21<sup>st</sup>; ghat areas of Madhya Maharashtra and Konkan & Goa during 15<sup>th</sup>-17<sup>th</sup> September, 2022. **Isolated very heavy rainfall also likely over Gujarat State on 15<sup>th</sup> and over ghat areas of Madhya Maharashtra and Konkan & Goa on 15<sup>th</sup> & 16<sup>th</sup> September, 2022.**
- Fairly widespread/ widespread light/moderate rainfall with **isolated heavy falls and thunderstorm/lightning** very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 15<sup>th</sup>, 16<sup>th</sup>, 20<sup>th</sup> & 21<sup>st</sup> September, 2022.
- Isolated to scattered rainfall activity is likely over rest parts of the country during the week except Rajasthan, where dry weather is likely during 2<sup>nd</sup> half of the week.

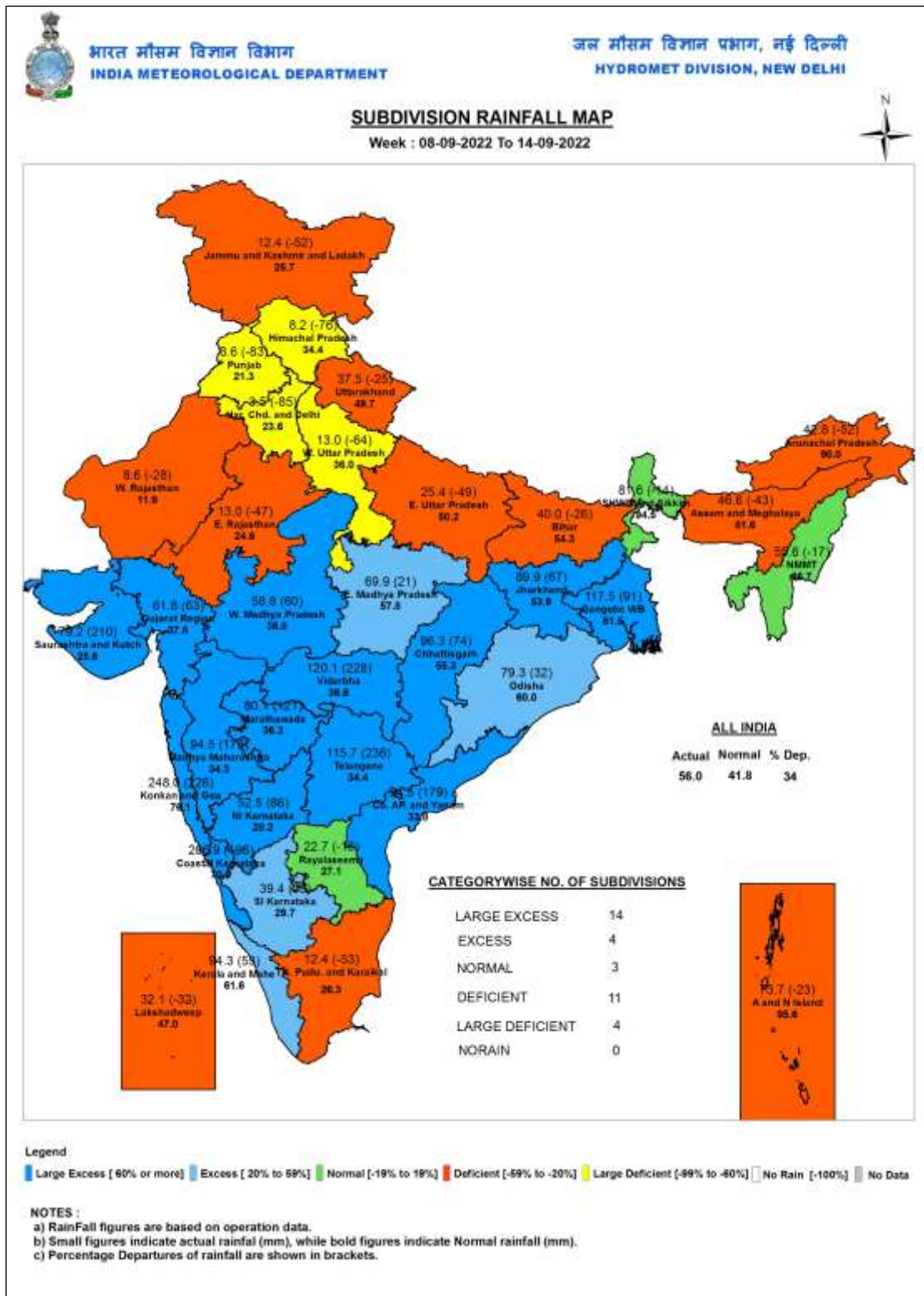
**Rainfall for week 2 (22 to 28 September, 2022):**

- Under the influence of Western Disturbance and its interaction with monsoonal winds, scattered to fairly widespread rainfall likely over northwest India during most days of the week. **Isolated heavy is also likely over Western Himalayan Region during some days of the week.**
- **Rainfall activity is likely to be above normal over northwest India.**
- **Rainfall activity is likely to be near normal over rest parts of the country.**

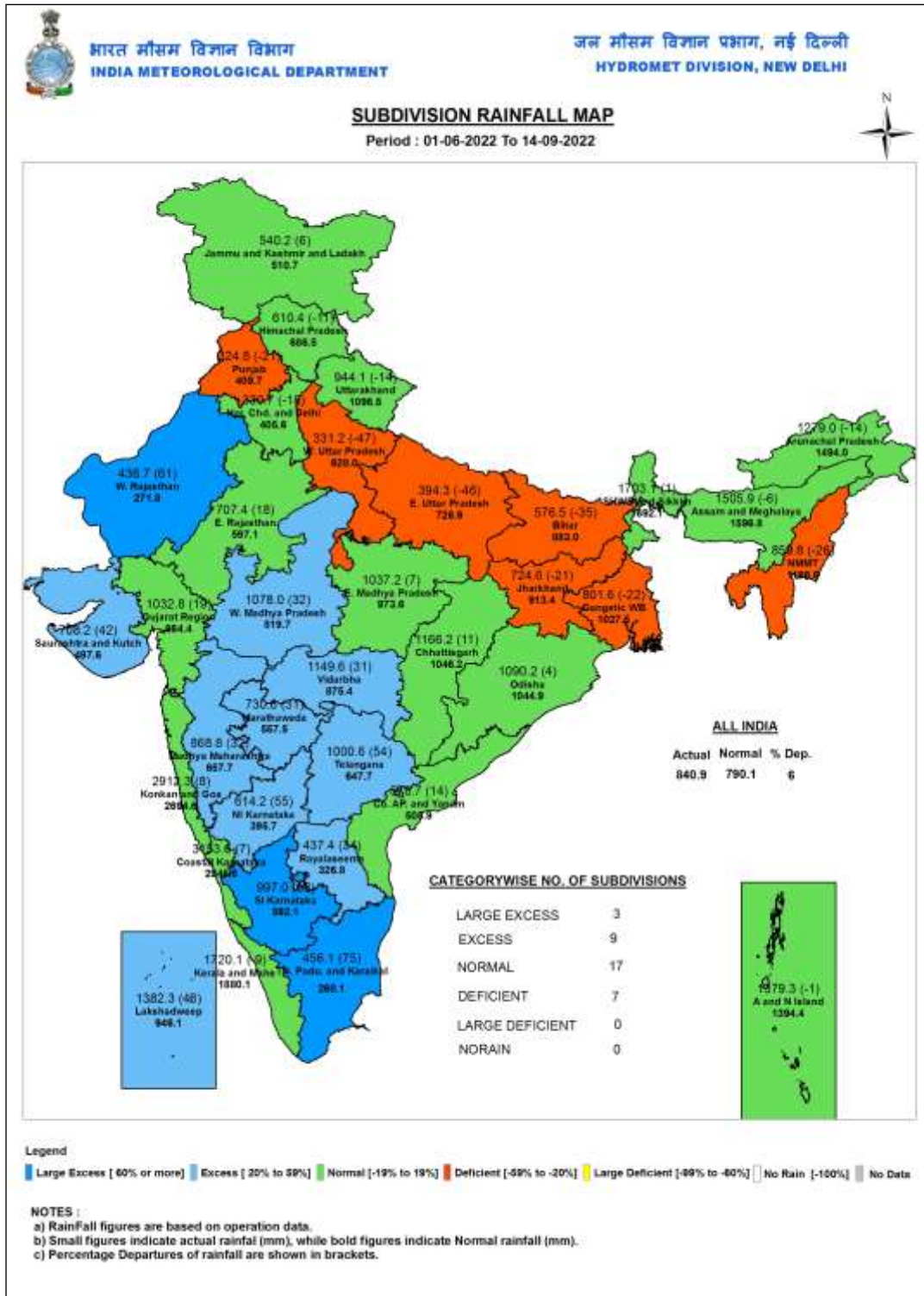
**Legends: Heavy Rain:** 64.5 to 115.5 mm **Very Heavy Rain:** 115.6 to 204.4 mm, **Extremely Heavy Rain** > 204.4 mm

<b>SPATIAL DISTRIBUTION</b> (% 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)

<b>Probabilistic Forecast</b>	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75



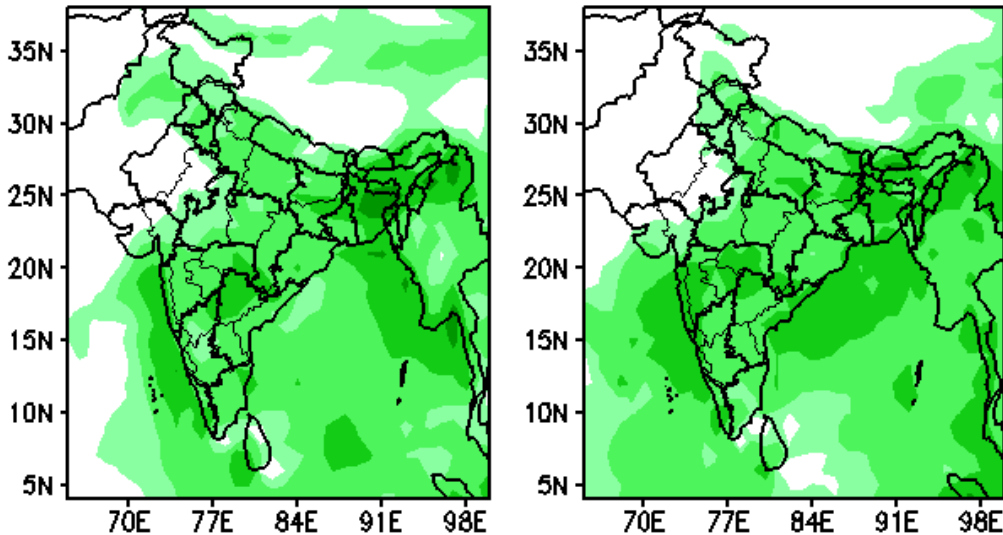




**Forecast Rainfall (mm/day)**

(Week1: 16Sep-22Sep)

(Week2: 23Sep-29Sep)



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

(Week1: 16Sep-22Sep)

(Week2: 23Sep-29Sep)

