



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

Press: Dated: 22 Sept, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(22 Sept-5 Oct 2022)**

1. Salient Observed Features for week ending on 22 Sept 2022

- **Withdrawal of Southwest Monsoon:** Southwest Monsoon has withdrawn from parts of southwest Rajasthan & adjoining Kutch on 20th September, 2022; the withdrawal line of Southwest Monsoon passed through Khajuwala, Bikaner, Jodhpur and Naliya on 20th September 2022 and remained the same till the end of the week.
- **Isolated heavy to very heavy rainfall with isolated extremely heavy rain** observed over central and eastern parts of Uttar Pradesh during 15-18 Sept, isolated heavy to very heavy rainfall had occurred over Gujarat, east Rajasthan, North Maharashtra and north Madhya Pradesh during 15-17 Sept and it was mainly due to northwestwards movement of Remnant of last week's Depression which moved initially as a Low Pressure Area to northwest Madhya Pradesh & neighbourhood 15th, persisted there on 16th and then re-curved to northeast Uttar Pradesh across central parts of Uttar Pradesh & neighbourhood as cyclonic circulation in the lower tropospheric levels during 17-18 Sept. There was also interaction of this system with western Disturbance which moved eastwards as trough in mid-latitude Westerly during 16-18 Sept across northwest India.
- **Analysis of Weekly overall Rainfall distribution during the current week ending on 21 Sept 2022 and Monsoon Season's Rainfall Scenario (01 June-21 Sept, 2022):** It shows for the country as a whole, the weekly cumulative All India Rainfall departure till week ending on 21 Sept 2022, from its long period average (LPA) was 17 %, with **over east and**

northeast India as -24% while all India Seasonal cumulative rainfall % departure during this year's **monsoon Season Rainfall during 01 June till 21 Sept 2022** is **+7%**. 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		
	15.09.2022 TO 21.09.2022			01.06.2022 TO 21.09.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	48.8	63.9	-24%	1067.9	1287.6	-17%
NORTH-WEST INDIA	38.2	18.4	+107%	545.7	567.7	-4%
CENTRAL INDIA	63.1	38.9	+62%	1128.4	939.6	+20%
SOUTH PENINSULA	14.5	41.3	-65%	846.3	667.1	+27%
Country as a whole	43.6	37.1	+17%	884.2	827.2	+7%

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 5 with amplitude less than 1 and would continue in same phase during first half of week 1. It will move across phases 6, 7

& 8 during second half of week 1. Thereafter, it will move across phases 2, 3 & 4 during week 2. Thus, MJO would support enhancement of convective activity over north Bay of Bengal (BoB) & central India during first half of week 1 and over the north Indian Ocean (NIO) including the Arabian Sea (AS) and BoB during week 2.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (22 to 28 September, 2022) and Week 2 (29 September to 05 October, 2022)

Forecast for week 1 (22 to 28 September, 2022):

- A cyclonic circulation lies over northwest Madhya Pradesh & neighbourhood extending upto mid-tropospheric levels. It is likely to move northwestwards and persists over West Uttar Pradesh & neighbourhood during 1st half of the week.
- An east-west trough runs from northwest & adjoining westcentral Bay of Bengal to central Rajasthan in lower tropospheric levels. It is likely to persist during 1st half of the week with gradual shifting of its eastern end towards northeastern states.
- A Western Disturbance as a trough in mid-tropospheric westerlies runs roughly along Long. 70°E to the north of Lat. 28°N.
- Under the influence of above systems:
 - Fairly widespread/widespread light/moderate rainfall with **isolated heavy falls** & thunderstorm/lightning very likely over Odisha & Telangana on 22nd, Madhya Pradesh during 22nd & 23rd September, 2022.
 - Scattered/Fairly widespread light/moderate rainfall with **isolated heavy falls** & thunderstorm/lightning very likely over Uttarakhand, West Uttar Pradesh and East Rajasthan during 1st half of the week; Haryana & Chandigarh on 22nd, East Uttar Pradesh on 22nd, 23rd, 25th and 26th September. **Isolated very heavy rainfall also likely over East Rajasthan and West Uttar Pradesh on 22nd September, 2022.**
 - Fairly widespread/Widespread light/moderate rainfall with isolated heavy falls & thunderstorm/lightning very likely over Arunachal Pradesh and Assam & Meghalaya during 1st half of the week.
 - Isolated to scattered rainfall activity is likely over rest parts of the country during the week except West Rajasthan & Punjab, where dry weather is likely during 2nd half of the week.

- Conditions are likely to become favourable for withdrawn of monsoon from some more parts of the northwest India towards end of the week.

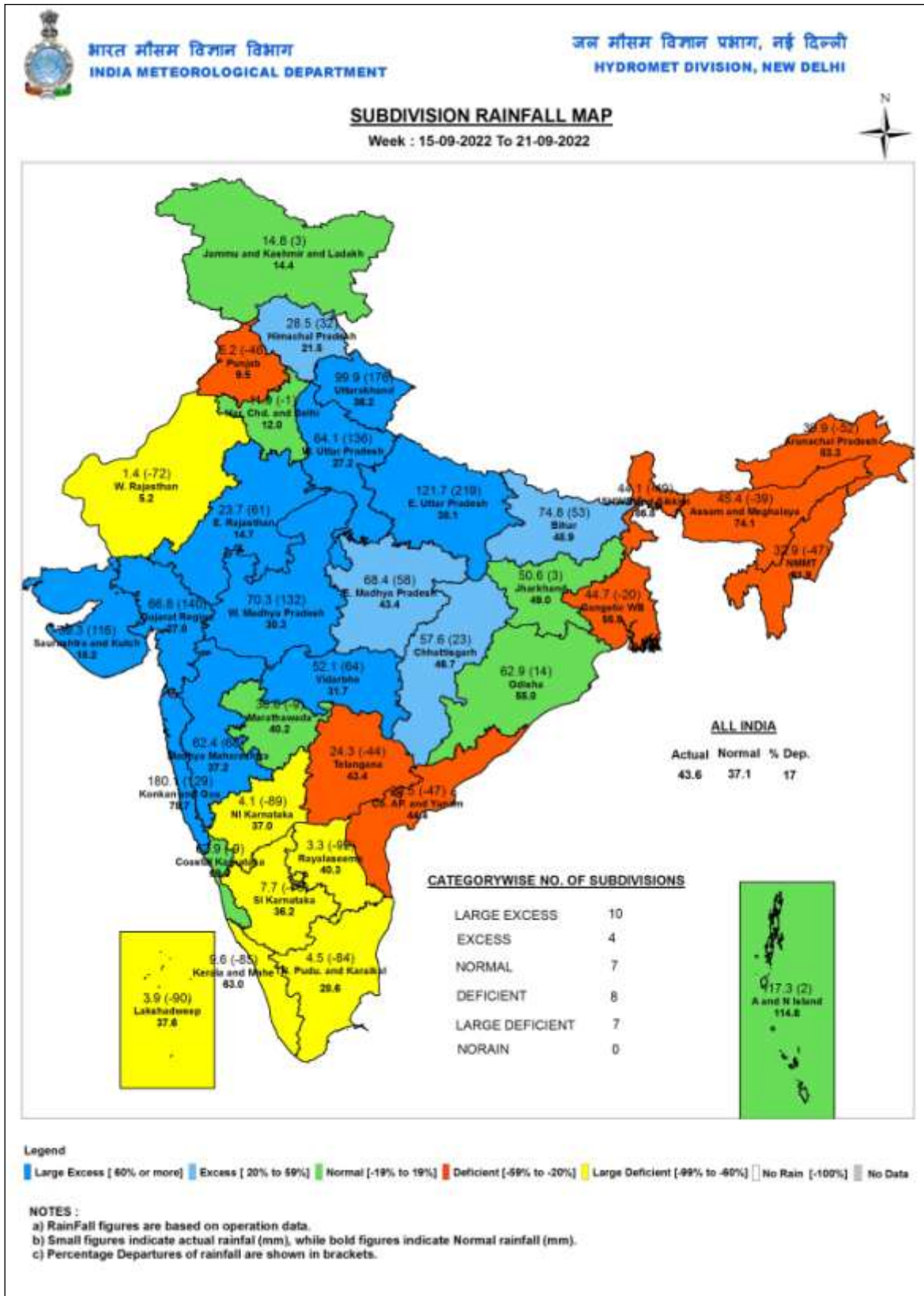
Rainfall for week 2 (29 September to 05 October, 2022):

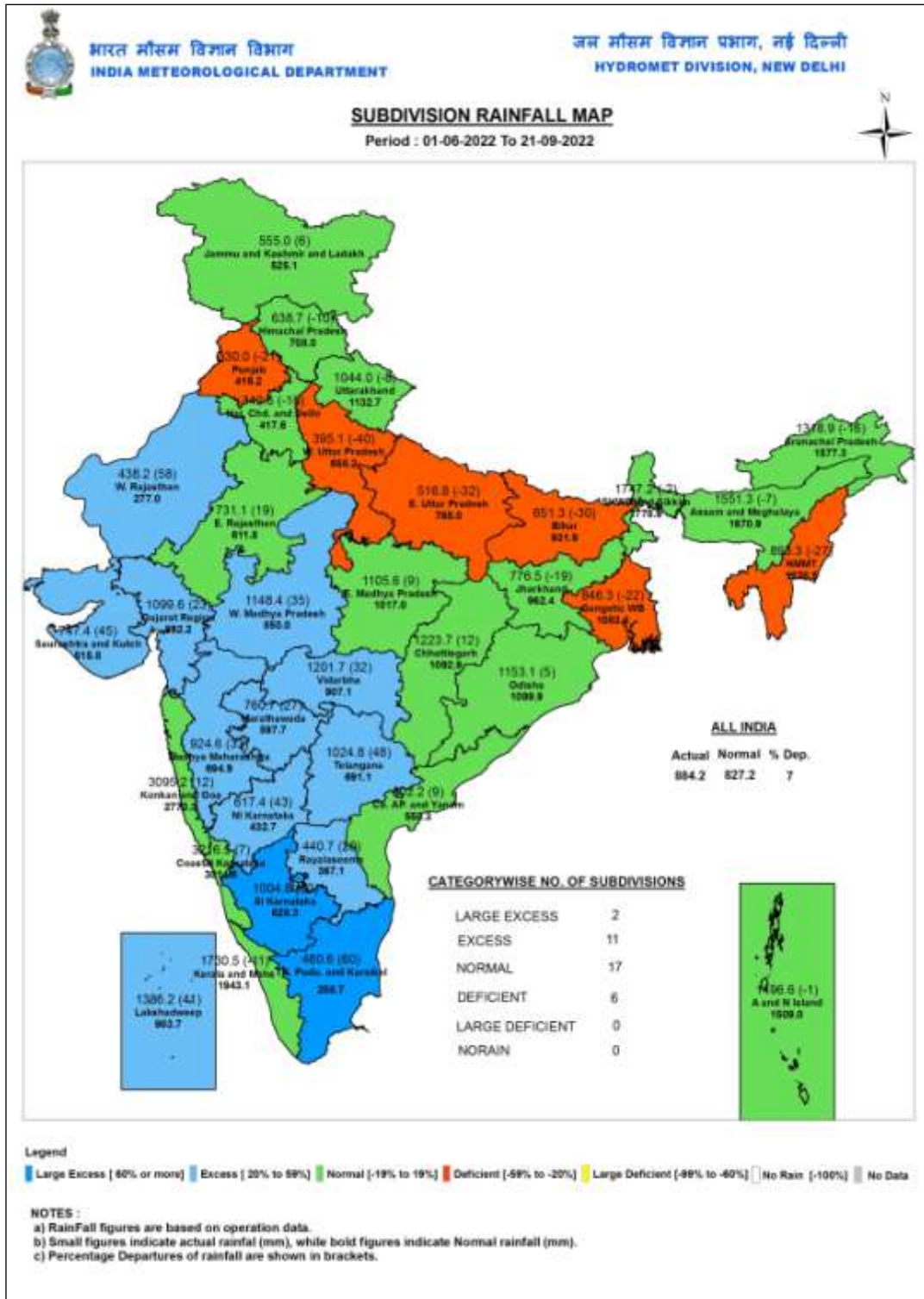
- Monsoon is likely to withdraw from some more parts of the northwest and some parts of Central India during the week.
- Due to trough/cyclonic circulation over Central and Peninsular India, scattered to fairly widespread rainfall & isolated thunderstorm/lightning likely over central and Peninsular India during most days of the week.
- Rainfall activity is likely to be below normal to near normal over northwest, east & northeast India.
- Rainfall activity is likely to be normal to above normal over central and Peninsular India.

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

SPATIAL DISTRIBUTION (% 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)

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

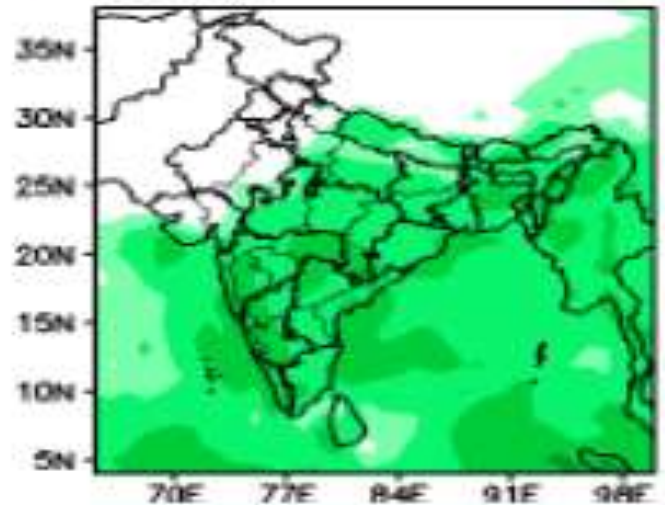
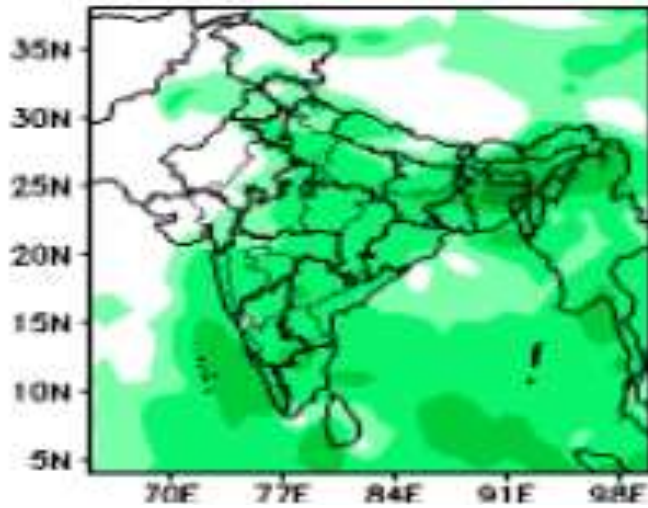




Forecast Rainfall (mm/day)

(Week1: 23Sep-29Sep)

(Week2: 30Sep-06Oct)



Forecast Rainfall Anomaly (mm/day)

(Week1: 23Sep-29Sep)

(Week2: 30Sep-06Oct)

