

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

Press: Dated: 1 Sept, 2022

Subject: Current Weather Status and Extended range Forecast for next two weeks (1-14 Sept 2022)

# 1. Salient Observed Features for week ending on 31 Aug 2022

- ➤ With Last week's Well Marked Low Pressure Area over southwest Rajasthan & adjoining Pakistan, less marked on 27<sup>th</sup> August 2022, as a low pressure area over southeast Pakistan & adjoining southwest Rajasthan, the monsoon trough at mean sea level which was passed through south of the normal position till 26 Aug, was quickly shifted and ran close to the foothills of the Himalayas on 27<sup>th</sup> and continued to remain close to the foothills of Himalayas till 31<sup>st</sup> August 2022. As a result, isolated heavy to very heavy heavy rainfall over subdivisions over both western and eastern Himalayas during 2<sup>nd</sup> half of the week.
- ➤ Also, a north-south trough over peninsular India and an embedded Cyclonic circulation in the lower levels over southeast peninsular India caused isolated heavy to very heavy rainfall over south peninsular India covering Kerala, south Karnataka and Tamil Nadu during 2<sup>nd</sup> half of the week leading to flood conditions mainly over Kerala.
- ➤ Plains of northwest and Central India continued to get sub-dued rain in 2<sup>nd</sup> half the week due to absence of any major system in these areas and the monsoon trough located at foot hills of the Himalayas.
- Analysis of Weekly overall Rainfall distribution during the current week ending on 31 Aug 2022 and Monsoon Season's Rainfall Scenario (01 June-31 Aug, 2022): It shows for the country as a whole, the weekly cumulative All India Rainfall departure till week ending on 31 Aug 2022, from its long period average (LPA) was -28 %, with over east and northeast India as -19% while all India Seasonal cumulative rainfall % departure during this

year's monsoon Season Rainfall during 01 June till 31 Aug 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 25.08.2022 TO 31.08.2022			SEASON 01.06.2022 TO 31.08.2022		
	EAST &					
NORTH-	55.4	68.4	-19%	879.5	1084.5	-19%
EAST INDIA						
NORTH-						
WEST INDIA	17.8	35.1	-49%	477.9	484.9	-1%
CENTRAL						
INDIA	24.7	61.9	-60%	942.5	800.4	18%
SOUTH						
PENINSULA	69.4	37.9	83%	709.2	556.2	28%
Country as a	26.2	50	200/	742.0	700 7	60/
whole	36.2	50	-28%	743.8	700.7	6%

#### 2. Large scale features

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 with amplitude remaining less than 1 during first half of week 1. Thereafter, it will move across phases 6, 7 & 8 with amplitude remaining less than 1 during remaining part of the forecast period.
- 3. Forecast for next two week

## Forecast for next two week

Weather systems & associated Precipitation during Week 1 (01 to 07 September, 2022) and Week 2 (08 to 14 September, 2022)

Forecast for week 1 (01 to 07 September, 2022):

- ✓ The monsoon trough at mean sea level runs north to its normal position.
- ✓ A cyclonic circulation lies over north Tamil Nadu in lower tropospheric levels.
- ✓ A north-south trough runs from central India to extreme south Peninsular India in lower tropospheric levels.
- ✓ Under the influence of the above systems:
- Fairly widespread/widespread rainfall with isolated heavy falls and thunderstorm/lightning very likely over Nagaland, Manipur, Mizoram & Tripura, Arunachal Pradesh and Assam & Meghalaya during the week. Isolated very heavy rainfall also likely over Arunachal Pradesh and Assam & Meghalaya on 02nd & 03rd September, 2022.
- Fairly widespread/widespread rainfall with isolated heavy falls & thunderstorm/lightning very likely over Madhya Pradesh on 01st; Bihar during 01st-03rd; Jharkhand on 03rd and over Sub-Himalayan West Bengal(SHWB) & Sikkim during next 5 days. Isolated extremely heavy rainfall over SHWB & Sikkim on 01st & 02nd; very heavy rainfall also likely on 03rd & 04th September, 2022.
- o Fairly widespread/widespread rainfall with isolated heavy falls and thunderstorm/lightning very likely over Coastal Karnataka on 01<sup>st</sup>, 04<sup>th</sup> to 07<sup>th</sup>; North Interior Karnataka on 01<sup>st</sup> & 05<sup>th</sup>; Lakshadweep on 01<sup>st</sup> & 02<sup>nd</sup>; Rayalaseema on 05<sup>th</sup> and over Tamil Nadu, Kerala & Mahe and South Interior Karnataka during next 5 days. Isolated very heavy rainfall also likely over Tamil Nadu & South Interior Karnataka on 01<sup>st</sup> and over Kerala & Mahe and Lakshadweep on 01<sup>st</sup> & 02<sup>nd</sup> September, 2022.
- o Isolated/scattered rainfall over Western Himalayan Region & Uttar Pradesh during 1st half

of the week and fairly widespread/widespread rainfall thereafter. **Isolated heavy falls** and thunderstorm/lightning very likely over Jammu & Kashmir on 04<sup>th</sup>; Himachal Pradesh on 04<sup>th</sup> & 05<sup>th</sup>; Uttarakhand on 01<sup>st</sup>, 03<sup>rd</sup> to 05<sup>th</sup> and over northwest & East Uttar Pradesh on 01<sup>st</sup> September, 2022. **Isolated very heavy rainfall also likely over Uttarakhand on 04<sup>th</sup> September, 2022.** 

- Fairly widespread/widespread rainfall with isolated heavy falls and thunderstorm/lightning very likely over Saurashtra & Kutch on 01<sup>st</sup>; Gujarat Region, Madhya Maharashtra & Konkan & Goa on 01<sup>st</sup> & 02<sup>nd</sup> September.
- Isolated to scattered rainfall with thunderstorm likely to occur over rest parts of the country during the week except West Rajasthan and Saurashtra, Kutch & Diu, where weather is likely to be dry during 2<sup>nd</sup> half of the week.

## Rainfall for week 2 (08 to 14 September, 2022):

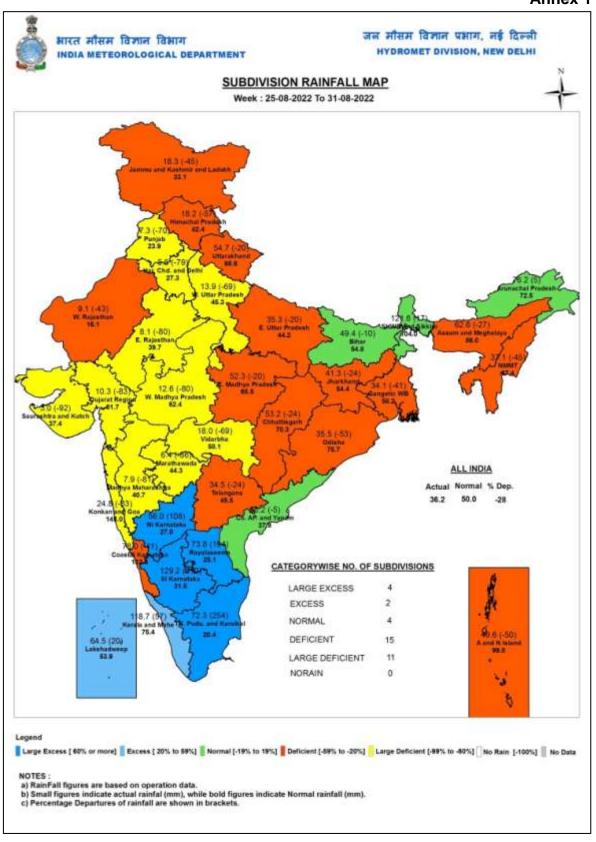
- Scattered to fairly widespread rainfall likely over northwest, central and south Peninsular India during most days of the week. Isolated heavy is also likely over south Peninsular and northwest India during some days of the week.
- Rainfall activity is likely to be above normal over south Peninsular and northwest India.
- Rainfall activity is likely to be normal to above normal over rest parts of the country outside Sub-Himalayan West Bengal & Sikkim, Bihar and Jharkhand, where it is likely to be below normal.

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

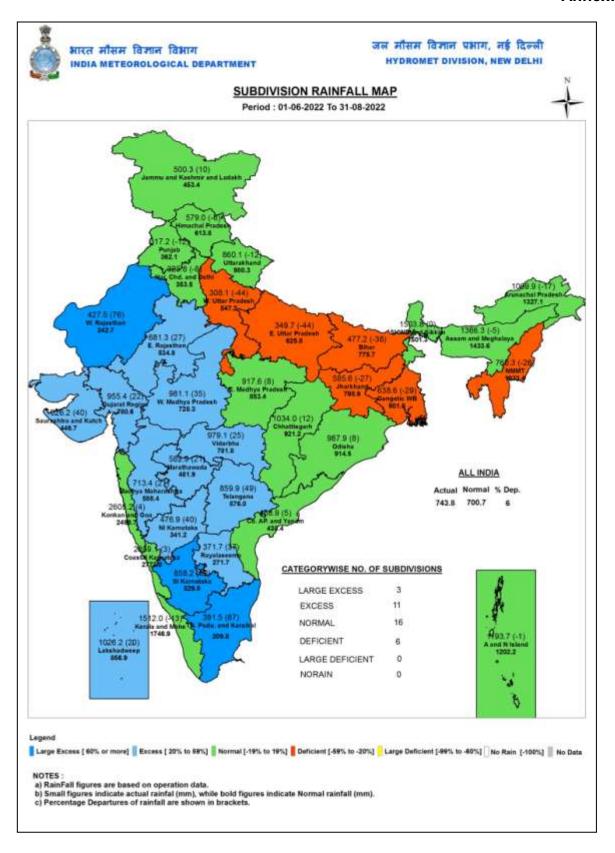


Probabilistic Forecast				
Terms	Probability of Occurrence (%)			
Unlikely	< 25			
Likely	25 - 50			
Very Likely	50 - 75			
Most Likely	> 75			

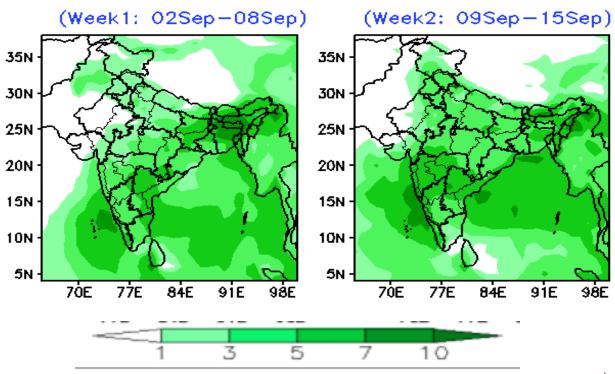
## Annex 1



#### Annex: II



# Forecast Rainfall (mm/day)



# Forecast Rainfall Anomaly (mm/day)

