



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

Press: Dated: 29 Sept, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(29 Sept-12 Oct 2022)**

1. Salient Observed Features for week ending on 28 Sept 2022

- **Vigorous to Active monsoon spell over Haryana, Chandigarh & Delhi, West Uttar Pradesh and East Rajasthan during 22-25 and over Uttarakhand during 24-26 Sept:** Fairly widespread to widespread rainfall/thunderstorm activity with isolated heavy to very heavy rainfall observed over Haryana, Chandigarh & Delhi, West Uttar Pradesh and East Rajasthan during 22-25 and over Uttarakhand during 24-26 Sept. **Isolated extremely heavy rain** also observed over Haryana and west Uttar Pradesh during 23-25 Sept. It was mainly due to northwestwards movement of remnant of the last week's Low Pressure Area which was seen as a cyclonic circulation over northwest Madhya Pradesh & neighbourhood 22nd. The Low pressure area has then redeveloped and lay over northeast Rajasthan and adjoining areas of northwest Madhya Pradesh on 23rd. It then interacted with a WD and moved north- northwestwards to over northeast Rajasthan & adjoining areas of Haryana & Delhi and southwest Uttar Pradesh in the morning of 24th; it lay over south Haryana and neighbourhood in the evening of 24th and over north Punjab & neighbourhood on morning of 25th; and it became less marked at evening of 25th Sept.
- **Withdrawal of Southwest Monsoon:** The Southwest Monsoon has further withdrawn, today on 29th Sept, from entire Punjab & Chandigarh; some parts of Jammu & Kashmir, Himachal Pradesh, West Uttar Pradesh and Haryana; entire Delhi; some more parts of Rajasthan. The withdrawal line of Southwest Monsoon as on 29th Sept, passes through Jammu, Una, Chandigarh, Karnal, Baghpat, Delhi, Alwar, Jodhpur and Nalia.
- **Analysis of Weekly overall Rainfall distribution during the current week ending on 28 Sept 2022 and Monsoon Season's Rainfall Scenario (01 June-28 Sept, 2022):** It shows

for the country as a whole, the weekly cumulative All India Rainfall departure till week ending on 28 Sept 2022, from its long period average (LPA) was 1 %, with **over east and northeast India as -26%** while all India Seasonal cumulative rainfall % departure during this year's **monsoon Season Rainfall during 01 June till 28 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		
	22.09.2022 TO 28.09.2022			01.06.2022 TO 28.09.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	49.4	67.2	-26%	1118	1354.8	-17%
NORTH-WEST INDIA	48	17.5	174%	593.7	585.2	+1%
CENTRAL INDIA	25.6	31.7	-19%	1154	971.3	+19%
SOUTH PENINSULA	15.7	37.6	-58%	860.7	704.7	+22%
Country as a whole	34.4	34.1	+1%	918.4	861.3	+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 indicate that La Niña conditions are likely to continue during Oct-Nov 2022. 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 indicate negative IOD conditions are likely to in Oct-Nov 2022.
- The Madden Julian Oscillation Index (MJO) currently lies in phase 3 with amplitude less than 1 and would move across phase 4 till the end of week 1 with amplitude becoming more than 1. It will thereafter move across phase 5 with amplitude remaining more than 1 till the middle of week

2. Thereafter, it will move to phase 6 with amplitude remaining more than 1. Enhanced MJO phase and amplitude during week 1 and first half of week 2 is likely to increase westerly winds over the Bay of Bengal region during the period. Thus, MJO would support enhancement of convective activity over the Bay of Bengal (BoB) during week 1 and first half of week 2.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (29 September to 05 October, 2022) and Week 2 (06 to 12 October, 2022)

Withdrawal of Southwest Monsoon

➤ The Southwest Monsoon has further withdrawn from entire Punjab & Chandigarh; some parts of Jammu & Kashmir, Himachal Pradesh, West Uttar Pradesh and Haryana; entire Delhi; some more parts of Rajasthan. The withdrawal line of Southwest Monsoon now passes through Jammu, Una, Chandigarh, Karnal, Baghpat, Delhi, Alwar, Jodhpur and Nalia (Annexure 1).

➤ **Southwest Monsoon is likely to withdraw from some more parts of the northwest and some parts of Central India during 1st half of the week.**

Forecast for week 1 (29 September to 05 October, 2022):

➤ A cyclonic circulation lies over Westcentral Bay of Bengal off Andhra Pradesh coast in lower tropospheric levels. It is likely to persist during next 2-3 days.

➤ An east-west trough runs from Eastcentral Bay of Bengal to South Interior Karnataka across Westcentral Bay of Bengal and Rayalaseema in lower tropospheric levels. It is likely to persist during 1st half of the week.

➤ A cyclonic circulation is likely to emerge into northeast & adjoining eastcentral Bay of Bengal around 01st October, 2022.

➤ Under the influence of above systems:

○ Scattered to fairly widespread light/moderate rainfall with **isolated heavy falls** very likely over Odisha on 29th September and 01st- 05th October; and Jharkhand on 03rd & 04th; Sub-Himalayan West Bengal & Sikkim, Bihar & East Uttar Pradesh on 04th & 05th; Gangetic West Bengal on 02nd to 05th October, 2022. **Isolated very heavy rainfall also very likely over Odisha on 03rd & 04th October, 2022.**

- Scattered to fairly widespread light/moderate rainfall with **isolated heavy falls** & thunderstorm/lightning very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 02nd to 05th October, 2022.
- Fairly widespread/widespread light/moderate rainfall with **isolated heavy falls** & thunderstorm/lightning very likely over Coastal Andhra Pradesh & Yanam during 29th September- 01st October, Telangana, Rayalaseema and Interior Karnataka on 29th & 30th September; Tamil Nadu, Puducherry & Karaikal on 29th September, 2022. **Isolated very heavy rainfall also very likely over south coastal Andhra Pradesh, Rayalaseema and Telangana on 29th September, 2022.**
- Isolated to scattered rainfall activity is likely over rest parts of the country during most days of the week except Punjab, West Rajasthan and Saurashtra, Kutch & Diu, where dry weather is likely during most days of the week.

Rainfall for week 2 (06 to 12 October, 2022):

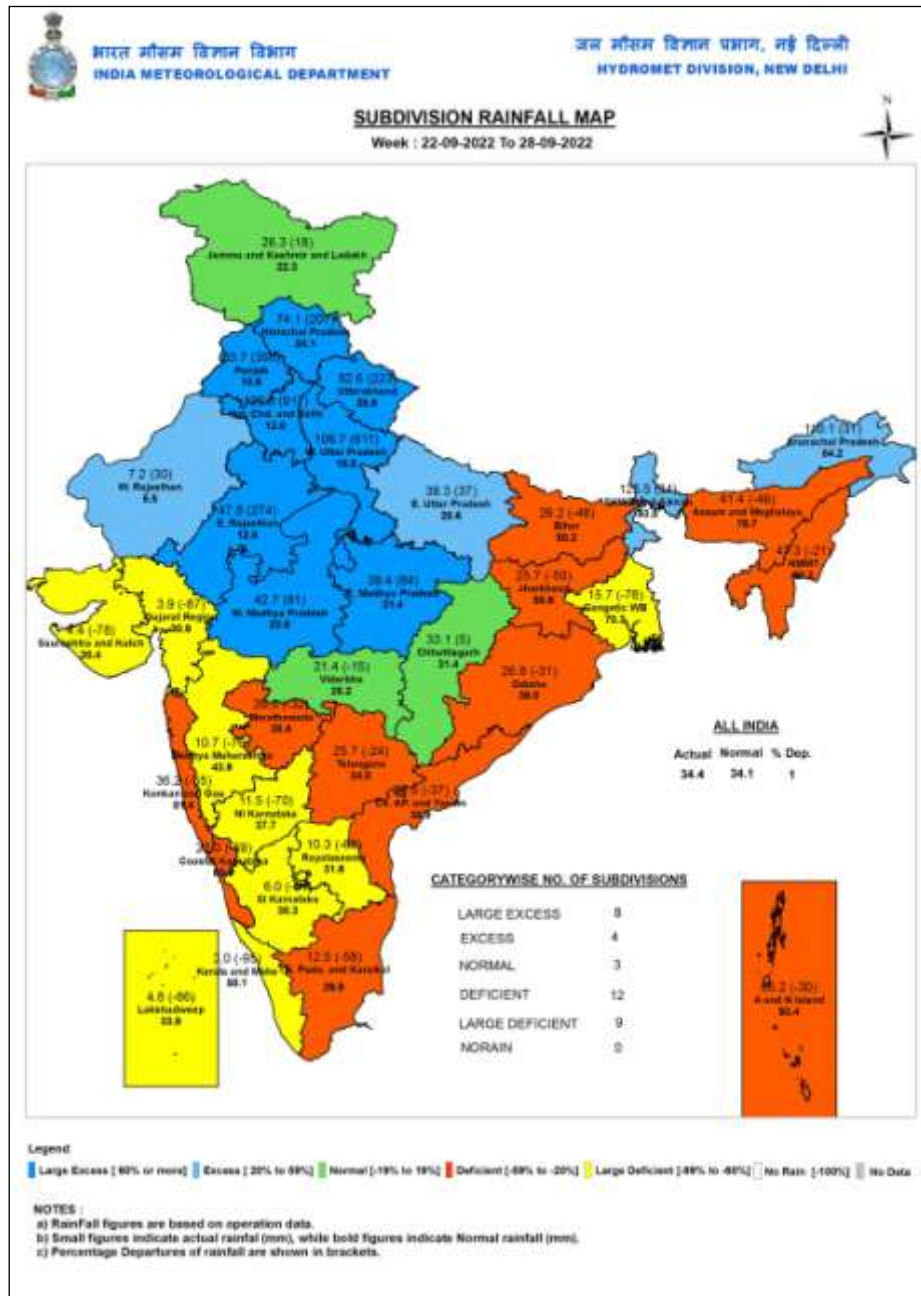
- **A fresh cyclonic circulation likely to develop over eastcentral Bay of Bengal towards middle of the week and move westwards subsequently.**
- Due to trough/cyclonic circulation over south Peninsular India, scattered to fairly widespread rainfall & isolated heavy falls likely over south Peninsular India during most days of the week.
- Due to Cyclonic circulation and wind from Bay of Bengal over north India at lower tropospheric levels, scattered to fairly widespread rainfall & **isolated heavy falls** likely over Bihar, Uttar Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, East Rajasthan and north Madhya Pradesh mainly during 1st half of the week. **Isolated very heavy rainfall is also likely over West Uttar Pradesh, Uttarakhand and Haryana & Chandigarh during 1st half of the week.**
- **Overall, rainfall activity is likely to be above normal over northwest, east & northeast India. It 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

Annex 1

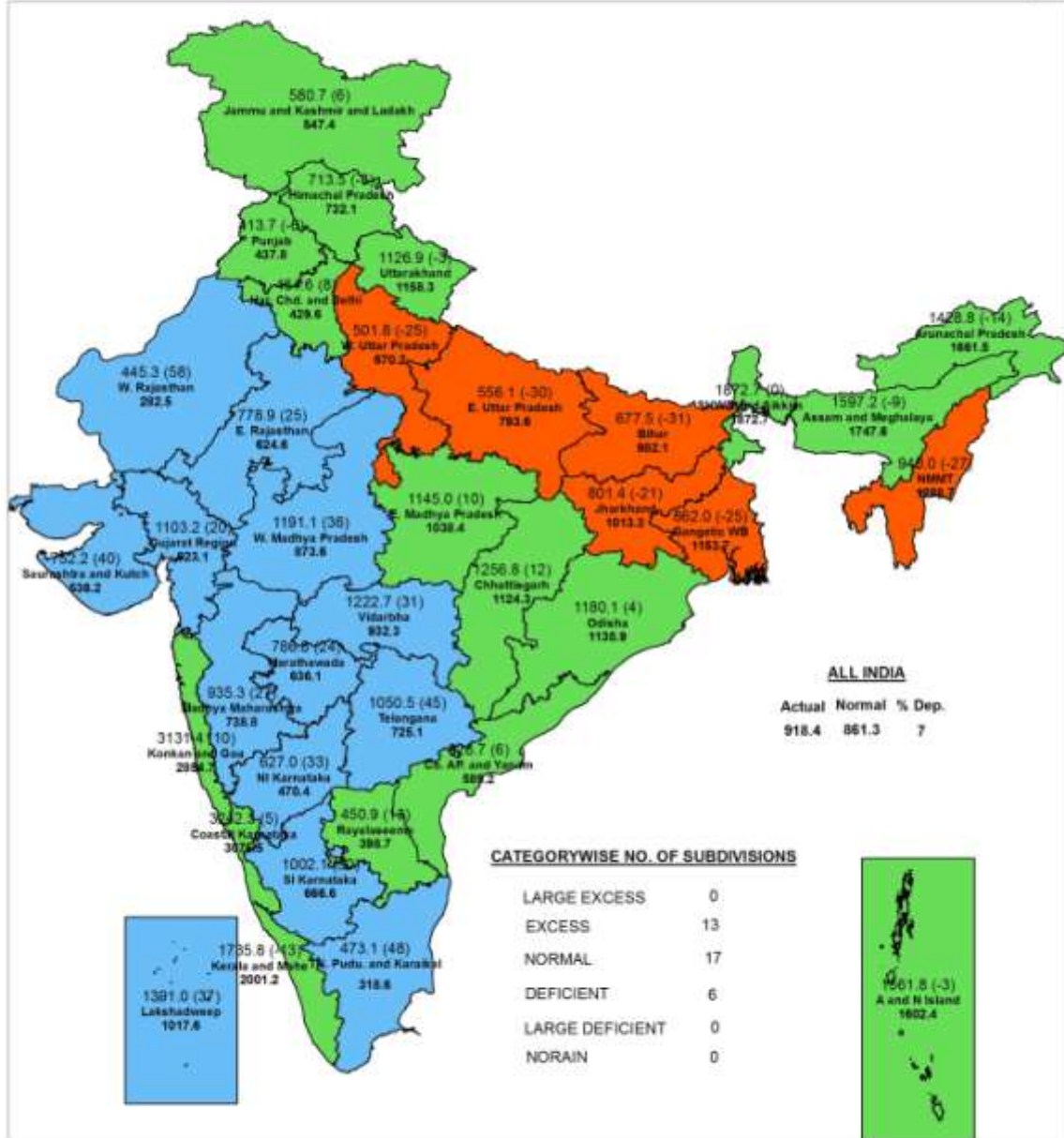


Annex: II



SUBDIVISION RAINFALL MAP

Period : 01-06-2022 To 28-09-2022



Legend

Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-59% to -80%] No Rain [-100%] No Data

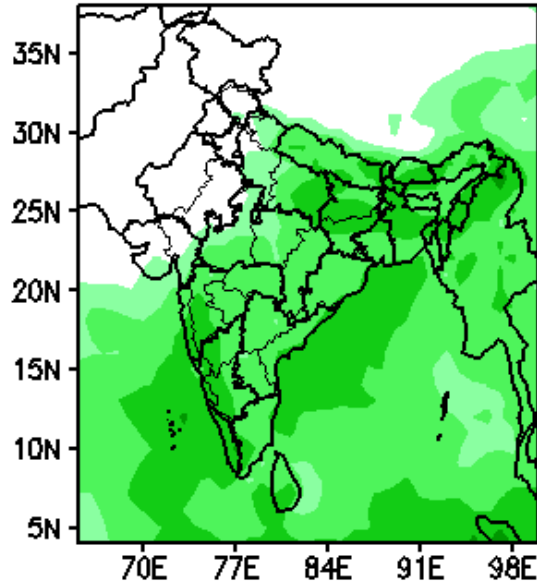
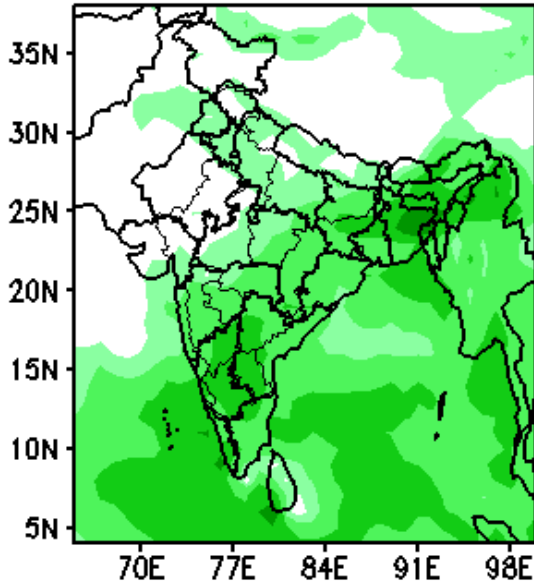
NOTES :

- a) Rainfall figures are based on operation data.
- b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
- c) Percentage Departures of rainfall are shown in brackets.

Forecast Rainfall (mm/day)

(Week1: 30Sep-06Oct)

(Week2: 07Oct-13Oct)



Forecast Rainfall Anomaly (mm/day)

(Week1: 30Sep-06Oct)

(Week2: 07Oct-13Oct)

