



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

Press: Dated: 3 Nov, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(3-16 Nov 2022)**

1. Salient Observed Features for week ending 2 Nov 2022

- **Commencement of Northeast Monsoon:** In view of setting in of northeasterly winds in the lower tropospheric levels over Bay of Bengal and South Peninsular India, the Northeast Monsoon rains have commenced over coastal areas of Tamil Nadu, Puducherry & Karaikal and adjoining areas of south Coastal Andhra Pradesh on 29th October 2022 and it has further covered Kerala & Mahe, South Interior Karnataka, Rayalaseema and remaining parts of Tamil Nadu, Puducherry & Karaikal on 30th October, 2022.
- **Heavy rainfall spell over Tamil Nadu, Puducherry & Karaikkal and adjoining areas of Kerala and South coastal Andhra Pradesh including over Chennai City during 30 Oct-2 Nov:** A cyclonic circulation formed over Southeast Bay of Bengal & adjoining Equatorial Indian ocean in the lower tropospheric levels on 29th and progressed westwards to reach Southwest Bay of Bengal off north Sri Lanka coast by 31st October and remained over the same areas/ neighbourhood with increased vertical extension towards the end of the week. In addition to this, a trough lay extending from this cyclonic circulation to Southeast Arabian Sea across extreme south Peninsula on one or two days during the second half of the week. Under influence of these synoptic systems and persistent northeasterly winds in the lower tropospheric levels over Bay of Bengal and South Peninsular India, isolated heavy to very heavy rainfall activities reported over Tamil Nadu, Puducherry & Karaikkal, including Chennai, on three to four days, over Coastal Andhra Pradesh & Yanam, Rayalseema, South Interior Karnataka and Kerala & Mahe on one or two days.

➤ **Analysis of Weekly overall Rainfall distribution during the week ending on 2 Nov 2022 and Post monsoon Season's Rainfall Scenario (01 Oct-2 Nov):** 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 2 Nov, was -70%, with south Peninsula India had -59% while all India Seasonal cumulative rainfall % departure during this year's post monsoon Season Rainfall during 01 Oct-2 Nov 2022 is +44% and over south Peninsula, it is +10%. 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		
	27.10.2022 TO 02.11.2022			01.10.2022 TO 02.11.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	2	9.4	-78%	164.5	125	+32%
NORTH-WEST INDIA	0.3	1.4	-80%	64.6	22	+194%
CENTRAL INDIA	0	4.6	-99%	93.3	58.2	+60%
SOUTH PENINSULA	13.1	32.2	-59%	179	162.1	+10%
Country as a whole	3	9.9	-70%	112.7	78.2	+44%

2. Large scale features

- Currently La Niña conditions are prevailing over Equatorial Pacific Ocean and negative Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The latest global model forecasts indicate that the La Niña conditions are likely to continue during the upcoming season and negative IOD conditions are likely to weaken during the upcoming months.
- The Madden Julian Oscillation Index (MJO) currently lies in phase 7 with amplitude more than 1 and would continue in same phase till 6 Nov and then entered into Phase 8 with amplitude more than 1 and would continue in same phase till 10 Nov. It is likely to retreat back to Phase 7 in the beginning of the week 2 with amplitude less than 1 and then further to Phase 6 towards end of the week 2

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (03 to 09 November, 2022) and Week 2 (10 to 16 November, 2022)

Forecast for week 1 (03 to 09 November, 2022):

- **A fresh Western Disturbance is very likely to influence Western Himalayan Region from 04th night and adjoining plains from 05th November, 2022.** It is very likely to cause Scattered/Fairly widespread light/moderate rainfall/snowfall likely over Jammu, Kashmir, Ladakh, Gilgit Baltistan & Muzaffarabad and Himachal Pradesh during 05th-07th; isolated light/moderate rainfall/snowfall over Uttarakhand on 06th & 07th and isolated light rainfall over Punjab during 05th-07th November, 2022. **Isolated heavy rainfall/snowfall is also likely over Kashmir Valley on 06th November, 2022.**
- Thereafter, another feeble Western disturbance is likely to affect Western Himalayan Region towards end of the week and would cause light rainfall/snowfall over the region.
- A Cyclonic circulation lies over south Tamil Nadu & neighbourhood and a trough runs from this system to Lakshadweep area in lower & middle tropospheric levels. Another, cyclonic circulation lies over Southwest Bay of Bengal & neighbourhood in lower tropospheric levels. Under its influence:
 - ❖ Fairly widespread/widespread light/moderate rainfall with **isolated heavy falls & thunderstorm/lightning** very likely to continue over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe during most days of the week. **Isolated very heavy rainfall** also very likely over south Tamil Nadu and south Kerala on 03th & 04th November, 2022.
 - No significant weather likely over any parts of the country except Andaman & Nicobar Islands, where light to moderate rainfall/thundershower is very likely during 2nd half of the week.
 - **A low pressure area is likely to form over southwest Bay of Bengal off Sri Lanka coast towards end of the 1st week or beginning of 2nd week. It is very likely to move west-northwestwards towards Tamilnadu coast with slight intensification during 1st half of the 2nd week.**

Rainfall for week 2 (10 to 16 November, 2022):

- **Due to active easterly wave and above mentioned Low Pressure System,** light/moderate scattered to fairly widespread rainfall activity is likely over most parts of south Peninsular India. **Isolated heavy to very heavy rainfall** is also likely over Tamilnadu and Kerala during many days of the week.
- No active Western Disturbance is likely to affect northwest India during the week.
- **Overall rainfall activity is likely to be normal to above normal over south Peninsular India; near normal over east & northeast India and below normal over northwest & Central India during the week.**

Minimum Temperatures and its forecast during Week 1 (03 to 09 November, 2022) and Week 2 (10 to 16 November, 2022)

- Minimum temperatures are above normal (1.6°C to 3.0°C) at most places over West Rajasthan Uttarakhand, Punjab and Haryana, Chandigarh & Delhi; at a few places over Himachal Pradesh, Odisha, East Rajasthan and Coastal Andhra Pradesh & Yanam. They are below normal (-1.6°C to -3.0°C) at a few places over Vidarbha, Marathwada and Tamil Nadu, Puducherry & Karaikal; at isolated places over Gangetic West Bengal, Konkan & Goa and Telangana and near normal over rest parts of the country. Today, the lowest minimum temperature of 12.0°C is reported at Motihari (Bihar) over the plains of the country.
- No significant change in minimum temperatures likely over northwest, central & east India during the week.
- Overall, these are likely to be above normal by 1 to 3° C over most parts of northwest, central and adjoining east India; and below normal by 1 to 2° C south Peninsular India.

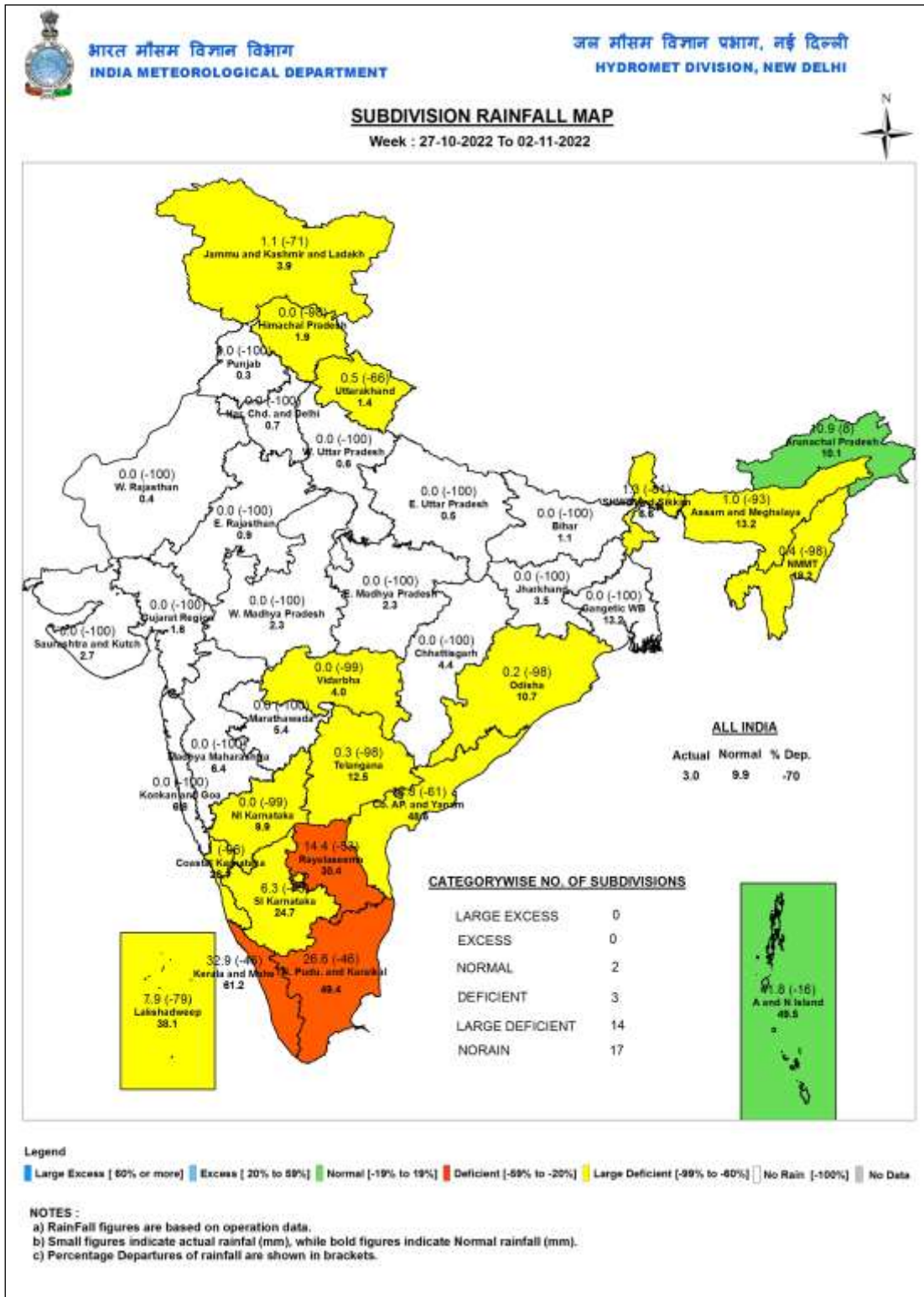
Minimum Temperatures for week 2 (10-16 November, 2021):

- Due to likely dry northwesterly winds from Himalayas to northwest & central India at lower tropospheric levels; minimum temperatures are likely to fall by 2-4° C during the week.
- Overall, these are likely to be below normal by 1 to 2° C over most 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

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

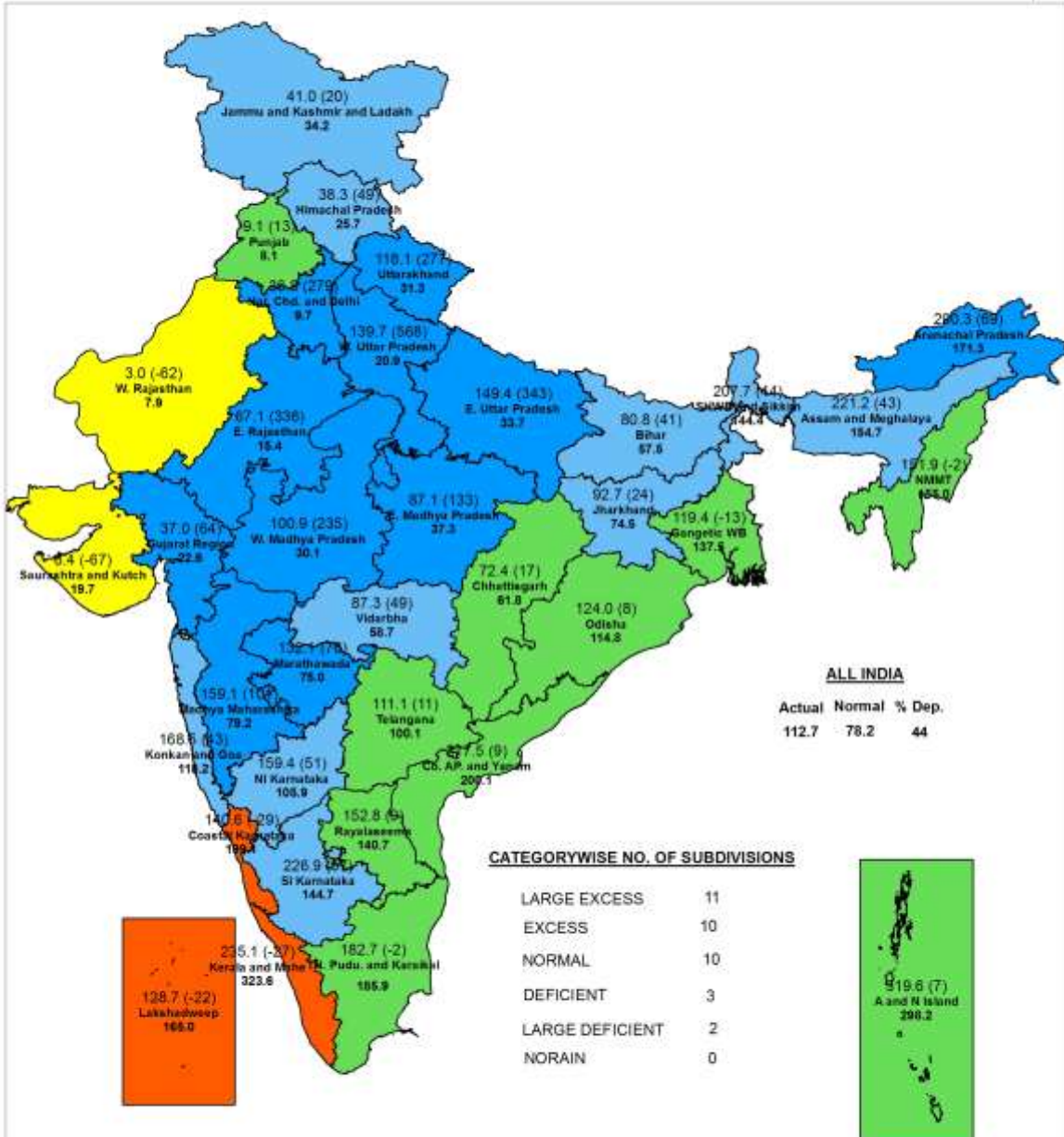


Annex: II



SUBDIVISION RAINFALL MAP

Period : 01-10-2022 To 02-11-2022



Legend

Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -60%] No Rain [-100%] No Data

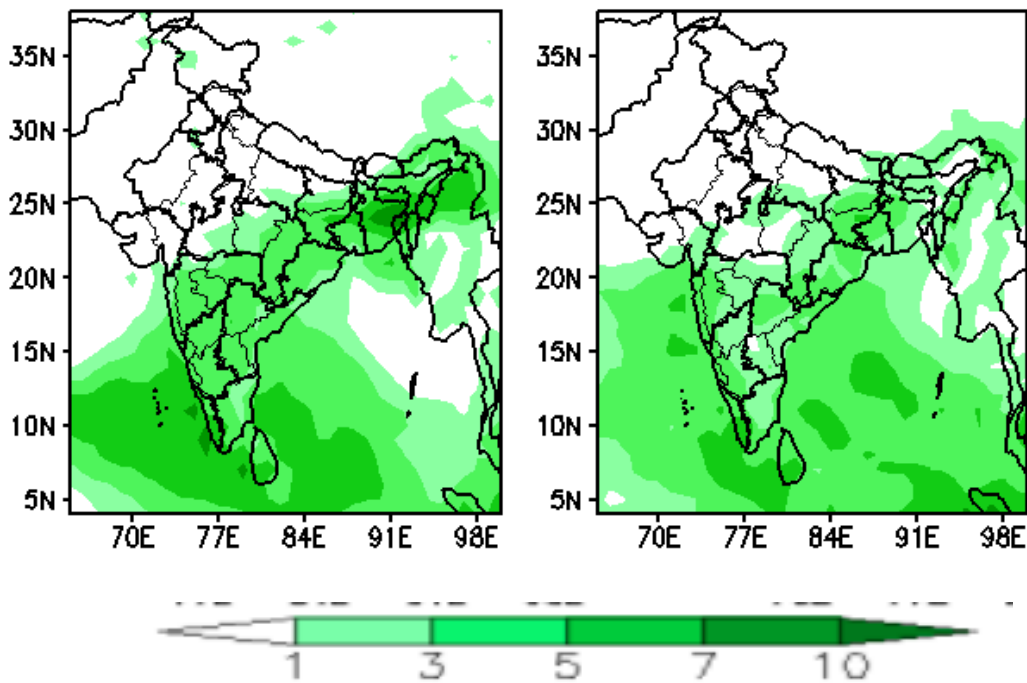
NOTES :

- 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: 04Nov-10Nov)

(Week2: 11Nov-17Nov)



Forecast Rainfall Anomaly (mm/day)

(Week1: 04Nov-10Nov)

(Week2: 11Nov-17Nov)

