

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

Press: Dated: 11 Nov, 2021

Subject: Current Weather Status and Extended range Forecast for next two weeks (11-24 Nov 2021)

1. Salient Features for the week ending on 10th Nov 2021

- Fairly widespread to wide spread rainfall with Isolated Heavy to Very heavy rainfall reported over Tamil Nadu, Puducherry & Karaikal in almost all dates during last week of 4-10 Nov 2021 with isolated extremely heavy rainfall on 6th and 9th Nov. Chennai city reported Isolated Heavy to Very heavy rainfall during 6-9 Nov with isolated extremely heavy rainfall of 21-23cm on 6-7 Nov 2021.
- In the 1st half of the week, it was due to northeasterly monsoonal winds due to a cyclonic circulation lay over Westcentral & adjoining Southwest Bay of Bengal off south Andhra Pradeshnorth Tamil Nadu coasts extended upto 4.5 km above mean sea level while during the 2nd half it was due to formation and movement of a low pressure area which formed over southeast Bay of Bengal & neighbourhood on 9th Nov and then moved over central parts of south Bay of Bengal as a well-marked low pressure area with the associated cyclonic circulation extended upto 5.8 above mean sea level on 10th Nov. Under the influence of these systems, Heavy to Very heavy rainfall at isolated places also reported over south Coastal Andhra Pradesh & Yanam and South Interior Karnataka for around 2-3 days.
- ➤ Rainfall during the week: During the week ending on 10 Nov 20221, weekly cumulative All India Rainfall departure from its long period average (LPA) during the week was below normal and it was -11% while weekly cumulative over south Peninsular India reported above normal of +34%. 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)

	WEEK			SEASON		
Region	04.11.2021 TO 10.11.2021			01.10.2021 TO 10.11.2021		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-						
EAST INDIA	0.1	8.0	-99%	149.1	139.8	7%
NORTH- WEST INDIA	0.4	2.6	-86%	68.2	26.5	157%
CENTRAL INDIA	1.8	4.5	-60%	62.5	59.9	4%
SOUTH PENINSULA	37.2	27.8	34%	248.6	195.6	27%
country as a whole	8	9	-11%	114.6	89	29%

3. Large scale features

- ➤ Neutral El-Nino Southern Oscillation (ENSO) conditions were observed over the equatorial Pacific. In the month, Equatorial sea surface temperatures (SSTs) are continued to be below average across the central and east-central Pacific Ocean. The tropical Pacific atmosphere is showing a consistent with La Niña conditions.
- ➤ Negative Indian Ocean Dipole (IOD) conditions prevailed over the Indian Ocean.
- ➤ The Madden Julian Oscillation (MJO) index currently lies in Phase 4 with amplitude close to 1. It will continue in same phase during the entire forecast period with amplitude gradually decreasing during week 1 and then increasing during week 2. Thus, MJO phase is conducive for enhancement of convective activity and hence cyclogenesis over the north Indian Ocean during major part of the forecast period.

4. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (11 to 17 November, 2021) and Week 2 (18 to 24 November, 2021)

Rainfall for week 1 (11 to 17 November, 2021):

- A Depression lay centred at 1430 hrs IST of today, the 11th November 2021, over southwest & adjoining west-central Bay of Bengal, near Lat. 12.8°N and Long. 80.5°E, about 30 km southeast of Chennai and 110 km northeast of Puducherry.It is very likely to move northwestwards and cross north Tamil Nadu & adjoining south Andhra Pradesh coasts close to Chennai during next few hours.. Under its influence, light to moderate rainfall at most places with heavy to very heavy rainfall at a few places & extremely heavy falls at isolated places very likely over north coastal Tamil Nadu, Puducherry, north interior Tamil Nadu, south coastal Andhra Pradesh and Rayalaseema and heavy to very heavy rainfall at isolated places over South interior Karnataka, Kerala and heavy rainfall at isolated places over north coastal Andhra Pradesh on 11th November, 2021. Light to moderate rainfall at most places with heavy rainfall at isolated places very likely over Tamil Nadu & Puducherry, South interior Karnataka and Kerala on 12th & 13th and over coastal Andhra Pradesh & Rayalaseema on 12th November, 2021.
- A fresh Low Pressure Area is likely to form over south Andaman sea and neighbourhood around 13th November. It is likely to move west-northwestwards and become more marked during subsequent 48 hours. Most of the models are also indicating it's intensification and northwestwards movement towards Andhra Pradesh coast in the 2nd half of the week. Under its influence widespread rainfall with isolated heavy falls very likely over Andaman & Nicobar Islands on 13Th & 14th November and then a fresh spell of isolated heavy to very heavy rainfall with isolated extremely heavy rainfall likely over Andhra Pradesh and adjoining parts of Telengana mainly during 16-18 Nov and it is likely to be isolated heavy falls very likely over Tamil Nadu, Puducherry, South interior Karnataka and Kerala during the same period.

- Light isolated to scattered rain/thundershower is very likely over Maharashtra,
 Telangana, Chhattisgarh, Odisha and Nagaland, Manipur, Mizoram & Tripura during most days of the week.
- Weather is very likely to be dry over remaining parts of India during most days of the week.
- Overall, rainfall activity is likely to be above normal over south Peninsular & east central India (Except north Maharashtra) and below normal over rest parts of the country.

Rainfall for week 2 (18 to 24 November, 2021):

- Due to easterly wave activity in the week, northeast monsoon is likely to remain normal to active conditions mainly over parts of northeastern parts of Peninsular covering coastal Andhra Pradesh, Telangana, north Tamil Nadu, Rayalaseema and Karnataka.
- Overall rainfall activity is likely to increase as compare to week 1 over India with above normal over peninsular India and east central India covering areas of coastal Andhra Pradesh, Telangana, Tamil Nadu, Rayalaseema and Karnataka, Maharashtra, Kerala, Odisha and Chhattisgarh. It is likely to be normal to below normal over Western Himalayan region due to absence of any active Western Disturbance to affect northwest India. (Refer Annex III for rainfall of week 1 and week 2)

Minimum Temperatures for week 1(11 to 17 November, 2021) and week 2(18 to 24 November, 2021)

Minimum Temperatures for Week 1(11 to 17 November, 2021):

- Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over Rayalaseema and Andaman & Nicobar Islands and at isolated places over Nagaland, Manipur, Mizoram & Tripura. They are below normal (-1.6°C to -3.0°C) at most places over Vidharbha, Konkan & Goa and Marathawada; at many places over East Rajasthan, Madhya Pradesh and Madhya Maharashtra; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Uttar Pradesh, Sub-Himalayan west Bengal & Sikkim, Assam & Meghalaya, Gujarat State, Coastal Karnataka and Tamilnadu, Puducherry & Karaikal.
- No significant change in minimum temperatures over most parts of Northwest India and Madhya Pradesh till today and gradual fall by 2-4°C thereafter.

- No significant change in minimum temperatures over Gujarat State during next 2 days and rise by 2- 3°C thereafter.
- Overall, these are likely to be below normal by 1 to 3° C over northwest, and adjoining central India; and likely to be near normal or slightly above normal over remaining parts of the country outside Odisha, South Chhattisgarh and Interior parts of Karnataka where it is likely to be 1-3degC above normal.

Minimum Temperatures for week 2 (18 to 24 November, 2021):

Minimum temperatures are very likely to be near normal or below normal by 1 to 2° C over northwest and adjoining central India; and likely to be above normal by 1 to 3°C over remaining parts of the country outside southeast Peninsular India and east central India where it is likely to be 2-4degC above normal. (Refer Annex V)

5. Cyclogenesis forecast for North Indian Ocean during next 2 weeks

There is **(a)** moderate probability of cyclogenesis over Andaman Sea and adjoining southeast BoB during first half of week 1 and **(b)** possibility of formation of a low pressure area (LPA) over eastcentral Arabian Sea from the remnant of depression over BoB during middle of week 1.

For more details refer

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_c5a35e_Extended%20Range%2 0Outlook_11112021.pdf

Next weekly update will be issued on next Thursday i.e. 11 Nov 2021(Happy Diwali)

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 Widespred (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 I

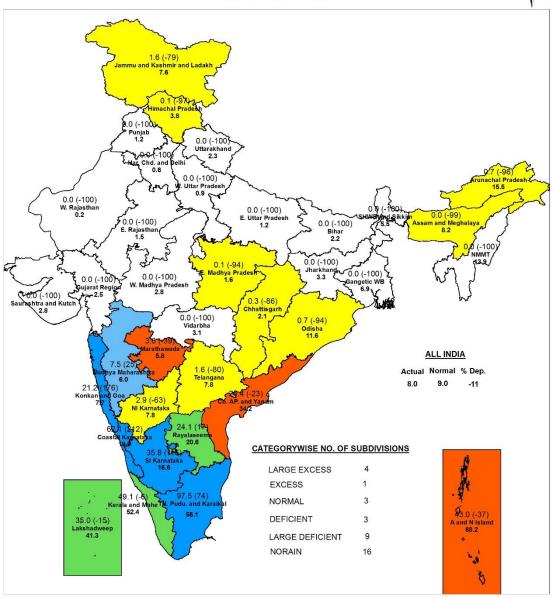


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SUBDIVISION RAINFALL MAP

Week: 04-11-2021 To 10-11-2021





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

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

Annexure II

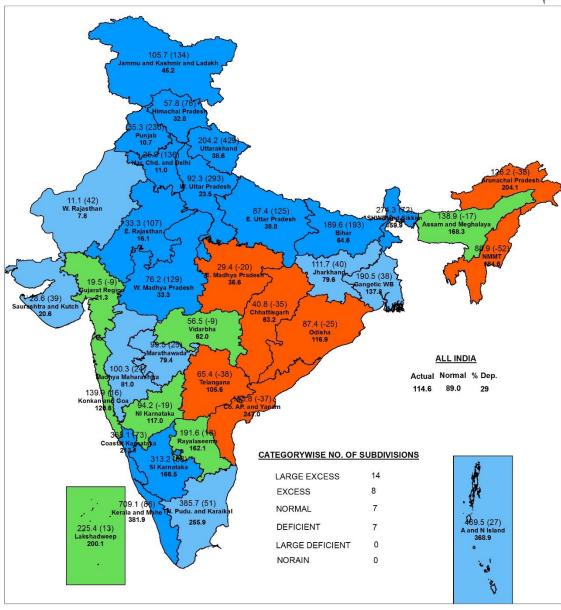


जल मौसम विज्ञान प्रभाग, नई दिल्ली HYDROMET DIVISION, NEW DELHI

SUBDIVISION RAINFALL MAP

Period: 01-10-2021 To 10-11-2021



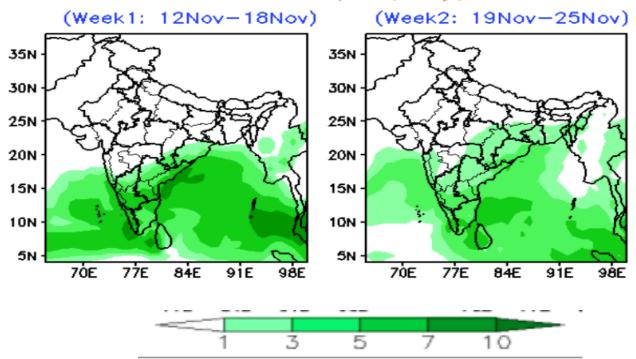


Large Excess [80% or more] 📲 Excess [20% to 59%] 📱 Normal [-19% to 19%] 📳 Deficient [-59% to -20%] 💆 Large Deficient [-99% to -80%] 🗍 No Rain [-100%] 🥛 No Data

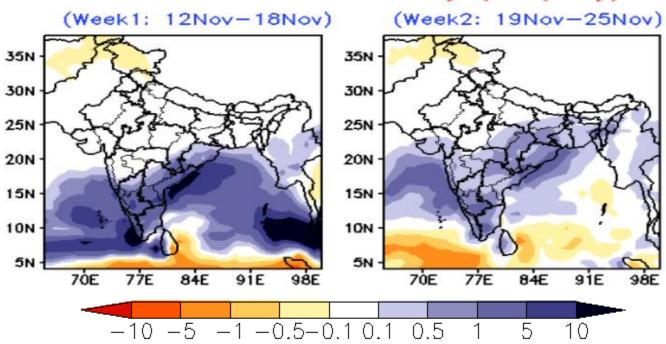
- NOTES:
- a) RainFall figures are based on operation data.
 b) Small figures indicate actual rainfal (mm), while bold figures indicate Normal rainfall (mm).
 c) Percentage Departures of rainfall are shown in brackets.

Annex III

Forecast Rainfall (mm/day)



Forecast Rainfall Anomaly (mm/day)



MME Bias corrected forecast Tmin (Deg

