



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

**Press: Dated: 12<sup>th</sup> Jan, 2023**

**Subject: Current Weather Status and Extended range Forecast for next two weeks  
(12-25 Jan 2023)**

**1. Salient Observed Features during 6 Jan till 12 Jan 2023**

- Last Week's extensive fog and low cloud coverage spell continued over Northern and adjoining central Parts of India till morning of 11 Jan and then reduced from night of 11<sup>th</sup> Jan over Punjab, Haryana, Chandigarh and Delhi due to impact of a WD which affected the region from 11 Jan.
- Under the influence of the same WD, Cold Wave to sever cold wave spells which was prevailed persistently over northern and central plains of India till 8 Jan, mainly over Haryana, Punjab, Chandigarh Delhi and West Uttar Pradesh and parts of northern parts of Madhya Pradesh, was also abated from 9 Jan, from most parts of these areas.
- The Northeast Monsoon rains have ceased over Kerala-Mahe, South Interior Karnataka, Tamilnadu-Puducherry-Karaikal, Rayalaseema and adjoining areas of Coastal Andhra Pradesh & Yanam from today, the 12th January, 2023.
- Analysis of Weekly **overall Rainfall distribution during the week ending on 11 Jan 2023 and Winter Season's Rainfall Scenario (1 Jan-11 Jan 2023)**: 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 11 Jan 2023 was -92 % with south Peninsula India had -86% while all India Seasonal cumulative rainfall %departure during this year's Winter Season Rainfall during 01 Jan-11 Jan 2023 is -94% and over south Peninsula, it is -89%**. 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		
	05.01.2023 TO 11.01.2023			01.01.2023 TO 11.01.2023		
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	0	3.2	-99%	0	5.3	-99%
NORTH-WEST INDIA	0.6	6	-90%	0.6	8.6	-93%
CENTRAL INDIA	0.1	1.6	-95%	0.1	2.8	-96%
SOUTH PENINSULA	0.3	2.3	-86%	0.4	3.8	-89%
Country as a whole	0.3	3.4	-92%	0.3	5.2	-94%

## 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 (MJO) Index is currently in Phase 8 with amplitude more than 1. It will continue in same phase during first half of week 1 and move to phase1 during later half of week 1 with same amplitude. Thereafter, it would move to phase 2 and 3 with amplitude more than 1. Thus, MJO will not support enhancement of convective activity over the North Indian Ocean (NIO) during week 1.

## 3. Forecast for next two week

### Forecast for next two weeks

#### (A) Weather systems & associated Precipitation

##### (i) Forecast and warning for week 1 (12 to 18 January, 2023):

- A Western Disturbance as a trough in middle tropospheric westerly winds runs along Long. 68°E to the north of 28°N and an induced cyclonic circulation lies over north Rajasthan in lower tropospheric levels. Jet stream winds of order upto 120 knots in upper tropospheric levels (12-14 Km above mean sea level) prevailing along latitude 30° N over Indian region.
- These systems are very likely to cause light/moderate scattered/fairly widespread rainfall/snowfall over Jammu & Kashmir, Ladakh, Gilgit, Baltistan&Muzaffarabad and Himachal Pradesh and Isolated rainfall/snowfall over Uttarakhand on 12<sup>th</sup>& 13<sup>th</sup> January, 2023.
- Isolated light rainfall likely over Punjab, Haryana and adjoining area of west Uttar Pradesh on 12<sup>th</sup>& 13<sup>th</sup> January, 2023.
- No significant rainfall likely over rest parts of the country during the week.

**(ii) Forecast and warning for week 2(19 to 25 January, 2023):**

- **An active Western Disturbance likely to affect northwest India during 1<sup>st</sup> half of the week. Under its influence,**
- Light/moderate scattered to fairly widespread rainfall/snowfall likely over Western Himalayan Region and light isolated rainfall over adjoining plains of northwest India.
- Light isolated to scattered rainfall is likely over extreme south Peninsular and Andaman & Nicobar Islands mainly during 1<sup>st</sup> half of the week.
- Overall, rainfall activity is likely to be near normal to above normal over parts of Western Himalayan Region and below normal over remaining parts of the country.

**(B) Forecast of Temperature and Fog:**

**(i) Forecast and warning for week 1 (12 to 18 January, 2023):**

**Minimum Temperature:**No significant change in minimum temperatures very likely over many parts of Northwest India and adjoining central India during next 48 hours and fall by 3-5°C from 14<sup>th</sup> January, 2023. No significant change in minimum temperatures very likely over many parts of East India during next 3 days and fall by 2-3°C from 15<sup>th</sup> January, 2023. Gradual fall in minimum temperatures by 3-6°C very likely over Gujarat state till 15<sup>th</sup> and no significant change thereafter. No significant change in minimum temperatures over the rest parts of country during next 4-5 days.

**Cold wave:** Cold Wave to severe cold wave conditions likely over some parts of North Rajasthan and Cold wave condition in isolated pockets of Himachal Pradesh, Uttarakhand, Punjab, Haryana & Chandigarh on 15<sup>th</sup> to 18<sup>th</sup>; over Interior Karnataka on 13<sup>th</sup>& 14<sup>th</sup> and over Madhya Pradesh on 16<sup>th</sup>& 17<sup>th</sup> January, 2023.

**Cold day:** Cold Day to severe cold day conditions very likely to continue in some parts of Bihar on 12<sup>th</sup> January. Cold day conditions also very likely in isolated pockets over West Uttar Pradesh during 15<sup>th</sup>-16<sup>th</sup>; over East Uttar Pradesh on 12<sup>th</sup>, 15<sup>th</sup>& 16<sup>th</sup> and over Bihar on 13<sup>th</sup>& 14<sup>th</sup> January 2023.

**Fog:**

- ❖ Due to continuation of prevailing light winds and high moisture near surface over Indo-Gangetic plains, dense to very dense fog very likely to continue in isolated/some parts during night & morning hours over Bihar during 13<sup>th</sup>-17<sup>th</sup> and Dense fog very likely in isolated pockets during night & morning hours over Uttar Pradesh, West Bengal & Sikkim, Odisha, Assam & Meghalaya and Tripura during 13<sup>th</sup> -14<sup>th</sup> January 2023.
- ❖ A fresh spell of dense to very dense fog very likely in isolated/some pockets during night & morning hours over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh during 14<sup>th</sup> to 17<sup>th</sup>; Dense Fog very likely in isolated pockets over Jammu division, Himachal Pradesh, Uttarakhand during 15<sup>th</sup> to 17<sup>th</sup> and over North Madhya Pradesh during 16<sup>th</sup> to 17<sup>th</sup> January, 2023.

**(ii) Forecast and warning for week 1 (19 to 25 January, 2023):**

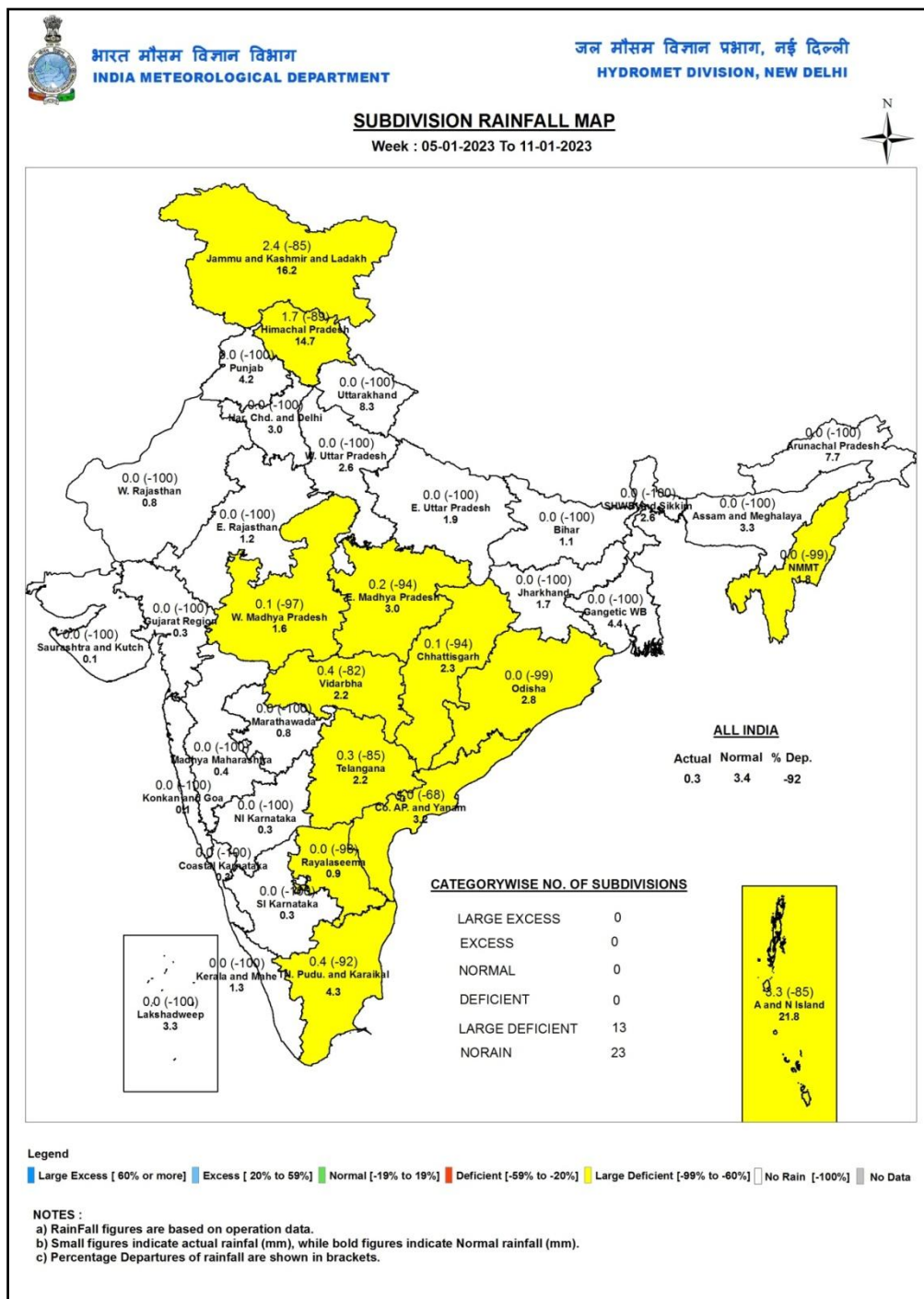
**Minimum Temperatures:** Minimum temperatures are likely to be below normal by 2-3°C overmost parts of the country outside Western Himalayan Region and Northeastern States, where these likely to be near normal or above normal.

**Cold wave:** Cold wave conditions likely in isolated pockets over northwest& adjoining central India mainly during 2<sup>nd</sup> half of the week.

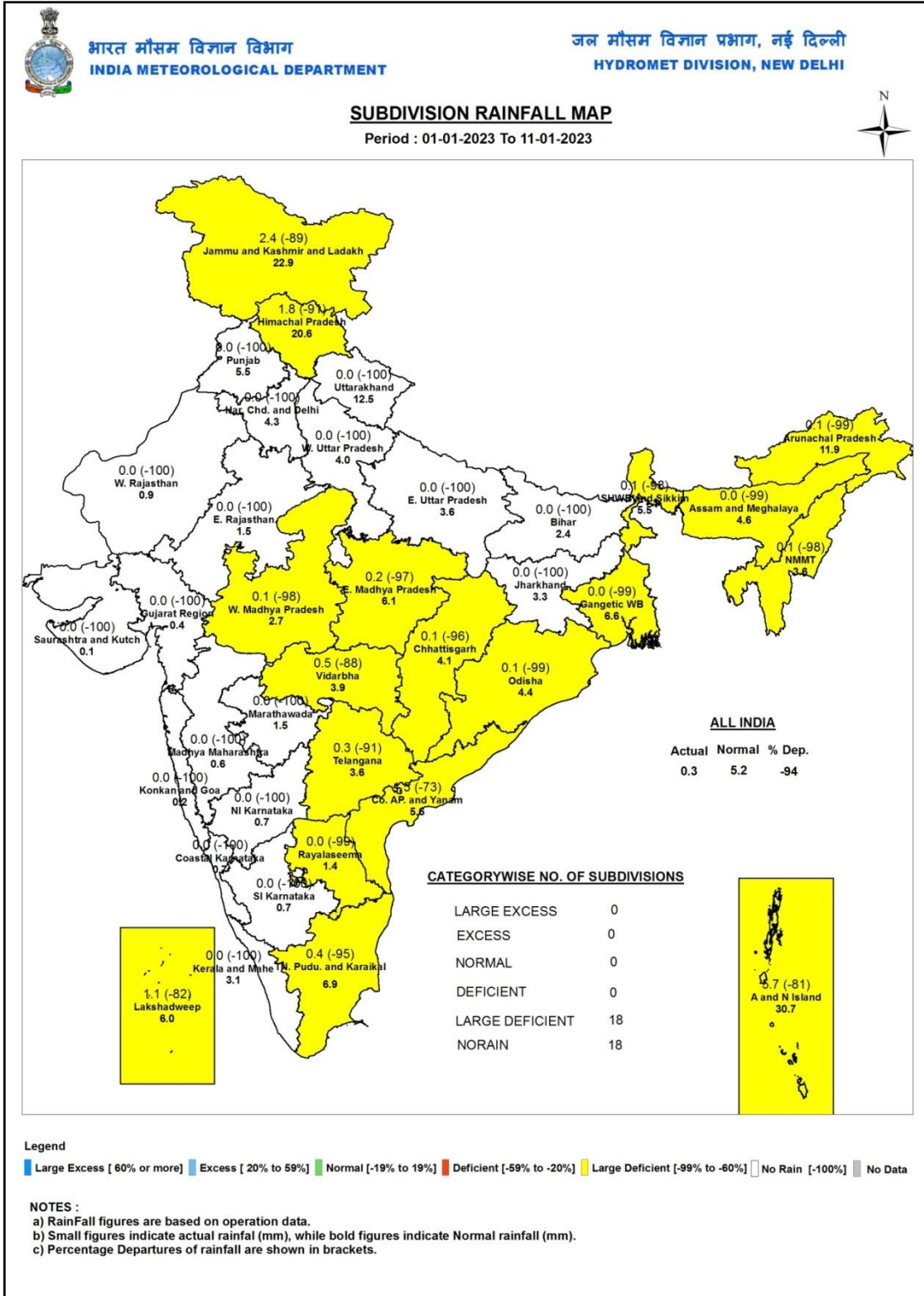
**Legends:** Heavy Rain: 64.5 to 115.5 mm Very Heavy Rain: 115.6 to 204.4 mm, Extremely Heavy Rain> 204.4 mm

<b>SPATIAL DISTRIBUTION</b> (% 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)

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



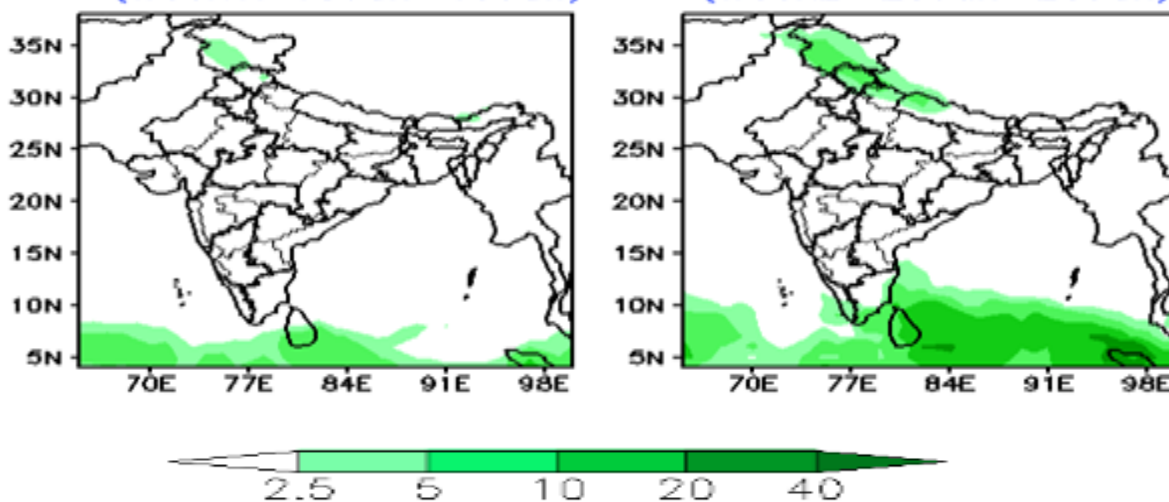
# Annex: II



**Forecast Rainfall (mm/day)**

(Week1: 13Jan-19Jan)

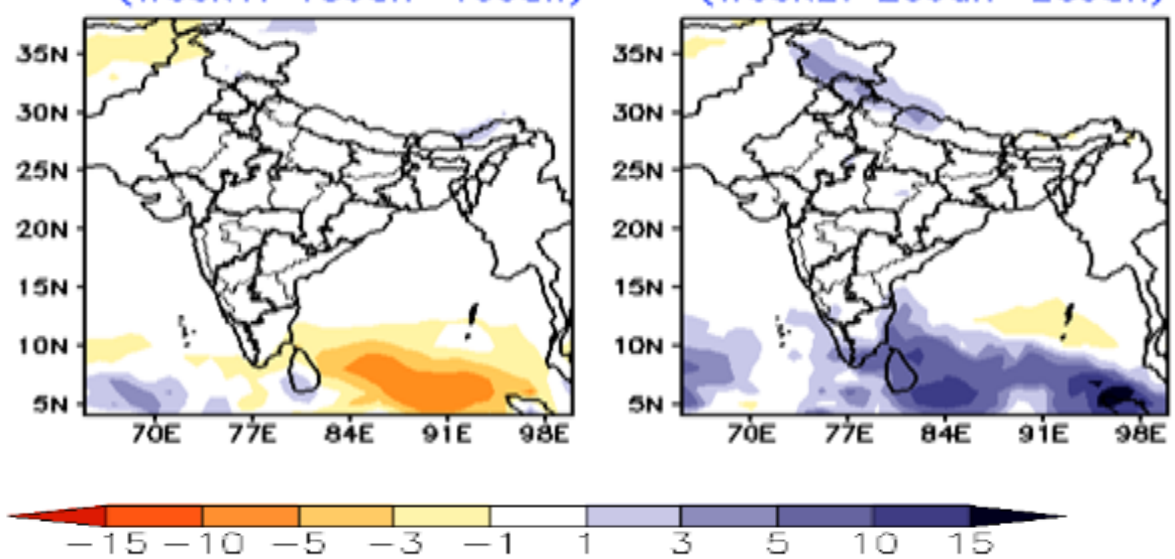
(Week2: 20Jan-26Jan)



**Forecast Rainfall Anomaly (mm/day)**

(Week1: 13Jan-19Jan)

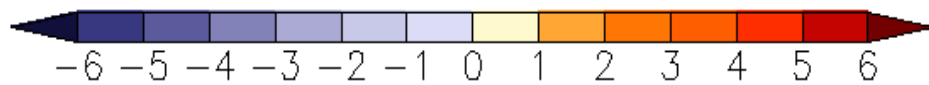
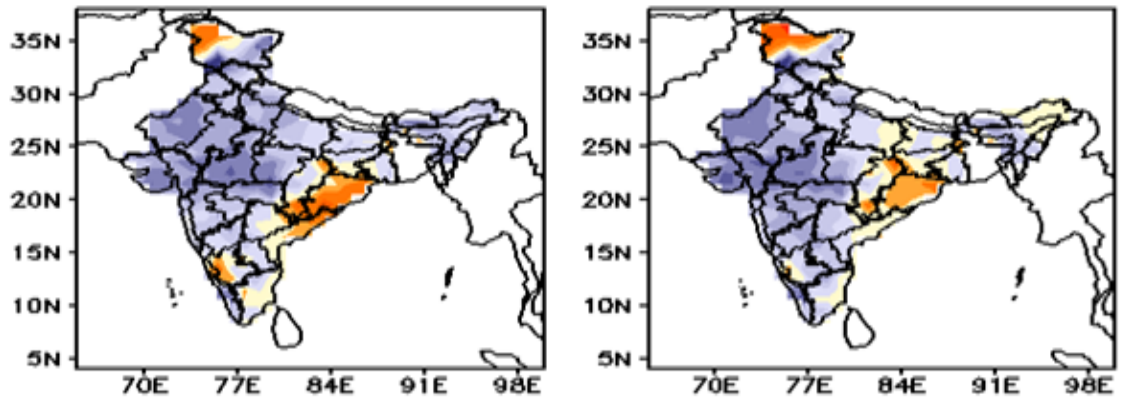
(Week2: 20Jan-26Jan)



**MME forecast Tmax anomaly (Deg C)**

(Week1: 13Jan-19Jan)

(Week2: 20Jan-26Jan)



**MME forecast Tmin anomaly (Deg C)**

(Week1: 13Jan-19Jan)

(Week2: 20Jan-26Jan)

