

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

Press: Dated 9th Feb, 2023

Subject: Current Weather Status and Extended range Forecast for next two weeks (9th-22nd Feb 2023)

1. Salient Observed Features during 3-8 Feb 2023

- Two feeble WDs (3-5 and 5-7 Feb) moved across extreme northern parts of India which have no significant impact on weather over the region during the week.
- Dense to very dense fog had been reported at isolated places over Sub Himalayan West Bengal & Sikkim on five days and over northern parts of East Uttar Pradesh on four days. There was no cold wave conditions observed during the week over any parts of India.
- Analysis of Weekly overall Rainfall distribution during the week ending on 8 Feb 2023 and Winter Season's Rainfall Scenario (1Jan-8 Feb 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 25 Jan 2023 was 7 % with south Peninsular India had 118% while all India Seasonal cumulative rainfall %departure during this year's Winter Season Rainfall during 01 Jan-25 Jan 2023 is -45% and over south Peninsula, it is -70%. 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.

	WEEK 02.02.2023 TO 08.02.2023			SEASON 01.01.2023 TO 08.02.2023			
Region							
	Actual	Normal	% Dep	Actual	Normal	% Dep	
EAST & NORTH-EAST INDIA	4	6.2	-35%	5.9	24.3	-76%	
NORTH-WEST INDIA	2.1	9.4	-77%	45.5	44	+3%	
CENTRAL INDIA	0	1.7	-100%	1.9	9.3	-80%	
SOUTH PENINSULA	3.2	1.4	+132%	6	9.4	-36%	
Country as a whole	1.9	4.7	-59%	16.8	22.4	-25%	

Table 1: Rainfall status (Week and season)

2. Large scale features

Currently La Niña conditions are prevailing over Equatorial Pacific Ocean and near normal 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 till end of the Winter months.

The Madden Julian Oscillation (MJO) Index is currently in Phase 4 with amplitude more than 1. It will move across phases 4 and 5 during first half of week 1 with amplitude remaining more than 1. Thereafter, it will move across phases 6,7 and 8 with amplitude remaining more than 1 during remaining part of the forecast period. Thus, MJO will support enhancement of convective activity over the Bay of Bengal (BoB) during first half of week 1 only.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (09 to 15 February, 2023) and Week 2 (16 to 22 February, 2023)

Forecast for week 1 (09 to 15 February, 2023):

➤ A Western Disturbance seen as a trough in lower & middle tropospheric westerlies roughly along Long. 60°E to the north of 30°N and an induced cyclonic circulation lies over central Pakistan & adjoining West Rajasthan in lower tropospheric levels. Jet stream winds of the order of 170 knots are prevailing along Latitude 30°N over Indian region. Under its influence,

✓ Light/moderate fairly widespread to widespread rainfall/snowfall with thunderstorm & lightning very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and scattered to fairly widespread rainfall/snowfall with thunderstorm & lightning over Uttarakhand on 09th & 10th with peak intensity on 09th February.

 \checkmark Isolated heavy rainfall/snowfall also likely over Kashmir Valley on 09th February.

✓ Isolated light rainfall likely over north Punjab on 09th & 10th and over north Haryana & Chandigarh on 10th February, 2023.

Strong Surface Wind (speed 20-30 kmph) very likely over plains of Northwest India during 11th-13th February, 2023.

> Light isolated to scattered rainfall/snowfall is very likely over Arunachal Pradesh during the week; light/moderate isolated to scattered rainfall over Andaman & Nicobar Islands during the week.

Rainfall for week 2 (16 to 22 February, 2023):

> Under the influence of Western Disturbance, light isolated to scattered rainfall/snowfall is likely over Western Himalayan Region during some days of the week.

> No significant weather activity likely over rest parts of the country.

> Overall, rainfall activity is likely to be below normal over all the regions of the country.

Minimum Temperatures and its forecast during Week 1 (09 to 15 February, 2023) and Week 2 (16 to 22 February, 2023):

Minimum Temperature Forecast, Cold Wave/Day & Fog Warnings for week 1 (09 to 15 February, 2023):

Minimum Temperature Forecast and Cold Wave/Day & Fog Warning

 The minimum temperatures are in the range of 9-12°C over most parts of plains of North India and Madhya Pradesh. The Lowest Minimum Temperature of 7.4°C has been observed over Rewa (East Madhya Pradesh) over plains of North India.

 \circ Rise in minimum temperatures by 2-3°C very likely over many parts of Northwest India till 10th; no significant change for subsequent 24 hours, fall by 2-3°C thereafter till 13th

February and no significant change thereafter. Rise in minimum temperatures by 2-3°C very likely over many parts of Central India till 11th and fall by 2-4°C thereafter. No significant change in minimum temperatures very likely over many parts of West India till 12th and gradual fall by 2-3°C thereafter. No significant change in minimum temperatures very likely over rest parts of the north India during the week.

• No Cold wave conditions likely any part of the country during the week.

• Dense fog very likely in isolated pockets during night/morning hours over Sub-Himalayan West Bengal and Odisha on 09th & 10th February, 2023.

Minimum Temperatures for week 2 (16 to 22 February, 2023):

 \circ Minimum temperatures likely to above normal by 1-3[°] C over northwest & northeast India; near normal to below normal by 1-3[°] C over rest parts of the country.

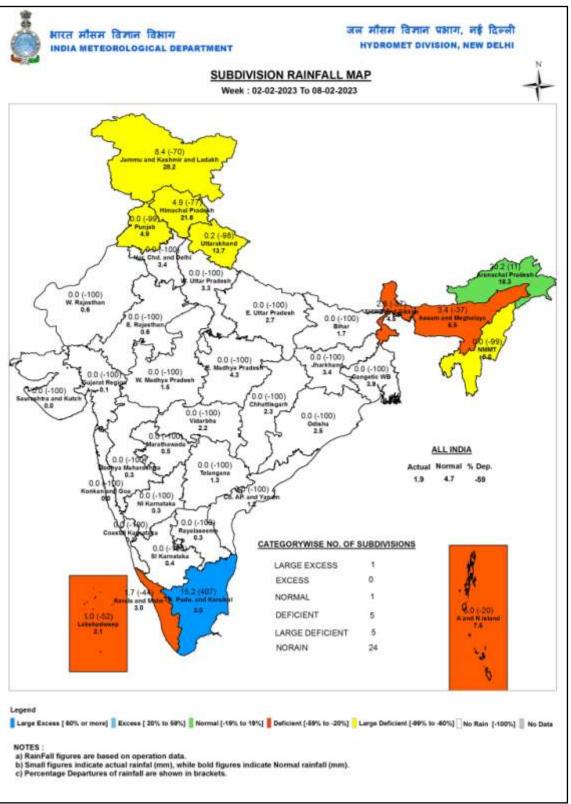
 \circ No Cold wave conditions likely over any part of the country during the week.

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

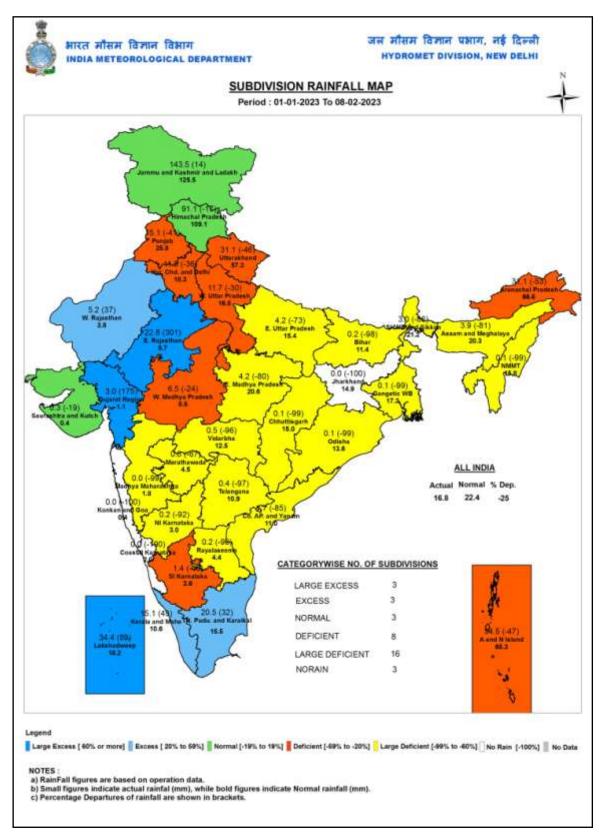
Heavy Rain> 204.4 mm

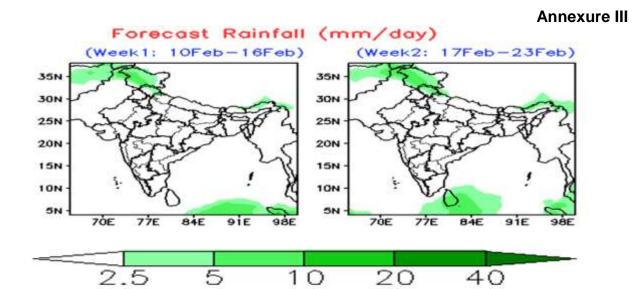
				Probabilistic Forecast		
	SPATIAL DISTRIBUT	Terms	Probability of Occurrence (%)			
% Stations	Category	% Stations	Category	Unlikely	< 25	
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)	Likely Very Likely	25 - 50 50 - 75	
51-75 Fairly Widespred (FWS/ Many Places)		1-25	Isolated (ISOL)	Most Likely	> 75	

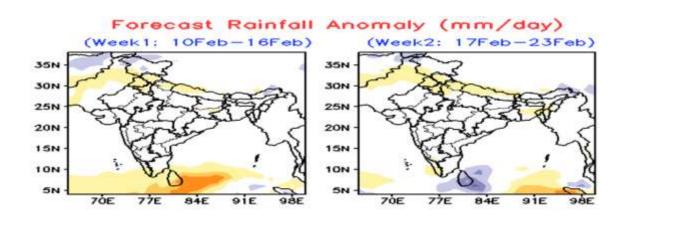
Annex 1













Annexure IV

