

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

Press: Dated: 3 Feb, 2022

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

- 1. Salient Features for week ending on 2 Feb 2022
- No major weather system affected the country and rainfall was sub-dued during the week. However, Remnants of Western Disturbances have caused fairly widespread rainfall/thunderstorm activity over Northeast India on three to four days and scattered to fairly widespread rainfall/thunderstorm activity over Sub Himalayan West Bengal & Sikkim on one or two days.
- ▶ Dense to very dense fog conditions observed persistently over Uttar Pradesh and Bihar during 29 Jan till 2 Feb which caused cold day to severe cold day during the period over these areas. It also extended to Punjab, Haryana, Chandigarh & Delhi and observed during 30 Dec to 2 Feb 2022. However, no major cold wave was prevailed over northwest India during the week except Cold Wave conditions prevailed mainly over parts of Madhya Pradesh, Vidarbha and north Odisha during 1st half of the week.
- ➤ Fog conditions improved with approach of present active WD on 2nd Feb night over northwest India.
- Weekly overall Rainfall distribution during the current week ending on 2 Feb 2022 Winter Season's Rainfall Scenario (01 Jan to 2 Feb, 2022): During the week ending on 2 Feb 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) was -69% with weekly cumulative over northwest India as -96%, while all India cumulative rainfall during this year's Winter Season till 2 Feb, 2022 is above LPA by +116% and over northwest India, it is above LPA by +122%. 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 27.01.2022 TO 02.02.2022			SEASON 01.01.2022 TO 02.02.2022		
Region						
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-						
EAST INDIA	8.0	7.0	+15%	28.3	20.8	+36%
NORTH- WEST INDIA	0.3	9.4	-96%	78.5	35.4	+122%
CENTRAL INDIA	0.0	2.1	-99%	22.7	8.1	+181%
SOUTH PENINSULA	0.8	1.0	-16%	19.8	8.5	+133%
country as a whole	1.6	5.0	-69%	40.2	18.6	+116%

2. Large scale features

- ➤ Currently La Niña conditions are prevailing over the Equatorial Pacific Ocean and neutral 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 prevail until March 2022 and neutral IOD conditions are likely to continue during the upcoming seasons.
- The Madden Julian Oscillation (MJO) Index currently lies in Phase 3 with amplitude less than 1 and will continue in same phase with amplitude remaining less than 1 till middle of week 1. Thereafter, it is likely to move to phase 4 with amplitude remaining less than 1 during rest part of the forecast period. MJO phase is thus favourable for enhancement of convective activity over the Bay of Bengal (BoB).

3. Forecast for next two week

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

Rainfall for week 1 (03 to 09 February, 2022):

- A Western Disturbance (WD) lies as a cyclonic circulation over north Pakistan & neighbourhood between 3.1 to 5.8 km above mean sea level with the trough aloft in middle & upper tropospheric levels with its axis at 7.6 km above mean sea level roughly along Long. 71°E to the north of Lat. 25°N. An induced Low Pressure Area lies over northwest Rajasthan & neighbourhood and associated cyclonic circulation in lower tropospheric levels. High moisture feeding from Arabian Sea and Bay of Bengal to northwest India at lower & middle tropospheric levels is very likely to continue during next 24 hours. Under its influence;
- ✓ Fairly widespread to widespread light/moderate rainfall/snowfall very likely to continue over Western Himalayan Region on 03rd & 04th February. Isolated hailstorm very likely over Himachal Pradesh on 03rd and over Uttarakhand on 03rd & 04th February, 2022.
- ✓ Isolated heavy rainfall/snowfall also very likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh on 03rd and over Uttarakhand on 03rd & 04th February, 2022.
- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Punjab, Haryana, Chandigarh, Delhi and Uttar Pradesh on 03rd February and light isolated on 04th February. Isolated heavy rainfall very likely over Punjab, Haryana & Chandigarh on 03rd February, 2022.
- The WD and its induced Cyclonic Circulation/Low is very likely to move east-northeastwards during next two days, as a result there will be high moisture feeding from Bay of Bengal to East & adjoining northeast India on 03rd & 04th February, 2022 due to confluence between westerlies and southeasterlies from the Bay of Bengal at lower tropospheric levels. As a result;
- ✓ Fairly widespread to widespread light/moderate rainfall with thunderstorm/lightning likely over Bihar & Jharkhand on 03rd & 04th and over West Bengal & Sikkim and Odisha on 04th with possibility of isolated hailstorm over the region 04th February. Isolated heavy rainfall also likely over Bihar, Jharkhand and West Bengal & Sikkim on 04th February, 2022.
- ✓ Widespread light/moderate rainfall with thunderstorm/lightning likely over northeast India on 04th & 05th February, 2022. Isolated heavy rainfall/snowfall likely over Arunachal Pradesh on 04th & 05th and heavy rainfall over west Assam & Meghalaya on 04th February, 2022. Isolated hailstorm also likely over West Assam & Meghalaya on 03rd & 04th and over Arunachal Pradesh on 04th February, 2022.
- Under the influence of a fresh Western Disturbance; isolated to scattered rainfall/snowfall very likely over Western Himalayan Region on 06th & 07th February, 2022.
- Light isolated rainfall very likely over Tamilnadu-Puducherry-Karaikal and Kerala-Mahe during 2nd half of the week.
- Dry weather very likely over remaining parts of the country during most days of the week.

 Overall rainfall activity is very likely to be above normal over northwest, east & northeast India during the week.

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

- No intense Western Disturbances likely to affect Western Himalayan Region, however, under the influence of feeble Western Disturbance, light/moderate isolated to scattered rainfall/snowfall likely during 2nd half of the week.
- Light/moderate isolated to scattered rainfall/thundershower is likely over northeast India during 2nd half of the week.
- Overall precipitation activity is likely to be below normal over all the regions of India.

Minimum Temperatures for week 1(03 to 09 February, 2022) and week 2(10 to 16 February, 2022)

Minimum Temperatures, cold wave and fog for Week 1(03 to 09 February, 2022):

- Minimum temperatures are above normal by 2-4°C over most parts of northwest, central & east India.
- Fall in minimum temperatures by 2-4°C very likely over most parts of Northwest India during next 2 days and rise by 2-4°C for subsequent 2 days.
- No significant change in minimum temperatures very likely over most parts of Central India during next 24 hours and fall by 3-5°C for subsequent 48 hours.
- No significant change in minimum temperatures very likely over most parts of East India during next 2 days and fall by 2-4°C for subsequent 3 days.
- Fall in minimum temperatures by 3-5°C over Gujarat during next 2 days and rise by 2-4°C thereafter.
- Dense Fog conditions in isolated pockets in night/morning hours very likely over Punjab and Haryana, Chandigarh & Delhi on during next 2 days.
- Overall, minimum temperatures are very likely to be slightly below normal or near normal over most parts of northwest & central India and below normal by 2-4°C over many parts of East India. These are likely to be above normal by 2-3°C over south Peninsular India.
- No significant cold wave is likely over any parts of the country.

Minimum Temperatures for week 2 (10 to 16 February, 2022):

- There is likely gradual rise in minimum temperatures over most parts of the country as compare to week 1.
- These are likely to be near normal over most parts of the country except many parts of East India, where these are likely to below normal by 1-3°C.
- o No significant cold wave is likely over any parts of the country. (Refer Annex IV)

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

Various broad scale features and model guidance indicate that no cyclogenesis is likely over the North Indian Ocean during the ensuing 2 weeks

Next weekly update will be issued on next Thursday i.e. 10 Feb 2022

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

Extremely Heavy Rain > 204.4 mm

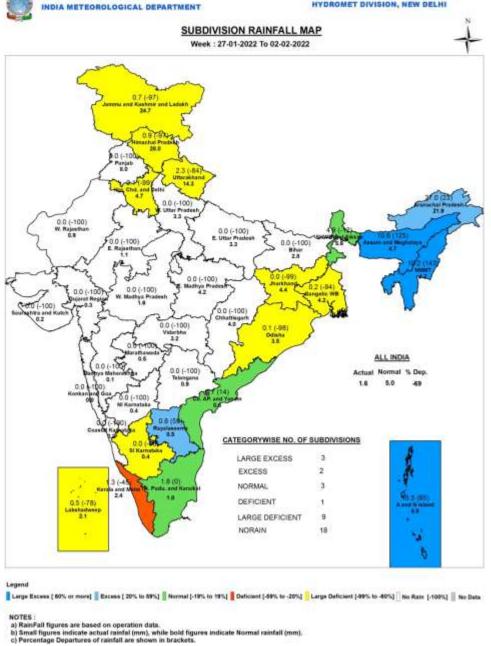
SPATIAL DISTRIBUTION (% of Stations reporting)					
% Stations	Category	% Stations	Category		
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)		
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)		

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

Annex I



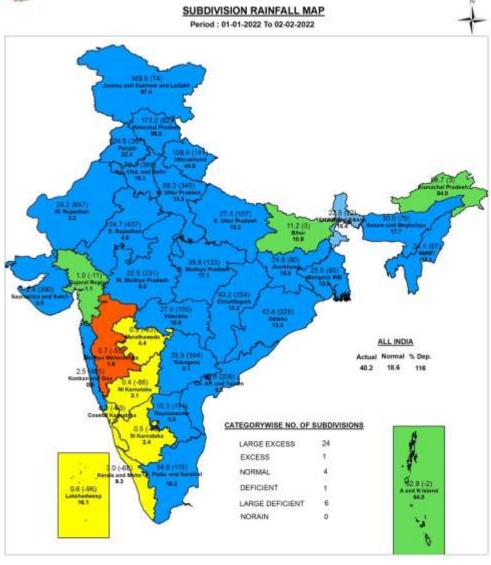
जल मौसम विज्ञान प्रधारा, नई दिल्ली HYDROMET DIVISION, NEW DELHI



Annexure II



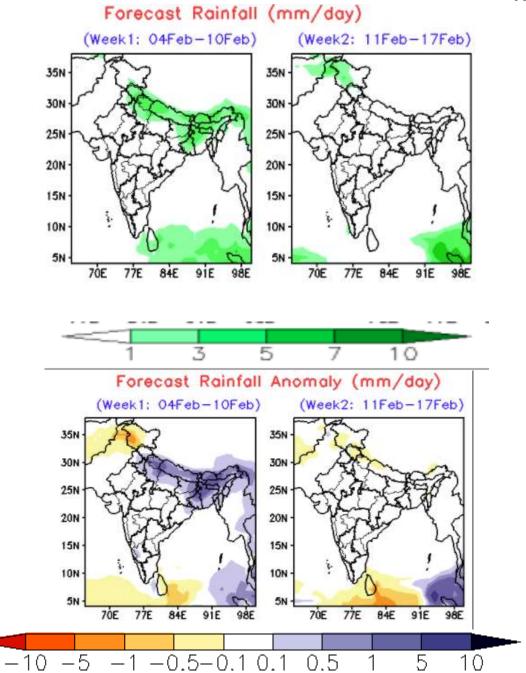
जल मौसम विज्ञान प्रभाग, नई दिल्ली HYDROMET DIVISION, NEW DELHI



Large Excess [60% or more] Excess [20% to 59%] | Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-99% to -40%] No Hain [-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



Annex IV

