

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

Press: Dated: 10 Feb, 2022

### Subject: Current Weather Status and Extended range Forecast for next two weeks (10-23 Feb 2022)

### 1. Salient Features for week ending on 09 Feb 2022

- ➤ Under the influence of an intense Western Disturbance and its induced cyclonic circulation(which attained the intensity of induced Low pressure area for a single day), parts of Northwest India including Western Himalayan Region have experienced weather activity from night of 3-5 Feb. It has caused fairly widespread to widespread rainfall/snowfall /thunderstorm activity over Western Himalayan Region and fairly widespread to widespread rainfall/thunderstorm activity over adjoining plains of Northwest India on one or two days during the period.
- This system moved rather fast and during its course of movement east-northeastwards, it has also caused fairly widespread to widespread rainfall/thunderstorm activity over parts of East and Northeast India during 4-6 Feb on two to three days and isolated rainfall activity over parts of Madhya Pradesh on a single day; this system has also caused isolated heavy to very heavy rainfall activity over West Uttar Pradesh and isolated heavy rainfall activity over parts of East & Northeast India on one day each; isolated hailstorm activity also have been reported from parts of East India on one day during the period.
- ➤ Under the influence of another two Western Disturbances immediately followed, parts of Western Himalayan Region have experienced isolated to scattered rainfall/snowfall activity during the remaining part of the week; under the influence of their induced cyclonic circulations, isolated to scattered rainfall/thunderstorm activity occurred over plains of Northwest India and adjoining areas of Madhya Pradesh mainly during night of 8<sup>th</sup> Feb till night of 9<sup>th</sup> Feb; isolated heavy rainfall and isolated hailstorm activity also have been reported from West Uttar Pradesh

on a single day during the period

Weekly overall Rainfall distribution during the current week ending on 9 Feb 2022
Winter Season's Rainfall Scenario (01 Jan to 09 Feb, 2022): During the week
ending on 9 Feb 2022, for the country as a whole, the weekly cumulative All India
Rainfall departure from its long period average (LPA) was +105% with weekly
cumulative over northwest India as +34%, while all India cumulative rainfall during this
year's Winter Season till 9 Feb, 2022 is above LPA by +108% and over northwest
India, it is above LPA by +77%. 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 03.02.2022 TO 09.02.2022			SEASON 01.01.2022 TO 09.02.2022		
Region						
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-						
EAST INDIA	27.5	8.0	244	55.8	28.8	94
NORTH- WEST INDIA	11.5	8.6	34	90.0	44.0	105
CENTRAL INDIA	2.0	2.0	0	24.7	10.1	145
SOUTH PENINSULA	0.3	1.5	-82	20.1	10.0	101
country as a whole	8.7	4.9	77	48.8	23.5	108

### 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 during next 3 days. Thereafter, it will move to phase 4 with amplitude becoming more than 1 during rest part of the forecast period. MJO phase is thus favourable for enhancement of convective activity over the North Indian Ocean (NIO).

#### 3. Forecast for next two week

### Weather systems & associated Precipitation during Week 1 (10 to 16 February, 2022) and Week 2 (17 to 23 February, 2022)

### Week 1 (10 to 16 February, 2022):

- o A Western Disturbance as a trough in middle & upper tropospheric westerlies runs along Long. 82°E to the north of Lat. 27°N and a trough runs from Bihar to North Interior Karnataka in lower tropospheric levels; it is very likely to cause:
- ✓ Isolated to scattered light/moderate rainfall with thunderstorm & lightning very likely over Sub-Himalayan West Bengal-Sikkim during next 2 days and over Jharkhand, Bihar, Gangetic West Bengal & Odisha on 10th February, 2022.
- ✓ Scattered to fairly widespread rainfall with thunderstorm & lightning very likely over Arunachal Pradesh and Assam & Meghalaya during next 2 days. Isolated hailstorm also likely over Assam & Meghalaya on 11th February, 2022.
- ✓ Strong winds (speed 25-35 kmph) very likely over Punjab, Haryana and West Uttar Pradesh during next 2 days.
- o Under the influence of fresh feeble Western Disturbance; isolated to scattered light rainfall/snowfall very likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand on 13th & 14th February, 2022.
- o Isolated to scattered rainfall very likely over Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep and Andaman & Nicobar Islands during most days of the week. Isolated thunderstorm accompanied with lightning also likely over Tamilnadu, Puducherry & Karaikal and Kerala & Mahe during 1<sup>st</sup> half of the week.
- o Dry weather very likely over remaining parts of the country during most days of the week.
- Overall rainfall activity is very likely to be below normal over Western Himalayan Region & adjoining plains and above normal over extreme south Peninsular India.

#### Week 2 (17 to 23 February, 2022):

Ounder the influence of a Western Disturbance; scattered to fairly widespread light/moderate rainfall/snowfall very likely over Western Himalayan Region and light isolated to scattered over plains of northwest India during 1<sup>st</sup> half of the week.

- Light/moderate isolated to scattered rainfall/thundershower is likely over east & northeast India during 2<sup>nd</sup> half of the week.
- o Light/moderate isolated to scattered rainfall/thundershower is likely over extreme south Peninsular India during most days of the week.
- Overall precipitation activity is likely to be below normal over most parts of Western Himalayan Region; normal to above normal over east & northeast India and extreme south Peninsular India.

## Minimum Temperatures, cold wave and fog for Week 1 and Week 2 Week 1(10 to 16 February, 2022):

- o Gradual fall in minimum temperatures by 2-4°C very likely over most parts of Northwest India during next 2 days and gradual rise by 2-4°C thereafter.
- Gradual fall in minimum temperatures by 3-5°C very likely over most parts of Central & East India during next 3 days and no significant change thereafter.
- Cold Day to Severe Cold Day conditions very likely in isolated pockets of Uttar Pradesh during next 2 days and Cold Day conditions very likely in isolated pockets over Uttarakhand during next 2 days.
- Dense to Very Dense Fog Conditions very likely in isolated pockets during night/morning hours over Uttar Pradesh during most days of the week and dense fog conditions very likely over Himachal Pradesh, Uttarakhand & northeast Rajasthan during next 24 hours and over Punjab, Haryana-Chandigarh-Delhi during night/morning hours of 13th-15th February, 2022.
- o No significant cold wave is likely over any parts of the country.

### week 2 (17 to 23 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 below normal by 1-3°C over most parts of the country except south Peninsular India, where these are likely to be above 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. 17 Feb 2022

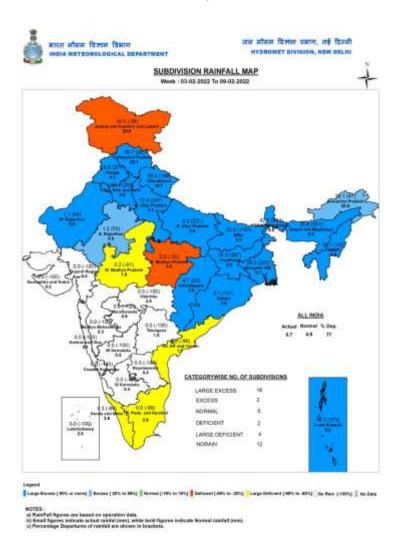
Legends: Heavy Rain: 64.5 to 115.5 mm Very Heavy Rain: 115.6 to 204.4 mm, Extremely

### **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



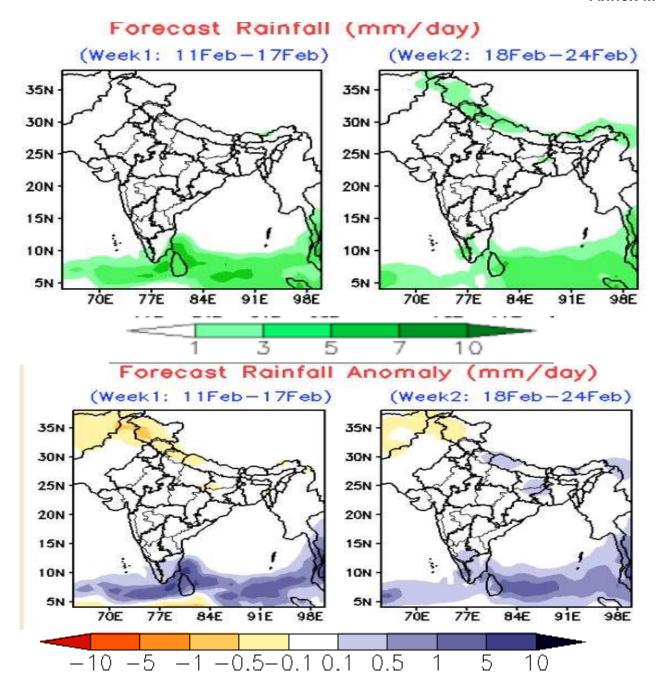
### **Annexure II**



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

## SUBDIVISION RAINFALL MAP Period: 01-01-2022 To 09-02-2022 ALL INDIA 23.5 48.8 108 CATEGORYWISE NO. OF SUBDIVISIONS LARGE EXCESS 2 EXCESS NORMAL DEFICIENT 0.6 (-97) Lakshadweep 18.1 LARGE DEFICIENT NORAIN 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 rainfal (mm), while bold figures indicate Normal rainfall (mm), c) Percentage Departures of rainfall are shown in brackets.



### **Annex IV**

