

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

Press: Dated: 24 Feb, 2022

## Subject: Current Weather Status and Extended range Forecast for next two weeks (24 Feb- 9 March 2022)

### 1. Salient Features for week ending on 23 Feb 2022

No major weather system affected the country and rainfall has been continued to remain sub-dued consecutively for the 2<sup>nd</sup> week, over most parts of India, during this week. However, movement of a WDs across extreme northern parts of India have caused fairly widespread to widespread rainfall/snowfall along with isolated heavy rainfall/snowfall activity over Jammu Kashmir & Ladakh during 22-23 Feb towards end of the week, while a cyclonic circulation has caused fairly widespread to widespread to widespread rainfall/thunderstorms had occurred over Andaman & Nicobar Islands during the first half of the week.

Weekly overall Rainfall distribution during the current week ending on 23 Feb 2022 Winter Season's Rainfall Scenario (01 Jan to 23 Feb, 2022): During the week ending on 23 Feb 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) was -46% with weekly cumulative over northwest India as -40%, while all India cumulative rainfall during this year's Winter Season till 23 Feb, 2022 is above LPA by +50% and over northwest India, it is above LPA by +43%. 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 17.02.2022 TO 23.02.2022				SEASON		
Region				01.01.2022 TO 23.02.2022			
	Actual	Normal	% Dep	Actual	Normal	% Dep	
EAST & NORTH-FAST							
INDIA	5.3	10.2	-49%	66.3	45.2	+47%	
NORTH- WEST INDIA	7.2	12.1	-40%	98.1	68.5	+43%	
CENTRAL INDIA	0.3	1.6	-80%	25.7	14.1	+82%	
SOUTH PENINSULA	1.4	2.5	-45%	23.7	14.8	+60%	
country as a whole	3.4	6.4	-46%	54.0	35.9	+50%	

### Table 1: Rainfall status (Week and season)

2. Large scale features

Currently, weak La Niña conditions are prevailing over equatorial Pacific region. The latest Monsoon Mission Climate Forecast System (MMCFS) forecast indicates that these La Niña conditions are likely to weaken starting from the northern hemisphere spring season and to reach cold ENSO neutral conditions during the second quarter of 2022. At present, neutral IOD conditions are present over Indian Ocean and the latest MMCFS forecast indicates that the neutral IOD conditions are likely to continue during the forecast period.

The Madden Julian Oscillation (MJO) Index currently lies in Phase 4 with amplitude close to 1 and will continue in same phase during first half of week 1. Thereafter, it will propagate to phase 5 with amplitude remaining less than 1 till end of week 1. The amplitude will gradually increase thereafter becoming more than 1 during week 2. MJO phase is thus favourable for enhancement of convective activity over Bay of Bengal (BoB) during entire forecast period.

### 3. Forecast for next two week

# Weather systems & associated Precipitation during Week 1 (24 February to 02 March, 2022) and Week 2 (03 to 09 March, 2022)

### Rainfall for week 1 (24 February to 02 March, 2022):

- A Western Disturbance as a cyclonic circulation lies over north Pakistan & adjoining Jammu & Kashmir at lower tropospheric levels and another Western Disturbance over northeast Afghanistan in middle tropospheric levels.
- A cyclonic circulation lies over West Madhya Pradesh & adjoining East Rajasthan and a trough runs from this cyclonic circulation to Nagaland in lower tropospheric levels. Under the influence of above systems:
- ✓ Scattered to fairly widespread light/moderate rainfall/snowfall with isolated thunderstorm & lightning activity very likely over Jammu-Kashmir-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during next 2 days and isolated rainfall/snowfall during subsequent 2 days. Isolated hailstorm also likely over Uttarakhand during next 2 days.
- ✓ Isolated to scattered light rainfall very likely over Punjab, Haryana-Chandigarh and West Uttar Pradesh during next 3 days. Isolated light rainfall very likely over Delhi on 25th & 26th February, 2022.
- ✓ Isolated to scattered light/moderate rainfall with isolated thunderstorm & lightning very likely over Bihar, Jharkhand, Odisha and West Bengal & Sikkim on 24th & 25th February, 2022.
- ✓ Scattered to fairly widespread rainfall with isolated thunderstorm & lightning over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura over the region on 25th & 26th February, 2022. Isolated hailstorm also likely over Assam & Meghalaya during next 2 days.
- A cyclonic circulation is likely to form over south Andaman Sea & neighbourhood around 27th February, 2022. Under its influence:

- ✓ Widespread light/moderate rainfall with isolated heavy falls very likely over Andaman & Nicobar Islands on 27th & 28th February, 2022.
- ✓ Squally winds (40-50 gusting to 60 Kmph) is very likely over south Andaman Sea on 27th and over south Andaman Sea & adjoining Southeast Bay of Bengal on 28th February, 2022.
- A fresh Western Disturbance is very likely to influence northwest India from 28th February, 2022. It is very likely to cause scattered to fairly widespread light/moderate rainfall/snowfall over Western Himalayan Region during 28th February to 02nd March, 2022 and isolated light rainfall over adjoining plains of northwest India on 01st & 02nd March, 2022.
- Light isolated rainfall is very likely over extreme south Peninsular India during 1<sup>st</sup> half of the week.
- Dry weather very likely over remaining parts of the country during most days of the week.

## Rainfall for week 2 (03 to 09 March, 2022):

- No intense Western Disturbance is likely to affect northwest India during the week.
- Light/moderate isolated to scattered rainfall/thundershower is likely over east and extreme south Peninsular India during most days of the week.
- Overall precipitation activity is likely to be above normal most parts of east India and Andaman & Nicobar Islands and below normal rest parts of the country.

Minimum Temperatures for week 1(24 February to 02 March, 2022) and week 2(03 to 09 March, 2022)

# Minimum Temperatures, cold wave and fog for Week 1(24 February to 02 March, 2022):

 Minimum temperatures are above normal by 2 to 4°C over parts of Western Himalayan Region, Haryana-Chandigarh-Delhi, Rajasthan, East Uttar Pradesh, Madhya Pradesh, Maharashtra, Vidharbha, Jharkhand, Bihar, Gangetic West Bengal, Odisha, Chhattisgarh and Saurashtra & Kutch.  No significant change in minimum temperatures likely over most parts of India during the week. These are likely to be near normal over most parts of the country.

### Minimum Temperatures for week 2 (03 to 09 March, 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 or slightly above normal over most parts of northwest & west India and slightly below normal or near normal over rest parts of the country. (Refer Annex IV)

### 4. Cyclogenesis forecast for North Indian Ocean during next 2 weeks

Various broad scale features, sea conditions and model guidance indicate that cyclogenesis is not likely over the North Indian Ocean during the ensuing 2 weeks. However, enhanced convective activity leading to formation of cyclonic circulation or a low pressure area is likely over south Andaman Sea and adjoining southeast Bay of Bengal during middle of week 1 and it is likely to move westwards towards Sri Lanka during later half of the week Next weekly update will be issued on next Thursday i.e. 4 March 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		



#### Legend

📕 Large Excess [ 80% or more] 📕 Excess [ 20% to 69%] 🚪 Normal [-19% to 19%] 🚪 Deficient [-69% to -20%] 📒 Large Deficient [-99% to -60%] 🗌 No Rain [-100%] 📗 No Rain

- 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.

### Annexure II



### Legend

Large Excess ( 60% or more) 📲 Excess ( 20% to 59%) 🚪 Normal [-19% to 19%) 🖥 Deficient [-59% to -20%) 🦂 Large Deficient [-59% to -60%] 🗌 No Rain (-190%) 📳 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

