

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

Press: Dated: 24 March, 2022

## Subject: Current Weather Status and Extended range Forecast for next two weeks (24 March-6 April 2022)

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

- Deep Depression over southeast Bay of Bengal(20-23 March 2022) which crossed Myanmar coast (2<sup>nd</sup> Deep Depression over the Bay of Bengal in this March 2022): A Low pressure area lay over Southeast Bay of Bengal and adjoining east Equatorial Indian Ocean on 17 March. It moved east-northeastwards and became a Well Marked Low pressure area over Southeast Bay of Bengal and adjoining south Andaman Sea on 19<sup>th</sup> March. It concentrated into a Depression over the same Areas on morning of 20<sup>th</sup> March. It moved nearly northwards and intensified into a deep depression over north Andaman Sea and adjoining southeast Bay of Bengal, on morning of 21<sup>st</sup> March. It continued to move nearly northwards along & off Andaman & Nicobar Islands crossed Myanmar coast near latitude 16.0° N & longitude, 94.2°E as a deep depression between 1330 hours IST and 1430 hours IST and lay over Coastal Myanmar as a Deep depression. Then, it moved nearly north-northeastwards and weakened into a depression over Myanmar in the night of 22<sup>nd</sup> and further into a well marked low pressure on morning 23<sup>rd</sup> March and into a low pressure are over the same area in the evening of 23<sup>rd</sup> March. It became less marked in the morning of 24<sup>th</sup> March. (Refer Annex 1 for track of the system)
- >The above system had moved along and off Andaman & Nicobar Islands and caused fairly widespread to widespread rainfall/thunderstorm activity with isolated heavy to very heavy rainfall during 19-22 March.
- No major weather system affected the main land of the country during the week and rainfall over most parts of India was sub-dued during most days of the week except rain and thunderstorms reported over southern parts of Peninsular India in most dates of the week and over parts of higher ridges of Western Himalayan region for 3 days during 18-21 March. Movement of a Western Disturbance and its induced cyclonic circulation had caused isolated light rainfall activity over the latter

areas during the period while a trough at lower levels have caused rainfall over the **southern parts of Peninsular India**.

- Abatement of heat wave from most parts of India during 2<sup>nd</sup> half of the week as forecasted by IMD -Heat Wave conditions to Severe Heat Wave conditions in isolated pockets continued over Gujarat state, west Rajasthan and Jammu Division, Himachal Pradesh, Uttarakhand, Vidarbha & West Madhya Pradesh till 19 March and gradually abated from most of these places while it was continued over west Madhya Pradesh till 23 March. Only fresh spell of heat wave at isolated places re- developed over Saurashtra on 23 March.
- Weekly overall Rainfall distribution during the current week ending on 23 March 2022 Premonsoon Season's Rainfall Scenario (01 March to 23 March, 2022): During the week ending on 23 March 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) was -76% with weekly cumulative over northwest India as -94%, while all India cumulative rainfall during this year's Pre-monsoon Season's Rainfall Scenario (01 March to 23 March, 2022) is below LPA by -82% and over northwest India, it is above LPA by -87%. 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			SEASON	
Region	17.03	.2022 TO 23.03	3.2022	01.0	3.2022 TO 23.0	3.2022
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST & NORTH-EAST INDIA	3.1	15.3	-79	4.1	40.7	-90
NORTH- WEST INDIA	0.8	14.0	-94	4.7	37.0	-87
CENTRAL INDIA	0.1	1.5	-92	1.0	6.2	-83
SOUTH PENINSULA	5.7	3.2	71	7.3	10.1	-28

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

country as a whole 1.9	7.9	-76	3.9 21.9	9 -82
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### 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 more than 1 and will move across phase 5 during first half of week 1 with amplitude gradually becoming less than 1. Thereafter, it will move across phases 6 & 7 during remaining part of the forecast period. Thus, MJO phase is conducive for enhancement of convective activity over the Bay of Bengal (BoB) during first half of week1.

### 3. Forecast for next two week

### Forecast for next two week

### Weather systems & associated Precipitation during Week 1 (24 to 30 March, 2022) and Week 2 (31 March to 06 April, 2022)

### Forecast for week 1 (24 to 30 March, 2022):

- Under the influence of Western Disturbance, isolated rainfall/snowfall very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Uttarakhand on 24<sup>th</sup> March, 2022.
- Thereafter, under the influence of a feeble fresh Western Disturbance, isolated rainfall/snowfall very likely over Western Himalayan Region during 28<sup>th</sup> night to 30<sup>th</sup> March, 2022.
- Light to moderate isolated/scattered rainfall very likely over Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Karnataka and Andaman & Nicobar Islands during most days of the week and over Coastal Andhra Pradesh, Telangana & Rayalaseema during next 2 days. Isolated thunderstorm/lightning activity also very likely over Kerala

& Mahe during most days of the week, over Tamilnadu, Puducherry-Karaikal and Karnataka during next 2 days. Isolated heavy rainfall also likely over Coastal & South Interior Karnataka on 24<sup>th</sup> march, 2022.

- Light to moderate scattered/fairly widespread rainfall very likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal & Sikkim during most days of the week with isolated thunderstorm/lightning/gusty winds over Northeast India during 24th-26th March and over Sub-Himalayan West Bengal & Sikkim on 24th March, 2022. Isolated heavy rainfall also likely over Arunachal Pradesh on 24th & 25th March, 2022.
- Dry weather very likely over remaining parts of the country during most days of the week.

### Rainfall for week 2 (31 March to 06 April, 2022):

- Due to trough over northeast India, light to moderate rainfall with thunderstorm activity is also likely over northeast & adjoining east India during many days of the week.
- Due to trough over south Peninsula India, isolated to scattered rainfall along with thunderstorm is likely over south Peninsular India during many days of the week.
- Under the influence of feeble Western Disturbances, light isolated rainfall/snowfall is likely over Western Himalayan region during some days of the week.
- Overall, rainfall activity is likely to be above normal over Andaman & Nicobar Islands; near normal to above normal over south Peninsular India and northeast & adjoining east India; and below normal over Western Himalayan Region.

# Maximum Temperatures for week 1(24 to 30 March, 2022) and week 2(31 March to 06 April, 2022)

### Maximum Temperatures for Week 1(24 to 30 March, 2022):

 Maximum Temperatures (as on 23/03/2022) recorded 40-41°C in many parts over Vidharbha and in isolated pockets over West Madhya Pradesh, interior Odisha, Marathawada, North Interior Karnataka, Rayalaseema and Telangana.

- The maximum temperatures were above normal by 4-6° C at most places Jammu Division. Himachal Pradesh, Punjab, Haryana & Chandigarh, Arunachal Pradesh, Assam & Meghalaya; at a few paces over Uttarakhand and at isolated places over West Rajasthan, west Madhya Pradesh, north Konkan and Gujarat state.
- No significant change in maximum temperatures very likely over most parts of Northwest India during next 2 days and rise by 2-4<sup>o</sup> C thereafter.
- No significant change in maximum temperatures very likely over most parts of Central & south peninsular India during next 3 days and rise by 2-3<sup>o</sup> C thereafter.
- Maximum temperatures are very likely to rise by 2-4<sup>o</sup> C over Gujarat state during 1<sup>st</sup> half of the week and no significant change thereafter.
- Gradual rise in maximum temperatures by 2-3<sup>o</sup> C very likely over Maharashtra during 1<sup>st</sup> half of the week and no significant change thereafter.
- No significant change in maximum temperatures very likely over rest parts of the country during next 4-5 days.
- Heat Wave conditions in isolated pockets very likely over Gujarat State from 26<sup>th</sup> to 28<sup>th</sup> March, 2022.
- Heat Wave conditions in isolated pockets also likely over south Madhya Pradesh and northern parts of Maharashtra during 2<sup>nd</sup> half of the week.

### Maximum Temperatures for week 2 (31 March to 06 April, 2022):

- No significant change in maximum temperatures likely over most parts of the country as compared to week 1.
- These are likely to be above normal by 2-4°C over most parts of northwest, east & adjoining central India, near normal over north peninsular, east & northeast India and below normal over rest parts of India.
- No significant Heat wave is likely over any part of the country except at isolated pockets over Central India during some days of the week. (Refer Annex V)

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

Analysis of all Model forecast products shows "there is likelihood of formation of a cyclonic circulation/low pressure area over central parts of south Arabian Sea during week 1 and over

southeast Bay of Bengal during week 2 with enhanced convective activity over these regions during the period. However, there is no likelihood of intensification of these circulations into a depression or higher intensity storms.

### Refer-

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24\_d95a40\_Extended%20Range%20Outl ook\_24032022.pdf

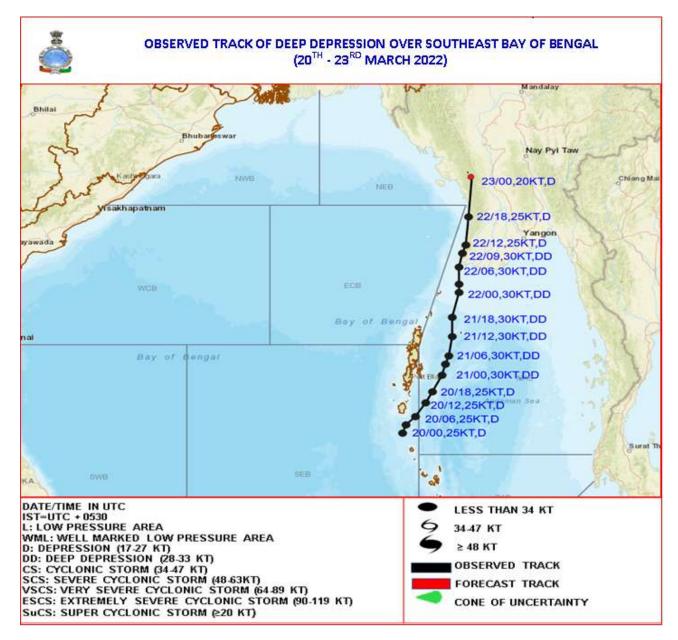
Next weekly update will be issued on next Thursday i.e. 31 March 2022

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

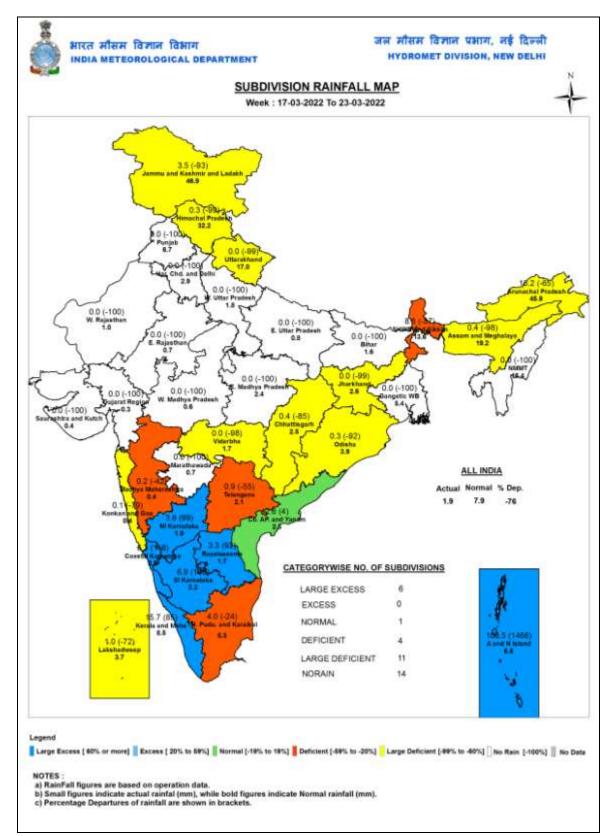
	SPATIAL DISTRIBUT		f Stations reporting)
% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)

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

### Annex I



### Annex: II



#### Annexure

