

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

Press: Dated: 17 March, 2022

Subject: Current Weather Status and Extended range Forecast for next two weeks (17-30 March 2022)

1. Salient Features for week ending on 16 March 2022

- No major weather system affected the main land of the country during 12-16 March and rainfall over most parts of India was sub-dued during most days of the week except parts of Maharashtra, west Madhya Pradesh and east Rajasthan which has received rainfall of 1-2 days. Movement of a Western Disturbance and its induced cyclonic circulation on 9-10 March (start of the week) had caused isolated light to moderate rainfall/thunderstorm activity over plains of Northwest India and adjoining areas of Central India and Gujarat and light to moderate rainfall and thunderstorms occurred at isolated places over Konkan-Goa, Madhya Maharashtra, Marathwada, Telangana and North Interior Karnataka on 11-12 March.
- Western parts of India experiences Season's 1st spell of heat wave to severe heat wave during 12-17 March 2022 with -Heat Wave conditions in a few pockets with Severe Heat Wave conditions in isolated pockets were observed over Saurashtra-Kutch during 11-16 March; Gujarat region during 12-16 March; Heat Wave to severe heat wave conditions in a few pockets over Konkan-Goa during 12-15 March; over west Raj during 14-16 March; and Heat Wave to severe heat wave in isolated pockets observed over Himachal Pradesh and Uttarakhand and Heat wave conditions in many pockets over Vidarbha and in isolated pockets over West Madhya Pradesh and Interior Odisha on 16th.
- This Season's 2nd low pressure system also formed over Equatorial Indian Ocean & adjoining Southwest Bay of Bengal on 16th March.
- Weekly overall Rainfall distribution during the current week ending on 16 March 2022 Premonsoon Season's Rainfall Scenario (01 March to 16 March, 2022): During the week ending on 16 March 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from

its long period average (LPA) was -97% with weekly cumulative over northwest India as -98%, while all India cumulative rainfall during this year's **Pre-monsoon Season's Rainfall Scenario (01 March to 16 March, 2022)** is below LPA by **-86%** and over northwest India, it is above LPA by **-83%**. 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	
	40.00	0000 TO 40.0				
Region	10.03	.2022 10 16.0	3.2022	01.0	J3.2022 TO 16.0	3.2022
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST &						
NORTH-EAST						
INDIA	0.0	12.3	-99%	1.0	25.4	-96%
NORTH-						
WEST INDIA	0.3	11.2	-98%	4.0	23.0	-83%
CENTRAL						
INDIA	0.3	2.3	-87%	0.9	4.7	-81%
SOUTH						
PENINSULA	0.3	3.8	-93%	1.6	6.9	-77%
country as a	0.2	6.0	07%	2.0	14.0	969/
whole	0.2	0.9	-97%	2.0	14.0	-80%

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 3 with amplitude more than 1 and will move across phases 4 and 5 during entire forecast period with amplitude becoming less than 1 during later half of week 2. Thus, MJO phase is conducive for enhancement of convective activity over the Bay of Bengal (BoB) during the entire forecast period

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (17 to 23 March, 2022) and Week 2 (24 to 30 March, 2022)

Forecast for week 1 (17 to 23 March, 2022):

Low pressure area southeast Bay of Bengal & it's likely intensification into a cyclonic storm by 21st March, 2022

 A low pressure area lies over southeast Bay of Bengal and adjoining east Equatorial Indian Ocean at 0830 hours IST of today the 17th March over. It is likely continue to move east-northeastwards, become a well marked low pressure area and lie over southeast Bay of Bengal and adjoining south Andaman Sea by 19th March morning. Thereafter, it is likely to move nearly northwards along & off Andaman & Nicobar Islands, intensify into a depression by morning of 20th March and into a cyclonic storm on 21st March. Thereafter, it is likely to move nearly north-northeastwards and reach near Bangladesh-north Myanmar coasts around morning of 22nd March, 2022 (graphics on experimental pre-genesis track & intensity forecast along with cone of uncertainty and wind distribution are enclosed). Under its influence:

Warnings:

1. Rainfall

- 18th March: Light to moderate rainfall/thundershower at most places with heavy to very heavy rainfall at isolated places very likely over Nicobar Islands.
- 19th March: Light to moderate rainfall/thundershower at most places with heavy to very heavy rainfall at a few places very likely over Andaman & Nicobar Islands with isolated extremely heavy rainfall likely over Nicobar Islands.
- 20th March: Light to moderate rainfall/thundershower at most places with heavy to very heavy rainfall at a few places and extremely heavy rainfall at isolated places very likely over Andaman and Nicobar Islands.

 21st March: Light to moderate rainfall/thundershower at most places with isolated heavy rainfalls very likely over Andaman Islands.

2. Wind warning

- 17th and 18th March: Squally winds speed reaching 40-50 kmph gusting to 60 kmph are very likely to prevail over southeast Bay of Bengal and adjoining south Andaman Sea.
- 19th March: Squally winds speed reaching 45-55 kmph gusting to 65 kmph are very likely to prevail over Andaman and Nicobar Islands, Andaman Sea and southeast Bay of Bengal.
- 20th March: Squally winds speed reaching 55-65 kmph gusting to 75 kmph are very likely to prevail over Andaman and Nicobar Islands, Andaman Sea and adjoining southeast Bay of Bengal from forenoon and would gradually increase thereafter.
- 21st March: Gale winds speed reaching 70-80 kmph gusting to 90 kmph are very likely to prevail over Andaman and Nicobar Islands, eastcentral Bay of Bengal and adjoining southeast Bay of Bengal.
- O 22nd March: Gale winds speed reaching 70-80 kmph gusting to 90 kmph are very likely to prevail over eastcentral Bay of Bengal, adjoining northeast Bay of Bengal and along & off southeast Bangladesh & North Myanmar coasts. Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely to prevail over north Andaman Islands, north Andaman Sea and adjoining southeast bay of Bengal.

3. Sea condition

- Sea condition is very likely to become rough over southeast Bay of Bengal and adjoining south Andaman Sea during 17th – 18th March.
- Sea condition is very likely to become rough to very rough over Andaman Sea and adjoining southeast Bay of Bengal during 19th March. It would become very rough over the same region on 20th March.
- Sea condition is very likely to become high over Andaman Sea, southeast and adjoining eastcentral Bay of Bengal on 21st, over eastcentral and adjoining southeast & northeast Bay of Bengal and north Andaman Sea on 22nd March.

4. Fishermen Warning (Graphics enclosed)

- Fishermen are advised not to venture into southeast BoB area areas during 17th 21st March.
- Into Andaman Sea and along & off Andaman and Nicobar Islands during 18th to 22nd March.
- Into eastcentral Bay of Bengal during 21st to 22nd March and into northeast Bay of Bengal on 22nd March.

Forecast & Warnings for other parts of the country:

- Under the influence of a fresh Western Disturbance, isolated to scattered rainfall/snowfall very likely over Western Himalayan Region during 18th night to 20th with thunderstorm/lightning on 19th March, 2022.
- Dust raising winds very likely to prevail over West Rajasthan on 19th & 20th March, 2022.
- o Due to trough over south Peninsula India, light isolated rainfall very likely over Kerala & Mahe and Tamilnadu, Puducherry & Karaikal during most days of the weeks; over Coastal & South Interior Karnataka during 1st half of the week; Andhra Pradesh & Telangana during 1st half of the week.
- Dry weather very likely over remaining parts of the country during most days of the week.
- Overall rainfall activity is likely to be above normal over south Peninsular India and below normal over the remaining homogeneous regions of the country during the week.

Rainfall for week 2 (24 to 30 March, 2022):

- Due to trough/wind discontinuity over south Peninsula India, isolated to scattered rainfall along with thunderstorm is likely over south Peninsular India during the week.
- Under the influence of Western Disturbances, isolated to scattered rainfall along with thunderstorm is likely over Western Himalayan Region during many days of the week.

- Due to tough over northeast India, thunderstorm activity is also likely over northeast & adjoining east India during some days of the week.
- Overall, rainfall activity is likely to be above normal over south Peninsular India; near normal to above normal over northeast & adjoining east India and parts of Western Himalayan Region.

Maximum Temperatures for week 1(17 to 23 March, 2022) and week 2(24 to 30 March, 2022)

Maximum Temperatures for Week 1(17 to 23 March, 2022):

- Maximum Temperatures (16/03/2022) recorded around 39-41°C over most parts of West Rajasthan, Gujarat Region and Vidarbha; over many parts of Saurashtra & Kutch, East Rajasthan, Madhya Maharashtra, Marathwada, Telangana, Rayalaseema and Chhattisgarh; over some parts of Madhya Pradesh, Odisha and Coastal Andhra Pradesh..
- No significant change in maximum temperatures very likely over most parts of Northwest, central, west and south Peninsular India during next 2 days and fall by 2-3°C thereafter.
- No significant change in maximum temperatures over rest parts of the country.
- Heat Wave to Severe Heat Wave conditions very likely to prevail in some parts of West Rajasthan & in isolated pockets Gujarat State during 1st half of the week.
- Heat Wave conditions in isolated pockets very likely over Madhya Pradesh,
 Vidharbha, Interior Odisha, Coastal Andhra Pradesh and Telangana during 1st
 half of the week.

Maximum Temperatures for week 2 (24 to 30 March, 2022):

- No significant change in maximum temperatures likely over most parts of the country as compare to week 1.
- These are likely to be above normal by 2-3°C over most parts of northwest, east & adjoining central India and near normal or below normal over rest parts of India.
- No significant Heat wave is likely over any part of the country except at isolated pockets over East Coast during some days of the week. (Refer Annex IV)

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

The pressure and wind fields of various models like IMD GFS, ECMWF, ECMWF ensemble, IMD MME, NCUM (Global) and NCUM (Regional) are indicating likely formation of depression over southeast BoB & adjoining south Andaman Sea on 19th March with subsequent intensification into a cyclonic storm around 21st March. However, there is variation among these models w.r.t. peak intensity with IMD GFS indicating higher intensity and ECMWF & NCUM indicating intensification upto marginal cyclonic storm only. There is good consensus among these models w.r.t. movement of system towards the Bangladesh & north Myanmar coasts. Climatologically, during the period 1891-2020, there has been 8 cyclonic disturbances over the north Indian Ocean with 6 over Bay of Bengal and 2 over Arabian Sea in the month of March. Out of these, 1 crossed TamilNadu coast as a cyclonic storm in the year 1925 and another crossed Sri Lanka coast as a severe cyclonic storm in 1907.Refer for all details

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_a7c1de_Extended%20Range%20Outlook_17032022. pdf

Next weekly update will be issued on next Thursday i.e. 24 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

% 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)	
	Pro	obabilisti	c Forecast	
	Pro	obabilisti	c Forecast	
	Pro	s Probal	c Forecast bility of Occurrence (%)	
	Pro Term Unlike	s Probal	c Forecast bility of Occurrence (%) < 25	
	Pro Term Unlike Likel	obabilisti s Proba ly	c Forecast bility of Occurrence (%) < 25 25 - 50	
	Pro Term Unlike Likely Very Lik	s Probab y kely	c Forecast bility of Occurrence (%) < 25 25 - 50 50 - 75	

Annex I



Legend

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 :

RainFall figures are based on operation data.
 Smail 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 [-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

