

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

Press: Dated: 7 April, 2022

Subject: Current Weather Status and Extended range Forecast for next two weeks (7-20 April 2022)

1. Salient Features for week ending on 6 April 2022

- ➤ No major weather system affected the main land of the country during the week and rainfall over northwest and central parts of India was continued to be sub-dued during most days of the week while rain and thunderstorms activities have increased, over southern parts of Peninsular India especially over Kerala, Karnataka and parts of Tamil Nadu and over northeastern parts of the country and Sub Himalayan West Bengal & Sikkim during the week.
- > Strong southwesterlies/southerlies causing enhanced moisture incursion into the area had caused fairly widespread to widespread rainfall/thunderstorms over parts of Northeast India and over Sub Himalayan West Bengal & Sikkim on most of the days during the week; under its influence, heavy /very heavy rainfall activity had been reported over these areas on three to four days whereas extremely heavy rainfall had been reported over Meghalaya on four days along with.
- ➤ Under the influence of north —south troughs/wind discontinuities /cyclonic circulations in the lower tropospheric levels, isolated to scattered rainfall/thunderstorm activity had occurred over southern parts of Peninsular India on most of the days during with isolated heavy rainfall also had been reported over Tamil Nadu, Puducherry & Karaikkal on one day along with.
- Last week's Heat wave spell which started mainly over west Rajasthan and adjoining areas of Gujarat state and west Madhya Pradesh from 27 March and over east Rajasthan, east Madhya Pradesh, south Haryana, Delhi and Southern parts of Uttar Pradesh from 29 March have intensified to severe heat wave at a few places over these areas and almost continued during this week on all dates. Besides this, heat wave to severe heat wave have also been continued over parts of western Himalayan region which reported with maximum temperature in the range of 25-33 degC at higher ridges while at lower ridges it

has been 33-39 deg C with 6 to 9 deg C above normal. Jharkhand and Bihar also reported heat wave from 2 and 4 April 2022 respectively which have been persisted over these areas till end of the week. Heat wave to severe heat wave days also observed at isolated pockets for 2-3 days during the week over Gujarat State and Vidarbha.

- The highest The highest maximum temperature of 44.5°C had been recorded at Barmer (West Rajasthan) on 6th April 2022 and the lowest minimum temperature of 12.5°C had been recorded at Jhansi (West Uttar Pradesh) on 5th April 2022 over the plains of the country during the week.
- Weekly overall Rainfall distribution during the current week ending on 6 April 2022 Premonsoon Season's Rainfall Scenario (01 March to 6 April, 2022): During the week ending on 6 April 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) was +33% with weekly cumulative over northwest India as -100%, while all India cumulative rainfall during this year's Pre-monsoon Season's Rainfall Scenario (01 March to 6 April, 2022) is below LPA by -50% and over northwest India, it is above LPA by -90%. 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 31.03.2022 TO 06.04.2022			SEASON 01.03.2022 TO 06.04.2022		
Region						
	Actual	Normal	% Dep	Actual	Normal	% Dep
EAST &						
NORTH-EAST						
INDIA	60.9	25.1	143%	85.9	85.0	+1%
NORTH-						
WEST INDIA	0.0	6.8	-100%	5.2	53.5	-90%
CENTRAL						
INDIA	0.2	2.0	-88%	1.4	10.2	-87%
SOUTH						
PENINSULA	3.6	5.6	-37%	15.6	19.5	-20%
country as a						
whole	10.5	7.9	33%	18.8	37.3	-50%

2. Large scale features

- ➤ Currently, La Niña conditions are prevailing over the equatorial Pacific region. The latest Monsoon Mission Climate Forecasting System (MMCFS) forecast indicates that La Niña conditions are likely to continue throughout the Month. Other climate models are also indicating enhanced probability for La Niña conditions likely during summer season. At present, neutral Indian Ocean Dipole(IOD) conditions are present over the Indian Ocean and the latest MMCFS forecast indicates that the neutral IOD conditions are likely to continue during summer season. As the changes in the sea surface temperature (SST) conditions over the Pacific and the Indian Oceans are known to influence the Indian climate, IMD is carefully monitoring the evolution of sea surface conditions over these Ocean basins.
- The Madden Julian Oscillation (MJO) Index currently lies in phase 4 with amplitude less than 1. It is likely to move eastwards into phase 5 during first half of week 1. Thereafter, it will move across phases 6 & 7 during remaining part of forecast period. Hence, MJO is favourable for enhancement of convective activity over Bay of Bengal (BoB) during first half of week 1.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (07 to 13 April, 2022) and Week 2 (14 to 20 April, 2022)

Forecast for week 1 (07 to 13 April, 2022):

- o Under the influence of strong southwesterly winds from Bay of Bengal to northeastern States at lower tropospheric levels:
- ✓ Fairly widespread to widespread rainfall accompanied with thunderstorm/lightning very likely over Sub-Himalayan West Bengal-Sikkim, Arunachal Pradesh, Assam-Meghalaya and isolated/scattered rainfall accompanied with thunderstorm/lightning over Nagaland, Manipur, Mizoram & Tripura during the week.
- ✓ Isolated heavy rainfall very likely over Arunachal Pradesh & Sub-Himalayan West Bengal-Sikkim during 07th to 10th April; over Assam-Meghalaya during most days of the week. Isolated heavy to very heavy rainfall also very likely West Assam & Meghalaya during 09th to 11th April, 2022.
- o Under the influence of trough over south Peninsular India,

- ✓ Light isolated/scattered rainfall accompanied with thunderstorm/lightning very likely over Kerala-Mahe, Lakshadweep, Tamilnadu-Puducherry-Karaikal, and Karnataka during the week; over Telangana on 07th and over Coastal Andhra Pradesh during 09th & 10th April, 2022.
- ✓ Isolated heavy rainfall likely over south Kerala on 08th &0 09th April, 2022.
- o Under the influence of a fresh Western Disturbance, light isolated rainfall is likely over Western Himalayan Region on 12th & 13th April, 2022.
- o Dry weather very likely over remaining parts of the country during most days of the week.

Rainfall for week 2 (14 to 20 April, 2022):

- Due to trough over northeast India and strong southwesterly winds from Bay of Bengal to northeastern states at lower tropospheric levels, light to moderate scattered to fairly widespread rainfall with thunderstorm activity is very likely to continue over northeast India during many days of the week.
- o Due to trough/wind discontinuity over south Peninsula India, light/moderate isolated to scattered rainfall along with thunderstorm is likely over extreme south Peninsular India during most days of the week.
- o Overall, rainfall activity is likely to be above normal over northeast India and Andaman & Nicobar Islands; near normal to above normal over south Peninsular India; below normal over northwest India and near normal over rest parts of the country.

Maximum Temperatures for week 1(07 to 13 April, 2022) and week 2(14 to 20 April, 2022)

Maximum Temperatures for Week 1(07 to 13 April, 2022):

- o Maximum Temperatures (as on 06/04/2022) were 42-44°C in most parts over West Rajasthan, parts of southeast Uttar Pradesh and Vidarbha, 41-43°C in most parts over east Rajasthan, Madhya Pradesh; in remaining parts of East Uttar Pradesh; in some parts of Bihar, Jharkhand, Gujarat state, south Haryana, Delhi, Madhya Maharashtra, Marathawada and Chhattisgarh.
- o The maximum temperatures were above normal by 6-10°C at many parts over Jammu

- division, Himachal Pradesh; by 4-6°C in many parts over Uttarakhand, Punjab, Rajasthan, Haryana-Delhi and in isolated pockets over Madhya Pradesh, East Uttar Pradesh and Saurashtra-Kutch.
- Rise in maximum temperatures by about 2°C very likely over many parts of Northwest India during 1st half of the week and no significant change thereafter.
- No significant change in maximum temperatures very likely over Gujarat during 1st half of the week and fall by 2-3°C thereafter.
- No significant change in maximum temperatures very likely over rest parts of the country during the week.
- O Heat Wave conditions in most parts with severe heat wave conditions in isolated pockets very likely over West Rajasthan; Heat Wave to severe heat wave conditions in some parts over East Rajasthan and in isolated pockets over south Haryana-Delhi during most days of the week.
- O Heat Wave conditions in some parts over Madhya Pradesh during most days of the week with severe heat wave conditions in isolated pockets over West Madhya Pradesh on 10th to 12th.
- Heat Wave conditions in some pockets over Himachal Pradesh and in isolated pockets over Punjab, Uttar Pradesh, Jharkhand & Bihar during most days of the week; over Jammu division on 07th & 08th; over north Madhya Maharashtra on 07th; over northern parts of Gujarat & Kutch during 07th-09th and over Vidarbha during 09th to 12th April, 2022.

Maximum Temperatures for week 2 (14 to 20 April, 2022):

- Maximum temperatures are likely to fall over most parts of the Indo-Gangetic Plains as compared to week 1.
- o However, these are likely to be above normal by 3-5°C over most parts of Western Himalayan Region and East Coast; by 2- 4°C over many parts of plains of northwest India and over rest parts of east India. It is likely to be below normal to near normal over rest parts of India.
- Heat wave at isolated pockets likely over plains of northwest India and along the East coast (Odisha and Andhra Pradesh) & its adjoining areas during some days of the week. (Refer Annex V)

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

Refer

https://rsmcnewdelhi.imd.gov.in/uploads/archive/24/24_81a913_Extended%20Range%20Outlook_07042022.pdf

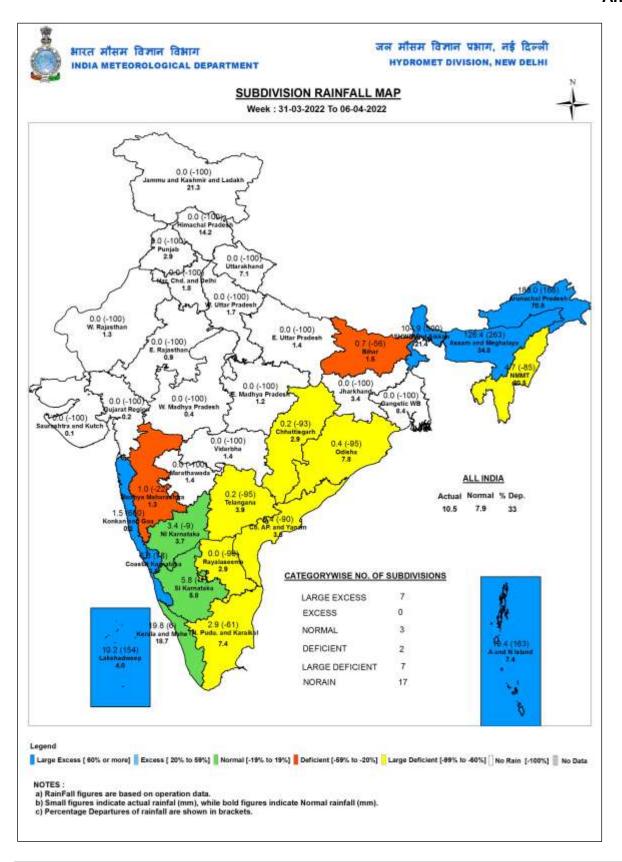
Next weekly update will be issued on next Thursday i.e. 14 April 2022

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

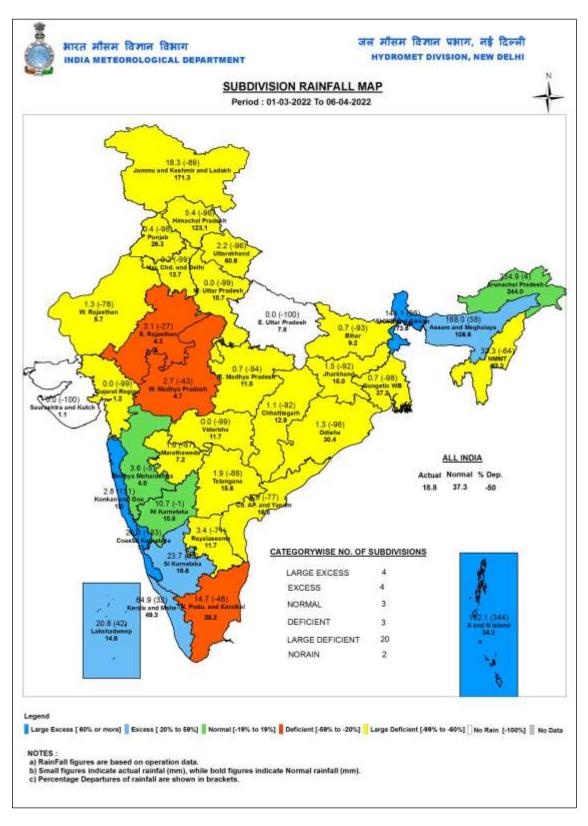
SPATIAL DISTRIBUTION (% of Stations reporting)					
% Stations	Category	% Stations	Category		
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)		
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)		

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

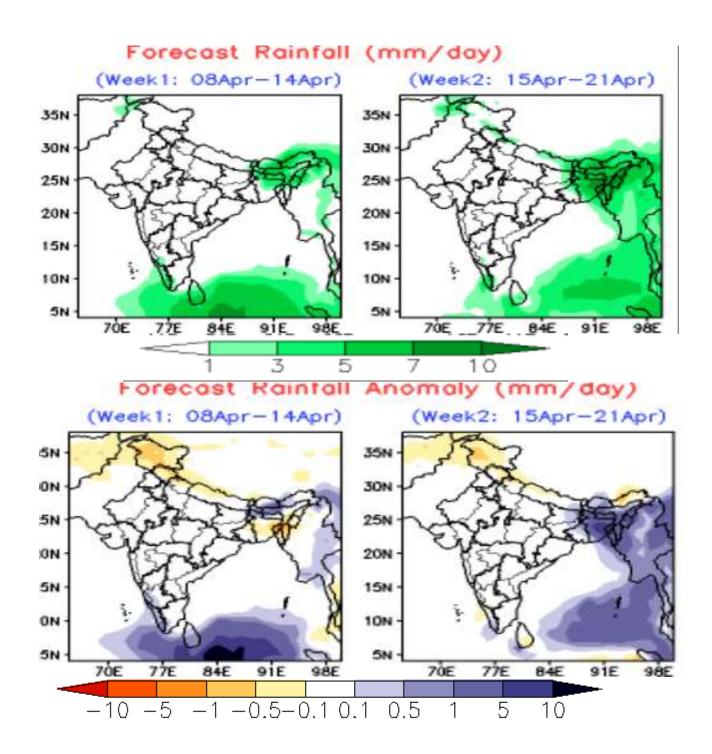
Annex I



Annex: II



Annexure III



Annex IV

