



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

**Press: Dated: 21 April, 2022**

**Subject: Current Weather Status and Extended range Forecast for next two weeks  
(21 April-03 May 2022)**

**1. Salient Features for week ending on 20 April 2022**

- Movement of two Western Disturbances had caused isolated to scattered rainfall/thunderstorm activity over Western Himalayan Region during 13-15 and during 19-20 April.
- Under the influence of a cyclonic circulation lay over Westcentral & adjoining areas of Southwest Bay of Bengal off south Andhra Pradesh north Tamilnadu coasts on 18<sup>th</sup> which moved over to south Tamilnadu coast & neighbourhood on 20<sup>th</sup> April along with a trough/wind discontinuity from Central India to South Peninsula in the lower tropospheric levels which persisted almost throughout the week had caused scattered to fairly widespread rainfall/thunderstorm activity over Kerala & Mahe, Karanatak and isolated to scattered rainfall/thunderstorm activity over remaining parts of south Peninsula on most of the days of the week; isolated heavy rainfall had occurred over Kerala & Mahe on four to five days and over Tamil Nadu, Puducherry & Karaikkal on three to 4 days.
- A fresh spell **heat wave** was observed at isolated pockets over West Rajasthan on 14 which then persisted for all dates till 18 April and then abated on 19 April. It was intensified to **severe heat wave conditions** on 18 and 19 April. **Heat wave** also prevailed at isolated places over Punjab, Jharkhand, Delhi, Haryana and West Madhya Pradesh during 17-20 April. **Heat wave to severe heat wave conditions** had occurred **at isolated places** over Himachal Pradesh during 18-20 April.
- The highest maximum temperature of **45.2°C** had been recorded **at Daltongang (Jharkhand) on 19<sup>th</sup> April 2022** and the lowest minimum temperature of **17.4 °C** had been recorded **at Merrut (West Uttar Pradesh) on 17<sup>th</sup> April 2022** over the plains of the country during the week.
- **Weekly overall Rainfall distribution during the current week ending on 20 April 2022 Pre-monsoon Season's Rainfall Scenario (01 March to 20 April, 2022):** During the week ending on

20April 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) was +21% with weekly cumulative over northwest India as -87%, while all India cumulative rainfall during this year's **Pre-monsoon Season's Rainfall Scenario (01 March to 20 April, 2022)** is below LPA by -31% 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)**

Region	WEEK			SEASON		
	14.04.2022 TO 20.04.2022			01.03.2022 TO 20.04.2022		
	Actual	Normal	% Dep	Actual	Normal	% Dep
<b>EAST &amp; NORTH-EAST INDIA</b>	46.8	29.2	60	158.5	139.1	14
<b>NORTH-WEST INDIA</b>	1.0	8.3	-87	6.7	69.0	-90
<b>CENTRAL INDIA</b>	0.8	2.4	-65	3.1	14.2	-78
<b>SOUTH PENINSULA</b>	18.8	8.4	124	48	34.4	39
<b>country as a whole</b>	11.8	9.7	21	37.8	55.0	-31

## 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 Index (MJO) currently lies in phase 8 with negligibly small amplitude. It is likely to move across phases 7 & 6 during first half of week 1. It will move across phase 5 during later part of week 1 with gradually increasing amplitude. Thereafter during week 2, it will move across phase 6 with amplitude close to 1. Hence, MJO will support enhancement of convective activity over the Bay of Bengal (BoB) during later part of week 1

### 3. Forecast for next two week

#### Weather systems & associated Precipitation during Week 1 (21-27 April, 2022) and Week 2 (28 April-4 May, 2022)

##### Forecast for week 1 (21 to 27 April, 2022):

- ✓ Under the influence of strong southwesterly winds from Bay of Bengal to northeastern States at lower tropospheric levels:
  - Scattered/fairly widespread rainfall very likely over Arunachal Pradesh, Assam-Meghalaya, Nagaland-Manipur-Mizoram-Tripura and Sub-Himalayan West Bengal & Sikkim with **thunderstorm/lightning/gusty winds** during next 5 days.
  - **Isolated heavy rainfall** likely over Sikkim on 22<sup>nd</sup>; over Assam-Meghalaya & Arunachal Pradesh during 22<sup>nd</sup>-24<sup>th</sup> April, 2022 and isolated **hailstorm/squall (speed 50-60 kmph)** also likely over Assam-Meghalaya and Sub-Himalayan West Bengal-Sikkim on 22<sup>nd</sup> April.
  - Isolated to scattered rainfall with **thunderstorm/lightning/gusty winds** very likely over Bihar, Jharkhand, Gangetic West Bengal & Odisha during next 2-3 days and isolated **hailstorm** also likely over Jharkhand on 22<sup>nd</sup> April.
- ✓ Under the influence of the Western Disturbance as a trough in mid & upper tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long.68°E to the north of Lat.20°N:
  - Light scattered/fairly widespread rainfall accompanied with isolated **thunderstorm/lightning/gusty winds** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during next 2 days. Isolated **hailstorm & squall (speed 50-60 kmph)** also likely over Uttarakhand on 21<sup>st</sup> & 22<sup>nd</sup> April.
  - Light isolated rainfall with **thunderstorm/lightning/gusty winds** likely over Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Madhya Pradesh & Rajasthan during next 12 hours.

- **Duststorm/Thunderstorm** at isolated places very likely Uttar Pradesh on 21<sup>st</sup> April, 2022.
- ✓ A fresh feeble Western Disturbance very likely to affect Western Himalayan Region from the night of 24<sup>th</sup> April, 2022 and likely to causes isolated rainfall over higher ridges of Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 24-26 April
- ✓ Under the influence of a trough from North Interior Karnataka to Comorin Area in lower tropospheric levels:
  - Isolated to scattered rainfall accompanied with **thunderstorm/lightning/gusty winds** very likely over Kerala-Mahe, Tamilnadu-Puducherry-Karaikal, Coastal Andhra Pradesh, Karnataka & Telangana during next 5 days
  - Dry weather very likely over remaining parts of the country during most days of the week.

#### **Rainfall for week 2 (28 April-4 May, 2022):**

- A fresh feeble Western Disturbance very likely to affect Western Himalayan Region from the night of 28<sup>th</sup> April, 2022 and likely to causes isolated rainfall and thunderstorm activities over higher ridges of Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 28-30 April.
- Another Western Disturbance very likely to affect Western Himalayan Region and adjoining plains of India from 3 May, 2022 and likely to causes scattered to fairly widespread rainfall and thunderstorm activities over these areas from 3 May till 5 May
- Due to 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 most dates of the week.
- Due to trough/wind discontinuity over south Peninsula India, light/moderate isolated to scattered rainfall along with thunderstorm is likely over Kerala and Karnataka during most days of the week and it is likely to be isolated over rest of extreme south Peninsula India.
- **Overall, rainfall activity is likely to be normal to above normal over extreme south Peninsular India covering mainly over Kerala and coastal Karnataka, northeast**

**India, Kashmir; below normal over plains of northwest, Himachal Pradesh and Uttarakhand and near normal over rest parts of the country.**

### **Maximum Temperatures for Week 1 (21-27 April, 2022) and Week 2 (28 April-4 May, 2022)**

#### **Maximum Temperatures for Week 1(21 to 27 April, 2022):**

- The maximum temperatures is likely to increase gradually over eastern India leading to Heat wave conditions on some places over Odisha and adjoining areas of Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand and East Uttar Pradesh during 2<sup>nd</sup> half of the week 1.
- Heat wave conditions likely to prevail in isolated pockets over west Rajasthan, south Punjab, and south Haryana and Himachal Pradesh from 25<sup>th</sup> April.

#### **Maximum Temperatures for week 2 (21 to 27 April, 2022):**

- The maximum temperatures is likely to be above normal by 2-3°C over most parts of Western Himalayan Region and adjoining Palins of northwest India and East Coast; over many parts of Indo-Gangetic plains, Odisha, Coastal Andhra Pradesh, some parts of Gujarat and Maharashtra coast. It is likely to be below normal to near normal over rest parts of India.
- Heat wave conditions likely to continue over eastern India (Odisha and adjoining areas of Chhattisgarh, Gangetic West Bengal, Bihar and Jharkhand) and at isolated places over northwest India and Uttar Pradesh during week .(Refer Annex V)

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

Considering various environmental features and model guidance, it is concluded that there is likelihood of formation of a cyclonic circulation over Comorin area/ southeast Arabian Sea during first half of week 1 with gradual westwards movement. There is no likelihood of cyclogenesis (formation of depression) over the north Indian Ocean during next 2 weeks.

Refer <https://rsmcnewdelhi.imd.gov.in/>

**Next weekly update will be issued on next Thursday i.e. 28 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

<b>SPATIAL DISTRIBUTION</b> (% 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)

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

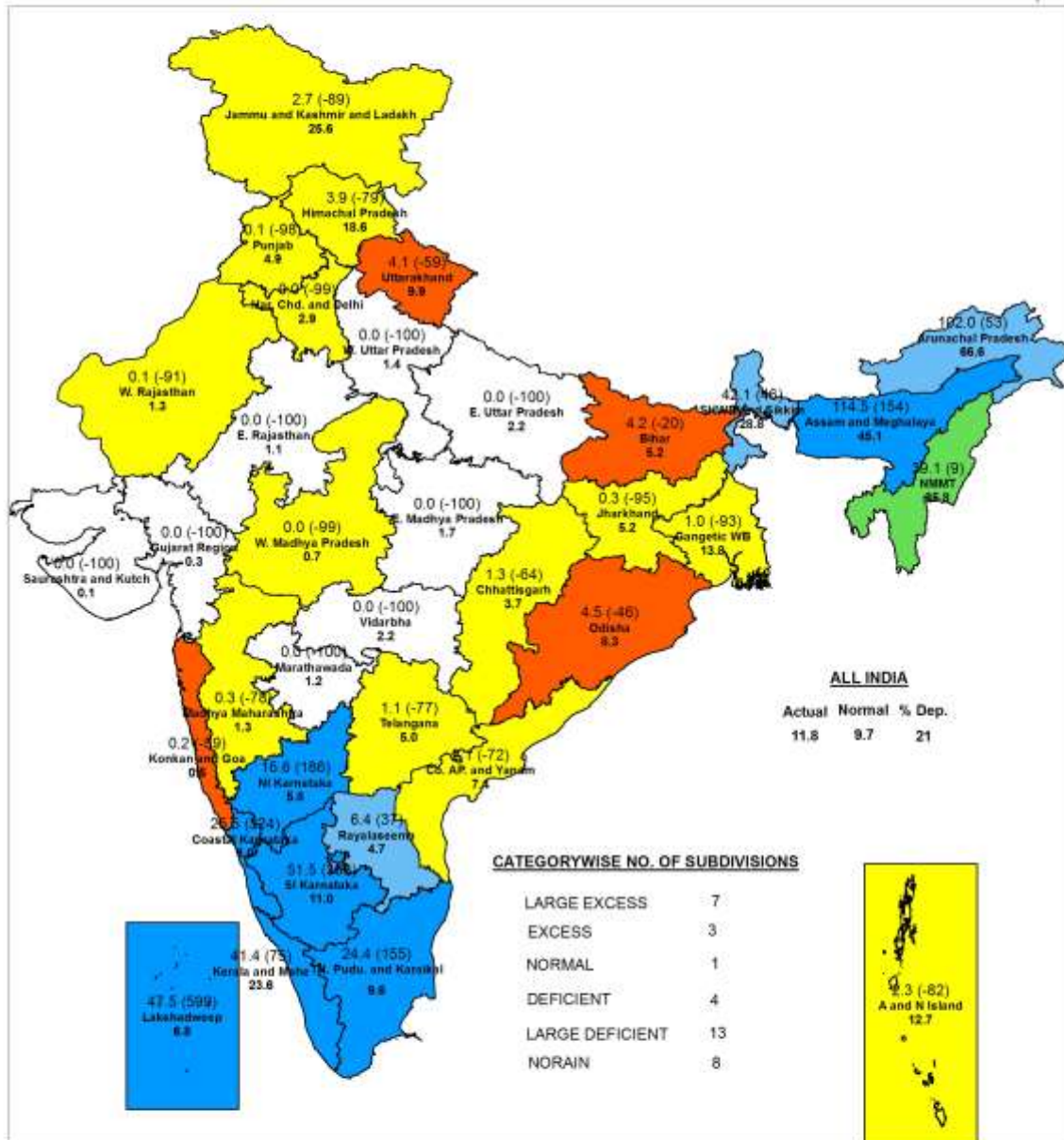


भारत मौसम विज्ञान विभाग  
INDIA METEOROLOGICAL DEPARTMENT

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

**SUBDIVISION RAINFALL MAP**

Week : 14-04-2022 To 20-04-2022



**Legend**

Large Excess [ 60% or more] | Excess [ 20% to 59%] | Normal [-19% to 19%] | Deficient [-59% to -20%] | Large Deficient [-89% to -60%] | No Rain [-100%] | No Data

**NOTES :**

- a) Rainfall figures are based on operation data.
- b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
- c) Percentage Departures of rainfall are shown in brackets.

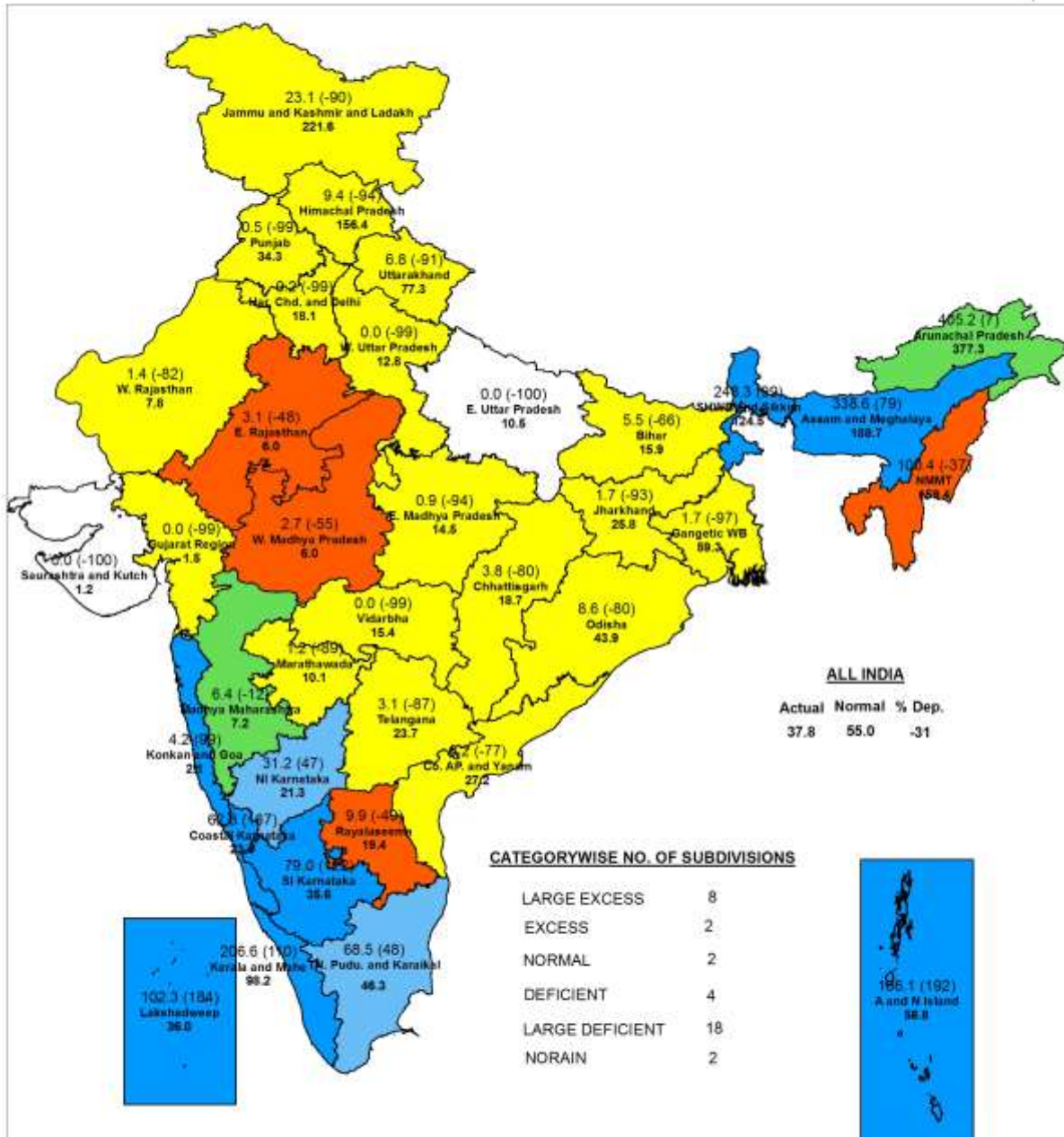
**Annex: II**





**SUBDIVISION RAINFALL MAP**

Period : 01-03-2022 To 20-04-2022



**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

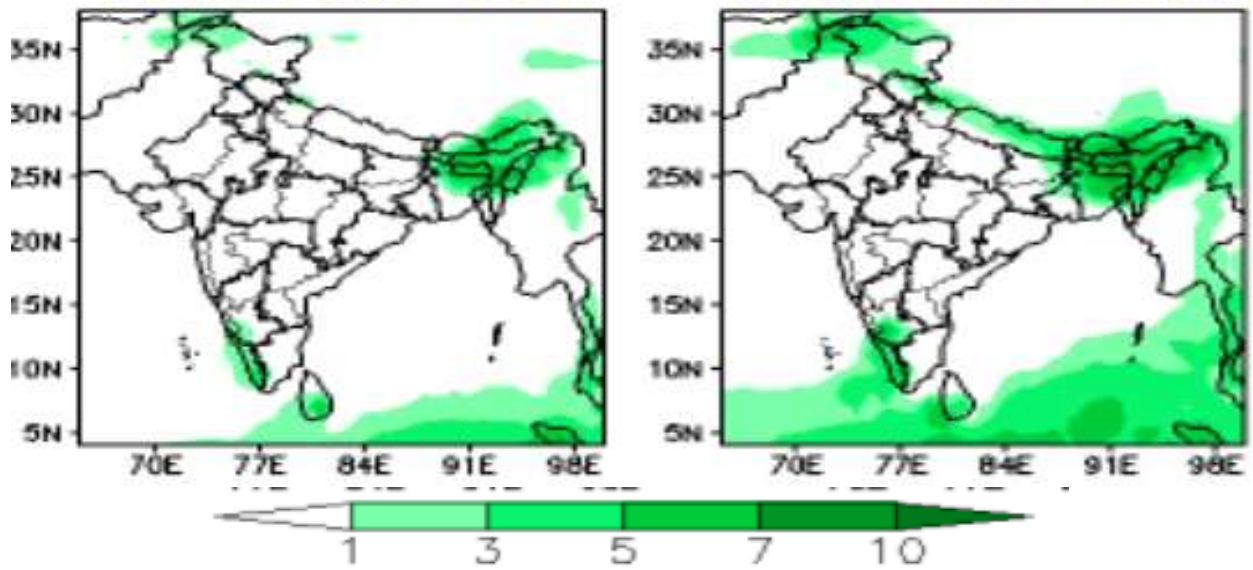
**NOTES :**

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- b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
- c) Percentage Departures of rainfall are shown in brackets.

**Forecast Rainfall (mm/day)**

(Week1: 22Apr-28Apr)

(Week2: 29Apr-05May)



**Forecast Rainfall Anomaly (mm/day)**

(Week1: 22Apr-28Apr)

(Week2: 29Apr-05May)

