

Wednesday, April 17, 2024  
Time of Issue: 1945 hours IST  
(NIGHT)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### Weather Systems and Forecast & Warnings:

- ❖ A Western Disturbance as a cyclonic circulation lies over Iran & neighbourhood in middle and upper tropospheric levels which is likely to affect Northwest India from 18<sup>th</sup> April, 2024. Under its influence:
  - ✓ Fairly widespread to widespread light to moderate rainfall/snowfall with **thunderstorm, lightning & gusty winds (40-50 kmph)** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh during 18<sup>th</sup>-21<sup>st</sup>; over Uttarakhand on 18 & 19<sup>th</sup> April, 2024.
  - ✓ Isolated to scattered rainfall with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Punjab, Haryana-Chandigarh-Delhi during 18<sup>th</sup>-20<sup>th</sup> April; West Uttar Pradesh, East Rajasthan on 19<sup>th</sup> and West Rajasthan on 17<sup>th</sup>-19<sup>th</sup> April, 2024.
  - ✓ **Isolated hailstorm** very likely over Himachal Pradesh 18<sup>th</sup> & 19<sup>th</sup> and Uttarakhand on 19<sup>th</sup> April, 2024.
  - ✓ **Isolated heavy rainfall/snowfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 19<sup>th</sup> April, 2024.
- ❖ A cyclonic circulation lies over northeast Bihar & adjoining Sub-Himalayan West Bengal & Sikkim and another over northeast Assam in lower tropospheric levels. Under its influence:
  - ✓ Fairly widespread to widespread light/moderate rainfall/snowfall with isolated **thunderstorm & lightning & gusty winds (30-40 kmph)** over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 17<sup>th</sup>-21<sup>st</sup> April, 2024.
  - ✓ Scattered to fairly widespread light/moderate rainfall/snowfall with isolated **thunderstorm & lightning & gusty winds (30-40 kmph)** over Sub-Himalayan West Bengal & Sikkim during 17<sup>th</sup>-21<sup>st</sup> April with possibility of isolated heavy rainfall over Sikkim on 18<sup>th</sup> April, 2024.
  - ✓ **Isolated heavy rainfall** over Arunachal Pradesh during 17<sup>th</sup>-21<sup>st</sup>; Assam & Meghalaya on 18<sup>th</sup>-21<sup>st</sup> and Nagaland, Manipur, Mizoram & Tripura on 18<sup>th</sup>, 20<sup>th</sup> & 21<sup>st</sup> April, 2024.
- ❖ A trough runs from south Vidarbha to South Interior Karnataka and another trough runs from Gulf of Mannar to south Telangana in lower tropospheric levels. Under their influence:
  - ✓ Isolated light rainfall with isolated **thunderstorm & lightning** very likely over Madhya Maharashtra and Marathwada during 17<sup>th</sup>-21<sup>st</sup> April, 2024.
  - ✓ Isolated to scattered rainfall with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Madhya Pradesh on 19<sup>th</sup> & 20<sup>th</sup> and over Vidarbha and Chhattisgarh during 19<sup>th</sup>-21<sup>st</sup> April.
  - ✓ Scattered to fairly widespread light/moderate rainfall accompanied with isolated **thunderstorm & lightning** very likely over Kerala & Mahe during 17<sup>th</sup>-21<sup>st</sup> and isolated rainfall with **thunderstorm & lightning & gusty winds (30-40 kmph)** over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana on 20<sup>th</sup> & 21<sup>st</sup>; over North Interior Karnataka during 18<sup>th</sup>-21<sup>st</sup> April, 2024.
  - ✓ **Isolated heavy rainfall** over Kerala & Mahe on 19<sup>th</sup> April, 2024.

#### Maximum temperature observation:

- ❖ Yesterday, maximum temperatures were in the range of 41-43°C over at a few places over Odisha, Coastal Andhra Pradesh & Yanam, Saurashtra & Kutch and Rayalaseema and at isolated pockets over West Uttar Pradesh, Jharkhand, Gangetic West Bengal, Gujarat Region, Konkan & Goa, Madhya Maharashtra, Telangana and North Interior Karnataka; 38-40°C over many places over East Uttar Pradesh and Vidarbha; at a few places over Tamil Nadu, Puducherry & Karaikal, Madhya Pradesh, Bihar, Chhattisgarh and Marathwada. These were above normal by 2-3° C at a few places over these areas.

#### Heat Wave, Warm Night and Hot & Humid weather warning for next 5 days:

- ❖ **Heat Wave conditions** in some pockets of Odisha, Gangetic West Bengal during 17<sup>th</sup>-21<sup>st</sup>; Jharkhand during 19<sup>th</sup>-21<sup>st</sup>; north Konkan and Saurashtra & Kutch on 17<sup>th</sup>; Madhya Maharashtra and Marathwada on 17<sup>th</sup> & 18<sup>th</sup>; Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana during 17<sup>th</sup>-19<sup>th</sup>; Tamil Nadu, Puducherry & Karaikal on 18<sup>th</sup>-19<sup>th</sup> April, 2024. **Severe Heat Wave conditions also likely in isolated pockets of Saurashtra on 17<sup>th</sup>; Odisha during 18<sup>th</sup> & 19<sup>th</sup>; Gangetic West Bengal during 19<sup>th</sup>-21<sup>st</sup> April.**
- ❖ **Hot and humid weather** very likely to prevail over Odisha and Gangetic West Bengal during 17<sup>th</sup>-21<sup>st</sup>; Coastal & South Interior Karnataka during 17<sup>th</sup>-19<sup>th</sup>; Kerala & Mahe on 17<sup>th</sup> & 18<sup>th</sup>; Tamil Nadu, Puducherry & Karaikal on 17<sup>th</sup>; Konkan & Goa on 18<sup>th</sup> & 19<sup>th</sup> and Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana on 20<sup>th</sup> & 21<sup>st</sup> April, 2024.
- ❖ **Warm night** very likely to prevail over Madhya Maharashtra and Marathwada on 17<sup>th</sup> & 18<sup>th</sup> April, 2024.

\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".

Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.

For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599

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## Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 to 1730 hours IST of today): at isolated places Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada and North Interior Karnataka.
- ❖ **Significant amount of rainfall** (from 0830 to 1730 hours IST of today)(in cm): **Madhya Maharashtra: Sangli-3.**
- ❖ Today, **Heat Wave to Severe Heat Wave** conditions prevailed in isolated pockets over Saurashtra & Kutch and **Heat Wave** conditions in isolated pockets over Gangetic West Bengal and Odisha.
- ❖ **Minimum Temperature Departures (as on 17-04-2024):** Minimum temperatures are **appreciably above normal (3.1°C to 5.0°C)** at a few places over Madhya Maharashtra and Konkan & Goa and at isolated places over Gangetic West Bengal, Bihar, Saurashtra & Kutch and Marathwada; **above normal (1.6°C to 3.0°C)** at most places over Jharkhand and North Interior Karnataka; at many places over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Odisha and Gujarat Region; at a few places over Andaman & Nicobar Islands, Assam & Meghalaya, East Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Telangana and Kerala & Mahe and at isolated places over West Rajasthan, Madhya Pradesh, Chhattisgarh, Rayalaseema and South Interior Karnataka. These are **below normal (-1.6°C to -3.0°C)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Haryana-Chandigarh-Delhi and **near normal** over rest parts of the country. Today, **the lowest minimum temperature** of **17.2°C** is reported at **Karnal (Haryana)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 17-04-2024):** Maximum temperatures are **markedly above normal (5.1°C or more)** at isolated places over Saurashtra & Kutch; **appreciably above normal (3.1°C to 5.0°C)** at many places over Gangetic West Bengal; at a few places over Odisha and Rayalaseema; at isolated places over Sub-Himalayan West Bengal & Sikkim, Gujarat Region, Telangana, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal; **above normal (1.6°C to 3.0°C)** at many places over Konkan & Goa and Madhya Maharashtra; at a few places over Chhattisgarh; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Nagaland, Manipur, Mizoram & Tripura, Bihar, Madhya Pradesh, Vidarbha, Coastal & South Interior Karnataka, Kerala & Mahe and Assam & Meghalaya. These are **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Assam & Meghalaya; **below normal (-1.6°C to -3.0°C)** at a few places over Haryana-Chandigarh-Delhi and West Rajasthan and **near normal** over rest parts of the country. Today, the highest maximum temperature of **44.0°C** is reported at **Amreli (Saurashtra & Kutch)** over the country.

## Meteorological Analysis (Based on 1730 hours IST)

- ❖ The Western Disturbance as a cyclonic circulation over Iran & neighbourhood between 5.8 km & 9.6 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Bihar & adjoining Sub-Himalayan West Bengal at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Assam at 1.5 km above mean sea level persists.
- ❖ The east-west trough from Bihar to Manipur across Sub-Himalayan West Bengal, south Assam & Meghalaya at 0.9 km above mean sea level persists.
- ❖ The trough from south Vidarbha to South Interior Karnataka across Marathwada & North Interior Karnataka at 0.9 km above mean sea level persists.
- ❖ The trough from Gulf of Mannar to south Telangana across Interior Tamil Nadu & Rayalaseema at 1.5 km above mean sea level persists.

## Weather Forecast for next 7 days (Upto 0830 hours IST of 24<sup>th</sup> April, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ Rise in maximum temperatures by 2-3°C very likely over East & parts of south peninsular India during next 3 days and no significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over northwest India during next 2 days and fall by 2-3°C for subsequent 3 days.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

## Weather Outlook for subsequent 3 days (During 24<sup>th</sup>-26<sup>th</sup> April, 2024)

- ❖ Isolated to scattered light/moderate rainfall/snowfall likely over Northeast and Northwest India.
- ❖ Isolated light rainfall likely over plains of central & south Peninsular India.
- ❖ Dry weather likely to prevail over rest parts of the country.

Table-1

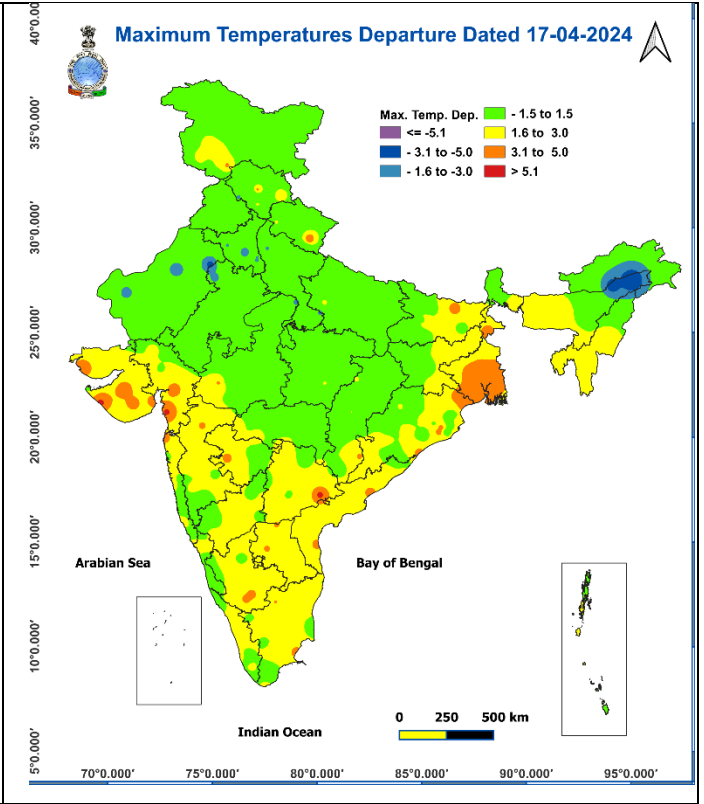
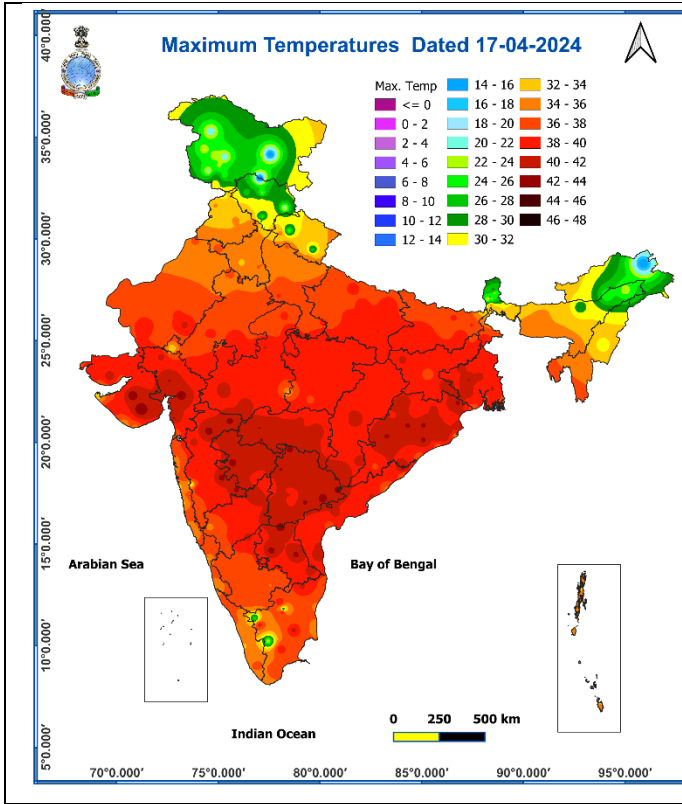
7 Days Rainfall Forecast								
S. No.	Subdivision	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	22-Apr	23-Apr
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	DRY	DRY	DRY	DRY	DRY	DRY	DRY
2	ARUNACHAL PRADESH	WS	FWS	WS	WS	WS	FWS	FWS
3	ASSAM & MEGHALAYA	SCT	FWS	FWS	WS	WS	FWS	SCT
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	ISOL	FWS	FWS	FWS	FWS	SCT	SCT
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	FWS	FWS	WS	FWS	SCT	SCT	SCT
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	ISOL	ISOL	DRY	DRY	DRY	DRY
12	UTTARAKHAND	ISOL	ISOL	FWS	ISOL	ISOL	SCT	SCT
13	HARYANA CHANDIGARH & DELHI	DRY	ISOL	SCT	ISOL	DRY	DRY	DRY
14	PUNJAB	DRY	SCT	SCT	ISOL	DRY	DRY	DRY
15	HIMACHAL PRADESH	ISOL	SCT	FWS	SCT	ISOL	SCT	SCT
16	JAMMU & KASHMIR AND LADAKH	ISOL	WS	WS	ISOL	ISOL	ISOL	DRY
17	WEST RAJASTHAN	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	ISOL	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	DRY	ISOL	ISOL	ISOL	ISOL	DRY
20	EAST MADHYA PRADESH	DRY	DRY	ISOL	ISOL	ISOL	ISOL	DRY
21	GUJARAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	ISOL	ISOL	DRY	DRY	ISOL	DRY	DRY
24	MADHYA MAHARASHTRA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
25	MARATHAWADA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
26	VIDARBHA	ISOL	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
27	CHHATTISGARH	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
30	RAYALASEEMA	DRY	ISOL	ISOL	ISOL	ISOL	ISOL	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	DRY	ISOL	SCT	ISOL	DRY	DRY	DRY
33	NORTH INTERIOR KARNATAKA	ISOL	DRY	DRY	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	ISOL	ISOL	SCT	ISOL	DRY	DRY	DRY
35	KERALA & MAHE	ISOL	FWS	FWS	SCT	SCT	ISOL	ISOL
36	LAKSHADWEEP	SCT	SCT	SCT	SCT	DRY	DRY	DRY

Legend	Category	% Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

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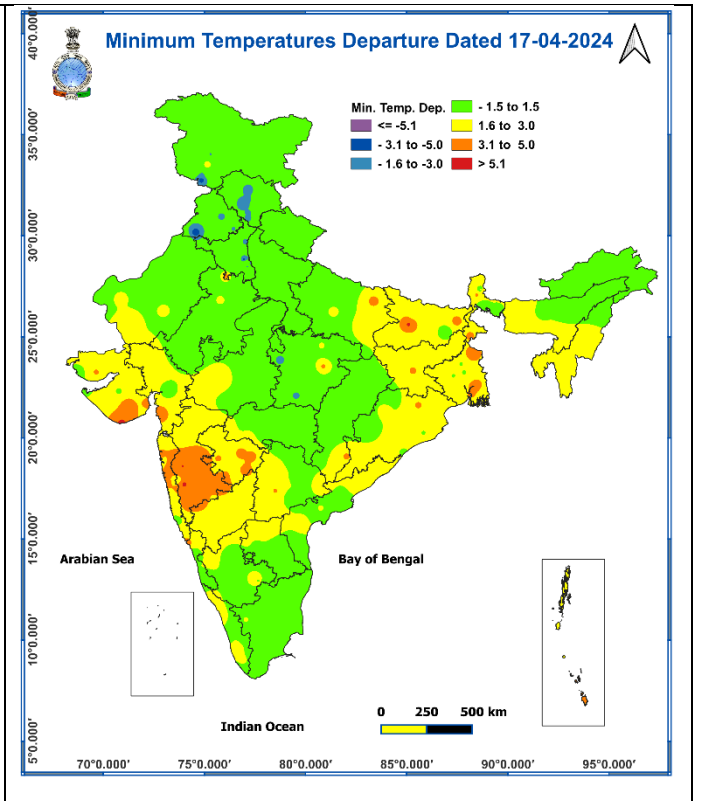
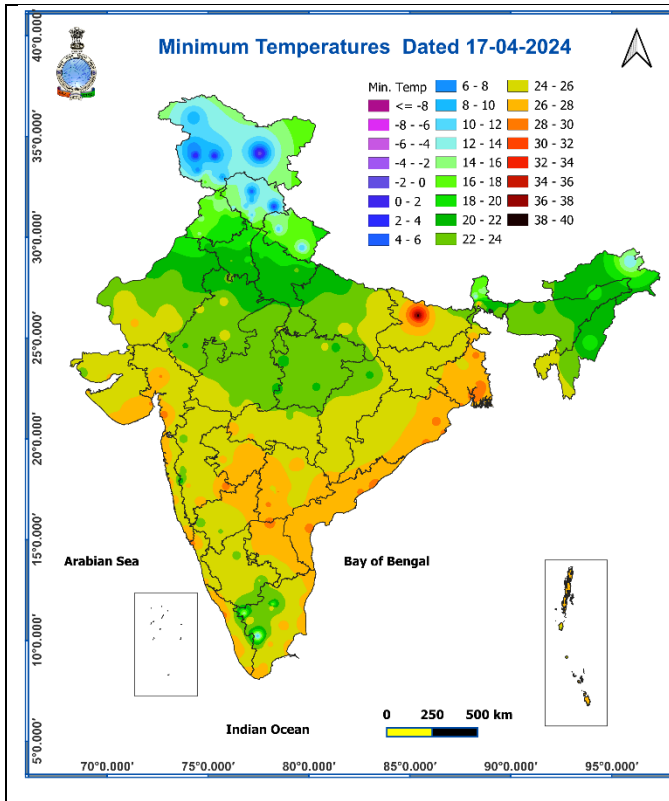
**Fig. 1: Maximum Temperatures**

**Fig. 2: Departure of Maximum Temperatures**



**Fig. 3: Minimum Temperatures**

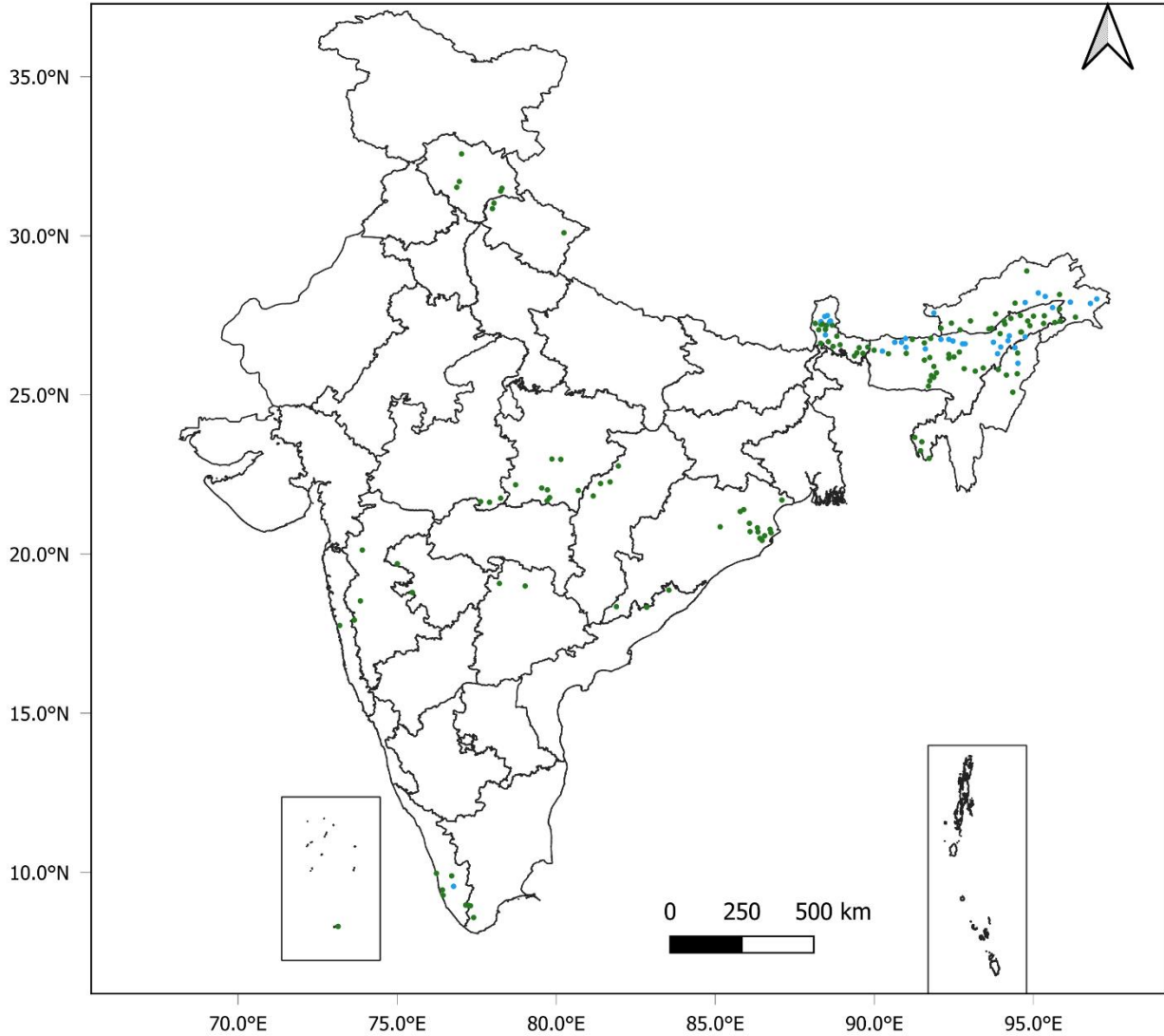
**Fig. 4: Departure of Minimum Temperatures**



**Fig. 5: Accumulated Rainfall (mm) during past 24 hours**

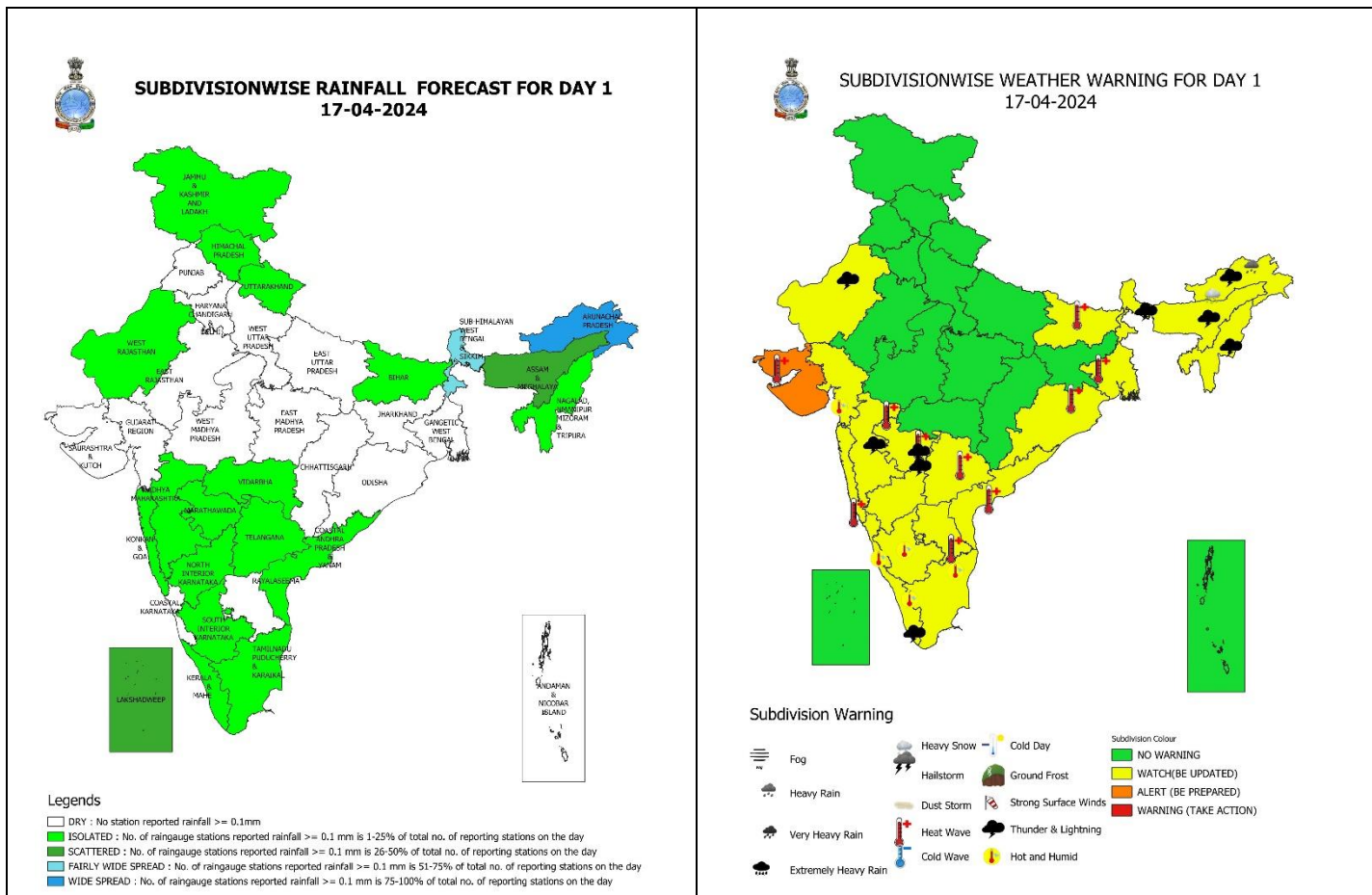


24 Hr cumulative rainfall recorded over different stations during  
0830 IST of 16-4-2024 to 0830 IST of 17-4-2024



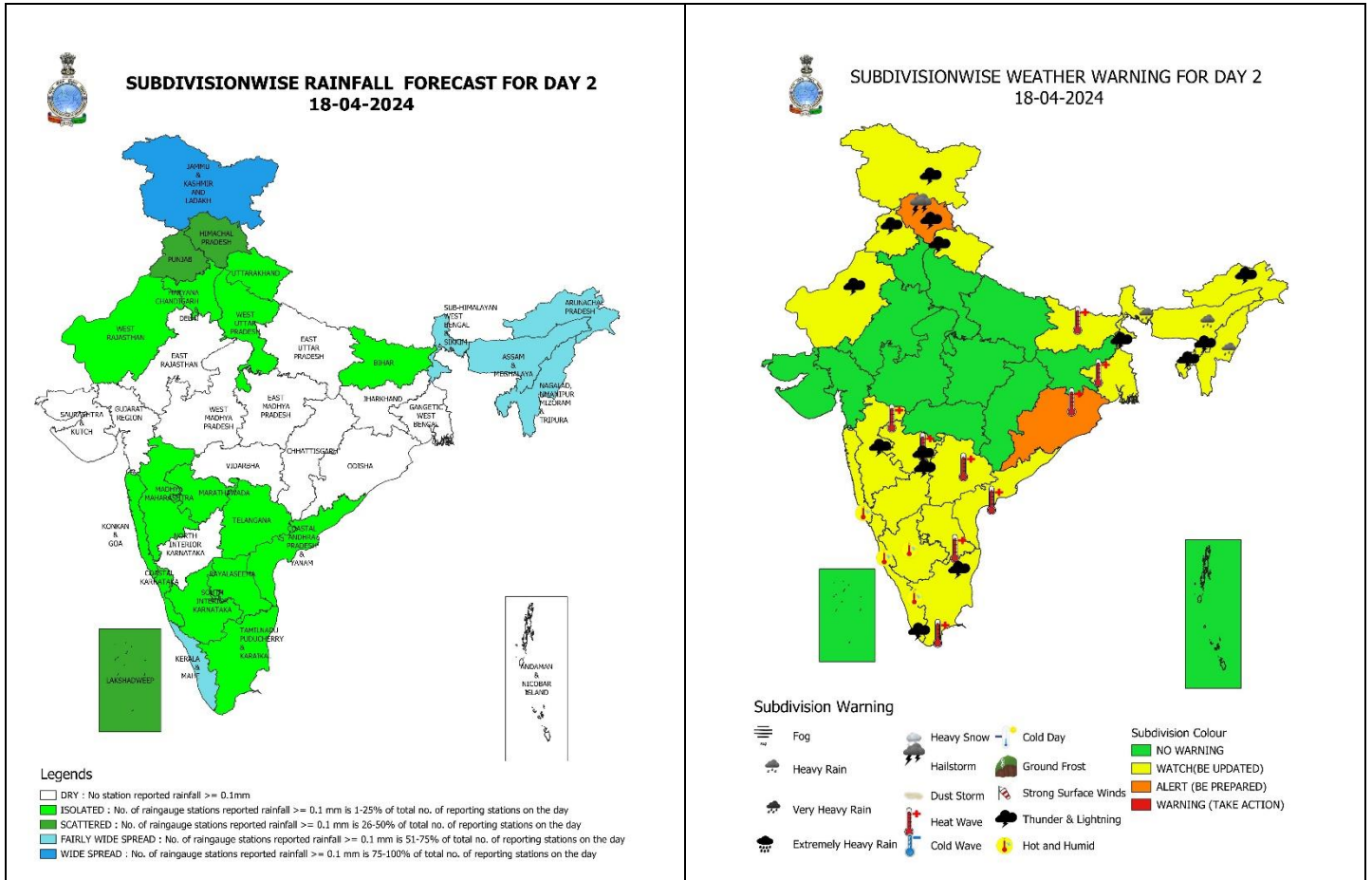
## Legends

- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall ( $\geq 204.5$  mm)



## 17 April (Day 1):

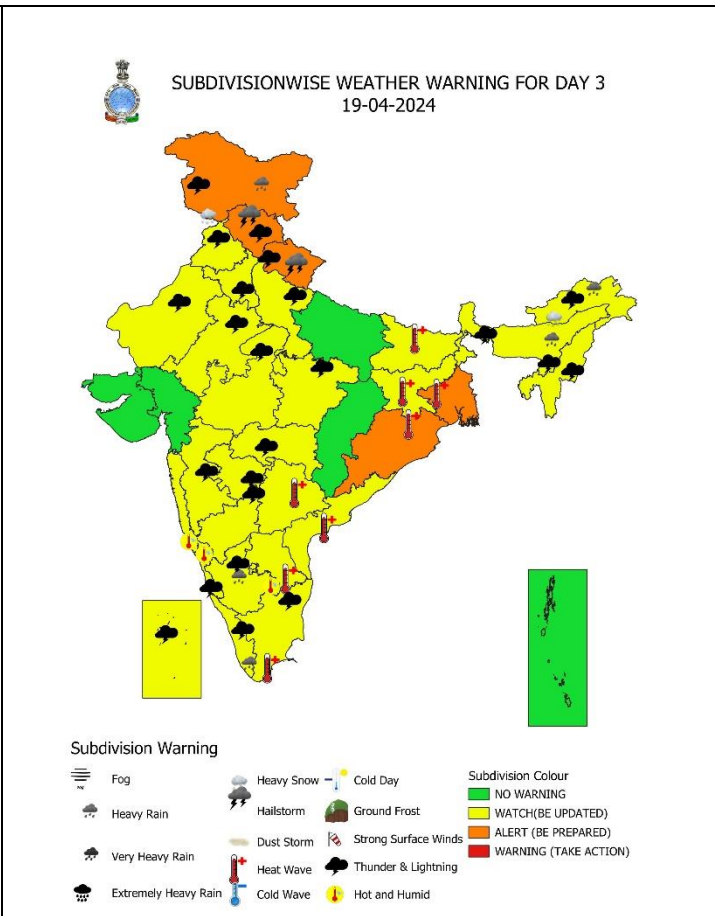
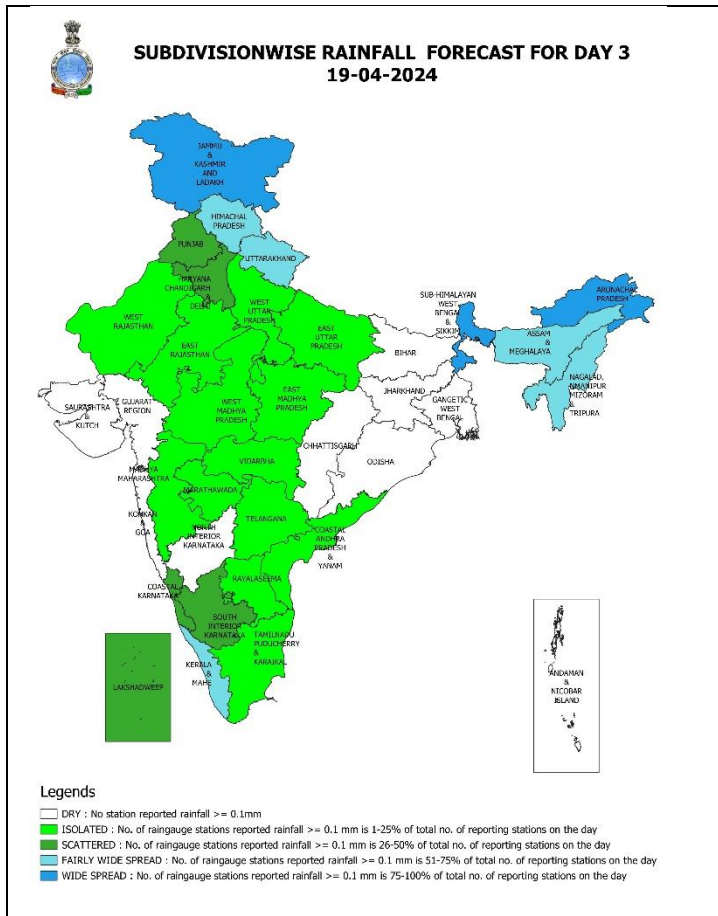
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Nagaland, Manipur, Mizoram & Tripura; with **lightning & gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, West Rajasthan; **with lightning** at isolated places over Arunachal Pradesh, Madhya Maharashtra, Marathwada, North Interior Karnataka and Kerala & Mahe.
- ❖ **Heavy rainfall/snowfall** very likely at isolated places over Arunachal Pradesh.
- ❖ **Hot and humid weather** very likely to prevail over coastal areas of Gujarat region, Coastal & south Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Heat wave to severe heat wave** very likely to prevail in isolated pockets over Saurashtra & Kutch; **Heat wave** in isolated pockets over Gangetic West Bengal, Bihar, Odisha, north Konkan, Madhya Maharashtra, Marathwada Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ **Warm Night** very likely to prevail in isolated pockets over Madhya Maharashtra and Marathwada.
- ❖ **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail over Gulf of Oman and adjoining Northwest Arabian Sea. Fishermen are advised not to venture into these areas.



## 18 April (Day 2):

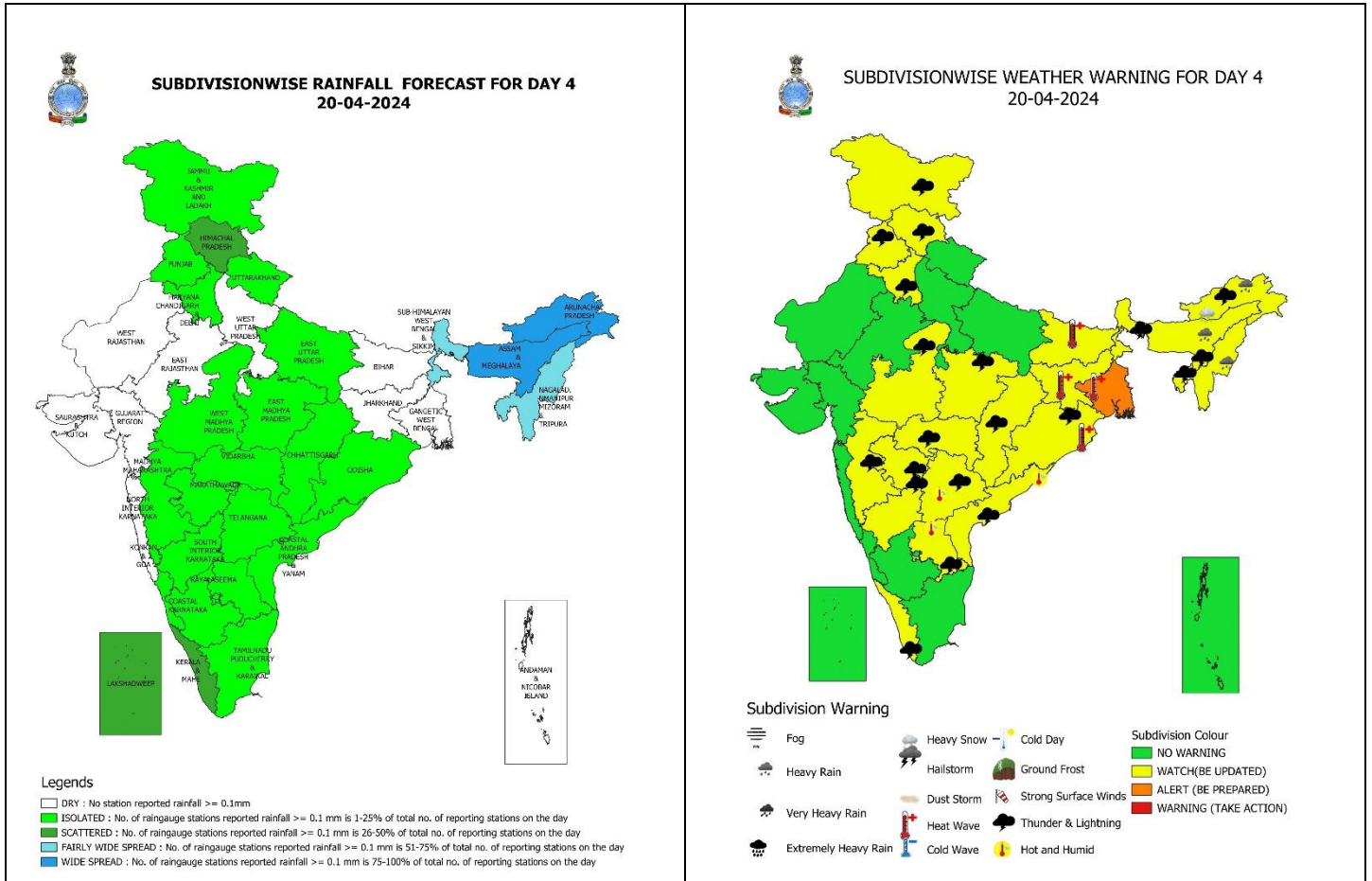
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; **with lightning & hailstorm** at isolated places over Himachal Pradesh; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Punjab, West Rajasthan, North Interior Karnataka and Kerala & Mahe; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Arunachal Pradesh, Madhya Maharashtra, Marathwada and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Heavy rainfall/snowfall** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim; **Heavy rainfall** at isolated places over Assam & Meghalaya.
- ❖ **Hot and humid weather** very likely to prevail over Konkan, Kerala & Mahe and Coastal & South Interior Karnataka.
- ❖ **Heat wave to severe heat wave** very likely to prevail in isolated pockets over Odisha, **Heat wave** at isolated pockets over Gangetic West Bengal, Bihar, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ **Warm Night** very likely to prevail in isolated pockets over Madhya Maharashtra.





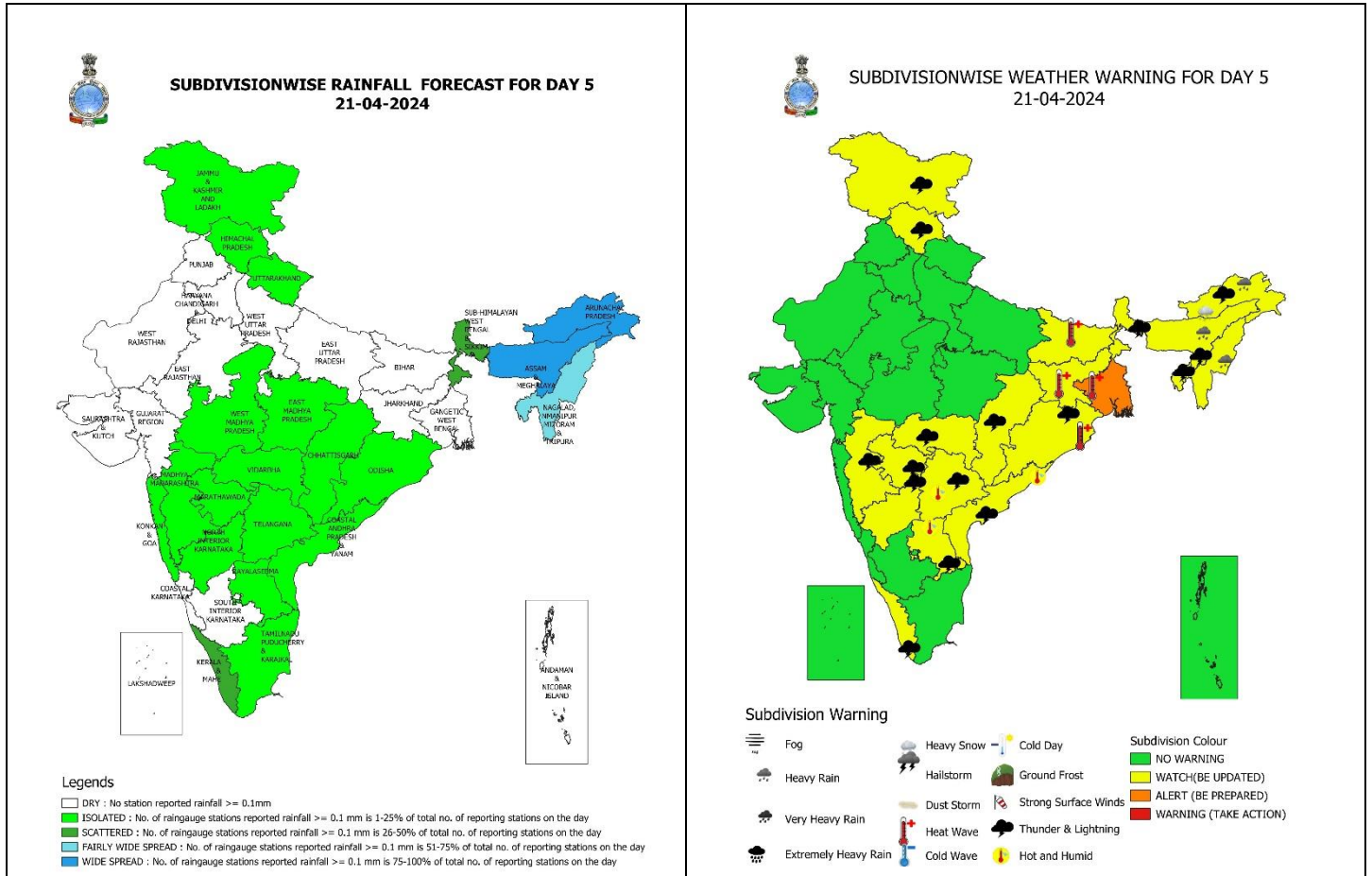
**19 April (Day 3):**

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) & hailstorm** likely at isolated places over Himachal Pradesh and Uttarakhand; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Karnataka and Kerala & Mahe; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Arunachal Pradesh, Assam & Meghalaya Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- ❖ **Heavy rainfall/snowfall** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Arunachal Pradesh; **Heavy rainfall** at isolated places over Assam & Meghalaya, South Interior Karnataka and Kerala & Mahe.
- ❖ **Hot and humid weather** likely to prevail over Konkan and Coastal & south Interior Karnataka.
- ❖ **Heat wave to severe heat wave** very likely to prevail in isolated pockets over Gangetic West Bengal and Odisha; **heat wave** likely to prevail in isolated pockets over Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Squally weather with wind speed 40 kmph to 45 kmph gusting to 55 kmph** likely over Comorin area and adjoining Gulf of Mannar.



## 20 April (Day 4):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Chhattisgarh; with **gusty winds (speed reaching 30-40 kmph)** likely at isolated places over Punjab, Haryana-Chandigarh-Delhi, East Madhya Pradesh, Vidarbha, Odisha, Telangana, North Interior Karnataka and Kerala & Mahe; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Madhya Pradesh, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam and Rayalaseema .
- ❖ **Heavy rainfall/snowfall** likely at isolated places over Arunachal Pradesh; **Heavy rainfall** at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Hot and humid weather** likely to prevail over Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ **Heat wave to severe heat wave** likely to prevail in isolated pockets over Gangetic West Bengal; **heat wave** likely to prevail in isolated pockets over Bihar, Jharkhand and Odisha.
- ❖ **Squally weather with wind speed 40 kmph to 45 kmph gusting to 55 kmph** likely over Comorin area and adjoining Gulf of Mannar.

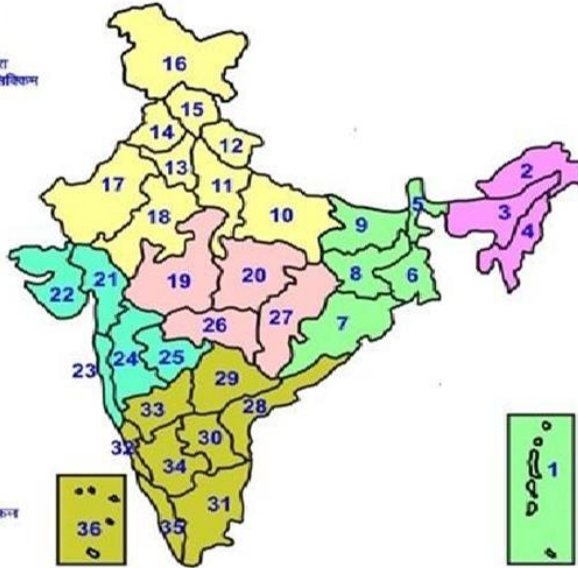


## 21 April (Day 5):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Chhattisgarh; with **gusty winds (speed reaching 30-40 kmph)** likely at isolated places over Vidarbha, Odisha, Telangana and North Interior Karnataka; with **lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Kerala & Mahe, Coastal Andhra Pradesh & Yanam and Rayalaseema.
- ❖ **Heavy rainfall/snowfall** likely at isolated places over Arunachal Pradesh; **Heavy rainfall** at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Hot and humid weather** likely to prevail over Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ **Heat wave to severe heat wave** likely to prevail in isolated pockets over Gangetic West Bengal; **heat wave** likely to prevail in isolated pockets over Bihar, Jharkhand and Odisha.

## LEGENDS

- 1 अंडमन और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर भीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा चंडिगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवंम लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 उत्तरीमहाराष्ट्र
- 28 उड़ीसा आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 दक्षिणतटीय
- 31 पश्चिम तटीय, पुदुचेरी एवंम कराईकल
- 32 तटिय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवंम माहे
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Odisha
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathawada
26. Vidharbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnadu, Puducherry & Karaikal
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala & Mahe
36. Lakshadweep

## 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 Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

## WARNING

WARNING (TAKE ACTION)
ALERT ( BE PREPARED)
WATCH (BE UPDATED)
NO WARNING ( NO ACTION)

## Probabilistic Forecast

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

## LEGENDS

### WARNING

<b>WARNING (TAKE ACTION)</b>
ALERT ( BE PREPARED)
WATCH (BE UPDATED)
NO WARNING ( NO ACTION)

### Probabilistic Forecast

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



Heavy: 64.5 to 115.5 mm/cm \*  
Very Heavy: 115.6 to 204.4 mm/cm\*  
Extremely Heavy: > 204.4 mm/cm \*

Rain/ Snow \*



Heat Wave

When maximum temperature of a station reaches  $\geq 40^{\circ}\text{C}$  for plains and  $\geq 30^{\circ}\text{C}$  for hilly regions  
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
Severe Heat Wave: Maximum Temperature Departure from normal  $\geq 6.5^{\circ}\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature  $\geq 45^{\circ}\text{C}$ .  
Severe Heat Wave: When actual maximum temperature  $\geq 47^{\circ}\text{C}$

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is  $> 4.5^{\circ}\text{C}$  from normal. Heat Wave may be described provided maximum temperature  $\geq 37^{\circ}\text{C}$



Warm Night

When maximum temperature remains  $40^{\circ}\text{C}$

Warm Night: When minimum temperature departure  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
Severe Warm Night: When minimum temperature departure  $> 6.4^{\circ}\text{C}$ .



Cold Wave

When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions.  
(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
Severe Cold Wave: Minimum Temperature Departure from normal  $\leq -6.5^{\circ}\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is  $\leq 4.0^{\circ}\text{C}$   
Severe Cold Wave: When Minimum Temperature is  $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is  $\leq -4.5^{\circ}\text{C}$  & actual Minimum Temperature is  $\leq 15^{\circ}\text{C}$



Cold Day

When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions  
Based on departure

Cold Day: Maximum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
Severe Cold Day: Maximum Temperature Departure from normal  $\leq -6.5^{\circ}\text{C}$



Fog

Phenomenon of small droplets suspended in air and the horizontal visibility  $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres  
Dense Fog: when the visibility between 50- 200 metres  
Very Dense Fog: when the visibility  $< 50$  metres



Thunderstorm

Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)



Dust/Sand Storm

An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.



Frost

Ice deposits on ground

Air temperature  $\leq 4^{\circ}\text{C}$  ( over Plains)



Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph  
Severe: Wind speed 62-87 kmph  
Very Severe: Wind speed  $> 87$  kmph



Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre  
High to very high: Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre  
Phenomenal: Wind speed  $> 117$  kmph ( $> 63$  knots) & Wave height  $> 14$  metre



Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)  
Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)  
Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)  
Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)  
Super Cyclone Strom: Wind speed  $> 220$  kmph ( $> 119$  knots)

\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".

Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.

For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599

(Service to the Nation since 1875)