

Friday, April 19, 2024  
Time of Issue: 0800 hours IST  
(MORNING)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### Weather Systems and Forecast & Warnings:

- ❖ A Western Disturbance lies as a cyclonic circulation over north Pakistan & neighbourhood with a trough aloft in middle & upper tropospheric westerlies runs roughly along Long. 65°E to the north of Lat. 28°N and induced cyclonic circulation lies over Pakistan & adjoining Punjab in lower tropospheric levels. A fresh Western Disturbance is likely to affect Northwest India from 22<sup>nd</sup> April, 2024. Under its influence:
  - ✓ Scattered to fairly widespread light to moderate rainfall/snowfall with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh during 19<sup>th</sup>-20<sup>th</sup> & 22<sup>nd</sup> & 23<sup>rd</sup> and isolated to scattered rainfall over Uttarakhand during 19<sup>th</sup>-24<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 19<sup>th</sup>-22<sup>nd</sup>; Uttar Pradesh and East Rajasthan on 19<sup>th</sup> April, 2024.
  - ✓ **Isolated hailstorm** very likely over Himachal Pradesh 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.
  - ✓ **Strong surface winds (25-35 kmph)** very likely to prevail over Haryana-Chandigarh-Delhi, Uttar Pradesh and Bihar on 19<sup>th</sup> April, 2024.
- ❖ A cyclonic circulation lies over Bangladesh & neighbourhood and another over northeast Assam in lower tropospheric levels. Under their influence:
  - ✓ Fairly widespread to widespread light to moderate rainfall/snowfall with isolated **thunderstorm & lightning & gusty winds (30-40 kmph)** very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 19<sup>th</sup>-22<sup>nd</sup> April, 2024.
  - ✓ Scattered to fairly widespread light/moderate rainfall/snowfall with isolated **thunderstorm & lightning & gusty winds (30-40 kmph)** very likely over Sub-Himalayan West Bengal & Sikkim during 19<sup>th</sup>-21<sup>st</sup> April, 2024.
  - ✓ **Isolated heavy rainfall** very likely over Arunachal Pradesh during 19<sup>th</sup>-23<sup>rd</sup>; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 19<sup>th</sup>-21<sup>st</sup> April, 2024. **Isolated very heavy rainfall** also very likely over Arunachal Pradesh on 20<sup>th</sup> April, 2024.
- ❖ A trough/Wind discontinuity runs from Comorin area to south Telangana in lower tropospheric levels. Under its influence:
  - ✓ Isolated light rainfall with isolated **thunderstorm & lightning** very likely over Madhya Maharashtra and Marathwada during 19<sup>th</sup>-23<sup>rd</sup> April, 2024.
  - ✓ Isolated to scattered rainfall with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Vidarbha and Chhattisgarh during 19<sup>th</sup>-22<sup>nd</sup> and Madhya Pradesh on 20<sup>th</sup> & 21<sup>st</sup> April, 2024.
  - ✓ Scattered to fairly widespread light/moderate rainfall accompanied with isolated **thunderstorm & lightning** very likely over Kerala & Mahe during 19<sup>th</sup>-23<sup>rd</sup> and isolated rainfall with **thunderstorm & lightning & gusty winds (30-40 kmph)** over Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana during 19<sup>th</sup>-22<sup>nd</sup>; Tamil Nadu, Puducherry & Karaikal on 19<sup>th</sup> & 20<sup>th</sup>; Coastal Karnataka during 19<sup>th</sup>-20<sup>th</sup>; North Interior Karnataka during 19<sup>th</sup>-21<sup>st</sup> and South Interior Karnataka and Lakshadweep on 19<sup>th</sup> & 20<sup>th</sup> April, 2024.
  - ✓ **Isolated heavy rainfall** over Kerala & Mahe and South Interior Karnataka on 19<sup>th</sup> April, 2024.

#### Maximum temperature observation:

- ❖ Yesterday, maximum temperatures were in the range of 42-43°C at many places over Marathwada, Telangana, Rayalaseema; at a few places over Madhya Maharashtra, Odisha and at isolated places over Gujarat Region, Vidarbha; 40-42°C at a few places over Saurashtra & Kutch, Madhya Pradesh, Chhattisgarh, Gangetic West Bengal, Jharkhand, East Uttar Pradesh; at isolated places over West Rajasthan, Tamil Nadu, Puducherry & Karaikal. These were above normal by 2-3°C over many parts of the above areas.

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

- ❖ **Heat Wave conditions** very likely to prevail in isolated/some pockets of Odisha during 19<sup>th</sup>-21<sup>st</sup>; Bihar during 20<sup>th</sup>-23<sup>rd</sup>; Jharkhand, Gangetic West Bengal during 19<sup>th</sup>-23<sup>rd</sup>; Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and interior Tamil Nadu on 19<sup>th</sup> April, 2024. **Severe Heat Wave conditions also likely in isolated/some pockets of Odisha on 19<sup>th</sup> and Gangetic West Bengal during 19<sup>th</sup>-21<sup>st</sup> April, 2024.**
- ❖ **Hot and humid weather** very likely to prevail over Konkan & Goa on 19<sup>th</sup>; Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana during 20<sup>th</sup>-23<sup>rd</sup> and Kerala & Mahe during 21<sup>st</sup> - 23<sup>rd</sup> April, 2024.
- ❖ **Warm night** very likely to prevail over Rayalaseema on 19<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/snowfall distribution (from 0830 hours IST to 1730 hours IST of yesterday):** at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and at isolated places over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh.
- ❖ **Rainfall distribution (from 0830 hours IST to 1730 hours IST of yesterday):** at isolated places over Assam & Meghalaya and North Interior Karnataka.
- ❖ **Heavy rainfall observed (from 0830 hours IST to 1730 hours IST of yesterday):** Nil.
- ❖ **Significant amount of rainfall (from 0830 hours IST to 1730 hours IST of yesterday) (in cm):** North Interior Karnataka: Gadag-3; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad: Pahalgam and Banihal-1 each; Sub-Himalayan West Bengal & Sikkim: Gangtok-1.
- ❖ Yesterday, **Heat Wave** conditions prevailed in some pockets over Saurashtra & Kutch, Gangetic West Bengal, Telangana and Odisha.
- ❖ **Minimum Temperature Departures (as on 18-04-2024):** Minimum temperatures were **markedly above normal (5.1°C or more)** at isolated places over Madhya Maharashtra; **appreciably above normal (3.1°C to 5.0°C)** at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at isolated places over Haryana-Chandigarh-Delhi, Gangetic West Bengal, Gujarat state, Konkan & Goa and Rayalaseema; **above normal (1.6°C to 3.0°C)** at many places over Punjab, Marathwada, North Interior Karnataka and Kerala & Mahe; at a few places over East Madhya Pradesh, Chhattisgarh, Telangana, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal, Lakshadweep and Andaman & Nicobar Islands; at isolated places over Himachal Pradesh, West Rajasthan, East Uttar Pradesh, Bihar and Sub-Himalayan West Bengal & Sikkim. These were **below normal (-1.6°C to -3.0°C)** at isolated places over East Rajasthan, East Madhya Pradesh and Odisha and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature** of 17.6°C was reported at **Rohtak (Haryana)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 18-04-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at many places over Gangetic West Bengal; **above normal (1.6°C to 3.0°C)** at many places over Haryana-Chandigarh-Delhi, Madhya Maharashtra, Marathwada, Konkan & Goa, Telangana, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal, Interior Karnataka, Nagaland, Manipur, Mizoram & Tripura, Vidarbha, Kerala & Mahe; at a few places over Odisha, Uttarakhand, East Rajasthan, West Madhya Pradesh, Jharkhand, West Uttar Pradesh, Gujarat state, Arunachal Pradesh; at isolated places over Assam & Meghalaya, East Uttar Pradesh, Chhattisgarh, East Madhya Pradesh. These were **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; **below normal (-1.6°C to -3.0°C)** at isolated places Sub-Himalayan West Bengal & Sikkim and West Rajasthan and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature** of 44.7°C was reported at **Nandyal (Rayalaseema)** over the country.

## Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Western Disturbance as a cyclonic circulation over north Pakistan & neighbourhood at 3.1 km above mean sea level persists. However, a trough aloft in middle & upper tropospheric westerlies with its axis at 5.8 km above mean sea level now runs roughly along Long. 65°E to the north of Lat. 28°N.
- ❖ The induced cyclonic circulation over Pakistan and adjoining Punjab extending upto 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over Bangladesh & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Assam between 1.5 km & 3.1 km above mean sea level persists.
- ❖ The trough/wind discontinuity from Comorin area to south Telangana across Interior Tamil Nadu & Rayalaseema at 0.9 km above mean sea level persists.

## Weather Forecast for next 7 days (Upto 0830 hours IST of 26<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 India during next 2 days and no significant change thereafter.
- ❖ Gradual fall in maximum temperatures by 2-3°C very likely over Gujarat during next 4-5 days.
- ❖ No significant change in maximum temperatures very likely over Maharashtra during next 24 hours and fall by 2-3°C for subsequent 4 days.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

## Weather Outlook for subsequent 3 days (During 26<sup>th</sup>-28<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 India and Kerala & Mahe.
- ❖ Dry weather likely to prevail over rest parts of the country.

Table-1

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

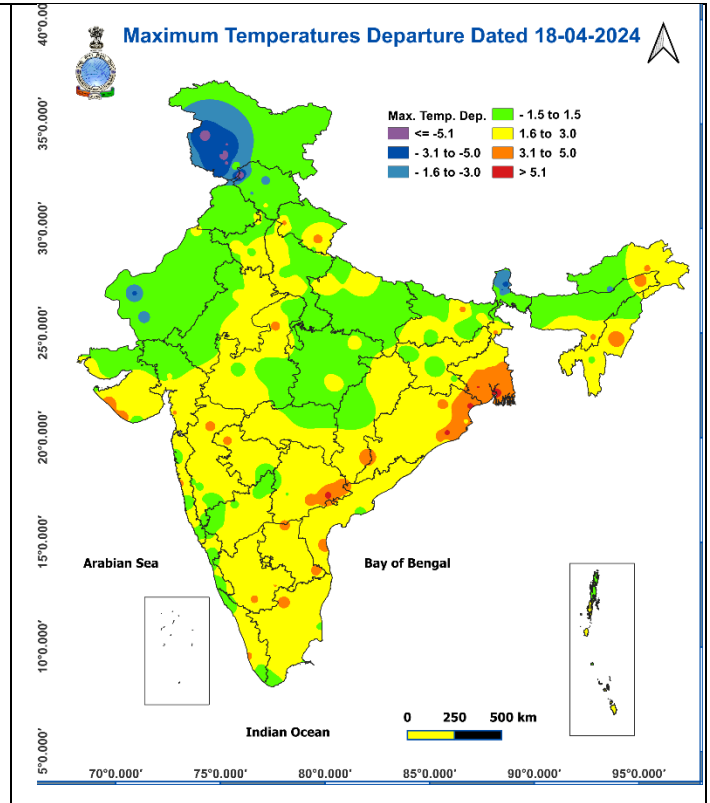
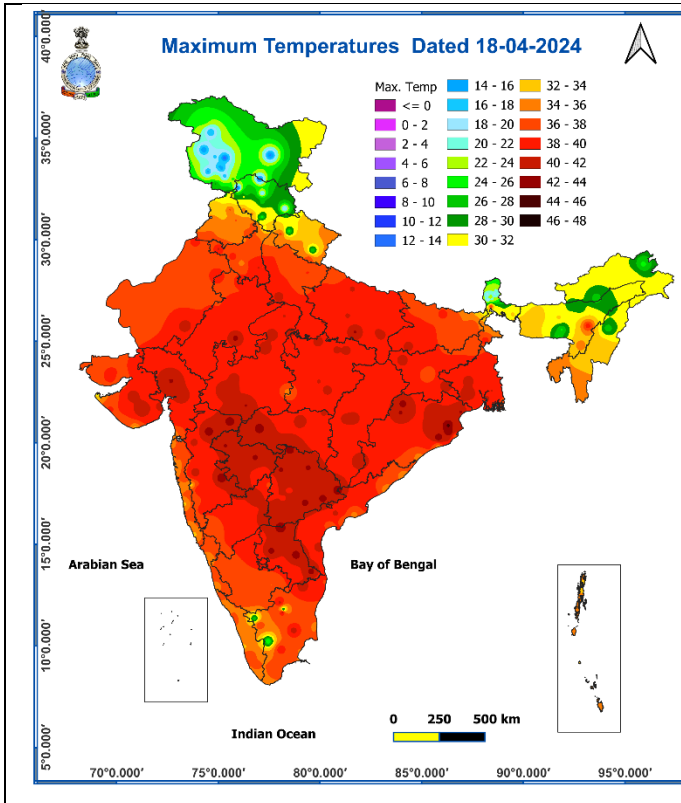
Legend	Category	% Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

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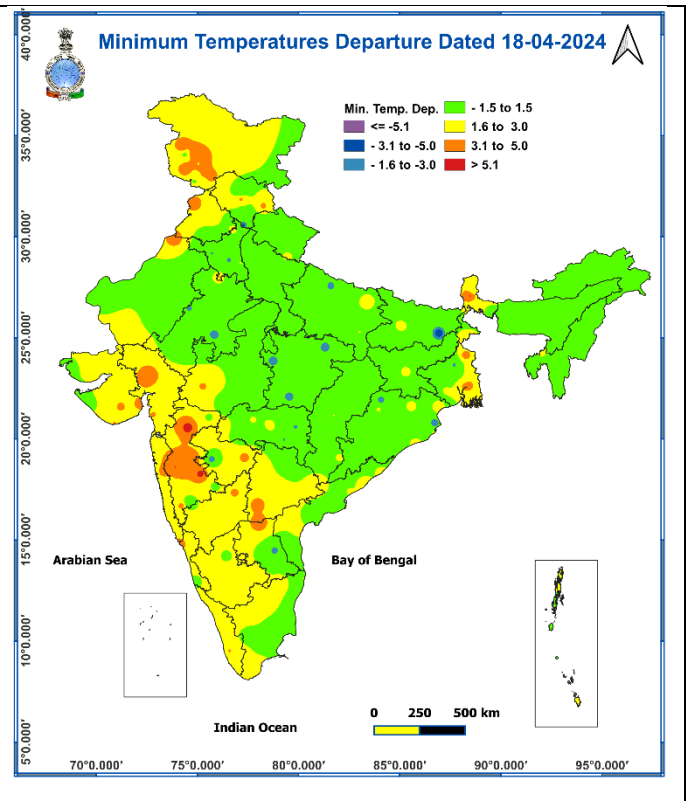
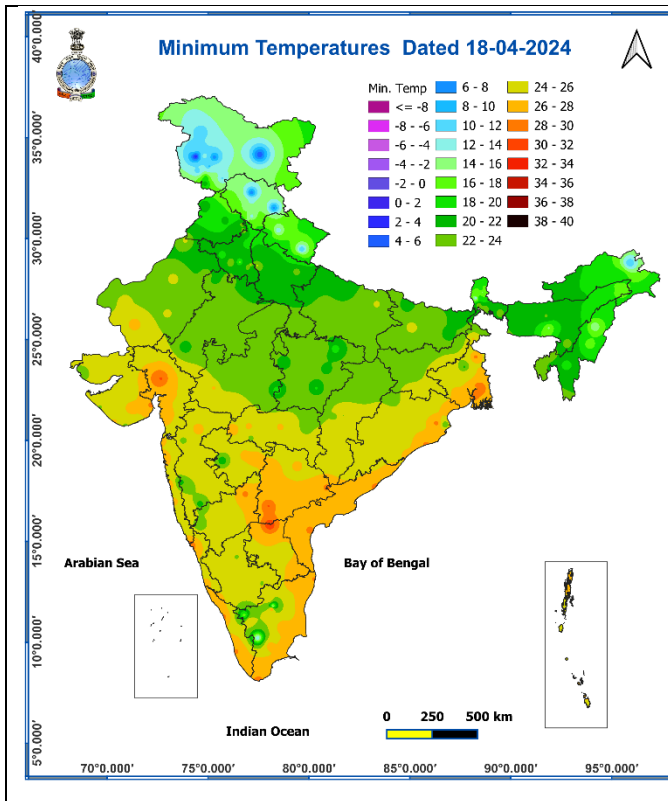
**Fig. 1: Maximum Temperatures**

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



**Fig. 3: Minimum Temperatures**

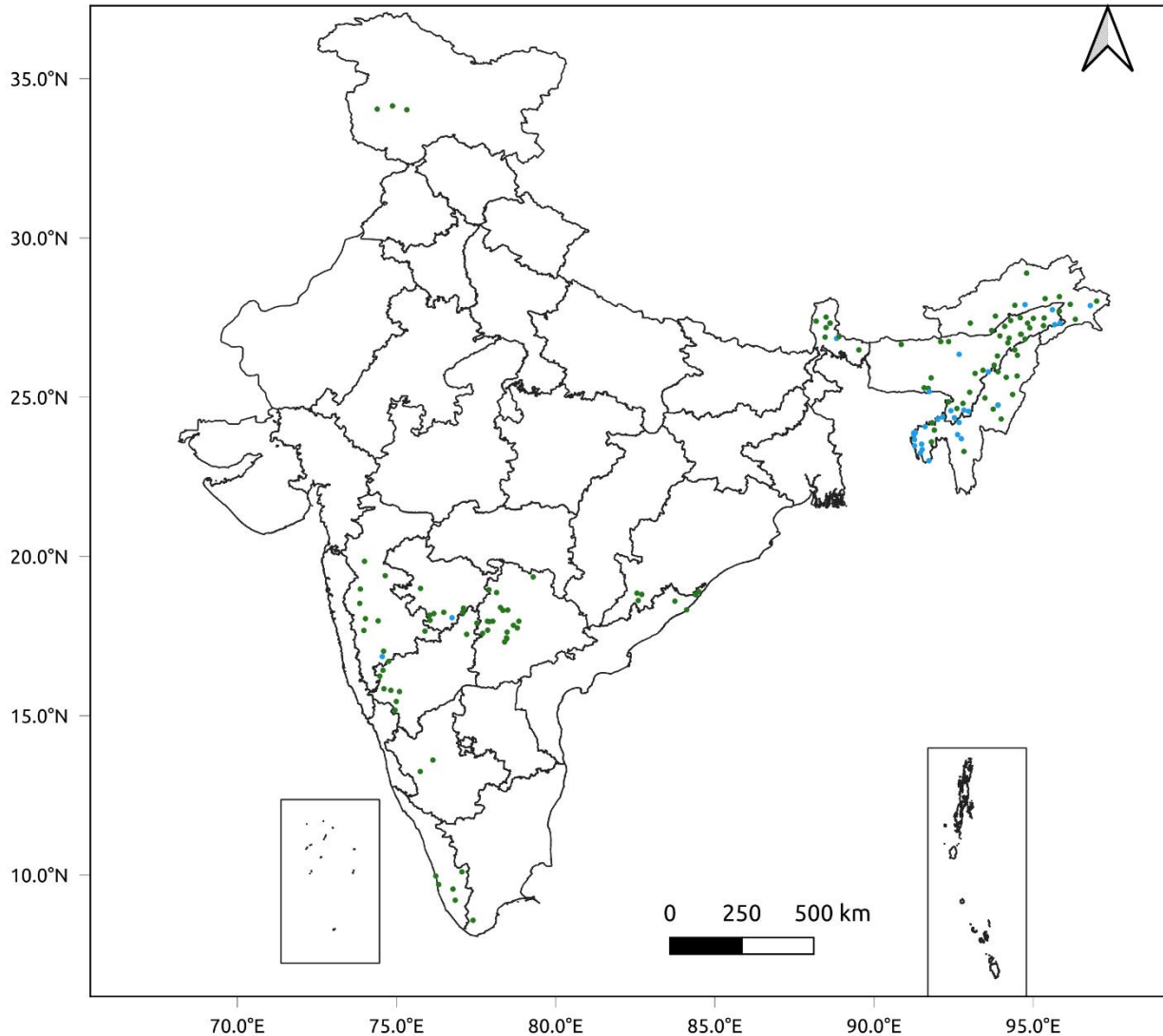
**Fig. 4: Departure of Minimum Temperatures**



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

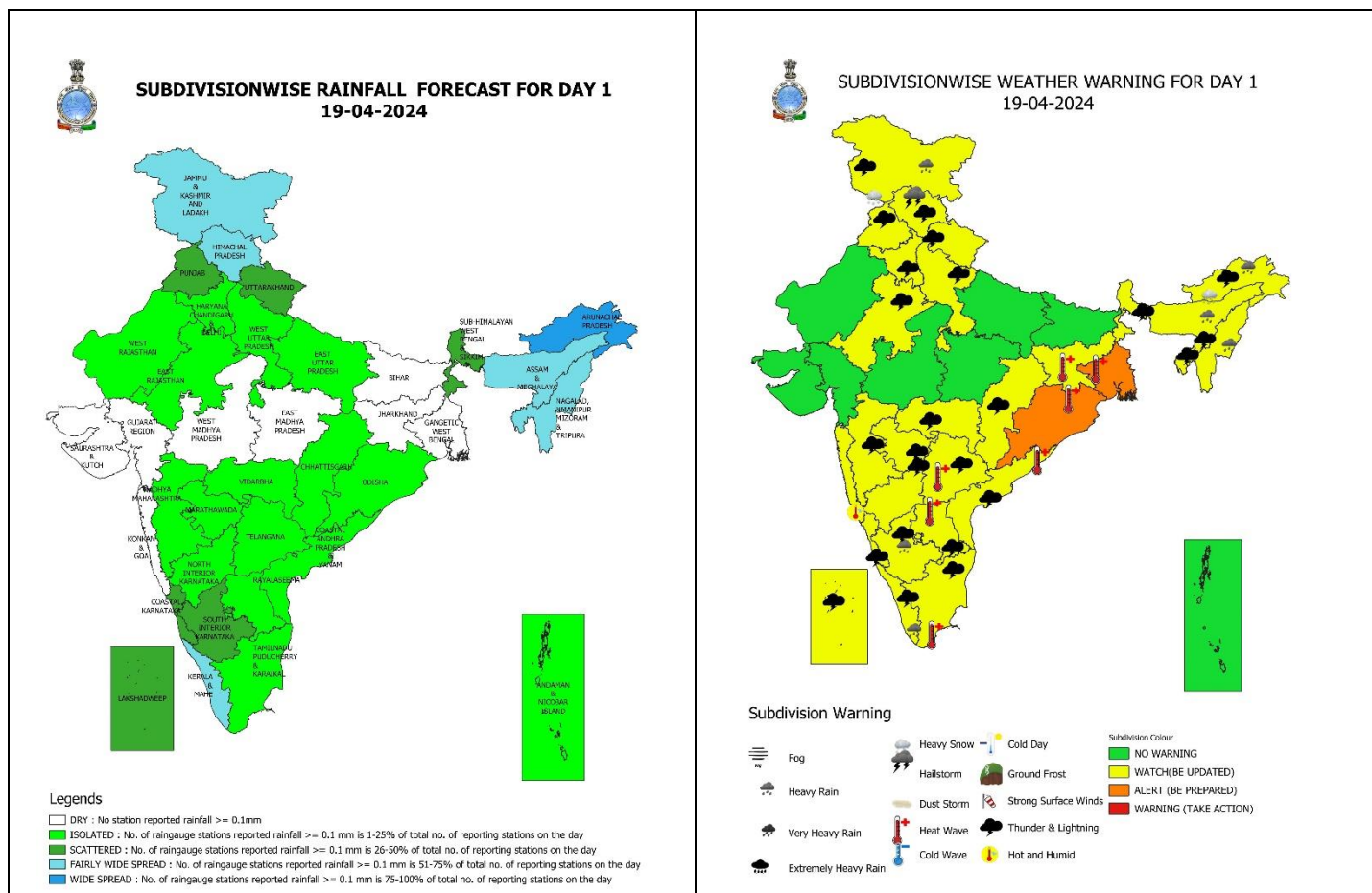


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 17-4-2024 to 0830 IST of 18-4-2024



## Legends

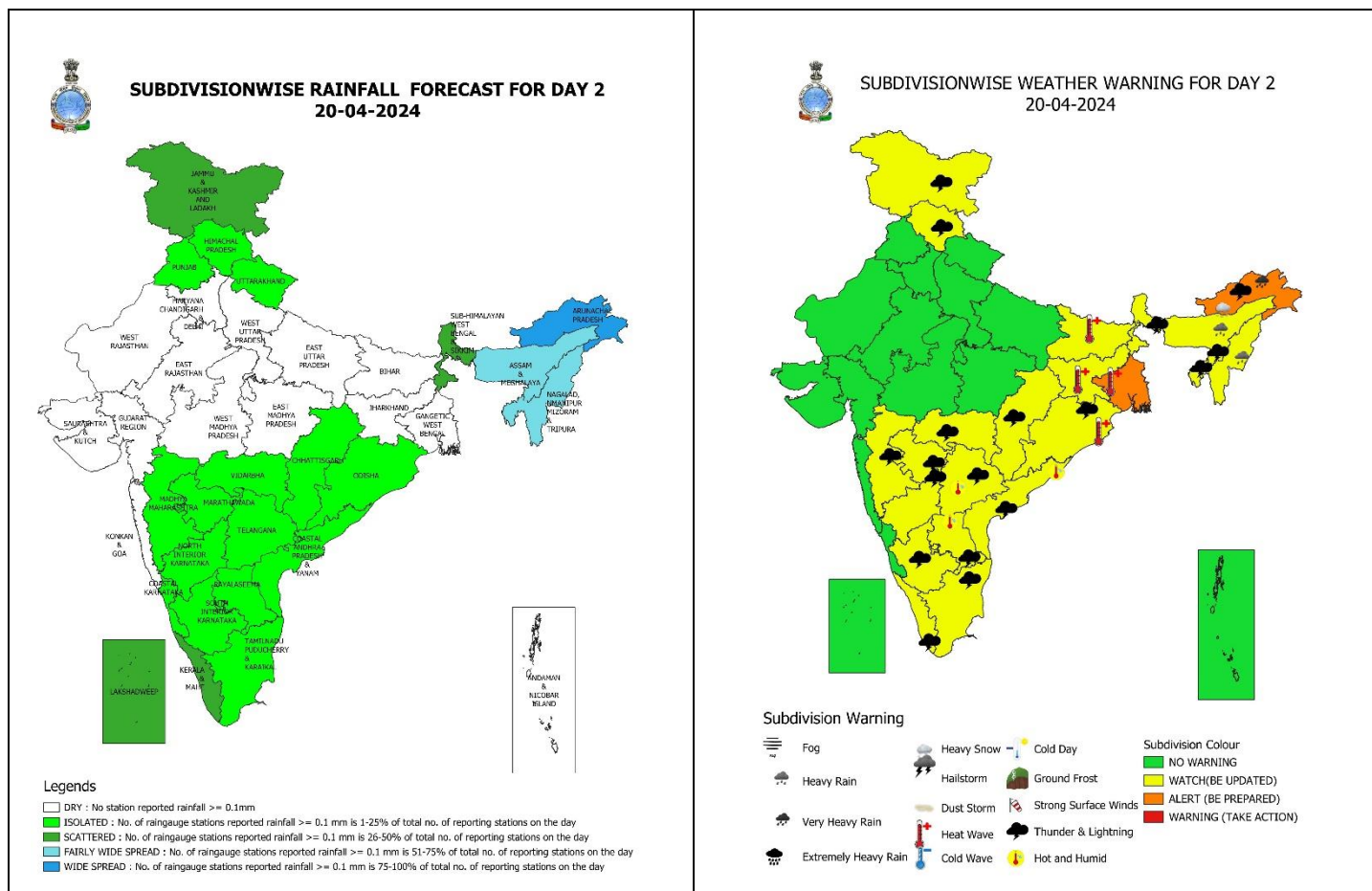
- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall ( $\geq 204.5$  mm)



## 19 April (Day 1):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph) & hailstorm** very likely at isolated places over Himachal Pradesh; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh, East Rajasthan, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Karnataka; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Vidarbha, Chhattisgarh, Arunachal Pradesh, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ **Heavy rainfall/snowfall** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Arunachal Pradesh; **Heavy rainfall** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe and South Interior Karnataka.
- ❖ **Hot and humid weather** very likely to prevail over Konkan.
- ❖ **Heat wave to severe heat wave** very likely to prevail in some pockets over Gangetic West Bengal; in isolated pockets over Odisha; **heat wave** in isolated pockets over Jharkhand, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ **Warm Night** very likely to prevail in isolated pockets over Rayalaseema.
- ❖ **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail over off north Andhra Pradesh and south Odisha coasts. Fishermen are advised not to venture into these areas.

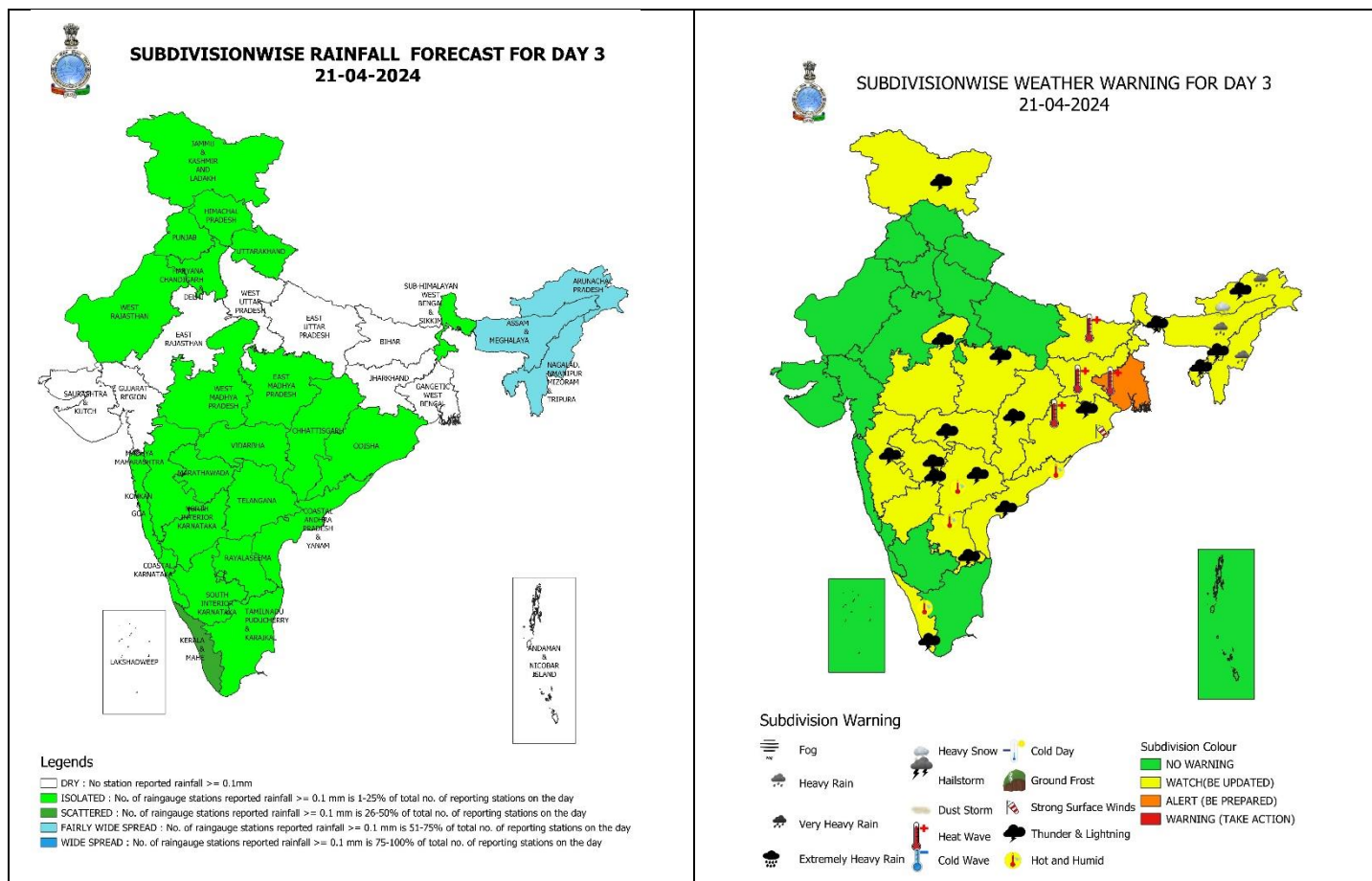




## 20 April (Day 2):

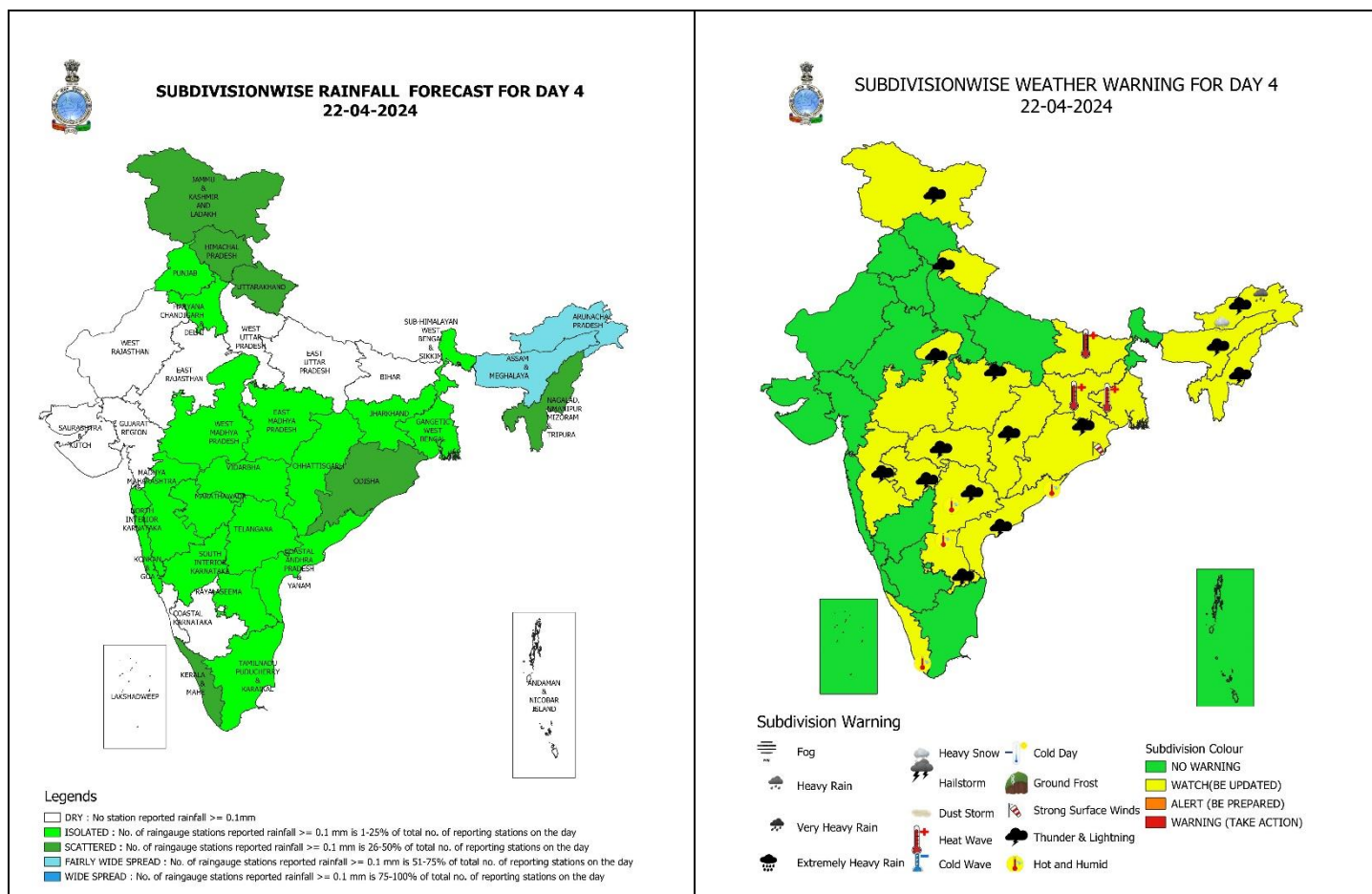
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Vidarbha and Chhattisgarh; with **gusty winds (speed reaching 30-40 kmph)** at isolated places over Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema, 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, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal & South Interior Karnataka.
- ❖ **Heavy to very heavy rainfall/snowfall** very likely at isolated places over Arunachal Pradesh; **Heavy rainfall** at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Hot and humid weather** very likely to prevail over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ **Heat wave to severe heat wave** very likely to prevail in some pockets over Gangetic West Bengal; **heat wave** in isolated pockets over Bihar, Jharkhand, Odisha.
- ❖ **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail over off north Andhra Pradesh and south Odisha coasts. Fishermen are advised not to venture into these areas.





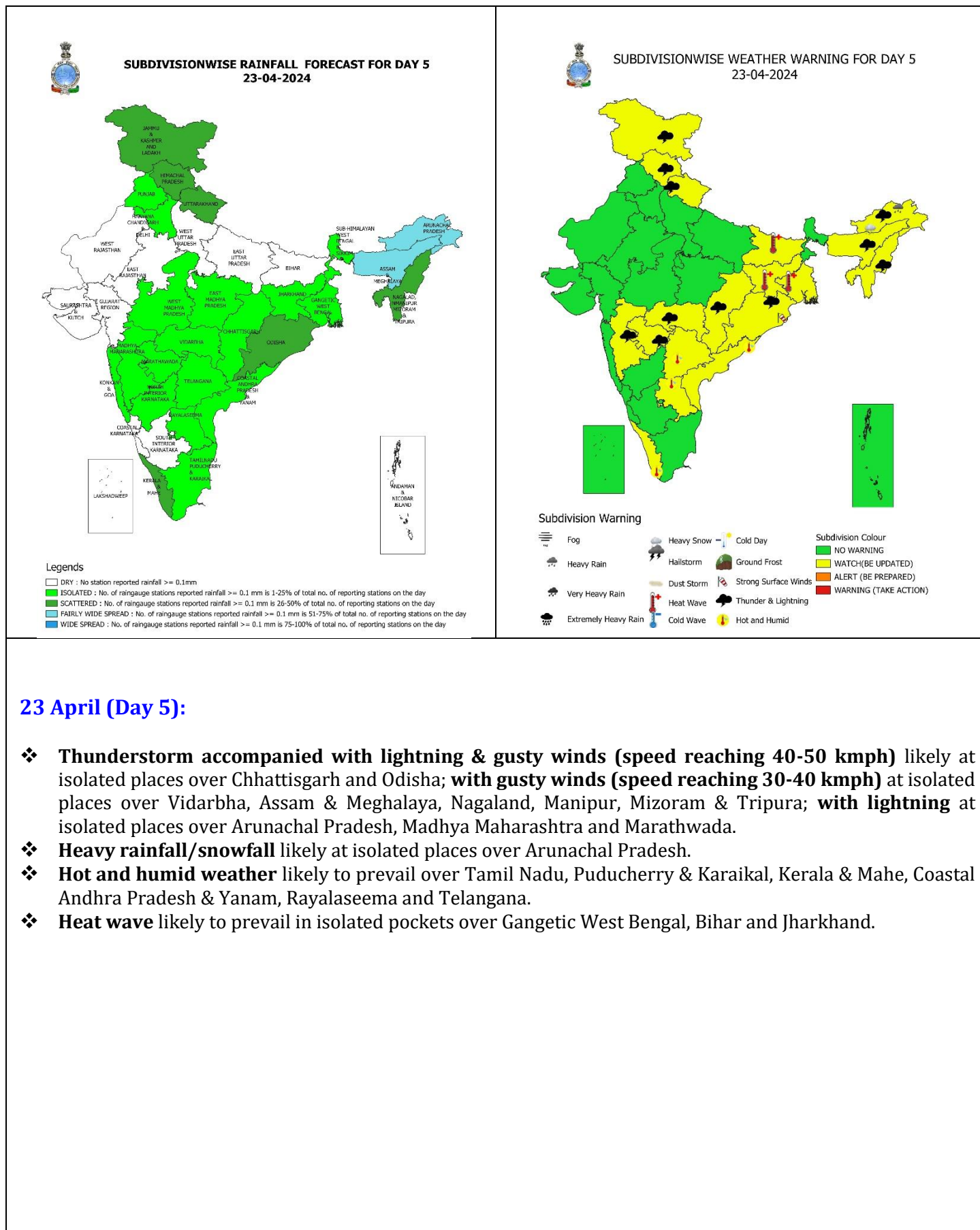
## 21 April (Day 3):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Vidarbha, Odisha and Chhattisgarh; **with gusty winds (speed reaching 30-40 kmph)** at isolated places over Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Madhya Maharashtra, Marathwada, Kerala & Mahe and North Interior Karnataka.
- ❖ **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 Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, 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** in isolated pockets over Bihar, Jharkhand and Odisha.



## 22 April (Day 4):

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



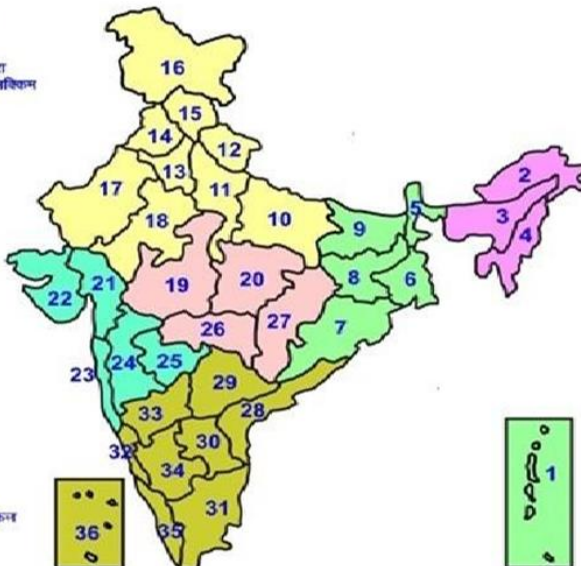
## 23 April (Day 5):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Chhattisgarh and Odisha; **with gusty winds (speed reaching 30-40 kmph)** at isolated places over Vidarbha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **with lightning** at isolated places over Arunachal Pradesh, Madhya Maharashtra and Marathwada.
- ❖ **Heavy rainfall/snowfall** likely at isolated places over Arunachal Pradesh.
- ❖ **Hot and humid weather** likely to prevail over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Telangana.
- ❖ **Heat wave** likely to prevail in isolated pockets over Gangetic West Bengal, Bihar and Jharkhand.



## LEGENDS

- 1 अंडमान और निकोबार द्वीप समुह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
- 5 उप-हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 गंगोत्री पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा, चंडीगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 उत्तरीसमूह
- 28 तटीय आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 दक्षिण तेलंगाना
- 31 तमिलनाडु, पुदुचेरी एवं काराईकल
- 32 तटस्थ कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवं 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. Marathwada
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

\* 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)



## LEGENDS

### 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



Rain/ Snow \*

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



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)

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