



Thursday, April 20, 2023
MORNING
Time of Issue: 0800 hours IST

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features

Maximum Temperatures and Heat Wave observed:

- ❖ Yesterday, Maximum Temperatures were in the range of 40-44°C over many parts of East Uttar Pradesh, Central & East India, interior parts of Gujarat & Maharashtra and Rayalaseema and over isolated pockets of eastern Peninsular India; 35-40°C over many parts of rest of the country except over Western Himalayan Region (12-25°C) and Northeast India & Islands (30-34°C). Maximum Temperatures are above normal by 3-5°C over many parts of East Uttar Pradesh, East & Northeast India and over some parts of Peninsular India.
- ❖ Heat Wave conditions are prevailing in isolated/some pockets over Gangetic West Bengal since last 9 days, Bihar since last 6 days, Odisha since last 3 days and East Uttar Pradesh since last 2 days.

Maximum Temperatures Forecast and Heat Wave Warnings:

East India:

Warnings:-

- ❖ **Bihar:** - Heat wave conditions in some parts with severe heat wave condition in isolated pockets very likely on 20th April and Heat wave conditions at isolated places very likely on 21st April.
- ❖ **West Bengal:** - Severe Heat wave conditions in isolated pockets likely over Gangetic West Bengal on 20th-21st April and Isolated Heat Wave conditions very likely over Sub-Himalayan West Bengal on 20th April.
- ❖ **Odisha & Jharkhand:** - Heat wave conditions in isolated pockets very likely on 20th April.

Rainfall Forecast and Warnings:

Northwest India:

- ❖ Light/moderate fairly widespread to widespread rainfall with thunderstorm/lightning very likely over Western Himalayan Region and isolated to scattered rainfall with thunderstorm/lightning/gusty winds over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Rajasthan during next 2 days.
- ❖ Isolated Hailstorm very likely over Himachal Pradesh, Punjab, Haryana on 19th; over Uttarakhand during 20th to 21st April, 2023.
- ❖ Isolated Thunderstorm/Duststorm/gusty winds very likely over Rajasthan during next 24 hours.

Northeast India:

- ❖ Light/moderate scattered to fairly widespread rainfall with thunderstorm/lightning/gusty winds very likely over the region during next 5 days.
- ❖ Heavy rainfall very likely at isolated places over Arunachal Pradesh during 20th-22nd and over Assam & Meghalaya on 21st & 22nd April, 2023.

Central India:

- ❖ Light/moderate isolated rainfall with thunderstorm/lightning/gusty winds very likely over Madhya Pradesh, Vidarbha and Chhattisgarh during next 5 days. Isolated hailstorm also likely over Vidarbha and Chhattisgarh on 20th April, 2023.

West India:

- ❖ Light isolated rainfall with thunderstorm/lightning/gusty winds very likely over parts of Maharashtra next 24 hours

East India:

- ❖ Light isolated rainfall with thunderstorm/lightning very likely Bihar, Jharkhand, West Bengal and Odisha during 21st -23rd April, 2023.

No significant weather likely over rest parts of the country.

* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798



- ❖ **Rainfall/thundershowers observed** (from 0830 hours IST to 1730 hours IST of yesterday): **at most places over** Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh; **at many places over** Uttarakhand, Punjab; **at isolated places over** Arunachal Pradesh, Assam & Meghalaya, Haryana, Chandigarh, Gujarat Region and Madhya Maharashtra.
- ❖ **Significant rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday) (2 cm or more): **Jammu & Kashmir:** Qazi Gund-5; Gulmarg & Pahalgaoon-3 each; Srinagar & Kokarnag-2 each; **Himachal Pradesh:** Manali-3; Kalpa-2.
- ❖ **Thunderstorm observed** (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Himachal Pradesh Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttarakhand, Punjab, Haryana, Chandigarh, Madhya Pradesh, Vidarbha, Telangana, Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Odisha, Madhya Maharashtra, North Interior Karnataka and Manipur.
- ❖ **Hailstorm observed** (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Haryana.
- ❖ **Yesterday, Heat wave to severe heat wave conditions observed** over many parts of Gangetic West Bengal and in isolated pockets over Sub-Himalayan West Bengal, **heat wave conditions** in isolated pockets observed over East Uttar Pradesh, Bihar, Odisha and Konkan.
- ❖ **Minimum Temperature Departures (as on 19-04-2023):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at many places over Haryana, Chandigarh & Delhi and Bihar; at a few places over Andaman & Nicobar Islands, Gujarat region and East Uttar Pradesh; **above normal (1.6°C to 3.0°C)** at most places over West Bengal; at many places over East Rajasthan, Madhya Pradesh, Saurashtra & Kutch, Madhya Maharashtra, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe; at a few places over Uttarakhand, Odisha and Jharkhand and at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, West Uttar Pradesh, West Rajasthan, Vidarbha and Marathwada. They were **below normal (-1.6°C to -3.0°C)** at many places over Rayalaseema and at isolated places over Madhya Pradesh and Coastal Andhra Pradesh & Yanam **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 16.7°C** was reported at **Una (Himachal Pradesh)** over plains of the country.
- ❖ **Maximum Temperature Departures (as on 19-04-2023):** Maximum temperatures were **markedly above normal (5.1°C or more)** at a few places over Gangetic West Bengal; at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Saurashtra & Kutch; **appreciably above normal (3.1°C to 5.0°C)** at most places over Bihar and Jharkhand; at many places over Chhattisgarh; at a few places over East Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura and Odisha; at isolated places over East Madhya Pradesh, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal; **above normal (1.6°C to 3.0°C)** at a few places over West Uttar Pradesh, Madhya Maharashtra, Marathwada, North Interior Karnataka and Kerala & Mahe; at isolated places over West Madhya Pradesh, Vidarbha, Telangana and Rayalaseema. They were **markedly below normal (-5.1°C or less)** at many places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and Himachal Pradesh; **appreciably below normal (-3.1°C to -5.0°C)** at a few places over West Rajasthan and **near normal** over rest parts of the country. Yesterday, the **highest maximum temperature of 44.5°C** was reported at **Prayagraj (East Uttar Pradesh)** and **Khajuraho (East Madhya Pradesh)**.

* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798



Meteorological Analysis (Based on 0530 hours IST)

- ❖ The **Western Disturbance** as a cyclonic circulation over Afghanistan at 3.1 km above mean sea level with trough aloft with its axis at 5.8 km above mean sea level now runs roughly along Long. 67°E to the north of Lat. 25°N.
- ❖ The induced **cyclonic circulation** over north Pakistan and adjoining Punjab extending upto 1.5 km above mean sea level persists.
- ❖ The **trough/wind discontinuity** from Madhya Maharashtra to south Tamil Nadu at 0.9 km above mean sea level persists.

Weather Forecast for next 5 days (upto 0830 hours IST of 25th April, 2023)

- ❖ Meteorological sub-division wise detailed 5 days rainfall forecast is given in Table-1.
- ❖ **Northwest India:** Fall in Maximum Temperatures by 2-4°C very likely during next 24 hours and gradual rise by 3-4°C thereafter for subsequent 4 days.
- ❖ **Central & West India:** No significant change in Maximum Temperatures very likely during next 24 hours and fall by 2-4°C during subsequent 4 days.
- ❖ **East India:** No significant change in Maximum Temperatures very likely during next 24 hours and gradual fall by 2-3°C thereafter.
- ❖ **Rest parts of the country:** No significant change in Temperatures very likely during 5 days.

Weather Outlook for subsequent 2 days (during 25th-27th April, 2023)

- ❖ Scattered to Fairly widespread light/moderate rainfall likely over Northeast India.
- ❖ Isolated to scattered light rainfall likely over parts of Western Himalayan region and Peninsular India.
- ❖ Dry weather likely over rest parts of India.

* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798



Weather Warning during next 5 days

20 April (Day 1): ♦ **Heavy rainfall/snowfall** very likely at isolated places over Arunachal Pradesh.

♦ **Hailstorm with thunderstorm, lightning & squall (50-60 kmph)** very likely at isolated places over Uttarakhand and **with thunderstorm, lightning & gusty wind (30-40 kmph)** at isolated places Sub-Himalayan West Bengal & Sikkim, Vidarbha and Chhattisgarh.

♦ **Thunderstorm with lightning & gusty wind (30-40 kmph)** very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi, Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh, Telangana and **with lightning** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, West Uttar Pradesh, Madhya Maharashtra, Marathwada, Coastal & North Interior Karnataka and Kerala & Mahe.

♦ **Duststorm with thunderstorm & lightning** very likely at isolated places over East Rajasthan.

♦ **Heat Wave to severe heat wave conditions** very likely in isolated pockets over Bihar and Gangetic West Bengal and **heat wave conditions** in isolated pockets over Sub-Himalayan West Bengal & Sikkim.

21 April (Day 2): ♦ **Heavy rainfall/snowfall** very likely at isolated places over Arunachal Pradesh and **heavy rainfall** at isolated places over Assam & Meghalaya.

♦ **Hailstorm with thunderstorm, lightning** very likely at isolated places over Uttarakhand.

♦ **Thunderstorm with lightning & gusty wind (30-40 kmph)** very likely at isolated places over Vidarbha, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh, Rayalaseema, Kerala & Mahe and **with lightning** at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Madhya Pradesh, Arunachal Pradesh, West Bengal & Sikkim, Odisha, Jharkhand, Telangana, Karnataka and Tamilnadu.

♦ **Heat Wave conditions** very likely in isolated pockets over Gangetic West Bengal and Bihar.

22 April (Day 3): ♦ **Heavy rainfall/snowfall** likely at isolated places over Arunachal Pradesh and **heavy rainfall** at isolated places over Assam & Meghalaya.

♦ **Thunderstorm with lightning & gusty wind (30-40 kmph)** likely at isolated places over Vidarbha, Chhattisgarh, Coastal Andhra Pradesh, Rayalaseema, Odisha, Jharkhand, Kerala & Mahe and **with lightning** at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Bengal & Sikkim, East Madhya Pradesh, Telangana, Interior Karnataka and Tamilnadu.

23 April (Day 4): ♦ **Thunderstorm with lightning & gusty wind (30-40 kmph)** likely at isolated places over Vidarbha, Chhattisgarh, Odisha, Jharkhand, Coastal Andhra Pradesh, Rayalaseema, Kerala & Mahe and **with lightning** at isolated places over East Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Telangana, South Interior Karnataka and Tamilnadu.

24 April (Day 5): ♦ **Thunderstorm with lightning & gusty wind (30-40 kmph)** likely at isolated places over Kerala & Mahe, Tamilnadu and **with lightning** at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Telangana, South Interior Karnataka, Odisha, south Chhattisgarh and Andhra Pradesh.

* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798



5 Day Rainfall Forecast

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

* Red color warning does not mean "Red Alert" Red color warning means "Take Action".

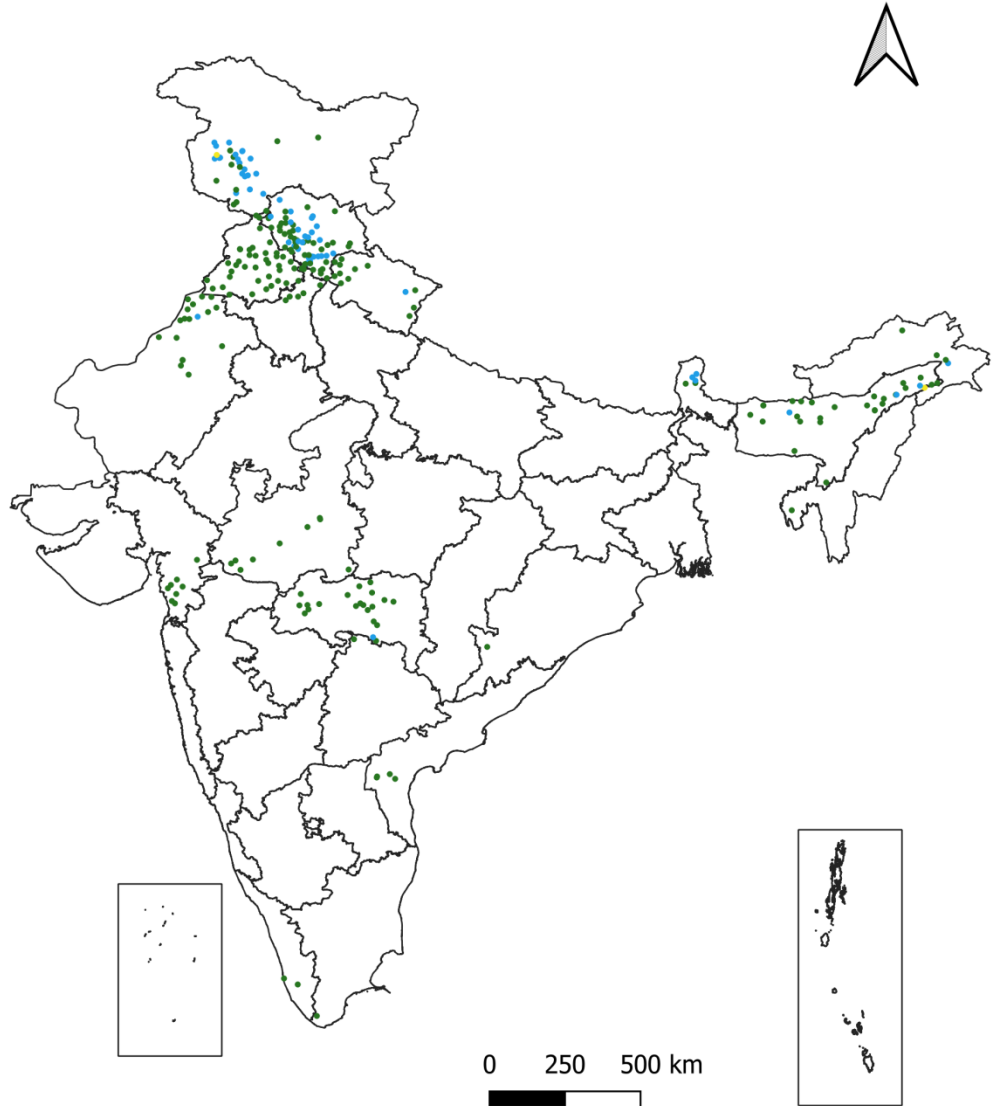
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day

For more details kindly visit www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798

Fig. 1: Accumulated Rainfall (mm) during past 24 hours



24 Hr cumulative rainfall recorded over different stations during 0830 IST of 18-4-2023 to 0830 IST of 19-4-2023



Legends

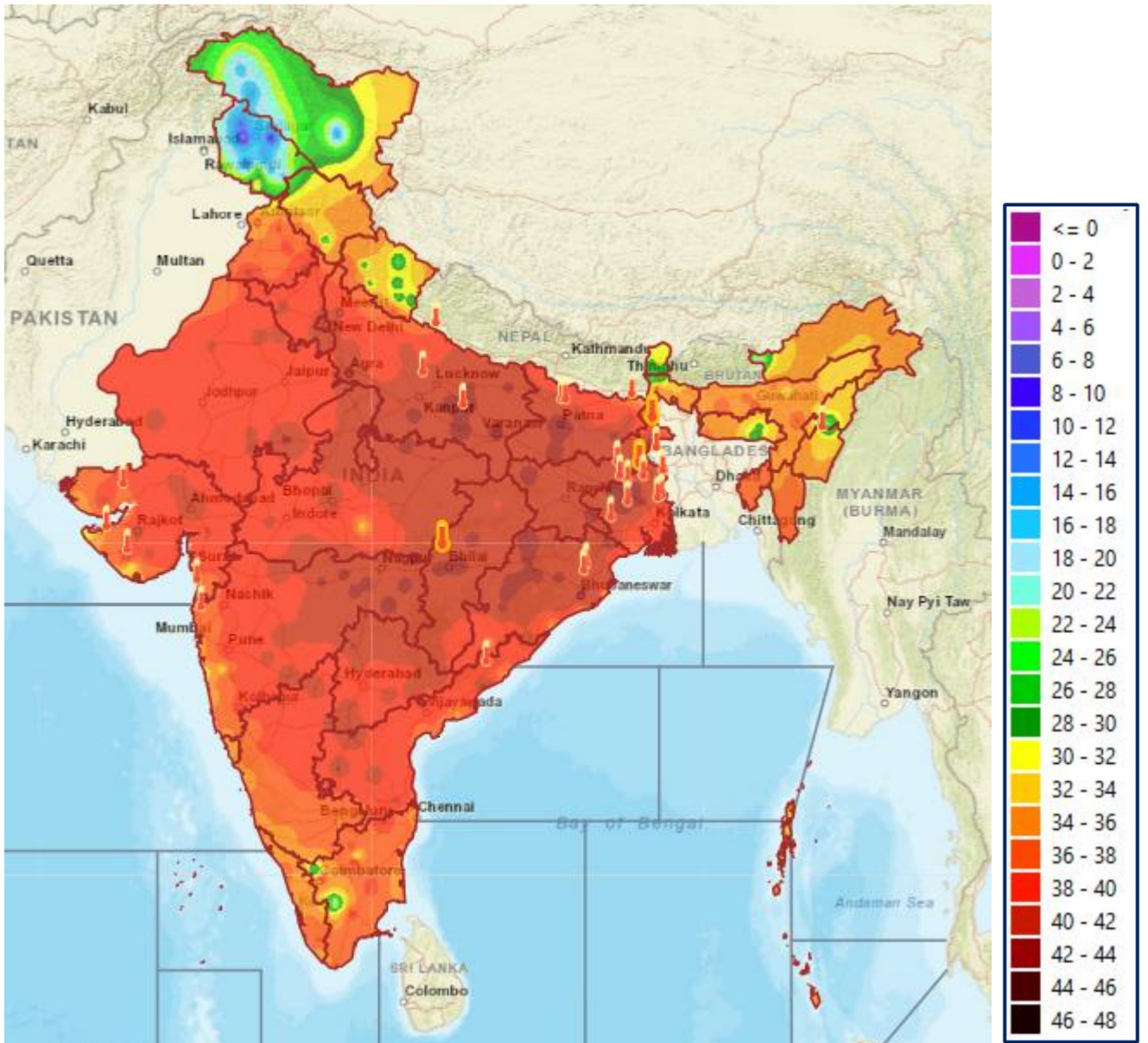
- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall (≥ 204.5 mm)

* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798

Fig. 2: Maximum Temperatures Dated 19.04.2023



* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798

Fig. 3: Minimum Temperatures Dated 19.04.2023

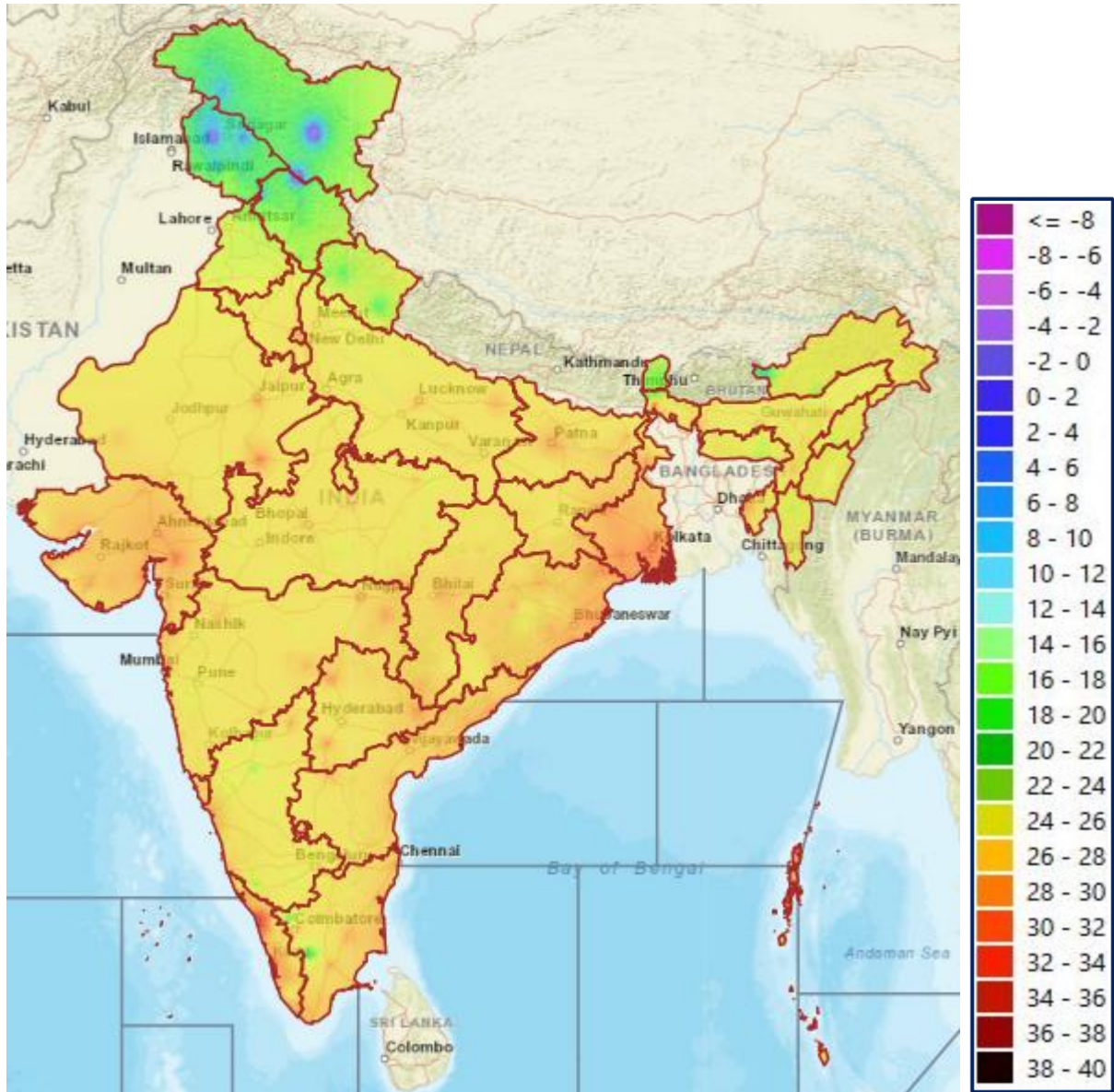
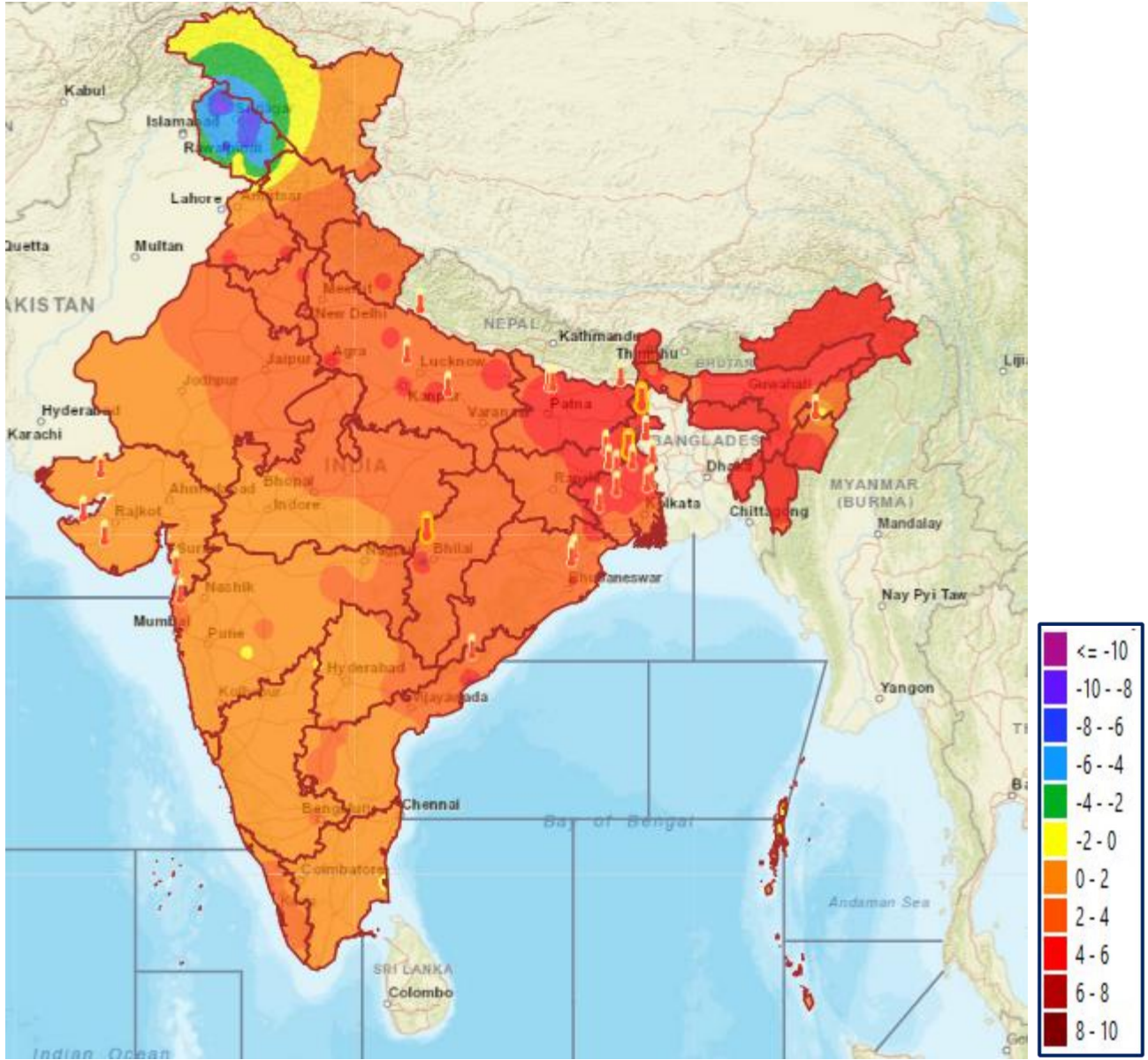
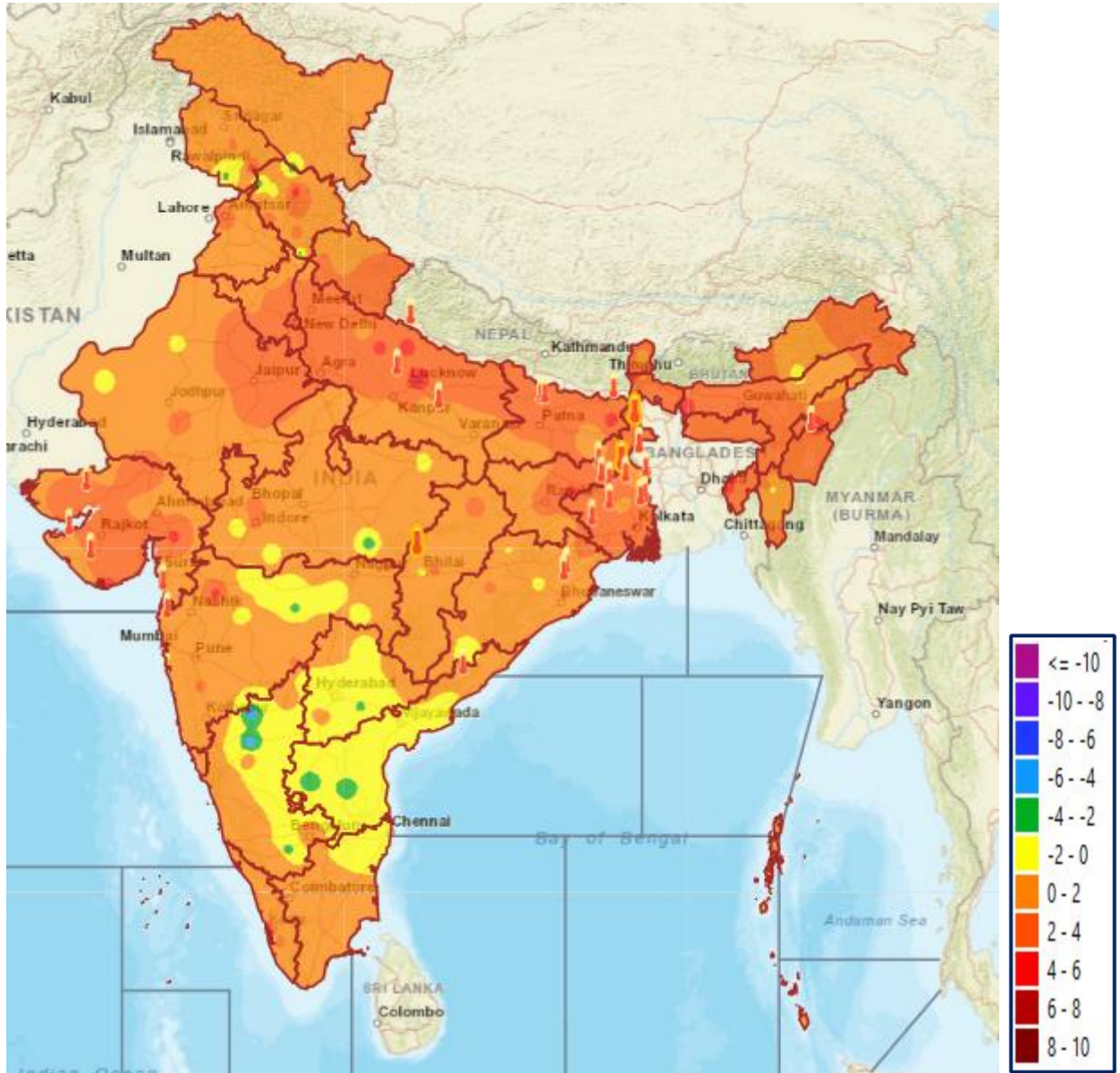


Fig. 4: Departure from Normal of Maximum Temperatures Dated 19.04.2023

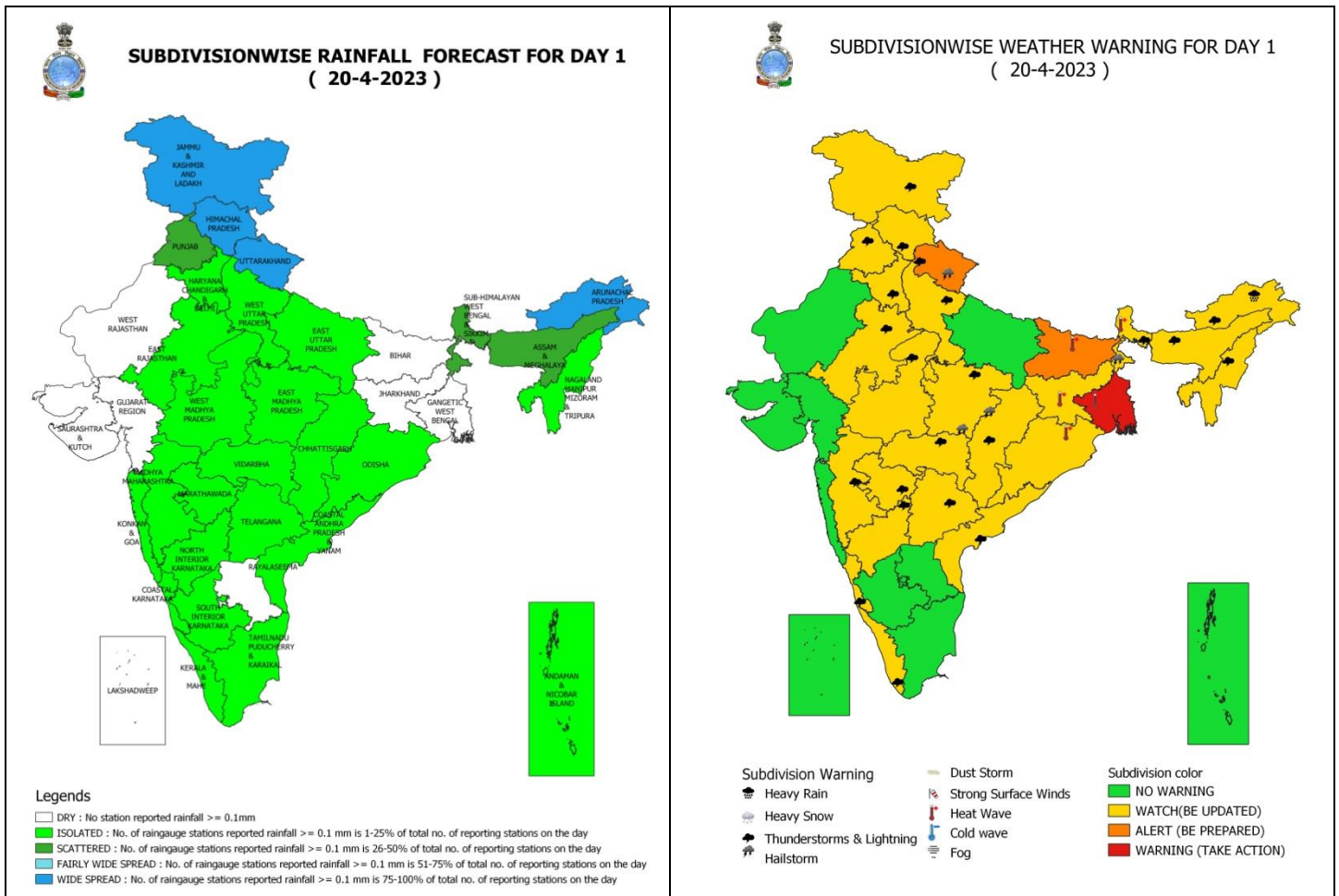


* Red color warning does not mean "Red Alert" Red color warning means "Take Action".
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day
For more details kindly visit www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798

Fig. 5: Departure from Normal of Minimum Temperatures Dated 19.04.2023



* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798



20 April (Day 1): ♦ Heavy rainfall/snowfall very likely at isolated places over Arunachal Pradesh.

♦ Hailstorm with thunderstorm, lightning & squall (50-60 kmph) very likely at isolated places over Uttarakhand and with thunderstorm, lightning & gusty wind (30-40 kmph) at isolated places Sub-Himalayan West Bengal & Sikkim, Vidarbha and Chhattisgarh.

♦ Thunderstorm with lightning & gusty wind (30-40 kmph) very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi, Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh, Telangana and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, West Uttar Pradesh, Madhya Maharashtra, Marathawada, Coastal & North Interior Karnataka and Kerala & Mahe.

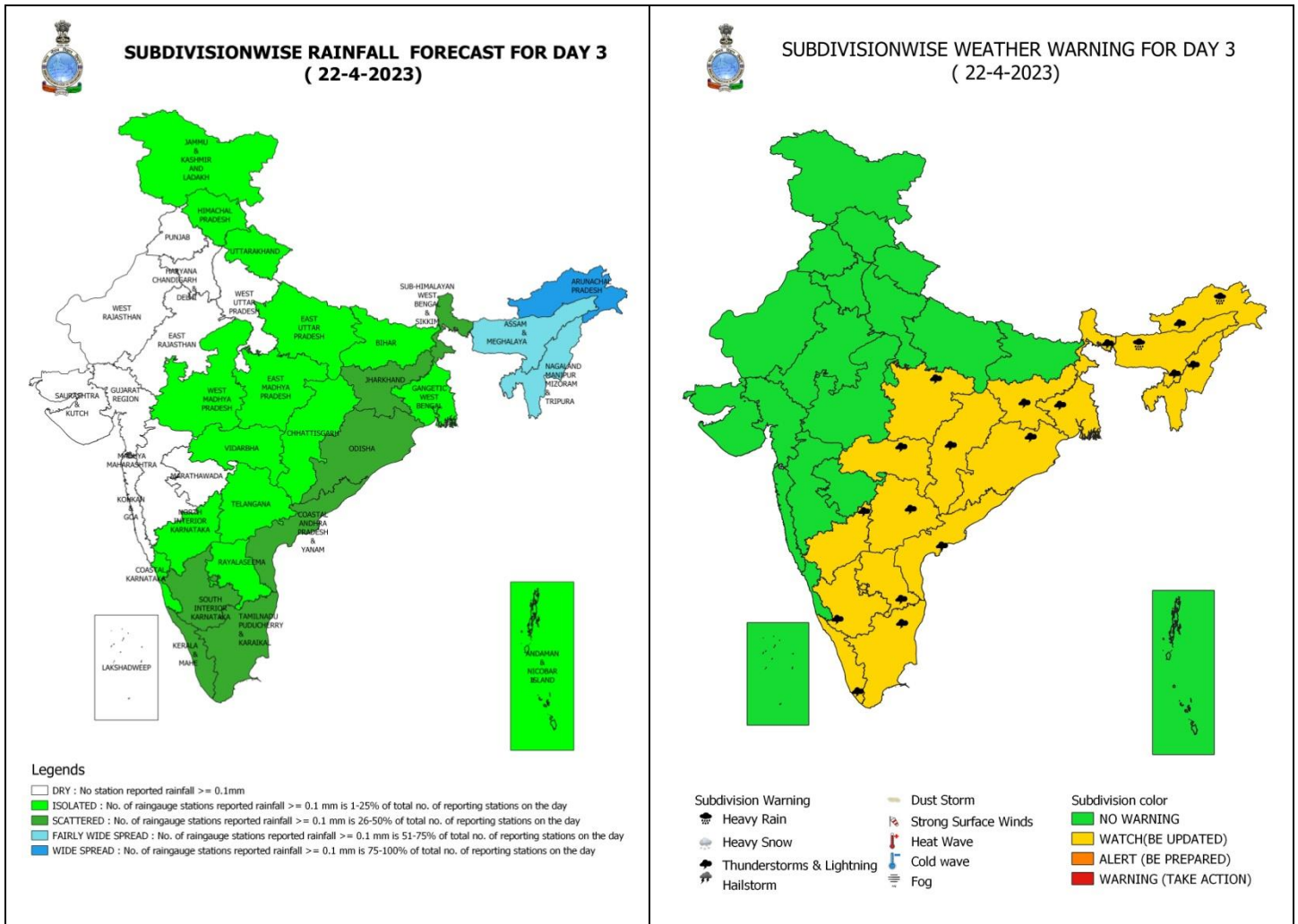
♦ Duststorm with thunderstorm & lightning very likely at isolated places over East Rajasthan.

♦ Heat Wave to severe heat wave conditions very likely in isolated pockets over Bihar and Gangetic West Bengal and heat wave conditions in isolated pockets over Sub-Himalayan West Bengal & Sikkim.

*** Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798



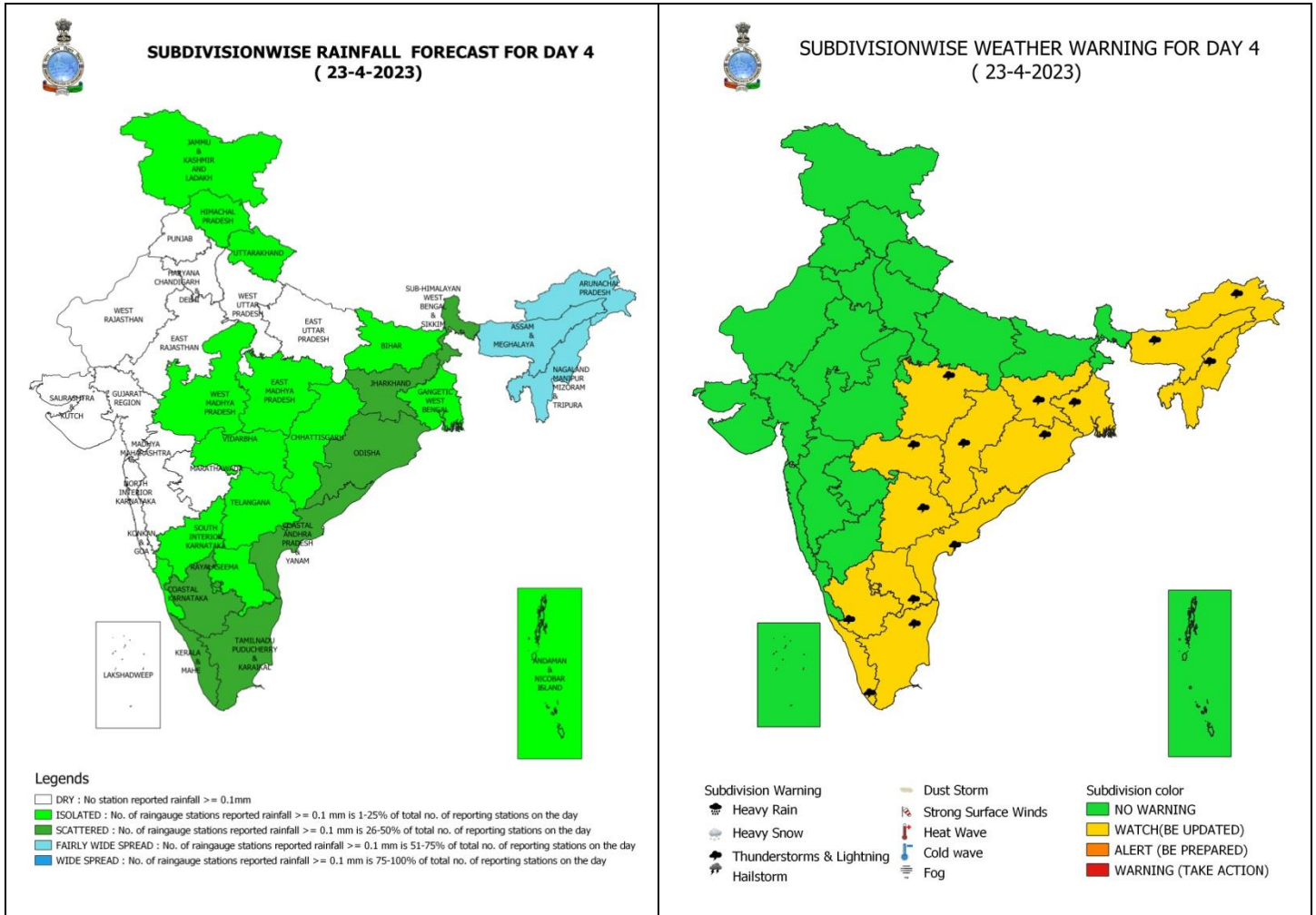
22 April (Day 3): ♦ **Heavy rainfall/snowfall** likely at isolated places over Arunachal Pradesh and **heavy rainfall** at isolated places over Assam & Meghalaya.

♦ **Thunderstorm with lightning & gusty wind (30-40 kmph)** likely at isolated places over Vidarbha, Chhattisgarh, Coastal Andhra Pradesh, Rayalaseema, Odisha, Jharkhand, Kerala & Mahe and **with lightning** at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Bengal & Sikkim, East Madhya Pradesh, Telangana, Interior Karnataka and Tamilnadu.

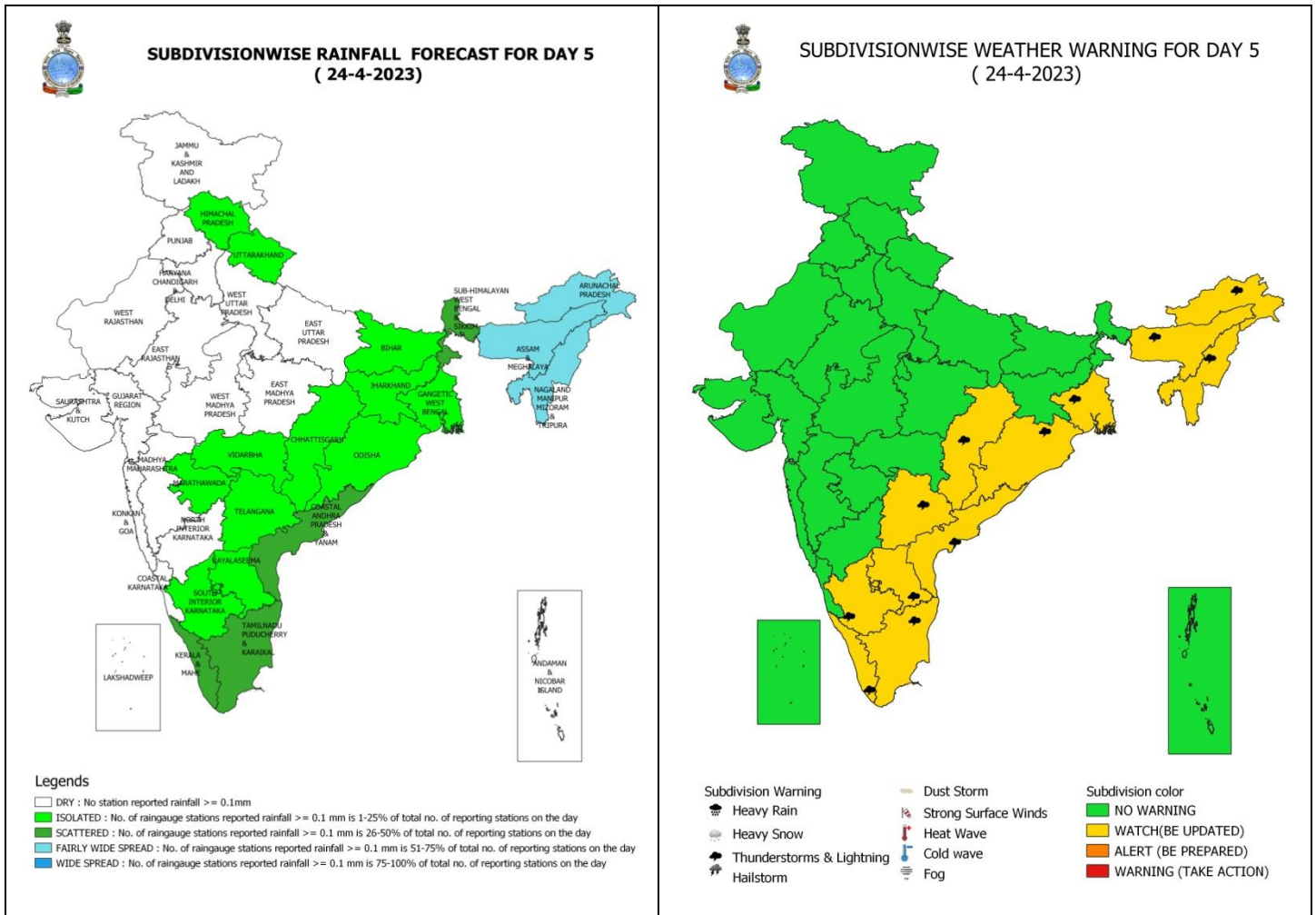
* Red color warning does not mean "Red Alert" Red color warning means "Take Action".

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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798



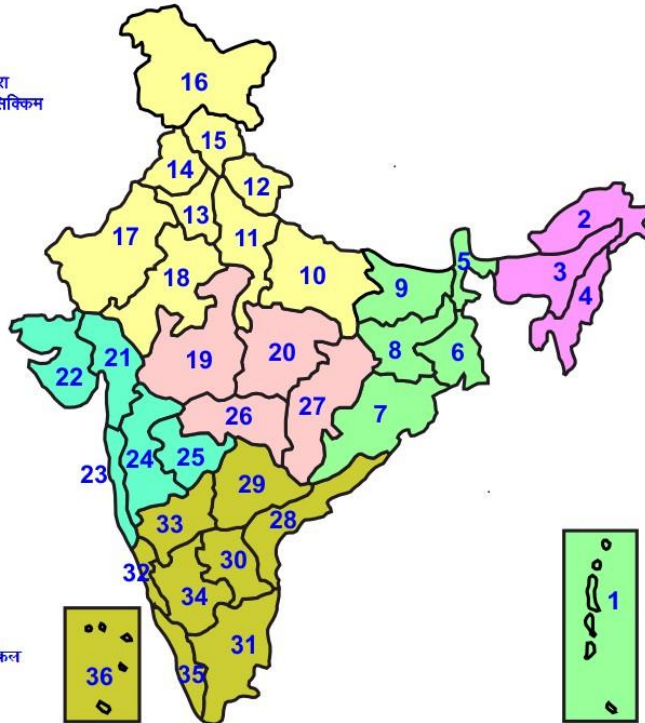
23 April (Day 4): ♦ Thunderstorm with lightning & gusty wind (30-40 kmph) likely at isolated places over Vidarbha, Chhattisgarh, Odisha, Jharkhand, Coastal Andhra Pradesh, Rayalaseema, Kerala & Mahe and **with lightning** at isolated places over Madhya Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Telangana, South Interior Karnataka and Tamilnadu.



24 April (Day 5): ♦ Thunderstorm with lightning & gusty wind (30-40 kmph) likely at isolated places over Kerala & Mahe, Tamilnadu and with lightning at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Telangana, South Interior Karnataka, Odisha, south Chhattisgarh and Andhra Pradesh.

LEGENDS

- 1 अंडमान और निकोबार द्वीप समुह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर मीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम गॉंगेय 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 एवं 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 मराठावाडा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 रायलसेमा
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 तटिय 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. Orissa
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



Heavy Rain



Heavy Snow



Thunderstorm



Dust Storm



Strong Winds



Visibility



Cyclone



Squall/ Hail



Frost



Cold Wave



Heat Wave



Sea State

* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798

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°C to 6.4°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°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°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°C to -6.4°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°C to -6.4°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 Storm: Wind speed >220 kmph (>119 knots)

* Red color warning does not mean "Red Alert" Red color 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 www.imd.gov.in or contact : +91 11 24631913, 24643965, 24629798