

Friday, May 10, 2024
Time of Issue: 0745 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems and Forecast & Warnings:

- ❖ A cyclonic circulation lies over northeast Assam, another cyclonic circulation over east Bangladesh and a trough runs from east Assam to north Odisha in lower tropospheric levels. Under their influence:
 - ✓ Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & squally winds (40-50 kmph)** very likely over West Bengal & Sikkim during 10th-12th; scattered to fairly widespread rainfall accompanied with **thunderstorm, lightning & gusty winds (40-50 kmph)** over Bihar, Jharkhand, Odisha during 10th-12th May, 2024.
 - ✓ **Thunderstorm, lightning & gusty winds (50-60 kmph)** very likely over Gangetic West Bengal on 10th & 11th and Jharkhand on 10th May, 2024.
 - ✓ **Isolated heavy rainfall also very likely over Gangetic West Bengal on 10th and Odisha during 10th-12th May, 2024.**
 - ✓ Fairly widespread to widespread light to moderate rainfall accompanied with isolated **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram & Tripura during next 7 days.
 - ✓ **Isolated heavy rainfall also very likely over Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram and Tripura on 10th May, 2024.**
- ❖ A cyclonic circulation lies over Madhya Maharashtra and a trough runs from northwest Rajasthan to west Vidarbha in lower tropospheric levels. Under their influence:
 - ✓ Isolated to scattered rainfall accompanied with **thunderstorm, lightning & gusty winds (40-50 kmph)** over very likely Vidarbha, Madhya Maharashtra and Chhattisgarh during 10th-14th; over Madhya Pradesh on 10th & 11th May, 2024.
 - ✓ **Hailstorm activity also very likely over Madhya Pradesh and Vidarbha on 10th May, 2024.**
 - ✓ Isolated to scattered light to moderate rainfall accompanied with **thunderstorm & lightning & gusty winds (30-40 kmph)** very likely over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and North Interior Karnataka during 10th-14th; scattered to fairly widespread rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** over Kerala & Mahe, Interior Karnataka and Lakshadweep during 10th-14th May, 2024.
 - ✓ **Isolated heavy rainfall very likely over South Interior Karnataka and Kerala & Mahe during 12th-14th; Tamil Nadu, Puducherry & Karaikal on 12th & 14th and Rayalaseema, Telangana on 13th & 14th May, 2024.**
- ❖ A Western Disturbance as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 58°E to the north of Lat. 30°N. A cyclonic circulation lies over northeast Rajasthan and another over northwest Rajasthan in lower tropospheric levels. Under their influence:
 - ✓ Scattered to fairly widespread rainfall activity accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during 10th-13th May, 2024.
 - ✓ **Hailstorm activity** very likely at isolated places over Uttarakhand during 10th-13th May, 2024.
 - ✓ Isolated light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Haryana-Chandigarh, Punjab and Uttar Pradesh during 10th-13th and Rajasthan during 10th-12th May, 2024.
 - ✓ **Duststorm/thunderstorm with gusty winds (30-40 kmph)** very likely to prevail Haryana-Chandigarh, East Uttar Pradesh and Rajasthan during 10th-13th and West Uttar Pradesh during 11th-13th May, 2024.
 - ✓ **Strong surface winds (30-40 kmph)** very likely to prevail over plains of northwest India during next 2 days.

Maximum temperature observation:

- ❖ **Areas having maximum temperatures greater than 40°C:-** Yesterday, maximum temperatures were in the range of 43-46°C over many parts of West Rajasthan; in isolated pockets of East Rajasthan and in the range of 40-43°C over many parts of Madhya Pradesh; in some parts of Gujarat & Odisha; at isolated pockets of Madhya Maharashtra, Marathwada and south Haryana & Telangana. These were above normal by 2-4°C in some parts of Rajasthan & Tamil Nadu; in isolated pockets of Gujrat, North Interior Karnataka and above normal by 1-2°C over rest of the above-mentioned areas.

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

- ❖ **Heat wave conditions** very likely to prevail in isolated pockets over West Rajasthan on 10th May, 2024.
- ❖ **Hot and humid weather** very likely to prevail in isolated pockets over coastal areas of Gujarat during next 5 days.

Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): at many places over many places over Kerala & Mahe, Bihar, Jharkhand, Gangetic West Bengal; at a few places over Arunachal Pradesh, Assam & Meghalaya, Uttarakhand; at isolated places over Madhya Maharashtra, Marathwada, Vidarbha, Telangana, Coastal Andhra Pradesh, Tamil Nadu, Odisha, Chhattisgarh, East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, South Interior Karnataka, Himachal Pradesh and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday): (in cm): **Kerala:** Wayanad, Kottayam-4 each, Kollam, Cheruthono-3 each, Ernakulam-2; **Vidarbha:** Nagpur-5, Bandara-2; **Jharkhand:** Saraikela-4, Gumla, Ramgarh-3 each, Dhanbad-2; **Bihar:** Araria-3, Darbhanga, Khagaria-2 each; **Gangetic West Bengal:** Nadia-4, Durgapur-3, Asansol-2.
- ❖ **Hailstorm** observed (from 0830 hours IST to 1730 hours IST of yesterday): at some places over Madhya Pradesh.
- ❖ **Yesterday, heat wave conditions** prevailed in some pockets of West Rajasthan.
- ❖ **Maximum wind speed (kmph) reported till 1730 hours IST of yesterday:** **West Madhya Pradesh:** Sehore - 87, Raisen-69, Shajapur-62, Bhopal-38; **East Madhya Pradesh:** Singrauli-71, Rewa-67, Damoh-54, Sagar-52, Katni-50, Jabalpur-50, Balaghat-43, Chhindwara-41, Chitrakoot-36.
- ❖ **Minimum Temperature Departures (as on 09-05-2024):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Punjab, West Rajasthan and Himachal Pradesh; **above normal (1.6°C to 3.0°C)** at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Haryana-Chandigarh-Delhi; at a few places over Andaman & Nicobar Islands and Lakshadweep; at isolated places over Uttarakhand, West Uttar Pradesh, East Rajasthan, Gujarat state, Marathwada, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. These were **markedly below normal (-5.1°C or less)** at isolated places over Vidarbha and Chhattisgarh; **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Jharkhand and West Madhya Pradesh; **below normal (-1.6°C to -3.0°C)** at isolated places over Bihar, Nagaland, Manipur, Mizoram & Tripura, interior Karnataka and Telangana and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 17.6°C** was reported at **Malanjhand (East Madhya Pradesh)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 09-05-2024):** Maximum temperatures were **markedly above normal (5.1°C or more)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Punjab; **above normal (1.6°C to 3.0°C)** at many places over Kerala & Mahe; at a few places over Rajasthan; at isolated places over Madhya Maharashtra, interior Karnataka and Tamil Nadu, Puducherry & Karaikal. These were **markedly below normal (-5.1°C or less)** at many places over Bihar; at a isolated places over Vidarbha; **appreciably below normal (-3.1°C to -5.0°C)** at a few places over Jharkhand, Gangetic West Bengal and at isolated places over Coastal Andhra Pradesh & Yanam; **below normal (-1.6°C to -3.0°C)** at many places over Uttar Pradesh, Uttarakhand, Arunachal Pradesh; at a few places over Assam & Meghalaya, East Madhya Pradesh, Chhattisgarh, Telangana; at isolated places over Haryana-Chandigarh-Delhi, Himachal Pradesh, Odisha, Nagaland, Manipur, Mizoram & Tripura and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 46.2°C** was reported at **Phalodi (West Rajasthan)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Western Disturbance as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level now runs roughly along Long. 58°E to the north of Lat. 30°N.
- ❖ The cyclonic circulation over northeast Assam & neighbourhood between 3.1 & 5.8 km above mean sea level persists.
- ❖ The cyclonic circulation over east Bangladesh & neighbourhood at 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Rajasthan & neighbourhood at 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over Madhya Maharashtra & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The trough from above cyclonic circulation over Madhya Maharashtra to South Interior Karnataka across North Interior Karnataka extending upto 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over northwest Rajasthan & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The trough from above cyclonic circulation over northwest Rajasthan to west Vidarbha across West Madhya Pradesh at 0.9 km above mean sea level persists.
- ❖ The trough from east Assam to north Odisha across Gangetic West Bengal at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Arabian sea at 3.1km above mean sea level persists.

Weather Forecast for next 7 days (Upto 0830 hours IST of 17th May, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ Thunderstorm accompanied with lightning very likely at isolated placed over Coastal Karnataka during next 2 days.
- ❖ No significant change in maximum temperatures very likely over Northwest India for next 24 hours and fall by about 2-3°C thereafter.
- ❖ Rise in maximum temperatures by about 2-4°C very likely over central India during next 4-5 days.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

Weather Outlook for subsequent 3 days (During 17th-19th May, 2024)

- ❖ Isolated to scattered light/moderate rainfall likely over Islands, Western Himalayan Region, Northeast & south Peninsular India.
- ❖ Dry weather likely to prevail over rest parts of the country.

Table-1

7 Days Rainfall Forecast

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

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 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)

Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

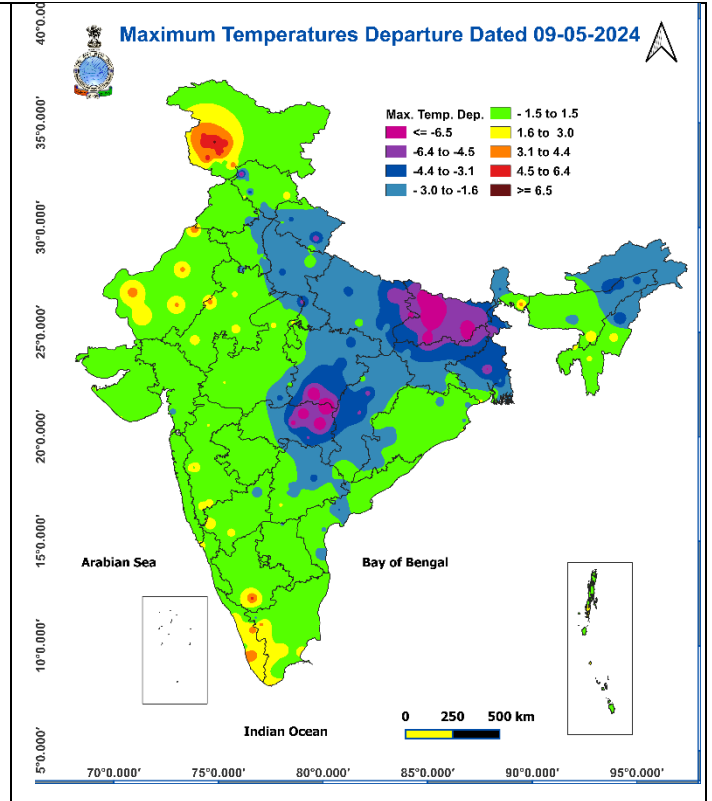
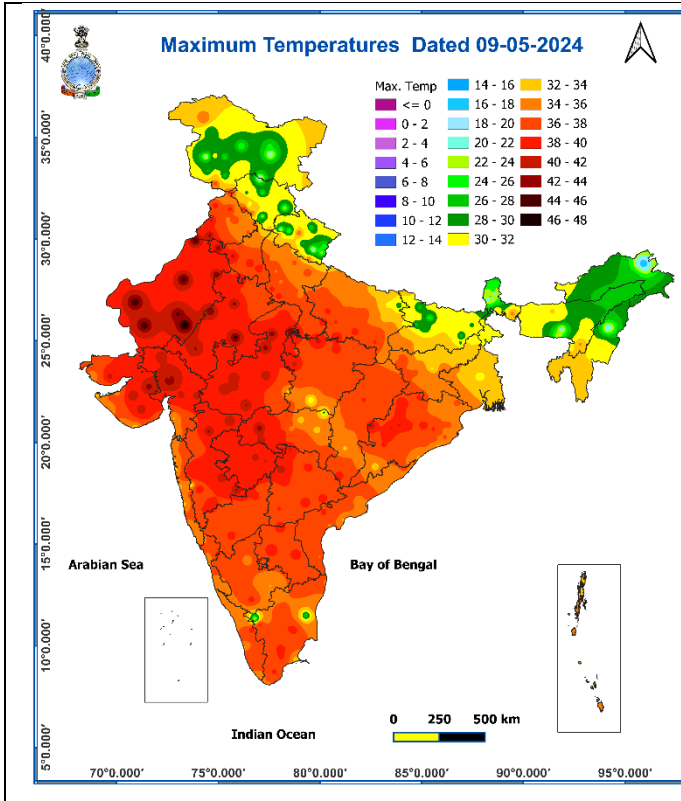


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

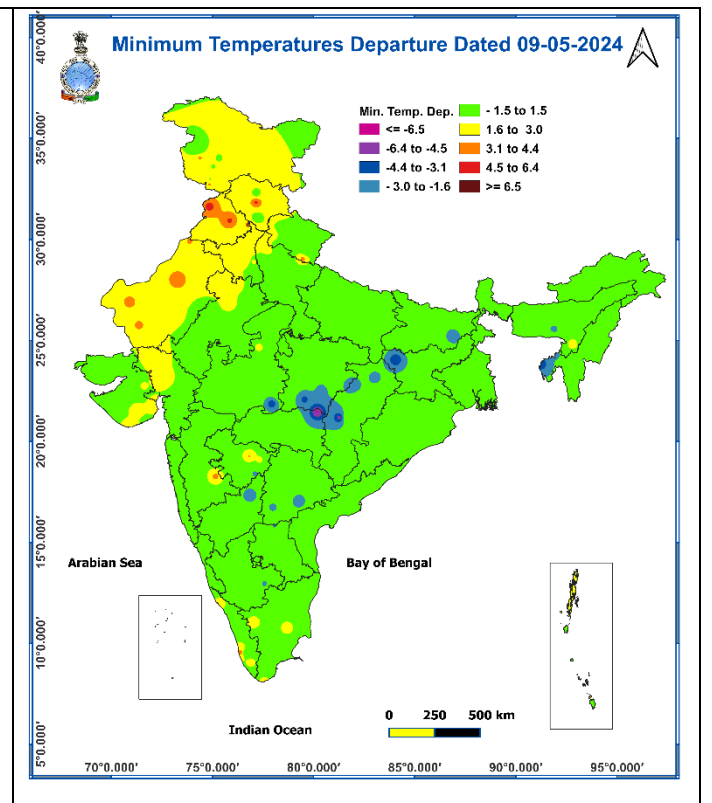
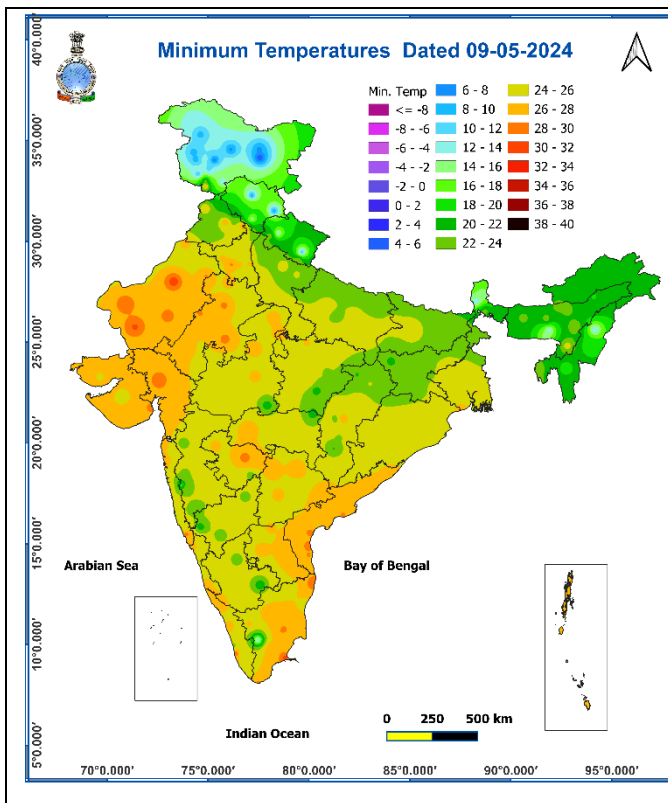
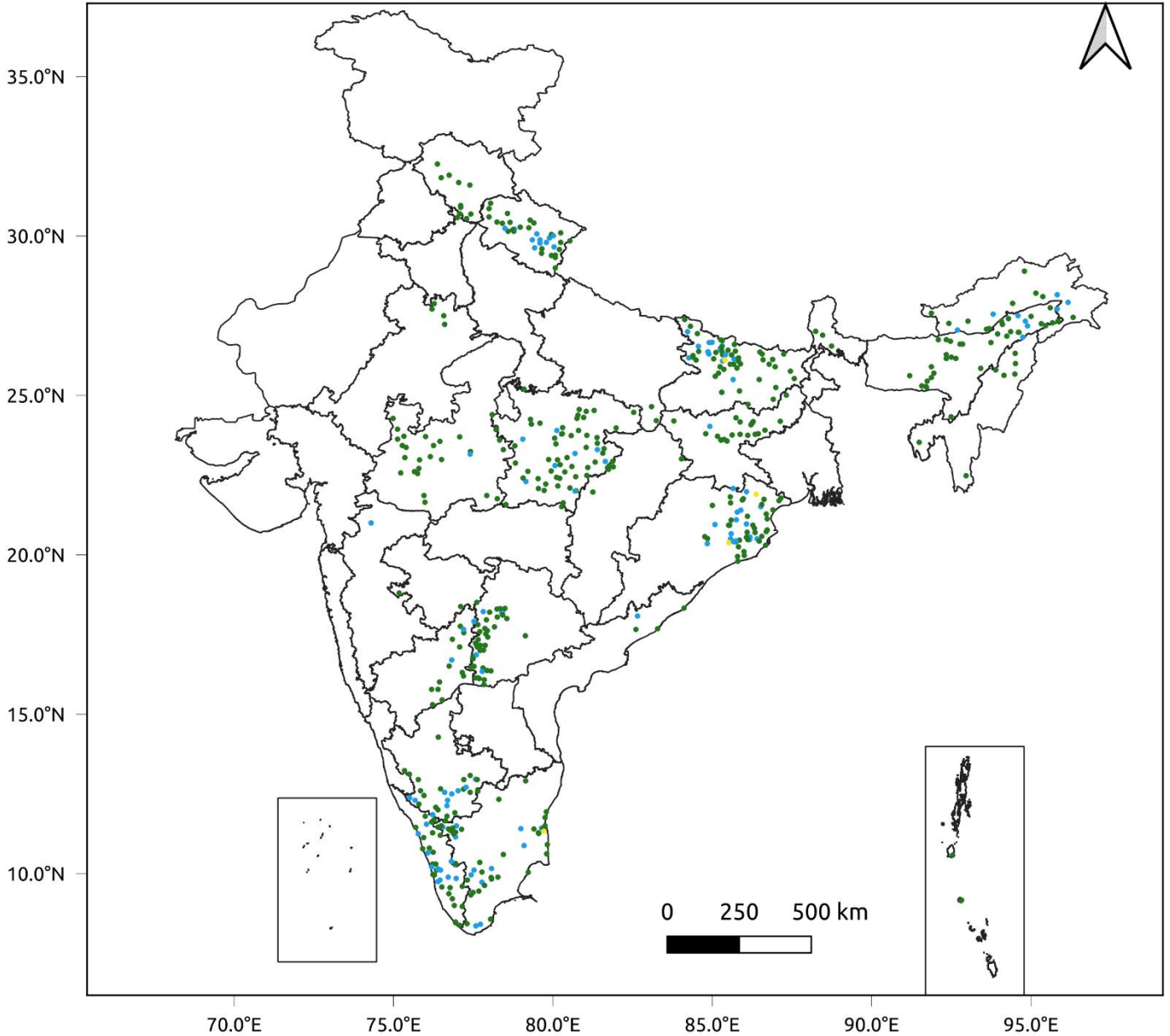


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

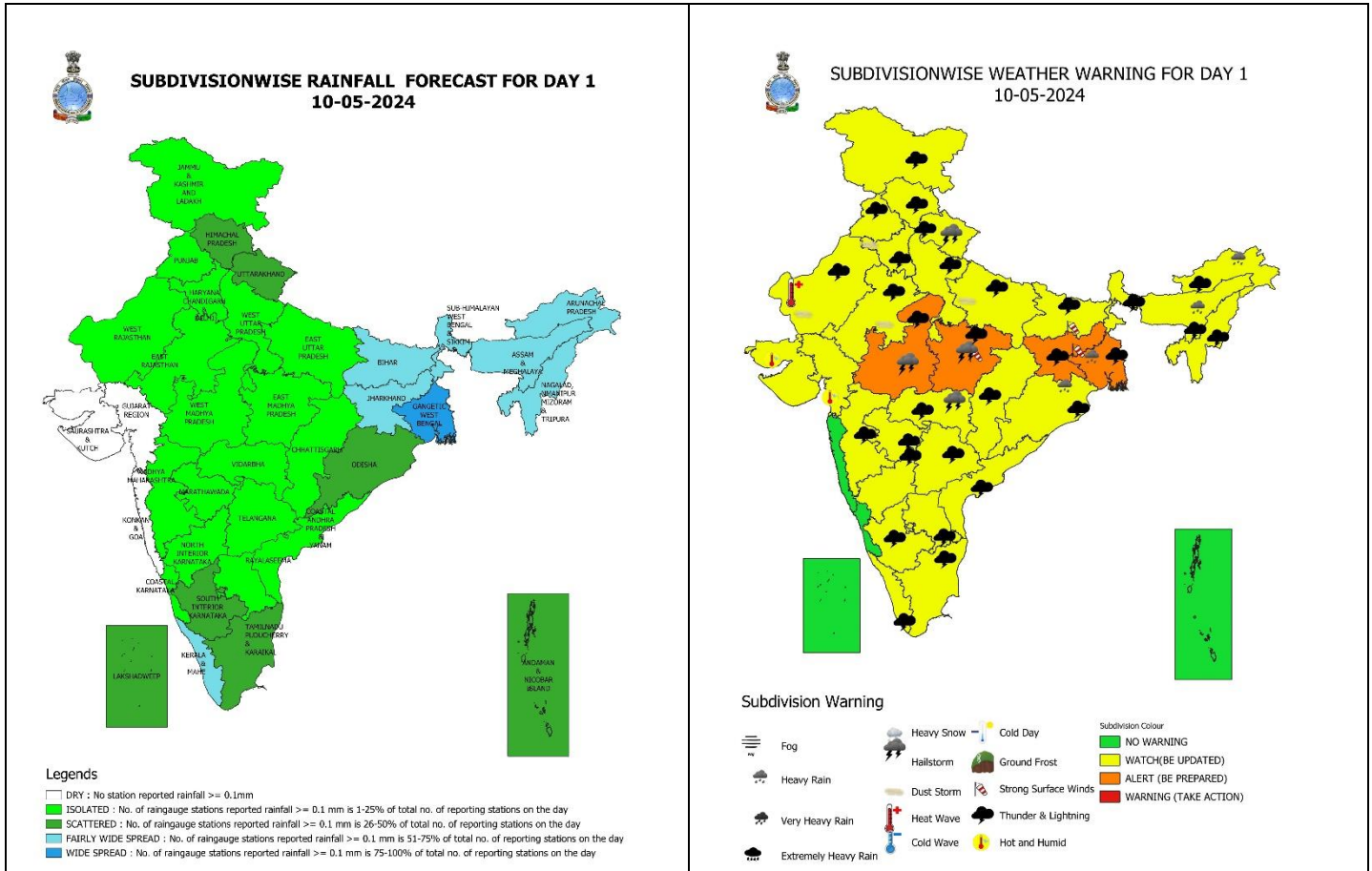


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 8-5-2024 to 0830 IST of 9-5-2024



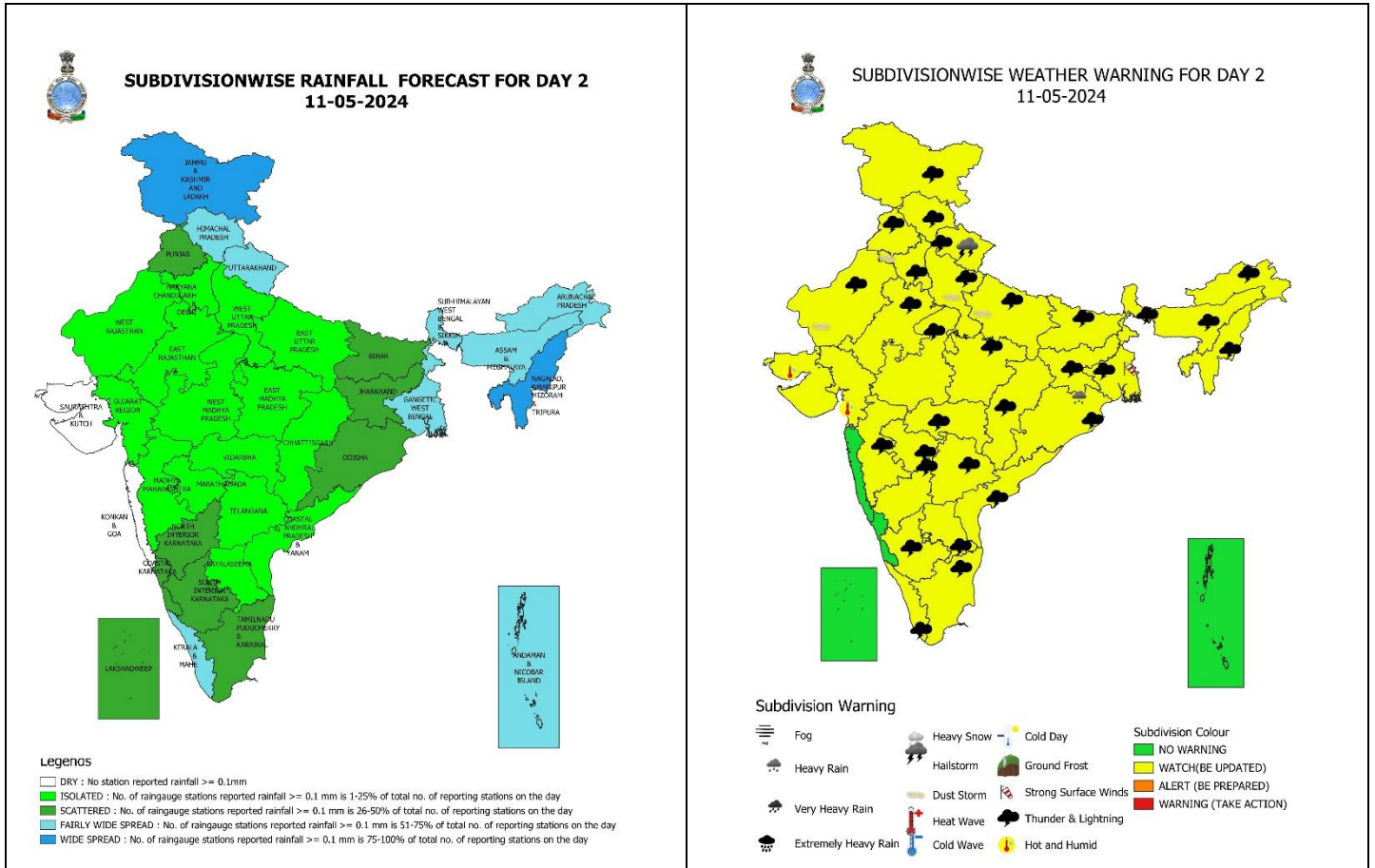
Legends

- 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 (≥ 204.5 mm)



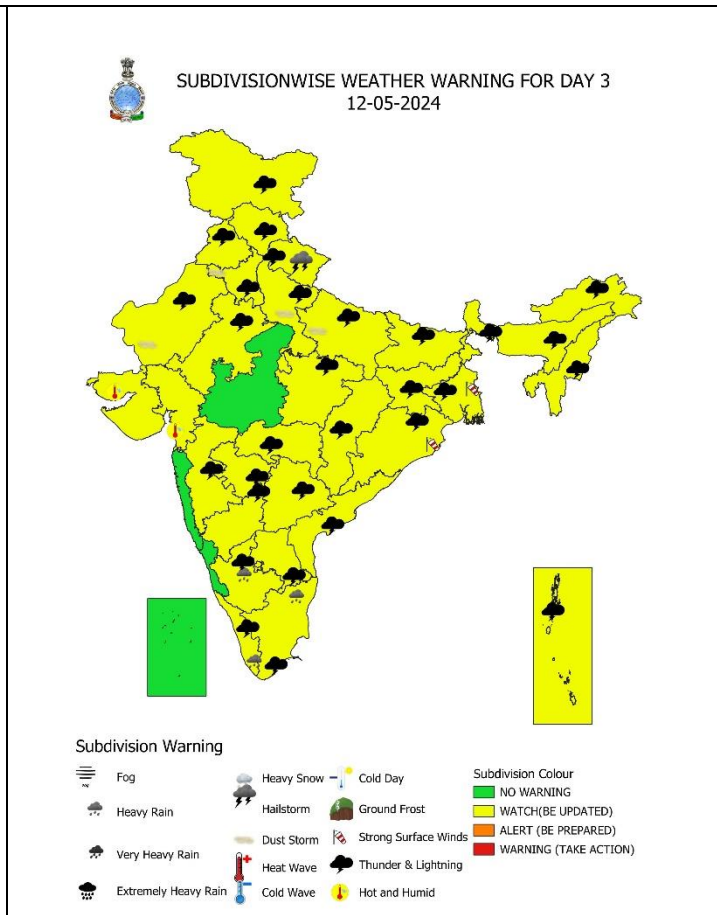
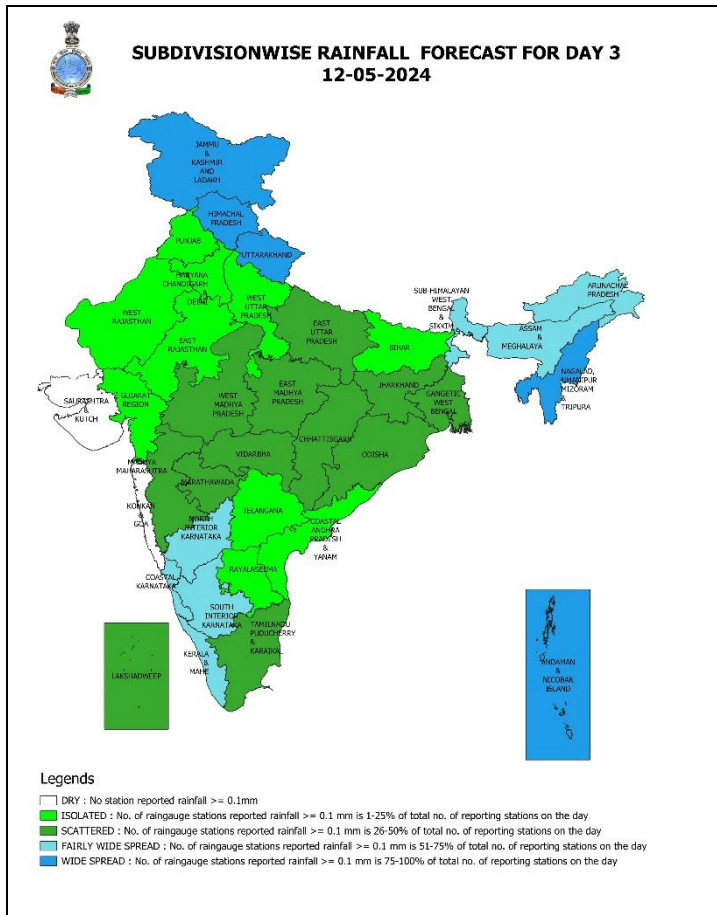
10 May (Day 1):

- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) & hailstorm** very likely at isolated places over Uttarakhand, Madhya Pradesh and Vidarbha; **with lightning & squally winds (speed reaching 50-60 kmph)** at isolated places Gangetic West Bengal and Jharkhand; **with lightning, gusty winds (speed reaching 40-50 kmph)** at isolated places over Chhattisgarh, Odisha, North Interior Karnataka; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Himachal Pradesh, Punjab, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, South Interior Karnataka; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, northwest Uttar Pradesh, Arunachal Pradesh and Marathwada.
- ❖ **Dust Storm/Thunderstorm with gusty winds (speed 40-50 kmph)** very likely in isolated pockets over Rajasthan; **with gusty winds (speed 30-40 kmph)** in isolated pockets over in isolated pockets over Haryana-Chandigarh-Delhi and East Uttar Pradesh.
- ❖ **Heavy rainfall** very likely at isolated places over Gangetic West Bengal, Odisha, Arunachal Pradesh and Assam & Meghalaya.
- ❖ **Hot and humid weather** very likely to prevail over coastal areas of Gujarat.
- ❖ **Heat wave conditions** very likely to prevail in some parts over West Rajasthan.



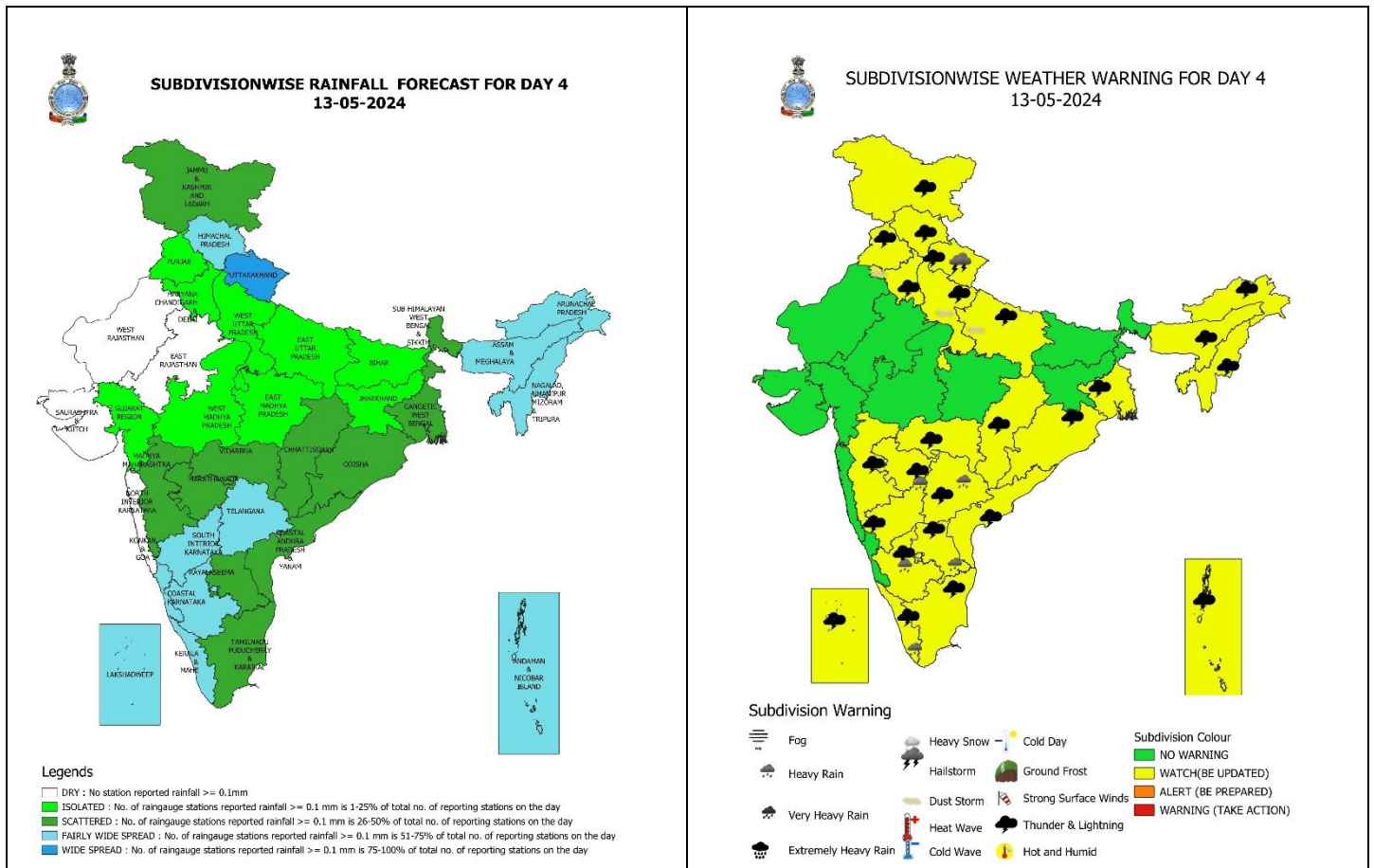
11 May (Day 2):

- ❖ **Thunderstorm accompanied with lightning, squally winds (speed reaching 50-60 kmph) & hailstorm** very likely at isolated places over Uttarakhand; **with lightning, squally winds (speed reaching 50-60 kmph)** at isolated places over Gangetic West Bengal; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over Uttar Pradesh, Chhattisgarh, Odisha, North Interior Karnataka, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Himachal Pradesh, Punjab, East Rajasthan, Madhya Pradesh, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and South Interior Karnataka; **with lightning** at isolated places Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad Arunachal Pradesh and Marathwada.
- ❖ **Dust Storm/Thunderstorm with gusty winds (speed 40-50 kmph)** very likely in isolated pockets over Uttar Pradesh and West Rajasthan; **with gusty winds (speed 30-40 kmph)** in isolated pockets over in isolated pockets over Haryana-Chandigarh-Delhi.
- ❖ **Heavy rainfall** very likely at isolated places over Odisha.
- ❖ **Hot and humid weather** very likely to prevail over coastal areas of Gujarat.



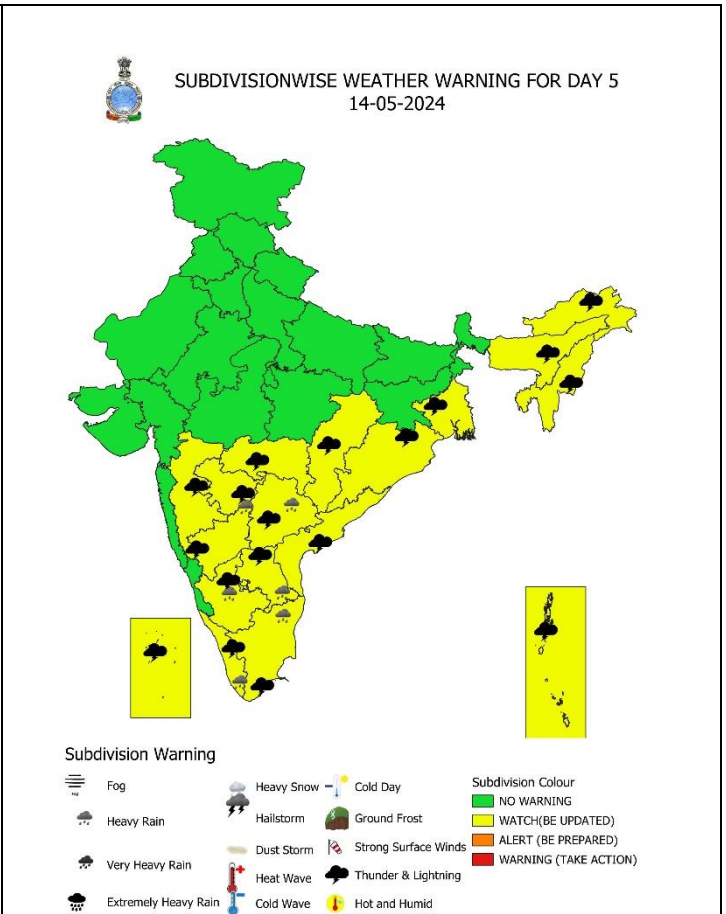
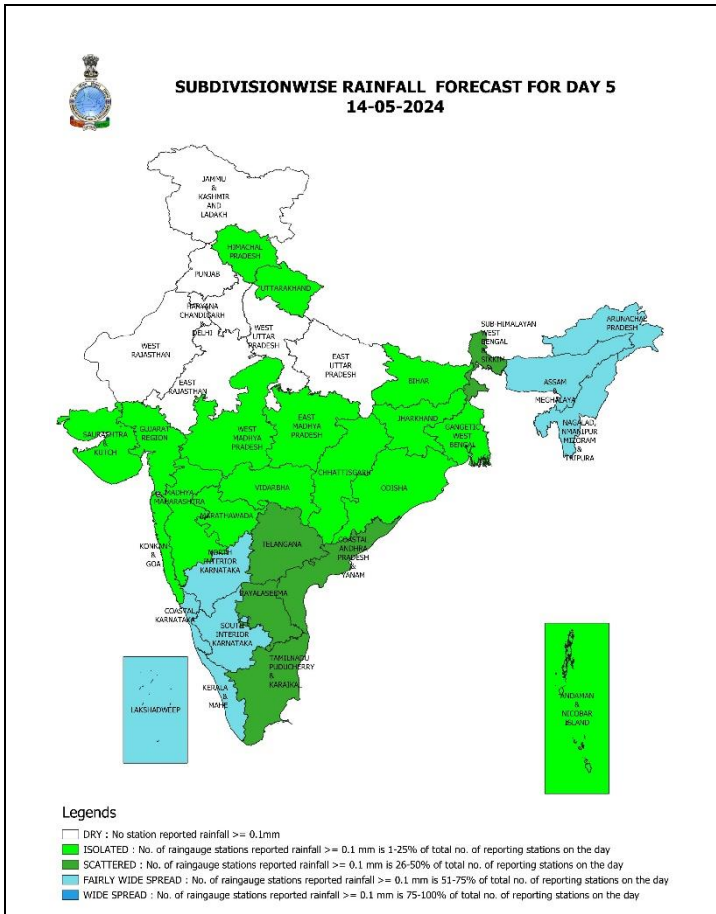
12 May (Day 3):

- ❖ **Thunderstorm accompanied with lightning, squally winds (speed reaching 50-60 kmph) & hailstorm** very likely at isolated places over Uttarakhand; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over Himachal Pradesh, East Rajasthan, Chhattisgarh, Odisha, Madhya Maharashtra, Kerala & Mahe, North Interior Karnataka and Rayalaseema; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Punjab, East Madhya Pradesh, Vidarbha, Andaman & Nicobar Islands, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana and South Interior Karnataka; **with lightning** at isolated places Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Arunachal Pradesh and Marathwada.
- ❖ **Dust Storm/Thunderstorm with gusty winds (speed 40-50 kmph)** very likely in isolated pockets over Uttar Pradesh; **with gusty winds (speed 30-40 kmph)** in isolated pockets over in isolated pockets over Haryana-Chandigarh-Delhi and West Rajasthan.
- ❖ **Heavy rainfall** very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and South Interior Karnataka.
- ❖ **Hot and humid weather** very likely to prevail over coastal areas of Gujarat.



13 May (Day 4):

- ❖ **Thunderstorm accompanied with lightning, squally winds (speed reaching 50-60 kmph gusting to 70 kmph) & hailstorm** likely at isolated places over Uttarakhand; **with lightning & gusty winds (speed reaching 40-50 kmph)** at isolated places over Chhattisgarh, Madhya Maharashtra, Kerala & Mahe, Rayalaseema, Telangana and North Interior Karnataka; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Himachal Pradesh, Vidarbha, Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal, Lakshadweep, Coastal Andhra Pradesh & Yanam and South Interior Karnataka; **with lightning** at isolated places Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Gangetic West Bengal, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada.
- ❖ **Dust Storm/Thunderstorm with gusty winds (speed 30-40 kmph)** likely in isolated pockets over Haryana-Chandigarh-Delhi and East Uttar Pradesh; **Dust Storm/Thunderstorm** in isolated pockets over West Uttar Pradesh.
- ❖ **Heavy rainfall** likely at isolated places over Kerala & Mahe, Rayalaseema, Telangana, North & South Interior Karnataka.

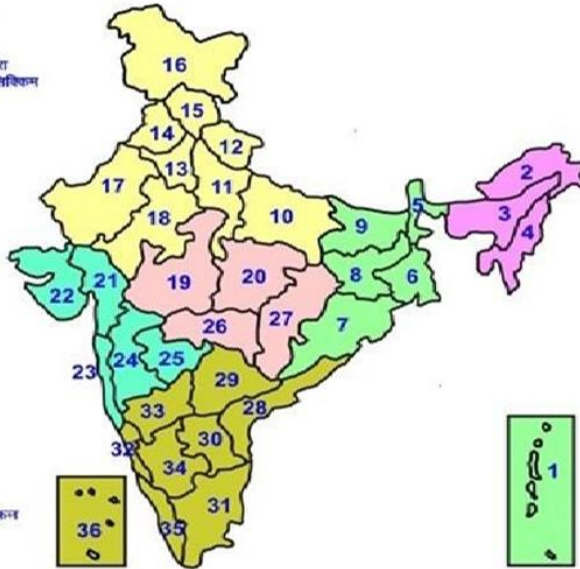


14 May (Day 5):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Chhattisgarh, Madhya Maharashtra, Kerala & Mahe, Rayalaseema, Telangana and North Interior Karnataka; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Vidarbha, Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal, Lakshadweep, Coastal Andhra Pradesh & Yanam and South Interior Karnataka; **with lightning** at isolated places Gangetic West Bengal, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada.
- ❖ **Heavy rainfall** likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Rayalaseema, Telangana and Interior Karnataka.

LEGENDS

- 1 अंडमान और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मिजोरम 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, 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
- 22 सौराष्ट्र
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 तमिलनाडु, पुदुचेरी एवं कराईकल
- 31 उत्तरीय कर्नाटक
- 32 दक्षिणी कर्नाटक
- 33 उत्तरीय कर्नाटक
- 34 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. Tamilnada, 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

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: 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°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 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)