

Thursday, April 25, 2024
Time of Issue: 0800 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 in lower tropospheric levels. Under its influence:
 - ✓ Fairly widespread to widespread light to moderate rainfall/snowfall accompanied with isolated **thunderstorm & lightning & gusty winds (30-40 kmph)** very likely over Arunachal Pradesh, and isolated to scattered rainfall over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 25th -29th April, 2024.
 - ✓ Isolated light to moderate rainfall accompanied with isolated **thunderstorm & lightning & gusty winds (30-40 kmph)** very likely over Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim during 25th -26th April, 2024.
 - ✓ **Isolated heavy rainfall** very likely over Arunachal Pradesh on 27th & 28th; over Assam & Meghalaya on 28th April, 2024.
- ❖ A Western Disturbance as a cyclonic circulation lies over east Iran & neighbourhood in middle & upper tropospheric levels. A cyclonic circulation lies over northwest Uttar Pradesh & neighbourhood in lower tropospheric levels. Under their influence:
 - ✓ Scattered to fairly widespread light to moderate rainfall/snowfall accompanied with **thunderstorm, lightning** very likely over the Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; Himachal Pradesh, Uttarakhand during 26th-28th April, 2024 with possibility of **hailstorm over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 26th, Himachal Pradesh during 26th -28th April, 2024.**
 - ✓ Isolated **Heavy rainfall** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 27th & 28th April, 2024.
 - ✓ Isolated rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Punjab and Haryana-Chandigarh-Delhi on 26 & 27th; over Rajasthan on 26th; over West Uttar Pradesh on 26th; over East Uttar Pradesh on 27th April, 2024.
 - ✓ Isolated **Hailstorm** very likely over Punjab on 26th & 27th; over Haryana on 27th April, 2024.
- ❖ A cyclonic circulation lies over Madhya Maharashtra and another over Telangana in lower tropospheric levels. A trough/wind discontinuity runs from cyclonic circulation over Telangana to south Tamil Nadu in lower tropospheric levels Under its influence:
 - ✓ Isolated light rainfall accompanied with **thunderstorm, lightning & gusty winds (30-50 kmph)** very likely over Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh during 25th - 27th April, 2024.
 - ✓ Isolated to scattered light to moderate rainfall accompanied with isolated **thunderstorm & lightning** very likely over Kerala & Mahe on 25th April, 2024.

Maximum temperature observation and forecast for next 5 days:

- ❖ Yesterday, maximum temperatures were in the range of 42-44°C over many parts of Rayalaseema; in some parts of Coastal Andhra Pradesh & Yanam, Telangana, Odisha and Gangetic West Bengal and in isolated pockets over Tamil Nadu, Puducherry & Karaikal and Jharkhand. These were in the range of 40-42°C over many parts of Bihar, East Uttar Pradesh; some parts of Gujarat; in isolated pockets over interior Karnataka, interior Maharashtra, West Rajasthan, Madhya Pradesh and West Uttar Pradesh. These were above normal by 3-5°C over many parts of West Bengal & Sikkim; at isolated pockets over Bihar, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Arunachal Pradesh.

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

- ❖ **Heat Wave to severe heat wave conditions** very likely to prevail in some places over coastal Odisha, Gangetic West Bengal & in isolated pockets over Sub-Himalayan West Bengal & Sikkim, Interior Karnataka during next 5 days. **Heat wave conditions** in isolated pockets over Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, during next 5 days; Coastal Karnataka on 25th & 26th, Tamil Nadu on 25th; East Uttar Pradesh during 25th - 28th and West Uttar Pradesh during 26th-28th; Konkan on 27th & 28th April.
- ❖ **Hot and humid weather** very likely to prevail over Tripura, Kerala & Mahe, Coastal Karnataka, Tamil Nadu during 24th - 28th; Assam & Meghalaya during 25th - 27th; Konkan & Goa on 25th & 26th; south Coastal Andhra Pradesh & Yanam on 25th April, 2024.

Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Arunachal Pradesh, Assam & Meghalaya, Manipur, East Madhya Pradesh, Odisha, Marathwada, Tamil Nadu and Lakshadweep.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Odisha: Puri-1; Tamil Nadu: Valparai-1.**
- ❖ Yesterday, **Heat Wave to severe heat wave conditions prevailed** in isolated pockets over Gangetic West Bengal and **heat wave conditions** in isolated pockets over Sub-Himalayan West Bengal, Bihar, Odisha and Tamil Nadu. **Heat wave conditions are prevailing over Odisha since 15th and over Gangetic West Bengal since 17th April.**
- ❖ **Minimum Temperature Departures (as on 24-04-2024):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places Bihar, West Bengal & Sikkim; **above normal (1.6°C to 3.0°C)** at many places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Madhya Maharashtra; at a few places over Arunachal Pradesh, Odisha, Kerala & Mahe; at isolated places over East Uttar Pradesh and West Rajasthan. These were **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over **Himachal Pradesh, Haryana-Chandigarh and East Madhya Pradesh; below normal (-1.6°C to -3.0°C)** at many places over Vidarbha; at a few places over Punjab, Uttarakhand and West Uttar Pradesh; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, north Rajasthan, Chhattisgarh and Tamil Nadu, Puducherry & Karaikal and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature** of **16.6°C** was reported at **Karnal (Haryana)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 24-04-2024):** Maximum temperatures were **markedly above normal(5.1°C or more)** at many places over Sub-Himalayan West Bengal & Sikkim; at isolated places over Bihar, Gangetic West Bengal and Assam & Meghalaya; **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Nagaland, Manipur, Mizoram & Tripura, Arunachal Pradesh and Jharkhand; **above normal (1.6°C to 3.0°C)** at many places over Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe; at isolated places over East Uttar Pradesh, Odisha and Telangana. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Vidarbha and East Madhya Pradesh and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature** of **43.7°C** was reported at **Anantapur (Rayalaseema)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

- ❖ The **Western Disturbance** as a cyclonic circulation in middle tropospheric westerlies over Iran now lies over east Iran & neighbourhood between 3.1 & 7.6 km above mean sea level.
- ❖ The cyclonic circulation over northwest Uttar Pradesh & neighbourhood at 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Assam & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over Madhya Maharashtra & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over Telangana & adjoining Coastal Andhra Pradesh at 0.9 km above mean sea level persists.
- ❖ The trough/wind discontinuity from above cyclonic circulation over Telangana & adjoining Coastal Andhra Pradesh to south Tamil Nadu at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over North Interior Karnataka & neighbourhood at 1.5 km above mean sea level persists.
- ❖ The Western Disturbance as a cyclonic circulation over Jammu division & neighbourhood at 5.8 km above mean sea level has moved away.

Weather Forecast for next 7 days (Upto 0830 hours IST of 02nd May, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ No significant change in maximum temperatures very likely over Maharashtra during next India during next 24 hours and rise gradually by 3-4°C thereafter.
- ❖ Rise by 2-3°C in maximum temperatures very likely over central & East 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 02nd-04th May, 2024)

- ❖ Isolated to scattered light/moderate rainfall/snowfall likely over Northeast and Northwest India.
- ❖ Isolated light rainfall likely over plains of Central India, South Interior Karnataka and Kerala & Mahe.
- ❖ Dry weather likely to prevail over rest parts of the country.

Table-1

7 Days Rainfall Forecast								
S. No.	Subdivision	25-Apr	26-Apr	27-Apr	28-Apr	29-Apr	30-Apr	01-May
		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	FWS	FWS	FWS	WS	WS	WS	WS
3	ASSAM & MEGHALAYA	SCT	SCT	SCT	FWS	FWS	FWS	FWS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	ISOL	ISOL	SCT	SCT	FWS	FWS	FWS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	DRY	DRY	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	ISOL	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	ISOL	ISOL	DRY	DRY	DRY	DRY
12	UTTARAKHAND	DRY	ISOL	SCT	ISOL	ISOL	DRY	DRY
13	HARYANA CHANDIGARH & DELHI	DRY	ISOL	ISOL	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	SCT	SCT	ISOL	DRY	ISOL	ISOL
15	HIMACHAL PRADESH	DRY	FWS	FWS	FWS	ISOL	ISOL	ISOL
16	JAMMU & KASHMIR AND LADAKH	ISOL	FWS	WS	WS	SCT	ISOL	ISOL
17	WEST RAJASTHAN	DRY	ISOL	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
20	EAST MADHYA PRADESH	ISOL	ISOL	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	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
25	MARATHAWADA	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
26	VIDARBHA	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
27	CHHATTISGARH	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
29	TELANGANA	ISOL	DRY	DRY	ISOL	ISOL	DRY	DRY
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
32	COASTAL KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
35	KERALA & MAHE	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
36	LAKSHADWEEP	DRY	DRY	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

Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

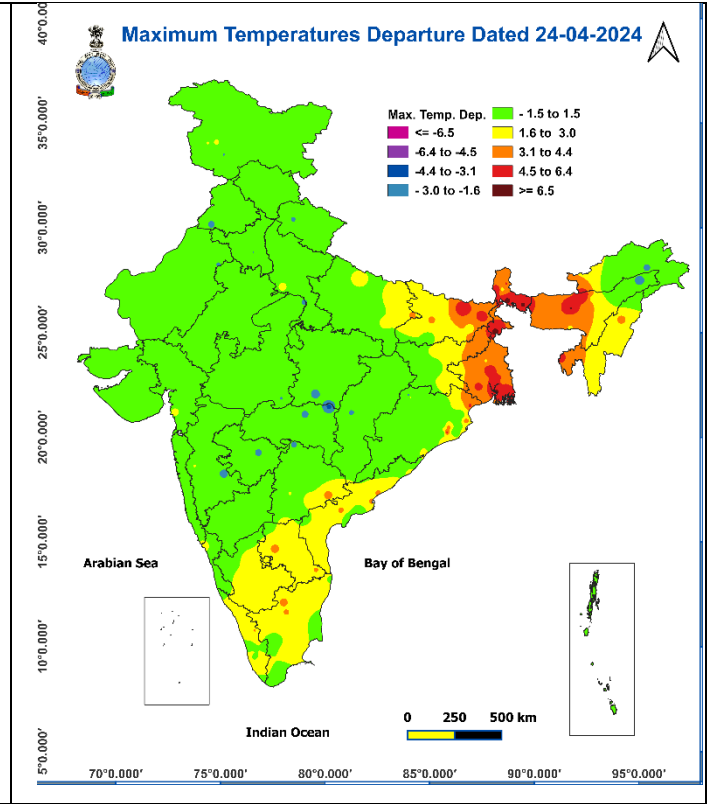
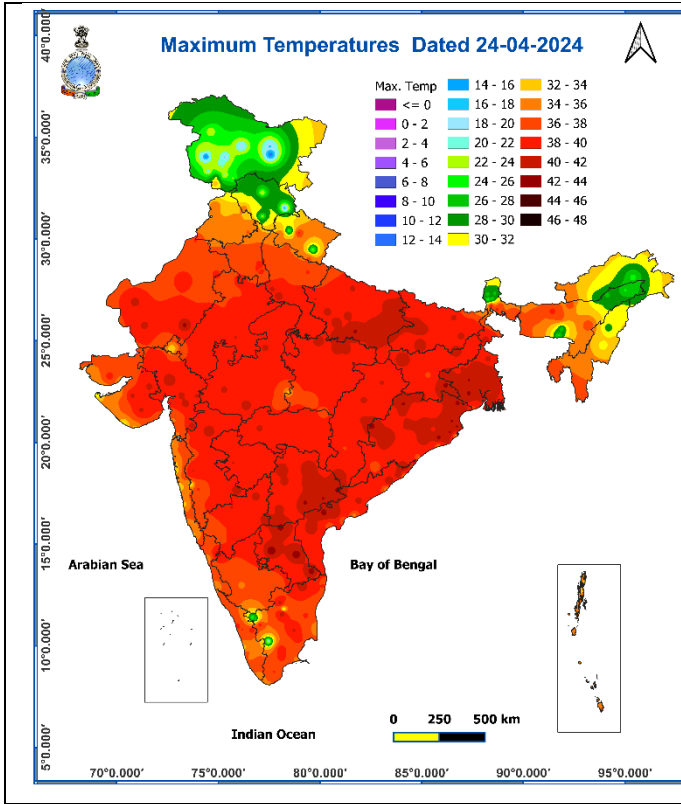


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

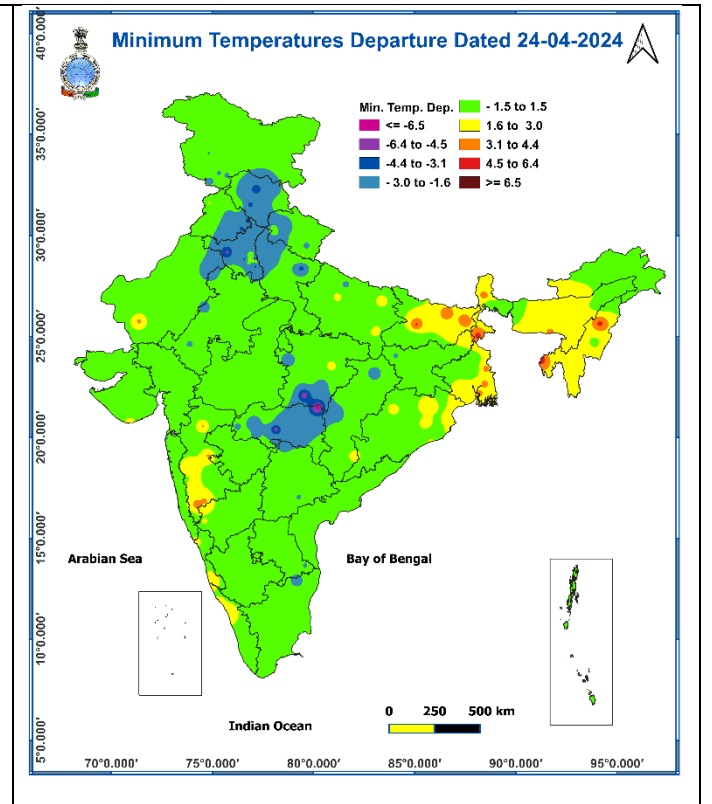
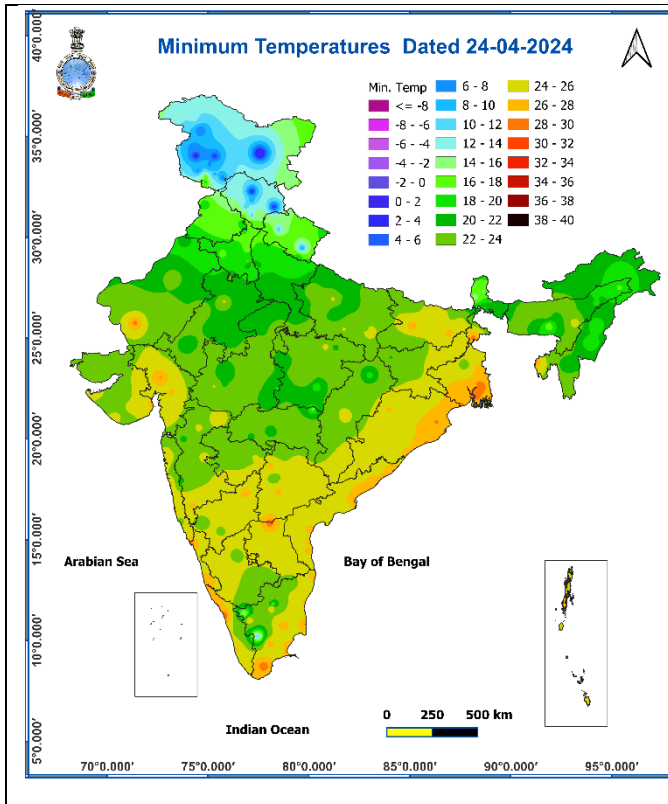
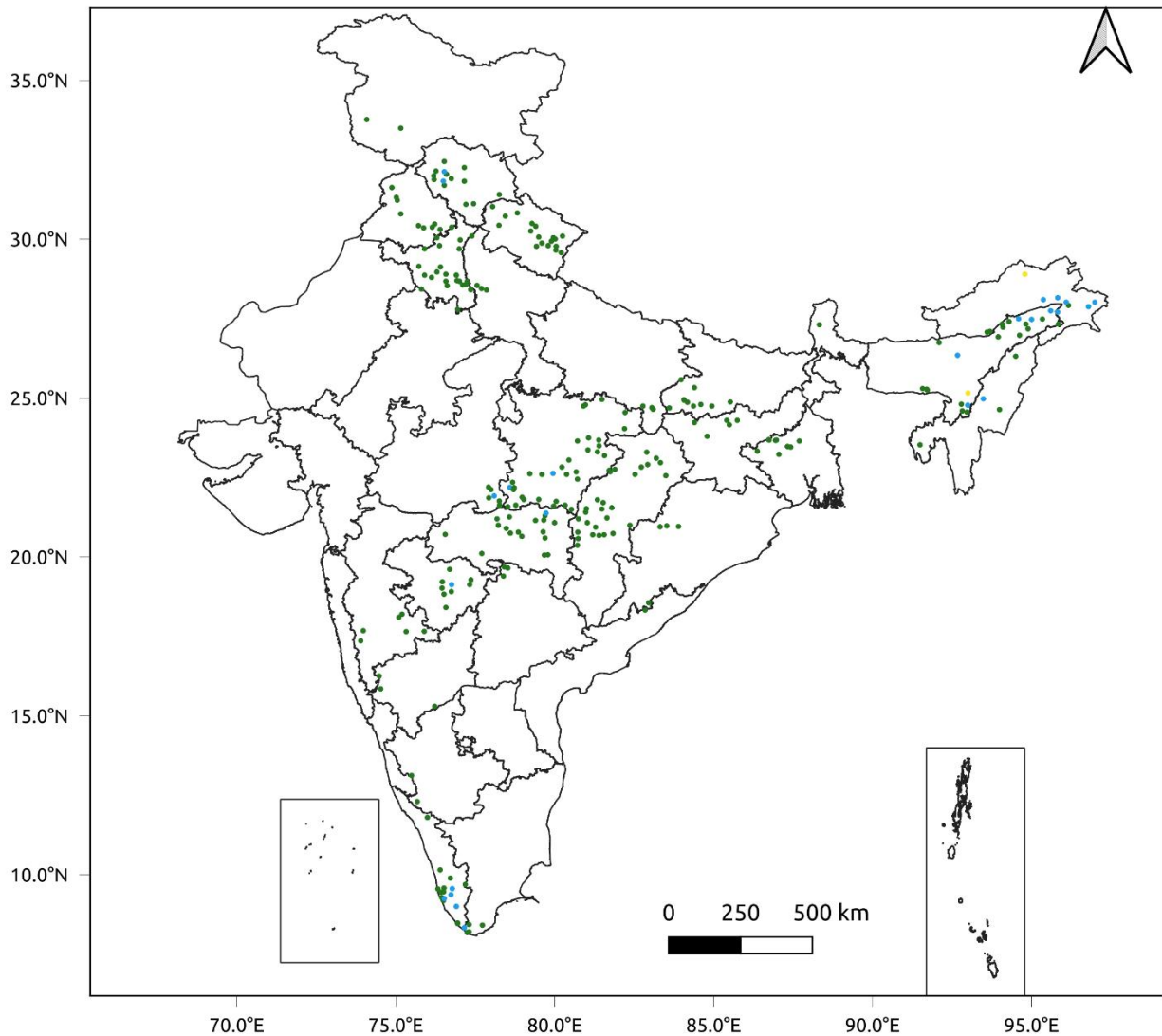


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

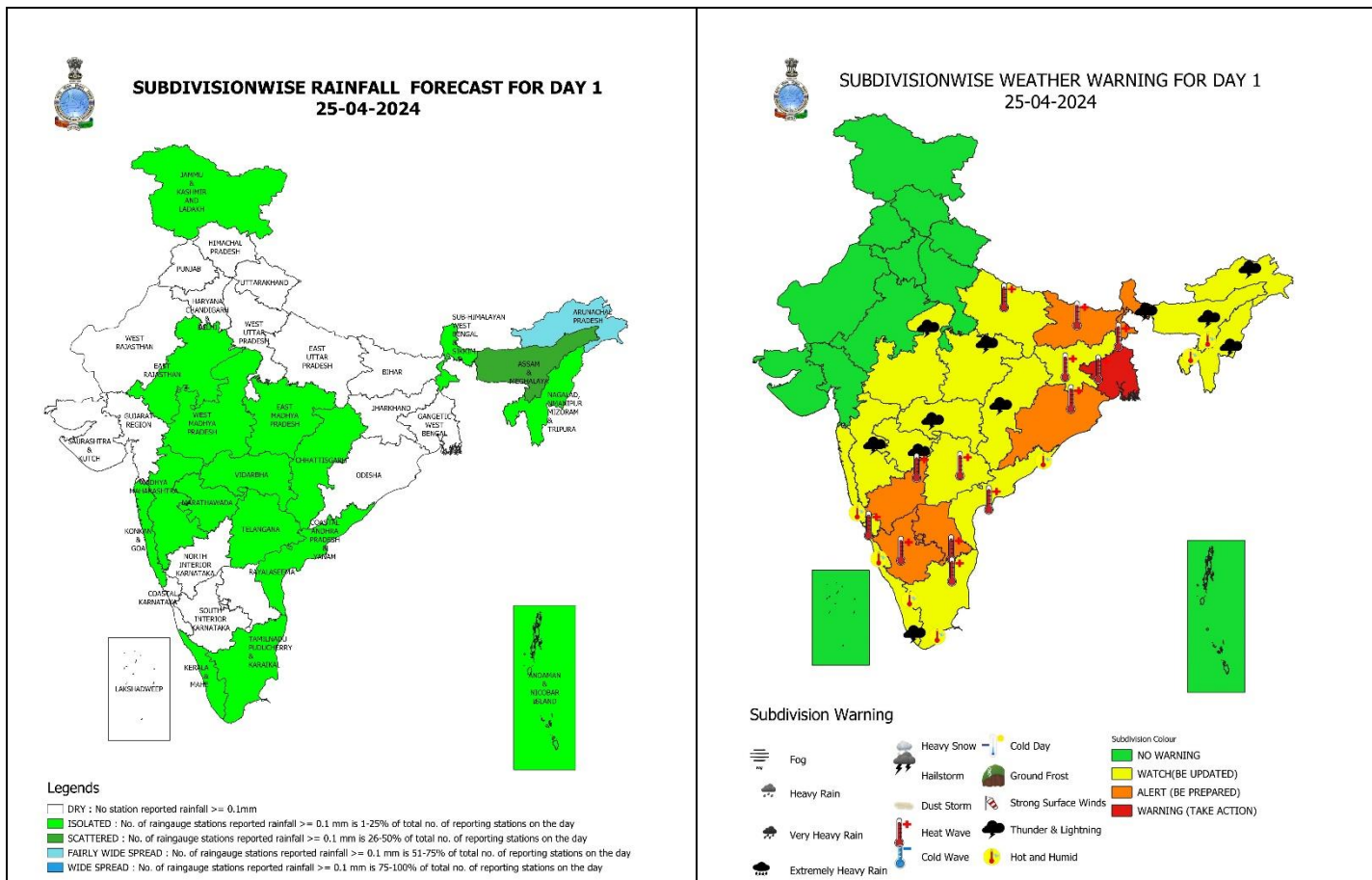


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 23-4-2024 to 0830 IST of 24-4-2024



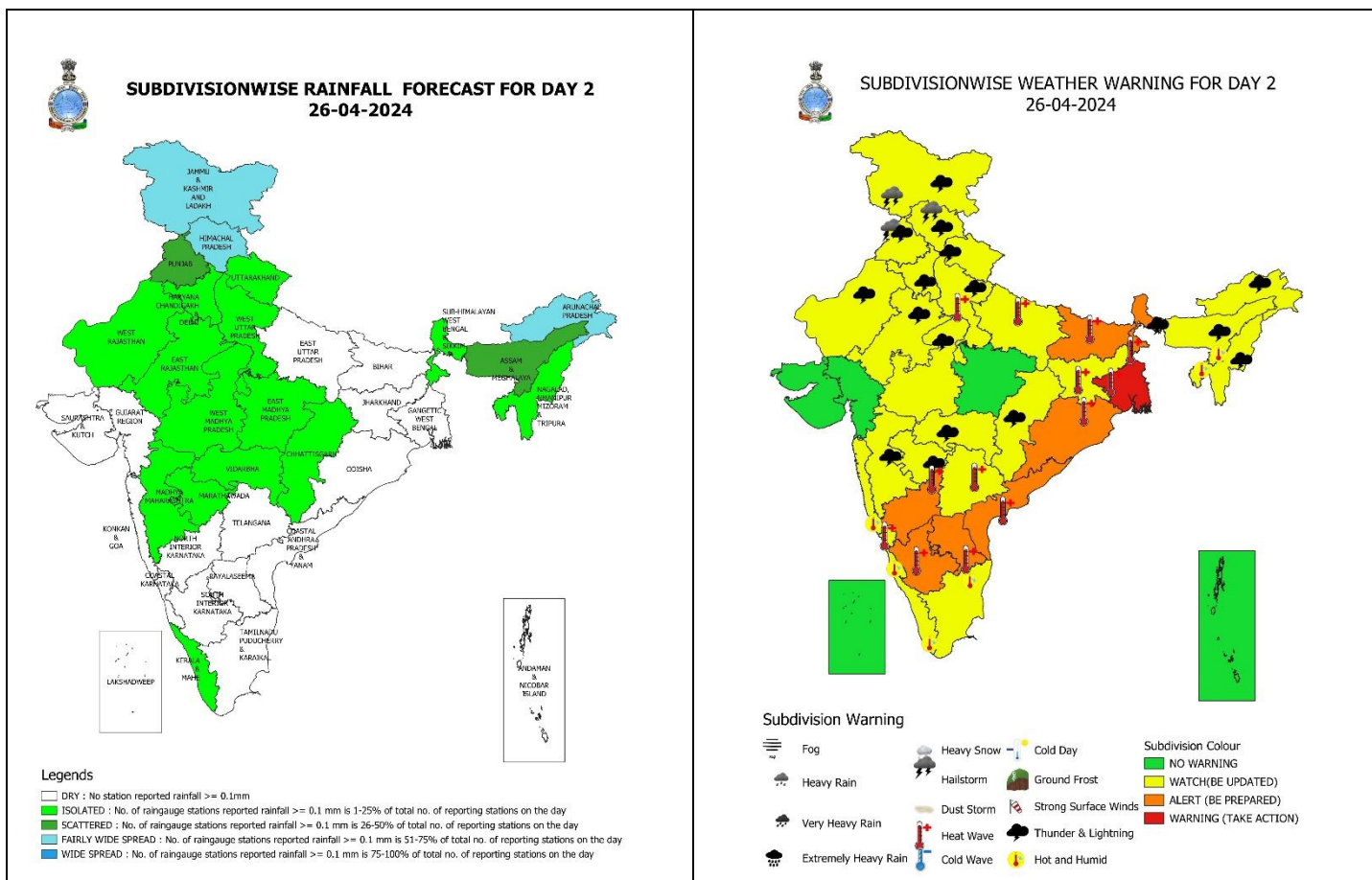
Legends

- 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 (≥ 204.5 mm)



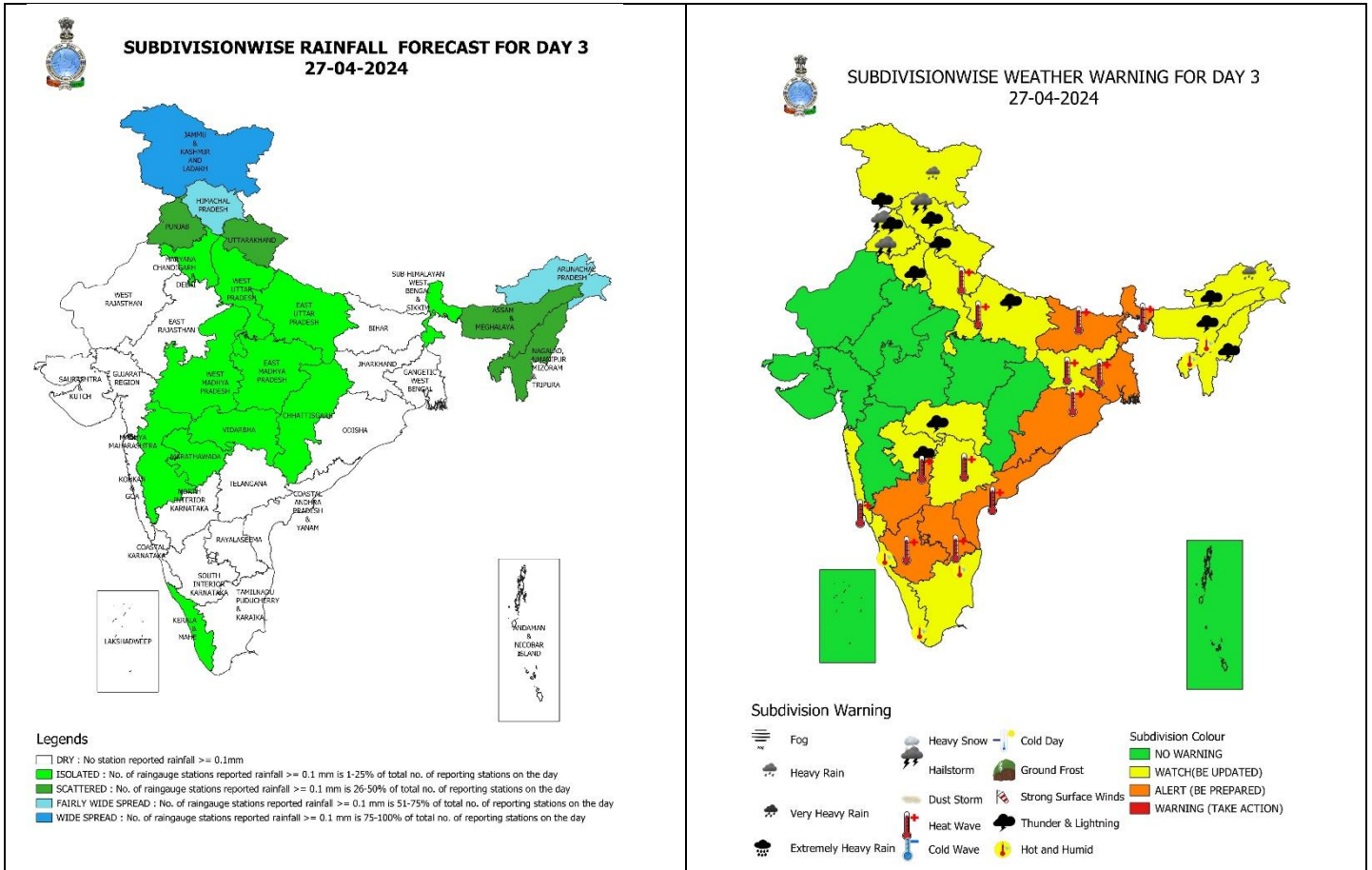
25 April (Day 1):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Madhya Pradesh, Vidarbha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **with lightning** at isolated places over Arunachal Pradesh, Madhya Maharashtra, Marathwada, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Kerala & Mahe.
- ❖ **Hot and humid weather** very likely to prevail over Assam & Meghalaya, Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail in many places over Gangetic West Bengal; in some parts over coastal Odisha and in isolated pockets over Sub-Himalayan West Bengal and Interior Karnataka; **heat wave conditions** in isolated pockets over Bihar, Jharkhand, Odisha, Tamil Nadu, Puducherry & Karaikal, Rayalaseema, Telangana, coastal Karnataka, Coastal Andhra Pradesh & Yanam.



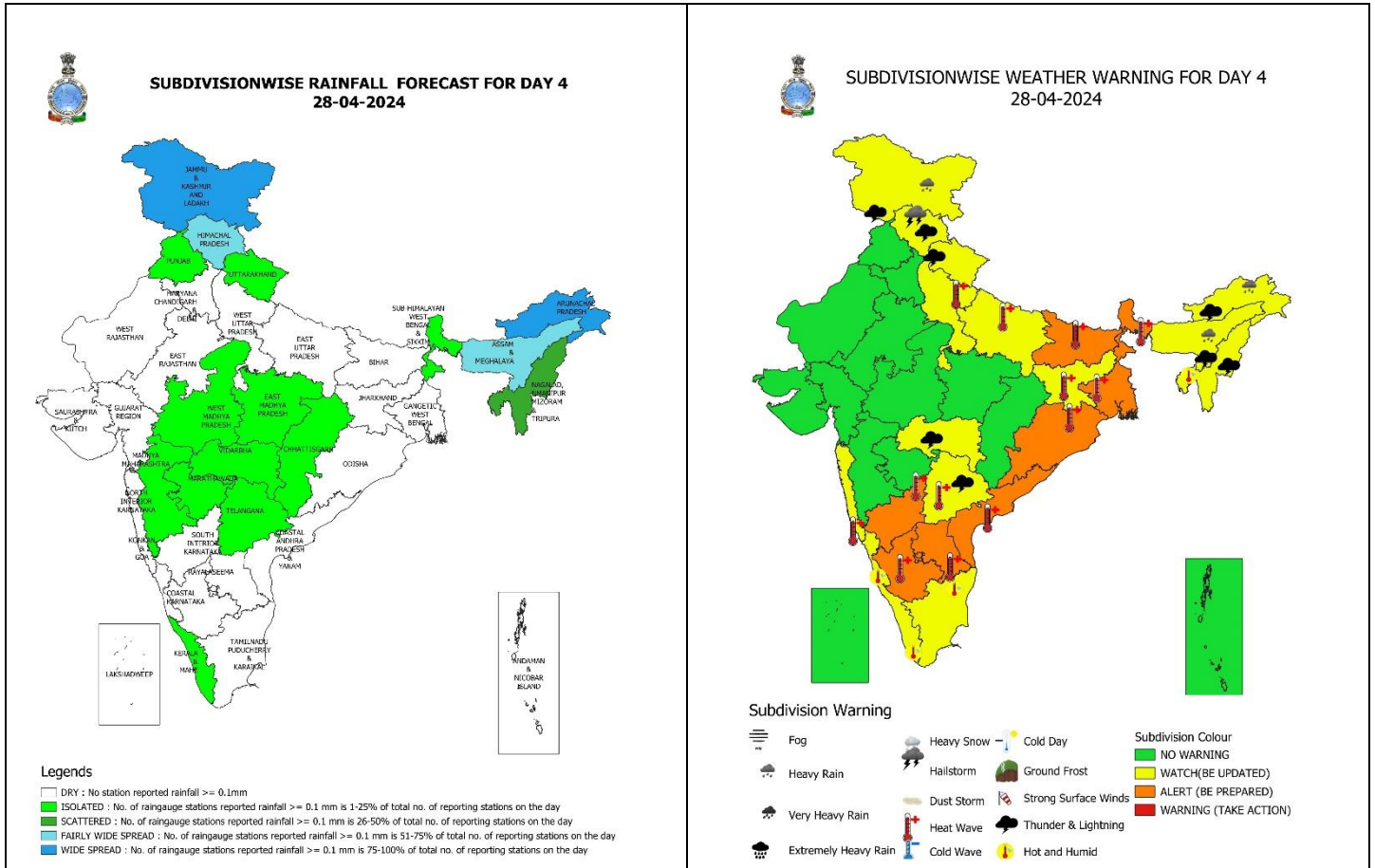
26 April (Day 2):

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



27 April (Day 3):

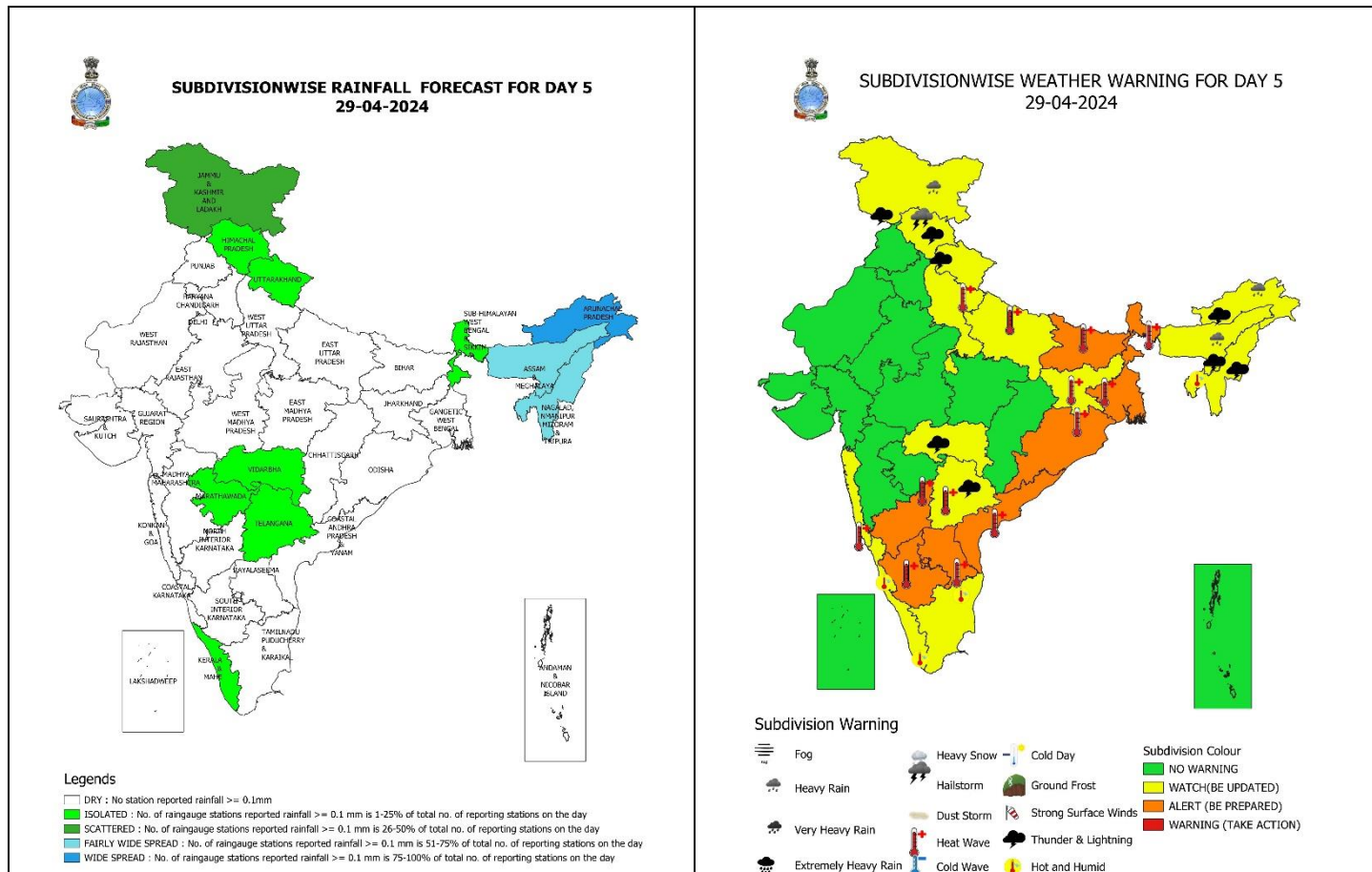
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph) and hail** likely at isolated places over Haryana-Chandigarh-Delhi and Punjab; **with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **with lightning & gusty winds (speed reaching 30-40 kmph)** likely at isolated places over Uttarakhand, East Uttar Pradesh, Vidarbha; **with lightning and hailstorm** at isolated places over Himachal Pradesh; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heavy rainfall** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Arunachal Pradesh.
- ❖ **Hot and humid weather** very likely to prevail over Assam & Meghalaya, Tripura, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail in many places over Gangetic West Bengal; in some parts over coastal Odisha and in isolated pockets over Sub-Himalayan West Bengal and Interior Karnataka; **heat wave conditions** in isolated pockets over Bihar, Jharkhand, Odisha, Tamil Nadu, Puducherry & Karaikal, Rayalaseema, Telangana, Coastal Andhra Pradesh & Yanam.



28 April (Day 4):

- ❖ **Thunderstorm accompanied with lightning and hail** likely at isolated places over Himachal Pradesh; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Punjab, Vidarbha and Telangana; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heavy rainfall** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ **Hot and humid weather** very likely to prevail over Tripura, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail in many places over Gangetic West Bengal; in some parts over coastal Odisha and in isolated pockets over Sub-Himalayan West Bengal and Interior Karnataka; **heat wave conditions** in isolated pockets over Bihar, Jharkhand, Odisha, Tamil Nadu, Puducherry & Karaikal, Rayalaseema, Telangana, Coastal Andhra Pradesh & Yanam.

* 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)

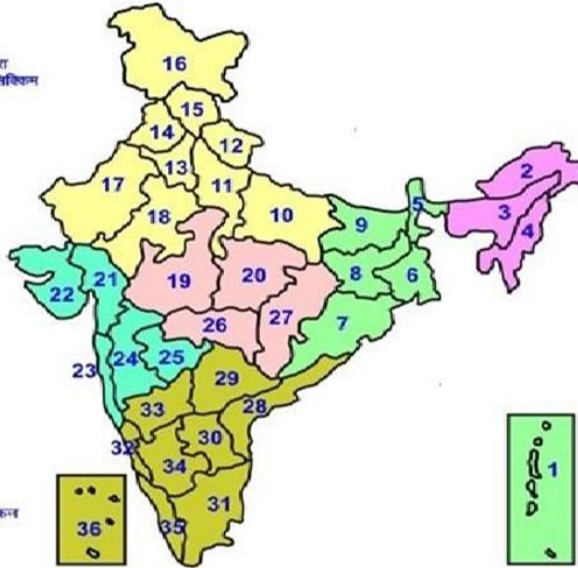


29 April (Day 5):

- ❖ **Thunderstorm accompanied with lightning and hail** likely at isolated places over Himachal Pradesh; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Punjab, Vidarbha and Telangana; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heavy rainfall** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ **Hot and humid weather** very likely to prevail over Tripura, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail in many places over Gangetic West Bengal; in some parts over coastal Odisha and in isolated pockets over Sub-Himalayan West Bengal and Interior Karnataka; **heat wave conditions** in isolated pockets over Bihar, Jharkhand, Odisha, Tamil Nadu, Puducherry & Karaikal, Rayalaseema, Telangana, Coastal Andhra Pradesh & Yanam.

LEGENDS

- 1 अंडमन और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मीज़ोरम 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 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 उत्तरीसमूह
- 28 तटीय आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 दख्खिणी
- 31 पश्चिमनाडु, पुदुचेरी एवंम कराईकल
- 32 उत्तरी 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. 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

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 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

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