

Thursday, April 4, 2024
Time of Issue: 0800 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

- ❖ A Western Disturbance as a trough in middle & upper tropospheric westerlies runs roughly along long. 65°E to the north of lat. 30°N. A cyclonic circulation lies over West Rajasthan and adjoining Pakistan & neighbourhood in lower tropospheric level. Another fresh Western Disturbance is likely to affect Western Himalayan Region from 05th April, 2024. Under their influence; isolated to moderate rainfall/snowfall very likely over Western Himalayan Region during next 2 days.
- ❖ The cyclonic circulation over north Bangladesh persists and another cyclonic circulation lies over east Assam & neighbourhood in lower tropospheric levels. Under the influence of these systems:
 - ✓ Fairly widespread to widespread light/moderate rainfall/snowfall with isolated **thunderstorms & lightning very likely** over Arunachal Pradesh; scattered to fairly widespread light to moderate rainfall over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 04th-10th April, 2024.
 - ✓ **Isolated heavy rainfall/snowfall very likely over Arunachal Pradesh during 04th-07th with possibility of very heavy falls on 06th April, 2024.**
 - ✓ **Isolated heavy rainfall over Assam & Meghalaya on 04th & 05th April.**
 - ✓ Isolated to scattered light/moderate rainfall very likely over Sub-Himalayan West Bengal & Sikkim during next 7 days with isolated **thunderstorms & lightning** during 04th-08th April, 2024.
 - ✓ Isolated to scattered light/moderate rainfall with isolated **thunderstorms & lightning** very likely over Gangetic West Bengal, Odisha, Jharkhand during 06th-10th and over Bihar on 07th & 08th April, 2024.
- ❖ The trough/wind discontinuity continues to run from south Tamil Nadu to east Vidarbha in lower tropospheric levels. Under its influence; isolated light rainfall likely over Madhya Maharashtra during 05th-10th; Konkan & Goa, Marathwada, Madhya Pradesh, Vidarbha, Chhattisgarh, Karnataka during 06th-10th and Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema during 07th-09th April, 2024.

Maximum temperature observation and forecast for next 5 days:

- ❖ Yesterday, Maximum temperatures were in the range of 40-42°C over many parts of Vidarbha, some parts of south Chhattisgarh, Marathwada, Telangana & adjoining north interior Karnataka, Rayalaseema and at isolated pockets over southeast Uttar Pradesh, North Interior Odisha, Madhya Maharashtra, coastal Andhra Pradesh & south interior Tamil Nadu. Maximum temperatures departures are above normal by 3-4°C at isolated pockets over Madhya Pradesh, Vidarbha & Telangana.
- ❖ Yesterday, the maximum temperature exceeded 98th percentile over some parts of Vidarbha and at isolated pockets over East Rajasthan, southwest Rajasthan, northwest Madhya Pradesh, East Madhya Pradesh, Marathwada, Odisha, Interior Karnataka, Telangana & Rayalaseema. The maximum temperature likely to exceed 98th percentile at isolated pockets over Karnataka & Rayalaseema during 04th-07th; south Kerala during 05th-07th and north interior Tamil Nadu on 06th & 07th April, 2024.

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

- ❖ **Heat wave conditions** very likely in isolated pockets over North Interior Karnataka on 04th & 05th; Odisha, Gangetic West Bengal during 04th-08th; Jharkhand, Rayalaseema and Coastal Andhra Pradesh & Yanam during 04th-06th April, 2024.
- ❖ **Warm night conditions** very likely to prevail in isolated pockets over Odisha and North Interior Karnataka during 04th- 06th April, 2024.
- ❖ **Hot and humid weather** very likely to prevail over Kerala & Mahe, Tamil Nadu and Puducherry & Karaikal during 04th-08th and Coastal Karnataka on 04th & 05th April, 2024.

Main Weather Observations:

- ❖ **Rainfall/snowfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): at a few places over Arunachal Pradesh; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh & Uttarakhand.
- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): at a few places over Assam & Meghalaya; at isolated places over Nagaland, Manipur, Mizoram, Tamil Nadu and Kerala.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **NIL**.
- ❖ **Minimum Temperature Departures (as on 03-04-2024):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at most places over Tripura; at isolated places over Sub-Himalayan West Bengal & Sikkim; **above normal (1.6°C to 3.0°C)** at most places over Arunachal Pradesh, Nagaland, Manipur & Mizoram, Assam & Meghalaya, Marathwada, Madhya Maharashtra, Konkan & Goa and North Interior Karnataka; at many places over Rayalaseema and Coastal Karnataka; at a few places over Bihar, Telangana and South Interior Karnataka; at isolated places over Gangetic West Bengal, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Vidarbha, Gujarat Region, Coastal Andhra Pradesh & Yanam, Odisha and Chhattisgarh. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Haryana-Chandigarh-Delhi and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 13.9°C** was reported at **Karnal (Haryana)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 03-04-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Madhya Pradesh, Vidarbha, Telangana; **above normal (1.6°C to 3.0°C)** at most places over Rayalaseema, Interior Karnataka & Marathwada, West Bengal & Sikkim; at many places over Bihar, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, Haryana-Chandigarh-Delhi; at a few places over Uttar Pradesh, Himachal Pradesh, East Rajasthan, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, Coastal Andhra Pradesh, Yanam & Chhattisgarh; at isolated places over Punjab, Uttarakhand, Odisha, Konkan & Goa & Coastal Karnataka. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Gujarat state and Arunachal Pradesh and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 43.0°C** was reported at **Nandyal (Rayalaseema)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Western Disturbance as a trough in middle & upper tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along long. 65°E to the north of lat. 30°N persists.
- ❖ The cyclonic circulation over north Bangladesh & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The trough/wind discontinuity from south Tamil Nadu to east Vidarbha across interior Karnataka & Marathwada at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over West Rajasthan and adjoining Pakistan & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over Odisha & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over East Assam & neighbourhood at 0.9 km above mean sea level persists.
- ❖ A fresh Western Disturbance is likely to affect Western Himalayan Region from 05th April, 2024.

Weather Forecast for next 7 days (Upto 0830 hours IST of 11th April, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ Gradual rise in maximum temperatures by 2-3°C very likely over many parts of East India during next 2 days and no significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over many parts of south peninsular India during next 5 days except parts of Telangana, Karnataka, Rayalaseema, Coastal Andhra Pradesh & Yanam where temperatures are likely to rise by 2-3°C during next 5 days.
- ❖ No significant change in maximum temperatures over rest parts of the country during next 5 days.

Weather Outlook for subsequent 3 days (During 11th-13th April, 2024)

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

Table-1

S. No.	Subdivision	04-Apr	05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	DRY	DRY	DRY	DRY	DRY	DRY	DRY
2	ARUNACHAL PRADESH	WS	WS	WS	WS	FWS	FWS	FWS
3	ASSAM & MEGHALAYA	FWS	FWS	FWS	FWS	SCT	SCT	SCT
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	SCT	SCT	SCT	SCT	SCT	SCT	SCT
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	ISOL	SCT	SCT	SCT	ISOL	ISOL	ISOL
6	GANGETIC WEST BENGAL	DRY	DRY	ISOL	SCT	ISOL	ISOL	ISOL
7	ODISHA	DRY	DRY	ISOL	SCT	SCT	ISOL	ISOL
8	JHARKHAND	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
9	BIHAR	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	ISOL	ISOL	DRY	DRY	DRY	DRY	ISOL
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	ISOL
16	JAMMU & KASHMIR AND LADAKH	ISOL	ISOL	DRY	DRY	DRY	ISOL	ISOL
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
20	EAST MADHYA PRADESH	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
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	DRY	ISOL	ISOL	ISOL	ISOL
24	MADHYA MAHARASHTRA	DRY	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
25	MARATHAWADA	DRY	DRY	ISOL	ISOL	ISOL	DRY	ISOL
26	VIDARBHA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
27	CHHATTISGARH	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
28	COASTAL ANDHRA PRADESH & YANAM	DRY	DRY	DRY	ISOL	ISOL	ISOL	DRY
29	TELANGANA	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
30	RAYALASEEMA	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	DRY	DRY	DRY	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
33	NORTH INTERIOR KARNATAKA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
35	KERALA & MAHE	ISOL	DRY	DRY	ISOL	ISOL	ISOL	ISOL
36	LAKSHADWEEP	SCT	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

* 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

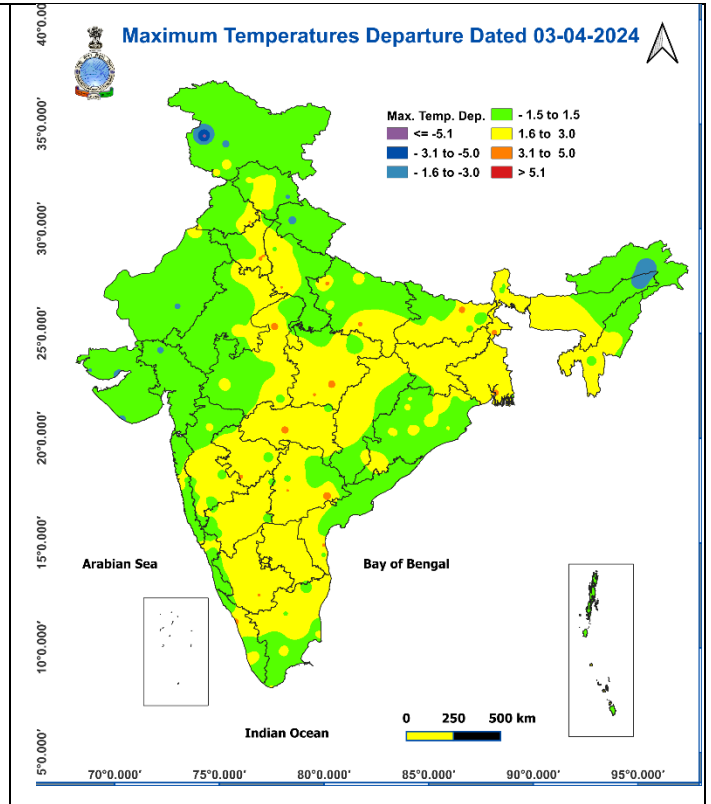
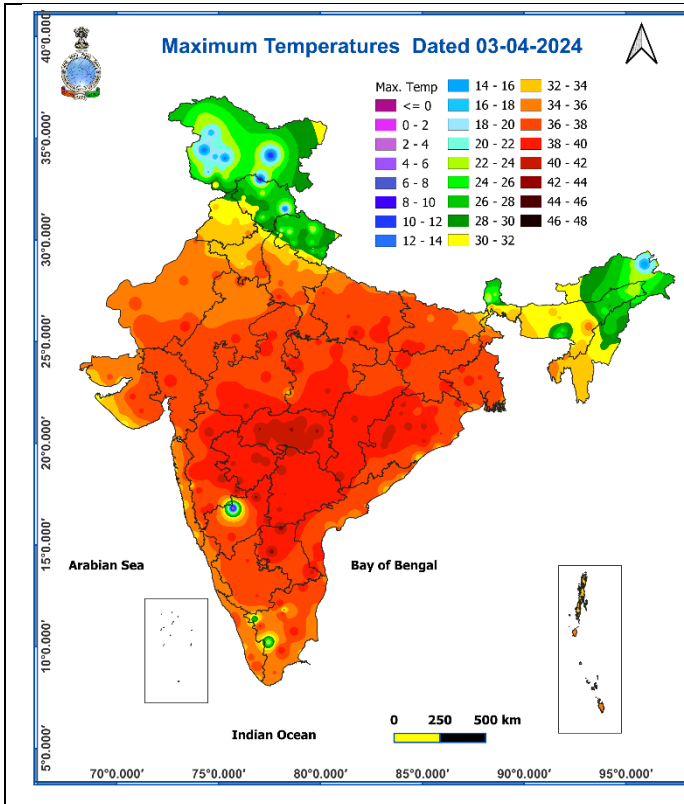


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

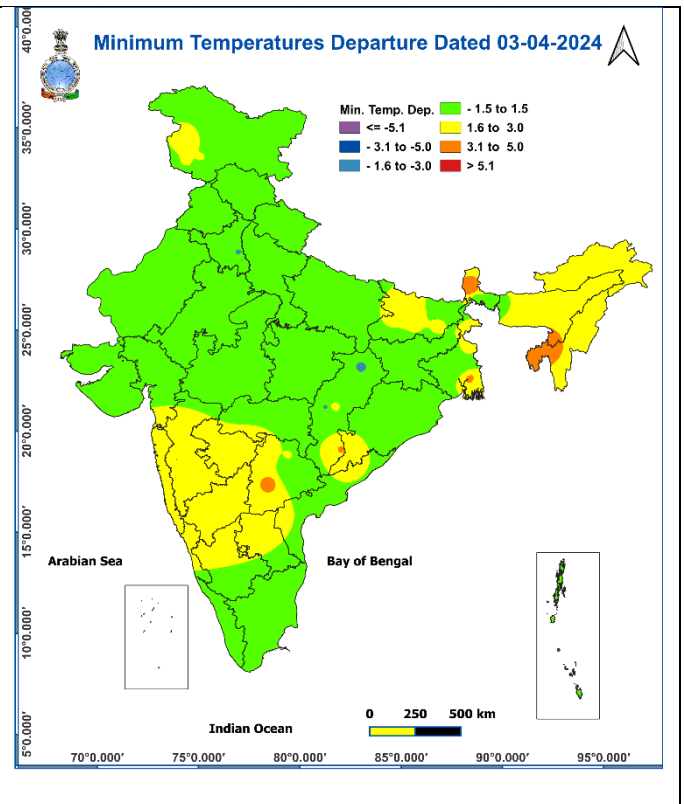
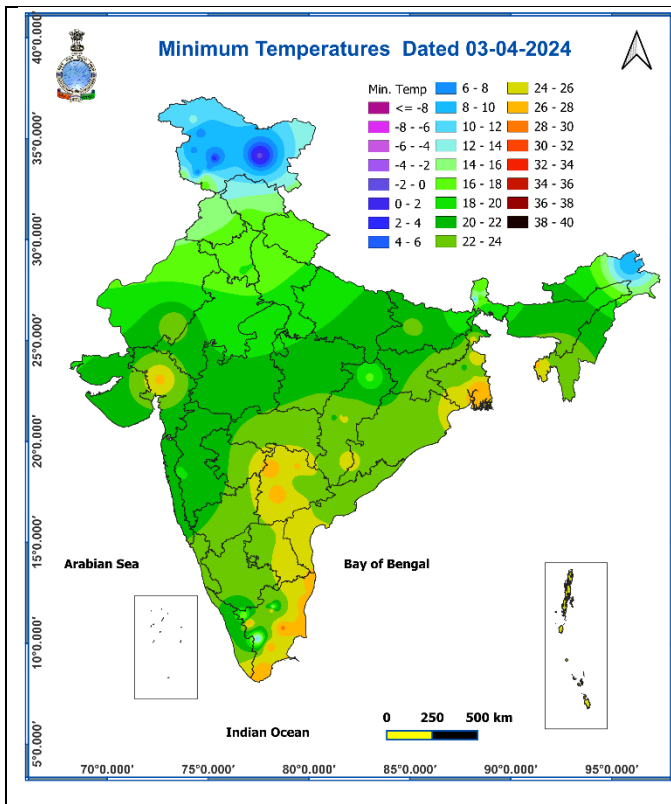
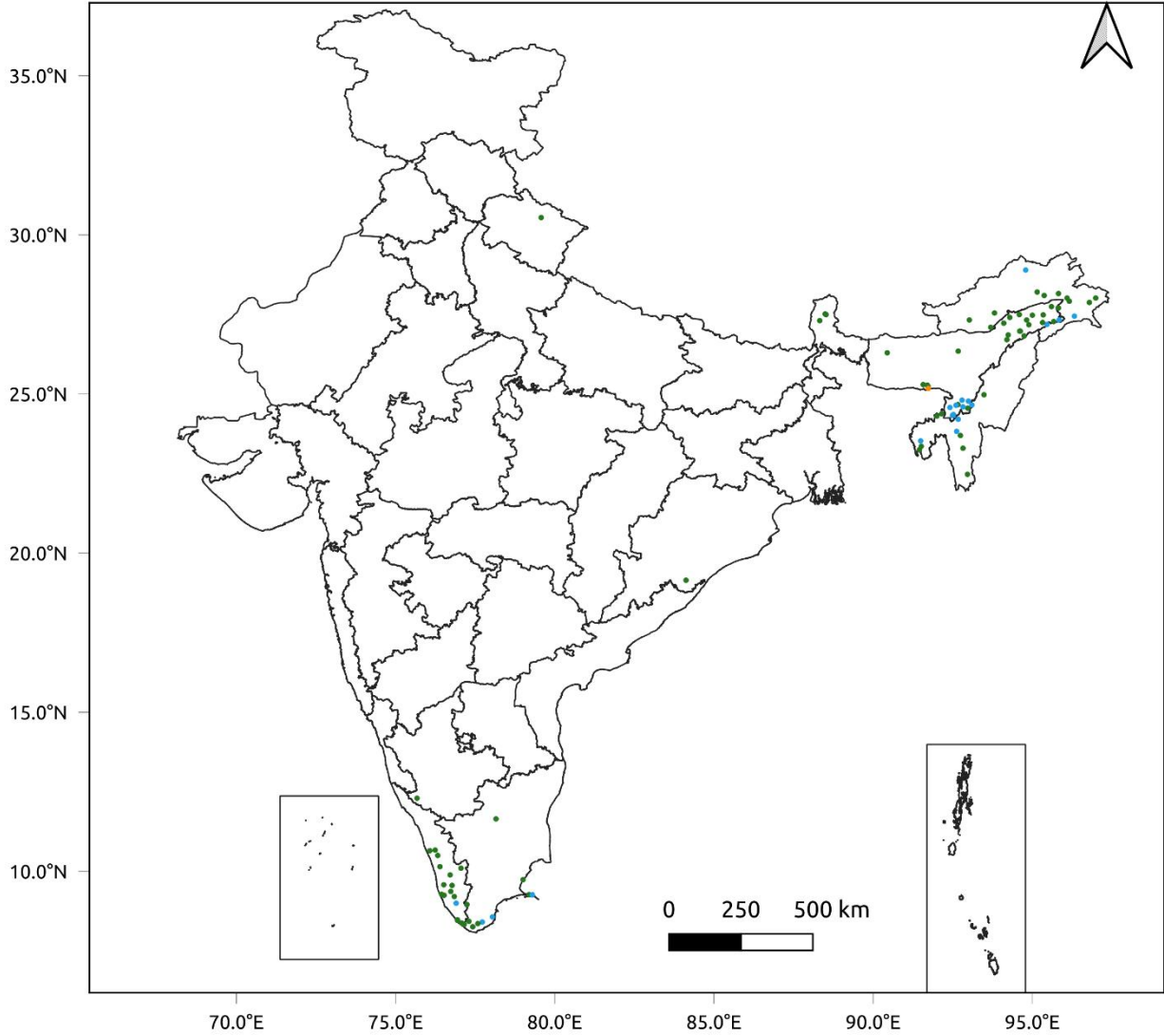


Fig. 5: Accumulated Rainfall (mm) during past 24 hours

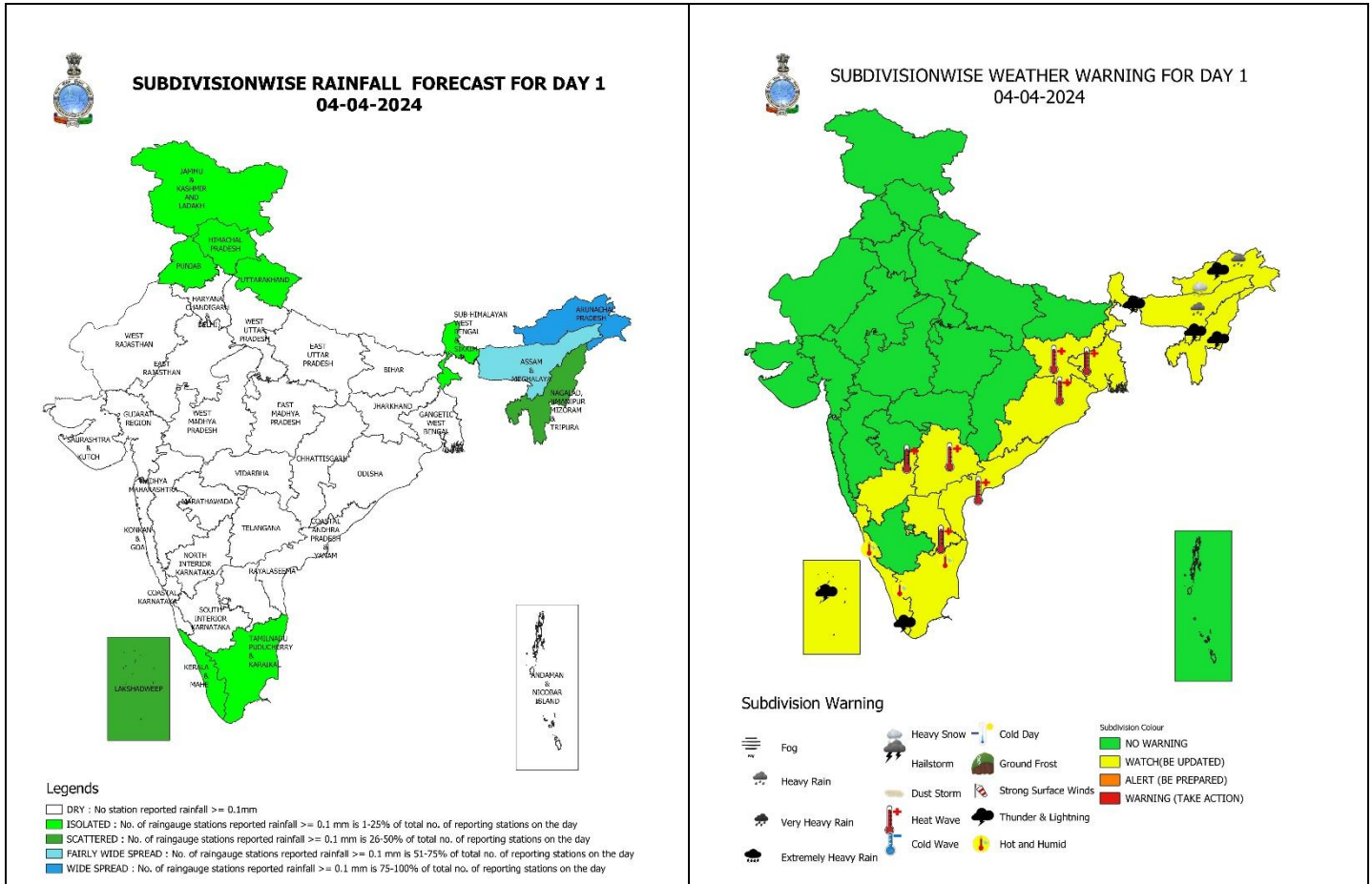


24 Hr cumulative rainfall recorded over different stations during 0830 IST of 2-4-2024 to 0830 IST of 3-4-2024



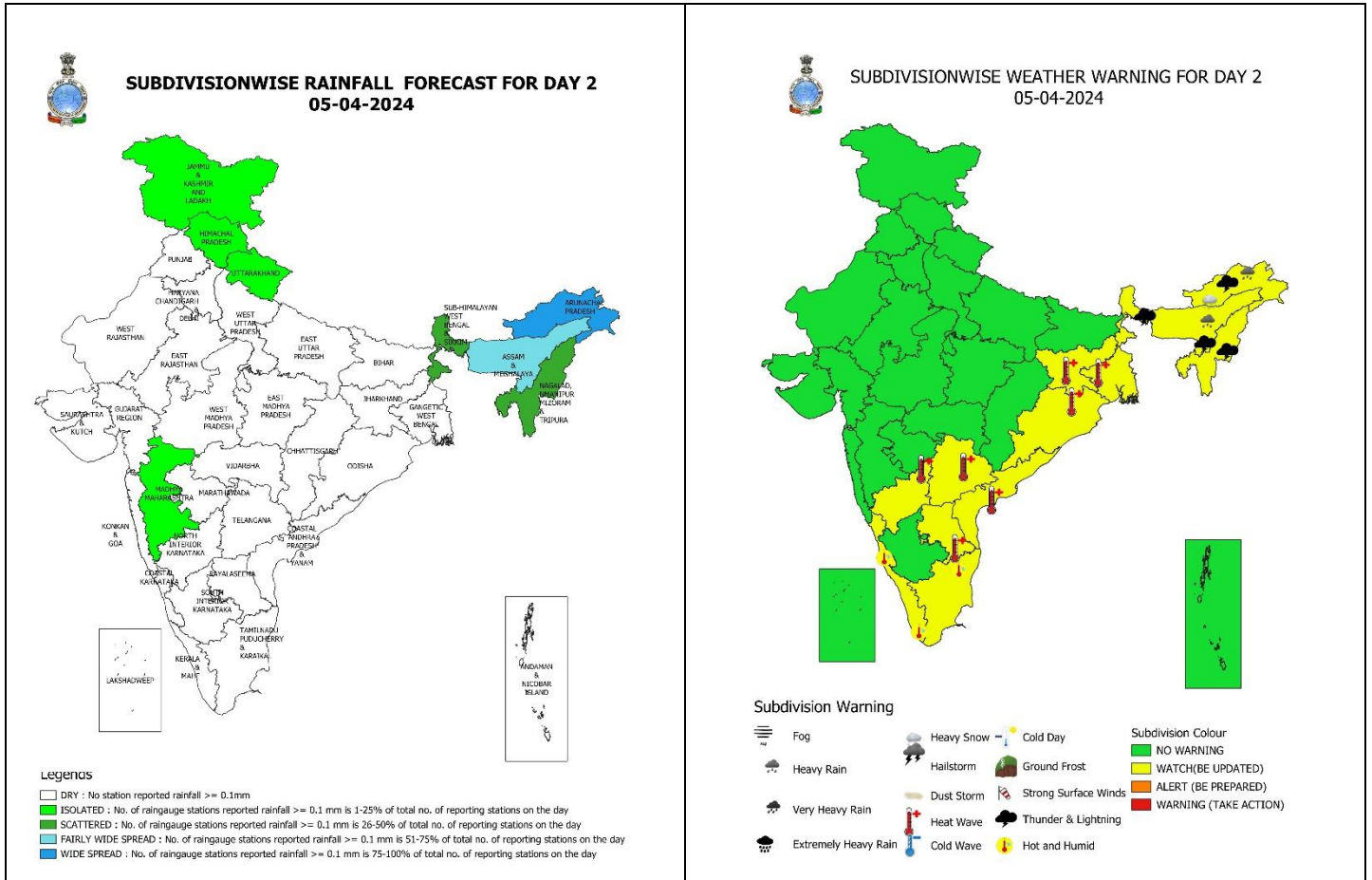
Legends

- 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)



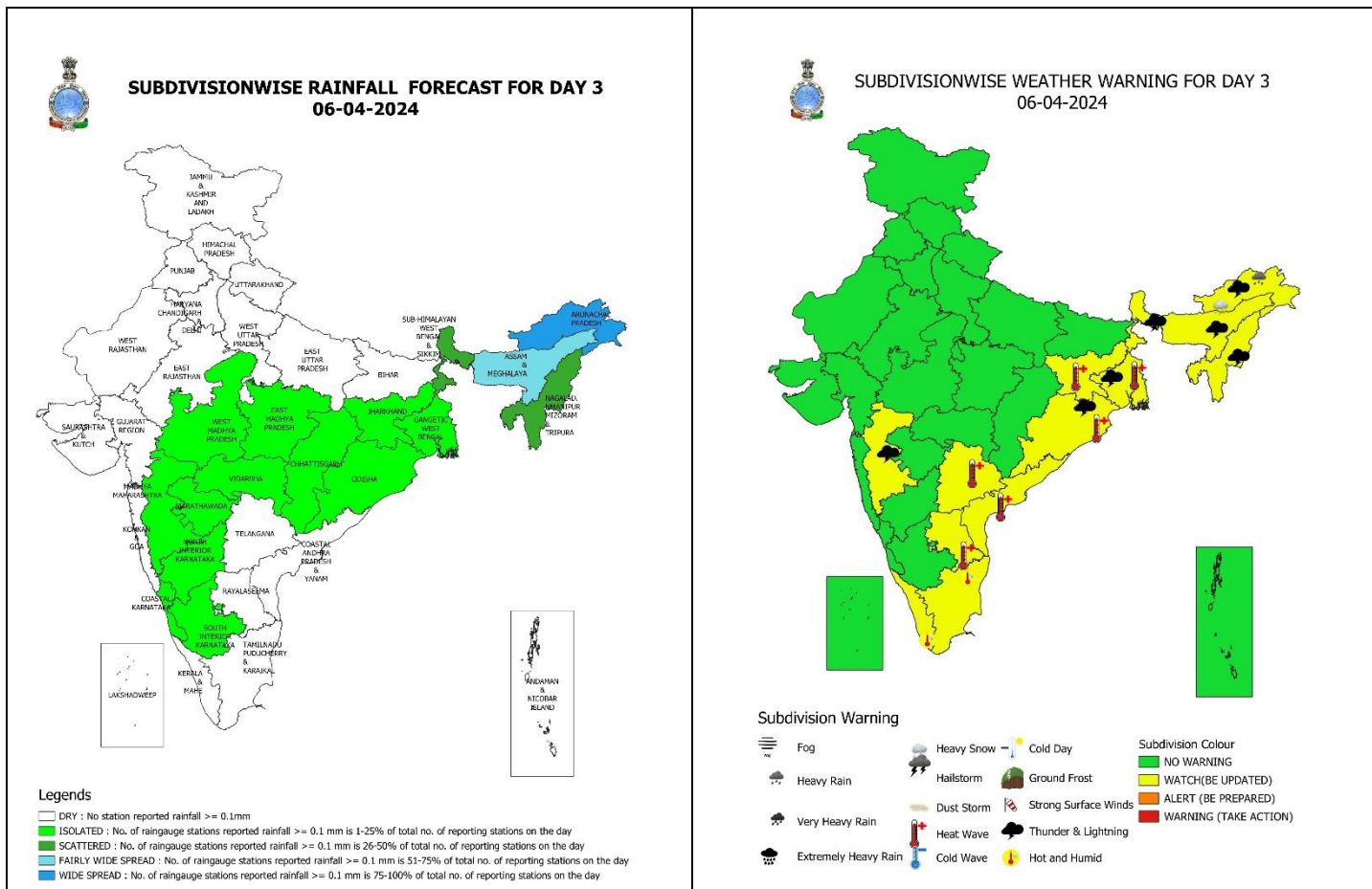
04 April (Day 1):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; **with lightning** at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Kerala & Mahe and Lakshadweep.
- ❖ **Heavy rainfall/snowfall** very likely at isolated places over Arunachal Pradesh; **Heavy rainfall** at isolated places over Assam & Meghalaya.
- ❖ **Warm night** very likely to prevail in isolated pockets over Odisha and North Interior Karnataka.
- ❖ **Heat wave conditions** very likely at isolated places over Gangetic West Bengal, Jharkhand, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and North Interior Karnataka.
- ❖ **Hot and humid weather** very likely to prevail over Coastal Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.



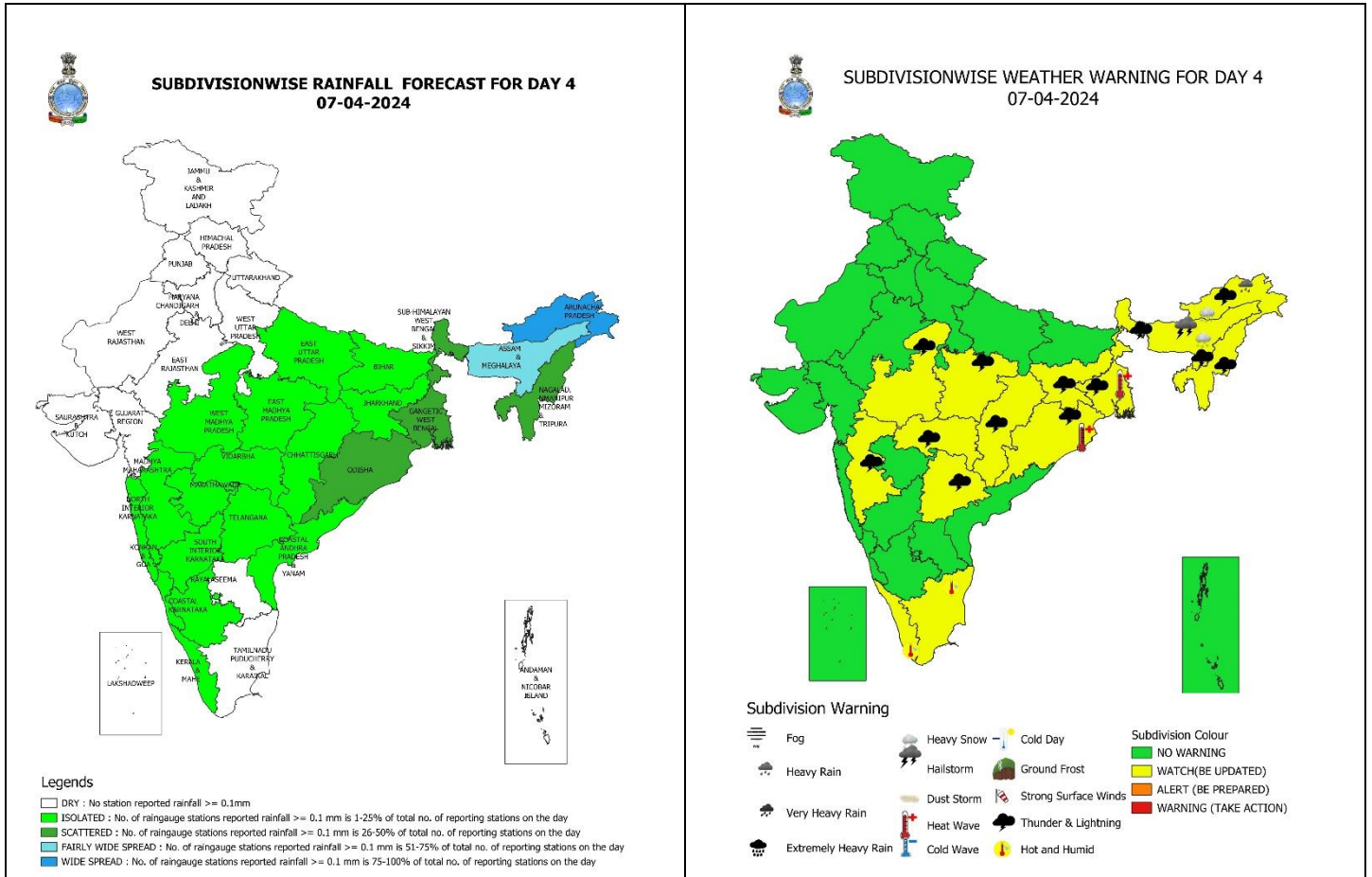
05 April (Day 2):

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



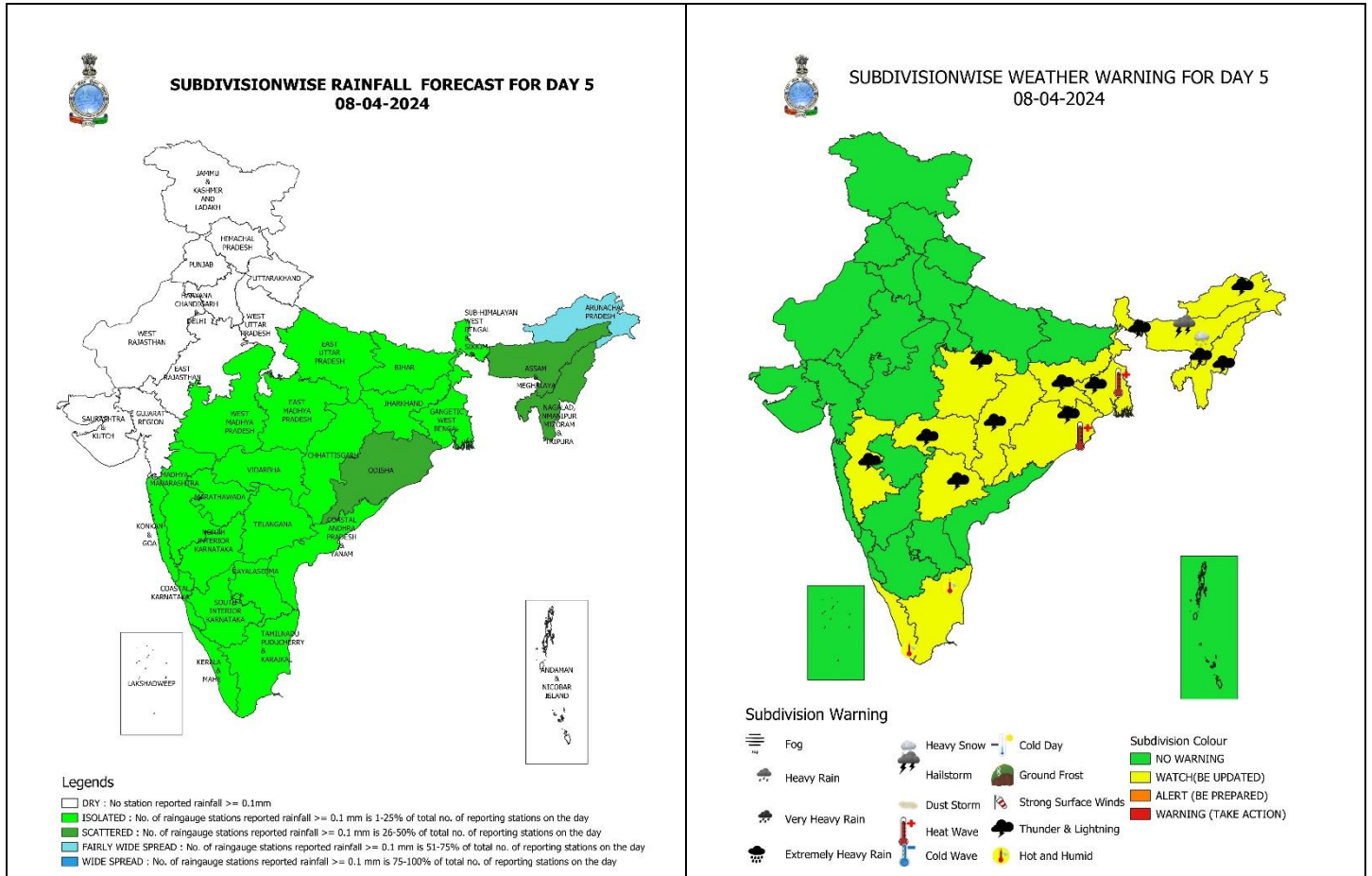
06 April (Day 3):

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



07 April (Day 4):

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

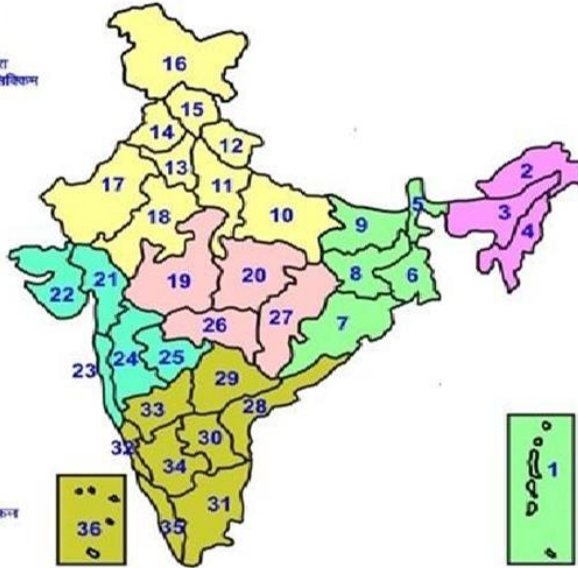


08 April (Day 5):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Gangetic West Bengal and Odisha; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Sub-Himalayan West Bengal & Sikkim, East Madhya Pradesh, Vidarbha, Chhattisgarh and Jharkhand; **with lightning** at isolated places over Madhya Maharashtra, Telangana, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heat wave conditions** likely at isolated places over Odisha and Gangetic West Bengal.
- ❖ **Hot and humid weather** likely to prevail over Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.

LEGENDS

- 1 अंडमन और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मणिपुर मीजोरम 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 एवंम लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 उत्तरीमहाराष्ट्र
- 28 तटीय आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 दखिनीय
- 31 दखिनीय, पुदुचेरी एवंम कराईकल
- 32 तटिय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवंम माहे
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Odisha
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. 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



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 Strom: Wind speed > 220 kmph (> 119 knots)

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

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

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

(Service to the Nation since 1875)