

Tuesday, July 9, 2024
Time of Issue: 0745 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems:

- ✓ The Monsoon trough is active and south of its normal position in lower tropospheric levels.
- ✓ A shear zone runs over north peninsular India in middle levels tilting southwards with height.
- ✓ A cyclonic circulation over Westcentral Bay of Bengal & adjoining northwest Bay of Bengal off north Andhra Pradesh coast in lower & middle tropospheric levels tilting southwestwards with height.
- ✓ The off-shore trough at mean sea level runs along south Gujarat- north Kerala coasts.

Forecast & Warnings:

❖ West and South Peninsular India

- ✓ Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm & lightning very likely over Konkan & Goa, Madhya Maharashtra, Kerala & Mahe, Lakshadweep, Coastal Karnataka; scattered to fairly widespread light to moderate rainfall over Marathwada, Gujarat Region, Coastal Andhra Pradesh & Yanam, Telangana and Interior Karnataka; isolated to scattered light to moderate rainfall over Tamil Nadu, Puducherry & Karaikal and Rayalaseema during next 5 days.
- ✓ Isolated **heavy rainfall** very likely over Konkan & Goa, Madhya Maharashtra on 10th; Gujarat Region, Marathwada on 09th; Kerala & Mahe, Coastal Andhra Pradesh & Yanam, North & South Interior Karnataka on 09th, 11th, 12th & 13th; Telangana on 09th, 12th & 13th; Coastal Karnataka on 10th & 11th July.
- ✓ **Isolated very heavy rainfall also very likely over Konkan & Goa and Madhya Maharashtra on 09th, 11th, 12th & 13th and over Coastal Karnataka on 09th, 12th & 13th July.**

❖ East & Northeast India

- ✓ Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm, lightning very likely over Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Bihar and Northeast India; scattered to fairly widespread light to moderate rainfall over Gangetic West Bengal, Jharkhand, Odisha during next 5 days.
- ✓ Isolated **heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Assam & Meghalaya during 09th-13th; Jharkhand on 12th & 13th; Nagaland, Manipur, Mizoram & Tripura during 09th-11th July.
- ✓ **Isolated very heavy rainfall also likely over Sub-Himalayan West Bengal & Sikkim on 12th & 13th; Bihar during 10th-13th; Arunachal Pradesh, Assam & Meghalaya during 09th-11th July.**
- ✓ **Isolated extremely heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim on 10th & 11th; Arunachal Pradesh on 09th July.**

❖ Northwest & Central India

- ✓ Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm & lightning very likely over Uttarakhand, Uttar Pradesh and Central India; scattered to fairly widespread light to moderate rainfall over Himachal Pradesh, Haryana-Chandigarh-Delhi; isolated to scattered light to moderate rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab and Rajasthan during next 5 days.
- ✓ Isolated heavy rainfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi on 12th & 13th; Himachal Pradesh during 11th-13th; Uttarakhand, West Uttar Pradesh, Madhya Pradesh, Chhattisgarh & East Uttar Pradesh during 09th -13th; East Rajasthan on 09th; Vidarbha on 09th & 10th July.
- ✓ **Isolated very heavy rainfall also likely over West Uttar Pradesh & West Madhya Pradesh on 11th; East Uttar Pradesh & East Madhya Pradesh on 10th & 11th July.**

Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours to 1730 hours IST of yesterday): at **most places** over Uttarakhand, Kerala & Mahe; at **many places** over Konkan & Goa; at **a few places** over Himachal Pradesh, Marathwada, Madhya Maharashtra, Coastal Karnataka, Chhattisgarh, Odisha, Bihar, Arunachal Pradesh Assam & Meghalaya; at **isolated places** over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana, Haryana-Chandigarh-Delhi, Punjab, Uttar Pradesh, Rajasthan, Madhya Pradesh, Gujarat state, Vidarbha, South Interior Karnataka, Jharkhand, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heavy rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy to very heavy rainfall** at isolated places over Konkan & Goa; **Heavy rainfall** at isolated places over Coastal Karnataka.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Konkan & Goa:** Ratnagiri 12, Harnai 11, Colaba 10, Mumbai City 7, Thane, Raigad 5 each, Alibagh 4; **Coastal Karnataka:** Mangalore 8, Honavar 4; **Marathwada:** Parbhani 2; **Vidarbha:** Gondia 2; **West Madhya Pradesh:** Betul 4; **East Madhya Pradesh:** Khajuraho 3, Mandla 2; **East Rajasthan:** Jaipur 2; **Saurashtra & Kutch:** Bhuj 2; **Uttarakhand:** Pantnagar 5, Mukteshwar 2; **West Uttar Pradesh:** Bareilly 3.
- ❖ **Minimum Temperature Departures (as on 08-07-2024):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at a few places over Gujarat state; at isolated places over Rajasthan, West Madhya Pradesh, Madhya Maharashtra, Gangetic West Bengal, Bihar and Tamil Nadu, Puducherry & Karaikal. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, West Uttar Pradesh, Telangana and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 18.8°C** was reported at **Valsad Bulsar (Gujarat Region)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 08-07-2024):** Maximum temperatures were **above normal (1.6°C to 3.0°C)** at a few places over Chhattisgarh, Gangetic West Bengal; at isolated places over Gujarat state, East Uttar Pradesh, Bihar, Jharkhand, Odisha, Assam & Meghalaya. These were **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over East Rajasthan, West Uttar Pradesh, West Madhya Pradesh, Coastal Karnataka, Haryana-Chandigarh-Delhi; **below normal (-1.6°C to -3.0°C)** at a few places over Tamil Nadu, Puducherry & Karaikal, Telangana; at isolated places over East Madhya Pradesh, Madhya Maharashtra, Marathwada, Interior Karnataka, Nagaland, Manipur, Mizoram & Tripura and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature of 38.4°C** was reported at **Bikaner & Barmer (West Rajasthan)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Monsoon trough at mean sea level continue to pass through Jaisalmer, Chittorgarh, Raisen, Mandla, Raipur, Kalingapatnam and thence southeastwards to central Bay of Bengal and extends upto 3.1 km above mean sea level.
- ❖ The cyclonic circulation over northeast Rajasthan & 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 off-shore trough at mean sea level along south Gujarat-north Kerala coasts persists.
- ❖ The cyclonic circulation over Westcentral Bay of Bengal adjoining northwest Bay of Bengal off north Andhra Pradesh coast between 3.1 & 7.6 km above mean sea level tilting southwestwards with height persists.
- ❖ The shear zone roughly along 18°N between 4.5 & 7.6 km above mean sea level tilting southwards with height persists.
- ❖ The cyclonic circulation over central Gujarat at 4.5 km above mean sea level persists.

Weather Forecast for next 7 days (Upto 0830 hours IST of 16th July, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ Thunderstorm accompanied with lightning very likely at isolated places over Northwest and South Peninsular India during next 4-5 days.
- ❖ No significant change in maximum temperatures very likely over most parts of the country.

Weather Outlook for subsequent 3 days (During 16th-18th July, 2024)

- ❖ Fairly widespread to widespread rainfall likely over most parts of the country except plains of northwest India and East peninsular India where isolated to scattered rainfall likely.

Table-1

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

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.
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Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

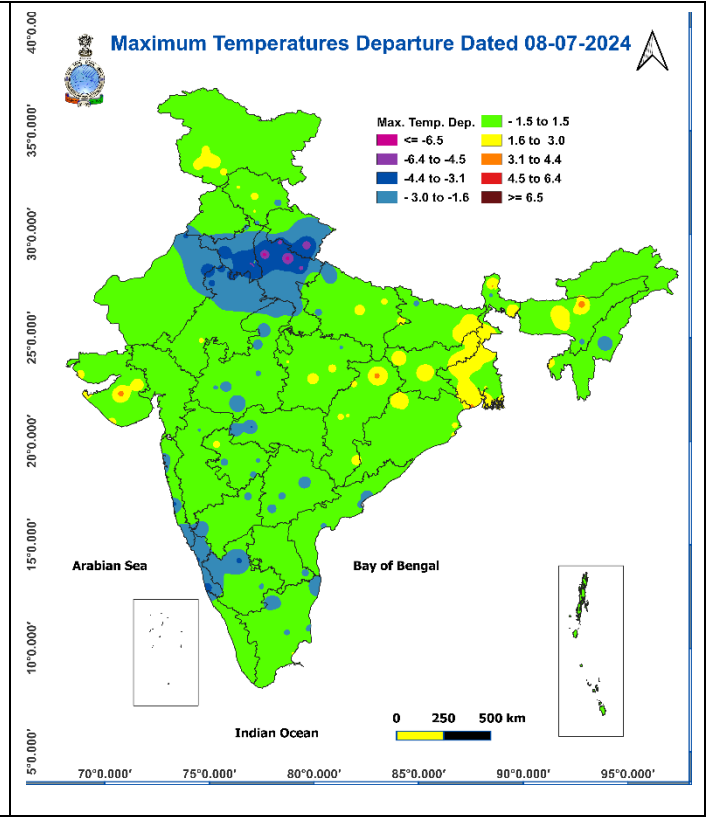
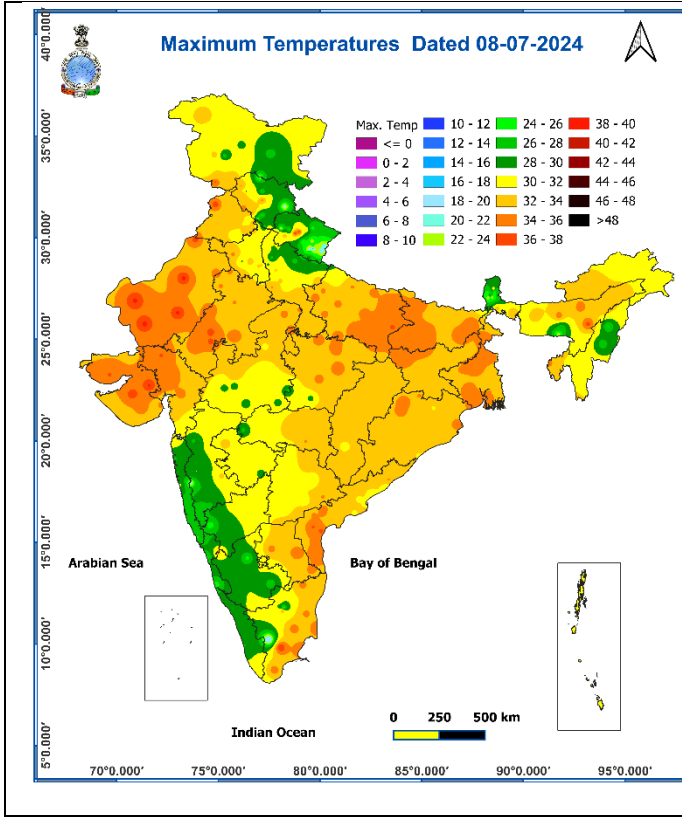


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

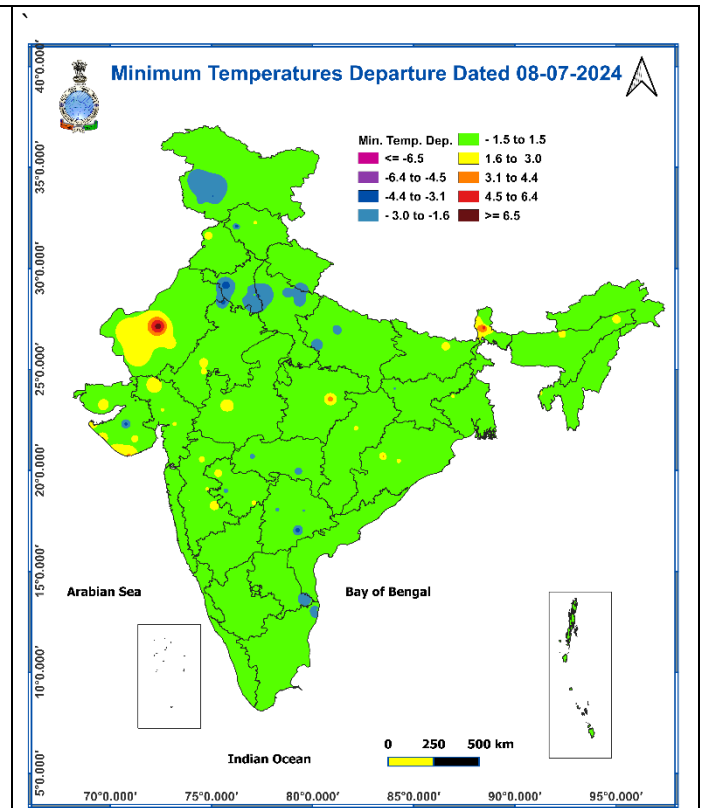
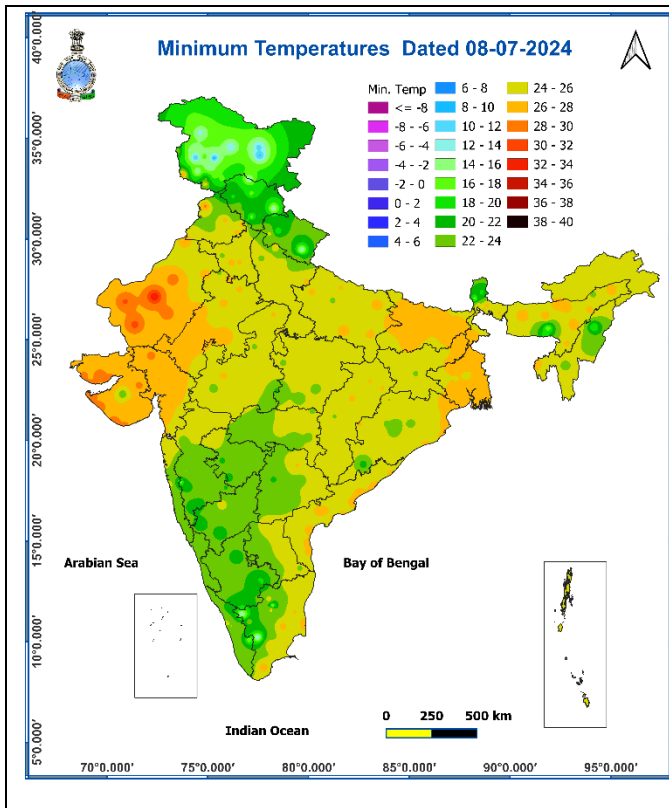
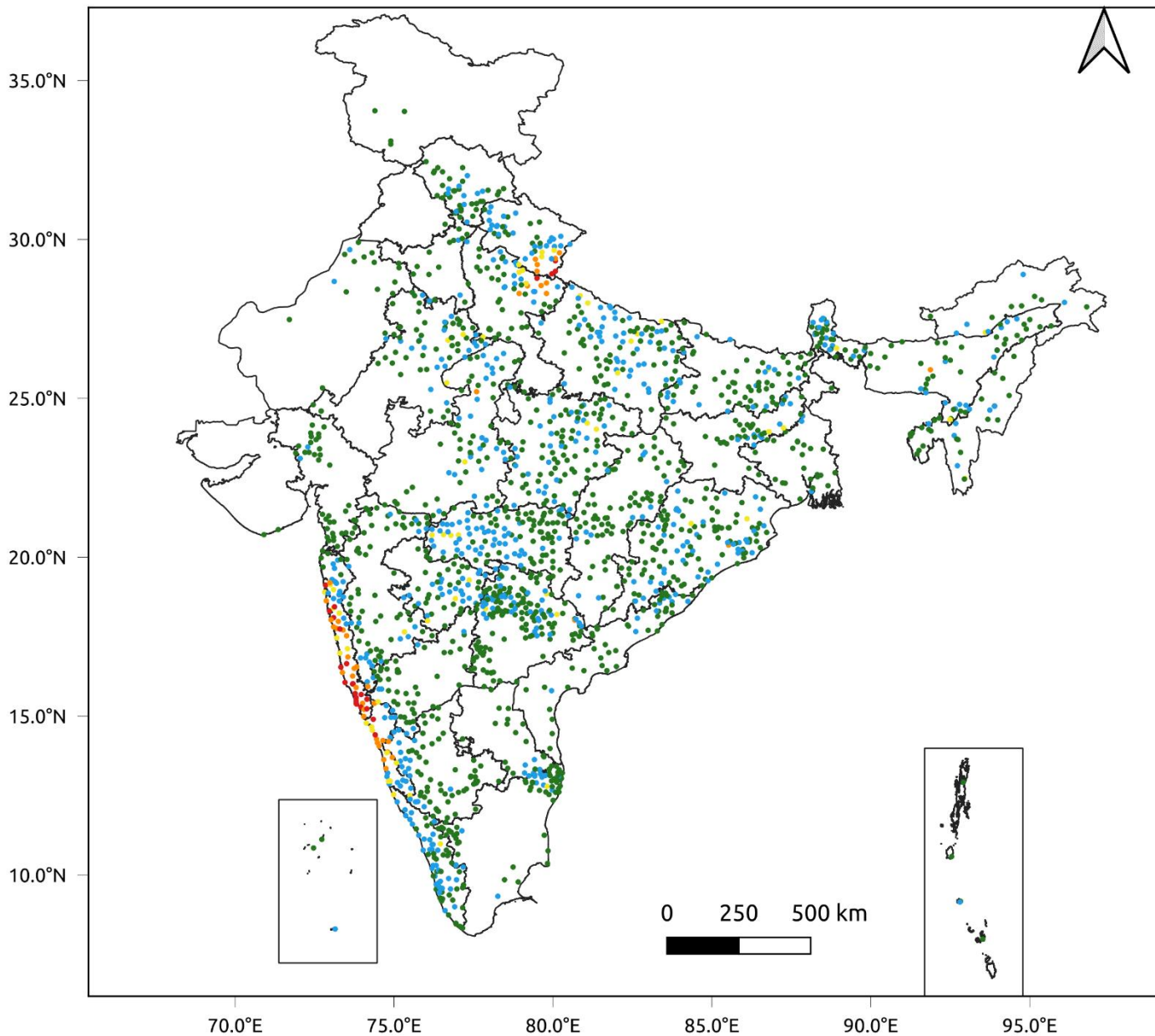


Fig. 5: Accumulated Rainfall (mm) during past 24 hours



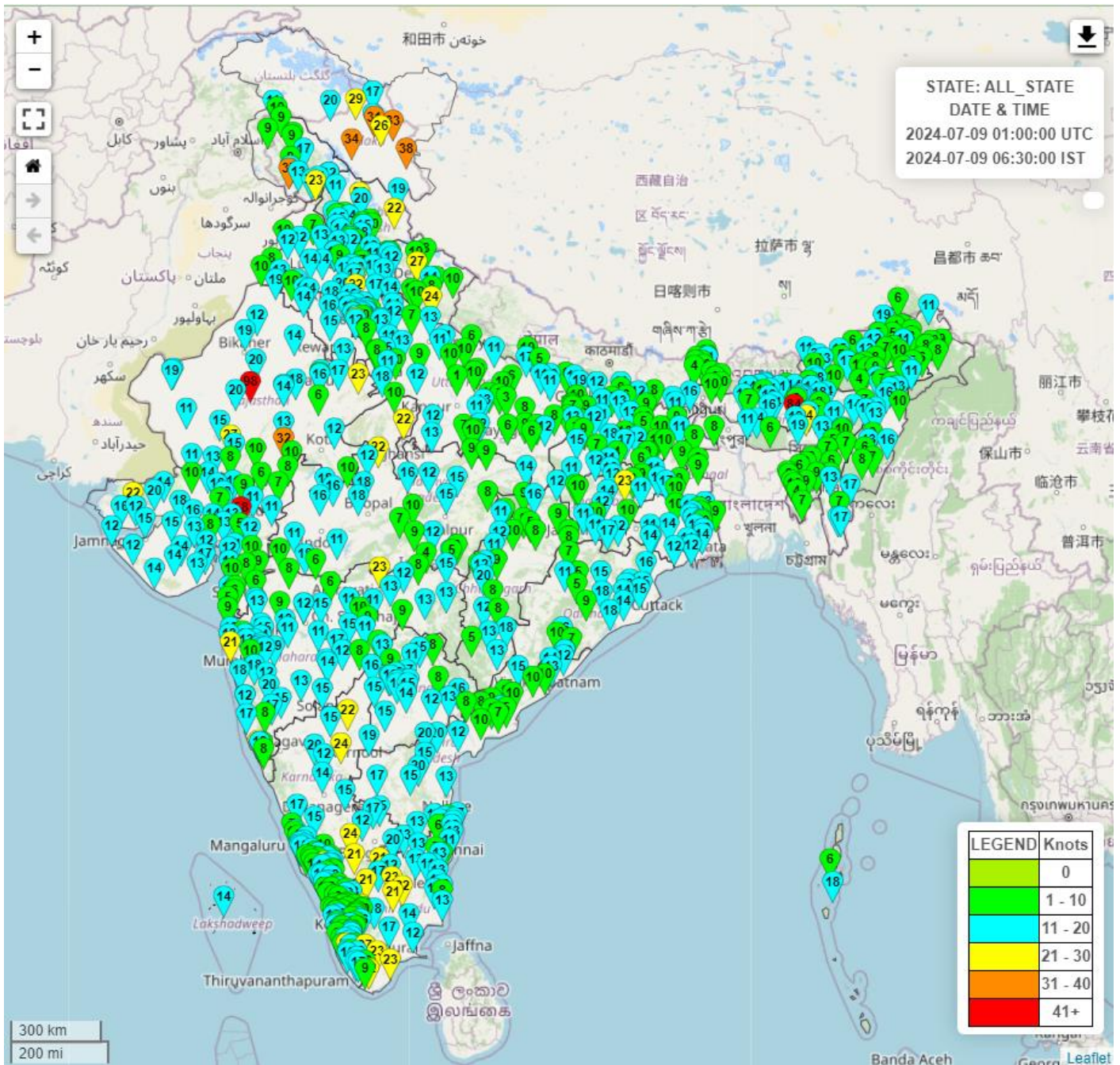
24 Hr cumulative rainfall recorded over different stations during 0830 IST of 7-7-2024 to 0830 IST of 8-7-2024



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)

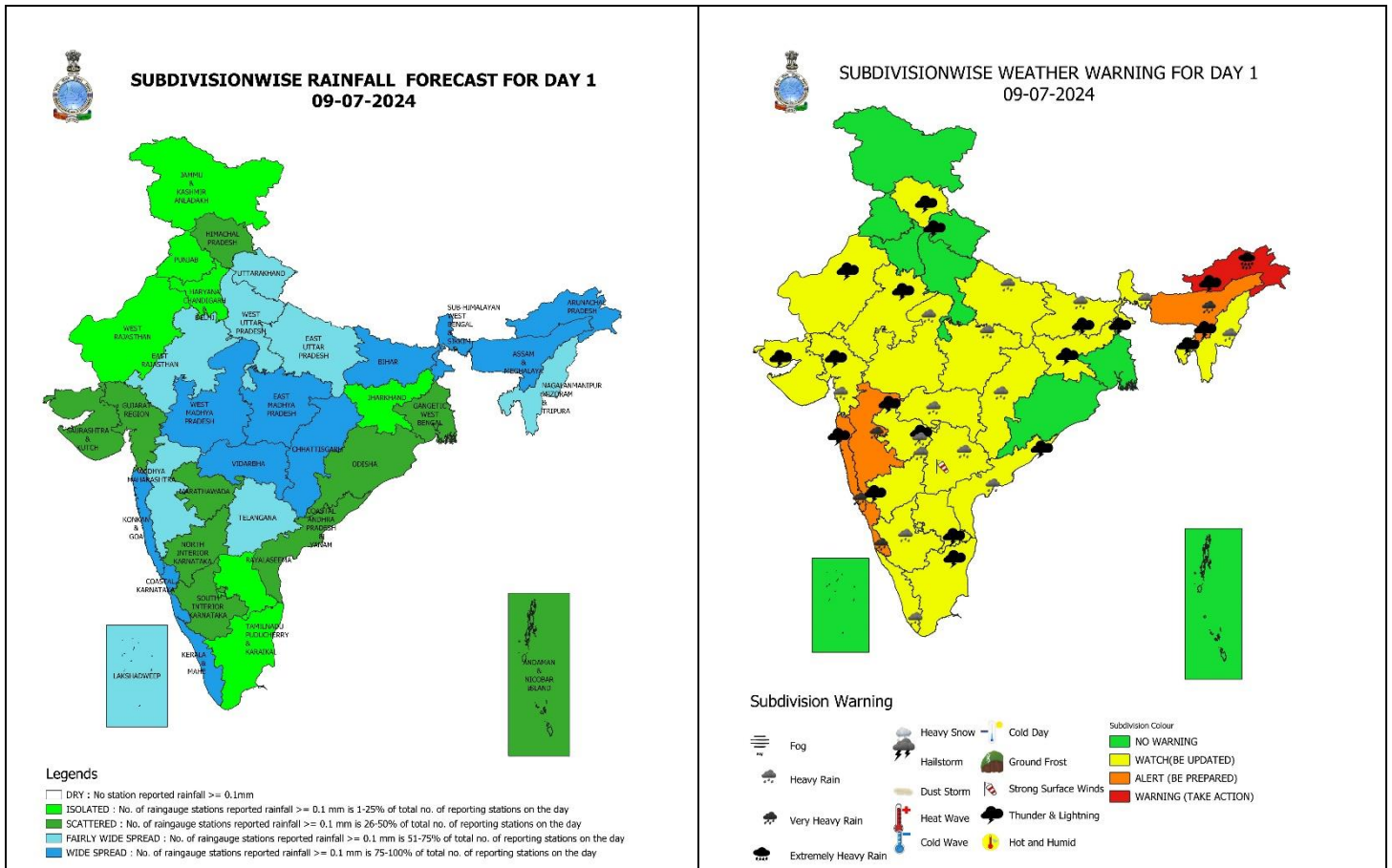
Fig. 6: Gusty winds reported over the country (in knots) from 0830 hours IST of 08.07.2024 to 0630 hours IST of 09.07.2024



1 Knot = 1.852 kmph

For more details, kindly refer: <http://aws.imd.gov.in:8091/>

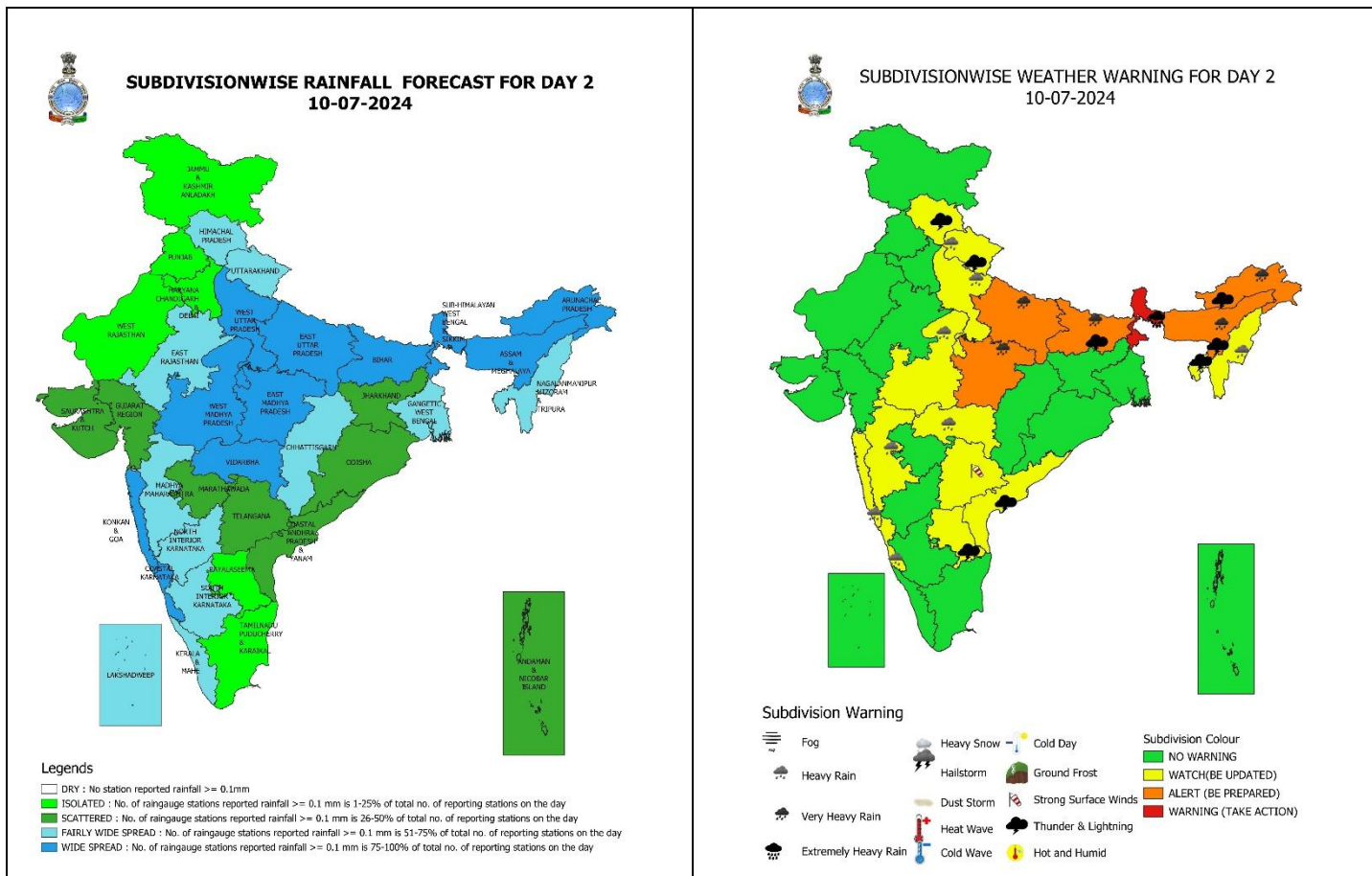
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09 July (Day 1):

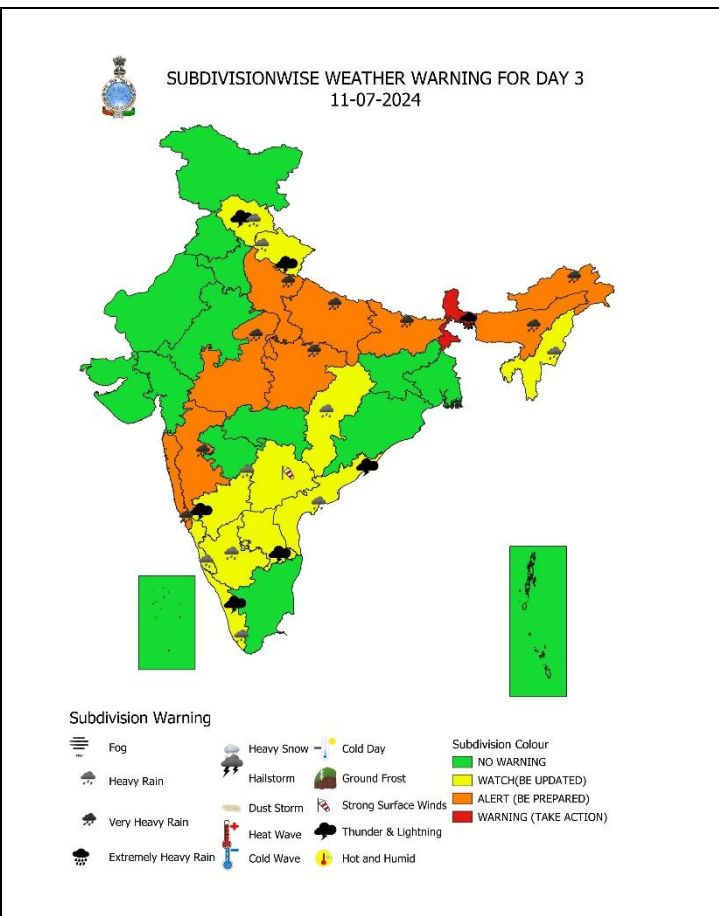
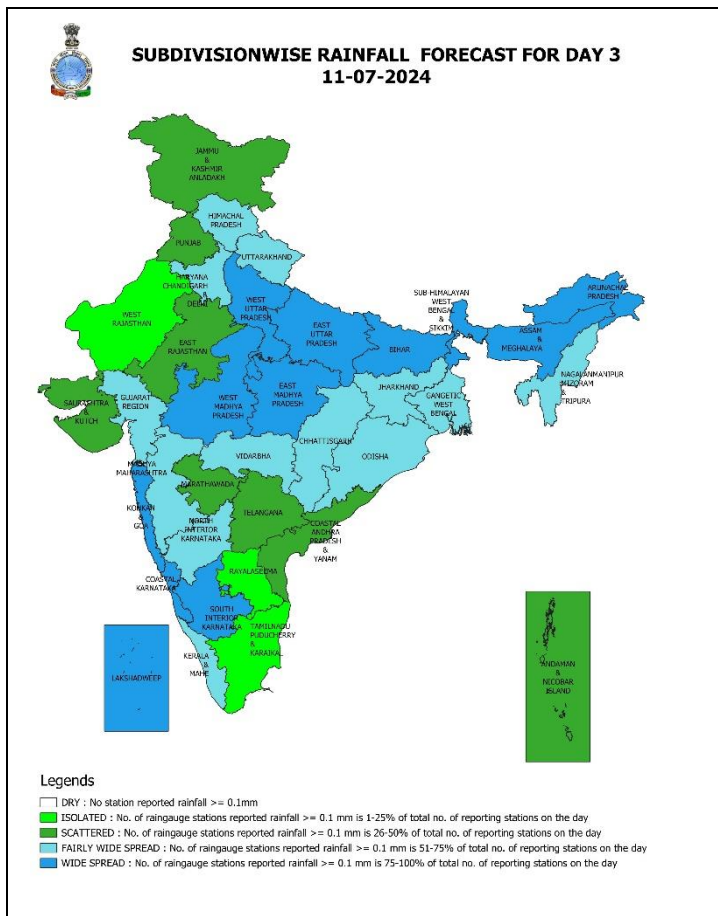
- ❖ **Heavy to very heavy rainfall with extremely heavy falls** very likely at isolated places over Arunachal Pradesh; **Heavy to very heavy rainfall** very likely at isolated places over and Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra and Coastal Karnataka; **Heavy rainfall** at isolated places over East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Gujarat Region, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana and Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Telangana; **with lightning** at isolated places over Himachal Pradesh, Haryana-Chandigarh-Delhi, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathwada, Gujarat state, Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema and North Interior Karnataka.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over many parts of eastcentral and westcentral Arabian sea, northern parts of southwest Arabian sea, gulf of Mannar, off Sri Lanka coast, southwest & adjoining southeast bob, most parts of central bob and adjoining northwest bob. **Squally wind with wind speed 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail along and off Somalia coast & adjoining and northern parts of southwest Arabian sea, over most parts of westcentral Arabian sea, along and off south Oman coast. Fishermen are advised not to venture into these areas.

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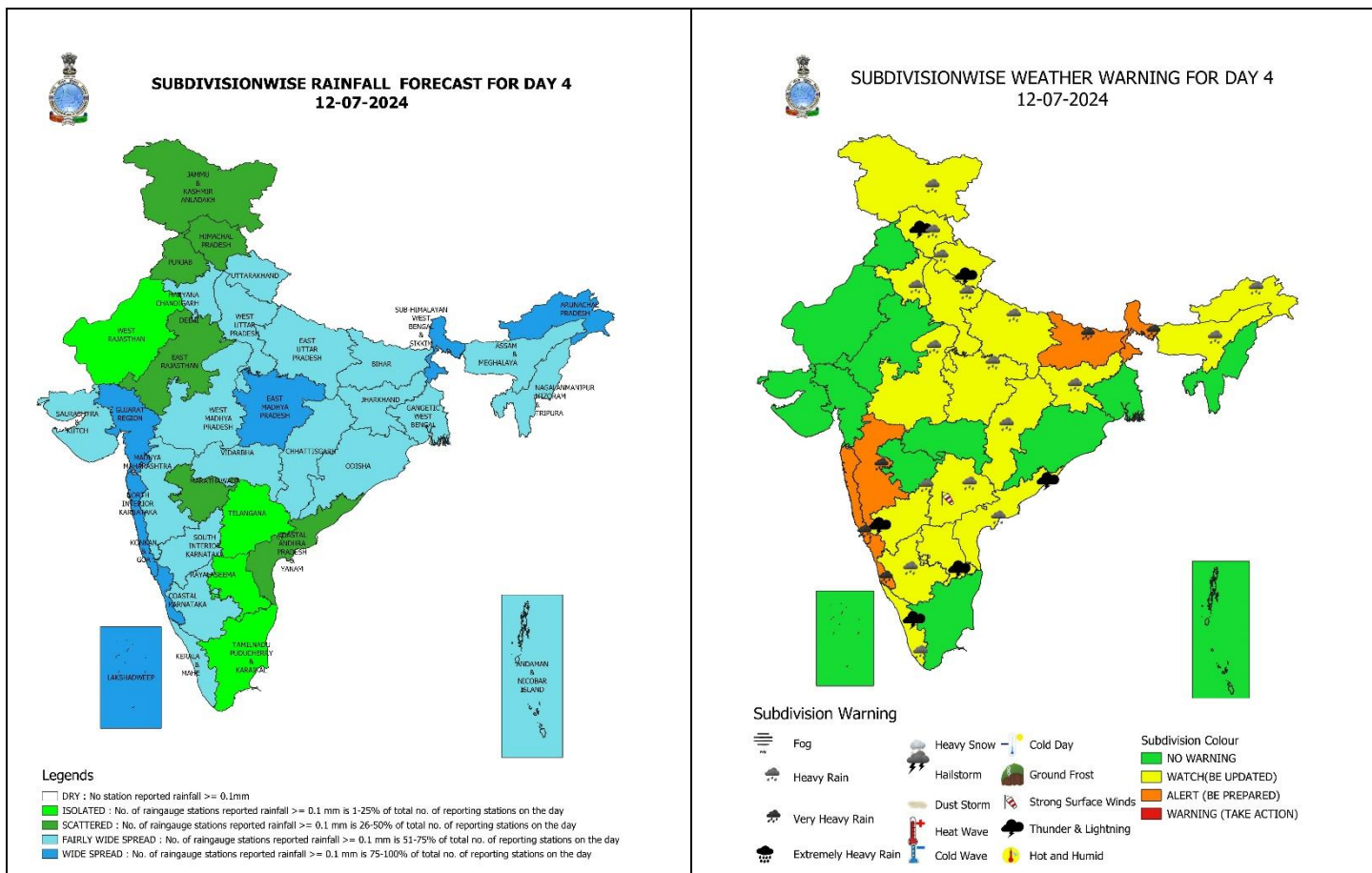
10 July (Day 2)

- ❖ **Heavy to very heavy rainfall with extremely heavy falls** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim; **Heavy to very heavy rainfall** likely at isolated places over East Uttar Pradesh, East Madhya Pradesh, Bihar, Arunachal Pradesh, Assam & Meghalaya; **Heavy rainfall** at isolated places over Uttarakhand, West Uttar Pradesh, East Madhya Pradesh, Vidarbha, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Telangana; **with lightning** at isolated places over Himachal Pradesh, Uttarakhand, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam and Rayalaseema.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over many parts of eastcentral and westcentral Arabian sea, northern parts of southwest Arabian sea, gulf of Mannar, off Sri Lanka coast, southwest & adjoining southeast Bay of Bengal, most parts of central Bay of Bengal and adjoining northwest Bay of Bengal, off north Andhra Pradesh, south Odisha coast. **Squally wind with wind speed 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail along and off Somalia coast & adjoining and northern parts of southwest Arabian sea, over most parts of westcentral Arabian sea, along and off south Oman coast. Fishermen are advised not to venture into these areas.



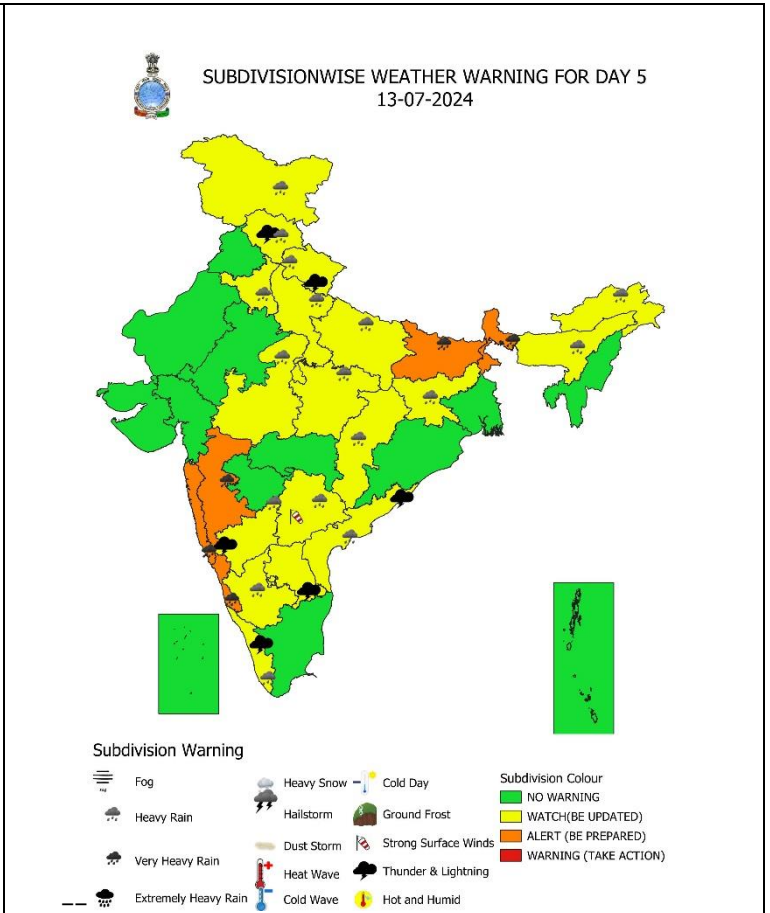
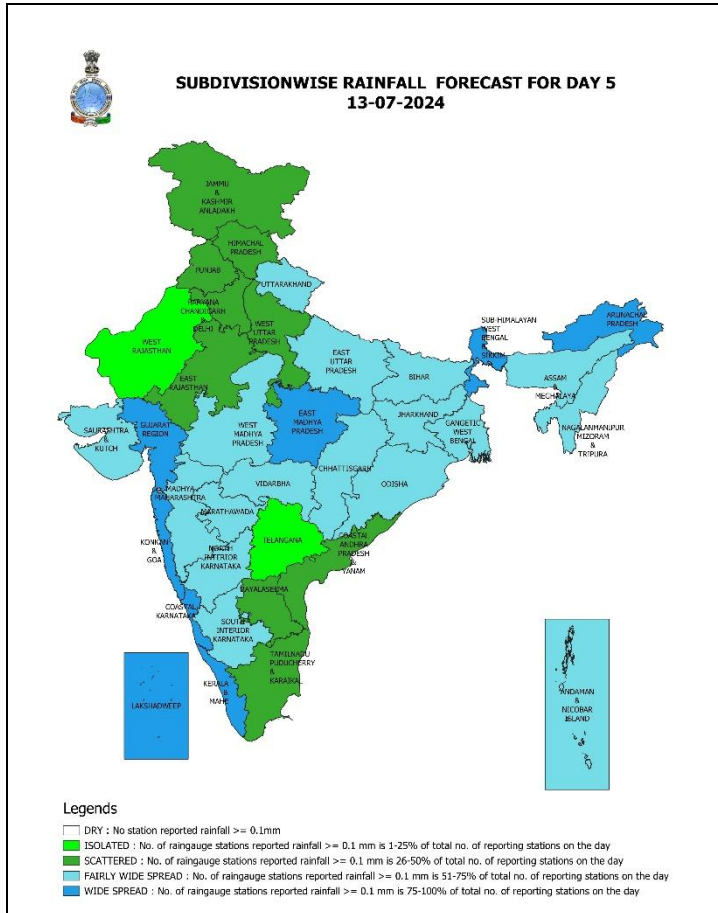
11 July (Day 3):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim; **Heavy to very heavy rainfall** likely at isolated places over Uttar Pradesh, Madhya Pradesh, Bihar and Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa and Madhya Maharashtra; **Heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Chhattisgarh, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe, Coastal Andhra Pradesh & Yanam and Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Telangana; **with lightning** at isolated places over Himachal Pradesh, Uttarakhand, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and North Interior Karnataka.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over southern parts of northeast Arabian sea and adjoining northwest Arabian sea, many parts of eastcentral and westcentral Arabian sea, northern parts of southeast and southwest Arabian sea, gulf of Mannar, off Sri Lanka coast, southwest & adjoining southeast Bay of Bengal, most parts. **Squally wind with wind speed 45 kmph to 55 kmph gusting to 65 kmph** very likely to prevail along and off Somalia coast & adjoining and northern parts of southwest Arabian sea, over most parts of westcentral Arabian sea, along and off south Oman coast. Fishermen are advised not to venture into these areas.



12 July (Day 4):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Bihar, Konkan & Goa, Madhya Maharashtra and Coastal Karnataka; **Heavy rainfall** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana and Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** likely at isolated places over Telangana; **with lightning** at isolated places over Himachal Pradesh, Uttarakhand, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and North Interior Karnataka.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over southern parts of northeast Arabian sea and adjoining northwest Arabian sea, eastcentral and adjoining westcentral Arabian sea, northern parts of southeast Arabian sea and most parts of southwest Arabian sea, gulf of Mannar, off Sri Lanka coast, southwest & adjoining southeast Bay of Bengal, most parts of central Bay of Bengal and north Bay of Bengal, off north Andhra Pradesh and south Odisha coasts. **Squally wind with wind speed 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over along off Gujrat coast and adjoining areas of northeast Arabian sea, central parts of west central Bay of Bengal. Fishermen are advised not to venture into these areas.

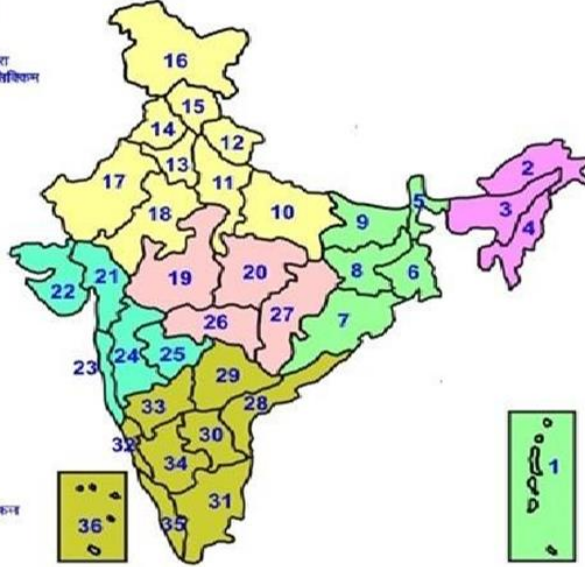


13 July (Day 5):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Bihar, Konkan & Goa, Madhya Maharashtra and Coastal Karnataka; **Heavy rainfall** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana-Chandigarh-Delhi, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Telangana and Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** likely at isolated places over Telangana; **with lightning** at isolated places over Himachal Pradesh, Uttarakhand, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and North Interior Karnataka.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over southern parts of northeast Arabian sea and adjoining northwest Arabian sea, eastcentral and adjoining westcentral Arabian sea, northern parts of southeast Arabian sea and most parts of southwest Arabian sea, gulf of Mannar, off Sri Lanka coast, southwest & adjoining southeast Bay of Bengal, most parts of central Bay of Bengal and north Bay of Bengal, off north Andhra Pradesh and south Odisha coasts. **Squally wind with wind speed 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over along off Gujrat coast and adjoining areas of northeast Arabian sea, central parts of west central Bay of Bengal. Fishermen are advised not to venture into these areas.

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 कच्छ
- 24 मध्य प्रदेश
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 उत्पी आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 रायलसेमा
- 31 तमिलनाडु, पुदुचेरी एवं केरला
- 32 उत्तरी कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरला एवं माहे
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Odisha
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathwada
26. Vidharbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnadu, Puducherry & Karaikal
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala & Mahe
36. Lakshadweep

SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

WARNING

WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

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 *



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 $\geq 37^\circ\text{C}$



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 $> 6.4^\circ\text{C}$.



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 $\leq 15^\circ\text{C}$



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 $\leq -6.5^\circ\text{C}$



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



Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)



An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.



Ice deposits on ground

Air temperature $\leq 4^\circ\text{C}$ (over Plains)



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



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



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)