

Thursday, June 27, 2024
Time of Issue: 0800 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Advance of Southwest Monsoon:

- ❖ The Northern Limit of Monsoon continues to pass through 23°N/60°E, 23°N/65°E, Mundra, Mehsana, Udaipur, Shivpuri, Siddhi, Lalitpur, Chaibasa, Haldia, Pakur, Sahibganj and Raxaul.
- ❖ Conditions are likely to become favourable for further advance of Southwest Monsoon into remaining parts of North Arabian Sea, Gujarat State, Madhya Pradesh; some more parts of Rajasthan; remaining parts of Chhattisgarh, West Bengal, Jharkhand and Bihar; most parts of East Uttar Pradesh; some more parts of West Uttar Pradesh; some parts of Uttarakhand, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, northern parts of Punjab and northern parts of Haryana during next 2-3 days.

Weather Systems and Forecast & Warnings:

- ❖ A trough at mean sea level runs off Maharashtra-central Kerala coasts. A cyclonic circulation lies over central Gujarat in lower & middle tropospheric levels and a trough runs from this cyclonic circulation to east Vidarbha in lower tropospheric levels. Under their influence:
 - Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm & lightning very likely over Konkan & Goa, Madhya Maharashtra, Marathwada, Karnataka, Kerala & Mahe, Lakshadweep, Gujarat state, Madhya Pradesh, Vidarbha, Chhattisgarh; scattered to fairly widespread light to moderate rainfall over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Tamil Nadu, Puducherry & Karaikal during next 5 days.
 - Isolated **heavy rainfall** very likely over Gujarat Region, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka during 27th-30th June & 01st July; Tamil Nadu, North Interior Karnataka, Telangana, Saurashtra & Kutch on 27th and over Coastal Andhra Pradesh, Kerala & Mahe, South Interior Karnataka on 27th & 28th June, 2024.
 - Isolated **heavy rainfall** also very likely over Madhya Pradesh and Chhattisgarh during 27th-30th June & 01st July and Vidarbha on 27th & 28th June, 2024.
 - Isolated **very heavy rainfall** very likely over Konkan & Goa, Coastal Karnataka on 27th & 28th; South Interior Karnataka, Kerala & Mahe on 27th June and north Madhya Pradesh on 01st July, 2024.
- ❖ A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 64°E to the north of Lat. 28°N. A cyclonic circulation lies over northwest Rajasthan and a trough runs from this cyclonic circulation to Manipur in the lower tropospheric levels. Strong southerly/southwesterly winds prevail in the lower tropospheric levels from the Bay of Bengal into east & northeast India. Under their influence:
 - Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm, lightning likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during next 5 days.
 - Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over East Rajasthan, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, Odisha and Gangetic West Bengal during next 5 days.
 - Isolated to Scattered light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi, West Rajasthan on 27th; and likely to increase with fairly widespread to widespread light to moderate rainfall during 28th-30th June & 01st July over these regions.
 - Isolated **heavy rainfall** very likely over Uttarakhand, East Rajasthan & Uttar Pradesh during 27th-30th June & 01st July; West Rajasthan on 27th; Himachal Pradesh, Haryana and over Punjab during 28th-30th June & 01st July, 2024.
 - Isolated **very heavy rainfall** very likely over Uttarakhand during 28th-30th; East Uttar Pradesh on 28th & 29th; over Haryana on 29th & 30th; West Uttar Pradesh on 29th & 30th June & 01st July and northeast Rajasthan on 01st July, 2024.
 - Isolated **heavy rainfall** very likely over Assam & Meghalaya and Andaman & Nicobar Islands on 27th; Sub-Himalayan West Bengal & Sikkim and Bihar during 27th-30th June & 01st July; Jharkhand during 28th-30th June & 01st July; Odisha on 29th; Gangetic West Bengal on 30th June, 2024.
 - Isolated **very heavy rainfall** very likely over Odisha on 27th & 28th; Arunachal Pradesh during 27th-30th June & 01st July; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 28th-30th June & 01st July, 2024.
- ❖ Yesterday, **Maximum temperatures** were in the range of 40-43°C over many parts of West Rajasthan, some parts of Punjab and in isolated pockets of East Rajasthan and North Madhya Pradesh. These were above normal by 2-4°C over these regions.

Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at most places** over Kerala & Mahe; **at many places** over Sub-Himalayan West Bengal & Sikkim, Chhattisgarh, Konkan & Goa; **at a few places** over Jammu division, Uttarakhand, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Madhya Maharashtra, East Rajasthan; **at isolated places** over Himachal Pradesh, Punjab, Uttar Pradesh, Bihar, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Odisha, Telangana, Tamil Nadu, Puducherry & Karaikal, Marathwada, Madhya Pradesh, Gujarat state.
- ❖ **Heavy to very heavy rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy to very heavy rainfall** at isolated places over Nagaland, Manipur, Mizoram & Tripura; **heavy rainfall** at isolated places over Saurashtra & Kutch, East Rajasthan, West Uttar Pradesh, Konkan & Goa.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Gujarat state:** Gir Somnath-8, Junagarh-7, Morbi-7, Rajkot-7, Banaskantha- 6, Jamnagar-4, Sabarkatha- 4; **West Uttar Pradesh:** Bareilly-7, Agra Taj- 3, Shahjahanpur- 2; **East Uttar Pradesh:** Kanpur- 3; **Kerala & Mahe:** Minicoy, Idukki, Kottayam, -4 each, Alappuzha, Kasaragod, Wayanad- 3 each; **West Madhya Pradesh:** Gwalior-4, Dhar-2; **Konkan & Goa:** Sindhudurg-8, Harnai, Raigad-5 each, Ratnagari-4; **East Rajasthan:** Dholpur-7; **West Rajasthan:** Chittorgarh-3; **Odisha:** Gajapati- 4, Sonepur- 3; **Coastal Andhra Pradesh & Yanam:** Vishakhapatnam, Vizianagaram- 4 each, Srikakulam-3; **Sikkim-** Gangtok-4, **Nagaland, Manipur, Mizoram & Tripura:** Imphal East- 17, Gomati-7; **Assam & Meghalaya:** Cachar-4, Hajoi-4, Karbianglong-4.
- ❖ **Minimum Temperature Departures (as on 26-06-2024):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at most places over Punjab; at a few places over Haryana-Chandigarh-Delhi; **above normal (1.6°C to 3.0°C)** at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand and West Uttar Pradesh; at many places over Himachal Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim and Vidarbha; at a few places over East Uttar Pradesh and Marathwada; at isolated places over Arunachal Pradesh, Assam & Meghalaya, Madhya Maharashtra and Coastal Andhra Pradesh & Yanam. These were **below normal (-1.6°C to -3.0°C)** at isolated places over Saurashtra & Kutch and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 19.2°C** was reported at **Bulsar (Gujarat Region)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 26-06-2024):** Maximum temperatures were **markedly above normal (5.1°C & above)** at isolated places over Vidarbha, Chhattisgarh, East Madhya Pradesh; **appreciably above normal (3.1°C to 5.0°C)** at many places over Gangetic West Bengal; at a few places over Odisha and at isolated places over Chhattisgarh, Punjab, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Saurashtra & Kutch, Sub-Himalayan West Bengal & Sikkim and East Madhya Pradesh and Marathwada; **above normal (1.6°C to 3.0°C)** at a few places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and at isolated places over, Gujarat State, Telangana, Konkan & Goa, Haryana-Chandigarh-Delhi, Jharkhand and Uttarakhand. These were **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Uttar Pradesh, Bihar and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature of 43.0°C** was reported at **Bikaner (West Rajasthan)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Northern Limit of Monsoon continues to pass through 23°N/60°E, 23°N/65°E, Mundra, Mehsana, Udaipur, Shivpuri, Lalitpur, Siddhi, Chaibasa, Haldia, Pakur, Sahibganj and Raxaul.
- ❖ Conditions are likely to become favourable for further advance of Southwest Monsoon into remaining parts of North Arabian Sea, Gujarat State, Madhya Pradesh; some more parts of Rajasthan; remaining parts of Chhattisgarh, West Bengal, Jharkhand and Bihar; most parts of East Uttar Pradesh; some more parts of West Uttar Pradesh; some parts of Uttarakhand, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, northern parts of Punjab and northern parts of Haryana during next 2-3 days.
- ❖ The Western Disturbance as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 64°E to the north of Lat. 28°N persists.
- ❖ The cyclonic circulation over central Gujarat & neighbourhood extending upto 5.8 km above mean sea level tilting southwards with height persists.
- ❖ The trough from above cyclonic circulation over central Gujarat to east Vidarbha across Madhya Maharashtra & Marathwada at 3.1 km above mean sea level persists.
- ❖ The cyclonic circulation over northwest Rajasthan & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The east-west trough from above cyclonic circulation over northwest Rajasthan to Manipur across south Uttar Pradesh & Jharkhand at 0.9 km above mean sea level persists.
- ❖ The trough at mean sea level off Maharashtra-central Kerala coasts persists.
- ❖ The cyclonic circulation over westcentral adjoining northwest Bay of Bengal between 1.5 & 5.8 km above mean sea level tilting southwestwards with height persists.

Weather Forecast for next 7 days (Upto 0830 hours IST of 04th 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 Northeast & south peninsular India during next 5 days.
- ❖ No significant change in maximum temperatures very likely over Northwest India during next 24 hours and fall by 3-5°C thereafter.
- ❖ Fall in maximum temperatures by 2-4°C very likely over Central India during next 5 days.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

Weather Outlook for subsequent 3 days (During 04th-06th July, 2024)

- ❖ Scattered to fairly widespread rainfall likely over Islands, Northeast India, East India, west coast and Scattered rainfall likely over Northwest, Central & Peninsular India.

Table-1

7 Days Rainfall Forecast								
S. No.	Subdivision	27-Jun	28-Jun	29-Jun	30-Jun	01-Jul	02-Jul	03-Jul
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	FWS	FWS	FWS	FWS	SCT
2	ARUNACHAL PRADESH	WS	WS	WS	WS	WS	WS	FWS
3	ASSAM & MEGHALAYA	WS	WS	WS	WS	WS	WS	WS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	FWS	WS	WS	WS	WS	WS	WS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	WS	WS	FWS	FWS	FWS	FWS	FWS
6	GANGETIC WEST BENGAL	SCT	FWS	FWS	WS	WS	FWS	WS
7	ODISHA	FWS	WS	FWS	FWS	FWS	SCT	FWS
8	JHARKHAND	SCT	FWS	FWS	WS	WS	FWS	WS
9	BIHAR	FWS	SCT	FWS	FWS	FWS	FWS	WS
10	EAST UTTAR PRADESH	WS	WS	WS	WS	WS	WS	FWS
11	WEST UTTAR PRADESH	WS	WS	WS	WS	WS	WS	SCT
12	UTTARAKHAND	WS	WS	WS	WS	WS	WS	WS
13	HARYANA CHANDIGARH & DELHI	SCT	FWS	WS	WS	FWS	FWS	SCT
14	PUNJAB	ISOL	SCT	FWS	FWS	SCT	SCT	SCT
15	HIMACHAL PRADESH	ISOL	FWS	FWS	FWS	FWS	FWS	FWS
16	JAMMU & KASHMIR AND LADAKH	SCT	FWS	FWS	FWS	FWS	FWS	SCT
17	WEST RAJASTHAN	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	SCT
18	EAST RAJASTHAN	FWS	FWS	SCT	SCT	FWS	FWS	WS
19	WEST MADHYA PRADESH	WS	WS	WS	WS	FWS	FWS	WS
20	EAST MADHYA PRADESH	WS	WS	WS	WS	FWS	FWS	FWS
21	GUJARAT REGION	WS	FWS	FWS	WS	WS	FWS	WS
22	SAURASHTRA & KUTCH	WS	FWS	FWS	FWS	FWS	SCT	FWS
23	KONKAN & GOA	WS	WS	WS	WS	WS	WS	WS
24	MADHYA MAHARASHTRA	FWS	SCT	SCT	SCT	SCT	SCT	FWS
25	MARATHAWADA	FWS	SCT	SCT	ISOL	ISOL	ISOL	SCT
26	VIDARBHA	WS	WS	WS	FWS	FWS	FWS	WS
27	CHHATTISGARH	WS	WS	WS	WS	WS	WS	WS
28	COASTAL ANDHRA PRADESH & YANAM	SCT	SCT	SCT	SCT	SCT	ISOL	ISOL
29	TELANGANA	FWS	SCT	SCT	FWS	ISOL	ISOL	ISOL
30	RAYALASEEMA	SCT	ISOL	ISOL	SCT	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	SCT	SCT	ISOL	ISOL
32	COASTAL KARNATAKA	WS	WS	WS	WS	WS	WS	WS
33	NORTH INTERIOR KARNATAKA	SCT	SCT	ISOL	ISOL	ISOL	SCT	SCT
34	SOUTH INTERIOR KARNATAKA	FWS	SCT	ISOL	ISOL	SCT	FWS	FWS
35	KERALA & MAHE	WS	WS	FWS	FWS	FWS	FWS	FWS
36	LAKSHADWEEP	FWS	FWS	FWS	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
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Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

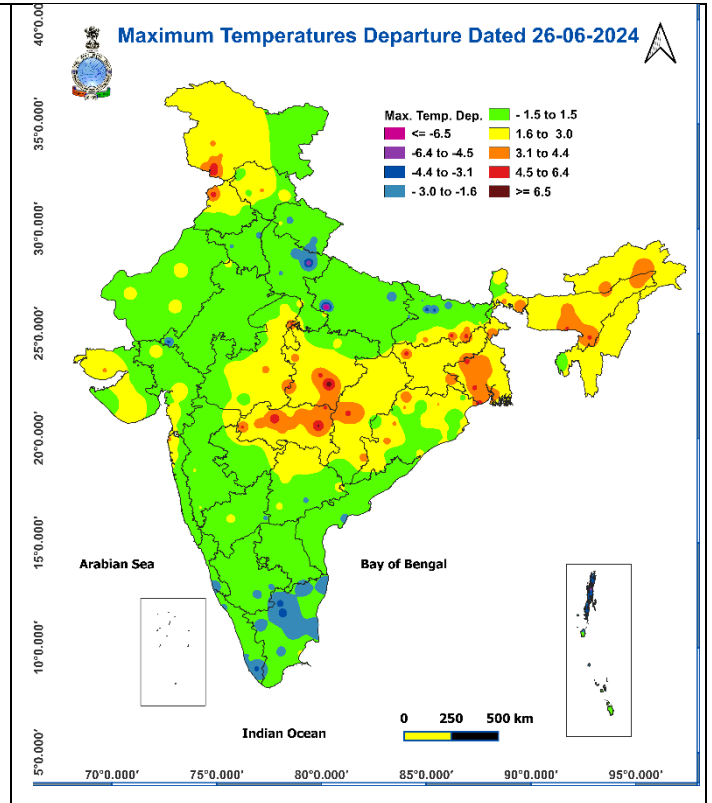
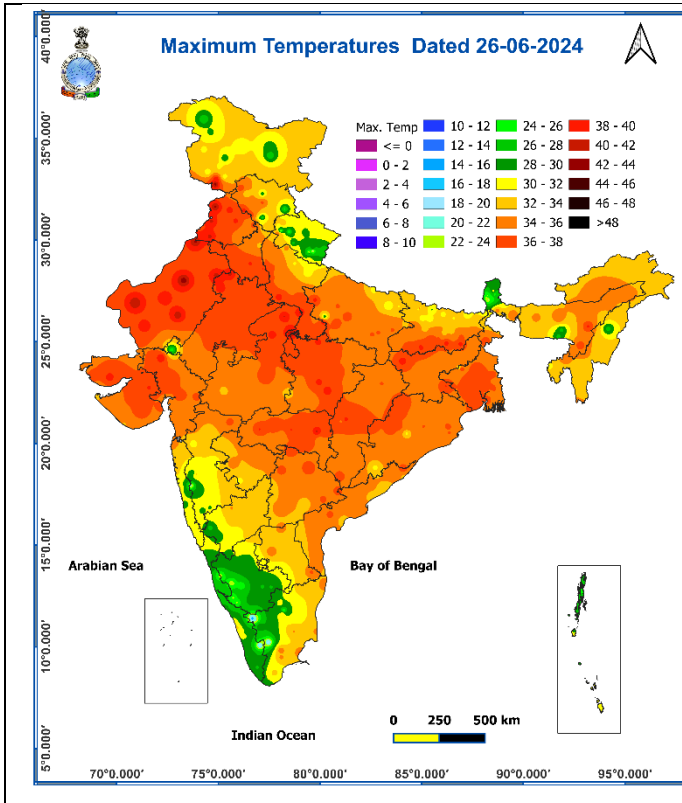


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

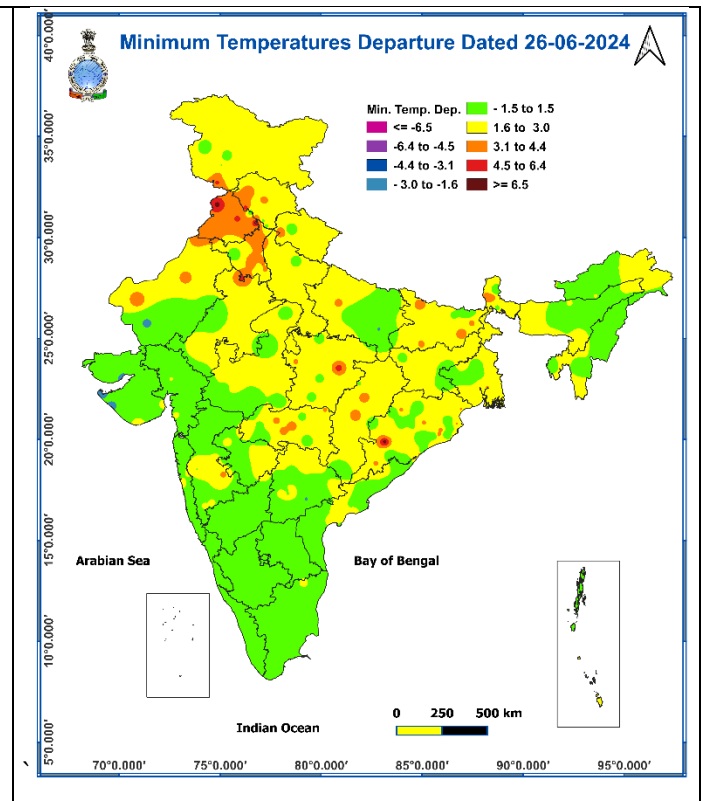
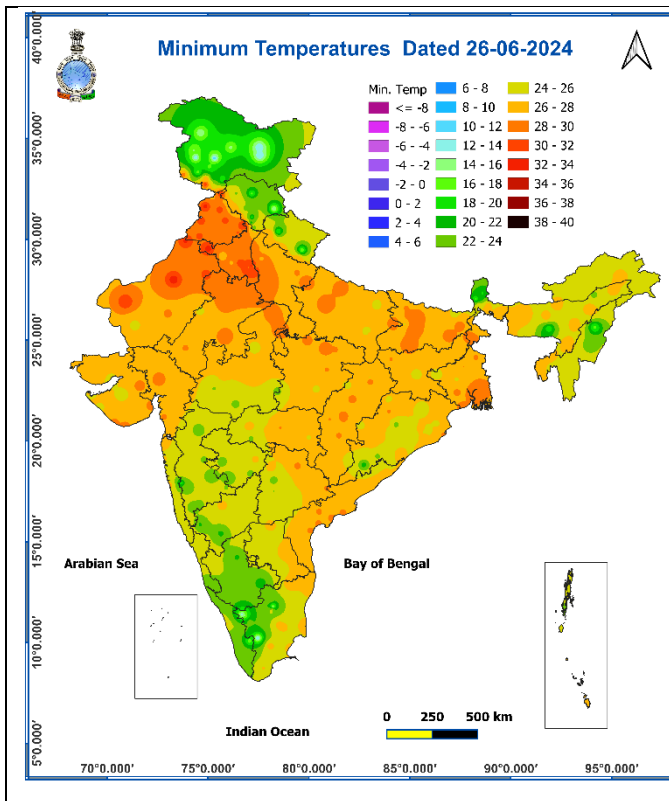
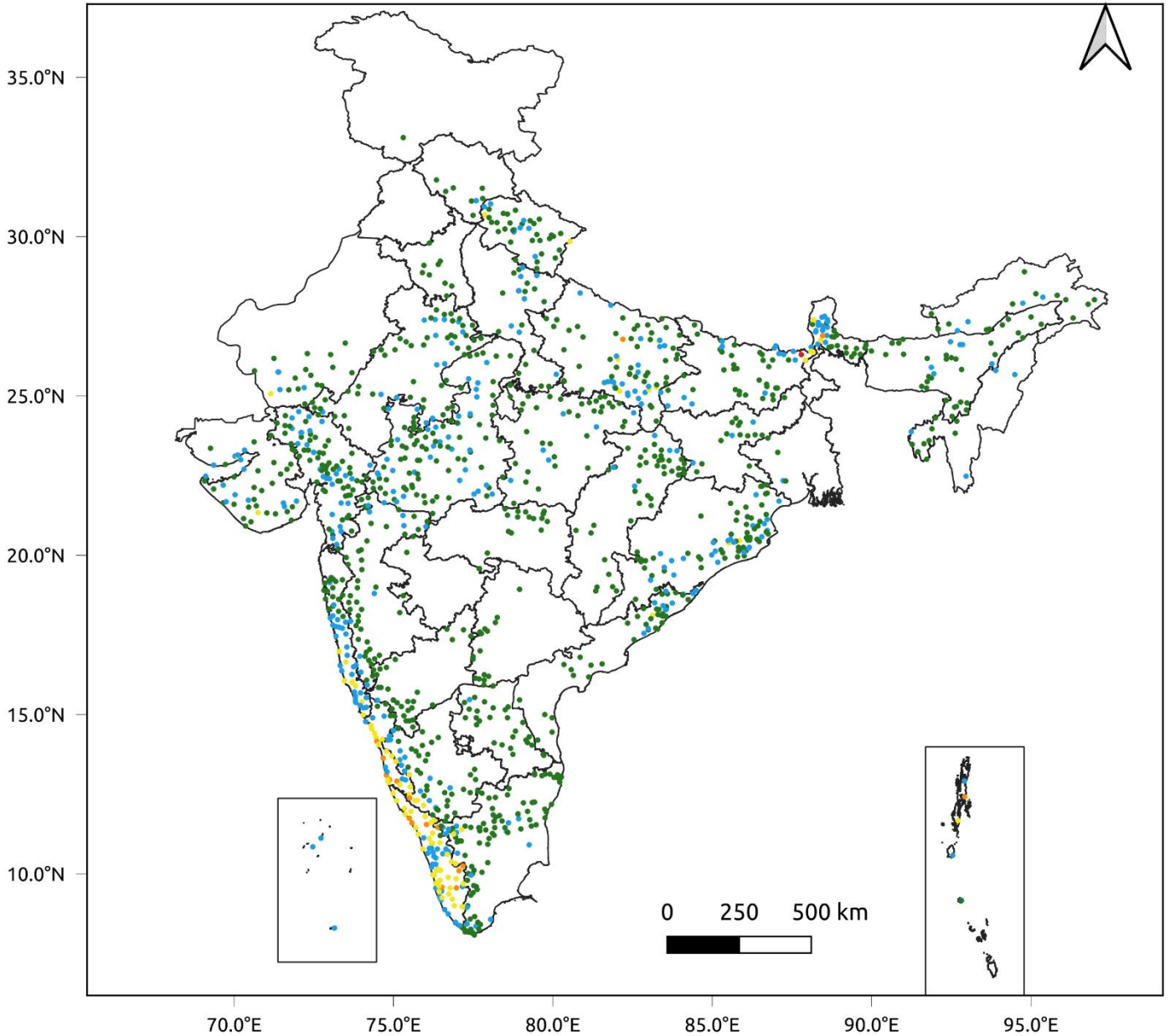


Fig. 5: Accumulated Rainfall (mm) during past 24 hours



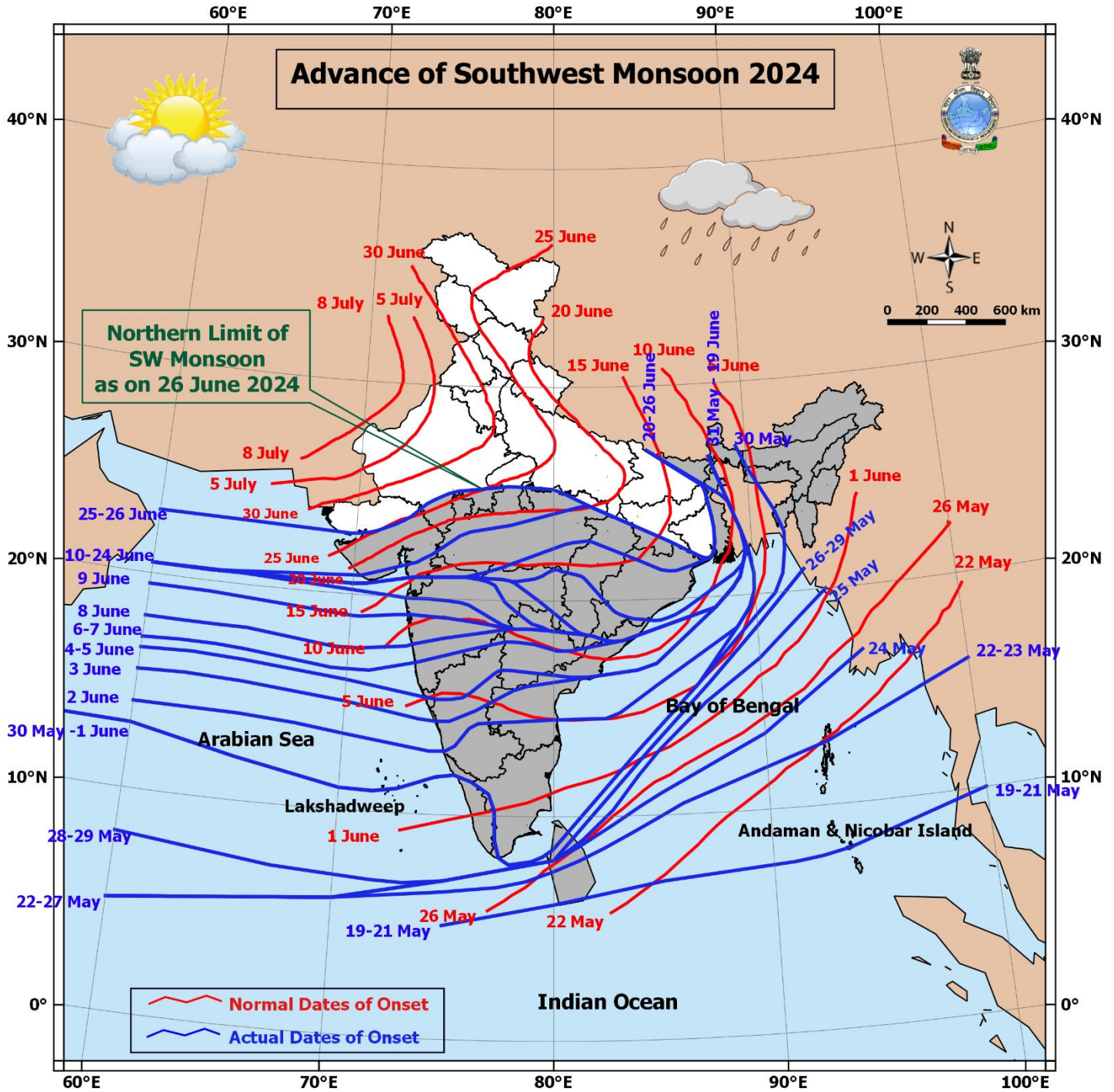
24 Hr cumulative rainfall recorded over different stations during 0830 IST of 25-6-2024 to 0830 IST of 26-6-2024



Legends

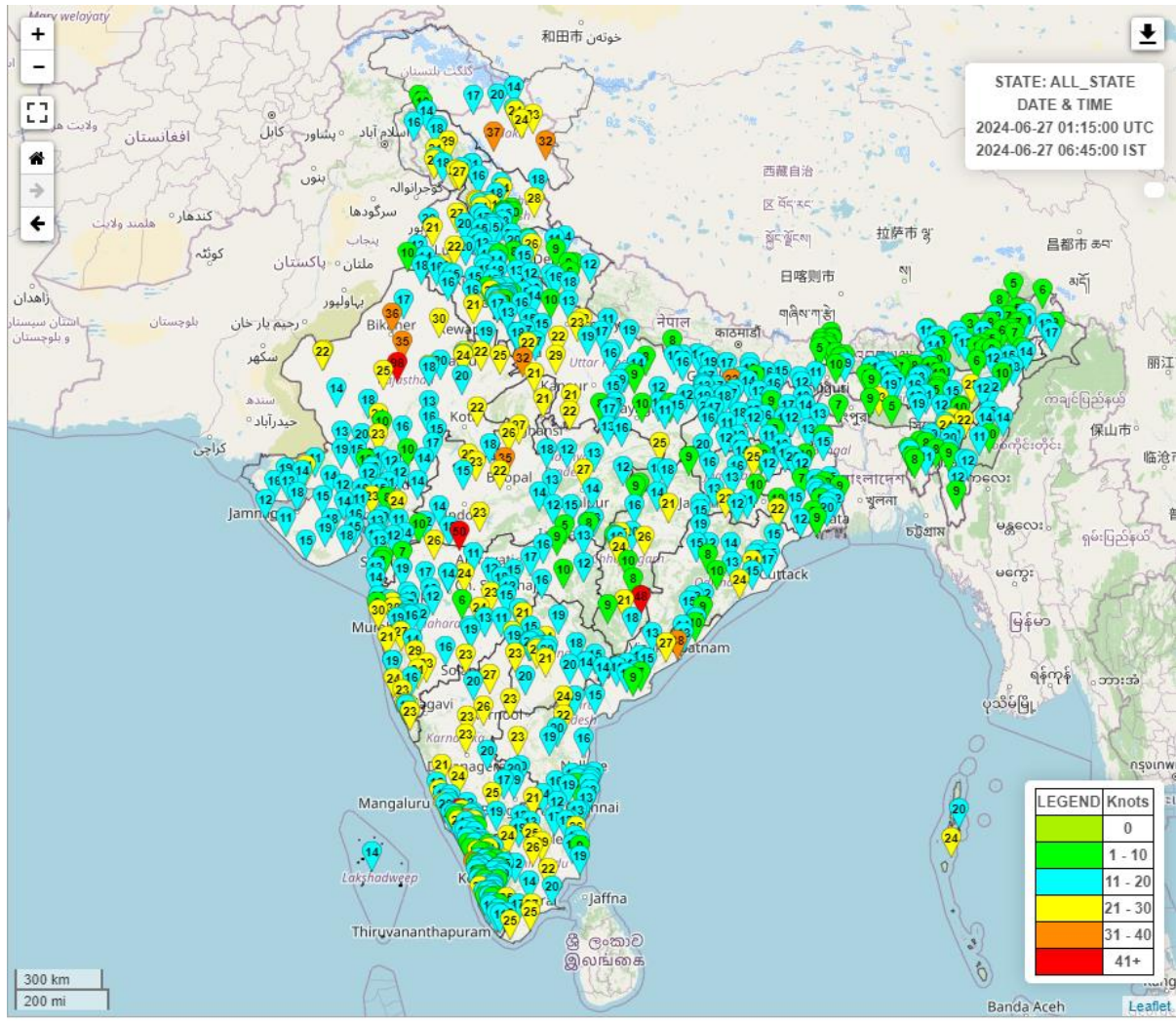
- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall (≥ 204.5 mm)

Fig. 6: Advance of Southwest Monsoon 2024



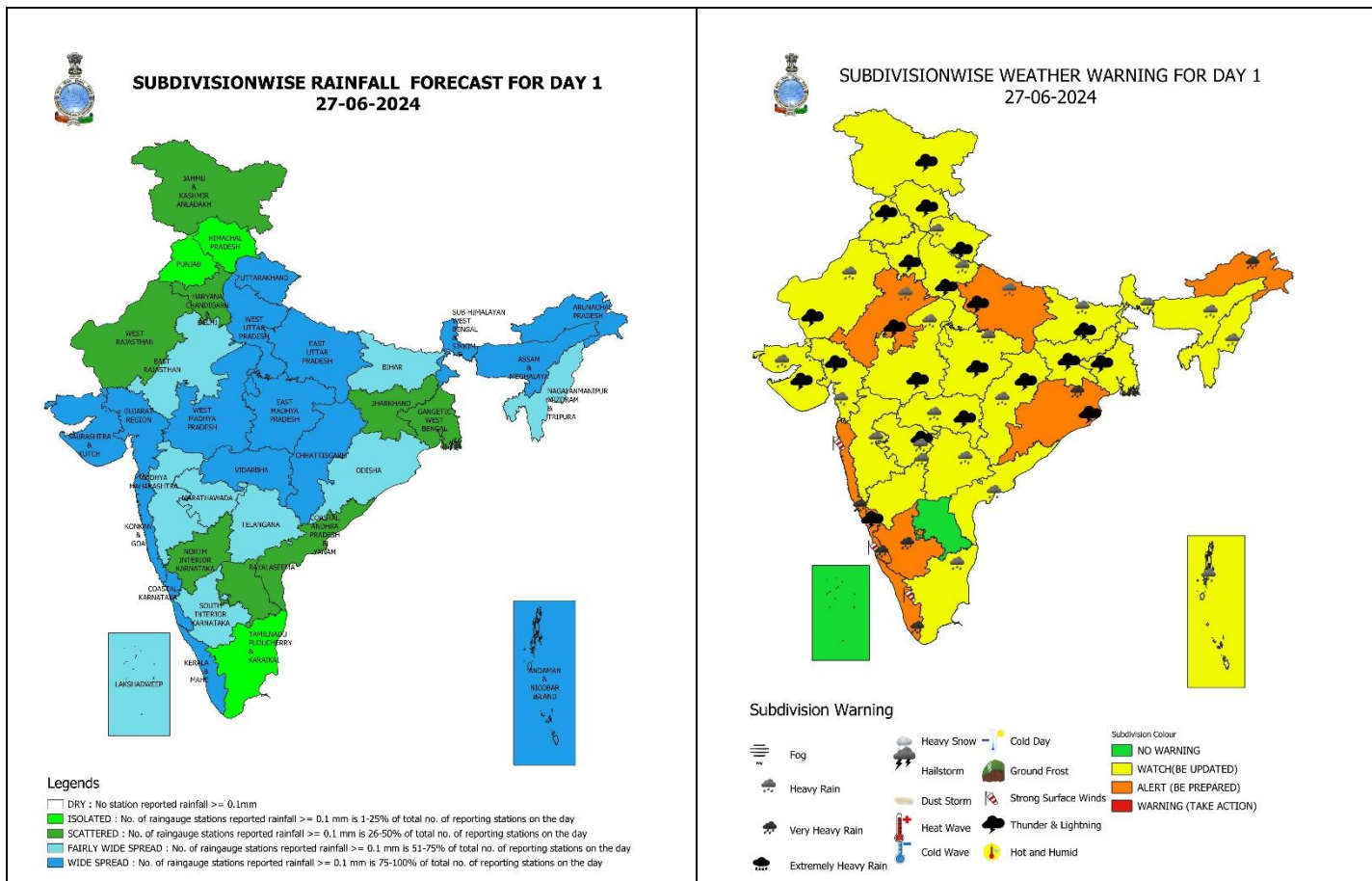
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Fig. 7: Gusty winds reported over the country (in knots) from 0830 hours IST of 26.06.2024 to 0645 hours IST of 27.06.2024



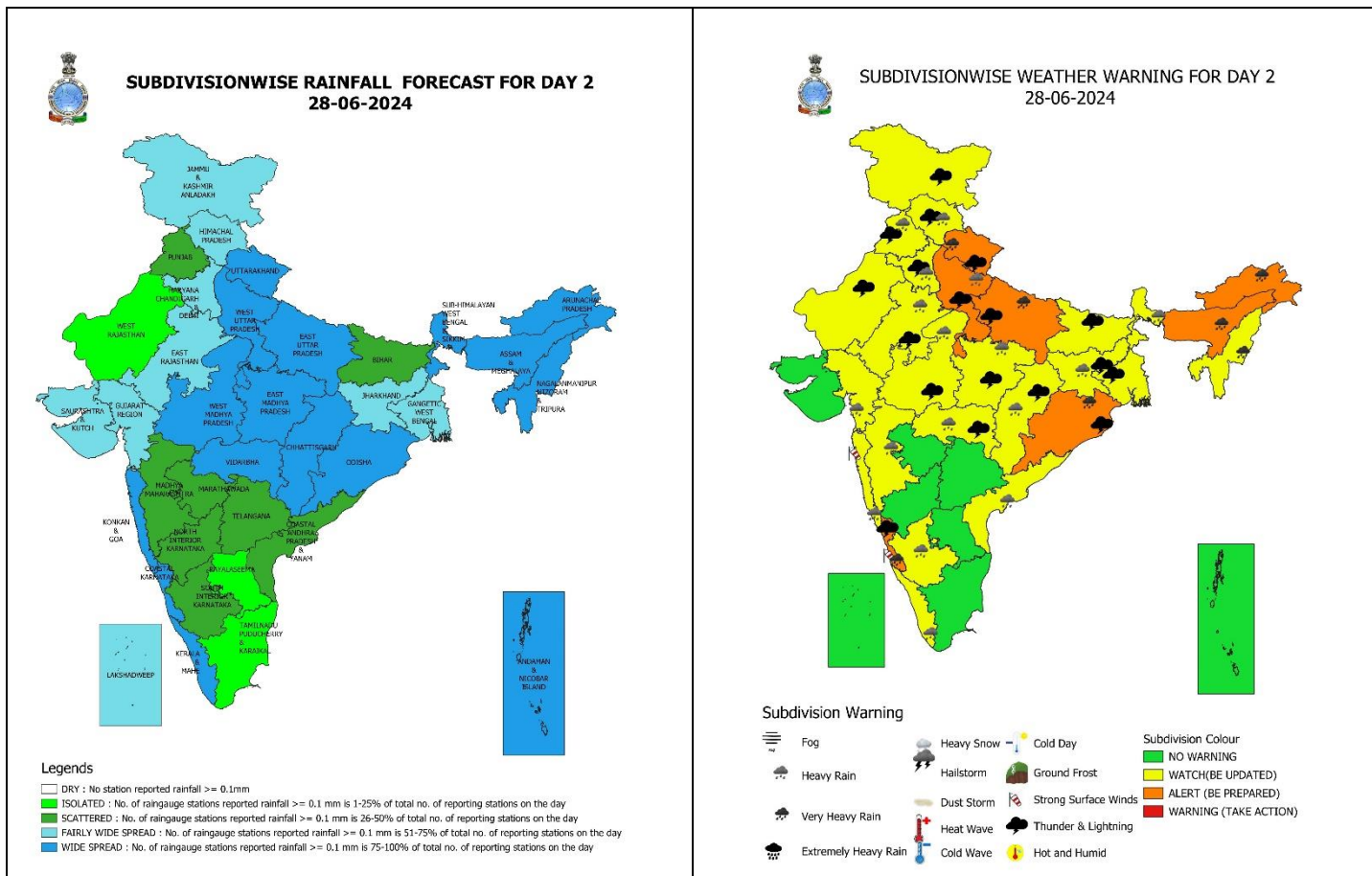
1 Knot = 1.852 kmph

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



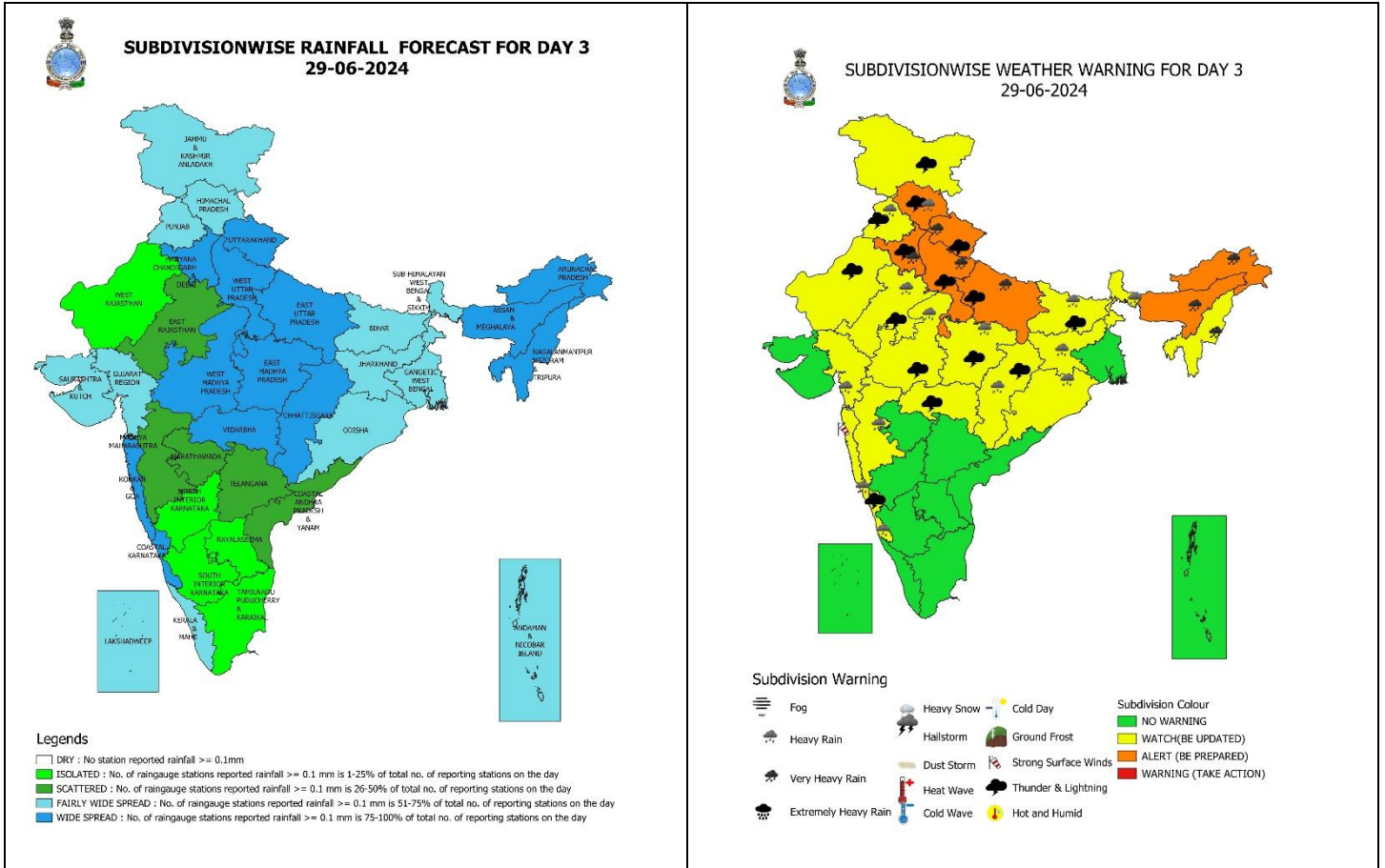
27 June (Day 1):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Odisha, Arunachal Pradesh, Konkan & Goa, Kerala & Mahe, Coastal Karnataka & South Interior Karnataka; **heavy rainfall** at isolated places over Uttarakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Gujarat state, Tamil Nadu, Coastal Andhra Pradesh & Yanam, Telangana and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Uttarakhand, Uttar Pradesh, Bihar; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Rajasthan, Madhya Pradesh, Vidarbha, Gangetic West Bengal, Jharkhand and Odisha; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi, Chhattisgarh, Marathwada and Gujarat state.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over Lakshadweep area, adjoining southeast Arabian sea, along and off Maharashtra, Konkan, Goa, Karnataka, Kerala coasts, over Gulf of Mannar, off Sri Lanka coast, off north Andhra pads and off south Odisha coasts, south and central Bay of Bengal & adjoining northwest Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast, southwest and adjoining southeast Arabian sea & central Arabian sea, along and off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



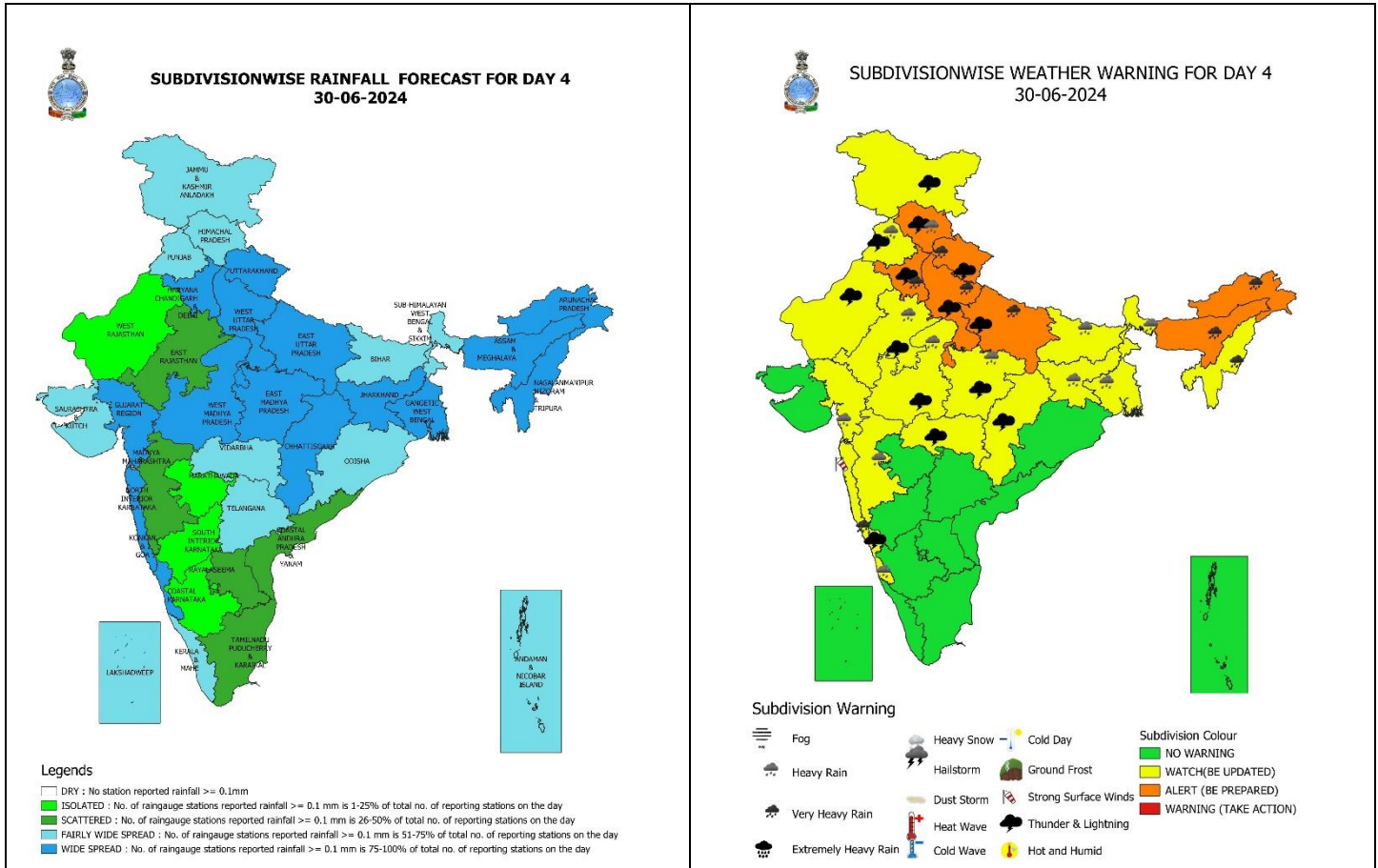
28 June (Day 2):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Uttarakhand, East Uttar Pradesh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Karnataka; **heavy rainfall** at isolated places over Punjab, Himachal Pradesh, Haryana-Chandigarh, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Kerala & Mahe, Coastal Andhra Pradesh & Yanam and South Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Rajasthan, Madhya Pradesh, Vidarbha, Gangetic West Bengal, Bihar, Jharkhand and Odisha; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana-Chandigarh-Delhi and Chhattisgarh.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over northern parts of southeast & southwest Arabian sea, along and off south Maharashtra, Konkan, Goa, Karnataka, coasts, over Gulf of Mannar, off Sri Lanka coast, south and central Bay of Bengal & adjoining north Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast, southwest and adjoining southeast Arabian sea & central Arabian sea, along and off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



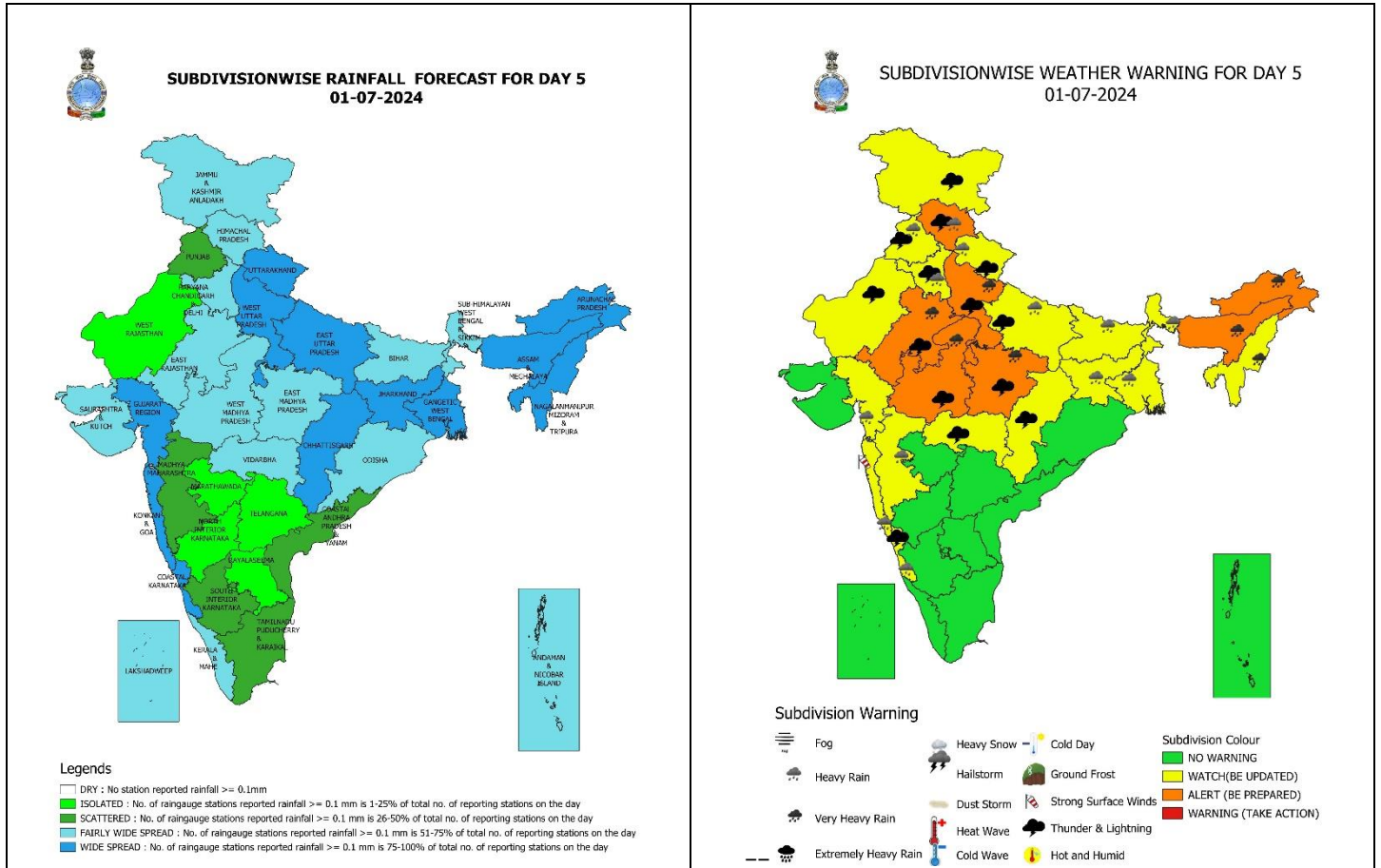
29 June (Day 3):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Uttarakhand, Haryana, Chandigarh, Uttar Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **heavy rainfall** at isolated places over Himachal Pradesh, Punjab, East Rajasthan, Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Konkan & Goa, Madhya Maharashtra, Gujarat Region and Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Rajasthan, Madhya Pradesh, Vidarbha and Bihar; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana-Chandigarh-Delhi and Chhattisgarh.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over northern parts of southeast Arabian sea, off Maharashtra, Konkan, Goa, Karnataka, coasts, over Gulf of Mannar, off Sri Lanka coast, south and central Bay of Bengal, southern parts of north Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast, southwest and adjoining southeast Arabian sea & central Arabian sea, along and off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



30 June (Day 4):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Uttarakhand, Haryana, Chandigarh, Uttar Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa; **heavy rainfall** at isolated places over Himachal Pradesh, Punjab, East Rajasthan, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Gangetic West Bengal, Madhya Maharashtra, Gujarat Region and Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Rajasthan, Madhya Pradesh, Vidarbha; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana-Chandigarh-Delhi and Chhattisgarh.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northern parts of southeast Arabian sea, off Maharashtra coast, over gulf of Mannar, off Sri Lanka coast, south and central Bay of Bengal, off north Andhra Pradesh, off Odisha, off west Bengal coasts, northwest and adjoining northeast Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast, southwest Arabian sea & central Arabian sea, along and off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.

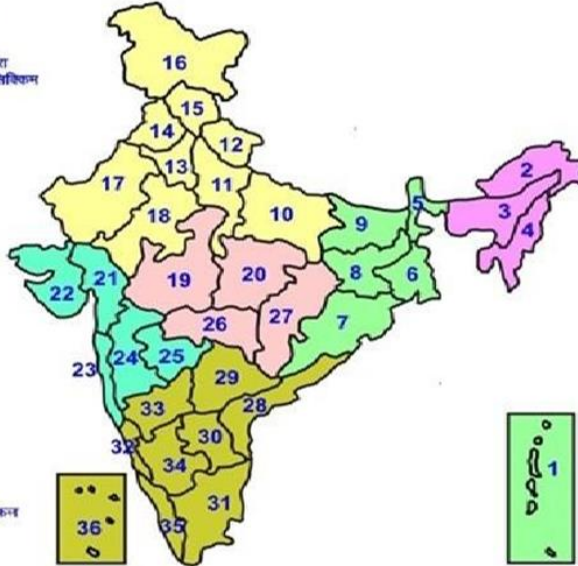


01 July (Day 5):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over northeast Rajasthan, north Madhya Pradesh, southwest Uttar Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **heavy rainfall** at isolated places over Uttarakhand, Himachal Pradesh, Haryana, Chandigarh, Punjab, East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Gangetic West Bengal, Madhya Maharashtra, Konkan & Goa, Gujarat Region and Coastal Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Rajasthan, Madhya Pradesh, Vidarbha; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana-Chandigarh-Delhi and Chhattisgarh.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northern parts of southeast Arabian sea, off Maharashtra coast, over gulf of Mannar, off Sri Lanka coast, south and central Bay of Bengal, off north Andhra Pradesh, off Odisha, off west Bengal coasts, northwest and adjoining northeast Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast, southwest Arabian sea & central Arabian sea, along and off Yemen and Oman coasts. 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 मनीपुर 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 एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सोराष्ट्र एवं कच्छ
- 23 कोकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 महाराष्ट्र
- 26 विदर्भ
- 27 उत्तरीमहाराष्ट्र
- 28 उड़ीसा आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 सत्यसहीमा
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 उत्तर कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवं माहे
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. 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)
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Probabilistic Forecast

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



Rain/ Snow *

Heavy: 64.5 to 115.5 mm/cm *
Very Heavy: 115.6 to 204.4 mm/cm*
Extremely Heavy: > 204.4 mm/cm *



Heat Wave

When maximum temperature of a station reaches $\geq 40^\circ\text{C}$ for plains and $\geq 30^\circ\text{C}$ for hilly regions
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C .
Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.
Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is $> 4.5^\circ\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^\circ\text{C}$



Warm Night

When maximum temperature remains 40°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°C .
Severe Warm Night: When minimum temperature departure $> 6.4^\circ\text{C}$.



Cold Wave

When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions.

(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C .
Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is $\leq 4.0^\circ\text{C}$
Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ & actual Minimum Temperature is $\leq 15^\circ\text{C}$



Cold Day

When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions
Based on departure

Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C .
Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^\circ\text{C}$



Fog

Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres
Dense Fog: when the visibility between 50- 200 metres
Very Dense Fog: when the visibility < 50 metres



Thunderstorm

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



Dust/Sand Storm

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



Frost

Ice deposits on ground

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



Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph
Severe: Wind speed 62-87 kmph
Very Severe: Wind speed > 87 kmph



Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre
High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre
Phenomenal: Wind speed > 117 kmph (> 63 knots) & Wave height > 14 metre



Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)
Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)
Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)
Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)
Super Cyclone Storm: Wind speed > 220 kmph (> 119 knots)