

Sunday, June 30, 2024
Time of Issue: 1630 hours IST
(EVENING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Advance of Southwest Monsoon:

- ❖ Northern Limit of Monsoon now passes through 26°N/65°E, Jaisalmer, Churu, Hissar, Karnal, Jalandhar, Tarn Taran and 31.5°N/74.5°E.
- ❖ Southwest monsoon has further advanced into some more parts of West Rajasthan and Haryana, remaining parts of Uttar Pradesh, some more parts of Punjab and remaining parts of Himachal Pradesh and Jammu.
- ❖ Conditions are favourable for further advance of southwest Monsoon into some more parts of West Rajasthan and Haryana-Chandigarh & Punjab during next 2-3 days.

Weather Systems and Forecast & Warnings:

- ❖ A cyclonic circulation lies over southeast Pakistan adjoining Kutch in lower tropospheric levels. A cyclonic circulation lies over north Gujarat & neighbourhood in middle tropospheric levels. The off-shore trough at mean sea level along Maharashtra- Kerala coasts. Under their influence:
 - Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm & lightning very likely over Kerala & Mahe, Lakshadweep, Coastal Karnataka, Konkan & Goa, Gujarat State; scattered to fairly widespread light to moderate rainfall over Madhya Maharashtra, Coastal Andhra Pradesh & Yanam; isolated to scattered light to moderate rainfall over Marathwada, Tamil Nadu, Puducherry & Karaikal, Rayalaseema, Telangana, North & South Interior Karnataka during next 5 days.
 - Isolated **heavy rainfall** very likely over Saurashtra & Kutch on 01st July; Gujarat Region during 02nd -04th July; Ghat areas of Madhya Maharashtra on 02nd & 04th July; Konkan & Goa on 02nd & 03rd July; Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe & South Interior Karnataka on 30th June & 01st July; Lakshadweep, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana on 30th June and Coastal Karnataka during 30th June-03rd July.
 - **Isolated very heavy rainfall very likely over Saurashtra & Kutch on 30th June; Gujarat Region, Madhya Maharashtra on 30th June & 01st July; Konkan & Goa on 30th June, 01st & 04th July.**
- ❖ A cyclonic circulation lies over east Jharkhand and another over northeast Assam in lower tropospheric levels. A trough runs from West Assam to North Odisha in lower tropospheric levels. A cyclonic circulation lies over central Madhya Pradesh and a trough runs from northeast Arabian Sea off south Gujarat coast to northwest Bihar across this cyclonic circulation in middle tropospheric levels. Under their influence;
 - Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm, lightning very likely over Northwest, Central, East and Northeast India during next 5 days.
 - Isolated **heavy rainfall** very likely over Punjab on 30th June, 03rd & 04th July; Delhi during 01st-03rd July; Haryana-Chandigarh on 04th July; Himachal Pradesh on 03rd & 04th July; East Rajasthan during 02nd July -04th July; West Madhya Pradesh on 30th June & 04th July; East Madhya Pradesh on 30th June, 03rd & 04th July; Vidarbha & Odisha on 30th June; Gangetic West Bengal on 30th June & 03rd July; Sub-Himalayan West Bengal & Sikkim on 03rd & 05th July; Jharkhand during 30th June-03rd July; Bihar on 03rd & 04th July and over Chhattisgarh during 30th June-4th July.
 - **Isolated very heavy rainfall likely over Himachal Pradesh during 30th June-02nd July; Uttarakhand during 30th June -04th July; Punjab on 01st & 02nd July; Haryana-Chandigarh & Uttar Pradesh during 30th June-03rd July; East Rajasthan on 30th June & 01st July; Sub-Himalayan West Bengal & Sikkim on 01st & 03rd July, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 30th June-4th July and over Bihar during 30th June-02nd July.**
 - **Isolated extremely heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya on 30th June; Arunachal Pradesh on 30th June & 01st July.**

Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at most places over** East Madhya Pradesh, Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Saurashtra & Kutch, Kerala & Mahe, Telangana and Coastal Karnataka; **at many places over** Uttar Pradesh, West Madhya Pradesh, Gujarat Region, Lakshadweep, Coastal Andhra Pradesh & Yanam; **at a few places over** Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Madhya Maharashtra, Marathwada, Interior Karnataka; **at isolated places over** West Rajasthan, Tamil Nadu, Puducherry & Karaikal and Rayalaseema.
- ❖ **Heavy rainfall recorded** (from 0830 hours IST of yesterday to 0830 hours IST of today): **Heavy to very heavy rainfall with extremely heavy falls occurred** at isolated places over Assam & Meghalaya, Arunachal Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim; **Heavy to very heavy rainfall** at isolated places over East Rajasthan, Haryana, Chhattisgarh; **Heavy rainfall** at isolated places over Uttarakhand, Uttar Pradesh, Odisha, Madhya Pradesh, Madhya Maharashtra, Konkan & Goa, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Tamil Nadu, Coastal & South Interior Karnataka, Telangana, Coastal Andhra Pradesh & Yanam.
- ❖ **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today): (in cm): **Assam & Meghalaya:** Mawsynram (dist East Khasi Hills) 33, Mawkyrwat (dist South West Khasi Hills) 23, Cherrapunji(rkm) (dist East Khasi Hills) 20, Mawkyrwat_arg (dist South West Khasi Hills) 20, Cherrapunji (dist East Khasi Hills) 19, Jiagaon (dist Tinsukia) 16, Chauldhowaghat (dist Lakhimpur) 15, Hailakandi_ Aws (dist Hailakandi) 11; **Arunachal Pradesh:** Roing (dist Lower Dibang Valley) 22, Pasighat_ Aero (dist East Siang) 19, Namsai Kvk Aws (dist Lohit) 12, Miao (dist Changlang) 10; **Bihar:** Chanan (dist Lakhisarai) 24, Kaler (dist Arwal) 16, Tekari (dist Gaya) 14, Jahanabad (dist Jahanabad) 12, Laxmipur (dist Jamui) 12, Jamui (dist Jamui) 12, Belanganj (dist Gaya) 11, Nawada (dist Nawada) 11, Khizirsarai (dist Gaya) 11, Lalbegiaghat (dist East Champaran) 11; **Sub-Himalayan West Bengal & Sikkim:** Sevoke (dist Darjeeling) 22, Jhallong (dist Kalimpong) 17, Jalpaiguri (dist Jalpaiguri) 14, Neora (dist Jalpaiguri) 13, Gajoldoba (dist Jalpaiguri) 12, Siliguri Pto (dist Darjeeling) 12, Bagdogra Iaf (dist Darjeeling) 11, Champasari (dist Darjeeling) 11; **Chhattisgarh:** Kusmi (dist Balrampur) 16, Patna (dist Koriya) 14, Pendra Road (dist Gaurela Pendra Marwahi) 10, Dornapal (dist Sukma) 9; **Haryana:** Samalkha (dist Panipat) 13, Hansi Arg (dist Hisar) 9, Ganaur (dist Sonapat) 8; **East Rajasthan:** Bari (dist Dholpur) 12, Baseri Sr (dist Dholpur) 11, Nagar Sr (dist Bharatpur) 10, Kumher Sr (dist Bharatpur) 9; **East Madhya Pradesh:** Mohangarh (dist Tikamgarh) 11, Jabalpur-aws (dist Jabalpur) 10, Baihar (dist Balaghat) 10, Patan (dist Jabalpur) 9; **Coastal Andhra Pradesh & Yanam:** Guntur (dist Guntur) 11; **East Uttar Pradesh:** Ramnagar (dist Barabanki) 11, Kaiserganj (dist Bahraich) 11; **South Interior Karnataka:** Agumbe EMO (dist Shivamogga) 9, Kottigehara (dist Chikkamagaluru) 9; **Odisha:** Banki (Dist Cuttack) 11, Bahanga (dist Balasore) 10, Bhograai (dist Balasore) 10; **Telangana:** Mulakalapalle (dist B. Kothagudem) 9; **Konkan & Goa:** Kankavli (dist Sindhudurg) 9.
- ❖ **Maximum Gusty Wind (in kmph) (AWS)** (from 0830 hours IST of yesterday to 0830 hours IST of today): **Ladakh:** Padum-70, Chuchot_Yokma-54, Nyoma-48, Upshi and Leh-46 each; **Himachal Pradesh:** Reckon-67; **Gujarat:** Arnej-63, Tharad-57, Anand and Ahmedabad-52 each, Chhotaudepur and Verawal-50 each, Godra-48, Dantewada-46; **Maharashtra:** Mo Alibagh-63, Kalwan-54, Jalgong-52, Mahabaleshwar-50, Latur-48, Satara-47, Sahahda and Lonawala-46 each; **Bihar:** Patna-57; **Jammu & Kashmir:** Chatha-54; **Mizoram-** Saiha-54, Champhai-52; **Goa:** North Goa-52, **Haryana:** Saragthal-50; **Meghalaya-** Nongstoin-50; **Andhra Pradesh:** Maruteru-50; **Madhya Pradesh:** Khandwa-48; **Punjab:** Faridkot and Moga-46 each; **West Uttar Pradesh:** Agra-46; **Jharkhand:** Palmau-46.
- ❖ **Minimum Temperature Departures (as on 30-06-2024):** Minimum temperatures are **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Himachal Pradesh; **above normal (1.6°C to 3.0°C)** at a few places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Rajasthan, Saurashtra & Kutch, Madhya Maharashtra, Konkan & Goa, Marathwada, North Interior Karnataka, Rayalaseema and Gangetic West Bengal. These are **below normal (-1.6°C to -3.0°C)** at a few places over East Madhya Pradesh; at isolated places over Coastal Andhra Pradesh & Yanam, Telangana, Haryana-Chandigarh-Delhi and Assam & Meghalaya and **near normal** over rest parts of the country. Today, **the lowest minimum temperature** of 20.0°C is reported at **Bulandshahr (West Uttar Pradesh) & Bahraich (East Uttar Pradesh)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 29-06-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Bihar, Odisha and Jharkhand; **above normal (1.6°C to 3.0°C)** at isolated places over West Bengal & Sikkim, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. These were **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Rajasthan, East Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Telangana and Saurashtra & Kutch; **below normal (-1.6°C to -3.0°C)** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Madhya Pradesh, Gujarat Region, Haryana-Chandigarh-Delhi and Vidarbha and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature** of 41.5°C was reported at **Ganganagar (West Rajasthan)** over the country.

Meteorological Analysis (Based on 1430 hours IST)

- ❖ Northern Limit of Monsoon continue to pass through 26°N/65°E, Jaisalmer, Churu, Hissar, Karnal, Jalandhar, Tarn Taran and 31.5°N/74.5°E.
- ❖ Southwest monsoon has further advanced into some more parts of West Rajasthan and Haryana, remaining parts of Uttar Pradesh, some more parts of Punjab and remaining parts of Himachal Pradesh and Jammu.
- ❖ Conditions are favourable for further advance of southwest Monsoon into some more parts of West Rajasthan and Haryana-Chandigarh & Punjab during next 2-3 days.
- ❖ The cyclonic circulation over east Jharkhand & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Assam & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The trough from west Assam to north Odisha between 3.1 & 3.6 km above mean sea level persists.
- ❖ The cyclonic circulation over north Haryana & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over central Pakistan & neighbourhood at 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over central Madhya Pradesh & neighbourhood at 5.8 km above mean sea level persists.
- ❖ The trough from northeast Arabian sea off south Gujarat coast to northwest Bihar across cyclonic circulation over central Madhya Pradesh at 5.8 km above mean sea level persists.
- ❖ The cyclonic circulation over north Gujarat & neighbourhood between 3.1 & 4.5 km above mean sea level persists.
- ❖ The cyclonic circulation over southeast Pakistan and adjoining Kutch at 1.5 km above mean sea level persists.
- ❖ The off-shore trough at mean sea level along Maharashtra- Kerala coasts persists.

Weather Forecast for next 7 days (Upto 0830 hours IST of 07th 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 & Northwest India during next 5 days.
- ❖ No significant change in maximum temperatures very likely over most parts of the country.

Weather Outlook for subsequent 3 days (During 07th-09th July, 2024)

- ❖ Fairly widespread to widespread rainfall likely over most parts of the country.

Table-1

7 Days Rainfall Forecast								
S. No.	Subdivision	30-Jun	01-Jul	02-Jul	03-Jul	04-Jul	05-Jul	06-Jul
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	FWS	SCT	FWS	WS	WS	WS	WS
2	ARUNACHAL PRADESH	WS	WS	WS	WS	WS	WS	WS
3	ASSAM & MEGHALAYA	WS	WS	WS	WS	WS	WS	WS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	WS	WS	WS	WS	WS	WS	WS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	WS	WS	WS	WS	WS	WS	WS
6	GANGETIC WEST BENGAL	WS	FWS	FWS	WS	WS	WS	FWS
7	ODISHA	FWS	SCT	SCT	SCT	SCT	FWS	FWS
8	JHARKHAND	WS	WS	FWS	FWS	FWS	WS	WS
9	BIHAR	FWS	WS	WS	FWS	FWS	SCT	SCT
10	EAST UTTAR PRADESH	WS	WS	WS	WS	WS	WS	FWS
11	WEST UTTAR PRADESH	WS	WS	WS	WS	FWS	WS	WS
12	UTTARAKHAND	WS	WS	WS	WS	WS	WS	WS
13	HARYANA CHANDIGARH & DELHI	FWS	WS	WS	WS	WS	FWS	FWS
14	PUNJAB	FWS	FWS	WS	WS	FWS	FWS	FWS
15	HIMACHAL PRADESH	FWS	FWS	FWS	FWS	FWS	WS	WS
16	JAMMU & KASHMIR AND LADAKH	SCT	SCT	SCT	FWS	WS	WS	WS
17	WEST RAJASTHAN	ISOL	ISOL	ISOL	ISOL	ISOL	SCT	SCT
18	EAST RAJASTHAN	FWS	FWS	FWS	FWS	FWS	FWS	FWS
19	WEST MADHYA PRADESH	WS	FWS	FWS	FWS	FWS	FWS	FWS
20	EAST MADHYA PRADESH	WS	FWS	FWS	WS	WS	WS	WS
21	GUJARAT REGION	WS	WS	WS	WS	WS	WS	WS
22	SAURASHTRA & KUTCH	WS	WS	SCT	SCT	FWS	FWS	SCT
23	KONKAN & GOA	WS	WS	WS	WS	WS	WS	WS
24	MADHYA MAHARASHTRA	FWS	FWS	SCT	SCT	SCT	FWS	FWS
25	MARATHAWADA	SCT	ISOL	ISOL	ISOL	SCT	SCT	ISOL
26	VIDARBHA	WS	FWS	FWS	FWS	WS	WS	WS
27	CHHATTISGARH	WS	FWS	FWS	FWS	FWS	FWS	FWS
28	COASTAL ANDHRA PRADESH & YANAM	FWS	SCT	SCT	SCT	SCT	SCT	SCT
29	TELANGANA	SCT	ISOL	ISOL	ISOL	ISOL	SCT	SCT
30	RAYALASEEMA	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	WS	WS	WS	WS	WS	WS	WS
33	NORTH INTERIOR KARNATAKA	SCT	ISOL	ISOL	SCT	SCT	SCT	SCT
34	SOUTH INTERIOR KARNATAKA	SCT	SCT	ISOL	SCT	SCT	SCT	SCT
35	KERALA & MAHE	WS	WS	SCT	FWS	FWS	WS	WS
36	LAKSHADWEEP	WS	WS	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.
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

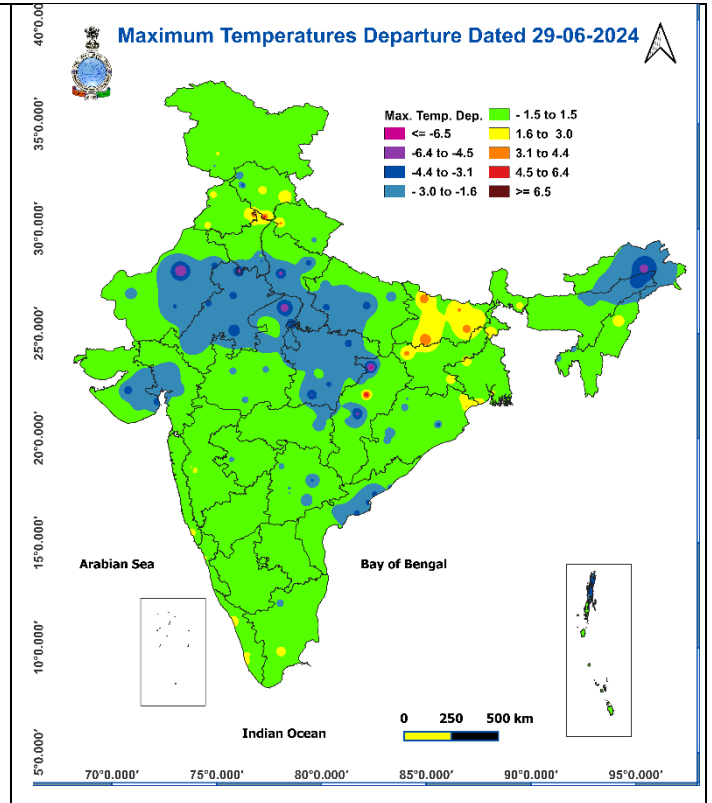
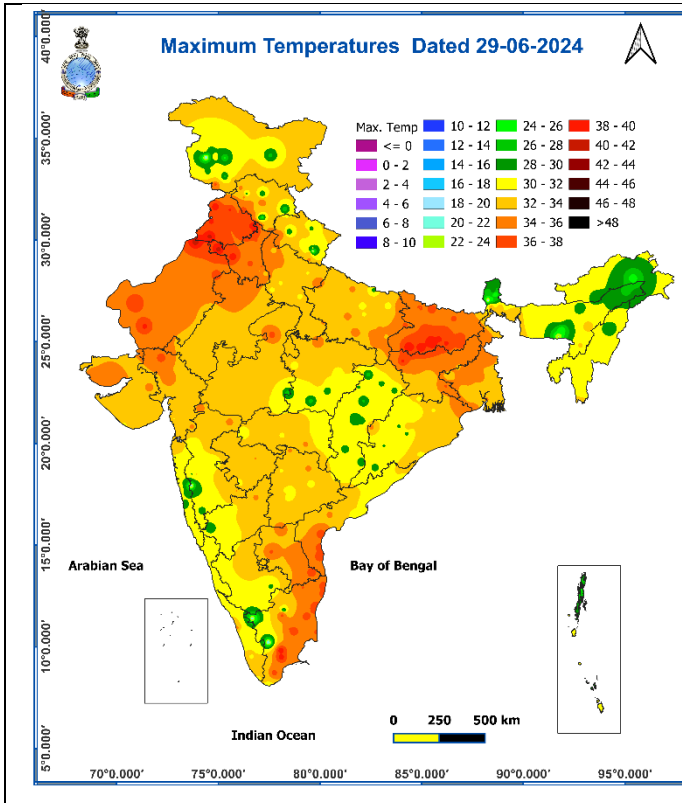


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

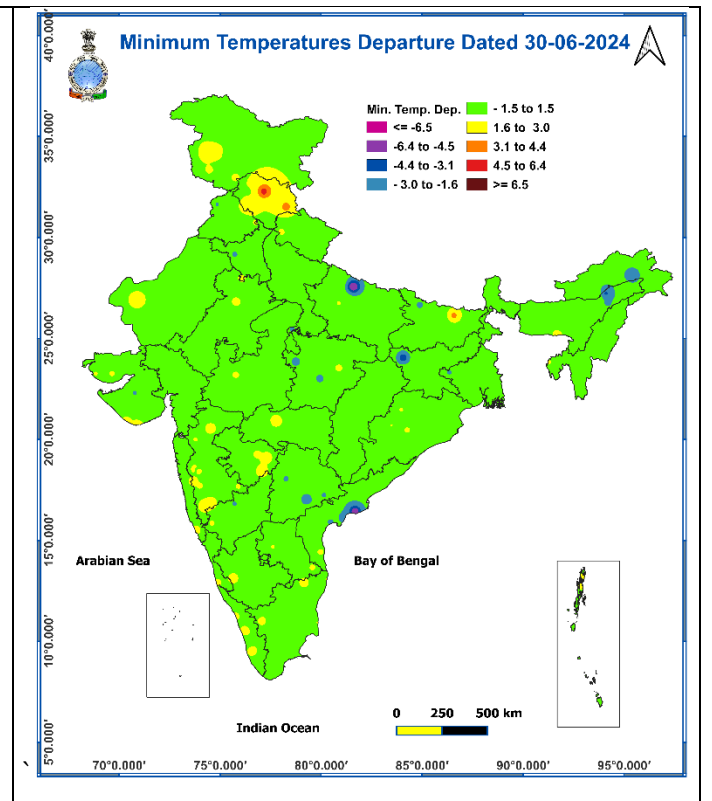
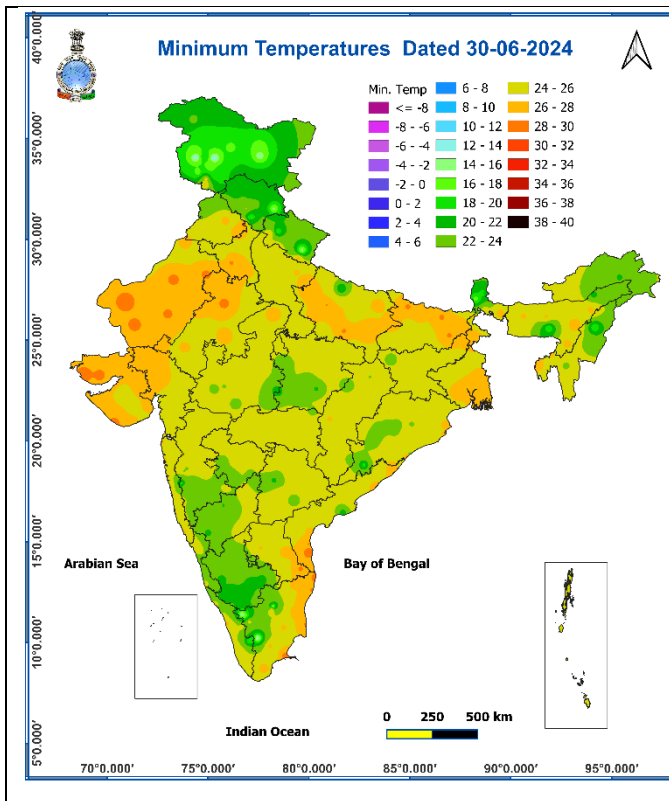
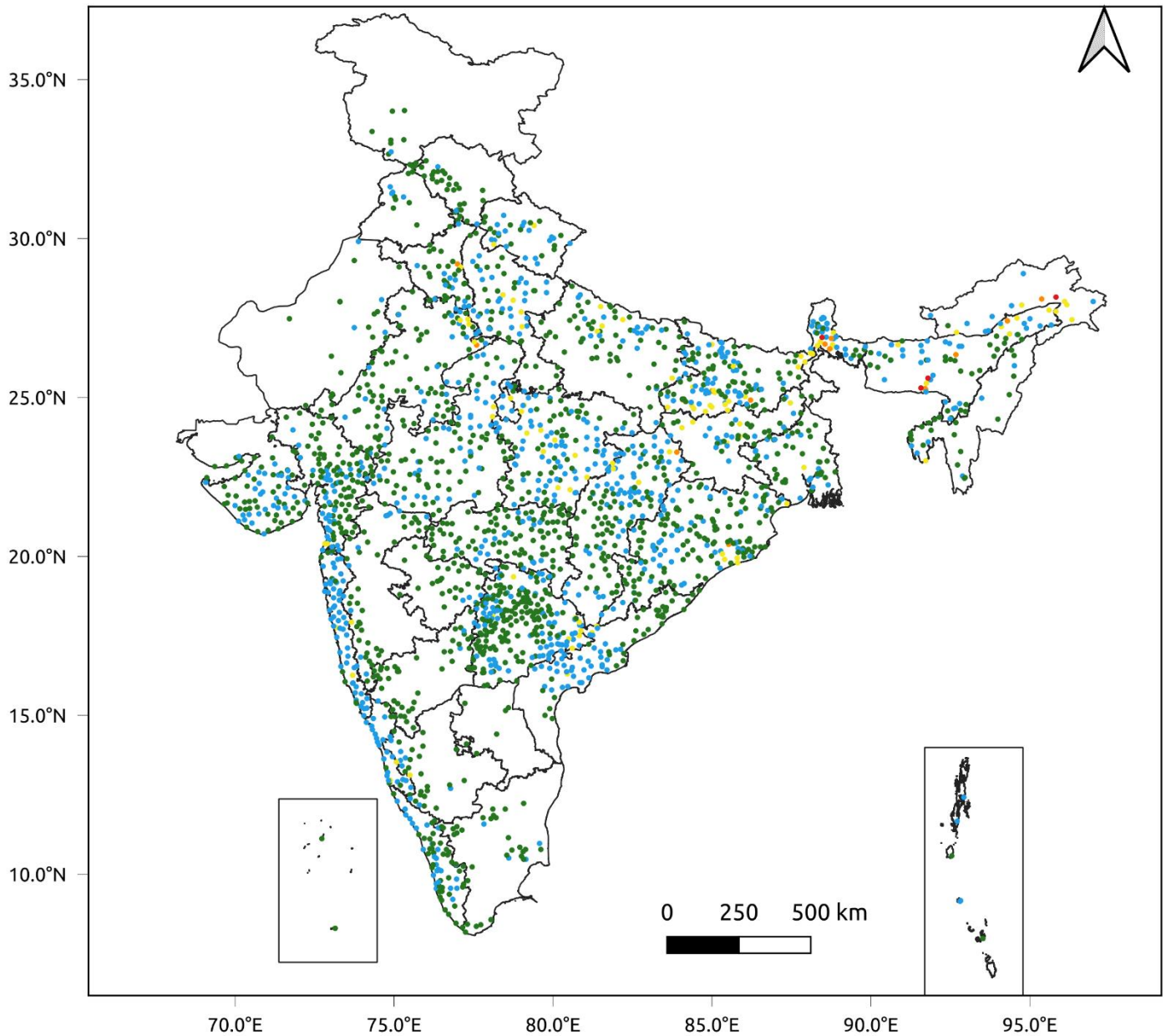


Fig. 5: Accumulated Rainfall (mm) during past 24 hours



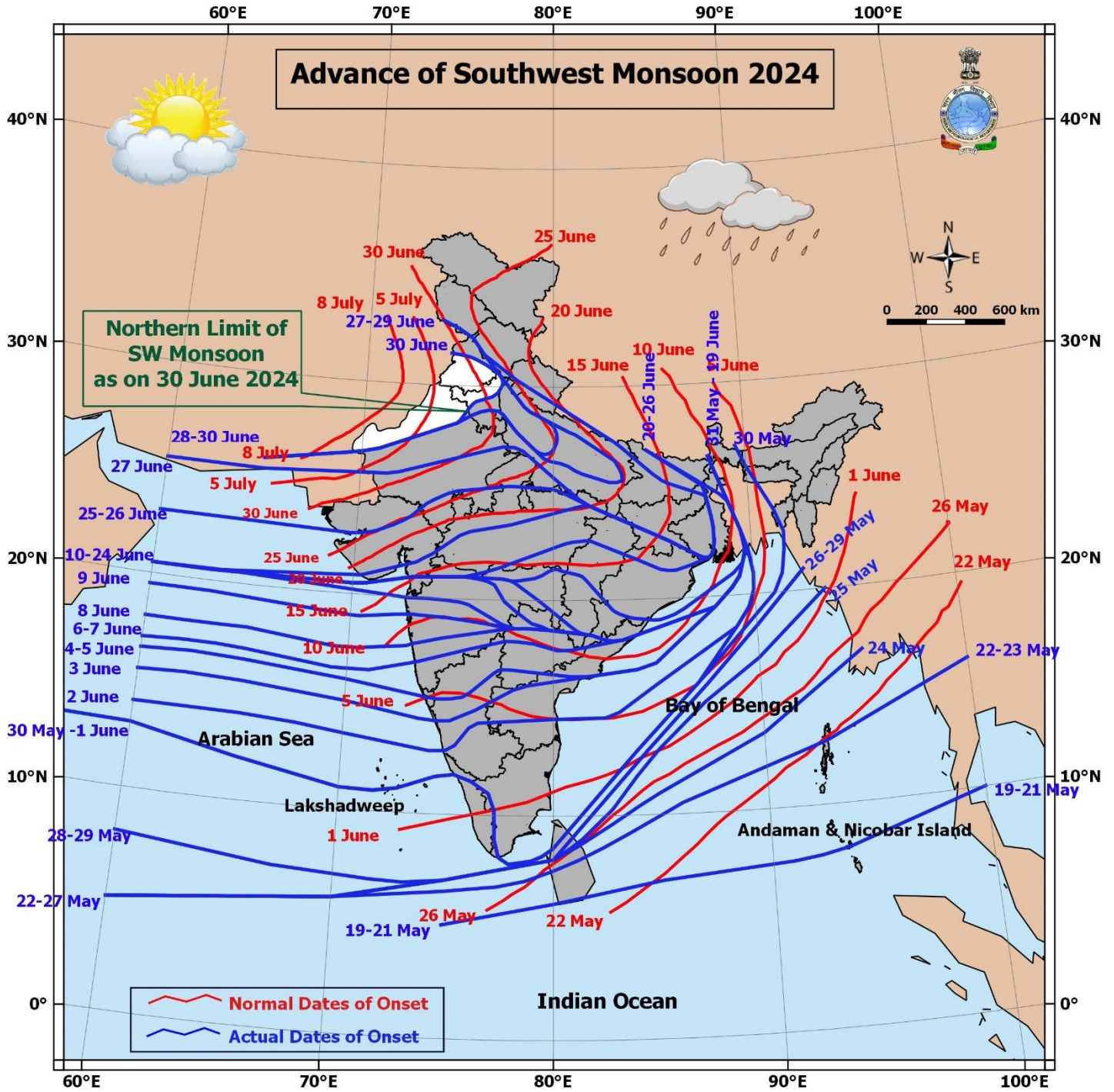
24 Hr cumulative rainfall recorded over different stations during 0830 IST of 29-6-2024 to 0830 IST of 30-6-2024



Legends

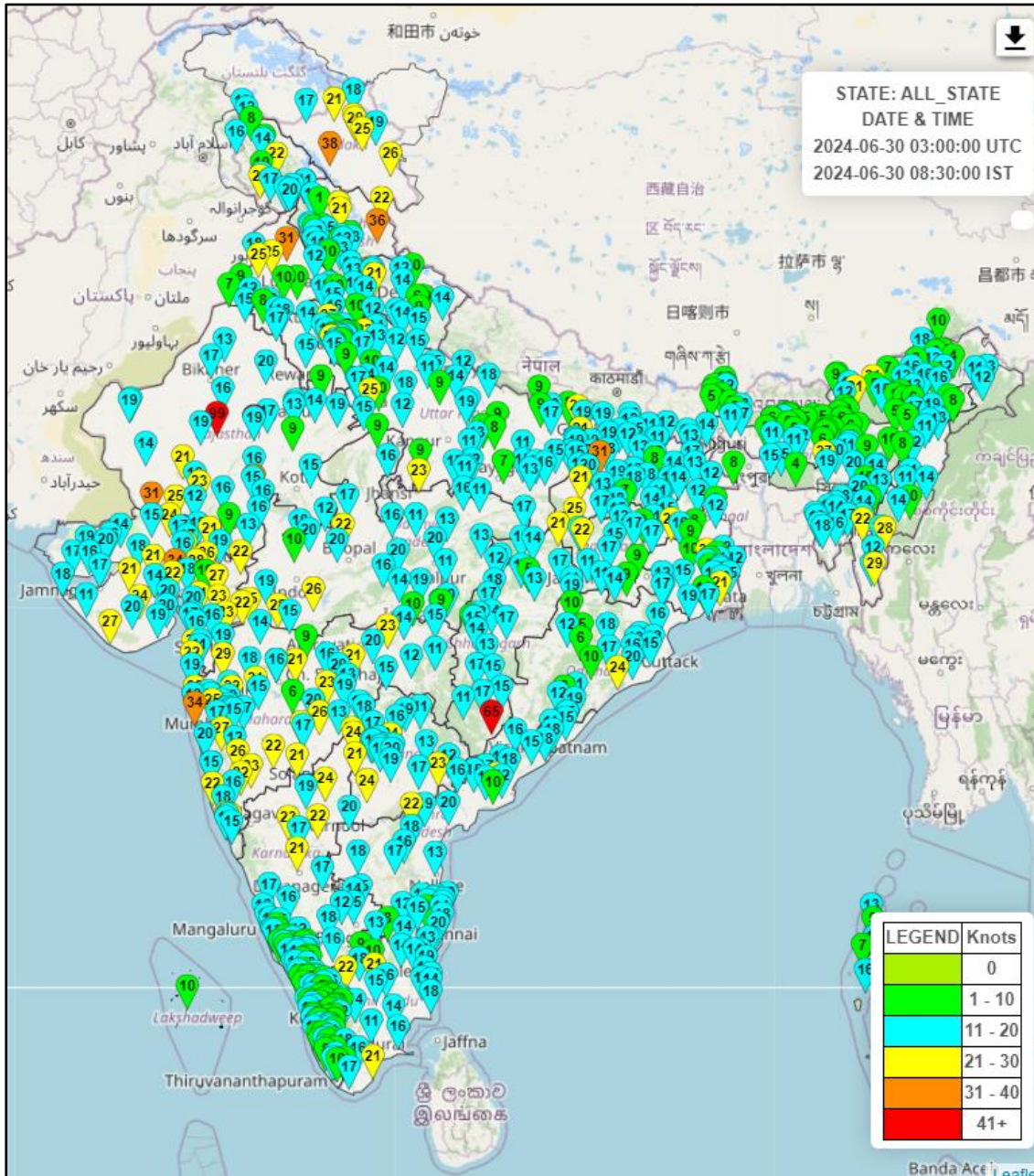
- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall (≥ 204.5 mm)

Fig. 6: Advance of Southwest Monsoon 2024



* 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)

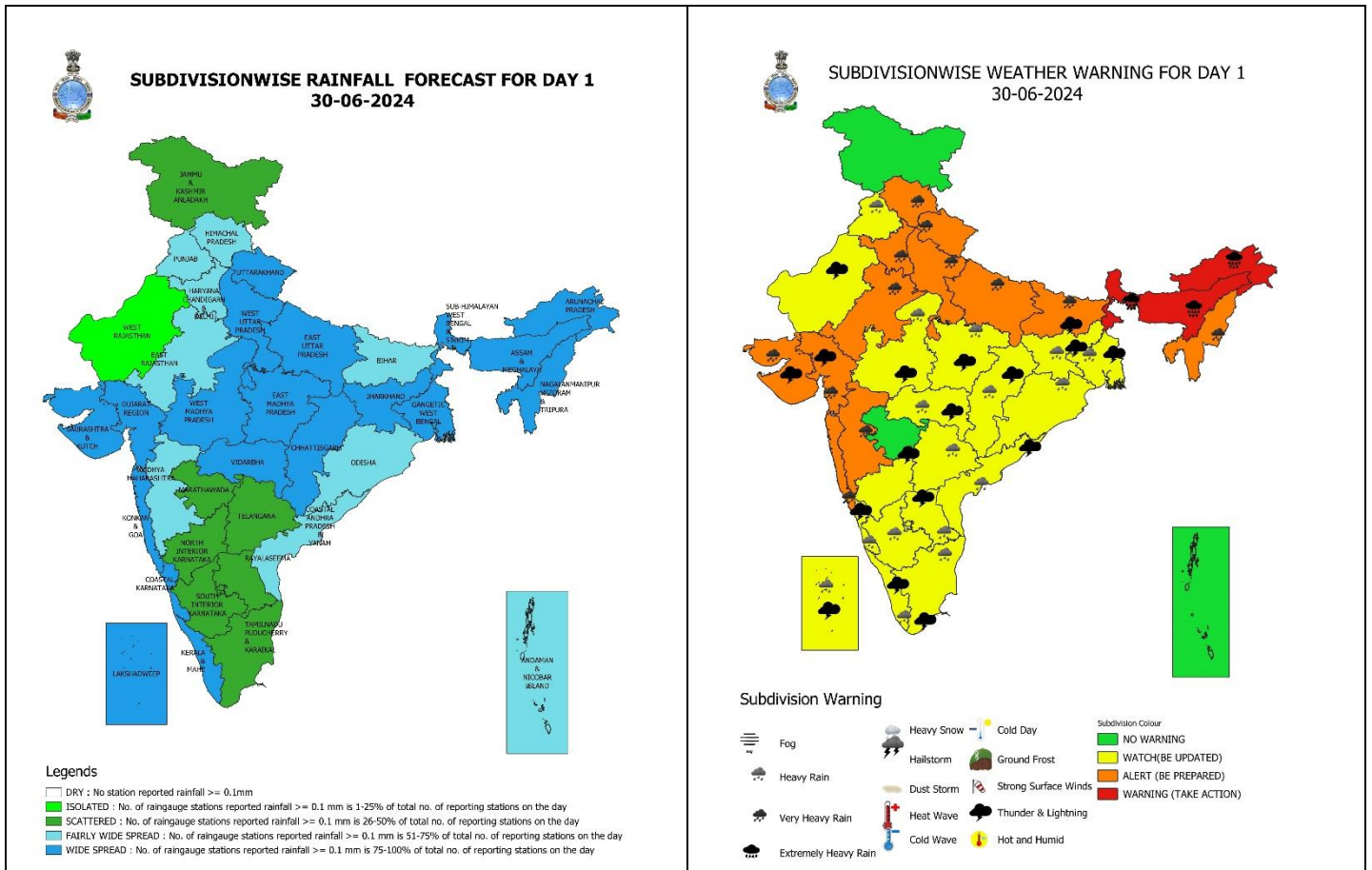
Fig. 7: Gusty winds reported over the country (in knots) from 0830 hours IST of 29.06.2024 to 0830 hours IST of 30.06.2024



1 Knot = 1.852 kmph

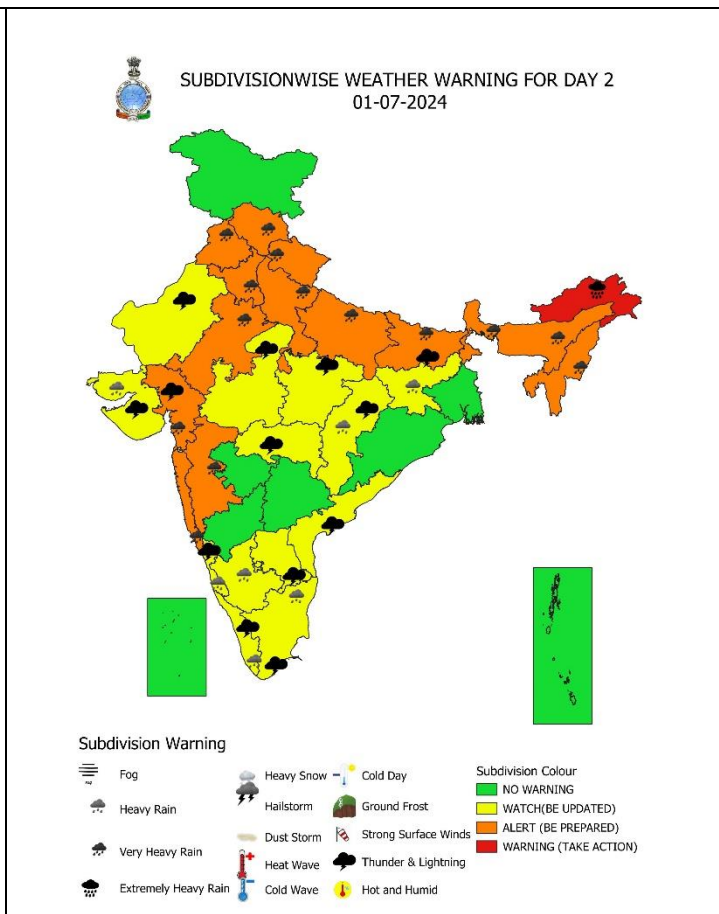
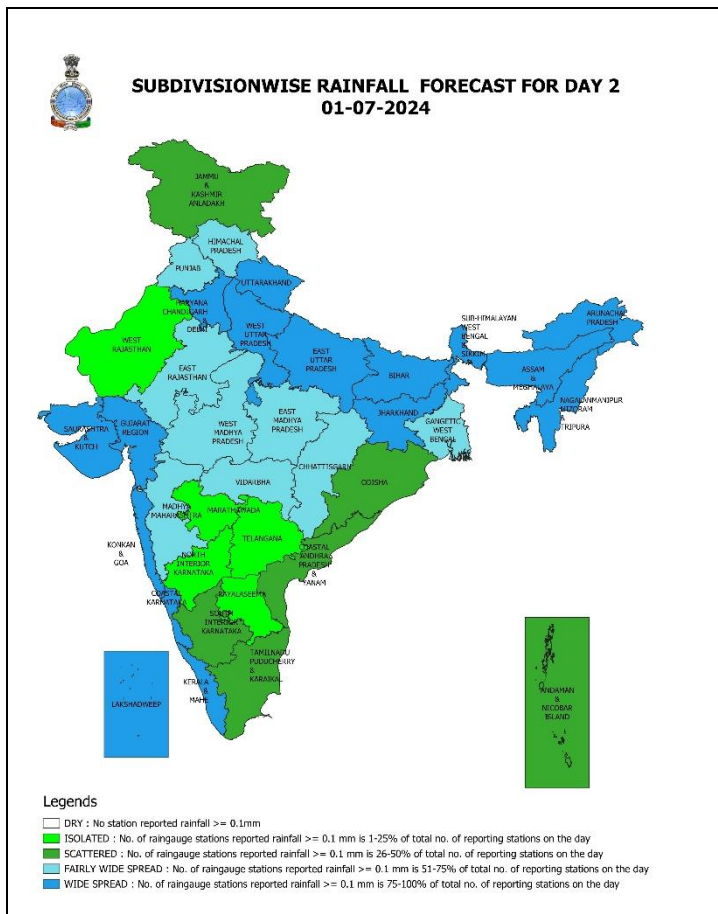
For more details, kindly refer: <http://aws.imd.gov.in:8091/>

* 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)



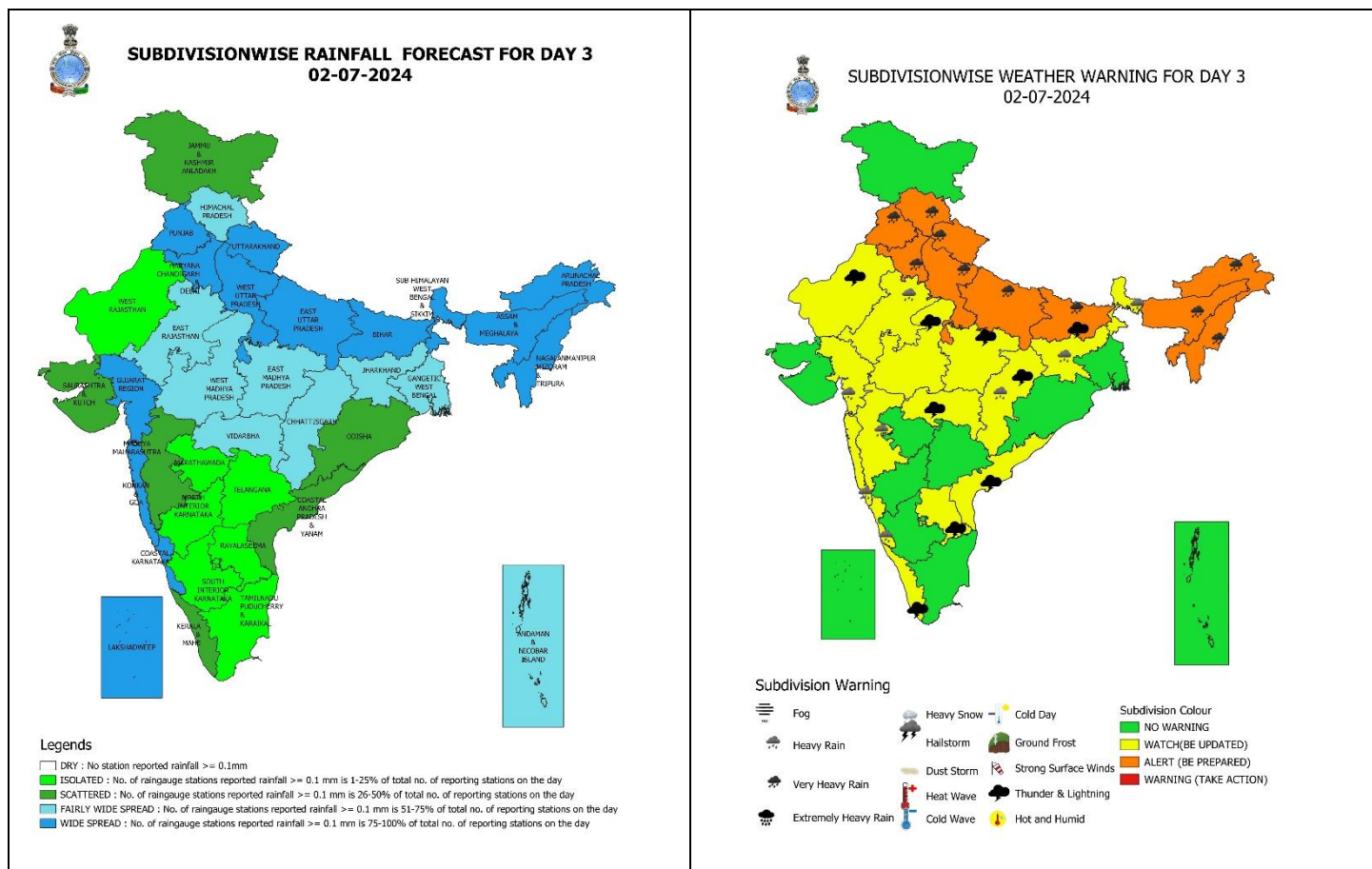
30 June (Day 1):

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



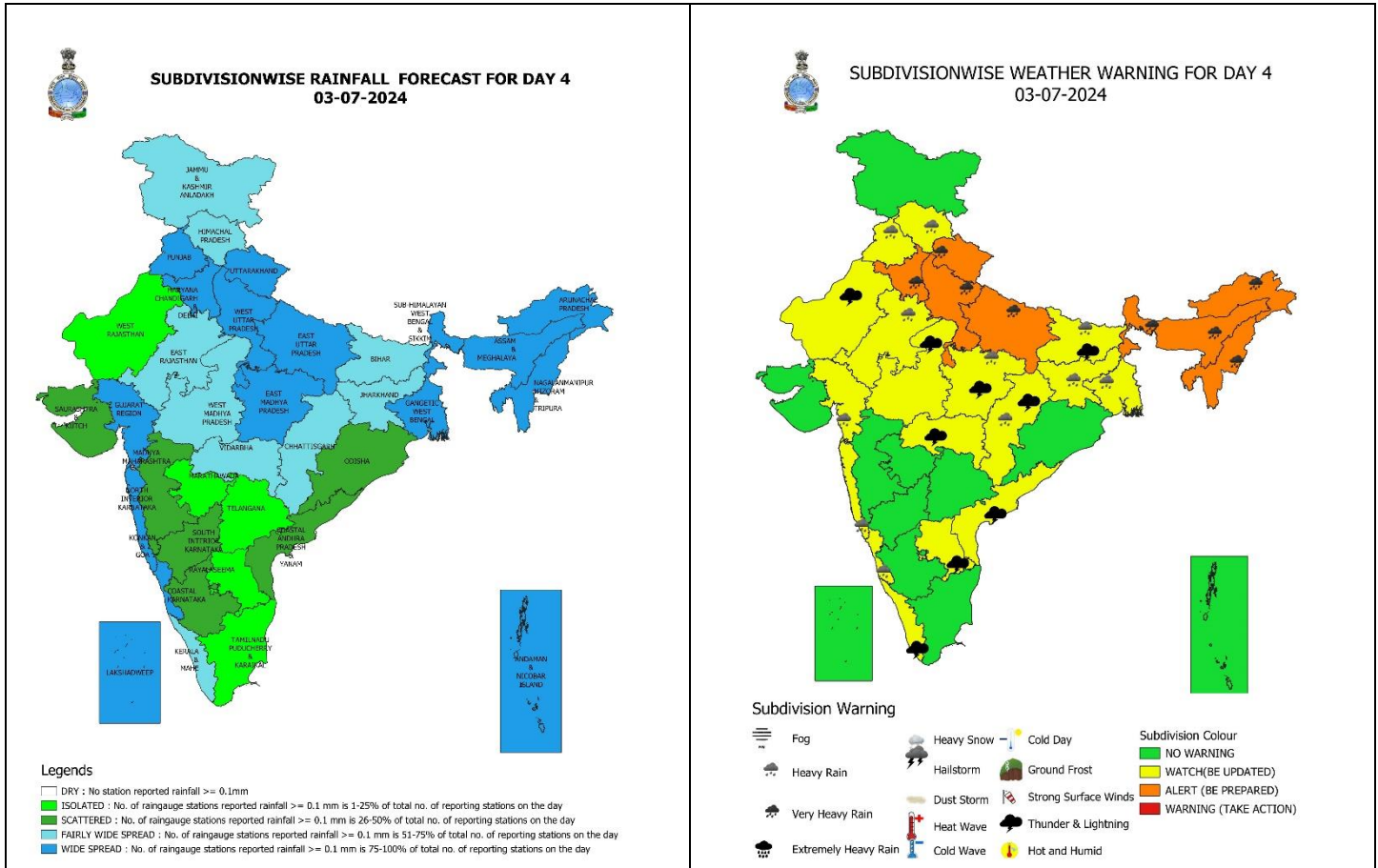
01 July (Day 2):

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



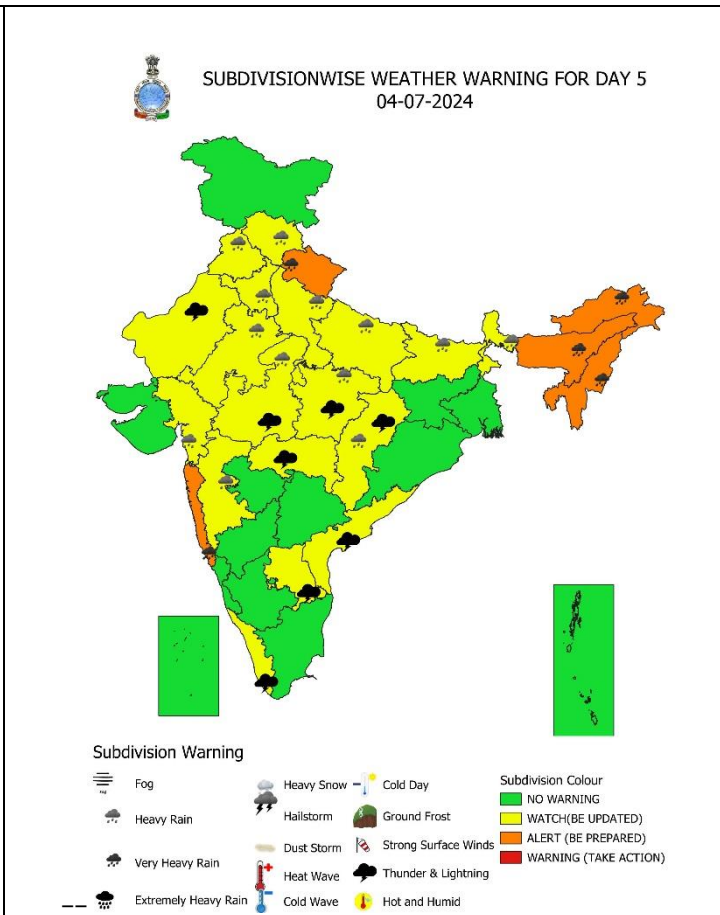
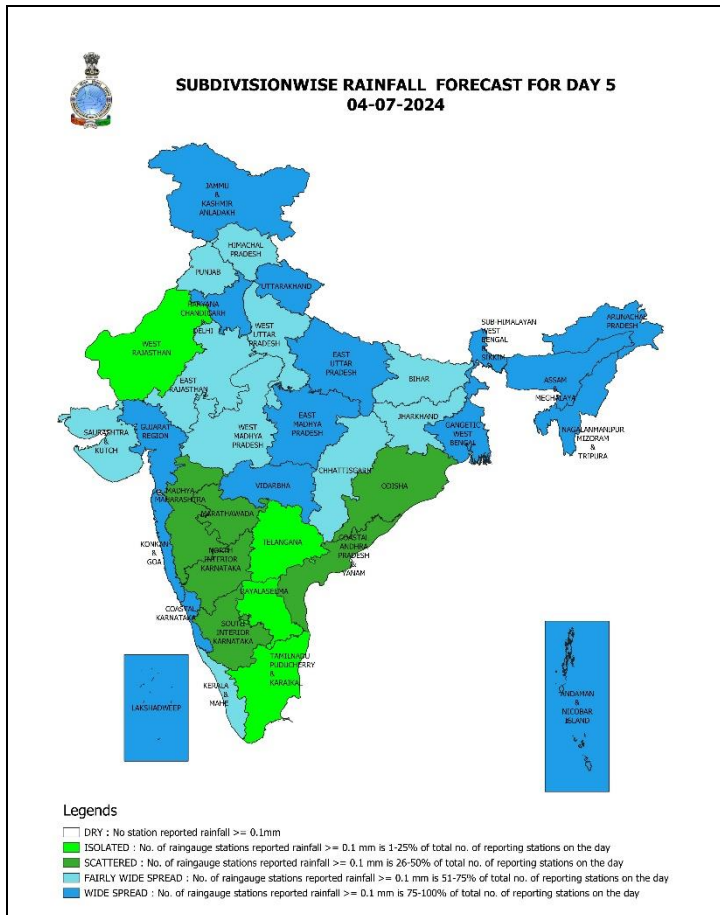
02 July (Day 3):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh and Bihar; **heavy rainfall** at isolated places over Konkan & Goa, Madhya Maharashtra, Gujarat Region, Coastal Karnataka, East Rajasthan, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim and Jharkhand.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 30-40 kmph)** likely at isolated places over West Rajasthan, Madhya Pradesh and Bihar; **with lightning** at isolated places over Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Chhattisgarh.
- ❖ **Squally weather with wind speed 45 to 55 gusting to 65 kmph** likely to prevail over northeast Arabian sea and along & off Gujarat, Maharashtra coasts. **Squally weather with wind speed 35 to 45 gusting to 55 kmph** is likely to prevail over eastcentral and adjoining areas of westcentral & southeast Arabian sea and along & off Karnataka coasts, Lakshadweep area, gulf of Mannar & Sri Lanka coasts. **Squally weather with wind speed 35 to 45 gusting to 55 kmph** is likely to prevail over major parts of southeast, central & north Bay of Bengal (bob) and **45 to 55 gusting to 65 kmph** along & off north Andhra Pradesh, Odisha & west Bengal coasts. **Squally wind with speed 45 to 55 gusting to 65 kmph** is likely to prevail over southwest and adjoining southeast & central Arabian sea and along & off Somalia, Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



03 July (Day 4):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Uttarakhand, Haryana-Chandigarh-Delhi, Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim; **heavy rainfall** at isolated places over Konkan & Goa, Gujarat Region, Coastal Karnataka, Himachal Pradesh, Punjab, East Rajasthan, East Madhya Pradesh, Chhattisgarh, Gangetic West Bengal, Bihar and Jharkhand.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 30-40 kmph)** likely at isolated places over West Rajasthan, West Madhya Pradesh, Vidarbha and Bihar; **with lightning** at isolated places over Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, East Madhya Pradesh and Chhattisgarh.
- ❖ **Squally weather with wind speed 45 to 55 gusting to 65 kmph** likely to prevail over northeast Arabian sea and along & off Gujarat, Maharashtra coasts. **Squally weather with wind speed 35 to 45 gusting to 55 kmph** is likely to prevail over eastcentral and adjoining areas of westcentral & southeast Arabian sea and along & off Karnataka coasts, Lakshadweep area, gulf of Mannar & Sri Lanka coasts. **Squally weather with wind speed 35 to 45 gusting to 55 kmph** is likely to prevail over major parts of southeast, central & north Bay of Bengal (bob) and **45 to 55 gusting to 65 kmph** along & off north Andhra Pradesh coast. Squally wind with speed **45 to 55 gusting to 65 kmph** is likely to prevail over southwest and adjoining southeast & central Arabian sea and along & off Somalia, Yemen and Oman coasts. Fishermen are advised not to venture into these areas.

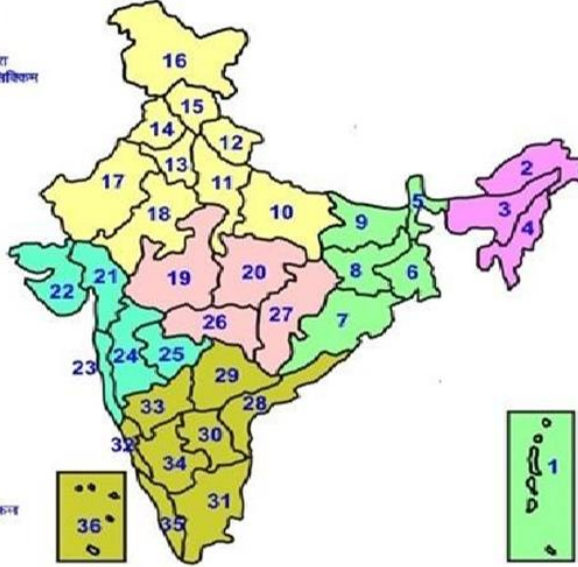


04 July (Day 5):

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa and Uttarakhand; **heavy rainfall** at isolated places over Madhya Maharashtra, Gujarat Region, Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim and Bihar.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 30-40 kmph)** likely at isolated places over West Rajasthan, Vidarbha; **with lightning** at isolated places over Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Madhya Pradesh and Chhattisgarh.
- ❖ **Squally weather with wind speed 45 to 55 gusting to 65 kmph** likely to prevail over northeast Arabian sea and along & off Gujarat, Maharashtra coasts. **Squally weather with wind speed 35 to 45 gusting to 55 kmph** is likely to prevail over eastcentral and adjoining areas of westcentral & southeast Arabian sea and along & off Karnataka coasts, Lakshadweep area, gulf of Mannar & Sri Lanka coasts. **Squally weather with wind speed 35 to 45 gusting to 55 kmph** is likely to prevail over major parts of southeast, central & north Bay of Bengal (bob). **Squally wind with speed 45 to 55 gusting to 65 kmph** is likely to prevail over southwest and adjoining southeast & central Arabian sea and along & off Somalia, 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 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 क्षेत्र
- 22 सोराष्ट्र एवं कच्छ
- 23 कोकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 महाराष्ट्र
- 26 विदर्भ
- 27 उत्तरीसमूह, पुदुचेरी एवं कराईकल
- 28 तटीय आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 तमिलनाडु
- 31 उत्तरीसमूह, पुदुचेरी एवं कराईकल
- 32 उत्तर कर्नाटक
- 33 उत्तर कर्नाटक
- 34 दक्षिण 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. 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 Storm: Wind speed > 220 kmph (> 119 knots)