

Friday, June 21, 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 passes through 20.5°N/60°E, 20.5°N/63°E, 20.5°N/70°E, Navsari, Jalgaon, Amravati, Gondia, Durg, Rampur (Kalahandi), 19.5°N/86.5°E, 23°N/89.5°E, Malda, Bhagalpur and Raxaul.
- ❖ Conditions are favourable for further advance of Southwest Monsoon into some more parts of North Arabian Sea, Gujarat State, Maharashtra, Madhya Pradesh, Odisha, Northwest Bay of Bengal, some parts of Gangetic West Bengal, remaining parts of Sub-Himalayan West Bengal, some parts of Jharkhand, some more parts of Bihar and some parts of East Uttar Pradesh during next 3 days.

Weather Systems and Forecast & Warnings:

- ❖ A cyclonic circulation lies over Assam and another over west Bihar and east west trough from east Rajasthan to Manipur in lower tropospheric levels. Strong southwesterly/southerly winds are prevailing from Bay of Bengal to northeast India in lower tropospheric levels. Under their influence:
 - Widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal during next 5 days.
 - Isolated **heavy to very heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh & Nagaland, Manipur, Mizoram & Tripura next 5 days.
 - Fairly widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Gangetic West Bengal, Bihar, Jharkhand, Odisha, Andaman & Nicobar Islands during next 5 days.
 - Isolated **heavy rainfall** very likely over Bihar during 21th-25th, Jharkhand on 21st & 25th and Andaman & Nicobar Islands during 23rd-25th June.
- ❖ A trough at mean sea level runs off south Maharashtra-Goa-Karnataka-Kerala coasts. Under its influence:
 - Scattered to fairly widespread light to moderate rainfall accompanied with **thunderstorm, lightning** likely over Gujarat state, Konkan & Goa, Madhya Maharashtra & Marathwada during next 5 days.
 - Isolated **heavy to very heavy rainfall** very likely over Konkan & Goa and ghat areas of Madhya Maharashtra during 21st-25th and isolated **heavy rainfall** over Gujarat region on 23rd June, 2024.
 - Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** likely over Karnataka, Kerala & Mahe, Lakshadweep; scattered light to moderate rainfall over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Tamil Nadu, Puducherry & Karaikal during next 5 days.
 - Isolated **heavy to very heavy rainfall** very likely over Kerala & Mahe, Coastal & South Interior Karnataka, Tamil Nadu during 21st-25th; North Interior Karnataka during 22nd-25th; Lakshadweep on 22nd & 23rd June.
 - Isolated **extremely heavy rainfall** also likely over Coastal Karnataka on 22nd-25th and Konkan & Goa on 23rd & 25th; Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, South Interior Karnataka on 23rd-25th June, 2024.
- ❖ Scattered to fairly widespread rainfall with **thunderstorm, lightning & gusty winds (40-60 kmph)** very likely over Madhya Pradesh, Vidarbha, Chhattisgarh during next 5 days. Isolated **heavy rainfall** very likely over Vidarbha, Chhattisgarh on 21st and West Madhya Pradesh on 22nd; East Madhya Pradesh on 25th June.
- ❖ Scattered to fairly widespread rainfall over Uttarakhand and East Uttar Pradesh during next 7 days. Isolated **heavy rainfall** very likely over Uttarakhand on 23rd & 24th and heavy to very heavy rainfall over East Uttar Pradesh on 24th & 25th June.

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

- ❖ **Heat wave conditions** very likely in isolated pockets of West Uttar Pradesh during 21st-23rd June and **abate thereafter**.
- ❖ **Warm night conditions** very likely in isolated pockets of north Rajasthan on 21st & 22nd June and **abate thereafter**.
- ❖ **Hot & Humid weather** very likely over Odisha on 21st June, 2024.

Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places** over Arunachal Pradesh, Assam & Meghalaya, East Madhya Pradesh, Konkan & Goa, Coastal Karnataka, Kerala & Mahe and Andaman & Nicobar Islands; **at a few places** over Chhattisgarh, Vidarbha, West Bengal & Sikkim, Odisha and Lakshadweep; **at isolated places** over Nagaland, Manipur, Mizoram & Tripura, Himachal Pradesh, Uttarakhand, Punjab, Haryana, West Uttar Pradesh, Rajasthan, West Madhya Pradesh, Marathwada, Gujarat Region, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- ❖ **Heavy Rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy to very heavy rainfall** occurred at isolated places over Konkan & Goa.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Konkan & Goa:** Matheran 16, Alibag 7; **Madhya Pradesh:** Mandla 5, Damoh 3, Umaria & Gwalior 2 each; **Madhya Maharashtra:** Mahabaleshwar 4; **Rajasthan:** Ganganagar 3, Sikar & Jaipur 2 each; **Chhattisgarh:** Bilaspur 3; **Meghalaya:** Cherrapunji 3; **Tamil Nadu:** Yercaud 3; **Gangetic West Bengal:** Haldia 2; **Kerala:** Punalur & Kannur 2 each.
- ❖ Yesterday, **Heat Wave conditions reported** in isolated pockets of south Uttar Pradesh and Odisha.
- ❖ **Minimum Temperature Departures (as on 20-06-2024):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at isolated places over East Rajasthan; **above normal (1.6°C to 3.0°C)** at a few places over Odisha; at isolated places over West Rajasthan, Madhya Pradesh, Gujarat state, Madhya Maharashtra, Marathwada, Vidarbha and Gangetic West Bengal. These were **below normal (-1.6°C to -3.0°C)** at many places over Himachal Pradesh; at a few places over Uttarakhand and Nagaland, Manipur, Mizoram & Tripura; at isolated places over Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Assam & Meghalaya, Bihar, Tamil Nadu, Puducherry & Karaikal and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature** of 21.6°C was reported at **Ranchi (Jharkhand)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 20-06-2024):** Maximum temperatures were **markedly above normal (5.1°C or more)** at many places over Odisha; **appreciably above normal (3.1°C to 5.0°C)** at a few places over East Madhya Pradesh and Vidarbha; at isolated places over West Uttar Pradesh, West Madhya Pradesh, Gujarat state, Gangetic West Bengal and Coastal Andhra Pradesh & Yanam; **above normal (1.6°C to 3.0°C)** at a few places over Telangana; at isolated places over Uttarakhand, East Uttar Pradesh, Rajasthan, Bihar, Madhya Maharashtra and Coastal Karnataka. These were **appreciably below normal (-3.1°C to -5.0°C)** at a few places over Assam & Meghalaya; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Arunachal Pradesh; **below normal (-1.6°C to -3.0°C)** at a few places over Tamil Nadu, Puducherry & Karaikal; at isolated places over Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands and **near normal** over rest parts of the country. Yesterday, **the highest Maximum Temperature** of 43.8°C was reported at **Sirsa (Haryana)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Northern Limit of Monsoon continues to pass through 20.5°N/60°E, 20.5°N/63°E, 20.5°N/70°E, Navsari, Jalgaon, Amravati, Gondia, Durg, Rampur (Kalahandi), 19.5°N/86.5°E, 23°N/89.5°E, Malda, Bhagalpur and Raxaul.
- ❖ Conditions are favourable for further advance of Southwest Monsoon into some more parts of North Arabian Sea, Gujarat State, Maharashtra, Madhya Pradesh, Odisha, Northwest Bay of Bengal, some parts of Gangetic West Bengal, remaining parts of Sub-Himalayan West Bengal, some parts of Jharkhand, some more parts of Bihar and some parts of East Uttar Pradesh during next 3 days.
- ❖ The Western Disturbance as a cyclonic circulation over Jammu-Kashmir & neighbourhood between 3.1 & 5.8 km above mean sea level persists.
- ❖ The induced cyclonic circulation over north Haryana & neighbourhood persists and now seen at 1.5 km above mean sea level.
- ❖ The cyclonic circulation over south Pakistan & neighbourhood now lies over southwest Rajasthan & adjoining Pakistan at 1.5 km above mean sea level.
- ❖ The cyclonic circulation over East Bihar & neighbourhood now lies over west Bihar & neighbourhood at 1.5 km above mean sea level.
- ❖ A, east west trough runs from east Rajasthan to Manipur across northwest Madhya Pradesh, southeast Uttar Pradesh, Bihar, Sub-Himalayan West Bengal, Meghalaya & south Assam at 0.9 km above means sea level.
- ❖ The cyclonic circulation over Assam persists and now seen at 1.5 km above mean sea.
- ❖ The cyclonic circulation over Eastcentral & adjoining Northeast Bay of Bengal now lies over central parts of Bay of Bengal between 3.1 & 5.8 km above mean sea level.
- ❖ The trough at mean sea level now runs off south Maharashtra-Goa-Karnataka-Kerala coasts.

Weather Forecast for next 7 days (Upto 0830 hours IST of 28th June, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ No significant change in maximum temperatures very likely over many parts of Northwest India (except East Uttar Pradesh) during next 24 hours and rise by about 2-3°C thereafter.
- ❖ Fall by about 2-3°C in maximum temperatures very likely over East India during next 24 hours and no significant change thereafter.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

Weather Outlook for subsequent 3 days (During 28th-30th June, 2024)

- ❖ Scattered to fairly widespread rainfall likely over Islands, Northeast India, East India, west coast and Peninsular India. Scattered rainfall likely over Northwest, Central India.
- ❖ Mainly dry weather likely to prevail over rest parts of the country.

Table-1

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

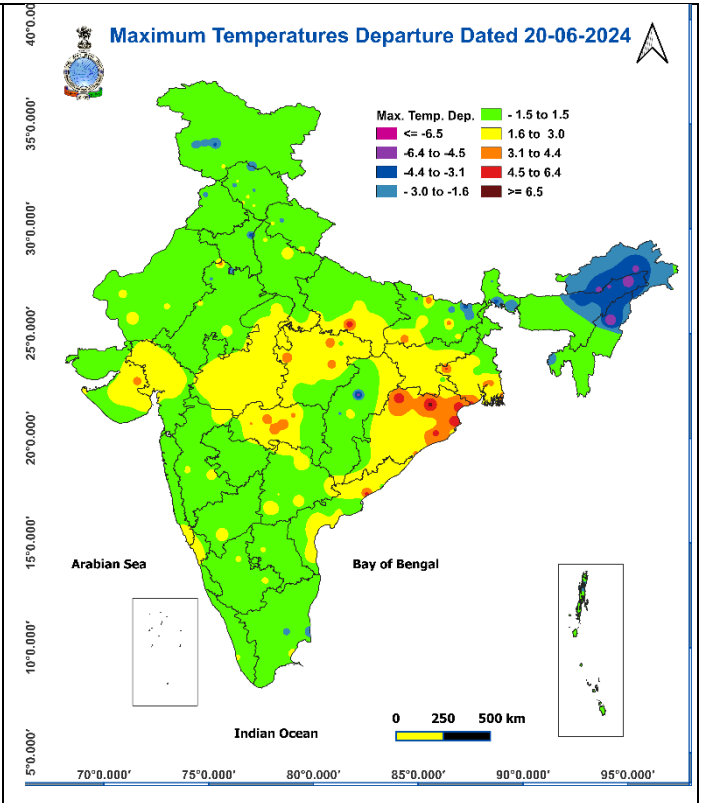
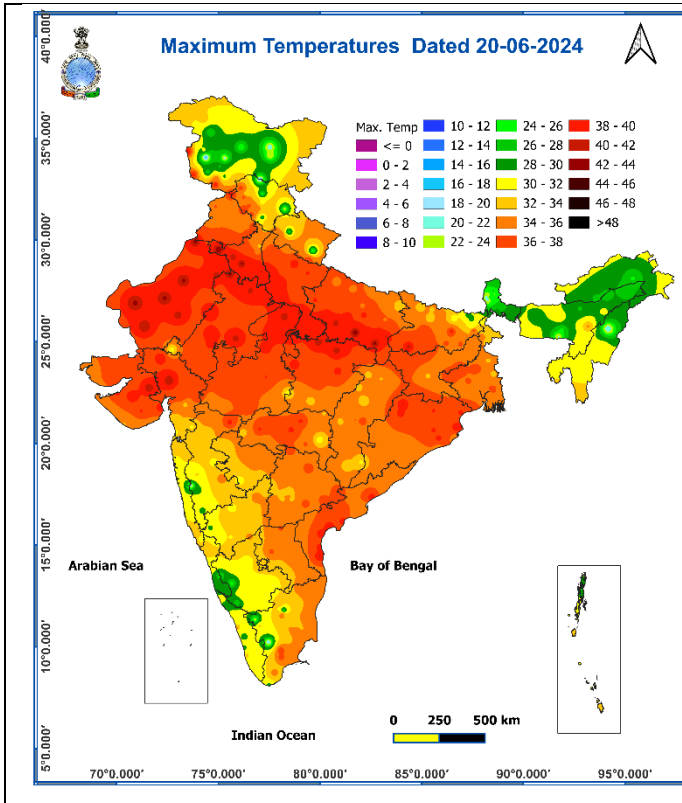


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

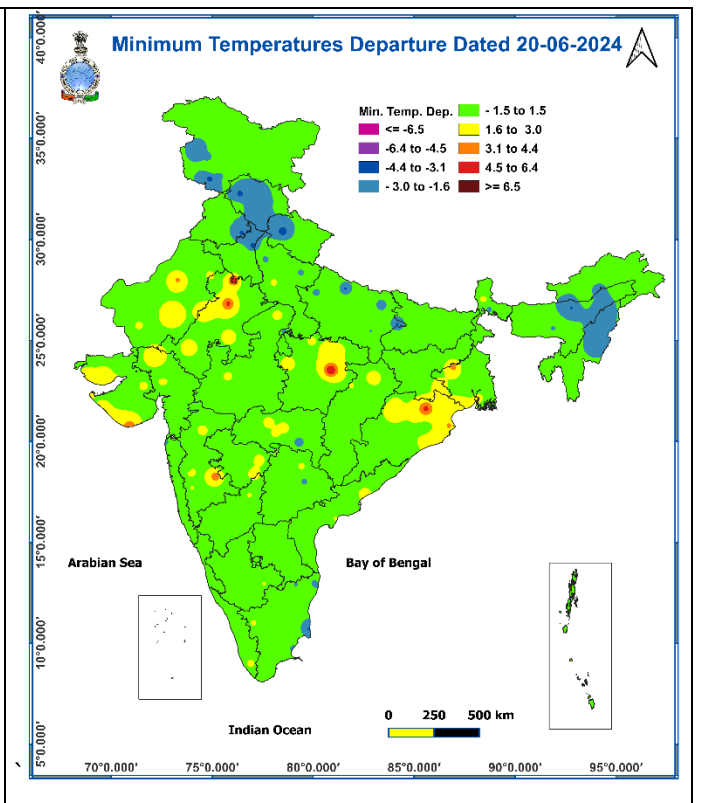
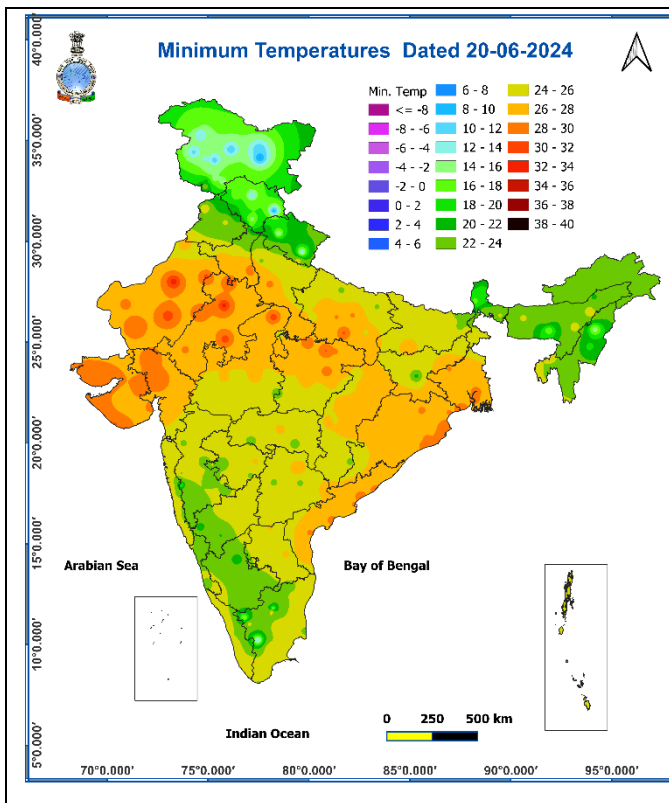
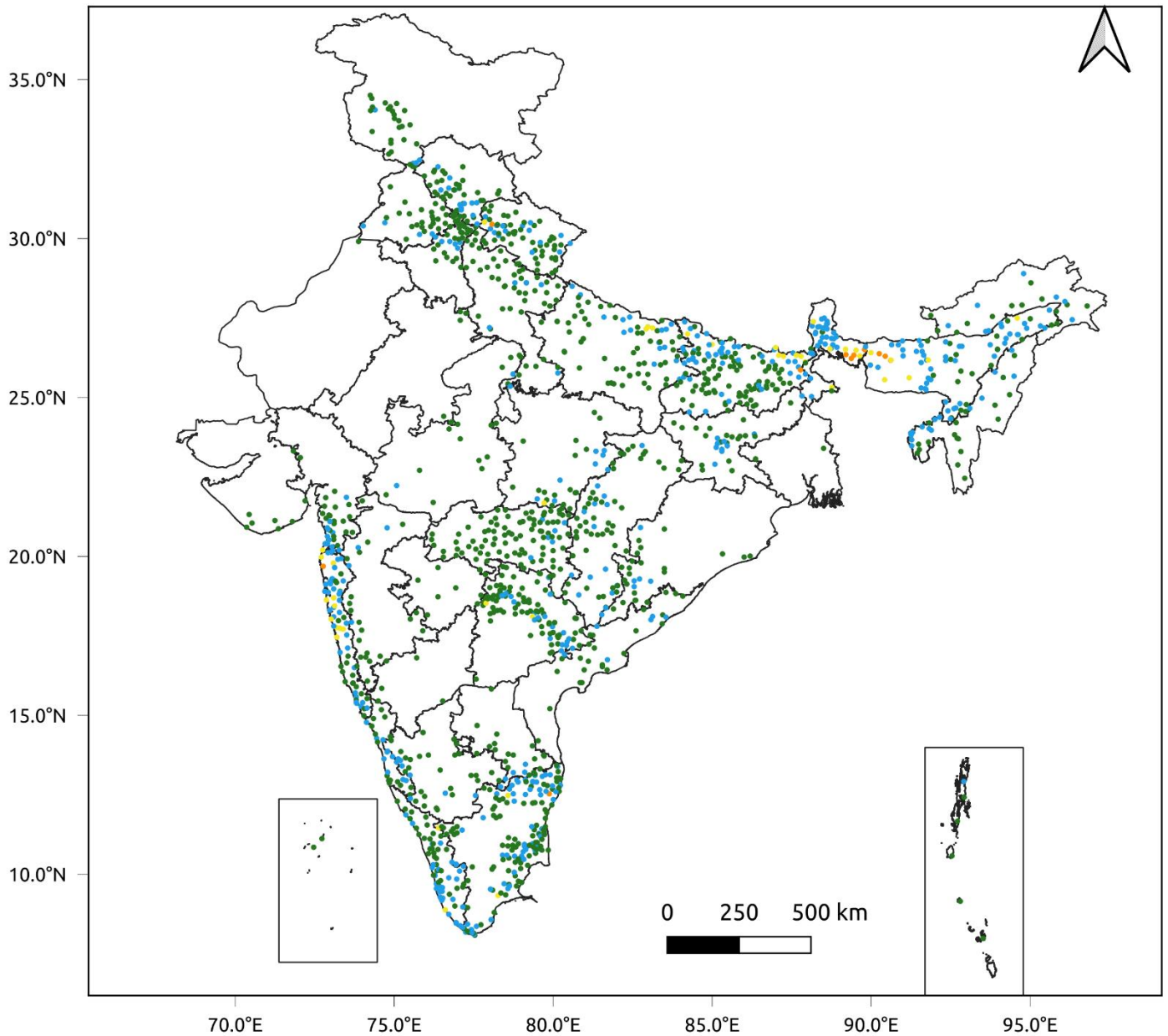


Fig. 5: Accumulated Rainfall (mm) during past 24 hours



24 Hr cumulative rainfall recorded over different stations during 0830 IST of 19-6-2024 to 0830 IST of 20-6-2024

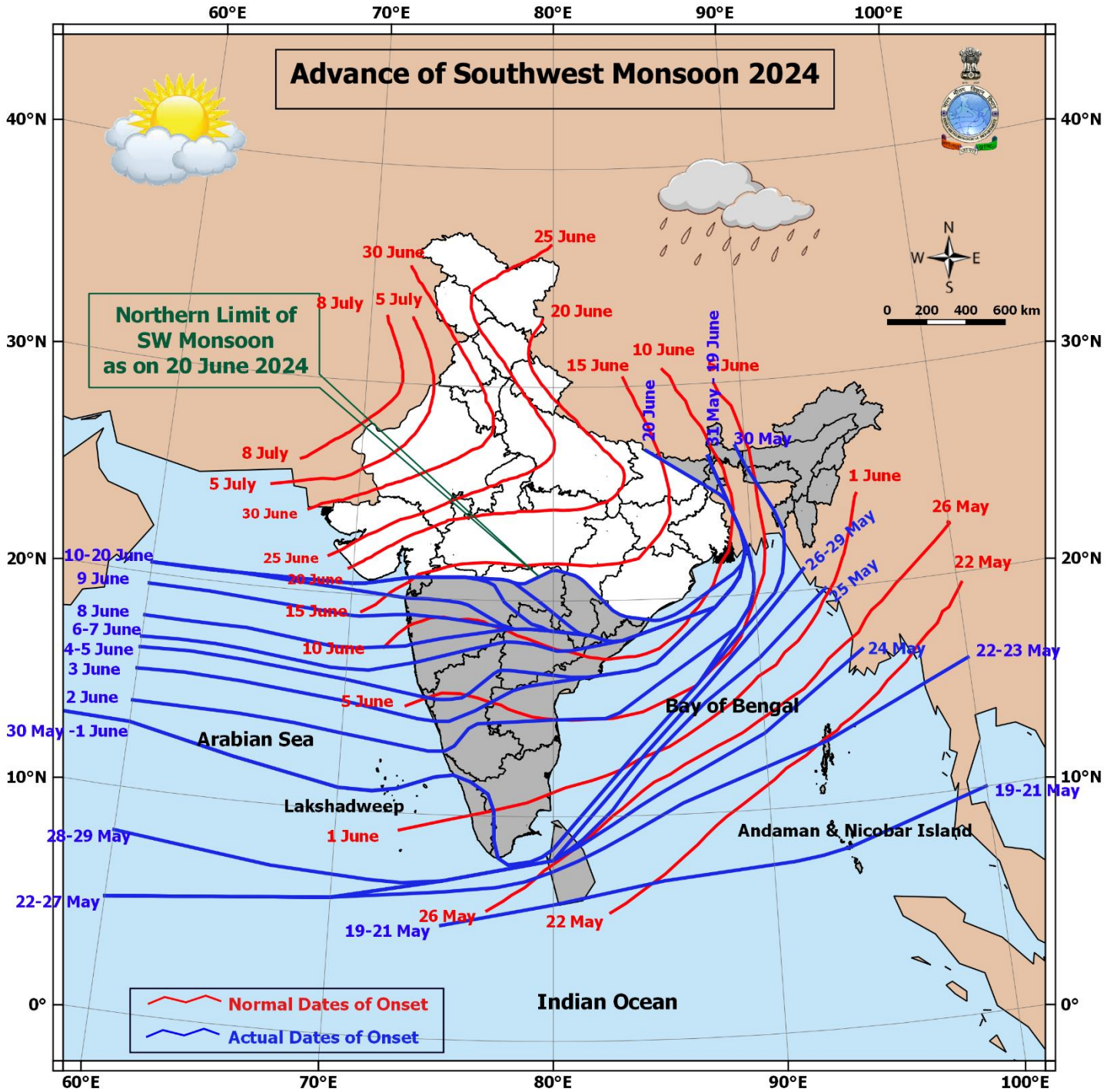


Legends

- 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)

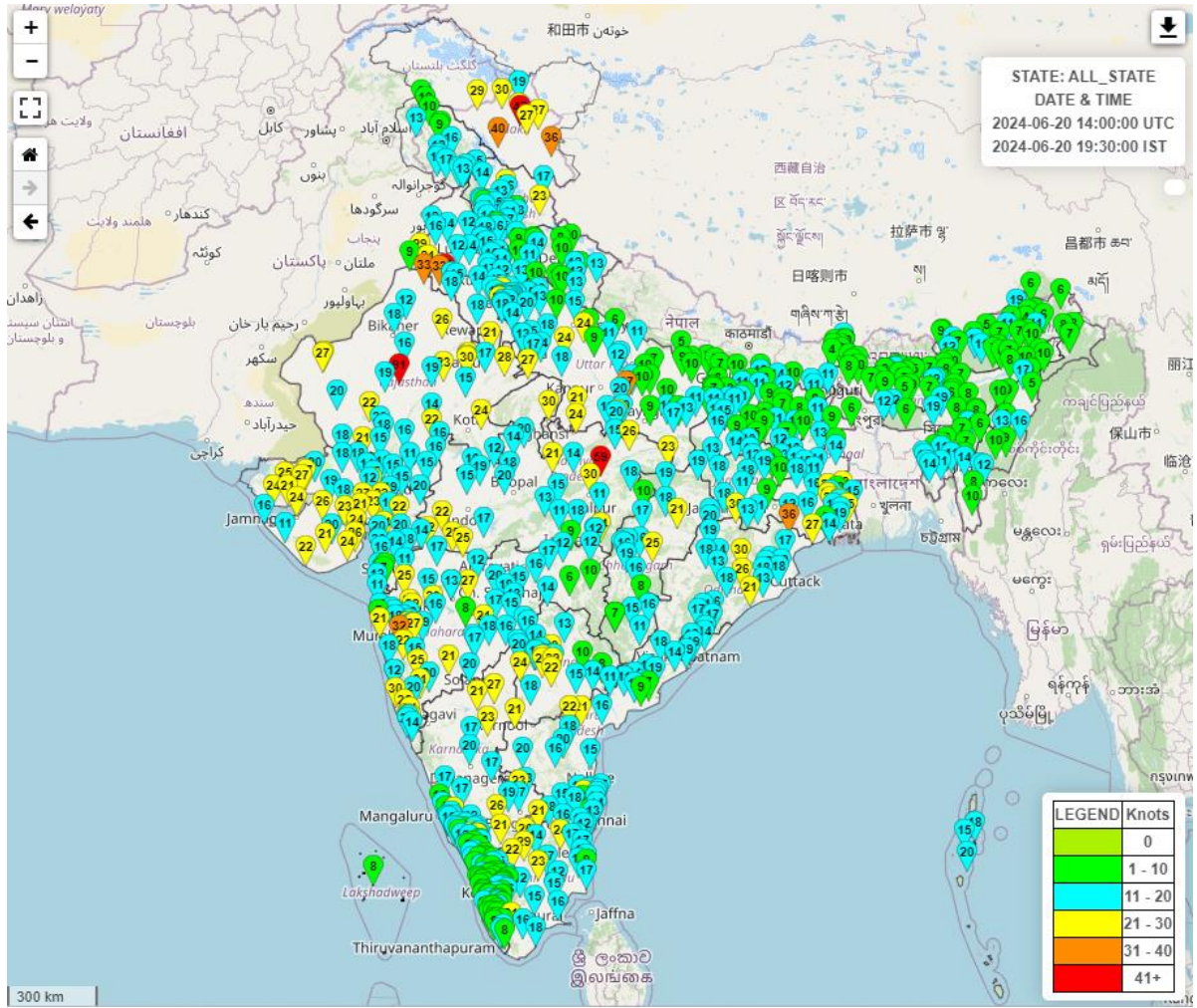
Fig. 6: Advance of Southwest Monsoon 2024

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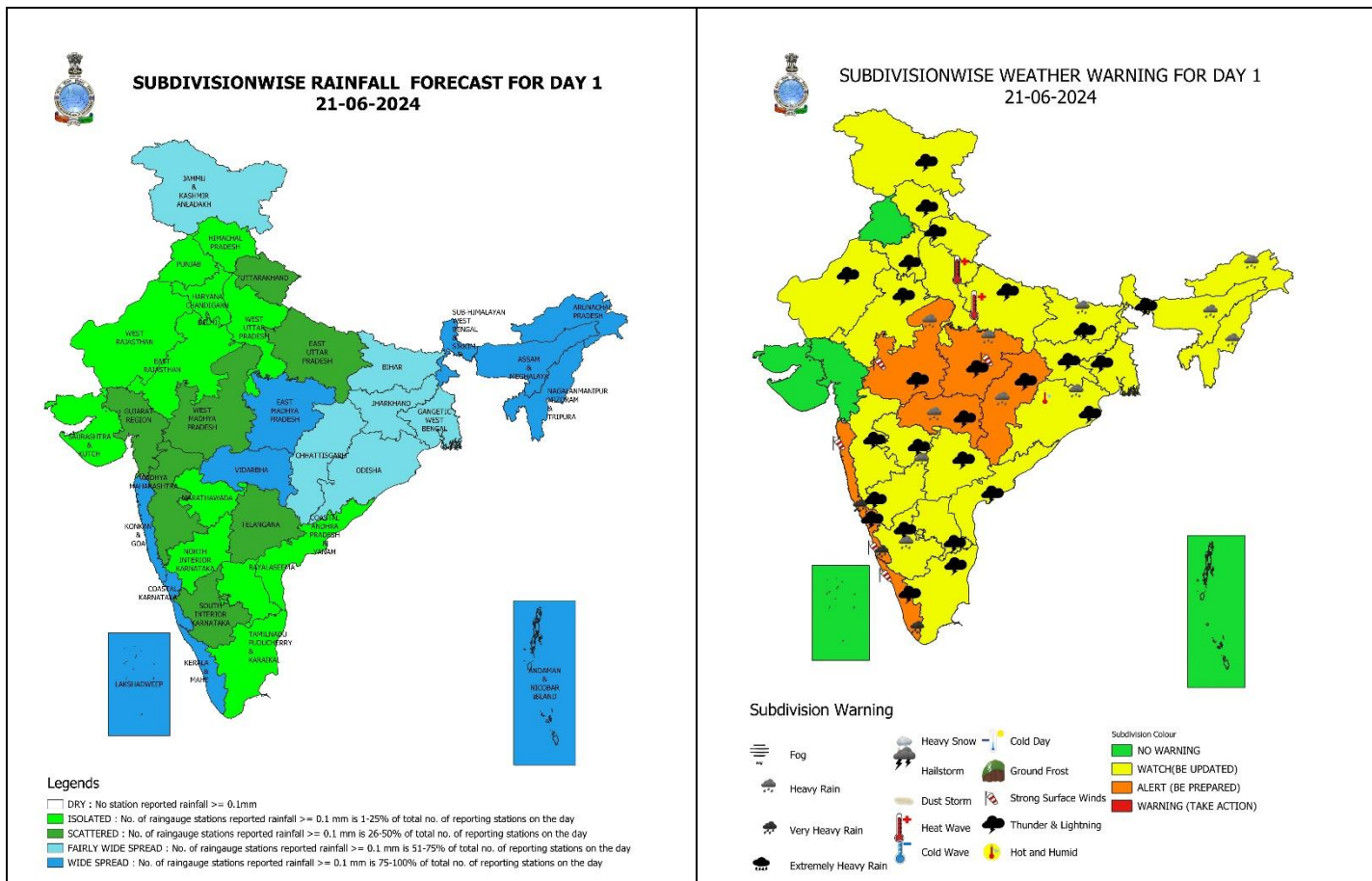
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Fig. 7: Gusty winds reported over the country (in knots) from 0830 to 1930 hours IST of 20.06.2024



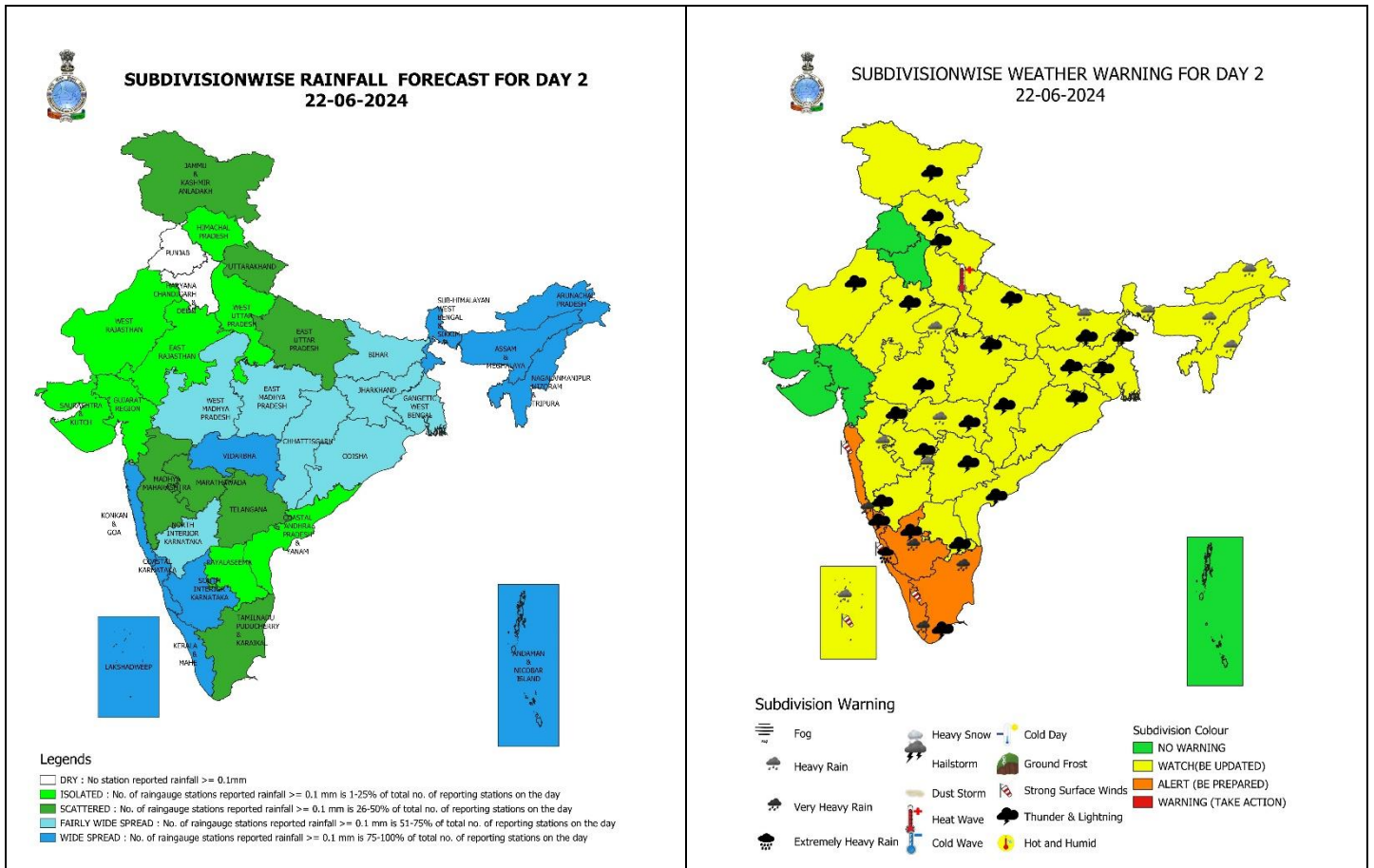
1 Knot = 1.852 kmph

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



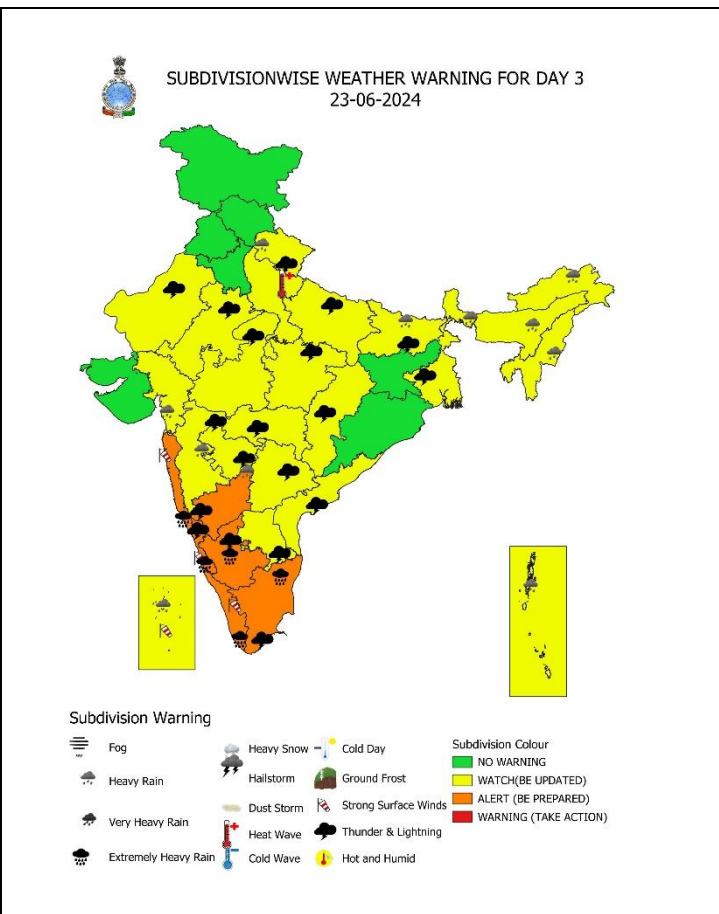
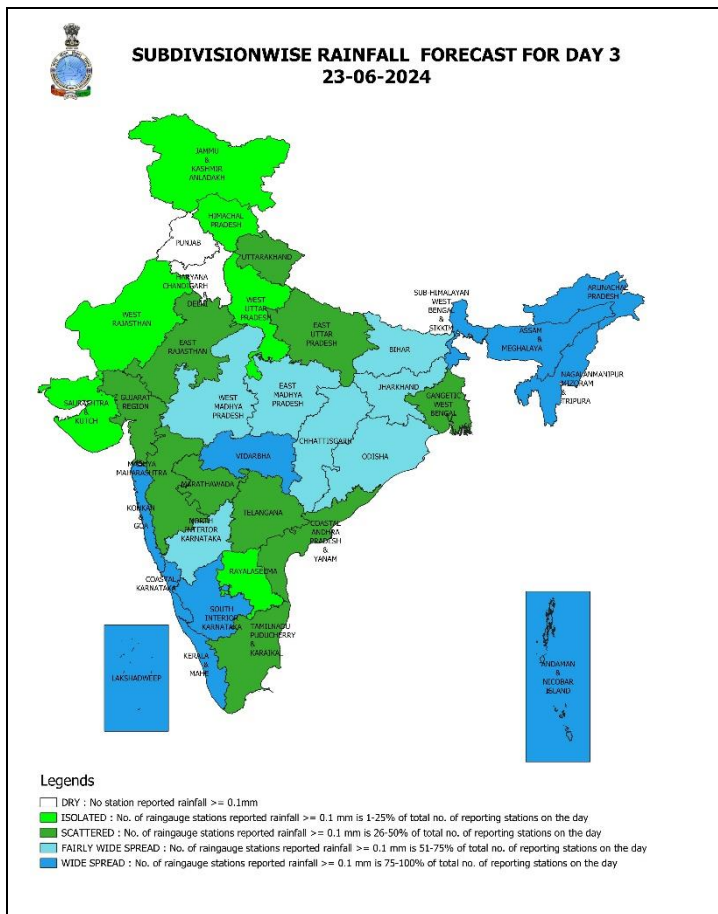
21 June (Day 1):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Konkan & Goa, Kerala & Mahe and Coastal Karnataka; **heavy rainfall** at isolated places over Assam & Meghalaya, Vidarbha, Madhya Pradesh, Odisha, Chhattisgarh, Bihar, Arunachal Pradesh, Tripura and Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning, squally winds (speed reaching 50-60 kmph gusting to 70 kmph)** very likely at isolated places over Madhya Pradesh; **with lightning, gusty winds (speed reaching 40-50 kmph)** at isolated places over Vidarbha, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam and Rayalaseema; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places East Uttar Pradesh, Rajasthan, Sub-Himalayan West Bengal & Sikkim, Odisha, Telangana and Interior Karnataka; with **lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Haryana, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Coastal Karnataka.
- ❖ **Heat wave conditions** very likely in some parts of West Uttar Pradesh.
- ❖ **Hot & Humid weather** very likely to prevail over Odisha.
- ❖ **Warm night conditions** very likely in isolated pockets of Rajasthan.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over eastcentral & adjoining westcentral, northern parts of southwest, southeast Arabian sea, along and off Gujarat, Maharashtra, Goa, Karnataka, Kerala coasts, adjoining Lakshadweep-Maldives area, off Sri Lanka coast, Gulf of Mannar, south & central Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast & adjoining southwest Arabian sea, west central & adjoining eastcentral, southern parts of north Arabian sea, off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



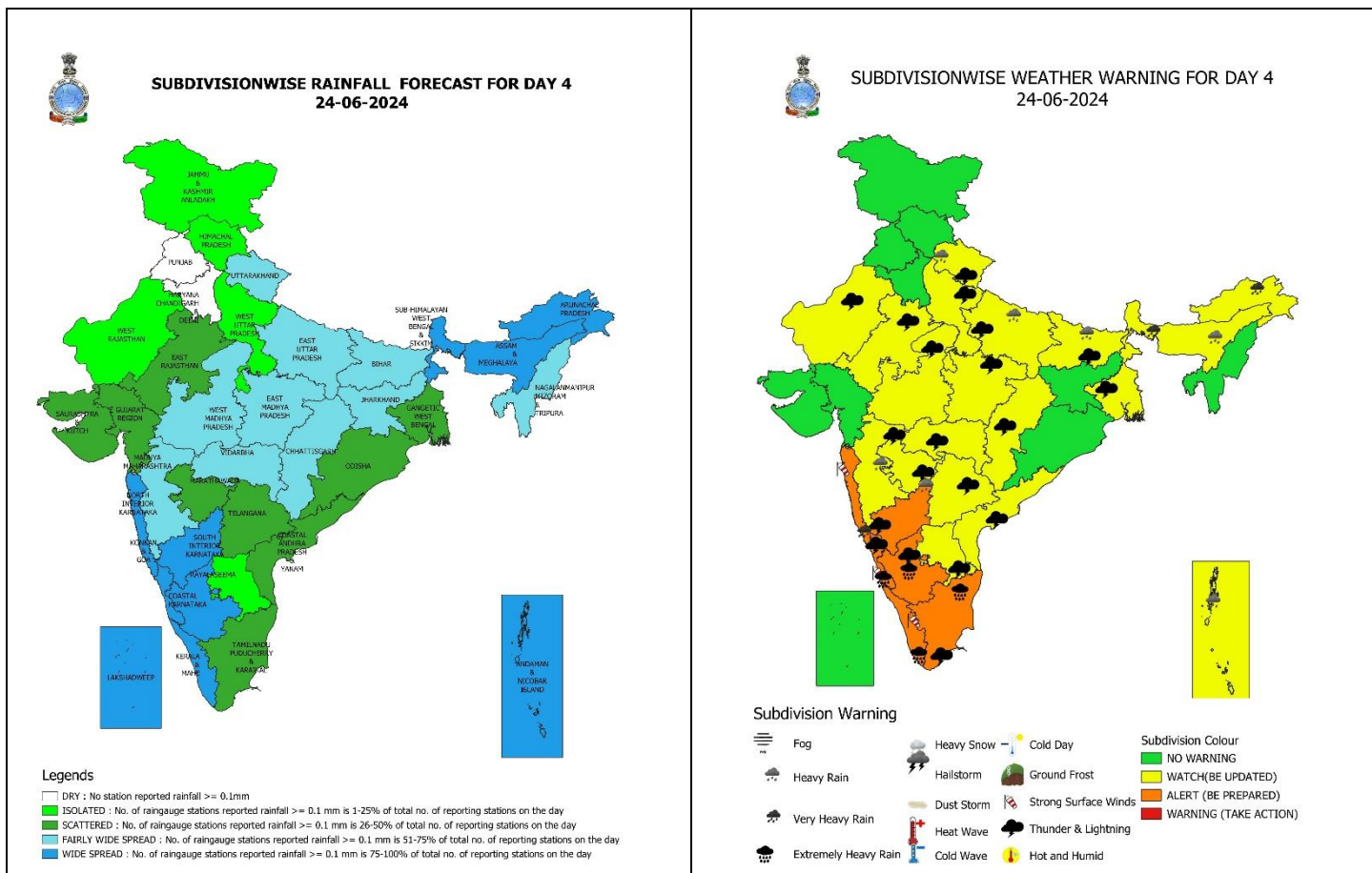
22 June (Day 2):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls** very likely at isolated places over Coastal Karnataka; **Heavy to very heavy rainfall** at isolated places over Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and South Interior Karnataka; **heavy rainfall** at isolated places over West Madhya Pradesh, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Lakshadweep and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over West Rajasthan, Madhya Pradesh, Gangetic West Bengal, Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places East Uttar Pradesh, East Rajasthan, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Odisha, Telangana and Interior Karnataka; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal and Coastal Karnataka.
- ❖ **Heat wave conditions** very likely in some parts of West Uttar Pradesh.
- ❖ **Warm night conditions** very likely in isolated pockets of Rajasthan.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** very likely to prevail over eastcentral & adjoining westcentral, northern parts of southwest, southeast Arabian sea, along and off south Maharashtra, Goa, Karnataka, Kerala coasts, adjoining Lakshadweep-Maldives area, off Sri Lanka coast, Gulf of Mannar, south & central Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast & adjoining southwest Arabian sea, west central & adjoining eastcentral, southern parts of north Arabian sea, off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



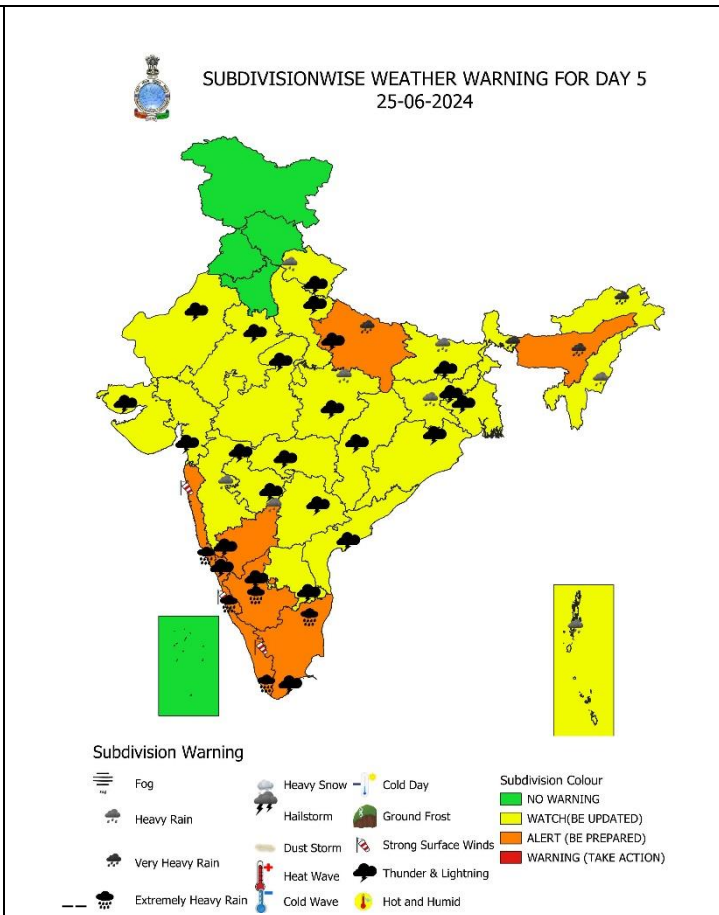
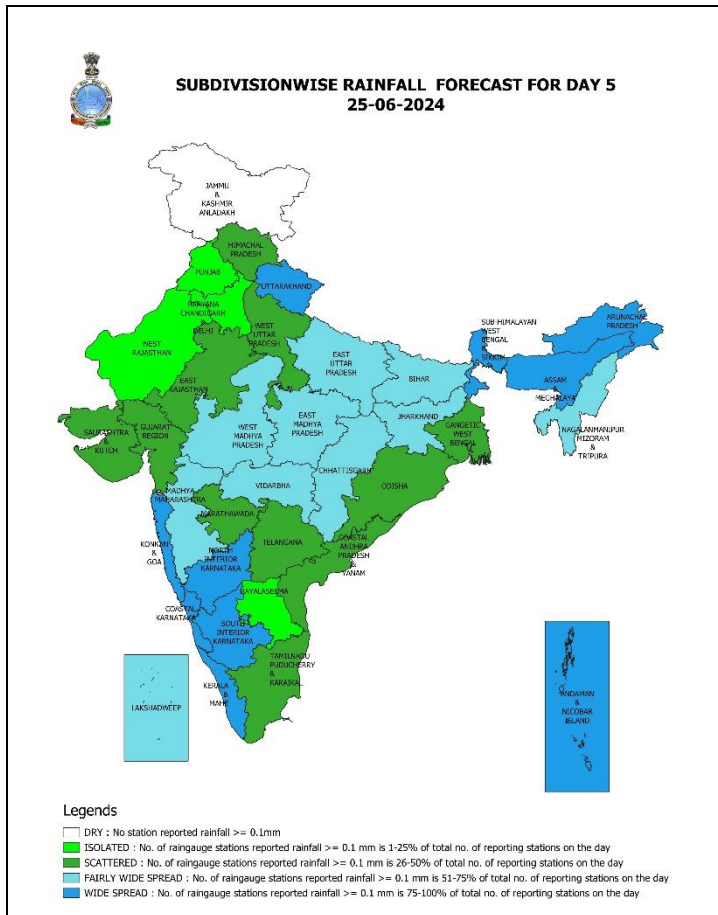
23 June (Day 3):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls** likely at isolated places over Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal & South Interior Karnataka; **Heavy to very heavy rainfall** at isolated places over North Interior Karnataka; **heavy rainfall** at isolated places over Uttarakhand, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Gujarat Region, Lakshadweep.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over West Rajasthan, Madhya Pradesh, Bihar, Coastal Andhra Pradesh & Yanam and Rayalaseema; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places East Uttar Pradesh, East Rajasthan, Vidarbha, Gangetic West Bengal, Telangana and Interior Karnataka; **with lightning** at isolated places over Uttarakhand, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal and Coastal Karnataka.
- ❖ **Heat wave conditions** likely in some parts of West Uttar Pradesh.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over eastcentral & adjoining westcentral, northern parts of southwest, southeast Arabian sea, adjoining Lakshadweep-Maldives area, off Sri Lanka coast, Gulf of Mannar, south, central & 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 & adjoining southwest Arabian sea, west central & adjoining eastcentral, southern parts of north Arabian sea, off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.



24 June (Day 4):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls** likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal & South Interior Karnataka; **Heavy to very heavy rainfall** likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Konkan & Goa, North Interior Karnataka; **heavy rainfall** at isolated places over Uttarakhand, East Uttar Pradesh, Andaman & Nicobar Islands, Bihar, Assam & Meghalaya and Madhya Maharashtra.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Madhya Pradesh, Bihar, Coastal Andhra Pradesh & Yanam and Rayalaseema; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Uttar Pradesh, Rajasthan, Gangetic West Bengal, Telangana and Interior Karnataka; **with lightning** at isolated places over Uttarakhand, Vidarbha, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Tamil Nadu, Puducherry & Karaikal and Coastal Karnataka.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over eastcentral & adjoining westcentral, northern parts of southwest, southeast Arabian sea, along and off south Maharashtra, Goa, Karnataka, Kerala coasts, adjoining Lakshadweep-Maldives area, off Sri Lanka coast, Gulf of Mannar, south & central Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast & adjoining southwest Arabian sea, west central & adjoining eastcentral, southern parts of north Arabian sea, off Yemen and Oman coasts. Fishermen are advised not to venture into these areas.

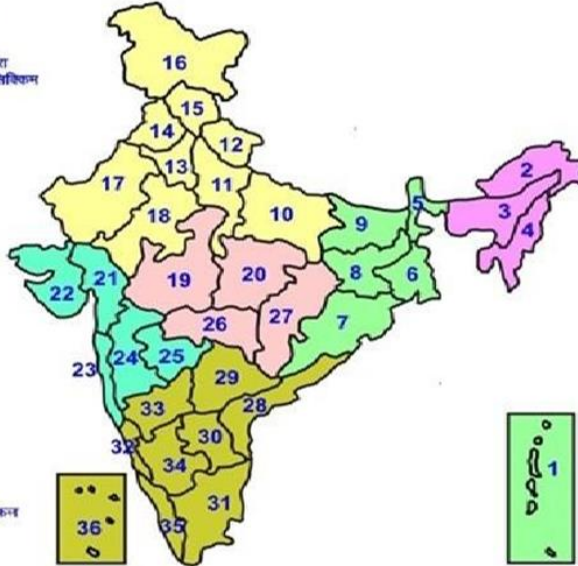


25 June (Day 5):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls** likely at isolated places over Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal & South Interior Karnataka; **Heavy to very heavy rainfall** likely at isolated places over East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh, and North Interior Karnataka; **heavy rainfall** at isolated places over Uttarakhand, East Madhya Pradesh, Andaman & Nicobar Islands, Bihar, Jharkhand, Nagaland, Manipur, Mizoram & Tripura and ghat area Madhya Maharashtra.
- ❖ **Thunderstorm accompanied with lightning, gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Madhya Pradesh, Bihar, Coastal Andhra Pradesh & Yanam and Rayalaseema; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places Uttar Pradesh, Rajasthan, Gangetic West Bengal, Gujarat state Telangana and Interior Karnataka; **with lightning** at isolated places over Uttarakhand, Vidarbha, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Jharkhand, Odisha, Marathwada, Tamil Nadu, Puducherry & Karaikal and Coastal Karnataka.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over eastcentral & adjoining westcentral, northern parts of southwest, southeast Arabian sea, along and off south Maharashtra, Goa, Karnataka, Kerala coasts, adjoining Lakshadweep-Maldives area, off Sri Lanka coast, Gulf of Mannar, south & central Bay of Bengal. **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast & adjoining southwest Arabian sea, west central & adjoining eastcentral, southern parts of north Arabian sea, 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 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 सौराष्ट्र 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 रायलसेमा
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 उत्तरी कर्नाटक
- 33 अंतरीक उत्तरी कर्नाटक
- 34 अंतरीक 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)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
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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)