

Wednesday, May 22, 2024  
Time of Issue: 0830 hours IST  
(MORNING)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features:

#### Weather Systems and Forecast & Warnings:

The Northern Limit of Monsoon continues to pass through 05°N/75°E, 06°N/80°E, 07°N/85°E, Nancowry and 10°N/100°E.

- ❖ **Conditions are favorable for further advance of Southwest Monsoon over some parts of Southeast Arabian Sea, some more parts of Maldives, Comorin area and South Bay of Bengal and some more parts of Andaman & Nicobar Islands and Andaman Sea during next 2 days.**
- ❖ A cyclonic circulation lies over north Kerala in lower & middle tropospheric levels and another over north Coastal Andhra Pradesh neighbourhood in lower tropospheric levels. Under their influence:
  - Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, Coastal & South Interior Karnataka and Isolated to scattered light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** over Coastal Andhra Pradesh & Yanam, Telangana, North Interior Karnataka and Rayalaseema during next 5 days.
  - **Isolated heavy rainfall very likely over Coastal & South Interior Karnataka on 22<sup>nd</sup> & 23<sup>rd</sup>; Lakshadweep, Tamil Nadu, Puducherry & Karaikal on 24<sup>th</sup>; Kerala on 25<sup>th</sup> May, 2024.**
  - **Isolated heavy to very heavy rainfall very likely over Tamil Nadu, Puducherry & Karaikal on 22<sup>nd</sup> & 23<sup>rd</sup> and Kerala & Mahe on May, 2024 with isolated extremely heavy rainfall over Kerala on 22<sup>nd</sup> & 23<sup>rd</sup> May, 2024.**
  - Widespread light to moderate rainfall very likely over Andaman & Nicobar Islands during next 7 days. **Isolated heavy rainfall very likely over Andaman & Nicobar Islands during 22<sup>nd</sup>-25<sup>th</sup> May, 2024.**
  - Isolated light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Madhya Pradesh on 22<sup>nd</sup> and Chhattisgarh during 22<sup>nd</sup>-26<sup>th</sup> May, 2024.
- ❖ A cyclonic circulation lies over east Bangladesh & neighbourhood and a trough runs from Haryana to east Bangladesh in lower tropospheric levels. Under its influence:
  - Scattered to fairly widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Gangetic West Bengal and isolated to scattered light to moderate rainfall over Odisha, Bihar and Jharkhand during next 7 days.
  - Scattered to fairly widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram and Tripura during next 5 days.
  - **Isolated heavy to very rainfall likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura and isolated heavy rainfall over Arunachal Pradesh on 26<sup>th</sup> May, 2024.**

#### A Low Pressure Area is likely to form over Southwest Bay of Bengal around 22<sup>nd</sup> May:

- ❖ Under the influence of the cyclonic circulation over Southwest Bay of Bengal; a **Low Pressure Area** has formed over Southwest adjoining Westcentral Bay of Bengal off north Tamil Nadu-South Andhra Pradesh coasts with associated cyclonic circulation extending upto 5.8 km above mean sea level. It is very likely to move northeastwards and concentrate into a Depression over central parts of Bay of Bengal by morning of 24<sup>th</sup> May, 2024. It would continue to move northeastwards and intensify further thereafter. Under its influence:
- ❖ **Heavy Rainfall Warning:**
  - Light to moderate rainfall at many places with heavy rainfall at isolated places is likely over North & South 24 Parganas, East Medinipur districts of West Bengal and Balasore district of Odisha on 25<sup>th</sup> May.
  - Light to moderate rainfall at many places with heavy rainfall at isolated places is likely over Mizoram, Tripura and South Manipur on 25<sup>th</sup> May.
- ❖ **Fishermen Warning:** Fishermen are advised not to venture into central & adjoining south Bay of Bengal from 23<sup>rd</sup> May and into North Bay of Bengal from 24<sup>th</sup> May onwards. Fishermen out at sea are advised to return to the coast before 23<sup>rd</sup> May.

#### Maximum temperature observation:

- ❖ **Areas having maximum temperatures greater than 40°C:** Yesterday, maximum temperatures were in the range of 44-47°C in many places over Rajasthan; in some places over Haryana, Madhya Pradesh & Gujarat state; in isolated pockets over West Uttar Pradesh; in the range of 40- 44°C in many places over Punjab, Odisha & interior Maharashtra; in some parts of East Uttar Pradesh & Chhattisgarh; in isolated pockets of Telangana. These were above normal by 2-4°C over many parts of Punjab and Saurashtra & Kutch; in some places over Haryana; in isolated pockets of Uttar Pradesh, Rajasthan and Gujarat Region.

#### Heat Wave, warm night and Hot & Humid weather warning for next 5 days:

- ❖ **Heat wave to severe heat wave conditions very likely in many/most pockets over Punjab, Haryana-Chandigarh-Delhi, West Rajasthan; in some parts of East Rajasthan during 21<sup>st</sup>-26<sup>th</sup>; in isolated pockets of Uttar Pradesh & northwest Madhya Pradesh during 21<sup>st</sup>-25<sup>th</sup> May, 2024.**
- ❖ **Heat wave conditions** very likely in isolated pockets of Jammu division, Himachal Pradesh, Gujarat state and Vidarbha during 22<sup>nd</sup>-26<sup>th</sup>; northeast Madhya Pradesh during 22<sup>nd</sup>-25<sup>th</sup> and north Madhya Maharashtra during 22<sup>nd</sup>-24<sup>th</sup> May, 2024.
- ❖ **Hot and humid weather** very likely to prevail over Assam during 22<sup>nd</sup>-24<sup>th</sup> and Konkan & Goa, Odisha on 22<sup>nd</sup> May, 2024.
- ❖ **Warm night conditions** very likely to prevail over West Uttar Pradesh during 22<sup>nd</sup> -25<sup>th</sup> and Rajasthan during 22<sup>nd</sup> -26<sup>th</sup> May, 2024.

### Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at many places** over Kerala & Mahe; **at a few places** over Tamil Nadu, Puducherry & Karaikal, Uttarakhand, Bihar and **at isolated places** over Coastal & South Interior Karnataka, Telangana, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Konkan & Goa, Madhya Maharashtra.
- ❖ **Heavy rainfall** observed (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy rainfall** at isolated places over Bihar & north coastal Kerala.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday): (in cm): **Bihar:** Purnea-8; Tamil Nadu: Salem-6, Triuunnamalai-3; **Kerala & Mahe:** Kasaragod 7, Thrissur-4, Peringome, Kannur, Kollam-3 each; **Assam & Meghalaya:** Ri-Bhoi-4, Barprta-3.
- ❖ **Maximum wind speed reported** (from 0830 hours IST of yesterday to 0530 hours IST of today) (in knots): **Haryana:** Gorgon 49, Chandigarh 41, Sirsa-40, Panchkula-38; Punjab: Mohali 40, Patiala 38, Ludhiana-38; Madhya Pradesh: Shahdol-49, Seoni-38, West Uttar Pradesh: Jhasni-44; Gujarat: Jamnagar 45, Kachchh 40, Chhotaudepur 38.
- ❖ Yesterday, **heat wave to severe heat wave** conditions prevailed over many parts of West Rajasthan; over some parts of East Rajasthan and in isolated pockets of Gujarat Region, West Madhya Pradesh. **Heat wave** conditions prevailed in some parts of Haryana, Punjab; in isolated pockets of West Uttar Pradesh. Heat wave conditions have been prevailing over Gujarat region since 15<sup>th</sup>; Saurashtra & Kutch since 16<sup>th</sup> and over Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh and Rajasthan since 17<sup>th</sup> May, 2024.
- ❖ **Minimum Temperature Departures (as on 21-05-2024):** Minimum temperatures are **appreciably above normal (3.1°C to 5.0°C)** at a few places over Himachal Pradesh; at isolated pockets over Uttarakhand, West Rajasthan, East Madhya Pradesh; **above normal (1.6°C to 3.0°C)** at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, Punjab, Uttar Pradesh, East Rajasthan, Gujarat Region, Gangetic West Bengal; at a few places over West Madhya Pradesh, Saurashtra & Kutch, Bihar; at isolated pockets over Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Madhya Maharashtra. These are **below normal (-1.6°C to -3.0°C)** at isolated places over Chhattisgarh, Vidarbha, Marathwada, Telangana and **near normal** over rest parts of the country. Today, **the lowest minimum temperature of 14.0°C** is reported at **Dehri (Bihar)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 21-05-2024):** Maximum temperatures were **markedly above normal (5.1°C or more)** at isolated places over Assam & Meghalaya, Saurashtra & Kutch; **appreciably above normal (3.1°C to 5.0°C)** at many places over Konkan & Goa, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at a few places over Punjab; at isolated places over Sub-Himalayan West Bengal & Sikkim, Bihar, Haryana, Gujarat Region; **above normal (1.6°C to 3.0°C)** at many places over Uttar Pradesh, Konkan & Goa; at a few places over Coastal Karnataka, Kerala & Mahe, Lakshadweep and at isolated places over Nagaland, Manipur, Mizoram & Tripura, Himachal Pradesh, Rajasthan. These were **markedly below normal (-5.1°C or less)** at isolated places East Madhya Pradesh, Telangana; **appreciably below normal (-3.1°C to -5.0°C)** at many places over Vidarbha, Marathwada; a few places over North Interior Karnataka; at isolated places over Coastal Andhra Pradesh & Yanam; **below normal (-1.6°C to -3.0°C)** at isolated places over Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, West Madhya Pradesh, Chhattisgarh and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 47.8°C** was reported at **Sirsa AWS (Haryana)** over the country.

## Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Northern Limit of Monsoon continues to pass through 05°N/75°E, 06°N/80°E, 07°N/85°E, Nancowry and 10°N/100°E.
- ❖ Conditions are favourable for further advance of Southwest Monsoon over some parts of Southeast Arabian Sea, some more parts of Maldives, Comorin area and South Bay of Bengal and some more parts of Andaman & Nicobar Islands and Andaman Sea during next 2 days.
- ❖ Under the influence of the cyclonic circulation over Southwest Bay of Bengal; a **Low Pressure Area** has formed over Southwest adjoining Westcentral Bay of Bengal off north Tamil Nadu-South Andhra Pradesh coasts with associated cyclonic circulation extending upto 5.8 km above mean sea level. It is very likely to move northeastwards and concentrate into a Depression over central parts of Bay of Bengal by morning of 24<sup>th</sup> May, 2024. It would continue to move northeastwards and intensify further thereafter.
- ❖ The Western Disturbance as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level now runs roughly along long. 76°E to the north of lat. 32°N.
- ❖ The cyclonic circulation over Haryana & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The north-south trough from above cyclonic circulation over Haryana to Marathwada across West Madhya Pradesh at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over east Bangladesh & neighbourhood between 1.5 & 5.8 km above mean sea level persists.
- ❖ The east-west trough from above cyclonic circulation over Haryana to the cyclonic circulation over east Bangladesh across Uttar Pradesh, Bihar, Gangetic West Bengal at 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over north Kerala & neighbourhood between 1.5 km & 5.8 km above mean sea level persists.
- ❖ The cyclonic circulation over north Coastal Andhra Pradesh & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The trough from above cyclonic circulation over Southwest Bay of Bengal to North Interior Karnataka across Rayalaseema at 0.9 km above mean sea level persists.

## Weather Forecast for next 7 days (Upto 0830 hours IST of 29<sup>th</sup> May, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ Gradual rise by about 2-3°C in maximum temperatures very likely over many parts of Northwest & Central India and Maharashtra during next 4-5 days.
- ❖ No significant change in maximum temperatures very likely over rest parts of the country.

## Weather Outlook for subsequent 3 days (During 29<sup>th</sup>-31<sup>th</sup> May, 2024)

- ❖ Scattered to fairly widespread rainfall likely over Islands, East India and extreme south peninsular India.
- ❖ Dry weather likely to prevail over rest parts of the country.

Table-1

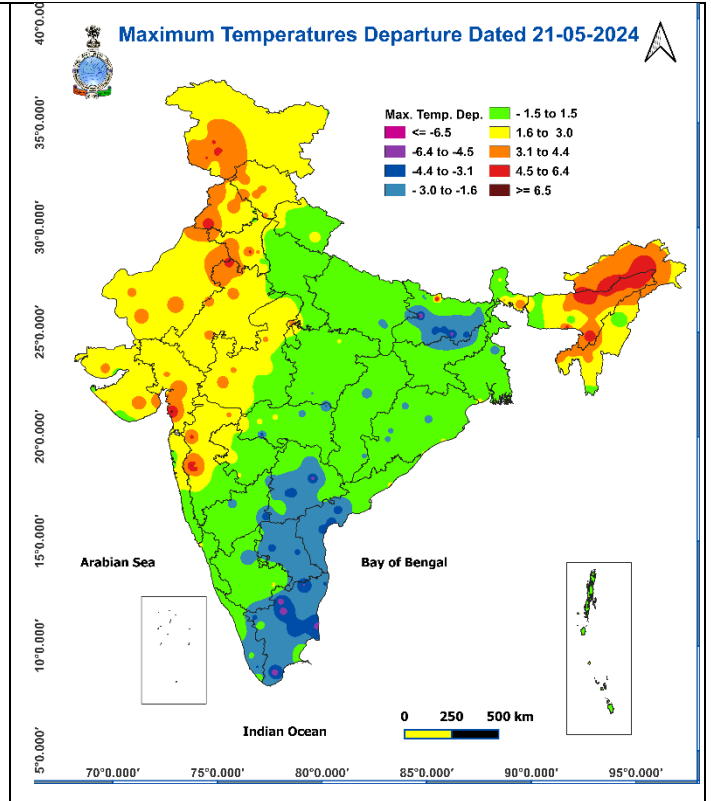
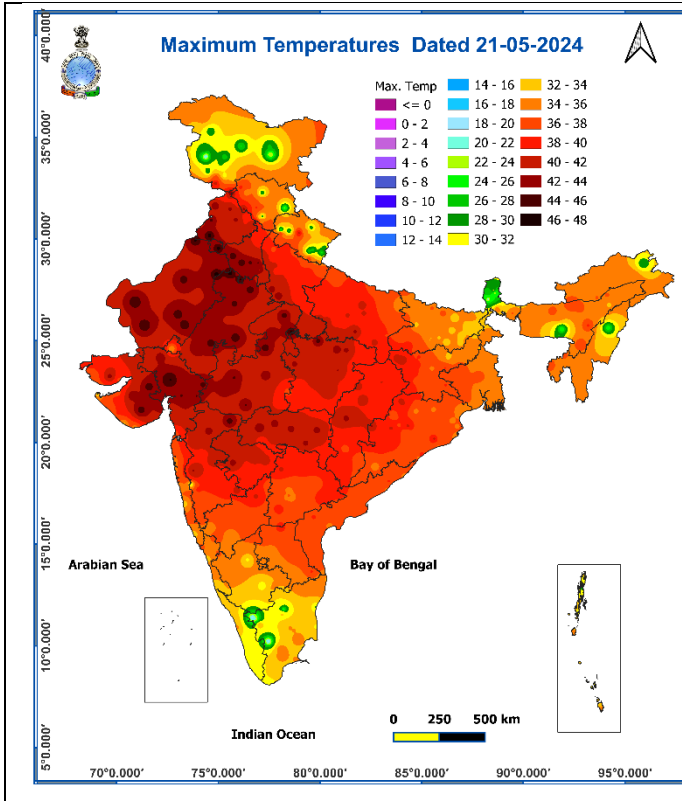
7 Days Rainfall Forecast								
S. No.	Subdivision	22-May	23-May	24-May	25-May	26-May	27-May	28-May
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	WS	WS	WS	WS	WS
2	ARUNACHAL PRADESH	SCT	SCT	SCT	FWS	WS	WS	WS
3	ASSAM & MEGHALAYA	SCT	SCT	SCT	FWS	WS	WS	WS
4	NAGALAND, MANIPUR,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

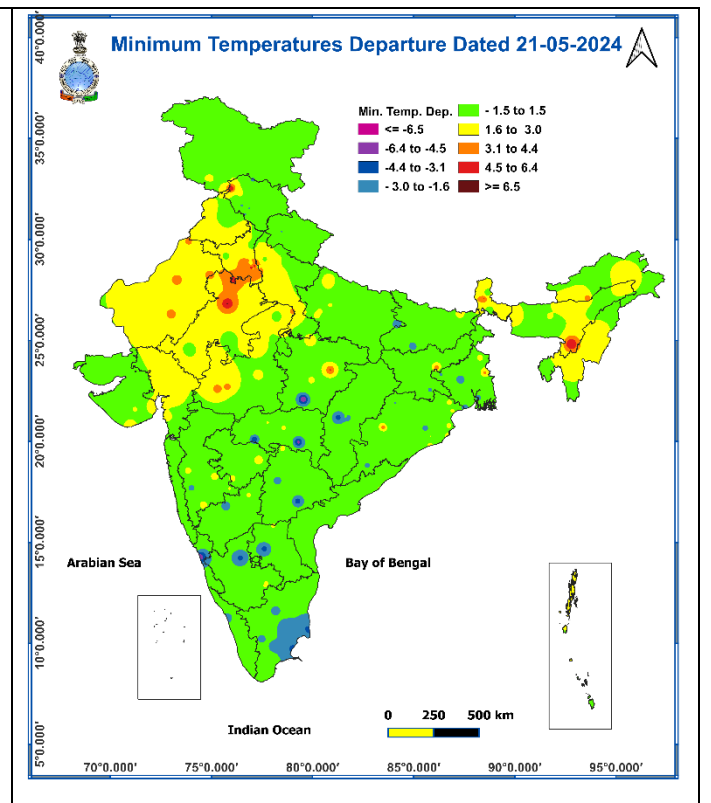
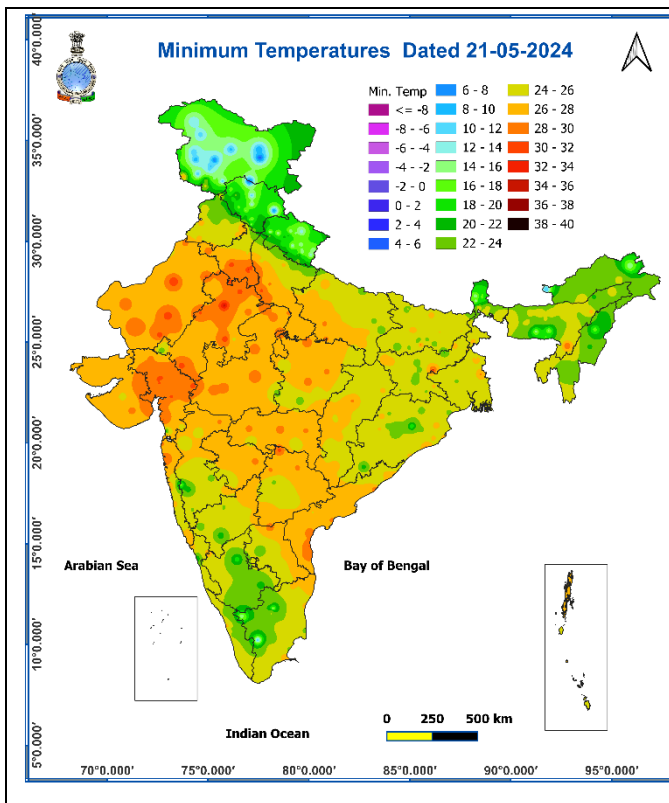
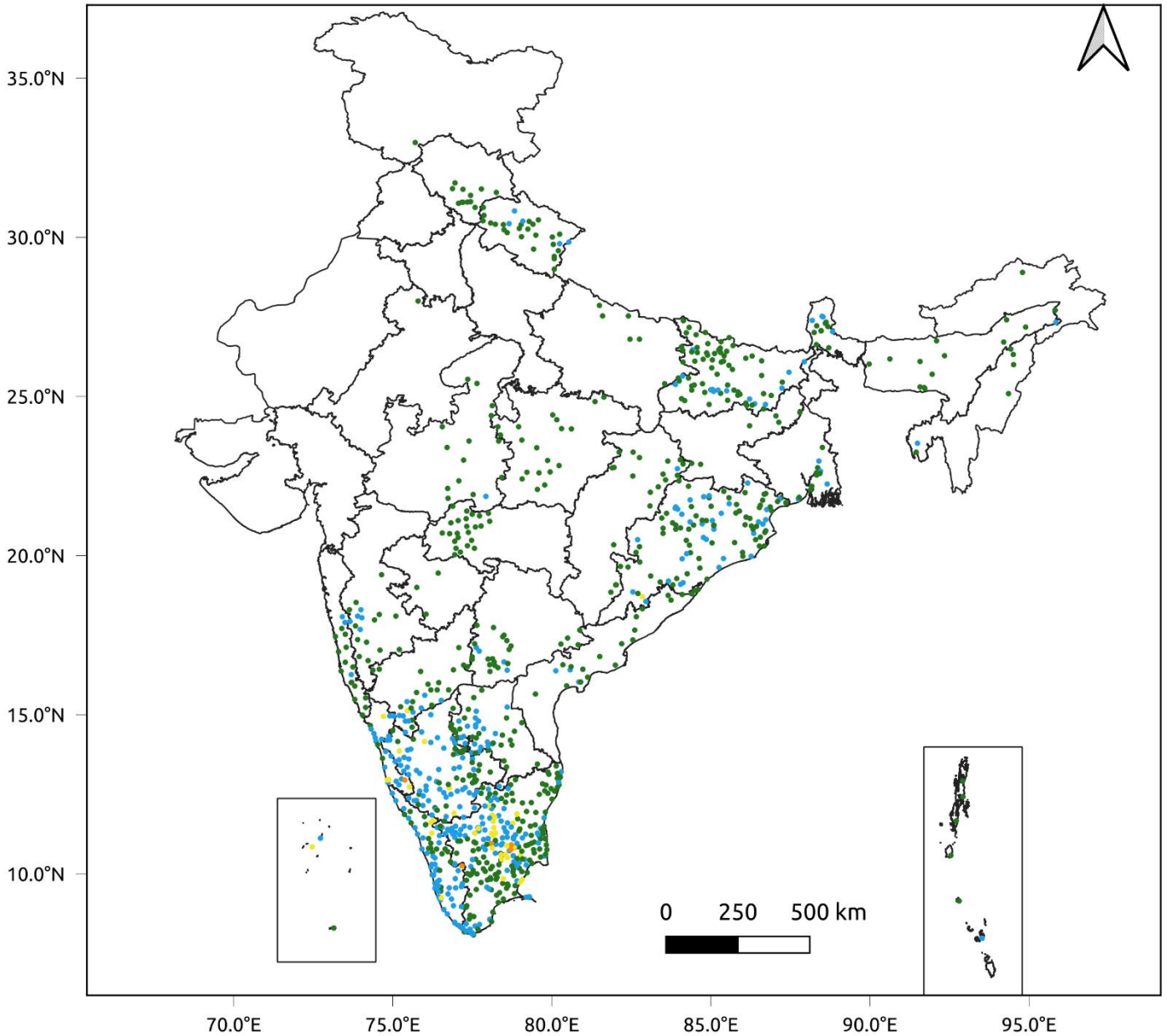


Fig. 5: Accumulated Rainfall (mm) during past 24 hours



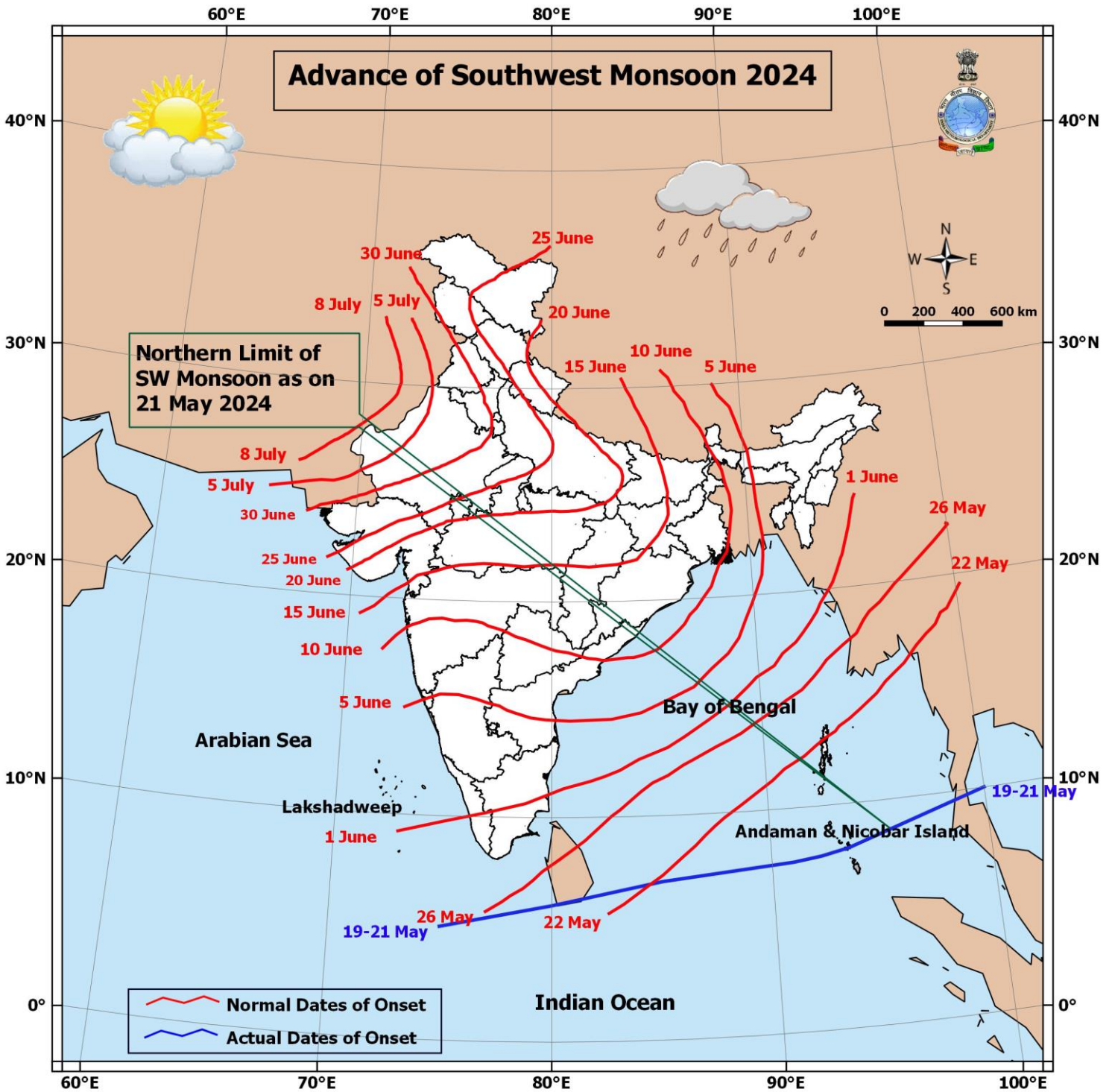
24 Hr cumulative rainfall recorded over different stations during 0830 IST of 20-5-2024 to 0830 IST of 21-5-2024



## Legends

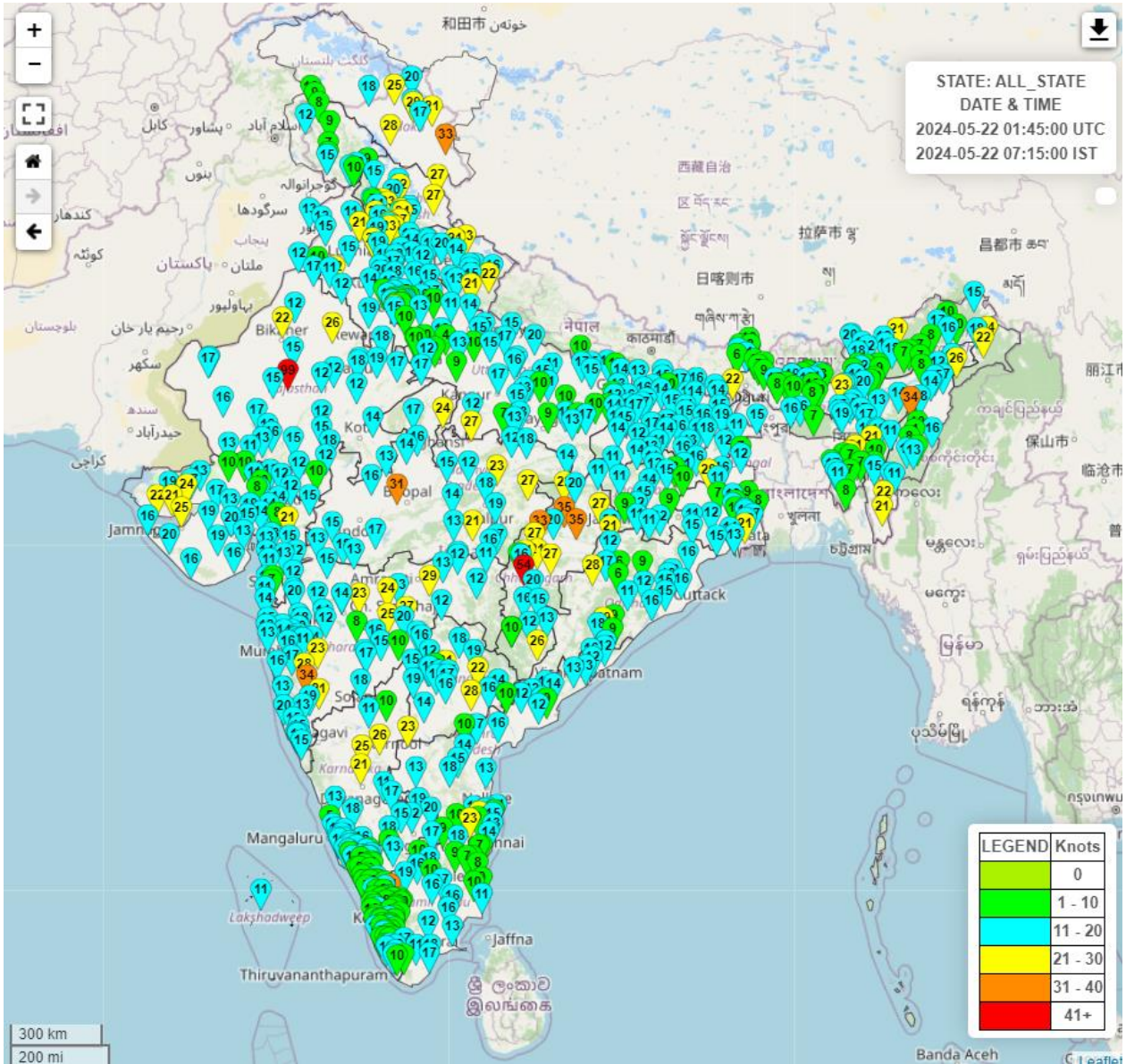
- Very Light to Light Rainfall (0.1 - 15.5 mm)
- Moderate Rainfall (15.6 - 64.4 mm)
- Heavy Rainfall (64.5 - 115.5 mm)
- Very Heavy Rainfall (115.6 - 204.4 mm)
- Extremely Heavy Rainfall ( $\geq 204.5$  mm)

**Fig. 6: Advance of Southwest Monsoon 2024**



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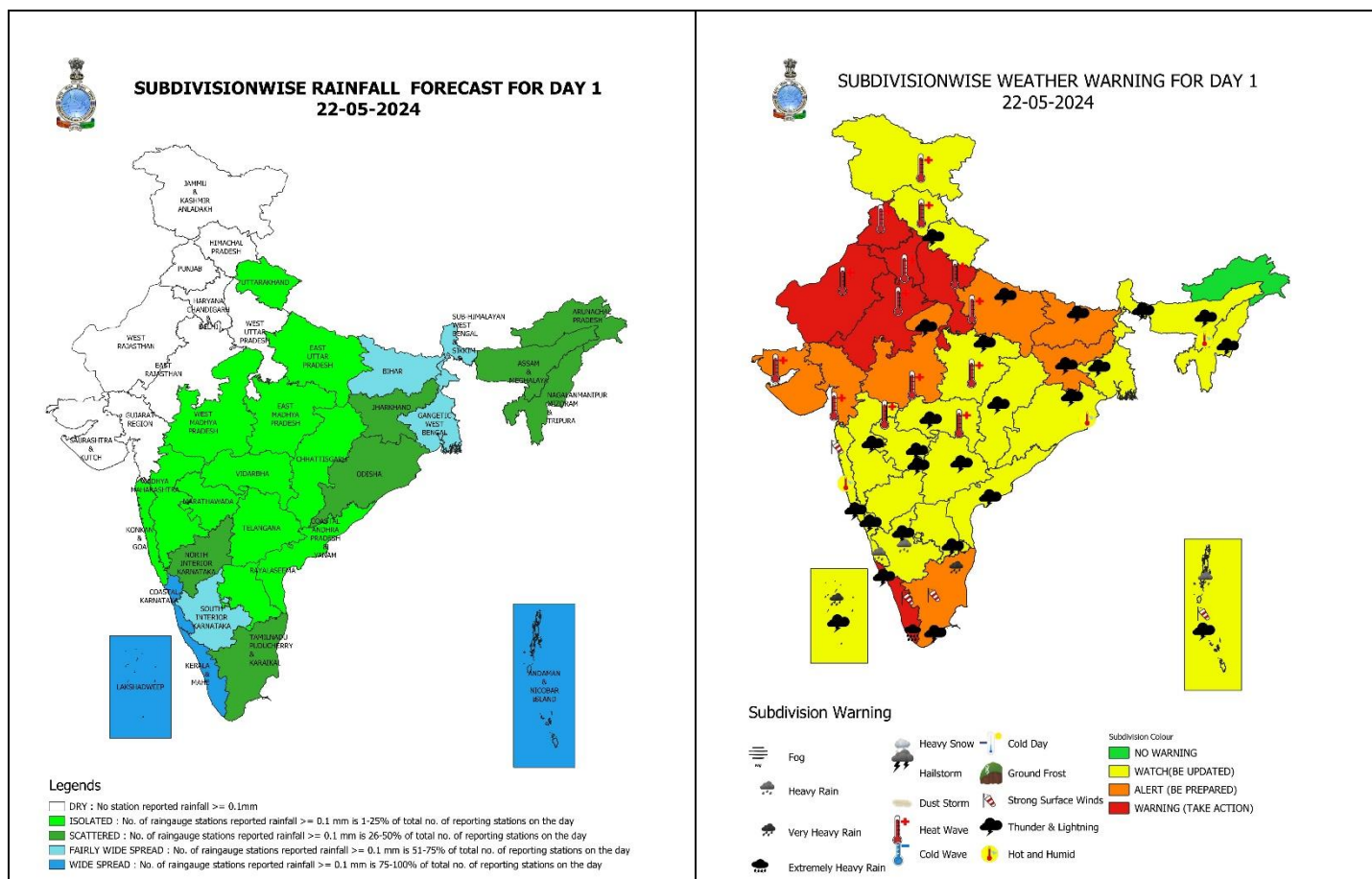
**Fig. 7: Gusty winds reported over the country (in knots) from 0830 hrs IST of 21.05.2024 to 0530 hrs IST of 22.05.2024**



1 Knot = 1.852 kmph

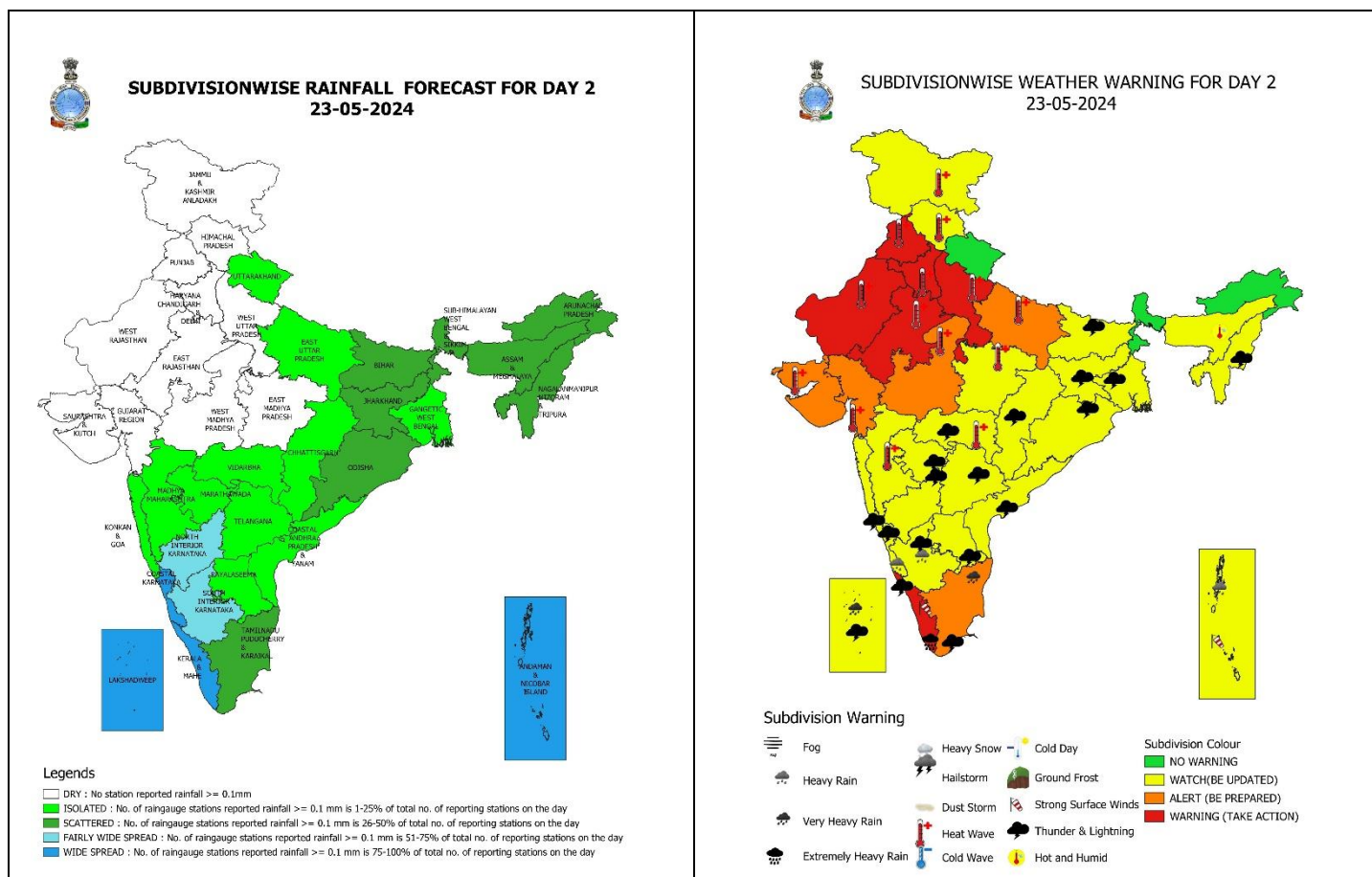
For more details, kindly refer: <http://aws.imd.gov.in:8091/>

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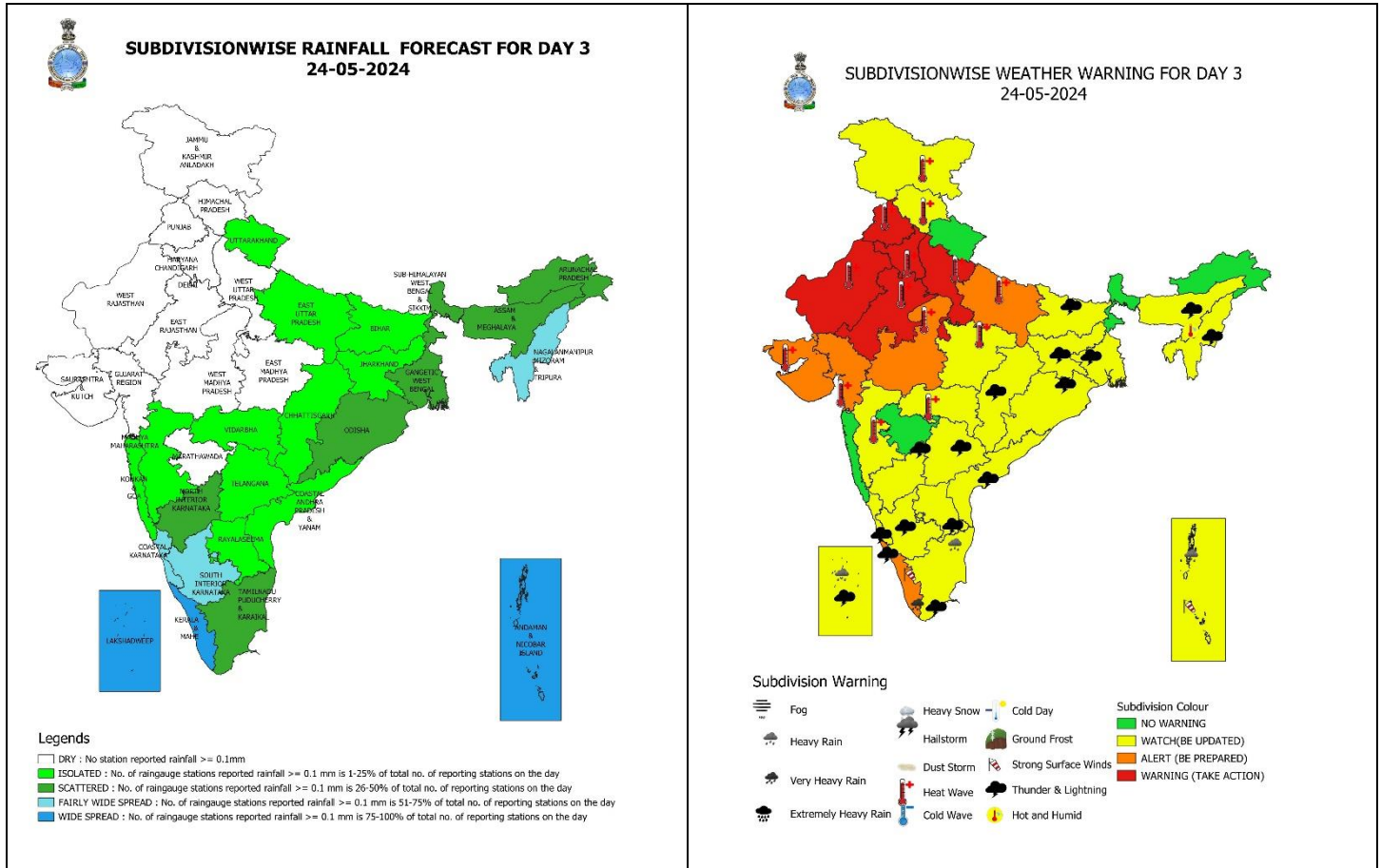
**22 May (Day 1):**

- ❖ **Heavy to very Heavy rainfall with extremely heavy falls** very likely at isolated places over Kerala & Mahe; **Heavy to very Heavy rainfall** at isolated places over Tamil Nadu, Puducherry & Karaikal, Lakshadweep; Heavy rainfall at isolated places Andaman & Nicobar Islands, Coastal Karnataka and South Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Gangetic West Bengal, Jharkhand, Bihar, Madhya Pradesh, Uttarakhand, Chhattisgarh, Kerala & Mahe, South Interior Karnataka; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Vidarbha, Konkan & Goa, Madhya Maharashtra, Marathwada, North Interior Karnataka; **with lightning** at isolated places over Assam & Meghalaya. Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Odisha, Tamil Nadu, Puducherry & Karaikal, Lakshadweep, Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema.
- ❖ **Heat Wave to severe heat wave Conditions** very likely to prevail in many parts over Rajasthan; in some parts of Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh; in isolated pockets over East Uttar Pradesh; **heat wave conditions** in isolated pockets over Jammu, Himachal Pradesh, north Madhya Pradesh, Vidarbha, north Madhya Maharashtra and Gujarat state.
- ❖ **Hot and humid weather** very likely to prevail over Assam, Odisha and Konkan & Goa.
- ❖ **Warm night conditions** very likely to prevail in isolated pockets over West Uttar Pradesh and Rajasthan.
- ❖ **Squally weather with wind speed 40 kmph to 45 kmph gusting to 55 kmph** very likely to prevail along and off Karnataka, Kerala, & Sri Lanka coasts Lakshadweep, Maldives areas, Comorin Area, Gulf of Mannar, south and adjoining central Bay of Bengal, Andaman Sea; **with wind speed 45 kmph to 55 kmph gusting to 65 kmph** prevail along and off south Kerala, Sri Lanka coasts, Comorin Area, Gulf of Mannar, southwest and adjoining southeast Bay of Bengal. **Squally wind with wind speed 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail along and off Somalia coast. Fishermen are advised not to venture into these areas.



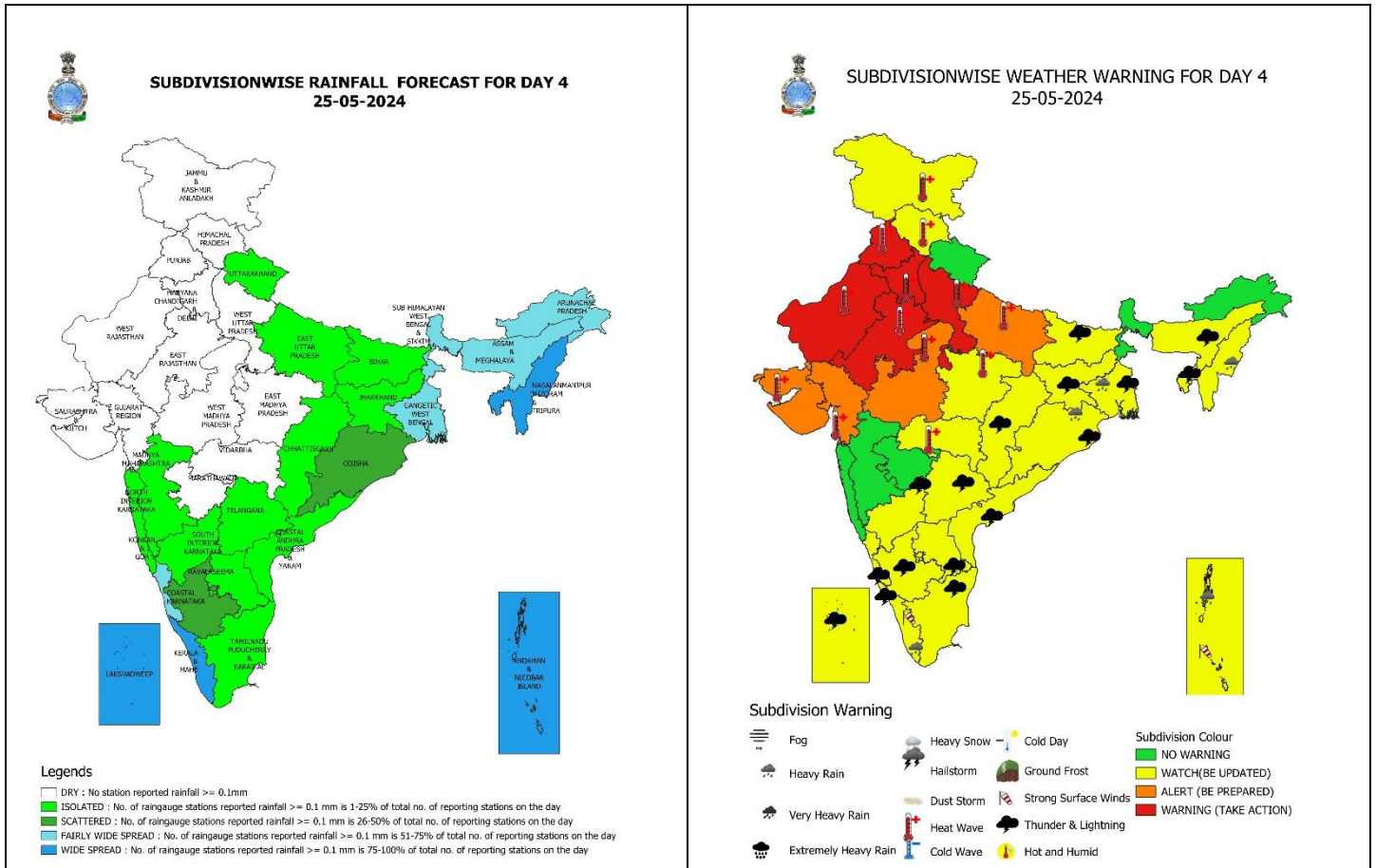
**23 May (Day 2):**

- ❖ **Heavy to very Heavy rainfall with extremely heavy falls** very likely at isolated places over Kerala & Mahe; **Heavy to very Heavy rainfall** at isolated places over Tamil Nadu, Puducherry & Karaikal, Lakshadweep; Heavy rainfall at isolated places Andaman & Nicobar Islands, Coastal Karnataka and South Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Jharkhand, Bihar, Kerala & Mahe, South Interior Karnataka; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Nagaland, Manipur, Mizoram & Tripura, Vidarbha, Chhattisgarh, Konkan & Goa, Madhya Maharashtra, Marathwada, North Interior Karnataka; **with lightning** at isolated places over Gangetic West Bengal, Odisha, Tamil Nadu, Puducherry & Karaikal, Lakshadweep, Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema.
- ❖ **Heat Wave to severe heat wave Conditions** very likely to prevail in many parts over Rajasthan, Punjab, Haryana-Chandigarh-Delhi; in some parts of West Uttar Pradesh; in isolated pockets over East Uttar Pradesh; **heat wave conditions** in isolated pockets over Jammu, Himachal Pradesh, north Madhya Pradesh, north Madhya Maharashtra Vidarbha and Gujarat state.
- ❖ **Warm night conditions** very likely to prevail in isolated pockets over West Uttar Pradesh and Rajasthan.
- ❖ **Hot and humid weather** very likely to prevail over Assam.
- ❖ **Squally weather with wind speed 40 kmph to 45 kmph gusting to 55 kmph** very likely to prevail along and off Karnataka, Kerala, Sri Lanka coasts, Lakshadweep, Maldives areas, Comorin Area, Gulf of Mannar, south, central & north Bay of Bengal, Andaman Sea; **with wind speed 45 kmph to 55 kmph gusting to 65 kmph** prevail along and off Kerala, Sri Lanka coasts, Comorin Area, Gulf of Mannar, south and adjoining central Bay of Bengal; **Squally wind with wind speed 50 kmph to 60 kmph gusting to 70 kmph** likely to prevail over eastcentral & southeast Bay of Bengal. Somalia coast. Fishermen are advised not to venture into these areas.



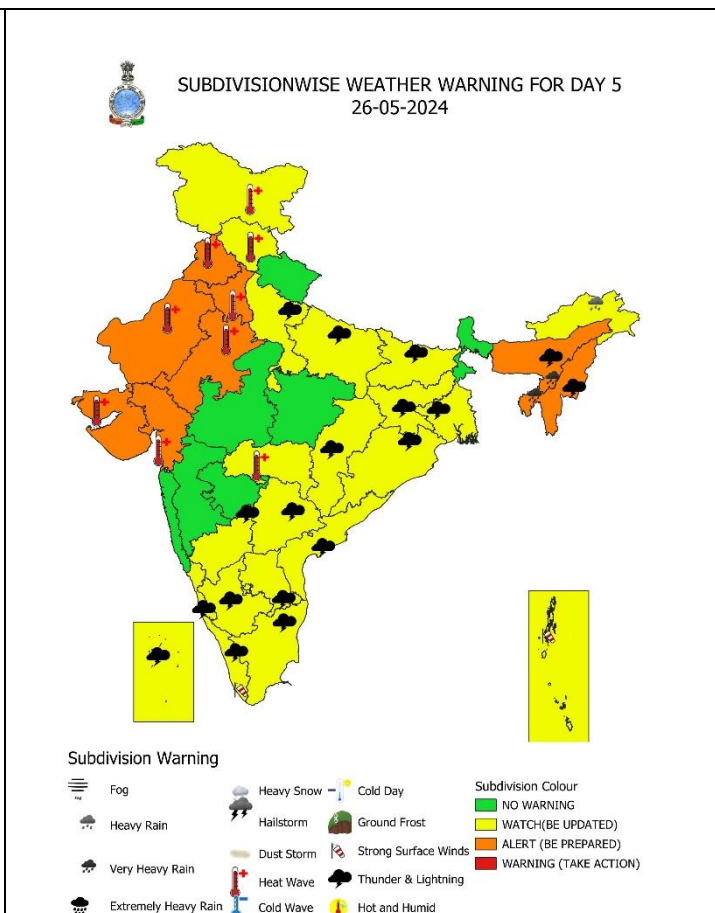
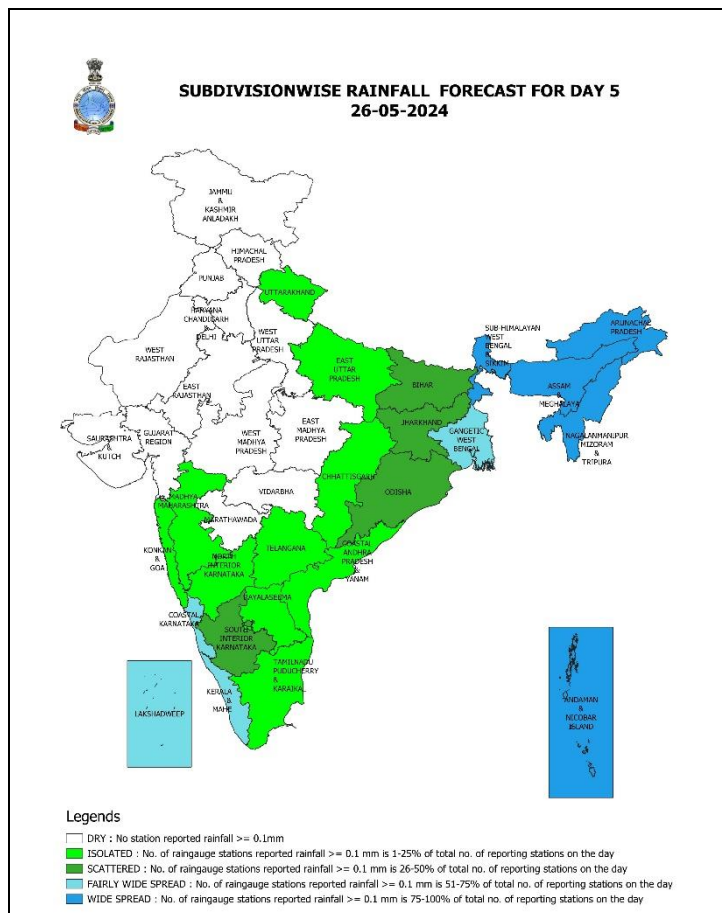
### 24 May (Day 3):

- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Kerala & Mahe; **Heavy rainfall** at isolated places over Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Kerala & Mahe, South Interior Karnataka; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Nagaland, Manipur, Mizoram & Tripura, Jharkhand, Chhattisgarh, North Interior Karnataka; **with lightning** at isolated places over Assam & Meghalaya, Gangetic West Bengal, Odisha, Tamil Nadu, Puducherry & Karaikal, Lakshadweep, Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema..
- ❖ **Heat Wave to severe heat wave Conditions** very likely to prevail in most parts of West Rajasthan; in many parts of Punjab, Haryana-Chandigarh-Delhi, East Rajasthan; in some parts of West Uttar Pradesh; in isolated pockets over East Uttar Pradesh; **heat wave conditions** in isolated pockets over Jammu, Himachal Pradesh, north Madhya Pradesh, north Madhya Maharashtra Vidarbha and Gujarat state.
- ❖ **Warm night conditions** very likely to prevail in isolated pockets over West Uttar Pradesh and Rajasthan.
- ❖ **Hot and humid weather** very likely to prevail over Assam.
- ❖ **Squally weather with wind speed 40 kmph to 45 kmph gusting to 55 kmph** very likely to prevail along and off Karnataka, Kerala, & Sri Lanka coasts Lakshadweep, Maldives areas & adjoining southeast Arabian sea, Comorin area, Gulf of Mannar, South Bay of Bengal, Eastcentral & adjoining Westcentral Bay of Bengal, northeast Bay of Bengal, Andaman sea; **with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off south Kerala, Sri Lanka coasts, Comorin area, Gulf of Mannar, south Bay of Bengal, Eastcentral & adjoining Westcentral bob, north Andaman sea; **with wind speed 50 kmph to 60 kmph gusting to 70 kmph** to prevail over eastcentral Bay of Bengal; **with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast. Fishermen are advised not to venture into these areas.



## 25 May (Day 4):

- ❖ **Heavy rainfall** likely at isolated places over Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya, Gangetic West Bengal, Odisha, Lakshadweep.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Kerala & Mahe, Gangetic West Bengal; with **lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Jharkhand, Bihar, Chhattisgarh, Interior Karnataka; **with lightning** at isolated places over Assam & Meghalaya, Odisha, Tamil Nadu, Puducherry & Karaikal, Lakshadweep, Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heat Wave to severe heat wave Conditions** likely to prevail in most parts of West Rajasthan; in many parts of Punjab, Haryana-Chandigarh-Delhi, East Rajasthan; in some parts of West Uttar Pradesh; in isolated pockets over East Uttar Pradesh; **heat wave conditions** in isolated pockets over Jammu, Himachal Pradesh, north Madhya Pradesh, Vidarbha and Gujarat state.
- ❖ **Warm night conditions** likely to prevail in isolated pockets over West Uttar Pradesh and Rajasthan.
- ❖ **Squally weather with wind speed 40 kmph to 45 kmph gusting to 55 kmph** likely to prevail along and off south Karnataka, Kerala, & Sri Lanka coasts Lakshadweep, Maldives areas, Comorin area, Gulf of Mannar, south Bay of Bengal, Eastcentral & adjoining Westcentral Bay of Bengal, northeast & adjoining northwest Bay of Bengal, Andaman Sea. **with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail over Comorin area, Gulf of Mannar, along and off Sri Lanka coast, south Bay of Bengal, Eastcentral & adjoining Westcentral Bay of Bengal, adjoining Northeast Bay of Bengal; **with wind speed 50 kmph to 60 kmph gusting to 70 kmph** to prevail over Eastcentral Bay of Bengal; **with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail along and off Somalia coast. Fishermen are advised not to venture into these areas.

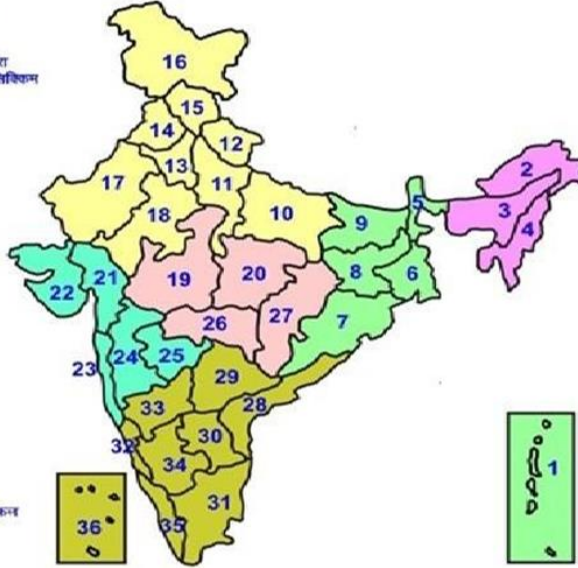


**26 May (Day 5):**

- ❖ **Heavy to very heavy rainfall** likely at isolated places over Nagaland, Manipur, Mizoram, Tripura and Assam & Meghalaya; **Heavy rainfall** at isolated places over Arunachal Pradesh.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Kerala & Mahe, Gangetic West Bengal; with **lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Jharkhand, Bihar, Chhattisgarh, Interior Karnataka; **with lightning** at isolated places over Uttar Pradesh, Assam & Meghalaya, Odisha, Tamil Nadu, Puducherry & Karaikal, Lakshadweep, Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heat Wave to severe heat wave Conditions** likely to prevail in most parts of West Rajasthan; in many parts of Punjab, Haryana, East Rajasthan; **heat wave conditions** in isolated pockets over Jammu, Himachal Pradesh, Vidarbha and Gujarat state.
- ❖ **Warm night conditions** likely to prevail in isolated pockets over Rajasthan.
- ❖ **Squally weather with wind speed 40 kmph to 45 kmph gusting to 55 kmph** likely to prevail along and off south Karnataka, Kerala, & Sri Lanka coasts Lakshadweep, Maldives areas, Comorin area, Gulf of Mannar, south Bay of Bengal, Eastcentral & adjoining Westcentral Bay of Bengal, northeast & adjoining northwest Bay of Bengal, Andaman Sea; **with wind speed 45 kmph to 55 kmph gusting to 65 kmph** to prevail over Comorin area, Gulf of Mannar, along and off Sri Lanka coast, south Bay of Bengal, Eastcentral & adjoining Westcentral Bay of Bengal, adjoining Northeast Bay of Bengal; **with wind speed 50 kmph to 60 kmph gusting to 70 kmph** to prevail over Eastcentral Bay of Bengal; **with wind speed 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail along and off Somalia coast. Fishermen are advised not to venture into these areas.

## LEGENDS

- 1 अंडमन और निकोबार द्वीप समूह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
- 5 उप-हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिशा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखण्ड
- 13 हरियाणा, चंडीगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात
- 22 सौराष्ट्र
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठवाड़ा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 आंध्र प्रदेश एवं यानम
- 29 तेलंगाना
- 30 तमिलनाडु, पुदुचेरी एवं कराईकल
- 31 उत्तरीय कर्नाटक
- 32 दक्षिणी कर्नाटक
- 33 उत्तरीय कर्नाटक
- 34 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

<b>WARNING (TAKE ACTION)</b>
<b>ALERT ( BE PREPARED)</b>
<b>WATCH (BE UPDATED)</b>
<b>NO WARNING ( NO ACTION)</b>

### 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  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
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  $40^{\circ}\text{C}$

Warm Night: When minimum temperature departure  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
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  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
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  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
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)