

Saturday, May 18, 2024
Time of Issue: 0745 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems and Forecast & Warnings:

Southwest Monsoon is very likely to advance into South Andaman Sea, some parts of Southeast Bay of Bengal and Nicobar Islands around 19th May, 2024.

- ❖ A cyclonic circulation lies over south Tamil Nadu & neighbourhood in lower tropospheric levels and another over Rayalaseema & adjoining north Tamil Nadu in lower & middle tropospheric levels. A trough runs from south Chhattisgarh to Comorin area in lower tropospheric levels. Under their influence:
 - Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (40-50 kmph)** very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, south Karnataka and Isolated to scattered light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** over Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema during next 7 days.
 - **Isolated heavy rainfall very likely over Tamil Nadu-Puducherry-Karaikal, Kerala-Mahe, Coastal & South Interior Karnataka during 18th-22nd and Lakshadweep during 20th-22nd May, 2024.**
 - **Isolated very heavy rainfall very likely over Tamil Nadu, Puducherry & Karaikal during 18th-22nd; Kerala & Mahe on 18th & 19th; and South Interior Karnataka during 20th-22nd May, 2024.**
 - **Isolated extremely heavy rainfall also very likely over Kerala during 20th-22nd and Coastal Karnataka on 22nd May, 2024.**
 - Isolated light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Konkan & Goa, Madhya Maharashtra, Marathwada on 18th & 19th and Madhya Pradesh, Vidarbha, Chhattisgarh on 18th May, 2024.
 - Scattered to fairly widespread light to moderate rainfall very likely over Andaman & Nicobar Islands during next 7 days. **Isolated heavy rainfall very likely over Nicobar Islands on during 20th-22nd May, 2024.**
 - Isolated to scattered light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Odisha during next 7 days; over Bihar, Jharkhand, Gangetic West Bengal during 19th-22nd May, 2024.
- ❖ A cyclonic circulation lies over northeast Assam & neighbourhood in lower tropospheric levels. Under its influence:
 - Scattered to fairly widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (40-50 kmph)** very likely over Sub-Himalayan West Bengal & Sikkim during next 7 days.
 - Fairly widespread to widespread light to moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram and Tripura during next 7 days.
 - **Isolated heavy rainfall likely over Sikkim on 19th & 20th; Arunachal Pradesh on 18th & 19th; Assam & Meghalaya during 18th-20th; Nagaland, Manipur on 19th May, 2024. Isolated very heavy rainfall also likely over Meghalaya on 19th & 20th May, 2024.**
- ❖ A fresh Western Disturbance seen as a trough in middle tropospheric westerlies roughly along Long. 52°E to the north of Lat. 30°N. Under its influence; isolated to scattered light rainfall activity very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand on 18th & 19th May, 2024.

Maximum temperature observation:

- ❖ **Areas having maximum temperatures greater than 42°C:** Yesterday, maximum temperatures were in the range of 43- 46°C in most places over Rajasthan; in many places over Haryana, Chandigarh and Punjab; in some places over Delhi, West Uttar Pradesh, Gujarat state; at isolated pockets over East Uttar Pradesh & West Madhya Pradesh; in the range of 40- 42°C at most places over Bihar, Gangetic West Bengal; in some parts over Jharkhand; at isolated pockets over Odisha, Vidarbha and Madhya Maharashtra. These were above normal by 2-4°C over these regions.

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

- ❖ **Heat wave to severe heat wave conditions very likely in some /many pockets over Rajasthan, Punjab, Haryana, Delhi during 18th-22nd May, 2024.**
- ❖ **Heat wave conditions** very likely in some parts of Uttar Pradesh during 18th-22nd; in isolated pockets over north Madhya Pradesh and Gujarat state during 18th-22nd; Bihar and Gangetic West Bengal during 18th-20th; Jharkhand on 19th & 20th and Odisha during 20th-22nd May, 2024.
- ❖ **Hot and humid weather** very likely to prevail over Konkan & Goa, Jharkhand, Assam, Tripura on 18th; Odisha on 18th & 19th May, 2024.
- ❖ **Warm night conditions** very likely to prevail over Uttar Pradesh on 18th 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, Arunachal Pradesh, Assam & Meghalaya; at isolated places over Nagaland, Manipur, Mizoram & Tripura, Uttarakhand, Himachal Pradesh, Jammu-Kashmir, Madhya Maharashtra, Konkan & Goa, Marathwada, Rayalaseema, Telangana, West Madhya Pradesh, Coastal Andhra Pradesh & Yanam.
- ❖ **Heavy rainfall** observed (from 0830 hours IST to 1730 hours IST of yesterday): **Heavy rainfall** at isolated places over Kerala.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday): (in cm): **Kerala:** Ernakulam, Idukki-7 each, Kottayam, Thrissur-2 each; **Tamil Nadu:** Karurparamathi-5, Coimbatore, Valparai- 4 each, Tiruchiparapalli, Dharmapuri- 3 each; **Rayalaseema:** Kurnool- 3, Trupati-2; **Telangana:** Ramgundam- 3.
- ❖ **Yesterday, Heat wave conditions** observed at most places over West Rajasthan; in some pockets over Haryana-Chandigarh-Delhi, Punjab, East Rajasthan; isolated pocket over East Uttar Pradesh & Gujarat State.
- ❖ **Minimum Temperature Departures (as on 17-05-2024):** Minimum temperatures were **appreciably above normal (3.1°C to 5.0°C)** at a few places over Nagaland, Manipur, Mizoram & Tripura; at isolated places over West Rajasthan, Bihar, Jharkhand, Assam & Meghalaya, Uttarakhand, Punjab, Gujarat Region and South Interior Karnataka; **above normal (1.6°C to 3.0°C)** at a few places over Gangetic West Bengal, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Andaman & Nicobar Islands; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, East Rajasthan, Haryana-Chandigarh-Delhi, West Madhya Pradesh, Saurashtra & Kutch and Chhattisgarh. These were **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Telangana; **below normal (-1.6°C to -3.0°C)** at isolated places over East Uttar Pradesh, East Madhya Pradesh, Rayalaseema, Coastal Andhra Pradesh & Yanam, Coastal Karnataka and Tamil Nadu, Puducherry & Karaikal and **near normal** over rest parts of the country. Yesterday, **the lowest minimum temperature of 21.1°C** was reported at **Nahan (Haryana)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 17-05-2024):** Maximum temperatures were **markedly above normal (5.1°C or more)** at a few places over Assam & Meghalaya; at isolated places over Saurashtra & Kutch; **appreciably above normal (3.1°C to 5.0°C)** at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Konkan & Goa; at a few places over Nagaland, Manipur, Mizoram & Tripura, Punjab; at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Gujarat Region; **above normal (1.6°C to 3.0°C)** at most places over Himachal Pradesh; at many places over Uttar Pradesh; at a few places over Kerala & Mahe; at isolated places over Uttarakhand, East Rajasthan, Coastal Karnataka. These were **markedly below normal (-5.1°C or less)** at isolated places over East Madhya Pradesh, Telangana; **appreciably below normal (-3.1°C to -5.0°C)** at many places over Vidarbha, Marathwada, Telangana; at 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 a few places over West Madhya Pradesh, Tamil Nadu, Puducherry & Karaikal, Chhattisgarh; at isolated places over Rayalaseema and **near normal** over rest parts of the country. Yesterday, **the highest maximum temperature of 46.9°C** was reported at **Agra Taj (West Uttar Pradesh)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

- ❖ The Western Disturbance as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 52°E to the north of Lat. 30°N persists.
- ❖ The cyclonic circulation over northwest Uttar Pradesh & adjoining Haryana extending upto 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Rajasthan & neighbourhood at 0.9 km above mean sea level persists.
- ❖ The trough from above cyclonic circulation over northeast Rajasthan to north Madhya Maharashtra across West Madhya Pradesh at 0.9 km above mean sea level persists.
- ❖ The cyclonic circulation over northeast Assam & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over Rayalaseema & adjoining north Tamil Nadu extending upto 5.8 km above mean sea level persists.
- ❖ The trough from south Chhattisgarh to Comorin area across above cyclonic circulation over Rayalaseema & adjoining north Tamil Nadu at 1.5 km above mean sea level persists.
- ❖ The cyclonic circulation over south Tamil Nadu & neighbourhood at 3.1 km above mean sea level persists.
- ❖ The cyclonic circulation over Westcentral Arabian Sea off Yemen coast between 3.1 & 4.5 km above mean sea level persists.
- ❖ **Southwest Monsoon** is very likely to advance into South Andaman Sea, some parts of Southeast Bay of Bengal and Nicobar Islands around 19th May, 2024.

Weather Forecast for next 7 days (Upto 0830 hours IST of 25th May, 2024)

- ❖ Meteorological sub-division wise detailed 7 days rainfall forecast is given in Table-1.
- ❖ Gradual rise in maximum temperatures by about 2°C very likely over many parts of Northwest India during next 24 hours and no significant change thereafter.
- ❖ Gradual rise in maximum temperatures by 2-3°C very likely over many parts of Central & East India during next 2-3 days and no significant change thereafter.
- ❖ Gradual rise in maximum temperatures by 2-4°C very likely over many parts of 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 25th-27th May, 2024)

- ❖ Isolated to scattered light/moderate rainfall likely over Western Himalayan Region, Central, East, Northeast & south Peninsular India.
- ❖ Fairly widespread to widespread rainfall likely over Islands.
- ❖ Dry weather likely to prevail over rest parts of the country.

Table-1

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

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Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

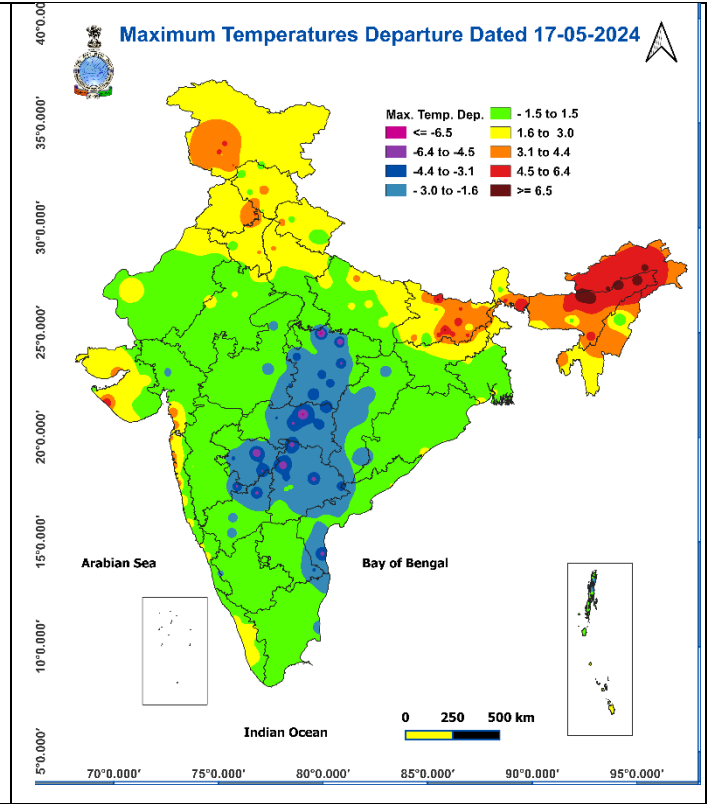
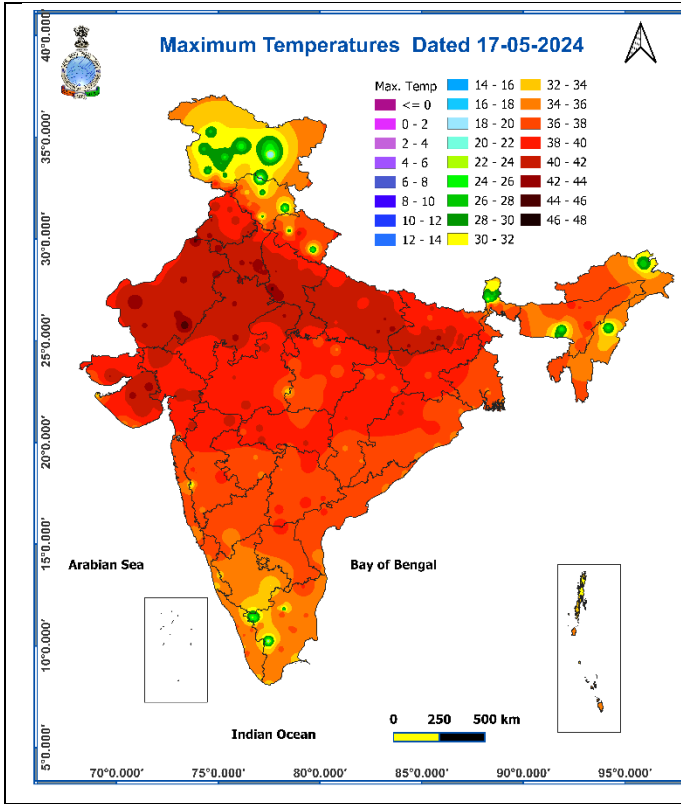


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

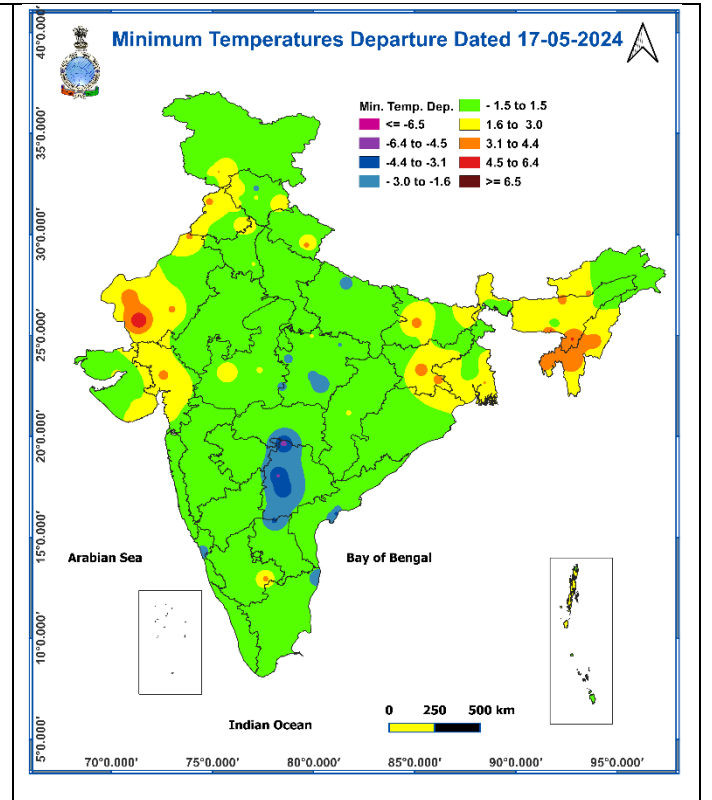
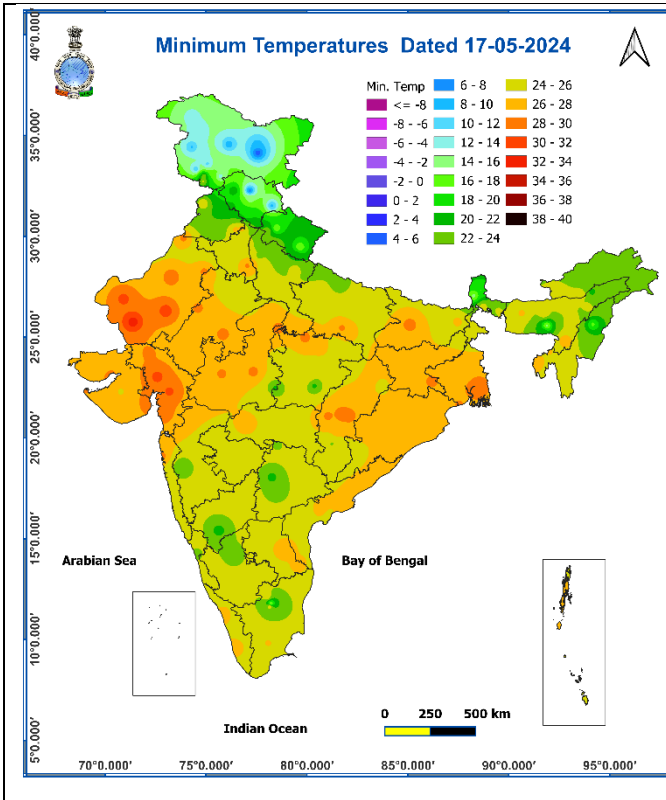
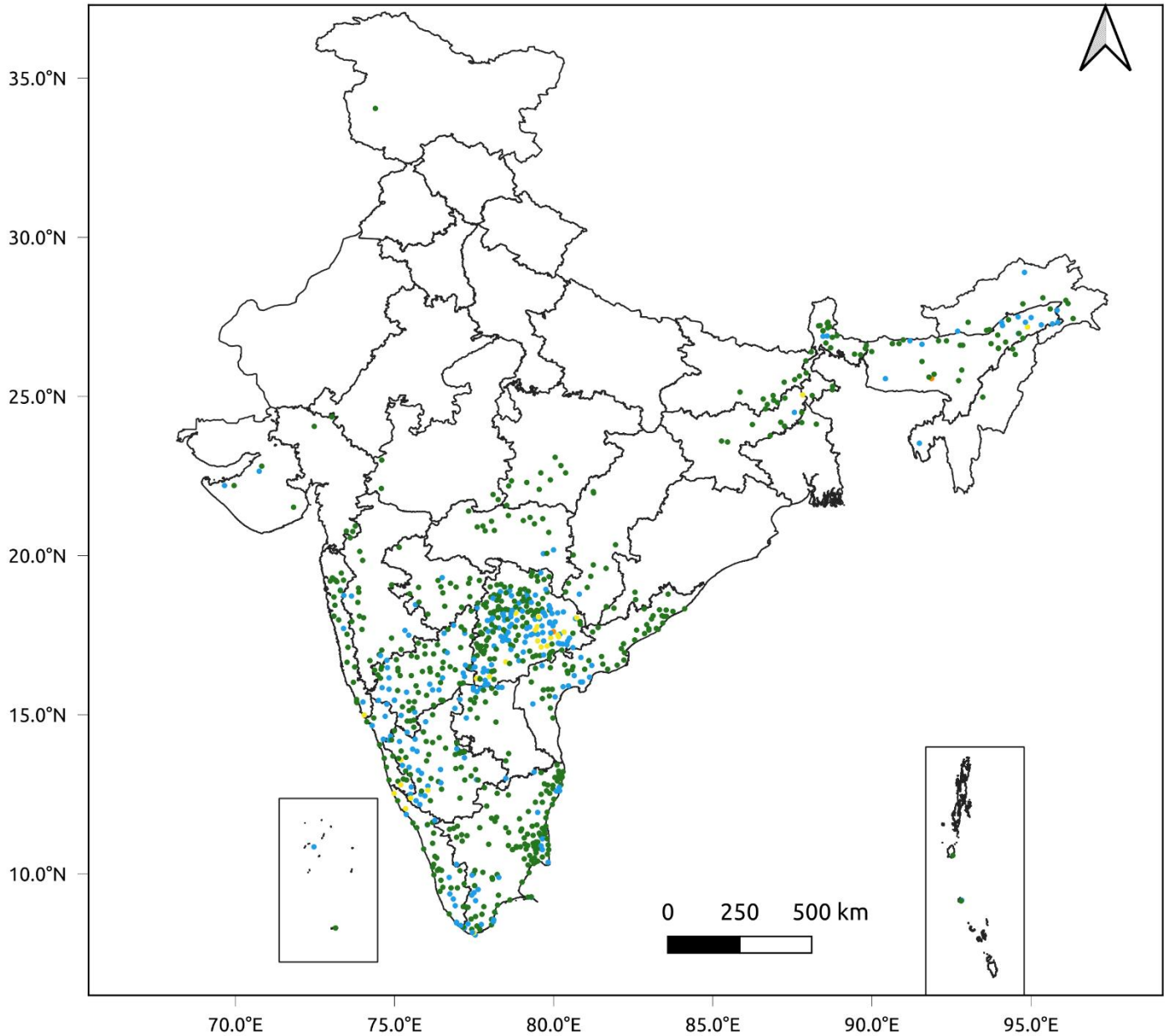


Fig. 5: Accumulated Rainfall (mm) during past 24 hours



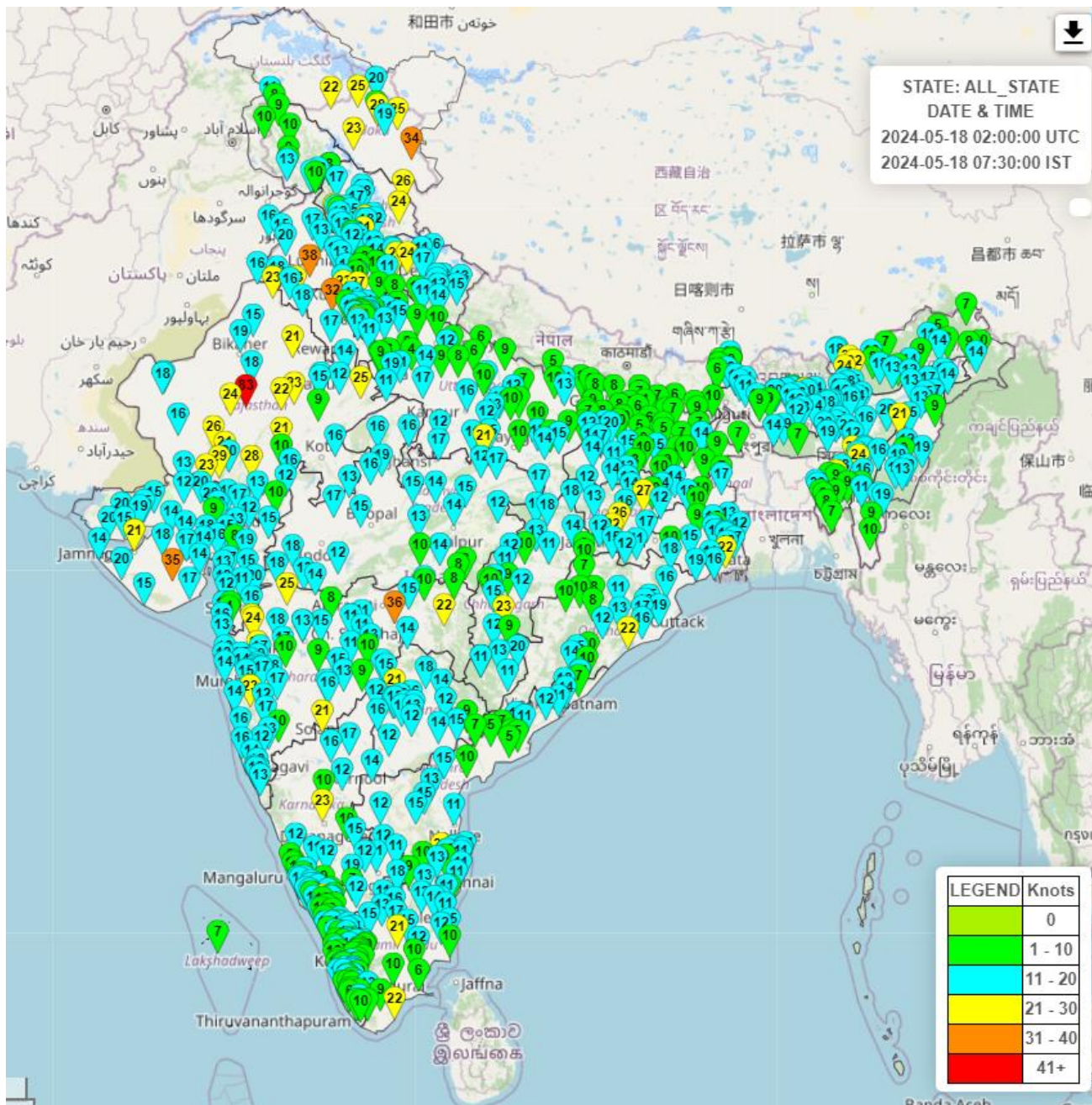
24 Hr cumulative rainfall recorded over different stations during 0830 IST of 16-5-2024 to 0830 IST of 17-5-2024



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 (≥ 204.5 mm)

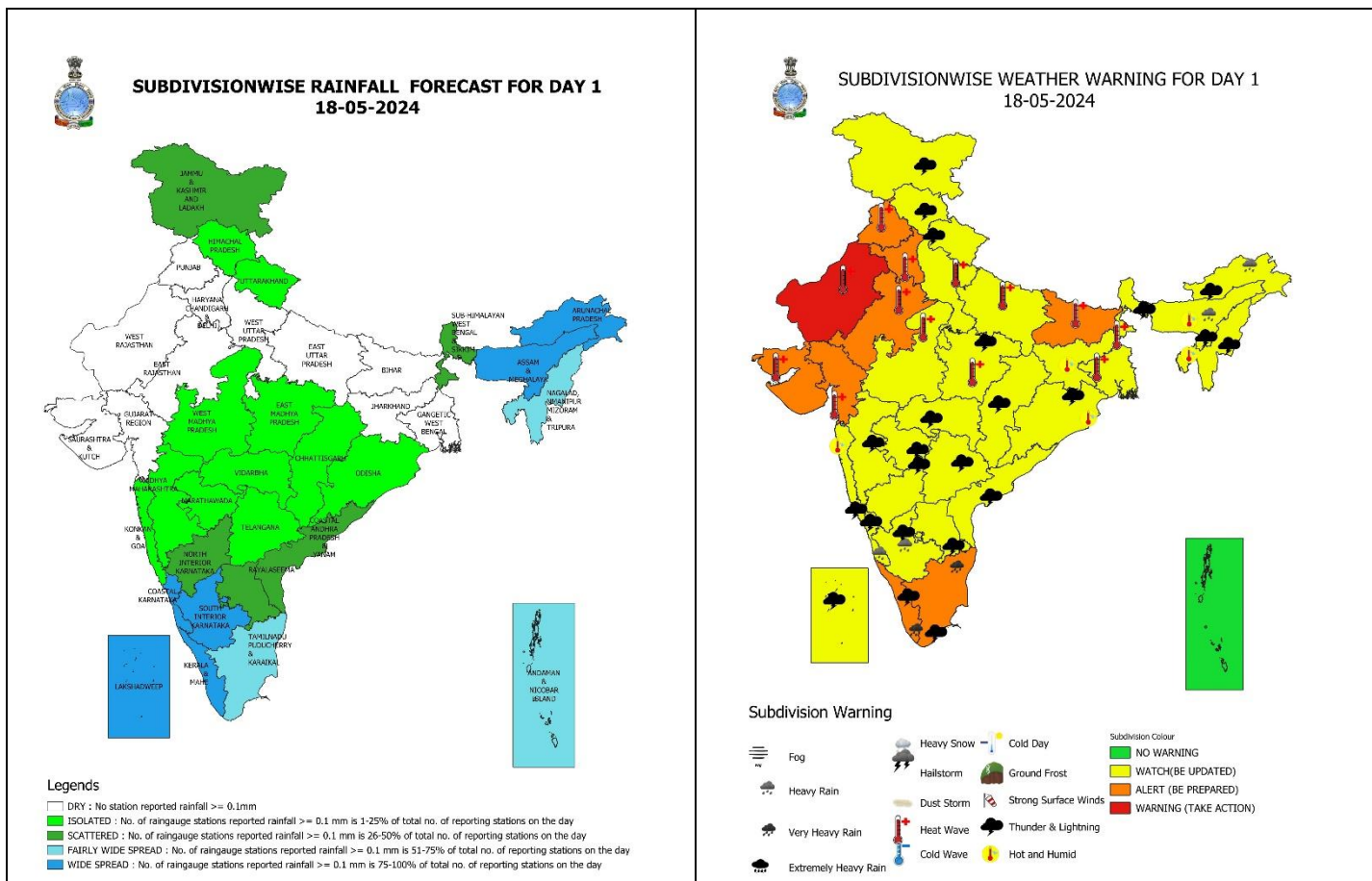
Gusty winds reported over the country (in knots) from 0830 hrs IST of 17.05.2024 upto 0730 hrs IST of 18.05.2024



1 Knot = 1.852 kmph

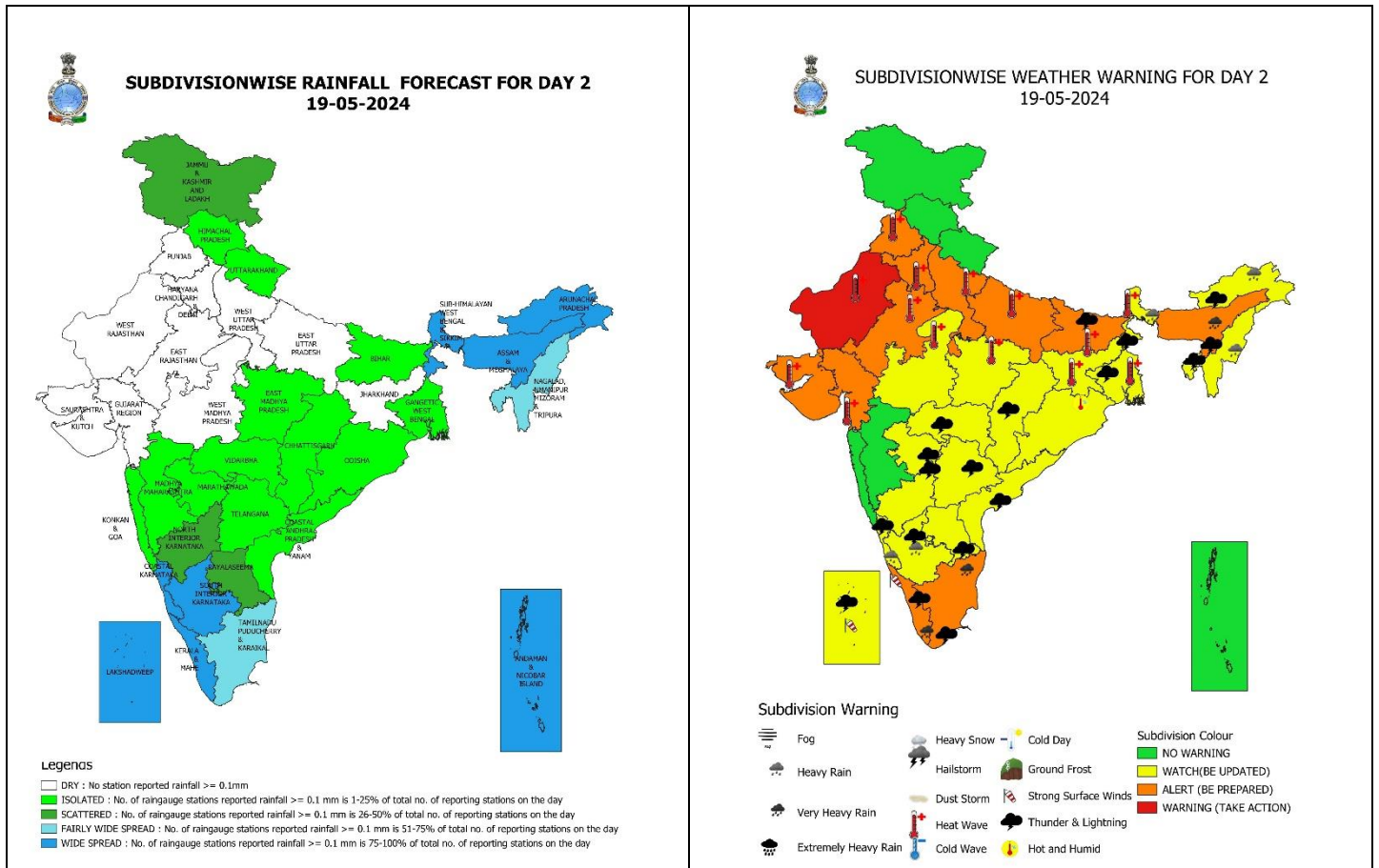
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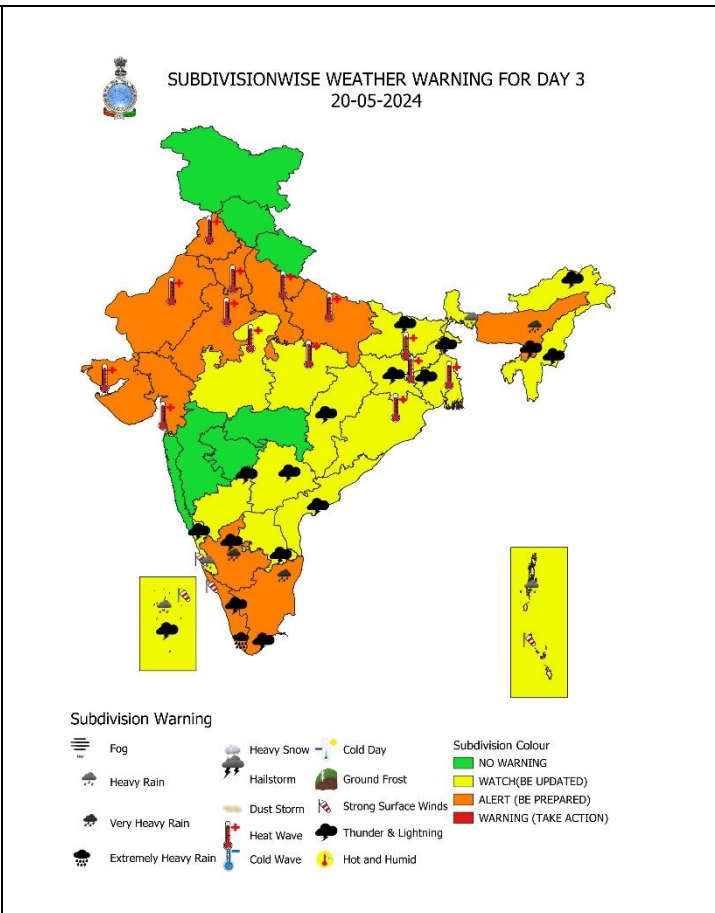
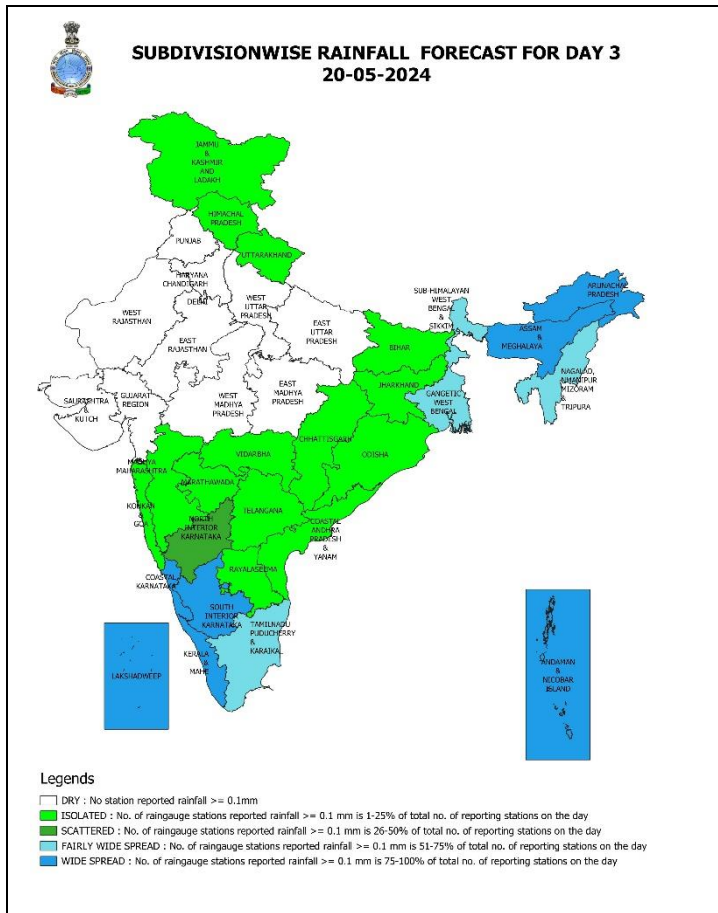
18 May (Day 1):

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



19 May (Day 2):

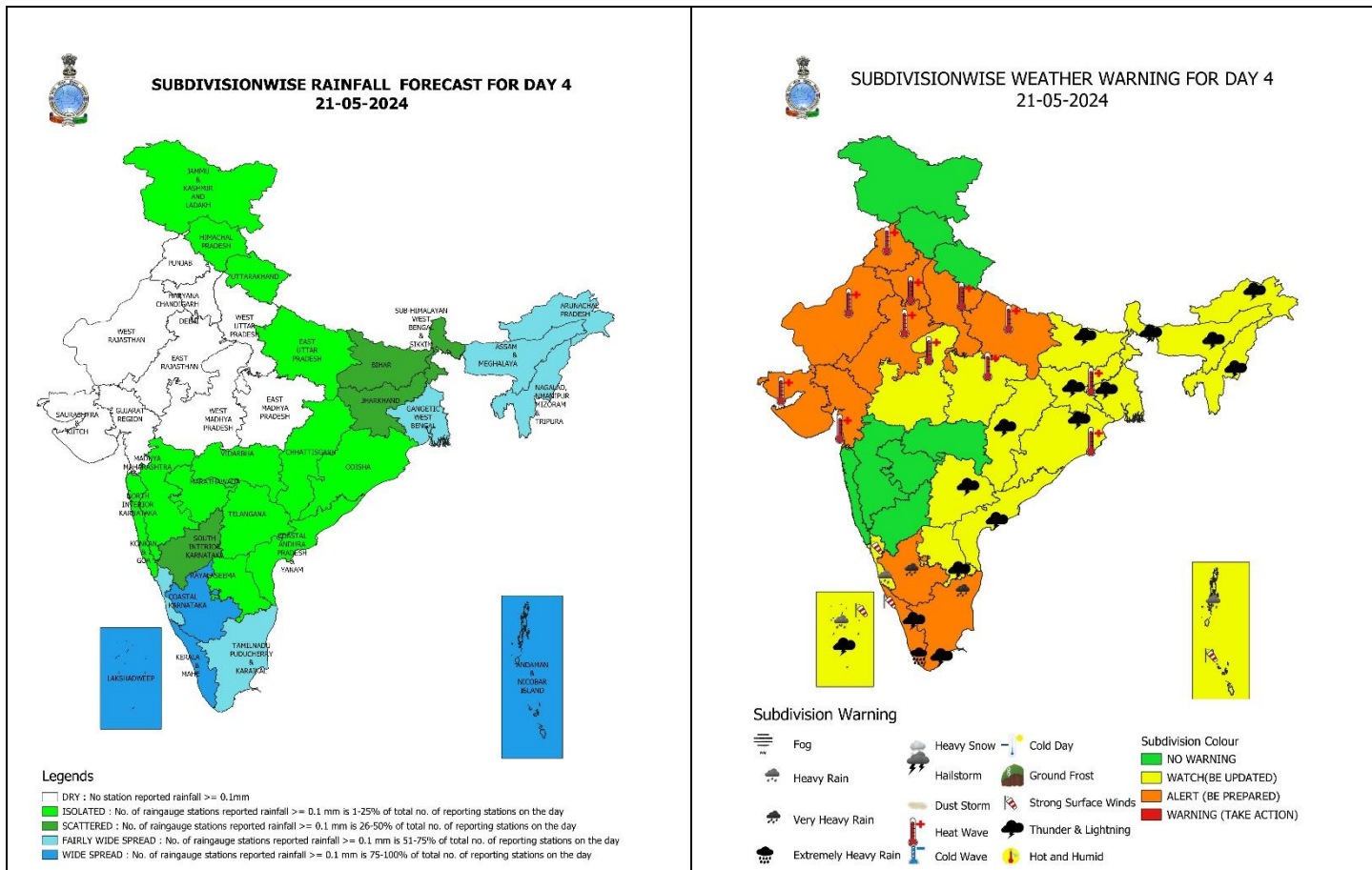
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Bihar, North Interior Karnataka; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Vidarbha, Chhattisgarh,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



20 May (Day 3):

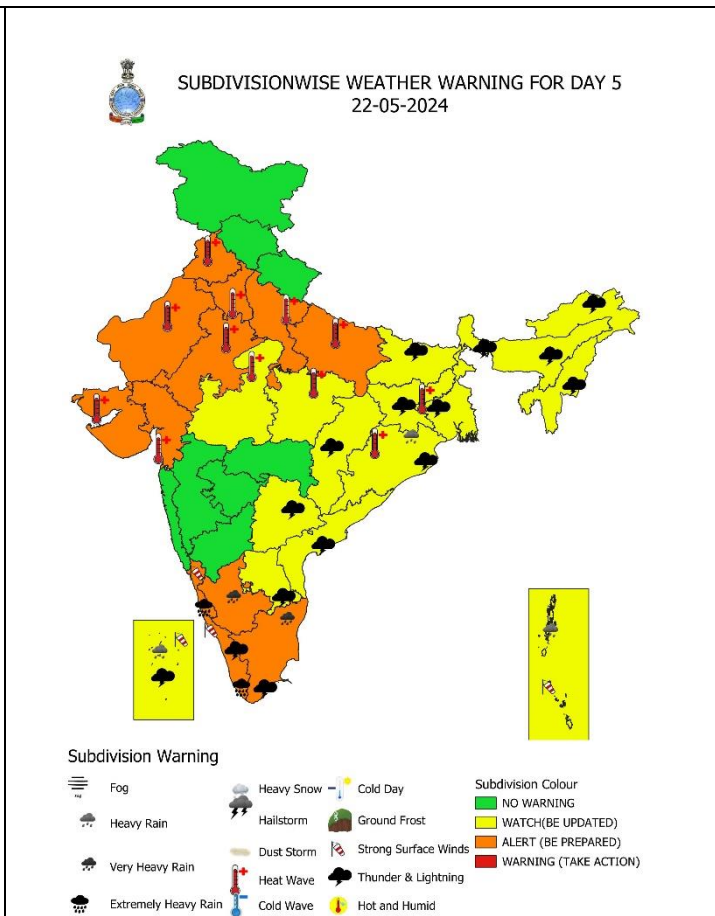
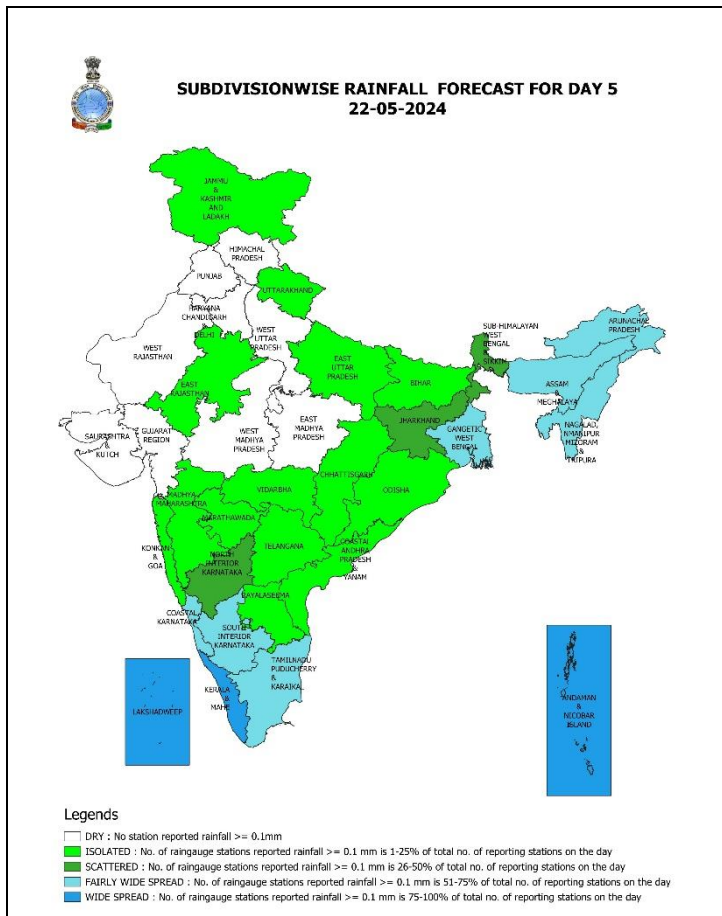
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Gangetic West Bengal, Bihar and North Interior Karnataka; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Chhattisgarh, Sub-Himalayan West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

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21 May (Day 4):

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

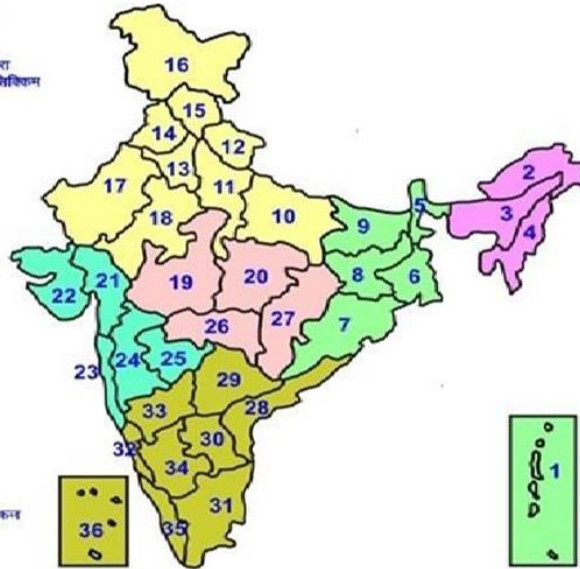


22 May (Day 5):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** likely at isolated places over Gangetic West Bengal, Jharkhand; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over Chhattisgarh, Bihar, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana; **with lightning** at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Lakshadweep.
- ❖ **Heavy to very Heavy rainfall with extremely heavy falls** likely at isolated places over Kerala & Mahe and Coastal Karnataka; **Heavy to very heavy rainfall** at isolated places over Tamil Nadu, Puducherry & Karaikal, South Interior Karnataka and **Heavy rainfall** at isolated places over Odisha, Andaman & Nicobar Islands, and Lakshadweep.
- ❖ **Heat Wave to severe heat wave Conditions** likely to prevail in many parts over Punjab and Haryana-Chandigarh; in some parts over West Rajasthan and **heat wave conditions** in some parts of Uttar Pradesh, East Rajasthan; in isolated pockets over Madhya Pradesh, Odisha, Gujarat state.
- ❖ **Squally weather with wind speed 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over Comorin area, Gulf of Mannar, along and off south Tamil Nadu coast, along and off Kerala and adjoining Karnataka coasts, off north Odisha coast and adjoining northwest Bay of Bengal, along and off Somalia coast; **with wind speed 40 kmph to 45 kmph gusting to 55 kmph** prevailing over along and off north Sri Lanka coast, Andaman Sea. 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 तेलंगाना
- 29 तेलंगाना
- 30 तेलंगाना
- 31 तेलंगाना
- 32 तेलंगाना
- 33 तेलंगाना
- 34 तेलंगाना
- 35 तेलंगाना
- 36 तेलंगाना



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

SPATIAL DISTRIBUTION (% of Stations reporting)

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

WARNING

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

Probabilistic Forecast

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

LEGENDS

WARNING

WARNING (TAKE ACTION)
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Probabilistic Forecast

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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)

* 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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