



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Saturday, February 22, 2025 Time of Issue: 0830 hours IST (NIGHT)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Realized weather from 0830 hours IST to 1730 hours IST of today

Temperature:

- During Past 24 hours, Day temperatures have risen by 2-4°C at some parts of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; It has fallen 2-4°C at many places over East Madhya Pradesh, Uttar Pradesh; at some parts over Uttarakhand; at isolated places over Arunachal Pradesh and Assam & Meghalaya.
- Day temperatures are in the range of 34-38°C over West and Peninsular & adjoining central India; at some parts of Odisha; 28-32°C over remaining central & East India; 23-28°C over Plains of Northwest India, Remaining East and Northeast India.
- ♦ Maximum temperatures appreciably above normal (3.1°C to 5.0°C) at a few places over Konkan & Goa; at isolated places over Saurashtra & Katch; above normal (1.6°C to 3.0°C) at many places over Madhya Maharashtra and Gujarat Region; at a few places over Bihar and Marathwada; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, East Uttar Pradesh, Jharkhand, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Coastal & north Interior Karnataka. These are markedly below normal (-3.1°C to -5.0°C) at isolated places over Arunachal Pradesh and Assam & Meghalaya. below normal (-3.0°C to -1.6°C) at isolated places over Nagaland, Manipur, Mizoram & Tripura and Gangetic West Bengal and near normal over rest parts of the country.

Weather Systems, Forecast and warning:

- A trough in westerlies runs from south Gangetic West Bengal to north Coastal Andhra Pradesh in the lower levels. An anti-cyclonic circulation lies over north Bay of Bengal in lower tropospheric levels, which is feeding moisture into east and east central India in the lower levels. Under the influence of these systems;
 - ✓ Isolated to Scattered light/moderate rainfall accompanied with thunderstorm, lightning with squall (speed 40-60 kmph) very likely over Odisha, Gangetic West Bengal on 22nd & 23rd, Jharkhand on 22nd; thunderstorm, lightning with gusty winds (speed 30-40 kmph) very likely over Nagaland, Manipur, Mizoram & Tripura on 22nd; Assam & Meghalaya on 22nd & 23rd and Jharkhand on 23rd February. Isolated to scattered light/moderate rainfall accompanied with thunderstorm & lightning very likely over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh & Nagaland, Manipur, Mizoram & Tripura on 22nd & 23rd; Assam & Meghalaya during 22nd-24th; Odisha on 24th February.
 - ✓ Hailstorm activity also likely at isolated places over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Jharkhand & Odisha, Arunachal Pradesh on 22nd; Gangetic West Bengal on 22nd & 23rd February.
- Under the influence of an active easterly wave Heavy rainfall at isolated places likely over Andaman & Nicobar Islands on 25th & 26th February. Isolated to Scattered light/moderate rainfall accompanied with thunderstorm, lightning very likely over Andaman & Nicobar Islands during 24th-26th February.
- A fresh Western Disturbance is likely to affect Northwest India from the night of 24th February, 2025. Under its influence,
 - ✓ **Fairly widespread to widespread** light to moderate rainfall/snowfall accompanied with thunderstorm & lightning likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh & Uttarakhand on 25th & 26th February.
 - ✓ Heavy rainfall/snowfall at isolated places likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 25th-28th; Himachal Pradesh during 26th-28th; Uttarakhand on 27th & 28th February.
 - ✓ Isolated to scattered light to moderate rainfall likely over Punjab, Haryana, Chandigarh during 26th- 28th; over West Uttar Pradesh & Rajasthan on 27th & 28th and East Uttar Pradesh on 28th February.

Temperature Forecast:

Forecast of temperature:

Minimum Temperature:

- Gradual fall in minimum temperatures by 1-2°C likely over Northwest India during next 2 days and gradual rise by 3-5°C thereafter.
- No significant change in minimum temperatures likely over Central India & Gujarat State during next 3 days and rise by 2-3°C thereafter.
- No significant change in minimum temperatures likely over rest parts of India during next 4-5 days.

Maximum temperature:

- No significant change in maximum temperatures likely over Western Himalayan region during next 3 days and gradual fall by 4-5°C thereafter.
- Gradual rise in maximum temperatures by 2-4°C likely over plains of Northwest India during next 4 days and no significant change thereafter.
- No significant change in maximum temperatures likely over Central India & Gujarat State during next 3 days and rise by 2-3°C thereafter.
- No significant change in maximum temperatures likely over rest parts of India during next 4-5 days.

Dense Fog Warnings:

• Dense fog conditions very likely to continue to prevail during night/early morning hours in isolated pockets of Sikkim till 24th February.







Main Weather Observations:

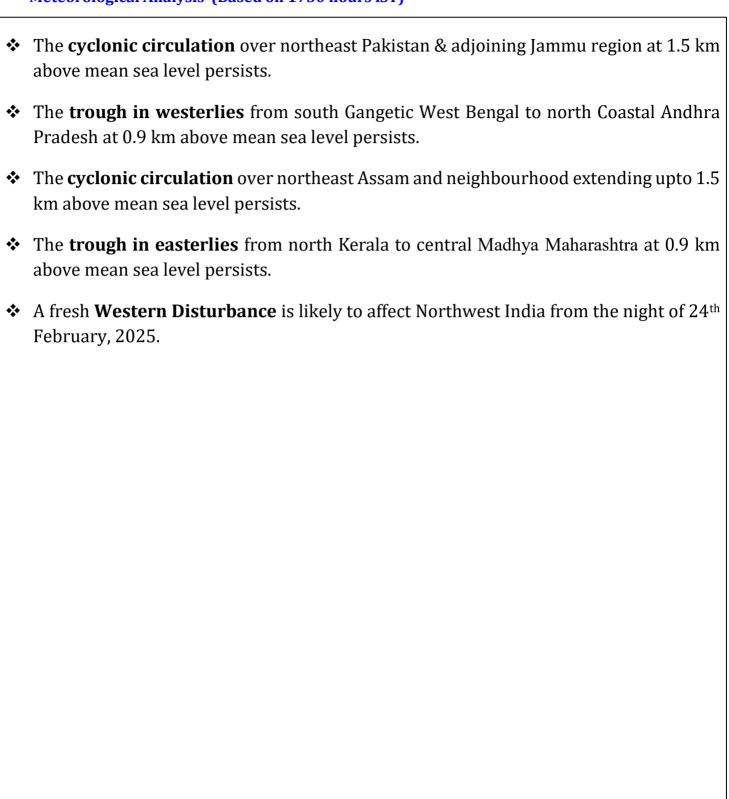
- ❖ Rainfall distribution (from 0830 hours IST to 1730 hours IST of today): at a few places over Arunachal Pradesh and Gangetic West Bengal; at isolated places over Assam & Meghalaya, Odisha and Jharkhand.
- ❖ **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of today): (in cm): **Gangetic West Bengal:** Berhampore & Panagarh 1 each; **Odisha**: Angul-2;
- ❖ Hailstorms reported at isolated locations over Sub-Himalayan West Bengal & Sikkim and Odisha.
- ❖ Minimum Temperature Departures (as on 22-02-2025): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over East Madhya Pradesh, Coastal Karnataka; at isolated places over East Uttar Pradesh, Bihar, Odisha, Madhya Maharashtra, Gujarat Region, Assam & Meghalaya; above normal (1.6°C to 3.0°C) at few places over Gangetic West Bengal, Andaman & Nicobar Islands, Konkan & Goa, Jharkhand; at isolated places over Kerala & Mahe, Saurashtra & Kutch, Chhattisgarh, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, North Interior Karnataka, Punjab, West Uttar Pradesh. These are below normal (-3.0°C to -1.6°C) at isolated places over East Madhya Pradesh and near normal over rest parts of the country (Fig. 4). Today, the lowest minimum temperature of 8.7°C is reported at Ambala (Haryana) over the plains of the country.
- ❖ Maximum Temperature Departures (as on 22-02-2025): Maximum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Konkan & Goa; at isolated places over Saurashtra & Katch; above normal (1.6°C to 3.0°C) at many places over Madhya Maharashtra and Gujarat Region; at a few places over Bihar and Marathwada; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, East Uttar Pradesh, Jharkhand, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Coastal & north Interior Karnataka. These are markedly below normal (-3.1°C to -5.0°C) at isolated places over Arunachal Pradesh and Assam & Meghalaya below normal (-3.0°C to -1.6°C) at isolated places over Nagaland, Manipur, Mizoram & Tripura and Gangetic West Bengal and near normal over rest parts of the country (Fig. 2). Today, the highest maximum temperature of 38.4°C is reported at Ratnagiri (Konkan & Goa) over the country.





National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

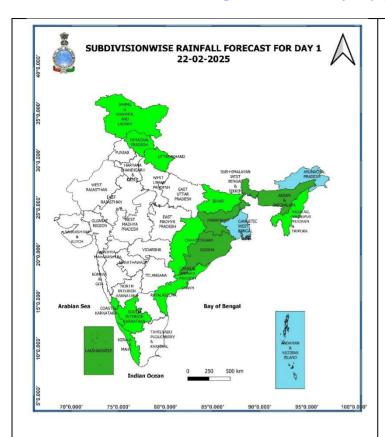
Meteorological Analysis (Based on 1730 hours IST)

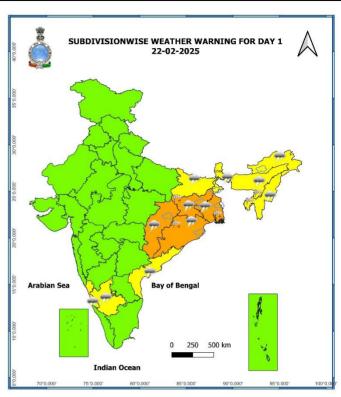






Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 01st March, 2025)



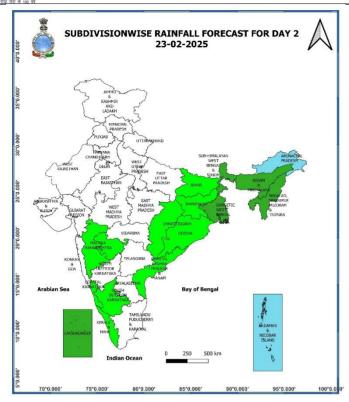


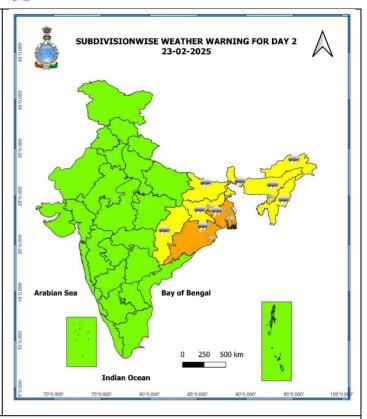
22nd February (Day 1):

- ❖ Thundersquall accompanied with gusty winds (50-60 kmph), hailstorm & lightning likely at isolated places over Odisha; with gusty winds (40-50 kmph), hailstorm & lightning at isolated places over Jharkhand, Gangetic West Bengal; with gusty winds (30-40 kmph) & lightning at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with hailstorm & lightning at isolated place over Chhattisgarh, Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim; with lightning at isolated places over Bihar, Coastal & South Interior Karnataka, Coastal Andhra Pradesh & Yanam.
- **Dense fog** conditions very likely in isolated pockets of Sikkim.



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences



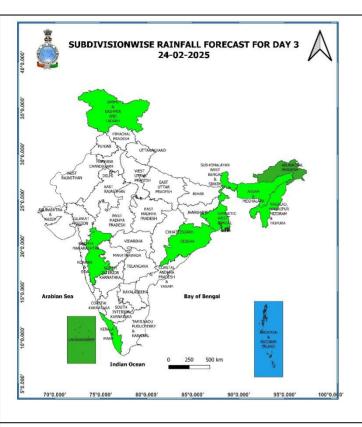


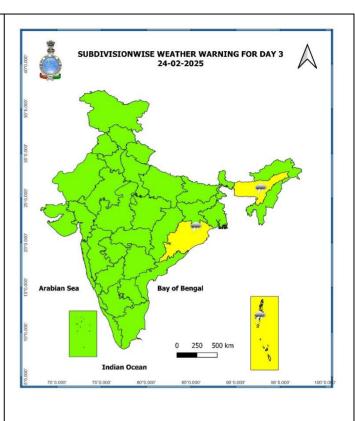
23rd February (Day 2):

- ❖ Thundersquall accompanied with gusty winds (40-50 kmph), hailstorm & lightning at isolated places over Odisha, Gangetic West Bengal; with gusty winds (30-40 kmph) & lightning likely at isolated places over Jharkhand, Assam & Meghalaya; with lightning at isolated places over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura.
- **❖ Dense fog conditions** very likely in isolated pockets of Sikkim.



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

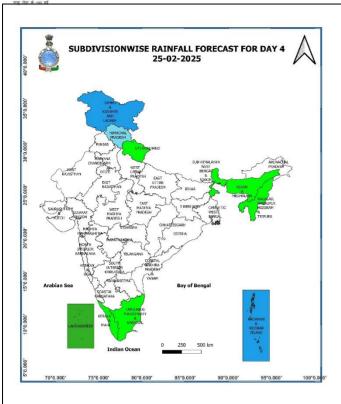


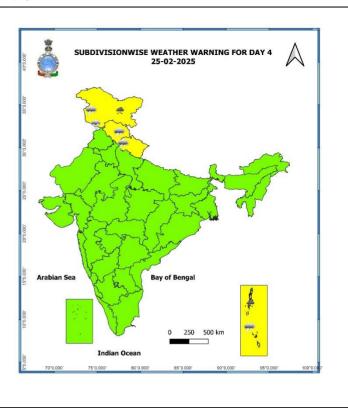


24th February (Day 3):

Thunderstorm accompanied with lightning likely at isolated places over Andaman & Nicobar Islands, Odisha, Assam & Meghalaya.

National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

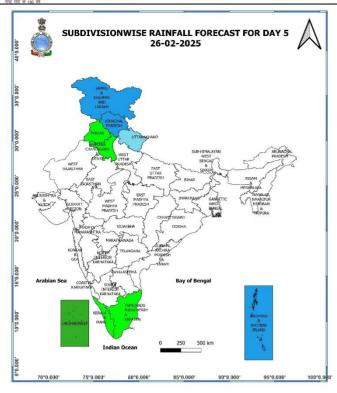


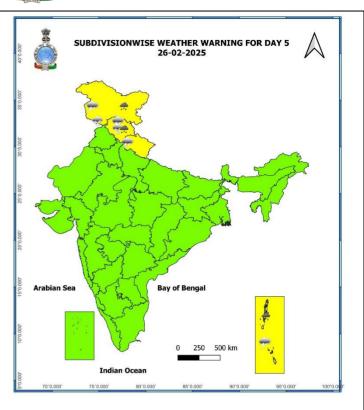


25th February (Day 4):

- ❖ Heavy Rainfall/Snowfall (≥ 7 cm) likely at isolated places of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Heavy Rainfall (≥ 7 cm) likely at isolated places of Andaman & Nicobar Islands.
- **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Andaman & Nicobar Islands.

National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences



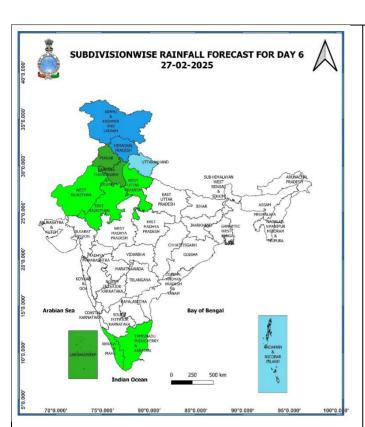


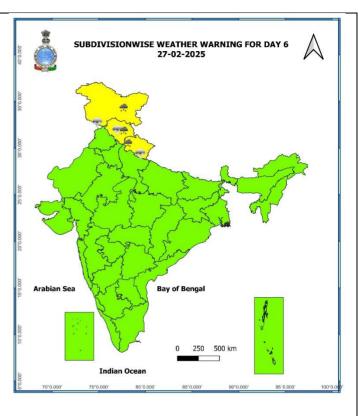
26th February (Day 5):

- **♦ Heavy Rainfall/Snowfall (≥ 7 cm)** likely at isolated places of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and **Heavy Rainfall (≥ 7 cm)** likely at isolated places of Andaman & Nicobar Islands.
- ❖ Thunderstorm accompanied with lightning likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Andaman & Nicobar Islands.







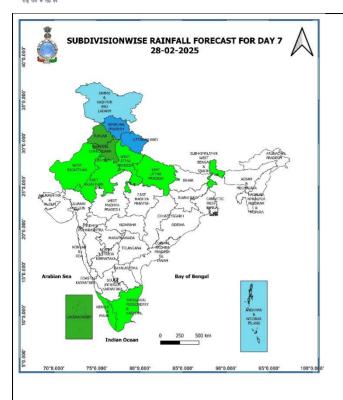


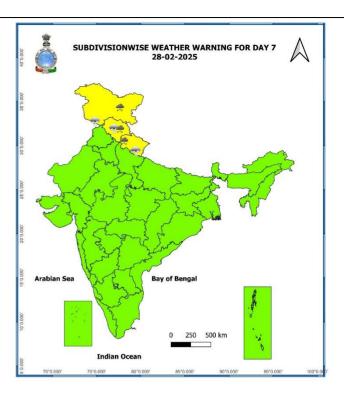
27th February (Day 6):

❖ Heavy Rainfall/Snowfall (≥ 7 cm) likely at isolated places of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand.



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences





28th February (Day 7):

♦ Heavy Rainfall/Snowfall (≥ 7 cm) likely at isolated places of Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand.

Weather Outlook for subsequent 3 days (During 01st March- 03rd March, 2025)

- ❖ Scattered to fairly widespread rainfall/snowfall likely over Western Himalayan region.
- ❖ Isolated to scattered rainfall likely over plains of Northwest India, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands.

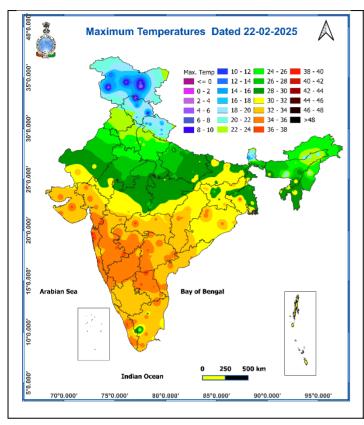
Action may be taken based on **ORANGE** AND **RED** COLOUR warnings.

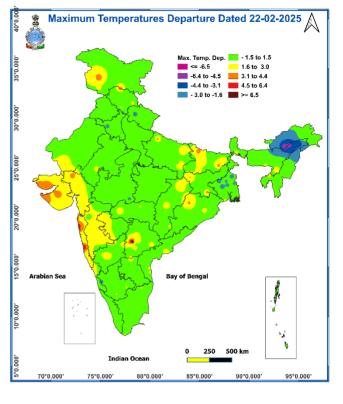
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.



Fig. 1: Maximum Temperatures







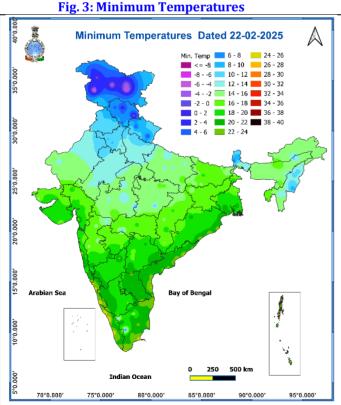
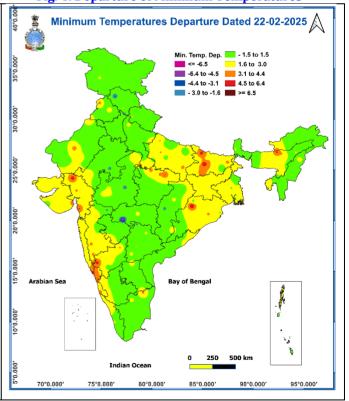


Fig. 4: Departure of Minimum Temperatures





National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Agromet advisories for likely impact of Hailstorms

- > Use hail nets or hail caps in fruit orchards and vegetable plants to protect them from mechanical damage in Arunachal Pradesh, Gangetic West Bengal, Sikkim, Odisha, Jharkhand and Chhattisgarh.
- ➤ Keep the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields.
- > Provide mechanical support to horticultural crops and staking to vegetables.

Livestock

- ➤ Keep the animals inside the shed during hailstorms and provide them with balanced feed.
- > Store feed and fodder in a safe place to prevent spoilage.

Impact expected and action suggested due to isolated thunderstorm with lightning/gusty winds & Hailstorm

Impact expected:

- > Strong wind/hail may damage plantation, horticulture and standing crops.
- Hail may injure people and cattle at open places.
- Partial damage to vulnerable structures due to strong winds.
- Minor damage to kutcha houses/walls and huts.
- Loose objects may fly.

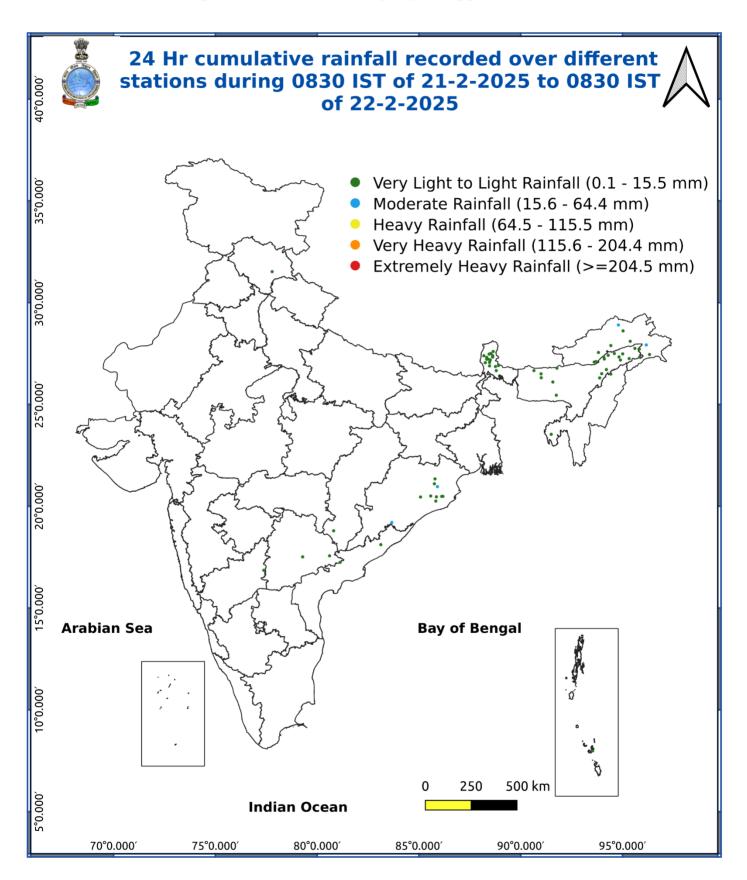
Action suggested:

- > Stay indoors, close windows & doors and avoid travel if possible.
- Take safe shelters: do not take shelter under trees.
- Do not lie on concrete floors and do not lean against concrete walls.
- Unplug electrical/ electronic appliances.
- > Immediately get out of water bodies.
- Keep away from all the objects that conduct electricity.





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



30. रायलसीमा

32. तटीय कर्नाटक

35. केरल और माहे

S Dust Raising Winds

36. लक्षद्वीप

33. आतंरिक उत्तरी कर्नाटक

34. आतंरिक दक्षिणी कर्नाटक

31. तमिलनाडु, पुडुचेरी और कराईकल

राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

LEGENDS



- 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. Rihar
- 10. East Uttar Pradesh
- 11. West Uttar Pradesh
- 12. Uttarakhand
- 13. Haryana, Chandigarh & Delhi
- 14. Puniab
- 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. Vidarbha
- 27. Chhattisgarh
- 28. Coastal Andhra Pradesh & Yanam
- 29. Telangana
- 30. Rayalaseema
- 31. Tamilnadu, Puducherry & Karaikal
- 32. Coastal Karnataka
- 33. North Interior Karnataka
- 34. South Interior Karnataka
- 35. Kerala & Mahe

Most Likely

> 75

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)



Strong Surface Winds





	DEFINITION/CRITERIA
	Heavy: 64.5 to 115.5 mm/cm *
Rain/ Snow	Very Heavy: 115.6 to 204.4 mm/cm* Extremely Heavy: > 204.4 mm/cm *
	When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly regions
	(a) Based on Departure from normal
	Heat Wave: Maximum Temperature Departure from normal 4.5° C to 6.4° C.
Heat Wave	Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C
	(b). Based on Actual maximum temperature Heat Wave: When actual maximum temperature ≥45°C.
	Severe Heat Wave: When actual maximum temperature ≥47°C
	(c). Criteria for heat wave for coastal stations When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C
	When maximum temperature remains 40°C
Warm Night	Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C.
	Severe Warm Night: When minimum temperature departure >6.4 °C.
	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions. (a). Based on departure
	Cold Wave: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C.
Cold Wave	Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C
Cold wave	(b) Based on actual Minimum Temperature (for Plains only)
	Cold Wave: When Minimum Temperature is ≤ 4.0 °C
	Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C
	(c) For Coastal Stations When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C
	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions
Cold Day	Based on departure
Cold Day	Cold Day: Maximum Temperature Departure from normal -4.5 °C to -6.4 °C.
	Severe Cold Day: Maximum Temperature Departure from normal ≤ -6.5 °C
	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km
Fog	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
hunderstorm	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.
	Ice deposits on ground
Frost	Air temperature ≤4°C (over Plains)
	A strong wind that rises suddenly, lasts for atleast 1 minute.
Squall	Moderate: Wind speed 52-61 kmph
	Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph
	Effect of various waves in the sea over specific area
Sea State	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
	Cualania Charma Mind and CO 07 Imagh (OA 47 Imagh)
	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 88-117 kmph (48-63 knots) Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)
Cyclone	very severe Cyclonic Storm. Wind speed 116-165 kmph (64 - 69 knots)
Cyclone	Extremely Severe Cyclonic Storm: Wind speed 116-165 kmph (64 - 89 knots)