राष्ट्रीय मौसम पूर्वानुमान केन्द्र
भारत मौसम विज्ञान विभाग
पृथ्वी विज्ञान मंत्रालय

National Weather Forecasting Centre
India Meteorological Department
Ministry of Earth Sciences

Friday, December 6, 2024
Time of Issue: 0745 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems:

- Yesterday's **Low Pressure area** over eastcentral & adjoining southeast Arabian sea has become less marked**,** however the **associated cyclonic circulation** now lay over southeast Arabian sea & neighbourhood extending upto middle tropospheric levels tilting southwestwards with height.
- A fresh **Western Disturbance** is likely to affect Western Himalayan Region and adjoining plains of Northwest India from 08th December. It is very likely to cause light/moderate rainfall/snowfall over Western Himalayan Region and light isolated rainfall over Punjab & Haryana on 08th & 09th December, 2024.

Forecast & Warnings (upto 7 days):

✓ **Dense fog conditions** very likely to prevail during late night/early morning hours in isolated pockets of Punjab, Haryana and Chandigarh during 07th-10th December.

ii. Temperature conditions and Forecast:

Forecast of temperature:

- Gradual fall in minimum temperatures by 2°C likely over Northwest India during next 3 days and no significant change thereafter.
- Gradual fall in minimum temperatures by 2°C likely over East India during next 2 days and gradual rise by 2-3°C thereafter.
- No significant change in minimum temperatures over Central India during next 5 days.

Weather Realised (past 24 hours) & forecast (during 06th Dec. to 08th Dec. 2024) over Delhi/NCR

Past Weather:
There has been a fall in minimum temperature upto 04°C and slight fall in maximum temperature over Delhi/NCR during past 24hr. The Maximum and Minimum temperature over Delhi is in the range of 25 to 28°C and 08 to 11°C respectively. The maximum temperature was above normal by 01 to 04 °C and minimum temperature was near normal over most places. Mainly smog/ mist condition with predominant surface wind from northwest direction with wind speed reaching 12 to 18 kmph prevailed on 04.12.2024. Mainly clear sky condition with wind speed less than 16 kmph northwest direction prevailed over the region in the forenoon today.

Weather Forecast:

06.12.2024: Mainly clear sky. The predominant surface wind is likely to be from northwest direction with speed less than 08 kmph during morning hours. Smog/mist is likely in the morning. The wind speed will increase thereafter becoming less than 14 kmph from northwest direction during afternoon. It will decrease thereafter becoming less than 06 kmph from northwest direction during evening and night. Smog/mist is likely in the evening/night.

07.12.2024: Mainly clear sky. The predominant surface wind is likely to be from northwest direction with speed less than 04 kmph during morning hours. Smog/shallow fog is likely in the morning. The wind speed will gradually increase becoming 04-06 kmph from variable direction during afternoon. It will decrease thereafter becoming less than 06 kmph from east direction during evening and night. Smog/mist is likely in the evening/night.

08.12.2024: Mainly clear sky. The predominant surface wind is likely to be from southeast direction with wind speed less than 08 kmph during morning hours. Smog/shallow to moderate fog in the morning. The wind speed will increase thereafter becoming 08-12 kmph from southeast direction during afternoon. It will gradually decrease becoming less than 06 kmph from southeast direction during evening and night. Smog/ shallow fog is likely in the evening/night.

Main Weather Observations:

- **Rainfall distribution** (from 0830 hours IST to 1730 hours IST of yesterday): **at isolated** places over Chhattisgarh, Karnataka, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal, Lakshadweep.

- **Heavy to very heavy rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday): Nil

- **Significant amount of rainfall** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Coastal Andhra Pradesh & Yanam:** Ongole 2.

- **Fog conditions observed (at 0530 hours IST of today): Shallow to Moderate fog** in isolated pockets of Bihar.

- **Visibility reported (at 0530 hours IST of today) (≤500 metres): Bihar**: Purnea-200, Bhagalpur - 500.

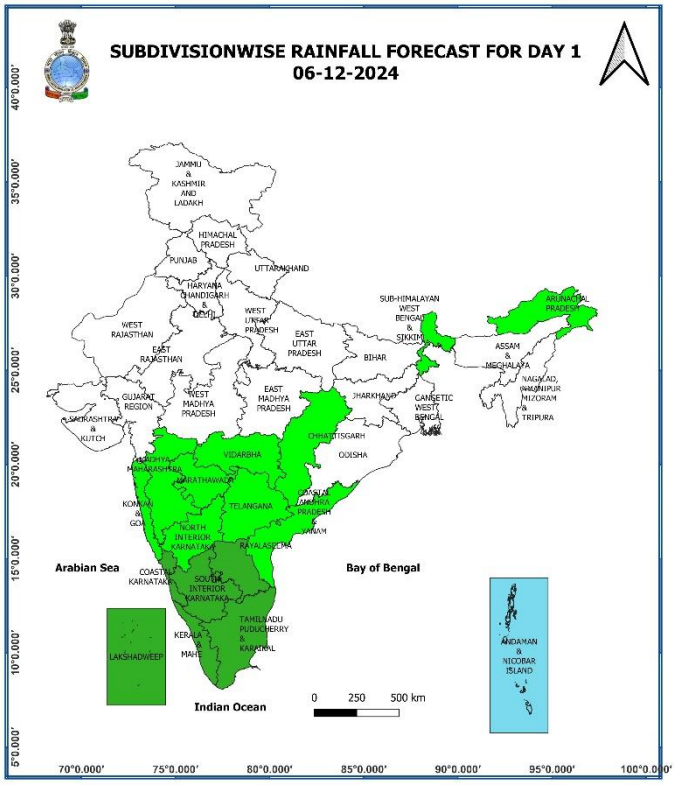
- **Minimum Temperatures Departures (as on 05-12-2024):** Minimum temperatures were **markedly above normal (5.0°C or more)** at many places over Telangana; at a few places over Madhya Maharashtra, Marathwada and Chhattisgarh; at isolated places over Odisha and Konkan & Goa; **appreciably above normal (3.1°C to 5.0°C)** at many places over Coastal Andhra Pradesh & Yanam, Vidarbha, Rayalaseema and North Interior Karnataka; and at isolated places over Gujarat state and South Interior Karnataka; **above normal (1.6°C to 3.0°C)** at most places over Coastal Karnataka; at many places over Madhya Pradesh, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal; at a few places over Jharkhand and Bihar; at isolated places over Gangetic West Bengal, Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura and near normal over rest parts of the country. Yesterday, **the lowest minimum temperature** of **6.0°C** was reported at **Hissar (Haryana)** over the plains of the country. **(Fig.4)**

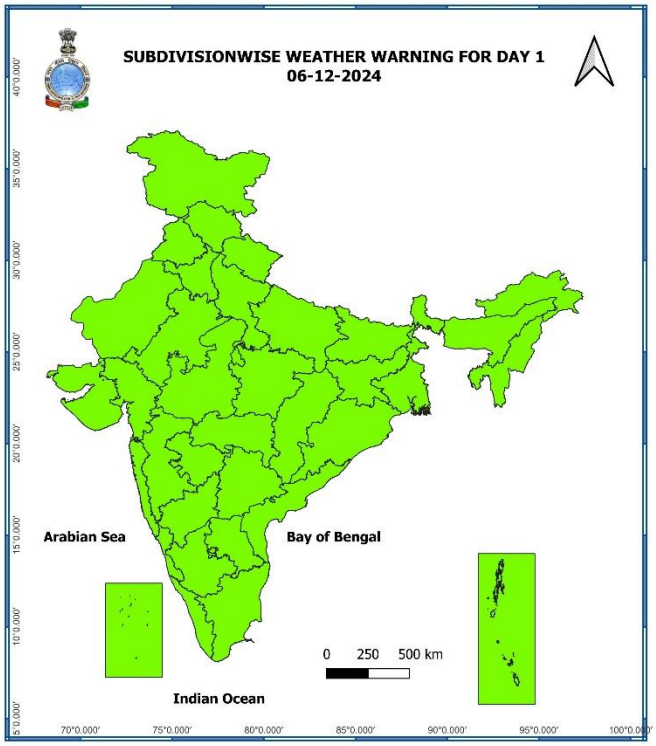
- **Maximum Temperature Departures (as on 05-12-2024):** Maximum temperatures were **appreciably above normal (3.1°C to 5.0°C**) at isolated places over Uttarakhand, East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha and Telangana; **above normal (1.6°C to 3.0°C)** at a few places over Marathwada, Madhya Maharashtra, Jharkhand, Gangetic West Bengal; at isolated places over Bihar, Saurashtra & Kutch, Konkan & Goa, North Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam. These were **below normal (-1.6°C to -3.0°C)** at isolated places Coastal Karnataka, Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura. Yesterday, **the highest maximum temperature** of **35.8°C** was reported at **T.B.I.A (Konkan & Goa)** over the country. **(Fig. 2)**

Meteorological Analysis (Based on 0530 hours IST)

- **The cyclonic circulation** over southeast Arabian sea & neighbourhood extending upto 4.5 km above mean sea level tilting southwestwards with height persists.
- **Jet Stream Winds** of the order upto 130 knots at 12.6 km above mean sea level are prevailing over North India.
- A fresh **Western Disturbance** is likely to affect Western Himalayan Region and adjoining plains of Northwest India from 08th December.

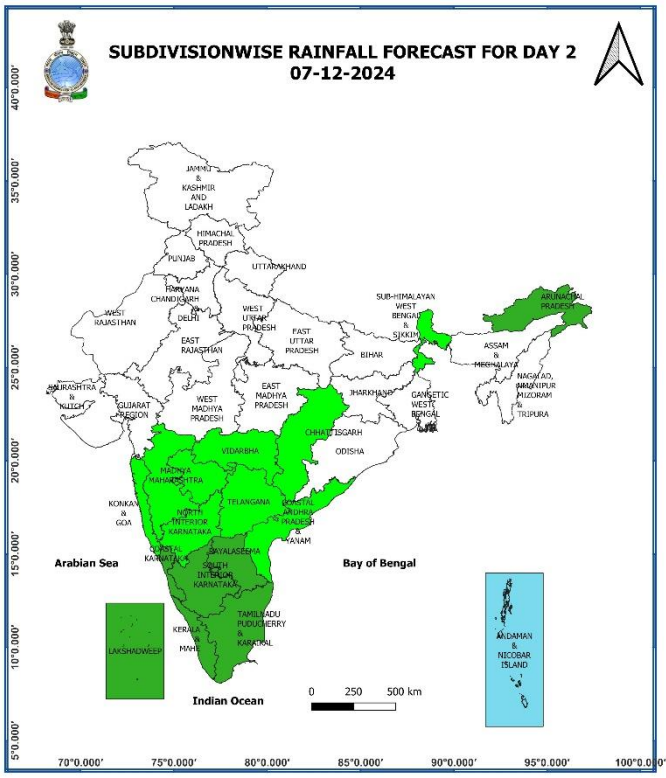
Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 13th December, 2024)

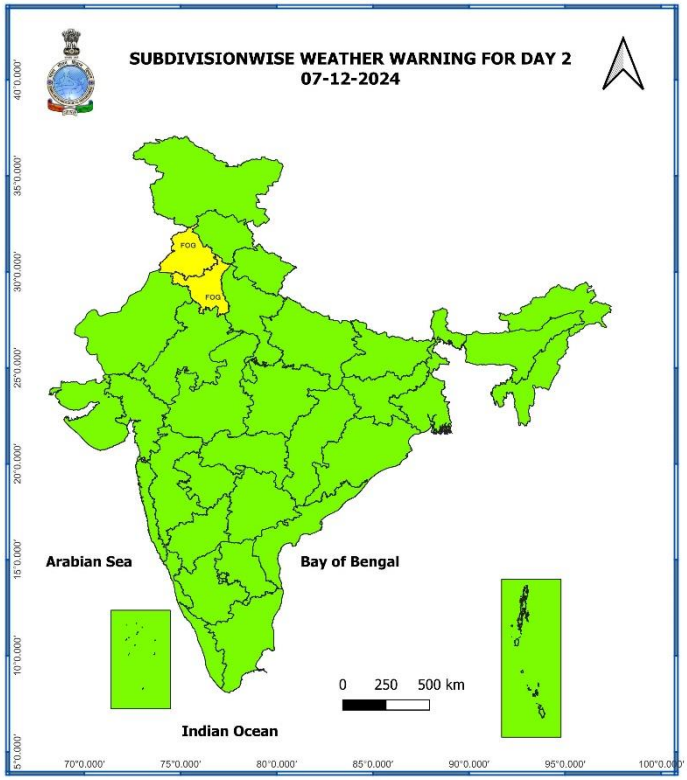




06 December (Day 1):

- **Thunderstorm accompanied with lightning** very likely at isolated places over Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal.

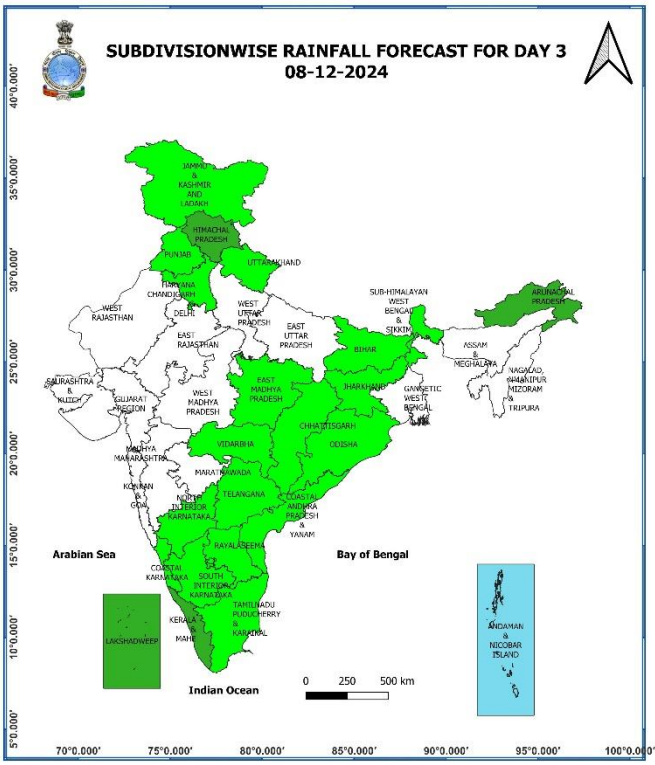


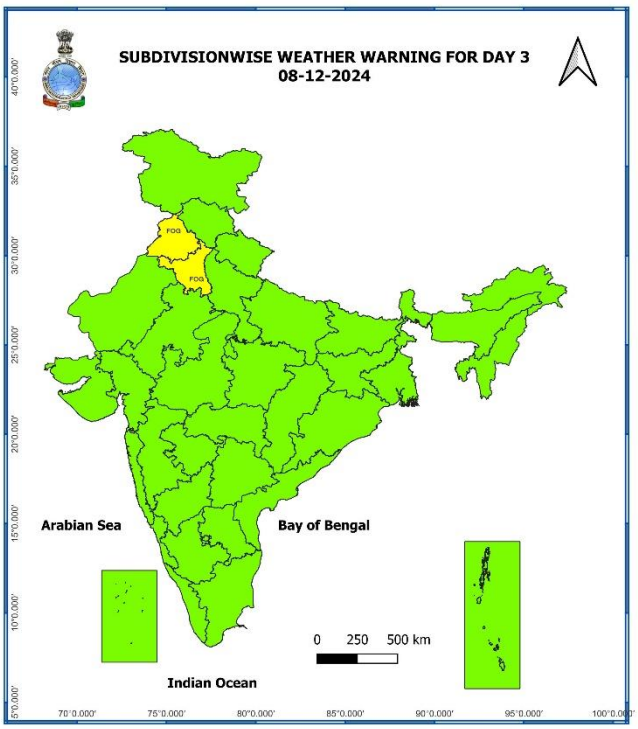


07 December (Day 2):

- **Dense fog** very likely in isolated pockets of Punjab, Haryana-Chandigarh-Delhi in night/morning hours.

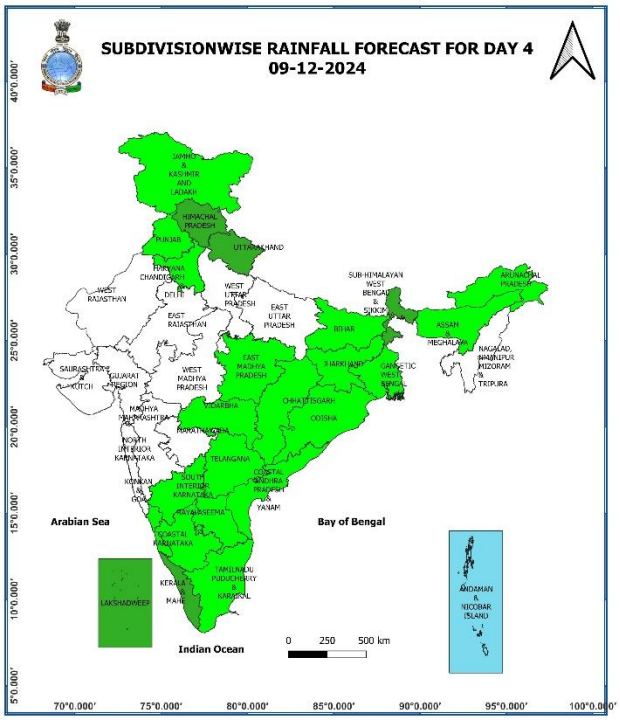
- **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevailing over southern parts of southeast Bay of Bengal. **Squally weather with wind speed 45 kmph to 65 kmph gusting to 75 kmph** is likely to prevailing over along and off Somalia coast. Fishermen are advised not to venture into these areas.

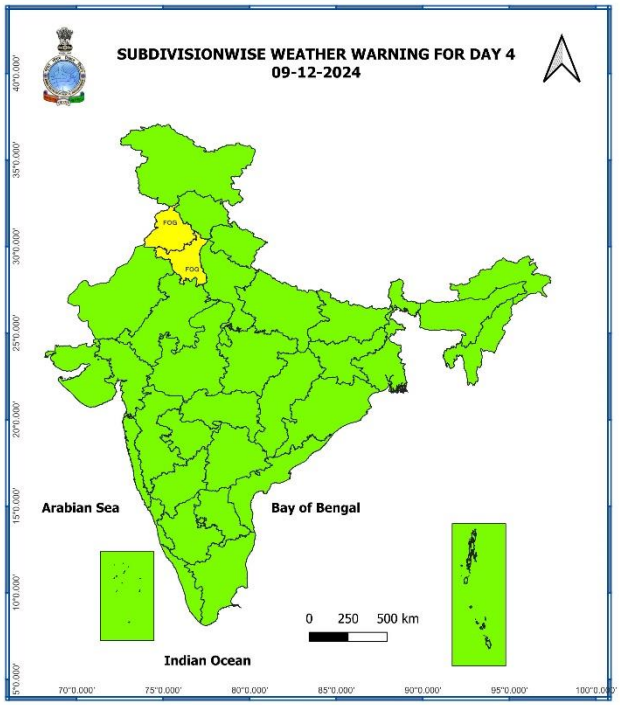




08 December (Day 3):

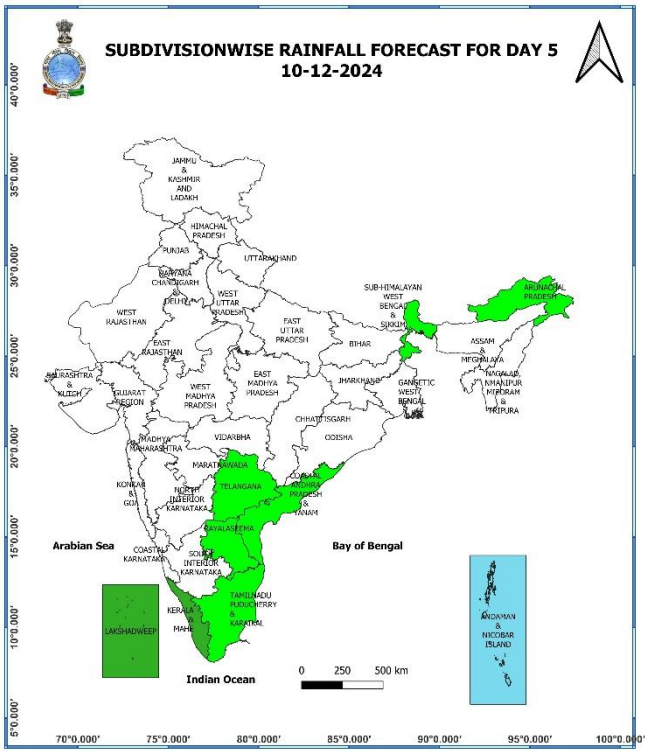
- **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand.
- **Dense fog** likely in isolated pockets of Punjab, Haryana-Chandigarh-Delhi in night/morning hours.
- **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is likely to prevailing over southern parts of southeast and adjoining southwest Bay of Bengal**. Squally weather with wind speed 45 kmph to 65 kmph gusting to 75 kmph** is likely to prevailing over along and off Somalia coast parts of northwest Arabian Sea. Fishermen are advised not to venture into these areas**.**

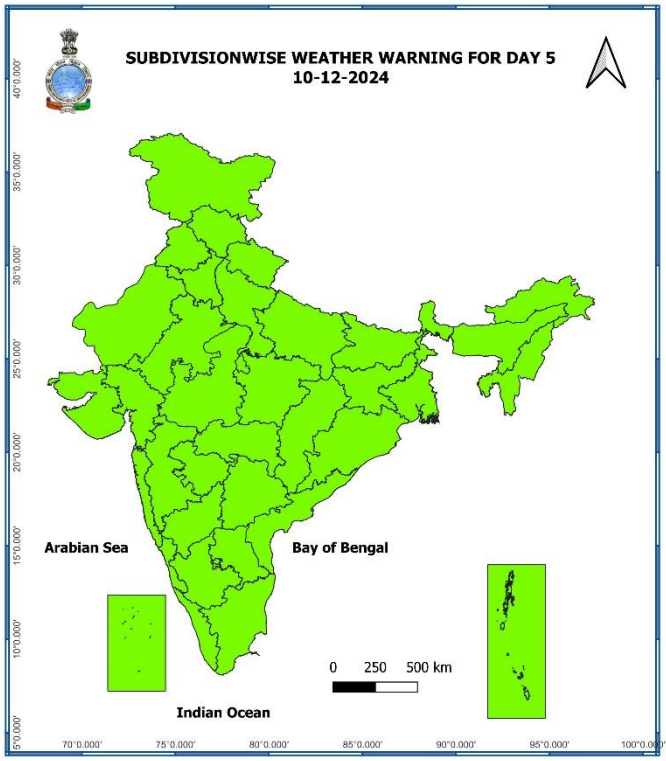




09 December (Day 4):

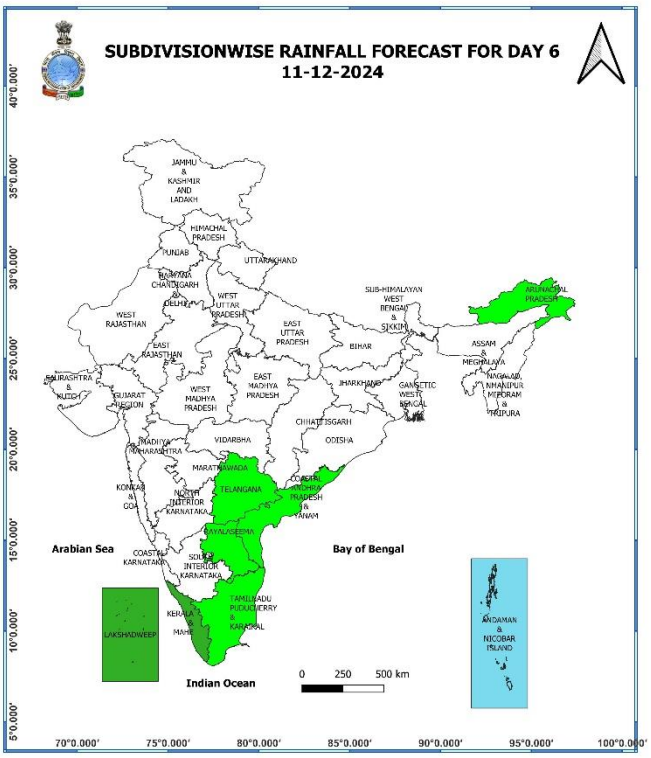
- **Thunderstorm accompanied with lightning** likely at isolated places over Uttarakhand.
- **Dense fog** likely in isolated pockets of Punjab, Haryana-Chandigarh-Delhi in night/morning hours.
- **Squally weather with wind speed 45 kmph to 65 kmph gusting to 75 kmph** is likely to prevailing over along and off Somalia coast parts of northwest Arabian Sea. Fishermen are advised not to venture into these areas.

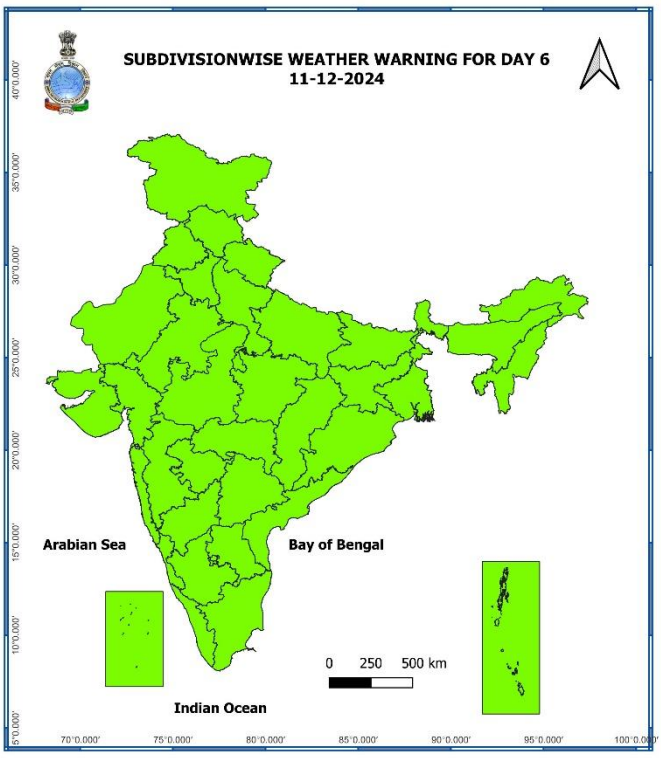




10 December (Day 5):

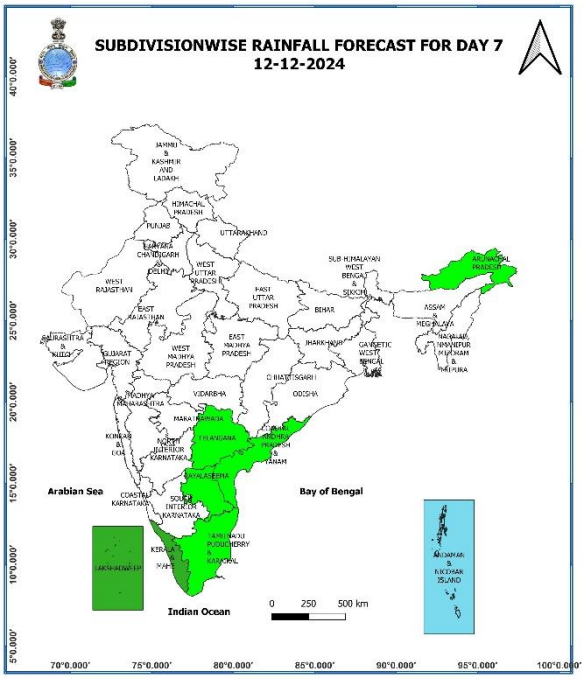
- **No Warning.**

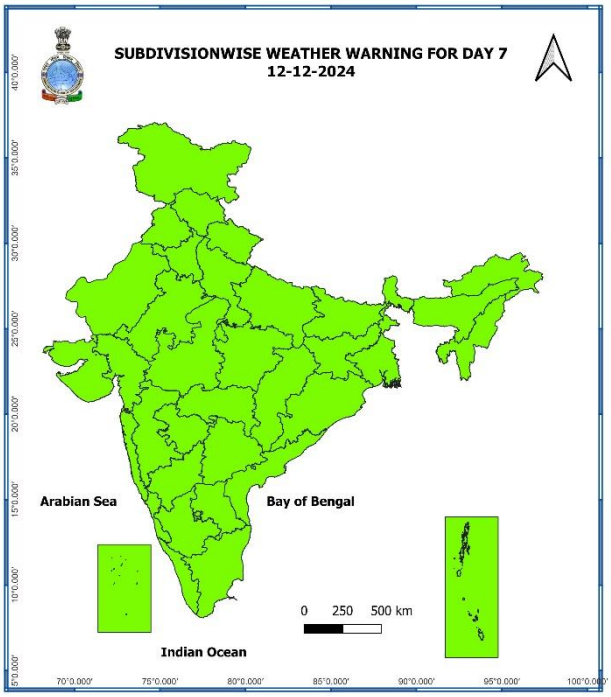




11 December (Day 6):

❖ **No Warning**.





12 December (Day 7):

❖ **No Warning**.

Weather Outlook for subsequent 3 days (During 13th December – 15th December, 2024)

❖ Isolated to Scattered to light to moderate rainfall likely over some parts of south peninsular India and light rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.

❖ Mainly dry weather will prevail over rest parts of country.

- **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.**

Impact expected due to dense fog in the night /morning hour:

❖ Transport and Aviation:

- May affect some airports, highways and railway routes in the areas of met- sub-division.
- Difficult driving conditions with slower journey times.
- Unless taken precautionary measures, it may lead to some road traffic collisions.

❖ Power Sector:

- Chances of Tripping of Power lines in the very dense fog routes.

❖ Human Health:

- Lung related health impacts: Dense fog contains particulate matter and other pollutants and in case exposed it gets lodged in the lungs, clogging them and decreasing their functional capacity which increases episodes of wheezing, coughing and shortness of breath.
- Impact on people having asthma bronchitis: Long time exposure to dense fog may cause respiratory problem for people having asthma bronchitis and other lung related health problems.
- Eye Irritation: Dense fog contains pollutions of various types and these Pollutants in the air if exposed may tend to irritate the membranes of the eye causing various infections leading to redness or swelling of the eye.

Action suggested:

❖ Transport and Aviation:

- Be careful while driving or outing through any transport.
- Use fog lights during driving.
- Be in touch with airlines, railways and state transport for schedule of your journey.

❖ Power Sector:

- To keep ready Maintenance Team
- Human Health: To avoid outing until unless emergency and to cover the face.

Fig. 1: Maximum Temperatures

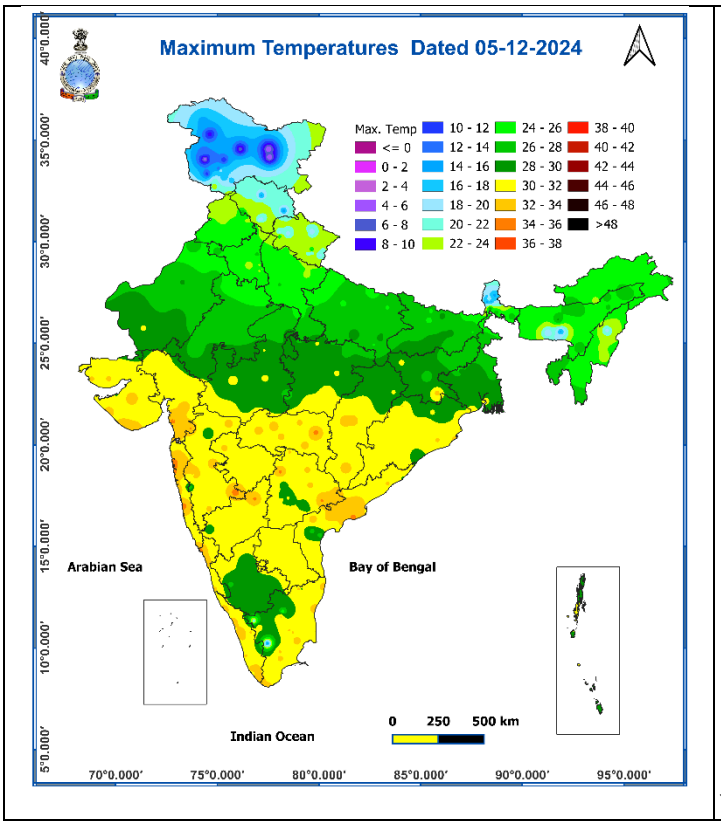


Fig. 2: Departure of Maximum Temperatures

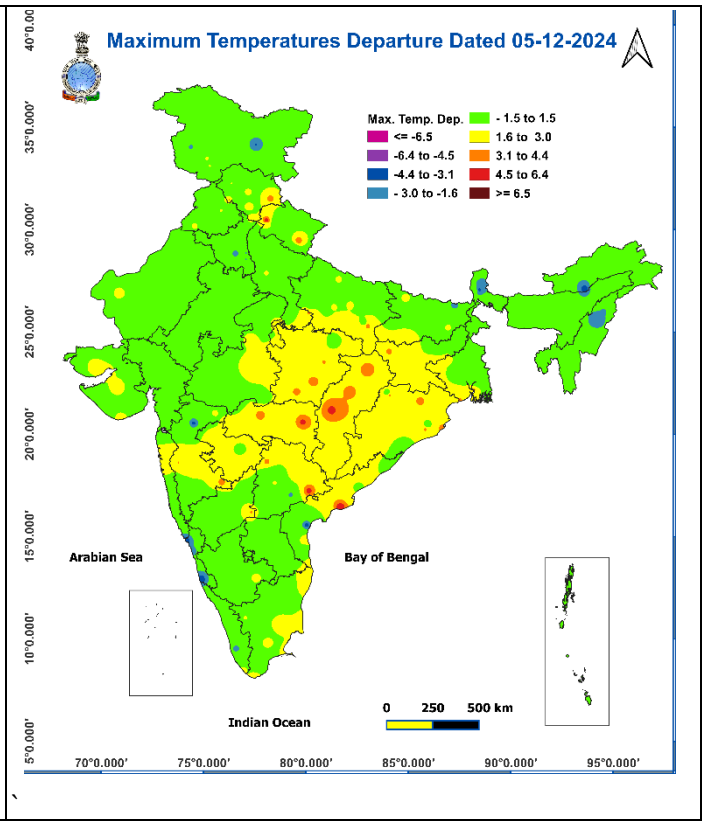


Fig. 3: Minimum Temperatures

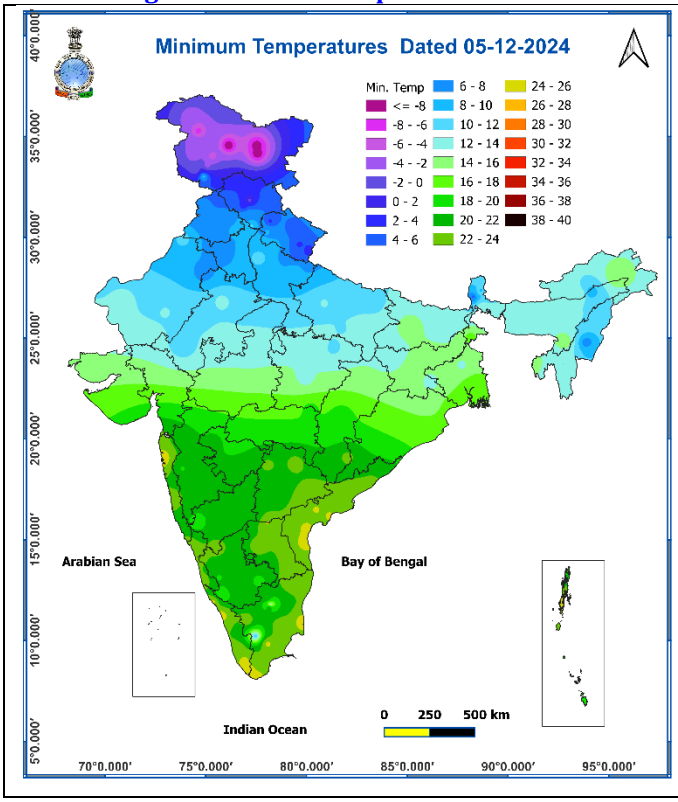
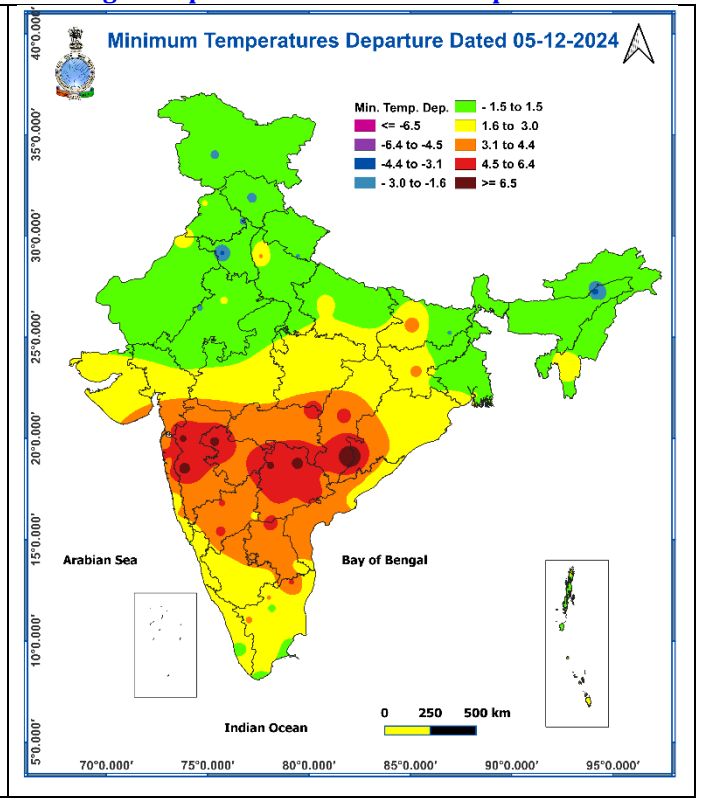
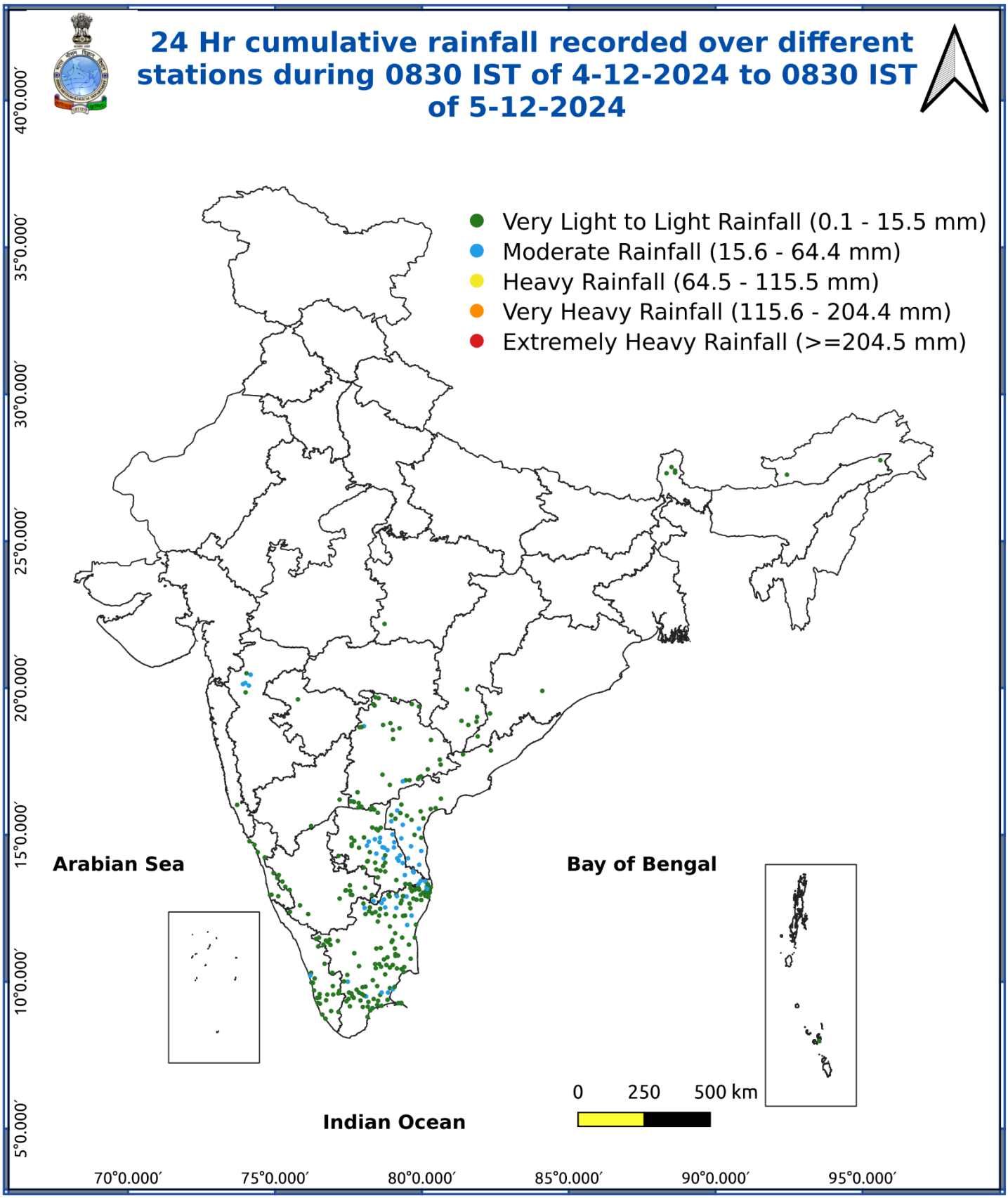


Fig. 4: Departure of Minimum Temperatures



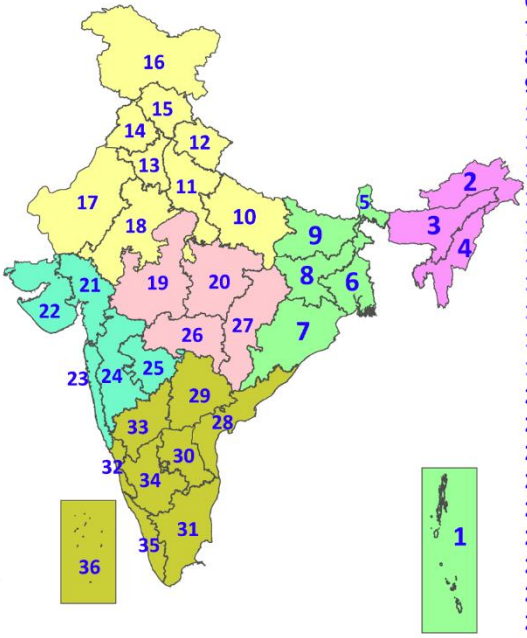
* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.
For more details, kindly visit https://mausam.imd.gov.in or contact: 011-2434-4599
(Service to the Nation since 1875)

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



LEGENDS

1. अंडमान और निकोबार द्वीपसमूह
2. अरुणाचल प्रदेश
3. असम और मेघालय
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
5. उप-हिमालयी पश्चिम बंगाल और सिक्किम
6. गंगीय पश्चिम बंगाल
7. ओडिशा
8. झारखंड
9. बिहार
10. पूर्वी उत्तर प्रदेश
11. पश्चिम उत्तर प्रदेश
12. उत्तराखंड
13. हरियाणा, चंडीगढ़ और दिल्ली
14. पंजाब
15. हिमाचल प्रदेश
16. जम्मू और कश्मीर और लद्दाख
17. पश्चिम राजस्थान
18. पूर्वी राजस्थान
19. पश्चिम मध्य प्रदेश
20. पूर्वी मध्य प्रदेश
21. गुजरात
22. सौराष्ट्र
23. कोंकण और गोवा
24. मध्य महाराष्ट्र
25. मराठवाड़ा
26. विदर्भ
27. छत्तीसगढ़
28. तटीय आंध्र प्रदेश और यनम
29. तेलंगाना
30. रायलसीमा
31. तमिलनाडु, पुडुचेरी और कराईकल
32. तटीय कर्नाटक
33. आंतरिक उत्तरी कर्नाटक
34. आंतरिक दक्षिणी कर्नाटक
35. केरल और 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, Chandigarh & 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. 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
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)

Fog
Heavy Rain
Very Heavy Rain
Extremely Heavy Rain
Thunder & Lightning
Hailstorm
Dust Raising Winds
Heavy Snow
Dust Storm
Heat Wave
Warm Night
Hot Day
Hot & Humid
Strong Surface Winds
Cold Wave
Cold Day
Ground Frost

COLOUR CODED WARNING

- No Warning (No Action)
- Watch (Be Aware)
- Alert (Be Prepared To Take Action)
- Warning (Take Action)

Probabilistic Forecast

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

* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.
For more details, kindly visit https://mausam.imd.gov.in or contact: 011-2434-4599
(Service to the Nation since 1875)

DEFINITION/CRITERIA

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 ≥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.
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

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 °C.

Cold Wave

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.
Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C

(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

Cold Day

When minimum temperature of a station ≤10°C for plains and ≤0°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 ≤ -6.5 °C

Fog

Phenomenon of small droplets suspended in air and the horizontal visibility < 1km

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 ≤4°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 Strom: 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
(Service to the Nation since 1875)