राष्ट्रीय मौसम पूर्वानुमान केन्द्र
भारत मौसम विज्ञान विभाग
पृथ्वी विज्ञान मंत्रालय

National Weather Forecasting Centre
India Meteorological Department
Ministry of Earth Sciences

Monday, February 17, 2025
Time of Issue: 1340 hours IST
(MID-DAY)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

i. Realised weather during past 24 hours till 0830 hours IST of today

Temperature:

- During Past 24 hours, Day temperatures have risen by 1-3°C at many places over Bihar, Gangetic West Bengal, Odisha, East Madhya Pradesh, Jharkhand, Chhattisgarh, Uttarakhand, east Vidarbha and North Telangana. It has fallen by 1-3 °C at many places over East Rajasthan, Gujarat state and Coastal Andhra Pradesh & Yanam.
- Day temperatures were **markedly above normal (5.0°C or more)** at many places over Jammu-Kashmir-Ladakh Gilgit-Baltistan-Muzaffarabad and southwest Rajasthan; **appreciably above normal (3.0°C to 5.0°C)** at many places over Delhi & adjoining West Uttar Pradesh, southeast Uttar Pradesh, Gujarat region & Kutch, remaining parts of Rajasthan, Konkan & adjoining parts Madhya Maharashtra, Vidarbha & adjoining Marathwada, Northwest & east Madhya Pradesh, North Chhattisgarh & adjoining interior Odisha, Jharkhand & adjoining Gangetic West Bengal; **above normal (1.0°C to 3.0°C)** at remaining parts of Northwest, central & adjoining west, east and north Peninsular India.
- During past 24 hours, Night temperatures have fallen by 1-2°C over many parts of Konkan & Goa, Karnataka & Kerala; risen by temperatures have risen by 2-4°C at many places over West Rajasthan; by 1-2°C at many places over Uttar Pradesh, Central & East India, Telangana, Assam and Meghalaya.
- Night temperatures were **above normal (2.0°C to 5.0°C)** at many places over Northwest India and adjoining central India, Gujarat, Konkan, North interior and coastal Odisha, Bihar, Jharkhand and south Gangetic West Bengal; They were **below normal by (-1.0°C to -2.0°C)** over many parts of Peninsular India, West Gangetic West Bengal, interior Maharashtra, Northeast Assam and Arunachal Pradesh. It is normal over rest parts of the country.

Rainfall:

- Light to moderate **Rainfall/Snowfall** observed at a few places over Arunachal Pradesh; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Himachal Pradesh; Light to moderate **Rainfall** at a few places over Sub-Himalayan West Bengal & Sikkim; at isolated places over Assam & Meghalaya.

ii. Weather Systems, Forecast and warning

- A **cyclonic circulation** lies over northeast Assam in lower tropospheric levels. Under its influence,
  - ✓ Scattered to Fairly widespread light/moderate rainfall/snowfall activity likely over Arunachal Pradesh during 17th-23rd February with **Heavy rainfall activity** likely on 19th February.
  - ✓ Isolated to scattered light rainfall activity likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal & Sikkim during next 7 days.
  - ✓ Thunderstorm & lightning activity likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 18th -21st February; with gusty winds (speed 30-40 kmph) over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 19th February.
- ✓ A **Western Disturbance** seen as a trough in middle tropospheric westerlies runs roughly along Long. 67°E to the north of Lat. 33°N. An **Induced cyclonic circulation** lies over West Rajasthan in lower tropospheric level. Under their influence, isolated light rainfall/snowfall activity likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 17th & 18th February.
- ✓ **With movement of this Western Disturbance further eastwards & a north-south Trough at lower levels: Thunderstorm accompanied with lightning & light rainfall likely over Gangetic West Bengal, Odisha and Jharkhand on 19th & 20th February.**
- ✓ Under the influence of a fresh **Western disturbance**; **scattered to fairly widespread light to moderate rainfall/snowfall accompanied with Thunderstorm & lightning over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh & Uttarakhand on 19th & 20th and isolated light rainfall/snowfall during 21st -23rd February.**
- ✓ **Isolated light rainfall activity likely over West Rajasthan on 19th; Punjab, Haryana on 19th & 20th; East Rajasthan on 19th; West Uttar Pradesh on 20th; Chhattisgarh on 21st & 22nd February.**

Temperature & Fog Forecast:

Forecast of temperature:

Minimum Temperature:

- No significant change in minimum temperatures likely over Northwest India during next 2 days and gradual rise by about 2°C during subsequent 3 days.
- No significant change in minimum temperature likely over rest parts of India during next 4-5 days.

Maximum temperature:

- Gradual rise in maximum temperature by about 2°C likely over Northwest India during next 2 days and gradual fall by 2-3°C during subsequent 3 days.
- No significant change in maximum temperature likely over rest parts of India during next 4-5 days.

Dense Fog Warnings:

Dense fog conditions very likely to continue to prevail during early morning hours in isolated pockets of Gangetic West Bengal till 18th and Sub-Himalayan West Bengal & Sikkim till 19th February.

Main Weather Observations:

- **Rainfall/Snowfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): at a few places over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Assam & Meghalaya and Himachal Pradesh.

- **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today):(in cm): **Arunachal Pradesh:** Tenali Aws (Upper Siang) 2, Tawang Chamgbu Kvk Aws (dist Tawang) 1, Tawang_ Aws (dist Tawang) 1, Mukto_arg (dist Tawang) 1

- **Fog reported** (from 0830 hours IST of yesterday to 0830 hours IST of today): Dense fog reported in isolated pockets of Gangetic West Bengal and Sub-Himalayan West Bengal & Sikkim.

- **Visibility reported** (from 0830 hours IST of yesterday to 0830 hours IST of today): (≤200 m): **Gangetic West Bengal:** Diamond Harbour 150; **Sub-Himalayan West Bengal & Sikkim:** Pakyong 100, Darjeeling 150.

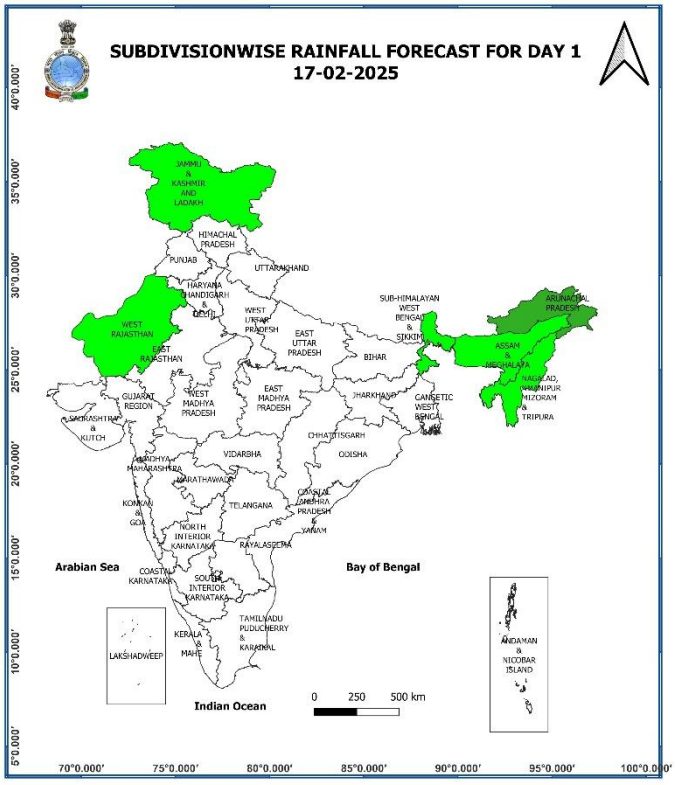
- **Minimum Temperature Departures (as on 17-02-2025):** Minimum temperatures are **markedly above normal (5.1°C or more)** at a few places over West Rajasthan; **appreciably above normal (3.1°C to 5.0°C)** at a few places over West Madhya Pradesh and Odisha; at isolated places over Gujarat state, East Madhya Pradesh and Gangetic West Bengal; **above normal (1.6°C to 3.0°C)** at most places over Jharkhand; at many places over East Uttar Pradesh; at a few places over East Rajasthan and Bihar; at isolated places over Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Lakshadweep, Coastal Karnataka, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Telangana, Madhya Maharashtra and Marathwada. These are **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Andaman & Nicobar Islands; **below normal (-1.6°C to -3.0°C)** at isolated places over Interior Karnataka and near normal over rest parts of the country **(Fig. 4)**. Today, the **lowest minimum temperature** of **6.8°C** is reported at **Ropar (Punjab)** over the plains of the country.

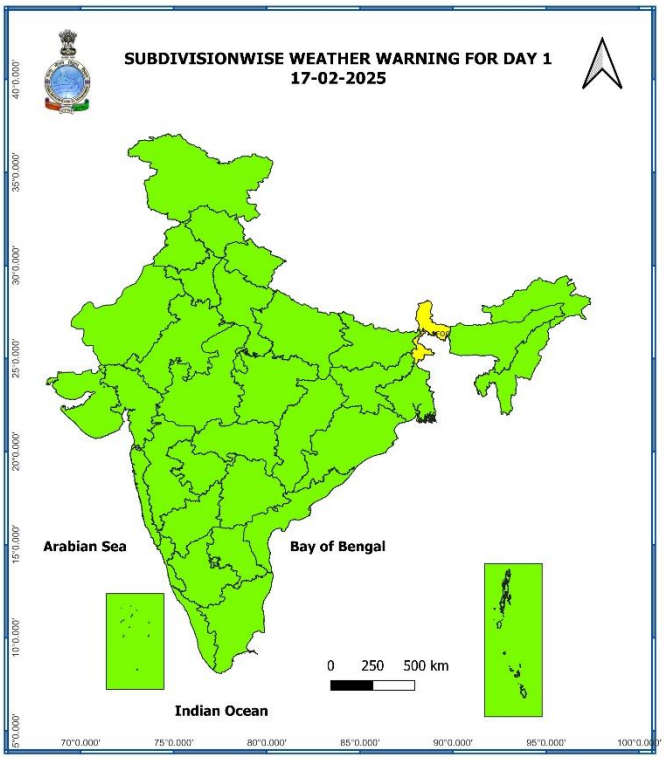
- **Maximum Temperature Departures (as on 16-02-2025**): Maximum temperatures were **markedly above normal (5.1°C or more)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and West Rajasthan; **appreciably above normal (3.1°C to 5.0°C)** at most places over Chhattisgarh; at many places over East Madhya Pradesh; at a few places over Vidarbha; at isolated places over East Rajasthan, East Uttar Pradesh, West Uttar Pradesh, Haryana-Chandigarh-Delhi, Himachal Pradesh, Gujarat state, West Madhya Pradesh, Konkan & Goa, Odisha, Gangetic West Bengal and Jharkhand; **above normal (1.6°C to 3.0°C)** at most places over Punjab, Telangana and North Interior Karnataka; at many places over Uttarakhand and Madhya Maharashtra; at a few places over Marathwada, Coastal Andhra Pradesh & Yanam and Coastal Karnataka; at isolated places over Rayalaseema, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, km and Lakshadweep. These were **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country (Fig. 2). Yesterday, the highest **maximum temperature of 38.2°C** was reported at **Kurnool (Rayalaseema)** over the country.

Meteorological Analysis (Based on 0830 hours IST)

- A **Western Disturbance** seen as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along Long. 67°E to the north of Lat. 33°N.
- An **Induced cyclonic circulation** over West Rajasthan & neighbourhood at 1.5 km above mean sea level.
- A **cyclonic circulation** lies over southwest Madhya Pradesh & neighbourhood at 0.9 km above mean sea level.
- Subtropical **westerly Jet Stream** with core winds of the order of 110-115 knots at 12.6 km above mean sea level is prevailing over plains of Northwest India.
- The **cyclonic circulation** over northeast Assam & neighbourhood persists and now seen between 1.5 & 3.1 km above mean sea level.
- The **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 3.1 km above mean sea level roughly along Long. 71°E to the north of Lat. 33°N has moved away east-northeastwards.
- The **Induced cyclonic circulation** over Haryana & neighbourhood at 1.5 km above mean sea level has become less marked.
- A fresh **Western Disturbance** is likely to affect Western Himalayan region from 19th February, 2025.

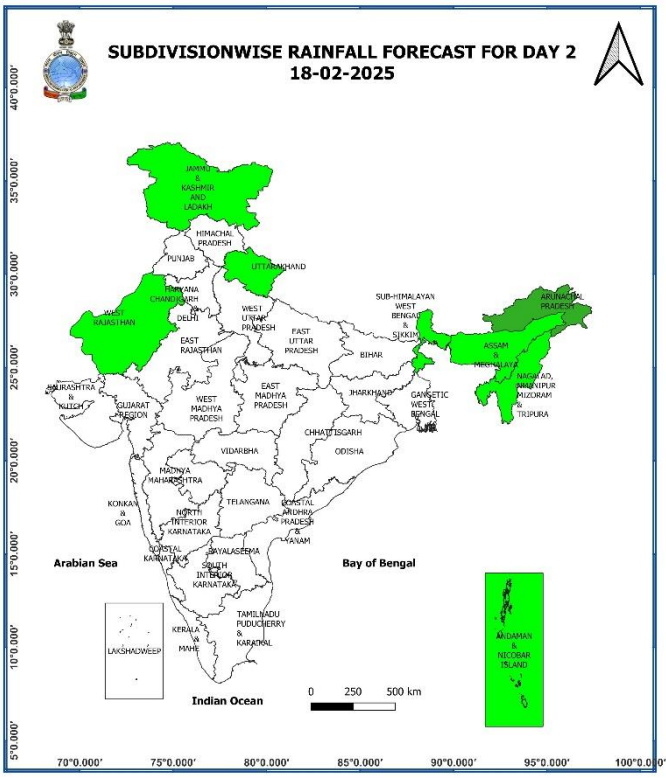
Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 24th February, 2025)

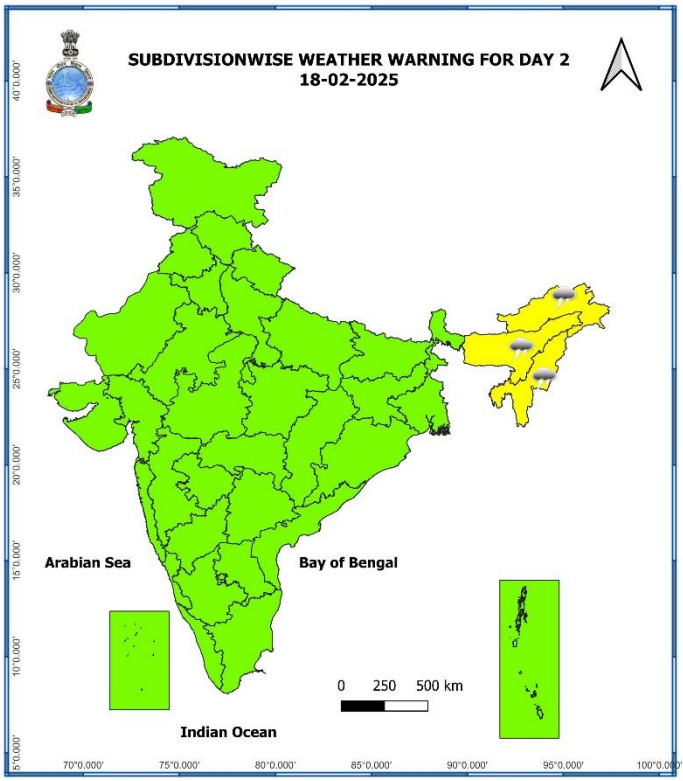




17th February (Day 1):

- **Dense fog conditions** very likely in isolated pockets of West Bengal & Sikkim.

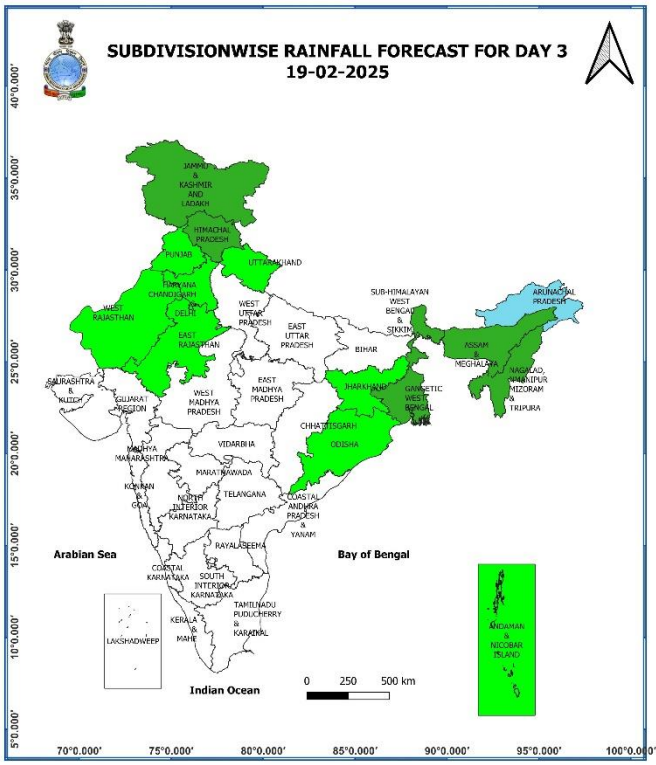


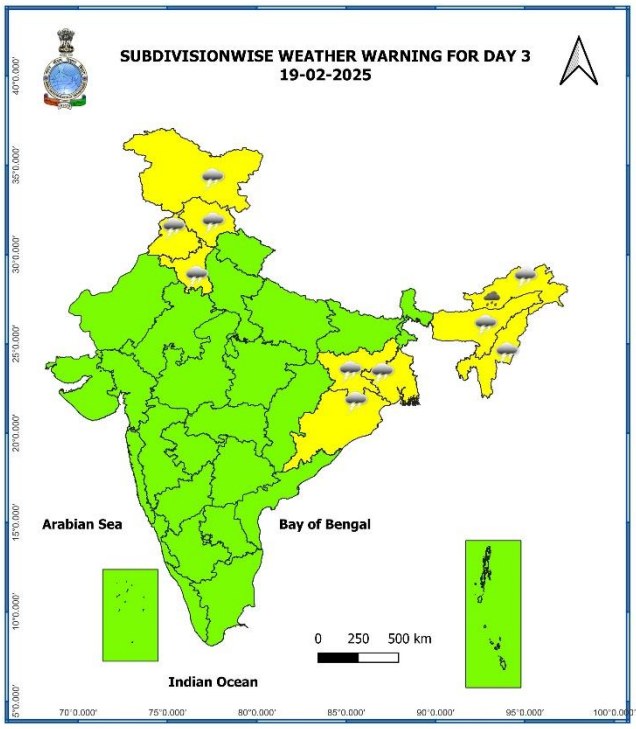


18th February (Day 2):

- **Thunderstorm accompanied with lightning** very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura**.**

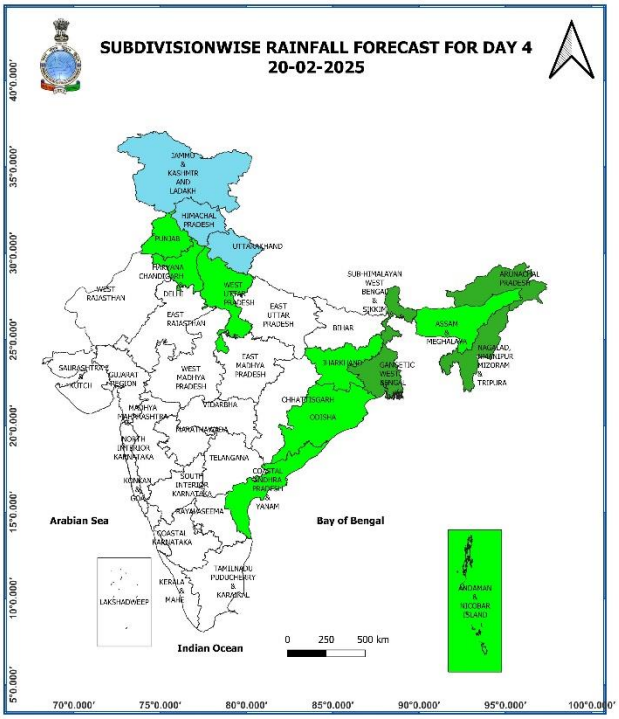
- **Dense fog conditions** very likely in isolated pockets of Sub-Himalayan West Bengal & Sikkim.

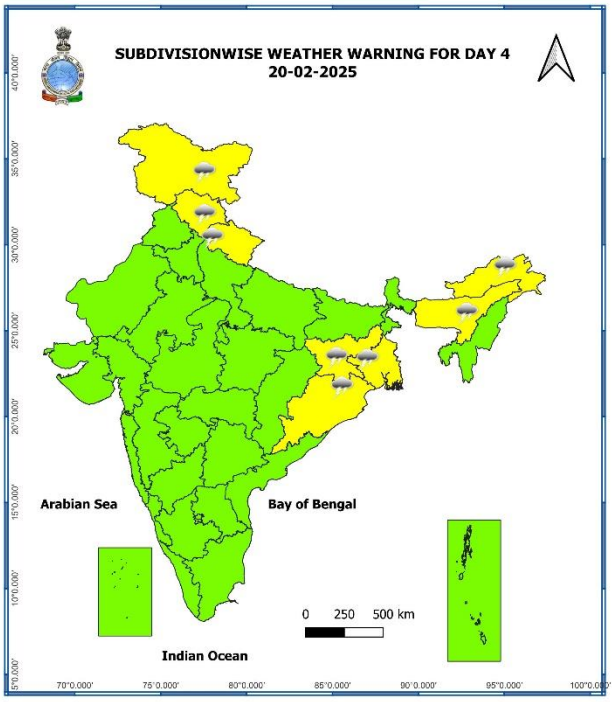




19th February (Day 3):

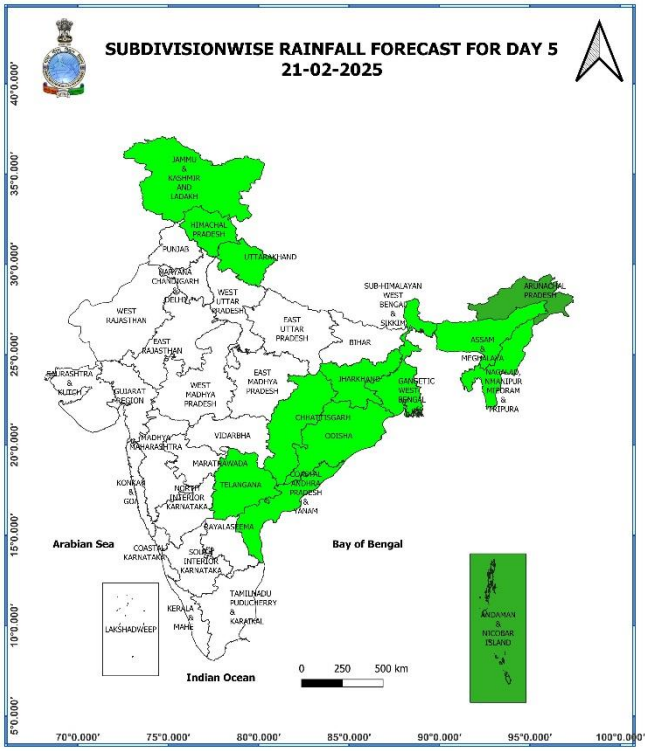
- **Heavy rainfall (≥7 cm)** likely at isolated places over Arunachal Pradesh.
- **Thunderstorm accompanied with gusty winds (30-40 kmph) & lightning** likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with lightening over Arunachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Haryana-Chandigarh, West Rajasthan, Gangetic West Bengal, Jharkhand and Odisha.

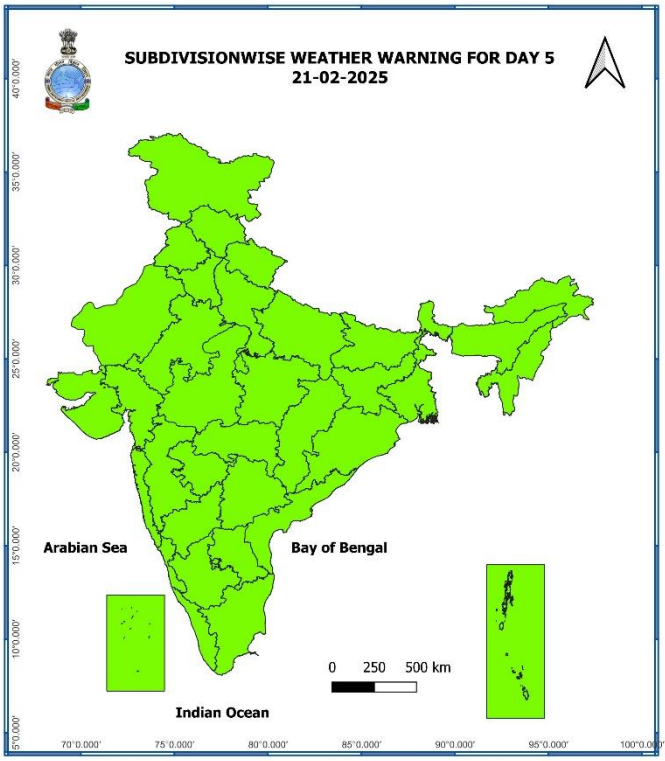




20th February (Day 4):

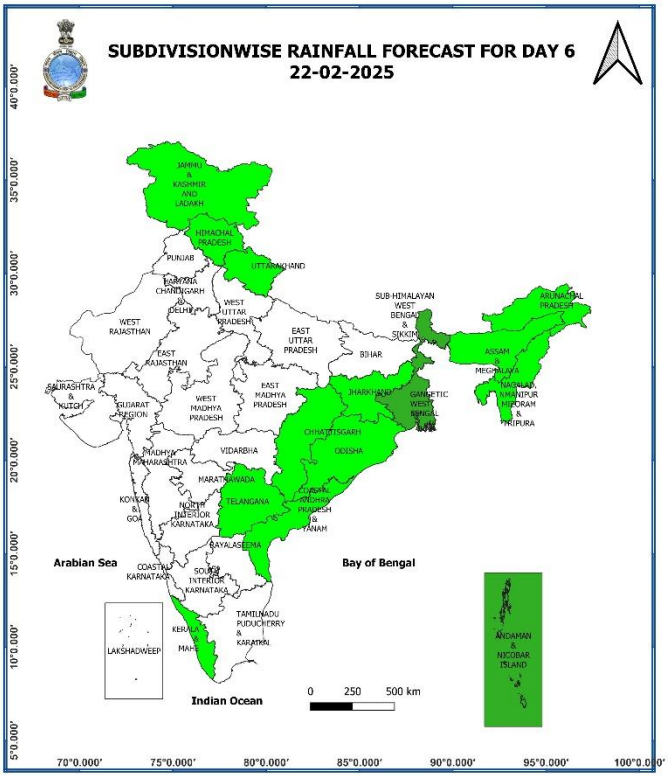
- **Thunderstorm accompanied with lightning** likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh, West Uttar Pradesh, Gangetic West Bengal, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

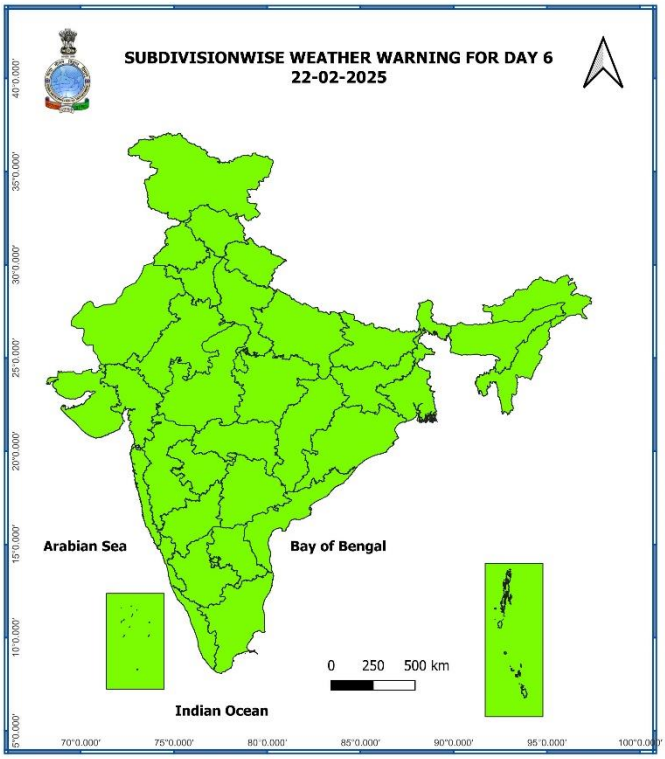




21st February (Day 5):

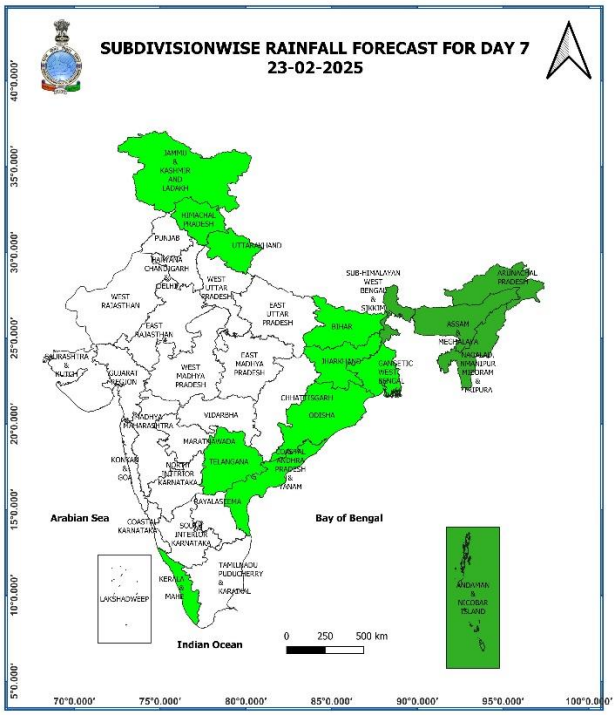
- **No Weather Warning.**

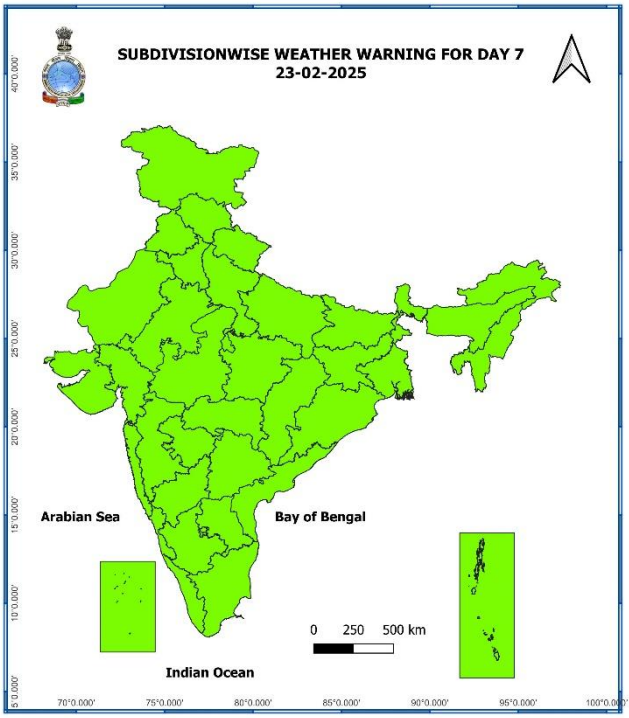




22nd February (Day 6):

- **No Weather Warning.**





23rd February (Day 7):

❖ **No Weather Warning.**

Weather Outlook for subsequent 3 days (During 24th February- 26th February, 2025)

❖ **Scattered to fairly widespread rainfall/snowfall** likely over Western Himalayan region.
❖ **Isolated rainfall** likely over plains of Northwest, adjoining Central, East and Northeast India.

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

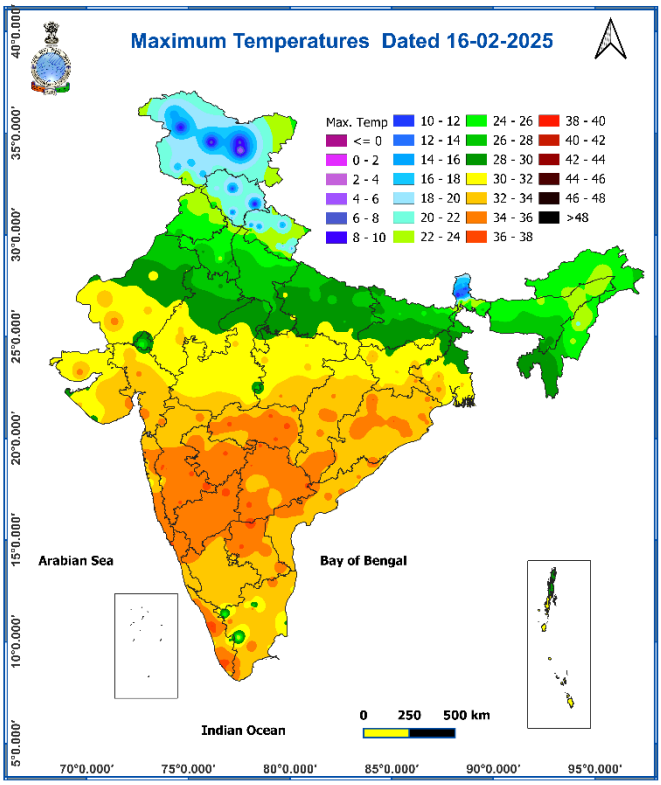


Fig. 2: Departure of Maximum Temperatures

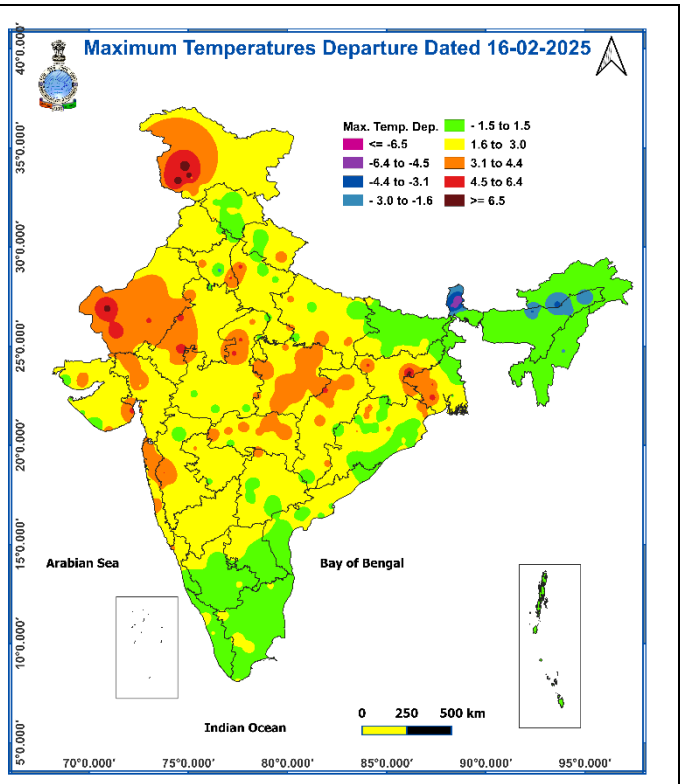


Fig. 3: Minimum Temperatures

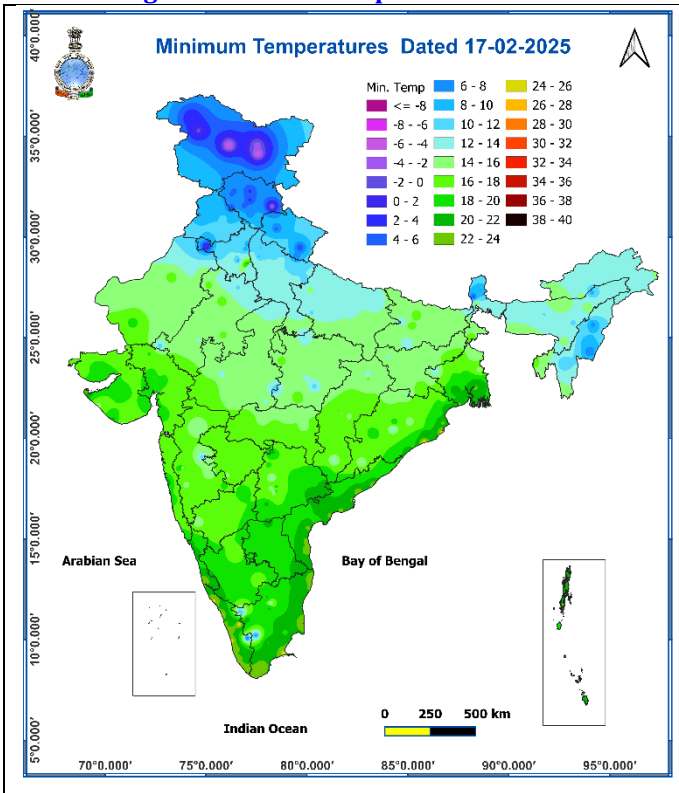
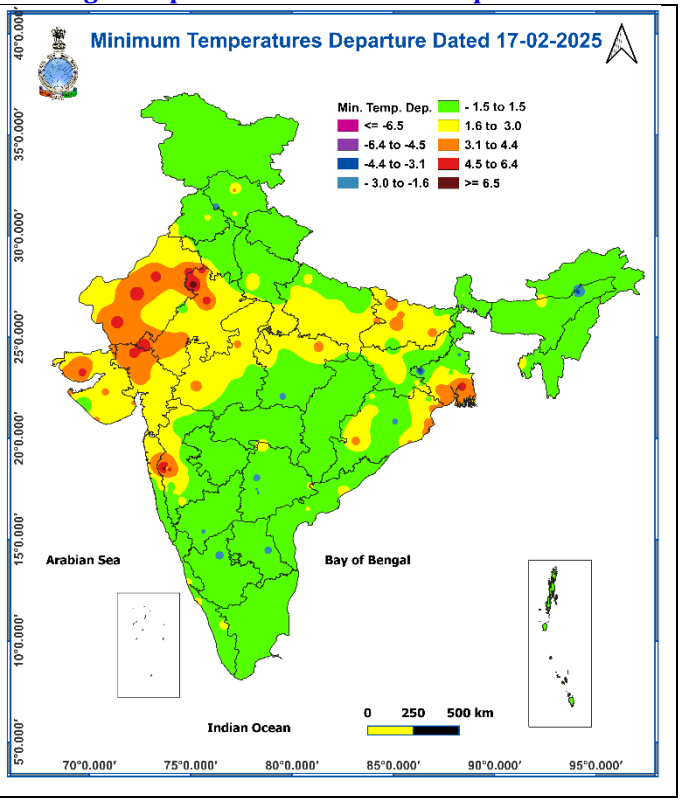


Fig. 4: Departure of Minimum Temperatures



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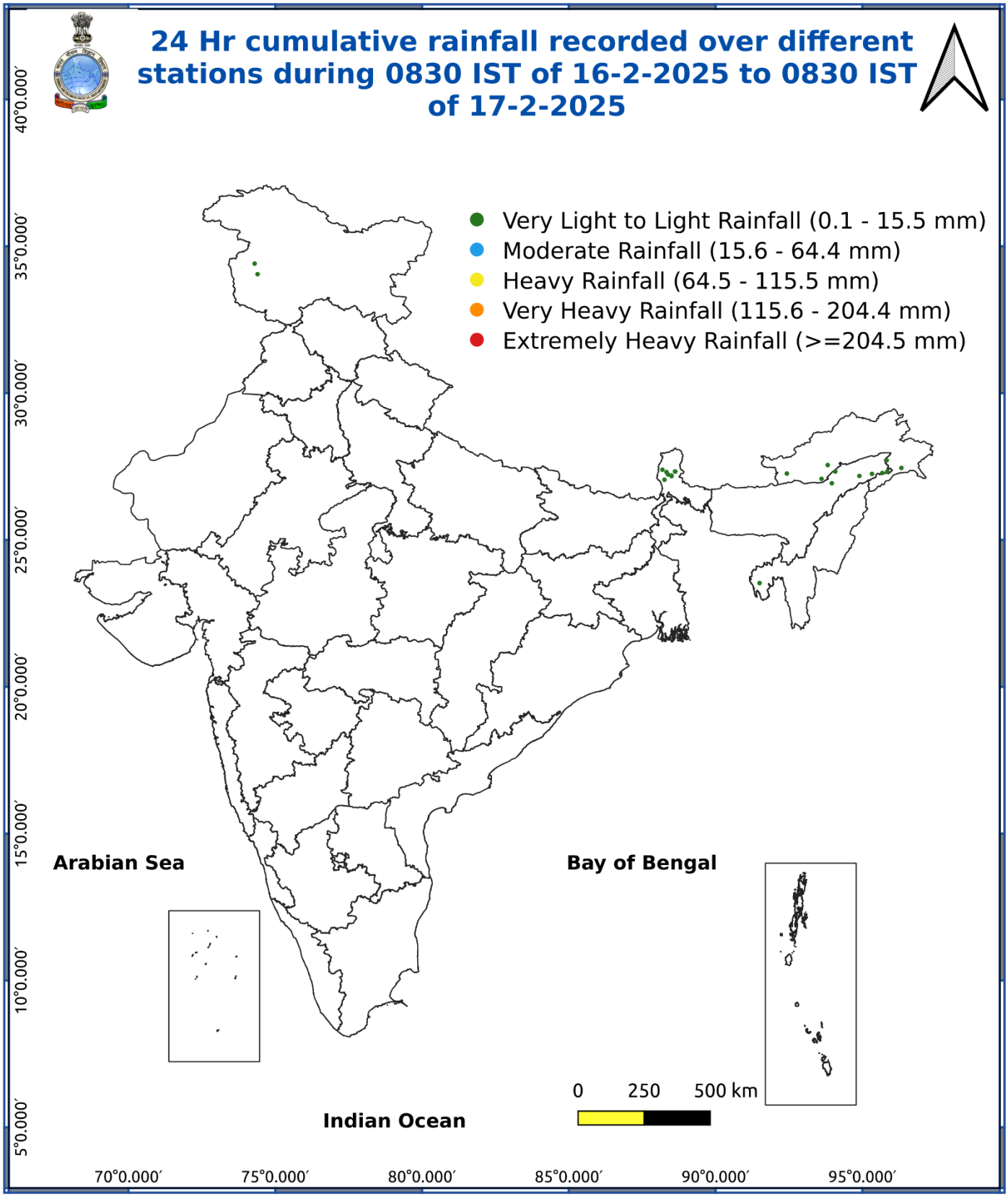
Agromet advisories for likely impact of Heavy Rainfall

- In **Arunachal Pradesh**, harvest mature rice and store the harvested produce in properly covered shelters. Make necessary arrangements to provide extensive drainage in the fields of rice, mustard, other standing crops, vegetables and horticultural crops.
- Provide mechanical support to horticultural crops and staking to vegetables.

Livestock

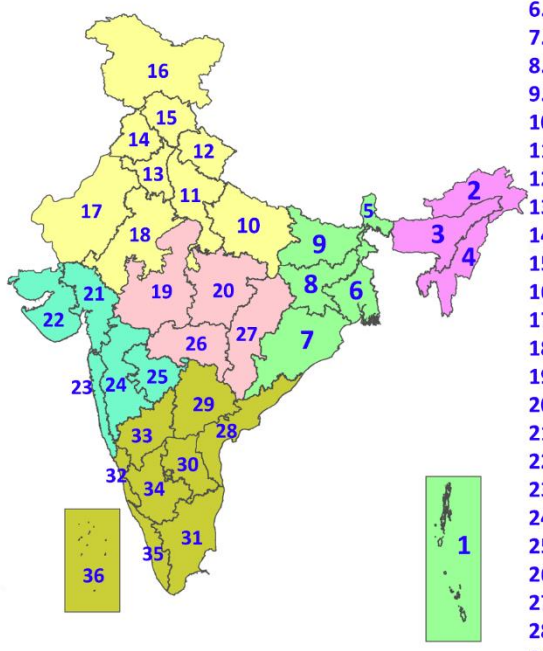
Keep the animals inside the shed during heavy rainfall and provide them with balanced feed. Store feed and fodder in a safe place to prevent spoilage.

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

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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
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