

Friday, April 25, 2025
Time of Issue: 1345 hours IST
(MID-DAY)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Weather Systems, Forecast and Warnings:

- ❖ An upper air cyclonic circulation lies over central Assam in lower tropospheric levels. A north-south trough runs from northern parts of Marathawada to Gulf of Mannar and another trough from Sikkim to southwest Bangladesh in lower tropospheric levels.
- ❖ Under the influence of these systems:
 - ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & strong winds speed reaching 40-50 kmph gusting to 60 kmph** likely over Northeast India during next 7 days.
 - ✓ **Thundersquall (wind speed reaching 50-60 kmph)** likely over Arunachal Pradesh, Assam & Meghalaya on 25th & 26th and Nagaland, Manipur, Mizoram & Tripura on 25th April.
 - ✓ **Heavy rainfall** likely over Assam & Meghalaya, Arunachal Pradesh during 25th-27th; over Nagaland, Mizoram & Tripura on 28th & 29th with **very heavy rainfall** over Arunachal Pradesh on 25th; Assam & Meghalaya during 25th-27th April.
 - ✓ **Extremely heavy falls also likely at isolated places over Meghalaya on 25th April.**
 - ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & strong winds speed reaching 30-40 kmph gusting to 50 kmph** likely over Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Kerala & Mahe, Tamilnadu Puducherry & Karaikal during next 7 days.
 - ✓ **Isolated heavy rainfall** over Kerala & Mahe on 25th, 28th & 29th April.
 - ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & strong winds speed reaching 40-50 kmph gusting to 60 kmph** likely over East India and East Uttar Pradesh during 26th-29th April.
 - ✓ **Isolated hailstorm** activity likely over North Interior Karnataka on 25th & 26th; Chhattisgarh during 26th-28th; Vidarbha on 27th; Sub-Himalayan West Bengal & Sikkim on 26th; Bihar, Jharkhand on 27th; Odisha on 27th & 28th April.
 - ✓ **Thundersquall (wind speed reaching 50-60 kmph)** likely over Interior Karnataka, Sub-Himalayan West Bengal & Sikkim, Jharkhand on 27th; Gangetic West Bengal, Odisha, Vidarbha on 27th & 28th; Bihar, Chhattisgarh during 26th-28th April.
 - ✓ **Isolated heavy rainfall** over Sikkim on 26th & 27th April.
- ❖ A Western Disturbance seen as a trough in middle tropospheric westerlies roughly along Long. 72°E to the north of Lat. 32°N and a cyclonic circulation lies over Jammu-Kashmir & neighbourhood in lower tropospheric levels. Under its influence;
 - ✓ **Isolated to scattered** light rainfall with **thunderstorm, lightning & strong winds speed reaching 30-40 kmph gusting to 50 kmph** likely over Western Himalayan Region on 25th-26th April.

Temperature Forecast:

- ❖ Gradual rise in maximum temperatures by 1-3°C likely over Punjab, Haryana Chandigarh & Delhi, Rajasthan during next 7 days.
- ❖ No significant change in maximum temperatures likely over Uttar Pradesh and east India during next 2 Days and fall by 3-5°C for subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over Gujarat during next 3 Days and rise by 2-3°C for subsequent 3 days.
- ❖ Gradual fall in maximum temperatures by 2-3°C likely over Central India except Madhya Pradesh during next 3 days.
- ❖ No significant change in maximum temperatures likely over Maharashtra during next 24 hours and fall by 2-4°C for subsequent 6 days.
- ❖ No significant change in maximum temperatures likely over rest parts of the country.

Heat wave, warm night and Hot & Humid weather warning:

- ❖ **Heat wave conditions** very likely in isolated pockets over Rajasthan during 25th April -01st May; Haryana during 25th -29th; Punjab during 26th April -01st May; West Madhya Pradesh during 25th-28th; East Madhya Pradesh, Vidarbha, West Bengal & Sikkim, Odisha on 25th & 26th April.
- ❖ **Warm night conditions** very likely in isolated pockets over West Rajasthan during 26th -29th; Odisha on 25th April.
- ❖ **Hot & humid weather** is likely to prevail over Coastal Karnataka, Madhya Maharashtra, Marathawada on 25th; Bihar, Jharkhand, Tamilnadu Puducherry & Karaikal, Kerala & Mahe on 25th & 26th; Coastal Andhra Pradesh & Yanam, Rayalaseema during 25th -27th; Gujarat State during 27th-31st.

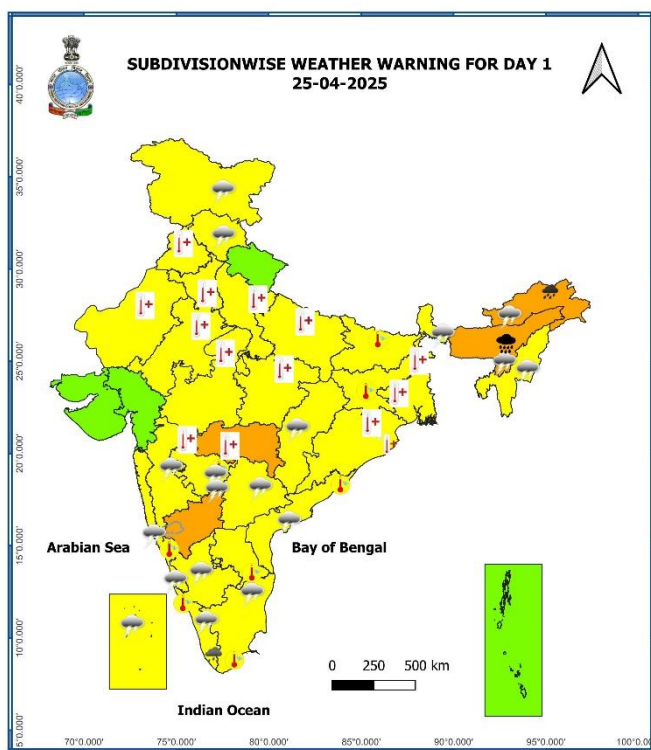
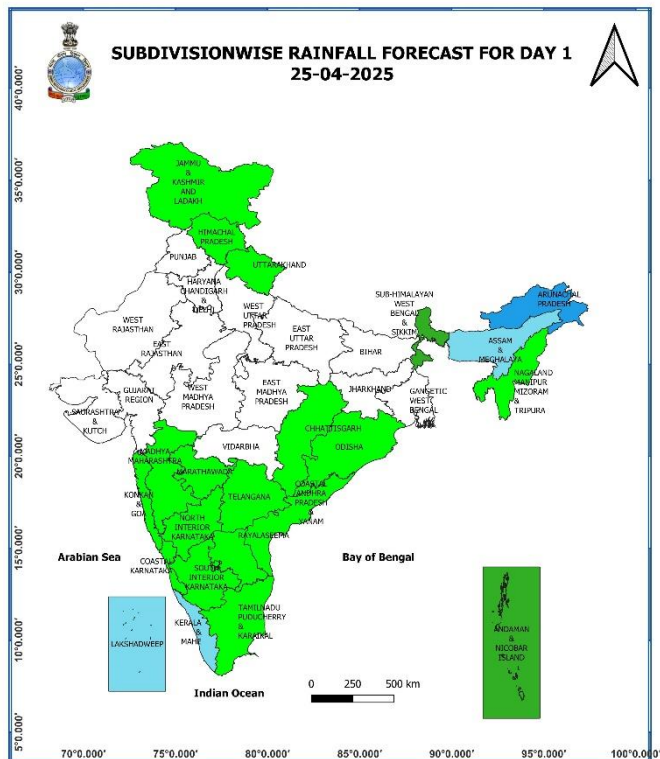
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at many places** over Assam & Meghalaya, Arunachal Pradesh; **at a few places** over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Andaman & Nicobar Islands, Kerala & Mahe, Lakshadweep; **at isolated places** over Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Odisha, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal Rayalaseema, Telangana, Karnataka.
- ❖ **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): **Assam & Meghalaya:** Cherrapunji (dist East Khasi Hills) 35, Cherrapunji(rkm) (dist East Khasi Hills) 31, Mawsynram (dist East Khasi Hills) 31, Nahar Katia (dist Dibrugarh) 16, Beky Rly.bridge (dist Barpeta) 14, Dholla Bazar (dist Tinsukia) 13, Barpeta (dist Barpeta) 12, Khliehriat (dist East Jaintia Hills) 7, Manash Nh Xing (dist Barpeta) 7, Panbari (dist Chirang) 7; **Arunachal Pradesh:** Tezu_Aws (dist Lohit) 11, Namsai (dist Lohit) 7; **Tamil nadu:** Uthagamandalam (dist The Nilgiris) 3; **Kerala & Mahe:** Kanjirappally (dist Kottayam) 3, Thodupuzha (dist Idukki) 3, Kollam (dist Kollam) 3.
- ❖ **Thunderstorm accompanied with Squally/Gusty winds** speed reaching 50-60 kmph prevailed at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Madhya Pradesh, Kerala & Mahe, North Interior Karnataka, Telangana, Coastal Andhra Pradesh & Yanam.
- ❖ **Hailstorm** occurred at isolated places over Assam & Meghalaya, Jammu & Kashmir.
- ❖ **Heavy to very heavy rainfall with extremely heavy falls** recorded at isolated places over Meghalaya; **heavy to very heavy rainfall** at isolated places over Assam; and **heavy rainfall** at isolated places over Arunachal Pradesh.
- ❖ **Heat wave conditions** prevailed in isolated pockets of West Bengal, Bihar, Odisha, East Madhya Pradesh and Vidarbha.
- ❖ **Warm night conditions** prevailed in isolated pockets of West Bengal and Odisha.
- ❖ **Hot & humid weather** prevailed in isolated pockets of Marathwada.
- ❖ **Minimum Temperature Departures (as on 25-04-2025):** Minimum temperatures are **appreciably above normal (3.1°C to 5.0°C)** at many places over Bihar, Sub-Himalayan West Bengal & Sikkim; at few places over West Rajasthan, Vidarbha; at isolated places over Punjab, Haryana-Chandigarh-Delhi, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Marathwada; **above normal (1.6°C to 3.0°C)** at most places over East Rajasthan, Jharkhand; at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Gujarat state, Telangana; at a few places over Coastal Andhra Pradesh & Yanam, Rayalaseema, North Interior Karnataka; at isolated places over Odisha. These are **markedly below normal (-5.1°C or less)** at few places over Arunachal Pradesh and normal over rest parts of the country (**Fig. 4**). Today, the **lowest minimum temperature** of **18.3°C** is reported at **Amritsar (Punjab)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 24-04-2025):** Maximum Temperatures were **appreciably above normal (3.1°C to 5.0°C)** at many places over Punjab, Haryana-Chandigarh-Delhi; at a few places over Uttarakhand, Uttar Pradesh, West Rajasthan; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Bihar, Chhattisgarh Odisha, Jharkhand, Marathwada, Madhya Pradesh, Assam & Meghalaya; **above normal (1.6°C to 3.0°C)** at few places over East Rajasthan, Madhya Maharashtra, Gangetic West Bengal, Coastal Karnataka; at isolated places over Gujarat state, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal. These were **below normal (-3.0°C to -1.6°C)** at isolated places over North Interior Karnataka, Andaman & Nicobar Islands and normal over rest parts of the country (**Fig. 2**). Yesterday, the highest **maximum temperature** of **45.9°C** was reported at **Brahmapuri (Vidarbha)** over the country.

Meteorological Analysis (Based on 0830 hours IST)

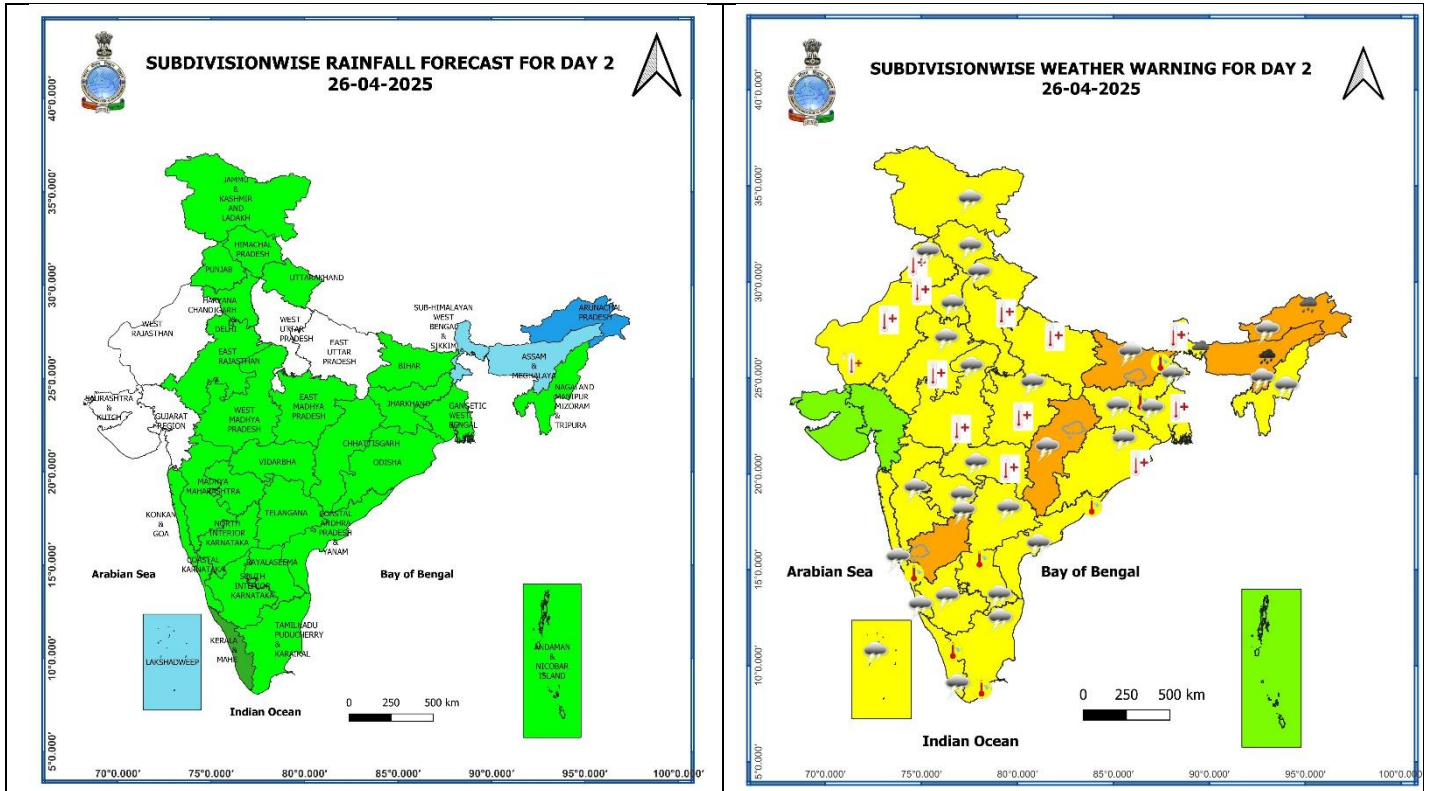
- ❖ The **Western Disturbance** as a trough in middle tropospheric westerlies with its axis at 5.8 km above mean sea level now runs roughly along Long. 72°E to the north of Lat. 32°N.
- ❖ A **cyclonic circulation** lies over Jammu-Kashmir & neighbourhood at 3.1 km above mean sea level.
- ❖ A **cyclonic circulation** lies over Punjab & neighbourhood at 1.5 km above mean sea level.
- ❖ The **trough** now runs from Sikkim to southwest Bangladesh coast across Sub-Himalayan West Bengal at 1.5 km above mean sea level.
- ❖ The north-south **trough** from northern part of Marathwada to Gulf of Mannar across Interior Karnataka and Tamil Nadu at 0.9 km above mean sea level persists.
- ❖ The upper air **cyclonic circulation** over northeast Assam now lies over central Assam & neighbourhood at 0.9 km above mean sea level.
- ❖ The **cyclonic circulation** over central Pakistan at 1.5 km above mean sea level has become less marked.
- ❖ The upper air **cyclonic circulation** over north Bangladesh & neighbourhood extending upto 1.5 km above mean sea level has become less marked.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 02nd May, 2025)



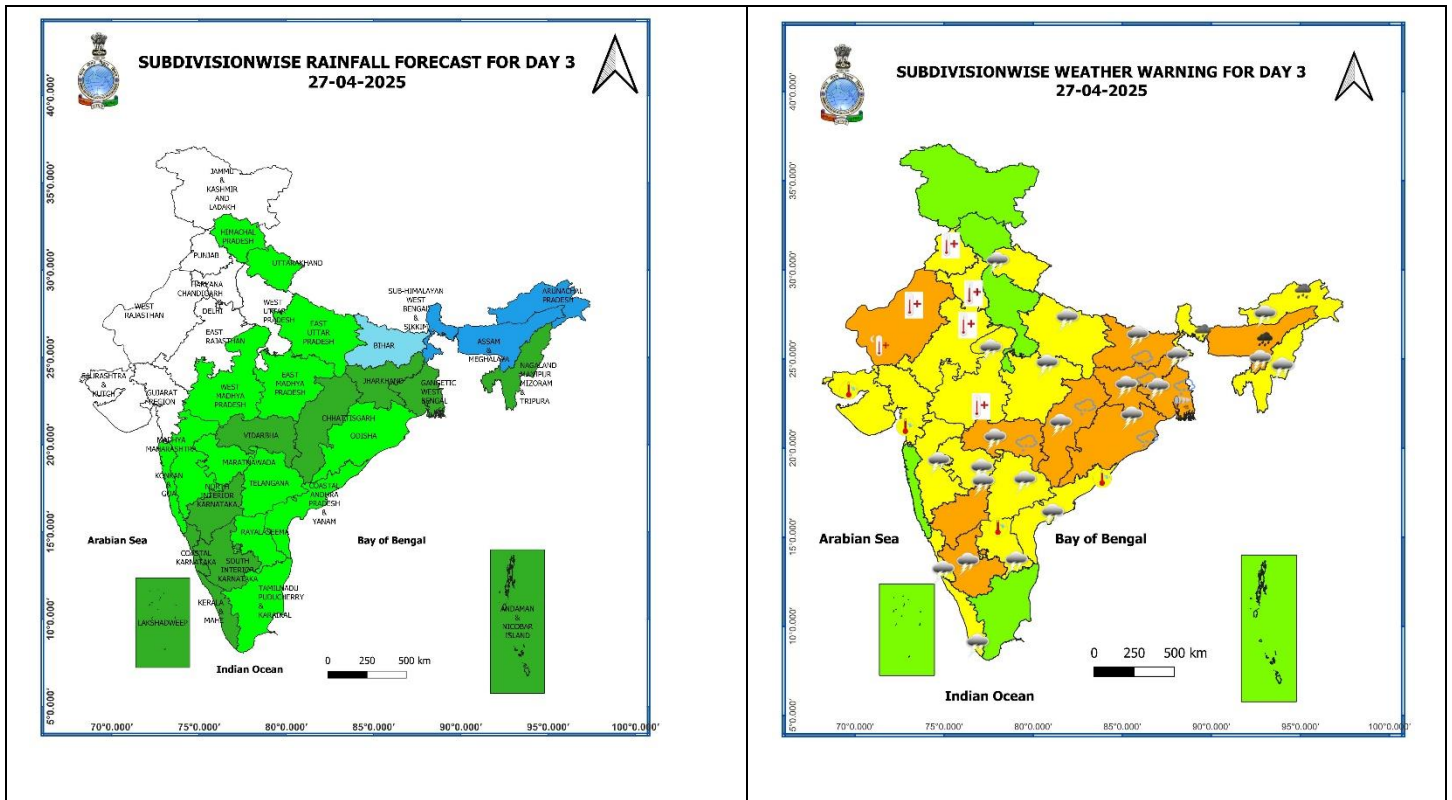
25th April (Day 1)

- ❖ **Heavy to very Heavy Rainfall** at isolated places over Arunachal Pradesh and Assam & Meghalaya.
- ❖ **Heavy Rainfall** at isolated places over Kerala.
- ❖ **Thunderstorms accompanied with gusty winds(50-60kmph)** very likely at isolated places over Arunachal Pradesh, Assam and Nagaland, Manipur, Meghalaya & Tripura; **with gusty winds(40-50kmph)** at isolated places over Madhya Maharashtra, North Interior Karnataka and Kerala; **with gusty winds(30-40kmph)** at isolated places over Himachal Pradesh and Coastal Andhra Pradesh and very likely at isolated places over Jammu and Kashmir and Ladakh, Marathwada, Chhattisgarh, Telangana and South Interior Karnataka; **with lightning** at isolated places over South Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry and very likely at isolated places over Konkan & Goa, Costal Karnataka and Lakshadweep.
- ❖ **Hailstorm** very likely at isolated places over North Interior Karnataka.
- ❖ **Hot and Humid conditions** very likely at isolated places over Jharkhand, Bihar, Marathwada, Coastal Andhra Pradesh, Rayalaseema, Tamilnadu & Puducherry, Costal Karnataka and Kerala.
- ❖ **Warm Night conditions** very likely at isolated places over Odisha.
- ❖ **Heat Wave conditions** very likely at isolated places over South Himalayan West Bengal & Sikkim, Gangetic West Bengal, East Rajasthan, West Madhya Pradesh, East Madhya Pradesh, Madhya Maharashtra and Vidarbha and very likely at isolated places over Odisha, East Uttar Pradesh, West Uttar Pradesh, Haryana, Chandigarh & Delhi, Punjab and West Rajasthan.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over Lakshadweep area, adjoining Maldives area, off south Kerala coast. Fishermen are advised not to venture into these areas.



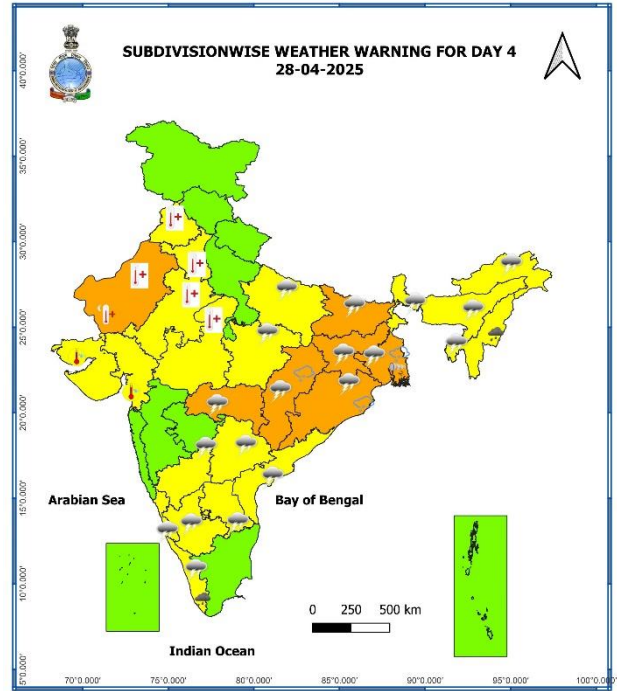
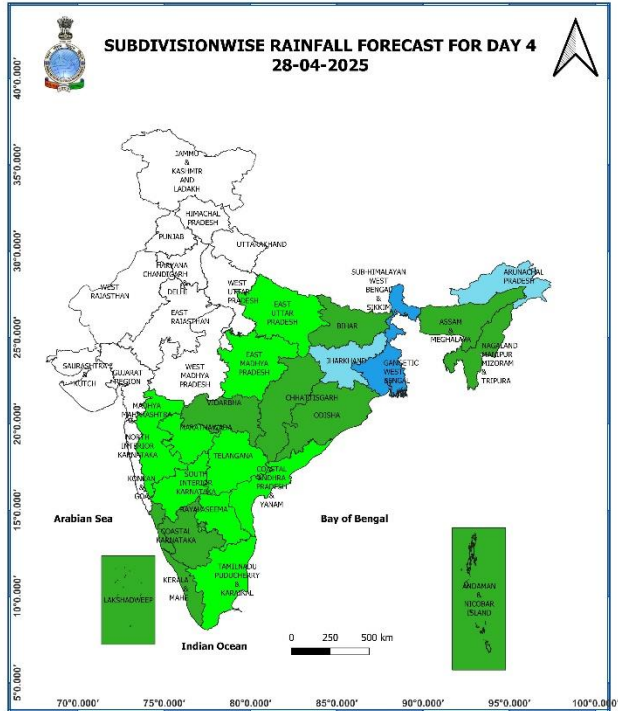
26th April (Day 2)

- ❖ **Heavy to very Heavy Rainfall** very likely at isolated places over Assam & Meghalaya
- ❖ **Heavy Rainfall** very likely at isolated places over Arunachal Pradesh and very likely at isolated places over South Himalayan West Bengal & Sikkim.
- ❖ **Hailstorm** very likely at isolated places over Bihar, Chhattisgarh and North Interior Karnataka
- ❖ **Thunderstorms accompanied with gusty winds(50-60kmph)** very likely at isolated places over Arunachal Pradesh, Assam, Bihar and Chhattisgarh; **with gusty winds(40-50kmph)** at isolated places over Nagaland, Manipur, Meghalaya & Tripura, Gangetic West Bengal, East Rajasthan, West Madhya Pradesh, East Madhya Pradesh, Madhya Maharashtra, Marathwada, Vidarbha and North Interior Karnataka and very likely at isolated places over South Interior Karnataka; **with gusty winds(30-40kmph)** at isolated places over Haryana, Chandigarh & Delhi, Punjab, Himachal Pradesh, Coastal Andhra Pradesh and Rayalaseema and very likely at isolated places over Jammu and Kashmir and Ladakh, Telangana and Kerala; **with lightning** at isolated places over South Himalayan West Bengal & Sikkim, Jharkhand, Uttarakhand, Konkan & Goa, Coastal Karnataka, Lakshadweep, Odisha and Tamilnadu & Puducherry
- ❖ **Hot and Humid conditions** very likely at isolated places over Jharkhand, Bihar, Coastal Andhra Pradesh, Rayalaseema, Tamilnadu & Puducherry, Coastal Karnataka and Kerala.
- ❖ **Warm Night conditions** very likely at isolated places over West Rajasthan.
- ❖ **Heat Wave conditions** very likely at isolated places over South Himalayan West Bengal & Sikkim, Gangetic West Bengal, Odisha, Haryana, Chandigarh & Delhi, Punjab, East Rajasthan, West Madhya Pradesh, East Madhya Pradesh and Vidarbha and very likely at isolated places over East Uttar Pradesh, West Uttar Pradesh and West Rajasthan.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over Lakshadweep area, adjoining Maldives area, off south Kerala coast. Fishermen are advised not to venture into these areas.



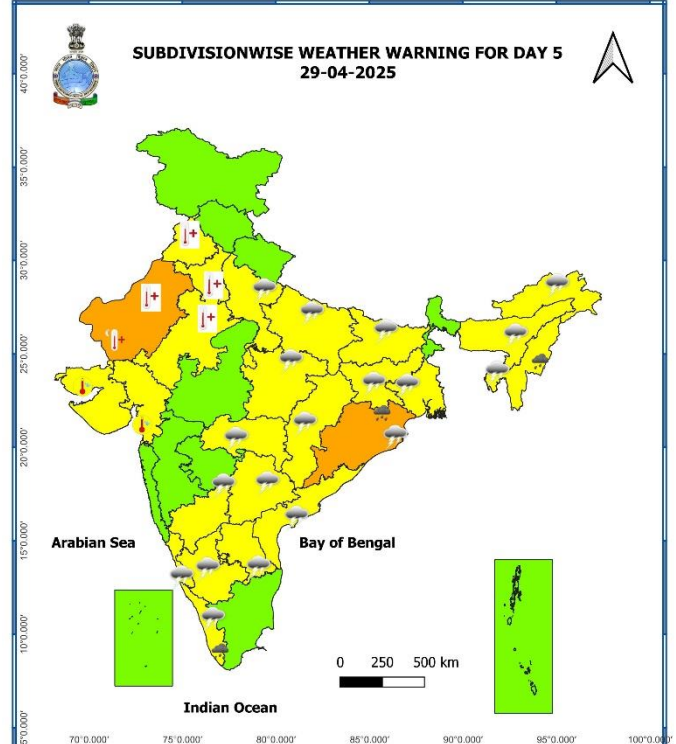
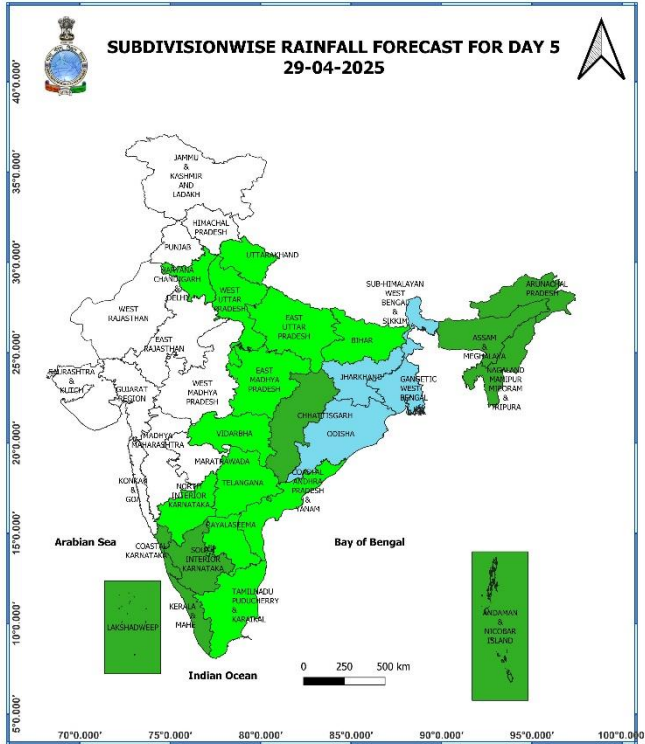
27th April (Day 3)

- ❖ **Heavy to very Heavy Rainfall** very likely at isolated places over Assam & Meghalaya.
- ❖ **Heavy Rainfall** at isolated places over Arunachal Pradesh and South Himalayan West Bengal & Sikkim.
- ❖ **Thunderstorms accompanied with gusty winds(50-60kmph)** very likely at isolated places over Gangetic West Bengal, Bihar, Vidarbha and Chhattisgarh and very likely at isolated places over Odisha, North Interior Karnataka and South Interior Karnataka; **with gusty winds(40-50kmph)** at isolated places over Arunachal Pradesh, Assam, Nagaland, Manipur, Meghalaya & Tripura, Jharkhand, West Madhya Pradesh and East Madhya Pradesh; **with gusty winds(30-40kmph)** at isolated places over East Uttar Pradesh, Coastal Andhra Pradesh and Rayalaseema and very likely at isolated places over Telangana; **with lightning** at isolated places over South Himalayan West Bengal & Sikkim, Uttarakhand, Madhya Maharashtra, Marathwada, Costal Karnataka and Kerala.
- ❖ **Hailstorm** very likely at isolated places over Gangetic West Bengal, Odisha, Jharkhand, Bihar, Vidarbha and Chhattisgarh.
- ❖ **Warm Night conditions** very likely at isolated places over West Rajasthan.
- ❖ **Heat Wave conditions** very likely at isolated places over Haryana, Chandigarh & Delhi and very likely at isolated places over Punjab, West Rajasthan, East Rajasthan and West Madhya Pradesh.
- ❖ **Hot and Humid conditions** very likely at isolated places over Gujarat Region, Saurashtra & Kutch, Coastal Andhra Pradesh and Rayalaseema.



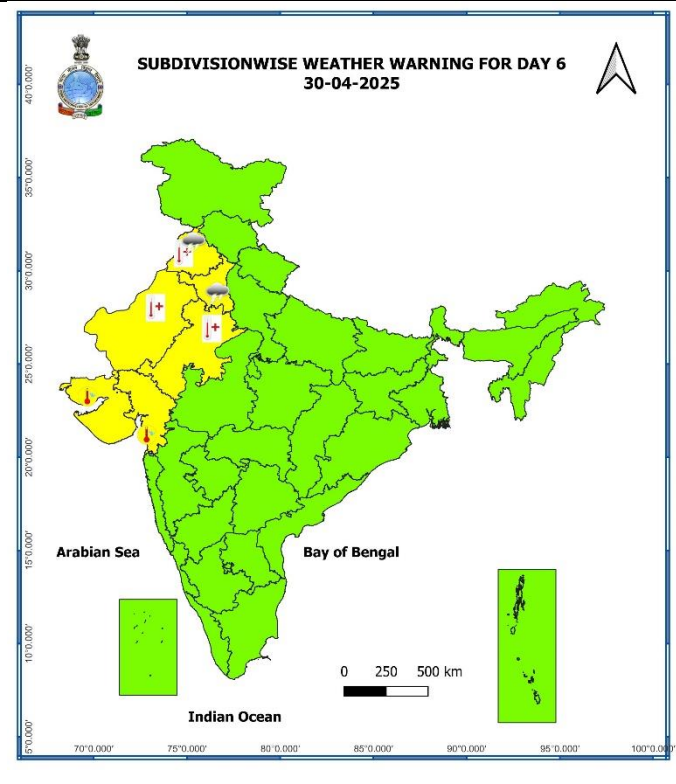
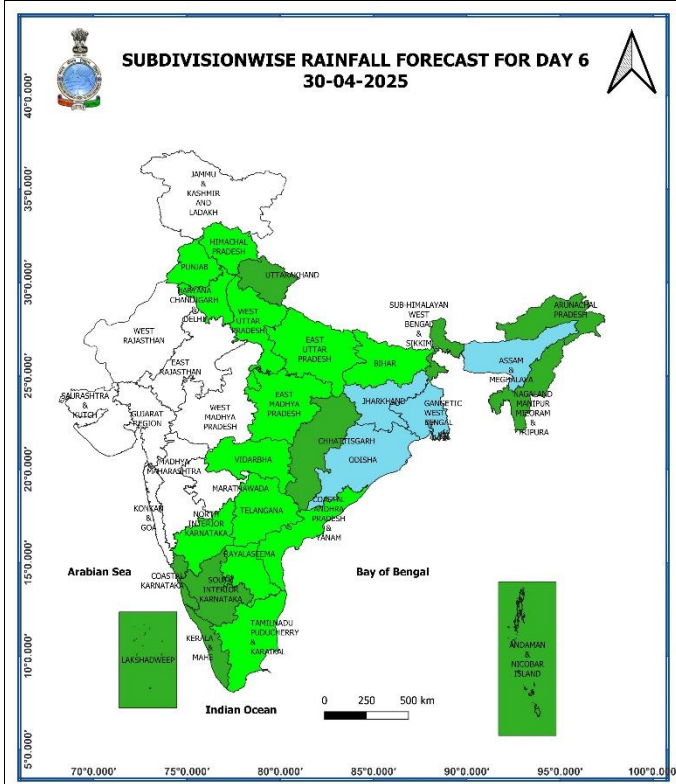
28th April (Day 4)

- ❖ **Heavy Rainfall** likely at isolated places over Nagaland, Manipur, Meghalaya & Tripura and likely at isolated places over Kerala.
- ❖ **Thunderstorms accompanied with gusty winds(50-60kmph)** likely at isolated places over Gangetic West Bengal, Odisha, Jharkhand, Bihar, East Madhya Pradesh, Vidarbha and Chhattisgarh; **with gusty winds(40-50kmph)** at isolated places over Arunachal Pradesh, Assam and Nagaland, Manipur, Meghalaya & Tripura and likely at isolated places over North Interior Karnataka and South Interior Karnataka; **with gusty winds(30-40kmph)** at isolated places over East Uttar Pradesh, Coastal Andhra Pradesh and Rayalaseema and likely at isolated places over Telangana; **with lightning** at isolated places over South Himalayan West Bengal & Sikkim, Coastal Karnataka and Kerala.
- ❖ **Hailstorm** likely at isolated places over Gangetic West Bengal, Odisha and Chhattisgarh
- ❖ **Hot and Humid conditions** likely at isolated places over Gujarat Region and Saurashtra & Kutch.
- ❖ **Warm Night conditions** likely at isolated places over West Rajasthan.
- ❖ **Heat Wave conditions** likely at isolated places over Haryana, Chandigarh & Delhi and likely at isolated places over Punjab, West Rajasthan, East Rajasthan and West Madhya Pradesh.
- ❖ **Strong Surface Winds** likely at isolated places over Gangetic West Bengal.



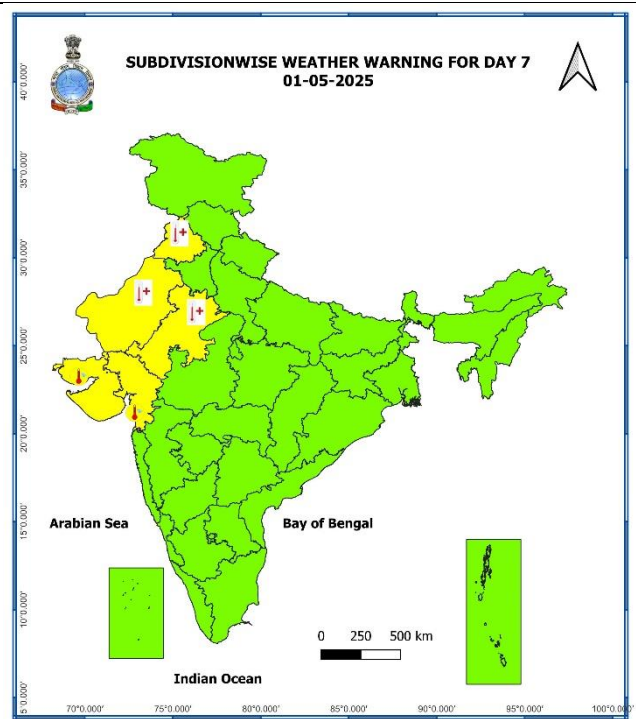
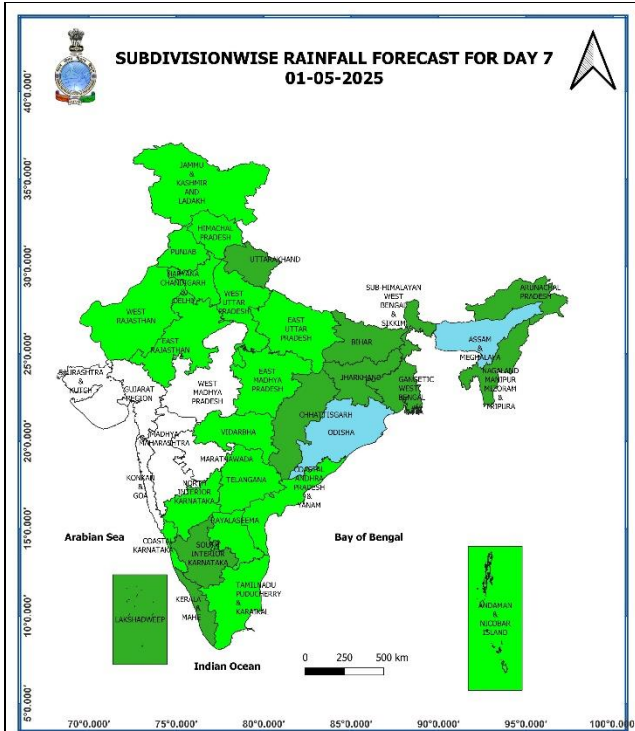
29th April (Day 5)

- ❖ **Heavy Rainfall** likely at isolated places over Nagaland, Manipur, Meghalaya & Tripura and Odisha and likely at isolated places over Kerala.
- ❖ **Thunderstorms accompanied with gusty winds(50-60kmph)** likely at isolated places over Odisha and East Madhya Pradesh; **with gusty winds(40-50kmph)** at isolated places over Assam & Meghalaya, Gangetic West Bengal, Jharkhand, Bihar, West Uttar Pradesh, Vidarbha and Chhattisgarh and likely at isolated places over South Interior Karnataka; **with gusty winds(30-40kmph)** at isolated places over Arunachal Pradesh, Nagaland, Manipur, Meghalaya & Tripura, East Uttar Pradesh, Coastal Andhra Pradesh, Telangana, North Interior Karnataka and Rayalaseema; **with lightning** at isolated places over Coastal Karnataka and Kerala.
- ❖ **Hot and Humid conditions** likely at isolated places over Gujarat Region and Saurashtra & Kutch.
- ❖ **Warm Night conditions** likely at isolated places over West Rajasthan.
- ❖ **Heat Wave conditions** likely at isolated places over Haryana, Chandigarh & Delhi and likely at isolated places over Punjab, West Rajasthan and East Rajasthan.



30th April (Day 6)

- ❖ **Thunderstorm accompanied with lightning** likely at isolated places over Haryana, Chandigarh & Delhi and likely at isolated places over Punjab.
- ❖ **Hot and Humid conditions** likely at isolated places over Gujarat Region and Saurashtra & Kutch.
- ❖ **Heat Wave conditions** likely at isolated places over Punjab, West Rajasthan and East Rajasthan.



01st May (Day 7)

- ❖ **Hot and Humid conditions** likely at isolated places over Gujarat Region and Saurashtra & Kutch.
- ❖ **Heat Wave conditions** likely at isolated places over Punjab, West Rajasthan and East Rajasthan.

Weather Outlook for subsequent 3 days (During 2nd May- 04th May, 2025)

- ❖ **Scattered to fairly widespread** rainfall activity likely over east & northeast India, Kerala.
- ❖ **Isolated to scattered rainfall** likely over Northwest India, adjoining central India, south peninsular India 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. 2: Departure of Maximum Temperatures

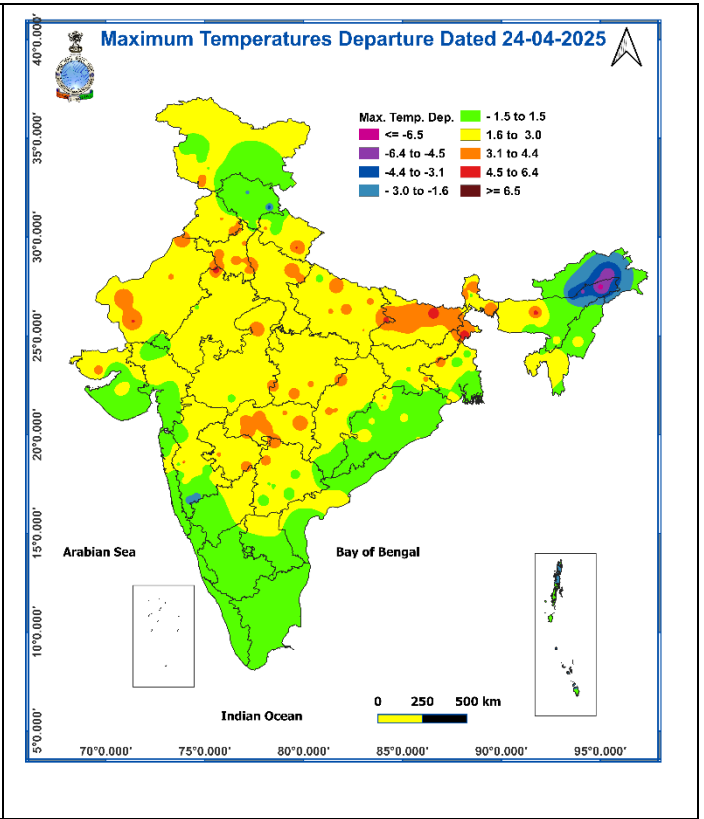
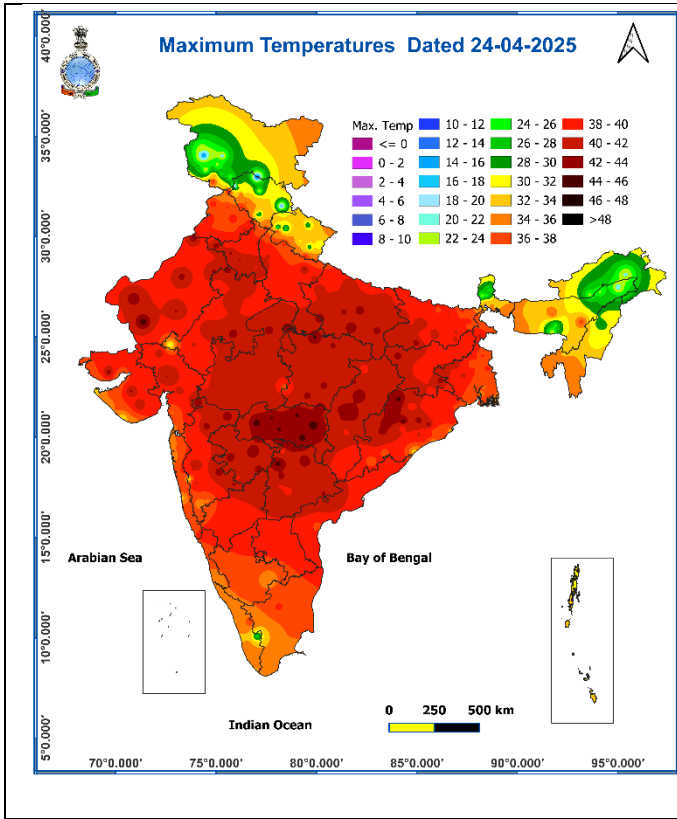


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures

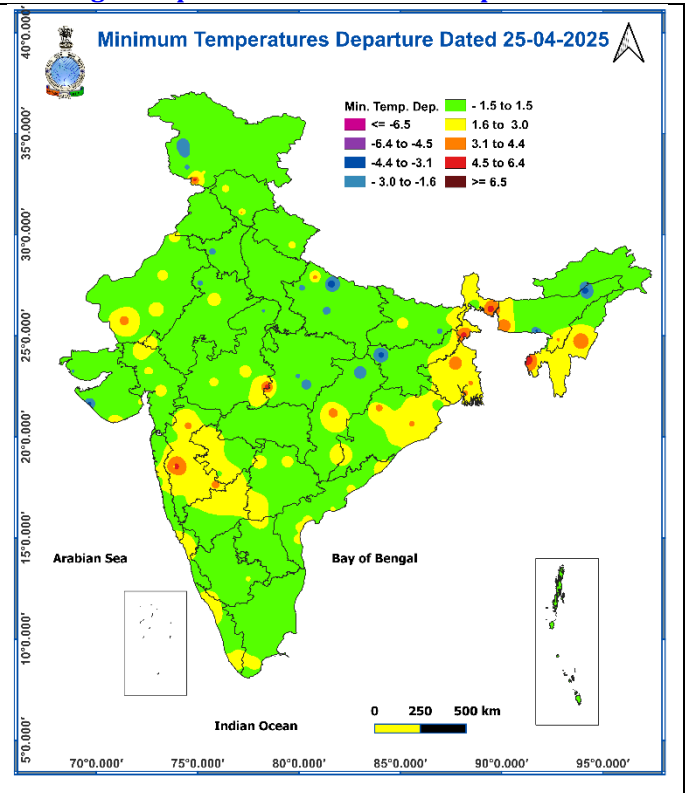
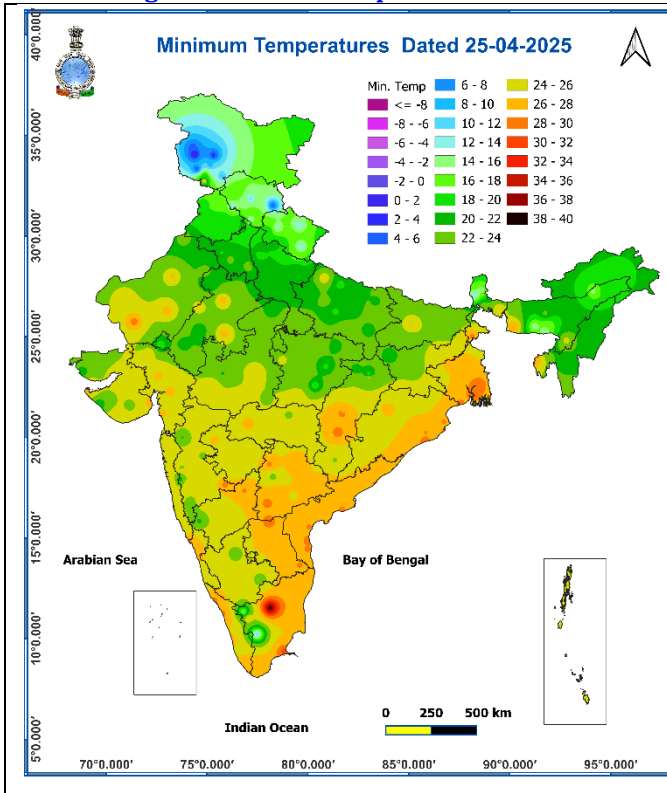
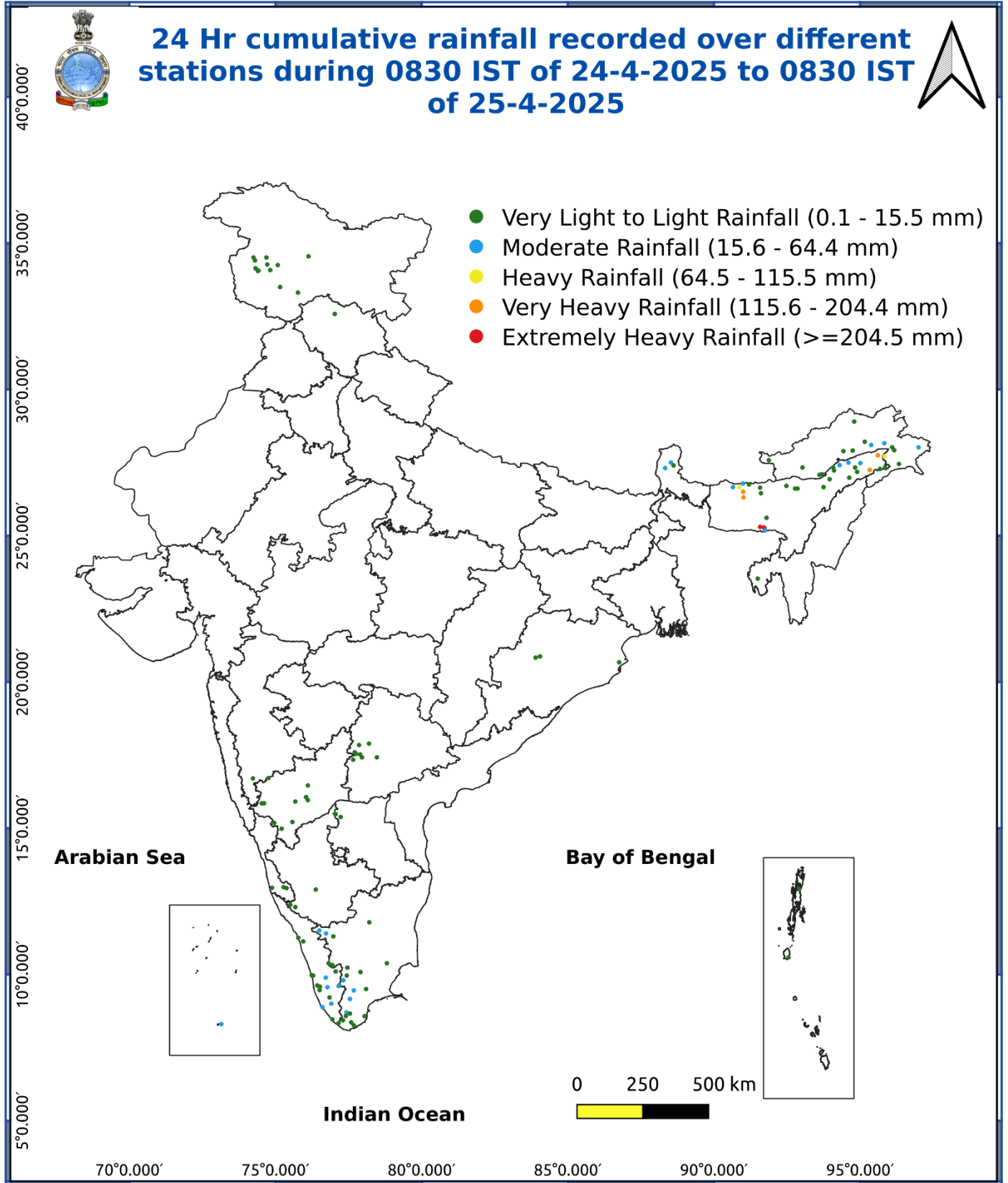


Fig. 5: Accumulated Rainfall (mm) during past 24 hours



* 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)

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

- ✓ **Isolated hailstorm** activity likely over North Interior Karnataka on 25th & 26th; Chhattisgarh during 26th-28th; Vidarbha on 27th; Sub-Himalayan West Bengal & Sikkim on 26th; Bihar, Jharkhand on 27th; Odisha on 27th & 28th April.
- ✓ **Thundersquall (wind speed reaching 50-60 kmph)** likely over Arunachal Pradesh, Assam & Meghalaya on 25th & 26th; Nagaland, Manipur, Mizoram & Tripura on 25th; Interior Karnataka, Sub-Himalayan West Bengal & Sikkim, Jharkhand on 27th; Gangetic West Bengal, Odisha, Vidarbha on 27th & 28th; Bihar, Chhattisgarh during 26th-28th April.

Impact expected:

- Breaking of tree branches, uprooting of large avenue trees. Large dead limbs blown from trees. Damage to Standing crops.
- Minor to Major damage to banana and papaya trees.
- Minor to major damage to power and communication lines due to breaking of branches.
- 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:

- People are advised to keep a watch on the weather for worsening conditions and be ready to move to safer places accordingly.
- 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.

Impact expected and action suggested due to Heat wave conditions over plains of Northwest India till 29th and East & Central India till 26th April.

Yellow alert Areas

- Moderate temperature & heat is tolerable for general public but moderate health concern likely for vulnerable people e.g. infants, elderly, people with chronic diseases.
- Avoid heat exposure.
- Wear lightweight, light colour, loose, cotton clothes.
- Cover your head, use a cloth, hat or umbrella.

Impact & Action Suggested due to heavy to very heavy rainfall over Arunachal Pradesh on 25th; Assam & Meghalaya during 25th-27th April.

Impact Expected

- ❖ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ❖ Occasional reduction in visibility due to heavy rainfall.
- ❖ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ❖ Minor damage to kutcha roads.
- ❖ Possibilities of damage to vulnerable structure.
- ❖ Localized Landslides/Mudslides
- ❖ Damage to horticulture and standing crops in some areas due to inundation.
- ❖ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC).

Action Suggested

- ❖ Check for traffic congestion on your route before leaving for your destination.
- ❖ Follow any traffic advisories that are issued in this regard.
- ❖ Avoid going to areas that face the water logging problems often.
- ❖ Avoid staying in vulnerable structure.

Agromet advisories for likely impact of Hailstorm / Heavy Rainfall / Gusty Winds / Heat wave

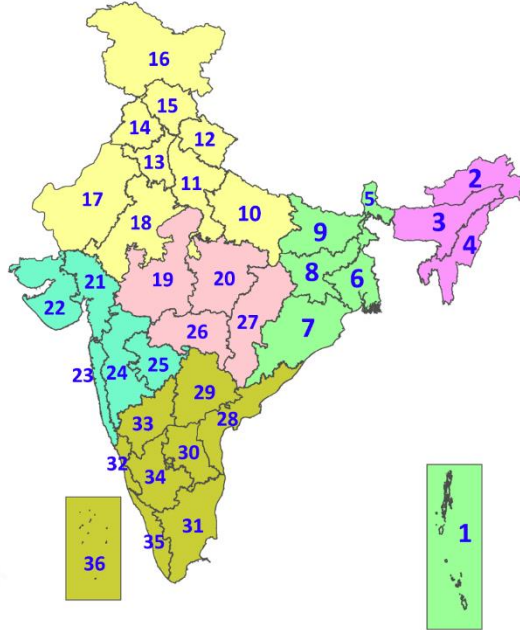
- Postpone sowing of *Jhum* paddy and transplanting of banana in **Arunachal Pradesh**; planting of ginger, turmeric and transplanting of papaya and banana in **Assam**; planting of ginger and transplanting of chilli and brinjal in **Meghalaya**.
- In **Arunachal Pradesh, Assam, Meghalaya, Sub Himalayan West Bengal and Kerala**, drain out excess water from standing crop and vegetable fields.
- In **Sub Himalayan West Bengal, Odisha, Bihar, Jharkhand, Vidarbha, Chhattisgarh, Marathwada and North Interior Karnataka**, use hail net and hail caps to prevent mechanical damage in vegetables and orchards due to the possibility of hailstorms. Drain out excess water from standing crops and vegetable fields.
- To protect standing crops, vegetables and orchards from adverse effects of heat waves and high temperatures, apply light and frequent irrigation in the evening.
- Shift the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields. Tie the harvested crops properly and cover them to minimise the risk of displacement due to strong surface winds.
- Provide mechanical support to horticultural crops and staking to vegetables to avoid lodging.

Livestock / Poultry / Fishery

- Keep the animals inside the shed during heavy rainfall / hailstorm and provide them balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.
- To reduce the effect of heat wave/high temperature, cover the roof of poultry sheds with grass. Also, provide clean, hygienic and plenty of drinking water to animals.
- Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.

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

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

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 $\geq 40^\circ\text{C}$ 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 Strom: Wind speed > 220 kmph (> 119 knots)