

Sunday, April 6, 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 lay over east Bihar and the trough runs from east Bihar to east Vidarbha in lower tropospheric levels.
- ❖ The north-south trough runs from Marathwada to south Tamil Nadu across interior Karnataka in lower tropospheric level.
- ❖ An upper air cyclonic circulation lies over South Interior Karnataka in lower tropospheric level.
- ❖ Under the influence of these systems and confluence of moist winds from Arabian sea and Bay of Bengal in lower tropospheric levels;
 - ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed 40-50 kmph)** likely over Tamilnadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam on 06th; Kerala & Mahe on 06th & 07th; Karnataka during 06th -08th; East and Northeast India during 06th-10th April.
 - ✓ **Isolated Hailstorm** likely over Gangetic West Bengal, Assam & Meghalaya on 06th and over Bihar on 09th April.
 - ✓ **Heavy rainfall** very likely at isolated places over Tamil Nadu Puducherry & Karaikal, Kerala & Mahe on 06th and over Assam & Meghalaya on 09th & 10th April.
- ❖ **A fresh Western Disturbance is likely to affect Western Himalayan region from 08th April, 2025.**
 - ✓ **Scattered to fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and isolated to scattered rainfall over Himachal Pradesh and Uttarakhand on 09th & 10th April.
 - ✓ **Isolated Hailstorm** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 09th April.
- ❖ The upper air cyclonic circulation over southeast Bay of Bengal & neighbourhood extends upto middle tropospheric levels. Under its influence, a Low Pressure Area likely to form over south Bay of Bengal during next 48 hours. Under its influence
 - ✓ **Fairly widespread to Widespread** light/moderate rainfall likely over Andaman & Nicobar Islands during next 6-7 days. Isolated **thunderstorm, lightning & gusty winds (speed 30-40 kmph)** and **heavy rainfall also likely on 06th April.**
 - ✓ Squally weather with wind speed 35 - 45 kmph gusting to 55 kmph likely to prevail over Andaman Sea and over southeast Bay of Bengal & adjoining central Bay of Bengal **during 06th -09th April, 2025.**

Temperature Forecast:

- ❖ Gradual rise in maximum temperatures by 2-4°C likely over many parts of Northwest India, Maharashtra and South Peninsular India during next 4 days and fall by 2-3°C during subsequent 3 days.
- ❖ Gradual rise in maximum temperatures by 2-3°C likely over many parts of central India during next 4 days and no significant change during subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over many parts of East India during next 2 days and fall by 2-3°C during subsequent 3 days and no significant change during subsequent 2 days.
- ❖ Rise in maximum temperatures by about 2°C likely over Gujarat during next 2 days and no significant change during subsequent 2 days and fall by 2-4°C during subsequent 3 days

Heat wave and Hot & Humid weather warning:

- ❖ Heat wave conditions likely at isolated to few pockets over Gujarat state during 06th-10th April with severe heat wave conditions at isolated pockets over Saurashtra & Kutch on 06th & 07th April.
- ❖ Heat wave conditions likely over Rajasthan during 06th-10th April with severe heat wave conditions at isolated pockets on during 07th-09th April.
- ❖ Heat wave conditions very likely in isolated pockets of Himachal Pradesh on 06th & 07th; Haryana, Chandigarh during 06th-10th; Punjab during 07th -10th; Delhi on 07th & 08th; West Uttar Pradesh during 07th-09th; Madhya Pradesh during 08th-10th April.
- ❖ Hot & humid weather is likely to prevail over coastal areas of Gujarat State and Konkan & Goa during 06th-09th April.

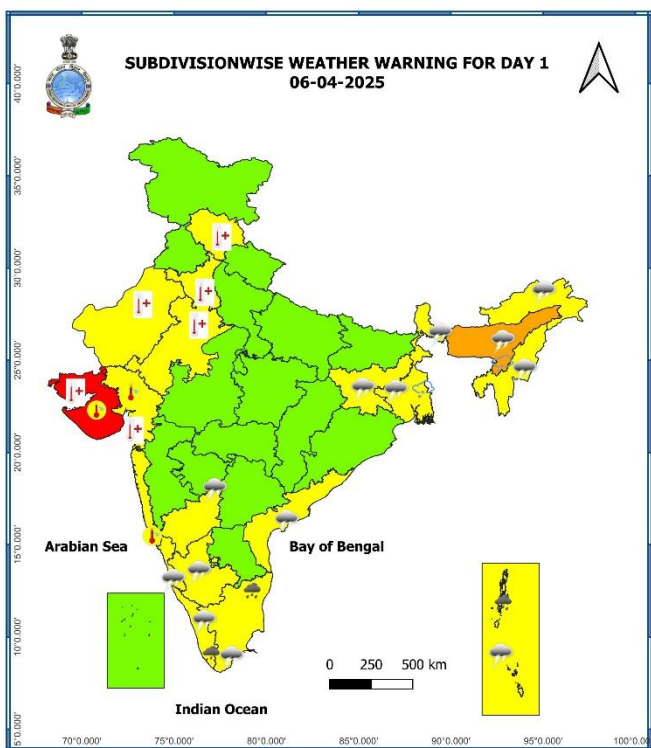
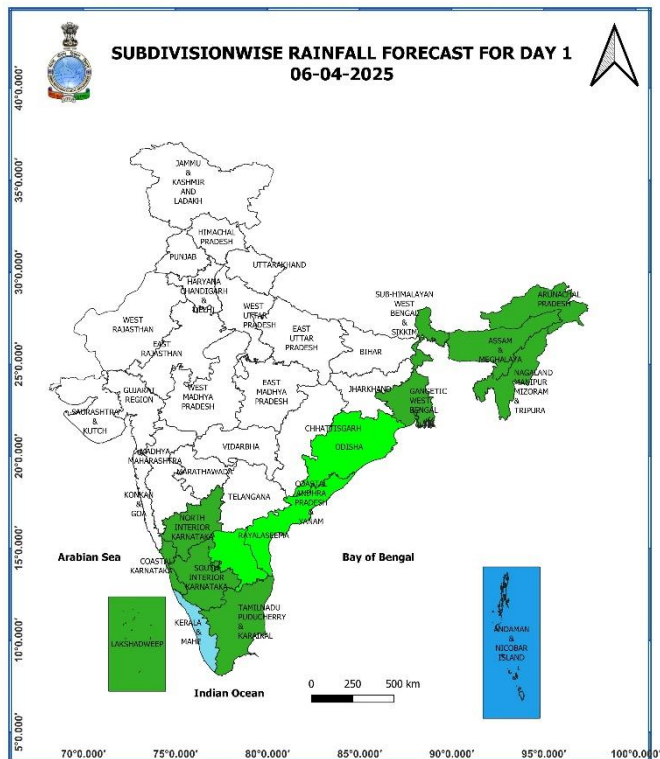
Main Weather Observations:

- ❖ **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at most places** over Coastal and North Interior Karnataka; **at many places** over Arunachal Pradesh, South Interior Karnataka; **at a few places** over Assam & Meghalaya, Kerala & Mahe, Lakshadweep; **at isolated places** over Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Tamilnadu Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana.
- ❖ **Significant amount of rainfall** (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): **Tamil Nadu:** Thirparappu (dist Kanyakumari) 7, Suralacode (dist Kanyakumari) 6, Pechiparai AWS (dist Kanyakumari), Pechiparai (dist Kanyakumari), Rasipuram (dist Namakkal), Virudhunagar (dist Virudhunagar) 5 each; **Kerala & Mahe:** Punalur (dist Kollam) 7, Laha Aws (dist Pathanamthitta) 6, Konni Arg (dist Pathanamthitta) 6, Kottayam (dist Kottayam) 5; **Coastal Karnataka:** Puttur Hms (dist Dakshina Kannada) 4; **South Interior Karnataka:** Agumbe Emo (dist Shivamogga) 5; **Coastal Andhra Pradesh & Yanam:** Chintalapudi (dist Eluru) 4, Prathipadu (dist Kakinada) 4, Narsipatnam (dist Anakapalli) 4.
- ❖ Yesterday, **Heatwave conditions** prevailed at isolated pockets over Himachal Pradesh, Southwest Rajasthan and Saurashtra & Kutch.
- ❖ **Minimum Temperature Departures (as on 06-04-2025):** Minimum temperatures are **appreciably above normal (3.1°C to 5.0°C)** at a few places over West Rajasthan; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Saurashtra & Kutch; **above normal (1.6°C to 3.0°C)** at a few places over Himachal Pradesh, West Bengal & Sikkim; at isolated places over Punjab, Bihar, Jharkhand, West Madhya Pradesh, East Rajasthan, Odisha, Gujarat Region, Madhya Maharashtra, Telangana, Nagaland, Manipur, Mizoram & Tripura. These are **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over East Madhya Pradesh; **below normal (-3.0°C to -1.6°C)** at isolated places over Uttar Pradesh, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam and normal over rest parts of the country (**Fig. 4**). Today, the **lowest minimum temperature** of 15.8°C is reported at **Bahraich (East Uttar Pradesh) & Sidhi (East Madhya Pradesh)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 05-04-2025):** Maximum Temperatures were **markedly above normal (5.1°C or more)** at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; at isolated places over Himachal Pradesh and Saurashtra & Kutch; **appreciably above normal (3.1°C to 5.0°C)** at many places over Punjab; at a few places over Uttarakhand and West Rajasthan; at isolated places over Madhya Pradesh, Gujarat Region, Gangetic West Bengal and Odisha; **above normal (1.6°C to 3.0°C)** at many places over Jharkhand and Vidarbha; at a few places over Delhi, Konkan & Goa and Lakshadweep; at isolated places over Haryana-Chandigarh, Assam & Meghalaya and Coastal Andhra Pradesh & Yanam. These were **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Tamil Nadu, Puducherry & Karaikal; **below normal (-3.0°C to -1.6°C)** at a few places over Andaman & Nicobar Islands, Telangana, Rayalaseema and North Interior Karnataka; at isolated places over Kerala & Mahe and near normal over rest parts of the country (**Fig. 2**). Yesterday, the highest **maximum temperature** of 44.0°C was reported at **Kandla (Saurashtra & Kutch)** over the country.

Meteorological Analysis (Based on 0830 hours IST)

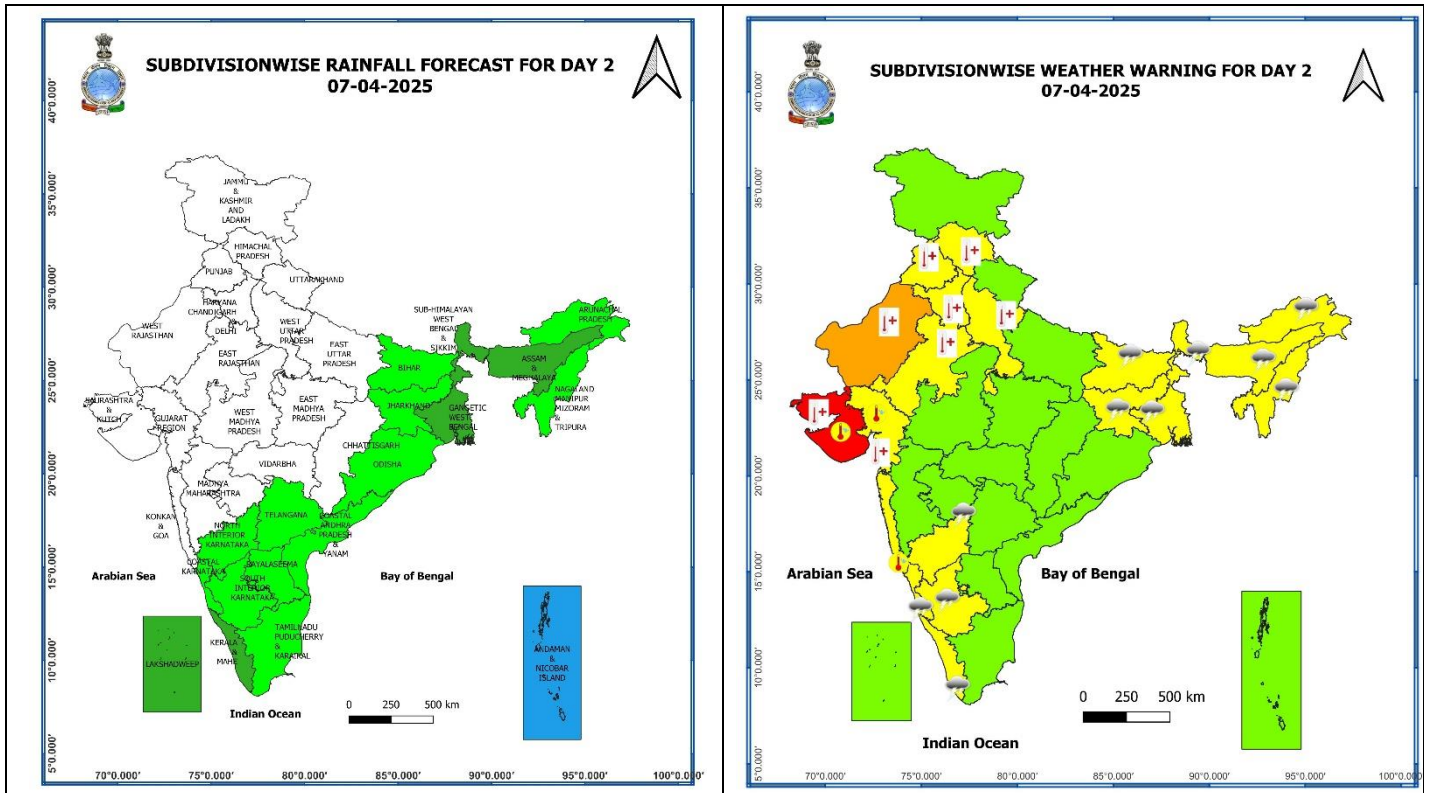
- ❖ An upper air **cyclonic circulation** lies over east Bihar & neighbourhood at 0.9 km above mean sea level.
- ❖ The **trough** from northeast Bihar to Vidarbha now runs from east Bihar to east Vidarbha embedded with the above cyclonic circulation over east Bihar across Jharkhand, Chhattisgarh and extends upto 1.5 km above mean sea level.
- ❖ The upper air **cyclonic circulation** lies over Chhattisgarh & neighbourhood at 0.9 km above mean sea level has merged with the above trough.
- ❖ The north-south **trough** from north Madhya Maharashtra to north Tamil Nadu now runs from Marathwada to south Tamil Nadu across interior Karnataka at 0.9 km above mean sea level.
- ❖ An upper air **cyclonic circulation** lies over South Interior Karnataka & neighbourhood at 1.5 km above mean sea level.
- ❖ The upper air **cyclonic circulation** over southeast Bay of Bengal & neighbourhood persists and now extends upto 5.8 km above mean sea level. Under its influence, a Low Pressure Area likely to form over south Bay of Bengal during next 48 hours.
- ❖ A fresh **Western Disturbance** is likely to affect Western Himalayan region from 08th April, 2025.
- ❖ The **Western Disturbance** as a trough in westerlies with its axis at 5.8 km above mean sea level roughly along Long. 85°E to the north of Lat. 25°N has moved away east-northeastwards.
- ❖ The upper air **Cyclonic Circulation** over northeast Assam & 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 13th April, 2025)



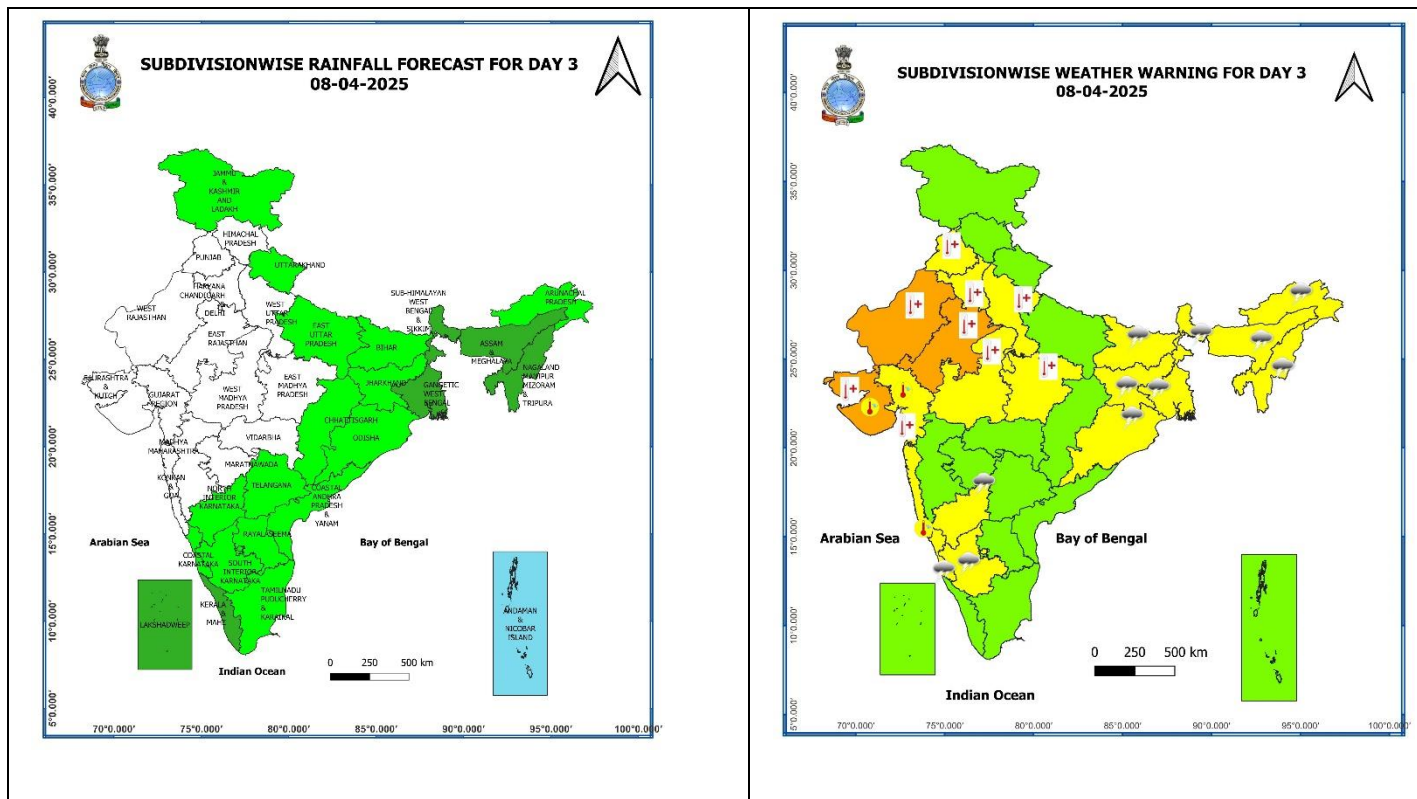
06th April (Day 1):

- ❖ **Heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40 - 50 kmph) & Hailstorm** very likely at isolated places over Gangetic West Bengal, Assam & Meghalaya; **with lightning & gusty winds (speed reaching 40 - 50 kmph)** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, South Interior Karnataka, Coastal Andhra Pradesh & Yanam; **with lightning & gusty winds (speed reaching 30 - 40 kmph)** at isolated places over Jharkhand, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe, North Interior Karnataka; **with lightning** at isolated places over Tamil Nadu, Puducherry & Karaikal.
- ❖ **Heat wave to severe Heat wave conditions** very likely in some parts of Saurashtra & Kutch; **Heat wave conditions** in isolated pockets of Rajasthan, Gujarat Region, Himachal Pradesh, Haryana-Chandigarh.
- ❖ **Hot and humid weather** very likely in isolated pockets of Coastal areas of Gujarat state, Konkan & Goa.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over Andaman sea and over southeast Bay of Bengal & adjoining Central Bay of Bengal. Fishermen are advised not to venture into these areas.



07th April (Day 2):

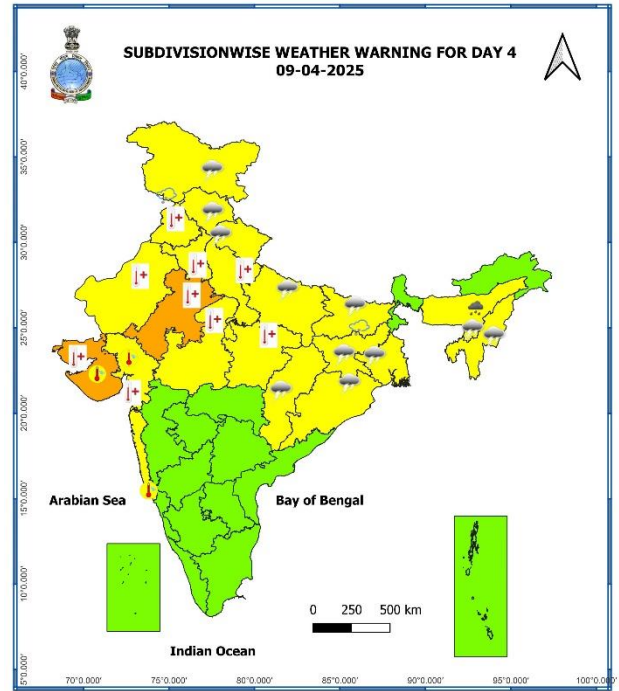
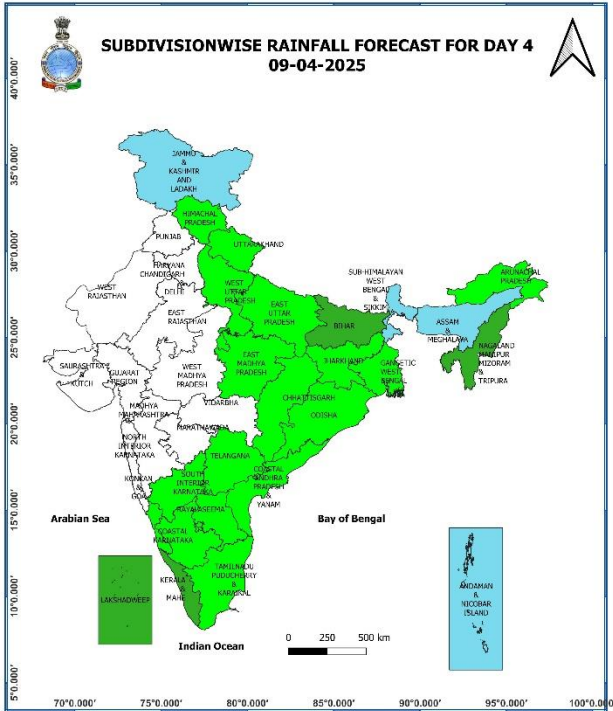
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40 - 50 kmph)** very likely at isolated places over Gangetic West Bengal, Bihar, South Interior Karnataka; **with lightning & gusty winds (speed reaching 30 - 40 kmph)** at isolated places over Sub-Himalayan West Bengal & Sikkim, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, North Interior Karnataka; **with lightning** at isolated places over Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe, Coastal Karnataka.
- ❖ **Heat wave to severe Heat wave conditions** very likely in some parts of Saurashtra & Kutch and West Rajasthan; **Heat wave conditions** in isolated pockets of East Rajasthan, Gujarat Region, Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh.
- ❖ **Hot and humid weather** very likely in isolated pockets of Coastal areas of Gujarat state, Konkan & Goa.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over Andaman sea, and over southeast Bay of Bengal & adjoining Central Bay of Bengal. Fishermen are advised not to venture into these areas.



08th April (Day 3):

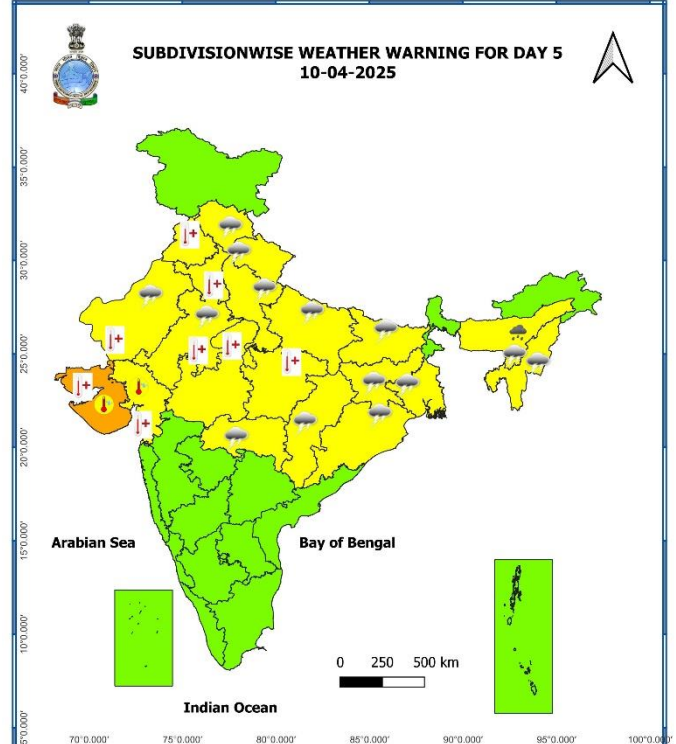
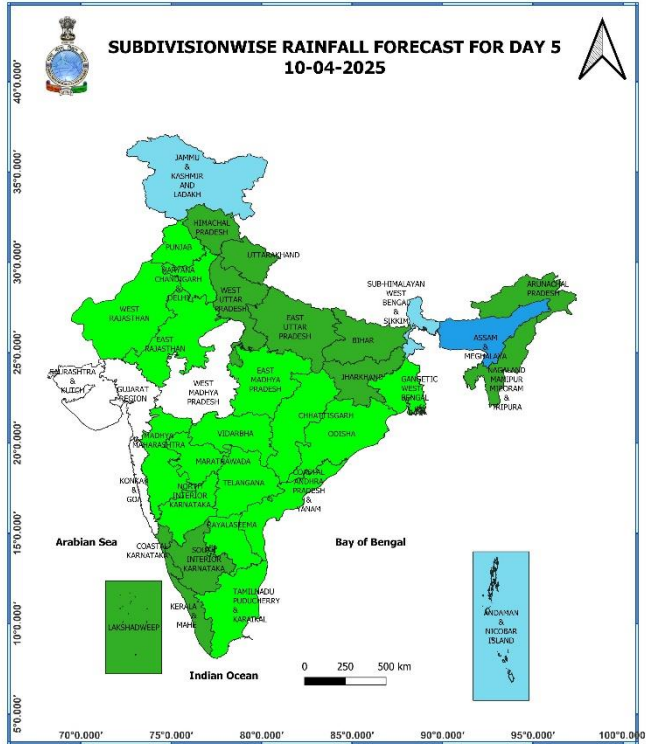
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40 - 50 kmph)** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Bihar, South Interior Karnataka; **with lightning & gusty winds (speed reaching 30 - 40 kmph)** at isolated places over Gangetic West Bengal, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya; **with lightning** at isolated places over Nagaland, Manipur, Mizoram & Tripura, Coastal Karnataka, North Interior Karnataka.
- ❖ **Heat wave to severe Heat wave conditions** very likely in some parts of West Rajasthan and in isolated pockets over East Rajasthan; **Heat wave conditions** in isolated pockets of Gujarat state, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh, Madhya Pradesh.
- ❖ **Hot and humid weather** very likely in isolated pockets of Coastal areas of Gujarat state, Konkan & Goa.
- ❖ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over South Bay of Bengal & adjoining Central Bay of Bengal. Fishermen are advised not to venture into these areas.

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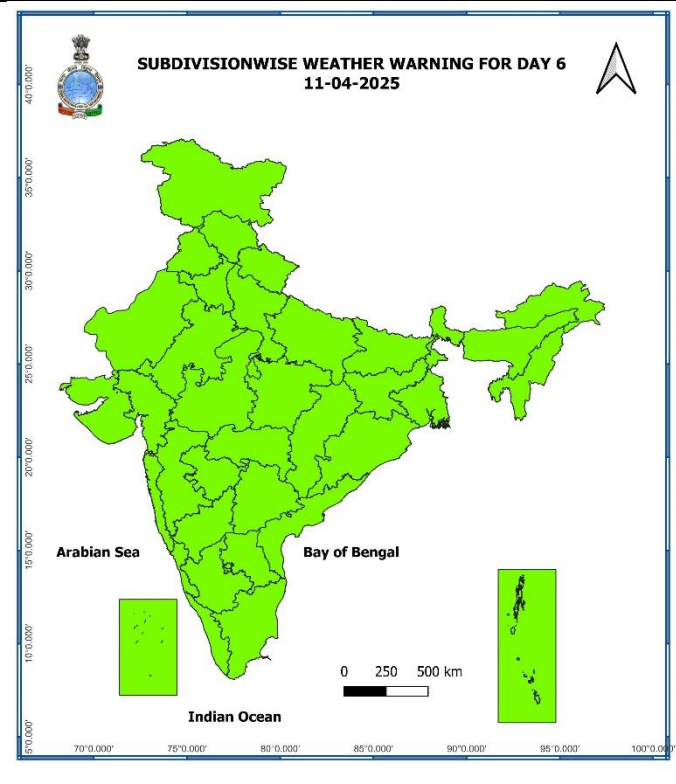
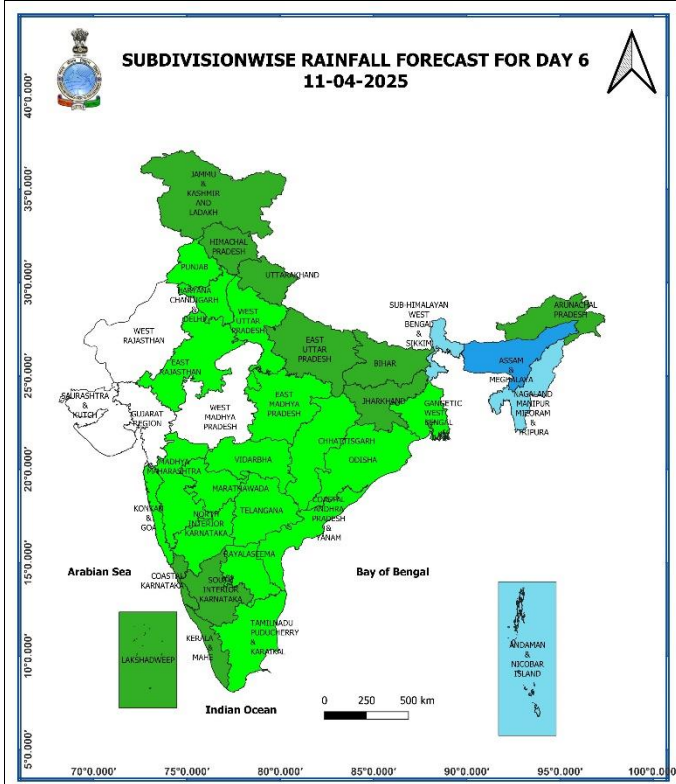
09th April (Day 4):

- ❖ **Heavy rainfall** likely at isolated places over Assam & Meghalaya.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40 - 50 kmph) & Hailstorm** very likely at isolated places over Bihar; **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30 - 40 kmph) & Hailstorm** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; **with lightning & gusty winds (speed reaching 30 - 40 kmph)** at isolated places over Himachal Pradesh, Uttarakhand, Jharkhand, Odisha, Chhattisgarh; **with lightning** at isolated places over East Uttar Pradesh, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heat wave to severe Heat wave conditions** likely in isolated pockets of East Rajasthan; **Heat wave conditions** in isolated pockets of Gujarat state, Punjab, Haryana-Chandigarh-Delhi, West Uttar Pradesh, West Rajasthan, Madhya Pradesh.
- ❖ **Hot and humid weather** very likely in isolated pockets of Coastal areas of Gujarat state, Konkan & Goa.



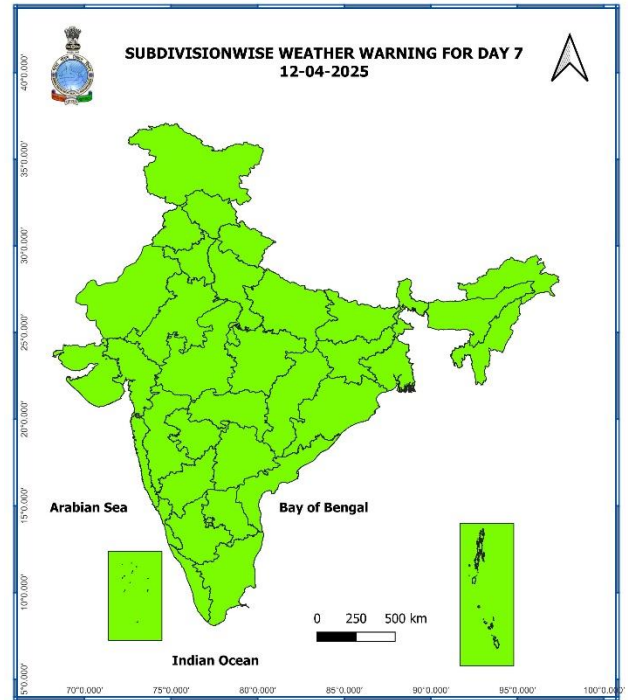
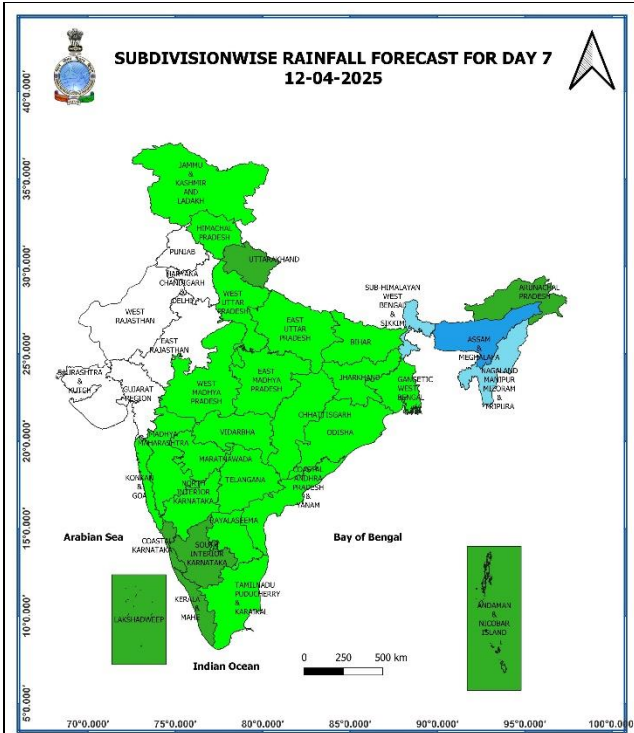
10th April (Day 5):

- ❖ **Heavy rainfall** likely at isolated places over Assam & Meghalaya.
- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40 - 50 kmph)** likely at isolated places over West Uttar Pradesh, Bihar, Jharkhand; **with lightning & gusty winds (speed reaching 30 - 40 kmph)** at isolated places over Himachal Pradesh, Uttarakhand, Rajasthan, Chhattisgarh, Odisha; **with lightning** at isolated places over East Uttar Pradesh, Vidarbha, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.
- ❖ **Heat wave conditions** in isolated pockets of Gujarat state, Punjab, Haryana-Chandigarh, Rajasthan, Madhya Pradesh.
- ❖ **Hot and humid weather** likely in isolated pockets of Coastal areas of Gujarat state.



11th April (Day 6):

❖ **No weather warning.**



12th April (Day 7):

❖ **No weather warning.**

Weather Outlook for subsequent 3 days (During 13th April- 15th April, 2025)

❖ **Isolated to scattered rainfall** likely over East & Northeast India, south peninsular 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

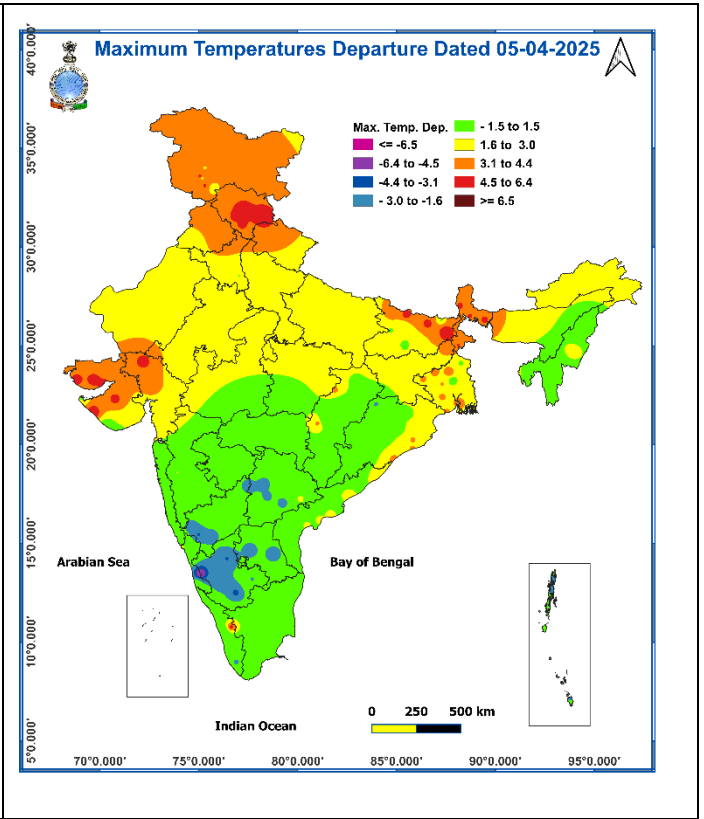
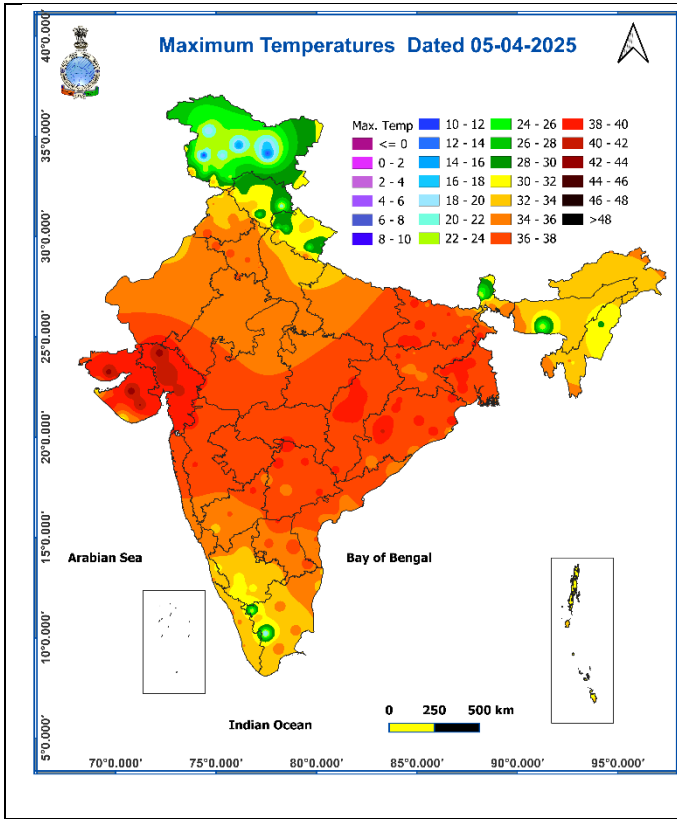
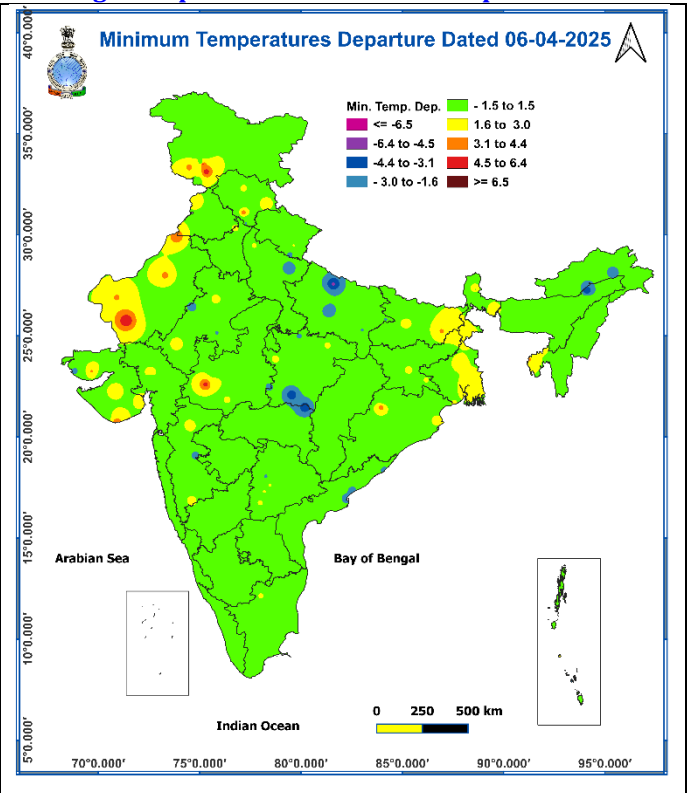
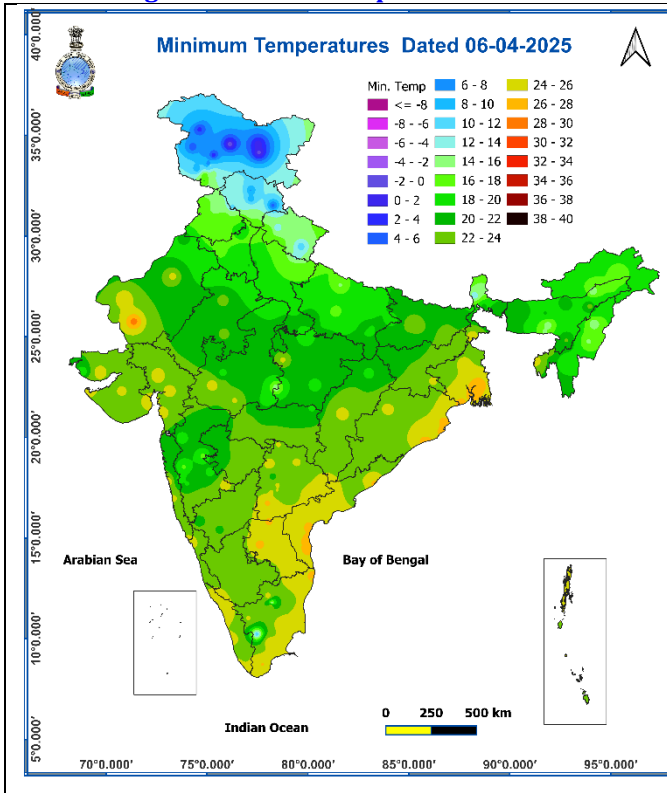


Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures



Impact expected and action suggested due to

- ❖ Heat Wave to severe heat wave conditions very likely to continue to prevail at isolated to few pockets of Saurashtra & Kutch during 06th-10th; West Rajasthan on 07th & 08th; East Rajasthan on 08th & 09th April.
- ❖ Heat wave conditions very likely in isolated pockets of Himachal Pradesh on 06th & 07th; Haryana-Chandigarh during 06th -10th; Delhi on 07th & 08th; Punjab during 07th & 10th; West Uttar Pradesh during 07th -09th; Madhya Pradesh during 08th -10th April.

Red alert Areas

- Very high likelihood of developing heat illness and heat stroke in all ages.
- Extreme care needed for vulnerable people.

Orange alert Areas

- High temperature & increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work.
- High health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.
- Avoid heat exposure– keep cool. Avoid dehydration.
- Drink sufficient water- even if not thirsty.
- Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated.

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 expected and action suggested due to isolated thunderstorm with lightning/gusty winds & Hailstorm over Assam & Meghalaya and Gangetic West Bengal on 06th and Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Bihar on 09th April, 2025.

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.

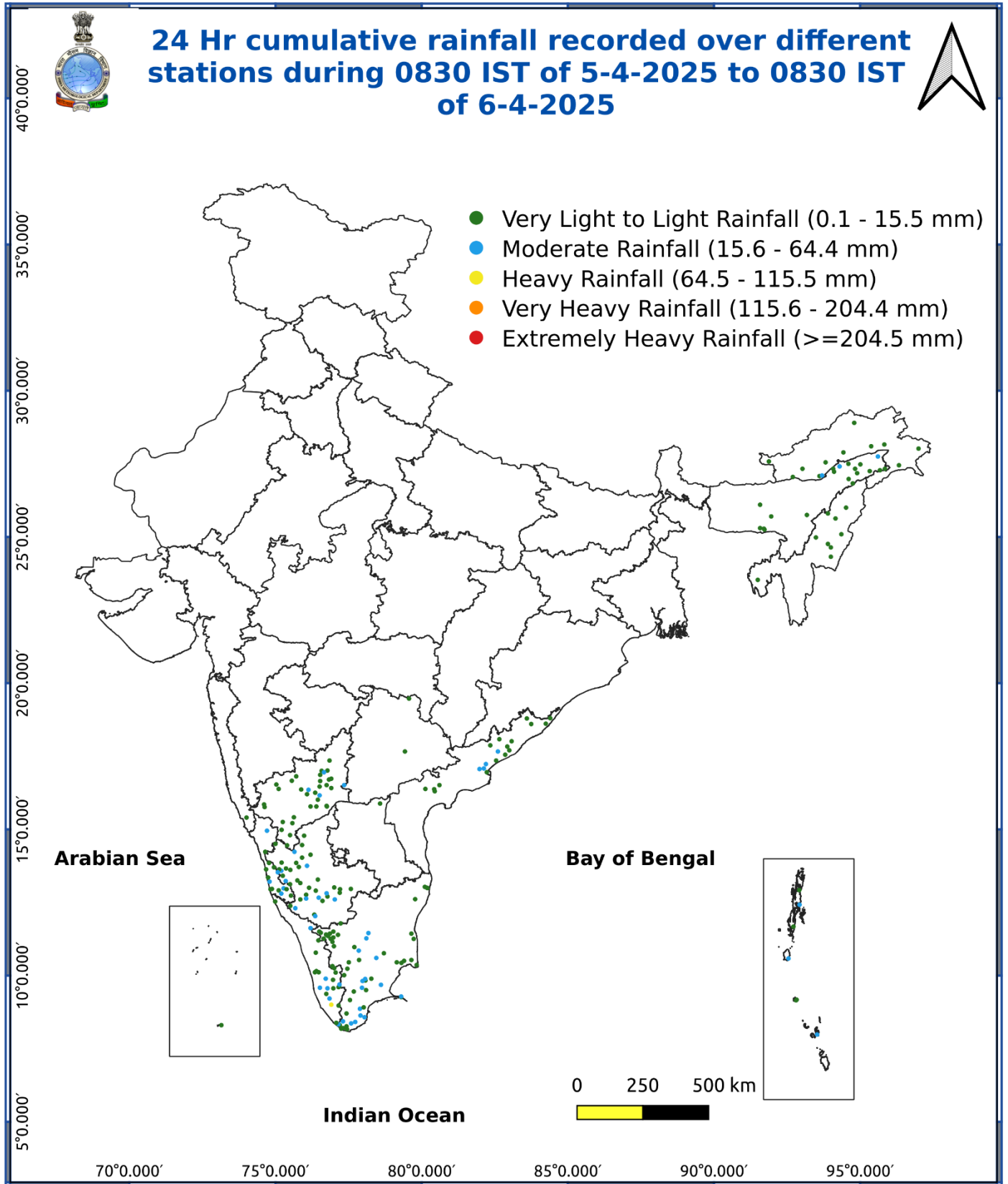
Agromet advisories for likely impact of Hailstorm / Heavy Rainfall / Gusty Winds / Heatwave

- ✓ In **West Assam, Meghalaya, Bihar and Jammu & Kashmir**, immediately harvest the matured crops, fruits and vegetables and shift the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields to avoid the adverse impact of likely hailstorm. Use hail net and hail caps to prevent mechanical damage in orchards due to hailstorms.
- ✓ In **Tamilnadu and Kerala**, drain out excess water from standing crop and vegetable fields.
- ✓ In **Andaman & Nicobar Islands and Assam & Meghalaya**, immediately harvest the matured crops, fruits and vegetables and shift the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields. Also make provision to drain out excess water from standing crop and vegetable fields.
- ✓ In **Himachal Pradesh, Punjab, Haryana, West Uttar Pradesh, Rajasthan, Madhya Pradesh and Gujarat State**, apply light and frequent irrigation to standing crops in the evening to protect them from heat waves.
- ✓ 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.

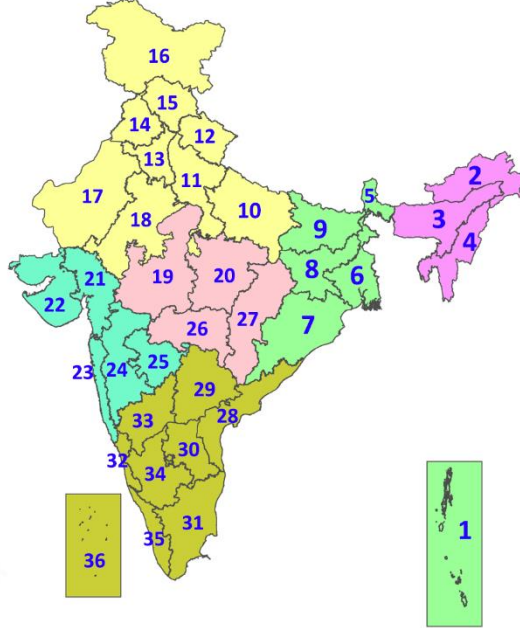
Fig. 5: Accumulated Rainfall (mm) during past 24 hours



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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)

Hot and Humid: When maximum temperatures remains 3°C above normal along with the above normal relative humidity.