

Wednesday, May 14, 2025
Time of Issue: 0800 hours IST
(MORNING)

ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

Significant Weather Features:

Northeast India:

- ❖ Fairly widespread to widespread light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed 30-50 kmph** likely over Northeast India during next 4 days.
- ❖ **Isolated heavy rainfall** over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura during 14th-17th with isolated **very heavy rainfall** over Arunachal Pradesh on 14th; Assam & Meghalaya during 14th-17th May.
- ❖ **Extremely heavy rainfall** at isolated places over Meghalaya on 14th May.

West India:

- ❖ **Isolated** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 30-50 kmph** likely over Konkan & Goa, Madhya Maharashtra, Marathawada during 14th-17th; Gujarat State on 14th May.
- ❖ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Madhya Maharashtra, Marathawada on 14th May.

South peninsular India:

- ❖ **Scattered to fairly** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 30-50 kmph** over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Interior Karnataka, Tamilnadu Puducherry & Karaikal during 14th-17th and over Kerala & Mahe on 14th; with **lightning** over Coastal Karnataka during 14th-17th May.
- ❖ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Telangana during 14th-15th; Coastal Andhra Pradesh & Yanam on 14th May.
- ❖ **Isolated heavy rainfall** likely over Tamilnadu Puducherry & Karaikal during 14th-16th; Coastal Karnataka on 14th; Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka during 14th -15th; Kerala & Mahe on 14th, 18th & 19th May.
- ❖ **Hailstorm** also likely at isolated places over Telangana on 14th & 15th May.

East & Central India:

- ❖ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 30-50 kmph** likely over Madhya Pradesh, Vidarbha, Chhattisgarh, West Bengal & Sikkim, Bihar during 14th-17th; Jharkhand during 15th-17th; Odisha during 14th-15th May.
- ❖ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Vidarbha, Chhattisgarh on 14th; Gangetic West Bengal, Bihar on 15th & 16th May.
- ❖ **Isolated heavy rainfall** likely over Andaman & Nicobar Islands during 14th-16th; Sub-Himalayan West Bengal & Sikkim during 14th-17th May.

Northwest India:

- ✓ **Isolated to Scattered** light to moderate rainfall with **thunderstorm, lightning & gusty winds speed reaching 30-50 kmph** likely over East Rajasthan on 14th; Uttarakhand during 16th-19th May.

Maximum Temperature Forecast:

- ❖ Gradual rise in maximum temperatures by 2-4°C likely over Northwest India during next 3 days and no significant change thereafter for subsequent 4 days.
- ❖ No significant change in maximum temperatures likely over East India during next 2 days and gradual fall by 2-3°C thereafter for subsequent 5 days.
- ❖ Gradual rise in maximum temperatures by 3-5°C over Gujarat State for next 7 days.
- ❖ No significant change in maximum temperatures likely over rest parts of the country.

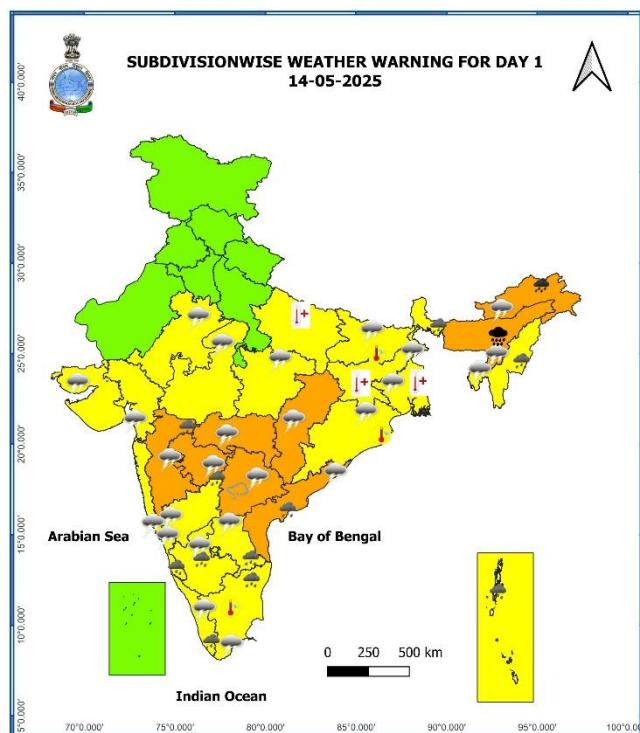
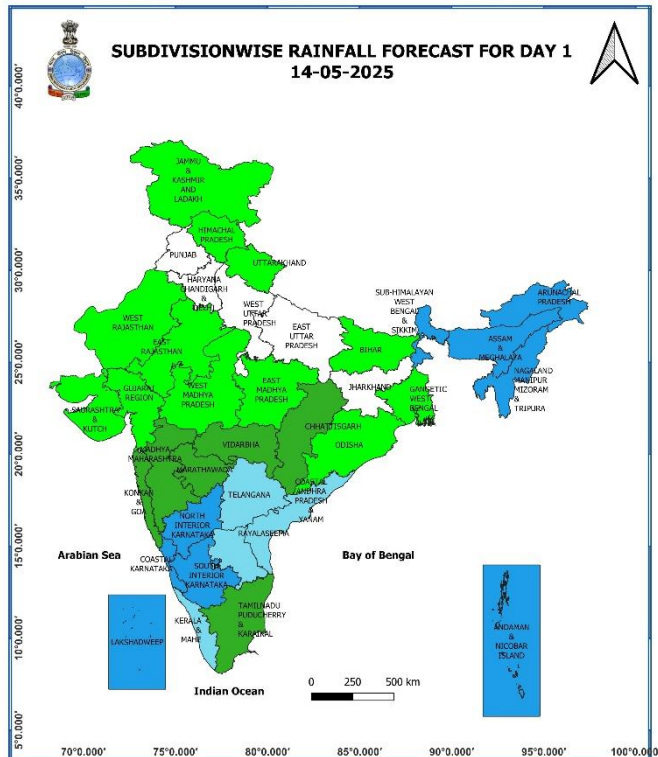
Main Weather Observations:

- ❖ **Rainfall observed** (from 0830 hours IST to 1730 hours IST of yesterday): **at most places over** Assam & Meghalaya; **at many places over** Andaman & Nicobar Islands; **at a few places over** Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Haryana-Chandigarh-Delhi, Lakshadweep; **at isolated places over** Himachal Pradesh, West Madhya Pradesh, West Bengal & Sikkim, East Rajasthan, Jharkhand, Odisha, Chhattisgarh, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal; Dry over rest of the country.
- ❖ **Significant amount of rainfall recorded** (from 0830 hours IST to 1730 hours IST of yesterday) (in cm): **Andaman & Nicobar Islands:** Port Blair & Hut Bay-2 each, Long Island-1; **Interior Karnataka:** Bengaluru-3, Belgaum-1; **Tripura:** Kailashahar-3; **Assam & Meghalaya:** Goalpara & Cherrapunji-4 each, Rangia & Mohanbari-2 each, Guwahati, Golaghat & Lumding-1 each; **Odisha:** Jharsuguda-1; **Madhya Maharashtra:** Pune-2; **Haryana:** Hissar-1; **Chhattisgarh:** Jagdalpur-2; **Lakshadweep:** Agathi-2; **Jharkhand:** Jamshedpur-2.
- ❖ **Minimum Temperature Departures (as on 13-05-2025):** Minimum temperatures were **above normal (1.6°C to 3.0°C)** at a few places over Gujarat state, Kerala & Mahe; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal. These were **below normal (-1.6°C to -3.0°C)** at a few places over Vidarbha, Gangetic West Bengal; at isolated places over Himachal Pradesh, Marathwada, East Rajasthan, Odisha and normal over rest parts of the country (**Fig. 4**). Yesterday, the **lowest minimum temperature of 18.2°C** was reported at **Sikar (East Rajasthan)** over the plains of the country.
- ❖ **Maximum Temperature Departures (as on 13-05-2025):** Maximum Temperatures were **above normal (1.6°C to 3.0°C)** at isolated places over Himachal Pradesh, Punjab, East Uttar Pradesh, Jharkhand, Haryana-Chandigarh-Delhi; **markedly below normal (-5.1°C or less)** at isolated places over Madhya Maharashtra, Marathwada, East Rajasthan; **appreciably below normal (-3.1°C to -5.0°C)** at isolated places over Arunachal Pradesh, Assam & Meghalaya; **below normal (-1.6°C to -3.0°C)** at many places over Gujarat Region, Vidarbha; at isolated places over Saurashtra & Kutch, Madhya Pradesh, North Interior Karnataka, Telangana, Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Rayalaseema and normal over rest parts of the country. (**Fig. 2**). Yesterday, the highest **maximum temperature of 44.2°C** was reported at **Banda (East Uttar Pradesh)** over the country.

Meteorological Analysis (Based on 0530 hours IST)

- ❖ **The Northern Limit of Monsoon continues to pass through 5°N/75°E, 5°N/80°E, 6°N/86°E, 8.5°N/90°E, Hut Bay, 13°N/95°E. and 16°N/98°E.**
- ❖ Conditions are favorable for further advance of southwest Monsoon over some parts of south Arabian Sea, Maldives & Comorin area; some more parts of South Bay of Bengal, entire Andaman & Nicobar Islands, remaining parts of Andaman Sea; and some parts of central Bay of Bengal during next 3-4 days.
- ❖ The **Western Disturbance** as a trough aloft in middle & upper tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 73°E to the north of Lat. 32°N persists.
- ❖ The **trough** from Saurashtra to eastcentral Arabian Sea across North East Arabian Sea between 3.1 & 5.8 km above mean sea level persists.
- ❖ The upper air **cyclonic circulation** over Uttarakhand & neighbourhood at 1.5 km above mean sea level persists.
- ❖ The upper air **cyclonic circulation** over East Uttar Pradesh & adjoining Bihar now lies over east Bihar & adjoining Sub-Himalayan West Bengal at 0.9 km above mean sea level.
- ❖ The **trough** from above cyclonic circulation over East Uttar Pradesh & adjoining Bihar to south Odisha now runs from above cyclonic circulation over east Bihar & adjoining Sub-Himalayan West Bengal to south Chhattisgarh across Jharkhand at 0.9 km above mean sea level.
- ❖ The upper air **cyclonic circulation** over Northeast Assam & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The upper air **cyclonic circulation** over Andaman Sea between 1.5 & 7.6 km above mean sea level tilting southwestwards with height persists.
- ❖ The **trough** from west Vidarbha to north Kerala across Marathwada & Interior Karnataka at 1.5 km above mean sea level persists.

Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 21st May, 2025)



14th May (Day 1)

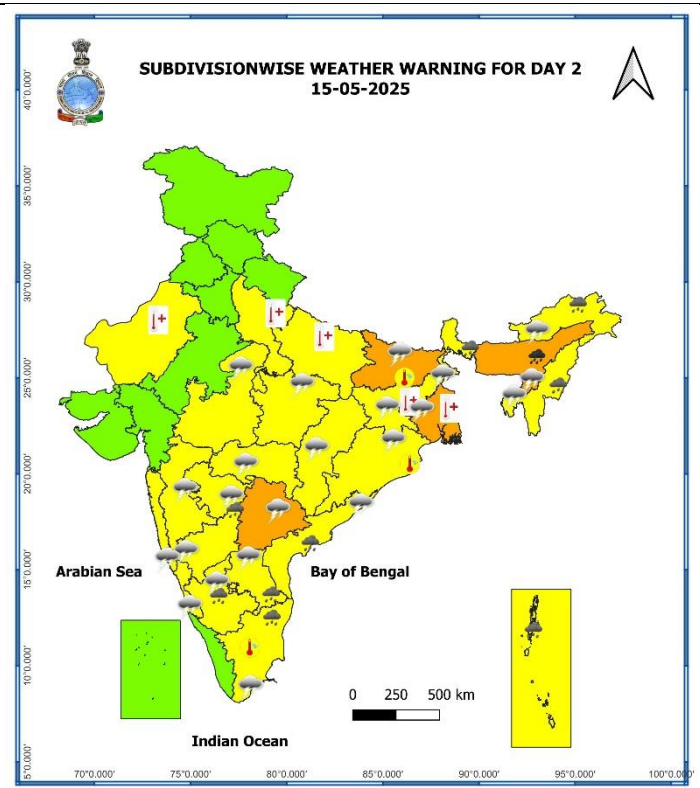
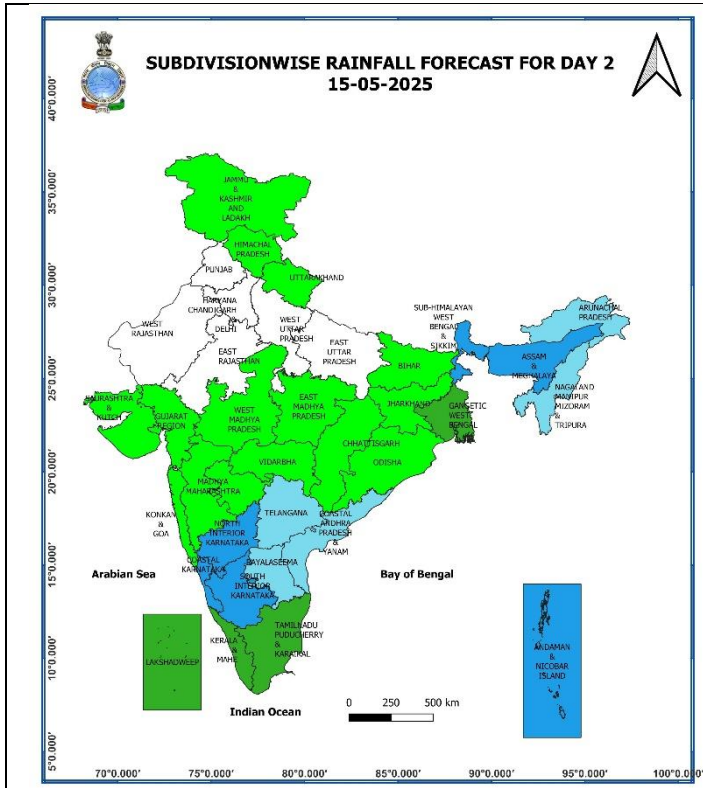
- ❖ **Heavy to Very Heavy Rainfall with isolated Extremely Heavy Rainfall** very likely at isolated places over Assam & Meghalaya.
- ❖ **Heavy to Very Heavy Rainfall** very likely at isolated places over Arunachal Pradesh.
- ❖ **Heavy Rainfall** very likely at isolated places over Madhya Maharashtra, Andaman & Nicobar Islands, Andhra Pradesh, Coastal Karnataka, Interior Karnataka, Kerala and Mahe, Nagaland, Manipur, Mizoram and Tripura, Sub Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry.
- ❖ **Thunderstorm accompanied with Hailstorm** very likely at isolated places over Telangana.
- ❖ **Thundersquall with wind speed reaching(50-60kmph)** very likely at isolated places over Chhattisgarh, Coastal Andhra Pradesh, Maharashtra and Telangana.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** very likely at isolated places over Assam & Meghalaya, East Rajasthan, Interior Karnataka, Kerala and Mahe, Konkan & Goa, Nagaland, Manipur, Mizoram and Tripura, Odisha, Rayalaseema, Tamilnadu & Puducherry and West Madhya Pradesh.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Bihar, East Madhya Pradesh, Gujarat and West Bengal & Sikkim.
- ❖ **Thunderstorm accompanied with Lightning** very likely at isolated places over Arunachal Pradesh and Coastal Karnataka.
- ❖ **Heat Wave conditions** very likely at isolated places over East Uttar Pradesh, Gangetic West Bengal and Jharkhand.
- ❖ **Hot and Humid Weather** very likely at isolated places over Bihar, Odisha and Tamilnadu & Puducherry.
- ❖ **Squally wind with speed 45 kmph to 50 kmph gusting to 55 kmph** very likely to prevail along and off Somalia coast, over gulf of Mannar; adjoining Comorin area, along and off south Sri Lanka coast; adjoining southwest Bay of Bengal. **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** prevailing over Andaman sea; adjoining parts of southeast Bay of Bengal. Fishermen are advised not to venture into these areas.

* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".

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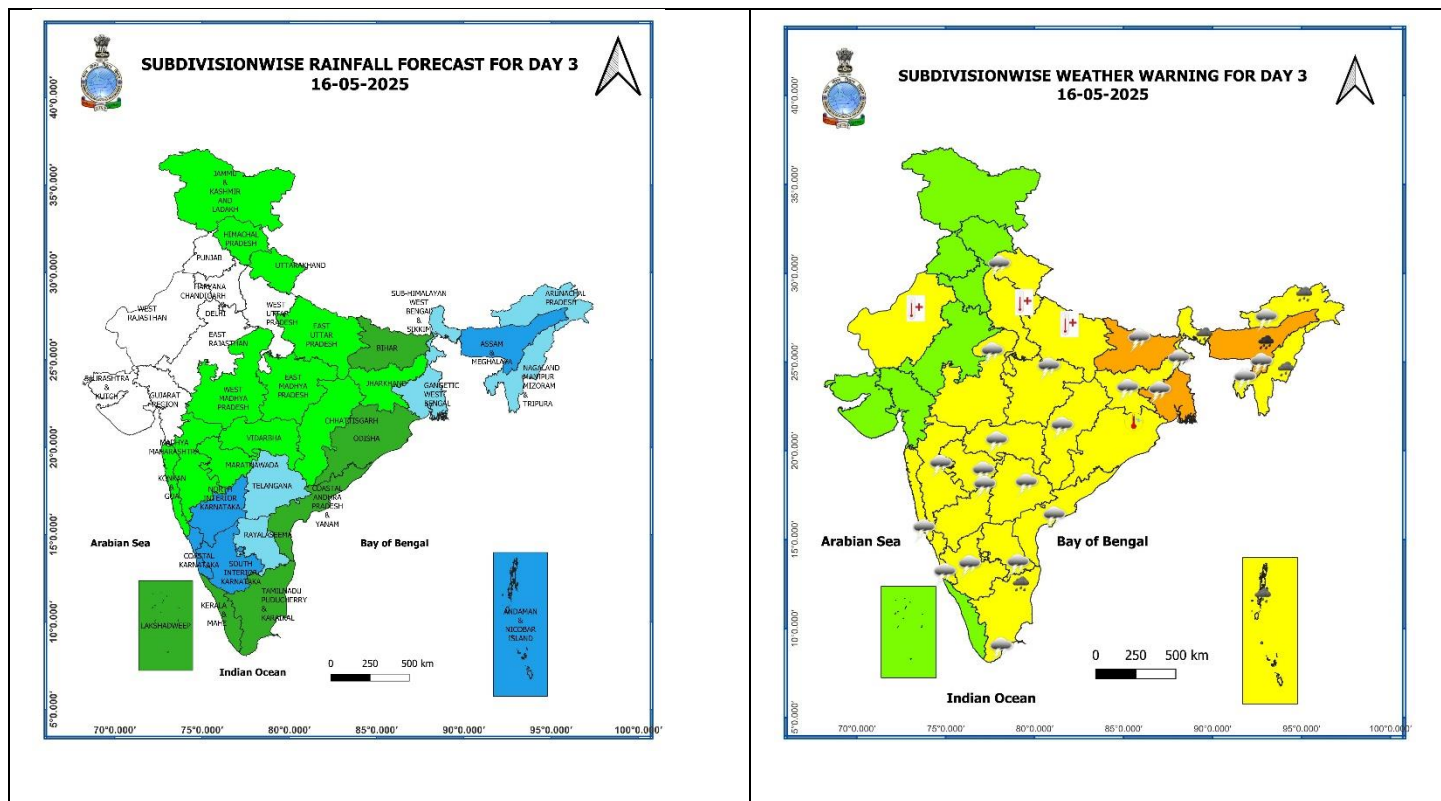
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15th May (Day 2)

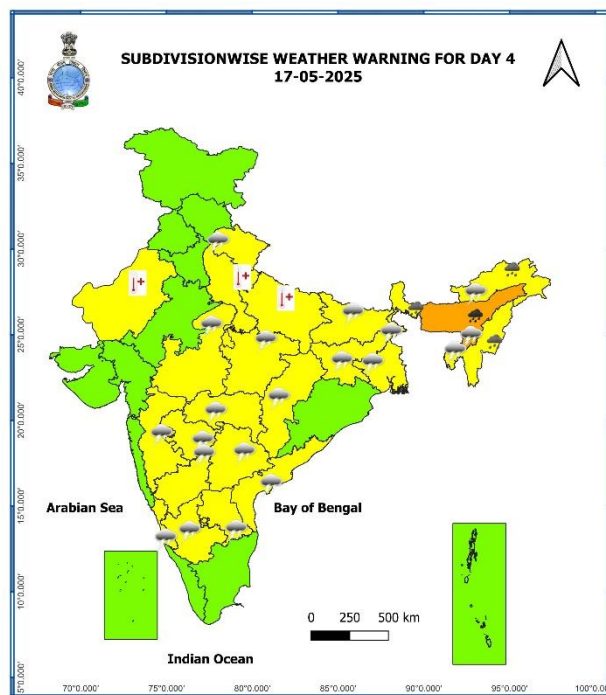
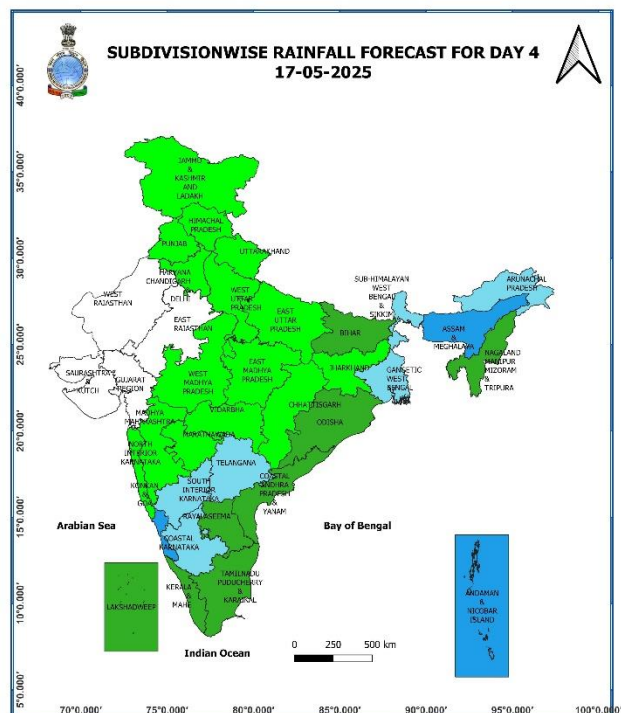
- ❖ **Heavy to Very Heavy Rainfall** very likely at isolated places over Assam & Meghalaya.
- ❖ **Heavy Rainfall** very likely at isolated places over Andaman & Nicobar Islands, Andhra Pradesh, Arunachal Pradesh, Interior Karnataka, Nagaland, Manipur, Mizoram and Tripura, Sub Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry.
- ❖ **Thundersquall with wind speed reaching(50-60kmph)** very likely at isolated places over Bihar, Gangetic West Bengal and Telangana.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** very likely at isolated places over Andhra Pradesh, Assam & Meghalaya, Chhattisgarh, Interior Karnataka, Konkan & Goa, Maharashtra, Odisha and West Madhya Pradesh.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over East Madhya Pradesh, Jharkhand, Nagaland, Manipur, Mizoram and Tripura, Sub Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry.
- ❖ **Thunderstorm accompanied with Lightning** very likely at isolated places over Arunachal Pradesh and Costal Karnataka.
- ❖ **Heat Wave conditions** very likely at isolated places over Gangetic West Bengal, Jharkhand, Uttar Pradesh and West Rajasthan.
- ❖ **Hot and Humid Weather** very likely at isolated places over Bihar, Odisha and Tamilnadu & Puducherry.
- ❖ **Squally wind with speed 45 kmph to 50 kmph gusting to 55 kmph** likely to prevail along and off Somalia coast, over gulf of Mannar; adjoining Comorin area, along and off south Sri Lanka coast; adjoining southwest Bay of Bengal. **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** prevailing over Andaman sea; adjoining parts of southeast bay of Bengal. Fishermen are advised not to venture into these areas.



16th May (Day 3)

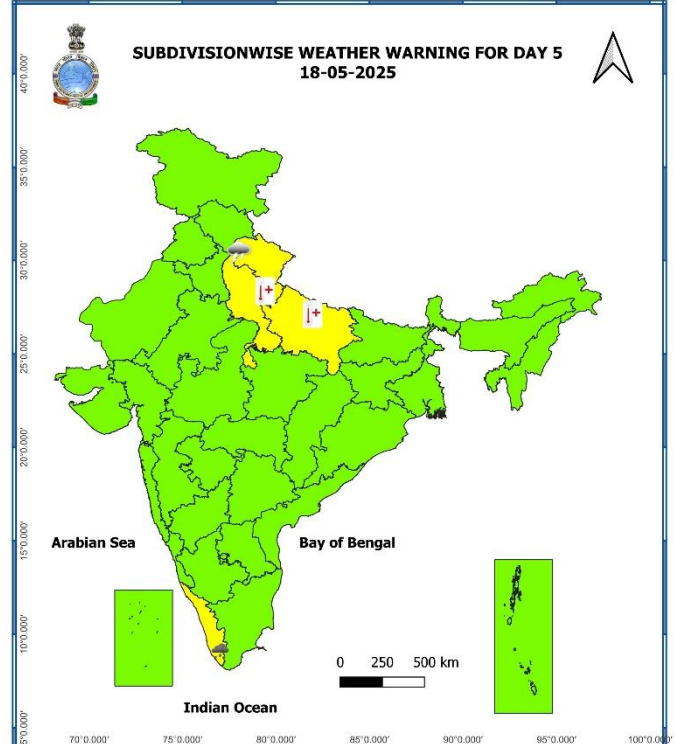
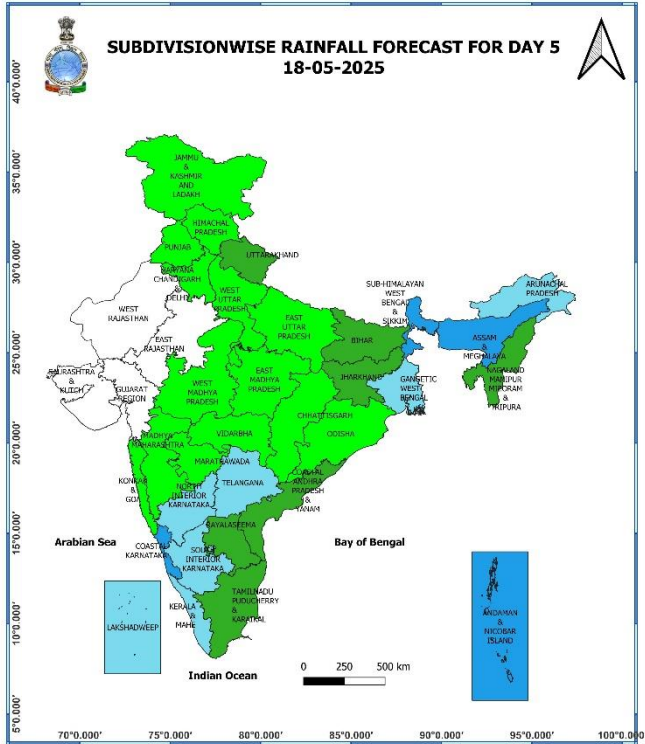
- ❖ **Heavy to Very Heavy Rainfall** likely at isolated places over Assam & Meghalaya.
- ❖ **Heavy Rainfall** likely at isolated places over Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram and Tripura, Sub Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry.
- ❖ **Thundersquall with wind speed reaching(50-60kmph)** likely at isolated places over Bihar and Gangetic West Bengal.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Andhra Pradesh, Chhattisgarh, Jharkhand, Konkan & Goa, Maharashtra and Telangana.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** likely at isolated places over Assam & Meghalaya, Interior Karnataka, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Sub Himalayan West Bengal & Sikkim, Tamilnadu & Puducherry and Uttarakhand.
- ❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Arunachal Pradesh and Coastal Karnataka.
- ❖ **Heat Wave conditions** likely at isolated places over Uttar Pradesh and West Rajasthan.
- ❖ **Hot and Humid Weather** likely at isolated places over Odisha.
- ❖ **Squally wind with speed 45 kmph to 50 kmph gusting to 55 kmph** likely to prevail along and off Somalia coast, along and off Oman coast, over gulf of Mannar; adjoining Comorin area, along and off south Sri Lanka coast; adjoining southwest Bay of Bengal. **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** prevailing over Andaman sea; adjoining parts of southeast bay of Bengal. Fishermen are advised not to venture into these areas.

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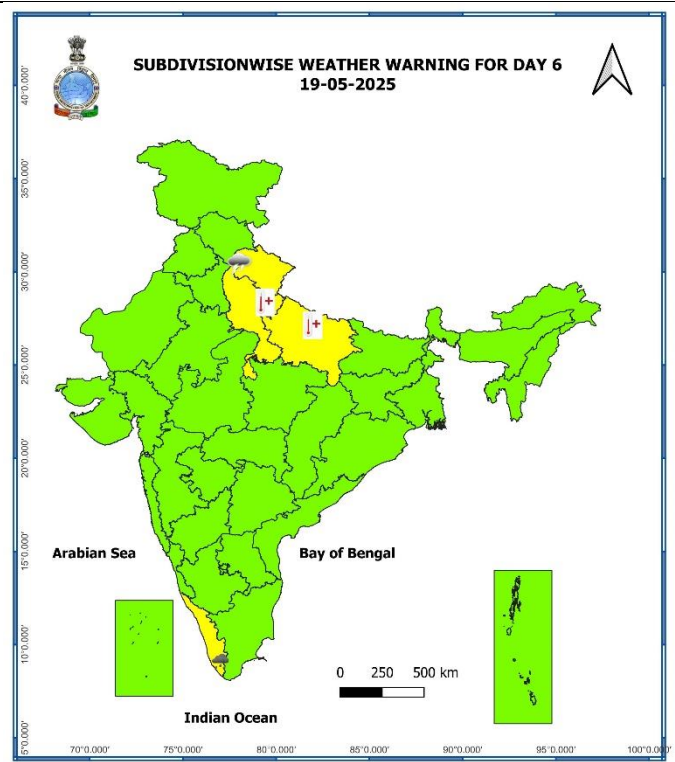
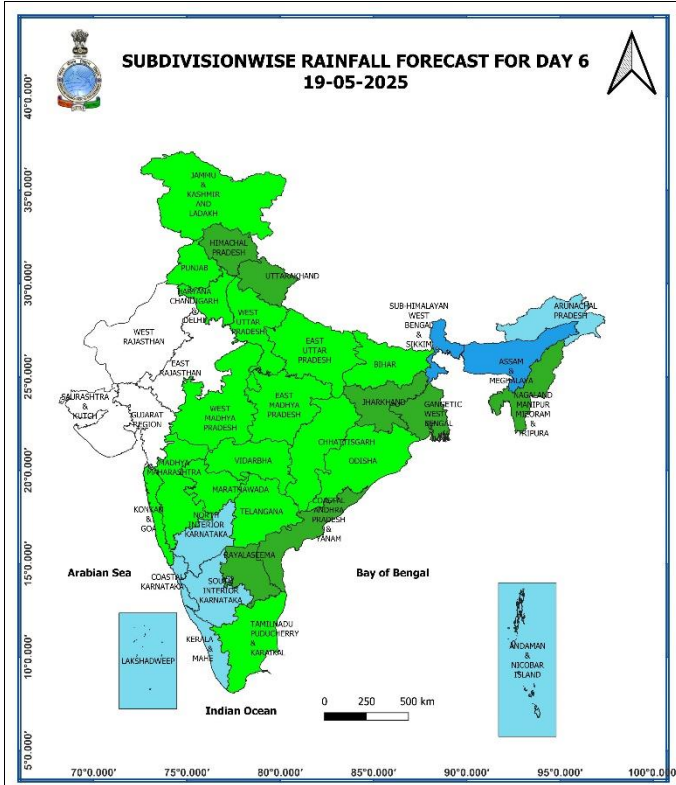
17th May (Day 4)

- ❖ **Heavy to Very Heavy Rainfall** likely at isolated places over Assam & Meghalaya.
- ❖ **Heavy Rainfall** likely at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram and Tripura and Sub Himalayan West Bengal & Sikkim.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Andhra Pradesh, Chhattisgarh, Jharkhand, Madhya Maharashtra, Marathwada and Telangana.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** likely at isolated places over Assam & Meghalaya, Bihar, Interior Karnataka, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Uttarakhand, Vidarbha and West Bengal & Sikkim.
- ❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Arunachal Pradesh and Costal Karnataka.
- ❖ **Heat Wave conditions** likely at isolated places over Uttar Pradesh and West Rajasthan.
- ❖ **Squally wind with speed 45 kmph to 50 kmph gusting to 55 kmph** likely to prevail along and off Somalia coast, over gulf of Mannar; adjoining Comorin area. Fishermen are advised not to venture into these areas.



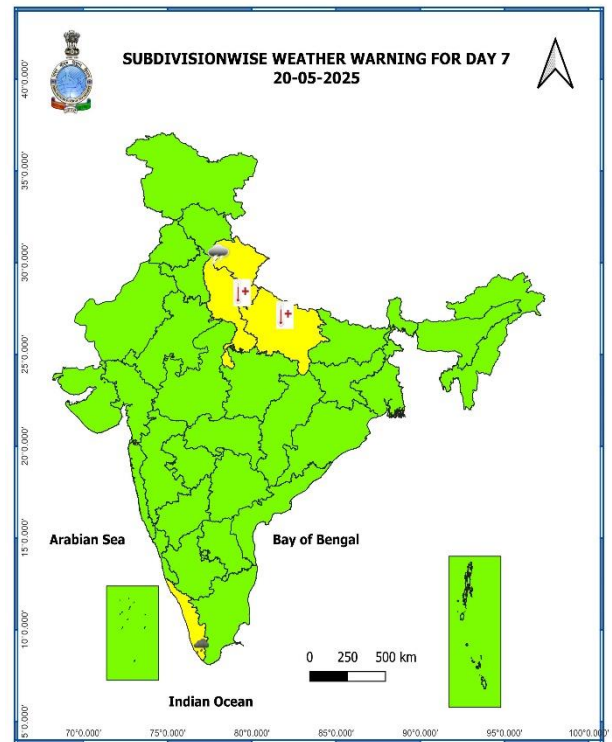
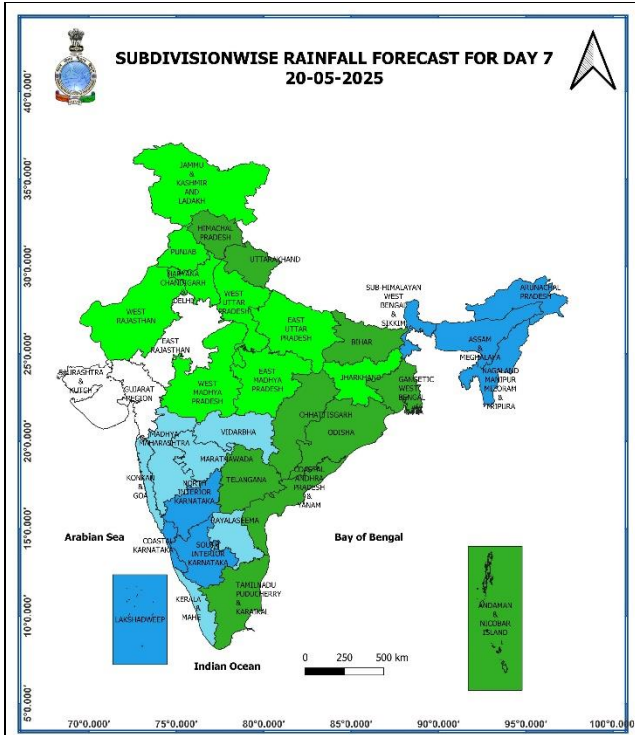
18th May (Day 5)

- ❖ Heavy Rain likely at isolated places over Kerala and Mahe.
- ❖ Thunderstorm accompanied with lightning & gusty winds(40-50kmph) likely at isolated places over Uttarakhand.
- ❖ Heat Wave likely at isolated places over Uttar Pradesh.



19th May (Day 6)

- ❖ **Heavy Rain** likely at isolated places over Kerala and Mahe.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Uttarakhand.
- ❖ **Heat Wave** likely at isolated places over Uttar Pradesh.



20th May (Day 7)

- ❖ Heavy Rain likely at isolated places over Kerala and Mahe.
- ❖ Thunderstorm accompanied with lightning & gusty winds(40-50kmph) likely at isolated places over Uttarakhand.
- ❖ Heat Wave likely at isolated places over Uttar Pradesh.

Weather Outlook for subsequent 3 days (During 21st May- 23rd May, 2025)

- ❖ Fairly widespread to widespread rainfall activity likely over northeast India.
- ❖ Scattered to fairly widespread rainfall activity likely over Chhattisgarh, Maharashtra, East and south peninsular India.
- ❖ Isolated to scattered rainfall likely over Jammu-Kashmir-Ladakh, Uttarakhand, Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi, Rajasthan, Uttar Pradesh.

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

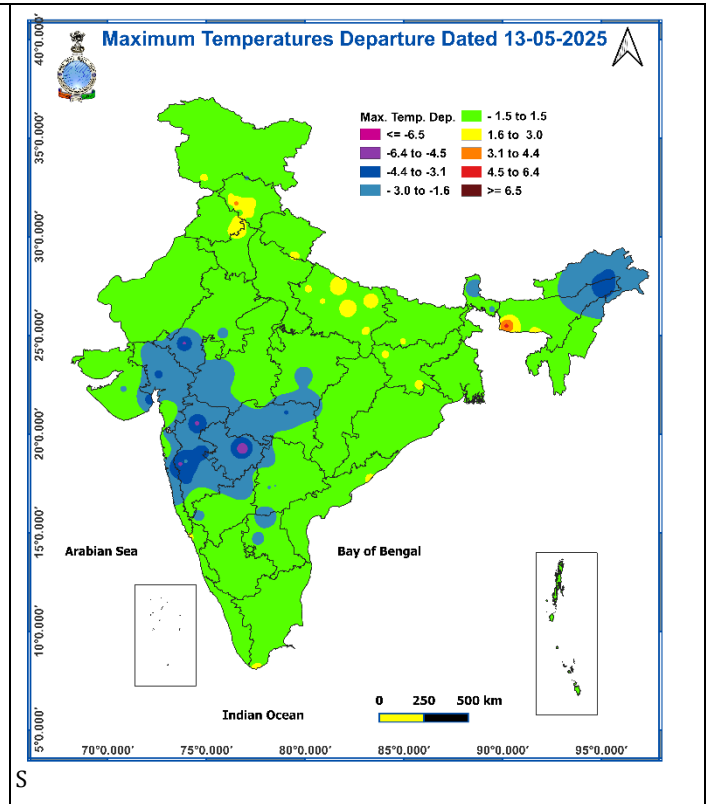
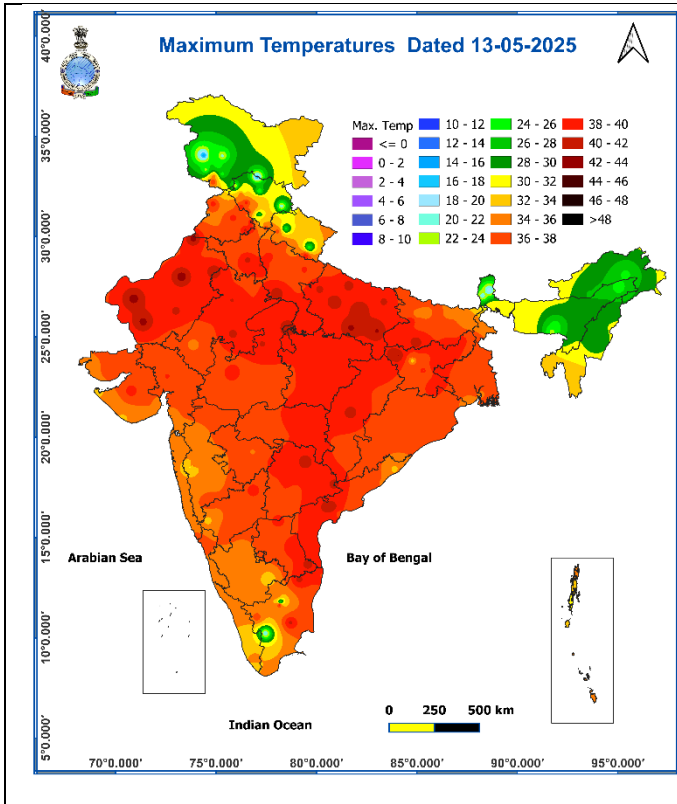
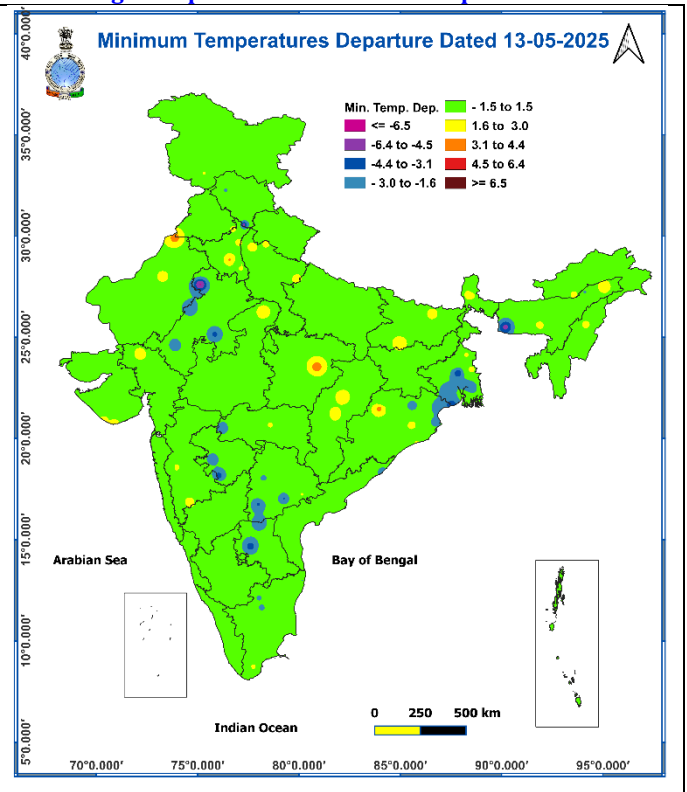
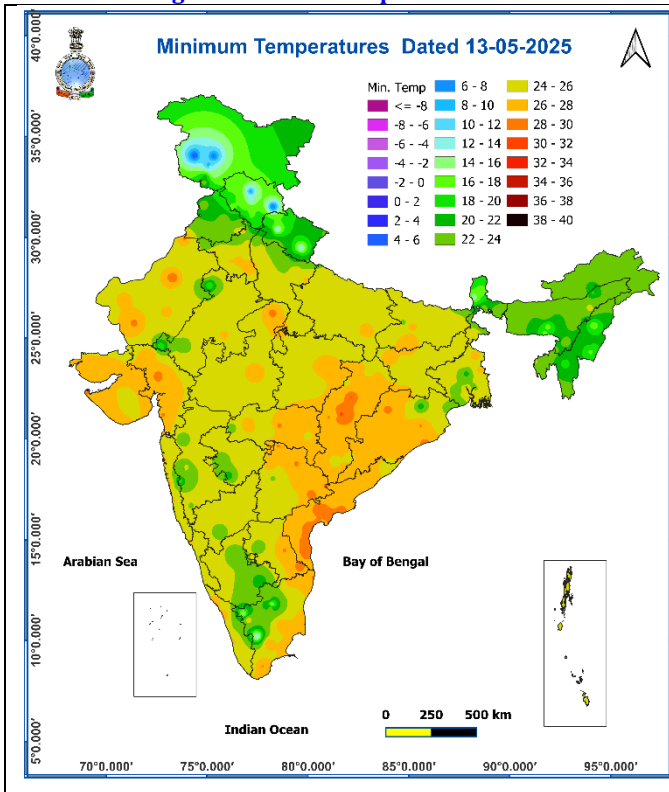


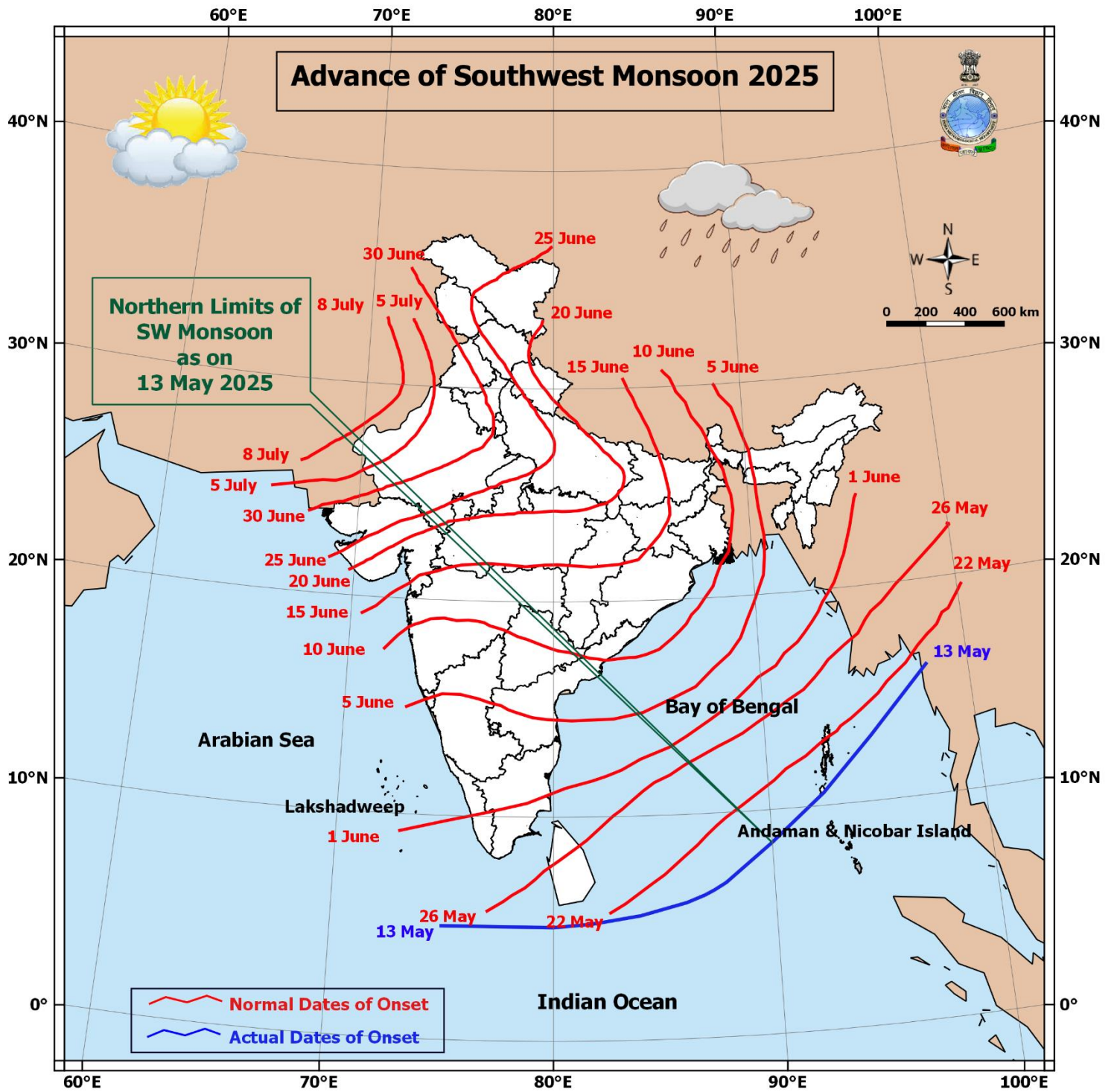
Fig. 3: Minimum Temperatures

Fig. 4: Departure of Minimum Temperatures



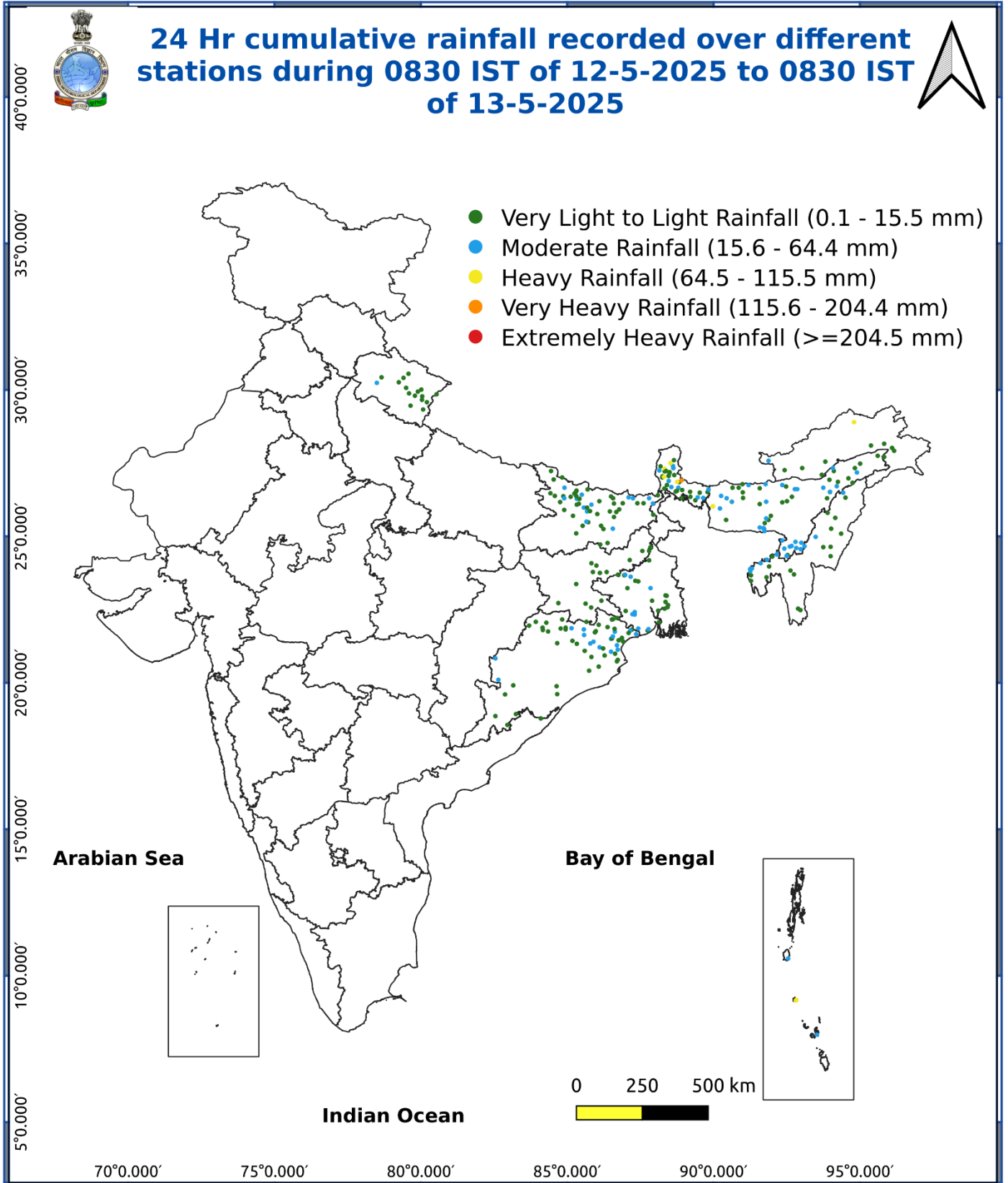
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Fig. 5: Advance of Southwest Monsoon 2025



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Fig. 6: Accumulated Rainfall (mm) during past 24 hours



Impact & Action Suggested due to very heavy rainfall over

- ❖ **Very heavy rainfall** over Arunachal Pradesh on 14th; Assam & Meghalaya during 14th-17th May.
- ❖ **Extremely heavy rainfall** at isolated places over Meghalaya on 14th May.

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 kutchha 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.

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

- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Vidarbha, Chhattisgarh on 14th; Gangetic West Bengal, Bihar on 15th & 16th May. Telangana during 14th-15th;
- ✓ **Isolated hailstorm** at isolated places over Telangana on 14th & 15th May.

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 kutchha 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 in isolated pockets of Gangetic West Bengal, Jharkhand on 14th & 15th; East Uttar Pradesh during 14th-19th; West Uttar Pradesh during 15th-19th; West Rajasthan during 15th-17th may.

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.

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

- In North Eastern States, Andaman & Nicobar Islands, Sub Himalayan West Bengal & Sikkim, Madhya Maharashtra, Tamil Nadu, Kerala, Karnataka and Andhra Pradesh, make provision to drain out excess water from standing crop and vegetable fields.
- In **Telangana**, use hail nets and hail caps to prevent mechanical damage in vegetables and orchards due to the possibility of hailstorms.
- 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.
- To protect standing crops, vegetables and orchards from the adverse effects of heat waves and high temperatures, apply light and frequent irrigation in the evening.

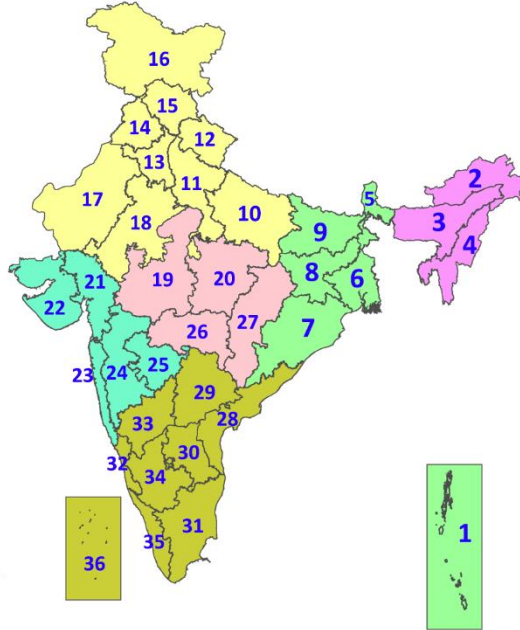
Livestock / Poultry / Fishery

- 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.
- Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.

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.

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)