



#### National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

Monday, May 12, 2025 Time of Issue: 1945 hours IST (NIGHT)

#### ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

#### **Significant Weather Features:**

#### Advancement of Southwest Monsoon:

- The fairly widespread rainfall with isolated heavy rainfall recorded over the Nicobar Islands during past 24 hours. Rainfall activity over Nicobar Islands is very likely to increase becoming widespread rainfall with isolated heavy to very heavy rainfall during next 24 hours. With expected continuance of rainfall activity over these areas, conditions are favourable for advance of southwest monsoon into some parts of Andaman Sea, South Bay of Bengal and Andaman & Nicobar Islands by tomorrow, the 13th May, 2025.
- Conditions are also becoming favourable for further advance over some parts of south Arabian Sea, Maldives & Comorin area; some more parts of South Bay of Bengal, entire Andaman & Nicobar Islands and Andaman Sea; and some parts of central Bay of Bengal during subsequent 4-5 days.

#### **Forecast and Warnings**

#### Northwest India:

✓ **Isolated to Scattered** light to moderate rainfall with **thunderstorm, lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 12<sup>th</sup>; Punjab, Haryana Chandigarh & Delhi, East Rajasthan on 12<sup>th</sup> & 13<sup>th</sup>; Himachal Pradesh during 16<sup>th</sup>-17<sup>th</sup>; **with winds speed reaching 30-40 kmph gusting to 50 kmph** over Himachal Pradesh on 12<sup>th</sup>; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 14<sup>th</sup> May.

#### West India:

- Isolated light/moderate rainfall accompanied with thunderstorm, lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph likely over Gujarat State on 12th; Konkan & Goa on 13th & 14th; Madhya Maharashtra, Marathawada during 14th-16th; with winds speed reaching 30-40 kmph gusting to 50 kmph over Konkan & Goa on 12th; Gujarat State on 13th May.
- \* Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph likely over Madhya Maharashtra, Marathawada on 12th & 13th May.

#### East & Central India:

- \$\footnote{\text{\$\colored}\$ Isolated to Scattered light/moderate rainfall accompanied with thunderstorm, lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph likely over Chhattisgarh on 12th & 13th; Madhya Pradesh during 12th-16th; Sub-Himalayan West Bengal & Sikkim during 13th-15th; Gangetic West Bengal during 12th-14th; Odisha on 12th; Jharkhand on 16th; with winds speed reaching 30-40 kmph gusting to 50 kmph over Vidarbha on 12th & 13th; Andaman & Nicobar Islands during 12th-15th; Sub-Himalayan West Bengal & Sikkim on 16th; Bihar during 12th-16th; Jharkhand on 12th & 15th; Odisha on 13th & 14th May.
- Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph likely over Sub-Himalayan West Bengal & Sikkim on 12th; Gangetic West Bengal on 15th & 16th May.
- Isolated heavy rainfall likely over Nicobar Islands, Sub-Himalayan West Bengal & Sikkim during 12th-16th; with isolated very heavy rainfall on Nicobar Islands on 12th & 13th and Sub-Himalayan West Bengal & Sikkim on 12th May.
- Isolated hailstorm at isolated places over East Madhya Pradesh on 12th May.

#### South peninsular India:

- Scattered to fairly light/moderate rainfall accompanied with thunderstorm, lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph over Kerala & Mahe, Interior Karnataka during 12th-14th; Tamil Nadu Puducherry & Karaikal, Rayalaseema during 14th-16th; Telangana on 13th & 16th; Coastal Andhra Pradesh & Yanam on 16th; with winds speed reaching 30-40 kmph gusting to 50 kmph likely over Tamilnadu Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema on 12th & 13th; Telangana on 12th; Interior Karnataka on 15th & 16th; with lightning over Lakshadweep on 12th & 13th and over Coastal Karnataka during 12th-16th May.
- Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph likely over Coastal Andhra Pradesh & Yanam and Telangana on 14th & 15th May.
- **Solated heavy rainfall** likely over Tamilnadu Puducherry & Karaikal on 12<sup>th</sup> & during 14<sup>th</sup>-16<sup>th</sup>; Kerala & Mahe during 12<sup>th</sup>-14<sup>th</sup>; Coastal Andhra Pradesh & Yanam on 14<sup>th</sup> & 15<sup>th</sup>; Rayalaseema during 13<sup>th</sup>-16<sup>th</sup>; Coastal Karnataka on 14<sup>th</sup>; North Interior Karnataka on 13<sup>th</sup> & 14<sup>th</sup> and South Interior Karnataka during 12<sup>th</sup>-16<sup>th</sup> May.

#### Northeast India:

- Fairly widespread to widespread light/moderate rainfall accompanied with thunderstorm, lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph likely over Northeast India during next 5 days with gusty winds speed reaching 50-60 kmph gusting to 70 kmph likely over Assam & Meghalaya on 13th May.
- **Soluted heavy rainfall** over Arunachal Pradesh, Assam & Meghalaya during 12th-16th and over Nagaland, Manipur, Mizoram & Tripura during 12th-15th with isolated **very heavy rainfall** over Arunachal Pradesh, Assam & Meghalaya on 13th-14th and over Tripura on 12th & 13th May.
- **Extremely heavy rainfall** at isolated places over Meghalaya on 13th May.

#### **Maximum Temperature Forecast:**

- Gradual rise in maximum temperatures by 3-5°C likely over Northwest India and Gujarat State during next 7 days.
- Gradual rise in maximum temperatures by 2-3°C likely over Central India during next 7 days.
- Gradual rise in maximum temperatures by 2-3°C likely over Jharkhand and north interior Odisha during next 3 days.
- No significant change in maximum temperatures likely over interior Maharashtra during next 2 days and gradual rise by 2-4°C thereafter for subsequent 5 days.
- $\ensuremath{ \stackrel{\bullet}{\bullet} }$  No significant change in maximum temperatures likely over rest parts of the country.

## Heat wave and Hot & Humid weather warning:

- Heat wave conditions very likely in isolated pockets of Gangetic West Bengal during 12th-15th; Sub-Himalayan West Bengal on 14th & 15th; Jharkhand during 13th-15th; West Uttar Pradesh & West Rajasthan during 15th-18th; East Uttar Pradesh during 14th-18th May.
- Hot & humid weather is likely to prevail over Sub-Himalayan West Bengal on 12th & 13th; Jharkhand on 12th and Tamil Nadu Puducherry & Karaikal on 12th & 13th; Odisha during 12th-15th; Bihar during 12th-16th May.
- Warm Night conditions likely to prevail at isolated locations over East Uttar Pradesh on 12th & 13th May.





#### **Main Weather Observations:**

- ❖ Rainfall observed (from 0830 hours IST to 1730 hours IST of today): at many places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; at a few places over Andaman & Nicobar Islands, Madhya Maharashtra; at isolated places over Kerala & Mahe, South Interior Karnataka, Lakshadweep, Telangana, Odisha, Gangetic West Bengal, Jharkhand, Arunachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand.
- ❖ Significant amount of rainfall recorded (from 0830 hours IST to 1730 hours IST of today) (in cm):Sub-Himalayan West Bengal & Sikkim: Gangtok 9; Andaman & Nicobar Islands: Car Nicobar (IAF) 8; Car Nicobar 7; Nancowry, Hut Bay 2 each; Nagaland, Manipur, Mizoram & Tripura: Agartala 3; South Interior Karnataka: Chitra Durga 3; Madhya Maharashtra: Kolhapur, Mahabaleshwar, Nashik 2 each.
- **\diamega Heat wave conditions** prevailed in isolated pockets of Gangetic West Bengal.
- **Heavy rainfall** recorded at isolated places over Andaman & Nicobar Islands.
- ❖ Minimum Temperature Departures (as on 12-05-2025): Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Himachal Pradesh, East Uttar Pradesh, Bihar, Gangetic West Bengal and Odisha; above normal (1.6°C to 3.0°C) at few places over Jharkhand; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, West Uttar Pradesh, Assam & Meghalaya, Konkan & Goa, West Rajasthan. These are appreciably below normal (-5.0°C to -3.1°C) at a few places over Lakshadweep; at a few places over West Madhya Pradesh; below normal (-1.6°C to -3.0°C) at a few places over East Rajasthan and Vidarbha; at isolated places Delhi, Tamil Nadu, Puducherry & Karaikal and normal over rest parts of the country (Fig. 4). Today, the lowest minimum temperature of 20.0°C is reported at Rajgarh (West Madhya Pradesh) over the plains of the country.
- ❖ Maximum Temperature Departures (as on 12-05-2025): Maximum Temperatures are above normal (1.6°C to 3.0°C) at many places over Tamil Nadu, Puducherry & Karaikal, Gangetic West Bengal; at a few places over Odisha, Coastal Andhra Pradesh & Yanam, Coastal Karnataka; at isolated places over Kerala & Mahe, West Uttar Pradesh. These were markedly below normal (-5.1 or below) at a few places over Nagaland, Manipur, Mizoram & Tripura; appreciably below normal (-3.1°C to -5.0°C) at a few places over Gujarat state, West Madhya Pradesh; at isolated places over Vidarbha, Madhya Maharashtra, Marathwada; below normal (-1.6°C to -3.0°C) at many places over Sub-Himalayan West Bengal & Sikkim; at few places over East Madhya Pradesh; at isolated places over Telangana, Interior Karnataka, Rayalaseema, Punjab, Himachal Pradesh, East Rajasthan and normal over rest parts of the country. (Fig. 2). Today, the highest maximum temperature of 43.4°C is reported at Banda (East Uttar Pradesh) over the country.





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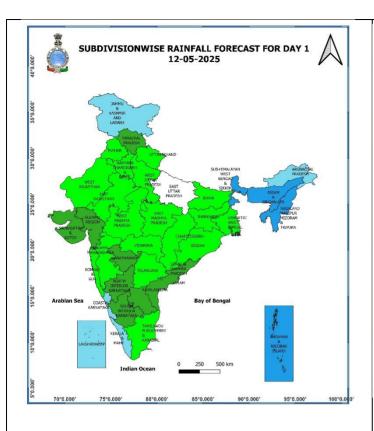
# Meteorological Analysis (Based on 1730 hours IST)

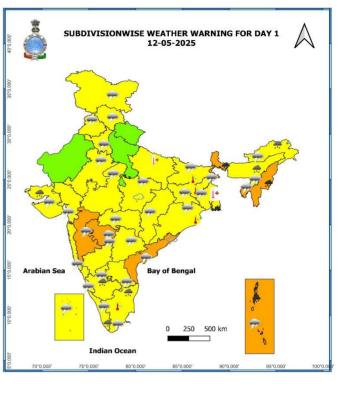
- ❖ The fairly widespread rainfall with isolated heavy rainfall recorded over the Nicobar Islands during past 24 hours. Rainfall activity over Nicobar Islands is very likely to increase becoming widespread rainfall with isolated heavy to very heavy rainfall during next 24 hours. With expected continuance of rainfall activity over these areas, conditions are favourable for advance of southwest monsoon into some parts of Andaman Sea, South Bay of Bengal and Andaman & Nicobar Islands by tomorrow, the 13th May, 2025.
- Conditions are also becoming favorable for further advance over some parts of south Arabian Sea, Maldives & Comorin area; some more parts of South Bay of Bengal, entire Andaman & Nicobar Islands and Andaman Sea; and some parts of central Bay of Bengal during subsequent 4-5 days.
- ❖ The **Western Disturbance** as a cyclonic circulation over Punjab & neighbourhood at 3.1 km above mean sea level with a trough aloft 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. 30°N.
- ❖ The **trough** from Saurashtra to eastcentral Arabian Sea across North East Arabian Sea at 3.1 km above mean sea level persists.
- ❖ The upper air **cyclonic circulation** over Northeast Assam & neighbourhood extending upto 4.5 km above mean sea level persists.
- ❖ The **cyclonic circulation** over Northwest Uttar Pradesh & neighbourhood extending upto 1.5 km above mean sea level persists.
- ❖ The **cyclonic circulation** over central Pakistan & adjoining west Rajasthan at 1.5 km above mean sea level persists.
- ❖ The **trough** from Central parts of Bihar to south Jharkhand extending upto 1.5 km above mean sea level persists.



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Weather Forecast & Warnings for next 7 days (Upto 0830 hours IST of 19th May, 2025)



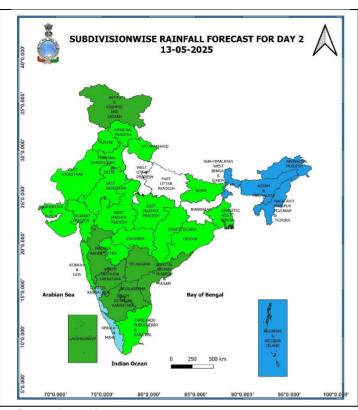


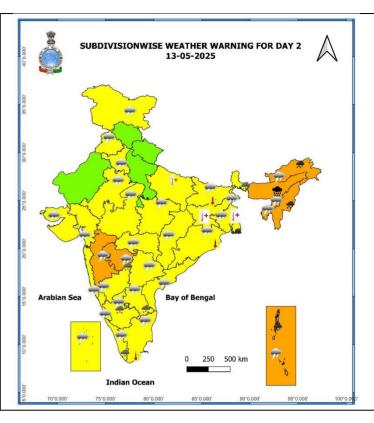
## 12th May (Day 1)

- \* Heavy to Very Heavy Rainfall very likely at isolated places over Nicobar Islands, Tripura and Sub-Himalayan West Bengal & Sikkim.
- Heavy Rainfall very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Kerala & Mahe. Saurashtra & Kutch, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm accompanied with Lightning very likely at isolated places over Arunachal Pradesh, Costal Karnataka and Lakshadweep.
- Thunderstorm accompanied with lightning & gusty winds(30-40kmph) very likely at isolated places over Andaman & Nicobar Islands, Andhra Pradesh, Bihar, Himachal Pradesh, Jharkhand, Konkan & Goa, Tamilnadu & Puducherry, Telangana and Vidarbha.
- Thunderstorm accompanied with lightning & gusty winds(40-50kmph) very likely at isolated places over Assam & Meghalaya, Chhattisgarh, East Rajasthan, Gangetic West Bengal, Gujarat, Haryana, Chandigarh & Delhi, Interior Karnataka, Jammu and Kashmir and Ladakh, Kerala and Mahe, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Odisha and Punjab.
- Thundersquall with wind speed reaching(50-60kmph) very likely at isolated places over Madhya Maharashtra, Marathwada and Sub Himalayan West Bengal & Sikkim.
- Thunderstorm accompanied with Hailstorm very likely at isolated places over Coastal Andhra Pradesh & Yanam and East Madhya Pradesh.
- **\* Heat Wave condition** very likely at isolated places over Gangetic West Bengal.
- \* Hot and Humid weather very likely at isolated places over Bihar, Jharkhand, Odisha and Tamil Nadu, Puducherry & Karaikal.
- 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, 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 south Andaman sea & adjoining southeast Bay of Bengal.



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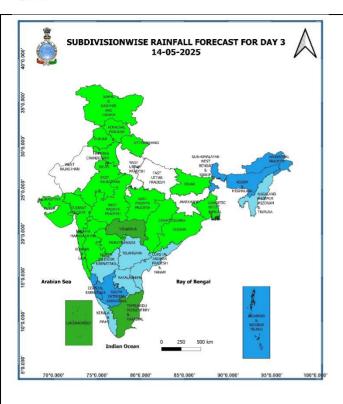


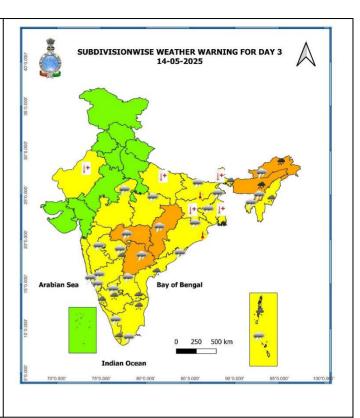
# 13th May (Day 2)

- \*Heavy to Very Heavy Rainfall with isolated Extremely Heavy Rainfall very likely at isolated places over Meghalaya.
- Heavy to Very Heavy Rainfall very likely at isolated places over Nicobar Islands, Arunachal Pradesh, Assam and Tripura.
- \* Heavy Rainfall very likely at isolated places over Interior Karnataka, Kerala & Mahe, Rayalaseema and Sub-Himalayan West Bengal & Sikkim.
- \* Thunderstorm accompanied with Lightning very likely at isolated places over Arunachal Pradesh, Costal Karnataka and Lakshadweep.
- Thunderstorm accompanied with lightning & gusty winds(30-40kmph) very likely at isolated places over Andaman & Nicobar Islands, Andhra Pradesh, Bihar, Gujarat, Jammu and Kashmir and Ladakh, Odisha, Tamilnadu & Puducherry and Vidarbha.
- \* Thunderstorm accompanied with lightning & gusty winds(40-50kmph) very likely at isolated places over Chhattisgarh, East Rajasthan, Haryana, Chandigarh & Delhi, Interior Karnataka, Kerala and Mahe, Konkan & Goa, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Punjab, Telangana and West Bengal & Sikkim.
- \* Thundersquall with wind speed reaching(50-60kmph) very likely at isolated places over Assam & Meghalaya, Madhya Maharashtra and Marathwada.
- ❖ Heat Wave condition very likely at isolated places over Bihar and West Bengal & Sikkim.
- \* Hot and Humid weather very likely at isolated places over Jharkhand, Kerala and Mahe and Tamilnadu & Puducherry.
- \* Warm Night very likely at isolated places over East Uttar Pradesh.
  - ♦ 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, 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 south Andaman sea & adjoining southeast Bay of Bengal.



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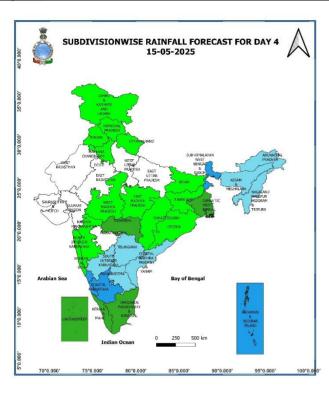
## 14th May (Day 3)

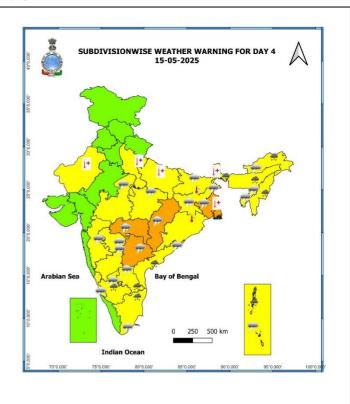
- Heavy to Very Heavy Rainfall likely at isolated places over Arunachal Pradesh and Assam & Meghalaya.
- Heavy Rainfall likely at isolated places over Andaman & Nicobar Islands, Andhra Pradesh, Costal Karnataka, Interior Karnataka, Kerala and Mahe, Nagaland, Manipur, Mizoram and Tripura, Sub Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry.
- \* Thunderstorm accompanied with Lightning very likely at isolated places over Arunachal Pradesh and Costal Karnataka.
- Thunderstorm accompanied with lightning & gusty winds(30-40kmph) very likely at isolated places over Andaman & Nicobar Islands, Bihar and Odisha.
- Thunderstorm accompanied with lightning & gusty winds(40-50kmph) very likely at isolated places over Assam & Meghalaya, Interior Karnataka, Kerala and Mahe, Konkan & Goa, Madhya Maharashtra, Madhya Pradesh, Marathwada, Nagaland, Manipur, Mizoram and Tripura, Rayalaseema, Tamilnadu & Puducherry and West Bengal & Sikkim.
- Thundersquall with wind speed reaching(50-60kmph) very likely at isolated places over Chhattisgarh, Coastal Andhra Pradesh, Telangana and Vidarbha.
- Heat Wave conditions likely at isolated places over East Uttar Pradesh, Jharkhand, West Bengal & Sikkim 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, 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 south Andaman sea & adjoining southeast Bay of Bengal.





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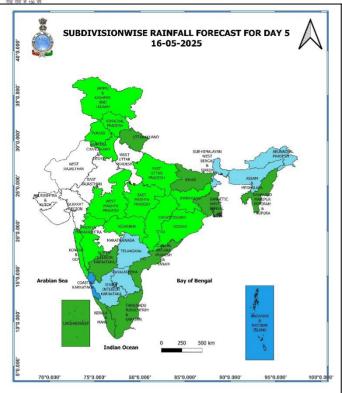


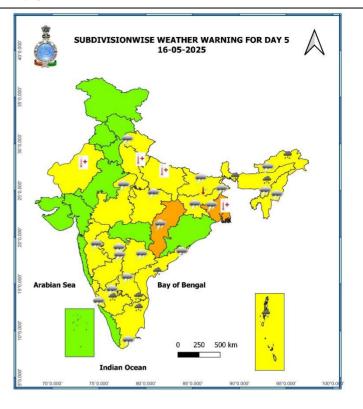
# 15th May (Day 4)

- Heavy Rainfall likely at isolated places over Andaman & Nicobar Islands, Andhra Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram and Tripura, South Interior Karnataka, Sub Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry.
- Thunderstorm accompanied with Lightning likely at isolated places over Arunachal Pradesh and Costal Karnataka.
- Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over Andaman & Nicobar Islands, Bihar, Interior Karnataka and Jharkhand.
- Thunderstorm accompanied with lightning & gusty winds(40-50kmph) likely at isolated places over Assam & Meghalaya, Madhya Maharashtra, Madhya Pradesh, Marathwada, Nagaland, Manipur, Mizoram and Tripura, Rayalaseema, Sub Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry.
- \* Thundersquall with wind speed reaching(50-60kmph) likely at isolated places over Chhattisgarh, Coastal Andhra Pradesh, Gangetic West Bengal, Telangana and Vidarhha
- Heat Wave conditions likely at isolated places over Gangetic West Bengal, Uttar Pradesh and West Rajasthan.
- Hot and Humid weather likely at isolated places over Bihar and Odisha.
  - 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, south Sri Lanka coast & adjoining southwest Bay of Bengal.



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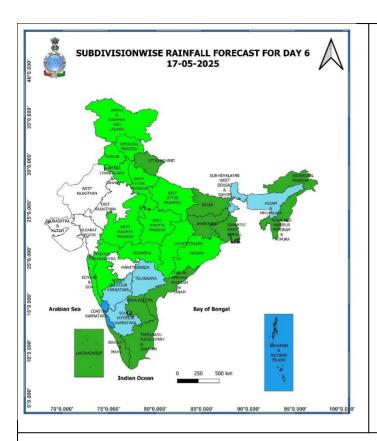


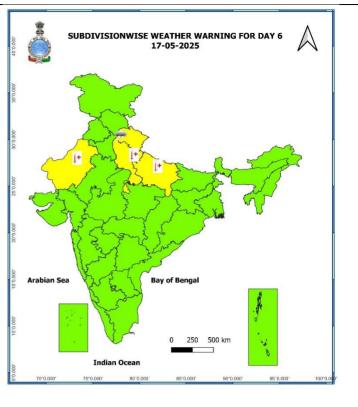
# 16th May (Day 5)

- Heavy Rainfall likely at isolated places over Andaman & Nicobar Islands, Andhra Pradesh, Arunachal Pradesh, Assam & Meghalaya, South Interior Karnataka, Sub Himalayan West Bengal & Sikkim and Tamilnadu & Puducherry.
- Thunderstorm accompanied with Lightning likely at isolated places over Arunachal Pradesh and Costal Karnataka.
- Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over Assam & Meghalaya, Bihar, Interior Karnataka, Jharkhand, 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, Madhya Maharashtra, Madhya Pradesh, Marathwada, Tamilnadu & Puducherry, Telangana and Uttarakhand.
- Thundersquall with wind speed reaching(50-60kmph) likely at isolated places over Chhattisgarh and Gangetic West Bengal.
- Heat Wave conditions likely at isolated places over Gangetic West Bengal, Uttar Pradesh and West Rajasthan.
- Hot and Humid weather likely at isolated places over Bihar.
  - 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, south Sri Lanka coast & adjoining southwest Bay of Bengal.



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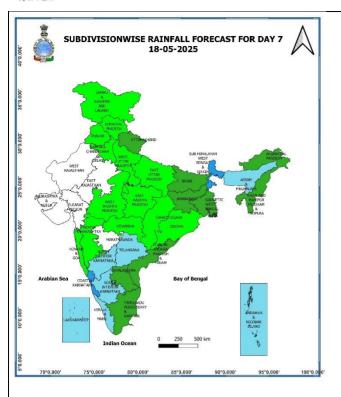


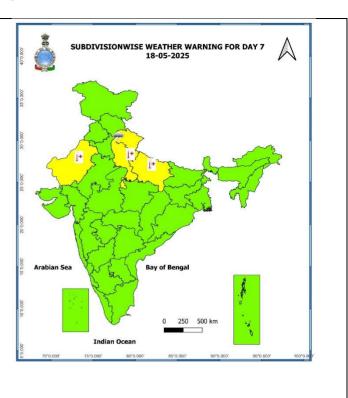
# 17th May (Day 6)

- ❖ Thunderstorm accompanied with lightning & gusty winds(40-50kmph) likely at isolated places over Uttarakhand.
  - **Heat Wave conditions** likely at isolated places over Uttar Pradesh and West Rajasthan.



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# 18th May (Day 7)

- ❖ Thunderstorm accompanied with lightning & gusty winds(40-50kmph) likely at isolated places over Uttarakhand.
  - ❖ Heat Wave conditions likely at isolated places over Uttar Pradesh and West Rajasthan.

# Weather Outlook for subsequent 3 days (During 19th May- 21st May, 2025)

- **Fairly widespread to widespread** rainfall activity likely over northeast India.
- **Scattered to fairly widespread** rainfall activity likely over south peninsular India.
- ❖ Isolated to scattered rainfall likely over East India, Chhattisgarh, Vidarbha, Madhya Pradesh and Maharashtra.

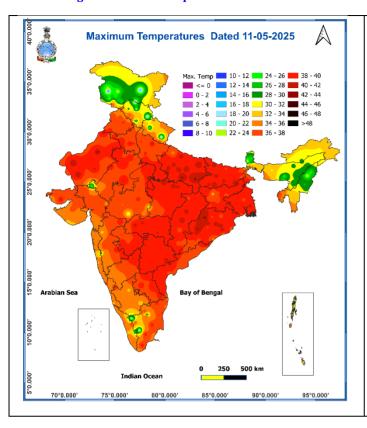
## Action may be taken based on **ORANGE** AND **RED** COLOUR warnings.

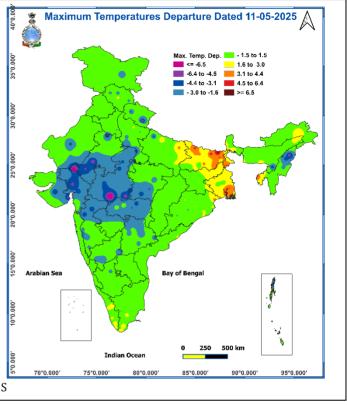
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.



Fig. 1: Maximum Temperatures

# Fig. 2: Departure of Maximum Temperatures





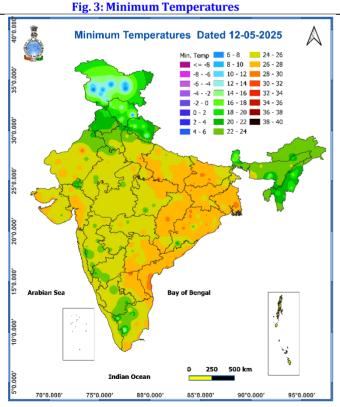


Fig. 4: Departure of Minimum Temperatures

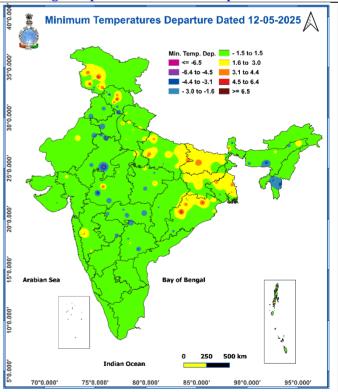
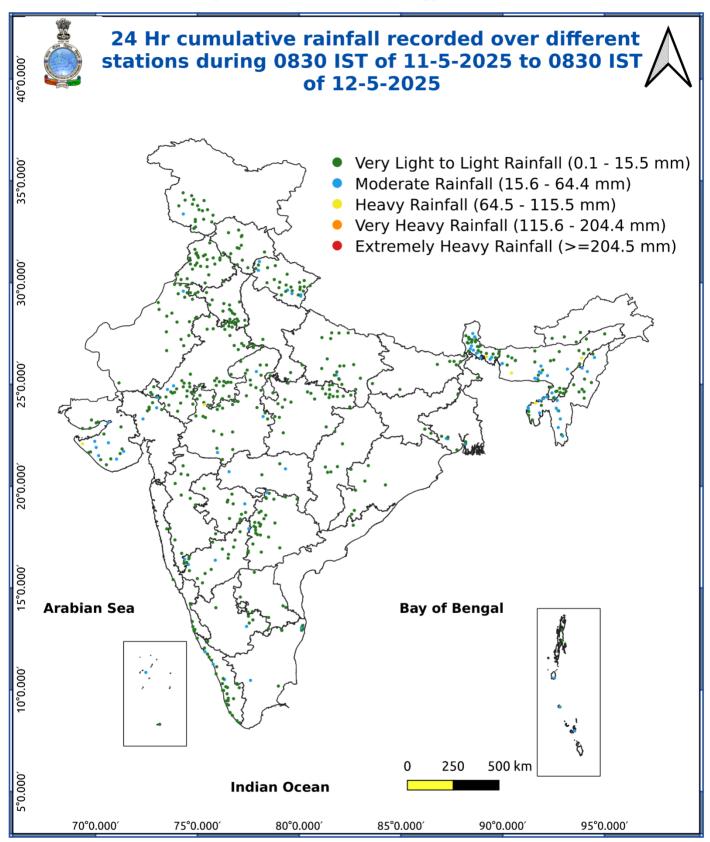






Fig. 5: Accumulated Rainfall (mm) during past 24 hours







## National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

## Impact & Action Suggested due to very heavy rainfall over

- ❖ Very heavy rainfall over Arunachal Pradesh, Assam & Meghalaya on 13th-14th; Nicobar Islands on 12th & 13th and Sub-Himalayan West Bengal & Sikkim on 12th; Tripura on 12th & 13th May.
- **Extremely heavy rainfall** at isolated places over Meghalaya on 13th 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 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.

# 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, Marathawada on 12<sup>th</sup> & 13<sup>th</sup> May; Sub-Himalayan West Bengal & Sikkim on 12<sup>th</sup>; Gangetic West Bengal on 15<sup>th</sup> & 16<sup>th</sup> May; Coastal Andhra Pradesh & Yanam and Telangana on 14<sup>th</sup> & 15<sup>th</sup> May, Assam & Meghalaya on 13<sup>th</sup> May.
- ✓ **Isolated hailstorm** at isolated places over East Madhya Pradesh and Coastal Andhra Pradesh & Yanam on 12<sup>th</sup> 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 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.





## National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

**Impact expected and action suggested due to Heat wave conditions over** in isolated pockets of Gangetic West Bengal during 12<sup>th</sup>-15<sup>th</sup>; Sub-Himalayan West Bengal on 14<sup>th</sup> & 15<sup>th</sup>; Jharkhand during 13<sup>th</sup>-15<sup>th</sup>; West Uttar Pradesh & West Rajasthan during 15<sup>th</sup>-18<sup>th</sup>; East Uttar Pradesh during 14<sup>th</sup>-18<sup>th</sup> 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, Saurashtra & Kutch, Tamil Nadu, Kerala, North Interior Karnataka, South Interior Karnataka and Rayalaseema, make provision to drain out excess water from standing crop and vegetable fields.
- > In **East Madhya Pradesh**, 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.

30. रायलसीमा

32. तटीय कर्नाटक

35. केरल और माहे

S Dust Raising Winds

36. लक्षद्वीप

33. आतंरिक उत्तरी कर्नाटक

34. आतंरिक दक्षिणी कर्नाटक

31. तमिलनाडु, पुडुचेरी और कराईकल

# राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



### National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

# **LEGENDS**



- 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. Rihar
- 10. East Uttar Pradesh
- 11. West Uttar Pradesh
- 12. Uttarakhand
- 13. Haryana, Chandigarh & Delhi
- 14. Puniab
- 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

Most Likely

> 75

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)



Strong Surface Winds





	DEFINITION/CRITERIA		
Rain/ Snow *	Heavy: 64.5 to 115.5 mm/cm *   Very Heavy: 115.6 to 204.4 mm/cm *   Extremely Heavy: > 204.4 mm/cm *		
Heat Wave	When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly regions (a) Based on Departure from normal		
	<b>Heat Wave:</b> Maximum Temperature Departure from normal 4.5° C to 6.4° C.		
	Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C		
	(b). Based on Actual maximum temperature		
	Heat Wave: When actual maximum temperature ≥45°C.  Severe Heat Wave: When actual maximum temperature ≥47°C		
	( c). Criteria for heat wave for coastal stations When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C		
Warm Night	When maximum temperature remains 40°C  Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C.		
warm wight	Severe Warm Night: When minimum temperature departure >6.4 °C.		
Cold Wave	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions.  (a). Based on departure  Cold Wave: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C.  Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C  (b) Based on actual Minimum Temperature (for Plains only)  Cold Wave: When Minimum Temperature is ≤ 4.0 °C  Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C  (c) For Coastal Stations  When Minimum Temperature departure is ≤ -4.5 °C & actual Minimum Temperature is ≤ 15 °C		
Cold Day	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions Based on departure		
	Cold Day: Maximum Temperature Departure from normal -4.5 °C to -6.4 °C.		
	Severe Cold Day: Maximum Temperature Departure from normal ≤ -6.5 °C		
Fog	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km  Moderate Fog: When the visibility between 500-200 metres  Dense Fog: when the visibility between 50-200 metres  Very Dense Fog: when the visibility < 50 metres		
Thunderstorm	Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)		
Dust/Sand Storm	An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.		
Frost	Ice deposits on ground		
	Air temperature ≤4°C ( over Plains)		
	A strong wind that rises suddenly, lasts for atleast 1 minute.		
Squall	Moderate: Wind speed 52-61 kmph		
	Severe: Wind speed 62-87 kmph		
	Very Severe: Wind speed >87 kmph		
	Effect of various waves in the sea over specific area		
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Sea State	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		
Sea State	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		
Sea State	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  Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)		
Sea State  Cyclone	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		
	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  Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)  Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)		