

# Government of India Ministry of Earth Sciences India Meteorological Department



Press Release Date: 09<sup>th</sup> May, 2025

Time of Issue: 1345 hours IST

Subject: i) A fresh spell of heat wave likely to commence over East India from 10th May, 2025.

- ii) Rainfall accompanied with thunderstorms, lightning likely to continue over Northwest & central India for next 4-5 days.
- iii) Thunderstorm, lightning & squally winds likely over Maharashtra & Gujarat state on 09th May, 2025.
- iv) Heavy Rainfall accompanied with thunderstorm & lightning likely over Northeast India during 10<sup>th</sup> to 13<sup>th</sup> May, 2025.

## **Advance of Southwest Monsoon:**

Southwest Monsoon is very likely to advance into South Andaman Sea, some parts of Southeast Bay of Bengal and Nicobar Islands around 13th May, 2025.

## Realised weather during past 24 hours till 0830 hours IST of today, the 09th May 2025 (Annexure I):

- ❖ Thunderstorm accompanied with Squally/Gusty winds with speed 70-80 kmph prevailed at isolated places over Uttarakhand, Punjab; with speed 30-60 kmph prevailed at isolated places over Tamilnadu Puducherry & Karaikal, Kerala & Mahe, Interior Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Madhya Maharashtra, Konkan & Goa, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Assam & Meghalaya, Arunachal Pradesh, Jharkhand, Chhattisgarh, Madhya Pradesh, Uttar Pradesh, Haryana, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- **\Delta Hailstorm** occurred at isolated places over Uttarakhand.
- Heavy rainfall has been recorded at isolated places over West Madhya Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, East Rajasthan

## For more details of realised weather, kindly refer Annexure I

Maximum Temperature observations during past 24 hours till 0830 hours IST of today are appended in Annexure II.

## i. Weather Systems, Forecast and Warnings (refer to Annexure III & IV):

- ❖ A Western **Disturbance** seen as a cyclonic circulation over north Pakistan & neighbourhood in lower and middle tropospheric levels.
- ❖ Another fresh **Western Disturbance** seen as a trough in middle tropospheric westerlies runs roughly along Long. 55°E to the north of Lat. 27°N.
- The upper air cyclonic circulation over northeast Rajasthan & neighbourhood in lower and middle tropospheric levels.
- ❖ The **trough** runs from eastcentral Arabian Sea to cyclonic circulation over northeast Rajasthan & neighbourhood in lower and middle tropospheric levels.
- The north- south trough runs from North Interior Karnataka to Gulf of Mannar across Rayalaseema and Tamil Nadu in lower tropospheric levels.
- ❖ A trough in westerlies runs from East Uttar Pradesh to North Interior Karnataka in upper tropospheric levels.
- The upper air cyclonic circulation over Northeast Assam & neighbourhood in lower tropospheric levels.
- Another, upper air cyclonic circulation over southeast Bay of Bengal and adjoining south Andaman Sea in lower & middle tropospheric levels.
- Under the influence of these systems, the following weather is likely:

### **Northwest India:**

- ✓ **Scattered to fairly widespread** light to moderate rainfall with **thunderstorm**, **lightning & gusty winds speed reaching 40-60 kmph** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand during 09<sup>th</sup>-11<sup>th</sup>; **Isolated to Scattered** light/moderate rainfall with **thunderstorm**, **lightning & gusty winds speed reaching 40-50 kmph** over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh during 09<sup>th</sup>-11<sup>th</sup> and over Rajasthan during 09<sup>th</sup>-13<sup>th</sup> May.
- ✓ Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph over Rajasthan on 09th May.

## West India:

- ✓ **Isolated** light/moderate rainfall accompanied with **thunderstorm**, **lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph** likely over West India during 09th-11th May.
- ✓ Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph over Gujarat State on 09<sup>th</sup> May.

### East & Central India:

- ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds speed reaching 40-50 kmph gusting to 60 kmph** likely over Madhya Pradesh, Vidarbha & Chhattisgarh during 09<sup>th</sup>-13<sup>th</sup> May; **with winds speed reaching 30-40 kmph gusting to 50 kmph** over Sub-Himalayan West Bengal & Sikkim during 09<sup>th</sup>-12<sup>th</sup> and over Gangetic West Bengal during 11<sup>th</sup>-13<sup>th</sup> May.
- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Chhattisgarh during 09<sup>th</sup>-13<sup>th</sup>; Vidarbha on 12<sup>th</sup> & 13<sup>th</sup> and over East Madhya Pradesh on 13<sup>th</sup> May.
- ✓ **Isolated heavy rainfall** likely over Sub-Himalayan West Bengal & Sikkim during 11<sup>th</sup>-13<sup>th</sup> with **very heavy** rainfall on 12<sup>th</sup> May.

### South peninsular India:

- ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm**, **lightning & strong winds speed reaching 30-40 kmph gusting to 50 kmph** likely over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Karnataka during 09<sup>th</sup>-13<sup>th</sup> and over Tamilnadu Puducherry & Karaikal on 09<sup>th</sup> May.
- ✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** likely over Coastal Andhra Pradesh & Yanam on 09<sup>th</sup> & 13<sup>th</sup>; Telangana on 12<sup>th</sup> & 13<sup>th</sup> May.
- ✓ **Isolated heavy rainfall** likely over Tamilnadu Puducherry & Karaikal on 09<sup>th</sup> May.

## **Northeast India:**

- ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm**, **lightning & gusty winds speed reaching 30-40 kmph gusting to 50 kmph** likely over Northeast India during next 5 days.
- ✓ **Isolated heavy rainfall** over Arunachal Pradesh during 10<sup>th</sup>-13<sup>th</sup>, Assam & Meghalaya during 11<sup>th</sup>-15<sup>th</sup> and over Nagaland, Manipur, Mizoram & Tripura during 11<sup>th</sup>-13<sup>th</sup> with **very heavy rainfall** over Arunachal Pradesh on 12<sup>th</sup> and over Assam & Meghalaya on 13<sup>th</sup> May.

## **Maximum Temperature Forecast:**

- No significant change in maximum temperatures likely over Northwest India during next 24 hours and rise by 4-6°C thereafter for subsequent 5 days.
- No significant change in maximum temperatures likely over Madhya Pradesh during next 24 hours and rise by 2-4°C thereafter for subsequent 5 days.
- Gradual rise in maximum temperatures by 3-4°C likely over East India during next 3 days and no significant change thereafter for subsequent 4 days.
- Gradual rise in maximum temperatures by 2-4°C likely over Maharashtra during next 2 days and no significant change thereafter for subsequent 4 days.
- ❖ Gradual rise in maximum temperatures by 3-5°C likely over Gujarat State during next 7 days.
- 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 Sub-Himalayan West Bengal & Sikkim on 11<sup>th</sup> & 12<sup>th</sup>; Gangetic West Bengal during 10<sup>th</sup>-14<sup>th</sup>; Bihar, Odisha during 11<sup>th</sup>-14<sup>th</sup>; Jharkhand during 12<sup>th</sup>-14<sup>th</sup>; East Uttar Pradesh on 14<sup>th</sup> & 15<sup>th</sup> May.
- \* Hot & humid weather is likely to prevail over Gangetic West Bengal on 09th; Bihar on 10th; Jharkhand on 10th & 11th; Odisha, Kerala & Mahe, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 09th & 10th May.

## iv. Weather conditions and forecast over Delhi/NCR during 09th May to 12th May, 2025 (Annexure V)

## For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all\_india\_forcast\_bulletin.php

For District wise warnings refer: <a href="https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php">https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php</a>

**ANNEXURE I** 

## Significant weather reported during past 24 hours till 0830 hours IST of today:

Light/moderate Rainfall with thunderstorm & lightning observed at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim; at many places over Himachal Pradesh, Assam & Meghalaya; at a few places over Uttarakhand, Punjab, Rajasthan, Gujarat State, Coastal Andhra Pradesh & Yanam, Rayalaseema; at isolated places over Tamilnadu Puducherry & Karaikal, Kerala & Mahe, Telangana, Interior Karnataka, Madhya Maharashtra, Konkan & Goa, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Odisha, Jharkhand, Bihar, Gangetic West Bengal, Chhattisgarh, Vidarbha, Madhya Pradesh, Uttar Pradesh, Haryana Chandigarh & Delhi.

## Rainfall recorded (in cm) reported during past 24 hours till 0830 hours IST of today:

- ❖ Sub Himalayan West Bengal & Sikkim: Sevoke (dist Darjeeling) 11; Indong T.e. (dist Jalpaiguri) 10; Nagarkata (dist Jalpaiguri) 8; Neora (dist Jalpaiguri), Murti (dist Jalpaiguri), Hasimara (dist Alipurduar), Pakyong (dist Pakyong), Ghish (dist Jalpaiguri), Hilla T.e. (dist Jalpaiguri), Washabari Tea Estate (dist Jalpaiguri) 6 Each;
- **East Rajasthan**: Tonk Tehsil SR (dist Tonk) 8; Sambhar SR (dist Jaipur) 6; Bhopalsagar SR (dist Chittorgarh) 5;
- **Chhattisgarh**: Bhopalpatnam (dist Bijapur) 7;
- ❖ West Madhya Pradesh: Sailana (dist Ratlam) 7, Shamgarh (dist Mandsaur) 4,
- ❖ Andaman & Nicobar Islands: Hut Bay (dist South Andaman) 6; Port Blair (dist South Andaman) 5;
- ❖ Coastal Andhra Pradesh & Yanam: Addanki (dist Bapatla) 5;
- Saurashtra & Kutch: Talala (dist Gir Somnath) 5;
- Gujarat Region: Dolvan (dist Tapi) 5;
- Odisha: Nuagada (dist Gajapati) 5;
- Jharkhand: Panchet (dist Dhanbad) 5;
- ❖ West Rajasthan: Bali (dist Pali), Desuri (dist Pali) 5 Each.

## Realised Gusty Winds during past 24hours ending at 0300 UTC of today i.e 09.05.2025 (AWS Data, KT):

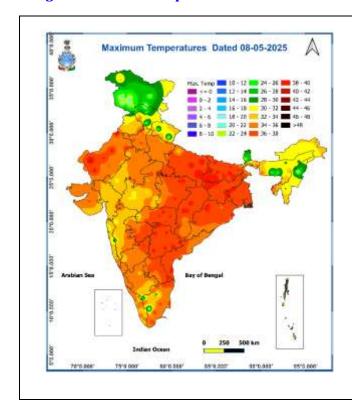
- **❖ Punjab:** Faridkot=81
- ❖ Uttarakhand: Jollygrant (Aws)-74, Mohkampur (Aws)-37
- **\( \text{Haryana:} \)** Hissar 64
- ❖ Jharkhand: Kvjamtara (48 Kmph), Bokaro\_Kvk (48 Kmph),
- Andaman & Nicobar Islands: Sri Vijaya Puram- 44 Kmph
- ❖ Gangetic West Bengal: Imd\_Mo\_Assansol (44 Kmph), Barrackpore\_Aws400 (44 Kmph), Santiniketan-Bolpur\_Kvk (35 Kmph), Raidighi (35 Kmph), Kvk\_Burdwan\_Budbud (33 Kmph),
- ❖ Bihar: Auranga Bad (41 Kmph), Arwal\_Aws400 (31 Kmph)
- ❖ Himachal Pradesh: Neri=41, Dhaulakaun=41, Seobagh=37
- ❖ Nagaland, Manipur, Mizoram & Tripura: Imphal\_Afmu = 40, Porompat = 35
- ❖ Sub-Himalaya West Bengal & Sikkim: Jalpaiguri (39 Kmph), Dinhata\_Aws400 (33 Kmph), Kalimpong\_Amfu (31 Kmph), Dhupguri (31 Kmph)
- **❖ Arunachal Pradesh**: Anini 39, Dirang 33, Kalaktang 31
- Assam & Meghalaya: Gossaigaon\_Amfu 31, Kokrajhar=35 Dima Hasao=31, Shillong =35 Mawsynram 35, Nongstoin\_Kvk 35, Ampati 35
- Odisha: Janhukuda(Near\_Satapada) (29kmph), Gunupur\_Kvk (29 Kmph),

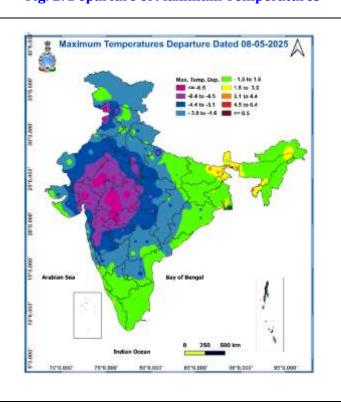
## Temperature observations during past 24 hours till 0830 hours IST of today:

- ❖ Yesterday, Maximum Temperatures are in the range of 38-41°C at a few pockets of West Rajasthan, East Uttar Pradesh, Bihar, Jharkhand, Gangetic West Bengal, Chhattisgarh, East Madhya Pradesh, Odisha, Telangana; at isolated pockets of Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu, Puducherry & Karaikal; in the range 34-37°C in isolated pockets of Haryana-Chandigarh-Delhi, West Uttar Pradesh, East Rajasthan, Interior Karnataka, Vidarbha, Saurashtra & Kutch, Kerala & Mahe and they were less than 34°C elsewhere over remaining parts of the country. Yesterday, the highest maximum temperature of 41.0°C was reported at Jaisalmer (West Rajasthan) over the country.
- ❖ Yesterday, Maximum Temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Sub-Himalayan West Bengal & Sikkim; at isolated places over Bihar, Nagaland, Manipur, Mizoram & Tripura; above normal (1.6°C to 3.0°C) at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Assam & Meghalaya, Odisha, Tamil Nadu, Puducherry & Karaikal, Gangetic West Bengal. These were markedly below normal (-5.1 or below) at a few places over West Madhya Pradesh, Madhya Maharashtra, East Rajasthan; at isolated places over many places over East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over Punjab, West Uttar Pradesh, Vidarbha, Andaman & Nicobar Islands, Marathwada; at isolated places over Haryana-Chandigarh-Delhi, Telangana, East Uttar Pradesh; below normal (-1.6°C to -3.0°C) at a few places over Uttarakhand, Himachal Pradesh, Chhattisgarh, Rayalaseema, Konkan & Goa; at isolated places over North Interior Karnataka and normal over rest parts of the country (Fig. 2).

Fig. 1: Maximum Temperatures

Fig. 2: Departure of Maximum Temperatures

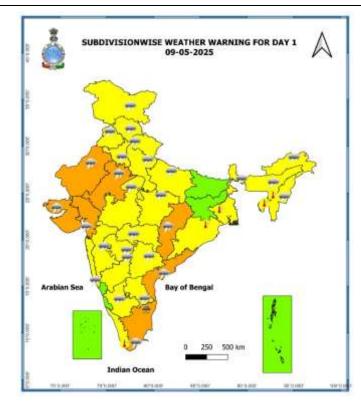


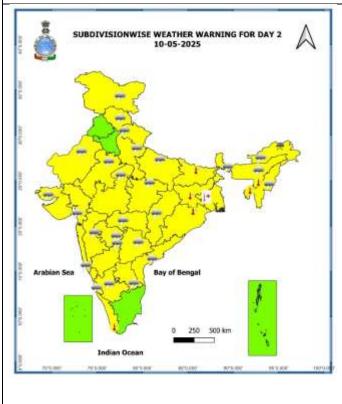


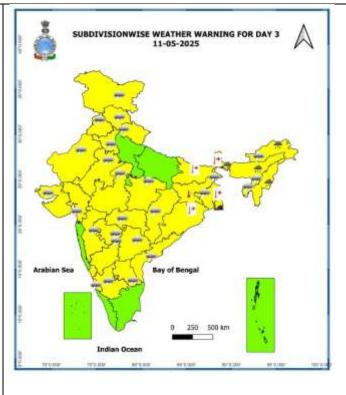
## **ANNEXURE III**

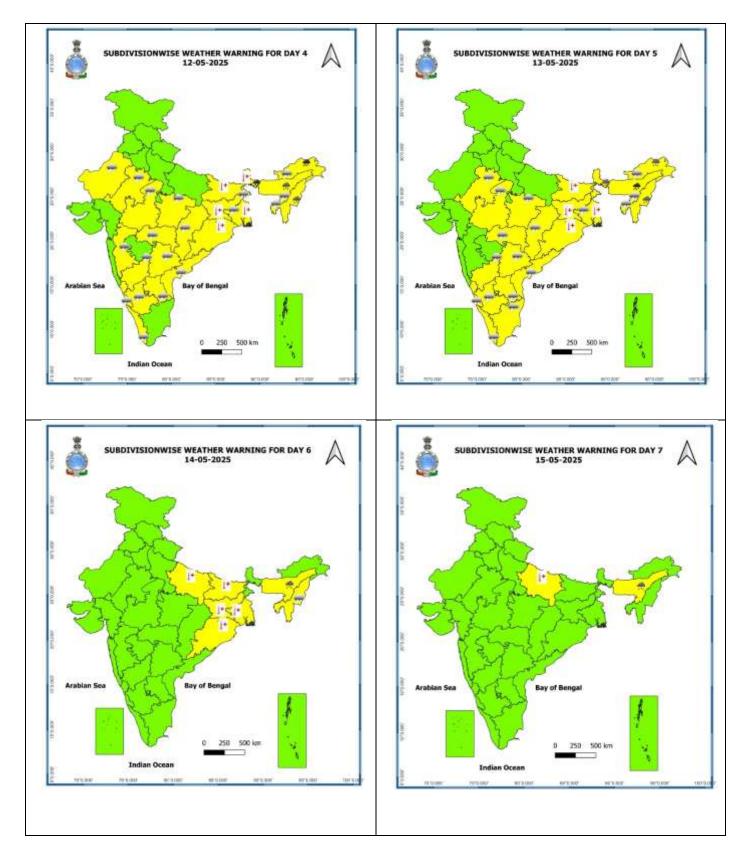
ANNEAURE III											
7 Days Rainfall Forecast											
S. No.	Subdivision	09-May	10-May	11-May	12-May	13-May	14-May	15-May			
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7			
1	ANDAMAN & NICOBAR ISLANDS	FWS	FWS	WS	WS	WS	WS	WS			
2	ARUNACHAL PRADESH	SCT	FWS	WS	WS	WS	FWS	FWS			
3	ASSAM & MEGHALAYA	SCT	SCT	FWS	WS	WS	WS	WS			
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	ISOL	ISOL	SCT	SCT	SCT	SCT	SCT			
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	SCT	SCT	FWS	WS	WS	FWS	FWS			
6	GANGETIC WEST BENGAL	ISOL	DRY	ISOL	ISOL	ISOL	SCT	SCT			
7	ODISHA	ISOL									
8	JHARKHAND	ISOL	DRY	DRY	DRY	ISOL	ISOL	ISOL			
9	BIHAR	DRY	DRY	DRY	DRY	DRY	ISOL	ISOL			
10	EAST UTTAR PRADESH	SCT	ISOL	DRY	DRY	DRY	DRY	DRY			
11	WEST UTTAR PRADESH	SCT	ISOL	DRY	DRY	DRY	DRY	DRY			
12	UTTARAKHAND	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL			
13	HARYANA CHANDIGARH & DELHI	ISOL	ISOL	SCT	ISOL	ISOL	ISOL	ISOL			
14	PUNJAB	ISOL	ISOL	SCT	ISOL	ISOL	ISOL	ISOL			
15	HIMACHAL PRADESH	FWS	SCT	ISOL	ISOL	ISOL	ISOL	ISOL			
16	JAMMU & KASHMIR AND LADAKH	FWS	SCT	SCT	SCT	ISOL	ISOL	ISOL			
17	WEST RAJASTHAN	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY			
18	EAST RAJASTHAN	SCT	ISOL	ISOL	ISOL	ISOL	DRY	DRY			
19	WEST MADHYA PRADESH	ISOL									
20	EAST MADHYA PRADESH	ISOL									
21	GUJARAT REGION	FWS	SCT	ISOL	ISOL	ISOL	DRY	DRY			
22	SAURASHTRA & KUTCH	FWS	SCT	ISOL	ISOL	ISOL	DRY	DRY			
23	KONKAN & GOA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	DRY			
24	MADHYA MAHARASHTRA	ISOL									
25	MARATHAWADA	ISOL									
26	VIDARBHA	ISOL	ISOL	SCT	SCT	ISOL	ISOL	ISOL			
27	CHHATTISGARH	ISOL									
28	COASTAL ANDHRA PRADESH & YANAM	ISOL	ISOL	ISOL	SCT	SCT	FWS	FWS			
29	TELANGANA	ISOL	SCT	ISOL	SCT	FWS	FWS	FWS			
30	RAYALASEEMA	ISOL	ISOL	ISOL	SCT	SCT	FWS	FWS			
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	ISOL	SCT	SCT	SCT			
32	COASTAL KARNATAKA	DRY	ISOL	ISOL	SCT	SCT	FWS	FWS			
33	NORTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	SCT	SCT	FWS	FWS			
34	SOUTH INTERIOR KARNATAKA	ISOL	ISOL	ISOL	SCT	SCT	FWS	FWS			
35	KERALA & MAHE	ISOL	ISOL	ISOL	SCT	SCT	FWS	FWS			
36	LAKSHADWEEP	DRY	SCT	SCT	SCT	SCT	FWS	FWS			

• As the lead period increases forecast accuracy decreases.









- 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.

Detailed district wise Multi Hazard weather warning for next five days available at <a href="https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php">https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php</a>

## Weather forecast over Delhi/NCR during 09th to 12th May 2025

### Past Weather:

There has been rise in minimum temperature and maximum temperature upto  $01^{\circ}\text{C}$  over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi are in the range of 36 to  $37^{\circ}\text{C}$  and 23 to  $27^{\circ}\text{C}$ , respectively. The minimum temperature was near normal and the maximum temperature was below normal up to  $02 - 04^{\circ}\text{C}$  over Delhi/NCR. Partly cloudy sky conditions with predominant surface wind from the southeast/east direction, with wind speeds less than 20 kmph with gusting to 40 kmph prevailed during the past 24 hours. Partly cloudy sky conditions with wind speed less than 08 kmph from the southeast direction prevailed over the region in the forenoon today.

## Weather Forecast:

**09.05.2025:** Partly cloudy sky. Very light to light rain at isolated places with thunderstorms/lightning and strong surface winds during evening/night. Wind speed may increase temporarily up to 30-40 kmph gusting to 50 kmph during thunderstorms. The maximum temperatures over Delhi are likely to be in the range of 35 to 37°C. The predominant surface wind will likely be from the southeast direction with a wind speed of less than 20 kmph till evening. It would decrease becoming less than 12 kmph from the northeast direction during the night.

**10.05.2025:** Partly cloudy sky. Very Light rain. Sustained surface winds (speed 10 - 20 kmph) occasionally gusting to 30 kmph. The maximum and minimum temperatures over Delhi are likely to be in the range of 36 to 38°C and 26 to 28°C, respectively. The minimum temperature will be above normal up to 01 - 03 °C, and the maximum temperature will be below normal up to 01 - 03 °C. The predominant surface wind will likely be from the southwest direction with a wind speed of 08-12 kmph during morning hours. The wind speed will gradually increase becoming 10-12 kmph from the southwest direction in the afternoon. It will increase becoming less than 20 kmph from the northwest direction during evening and night.

11.05.2025: Partly cloudy sky. Sustained surface winds (speed 15 – 25 kmph) occasionally gusting to 35 kmph. The maximum and minimum temperatures over Delhi are likely to be in the range of 37 to 39°C and 26 to 28°C, respectively. The minimum temperature will be above normal up to 01 - 03 °C, and the maximum temperature will be below normal up to 01 - 03 °C. The predominant surface wind will likely be from the northwest direction with a wind speed of less than 14 kmph during the morning hours. The wind speed will gradually increase becoming 15-18 kmph from the northwest direction in the afternoon. It will decrease becoming less than 14 kmph from the northwest direction during evening and night.

**12.05.2025:** Partly cloudy sky. Sustained surface winds (speed 15 – 25 kmph) occasionally gusting to 35 kmph. The maximum and minimum temperatures over Delhi are likely to be in the range of 37 to 39°C and 27 to 29°C, respectively. The minimum temperature will be above normal up to 02 - 04 °C, and the maximum temperature will be below normal up to 01 - 02 °C. The predominant surface wind will likely be from the northwest direction with a wind speed of less than 14 kmph during the morning hours. The wind speed will gradually increase becoming 12-16 kmph from the northwest direction in the afternoon. It will decrease becoming less than 12 kmph from the northwest direction during evening and night.

## Impact expected and Action Suggested due to isolated thunderstorm with lightning/gusty winds:

- Be cautious and take precautionary measures, though there is the likelihood of thunderstorm/lightning/dust storm accompanied by strong surface winds 30 40 kmph gusting to 50 kmph.
- Breaking of tree branches, uprooting of large avenue trees, Large dead limbs blown from trees, Damage to standing crops, Minor to major damage to power and communication lines due to breaking of branches, Partial damage to vulnerable structures due to strong winds, Loose objects may fly.
- 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 isolated thunderstorm with lightning/gusty & Squally winds & Hailstorm over

✓ **Thundersquall wind speed reaching 50-60 kmph gusting to 70 kmph** over Rajasthan, Gujarat state on 09<sup>th</sup> May; Chhattisgarh during 09<sup>th</sup>-13<sup>th</sup>; Vidarbha on 12<sup>th</sup> & 13<sup>th</sup> and over East Madhya Pradesh on 13<sup>th</sup> May. Coastal Andhra Pradesh & Yanam on 09<sup>th</sup> & 13<sup>th</sup>; Telangana on 12<sup>th</sup> & 13<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.

Impact expected and action suggested due to Heat wave conditions over Sub-Himalayan West Bengal & Sikkim on 11<sup>th</sup> & 12<sup>th</sup>; Gangetic West Bengal during 10<sup>th</sup>-14<sup>th</sup>; Bihar, Odisha during 11<sup>th</sup>-14<sup>th</sup>; Jharkhand during 12<sup>th</sup>-14<sup>th</sup>; East Uttar Pradesh on 14<sup>th</sup> & 15<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 Hailstorm / Heavy Rainfall / Gusty Winds / Heat Wave

- In Arunachal Pradesh, Assam & Meghalaya, Manipur, Sub Himalayan West Bengal & Sikkim and Tamil Nadu, make provision to drain out excess water from standing crop and vegetable fields.
- > 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 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 & abbreviations:**

- **❖ Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- Obsy: Observatory; AWS: Automatic Weather Station; ARG: Automatic Rain Gauge; dist: District: NH: National Highway; KVK: Krishi Vigyan Kendra; DVC: Damodar Valley Corporation; PTO: Part Time Office, Aero: Aerodrome, IAF: Indian Air Force.
- **Region wise classification of meteorological Sub-Divisions:** 
  - Northwest India: Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
  - Central India: West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
  - **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
  - Northeast India: Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
  - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathawada.
  - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.



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



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

## **LEGENDS**



## SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category		% Stations	Cate	gory		
76-100	Widespread (WS/Most Places)		26-50	Scattered (SCT/A Few Places)			
51-75	Fairly Widesp	read (FWS/Many Places)	1-25	isolated (ISOL)			
Fog		Heavy Snow	Cold Wave	COLOUR CO	DED WARNING		
Heavy Rain			#	No Warni	No Warning (No Action)  Watch (Be Aware)  Alert (Be Prepared To Take Action)		
		<b>⊜</b> Dust Storm	Cold Day	Watch (B			
Very Heavy Rain		+ Heat Wave	Ground Fro	Alert (Be			
Extremely	Heavy Rain	+ Warm Night		Warning	Warning (Take Action)		
<b>.</b>	0 1:-ba-:	+ Hot Day			Probabilistic Forecast		
Thunder & Lightning		4		Terms	Probability of Occurrence (%		
Hailstorm Phot & Humid				Unlikely Likely Very Likely	< 25 25 - 50 50 - 75		
Dust Raising Winds Strong Surface Wind			ds	Most Likely	> 75		





## DEFINITION/CRITERIA Heavy: 64.5 to 115.5 mm/cm \* Very Heavy: 115.6 to 204.4 mm/cm Rain/ Snow \* Extremely Heavy: > 204.4 mm/cm When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly regions (a) Based on Departure from normal Heat Wave: Maximum Temperature Departure from normal 4.5° C to 6.4° C. Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C **Heat Wave** (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 When maximum temperature remains 40°C nimum temperature departure 4.5 °C to 6.4 °C Warm Night: Whe Warm Night Severe Warm Night: When minimum temperature departure >6.4 °C 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 **Cold Wave** (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 When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions Based on departure Cold Day Cold Day: Maximum Temperature Departure from normal -4.5 °C to -5.4 °C. Severe Cold Day: Maximum Temperature Departure from normal ≤ -6.5 °C 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 Fog Very Dense Fog: when the visibility < 50 metres Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder) Thunderstorm An ensemble of particles of dust or sand energetically lifted to great heights by a strong and **Dust/Sand** turbulent wind. Ice deposits on ground Frost Air temperature s4°C (over Plains) A strong wind that rises suddenly, lasts for atleast 1 minute. Moderate: Wind speed 52-61 kmph Squall Severe: Wind speed 62-87 kmph Very Severe: Wind speed >87 kmph 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 Sea State 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) Cyclone Super Cyclone Strom: Wind speed >220 kmph (>119 knots)

\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action". Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day. For more details, kindly visit https://mausam.imd.gov.in or contact: 011-2434-4599 (Service to the Nation since 1875)

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