

# Government of India Ministry of Earth Sciences India Meteorological Department



Date: 27<sup>th</sup> February, 2025 Time of Issue: 1315 hours IST

Subject: 1) Due to active Western Disturbance, heavy to very heavy rainfall/snowfall likely over Jammu & Kashmir, Himachal Pradesh and isolated heavy rainfall/snowfall over Uttarakhand on 27<sup>th</sup> & 28<sup>th</sup> February. It is also likely to cause scattered to fairly widespread light/moderate rainfall with isolated heavy falls over plains of northwest India on 27<sup>th</sup> & 28<sup>th</sup> February, 2025.

2) Heat wave conditions at isolated pockets likely over Konkan during next 24 hours and over Coastal Karnataka on 27th & 28th February, 2025.

i. Realised weather during past 24 hours till 0830 hours IST of today (Annexure I)

#### Temperature:

- ❖ Maximum temperatures were markedly above normal (5°C or more) at isolated places over Haryana-Chandigarh-Delhi, West Uttar Pradesh, East Rajasthan and Konkan & Goa; appreciably above normal (3°C to 5°C) at many places over Saurashtra & Kutch; at isolated places over Punjab, West Rajasthan and Coastal Karnataka; above normal (1°C to 3°C) at many places over Uttarakhand; at a few places over East Uttar Pradesh, Arunachal Pradesh, West Madhya Pradesh, Madhya Maharashtra and Kerala & Mahe. Yesterday, the highest maximum temperature of 39.2°C was reported at Kannur Airport (Kerala) over the plains of the country.
- ❖ Further detailed temperature observations during past 24 hours till 0830 hours IST of today are provided in Annexure II

## Rainfall:

- ❖ Light to moderate Rainfall/Snowfall observed at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh; at isolated places over Uttarakhand & Arunachal Pradesh; Light to moderate Rainfall at many places over Andaman & Nicobar Islands; at a few places over Haryana; at isolated places over Sub-Himalayan West Bengal & Sikkim, Punjab, West Uttar Pradesh, West Rajasthan, Tamilnadu Puducherry & Karaikal and Kerala & Mahe.
- \* Heavy rainfall recorded at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ Thunderstorm with lightning reported at isolated places over Jammu & Kashmir, Himachal Pradesh and Uttarakhand.
- **Hailstorm** recorded at isolated places over Jammu-Kashmir and Himachal Pradesh.
- ❖ Heat Wave conditions observed at isolated places over Konkan.
- ❖ Hot & Humid weather conditions observed at isolated places over coastal Gujarat.

## ii. Weather Systems, Forecast and warning (Annexure III & IV):

- ❖ The **Western Disturbance** as a trough in lower to upper tropospheric levels with its axis at 5.8 km above mean sea level runs roughly along Long. 56°E to the north of Lat. 28°N. There is a Divergence of the order of 20-30 x 10<sup>-6</sup> s <sup>-1</sup> in the forward sector of the trough over Northwest India. High moisture feeding is also taking place over northwest India in lower tropospheric levels from Arabian Sea. As a result;
  - ✓ **Widespread** light to moderate rainfall/snowfall accompanied with thunderstorm & lightning likely over Western Himalayan region on 27<sup>th</sup> & 28<sup>th</sup> February with **gusty winds (speed 40-50 kmph)** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 27<sup>th</sup> February; with **gusty winds (speed 30-40 kmph)** over Himachal Pradesh on 27<sup>th</sup> February and decrease in intensity thereafter.
  - ✓ Heavy rainfall/snowfall at isolated places likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Uttarakhand on 27<sup>th</sup> & 28<sup>th</sup> February; with isolated very heavy rainfall/snowfall at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 27<sup>th</sup> and Himachal Pradesh on 27<sup>th</sup> & 28<sup>th</sup> February.

- ✓ **Fairly widespread** to **widespread** light to moderate rainfall accompanied with thunderstorm & lightning likely over Punjab, Haryana, Chandigarh on 27<sup>th</sup> & 28<sup>th</sup> February; **Isolated** to **Scattered** light to moderate rainfall accompanied with thunderstorm & lightning likely over West Uttar Pradesh & Rajasthan during 27<sup>th</sup> February-01<sup>st</sup> March; East Uttar Pradesh in 28<sup>th</sup> February & 01<sup>st</sup> march with **gusty winds (speed 30-40 kmph)** very likely over Punjab & Haryana on 27<sup>th</sup> & 28<sup>th</sup> and Rajasthan on 28<sup>th</sup> February.
- ✓ **Heavy rainfall** at isolated places likely over Punjab on 27<sup>th</sup> & 28<sup>th</sup> February.
- ✓ Isolated Hailstorm activity also likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Himachal Pradesh on 27<sup>th</sup>; Uttarakhand, Punjab & Haryana on 27<sup>th</sup> & 28<sup>th</sup>; West Uttar Pradesh on 28<sup>th</sup> February.
- ❖ Isolated to Scattered light/moderate rainfall/snowfall accompanied with thunderstorm, lightning very likely over Arunachal Pradesh on 28<sup>th</sup> February & 01<sup>st</sup> March; Isolated to scattered light/moderate rainfall accompanied with thunderstorm & lightning likely over Sub-Himalayan West Bengal & Sikkim on 27<sup>th</sup> & 28<sup>th</sup> February; Assam & Meghalaya on 28<sup>th</sup> February & 01<sup>st</sup> March with gusty winds (speed 30-40 kmph) on 28<sup>th</sup> February. Isolated Heavy rainfall likely over Arunachal Pradesh on 01<sup>st</sup> March.
- Under the influence of an active easterly wave;
  - ✓ **Scattered to Fairly widespread** light/moderate rainfall accompanied with **thunderstorm, lightning** very likely over Andaman & Nicobar Islands on 27<sup>th</sup> February.
- **❖** Isolated to Scattered light/moderate rainfall accompanied with thunderstorm & lightning very likely over Tamilnadu Puducherry & Karaikal during 27<sup>th</sup> February − 01<sup>st</sup> March; Kerala & Mahe during 28<sup>th</sup> February-02<sup>nd</sup> March; Lakshadweep on 28<sup>th</sup> February & 01<sup>st</sup> March with isolated heavy rainfall on Tamilnadu Puducherry & Karaikal on 28<sup>th</sup> February & 01<sup>st</sup> March and Kerala & Mahe 01<sup>st</sup> March.
- ❖ A fresh **Western Disturbance** is likely to affect Northwest India from 02<sup>nd</sup> March. Under its influence; **Isolated to Scattered** light/moderate rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad & Himachal Pradesh during 02<sup>nd</sup> -05<sup>th</sup>; Uttarakhand during 02<sup>nd</sup>-04<sup>th</sup>; **Isolated** light/moderate rainfall/snowfall likely over Punjab, Haryana, Chandigarh on 03<sup>rd</sup> February.

## **Temperature Forecast:**

## **Forecast of temperature:**

## **Minimum Temperature:**

- No significant change in minimum temperatures likely over Northwest India during next 2 days and gradual fall by 2-4°C thereafter.
- No significant change in minimum temperatures likely over rest parts of India during next 4-5 days.

## **Maximum temperature:**

- ❖ Gradual fall in maximum temperatures by 3-5°C likely over Northwest India during next 2 days and gradual rise by 4-6°C thereafter.
- No significant change in maximum temperatures likely over Konkan & Goa during next 24 hours and gradual fall by 2-3°C thereafter.
- No significant change in maximum temperatures likely over West India during next 24 hours and gradual fall by 2-3°C thereafter.
- ❖ No significant change in maximum temperatures likely over rest parts of India during next 4-5 days.

## Heat Wave and Hot & Humid weather warnings:

- **Heat wave conditions** very likely in isolated pockets over Konkan & Goa on 27<sup>th</sup>; Coastal Karnataka on 27<sup>th</sup> & 28<sup>th</sup> February.
- ❖ Hot and humid weather very likely to prevail over Konkan & Goa on 28<sup>th</sup> February and Coastal Karnataka on 01<sup>st</sup> March.

## iii. Weather conditions and forecast over Delhi/NCR during 27th Feb. to 02nd March. 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>

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

- Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad: Banihal (dist Ramban) 8
- Andaman & Nicobar Islands: Nancowry (dist Nicobar) 2, Iaf Carnicobar (dist Nicobar) 1, Long Island (dist North; Middle Andaman) 1

## **Thunderstorm reported:**

❖ Jammu &Kashmir: Sri Nagar, Qazigund; Himachal Pradesh: Sundernagar, Palampur, Jot, Kangra, Buntar.

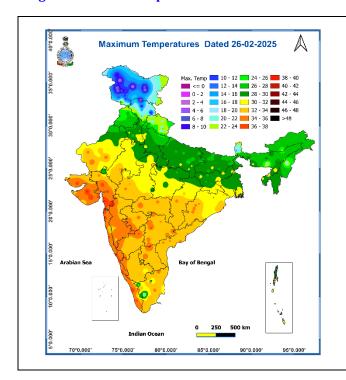
## Visibility reported (≤200 m) (in meter):

- ❖ Dense fog (visibility 50-199 m) reported in isolated pockets of Meghalaya.
- **❖ Visibility reported (≤200 m) (in meter): Meghalaya:** Barapani 50

#### **ANNEXURE II**

- ❖ Minimum temperatures are in the range of 12°C to 18 °C at many places over Uttar Pradesh, Punjab, East Rajasthan, Bihar, Jharkhand, Assam, Marathawada; 18°C to 24 °C at many places over Haryana, Chandigarh & Delhi, Gujarat State. Today, the lowest minimum temperature of 10.0°C is reported at Ayodhya (Uttar Pradesh) over the plains of the country.
- During the past 24 hours, minimum temperatures have fallen by 1-3°C at isolated places over Telangana & Tamilnadu Puducherry & Karaikal and it has risen by 1-4°C at many places over Northwest India & Madhya Pradesh; at a few places over West Bengal & Sikkim, Gujarat State; at isolated places over Bihar, Jharkhand, Vidarbha, Madhya Maharashtra, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura.
- Minimum temperatures are markedly above normal (5°C or more) over many parts of Punjab & Delhi; at a few places over Haryana, West Uttar Pradesh & Rajasthan; appreciably above normal by (3°C to 5°C) over many places over Gujarat State; at isolated places over Jammu-Kashmir & Himachal Pradesh; above normal by (1°C to 3°C) at many places over Madhya Pradesh, Bihar, Odisha, Tamilnadu Puducherry & Karaikal; at a few places over East Uttar Pradesh, Maharashtra, Coastal Andhra Pradesh & Yanam, Kerala & Mahe; at isolated places over Gangetic West Bengal, Coastal & North Interior Karnataka and Andaman & Nicobar Islands. These are below normal by (-3°C to -1°C) over most parts of Assam & Meghalaya, Vidarbha & Telangana and near normal over remaining parts of the country.
- Maximum temperatures were in the range of 35-40°C at many places over Gujarat State, Vidarbha, Tamilnadu Puducherry & Karaikal, Kerala & Mahe; at a few places over Konkan & Goa; at isolated places over West Rajasthan, Madhya Maharashtra, Telangana, Rayalaseema, Coastal & North Interior Karnataka; 30-35°C at many places over Central India, Odisha; at a few places over East Rajasthan & Gangetic West Bengal; at isolated places over Haryana & Uttar Pradesh. Yesterday, the highest maximum temperature of 39.2°C was reported at Kannur Airport (Kerala) over the plains of the country.
- During the past 24 hours, maximum temperatures had fallen by 1-4°C at isolated places over Jammu-Kashmir, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam and North Interior Karnataka. It had risen by 2-5°C at many places over Himachal Pradesh, Delhi & Rajasthan; at isolated places over Haryana, Punjab, West Uttar Pradesh and Assam; by 1-2°C at many places over Gujarat State & Madhya Pradesh; at isolated places over East Uttar Pradesh, Madhya Maharashtra, Vidarbha, Odisha, Sub-Himalayan West Bengal & Sikkim and Meghalaya.
- Maximum temperatures were markedly above normal (5°C or more) at isolated places over Haryana-Chandigarh-Delhi, West Uttar Pradesh, East Rajasthan and Konkan & Goa; appreciably above normal (3°C to 5°C) at many places over Saurashtra & Kutch; at isolated places over Punjab, West Rajasthan and Coastal Karnataka; above normal (1°C to 3°C) at many places over Uttarakhand; at a few places over East Uttar Pradesh, Arunachal Pradesh, West Madhya Pradesh, Madhya Maharashtra and Kerala & Mahe. These were markedly below normal (-5°C or less) at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh; below normal (-3°C to -1°C) at most places over Gangetic West Bengal and near normal over rest parts of the country.

Fig. 2: Departure of Maximum Temperatures



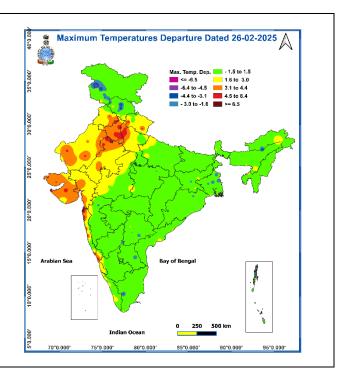
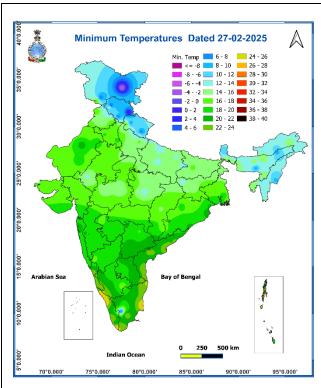
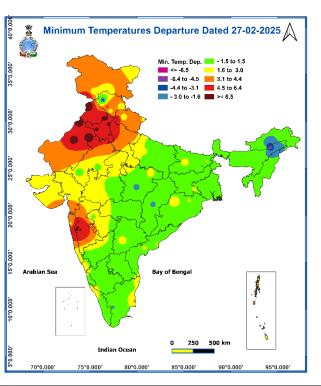


Fig. 3: Minimum Temperatures

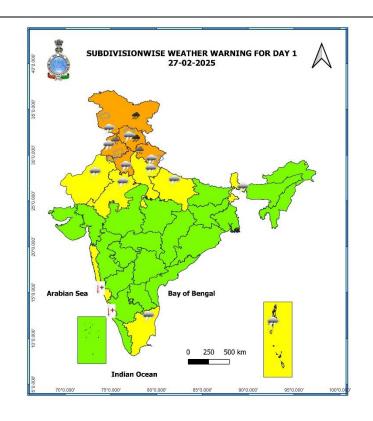
Fig. 4: Departure of Minimum Temperatures

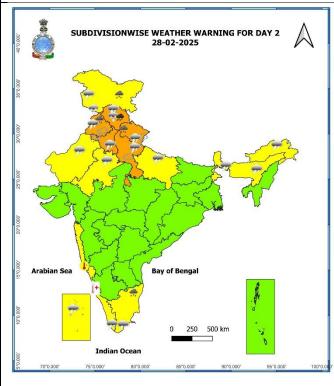


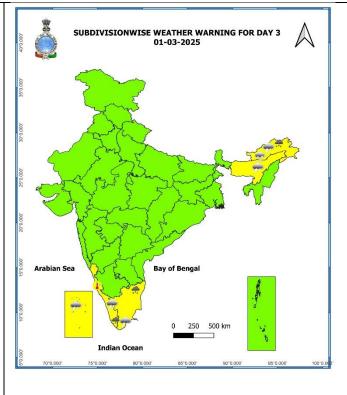


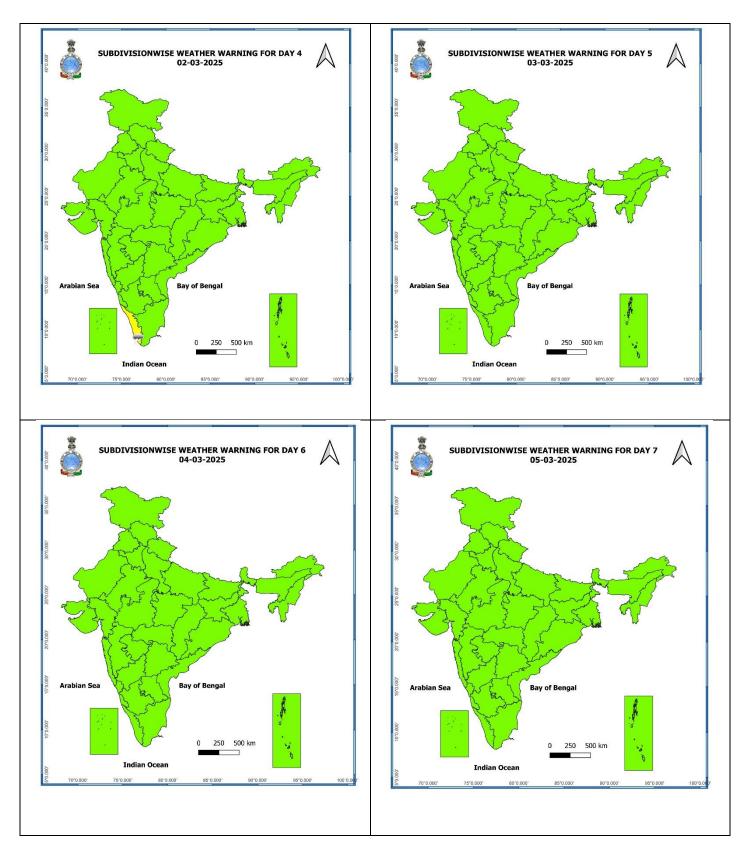
| 7 Days Rainfall Forecast |                                      |            |            |            |            |            |            |            |  |  |
|--------------------------|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|--|--|
| S.<br>No.                | Subdivision                          | 27-<br>Feb | 28-<br>Feb | 01-<br>Mar | 02-<br>Mar | 03-<br>Mar | 04-<br>Mar | 05-<br>Mar |  |  |
| NO.                      |                                      | Day<br>1   | Day<br>2   | Day 3      | Day 4      | Day 5      | Day 6      | Day 7      |  |  |
| 1                        | ANDAMAN & NICOBAR ISLANDS            | FWS        | SCT        | ISOL       | ISOL       | ISOL       | DRY        | DRY        |  |  |
| 2                        | ARUNACHAL PRADESH                    | DRY        | ISOL       | SCT        | SCT        | ISOL       | ISOL       | DRY        |  |  |
| 3                        | ASSAM & MEGHALAYA                    | DRY        | ISOL       | ISOL       | ISOL       | DRY        | DRY        | DRY        |  |  |
| 4                        | NAGALAND, MANIPUR, MIZORAM & TRIPURA | DRY        | ISOL       | ISOL       | ISOL       | DRY        | DRY        | DRY        |  |  |
| 5                        | SUB-HIMALAYAN WEST BENGAL & SIKKIM   | ISOL       | SCT        | ISOL       | ISOL       | DRY        | ISOL       | ISOL       |  |  |
| 6                        | GANGETIC WEST BENGAL                 | DRY        |  |  |
| 7                        | ODISHA                               | DRY        |  |  |
| 8                        | JHARKHAND                            | DRY        | ISOL       | ISOL       | DRY        | DRY        | DRY        | DRY        |  |  |
| 9                        | BIHAR                                | DRY        | ISOL       | ISOL       | DRY        | DRY        | DRY        | DRY        |  |  |
| 10                       | EAST UTTAR PRADESH                   | DRY        | ISOL       | ISOL       | DRY        | DRY        | DRY        | DRY        |  |  |
| 11                       | WEST UTTAR PRADESH                   | ISOL       | SCT        | ISOL       | DRY        | DRY        | DRY        | DRY        |  |  |
| 12                       | UTTARAKHAND                          | WS         | WS         | SCT        | ISOL       | SCT        | ISOL       | DRY        |  |  |
| 13                       | HARYANA CHANDIGARH & DELHI           | WS         | FWS        | ISOL       | DRY        | ISOL       | DRY        | DRY        |  |  |
| 14                       | PUNJAB                               | WS         | WS         | ISOL       | DRY        | SCT        | DRY        | DRY        |  |  |
| 15                       | HIMACHAL PRADESH                     | WS         | WS         | ISOL       | ISOL       | FWS        | SCT        | ISOL       |  |  |
| 16                       | JAMMU & KASHMIR AND LADAKH           | WS         | WS         | ISOL       | SCT        | FWS        | ISOL       | ISOL       |  |  |
| 17                       | WEST RAJASTHAN                       | ISOL       | ISOL       | DRY        | DRY        | DRY        | DRY        | DRY        |  |  |
| 18                       | EAST RAJASTHAN                       | ISOL       | ISOL       | ISOL       | DRY        | DRY        | DRY        | DRY        |  |  |
| 19                       | WEST MADHYA PRADESH                  | DRY        |  |  |
| 20                       | EAST MADHYA PRADESH                  | DRY        |  |  |
| 21                       | GUJARAT REGION                       | DRY        |  |  |
| 22                       | SAURASHTRA & KUTCH                   | DRY        |  |  |
| 23                       | KONKAN & GOA                         | DRY        |  |  |
| 24                       | MADHYA MAHARASHTRA                   | DRY        |  |  |
| 25                       | MARATHAWADA                          | DRY        |  |  |
| 26                       | VIDARBHA                             | DRY        |  |  |
| 27                       | CHHATTISGARH                         | DRY        |  |  |
| 28                       | COASTAL ANDHRA PRADESH & YANAM       | DRY        |  |  |
| 29                       | TELANGANA                            | DRY        |  |  |
| 30                       | RAYALASEEMA                          | DRY        | ISOL       | ISOL       | DRY        | DRY        | DRY        | DRY        |  |  |
| 31                       | TAMILNADU PUDUCHERRY & KARAIKAL      | ISOL       | SCT        | SCT        | ISOL       | ISOL       | DRY        | DRY        |  |  |
| 32                       | COASTAL KARNATAKA                    | DRY        |  |  |
| 33                       | NORTH INTERIOR KARNATAKA             | DRY        |  |  |
| 34                       | SOUTH INTERIOR KARNATAKA             | DRY        |  |  |
| 35                       | KERALA & MAHE                        | ISOL       | SCT        | FWS        | SCT        | ISOL       | DRY        | DRY        |  |  |
| 36                       | LAKSHADWEEP                          | DRY        | SCT        | FWS        | FWS        | SCT        | DRY        | DRY        |  |  |

• 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 27th Feb. to 02nd March, 2025.

#### **Past Weather:**

There has been a markedly rise in minimum temperatures and maximum temperatures over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi are in the range of 29 to 32°C and 18 to 20°C, respectively. The minimum temperatures were above normal by 04-07°C, and maximum temperatures were above normal by 03-06°C over most places. Partly cloudy sky conditions with predominant surface wind from the southeast direction with wind speeds less than 08 to 10 kmph prevailed during the past 24 hours. Mainly, haze conditions with wind speed less than 16 kmph from the east/southeast direction prevailed over the region in the forenoon today.

#### Weather Forecast:

**27.02.2025:** Generally cloudy sky. Very light to light rain accompanied by thunderstorm/lightning. The maximum temperature over Delhi is likely to be in the range of 24 to 26°C. The predominant surface wind will likely be from the north-northeast direction with a wind speed of less than 18 kmph till evening. It would increase thereafter, becoming less than 20 kmph from the east-northeast direction during the night.

**28.02.2025:** Generally cloudy sky. Mist likely in the morning. Very light to light rain accompanied by thunderstorm/lightning. The maximum and minimum temperatures over Delhi are likely to be in the range of 22 to 24°C and 15 to 17°C, respectively. The predominant surface wind will likely be from the east-northeast direction with a wind speed of 18-20 kmph during morning hours. The wind speed will gradually decrease thereafter, becoming 14-16 kmph from the southeast direction during the afternoon. It will increase, becoming less than 20 kmph from the east-northeast direction during evening and night.

**01.03.2025:** Generally cloudy sky. Very light rain/drizzle is likely in the morning and forenoon. The maximum and minimum temperatures over Delhi are likely to be in the range of 26 to 28°C and 14 to 16°C, respectively. The predominant surface wind will likely be from the east-southeast direction with a wind speed of 12-14 kmph during morning hours. The wind speed will gradually increase thereafter, becoming 14-16 kmph from the east-southeast direction during the afternoon. It will decrease, becoming less than 10 kmph from the east-northeast direction during evening and night.

**02.03.2025:** Partly cloudy sky. Mist likely in the morning. The maximum and minimum temperatures over Delhi are likely to be in the range of 27 to 29°C and 14 to 16°C, respectively. The predominant surface wind will likely be from the north-northeast direction with a wind speed of 06-08 kmph during morning hours. The wind speed will gradually increase, becoming 10-12 kmph from the north-northwest direction in the afternoon. It will decrease, becoming less than 10 kmph from the northeast direction during evening and night.

## Agromet advisories for likely impact of Heavy Rainfall / Snowfall / Hailstorm / Heat Wave

- ➤ Use hail nets or hail caps in fruit orchards and vegetable plants to protect them from mechanical damage in **Jammu & Kashmir**, **Himachal Pradesh**, **Uttarakhand**, **Punjab**, **Haryana** and **West Uttar Pradesh**.
- Complete harvesting of matured paddy in Tamil Nadu and Kerala.
- Make provision for draining out excess water from the standing crop fields in Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Tamil Nadu and Kerala. In the regions of heavy snowfall, shake the fruit bearing trees to remove snow immediately from the branches.
- In **Konkan** and **Coastal Karnataka**, apply light and frequent irrigation to the standing crops in the evening to protect them from heat wave.
- ➤ Keep the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields.
- Provide mechanical support to horticultural crops and staking to vegetables to avoid lodging.

## Livestock

- 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.

Impact & Action Suggested due to heavy to very heavy rainfall/snowfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh & Uttarakhand on 27th & 28th February.

## A. 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).

## **B. 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 winds & Hailstorm over Northwest India on 27th & 28th February and Northeast India on 28th February & 01st March.

#### **Impact expected:**

- Strong wind/hail may damage plantation, horticulture and standing crops.
- Hail may injure people and cattle at open places.
- Partial damage to vulnerable structures due to strong winds.
- Minor damage to kutcha houses/walls and huts.
- Loose objects may fly.

## **Action suggested:**

- > Stay indoors, close windows & doors and avoid travel if possible.
- > Take safe shelters; do not take shelter under trees.
- > Do not lie on concrete floors and do not lean against concrete walls.
- > Unplug electrical/ electronic appliances.
- Immediately get out of water bodies.
- ➤ Keep away from all the objects that conduct electricity.

 $Impact\ expected\ and\ action\ suggested\ due\ to\ Heat\ Wave\ conditions\ over\ Konkan\ and\ Coastal\ Karnataka.$ 

## 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.

## **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**

16



4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा 5. उप-हिमालयी पश्चिम बंगाल और सिक्किम

6. गंगीय पश्चिम बंगाल



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. आतंरिक उत्तरी कर्नाटक

Sust Raising Winds

34. आतंरिक दक्षिणी कर्नाटक

35. केरल और माहे

36. लक्षद्वीप



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. 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

50 - 75

> 75

32. Coastal Karnataka

33. North Interior Karnataka

34. South Interior Karnataka

35. Kerala & Mahe

36. Lakshadweep

Very Likely

Most Likely

# 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)              |



**Hot & Humid** 

Strong Surface Winds





#### **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 (b). Based on Actual maximum temperature **Heat Wave** 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 Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C. **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 $\leq$ -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 -6.4 °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 **Dust/Sand** An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind. Ice deposits on ground Frost Air temperature ≤4°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 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) 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.