

# Government of India Ministry of Earth Sciences India Meteorological Department



Press Release Date: 25<sup>th</sup> April, 2025 Time of Issue: 1315 hours IST

Subject: i) Heat wave conditions likely over plains of Northwest India till 29<sup>th</sup> and East & Central India till 26<sup>th</sup> April, 2025;

- ii) Heavy to very heavy rainfall spell likely to continue over Northeast India till 27<sup>th</sup> April, 2025.
- iii)A fresh spell of rainfall accompanied with thunderstorms, lightning & strong winds over East & adjoining central India from 26th to 29th April, 2025.

### i. Realised weather during past 24 hours till 0830 hours IST of today, the $25^{th}$ April 2025 (Annexure I):

- Thunderstorm accompanied with Squally/Gusty winds speed reaching 50-60 kmph prevailed at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Madhya Pradesh, Kerala & Mahe, North Interior Karnataka, Telangana, Coastal Andhra Pradesh & Yanam.
- **Hailstorm** occurred at isolated places over Assam & Meghalaya, Jammu & Kashmir.
- Heavy to very heavy rainfall with extremely heavy falls recorded at isolated places over Meghalaya; heavy to very heavy rainfall at isolated places over Assam; and heavy rainfall at isolated places over Arunachal Pradesh.
- Heat wave conditions prevailed in isolated pockets of West Bengal, Bihar, Odisha, East Madhya Pradesh and Vidarbha,
- Warm night conditions prevailed in isolated pockets of West Bengal and Odisha,
- **\Display** Hot & humid weather prevailed in isolated pockets of Marathawada.

For more details of realised weather, kindly refer Annexure I

#### **Temperature:**

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

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

- An upper air cyclonic circulation lies over central Assam in lower tropospheric levels. A northsouth trough runs from northern parts of Marathawada to Gulf of Mannar and another trough from Sikkim to southwest Bangladesh in lower tropospheric levels.
- Under the influence of these systems:
  - ✓ **Fairly widespread to widespread** light/moderate rainfall accompanied with **thunderstorm, lightning & strong winds speed reaching 40-50 kmph gusting to 60 kmph** likely over Northeast India during next 7 days.
  - ✓ **Thundersquall (wind speed reaching 50-60 kmph)** likely over Arunachal Pradesh, Assam & Meghalaya on 25<sup>th</sup> & 26<sup>th</sup> and Nagaland, Manipur, Mizoram & Tripura on 25<sup>th</sup> April.

- ✓ **Heavy rainfall** likely over Assam & Meghalaya, Arunachal Pradesh during 25<sup>th</sup>-27<sup>th</sup>; over Nagaland, Mizoram & Tripura on 28<sup>th</sup> & 29<sup>th</sup> with **very heavy rainfall** over Arunachal Pradesh on 25<sup>th</sup>; Assam & Meghalaya during 25<sup>th</sup>-27<sup>th</sup> April.
- ✓ Extremely heavy falls also likely at isolated places over Meghalaya on 25<sup>th</sup> April.
- ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm**, **lightning** & **strong winds speed reaching 30-40 kmph gusting to 50 kmph** likely over Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Kerala & Mahe, Tamilnadu Puducherry & Karaikal during next 7 days.
- ✓ **Isolated heavy rainfall** over Kerala & Mahe on 25th, 28th & 29th April.
- ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm**, **lightning & strong winds speed reaching 40-50 kmph gusting to 60 kmph** likely over East India and East Uttar Pradesh during 26<sup>th</sup>-29<sup>th</sup> April.
- ✓ **Isolated hailstorm** activity likely over North Interior Karnataka on 25<sup>th</sup> & 26<sup>th</sup>; Chhattisgarh during 26<sup>th</sup>-28<sup>th</sup>; Vidarbha on 27<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim on 26<sup>th</sup>; Bihar, Jharkhand on 27<sup>th</sup>; Odisha on 27<sup>th</sup> & 28<sup>th</sup> April.
- ✓ **Thundersquall (wind speed reaching 50-60 kmph)** likely over Interior Karnataka, Sub-Himalayan West Bengal & Sikkim, Jharkhand on 27th; Gangetic West Bengal, Odisha, Vidarbha on 27th & 28th; Bihar, Chhattisgarh during 26th-28th April.
- ✓ **Isolated heavy rainfall** over Sikkim on 26<sup>th</sup> & 27<sup>th</sup> April.
- ❖ A Western Disturbance seen as a trough in middle tropospheric westerlies roughly along Long. 72°E to the north of Lat. 32°N and a cyclonic circulation lies over Jammu-Kashmir & neighbourhood in lower tropospheric levels. Under its influence;
  - ✓ **Isolated to scattered** light rainfall with **thunderstorm**, **lightning & strong winds speed reaching 30-40 kmph gusting to 50 kmph** likely over Western Himalayan Region on 25th-26th April.

#### **Temperature Forecast:**

- Gradual rise in maximum temperatures by 1-3°C likely over Punjab, Haryana Chandigarh & Delhi, Rajasthan during next 7 days.
- ❖ No significant change in maximum temperatures likely over Uttar Pradesh and east India during next 2 Days and fall by 3-5°C for subsequent 3 days.
- ❖ No significant change in maximum temperatures likely over Gujarat during next 3 Days and rise by 2-3°C for subsequent 3 days.
- ❖ Gradual fall in maximum temperatures by 2-3°C likely over Central India except Madhya Pradesh during next 3 days.
- ❖ No significant change in maximum temperatures likely over Maharashtra during next 24 hours and fall by 2-4°C for subsequent 6 days.
- ❖ No significant change in maximum temperatures likely over rest parts of the country.

#### Heat wave, warm night and Hot & Humid weather warning:

- ❖ Heat wave conditions very likely in isolated pockets over Rajasthan during 25<sup>th</sup> April -01<sup>st</sup> May; Haryana during 25<sup>th</sup> -29<sup>th</sup>; Punjab during 26<sup>th</sup> April -01<sup>st</sup> May; West Madhya Pradesh during 25<sup>th</sup>-28<sup>th</sup>; East Madhya Pradesh, Vidarbha, West Bengal & Sikkim, Odisha on 25<sup>th</sup> & 26<sup>th</sup> April.
- **❖ Warm night conditions** very likely in isolated pockets over West Rajasthan during 26<sup>th</sup> -29<sup>th</sup>; Odisha on 25<sup>th</sup> April.
- ❖ Hot & humid weather is likely to prevail over Coastal Karnataka, Madhya Maharashtra, Marathawada on 25th; Bihar, Jharkhand, Tamilnadu Puducherry & Karaikal, Kerala & Mahe on 25th & 26th; Coastal Andhra Pradesh & Yanam, Rayalaseema during 25th -27th; Gujarat State during 27th-31st;

### iv. Weather conditions and forecast over Delhi/NCR during 25th April to 28th April, 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:

https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php

**ANNEXURE I** 

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

Light/moderate Rainfall with thunderstorm & lightning observed at many places over Arunachal Pradesh, Assam & Meghalaya; at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Andaman & Nicobar Islands, Kerala & Mahe; at isolated places over Nagaland, Manipur, Mizoram & Tripura, Himachal Pradesh, Madhya Maharashtra, Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Odisha, Tamilnadu Puducherry & Karaikal, Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema.

#### Rainfall recorded (in cm):

- \* Assam & Meghalaya: Cherrapunji (dist East Khasi Hills) 35, Cherrapunji(rkm) (dist East Khasi Hills) 31, Mawsynram (dist East Khasi Hills) 31, Nahar Katia (dist Dibrugarh) 16, Beky Rly.bridge (dist Barpeta) 14, Dholla Bazar (dist Tinsukia) 13, Barpeta (dist Barpeta) 12, Khliehriat (dist East Jaintia Hills) 7, Manash Nh Xing (dist Barpeta) 7, Panbari (dist Chirang) 7,
- ❖ Arunachal Pradesh: Tezu\_ Aws (dist Lohit) 11, Namsai (dist Lohit) 7,
- **❖ Tamil nadu:** Uthagamandalam (dist The Nilgiris) 3,
- Kerala & Mahe: Kanjirappally (dist Kottayam) 3, Thodupuzha (dist Idukki) 3, Kollam (dist Kollam) 3.

#### Realised Gusty wind since last 24 hours (till 0830 hrs IST) (Max Gust in knots, time in IST)

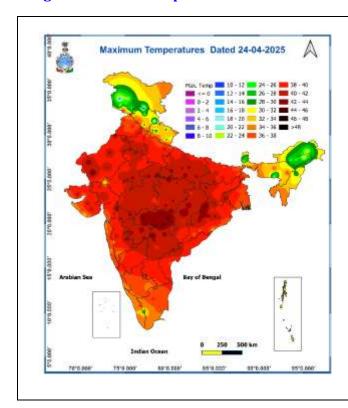
- Assam & Meghalaya: SONITPUR\_AMFU 20, GHORAMARA\_AEGCL 21,GAURIPUR\_AEGCL 21, KOKRAGHAR 21,SALAKATI\_AEGCL 20, KAJALGAON 17, 26, BARPETA 28, DUDHNOI\_KVK CHIRANG 28, BONGAIGAON 28, BOKO\_AEGCL 17. CHANDUBI 22, KUKURMARA MIRZA AEGCL 17, AMINGAON 20, GUWAHATI 17, SHILLONGANI\_AMFU 21, HABANG\_CIRCLE GAUHATI\_UNIVERSITY 21, UMLAPHER 21, LKHEP 26, HALFLONG\_AEGCL 17, KARIMGANJ\_AMFU 18, SILCHAR\_JNS\_COLLEGE 18, DIPHU\_AMFU 25, BOKAJAAN\_AEGCL 19, DIBRUGARH 17, RUPAI\_AEGCL 26, Mawsynram 40 Umium AMFU 30
- **❖ Arunachal Pradesh:** BOMDILA=30;
- Nagaland, Manipur, Mizoram & Tripura: THONOKNYU\_AWS=31, DHALAI=22, KHAZAWL=17;
- Gangetic West Bengal: AWS Data: Gangasagar (20 kt) Canning, Digha (19 kt) Kalyani, Berhampore (18 kt)
- Odisha: Kendrapara (18 kt) Cuttack (17 kt)
- ❖ **Iharkhand:** Chatra, Barhi (18 kt) Netarhat (17 kt).
- Bihar: Bhojpur, Arwal (21 kt) Manjhi (20 kt) Buxar, Saraiya (19 kt) Pusa (17 kt),
- ❖ Uttarakhand: Kosya\_Kutauli-43, Jollygrant-37, Pantnagar-35, Ranichauri-35, Rudraprayag-31, Barshar-30, Chaubtia\_Ranikhet-30,
- ❖ Punjab: SANGRUR=41, HOSHIARPUR (SALERN)=37
- ❖ West Uttar Pradesh: AGRA (IAF)11G 21 KT
- ❖ East Uttar Pradesh: GORAKHKPUR(IAF)-10G20KT, AYODHYA (AP)-10G20KT, LUCKNOW-10G20KT,

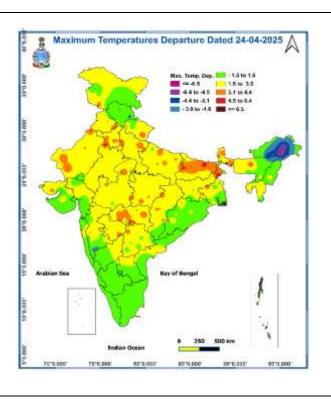
#### Temperature observations during past 24 hours till 0830 hours IST of today:

- ❖ Yesterday, maximum temperatures were in the range of 40-45°C at many/some stations over Rajasthan, Madhya Pradesh, Vidarbha; at a few stations over East Uttar Pradesh, Gujarat state, Marathwada, Madhya Maharashtra, Telangana, Chhattisgarh, Odisha, Gangetic West Bengal, Haryana-Chandigarh-Delhi; at isolated stations over Punjab, Bihar, Jharkhand, Rayalaseema, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal, North Interior Karnataka, Coastal Andhra Pradesh & Yanam. Yesterday, the highest maximum temperature of 45.9°C was reported at Brahmapuri (Vidarbha) over the country.
- ❖ Yesterday, Maximum Temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Punjab, Haryana-Chandigarh-Delhi; at a few places over Uttarakhand, Uttar Pradesh, West Rajasthan; at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Bihar, Chhattisgarh Odisha, Jharkhand, Marathwada, Madhya Pradesh, Assam & Meghalaya; above normal (1.6°C to 3.0°C) at few places over East Rajasthan, Madhya Maharashtra, Gangetic West Bengal, Coastal Karnataka; at isolated places over Gujarat state, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal. These were below normal (-3.0°C to -1.6°C) at isolated places over North Interior Karnataka, Andaman & Nicobar Islands and normal over rest parts of the country (Fig. 2)
- ❖ Yesterday, Maximum Temperatures had risen by 1-3°C at many places over Himachal Pradesh, East Uttar Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Coastal Andhra Pradesh & Yanam; at a few places over Punjab, Haryana-Chandigarh-Delhi, Rajasthan, West Uttar Pradesh, Bihar, Tamil Nadu, Puducherry & Karaikal and fallen by 2-4°C at a few places over Gujarat state, Madhya Maharashtra, Gangetic West Bengal; at isolated places over Madhya Pradesh, North Interior Karnataka and no significant change over rest parts of the country.

Fig. 1: Maximum Temperatures

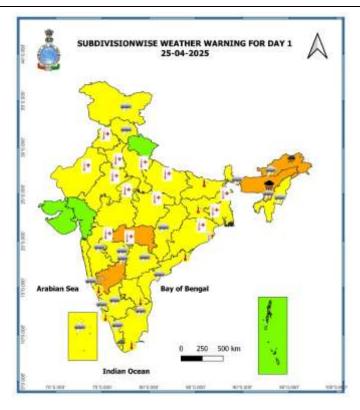


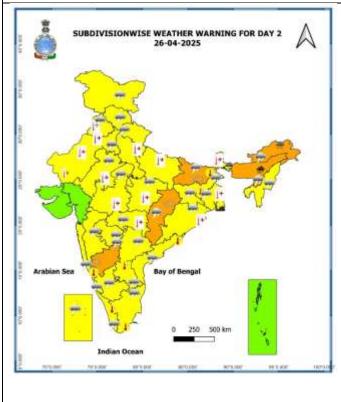


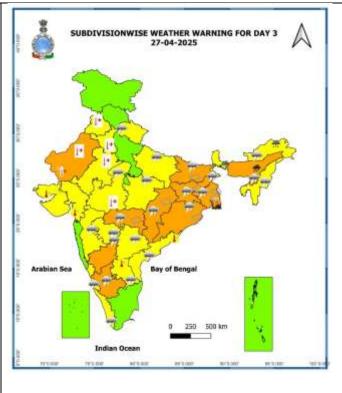


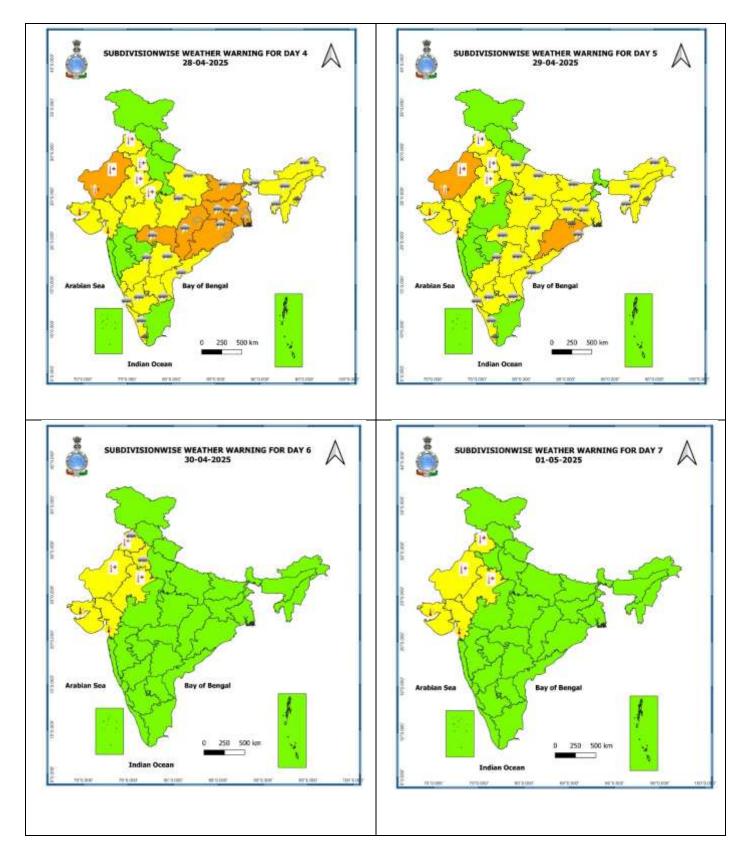
7 Days Rainfall Forecast											
S. No.	Subdivision	25-Apr	26-Apr	27-Apr	28-Apr	29-Apr	30-Apr	01-May			
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7			
1	ANDAMAN & NICOBAR ISLANDS	SCT	ISOL	SCT	SCT	SCT	SCT	ISOL			
2	ARUNACHAL PRADESH	WS	WS	WS	FWS	SCT	SCT	SCT			
3	ASSAM & MEGHALAYA	FWS	FWS	WS	SCT	SCT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

• 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 25 to 28 Apr. 2025

#### **Past Weather:**

There has been rise in minimum and maximum temperatures upto 01°C over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi are in the range of 40 to 43°C and 20 to 23 °C respectively. The minimum temperature was below normal upto 01 - 02°C and maximum temperature was above normal upto 02 - 04°C over Delhi/NCR. Predominant surface wind from the west direction with wind speeds less than 18 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 12 kmph from the southwest direction prevailed over the region in the forenoon today.

#### **Weather Forecast:**

**25.04.2025:** Mainly clear sky becoming partly cloudy sky towards evening. Occasional sustained surface winds (speed 10-20 kmph). Heat wave conditions very likely at isolated places over Delhi. The maximum temperature over Delhi is likely to be in the range of 41 to 43°C. The maximum temperature will be above normal upto 03 - 05°C. The predominant surface wind will likely be from the west direction with a wind speed of less than 10 kmph till evening. It would decrease becoming less than 08 kmph from the northwest direction during the night.

**26.04.2025:** Partly cloudy sky. Occasional sustained surface winds (speed 10-20 kmph) gusting upto 30 kmph. Heat wave conditions very likely at isolated places over Delhi. The maximum and minimum temperatures over Delhi are likely to be in the range of 41 to 43°C and 23 to 25°C respectively. The minimum temperature will be near normal and maximum temperature will be above normal upto 03 - 05°C. The predominant surface wind will likely be from the southwest direction with a wind speed of 06-10 kmph during morning hours. The wind speed will gradually increase thereafter becoming 14-18 kmph from the southwest direction during the afternoon. It will decrease becoming less than 10 kmph from the southeast direction during evening and night.

**27.04.2025**: Partly cloudy sky. Occasional sustained surface winds (speed 10-20 kmph) gusting upto 30 kmph. The maximum and minimum temperatures over Delhi are likely to be in the range of 40 to 42°C and 23 to 25°C respectively. The minimum temperature will be near normal and maximum temperature will be above normal upto 01 - 03°C. The predominant surface wind will likely be from the southeast direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase becoming 12-14 kmph from the southeast direction in the afternoon. It will decrease becoming less than 10 kmph from the southeast direction during evening and night.

**28.04.2025:** Partly cloudy sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 40 to 42°C and 22 to 24°C respectively. The minimum temperature will be below normal upto 01 - 03°C and maximum temperature will be above normal upto 01 - 02°C. The predominant surface wind will likely be from the southeast direction with a wind speed less than 12 kmph during morning hours. The wind speed will gradually increase becoming 12-14 kmph from the southeast direction in the afternoon. It will decrease becoming less than 12 kmph from the southeast direction during evening and night.

#### **Impact expected and Action Suggested:**

- Be cautious and take precautionary measures though there is likelihood of heat wave conditions. There is likelihood of heat related impact to vulnerable population as the temperatures are likely to be above normal.
- Moderate health concern for vulnerable people e.g. infants, elderly people with chronic diseases.
- Avoid heat exposure, wear light weight, light colored, loose, cotton clothes, cover your head, use a cloth, hat or umbrella.

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

- ✓ **Isolated hailstorm** activity likely over North Interior Karnataka on 25<sup>th</sup> & 26<sup>th</sup>; Chhattisgarh during 26<sup>th</sup>-28<sup>th</sup>; Vidarbha on 27<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim on 26<sup>th</sup>; Bihar, Jharkhand on 27<sup>th</sup>; Odisha on 27<sup>th</sup> & 28<sup>th</sup> April.
- ✓ **Thundersquall (wind speed reaching 50-60 kmph)** likely over Arunachal Pradesh, Assam & Meghalaya on 25<sup>th</sup> & 26<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura on 25<sup>th</sup>; Interior Karnataka, Sub-Himalayan West Bengal & Sikkim, Jharkhand on 27<sup>th</sup>; Gangetic West Bengal, Odisha, Vidarbha on 27<sup>th</sup> & 28<sup>th</sup>; Bihar, Chhattisgarh during 26<sup>th</sup>-28<sup>th</sup> April.

#### 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 plains of Northwest India till 29th and East & Central India till 26th April.

#### **Yellow alert Areas**

- Moderate temperature & heat is tolerable for general public but moderate health concern likely for vulnerable people e.g. infants, elderly, people with chronic diseases.
- Avoid heat exposure.
- Wear lightweight, light colour, loose, cotton clothes.
- Cover your head, use a cloth, hat or umbrella.

## Impact & Action Suggested due to heavy to very heavy rainfall over Arunachal Pradesh on 25th; Assam & Meghalaya during 25th-27th April.

#### **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.

#### Agromet advisories for likely impact of Hailstorm / Heavy Rainfall / Gusty Winds / Heat wave

- ➤ Postpone sowing of *Jhum* paddy and transplanting of banana in **Arunachal Pradesh**; planting of ginger, turmeric and transplanting of papaya and banana in **Assam**; planting of ginger and transplanting of chilli and brinjal in **Meghalaya**.
- ➤ In **Arunachal Pradesh, Assam, Meghalaya, Sub Himalayan West Bengal** and **Kerala,** drain out excess water from standing crop and vegetable fields.
- In **Sub Himalayan West Bengal, Odisha, Bihar, Jharkhand, Vidarbha, Chhattisgarh, Marathwada** and **North Interior Karnataka,** use hail net and hail caps to prevent mechanical damage in vegetables and orchards due to the possibility of hailstorms. Drain out excess water from standing crops and vegetable fields.
- ➤ To protect standing crops, vegetables and orchards from adverse effects of heat waves and high temperatures, apply light and frequent irrigation in the evening.
- ➤ 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.

#### **Livestock / Poultry / Fishery**

- Keep the animals inside the shed during heavy rainfall / hailstorm and provide them balanced feed
- > Store feed and fodder in a safe place to prevent spoilage.
- To reduce the effect of heat wave/high temperature, cover the roof of poultry sheds with grass. Also, provide clean, hygienic and plenty of drinking water to animals.
- Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.

#### 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)		
		<b>⊜</b> Dust Storm	Cold Day	Watch (B			
Very Heav	y Rain	+ Heat Wave	Ground Fro	Alert (Be	Alert (Be Prepared To Take Action)		
Extremely	Heavy Rain	+ Warm Night		Warning	Warning (Take Action)		
<b>.</b>	0 1:-ba-:	+ Hot Day		-	Probabilistic Forecast		
Thunder & Lightning		* in		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.