



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 20th April, 2025

Time of Issue: 1400 hours IST

Subject: i) Significant reduction in rainfall activities over Western Himalayan region including Jammu and Kashmir from 21st April, 2025
ii) A fresh spell of heat wave conditions likely to affect Vidarbha during 21st -23rd; south Uttar Pradesh, Madhya Pradesh during 22nd -24th; Rajasthan, south Haryana on 23rd & 24th April, 2025;
iii) A fresh spell of heavy rainfall likely to impact Northeast India from 22nd April, 2025.
iv) Gradual reduction of thunderstorm activity over Eastern parts of India from 21st onwards.

i. Realised weather during past 24 hours till 0830 hours IST of today, the 20th April 2025 (Annexure I):

- ❖ **Thunderstorm** accompanied with Squally/Gusty winds prevailed at isolated places Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, East Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Gangetic West Bengal, Odisha, Jharkhand, Bihar, Northeast India, Kerala & Mahe, Tamilnadu Puducherry & Karaikal, Interior Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana.
- ❖ **Hailstorm** occurred at isolated places over Odisha, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Tamilnadu Puducherry & Karaikal, Telangana.
- ❖ **Heavy rainfall** has been recorded at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ **Heat wave conditions** at isolated places over East Rajasthan.
- ❖ **Warm night to sever warm night** prevailed at isolated places over Rajasthan.

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):

- ❖ Under the influence of Western **Disturbance** as a trough in middle tropospheric westerlies and an upper air cyclonic circulation over central Pakistan & adjoining northwest Rajasthan in lower tropospheric levels;
 - ✓ **Scattered to fairly widespread** light/moderate rainfall with **thunderstorm, lightning & squally winds (speed 50-60 kmph gusting to 70 kmph)** likely over Himachal Pradesh (Orange colour warning) on 20th; accompanied with **thunderstorm, lightning & gusty winds (speed 40-50 kmph gusting to 60 kmph)** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad (Orange colour warning) on 20th & 21st and over

Himachal Pradesh on 20th; with **gusty winds (speed 30-40 kmph gusting to 50 kmph)** over Uttarakhand on 20th April and reduce thereafter.

- ✓ **Heavy rainfall** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 20th April.
 - ✓ **Isolated Hailstorm** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh on 20th April.
 - ✓ Isolated light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed 30-40 kmph gusting to 50 kmph)** likely over Punjab, Haryana and West Uttar Pradesh on 20th April.
- ❖ A north south trough from central Assam to Tripura and 2nd from central Pakistan & adjoining northwest Rajasthan to central parts of Bangladesh; 3rd trough from northeast Madhya Pradesh to Gulf of Mannar in lower tropospheric levels.
- ❖ Under the influence of these systems:
- ✓ **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 to scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed reaching 30-40 kmph gusting to 50 kmph)** likely over East India during next 3 days and over Chhattisgarh during 20th -24th April.
 - ✓ **Heavy rainfall** likely over Arunachal Pradesh & Assam & Meghalaya during 22nd-24th with **very heavy rainfall** at isolated places over Assam & Meghalaya on 22nd April.
 - ✓ **Isolated to Scattered** light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (speed reaching 30-40 kmph gusting to 50 kmph)** likely over Interior Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe during next 5 days and Telangana during next 5 days; **with lightning** over Tamilnadu Puducherry & Karaikal, Telangana, Coastal Karnataka during next 5 days.
 - ✓ **Heavy rainfall** likely over Kerala & Mahe, Coastal Andhra Pradesh & Yanam and Assam & Meghalaya on 20th April, 2025.
- ❖ **Dust raising winds** very likely in isolated pockets over Gujarat state on 20th April.

Temperature Forecast:

- ❖ Gradual rise in maximum temperatures by 2-3°C likely over Northwest India during next 5 Days and no significant change during subsequent 2 days.
- ❖ No significant change in maximum temperatures likely over Central India and Gujarat State during next 24 hours and gradual rise by 2-3°C during subsequent 6 days.
- ❖ Gradual rise in maximum temperatures by 4-6°C likely over East India during next 4 Days and no significant change during subsequent 3 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 south Uttar Pradesh, Madhya Pradesh during 22nd -24th; Rajasthan, Haryana on 23rd & 24th; Vidarbha during 21st -23rd April.
- ❖ **Hot & humid weather** is likely to prevail over Madhya Maharashtra, Marathwada on 20th; Tamilnadu Puducherry & Karaikal during 20th -22nd and over Gujarat State during 22nd -24th April.

iv. Weather conditions and forecast over Delhi/NCR during 20th April to 23rd April, 2025 (Annexure V)

For more details, kindly refer National Weather Bulletin:

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

For District wise warnings refer:

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

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

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

Rainfall recorded (in cm):

- ❖ **Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Govindpura Aws (dist Ramban) 9, Banihal (dist Ramban) 7, Qazi Gund (dist Kulgam) 5, Nowgam (dist Kupwara) 5, Kukernag (dist Anantnag) 4, Khudwani Arg (dist Anantnag) 4, Lolab (dist Kupwara) 4, Kargil (dist Kargil) 4, Buhama (dist Kupwara) 4, Tengmarg (dist Baramulla) 4, Raj Pura Arg (dist Poonch) 4,
- ❖ **Tamilnadu Puducherry & Karaikal:** Sivakasi (dist Virudhunagar) 5, Valparai PTO (dist Coimbatore) 4,
- ❖ **Kerala & Mahe:** Poonjar Aws (dist Kottayam) 6, Anayirankal Dam Aws (dist Idukki) 3, Kudulu (dist Kasargod) 3,

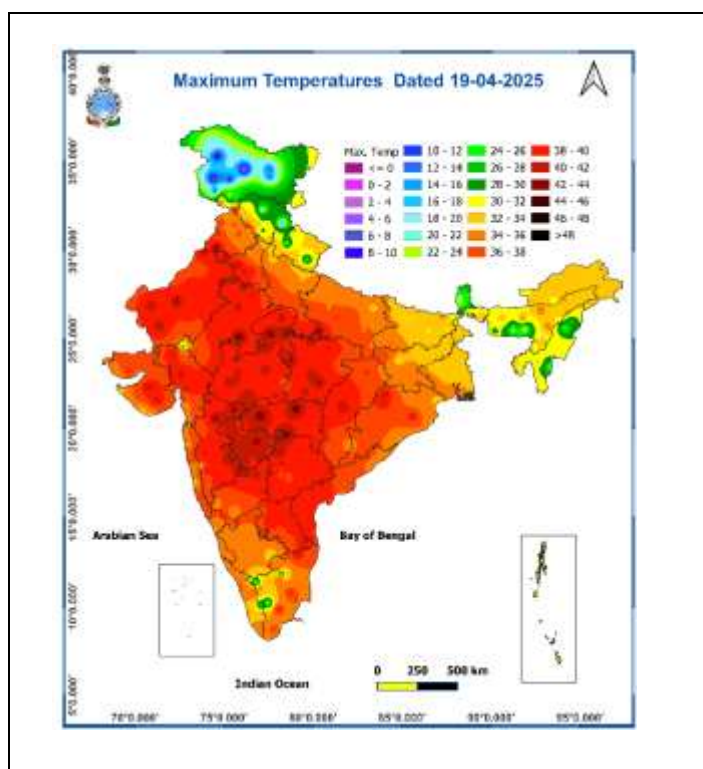
Realised Gusty Winds (Knot, IST) during past 24hours ending at 0300 UTC of today i.e 20.04.2025 (Received from RMCs/MCs, AWS DATA):

- ❖ **Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad:** Jammu (31kts,1545), Leh(48kts,1830), Kargil (35kts,1745), Jammu (31kts,1315);
- ❖ **Himachal Pradesh:** Hoshiarpur (26,1500),
- ❖ **Chhattisgarh:** Bemetara (37,1745), Mungeli (32,1615)
- ❖ **Bihar:** East_Champaran(24,1045)
- ❖ **Jharkhand:** Simdega (23,1600)
- ❖ **Meghalaya:** Ri_Bhoi (31,1415)
- ❖ **Telangana:** Adilabad (36,1145), Vikarabad (29,1835), Ranga_Reddy (23,1545)
- ❖ **Tamil_Nadu:** Thoothukudi (34,1730) Kovilpatti_Amfu (63kmph, 1730) Thiruchendur(39kmph, 1600)

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

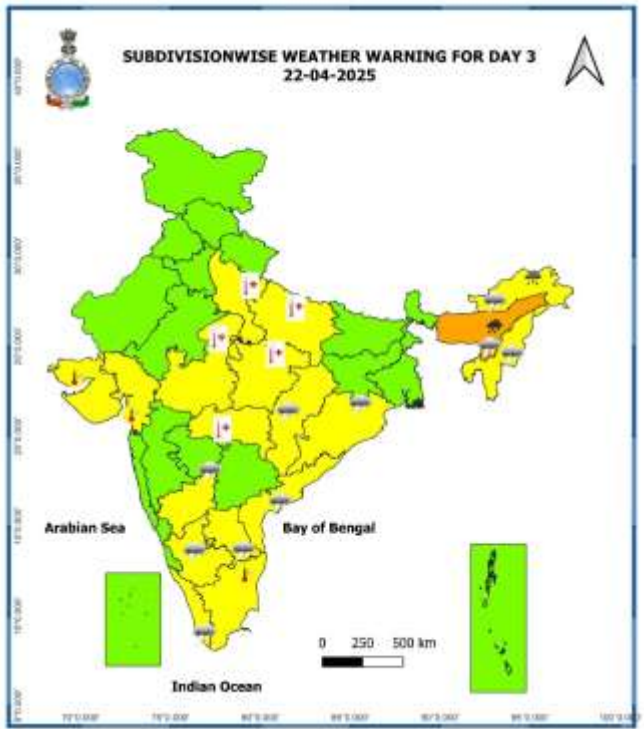
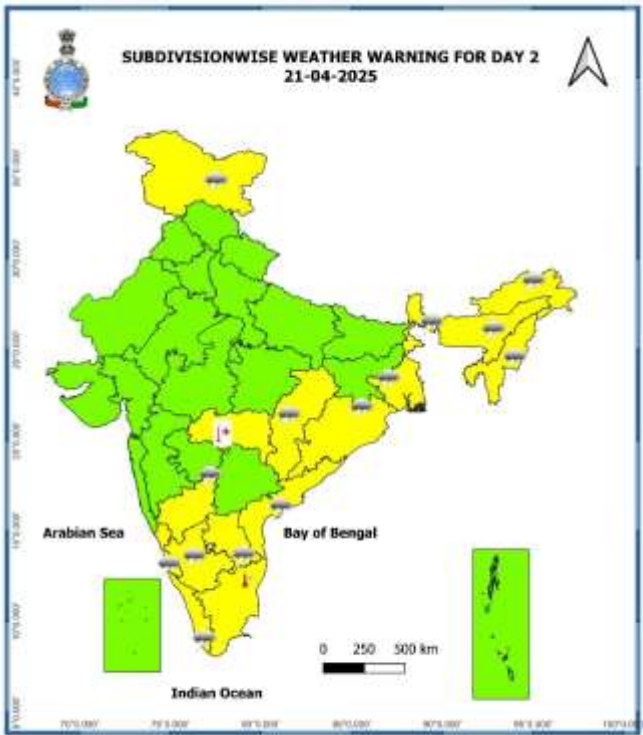
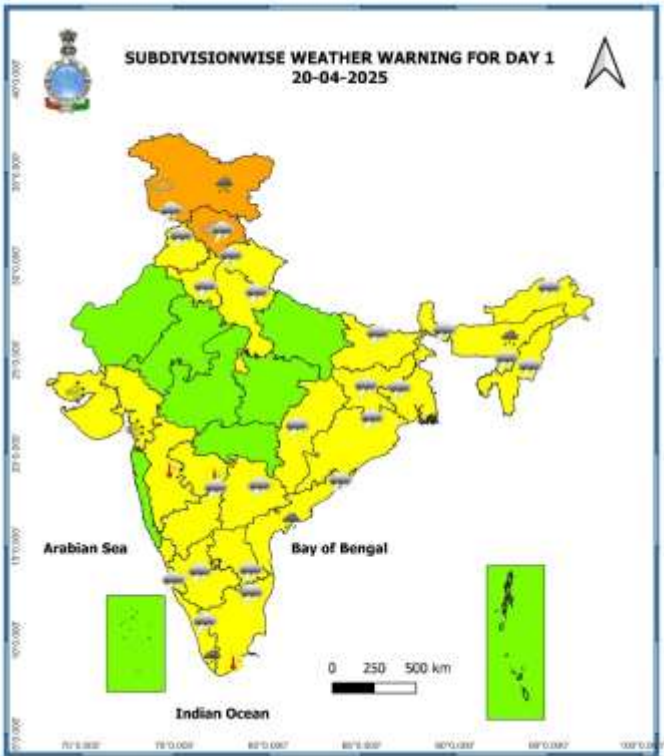
- ❖ **Yesterday**, Maximum Temperatures had risen by **5°C -7°C** in some places of Gangetic West Bengal, Jammu and Kashmir, by **2°C -4°C** in some places of Bihar, **1°C -2°C** over some places of Vidarbha, isolated places of Assam & Meghalaya, they have fallen by **2°C -4°C** at most places of Rajasthan, some places of West Madhya Pradesh, and isolated places of Punjab & Haryana.
- ❖ **Yesterday, Maximum Temperatures** were in the **range of 41°C to 45°C** at a few places of Madhya Pradesh, Maharashtra, isolated places of Rajasthan, Chhattisgarh, Odisha, Haryana, Saurashtra & Kutch, Telangana, Rayalaseema, north interior Karnatak, in the **range of 36°C to 40°C** over many places in Tamil Nadu, at some places of Konkan & Goa, isolated places of coastal Andhra Pradesh, and less than 36 C of most places of Gangetic West Bengal, most places Uttar Pradesh, Bihar, at some places in Jharkhand, Kerla, coastal Karnatak and Nagaland, Manipur, Tripura. Yesterday, **the highest maximum temperature of 44.7°C was reported at Nagpur (Sonegaon) (Vidarbha)** over the country.
- ❖ Yesterday, Yesterday, **Maximum Temperatures** were **markedly above normal (5.1°C or more)** at isolated places over Arunachal Pradesh, Assam & Meghalaya; **appreciably above normal (3.1°C to 5.0°C)** at isolated places over Madhya Pradesh, East Rajasthan, Haryana-Chandigarh-Delhi; **above normal (1.6°C to 3.0°C)** at most places over Marathwada; at many places over Vidarbha; at a few places over West Rajasthan; at isolated places over Punjab, Himachal Pradesh, Madhya Maharashtra, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Sub-Himalayan West Bengal & Sikkim, Tamil Nadu, Puducherry & Karaikal. These **were markedly below normal (-5.1°C or less)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Bihar, Gangetic West Bengal; **below normal (-3.0°C to -1.6°C)** at many places over Jharkhand; at a few places over East Uttar Pradesh, Andaman & Nicobar Islands; at isolated places over West Uttar Pradesh, Odisha and normal over rest parts of the country (**Fig. 2**)

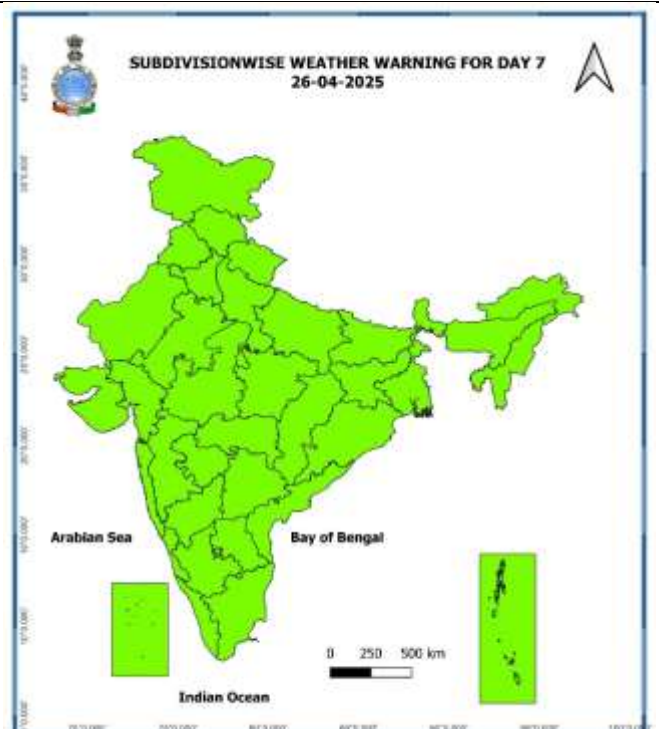
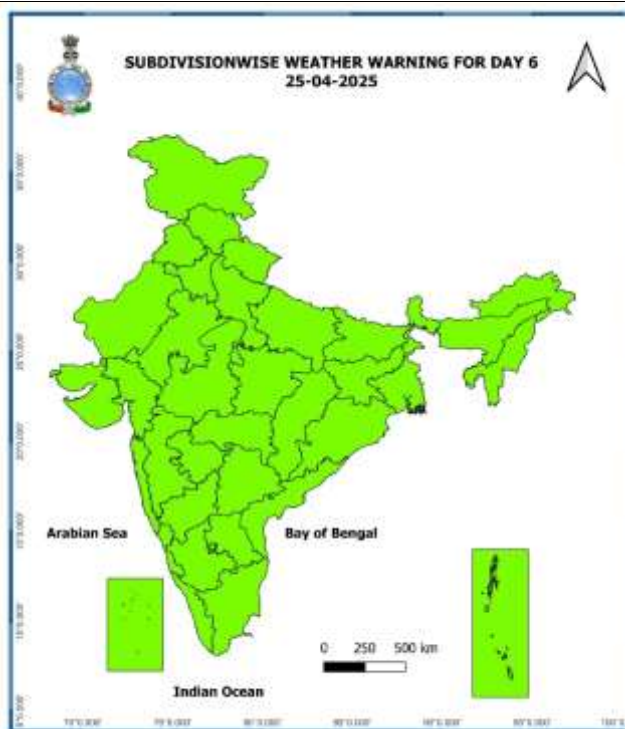
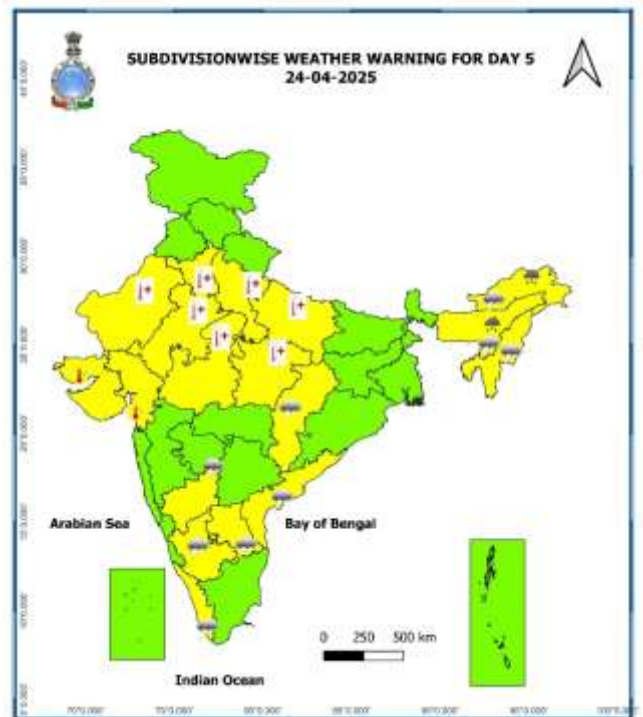
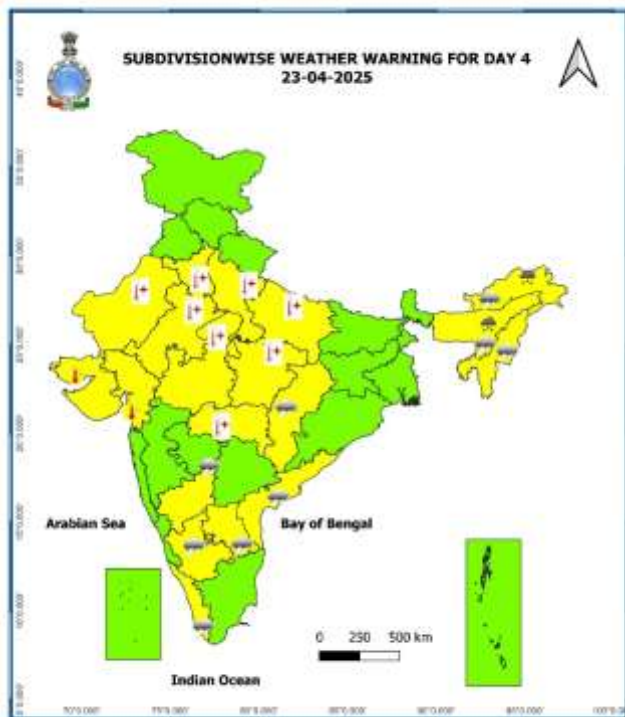
Fig. 1: Maximum Temperatures



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

Weather forecast over Delhi/NCR during 20th to 23th Apr. 2025

Past Weather:

There has been no significance change in minimum temperature and fall in maximum temperature upto 01°C over Delhi/NCR during the past 24 hours. The maximum and minimum temperatures over Delhi are in the range of 38 to 39 °C and 25 to 26 °C respectively. The minimum temperature was above normal upto 04°C and maximum temperature was near normal at many places. Mainly clear sky with predominant surface wind from the southeast direction with wind speeds less than 18 to 20 kmph with gusting to 40 kmph prevailed during the past 24 hours. Mainly clear sky conditions with wind speed less than 10 kmph from the southeast direction prevailed over the region in the forenoon today.

Weather Forecast:

20.04.2025: Partly cloudy sky becoming generally cloudy sky towards evening. Very light rain/ drizzle accompanied with thunderstorms, lightning, dust storms and surface wind speed reaching 30 to 40 kmph gusting 50 kmph during evening/ night hours. The maximum temperature over Delhi is likely to be in the range of 38 to 40°C. The predominant surface wind will likely be from the southeast direction with a wind speed of less than 18 kmph till evening. It would decrease becoming less than 12 kmph from the northwest direction during the night.

21.04.2025: Partly cloudy sky. Sustained Surface winds (speed 15-25 kmph) gusting to 35kmph. The maximum and minimum temperatures over Delhi are likely to be in the range of 39 to 41°C and 24 to 26°C respectively. The predominant surface wind will likely be from the west direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase thereafter becoming 16-20 kmph from the west direction during the afternoon. It will decrease becoming less than 14 kmph from the northwest direction during evening and 2night.

22.04.2025: Mainly clear sky. Strong surface winds (speed 20-30 kmph) gusting to 40kmph. The maximum and minimum temperatures over Delhi are likely to be in the range of 39 to 41°C and 23 to 25°C respectively. The predominant surface wind will likely be from the northwest direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase becoming 16-20 kmph from the northwest direction in the afternoon. It will decrease becoming less than 14 kmph from the northwest direction during evening and night.

23.04.2025: Mainly clear sky. Strong surface winds (speed 20-30 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 predominant surface wind will likely be from the northwest direction with a wind speed of 10-12 kmph during morning hours. The wind speed will gradually increase becoming 16-20 kmph from the northwest direction in the afternoon. It will increase becoming less than 14 kmph from the northwest direction during evening and night.

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

- ✓ **Isolated Hailstorm Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh on 20th 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 south Uttar Pradesh, Madhya Pradesh during 22nd -24th; Rajasthan, Haryana on 23rd & 24th; Vidarbha during 21st - 23rd 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.

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

- In **Kerala, Coastal Andhra Pradesh, Arunachal Pradesh and Assam and Meghalaya**, make provision to drain out excess water from standing crop and vegetable fields.
- In **Jammu & Kashmir**, use hail net and hail caps to prevent mechanical damage in vegetables and orchards due to possibility of hailstorms. Drain out excess water from standing crops and vegetable fields.
- In **Vidarbha, Rajasthan, Madhya Pradesh, Uttar Pradesh and Haryana**, apply light and frequent irrigation to standing crops, vegetables and orchards in the evening to protect them from adverse effects of heat waves and high temperatures.
- 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.

LEGENDS

1. अंडमान और निकोबार द्वीपसमूह

2. अरुणाचल प्रदेश

3. असम और मेघालय

4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा

5. उप-हिमालयी पश्चिम बंगाल और सिक्किम

6. गंगीय पश्चिम बंगाल

7. ओडिशा

8. झारखंड

9. बिहार

10. पूर्वी उत्तर प्रदेश

11. पश्चिम उत्तर प्रदेश

12. उत्तराखंड

13. हरियाणा, चंडीगढ़ और दिल्ली

14. पंजाब

15. हिमाचल प्रदेश

16. जम्मू और कश्मीर और लद्दाख

17. पश्चिम राजस्थान

18. पूर्वी राजस्थान

19. पश्चिम मध्य प्रदेश

20. पूर्वी मध्य प्रदेश

21. गुजरात

22. सौराष्ट्र

23. कोंकण और गोवा

24. मध्य महाराष्ट्र

25. मराठवाड़ा

26. विदर्भ

27. छत्तीसगढ़

28. तटीय आंध्र प्रदेश और यनम

29. तेलंगाना

30. रायलसीमा

31. तमिलनाडु, पुडुचेरी और कराईकल

32. तटीय कर्नाटक

33. आंतरिक उत्तरी कर्नाटक

34. आंतरिक दक्षिणी कर्नाटक

35. केरल और माहे

36. लक्षद्वीप



1. Andaman & Nicobar Islands

2. Arunachal Pradesh

3. Assam & Meghalaya

4. Nagaland, Manipur, Mizoram & Tripura

5. Sub-Himalayan West Bengal & Sikkim

6. Gangetic West Bengal

7. Odisha

8. Jharkhand

9. Bihar

10. East Uttar Pradesh

11. West Uttar Pradesh

12. Uttarakhand

13. Haryana, Chandigarh & Delhi

14. Punjab

15. Himachal Pradesh

16. Jammu & Kashmir and Ladakh

17. West Rajasthan

18. East Rajasthan

19. West Madhya Pradesh

20. East Madhya Pradesh

21. Gujarat

22. Saurashtra

23. Konkan & Goa

24. Madhya Maharashtra

25. Marathwada

26. Vidarbha

27. Chhattisgarh

28. Coastal Andhra Pradesh & Yanam

29. Telangana

30. Rayalaseema

31. Tamilnadu, Puducherry & Karaikal

32. Coastal Karnataka

33. North Interior Karnataka

34. South Interior Karnataka

35. Kerala & Mahe

36. Lakshadweep

SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/A Few Places)
51-75	Fairly Widespread (FWS/Many Places)	1-25	Isolated (ISOL)



Fog



Heavy Snow



Cold Wave



Heavy Rain



Dust Storm



Cold Day



Very Heavy Rain



Heat Wave



Ground Frost



Extremely Heavy Rain



Warm Night



Thunder & Lightning



Hot Day



Hailstorm



Hot & Humid



Dust Raising Winds



Strong Surface Winds

COLOUR CODED WARNING

No Warning (No Action)

Watch (Be Aware)

Alert (Be Prepared To Take Action)

Warning (Take Action)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

* 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)

DEFINITION/CRITERIA

Rain/ Snow *

Heavy: 64.5 to 115.5 mm/cm *
Very Heavy: 115.6 to 204.4 mm/cm *
Extremely Heavy: > 204.4 mm/cm *

Heat Wave

When maximum temperature of a station reaches $\geq 40^{\circ}\text{C}$ for plains and $\geq 30^{\circ}\text{C}$ for hilly regions
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C .

Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^{\circ}\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$.

Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$.

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is $> 4.5^{\circ}\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^{\circ}\text{C}$.

Warm Night

When maximum temperature remains 40°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°C .

Severe Warm Night: When minimum temperature departure $> 6.4^{\circ}\text{C}$.

Cold Wave

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions.

(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave: When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$

Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is $\leq -4.5^{\circ}\text{C}$ & actual Minimum Temperature is $\leq 15^{\circ}\text{C}$

Cold Day

When minimum temperature of a station $\leq 10^{\circ}\text{C}$ for plains and $\leq 0^{\circ}\text{C}$ for hilly regions
Based on departure

Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C .

Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$

Fog

Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres

Dense Fog: when the visibility between 50- 200 metres

Very Dense Fog: when the visibility < 50 metres

Thunderstorm

Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)

Dust/Sand Storm

An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.

Frost

Ice deposits on ground

Air temperature $\leq 4^{\circ}\text{C}$ (over Plains)

Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph

Severe: Wind speed 62-67 kmph

Very Severe: Wind speed > 67 kmph

Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre

High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre

Phenomenal: Wind speed > 117 kmph (> 63 knots) & Wave height > 14 metre

Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)

Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)

Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)

Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)

Super Cyclone Storm: 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.