

Tuesday, April 23, 2024  
Time of Issue: 0800 hours IST  
(MORNING)

## All India Impact Based Weather Warning Bulletin

### 23 April (Day 1):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 40-50 kmph)** very likely at isolated places over Vidarbha, Chhattisgarh and Assam & Meghalaya; **with lightning & gusty winds (speed reaching 30-40 kmph)** at isolated places over East Madhya Pradesh, Jharkhand, Nagaland, Manipur, Mizoram & Tripura, Telangana and North Interior Karnataka; **with lightning** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Madhya Maharashtra, Marathwada and Kerala & Mahe.
- ❖ **Heavy to very heavy rainfall** very likely at isolated places over Arunachal Pradesh.
- ❖ **Hot and humid weather** very likely to prevail over Sub-Himalayan West Bengal, Bihar, Odisha, Assam, west Meghalaya, Tripura, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail in isolated pockets over Gangetic West Bengal; **heat wave conditions** in isolated pockets over East Uttar Pradesh and Interior Karnataka.
- ❖ **Warm Night conditions** very likely to prevail in isolated pockets over East Madhya Pradesh.

### 24 April (Day 2):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** very likely at isolated places over Vidarbha, Chhattisgarh, Assam & Meghalaya and Telangana; **with lightning** at isolated places over Uttarakhand, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Marathwada.
- ❖ **Heavy rainfall** very likely at isolated places over Arunachal Pradesh.
- ❖ **Hot and humid weather** very likely to prevail over Odisha, Assam, west Meghalaya, Tripura, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** very likely to prevail in isolated pockets over Gangetic West Bengal; **heat wave conditions** in isolated pockets over Uttar Pradesh, Sub-Himalayan West Bengal, Bihar and Interior Karnataka.

### 25 April (Day 3):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** likely at isolated places over East Rajasthan, West Madhya Pradesh and Chhattisgarh.
- ❖ **Hot and humid weather** likely to prevail over Assam, west Meghalaya, Tripura, Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** likely to prevail in isolated pockets over Gangetic West Bengal; **heat wave conditions** in isolated pockets over Uttar Pradesh, Sub-Himalayan West Bengal, Jharkhand, Odisha, Bihar and Interior Karnataka.

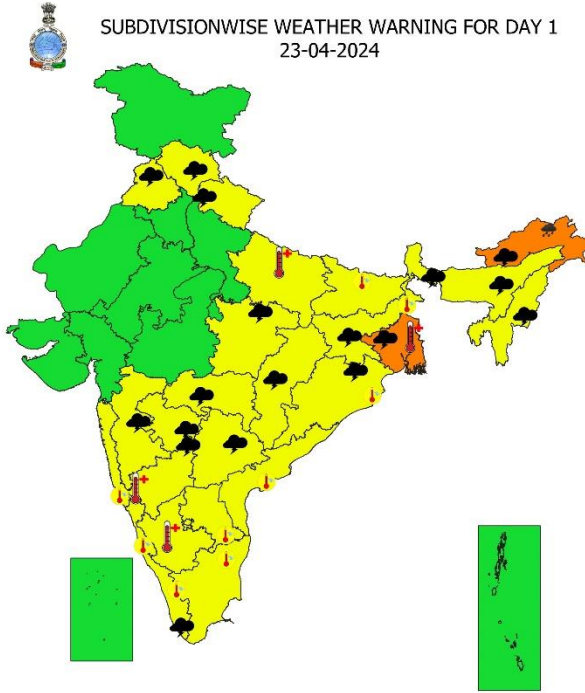
### 26 April (Day 4):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** likely at isolated places over Rajasthan, West Madhya Pradesh and Chhattisgarh; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Punjab.
- ❖ **Hot and humid weather** likely to prevail over Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** likely to prevail in isolated pockets over Gangetic West Bengal; **heat wave conditions** in isolated pockets over Uttar Pradesh, Sub-Himalayan West Bengal, Jharkhand, Odisha, Bihar and Interior Karnataka.

### 27 April (Day 5):

- ❖ **Thunderstorm accompanied with lightning & gusty winds (speed reaching 30-40 kmph)** likely at isolated places over East Rajasthan, West Madhya Pradesh and Chhattisgarh; **with lightning** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Haryana-Chandigarh-Delhi and Punjab.
- ❖ **Thunderstorm/Duststorm accompanied with lightning** likely at isolated places over West Rajasthan.
- ❖ **Hot and humid weather** likely to prevail over Konkan & Goa, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Rayalaseema and Coastal Karnataka.
- ❖ **Heat wave to severe heat wave conditions** likely to prevail in isolated pockets over Gangetic West Bengal, Odisha; **heat wave conditions** in isolated pockets over Uttar Pradesh, Sub-Himalayan West Bengal, Jharkhand, Bihar and Interior Karnataka.

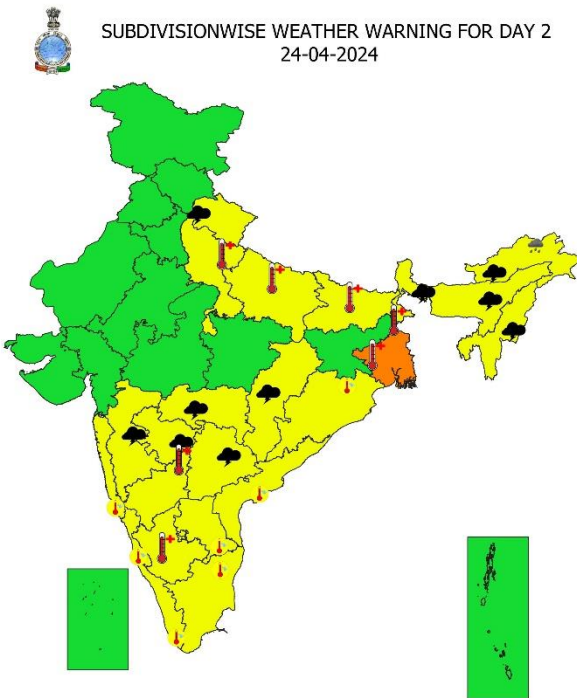
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1  
 23-04-2024



**Subdivision Warning**

Fog	Heavy Snow	Cold Day	<b>Subdivision Colour</b>
Heavy Rain	Hailstorm	Ground Frost	NO WARNING
Very Heavy Rain	Dust Storm	Strong Surface Winds	WATCH (BE UPDATED)
Extremely Heavy Rain	Heat Wave	Thunder & Lightning	ALERT (BE PREPARED)
	Cold Wave	Hot and Humid	WARNING (TAKE ACTION)

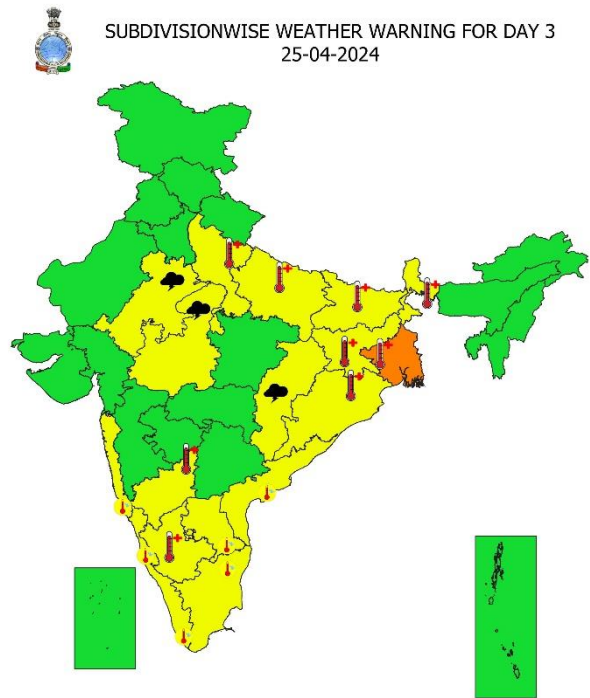
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2  
 24-04-2024



**Subdivision Warning**

Fog	Heavy Snow	Cold Day	<b>Subdivision Colour</b>
Heavy Rain	Hailstorm	Ground Frost	NO WARNING
Very Heavy Rain	Dust Storm	Strong Surface Winds	WATCH (BE UPDATED)
Extremely Heavy Rain	Heat Wave	Thunder & Lightning	ALERT (BE PREPARED)
	Cold Wave	Hot and Humid	WARNING (TAKE ACTION)

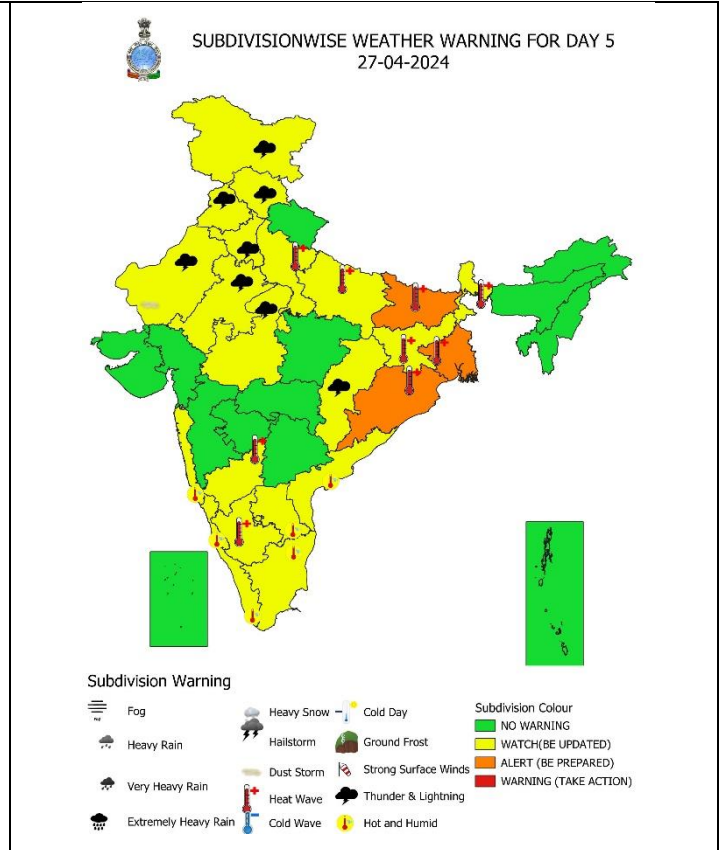
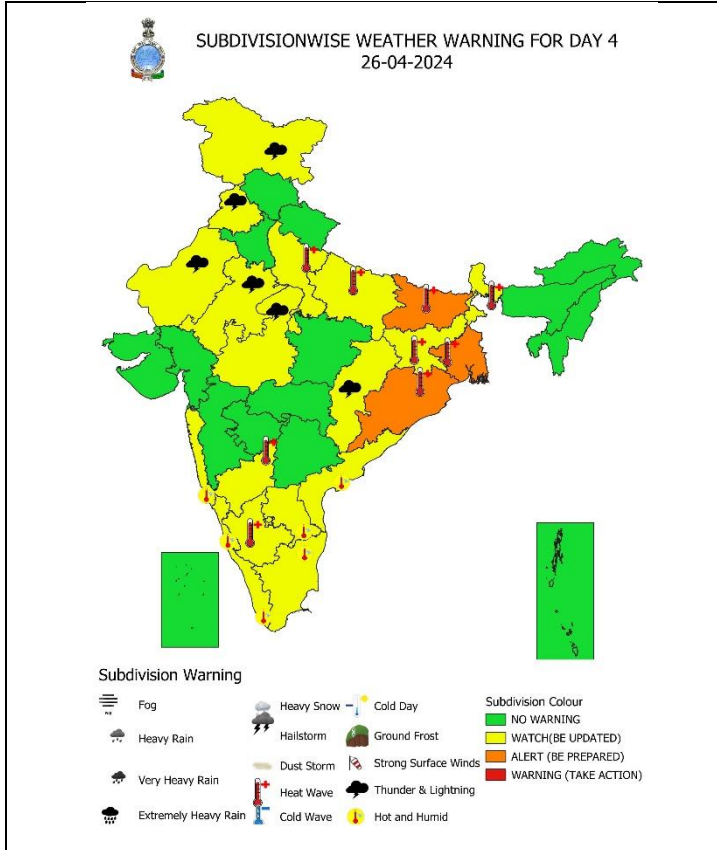
SUBDIVISIONWISE WEATHER WARNING FOR DAY 3  
 25-04-2024



**Subdivision Warning**

Fog	Heavy Snow	Cold Day	<b>Subdivision Colour</b>
Heavy Rain	Hailstorm	Ground Frost	NO WARNING
Very Heavy Rain	Dust Storm	Strong Surface Winds	WATCH (BE UPDATED)
Extremely Heavy Rain	Heat Wave	Thunder & Lightning	ALERT (BE PREPARED)
	Cold Wave	Hot and Humid	WARNING (TAKE ACTION)

**\* 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)



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**Impact & Action Suggested due to heavy/very heavy rainfall over Arunachal Pradesh during 23<sup>rd</sup>-24<sup>th</sup> April, 2024.**

**Impacts Expected for Rainfall/Snowfall over above regions:**

- Disruption of Electricity.
- Landslide, rock fall and mudslides, Blocking/washout of roads/highways/bridges Nallahs.
- Disruption of traffic flow.
- Damage to Kuccha and unsecured structures.

**Suggested Actions**

- Avoid roadway underpasses, drainage ditches, low lying areas and areas where water collects – they can unexpectedly flood or overflow.
- Stay away from power lines or electrical wires.
- Don't stay in kuchcha houses during heavy rainfall as it may collapse anytime soon.
- Drive carefully.

**IMPACT & ACTION SUGGESTED due to Heat Wave Conditions:**

**Orange alert Areas (Bihar, Odisha & Gangetic West Bengal)**

- ❖ 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- keep cool. Avoid dehydration.
- ❖ Drink sufficient water- even if not thirsty.
- ❖ Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. to keep yourself hydrated

**Yellow alert Areas (Uttar Pradesh, Jharkhand, interior Karnataka)**

- ❖ 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

### WARNING

WARNING (TAKE ACTION)
ALERT ( BE PREPARED)
WATCH (BE UPDATED)
NO WARNING ( NO ACTION)

### Probabilistic Forecast

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



**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 \*



**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  $4.5^\circ\text{C}$  to  $6.4^\circ\text{C}$ .  
**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  $\geq 37^\circ\text{C}$



**When maximum temperature remains  $40^\circ\text{C}$**

**Warm Night:** When minimum temperature departure  $4.5^\circ\text{C}$  to  $6.4^\circ\text{C}$ .  
**Severe Warm Night:** When minimum temperature departure  $>6.4^\circ\text{C}$ .



**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  $-4.5^\circ\text{C}$  to  $-6.4^\circ\text{C}$ .  
**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  $\leq 15^\circ\text{C}$



**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  $-4.5^\circ\text{C}$  to  $-6.4^\circ\text{C}$ .  
**Severe Cold Day:** Maximum Temperature Departure from normal  $\leq -6.5^\circ\text{C}$



**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  
**Very Dense Fog:** when the visibility < 50 metres



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



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



**Ice deposits on ground**

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



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

**Moderate:** Wind speed 52-61 kmph  
**Severe:** Wind speed 62-87 kmph  
**Very Severe:** Wind speed  $>87$  kmph



**Effect of various waves in the sea over specific area**

**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



**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)

Kindly download MAUSAM APP for location specific forecast & warning, MEGHDOOT APP for Agromet advisory and DAMINI APP for Lightning Warning & visit state MC/RMC websites for district wise warning.

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