



**Government of India  
Ministry of Earth Sciences  
India Meteorological Department**

**Press Release  
Date: 21<sup>st</sup> April, 2023  
Time of Issue: 1330 hours IST**

**Subject: (i) Abatement of Heat wave conditions over East India from tomorrow.  
(ii) Wet spell over northeast India with possibility of isolated heavy falls during next 2 days and reduce significantly thereafter.**

**Weather observed during past 24 hours ending at 0830 hrs IST of today: Refer Annexure I**

**Significant Meteorological features:**

- ❖ A Western Disturbance seen as a trough in middle tropospheric westerlies roughly along Long 72°E to the north of Lat. 30°N.
- ❖ A trough/wind discontinuity runs from Vidarbha to south Tamil Nadu in lower tropospheric levels.
- ❖ A trough in lower tropospheric westerlies runs roughly along Long 88°E to the north of Lat. 20°N.

**Maximum Temperatures and Heat Wave observed:**

- ❖ Yesterday's, Maximum Temperatures were in the range of 40-44°C over many parts of East India and East Uttar Pradesh; in some parts of Central India, interior Maharashtra and Rayalaseema; 35-40°C of rest of the parts of the country except over Western Himalayan Region (12-25°C). Maximum Temperatures were above normal by 4-6°C over many parts of East India; 2-4°C over some parts of East Uttar Pradesh, Andhra Pradesh, Tamil Nadu, Kerala, Konkan, and Northeast India.
- ❖ **Heat wave to severe heat wave conditions** observed in many parts of Gangetic West Bengal; in some parts of Bihar; **heat wave conditions** observed in isolated pockets over Sub-Himalayan West Bengal and Odisha.
- ❖ **Heat Wave conditions** are prevailing over Gangetic West Bengal since last 10 days; Bihar since last 7 days and Odisha since last 5 days.

**Maximum Temperatures Forecast and Heat Wave Warnings (Graphics in Annexure II):**

**East India:**

- ❖ Fall by 3-5°C in Maximum Temperatures very likely during next 5 days.

**Warnings:-**

- ❖ **West Bengal & Odisha: - Heat wave conditions** very likely in isolated pockets today.

**Northwest India:**

- ❖ No significant change in Maximum Temperatures very likely during next 3 days and rise by 2-4°C thereafter.

**Central India:**

- ❖ No significant change in Maximum Temperatures very likely during next 5 days.

**West India:**

- ❖ No significant change in Maximum Temperatures very likely during next 2 days and rise by 2-3°C thereafter.

- ✓ **Due to humid air and High Temperature, Hot and Discomfort weather is very likely over Konkan (including Mumbai & Thane), Kerala on 21<sup>st</sup> and coastal Tamil Nadu on 21<sup>st</sup> & 22<sup>nd</sup> April, 2023.**

## Rainfall Forecast and Warnings (Graphics in Annexure II):

### Northwest India:

- ❖ Light/moderate scattered to fairly widespread rainfall/snowfall with thunderstorm/lightning very likely over Western Himalayan Region and Isolated rainfall with thunderstorm/lightning likely over Punjab, Haryana, Chandigarh, Uttar Pradesh today and significant reduction thereafter.
- ❖ Isolated **Hailstorm** very likely over Uttarakhand today.

### Northeast India:

- ❖ Light/moderate fairly widespread to widespread rainfall with thunderstorm/lightning/gusty winds very likely over the region during next 3 days.
- ❖ **Heavy rainfall** very likely at isolated places over Arunachal Pradesh and Assam & Meghalaya on 21<sup>st</sup> & 22<sup>nd</sup> April, 2023.

### Central India:

- ❖ Light/moderate isolated rainfall with thunderstorm/lightning/gusty winds very likely over Madhya Pradesh, Vidarbha and Chhattisgarh during next 5 days. Isolated **hailstorm** also likely over Chhattisgarh on 21<sup>st</sup> & 22<sup>nd</sup> and over Vidarbha on 22<sup>nd</sup> April, 2023.

### East India:

- ❖ Light isolated to scattered rainfall with thunderstorm/lightning/gusty winds very likely over Bihar, Jharkhand, West Bengal & Sikkim and Odisha during next 5 days. Isolated **hailstorm** also likely over Odisha on 22<sup>nd</sup> & 23<sup>rd</sup> and over Bihar on 24<sup>th</sup> April, 2023.

### South India:

- ❖ Light isolated to scattered rainfall with thunderstorm/lightning/gusty winds very likely over Coastal Andhra Pradesh, Telangana, Rayalaseema, Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe during next 5 days.

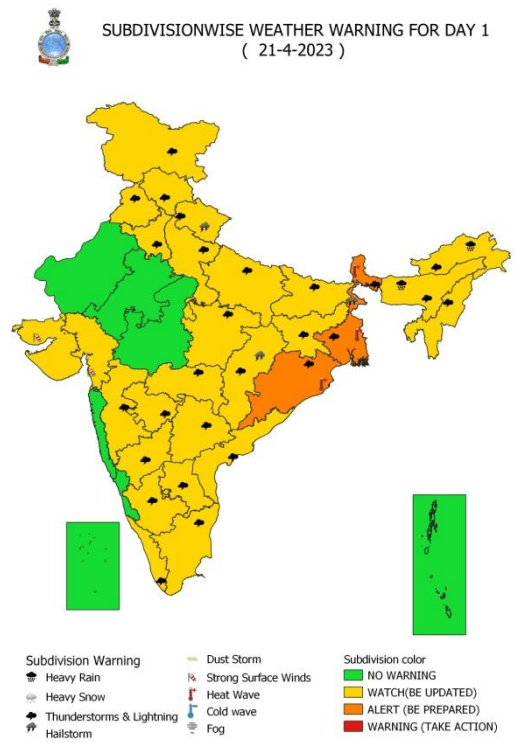
For more details kindly refer:

[https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

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

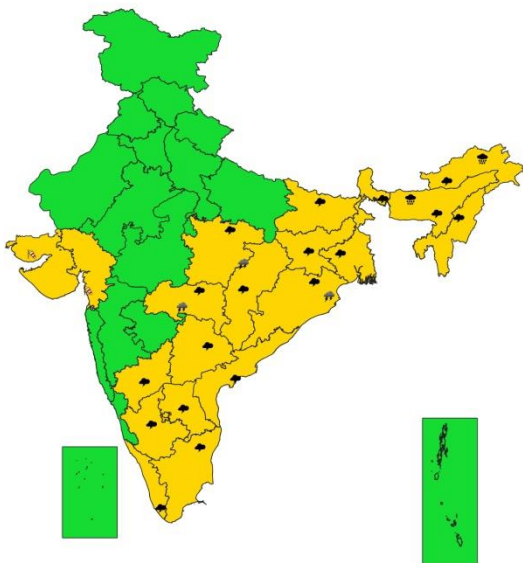
**Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today):**

- ❖ **Rainfall/thundershowers observed at most places over** Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Vidarbha; **at many places** over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim; **at a few places** over Punjab, Haryana, Chandigarh & Delhi, Odisha, Chhattisgarh, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands **and at isolated places** over Uttar Pradesh, Madhya Pradesh, Bihar, Jharkhand, Gangetic West Bengal, Madhya Maharashtra, Marathawada, Interior Karnataka, Tamil Nadu, Coastal Andhra Pradesh, Telangana and Kerala.
- ❖ **Significant amount of rainfall (in cm): Jammu & Kashmir:** Kupwara, Udhampur-3 each, Bandipore, Gulmarg, Baramulla-2 each; **Himachal Pradesh:** Shimla-6, Kullu, Mandi-5 each, Chamba, Kinnaur, Kangra-3 each, **Uttarakhand:** Joshimath-5, Uttarkashi-4, Chakrata, Mussoorie, Rudraprayag -2 each; **Arunachal Pradesh:** Naharlagun (dist Papumpara) 4; **Assam & Meghalaya:** Srijangram Arg (dist Bongaigaon) 5, Karimganj\_aws (dist Karimganj) 5, Kokrajhar (dist Kokrajhar) 4, Ranganadi Nt Xing (dist Lakhimpur) 4, Neamatighat (dist Jorhat) 4.
- ❖ **Hailstorm observed** at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Delhi, Vidarbha, Madhya Maharashtra, Sikkim and Arunachal Pradesh.





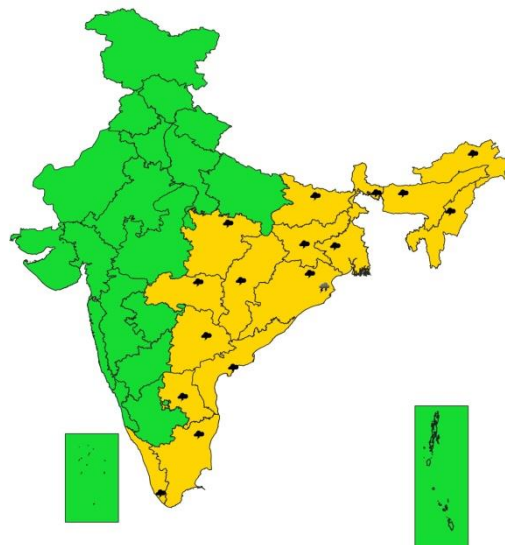
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 2 ( 22-4-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| Heavy Rain                 | Strong Surface Winds | NO WARNING               |
| Heavy Snow                 | Heat Wave            | WATCH (BE UPDATED)       |
| Thunderstorms & Lightning  | Cold wave            | ALERT (BE PREPARED)      |
| Hailstorm                  | Fog                  | WARNING (TAKE ACTION)    |



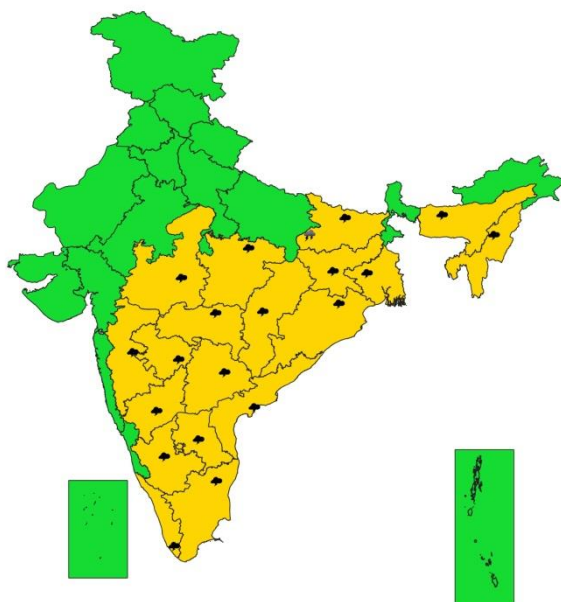
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 3 ( 23-4-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| Heavy Rain                 | Strong Surface Winds | NO WARNING               |
| Heavy Snow                 | Heat Wave            | WATCH (BE UPDATED)       |
| Thunderstorms & Lightning  | Cold wave            | ALERT (BE PREPARED)      |
| Hailstorm                  | Fog                  | WARNING (TAKE ACTION)    |



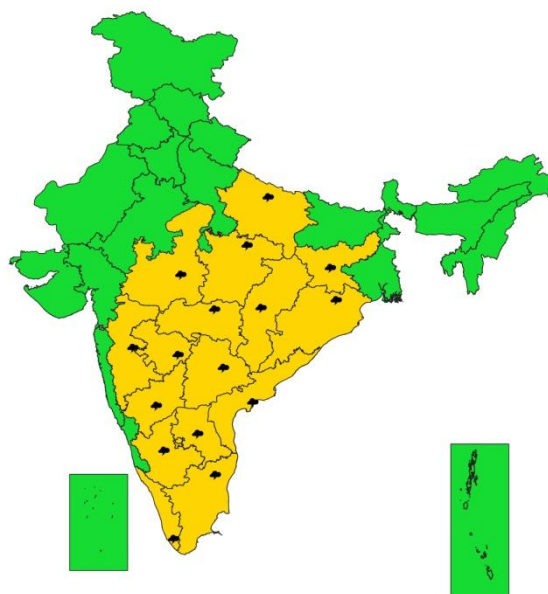
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 4 ( 24-4-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| Heavy Rain                 | Strong Surface Winds | NO WARNING               |
| Heavy Snow                 | Heat Wave            | WATCH (BE UPDATED)       |
| Thunderstorms & Lightning  | Cold wave            | ALERT (BE PREPARED)      |
| Hailstorm                  | Fog                  | WARNING (TAKE ACTION)    |



### SUBDIVISIONWISE WEATHER WARNING FOR DAY 5 ( 25-4-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| Heavy Rain                 | Strong Surface Winds | NO WARNING               |
| Heavy Snow                 | Heat Wave            | WATCH (BE UPDATED)       |
| Thunderstorms & Lightning  | Cold wave            | ALERT (BE PREPARED)      |
| Hailstorm                  | Fog                  | WARNING (TAKE ACTION)    |

### **Orange alert areas for heat wave:**

#### **IMPACT:**

- High temperature. Increased likelihood of heat illness symptoms in people who are either exposed to sun for a prolonged period or doing heavy work.
- High health concern for vulnerable people e.g. infants, elderly, people with chronic diseases.

#### **ACTION SUGGESTED**

- 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.

For Districtwise heat wave warning visit:

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














### **Agromet advisories for Heat wave and rainfall accompanied with thunderstorms/gusty winds and Hails likely over various parts of the country:**

- Postpone harvesting of matured wheat and mustard in Jammu & Kashmir, Himachal Pradesh, Uttarakhand; rice in Arunachal Pradesh; keep the already harvested produce at safer places.
- Postpone sowing of jute and summer vegetables in Assam & Meghalaya.
- Drain out excess water from the crop fields in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh and Assam & Meghalaya.
- Use hail nets to protect orchards in Uttarakhand, Sub Himalayan West Bengal & Sikkim, Vidarbha, Chhattisgarh and Odisha.
- Provide mechanical support to horticultural crops and staking to vegetables.
- Provide light and frequent irrigation to crops in West Bengal during morning and evening hours.

## Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **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-Himalaya 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 Marathwada.
  - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal and 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)

Subdivision Warning	 Dust Storm	Subdivision color
 Heavy Rain	 Strong Surface Winds	 NO WARNING
 Heavy Snow	 Heat Wave	 WATCH(BE UPDATED)
 Thunderstorms & Lightning	 Cold wave	 ALERT (BE PREPARED)
 Hailstorm	 Fog	 WARNING (TAKE ACTION)

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