



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

**Press Release
Date: 20th April, 2023
Time of Issue: 1330 hours IST**

**Subject: (i) Heat wave conditions likely to continue over East India during next 2 days and abate thereafter.
(ii) Wet spell over northeast India with possibility of isolated heavy falls during next 3-4 days.**

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. 68°E to the north of Lat. 25°N.
- ❖ An induced cyclonic circulation lies over north Pakistan & adjoining Punjab in lower tropospheric levels.
- ❖ A trough runs from east Bangladesh to Northwest Bay of Bengal in lower tropospheric levels.

Maximum Temperatures and Heat Wave observed:

- ❖ Yesterday's, Maximum Temperatures were in the range of 40-44°C over most parts of East India and East Uttar Pradesh; in many parts of Central India, interior Maharashtra, Gujarat Telangana and Rayalaseema; 35-40°C over many parts of rest of the country except over Western Himalayan Region (12-25°C). Maximum Temperatures were above normal by 3-5°C over most parts of East India; over many parts of Uttar Pradesh and Northeast India.
- ❖ Heat Wave conditions are prevailing in isolated pockets over Gangetic West Bengal since last 9 days; Coastal Andhra Pradesh since last 7 days, Bihar since last 6 days and Odisha since last 4 days.

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

East India:

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

Warnings:-

- ❖ **Gangetic West Bengal:** - Heat wave to severe heat wave condition in some parts very likely on 20th April and Heat wave conditions in isolated pockets on 21st & 22nd April.
- ❖ **Bihar and Sub-Himalayan West Bengal:** Heat wave to severe heat wave condition in some parts very likely on 20th April and Heat wave conditions in isolated pockets on 21st April.
- ❖ **Odisha:** - Heat wave conditions in isolated pockets very likely on 20th & 21st April.
- ❖ **Jharkhand:** Heat wave conditions in isolated pockets very likely on 20th April.

Northwest India:

- ❖ No significant change in Maximum Temperatures very likely during next 4-5 days.

Central India:

- ❖ No significant change in Maximum Temperatures likely over Vidarbha & Chhattisgarh during next 2 days and fall by 2-4°C thereafter.

West India:

- ❖ No significant change in Maximum Temperatures very likely during next 4-5 days.

Warnings:-

- ❖ **Konkan & Goa:-** Heat wave conditions are very likely in isolated pockets on 20th April.

South Peninsular India:

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

Warnings:-

- ❖ **Coastal Andhra Pradesh:- Heat wave conditions** are very likely in isolated pockets on 20th April.

Rainfall Forecast and Warnings (Graphics in Annexure II):

Northwest India:

- ❖ Light/moderate fairly widespread to widespread rainfall with thunderstorm/lightning very likely over Western Himalayan Region during next 2 days and isolated rainfall with thunderstorm/lightning/gusty winds over Punjab, Haryana, Chandigarh, Uttar Pradesh during next 24 hours.
- ❖ Isolated **Hailstorm** very likely over Uttarakhand during 20th to 21st April, 2023.

Northeast India:

- ❖ Light/moderate scattered to fairly widespread rainfall with thunderstorm/lightning/gusty winds very likely over the region during next 4 days.
- ❖ **Heavy rainfall** very likely at isolated places over Arunachal Pradesh and Assam & Meghalaya during 20th-22nd 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 23rd April, 2023.

East India:

- ❖ Light isolated rainfall with thunderstorm/lightning very likely Bihar, Jharkhand, West Bengal and Odisha during 21st-24th April, 2023.

No significant weather likely over rest parts of the country.

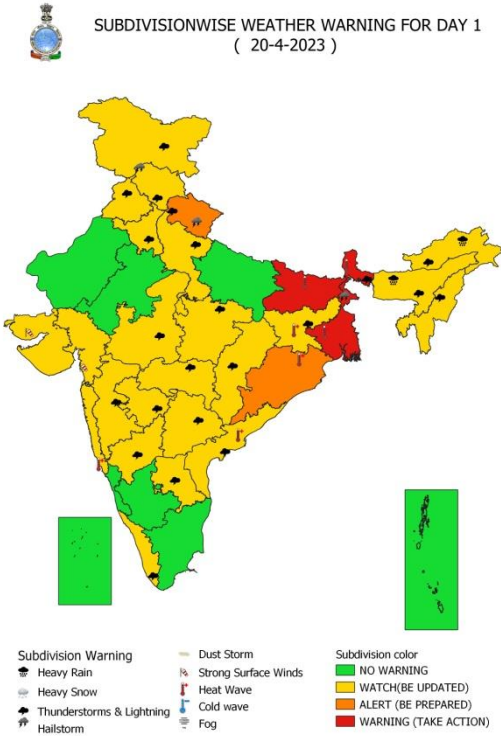
For more details kindly refer:

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

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

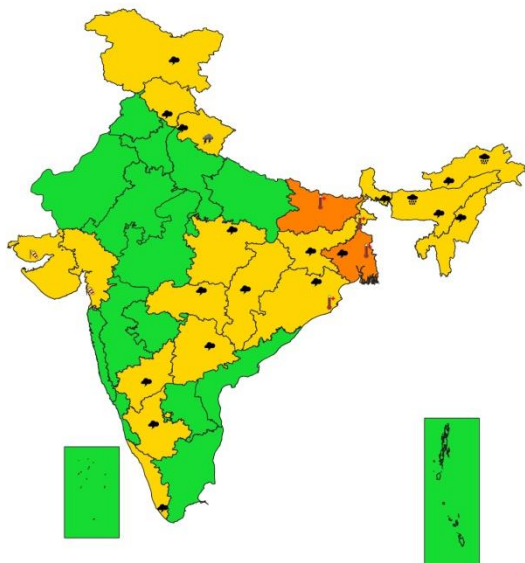
Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today):

- ❖ **Rainfall/thundershowers observed at most places over** Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Arunachal Pradesh; **at many places** over Uttarakhand, Assam & Meghalaya;; **at a few places** over Punjab, Haryana, Nagaland, Manipur, Mizoram & Tripura **and at isolated places** over Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Madhya Maharashtra, Marathawada, North Interior Karnataka, Tamil Nadu, Coastal Andhra Pradesh, Telangana and Kerala.
- ❖ **Significant amount of rainfall (in cm): Jammu & Kashmir:** Qazigund-7, Verinag, Shalimar-5 each, Batote, Banihal, Bandipore, Gulmarg, Anantnag, Pahalgam-4 each; **Himachal Pradesh:** Kullu-7, Kinnaur-5, Mandi, Chamba, Kangra, Lahaul & Spiti, Shimla-4 each, **Uttarakhand:** Bhatwari-6, Deoprayag-4, Joshimath, Chakrata-3 each Bagheshwar-2; **Punjab:** Amritsar-3, Patankot-2, **Haryana:** Karnal-2; **Arunachal Pradesh:** Miao (dist Changlang) 6, Deomali_aws (dist Tirap) 3, Daparijo (dist Upper Subansiri) 3; **Assam & Meghalaya:** Mawsynram (dist East Khasi Hills) 7, Cherrapunji (dist East Khasi Hills) 7, Tangla_arg (dist Udalguri) 5, Dhemaji (dist Dhemaji) 5.
- ❖ **Heavy rainfall** occurred at isolated places over Jammu & Kashmir, Himachal Pradesh and Assam & Meghalaya.
- ❖ **Hailstorm observed** at isolated places over Himachal Pradesh, Punjab, north Haryana, Chandigarh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh.
- ❖ **Heat wave to severe heat wave conditions** observed in many parts of West Bengal and Bihar; **heat wave conditions** observed in isolated pockets over East Uttar Pradesh, Odisha, Jharkhand and Coastal Andhra Pradesh.





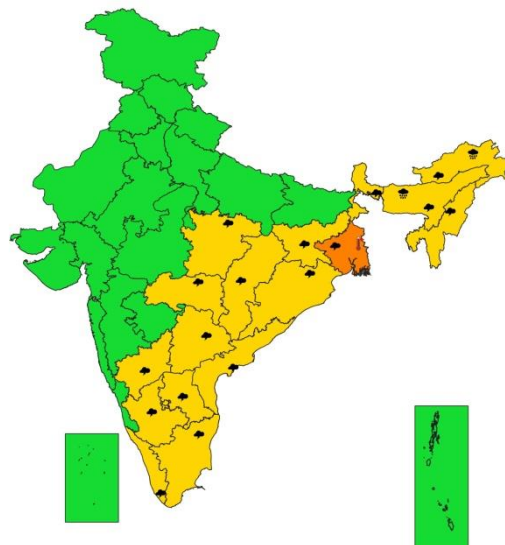
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2 (21-4-2023)



- | | | |
|----------------------------|----------------------|--------------------------|
| 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) |



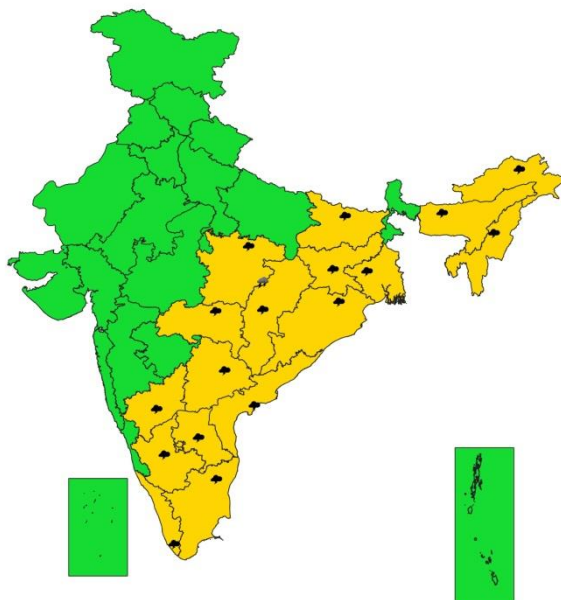
SUBDIVISIONWISE WEATHER WARNING FOR DAY 3 (22-4-2023)



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| 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) |



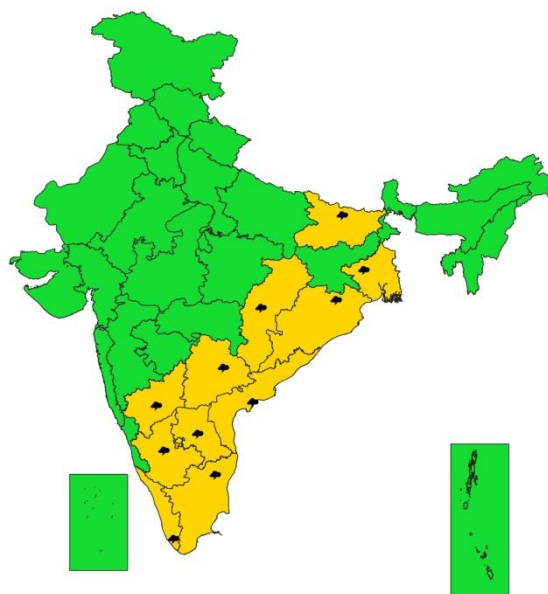
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4 (23-4-2023)



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| 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) |



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5 (24-4-2023)



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|----------------------------|----------------------|--------------------------|
| 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) |

IMPACT & ACTION SUGGESTED:

Yellow alert areas:

(1) Moderate temperature, Heat is tolerable for general public but moderate health concern for vulnerable people e.g. infants, elderly, people with chronic diseases. (2) Avoid heat exposure, Wear lightweight, light coloured, loose, cotton clothes, Cover your head, Use a cloth, hat or umbrella.

Orange alert areas:

(1) 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.

(2) 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.ind.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, 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 Himachal Pradesh, Uttarakhand and Sub Himalayan West Bengal & Sikkim.
- Provide mechanical support to horticultural crops and staking to vegetables.
- Provide light and frequent irrigation to crops in West Bengal, Odisha, Jharkhand, Bihar and Coastal Andhra Pradesh 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
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 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