



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

**Press Release
Date: 17th April, 2023
Time of Issue: 1345 hours IST**

**Subject: (i) Heat wave conditions likely to continue over East India during next 4 days.
(ii) Rainfall with thunderstorm over Western Himalayan Region during 17th-20th April
and over plains of northwest India on 18th & 19th April.**

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

Significant Meteorological features:

- ❖ A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 60°E to the north of Lat. 28°N.
- ❖ A cyclonic circulation lies over southwest Rajasthan & neighbourhood in lower tropospheric levels.
- ❖ A trough/wind discontinuity runs from North Interior Karnataka to south Tamil Nadu in lower tropospheric levels.

Maximum Temperatures and Heat Wave observed:

- ❖ Yesterday's, Maximum Temperatures were in the range of 40-42°C over some/many parts of plains of Northwest India, Central and East India and 35-40°C over many parts of rest of the country except over Western Himalayan Region (22-25°C) & Islands (30-34°C). Maximum Temperatures were above normal by 3-5°C over many parts of East & Northeast India.
- ❖ Heat Wave conditions are prevailing in isolated pockets over Gangetic West Bengal since last 6 days; Coastal Andhra Pradesh since last 4 days and Bihar since last 3 days.

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

Northwest India:

- ❖ Rise in Maximum Temperatures by 2-3°C very likely during next 3 days; gradual fall by 2-4°C during subsequent 2 days and rise by 2-4°C thereafter.
- ❖ **Heat wave conditions** are very likely in isolated pockets over Punjab, Haryana on 17th; over West Uttar Pradesh on 18th; over East Uttar Pradesh on 18th & 19th April and abate thereafter.

East India:

- ❖ No significant change in Maximum Temperatures very likely during next 5 days.
- ❖ **Heat wave conditions** are very likely in isolated/some pockets over Gangetic West Bengal and Bihar during next 4 days; over Sub-Himalayan West Bengal & Sikkim & Odisha during next 2 days and over Jharkhand on 18th & 19th April.

Central India:

- ❖ Rise in Maximum Temperatures by 2-3°C very likely during next 3 days and fall by 2-3°C during subsequent 2 days.

South Peninsular India:

- ❖ Rise in Maximum Temperatures by about 2°C very likely over Andhra Pradesh and Telangana during next 5 days.
- ❖ **Heat wave conditions** very likely in isolated pockets over Coastal Andhra Pradesh & Yanam during next 3 days.

West India:

- ❖ Rise in Maximum Temperatures over Maharashtra by 2-3°C during next 3 days and no significant change thereafter.

Rainfall Forecast and Warnings (Graphics in Annexure II):

Northwest India:

- ❖ Light/moderate scattered to fairly widespread rainfall with thunderstorm/lightning very likely over Western Himalayan Region during next 5 days and isolated to scattered rainfall over Punjab, Haryana, Chandigarh & Delhi and Rajasthan during 18th-20th April.
- ❖ **Heavy rainfall** very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad on 18th; over Himachal Pradesh on 18th & 19th and over Uttarakhand on 19th April.
- ❖ Isolated **Hailstorm** very likely over Himachal Pradesh on 17th & 18th; over Uttarakhand during 18th to 20th; over Punjab on 18th & 19th April, 2023.

West India:

- ❖ Light isolated rainfall with thunderstorm/lightning/gusty winds very likely over parts of Maharashtra next 5 days. Isolated hailstorm also likely over Madhya Maharashtra today, on 17th 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>

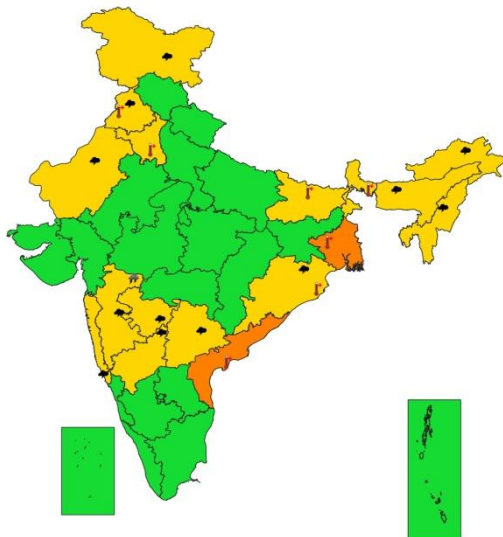
Annexure I

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

- ❖ **Rainfall/thundershowers observed at many places** over Sub-Himalayan West Bengal & Sikkim, Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; **at a few places over** Arunachal Pradesh, Coastal Andhra Pradesh & Yanam; **isolated places** over Assam & Meghalaya, Gangetic West Bengal, Odisha, East Uttar Pradesh, Haryana, Chandigarh & Delhi, Punjab, West Rajasthan, West Madhya Pradesh, Madhya Maharashtra, Marathwada, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and North Interior Karnataka.
- ❖ **Significant rainfall recorded** (in cm): **Madhya Maharashtra:** Paud Mulshi (dist Pune) 4, Wai (dist Satara) 2.
- ❖ **Thunderstorm observed** at isolated places over Arunachal Pradesh, Assam & Meghalaya, Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, West Rajasthan, Marathwada, North Interior Karnataka and Madhya Maharashtra.
- ❖ **Hailstorm observed** at isolated places over Sikkim and Madhya Maharashtra.
- ❖ **Heat wave conditions** observed in few pockets over Gangetic west Bengal and in isolated pockets over Punjab, Haryana, Bihar and Coastal Andhra Pradesh.



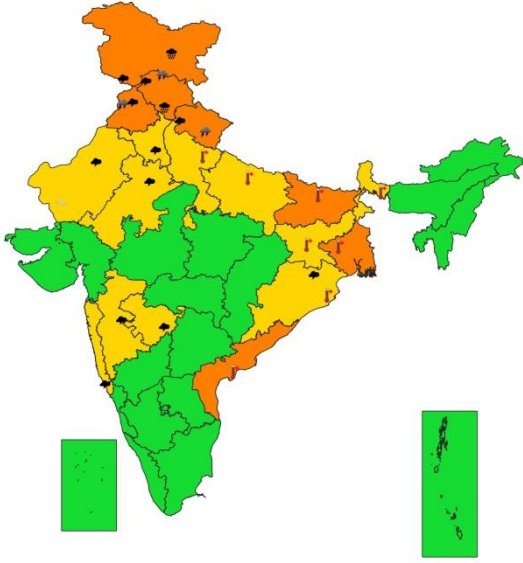
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
(17-4-2023)



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



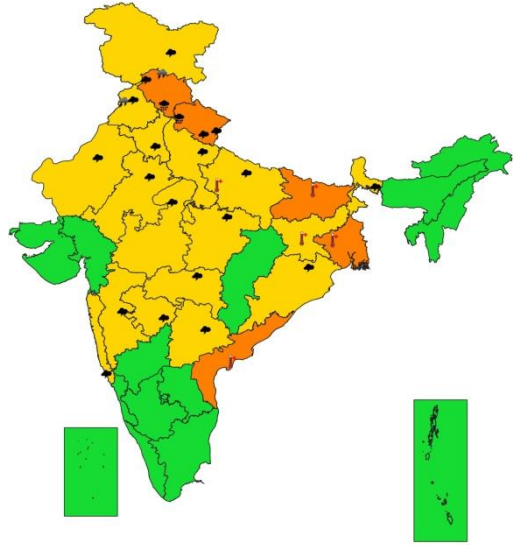
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2 (18-4-2023)



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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) |



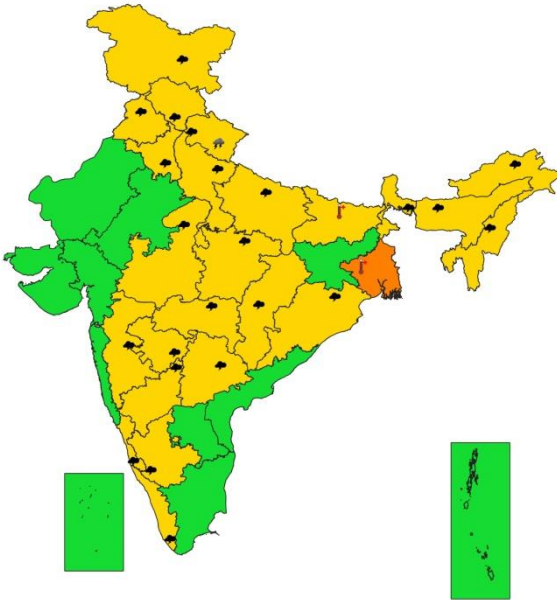
SUBDIVISIONWISE WEATHER WARNING FOR DAY 3 (19-4-2023)



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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) |



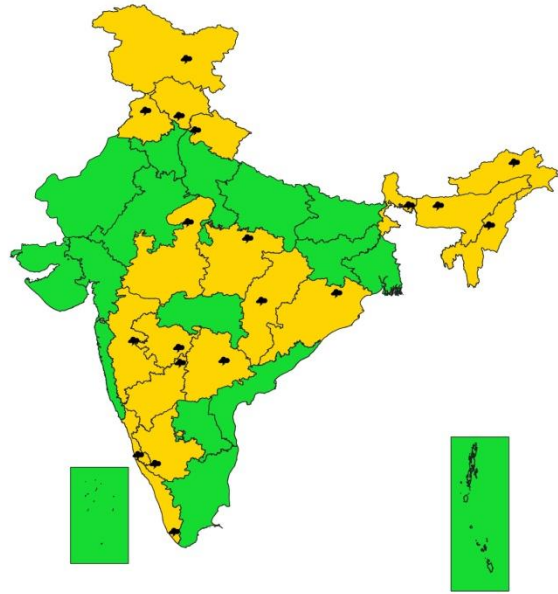
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4 (20-4-2023)



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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 (21-4-2023)



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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.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:

- Complete the harvesting of matured wheat, mustard and vegetables at the earliest in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab and Haryana and move the harvested produce to safer places.
- Make necessary arrangements for draining out excess water from the crop fields.
- Use hail nets to protect orchards in Himachal Pradesh, Uttarakhand, Punjab, Haryana and Madhya Maharashtra.
- Provide mechanical support to horticultural crops and staking to vegetables.














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