



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

**Press Release
Date: 16th April, 2023
Time of Issue: 1400 hours IST**

**Subject: (i) Heat wave conditions likely over West Bengal, Bihar and Coastal Andhra Pradesh during next 4-5 days; over Punjab and Haryana next 2 days and abate thereafter.
(ii) A fresh spell of rainfall over Western Himalayan Region from 16th April and over plains of northwest India from 18th 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. 59°E to the north of Lat. 28°N.
- ❖ A cyclonic circulation lies over north Pakistan & adjoining Punjab in lower tropospheric levels.
- ❖ A trough/wind discontinuity runs from south Madhya Maharashtra to Tamil Nadu in lower tropospheric levels.

Maximum Temperatures and Heat Wave observed:

- ❖ Maximum Temperatures are in the range of 40-42°C over some/many parts of plains of Northwest India & adjoining Madhya Pradesh and East India and 35-40°C over many parts of rest of the country except over Western Himalayan Region (25-30°C) & Islands (30-34°C). Maximum Temperatures are above normal by 3-5°C over many parts of Northwest, East & Northeast India.
- ❖ **Heat Wave conditions** are prevailing in isolated pockets over Gangetic West Bengal since last 5 days; Coastal Andhra Pradesh since last 3 days and Bihar since last 2 days.

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

Northwest India:

- ❖ No significant change in Maximum Temperatures very likely during next 2 days and gradual fall by 2-4°C during subsequent 3 days.
- ❖ Heat wave conditions are very likely in isolated pockets over Punjab and Haryana on 16th & 17th 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 5 days and over Sub-Himalayan West Bengal & Sikkim during next 3 days.

Central India:

- ❖ Rise in Maximum Temperatures by 2-3°C very likely during next 3 days and fall by about 2°C during subsequent 2 days.
- ❖ Heat wave conditions very likely in isolated pockets over West Madhya Pradesh on 17th & 18th April.

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 2-4°C during next 5 days.

Rainfall Forecast and Warnings (Graphics in Annexure II):

Northwest India:

- ❖ Light/moderate scattered rainfall with thunderstorm/lightning very likely over Western Himalayan Region during next 5 days.
- ❖ Heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad on 18th; over Himachal Pradesh on 18th & 19th and over Uttarakhand on 19th April.
- ❖ Hailstorm over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad on 16th & 17th; over Himachal Pradesh during 16th to 18th and over Uttarakhand during 18th to 20th April.

West India:

- ❖ Light isolated rainfall with thunderstorm/lightning/gusty winds very likely over parts of Maharashtra next 5 days.

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:

- ❖ **Rainfall/thundershowers observed** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at a few places** over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and **at isolated places** over Himachal Pradesh, Uttarakhand, Rajasthan, Odisha, Madhya Pradesh, Maharashtra, Coastal Andhra Pradesh & Yanam, North Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe.
- ❖ **Significant rainfall recorded** (from 0830 hours IST of yesterday to 0830 hours IST of today) (in cm): **Vidarbha:** Buldana (dist Buldhana) 3; **Madhya Maharashtra:** Imd Obsy (dist Satara) 1, Wai (dist Satara) 1, Satna Baglan (dist Nashik) 1, Purandar Sasvad (dist Pune) 1, Mahabaleshwar- Imd Obsy (dist Satara) 1, Nashik - Imd Obsy (dist Nashik) 1; **East Rajasthan:** Kishangarh (dist Ajmer) 1.
- ❖ **Thunderstorm observed** (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Odisha and Madhya Maharashtra.
- ❖ **Hailstorm observed** (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Himachal Pradesh, Madhya Maharashtra and Marathwada.

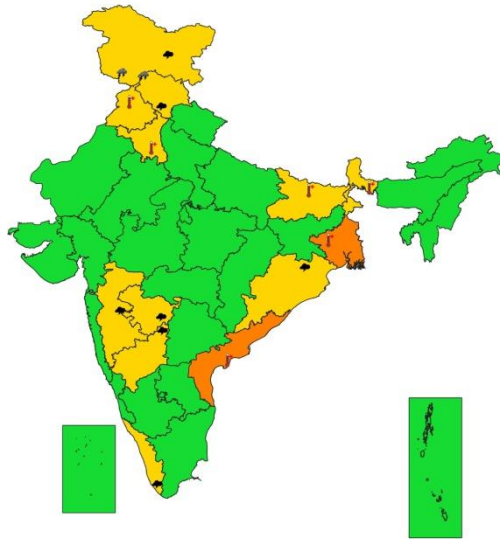
Agromet advisories for heat wave and rainfall accompanied with thunderstorms/gusty winds likely over various parts of the country

- ❖ Complete the harvesting of matured wheat, mustard and vegetables at the earliest in Jammu & Kashmir, Himachal Pradesh and Uttarakhand and move the harvested produce to safer places. Also make necessary arrangements for draining out excess water from the crop fields.
- ❖ Use hail nets to protect orchards in Jammu & Kashmir and Himachal Pradesh.
- ❖ Provide mechanical support to horticultural crops and staking to vegetables.
- ❖ Provide light and frequent irrigation to crops in Punjab, Haryana, West Bengal, Bihar, West Madhya Pradesh and Coastal Andhra Pradesh during morning and evening hours.

Annexure II



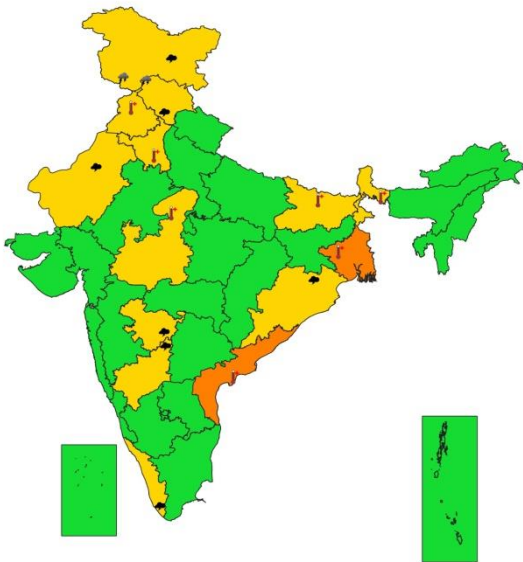
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
(16-4-2023)



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



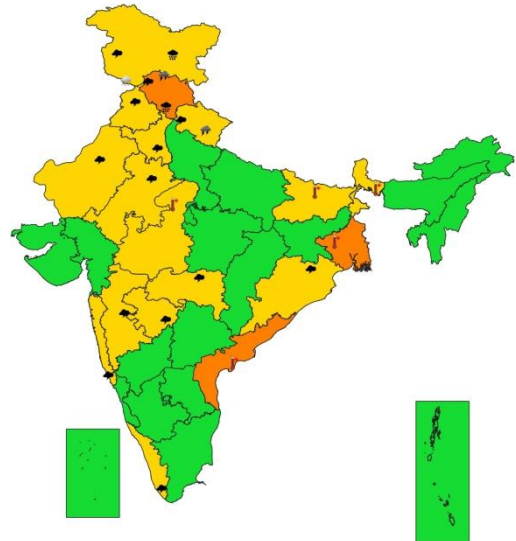
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(17-4-2023)



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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) |



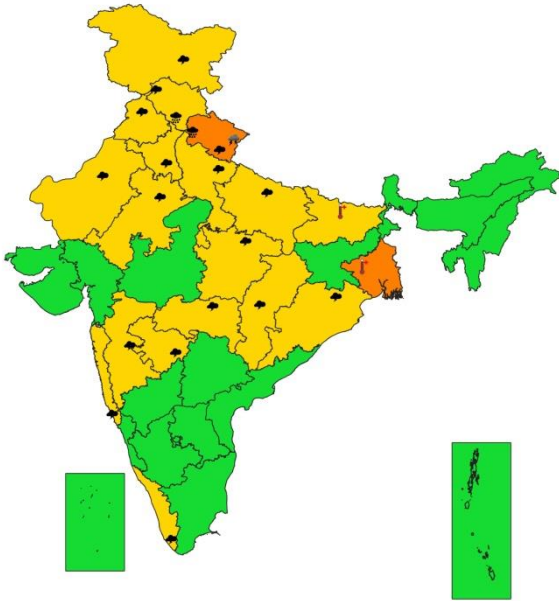
SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(18-4-2023)



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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) |



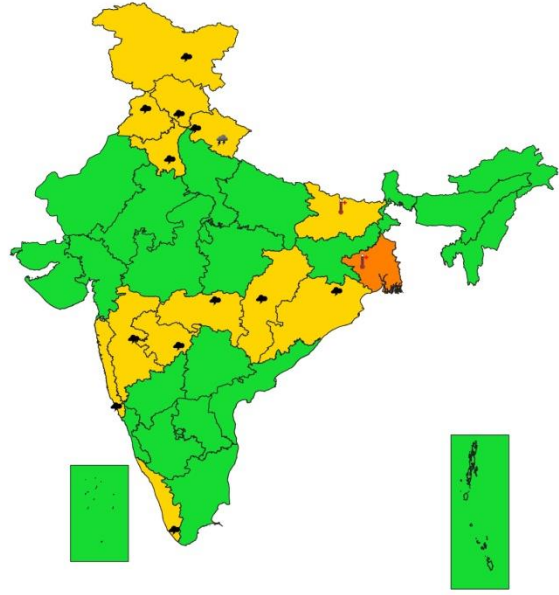
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(19-4-2023)**



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| <ul style="list-style-type: none"> ☁ Subdivision Warning ☔ Heavy Rain ❄ Heavy Snow ⚡ Thunderstorms & Lightning ⚡ Hailstorm | <ul style="list-style-type: none"> ☁ Dust Storm 🌪 Strong Surface Winds 🔥 Heat Wave ❄ Cold wave ☁ Fog | <ul style="list-style-type: none"> 🟢 Subdivision color 🟢 NO WARNING 🟡 WATCH (BE UPDATED) 🟠 ALERT (BE PREPARED) 🔴 WARNING (TAKE ACTION) |
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**SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
(20-4-2023)**



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| <ul style="list-style-type: none"> ☁ Subdivision Warning ☔ Heavy Rain ❄ Heavy Snow ⚡ Thunderstorms & Lightning ⚡ Hailstorm | <ul style="list-style-type: none"> ☁ Dust Storm 🌪 Strong Surface Winds 🔥 Heat Wave ❄ Cold wave ☁ Fog | <ul style="list-style-type: none"> 🟢 Subdivision color 🟢 NO WARNING 🟡 WATCH (BE UPDATED) 🟠 ALERT (BE PREPARED) 🔴 WARNING (TAKE ACTION) |
|---|---|---|














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