



Government of India
Ministry of Earth Sciences
India Meteorological Department



Date: 12th April, 2024
Time of Issue: 1300 hours IST

Special Message (No.- 7)

FROM: INDIA METEOROLOGICAL DEPARTMENT
TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS
CONTROL ROOM NDMA
SECRETARY, MOES
DIRECTOR GENERAL, DOORDARSHAN
DIRECTOR GENERAL, AIR
PIB MOES
CHIEF SECRETARY, GOVT. OF MADHYA PRADESH
CHIEF SECRETARY, GOVT. OF CHHATTISGARH
CHIEF SECRETARY, GOVT. OF MAHARASHTRA

Subject: Light to moderate rainfall spell accompanied with thunderstorm, gusty winds & hail likely to continue over Central India on 12th & 13th April, 2024.

Realised weather during past 24 hours till 0830 hours IST of today:

- ❖ **Hailstorm occurred** at isolated places over Madhya Pradesh and Vidarbha.
- ❖ **Thundersquall/gusty winds** observed at isolated places over Madhya Pradesh, Vidarbha and Chhattisgarh.
- ❖ **Thunderstorm** observed at many places over Madhya Pradesh; at some parts of Vidarbha and at isolated places over Chhattisgarh, Madhya Maharashtra & Marathwada.

Weather Systems and Forecast & Warnings:

- ❖ A cyclonic circulation lies over Saurashtra & Kutch and a trough/wind discontinuity runs from this cyclonic circulation to South Interior Karnataka in lower tropospheric levels. A cyclonic circulation lies over north Odisha and another over Comorin area & neighbourhood in lower tropospheric levels. Under the influence of these systems:
 - ✓ Isolated to scattered light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-40 kmph)** very likely over Madhya Pradesh, Chhattisgarh, Vidarbha, Marathwada, Madhya Maharashtra during 12th-14th. **Squally wind speed reaching 50-60 gusting to 70 Kmph likely at isolated places over Madhya Pradesh on 12th April, 2024.**
 - ✓ **Hailstorm activity also very likely at isolated places over Madhya Pradesh on 12th & 13th, Vidarbha, Madhya Maharashtra & Marathwada on 12th April, 2024.**

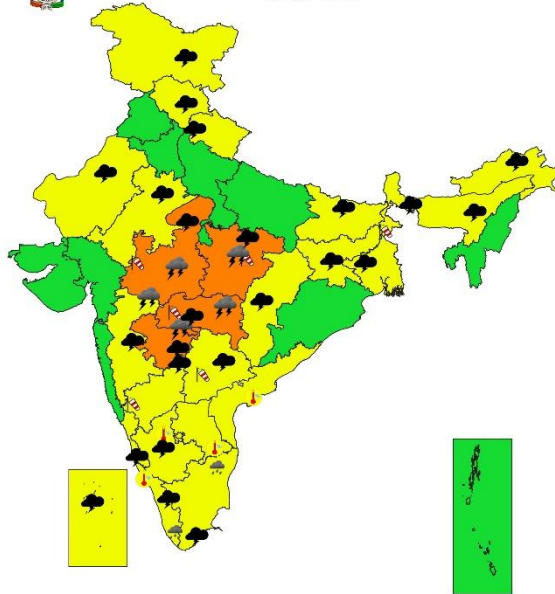
The state-wise forecast is given below: (Warning graphics are given at ANNEXURE-I)

S. No.	State/sub-division	Forecast
1.	East Madhya Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & squally winds (speed occasionally reaching 30-50 kmph) at isolated places during 12th-14th April. • Hailstorm also likely at isolated places on 12th & 13th April.
2.	West Madhya Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & squally winds (speed occasionally reaching 30-50 kmph) at isolated places during 12th-14th April. • Hailstorm also likely at isolated places on 12th & 13th April.
3.	Vidarbha	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & squally winds (speed occasionally reaching 40-50 kmph) at a few places on 12th; at isolated places on 13th April. • Hailstorm also likely at isolated places on 12th April.
4.	Chhattisgarh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning at isolated places during 12th-14th April.
5.	Marathwada	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & squally winds (speed occasionally reaching 30-50 kmph) at a few places on 12th; at isolated places on 13th April. • Hailstorm also likely at isolated places on 12th April.
6.	Madhya Maharashtra	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & squally winds (speed occasionally reaching 30-50 kmph) at isolated places on 12th & 13th April. • Hailstorm also likely at isolated places on 12th April.

For more details, kindly refer: [https://mausam.imd.gov.in/responsive/all india forecast bulletin.php](https://mausam.imd.gov.in/responsive/all%20india%20forecast%20bulletin.php)

Shobhit Katiyar
Scientist- 'D'
NWFC, IMD New Delhi

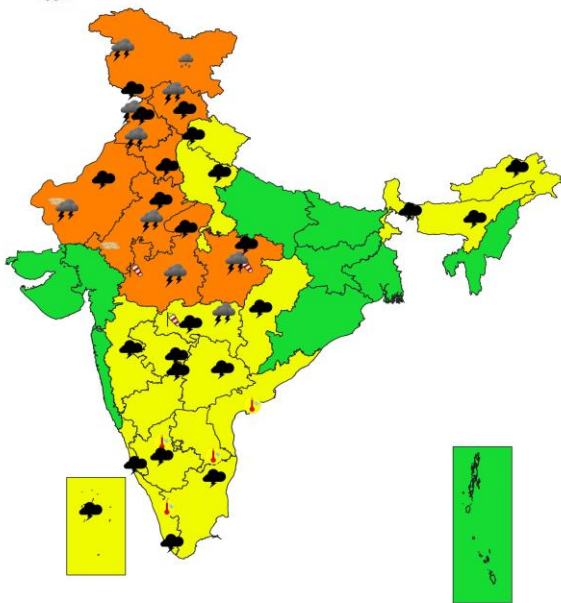
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
12-04-2024



Subdivision Warning

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

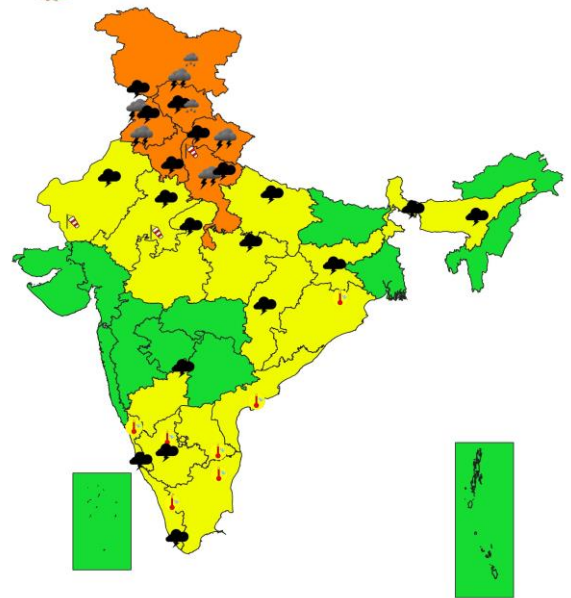
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
13-04-2024



Subdivision Warning

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

SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
14-04-2024

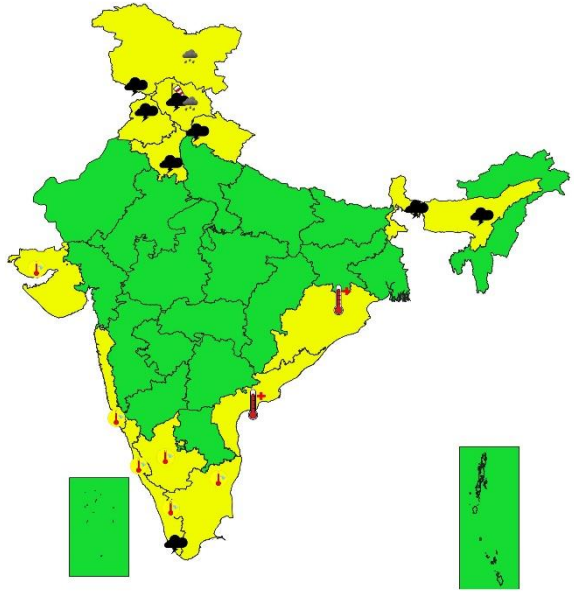


Subdivision Warning

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



SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
15-04-2024

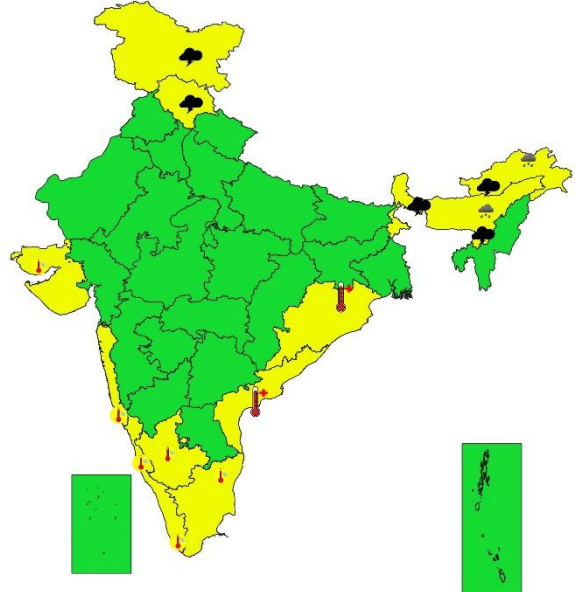


Subdivision Warning

- | | | | |
|----------------------|------------|----------------------|---------------------------|
| Fog | Heavy Snow | Cold Day | Subdivision Colour |
| 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 5
16-04-2024



Subdivision Warning

- | | | | |
|----------------------|------------|----------------------|---------------------------|
| Fog | Heavy Snow | Cold Day | Subdivision Colour |
| 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) |

- ✓ **Impact expected and action suggested due to thunderstorm accompanied with lightning/gusty winds & Hailstorm over Madhya Pradesh on 12th & 13th; Vidarbha, Marathwada on 12th April.**

Impact expected:

- ❖ Strong wind/hail may damage plantation, horticulture and standing crops.
- ❖ Hail may injure people and cattle at open places.
- ❖ Partial damage to vulnerable structures due to strong winds.
- ❖ Minor damage to kutcha houses/walls and huts.
- ❖ Loose objects may fly.

Action suggested:

- ❖ Stay indoors, close windows & doors and avoid travel if possible.
- ❖ Take safe shelters; do not take shelter under trees.
- ❖ Do not lie on concrete floors and do not lean against concrete walls.
- ❖ Unplug electrical/ electronic appliances.
- ❖ Immediately get out of water bodies.
- ❖ Keep away from all the objects that conduct electricity.













Agromet advisories for Heavy Rainfall, Gusty Winds, Hailstorm and Heat Wave likely over various parts of the country

- Harvest the matured crops, fruits and vegetables during clear weather and keep the harvested produce at safer places or cover the heaps of harvested produce in the fields with tarpaulin sheets in Central India, Marathwada and Madhya Maharashtra.
- Use hail nets or hail caps in fruit orchards to protect them from mechanical damage in Madhya Pradesh, Vidarbha, Madhya Maharashtra and Marathwada.
- Provide mechanical support to horticultural crops & staking to vegetables in Central India, Madhya Maharashtra and Marathwada.

Legends & abbreviations:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office.
- ❖ **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-Himalayan 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, Tamil Nadu, 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

Flash Flood Risk	
	High Risk (Take Action)
	Moderate Risk (Be Prepared)
	Low Risk (Be Updated)