



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



**Date: 09th April, 2024
Time of Issue: 1315 hours IST**

Special Message (No.- 4)

**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 ODISHA
CHIEF SECRETARY, GOVT. OF JHARKHAND
CHIEF SECRETARY, GOVT. OF WEST BENGAL
CHIEF SECRETARY, GOVT. OF MAHARASHTRA**

Subject: Light to moderate rainfall spell accompanied with thunderstorm, gusty winds & hail likely over Central India during 09th-10th April, 2024.

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

- ❖ **Hailstorm occurred** at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh.
- ❖ **Light/Moderate rain** accompanied with **thunderstorm** observed over many parts of Chhattisgarh; over some parts of East Madhya Pradesh, Vidarbha and at isolated places over West Madhya Pradesh, West Bengal & Sikkim, Jharkhand, Odisha.

Weather Systems and Forecast & Warnings during next 5 days: (details in Annexure I)

- ❖ A cyclonic circulation lies over central parts of Madhya Maharashtra and a trough/wind discontinuity runs from north Gujarat to south Tamil Nadu in lower tropospheric levels. Under its influence;
 - ✓ Scattered light/moderate rainfall accompanied with **thunderstorm, lightning & gusty winds (30-50 kmph)** very likely over Madhya Pradesh, Chhattisgarh, Vidarbha and isolated to scattered over West Madhya Pradesh, Marathwada, Madhya Maharashtra during 09th-13th April, 2024.
 - ✓ Isolated light/moderate rainfall accompanied with **thunderstorm, lightning** very likely over Gangetic West Bengal, Jharkhand, Odisha, Bihar during 09th-13th April.
 - ✓ **Hailstorm activity also very likely at isolated places over West Madhya Pradesh, Vidarbha on 09th & 10th; East Madhya Pradesh during 09th-11th and Chhattisgarh on 09th April, 2024.**

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

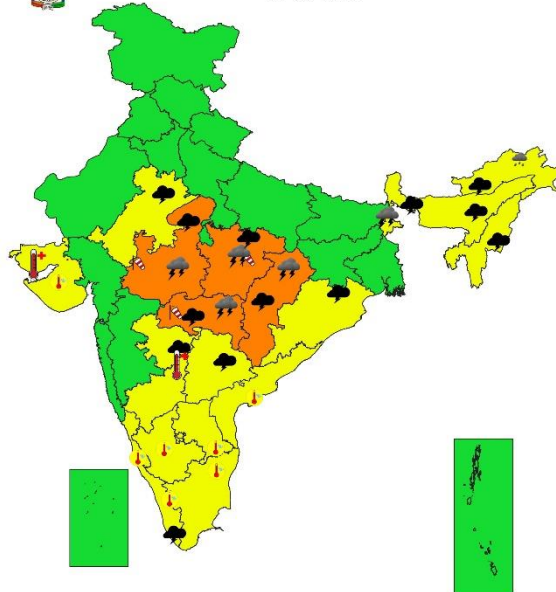
S. No.	State/sub-division	Forecast
1.	East Madhya Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & gusty winds (speed reaching 40-50 kmph) at isolated places during 09th-13th April. • Light to moderate rain at isolated places on 14th & 15th April. • Hailstorm also likely at isolated places on 09th & 10th April.
2.	West Madhya Pradesh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & gusty winds (speed reaching 40-50 kmph) at isolated places during 09th-13th April. • Light to moderate rain at isolated places on 14th & 15th April. • Hailstorm also likely at isolated places on 09th & 10th April.
3.	Vidarbha	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & gusty winds (speed reaching 40-50 kmph) at isolated places 09th-11th April and with gusty winds (speed reaching 30-40 kmph) at isolated places on 12th & 13th April. • Light to moderate rain at isolated places on 14th & 15th April. • Hailstorm also likely at isolated places on 09th & 10th April.
4.	Chhattisgarh	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & gusty winds (speed reaching 30-40 kmph) at isolated places during 09th-13th April. • Light to moderate rain at isolated places on 14th & 15th April. • Hailstorm also likely at isolated places on 09th April.
5.	Marathwada	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm & lightning at isolated places during 09th-12th April. • Light to moderate rain at isolated places on 13th&15th April.
6.	Madhya Maharashtra	<ul style="list-style-type: none"> • Light to moderate rain at isolated places on 09th and accompanied with thunderstorm & lightning at during 10th -12th April. • Light to moderate rain at isolated places on 15th April.

7.	Odisha	<ul style="list-style-type: none"> • Light to moderate rain accompanied with thunderstorm, lightning & gusty winds (speed reaching 30-40 kmph gusting to 50 kmph) at isolated places on 09th April and with lightning at isolated places on 10th & 11th April. • Light to moderate rain at isolated places on 12th & 13th April.
8.	Gangetic West Bengal	<ul style="list-style-type: none"> • Light to moderate rain at isolated places on 09th & 10th and accompanied with thunderstorm, lightning & gusty winds (speed reaching 30-40 kmph gusting to 50 kmph) at isolated places on 11th April. • Light to moderate rain at isolated places during 12th – 14th April.
9.	Jharkhand	<ul style="list-style-type: none"> • Light to moderate rain at isolated places on 09th and accompanied with thunderstorm, lightning & gusty winds (speed reaching 30-40 kmph gusting to 50 kmph) at isolated places on 10th & 11th April and with lightning at isolated places on 12th April. • Light to moderate rain at isolated places on 13th & 14th April.

For more details, kindly refer: https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

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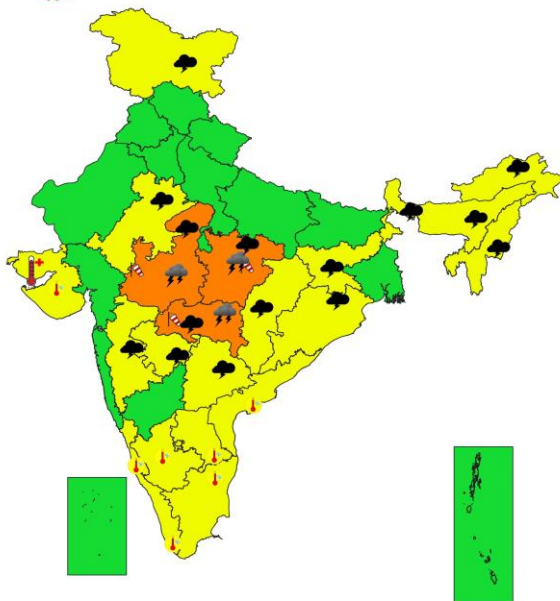
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
09-04-2024



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) |

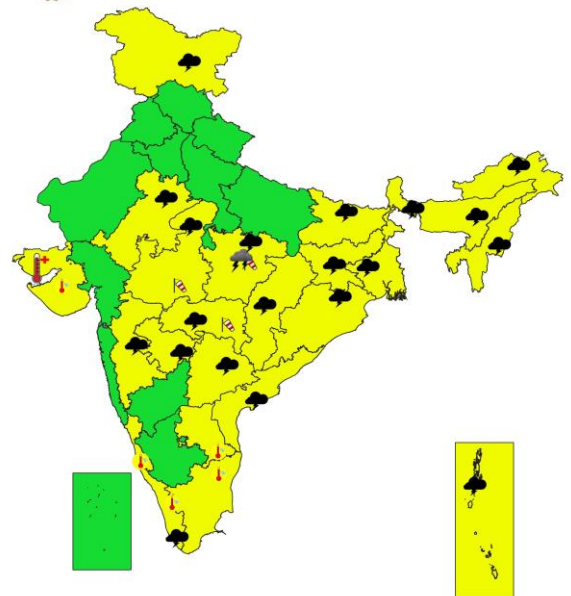
SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
10-04-2024



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 3
11-04-2024

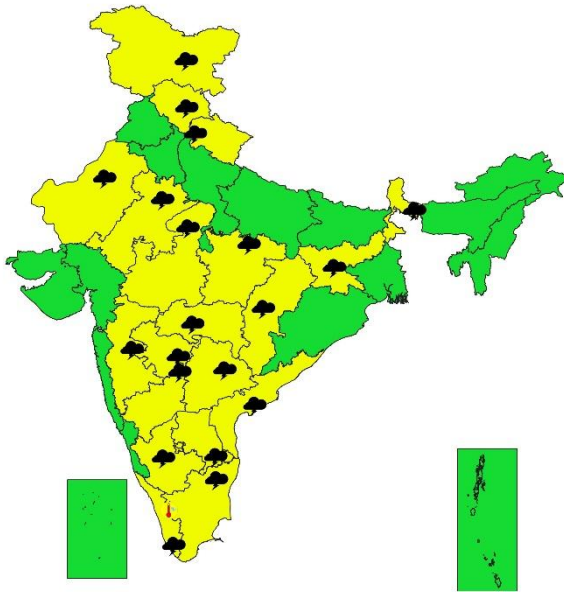


Subdivision Warning

- | | | | |
|----------------------|------------|----------------------|---------------------------|
| 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 4
12-04-2024

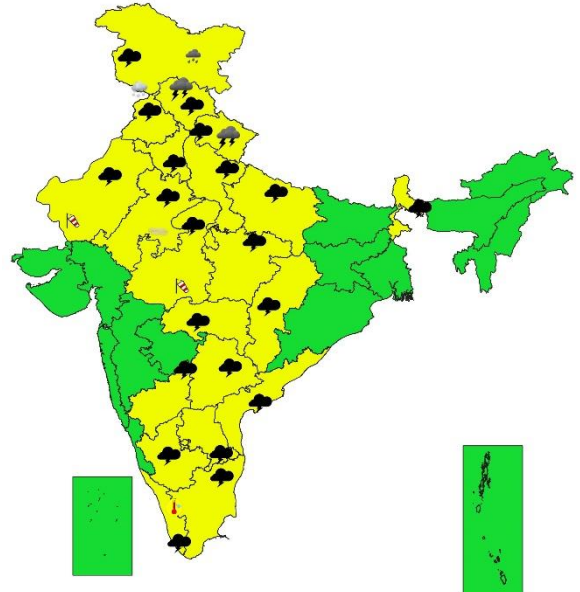


Subdivision Warning

- | | | | |
|----------------------|------------|----------------------|---------------------------|
| 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
13-04-2024



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 Central & adjoining peninsular India during 09th-11th 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 at the earliest and keep the harvested produce at safer places or cover the heaps of harvested produce in the fields with tarpaulin sheets.
- Use hail nets or hail caps in fruit orchards to protect them from mechanical damage and provide mechanical support to horticultural crops & staking to vegetables in Madhya Pradesh, Chhattisgarh, Vidarbha.

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)