



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Date: 09<sup>th</sup> 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 09<sup>th</sup>-10<sup>th</sup> 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 09<sup>th</sup>-13<sup>th</sup> April, 2024.
  - ✓ Isolated light/moderate rainfall accompanied with **thunderstorm, lightning** very likely over Gangetic West Bengal, Jharkhand, Odisha, Bihar during 09<sup>th</sup>-13<sup>th</sup> April.
  - ✓ **Hailstorm activity also very likely at isolated places over West Madhya Pradesh, Vidarbha on 09<sup>th</sup> & 10<sup>th</sup>; East Madhya Pradesh during 09<sup>th</sup>-11<sup>th</sup> and Chhattisgarh on 09<sup>th</sup> April, 2024.**

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

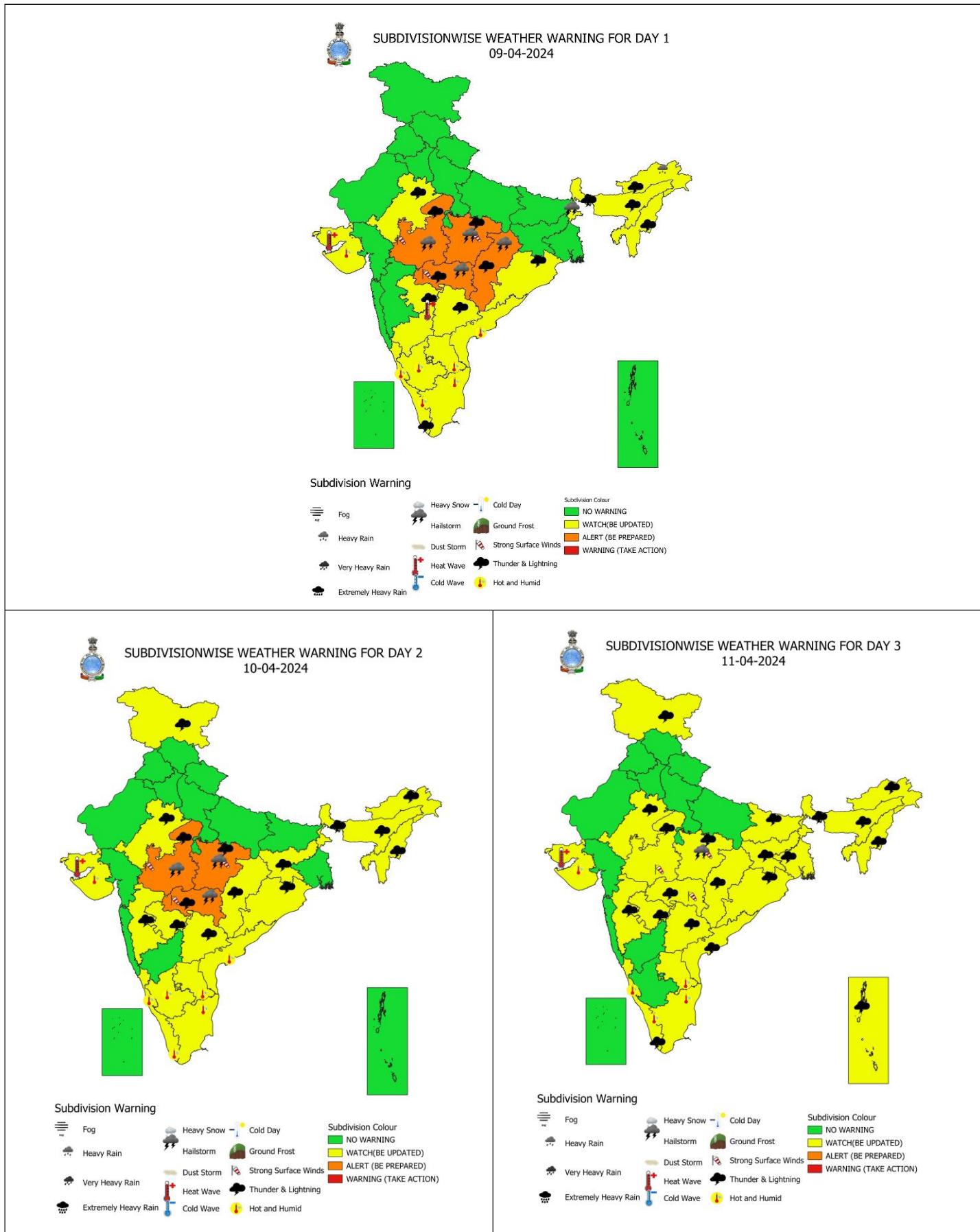
S. No.	State/sub-division	Forecast
1.	East Madhya Pradesh	<ul style="list-style-type: none"> <li>Light to moderate rain accompanied with thunderstorm, lightning &amp; gusty winds (speed reaching 40-50 kmph) at isolated places during 09<sup>th</sup>-13<sup>th</sup> April.</li> <li>Light to moderate rain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

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

For more details, kindly refer: [https://mausam.imd.gov.in/responsive/all\\_india\\_forcast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forcast_bulletin.php)

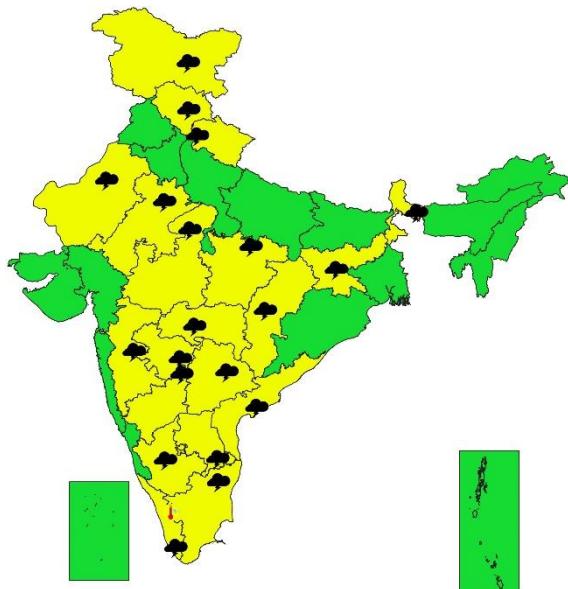
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 Scientist- 'C'  
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## ANNEXURE I





SUBDIVISIONWISE WEATHER WARNING FOR DAY 4  
12-04-2024

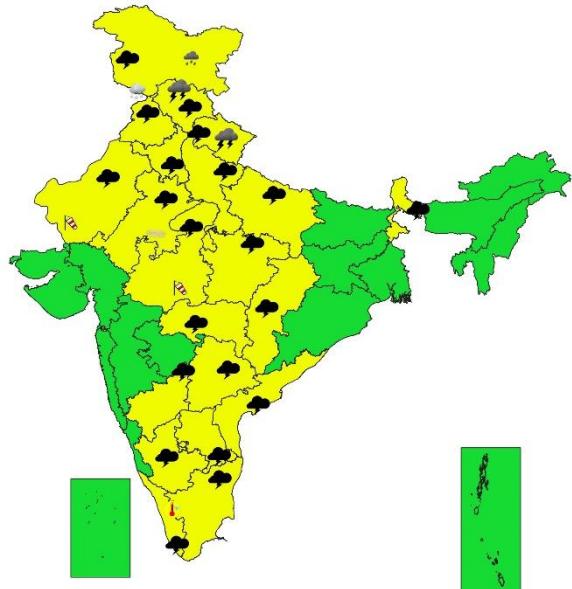


Subdivision Warning

Fog	Heavy Snow	Cold Day
Heavy Rain	Hailstorm	Ground Frost
Very Heavy Rain	Dust Storm	Strong Surface Winds
Extremely Heavy Rain	Heat Wave	Thunder & Lightning
	Cold Wave	Hot and Humid



SUBDIVISIONWISE WEATHER WARNING FOR DAY 5  
13-04-2024



Subdivision Warning

Fog	Heavy Snow	Cold Day
Heavy Rain	Hailstorm	Ground Frost
Very Heavy Rain	Dust Storm	Strong Surface Winds
Extremely Heavy Rain	Heat Wave	Thunder & Lightning
	Cold Wave	Hot and Humid

**Impact expected and action suggested due to thunderstorm accompanied with lightning/gusty winds & Hailstorm over Central & adjoining peninsular India during 09<sup>th</sup>-11<sup>th</sup> 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)	