



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

**Press Release**

**Date: 10<sup>th</sup> September, 2023**

**Time of Issue: 1245 hours IST**

**Subject: 1) Heavy rainfall activity likely over East Rajasthan, Madhya Pradesh & Uttar Pradesh on 10<sup>th</sup> & 11<sup>th</sup> and over northeast India during next 3-4 days.  
2) Increase in rainfall activity with isolated heavy falls likely over Odisha and Chhattisgarh from 12<sup>th</sup> September.**

**Weather observed during past 24 hours ending at 0830 hours IST of today (Annexure I):**

**Significant Weather features:**

- ❖ Yesterday's cyclonic circulation over central parts of north Madhya Pradesh lies over northwest Madhya Pradesh & adjoining northeast Rajasthan in lower & middle tropospheric.
- ❖ A trough runs from cyclonic circulation over northwest Madhya Pradesh & adjoining northeast Rajasthan to south Chhattisgarh in lower tropospheric levels.
- ❖ The Monsoon Trough lies to the south of its normal position and passes through Jaisalmer, Kota, Sidhi, Jamshedpur, Digha and thence east-southeastwards to Northeast Bay of Bengal.
- ❖ A fresh cyclonic circulation likely to form over northwest & adjoining Westcentral Bay of Bengal around 12th September, 2023.

**Weather Forecast and Warnings: (Annexure II)**

**East India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** activity very likely over Andaman & Nicobar Islands during 10<sup>th</sup> -13<sup>th</sup> and over Odisha during 12<sup>th</sup>-14<sup>th</sup>; Jharkhand on 13<sup>th</sup> & 14<sup>th</sup> and over Gangetic West Bengal on 14<sup>th</sup> September.

**Isolated very heavy rainfall very likely over Andaman & Nicobar Islands on 10<sup>th</sup> and over Odisha on 14<sup>th</sup> September.**

**South India:** Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over Kerala & Mahe on 10<sup>th</sup> & 11<sup>th</sup>; over Coastal Andhra Pradesh during 10<sup>th</sup> - 14<sup>th</sup> and over Telangana on 10<sup>th</sup> & 14<sup>th</sup> September.

**Central India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Madhya Pradesh on 10<sup>th</sup> & 11<sup>th</sup>; Chhattisgarh on 13<sup>th</sup> & 14<sup>th</sup> and over Vidarbha on 14<sup>th</sup> September.

**Isolated very heavy rainfall very likely over West Madhya Pradesh on 10<sup>th</sup> September.**

**West India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Konkan & Goa and ghat areas of Madhya Maharashtra on 10<sup>th</sup>

September.

**Northeast India:** Light/moderate scattered to fairly widespread rainfall/thunderstorm with isolated **heavy rainfall** activity very likely over Assam & Meghalaya during 10<sup>th</sup>-12<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura during 10<sup>th</sup>-14<sup>th</sup> and over Arunachal Pradesh on 10<sup>th</sup> & 11<sup>th</sup> September.

**Northwest India:** Light/moderate isolated to scattered rainfall/thunderstorm with isolated **heavy rainfall** activity very likely over East Rajasthan on 10<sup>th</sup>, Uttar Pradesh on 10<sup>th</sup> & 11<sup>th</sup>; Uttarakhand on 10<sup>th</sup>, 13<sup>th</sup> & 14<sup>th</sup> September.

**Isolated very heavy rainfall very likely over Uttarakhand and northwest Uttar Pradesh on 10<sup>th</sup> September.**

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)

#### Annexure I

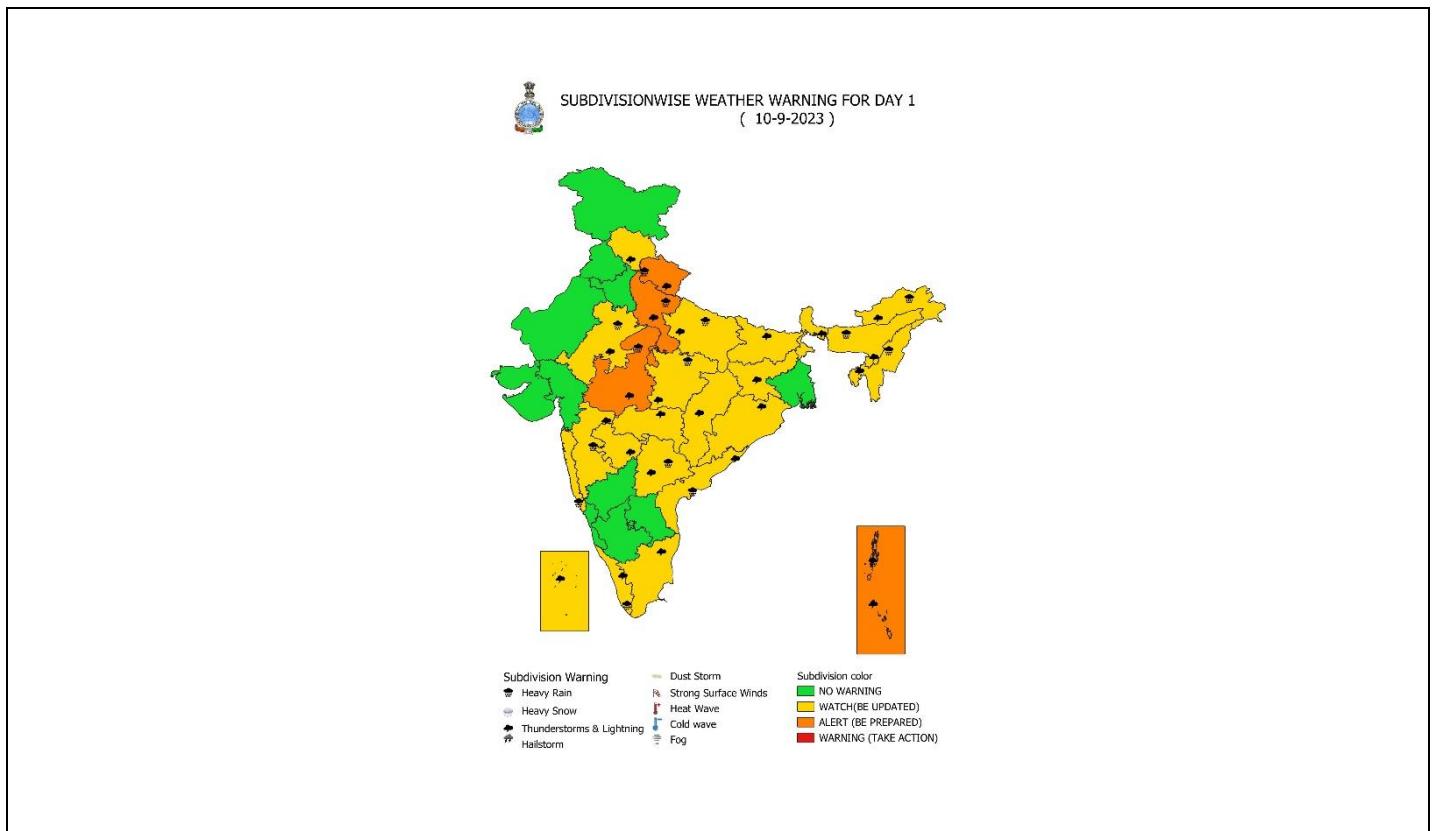
**Rainfall observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 10<sup>th</sup> September, 2023):**

- **Extremely heavy rainfall** at isolated places over East Rajasthan; **Heavy to very heavy rainfall** at isolated places over Uttarakhand, Madhya Pradesh, West Uttar Pradesh, Assam & Meghalaya and **heavy rainfall** at isolated places over Konkan & Goa, Madhya Maharashtra, Telangana, Bihar, Odisha, East Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe.
- **Significant rainfall recorded (in cm):**
- ✓ **East Rajasthan:** Dholpur Tehsil Sr (dist Dholpur) 23, Banswara Sr (dist Banswara) 15, Kesarpura Sr (dist Banswara) 15,
- ✓ **West Madhya Pradesh:** Morena-aws (dist Morena) 17, Petlawad (dist Jhabua) 10, Narmadapuram (dist Narmadapuram) 10, Tal (dist Ratlam) 9, Alot (dist Ratlam) 9, Bajna (dist Ratlam) 9, Alipur(jaura) (dist Morena) 8, Itarsi (dist Narmadapuram) 8, Pachmarhi (dist Narmadapuram) 8, Sitamau (dist Mandsaur) 7, Goharganj (dist Raisen) 7, Bairad (dist Shivpuri) 7,
- ✓ **West Uttar Pradesh:** Nagina (dist Bijnor) 15, Sikandra Rao (dist Hathras) 12, Baheri (dist Bareilly) 11, Jalesar (dist Etah) 9, Tundla (dist Firozabad) 8, Aligarh (dist Aligarh) 8, Thakurdwara (dist Moradabad) 7, Vrindavan (dist Mathura) 7, Bijnor (dist Bijnor) 7, Budaun (dist Badaun) 7, Jasrana (dist Firozabad) 7, Dhampur (dist Bijnor) 7, Sasani (dist Hathras) 7,
- ✓ **East Madhya Pradesh:** Tamia (dist Chindwara) 14, Parasia (dist Chindwara) 10, Gaurihar (dist Chhatarpur) 7, Chahtarpur-aws (dist Chhatarpur) 7, Chindwara-aws (dist Chindwara) 7,
- ✓ **Assam & Meghalaya:** Barapani (dist Ri Bhoi) 12
- ✓ **Uttarakhand:** Nainital-12; Champawat (Champawat) 9, Lohaghat-7.
- ✓ **Nagaland, Manipur, Mizoram & Tripura:** Saiha (dist Saiha) 8
- ✓ **Konkan & Goa:** Chiplun (dist Ratnagiri) 7, Tala (dist Raigad) 7,
- ✓ **Madhya Maharashtra:** Mahabaleshwar- Imd Obsy (dist Satara) 14, Yaval (dist Jalgaon) 8, Lonavala\_agri (dist Pune) 7,
- ✓ **Telangana:** Gopalpet (dist Wanaparthy) 7,
- ✓ **Bihar:** Rajpur (dist Buxar) 8, Sono (dist Jamui) 7, Darbhanga (dist Darbhanga) 7, Rosera (dist Samastipur) 7,
- ✓ **Odisha:** Rajnagar (dist Kendrapara) 7,
- ✓ **East Uttar Pradesh:** Chhigramau (dist Kannauj) 7, Nawabganj Tehsil (dist Barabanki) 7,

- ✓ **Kerala:** Kodungallur (Thrissur district), Kunnathanam AWS (Pathanamthitta district) & Kalamassery AWS (Ernakulam district) 7 each.

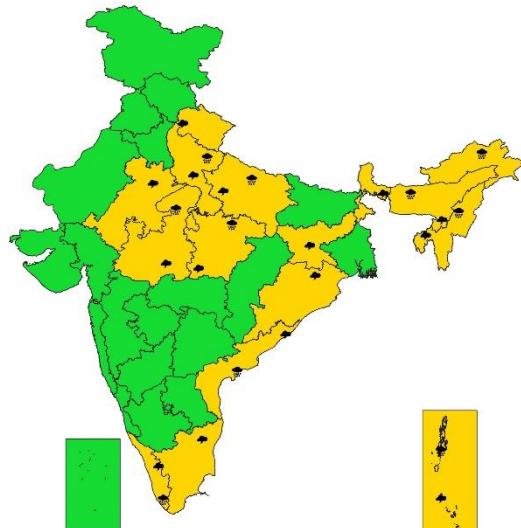
**Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation

## Annexure II





SUBDIVISIONWISE WEATHER WARNING FOR DAY 2  
( 11-9-2023)

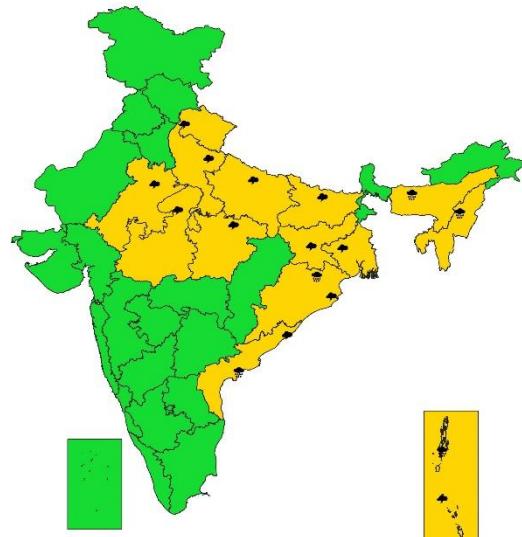


Subdivision Warning  
Heavy Rain  
Heavy Snow  
Thunderstorms & Lightning  
Hailstorm  
Dust Storm  
Strong Surface Winds  
Heat Wave  
Cold wave  
Fog

Subdivision color  
NO WARNING  
WATCH(BE UPDATED)  
ALERT (BE PREPARED)  
WARNING (TAKE ACTION)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 3  
( 12-9-2023)

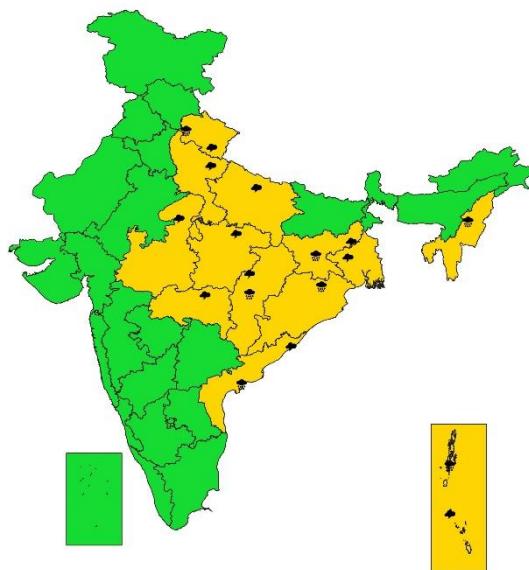


Subdivision Warning  
Heavy Rain  
Heavy Snow  
Thunderstorms & Lightning  
Hailstorm  
Dust Storm  
Strong Surface Winds  
Heat Wave  
Cold wave  
Fog

Subdivision color  
NO WARNING  
WATCH(BE UPDATED)  
ALERT (BE PREPARED)  
WARNING (TAKE ACTION)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 4  
( 13-9-2023)

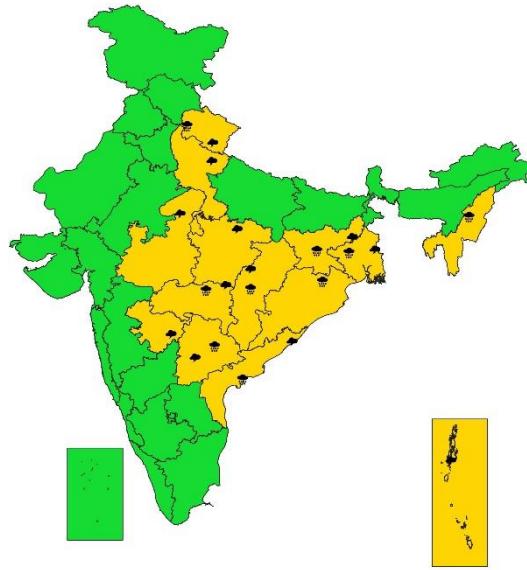


Subdivision Warning  
Heavy Rain  
Heavy Snow  
Thunderstorms & Lightning  
Hailstorm  
Dust Storm  
Strong Surface Winds  
Heat Wave  
Cold wave  
Fog

Subdivision color  
NO WARNING  
WATCH(BE UPDATED)  
ALERT (BE PREPARED)  
WARNING (TAKE ACTION)



SUBDIVISIONWISE RAINFALL FORECAST FOR DAY 5  
( 14-9-2023)



Subdivision Warning  
Heavy Rain  
Heavy Snow  
Thunderstorms & Lightning  
Hailstorm  
Dust Storm  
Strong Surface Winds  
Heat Wave  
Cold wave  
Fog

Subdivision color  
NO WARNING  
WATCH(BE UPDATED)  
ALERT (BE PREPARED)  
WARNING (TAKE ACTION)

**Impact & Action Suggested due to very heavy rainfall** over Uttarakhand, West Uttar Pradesh, West Madhya Pradesh and Andaman & Nicobar Islands on 10<sup>th</sup> September.

**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.

**Legends:**

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **AWS:** Automatic Weather Station
- ❖ **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, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

<b>SPATIAL DISTRIBUTION</b> (% 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)