



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

**Press Release
Date: 08th September, 2023
Time of Issue: 1300 hours IST**

Subject: Heavy rainfall activity likely over northeast India during next 5 days and over Madhya Pradesh, Maharashtra & Gujarat during next 3 days.

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 interior Odisha & adjoining Chhattisgarh now lies over southeast Madhya Pradesh extending upto middle tropospheric levels tilting southwards with height.
- ❖ The Monsoon Trough is active and lies to the south of its normal position. It passes through Jaisalmer, Kota, Raisen, Pendra Road, Jamshedpur, Digha and thence east-southeastwards to Northeast Bay of Bengal.

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 *Gangetic West Bengal and Jharkhand on 08th; over Odisha on 08th & 12th; Bihar and Sub-Himalayan West Bengal on 08th & 09th; and over Andaman & Nicobar Islands during 10th -12th September.*

South India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely over Coastal Karnataka and South Interior Karnataka on 08th; over ghat areas of Tamil Nadu, Puducherry & Karaikal during 08th -10th and over Kerala & Mahe during 08th -11th September.

Central India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Madhya Pradesh *during 08th-10th; Vidarbha and Chhattisgarh on 08th September.*

Isolated very heavy rainfall very likely over West Madhya Pradesh on 08th September.

West India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** very likely over Marathwada on 08th; over Konkan & Goa and Madhya Maharashtra during 08th & 12th and over Gujarat Region on 08th & 09th September.

Isolated very heavy rainfall very likely over Konkan & Goa, Madhya Maharashtra and Gujarat Region on 08th September.

Northeast India: Light/moderate scattered to fairly widespread rainfall/thunderstorm with **isolated heavy rainfall** activity very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 08th-12th and Arunachal Pradesh on 10th September.

Isolated very heavy rainfall very likely over Assam & Meghalaya on 08th September.

Northwest India: Light/moderate isolated to scattered rainfall/thunderstorm with isolated **heavy rainfall** activity very likely over southeast Rajasthan on 08th; Uttarakhand on 09th and over East Uttar Pradesh during 08th-10th September.

For more details kindly refer:

https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

Annexure I

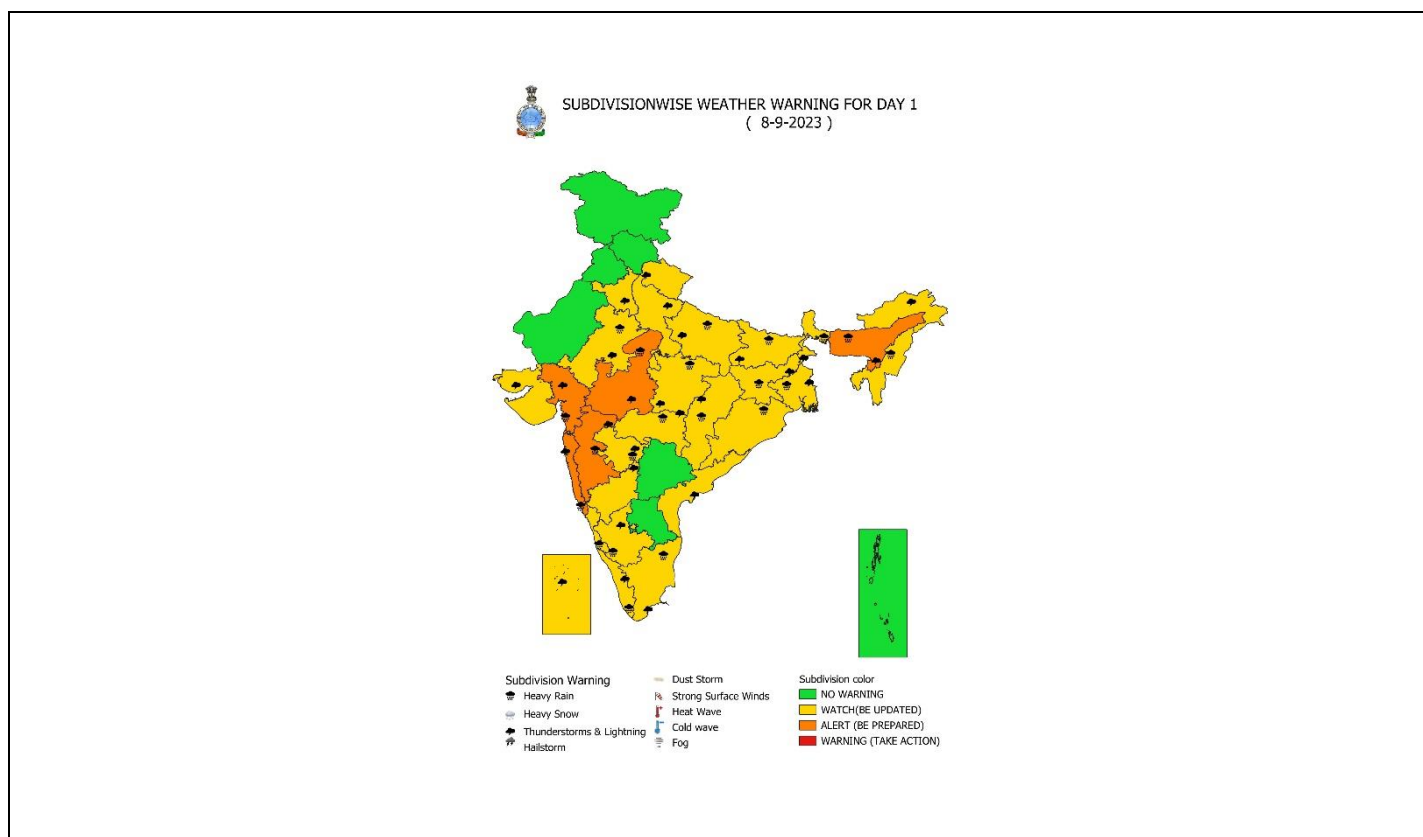
Rainfall observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 08th September, 2023):

- **Extremely heavy rainfall** at isolated places over Konkan & Goa; **Heavy to very heavy rainfall** at isolated places over Jharkhand, Gujarat region, Madhya Maharashtra, Assam & Meghalaya, Gangetic West Bengal and **heavy rainfall** at isolated places over Madhya Pradesh, Chhattisgarh, East Rajasthan, Sub-Himalayan West Bengal, Vidarbha, Uttar Pradesh, Odisha, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal,
- **Significant rainfall recorded (in cm):**
 - ✓ **Konkan & Goa:** Harnai Imd Obsy (dist Ratnagiri) 21, Bhiwandi (dist Thane) 17, Matheran (dist Raigad) 16, Ambernath (dist Thane) 15, Ulhasnagar (dist Thane) 14, Mokhedra - Fmo (dist Palghar) 14, Palghar_agri (dist Palghar) 13, Vasai (dist Palghar) 13, Shahapur (dist Thane) 13, Panvel_agri (dist Raigad) 13, Karjat_agri (dist Raigad) 12, Wada (dist Palghar) 12, Thane (dist Thane) 11, Santacruz - Imd Obsy (dist Mumbai Suburban) 11, Jawhar (dist Palghar) 10, Murbad (dist Thane) 10, Kalyan (dist Thane) 10, Tbia Imd Part Time (dist Thane) 7, Dapoli_agri (dist Ratnagiri) 7, Devgad (dist Sindhudurg) 7, Khalapur (dist Raigad) 7, Guhagarh (dist Ratnagiri) 7,
 - ✓ **Jharkhand:** Narayanpur-15; Palganj-10; Nandadih-10; Karmatand-9; Godda-9; Arki-8; Topchanchi-7; Margomunda-7; Kuru-7; Putki-6; Jamtara-6; Putki-6; Godda KVK-6; Jamtara-6; Nala-5; Barkisuriya-5; Jamshedpur-5;
 - ✓ **Gujarat Region:** Waghai (dist Dangs) 14, Umerpada (dist Surat) 12, Dang_kvka Aws (dist Dangs) 11, Dangs (ahwa) (dist Dangs) 7, Ukai (dist Surat) 7, Subir (dist Dangs) 7,
 - ✓ **Gangetic West Bengal:** Chittaranjan- 14, Sagar Island- 8, Luchipur- 7,
 - ✓ **Madhya Maharashtra:** Lonavala_agri (dist Pune) 13, Harsul - Fmo (dist Nashik) 12, Igatpuri (dist Nashik) 9, Bhadgaon (dist Jalgaon) 7, Junnar (dist Pune) 7,
 - ✓ **Assam & Meghalaya:** Dudhnoi KVK(AWS) (Dist Gowalpara) 13, Goalpara_Cwc (Dist Goalpara) 10, Panbari (Dist Chirang) 9, Kokrajhar (Dist Kokrajhar) 7, Mawsynram (Dist East Khasi Hills) 7, Khata Laitkroh(ARG)(Dist East Khasi Hills) 7
 - ✓ **Kerala & Mahe:** AMS KANNUR & Mattannur ARG (both in Kannur district) 11 each, Kannur Airport AWS 10, Kalamassery AWS & Odakali AWS (both in Ernakulam district) 9 each, Udumbannor(Idukki district), Perumbavur (Ernakulam district), Kodungallur (Thrissur district), Ponnani (Malappuram district) & Vythiri (Wayanad district) 8 each, C.I.A.L. Kochi (Ernakulam district), Kozhikode, Piravam (Ernakulam district), Aluva (Ernakulam District), Nilambur (Malappuram district), Urumi AWS (Kozhikode district), Vilingad (Kozhikode district) & Aralam AWS (Kannur district) 7 each,
 - ✓ **West Madhya Pradesh:** Bhikangaon (dist Khargone) 10, Ujjain-aws (dist Ujjain) 9, Dewas-aws (dist Dewas) 8, Khalwa (dist Khandwa) 8, Warla (dist Barwani) 7, Betul (dist Betul) 7, Amla (dist Betul) 7, Maheshwar (dist Khargone) 7,
 - ✓ **Odisha:** Patnagarh (Bolangir) 10, Banki (Cuttack) 9, Jenapur (Jajpur) 9.

- ✓ **East Madhya Pradesh:** Pushprajgarh (dist Anuppur) 9, Malthone (dist Sagar) 8, Vijayraghgarh (dist Katni) 7, Singodi (dist Katni) 7, Katni(mudwara) (dist Katni) 7,
- ✓ **Chhattisgarh:** Pendra (dist Bilaspur) 8, Takhatpur (dist Bilaspur) 8, Durg (dist Durg) 8, Kusmi (dist Balrampur) 7,
- ✓ **Sub-Himalayan West Bengal & Sikkim:** Shipgyer- 8,
- ✓ **Tamilnadu, Puducherry & Karaikal:** Adayar Eco Park (dist Chennai), Tirur KVK AWS (dist Tiruvallur), Avadi (dist Tiruvallur) 8 each, Koratur (dist Tiruvallur), Minnal (dist Ranipet), Chinnakalar (dist Coimbatore), Worth Estate Cherrumulli (dist Nilgiris) 7
- ✓ **Vidarbha:** Nagpur Aerodrome (dist Nagpur) 8, Bhamragad (dist Gadchiroli) 7,
- ✓ **East Uttar Pradesh:** Haidargarh (dist Barabanki) 8, Ramnagar (dist Barabanki) 8,
- ✓ **West Uttar Pradesh:** Kalpi Tehsil (dist Jalaun) 7,

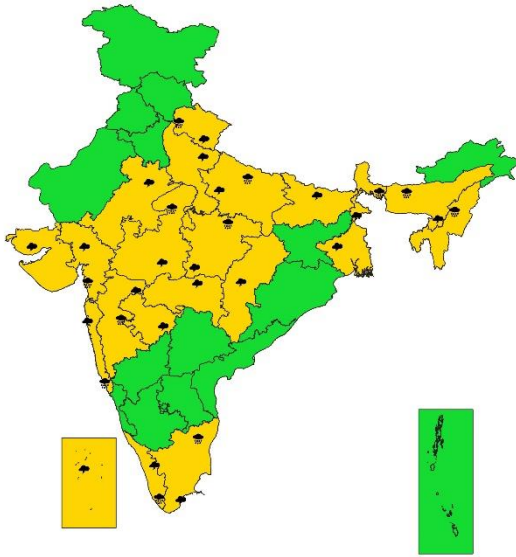
Obsy: Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation

Annexure II





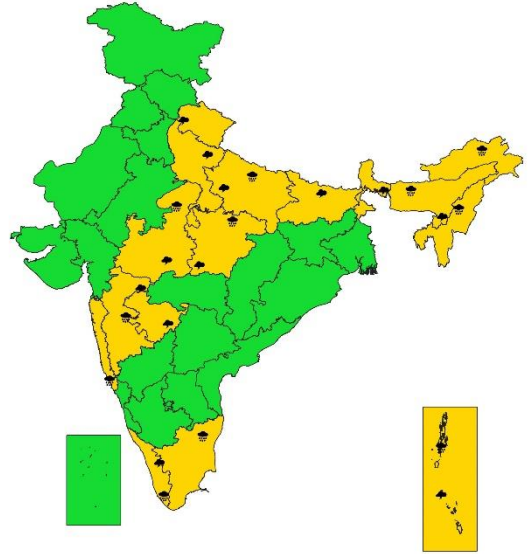
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(9-9-2023)**



- | | |
|-----------------------------|--------------------------|
| Subdivision Warning | Subdivision color |
| ☁ Heavy Rain | 🟢 NO WARNING |
| ❄ Heavy Snow | 🟡 WATCH(BE UPDATED) |
| ⚡ Thunderstorms & Lightning | 🟠 ALERT (BE PREPARED) |
| 🌨 Hailstorm | 🔴 WARNING (TAKE ACTION) |
| ☁ Dust Storm | |
| 🌪 Strong Surface Winds | |
| 🔥 Heat Wave | |
| ❄ Cold wave | |
| 🌫 Fog | |



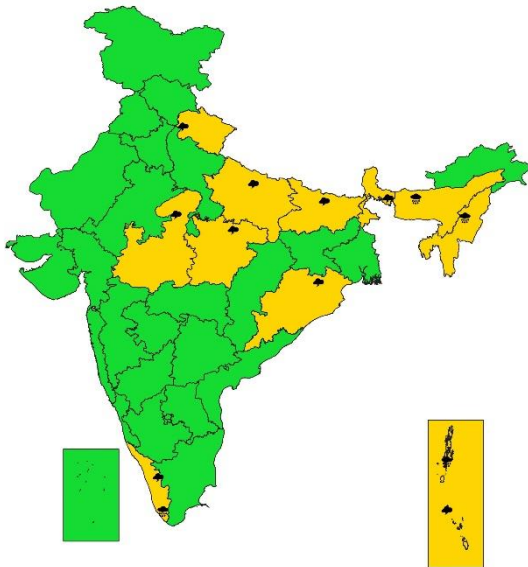
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(10-9-2023)**



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|-----------------------------|--------------------------|
| Subdivision Warning | Subdivision color |
| ☁ Heavy Rain | 🟢 NO WARNING |
| ❄ Heavy Snow | 🟡 WATCH(BE UPDATED) |
| ⚡ Thunderstorms & Lightning | 🟠 ALERT (BE PREPARED) |
| 🌨 Hailstorm | 🔴 WARNING (TAKE ACTION) |
| ☁ Dust Storm | |
| 🌪 Strong Surface Winds | |
| 🔥 Heat Wave | |
| ❄ Cold wave | |
| 🌫 Fog | |



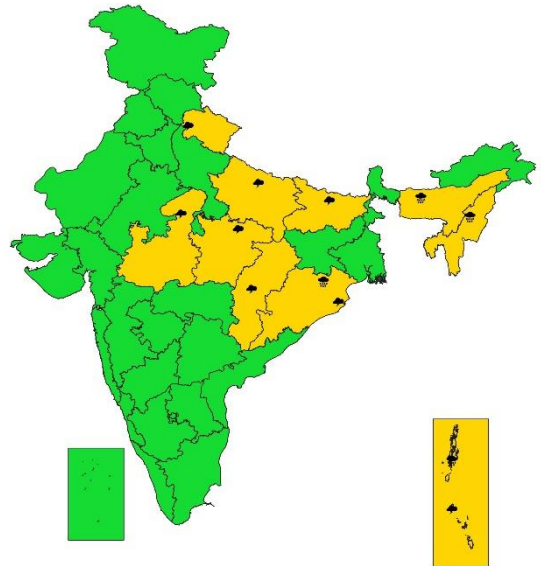
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
(11-9-2023)**



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|-----------------------------|--------------------------|
| Subdivision Warning | Subdivision color |
| ☁ Heavy Rain | 🟢 NO WARNING |
| ❄ Heavy Snow | 🟡 WATCH(BE UPDATED) |
| ⚡ Thunderstorms & Lightning | 🟠 ALERT (BE PREPARED) |
| 🌨 Hailstorm | 🔴 WARNING (TAKE ACTION) |
| ☁ Dust Storm | |
| 🌪 Strong Surface Winds | |
| 🔥 Heat Wave | |
| ❄ Cold wave | |
| 🌫 Fog | |



**SUBDIVISIONWISE RAINFALL FORECAST FOR DAY 5
(12-9-2023)**



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|-----------------------------|--------------------------|
| Subdivision Warning | Subdivision color |
| ☁ Heavy Rain | 🟢 NO WARNING |
| ❄ Heavy Snow | 🟡 WATCH(BE UPDATED) |
| ⚡ Thunderstorms & Lightning | 🟠 ALERT (BE PREPARED) |
| 🌨 Hailstorm | 🔴 WARNING (TAKE ACTION) |
| ☁ Dust Storm | |
| 🌪 Strong Surface Winds | |
| 🔥 Heat Wave | |
| ❄ Cold wave | |
| 🌫 Fog | |

Impact & Action Suggested due to very heavy rainfall over West Madhya Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra and Gujarat Region on 08th 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.

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)