



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

**Press Release**

**Date: 21<sup>st</sup> August, 2023**

**Time of Issue: 1300 hours IST**

**Subject: (i) Heavy to very heavy rainfall spell likely over northeast India and Sikkim during next 5 days.**

**(ii) Isolated heavy rainfall likely over Himachal Pradesh, Uttarakhand and Uttar Pradesh during next 5 days and over East Rajasthan & Madhya Pradesh next 2-3 days.**

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

**Significant Weather features:**

- ❖ A cyclonic circulation lies over northwest Madhya Pradesh & neighbourhood in lower tropospheric levels.
- ❖ Monsoon Trough is active and runs south of its normal position. It is likely to shift northwards gradually towards north of its normal position during next 2-3 days.
- ❖ The Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 58°E to the north of Lat. 28°N.

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

**Northwest India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** likely over Himachal Pradesh during 22<sup>nd</sup>-25<sup>th</sup>; over Uttarakhand and East Uttar Pradesh during 21<sup>st</sup>-25<sup>th</sup>; over West Uttar Pradesh during 21<sup>st</sup>-24<sup>th</sup>; over East Rajasthan during 21<sup>st</sup>-22<sup>nd</sup> and over north Haryana-Chandigarh on 22<sup>nd</sup> August, 2023.

**Isolated very heavy rainfall also likely over Uttarakhand during 21<sup>st</sup>-24<sup>th</sup>; over Himachal Pradesh on 23<sup>rd</sup> & 24<sup>th</sup> and over northwest Uttar Pradesh on 22<sup>nd</sup> & 23<sup>rd</sup> August, 2023.**

**Central India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** activity very likely over West Madhya Pradesh during 21<sup>st</sup>-23<sup>rd</sup> and over East Madhya Pradesh on 22<sup>nd</sup> & 23<sup>rd</sup> August, 2023.

**East India:** Light/moderate fairly widespread to widespread rainfall/ thunderstorm & lightning with **isolated heavy rainfall** activity very likely over Sub-Himalayan West Bengal & Sikkim during next 5 days; over Gangetic West Bengal on 24<sup>th</sup> & 25<sup>th</sup>; over Odisha and Jharkhand during 23<sup>rd</sup>-25<sup>th</sup> and over Bihar during 22<sup>nd</sup>- 25<sup>th</sup> August, 2023.

**Isolated very heavy rainfall also likely over Sub-Himalayan West Bengal & Sikkim on 24<sup>th</sup> & 25<sup>th</sup>; over Bihar during 22<sup>nd</sup> & 25<sup>th</sup> August. Isolated extremely heavy rainfall also likely over Sub-Himalayan West Bengal & Sikkim on 22<sup>nd</sup> & 23<sup>rd</sup> August, 2023.**

**Northeast India:** Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** activity very likely over the region during next 5 days.

**Isolated very heavy rainfall also likely over Assam & Meghalaya during 21<sup>st</sup>-25<sup>th</sup> and over Arunachal Pradesh during 23<sup>rd</sup>-25<sup>th</sup> August, 2023.**

**South India:** Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** activity very likely over Tamil Nadu on 22<sup>nd</sup> August, 2023.

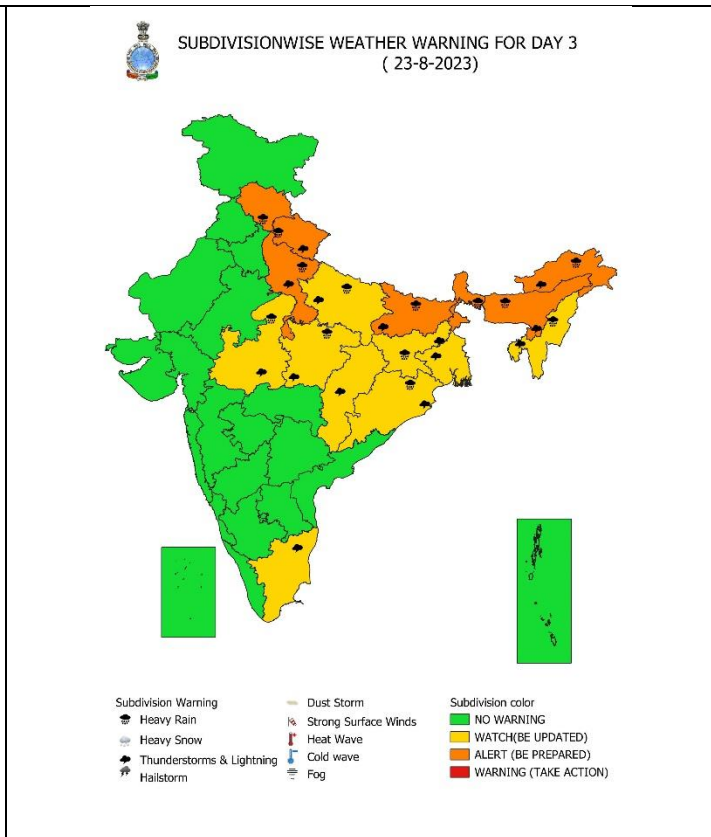
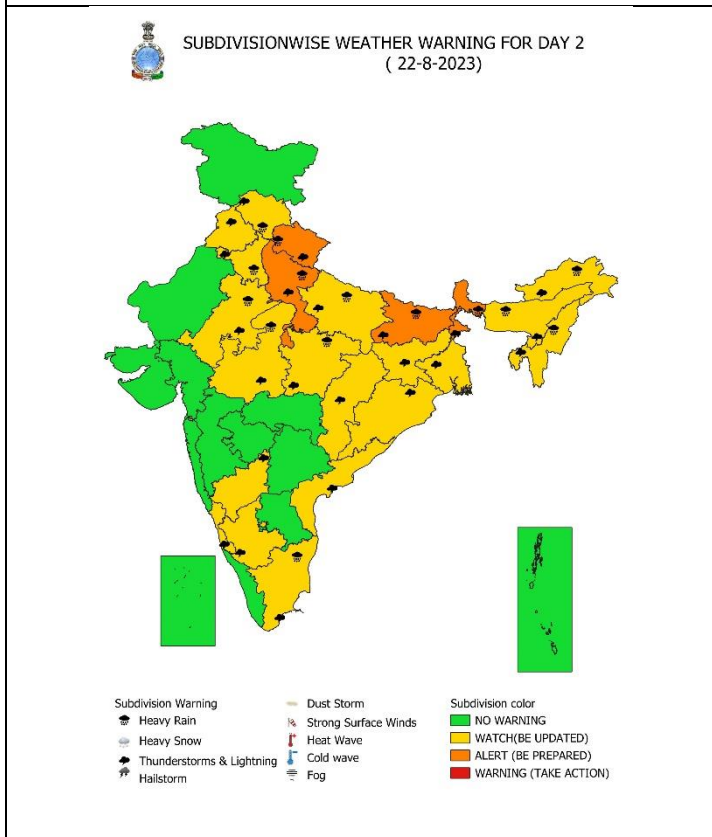
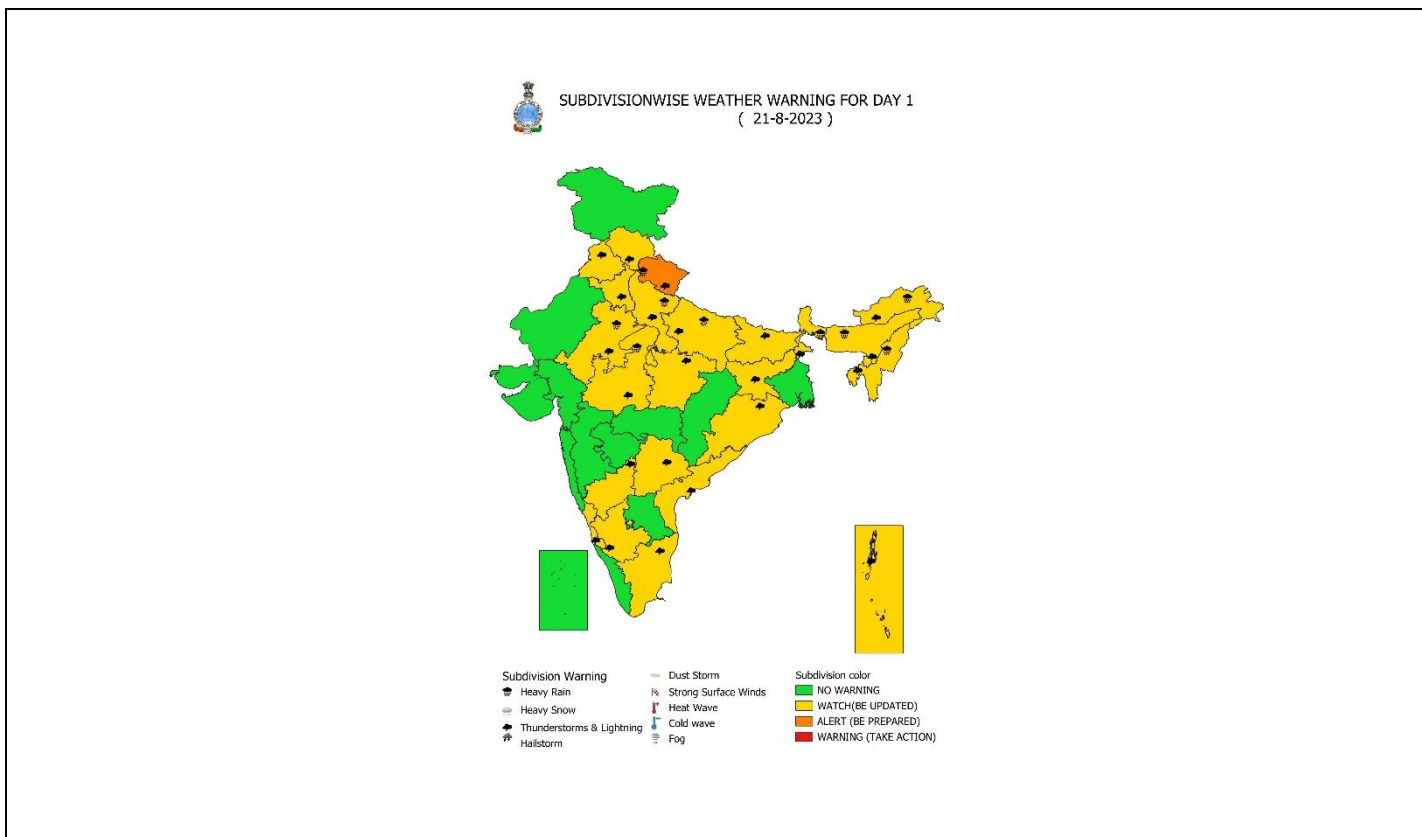
**No significant weather over rest parts of the country during next 5 days.**

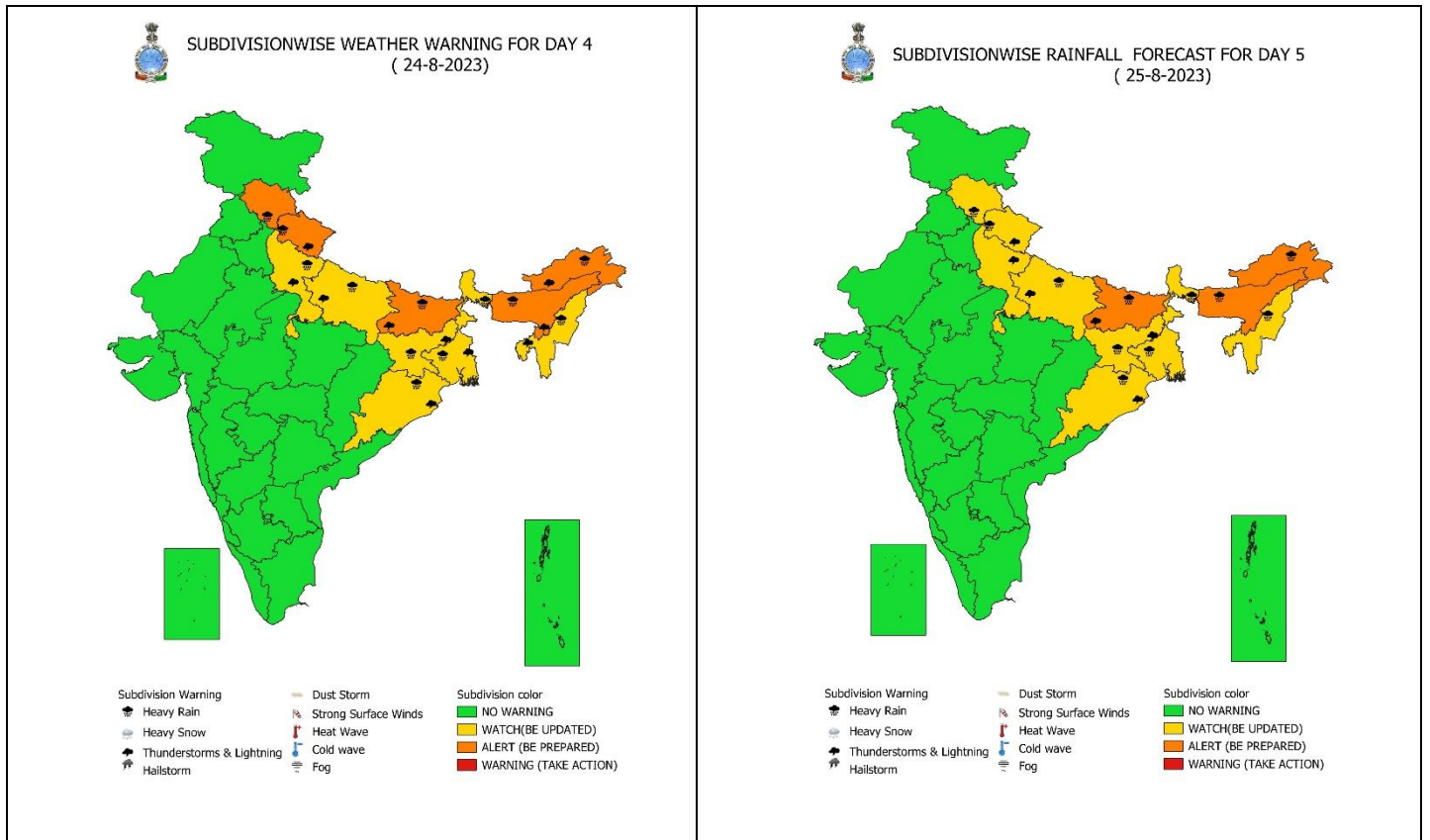
For more details kindly refer: [https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

## Annexure I

### Rainfall observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 21<sup>st</sup> August, 2023):

- **Heavy to very heavy rainfall** at isolated places over East Rajasthan and **heavy rainfall** at isolated places over Uttarakhand, West Rajasthan, West Madhya Pradesh, Odisha, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya.
  
- **Significant rainfall recorded (in cm):**
  - ✓ **East Rajasthan:** Bagidora Sr (dist Banswara) 16, Sajjangarh Sr (dist Banswara) 14, Udaipur/d-aero (dist Udaipur) 13, Garhi (dist Banswara) 11, Sallopat Sr (dist Banswara) 9, Mavli (dist Udaipur) 8, Nathdwara (dist Rajsamand) 7, Shergarh Sr (dist Banswara) 7;
  - ✓ **West Rajasthan:** Makrana Sr (dist Nagaur) 11, Sojat (dist Pali) 6;
  - ✓ **Uttarakhand:** Sahastradhara (dist Dehradun) 10, Asharori (dist Dehradun) 7;
  - ✓ **Assam & Meghalaya:** Dhemaji (dist Dhemaji) 9;
  - ✓ **Sub-Himalayan West Bengal & Sikkim:** Neora (dist Jalpaiguri) 9, Nagarkata (dist Jalpaiguri) 7, Bagrakote (dist Darjeeling) 7;
  - ✓ **Odisha:** Ullunda (dist Sonepur) 9, Reamal (dist Deogarh) 8, Daringibadi (dist Kandhamal) 7;
  - ✓ **West Madhya Pradesh:** Sitamau (dist Mandsaur) 8, Shamgarh (dist Mandsaur) 6;





### Impact & Action Suggested due to very heavy rainfall over:

1. Uttarakhand during 21<sup>st</sup> -24<sup>th</sup> August.
2. Sub-Himalaya West Bengal & Sikkim and Bihar during 22<sup>nd</sup> – 25<sup>th</sup> August
3. Himachal Pradesh on 23<sup>rd</sup> & 24<sup>th</sup> August.
4. West Uttar Pradesh on 22<sup>nd</sup> & 23<sup>rd</sup> August.
5. Arunachal Pradesh and Assam & Meghalaya during 23<sup>rd</sup> – 25<sup>th</sup> August.

#### A. Impact Expected

- ❖ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ❖ Occasional reduction in visibility due to heavy rainfall.
- ❖ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ❖ Minor damage to kutchha roads.
- ❖ Possibilities of damage to vulnerable structure.
- ❖ Localized Landslides/Mudslides in the hilly areas.
- ❖ Damage to horticulture and standing crops in some areas due to inundation.
- ❖ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC).

#### B. Action Suggested

- ❖ Check for traffic congestion on your route before leaving for your destination.
- ❖ Follow any traffic advisories that are issued in this regard.
- ❖ Avoid going to areas that face the water logging problems often.

❖ Avoid staying in vulnerable structure.

**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)

<p>Subdivision Warning</p> <p> Heavy Rain</p> <p> Heavy Snow</p> <p> Thunderstorms &amp; Lightning</p> <p> Hailstorm</p>	<p> Dust Storm</p> <p> Strong Surface Winds</p> <p> Heat Wave</p> <p> Cold wave</p> <p> Fog</p>	<p>Subdivision color</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #00FF00; border: 1px solid black;"></span> NO WARNING</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black;"></span> WATCH(BE UPDATED)</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #FFA500; border: 1px solid black;"></span> ALERT (BE PREPARED)</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black;"></span> WARNING (TAKE ACTION)</p>
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Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

Flash Flood Risk	
<span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black;"></span>	High Risk (Take Action)
<span style="display: inline-block; width: 15px; height: 15px; background-color: #FFA500; border: 1px solid black;"></span>	Moderate Risk (Be Prepared)
<span style="display: inline-block; width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black;"></span>	Low Risk (Be Updated)