



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

**Press Release
Date: 09th August, 2023
Time of Issue: 1245 hours IST**

**Subject: i) Isolated heavy to very heavy rainfall likely over Uttarakhand, Bihar, Sikkim and Arunachal Pradesh during next 5 days.
ii) Subdued rainfall activity likely over rest parts of the country during next one week.**

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

Significant Weather features:

- ❖ A cyclonic circulation lies over northeast Bihar & neighbourhood extends upto middle tropospheric levels.
- ❖ The Monsoon Trough lies north of its normal position. It is likely to be north of its normal position or along the foothills of Himalayas during next 4-5 days.
- ❖ A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 60°E to the north of 32°N.

Weather Forecast and Warnings:

Northwest India: Light/moderate scattered to fairly widespread rainfall with isolated **heavy to very heavy rainfall** activity very likely over Uttarakhand during 09th-13th and East Uttar Pradesh on 09th August and isolated **heavy rainfall** likely over Himachal Pradesh, Punjab, Haryana on 10th & 13th; West Uttar Pradesh on 13th; East Uttar Pradesh on 10th & 13th August, 2023. Isolated **extremely heavy rainfall** also likely over Uttarakhand today.

Subdued rainfall activity likely over rest parts of northwest India during next 7 days.

East India: Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** activity very likely over Bihar, Sub-Himalayan West Bengal & Sikkim during 09th-13th August and Jharkhand on 09th, 12th & 13th August. Isolated **very heavy rainfall** likely over Jharkhand on 09th and Sikkim on 09th, 12th & 13th August. Isolated **extremely heavy rainfall** also likely over Bihar today.

Northeast India: Light/moderate fairly widespread to widespread rainfall with isolated **heavy to very heavy rainfall** activity very likely over Arunachal Pradesh, Assam, Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 5 days.

Central, West & South India: Subdued rainfall activity likely over these regions during next 7 days.

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

Flash Flood Guidance ([Annexure III](#))

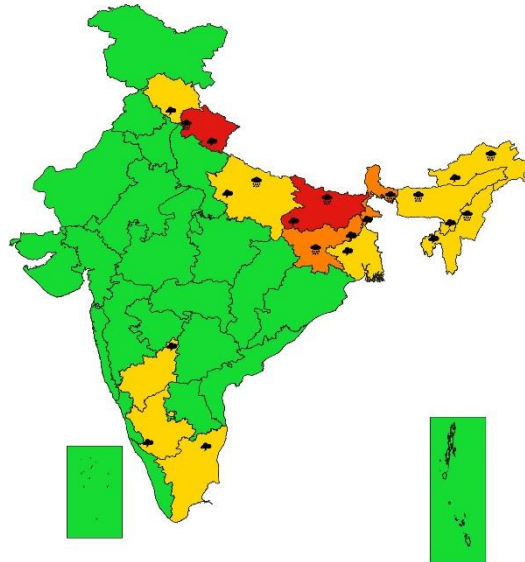
Rainfall Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 09th August, 2023):

- **Heavy to very heavy rainfall with extremely heavy falls** at isolated places observed over Uttarakhand, Bihar; **Heavy to very heavy rainfall** at isolated places over Assam & Meghalaya, Sub-Himalaya West Bengal & Sikkim, Jharkhand and **heavy rainfall** at isolated places over East Uttar Pradesh, Tripura and Tamil Nadu.
- **Significant rainfall recorded (in cm):**
 - ✓ **Bihar:** Purnea: Rupouli-27, **Bhagalpur:** Sultanganj-26, Colgaon-23, Pirpaiti-21, **Muzaffarpur:** Mushari-25, Minapur-19, Muzaffarpur-16; **East Champaran:** Chakia, Lalbegiaghat-22 each, Mehshi-20, Ahirwalia-14; **Monghyr:** Tarapaur-20, **Samastipur:** Pusa-19, **Sheohar:** Dumri-18, **Jamui:** Laxmipur-17, **Khagaria:** Parbatta-16, **Banka:** Shambhuganj -15
 - ✓ **Uttarakhand:** **Pauri Garhwal:** Kotdwar-28, Yamkeshwar-15, **Nainital:** Kathgodam-24, Chorgalia-23, Kaladhungi, Nainital(Jeolikot)-20 Each, Nainital- 17, **Champawat:** Banbasa-21, Tanakpur-19, Bastia-7, **Bageshwar:** Sama-16, Loharkhet-13; **Tehri Garhwal:** Narendranagar-16; **Udham Singh Nagar:** Khatima-14, Pantnagar-12, Pantnagar-11, **Rudraprayag:** Soneprayag-8;
 - ✓ **Assam & Meghalaya:** Mawsynram (dist East Khasi Hills) 21, Mawkyrwat (dist South West Khasi Hills) 12, Naharkatia Arg (dist Dibrugarh) 12, Jia Bharali N T Xing (dist Shonitpur) 11, Cherrapunji(rkm) (dist East Khasi Hills) 10, Cherrapunji (dist East Khasi Hills) 9, Sonari_arg (dist Sibsagar) 7, D/mohanbari Aero (dist Dibrugarh) 7, Tangla_arg (dist Udalguri) 7, Jowai_aws (dist West Jaintia Hills) 7, Hazuah (dist Barpeta) 7,
 - ✓ **Sub-Himalaya West Bengal & Sikkim:** Algarah, Namchi : 13 Each, Kalimpong, Lava :12 Majhian : 11, Pakyong : 11, Mazitar, Namthang : 10, Kalimpong: 10, Pedong : 9, Gangarampur, Darjeeling, Rongo : 8, Chel, Samsing, Sankosh : 7, Rongli : 8, Damthang : 7
 - ✓ **Jharkhand:** Sahibganj-13; Rajmahal -11; Godda -9; Godda -8; Pathargama -7
 - ✓ **Tripura:** South Tripura) 8, Lengpui (dist Aizawl) 7, Chhamonu (dist Dhalai) 7,
 - ✓ **East Uttar Pradesh:** Bansi Cwc (dist Siddharth Nagar) 8, Chanderdeepghat (dist Gorakhpur) 6, Birdghat (dist Gorakhpur) 5, Domeriaganj (dist Siddharth Nagar) 4,
 - ✓ **Tamil Nadu:** Gomugi Dam Pwd (dist Kallakurichi) 7, Chittampatti (dist Madurai) 6, Thaniamangalam (dist Madurai), Kumbakonam (dist Thanjavur), Kattumayilur (dist Cuddalore), Melur (dist Madurai), Mettupatti (dist Madurai), Tallakulam (dist Madurai), Kodaikanal (dist Dindigul) 5 each,
 - ✓ **Himachal Pradesh:** Dharmshala Aws (dist Kangra) 5, Guler (dist Kangra) 4,

Annexure II



SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
(9-8-2023)

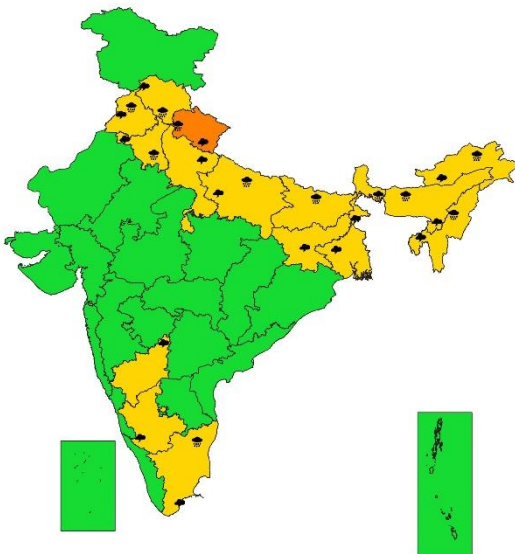


Subdivision Warning
 ☁ Heavy Rain
 ❄ Heavy Snow
 ⚡ Thunderstorms & Lightning
 🌨 Hailstorm
 🌪 Dust Storm
 🌬 Strong Surface Winds
 📈 Heat Wave
 🌡 Cold wave
 🌫 Fog

Subdivision color
 🟢 NO WARNING
 🟡 WATCH (BE UPDATED)
 🟠 ALERT (BE PREPARED)
 🔴 WARNING (TAKE ACTION)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(10-8-2023)

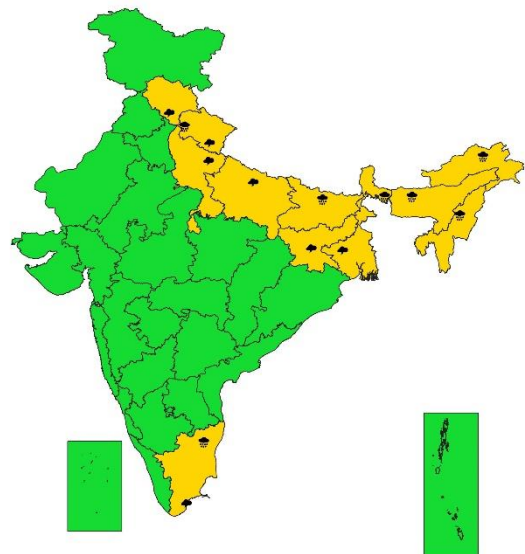


Subdivision Warning
 ☁ Heavy Rain
 ❄ Heavy Snow
 ⚡ Thunderstorms & Lightning
 🌨 Hailstorm
 🌪 Dust Storm
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 🌡 Cold wave
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Subdivision color
 🟢 NO WARNING
 🟡 WATCH (BE UPDATED)
 🟠 ALERT (BE PREPARED)
 🔴 WARNING (TAKE ACTION)

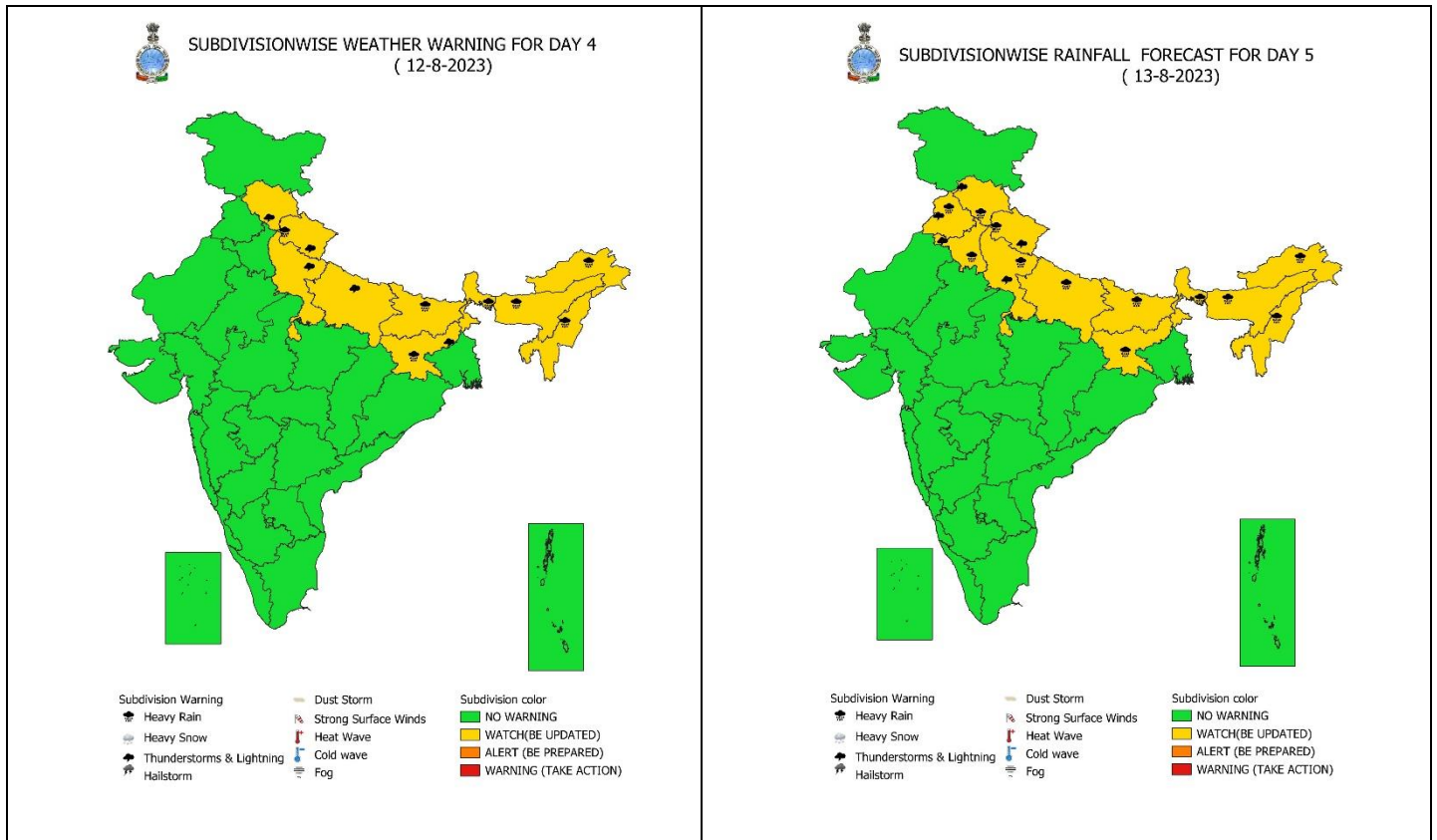


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(11-8-2023)



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/extremely heavy rainfall over:

1. Uttarakhand on 09th & 10th August
2. Bihar, East Uttar Pradesh, Sub-Himalaya West Bengal & Sikkim, Jharkhand on 09th 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.

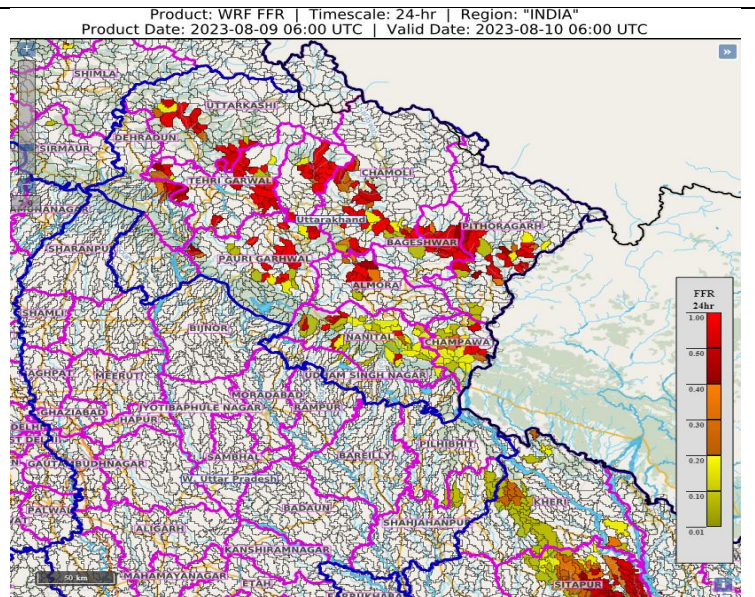
Annexure III

Flash Flood Guidance for next 24 hours

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 10-08-2023 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Uttarakhand Met Sub-divisions during next 24 hours.

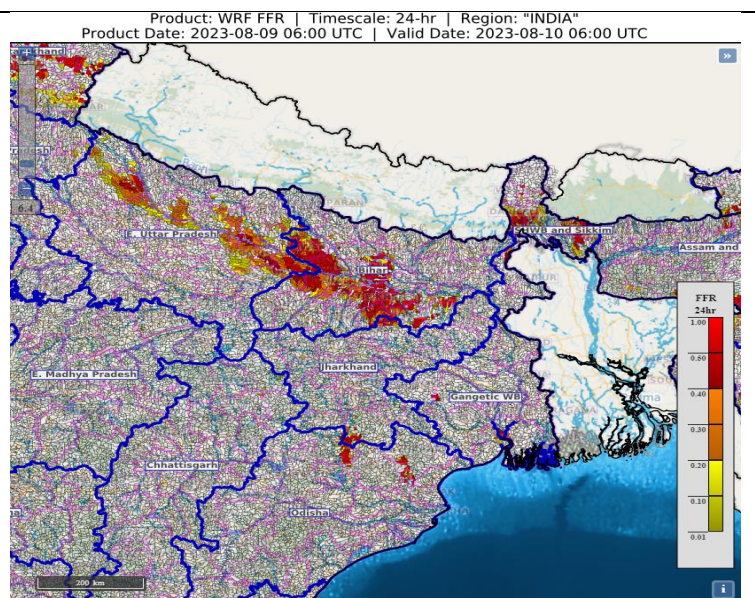
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 10-08-2023 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of East Uttar Pradesh adjoining Bihar and SHWB & Sikkim Met Sub-divisions during next 24 hours.














Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.




Legends:

- ❖ **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
- ❖ **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)