



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

**Press Release
Date: 14th August, 2023
Time of Issue: 1330 hours IST**

- Subject:** i) Isolated extremely heavy rainfall likely to continue over Himachal Pradesh & Uttarakhand and reduce from tomorrow.
ii) Gradual increase in rainfall activity over East & adjoining central India from today, the 14th August, 2023.
iii) Subdued rainfall activity likely to continue over rest parts of the country during next 4-5 days.

**Weather observed during past 24 hours ending at 0830 hours IST of today (Annexure I):
For Flash Flood Guidance (Annexure III)**

Significant Weather features:

- ❖ The Monsoon Trough lies north of its normal position. It is likely to gradually shift southwards and lie near its normal position from 18th August.
- ❖ A cyclonic circulation lies over south Bangladesh & neighbourhood lower & middle tropospheric levels.
- ❖ A fresh Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 68°E to the north of Lat. 32°N.

Weather Forecast and Warnings: (Annexure II)

Northwest India: Light/moderate scattered to fairly widespread rainfall with isolated **heavy rainfall** likely over Jammu Division on 14th; Himachal Pradesh on 14th & 15th; Uttarakhand during 14th to 18th; extreme north Punjab-Haryana-Chandigarh, Northwest Uttar Pradesh on 14th August, 2023.

Isolated extremely heavy falls also likely over Uttarakhand and Himachal Pradesh during next 24 hours and substantial decrease thereafter from tomorrow.

East India: Light/moderate scattered to fairly widespread rainfall with **isolated heavy rainfall** activity very likely over Odisha during 14th-18th; Sub-Himalayan West Bengal & Sikkim during 15th-17th August; over Gangetic West Bengal on 14th, 16th & 17th; over Jharkhand during 15th-18th and over Andaman & Nicobar Islands on 17th & 18th August.

Northeast India: Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** activity very likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 14th to 18th August.

Central, West & South India: Light/moderate isolated to scattered rainfall with isolated **heavy rainfall** activity very likely to increase over East Madhya Pradesh and Chhattisgarh on 17th & 18th August.

Subdued rainfall activity likely over remaining parts of these regions during next 7 days.

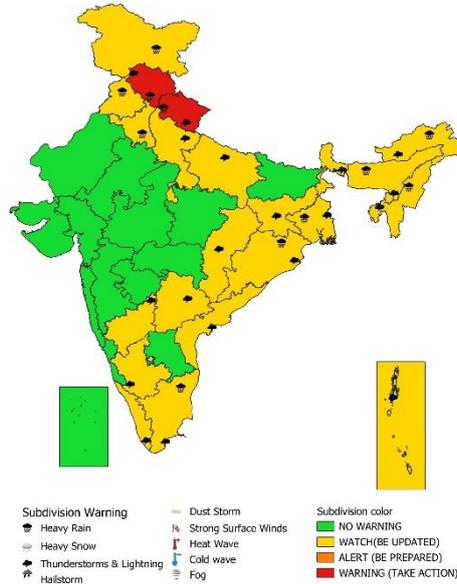
For more details kindly refer: https://mausam.ind.gov.in/responsive/all_india_forecast_bulletin.php

Annexure I

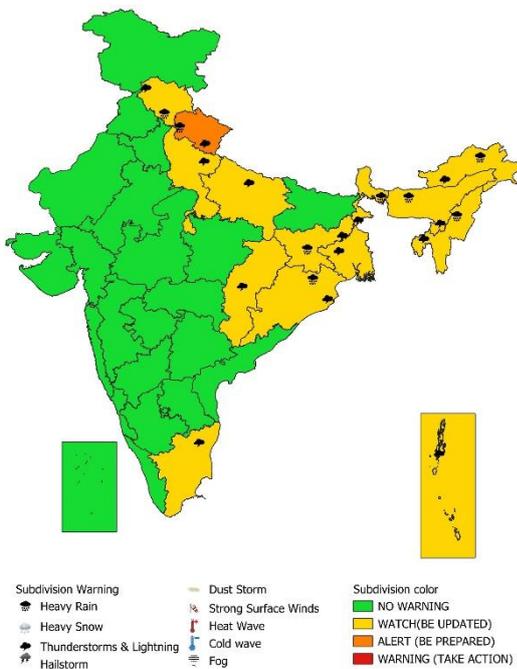
Rainfall Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 14th August, 2023):

- **Exceptionally heavy rainfall recorded over Rishikesh (Dehradun)-42 cm**
- **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Himachal Pradesh, Uttarakhand; **Heavy to very heavy rainfall** at isolated places over Haryana, Odisha, Tamil Nadu and **heavy rainfall** at isolated places over Jammu, Punjab, East Uttar Pradesh, Coastal Andhra Pradesh and Sub-Himalaya West Bengal.
- **Significant rainfall recorded (in cm):**
 - ✓ **Uttarakhand: Dehradun:** Rishikesh-42, Sahastradhara-25, Uni, Mussoorie, Raiwala-19 each, Mohkampur-18, Jollygrant-17, Chakrata- 8, Haripur-7, **PAURI GARHWAL:** Lansdown-17, Yamkeshwar-15, Kotdwar-11, Rikhnikhal-10, Satpuli- 9, Srinagar -7; **CHAMPAWAT:** Chalthi-16, Bastia-14, Tanakpur- 10, Champawat-9, Champawat-8, Lohaghat-7; **TEHRI GARHWAL:** Rani_Chawri-15, Tehri-12, Devprayag-14, Koteshwer, Narendranagar-8 each, Dhanolti, Ghansali-7 each; **BAGESHWAR:** Liti-16, Song-8, Kanda-7, **UDHAM SINGH NAGAR:** Jaspur-10; **PITHORAGARH:** Didihat-8, Berinag, Jauljibi-7 each,
 - ✓ **Himachal Pradesh:** Kangra (dist Kangra) 27, Sujampur Tira (dist Hamirpur) 25, Dharmsala (dist Kangra) 25, Palampur (dist Kangra) 22, Guler (dist Kangra) 19, Jogindarnagar (dist Mandi) 18, Nagrota Surian (dist Kangra) 18, Kataula (dist Mandi) 17, Sundarnagar (dist Mandi) 17, Baldwara (dist Mandi) 15, Mandi (dist Mandi) 14, Shimla (dist Shimla) 13, Dharmshala (dist Kangra) 13, Barthin (dist Bilaspur) 13, Simla (dist Shimla) 13, Berthin (dist Bilaspur) 12, Gohar (dist Mandi) 12, Nahan (dist Sirmaur) 11, Ghumarwin (dist Bilaspur) 10, Kasauli (dist Solan) 10, Paonta (dist Sirmaur) 9, Dalhousi Alha (dist Chamba) 8, Nadaun (dist Hamirpur) 8, Bilaspur Sadar (dist Bilaspur) 8, Arki (dist Solan) 8, Kufri Aws (dist Shimla) 8, Mashobra (dist Shimla) 7, Aghar (dist Hamirpur) 7, Rohru (dist Shimla) 7, Mehre (barsar) (dist Hamirpur) 7, Kandaghat (dist Solan) 7,
 - ✓ **Haryana:** Tajewala (dist Yamuna Nagar) 15, Partapnagar (dist Yamuna Nagar) 10, Morni (dist Panchkula) 7,
 - ✓ **Tamil Nadu:** Jamine Koratur (Tiruvallur) 14, Tirur Kvk AWS (Tiruvallur) 12, Ambathur (Tiruvallur), ACS Medical College (Kancheepuram) 11 each, Poonamallee (Tiruvallur), Poonamalle Arg (Tiruvallur), Maduravoyal (Chennai), Mugalivakkam (Chennai), Malar Colony (Chennai), Valasaravakkam (Chennai), Adyar Eco Park (Kancheepuram) 10 each, DGP Office (Chennai), Chennai Airport (Chennai), Adyar (Chennai), Royapuram (Chennai), T. V. K. Nagar (Chennai), Kolathur (Chennai), YMCA Nandanam (Chennai) 9 each, Tiruvallur (Tiruvallur), MGR Nagar (Chennai), Anna University (Chennai), Kodambakkam (Chennai), Teynampet (Chennai) 8 each, Perambur (Chennai), Ayanavaram Taluk Office (Chennai), Alandur (Chennai), Sholinganallur (Chennai), Chennai Nungambakkam (Chennai), Chembarabakkam (Kancheepuram), Chembarambakkam (Kancheepuram), Chennai Collectorate (Chennai), Anna Nagar (Chennai) 7 each,
 - ✓ **Odisha :** Nuagaon (dist Nayagarh) 13, Pattamundai (dist Kendrapara) 8,
 - ✓ **Jammu & Kashmir:** Reasi 10, Chatha 9, Jammu, Katra , RsPura- 8 each,
 - ✓ **Sub-Himalaya West Bengal:** Darzeeling-9, Jalpaiguri-8
 - ✓ **Coastal Andhra Pradesh:** Balajipeta (dist Parvathipuram Manyam) 8,
 - ✓ **East Uttar Pradesh:** Rai Bareilly, Sant Kabir Nagar-7 each
 - ✓ **Punjab:** Pathankot Iaf (dist Pathankot) 7,

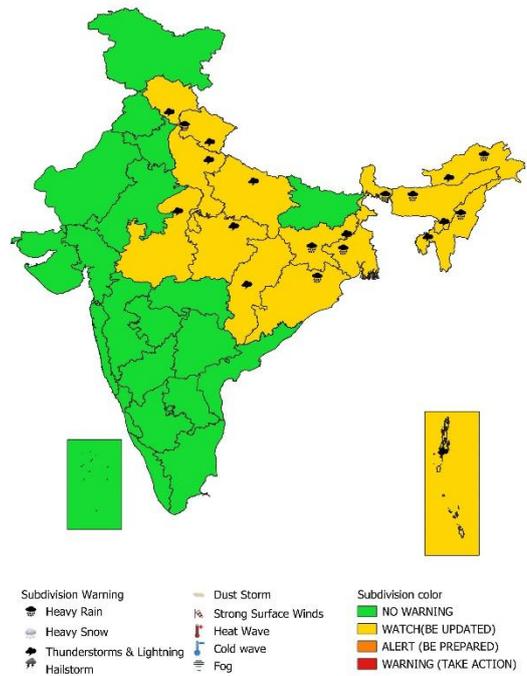
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
(14-8-2023)

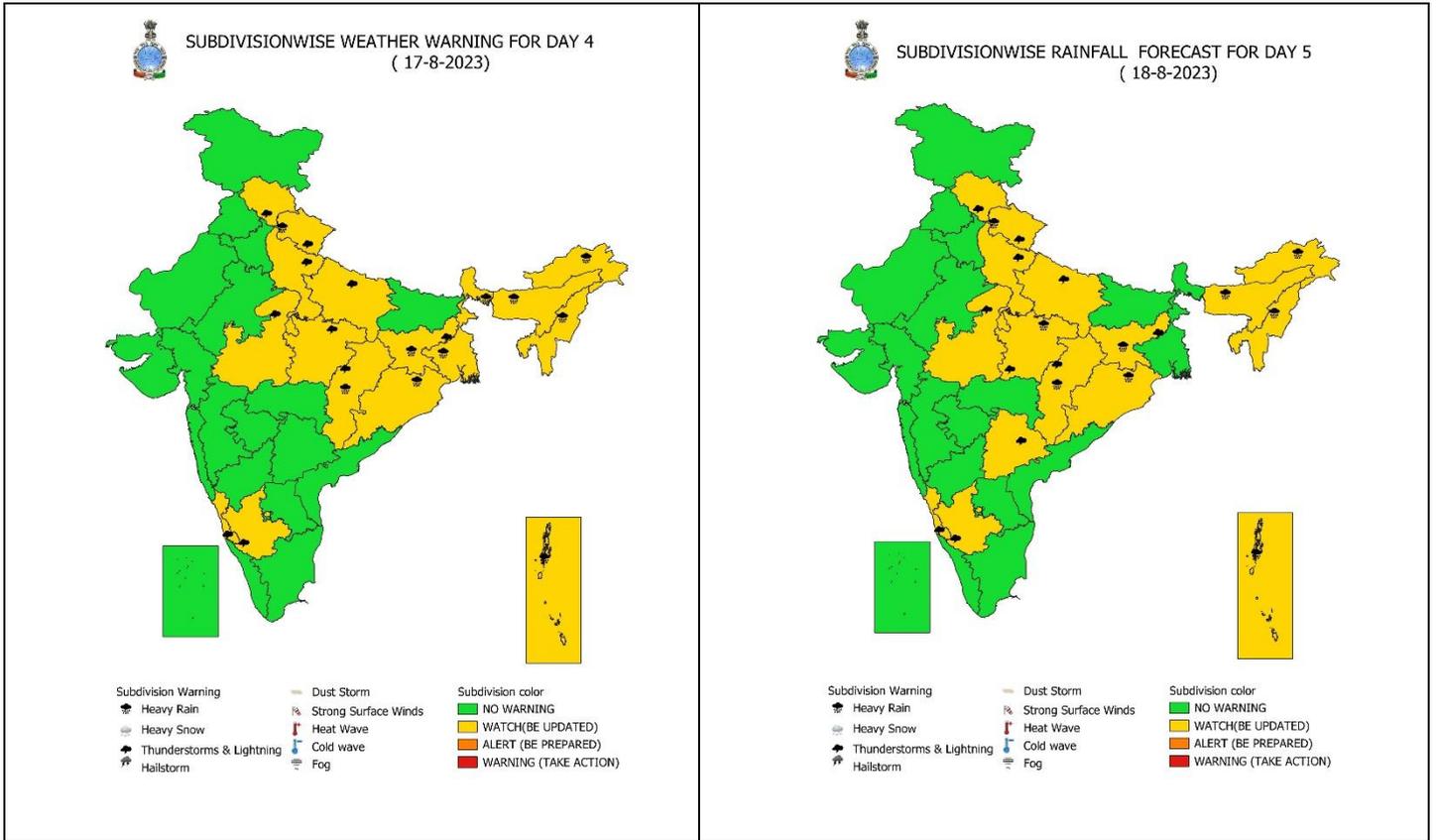


SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
(15-8-2023)



SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
(16-8-2023)





Impact & Action Suggested due to very heavy/extremely heavy rainfall over:

- 1. Uttarakhand on 14th & 15th August;**
- 2. Himachal Pradesh on 14th 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 kutcha 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

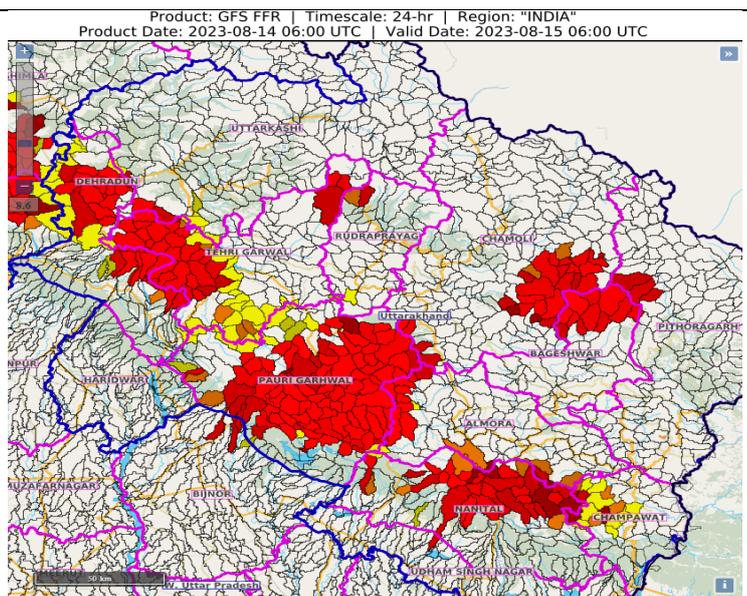
- ❖ Check for traffic congestion on your route before leaving for your destination.
- ❖ Follow any traffic advisories that are issued in this regard.
- ❖ Avoid going to areas that face the water logging problems often.
- ❖ Avoid staying in vulnerable structure.

Annexure III

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 15-08-2023 :

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

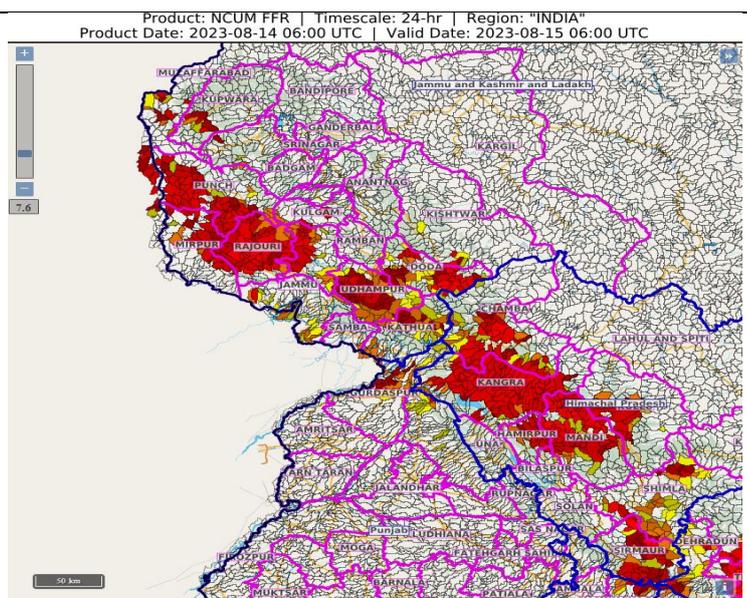
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 15-08-2023 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of **Himachal Pradesh** and **Jammu & Kashmir & Ladakh** 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; **::** 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)