



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

Press Release

Date: 19th August, 2023

Time of Issue: 1315 hours IST

Subject: (i) Heavy rainfall activity likely over Madhya Pradesh and Vidarbha on 19th & 20th August.

(ii) Heavy to very Heavy rainfall likely over Western Himalayan Region during next 3-4 days and adjoining plains during next 24 hours.

(iii) Subdued rainfall activity likely to continue over Southern parts of Peninsular India and Gujarat during next 4-5 days.

(iv) Increase in rainfall activity over east and northeast India from 21st August.

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

Significant Weather features:

- ❖ Monsoon Trough runs along normal position and passes through Ganganagar, Narnaul, Datia, Satna, the centre of Low Pressure Area over north Chhattisgarh & neighbourhood, Keonjhar, Balasore and thence southeastwards to Northeast Bay of Bengal and extends upto 1.5 km above mean sea level. The eastern end is likely to shift northwards to the north of its normal position from 21st August.
- ❖ Yesterday's Low pressure area over Northwest Bay of Bengal & adjoining West Bengal-north Odisha coasts moved west-northwestwards and now lies over North Chhattisgarh & neighbourhood. It is likely to move west-northwestwards across Northeast Madhya Pradesh during next 24 hours.
- ❖ The Western Disturbance as a trough in middle tropospheric westerlies now runs roughly along Long. 72°E to the north of Lat. 32°N.

Weather Forecast and Warnings: (Annexure II)

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

Isolated very heavy rainfall also likely over Sub-Himalaya West Bengal & Sikkim on 22nd & 23rd; over Bihar on 23rd August.

Central India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with **isolated heavy rainfall** activity very likely over Madhya Pradesh during 19th to 22nd; over Vidarbha on 19th & 20th; Chhattisgarh on 19th August, 2023.

Isolated very heavy rainfall also likely over Madhya Pradesh and Vidarbha on 19th August, 2023.

Northeast India: Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with isolated

heavy rainfall activity very likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Arunachal Pradesh during 19th-23rd August, 2023.

Isolated very heavy rainfall also likely over Assam & Meghalaya on 19th, 21st, 22nd & 23rd; over Arunachal Pradesh on 22nd & 23rd August, 2023.

Northwest India: Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** likely over Himachal Pradesh and Uttarakhand during next 5 days; over Punjab and Haryana on 19th; over West Uttar Pradesh on 19th & 22nd and over East Uttar Pradesh on 22nd & 23rd August, 2023. Light to moderate rainfall also very likely over Delhi on 19th August, 2023.

Isolated very heavy rainfall also likely over Uttarakhand during 19th to 23rd; over Himachal Pradesh during 19th to 21st and over Punjab and Haryana-Chandigarh on 19th August, 2023.

South India: Light/moderate scattered to fairly widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** activity very likely over Coastal Andhra Pradesh during 19th to 23rd; over Telangana and Coastal Karnataka on 19th August.

Hot and humid weather is likely to prevail over Tamil Nadu during next 2 days.

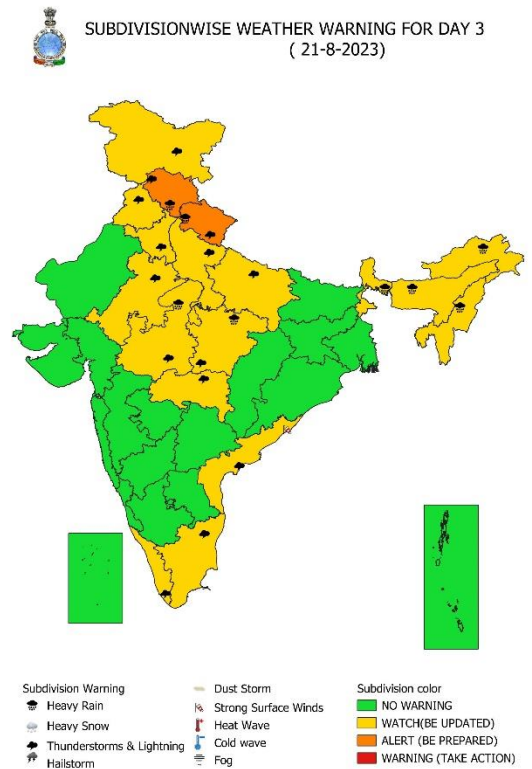
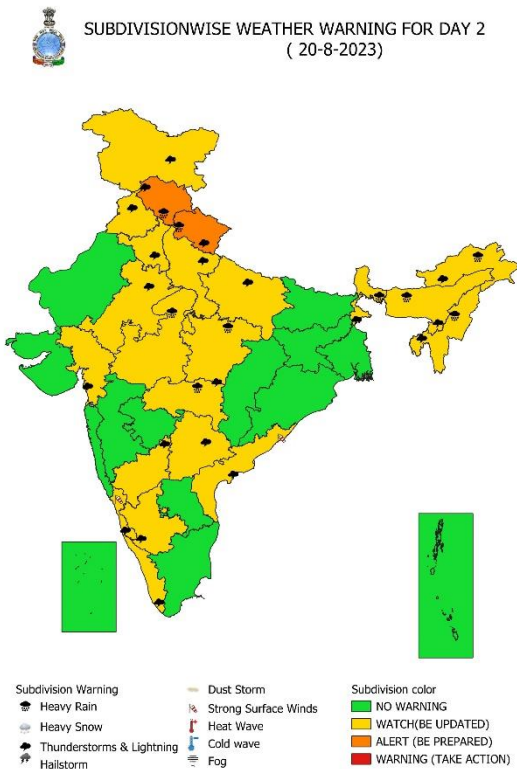
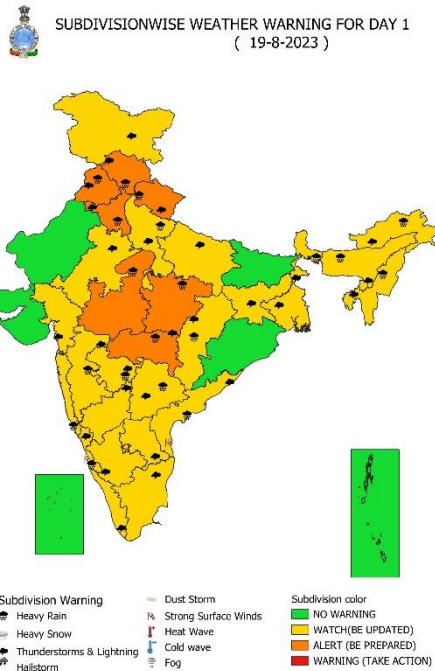
West India: Light/moderate fairly widespread to widespread rainfall/thunderstorm & lightning with isolated **heavy rainfall** activity very likely over Goa, Madhya Maharashtra and Marathwada on 19th August.

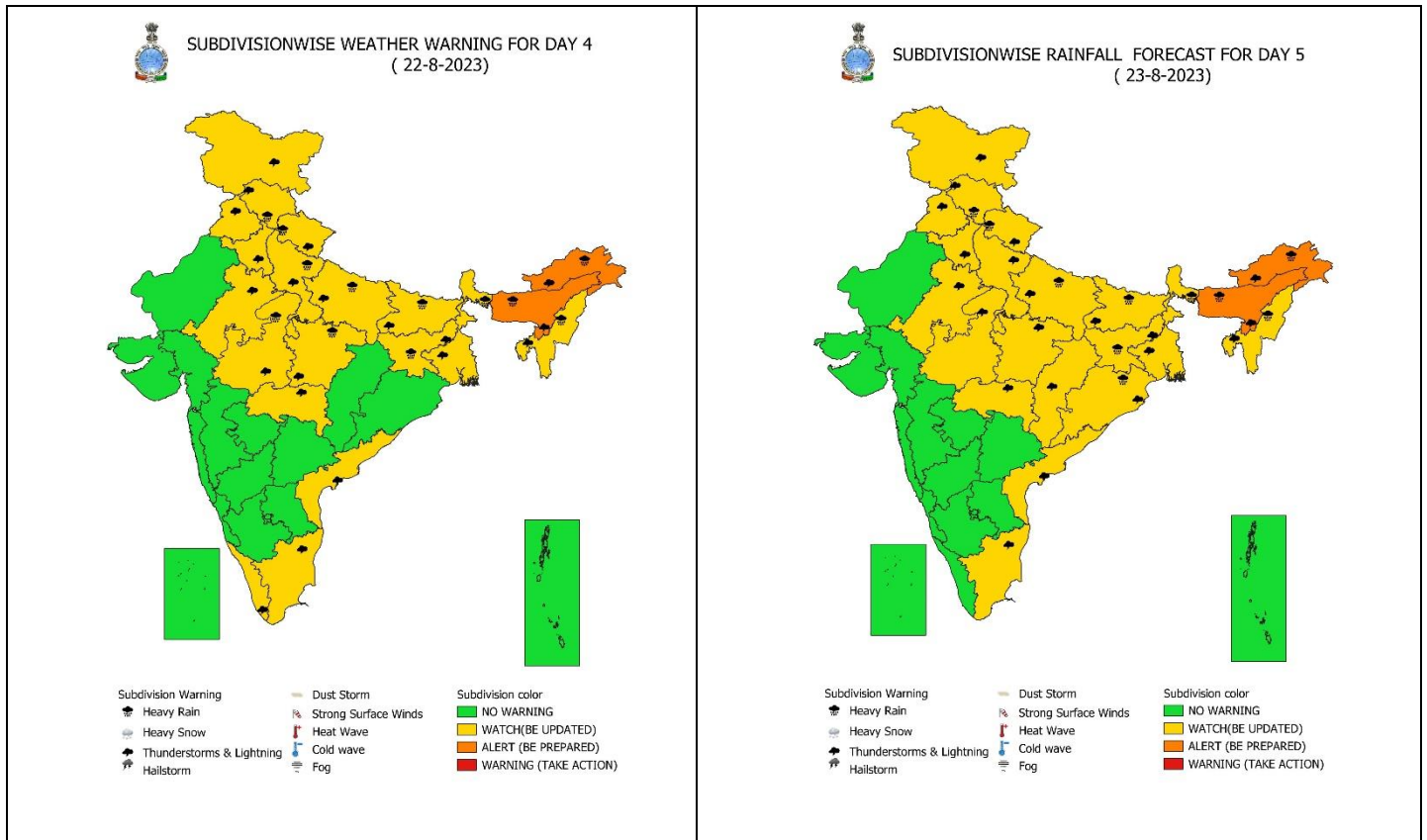
Subdued rainfall activity likely to continue over Southern parts of Peninsular India and Gujarat during next 4-5 days.

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

Rainfall observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 19th August, 2023):

- **Heavy to very heavy rainfall** at isolated places over Sub-Himalaya West Bengal & Sikkim, East Madhya Pradesh, Chhattisgarh and **heavy rainfall** at isolated places over Telangana, Assam & Meghalaya, Delhi, West Madhya Pradesh, Odisha, Vidarbha, Arunachal Pradesh, Coastal Karnataka.
- **Significant rainfall recorded (in cm):**
 - ✓ **Sub-Himalaya West Bengal & Sikkim:** Jhalong 16, Sankalan 7;
 - ✓ **East Madhya Pradesh:** Shahpura (dist Jabalpur) 15, Tamia (dist Chindwara) 15, Keolari (dist Seoni) 12, Gotegaon (dist Narsinghpur) 9, Jabalpur- (dist Jabalpur) 9, Patan (dist Jabalpur) 8, Narayanganj (dist Mandla) 8, Sihora (dist Jabalpur) 7, Narsinghpur- (dist Narsinghpur) 7, Gadarwara (dist Narsinghpur) 7, Khajuraho (dist Chhatarpur) 7, Jaithari (dist Anuppur) 7, Orchha (dist Niwari) 7, Pushprajgarh (dist Anuppur) 7, Bijadandi (dist Mandla) 7, Lavkushnagar (dist Chhatarpur) 7;
 - ✓ **Chhattisgarh:** Takhatpur (dist Bilaspur) 12, Bhopalpatnam (dist Bijapur) 12, Charama (dist Kanker) 11, Dhamtari (dist Dhamtari) 11, Bhairamgarh (dist Bijapur) 11, Kota (dist Bilaspur) 8, Rajnandgaon (dist Rajnandgaon) 8, Champa (dist Janjgir) 7, Gurur (dist Balod) 7, Khadgava (dist Koriya) 7, Pendra Road (dist Bilaspur) 7, Bhanupratappur (dist Kanker) 7, Pusaur (dist Raigarh) 7, Sakti (dist Janjgir) 7, Sarangarh (dist Raigarh) 7, Dharamjaigarh (dist Raigarh) 7, Baramkela (dist Raigarh) 7, Antagarh (dist Kanker) 7, Raigarh (dist Raigarh) 7, Labhandih (dist Raipur) 7;
 - ✓ **Telangana:** Venkatapuram (dist Mulugu) 11, Kataram (dist J. Bhupalpally) 10, Nirmal (dist Nirmal) 10, Mortad (dist Nizamabad) 10, Bheemgal (dist Nizamabad) 10, Metpalle (dist Jagtial) 10, Mutharam Mahadevpur (dist J. Bhupalpally) 9, Kathlapur (dist Jagtial) 9, Kammar Palle (dist Nizamabad) 9, Dilawarpur (dist Nirmal) 9, Sarangapurnrl (dist Nirmal) 9, Velpur (dist Nizamabad) 8, Ghanpurjskb (dist J. Bhupalpally) 8, Govindaraopet (dist Mulugu) 8, Jaipur (dist Mancheria) 8, Ramgundam (dist Peddapalle) 7, Pegadapalle (dist Jagtial) 7, Karimnagar(a) (dist Karimnagar) 7, Chandurthi (dist Rajanna Sircilla) 7, Khanpur (dist Nirmal) 7, Mandhamarri (dist Mancheria) 7, Sultanabad (dist Peddapalle) 7, Balkonda (dist Nizamabad) 7, Ranjal (dist Nizamabad) 7, Navipet (dist Nizamabad) 7, Venkatapur (dist Mulugu) 7, Sarangapur (dist Jagtial) 7, Mallapur (dist Jagtial) 7;
 - ✓ **Assam & Meghalaya:** Lakhipur (Cachar.) 11, Silchar (Dist. Cachar) 08 , Udaipur (Dist. Nagaon) 08 , Jiagoan (Dist. Tinsukia) 08 , Lakhipur (Dist. Cachar.) 09;
 - ✓ **Delhi:** Jafarpur-10, Dhansa -8, Najafgarh -7, Pusa -6, Palam -4;
 - ✓ **West Madhya Pradesh:** Pachmarhi (dist Narmadapuram) 10, Bankhedi (dist Narmadapuram) 10, Amla (dist Betul) 8, Pipariya (dist Narmadapuram) 7;
 - ✓ **Odisha:** Sukinda (dist Jajpur) 10, Kolabira (dist Jharsuguda) 10, Dabugan (dist Nawarangpur) 9, Jajpur (dist Jajpur) 9, Jujumura (dist Sambalpur) 8, Hindol (dist Dhenkanal) 8, Kuchinda (dist Sambalpur) 8, Deogaon (dist Jharsuguda) 8, Hemgiri (dist Sund arh) 8, Jajpur Pto (dist Jajpur) 8, Batli (dist B arh) 7;
 - ✓ **Vidarbha:** Dhanora (dist Gadchiroli) 9, Mulchera (dist Gadchiroli) 8, Gadchiroli (dist Gadchiroli) 8, Mul (dist Chandrapur) 8, Sindewahi (dist Chandrapur) 7;
 - ✓ **Arunachal Pradesh:** Namsai (Dist. Namsai) 08 , Roing (Dist. Lower Dibang Valley) 08
 - ✓ **Coastal Karnataka:** Kota (dist Udupi) 7;





Impact & Action Suggested due to very heavy rainfall over:

1. Uttarakhand, Himachal Pradesh during 19th-21st August
2. Punjab, Haryana, Madhya Pradesh, Vidarbha on 19th August
3. Arunachal Pradesh, Assam & Meghalaya on 22nd & 23rd 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).

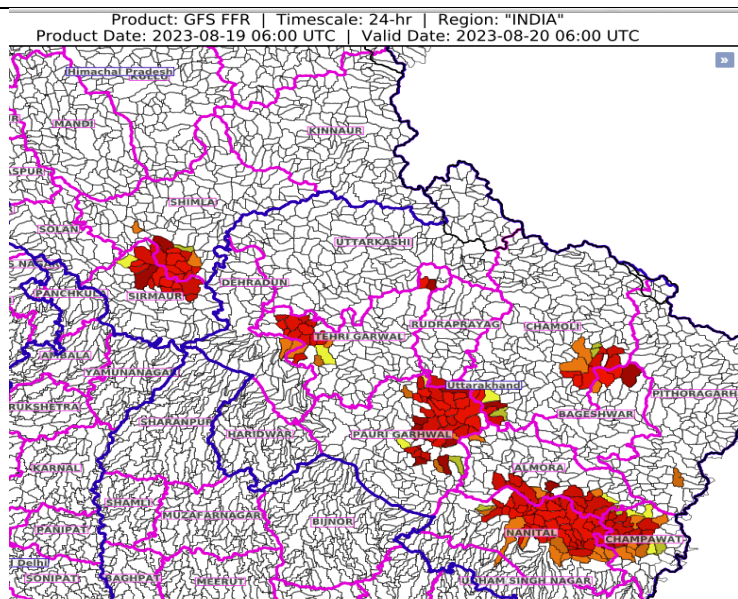
B. Action Suggested

- ❖ 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.

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 20-08-2023 :

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

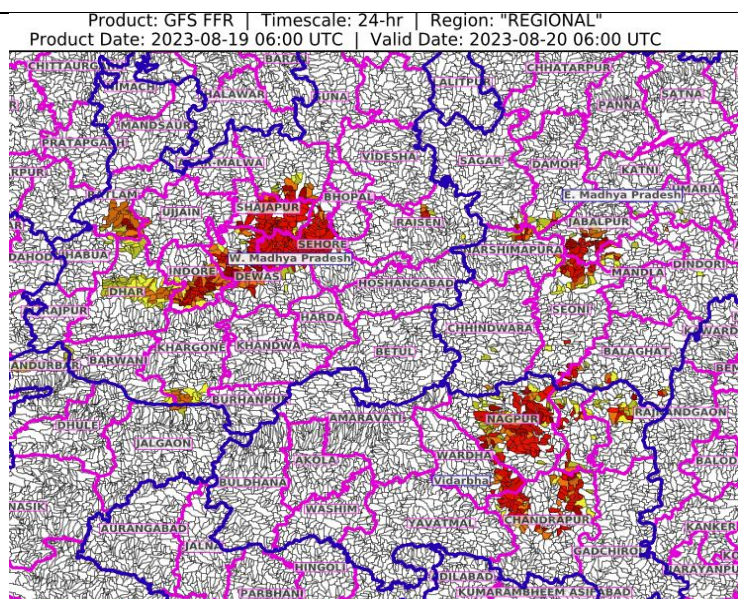
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 20-08-2023 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Vidarbha and West Madhya Pradesh adjoining East Madhya Pradesh 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.
- ❖ **y:** ervatory; **..:** 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)