



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

**Press Release**

**Date: 02<sup>nd</sup> August, 2023**

**Time of Issue: 1400 hours IST**

**Subject: i) Deep Depression over Gangetic West Bengal and it is likely to move west-northwestwards across Jharkhand**  
**ii) Exceptionally heavy rainfall recorded over Odisha (Boudhgarh 39 cm) during past 24 hours.**  
**(iii) Isolated heavy to very heavy rainfall with extremely heavy falls likely over Odisha, Chhattisgarh today and over Madhya Pradesh on 02<sup>nd</sup> & 03<sup>rd</sup> August.**  
**iv) Isolated heavy to very heavy rainfall likely over Northwest India during 03<sup>rd</sup>-06<sup>th</sup> August.**  
**v) Subdued rainfall activity would continue over Peninsular India during next 5 days.**

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

**Significant Weather features:**

- ❖ **Deep Depression over Northeast Bay of Bengal off Bangladesh coast:** Yesterday's Deep Depression over northeast Bay of Bengal off Bangladesh coast now lies over Gangetic West Bengal at 0830 hours IST of 02<sup>nd</sup> August, 2023 near latitude 23.2°N and longitude 87.1°E, close to Bankura (West Bengal), about 70 km east-southeast of Purulia (West Bengal) and 180 km east of Ranchi. It is likely to move west-northwestwards across Jharkhand and weaken gradually into a Depression during next 12 hours and into a Well Marked Low Pressure Area during subsequent 24 hours.
- ❖ The Western end of the Monsoon Trough at mean sea level runs close to foothills of Himalayas and Eastern end lies to the south of its normal position. Western end of the Monsoon trough likely to shift southwards from 3<sup>rd</sup> August.

**Weather Forecast and Warning associated with Deep Depression (Annexure II):**

**(i) Rainfall warning**

**Odisha:** Light to moderate rainfall at most places with isolated heavy to very heavy rainfall over Odisha and isolated extremely heavy rainfall also likely over north Odisha on 2<sup>nd</sup> August. Heavy rainfall at isolated places is likely on 3<sup>rd</sup> August.

**Gangetic West Bengal:** Light to moderate rainfall at most places with isolated heavy rainfall over Gangetic West Bengal on 2<sup>nd</sup> August.

**Jharkhand:** Light to moderate rainfall at most places with isolated heavy to very heavy rainfall on 2<sup>nd</sup> August.

**Bihar:** Light to moderate rainfall at most places with isolated heavy rainfall on 2<sup>nd</sup> August.

**Chhattisgarh:** Light to moderate rainfall at most places with isolated heavy to very heavy rainfall over Chhattisgarh on 2<sup>nd</sup> & 3<sup>rd</sup> August and extremely heavy rainfall over north Chhattisgarh on 2<sup>nd</sup> August. Heavy rainfall at isolated places is likely on 4<sup>th</sup> August.

**East Madhya Pradesh:** Light to moderate rainfall at most places with isolated heavy to very heavy rainfall during 2<sup>nd</sup> to 4<sup>th</sup> and extremely heavy rainfall on 2<sup>nd</sup> & 3<sup>rd</sup> August. Heavy rainfall at isolated places is likely on 5<sup>th</sup> August.

**West Madhya Pradesh:** Light to moderate rainfall at most places with isolated heavy to very heavy rainfall on 2<sup>nd</sup> & 3<sup>rd</sup> and extremely heavy rainfall on 3<sup>rd</sup> August. Heavy rainfall at isolated places is likely on 4<sup>th</sup> August.

**East Uttar Pradesh:** Light to moderate rainfall at most places with isolated heavy to very heavy rainfall on 2<sup>nd</sup> & 3<sup>rd</sup> August and heavy rainfall during 4<sup>th</sup> to 6<sup>th</sup> August.

### **(ii) Wind warning**

Squally wind speed reaching 45-55 kmph gusting to 65 kmph is prevailing over North Bay of Bengal and adjoining Bangladesh-West Bengal coasts and it is likely to become 35-45 kmph gusting to 55 kmph from afternoon to night of today, the 2<sup>nd</sup> August. It is likely to decrease gradually thereafter.

Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail along & off North Odisha coast till today afternoon and it is likely to become 35-45 kmph gusting to 55 kmph from afternoon of today, the 2<sup>nd</sup> August. It is likely to decrease gradually thereafter.

**(iii) Sea Condition:** Rough to very rough sea condition very is prevailing over North Bay of Bengal and adjoining Bangladesh-West Bengal-North Odisha coasts and it is likely to become rough to moderate sea conditions from afternoon of today, the 2<sup>nd</sup> August. It is likely to improve gradually thereafter.

### **(iv) Fishermen Warning**

Fishermen are advised not to venture into North Bay of Bengal and adjoining Bangladesh-West Bengal-North Odisha coasts till afternoon of today, the 2<sup>nd</sup> August.

### **Weather Forecast and Warning for remaining parts of the country:**

**Northwest India:** Light/moderate scattered to fairly widespread rainfall with isolated **heavy rainfall** is very likely over Uttarakhand, Uttar Pradesh during 02<sup>nd</sup>-06<sup>th</sup> August; Himachal Pradesh 03<sup>rd</sup>-06<sup>th</sup>; Punjab, Haryana and East Rajasthan during 03<sup>rd</sup>-05<sup>th</sup> August, 2023.

**Isolated very heavy rainfall also likely over Uttarakhand during 02<sup>nd</sup>-05<sup>th</sup>; East Uttar Pradesh on 02<sup>nd</sup>; West Uttar Pradesh on 02<sup>nd</sup> & 03<sup>rd</sup> and over Himachal Pradesh on 04<sup>th</sup> & 05<sup>th</sup> August.**

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

**West India:** Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely to continue over Konkan & Goa and ghat areas of Madhya Maharashtra during next 4 days with possibility of **very heavy rainfall** over Konkan & Goa on 03<sup>rd</sup> and Madhya Maharashtra on 02<sup>nd</sup> & 03<sup>rd</sup> August.

**South India:** Light/moderate widespread rainfall with **isolated heavy rainfall** very likely over Coastal Karnataka during 02<sup>nd</sup>-04<sup>th</sup> August and subdued rainfall activity over the remaining region.

[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)

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

**Odisha, Jharkhand, Gangetic West Bengal on 02<sup>nd</sup> August**

**Madhya Pradesh, Chhattisgarh on 02<sup>nd</sup> & 03<sup>rd</sup> August**

**Uttarakhand during 02<sup>nd</sup>-05<sup>th</sup>, Himachal Pradesh on 04<sup>th</sup> & 05<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 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.

### Rainfall Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 02<sup>nd</sup> August, 2023):

➤ **Exceptionally heavy rainfall** over Boudhgarh (dist Boudhgarh) 39 cm in Odisha; **Heavy to very heavy rainfall** at isolated places over Chhattisgarh, Uttarakhand, Madhya Pradesh, Jharkhand, West Bengal & Sikkim and **heavy rainfall** at isolated places over Konkan, Madhya Maharashtra, East Uttar Pradesh, Assam & Meghalaya and Bihar .

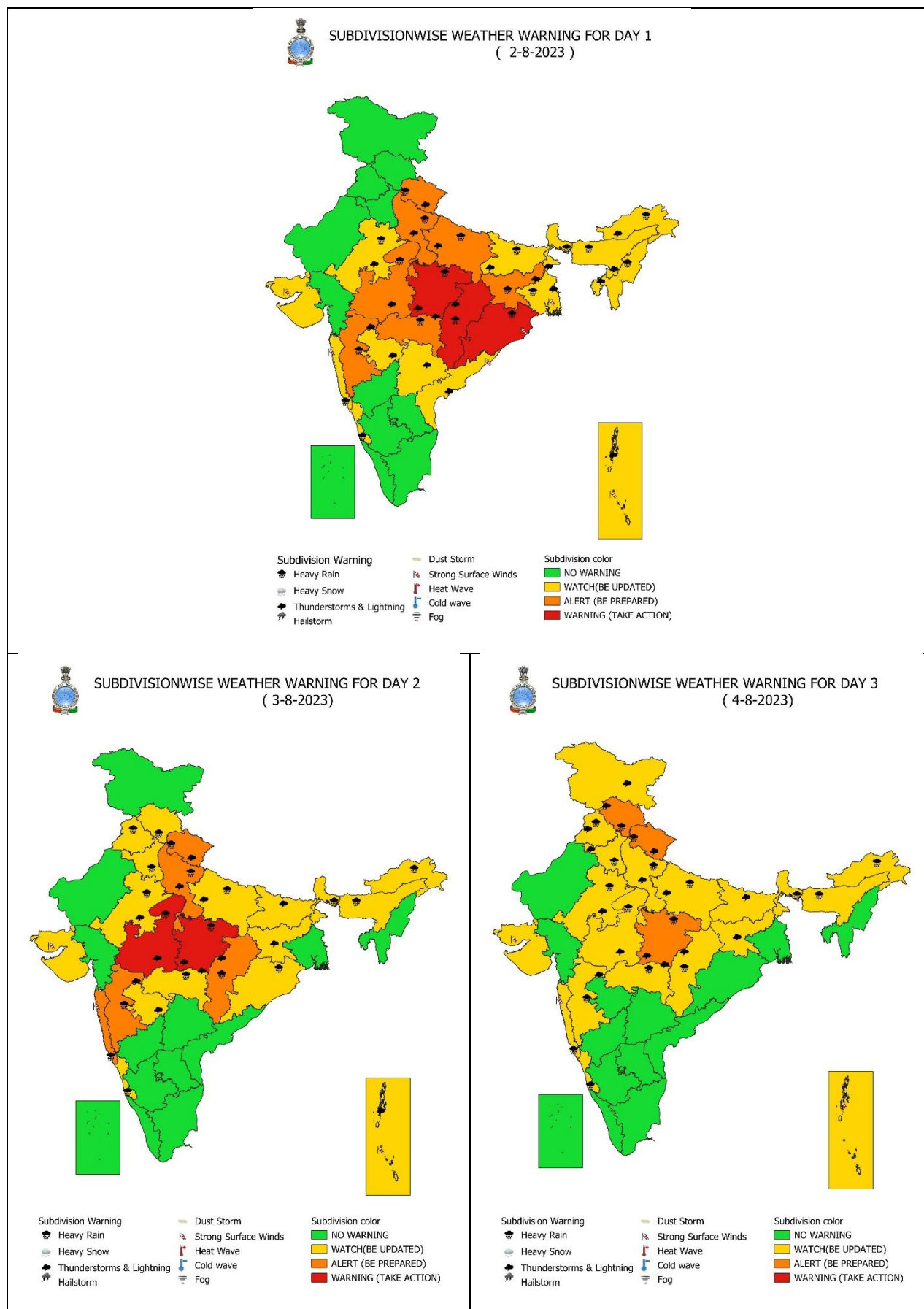
#### ➤ **Significant rainfall recorded (in cm):**

- ✓ **Odisha:** Boudhgarh (dist Boudhgarh) 39, Jujumura (dist Sambalpur) 36, Rairakhola (dist Sambalpur) 35, Karanjia (dist Mayurbhanj) 30, Sharpada (dist Keonjhar) 28, Birmaharajpur (dist Sonapur) 27, Thakurmunda (dist Mayurbhanj) 26, Ullunda (dist Sonapur) 26, Athmalik (dist Angul) 23, Rajkishorenagar (dist Angul) 23, Binika (dist Sonapur) 23, Agalpur (dist Bolangir) 22, Phiringia (dist Kandhamal) 22, Khairamal (dist Boudhgarh) 22, Joshipur (dist Mayurbhanj) 22, Sonapur (dist Sonapur) 21, Dunguripalli (dist Sonapur) 21, Raruana (dist Mayurbhanj) 21, Baliguda (dist Kandhamal) 21, Sukruli (dist Mayurbhanj) 21, K Nuagaon (dist Kandhamal) 21, Phulbani (dist Kandhamal) 21, Salebhatta (dist Bolangir) 20, Madanpur Rampur (dist Kalahandi) 19, Kirmira (dist Jharsuguda) 19, Kolabira (dist Jharsuguda) 19, Kusumi (dist Mayurbhanj) 19, Telkoi (dist Keonjhar) 19, Khaira (dist Balasore) 19, Bijepur (dist Bargarh) 19, Jamda (dist Mayurbhanj) 19, Tensa (dist Sundargarh) 17, Bolangir (dist Bolangir) 17, Swam-patna (dist Keonjhar) 17, Gaisilet (dist Bargarh) 17, Ambadola (dist Rayagada) 17, Kantamal (dist Boudhgarh) 16, Pallahara (dist Angul) 16, Oupada (dist Balasore) 16, Bangamunda (dist Bolangir) 16, Laikera (dist Jharsuguda) 16, Tarva (dist Sonapur) 16, Belgaon (dist Bolangir) 15, Keonjhar (dist Keonjhar) 15, Angul (dist Angul) 15, Kaptipada (dist Mayurbhanj) 15, Barpalli (dist Bargarh) 15, Daitari (dist Keonjhar) 15, Talcher (dist Angul) 15, Chakapad (dist Kandhamal) 15, Banspal (dist Keonjhar) 15, Bhuban (dist Dhenkanal) 15, Bhawanipatna (dist Kalahandi) 15, Bahalda (dist Mayurbhanj) 15, Soro (dist Balasore) 14, Harabhanga (dist Boudhgarh) 14, Naktideul (dist Sambalpur) 14, Komna (dist Nawapara) 14, Balasore (dist Balasore) 14, Kotagarh (dist Kandhamal) 14, Bhograi (dist Balasore) 13, Khajuripada (dist Kandhamal) 13, Chendipada (dist Angul) 13, Nh5 Gobindpur (dist Balasore) 13, Sohela (dist Bargarh) 13, Tikabali (dist Kandhamal) 13, Hindol (dist Dhenkanal) 13, Rajghat (dist Balasore) 13, Gudvela (dist Bolangir) 13, Kantapada (dist Cuttack) 12, Loisingha (dist Bolangir) 12, Narla (dist Kalahandi) 12, Ghatagaon (dist Keonjhar) 12, Basudevapur (dist Bhadrak) 12, Padampur (dist Bargarh) 12, Padmapur (dist Rayagada) 12, Raikia (dist Kandhamal) 12, Danagadi (dist Jajpur) 12, Joda (dist Keonjhar) 12, Lanjigarh (dist Kalahandi) 12,
- ✓ **Chhattisgarh:** Kusmi (dist Balrampur) 18, Rajpur (dist Balrampur) 9, Ambikapur (dist Surguja) 9, Pratappur (dist Surajpur) 9, Saraipali (dist Mahasamund) 9, Shankargarh (dist Balrampur) 9, Basana (dist Mahasamund) 9, Pithora (dist Mahasamund) 8, Premnagar (dist Surajpur) 8, Janakpur (dist Koriya) 7, Arang (dist Raipur) 7,
- ✓ **East Madhya Pradesh:** Jabalpur-aws (dist Jabalpur) 17, Chandia (dist Umaria) 15, Umaria-aws (dist Umaria) 15, Kumdam (dist Jabalpur) 14, Sihora (dist Jabalpur) 14, Bijadandi (dist Mandla) 13, Majholi (dist Jabalpur) 13, Badwara (dist Katni) 11, Gohparu (dist Shahdol) 10, Karkeli (dist Umaria) 10, Mehadwani (dist Dindori) 10, Mohgaon (dist Mandla) 10, Mauganj

(dist Rewa) 8, Patan (dist Jabalpur) 8, Semariya (dist Rewa) 8, Beohari (dist Shahdol) 7, Mawai (dist Mandla) 7, Panagar (dist Jabalpur) 7, Mandla (dist Mandla) 7,

- ✓ **Sub-Himalaya West Bengal & Sikkim:** Rongo-17, Kalingpong-14, Kumargram-9, Alipurduar-8, Falakata, Pedong-7 each
- ✓ **Jharkhand:** Majhgaon-15; Palganj-14; Manjhari-12; Chakulia-11; Noamundi-9; Atgamharia, Nala-8 each; Bargar, Ghatsila, Tonto Sadar, Chaibasa, Jaganathpur bau kvk aws, Bhandaria, Deoghar, Dhalbhumgarh-7 each
- ✓ **Gangetic West Bengal:** Durgachack-16, Euluberia-11, Diamond Harbour-10, Canning, Bankura-9 each, Alipore, Digha-8 each, Durgapur-7
- ✓ **Uttarakhand:** Champawat-16, Tanakpur-9, Bastia-8, Bageshwar: Kapkot-10, Loharkhet, Sama-8 each, Nainital: Ramnagar-9, U S Nagar: Khatima-8
- ✓ **West Madhya Pradesh:** Satwas (dist Dewas) 12,
- ✓ **Madhya Maharashtra:** Mahabaleshwar- Imd Obsy (dist Satara) 11, Gaganbawada (dist Kolhapur) 9,
- ✓ **Assam & Meghalaya:** Panbari (dist Chirang) 8, Bilasipara Arg (dist Dhubri) 7,
- ✓ **East Uttar Pradesh:** Banda-8
- ✓ **Bihar:** Bhabua, Madhepura, Jamui-8 each, Gaya, Rohtash-7 each
- ✓ **Konkan & Goa:** Rajapur (dist Ratnagiri) 7,

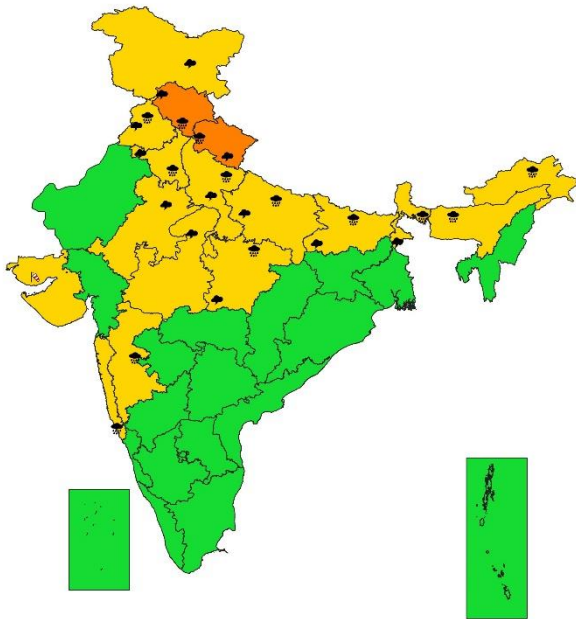
❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation







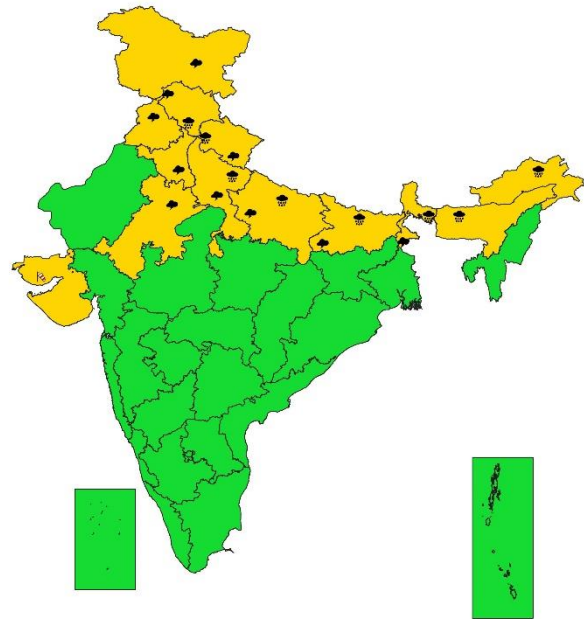
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 4 ( 5-8-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| 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)    |



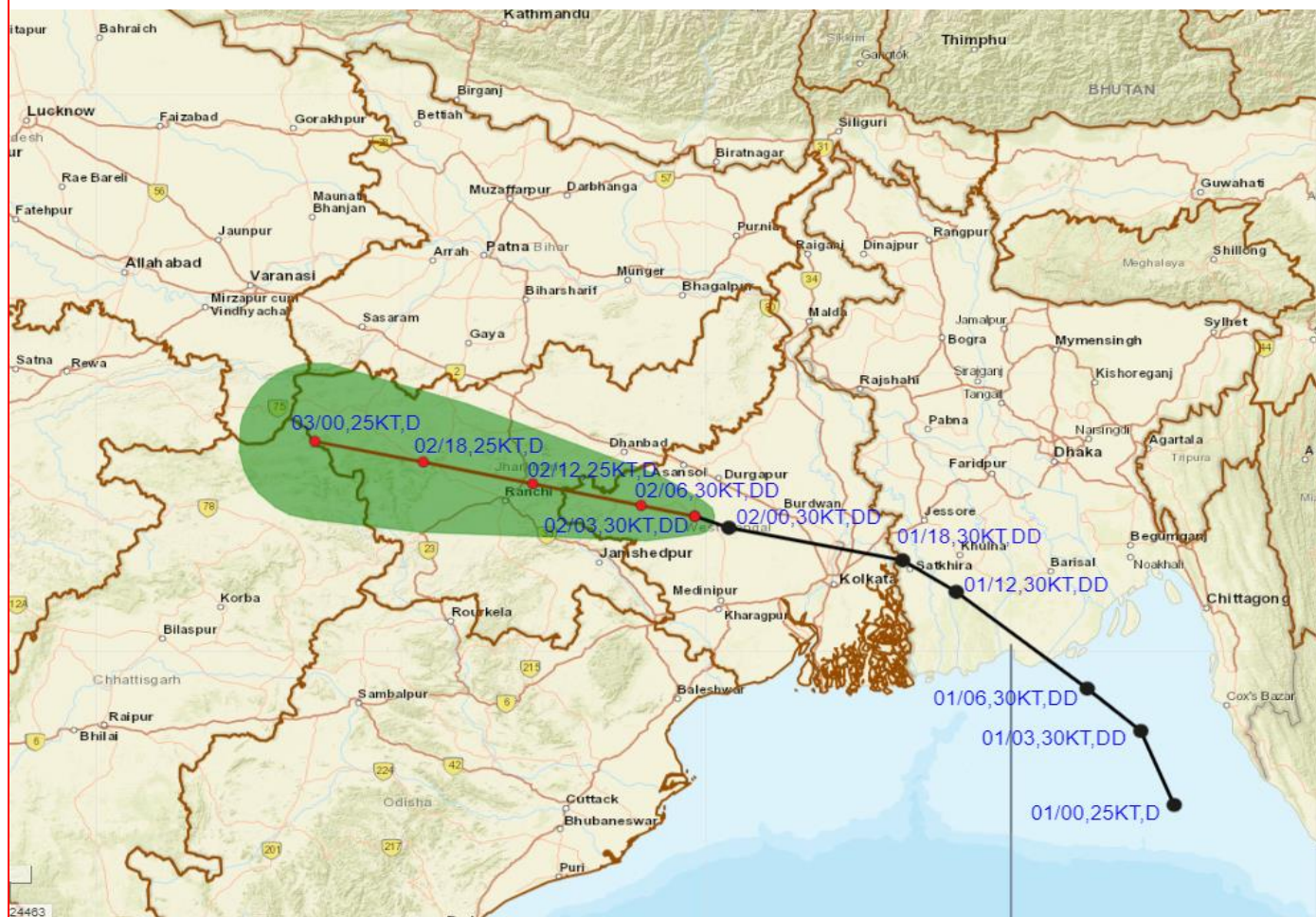
### SUBDIVISIONWISE RAINFALL FORECAST FOR DAY 5 ( 6-8-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| 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)    |



## OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER GANGETIC WEST BENGAL BASED ON 0300 UTC (0830 IST) OF 02<sup>ND</sup> AUGUST 2023.



DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS: SUPER CYCLONIC STORM ( $\geq 120$  KT)

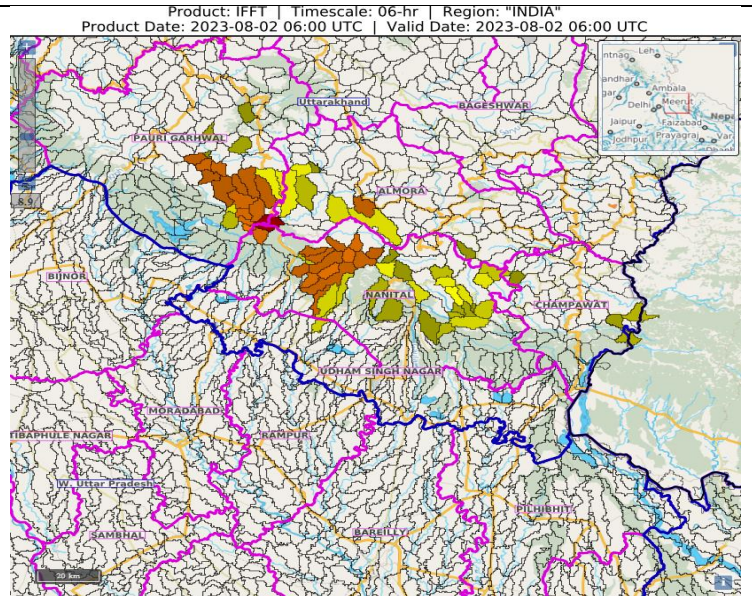
- LESS THAN 34 KT
- 34-47 KT
- $\geq 48$  KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY



Observed Flash Flood Threat (IFFT) till 1130 IST of 02-08-2023 :

Moderate flash flood threat observed over few watersheds & neighbourhoods of following Met Sub-divisions during last 6 hours.

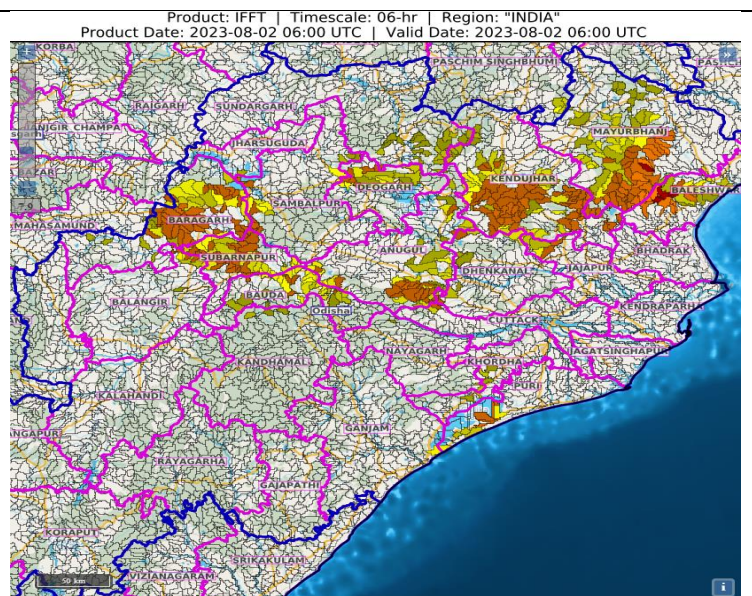
Uttarakhand - Almora, Champawat, Nanital and Pauri Garhwal districts.



Observed Flash Flood Threat (IFFT) till 1130 IST of 02-08-2023 :

Moderate flash flood threat observed over few watersheds & neighbourhoods of following Met Sub-divisions during last 6 hours.

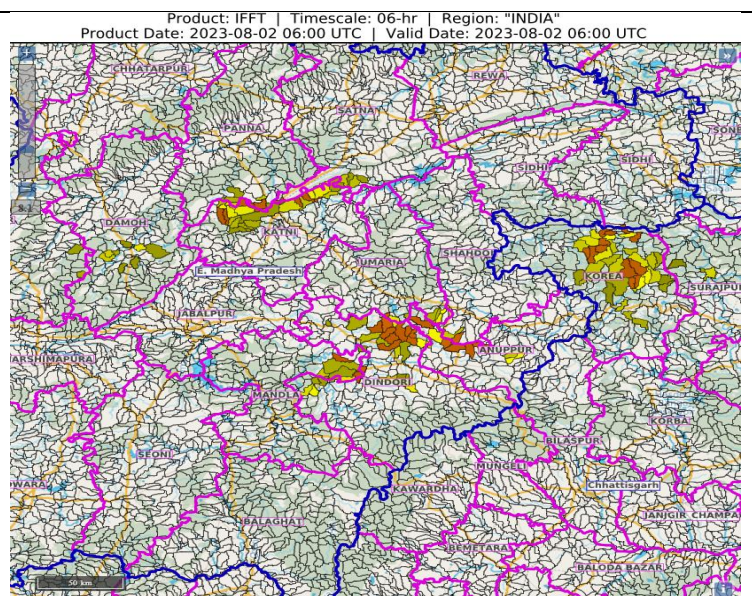
Odisha - Anugul, Baleshwar, Baragarh, Bauda, Deogarh, Jajapur, Kendujhar, Mayurbhanj and Subarnapur districts.



Observed Flash Flood Threat (IFFT) till 1130 IST of 02-08-2023 :

Moderate flash flood threat observed over few watersheds & neighbourhoods of following Met Sub-divisions during last 6 hours.

Chhattisgarh - Korea and Surajpur districts.



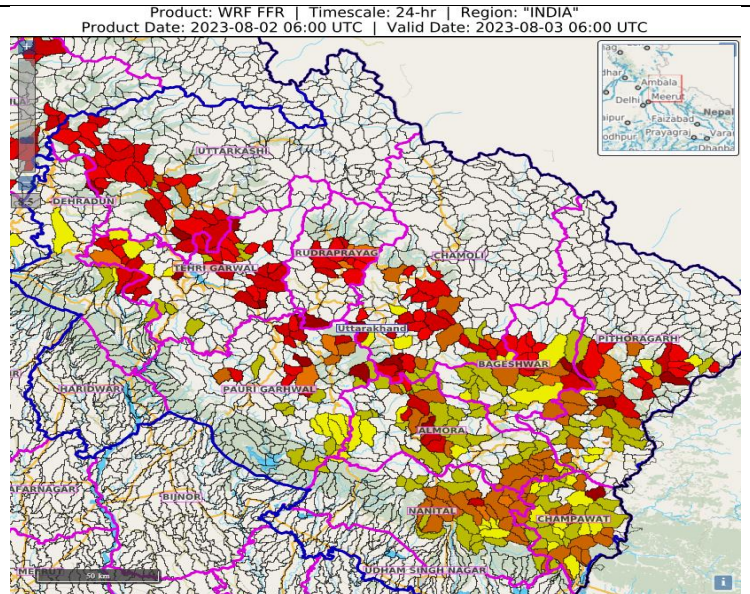


East Madhya Pradesh - Anuppur, Damoh, Dindori and Katni districts.

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 03-08-2023 :

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

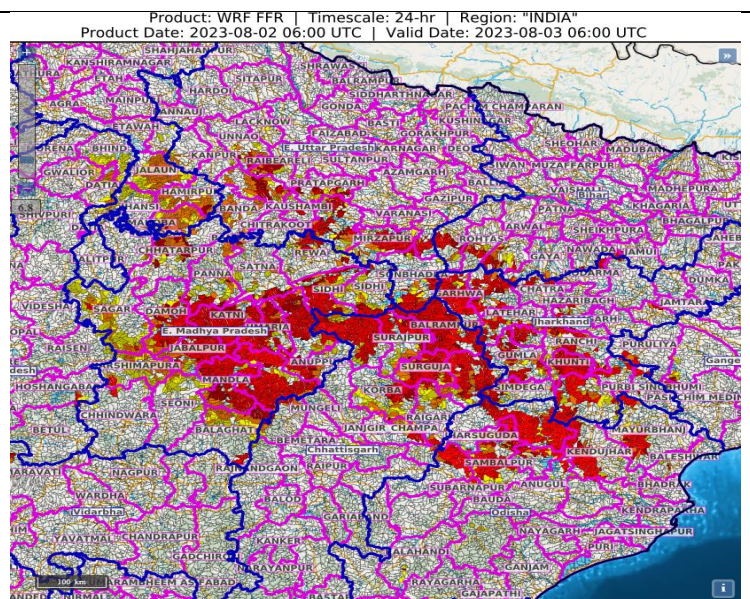
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 03-08-2023 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of East Uttar Pradesh, South-Eastern part of West Uttar Pradesh, North Chhattisgarh, East Madhya Pradesh, North-West Odisha and adjoining Jharkhand 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		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		

Probabilistic Forecast	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75