



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 02<sup>nd</sup> August, 2024

Time of Issue: 1330 hours IST

**Subject:** 1) Under the influence of Low Pressure area, isolated extremely heavy rainfall likely over Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Chhattisgarh on 02<sup>nd</sup>; Madhya Maharashtra, East Madhya Pradesh on 02<sup>nd</sup> & 03<sup>rd</sup>; West Madhya Pradesh on 03<sup>rd</sup> & 04<sup>th</sup>; Gujarat Region, Konkan & Goa on 03<sup>rd</sup>; East Rajasthan on 04<sup>th</sup> August.  
2) Monsoon is likely to be active over Northwest, Central & East India during next 3-4 days.

**Realised weather during past 24 hours till 0830 hours IST of today (Annexure I)**

Heavy to very heavy rainfall with extremely heavy rainfall occurred at isolated places over East Madhya Pradesh, Tripura; Heavy to very heavy rainfall at isolated places over Coastal Karnataka, West Rajasthan, West Madhya Pradesh, Chhattisgarh, Meghalaya, South Interior Karnataka, East Rajasthan, Madhya Maharashtra, Konkan & Goa, Heavy rainfall at isolated places over East Uttar Pradesh, Kerala & Mahe, Haryana, Punjab, Kerala, Coastal Andhra Pradesh, Odisha, Nagaland, Manipur.

**Weather Systems**

- ✓ The Low Pressure Area over Gangetic West Bengal and adjoining Jharkhand persists and associated cyclonic circulation in middle & upper tropospheric levels. It is likely to move west-northwestwards and intensify into a Depression over Jharkhand and neighbourhood during next 24 hours.
- ✓ The Monsoon trough is active and near of its normal position at mean sea level. It is likely to persist near its normal position during next 4-5 days.
- ✓ An east-west trough runs from northeast Rajasthan to south Assam in lower & middle tropospheric levels.
- ✓ The off-shore trough at mean sea level runs along South Gujarat to Kerala coast.

**Forecast & Warnings: (Annexure II)**

❖ **West & Central India**

- ✓ Fairly widespread to widespread light to moderate rainfall accompanied with thunderstorm & lightning very likely over the region during next 5 days.
- ✓ Isolated extremely heavy rainfall very likely over Chhattisgarh on 02<sup>nd</sup>; East Madhya Pradesh, Madhya Maharashtra on 02<sup>nd</sup> & 03<sup>rd</sup>; West Madhya Pradesh on 03<sup>rd</sup> & 04<sup>th</sup>; Gujarat Region, Konkan & Goa on 03<sup>rd</sup> August.
- ✓ Heavy to very heavy rainfall very likely at isolated places over West Madhya Pradesh during 02<sup>nd</sup> – 05<sup>th</sup>; Chhattisgarh on 03<sup>rd</sup>; Konkan & Goa during 02<sup>nd</sup>- 04<sup>th</sup>; Madhya Maharashtra during 02<sup>nd</sup> – 06<sup>th</sup>; Gujarat State, East Madhya Pradesh during 02<sup>nd</sup> – 04<sup>th</sup> August.
- ✓ Heavy rainfall very likely at isolated places over Vidarbha on 02<sup>nd</sup> & 03<sup>rd</sup>; East Madhya Pradesh, Chhattisgarh on 07<sup>th</sup> & 08<sup>th</sup>; Marathwada on 03<sup>rd</sup> & 04<sup>th</sup>; Konkan & Goa during 05<sup>th</sup> – 07<sup>th</sup> August.

#### ❖ Northwest India

- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm & lightning** very likely over Jammu-Kashmir, Himachal Pradesh, Uttarakhand; scattered to fairly widespread rainfall over Uttar Pradesh and Rajasthan; isolated to scattered rainfall over Punjab, Haryana-Chandigarh-Delhi during the week.
- ✓ **Isolated extremely heavy rainfall very likely over East Rajasthan on 04<sup>th</sup> August.**
- ✓ **Isolated very heavy rainfall also likely over East Rajasthan on 02<sup>nd</sup> & 03<sup>rd</sup> Uttarakhand on 03<sup>rd</sup> & 08<sup>th</sup>; East Uttar Pradesh on 02<sup>nd</sup>; West Rajasthan on 02<sup>nd</sup> & 05<sup>th</sup> August.**
- ✓ Isolated **heavy rainfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh during 02<sup>nd</sup> – 08<sup>th</sup>; Punjab during 04<sup>th</sup> – 08<sup>th</sup>; Haryana-Chandigarh during 06<sup>th</sup> – 08<sup>th</sup>; Rajasthan during 02<sup>nd</sup> – 06<sup>th</sup> August.

#### ❖ South Peninsular India:

- ✓ Fairly widespread to widespread light to moderate rainfall over Coastal Karnataka, Lakshadweep and Kerala & Mahe, Karnataka and isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema during next 5 days.
- ✓ **Very heavy rainfall very likely at isolated places over South Interior Karnataka on 02<sup>nd</sup>; Coastal Karnataka during 02<sup>nd</sup> – 04<sup>th</sup> August.**
- ✓ **Heavy rainfall** very likely at isolated places over Kerala & Mahe during 02<sup>nd</sup> – 04<sup>th</sup>; Coastal Karnataka during 05<sup>th</sup> -07<sup>th</sup>; North Interior Karnataka on 2<sup>nd</sup> & 03<sup>rd</sup>; South Interior Karnataka on 03<sup>rd</sup> & 04<sup>th</sup> August.

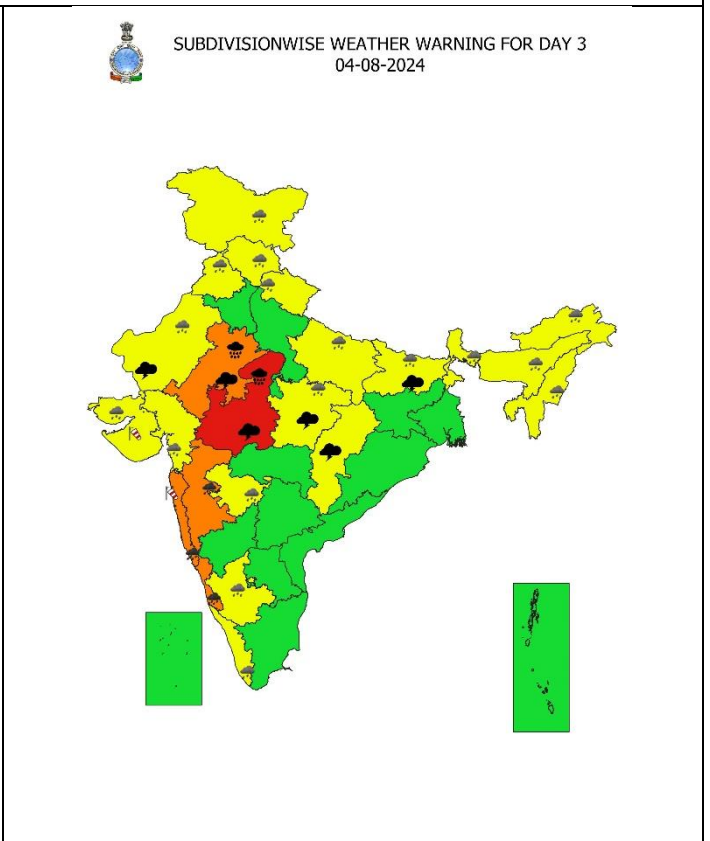
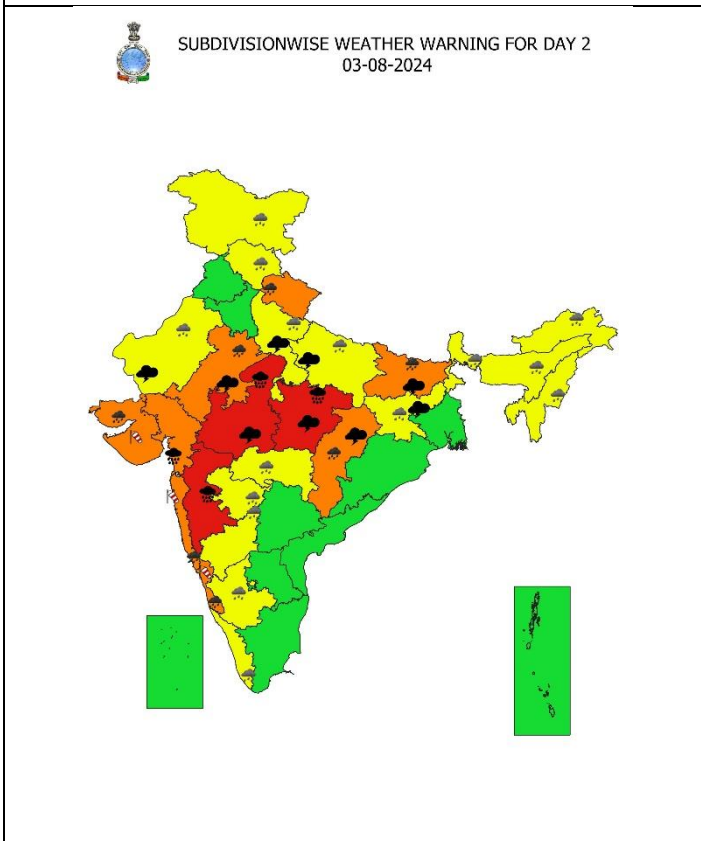
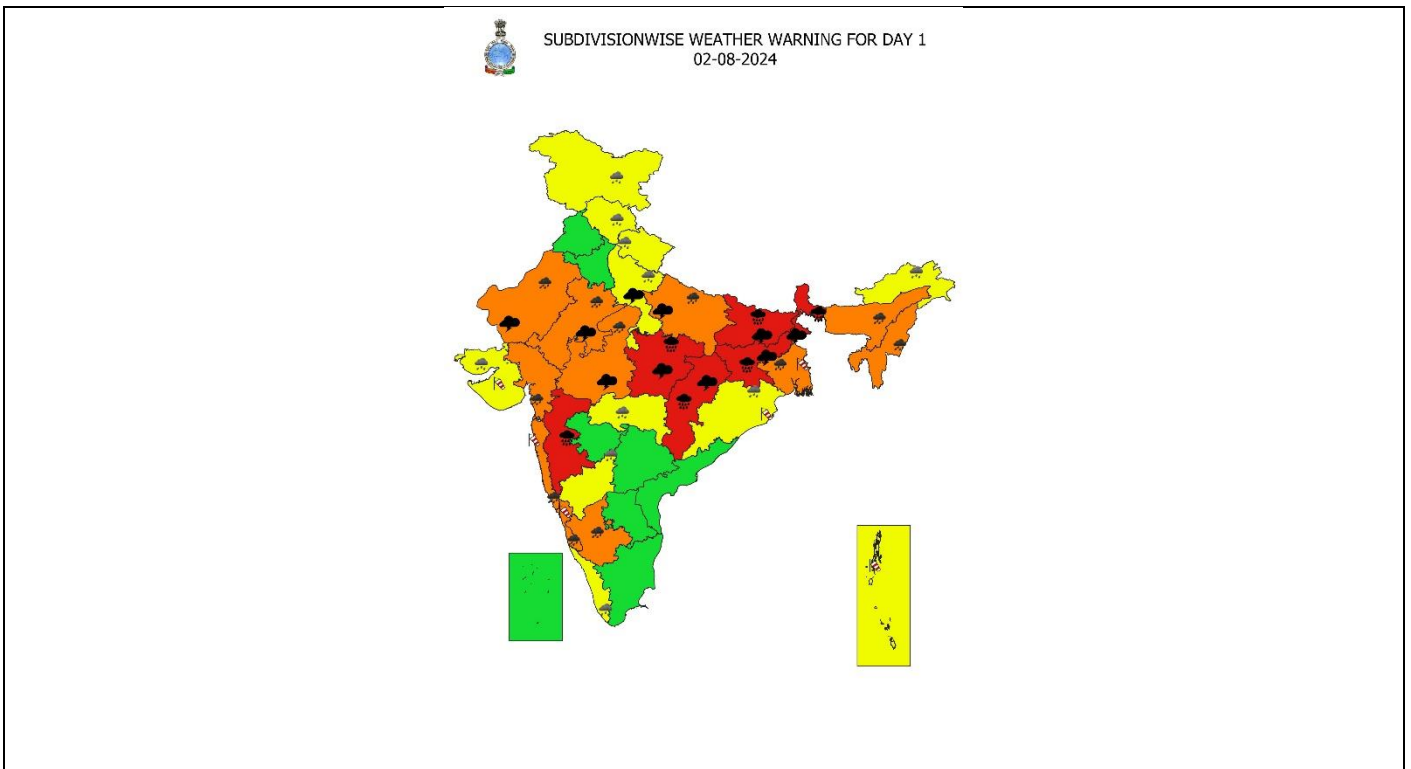
#### ❖ East & Northeast India

- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm, lightning** very likely over East & Northeast India during next 5 days.
- ✓ **Isolated extremely heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand on 02<sup>nd</sup> August.**
- ✓ **Heavy to very heavy rainfall very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Bihar during 03<sup>rd</sup> – 06<sup>th</sup>; Gangetic West Bengal on 02<sup>nd</sup> August; Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 02<sup>nd</sup>-06<sup>th</sup> August.**
- ✓ **Very heavy rainfall** very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya on 07<sup>th</sup> & 08<sup>th</sup>;
- ✓ Isolated **heavy rainfall** very likely over Odisha on 02<sup>nd</sup>; Gangetic West Bengal on 07<sup>th</sup> & 08<sup>th</sup>; Jharkhand on 03<sup>rd</sup>, 07<sup>th</sup> & 08<sup>th</sup>; Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Bihar on 07<sup>th</sup> & 08<sup>th</sup> August.

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)

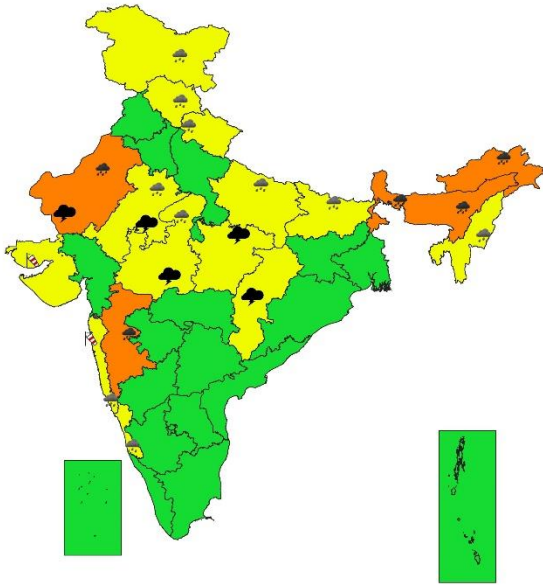
**Significant Rainfall recorded during past 24 hours till 0830 hours IST of today (in cm):**

- ❖ **East Madhya Pradesh:** Devser (dist Singrauli) 21, Singrauli-aws (dist Singrauli) 16, Benibari (dist Anuppur) 11, Mangawan (dist Rewa) 11, Tamia (dist Chindwara) 9, Sidhi (gopadbanas) (dist Sidhi) 9, Gadarwara (dist Narsinghpur) 9, Bahri (dist Sidhi) 9, Junnardeo (dist Chindwara) 8, Parasia (dist Chindwara) 8, Sarai (dist Singrauli) 8, Satna (raghurajnar) (dist Satna) 7, Jaisingh Nagar (dist Shahdol) 7, Niwas (dist Mandla) 7,
- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Belonia (dist South Tripura) 21, Kvk South (dist South Tripura) 16, Sabroom (dist South Tripura) 15, Amarpur (dist Gomati) 14, Amarpur Arg (dist Gomati) 13, Sonamura (dist Sipahijala) 10, Teliamura\_arg (dist Khowai) 9, Arundhutinagar (dist West Tripura) 9, Dm Office Arg (dist West Tripura) 9, Gandachara Aws (dist Dhalai) 7, Bishnupur (dist Bishnupur) 7, Agartala Aero (dist West Tripura) 7,
- ❖ **Coastal Karnataka:** Mani (dist Dakshina Kannada) 19, Puttur Hms (dist Dakshina Kannada) 16, Mangaluru(dist Dakshina Kannada) 15, Panambur Obsy (dist Dakshina Kannada) 15, Karkala (dist Udupi) 14, Manki (dist Uttara Kannada) 14, Ankola (dist Uttara Kannada) 13, Kadra (dist Uttara Kannada) 13, Uppinangadi (dist Dakshina Kannada) 13, Mangaluru Ap Obsy (dist Dakshina Kannada) 12, Gersoppa (dist Uttara Kannada) 12, Kundapur (dist Udupi) 12, Gokarna (dist Uttara Kannada) 11, Honavar Obsy (dist Uttara Kannada) 11, Kota (dist Udupi) 11, Kumta (dist Uttara Kannada) 11, Castle Rock (dist Uttara Kannada) 10, Sulya (dist Dakshina Kannada) 9, Dharmasthala (dist Dakshina Kannada) 9, Shirali Pto (dist Uttara Kannada) 8, Karwar Obsy (dist Uttara Kannada) 8, Siddapur (dist Uttara Kannada) 8, Mulki (dist Dakshina Kannada) 8, Joida (dist Uttara Kannada) 7,
- ❖ **West Rajasthan:** Kajuwala Sr (dist Bikaner) 19, Pungal Sr (dist Bikaner) 13, Hanumangarh (dist Hanumangarh) 12, Sadulsahar Sr (dist Sri Ganganagar) 12, Tibi Sr (dist Hanumangarh) 11, Sriganganagar Tehsil Sr (dist Sri Ganganagar) 9, Sangaria Sr (dist Hanumangarh) 8, Erinpura/jawai Dam (dist Pali) 8, Desuri (dist Pali) 8, Ganganagar (dist Sri Ganganagar) 7, Bali (dist Pali) 7, Suratgarh (dist Sri Ganganagar) 7,
- ❖ **West Madhya Pradesh:** Pipariya (dist Narmadapuram) 16, Sohagpur (dist Narmadapuram) 15, Badi (dist Raisen) 9, Sehore-aws (dist Sehore) 9, Narmadapuram (dist Narmadapuram) 9, Narsingarh (dist Rajgarh) 9, Bhopal Arera Hills (dist Bhopal) 9, Pachmarhi (dist Narmadapuram) 9, Bairagarh Airport (dist Bhopal) 9, Kolar (dist Bhopal) 8, Khategaon (dist Dewas) 8, Kathiwada (dist Alirajpur) 8, Raisen-aws (dist Raisen) 8, Karhal (dist Sheopur) 8, Bankhedi (dist Narmadapuram) 8, Rehti (dist Sehore) 7, Sultanpur (dist Raisen) 7, Itarsi (dist Narmadapuram) 7, Bareli (dist Raisen) 7, Kolaras (dist Shivpuri) 7, Pachore (dist Rajgarh) 7, Budhni (dist Sehore) 7, Shyampur (dist Sehore) 7, Berasia (dist Bhopal) 7, Nasrullahganj (dist Sehore) 7,
- ❖ **Chhattisgarh:** Raghunath Nagar (dist Balrampur) 15, Kusmi (dist Balrampur) 14, Shankargarh (dist Balrampur) 13, Chando (dist Balrampur) 11, Samari (dist Balrampur) 11, Doura Kochali (dist Balrampur) 9, Katghora (dist Korba) 9, Karpawand (dist Bastar) 9, Pondi Bachra (dist Koriya) 9, Pasaan (dist Korba) 8, Darri (dist Korba) 7, Pratappur (dist Surajpur) 7, Poudi Uparora (dist Korba) 7, Korba (dist Korba) 7, Sanna (dist Jashpur) 7, Wandrafnagar (dist Balrampur) 7,
- ❖ **Meghalaya:** RKM Sohra (Dist. East Khasi Hills) 15, Sohra (Dist. East Khasi Hills) 12, Sohra (Dist. East Khasi Hills) 10, Pynursla (Dist. East Khasi Hills) 10, Mawsynram (Dist. East Khasi Hills) 8, Mawkyrwat (Dist. South West Khasi Hills) 8, Mawkyrwat (Dist. South West Khasi Hills) 8,
- ❖ **South Interior Karnataka:** Agumbe Emo (dist Shivamogga) 14, Linganamakki Hms (dist Shivamogga) 9, Kammardi (dist Chikkamagaluru) 8,
- ❖ **East Rajasthan:** Malerainadunger Sr (dist Sawai Madhopur) 14, Khandar Sr (dist Sawai Madhopur) 12, Chomu (dist Jaipur) 12, Srimadhpor (dist Sikar) 12, Paowta (dist Jaipur) 11, Jamwaramgarh Sr (dist Jaipur) 11, Jaipur Tehsil Sr (dist Jaipur) 10, Bassi (dist Jaipur) 10, Chaksu (dist Jaipur) 9, Dausa (dist Dausa) 8, Tonk Vanasthali (dist Tonk) 8, Kotputli (dist Jaipur) 8, Mozamabad Sr (dist Jaipur) 8, Jaipur Aero (dist Jaipur) 8, Bonli (dist Sawai Madhopur) 8, Mounntabu Tehsil Sr (dist Sirohi) 7, Nasirabad (dist Ajmer) 7, Tatgarh Sr (dist Ajmer) 7, Phagi (dist Jaipur) 7, Sanganer Tehsil Sr (dist Jaipur) 7, Kishngarhwas Sr (dist Alwar) 7, Sawaimadhpor Tesil Sr (dist Sawai Madhopur) 7, Niwai (dist Tonk) 7, Salumber (dist Udaipur) 7,
- ❖ **Madhya Maharashtra:** Mahabaleshwar- Imd Obsy (dist Satara) 14, Ajra (dist Kolhapur) 9, Shahuwadi (dist Kolhapur) 8, Chandgad (dist Kolhapur) 8, Surgana (dist Nashik) 7,
- ❖ **Konkan & Goa:** Sanguem (dist South Goa) 12, Matheran (dist Raigad) 11, Karjat\_agri (dist Raigad) 11, Valpoi (dist North Goa) 9, Quepem (dist South Goa) 9, Sangameshwar Devrukh (dist Ratnagiri) 9, Mulde\_Agri (dist Sindhudurg) 8, Wakwali\_agri (dist Ratnagiri) 7, Kudal (dist Sindhudurg) 7, Sawantwadi (dist Sindhudurg) 7, Pernem (dist North Goa) 7, Poladpur (dist Raigad) 7, Dodamarg (dist Sindhudurg) 7,
- ❖ **Kerala & Mahe:** Bayar (dist Kasargod) 11, Panathur (dist Kasargod) 9, Muliyar (dist Kasargod) 8, Taliparamba (dist Cannur) 7,
- ❖ **Haryana:** Ellenabad Rev (dist Sirsa) 9, Ellenabad (dist Sirsa) 9,
- ❖ **East Uttar Pradesh:** Manikpur (dist Chitrakoot) 9, Bara (dist Prayagraj) 9, Karwi (dist Chitrakoot) 8, Koraon (dist Prayagraj) 8,
- ❖ **Punjab:** Bhatinda Iaf (dist Bhatinda) 9,
- ❖ **Kerala:** Panathur Aws (dist Kasargod) 9, Muliyar Aws (dist Kasargod) 8, Taliparamba (dist Cannur) 7,
- ❖ **Odisha:** Lahunipara ( Sundargarh) 9, Tensa ( Sundargarh) 8, Mahanga ( Cuttack) 8,
- ❖ **Coastal Andhra Pradesh:** Kukunoor (dist Eluru) 7

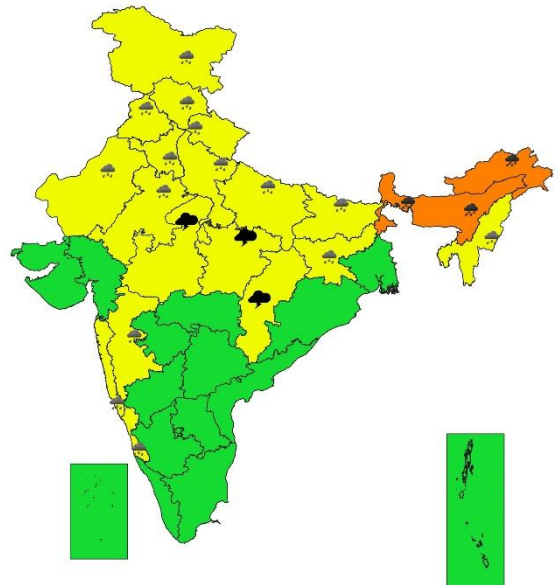




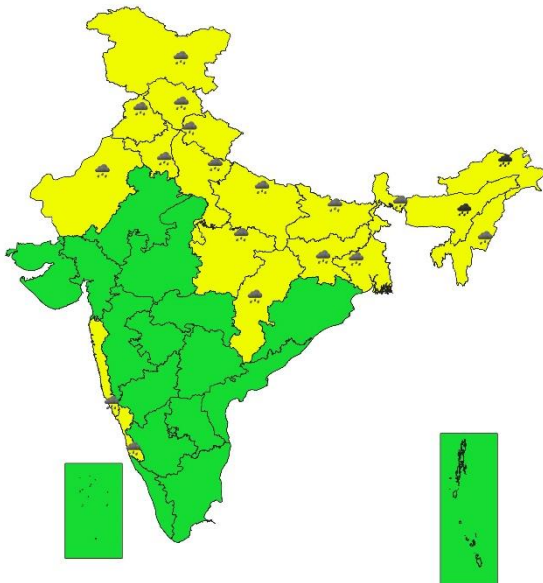
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4  
05-08-2024



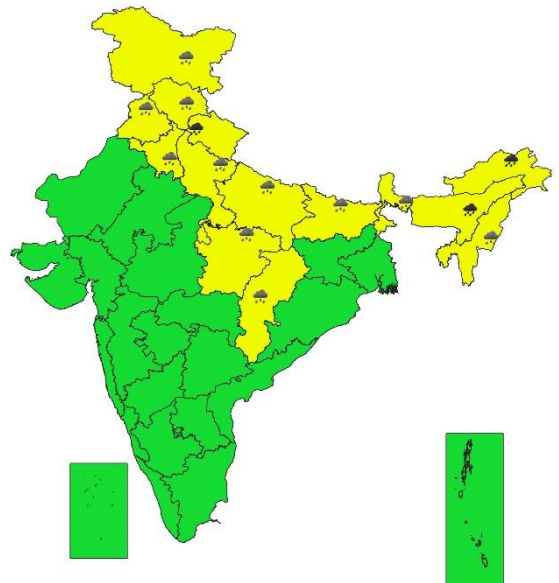
SUBDIVISIONWISE WEATHER WARNING FOR DAY 5  
06-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 6  
07-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 7  
08-08-2024



- Action may be taken based on **ORANGE AND RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.



## **IMPACT & ACTION SUGGESTED due to**

- ✓ **Isolated extremely heavy rainfall very likely over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand on 02<sup>nd</sup>; East Madhya Pradesh, Madhya Maharashtra on 02<sup>nd</sup> & 03<sup>rd</sup>; West Madhya Pradesh on 03<sup>rd</sup> & 04<sup>th</sup>; Gujarat Region on 03<sup>rd</sup>; East Rajasthan on 04<sup>th</sup> August.**
- ✓ **Heavy to very heavy rainfall very likely at isolated places over West Madhya Pradesh during 02<sup>nd</sup> – 05<sup>th</sup>; Chhattisgarh on 03<sup>rd</sup>; Konkan & Goa during 02<sup>nd</sup>- 06<sup>th</sup>; Madhya Maharashtra during 02<sup>nd</sup> – 06<sup>th</sup>; Coastal Karnataka Gujarat State, East Madhya Pradesh during 02<sup>nd</sup> – 04<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim, Bihar during 03<sup>rd</sup> – 06<sup>th</sup>; Gangetic West Bengal on 02<sup>nd</sup>; Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 02<sup>nd</sup>-06<sup>th</sup> August.**
- ✓ **Isolated very heavy rainfall also likely over East Rajasthan on 02<sup>nd</sup> & 03<sup>rd</sup> Uttarakhand on 03<sup>rd</sup> & 08<sup>th</sup>; East Uttar Pradesh, South Interior Karnataka on 02<sup>nd</sup>; West Rajasthan on 02<sup>nd</sup> & 05<sup>th</sup> August.**
  - 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/landslips/mud slips/land sinks/mud sinks.
  - 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)

### **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.

## **Agromet advisories for Heavy Rainfall likely over various parts of the country**

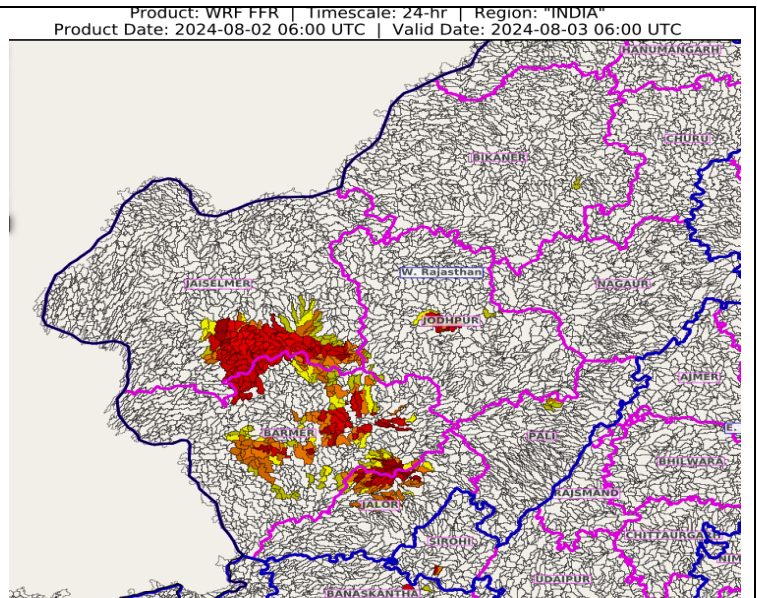
- Make provision for draining out excess water from crop fields to avoid water stagnation in Arunachal Pradesh, Assam & Meghalaya, NMMT, Gangetic West Bengal, Sub Himalayan West Bengal, Odisha, Jharkhand, Bihar, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Vidarbha, Konkan Goa, Ghat areas of Madhya Maharashtra, Gujarat State, Kerala and Karnataka.
- Provide mechanical support to horticultural crops & staking to vegetables.

**Flash Flood Guidance:**

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 03-08-2024 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of Jaisalmer, Barmer, Jalore & Jodhpur districts of West Rajasthan Met Sub-divisions during next 24 hours.

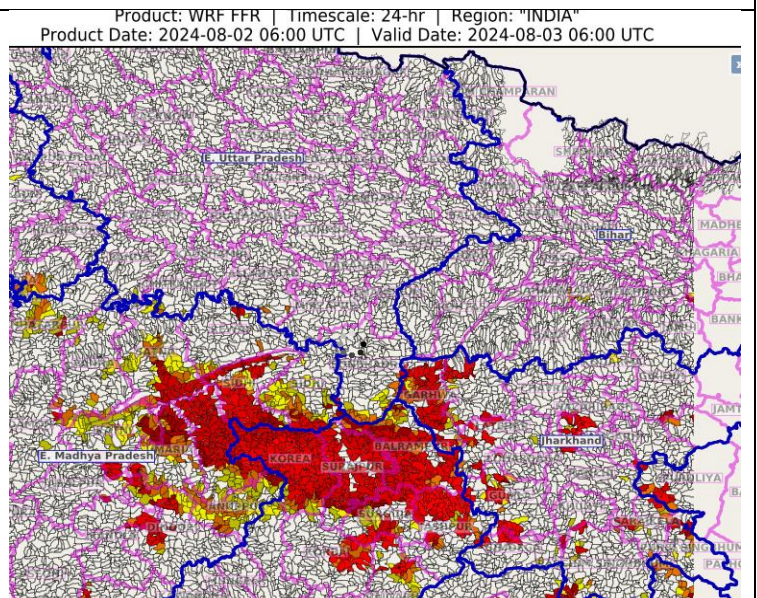
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 03-08-2024 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of Chhattisgarh, East Madhya Pradesh and Jharkhand Met Sub-divisions during next 24 hours.

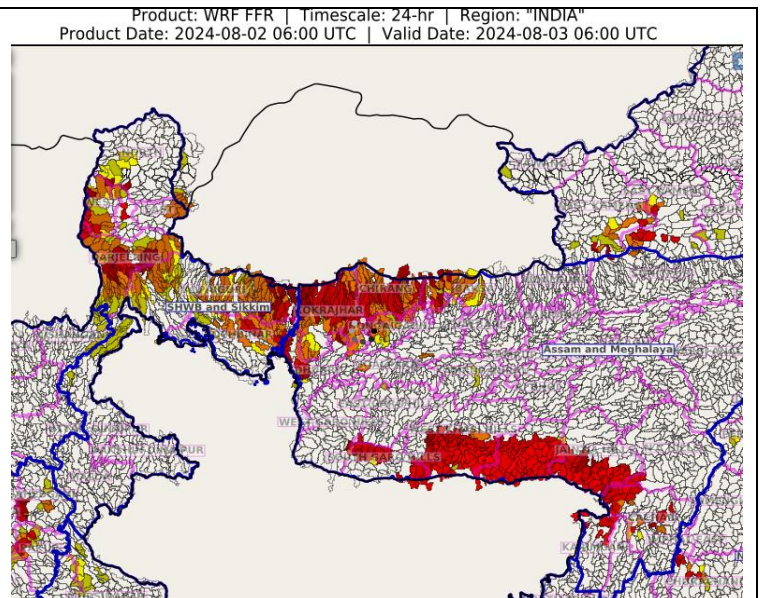
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 03-08-2024 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of Assam & Meghalaya and SHWB & Sikkim Met Sub-divisions during next 24 hours.

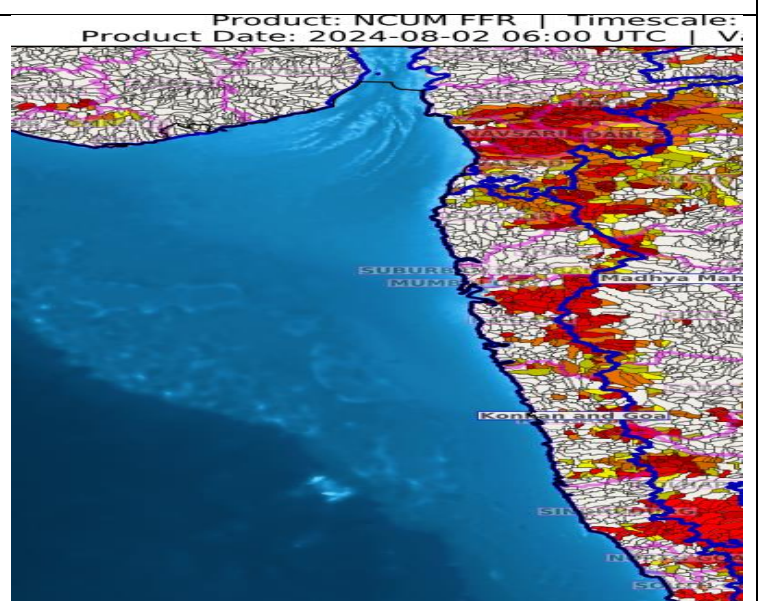
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 03-08-2024 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of southern Gujarat Region and Konkan & Goa 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 & abbreviations:**

- ❖ **Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **ARG:** Automatic Rain Gauge; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office, **Aero:** Aerodrome, **IAF:** Indian Air Force.
- ❖ **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-Himalayan 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 Marathawada.
  - **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 Widespred (FWS/ Many Places) | 1-25       | Isolated (ISOL)               |

Fog

Heavy Rain

Very Heavy Rain

Extremely Heavy Rain

Heavy Snow

Hailstorm

Dust Storm

Heat Wave

Cold Wave

Cold Day

Ground Frost

Strong Surface Winds

Thunder & Lightning

Hot and Humid

Subdivision Colour

|  |                       |
|--|-----------------------|
|  | NO WARNING            |
|  | WATCH(BE UPDATED)     |
|  | ALERT (BE PREPARED)   |
|  | WARNING (TAKE ACTION) |

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

## LEGENDS

### WARNING

|                                |
|--------------------------------|
| <b>WARNING (TAKE ACTION)</b>   |
| <b>ALERT ( BE PREPARED)</b>    |
| <b>WATCH (BE UPDATED)</b>      |
| <b>NO WARNING ( NO ACTION)</b> |

### Probabilistic Forecast

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



**Rain/ Snow \***

|                                   |
|-----------------------------------|
| Heavy: 64.5 to 115.5 mm/cm *      |
| Very Heavy: 115.6 to 204.4 mm/cm* |
| Extremely Heavy: > 204.4 mm/cm *  |



**Heat Wave**

**When maximum temperature of a station reaches  $\geq 40^{\circ}\text{C}$  for plains and  $\geq 30^{\circ}\text{C}$  for hilly regions**

**(a) Based on Departure from normal**

|   |
|---|
| Heat Wave: Maximum Temperature Departure from normal $4.5^{\circ}\text{C}$ to $6.4^{\circ}\text{C}$ . |
| Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^{\circ}\text{C}$                |

**(b). Based on Actual maximum temperature**

|   |
|---|
| Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$ .      |
| Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$ |

**(c). Criteria for heat wave for coastal stations**

When maximum temperature departure is  $> 4.5^{\circ}\text{C}$  from normal. Heat Wave may be described provided maximum temperature  $\geq 37^{\circ}\text{C}$



**Warm Night**

**When maximum temperature remains  $40^{\circ}\text{C}$**

|   |
|---|
| Warm Night: When minimum temperature departure $4.5^{\circ}\text{C}$ to $6.4^{\circ}\text{C}$ . |
| Severe Warm Night: When minimum temperature departure $> 6.4^{\circ}\text{C}$ .                 |



**Cold Wave**

**When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions.**

**(a). Based on departure**

|   |
|---|
| Cold Wave: Minimum Temperature Departure from normal $-4.5^{\circ}\text{C}$ to $-6.4^{\circ}\text{C}$ . |
| Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$                 |

**(b) Based on actual Minimum Temperature (for Plains only)**

|  |
|--|
| Cold Wave : When Minimum Temperature is $\leq 4.0^{\circ}\text{C}$       |
| Severe Cold Wave: When Minimum Temperature is $\leq 2.0^{\circ}\text{C}$ |

**(c) For Coastal Stations**

When Minimum Temperature departure is  $\leq -4.5^{\circ}\text{C}$  & actual Minimum Temperature is  $\leq 15^{\circ}\text{C}$



**Cold Day**

**When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions**

**Based on departure**

|  |
|--|
| Cold Day: Maximum Temperature Departure from normal $-4.5^{\circ}\text{C}$ to $-6.4^{\circ}\text{C}$ . |
| Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^{\circ}\text{C}$                 |



**Fog**

**Phenomenon of small droplets suspended in air and the horizontal visibility  $< 1\text{km}$**

|  |
|--|
| Moderate Fog: When the visibility between 500-200 metres |
| Dense Fog: when the visibility between 50-200 metres     |
| Very Dense Fog: when the visibility $< 50$ metres        |



**Thunderstorm**

**Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)**



**Dust/Sand Storm**

**An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.**



**Frost**

**Ice deposits on ground**

|   |
|---|
| Air temperature $\leq 4^{\circ}\text{C}$ ( over Plains) |
|---|



**Squall**

**A strong wind that rises suddenly, lasts for atleast 1 minute.**

|                                     |
|-------------------------------------|
| Moderate: Wind speed 52-61 kmph     |
| Severe: Wind speed 62-87 kmph       |
| Very Severe: Wind speed $> 87$ kmph |



**Sea State**

**Effect of various waves in the sea over specific area**

|  |
|--|
| Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre |
| High to very high: Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre  |
| Phenomenal: Wind speed $> 117$ kmph ( $> 63$ knots) & Wave height $> 14$ metre     |



**Cyclone**

|  |
|--|
| Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)                      |
| Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)              |
| Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)      |
| Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots) |
| Super Cyclone Storm: Wind speed $> 220$ kmph ( $> 119$ knots)            |