



Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 06<sup>th</sup> August, 2024

Time of Issue: 1315 hours IST

**Subject: Fairly widespread to widespread rainfall with isolated heavy to very heavy falls likely over Himachal Pradesh, Uttarakhand during next 5 days and over plains of northwest & east India during next 3 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 West Rajasthan; **Heavy to very heavy rainfall** at isolated places over East Rajasthan, Tamil Nadu, Telangana, Jharkhand, Bihar, Odisha, Jammu & Kashmir, Assam & Meghalaya; **Heavy rainfall** at isolated places over Himachal Pradesh, Punjab, East Madhya Pradesh, East Uttar Pradesh, Kerala, Coastal Karnataka, North Interior Karnataka, Madhya Maharashtra, Arunachal Pradesh, Manipur and West Bengal & Sikkim.

**Weather Systems**

- ✓ The **depression** over Northeast Rajasthan and neighbourhood moved west-northwestwards and weakened into a well marked low pressure area over central parts of Pakistan at 0530 hours IST of today, the 06<sup>th</sup> August and further weakened into a low pressure area over the same region at 0830 hours IST of today.
- ✓ An east-west trough runs from the Low Pressure area over central parts of Pakistan to east Bihar in lower tropospheric levels.
- ✓ The **Monsoon trough** is active and south of the normal position at mean sea level.
- ✓ The feeble **off-shore trough** at mean sea level runs along South Gujarat to north Kerala coast.

**Forecast & Warnings: (upto 7 days):**

**(Rainfall distribution and Graphics for warning are given in Annexure II & III respectively)**

**❖ Forecast warning for Northwest India**

- ✓ Fairly widespread to widespread light/moderate rainfall **accompanied with thunderstorm & lightning** very likely over Jammu-Kashmir, Himachal Pradesh, Uttarakhand & Rajasthan; scattered to fairly widespread rainfall over Uttar Pradesh, Punjab, Haryana-Chandigarh-Delhi during the week.
- ✓ Isolated **very heavy rainfall** also likely over West Rajasthan on 06<sup>th</sup>, Himachal Pradesh on 07<sup>th</sup> & 10<sup>th</sup>; West Uttar Pradesh on 07<sup>th</sup> and Uttarakhand on 06<sup>th</sup>, 07<sup>th</sup>, 09<sup>th</sup> & 10<sup>th</sup>; August.
- ✓ Isolated **heavy rainfall** very likely over Jammu-Kashmir on 06<sup>th</sup>, 07<sup>th</sup>, 10<sup>th</sup>; Himachal Pradesh, Uttarakhand, East Uttar Pradesh, East Rajasthan during 06<sup>th</sup>-12<sup>th</sup>, Punjab, Haryana-Chandigarh on 06<sup>th</sup>, 07<sup>th</sup> & 10<sup>th</sup>; West Rajasthan on 06<sup>th</sup>, during 10<sup>th</sup>-12<sup>th</sup>; West Uttar Pradesh during 06<sup>th</sup>-08<sup>th</sup> and on 11<sup>th</sup> & 12<sup>th</sup> August.

#### ❖ West & Central India

- ✓ Fairly widespread to widespread light to moderate rainfall **accompanied with thunderstorm & lightning** very likely over the region Konkan & Goa, Gujarat Region during the week; scattered to fairly widespread rainfall over Madhya Maharashtra, Marathwada & Saurashtra & Kutch during the week.
- ✓ **Very heavy rainfall** very likely at isolated places over East Madhya Pradesh on 07<sup>th</sup> August.
- ✓ **Heavy rainfall** very likely at isolated places over West Madhya Pradesh on 07<sup>th</sup> & 08<sup>th</sup>; East Madhya Pradesh during 06<sup>th</sup>-08<sup>th</sup>; Chhattisgarh on 06<sup>th</sup> & 07<sup>th</sup>; Konkan & Goa during 07<sup>th</sup> -11<sup>th</sup>, Madhya Maharashtra during 06<sup>th</sup>-12<sup>th</sup> and Gujarat Region on 08<sup>th</sup> & 09<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 the week.
- ✓ **Heavy to very heavy rainfall** very likely at isolated places over Assam & Meghalaya during 06<sup>th</sup>-12<sup>th</sup>; Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura during 06<sup>th</sup>-10<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim on 06<sup>th</sup> August and Odisha & Bihar on 06<sup>th</sup> August.
- ✓ Isolated **heavy rainfall** very likely over Bihar during 06<sup>th</sup>-11<sup>th</sup>; Odisha during 06<sup>th</sup>-08<sup>th</sup>; Jharkhand on 06<sup>th</sup>, 07<sup>th</sup> & 11<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim during 07<sup>th</sup>-10<sup>th</sup>; Gangetic West Bengal on 06<sup>th</sup> August.

#### ❖ South Peninsular India:

- ✓ Scattered to fairly widespread light to moderate rainfall over Kerala & Mahe, Lakshadweep, Karnataka and isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema during next 5 days.
- ✓ **Heavy rainfall** very likely at isolated places over Tamil Nadu, Coastal Andhra Pradesh & Yanam, Telangana on 06<sup>th</sup> & 07<sup>th</sup> and Kerala on 06<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 06.08.2024(in cm):**

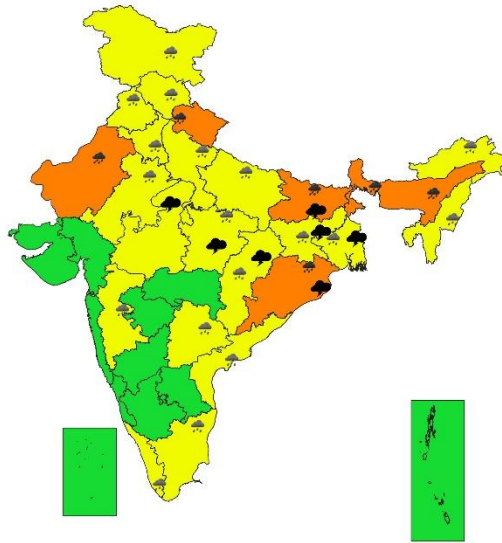
- ❖ **West Rajasthan:** Pali (dist Pali) 26, Pokhran (dist Jaisalmer) 19, Marwar Junction (dist Pali) 17, Ahore Sr (dist Jalore) 16, Jalore (dist Jalore) 15, Rohat Sr (dist Pali) 13, Nachna / Lathi (dist Jaisalmer) 13, Fatehgarh (dist Jaisalmer) 12, Phalodi (dist Jodhpur) 11, Sojat (dist Pali) 10, Phalodi Tehsil Sr (dist Jodhpur) 10, Gida Sr (dist Barmer) 10, Nokh Sr (dist Jaisalmer) 10, Jaisalmer (dist Jaisalmer) 9, Luni Sr (dist Jodhpur) 8,
- ❖ **Bihar:** Chanpatia (dist West Champaran) 20, Bettiah (dist West Champaran) 16, Rahghopur (dist Supaul) 15, Gaunaha (dist West Champaran) 13, Bhore (dist Gopalganj) 13, Pipra (dist Supaul) 13, Barharia (dist Siwan) 13, Kishanpur (dist Supaul) 12, Saraigarh Bhaptiyahi (dist Supaul) 12, Tribeniganj (dist Supaul) 11, Madhubani (dist West Champaran) 11, Bagaha (dist West Champaran) 11, Nautan (dist West Champaran) 11, Taibpur (dist Kishanganj) 11, Pratapganj (dist Supaul) 10, Bhagwanpur Hat (dist Siwan) 10, Nautan (dist Siwan) 9, Bajpatti (dist Sitamarhi) 9, Siwan Sadar (dist Siwan) 9, Motipur (dist Muzaffarpur) 8, Kurhani (dist Muzaffarpur) 8, Ziradei (dist Siwan) 8, Sahebganj (dist Muzaffarpur) 8, Birpur (dist Supaul) 8, Dumra (dist Sitamarhi) 8, Thakurganj (dist Kishanganj) 7, Muzaffarpur (dist Muzaffarpur) 7, Kodawanpur/c.b li (dist Begusarai) 7, Bathnaha (dist Sitamarhi) 7, Chakia (dist East Champaran) 7, Nanpur (dist Sitamarhi) 7, Pachdeuri (dist Gopalganj) 7, Lauria Nandangarh (dist West Champaran) 7, Benipatti (dist Madhubani) 7, Hathwa (dist Gopalganj) 7, Kalyanpur (dist East Champaran) 7, Gopalganj (dist Gopalganj) 7, Kucchaikot (dist Gopalganj) 7, Bihariganj (dist Madhepura) 7, Bidupur (dist Vaishali) 7, Thakrahan (dist West Champaran) 7,
- ❖ **East Rajasthan:** Nasirabad (dist Ajmer) 17, Srinagar Sr (dist Ajmer) 14, Pisagan Sr (dist Ajmer) 13, Ajmer (dist Ajmer) 11, Ajmer Tehsil Sr (dist Ajmer) 11, Mangliawas Sr (dist Ajmer) 10, Pushkar Sr (dist Ajmer) 9, Deogarh (dist Rajsamand) 9, Nayanagar/beawar (dist Ajmer) 8, Tatgarh Sr (dist Ajmer) 8;
- ❖ **Odisha:** Boudhgarh ( Boudhgarh) 15, Ullunda ( Sonepur) 14, Birmaharajpur ( Sonepur) 11, Binika ( Sonepur) 11, Sonepur ( Sonepur) 10, Kantamal ( Boudhgarh) 8, Jujumura ( Sambalpur) 8, Khairamal ( Boudhgarh) 7, Atabira ( Bargarh) 7, Athmalik ( Angul) 7, Phulbani ( Kandhamal) 7, Madanpur Rampur ( Kalahandi) 7, Karlamunda ( Kalahandi) 7,
- ❖ **Tamil Nadu:** Wallajah (dist Ranipet), Attur (dist Salem) 13 each;Chengam (dist Tiruvannamalai) 10;Katpadi (dist Vellore), Kalavai PWD (dist Ranipet) 8 each;Vembakottai (dist Virudhunagar), Krishnagiri (dist Krishnagiri), Chinnakalar (distCoimbatore), Arcot (dist Ranipet), Kudimiyannmalai (dist Pudukkottai), Vellore 7 each;
- ❖ **Telangana:** Thollada (dist Khammam) 13, Wyra Kvk(agro) (dist Khammam) 8, Konijerla (dist Khammam)8, Malyal (dist Mahabubabad) 8, Ghattu (dist Jogulamba Gadwal) 7, Garla (dist Mahabubabad) 7, Dornakal(dist Mahabubabad) 7,
- ❖ **Assam & Meghalaya:** Khanapara (dist Kamrup Metropolitan) 13, Melabazar/matunga (dist Nalbari) 11, Kheronighat (dist Karbi Anglong) 11, Drf (dist Baksa) 11, Hangrabari Arg (dist Kamrup Metropolitan) 11, Jorhat (dist Jorhat) 10, Kalakshetra Arg (dist Kamrup Metropolitan) 10, Goibargaon (dist Baksa) 10, Dhemaji (dist Dhemaji) 9, Jorhat\_aws (dist Jorhat) 9, Matijuri Arg (dist Hailakandi) 8, Majuli (dist Jorhat) 8, Lakhipur (dist Cachar) 8, Cherrapunji (dist East Khasi Hills) 8, Guwahati City Imd (dist Kamrup Metropolitan) 8, Gossaigaon (dist Kokrajhar) 8, Matijuri (dist Hailakandi) 7, Guwahati\_arg (dist Kamrup Metropolitan) 7,
- ❖ **Jharkhand:** Panchet (dist Dhanbad) 12, Panchet Dvc (dist Dhanbad) 11, Palganj (dist Giridih) 11, Koner (dist Hazaribag) 10, Koner Dvc (dist Hazaribag) 9, Simdega (dist Simdega) 8, Kharsema (dist Seraikela-kharsawan) 7,
- ❖ **Sub-Himalayan West Bengal & Sikkim:** Gyalsing (pto) (dist Gyalshing) 11, Shipgyar (dist Mangan) 8, Rongli (dist Pakyong) 8, Gangtok (dist Gangtok) 7, Jalpaiguri (dist Jalpaiguri) 7, Falakata (dist Alipurduar) 7, Dentam (dist Gyalshing) 7, Dhupguri (dist Jalpaiguri) 7;
- ❖ **Gangetic West Bengal:** Kharidwar (dist Purulia) 10, Panagarh (iaf) (dist Paschim Bardhaman) 9, Durgapur (dist Paschim Bardhaman) 8, Asansol(cwc) (dist Paschim Bardhaman) 7;
- ❖ **East Uttar Pradesh:** Nautanwa (dist Maharajganj) 10, Mehdawal (dist Sant Kabir Nagar) 7,
- ❖ **Kerala:** Ayyankunnu AWS (Kannur district) 9, Amini (Lakshadweep UT) 7;
- ❖ **Manipur:** Imphal T-aero (dist Imphal East) 9,
- ❖ **Coastal Karnataka:** Shirali Pto (dist Uttara Kannada) 9,
- ❖ **North Interior Karnataka:** Gabbur (dist Raichur) 7,
- ❖ **Punjab:** Ranjit Sagar Dam Site (dist Pathankot) 7,
- ❖ **Himachal Pradesh:** Bharwain (dist Una) 7, Jogindarnagar (dist Mandi) 5,
- ❖ **East Madhya Pradesh:** Nainpur (dist Mandla) 8, Keolari (dist Seoni) 4,
- ❖ **Madhya Maharashtra:** Gaganbawada (dist Kolhapur) 7, Lonavala\_agri (dist Pune) 7,
- ❖ **Arunachal Pradesh:** Naharlagun (dist Papumpara) 7,

7 Days Rainfall Forecast								
S. No.	Subdivision	06-Aug	07-Aug	08-Aug	09-Aug	10-Aug	11-Aug	12-Aug
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	WS	FWS	FWS	WS	WS
2	ARUNACHAL PRADESH	WS	FWS	FWS	WS	WS	FWS	FWS
3	ASSAM & MEGHALAYA	FWS	FWS	WS	WS	WS	WS	FWS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	FWS	FWS	FWS	WS	WS	FWS	FWS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	WS	WS	WS	WS	WS	WS	WS
6	GANGETIC WEST BENGAL	WS	WS	FWS	FWS	FWS	WS	WS
7	ODISHA	FWS	WS	WS	FWS	SCT	SCT	FWS
8	JHARKHAND	FWS	WS	WS	FWS	FWS	FWS	FWS
9	BIHAR	FWS	WS	WS	FWS	FWS	FWS	FWS
10	EAST UTTAR PRADESH	SCT	FWS	WS	FWS	SCT	SCT	FWS
11	WEST UTTAR PRADESH	ISOL	FWS	WS	FWS	SCT	SCT	FWS
12	UTTARAKHAND	FWS	WS	WS	WS	WS	WS	WS
13	HARYANA CHANDIGARH & DELHI	ISOL	SCT	FWS	FWS	SCT	SCT	FWS
14	PUNJAB	ISOL	SCT	FWS	SCT	SCT	SCT	SCT
15	HIMACHAL PRADESH	FWS	FWS	FWS	WS	WS	WS	WS
16	JAMMU & KASHMIR AND LADAKH	FWS	FWS	FWS	SCT	SCT	SCT	SCT
17	WEST RAJASTHAN	WS	FWS	FWS	FWS	FWS	FWS	FWS
18	EAST RAJASTHAN	WS	WS	FWS	FWS	WS	WS	FWS
19	WEST MADHYA PRADESH	FWS	FWS	WS	WS	WS	FWS	FWS
20	EAST MADHYA PRADESH	FWS	WS	WS	WS	WS	WS	WS
21	GUJARAT REGION	WS	FWS	FWS	WS	WS	WS	WS
22	SAURASHTRA & KUTCH	WS	FWS	SCT	FWS	FWS	FWS	FWS
23	KONKAN & GOA	WS	WS	WS	WS	WS	WS	WS
24	MADHYA MAHARASHTRA	FWS	SCT	SCT	SCT	SCT	SCT	SCT
25	MARATHAWADA	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL
26	VIDARBHA	WS	FWS	FWS	FWS	FWS	FWS	FWS
27	CHHATTISGARH	FWS	WS	WS	FWS	FWS	FWS	FWS
28	COASTAL ANDHRA PRADESH & YANAM	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	SCT	SCT	SCT	SCT	SCT	ISOL	ISOL
30	RAYALASEEMA	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	SCT	SCT	SCT	ISOL	ISOL	SCT	SCT
32	COASTAL KARNATAKA	WS	WS	WS	WS	WS	FWS	FWS
33	NORTH INTERIOR KARNATAKA	SCT	FWS	FWS	SCT	SCT	SCT	SCT
34	SOUTH INTERIOR KARNATAKA	SCT	FWS	FWS	SCT	FWS	FWS	FWS
35	KERALA & MAHE	WS	FWS	FWS	SCT	SCT	FWS	FWS
36	LAKSHADWEEP	WS	FWS	SCT	SCT	SCT	SCT	SCT

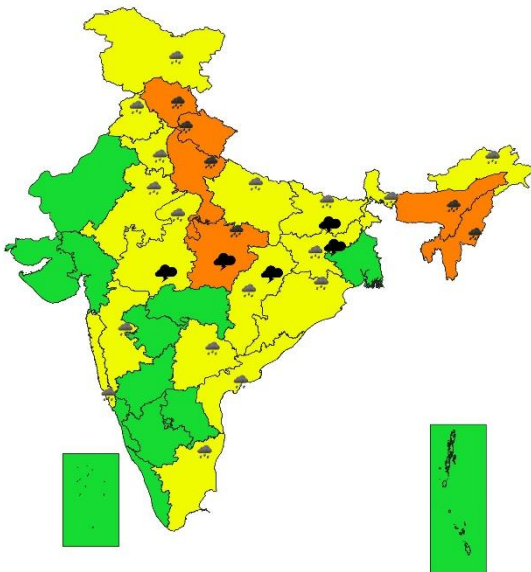
- As the lead period increases forecast accuracy decreases.



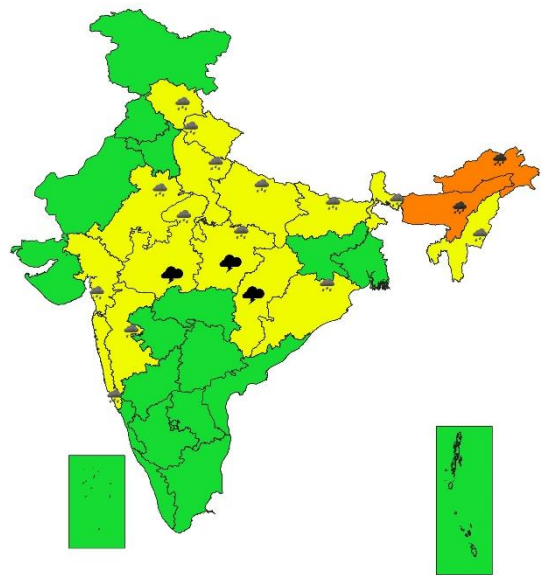
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1  
06-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2  
07-08-2024

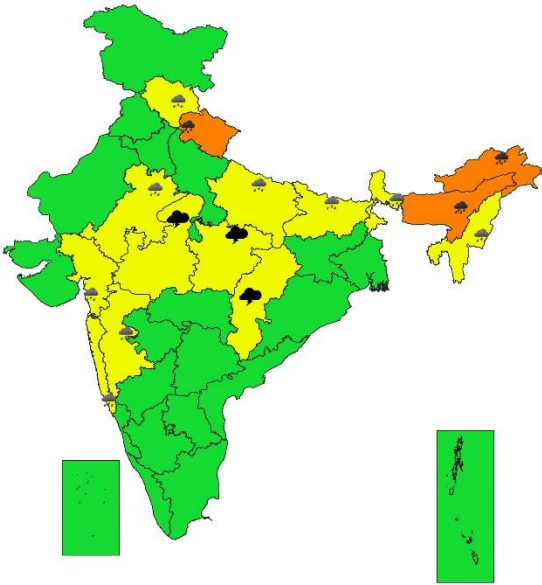


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3  
08-08-2024

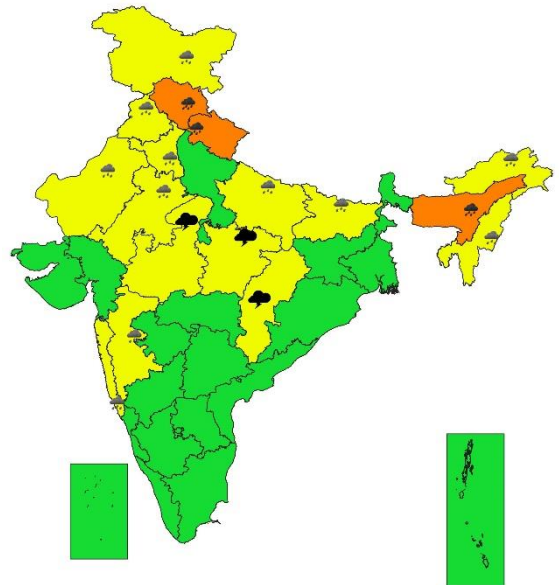




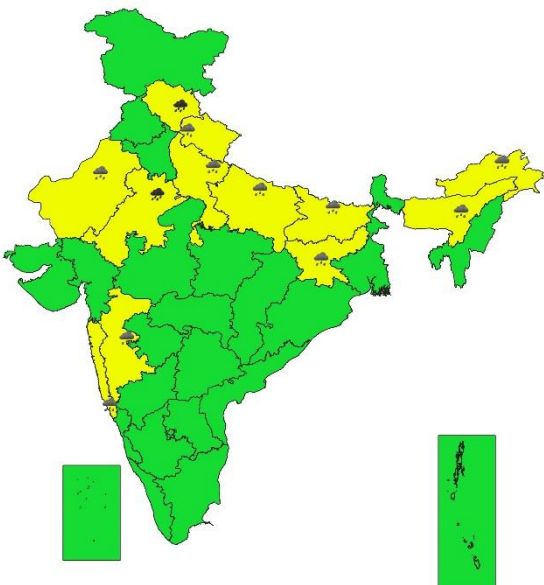
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4  
09-08-2024



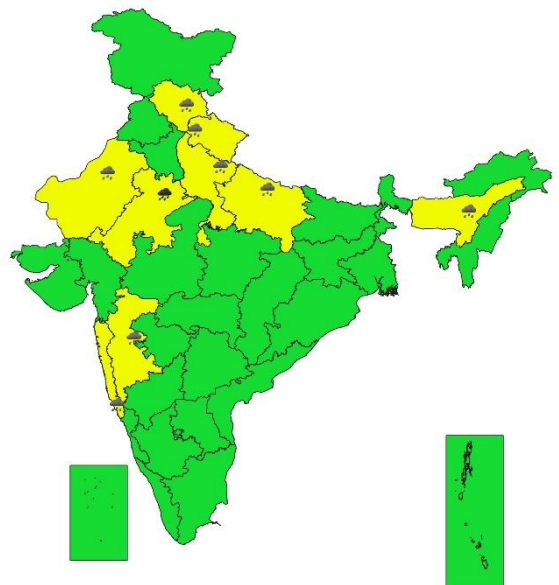
SUBDIVISIONWISE WEATHER WARNING FOR DAY 5  
10-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 6  
11-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 7  
12-08-2024



- 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 due to

- Isolated **very heavy rainfall** also likely over West Rajasthan, Bihar, Odisha on 06<sup>th</sup>, Himachal Pradesh on 07<sup>th</sup> & 10<sup>th</sup>; West Uttar Pradesh, East Madhya Pradesh on 07<sup>th</sup>; Uttarakhand on 06<sup>th</sup>, 07<sup>th</sup>, 09<sup>th</sup> & 10<sup>th</sup> and Assam & Meghalaya during 06<sup>th</sup>-10<sup>th</sup> August.
- **Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura Met Sub-divisions on 06<sup>th</sup> August. (ANNEXURE IV)**
  - ✓ 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

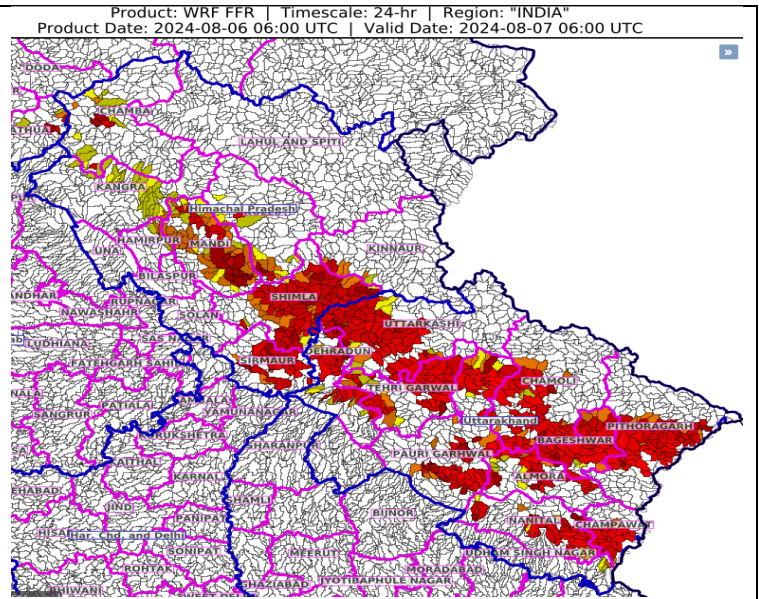
- Make provision for draining out excess water from crop fields to avoid water stagnation in North Eastern states, West Bengal, Odisha, Bihar, Himachal Pradesh, Uttarakhand, Rajasthan, Madhya Pradesh, ghat areas of Madhya Maharashtra, Tamil Nadu, Kerala, Coastal Karnataka and Telangana.
- Provide mechanical support to horticultural crops & staking to vegetables.

**Flash Flood Guidance:**

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 07-08-2024 :

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

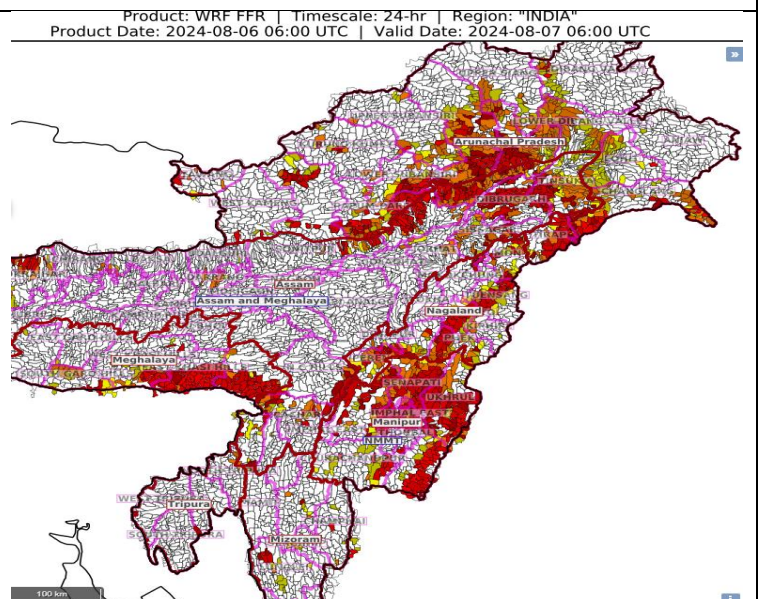
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.



24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 07-08-2024 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Arunachal Pradesh, Assam & Meghalaya and NMMT 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.

<b>SPATIAL DISTRIBUTION</b> (% 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 Snow		Cold Day	Subdivision Colour
	Heavy Rain		Hailstorm		Ground Frost	 NO WARNING
	Very Heavy Rain		Dust Storm		Strong Surface Winds	 WATCH(BE UPDATED)
	Extremely Heavy Rain		Heat Wave		Thunder & Lightning	 ALERT (BE PREPARED)
			Cold Wave		Hot and Humid	 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)	