

Thursday, August 01, 2024  
Time of Issue: 2000 hours IST  
(NIGHT)

All India Impact Based Weather Warning Bulletin

**01 August (Day 1):**

- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm )** very likely at isolated places over Madhya Maharashtra and Coastal Karnataka; **Heavy to very heavy rainfall ( $\geq 12$  cm)** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana-Chandigarh-Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Jharkhand, Odisha, Assam & Meghalaya, Mizoram, Konkan & Goa, Kerala & Mahe and South Interior Karnataka ; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Gujarat Region, Tamil Nadu, Puducherry & Karaikal, Telangana and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Uttar Pradesh, Rajasthan, Madhya Pradesh, **Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Bihar and Jharkhand.**
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast Arabian sea, over most parts of eastcentral Arabian sea, many parts of westcentral Arabian sea, northern parts of southeast and adjoining southwest Arabian sea, along and off Gujarat, Maharashtra, Konkan, goa, Karnataka, Kerala coasts, over Lakshadweep area, gulf of Mannar, off Sri Lanka coast, over many parts of southwest bob & few parts of southeast bob, most parts of central bob and north bob. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over few parts over westcentral bob. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

**02 August (Day 2):**

- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm )** at isolated places over East Madhya Pradesh and Madhya Maharashtra; **Heavy to very heavy rainfall ( $\geq 12$  cm)** at isolated places over Uttarakhand, East Rajasthan, West Madhya Pradesh, Chhattisgarh, Assam & Meghalaya, Konkan & Goa, Gujarat Region, Coastal & South Interior Karnataka; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Jammu-Kashmir, Himachal Pradesh, Punjab, Haryana-Chandigarh, Uttar Pradesh, West Rajasthan, Vidarbha, West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Kerala & Mahe and North Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Jharkhand and Bihar.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of eastcentral Arabian sea, many parts of westcentral Arabian sea, along and off south Maharashtra, Konkan, goa, Karnataka coasts, gulf of Mannar, off Sri Lanka coast, over many parts of southwest bob & few parts of southeast bob, most parts of central bob and many parts of north bob. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail along and off Gujarat, north Maharashtra coasts, over few parts over westcentral bob. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

### 03 August (Day 3):

- ❖ **Heavy to very heavy rainfall with extremely heavy falls (> 20 cm)** likely at isolated places over Madhya Pradesh, Konkan & Goa, Madhya Maharashtra and Gujarat Region; **Heavy to very heavy rainfall ( $\geq 12$  cm)** at isolated places over Uttarakhand, East Rajasthan and Saurashtra & Kutch; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttar Pradesh, Vidarbha, Chhattisgarh, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Kerala & Mahe and Coastal & South Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Uttar Pradesh, Bihar and Jharkhand.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of eastcentral Arabian sea, many parts of westcentral Arabian sea, along and off south Maharashtra, coast, gulf of Mannar, off Sri Lanka coast, over many parts of southwest bob & few parts of southeast bob, most parts of central bob and many parts of north bob. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail along and off Gujarat, north Maharashtra coasts, over few parts over westcentral bob. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

### 04 August (Day 4):

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over East Rajasthan, West Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Gujarat Region; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, West Rajasthan, East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch and Coastal & South Interior Karnataka.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Bihar.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of eastcentral Arabian sea, many parts of westcentral Arabian sea, along and off south Maharashtra, coast, gulf of Mannar, off Sri Lanka coast, over many parts of southwest bob & few parts of southeast bob, most parts of central bob and many parts of north bob. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail along and off Gujarat, north Maharashtra coasts. Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

### 05 August (Day 5):

- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Madhya Maharashtra; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Rajasthan, Bihar, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Gujarat Region.
- ❖ **Thunderstorm accompanied with lightning** very likely at isolated places over Rajasthan and Bihar.
- ❖ **Squally weather with wind speed reaching 35 kmph to 45 kmph gusting to 55 kmph** likely to prevail over northeast and adjoining northwest Arabian sea, most parts of eastcentral Arabian sea, many parts of westcentral Arabian sea, along and off south Maharashtra, coast, gulf of Mannar, off Sri Lanka coast, over many parts of southwest bob & few parts of southeast bob, most parts of central bob and many parts of north bob. **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail along and off Gujarat, north Maharashtra coasts, over few parts over westcentral bob. **Squally winds with speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over central Arabian sea & adjoining areas of southwest Arabian sea, southern parts of north Arabian sea, along & off Somalia & Oman coasts. Fishermen are advised not to venture into these areas.

## 06 August (Day 6):

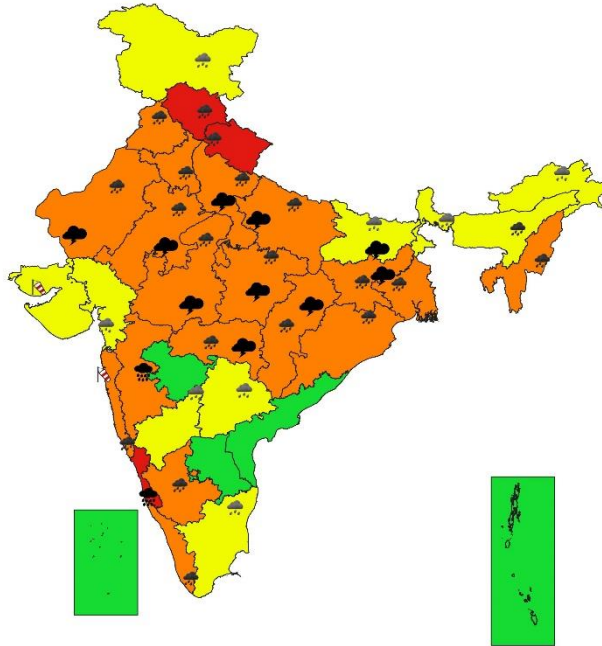
- ❖ **Heavy to very heavy rainfall ( $\geq 12$  cm)** likely at isolated places over Uttarakhand; **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Himachal Pradesh, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat Region.

## 07 August (Day 7):

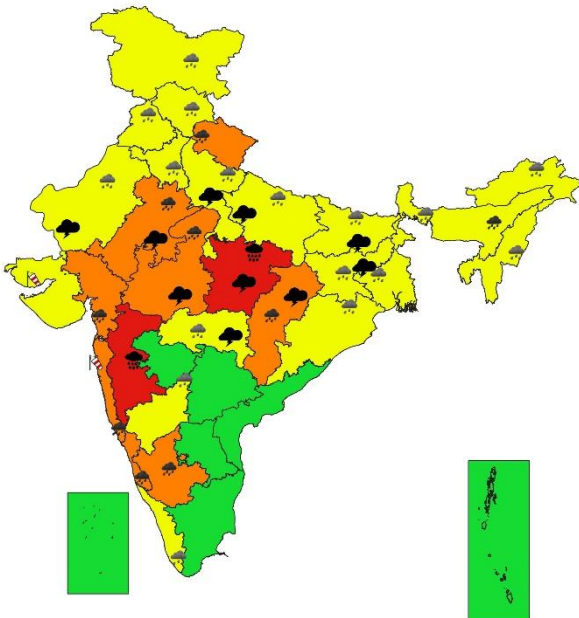
- ❖ **Heavy rainfall ( $\geq 7$  cm)** at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Gujarat Region.



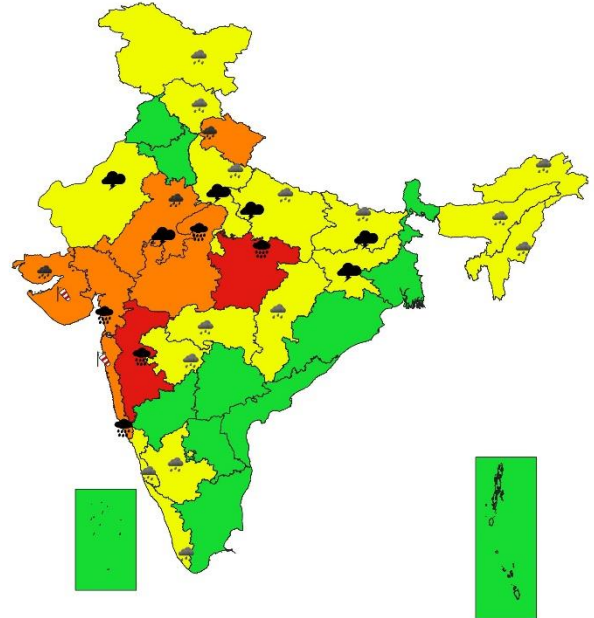
**SUBDIVISIONWISE WEATHER WARNING FOR DAY 1**  
01-08-2024



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 2**  
02-08-2024



**SUBDIVISIONWISE WEATHER WARNING FOR DAY 3**  
03-08-2024

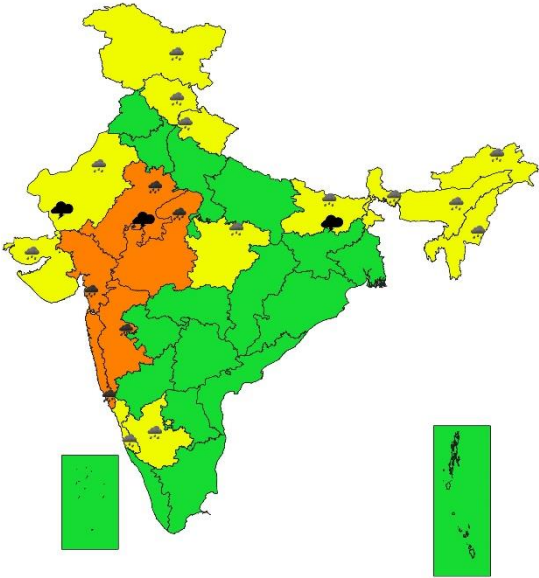


**\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".**  
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.  
For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599  
(Service to the Nation since 1875)

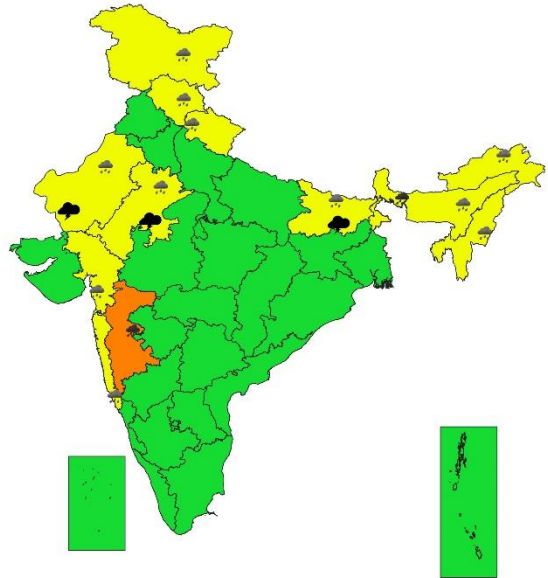




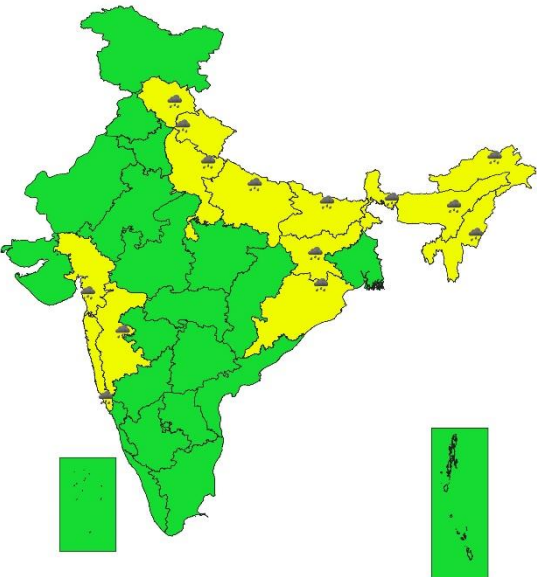
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4  
04-08-2024



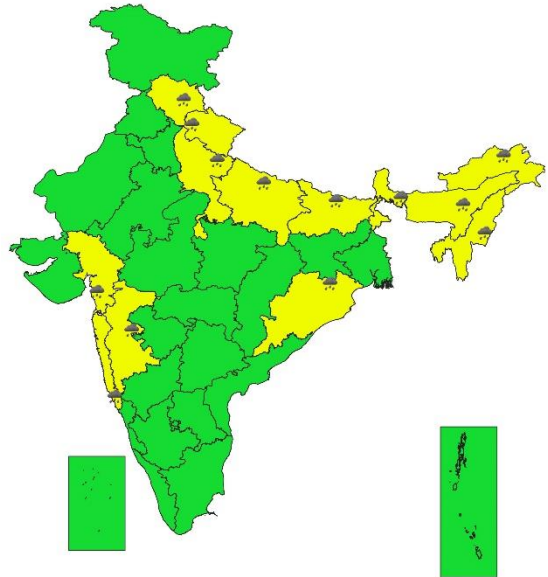
SUBDIVISIONWISE WEATHER WARNING FOR DAY 5  
05-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 6  
06-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 7  
07-08-2024



- 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.

**\* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".**  
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.  
For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599  
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## IMPACT & ACTION SUGGESTED due to

- ✓ **Isolated extremely heavy rainfall very likely over Coastal Karnataka on 01<sup>st</sup>; Madhya Maharashtra during 01<sup>st</sup>-03<sup>rd</sup> August; East Madhya Pradesh on 02<sup>nd</sup> & 03<sup>rd</sup>; Konkan & Goa, West Madhya Pradesh and Gujarat Region on 03<sup>rd</sup> August.**
  - ✓ **Heavy to very heavy rainfall very likely at isolated places over Konkan & Goa, Madhya Maharashtra, Gujarat Region during 01<sup>st</sup>-05<sup>th</sup>; Madhya Pradesh during 01<sup>st</sup>-04<sup>th</sup>; Vidarbha, Chhattisgarh during 01<sup>st</sup>-03<sup>rd</sup> and Saurashtra & Kutch on 03<sup>rd</sup> August.**
  - ✓ **Isolated very heavy rainfall also likely over Himachal Pradesh, Punjab, Haryana-Chandigarh, West Uttar Pradesh, West Rajasthan, Jharkhand, Odisha, Gangetic West Bengal, Kerala on 01<sup>st</sup>; Uttarakhand during 01<sup>st</sup>-03<sup>rd</sup>; East Rajasthan during 01<sup>st</sup>-04<sup>th</sup>; South Interior Karnataka 01<sup>st</sup> & 02<sup>nd</sup>; on 01<sup>st</sup> and Coastal Karnataka on 02<sup>nd</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 Assam & Meghalaya, NMMT, Gangetic West Bengal, Odisha, Jharkhand, Bihar, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Vidarbha, Konkan & Goa, *Ghat* areas of Madhya Maharashtra, Gujarat State, Tamilnadu, 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 1730 IST of 02-08-2024 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of Har - Chd & Delhi, Jammu & Kashmir & Ladakh and Punjab adjoining 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.

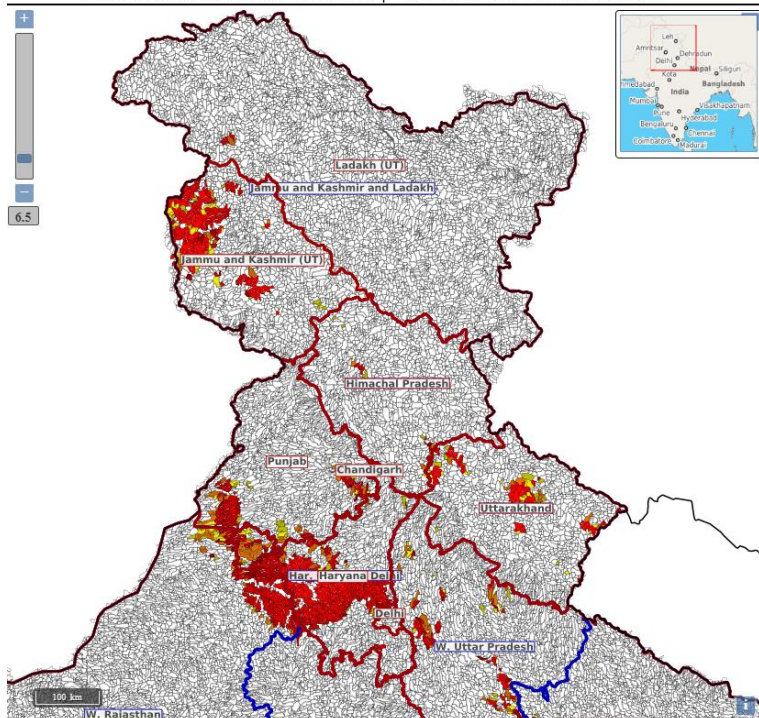
### 24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 02-08-2024 :

Moderate flash flood risk likely over few watersheds & neighbourhoods of Tripura, Manipur & Mizoram states of NMMT Met Sub-divisions during next 24 hours.

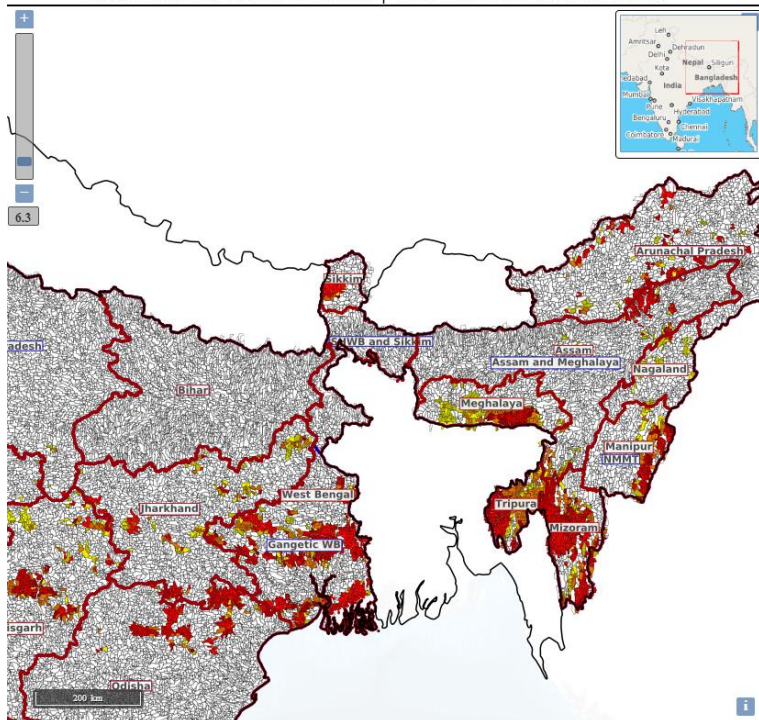
Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Gangetic West Bengal adjoining Odisha Met Sub-divisions during next 24 hours.

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.

Product: NCUM FFR | Timescale: 24-hr | Region: "INDIA"  
Product Date: 2024-08-01 12:00 UTC | Valid Date: 2024-08-02 12:00 UTC



Product: NCUM FFR | Timescale: 24-hr | Region: "INDIA"  
Product Date: 2024-08-01 12:00 UTC | Valid Date: 2024-08-02 12:00 UTC

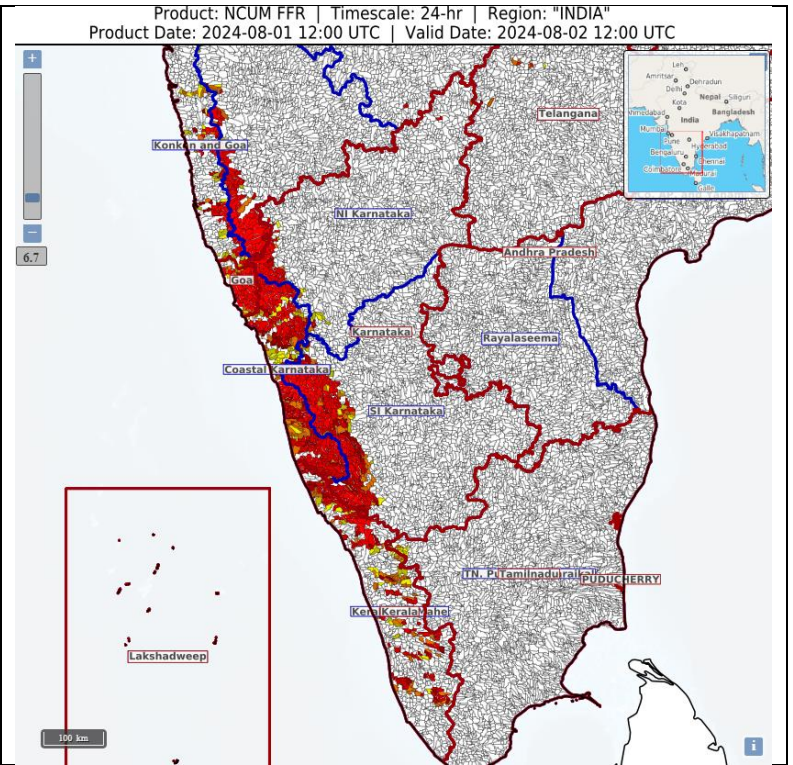




## 24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 02-08-2024 :

Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Coastal Karnataka and adjoining South 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 Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)



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



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



**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  $\geq 37^{\circ}\text{C}$



**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  $> 6.4^{\circ}\text{C}$ .



**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  $\leq 15^{\circ}\text{C}$



**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  $\leq -6.5^{\circ}\text{C}$



**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



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



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



**Ice deposits on ground**

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



**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



**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



**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)

Kindly download MAUSAM APP for location specific forecast & warning, MEGHDOOT APP for Agromet advisory and DAMINI APP for Lightning Warning & visit state MC/RMC websites for district wise warning.