



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 17th August, 2024

Time of Issue: 1350 hours IST

Subject: (i) Low Pressure Area over south Bangladesh likely to move north-northwestwards and become more marked during next 2-3 days causing Heavy to very heavy rainfall over East India.
(ii) Isolated heavy to very heavy rainfall very likely over Kerala, Tamil Nadu and Lakshadweep during next 2-3 days.

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

Heavy to very heavy rainfall at isolated places over West Rajasthan, East Uttar Pradesh, Assam & Meghalaya, Rayalaseema, Telangana, Kerala & Mahe and Lakshadweep; **Heavy rainfall** at isolated places over Himachal Pradesh, Chhattisgarh, Uttarakhand, Coastal Andhra Pradesh & Yanam, Haryana, East Madhya Pradesh, Marathwada, West Uttar Pradesh, Tamil Nadu, Puducherry & Karaikal, North Interior Karnataka, South Interior Karnataka, Odisha and Nagaland, Manipur, Mizoram & Tripura.

Weather Systems:

- ✓ The **low pressure** area over north Bay of Bengal and adjoining areas of Bangladesh-West Bengal coasts lay over south Bangladesh & neighbourhood at 0830 hrs IST of today, the 17th August 2024. It is likely to move slowly north-northwestwards and become a **Well-marked Low pressure** area over Bangladesh and adjoining Gangetic West Bengal by 19th August. Thereafter, it is likely to move west-northwestwards across Gangetic West Bengal, Jharkhand & adjoining Bihar and Uttar Pradesh & adjoining Madhya Pradesh during subsequent 3-4 days.
- ✓ The western end of the **Monsoon trough** lies to the south of its normal position and the eastern end lies near its normal position and passes through the above low pressure area.
- ✓ A **cyclonic circulation** lies over West Rajasthan & neighbourhood extending upto middle tropospheric levels. A **trough** runs from this cyclonic circulation to westcentral Arabian sea at lower tropospheric level.
- ✓ A **cyclonic circulation** lies over North Interior Karnataka adjoining Telangana extending upto middle tropospheric level and a **trough** extends from this circulation to Comorin area in lower tropospheric levels.

Forecast & Warnings (upto 7 days):

❖ Northwest India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Himachal Pradesh and Uttarakhand; scattered to fairly widespread rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttar Pradesh; isolated to scattered rainfall over Punjab, Haryana-Chandigarh-Delhi, Rajasthan during the week.
- ✓ Isolated **heavy rainfall** very likely over West Rajasthan on 17th; Jammu division on 18th & 19th; Himachal Pradesh and East Uttar Pradesh during 17th-23rd; Uttarakhand during 17th-19th & 21st-23rd; Punjab on 17th & 20th-21st; Haryana-Chandigarh-Delhi on 20th & 21st; West Uttar Pradesh during 19th-23rd; East Uttar Pradesh 17th-22nd; East Rajasthan on 22nd & 23rd August.
- ✓ Isolated **very heavy rainfall** also very likely over Jammu division on 17th and Uttarakhand on 20th August.

❖ West & Central India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over central India; scattered to fairly widespread rainfall over West India during the week.
- ✓ Isolated **Heavy rainfall** very likely over Vidarbha and Marathwada on 17th; Chhattisgarh during 17th-20th; West Madhya Pradesh during 20th-23rd; East Madhya Pradesh during 18th-23rd; Konkan & Goa during 18th-22nd; Madhya Maharashtra on 19th & 20th and Gujarat Region on 21st & 22nd August.

❖ East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over east India except Bihar and scattered to fairly widespread rainfall over Bihar and northeast during the week.
- ✓ Isolated **heavy rainfall** very likely over Gangetic West Bengal on 17th, 20th & 21st; Odisha during 17th-20th; Jharkhand on 17th, 18th, 20th & 21st; Bihar during 18th-22nd; Sub-Himalayan West Bengal & Sikkim during 20th-22nd; Assam & Meghalaya on 17th, 18th & 23rd; Nagaland, Manipur, Mizoram & Tripura during 18th-21st August.
- ✓ Isolated **very heavy rainfall** also very likely over Nagaland, Manipur, Mizoram & Tripura on 17th, 22nd & 23rd; Gangetic West Bengal on 18th & 19th; Jharkhand on 19th August.

❖ South Peninsular India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Kerala & Mahe, Lakshadweep, Coastal Karnataka; scattered to fairly widespread rainfall over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Telangana, Interior Karnataka; isolated to scattered rainfall over Rayalaseema during the week.
- ✓ Isolated **heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal and Telangana on 17th; Kerala & Mahe on 20th & 21st; Lakshadweep on 20th; Rayalaseema on 17th & 18th; Coastal Karnataka on 17th-19th; North Interior Karnataka during 17th-20th; South Interior Karnataka on 17th-19th August.
- ✓ Isolated **very heavy rainfall** also very likely over Kerala & Mahe and Lakshadweep during 17th-19th; Tamil Nadu, Puducherry & Karaikal on 18th & 19th; Coastal Karnataka on 20th & 21st August.

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

Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 17.08.2024 (in cm):

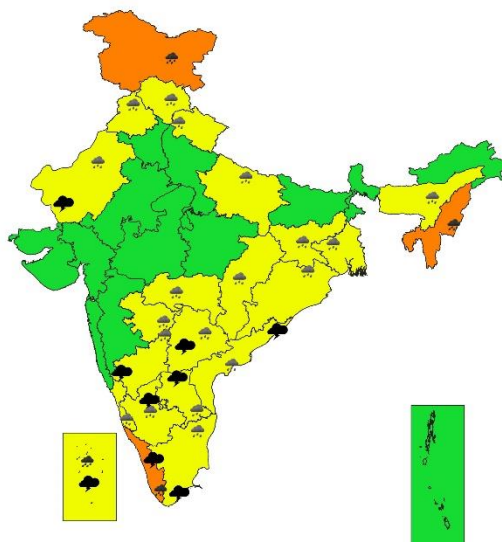
- ❖ **Lakshadweep:** Agathi (dist Lakshadweep) 20, Minicoy (dist Lakshadweep) 7;
- ❖ **East Uttar Pradesh:** Nautanwa (dist Maharajganj) 17;
- ❖ **Kerala & Mahe:** Kanjirappally (dist Kottayam) 16, Poonjar (dist Kottayam) 15 Laha (Pathanamthitta district), Peermade (dist Idukki) 11, Neeleswaram (dist Ernakulam) 7;
- ❖ **Telangana:** Chigurumamidy (dist Karimnagar) 16, Medak (dist Medak) 13, Gangadhara (dist Karimnagar) 10, Kamareddy (dist Kamareddy) 10, Mallapur (dist Jagtial) 10, Venkatapuram (dist Mulugu) 10, Bhiknur (dist Kamareddy) 9, Shankarapatnam (dist Karimnagar) 9, Jadcherla (dist Mahabubnagar) 9, Venkatapur (dist Mulugu) 8, Mutharam Mahadevpur (dist J. Bhupalpally) 8, Mallial (dist Jagtial) 8, Ranjal (dist Nizamabad) 7, Dullapally(a) (dist Rangareddy) 7, Dharmapuri (dist Jagtial) 7, Boinpalle (dist Rajanna Sircilla) 7, Thimmajipeta (dist Nagarkurnool) 7, Kataram (dist J. Bhupalpally) 7;
- ❖ **Assam & Meghalaya:** Dholai (dist Cachar) 15;
- ❖ **Rayalaseema:** Puttur (dist Tirupati) 14, Amarapuram (dist Sri Sathyasai District) 10, Gorantla (dist Sri Sathyasai District) 9, Madakasira (dist Sri Sathyasai District) 9, Atmakur (dist Anantapuramu) 9, Raptadu (dist Anantapuramu) 9, Chenne Kothapalle (dist Sri Sathyasai District) 9, Singanamala (dist Anantapuramu) 9, Anantpur (dist Anantapuramu) 8, Tadimarri (dist Sri Sathyasai District) 8, Kalyandrug (dist Anantapuramu) 7, Pamidi (dist Anantapuramu) 7, Settur (dist Anantapuramu) 7, Uravakonda (dist Anantapuramu) 7;
- ❖ **West Rajasthan:** Nachna / Lathi (dist Jaisalmer) 14, Pokhran (dist Jaisalmer) 12, Nokha (dist Bikaner) 9, Jayal Sr (dist Nagaur) 8;
- ❖ **Himachal Pradesh:** Naina Davi (dist Bilaspur) 11, Hamirpur (dist Hamirpur) 8, Palampur (dist Kangra) 7, Una (dist Una) 7, Gohar (dist Mandi) 7;
- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Lengpui (dist Aizawl) 11, Sabroom (dist South Tripura) 7, Mamit Agri (dist Mamit) 7;
- ❖ **North Interior Karnataka:** Kushtagi (dist Koppal) 11, Hunsagi (dist Yadgir) 10, Lingasugur (dist Raichur) 10, Kuknoor (dist Koppal) 9, Kakkeri (dist Yadgir) 9, Indi (dist Vijayapura) 8, Munirabad (dist Koppal) 7, Yelburga (dist Koppal) 7;
- ❖ **Chhattisgarh:** Latori (dist Surajpur) 10, Lailunga (dist Raigarh) 7, Ramchandrapur (dist Balrampur) 7;
- ❖ **Uttarakhand:** Sama (Bageshwar): 10;
- ❖ **Coastal Andhra Pradesh & Yanam:** Paderu (dist Alluri Sitharamaraju) 9;
- ❖ **Odisha:** Banki (dist Cuttack) 9, Pipili (dist Puri) 7, Rajgangpur (dist Sundargarh) 7;
- ❖ **South Interior Karnataka:** Madhugiri (dist Tumakuru) 9, Pavagada (dist Tumakuru) 8;
- ❖ **Haryana:** Alewa Rev (dist Jind) 8;
- ❖ **East Madhya Pradesh:** Hanumana (dist Rewa) 8;
- ❖ **Tamil Nadu, Puducherry & Karaikal:** Yercaud (dist Salem) 8, Paramathivelur (dist Namakkal), Aravakurichi (dist Karur) 7 each;
- ❖ **Marathwada:** Bhokardan (dist Jalna) 8;
- ❖ **West Uttar Pradesh:** Talbehat (dist Lalitpur) 7;

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

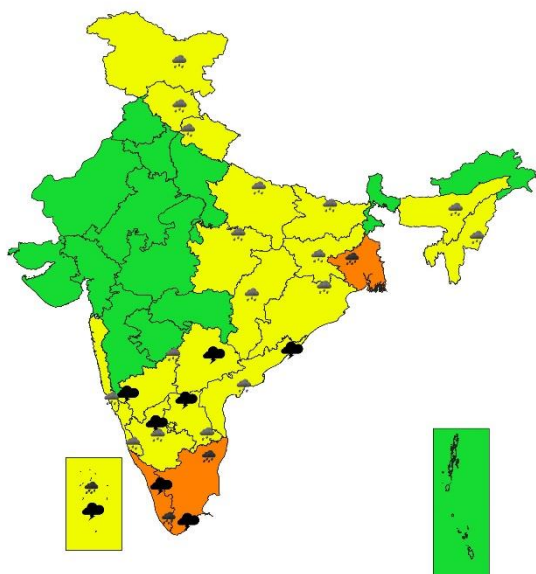
- As the lead period increases forecast accuracy decreases.



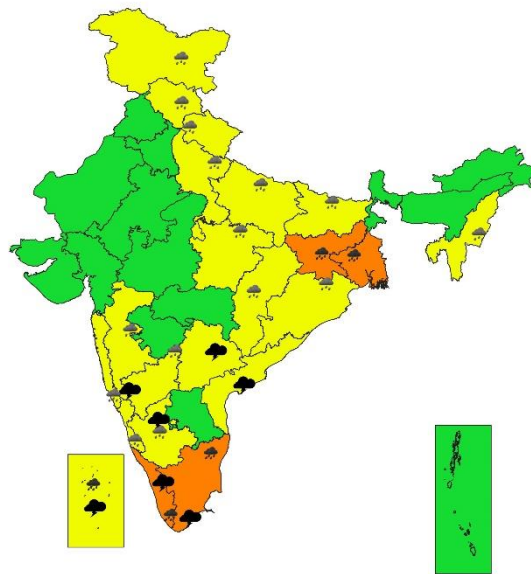
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
17-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
18-08-2024

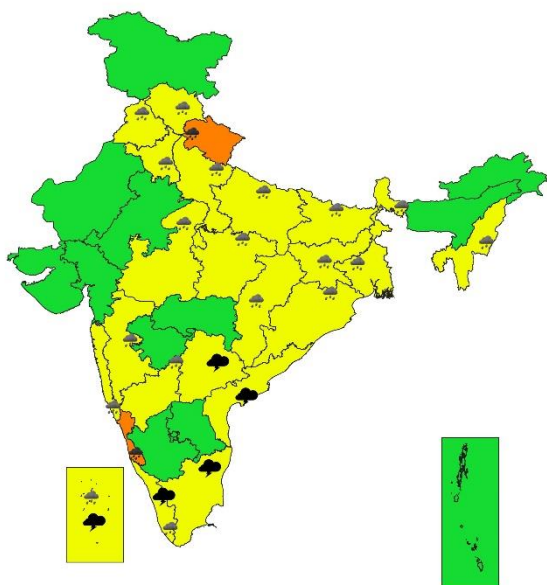


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
19-08-2024

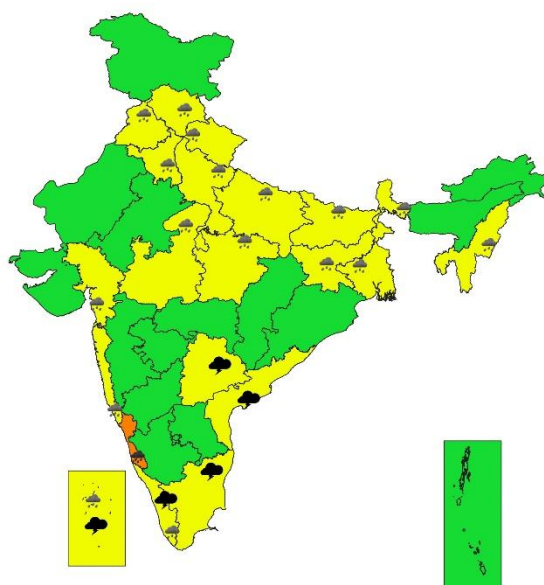




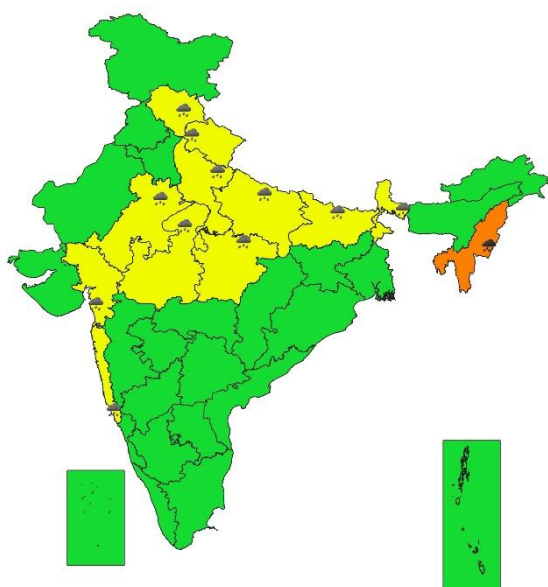
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
20-08-2024



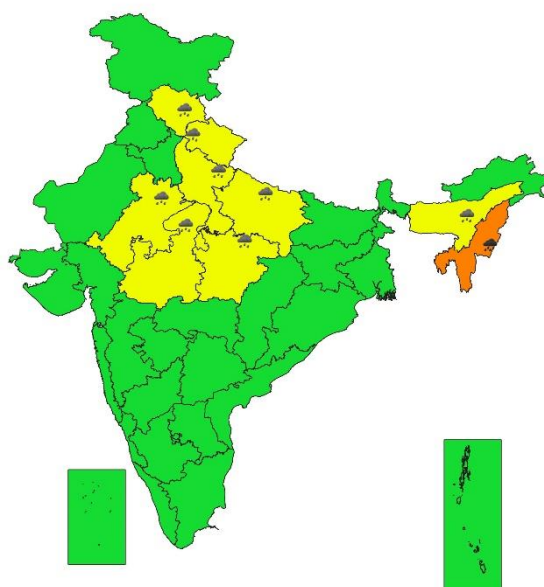
SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
21-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 6
22-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 7
23-08-2024



- 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

- **Very heavy rainfall** at isolated over Jammu division on 17th; Kerala & Mahe and Lakshadweep during 17th-19th; Nagaland, Manipur, Mizoram & Tripura on 17th, 22nd & 23rd; Gangetic West Bengal and Tamil Nadu, Puducherry & Karaikal on 18th & 19th; Jharkhand on 19th; Uttarakhand on 20th; Coastal Karnataka on 20th & 21st August.
- **Low to Moderate flash flood risk** likely over few watersheds & neighbourhoods of Chhattisgarh, Gangetic West Bengal, Himachal Pradesh, Uttarakhand and Jammu & Kashmir and Ladakh on 17th & 18th 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

- Drain out excess water from field crops and horticultural crops in Assam & Meghalaya, NMMT, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, West Rajasthan, Chhattisgarh, Odisha, Jharkhand, Tamil Nadu, Kerala, Lakshadweep, Karnataka, Andhra Pradesh and Telangana.
- Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Gangetic West Bengal, Punjab, East Madhya Pradesh, Vidarbha, Konkan & Goa, Madhya Maharashtra.
- In **Himachal Pradesh** and **Uttarakhand**, harvest the matured apples and vegetable immediately during the clear weather and store them at safe places.
- Provide mechanical support to horticultural crops & staking to vegetables.

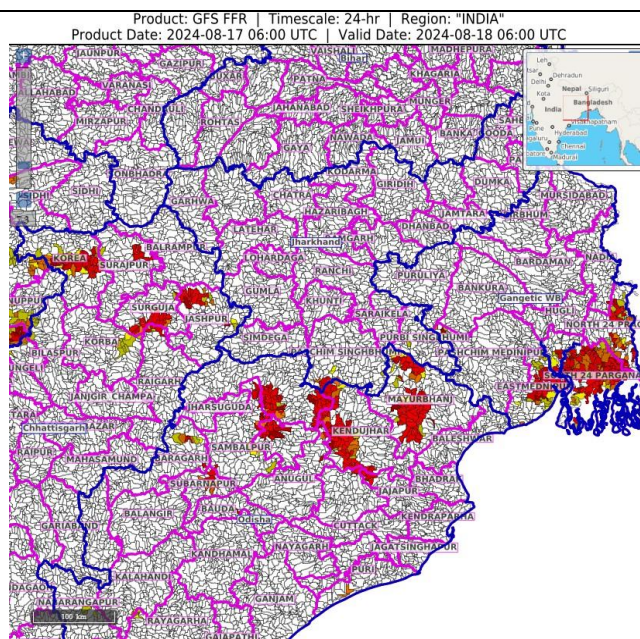
Flash Flood Guidance:**24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 18-08-2024 :**

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

Chhattisgarh - Korea, Jashpur, Korba Surajpur and Surguja districts. **Odisha** – Sambalpur, Saharanpur, Jharsuguda, Kendujhar, Mayurbhanj, Deogarh and Anugul districts.

Gangetic West Bengal – East Mednipur, Nadia, North 24 Pragana, Haora and South 24 Parganas districts.

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

**24 hours Outlook for the Flash Flood Risk (FFR) till 0530 IST of 18-08-2024 :**

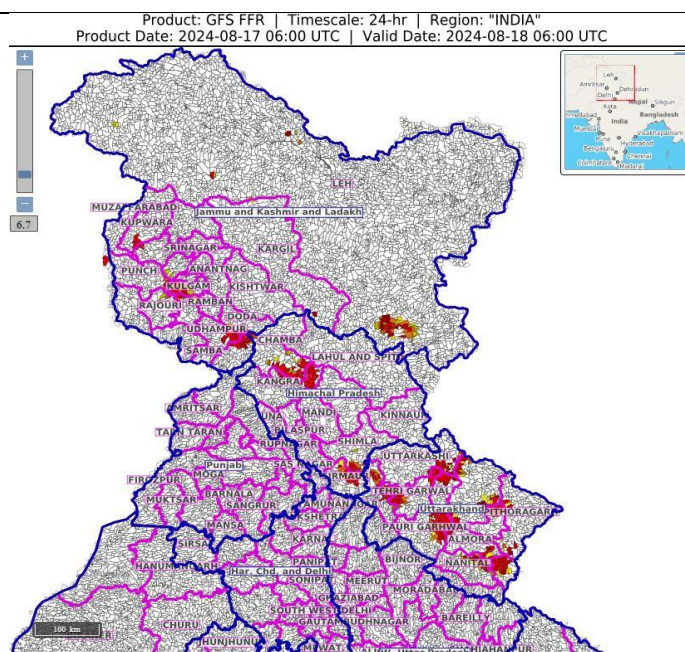
Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Himachal Pradesh - Chamba, Kangra, Mandi and Sirmaur districts.

Jammu & Kashmir and Ladakh - Kupwara, Kulgam, Kathua, Rajouri, Riasi, Doda, and Udhampur districts.

Uttarakhand – Uttarkashi, Tehri Garwal Almora, Bageshwar, Chamoli, Champawat, Dehradun, Nanital, Pauri Garhwal, Pithoragarh, Rudraprayag, and Districts.

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

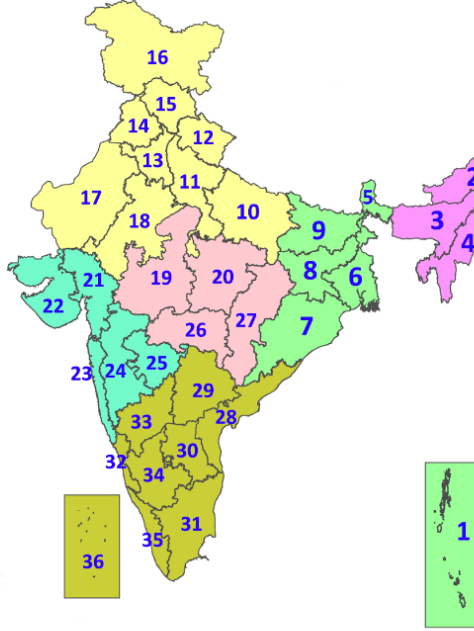


Legends & abbreviations:

- ❖ **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.

LEGENDS

1. अंडमान और निकोबार द्वीपसमूह
2. अरुणाचल प्रदेश
3. असम और मेघालय
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
5. उप-हिमालयी पश्चिम बंगाल और सिक्किम
6. गंगीय पश्चिम बंगाल
7. ओडिशा
8. झारखंड
9. बिहार
10. पूर्वी उत्तर प्रदेश
11. पश्चिम उत्तर प्रदेश
12. उत्तराखंड
13. हरियाणा, चंडीगढ़ और दिल्ली
14. पंजाब
15. हिमाचल प्रदेश
16. जम्मू और कश्मीर और लद्दाख
17. पश्चिम राजस्थान
18. पूर्वी राजस्थान
19. पश्चिम मध्य प्रदेश
20. पूर्वी मध्य प्रदेश
21. गुजरात
22. सौराष्ट्र
23. कोंकण और गोवा
24. मध्य महाराष्ट्र
25. मराठवाड़ा
26. विदर्भ
27. छत्तीसगढ़
28. तटीय आंध्र प्रदेश और यनम
29. तेलंगाना
30. रायलसीमा
31. तमिलनाडु, पुडुचेरी और कराईकल
32. तटीय कर्नाटक
33. आंतरिक उत्तरी कर्नाटक
34. आंतरिक दक्षिणी कर्नाटक
35. केरल और माहे
36. लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Odisha
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chandigarh & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathwada
26. Vidarbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnadu, Puducherry & Karaikal
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala & Mahe
36. 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)



Fog



Heavy Snow



Cold Wave



Heavy Rain



Dust Storm



Cold Day



Very Heavy Rain



Heat Wave



Ground Frost



Extremely Heavy Rain



Warm Night



Thunder & Lightning



Hot Day



Hailstorm



Hot & Humid



Dust Raising Winds



Strong Surface Winds

COLOUR CODED WARNING

No Warning (No Action)

Watch (Be Aware)

Alert (Be Prepared To Take Action)

Warning (Take Action)

Probabilistic Forecast

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

* 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)

DEFINITION/CRITERIA

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°C to 6.4°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°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°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°C to -6.4°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°C to -6.4°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 Strom: Wind speed > 220 kmph (> 119 knots)

* 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)