



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 20th August, 2024

Time of Issue: 1342 hours IST

Subject: (i) The Low Pressure Area over central parts of Bangladesh likely to cause isolated very heavy to extremely heavy rainfall over Northeast India during next 2 days.
(ii) Isolated heavy to very heavy rainfall very likely over Kerala, Tamil Nadu and Lakshadweep during next 2 days.

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

Heavy to very heavy rainfall with extremely heavy falls at isolated places over Tripura, Meghalaya; **Heavy to very heavy rainfall** at isolated places over Uttarakhand, East Rajasthan, Jammu & Kashmir, Nagaland, Jharkhand, Telangana, Assam, Rayalaseema; **Heavy rainfall** at isolated places over Himachal Pradesh, Delhi, East Madhya Pradesh, Haryana, Marathwada, Bihar, Tamil Nadu, Interior Karnataka, Coastal Andhra Pradesh & Yanam.

Weather Systems:

- ✓ The low pressure area lies over Central parts of Bangladesh & neighbourhood. It is likely to move north-northwestwards across West Bengal during next 48-hours.
- ✓ The western end of **monsoon trough** lies near its normal position and its eastern end to the north of its normal position at mean sea level.
- ✓ A **cyclonic circulation** lies over northwest Uttar Pradesh & neighbourhood at lower tropospheric levels.
- ✓ A **trough** runs from eastcentral Arabian sea off Karnataka coast to Maldives area in lower & middle tropospheric levels.
- ✓ A Western Disturbance as a trough in middle tropospheric westerlies runs roughly along Long. 70°E to the north of Lat. 32°N.
- ✓ A cyclonic circulation lies over southeast Arabian Sea & adjoining Lakshadweep in lower & middle tropospheric levels.

Forecast & Warnings (upto 7 days):

❖ **Northwest India**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Uttarakhand, East Uttar Pradesh; scattered to fairly widespread rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttar Pradesh; isolated to scattered rainfall over Punjab, Haryana-Chandigarh-Delhi, Rajasthan during the week.
- ✓ Isolated **heavy rainfall** very likely over Jammu division, Punjab, Haryana-Chandigarh on 20th; Himachal Pradesh on 20th, 21st, 25th & 26th; Uttarakhand during 20th – 26th; West Uttar Pradesh on 20th,

23rd & 24th; East Uttar Pradesh during 20th – 24th; West Rajasthan on 25th; East Rajasthan during 22nd – 26th August.

- ✓ Isolated **very heavy rainfall** also very likely over Uttarakhand on 20th August.

❖ West & Central India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over central India, Konkan & Goa, Madhya Maharashtra; scattered to fairly widespread rainfall over Marathwada, Gujarat State during the week.
- ✓ Isolated **Heavy rainfall** very likely over Madhya Pradesh, Madhya Maharashtra on 20th, 21st and during 23rd – 26th; Vidarbha during 24th-26th; Chhattisgarh during 20th – 25th; Konkan & Goa during 20th – 26th; Marathwada on 25th; Saurashtra & Kutch on 26th; Gujarat Region on 21st, 25th & 26th August.
- ✓ Isolated **very heavy rainfall** also very likely over Konkan & Goa during 24th – 26th; Madhya Maharashtra on 25th & 26th August.

❖ East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over East & Northeast India, during the week.
- ✓ Isolated **heavy rainfall** very likely over West Bengal & Sikkim, Arunachal Pradesh during 20th -23rd; Bihar, Jharkhand, Odisha during 20th -24th; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during next 7 days.
- ✓ Isolated **very heavy rainfall** also very likely over Assam & Meghalaya on 21st & 24th; Nagaland, Manipur, Mizoram & Tripura on 21st – 25th August.
- ✓ **Isolated extremely heavy rainfall very likely over** Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 20th August.

❖ South Peninsular India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Kerala & Mahe, Lakshadweep, Coastal Karnataka; isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, Interior Karnataka during the week.
- ✓ Isolated **heavy rainfall** very likely over Interior Karnataka on 20th; Tamil Nadu, Puducherry & Karaikal, Lakshadweep, Coastal Karnataka on 20th & 21st; Coastal Andhra Pradesh & Yanam on 20th & 22nd; Rayalaseema on 21st; Telangana on 20th & 24th; Coastal Karnataka on 20th, 25th & 26th August.
- ✓ Isolated **very heavy rainfall** also very likely over Kerala & Mahe 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 20.08.2024 (in cm):

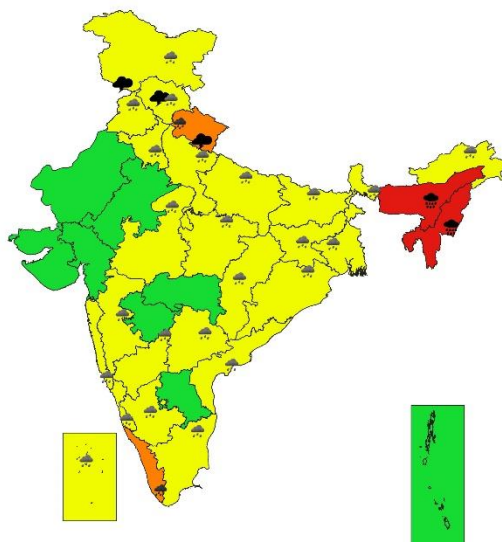
- ❖ **Tripura:** Bagafa (dist South Tripura) 38, Belonia (dist South Tripura) 32, Amarpur (dist Gomati) 31, Amarpur CWC (dist Gomati) 27, Belonia Arg (dist South Tripura) 25, Kamalpur (dist Dhalai) 23, Kumarghat CWC (dist Unakoti) 23, Kvk Dhalai (dist Dhalai) 22, Teliamura_arg (dist Khowai) 21, Kailashahar CWC (dist Unakoti) 21, Sabroom (dist South Tripura) 21, Hrc Nagicherra Arg (dist West Tripura) 18, Gajaria CWC (dist Sepahijala) 18, Gandecherra (dist Dhalai) 17, Kailashahar Aero (dist Unakoti) 17, Dharmanagar/ Panisagar (dist North Tripura) 17, Arundhutinagar (dist West Tripura) 16, Budhjongnagar Arg (dist West Tripura) 16, Manughat CWC (dist Dhalai) 16, Udaipur (dist Gomati) 16, Kvk South (dist South Tripura) 16, Khumluwang Arg (dist West Tripura) 15, Sonamura (dist Sipahijala) 15, Lembuchhera (dist West Tripura) 15, Belonia CWC (dist South Tripura) 15, Chhamonu (dist Dhalai) 14, Sonamura Mohanbhog CWC (dist Sepahijala) 14, Nutanbazar CWC (North Tripura) 14, Kadamtala CWC (dist North Tripura) 14, Dm Office Arg (dist West Tripura) 14, Khowai (dist Khowai) 13, Bagafa AWS (dist South Tripura) 13, Paren (dist Peren) 12, Secretariat ARG (dist West Tripura) 11, Houra CWC (dist West Tripura) 11, Kadamtala Arg (dist North Tripura) 10, Kanchanpur (dist North Tripura) 9, Bishalgarh (dist Sipahijala) 9, Met Agartala ARG (dist West Tripura) 8, Agartala Aero (dist West Tripura) 8, Kailashahar Aws (dist Unakoti) 7, Eden Lauge (dist North Tripura) 7
- ❖ **Meghalaya:** Sohra ARG (dist. East Khasi Hills) 35, RKM Sohra (dist. East Khasi Hills) 34, Sohra (dist. East Khasi Hills) 32, Mawsynram (dist. East Khasi Hills) 25, Laitkhroh (dist. East Khasi Hills) 18, Mawphlang (dist. East Khasi Hills) 18, Khliehriat (dist. East Jaintia Hills) 14, Shillong (dist. East Khasi Hills) 13, Shillong AWS (dist. East Khasi Hills) 12, NEHU ARG (dist. East Khasi Hills) 12, Meecl (dist. East Khasi Hills) 11, Mawkyrwat ARG (dist. South West Khasi Hills) 10, Mawkyrwat (dist. South West Khasi Hills) 10, Ratachera (dist. East Jaintia Hills) 8, Barapani (dist. Ribhoi) 8,
- ❖ **Uttarakhand:** Sama (Bageshwar) 19, Kapkot (Bageshwar) 16, Nainital (Nainital) 8, Haldwani (Nainital) 8, Chamoli (Chamoli) 8, Rishikesh (Dehradun) 7,
- ❖ **Telangana:** Yadagirigutta (dist Y. Bhuvanagiri) 17, Yadagirigutta(arg) (dist Y. Bhuvanagiri) 15, Maddur (dist Narayanpet) 14, Bhuvanagiri (dist Y. Bhuvanagiri) 12, Aiza (dist Jogulamba Gadwal) 12, Saroornagar (dist Rangareddy) 11, Narva (dist Narayanpet) 11, Hakimpet Iaf (dist M. Malkajgiri) 10, Itikyal (dist Jogulamba Gadwal) 10, Koilkonda (dist Mahabubnagar) 9, Bheemadevarpalle (dist Hanumakonda) 9, Miryalaguda (dist Nalgonda) 9, Shekpet (dist Hyderabad) 9, Medchal (dist M. Malkajgiri) 9, Nizamabad (dist Nizamabad) 9, Himayatnagar (dist Hyderabad) 8, Narayanpet (dist Narayanpet) 8, Shamshabad(arg) (dist Rangareddy) 8, Maganoor (dist Narayanpet) 8, Thimmajipeta (dist Nagarkurnool) 8, Nidamanur (dist Nalgonda) 8,
- ❖ **East Rajasthan:** Bansur (Alwar) 13, Bahrod (Alwar) 9, Khairthal (Alwar) 8, Alwar Obs (Alwar) 8, Bahadurpur (Alwar) 8, Mandawar (Alwar) 8,
- ❖ **Jammu & Kashmir:** Jammu Aws (dist Jammu) 13, Jammu (dist Jammu) 12, Kathua Arg (dist Kathua) 11,
- ❖ **Nagaland:** Peren (dist Peren) 12.
- ❖ **Jharkhand:** Goilkera (dist West Singhbhum) 12, Simdega (dist Simdega) 9, Kolebira (dist Simdega) 8,
- ❖ **Assam:** Karimganj (dist Karimganj) 12, Karimganj AGRI (dist Karimganj) 11, Haflong (dist Dima Hasao) 9, Umrangso (dist Dima Hasao) 9, Chandubi (dist Kamrup R) 8.
- ❖ **Rajalaseema:** Jammalamadugu (dist Ysr District) 12, Simhadripuram (dist Ysr District) 11, Amadagur (dist Sri Sathyasai District) 10, Pagidyala (dist Nandyal) 9, Pattikanda (dist Kurnool) 9, Kondapuram (dist Ysr District) 9, Kadiri (dist Sri Sathyasai District) 9, Alur (dist Kurnool) 8, Rolla (dist Sri Sathyasai District) 7, Nandikotkur (dist Nandyal) 7, Brahmasamudram (dist Anantapuramu) 7, Jupadu Bungalow (dist Nandyal) 7, Rudravaram (dist Nandyal) 7, Pamidi (dist Anantapuramu) 7, Aspari (dist Kurnool) 7,
- ❖ **Himachal Pradesh:** Baijnath (dist Kangra) 11, Mandi (dist Mandi) 10, Nagrota Surian (dist Kangra) 8, Naina Davi (dist Bilaspur) 7,
- ❖ **Delhi:** Delhi University Obs (dist North Delhi) 10, Delhi Ridge (dist North Delhi) 7,
- ❖ **East Madhya Pradesh:** Rampur (dist Sidhi) 10, Pandhurna (dist Chindwara) 9, Sidhi (gopadbanas) (dist Sidhi) 8, Nagode (dist Satna) 7, Umari-aws (dist Umari) 7,
- ❖ **Haryana:** Bawal (dist Rewari) 9, Kalanaur (dist Rohtak) 8, Pataudi (dist Gurgaon) 7, Rewari (dist Rewari) 7,
- ❖ **Marathwada:** Gangapur (dist Chh. Sambhajinagar) 9, Beed (dist Beed) 7,
- ❖ **Bihar:** Tajpur (dist Samastipur) 9, Pusa (dist Samastipur) 9, Kashichak (dist Nawada) 8, Sarairanjan (dist Samastipur) 7, Morwa/tajpur (dist Samastipur) 7,
- ❖ **Tamil Nadu:** Singampunari (dist Sivagangai) 9, Uppar Dam (dist Tiruppur), Peraiyur (dist Madurai) Karaiyur (dist Pudukkottai), Tiruppur IB PWD (dist Tiruppur) 7 each,
- ❖ **North Interior Karnataka:** Gangavathi (dist Koppal) 9, Kurdi (dist Raichur) 9, Gangavathi Arg (dist Koppal) 7, Manvi (dist Raichur) 7,
- ❖ **South Interior Karnataka:** Bellur (dist Mandya) 9, Kudathini (dist Ballari) 7
- ❖ **Coastal Andhra Pradesh:** Velairpad (dist Eluru) 8, Polavaram (dist Eluru) 7,
- ❖ **Kerala:** Enamakal (dist Thrissur) 8, Kanjirapuzha (dist Palakkad) 7,
- ❖ **Punjab:** Madhopur (dist Pathankot) 8,
- ❖ **Madhya Maharashtra:** Rahuri (dist Ahmednagar) 8, Mohol (dist Sholapur) 7,

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

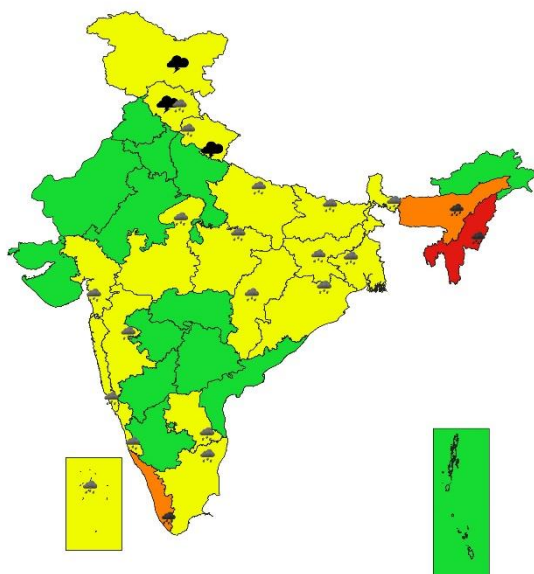
- As the lead period increases forecast accuracy decreases.



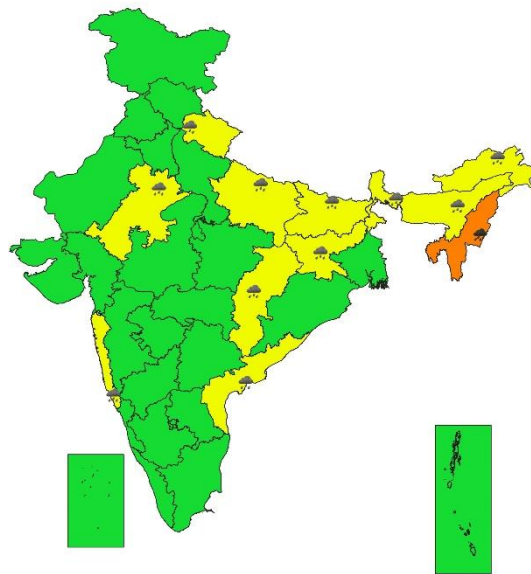
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
20-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
21-08-2024

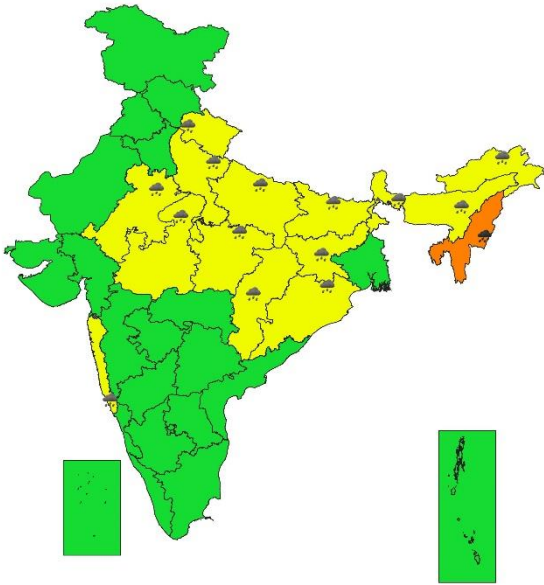


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
22-08-2024

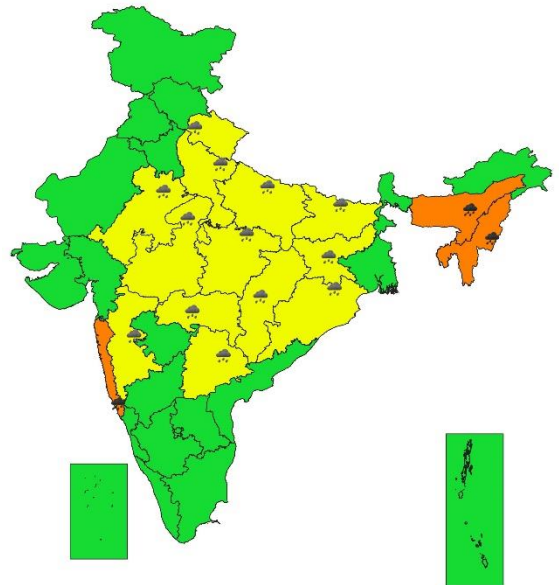




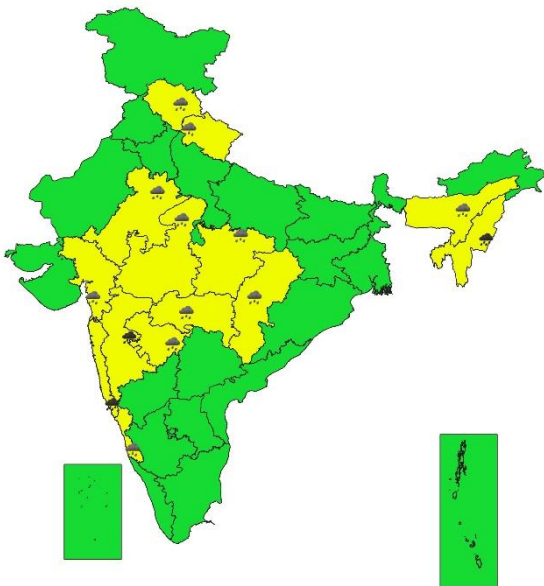
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
23-08-2024



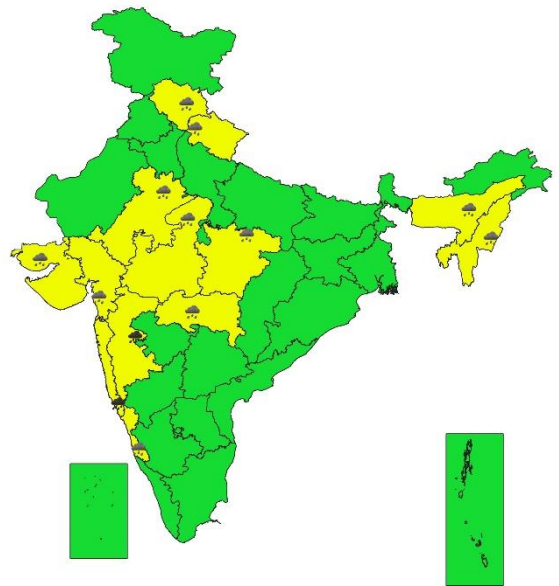
SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
24-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 6
25-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 7
26-08-2024



- 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 extremely heavy rainfall very likely over** Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 20th August.
- ✓ **Very heavy rainfall** at isolated over Uttarakhand on 20th; Kerala & Mahe on 20th & 21st ; Assam & Meghalaya on 21st & 24th; Nagaland, Manipur, Mizoram & Tripura on 21st – 25th ;Konkan & Goa during 24th – 26th; Madhya Maharashtra on 25th & 26th August.
- ✓ **Low to Moderate flash flood risk** likely over few watersheds & neighbourhoods of Uttarakhand, Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya on 19th & 20th 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, Tripura, Mizoram, Jammu division, Himachal Pradesh, Uttarakhand, Haryana, East Rajasthan, West Madhya Pradesh, Odisha, Jharkhand, Bihar, Tamil Nadu, Kerala, Interior Karnataka, Andhra Pradesh and Telangana.
- Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Sub Himalayan West Bengal, East Uttar Pradesh, Chhatisgarh, Konkan & Goa.
- Postpone sowing of cowpea in Meghalaya.
- ☐ Drain out excess water from rice field to prevent submergence of transplanted seedlings in Tripura and Mizoram.
- ☐ Provide propping in banana and staking to vegetables to prevent lodging of plants in Kerala.

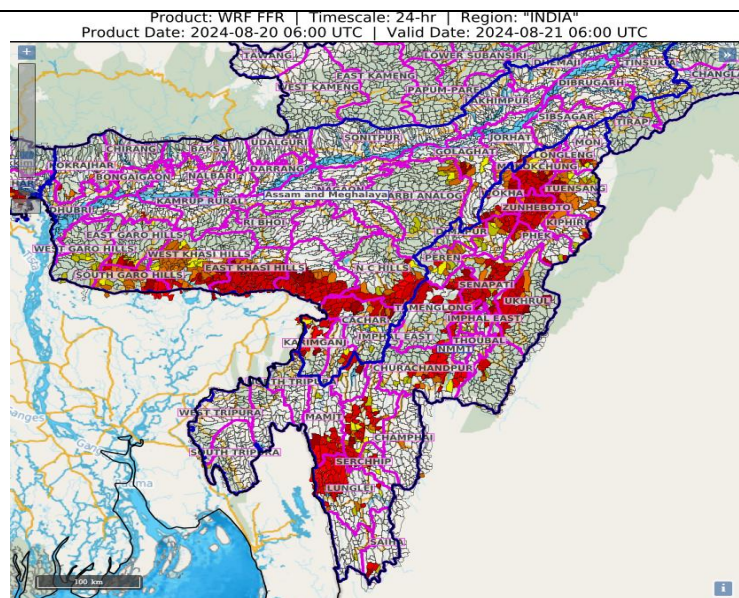
Flash Flood Guidance:

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 21-08-2024 :

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

Assam & Meghalaya - Cachar, Golaghat, Karbi Analog, N.C Hills, East Garo Hills, East Khasi Hills, South Garo Hills, West Khasi Hills and Jaintia Hills districts.
NMMT - Bishnupur, Chandel, Churachandpur, Senapati, Tamenglong, Ukhul, Aizawl, Kolasib, Lunglei, Mamit, Saiha, Serchhip, Kiphire, Kohima, Longleng, Mokokchung, Mon, Peren, Phek, Tuensang and Wokha districts.

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.

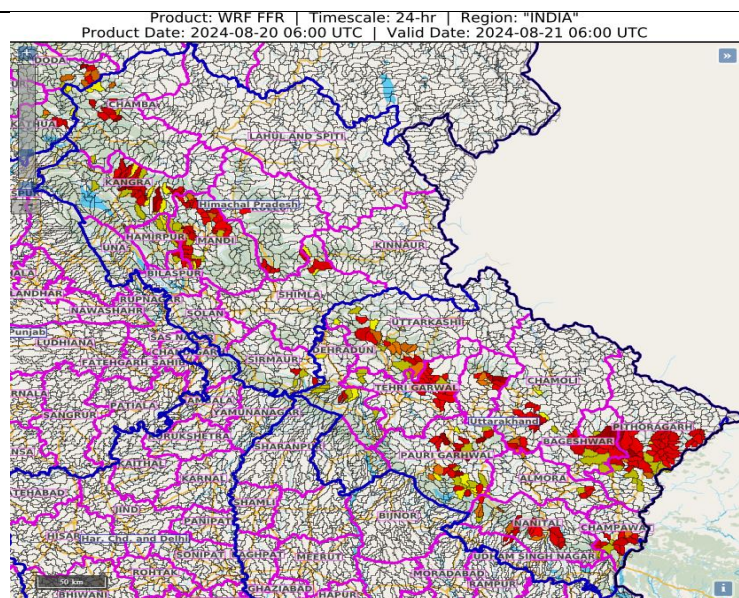


24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 21-08-2024 :

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

Himachal Pradesh - Bilaspur, Chamba, Hamirpur, Kangra, Kullu, Mandi, Shimla and Sirmour districts.
Uttarakhand - Almora, Bageshwar, Chamoli, Champawat, Dehradun, Nanital, Pauri Garhwal, Pithoragarh, Rudraprayag, Tehri Garwal and Uttarkashi districts.

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.

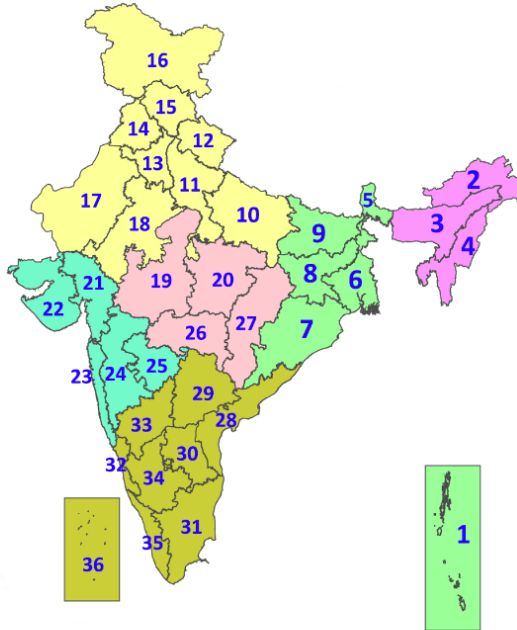


Legends & abbreviations:

- ❖ **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.

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)

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