

Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 13th August, 2024

Time of Issue: 1335 hours IST

Subject: (i) Isolated heavy rainfall likely to continue over Western Himalayan Region, Uttar Pradesh & East India during next 7 days and over Haryana, Rajasthan & northeast India during next 4-5 days.

(ii) isolated heavy to very heavy rainfall very likely over Kerala, Tamil Nadu, South Interior Karnataka & Rayalaseema during next 5 days.

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

Heavy to very heavy rainfall at isolated places over East Rajasthan, East Uttar Pradesh Assam & Meghalaya and Kerala; **Heavy rainfall** at isolated places over Arunachal Pradesh, Himachal Pradesh, Rayalaseema, South Interior Karnataka, Jharkhand, Gujarat Region, West Rajasthan, Nagaland, Manipur, Mizoram & Tripura, West Madhya Pradesh, Uttarakhand, Gangetic West Bengal and Tamil Nadu.

Weather Systems

- ✓ The **Monsoon trough** is near its normal position at mean sea level. It is likely to oscillate near its normal position during most days of the week.
- ✓ A **cyclonic circulation** lies over northeast Rajasthan & neighbourhood extending upto middle tropospheric levels and a trough runs from this cyclonic circulation to Bangladesh in lower tropospheric levels. It is likely to persist during next 2 days.
- ✓ A **cyclonic circulation** lies over southeast Pakistan & adjoining Rajasthan at lower tropospheric levels.
- ✓ Another **cyclonic circulation** over south Bangladesh & neighbourhood extending upto middle tropospheric levels.
- ✓ Another **trough** runs from Rayalaseema to Comorin area in lower tropospheric levels.

Forecast & Warnings: (upto 7 days):

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

❖ **Northwest India**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Himachal Pradesh & Uttarakhand; scattered to fairly widespread rainfall over Jammu-Kashmir, Haryana-Chandigarh-Delhi, Uttar Pradesh & Rajasthan during the week.
- ✓ Isolated **heavy rainfall** very likely over Himachal Pradesh & Uttar Pradesh during 13th-19th; Punjab on 14th; Uttarakhand during 14th-19th; West Rajasthan & Haryana-Chandigarh during 13th-16th; East Rajasthan during 15th-17th and Jammu division during 15th-19th August.
- ✓ Isolated **very heavy rainfall** also very likely over Uttarakhand on 13th; East Rajasthan on 13th & 14th August.

❖ West & Central India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Madhya Pradesh, Chhattisgarh, Konkan & Goa & Gujarat Region; scattered to fairly widespread rainfall over Vidarbha, Saurashtra & Kutch; isolated to scattered rainfall over Madhya Maharashtra & Marathwada during the week.
- ✓ Isolated **Heavy rainfall** very likely over Saurashtra & Kutch on 13th; Madhya Pradesh & Gujarat Region on 13th & 14th; Chhattisgarh during 13th – 16th August.

❖ East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over east India and scattered to fairly widespread rainfall over northeast during the week.
- ✓ Isolated **heavy rainfall** very likely over Arunachal Pradesh during 13th–15th; Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during 13th–16th; Bihar & Sub-Himalayan West Bengal & Sikkim during 13th–19th; Gangetic West Bengal on 14th & 17th; Jharkhand on 13th-14th & 17th-18th; Odisha during 13th–18th August.

❖ South Peninsular India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Kerala & Mahe, Lakshadweep & South Interior Karnataka; scattered to fairly widespread rainfall over Tamil Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and Coastal & North Interior Karnataka during the week.
- ✓ Isolated **heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam on 13th; South Interior Karnataka on 13th, 16th & 17th; Rayalaseema during 13th-17th; Tamil Nadu, Puducherry & Karaikal during 14th-17th; Kerala & Mahe on 16th & 17th; Lakshadweep on 14th August.
- ✓ Isolated **very heavy rainfall** also very likely over Tamil Nadu, Puducherry & Karaikal on 13th; Kerala & Mahe during 13th – 15th; South Interior Karnataka on 14th & 15th 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 13.08.2024 (in cm):

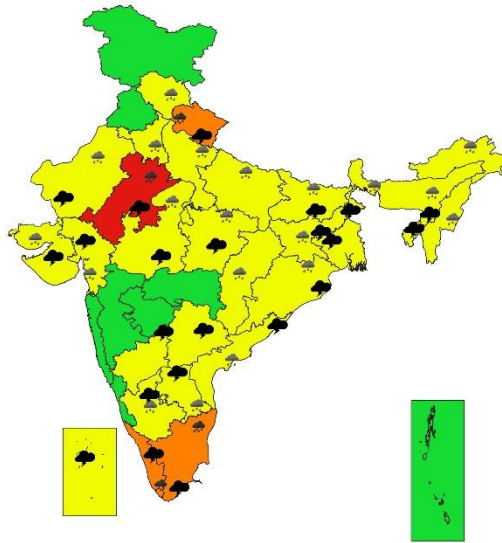
- ❖ **East Rajasthan:** Niwai (dist Tonk) 16, Mahwa (dist Dausa) 16, Nainwa (dist Bundi) 16, Sanganer Tehsil (dist Jaipur) 15, Malakhera (dist Alwar) 9, Mandawar (dist Alwar) 9, Jaipur (dist Jaipur) 9, Todabhim (dist Karauli) 8, Chaksu (dist Jaipur) 7, Uniara / Aligarh (dist Tonk) 7, Sawaimadhampur Tesil (dist Sawai Madhopur) 7, Tonk Vanasthali (dist Tonk) 7,
- ❖ **East Uttar Pradesh:** Bhanpur (dist Basti) 16,
- ❖ **Assam & Meghalaya:** Hazuah (dist Barpeta) 14, Majbat (dist Udalguri) 10, Melabazar/matunga (dist Nalbari) 8, DRF (dist Baksa) 8, Goibargaon (dist Baksa) 7,
- ❖ **Kerala:** Ayyankunnu (dist Cannur) 12, Venkurinji (dist Pathanamthitta) 10, Ranni (dist Pathanamthitta) 9, Punalur (dist Kollam) 8, Athirappalli (dist Thrissur) 8,
- ❖ **Arunachal Pradesh:** Bhalukpong (dist West Kameng) 10,
- ❖ **Himachal Pradesh:** Naina Davi (dist Bilaspur) 10,
- ❖ **Rayalaseema:** Tanakal (dist Sri Sathyasai) 9, Punganur (dist Chittoor) 9, Amadagur (dist Sri Sathyasai) 9, Kadiri (dist Sri Sathyasai) 8, Madanapalle (dist Annamayya) 8,
- ❖ **South Interior Karnataka:** Rayalpadu (dist Kolar) 9,
- ❖ **Jharkhand:** Chandrapura (dist Bokaro) 9,
- ❖ **Gujarat Region:** Navsari (dist Navsari) 8, Anand (dist Anand) 7, Palsana (dist Surat) 7
- ❖ **West Rajasthan:** Dungargarh (dist Bikaner) 8,
- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Agartala (dist West Tripura) 8, Met Agartala (dist West Tripura) 8,
- ❖ **West Madhya Pradesh:** Kalapipal (dist Shajapur) 7,
- ❖ **Uttarakhand:** Loharkhet (Bageshwar) 7,
- ❖ **Gangetic West Bengal:** Luchipur (dist Paschim Bardhaman) 7, Burnpur (dist Paschim Bardhaman) 7
- ❖ **Tamil Nadu:** Palani (dist Dindigul), Kodaikannal Boat Club (dist Dindigul), Katpadi (dist Vellore) 7each,

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

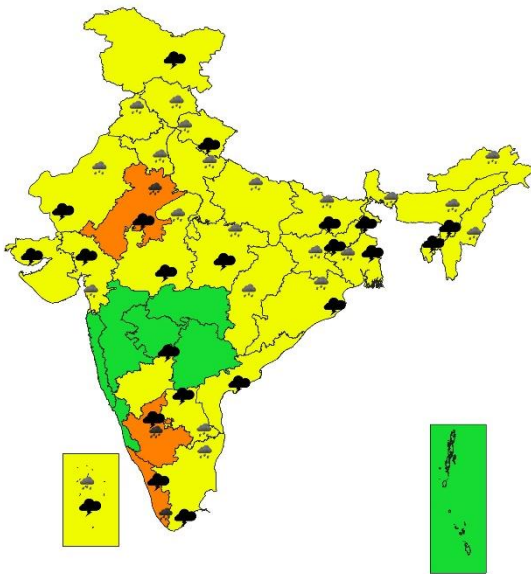
- As the lead period increases forecast accuracy decreases.



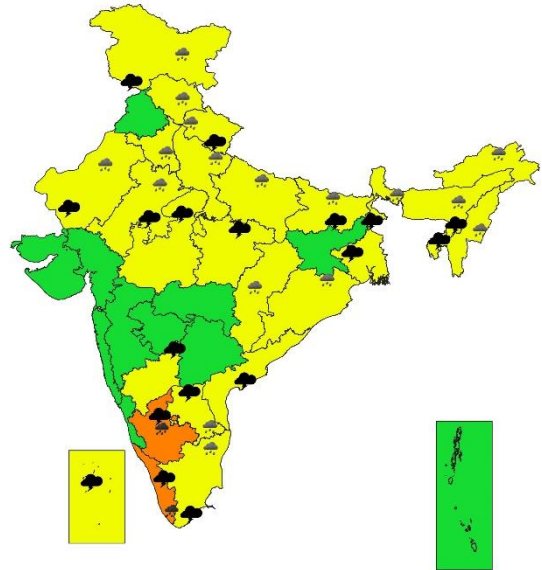
SUBDIVISIONWISE WEATHER WARNING FOR DAY 1
13-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 2
14-08-2024

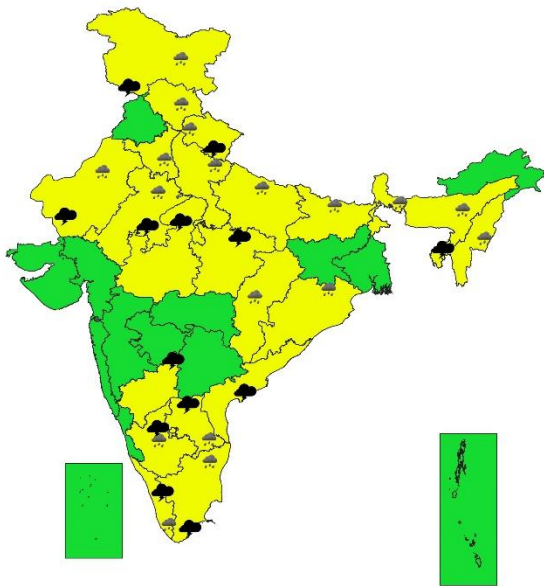


SUBDIVISIONWISE WEATHER WARNING FOR DAY 3
15-08-2024

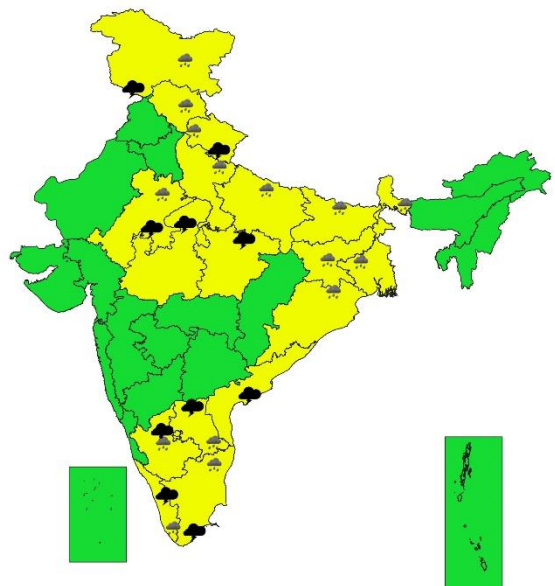




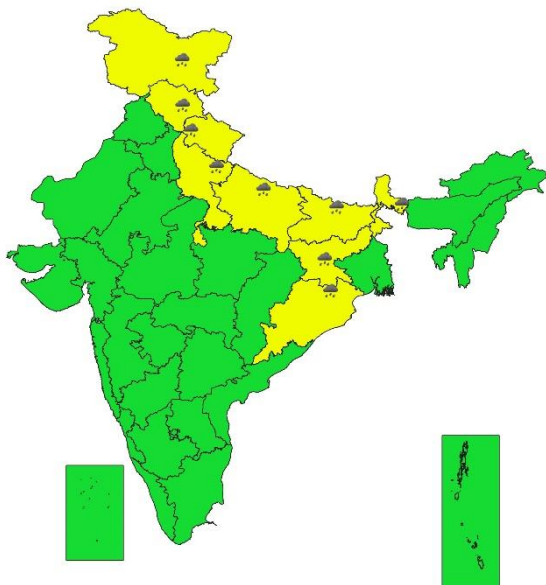
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
16-08-2024



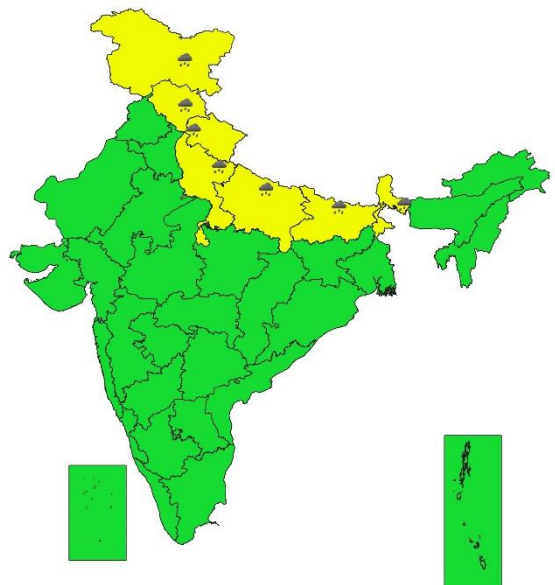
SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
17-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 6
18-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 7
19-08-2024



- 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 places over Uttarakhand and Tamil Nadu, Puducherry & Karaikal on 13th; East Rajasthan on 13th & 14th; Kerala & Mahe during 13th–15th; South Interior Karnataka on 14th & 15th August.
- **Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Uttarakhand, East Rajasthan and West Madhya Pradesh Met Sub-divisions on 13th & 14th 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

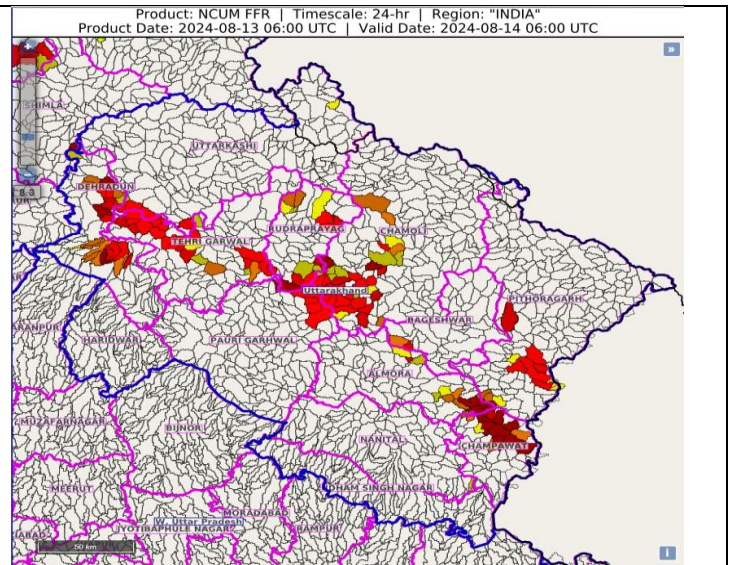
- Drain out excess water from field crops and horticultural crops in Arunachal Pradesh,
- Assam & Meghalaya, Bihar, Himachal Pradesh, Uttarakhand, East Rajasthan, West
- Madhya Pradesh, Tamil Nadu, Kerala and South Interior Karnataka.
- Make provision for draining out excess water from standing crop fields and fruit orchards
- to avoid water stagnation in Haryana, Uttar Pradesh and Coastal Andhra Pradesh.
- Provide mechanical support to horticultural crops & staking to vegetables.
- In Arunachal Pradesh, make proper arrangements for runoff management in Jhum rice
- fields by putting obstacles across the slopes.
- In Assam, postpone sowing of sesame, green gram and black gram.

Flash Flood Guidance:**24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 14-08-2024:**

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

Uttarakhand - Almora, Chamoli, Champawat, Dehradun, Pauri Garhwal, Pithoragarh, Rudraprayag and Tehri Garwal 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.

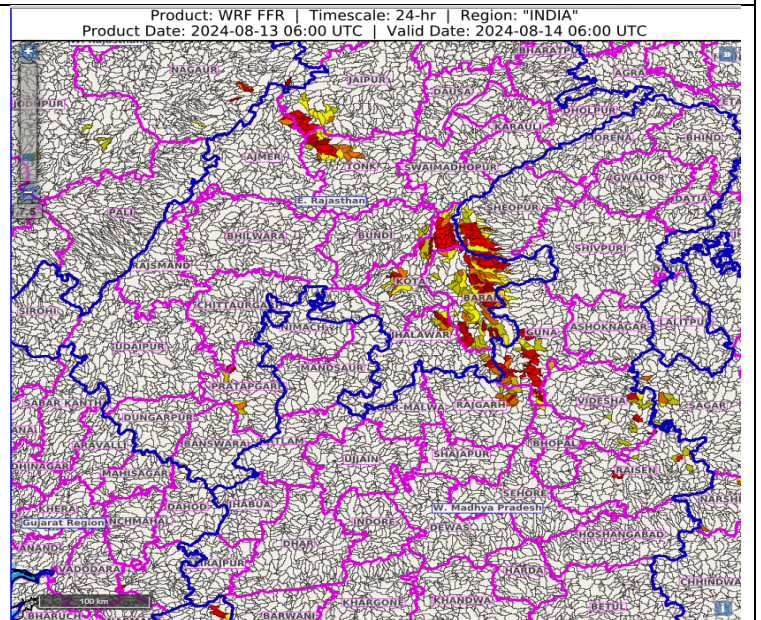
**24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 14-08-2024:**

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

East Rajasthan - Ajmer, Baran, Jaipur, Jhalawar, Kota and Tonk districts.

West Madhya Pradesh - Guna, Rajgarh, Sheopur and Vidisha 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.

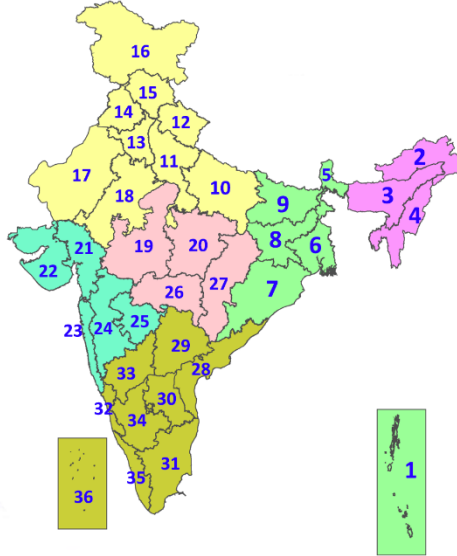


Legends & abbreviations:

- ❖ **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.
 - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

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 *	<p>Heavy: 64.5 to 115.5 mm/cm *</p> <p>Very Heavy: 115.6 to 204.4 mm/cm *</p> <p>Extremely Heavy: > 204.4 mm/cm *</p>
Heat Wave	<p>When maximum temperature of a station reaches $\geq 40^\circ\text{C}$ for plains and $\geq 30^\circ\text{C}$ for hilly regions</p> <p>(a) Based on Departure from normal</p> <p>Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C.</p> <p>Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$</p> <p>(b). Based on Actual maximum temperature</p> <p>Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.</p> <p>Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$</p> <p>(c). Criteria for heat wave for coastal stations</p> <p>When maximum temperature departure is $> 4.5^\circ\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^\circ\text{C}$</p>
Warm Night	<p>When maximum temperature remains 40°C</p> <p>Warm Night: When minimum temperature departure 4.5°C to 6.4°C.</p> <p>Severe Warm Night: When minimum temperature departure $> 6.4^\circ\text{C}$.</p>
Cold Wave	<p>When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions.</p> <p>(a). Based on departure</p> <p>Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$</p> <p>(b) Based on actual Minimum Temperature (for Plains only)</p> <p>Cold Wave : When Minimum Temperature is $\leq 4.0^\circ\text{C}$</p> <p>Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$</p> <p>(c) For Coastal Stations</p> <p>When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ & actual Minimum Temperature is $\leq 15^\circ\text{C}$</p>
Cold Day	<p>When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions</p> <p>Based on departure</p> <p>Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^\circ\text{C}$</p>
Fog	<p>Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$</p> <p>Moderate Fog: When the visibility between 500-200 metres</p> <p>Dense Fog: when the visibility between 50- 200 metres</p> <p>Very Dense Fog: when the visibility < 50 metres</p>
Thunderstorm	<p>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</p>
Dust/Sand Storm	<p>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</p>
Frost	<p>Ice deposits on ground</p> <p>Air temperature $\leq 4^\circ\text{C}$ (over Plains)</p>
Squall	<p>A strong wind that rises suddenly, lasts for atleast 1 minute.</p> <p>Moderate: Wind speed 52-61 kmph</p> <p>Severe: Wind speed 62-87 kmph</p> <p>Very Severe: Wind speed > 87 kmph</p>
Sea State	<p>Effect of various waves in the sea over specific area</p> <p>Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre</p> <p>High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre</p> <p>Phenomenal: Wind speed > 117 kmph (> 63 knots) & Wave height > 14 metre</p>
Cyclone	<p>Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)</p> <p>Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)</p> <p>Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)</p> <p>Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)</p> <p>Super Cyclone Strom: Wind speed > 220 kmph (> 119 knots)</p>

* 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)