



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 16th August, 2024

Time of Issue: 1330 hours IST

Subject: (i) Under the influence of Low Pressure Area over northwest Bay of Bengal & adjoining West Bengal and its likely intensification, enhanced rainfall likely over East & central India during next week.

(ii) Isolated heavy to very heavy rainfall very likely over Kerala, Tamil Nadu, Karnataka during next 2-3 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 East Rajasthan; **Heavy to very heavy rainfall** at isolated places over West Rajasthan, Haryana, West Madhya Pradesh & Odisha; **Heavy rainfall** at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, East Madhya Pradesh, Chhattisgarh, Vidarbha, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, and Telangana.

Weather Systems:

- ✓ A Low pressure area formed over Northwest Bay of Bengal and adjoining areas of West Bengal & Bangladesh. It is likely to move north-northwestwards during next 2 days and become a Well-marked Low pressure area over Bangladesh & adjoining Gangetic West Bengal. Thereafter, it is likely to move west-northwestwards across Gangetic West Bengal, Jharkhand & adjoining areas during subsequent 3 days.
- ✓ The **Monsoon trough** at mean sea level is likely to remain active and near its normal position during the week.
- ✓ A **cyclonic circulation** lies over northwest Rajasthan & neighbourhood extending upto middle tropospheric levels.
- ✓ A **cyclonic circulation** lies over South Interior Karnataka & neighbourhood extending upto middle tropospheric level. The trough now runs from North Interior Karnataka to Comorin area across the cyclonic circulation in lower tropospheric levels.

Forecast & Warnings (upto 7 days):

❖ **Northwest India**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Himachal Pradesh & Uttarakhand; scattered to fairly widespread rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-

Muzaffarabad, Uttar Pradesh, East Rajasthan; isolated to scattered rainfall over Punjab, Haryana-Chandigarh-Delhi, West Rajasthan during the week.

- ✓ Isolated **heavy rainfall** very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 16th, 19th & 20th; Himachal Pradesh during 16th -20th; Uttarakhand during 17th -20th; Haryana-Chandigarh-Delhi on 20th; West Uttar Pradesh during 18th -22nd; East Uttar Pradesh 17th -22nd; West Rajasthan on 16th & 17th; East Rajasthan on 16th August.
- ✓ Isolated **Extremely heavy** rainfall also likely over West Rajasthan on 16th August.

❖ West & Central India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Madhya Pradesh, Vidarbha, Konkan & Goa, Chhattisgarh; scattered to fairly widespread rainfall over Gujarat Region, Marathwada; isolated to scattered rainfall over Madhya Maharashtra and Saurashtra & Kutch during the week.
- ✓ Isolated **Heavy rainfall** very likely over Madhya Pradesh during 16th -22nd; Vidarbha during 16th -20th; Chhattisgarh during 16th -21st; Konkan & Goa during 18th -21st; Madhya Maharashtra on 19th & 20th; Gujarat Region on 16th; Marathwada on 16th August.
- ✓ Isolated **very heavy rainfall** also very likely over Chhattisgarh on 16th & 17th 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 Sub-Himalayan West Bengal & Sikkim during 20th -22nd; Gangetic West Bengal during 16th-20th; Bihar during 18th -20th; Jharkhand & Odisha during 16th - 20th; Arunachal Pradesh on 22nd; Assam & Meghalaya on 16th, 17th & during 20th -22nd; Nagaland, Manipur, Mizoram & Tripura during 16th -22nd August.
- ✓ Isolated **very heavy rainfall** also very likely over Gangetic West Bengal during 16th-19th; Jharkhand on 18th & 19th; Odisha on 17th; Nagaland, Manipur, Mizoram & Tripura on 16th & 22nd August.
- ✓ Isolated **Extremely heavy** rainfall also likely over Odisha on 16th 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, Rayalaseema, Interior Karnataka during the week.
- ✓ Isolated **heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal during 16th - 18th; Kerala & Mahe on 16th & 17th; Lakshadweep on 16th -20th; Rayalaseema & Telangana on 16th; Coastal Karnataka on 16th, 19th & 20th; North Interior Karnataka on 16th, 17th & 20th; South Interior Karnataka on 16th & 17th August.
- ✓ Isolated **very heavy rainfall** also very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe on 16th & 17th; South Interior Karnataka on 16th August.

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

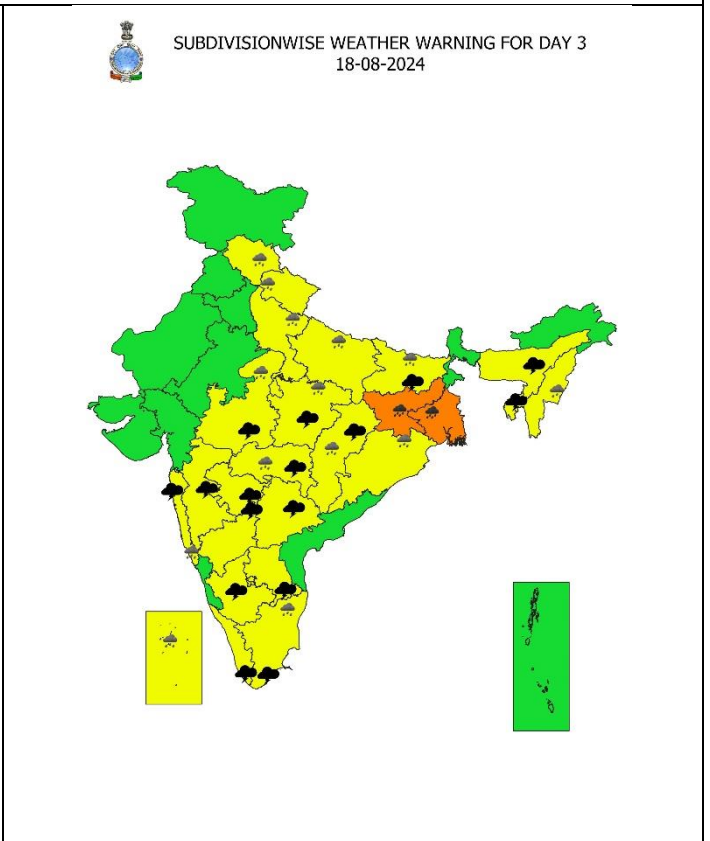
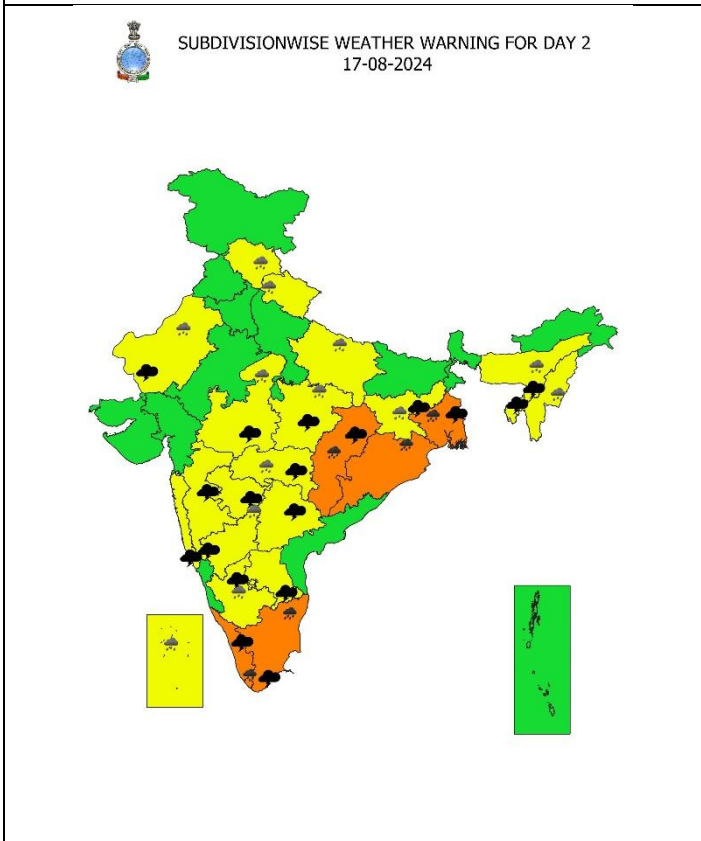
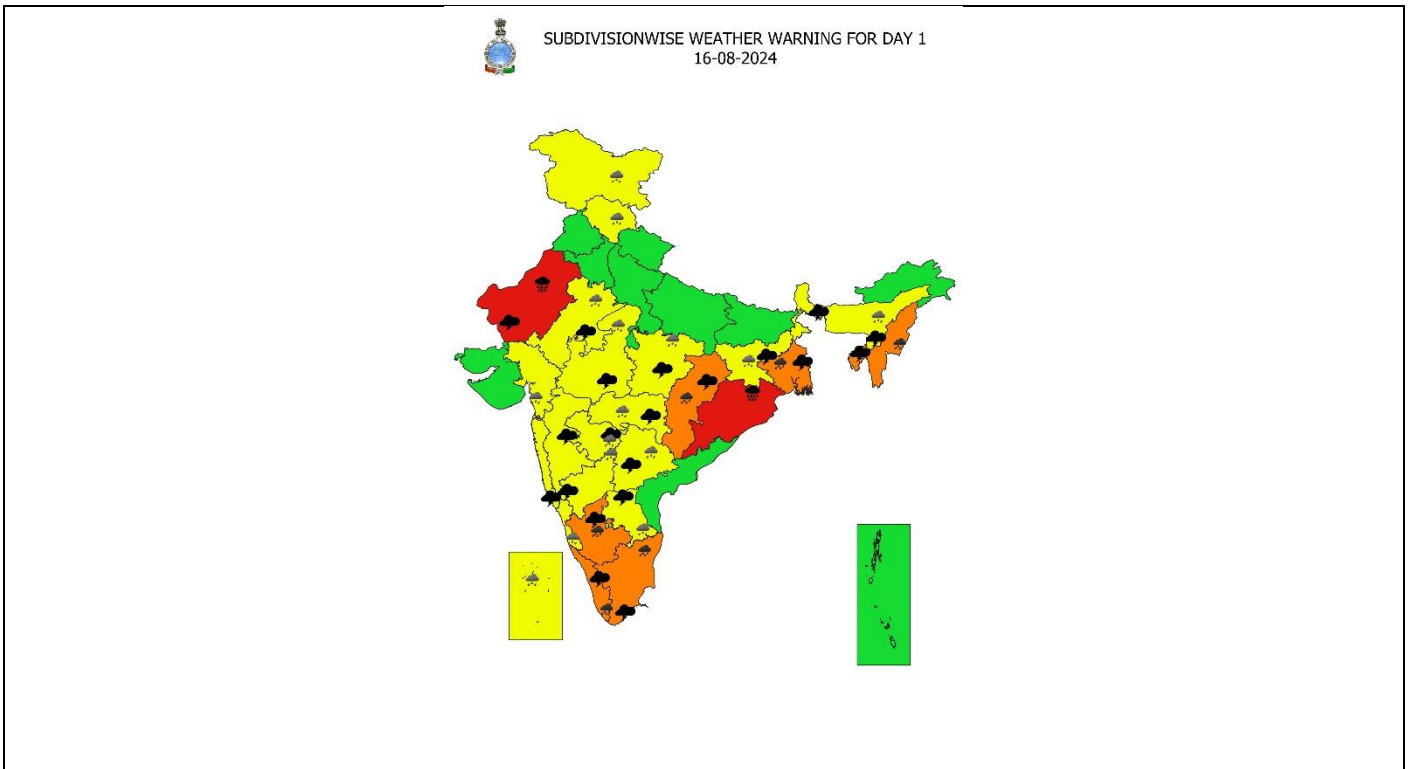
Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 16.08.2024 (in cm):

- ❖ **East Rajasthan:** Hindoli (dist Bundi) 22, Mangliawas Sr (dist Ajmer) 21, Tatgarh Sr (dist Ajmer) 17, Atru Sr (dist Baran) 16, Pisagan Sr (dist Ajmer) 15, Mahwa (dist Dausa) 12, Bamanwas Sr (dist Sawai Madhopur) 12, Bundi (dist Bundi) 11, Nayanagar/beawar (dist Ajmer) 11, Chaksu (dist Jaipur) 11, Sangod (dist Kota) 10, Bhilwara Tehsil Sr (dist Bhilwara) 10, Bhilwara (dist Bhilwara) 10, Baran (dist Baran) 9, Degod Sr (dist Kota) 9, Kishanganj (dist Baran) 8, Sanganer Tehsil Sr (dist Jaipur) 8, Patan (dist Bundi) 8, Tonk Tehsil Sr (dist Tonk) 8, Sikar (dist Sikar) 7, Anta Sr (dist Baran) 7, Kotkasim Sr (dist Alwar) 7, Bahadurpur Sr (dist Alwar) 7, Govindgarh Sr (dist Alwar) 7, Shahabad (dist Baran) 7,
- ❖ **West Rajasthan:** Kolayat Magra (dist Bikaner) 17, Jaitran (dist Pali) 15, Shergarh (dist Jodhpur) 12, Luni Sr (dist Jodhpur) 11, Bautu Sr (dist Barmer) 10, Lunkaransar (dist Bikaner) 9, Parbatsar (dist Nagaur) 9, Bhopalgarh Sr (dist Jodhpur) 9, Sojat (dist Pali) 8, Makrana Sr (dist Nagaur) 8, Osian Sr (dist Jodhpur) 8, Nokha (dist Bikaner) 7, Raipur Sr (dist Pali) 7,
- ❖ **Odisha:** Jenapur (Jajpur) 15, Belaguntha (Ganjam) 13, Gudari(Rayagada) 13, Telkoi(Keonjargarh) 13, Bhuban (Dhenkanal) 12, Kantapada (Cuttack) 10, Kankadahad (Dhenkanal) 9, Krishnaprasad (Puri) 9, Pallahara (Angul) 9, Jajpur (Jajpur) 9, Sukinda (Jajpur)8, Tihidi (Bhadrak) 8, Chandikhol (Jajpur) 7, Bhadrak (Bhadrak) 7, Jagatsinghpur (Jagatsinghpur) 7,
- ❖ **West Madhya Pradesh:** Guna-aws (dist Guna) 12, Raghogarh (dist Guna) 11, Karhal (dist Sheopur) 11, Kolaras (dist Shivpuri) 10, Badarwas (dist Shivpuri) 9, Ashoknagar-aws (dist Ashoknagar) 7, Pachmarhi (dist Narmadapuram) 7,
- ❖ **Haryana-Chandigarh-Delhi:** Narnound Rev (dist Hisar) 12,
- ❖ **Jammu-Kashmir:** Kupwara Kvk Aws (dist Kupwara) 10,
- ❖ **Chhattisgarh:** Durgkondal (dist Kanker) 9, Pratappur (dist Surajpur) 7, Latori (dist Surajpur) 7, Lormi (dist Mungeli) 7,
- ❖ **Vidarbha:** Nagpur (aws) (dist Nagpur) 9,
- ❖ **Nagaland, Manipur, Mizoram & Tripura:** Kanchanpur (dist North Tripura) 9, Kvk Dhalai (dist Dhalai) 9, Lunglei (dist Lunglei) 8, Kamalpur (dist Dhalai) 7, Aizwal (dist Aizawl) 7,
- ❖ **Jharkhand:** Torpa (dist Khunti) 8,
- ❖ **Assam & Meghalaya:** Barpeta/sarbhog_aws (dist Barpeta) 7,
- ❖ **Telangana:** Achampeta 8, Saroornagar 7.
- ❖ **East Madhya Pradesh:** Chand (dist Chindwara) 7,

Annexure II

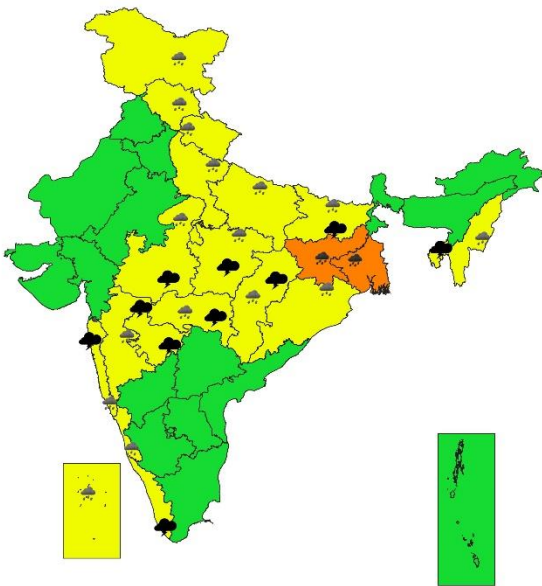
7 Days Rainfall Forecast								
S. No.	Subdivision	16-Aug	17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	SCT	FWS	FWS	FWS	FWS	FWS	FWS
2	ARUNACHAL PRADESH	SCT	SCT	SCT	SCT	SCT	FWS	FWS
3	ASSAM & MEGHALAYA	FWS	SCT	SCT	SCT	SCT	FWS	FWS
4	NAGALAND,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

- As the lead period increases forecast accuracy decreases.

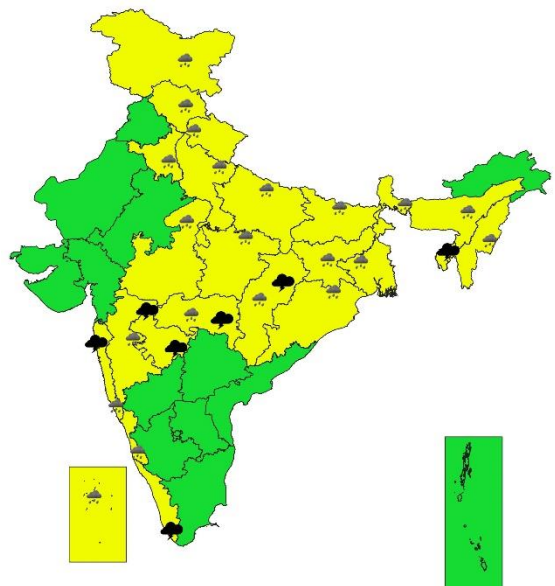




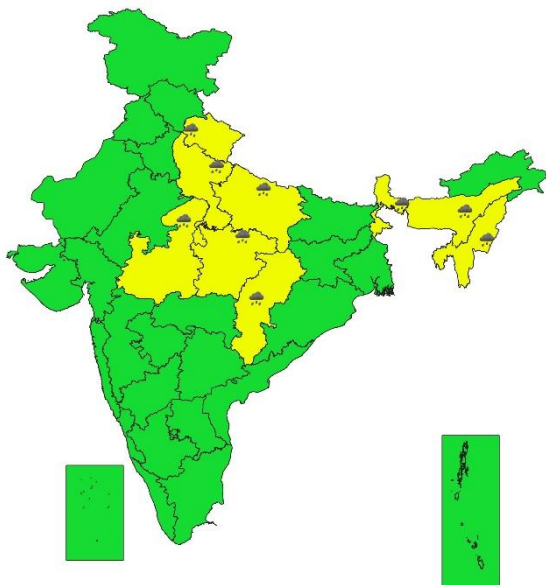
SUBDIVISIONWISE WEATHER WARNING FOR DAY 4
19-08-2024



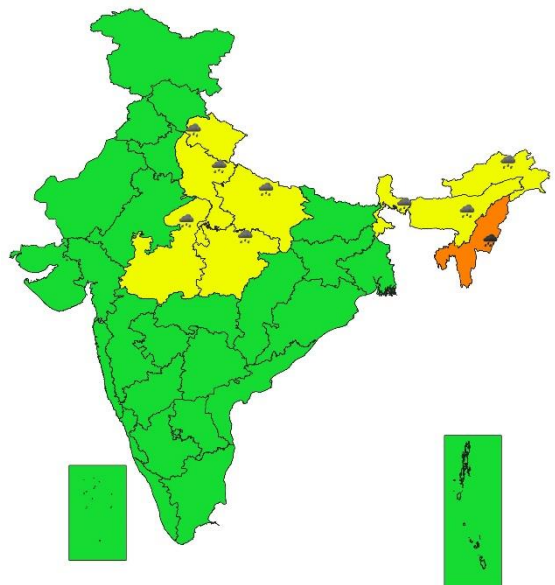
SUBDIVISIONWISE WEATHER WARNING FOR DAY 5
20-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 6
21-08-2024



SUBDIVISIONWISE WEATHER WARNING FOR DAY 7
22-08-2024



- 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

- **Extremely heavy rainfall** very likely at isolated places over West Rajasthan & Odisha on 16th August;
- **Very heavy rainfall** at isolated over Chhattisgarh, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe on 16th & 17th; Gangetic West Bengal during 16th -19th; Jharkhand on 18th & 19th; Odisha on 17th; Nagaland, Manipur, Mizoram & Tripura on 16th & 22nd; South Interior Karnataka on 16th August.
- **Moderate flash flood risk likely over few watersheds & neighbourhoods of Chhattisgarh, north Odisha & Jharkhand on 16th & 17th August; Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of West Rajasthan & Nagaland, Manipur, Mizoram & Tripura on 16th & 17th 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

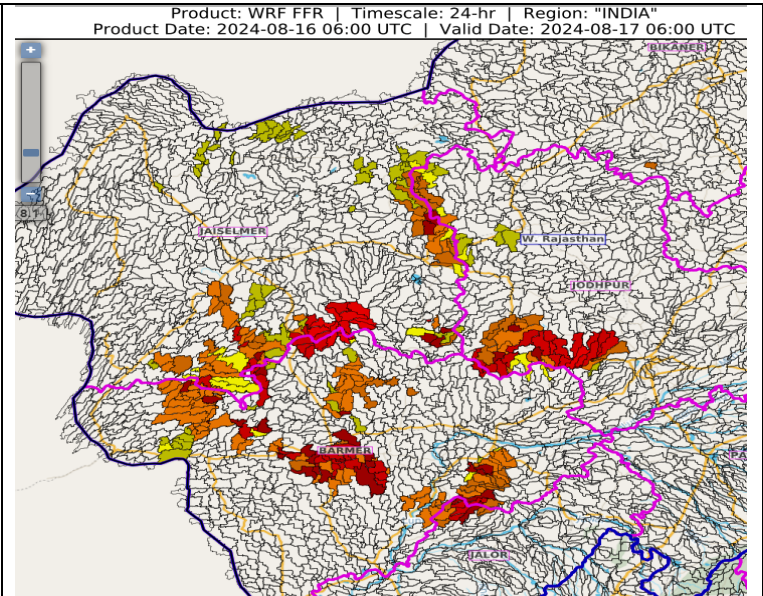
- Drain out excess water from field crops and horticultural crops in Jammu & Kashmir, Himachal Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Gangetic West Bengal, Odisha, Jharkhand, Tamil Nadu, Kerala, Lakshadweep, Karnataka and Telangana.
- In **Himachal Pradesh**, harvest the matured apples and 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 1130 IST of 17-08-2024:**

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

West Rajasthan - Barmer, Jaisalmer, Jalor and Jodhpur 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 17-08-2024:**

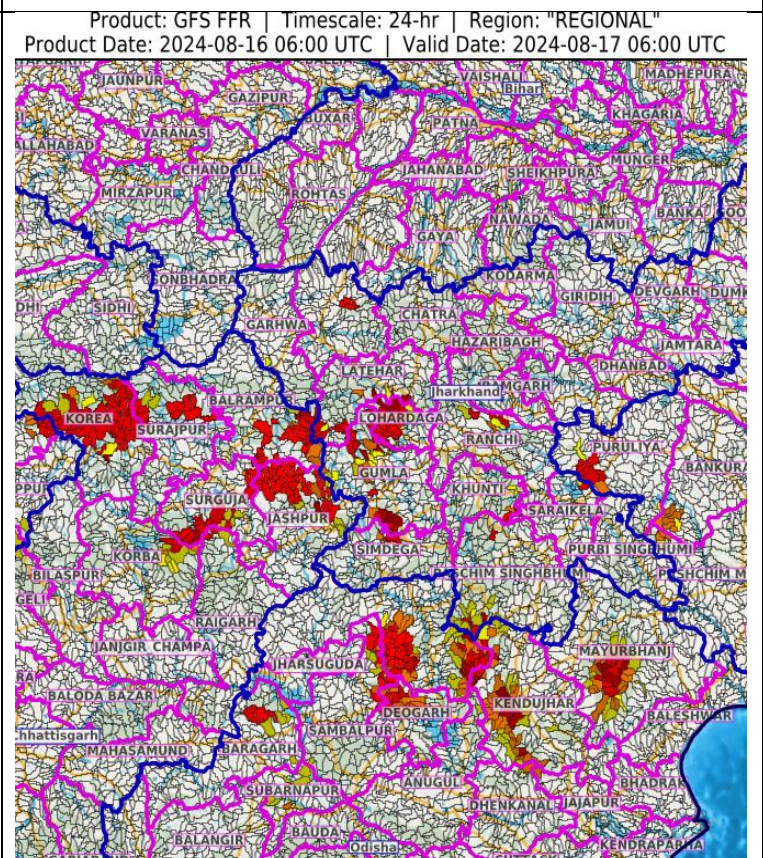
Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Chhattisgarh - Balarampur, Jashpur, Korea, Surajpur and Surguja districts.

North Odisha - Anugul, Baleswar, Baragarh, Deogarh, Jharsuguda, Kendujhar, Mayurbhanj, Sambalpur and Subarnapur districts.

Jharkhand - Gumla, Khunti, Latehar, Lohardaga, Palamu, Ranchi, Saraikela, Simdega and West Singhbhum 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.

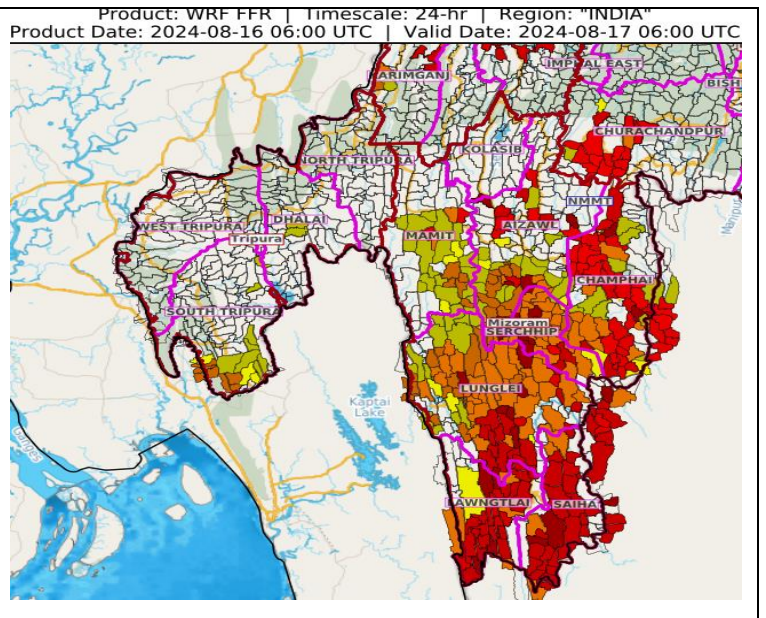


24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 17-08-2024 :

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

NMMT - Aizawl, Champhai, Lawngtlai, Lunglei, Mamit, Saiha and Serchhip 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.

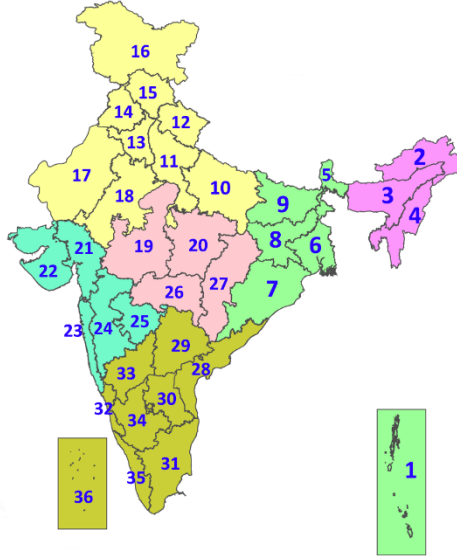


Legends & abbreviations:

- ❖ **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 | Hot Day |
| Thunder & Lightning | Hot & Humid | Strong Surface Winds |
| Hailstorm | | |
| Dust Raising 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
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