

Government of India Ministry of Earth Sciences India Meteorological Department



Press Release Date: 24th August, 2024 Time of Issue: 1430 hours IST

Subject: (i) Well-marked low-pressure area over southeast Uttar Pradesh and northeast MadhyaPradesh is expected to move westward, intensify into a depression over west MadhyaPradesh by 26th , and reach south Rajasthan and north Gujarat by 27 August.

(ii) Formation of fresh Low-Pressure area likely over north Bay of Bengal during next 48 hours

(ii) Very heavy to extremely heavy rainfall likely over Marathwada, Vidarbha, interior Karnataka on 24th, West Rajasthan, East Madhya Pradesh, Chhattisgarh on 25th, Gangetic West Bengal and Odisha during 24th-25th, Coastal Karnataka, West Madhya Pradesh, East Rajasthan, Mizoram and Tripura during 24th-26th, Gujarat state during 24th-28th August and Konkan & Goa, Madhya Maharashtra during 24th-27th August.

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 Konkan & Goa; **Heavy to very heavy rainfall** at isolated places over East Rajasthan, Gujarat Region, Chhattisgarh, Madhya Pradesh, Coastal Karnataka, Madhya Maharashtra, Jharkhand, Odisha; **Heavy rainfall** at isolated places over Haryana-Delhi, West Rajasthan, Saurashtra & Kutch, North Interior Karnataka, Telangana, Marathwada, Arunachal Pradesh.

Weather Systems:

- ✓ The low pressure area over northwest Jharkhand & neighbourhood moved nearly westwards, intensified and lay as well marked low pressure area over southeast Uttar Pradesh & adjoining northeast Madhya Pradesh at 0830 hrs IST of today, 24th August 2024. It is likely to continue to move nearly westwards, intensify into a depression over west Madhya Pradesh by 26th and reach south Rajasthan and adjoining north Gujarat by 27th August.
- ✓ The cyclonic circulation over north Bay of Bengal now lies in middle tropospheric level. Under its influence a low pressure area is likely to form over the same region during next 48 hours.
- ✓ The western end of the Monsoon trough lies south of its normal position while the eastern end is at the normal position. It is likely to continue to be so during next 2-3 days.
- ✓ The offshore trough has strengthened and now runs from south Gujarat to south Kerala coast.
- ✓ The low level westerly flow from the Arabian Sea along the northern parts of the west peninsular coast has strengthened since yesterday. It is likely to continue to be so during next 2-3 days.

Forecast & Warnings (upto 7 days):

Northwest India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Himachal Pradesh, Uttarakhand, East Rajasthan; isolated to scattered rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Uttar Pradesh Haryana-Chandigarh-Delhi, West Rajasthan during the week.
- ✓ Isolated **heavy rainfall** very likely over Himachal Pradesh on 24th; Uttarakhand on 24th & 28th; Punjab & Haryana-Chandigarh-Delhi on 27th & 28th; Uttar Pradesh on 24th & 25th; Rajasthan during 24th -26th August.
- Isolated very heavy rainfall also very likely over West Rajasthan on 25th; East Rajasthan on 24th & 26th August.
- ✓ Isolated **extremely heavy rainfall also very likely** over East Rajasthan on 25th August.

* West & Central India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over West & Central India during the week.
- ✓ Isolated Heavy rainfall very likely over Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch during 24th -29th; Marathwada on 24th & 25th; Vidarbha on 24th & 25th; Chhattisgarh on 24th; Gujarat Region during 24th -28th; Madhya Pradesh during 24th 26th August.
- ✓ Isolated very heavy rainfall also very likely over East Madhya Pradesh, Chhattisgarh, Marathwada & Vidarbha on 24th August.
- ✓ Isolated extremely heavy rainfall also very likely over West Madhya Pradesh on 24th & 25th; Madhya Maharashtra & Gujarat Region during 24th -26th; Saurashtra & Kutch during 24th -27th; West Madhya Pradesh on 25th 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 Andaman & Nicobar Islands on 27th; West Bengal & Sikkim on 26th; Bihar on 26th & 27th; Jharkhand during 24th -27th; Odisha on 26th Arunachal Pradesh on 24th, 28th, 29th & 30th August; Assam & Meghalaya, Mizoram & Tripura during all the 7 days of the week.
- Isolated very heavy rainfall also very likely over Gangetic West Bengal on 24th & 26th; Odisha on 24th; Assam & Meghalaya on 25th; Mizoram & Tripura on 24th, 26th & 27th August.
- ✓ Isolated **extremely heavy rainfall also very likely** over Tripura, Mizoram on 26th August.

* South Peninsular India:

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over Kerala & Mahe, Lakshadweep, Coastal Andhra Pradesh & Yanam, Coastal Karnataka, Interior Karnataka; isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, Rayalaseema & Telangana during the week.
- Isolated heavy rainfall very likely over Kerala & Mahe during 24th 30th; Coastal Andhra Pradesh & Yanam on 24th; Telangana on 24th & 25th; Coastal Karnataka during 27th -30th; North Interior Karnataka during 25th -30th; South Interior Karnataka on 25th ,29th & 30th August.
- ✓ Isolated very heavy rainfall also very likely over Coastal Karnataka during 24th -26th; North Interior Karnataka on 24th; South Interior Karnataka on 24th August.

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

Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 24.08.2024 (in cm):

- East Madhya Pradesh: Nowrozabad (dist Umaria) 16, Anuppur-aws (dist Anuppur) 16, Shahdole(sohagpur) (dist Shahdol) 15, Jaithari (dist Anuppur) 14, Chandia (dist Umaria) 14, Kotma (dist Anuppur) 14, Pali (dist Umaria) 13, Karkeli (dist Umaria) 11, Patan (dist Jabalpur) 9, Badwara (dist Katni) 9, Pawai (dist Panna) 8, Mada (dist Singrauli) 8, Sidhi (gopadbanas) (dist Sidhi) 8, Bilaspur (dist Umaria) 7, Umaria-aws (dist Umaria) 7, Deori (dist Sagar) 7, Budhar (dist Shahdol) 7, Bahri (dist Sidhi) 7, Harrai (dist Chindwara) 7, Devser (dist Singrauli) 7,
- West Madhya Pradesh: Indore (dist Indore) 15, Susner (dist Agar-malwa) 13, Meghnagar (dist Jhabua) 12, Barod (dist Agar-malwa) 10, Navibagh Aet (dist Bhopal) 9, Hatpiplaya (dist Dewas) 9, Tal (dist Ratlam) 8, New Harsud (dist Khandwa) 8, Satwas (dist Dewas) 8, Bairagarh Airport (dist Bhopal) 8, Bhimpur (dist Betul) 7, Khilchipur (dist Ratgarh) 7, Bhopal Arera Hills (dist Bhopal) 7, Burhanpur (dist Burhanpur) 7, Khandwa (dist Khandwa) 7, Udainagar (dist Dewas) 7, Vidisha (dist Vidisha) 7, Ichhawar (dist Sehore) 7,
- Jharkhand: Dhurki (dist Garhwa) 15, Baharagora (dist East Singbhum) 8, Sikatia (dist Deoghar) 8, Chakradharpur (dist West Singbhum) 7,
- West Rajasthan: Marwar Junction (dist Pali) 7, Desuri (dist Pali) 7,
- Haryana-Chandigarh-Delhi: Samalkha (dist Panipat) 11, Pitampura Aws (dist North West Delhi) 7,
- Chhattisgarh: Adbhar (dist Sakti) 19, Ramchandrapur (dist Balrampur) 11, Bamhnidih (dist Janjgir) 10, Sakti (dist Sakti) 10, Marwahi (dist Gaurela Pendra Marwahi) 10, Pasaan (dist Korba) 10, Pamgarh (dist Janjgir) 9, Malkharoda (dist Sakti) 9, Pratappur (dist Surajpur) 9, Odagi (dist Surajpur) 9, Raigarh (dist Raigarh) 8, Pali (dist Korba) 8, Bhaisma (dist Korba) 8, Poudi Uparora (dist Korba) 8, Baikunthpur (dist Koriya) 8, Champa (dist Janjgir) 8, Khadgava (dist Manendragarh Bharatpur) 7, Ambikapur (dist Surguja) 7, Chirmiri (dist Manendragarh Bharatpur) 7, Kotadol (dist Manendragarh Bharatpur) 7, Pondi Bachra (dist Koriya) 7, Saragaon (dist Janjgir) 7, Naya Baradwar (dist Sakti) 7, Bijapur (dist Bijapur) 7, Gangalur (dist Bijapur) 7, Pendra (dist Gaurela Pendra Marwahi) 7, Patna (dist Koriya) 7, Kapu (dist Raigarh) 7, Bhothiya (dist Sakti) 7, Usoor (dist Bijapur) 7, Lailunga (dist Raigarh) 7, Navagarh (dist Janjgir) 7, Rajpur (dist Balrampur) 7,
- Odisha: Bamra (dist Sambalpur) 17, Sundargarh (dist Sundargarh) 14, Tangarpali (dist Sundargarh) 13, Kutra (dist Sundargarh) 13, Lathikata (dist Sundargarh) 13, Rajgangpur (dist Sundargarh) 12, Bargaon (dist Sundargarh) 11, Panposh (dist Sundargarh) 8, Jamda (dist Mayurbhanj) 7, Sarasakana (dist Mayurbhanj) 7, Berhampur (dist Ganjam) 7,
- Marathwada: Sonpeth (dist Parbhani) 11, Jalkot (dist Latur) 8, Ambejogai / Mominabad (dist Beed) 8, Mukhed (dist Nanded) 7, Patoda (dist Beed) 7, Ashti (dist Beed) 7, Parli Vaijnath (dist Beed) 7,
- East Rajasthan: Bhungra Sr (dist Banswara) 13, Mounntabu Tehsil Sr (dist Sirohi) 12, Khushalgarh (dist Banswara) 11, Pratapgarh (dist Pratapgarh) 10, Kapasan Sr (dist Chittorgarh) 9, Dholpur Tehsil Sr (dist Dholpur) 9, Ramganjmandi Sr (dist Kota) 8, Mounnt Abu (dist Sirohi) 7, Jhadol Sr (dist Udaipur) 7, Dug (dist Jhalawar) 7, Pipalkhunt Sr (dist Pratapgarh) 7, Jaipur Aero (dist Jaipur) 7, Loharia (dist Banswara) 7, Manohar Thana (dist Jhalawar) 7,
- Madhya Maharashtra: Rahuri (dist Ahmednagar) 13, Igatpuri (dist Nashik) 11, Trimbakshwar (dist Nashik) 11, Gaganbawada (dist Kolhapur) 9, Bhadgaon (dist Jalgaon) 8, Mahabaleshwar- Imd Obsy (dist Satara) 8, Bhor (dist Pune) 8, Jamkhed (dist Ahmednagar) 8, Ahmednagar Imd Pt (dist Ahmednagar) 7, Chandgad (dist Kolhapur) 7, Ambegaon Ghodegaon (dist Pune) 7, Sangamner (dist Ahmednagar) 7, Pathardi (dist Ahmednagar) 7, Shahuwadi (dist Kolhapur) 7,
- Konkan & Goa: Mulde_Agri (dist Sindhudurg) 21, Awalegaon Arg (dist Sindhudurg) 20, Rameshwar_agri (dist Sindhudurg) 18, Kudal (dist Sindhudurg) 16, Devgad (dist Sindhudurg) 16, Ratnagiri Imd Obsy (dist Ratnagiri) 14, Canacona (dist South Goa) 12, Sawantwadi (dist Sindhudurg) 12, Harnai Imd Obsy (dist Ratnagiri) 12, Lanja (dist Ratnagiri) 11, Malvan (dist Sindhudurg) 11, Rajapur (dist Ratnagiri) 11, Shriwardhan (dist Raigad) 10, Dapoli_agri (dist Ratnagiri) 10, Kankavli (dist Sindhudurg) 10, Vengurla Arg (dist Sindhudurg) 9, Sangameshwar Devrukh (dist Ratnagiri) 9, Pawarwadi Arg (dist Ratnagiri) 9, Sanguem (dist South Goa) 8, Dabolim N.a.s.- Navy (dist South Goa) 8, Murud (dist Raigad) 8, Mapusa (dist North Goa) 7, Wakwali_agri (dist Ratnagiri) 7, Ponda (dist North Goa) 7, Mormugao Pmo Imd (dist South Goa) 7, Panjim Imd Obsy (dist North Goa) 7,
- Gujarat Region: Kapadvanj (dist Kheda) 16, Vijapur (dist Mehsana) 15, Vadgam (dist Banaskantha) 14, Dahegam (dist Gandhinagar) 13, Nadiad (dist Kheda) 10, Meghraj (dist Aravalli) 10, Mahudha (dist Kheda) 10, Talod (dist Sabarkantha) 10, Prantij (dist Sabarkantha) 9, Godhra (dist Panchmahal) 9, Amirgadh (dist Banaskantha) 9, Wanakbori (dist Mahisagar) 9, Bilodara_aws (dist Kheda) 8, Mansa (dist Gandhinagar) 8, Chhota Udepur (dist Chhota Udepur) 8, Bayad (dist Aravalli) 8, Kadana (dist Mahisagar) 8, Sagbara (dist Narmada) 8, Bayad_arg (dist Aravalli) 8, Nanipalson (dist Valsad) 8, Hansot (dist Bharuch) 8, Poshina (dist Sabarkantha) 7, Modasa (dist Aravalli) 7, Santrampur (dist Mahisagar) 7, Malpur (dist Aravalli) 7, Abad City (dist Ahmedabad) 7,
- Saurashtra & Kutch: Bagasra (dist Amreli) 10,
- Coastal Karnataka: Castle Rock (dist Uttara Kannada) 13, Manki (dist Uttara Kannada) 11,
- North Interior Karnataka: Londa (dist Belagavi) 7,
- Telangana: Mudhole (dist Nirmal) 9, Bejjur (dist Kumaram Bheem) 8, Bheemgal (dist Nizamabad) 7, Navipet (dist Nizamabad) 7, Mallapur (dist Jagtial) 7, Nirmal (dist Nirmal) 7,
- Arunachal Pradesh: Pasighat (dist East siang)11, Roing 8, Kamba 8,

| 24- | 25- | | 7 Days Rainfall Forecast | | | | | | | |
|---|------------|-------------------|--------------------------|-------------------|-------------------|-------------------|--|--|--|--|
| S. Subdivision Aug Day | Aug Day | 26- Aug Day | 27- Aug Day | 28- Aug Day | 29- Aug Day | 30- Aug Day | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| 1 ANDAMAN & NICOBAR ISLANDS SCT | FWS | FWS | WS | WS | WS | WS | | | | |
| 2 ARUNACHAL PRADESH FWS | FWS | SCT | SCT | FWS | FWS | FWS | | | | |
| 3 ASSAM & MEGHALAYA FWS | FWS | WS | FWS | FWS | FWS | FWS | | | | |
| 4 NAGALAND, MANIPUR, MIZORAM & TRIPURA WS | WS | FWS | FWS | FWS | FWS | FWS | | | | |
| 5 SUB-HIMALAYAN WEST BENGAL & SIKKIM SCT | FWS | FWS | FWS | FWS | FWS | SCT | | | | |
| 6 GANGETIC WEST BENGAL WS | WS | WS | FWS | FWS | SCT | SCT | | | | |
| 7 ODISHA WS | FWS | FWS | SCT | SCT | FWS | FWS | | | | |
| 8 JHARKHAND WS | WS | WS | FWS | FWS | FWS | SCT | | | | |
| 9 BIHAR SCT | SCT | FWS | FWS | FWS | SCT | SCT | | | | |
| 10EAST UTTAR PRADESHFWS | FWS | SCT | SCT | SCT | SCT | SCT | | | | |
| 11WEST UTTAR PRADESHSCT | FWS | FWS | SCT | SCT | SCT | SCT | | | | |
| 12 UTTARAKHAND FWS | FWS | FWS | FWS | FWS | FWS | FWS | | | | |
| 13 HARYANA CHANDIGARH & DELHI ISOL | ISOL | SCT | FWS | FWS | SCT | SCT | | | | |
| 14 PUNJAB SCT | SCT | SCT | SCT | SCT | SCT | SCT | | | | |
| 15 HIMACHAL PRADESH SCT | SCT | FWS | WS | FWS | FWS | SCT | | | | |
| 16 JAMMU & KASHMIR AND LADAKH ISOL | ISOL | SCT | FWS | SCT | SCT | SCT | | | | |
| 17 WEST RAJASTHAN SCT | FWS | SCT | SCT | ISOL | ISOL | ISOL | | | | |
| 18 EAST RAJASTHAN FWS | WS | WS | SCT | ISOL | ISOL | SCT | | | | |
| 19 WEST MADHYA PRADESH WS | WS | FWS | FWS | FWS | FWS | FWS | | | | |
| 20 EAST MADHYA PRADESH WS | WS | FWS | FWS | FWS | FWS | FWS | | | | |
| 21 GUJARAT REGION WS | WS | WS | WS | WS | WS | WS | | | | |
| 22 SAURASHTRA & KUTCH WS | WS | WS | WS | WS | WS | WS | | | | |
| 23 KONKAN & GOA WS | WS | WS | WS | WS | WS | WS | | | | |
| 24 MADHYA MAHARASHTRA WS | WS | WS | FWS | FWS | SCT | SCT | | | | |
| 25 MARATHAWADA WS | FWS | SCT | SCT | SCT | SCT | SCT | | | | |
| 26 VIDARBHA WS | WS | FWS | FWS | FWS | FWS | FWS | | | | |
| 27 CHHATTISGARH WS | FWS | SCT | FWS | FWS | FWS | FWS | | | | |
| 28 COASTAL ANDHRA PRADESH & YANAM FWS | SCT | SCT | SCT | SCT | FWS | FWS | | | | |
| 29 TELANGANA FWS | SCT | ISOL | ISOL | ISOL | SCT | SCT | | | | |
| 30 RAYALASEEMA SCT | ISOL | ISOL | ISOL | ISOL | SCT | SCT | | | | |
| 31 TAMILNADU PUDUCHERRY & KARAIKAL ISOL | ISOL | ISOL | ISOL | ISOL | ISOL | SCT | | | | |
| 32 COASTAL KARNATAKA WS | WS | WS | WS | WS | WS | WS | | | | |
| 33 NORTH INTERIOR KARNATAKA WS | FWS | FWS | SCT | SCT | FWS | FWS | | | | |
| 34 SOUTH INTERIOR KARNATAKA SCT | SCT | SCT | ISOL | SCT | SCT | FWS | | | | |
| 35 KERALA & MAHE FWS | FWS | FWS | FWS | ISOL | ISOL | ISOL | | | | |
| 36 LAKSHADWEEP FWS | SCT | SCT | SCT | FWS | FWS | FWS | | | | |

• As the lead period increases forecast accuracy decreases.

Annexure II

ANNEXURE III





- 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 East Rajasthan on 25th; Madhya Pradesh on 24th & 25th; Konkan & Goa on 14th & 25th; Madhya Maharashtra during 24th -26th; Saurashtra & Kutch during 24th -27th; Gujarat Region during 24th -26th; Mizoram & Tripura on 26th August.
- Very heavy rainfall at isolated over East Madhya Pradesh, Chhattisgarh, Marathwada, Vidarbha, Interior Karnataka on 24th; West Rajasthan on 25th; Gangetic West Bengal during 24th & 25th; Odisha on 24th & 25th; Coastal Karnataka on 24th & 26th August.
- Low to Moderate flash flood risk likely over Chhattisgarh, East Madhya Pradesh, Odisha, Gangetic West Bengal, Jharkhand, East Rajasthan, West Madhya Pradesh, Gujarat Region, Saurashtra & Kutch, Coastal Karnataka & Konkan & Goa 24th & 25th 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 Arunachl Pradesh, Assam & Meghalaya, Rajasthan, Madhya Pradesh, Chhattisgarh, Gujrat, Konkan & Goa, Madhya Maharashtra, Odisha, Jharkhand and Gangetic Wet Bengal.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Uttar Pradesh, Marathwada, Vidarbha, North Kerala, Karnataka, Coastal Andhra Pradesh and Telangana.
- ✓ Due to continuous heavy rain transplanted rice and vegetables are submerged in low lying areas, recovery of young rice seedlings is unlikely, farmers are advised to collect short duration rice varieties after cessation of rain otherwise can wait a bit and prepare in advance for winter vegetables in Tripura.
- ✓ Drain out excess water from kharif rice, groundnut, sesame, soyabean, ginger, turmeric and vegetables to prevent the water logging in Mizoram.
- ✓ Drain out excess water from pigeon pea, soybean, cotton and sesame crop fields in Saurashtra & Kutch; from transplanted rice, castor, cotton, pearl millet, groundnut, sesame and maize fields in Gujrat.
- ✓ 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 25-08-2024: Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours. Chhattisgarh - Bilaspur, Jashpur, Korea, Mungeli, Raigarh and Surguja districts. East Madhya Pradesh - Anuppur, Balaghat, Damoh, Dindori, Jabalpur, Katni, Mandla, Sagar, Seoni and Umaria districts. Odisha - Baragarh, Deogarh, Dhenkanal, Jharsuguda, Kendujhar, Mayurbhanj, Puri, Sambalpur and Sundargarh districts. Gangetic West Bengal - Bankura, Eastmednipur, Pashchim Medinipur and South 24 Parganas

Pashchim Medinipur and South 24 Parganas districts.

Jharkhand - Bokaro, Gumla, Ranchi, 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 25-08-2024:

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

East Rajasthan - Banswara, Baran, Bundi, Dungarpur, Jhalawar, Kota, Pratapgarh and Udaipur districts.

West Madhya Pradesh - Agar-Malwa, Barwani, Burhanpur, Guna, Indore, Khargone, Mandsaur, Nimach, Ujjain and Videsha districts.

Gujarat Region - Daman, Chhota Udepur, Dangs, Narmada, Navsari, Panchmahal, Surat and Valsad districts.

Saurashtra & Kutch - Amreli, Bhavnagar, Gir Somnath and Junagarh 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.

Product: NCUM FFR | Timescale: 24-hr | Region: "REGIONAL" Product Date: 2024-08-24 06:00 UTC | Valid Date: 2024-08-25 06:00 UTC ALEXANDER | PRODUCT | VALUE | 24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 25-08-2024 :

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

Coastal Karnataka - Dakshin Kannada, Udupi andUttarKannadadistricts.Konkan & Goa - North Goa, South Goa, MumbaiCity, Palghar, Raigarh, Ratnagiri, Sindhudurg,SuburbanMumbaiandThanedistricts.

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.



राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विंज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



National Weather Forecasting Centre India Meteorological Department **Ministry of Earth Sciences**



* 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)





National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

| ain/ Snow * | Heavy: 64.5 to 115.5 mm/cm * Very Heavy: 115.6 to 204.4 mm/cm * Extremely Heavy: > 204.4 mm/cm * |
|--------------------|--|
| | When maximum temperature of a station reaches ≥40° C for plains and ≥30° C for hilly regions (a) Based on Departure from normal |
| Heat Wave | Heat Wave: Maximum Temperature Departure from normal 4.5° C to 6.4° C. |
| | Severe Heat Wave: Maximum Temperature Departure from normal ≥6.5° C (b). Based on Actual maximum temperature |
| | Heat Wave: When actual maximum temperature ≥45°C. |
| | Severe Heat Wave: When actual maximum temperature ≥47°C (c). Criteria for heat wave for coastal stations When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C |
| | When maximum temperature remains 40°C |
| Warm Night | Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C. |
| | Severe Warm Night: When minimum temperature departure >6.4 °C. |
| Cold Wave | When minimum temperature of a station $\leq 10^{\circ}$ C for plains and $\leq 0^{\circ}$ 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 ≤ -6.5 °C |
| | (b) Based on actual Minimum Temperature (for Plains only) |
| | Cold Wave : When Minimum Temperature is ≤ 4.0 °C |
| | Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C |
| | (c) For Coastal Stations When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C |
| Cold Day | When minimum temperature of a station ≤10°C for plains and ≤0°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 ≤ -6.5 °C |
| Fog | Phenomenon of small droplets suspended in air and the horizontal visibility < 1km |
| | Very Dense Fog: when the visibility < 50 metres |
| understorm | 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 ≤4°C (over Plains) |
| | A strong wind that rises suddenly, lasts for atleast 1 minute. |
| Squall | Moderate: Wind speed 52-61 kmph Severe: Wind speed 62-87 kmph |
| | Very Severe: Wind speed >87 kmph |
| | Effect of various waves in the sea over specific area |
| Sea State | 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 |
| Jea State | Phenomenal: Wind speed >117 kmph (>+05 kinds) & 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 162-05 kmph (94 - 95 kHots) Super Cyclone Strom: Wind speed 220 kmph (90 - 119 knots) |
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st and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of ne For more details, kindly visit https://mausam.imd.gov.in or contact: 011-2434-4599 (Service to the Nation since 1875)