



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 25th September, 2024

Time of Issue: 1300 hours IST

Subject: (i) Isolated extremely heavy rainfall very likely over Konkan & Goa, Madhya Maharashtra on 25th & 26th; Gujarat Region on 26th and Sub-Himalayan West Bengal & Sikkim on 25th & 26th September.
(ii) Enhanced rainfall activity with isolated heavy falls likely over central, east & northeast India during next 3 days.

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

Heavy to very Heavy rainfall at isolated places over Konkan & Goa, Coastal Andhra Pradesh & Yanam, East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Marathwada, Coastal Karnataka, Bihar; **Heavy rainfall** at isolated places over Rayalaseema, Gujarat Region, Chhattisgarh, West Madhya Pradesh, Gangetic West Bengal, Odisha, Madhya Maharashtra, Interior Karnataka & Telangana.

Weather Systems:

- ✓ Yesterday's **low pressure** area over Westcentral & adjoining Northwest Bay of Bengal off north Andhra Pradesh-south Odisha coasts moved west-northwestwards and has become less marked. However, the associated cyclonic circulation lies over south Chhattisgarh & neighbourhood and extends upto middle tropospheric level, tilting southwards with height.
- ✓ A trough runs from north Konkan to south Bangladesh across the above cyclonic circulation over south Chhattisgarh and extends upto middle tropospheric level tilting southwards with height.

Forecast & Warnings (upto 7 days) (Annexure II & III):

West India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Konkan & Goa during the week; Fairly widespread to widespread light to moderate rainfall over Madhya Maharashtra, Gujarat Region, Marathwada during next 4 days & Isolated to Scattered light to moderate rainfall during the next subsequent 3 days; Scattered to Fairly widespread light to moderate rainfall over Saurashtra & Kutch during the next 3 days & Isolated to Scattered light to moderate rainfall during the next subsequent 4 days.
- ✓ **Isolated extremely heavy rainfall** very likely over Konkan & Goa & Madhya Maharashtra on 25th & 26th; Gujarat Region on 26th September.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Konkan & Goa, Gujarat Region & Madhya Maharashtra during 25th -27th; Marathwada on 25th; Saurashtra & Kutch on 26th & 27th September.
- ✓ **Isolated heavy rainfall** very likely over Konkan & Goa & Madhya Maharashtra during 25th -27th; Marathwada on 25th & 26th; Gujarat State during 25th -28th September.

Central India:

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Vidarbha, Chhattisgarh during next 2 days & Scattered to Fairly widespread light to moderate rainfall during next subsequent 5 days; Scattered to Fairly widespread light to moderate rainfall over Madhya Pradesh during next 4 days & Isolated to Scattered light to moderate rainfall during the next subsequent 3 days.
- ✓ **Isolated heavy to very heavy rainfall** very likely over East Madhya Pradesh on 25th September.
- ✓ **Isolated heavy rainfall** very likely over Vidarbha & Chhattisgarh on 25th; West Madhya Pradesh during 25th -27th; East Madhya Pradesh on 25th & 26th September.

East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Northeast India during the next 7 days; Fairly widespread to widespread light/moderate rainfall very likely over West Bengal & Sikkim, Bihar during next 3 days & Scattered to Fairly widespread light to moderate rainfall during next subsequent 4 days; Fairly widespread to widespread light/moderate rainfall very likely over Jharkhand, Odisha during next 2 days & Isolated to Scattered light to moderate rainfall during the next subsequent 5 days; Scattered to Fairly widespread light to moderate rainfall over Andaman & Nicobar Islands during the week.
- ✓ **Isolated extremely heavy rainfall** very likely over Sub-Himalayan West Bengal & Sikkim on 25th & 26th September.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Assam & Meghalaya on 25th & 26th; Nagaland, Manipur & Gangetic West Bengal on 25th; Bihar, Sub-Himalayan West Bengal & Sikkim during 25th -27th; Arunachal Pradesh on 26th September.
- ✓ **Isolated heavy rainfall** very likely over Arunachal Pradesh, Assam & Meghalaya during the week; Nagaland, Manipur, Mizoram & Tripura during 25th -27th September & 01st October; Sub-Himalayan West Bengal & Sikkim during 25th -27th; Jharkhand, Odisha & Gangetic West Bengal on 25th & 26th; Bihar during 25th -28th September.

Northwest India

- ✓ Scattered to Fairly widespread light to moderate rainfall over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand & East Uttar Pradesh during next 3 days & Isolated to Scattered light to moderate rainfall during the next subsequent 4 days; Isolated to Scattered light to moderate rainfall over the remaining region during the week.
- ✓ **Isolated heavy to very heavy rainfall** very likely East Uttar Pradesh on 27th September.
- ✓ **Isolated heavy rainfall** very likely over Uttarakhand during 25th -27th; West Uttar Pradesh on 27th; East Uttar Pradesh during 26th -28th September.

South Peninsular India

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

Southwest Monsoon withdrawal Map (ANNEXURE IV)

For more details, kindly refer: https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php
For District wise warnings refer: <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

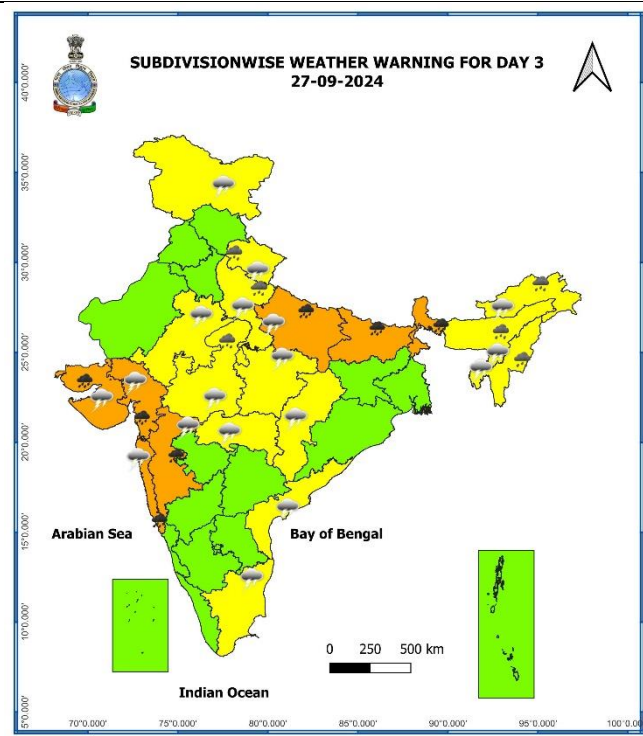
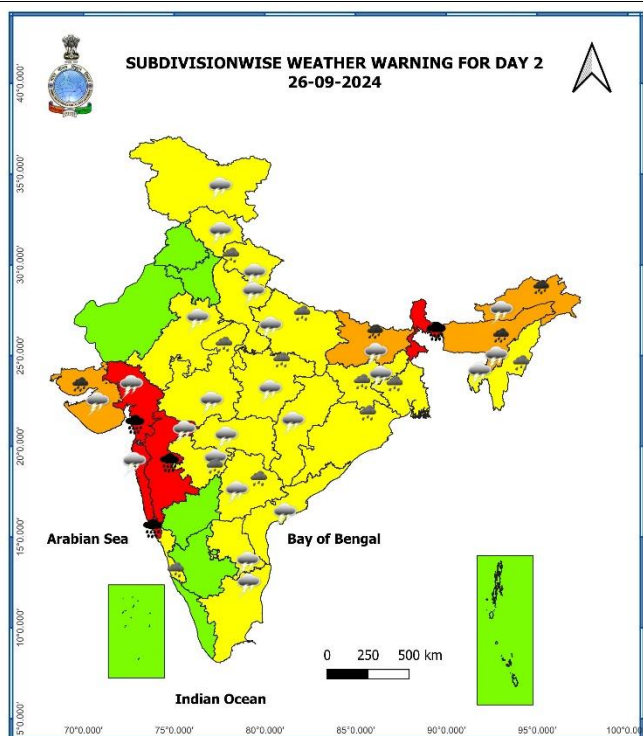
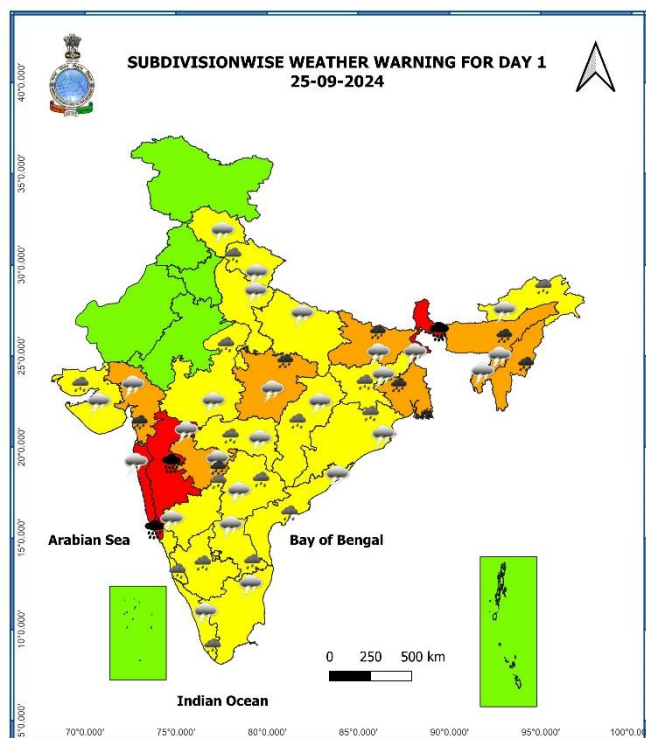
ANNEXURE I

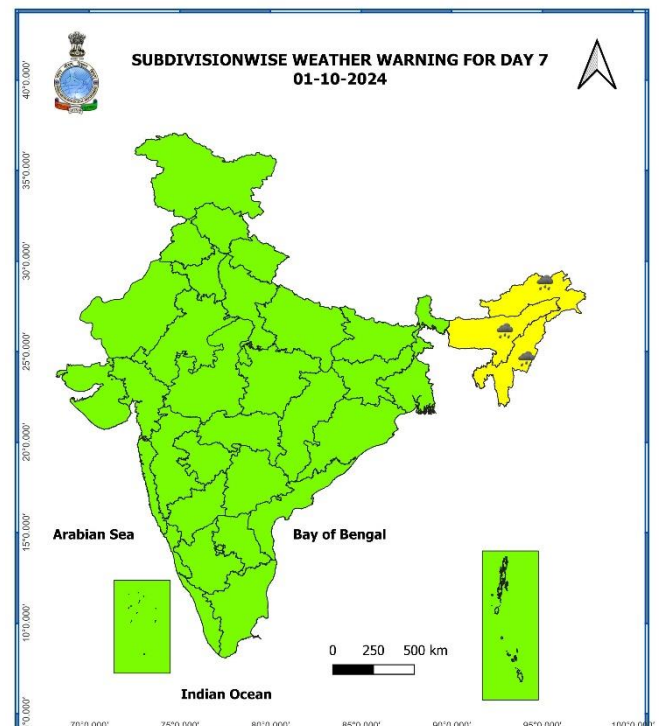
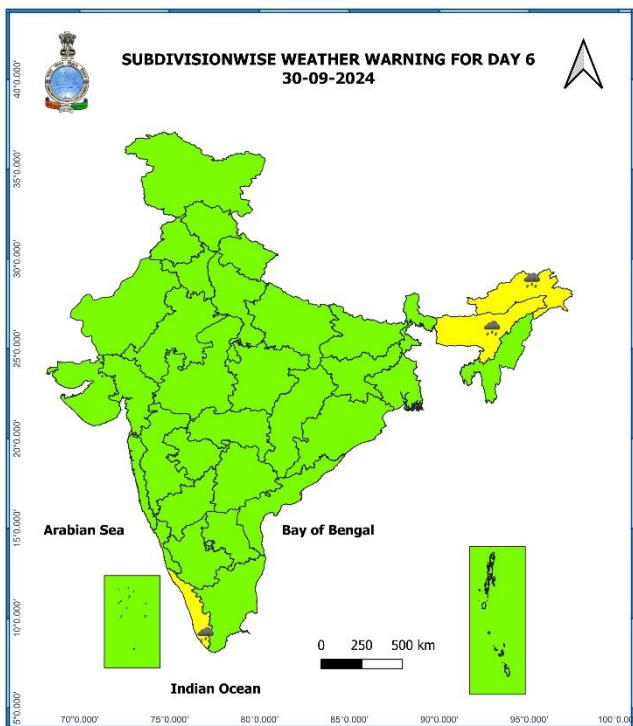
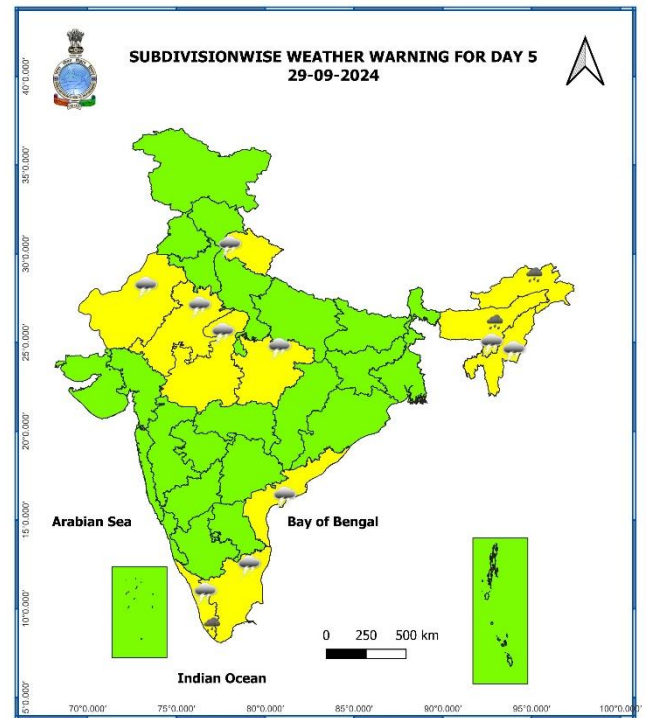
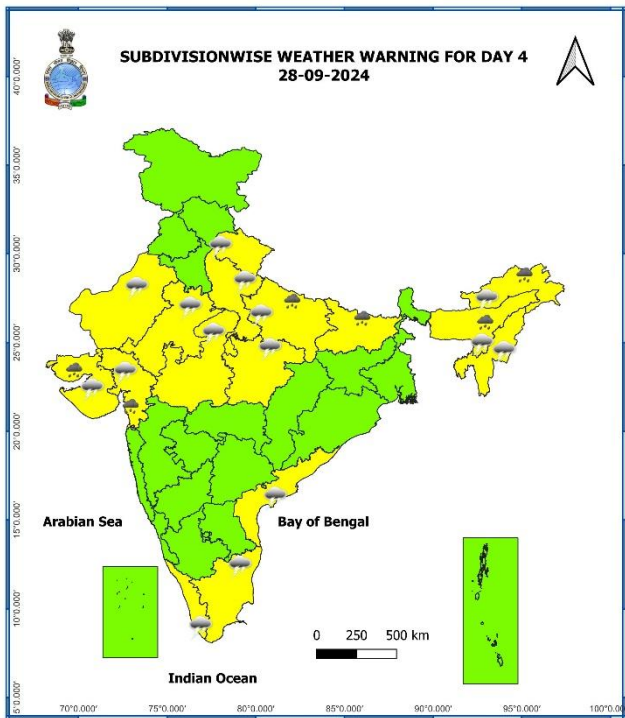
Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 25.09.2024 (in cm):

- ❖ **Konkan & Goa:** Pernem (dist North Goa) 19, Sawantwadi (dist Sindhudurg) 16, Palghar_agri (dist Palghar) 15, Malvan (dist Sindhudurg) 14, Devgad (dist Sindhudurg) 14, Panjim - Imd Obsy (dist North Goa) 14, Kudal (dist Sindhudurg) 13, Mulde_Agri (dist Sindhudurg) 13, Mapusa (dist North Goa) 12, Sanguem (dist South Goa) 11, Mormugao - Pmo Imd (dist South Goa) 10, Chiplun (dist Ratnagiri) 10, Matheran (dist Raigad) 10, Vasai (dist Palghar) 10, Dahanu - Imd Obsy (dist Palghar) 9, Ratnagiri - Imd Obsy (dist Ratnagiri) 9, Canacona (dist South Goa) 8, Dabolim N.a.s.- Navy (dist South Goa) 8, Margao (dist South Goa) 8, Guhagarh (dist Ratnagiri) 8, Ponda (dist North Goa) 7, Santacruz - Imd Obsy (dist Mumbai Suburban) 7,
- ❖ **Sub-Himalayan West Bengal & Sikkim:** Bijonbari (dist Darjeeling) 15, Darjeeling (dist Darjeeling) 14, Bagdogra Iaf (dist Darjeeling) 10, Yuksom (dist Gyalshing) 9, Soreng Arg (dist Soreng) 9, Bhutanghat (dist Alipurduar) 7, Amfu Kalimpong (dist Kalimpong) 7, Gyalsing (pto) (dist Gyalshing) 7, Champasari (dist Darjeeling) 7, Damthang (dist Namchi) 7
- ❖ **East Madhya Pradesh:** Bijadandi (dist Mandla) 14, Keolari (dist Seoni) 10,
- ❖ **Coastal Karnataka:** Kundapur (dist Udupi) 13, Shirali Pto (dist Uttara Kannada) 11, Karkala (dist Udupi) 9, Kota (dist Udupi) 9, Mangaluru Ap Obsy (dist Dakshina Kannada) 7,
- ❖ **Coastal Andhra Pradesh & Yanam:** Yanam (dist Yanam) 12, Podili (dist Prakasam) 11, Anakapalle(a) (dist Anakapalli) 9, Narsipatnam (dist Anakapalli) 8, Markapur (dist Prakasam) 8, Vepada (dist Vizianagaram) 8, Cumbum (dist Prakasam) 7, Konakanamitla (dist Prakasam) 7, Bestavaripeta (dist Prakasam) 7, Darsi (dist Prakasam) 7, Guntur (dist Guntur) 7, Repalle (dist Bapatla) 7, Tadepalligudem (dist West Godavari) 7,
- ❖ **Marathwada:** Washi (dist Dharashiv) 12, Ahmedpur (dist Latur) 7,
- ❖ **Bihar:** Sangrampur (dist Monghyr) 12, Narpatganj (dist Araria) 7, Banka (dist Banka) 7,
- ❖ **Telangana:** Devaruppal (dist Jangaon) 11, Kusumanchi (dist Khammam) 10, Nawabpetmbn (dist Mahabubnagar) 10, Nawabpet (dist Vikarabad) 10, Mogullapalle (dist J. Bhupalpally) 7, Bhupalpalle (dist J. Bhupalpally) 7, Kaveri_siddipet(a) (dist Siddipet) 7, Kosgi (dist Narayanpet) 7,
- ❖ **Gangetic West Bengal:** Digba (dist East Midnapore) 10, Contai (dist East Midnapore) 7,
- ❖ **Gujarat Region:** Silvassa (dist Dadara & Nagar Haveli) 9, Valsad_Kvk Aws (dist Valsad) 8, Jambughoda (dist Panchmahal) 7,
- ❖ **Odisha:** Balasore (Balasore) 10, Talcher (Angul) 9, Tikarpara (Angul) 9, Banki (Cuttack) 9, Rajnagar (Kendrapara) 8, Jaipur (Balasore) 8, Rasagovindapur (Mayurbhanj) 7, Nh5 Gobindpur (Balasore) 7, Polsara (Ganjam) 7, Padia (Malkangiri) 7, Banarpal (Angul) 7, Nilgiri (Balasore) 7, Remuna (Balasore) 7, Athmalik (Angul) 7, Chandua Kuliana (Mayurbhanj) 7,
- ❖ **Chhattisgarh:** Baramkela (dist Sarangarh Bilaigarh) 9, Sariya (dist Sarangarh Bilaigarh) 8,
- ❖ **Rayalaseema:** Proddutur (dist Ysr District) 8, Duvvur (dist Ysr District) 8, Kamalapuram (dist Ysr District) 7, Raju Palem (dist Ysr District) 7, Badvel (dist Ysr District) 7,
- ❖ **South Interior Karnataka:** Kottigehara (dist Chikkamagaluru) 8, Kalasa (dist Chikkamagaluru) 7,
- ❖ **North Interior Karnataka:** Shahpur (dist Yadgir) 7,
- ❖ **West Madhya Pradesh:** Dahi (dist Dhar) 7, Bagh (dist Dhar) 7,
- ❖ **Madhya Maharashtra:** Akole (dist Ahmednagar) 7, Igatpuri (dist Nashik) 7,

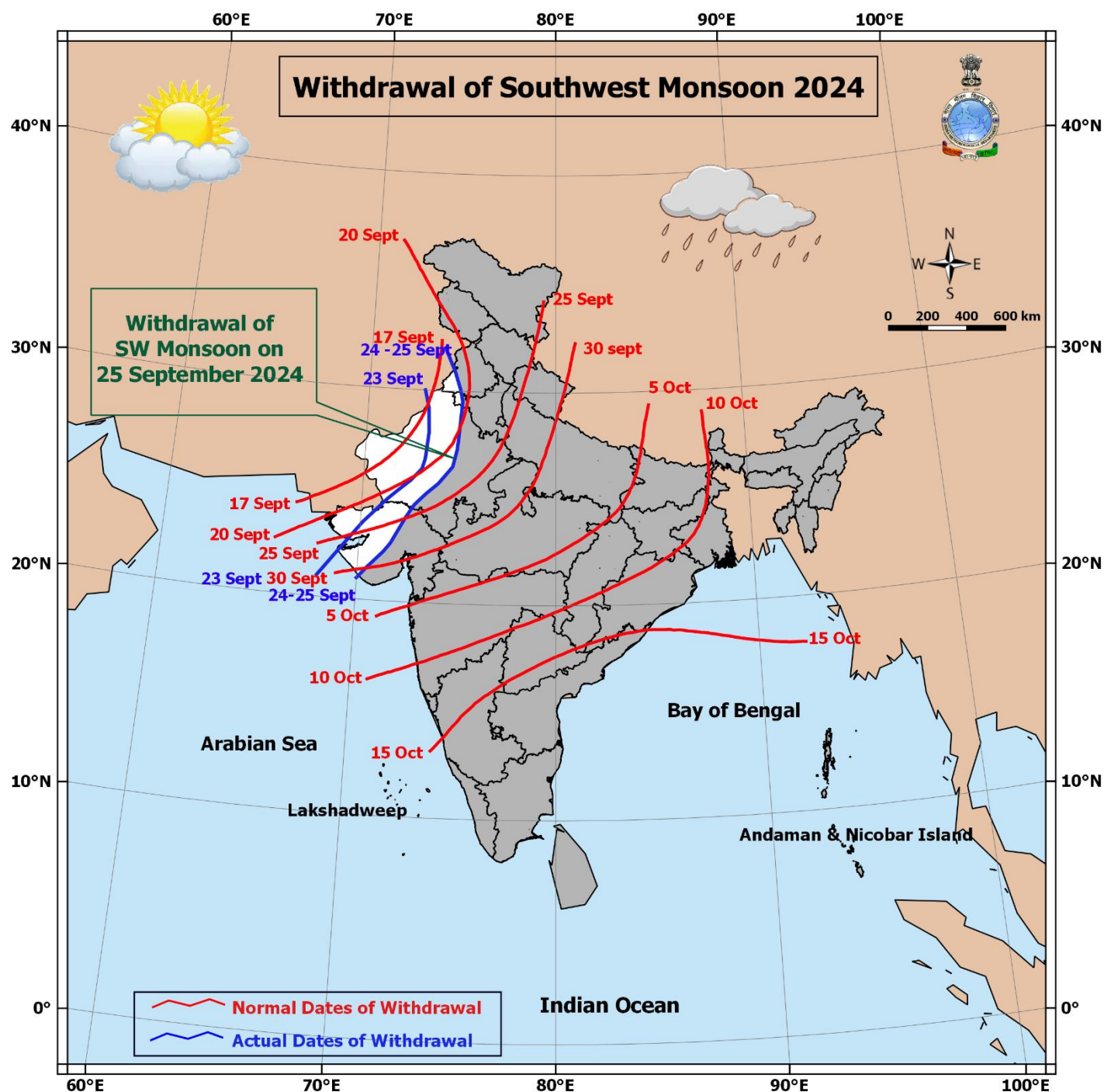
7 Days Rainfall Forecast								
S. No.	Subdivision	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	01-Oct
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	FWS	SCT	SCT	SCT	SCT	SCT	FWS
2	ARUNACHAL PRADESH	FWS	WS	FWS	FWS	FWS	FWS	WS
3	ASSAM & MEGHALAYA	WS	WS	WS	FWS	FWS	FWS	WS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	WS	WS	WS	FWS	FWS	FWS	WS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	WS	WS	WS	FWS	SCT	SCT	FWS
6	GANGETIC WEST BENGAL	WS	WS	FWS	SCT	SCT	SCT	SCT
7	ODISHA	WS	FWS	SCT	SCT	ISOL	ISOL	SCT
8	JHARKHAND	WS	WS	FWS	SCT	ISOL	ISOL	ISOL
9	BIHAR	FWS	WS	WS	FWS	SCT	ISOL	ISOL
10	EAST UTTAR PRADESH	SCT	FWS	WS	FWS	SCT	ISOL	ISOL
11	WEST UTTAR PRADESH	SCT	SCT	SCT	SCT	ISOL	ISOL	ISOL
12	UTTARAKHAND	FWS	FWS	FWS	SCT	SCT	ISOL	ISOL
13	HARYANA CHANDIGARH & DELHI	SCT	SCT	ISOL	ISOL	DRY	DRY	DRY
14	PUNJAB	ISOL	SCT	SCT	ISOL	ISOL	ISOL	ISOL
15	HIMACHAL PRADESH	SCT	SCT	SCT	ISOL	ISOL	DRY	DRY
16	JAMMU & KASHMIR AND LADAKH	ISOL	FWS	FWS	ISOL	DRY	DRY	DRY
17	WEST RAJASTHAN	DRY	ISOL	ISOL	ISOL	ISOL	DRY	DRY
18	EAST RAJASTHAN	ISOL	SCT	SCT	SCT	SCT	ISOL	DRY
19	WEST MADHYA PRADESH	SCT	FWS	FWS	FWS	SCT	ISOL	ISOL
20	EAST MADHYA PRADESH	FWS	FWS	SCT	SCT	SCT	ISOL	ISOL
21	GUJARAT REGION	WS	WS	WS	WS	SCT	SCT	ISOL
22	SAURASHTRA & KUTCH	SCT	FWS	FWS	SCT	ISOL	ISOL	ISOL
23	KONKAN & GOA	WS	WS	WS	WS	WS	FWS	FWS
24	MADHYA MAHARASHTRA	WS	WS	WS	FWS	SCT	ISOL	ISOL
25	MARATHAWADA	WS	WS	WS	WS	WS	ISOL	ISOL
26	VIDARBHA	WS	WS	FWS	FWS	FWS	SCT	SCT
27	CHHATTISGARH	WS	FWS	SCT	SCT	SCT	SCT	SCT
28	COASTAL ANDHRA PRADESH & YANAM	WS	FWS	SCT	SCT	SCT	FWS	FWS
29	TELANGANA	FWS	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
30	RAYALASEEMA	WS	FWS	ISOL	ISOL	ISOL	SCT	SCT
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	SCT	SCT	SCT	SCT
32	COASTAL KARNATAKA	WS	WS	FWS	FWS	FWS	FWS	WS
33	NORTH INTERIOR KARNATAKA	WS	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	FWS	SCT	ISOL	ISOL	FWS	FWS	FWS
35	KERALA & MAHE	FWS	SCT	SCT	FWS	WS	WS	FWS
36	LAKSHADWEEP	WS	SCT	SCT	SCT	FWS	FWS	FWS

- As the lead period increases forecast accuracy decreases.





- 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 Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra on 25th & 26th; Gujarat Region on 26th September.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Nagaland, Manipur, Gangetic West Bengal, Marathwada, East Madhya Pradesh on 25th; Assam & Meghalaya on 25th & 26th; Bihar, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Gujarat Region & Madhya Maharashtra during 25th -27th; Saurashtra & Kutch on 26th & 27th; Arunachal Pradesh on 26th; East Uttar Pradesh on 27th September.
- ✓ **Moderate flash flood risk** likely over few watersheds & neighbourhoods of Sub-Himalayan West Bengal & Sikkim, south Gujarat Region, Madhya Maharashtra, Konkan & Goa on 25th & 26th September. **(Annexure V).**

Impact Expected

- ✓ 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 and roadways 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 and wind.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

Action Suggested

- ✓ Judicious regulation of surface transports including railways and roadways.
- ✓ 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

- ✓ In Madhya Maharashtra, Marathwada and Vidarbha regions of Maharashtra, postpone harvesting of matured soybean, groundnut, maize and pearl millet. Immediately move the harvested produce to safer places and cover them with plastic sheets or tarpaulin.
- ✓ In Konkan region of Maharashtra, make arrangements to drain out excess water from rice, finger millet, turmeric, groundnut, vegetables and orchards.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Kerala, Karnataka, Andhra Pradesh, Telangana, Madhya Pradesh, Chhattisgarh, Gujarat, Maharashtra, Goa, West Bengal, Odisha, and North Eastern States.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.

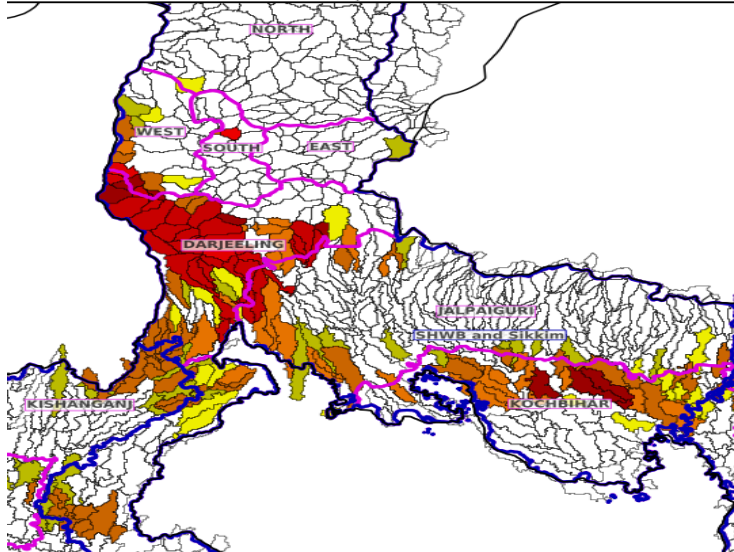
24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 26-09-2024:

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

SHWB & Sikkim - North Sikkim, South Sikkim, West Sikkim, Darjeeling, Jalpaiguri, Kochbihar and Uttar_Dinajpur 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.

Product: WRF FFR | Timescale: 24-hr | Region: "INDIA"
Date: 2024-09-25 06:00 UTC | Valid Date: 2024-09-26 06:00 UTC

**24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 26-09-2024:**

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

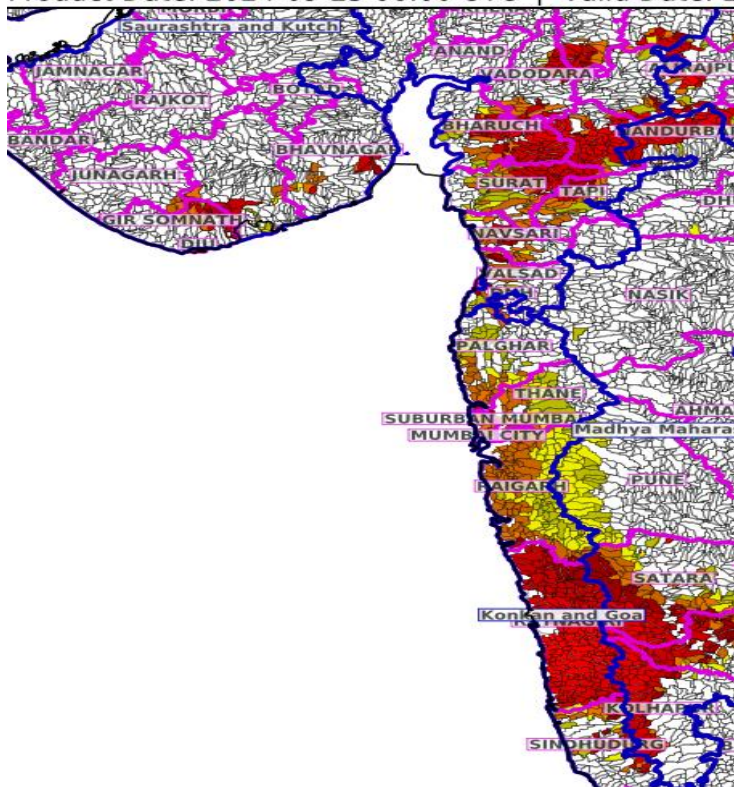
South Gujarat Region - Dadar & Nagar Haveli, Daman, Bharuch, Dahod, Narmada, Navsari, Panchmahal, Surat, Tapi, Vadodara and Valsad districts.

Konkan & Goa - Mumbai City, Palghar, Raigarh, Ratnagiri, Sindhudurg, Suburban Mumbai and Thane districts.

Madhya Maharashtra - Kolhapur, Nandurbar, Pune, Sangli and Satara 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.

Product: GFS FFR | Timescale: 24-hr | Region: "INDIA"
Product Date: 2024-09-25 06:00 UTC | Valid Date: 2024-09-26 06:00 UTC

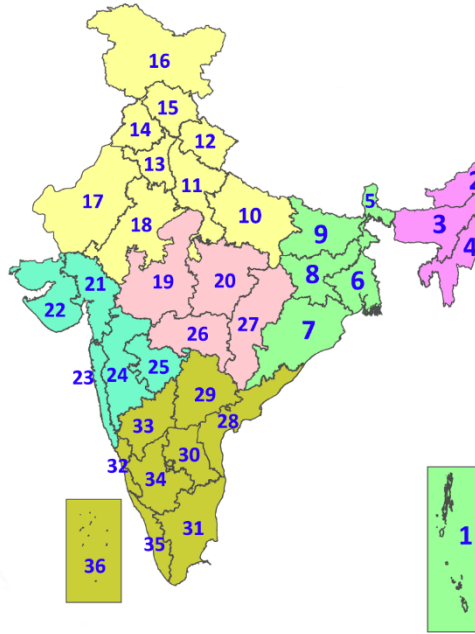


Legends & abbreviations:

- ❖ **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 *

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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