



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 04th September, 2024

Time of Issue: 1315 hours IST

Subject: Heavy to very heavy rainfall likely over Gujarat & Rajasthan on today and over Coastal Andhra Pradesh & Telangana during next 2 days and decrease thereafter.

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

Heavy to very heavy rainfall at isolated places over Rajasthan, Telangana, Jharkhand Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Assam & Meghalaya; **Heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, West Uttar Pradesh, Madhya Pradesh, West Bengal & Sikkim, Bihar, Konkan & Goa, Madhya Maharashtra, Gujarat Region, Karnataka.

Weather Systems:

- ✓ The monsoon trough is active and its western end is near its normal position and eastern end is south of its normal position at mean sea level. It is likely to continue so for next 2-3 days.
- ✓ A shear zone runs roughly along 22°N over north Peninsular India at 3.1 km above mean sea level.
- ✓ A **cyclonic circulation lies** over north Coastal Andhra Pradesh & neighbourhood in lower & middle tropospheric levels. **Under its influence, a low pressure area** is likely to form over westcentral & adjoining northwest Bay of Bengal around 05th September, 2024.

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

❖ **West & Central India:**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over West & Central India during the week.
- ✓ Isolated **very heavy rainfall** also very likely over Gujarat Region 04th September.
- ✓ Isolated **heavy rainfall** very likely over Chhattisgarh during next 7 days; West Madhya Pradesh on 04th; East Madhya Pradesh, Saurashtra & Kutch during 04th -06th; Vidarbha on 04th & 10th; Konkan & Goa during 04th -08th; ghat areas of Madhya Maharashtra during 06th - 08th; Gujarat Region during 04th -08th September.

❖ **South Peninsular India:**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Coastal Karnataka, Kerala & Mahe; Scattered to Fairly widespread light/moderate rainfall over Coastal Andhra Pradesh & Yanam, Telangana, Lakshadweep; isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, North Interior Karnataka, Rayalaseema and Interior Karnataka during the week.
- ✓ Isolated **very heavy rainfall** also very likely over Coastal Andhra Pradesh & Yanam, Telangana on 04th & 05th September.
- ✓ Isolated **heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka, North Interior Karnataka during 04th -08th; South Interior Karnataka during 04th - 07th; Kerala & Mahe during 08th -10th September.

❖ **East & Northeast India**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Northeast India, Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim; Scattered to Fairly widespread light/moderate rainfall very likely over Gangetic West Bengal, Bihar, Jharkhand & Odisha during the week.
- ✓ Isolated **very heavy rainfall** also very likely over Arunachal Pradesh on 04th September.
- ✓ Isolated **heavy rainfall** very likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during next 7 days; Arunachal Pradesh during 04rd – 06th; Sub-Himalayan West Bengal & Sikkim on 04th & 05th; Bihar on 05th & 06th; Odisha during 04th – 08th September.

❖ **Northwest India**

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan; isolated to scattered rainfall over Punjab & Haryana-Chandigarh-Delhi during the week.
- ✓ Isolated **very heavy rainfall** also very likely over Rajasthan on 04th September.
- ✓ Isolated **heavy rainfall** very likely over Uttarakhand, Rajasthan during 04th – 08th; Himachal Pradesh, Haryana on 04th; West Uttar Pradesh on 04th & 05th; East Uttar Pradesh during 04rd – 06th September.

For more details, kindly refer to National bulletin on: <https://rsmcnewdelhi.imd.gov.in/>

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

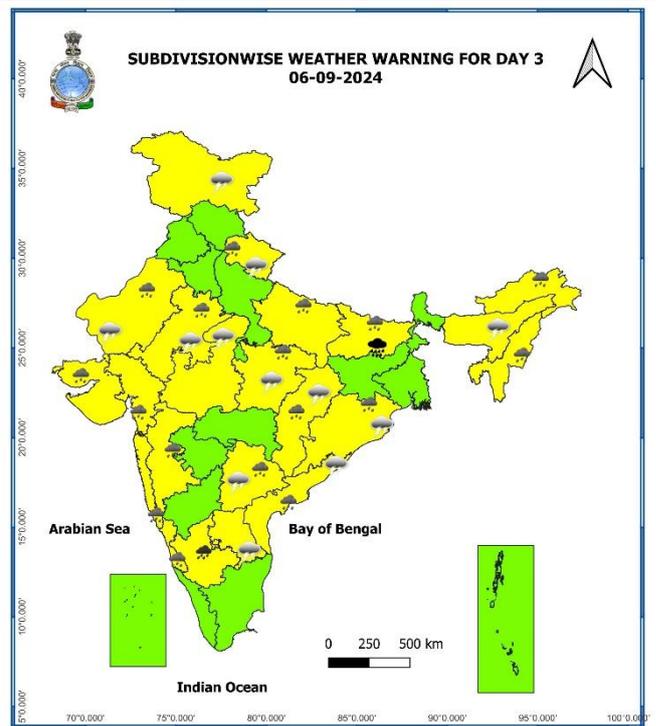
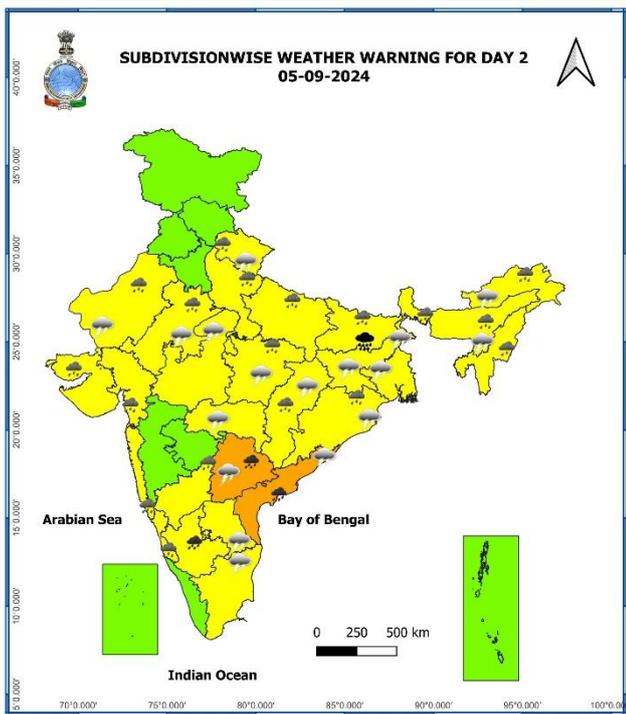
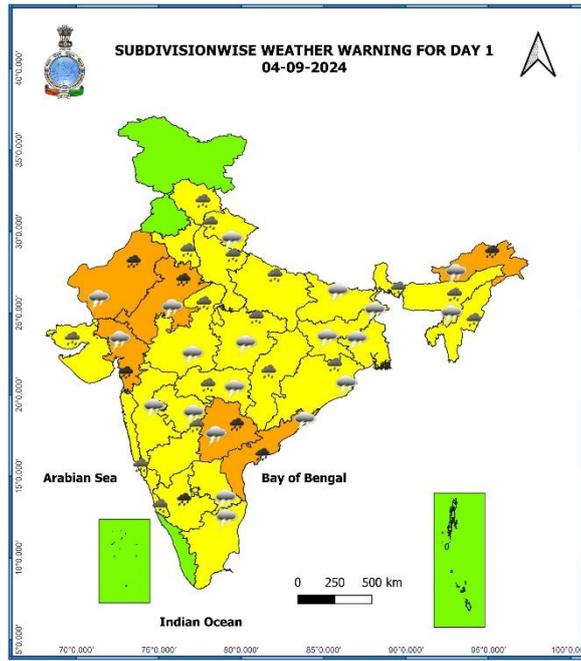
For District wise warnings refer: <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.ph>

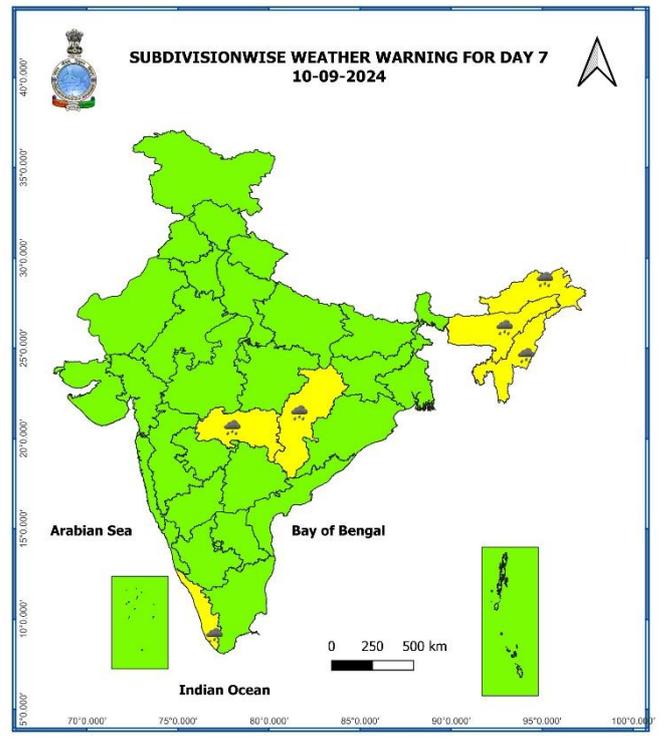
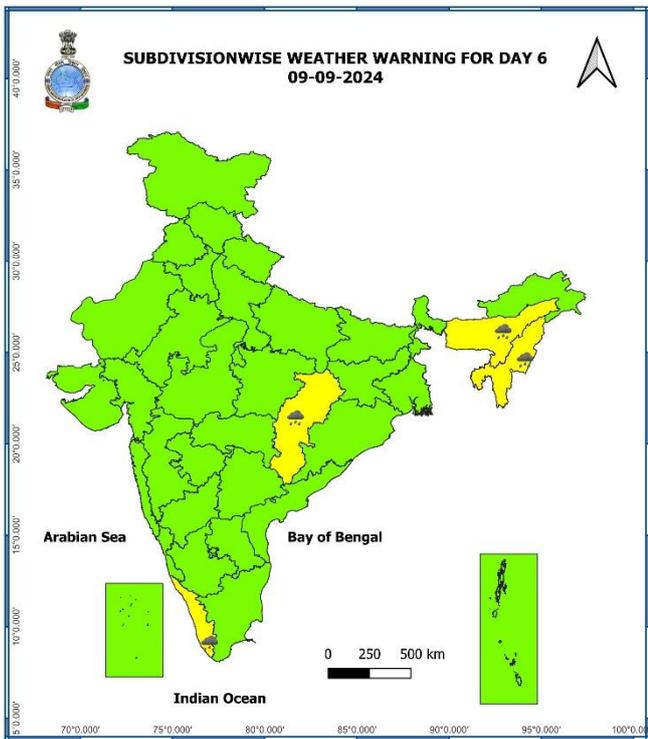
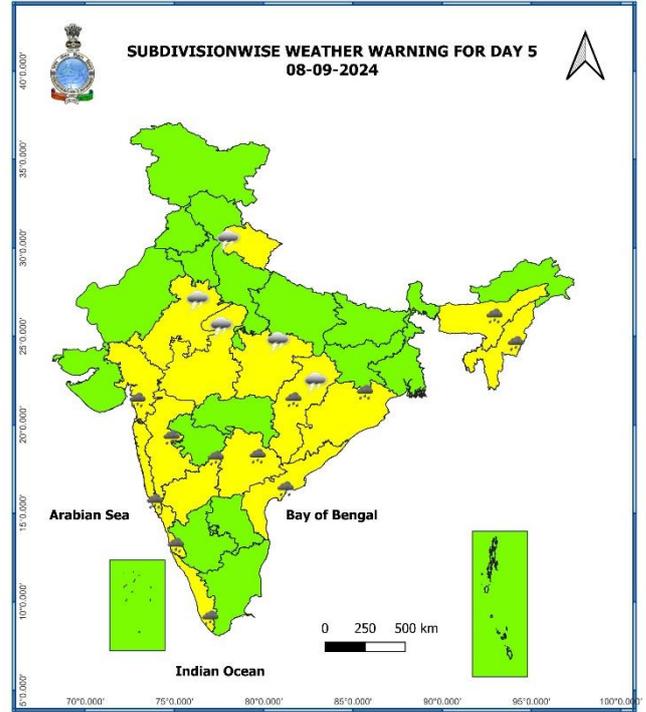
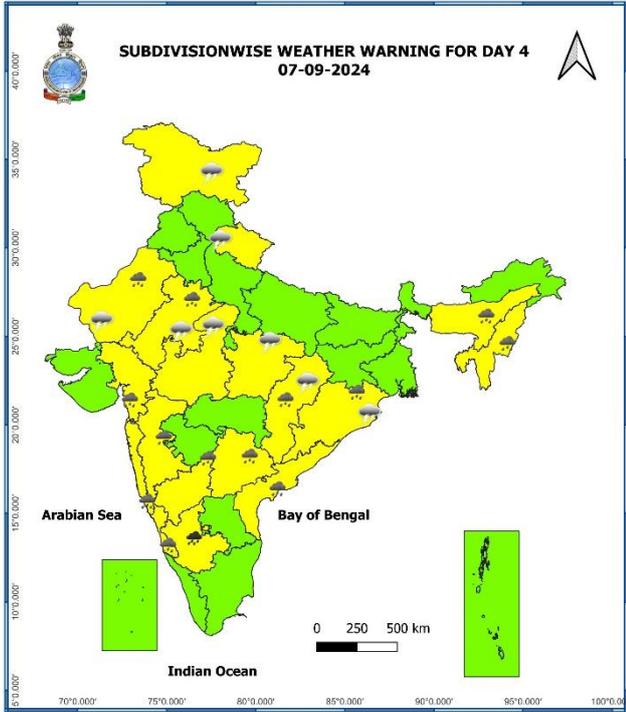
Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 04.09.2024 (in cm):

- ❖ **Telangana:** Husnabad(arg) (dist Siddipet) 17, Nandipet (dist Nizamabad) 13, Makloor (dist Nizamabad) 13, Yellandu (dist B. Kothagudem) 13, Nanganur (dist Siddipet) 12, Yellandu(arg) (dist B. Kothagudem) 11, Nangnoor(arg) (dist Siddipet) 11, Dich Palle (dist Nizamabad) 11, Velpur (dist Nizamabad) 11, Bejjanki (dist Siddipet) 9, Mudhole (dist Nirmal) 9, Ranjal (dist Nizamabad) 9, Armur (dist Nizamabad) 9, Jainoor (dist Kumaram Bheem) 9, Nizamabad (dist Nizamabad) 9, Kondapak (dist Siddipet) 9, Chigurumamidy (dist Karimnagar) 8, Navipet (dist Nizamabad) 8, Mudholebasar (dist Nirmal) 7, Jakranpalle (dist Nizamabad) 7, Ramgundam (dist Peddapalle) 7, Balkonda (dist Nizamabad) 7, Dullapally(a) (dist Rangareddy) 7, Ghattu (dist Jogulamba Gadwal) 7, Wankdi (dist Kumaram Bheem) 7, Sangareddy (dist Sangareddy) 7, Jajireddigudem (dist Suryapet) 7,
- ❖ **Andaman & Nicobar Islands:** Hut Bay (dist South Andaman) 17
- ❖ **West Rajasthan:** Gudamalani Sr (dist Barmer) 15, Pali (dist Pali) 8, Sanchore (dist Jalore) 8, Dorimanna Sr (dist Barmer) 7, Bagoda Sr (dist Jalore) 7,
- ❖ **Arunachal Pradesh:** Longding 13, Kamba 9;
- ❖ **Nagaland:** Mokokhang 12, Medziphema(Arg)
- ❖ **East Rajasthan:** Kotri (dist Bhilwara) 12, Nainwa (dist Bundi) 9, Pipalkhunt Sr (dist Pratapgarh) 9, Banswara Sr (dist Banswara) 9, Bassi (dist Jaipur) 8, Vallabhagar (dist Udaipur) 8, Gogunda Sr (dist Udaipur) 8, Deoli (dist Tonk) 8, Mangrol (dist Baran) 8, Ladpura Sr (dist Kota) 8, Pipalda Sr (dist Kota) 7, Bari-sadri (dist Chittorgarh) 7, Kesarpura Sr (dist Banswara) 7, Girva Sr (dist Udaipur) 7, Chothkabarwara Sr (dist Sawai Madhopur) 7, Jhadol Sr (dist Udaipur) 7, Badesar Sr (dist Chittorgarh) 7,
- ❖ **Jharkhand:** Messenjar (dist Dumka) 12, Zrs Dumka (dist Dumka) 10, Maharo (dist Dumka) 7,
- ❖ **Assam:** Amraghat 14, Gossaigaon Agri 12;
- ❖ **Konkan & Goa:** Dapoli_agri (dist Ratnagiri) 11, Poladpur (dist Raigad) 8, Wakwali_agri (dist Ratnagiri) 8, Khed (dist Ratnagiri) 7, Mandangad (dist Ratnagiri) 7,
- ❖ **West Madhya Pradesh:** Jawad (dist Neemuch) 11, Aron (dist Guna) 8, Kannod (dist Dewas) 8, Mandsaur-aws (dist Mandsaur) 7,
- ❖ **Punjab:** Nabha Arg (dist Patiala) 10, Anandpur Sahib (dist Rupnagar) 9, Patiala (dist Patiala) 9, Patiala Aws (dist Patiala) 7, Fatehgarh Sahib Aws (dist Fatehgarh Sahib) 7, Muktsar (dist Muktsar) 7,
- ❖ **Coastal Karnataka:** Castle Rock (dist Uttara Kannada) 9
- ❖ **North Interior Karnataka:** Bhalki (dist Bidar) 9, Bidar (dist Bidar) 9
- ❖ **Himachal Pradesh:** Kasauli (dist Solan) 9, Dharampur (dist Solan) 7, Kandaghat (dist Solan) 7, Kataula (dist Mandi) 7,
- ❖ **Uttarakhand:** Uttarkashi 9, Kapkot 7,
- ❖ **Madhya Maharashtra:** Mahabaleshwar- Imd Obsy (dist Satara) 9, Lonavala_agri (dist Pune) 7,
- ❖ **Gujarat Region:** Valia (dist Bharuch) 8, Palsana (dist Surat) 8, Nandod (dist Narmada) 7,
- ❖ **Haryana:** Nilokheri (dist Karnal) 8, Hissar (dist Hisar) 7,
- ❖ **East Madhya Pradesh:** Buxwaha (dist Chhatarpur) 8,
- ❖ **Gangetic West Bengal:** Rampurhat (drms) (dist Birbhum) 8,
- ❖ **South Interior Karnataka:** Agumbe Emo (dist Shivamogga) 7,
- ❖ **Sub-Himalayan West Bengal & Sikkim:** Chengmari/diana (dist Jalpaiguri) 7.

7 Days Rainfall Forecast								
S. No.	Subdivision	04-Sep	05-Sep	06-Sep	07-Sep	08-Sep	09-Sep	10-Sep
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS						
2	ARUNACHAL PRADESH	FWS	FWS	SCT	SCT	SCT	FWS	FWS
3	ASSAM & MEGHALAYA	WS	FWS	SCT	SCT	FWS	WS	WS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	WS	FWS	FWS	FWS	FWS	WS	WS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	WS	WS	FWS	SCT	SCT	FWS	FWS
6	GANGETIC WEST BENGAL	SCT	SCT	SCT	SCT	SCT	FWS	FWS
7	ODISHA	SCT	FWS	FWS	FWS	FWS	FWS	FWS
8	JHARKHAND	SCT	SCT	SCT	SCT	FWS	FWS	FWS
9	BIHAR	SCT						
10	EAST UTTAR PRADESH	SCT	FWS	FWS	SCT	SCT	SCT	SCT
11	WEST UTTAR PRADESH	SCT	FWS	FWS	SCT	ISOL	ISOL	SCT
12	UTTARAKHAND	FWS	FWS	FWS	SCT	SCT	SCT	SCT
13	HARYANA CHANDIGARH & DELHI	FWS	SCT	SCT	SCT	ISOL	ISOL	ISOL
14	PUNJAB	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL
15	HIMACHAL PRADESH	FWS	FWS	FWS	SCT	ISOL	ISOL	ISOL
16	JAMMU & KASHMIR AND LADAKH	SCT	ISOL	SCT	SCT	ISOL	DRY	DRY
17	WEST RAJASTHAN	FWS	FWS	SCT	SCT	ISOL	ISOL	ISOL
18	EAST RAJASTHAN	WS	WS	FWS	FWS	FWS	FWS	FWS
19	WEST MADHYA PRADESH	SCT	SCT	SCT	FWS	SCT	SCT	SCT
20	EAST MADHYA PRADESH	FWS	FWS	FWS	FWS	SCT	SCT	SCT
21	GUJARAT REGION	WS	WS	WS	WS	WS	FWS	FWS
22	SAURASHTRA & KUTCH	WS	WS	WS	FWS	FWS	FWS	FWS
23	KONKAN & GOA	WS						
24	MADHYA MAHARASHTRA	FWS	FWS	FWS	FWS	FWS	SCT	SCT
25	MARATHAWADA	FWS	SCT	SCT	SCT	SCT	ISOL	ISOL
26	VIDARBHA	FWS	FWS	FWS	FWS	FWS	SCT	SCT
27	CHHATTISGARH	SCT	FWS	FWS	FWS	FWS	WS	WS
28	COASTAL ANDHRA PRADESH & YANAM	FWS	FWS	FWS	FWS	SCT	SCT	SCT
29	TELANGANA	WS	WS	WS	WS	FWS	SCT	SCT
30	RAYALASEEMA	FWS	FWS	FWS	SCT	SCT	SCT	SCT
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL						
32	COASTAL KARNATAKA	WS						
33	NORTH INTERIOR KARNATAKA	SCT	SCT	SCT	SCT	FWS	FWS	SCT
34	SOUTH INTERIOR KARNATAKA	ISOL	SCT	SCT	SCT	SCT	SCT	SCT
35	KERALA & MAHE	WS	FWS	FWS	FWS	FWS	WS	WS
36	LAKSHADWEEP	FWS	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

- ✓ **Very heavy rainfall** at isolated over Gujarat Region, Rajasthan, Arunachal Pradesh 04th; Coastal Andhra Pradesh & Yanam, Telangana on 04th & 05th September.
- ✓ **Low to Moderate flash flood risk** likely over few watersheds & neighbourhoods of Uttarakhand on 05th & 06th September. (**ANNEXURE IV**)

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.
- ✓ Reduction of visibility over sea area due to sea spray induced by strong wind and heavy rainfall.
- ✓ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ✓ Minor damage to kutchha 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

- ✓ Judicious regulation of offshore/onshore Operations
- ✓ 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

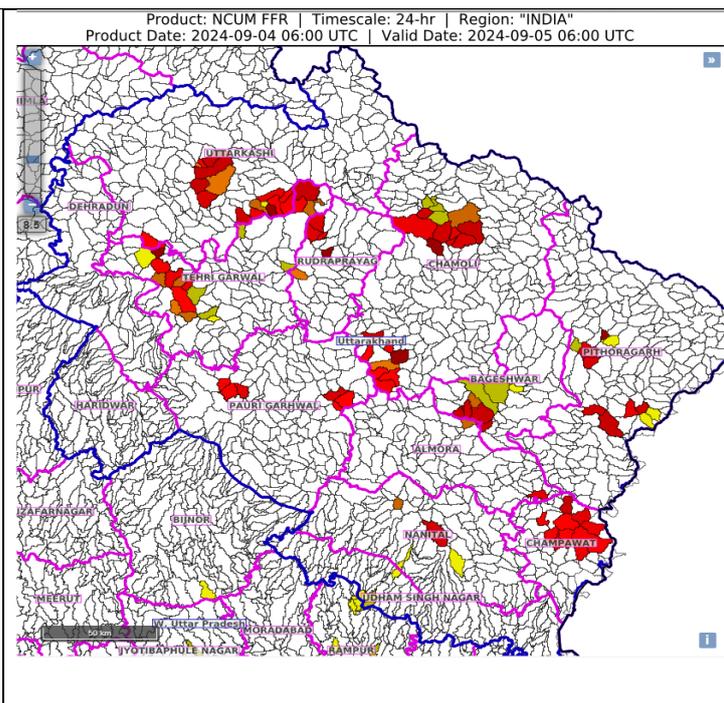
- Drain out excess water from field crops and horticultural crops in Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar, Jharkhand, Bihar, Himachal Pradesh, Uttarakhand, Rajasthan, Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Gujrat region, Karnataka, Coastal Andhra Pradesh and Telangana.
- Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Sub Himalayan West Bengal, Odisha, Uttar Pradesh, Vidarbha, Chhattisgarh, Saurashtra & Kutch.
- Drain out excess water from rice, castor, cotton, pearl millet, groundnut, sesame and maize fields in **Gujarat**; from rice, soybean, red gram, maize, cotton and Turmeric in **Telangana** to prevent water logging.
- Store the harvested produce of black gram and green gram at safer places in **Vidarbha**.
- 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 05-09-2024 :**

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

Uttarakhand - Bageshwar, Chamoli, Champawat, Pauri Garhwal, Pithoragarh, Rudraprayag, Tehri Garwal and Uttarkashi districts.

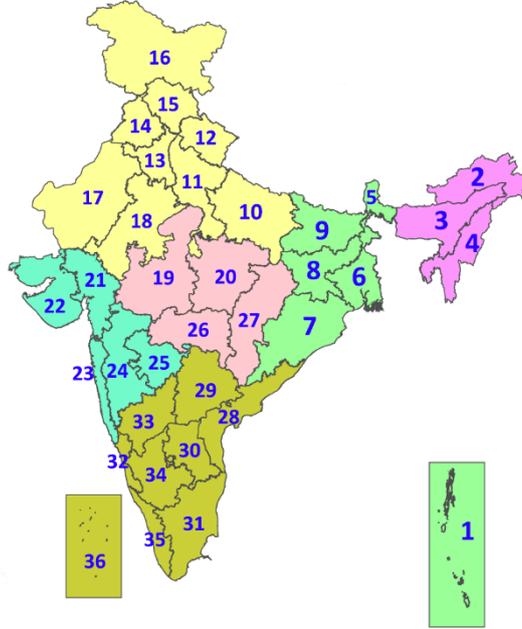
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.

**Legends & abbreviations:**

- ❖ **Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station; **ARG:** Automatic Rain Gauge; **dist:** District; **NH:** National Highway; **KVK:** Krishi Vigyan Kendra; **DVC:** Damodar Valley Corporation; **PTO:** Part Time Office, **Aero:** Aerodrome, **IAF:** Indian Air Force.
- ❖ **Region wise classification of meteorological Sub-Divisions:**
 - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
 - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
 - **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
 - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
 - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathawada.

LEGENDS

1. अंडमान और निकोबार द्वीपसमूह
2. अरुणाचल प्रदेश
3. असम और मेघालय
4. नागालैंड, मणिपुर, मिजोरम और त्रिपुरा
5. उप-हिमालयी पश्चिम बंगाल और सिक्किम
6. गंगीय पश्चिम बंगाल
7. ओडिशा
8. झारखंड
9. बिहार
10. पूर्वी उत्तर प्रदेश
11. पश्चिम उत्तर प्रदेश
12. उत्तराखंड
13. हरियाणा, चंडीगढ़ और दिल्ली
14. पंजाब
15. हिमाचल प्रदेश
16. जम्मू और कश्मीर और लद्दाख
17. पश्चिम राजस्थान
18. पूर्वी राजस्थान
19. पश्चिम मध्य प्रदेश
20. पूर्वी मध्य प्रदेश
21. गुजरात
22. सौराष्ट्र
23. कोंकण और गोवा
24. मध्य महाराष्ट्र
25. मराठवाड़ा
26. विदर्भ
27. छत्तीसगढ़
28. तटीय आंध्र प्रदेश और यनम
29. तेलंगाना
30. रायलसीमा
31. तमिलनाडु, पुडुचेरी और कराईकल
32. तटीय कर्नाटक
33. आंतरिक उत्तरी कर्नाटक
34. आंतरिक दक्षिणी कर्नाटक
35. केरल और माहे
36. लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Odisha
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chandigarh & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathwada
26. Vidarbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnadu, Puducherry & Karaikal
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala & Mahe
36. Lakshadweep

SPATIAL DISTRIBUTION (% of Stations reporting)

% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/A Few Places)
51-75	Fairly Widespread (FWS/Many Places)	1-25	Isolated (ISOL)



Fog



Heavy Snow



Cold Wave



Heavy Rain



Dust Storm



Cold Day



Very Heavy Rain



Heat Wave



Ground Frost



Extremely Heavy Rain



Warm Night



Thunder & Lightning



Hot Day



Hailstorm



Hot & Humid



Dust Raising Winds



Strong Surface Winds

COLOUR CODED WARNING

No Warning (No Action)

Watch (Be Aware)

Alert (Be Prepared To Take Action)

Warning (Take Action)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

* Red colour warning does not mean "Red Alert", Red colour warning means "Take Action".
Forecast and Warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day.
For more details, kindly visit <https://mausam.imd.gov.in> or contact: 011-2434-4599
(Service to the Nation since 1875)

DEFINITION/CRITERIA

Rain/ Snow *

Heavy: 64.5 to 115.5 mm/cm *
Very Heavy: 115.6 to 204.4 mm/cm*
Extremely Heavy: > 204.4 mm/cm *

Heat Wave

When maximum temperature of a station reaches $\geq 40^\circ\text{C}$ for plains and $\geq 30^\circ\text{C}$ for hilly regions
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C .
Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.
Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is $> 4.5^\circ\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^\circ\text{C}$

Warm Night

When maximum temperature remains 40°C

Warm Night: When minimum temperature departure 4.5°C to 6.4°C .
Severe Warm Night: When minimum temperature departure $> 6.4^\circ\text{C}$.

Cold Wave

When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions.
(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C .
Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is $\leq 4.0^\circ\text{C}$
Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ & actual Minimum Temperature is $\leq 15^\circ\text{C}$

Cold Day

When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions
Based on departure

Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C .
Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^\circ\text{C}$

Fog

Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres
Dense Fog: when the visibility between 50- 200 metres
Very Dense Fog: when the visibility < 50 metres

Thunderstorm

Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)

Dust/Sand Storm

An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.

Frost

Ice deposits on ground

Air temperature $\leq 4^\circ\text{C}$ (over Plains)

Squall

A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph
Severe: Wind speed 62-87 kmph
Very Severe: Wind speed > 87 kmph

Sea State

Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre
High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre
Phenomenal: Wind speed > 117 kmph (> 63 knots) & Wave height > 14 metre

Cyclone

Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)
Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)
Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)
Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)
Super Cyclone Strom: Wind speed > 220 kmph (> 119 knots)

* 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)