



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 07th September, 2024

Time of Issue: 1304 hours IST

Subject: In association with a well marked low pressure area, enhanced rainfall activity likely over Odisha, Coastal Andhra Pradesh & Telangana during 07th-10th September.

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

Heavy to very heavy rainfall at isolated places East Rajasthan, Telangana; **Heavy rainfall** at isolated places over Uttarakhand, Haryana, West Rajasthan, Madhya Pradesh, Odisha, Coastal Andhra Pradesh, Kerala.

Weather Systems:

- ✓ A Well Marked Low Pressure Area lies over the northwest & adjoining central Bay of Bengal at 0830 hrs IST of today. It is likely to move nearly northwards and intensify into a Depression over northwest Bay of Bengal off North Odisha-West Bengal coasts on 8th September. Thereafter, it is likely to move west-northwestwards across Gangetic West Bengal, north Odisha, Jharkhand and adjoining north Chhattisgarh during subsequent 3 days.
- ✓ The **monsoon trough** is south of its normal position at mean sea level. It is likely to continue so for next 3-4 days.
- ✓ A cyclonic circulation lies over central Rajasthan & neighbourhood and extends upto middle tropospheric levels.

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

❖ **West & Central India:**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over West India; Scattered to Fairly widespread light/moderate rainfall very likely over Central India during the week.
- ✓ Isolated **very heavy rainfall** very likely over ghat areas of Madhya Maharashtra on 08th & 09th and over Vidarbha on 12th September.
- ✓ Isolated **heavy rainfall** very likely over Madhya Pradesh during next 7 days; Gujarat Region on 07th; Chhattisgarh, Konkan & Goa during 07th -12th; Vidarbha during 08th -13th; Madhya Maharashtra during 07th -10th; Marathwada on 12th & 13th 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 Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Interior Karnataka during the week.

- ✓ Isolated **extremely heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam on 08th September.
- ✓ Isolated **very heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam and Telangana on 08th & 09th September.
- ✓ Isolated **heavy rainfall** very likely over Kerala & Mahe during 07th – 09th; Coastal Andhra Pradesh & Yanam, Telangana, South Interior Karnataka during 07th – 10th; Coastal Karnataka during 07th -11th September.

East & Northeast India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands during next 7 days; Scattered to Fairly widespread light/moderate rainfall very likely over Arunachal Pradesh during the week and East India during 06th-09th & fairly widespread to widespread light/moderate rainfall during 10th-12th September.
- ✓ Isolated **very heavy rainfall** very likely over Odisha during 08th -10th; Assam & Meghalaya during 10th -12th; Nagaland, Manipur, Mizoram & Tripura on 10th & 11th September.
- ✓ Isolated **heavy rainfall** very likely over Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura during next 7 days; Odisha during 07th -11th; Arunachal Pradesh during 10th -13th; West Bengal & Sikkim during 09th -13th; Bihar and Jharkhand during 11th & 13th September.

❖ Northwest India

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over Northwest India on 06th & 07th; isolated to scattered rainfall over the region during subsequent 5 days.
- ✓ Isolated **very heavy rainfall** very likely over East Rajasthan on 07th September.
- ✓ Isolated **heavy rainfall** very likely over West Uttar Pradesh on 07th; Haryana, West Rajasthan on 07th & 08th; Uttarakhand on 07th and during 09th -11th; East Uttar Pradesh on 10th & 11th; East Rajasthan during 07th -09th and on 13th September.

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

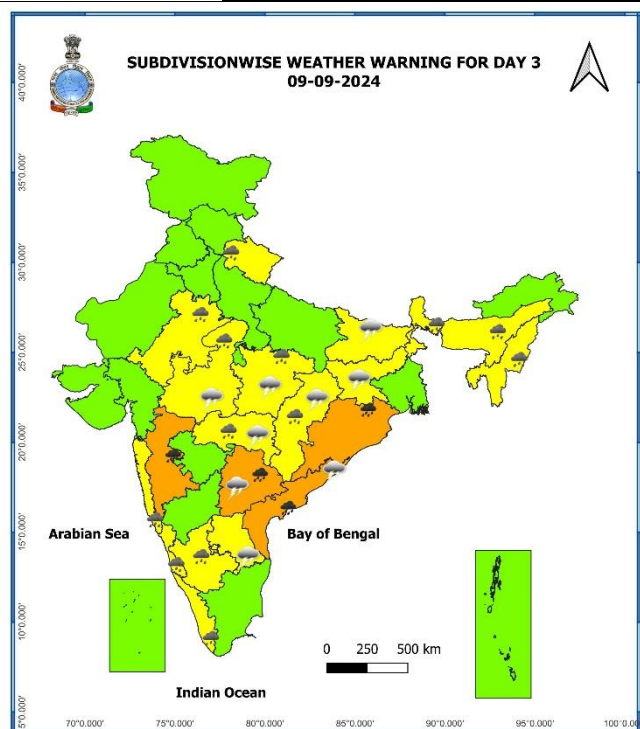
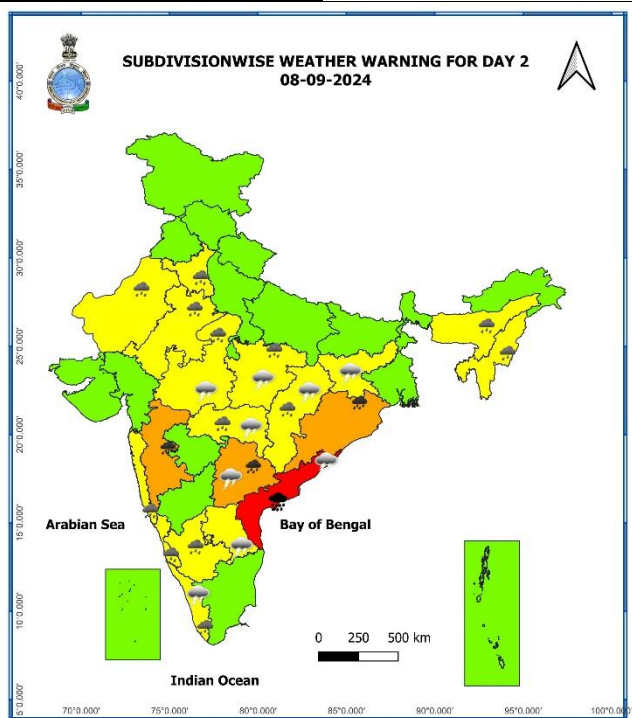
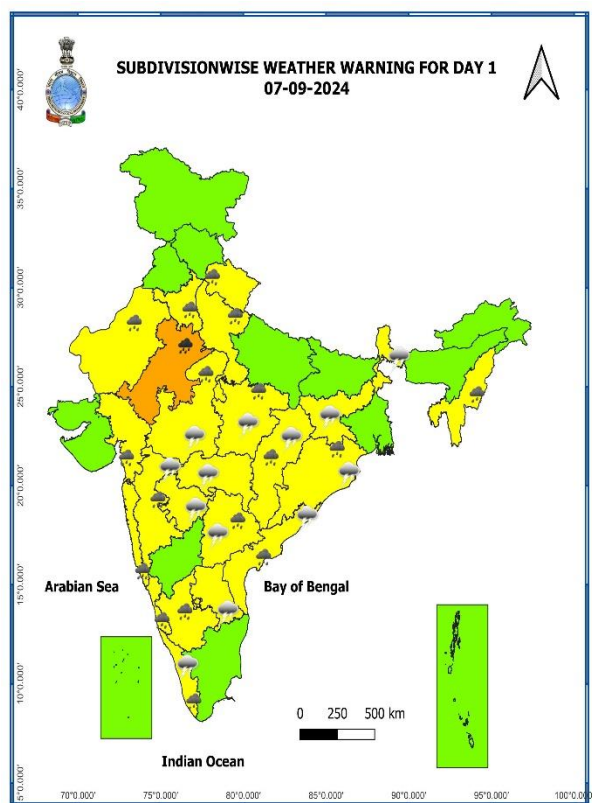
For District wise warnings refer: <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.ph>

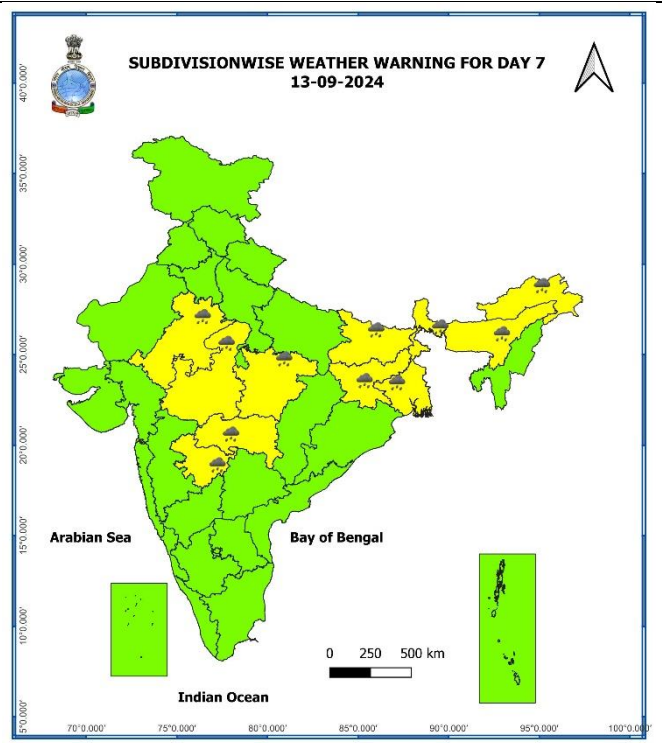
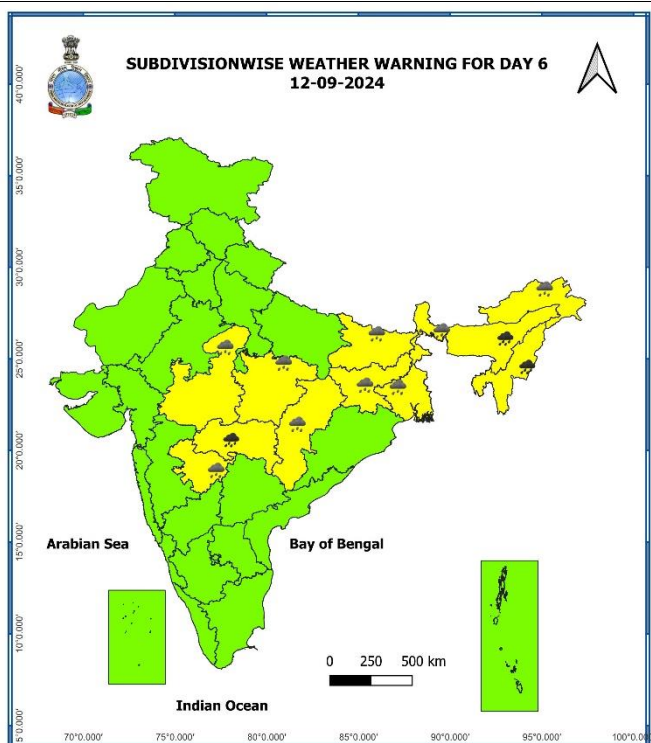
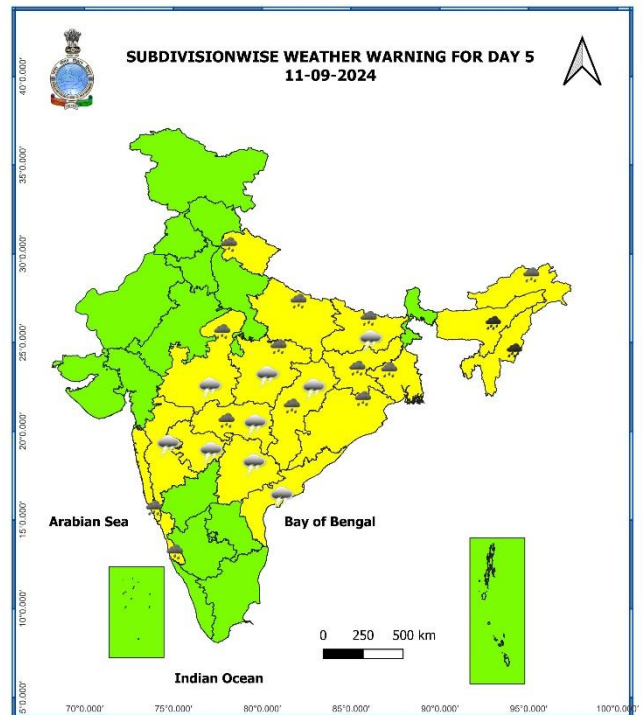
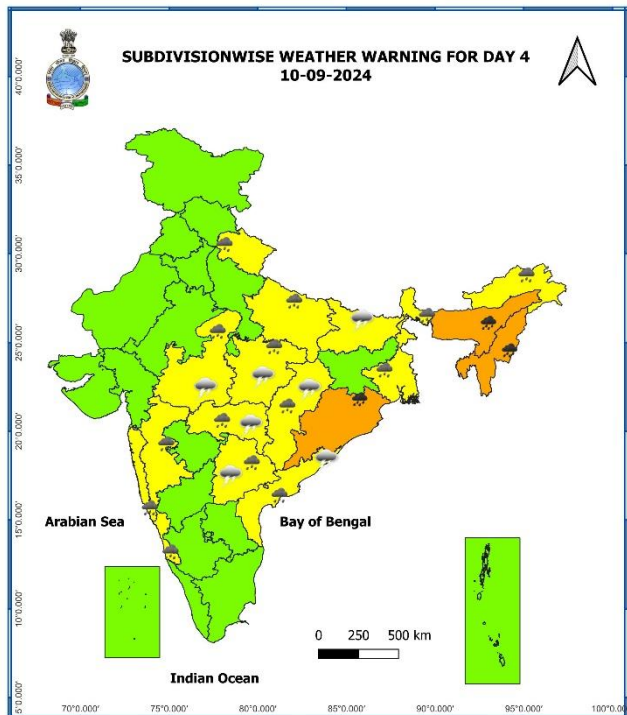
Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 07.09.2024 (in cm):

- ❖ **East Rajasthan:** Loharia (dist Banswara) 17, Deogarh (dist Rajsamand) 14, Pushkar Sr (dist Ajmer) 13, Baswa (dist Dausa) 12, Pachpahar Sr (dist Jhalawar) 10, Bhungra Sr (dist Banswara) 9, Ghatol (dist Banswara) 9, Pipalkhunt Sr (dist Pratapgarh) 8, Kesarpura Sr (dist Banswara) 8, Rajgarh (dist Alwar) 8, Banswara Sr (dist Banswara) 8, Dausa (dist Dausa) 8, Todabhim (dist Karauli) 8, Sikrai (dist Dausa) 7, Nimarana (dist Alwar) 7, Govindgarh Sr (dist Alwar) 7, Sawaimadhopur Tesil Sr (dist Sawai Madhopur) 7, Kotputli (dist Jaipur) 7, Ajmer Tehsil Sr (dist Ajmer) 7, Danpur (dist Banswara) 7, Pratapgarh (dist Pratapgarh) 7, Behror (dist Alwar) 7, Pisagan Sr (dist Ajmer) 7,
- ❖ **Telangana:** Angareddy (dist Sangareddy) 12, Suryapet (dist Suryapet) 9
- ❖ **West Rajasthan:** Raipur Sr (dist Pali) 10, Merta City (dist Nagaur) 7,
- ❖ **Coastal Andhra Pradesh & Yanam:** Palakonda (dist Parvathipuram Manyam) 9, Seethanagaram (dist Parvathipuram Manyam) 8, Merakamudidam (dist Vizianagaram) 8, Palakonda(arg) (dist Parvathipuram Manyam) 8,
- ❖ **Haryana:** Panchkula (dist Panchkula) 9, Jagadhari (dist Yamuna Nagar) 8, Panchkula (dist Panchkula) 7,
- ❖ **Odisha:** Khairamal (dist Boudhgarh) 8, Gosani (dist Gajapati) 8, Similiguda (dist Koraput) 7, Nandapur (dist Koraput) 7,
- ❖ **Kerala & Mahe:** Muliya (dist Kasargode) 7,
- ❖ **Uttarakhand:** Loharkhet (Bageshwar) 7, Haripur (Dehradun) 6,
- ❖ **East Madhya Pradesh:** Narsinghpur-aws (dist Narsinghpur) 7,
- ❖ **West Madhya Pradesh:** Malhargarh (dist Mandsaur) 7,

7 Days Rainfall Forecast								
S. No.	Subdivision	07-Sep	08-Sep	09-Sep	10-Sep	11-Sep	12-Sep	13-Sep
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	WS	WS	WS	WS	WS	WS
2	ARUNACHAL PRADESH	SCT	SCT	SCT	FWS	FWS	FWS	FWS
3	ASSAM & MEGHALAYA	SCT	SCT	FWS	WS	WS	WS	FWS
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	SCT	SCT	FWS	FWS	WS	WS	FWS
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	SCT	SCT	FWS	WS	FWS	FWS	FWS
6	GANGETIC WEST BENGAL	SCT	SCT	FWS	WS	WS	WS	WS
7	ODISHA	FWS	WS	WS	WS	FWS	SCT	SCT
8	JHARKHAND	ISOL	SCT	SCT	FWS	WS	WS	FWS
9	BIHAR	ISOL	ISOL	SCT	SCT	FWS	FWS	FWS
10	EAST UTTAR PRADESH	ISOL	ISOL	SCT	FWS	FWS	FWS	FWS
11	WEST UTTAR PRADESH	ISOL	ISOL	SCT	SCT	SCT	SCT	SCT
12	UTTARAKHAND	FWS	FWS	FWS	SCT	SCT	ISOL	ISOL
13	HARYANA CHANDIGARH & DELHI	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
14	PUNJAB	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
15	HIMACHAL PRADESH	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
16	JAMMU & KASHMIR AND LADAKH	SCT	ISOL	ISOL	DRY	DRY	DRY	DRY
17	WEST RAJASTHAN	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
18	EAST RAJASTHAN	FWS	FWS	FWS	SCT	SCT	SCT	SCT
19	WEST MADHYA PRADESH	FWS	SCT	SCT	SCT	FWS	FWS	FWS
20	EAST MADHYA PRADESH	FWS	SCT	SCT	FWS	FWS	FWS	FWS
21	GUJARAT REGION	WS	WS	WS	WS	WS	FWS	FWS
22	SAURASHTRA & KUTCH	WS	WS	WS	FWS	FWS	FWS	FWS
23	KONKAN & GOA	WS	WS	WS	WS	WS	WS	WS
24	MADHYA MAHARASHTRA	FWS	FWS	SCT	SCT	FWS	FWS	FWS
25	MARATHAWADA	FWS	FWS	SCT	SCT	FWS	FWS	FWS
26	VIDARBHA	FWS	FWS	FWS	FWS	WS	WS	WS
27	CHHATTISGARH	WS	WS	WS	FWS	FWS	FWS	FWS
28	COASTAL ANDHRA PRADESH & YANAM	FWS	WS	FWS	SCT	SCT	SCT	SCT
29	TELANGANA	WS	FWS	FWS	SCT	SCT	ISOL	ISOL
30	RAYALASEEMA	SCT	FWS	SCT	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	WS	WS	WS	WS	WS	WS	WS
33	NORTH INTERIOR KARNATAKA	SCT	SCT	ISOL	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	SCT	FWS	ISOL	ISOL	ISOL	ISOL	ISOL
35	KERALA & MAHE	WS	WS	WS	WS	FWS	FWS	FWS
36	LAKSHADWEEP	WS	WS	WS	FWS	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 Coastal Andhra Pradesh & Yanam on 08th September.
- ✓ **Very heavy rainfall** at isolated over East Rajasthan on 07th; ghat areas of Madhya Maharashtra on 08th & 09th and Vidarbha on 12th; Coastal Andhra Pradesh & Yanam and Telangana on 08th & 09th; Odisha during 08th -10th; Assam & Meghalaya during 10th -12th; Nagaland, Manipur, Mizoram & Tripura on 10th & 11th September.
- ✓ **Low flash flood risk** likely over few watersheds & neighbourhoods of Uttarakhand on 07th & 08th 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 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

- ✓ 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 rice, pigeon pea, maize, sunflower, groundnut, soybean, vegetables and orchards in **Maharashtra**; from maize, cotton and soybean in **Rajasthan**; from rice, soybean, red gram, maize, cotton and turmeric in **Telangana**; from rice, finger millet, maize and groundnut in **Odisha** to prevent water logging.
- Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in Assam & Meghalaya, NMMT, Vidarbha, Chhattisgarh, Konkan & Goa, Kerala, Coastal Karnataka and South Interior Karnataka.
- Postpone transplanting of rice in North Coastal **Andhra Pradesh**.
- Provide mechanical support to horticultural crops & staking to vegetables.
- Keep the harvested produce at safer place.

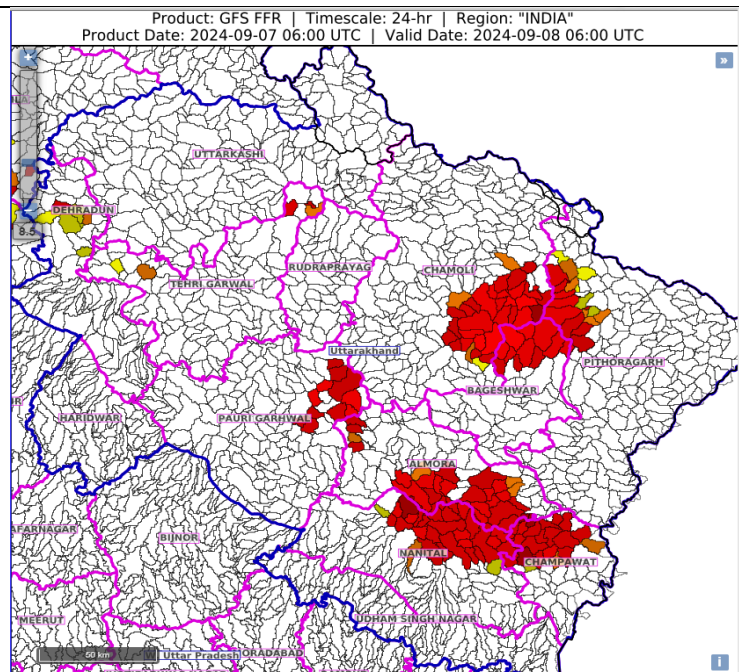
Flash Flood Guidance:

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 08-09-2024 :

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

Uttarakhand - Almora, Bageshwar, Chamoli, Champawat, Dehradun, Nanital, Pauri Garhwal, Pithoragarh and Tehri Garwal districts.

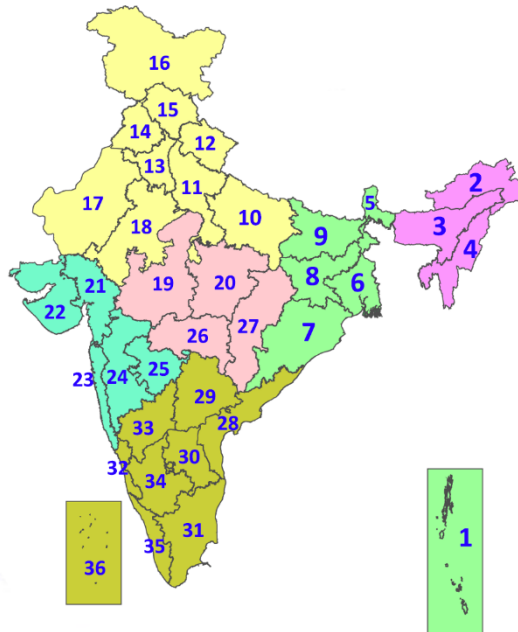
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown in map due to expected rainfall occurrence in next 24 hours.

**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)

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