



Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 10th September, 2025

Time of Issue: 1315 hours IST

Subject: i) Isolated heavy to very heavy rainfall likely over Sub-Himalayan West Bengal & Sikkim on 10th & 13th; Odisha on 11th; Arunachal Pradesh and Nagaland & Manipur during 12th-16th; Assam & Meghalaya during 13th-16th September, 2025.
ii) Heavy rainfall spell likely over East India and Peninsular India during next 4-5 days.
iii) Increasing rainfall activity likely over Maharashtra from 13-16th September, 2025.

Realised weather during past 24 hours till 0830 hours IST of today, the 10th September, 2025:

- ❖ **Very heavy rainfall (12-20 cm)** has been recorded at isolated places over Sub-Himalayan West Bengal & Sikkim and Bihar.
- ❖ **Heavy rainfall (7-11 cm)** has been recorded at isolated places over Uttarakhand, Jharkhand, West Madhya Pradesh, Chhattisgarh, Arunachal Pradesh, Assam, Lakshadweep, Coastal Andhra Pradesh, Rayalaseema and Tamil Nadu.

For more details of realised weather, kindly refer [Annexure I](#).

i. Weather Systems, Forecast and Warnings (refer to Annexure II & III):

- ❖ The western end of the **Monsoon trough** at mean sea level runs south of its normal position and eastern end runs its near normal position.
 - ❖ The **depression** over southeast Pakistan moved nearly westwards and lay centred at 0530 hrs IST of today, the 10th September, 2025, over the northeast Arabian Sea & adjoining south Pakistan. It moved nearly westwards, lay centred at 0830hrs IST of today, the 10th September, 2025, over the same region near latitude 24.8°N and longitude 65.5°E, 170 km west of Karachi (Pakistan), 300 km west-southwest of Hyderabad (Pakistan), and 390 km west-northwest of Naliya (Gujarat). It is very likely to continue to move nearly westwards and weaken gradually into a well-marked low pressure area during next 06 hours.
 - ❖ An upper air **cyclonic circulation** lies over South Odisha & adjoining north Coastal Andhra Pradesh in lower tropospheric levels.
 - ❖ An upper air **cyclonic circulation** over Sikkim & neighbourhood in lower tropospheric levels.
 - ❖ A **trough** runs from South Interior Karnataka to Gulf of Mannar in lower tropospheric levels.
 - ❖ A **trough** in westerlies in lower tropospheric levels runs roughly along at Long. 86°E to the north of Lat. 22°N.
- Under the influence of these systems, the following weather is likely:

Northeast India:

- ❖ Light/moderate rain/thunderstorm at many/some places with isolated **heavy rainfall** likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 10th-16th September with **very heavy falls over Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura during 12th-16th; Assam & Meghalaya during 13th-16th September.**

East & Central India:

- ❖ Light to moderate rain/thunderstorm at many/some places with isolated **heavy rainfall** likely over West Madhya Pradesh on 10th; Andaman & Nicobar Islands & East Madhya Pradesh on 10th & 11th; Chhattisgarh & Bihar during 10th-14th; Sub-Himalayan West Bengal & Sikkim during 10th-15th; Jharkhand on 11th; Vidarbha

during 12th-14th; Odisha on 11th & 12th September with isolated **very heavy falls over Sub-Himalayan West Bengal & Sikkim on 10th & 13th; Odisha on 11th September.**

Northwest India:

- ❖ Light to moderate rain/thunderstorm at some/isolated places with **isolated heavy rainfall** likely over East Uttar Pradesh on 11th, 12th, 15th & 16th; West Uttar Pradesh on 12th; Jammu-Kashmir on 13th; Himachal Pradesh on 13th & 14th; Uttarakhand during 12th-15th September.

West India:

- ❖ Light to moderate rain/thunderstorm at some/isolated places with **isolated heavy rainfall** likely over Madhya Maharashtra during 12th-16th; Marathawada during 12th-14th; Konkan & Goa during 13th-16th; Gujarat Region during 14th-16th September with **very heavy falls over Marathawada on 13th; Konkan & Goa, Madhya Maharashtra on 14th September.**

South Peninsular India:

- ❖ Light to moderate rain/thunderstorm & gusty winds (speed 30-40 kmph) at many/some places with isolated **heavy rainfall** likely over Tamil Nadu on 10th & 11th; Kerala & Mahe, South Interior Karnataka on 10th; Coastal Andhra Pradesh & Yanam & Telangana during 10th-13th; North Interior Karnataka during 10th-14th September.
- ❖ Strong surface winds (speed reaching 30-40 kmph) very likely over Coastal Andhra Pradesh & Yanam and Rayalaseema during next 5 days.

Fishermen warning:

Fishermen are advised not to venture into the following from 10th to 15th September 2025 to the following Areas:

Arabian Sea

Along and off north Gujarat, Pakistan coasts, some parts of northeast Arabian Sea & adjoining northwest Arabian Sea on 10th; Along and off the Somalia coast, many parts of westcentral & some parts of southwest Arabian sea during 10th to 12th September; Along and off the Somalia coast, some parts of westcentral & some parts of southwest Arabian sea during 12th to 15th September.

Bay of Bengal

Few parts of southwest, along and off south Sri Lanka coast on 10th September; along and off Tamil Nadu coast on 14th September; along and off south Andhra Pradesh coast on 14th September; some parts of southwest Bay of Bengal, along and off south Sri Lanka coast during 11th to 15th; over Gulf of Mannar & adjoining Comorin area on 10th to 15th September.

ii. Weather conditions and forecast over Delhi/NCR during 10th September to 13th September 2025 (Annexure IV)

For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php

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

For Fishermen warning refer <https://rsmcnewdelhi.imd.gov.in/fishermen-warning.php>

ANNEXURE I

Rainfall recorded (in cm) during past 24 hours till 0830 hours IST of today, the 10th September (≥ 7cm):

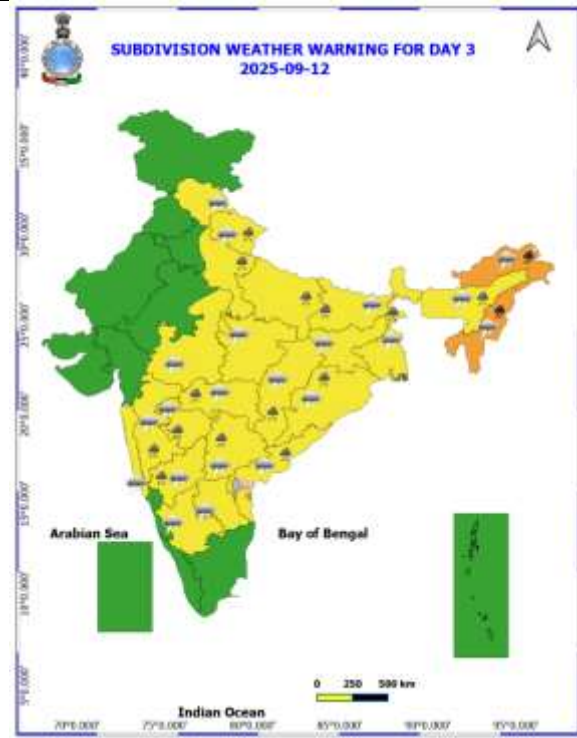
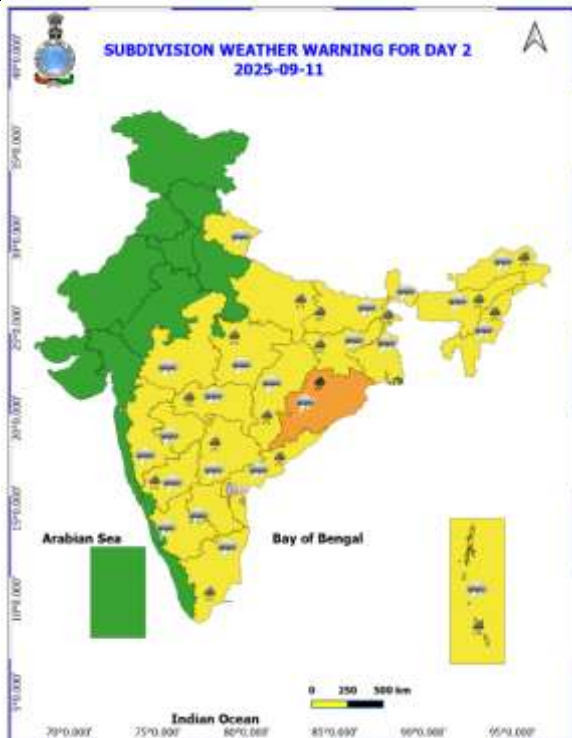
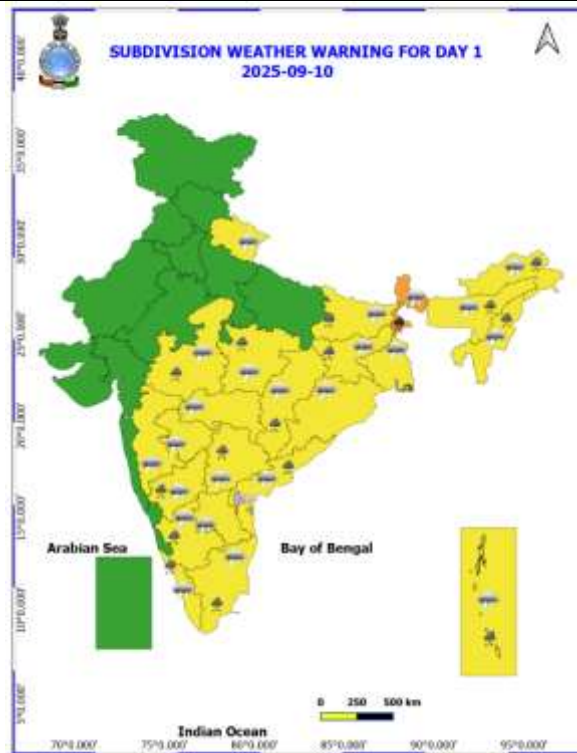
- ❖ **Sub-Himalayan West Bengal & Sikkim:** Gyalsing (dist Gyalshing) 16, Sevoke (dist Darjeeling) 8, Damthang (dist Namchi) 7;
- ❖ **Bihar:** Bettiah (dist West Champaran) 13, Narpatganj (dist Araria) 7, Pratapganj (dist Supaul) 7, Nirmali (dist Supaul) 7;
- ❖ **Rayalaseema:** Kuppam (dist Chittoor) 9;
- ❖ **Assam:** A P Ghat (dist Cachar) 9, Barpeta (dist Barpeta) 8, Beky Rly.bridge (dist Barpeta) 7, Beki Mathungari (dist Barpeta) 7;
- ❖ **Jharkhand:** Putki Dvc (dist Dhanbad) 9, Jamtara (dist Jamtara) 8, Dhanbad (dist Dhanbad) 7;
- ❖ **West Madhya Pradesh:** Pachmarhi (dist Narmadapuram) 9, Bhopal Arera Hills (dist Bhopal) 7;
- ❖ **Coastal Andhra Pradesh:** Visakhapatnam (dist Vishakhapatnam) 8;
- ❖ **Uttarakhand:** Haripur (dist Dehradun) 8;
- ❖ **Chhattisgarh:** Durg (dist Durg) 8;

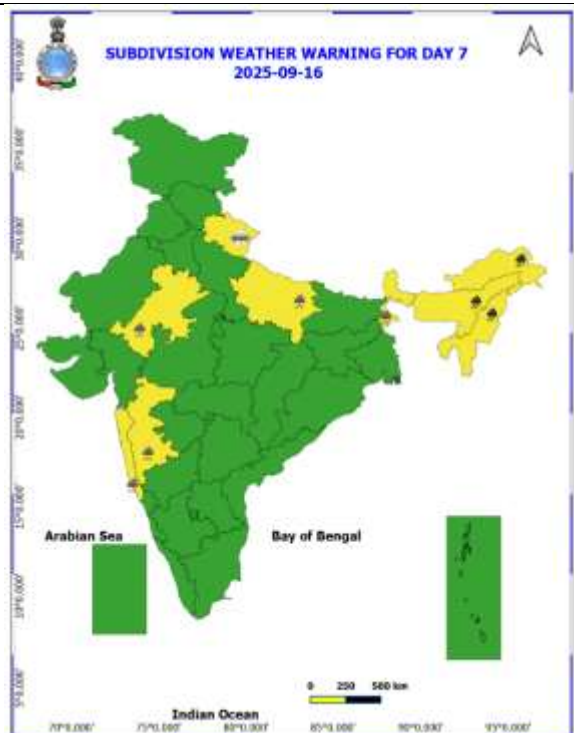
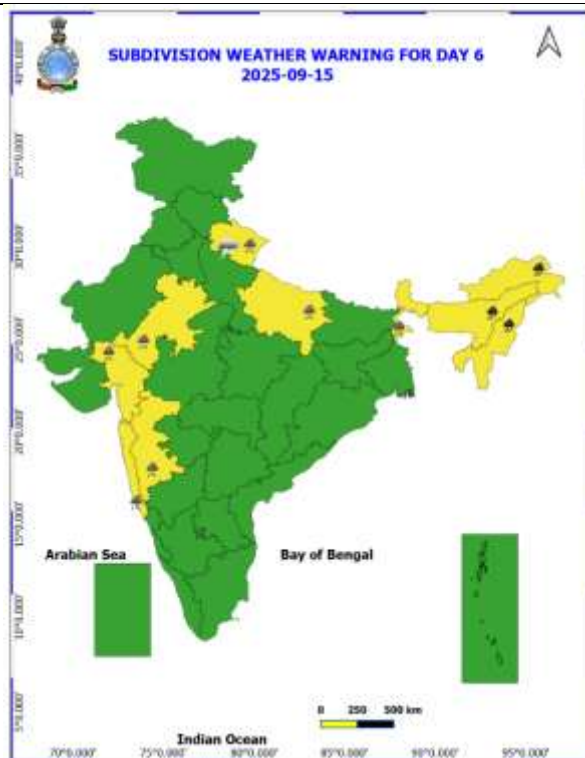
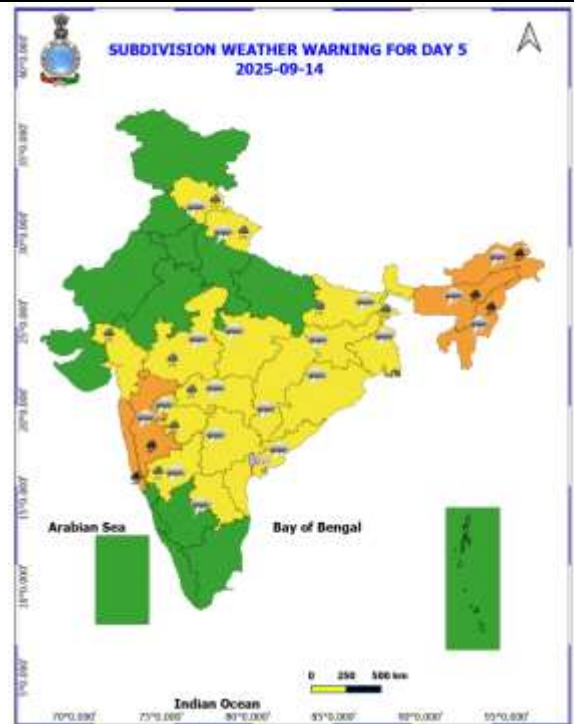
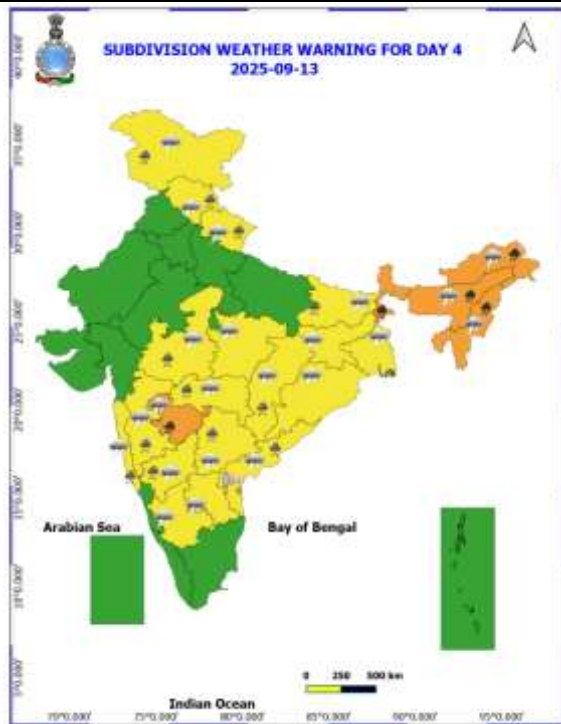
- ❖ **Tamil Nadu:** Dindigul (dist Dindigul) 8, Thuraiyur ARG (dist Thiruchirappalli), Alangayam (dist Tirupathur) 7 each;
- ❖ **Arunachal Pradesh:** Dirang Arg (dist West Kameng) 7;
- ❖ **Lakshadweep:** Agathi (dist Lakshadweep) 7.

ANNEXURE II

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

- As the lead period increases forecast accuracy decrease.





- Action may be taken based on ORANGE AND REDCOLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

Detailed districtwise Multi Hazard weather warning for next five days available at
<https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

Weather forecast over Delhi/NCR during 10th to 13th September 2025**Past Weather:**

There has been no large change in maximum temperature and minimum temperatures in past 24 hours over Delhi. The minimum temperatures were in the range of 24-27°C and maximum temperatures were in the range of 34- 35°C. The minimum temperatures were near normal and maximum temperatures were above normal by 1-2°C over Delhi. Westerly winds prevailed with wind speed upto 19 kmph in past 24 hours over Delhi. Mainly clear sky with a wind speed of upto 10-15 kmph from the south west direction prevailed over the region in the forenoon today.

Weather Forecast:

10.09.2025: Partly cloudy sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to 36°C. The maximum temperature will be above normal upto 1 to 3°C. The predominant surface wind will likely to be from the northwest direction with a wind speed of upto 20-25 kmph during afternoon hours. It will reach remain upto 20-25 kmph from the northwest direction during evening and night.

11.09.2025: Partly cloudy sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to 36°C and 24 to 26°C respectively. The minimum temperature will be near normal and the maximum temperature will be below above up to 3°C. The predominant surface wind will likely to be from the northwest direction with a wind speed of upto 20-25 kmph during morning and afternoon hours. It will then decrease upto 15-20 kmph from the northwest during evening and night.

12.09.2025: Partly cloudy sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to 36°C and 24 to 26°C respectively. The minimum temperature will be near normal and the maximum temperature will be above normal up to 0 to 3°C. The predominant surface wind will likely to be from the northwest direction with a wind speed upto 20-25 kmph during morning. The predominant surface wind will likely to be from the north west direction with a wind speed of upto 10-15 kmph during afternoon. It will remain upto 10-15 kmph from the north west direction during evening and night.

13.09.2025: Partly cloudy sky. The maximum and minimum temperatures over Delhi are likely to be in the range of 34 to 36°C and 24 to 26°C respectively. The minimum temperature will be near normal and the maximum temperature will be above normal up to 0 to 2°C. The predominant surface wind will likely to be from the northwest direction with a wind speed upto 15-20 kmph during morning. The predominant surface wind will likely to be from the north west direction with a wind speed of upto 10-15 kmph during afternoon. It will remain upto 05-10 kmph from the north west direction during evening and night.

Impact & Action Suggested due to

- ❖ **Heavy to very heavy rainfall (12-20 cm)** at isolated places over Sub-Himalayan West Bengal & Sikkim on 10th & 13th; Odisha on 11th; Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura during 12th-16th; Assam & Meghalaya during 13th-16th; Marathawada on 13th; Konkan & Goa and Madhya Maharashtra on 14th September.

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 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/mudsinks/mudsinks.
- 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 likely impact of Heavy / Heavy to Very Heavy Rainfall

- In Arunachal Pradesh, immediately harvest matured crops of *Jhum* rice, finger millet, soybean and matured bunches of banana and shift to properly covered shelter. Maintain proper drainage in standing crops like rice, soybean, finger millet and vegetables to avoid water stagnation.
- In Assam, ensure proper drainage in fields of rice, sugarcane, black gram and sesame in Hill Zone. In Lower Brahmaputra Valley Zone, ensure proper drainage system in *Sali* rice fields and nursery bed of vegetables. Cover the nursery bed with thin polythin to avoid the damages due to heavy rainfall. In Barak Valley Zone, postpone the sowing of green gram and black gram and provide adequate drainage facilities in fields of rice, vegetables and already sown green gram and black gram.
- In Meghalaya, maintain proper drainage in ginger and vegetable fields and fruit orchards. Provide support to banana plants to prevent lodging. Maintain a thin layer of 2-3 cm stagnant water in rice fields after transplanting.
- In Nagaland, undertake harvesting of matured *Jhum* rice, pods of sesame and Naga King chilli and store the harvested produce in safe places. Maintain 3-5 cm stagnate water in rice fields.
- In Mizoram, undertake harvesting of matured cobs of maize.
- In Manipur, harvest matured cobs of maize, matured pods of soybean and groundnut and matured grains of finger millet.
- In Sub-Himalayan West Bengal, make provision to drain out excess water from *aman* paddy and vegetable fields (chilli, bitter gourd, pointed gourd, okra, brinjal etc.) in Terai Zone.
- In Odisha, make arrangements for draining out excess water from the field of pulses (pigeon pea, black gram, green gram), maize, groundnut and vegetables (tomato, brinjal, okra, chilli) in Eastern Ghat High Land Zone and South Eastern Ghat Zone.

Livestock / Fishery

- Keep the animals inside the shed during heavy rainfall and provide them balanced feed.
- Store feed and fodder in a safe place to prevent spoilage.
- Construct an outlet with proper netting around the ponds to drain out excess water, thereby preventing fish from escaping in case of overflow.

Agromet advisories for likely impact of Thunderstorm / Gusty Winds / Squally Winds

- Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.

Legends & abbreviations:

- ❖ **Heavy Rain:**64.5-115.5mm; **Very Heavy Rain:**115.6-204.4mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; 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

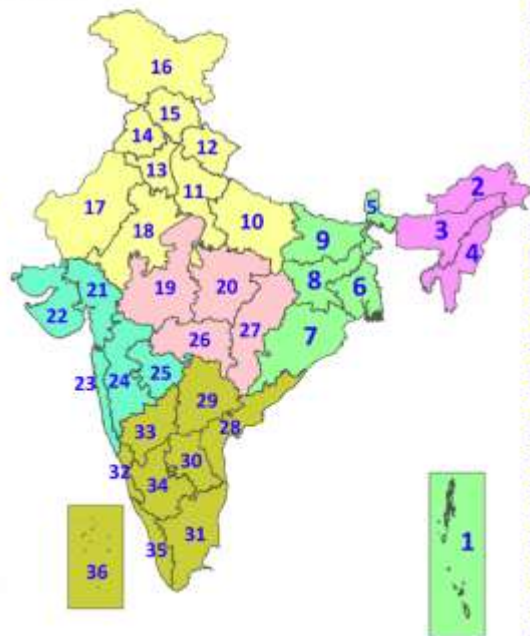
32. तटीय कर्नाटक

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 62-67 kmph
Very Severe: Wind speed > 67 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 Storm: 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)

Hot and Humid: When maximum temperatures remain 3°C above normal along with the above normal relative humidity.