

Government of India
Ministry of Earth Sciences
India Meteorological Department



Press Release

Date: 02nd December, 2024

Time of Issue: 1330 hours IST

Subject: (i) The well marked low pressure area [remnant of Cyclonic Storm “FENGAL”] over north interior Tamil Nadu. The remnant low pressure area is likely to emerge over southeast & adjoining eastcentral Arabian Sea off north Kerala-Karnataka coasts around 03rd December 2024.

(ii) Heavy to very heavy rainfall at a few places with isolated extremely heavy rainfall very likely over Ghat districts of Tamil Nadu, Kerala and South Interior Karnataka on 02nd December.

i. Realised weather during past 24 hours till 0830 hours IST of today

Rainfall realized over the country: (details in Annexure I)

- ❖ **Heavy to very heavy rainfall** occurred at many places with **extremely heavy rainfall** at isolated places over North interior Tamil Nadu and **Heavy to very heavy rainfall** at a few places over North coastal Tamil Nadu and Puducherry. **Exceptionally heavy rainfall** also occurred at isolated places over the districts of Krishnagiri & Villupuram of North Tamil Nadu (Uthangarai 50 cm and RSCL-2 Kedar 42 cm).
- ❖ **Heavy to very heavy rainfall** occurred at isolated places over Kerala and **heavy rainfall** at isolated places over south Coastal Andhra Pradesh.

Weather Systems:

- ❖ The **Cyclonic Storm “FENGAL” [pronounced as FEINJAL]** over north coastal Tamil Nadu & Puducherry weakened into a **deep depression** over the same region at 1130 hrs IST of yesterday, into a depression at 1730 hrs IST and into a well marked low pressure area over north interior Tamil Nadu at 0530 hrs IST of today, the 02nd December and persisted over the same region at 0830 hrs IST. The remnant low pressure area is likely to emerge into southeast & adjoining eastcentral Arabian Sea off north Kerala-Karnataka coasts around 03rd December 2024.
- ❖ A **Western disturbance** lies as a trough in middle tropospheric westerlies roughly running along Long. 65°E to the north of Lat. 30°N.

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

- ✓ **North interior Tamil Nadu: Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places very likely over ghat districts of Tamil Nadu adjoining to Kerala on 02nd December. It will decrease becoming isolated heavy rainfall on 03rd December.
- ✓ **Kerala: Heavy to very heavy rainfall at a few places with extremely heavy falls** at isolated places very likely over Kerala on 02nd December and **Heavy to very heavy rainfall** at isolated places very likely on 03rd December.

- ✓ **South Interior Karnataka: Heavy to very heavy rainfall with extremely heavy falls** at isolated places very likely over South Interior Karnataka on 02nd and isolated heavy rainfall on 03rd December.
- ✓ **Coastal Karnataka: Heavy to very heavy rainfall** at isolated places very likely over Coastal Karnataka on 02nd and isolated heavy rainfall on 03rd December.
- ✓ **Royalaseema: Isolated heavy rainfall** very likely over Royalaseema on 02nd December.
- ✓ **Lakshadweep: Isolated heavy rainfall** very likely over Lakshadweep on 03rd & 04th December.

ii. Temperature conditions and Forecast:

Temperature Conditions during past 24 hours till 0830 hours IST of today

There was no significant change in minimum temperature over most parts of the country during past 24 hours. Minimum temperatures are **markedly above normal (5°C or more)** at a few places over Telangana and Odisha; **appreciably above normal (3°C to 5°C)** at a few places over Gangetic West Bengal and Coastal Andhra Pradesh & Yanam; at isolated places over Punjab, Bihar, Maharashtra, Nagaland, Manipur, Mizoram & Tripura; **above normal (1°C to 3°C)** at many places over Rajasthan, Tamil Nadu, Puducherry & Karaikal; at a few places over Kerala & Mahe; at isolated places over Haryana-Chandigarh-Delhi, Uttar Pradesh, Chhattisgarh, East Madhya Pradesh and Andaman & Nicobar Islands. These are **appreciably below normal (-5°C to -3°C)** at isolated places over Assam & Meghalaya; **below normal (-3°C to -1°C)** at isolated places over West Madhya Pradesh, Saurashtra & Kutch and near normal over rest parts of the country. Today, **the lowest minimum temperature of 7.8°C** is reported at **Nowgong (East Madhya Pradesh)** over the plains of the country.

Forecast of temperature:

- ❖ No significant change in minimum temperatures likely over Northwest, Central & East India during next 2-3 days and gradual fall by 2-4°C thereafter.
- ❖ No significant change in minimum temperatures likely over West India during next 4-5 days.

iii. Fishermen & Wind Warnings (Annexure IV):

Fishermen Warnings:

Fishermen are advised not venture along and off Kerala-Karnataka coasts on 02nd & 03rd December; Lakshadweep area on 4th & 05th December; over southeast adjoining east central Arabian sea during 04-06th December 2024.

iv. Weather conditions and forecast over Delhi/NCR during 02nd to 05th Dec. 2024 (Annexure V)

For more details, kindly refer National Weather Bulletin:

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

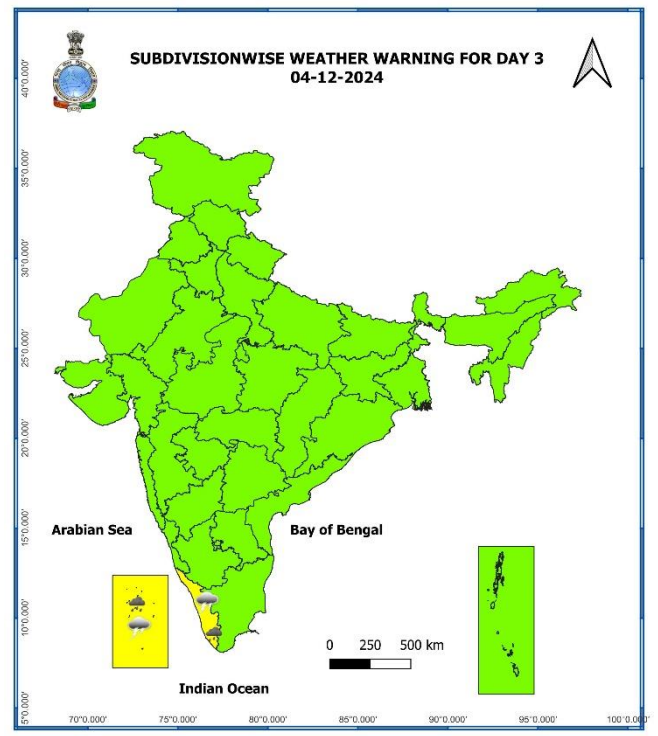
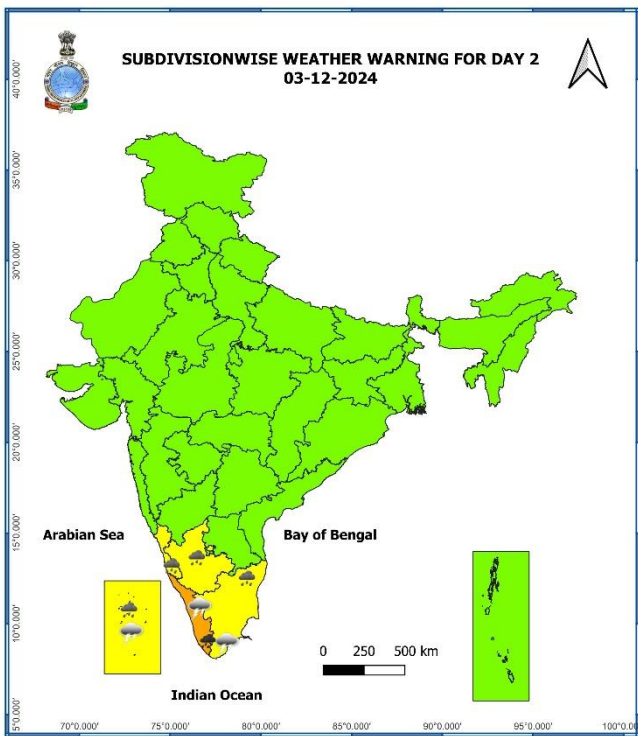
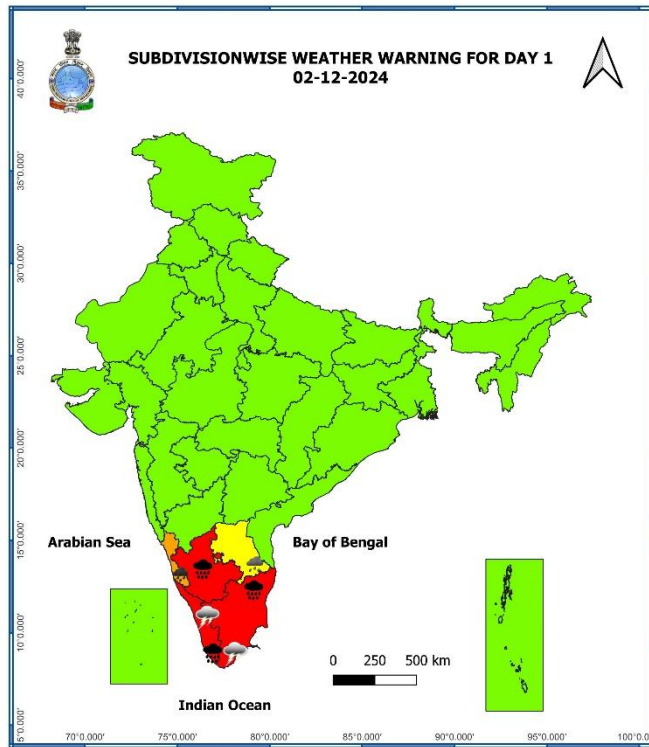
For District wise warnings refer: <https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

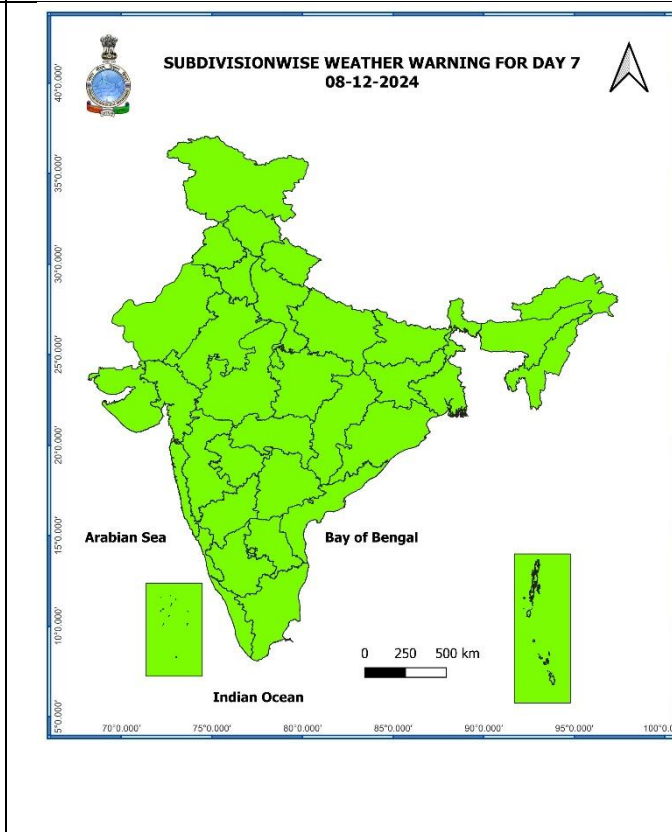
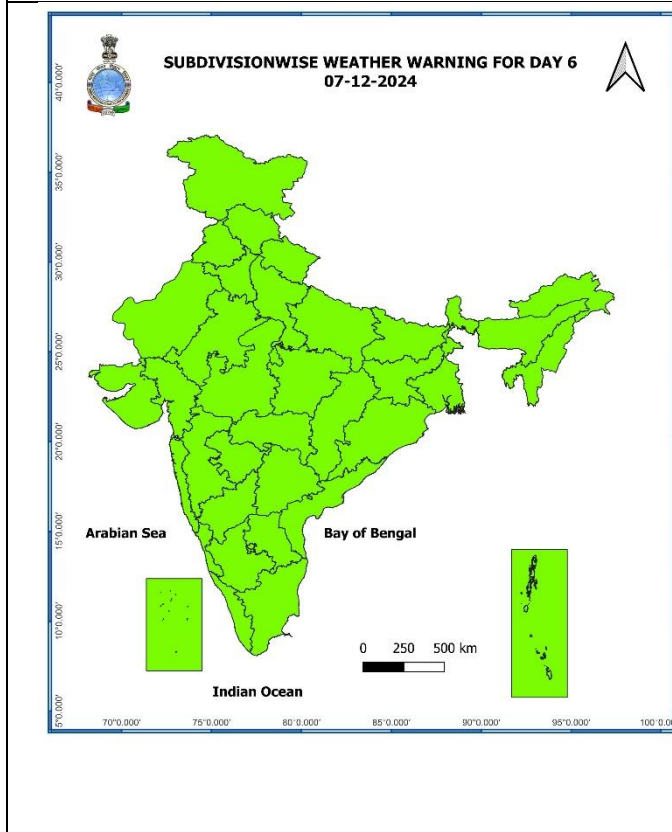
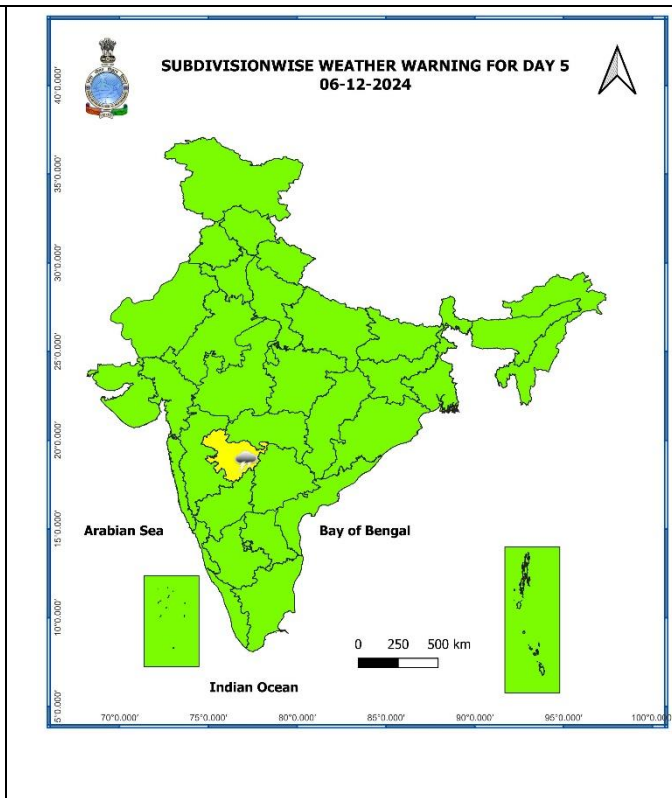
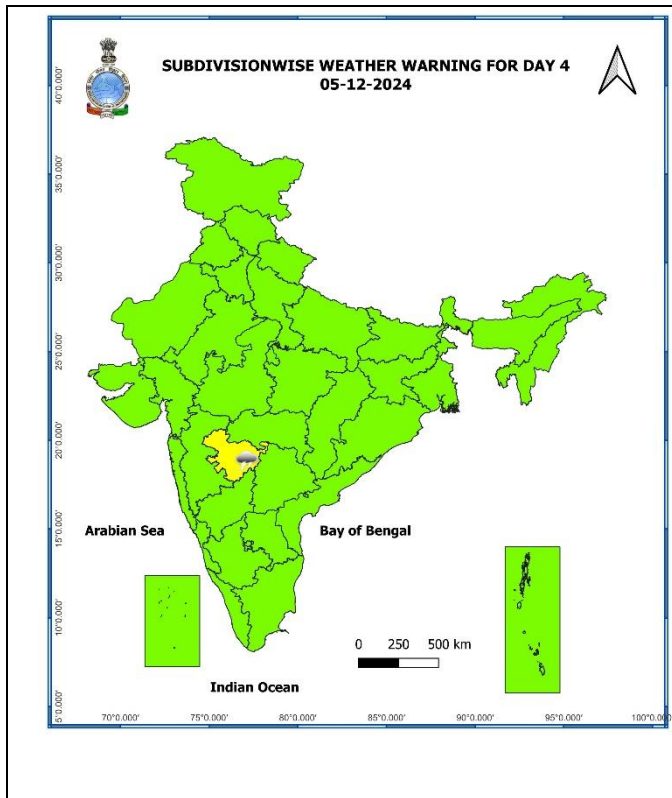
Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 02.12.2024 (in cm):

- ❖ **Tamil Nadu:** Uthangarai (dist Krishnagiri) 50, RSCL-2 Kedar (dist Villupuram) 42, RSCL-2 Soorapattu (dist Villupuram) 38, Vilupuram (dist Villupuram) 35, Harur (dist Dharmapuri) 33, RSCL-2 Mundiampakkam (dist Villupuram), RSCL-2 Koliyanur (dist Villupuram), DSCL Thirupalapandal (dist Kallakurichi) 32 each, DSCL Madampoondi (dist Kallakurichi) 31, BASL Mugaiyur (dist Villupuram), RSCL-2 Valavanur (dist Villupuram) 30 each, RSCL-2 Nemoor (dist Villupuram), BASL Manampoondi (dist Villupuram), RSCL-2 Kanjanur (dist Villupuram) 29 each, BASL Vengur (dist Kallakurichi) 27, Tirukoilur (dist Kallakurichi) 26, Jambukuttapatti (dist Krishnagiri), Pochampalli ARG (dist Krishnagiri) 25 each, Yercaud (dist Salem) 24, DSCL Eraiyur (dist Kallakurichi), Jamunamarathur (dist Tiruvannamalai) 23 each, Pambar Dam (dist Krishnagiri), BASL Manalurpet (dist Kallakurichi) 21 each, Thandampettai (dist Tiruvannamalai), Barur (dist Krishnagiri), Pappireddipatti (dist Dharmapuri) 20 each, Penucondapuram (dist Krishnagiri), Sankarapuram (dist Kallakurichi) 19 each, Kallakurichi (dist Kallakurichi) 18, RSCL-3 Anandhapuram (dist Villupuram), DSCL Kalayanallur (dist Kallakurichi) 17 each, Tiruvannamalai (dist Tiruvannamalai), Panruti (dist Cuddalore), Dharmapuri PTO (dist Dharmapuri) 16 each, KCS Mill-2 Moorarpalayam (dist Kallakurichi), Vanamadevi (dist Cuddalore), Keelpennathur (dist Tiruvannamalai), KCS Mill-1 Moongilthuraipattu (dist Kallakurichi), Ulundurpet (dist Kallakurichi), Kariyakovil Dam (dist Salem), DSCL Sulangurichi (dist Kallakurichi), DSCL Rishivandhiyam (dist Kallakurichi), SCS Mill Pillaiyarkuppam (dist Kallakurichi), DSCL Keelpadi (dist Kallakurichi) 15 each, DSCL Virugavoor (dist Kallakurichi), Nedungal (dist Krishnagiri), Kattumayilur (dist Cuddalore) 14 each, KCS Mill-1 Ariyalur (dist Kallakurichi), Ariyalur Camp Area (dist Kallakurichi), KCS Mill-1 Kadavanur (dist Kallakurichi) 13 each, Vepur (dist Cuddalore), Me Mathur (dist Cuddalore) 12 each, DSCL Thiyagadurgam (dist Kallakurichi), Pennagaram (dist Dharmapuri), RSCL-3 Semmedu (dist Villupuram), Manimutharu Dam PWD (dist Kallakurichi), SRC Kudithangi (dist Cuddalore), Krishnagiri (dist Krishnagiri), KCS Mill-2 Kachirayaopalayam (dist Kallakurichi), Thirukkanur (dist Puducherry), Paiyur AWS (dist Krishnagiri) 11 each, Sethiathope (dist Cuddalore), Anaimaduvu Dam (dist Salem), Omalur (dist Salem), KRP Dam (dist Krishnagiri), Danishpet (dist Salem) 10 each, Kallakurichi ARG (dist Kallakurichi), Gomugi Dam PWD (dist Kallakurichi), Palacode ARG (dist Dharmapuri), Pelandurai (dist Cuddalore), Hogenekal (dist Dharmapuri) 9 each, Vadapudupattu (dist Tirupathur), Bhuvanagiri (dist Cuddalore), Bahour (dist Puducherry), Palacode (dist Dharmapuri), Denkanikottai (dist Krishnagiri), TNAU CRI Yethapur (dist Salem), Vaniyambadi (dist Tirupathur) 8 each, Dharmapuri (dist Dharmapuri), SCS Mill Arasoor (dist Villupuram), Kuppanatham (dist Cuddalore), Gudalur Bazar (dist The Nilgiris), SCS Mill Thiruvannainal (dist Villupuram), Tirupattur PTO (dist Tirupathur), Natrampalli (dist Tirupathur), Ambur (dist Tirupathur), Lakkur (dist Cuddalore), Kodanad (dist The Nilgiris), Tirupattur AWS (dist Tirupathur), RSCL-3 Avalurpettai (dist Villupuram), Mangalapuram (dist Namakkal), Kilacheruvai (dist Cuddalore), TCS Mill Kethandapatti (dist Tirupathur), Chengam (dist Tiruvannamalai), Chidambaram (dist Cuddalore), Vridhachalam ARG (dist Cuddalore) 7 each;
- ❖ **Kerala:** Kodungallur (dist Thrissur) 19, Kottayam (dist Kottayam) 18, Kurudamannil (dist Pathanamthitta) 17, Kanjirappally (dist Kottayam) 16, Ranni (dist Pathanamthitta) 16, Konni (dist Pathanamthitta) 16, Haripad (dist Alapuzha) 15, Kochi C.i.a.l. (dist Ernakulam) 15, Peermade To (dist Idukki) 15, Perumpavur (dist Ernakulam) 14, Alwaye (dist Ernakulam) 13, Aluva (dist Ernakulam) 13, Laha (dist Pathanamthitta) 13, Kunnathanam (dist Pathanamthitta) 12, Thycattussery (dist Alapuzha) 12, Cherthala (dist Alapuzha) 12, Kalamassery (dist Ernakulam) 11, Konni (dist Pathanamthitta) 8, Kumarakam (dist Kottayam) 8, Vaikom (dist Kottayam) 7, Kozhikode (dist Kozhikode) 7, Piravam (dist Ernakulam) 7;
- ❖ **Coastal Andhra Pradesh & Yanam:** Yanam (dist Yanam) 8;
- ❖ **Royalaseema:** Chittoor (dist Chittoor) 6, Kodur (dist Ysr District) 6, Pullampeta (dist Annamayya District) 5

7 Days Rainfall Forecast								
S. No.	Subdivision	02-Dec	03-Dec	04-Dec	05-Dec	06-Dec	07-Dec	08-Dec
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	SCT	SCT	SCT	FWS	FWS	FWS	FWS
2	ARUNACHAL PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
3	ASSAM & MEGHALAYA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
4	NAGALAND, MANIPUR, MIZORAM & TRIPURA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
5	SUB-HIMALAYAN WEST BENGAL & SIKKIM	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
6	GANGETIC WEST BENGAL	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
7	ODISHA	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY
8	JHARKHAND	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	DRY	DRY	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
13	HARYANA CHANDIGARH & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
16	JAMMU & KASHMIR AND LADAKH	SCT	ISOL	DRY	DRY	DRY	DRY	DRY
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	ISOL	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
21	GUJARAT REGION	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
24	MADHYA MAHARASHTRA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	DRY
25	MARATHAWADA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	DRY
26	VIDARBHA	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY
27	CHHATTISGARH	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
28	COASTAL ANDHRA PRADESH & YANAM	FWS	SCT	SCT	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	SCT	SCT	SCT	SCT	SCT	ISOL	ISOL
30	RAYALASEEMA	WS	SCT	SCT	ISOL	ISOL	ISOL	ISOL
31	TAMILNADU PUDUCHERRY & KARAIKAL	FWS	FWS	SCT	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	WS	FWS	SCT	ISOL	DRY	DRY	DRY
33	NORTH INTERIOR KARNATAKA	SCT	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
34	SOUTH INTERIOR KARNATAKA	WS	FWS	ISOL	ISOL	DRY	DRY	DRY
35	KERALA & MAHE	WS	FWS	FWS	SCT	ISOL	ISOL	ISOL
36	LAKSHADWEEP	FWS	WS	WS	SCT	SCT	SCT	SCT

- As the lead period increases forecast accuracy decreases.

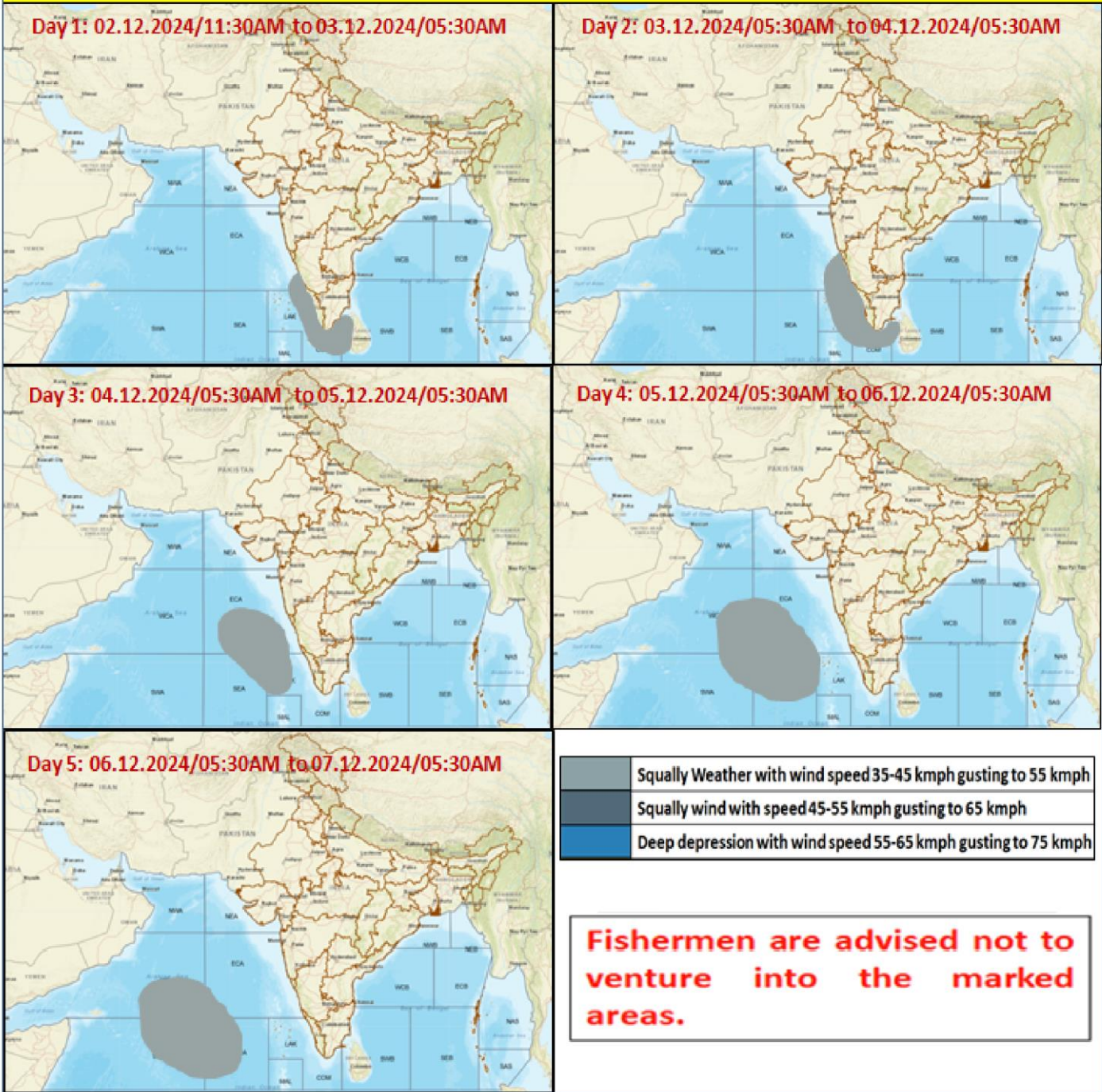




- Action may be taken based on ORANGE AND RED COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.



Fishermen Warning Graphics



Weather Realised (past 24 hours) & forecast (during 02nd Dec. to 05th Dec. 2024) over Delhi/NCR**Past Weather:**

There has been a slight fall in minimum temperature and slight rise in maximum temperature over Delhi/NCR during past 24hr. The Maximum and Minimum temperature over Delhi is in the range of 24 to 27°C and 10 to 13°C respectively. The maximum and minimum temperature were above normal by 01 to 02 °C over most places. Mainly smog/ shallow fog condition with predominant surface wind from northwest direction with wind speed reaching 04 to 12 kmph prevailed during day time and calm wind during night time on 01.12.2024. Shallow fog reported at Safdarjung airport during early morning today. Safdarjung airport recorded lowest visibility 600 m during 0700 hours to 0730 hours IST which improved thereafter becoming 1200m at 0800 hours IST. Mainly clear sky condition with wind speed less than 08 kmph west direction prevailed over the region in the forenoon today.

Weather Forecast:

02.12.2024: Mainly clear sky. The predominant surface wind is likely to be northwest direction with wind speed less than 08 kmph till evening. It would decrease thereafter becoming less than 06 kmph from northwest direction during night. Smog/mist fog is likely in the evening/night.

03.12.2024: Mainly clear sky. The predominant surface wind is likely to be from northwest direction with speed less than 08 kmph during morning hours. Smog/ shallow fog is likely in the morning. The wind speed will increase thereafter becoming less than 12 kmph from northwest direction during afternoon. It will decrease thereafter becoming less than 10 kmph from northwest direction during evening and night. Smog/mist is likely in the evening/night.

04.12.2024: Mainly clear sky. The predominant surface wind is likely to be from northwest direction with speed less than 08 kmph during morning hours. Smog/shallow fog is likely in the morning. The wind speed will gradually increase becoming 12-16 kmph from northwest direction during afternoon. It will decrease thereafter becoming less than 10 kmph from northwest direction during evening and night. Smog/mist is likely in the evening/night.

05.12.2024: Mainly clear sky. The predominant surface wind is likely to be from northwest direction with wind speed less than 08 kmph during morning hours. Smog/shallow fog in the morning. The wind speed will increase thereafter becoming 10-12 kmph from northwest direction during afternoon. It will gradually decrease becoming less than 08 kmph from northwest direction during evening and night. Smog/ mist is likely in the evening/night.

Impact & Action Suggested due to: Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over ghat districts of Tamil Nadu adjoining to Kerala, Kerala and South Interior Karnataka on 02nd December.

A. 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 kutcha roads.
- ❖ Damage to horticulture and standing crops in some areas due to inundation.

B. Action Suggested

- ❖ Check for traffic congestion on your route before leaving for your destination.
- ❖ Follow any traffic advisories that are issued in this regard.
- ❖ Avoid going to areas that face the water logging problems often.
- ❖ Avoid staying in vulnerable structure.

Agromet advisories for Heavy Rainfall likely over various parts of the country

- Drain out excess water from rice, sugarcane, cotton, turmeric, vegetables, and other standing crop fields, as well as coconut and banana orchards in **North Interior Tamil Nadu**; from rice, coffee, banana, coconut, arecanut, ginger, pepper, cardamom and other standing crops in **Kerala** and from cotton, rice, maize, groundnut, finger millet, pigeon pea, arecanut, fruits and vegetables in **South Interior Karnataka**.
- Keep the harvested produce in safer places or cover the produce with tarpaulin sheets in the fields.
- Provide adequate drainage facilities for the removal of excess water from standing crop fields and fruit orchards in Coastal Karnataka.
- Provide mechanical support to horticultural crops and staking to vegetables.

Livestock and Fishery

- Keep the animals inside the shed during heavy rainfall and provide balanced feed.
- Store the feed and fodder at safer place to avoid spoilage from rainfall.
- Hang gunny bags all around poultry sheds.
- Construct an outlet with proper netting around the pond to drain out excess rain water, thereby preventing fishes/fingerlings from escaping in case of overflowing.
- Check and repair dykes around the ponds to avoid entry of runoff water from the catchment areas.

FLASH FLOOD GUIDANCE:

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 03-12-2024:

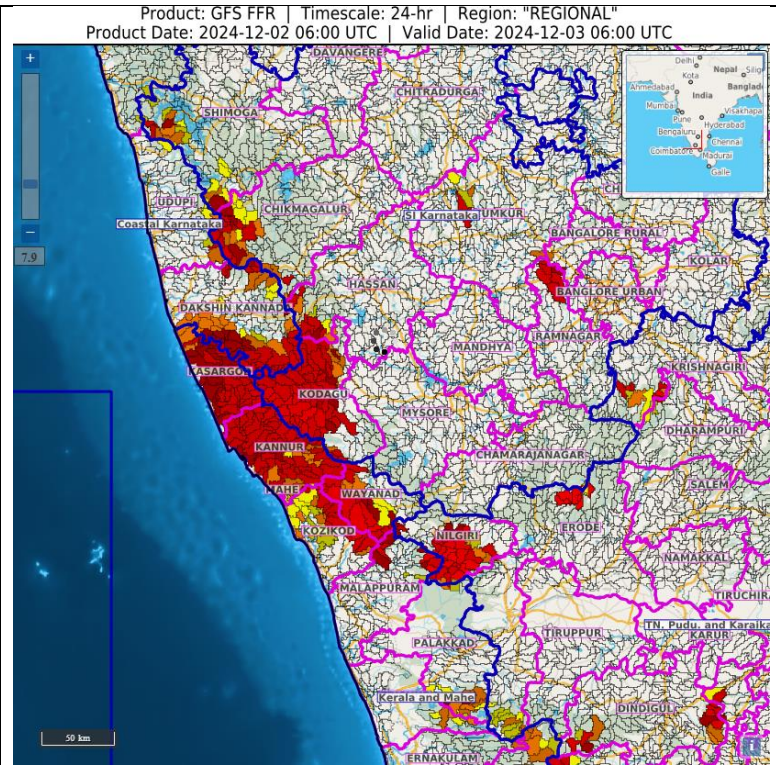
Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Meteorological Sub-divisions during next 24 hours.

Kerala – Kasargod, Kannur, Mahe, Wayand, Kozhikode, Malapuram and Pallakad districts

Tamil Nadu, Puducherry and Karaikal – Nilgiri district.

Coastal Karnataka – Udupi, Dakshin, Kannada 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.

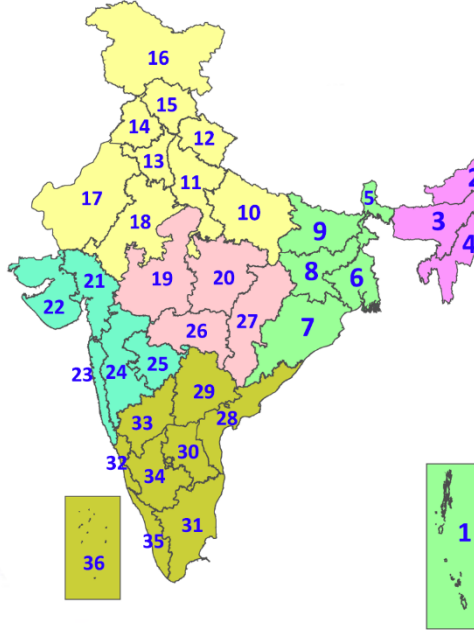


Legends & abbreviations:

- ❖ **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. रायलसेमा
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 *	<p>Heavy: 64.5 to 115.5 mm/cm *</p> <p>Very Heavy: 115.6 to 204.4 mm/cm*</p> <p>Extremely Heavy: > 204.4 mm/cm *</p>
Heat Wave	<p>When maximum temperature of a station reaches $\geq 40^\circ\text{C}$ for plains and $\geq 30^\circ\text{C}$ for hilly regions</p> <p>(a) Based on Departure from normal</p> <p>Heat Wave: Maximum Temperature Departure from normal 4.5°C to 6.4°C.</p> <p>Severe Heat Wave: Maximum Temperature Departure from normal $\geq 6.5^\circ\text{C}$</p> <p>(b). Based on Actual maximum temperature</p> <p>Heat Wave: When actual maximum temperature $\geq 45^\circ\text{C}$.</p> <p>Severe Heat Wave: When actual maximum temperature $\geq 47^\circ\text{C}$</p> <p>(c). Criteria for heat wave for coastal stations</p> <p>When maximum temperature departure is $>4.5^\circ\text{C}$ from normal. Heat Wave may be described provided maximum temperature $\geq 37^\circ\text{C}$</p>
Warm Night	<p>When maximum temperature remains 40°C</p> <p>Warm Night: When minimum temperature departure 4.5°C to 6.4°C.</p> <p>Severe Warm Night: When minimum temperature departure $>6.4^\circ\text{C}$.</p>
Cold Wave	<p>When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions.</p> <p>(a). Based on departure</p> <p>Cold Wave: Minimum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Wave: Minimum Temperature Departure from normal $\leq -6.5^\circ\text{C}$</p> <p>(b) Based on actual Minimum Temperature (for Plains only)</p> <p>Cold Wave : When Minimum Temperature is $\leq 4.0^\circ\text{C}$</p> <p>Severe Cold Wave: When Minimum Temperature is $\leq 2.0^\circ\text{C}$</p> <p>(c) For Coastal Stations</p> <p>When Minimum Temperature departure is $\leq -4.5^\circ\text{C}$ & actual Minimum Temperature is $\leq 15^\circ\text{C}$</p>
Cold Day	<p>When minimum temperature of a station $\leq 10^\circ\text{C}$ for plains and $\leq 0^\circ\text{C}$ for hilly regions</p> <p>Based on departure</p> <p>Cold Day: Maximum Temperature Departure from normal -4.5°C to -6.4°C.</p> <p>Severe Cold Day: Maximum Temperature Departure from normal $\leq -6.5^\circ\text{C}$</p>
Fog	<p>Phenomenon of small droplets suspended in air and the horizontal visibility $< 1\text{km}$</p> <p>Moderate Fog: When the visibility between 500-200 metres</p> <p>Dense Fog: when the visibility between 50- 200 metres</p> <p>Very Dense Fog: when the visibility < 50 metres</p>
Thunderstorm	<p>Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)</p>
Dust/Sand Storm	<p>An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.</p>
Frost	<p>Ice deposits on ground</p> <p>Air temperature $\leq 4^\circ\text{C}$ (over Plains)</p>
Squall	<p>A strong wind that rises suddenly, lasts for atleast 1 minute.</p> <p>Moderate: Wind speed 52-61 kmph</p> <p>Severe: Wind speed 62-87 kmph</p> <p>Very Severe: Wind speed >87 kmph</p>
Sea State	<p>Effect of various waves in the sea over specific area</p> <p>Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre</p> <p>High to very high: Wind speed 63-117 kmph (34-63 knots) & Wave height 6-14 metre</p> <p>Phenomenal: Wind speed >117 kmph (>63 knots) & Wave height >14 metre</p>
Cyclone	<p>Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)</p> <p>Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)</p> <p>Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)</p> <p>Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)</p> <p>Super Cyclone Strom: Wind speed >220 kmph (>119 knots)</p>

* 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)