

Government of India  
Ministry of Earth Sciences  
India Meteorological Department



Press Release

Date: 05<sup>th</sup> October, 2024

Time of Issue: 1315 hours IST

**Subject: i. The southwest monsoon has further withdrawn from some more parts of central & northwest India.**

**ii. Very heavy rainfall activity very likely over Northeast India, Kerala and Tamil Nadu today and decrease thereafter.**

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

**Heavy to very Heavy rainfall with extremely heavy fall** realized at isolated places over Assam & Meghalaya; **Heavy to very Heavy rainfall** at isolated places over Arunachal Pradesh, Tamil Nadu, Puducherry & Karaikal, South Interior Karnataka; **Heavy rainfall** at isolated places over Sub-Himalayan West Bengal & Sikkim, Jharkhand, Odisha, Kerala & Mahe, Rayalaseema, Telangana, Coastal Karnataka.

**On further Withdrawal of Southwest Monsoon**

- ✓ The southwest monsoon has further withdrawn from some more parts of Uttar Pradesh, Gujarat Region, Madhya Pradesh, some parts of Maharashtra and most parts of North Arabian Sea today the 5<sup>th</sup> October 2024.
- ✓ The **line of withdrawal of Southwest Monsoon** now passes through 29°N/84°E, Nautanwa, Sultanpur, Panna, Narmadapuram, Khargaon, Nandurbar, Navsari and 20°N/70°E.
- ✓ Conditions are favourable for further **withdrawal of Southwest Monsoon** from remaining parts of Gujarat, Madhya Pradesh and some more parts of Maharashtra during next 2-3 days.

**Weather Systems:**

- ✓ An **upper air cyclonic circulation** lies over northern parts of Gangetic West Bengal & neighbourhood in lower tropospheric levels.
- ✓ An **upper air cyclonic circulation** lies over westcentral Bay of Bengal off Andhra Pradesh coast in lower and middle tropospheric levels.
- ✓ A **cyclonic circulation** lies over northeast Assam & neighbourhood and another **cyclonic circulation** lies over north Pakistan & adjoining Punjab in lower tropospheric levels.

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

**East & Northeast India**

- ✓ Fairly widespread to widespread light to moderate rainfall very likely over Northeast India, Andaman & Nicobar Islands during the week and West Bengal & Sikkim during next 2 days; Isolated to Scattered light to moderate rainfall over East India region during the remaining part of the week.

- ✓ **Isolated heavy to very heavy rainfall** very likely over Meghalaya, Arunachal Pradesh on 05<sup>th</sup> October.
- ✓ **Isolated heavy rainfall** also very likely over Arunachal Pradesh, Assam & Meghalaya during next 7 days; Nagaland, Manipur, Mizoram & Tripura on 05<sup>th</sup>, 08<sup>th</sup> & 09<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim on 05<sup>th</sup> October.

### **South Peninsular India**

- ✓ Fairly widespread to widespread light to moderate rainfall very likely over Kerala & Mahe, Lakshadweep, Karnataka, Tamil Nadu during the week; Isolated to Scattered light to moderate rainfall very likely over Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana during the week.
- ✓ **Isolated heavy to very heavy rainfall** very likely over Tamil Nadu, Puducherry & Karaikal on 5<sup>th</sup>; Kerala & Mahe on 05<sup>th</sup> & during 08<sup>th</sup> -11<sup>th</sup> October.
- ✓ **Isolated heavy rainfall** also very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe during next 7 days; South Interior Karnataka during 05<sup>th</sup>-09<sup>th</sup>; Rayalaseema on 05<sup>th</sup> & 06<sup>th</sup>; Coastal Karnataka during 06<sup>th</sup>-08<sup>th</sup>; Lakshadweep during 08<sup>th</sup> -11<sup>th</sup> October.

### **Northwest, West & Central India:**

- ✓ No significant rainfall likely over these regions during next one week.

### **Fishermen warning**

- ✓ **Squally weather with wind speed 35 kmph to 45 kmph gusting to 55 kmph** is prevailing over Lakshadweep area, Gulf of Mannar, northern parts of southwest Bay of Bengal and adjoining westcentral Bay of Bengal, off north Tamil Nadu coast on 05<sup>th</sup> October. Fishermen are advised not to venture into these areas during the period.

### **Southwest Monsoon withdrawal Map (ANNEXURE IV)**

**For more details, kindly refer:**

[https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

**For District wise warnings refer:**

<https://mausam.imd.gov.in/responsive/districtWiseWarningGIS.php>

## ANNEXURE I

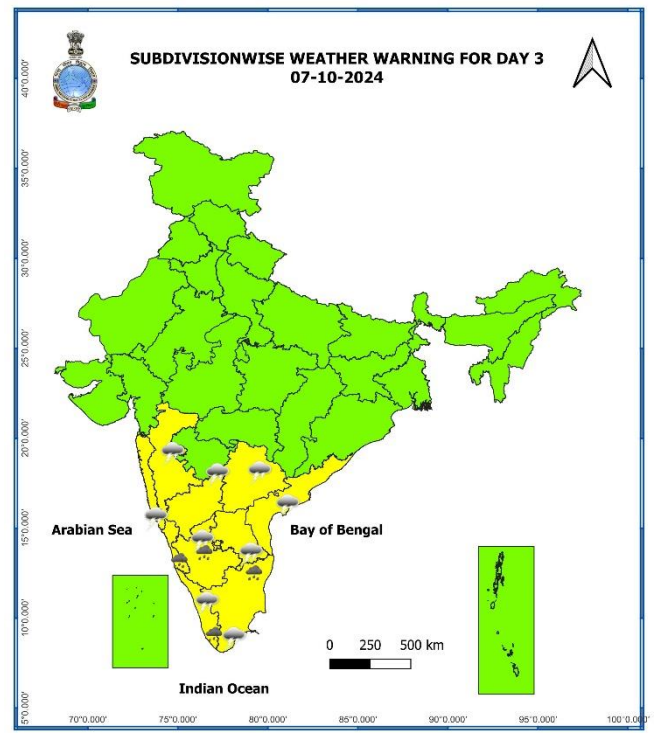
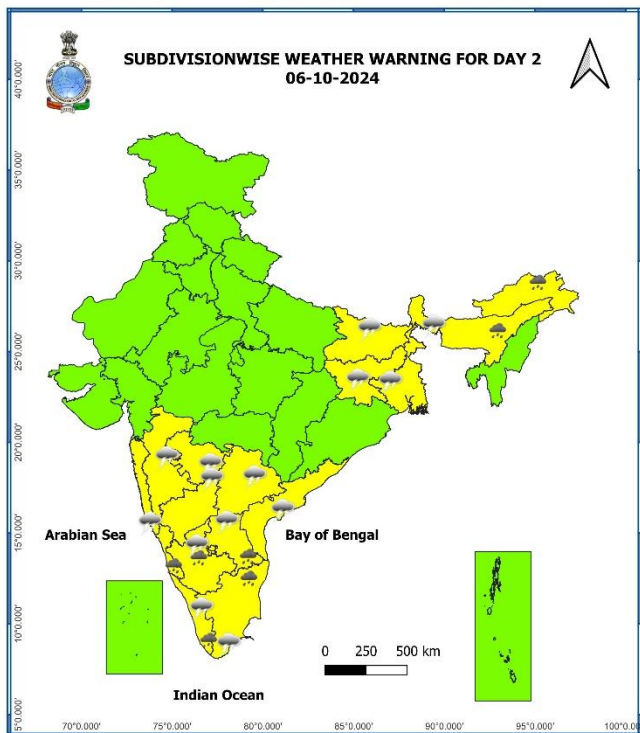
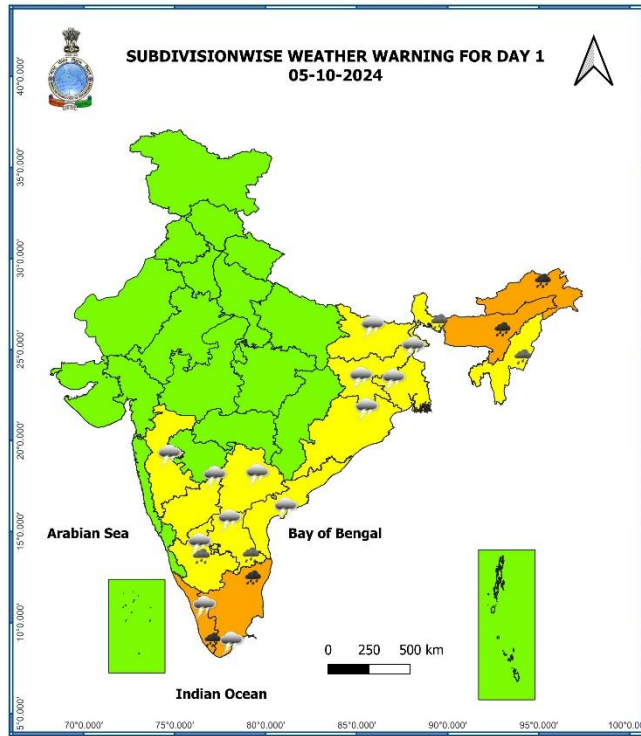
### Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 05.10.2024 (in cm):

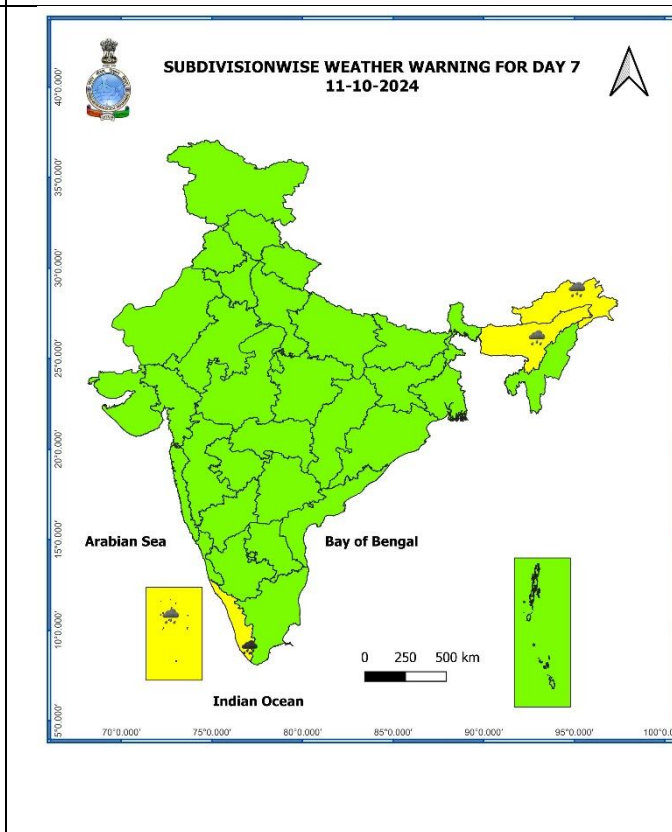
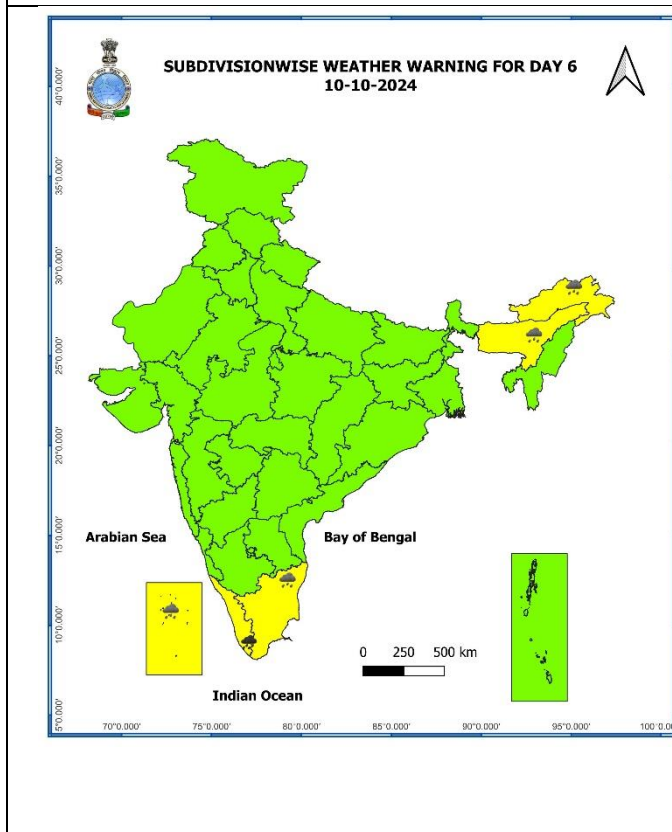
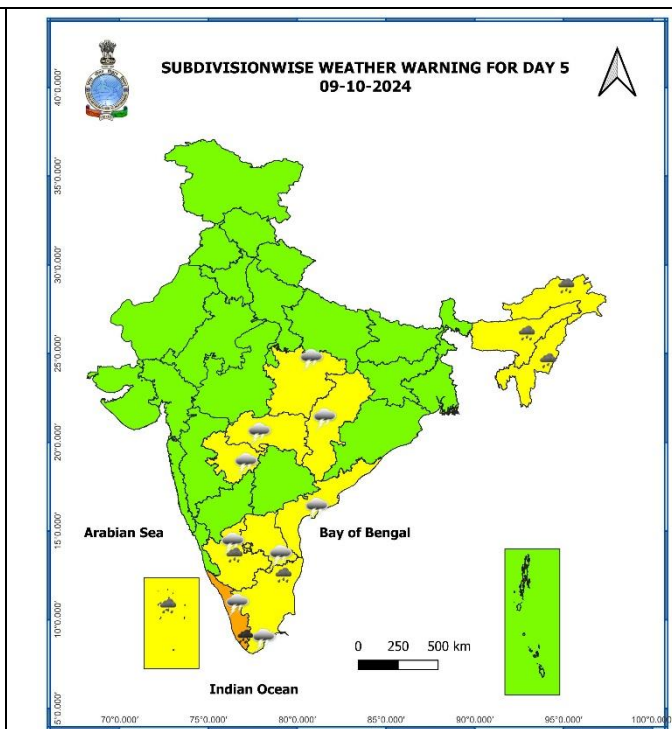
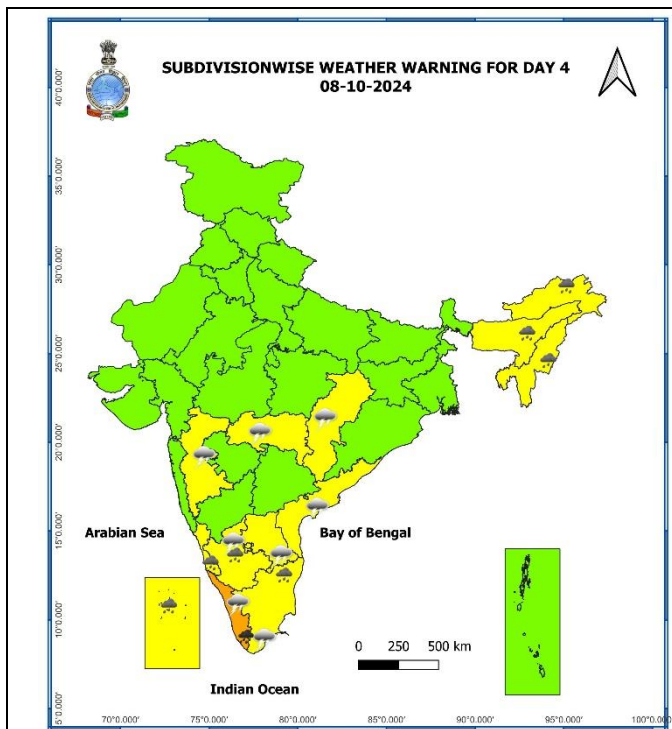
- ❖ **Assam & Meghalaya:** Mawsynram (dist East Khasi Hills) 24, Nongstein (dist West Khasi Hills) 16, Cherrapunji(rkm) (dist East Khasi Hills) 15, Cherrapunji (dist East Khasi Hills) 14, Mawkyrwat (dist South West Khasi Hills) 12, Mawphlang (dist East Khasi Hills) 11, Kokrajhar (dist Kokrajhar) 9, Goalpara\_cwc (dist Goalpara) 9, Jowai (dist West Jaintia Hills) 9, Goalpara\_aws (dist Goalpara) 7, Srijangram Arg (dist Bongaigaon) 7,
- ❖ **Jharkhand:** Narayanpur (dist Jamtara) 12, Putki (dist Dhanbad) 7, Putki Dvc (dist Dhanbad) 7,
- ❖ **Tamil Nadu:** Me Mathur (dist Cuddalore) 13; Avudayarkoil (dist Pudukkottai), Thirukkanur (dist Puducherry), Thangachimadam (dist Ramanathapuram) 12 each; DSCL Sulangurichi (dist Kallakurichi) 11; Sendamangalam (dist Namakkal) 10; DSCL Kalayanallur (dist Kallakurichi), Jambukuttapatti (dist Krishnagiri), Pochampalli ARG (dist Krishnagiri), Jayamkondam (dist Ariyalur) 9 each; Karur AWS (dist Karur), Vamban KVK AWS (dist Pudukkottai), Pamban (dist Ramanathapuram), Pudukkottai (dist Pudukkottai), Chidambaram AWS (dist Cuddalore), Tirupattur (dist Tirupathur), Manapparai (dist Thiruchirappalli), Manimutharu Dam PWD (dist Kallakurichi) 8 each; Tiruvadana (dist Ramanathapuram), Tiruchengode (dist Namakkal), Nandhiyar Head (dist Thiruchirappalli), Kariyakovil Dam (dist Salem), Sembanarkoil PWD (dist Mayiladuthurai), Illuppur (dist Pudukkottai), Annamalai Nagar (dist Cuddalore), Paramathivelur(dist Namakkal), Vadapudupattu (dist Tirupathur), Natrampalli (dist Tirupathur) 7 each;
- ❖ **South Interior Karnataka:** Agumbe Emo (dist Shivamogga) 17, Nayakanahatty (dist Chitradurga) 13, Hosadurga (dist Chitradurga) 7,
- ❖ **Rayalaseema:** Santhipuram (dist Chittoor) 11, Rayadurg (dist Anantapuramu) 8, Chilamathur (dist Sri Sathyasai District) 7, Lepakshi (dist Sri Sathyasai District) 7,
- ❖ **Arunachal Pradesh:** Kamba Aws (dist West Siang) 9, Yingkiong (dist Upper Siang) 9, Daparijo (dist Upper Subansiri) 8,
- ❖ **Kerala & Mahe:** Idukki (dist Idukki) 9, Cheruthoni (dist Idukki) 9,
- ❖ **Telangana:** Yellareddy (dist Kamareddy) 8,
- ❖ **Coastal Karnataka:** Dharmasthala (dist Dakshina Kannada) 8,
- ❖ **Tamil Nadu:** Vanur (dist Villupuram) 8,
- ❖ **Odisha:** Chandanpur (dist Mayurbhanj) 8,
- ❖ **Sub-Himalayan West Bengal & Sikkim:** Yuksom (dist Gyalshing) 7,
- ❖ **Andaman & Nicobar Islands:** Hut Bay (dist South Andaman) 7,

## ANNEXURE II

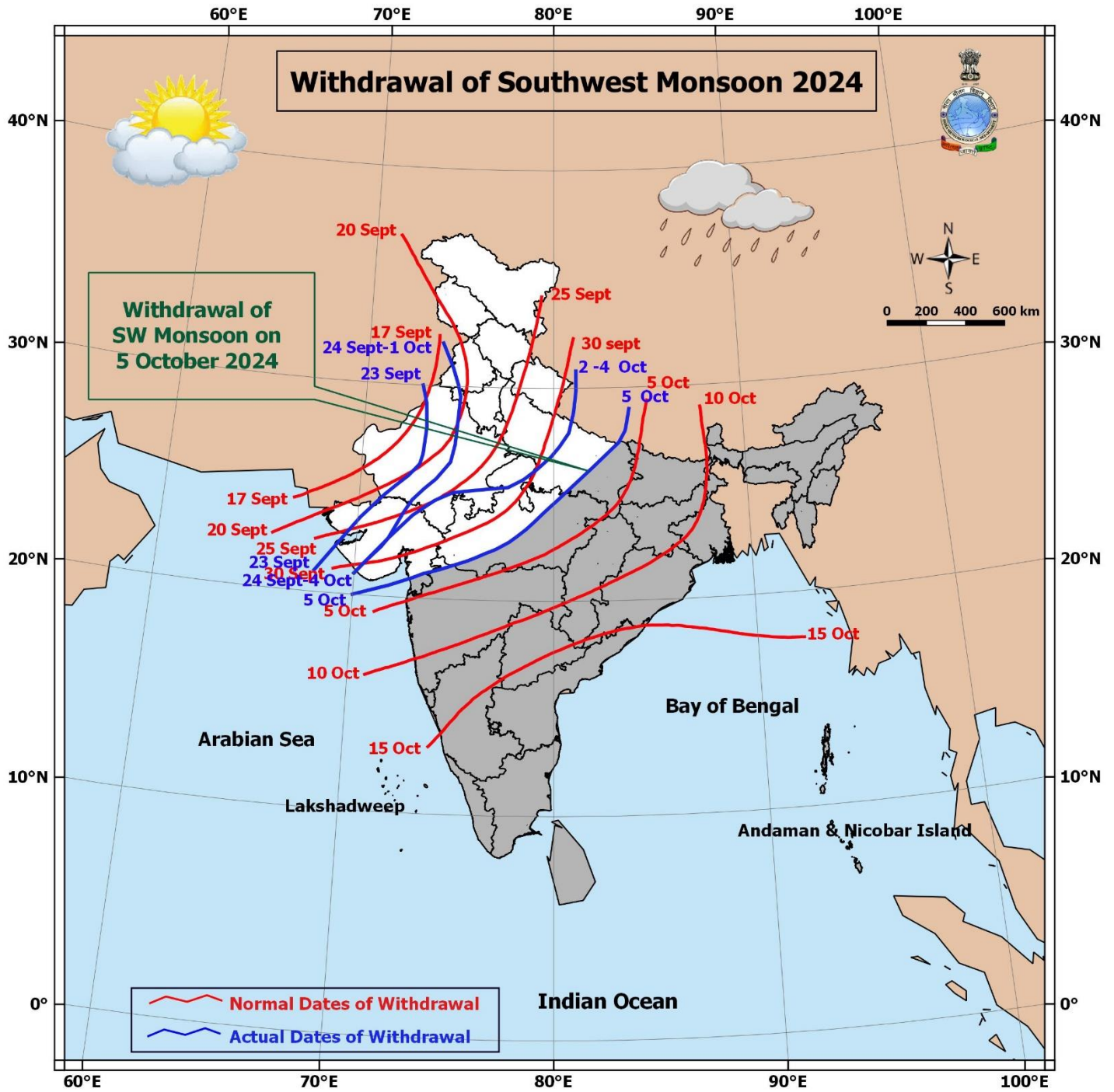
7 Days Rainfall Forecast								
S. No.	Subdivision	05-Oct	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	WS	FWS	FWS	FWS	FWS	FWS	FWS
2	ARUNACHAL PRADESH	WS	FWS	FWS	FWS	FWS	FWS	FWS
3	ASSAM & MEGHALAYA	WS	FWS	SCT	SCT	FWS	FWS	FWS
4	NAGALAND,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

- 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 heavy to very heavy rainfall** very likely over Meghalaya, Arunachal Pradesh on 05<sup>th</sup>; Tamil Nadu, Puducherry & Karaikal on 05<sup>th</sup>; Kerala & Mahe on 05<sup>th</sup> & during 08<sup>th</sup> -11<sup>th</sup> October.
- ✓ **Moderate flash flood risk** likely over few watersheds & neighbourhoods of Arunachal Pradesh, Assam & Meghalaya on 05<sup>th</sup> & 06<sup>th</sup> October.

## Impact Expected

- ✓ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ✓ Occasional reduction in visibility due to heavy rainfall.
- ✓ Disruption of traffic in major cities and roadways due to water logging in roads leading to increased travel time.
- ✓ Minor damage to kutcha roads.
- ✓ Possibilities of damage to vulnerable structure.
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Damage to horticulture and standing crops in some areas due to inundation and wind.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

## Action Suggested

- ✓ Judicious regulation of surface transports including railways and roadways.
- ✓ Check for traffic congestion on your route before leaving for your destination.
- ✓ Follow any traffic advisories that are issued in this regard.
- ✓ Avoid going to areas that face the water logging problems often.
- ✓ Avoid staying in vulnerable structure

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

- Drain out excess water from rice, millets, cowpea, frenchbean, vegetable crops and orchards in Meghalaya; from rice in Arunachal Pradesh.
- Drain out excess water from standing crop fields and fruit orchards to avoid water stagnation in Tamil Nadu, Kerala, Coastal Karnataka, South Interior Karnataka, Rayalaseema, Sub Himalayan Wes Bengal, Odisha, Jharkhand and North Eastern States.
- Keep the harvested produce at safer places.
- Provide mechanical support to horticultural crops & staking to vegetables.



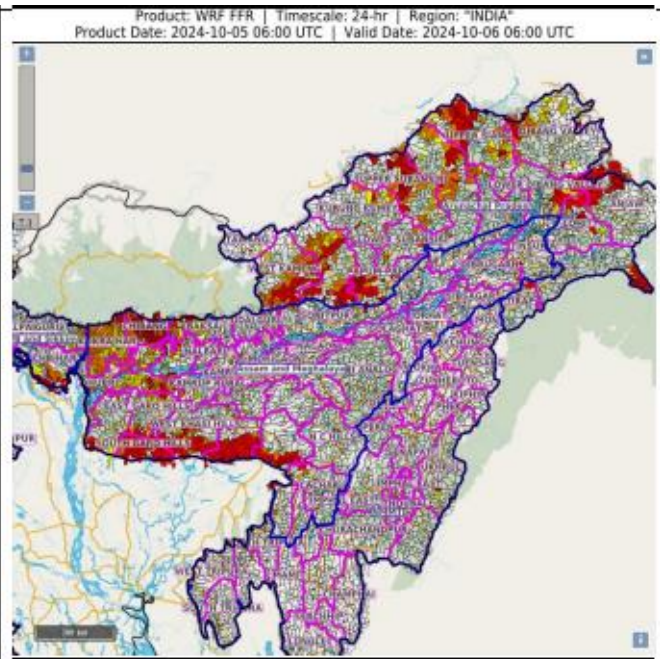
### **24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 06-10-2024 :**

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

**Assam & Meghalaya** – Bongaigaon, Kamrup Rural, Kokrajhar, Baska, Dhubri, East Garo Hills, South Garo Hills, West Garo Hills, West Khasi Hills, Dhubri and Jaintia Hills districts.

**Arunachal Pradesh** – Anjaw, Lower Dibang Valley, Dibang Valley, Upper Siang, Lohit, Pupam Pare, East Kameng and West Kameng 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.

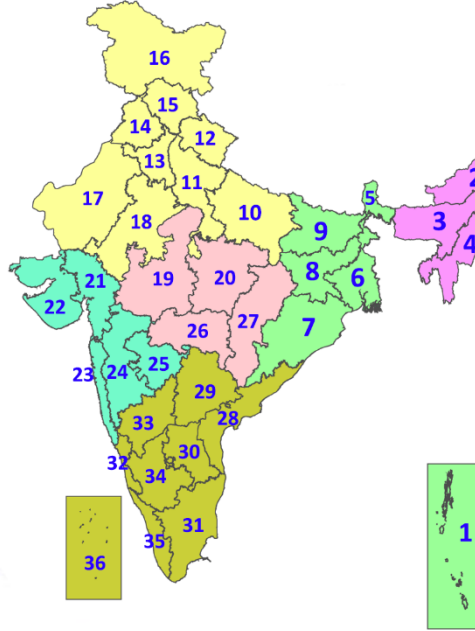


### **Legends & abbreviations:**

- ❖ **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.
  - **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

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