

Government of India Ministry of Earth Sciences India Meteorological Department



Press Release Date: 20<sup>th</sup> October, 2024 Time of Issue: 1415 hours IST

Subject: (i) A Low Pressure Area is very likely to form over the Eastcentral Bay of Bengal and adjoining north Andaman Sea during next 24 hours. It is very likely to move west-northwestwards and intensify into a depression by 22nd October morning and into a cyclonic storm by 23rd October, 2024 over Eastcentral Bay of Bengal.
(ii) Isolated heavy to very heavy rainfall likely over Andaman & Nicobar Islands on 20<sup>th</sup> & 21<sup>st</sup> and over Gangetic West Bengal on 24<sup>th</sup> & 25<sup>th</sup>; isolated extremely heavy rainfall over Odisha on 24<sup>th</sup> & 25<sup>th</sup> October 2024.

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

Heavy to very Heavy rainfall at isolated places over Telangana; Heavy rainfall at isolated places over Tamil Nadu, Puducherry & Karaikal, Madhya Pradesh, Coastal & South Interior Karnataka, Gujarat State, Sub-Himalayan West Bengal & Sikkim, Rayalaseema, Odisha.

#### Weather Systems:

- Yesterday's upper air cyclonic circulation over central Andaman Sea lay over North Andaman Sea at 0830 hrs IST of today. Under its influence, a Low Pressure Area is very likely to form over the Eastcentral Bay of Bengal & adjoining north Andaman Sea during next 24 hours. It is very likely to move west-northwestwards and intensify into a depression by 22nd October morning and into a cyclonic storm by 23rd October, 2024 over Eastcentral Bay of Bengal. Thereafter, it is very likely to move northwestwards and reach northwest Bay of Bengal off Odisha-West Bengal coasts by 24th October morning.
- The upper air cyclonic circulation over southwest & adjoining westcentral Bay of Bengal off north Tamil Nadu & south Andhra Pradesh coast extending upto middle tropospheric level tilting southwestwards with height.
- The well marked low pressure area over westcentral Arabian Sea weakened into a low pressure area over the same region at 0830 hours IST of today, the 20th October. It is likely to move west-northwestwards away from Indian coast and weaken further during next 24 hours.

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

#### East India

- ✓ Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places very likely over Andaman & Nicobar Islands on 20<sup>th</sup> & 21<sup>st</sup> October.
- ✓ Light to moderate rainfall at most places with heavy rainfall at isolated places very likely over Odisha on 23<sup>rd</sup> & heavy to very heavy rainfall at a few places with extremely heavy rainfall at isolated places on 24<sup>th</sup> & 25<sup>th</sup> October.

✓ Light to moderate rainfall at most places with heavy rainfall at isolated places very likely over Gangetic West Bengal on 23<sup>rd</sup> heavy to very heavy rainfall on 24<sup>th</sup> & 25<sup>th</sup> October.

# South Peninsular India

- ✓ Light to moderate rainfall at many places accompanied with isolated thunderstorm and lightning very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep, Costal & South Interior Karnataka; light to moderate rainfall at Isolated places very likely over rest of the region during the week.
- ✓ Isolated very heavy rainfall very likely over South Interior Karnataka on 20<sup>th</sup>; Coastal Andhra Pradesh & Yanam on 25<sup>th</sup> October.
- ✓ Isolated heavy rainfall very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe, South Interior Karnataka during 20<sup>th</sup>-23<sup>th</sup>; Coastal Andhra Pradesh & Yanam on 20<sup>th</sup> & 24<sup>th</sup>; Rayalaseema on 20<sup>th</sup>; Coastal & North Interior Karnataka on 20<sup>th</sup> & 21<sup>st</sup> October.

# West & Central India

- ✓ Light to moderate rainfall at many places accompanied with isolated thunderstorm and lightning very likely over Konkan & Goa, Madhya Maharashtra; light to moderate rainfall at Isolated places very likely over rest of the region during next 4 days and where dry weather is likely to prevail subsequent 3 days.
- ✓ Isolated heavy rainfall very likely over Konkan & Goa, Gujarat State on 20<sup>th</sup>; Madhya Maharashtra on 20<sup>th</sup> & 21<sup>st</sup> and over Chhattisgarh on 25 & 26<sup>th</sup> October.

#### Northeast & Northwest India

✓ No significant rainfall likely over these regions during the week.

# Wind Warning:

**Andaman Sea**: Squally weather with wind speed reaching 35-45 gusting to 55 kmph is very likely over Andaman Sea till 21<sup>st</sup> October.

**Eastcentral Bay of Bengal**: Squally wind speed reaching 40-50 gusting to 60 kmph is very likely on  $21^{st}$  October, 55-65 gusting to 75 kmph by  $22^{nd}$  evening, 70-90 kmph gusting to 100 kmph from  $23^{rd}$  evening till  $24^{th}$  morning.

**Adjoining areas of Westcentral Bay of Bengal**: Squally wind speed reaching 45-55 gusting to 65 kmph is very likely on 23<sup>rd</sup> and 24<sup>th</sup> Oct.

**North Bay of Bengal**: Squally wind speed reaching 40-50 gusting to 60 kmph is very likely to commence from 23<sup>rd</sup> morning. It would gradually increase becoming gale wind speed reaching 100-110 kmph gusting to 120 kmph from 24<sup>th</sup> Oct evening to 25<sup>th</sup> Oct morning and decrease thereafter.

**Along & off Odisha-west Bengal coasts**: Squally wind speed reaching 40-50 gusting to 60 kmph is very likely to commence from 23rd Oct evening. It would gradually increase becoming gale wind speed reaching 100-110 kmph gusting to 120 kmph from 24th Oct night till 25th Oct morning.

# Fishermen Warning (ANNEXURE IV):

Fishermen are advised not to venture into

- Andaman Sea till 21<sup>st</sup> October.
- Eastcentral Bay of Bengal during 21<sup>st</sup>-24<sup>th</sup> October.
- Adjoining areas of Westcentral Bay of Bengal on 23<sup>rd</sup> and 24<sup>th</sup> Oct.
- North Bay of Bengal and along & off Odisha, West Bengal and Bangladesh coasts during 23<sup>rd</sup> to 25<sup>th</sup> Oct.

Fishermen out at sea are advised to return to coasts by 21st Oct

#### For more details, kindly refer National Weather Bulletin:

https://mausam.imd.gov.in/responsive/all\_india\_forcast\_bulletin.php

For District wise warnings refer:

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

For Fishermen warnings, kindly refer:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/51/51 bdf575 GRAPHIC.png

For bulletin associated with the likely formation of cyclonic storm refer:

https://rsmcnewdelhi.imd.gov.in/uploads/archive/1/1 f05df7 1.Special%20Message%20No%20 1-20Oct2024 0830IST.pdf

# Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 20.10.2024 (in cm):

- Telangana: Mudhole (dist Nirmal) 12,
- Tamil Nadu, Puducherry & Karaikal: Sathiar (dist Madurai) 11, Kallakurichi (distKallakurichi) 9, Andipatti (dist Madurai) 8, Vadipatti (dist Madurai), Arcot dist Ranipet), Zone 13 Adyar (dist Chennai) 7 each,
- East Madhya Pradesh: Pandhurna (dist Chindwara) 11,
- West Madhya Pradesh: Godadongri (dist Betul) 10,
- South Interior Karnataka: Shivamogga Pto (dist Shivamogga) 10, Magadi (dist Ramanagara)
   9, Hoskote (dist Bengaluru Rural) 8, Bellur (dist Mandya) 7,
- Coastal Andhra Pradesh & Yanam: Udayagiri (dist Spsr Nellore) 10,
- Saurashtra & Kutch: Mendarda (dist Junagadh) 10, Lalpur (dist Jamnagar) 8, Malia (dist Junagadh) 7;
- Odisha: Jatni (dist Khurda) 8, Khordha PTO (dist Khurda) 7,
- Sub-Himalayan West Bengal & Sikkim: Gyalsing (pto) (dist Gyalshing) 8,
- ✤ Rayalaseema: Kondapuram (dist Ysr District) 7,
- Gujarat Region: Umerpada (dist Surat) 7;

# **ANNEXURE II**

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

• As the lead period increases forecast accuracy decreases.

#### **ANNEXURE III**





- 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 Odisha on 24<sup>th</sup> & 25<sup>th</sup> October.
- ✓ Isolated heavy to very heavy rainfall very likely over South Interior Karnataka on 20<sup>th</sup>; Coastal Andhra Pradesh & Yanam on 25<sup>th</sup>; Gangetic West Bengal on 24<sup>th</sup> & 25<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.
- $\checkmark\,$  Check for traffic congestion on your route before leaving for your destination.
- $\checkmark~$  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

- ✓ In Tamil Nadu, drain out excess water from rice nurseries and fields of rice, maize, pepper and newly planted turmeric. Undertake detrashing and propping of more than five-month-old sugarcane to avoid lodging. Provide support to banana plantations.
- ✓ In Andaman and Nicobar Islands, carry out harvesting of matured rice to avoid shattering loss and keep the harvested produce in safe places. To avoid water stagnation, provide adequate drainage in the rice fields (near physiological maturity).
- ✓ In Madhya Maharashtra, continue picking of fully opened and matured bolls of cotton and harvesting of matured soybean, maize, pearl millet, groundnut, papaya and banana and keep the harvested produce at safer places.
- ✓ In Odisha, undertake harvesting of rice crop if 85% of grains are matured in a panicle and store them at safer places. Immediately harvest matured maize, black gram, green gram, groundnut, and vegetables and shift them to safe places.
- ✓ Make necessary arrangements to drain out excess water from standing crop fields and fruit orchards to avoid water stagnation in Kerala, Karnataka, Andhra Pradesh, and Gujarat.
- ✓ Keep the harvested produce at safer places.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables.

# 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.



राष्ट्रीय मौसम पूर्वानुमान केन्द्र भारत मौसम विज्ञान विभाग पृथ्वी विज्ञान मंत्रालय



National Weather Forecasting Centre India Meteorological Department Ministry of Earth Sciences

		<u>FENDS</u>	
1. अंडमान और निकोबार द्वीप	ासमूह		1. Andaman & Nicobar Islands
2. अरुणाचल प्रदेश 3. असम और मेघालय			2. Arunachal Pradesh
. असम आर मयालय 4. नागालैंड, मणिपुर, मिजोरम	और निमय		3. Assam & Meghalaya
4. नागालड, माणपुर, मिजारम 5. उप-हिमालयी पश्चिम बंगाल	आर ।त्रपुर। और गिलिस्म		4. Nagaland, Manipur, Mizoram & Tripur
6. गंगीय पश्चिम बंगाल	जारासायकम		5. Sub-Himalayan West Bengal & Sikkim 6. Gangetic West Bengal
र. ओडिशा	and and		7. Odisha
8. झारखंड			8. Jharkhand
9. बिहार	<b>16</b>		9. Bihar
10. पूर्वी उत्तर प्रदेश	15		10. East Uttar Pradesh
11. पश्चिम उत्तर प्रदेश	14 12		11. West Uttar Pradesh
12. उत्तराखंड	13		12. Uttarakhand
13. हरियाणा, चंडीगढ़ और दि	eef 17 5 m 11	ma E	13. Haryana, Chandigarh & Delhi
14. पंजाब		Sa fa	<b>3</b> 14. Punjab
15. हिमाचल प्रदेश	the per of german	man R	15. Himachal Pradesh
16. जम्मू और कश्मीर और लह		<b>1 8 ~ 6</b> {	16. Jammu & Kashmir and Ladakh
17. पश्चिम राजस्थान	22 The share	from the	17. West Rajasthan
18. पूर्वी राजस्थान	26 27	7 >	18. East Rajasthan
19. पश्चिम मध्य प्रदेश	25 25		19. West Madhya Pradesh
20. पूर्वी मध्य प्रदेश	23 24 29 29	M	20. East Madhya Pradesh
21. गुजरात	5 33 2 28	5	21. Gujarat
22. सौराष्ट्र	32 30		22. Saurashtra
23. कोंकण और गोवा	32 34		23. Konkan & Goa
24. मध्य महाराष्ट्र	Roman Company		24. Madhya Maharashtra
25. मराठवाड़ा	35, 31		<b>1</b> 25. Marathwada
26. विदर्भ	36		26. Vidarbha
27. छत्तीसगढ़	•		27. Chhattisgarh
28. तटीय आंध्र प्रदेश और यन	म		28. Coastal Andhra Pradesh & Yanam
29. तेलंगाना		29. Telangana	
30. रायलसीमा		30. Rayalaseema	
31. तमिलनाडु, पुडुचेरी और व	नराईकल	31. Tamilnadu, Puducherry & Karaikal	
32. तटीय कर्नाटक			32. Coastal Karnataka
33. आतंरिक उत्तरी कर्नाटक		33. North Interior Karnataka	
34. आतंरिक दक्षिणी कर्नाटक	1		34. South Interior Karnataka
35. केरल और माहे			35. Kerala & Mahe
36. लक्षद्वीप			36. Lakshadweep
SPA	<b>FIAL DISTRIBU</b>	TION (%	of Stations reporting)
% Stations	Category	% Stations	Category
	read (WS/Most Places)	26-50	Scattered (SCT/A Few Places)
51-75 Fairly Wide			
51-75 Fairly wide	spread (FWS/Many Places)	1-25	isolated (ISOL)
	spread (FWS/Many Places)	1-25 	Isolated (ISOL)
Fog	Heavy Snow	– Cold Way	Isolated (ISOL) Ve COLOUR CODED WARNING No Warning (No Action)
Fog			Isolated (ISOL) Ve COLOUR CODED WARNING No Warning (No Action)
Fog Heavy Rain	Heavy Snow	– Cold Way	Isolated (ISOL)         ve       COLOUR CODED WARNING         No Warning (No Action)         Watch (Be Aware)         Frost       Alert (Be Prepared To Take Action)
Fog Heavy Rain Very Heavy Rain	الله Heavy Snow في Dust Storm	- Cold Way	Isolated (ISOL)         ve       COLOUR CODED WARNING         No Warning (No Action)         Watch (Be Aware)         Alort (Be Brangred To Take Action)
Fog Heavy Rain Very Heavy Rain Extremely Heavy Rain	Heavy Snow Dust Storm + Heat Wave	- Cold Way	Isolated (ISOL)         ve       COLOUR CODED WARNING         No Warning (No Action)         Watch (Be Aware)         Alert (Be Prepared To Take Action)         Warning (Take Action)         Probabilistic Forecast
Fog Heavy Rain Very Heavy Rain Extremely Heavy Rain Thunder & Lightning	Heavy Snow Dust Storm + Heat Wave + Warm Night + Hot Day	- Cold Way	Isolated (ISOL)         ve       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
Fog Heavy Rain Very Heavy Rain Extremely Heavy Rain	Heavy Snow Dust Storm + Heat Wave + Warm Night	- Cold Way	Isolated (ISOL)         ve       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 (%)

\* 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)





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*	Heavy: 64.5 to 115.5 tm //cm *
ain/ Snow *	Very Heavy: 115.6 to 204.4 mm/cm* Extremely Heavy: > 204.4 mm/cm *
	When maximum temperature of a station reaches ≥40° C for plains and ≥30° 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 ≥6.5° C
leat Wave	(b). Based on Actual maximum temperature Heat Wave: When actual maximum temperature ≥45°C.
	Severe Heat Wave: When actual maximum temperature ≥45 C.
	( c). Criteria for heat wave for coastal stations When maximum temperature departure is >4.5°C from normal. Heat Wave may be described provided maximum temperature ≥37°C
	When maximum temperature remains 40°C
/arm Night	Warm Night: When minimum temperature departure 4.5 °C to 6.4 °C.
	Severe Warm Night: When minimum temperature departure >6.4 °C.
	When minimum temperature of a station $\leq 10^{\circ}$ C for plains and $\leq 0^{\circ}$ C for hilly regions. (a). Based on departure
	Cold Wave: Minimum Temperature Departure from normal -4.5 °C to -6.4 °C.
Cold Wave	Severe Cold Wave: Minimum Temperature Departure from normal ≤ -6.5 °C
	(b) Based on actual Minimum Temperature (for Plains only) Cold Wave : When Minimum Temperature is ≤ 4.0 °C
	Severe Cold Wave: When Minimum Temperature is ≤ 2.0 °C
	( c) For Coastal Stations
	When Minimum Temperature departure is ≤-4.5 °C & actual Minimum Temperature is ≤ 15 °C
	When minimum temperature of a station ≤10°C for plains and ≤0°C for hilly regions Based on departure
Cold Day	Cold Day: Maximum Temperature Departure from normal -4.5 °C to -6.4 °C.
	Severe Cold Day: Maximum Temperature Departure from normal ≤ -6.5 °C
	Phenomenon of small droplets suspended in air and the horizontal visibility < 1km
	Moderate Fog: When the visibility between 500-200 metres
Fog	Dense Fog: when the visibility between 50- 200 metres
	Very Dense Fog: when the visibility < 50 metres
understorm	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.
	Ice deposits on ground
Frost	Air temperature ≤4°C ( over Plains)
	A strong wind that rises suddenly, lasts for atleast 1 minute.
	Moderate: Wind speed 52-61 kmph
Squall	Severe: Wind speed 62-87 kmph
	Very Severe: Wind speed >87 kmph
	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
Sea State	High 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
	Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)
	Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)
Cyclone	Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots) Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)
	Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots) Super Cyclone Strom: Wind speed >220 kmph (>119 knots)

For a colour warning uses not mean ked Alert, ked colour warning means "Take Action". For cast 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)