



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Date: 07th December, 2022
Time of Issue: 1300 hrs IST

Subject: 1. Deep Depression over Southeast & adjoining Southwest Bay of Bengal.
2. Heavy to very heavy rainfall spell over north Tamil Nadu, south Coastal Andhra Pradesh and Rayalaseema during 08th-10th and isolated extremely heavy rainfall over north Tamil Nadu & south coastal Andhra Pradesh on 09th December, 2022.

Weather observed during past 24 hours ending at 0830 hrs IST of today:

- ❖ **Minimum temperatures** are in the range of 8-11° C over many parts of plains of Northwest and adjoining centre India. These are near normal over northern parts of the country.
- ❖ **Heavy rainfall** occurred at isolated places over Andaman Islands and **light rainfall** at most places over Andaman & Nicobar Islands; at a few places over Lakshadweep and at isolated places over Tamilnadu and Kerala.
- ❖ **Significant rainfall observed from 0830 hrs IST of yesterday to 0830 hrs IST of today (in cm):** Long Island-8.

Weather systems, rainfall/thunderstorm Forecast & Warnings: (Refer Annexure I)

Yesterday's Well Marked Low Pressure area over southeast Bay of Bengal intensified into a Depression over same region yesterday evening. It further intensified into a **Deep Depression** over Southeast & adjoining Southwest Bay of Bengal today morning and it lay centred at 0830 hours IST of today, the 07th December, 2022 over Southwest and adjoining Southeast Bay of Bengal, near latitude 8.7°N and longitude 85.7°E, about 500 km east of Trincomalee (Sri Lanka), about 630 km east-southeast of Jaffna (Sri Lanka), about 690 km east-southeast of Karaikal and about 770 km east-southeast of Chennai.

It is very likely to move west-northwestwards and intensify further gradually into a Cyclonic Storm around 07th December evening and reach Southwest Bay of Bengal off north Tamil Nadu-Puducherry & adjoining south Andhra Pradesh coasts by 08th December morning. It will continue to move west-northwestwards towards north Tamil Nadu-Puducherry & adjoining south Andhra Pradesh coasts during subsequent 48 hours.

Warnings:

(i) Rainfall (Annexure-I)

- ❖ Light to moderate rainfall at most places with heavy to very heavy falls at isolated places very likely over coastal Tamilnadu, Puducherry & Karaikal and isolated heavy rainfall over adjoining areas of south coastal Andhra Pradesh and Rayalaseema on 08th December.
- ❖ Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy rainfall at isolated places very likely over north coastal Tamilnadu, Puducherry and adjoining south Coastal Andhra Pradesh and isolated heavy to very heavy rainfall likely over north interior Tamilnadu and adjoining Rayalaseema on 09th December.
- ❖ It is likely to reduce to Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places likely over north Tamilnadu and Rayalaseema and south Andhra Pradesh on 10th December.

(ii) Wind warning :

- ❖ **Squally wind, speed reaching 50-60 kmph gusting to 70 kmph**, is likely to prevail over Southeast Bay of Bengal during next 24 hours and then reduce to **40-45 kmph gusting to 55 kmph on 8th Dec.**
- ❖ **Squally wind, speed reaching 50-60 kmph gusting to 70 kmph** prevailing over Southwest Bay of Bengal, would increase gradually becoming **60-70 kmph gusting to 80 kmph** from 7th evening. It would further increase becoming Gale wind, speed reaching **70-80 kmph gusting to 90 kmph**, over the region from 8th morning and **80-90 kmph gusting to 100 kmph** during 08th evening to 09th morning. It would decrease thereafter gradually.
- ❖ **Squally wind, speed reaching 40-50 kmph gusting to 60 kmph**, likely to commence along & off Tamilnadu, Puducherry, south Andhra Pradesh and north Sri Lanka coasts coast from 08th December morning, becoming **50-60 kmph gusting to 70 kmph** from 08th December evening, **70-80 kmph gusting to 90 kmph** from 09th December evening to 10th December morning. It is likely to reduce gradually to **50-60 kmph gusting to 70 kmph** by afternoon of 10th December and then to **40-50 kmph gusting to 60 kmph** by 10th December night.
- ❖ **Squally wind, speed reaching 40-50 kmph gusting to 60 kmph**, likely over Gulf of Mannar from 08th December evening becoming **50-60 kmph gusting to 70 kmph** from 09th December evening to 10th December morning. It is likely to reduce gradually thereafter.

(iii) Sea condition

- ❖ **Sea condition likely to be rough to very rough** over Southeast Bay of Bengal on 07th.
- ❖ **Sea condition likely to be rough to very rough** over Southwest and adjoining areas of Westcentral Bay of Bengal till 7th evening and very rough to high thereafter till 10th morning and improve gradually thereafter.
- ❖ **Sea condition likely to be rough to very rough** along & off South Andhra Pradesh, Tamil Nadu, Puducherry and Sri Lanka coasts on 07th, 08th and 10th and high on 9th December.

(iv) Fishermen Warning (Annexure-II)

Fishermen are advised not to venture into:

- ❖ Southeast Bay of Bengal on 07th December.
- ❖ Southwest Bay of Bengal during 07th-10th December
- ❖ Along & off Sri Lanka coast during 07th-09th December.
- ❖ Along & off Tamilnadu, Puducherry and South Andhra Pradesh coasts and Gulf of Mannar during 07th-10th December.
- ❖ Fishermen out at sea should return to the coast or move to the safe area.

(v) Adverse Weather Warning for onshore and off-shore operations

- ❖ Regulate on-shore and off-shore operations over Southeast Bay of Bengal on 07th and over Southwest Bay of Bengal during 07th-10th; along & off Tamilnadu-Puducherry-South Andhra Pradesh coasts and Gulf of Mannar during 08th-10th December.

Minimum Temperature and Fog Forecast

- ❖ No significant change in minimum temperatures very likely over East & Central India during next 2 days and rise by 2-3°C during subsequent 3 days. No significant change in minimum temperatures likely over Maharashtra during next 24 hours and rise by 2-3°C

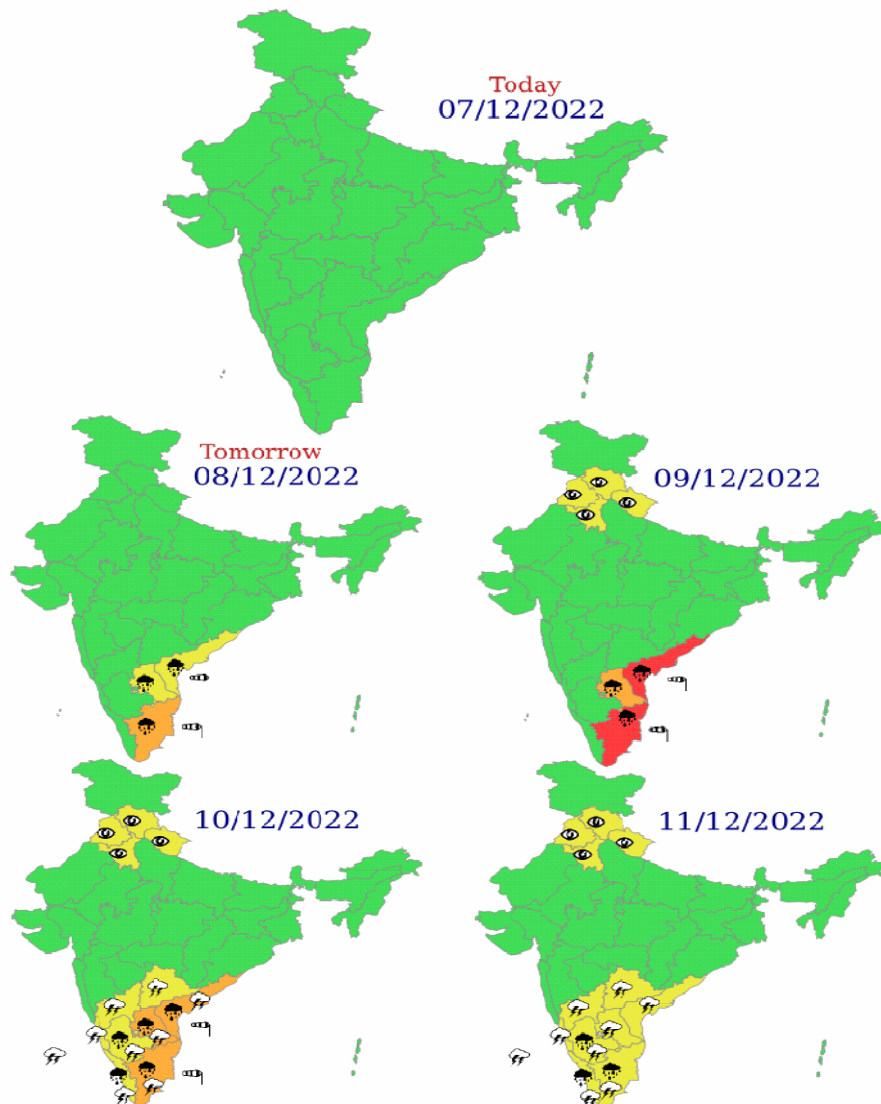
thereafter. No significant change in minimum temperatures likely over rest parts of the country during next 4-5 days.

- ❖ Dense fog very likely in isolated pockets over Himachal Pradesh, Uttarakhand, Haryana and Punjab during morning hours of 09th – 11th December. Shallow to moderate fog likely at isolated pockets over parts of Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 2 days.

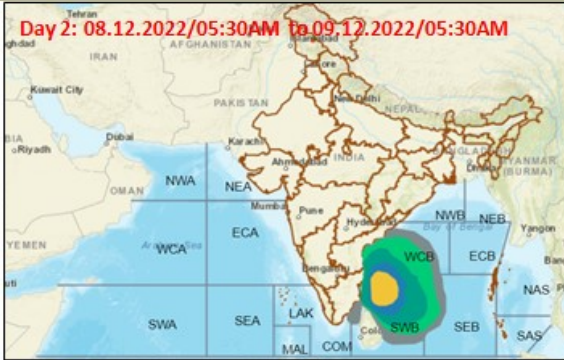
For more details kindly refer:

https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php

Annexure I



Fishermen warning graphics

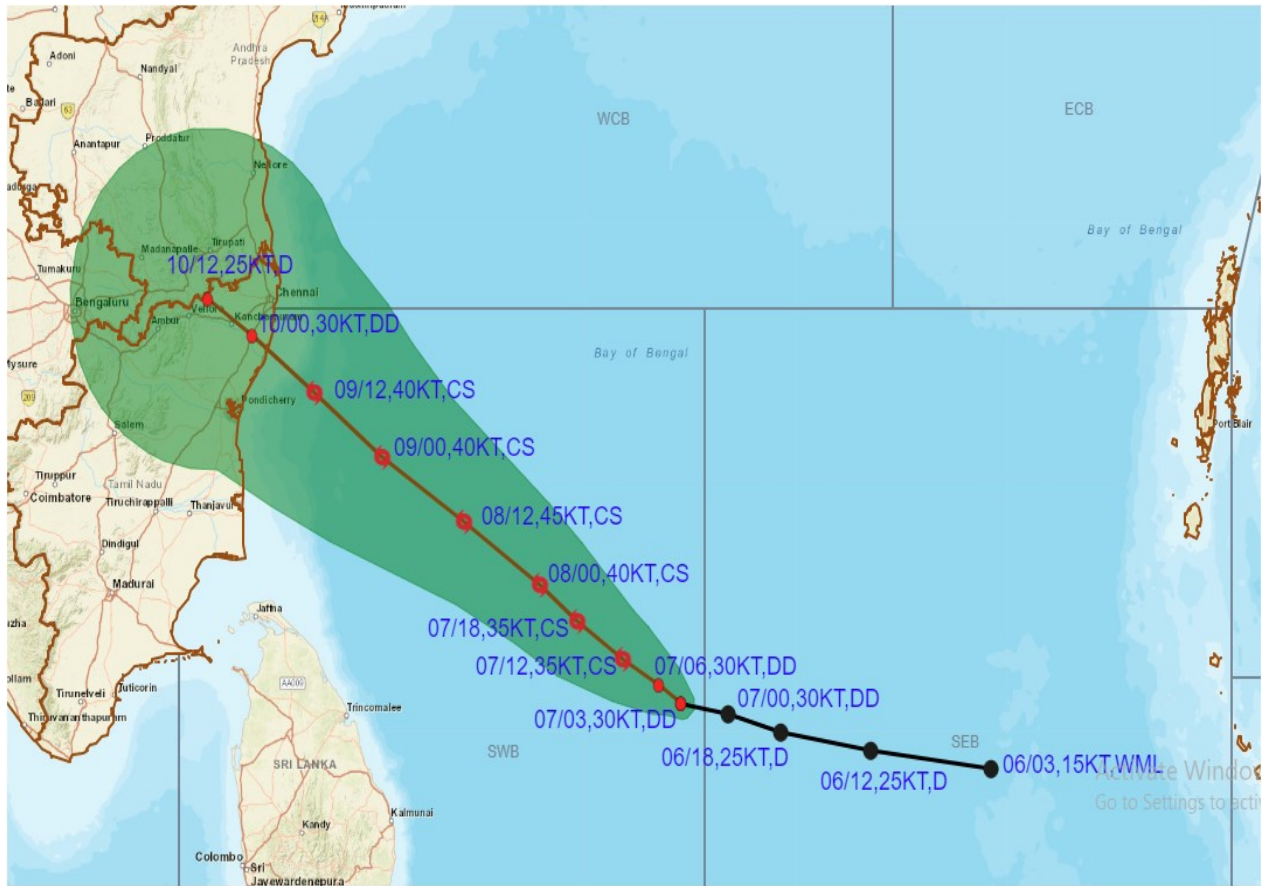


	Squally WX with wind speed 40-45 kmph gusting to 55 kmph
	Squally WX with wind speed 45-55 kmph gusting to 65 kmph
	Squally wind speed 45-55 kmph gusting to 65 kmph
	Squally wind with wind speed 55-65 kmph gusting to 75 kmph
	Gale wind with wind speed 70-80 kmph gusting to 90 kmph
	Gale wind with wind speed 89-90 kmph gusting to 100 kmph

Fishermen are advised not to venture into the marked areas.



OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL BASED ON 0300 UTC OF 07th DECEMBER, 2022.

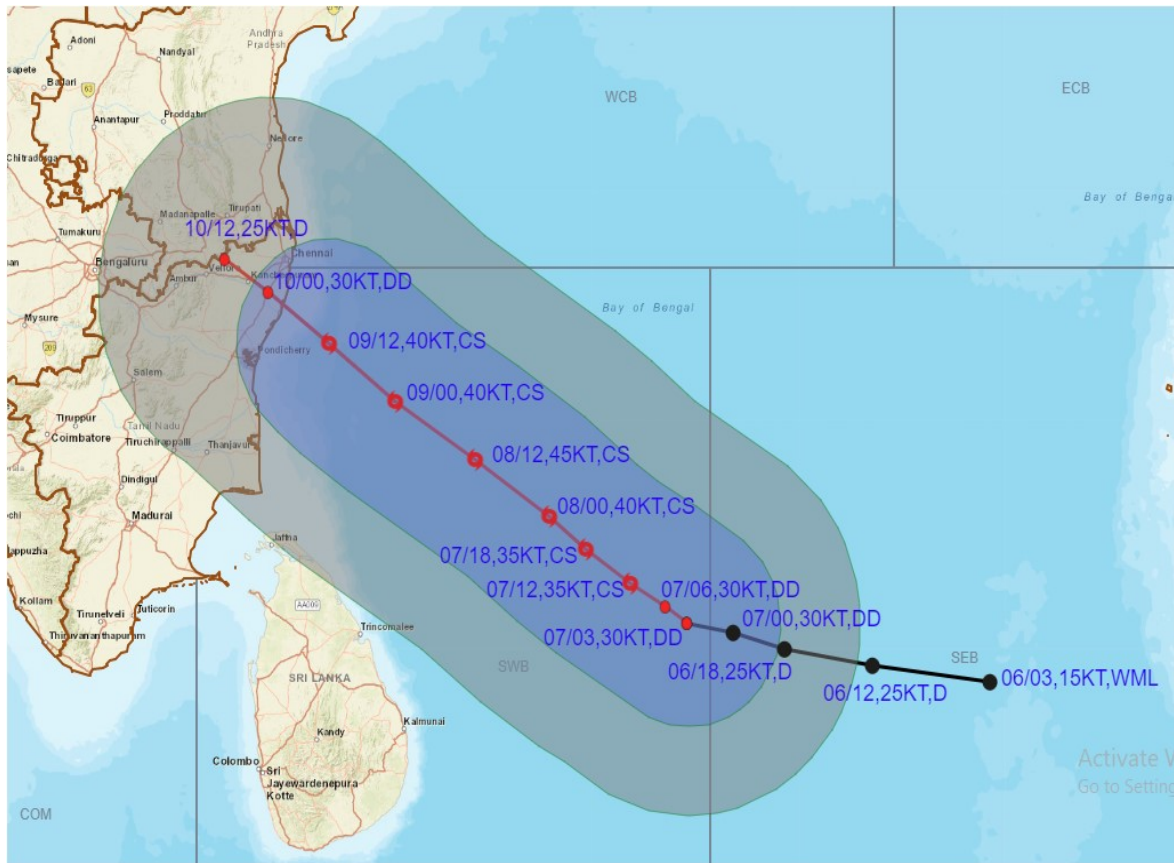


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER SOUTHWEST AND ADJOINING SOUTHEAST BAY OF BENGAL BASED ON 0300 UTC OF 07th DECEMBER, 2022.



DATE/TIME IN UTC
IST=UTC + 0530

L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
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● LESS THAN 34 KT
○ 34-47 KT
○ ≥ 48 KT
— OBSERVED TRACK
— FORECAST TRACK
— CONE OF UNCERTAINTY
AREA OF MAXIMUM SUSTAINED WIND SPEED:
■ 28-33 KT (52-61 KMPH)
■ 34-49 KT (62-91 KMPH)
■ 50-63 KT (92-117 KMPH)
■ ≥ 64 KT (≥ 118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥ 118)	Phenomenal	Total suspension of fishing operations

Legends:

Heavy Rain: 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4 mm.

Region wise classification of meteorological Sub-Divisions:

- 1) **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.
- 2) **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- 3) **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- 4) **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 5) **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
- 6) **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and 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)

WARNING

WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

 Heavy Rain	 Heavy Snow	 Thunderstorm	 Dust Storm
 Strong Winds	 Visibility	 Cyclone	 Squall/ Hail
 Frost	 Cold Wave	 Heat Wave	 Sea State