



**India Meteorological Department  
(Ministry of Earth Sciences)**

**NATIONAL BULLETIN NO. 14 (BOB/07/2024)**

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**FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)**

**TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)**

**CONTROL ROOM NDMA (FAX.NO. 26701729)**

**CABINET SECRETARIAT (FAX.NO.23012284, 23018638)**

**PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)**

**SECRETARY, MOES (FAX NO. 24629777)**

**H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)**

**DIRECTOR GENERAL, DOORDARSHAN (23385843)**

**DIRECTOR GENERAL, AIR (23421105, 23421219)**

**PIB MOES (FAX NO. 23389042)**

**UNI (FAX NO. 23355841)**

**D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)**

**DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)**

**CHIEF SECRETARY, ANDAMAN & NICOBAR ISLANDS (FAX NO. 03192-232656)**

**CHIEF SECRETARY, TAMIL NADU (FAX NO. 044-25672304)**

**CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0863-2441029)**

**CHIEF SECRETARY, PUDUCHERRY (FAX NO. 0413-2334145)**

**CHIEF SECRETARY, ODISHA (FAX NO. 0674-2536660)**

**Sub: Deep depression over Southwest Bay of Bengal**

The Deep Depression over Southwest Bay of Bengal remained practically stationary during past 6 hours and lay centred at 2330 hours IST of yesterday, the 27th November 2024 over the same region near latitude 9.0°N and longitude 82.1°E, about 100 km east-northeast of Trincomalee, 320 km southeast of Nagappattinam, 410 km southeast of Puducherry and 490 km south-southeast of Chennai.

It is very likely to continue to move nearly north-northwestwards skirting Sri Lanka coast and intensify into a cyclonic storm during next 12 hours. Thereafter, it will continue to move north-northwestwards and cross north Tamil Nadu-Puducherry coasts between Karaikal and Mahabalipuram around morning of 30th November as a deep depression with a wind speed of 50-60 kmph gusting to 70 kmph.

The system is being tracked by DWR Karaikal. A continuous watch is being maintained for the movement and intensification of system.

Forecast track and intensity are given in the following table:

Date/ Time (IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
27.11.24/2330	9.0/82.1	50-60 gusting to 70	Deep Depression
28.11.24/0530	9.3/82.0	60-70 gusting to 80	Cyclonic Storm
28.11.24/1130	9.6/81.9	60-70 gusting to 80	Cyclonic Storm
28.11.24/1730	10.0/81.8	60-70 gusting to 80	Cyclonic Storm
28.11.24/2330	10.4/81.6	60-70 gusting to 80	Cyclonic Storm
29.11.24/1130	11.0/81.0	60-70 gusting to 80	Cyclonic Storm
29.11.24/2330	11.5/80.4	50-60 gusting to 70	Deep Depression
30.11.24/1130	11.9/79.8	50-60 gusting to 70	Deep Depression
30.11.24/2330	12.3/79.2	40-50 gusting to 60	Depression

### **Warnings:**

#### **(i) Rainfall Warning:**

**Tamil Nadu & Puducherry:** Light to moderate rainfall at many places with Heavy to very heavy rainfall at isolated places is very likely over coastal Tamil Nadu-Puducherry on 28<sup>th</sup> November and heavy to very heavy rainfall at isolated places is likely over north Tamil Nadu – Puducherry on 29<sup>th</sup> & 30<sup>th</sup> November.

**Coastal Andhra Pradesh:** Light to moderate rainfall at many places with heavy rainfall at isolated places is likely south coastal Andhra Pradesh during 28<sup>th</sup> to 30<sup>th</sup> November.

**Rayalaseema:** Light to moderate rainfall at many places with heavy rainfall at isolated places is likely on 29<sup>th</sup> & 30<sup>th</sup> November.

**Kerala:** Light to moderate rainfall at many places with heavy rainfall at isolated places is likely on 1<sup>st</sup> December.

#### **(ii) Wind warning:**

- Gale wind speed reaching 65-75 kmph gusting to 85 kmph is likely to prevail over southwest Bay of Bengal from evening of 28<sup>th</sup> November till morning of 29<sup>th</sup> November. Thereafter, it is likely to decrease becoming squally winds speed reaching 50-60 kmph gusting to 70 kmph by evening of 30<sup>th</sup> November.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail over adjoining westcentral Bay of Bengal from 28<sup>th</sup> November evening. It is likely to increase becoming 50-60 kmph gusting to 70 kmph from 29<sup>th</sup> evening till 30<sup>th</sup> November afternoon.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph is prevailing along & off Tamil Nadu - Puducherry and 35-45 kmph gusting to 55 kmph along & off south Andhra Pradesh coasts. It is likely to increase becoming 50-60 kmph gusting to 70 kmph from 28<sup>th</sup> evening till 30<sup>th</sup> November afternoon.

#### **(iii) Sea condition:**

- Rough to very Rough Sea condition is likely to prevail along & off Sri Lanka coast till evening of 28<sup>th</sup> November.
- Rough to very Rough Sea condition is prevailing over southwest Bay of Bengal It is likely to become high from 28<sup>th</sup> morning till 29<sup>th</sup> November evening and improve thereafter becoming very rough to rough till 30<sup>th</sup> November.
- Rough to very rough Sea condition is very likely to prevail along and off Tamil Nadu-Puducherry and south Andhra Pradesh coasts till 30<sup>th</sup> November.
- Rough to very Rough Sea condition is likely to prevail over adjoining westcentral Bay of Bengal from 28<sup>th</sup> evening till 30<sup>th</sup> November.

**(iv) Fisherman warning:**

- Fishermen are advised not venture into
  - southwest Bay of Bengal and along & off Sri Lanka & Tamilnadu coasts till 30<sup>th</sup> November.
  - Adjoining areas of Westcentral Bay of Bengal and along & off south Andhra Pradesh coast during 28<sup>th</sup> to 30<sup>th</sup> November.
- Fishermen out at sea are advised to return to coasts immediately.

**(v) Impact Expected [over Tamil Nadu – Puducherry and south Andhra Pradesh]**

- Localized Flooding of roads, water logging in low lying areas.
- Occasional reduction in visibility due to heavy rainfall in some areas.
- Disruption of traffic in major cities due to water logging in roads leading to increased travel time in some areas.
- Minor damage to kutcha roads.
- Damage to horticulture and standing crops in some areas due to inundation.

**(vi) Action Suggested**

- Fishermen are advised not venture into
  - southwest Bay of Bengal and along & off Sri Lanka & Tamilnadu coasts till 30<sup>th</sup> November.
  - Adjoining areas of Westcentral Bay of Bengal and along & off south Andhra Pradesh coast during 28<sup>th</sup> to 30<sup>th</sup> November.
- Fishermen out at sea are advised to return to coasts immediately
- 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.
- Special care may be taken for fishing ponds and poultries over coastal areas.
- Avoid staying in vulnerable structure.

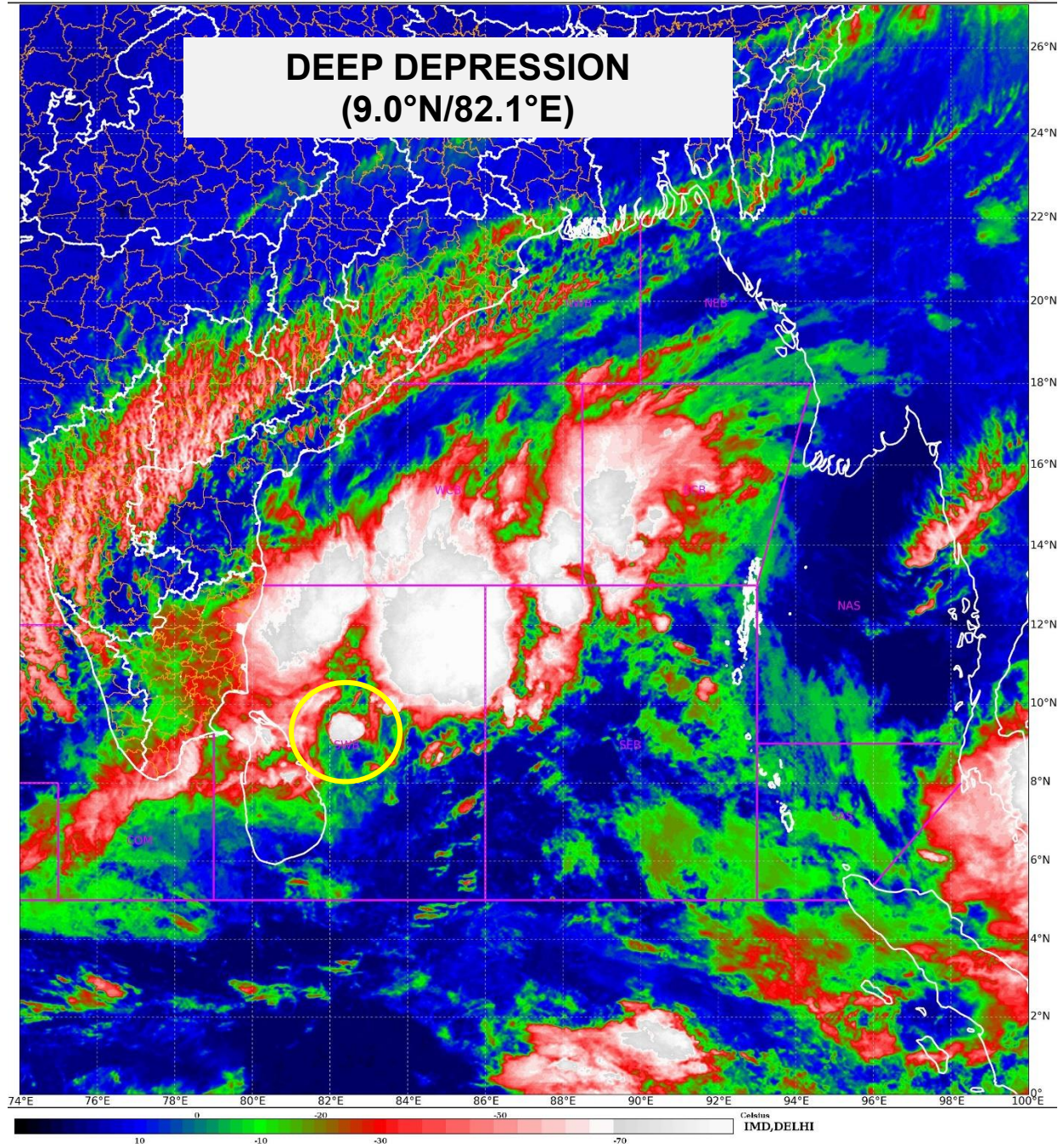
**(vii) Agromet advisories [over Tamil Nadu – Puducherry and Andhra Pradesh]**

- Provide adequate drainage facilities for the removal of excess water from rice, cotton, sugarcane, turmeric and vegetable fields, coconut and banana orchards. Provide mechanical support to banana plants to prevent lodging.
- Make arrangements to drain out excess water from the standing crop fields and fruit orchards in Kerala and Coastal Andhra Pradesh.
- Harvest the matured crops and keep it in safe place.
- Provide mechanical support to horticultural crops and staking to vegetables.

**Next bulletin will be issued at 0830 hours IST of today, the 28<sup>th</sup> November, 2024.**

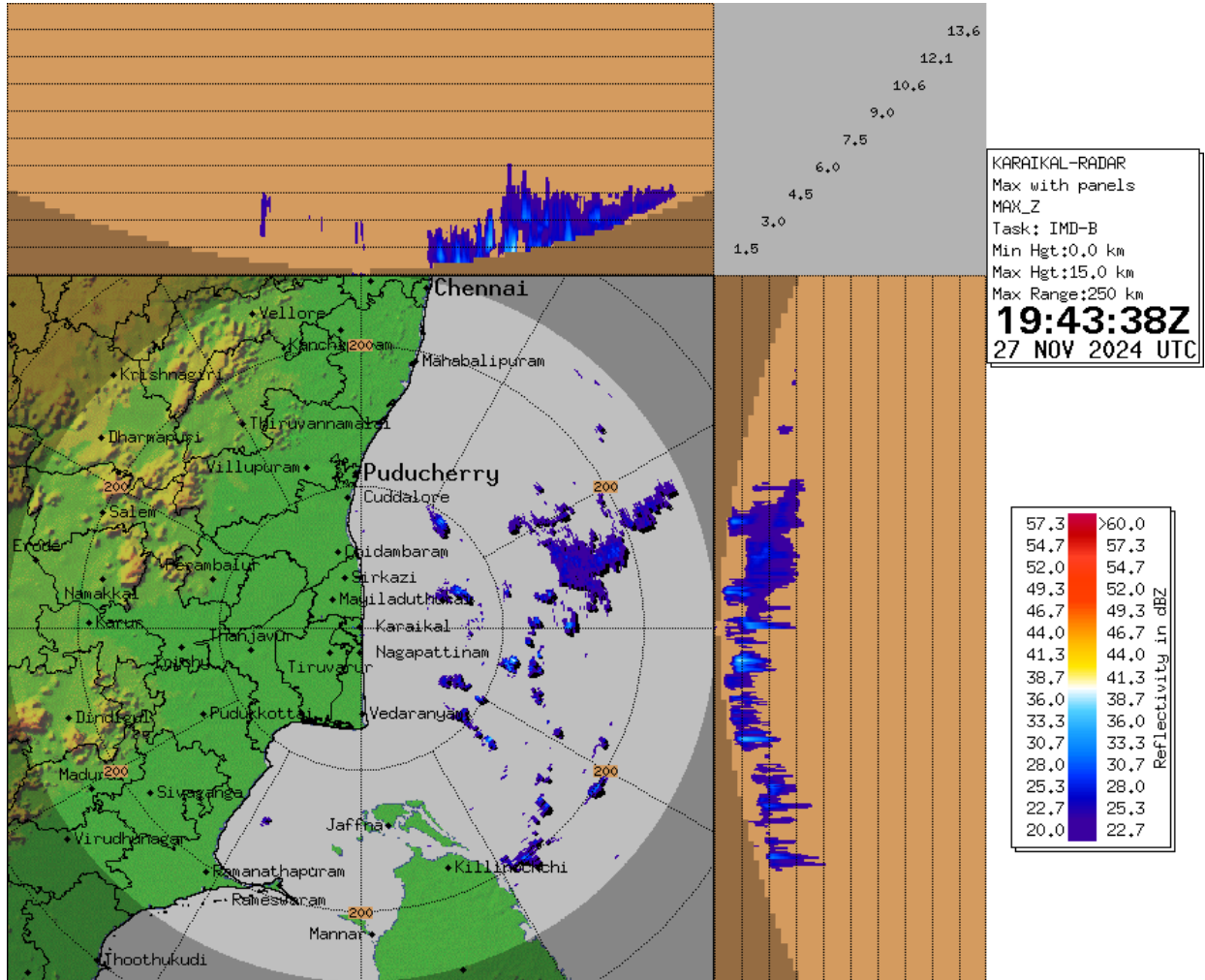
**(Dr. Trisanu Banik)  
Scientist D, RSMC, New Delhi**

*Copy to: ACWC Kolkata/ACWC Chennai/CWC Bhubaneswar/MC, Amaravati/MC, Thiruvananthapuram/CWC, Vishakhapatnam*



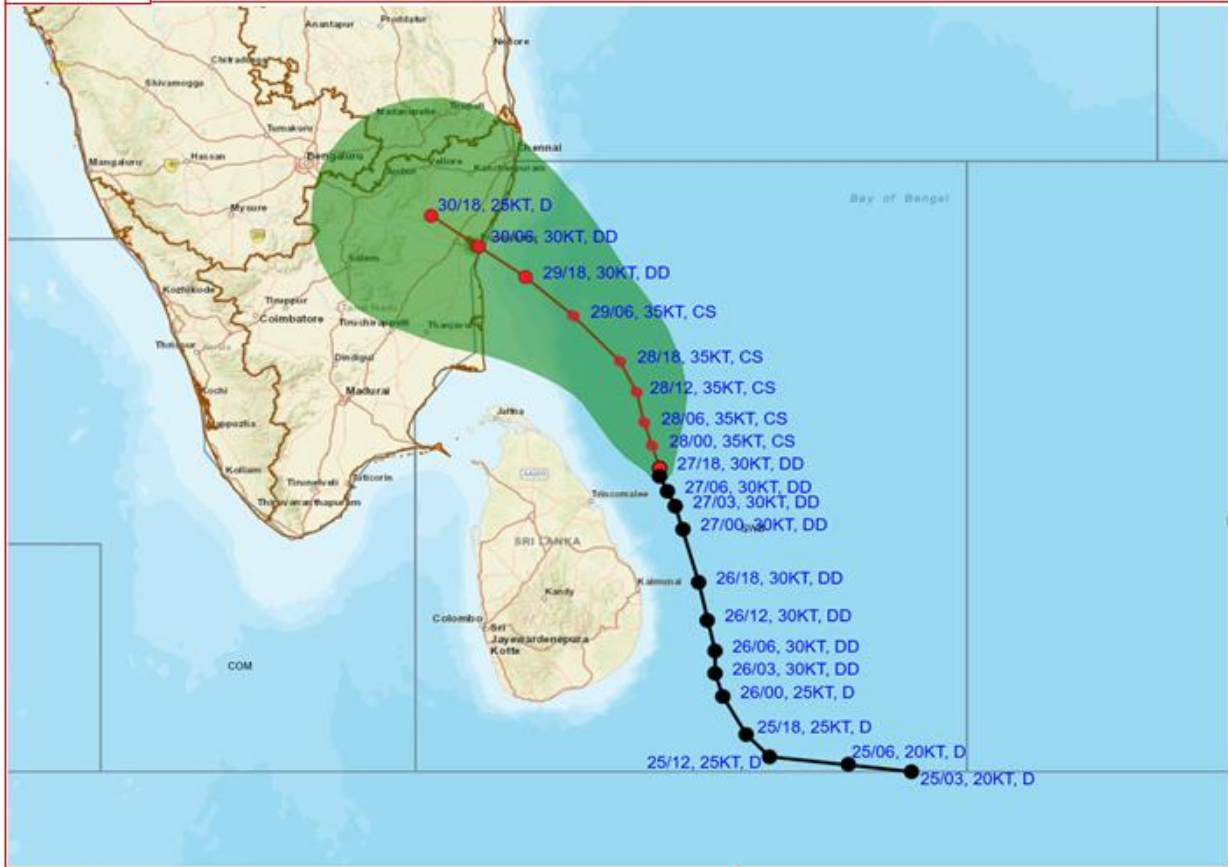


# Doppler Weather Radar Observation (Max Z) at Karaikal





**OBSERVED AND FORECAST TRACK ALONG WITH CONE OF UNCERTAINTY OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC (2330 HRS. IST) OF 27<sup>TH</sup> NOVEMBER, 2024**



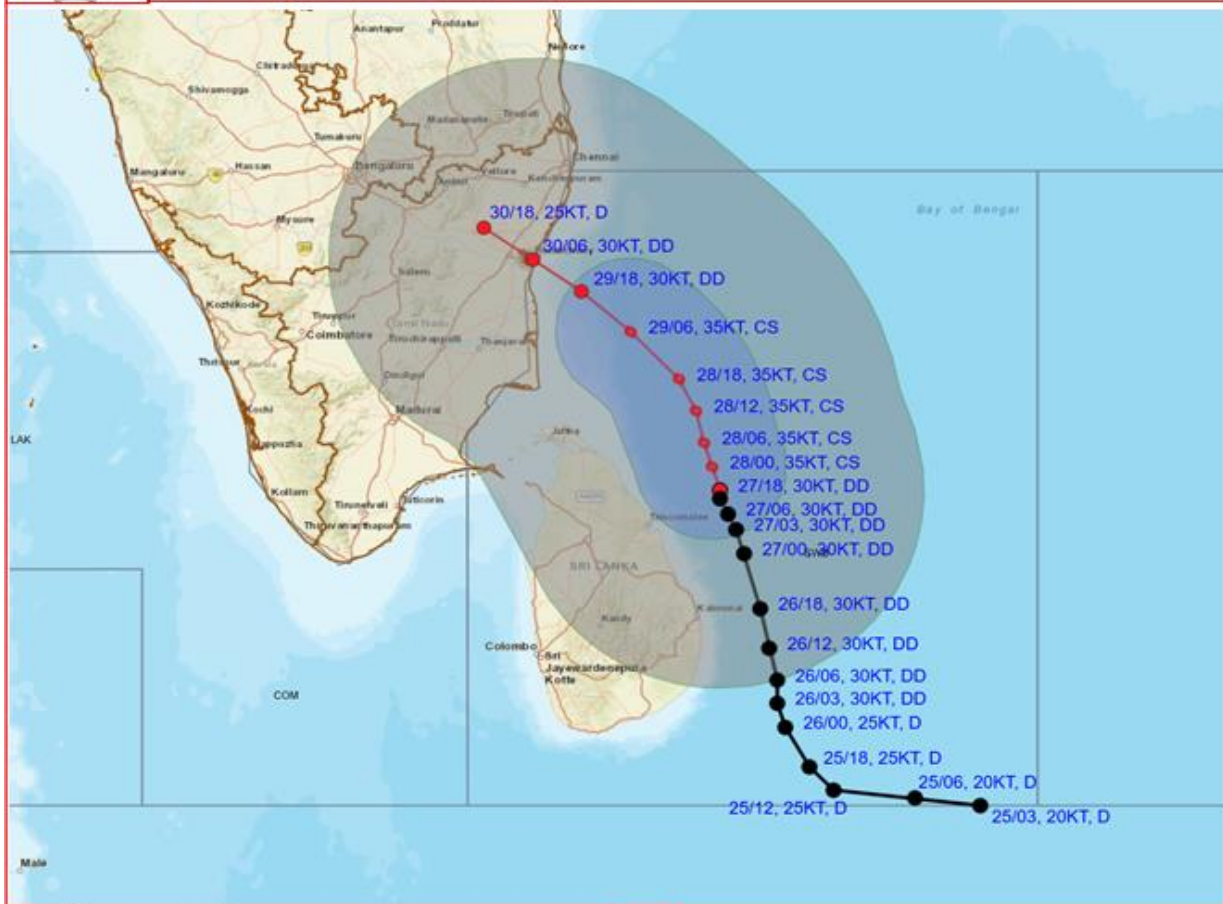
**DATE/TIME** : IN UTC  
**IST** : UTC + 0530  
**KT** : NAUTICAL MILE S/HOUR = 1.85 KM/HOUR  
**LPA** : LOW PRESSURE AREA  
**WML** : WELL MARKED LOW PRESSURE AREA  
**D** : DEPRESSION (17-27 KT)  
**DD** : DEEP DEPRESSION (28-33 KT)  
**CS** : CYCLONIC STORM (34-47 KT)  
**SCS** : SEVERE CYCLONIC STORM (48-63 KT)  
**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

Forecast	DISTANCE (KM) AND DIRECTION FROM STATIONS				
Date and Time (UTC)	BATTICALOA	TRINCOMEALEE	NAGAPPATTINAM	PUDUCHERRY	CHENNAI/MINAMBAKKAM
27.11.24/1800	150, NNE	100, ENE	320, SE	410, SE	490, SSE
28.11.24/1800	300, N	210, N	200, ESE	260, SE	330, SSE
29.11.24/1800	440, NNW	340, NNW	100, NE	80, SE	170, S
30.11.24/1800	580, NNW	470, NNW	180, NNW	80, WNW	130, SW



**OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 1800 UTC (2330 HRS. IST) OF 27<sup>TH</sup> NOVEMBER, 2024.**



DATE/TIME : IN UTC  
 IST : UTC + 0530  
 KT : NAUTICAL MILE/HOUR = 1.85 KM/HOUR  
 LPA : 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 (48-63 KT)  
 VSCS : VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS : EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)  
 SuCS : SUPER CYCLONIC STORM (≥120 KT)

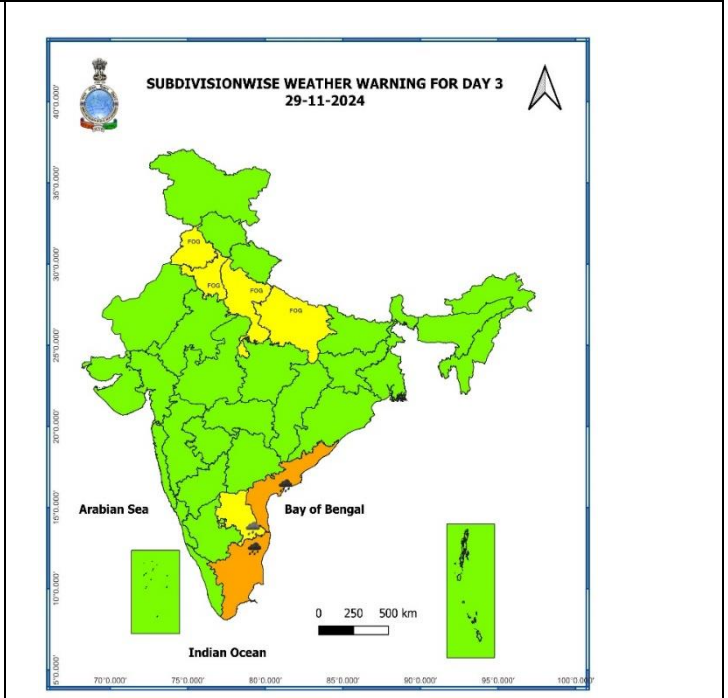
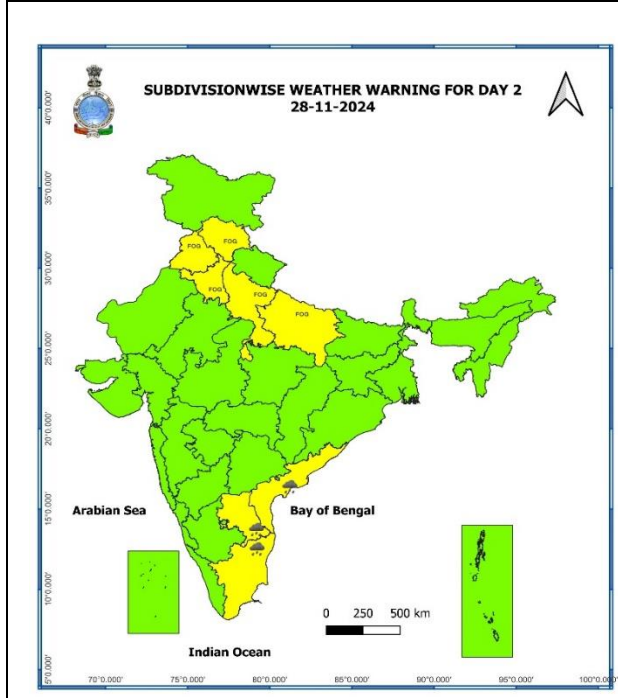
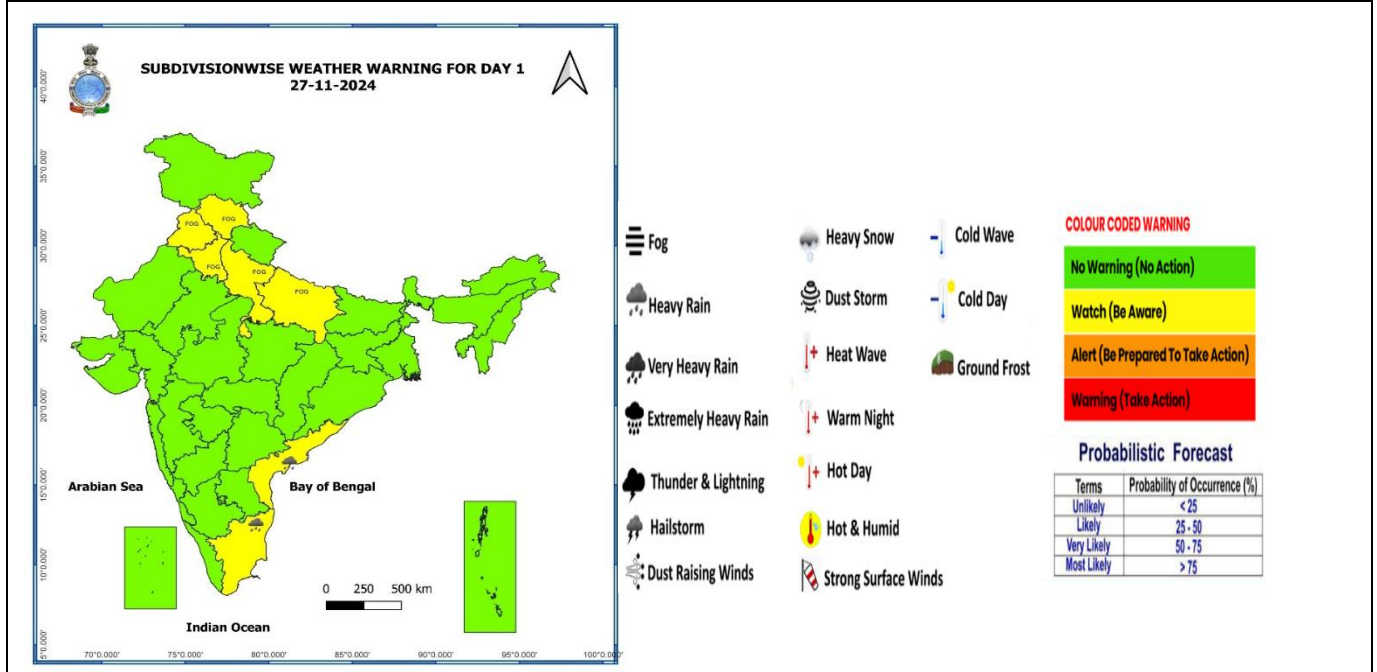
● LESS THAN 34 KT  
 ○ 34-47 KT  
 ● ≥ 48 KT  
 — OBSERVED TRACK  
 — FORECAST TRACK  
 — CONE OF UNCERTAINTY  
 AREA OF MAXIMUM SUSTAINED WIND SPEED:  
 ■ 28-33 KT (52-61 KMPH)  
 ■ 34-49 KT (62-91 KMPH)  
 ■ 50-63 KT (92-117 KMPH)  
 ■ ≥ 64 KT (≥118 KMPH)

**IMPACT OVER THE SEA**

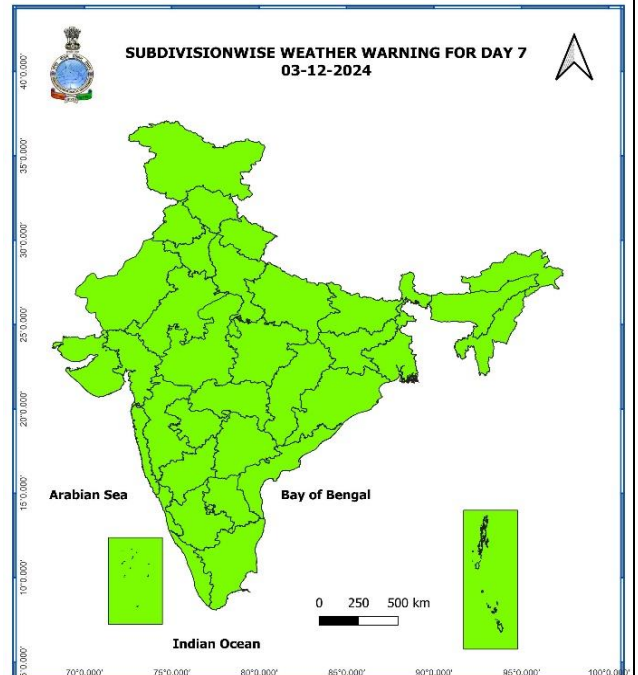
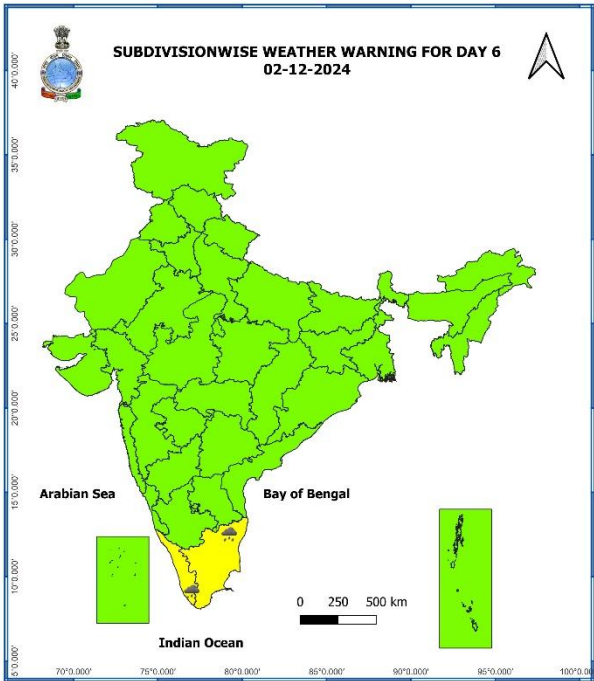
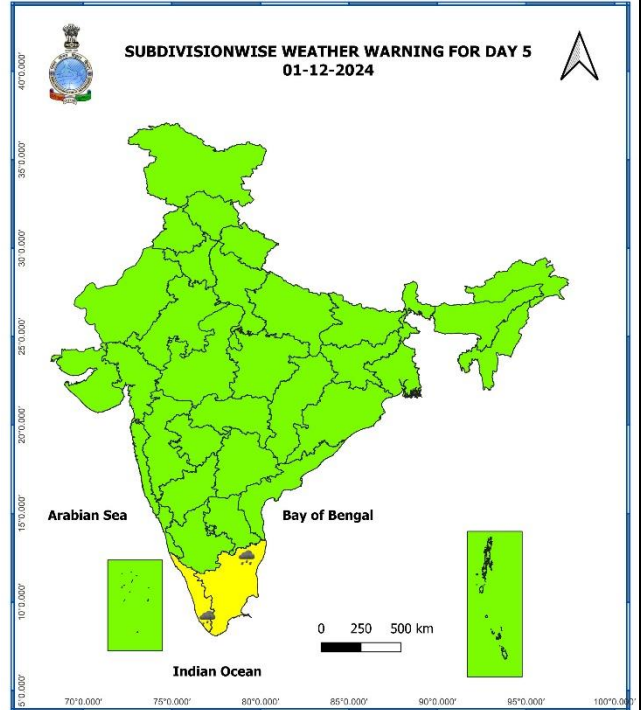
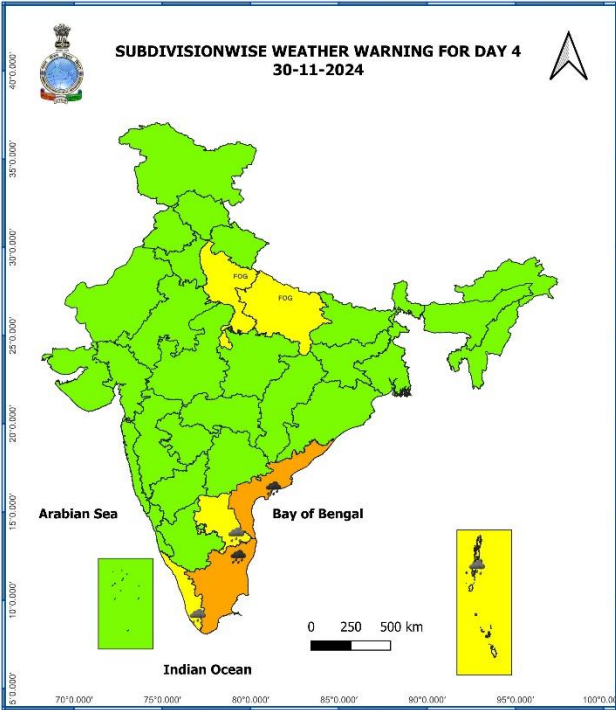
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations



# Weather Warning Graphics







- 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.

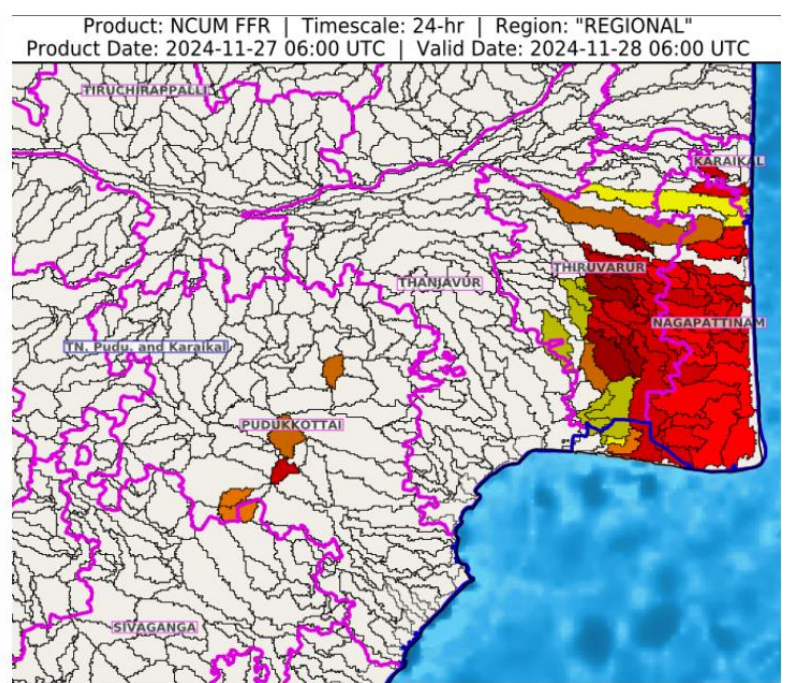
## Flash Flood Guidance

### **24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 28-11-2024:**

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

**Tamil Nadu - Pudu & Karaikal** - Karaikal, Nagapattinam, Pudukkottai and Thiruvarur 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.



### **Flash Flood Risk**

 **High Risk (Take Action)**

 **Moderate Risk (Be Prepared)**

 **Low Risk (Be Updated)**



**Fishermen Warning Graphics**

