



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

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

**CHIEF SECRETARY, WEST BENGAL (FAX NO. 033-22144328)**

**CHIEF SECRETARY, ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)**

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

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

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

**Sub: Deep Depression over Southwest Bay of Bengal (Cyclone Alert for Andhra Pradesh and adjoining North Tamil Nadu-Puducherry Coasts: **Yellow Message**)**

The deep depression over Southwest Bay of Bengal moved west-northwestwards with a speed of 17 kmph during past 06 hours and lay centered at 1130 hours IST of today, the 2<sup>nd</sup> December, 2023 over the same region near Latitude 10.7°N and Longitude 83.2°E, about 440 km east-southeast of Puducherry, 420 km southeast of Chennai, 540 km southeast of Nellore, 650 km south-southeast of Bapatla and 650 km south-southeast of Machilipatnam.

It is likely to move west-northwestwards and intensify into a Cyclonic Storm over Southwest Bay of Bengal during next 24 hours. Thereafter, it would move northwestwards and reach westcentral Bay of Bengal off south Andhra Pradesh and adjoining north Tamilnadu coasts by 4<sup>th</sup> December forenoon. Thereafter, it would move nearly northwards almost parallel and close to south Andhra Pradesh coast and cross South Andhra Pradesh coast between Nellore and Machilipatnam during forenoon of 5<sup>th</sup> December as a **Cyclonic Storm** with a maximum sustained wind speed of 80-90 kmph gusting to 100 kmph.

### Track and Intensity Forecasts:

Date/Time (IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
02.12.23/1130	10.7/83.2	50-60 kmph gusting to 70 kmph	Deep Depression
02.12.23/1730	11.1/82.6	55-65 kmph gusting to 75 kmph	Deep Depression
02.12.23/2330	11.5/82.2	60-70 kmph gusting to 80 kmph	Cyclonic Storm
03.12.23/0530	11.8/82.0	65-75 kmph gusting to 85 kmph	Cyclonic Storm
03.12.23/1130	12.3/81.7	70-80 kmph gusting to 90 kmph	Cyclonic Storm
03.12.23/2330	13.1/81.2	75-85 kmph gusting to 95 kmph	Cyclonic Storm
04.12.23/1130	14.0/80.7	80-90 kmph gusting to 100 kmph	Cyclonic Storm
04.12.23/2330	15.0/80.6	80-90 kmph gusting to 100 kmph	Cyclonic Storm
05.12.23/1130	16.0/80.9	80-90 kmph gusting to 100 kmph	Cyclonic Storm
05.12.23/2330	17.1/81.6	60-70 kmph gusting to 80 kmph	Cyclonic Storm
06.12.23/1130	18.1/82.9	45-55 kmph gusting to 65 kmph	Depression
06.12.23/2330	18.9/84.0	30-40 kmph gusting to 50 kmph	Well Marked Low Pressure Area

### Warnings:

#### (i) Rainfall Warning (graphics enclosed):

- **North Coastal Tamil Nadu & Puducherry:** Light to moderate rainfall at most places with isolated heavy rainfall is very likely on 2<sup>nd</sup> December, heavy to very heavy rainfall at a few places on 3<sup>rd</sup> Dec., isolated heavy rainfall on 4<sup>th</sup> December and decrease thereafter.
- **Coastal Andhra Pradesh:** Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places over south coastal Andhra Pradesh on 3<sup>rd</sup> and heavy to very heavy rainfall with extremely heavy falls at isolated places over coastal Andhra Pradesh & Yanam on 4<sup>th</sup> & 5<sup>th</sup> December. Isolated heavy rainfall is likely over north coastal Andhra Pradesh on 6<sup>th</sup> December.
- **Rayalaseema:** Light to moderate rainfall at most places with **isolated heavy rainfall** during 2<sup>nd</sup>-4<sup>th</sup> with **very heavy rainfall** at isolated places on 3<sup>rd</sup> December.
- **Odisha:** Light to moderate rainfall at most places with **isolated heavy rainfall** is likely over south Coastal and adjoining south Interior Odisha during 4<sup>th</sup> -6<sup>th</sup> with **isolated very heavy rainfall** over the same region on 5<sup>th</sup> December.

#### (ii) Wind warning:

- **Southwest Bay of Bengal along & off north Tamil Nadu-Puducherry Coasts:**  
**Squally wind** speed reaching **50-60 kmph gusting to 70 kmph** is prevailing over Southwest Bay of Bengal. It is likely to gradually increase becoming **Gale Wind** speed reaching **60-70 kmph gusting to 80 kmph** from 2<sup>nd</sup> December night to 4<sup>th</sup> Dec. evening and it will gradual decrease thereafter.
- **Southeast Bay of Bengal:**  
**Squally weather** with wind speed reaching **45-55 kmph gusting to 65 kmph** is prevailing over Southeast Bay of Bengal on 2<sup>nd</sup> and likely to decrease thereafter.
- **Westcentral Bay of Bengal and along & off south Andhra Pradesh Coast:**  
**Squally wind** speed reaching **35-45 kmph gusting to 55 kmph** is likely to prevail over westcentral Bay of Bengal from 2<sup>nd</sup> December evening. It is likely to gradually increase becoming **55-65 kmph gusting to 75 kmph** from 3<sup>rd</sup> December morning. It is likely to increase further becoming **Gale Wind** speed reaching **70-80 kmph gusting to 90 kmph** from 3<sup>rd</sup> evening and **80-90 kmph gusting to 100 kmph** from 4<sup>th</sup> evening to 5<sup>th</sup> Dec. noon. It would gradually decrease thereafter.

- **Along & off north Andhra Pradesh Coast:**

**Squally wind** speed reaching **45-55 kmph gusting to 65 kmph** likely from 4<sup>th</sup> December evening, likely to gradually increase **becoming 55-65 kmph gusting to 75 kmph** from 5<sup>th</sup> December evening for subsequent 12 hours. It would gradually decrease thereafter.

- **Along & off South Odisha Coast:**

**Squally wind** speed reaching **35-45 kmph gusting to 55 kmph** likely from 4<sup>th</sup> December evening, likely to gradually increase becoming **40-50 kmph gusting to 60 kmph** from 5<sup>th</sup> December evening for subsequent 12 hours. It would gradually decrease thereafter.

**(iii) Sea Condition:**

- **Southeast Bay of Bengal:**

**Rough to very Rough** Sea condition is likely over Southeast Bay of Bengal on 2<sup>nd</sup> December and would improve thereafter.

- **Southwest Bay of Bengal and along & off north Tamil Nadu-Puducherry Coasts:**

**Rough to Very Rough sea condition** is prevailing over the region. It is likely to become **very rough to high** from 3<sup>rd</sup> December for subsequent 24 hours and improve thereafter gradually.

- **Westcentral Bay of Bengal and along & off south Andhra Pradesh Coast:**

**Rough to Very Rough to sea condition** is likely from 2<sup>nd</sup> December evening, becoming **very rough to high** from 3<sup>rd</sup> December morning till 5<sup>th</sup> December.

- **Along & off North Andhra Pradesh Coast:**

**Rough to Very Rough to sea condition** is likely from 4<sup>th</sup> December, very rough to high on 5<sup>th</sup> and very rough to rough on 6<sup>th</sup> December.

- **Along & off South Odisha Coast:**

**Rough to Very Rough to sea condition** is likely from 4<sup>th</sup> December evening till 6<sup>th</sup> December morning.

**(iv) Fishermen Warning (graphics attached):**

Fishermen are advised not to venture into:

- Southeast Bay of Bengal on 2<sup>nd</sup> December.
- Southwest Bay of Bengal and along & off North Tamil Nadu-Puducherry Coasts during 2<sup>nd</sup> to 4<sup>th</sup> December.
- Westcentral Bay of Bengal and along & off Andhra Pradesh Coast from 2<sup>nd</sup> December morning to 6<sup>th</sup> December.
- Along & off South Odisha coast from 4<sup>th</sup> December evening till 6<sup>th</sup> December

The Fishermen out at sea are advised to return to coast.

**(v) Storm Surge (Graphics enclosed):**

Storm surge of about 1-1.5 meter above astronomical tide likely to inundate south Coastal Andhra Pradesh districts at the time of landfall.

**(vi) Damage Expected over coastal districts of South Andhra Pradesh and adjoining coastal districts of North Tamil Nadu-Puducherry:**

- Damage to thatched huts.
- Possibilities of damage to vulnerable structure.
- Breaking of tree branches and uprooting of small & medium sized trees.
- Minor damage to power and communication lines due to breaking of branches and uprooting of trees.
- Major damage to Kutcha and minor damage to Pucca roads due to heavy rain.
- Damage to paddy crops, horticultural crops and orchards.
- Sea water inundation in low lying areas after erosion of Kutcha embankments
- Inundation of low lying areas in coastal districts due to heavy rainfall and flash flood

- Localized Flooding of roads and closure of underpasses mainly in urban areas of the above region.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic due to water logging and squally winds
- Localized Landslides/Mudslides
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

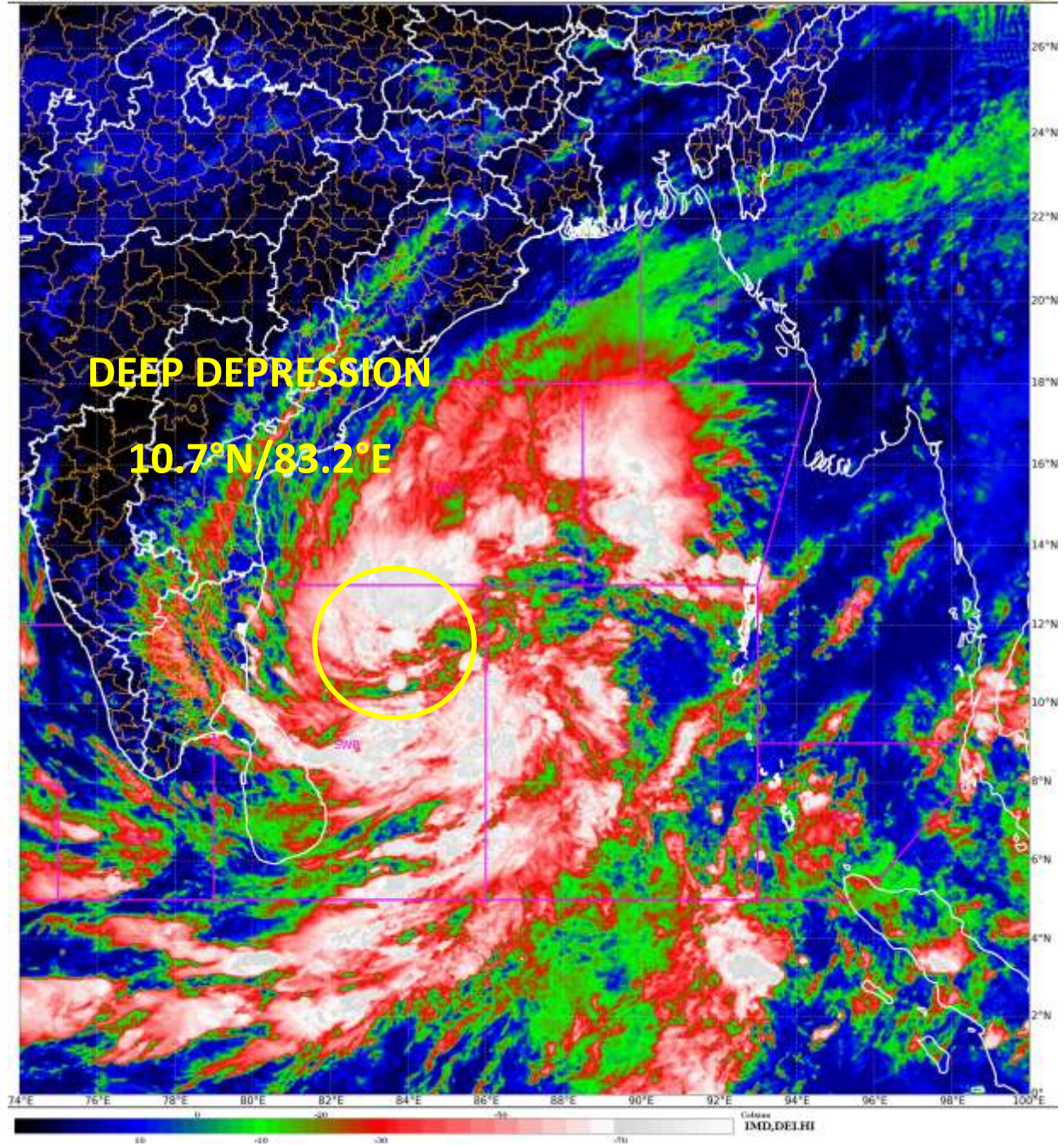
**(vi) Action Suggested for coastal districts of South Andhra Pradesh and adjoining coastal districts of North Tamil Nadu-Puducherry:**

- Total suspension of fishing operations.
- Fishermen out at sea are advised to return to coast by 1st December
- Surface transport and shipping operations need to be regulated
- Onshore & Offshore operation need to be regulated as per guidelines
- Coastal hutment dwellers to be in safer places.
- People in affected areas to remain indoors.
- Avoid going to areas that face the water logging problems often.
- Avoid staying in vulnerable structure.

**The system is under continuous surveillance and the next message will be issued at 2030 hours IST of today, the 02<sup>nd</sup> December, 2023.**

**(D R Pattanaik)  
Scientist F, Cyclone Warning, New Delhi**

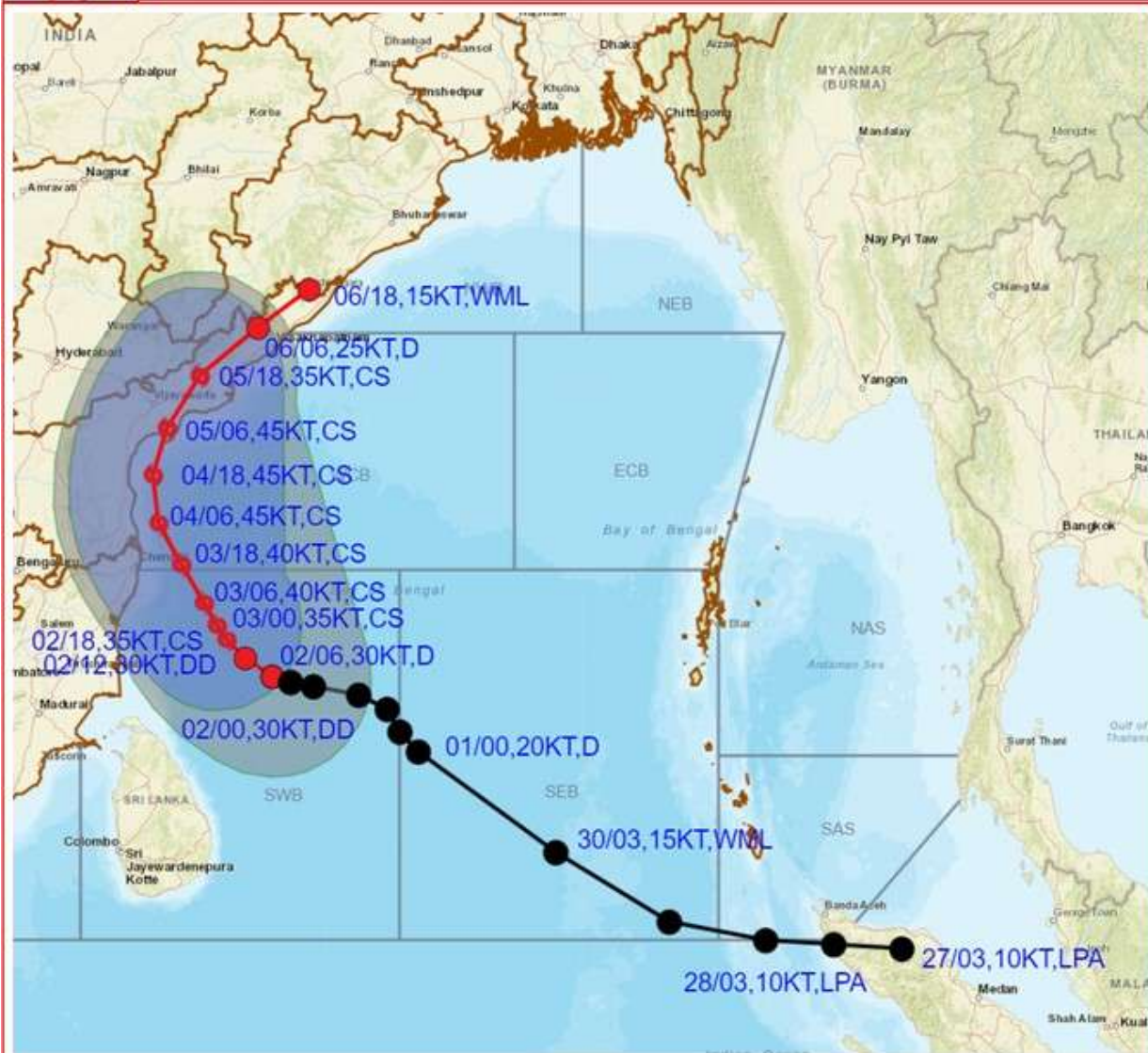
*Copy to: ACWC Chennai/ ACWC Kolkata/ CWC Bhubaneswar/ CWC Vishakhapatnam/ MC Amravati*







**OBSERVED AND FORECAST TRACK ALONG WITH QUADRANT WIND DISTRIBUTION IN ASSOCIATION WITH DEEP DEPRESSION OVER SOUTHWEST BAY OF BENGAL BASED ON 0600 UTC (1130 IST) OF 02<sup>ND</sup> DECEMBER 2023.**



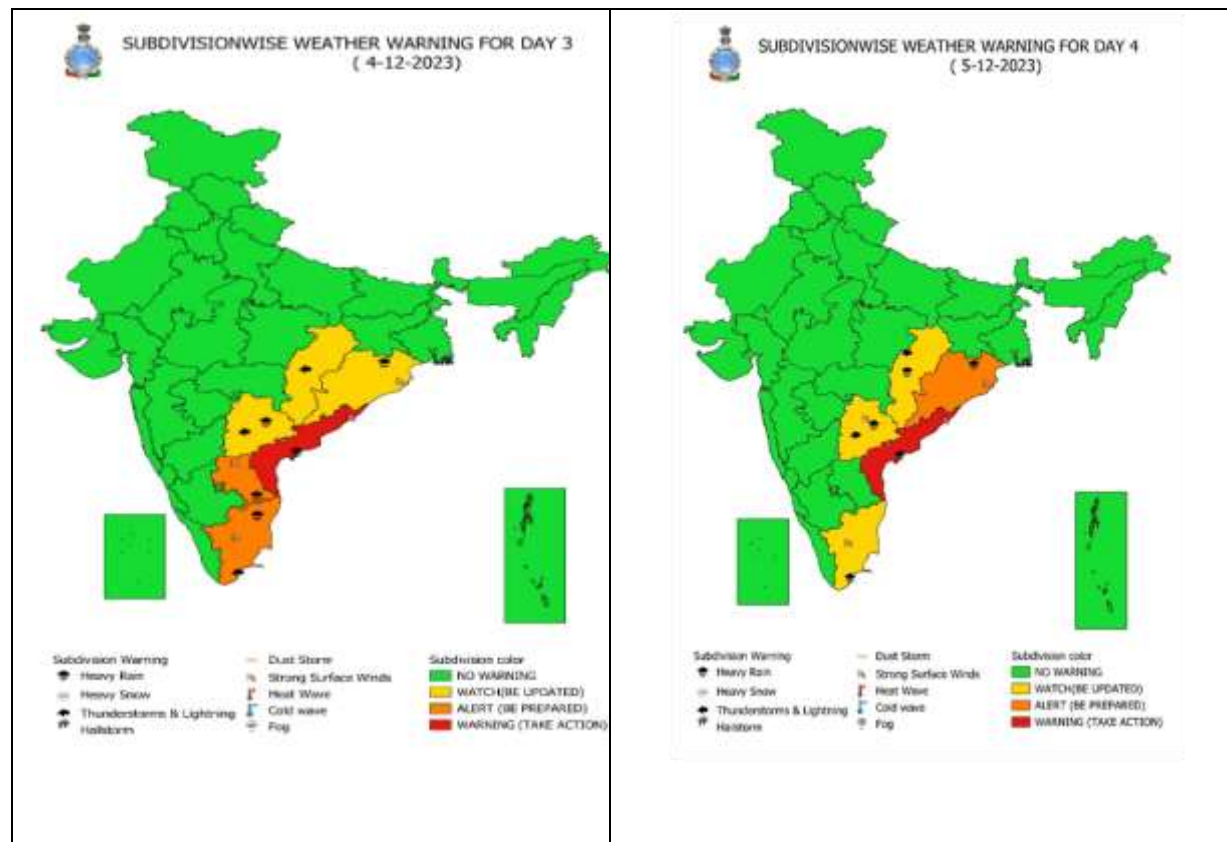
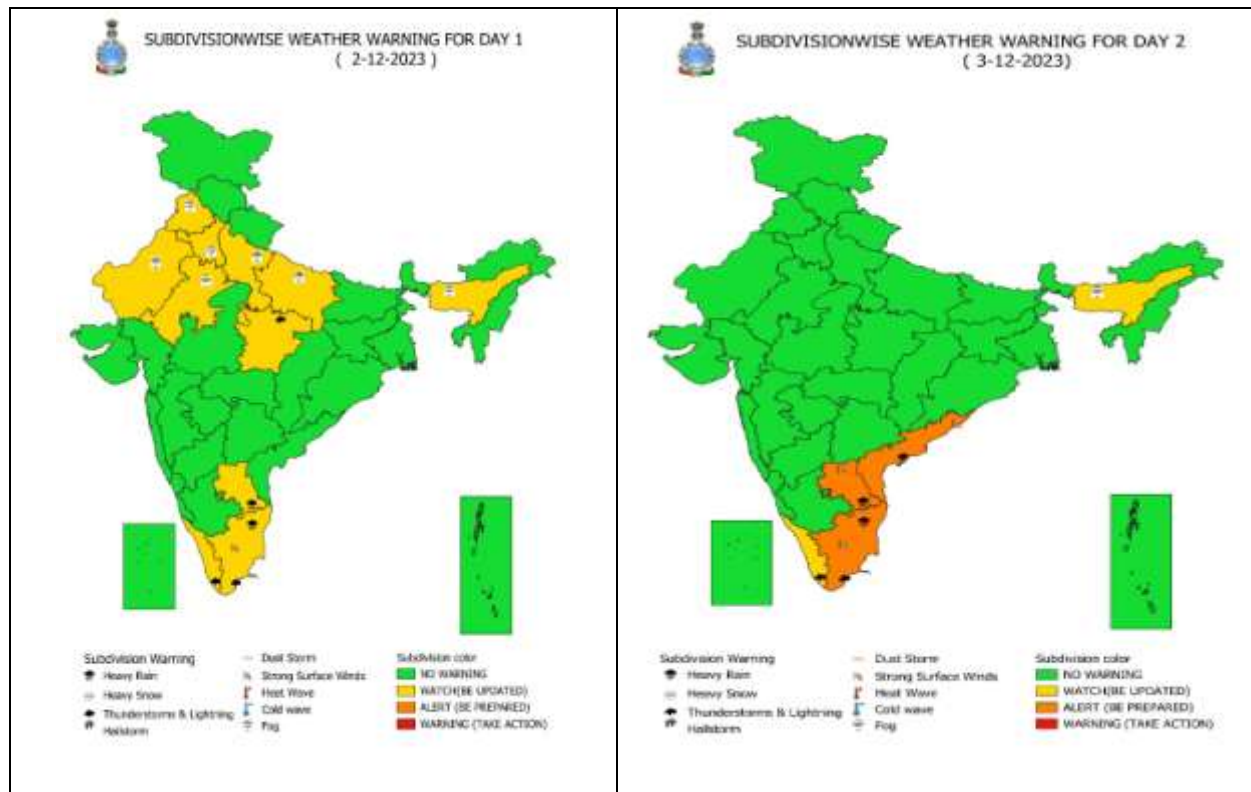
DATE/TIME IN UTC  
 IST=UTC + 0530  
 L: LOW PRESSURE AREA  
 WML: WELL MARKED LOW PRESSURE AREA  
 D: DEPRESSION (17-27 KT)  
 DD: DEEP DEPRESSION (28-33 KT)  
 CS: CYCLONIC STORM (34-47 KT)  
 SCS: SEVERE CYCLONIC STORM (48-63KT)  
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)  
 ESCS: EXTREMELY SEVERE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

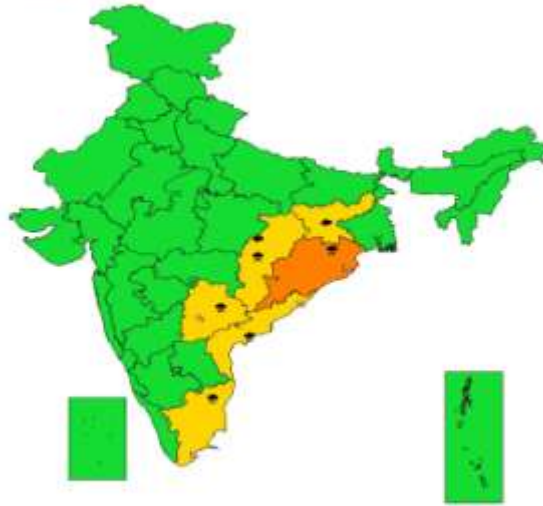
# Weather Warning Graphics







**SUBDIVISIONWISE WEATHER WARNING FOR DAY 5  
( 6-12-2023)**



- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>☁ Heavy Rain</li> <li>❄ Heavy Snow</li> <li>⚡ Thunderstorm &amp; Lightning</li> <li>⚡ Hailstone</li> </ul> | <ul style="list-style-type: none"> <li>☁ Dust Storm</li> <li>🌀 Strong Surface Winds</li> <li>🌡 Heat Wave</li> <li>🌡 Cold wave</li> <li>🌫 Fog</li> </ul> | <ul style="list-style-type: none"> <li>🟢 Subdivision color</li> <li>🟢 NO WARNING</li> <li>🟡 WATCH (BE UPDATED)</li> <li>🟠 ALERT (BE PREPARED)</li> <li>🔴 WARNING (TAKE ACTION)</li> </ul> |
|---|---|---|

## WARNING



**Heavy Rain**



**Heavy Snow**



**Thunderstorm**



**Dust Storm**



**Strong Winds**



**Visibility**



**Cyclone**



**Squall/ Hail**



**Frost**



**Cold Wave**

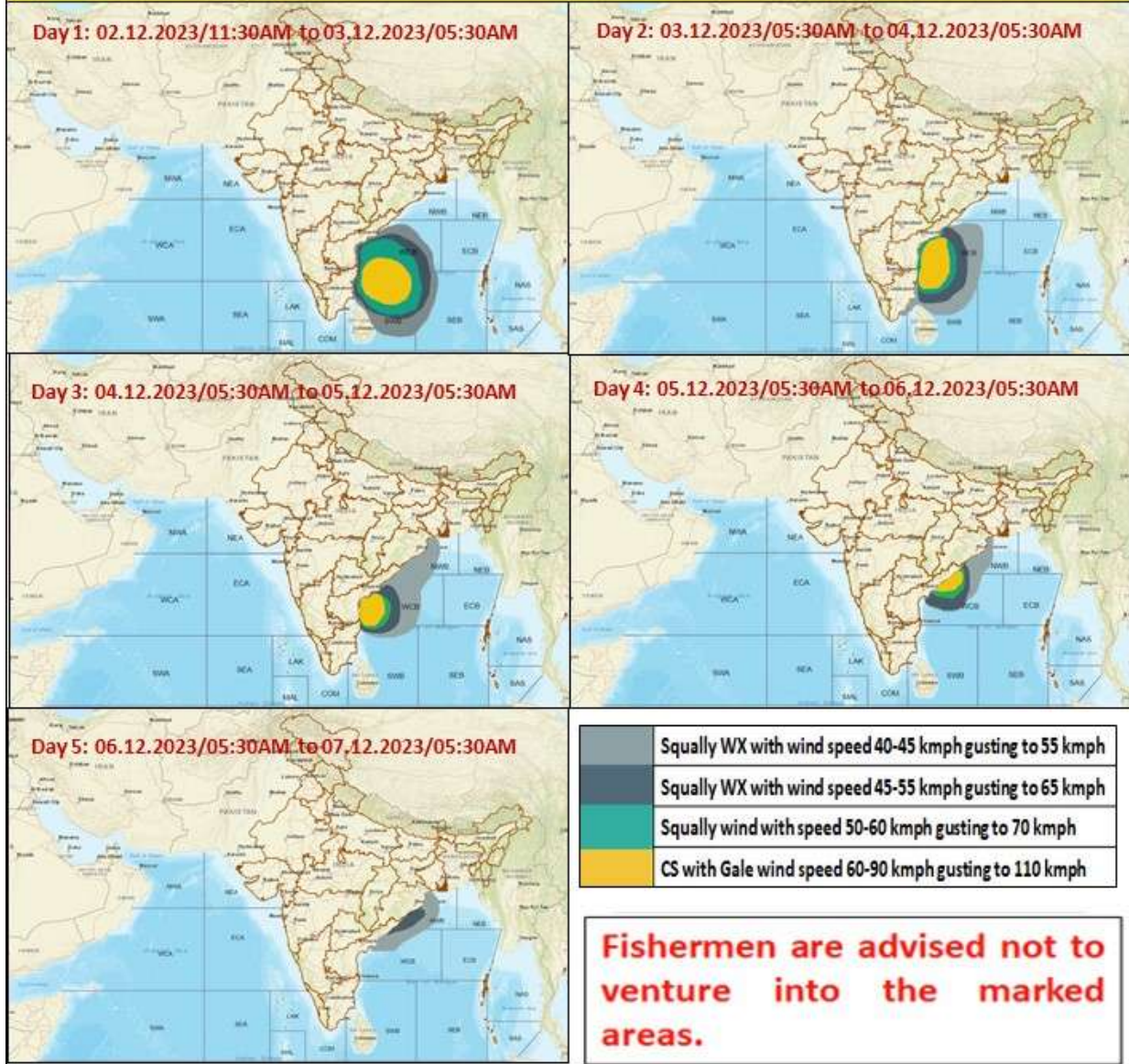


**Heat Wave**



**Sea State**

## Fishermen warning graphics



**Storm Surge Warning Graphics based on Forecast Track**

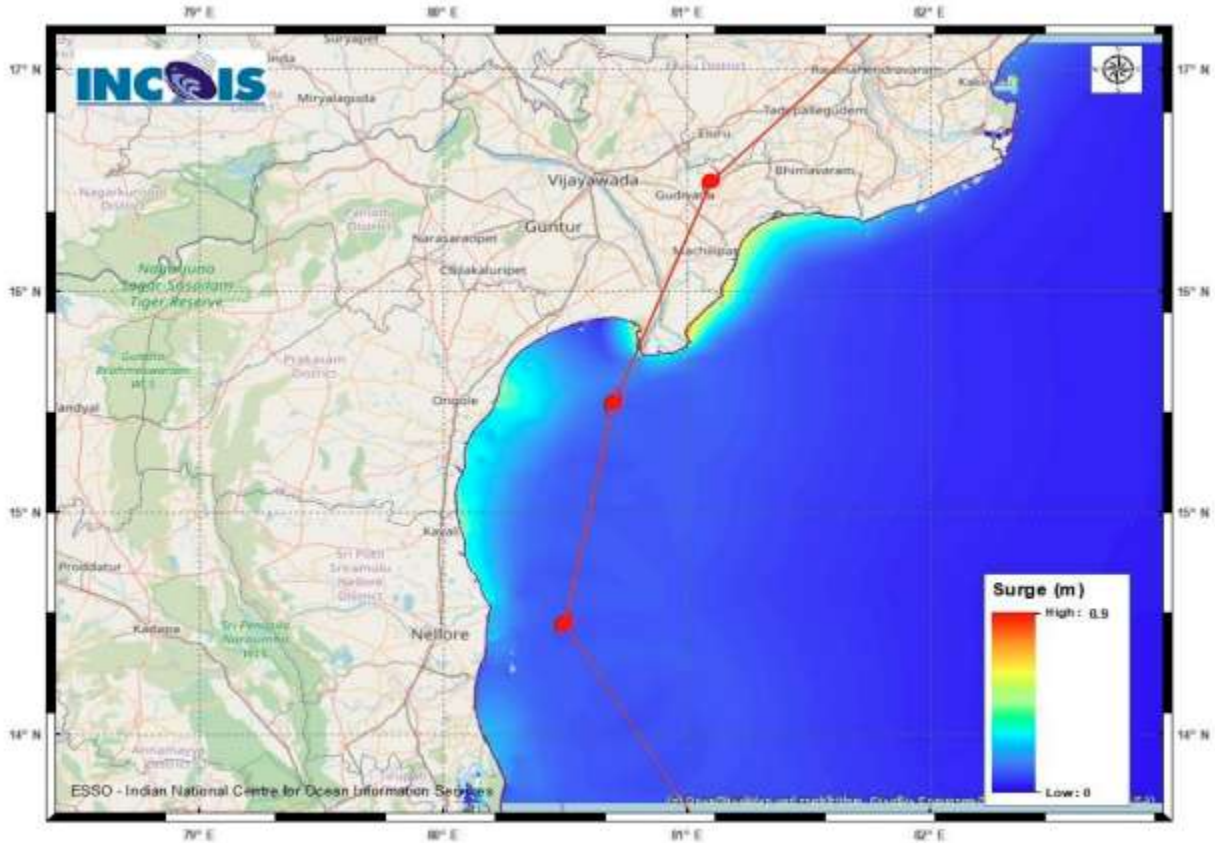


Figure: Storm Surge Map

**STORM SURGE HEIGHT INFORMATION:**

\* The below listed surge heights are over and above astronomical tide.

MANDAL/TALUK	DISTRICT	STATE/UNION TERRITORY	NEAREST PLACE OF HABITATION	STORM SURGE (m) *	EXPECTED INUNDATION EXTENT (km)
Avanigadda	Krishna	Andhra Pradesh	Ramakrishnapuram	0.3-0.8	Upto 0.10
Machilipatnam	Krishna	Andhra Pradesh	Chinagollapalem	0.4-0.9	Upto 0.49
Repalle	Guntur	Andhra Pradesh		0.2-0.5	Upto 0.34