



India Meteorological Department  
(Ministry of Earth Sciences)

BULLETIN NUMBER: 02 (BOB/07/2021)

TIME OF ISSUE: 0220 HOURS IST

DATED: 03.12.2021

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, ANDHRA PRADESH (FAX NO. 0863-2441029, 08645-246600)  
CHIEF SECRETARY, GOVT. OF ODISHA (FAX NO. 0674 -2536660)  
CHIEF SECRETARY, GOVT. OF WEST BENGAL (FAX NO. 033-22144328)  
CHIEF SECRETARY, TAMIL NADU (FAX NO 044-25672304)  
CHIEF SECRETARY, PUDUCHERRY (FAX NO 0413-2334145)  
CHIEF SECRETARY, ASSAM (FAX NO. 0361-2260900)  
CHIEF SECRETARY, MEGHALAYA (FAX NO 0364-2225978)  
CHIEF SECRETARY, MIZORAM (FAX NO 0389-2322745)  
CHIEF SECRETARY, TRIPURA (FAX NO 0381-2414013)

**Sub: Depression over southeast Bay of Bengal: Pre-Cyclone Watch for north Andhra Pradesh and Odisha coasts.**

The **Depression** over southeast Bay of Bengal moved west-northwestwards with a speed of 32 kmph during past 06 hours and lay centered at 2330 hrs IST of 2<sup>nd</sup> December 2021, over the same region near Lat. 12.0°N and Long. 87.5°E, about 770 km south-southeast of Vishakhapatnam (Andhra Pradesh), 850 km south-southeast of Gopalpur (Odisha) & 920 km south-southeast of Paradip (Odisha).

It is likely to move northwestwards and intensify into a **Cyclonic Storm** over central parts of the Bay of Bengal during next 24 hours. It is likely to reach west-central Bay of Bengal off north Andhra Pradesh – south Odisha coasts around 4<sup>th</sup> December morning. Thereafter it is likely to move north-northeastwards.

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
02.12.21/2330	12.0/87.5	45-55 gusting to 65	Depression
03.12.21/1130	13.6/85.4	50-60 gusting to 70	Deep Depression
03.12.21/2330	15.2/84.1	70-80 gusting to 90	Cyclonic Storm
04.12.21/1130	16.9/83.6	90-100 gusting to 110	Severe Cyclonic Storm
04.12.21/2330	18.4/84.5	80-90 gusting to 100	Cyclonic Storm
05.12.21/1130	19.5/85.6	60-70 gusting to 80	Cyclonic Storm

## **Warnings:**

### **(i) Rainfall (warning graphics enclosed)**

**3<sup>rd</sup> Dec.:** Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places over south coastal Odisha and heavy rainfall at isolated places over north coastal Andhra Pradesh.

**4<sup>th</sup> Dec.:** Light to moderate rainfall at most places with heavy to very heavy rainfall & extremely heavy falls at isolated places very likely over south coastal Odisha and heavy to very heavy rainfall at isolated places over north coastal Andhra Pradesh, north coastal Odisha & adjoining interior districts and also over coastal districts of Gangetic west Bengal.

**5<sup>th</sup> Dec.:** Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places likely over Gangetic West Bengal & north Odisha and heavy rainfall at isolated places over Assam & Meghalaya and Tripura.

**6<sup>th</sup> Dec.:** Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places likely over Assam & Meghalaya, Mizoram and Tripura.

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

- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely to prevail over southeast Bay of Bengal & adjoining Andaman Sea during next 06 hours.
- It would further increase to wind speed reaching 50-60 kmph gusting to 70 kmph over southeast & adjoining east-central Bay of Bengal, from 3<sup>rd</sup> December morning.
- Gale winds speed reaching 65-75 kmph gusting to 85 kmph likely to prevail over central Bay of Bengal from the morning of 3<sup>rd</sup> December evening and gradually increase becoming 90-100 kmph gusting to 110 kmph over northwest & adjoining west-central Bay of Bengal from the morning of 4<sup>th</sup> December for the subsequent 24 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely to commence along & off North Andhra Pradesh – Odisha coasts from the mid-night of 3<sup>rd</sup> December and increase gradually becoming 70-80 kmph gusting to 90 kmph from 4<sup>th</sup> morning, for the subsequent 12 hours.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph also likely to commence along & off West Bengal coast from 4<sup>th</sup> December morning and become Gale wind speed reaching 60-70 kmph gusting to 80 kmph from the evening of 4<sup>th</sup> December for the subsequent 12 hours.

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

- Sea condition will be very rough to High over southeast & adjoining east-central Bay of Bengal, Andaman & Nicobar Islands & Andaman Sea during next 06 hours.
- Sea condition would be High over central Bay of Bengal on 3<sup>rd</sup> December and High to very High over west-central & northwest Bay of Bengal from the early morning of 4<sup>th</sup> December for the subsequent 24 hours.
- Sea condition will be rough to very rough over along & off North Andhra Pradesh – Odisha coast from the mid-night of 3<sup>rd</sup> December and become High to very High from 4<sup>th</sup> Afternoon, for the subsequent 12 hours.
- It will be rough to very rough along & off West Bengal coast from 4<sup>th</sup> morning and High from the same evening for the subsequent 12 hours.

### **(iv) Fishermen Warning (in association with the likely intensification of the system)**

Fishermen are advised not to venture into southeast & adjoining east-central Bay of Bengal on 3<sup>rd</sup> December, over west-central & northwest Bay of Bengal and along & off north Andhra Pradesh - Odisha- West Bengal coasts during 3<sup>rd</sup> - 5<sup>th</sup> December 2021 (Graphics enclosed).

## **(v) Advisory to along & off shore Installations**

The off-shore & alongshore operations along north Andhra Pradesh, Odisha & West Bengal coasts are advised to be judiciously regulated on 3<sup>rd</sup> December and to be suspended on 4<sup>th</sup> December 2021, to ensure safety of life & property.

## **(vi) EXPECTED IMPACT & ACTION SUGGESTED**

### **A. Impact Expected**

- Major damage to thatched houses/ huts.
- Breaking of tree branches, uprooting of trees.
- Minor damage to power and communication lines.
- Localized Flooding of roads, inundation and water logging in low lying areas and closure of underpasses mainly in urban areas of the affected region.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- Minor damage to kutchra roads.
- Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides
- Damage to horticulture and standing crops in some areas due to inundation. Damage to banana, Papaya & Moringa (Drumstick) trees.
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

### **B. Action Suggested**

- Total suspension of fishing operations.
- 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.
- Harvest the ripen crops like Paddy & Horticultural crops and also secure the harvested crops securely from the damage due to rain and strong winds.

Next Bulletin will be issued at 0830 hrs IST of 3<sup>rd</sup> December 2021.

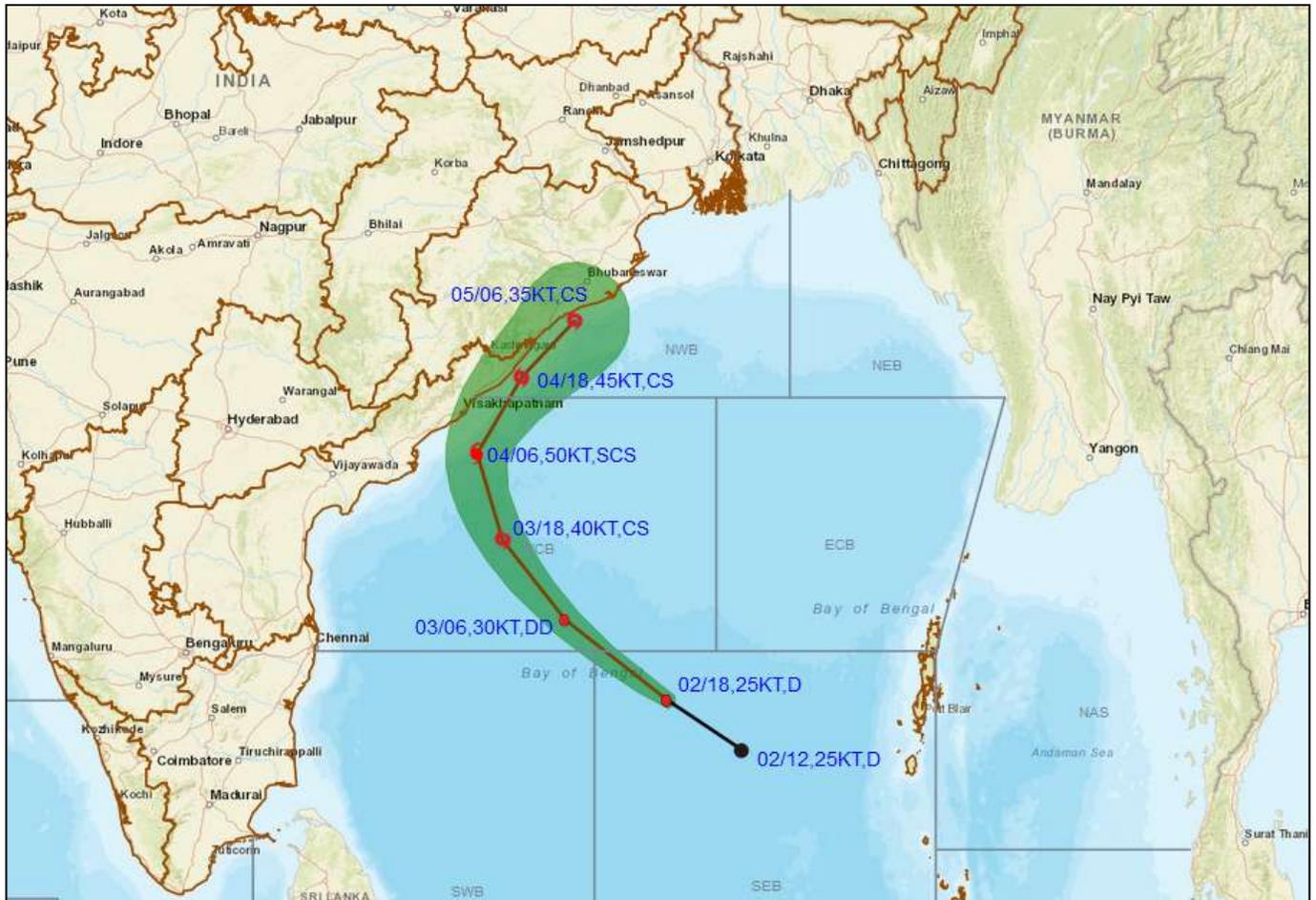
**(Shobhit Katiyar)**  
**Scientist-C, RSMC, New Delhi**

Copy to: ACWC Kolkata/ CWC Vishakhapatnam/CWC Bhubaneswar/RMC Guwahati  
**LEGEND: Heavy Rainfall:** 64.5 to 115.5mm, **Very Heavy Rainfall:** 115.6 to 204.4mm **Most Places:** more than 76% of total stations, **Isolated Places:** Less than 25% of total stations





## OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER SOUTHEAST BAY OF BENGAL BASED ON 1800 UTC OF 2<sup>nd</sup> DECEMBER, 2021

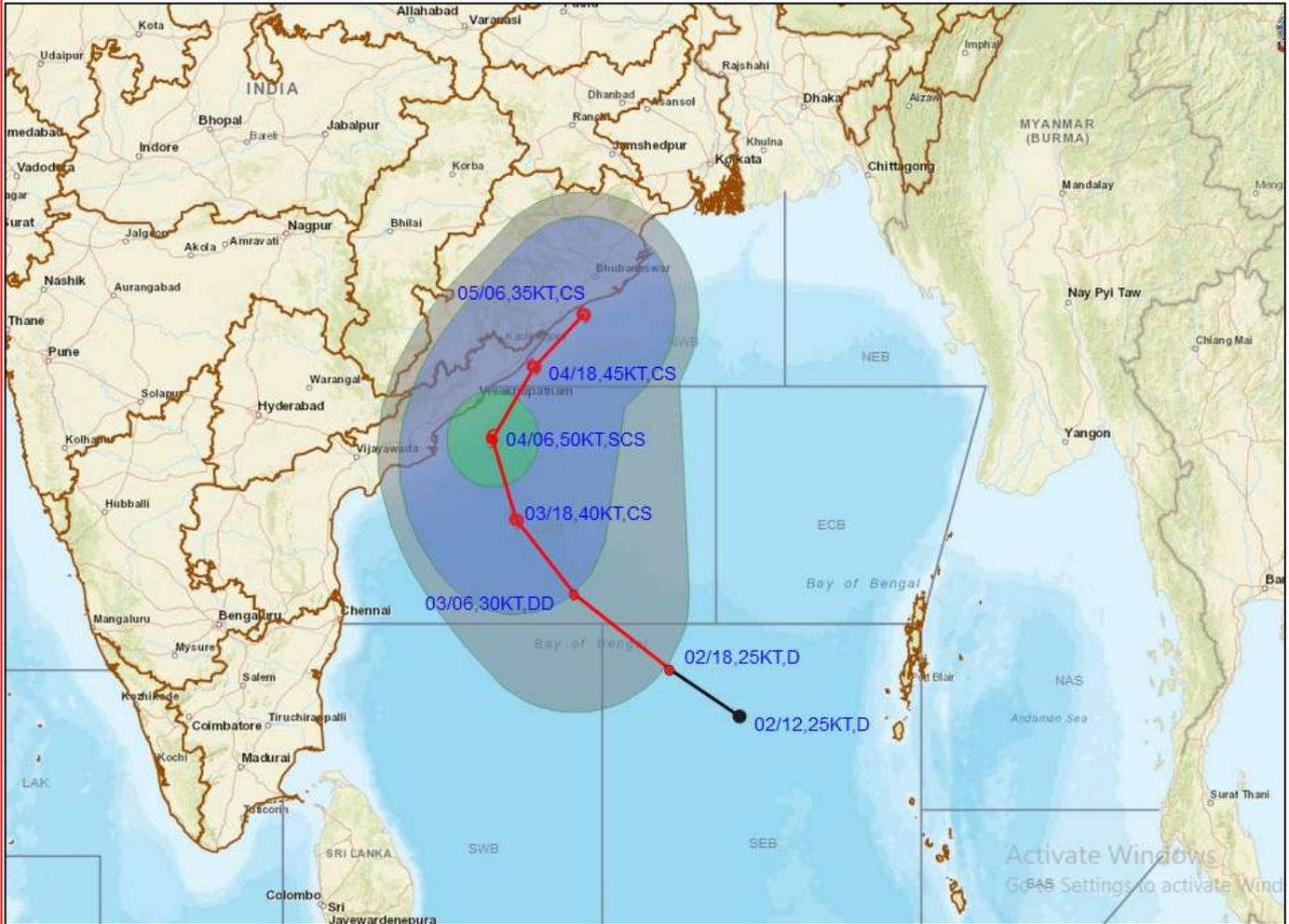


**DATE/TIME IN UTC**  
 IST=UTC + 0530  
**L:** LOW PRESSURE AREA  
**WML:** WELL MARKED LOW PRESSURE AREA  
**D:** DEPRESSION (17-27 KT)  
**DD:** DEEP DEPRESSION (28-33 KT)  
**CS:** CYCLONIC STORM (34-47 KT)  
**SCS:** SEVERE CYCLONIC STORM (48-63KT)  
**VSCS:** VERY SEVERE CYCLONIC STORM (64-89 KT)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

- LESS THAN 34 KT
- 34-47 KT
- $\geq$  48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY



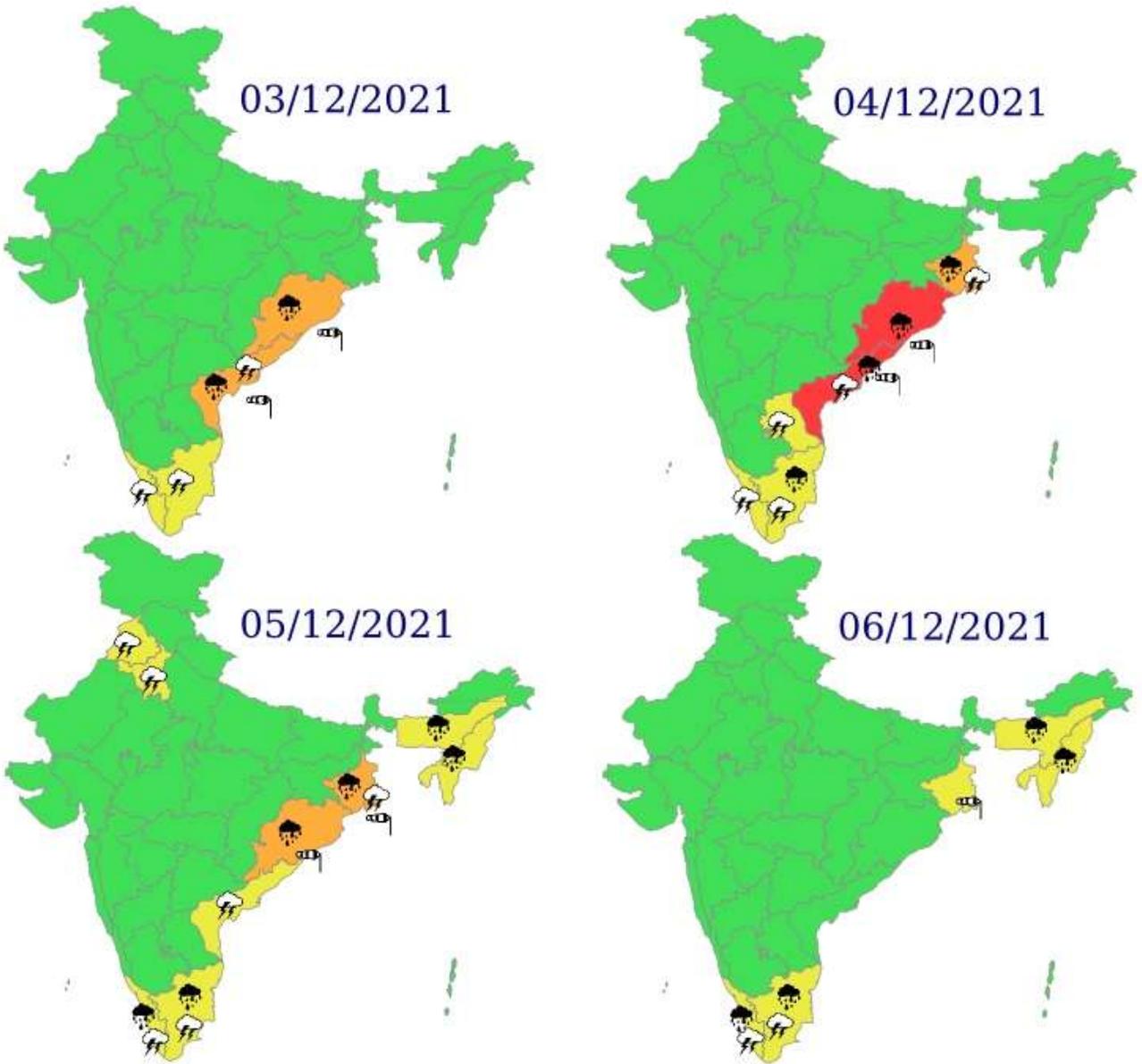
## OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHEAST BAY OF BENGAL BASED ON 1800 UTC OF 2<sup>nd</sup> DECEMBER, 2021



**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 ( $\geq$  120 KT)**

- LESS THAN 34 KT
- 34-47 KT
- $\geq$  48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

Sub-division wise heavy rainfall warning for next 4 days



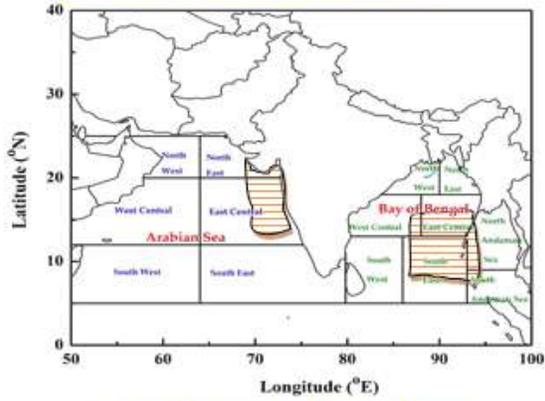
■ No warning    ■ Watch  
■ Alert        ■ Warning

☁️ Heavy Rain  
🌪️ Strong Winds

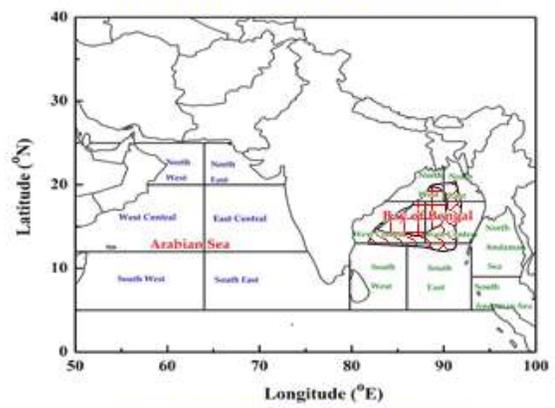
# Fishermen Warning

## INDIA METEOROLOGICAL DEPARTMENT FISHERMAN WARNING FOR BAY OF BENGAL AND ARABIAN SEA

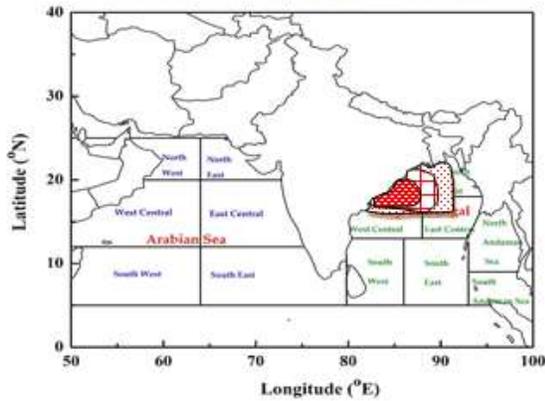
DAY-1: 02.12.2021/0600 UTC TO 03.12.2021/0600 UTC



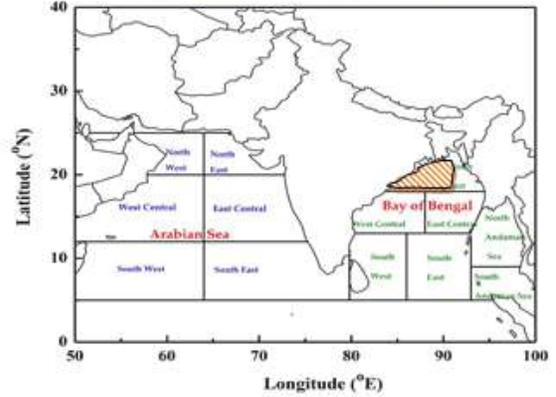
DAY-2: 03.12.2021/0600 UTC TO 04.12.2021 /0600 UTC



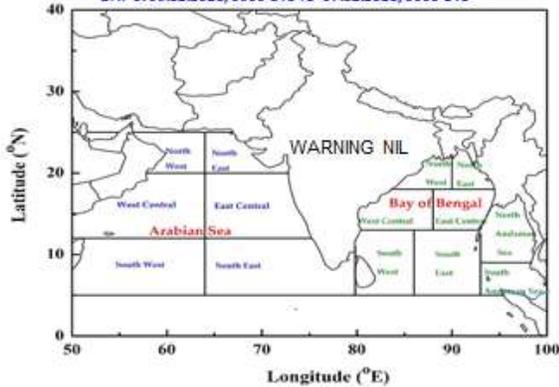
DAY-3: 04.12.2021/0600 UTC TO 05.12.2021/0600 UTC



DAY-4 05.12.2021/0600 UTC TO 06.12.2021/0600 UTC



DAY-5: 06.12.2021/0600 UTC TO 07.12.2021/0600 UTC



### AREA UNDER FISHERMEN WARNING

-  40-50 KMPH G TO 60 KMPH (SQ.WEATHER)
-  45-55 KMPH GUSTING TO 65 KMPH
-  50-60 KMPH G TO 70 KMPH
-  60-70 KMPH G TO 80 KMPH
-  70-80 KMPH G TO 90 KMPH
-  80-90 KMPH G TO 95 KMPH
-  90-100 KMPH G TO 110 KMPH