



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

BULLETIN NUMBER: 19 (BOB/07/2021)

TIME OF ISSUE: 1350 HOURS IST

DATED: 05.12.2021

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: Deep Depression (remnant of Cyclonic Storm 'JAWAD') over northwest Bay of Bengal near Odisha coast

The **Deep Depression (remnant of Cyclonic Storm 'JAWAD')** over northwest and adjoining westcentral Bay of Bengal moved north-northeastwards with a speed of 18 kmph during past 06 hours, and lay centered at 1130 hrs IST of today, the 05th December 2021, over northwest Bay of Bengal close to Odisha coast near Lat. 19.1°N and Long. 85.9°E, about 70 km south-southeast of Puri (Odisha), 100 km east-southeast of Gopalpur (Odisha), 150 km south-southwest of Paradip (Odisha) and 320 km east-northeast of Vishakhapatnam (Andhra Pradesh).

It is likely to continue to move north-northeastwards, **weaken further into a Depression** and during next 3 hours. Thereafter it is likely to continue to move north-northeastwards along Odisha coast towards West Bengal coast and weaken into a well marked low pressure area around mid-night of 5th December 2021.

Coastal Odisha received heavy to very heavy rainfall during past 24 hours ending at 0830 hrs IST of today, the 5th December 2021. (Some of the significant amounts are enlisted under Annexure).

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
05.12.21/1130	19.1/85.9	50-60 gusting to 70	Deep Depression
05.12.21/1730	19.8/86.5	40-50 gusting to 60	Depression
05.12.21/2330	20.6/87.3	30-40 gusting to 50	Well Marked Low

Warnings:

(i) Rainfall (warning graphics enclosed)

5th Dec.: Light to moderate rainfall at most places with **heavy to very heavy rainfall at isolated places** likely over north coastal & adjoining areas of Odisha & Gangetic West Bengal. **Heavy rainfall at isolated places** is also likely over south coastal Odisha during next 06 hours.

6th Dec.: Light to moderate rainfall at many places with **heavy to very heavy rainfall at isolated places** likely over south Assam & Meghalaya, Mizoram and Tripura and **heavy rainfall at isolated places** over eastern districts of Gangetic West Bengal.

(ii) Wind warning

- Squally wind speed reaching 50-60 kmph gusting to 70 kmph prevails over northwest and adjoining westcentral Bay of Bengal. It would gradually decrease becoming 40-50 kmph gusting to 60 kmph over northwest and adjoining westcentral Bay of Bengal by evening of today, the 5th December. It would decrease further becoming 30-40 kmph gusting to 50 kmph over northwest Bay of Bengal by night of today, the 5th December.
- Squally winds speed reaching 45-55 kmph gusting to 65 kmph likely to prevail along & off North Andhra Pradesh coast during next 03 hours and along & off Odisha – West Bengal coasts during next 24 hours.

(iii) Sea condition

- Rough to very rough Sea conditions likely to prevail over northwest Bay of Bengal and along & off Odisha & West Bengal coasts during next 24 hours and adjoining west-central Bay of Bengal and along & off North Andhra Pradesh coast during next 06 hours.

(iv) Fishermen Warning (warning graphics enclosed)

Fishermen are advised not to venture into northwest Bay of Bengal, along & off Odisha-West Bengal coasts during next 24 hours and adjoining west-central Bay of Bengal along & off north Andhra Pradesh coast during next 06 hours.

(v) Advisory to along & off shore Installations

The off-shore & alongshore operations along & off Odisha & West Bengal coasts are advised to be regulated till evening of today, the 05th December 2021.

(vi) EXPECTED IMPACT & ACTION SUGGESTED (For Gajapati, Ganjam, Puri, Khurda, Cuttack, Jagatsinghpur & Kendrapara districts of Odisha) during next 12 hours.

A. Impact Expected

- Breaking of tree branches.
- Localized Flooding, water logging and inundation in low lying areas due to Heavy rain.
- Disruption of traffic in roads of major cities due to water logging leading to delayed travel.
- Minor damage to kutcha roads.
- Damage to horticulture and standing crops in some areas due to inundation. Damage to banana, Papaya & Moringa (Drumstick) trees due to strong winds.

B. Action Suggested

- Fishermen are advised not to venture into northwest & adjoining westcentral Bay of Bengal, along & off Odisha-West Bengal coasts during next 24 hours and along and off north Andhra Pradesh during next 12 hours.
- Check for traffic congestion on your route due to heavy rain 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.
- Stay in safe places.

Next Bulletin will be issued at 1730 hrs IST of today, the 05th December 2021.

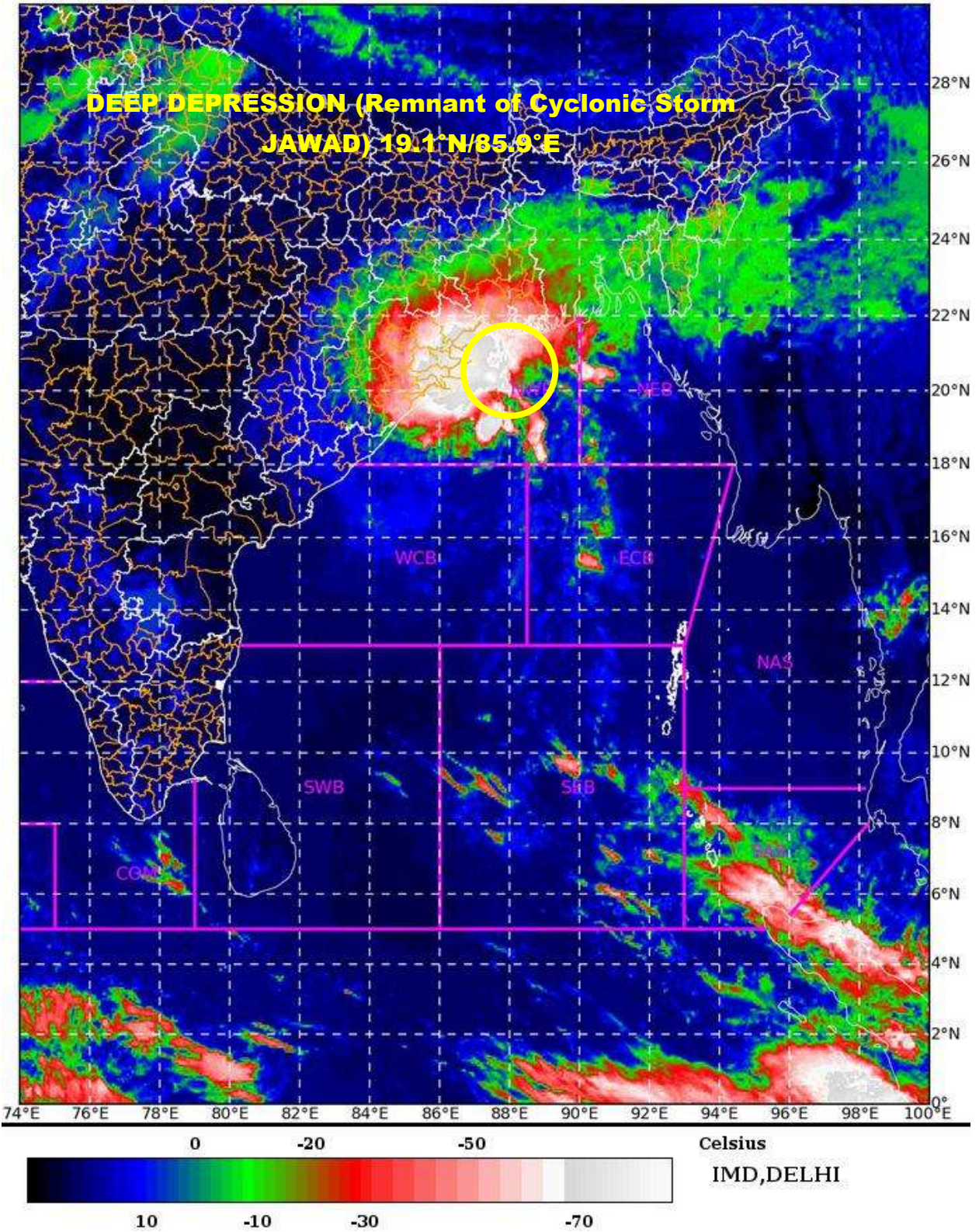
(Sunitha Devi. S)
Scientist-F, RSMC, New Delhi

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

SAT : INSAT-3D IMG 05-12-2021/(0700 to 0727) GMT

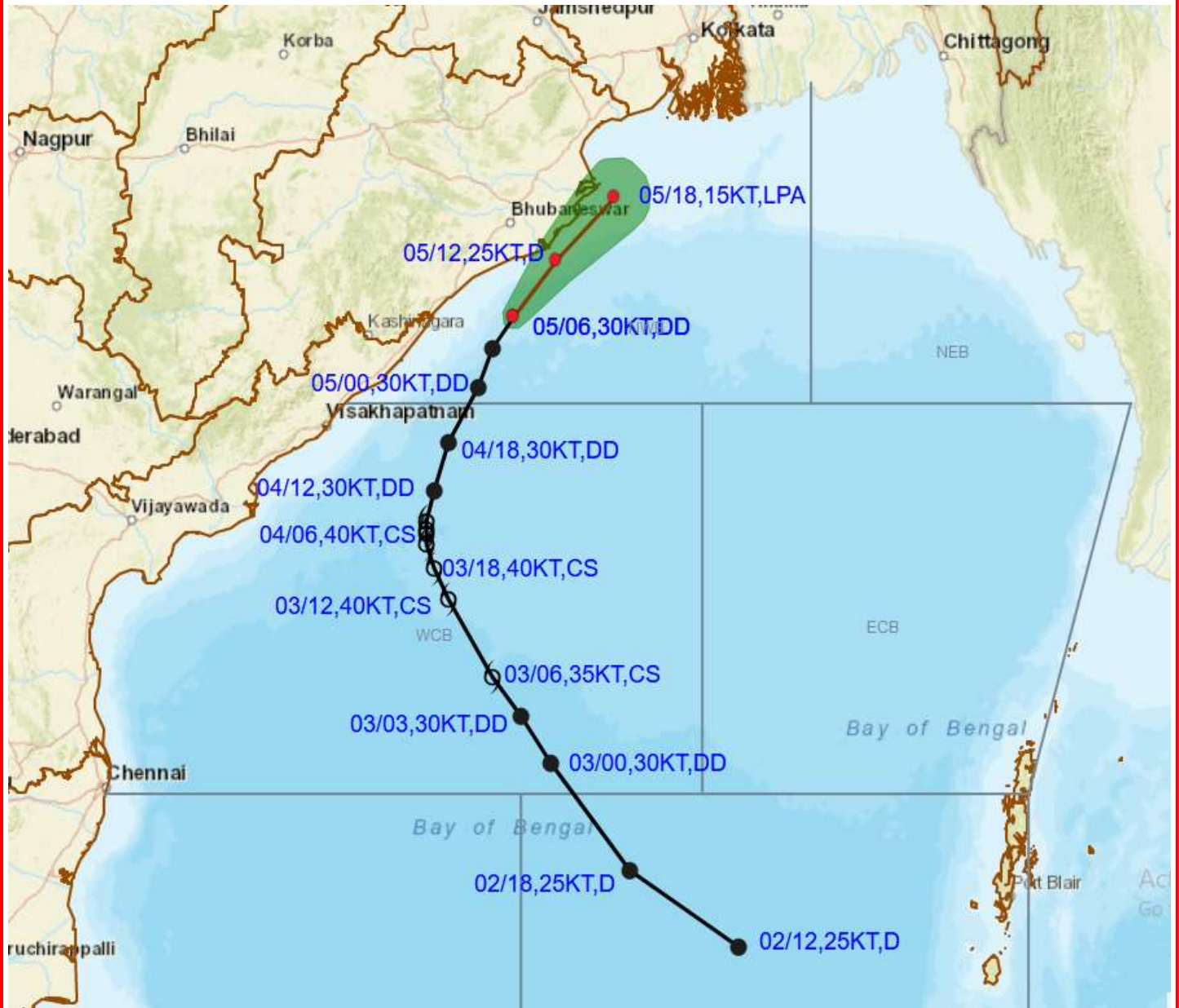
IMG_TIR1_TEMP 10.8 um 05-12-2021/(1230 to 1257) IST

L1C Mercator





OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION (REMANANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST BAY OF BENGAL NEAR ODISHA COAST BASED ON 0600 UTC OF 5th 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

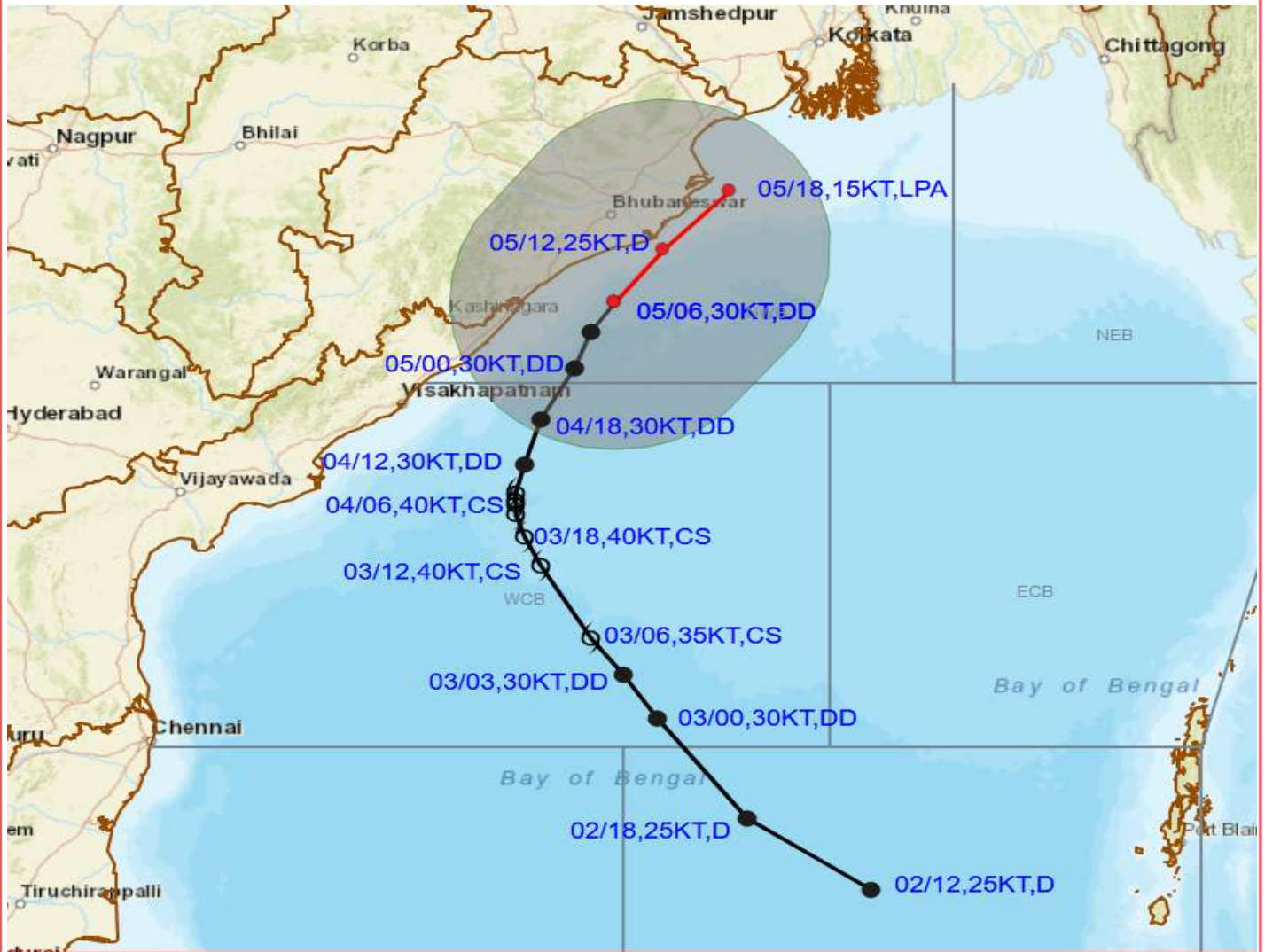
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEEP DEPRESSION (REMANANT OF CYCLONIC STORM 'JAWAD') OVER NORTHWEST BAY OF BENGAL NEAR ODISHA COAST BASED ON 0600 UTC OF 5th DECEMBER, 2021



DATE/TIME IN UTC
IST=UTC + 0530

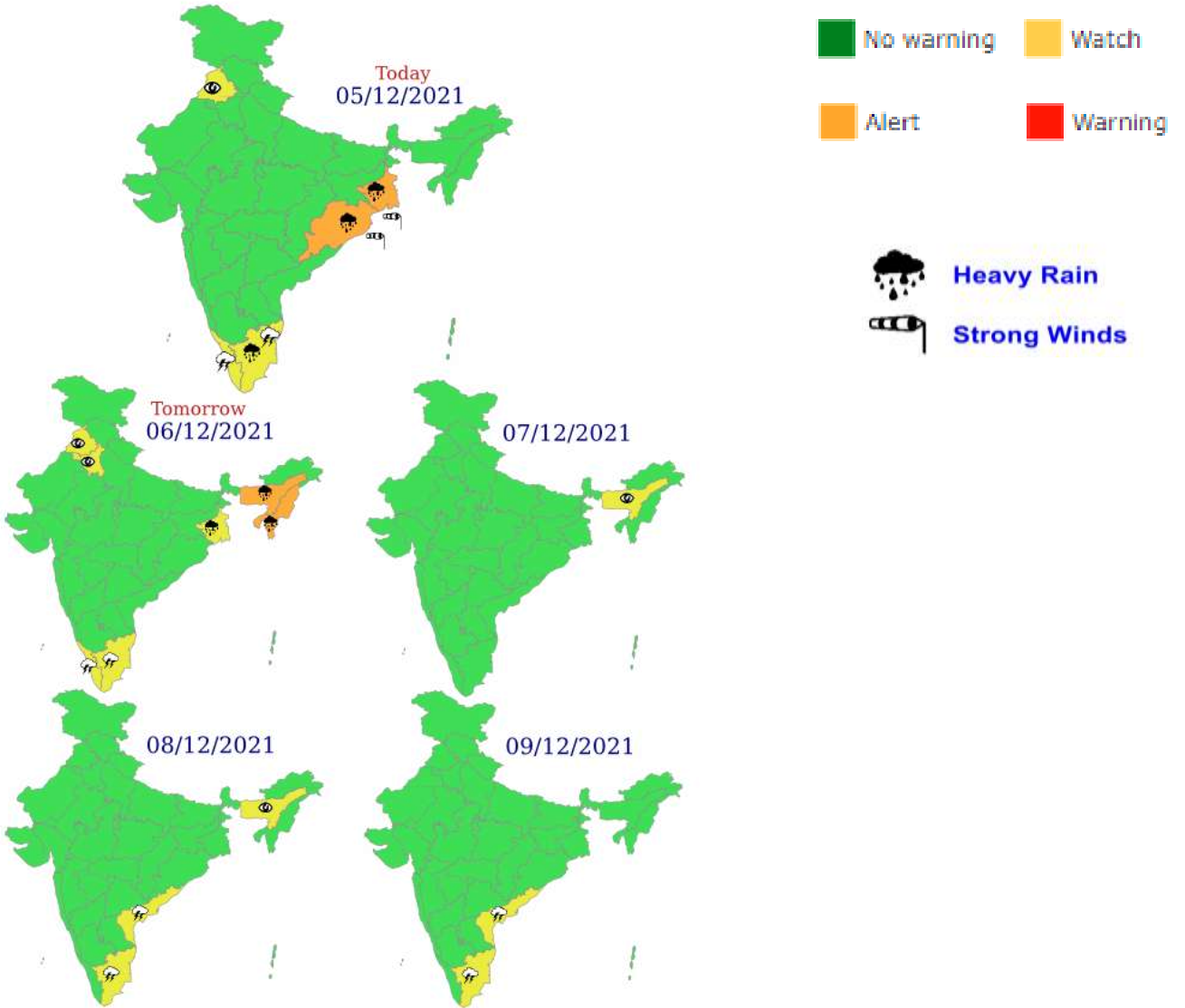
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

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

IMPACT OVER THE SEA

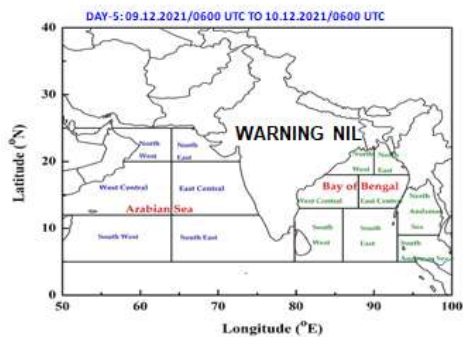
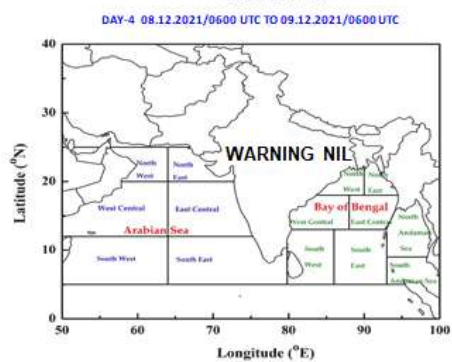
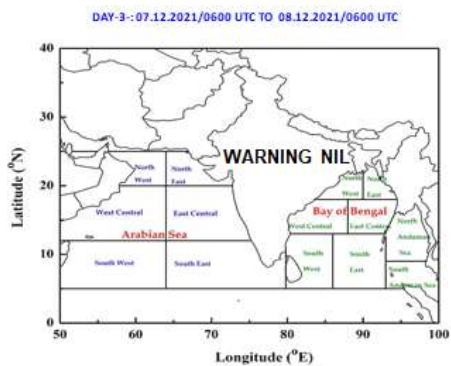
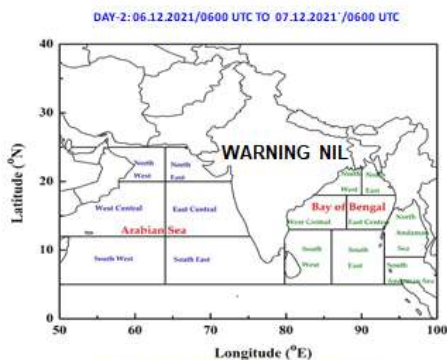
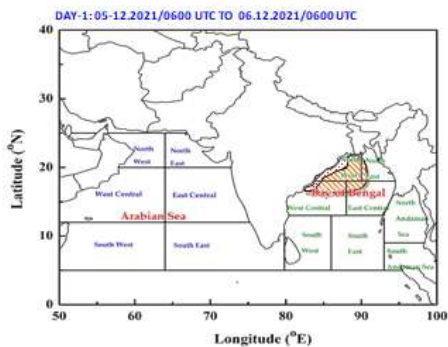
MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
\geq 64 (\geq 118)	Phenomenal	Total suspension of fishing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

Meteorological Sub-division-wise Multi- hazard weather warning map for next 5 days



Fishermen Warning Graphics

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



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

Annexure

Realised rainfall (in mm) over Odisha during past 24 hours ending at 0830 hrs IST of today, the 5th December 2021.

Station	District	Rainfall (mm)
Khalikot	Ganjam	158.0
Nayagarh	Nayagarh	107.5
Chhatrapur	Ganjam	86.6
Banpur	Khurda	81.0
Polasara	Ganjam	71.8
Kodala	Ganjam	71.4
Ganjam	Ganjam	68.0
Erasama	Jagatsinghpur	68.0
Rajnagar	Kendrapara	65.0