

SPECIAL BULLETIN-04

Date: 2nd December 2021

Time: 2100 Hrs IST

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

The Well Marked Low Pressure Area over southeast Bay of Bengal moved west-northwestwards, concentrated into a Depression and lay centered at 1730 hrs IST of today, the 2nd December 2021, over southeast Bay of Bengal near Lat. 11.0°N and Long. 89.0°E, about 960 km south-southeast of Vishakhapatnam (Andhra Pradesh), 1020 km south-southeast of Gopalpur (Odisha) & 1060 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 4th 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
02.12.21/1730	11.0/89.0	45-55 gusting to 65	DEPRESSION
03.12.21/0530	12.9/86.2	50-60 gusting to 70	DEEP DEPRESSION
03.12.21/1730	14.4/84.6	60-70 gusting to 80	CYCLONIC STORM
04.12.21/0530	16.1/83.7	80-90 gusting to 100	CYCLONIC STORM
04.12.21/1730	17.7/84.0	90-100 gusting to 110	SEVERE CYCLONIC STORM
05.12.21/0530	19.3/85.4	80-90 gusting to 100	CYCLONIC STORM

Details Forecast and warning as follows:

Rainfall Forecast:

Light to moderate rain or thundershower very likely to occur at many places over the districts of south coastal Odisha & at a few places over rest districts Odisha on 3rd, light to moderate rain or thundershower very likely to occur at most places over districts of coastal Odisha & at many places over the districts of interior Odisha on 4th and light to moderate rain or thundershower very likely to occur at most places over the districts of north coastal Odisha and at many places over rest districts of Odisha on 5th Dec, 2021.

Warnings:

Heavy Rainfall Warning	Expected Impact & action suggested
Day-2 (Valid from 0830 Hrs IST of 03.12.21 to 0830 Hrs IST of 04.12.21): Yellow Warning (Be updated) Heavy to very heavy rainfall very likely to occur at one or two places over the districts of Ganjam , Gajapati with heavy rainfall very likely to occur at one or two places over the districts of Koraput, Rayagada, Puri Jagatsinghpur and Kendrapada	Impact Expected: i)Major damage to thatched houses/ huts. ii) Breaking of tree branches, uprooting of trees. iii)Minor damage to power and communication lines. iv)Localized Flooding of roads, inundation and water logging in low lying areas and closure of underpasses mainly in urban areas of the affected region. v)Occasional reduction in visibility due to heavy rainfall. vi)Disruption of traffic in major cities due to water logging in roads leading to increased travel time. vii) Minor Damage to Kutcha roads and vulnerable structure and wall collapsed of vulnerable kutcha houses
Day-3 (Valid from 0830 Hrs IST of 04.12.21 to 0830 Hrs IST of 05.12.21):	
Red warning (Take action)	

Heavy to very heavy rainfall very likely to occur at a few places with isolated extremely heavy falls (more than 20 cm) over the districts of Gajapati, Ganjam, Puri, and Jagatsinghpur	viii) Localized Landslides/Mudslides in hilly areas ix) Damage to horticulture and standing crops in some areas due to inundation. Damage to banana, Papaya & Moringa (Drumstick) trees. x) It may lead to riverine flooding in some river catchments (Nagavali, Rushikulya, Vanshadhara) (for riverine flooding please visit Web page of CWC)
Orange warning (Be Prepared) Heavy to very heavy rainfall very likely to at one or two places over the districts of Kendrapada, Cuttack, Khordha, Nayagarh, Kandhamal, Rayagada and Koraput	I Action Suggested i) Total suspension of fishing operations. ii) Check for traffic congestion on your route before leaving for your destination. iii) Follow any traffic advisories that are issued in this regard. iv) Avoid going to areas that face the water logging problems often. v) Avoid staying in vulnerable structure. vi) Harvest the ripen crops like Paddy & Horticultural crops and also secure the harvested crops securely from the damage due to rain and strong winds. vii) Harvest of matured paddy crop and the harvested paddy should be shifted to safer places. Also harvest the rabi vegetables like cauliflower and cabbage if heads are ready to use. viii) Do arrangement for Drainage of excess water from standings crops in growing stage and vegetable fields. ix) Postpone sowing of rabi crop like Green gram, black gram and Mustard and vegetables like potato, Onion and coriander. x) Provide support to young fruit plants like Papaya and Banana and vegetables like ridge gourd. Cover the vegetable nursery with white polythene. xi) Keep the livestock indoors during rainfall if possible keep them loose inside the shed. Keep feed for 3-5 days, in case of any emergency.
Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the districts of Balasore, Bhadrak, Jajpur and Malkangiri.	
Day-4 (Valid from 0830 Hrs IST of 05.12.21 to 0830 Hrs IST of 06.12.21)	
Orange warning (Be Prepared) Heavy to very heavy rainfall very likely to occur at one or two places over the districts of Mayurbhanj, Balasore, Bhadrak, Kendrapada, Jagatsinghpur, Jajpur, Cuttack, and Puri.	
Yellow Warning (Be updated) Heavy rainfall very likely to occur at isolated places over the districts of Keonjhar, Angul, Dhenkanal, Nayagarh, Khordha, Ganjam and Gajapati	

Wind warning:

(i) Squally wind speed reaching wind speed reaching 50-60 kmph gusting to 70 kmph over east-central Bay of Bengal, from 3rd 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 3rd 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 4th December for the subsequent 24 hours.

(ii) 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 3rd December and increase gradually becoming 70-80 kmph gusting to 90 kmph from 4th morning, for the subsequent 12 hours.

Sea conditions

Sea condition would become very rough to High over southeast & adjoining east-central Bay of Bengal on today, 2nd December. • Sea condition would be High over central Bay of Bengal on 3rd December and High to very High over west-central & northwest Bay of Bengal from the early morning of 4th 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 3rd December and become High to very High from 4th Afternoon, for the subsequent 12 hours.

Fishermen Warning:

Fishermen are advised not to venture into southeast & adjoining east-central Bay of Bengal till 3rd December, west-central & adjoining northwest Bay of Bengal and along & off north Andhra Pradesh - Odisha- West Bengal coasts during 3rd - 5th December 2021.

Port warning:

Hoist Distance Cautionary Signal No.1 (DC-1) at all ports of Odisha.

भारतसरकार
पृथ्वीविज्ञानमंत्रालय
भारतमौसमविज्ञानविभाग
मौसमविज्ञानकेंद्र
भुवनेश्वर, ओडिशा-751020


GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
INDIA METEOROLOGICAL DEPARTMENT
METEOROLOGICAL CENTRE
BHUBANESWAR, ODISHA-751020

ଭାରତସରକାର
ପୃଥିବୀବିଜ୍ଞାନମନ୍ତ୍ରାଳୟ
ଭାରତପାଣିପାଗବିଜ୍ଞାନବିଭାଗ
ପାଣିପାଗବିଜ୍ଞାନକେନ୍ଦ୍ର
ଭୁବନେଶ୍ୱର, ଓଡ଼ିଶା-୭୫୧୦୨୦

Advisory to along & off shore Installations

The off-shore & alongshore operations along Odisha coast (Viz., All ports of Odisha, ITR Chandipur, Army Defence College, Gopalpur, INS Chilika, Chilika Development Authority establishment, ICZMP activity, Bhitarkanika wildlife sanctuary, Kendrapada, ONGC Odisha etc) are advised to be judiciously regulated on 3rd December and to be suspended on 4th December 2021, to ensure safety of life & property.

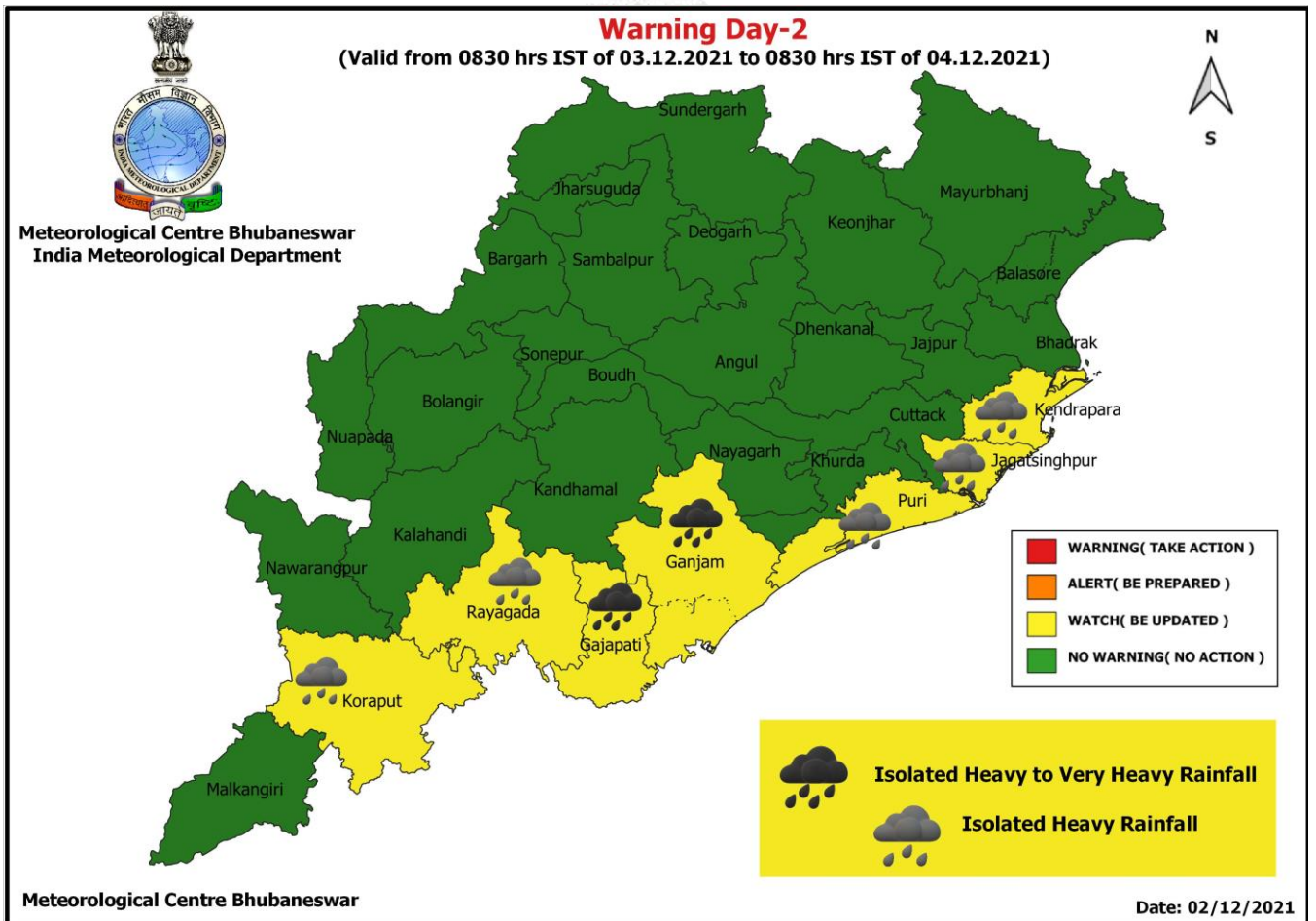
N.B: SPATIAL RAINFALL DISTRIBUTION: ISOLATED :=< 25%, A FEW: 26-50%, MANY: 51-75%, MOST: 76-100%, RAINFALL AMOUNT (MM): HEAVY RAIN: 64.5 – 115.5, VERY HEAVY RAIN: 115.6 – 204.4, EXTREMELY HEAVY RAIN: 204.5 OR MORE. PROBABILISTIC FORECAST: UNLIKELY =< 25%, LIKELY 26-50%, VERY LIKELY 51-75%, MOST LIKELY > 75%

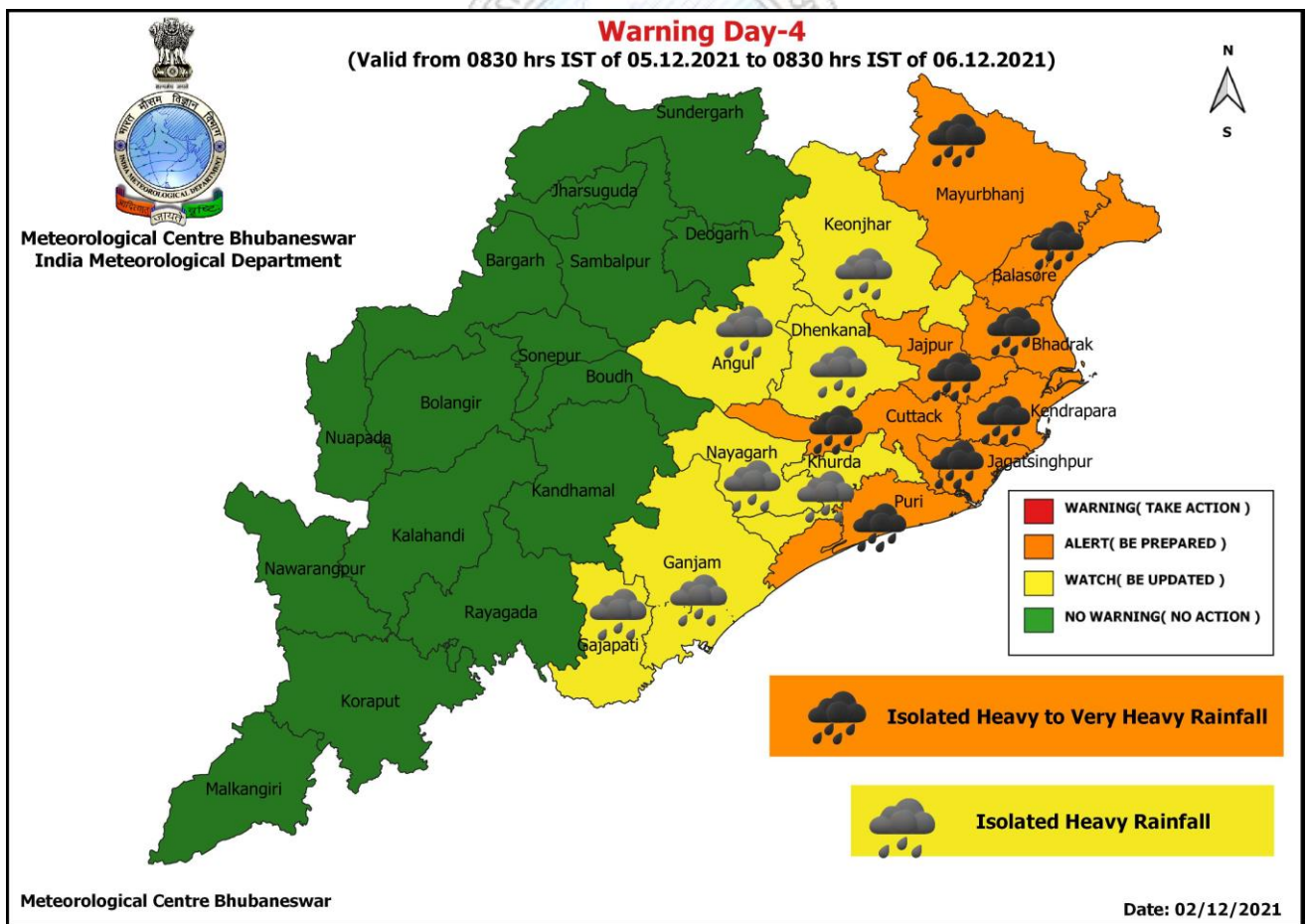
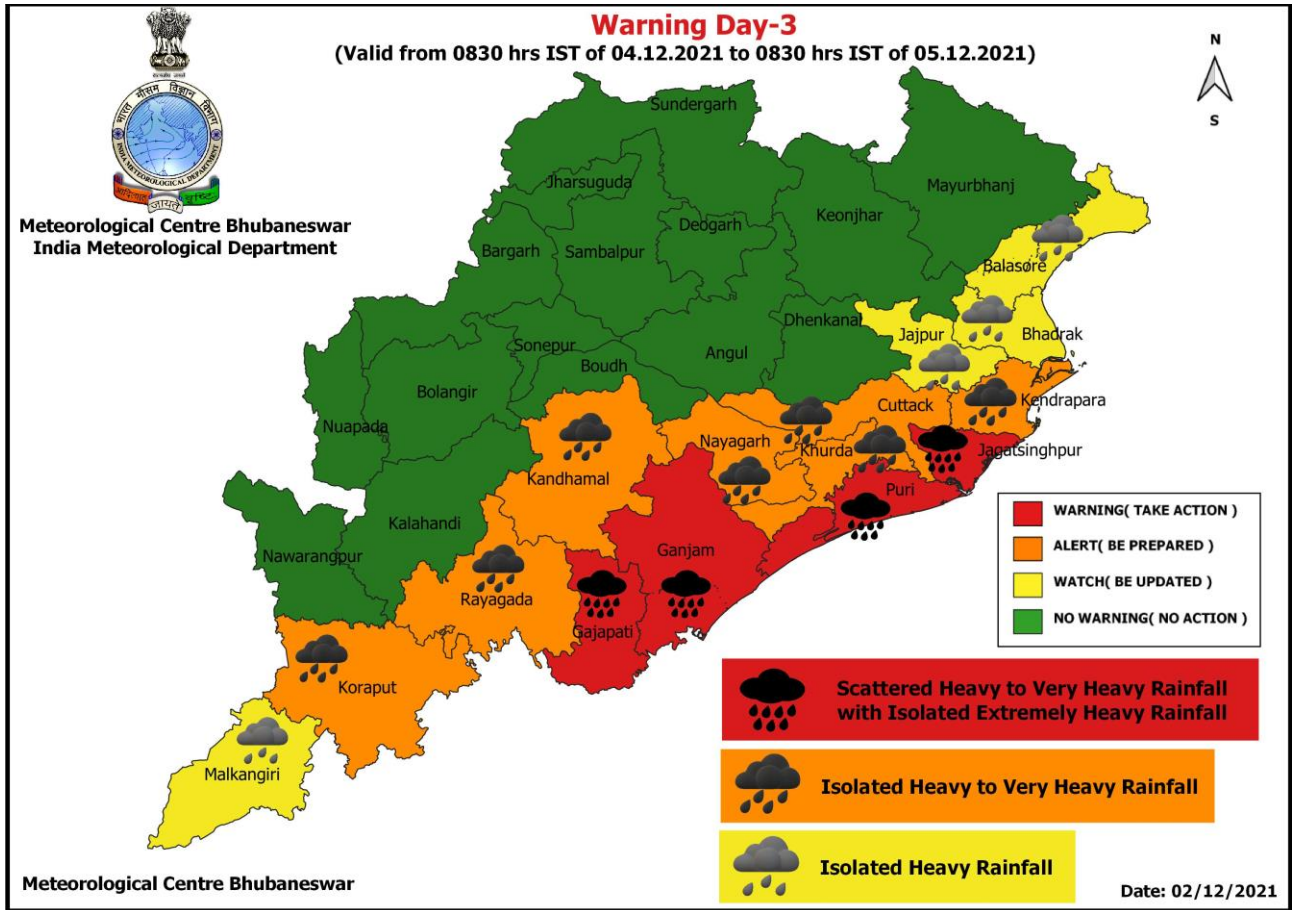
Dr.H.R. Biswas,
Head & Scientist-E,
Met .Centre Bhubaneswar

To

1. CHIEF SECRETARY , GOVT. OF ODISHA
2. PRINCIPAL SECRETARY, REVENUE & DISASTER MANAGEMENT, GOVT. OF ODISHA.
3. PRINCIPAL SECRETARY, DEPT. OF AGRICULTURE, GOVT. OF ODISHA.
4. PRINCIPAL SECRETARY, DEPARTMENT OF WATER RESOURCES, GOVT. OF ODISHA.
5. SPECIAL RELIEF COMMISSIONER (SRC), GOVT. OF ODISHA BHUBANESWAR.
6. REVENUE SECRETARY, GOVT. OF ODISHA, BHUBANESWAR.
7. M.D., OSDMA, GOVT. OF ODISHA, BHUBANESWAR.
8. RDC, CENTRAL DIVISION/ SOUTHERN DIVISION/ NORTHERN DIVISION.
9. AIR CUTTACK / DOORDARSHAN.

Rainfall Warning Maps for Day-2 to Day-4



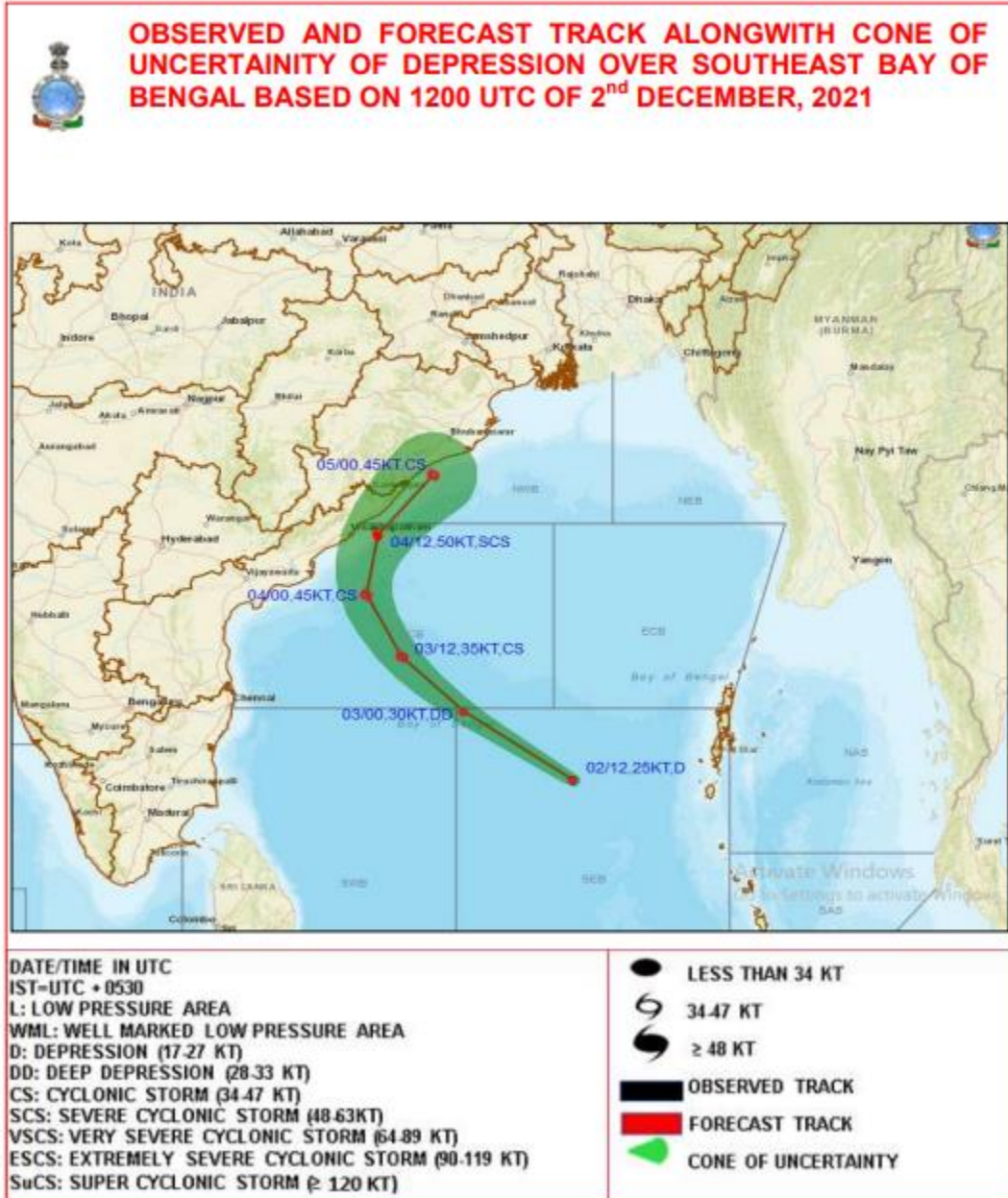


भारतसरकार
 पृथ्वीविज्ञानमंत्रालय
 भारतमौसमविज्ञानविभाग
 मौसमविज्ञानकेंद्र
 भुवनेश्वर, ओडिशा-751020



GOVERNMENT OF INDIA
 MINISTRY OF EARTH SCIENCES
 INDIA METEOROLOGICAL DEPARTMENT
 METEOROLOGICAL CENTRE
 BHUBANESWAR, ODISHA-751020

ଭାରତସରକାର
 ପୃଥିବୀବିଜ୍ଞାନମନ୍ତ୍ରାଳୟ
 ଭାରତପାଣିପାଗବିଜ୍ଞାନବିଭାଗ
 ପାଣିପାଗବିଜ୍ଞାନକେନ୍ଦ୍ର
 ଭୁବନେଶ୍ୱର, ଓଡ଼ିଶା-୭୫୧୦୨୦





OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTHEAST BAY OF BENGAL BASED ON 1200 UTC OF 2nd 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)

ECS: 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

SAT : INSAT-3D IMG 02-12-2021/(1200 to 1226) GMT
IMG_TIR1_TEMP 10.8 um 02-12-2021/(1730 to 1756) IST
L1C Mercator

