



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

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Sub: Cyclonic Storm 'Gulab' (pronounced as Gul-Aab) over Northwest & adjoining west-central Bay of Bengal: Cyclone warning for north Andhra Pradesh and south Odisha coasts – Orange Message

The Cyclonic Storm 'Gulab' (pronounced as Gul-Aab) over northwest and adjoining westcentral Bay of Bengal moved nearly westwards with a speed of 07 kmph in last 6 hours, and lay centered at 2030 hrs IST of 25th September 2021, over northwest and adjoining westcentral Bay of Bengal near Lat. 18.3°N and Long. 88.1°E, about 350 km east-southeast of Gopalpur (Odisha) & 420 km east of Kalingapatnam (Andhra Pradesh).

It is likely to move nearly westwards and cross north Andhra Pradesh - south Odisha coasts between Kalingapatnam & Gopalpur around evening of 26th September, 2021.

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
25.09.21/2030	18.3/88.1	60-70 gusting to 80	Cyclonic Storm
25.09.21/2330	18.3/87.6	65-75 gusting to 85	Cyclonic Storm
26.09.21/0530	18.4/86.8	70-80 gusting to 90	Cyclonic Storm
26.09.21/1130	18.4/85.9	75-85 gusting to 95	Cyclonic Storm
26.09.21/1730	18.5/84.8	75-85 gusting to 95	Cyclonic Storm
27.09.21/0530	18.7/83.1	45-55 gusting to 65	Deep Depression
27.09.21/1730	18.9/81.4	40-50 gusting to 60	Depression

Warnings:

(i) Rainfall

- 25th Sept.: Light to moderate rainfall at many places with heavy rainfall at isolated places likely over Gangetic West Bengal, Odisha and Coastal Andhra Pradesh.
- 26th Sept.: Light to moderate rainfall at most places with heavy to very heavy falls at a few places & extremely heavy falls at isolated places very likely over south Odisha and north coastal Andhra Pradesh; heavy to very heavy falls at isolated places is also likely over Telangana and heavy falls at isolated places over north interior Odisha & Chhattisgarh.
- 27th Sept.: Light to moderate rainfall at most places with heavy to very heavy & extremely heavy falls at isolated places very likely over south Chhattisgarh; heavy to very heavy falls at isolated places over Odisha, Telangana & Vidarbha and heavy rainfall at isolated places over coastal West Bengal & North Chattisgarh.

(ii) Wind warning

- 25th Sept: Gale wind speed reaching 60-70 kmph gusting to 80 kmph very likely to prevail over Northwest and adjoining Westcentral Bay of Bengal and increase further becoming wind speed reaching 75-85 kmph gusting to 95 kmph from 26th forenoon till late evening.
- Squally wind speed reaching 45-55 kmph gusting to 65 kmph likely to prevail along and off Odisha-North Andhra Pradesh coasts. It will gradually increase becoming gale wind speed reaching 75-85 kmph gusting to 95 kmph from afternoon of 26th till midnight along & off north Andhra Pradesh (Srikakulam, Vizianagaram, Visakhapatnam Districts) and south Odisha coasts (Ganjam, Gajapati Districts), 55-65 kmph gusting to 75 kmph along & off Khordha, Puri, Raigada & Koraput districts, 50-60 kmph gusting to 70 kmph over Navrangpur & Malkangiri districts of Odisha. Squally wind speed reaching 40-50 kmph gusting to 60 kmph likely to prevail along & off remaining parts of Odisha & Andhra Pradesh & West Bengal coasts on 26th Sept. and over northeast Bay of Bengal on 25th & 26th Sept.

(iii) Sea condition

- Sea condition will be rough to very rough over east-central & adjoining northeast Bay of Bengal on 25th & 26th Sept.
- Sea condition will be 'very rough to high' over Northwest and adjoining Westcentral Bay of Bengal during next 24 hours, rough to very rough along and off Odisha, West Bengal and North Andhra Pradesh coasts during next 12 hours and become High from tomorrow morning till late evening.
- Sea condition will be rough to very rough over Northwest Bay of Bengal and along and off Odisha-north Andhra Pradesh coasts on 27th Sept.

(iv) Storm surge warning

Tidal wave of about 0.5 m height above the astronomical tide likely to inundate low lying areas of Srikakulam, Sompeta, Vizianagaram, Ganjam districts during the time of landfall.

(iv) Fishermen Warning

- The fishermen are advised not to venture into east-central & adjoining northeast Bay of Bengal and Andaman Sea on 25th & 26th Sept.
- The fishermen are advised not to venture into northwest & adjoining westcentral Bay of Bengal and along & off Odisha, West Bengal & North Andhra Pradesh coasts till 27th Sept.

(v) EXPECTED IMPACT & ACTION SUGGESTED due to Strong winds & very Heavy/Extremely heavy Rainfall.

- Damage to thatched huts.
- 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.
- Sea water inundation in low lying areas after erosion of Kutcha embankments.
- Localized Flooding of roads, inundation and water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic in cities due to water logging in roads. Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides
- Damage to standing crops and horticulture including paddy, banana, papaya trees and orchards due to inundation and strong winds.
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

B. Action Suggested

- Complete suspension of fishing operations, onshore & off-shore activities over the above region till 27th Sept. morning.
- Stay indoors and in safe places.
- Avoid staying in vulnerable structure.
- Avoid going to areas that face the water logging problems often.
- Check for traffic congestion on your route before leaving for your destination.
- Follow any traffic advisories that are issued in this regard.
- Follow IMD warnings for updates

(D R Pattanaik)
Scientist F, RSMC, New Delhi

Next bulletin will be issued at 0230 hrs IST of today, the 26th September, 2021.

Copy to: ACWC Kolkata/ Chennai/CWC Bhubaneswar/CWC Visakhapatnam/MC Ranchi/MC Hyderabad/MC Raipur

<p>LEGEND: Heavy Rainfall: 64.5 to 115.5mm, Very Heavy Rainfall: 115.6 to 204.4mm, Extremely Heavy Rainfall: 204.5mm or more. Many Places: 51% to 75% of the stations, Most Places: more than 76% of total stations, Isolated Places: Less than 25% of total stations</p>

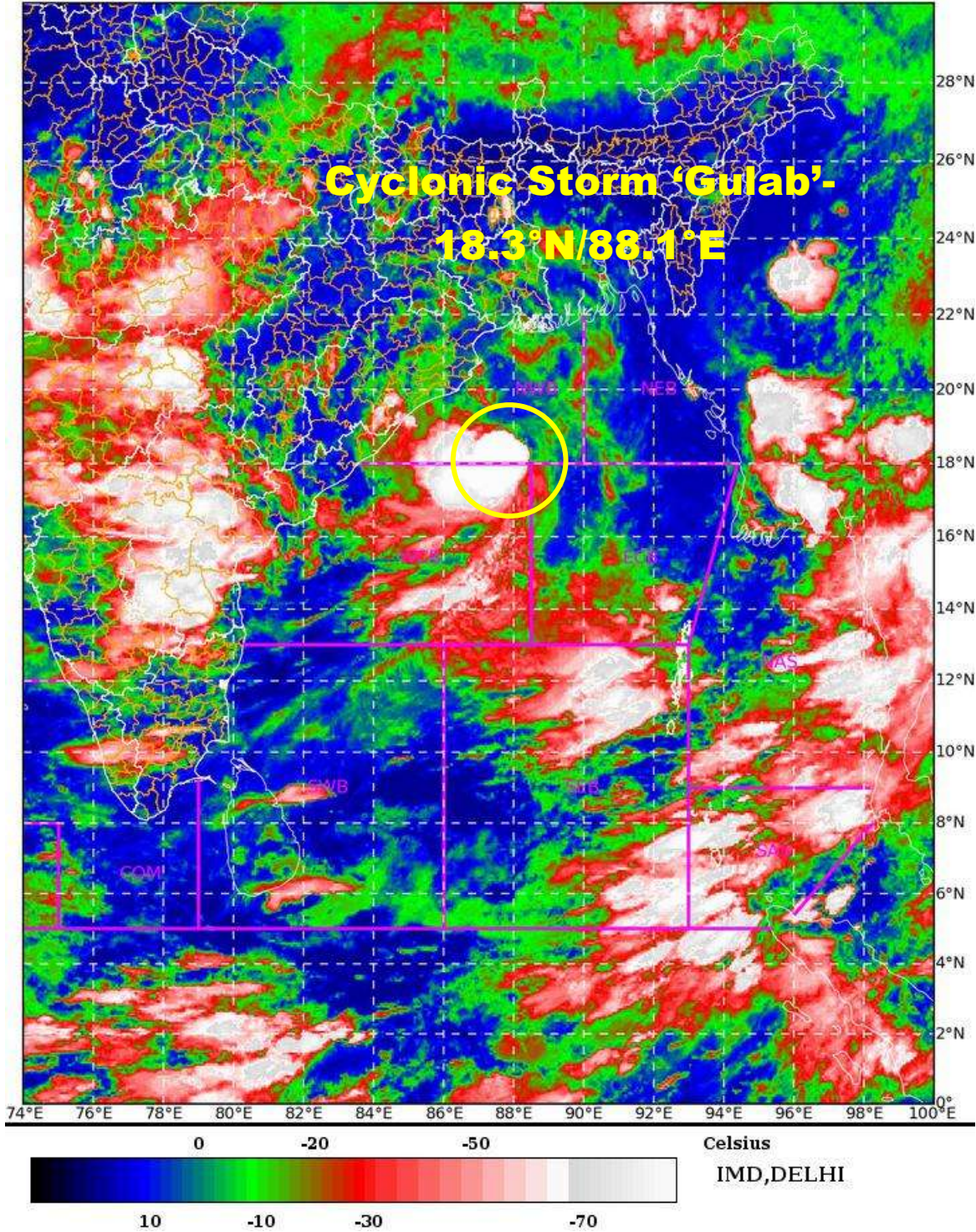
SAT : INSAT-3D IMG

25-09-2021/(1630 to 1656) GMT

IMG_TIR1_TEMP 10.8 um

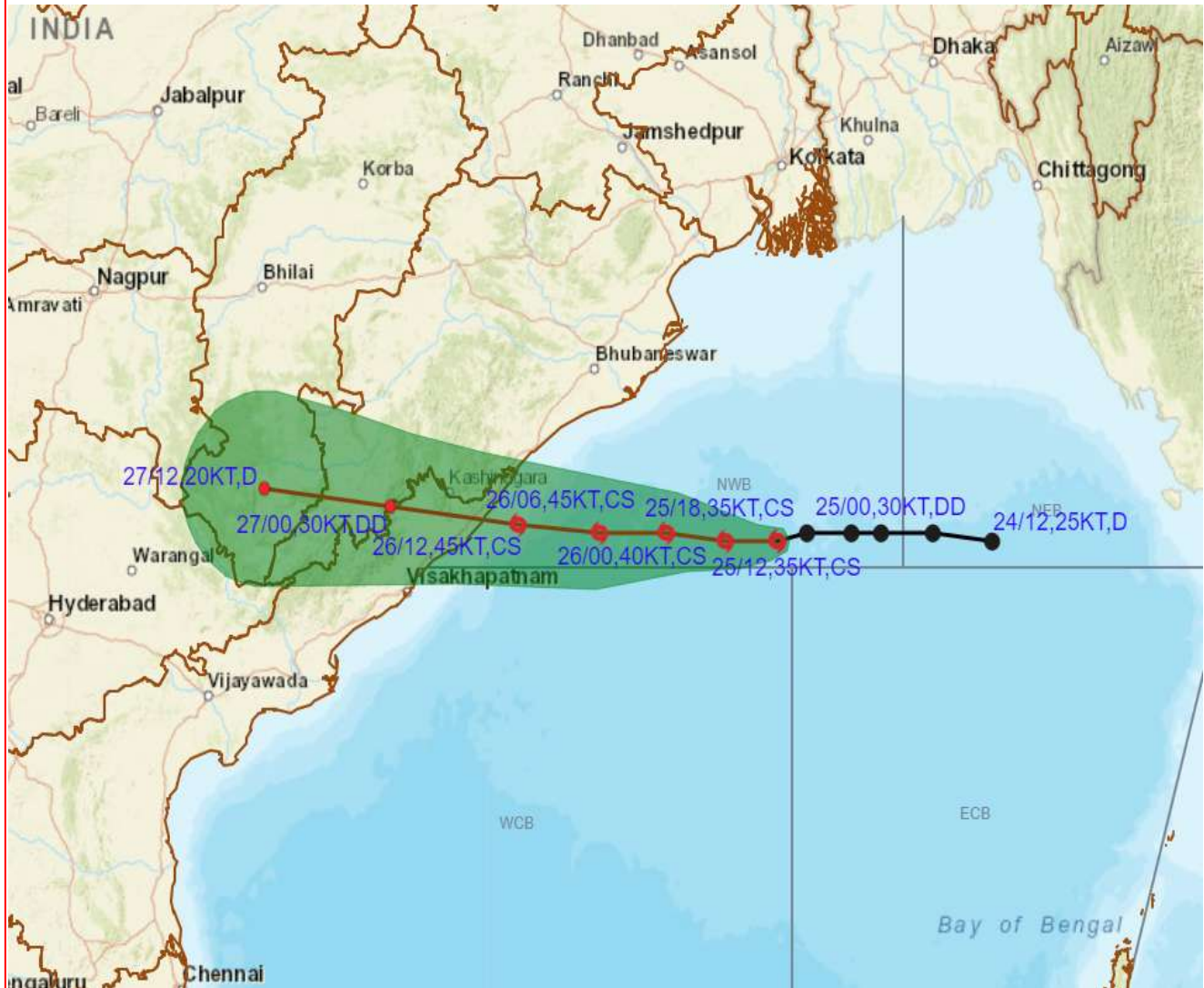
25-09-2021/(2200 to 2226) IST

L1C Mercator






OBSERVED AND FORECAST TRACK OF CYCLONIC STORM GULAB OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL BASED ON 1500 UTC OF 25TH SEPTEMBER, 2021

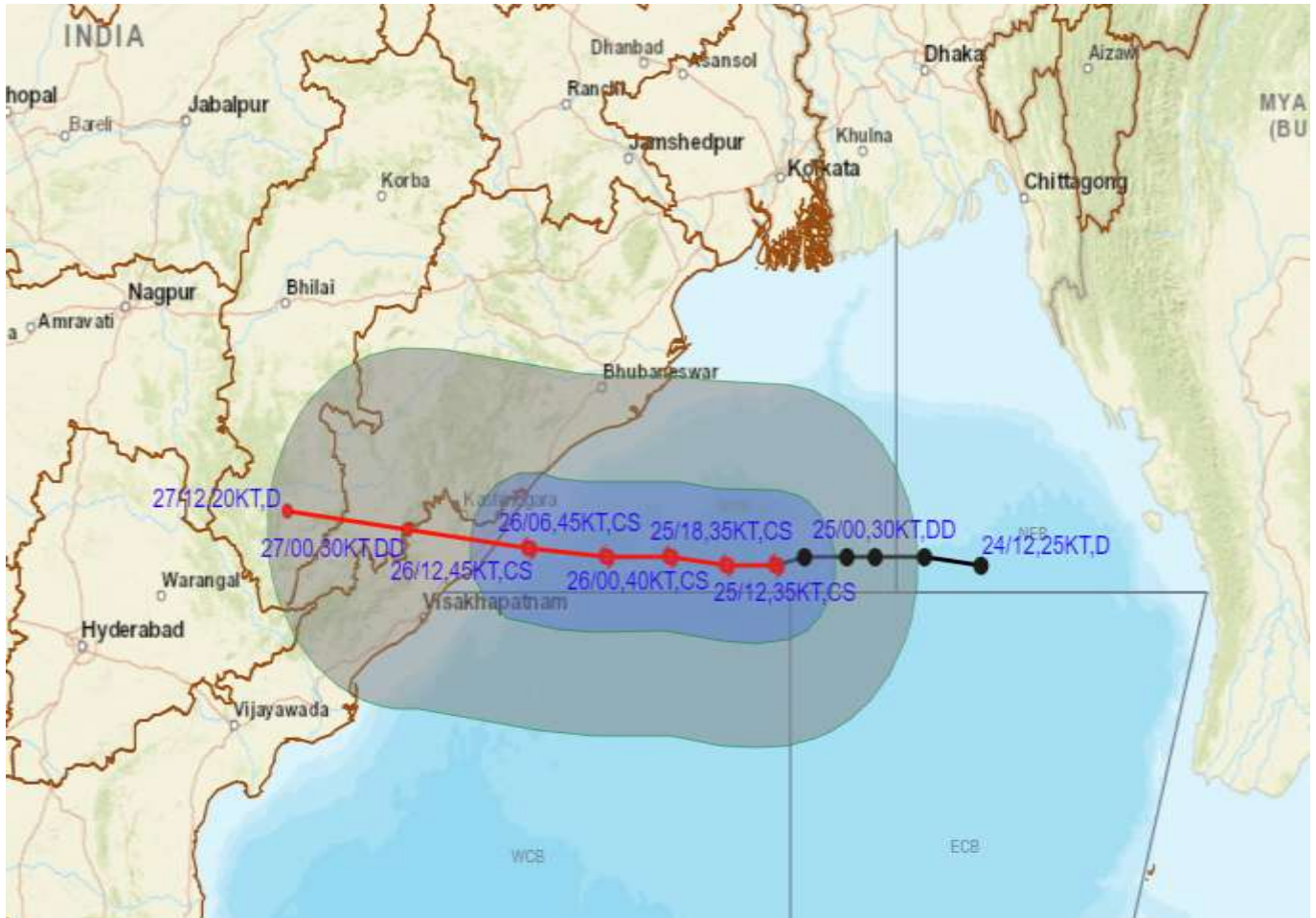


DATE/TIME IN UTC
IST=UTC + 0530
L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)
DD: DEEP DEPRESSION (28-33 KT)
CS: CYCLONIC STORM (34-47 KT)
SCS: SEVERE CYCLONIC STORM (48-63KT)
VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
ECS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
SuCS: SUPER CYCLONIC STORM (\geq 20 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 CYCLONIC STORM GULAB OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL BASED ON 1500 UTC OF 25TH SEPTEMBER, 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 (≥ 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)

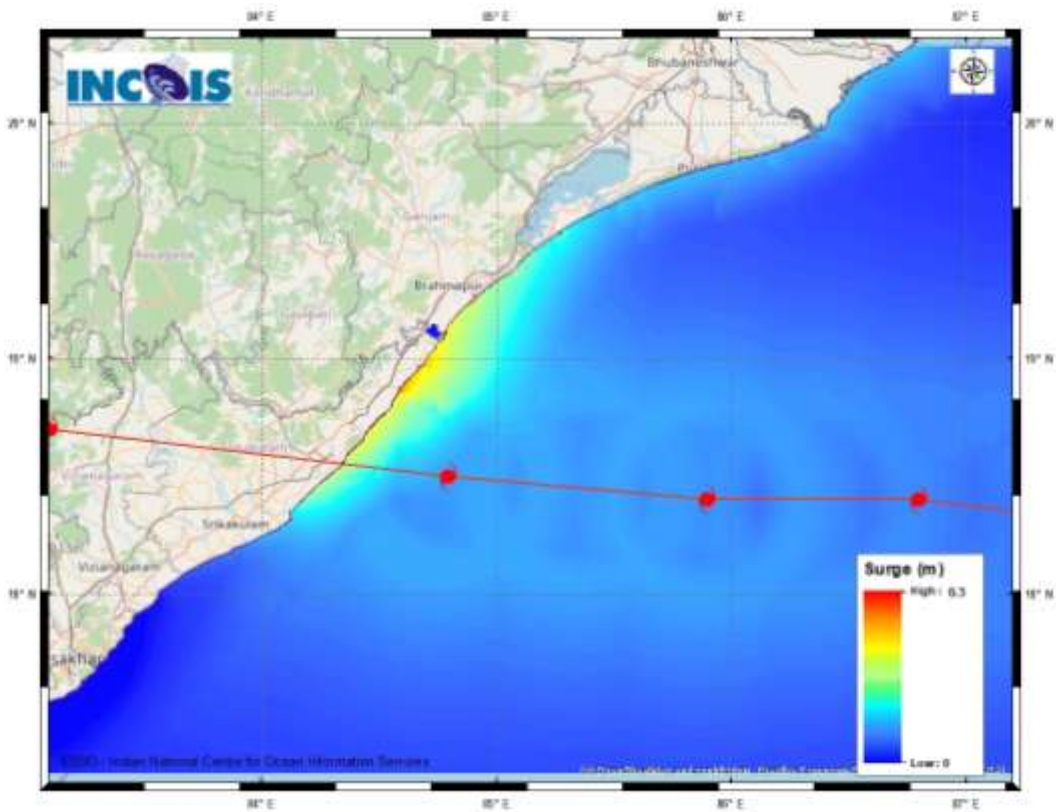
■ 34-49 KT (62-91 KMPH)

■ 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



Storm surge graphic from INCOIS for the current system (BoB/04/2021)

Peak storm surge of 0.3m over and above the astronomical tide is noticed at (i) Sompeta, Srikakulam district, Andhra Pradesh and (ii) Brahmampur, Ganjam district, Odisha.

Sub-division wise heavy rainfall warning for next 5 days

