



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

HOURLY UPDATE ON CYCLONIC STORM 'GULAB'

BULLETIN NO. 03

DATE: 26-09-2021

TIME OF ISSUE: 1350 HRS IST

DATE/TIME (IST) OF OBSERVATION	BASED ON 26-09-2021 (1330 HRS IST)
LOCATION LATITUDE/LONGITUDE	THE CYCLONIC STORM 'GULAB' (PRONOUNCED AS 'Gul-Aab') LAY CENTRED AT 1330 HRS IST OF THE 26 TH SEP, 2021 OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL NEAR LATITUDE 18.4°N AND LONGITUDE 85.6°E, ABOUT 160 KM EAST OF KALINGAPATNUM, 125 KM SOUTHEAST OF GOPLAPUR.
CURRENT INTENSITY NEAR CENTRE	75-85 KMPH GUSTING TO 95 KMPH
PAST MOVEMENT	MOVED NEARLY WESTWARDS WITH A SPEED OF 17 KMPH DURING PAST 05 HOURS.
FORECAST MOVEMENT AND INTENSITY	IT IS LIKELY TO MOVE NEARLY WESTWARDS AND CROSS NORTH ANDHRA PRADESH - SOUTH ODISHA COASTS BETWEEN KALINGAPATNAM & GOPALPUR, AS A CYCLONIC STORM WITH MAXIMUM SUSTAINED WIND SPEED OF 75-85 KMPH GUSTING TO 95 KMPH, BY MID-NIGHT OF TODAY, THE 26TH SEPTEMBER, 2021.THE LANDFALL PROCESS WILL COMMENCE FROM EVENING OF TODAY.
FORECAST RAINFALL	<ul style="list-style-type: none">• 26TH SEP: LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH HEAVY TO VERY HEAVY FALLS AT A FEW PLACES & EXTREMELY HEAVY RAINFALL (≥ 20 CM) 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 SEP: LIGHT TO MODERATE RAINFALL AT MOST PLACES WITH HEAVY TO VERY HEAVY & EXTREMELY HEAVY RAINFALL (≥ 20 CM) 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.

FORECAST WIND SPEED (KMPH) AT THE TIME OF LANDFALL	75-85 KMPH GUSTING TO 95 KMPH
FORECAST STORM SURGE	TIDAL WAVE OF ABOUT 0.5 M HEIGHT ABOVE THE ASTRONOMICAL TIDE LIKELY TO INUNDATE LOW LYING AREAS OF SRIKAKULAM, VIZIANAGARAM, GANJAM DISTRICTS DURING THE TIME OF LANDFALL.

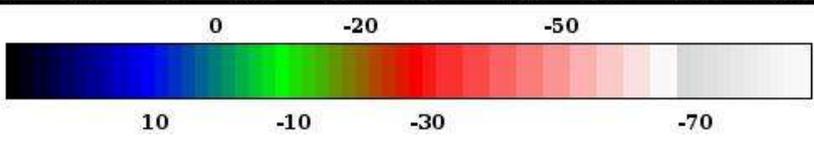
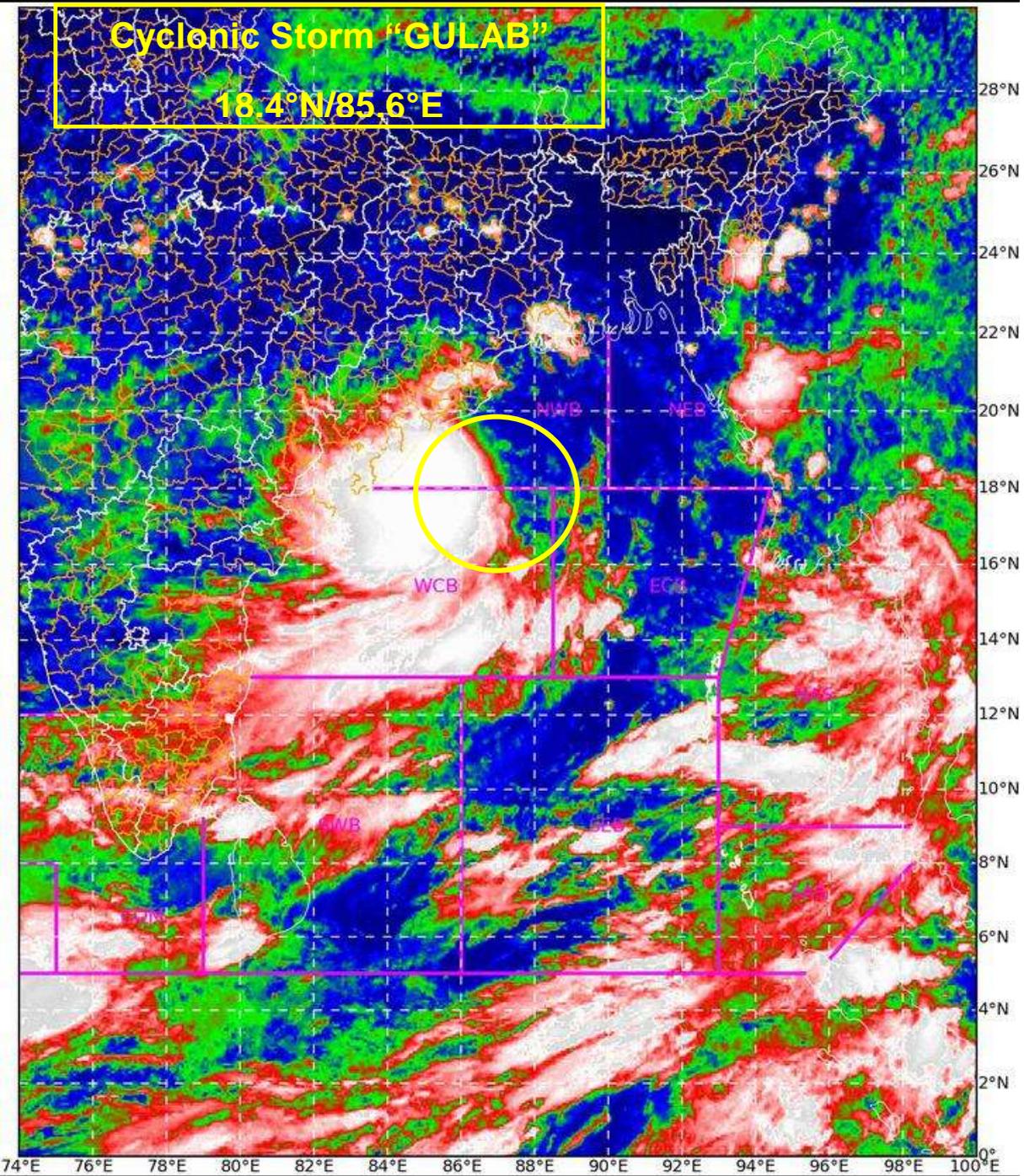
SAT : INSAT-3D IMG

26-09-2021/(0700 to 0726) GMT

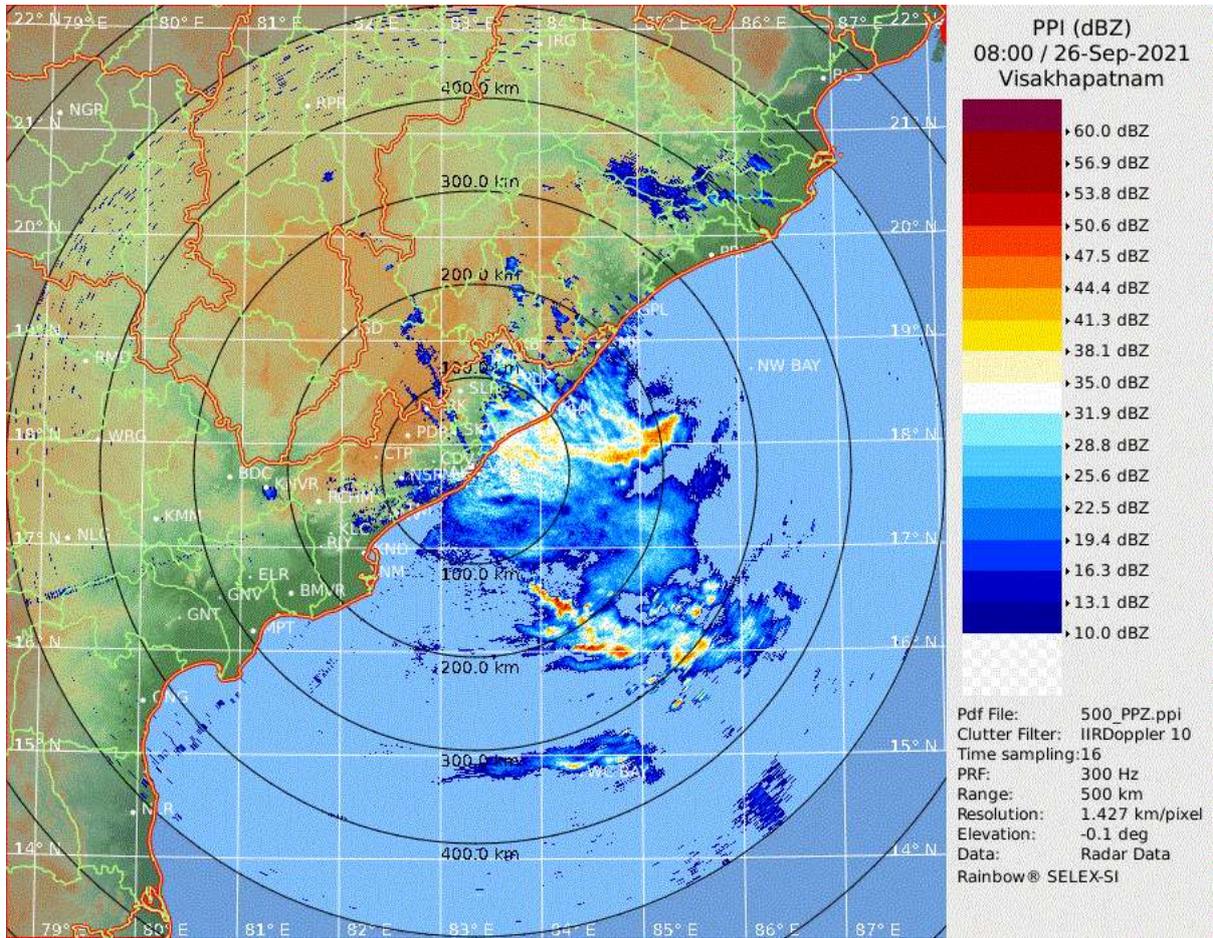
IMG_TIR1_TEMP 10.8 um

26-09-2021/(1230 to 1256) IST

L1C Mercator



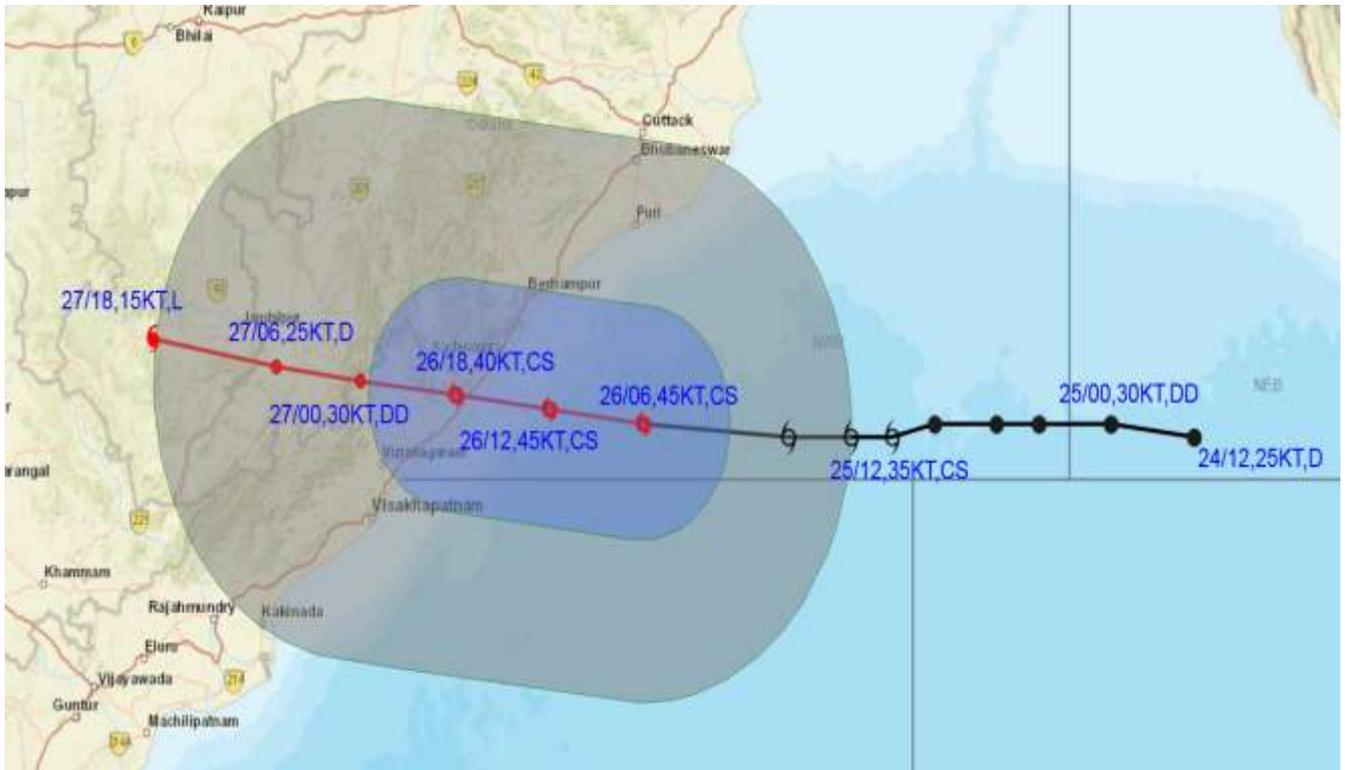
Celsius
IMD, DELHI



Reflectivity imagery from Doppler weather RADAR Visakhapatnam based on 1330 hrs IST of 26th September 2021.



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM GULAB OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL BASED ON 0600 UTC OF 26TH 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)

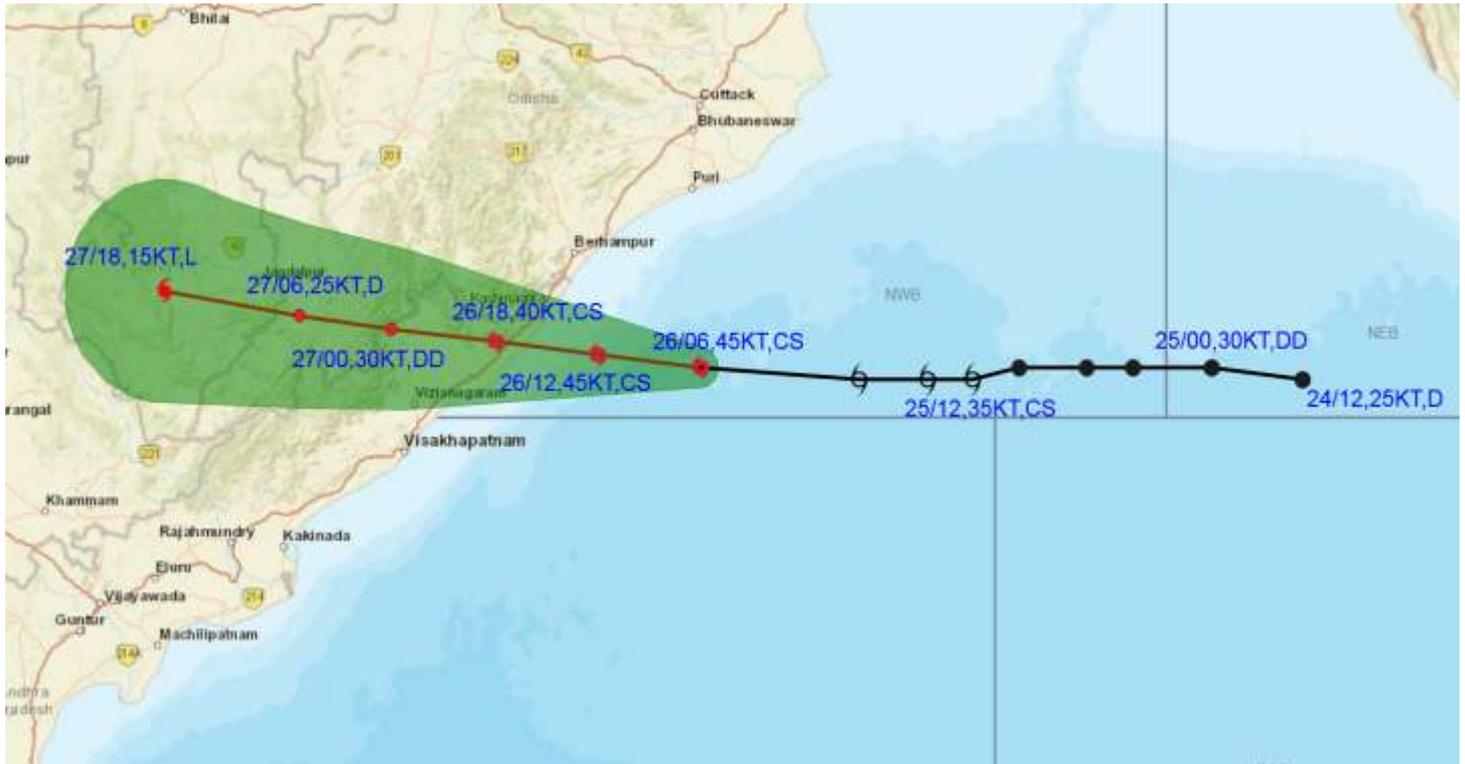
● LESS THAN 34 KT
 Ⓞ 34-47 KT
 Ⓢ ≥ 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ▲ CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ ≥ 64 KT (≥118 KMPH)

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

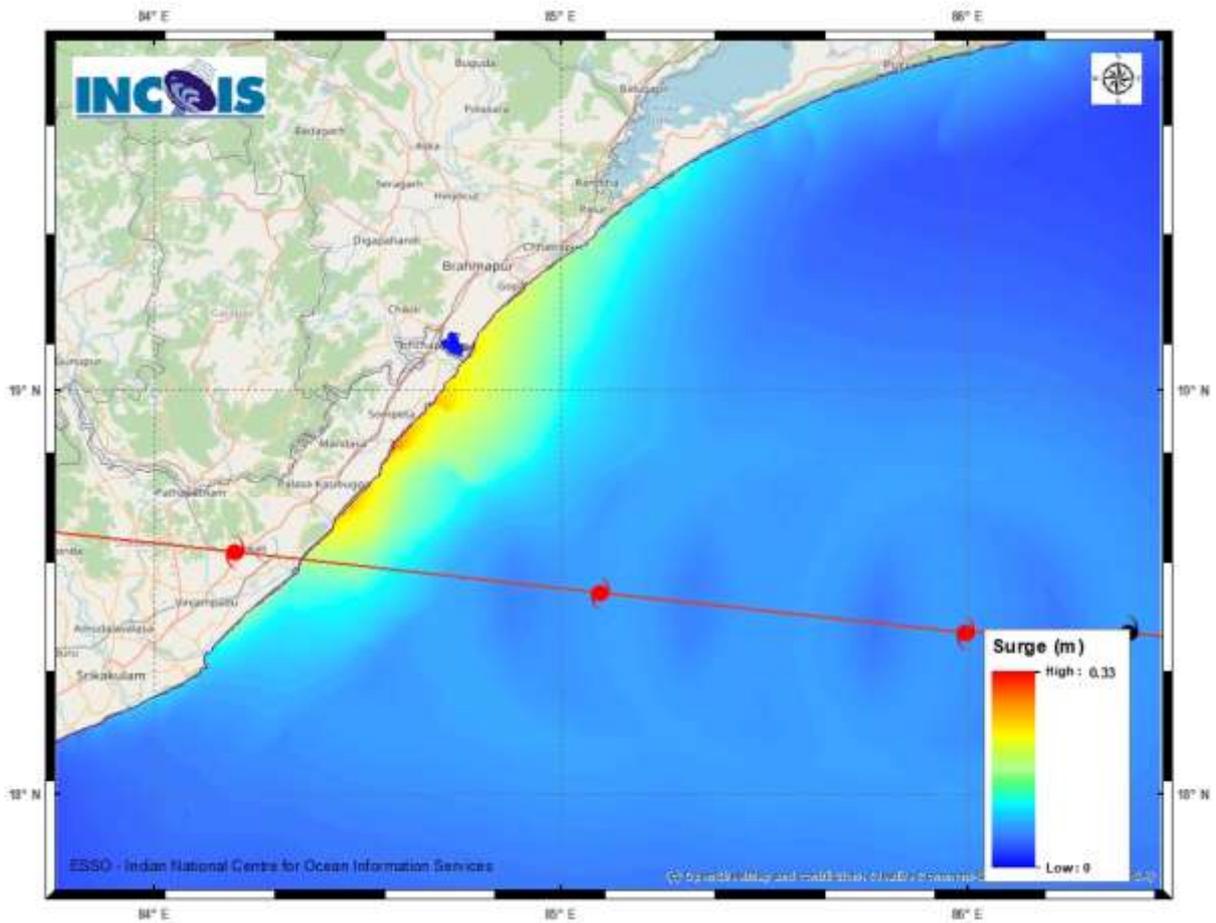


OBSERVED AND FORECAST TRACK OF CYCLONIC STORM GULAB OVER NORTHWEST AND ADJOINING WESTCENTRAL BAY OF BENGAL BASED ON 0600 UTC OF 26TH SEPTEMBER, 2021



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 SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

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



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

Peak storm surge upto 0.5 m over and above the astronomical tide is noticed at (i) Sompeta and Tekkali of Srikakulam district, Andhra Pradesh and (ii) Brahmapur of Ganjam district, Odisha.

Forecasted Flash Flood Threat (PFFT)
Till 1730 IST of 26.09.2021:

Moderate to High Threat very likely over few watersheds and neighborhoods in the Srikakulam, Vizianagaram districts of North Coastal Andhra Pradesh and adjoining Gajapati district of South Odisha Met Subdivisions in next 6 hours.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as depicted in map due to the persistence rainfall of Cyclonic Storm "Gulab" in next 6 hours.



24 hours Flash Flood Risk Outlook Till
1130 IST of 27.09.2021:

High Risk likely over few watersheds and neighborhoods of North Coastal Andhra Pradesh and adjoining South Odisha, South Chhattisgarh Met Subdivisions in next 24 hours.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as depicted in map due to the expected rainfall of Cyclonic Storm "Gulab" approaching landfall in next 24 hours.

