



REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI
TROPICAL WEATHER OUTLOOK

FROM: RSMC –TROPICAL CYCLONES, NEW DELHI

TO: STORM WARNING CENTRE, NAYPYI TAW (MYANMAR)
STORM WARNING CENTRE, BANGKOK (THAILAND)
STORM WARNING CENTRE, COLOMBO (SRILANKA)
STORM WARNING CENTRE, DHAKA (BANGLADESH)
STORM WARNING CENTRE, KARACHI (PAKISTAN)
METEOROLOGICAL OFFICE, MALE (MALDIVES)
OMAN METEOROLOGICAL DEPARTMENT, MUSCAT (THROUGH RTH JEDDAH)
YEMEN METEOROLOGICAL SERVICES, REPUBLIC OF YEMEN (THROUGH RTH JEDDAH)
NATIONAL CENTRE FOR METEOROLOGY, UAE (THROUGH RTH JEDDAH)
PRESIDENCY OF METEOROLOGY AND ENVIRONMENT, SAUDI ARABIA (THROUGH RTH JEDDAH)
IRAN METEOROLOGICAL ORGANISATION, (THROUGH RTH JEDDAH)
QATAR METEOROLOGICAL DEPARTMENT (THROUGH RTH JEDDAH)

TROPICAL CYCLONE ADVISORY NO. 12 FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 2300 UTC OF 26.09.2021 BASED ON 2100 UTC OF 26.09.2021.

SUB: CYCLONIC STORM 'GULAB' (PRONOUNCED AS GUL-AAB) WEAKENED INTO A DEEP DEPRESSION OVER NORTH ANDHRA PRADESH AND ADJOINING SOUTH ODISHA

THE CYCLONIC STORM '**GULAB**' (PRONOUNCED AS GUL-AAB) OVER NORTH ANDHRA PRADESH AND ADJOINING SOUTH ODISHA MOVED WESTWARDS WITH A SPEED OF 14 KMPH DURING LAST 06 HOURS, WEAKENED INTO A DEEP DEPRESSION AND LAY CENTERED AT 0230 HRS IST OF 27TH SEPTEMBER 2021 OVER NORTH ANDHRA PRADESH AND ADJOINING SOUTH ODISHA NEAR LAT. 18.4°N AND LONG. 83.0°E, ABOUT 220 KM WEST-SOUTHWEST OF GOPALPUR (43049), 130 KM EAST-SOUTHEAST OF JAGDALPUR (43041) AND 120 KM WEST OF KALINGAPATNAM (43105).

IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND WEAKEN FURTHER INTO A DEPRESSION DURING NEXT 06 HOURS.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
27.09.21/2100	18.4/83.0	50-60 GUSTING TO 70	DEEP DEPRESSION
27.09.21/0000	18.5/82.4	45-55 GUSTING TO 65	DEEP DEPRESSION
27.09.21/0600	18.6/81.6	40-50 GUSTING TO 60	DEPRESSION
27.09.21/1200	18.7/80.8	30-40 GUSTING TO 50	WELL MARKED LOW

AS PER INSAT-3D IMAGERY AT 2100 UTC OF 26TH SEP. MINIMUM CLOUD TOP TEMPERATURE IS -93°C. ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER COASTAL ANDHRA PRADESH ADJOINING ODISHA, EAST TEELNGANA ADJOINING SOUTH CHATTISGARH AND OVER WESTCENTRAL BAY OF BENGAL BETWEEN LATITUDE 14.0° N TO 18.5° N LONGITUDE 80.0° E TO 86.5° E.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. THE SEA CONDITION WILL BE ROUGH TO VERY ROUGH OVER NORTHWEST & ADJOINING WESTCENTRAL BOB FOR NEXT 12 HOURS. THE ESTIMATED CENTRAL PRESSURE IS 996 HPA.

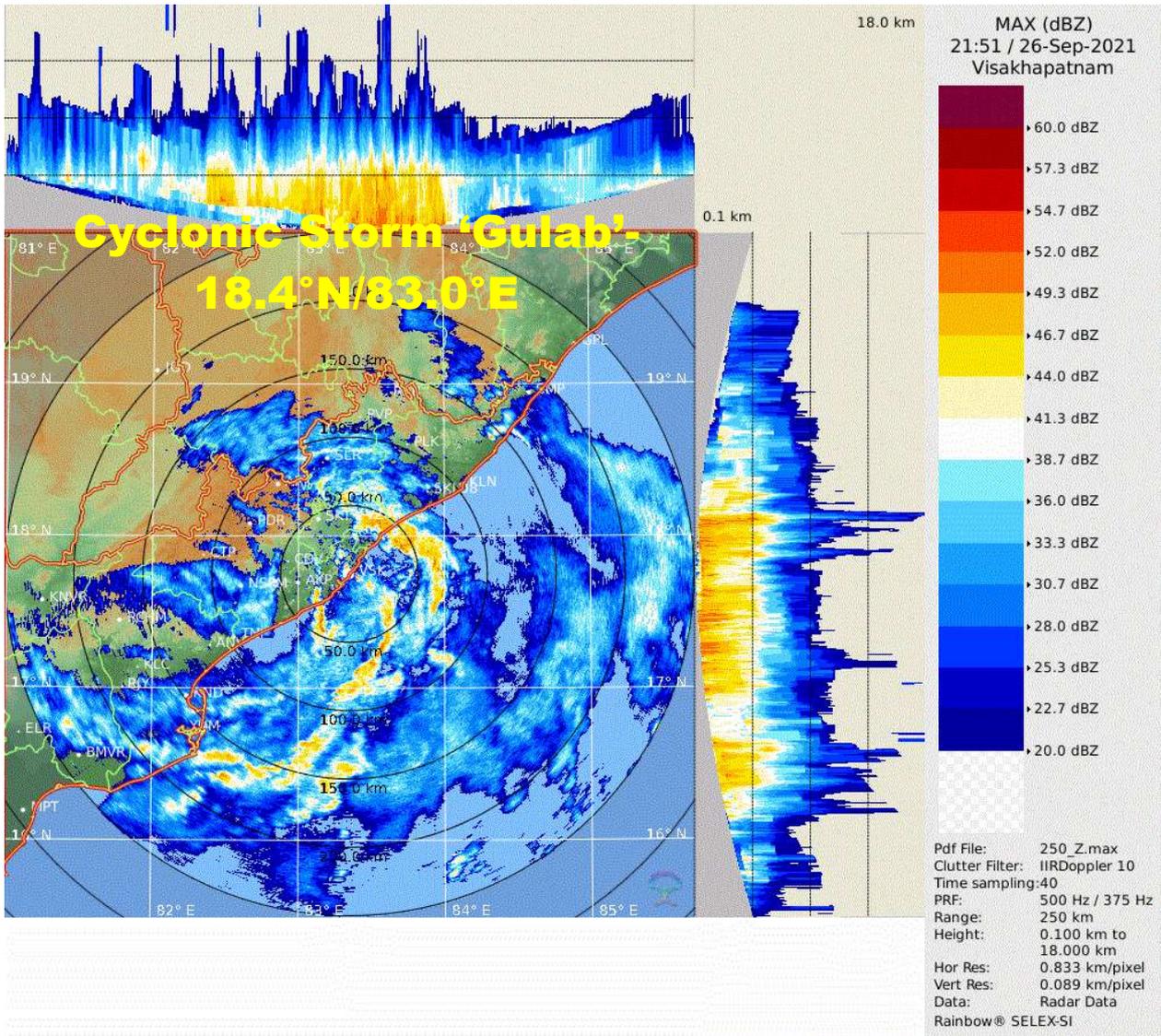
REMARKS:

SEA SURFACE TEMPERATURE (SST) IS ABOUT 28-29°C OVER CENTRAL & ADJOINING NORTH BAY OF BENGAL (BOB) AND TROPICAL CYCLONE HEAT POTENTIAL (TCHP) IS ABOUT 80-90 KJ/CM² OVER THE SAME AREA. MADDEN JULIAN OSCILLATION (MJO) INDEX IS LYING IN PHASE 4 WITH AMPLITUDE MORE THAN 1. A ZONE OF POSITIVE LOW LEVEL VORTICITY ($150 \times 10^{-6} \text{S}^{-1}$) LIES SOUTHEAST OF THE SYSTEM CENTRE. A ZONE OF POSITIVE LOWER LEVEL CONVERGENCE OF $30 \times 10^{-5} \text{S}^{-1}$ LIES TO THE SOUTHEAST OF SYSTEM CENTRE. POSITIVE UPPER LEVEL DIVERGENCE OF $20 \times 10^{-5} \text{S}^{-1}$ IS ALSO SEEN TO THE SOUTHWEST OF SYSTEM CENTRE. VERTICAL WIND SHEAR (VWS) IS ABOUT 10-15 KTS OVER THE SYSTEM AND SURROUNDING ENVIRONMENT AND ALONG THE FORECAST TRACK. THE UPPER TROPOSPHERIC RIDGE IS SEEN NEAR 25°N. THE SYSTEM IS LYING IN THE SOUTHERN PERIPHERY OF THE RIDGE NEAR 25°N AND WILL BE STEERED NEARLY WESTWARDS DURING NEXT 12 HOURS.

THE SYSTEM WILL WEAKENED INTO A DEEP DEPRESSION AND LIKELY TO WEAKEN FURTHER DURING NEXT 06 HOURS. THE SYSTEM WILL MOVE NEARLY WESTWARDS DURING NEXT 12 HOURS.

THIS IS THE LAST TROPICAL CYCLONE ADVISORY FOR THE CYCLONIC STORM 'GULAB'.

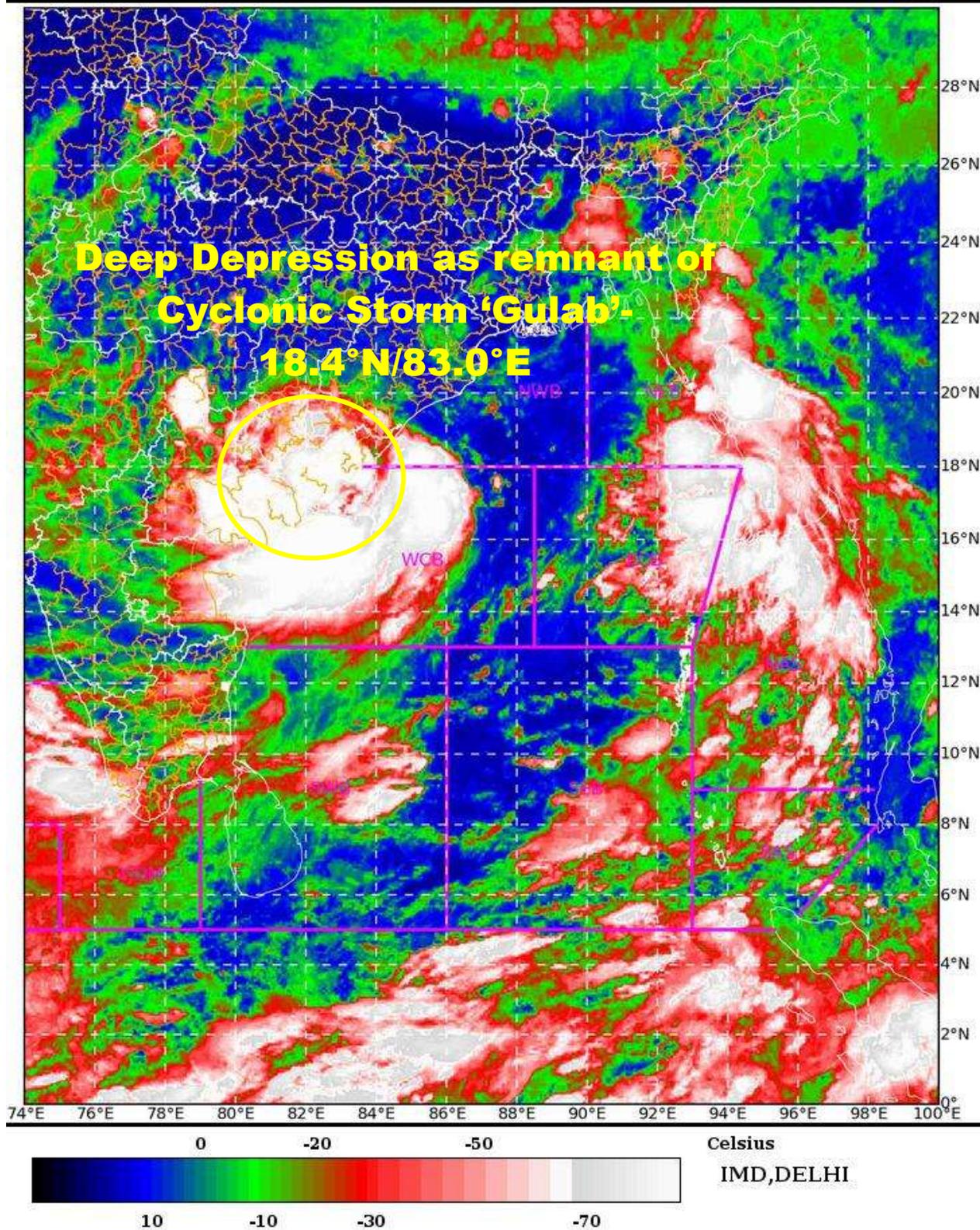
(ANANDA KUMAR DAS)
SCIENTIST-E, RSMC, NEW DELHI



Reflectivity imagery from Doppler weather RADAR Visakhapatnam based on 2151 hrs UTC of 26th September 2021.



L1C Mercator





OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM GULAB OVER NORTH ANDHRA PRADESH AND ADJOINING SOUTH ODISHA BASED ON 1800 UTC OF 26TH SEPTEMBER 2024



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 NORTH ANDHRA PRADESH AND ADJOINING SOUTH ODISHA BASED ON 1800 UTC OF 26TH SEPTEMBER, 2024



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