



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 29.05.2025

SPECIAL TROPICAL WEATHER OUTLOOK FOR THE NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR THE NEXT 168 HOURS ISSUED AT 1000 UTC OF 29.05.2025 BASED ON 0600 UTC OF 29.05.2025.

Sub: Deep Depression crossed West Bengal-Bangladesh Coasts close to Raidighi

The deep depression over Northwest Bay of Bengal off West Bengal-Bangladesh coasts moved nearly northwards with a speed of 22 kmph during past 6 hours and crossed West Bengal – Bangladesh coasts between Sagar Island & Khepupara (Bangladesh) close to Raidighi (West Bengal) during 0500-0600 UTC and lay centred at 0600 UTC of today, the 29th May 2025 over West Bengal-Bangladesh coasts near latitude 22.0° N and longitude 88.4° E, close to Raidighi, about 40 km southwest of Canning (India, 42812), 130 km west-southwest of Mongla (Bangladesh, 41958) and 190 km west of Khepupara (Bangladesh).

It is very likely to move nearly north-northeastwards, maintain its intensity of deep depression till evening and weaken gradually into a depression thereafter.

As per the satellite imagery based on 0600 UTC of 29th May, the deep depression lay over northwest Bay of Bengal off Gangetic West Bengal and adjoining Bangladesh coasts and neighbourhood. Intensity of the system is characterized as C.I. 2.0. Associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over north and central Bay of Bengal. Minimum cloud top temperature is -75°C to -85°C. Moderate to intense convection lay over Odisha, Gangetic West Bengal, Bangladesh, north coastal Andhra Pradesh, Mizoram, Tripura, north Bangladesh. Minimum cloud top temperature is -50°C to -70°C

The associated estimated central pressure is 990 hPa and the associated maximum sustained wind speed is 30 kt gusting to 40 kt.

Canning (42812) reported mean sea level pressure (MSLP) of 991.1 hPa & maximum sustained wind speed (MSW) of 350⁰/04kt, Mongla (41958) reported MSLP as 990.9 hPa.

Remarks:

The sea surface temperature is 30-32°C over entire the Bay of Bengal (BoB). The Madden Julian Oscillation (MJO) is in phase 5 with amplitude more than 1 during next 3 days and with amplitude less than 1 in the same phase thereafter. The mid-level vertical wind shear is moderate (5-10 kt) over the system area. Low level relative vorticity is $200 \times 10^{-6} \text{ s}^{-1}$ near system centre with vertical extension upto 200 hPa. Low level convergence has decreased and is around $30 \times 10^{-6} \text{ s}^{-1}$ to the northeast of system centre and upper level divergence has decreased and is around $20 \times 10^{-6} \text{ s}^{-1}$ to the southwest and another to the northeast of system centre. The total precipitable water imagery indicates warm moist air over the entire region extending upto coastal areas of Gangetic West Bengal and Bangladesh.

Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature(CTT)>-25°C,(b)Moderate:CTT:-25°Cto-40°C,(c)Intense:CTT: -41°Cto -70°Cand(d)Very Intense::Less than -70°C
PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION): NIL:0%, LOW:1-33%, MODERATE:34-66% AND HIGH:67-100%
This is a guidance Bulletin for WMO/ESCAP Panel Member countries. Visit respective National websites for Country specific Bulletins

Under these favourable features the deep depression over coastal areas of Gangetic West Bengal and Bangladesh is likely to maintain its intensity for some more time and weaken into a depression gradually. The upper tropospheric ridge is located near 21°N. The system is being steered nearly north-northeastwards along the ridge.

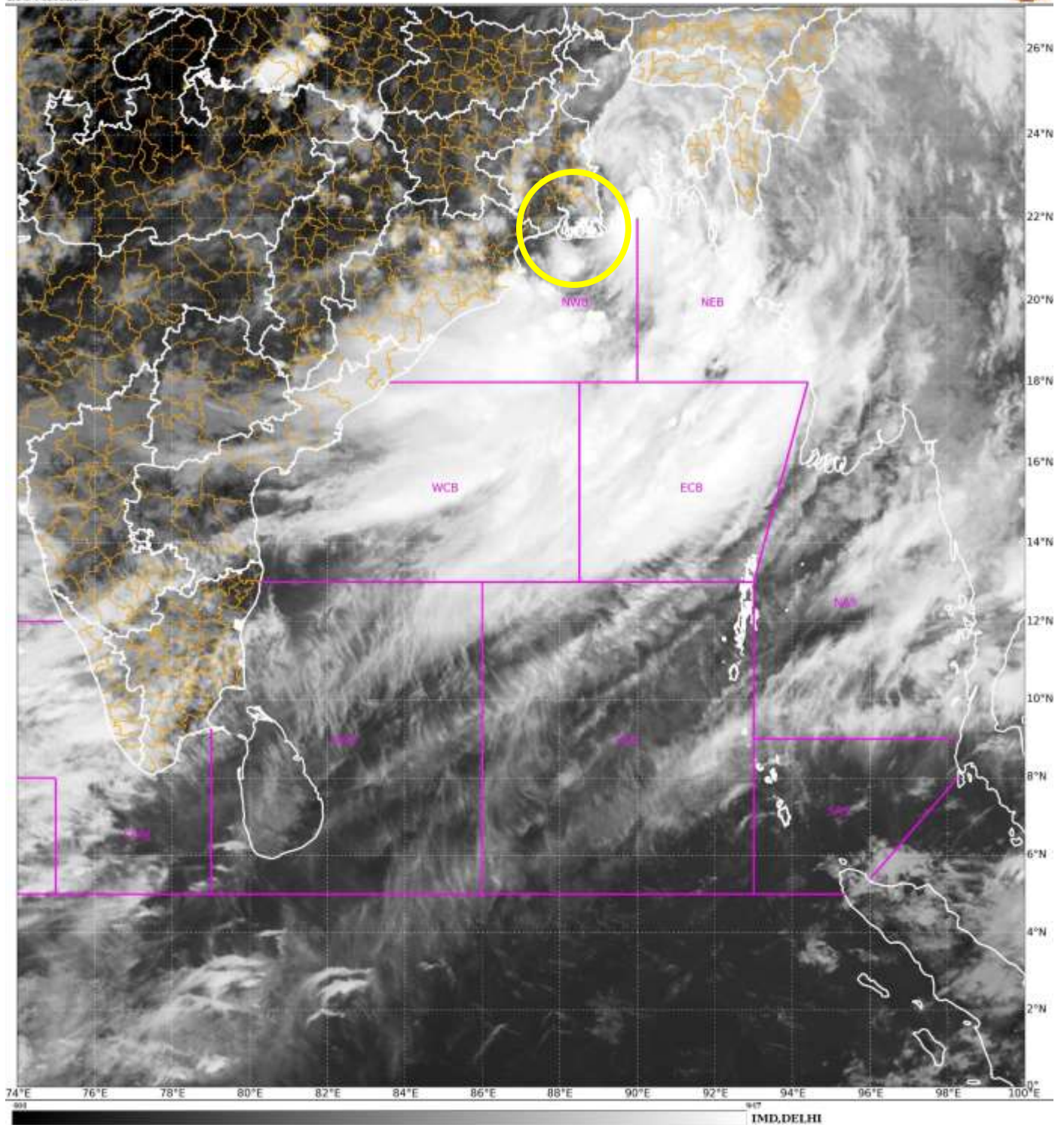
Most of the models are indicating nearly northwards movement of the system and weakening into a depression around 1200 UTC of 29th May.

Monica Sharma
Scientist-D
RSMC New Delhi

SAT : INSAT-3DR IMG
IMG_TIR1 10.8 um
LIC Mercator

29-05-2023/(0615 to 0642) GMT
29-05-2023/(1145 to 1212) IST

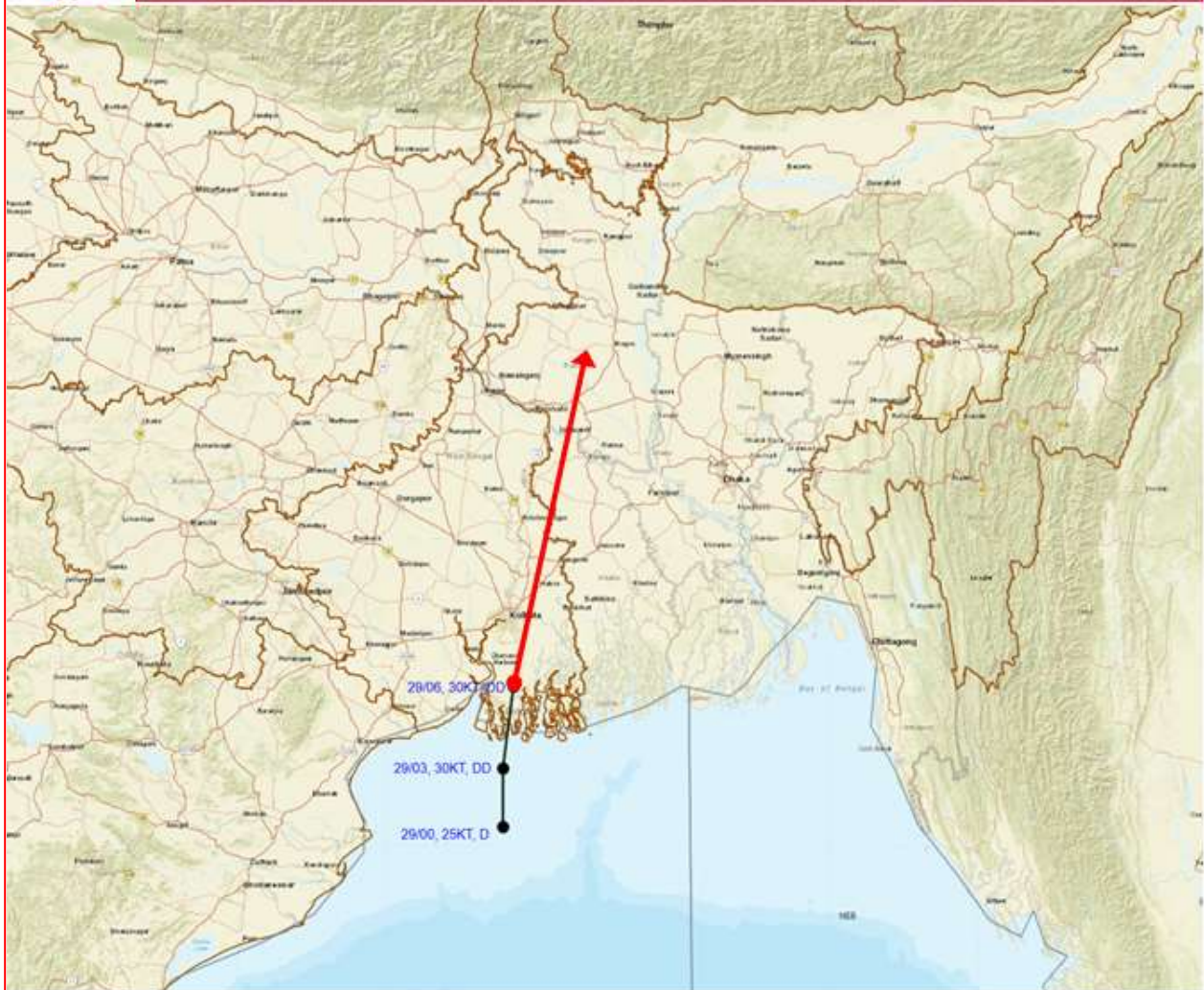
DEEP DEPRESSION (22.0N, 88.4E)



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**OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER WEST BENGAL-
BANGLADESH COASTS BASED ON 0600 UTC (1130 IST) OF 29th MAY, 2025**



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 (48-63 KT)

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

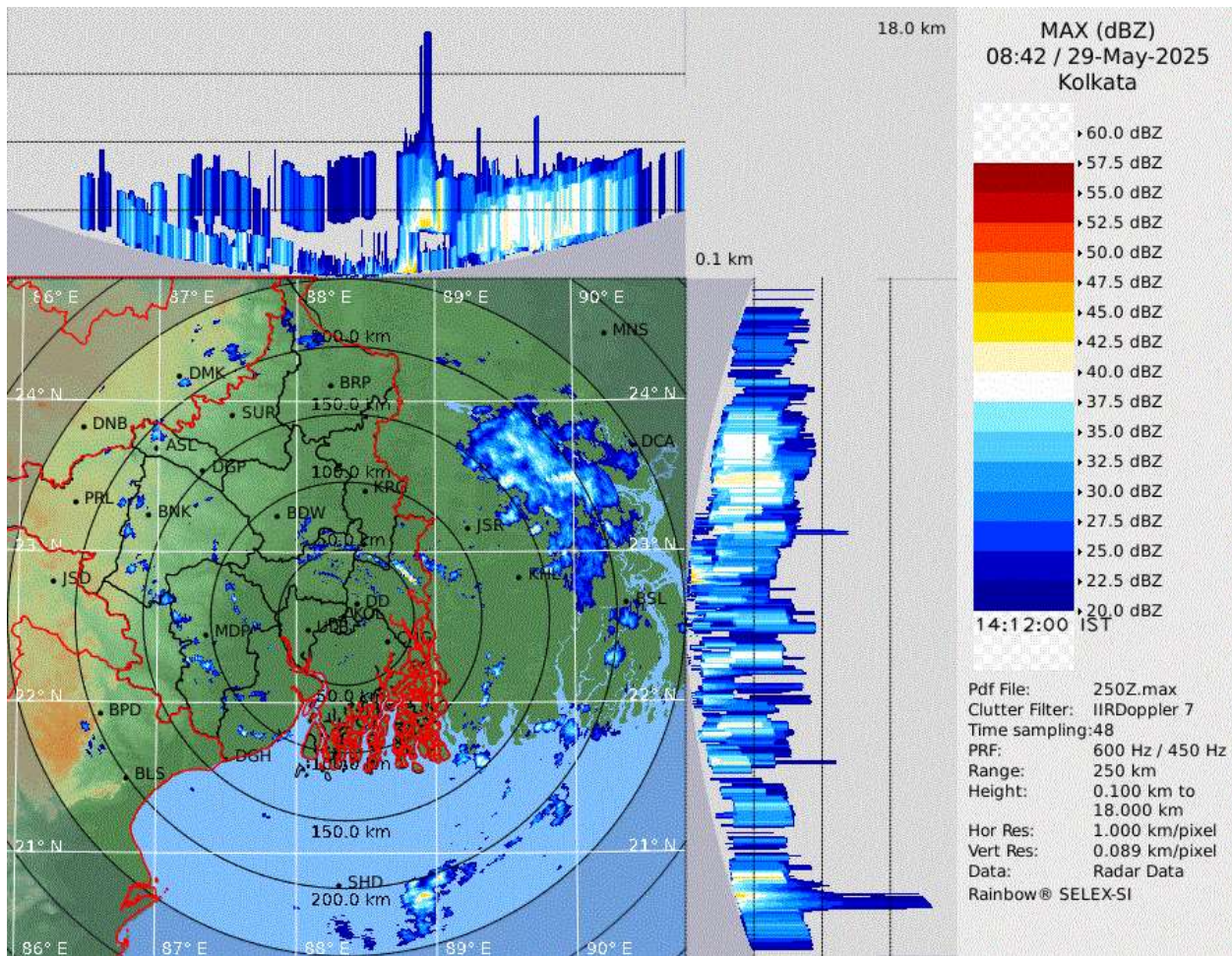
○ 34-47 KT

○ ≥ 48 KT

— OBSERVED TRACK

— FORECAST TRACK

— CONE OF UNCERTAINTY



Maximum Reflectivity (dBZ) Observation by Doppler Weather Radar (DWR) at Kolkata

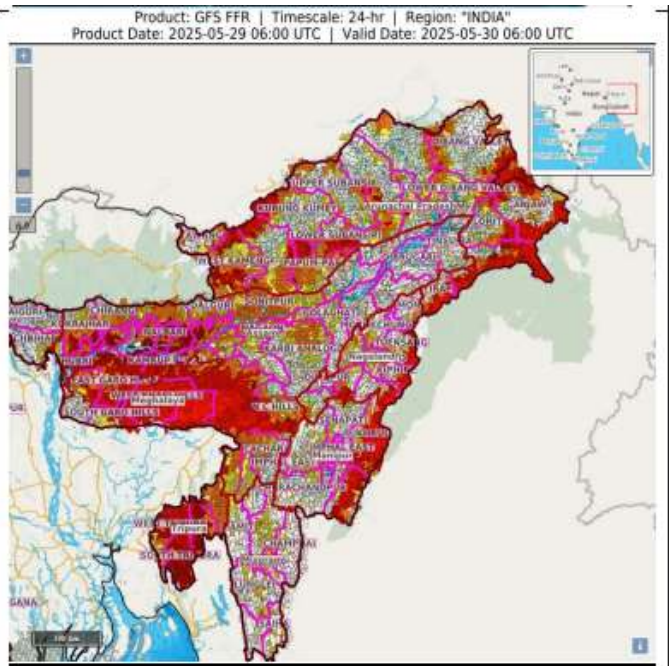
24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 30-05-2025:







Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

Assam & Meghalaya - Kamrup Rural, N.C Hills, Karimganj, Kokrajhar, Ro-Bhoi, Darang, Morigaon, Sonitpur, Karbi Analog, Cachar, East/West Khasi Hills, West/East/South Garo Hills and Jaintia Hills districts.

Nagaland Mizoram Manipur Tripura (NMMT) – Tuensang, Mon, Kiphire, Zunheboto, Kohima, Phek, Ukhrul, Chandel, Bishnupur, North Tripura, Dhalai, South Tripura and West Tripura, Thoubal, Aizawl districts.

Arunacahal Pradesh – Tirap, Changlang, Anjaw, Dabang Valley, Lower Dabang Valley, West Siang, Lower Subansiri, Papum Pare, Kurung Kumey, West/West Kameng, Tawang,



Flash Flood Threat	Flash Flood Risk
 High Threat (Take Action)	 High Risk (Take Action)
 Moderate threat (Be Prepared)	 Moderate Risk (Be Prepared)
 Low Threat (Be Updated)	 Low Risk (Be Updated)

Fishermen Warning Graphics

