



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 1500 UTC OF 29.05.2025 BASED ON 1200 UTC OF 29.05.2025.

Sub: Deep Depression over coastal West Bengal and adjoining Bangladesh

The deep depression over coastal West Bengal and adjoining Bangladesh moved slowly northeastwards with a speed of 5 kmph during past 6 hours and lay centred at 1200 UTC of today, the 29th May 2025 over the same region near latitude 22.2° N and longitude 88.6° E, about close to Canning (42812, India) and 100 km west-southwest of Mongla (41958, Bangladesh).

It is very likely to move nearly north-northeastwards and weaken into a depression during next 12 hours and into a well-marked low pressure area during subsequent 24 hours.

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. Associated scattered to broken low and medium clouds with embedded intense to very intense convection lay over north and central Bay of Bengal, Bangladesh and coastal Odisha. Minimum cloud top temperature is -75°C to -85°C. Moderate to intense convection lay over rest Odisha, Gangetic West Bengal, north coastal Andhra Pradesh and Northeastern states. Minimum cloud top temperature is -50°C to -70°C.

The associated estimated central pressure is 988 hPa and the associated maximum sustained wind speed is 30 kt gusting to 40 kt.

Canning (42812) reported mean sea level pressure (MSLP) of 988 hPa, maximum sustained wind speed (MSW) of 70⁰/01kt, Pressure change in past 24 hr (P24) as -5.3 hPa & Departure as -12.8 hPa; Mongla (41958) reported MSLP as 988.2 hPa, MSW of 180⁰/01kt, P24 as -5.8 hPa and Khepupara reported MSLP as 987.5 hPa, MSW of 230⁰/05kt, P24 as -5.3 hPa.

Remarks:

The Madden Julian Oscillation (MJO) is in phase 5 with amplitude close to 1 and would continue in same phase during next 3 days and with amplitude close to 1. The mid-level vertical wind shear is moderate (10-15 kt) over the system area. Low level relative vorticity has reduced and is $150 \times 10^{-6} \text{ s}^{-1}$ to the south of system centre. Low level convergence has increased and is around $40 \times 10^{-6} \text{ s}^{-1}$ to the northeast of system centre and upper level divergence is same and is around $20 \times 10^{-6} \text{ s}^{-1}$ 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. 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.

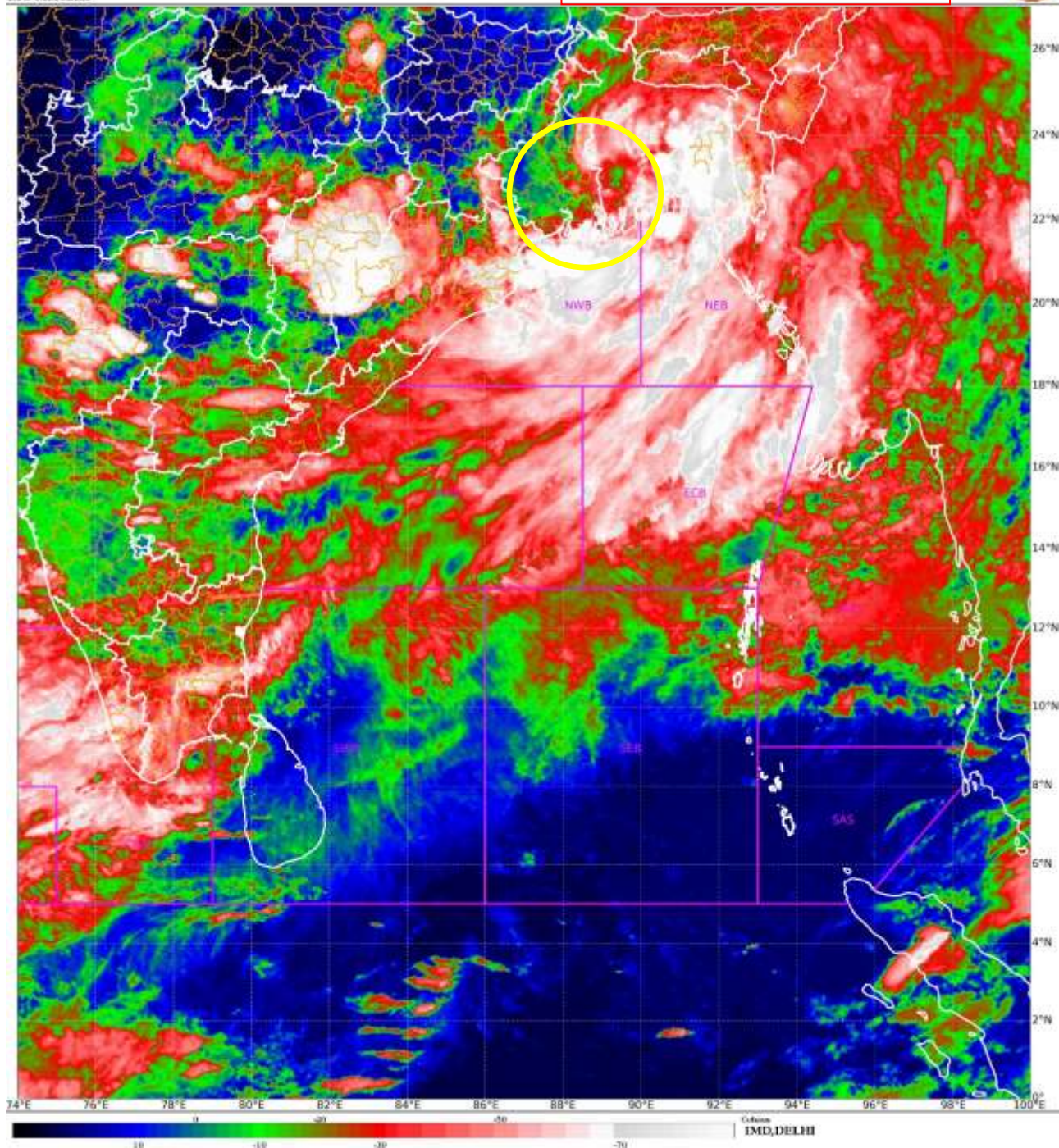
**Monica Sharma
Scientist-D
RSMC New Delhi**

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
PROBABILITYOFCYCLOGENESIS(FORMATIONOFDEPRESSION):NIL:0%,LOW :1-33%,MODERATE:34-66%ANDHIGH:67-100%
ThisisaguidanceBulletinforWMO/ESCAPPanelMembercountries.VisitrespectiveNationalwebsitesforCountry specific Bulletins

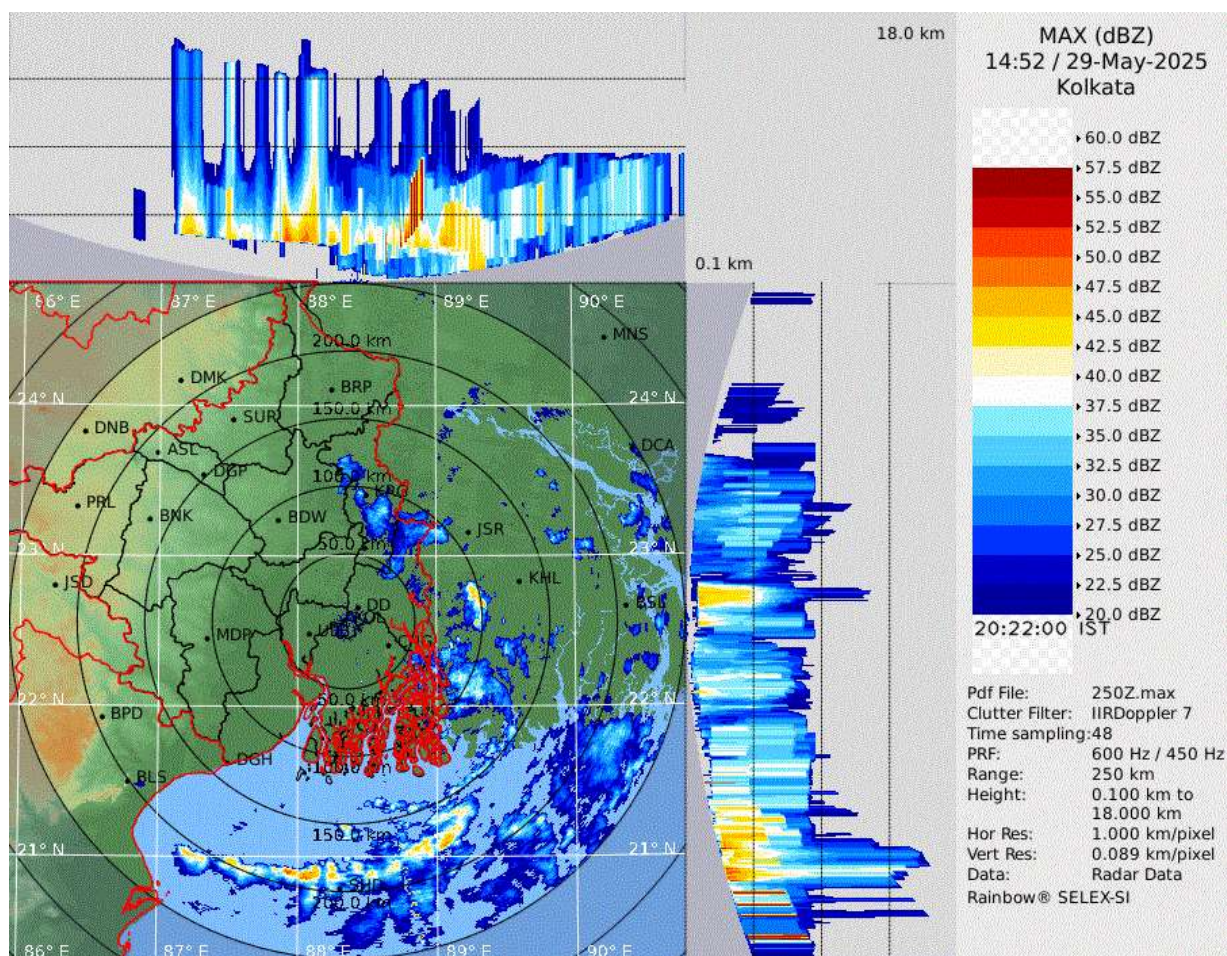
SAT : INSAT-3DR IMG
 IMG_TIR1_TEMP 10.8 um
 LIC Mercator

29-05-2025/(1345 to 1412) GMT
 29-05-2025/(1915 to 1942) IST

DEEP DEPRESSION (22.2N, 88.6E)



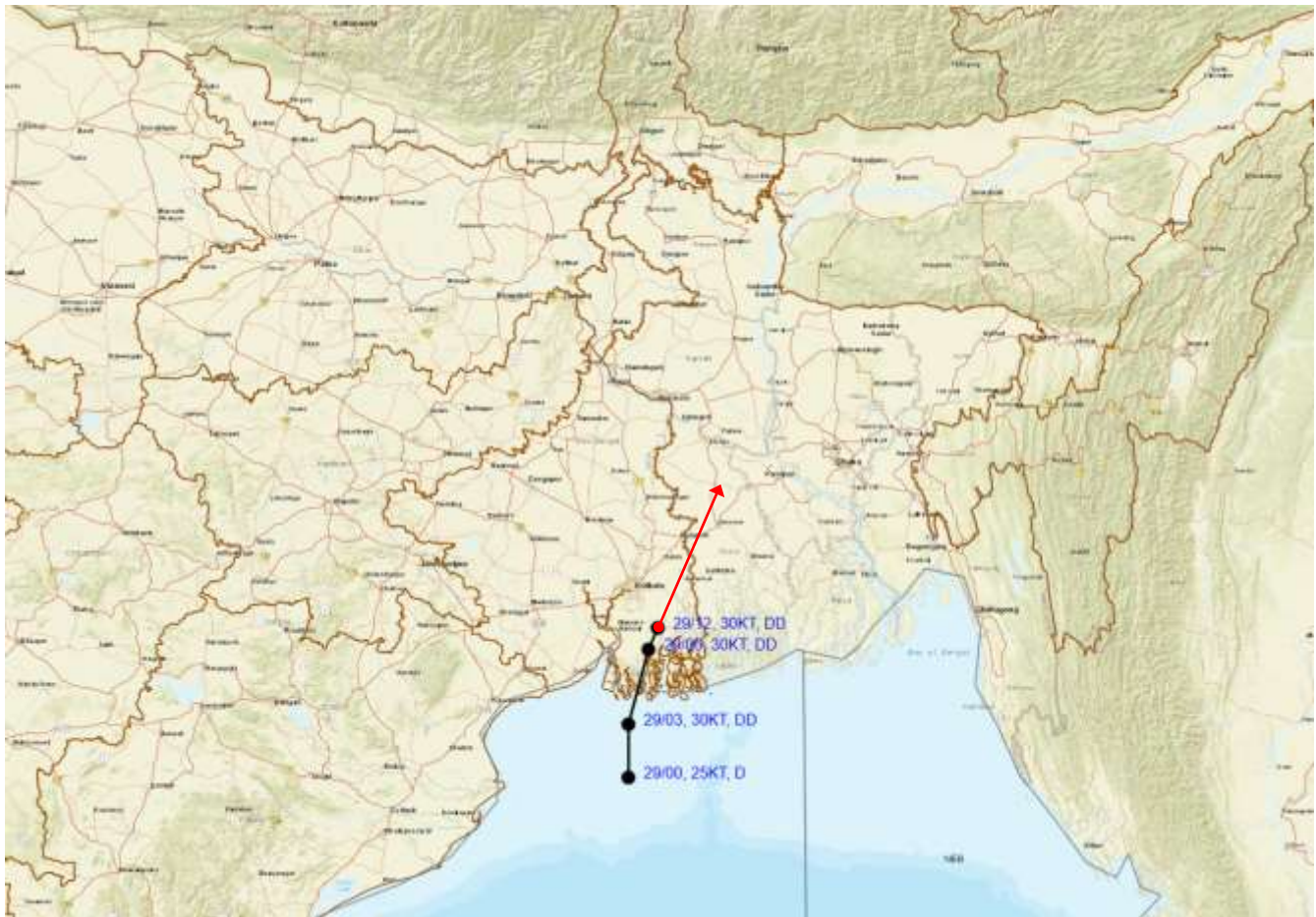
Cloud distribution: (a) Isolated: <25%, Scattered: 25-50%, Broken: 51-75%, Solid: >75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) > -25°C, (b) Moderate: CTT: -25°C to -40°C, (c) Intense: CTT: -41°C to -70°C and (d) Very Intense: Less than -70°C
 PROBABILITY OF CYCLOGENESIS (FORMATION 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



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



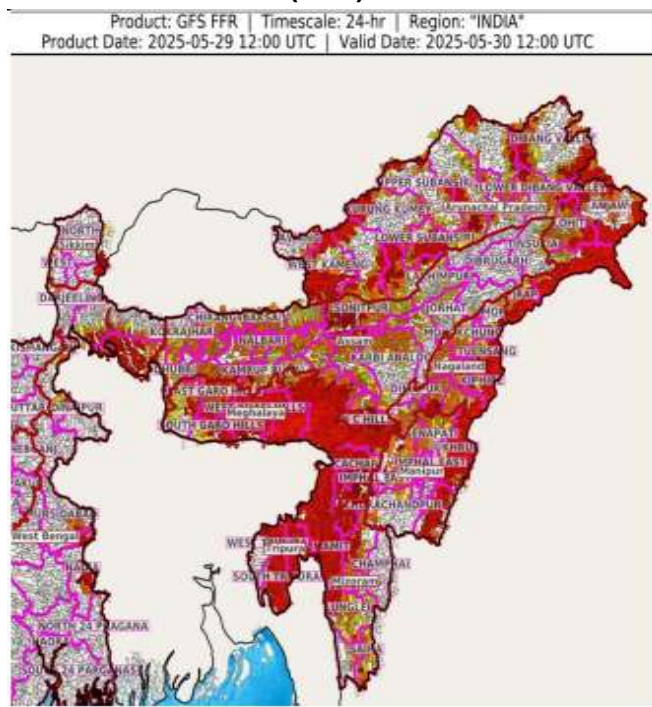
OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER COASTAL WEST BENGAL & ADJOINING BANGLADESH BASED ON 1200 UTC (1730 IST) OF 29th MAY, 2025



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 (48-63KT)
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

24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 30-05-2025 :



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)

Arunachal Pradesh - Changlang, Dibang Valley, East Kameng, East Siang, Lohit, Lower Dibang Valley, Lower Subansiri, Papum-Pare, Tawang, Tirap, West Kameng, West Siang, Anjaw, Upper Siang and Kurung Kumey districts.

Assam & Meghalaya - Baksa, Barpeta, Bongaigaon, Cachar, Chirang, Darrang, Dhemaji, Dibrugarh, Goalpara, Golaghat, Hailakandi, Jorhat, Kamrup Metro, Kamrup Rural, Karbi Analog, Kokrajhar, Lakhimpur, Morigaon, N.C Hills, Nagaon, Nalbari, Sibsagar, Sonitpur, Tinsukia, Udalguri, Karimganj, East Garo Hills, East Jaintia Hills, East Khasi Hills, North Garo Hills, Ri Bhoi, South Garo Hills, South West Garo Hills, South West Khasi Hills, West Garo Hills, West Jaintia Hills, West Khasi Hills, Dhubri and Jaintia Hills districts.

Nagaland Mizoram Manipur Tripura (NMMT) - Bishnupur, Chandel, Churachandpur, Imphal East, Imphal West, Senapati, Tamenglong, Thoubal, Ukhrul, Aizawl, Champhai, Kolasib, Lawngtlai, Lunglei, Mamit, Saiha, Serchhip, Dimapur, Kiphire, Kohima, Longleng, Mokokchung, Mon, Peren, Phek, Tuensang, Wokha, Zunheboto, Dhalai, Gomati, Khowai, North Tripura, Sipahijala, South Tripura, Unakoti and West Tripura districts.

Fishermen Warning Graphics

