



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 13.09.2024

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 2100 UTC OF 13.09.2024 BASED ON 1800 UTC OF 13.09.2024.

SUB: DEPRESSION CROSSED BANGLADESH COAST

THE DEPRESSION OVER NORTHEAST BAY OF BENGAL MOVED WEST-NORTHWESTWARDS WITH A SPEED OF 8 KMPH DURING PAST 6 HOURS, CROSSED BANGLADESH COAST BETWEEN 1700-1800 UTC OF 13TH SEPTEMBER CLOSE TO PATUAKHALI (41960, BANGLADESH) AND LAY CENTRED AT 1800 UTC OF 13TH SEPTEMBER 2024, OVER COASTAL BANGLADESH CLOSE TO PATUAKHALI (41960, BANGLADESH), NEAR LATITUDE 22.3° N AND LONGITUDE 90.4° E, 180 KM EAST OF CANNING (42812, WEST BENGAL) AND 210 KM EAST OF KOLKATA (42807, WEST BENGAL).

IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS COASTAL BANGLADESH AND GANGETIC WEST BENGAL DURING NEXT 48 HOURS. THE DEPRESSION IS UNDER CONTINUOUS SURVEILLANCE BY THE DOPPLER WEATHER RADAR AT KOLKATA.

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 |
|-----------------|------------------------------|---|----------------------------------|
| 13.09.24/1800 | 22.3/90.4 | 45-55 GUSTING TO 65 | DEPRESSION |
| 14.09.24/0000 | 22.4/89.7 | 45-55 GUSTING TO 65 | DEPRESSION |
| 14.09.24/0600 | 22.5/89.0 | 45-55 GUSTING TO 65 | DEPRESSION |
| 14.09.24/1200 | 22.6/88.3 | 45-55 GUSTING TO 65 | DEPRESSION |
| 14.09.24/1800 | 22.7/87.6 | 40-50 GUSTING TO 60 | DEPRESSION |
| 15.09.24/0600 | 22.7/86.4 | 40-50 GUSTING TO 60 | DEPRESSION |
| 15.09.24/1800 | 22.7/84.9 | 35-45 GUSTING TO 55 | DEPRESSION |

AT 1800 UTC, INTENSITY OF THE SYSTEM IS CHARACTERISED AS CI 1.5. AS PER INSAT 3DR IMAGERY AT 1800 UTC, ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER BIHAR. JHARKHAND. WEST BENGAL. ODISHA. TRIPURA. MIZORAM. BANGLADESH. NORTH ADJOINING CENTRAL BAY OF BENGAL (MINIMUM CTT MINUS 80-93°C)

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED (MSW) IN ASSOCIATION WITH THE SYSTEM IS 25 KTS GUSTING TO 35 KTS. ESTIMATED CENTRAL PRESSURE IS 992 HPA.

AT 1800 UTC, LOWEST MEAN SEA LEVEL PRESSURES (MSLP) WERE REPORTED AT KHEPUPARA 995.5 HPA AND SANDWIP 995.6 HPA.

WIND WARNING:

SQUALLY WIND SPEED REACHING 45-55 KMPH GUSTING TO 65 KMPH PREVAILING OVER NORTH BAY OF BENGAL AND ALONG & OFF BANGLADESH, WEST BENGAL AND ODISHA COASTS. IT IS LIKELY TO CONTINUE TILL 1200UTC OF 14TH SEPTEMBER. IT IS LIKELY TO DECREASE, GRADUALLY BECOMING 40-50 KMPH GUSTING TO 60 KMPH BY 0000UTC OF 15TH SEPTEMBER.

SEA CONDITION:

ROUGH TO VERY ROUGH SEA CONDITION IS VERY LIKELY TO PREVAIL OVER NORTH BAY OF BENGAL AND ALONG & OFF WEST BENGAL-ODISHA COASTS TILL 0300 UTC OF 16TH SEPTEMBER.

FISHERMEN WARNING:

FISHERMEN ARE ADVISED NOT TO VENTURE INTO NORTH BAY OF BENGAL AND ALONG & OFF WEST BENGAL-ODISHA COASTS TILL 0300UTC OF 16TH SEPTEMBER.

REMARKS:

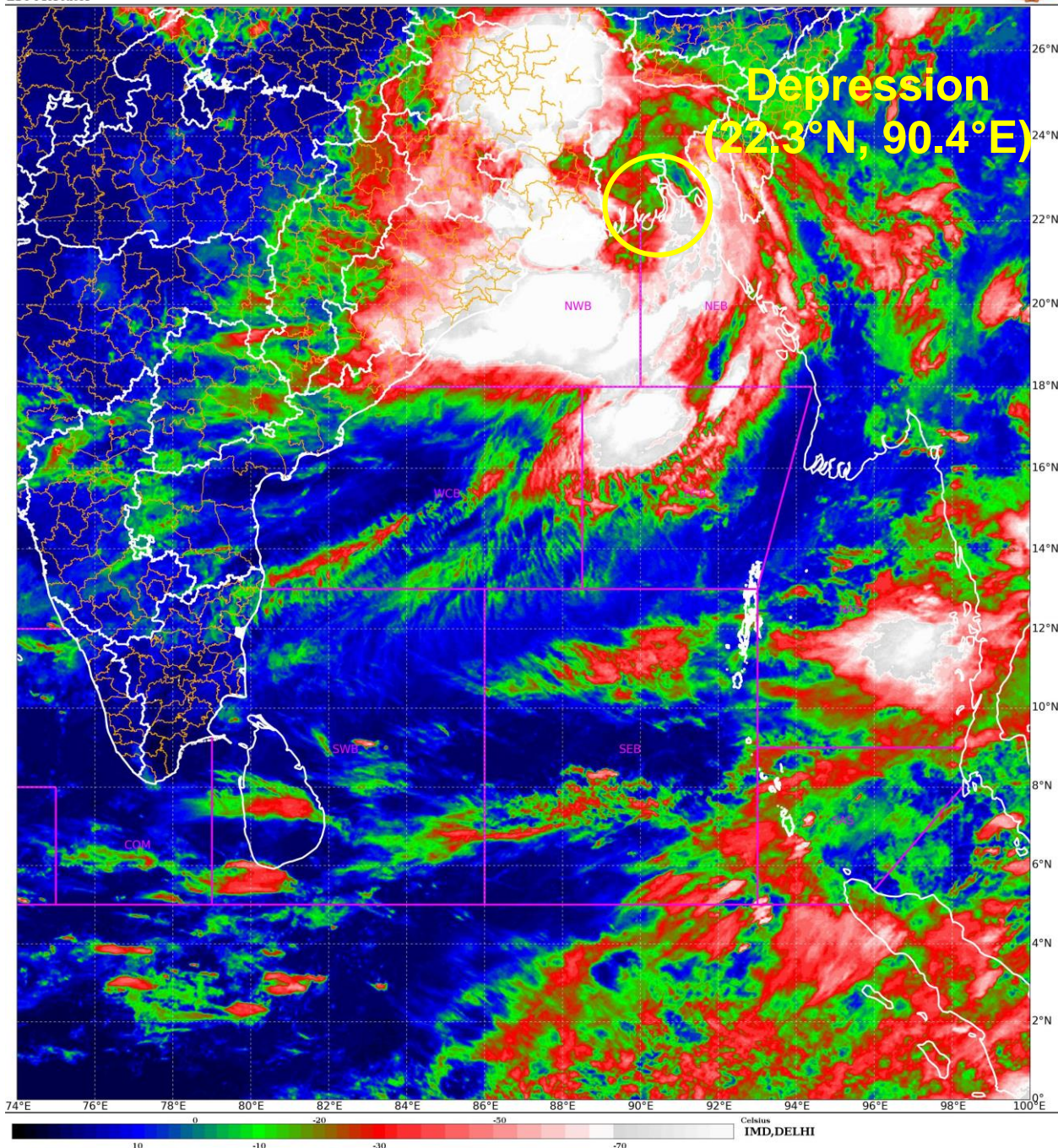
CURRENT ENVIRONMENTAL CONDITIONS INDICATE THAT THE DEPRESSION OVER NORTH BAY OF BENGAL (BOB) IS LYING IN A FAVOURABLE ENVIRONMENT. SEA SURFACE TEMPERATURE IS 28-30°C OVER NORTH BOB. TROPICAL CYCLONE HEAT POTENTIAL IS 80-100KJ/CM² NEAR SYSTEM LOCATION.

MADDEN JULIAN OSCILLATION (MJO) INDEX IS CURRENTLY IN PHASE 5 WITH AMPLITUDE LESS THAN 1. IT IS LIKELY TO CONTINUE IN SAME PHASE DURING NEXT 2-3 DAYS AND THEN LIKELY TO MOVE TO PHASE 6. THUS, MJO WOULD SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER NORTH BOB AND ADJOINING AREAS TILL NEXT 2-3 DAYS.

THE LOW LEVEL CONVERGENCE IS AROUND 20-30X10⁻⁵ S⁻¹ AND UPPER LEVEL DIVERGENCE IS AROUND 20X10⁻⁵ S⁻¹ OVER NORTH BAY OF BENGAL. THE WIND SHEAR IS LOW (05-10 KT) OVER SYSTEM AREA AND ALONG THE FORECAST TRACK. VORTICITY AT 850 HPA LEVEL IS AROUND 150X10⁻⁵ S⁻¹ OVER NORTH BAY OF BENGAL AND EXTENDS UP TO 200 HPA (40 X10⁻⁵ S⁻¹). THE SYSTEM IS CURRENTLY IN THE ZONE OF LOW VERTICAL WIND SHEAR AND DUE TO ITS WEST-NORTHWESTWARD MOVEMENT; IT WOULD REMAIN IN THE LOW TO MODERATE SHEAR.

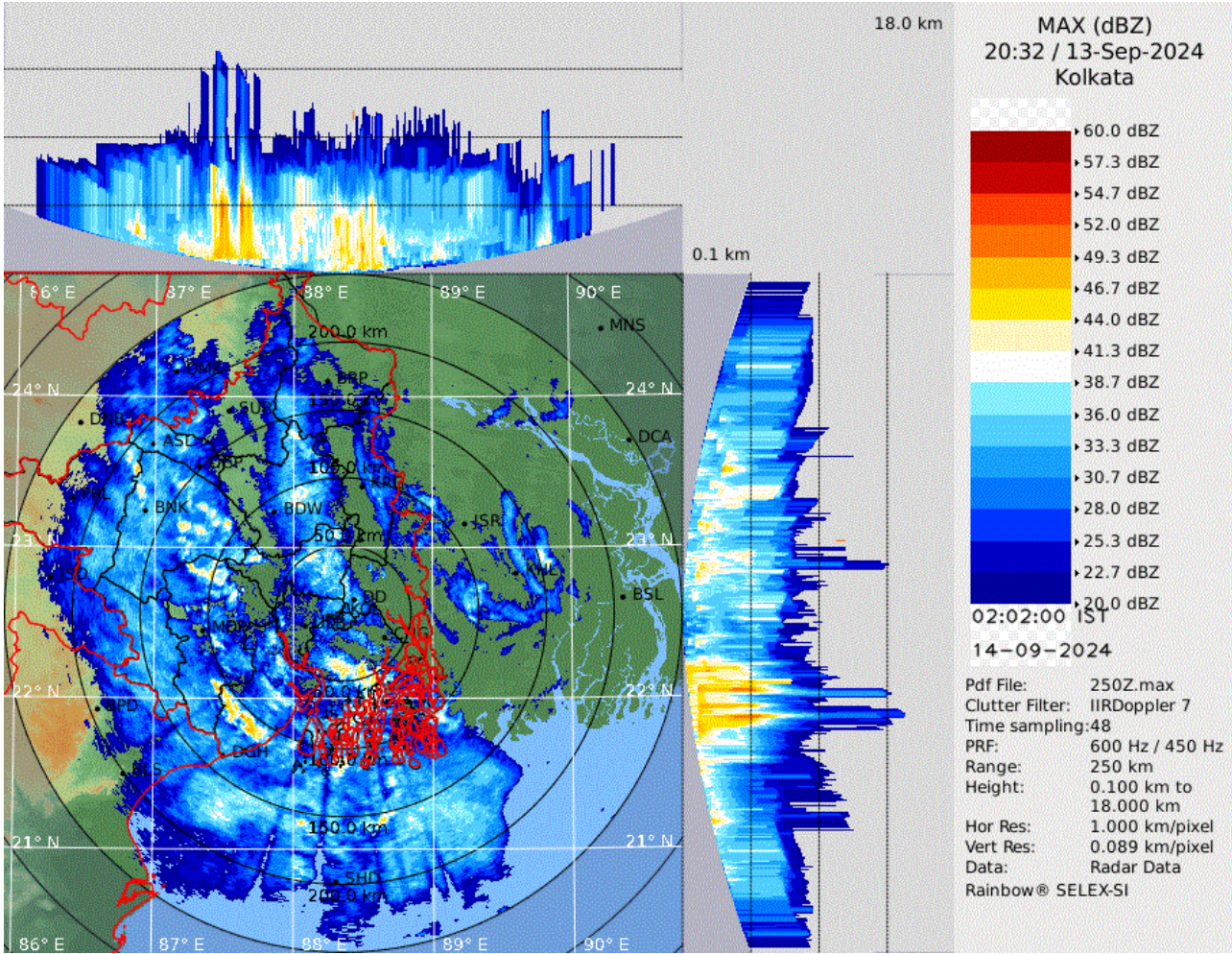
MOST OF THE NWP MODELS INDICATE THAT THE SYSTEM IS LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS COASTAL BANGLADESH AND GANGETIC WEST BENGAL DURING NEXT 48 HOURS.

DR SHASHI KANT
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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

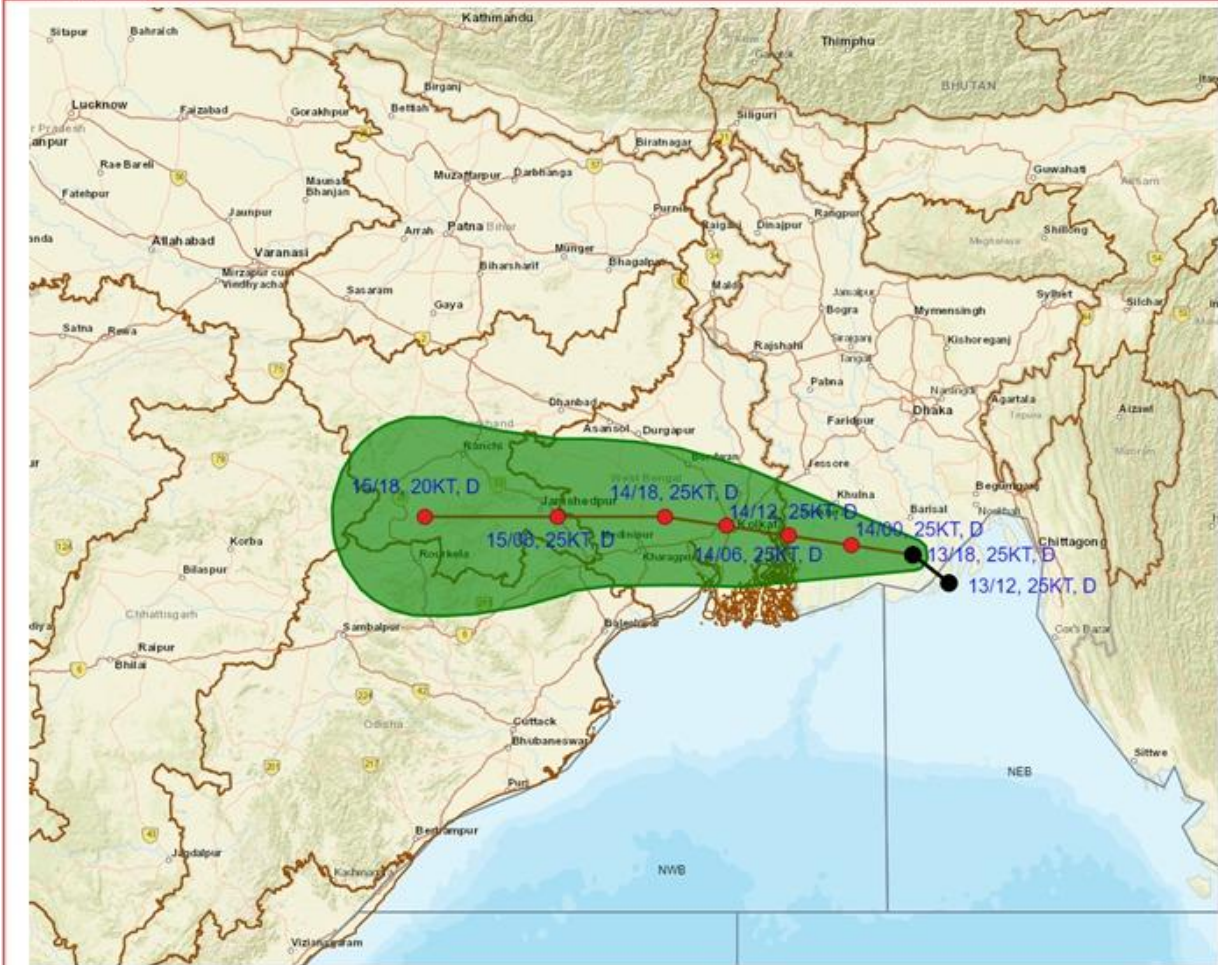
Kolkata Radar Image



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**OBSERVED AND FORECAST TRACK OF DEPRESSION OVER COASTAL BANGLADESH
BASED ON 1800 UTC (2330 IST) OF 13TH 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

Fishermen Warning Graphics

