



**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 1630 UTC OF 13.09.2024 BASED ON 1200 UTC OF 13.09.2024.

SUB:DEPRESSION OVER NORTHEAST BAY OF BENGAL CLOSE TO BANGLADESH COAST

THE WELL MARKED LOW PRESSURE AREA OVER NORTHEAST BAY OF BENGAL AND ADJOINING SOUTHEAST BANGLADESH COAST MOVED WEST-NORTHWESTWARDS, CONCENTRATED INTO A DEPRESSION AND LAY CENTRED AT 1200 UTC OF TODAY, THE 13TH SEPTEMBER, 2024 OVER NORTHEAST BAY OF BENGAL CLOSE TO BANGLADESH COAST, NEAR LATITUDE 22.0° N AND LONGITUDE 90.8° E, ABOUT 60 KM SOUTHEAST OF PATUAKHALI (41960, BANGLADESH), 220 KM EAST OF CANNING (42812, WEST BENGAL) AND 260 KM EAST-SOUTHEAST OF KOLKATA (42807, WEST BENGAL).

CONTINUING TO MOVE WEST-NORTHWESTWARDS, IT WILL CROSS BANGLADESH COAST NEAR PATUAKHALI TONIGHT. THEREAFTER, IT IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS ACROSS COASTAL BANGLADESH AND GANGETIC WEST BENGAL DURING SUBSEQUENT 48 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
13.09.24/1200	22.0/90.8	45-55 GUSTING TO 65	DEPRESSION
13.09.24/1800	22.1/90.2	45-55 GUSTING TO 65	DEPRESSION
14.09.24/0000	22.2/89.4	45-55 GUSTING TO 65	DEPRESSION
14.09.24/0600	22.4/88.8	45-55 GUSTING TO 65	DEPRESSION
14.09.24/1200	22.5/88.2	45-55 GUSTING TO 65	DEPRESSION
15.09.24/0000	22.5/87.5	40-50 GUSTING TO 60	DEPRESSION
15.09.24/1200	22.5/86.7	35-45 GUSTING TO 55	DEPRESSION

AT 1200 UTC, INTENSITY OF THE SYSTEM IS CHARACTERISED AS CI 1.5. AS PER INSAT 3DR IMAGERY AT 1200 UTC, ASSOCIATED SCATTERED TO BROKEN LOW & MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER EAST ODISHA, GANGETIC WEST BENGAL,

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

MEGHALAYA, BANGLADESH, NORTH ADJOINING CENTRAL BAY OF BENGAL, ARAKAN COAST, WEST MYANMAR (MINIMUM CTT MINUS 80-93⁰C) AND MODERATE TO INTENSE CONVECTION OVER MIZORAM AND TRIPURA (MINIMUM CTT MINUS 60-70⁰C)

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 1200 UTC, LOWEST MEAN SEA LEVEL PRESSURES (MSLP) WERE REPORTED AT PATUAKHALI (41960, BANGLADESH) 995.6 HPA; CANNING (42812, WEST BENGAL) 996.7 HPA AND KOLKATA-ALIPORE (42807, WEST BENGAL) 997.6 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 28-30⁰C 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 $20 \times 10^{-5} \text{ S}^{-1}$ AND UPPER LEVEL DIVERGENCE IS AROUND $20 \times 10^{-5} \text{ S}^{-1}$ 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 $200 \times 10^{-5} \text{ S}^{-1}$ OVER NORTH BAY OF BENGAL AND EXTENDS UP TO 200 HPA ($40 \times 10^{-5} \text{ S}^{-1}$).

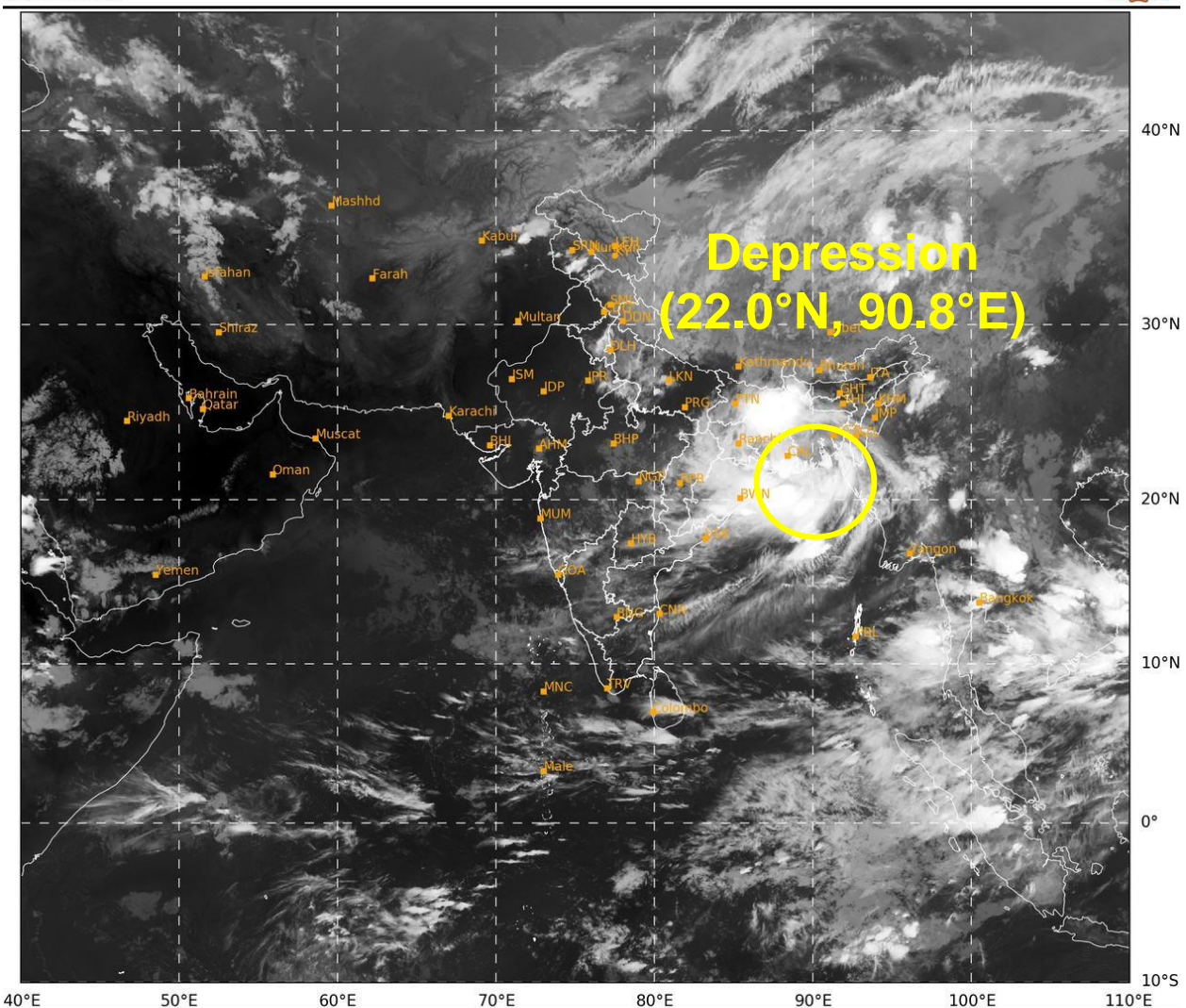
THE SYSTEM IS CURRENTLY IN THE ZONE OF LOW VERTICAL WIND SHEAR AND DUE TO ITS WEST-NORTHWESTWARD MOVEMENT; IT WOULD REMAIN IN THE LOW TO MODERATE SHEAR.

MOST OF THE NWP MODELS INDICATE WEST-NORTHWESTWARDS MOVEMENT AND CROSS BANGLADESH COAST NEAR PATUAKHALI AROUND 1800 UTC. THEREAFTER, IT IS LIKELY TO CONTINUE TO MOVE WEST-NORTHWESTWARDS ACROSS COASTAL BANGLADESH AND GANGETIC WEST BENGAL DURING SUBSEQUENT 48 HOURS.

DR RK JENAMANI
SC.-G, RSMC NEW DELHI

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

13-09-2024/(1545 to 1612) GMT
13-09-2024/(2115 to 2142) IST

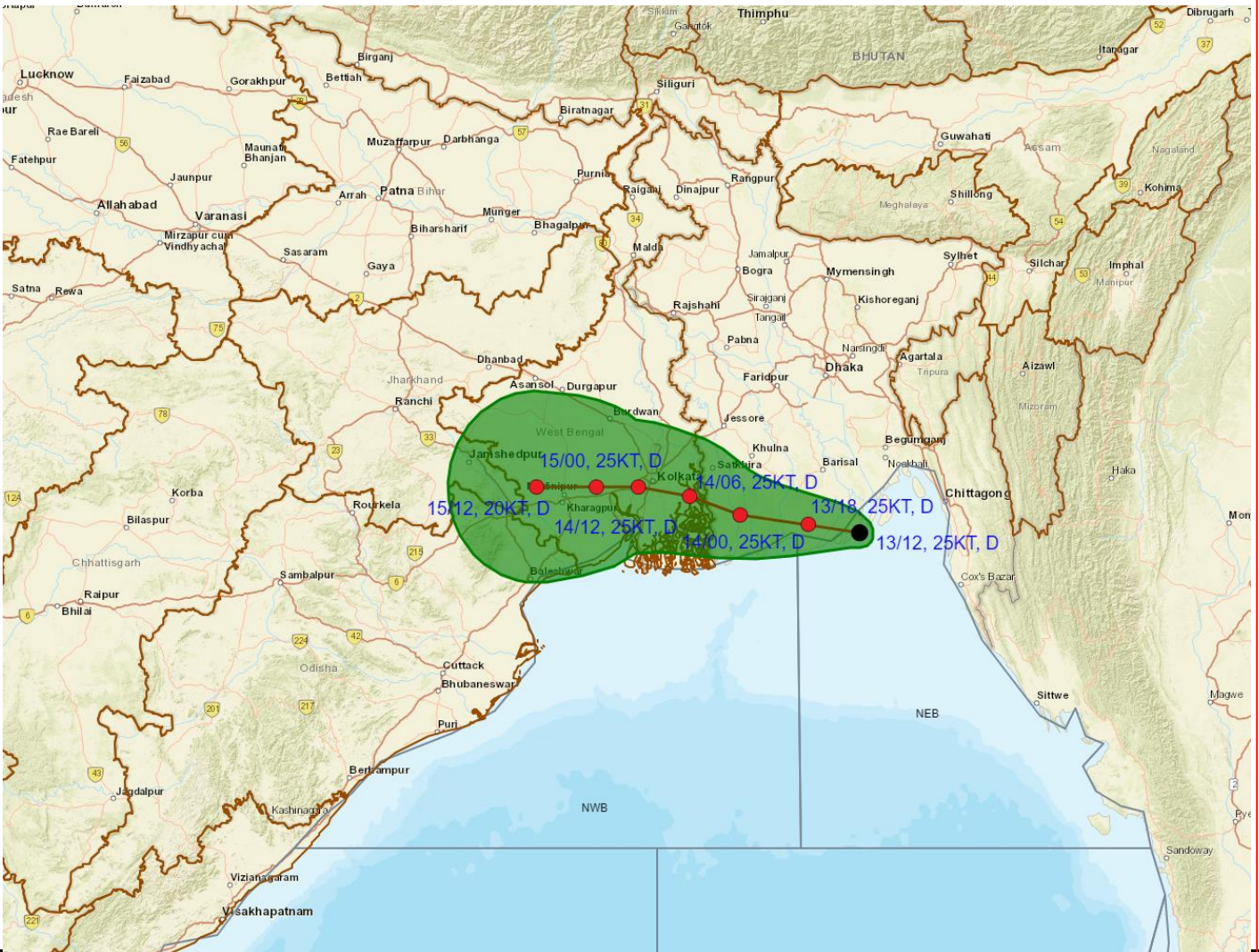


IMD, DELHI

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°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



OBSERVED AND FORECAST TRACK OF DEPRESSION OVER NORTHEAST BAY OF BENGAL CLOSE TO BANGLADESH COAST BASED ON 1200 UTC (1730 IST) OF 13TH SEPTEMBER, 2024.



Cloud distribution: (a) Isolated: <25%. Scattered:25-50%. Broken: 51-75%. Solid:>75%. Convection Intensity: (a) Weak: Cloud Top

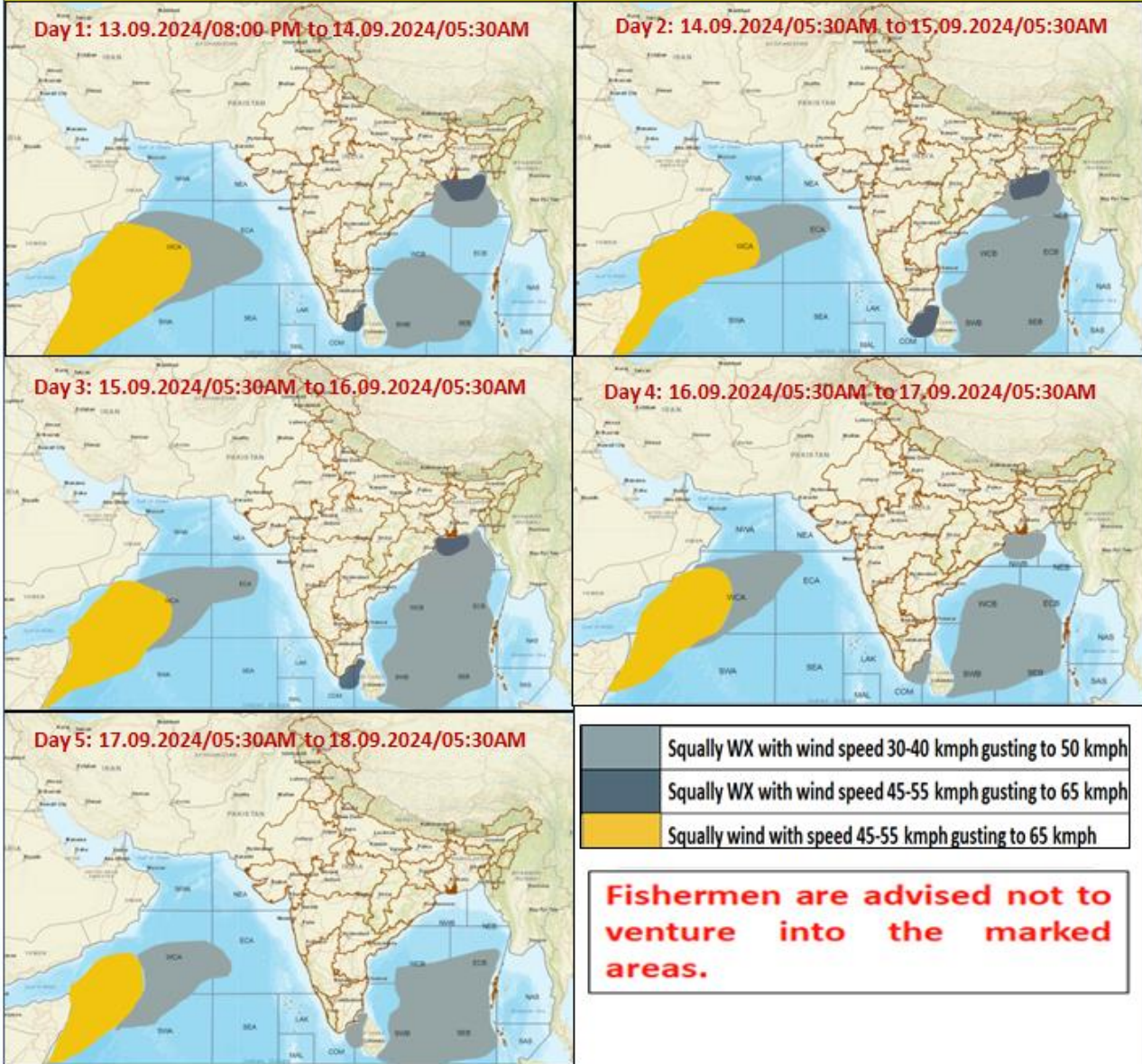
Tem DATE/TIME IN UTC
PRO IST=UTC + 0530

This L: LOW PRESSURE AREA
WML: WELL MARKED LOW PRESSURE AREA
D: DEPRESSION (17-27 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT

70°C
00%
tins

Fishermen Warning Graphics



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