



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

**DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 20.08.2022**

**TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0700 UTC OF 20.08.2022 BASED ON 0300 UTC OF 20.08.2022.**

**(A) DEEP DEPRESSION OVER SOUTH JHARKHAND AND ADJOINING NORTH ODISHA**

THE DEEP DEPRESSION OVER SOUTH JHARKHAND AND ADJOINING NORTH ODISHA & WEST BENGAL MOVED WEST-NORTHWESTWARDS DURING PAST 06 HOURS WITH A SPEED OF 15 KMPH AND LAY CENTERED AT 0300 UTC OF TODAY, THE 20TH AUGUST, 2022 OVER SOUTH JHARKHAND AND ADJOINING NORTH ODISHA NEAR LATITUDE 22.7°N AND LONGITUDE 85.6°E, ABOUT 60 KM WEST-SOUTHWEST OF JAMSHEDPUR (42798), ABOUT 70 KM SOUTH-SOUTHEAST OF RANCHI (42701), AND 170 KM EAST-NORTHEAST OF JHARSUGUDA (42886).

IT WOULD CONTINUE TO MOVE WEST-NORTHWESTWARDS ACROSS JHARKHAND AND NORTH CHHATTISGARH TOWARDS NORTH MADHYA PRADESH DURING NEXT 24 HOURS AND WEAKEN GRADUALLY.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

<b>DATE/TIME(UTC)</b>	<b>POSITION LAT. °N/ LONG. °E</b>	<b>MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)</b>	<b>CATEGORY OF CYCLONIC DISTURBANCE</b>
20.08.22/0300	22.7/85.6	50-60 GUSTING TO 70	DEEP DEPRESSION
20.08.22/0600	22.9/85.0	45-55 GUSTING TO 65	DEEP DEPRESSION
20.08.22/1200	23.3/83.8	45-55 GUSTING TO 65	DEEP DEPRESSION
20.08.22/1800	23.6/82.6	40-50 GUSTING TO 60	DEPRESSION
21.08.22/0000	23.8/81.2	40-50 GUSTING TO 60	DEPRESSION

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 30 KNOTS GUSTING TO 40 KNOTS. ESTIMATED CENTRAL PRESSURE IS ABOUT 992 HPA AROUND SYSTEM CENTRE OVER JHARKHAND. RANCHI REPORTED LOWEST MEAN SEA LEVEL PRESSURE OF 992.7 HPA.

AS PER INSAT 3D IMAGERY AT 0300 UTC . ASSOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED INTENCE TO VERY INTENCE CONVECTION OVER JHARKHAND AND ODISHA WEST GANGETIC WEST BENGAL. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 90°C.

**REMARKS:**

MADDEN JULIAN OSCILLATION (MJO) INDEX IS CRRENTLY IN PHASE 1 WITH AMPLITUDE MORE THAN 1. IT IS LIKELY TO CONTINUE IN SAME PHASE DURING NEXT 2-3 DAYS. LOW LEVEL RELATIVE VORTICITY IS AROUND  $150 \times 10^{-6} \text{ S}^{-1}$  AROUND SYSTEM CENTRE. LOW LEVEL CONVERGENCE IS ABOUT  $10 \times 10^{-5} \text{ S}^{-1}$  TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS ABOUT  $10 \times 10^{-5} \text{ S}^{-1}$  TO THE EAST OF THE SYSTEM CENTRE AS WELL AS OVER AN EXTENDED ZONE TOWARDS WEST AND ASSOCIATED WESTWARD

OUTFLOW IS PREVAILING IN UPPER LEVELS. VERTICAL WIND SHEAR IS AROUND 30 KNOTS NEAR THE SYSTEM CENTER AND HIGH ABOUT 30-40 KNOTS ALONG THE FORECAST TRACK.

MOST OF THE NUMERICAL MODELS INDICATE THAT THE SYSTEM WOULD MAINTAIN IT'S INTENSITY AND MOVE WEST-NORTHWESTWARDS DURING NEXT 24 HOURS.

IN VIEW OF ALL THE ABOVE, THE SYSTEM IS LIKELY CONTINUE TO MOVE WEST-NORTHWESTWARDS ACROSS JHARKHAND AND NORTH CHHATTISGARH TOWARDS NORTH MADHYA PRADESH DURING NEXT 24 HOURS AND WEAKEN GRADUALLY.

**(B) BAY OF BENGAL:**

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHWEST & SOUTHWEST BAY OF BENGAL OFF NORTH TAMILNADU COAST. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER CENTRAL AND ADJOINING SOUTH BAY OF BENGAL AND EAST ANDAMAN SEA.

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:**

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	NIL	NIL

**(C) ARABIAN SEA:**

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION LAY OVER NORTH ARABIAN SEA AND ISOLATED WEAK TO MODERATE CONVECTION LAY OVER REST LAKSHADWEEP ISLAND AREA AND COMORIN AREA.

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24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	NIL	NIL

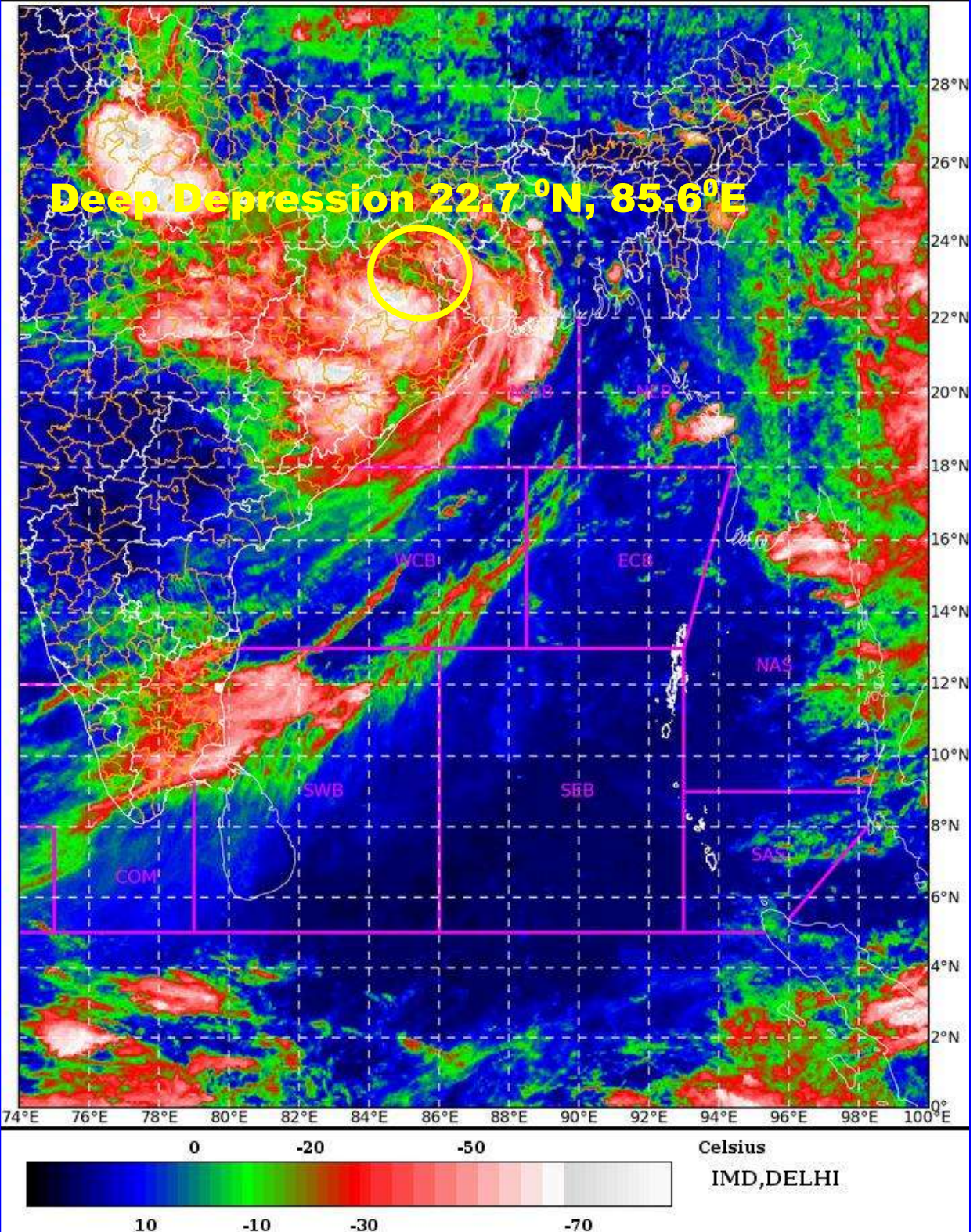
**(M. T. BUSHAIR)  
SCIENTIST-C  
RSMC NEW DELHI**



SAT : INSAT-3D IMG 20-08-2022/(0400 to 0426) GMT

IMG\_TIR1\_TEMP 10.8 um 20-08-2022/(0930 to 0956) IST

L1C Mercator



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 ALONGWITH CONE OF UNCERTAINTY OF DEEP DEPRESSION OVER SOUTH JHARKHAND AND ADJOINING NORTH ODISHA BASED ON 0300 UTC OF 20<sup>th</sup> AUGUST, 2022



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

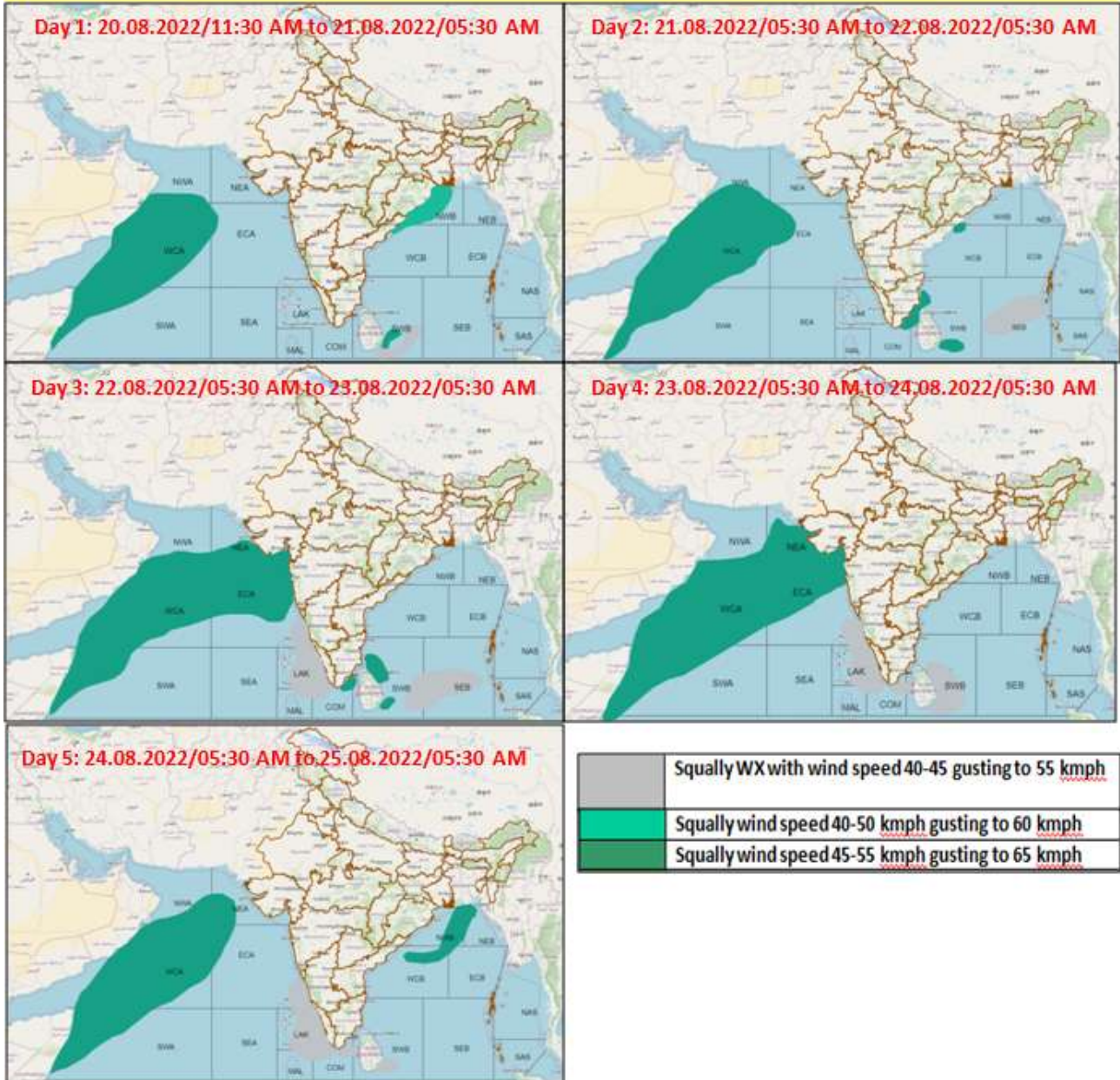
○ ≥ 48 KT

— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY

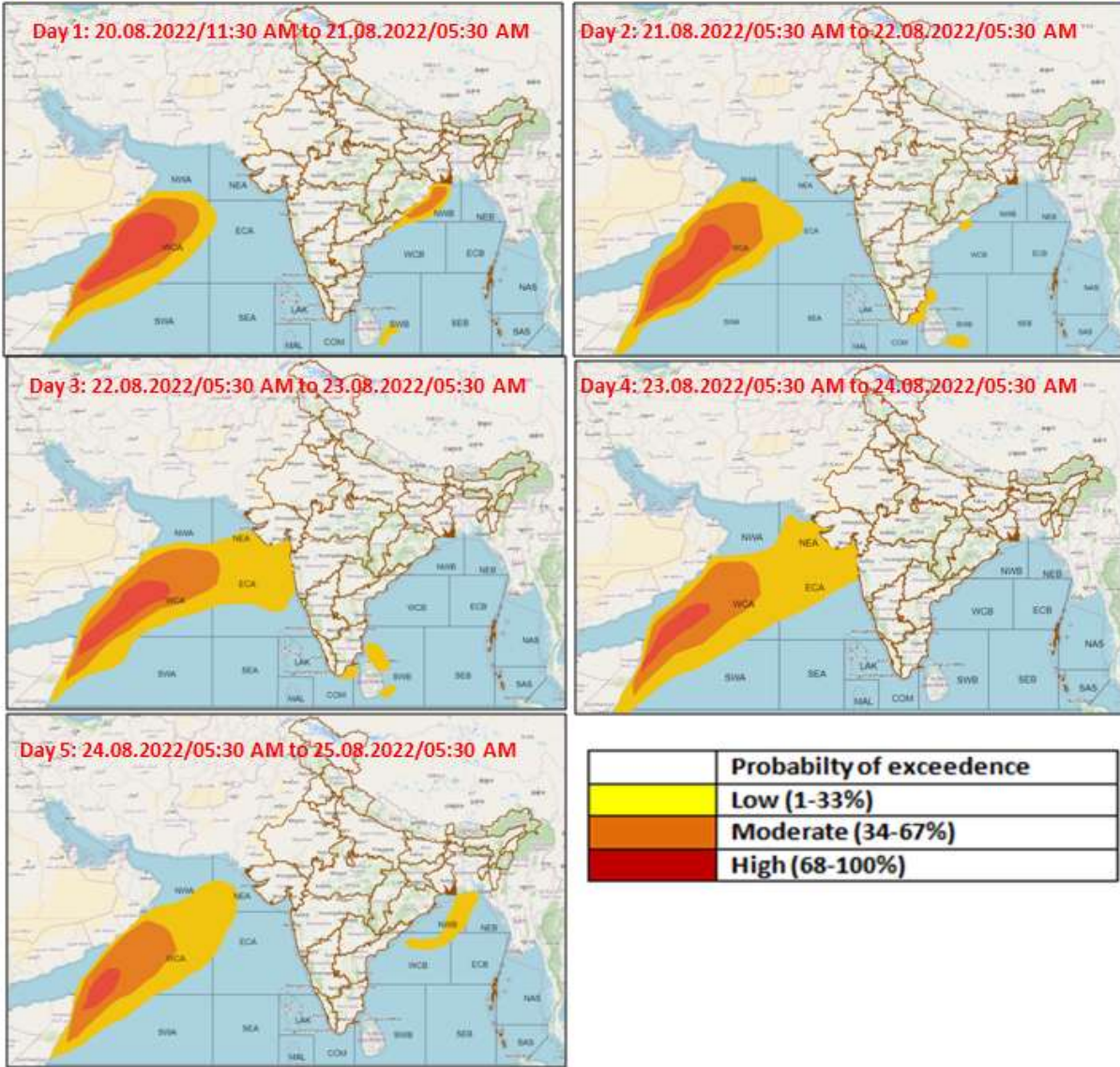
## Fishermen warning graphics



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## Probability of exceedance of maximum sustained winds $\geq 45$ kmph



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