



## REGIONALSPECIALISEDMETEOROLOGICALCENTRE-TROPICALCYCLONES, NEWDELHITROPICALWEATHEROUTLOOK

## **DEMS-RSMCSPECIAL TROPICAL CYCLONES NEW DELHI DATED 21.08.2022**

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL OF BENGAL ANDARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 21.08.2022 BASED ON 0300 UTC OF 21.08.2022.

## (A) DEEP DEPRESSION WEAKENED INTO A DEPRESSION OVER NORTHWEST CHATTISGARH AND ADJOINING NORTHEAST MADHYA PRADESH

YESTERDAY'S DEEP DEPRESSION OVER SOUTH JHARKHAND AND ADJOINING NORTH ODISHA MOVED WEST-NORTHWESTAWARDS, WEAKENED INTO A DEPRESSION OVER NORTHWEST CHHATTISGARH AND ADJOINING NORTHEAST MADHYA PRADESH & SOUTHEAST UTTAR PRADESH IN THE MORNING (0000 UTC) OF TAODAY, THE 21T AUGUST, 2022. CONTINUING TO MOVE FURTHER WEST-NORTHWESTWARDS IT LAY CENTERED AT 0300 UTC OF TODAY, THE 21<sup>ST</sup> AUGUST, 2022 OVER NORTHWEST CHHATISGARH AND ADJOINING NORTHEAST MADHYA PRADESH NEAR LATITUDE 23.8°N AND LONGITUDE 81.7°E, ABOUT 80 KM EAST-NORTHEAST OF UMARIA (42679), 120 KM SOUTHEAST OF SATNA (42571) AND 220 KM EAST OF DAMOH (42674).

IT WOULD CONTINUE TO MOVE WEST-NORTHWESTWARDS ACROSS NORTH MADHYA PRADESH AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 24 HOURS.

| DATE/TIME(UTC) | POSITION            | MAXIMUM SUSTAINED SURFACE | CATEGORY OF CYCLONIC |
|----------------|---------------------|---------------------------|----------------------|
|                | (LAT. ⁰N/ LONG. ⁰E) | WIND SPEED (KMPH)         | DISTURBANCE          |
| 21.08.22/0300  | 23.8/81.7           | 40-50 GUSTING TO 60       | DEPRESSION           |
| 21.08.22/0600  | 23.9/81.2           | 40-50 GUSTING TO 60       | DEPRESSION           |
| 21.08.22/1200  | 24.0/80.2           | 35-45 GUSTING TO 55       | DEPRESSION           |
| 21.08.22/1800  | 24.1/79.3           | 30-40 GUSTING TO 50       | DEPRESSION           |
| 22.08.22/0000  | 24.2/78.4           | 25-35 GUSTING TO 45       | WELL MARKED LOW      |

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. ESTIMATED CENTRAL PRESSURE IS ABOUT 994 HPA AROUND SYSTEM CENTRE. UMARIA (42679) REPORTED LOWEST MEAN SEA LEVEL PRESSURE OF 994.3 HPA.

AS PER INSAT 3D IMAGERY AT 0300 UTC.ASSOCIATEDSCATTERED TO BROKENLOW/MEDIUM CLOUDS WITH EMBEDDED INTENCE TO VERY INTENCE CONVECTION OVER MADHYA PRADESH MINIMUM CLOUD TOP TEMPERATURE IS MINUS 80°C AND MODERATE TO INTENSE CONVECTION OVER NORTH CHHATTISGARH AND SOUTH UTTAR PRADESH.

### **REMARKS**:

MADDEN JULIAN OSCILLATION (MJO) INDEX IS CRRENTLY IN PHASE 2 WITH AMPLITUDE CLOSE TO 1. IT IS LIKELY TO CONTINUE IN SAME PHASE DURING NEXT 3-4 DAYS. LOW LEVEL RELATIVE VORTICITY IS AROUND 150X10<sup>-6</sup> S<sup>-1</sup> AROUND SYSTEM CENTRE. LOW LEVEL CONVERGENCE IS ABOUT  $15X10^{-5}$  S<sup>-1</sup> TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS ABOUT  $10X10^{-5}$  S<sup>-1</sup> TO THE EAST OF THE SYSTEM CENTRE.

VERTICAL WIND SHEAR MODERATE (15-20 KNOTS) NEAR THE SYSTEM CENTER AND 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, CONTINUE TO MOVE WEST-NORTHWESTWARDS ACROSS NORTH MADHYA PRADESH AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA DURING NEXT 24 HOURS.

#### (B) BAY OF BENGAL:

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER WESTCENTRAL BAY OF BENGAL OFF SOUTH ANDHARA PRADESH COAST, SOUTHWEST BAY OF BENGAL OFF NORTH TAMILNADU COAST, NORTHEAST & EASTCENTRAL BAY OF BENGAL, NORTH ANDAMAN SEAAND TENASSERIM COAST.SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL, SOUTH ANDAMAN SEA, GULF OF MARTABAN & ARAKAN COAST AND ISOLATED WEAK TO MODERATE CONVECTION OVER REST BAY OF BENGAL.

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:

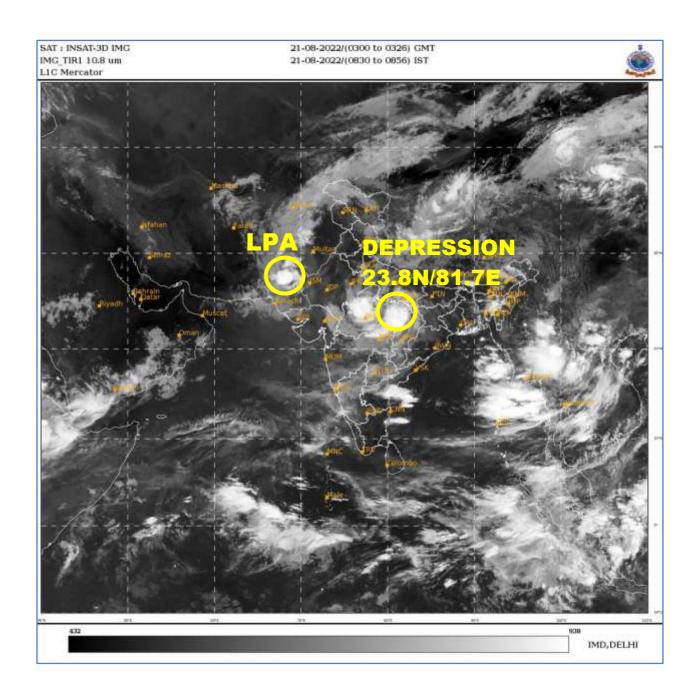
LOW PRESSURE AREA OVER SOUTH PAKISTAN PERSISTS. SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTH PAKISTAN. MINIMUM CLOUD TOP TEMPERATIRE IS -80°C.

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER EASTCENTRAL ARABIAN SEA ADJOINING SOUTH KARNATAKA COAST, SOUTH ARABIAN SEA, LAKSHADWEEP ISLAND AREA AND ISOLATED WEAK TO MODERATE CONVECTION LAY OVER REST ARABIAN SEA.

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

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|----------|-------------|-------------|-------------|--------------|
| NIL      | NIL         | NIL         | NIL         | NIL          |
|          |             |             |             |              |

(M. SHARMA) SCIENTIST-D RSMC NEW DELHI

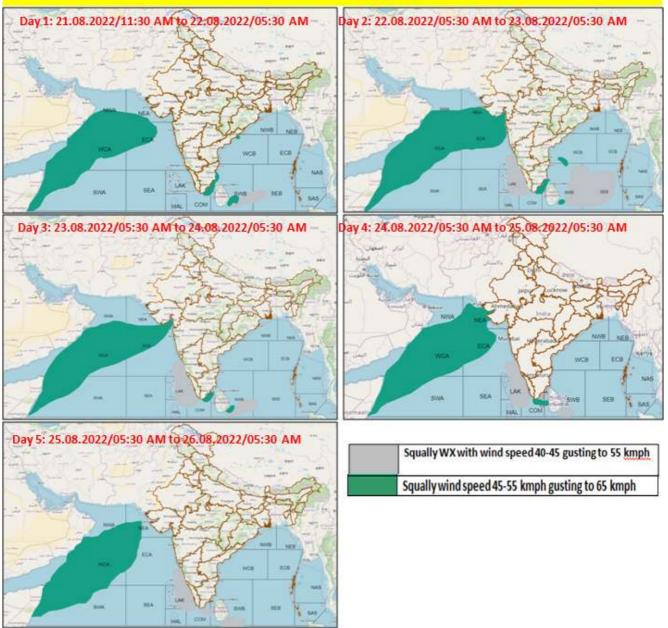


LPA: LOW PRESSURE AREA

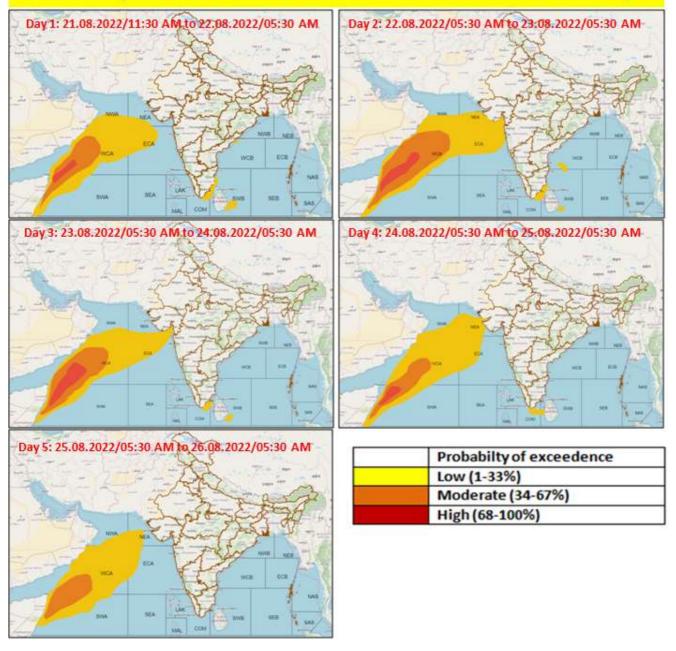


## OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER NORTHWEST CHHATISGARH AND ADJOINING NORTHEAST MADHYA PRADESH BASED ON 0300 UTC OF 21<sup>st</sup> AUGUST, 2022





# **Fishermen warning graphics**



# Probability of exceedance of maximum sustained winds ≥ 45 kmph