



# REGIONALSPECIALISEDMETEOROLOGICALCENTRE-TROPICAL CYCLONES,NEW DELHI TROPICALWEATHEROUTLOOK

**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 22.08.2022** 

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 22.08.2022 BASED ON 0300 UTC OF 22.08.2022.

# (A) DEPRESSION OVER NORTHWEST MADHYA PRADESH AND ADJOINING SOUTHWEST UTTAR PRADESH

THE DEPRESSION OVER NORTHEAST MADHYA PRADESH AND ADJOINING SOUTH UTTAR PRADESH MOVED NEARLY WESTWARDS DURING PAST 06 HOURS WITH A SPEED OF 15 KMPH AND LAY CENTERED AT 0300 UTC OF 22<sup>ND</sup> AUGUST, 2022 OVER NORTHWEST MADHYA PRADESH AND ADJOINING SOUTHWEST UTTAR PRADESH NEAR LATITUDE 24.3°N AND LONGITUDE 78.4°E, ABOUT 60 KM NORTH-NORTHWEST OF SAGAR (42671), 110 KM EAST-SOUTHEAST OF GUNA (42559) AND 120 KM SOUTH OF JHANSI (42463).

IT IS LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS ACROSS NORTHWEST MADHYA PRADESH TOWARDS EAST RAJASTHAN AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA BY TOMORROW MORNING.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT. <sup>0</sup> N/ LONG. <sup>0</sup> E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
22.08.22/0300	24.3/78.4	35-45 GUSTING TO 55	DEPRESSION
22.08.22/0600	24.3/77.8	35-45 GUSTING TO 55	DEPRESSION
22.08.22/1200	24.4/76.7	30-40 GUSTING TO 50	DEPRESSION
22.08.22/1800	24.5/75.7	30-40 GUSTING TO 50	DEPRESSION
23.08.22/0000	24.6/74.8	20-30 GUSTING TO 40	WELL MARKED LOW

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. ESTIMATED CENTRAL PRESSURE IS ABOUT 990 HPA AROUND SYSTEM CENTRE. SAGAR (42671) REPORTED LOWEST MEAN SEA LEVEL PRESSURE OF 989 HPA.

AS PER INSAT 3D IMAGERY AT 0300 UTC, ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER MADHYA PRADESH, ADJOINING SOUTHWEST UTTAR PRADESH & EAST RAJASTHAN. MINIMUM CLOUD TOP TEMPERATURE IS MINUS  $85^{\circ}$ C.

#### **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 150X10-6 S-1 AROUND SYSTEM CENTRE. LOW LEVEL CONVERGENCE IS ABOUT 20X10-5 S-1 TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS ABOUT 20X10-5 S-1 TO THE EAST OF THE SYSTEM CENTRE. VERTICAL WIND SHEAR MODERATE (10-15 KNOTS) NEAR THE SYSTEM CENTER AND ALONG THE FORECAST TRACK.

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

MOST OF THE NUMERICAL MODELS INDICATE THAT THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS AND WEAKEN GRADUALLY DURING NEXT 24 HOURS.

IN VIEW OF ALL THE ABOVE, THE DEPRESSION OVER NORTHWEST MADHYA PRADESH IS LIKELY TO MOVE NEARLY WEST-NORTHWESTWARDS TOWARDS EAST RAJASTHAN AND WEAKEN INTO A WELL MARKED LOW PRESSURE AREA BY TOMORROW MORNING.

#### (B)BAY OF BENGAL:

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHEAST & EASTCENTRALBAY OF BENGAL, NORTH ANDAMAN SEA AND TENASSERIM COAST. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER REST OF BAY OF BENGAL, SOUTH ANDAMAN SEA AND GULF OF MARTABAN.

#### 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:

YESTERDAY'S LOW PRESSURE AREA OVER SOUTH PAKISTAN LAY OVER SOUTHEAST PAKISTAN AND NEIGHBOURHOOD AT 0300 UTC OF TODAY, THE 22<sup>ND</sup> AUGUST, 2022.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTH PAKISTAN.

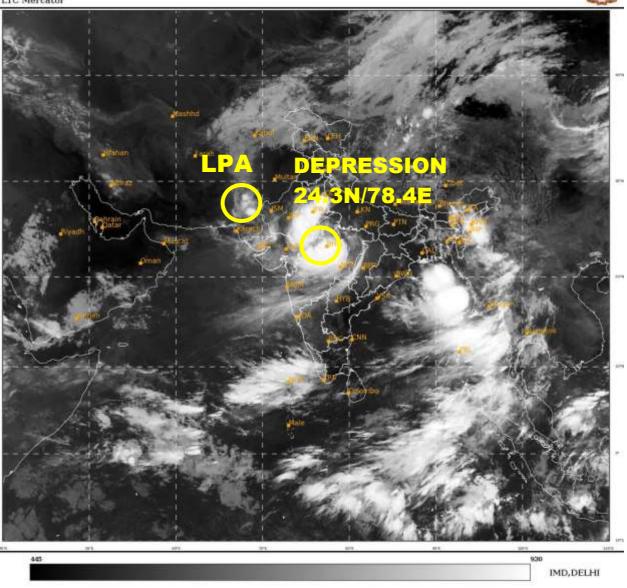
SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTH ARABIAN SEA AND LAKSHADWEEP ISLANDS AREA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED WEAK TO MODERATE CONVECTION LAY OVER NORTHEAST & EASTCENTRAL ARABIAN SEA.

#### 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

(M. SHARMA) SCIENTIST-D RSMC NEW DELHI

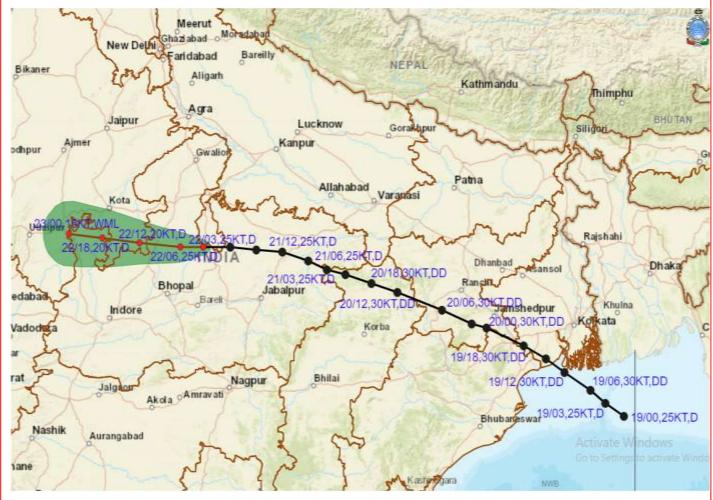




**LPA: LOW PRESSURE AREA** 



### OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER NORTHWEST MADHYA PRADESH AND ADJOINING SOUTHWEST UTTAR PRADESH BASED ON 0300 UTC OF 22st AUGUST. 2022



DATE/TIME IN UTC IST=UTC + 0530

L: LOW PRESSURE AREA

WML: WELL MARKED LOW PRESSURE AREA

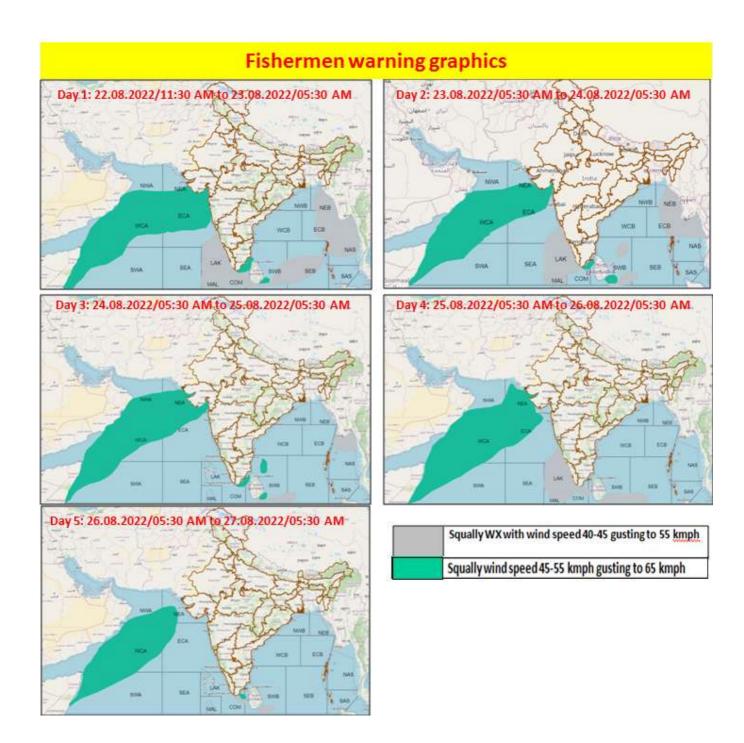
D: DEPRESSION (17-27 KT) DD: DEEP DEPRESSION (28-33 KT) CS: CYCLONIC STORM (34-47 KT)

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)





## Probability of exceedance of maximum sustained winds ≥ 45 kmph

