



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

### DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 26.08.2024

**SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 0700 UTC OF 26.08.2024 BASED ON 0300 UTC OF 26.08.2024.**

### LAND DEPRESSION OVER WEST INDIA:

#### SUB: DEEP DEPRESSION OVER EAST RAJASTHAN

THE DEEP DEPRESSION OVER EAST RAJASTHAN AND ADJOINING WEST MADHYA PRADESH MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF 8 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0300 UTC OF TODAY, THE 26<sup>TH</sup> AUGUST OVER EAST RAJASTHAN NEAR LATITUDE 24.1°N AND LONGITUDE 74.0°E, ABOUT 60 KM SOUTH-SOUTHEAST OF UDAIPUR (42543), 180 KM EAST OF DEESA (42539) AND 180 KM NORTHEAST OF AHMEDABAD (42647).

IT IS LIKELY TO CONTINUE TO MOVE SLOWLY WEST-SOUTHWESTWARDS ACROSS SOUTH RAJASTHAN AND GUJARAT REGION AND REACH SAURASHTRA & KUTCH AND ADJOINING AREAS OF PAKISTAN AND NORTHEAST ARABIAN SEA BY MORNING OF 29<sup>TH</sup> AUGUST.

BASED ON 0300 UTC INSAT 3DR IMAGERY, SCATTERED TO BROKEN LOW/ MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH RAJASTHAN, SOUTH WEST MADHYA PRADESH, NORTH MADHYA MAHARSHTRA AND ADJOINING NORTH KONKAN (MINIMUM CLOUD TOP TEMPERATURE (CTT) MINUS 93<sup>0</sup> C) AND MODERATE TO INTENSE CONVECTION LAY OVER NORTHEAST RAJASTHAN, NORTHWEST MADHYA PRADESH, SOUTH MADHYA MAHARASHTRA AND KONKAN & GOA (MINIMUM CTT MINUS 50<sup>0</sup>-60<sup>0</sup> C).

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 30 KTS GUSTING TO 40 KTS. ESTIMATED CENTRAL PRESSURE IS 993 HPA. AT 0300 UTC, UDAIPUR REPORTED MEAN SEA LEVEL PRESSURE OF 995.5 HPA & PRESSURE CHANGE IN 24 HOURS AS -5.0 HPA WITH DEPARTURE FROM NORMAL AS -8.5 HPA. AHMEDABAD REPORTED MEAN SEA LEVEL PRESSURE OF 996.1 HPA & PRESSURE CHANGE IN 24 HOURS AS -6.1 HPA WITH DEPARTURE FROM NORMAL AS -9.3 HPA. DEESA REPORTED MEAN SEA LEVEL PRESSURE OF 996.4 HPA & PRESSURE CHANGE IN 24 HOURS AS -5.8 HPA WITH DEPARTURE FROM NORMAL AS -8.3 HPA.

## ARABIAN SEA:

### (I) SEA CONDITION AND ADVISORY FOR FISHERMEN IN ASSOCIATION WITH THE MOVEMENT OF THE SYSTEM OVER SAURASHTRA & KUTCH AND ADJOINING PAKISTAN AND NORTHEAST ARABIAN SEA FROM INDIA AROUND 29<sup>TH</sup> AUGUST:

- SQUALLY WEATHER WITH WIND SPEED REACHING 30-40 KMPH GUSTING TO 50 KMPH IS LIKELY OVER NORTHEAST ARABIAN SEA & ADJOINING EASTCENTRAL ARABIAN SEA AND ALONG & OFF GUJARAT & ADJOINING PAKISTAN & MAHARASHTRA COASTS TILL 27<sup>TH</sup> AUGUST. THE WIND SPEED WOULD GRADUALLY INCREASE THEREAFTER BECOMING 55-65 KMPH GUSTING TO 75 KMPH OVER THESE REGIONS ON 29<sup>TH</sup> & 30<sup>TH</sup> AUGUST. ROUGH TO VERY ROUGH SEA CONDITIONS IS VERY LIKELY TO PREVAIL ALONG & OFF PAKISTAN, GUJARAT & NORTH MAHARASHTRA COASTS AND NORTHEAST & ADJOINING EASTCENTRAL ARABIAN SEA TILL 30<sup>TH</sup> AUGUST.
- FISHERMEN ARE ADVISED NOT TO VENTURE INTO NORTHEAST & ADJOINING EASTCENTRAL ARABIAN SEA AND ALONG & OFF PAKISTAN, GUJARAT & NORTH MAHARASHTRA COASTS TILL 30<sup>TH</sup> AUGUST.

### (II) CLOUDS ASSOCIATED WITH ARABIAN SEA:

SCATTERED LOW TO MEDIUM CLOUDS WITH INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTHEAST ARABIAN SEA OFF GUJARAT COAST, GULF OF KUTCH AND GULF OF CAMBAY. SCATTERED LOW TO MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTH WEST ARABIAN SEA AND WEAK TO MODERATE CONVECTION OVER REST OF THE ARABIAN SEA AREA, LAKHSHADWEEP ISLANDS, MALDIVES AND COMORIN AREA.

### \*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS OVER ARABIAN SEA:

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	MOD	HIGH	HIGH	-

\*NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY

## BAY OF BENGAL:

### SUB: WELL MARKED LOW PRESSURE AREA OVER GANGETIC WEST BENGAL AND ADJOINING BANGLADESH

THE WELL MARKED LOW PRESSURE AREA OVER GANGETIC WEST BENGAL MOVED WEST-NORTHWESTWARDS AND LAY OVER THE SAME REGION AT 0300 UTC OF TODAY, THE 26<sup>TH</sup> AUGUST 2024. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS ACROSS GANGETIC WEST BENGAL, JHARKHAND AND ADJOINING NORTH ODISHA DURING NEXT 2 DAYS.

ASSOCIATED SCATTERED TO BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER ODISHA, GANGETIC WEST BENGAL, BANGLADESH AND NORTH BAY OF BENGAL (MINIMUM CTT MINUS 93 DEG CEL) AND MODERATE TO INTENSE CONVECTION OVER EAST JHARKHAND.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 10-15 KTS. ESTIMATED CENTRAL PRESSURE IS 998 HPA.

### SEA CONDITION AND ADVISORY FOR FISHERMEN:

- SQUALLY WEATHER WITH WIND SPEED REACHING 30-40 KMPH GUSTING 50 KMPH AND ROUGH SEA CONDITION IS VERY LIKELY TO PREVAIL OVER NORTH BAY OF

BENGAL AND ALONG & OFF NORTH ODISHA, WEST BENGAL, BANGLADESH COASTS ON 26<sup>TH</sup> AUGUST.

- FISHERMEN ARE ADVISED NOT TO VENTURE INTO NORTH BAY OF BENGAL AND ALONG & OFF NORTH ODISHA, WEST BENGAL, BANGLADESH COASTS ON 26<sup>TH</sup> AUGUST.

**\*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:**

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS	120-144 HOURS	144-168 HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

**\*NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY**

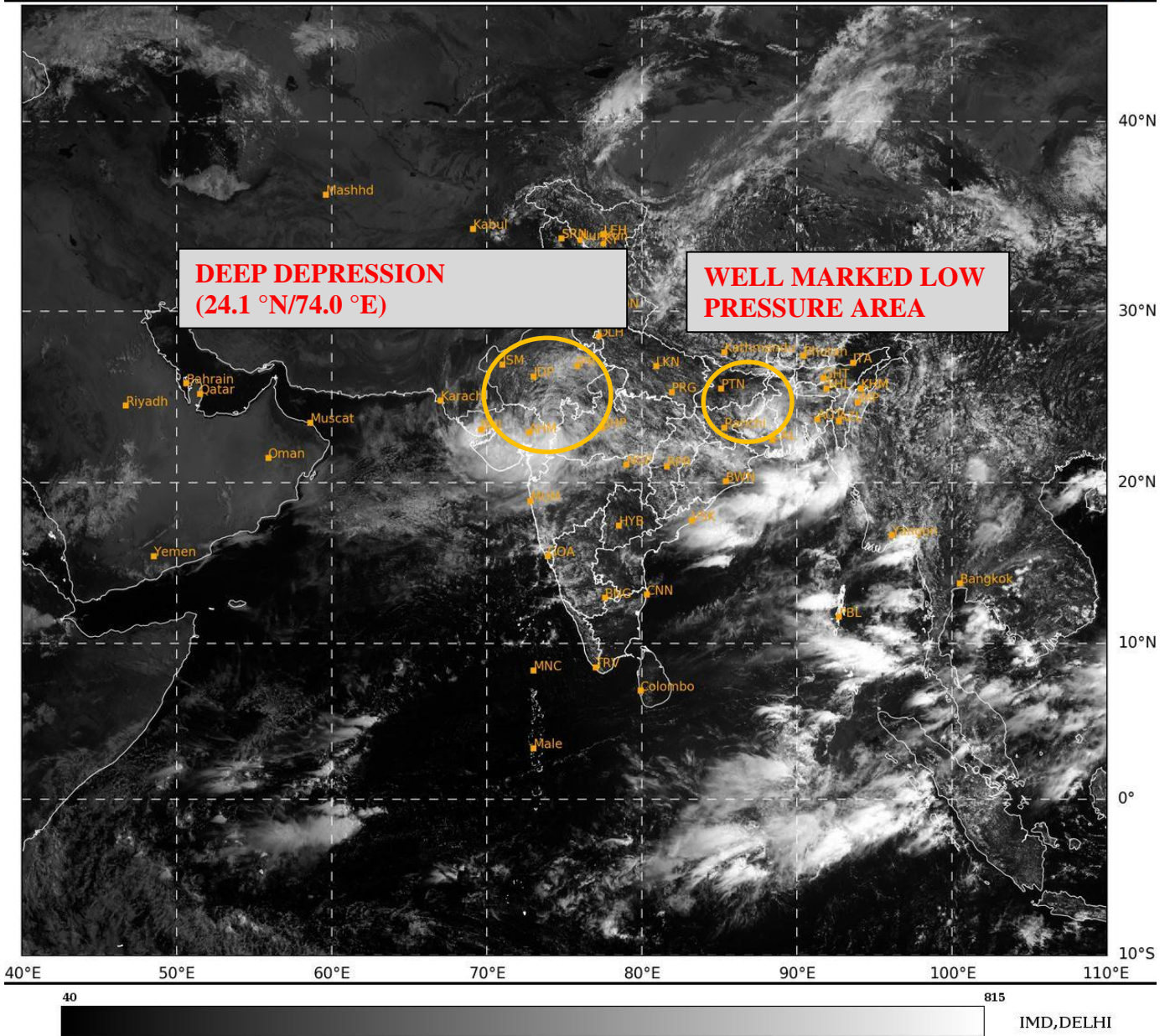
**REMARKS:**

THE MADDEN JULIAN OSCILLATION (MJO) INDEX CURRENTLY LIES IN PHASE 3 WITH AN AMPLITUDE GREATER THAN 1. IT IS LIKELY TO MOVE EASTWARDS ACROSS PHASE 3 AND 4 WITH AMPLITUDE REMAINING CLOSE TO 1 DURING NEXT 5 DAYS. THE NCICS FORECASTS INDICATE SIGNIFICANT PRESENCE OF CONVECTIVELY COUPLED EQUATORIAL ROSSBY WAVES (ERW) PROPAGATING WESTWARDS STARTING FROM SOUTH CHINA SEA AND BOB TO SOUTHEAST AND EASTCENTRAL DURING NEXT 5 DAYS. THE WEAK WESTERLY WINDS (1-3 MPS) ARE LIKELY OVER SOUTHERN AND ADJOINING CENTRAL PARTS OF ARABIAN SEA AND BAY OF BENGAL DURING NEXT FIVE DAYS. THE EASTWARD-MOVING KELVIN WAVES (KW) ARE ALSO LIKELY OVER NORTHERN PARTS OF ARABIAN SEA AND SOUTH BAY OF BENGAL DURING NEXT FIVE DAYS. THE LOW LEVEL CONVERGENCE HAS INCREASED AND IS AROUND  $20 \times 10^{-5} \text{ S}^{-1}$  TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND  $30 \times 10^{-5} \text{ S}^{-1}$  TO THE SOUTH WEST OF SYSTEM CENTRE EXTENDING UPTO EASTCENTRAL ARABIAN SEA. THE WIND SHEAR IS MODERATE OVER THE SYSTEM AREA. VORTICITY AT 850 HPA LEVEL IS AROUND  $100 \times 10^{-5} \text{ S}^{-1}$  NEAR THE SYSTEM AREA EXTENDING UP TO 200 HPA. FAVORABLE MJO, PRESENCE OF EQUATORIAL WAVES, MOISTURE FEEDBACK FROM ARABIAN SEA MODERATE WIND SHEAR.

MOST OF THE NUMERICAL WEATHER PREDICTION MODELS (IMD GFS, NCEP GFS, GEFS, ECMWF, AND NCUM) INDICATE THAT THE EXISTING DEEP DEPRESSION OVER EAST RAJASTHAN WOULD MOVE WEST-SOUTHWESTWARDS ACROSS RAJASTHAN AND GUJARAT. THERE IS A CONSENSUS AMONG VARIOUS MODELS THAT THE SYSTEM WOULD PERSIST OVER SAURASHTRA & KUTCH REGION DURING 28<sup>TH</sup> TO 30<sup>TH</sup> AUGUST. THERE IS ALSO VARIATION AMONG MODELS WRT INTENSIFICATION OF SYSTEM WITH GFS & NCUM GROUP SHOWING HIGHER INTENSIFICATION UPTO VERY SEVERE CYCLONIC STORM CATEGORY AND ECMWF IS SHOWING INTENSIFICATION UPTO MARGINAL CYCLONIC STORM. WITH RESPECT TO BAY OF BENGAL SYSTEM MODELS ARE NOT INDICATING SIGNIFICANT INTENSIFICATION AND THERE IS ALSO CONSENSUS AMONG MODELS REGARDING WEST NORTH WEST WARD MOVEMENT OF THE SYSTEM.

CONSIDERING ALL THE ABOVE, IT IS INFERRED THAT THE DEEP DEPRESSION OVER EAST RAJASTHAN AND ADJOINING WEST MADHYA PRADESH WOULD GRADUALLY MOVE TOWARDS SAURASHTRA & KUTCH AND ADJOINING PAKISTAN AND NORTHEAST ARABIAN SEA AROUND 0000 UTC OF 29TH AUGUST.

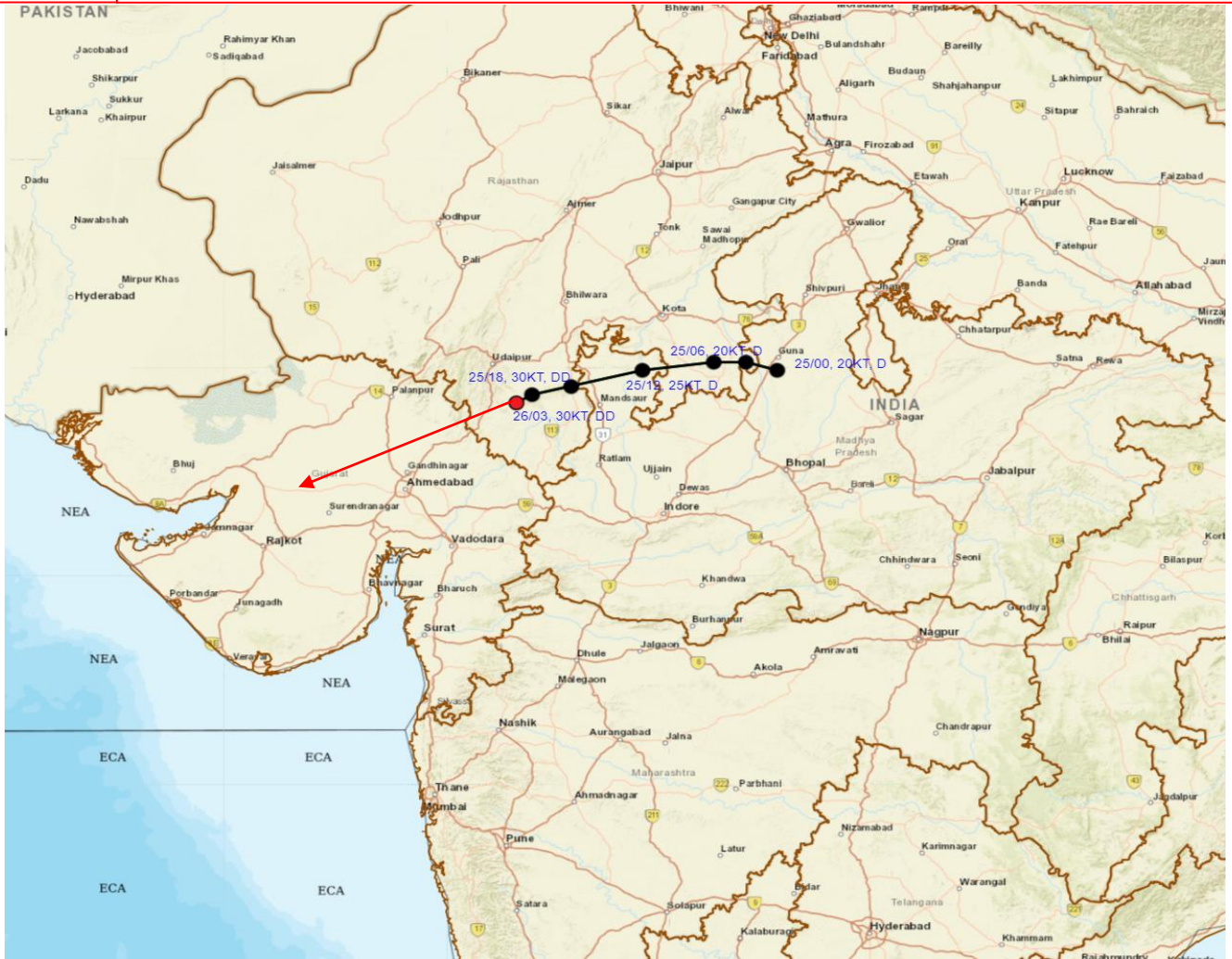
(M SHARMA)  
RSMC NEW DELHI



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 DEEP DEPRESSION OVER EAST RAJASTHAN BASED ON 0300 UTC (0830 IST) OF 26<sup>TH</sup> AUGUST, 2024.

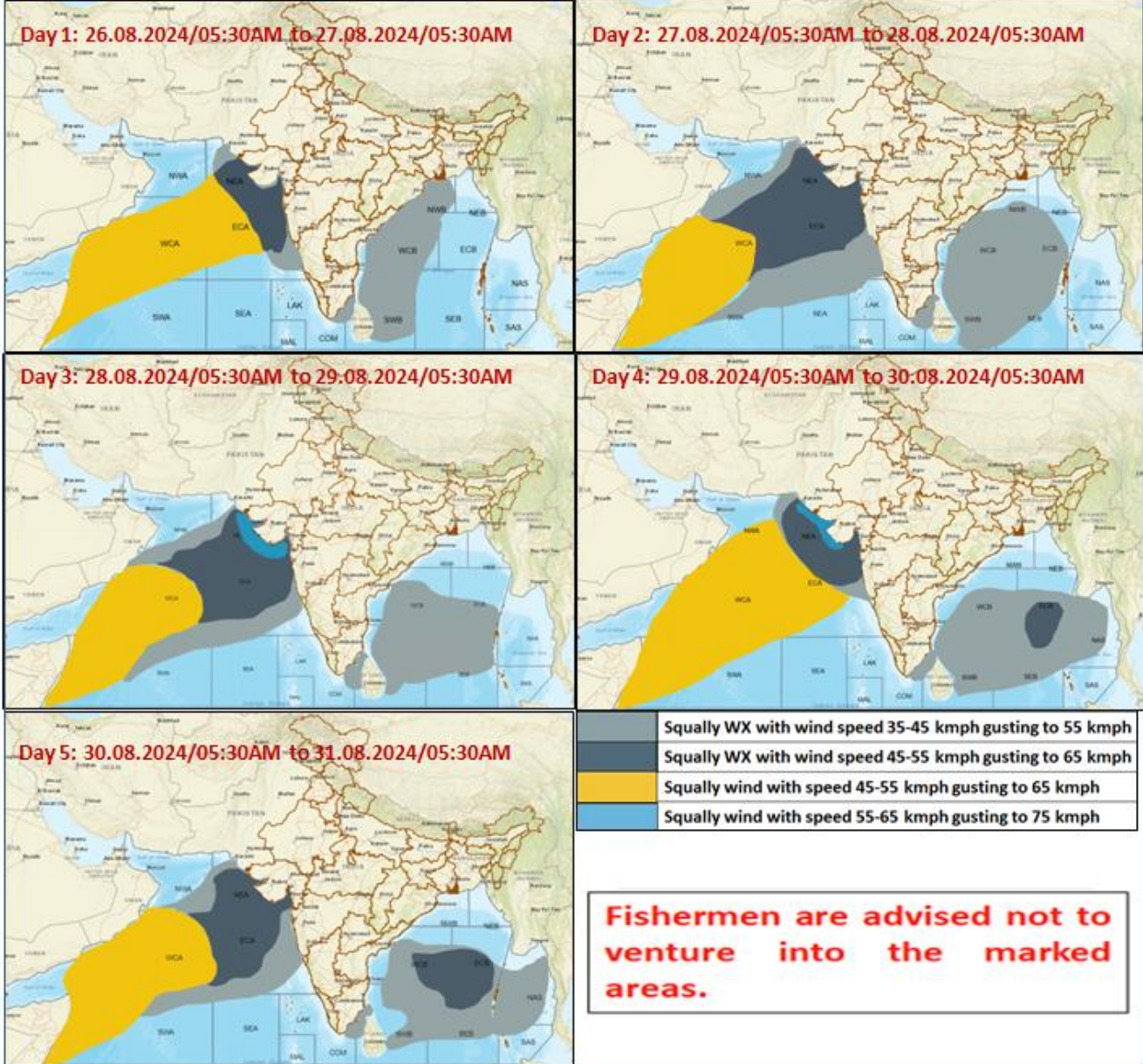


**DATE/TIME IN UTC**  
**IST=UTC + 0530**  
**L: LOW PRESSURE AREA**  
**WML: WELL MARKED LOW PRESSURE AREA**  
**D: DEPRESSION (17-27 KT)**  
**DD: DEEP DEPRESSION (28-33 KT)**  
**CS: CYCLONIC STORM (34-47 KT)**  
**SCS: SEVERE CYCLONIC STORM (48-63KT)**  
**VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)**  
**ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)**  
**SuCS: SUPER CYCLONIC STORM ( $\geq$  120 KT)**

- LESS THAN 34 KT
- 34-47 KT
- $\geq$  48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

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## Fishermen Warning Graphics



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