



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 0930 UTC OF 26.08.2024 BASED ON 0600 UTC OF 26.08.2024.

LAND DEPRESSION OVER WEST INDIA:

SUB: DEEP DEPRESSION OVER SOUTHEAST RAJASTHAN AND ADJOINING NORTH GUJARAT

THE DEEP DEPRESSION OVER EAST RAJASTHAN MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF 12 KMPH DURING PAST 6 HOURS AND LAY CENTERED AT 0600 UTC OF TODAY, THE 26TH AUGUST OVER EAST RAJASTHAN NEAR LATITUDE 23.8°N AND LONGITUDE 73.6 °E, ABOUT 90 KM SOUTH OF UDAIPUR (42543), 150 KM EAST-SOUTHEAST OF DEESA (42539) AND 130 KM NORTHEAST OF AHMEDABAD (42647).

IT IS LIKELY TO CONTINUE TO MOVE SLOWLY WEST-SOUTHWESTWARDS ACROSS GUJARAT REGION AND REACH SAURASHTRA & KUTCH AND ADJOINING AREAS OF PAKISTAN AND NORTHEAST ARABIAN SEA BY 0000 UTC OF 29TH AUGUST.

BASED ON 0600 UTC INSAT 3DR IMAGERY, SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST RAJASTHAN AND GUJARAT (MINIMUM CLOUD TOP TEMPERATURE (CTT) MINUS 93⁰ C) AND MODERATE TO INTENSE CONVECTION LAY OVER SOUTHWEST MADHYA PRADESH, NORTH MADHYA MAHARASHTRA AND ADJOINING NORTH KARNATAKA.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 30 KTS GUSTING TO 40 KTS. ESTIMATED CENTRAL PRESSURE IS 993 HPA. AT 0600 UTC, UDAIPUR REPORTED MEAN SEA LEVEL PRESSURE OF 996.7 HPA & PRESSURE CHANGE IN 24 HOURS AS -2.6 HPA. AHMEDABAD REPORTED MEAN SEA LEVEL PRESSURE OF 995.7 HPA & PRESSURE CHANGE IN 24 HOURS AS -6.4 HPA. DEESA REPORTED MEAN SEA LEVEL PRESSURE OF 996.3 HPA & PRESSURE CHANGE IN 24 HOURS AS -5.3 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 29TH 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

27TH AUGUST. THE WIND SPEED WOULD GRADUALLY INCREASE THEREAFTER BECOMING 55-65 KMPH GUSTING TO 75 KMPH OVER THESE REGIONS ON 29TH & 30TH 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 30TH AUGUST.

- FISHERMEN ARE ADVISED NOT TO VENTURE INTO NORTHEAST & ADJOINING EASTCENTRAL ARABIAN SEA AND ALONG & OFF PAKISTAN, GUJARAT & NORTH MAHARASHTRA COASTS TILL 30TH AUGUST.

(II) CLOUDS ASSOCIATED WITH ARABIAN SEA:

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

THE WELL MARKED LOW PRESSURE AREA OVER GANGETIC WEST BENGAL MOVED WEST-NORTHWESTWARDS AND LAY OVER THE SAME REGION AT 0600 UTC OF TODAY, THE 26TH 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 LAY OVER GANGETIC WEST BENGAL, BANGLADESH AND NORTH BAY OF BENGAL (MINIMUM CTT MINUS 93 DEG CEL) AND MODERATE TO INTENSE CONVECTION LAY OVER NORTHEAST ODISHA, EAST JHARKHAND ANND SOUTH SUB-HIMALAYAN WEST BENGAL.

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

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

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

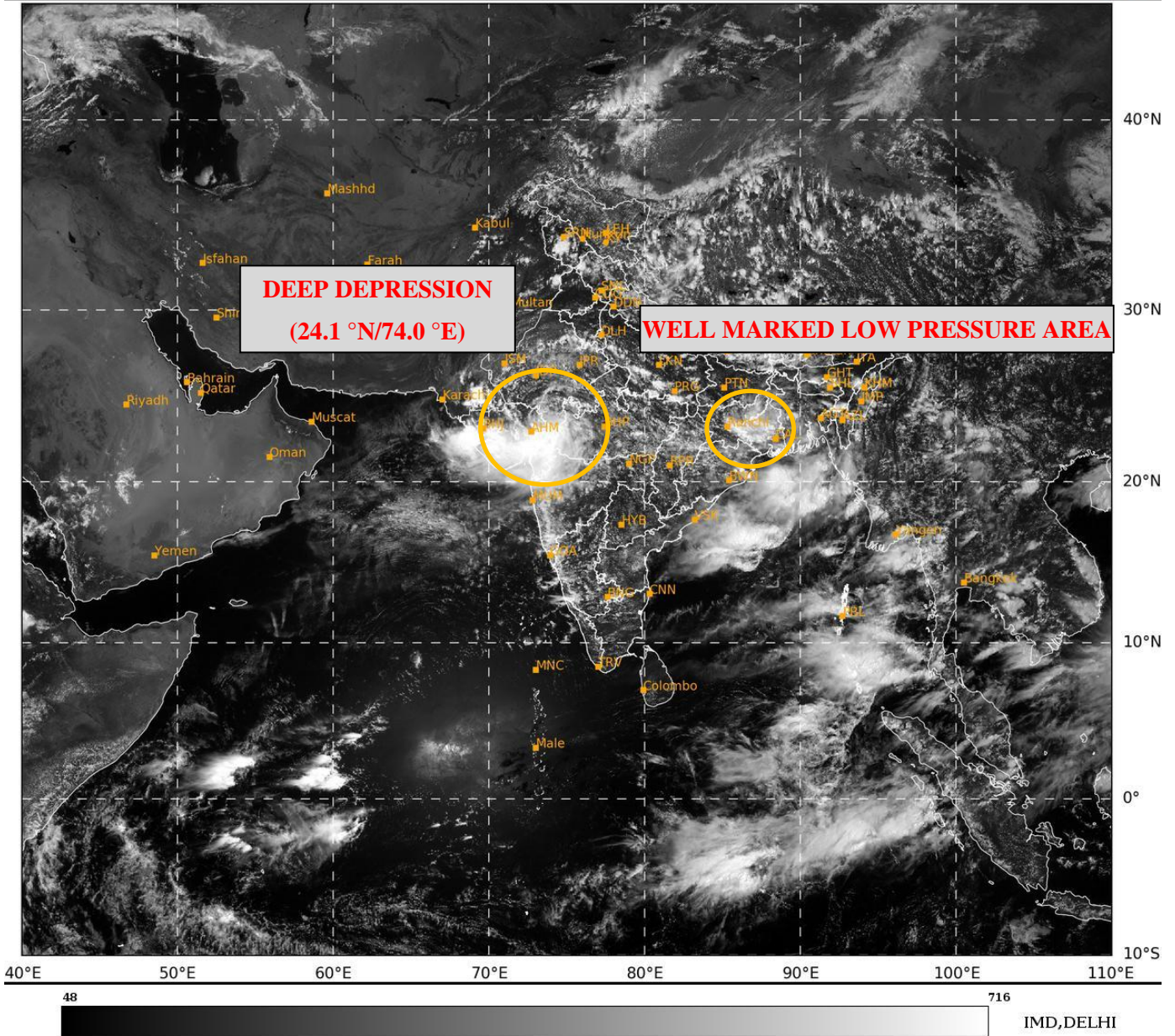
REMARKS:

THE MADDEN JULIAN OSCILLATION (MJO) INDEX CURRENTLY LIES IN PHASE 4 WITH AMPLITUDE GREATER THAN 1. IT IS LIKELY TO MOVE ACROSS PHASE 4 AND 5 WITH AMPLITUDE REMAINING MORE THAN 1 DURING NEXT 5 DAYS. THE NCICS FORECASTS INDICATE SIGNIFICANT PRESENCE OF CONVECTIVELY COUPLED EQUATORIAL ROSSBY WAVES (ERW) PROPAGATING WESTWARDS STARTING FROM BOB,CENTRAL INDIA AND CENTRAL ARABIAN SEA DURING NEXT 5 DAYS. THE WESTERLY WINDS (5-7 MPS) ARE LIKELY OVER THE SAME REGION AND STRONG EASTERLIES (5-7 MPS) OVER THE NORTHWESTERN PARTS OF INDIA AND NORTHEAST ARABIAN SEA DURING NEXT FIVE DAYS. THE EASTWARD-MOVING KELVIN WAVES (KW) ARE ALSO LIKELY OVER SOUTHEAST ARABIAN SEA. ALL THESE FETRUES INDICATE VERY FAVOURABLE ENVIRONMENT FOR INTENSIFICATION OF THE DEEP DEPRESSION OVER RAJASTHAN. THE LOW LEVEL CONVERGENCE IS AROUND $20 \times 10^{-5} \text{ S}^{-1}$ AROUND THE SYSTEM AREA. UPPER LEVEL DIVERGENCE HAS DECREASED AND IS AROUND $20 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTH WEST OF SYSTEM CENTRE EXTENDING UPTO EASTCENTRAL ARABIAN SEA. THE WIND SHEAR IS LOW TO MODERATE OVER THE SYSTEM AREA. VORTICITY AT 850 HPA LEVEL IS AROUND $180 \times 10^{-5} \text{ S}^{-1}$ NEAR THE SYSTEM AREA EXTENDING UP TO 200 HPA. FAVORABLE MJO, PRESENCE OF EQUATORIAL WAVES, MOISTURE FEEDBACK FROM ARABIAN SEA AND LOW TO 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 28TH TO 30TH 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 SOUTHEAST RAJASTHAN AND ADJOINING NORTH GUJARAT WOULD GRADUALLY MOVE WEST-SOUTHWESTWARDS ACROSS GUJARAT REGION AND REACH SAURASHTRA & KUTCH AND ADJOINING AREAS OF PAKISTAN AND NORTHEAST ARABIAN SEA BY 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 SOUTHEAST RAJASTHAN AND ADJOINING GUJARAT BASED ON 0600 UTC (1130 IST) OF 26TH 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 (≥ 120 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

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

Fishermen Warning Graphics

