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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 13.09.2024

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 168 HOURS ISSUED AT 0730 UTC OF 13.09.2024 BASED ON 0300 UTC OF 13.09.2024.

SUB: (A) WELL MARKED LOW PRESSURE AREA OVER NORTHWEST UTTAR PRADESH & NEIGHBORHOOD
(B) WELL MARKED LOW PRESSURE AREA OVER NORTHEAST BAY OF BENGAL AND ADJOINING SOUTHEAST BANGLADESH COAST

(A) WELL MARKED LOW PRESSURE AREA OVER NORTHWEST UTTAR PRADESH & NEIGHBORHOOD

THE DEPRESSION OVER CENTRAL UTTAR PRADESH MOVED NORTH-NORTHWESTWARDS DURING PAST 6 HOURS AND WEAKENED INTO A WELL MARKED LOW PRESSURE AREA OVER NORTHWEST UTTAR PRADESH & NEIGHBORHOOD AT 0300 UTC OF TODAY, THE 13TH SEPTEMBER.

IT IS LIKELY TO WEAKEN FURTHER INTO A LOW PRESSURE AREA DURING NEXT 12 HOURS.

AS PER INSAT 3DR IMAGERY AT 0300 UTC THE ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER UTTARAKHAND AND WEST UTTAR PRADESH WITH MINIMUM CLOUD TOP TEMPERATURE OF MINUS 75 DEGREE CELCIUS. MODRATE TO INTENSE CONVECTION LAY OVER EAST HIMACHAL PRADESH, EAST RAJASTHAN AND NORTHWEST MADHYA PRADESH WITH MINIMUM CLOUD TOP TEMPERATURE OF MINUS 50-60 DEGREE CELCIUS AND WEAK TO MODERATE CONVECTION LAY OVER EAST LADAKH, WEST HIMACHAL PRADESH, EAST PUNJAB, HARYANA, DELHI AND EAST UTTAR PRADESH.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED (MSW) IN ASSOCIATION WITH THE SYSTEM IS 15 KTS GUSTING TO 25 KTS. ESTIMATED CENTRAL PRESSURE IS 996 HPA. At 0300 UTC, THE LOWEST MEAN SEA LEVEL PRESSURE 996.2 HPA IS RECORDED AT BAREILLY (42189).

REMARKS:

MADDEN JULIAN OSCILLATION (MJO) INDEX IS CURRENTLY IN PHASE 5 WITH AMPLITUDE GREATER 1. IT IS LIKELY TO CONTINUE IN SAME PHASE DURING NEXT 2 DAYS AND THEREAFTER MOVE TO PHASE 6 DURING NEXT WEEK. THUS, THE SUPPORT OF MJO WOULD DECREASE GRADUALLY TOWARDS THE ENHANCEMENT OF CONVECTIVE ACTIVITY OVER NORTHERN PART OF INDIA.

THE LOW LEVEL CONVERGENCE IS ABOUT $20X10^{-5}$ S^{-1} AROUND SYSTEM AREA. UPPER LEVEL DIVERGENCE IS ABOUT $20X10^{-5}$ S^{-1} AROUND SYSTEM AREA. THE WIND SHEAR IS LOW TO MODERATE (5-15 KT) OVER SYSTEM AREA AND HIGH (>20) TO THE NORTH OF SYSTEM AREA. VORTICITY AT 850 HPA LEVEL IS AROUND $100X10^{-5}$ S^{-1} OVER SYSTEM AREA WITH VERTICAL EXTENSION UPTO 700 HPA LEVEL. THE SYSTEM IS ALSO GRADUALLY EXPERIENCING THE

INFLUENCE OF HIGH VERTICAL WIND SHEAR AS THE TROUGH IN WESTERLY WINDS IN THE UPPER TROPOSPHERE IS MOVING AWAY EASTWARD.
AS THE ENVIRONMENT IS NOT SUPPORTIVE TO MAINTAIN THE INTENSITY OF THE SYSTEM, IT WEAKENED INTO A WELL MARKED LOW PRESSURE AREA AND LIKELY TO WEAKEN FURTHER INTO A LOW PRESSURE AREA DURING NEXT 12 HOURS.

THIS IS THE LAST UPDATE IN ASSOCIATION WITH THIS SYSTEM. HOWEVER, REGULAR TROPICAL WEATHER OUTLOOK WILL CONTINUE FROM RSMC, NEW DELHI.

(B) WELL MARKED LOW PRESSURE AREA OVER NORTHEAST BAY OF BENGAL AND ADJOINING SOUTHEAST BANGLADESH COAST

THE LOW PRESSURE AREA OVER SOUTHEAST BANGLADESH AND NEIGHBOURHOOD MOVED WEST-NORTHWESTWARDS AND LAY AS A WELL MARKED LOW PRESSURE AREA OVER NORTHEAST BAY OF BENGAL AND ADJOINING SOUTHEAST BANGLADESH COAST AT 0300 UTC OF TODAY, THE 13TH SEPTEMBER, 2024.

IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND INTENSIFY INTO A DEPRESSION OVER COASTAL WEST BENGAL AND ADJOINING NORTHWEST BAY OF BENGAL BY TOMORROW, THE 14TH SEPTEMBER.

RECENT INSAT SATELLITE IMAGERY INDICATES THAT ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER NORTH AND ADJOINING CENTRAL BAY OF BENGAL, ARAKAN COAST, SOUTHEAST BAY OF BENGAL, ANDAMAN SEA, GULF OF MARTABAN AND TENASSERIM COAST WITH MINIMUM CLOUD TOP TEMPERATURE OF MINUS 70 TO 93°C. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED ISOLATED MODERATE TO INTENSE CONVECTION LAY OVER REST OF BAY OF BENGAL.

THE LOW LEVEL CONVERGENCE IS ABOUT 20X10^{-5} S^{-1} OVER NORTHEAST BAY OF BENGAL & ADJOINING MYANMAR. UPPER LEVEL DIVERGENCE IS ABOUT 20X10^{-5} S^{-1} OVER NORTHEAST BAY OF BENGAL & ADJOINING MYANMAR. THE WIND SHEAR IS LOW TO MODERATE (5-15 KT) OVER COASTAL BANGLADESH & NEIGHBOURHOOD. VORTICITY AT 850 HPA LEVEL IS AROUND 100-120X10^{-5} S^{-1} OVER NORTHEAST BAY OF BENGAL & ADJOINING MYANMAR WITH SIGNIFICANT VERTICAL EXTENSION UPTO 500 HPA LEVEL. THE SYSTEM IS CURRENTLY IN THE ZONE OF LOW TO MODERATE VERTICAL WIND SHEAR AND DUE TO ITS WEST-NORTHWESTWARD MOVEMENT, IT WOULD REMAIN IN THE LOW TO MODERATE SHEAR. HENCE IT WOULD INTENSIFY FURTHER.

MOST OF THE NWP MODELS INDICATE GRADUAL NORTHWESTWARDS MOVEMENT AND INTENSIFICATION INTO A DEPRESSION OVER COASTAL WEST BENGAL AND ADJOINING NORTHWEST BAY OF BENGAL BY TOMORROW, THE 14TH SEPTEMBER.

***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
MOD	HIGH	-	-	-	-	-

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

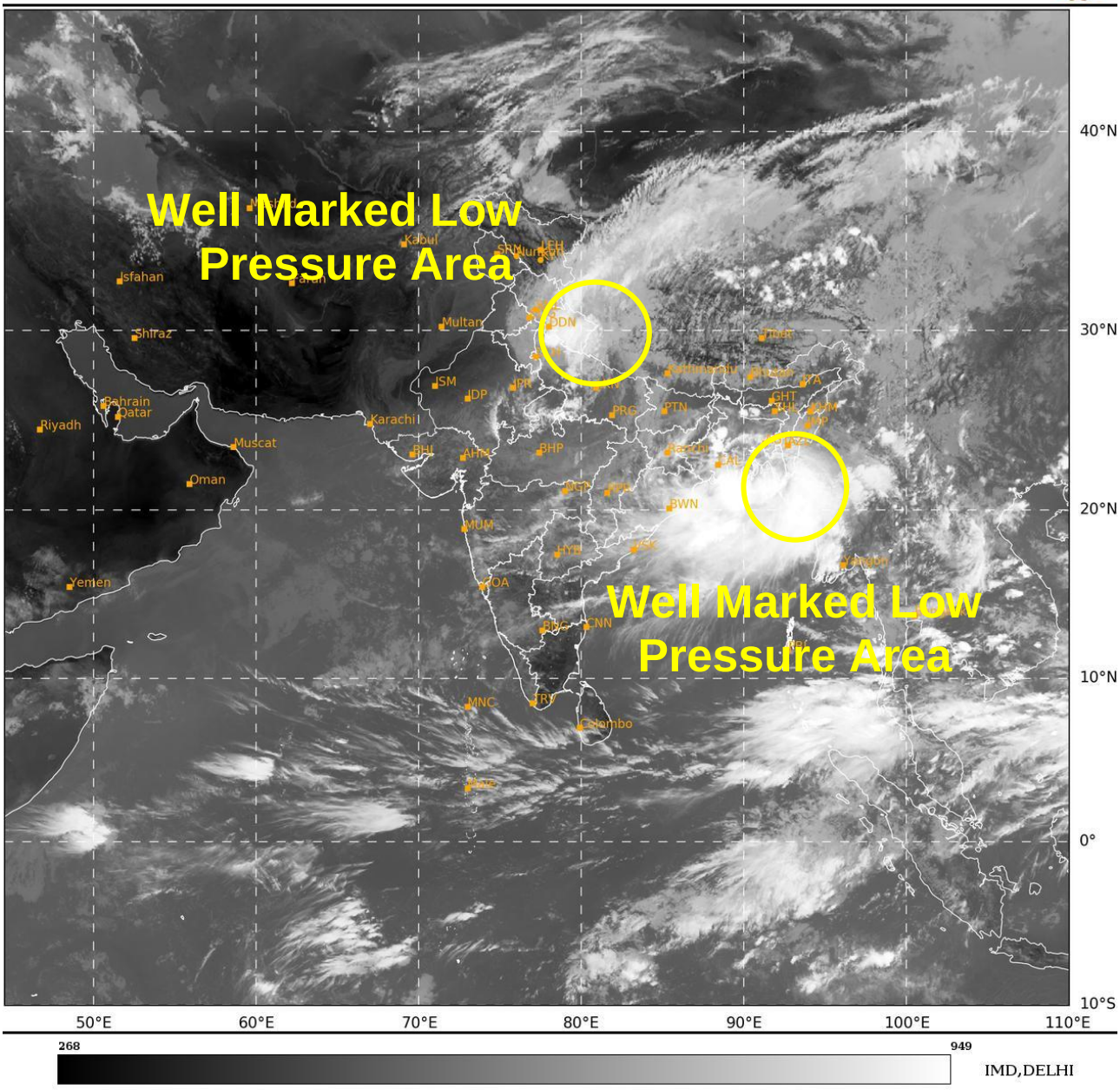
THE NEXT BULLETININ ASSOCIATION WITH THIS SYSTEM WILL BE ISSUED AT 0600 UTC OF 14TH SEPTEMBER, 2024.

ANANDA KUMAR DAS
SC.-F, 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

SAT : INSAT-3DR IMG
IMG_TIR1 10.8 um
L1C Mercator

13-09-2024/(0615 to 0642) GMT
13-09-2024/(1145 to 1212) IST



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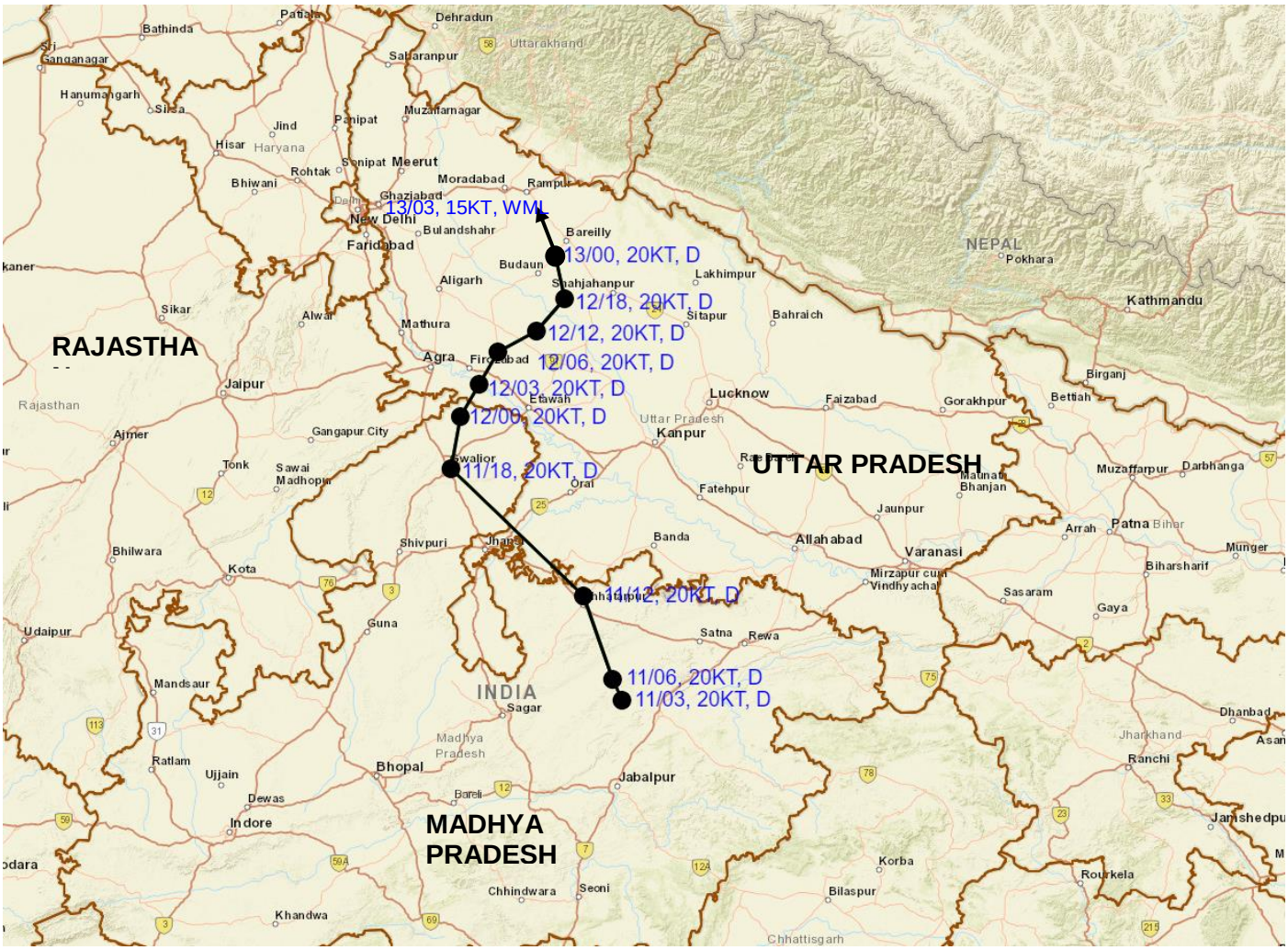
OBSERVED TRACK OF LAND DEPRESSION OVER CENTRAL INDIA DURING 11TH – 13TH SEPTEMBER, 2024



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

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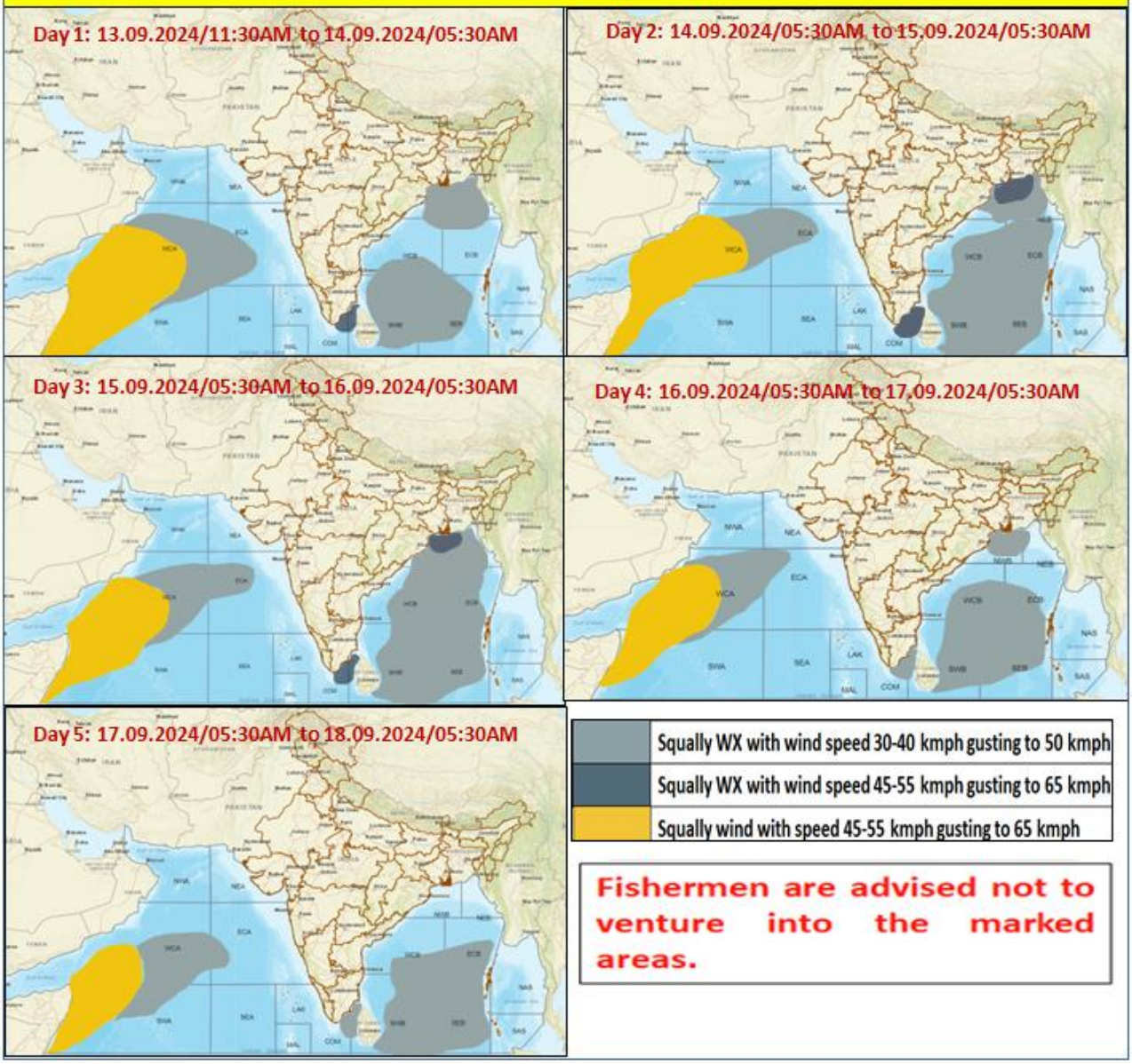
Fishermen Warning Graphics



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