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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 21.12.2024

SPECIAL TROPICAL WEATHER OUTLOOK FOR THE NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR THE NEXT 120 HOURS ISSUED AT 1500 UTC OF 21.12.2024 BASED ON 1200 UTC OF 21.12.2024.

SUB: DEPRESSION WEAKENED INTO WELL MARKED LOW PRESSURE AREA OVER WESTCENTAL BAY OF BENGAL

THE DEPRESSION OVER WESTCENTRAL BAY OF BENGAL MOVED EAST-NORTHEASTWARDS AND WEAKENED INTO A WELL MARKED LOW PRESSURE AREA OVER THE SAME REGION AT 1200 UTC OF TODAY, THE 21ST DECEMBER 2024.

THE WELL MARKED LOW PRESSURE AREA IS LIKELY TO PERSIST OVER THE SAME REGION AND WEAKEN GRADUALLY THEREAFTER OVER THE SEA.

ESTIMATED CENTRAL PRESSURE IN ASSOCIATION WITH THE SYSTEM IS 1006 HPA AND ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 15 KTS GUSTING TO 25 KTS.

AS PER LATEST SATELLITE IMAGERY, INTENSITY OF THE SYSTEM IS T 1.5. CLOUDS ARE ORGANISED IN SHEAR PATTERN. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER BAY OF BENGAL BETWEEN LATITUDE 8.0°N TO 15.0°N AND LONGITUDE 82.0°E TO 90.0 °E WITH MINIMUM CLOUD TOP TEMPERATURE AS MINUS 82-90°C AND MODERATE CONVECTION LAY OVER MIZORAM, TRIPURA AND ADJOINING AREAS AND LOW/MEDIUM CLOUDS OVER SOUTH GANGETIC WEST BENGAL, ODISHA, NORTH COASTAL ANDHRA PRADESH AND NORTH EASTERN STATES.

WIND WARNING:

SQUALLY WEATHER WITH WIND SPEED REACHING 35-45 KMPH GUSTING TO 55 KMPH IS LIKELY TO PREVAIL OVER WESTCENTRAL & ADJOINING CENTRAL PARTS OF SOUTH BAY OF BENGAL AND ALONG & OFF ANDHRA PRADESH-NORTH TAMIL NADU COASTS TILL 22ND DECEMBER.

SEA CONDITION:

ROUGH SEA CONDITIONS ARE VERY LIKELY TO PREVAIL OVER WESTCENTRAL AND ADJOINING CENTRAL PARTS OF SOUTH BAY OF BENGAL AND ALONG & OFF ANDHRA PRADESH-NORTH TAMIL NADU COASTS TILL 22ND DECEMBER.

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

FISHERMAN WARNING:

FISHERMEN ARE ADVISED NOT TO VENTURE INTO WESTCENTRAL & ADJOINING CENTRAL PARTS OF SOUTH BAY OF BENGAL AND ALONG & OFF SOUTH ODISHA-ANDHRA PRADESH-NORTH TAMIL NADU COASTS ON 21ST & 22ND DECEMBER.

REMARKS:

THE SYSTEM IS OVER THE SEA AREA WITH WARM SST (27-29°C) AND TROPICAL CYCLONE HEAT POTENTIAL AROUND 70 KJ/CM^2. THE TOTAL PRECIPITABLE WATER IMAGERY IS INDICATING SIGNIFICANT DECREASE IN WARM MOIST AROUND SYSTEM AREA AND COLD DRY AIR INCUSRSION IS ALSO SEEN FROM SOUTHWEST SECTOR.

LOW LEVEL POSITIVE CYCLONIC VORTICITY AT 850 HPA LEVEL IS AROUND 50X10^{-5} S^{-1} TO THE NORTH-NORTHEAST OF THE SYSTEM CENTRE WITH VERTICAL EXTENSION UPTO 700 HPA LEVEL. VERTICAL EXTENSION OF THE SYSTEM HAS DECREASED. THE LOW LEVEL CONVERGENCE IS THE SAME AND IS AROUND 20 X10^{-5} S^{-1} TO THE NORTH-NORTHEAST OF SYSTEM CENTRE. AT THE SAME TIME, THE UPPER LEVEL DIVERGENCE HAS DECREASED SIGNIFICANTLY IN PAST 3 HOURS WITH EMERGENCE OF A LARGE CONVERGENCE ZONE TO THE NORTHEAST OF SYSTEM CENTRE. THE MID LEVEL VERTICAL WIND SHEAR IS MODERATE (15-20 KT) OVER THE SYSTEM AREA. ALL THESE FEAURES LED TO WEAKENING OF SYSTEM OVER WESTCENTRAL BAY OF BENGAL.

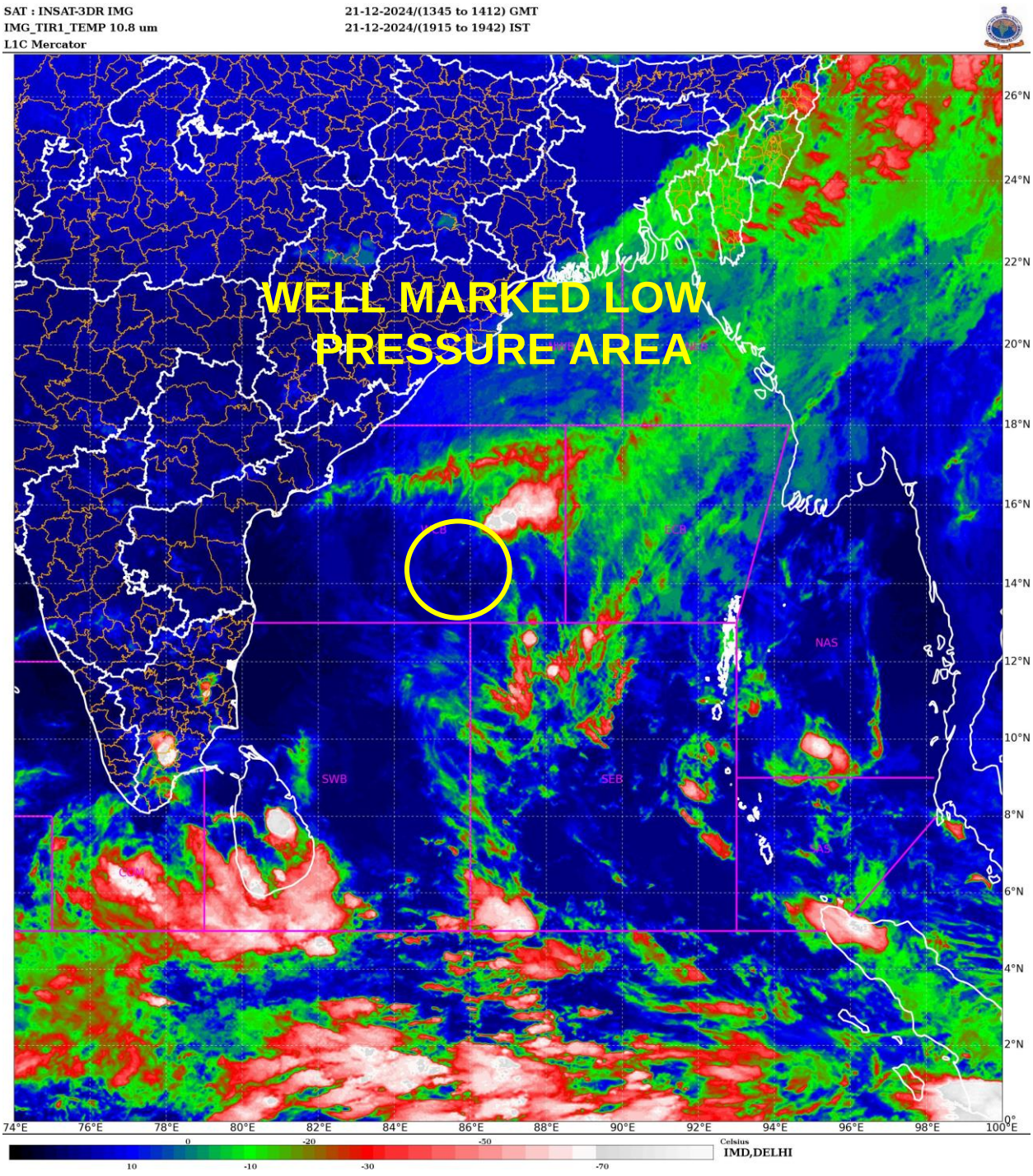
MOST OF THE MODELS ARE INDICATING THAT THE SYSTEM WOULD MOVE SLOWLY OVER CENTRAL PARTS OF BAY OF BENGAL DURING NEXT 24 HOURS AND WEAKEN THEREAFTER.

THUS, THE WELL MARKED LOW PRESSURE AREA IS LIKELY TO PERSIST OVER THE SAME REGION AND WEAKEN GRADUALLY THEREAFTER OVER THE SEA.

THIS IS LAST UPDATE IN ASSOCIATION WITH THIS SYSTEM. HOWEVER, REGULAR TROPICAL WEATHER SHALL CONTINUE TO BE ISSUED BY RSMC NEW DELHI FROM TOMORROW, THE 22ND DECEMBER ONWARDS.

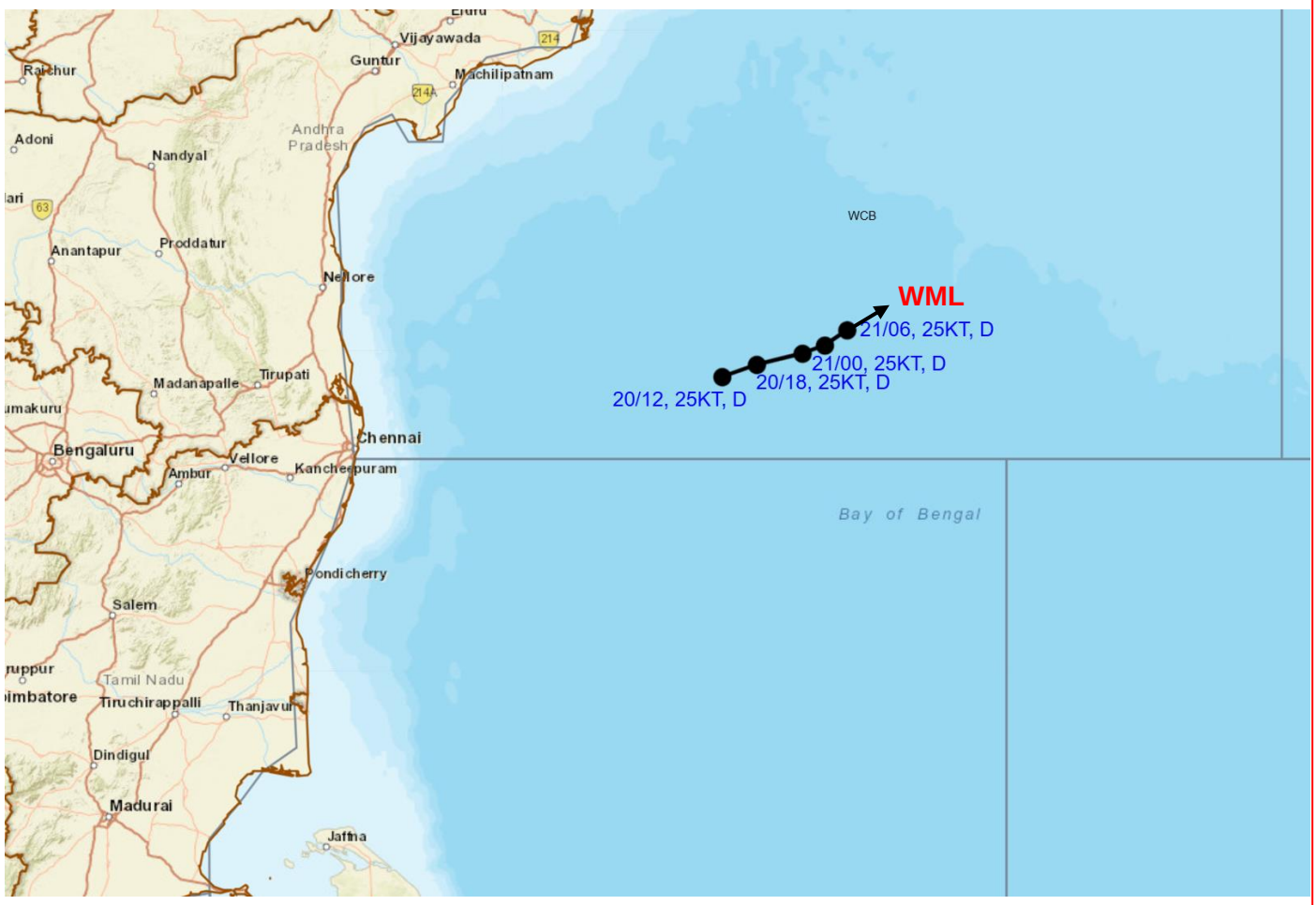
.

(MONICA SHARMA)
SCIENTIST-D, 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 TRACK OF DEPRESSION OVER WESTCENTRAL BAY OF BENGAL DURING 20TH - 21st DECEMBER, 2024.

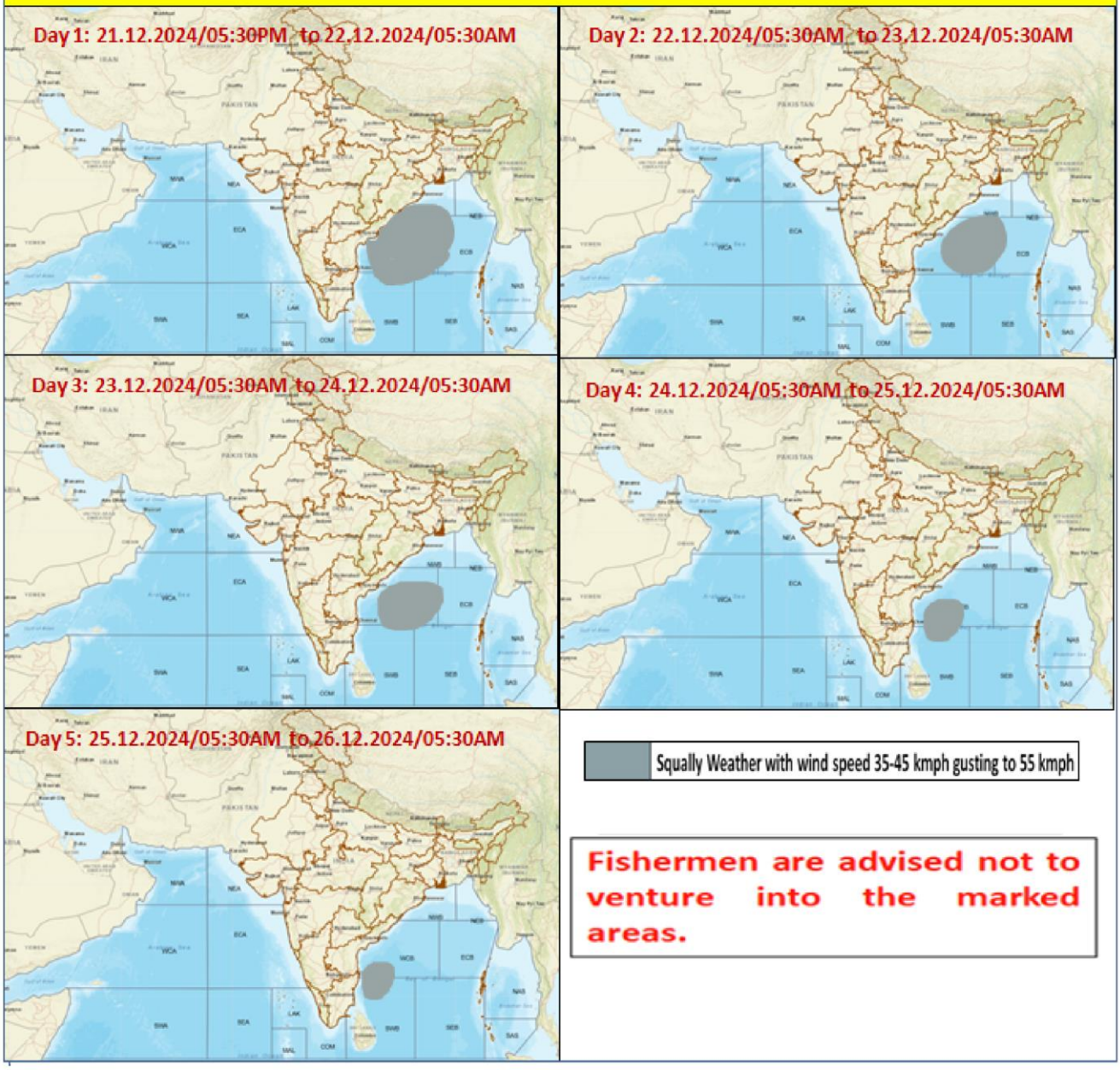


DATE/TIME	:	IN UTC
IST	:	UTC + 0530
KT	:	NAUTICAL MILES/HOUR = 1.85 KM/HOUR
LPA	:	LOW PRESSURE AREA
WML	:	WELL MARKED LOW PRESSURE AREA
D	:	DEPRESSION (17-27 KT)
DD	:	DEEP DEPRESSION (28-33 KT)
CS	:	CYCLONIC STORM (34-47 KT)
SCS	:	SEVERECYCLONIC STORM (48-63 KT)
VSCS	:	VERY SEVERECYCLONIC STORM (64-89 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



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