



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 25.12.2022

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1100 UTC OF 25.12.2022 BASED ON 0900 UTC OF 25.12.2022.

BAY OF BENGAL:

SUB: DEPRESSION OVER SOUTHWEST BAY OF BENGAL CROSSED SRI LANKA COAST

THE DEPRESSION OVER SOUTHWEST BAY OF BENGAL AND ADJOINING SRI LANKA COAST MOVED WEST-SOUTHWESTWARDS WITH A SPEED OF 18 KMPH DURING PAST 06 HOURS, CROSSED SRI LANKA COAST TO THE SOUTH OF TRINCOMALEE (SRI LANKA, 43418) NEAR LATITUDE 8.35°N AND LONGITUDE 81.4°E AS A DEPRESSION WITH MAXIMUM SUSTAINED WIND SPEED OF 45-55 KMPH GUSTING TO 65 KMPH DURING 0700 TO 0800 UTC OF TODAY, THE 25TH DECEMBER. THEREAFTER, IT CONTINUED TO MOVE WEST-SOUTHWESTWARDS, WEAKENED INTO A WELL MARKED LOW PRESSURE AREA OVER SRI LANKA AT 0900 UTC OF TODAY, THE 25TH DECEMBER 2022.

IT IS LIKELY TO CONTINUE TO MOVE WEST-SOUTHWESTWARDS AND EMERGE INTO COMORIN AREA & NEIGHBOURHOOD BY 26TH DECEMBER MORNING (0000 UTC).

AS PER INSAT-3D IMAGERY, THE SYSTEM IS OVER LAND. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SRI LANKA COAST BETWEEN LAT 4.0°N TO 12.0°N LONG 76.0°E TO 85.0°E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93°C.

THE MAXIMUM SUSTAINED SURFACE WIND SPEED IS 15-20 KNOTS GUSTING TO 30 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS ABOUT 1006 HPA. SEA CONDITION IS ROUGH TO VERY ROUGH OVER SOUTHWEST BAY OF BENGAL AND ALONG & OFF TAMILNADU & SRILANKA COASTS, GULF OF MANNAR AND COMORIN AREA .

AT 0900 UTC, TRINCOMALEE (43418) REPORTED MEAN SEA LEVEL PRESSURE OF 1006.7 HPA.

THIS IS THE LAST BULLETIN IN ASSOCIATION WITH THIS SYSTEM. HOWEVER, THE WELL MARKED LOW PRESSURE AREA OVER SRI LANKA WOULD BE MONITORED CONTINUOUSLY FOR ANY FURTHER DEVELOPMENT, AS THE WELL MARKED LOW PRESSURE AREA IS LIKELY TO MOVE TOWARDS SOUTHEAST ARABIAN SEA ACROSS COMORIN AREA. REGULAR TROPICAL WEATHER OUTLOOK WILL BE CONTINUED FROM REGIONAL SPECIALISED METEOROLOGICAL CENTRE NEW DELHI.

ARABIAN SEA:

THE WELL MARKED LOW PRESSURE AREA OVER SRI LANKA IS LIKELY TO EMERGE INTO COMORIN AREA AROUND 26TH DECEMBER AND MOVE WEST-NORTHWESTWARDS THEREAFTER TOWARDS SOUTHEAST ARABIAN SEA.

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%
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SCATTERED LOW/MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OVER EAST PARTS OF COMORIN AREA AND ISOLATED WEAK TO MODERATE CONVECTION OVER NORTHWEST & EXTREME SOUTHWEST 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 |

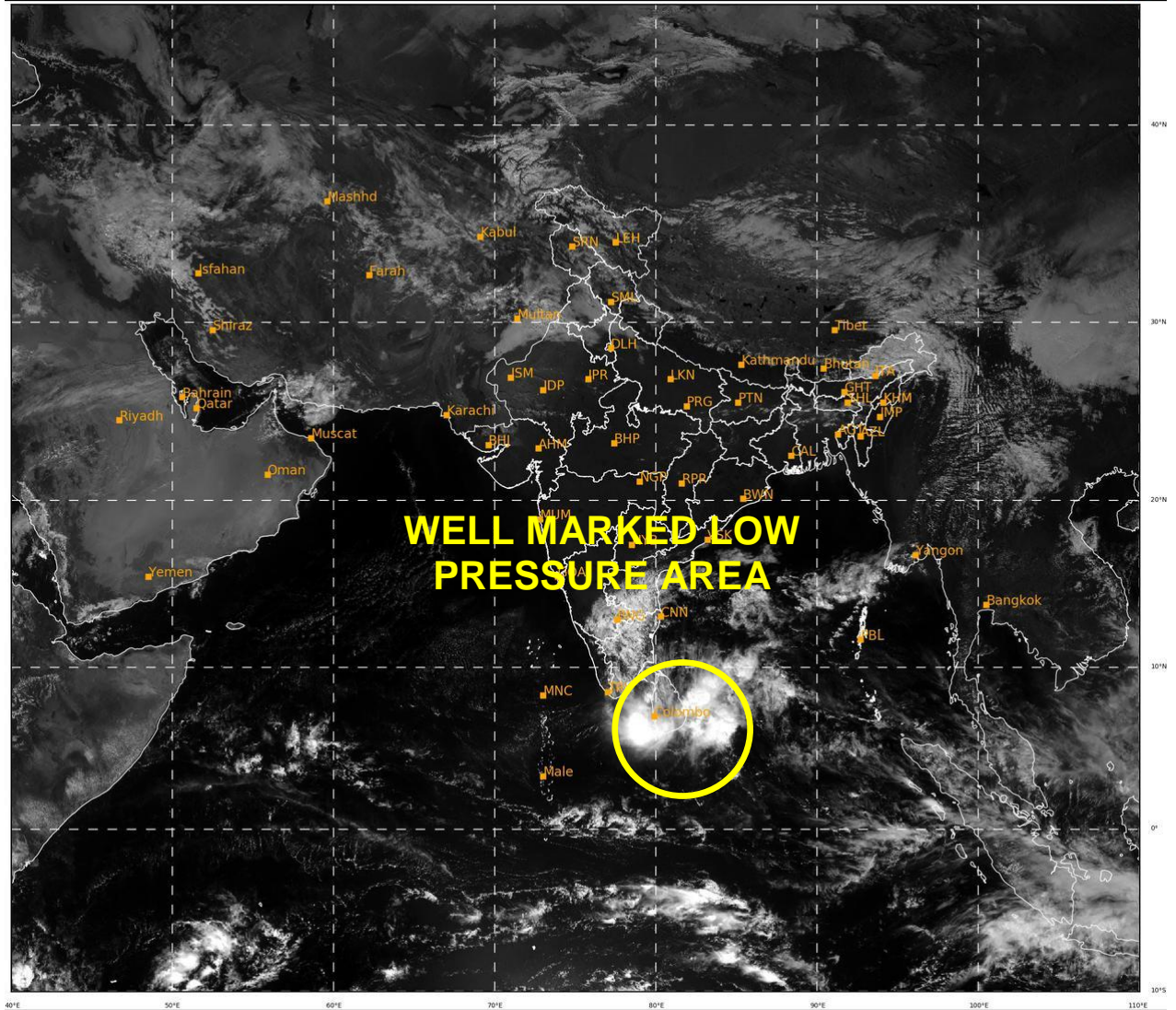
REMARKS:

LOW LEVEL RELATIVE VORTICITY HAS DECREASED AND IS AROUND $50-60 \times 10^{-6} \text{ S}^{-1}$ AROUND THE SYSTEM CENTRE. LOW LEVEL CONVERGENCE IS ABOUT $15 \times 10^{-5} \text{ S}^{-1}$ TO THE NORTHEAST OF THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS ABOUT $30 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHEAST OF SYSTEM CENTRE. VERTICAL WIND SHEAR OF 10-20 KNOTS AROUND THE SYSTEM CENTRE AND MODERATE (~ 15-20 KNOTS) WIND SHEAR IS PREVAILING TO THE WEST OF THE SYSTEM AREA OVER COMORIN AND LAKSHADWEEP.

MOST OF THE MODELS (IMD GFS & NCUM GROUP, IMD MME AND ECMWF) ARE INDICATING EXISTING SYSTEM OVER SRI LANKA TO MOVE GRADUALLY SOUTHWESTWARDS REACHING COMORIN AREA BY 26TH/0000 UTC. MODELS ARE NOT INDICATING FURTHER INTENSIFICATION OF THE SYSTEM. THE MODELS ARE ALSO PREDICTING POSSIBLE EMERGENCE OF THE SYSTEM OVER THE ARABIAN SEA AND INDICATING THE WEST-NORTHWESTWARDS MOVEMENT WITH GRADUAL WEAKENING.

IN VIEW OF ALL THE ABOVE, THE WELL MARKED LOW PRESSURE AREA OVER SRI LANKA IS LIKELY TO CONTINUE TO MOVE WEST-SOUTHWESTWARDS AND EMERGE INTO COMORIN AREA & NEIGHBOURHOOD BY TOMORROW, THE 26TH DECEMBER MORNING.

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IMD, DELHI

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OBSERVED TRACK OF DEPRESSION OVER SOUTHWEST BAY OF BENGAL (22ND TO 25TH DECEMBER 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 (\geq 20 KT)

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

Fishermen warning graphics

Day 1: 25.12.2022/11:30AM to 26.12.2022/05:30AM



Day 2: 26.12.2022/05:30AM to 27.12.2022/05:30AM



Day 3: 27.12.2022/05:30AM to 28.12.2022/05:30AM



Day 4: 28.12.2022/05:30AM to 29.12.2022/05:30AM



Day 5: 29.12.2022/05:30AM to 30.12.2022/05:30AM



Squally WX with wind speed 40-50 kmph gusting to 60 kmph

Squally wind speed 45-55 kmph gusting to 65 kmph

Fishermen are advised not to venture into the marked areas.