



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 14.12.2022

SPECIAL TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1200 UTC OF 14.12.2022 BASED ON 0900 UTC OF 14.12.2022.

ARABIAN SEA:

(A) WELL MARKED LOW PRESSURE AREA OVER EASTCENTRAL AND ADJOINING SOUTHEAST ARABIAN SEA CONCENTRATED INTO A DEPRESSION

THE WELL MARKED LOW PRESSURE AREA OVER EASTCENTRAL AND ADJOINING SOUTHEAST ARABIAN SEA MOVED NORTHWESTWARDS, CONCENTRATED INTO A DEPRESSION OVER THE SAME REGION AND LAY CENTERED AT 0900 UTC OF TODAY, THE 14TH DECEMBER 2022 NEAR LATITUDE 13.5°N AND LONGITUDE 69.6°E ABOUT 430 KM WEST-NORTHWEST OF AMINIDIVI (43311), ABOUT 500 KM WEST-SOUTHWEST OF PANJIM (43192) AND 1710 KM EAST-SOUTHEAST OF SALALAH (41316), OMAN.

IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS OVER EASTCENTRAL ARABIAN SEA AWAY FROM INDIA COAST AND INTENSIFY FURTHER INTO A DEEP DEPRESSION BY MORNING OF TOMORROW, THE 15TH DECEMBER 2022.

AS PER INSAT 3D IMAGERY, THE CLOUDS HAVE FURTHER ORGANIZED FURTHER DURING PAST 6 HOURS AND SHAER PATTERN IS SEEN. INTENSITY OF THE SYSTEM IS T 1.5. ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER EASTCENTRAL ARABIAN SEA ADJOINING SOUTHEAST ARABIAN SEA & LAKHSDWEEP ISLANDS AREA. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1002 HPA. SEA CONDITION IS LIKELY TO BE ROUGH TO VERY ROUGH OVER EASTCENTRAL & ADJOINING SOUTHEAST ARABIAN SEA AND LAKSHADWEEP AREA.

AT 0900 UTC, A SHIP NEAR 14.6°N/68.1°E REPORTED MAXIMUM SUSTAINED WINDS OF 020°/22 KNOTS.

BAY OF BENGAL:

(B) LOW PRESSURE AREA OVER SOUTH ANDAMAN SEA AND ADJOINING STRAIT OF MALACCA & SUMATRA

UNDER THE INFLUENCE OF THE CYCLONIC CIRCULATION OVER SOUTH ANDAMAN SEA AND ADJOINING STRAIT OF MALACCA & SUMATRA, A LOW PRESSURE AREA FORMED OVER EQUATORIAL INDIA OCEAN AND ADJOINING AREAS OF SOUTH ANDAMAN SEA & SOUTHEAST BAY OF BENGAL AT 0900 UTC OF TODAY, 14TH DECEMBER, 2022. IT IS LIKELY TO MOVE GRADUALLY WESTWARDS AND BECOME WELL MARKED LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL AND ADJOINING EQUATORIAL INDIAN OCEAN BY 15TH

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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DEC. THEREAFTER, IT WOULD CONTINUE TO MOVE WESTWARDS AND MAINTAIN ITS INTENSITY OVER SEA TILL MORNING OF 17TH DECEMBER 2022.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL AND SOUTH ANDAMAN SEA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTHEAST BAY OF BENGAL AND ADJOINING SOUTH ANDAMAN SEA BETWEEN LATITUDE 2.0N & 10N AND EAST OF LONG 84.0E. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEG C.

ASSOCIATED MAXIMUM SUSTAINED WIND SPEED IS 15 KNOTS. THE ESTIMATED CENTRAL PRESSURE IS 1008 HPA. SEA CONDITION IS LIKELY TO BE ROUGH OVER EQUATORIAL INDIAN OCEAN AND ADJOINING SOUTHEAST & SOUTH ANDAMNA 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	LOW	LOW	NIL	NIL

REMARKS:

ARABIAN SEA:

SEA SURFACE TEMPERATURE IS ABOUT 28-29°C OVER EASTCENTRAL AND ADJOINING SOUTHEAST ARABIAN SEA BECOMING 27°C TO THE WEST OF 67°E . LOW LEVEL RELATIVE VORTICITY HAS INCREASED DURING PAST 06 HOURS AND IS AROUND $100 \times 10^{-6} \text{ S}^{-1}$ TO THE SOUTH OF SYSTEM CENTRE. LOW LEVEL CONVERGENCE HAS INCREASED AND IS ABOUT $10 \times 10^{-5} \text{ S}^{-1}$ TO THE SOUTHEAST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS ABOUT $20 \times 10^{-5} \text{ S}^{-1}$ TO THE NORTHEAST OF THE SYSTEM CENTRE AND IS NORTH-SOUTH ORIENTED. MODERAT VERTICAL WIND SHEAR OF ABOUT 15-20 KNOTS IS PREVAILING AROUND SYSTEM AREA AND IS INCREASING TOWARDS WEST AND NORTHWEST ARABIAN SEA. MULTI-SATELLITE WINDS ARE INDICATING STRONGER WINDS IN THE NORTHEAST SECTOR. TOTAL PRECIPITABLE WATER VAPOUR IMAGERY INDICATES WARM MOIST AIR ADVECTION FROM SOUTHERN SECTOR AND DRY COLD WIND INCURSION IS SEEN UPTO SOUTHERN SECTOR IN THE OUTER REGION. THE SYSTEM IS CURRENTLY MOVING NORTHWESTWARDS UNDER THE INFLUENCE OF SOUTHEASTERLY WINDS PREVAILING IN THE PERIPHERY OF THE RIDGE NEAR 14°N IN THE MIDDLE AND UPPER TROPOSPHERIC LEVELS. ALL THESE FEATURES INDICATE THAT CURRENTLY THE SYSTEM IS IN A FAVOURABLE ENVIRONMENT AND IS LIKELY TO MOVE NORTHWESTWARDS AND INTENSIFY FURTHER.

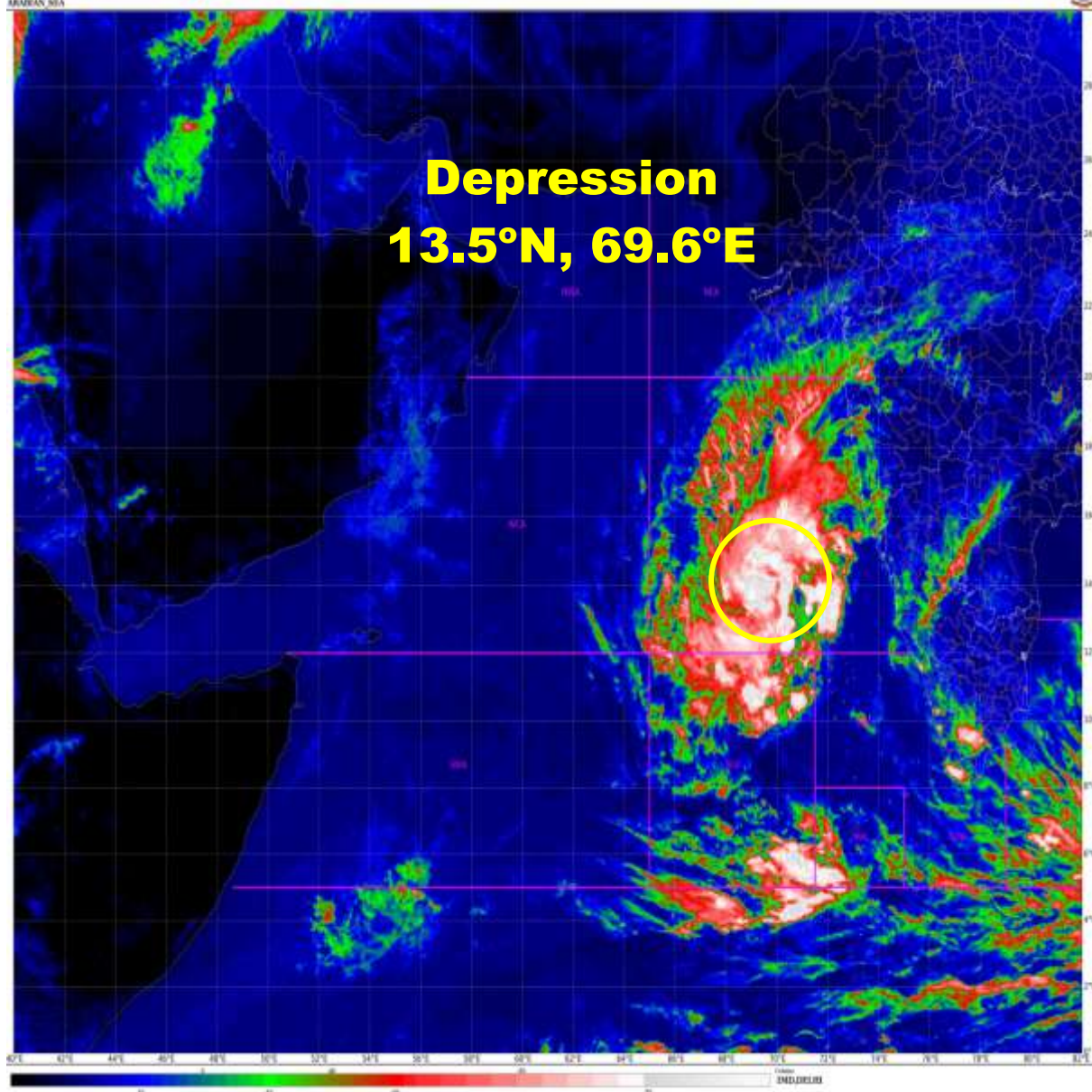
VARIOUS MODELS INDICATE THAT THE SYSTEM IS LIKELY TO MOVE WEST-NORTHWESTWARDS TILL 17TH/18TH DECEMBER. MODELS ARE ALSO INDICATING THAT THE SYSTEM WOULD INTENSIFY INTO A DEEP DEPRESSION BY 15TH DECEMBER, MAINTAIN IT'S INTENSITY TILL 16TH DECEMBER AND WEAKEN SLOWLY THEREAFTER WHILE MOVING OVER COLDER SEA AND REGION OF HIGH VERTICAL WIND SHEAR.

IN VIEW OF ABOVE, THE DEPRESSION OVER EASTCENTRAL AND ADJOINING SOUTHEAST ARABIAN SEA IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS OVER EASTCENTRAL ARABIAN SEA AND INTENSIFY FURTHER INTO A DEEP DEPRESSION BY 0000 UTC OF TOMORROW, THE 15TH DECEMBER 2022.

**M. SHARMA
SCIENTIST-D
RSMC NEW DELHI**

NET - INDIAN OCEAN
TIME_ZONE_TEMP 14.8 sec
ARABIAN SEA

14-12-2020 0100 to 1420 GMT
14-12-2020 0100 to 1336 IST



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Fishermen warning graphics



	Squally WX with wind speed 35-45 kmph gusting to 55 kmph
	Squally WX with wind speed 45-55 kmph gusting to 65 kmph
	Squally wind speed 45-55 kmph gusting to 65 kmph

Fishermen are advised not to venture into the marked areas.

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Probability of exceedance of maximum sustained winds ≥ 45 kmph



Probability of exceedance	
	Low (1-33%)
	Moderate (34-67%)
	High (68-100%)

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