



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 01.06.2020

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 1530 UTC OF 01.06.2020 BASED ON 1200 UTC OF 01.06.2020.

SUB: DEPRESSION OVER EASTCENTRAL ARABIAN SEA

THE DEPRESSION OVER EASTCENTRAL AND ADJOINING SOUTHEAST ARABIAN SEA MOVED NORTH-NORTHWESTWARDS WITH A SPEED OF 09 KMPH DURING PAST 06 HOURS AND LAY CENTRED AT 1200UTC OF TODAY THE 1ST JUNE, 2020 NEAR LATITUDE 14.2°N AND LONGITUDE 71.2°E OVER EASTCENTRAL ARABIAN SEA ABOUT 310 KM SOUTHWEST OF PANJIM (43192), 570KM SOUTH-SOUTHWEST OF MUMBAI (43003) AND 800 KM SOUTH-SOUTHWEST OF SURAT (42840). IT IS VERY LIKELY TO INTENSIFY INTO A DEEP DEPRESSION DURING NEXT 12 HOURS AND *INTENSIFY FURTHER INTO A CYCLONIC STORM OVER EASTCENTRAL ARABIAN SEA DURING THE SUBSEQUENT 12 HOURS*. IT IS VERY LIKELY TO MOVE NEARLY NORTHWARDS INITIALLY TILL 0600 UTC OF 02ND JUNE AND THEN RECURVE NORTH-NORTHEASTWARDS AND CROSS NORTH MAHARASHTRA AND SOUTH GUJARAT COASTS BETWEEN HARIHARESHWAR (RAIGAD, MAHARASHTRA) AND DAMAN (42916) DURING 0700 TO 1200 UTC OF 3RD JUNE.

FORECAST TRACK AND INTENSITY ARE GIVEN IN THE FOLLOWING TABLE:

DATE/TIME(UTC)	POSITION (LAT. °N/ LONG. °E)	MAXIMUM SUSTAINED SURFACE WIND SPEED (KMPH)	CATEGORY OF CYCLONIC DISTURBANCE
01.06.20/1200	14.2/71.2	45-55 GUSTING TO 65	DEPRESSION
01.06.20/1800	14.7/71.2	45-55 GUSTING TO 65	DEPRESSION
02.06.20/0000	15.1/71.2	55-65 GUSTING TO 75	DEEP DEPRESSION
02.06.20/0600	15.6/71.3	70-80 GUSTING TO 90	CYCLONIC STORM
02.06.20/1200	16.2/71.5	85-95 GUSTING TO 105	SEVERE CYCLONIC STORM
03.06.20/0000	17.5/72.1	95-105 GUSTING TO 115	SEVERE CYCLONIC STORM
03.06.20/1200	19.8/73.5	70-80 GUSTING TO 90	CYCLONIC STORM
04.06.20/0000	21.2/75.0	55-65 GUSTING TO 75	DEEP DEPRESSION
04.06.20/1200	22.5/76.7	45-55 GUSTING TO 65	DEPRESSION

AS PER INSAT-3D SATELLITE IMAGERY BASED ON 1200 UTC OF 01ST JUNE, THE INTENSITY OF THE SYSTEM CI IS 1.5. ASSOCIATED SCATTERED TO BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION OBSERVED OVER SOUTHEAST AND ADJOINING EASTCENTRAL ARABIAN SEA BETWEEN LATITUDE 7.5N TO 17.0N AND LONGITUDE 65.0E TO 74.5E. MINIMUM CLOUD TOP TEMPERATURE (CTT) IS MINUS 93°C.

THE ESTIMATED MAXIMUM SUSTAINED WIND SPEED IS 25 KNOTS GUSTING TO 35 KNOTS. THE SEA CONDITION IS ROUGH TO VERY ROUGH AROUND THE SYSTEM CENTER. THE ESTIMATED CENTRAL PRESSURE IS 1002 HPA.

AT 1200 UTC OF 01ST JUNE, A BOUY LOCATED AT 14.8°N/69.0°E REPORTED A MEAN SEA LEVEL PRESSURE OF 1006.9 HPA AND MEAN SURFACE WIND SPEED OF 030°/19.4 KNOTS. A SHIP(A8ZE4) LOCATED AT 14.2°N/70.3°E REPORTED A MEAN SEA LEVEL PRESSURE OF 1002.3 HPA

PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)

NIL: 0%, LOW: 1-25%, FAIR: 26-50%, MODERATE: 51-75% AND HIGH: 76-100%

REMARKS:

THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES CURRENTLY IN PHASE 1 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE TO BE IN SAME PHASE DURING NEXT 7 DAYS WITH AMPLITUDE REMAINING MORE THAN 1.

THE SEA SURFACE TEMPERATURE (SST) IS 30-31°C OVER EASTCENTRAL ARABIAN SEA. THE TROPICAL CYCLONE HEAT POTENTIAL IS 100-120 KJ/CM² OVER EASTCENTRAL ARABIAN SEA AND BECOMING 80-100 KJ/CM² NEAR KARNATAKA, MAHARASHTRA AND GUJARAT COAST.

POSITIVE LOWER LEVEL VORTICITY IS ABOUT 100 X10⁻⁶SEC⁻¹ OVER EASTCENTRAL ARABIAN SEA. IT IS EXTENDING UPTO 200 HPA LEVEL TILTING SOUTHWARDS WITH HEIGHT. THE LOWER LEVEL CONVERGENCE IS AROUND 20X10⁻⁵ SEC⁻¹ OVER THE SYSTEM CENTER. THE UPPER LEVEL DIVERGENCE IS 30X10⁻⁵ SEC⁻¹ TO THE SOUTHWEST OF THE SYSTEM CENTER. VERTICAL WIND SHEAR (VWS) IS LOW (05-10 KTS) AROUND THE SYSTEM CENTRE AND IS MODERATE(15-20 KTS) ALONG THE FORECAST TRACK .

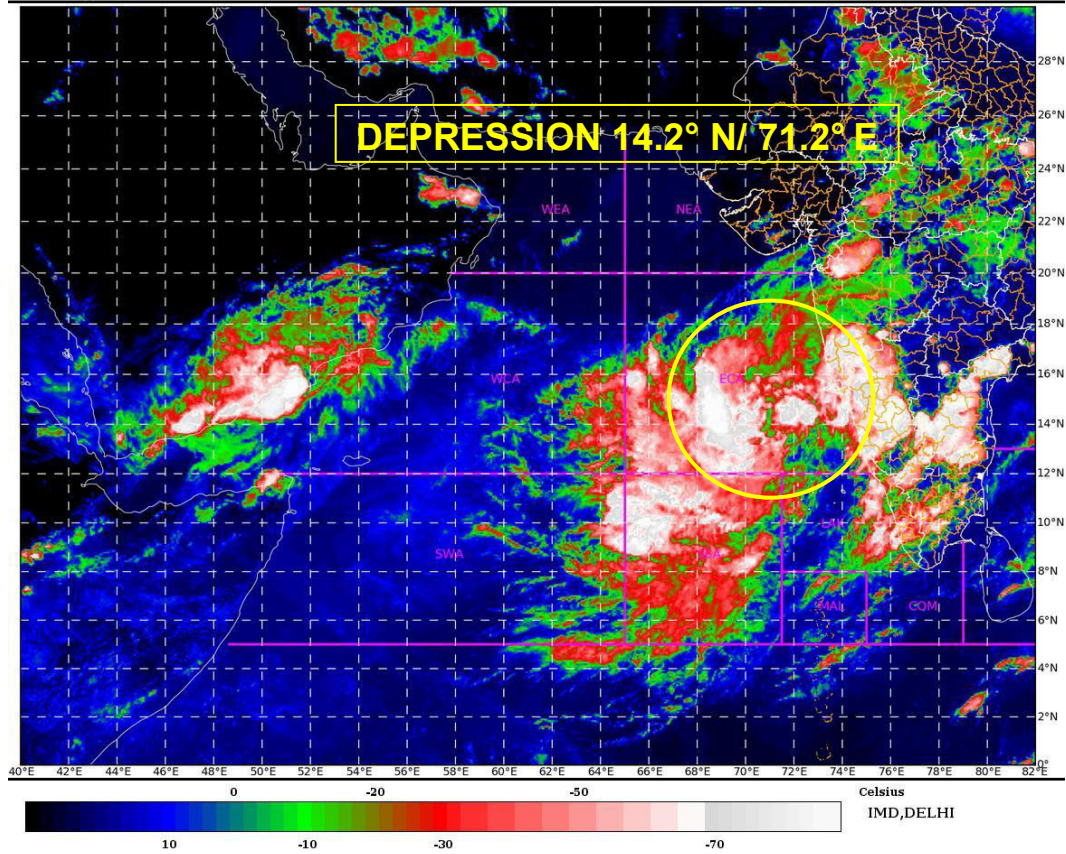
MOST OF THE NUMERICAL MODELS INCLUDING ECMWF, IMD GFS, NCEP GFS, GEFS, NEPS, NCUM ETC. ARE INDICATING FURTHER INTENSIFICATION OF THE SYSTEM, INITIAL NORTHWARD MOVEMENT AND NORTH-NORTHEASTWARD RE-CURVATURE THEREAFTER. UNDER FAVOURABLE ENVIRONMENTAL CONDITIONS LIKE LOW VERTICAL WIND SHEAR AND HIGH OCEAN HEAT CONTENT, ALONG WITH THE WIND SURGE ASSOCIATED WITH THE SOUTHWEST MONSOON FLOW OVER THE REGION, THE SYSTEM IS VERY LIKELY TO INTENSIFY INTO A DEEP DEPRESSION OVER EASTCENTRAL ARABIAN SEA DURING NEXT 12 HOURS AND **INTENSIFY FURTHER INTO A CYCLONIC STORM DURING THE SUBSEQUENT 24 HOURS**. IT IS VERY LIKELY TO MOVE NEARLY NORTHWARDS INITIALLY TILL 00UTC OF 02ND JUNE AND THEN RECURVE NORTH-NORTHEASTWARDS AND CROSS NORTH MAHARASHTRA AND SOUTH GUJARAT COASTS BETWEEN HARIHARESHWAR (RAIGAD, MAHARASHTRA) AND DAMAN (42916) DURING 0700 TO 1200 UTC OF 3RD JUNE .

(R.K.JENAMANI)

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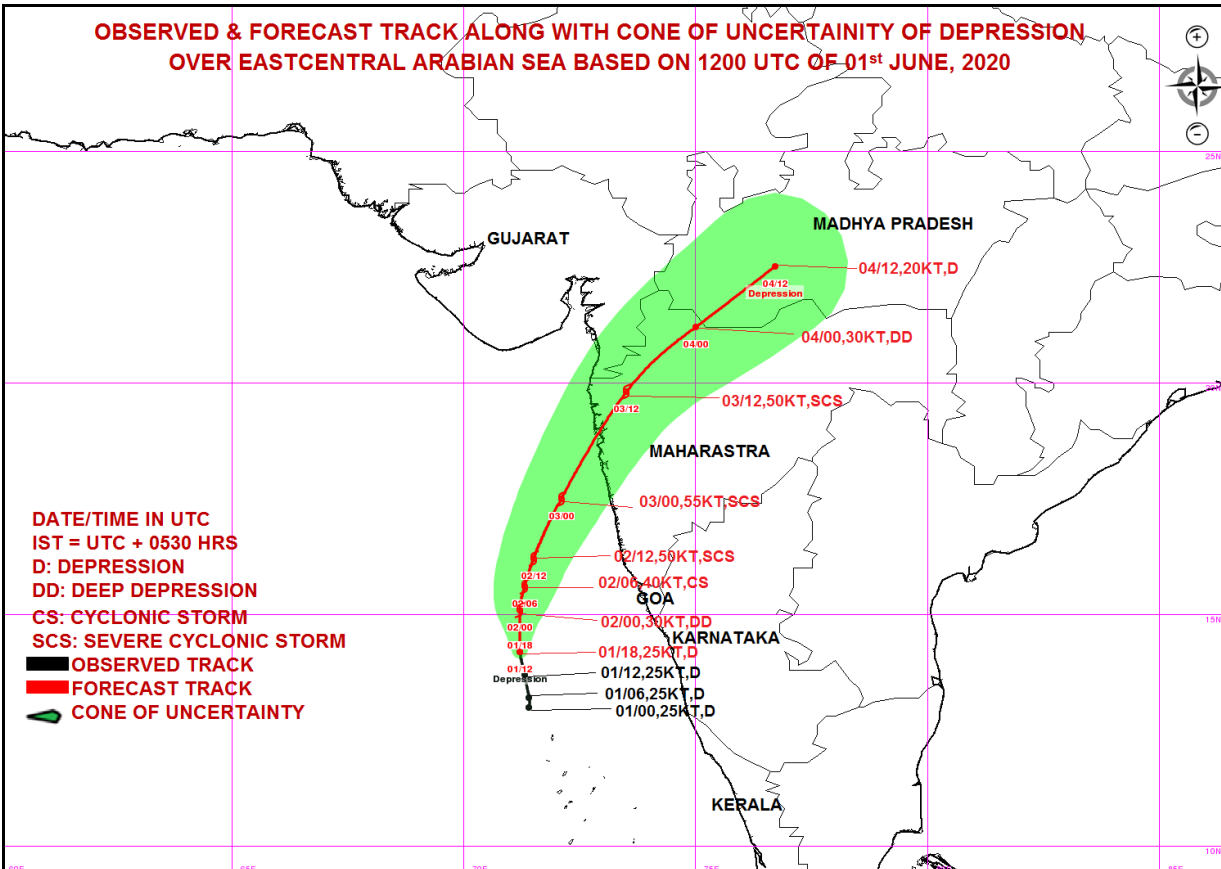
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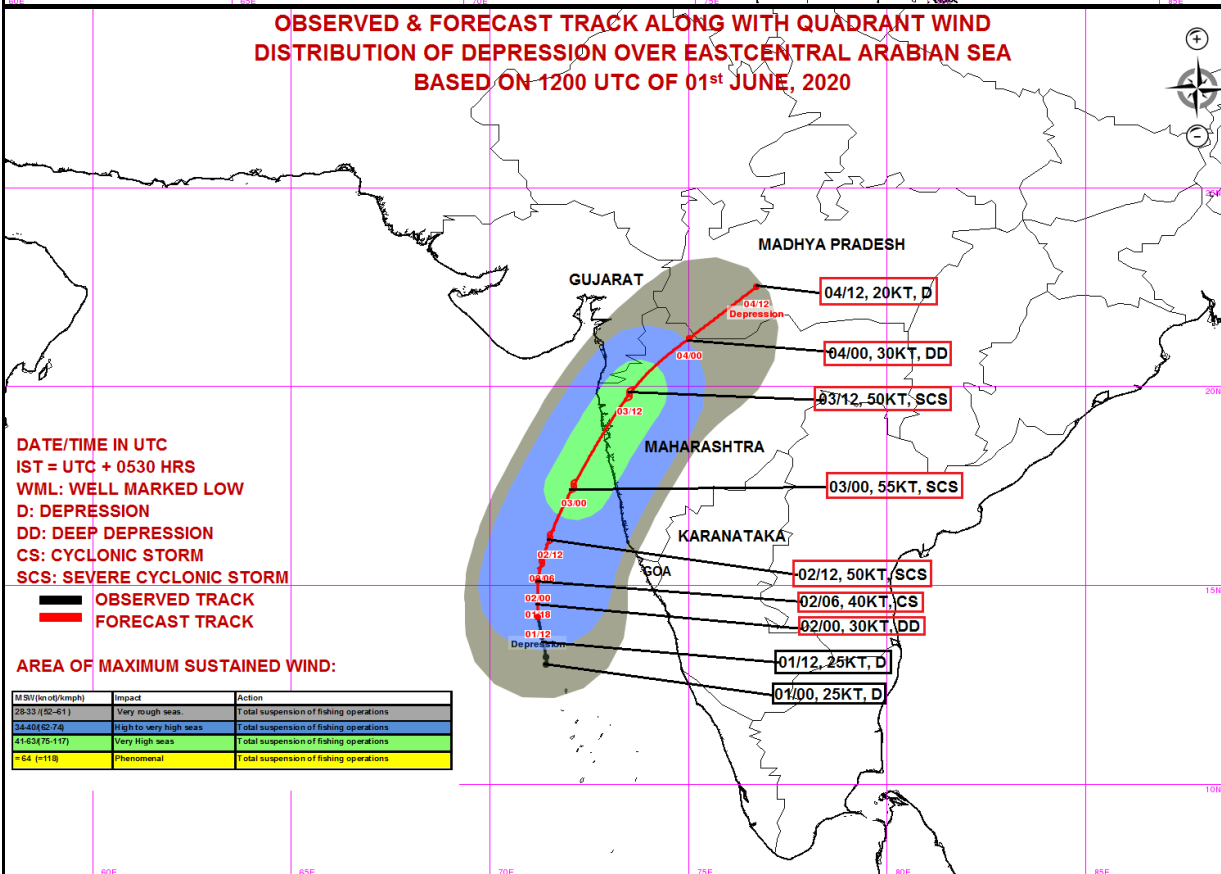


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OBSERVED & FORECAST TRACK ALONG WITH CONE OF UNCERTAINTY OF DEPRESSION OVER EASTCENTRAL ARABIAN SEA BASED ON 1200 UTC OF 01st JUNE, 2020



OBSERVED & FORECAST TRACK ALONG WITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER EASTCENTRAL ARABIAN SEA BASED ON 1200 UTC OF 01st JUNE, 2020



MSW(knot)/kmph	Impact	Action
28-33 (52-61)	Very rough seas.	Total suspension of fishing operations
34-40(62-74)	High to very high seas	Total suspension of fishing operations
41-63(75-117)	Very High seas	Total suspension of fishing operations

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