



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

**DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 30.05.2020**

**TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0300 UTC OF 30.05.2020 BASED ON 0000 UTC OF 30.05.2020.**

**SUB: (1) DEPRESSION OVER SOUTH COASTAL OMAN & ADJOINING YEMEN  
(2) LIKELY FORMATION OF A LOW PRESSURE AREA OVER SOUTHEAST AND ADJOINING EASTCENTRAL ARABIAN SEA DURING NEXT 48 HOURS.**

1. THE DEPRESSION OVER SOUTH COASTAL OMAN AND ADJOINING YEMEN REMAINED PRACTICALLY STATIONARY DURING PAST 06 HOURS AND LAY CENTRED AT 0000 UTC OF TODAY, THE 30<sup>TH</sup> MAY, 2020 NEAR LATITUDE 17.3°N AND LONGITUDE 54.2°E, ABOUT 30 KM NORTH-NORTHEAST OF SALALAH (42316) AND 240 KM EAST-NORTHEAST OF AL GHAYDAH (41398). IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE SLOWLY WEST-NORTHWESTWARDS DURING NEXT 12 HOURS AND WEST-SOUTHWESTWARDS THEREAFTER.

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
30.05.20/0000	17.3/54.2	40-50 GUSTING TO 60	DEPRESSION
30.05.20/1200	17.4/54.0	50-60 GUSTING TO 70	DEEP DEPRESSION
31.05.20/0000	17.3/53.6	50-60 GUSTING TO 70	DEEP DEPRESSION
31.05.20/1200	17.2/53.2	50-60 GUSTING TO 70	DEEP DEPRESSION
01.06.20/0000	17.0/52.7	50-60 GUSTING TO 70	DEEP DEPRESSION

AS PER SATELLITE IMAGERY BASED ON 0000 UTC OF TODAY, THE 30<sup>TH</sup> MAY, ASSOOCIATED BROKEN LOW/MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER WESTCENTRAL ARABIAN SEA BETWEEN LATITUDE 13.5°N TO 19.5°N LONGITUDE 51.5°E TO 56.5°E & SOUTH OMAN ADJOINING NORTH YEMAN. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93° C.

THE MAXIMUM SUSTAINED WIND SPEED AROUND THE SYSTEM IS ABOUT 25 KTS GUSTING TO 35 KTS, NOW IN ITS SOUTHWEST SECTOR. THE ESTIMATED CENTRAL PRESSURE IS 1000 HPA. SEA CONDITION IS ROUGH TO VERY ROUGH OVER WESTCENTRAL ARABIAN SEA ALONG & OFF SOUTH OMAN-EAST YEMEN COASTS.

**RAINFALL FORECAST IS AVAILABLE AT [http://nwp.imd.gov.in/gfsproducts00\\_all.php](http://nwp.imd.gov.in/gfsproducts00_all.php)**

2. ANOTHER LOW PRESSURE AREA IS VERY LIKELY TO FORM OVER SOUTHEAST & ADJOINING EASTCENTRAL ARABIAN SEA DURING NEXT 48 HOURS. IT IS VERY LIKELY TO MOVE NORTH-NORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION OVER EASTCENTRAL AND ADJOINING SOUTHEAST ARABIAN SEA DURING SUBSEQUENT 48 HOURS.

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION)**

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

## REMARKS:

**MJO CONDITION:** THE MADDEN JULIAN OSCILLATION (MJO) INDEX LIES CURRENTLY IN PHASE 1 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE TO BE IN PHASE 1 DURING NEXT 7 DAYS WITH AMPLITUDE REMAINING MORE THAN 1. THUS MJO WILL SUPPORT ENHANCEMENT OF CONVECTIVE ACTIVITY OVER THE WEST AS AND GRADUALLY WILL SUPPORT CONVECTIVE ACTIVITY OVER EASTERN PARTS OF AS FROM 1<sup>ST</sup> JUNE ONWARDS.

CONSIDERING THE SEA CONDITIONS, THE SEA SURFACE TEMPERATURE (SST) IS 30-32°C OVER THE ENTIRE AS. THE TROPICAL CYCLONE HEAT POTENTIAL IS MORE THAN 100 KJ/CM<sup>2</sup> OVER MAJOR PARTS OF SOUTH & WESTCENTRAL AS. IT IS ABOUT 60-80 KJ/CM<sup>2</sup> OVER CENTRAL AS AND IS BECOMING NEGATIVE OVER EXTREME NORTH AS & OFF OMAN COAST.

**ENVIRONMENTAL CONDITIONS FOR SYSTEM 1 OVER SOUTH COASTAL OMAN AND ADJOINING YEMEN:** LOW LEVEL POSITIVE VORTICITY HAS INCREASED AND IS ABOUT 150 X10<sup>-6</sup> SEC<sup>-1</sup> OVER WESTCENTRAL ARBIAN SEA TO THE EAST OF THE SYSTEM CENTRE. IT IS EXTENDING UPTO 200 HPA LEVEL. THE LOW LEVEL CONVERGENCE IS OF ORDER 20X10<sup>-5</sup> SEC<sup>-1</sup> IN SOUTHWEST OF THE SYSTEM CENTRE OVER WESTCENTRAL ARBIAN SEA. THE POSITIVE UPPER LEVEL DIVERGENCE IS OF THE ORDER 20X10<sup>-5</sup> SEC<sup>-1</sup> AROUND THE SYSTEM CENTRE OVER WESTCENTRAL ARBIAN SEA. VERTICAL WIND SHEAR (VWS) IS LOW TO MODERATE (10-20 KTS) OVER WESTCENTRAL ARABIAN SEA ALONG OVER THE SYSTEM CENTRE . THE UPPER TROPOSPHERIC RIDGE LIES NEAR 18.0<sup>0</sup> N OVER THE ARABIAN SEA.

**MODEL GUIDANCE:** MOST OF THE NUMERICAL MODELS INCLUDING ECMWF, IMD GFS, NCEP GFS, GEFS, NEPS, NCUM ETC. ARE INDICATING FURTHER INTENSIFICATION OF THE SYSTEM AND NORTH-NORTHWESTWARDS MOVEMENT FOLLOWED BY WEST-SOUTHWEST MOVEMENT. SOME MODELS LIKE ECMWF, NEPS, NCEP GFS, IMD GFS ARE ALSO INDICATING DEVELOPMENT OF LOW PRESSURE AREA OVER SOUTHEAST DURING NEXT 48 HOURS WITH FURTHER INTENSIFICATION INTO DEPRESSION DURING SUBSEQUENT 2 DAYS.

CONSIDERING ALL THE ABOVE THE SYSTEM OVER SOUTH COASTAL OMAN AND ADJOINING YEMEN IS LIKELY TO INTENSIFY FURTHER INTO A DEEP DEPRESSION DURING NEXT 12 HOURS. IT IS VERY LIKELY TO MOVE SLOWLY WEST-NORTHWESTWARDS DURING NEXT 12 HOURS AND WEST-SOUTHWESTWARDS THEREAFTER.

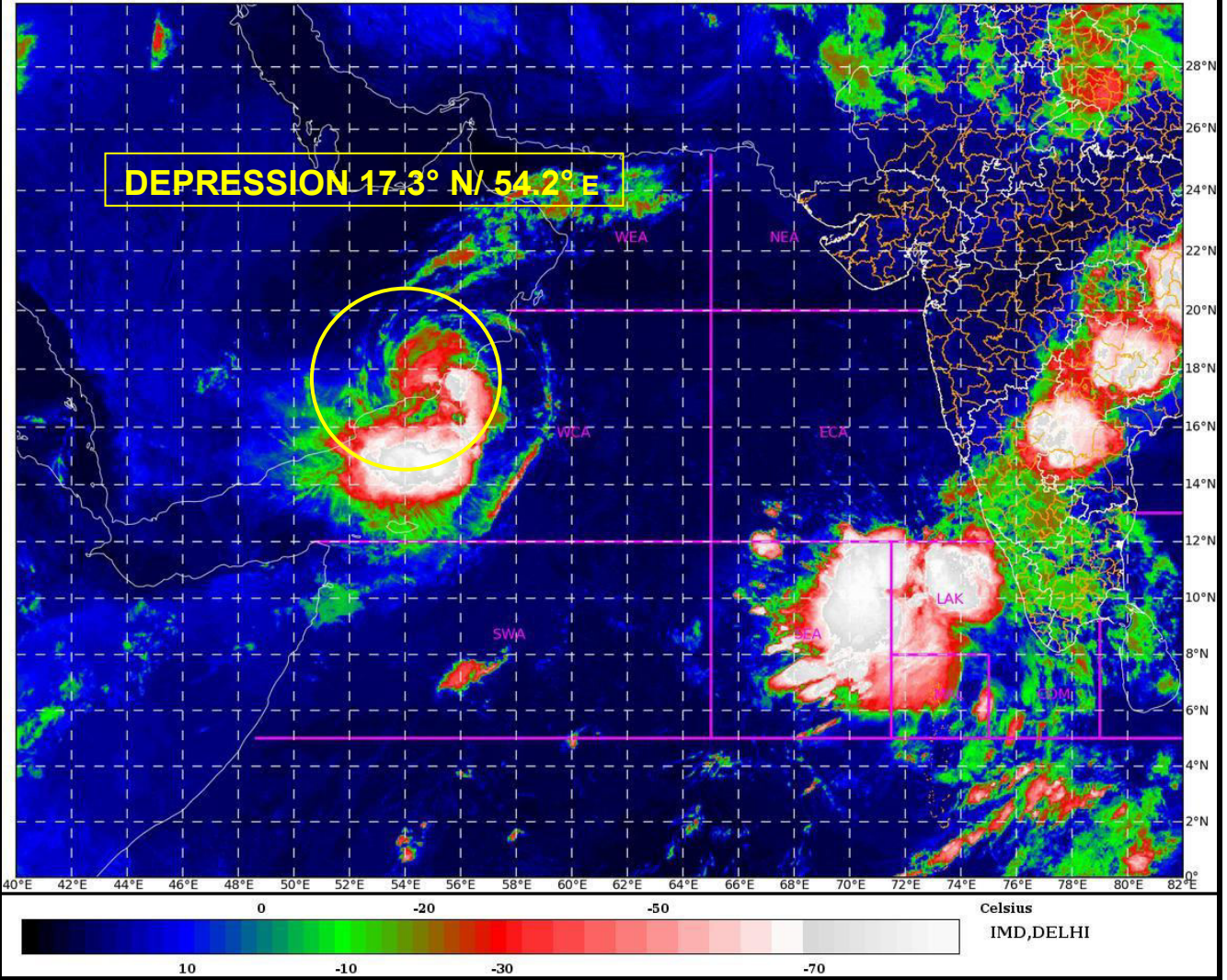
ANOTHER LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTHEAST & ADJOINING EASTCENTRAL DURING NEXT 48 HOURS WITH DEVELOPMENT OF DEPRESSION DURING SUBSEQUENT 48 HOURS. THUS, THE AREA OVER WESTCENTRAL AS AND SOUTHEAST AS IS MAINTAINED UNDER CONTINUOUS WATCH FOR NEXT 7 DAYS.

(SUNITHA DEVI )  
SCIENTIST-E, RSMC, NEW DELHI

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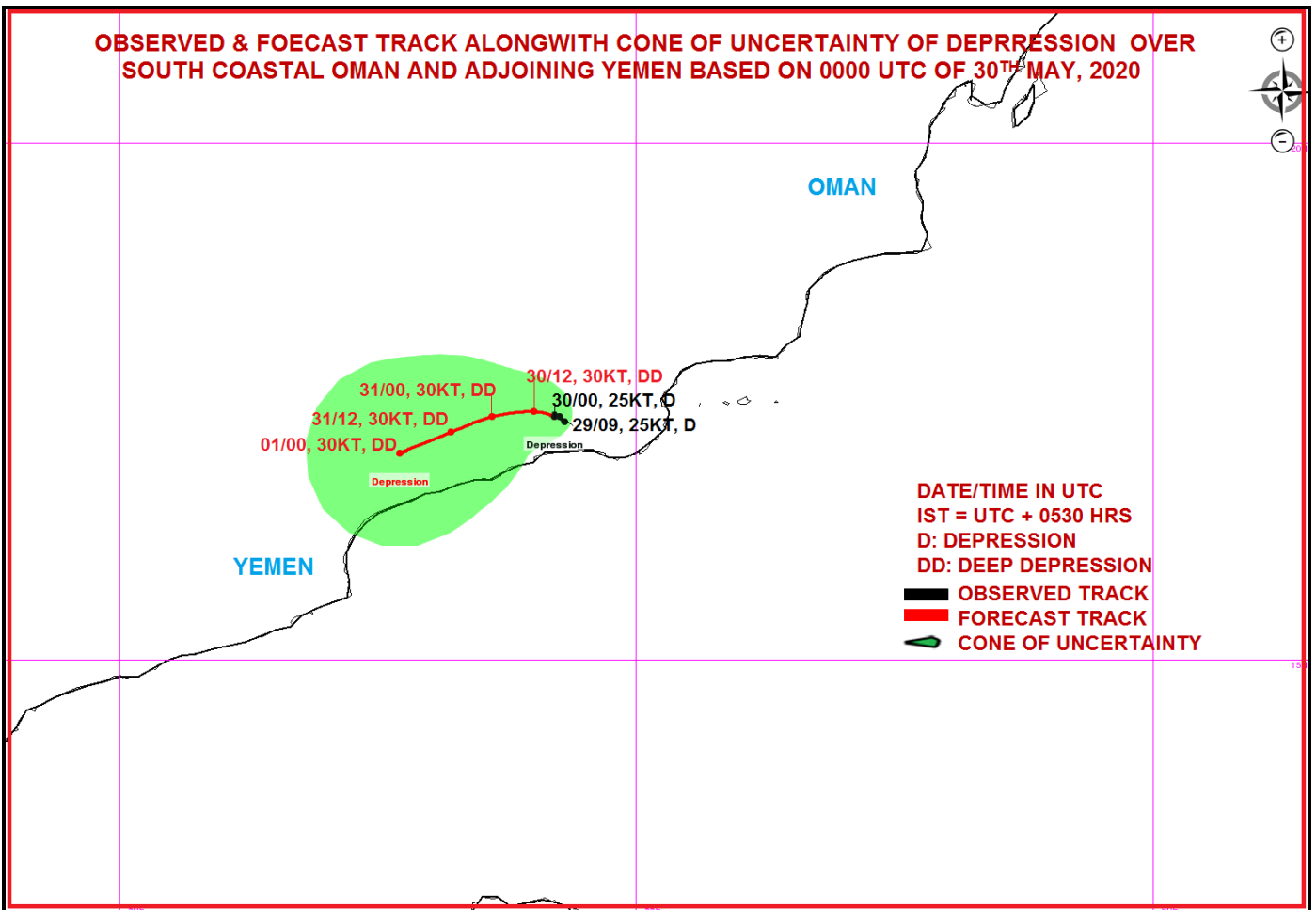
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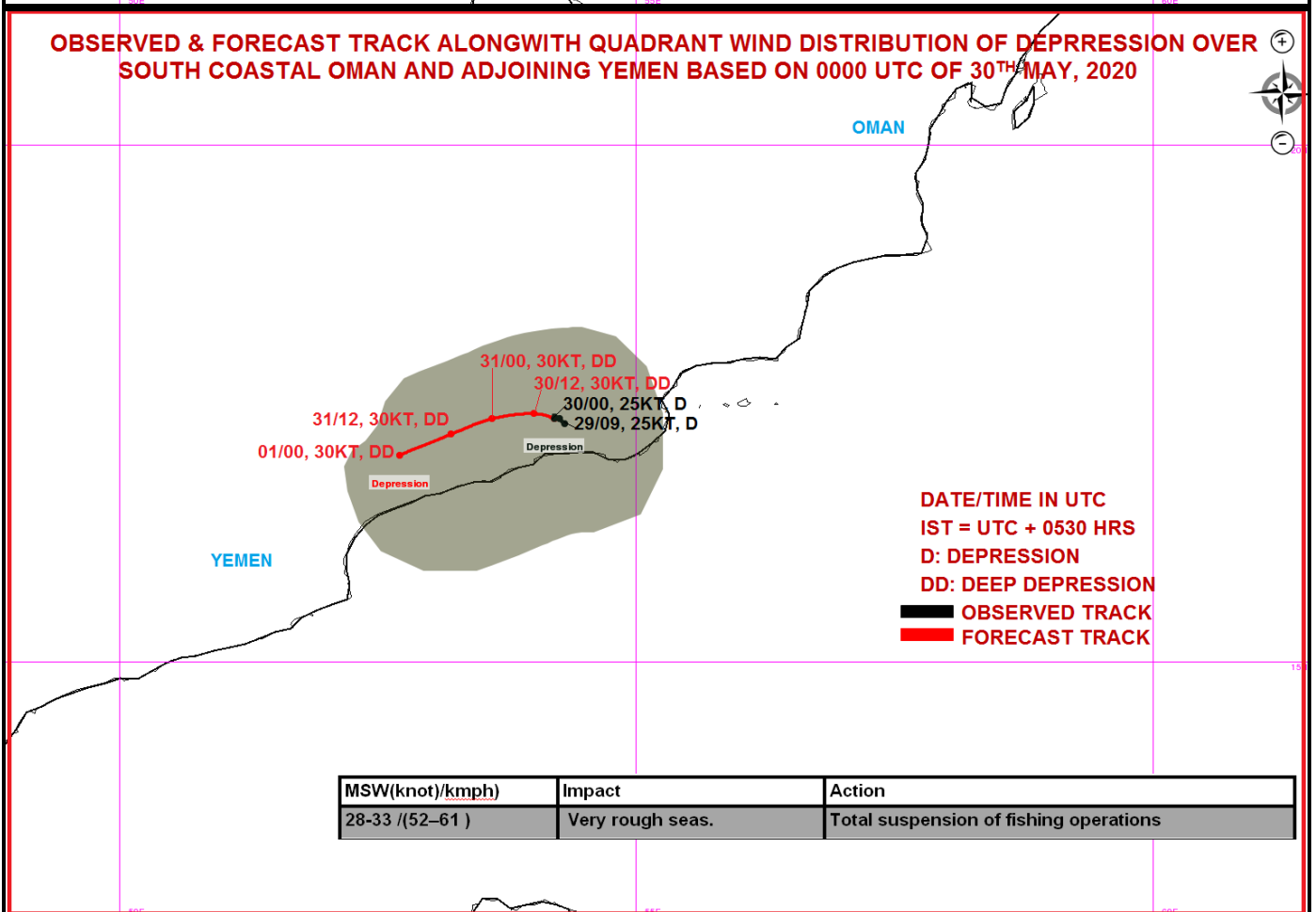


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**OBSERVED & FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF DEPRESSION OVER SOUTH COASTAL OMAN AND ADJOINING YEMEN BASED ON 0000 UTC OF 30<sup>TH</sup> MAY, 2020**

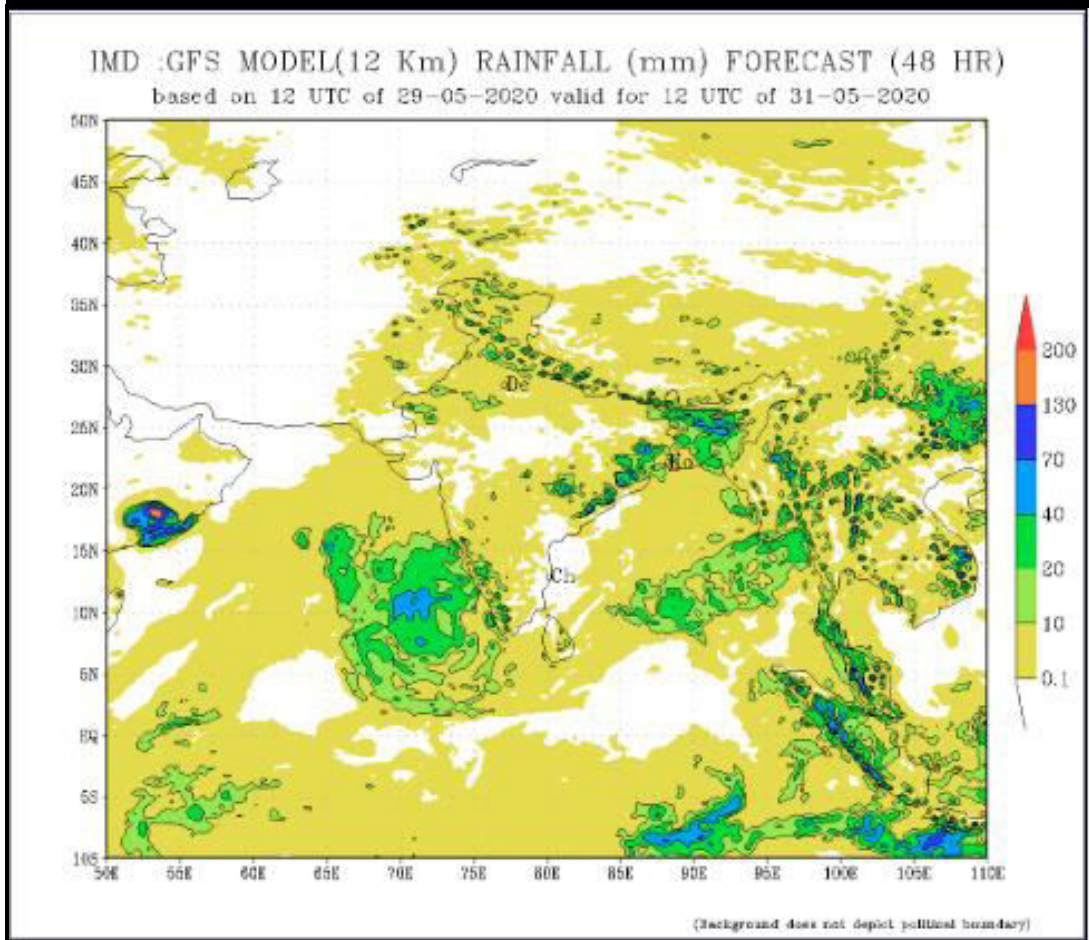
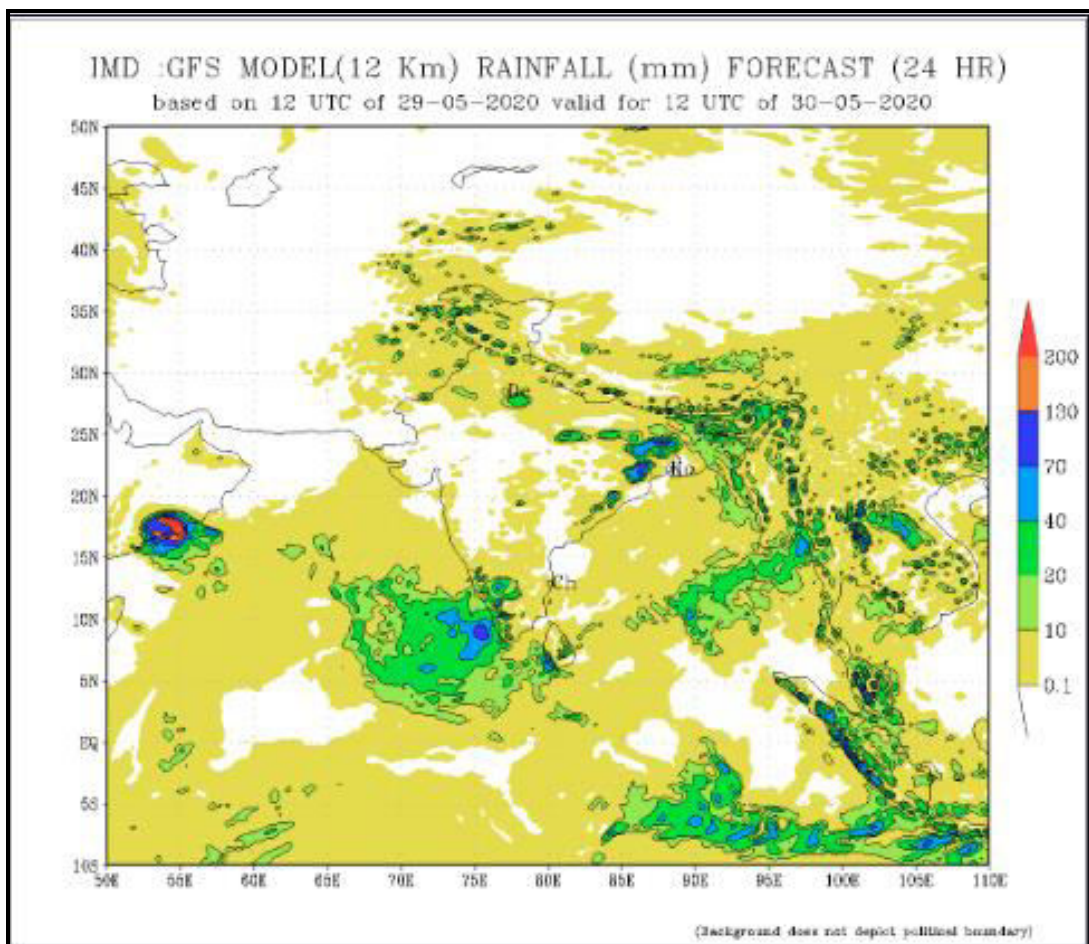


**OBSERVED & FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF DEPRESSION OVER SOUTH COASTAL OMAN AND ADJOINING YEMEN BASED ON 0000 UTC OF 30<sup>TH</sup> MAY, 2020**



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