



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

DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 18.11.2022

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 18.11.2022 BASED ON 0300 UTC OF 18.11.2022.

BAY OF BENGAL:

YESTERDAY'S LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL & ADJOINING ANDAMAN SEA MOVED WESTWARDS AND LAY OVER SOUTHEAST BAY OF BENGAL & NEIGHBOURHOOD IN THE MORNING OF TODAY, THE 18TH NOVEMBER, 2022. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND GRADUALLY CONCENTRATE INTO A DEPRESSION OVER CENTRAL PARTS OF SOUTH BAY OF BENGAL DURING NEXT 48 HOURS. THEREAFTER, IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS TOWARDS TAMILNADU-PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS DURING SUBSEQUENT 3 DAYS.

ASSOCIATED SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL & SOUTH BAY OF BENGAL. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 90 DEGREE CELSIUS.

THE ESTIMATED CENTRAL PRESSURE IS 1008 HPA. SEA CONDITION WILL BE ROUGH OVER SOUTHEAST BAY OF BENGAL AND ADJOINING AREAS OF SOUTHWEST & WESTCENTRAL BAY OF BENGAL ON 18TH NOVEMBER. AT 03000 UTC, A BUOY LOCATED NEAR 16.1N/87.9E REPORTED MEAN SEA LEVEL PRESSURE OF 1011 HPA, MAXIMUM SUSTAINED WIND SPEED 20°/20KT AND SEA SURFACE TEMPERATURE OF 28.6°C.

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	MOD	MOD	LOW

ARABIAN SEA:

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTH 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:

THE MADDEN JULIAN OSCILLATION (MJO) INDEX CURRENTLY LIES IN PHASE 5 WITH AMPLITUDE MORE THAN 1. IT WILL CONTINUE IN SAME PHASE FOR NEXT 3 DAYS AND THEN MOVE TO PHASE 6. MJO INDEX IS THUS CONDUCIVE FOR ENHANCEMENT OF CONVECTIVE ACTIVITY OVER BAY OF BENGAL. SEA SURFACE TEMPERATURE (SST) IS AROUND 28-29°C OVER MAJOR PARTS OF BOB AND 29-30°C OVER A SMALL POCKET OF SOUTHWEST BOB AND OFF SRI LANKA COAST. THE OCEAN HEAT CONTENT (OHC) IS 80-100 KJ/CM² OVER CENTRAL & ADJOINING SOUTH BOB AND LESS THAN 40 KJ/CM² OVER WESTCENTRAL AND SOUTHWEST BOB ALONG EAST COAST OF INDIA.

LOW LEVEL VORTICITY IS 50X10⁻⁶ S⁻¹ TO THE SOUTHWEST OF SYSTEM CENTRE AND IS EXTENDING UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE IS 10 X10⁻⁵ S⁻¹ TO THE WEST OF SYSTEM CENTRE OVER SOUTHWEST BOB. UPPER LEVEL DIVERGENCE IS 20 X10⁻⁵ S⁻¹ OVER SOUTHWEST BOB TO THE SOUTHWEST OF SYSTEM CENTRE. WIND SHEAR IS MODERATE (10-15 KNOTS) OVER CENTRAL & ADJOINING SOUTH BOB AND OVER ANDAMAN SEA, ALONG THE EXPECTED TRACK. UPPER TROPOSPHERIC RIDGE IS RUNNING ALONG 18.0°N OVER THE BOB.

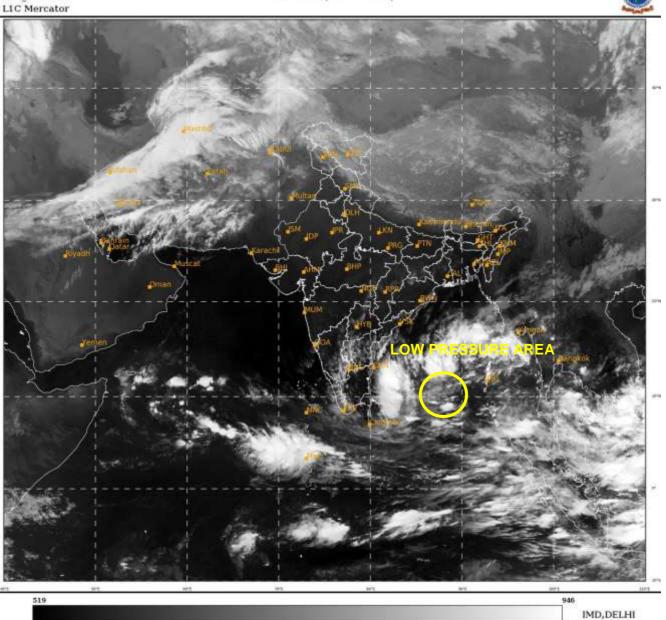
MOST OF THE MODELS ARE INDICATING DEVELOPMENT OF DEPRESSION OVER CENTRAL PARTS OF SOUTH BOB DURING $19^{TH}-20^{TH}$ NOVEMBER. MODELS ARE ALSO INDICATING THAT THE SYSTEM WOULD MOVE WEST-NORTHWESTWARDS TOWARDS NORTH TAMIL NADU-SOUTH ANDHRA PRADESH COASTS DURING 20^{TH} TO 23^{RD} . MOST OF THE MODELS EXCEPT NCUM ARE INDICATING THAT THE SYSTEM WOULD WEAKEN NEAR THE COAST. HOWEVER, NCUM GROUP IS INDICATING THAT THE SYSTEM WOULD CROSS SOUTH ANDHRA PRADESH COAST AS A DEPRESSION ON 22^{ND} .

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL & NEIGHBOURHOOD IS LIKELY TO MOVE WEST-NORTHWESTWARDS AND GRADUALLY CONCENTRATE INTO A DEPRESSION OVER CENTRAL PARTS OF SOUTH BAY OF BENGAL DURING NEXT 48 HOURS. THEREAFTER, IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS TOWARDS TAMILNADU-PUDUCHERRY AND SOUTH ANDHRA PRADESH COASTS DURING SUBSEQUENT 3 DAYS.

> (M. SHARMA) SCIENTIST-D RSMC NEW DELHI

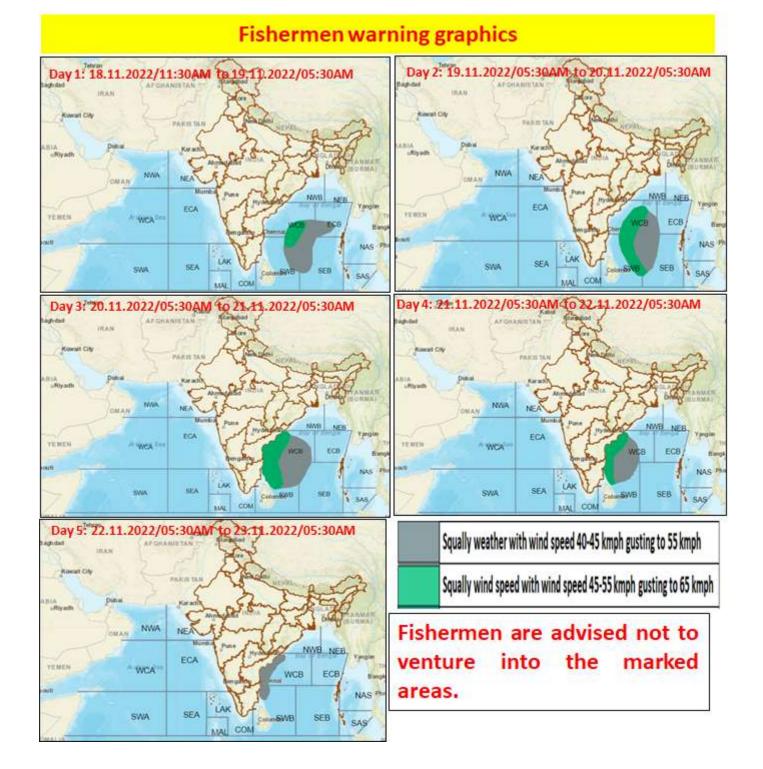
Cloud distribution: (a) Isolated: <25%, Scattered:25-50%, Broken: 51-75%, Solid:>75%, Convection Intensity: (a) Weak: Cloud Top Temperature (CTT) >-25°C, (b) Moderate: CTT: - 25°C to -40°C, (c) Intense: CTT: - 41°C to -70°C and (d) Very Intense: : Less than -70°C PROBABILITY OF CYCLOGENESIS (FORMATION 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

LPA: LOW PRESSURE AREA

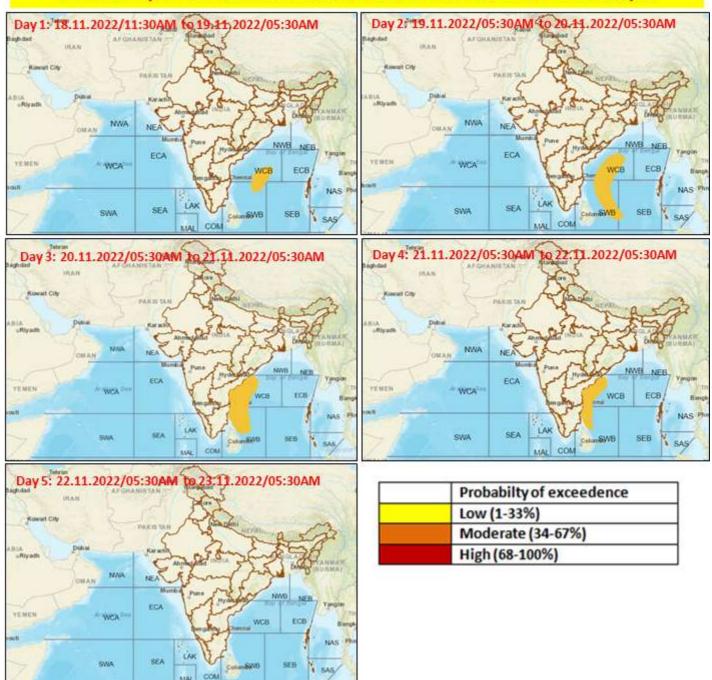


SAT : INSAT-3D IMG IMG_TIR1 10.8 um

18-11-2022/(0300 to 0326) GMT 18-11-2022/(0830 to 0856) IST



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Probability of exceedance of maximum sustained winds ≥ 45 kmph

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