



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

DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 19.10.2022

TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 19.10.2022 BASED ON 0300 UTC OF 19.10.2022.

BAY OF BENGAL:

YESTERDAY'S CYCLONIC CIRCULATION OVER NORTH ANDAMAN SEA AND NEIGHBOURHOOD PERSISTED OVER THE SAME REGION EXTENDING UPTO MID TROPOSPHERIC LEVELS AT 0830 IST OF TODAY, THE 19TH OCTOBER 2022. UNDER ITS INFLUENCE, A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTHEAST AND ADJOINING EASTCENTRAL BAY OF BENGAL DURING NEXT 24 HOURS. IT IS LIKELY TO MOVE WESTNORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION BY 22ND MORNING OVER CENTRAL BAY OF BENGAL. IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A CYCLONIC STORM OVER WESTCENTRAL BAY OF BENGAL DURING SUBSEQUENT 48 HOURS.

INTENSE CONVECTION LAY OVER ANDAMAN SEA AND NEIGHBOURHOOD HAS INCREASED DURING LAST 12 HRS. MINIMUM CLOUD TOP TEMPERATURE IS MINUS 93 DEGREE CELSIUS. SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER SOUTH BAY OF BENGAL AND ANDAMAN 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	LOW	MODERATE	HIGH

ARABIAN SEA:

YESTERDAY'S CYCLONIC CIRCULATION OVER SOUTHWEST ARABIAN SEA & NEIGHBOURHOOD PERSISTED OVER THE SAME REGION AT 0300 UTC OF TODAY, THE 19TH OCTOBER, 2022.

YESTERDAY'S CYCLONIC CIRCULATION OVER EASTCENTRAL ARABIAN SEA OFF MAHARASHTRA COAST PERSISTED OVER THE SAME REGION AT 0300 UTC OF TODAY, THE 19TH OCTOBER, 2022.

BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE CONVECTION LAY OVER EASTCENTRAL & SOUTHEAST ARABIAN SEA AND LAKSHADWEEP ISLANDS AREA. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER WESTCENTRAL & SOUTHWEST ARABIAN SEA AND COMORIN AREA.

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:

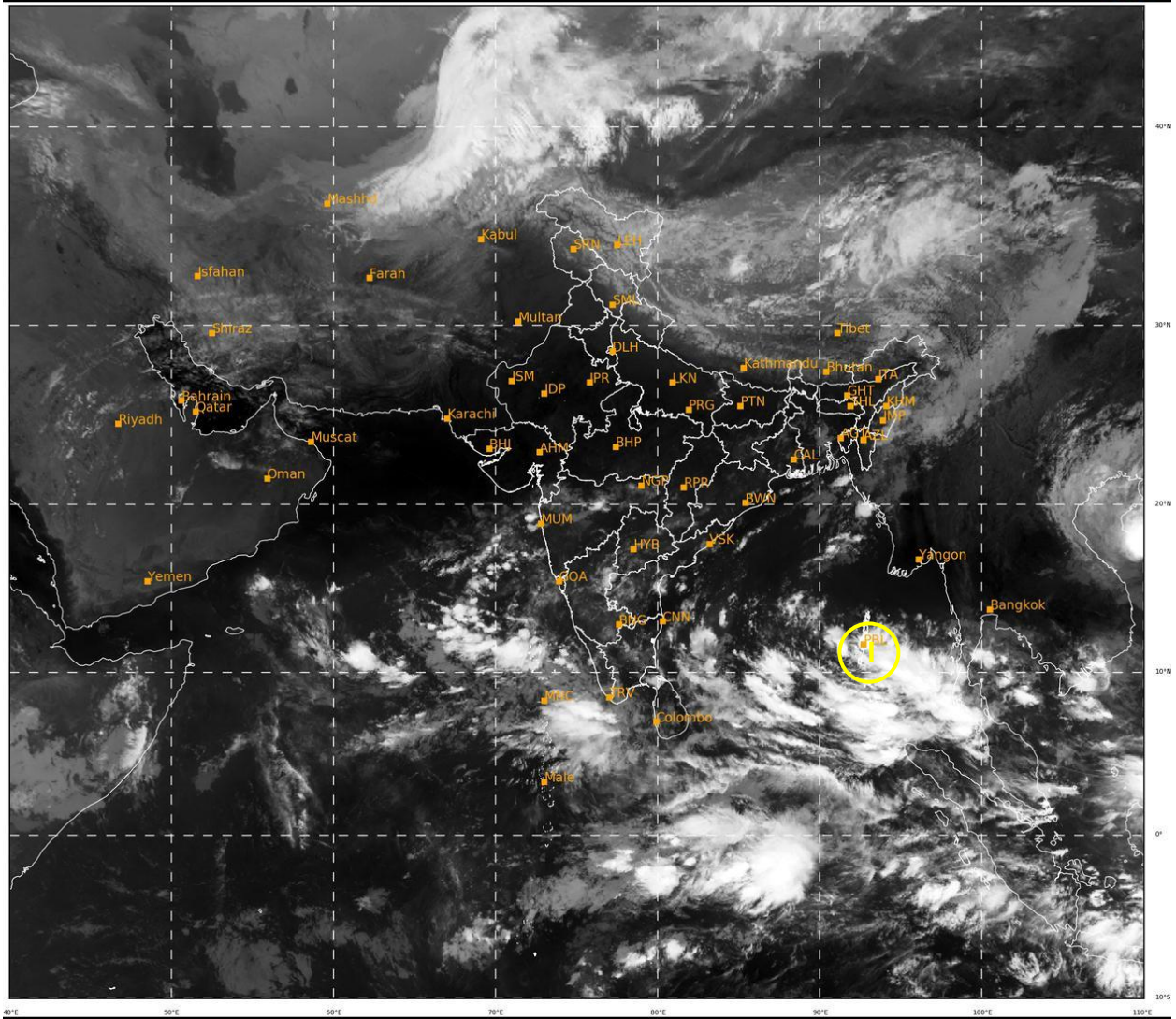
THE MADDEN JULIAN OSCILLATION INDEX (MJO) CURRENTLY LIES IN PHASE 6 WITH AMPLITUDE GREATER THAN 1. IT WOULD CONTINUE IN SAME PHASE 6 DURING NEXT 5 DAYS WITH GRADUALLY INCREASING AMPLITUDE. HENCE MJO IS NOT SUPPORTIVE FOR ENHANCEMENT OF CONVECTIVE ACTIVITY OVER BAY OF BENGAL OF BENGAL.

SEA SURFACE TEMPERATURE (SST) IS AROUND 29-31⁰C OVER ENTIRE BOB. THE OCEAN HEAT CONTENT (OHC) IS >100 KJ/CM² OVER ENTIRE ANDAMAN SEA, CENTRAL BOB, SOUTH BOB & ADJOINING EIO AND 50-70 KJ/CM² OVER WESTERN PARTS OF BOB.

LOW LEVEL VORTICITY HAS INCREASED DURING PAST 24 HOURS AND IS AROUND 100 X10⁻⁶ S⁻¹ TO THE SOUTHWEST OF SYSTEM CENTRE. VERTICALLY IT IS EXTENDING UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE IS AROUND 10 X10⁻⁵ S⁻¹ TO THE SOUTHWEST OF SYSTEM CENTRE. UPPER LEVEL DIVERGENCE IS AROUND 10 X10⁻⁵ S⁻¹ OVER ANDAMAN SEA TO THE SOUTHWEST OF SYSTEM CENTRE. WIND SHEAR IS MODERATE (15 KNOTS) OVER ANDAMAN SEA. CURRENTLY, THE CYCLONIC CIRCULATION OVER ANDAMAN SEA IS IN A FAVOURABLE ENVIRONMENT.

MOST OF THE MODELS ARE INDICATING DEVELOPMENT OF LOW PRESSURE AREA OVER SOUTHEAST & ADJOINING EASTCENTRAL BOB TODAY. MODELS ARE ALSO INDICATING FURTHER INTENSIFICATION OF THIS SYSTEM DURING 21/1200 utc TO 22ND/0000 UTC AND INTO A CYCLONIC STORM BY 24/0000 UTC. THERE IS STILL LARGE VARIATION AMONG VARIOUS MODELS WRT TRACK & PEAK INTENSIFICATION OF THIS SYSTEM. THE LANDFALL POINT BASED ON ECMWF, NCUM 7 NCEP GFS IS VARYING BETWEEN WEST BENGAL (DIGHA) TO BANGLADESH (PATHER GHAT) COASTS. LANDFALL TIME IS VARYING BETWEEN 25/0000 TO 25/1200 UTC FROM THESE MODELS. HOWEVER, IMD GFS IS INDICATING LANDFALL OVER ODISHA AROUND 28/0000 UTC.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT UNDER THE INFLUENCE OF THE CYCLONIC CIRCULATION OVER NORTH ANDAMAN SEA, A LOW PRESSURE AREA IS LIKELY TO FORM OVER SOUTHEAST AND ADJOINING EASTCENTRAL BAY OF BENGAL DURING NEXT 24 HOURS. IT IS LIKELY TO MOVE WESTNORTHWESTWARDS AND CONCENTRATE INTO A DEPRESSION BY 22ND/0000 UTC OVER CENTRAL BAY OF BENGAL OF BENGAL. IT IS VERY LIKELY TO INTENSIFY FURTHER INTO A CYCLONIC STORM OVER WESTCENTRAL BAY OF BENGAL DURING BY 24TH/0000 UTC.



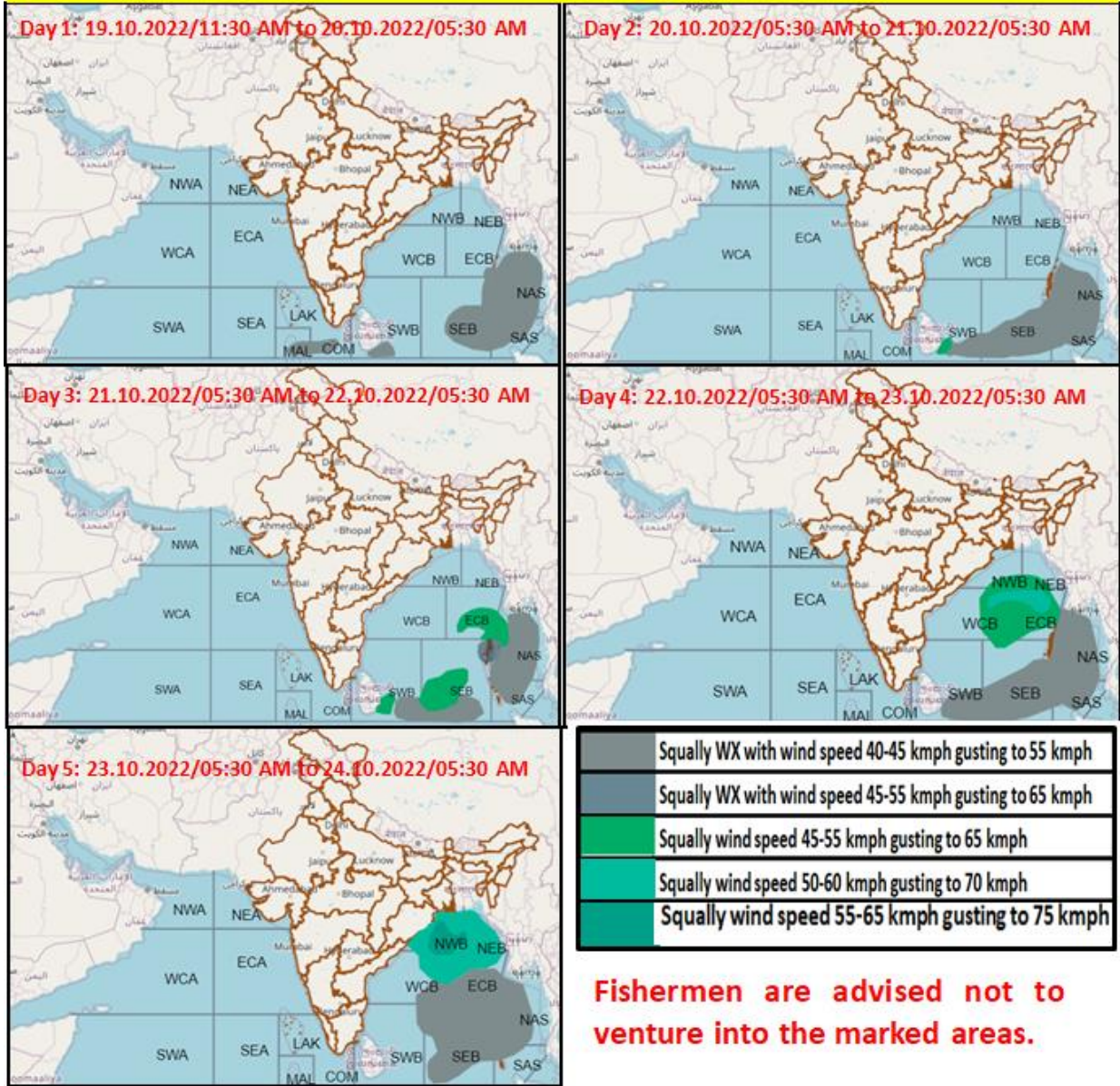
IMD, DELHI

I: INVEST AREA

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

AREA OF MAXIMUM SUSTAINED WIND ≥ 25 KNOTS

Fishermen warning graphics



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