





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

### **DEMS-RSMC TROPICAL CYCLONES NEW DELHI DATED 19.11.2024**

TROPICAL WEATHER OUTLOOK FOR THE NORTH INDIAN OCEAN (THE BAY OF BENGAL AND THE ARABIAN SEA) VALID FOR THE NEXT 168 HOURS ISSUED AT 0600 UTC OF 19.11.2024 BASED ON 0300 UTC OF 19.11.2024.

#### **BAY OF BENGAL:**

An upper air cyclonic circulation is likely to form over South Andaman Sea & adjoining areas around 21<sup>st</sup> November. It is likely to move west-northwestwards and become a low pressure area over southeast Bay of Bengal around 23<sup>rd</sup> November. Thereafter, it is likely to continue to move west-northwestwards and intensify into a depression over southwest Bay of Bengal during subsequent 2 days.

Scattered low and medium clouds with embedded intense to very intense convection lay over southwest Bay of Bengal. Scattered low and medium clouds with embedded moderate to intense convection lay over eastcentral Bay of Bengal and south Andaman sea and weak to moderate convection lay over southeast Bay of Bengal.

## \*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:

24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
NIL	NIL	NIL	NIL	NIL	LOW	

\*NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY

### **ARABIAN SEA:**

Yesterday's cyclonic circulation over Comorin area & neighbourhood at 0.9 km above mean sea level has become less marked at 0300 UTC of today, the 19<sup>th</sup> November, 2024.

Scattered low and medium clouds with embedded moderate to intense convection lay over south adjoining central Arabian sea, Lakshadweep islands, Comorin & Maldives area.

### \*PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 168 HRS:

24	24-48	48-72	72-96	96-120	120-144	144-168
HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
NIL	NIL	NIL	NIL	NIL	NIL	NIL

\*NOTE: EVERY 24HR FORECAST IS VALID UPTO 0300 UTC (0830 IST) OF NEXT DAY

## **REMARKS:**

Madden Julian Oscillation (MJO) index is currently in phase 3 with amplitude greater than 1. It is likely to continue in same phase during next 4 days and then likely to move to phase 4 with decreasing amplitude. The sea surface temperature (SST) is 28-30°C over entire Bay of Bengal and Andaman Sea. The Tropical Cyclone Heat Potential (TCHP) Is 120-160 kJ/cm² over northeast & east central Bay of Bengal and Andaman sea, 100-130 kJ/cm² over northwest, extreme south Bay of Bengal and adjoining EIO and 40-70 over remaining parts of Bay of Bengal. A Zone of positive cyclonic vorticity at 850 hpa level is around 30-40x10<sup>-5</sup> s<sup>-1</sup> over Sri Lanka. The low level convergence is around 10-20 x10<sup>-5</sup> s<sup>-1</sup> over southwest Bay of Bengal off Sri Lanka and adjoining EIO and another zone of 5 x10<sup>-5</sup> s<sup>-1</sup> over eastcentral Bay of Bengal & adjoining Andaman Sea. Upper level divergence is around 5-10x10<sup>-5</sup> s<sup>-1</sup> over southeast Bay of Bengal off Tamil Nadu coast and north Sri Lanka. The wind shear is low to moderate over central Bay of Bengal and high over the north Bay of Bengal.

Most of the models (IMD GFS, NCEP GFS, ECMWF, ECMM) are indicating likely formation of cyclonic circulation over South Andaman Sea and adjoining areas around 21st and its west-northwestwards movement with intensification into a low pressure area over southeast Bay of Bengal around 23<sup>rd</sup> and depression over southwest Bay of Bengal around 24<sup>th</sup>. However, NCUM group is not indicating any significant intensification of system.

Considering all the above it is inferred that, an upper air cyclonic circulation is likely to form over South Andaman Sea & adjoining areas around 21st November. It is likely to move west-northwestwards and become a low pressure area over southeast Bay of Bengal around 23rd November. Thereafter, it is likely to continue to move west-northwestwards and intensify into a depression over southwest Bay of Bengal during subsequent 2 days

A continuous watch is being maintainted for further intensification and movement of system towards Tamil Nadu-Sri Lanka coasts.

SAT: INSAT-3DR IMG IMG\_TIR1 10.8 um L1C Mercator

19-11-2024/(0315 to 0342) GMT 19-11-2024/(0845 to 0912) IST



