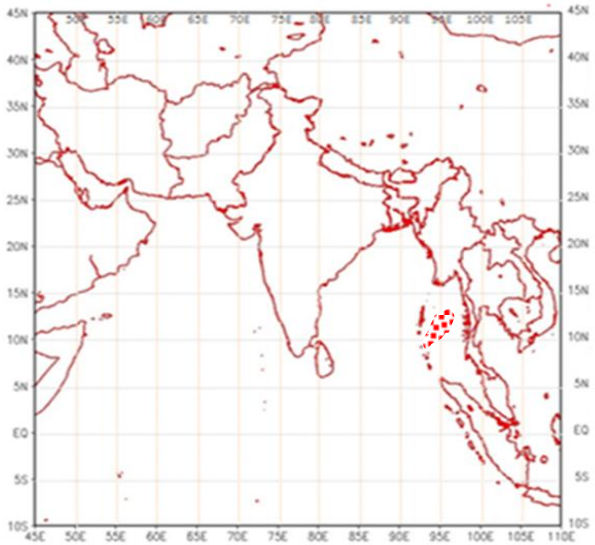
India Meteorological Department
Ministry of Earth Sciences
Mausam Bhavan, Lodi Road, New Delhi-110003

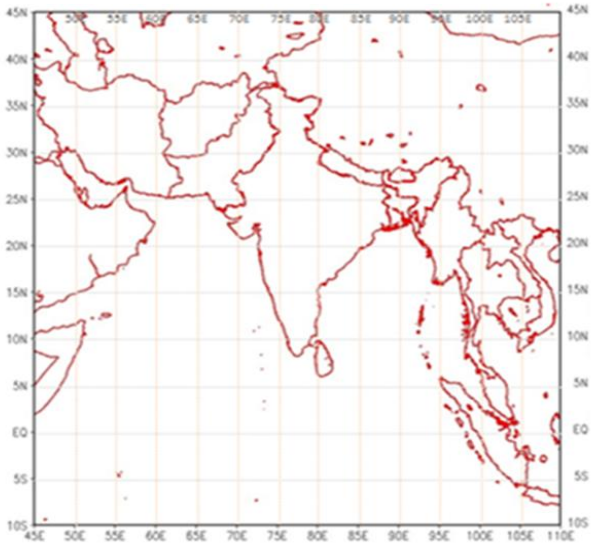
Issued on 01.04.2021

NORTH INDIAN OCEAN EXTENDED RANGE OUTLOOK FOR CYCLOGENESIS

WEEK 1: 02.04.2021-08.04.2021



WEEK 2: 09.04.2021-15.04.2021



PROBABILITY OF CYCLOGENESIS
(FORMATION OF DEPRESSION OR HIGHER INTENSITY)

LOW	(1-33% PROBABILITY)
MODERATE	(34-67% PROBABILITY)
HIGH	(68-100% PROBABILITY)

CONFIDENCE

A well-marked low pressure area lay over central parts of Andaman Sea and neighbourhood. It is currently lying in a favourable environment of 90-100 kJ/cm^2 Tropical Cyclone heat Potential, moderate vertical wind shear and positive low cyclonic vorticity (80-90 X10^{-6}S).

The Madden Julian Oscillation (MJO) index lies currently in phase 5 with amplitude more than 1. It will continue in same phase till 2nd April. Thereafter, it will move to phase 6 with amplitude remaining more than 1 from the latter half of week 1 and further into phase 7 from the beginning of week 2 with amplitude more than 1. Thus, MJO phase and amplitude will support enhancement of convective activity over the Andaman sea and adjoining areas till the beginning of week 1 and will become unfavourable thereafter. Hence the MJO will support convection over the Indian Seas (Bay of Bengal & Arabian Sea) only for the next couple of days.

A few of the ensemble model products like GEFS, ECMWF & CGEPS (MME) are indicating varied probability for Cyclogenesis over Andaman Sea on a lower range during week 1. CGEPS (MME) shows 50-60% probability over Andaman Sea. ECMWF cyclogenesis probability product shows a very low likelihood of 10-30% over south BoB during the beginning of week 1. Genesis Potential parameter (GPP) shows potential for cyclogenesis over Andaman Sea on 1st & 2nd April. IMD GFS & GEFS indicates likely formation of a low pressure area over Andaman Sea without any further intensification during the same period. NCUM and its ensemble & regional models are not indicating any probability of genesis over NIO. Thus a few models are indicating intensification of the system into a depression around 2nd April with north-northeastwards movement towards Myanmar coast and weakening over the coastal waters of Myanmar.

Considering all these, the well marked low pressure area is likely to concentrate into a depression with low probability by 2nd April and gradually weaken thereafter. It would move north-eastwards towards Myanmar coast.

(a) Area likely to be affected: Andaman Sea, Andaman & Nicobar Islands, along & off Myanmar & adjoining Thailand coasts

(b) Impact expected: Rough to very rough Seas and squally weather with wind speed 45-55 kmph gusting to 65 kmph, affecting small vessels and fishing operations.

(c) Warnings / Advisory:

- Fishermen are advised not to venture into Andaman Sea on 1st & 2nd April 2021
- Small ships are advised to avoid the area
- Ports along the Andaman & Nicobar Islands may take necessary pre-cautions.
- Naval base operations may maintain necessary pre-cautions
- Tourism activities may be restricted briefly over the area specified for squally weather & rough Sea warning

Verification of forecast issued during last two weeks:

The forecast issued on 18th March for week 2 and the forecast issued on 25th March for week 1 for the period (26.03.2021-01.04.2021) indicated 'Low' probability for cyclogenesis over the BoB during the later part of the period. A low pressure area formed over southeast BoB and adjoining south Andaman Sea on 31st March and became well marked over central parts of Andaman Sea on 01st April.

Next update: 08.04.2021