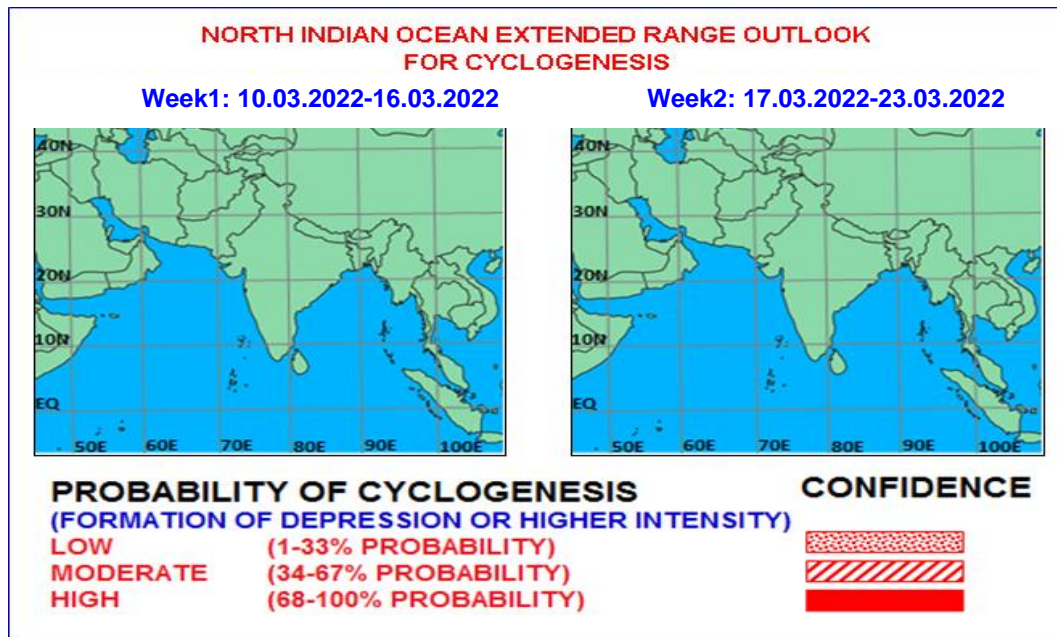




Issued on 10.03.2022



The Madden Julian Oscillation (MJO) Index currently lies in Phase 1 with amplitude less than 1 and will move across phases 2, 3 and 4 during entire forecast period. Thus, MJO phase is conducive for enhancement of convective activity over the north Indian Ocean during entire forecast period.

Based on CFS forecast, weak westerlies are likely to prevail over Bay of Bengal (BoB) during week 1. During week 2, further weakening of westerly flow is predicted over BoB. No other equatorial wave is likely over the North Indian Ocean (NIO) region during the entire forecast period. Considering the sea conditions, sea surface temperatures (SST) is around 28-29°C over southern parts of NIO. The ocean heat content is more 60-80 KJ/cm² over major parts of south BoB and more than 100 KJ/cm² over south BoB & adjoining Equatorial Indian Ocean (EIO) and over southeast Arabian Sea. It is less than 50 KJ/cm² over remaining parts of NIO.

The pressure and wind fields of various models like IMD GFS, GEFS, ECMWF, NCEP GFS, NCUM and NEPS are not indicating any cyclogenesis over NIO during the forecast period. However, some models like IMD GFS, ECMWF, ECMWF ensemble, NCEP GFS are indicating a cyclonic circulation over central parts of south Bay of Bengal during week 1.

Hence to conclude, various broad scale features, sea conditions and model guidance indicate that no cyclogenesis is expected over the North Indian Ocean region during next 2 weeks. However, favourable MJO & sea conditions and various models guidance indicate development of a cyclonic circulation over the central parts of south Bay of Bengal during first half of week 1 leading to enhanced convective activity over the region.

Verification of forecast issued during last two weeks:

The forecast issued on 24th February for week 2 (04.03.2022-10.03.2022) indicated no cyclogenesis over the NIO during the period. The forecast issued on 3rd March for week 1 (04.03.2022-10.03.2022) indicated high probability of cyclogenesis over the southwest BoB. Actually a depression was lying over southwest BoB on 4th March. It moved nearly northwards till evening of 5th March, recurved southwestwards thereafter and weakened into a well marked low pressure area over southwest BoB on 6th morning. Thus cyclogenesis area was correctly indicated in week 1 forecast.

Next update: 17.03.2022