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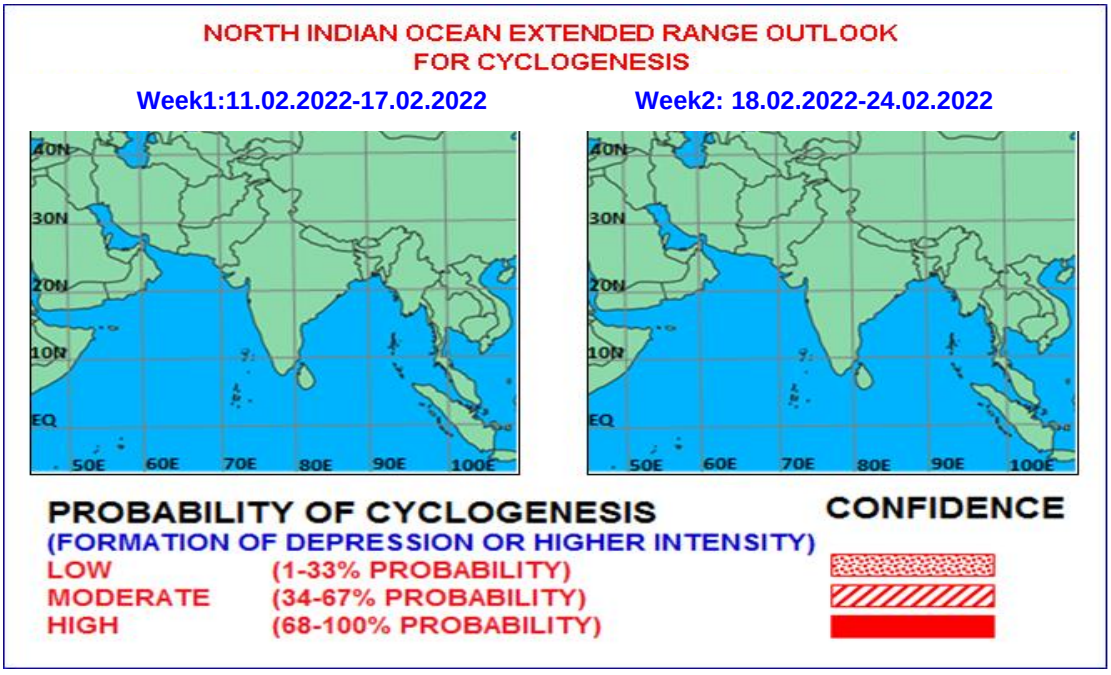

The Madden Julian Oscillation (MJO) Index currently lies in Phase 3 with amplitude less than 1 and will continue in same phase during next 3 days. Thereafter, it will move to phase 4 with amplitude becoming more than 1 during rest part of the forecast period. MJO phase is thus favourable for enhancement of convective activity over the North Indian Ocean (NIO).

Based on CFS forecast, feeble easterly flow is likely to prevail over Equatorial Indian Ocean (EIO) and adjoining southeast Arabian Sea (AS) & southwest BoB (3-5 mps) and eastcentral BoB (1-3 mps) during week 1. Strengthening (3-5 mps) of easterlies with increase in areal extension is predicted over EIO and adjoining south AS. Feeble westerlies (1-3 mps) are predicted over adjoining Gulf of Thailand during week 1. Strengthening of westerlies (3-5 mps) over the same regions is predicted during week 2. MJO is active over southwest BoB during week 1 and over Gulf of Thailand during week 2. Equatorial Rossby (ER) waves and Kelvin Waves (KW) are not likely to prevail over the NIO region during entire forecast period. Further the sea surface temperatures are not favourable as they are around 26^0C over southern parts of NIO and less than that over the northern parts. Similarly, ocean heat content is 60-80 KJ/cm^2 over southern parts of NIO becoming less than 50 KJ/cm^2 over the northern parts. Thus, various broad scale features including MJO, westerlies, easterlies, ERW, KW and ITCZ etc. and oceanic conditions indicate no likelihood of cyclogenesis over the NIO region during forecast period. However, MJO and enhanced westerlies are likely to contribute towards increased convective activity over EIO & adjoining southwest BoB during week 1 and over adjoining South Andaman Sea and Gulf of Thailand during week 2.

The forecast fields of various numerical models including IMD GFS, IMD GPP, NCEP GFS, GEFS, NCUM, NEPS, ECMWF, ECMWF ensemble and MME CFS-V2 are not indicating any cyclogenesis over the NIO region during next two weeks.

Hence to conclude, various broad scale features, sea conditions and model guidance indicate that cyclogenesis is not likely over the North Indian Ocean during the ensuing 2 weeks. However, enhanced convective activity is likely over EIO & adjoining southwest BoB during week 1 and over adjoining South Andaman Sea and Gulf of Thailand during week 2.

Verification of forecast issued during last two weeks:

The forecast issued on 27th January for week 2 (04.02.2022-10.02.2022) and on 03rd February for week 1 (04.02.2022-10.02.2022) indicated no cyclogenesis over the region during the forecast period. Hence non-occurrence of cyclogenesis was correctly predicted in the two weeks forecast.

Next update: 17.02.2022