



The Madden Julian Index (MJO) currently lies in phase 6 with amplitude close to 1. It is likely to move into phase 7 from the beginning of week 1 and continue in same phase with amplitude remaining more than 1 during weeks 1 & 2. The Tropical Cyclone Heat Potential (TCHP) is more than 100 KJ/cm² over Andaman Sea and adjoining southeast Bay of Bengal (BoB), some parts of east-central BoB and southeast and adjoining southwest Arabian Sea (AS). It is more than 60 KJ/cm² elsewhere outside some parts of southwest BoB, Comorin area, along Tamil Nadu, Andhra Pradesh & Odisha coasts and also over southwest, west-central and northwest Arabian Sea. Sea Surface Temperature (SST) is around 30-31⁰C over major parts of the BoB and AS except over Somalia & Oman coasts, where it is 24-26⁰C. Though the Oceanic conditions are favourable for sustained convection over the north Indian Ocean (NIO), the phase of MJO remains unfavourable for cyclogenesis over the NIO during next 2 weeks.

Most of the numerical models including IMD GFS, NCEP GFS, GEFS, NEPS, ECMWF and NCUM are not indicating any cyclogenesis during the respective forecast periods. The genesis potential parameter (GPP) based on IMD GFS & MME (CFSV2) is also not indicating any potential zone for cyclogenesis.

Considering all the above, it may be concluded no cyclogenesis likely over the north Indian Ocean during next 2 weeks.

Verification of forecast issued during last two weeks:

The forecast issued on 13th May for week 2 (21.5.2021- 28.05.2021) indicated low probability of cyclogenesis over eastcentral and adjoining northeast Bay of Bengal during later part of the week. The forecast issued on 20th May for week 1(21.5.2021- 28.05.2021) indicated high probability of cyclogenesis over Andaman Sea and adjoining eastcentral BoB during first half of week. Actually, low pressure area formed over eastcentral BoB on 22nd, concentrated into depression on 23rd, moved north-northwestwards and crossed north Odisha coast on 26th May. Thus, cyclogenesis over BoB region could be well predicted two weeks (10 days) in advance.

Next update: 03.06.2021