



The Madden Julian Oscillation (MJO) index is currently in Phase 4 with amplitude slightly greater than 1. It will remain in Phase 4 with amplitude less than 1 during first half of week 1. It is likely to move into Phase 5 with amplitude less than 1 from the latter part of week 1 and enter into Phase 6 during week 2. Thus, the phase of MJO will support convective activity over the north Indian Ocean during week 1 alone.

Most of the numerical models including IMD GFS, GEFS & ECMWF are not indicating any cyclogenesis over the region during week 1 and NCEP GFS during weeks 1 & 2. ECMWF however is indicating cyclogenesis over the land during the later part of week 1. NEPS & NCUM indicate probable formation of a Depression over westcentral & adjoining northwest Bay of Bengal (BoB) off north Andhra Pradesh – south Odisha coasts during the second half of week 1. The Genesis Potential Parameter (GPP) based on IMD GFS is also indicating potential zone for cyclogenesis during middle of week-1 over the BoB. The GPP based on CGEPS (MME) is also indicating cyclogenesis with 40 – 50 % probability during second half of week-1. However, all these models indicate chance of formation of a low pressure area over north and adjoining central Bay of Bengal during the second half of week-1 and no genesis during week -2.

It is very likely that the remnant of Tropical Storm ‘NOUL’ which is currently over west pacific could move across Vietnam, Laos & Myanmar and emerge into northeast BoB around the middle of week -1. Out of the 7 model products consulted, only 3 of them indicate potential for formation of a Depression over the Sea area.

**Considering the above, it may be concluded that there is a ‘Low’ probability for cyclogenesis over North Bay of Bengal during second half of week 1.**

**Verification of forecast issued during last two weeks:**

The forecast issued on 3<sup>rd</sup> September for week 2 (11.09.2020-17.09.2020) and the forecast issued on 10<sup>th</sup> September for week 1 (11.09.2020-17.09.2020) stated NIL probability for the period. Thus non occurrence of cyclogenesis over North Indian Ocean was correctly predicted two weeks in advance.