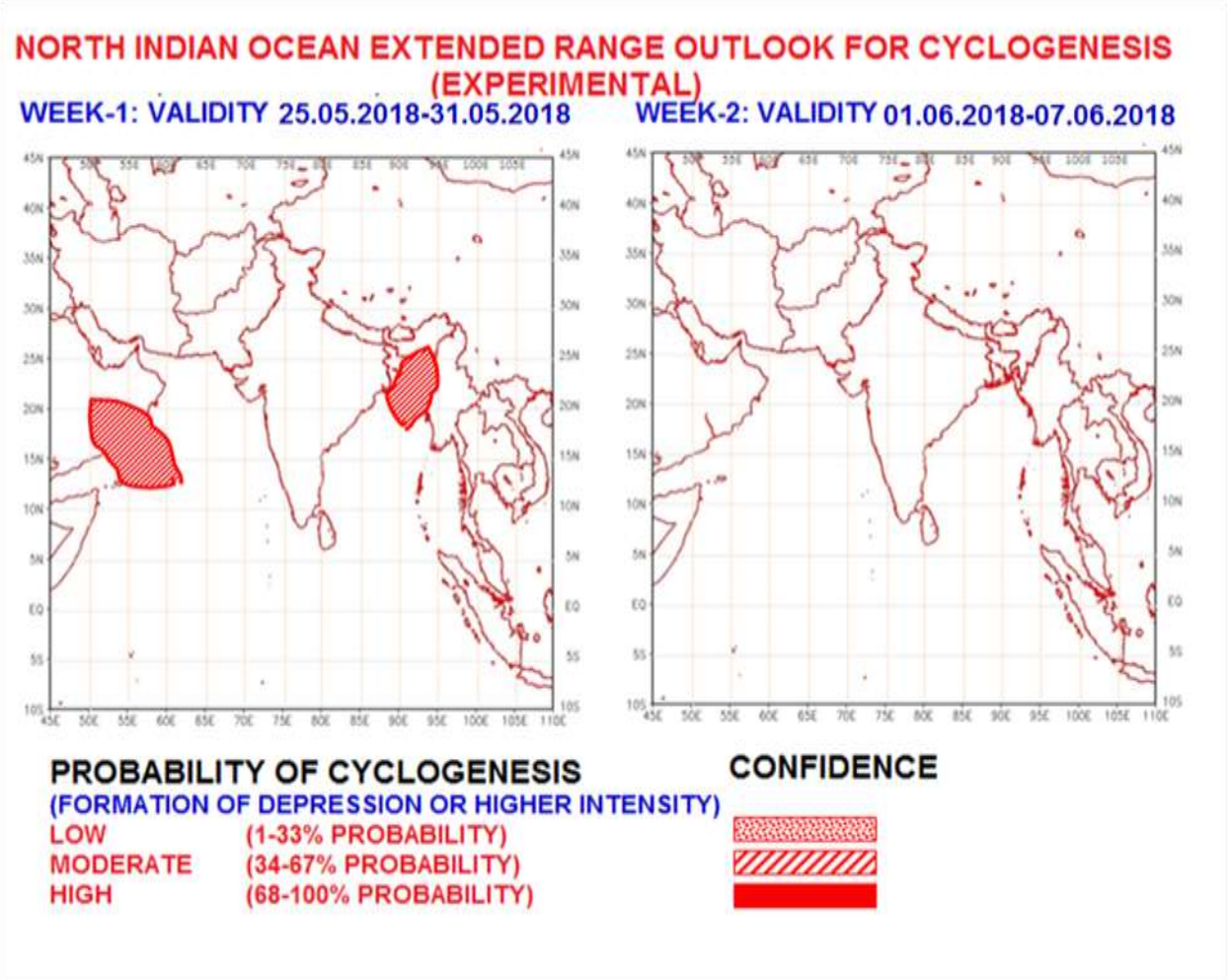
Issued on 24.05.2018



The Madden Julian Oscillation (MJO) is currently located in phase 2 with amplitude more than 1 on 24th May 2018. During first half of week-1, it will continue in phase 2 with amplitude more than 1. During second half of week-1, it will move to phase 3 with decreasing amplitude but greater than 1. Hence, the MJO is favourable for convective activity over north Indian Ocean (including Arabian Sea (AS) during first half and over Bay of Bengal (BoB)) during second half of first week. In week 2, MJO enhanced phase will continue in phase 3, but with decreasing amplitude becoming less than 1 in later part of the week 2. Hence the MJO is favourable for sustenance of intensity of the existing cyclone, MEKUNU over the Arabian Sea during first half of the week 1. It will become favourable for cyclogenesis over the Bay of Bengal during second half of the week 1. However, the intensity of the system may be less due to unfavourable amplitude. The MJO is not favourable for any genesis in week 2.

Most of the models (including IMD GFS, NCEP GFS, ECMWF, NEPS, NCUM) suggest that Very Severe Cyclonic Storm Kemunu over westcentral AS will track nearly northwards for next 24 hours & then north-northwestwards and cross southeast Yemen-south Oman coasts around 26th morning.

The Genesis Potential Parameter (GPP) indicates development of potential cyclogenesis zone over Comorin area and adjoining south Tamil Nadu coast during 26-28 May. It also indicates a potential zone of cyclogenesis over eastcentral BoB during 27-30 May.

ECMWF model indicates development of depression over eastcentral BoB crossing Myanmar coast on 30th May. Models like NEPS and NCUM indicate development of depression over westcentral BoB on 29th with north-northwestwards movement and crossing over Odisha/West Bengal on 30th.

Cyclogenesis Probability based on Genesis Potential Index by IITM indicates 80-90% probability over southwest BoB during first half of week 1. However the probability decreases as days progress.

Hence there is a large scale consensus regarding movement, intensity and landfall features of VSCS Mekunu. There is moderate probability of development of depression over central parts of BoB with gradual intensification during first half of week 1.

Verification of forecast issued during last two weeks:

Considering the forecast issued on 17th May for week 1 (18-24 May), cyclogenesis was predicted with High probability during 22-24 May over southeast AS with gradual intensification and movement towards Oman/Gulf of Aden. VSCS Mekunu developed over southwest AS on 21st and is moving nearly north-northwestwards towards south Oman-southeast Yemen coasts. Considering the forecast issued on 10th May for week 2 (18-24 May), cyclogenesis forecast was issued as NIL for week 2. Hence cyclogenesis could be predicted accurately 1 week in advance.

Next update: 31.05.2018