

Coupled *versus* Uncoupled Forecasts of the MJO during DYNAMO

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The Dynamics of the MJO (DYNAMO) field campaign took place in the Indian Ocean from 1 October 2011 to 31 March 2012. The state of the atmosphere – ocean system was observed using a multitude of instruments which included radiosondes, radars, moorings, aircraft and ships. The campaign proved to be very successful as robust MJO activity occurred during nearly all of the observing period. NCEP and UMCP-ESSIC were funded by NOAA’s Climate Program Office to provide real time monitoring and forecast support to DYNAMO. Among the tools used was the suite of global forecast models from NCEP [Global Forecast System (GFS), the ensemble GFS (GEFS) and the Climate Forecast System Version 2 (CFSv2)]. In this study we provide a brief description of synchronous MJO and Sea Surface Temperature variability during the campaign. We then compare forecast skill between the coupled CFSv2 and the uncoupled GFS and GEFS. Finally we explore systematic differences in OLR between coupled and uncoupled forecasts as a function of lead time and compare them to modes of internal atmospheric variability as revealed from the GEFS ensembles.