**Realtime Oceanographic Monitoring and Forecasting Support of DYNAMO using the CFS**

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The Dynamics of the MJO (DYNAMO) campaign observed the state of the atmosphere and ocean over the central Indian Ocean from October 1st, 2011 through March 31st, 2012. During the DYNAMO Intensive Observing Period (IOP) (October 1st through January 15th) the atmosphere–ocean system in this critical area for MJO genesis was systematically observed by aircraft, ground radars, radiosondes, ships and oceanic moorings. DYNAMO was a very successful campaign as it was able to observe three full MJO cycles and one apparent MJO event that decayed over the Maritime Continent. The Climate Prediction Center (CPC) of the National Centers for Environmental Prediction (NCEP) provided real time monitoring and forecasting for DYNAMO based on satellite and model reanalysis and forecast data. Oceanographic forecasts were available from the NCEP Climate Forecast System Version 2 (CFSv2). All ensemble members initialized on a given day were averaged to provide daily averaged forecasts for Days 1 to 7 and for weekly averaged forecast for Week-1 and Week-2. In this paper, we first examine the quality of representation of the Indian Ocean climatology by the CFSv2 (mean state and subseasonal, seasonal and interannual variability) as function of lead time using the CFS-Reanalysis and Reforecast. We then compare ocean currents, temperature and salinity observed by the DYNAMO moorings to those forecast by the CFSv2. Finally, in order to provide some insight on the importance of the ocean to MJO onset, maintenance and decay, we focus on the state of the ocean just before, during and after the occurrence of the observed events.