

MJO Forecasting Activities at NOAA's Climate Prediction Center

John Gottschalck

NOAA CPC

Abstract

The Climate Prediction Center as part of the National Centers for Environmental Prediction (NCEP) within the U.S. National Oceanic and Atmospheric Administration (NOAA) has established activities for MJO monitoring, prediction and research. This paper provides a summary of both operational and research activities at CPC related to MJO forecasting. A review of the most frequently used statistical and dynamical MJO forecasting techniques at CPC are described and will include an overview of the method, skill measures where possible and observed operational deficiencies.

An important and encouraging activity at CPC is the application of a uniform diagnostic and set of skill metrics for analyzing and assessing dynamical forecasts of the MJO as outlined by the U.S. Climate Variability and Predictability (CLIVAR) MJO Working Group (MJOWG). CPC is hosting the acquisition of the forecast data from ten international operational centers, application of the diagnostic and realtime display of the standardized forecasts. The background, status and plans of this activity will be described. The CPC weekly MJO update and Global Tropics Benefits and Hazards Assessment are current operational products that utilize the aforementioned CPC MJO monitoring and forecasting products. A brief review of the background, users and applications of these assessment products will be provided. The role CPC expects to play in the proposed Dynamics of the MJO (DYNAMO) field experiment will also be discussed.