

Forecast skill of MJO in CCCma coupled models

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The daily outputs of two CCCma coupled ocean-atmospheric models participating in the World Climate Research Program's Climate-system Historical Forecast Project (CHFP) are utilized to assess skill in predicting the Madden-Julian Oscillation (MJO). The models are the CanCM3 and CanCM4 coupled model versions, based respectively on CCCma's third and fourth generation general circulation models. The study uses a large data set comprised of ten-member ensembles of three variables (OLR and lower and upper-level zonal winds) for the period 1979-2008 for each model. These variables are used to construct a bivariate index representing the amplitude and phase of the MJO. The ability of forecasts from the two models to predict this index will be described and related to the nature of MJO-like variability in corresponding freely-running simulations.