AvH8-34
8th Alexander von Humboldt International Conference
Cusco, Peru, 12 – 16 November 2012

Preliminary comparison results for the CFSv2 hindcasts and statistical downscaling over the Northeast Brazil

G.A.M. Silva and D. Mendes
University Federal of Rio Grande do Norte/ Center for Exact and Earth Sciences (UFRN/CCET), Brazil

A comparison between the predictability of the hindcasts from the Climate Forecast System v2 (CFSv2) and the Artificial Neural Network (ANN) for precipitation over the Northeast Brazil is presented. For the period between 1982–2009 we select three gridded boxes regions associated with the maximum precipitation values over the Northeast: to the south, north and east in which the rainy seasons occur during Dec-Feb(DJF), Mar-May(MAM) and Apr-Jun(AMJ), respectively. The model reproduces below the average precipitation over these three boxes.
The correlation coefficients computed between the first mode of Sea Surface Temperature (SST) variability from the model runs and the observations are 0.97, 0.92 and 0.90 for DJF, MAM, AMJ, respectively. Some biases in SST mean field are found over the tropics and subtropics in both hemispheres. More details related to the accuracy of the CFSv2 in simulate reasonably well the modes of variability and the present climate are in progress. Based on this analyses we intend to use the time series from the observed SST and others atmospheric variables as input predictors in ANN. Finally, the preliminary objective comparison between model and statistical downscaling will be done.