

**UMA BREVE DESCRIÇÃO DO SISTEMA DE PREVISÃO CLIMÁTICA
REGIONALIZADA (DOWNSCALING DINÂMICO) IMPLANTADO NA FUNCEME.**

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ABSTRACT

FUNCEME (Fundação Cearense de Meteorologia e Recursos Hídricos) and IRI (International Research Institute for Climate Prediction) developed a dynamical climate downscaling prediction system over Northeast Brazil, having the NCEP regional spectral model (RSM) and ECHAM atmospheric general circulation model (AGCM) as its core. Sea surface temperature forecasts are produced first, and then used as lower boundary condition forcing for the RSM - ECHAM4.5 AGCM nested system.

A number of simulations were performed to obtain the best combination of horizontal resolution and domain size for the RSM. Then, an ensemble of ten runs of the RSM - ECHAM4.5 AGCM nested system was carried out for the period of 1971-2000, using observed SSTs as boundary forcing. Skill estimates obtained from this sort of hindcasting are considered as upper limit of forecast skills. A number of statistical tools were used to correct for systematic and conditional biases in the post-processing of model forecasts. Results of seasonal climate forecasts for February-May 2002 are presented.