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Development of a regional climate atmospheric model

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Coupled Atmosphere-Ocean General Circulation Models (AOGCMs), have been widely used during the recent years to simulate global climate changes. The climate scenarios presented in the fourth IPCC assessment report demonstrated that the climate variability may have important regional aspects. Further detailed study of this problem may be achieved by regional downscaling of climate model simulations. This presentation is about development of a dynamical method for climate models downscaling by using regional general circulation model (RGCM). The RGCM is the Weather Research and Forecasting (WRF) model Version 3. The region of the study is the North America and Eastern North Atlantic. The resolution of the RGCM is 30km with 26 vertical sigma levels. The presentation will discuss preliminary results from these RGCM simulations.