



A new version of the regional climate model RegCM: RegCM4.0

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A new version of the RegCM regional climate modeling system, RegCM4, has been developed and is available for community use. Compared to previous versions, RegCM4 includes a comprehensive improvement in the code's architecture (like dynamic memory allocation, unique makefile for the whole code from pre-processing to post-processing, etc...), which make the model much more flexible, portable and user-friendly. RegCM4 also includes upgrades in the model physics, particularly in the areas of land surface processes (RegCM4-CLM coupling), cloud radiation, planetary boundary layer physics and convection, which are designed to correct systematic biases in the model performance. A tropical band version and coupling with aerosol and gas phase chemistry are also available. This talk will describe the model developments and a set of basic model validation experiments aimed at evaluating the model performance over different domains within the CORDEX program.