3.7 Single-column physics modeling adventures with WRF SCM

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The WRF SCM capability has been used to contribute to several international physics modeling experiments recently, including DICE and GABLS4. It has also been used for testing of proposed physics improvements internally at NOAA ESRL. I am aware of a few other uses, and probably unaware of many others. Each use requires different forcings, and we have found no general solution, particularly for surface forcing. Each use therefore requires changes in the WRF code. I will present a selection of results from these studies, discuss how they were implemented, and offer some perspective on how the SCM might be made easier to understand and use.