

Interactive comment on “Improved simulation of precipitation in the tropics using a modified BMJ scheme in WRF model” by R. Fonseca et al.

Anonymous Referee #2

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The study conducted and commented in this paper is a modification of some parameters of the BMJ scheme used in the WRF model. This scheme is detailed in the annexes of the paper. The study starts from a problematic encountered when modeling rainfall by this scheme with a generally over-estimation of precipitation values. The study consists in some parameters modifications regarding to prior scientific considerations. Validation of those modifications is performed by distinguishing between different latitudes and different seasons. The control values are given from the TRMM precipitation. However, the figures formatting needs improvement they are not clear. The validation tool being precipitation only, it would be preferable if other diagnostics are performed such as vertical profiles versus radio-soundings or any other source of verification. Furthermore, in line 12 of page 4020, the word "and" should be removed and in line 5 of page 4022, the word "August" should be replaced by September. As

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as a conclusion, the paper presents a considerable contribution to the modeling in WRF, and could be published after minor modifications.

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