

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

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Improved simulation of precipitation in the tropics using a modified BMJ scheme in WRF model

General comments: This paper analyses BMJ scheme and modifications of BMJ scheme in WRF model. In general WRF with BMJ scheme rains more than observed. With the help of modified BMJ scheme rainfall matches well TRMM satellite merged data.

This will help model developers to develop a new scheme.

This will help operational users of WRF to implement directly in operational model.

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Well written and figures with explanation. A very good attempt on sensitivity experiments of BMJ scheme.

Specific questions: 1. Why authors have changed the model domain and resolution for different runs like 1day and 10 months

2. The model domain is very big, whereas real application of WRF is for a regional small domain.

3. Why authors have used 2008 for 10 months run? Is there any specific reason ?

4. In general GFS overestimates rain which is ICBC for WRF. These sensitivity experiments may not work for different ICBC like GFS.

5. Already GFS 25km resolution data is available. I would have been better if authors could have run the model with higher resolution of 9km using 25km GFS data.

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