

Interactive comment on “Analysis of predicted and observed accumulated convective precipitation in the area with frequent split storms” by M. Ćurić and D. Janc

Anonymous Referee #1

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Subject

Ćurić M., and D. Janc: Analysis of predicted and observed accumulated convective precipitation in the area with frequent split storms

Overall

The objective of the manuscript is to present simulation results of selected convective precipitation events and compares a real accumulated convective precipitation sums with observations in the area with frequent split storms. The manuscript presents results and ideas that can be important to hydrologists. The paper is well written and

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the presentation is acceptable and understandable. I do believe that the manuscript contains material of sufficient interest to the hydro-meteorological community, which merit publication.

General comments

1. The subject of the paper could be considered quite broad, because it provides information to scientists dealing with hydrology, meteorology, climatology and cloud physics. At the same time, could be considered very specialized, since it deals with accumulated convective precipitation from split storms. Hence, it is significant and interesting, with a lot of concern and appropriate for the journal. 2. The paper represents the simulated accumulated precipitation sums from split storms and then their comparisons with the observed counterparts, by using the appropriate statistical analysis. The results of the paper are useful to scientists in the general sense and particularly to those specialized on the areas of hydrology and cloud modeling. 2. The abstract is informative about the concept of the paper and clearly states the main results. It is easy to follow and understand it. 3. The adopted methodology is very appropriate and acceptable. It combines observations, well accepted cloud model, as well as the statistical analysis of data from these two subjects. 4. The manuscript is quite precise on the expressions and well written. The presentations are clear and well organized. The interpretations are adequately supported by arguments and evidences. The reader has no problem to keep up with. 5. The presented figures, graphics and tables seem to be in good quality and necessary, while the captions are self-explanatory. 6. The results are well documented and reliable. 7. The references are appropriately stated.

Specific comments

1. In Figs.2 and 3 legends the word 'accumulated' need to be omitted. 2. Recently, mesoscale meteorological models with different microphysics started to apply for rainfall simulation and hydrological purposes. Bearing this statement in mind, I recommend two references to be added in this paper: Richard E., Cosma S., Benoit R., Binder P.,

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Buzzi A., and P. Kaufmann: Intercomparison of mesoscale meteorological models for precipitation forecasting. *Hydrol. Earth Syst. Sci.*, 14, 799-811, 2003. Cerlini P.B., Emanuel, K.A., and E. Todini: Orographic effects on convective precipitation and space-time rainfall variability: preliminary results. *Hydrol. Earth Syst. Sci.*, 9(4), 285-299, 2005.

Interactive comment on *Hydrol. Earth Syst. Sci. Discuss.*, 8, 7237, 2011.