Hydrol. Earth Syst. Sci. Discuss., 8, C4056-C4057, 2011

www.hydrol-earth-syst-sci-discuss.net/8/C4056/2011/ © Author(s) 2011. This work is distributed under the Creative Commons Attribute 3.0 License.



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

## Ph.D SPIRIDONOV

vspiridonov@meteo.gov.mk

Received and published: 15 September 2011

The objective of this manuscript is the quantitative estimation of convective precipitation by the cloud-resolving mesoscale model in the area with frequent split storms. This is the most complex scenario because precipitation from split storms often cannot be determined successfully by the radar. On the other side, shower precipitation from such storms may lead to flash floods. It is important to recognize that the shower precipitation from convective storms and flash flooding in small catchments are intimately linked. Therefore, any efforts for better quantitative estimation of convective

C4056

precipitation must pay attention of hydrologists. There are a lot of cloud models, but only several models are capable to estimate successfully the accumulated convective precipitation. This investigation clearly shows that the cloud model with excellent microphysics and dynamics and appropriate initial conditions may estimate well the accumulated precipitation even in the most complex scenario. This result follows from the relevant statistical analysis which shows the good agreement between observed and model accumulated convective precipitation data sets. My opinion is that the both meteorological and hydrological communities now have an excellent tool for the quantitative estimation of convective precipitation sums in small catchments. I have therefore recommended this manuscript to be published in your journal. Congratulations for authors!

Please also note the supplement to this comment: http://www.hydrol-earth-syst-sci-discuss.net/8/C4056/2011/hessd-8-C4056-2011supplement.pdf

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