

Correcting the radar rainfall forcing of a hydrological model with data assimilation: application to flood forecasting in the Lez Catchment in Southern France

Harader et al.

The paper will be reconsidered after major revisions based on the reviewer comments and recommendations and the additional evaluation of the editor. The paper has been reviewed by three experts in the field.

I share the majority of the concerns of the reviewers. Especially, the concern of reviewer 2 and 3 regarding the workings of the DA method (sequential, updating frequency, etc) and its relation to other approaches reported in the literature. Please make sure this is clear for a broad audience. Also the observation by reviewer 2 regarding the discharge observation error needs to be addressed/justified in relation to what is reported in the literature.

Additional comments:

Please adopt the HESS manuscript style (http://www.hydrology-and-earth-system-sciences.net/submission/manuscript_preparation.html meaning: introduction material&methods, results&discussions, conclusions/summary). This will help to overcome some of the criticism by the reviewer.

Formal Manuscript Rating and Recommendation

1) Scientific Significance

Does the manuscript represent a substantial contribution to scientific progress within the scope of this journal (substantial new concepts, ideas, methods, or data)?

0X Excellent 2X Good 1X Fair 0X Poor

2) Scientific Quality

Are the scientific approach and applied methods valid? Are the results discussed in an appropriate and balanced way (consideration of related work, including appropriate references)?

0X Excellent 1X Good 2X Fair 0X Poor

3) Presentation Quality

Are the scientific results and conclusions presented in a clear, concise, and well structured way (number and quality of figures/tables, appropriate use of English language)?

0X Excellent 0X Good 3X Fair 0X Poor

For final publication, the manuscript should be

0X accepted as is
0X accepted subject to technical corrections
0X accepted subject to minor revisions
3X reconsidered after major revisions
0X rejected