Interactive comment on “Sources of uncertainty in rainfall maps from cellular communication networks” by M. F. Rios Gaona et al.

Anonymous Referee #2

Received and published: 22 April 2015

The paper describes an approach to quantify uncertainties in rainfall maps created from microwave cellular networks. It is well written and, like Reviewer #1, I could not find any major flaws.

While the scientific content is very good, I agree with most points Reviewer #1 raised. The paper can certainly be improved by adding a more detailed description of the sources of error listed in the introduction, and their implications on data quality.

Overall, I suggest that the paper could be published after some additions are made to the methods and discussion sections. It is currently very short and could gain in clarity this way. Also, the main findings of the study that the main source of uncertainty are the link rainfall retrievals themselves is not reported in the abstract.

Finally, while this is an interesting alternative to use already existing infrastructures, discussion is needed on the usefulness of these network-based rainfall data for hydrological modelling and flood forecast.

More precisely, while the study focuses on 12 days, can we foresee using link rainfall in an operational way in the future? and what are the key improvements required to reach this stage? This would make an interesting point of the applicability of this method to measures rainfall in places which may have a well-developed cellular network but lack a radar and/or an extensive gauge network.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 3289, 2015.