

## ***Interactive comment on “Evaluation of TRMM 3B42 (TMPA) precipitation estimates and WRF retrospective precipitation simulation over the Pacific-Andean basin into Ecuador and Peru” by A. Ochoa et al.***

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The referee acknowledges the usefulness of our work and finds the manuscript well presented and discussed. The main complaint is about a tendency to densify the paper and particularly suggests reducing some sections. The referee also raises a comment on the argument to use basin-wide averages of precipitation products in our analysis. Below, we reply to this comment and provide more details on this key decision in our methodology.

C834

We fully agree with the referee’s interpretation on the rationality behind the use of basin-wide averages. First, our work aims at performing an evaluation to understand better the potential use of satellite and model based precipitation products for hydrological applications in different basins of the target region. Hence, the ‘spatial unit’ for analysis was set at sub-catchment level. The second motivation is that by such spatial averages both products and gauge-based interpolated fields are assessed accounting regional differences in precipitation. We acknowledge that the spatial average implies a degree of arbitrariness as it is based on our ‘ad hoc’ definition of ‘spatial homogeneity’. However, the spatial average is intuitive since it captures the most prominent precipitation features. We will delete the first phrase (“reduce random errors”, “appropriate scale”, etc) in section 2.4 and rewrite the introductory sentence of this section to avoid misleading.

Concerning the shortening and editing of the manuscript, we will condense and reduce the ‘Results’ and ‘Discussion’ sections emphasizing key messages and removing no contributing specific details.

We thank the reviewer for the overall assessment and the technical corrections which we will fully take in consideration in the revised version of our manuscript.

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C835