Interactive comment on “An integration of gauge, satellite and reanalysis precipitation datasets for the largest river basin of the Tibetan Plateau” by Yuanwei Wang et al.

Anonymous Referee #2

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In the paper, the authors integrated five satellite/reanalysis data to generate a new precipitation dataset set in the Yarlung Tsangpo basin in South Tibetan Plateau (TP). Actually, the issue is important for the hydrological studies in TP including this study area, but it is also a difficult issue, as there lacks enough observed data. The authors did a good try to generate this precipitation dataset, and it would be useful for the relevant studies in the basin. Overall, I suggest the authors consider more the following issues before its acceptance. (1) The authors assumed that daily precipitation conforms to a normal distribution. However, precipitation data generally follow skew distribution. The reasonability of this assumption should be discussed more. (2) Some contents can be added to discuss more about the altitude effects on the quality of the
new precipitation data, especially on the IDW practices, although some discussions have been given in Conclusions. (3) In lines 252-253, it is interesting to find that the weights become smaller with time periods, why? Is it due more reliable quality of the five datasets in recently years? or due to more observed data used? Some contents can be added to simply explain this. (4) In Figure 6, does the P_int have similar PDF as the CMA? Why? (5) This study area should be called “Yarlung Tsangpo” or “Yarlung Zangbo”? please check it.