Interactive comment on “Global meteorological drought: Part 1 – probabilistic monitoring” by E. Dutra et al.

Anonymous Referee #1

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Dutra et al. presented an interesting study on a novel approach to near real time drought monitoring on global scales. They propose to extend (precipitation) monitoring products, that cannot be updated in near real time, with data stemming from probabilistic weather forecasts. In a subsequent analysis they demonstrate the validity of their approach as well as its performance compared to other data products.

Overall the paper is well written and the results are presented convincingly. Nevertheless the paper would benefit from some minor clarifications along the following lines:

1. A lot of information is presented in the Supplementary information. While I also prefer concise articles that are not overloaded with figures, I have the impression that the sheer magnitude of the supplementary information makes some sections of the article difficult to read. Therefore I would suggest to move some of the figures in the supplement to the main body of the article. Especially in sections where substantial parts of the text discuss the content of the supplementary Figures (e.g. Section 3.3).

2. p. 897, ll. 1-9: In Fig. 5 ENS1 and ENS4 are mentioned before they are introduced in the text. This is quite confusing on first reading.

3. p. 897, l. 11f: How are the confidence intervals of the mean in Figures 5, S2, S3 constructed?

4. Figure 6 and corresponding figures: How is the significance of the correlation determined (i.e. how is the threshold value of 0.3 constructed)?

5. Figure S3: caption would be "As Figure 5..." (and not "As Figure 4...")

6. Figures S7, S8, S10, S11, S13: Adjust the caption, such that it first describes the upper panel or change the order of the panels.

7. Figures S14, S15: Please specify units of RMSE of precipitation.

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