Interactive comment on “Earth observation Water Cycle Multi-Mission Observation Strategy (WACMOS)” by Z. Su et al.

Anonymous Referee #1
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The paper by Su et al. on the description of the WACMOS project could be of interest to the hydrology community as it gives an overview of the current space borne systems for observing hydrologically relevant parameters. However, the main problem with this paper is that on the one hand it tries to give an overview of where EO currently stands and where it aims at (but it fails in being a review) whereas on the other hand, it mentions some progress made by the WACMOS team (without going into detail: only some illustrations are given without any scientific proof). Therefore, in its current version, it is of low scientific value. To improve this paper, I would suggest that the main focus indeed goes to the objectives and the results of the WACMOS project, but that the project, its methodologies and its results should be better positioned within the advances of remote sensing community (i.e. alternative approaches should be briefly discussed, or papers confirming similar approaches should be referenced). I.e. the paper should aim at being a review paper (on the topics of WACMOS), demonstrating where WACMOS aims at contributing to the current knowledge.

Some minor comments:
1. The scale which is aimed at should also be made clear to the readers: apparently only coarse scale is being studied, and fine scale RS is not included (e.g. SAR).
2. line 6 of page 7908: Scatterometer is wrongly spelled.
3. Please add reference to the statement on p. 7916 line 23-25 stating that AMSR-E is known to provide the most reliable soil moisture estimates and climatology of all considered passive systems.
4. Title of 4.3 should read "Cloud products: methodology, results and validation"
5. page 7921, line 20: reflectance is wrongly spelled.