

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

J. Wen (Referee)

jwen@lzb.ac.cn

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General comments:

To improve the understanding of water cycle on the Earth, the detail analyses of several hydrological relevant geophysical variables are essential. In this research, the authors presented a very good and comprehensive overview about methodologies, retrieval results and validation of evapotranspiration, soil moisture, cloud products and water vapour. They also provided much useful information about satellite remote sensing technology to the general readers. This manuscript showed that the authors have very strong background in this research field, and also familiar with the current front research topics in this field, and referred many former investigations. I suggest accept-

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ing it for publishing in this journal after making a minor technical correction to the flaws appeared in the manuscript.

Specific points:

Pg3L5: Explain what kind of “Earth observation technology” is mentioned here.

Pg3L7: A comma is needed after “coming years”.

Pg3L23-25: The incident radiation does not evaporate water from water bodies and soil! Please rewrite this sentence.

Pg4L9-13: “and because different physical processes control the change in water vapour and evaporation/precipitation, a more extreme distribution of precipitation is expected leading to, in general, wet areas wetter and dry areas dryer and as such the changes in the hydrological cycle as a consequence of climate warming may be more severe than the temperature changes”. This is not the real case, please clarify this!

Pg4L24: What is “surface water level”?

Pg5L8: “has” should be “have” here!

Pg5L5: Products could be described by the word “robust”!

Pg5L7: A full stop is needed at the end of this sentence!

Pg6L3: A comma is needed after “years”!

Pg43: The images in Figure 2 need to be reprocessed!

Pg14L1: A word “indirectly” is needed before “estimated”!

Pg46: The incorrect value (extremely big evaporative fraction) in the right of figure 5 needs to be removed before making the plot!