

Interactive comment on “Climate change impacts on snow water availability in the Euphrates-Tigris basin” by M. Özdoğan

Anonymous Referee #3

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Review of Climate change impacts on snow water availability in the Euphrates-Tigris basin Author: M. Ozdogan

Summary:

This paper presents an analysis of climate change impacts to water resources in E-T basin. The modeled water amount, SWE, and river flows will be a good reference for the future water planning and water use of the three countries. The paper was well written in clear logics. This reader recommends this paper to be accepted for publishing in HESSD after minor revisions.

Specific comments:

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Page 3641 line 12: The comparison of snow covered area was made in January, when the snow accumulation is far more than important processes during at the time. This reader suggests the author to provide a comparison of SCA in late March or April, through which the efficiency of the modeling in evaluate snowmelt can be evaluated.

The validation of the hydrological model to a watershed in the watershed with relatively low data availability is a hard part for modeling evaluation. This reader suggests the author to provide more comparisons of flow at the gages within the watershed if any other gage is available.

Fig 1. A scale in the figure will provide the readers who are not familiar to learn the size of the watershed. Add some weather stations and river flow gages would also help readers to better understanding the work.

Fig 5. The modeled and observed SCA maps during late March till May will help readers to learn the efficiency of VIC modeling in modeling both the snow accumulation and snowmelt processes.

Fig 6. This figure only shows 12 out of the 13 models. The author should explain why one model was left out.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 8, 3631, 2011.

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