

Interactive comment on “Water resource monitoring systems and the role of satellite observations” by A. I. J. M. van Dijk and L. J. Renzullo

Anonymous Referee #1

Received and published: 27 September 2010

This paper reviews the current state and suggests future innovations for spatial water resource monitoring systems with an emphasis on the role of satellite data. It also introduces the Australian water resources assessment system including how it currently uses satellite observations and current and planned development activities to improve the system. They identify many opportunities for the use of satellite observations in these systems, with many cases of experiments demonstrating benefits that have not yet been utilized or implemented operationally. Contributions made by others and the authors are clearly identified. The paper is well written and provides a worthwhile overview and analysis of opportunities for satellite data in operational water resource

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monitoring. The title and abstract reflect the content of the paper. I recommend publication after addressing the minor comments below.

Minor Comments Pg 6308, ln 3: “ICT” is used but has not been previously defined. Pg 6311, ln 24: The authors state “all four models” though they have, a few lines earlier, listed five models. They need to clarify which models they actually mean. Fig 2 caption, last line: “used the” should be “used in the” Pg 6343, ln 7: Australian is spelt wrong Fig 4: It would be useful to see the distribution of gauge stations used in map a. Thus one could see if the changes made by including the satellite data were occurring only between in-situ observations or if these observations are also being changed. Pg 6336: the 2 Guerschman references are identical. Pg 6338 ln 14: fix the space between “and” and “vegetation”

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 7, 6305, 2010.

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