

Interactive comment on “Can the dataset of field based recharge estimates in Australia be used to predict recharge in data-poor areas?” by R. S. Crosbie et al.

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General comments The paper is well written and clearly describes the work (with only a few minor corrections). The results provide a useful first approximation for estimating recharge where measurements are not feasible/affordable. More importantly they provide information about how confident we can be in various situations (including those where we basically don't know recharge!). The influence of the methods of recharge estimation is clear (some methods are measuring different things) and the comparison of methods is useful when considering using such methods. The paper should be

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published more or less as it is.

This meta-analysis makes it obvious that many of the factors influencing recharge rates were not described in the source studies. One would hope that future studies could be improved by providing more information about these factors influencing recharge.

Specific comments

* Page 5665 line 27. An explanation of the logic used to arrive at the “5%” would be helpful. * Table 1. I suggest providing an indication of which relationships are statistically significant (at some level) e.g. bold the R2 if significant at $P=0.05$.

Technical corrections

* Soil names (e.g. Vertosol) (page 5663) are proper names (like towns) and should be capitalised. * The only correction to the text required is on line 13 p5664 – delete “it is” and “that” on the next line (or similar) – the sentence is hard to understand as it is. * There are some sections where tense varies and a more competent editor than I should be consulted – they may be “liveable” but some readers might be put off. For example, 1) the first sentence on page 5660 is present tense whereas the section is largely in past tense. 2) section 2.3 in methods is in future tense.

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