

## ***Interactive comment on “Identifying flood recharge and inter-aquifer connectivity using multiple isotopes in subtropical Australia” by A. C. King et al.***

**Anonymous Referee #2**

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This paper reports on the interpretation of geochemical and multiple isotope data collected a few months after the major 2010/2011 flooding events in Queensland, Australia. From the 200 km<sup>2</sup> Cressbrook Creek catchment located close to Brisbane, rainfall, surface and groundwater data were analyzed to understand flow processes within the catchment.

General comments:

This is an interesting and well written paper. I am wondering if the paper would benefit from a little more focus: The main conclusion of the paper is that most of the rainfall

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contributing to the flood event obviously ended up in the Cressbrook dam or recharged the alluvial aquifer in the lower part of the catchment. However, this result can be inferred from Figure 8 alone, which only presents data of stable water isotopes plus chloride. The paper would also benefit from discussion of some of the uncertainties involved in the interpretation of recharge processes inferred from the environmental tracer data.

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