Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-207-RC2, 2018 © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Evaluation of flushing time, groundwater discharge and associated nutrient fluxes in Daya Bay, China" by Yan Zhang et al.

Anonymous Referee #2

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My main concern about this paper is the methodology. The sampling is very located in time (28 to 31 july 2015). The measured concentration of Radium shows high spatial variability (p. 7), the same for nutrients. This shows that the system is very dynamic. However, the model used for flux balance is in steady state. Taking care of the highly variable meteorological conditions, the sampled concentrations are not representative of steady state conditions. Therefore, the estimated water and solute fluxes are highly questionable.

Furthermore, the manuscript lacks some information like: - Is evapotranspiration the potential one? (should not be). How is the actual evapotranspiration estimated? - The

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tidal prism is depending on the GW level. Please explain in details how it is taken into account. - Assumptions related to eq. 7 should be clearly stated...

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