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Hydrology and Earth System Sciences
Discussions

Interactive comment on "Temporal variations of groundwater table and implications for submarine groundwater discharge: A three-decade case study in Central Japan" *by* Bing Zhang et al.

Anonymous Referee #1

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The submarine groundwater discharge is likely an important source of nutrients and pollutants to the coastal oceans but is poorly studied. This manuscript provides some long-term data and forecasts the effects of climate change on the SGD. The subject is significant and timely. My major concern is on whether the conclusions are robust. The rain/snow fall varies by 30%. The estimations of ET, river outflow and groundwater discharge are also subject to large uncertainties. The authors should try to propagate the errors and find out what the uncertainty is for the estimated SGD discharge. The readers would then get a better idea whether the forecast is reasonable. A minor issue is that reading numbers in a table does not easily give a trend. A figure replacing Table 3 would do the job more effectively.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2017-142, 2017.