Interactive comment on “What are the key drivers of regional differences in the water balance on the Tibetan Plateau?” by S. Biskop et al.

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I mainly looked at the results of Lake Nam Co. I appreciate their work and agree with them that the key driver is the precipitation. However, I found large differences between their simulated results and the in-situ observations of most components of the lake water balance. Of the four lakes, Nam Co is the only lake with detailed long-term in-situ observations of lake water balance (Zhou et al., 2013). I wonder that, while they cited the paper by Zhou et al. (2013), they did not refer to it. So I would suggest the authors to compare their results with the observed data by Zhou et al. (2013). In addition, possible water seepage of the lakes could be taken into consideration.

I would like to provide some important information: In-situ observations show that the
average annual lake level increase of Lake Nam Co was only several centimeters during the period of 2005-2010 (unpublished yet), much lower than the data they adopted (22 cm per year, Table 2). Also, the precipitation was around 340 mm at Nam Co Station during the period from July through December 2006, which is much higher than their data of 270 mm for the whole year (P4283, Line 13).

Minor comments: P4284, Lines 11-13: The main reason should be the lower air temperature caused by more precipitation during the melt season (Zhou et al., 2010).

References:


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