

Interactive comment on “Comparison of different base flow separation methods in a lowland catchment” by A. L. Gonzales et al.

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I would like to make a suggestion on the literature part of the paper:

1. Following sentence can be added after “... method (e.g. Su, 1995).” at the end of Line 10 in Page 3486.

Recently, this type of baseflow separation methods were studied by Aksoy et al. (2008) who adopted the smoothed minima baseflow separation method of UK Institute of Hydrology (1980) for intermittent streams and by Aksoy et al. (2009) who suggested the filtered smoothed minima baseflow separation method after coupling the smoothed minima method with the recursive digital filter.

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2. Following sentence can be added after “... and stream flows.” at the end of Line 19 in Page 3486.

Baseflow separation method conceptualized by the nonlinear reservoir algorithm should also be mentioned. In this method, the groundwater storage (S) is related to the baseflow discharge (Q) in the river in a nonlinear fashion as $S = aQ^b$ where $b \neq 1$ but is found equal to 0.5 on average, based on several case studies (Wittenberg, 1999; 2003; Wittenberg and Sivapalan, 1999).

References:

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5. Wittenberg H (2003) Effects of season and man-made changes on baseflow and flow recession: case studies. *Hydrol. Processes*, 17, 2113-2123.
6. Wittenberg H & Sivapalan M (1999) Watershed groundwater balance estimation using streamflow recession analysis and baseflow separation. *J. Hydrol.*, 219, 20-33.

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