**Hydrology and
Earth System
Sciences
Discussions**

Interactive comment on "Classification procedures in the context of PUB: ways forward?" *by* R. T. Clarke

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General comments

This is an opinion paper, which discusses the application of cluster analysis for transposing parameters of hydrologic model to ungauged sites. The objective is to comment on its main limitations and to identify potentially novel procedures, which might serve as an alternative in the future.

Opinions on ways forward in the PUB context are very welcome and are definitely within the scope of HESS. This contribution is clearly written, however, it would be an advantage if the author's view will be more closely put in the context of recent studies. There are several papers which e.g. discuss the use of geostatistical methods for transposing either model parameters or flow charactersistics (see e.g. Gottschalk et al. 2006, Merz and Blöschl, 2004, 2005, Skoien et al., 2006, 2007, Oudin et al., 2008),

apply splitting records for evaluation of regionalization performance (e.g. Parajka et al., 2005) or propose different novel approaches within the PUB context (Blöschl, 2005, Bardossy, 2007, Wagener et al., 2007, Buytaert and Beven, 2009, Zhang et al., 2009, Samaniego et al. 2010). Back up of personal views with existing examples will increase the merits of this contribution.

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