

Interactive comment on “Contrasting trends in hydrologic extremes for two sub-arctic catchments in northern Sweden – does glacier melt matter?” by H. E. Dahlke et al.

L. Braun (Referee)

Ludwig.Braun@kfg.badw.de

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General comment:

This paper is a valuable contribution on the changes of runoff totals and extremes as observed in a highly glacierized and an almost non-glacierized catchment in Northern Sweden over the past 50 to 100 years. It gives an impressive overview on the relevant literature, and it is suggested that it be published as it stands.

A minor point that needs clarification: P. 1047, line 20: How can Falkenmark (1972) report on data recorded at Trafala Research station for the period 1965-2009? There needs to be an more up-to-date reference.

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One further suggestion: Maybe it would be helpful to include solar radiation data in the analysis. As climatologists have shown there was much less global radiation received at the earth's surface particularly in the Arctic Regions (arctic haze) in 1960s to 1970s, and the recovery to "normal" values after 1980 as a consequence of reduced air pollution. It could be helpful to also consider solar radiation data in the control of melt apart from air temperature.

All in all: a very enlightening paper!

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