Review of

The role of glacier dynamics and threshold definition in the characterization of future streamflow droughts in glacierised catchments

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General comment

This paper is an analysis on the possible causes of streamflow droughts in glacierised catchments in the context of climate change (affecting glacier geometry, melt rate, discharge regime and drought). The authors have chosen 2 different highly (more than 60%) glacierised catchments for their study. They considered 2 different approaches for modeling glacier change: (1) glacier topography remains constant, and (2) glacier topography is empirically updated every year according to surface mass balance.

First, different approaches on how taking into account changes in glacier geometry in streamflow modeling is discussed. Since the approaches used are empirical, no ice dynamics in the strict sense is considered. So I suggest to modify ''glacier dynamics'' into ''glacier changes'' in the title.

Since glacier topography always changes in a changing climate, it is in my opinion not a sound option to analyze streamflow evolution without adapting the glacier topography accordingly. A more realistic option would be to assume no glacier at all. But assuming a constant and arbitrary glacier surface area in a changing climate will produce streamflow results which can hardly be interpreted.

Furthermore, I feel that the different ways of defining a drought a bit confusing. Since I am not hydrologist, I apologize for that. But in my opinion, it would be sufficient to define a reference period (RP) (f. i. 1960-1990 as used in Switzerland for climatology), and to present streamflow results outside this RP as deviations from it. I think results presented this way will be more useful for water management purposes.

The paper is well written and the results well presented.

I can recommend publication.

Specific comments:

p. 18 line 14: ''… in de left …'' needs correction