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The Cryosphere Discussions

Interactive comment on "The role of glaciers in stream flow from the Nepal Himalaya" *by* D. Alford and R. Armstrong

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The paper gives a comprehensive overlook of the Nepal main watersheds and their high-mountain glaciers feeding these. As being stated in the introduction it is not a purely scientific contribution. Instead, it is a valuable overview of the role of meltwaters from the glaciers through the seasons. The main result of just 4% of water contribution from the glaciers to runoff of the rivers is surprising and thus extremely valuable for the planners of hydropower stations and irrigation campaigns. The differences between the seasons should be worked out more intensely. The description of the procedure seems a bit long-winded and some of the techniques applied seem to be self-understanding and state-of-the-art. E.g., line 9 - 17 could be deleted without substatial losses. P 475, line 2: some references would be helpful to be abel to judge what is well-known and

what is new. The same is true for the introduction of chapter 3: Lines 10 through 19 seem to be basic and can be deleted. P 476, lines 20 and 21: Why 2.8 m (1,3 m) instead of 2800 mm (1300 mm)? P 478, line 5: ICIMOD (ref.). P 479, line 13: Why is the estimated of 4% contribution mentioned there as this important value is the main result of the study a discussed in lines 19 - 28? P 480, line 20: misprint at the end of the line. Line 24: ...evidence in the literature... give references. P 482, line 23: misprint: ....Nationalkomitee für das... line 31: misprint: ...validation, Quaternary International Volumes, 138-139, ... p. 22-31.

Conclusion: The paper can be condensed considerably and should address more clearly to planners and engineers instead to the scientific community.

Interactive comment on The Cryosphere Discuss., 4, 469, 2010.