

Interactive comment on “Climate change and runoff contribution by hydrological zones of cryosphere catchment of Indus River, Pakistan” by Kashif Jamal et al.

Anonymous Referee #3

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The paper by Jamal and co-authors examines the influence of climate change on runoff and other hydrological processes in the mountains of the Hunza River Catchment. Two future climate change scenarios are used to credit the future of the basin using the Snowmelt-Runoff Model. At present, this manuscript should be rejected. The English is very poor, and requires many dozens of substantive changes to improve clarity and correctness. In terms of a scientific paper, it reads more like an engineering report than a contribution to the literature. There is a lack of appropriate referencing as there has been considerable work in this area (recently) that has been ignored. Furthermore, the SRM model is an antiquated snowmelt model that I do not believe is appropriate for climate change scenarios as it does not explicitly account for the energy balance of

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the snowpack and other changes in surface-atmosphere exchanges when temperature changes. I fail to see the scientific contribution of this paper in its current form.

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