

Impact of climate change on hydro-meteorology of Imja watershed of Nepal

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Hydrological modeling of glacierized catchments is a challenging task because internal inconsistencies might be hidden due to ice melt which represents an additional source of water. On the glaciers of the Nepalese High Mountains, a detailed knowledge of mass-balance observation and discharge measurement are considered and the combination of both will be analyzed by means of either Monte Carlo analysis or General Climate Model (GCM) with multicriteria model performance evaluation. To obtain good ensemble prediction, the discharge measurements should be taken during the melting season which demonstrates that timing of runoff. Simultaneously glacier caused by deposition of rock avalanche on the ice that will be followed by stagnation of the advanced ice lobe. This will help to formulate numerical flow line glacier model on High Mountains of Nepal.

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