



## **Changing in glacier and snow cover of Karakorum and Western Himalaya and impacts on hydrologic regimes**

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Glacierized river basins with insufficient summer precipitation (rain) but abundant in snow- and glacier-melt water, are highly suspected by reduction and seasonal alteration in the annual stream-flows owing to climate change. However, the glacio-hydrological observations and investigations to address the linkage between stream-flow fluctuations and glacier storage changes are still very weak, which also a consequent of controversies like 'Karakorum Anomaly' among the scientists concerning the behavior of glaciers in the changing climate. Therefore an investigation to determine the implications of climatic variability over the hydrological regimes of Karakorum and Western Himalayan basins is carried out by employing long term in-situ hydro-meteorological and as well as Remote sensing data. The study reveals that both the basins receives significant winter precipitation therefore the snow cover area reaches to 85