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Glacial Lake Outburst Floods, paraglaciation and climate sensitivity

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Most mountain glaciers have been receding from their late historic positions during the last century and the rate of recession has increased over the past decades largely as a consequence of global warming. Because glaciers are coupled to their slope and valley-floor geomorphic systems, recession impacts upon these in a number of complex ways, producing a range of natural hazards that have severe impacts on downstream communities and infrastructure. The most important of these are glacial lake outburst floods (GLOFs). Here, GLOFs are discussed in the context of paraglaciation and the concept of climate sensitivity. We use these ideas to assess three things: the geomorphological implications of current and future glacier recession; GLOFs and climate change attribution; paraglaciation as a guide to the future