



Glacial landform assemblages in the catchment area of the upper Quitarasca valley (Cordillera Blanca, Perú)

L. Iturriaga

Departamento de Geología, Universidad de Chile, Santiago, Chile and University of Goettingen, Institute of Geography, High Mountain Geomorphology, Goettingen, Germany (liturri@gwdg.de)

The research project focuses on the glacial landform sequences in the upper Quitarasca valley ($8^{\circ}51'S/77^{\circ}36'W$) with particular consideration of the Pucahirca glacier. The study area is located at the eastern side of the Cordillera Blanca, about almost 40 km valley upstream of the confluence with the Rio Santa valley. The highest catchment area is the Pucahirca Massif (6020 m a.s.l.). The present glacier tongue terminates at an elevation of 4500 m a.s.l.. The investigations analyzed the extent of the glaciations from the Last Glacial Maximum to modern times in regard to the transition of the moraine types during the course of deglaciation. The distinct moraine stages were correlated with existent glacial chronologies of adjacent valleys. Due to the hazard potential of the Laguna Safuna Alta, which developed in the late 1940s at the terminus of the Pucahirca glacier, detailed studies have been carried out by various research groups in regard to the composition of the historical / Neoglacial moraine composition providing at the same time valuable material for multi-temporal comparison of the recent development of the glacier tongue. The investigations presented here are part of a project on the glacial geomorphology in the Tropical Andes, financed by the Alexander von Humboldt Foundation.