



## **The glacial geomorphology of the Lago Buenos Aires and Lago Puerreydón ice lobes, Central Patagonia**

Jacob Bendle, Varyl Thorndycraft, and Adrian Palmer

Centre for Quaternary Research, Department of Geography, Royal Holloway, University of London, United Kingdom  
(jacob.bendle.2011@live.rhul.ac.uk)

Patagonia is ideally located for reconstructions of late Quaternary ice-climate interaction(s) in the Southern Hemisphere mid-latitudes, yet many questions remain concerning post-LGM ice sheet retreat dynamics across the region. While modern-day glaciation is restricted to three small icefields (the North and South Patagonian and Cordillera Darwin icefields), during the Quaternary, and at the LGM, episodes of significant ice advance culminated in an expansive Patagonian ice sheet (PIS) centered over the southern Andes, for which a long and well-preserved landform record exists. Previous mapping in the region has either aimed to achieve regional coverage, necessarily omitting more subtle/complex features suggestive of certain ice-marginal processes, or has focused on the identification of palaeo-ice limits (e.g. moraine ridges) for geochronological applications, with little attention given to other (e.g. glaciofluvial, glaciolacustrine) features that are significant for understanding post-LGM ice sheet retreat dynamics. This poster presents a comprehensive and highly detailed (<30m spatial resolution) map of the glacial geomorphology of the Lago Buenos Aires (46.4°S) and Lago Puerreydón (47.2°S) ice lobes, major outlet glaciers of the central sector of the former PIS. The map allows refined reconstructions of glacial and, in particular, deglacial ice-marginal processes, and will underpin further analysis on the retreat history of the palaeo-ice lobes using high-resolution lithostratigraphic (varve) analyses.