Figure DR1
CAPTIONS FOR DATA REPOSITORY FIGURES

Figure DR1. Left: DEM of Blodgett Canyon overlaid with an orthophoto. The glacial trough down the main canyon can be clearly seen. Right: Blodgett Canyon with modeled ice surface. Trimlines were determined from field observations and aerial photograph analysis. A spline surface was used to interpolate the points and create a model of the maximum paleo-ice surface for each canyon. Basal shear stress values were calculated for each reconstructed glacier according to Paterson (1994) and found to be within the range for typical valley glaciers (0.5 – 1.5 kPa), with one exception (Kootenai Creek; 2.0 kPa). The elevation of the ice was used to excise, from the topographic analyses, any part of the landscape that may have been affected by the main valley glacier. Although ice is shown in the tributary valleys on the north-facing slopes, these areas were included in the analyses because the influx of ice was coming down the north-facing slopes, rather than from the main valley glacier.

Figure DR2. Left: Hillshade of Kootenai Creek DEM displaying the prominent north-south trending spur ridges. Right: Spline surface fitted along the tops of the spur ridges represents an idealized “pre-erosion” surface. Although the modeled pre-erosion surface is likely too smooth, it provides a benchmark from which the amount of material eroded may be calculated. The spline surface does dip into the glacial cirques, suggesting that the calculation of eroded mass from the north-facing slopes is a conservative estimate. Note that, relative to the other figures, north and south are reversed; the surfaces are easier to compare from this perspective.