

**Fig. S1.** Processed and interpreted fence diagrams for selected lines of pseudo-3D grid 1 (Figs. 1 and 2B and C) on Young Lake esker-like ridge. Hairlines show interpreted and generalized interior reflections between bounding surfaces (bolder lines). The relative location of these selected profiles are represented by the solid lines on the grid map (top right). Example thumbnail images of radar reflections for each radar element are presented at the bottom left (refer to text for detailed descriptions). Dashed lines demark offset reflections. GPR profiles are shown with no vertical exaggeration.