

Current understanding of the Younger Dryas (Loch Lomond Stadial) ice cap in Scotland is dominated by reconstructions derived solely from field evidence. We use an area in the western Scottish Highlands to evaluate three examples of this approach by comparing the proposed glacier reconstructions with new empirical data and the predictions of a high-resolution numerical model. Particular emphasis is placed on accurately determining the maximum surface altitude attained by the ice cap, dominant palaeo-iceflow directions and the style of ice-cap recession. By combining new geomorphological and sedimentological data with model predictions, we present a revised interpretation of the build-up and decay of Loch Lomond Stadial ice in the study area—one that suggests a maximum ice-surface altitude of c. 900 m a.s.l., east and southeastward iceflow and active recession of a dynamic margin. Good agreement between the new field-based interpretation and the predictions of the numerical model validates the latter and by implication extends confidence in its veracity beyond the study area.