

Until recently, the scientific consensus has been that the uplands of south-west Britain remained unglaciated throughout the Quaternary, with glacial ice sheet limits lying to the north of the south-west peninsula. However, recent work has shown that small glaciers and ice caps existed in the uplands of Exmoor and Dartmoor during the late Quaternary, demonstrating that the consensus of an unglaciated south-west Britain requires considerable revision. Here we report geomorphological and sedimentary evidence supported by glacier-climate modelling for a Quaternary niche glacier from west Cornwall, south-west England. This niche glacier represents the southernmost such system from mainland Great Britain, and provides evidence for the presence of extra-glacial niche glaciers probably during the Last Glacial Maximum of the Devensian glaciation, and well outside the limits of the main British–Irish Ice Sheet.