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## Geomorphology of the continental shelf west of Ireland

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The continental shelf region West of Ireland contains a rich geomorphic and sedimentary record of glacially-influenced marine processes, including ice sheet extension from Ireland into the Atlantic during the last cold period (Late Midlandian glaciation in Ireland). Intricate sets of curvilinear ridges of varying form and scale across the outer shelf have been recently associated with grounded glacial ice withdrawal from maximum limits. The region lies at the southern limit of the glaciation of the Atlantic margin of northwest Europe, and thus occupies an important position in palaeoglaciological reconstructions. Studies of seabed morphology west of Ireland have been greatly enhanced by exhaustive multibeam bathymetric coverage of the Irish National Seabed Survey, associated sediment sampling and high-resolution shallow seismic profiles; in places, these have been complemented by the use of industry 3D seismic data cubes to visualise the internal structure and geomorphology of glacial ridges and large-scale sediment aprons. This paper presents observations from combined sediment ground truthing, high-resolution geophysical and bathymetric data, focusing on the Porcupine Bank, Saddle and Inner shelf areas of the Western Irish Shelf, in order to examine available models of shelf glaciation.