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Marine mapping in a drowned glacial environment.

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Much of the continental shelf around the United Kingdom is dominated by relic landforms created during past glaciations and subsequently submerged during sea level rise. Although much less accessible than their terrestrial counterparts the extent and degree of preservation of submarine glacigenic features allows not only for detailed mapping but the dynamics and limits of ice sheets to be inferred. This additional information will inform future attempts to reconstruct and model the effects of climate change. There is a broad range of features that can be mapped; the majority recording the retreat phase of any glacial episode beyond the limits of subsequent glacial readvances. New data, with different resolutions, from the NW Highlands and west of Orkney form the basis for a new approach by BGS to offshore Quaternary mapping. The challenge for a national survey is to capture and present both non-genetic and interpretive data in an understandable and consistent manner between different datasets at differing resolution and across the ephemeral boundary of the present day coastline.