# Carbon-cycle perturbations in the deep Iapetus during the Great Ordovician Biodiversification Event

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The Ordovician represents a period of major biospheric change in the Earth history, including a long-term biodiversification followed by a short-term extinction; the latter has been linked to a global cooling episode. The three-fold increase in biodiversity of throughout the Ordovician is known as the Great Ordovician Biodiversification Event (GOBE), which has been a focus of numerous paleo-environmental investigations in the fossiliferous shallow-marine strata deposited along continental margins. However, strata of deep-sea facies have not been focused in previous paleo-environmental studies, although they occupied extensive oceanic domains.
Deep-sea bedded cherts in the Ballantrae accretionary complex in SW Scotland is appropriate for checking the Ordovician extinction-related paleo-environmental information in the deep Iapetus Ocean. To examine the perturbations in C-cycle in the deep oceans during the GOBE, we preliminary report the organic carbon isotopic records from the Middle Ordovician deep-sea cherts at Bennane Head, Ballantrae Complex, SW Scotland.

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