Abstract:

A layered calcite coating over ancient cave fill in Aillwee Cave, Co. Clare, Ireland, yielded a suite of four U-Th dates ranging in stratigraphical order from 441 (-44+79) ka to infinity. These mid-Pleistocene dates are the oldest finite dates from a cave in Ireland, and are clearly distinct from the (few) previously published dates, which are generally Holocene. They suggest that this cave had already been formed and partly re-filled by the mid-Pleistocene. Passage morphology and orientation indicate that topographical and hydrological conditions during cave formation were markedly different from those operating today.