The ‘Black Band’: local expression of a global event

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The Cenomanian–Turonian Boundary Event (CTBE) or Oceanic Anoxic Event II (OAEII) is regarded as one of the major global bioevents, though not as dramatic as the ‘big five’. The biotic changes at the CTBE are at the generic or species level, rather than that of Family or above, and the percentage change is not so significant on a global scale (GALE et al., 2000). Perhaps more significant is the importance of this event as one of the Cretaceous OAEs that begin in the early Cretaceous (Weissert Event, Faraoni Event, etc.) and continue into the Santonian (OAEIII). The Black Band of Yorkshire, Humberside and Lincolnshire is, of course, where the study of Cretaceous OAEs began with the seminal work of SCHLANGER & JENKYNs (1976). The quarry on the south bank of the Humber Estuary, at South Ferriby, was the location where the first description of an oceanic anoxic event was related to changes in the water column, notably anoxia. Since that time, OAEII has been recognised as a global event, being recognised in the world’s oceans (DSDP, ODP, IODP cores), and on every continent in both deep water mudstones and relatively shallow water carbonate successions (WOHLWEND et al., 2016). Despite all the research on this interval the original question as to whether it represents exceptional preservation of organic matter or enhanced productivity still remains.