



The ICDP-Hominin Sites and Paleolakes Drilling Project (HSPDP): new data from the Chew Bahir site in Ethiopia

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There are currently few long, continuous, Pleistocene records from East Africa, meaning it has been difficult to establish the relative influence of low- versus high-latitude forcing on East African climate and climatic conditions at the time of anatomically modern human origin and subsequent dispersal. We have been attempting to address these gaps in our knowledge by analysing lake sediments taken from Chew Bahir, an area of playa mudflats in southern Ethiopia close to the site of the oldest-known anatomically modern human fossils at Omo-Kibish. In March 2014, Chew Bahir was cored to a depth of ~ 40 metres, and the resulting sediment sequence is estimated to cover the last ~ 115 ka. In December 2014, a nearby site was drilled to a depth of ~ 280 metres as part of the International Continental scientific Drilling Programme - Hominin Sites and Paleolakes Drilling Project (HSPDP). The oxygen and carbon isotope composition of endogenic calcite and other data from these cores will be presented. The data show some significant changes in water balance variability, the period prior to 70ka appears very unstable with some significant periods of drought and flood. Between 70-20ka the lake was stable and evaporative. The last 20ka years was wetter.