the surprisingly high ^{14}C age of ~16,000 BP. The age of the terrestrial plants is believed to reflect the true age of the sediment. It is proposed that the anomalously high ^{14}C age of the aquatic moss may be an effect of the moss having grown in geothermal water, as the area is known to be geothermally active today. In a test of this hypothesis, modern aquatic moss growing in geothermal water showed a similar ^{14}C anomaly, with measured ages ranging from 6000 to 8000 BP, which may be explained by the equally high ages measured for the corresponding water samples. The ^{14}C content of geothermal springs and neighboring rivers in the area ranges from 9 to 50 pMC, equivalent to 20,000–5500 BP.

A FULLY RELATIONAL DATA BASE FOR RADIOCARBON PROJECTS

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This paper describes the progression in technique and sophistication from a simple punched-card system for a radiocarbon data base, through computer-based 'flat' systems, to the powerful, menu-driven fully relational data base capable of handling most aspects of the research laboratory projects.

COMPARISONS OF URANIUM SERIES AND RADIOCARBON DATES ON LACUSTRINE DEPOSITS OF THE EASTERN SAHARA

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Glacial conditions in the northern hemisphere are known to correspond with hyperarid conditions in the Sahara where past pluvial conditions correspond with interglacial conditions in northern Europe. Radiocarbon dating of lacustrine deposits in the eastern Sahara have indicated pluvial conditions between around 25,000 to 50,000 BP (oxygen isotope stage 3), whereas absence of archaeological evidence has failed to support this conclusion. Uranium-series dating of lacustrine carbonates in the same region, and, in some cases, on the same deposits as those dated by radiocarbon, also fail to support pluvial conditions between pluvials of the early Holocene (oxygen isotope stage 1) and those of isotope stage 5.

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THE CONTRIBUTION OF SECONDARY RADIATION TO THE BACKGROUND OF GAS PROPORTIONAL COUNTERS AND THE ANALYSIS OF BACKGROUND COMPONENTS

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We present here the results of background measurements in a low-level gas counting system taken at different shielding conditions, from the top of a mountain to deep underground. The results demonstrate clearly the importance of secondary radiation, formed by the interaction of charged cosmic-ray particles with the passive shield, in the background of a low-level counting system. It is further shown how the measurement of the background, under varying secondary radiation