itate 'on the spot' screen or paper presentation for research, text entry is still orientated towards the HLF fields style previously described (Wilcock *et al* 1988), as it is ideally suited to wider data exchange, in particular to the IRDB minimum entry fields (Kra 1989; Walker & Kra 1988).

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^{14}C DATING AND MEASUREMENTS OF CLIMATIC PROXY INDICES OF LOESS SEQUENCE TO RECORD PALEOMONSOON VARIATION ON THE LOESS PLATEAU OF CHINA DURING THE LAST 16,000 YEARS

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A loess profile, 15 m thick, which has developed in the Baxie River Valley, west of the Loess Plateau, can be considered to be representative of loess-paleosol sequences formed over the last 16,000 years. The ^{14}C determinations of various organic fractions and thermoluminescence (TL) dates of quartz from the profile indicate that the paleosol complex, 8–4.9 m deep below the top of the profile, which can be interpreted as recording the Holocene Optimum, and reflects the prevalence of Asian summer monsoon circulation, developed between 10,000 and 6000 BP. A loess layer, 1.25 m thick, at a depth of 9.25–8 m, is characterized by low organic content, low magnetic susceptibility and more positive organic δ^{13}C values. These data indicate that the loess layer records an abrupt change in Asian monsoon climate spanning 10,870–10,230 BP. A weakly pedogenic paleosol at 9.25–9.75 m depth marks the termination of the Last Glacial period and the reactivation of the summer monsoons. This paleosol spans the range from 12,500 to 11,000 BP. Two ^{14}C determinations on the humin fraction of the organic component of the base of the higher paleosol complex and the top of the lower paleosol gave ages of 10,230 ± 230 cal BP and 10,870 ± 270 cal BP, respectively. These ages mark the beginning and termination of an abrupt event involving increased dust influx under the domination of winter-monsoon conditions. This abrupt change seems to have lagged behind the equivalent Younger Dryas event found in the North Atlantic region. Further work is needed to provide an explanation for this time lag.

The organic δ^{13}C values from the profile range from −21‰ to −24‰. The more positive δ^{13}C value suggested that the proportion of C3-type plants in the river valley of the loess plateau increased when summer monsoon influence strengthened, and C4-type vegetation increased when the summer monsoon influence weakened. Magnetic susceptibility and organic content were low during loess deposition, also reflecting domination of winter monsoons over summer monsoons.

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