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Holocene sub-centennial timescale environmental and climatic changes in SW Cameroun

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We present geochemical studies have been conducted on two lake sediment cores collected in 2007 in Lake Ossa in the Sanaga Basin in south-western Cameroon. We show a significant fragmentation of the forest between 2500 and 2300 BP corroborating results of Ngomanda et al., (2009). These authors suggest an important aridification marked by a long dry season of $\sim$ 7 to 9 months as evidenced by the presence of Pennisetum glaucum (millet). The existence of this drier phase is also supported by the covariation between the isotopic signal and the iron content increasing with erosion of lateritic soils resulting from the dry season. We compared this geochemical record with the archaeological data from the area of South Cameroon. This shows a covariation between forest fragmentation and the Bantu population density increase. From 1400 BP until 800 BP, the absence of Bantu population settlements is concomittant with forest regrowth. After this period, the human presence is again confirmed by archaeologists. The fundamental questions remain. They concern the origin of this hiatus of human presence, the link between climate, man and his environment and the timing of this information.