



Central southern Africa at the time of the African Humid Period: A new analysis of Holocene palaeoenvironmental and palaeoclimate data.

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The Holocene African Humid Period (c 14.8-5.5 ka) is now recognised in high-resolution records from western Africa as well as in tropical Africa north of the equator. Establishing a clear picture of Holocene environmental changes from palaeodata in central southern Africa is, however, proving both difficult and contentious. This is because in dryland systems in particular it can be difficult to distinguish the effects of sub-millennial scale regional climatic variability from those of major externally-forced global climate changes. We analyse and review existing records for central southern Africa, and neighbouring areas affected by the same climate systems, to attempt to build a clearer spatial picture of regional hydrological system responses during the Holocene. We suggest palaeodata, including new data from Makgadikgadi basin barchan dunes indicate mid-late Holocene aridity following a period of marked hydrological dynamism extending from the early Holocene. We propose that present-day conditions in central southern Africa are relatively stable compared to the early and mid-Holocene and infer that this period of relative stability in the landscape has occurred since ca. 2 ka. We explain Holocene hydrological changes through analysis of changing zonal climatic influences linked to Congo Air Boundary (CAB) and Intertropical Convergence Zone (ITCZ) dynamics, the effects of which filter into the region via complex drainage basin dynamics. It is proposed that, *sensu stricto*, the AHP was not a spatially uniform feature of early Holocene central southern Africa.