

**The African and American southern tropics:
how were post-glacial climatic changes related?
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The climatic variability at low latitudes is investigated through a comparison of continental records from southern Bolivia and southern Africa. Our goal is to better understand potential links between the two continents, marine circulation, and high latitude climates.

We focus on hydrological changes inferred from well-dated lake and diatom records, complemented by other proxies (e.g. pollen).

Post-glacial wetting/warming started around 19/18 cal. kyr BP, concomitant with a steep temperature increase in southeastern Atlantic and in Antarctica. Later, the tropics responded to the global climatic events of the last deglaciation at the onsets of the Bolling and Preboreal periods by major hydrological changes, but our observations suggest two types of regional behavior. North of the present-day January ITCZ, palaeohydrological fluctuations seem to be linked to climate changes in the North Atlantic region, i.e. wet/dry in Bolivia and East Africa, warm/cold in high latitudes. Southward, hydrological changes remained related with climate changes in continental Antarctica, e.g. , a dry period in southwest Africa matching the Antarctica Cold Reversal.

Also during the Holocene, the southern tropics experienced large hydrological fluctuations. An East-West antiphasing is observed between Southern America and southwest Africa (e.g., wet/dry at ca. 9.5-10.5 and after ca. 4.5 cal. kyr BP, respectively).

If during the Late Glacial, our observations suggest a north-south forcing gradient between the high and low latitudes, during the Holocene, the climate variability seems to be related to a zonal circulation. The ENSO dynamics could explain in part the climate changes.