

Interactive comment on “Holocene sea level and environmental change at the southern Cape – an 8.5 kyr multi-proxy paleoclimate record from lake Voëlvlei, South Africa” by Paul Strobel et al.

Anonymous Referee #2

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Dear editors of Climate of the Past

I apologise for the length of time this took to reach my decision, as you will note below, it is complicated.

This paper highlights state of the art analyses (mostly inaccessible to African scientists due to budgetary constraints) applied to a core from the south coast of South Africa. The story is relatively clear, though better attention can be paid to the geomorphic functioning of the system relative to sea-level change. This is because a core is merely a one dimensional facet in a system that responds dynamically to changing sea level and which inevitably manifests sedimentologically and geochemically via multiple feed-

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back loops between the system geomorphology and core constituents. This is often ignored in these systems with the assumption that they are mostly steady state and thus a climate or sea level archive. Better discussion of geomorphic influences needs to be made. Without this, I cannot completely trust the archive status of the core and results thereafter.

On a more serious topic, and something I have wrestled with for some time now, I feel I can no longer be complicit in the denudation and slow drain of research resources and ideas from Africa (and other developing nations) by the processes of scientific colonialism. The paper has not a single local author in the long team of people involved, with merely an acknowledgement to South African field workers. It remains unclear what all authors did, and why indeed a multinational and internationally authored paper and project funded by the BMBF is permitted to be submitted without inclusion of local knowledge and authors. Attached to this review, and available from the below links are several articles, tweets and papers that highlight a serious issue surrounding scientific imperialism and the continued exclusion of African and developing world scientists by better funded and resourced first world teams.

By excluding local scientists who I presume were at some point included in the proposal in order for it to be successful (see <https://www.spaces-training.org/>), this subtly acknowledges that locals are less capable, or do not have the intellectual capacity to participate in high level science such as that espoused by this journal. The SPACES brief is as follows “It is a collaborative effort between Germany and several southern African countries. Its focus is on the complex interactions between land and sea, and between the atmosphere and biosphere, in southern Africa“. “Sustainable research requires early support for young experts in research and education at universities and research institutes, including industry-related ones, in Germany and the participating African countries South Africa, Namibia, Angola, Malawi, Mozambique and Zambia. Good networking, close coordination and long-term cooperation between the scientists of these nations are of equal importance“. I do not see this being upheld here.

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The skew in funding resources and equipment access further exacerbates this, and the result is a slow whittling of academic resources and ideas from the developing world and further concentration in the developed.

I had written to the editors-in chief to highlight this concern as I feel that in reviewing papers like this, with no clear reasons as to why there are no locals included, I too become part of this growing problem. Their suggestion was to make this comment in my review. On this basis, I cannot pass further judgement on this paper and cannot provide further review or energy on this matter. Simply put, this is just not acceptable anymore and more people need to start standing up to this resurgence of parachute science. Are developing world authors merely to remain as field assistants and people from whom nascent ideas and local access to field sites be sourced from? I sincerely hope not. It is up to us as reviewers, scientists, editors and humans to raise this debate and end this practice.

Links below include the following: <https://www.sciencedirect.com/science/article/abs/pii/S001North, M.A., Hastie, W.W. and Hoyer, L., 2020. Out of Africa: The underrepresentation of African authors in high-impact geoscience literature. Earth-Science Reviews, p.103262.>

<https://onlinelibrary.wiley.com/doi/full/10.1002/esp.5026> Tooth, S. and Viles, H.A., 2021. Equality, diversity, inclusion: ensuring a resilient future for geomorphology. Earth Surface Processes and Landforms.

https://eos.org/articles/why-arent-there-more-journal-papers-by-african-geoscientists?fbclid=IwAR1JdQvhfbc_zFs5jGBQE44IJh4GVn-B_Dm3HwtPdBsfdWieg4_v_1gEzQY

<https://www.scientificamerican.com/article/the-problem-of-colonial-science/>

And this troubling article spawned by a series of outraged tweets by Brazilian and international scientists <https://www.nationalgeographic.com/science/article/one-of-a-kind->

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dinosaur-removed-from-brazil-sparks-legal-investigation

#UbirajaraBelongstoBR search handle on twitter.

Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2020-130>, 2020.

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