

# ***Interactive comment on “A standardized database of MIS 5e sea-level proxies in southern Africa (Angola, Namibia and South Africa)” by J. Andrew G. Cooper and Andrew N. Green***

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This is an important review and the historic overview of sea-level studies in South Africa is very well documented, but the last 10 years of this have several relevant studies that have been missed, and as such, a major revision is necessary. Some additional references to check, that contain ages and information on Last Interglacial deposits:

[if Mozambique will be considered in the review?] Armitage, S.J., Botha, G.A., Duller, G.A.T., Wintle, A.G., Rebêlo, L.P. and Momade, F.J., 2006. The formation and evolution of the barrier islands of Inhaca and Bazaruto, Mozambique. *Geomorphology*, 82(3-4), 295-308.

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Roberts, D.L., Bateman, M.D., Murray-Wallace, C.V., Carr, A.S. and Holmes, P.J., 2009. West coast dune plumes: climate driven contrasts in dunefield morphogenesis along the western and southern South African coasts. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 271(1-2), 24-38.

[LIG dunes dated on the East Coast] Fisher, E.C., Albert, R.M., Botha, G., Cawthra, H.C., Esteban, I., Harris, J., Jacobs, Z., Jerardino, A., Marean, C.W., Neumann, F.H. and Pargeter, J., 2013. Archaeological reconnaissance for middle stone age sites along the Pondoland Coast, South Africa. *PaleoAnthropology*, 104-137.

[a review paper on dunes that includes a database as a supplement and may be helpful] Roberts, D., Cawthra, H. and Musekiwa, C., 2014. Dynamics of late Cenozoic aeolian deposition along the South African coast: a record of evolving climate and ecosystems. *Geological Society, London, Special Publications* 388(1), 353-387.

Morrissey, P., Knight, J. and Stratford, D.J., 2020. Early Marine Isotope Stage 5 sea levels, coastal dune palaeoenvironments, and human occupation on the southeast coast of South Africa. *Quaternary Science Reviews* 245, 106504.

On 'future research directions', Swartklip and Nahoon are tagged as 'priority' sites but these have already been recently re-addressed. They are published in Roberts et al. 2009 (the paper on West Coast dune plumes) and Morrissey's 2019 Masters project that was published in 2020.

I found the figures to be of fairly poor quality and some of them (e.g., from Jacobs and Roberts, 2009) are not sufficiently modified from their original form. Runds (2017) is missing a reference in the reference list so I could not compare this to its source.

On coverage and completeness: was Mozambique deliberately left out of Southern Africa? There has been work done there on the Last Interglacial which I would think appropriate to include here.

Not all studies described in the text are given equal consideration, and I felt that the

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dated sites that are presented in the database did not receive as much attention in the main text as undated sites with inferred or relative ages. This seems a bit odd and I think better cohesion between the two parts of this work is needed.

My overall feeling is that this paper should not be published in its current form as it is missing too many relevant and recent studies. A lot of literature has been overlooked, and my impression is that if the authors were not aware of all research going on in other parts of Southern Africa, they could have approached a more diverse team of people working in this region to work with them in order to tell a fuller story.

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