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Interactive comment

Interactive comment on "Neotectonics of Brazzaville and Kinshasa: linking Congo Basin seismicity and in situ stress in the Inkisi Group" by Hardy M. D. Nkodia et al.

Virginia Toy (Editor)

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The reviewers have provided thorough comments that should allow linguistic revisions, and have identified a few issues with data presentation, such as that the field data used in your stress inversions is not presented. I am confident that revising the manuscript according to these two reviews will yield a scientifically robust and valuable contribution to the literature.

I have a few more more suggestions from an editorial perspective: Throughout the manuscript 1. Please talk about azimuths of 'tectonic shortening' rather than 'compression' since the latter implies a combination of stress and strain. 2. Present azimuths of

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Discussion paper



bearings or strikes as numbers ranging from 0 to 360 degrees, rather than e.g. N078 degrees.

Abstract: I find the section of this from line 19 onward fairly unclear at present and would revise it with this focus (which I hope is what you mean?) - Paleostress indicators show two phases, one related to Paleozoic orogenesis, and a second related to the modern tectonic regime that is responding to opening of the Atlantic ocean - The second of these phases shows a shortening direction approximately coincident with modern earthquake focal mechanisms and the world stress map database.

A couple of things I noticed in the remainder of the manuscript: L105... basin developed as a geometric consequence of displacement of the Kasai block... L118-125... Entire paragraph could be refined to something like "We compiled earthquake hypospectral locations from the USGS catalogue (citation) and information about stresses in Earth's crust from the World Stress Map Project (citation) using GIS." Also, please be aware that one of the primary datasets considered in making the World Stress Map (WSM) are earthquake focal mechanisms. So it doesn't make a lot of sense to plot the focal mechanisms and the entire catalogue of stress orientations from the WSM. I think you can select to leave the stress orientations derived from focal mechanism inversions out of the maps generated from the WSM website, and recommend you do this.

I do hope that you are able to make these revisions, since I think it is valuable for a study of the paleo- and neotectonics record in this region to be published.

Virginia Toy.

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