

## ***Interactive comment on “Influence of basement heterogeneity on the architecture of low subsidence rate Paleozoic intracratonic basins (Ahnet and Mouydir basins, Central Sahara)” by Paul Perron et al.***

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Beside the technical and scientific value of the paper I have collected some observations on the structure of the article. How data are presented and how much is clear which is the original work performed with respect of what has been re-digested from previous published work. On this respect there is to me some room of improvement. The reader needs a bit of help in being directed towards the key messages. As it is structured now I found it a little difficult, too much relevant observations in “brackets”, too frequently reader is requested to look at more than one figures with reference to the

C1

same concept, jumping ahead and back-word. I would suggest some degree of simplification. At the end, even if it is important to mark how big has been the effort of to give spatial relevance to info already published (e.g geochronology, etc. . .) the important thing is to convey the new and original message of the work. I Have never seen in my life Figures Captions as these. Captions represents basically another article. The relevance of illustrations must be stated in the article text. The Figure needs clear legends, but captions , if possible must be concise.

Abstract Row 17 – 40: It is lacking reference to your original work and the results of it. What make this paper one of original scientific content? Which is the new aspects of your approach with respect to what ( a lot) have been already published on North Africa Paleozoic? Shorten the introductory remarks on Paleozoic Basins and expand the above.

Introduction R47\_ No need to cite specific Figure of Heine for a general remarks like this, work citation is enough R48\_ Non conventional exploration has revived interest. . . . .explain why and where R50,51,60,61\_ incorporate in text all the (i.e. in brackets), too much. . . . . Example: Share several common features, being generally from circular to . . . . , being filled by continental to shallow marine. . . . . etc. . . . etc R64\_ Depositional environment. . . . This is just the same you just stated in Row 51. Try to be more short in introductory remarks, these concepts are enough when explained once, you do it too frequently through the text. R82-86. In abstract too

Geol Setting. . . . R99\_ sandwiching ! R105\_ Individualizing?

Data & meth R122 – 129. The integrated work you describe is a standard one. You should underline more which are the new data you are presenting in this paper for the first time. Making use of GIS or looking at log and seismic doesn't represent itself something that is worth of note. R138 – 157. Describing data you analyze and methods you make reference to one table and Figs 3, 4, 5,6, 9,10. The reader would be supposed to jump ahead and backward to text to try and figure where these data

C2

are. .... It would be possible to limitate this to wells, Outcrops, seismic, geol profiles and eventually have all of these on one or two Figures only? R147\_ supplementary data? What are they and where I found it in the paper?

Structural framework 170\_ Same is stated in the introduction. . .no need to repeat 4.1 & 4.2 Syn-sedimentary Same comment for these two and is relevant to Figures citation. e.g. R187, R204, 231,242 To figure out one simple geological concept that comes from an original observation made by you the reader is supposed to jump among 3 or more Figures, looking for, with a lens because is almost always un-readable, a fault F2. ....a label DO1,DO2. ....a part of Fig 5 that is 5AA' (R189) or 5A-A' (182). The reader is lost with all these citation. In fig 5 you have one map and one section, which is the need to label it differently if they are univocally designed by a 5A? Try if possible to simplify these two paragraphs because they are currently impossible to follow. Minimize the reference to the figures that display a concept, you do not need to cite all, just the more significative.

5.1 Facies association. .... R268. Explain how the present study add knowledge to what stated above in definining the facies associations. Which are the new data? Which is the news with respect to the works cited? R454 6. An association. ....refer the title to an observation not to a conclusion. ...eg: subsidence and tectonic history R532. Same as above R546. .list of thermos orogenic events is complex, brackets inside brackets, cite name or age

Figures Fig.1 . Too full. Very difficult to read. I would simplify the Paleozoic series legend it is impossible to identify on Map different grades of colours within Cambrian or Carboniferous. Too much writings in the AOI (fig3A) too small figure and too dense posting of the Geochronology data to appreciate their relationships with terrains Fig.3. W=well and O=Outcrops not in the legend. Reference to location of sections Fig 5 & 6 difficult to read in Map. Capital letters of arches and basins confusing with letters that make reference to following figures. Fig.4. I do not understand which is the extent of this area with respect to the previous Map (Fig.3A). The small writings (eg: Otj. ....)

C3

are completely unreadable, remove it or enlarge. Fig.5. Same comment made above for the small writings in Figures. I do not understand the need to differentiate map and section with A, A' Fig.7. symbols on core description section are too small to be understand. Fig11. K cited in legend but not in Figure Fig.12. A,B & C are too small, it should be enlarged. D &E are necessary?

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C4