

## ***Interactive comment on “New data on geology of the Southern Urals: a concise summary of research after the period of EUROPROBE activity” by Victor Puchkov***

**R. Ernst (Referee)**

Richard.Ernst@ErnstGeosciences.com

Received and published: 21 June 2016

GENERAL COMMENTS This is a very useful paper by the leading expert on the Urals that summaries progress in Urals research during the past decade after the great expansion of western collaboration in the 90s.

Dr. Puchkov writes well, remarkably well for a non-native English speaker, but the manuscript could benefit from some additional editing by a native English speaker. I have made some suggestions. It is mostly a question of changing just a few words here and there.

The paper is well structured and full of interesting information. I thoroughly enjoyed

C1

reading the paper

### SPECIFIC COMMENTS

Page 9, line 24: can a reference be added after “GSSP establishment”

Page 11, line 15: the meaning of “problems of acquisition of primary data”. Does this mean that data were not collected, or does this mean that data were collected but were flawed? Page 11, line 22: what do you mean by “new materials”? Do you mean new seismic profiles?

Page 12, line 25-26: insert citation of Ernst et al. 2008” which includes details on the 1385 Ma magmatism worldwide. Page 12, line 28: after “compare with Ernst, 2014” consider adding “and “Ernst et al. 2016” This new Nature Geoscience paper includes the latest information on 720 Ma LIPs of northern Laurentia and southern Siberia.

References (page 12, line 13): Correct: Ernst (2014) reference. The publisher is Cambridge University Press, NOT Elsevier Add: Ernst, R.E., Wingate, M.T.D., Buchan, K.L., & Li, Z.X. (2008). Global record of 1600–700 Ma Large Igneous Provinces (LIPs): implications for the reconstruction of the proposed Nuna (Columbia) and Rodinia supercontinents. *Precambrian Research*, 160: 159–178. Possibly add: Ernst, R.E., Hamilton, M.A., Söderlund, U., Hanes, J.A., Gladkochub, D.P., Okrugin, A.V., Kolotilina, T., Mekhonoshin, A.S., Bleeker, W., LeCheminant, A.N., Buchan, K.L., Chamberlain, K.R., Didenko, A.N., 2016. Long-lived connection between southern Siberia and northern Laurentia in the Proterozoic. *Nature Geoscience*, v. 9, p. 464-469

TECHNICAL COMMENTS Page 2, line 9 (Abstract): find a different word than “actual” Page 2, line 10: change “when the” to “after” Page 2, line 11: change “done” to “reached”

Page 3, line 10: correct spelling of “extraordinary” Page 3, line 13: change “90-ties” to “90s” Page 3, line 24: correct spelling of “territories” and perhaps replace with “regions”

Page 4, line 6: change “to run” to “running of” Page 4, line 7: change “. . .budget. A

C2

support. . ." to ". . .budget. Support. . ." Page 4, line 9: insert "funded" before "from National Science. . ." Page 4, line 20: change "recommended" to "evaluated"

Page 5, line 2: correct spelling of "Finland"

Page 5, line 14: change "big" to "large" Page 5, line 15: change to "Gee and Stephenson" so that the citation is in standard western style. Page 5, line 19" change "of 90-ths" to "the 90s" Page, 5 line 19: change "Eltsin's" to "Yeltsin's" to match the way this name is normally translated in English Page 5, line 21: insert "an" before "ill-conceived" Page 5, line 24: insert "continued" before "arrival" Page 5, line 25: change "colleagues that had finance providing" to "colleagues who had funding" Page 5, line 25-26: change "permitted to continue the" to "permitted the continuation of" Page 5, line 26: meaning of "and reach a progress" is not clear

Page 6, line 18: change "inavailable" to "unavailable"

Page 7, line 19: change "In the same time" to "At the same time" Page 7, line 21: change Russian "e letter" to "and"

Page 8, line 3-4: this text is a bit awkward "permitted to come to a conclusion. . ." Not quite sure what to suggest Page 8, line 16: change "to construct" to "construction of" Page 8, line 29: change "XX century" to "20th century"

Page 9, line 2: insert "the" before "recent" Page 9, line 2" change to "Mavrinskaya and Yakupov" to match the standard western style for citations Page 9, line 26: remove "a" from before "small progress"

Page 10, line 6" change ". . .of most important and insufficiently. . ." to ". . .of the most important but insufficiently. . ." Page 10, line 24: not sure what you mean by "digests"â€"do you mean "abstracts" or "summaries"? Page 10, line 26: change "the progress. . ." to "Progress. . ."

Page 11, line 4: change "going on" to "on going" Page 11, line 19: change "strike-slips" to "strike-slip faults" Page 11, line 21: insert "continued" before "interpretation", and

C3

in the next line (22) remove "was continued" Page 11, line 23: start new sentence at "So several new papers. . ." Page 11, line 27: "zero years" is an unusual phrase, but is understandableâ€"could be replaced with "first decade"

Page 12, line 4: correct spelling of "rapakivi" Page 12, lines 6-7: change "permits to put forward a preliminary list of objects "candidates" at attribution to Large Igneous Provinces (LIPs)." to "permits the identification of potential Large Igneous Province (LIP) candidates." Page 12, line 9: remove "of their areas", and then in the next line (13) after structure insert "in the area" Page 12, line 11: change "As it was mentioned before. . ." to "As mentioned before. . ." Page 12, line 21: after "the same ages have also" insert "been obtained for" Page 12, line 22: correct spelling of "rapakivi"

Page 14, line 16: insert "the" before "age of a sedimentary Page 14, line 17: change "permitted to date the ophiolites. . ." to "permitted dating of the ophiolites. . ." Page 14, line 24: remove "to" from before "more examples of Precambrian"

Page 15, line 15: change "during so long time, within" to "that spent such a long time within" Page 15, line 24: change "made hand in hand" to "made in collaboration"

Page 16, line 11: change "50-ties" to "50s" Page 16, line 11: change "XXth century" to "20th century" Page 16, line 18" change "The most of . . ." to "Most of. . ."

Page 17, line 4: add either "a" or "the" before "subducted slab"

Page 18: line 9: change "than it was thought before" to "than was thought before" Page 18, line 12: change "Here we touched not all the problems that were being solved during. ." to "Here we touched on many, but not all of the problems that were addressed during" Page 18, line 17: change "served to a general progress" to "served for general progress" Page 18, line 21: insert "the" before "field"

---

Interactive comment on Solid Earth Discuss., doi:10.5194/se-2016-62, 2016.

C4