

Interactive comment on “Onset of intense permafrost conditions in Northern Eurasia at ~ 2.55 Ma seen in a cryogenic weathering record from Lake El’gygytgyn” by G. Schwamborn et al.

G. Schwamborn et al.

georg.schwamborn@awi.de

Received and published: 24 February 2014

Thank you for the two reviews! It won't be a surprise that we do not fully embrace it, when the two reviewers dislike the basic idea that freeze/thaw cycling in NE Eurasia soil may go parallel with the permafrost occurrence in the area. Obviously the term "permafrost" was toxic to the paper. Instead - this might be speculated - reviewers may be more in favour, if we just call it a "cryogenic weathering" record.

The study area is non-glaciated and highly continental and this is valid for much of the Quaternary. This was thought to be a unique advantage to apply our approach in this particular environment. And the contrast between non-cryogenic weathering con-

C3503

ditions in the Pliocene and cryogenic weathering conditions in the Pleistocene became obvious - according to our opinion.

Without using a linear trend across the Plio/Pleistocene we still can discuss individual CWI values, but we are aware of some limitations regarding the sample quality; i.e. reworked sampled in two ways: on the slopes in nature, on the table in the lab. To our mind the overall linear trend made the story.

Well, we didn't convince them for now - c'est la vie...

We may extract some interesting hints from the reviews; e.g. concerning the issue of an allochthonous silt origin, emphasizing that the frequency of F/T is essential for grain destruction and what role the seasonal temperature amplitude in the soil will play. We also may add some more sediment data, which will become available soon. It might become useful, when setting up a new version of the manuscript.

Interactive comment on Clim. Past Discuss., 9, 6255, 2013.

C3504