

Interactive comment on “Review of some significant claimed irregularities in Scandinavian postglacial uplift in time scales from tens to thousands of years: earthquakes?” by S. Gregersen

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Received and published: 9 December 2013

To referee Hilmar Bungum: I agree, that it is really worthwhile to do the assessment of claims of neotectonics as it has been done in Norway. A few words can be introduced to address the classification of Muir Wood. The treated claims are of classifications D and E. Maybe we ought to get together for Scandinavia. This paper treats Denmark, and Hallandsaasen very close to Denmark, because significant claims are found in the literature. OK the Scandinavian overall uplift picture of Mörner does not have the detail of the new Norwegian pictures. I will review how well it is representative of the models

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of Peltier, Lambeck as well as Milne? Some remarks will be included to take this into account. OK also to the remark that other causes of stresses affect specific regions of Scandinavia. Yes some remarks can be introduced. The detail of the assessments will naturally be given a second thought when a referee mentions it. It needs some length to be understandable, but will be attempted improved to be short and exact. The very concrete questions concerning specific claims will be directly answered, e.g. the specifications of the Carlsberg Fault and the orientation of the Læsø displacement. Wording will be improved by following directly the referee or by consulting colleagues in cases where that is appropriate. The choice of references will be given two extra thoughts.

To referee no 2: Yes I agree that the earthquake indications in northern Scandinavia are very convincing for events about 9000 years ago. Really different from the claims treated in this paper. And yes the assessments of this paper are not absolute, but they are very probable and worth writing down. Further investigations are worthwhile, e.g. a comparative study with common methods across Kattegat from northern Jylland across Læsø and into southwestern Sweden. Also to satisfy this referee a short discussion on the modelling of Peltier as well as Lambeck as well as Milne will be introduced. To the very concrete suggestions on better explanation or clearer language a clear yes. I will follow good advice. I feel it is warranted to discuss the possibility of larger earthquakes even if the claims are judged as non-probable. But I accept that a number is uncertain, so that is not warranted.

Interactive comment on Solid Earth Discuss., 5, 1615, 2013.