

## ***Interactive comment on “Using the Nordic Geodetic Observing System for land uplift studies” by M. Nordman et al.***

**M. Vermeer**

[martin.vermeer@aalto.fi](mailto:martin.vermeer@aalto.fi)

Received and published: 15 February 2014

Disclosure: I supervised the master's thesis of Antti Kairus, work which contributes to this manuscript.

General assessment:

A basically good paper describing a new and valuable geodetic infrastructure and its establishment. The paper doesn't offer much in the way of scientific novelty, though some test computations using the new facility are described.

I believe that presenting an important new research infrastructure is the kind of novelty worth publishing, and that the paper is publishable with minor corrections.

C27

Detailed comments:

Abstract

1) I dislike the way how, in the last paragraph, several specific undertakings are mentioned by name. I think an abstract should remain more 'abstract', describing rather the scientific problems in geodesy or geophysics that the new system may help address. Of course in the body text these undertakings may be mentioned and described, as they are.

2) "...exceed the scope of an observing system" -> "...exceed the scope of the EXISTING observing system GGOS" (?)

Introduction

3) "There are several ongoing projects..." I wouldn't characterise DynaQLim or EPOS as "projects", rather as much broader undertakings. "Initiatives"?

4) THE International Lithosphere Program (add article)

5) "...and this raises an issue to discuss and develop the products of an observing system" Clumsy language. Perhaps "Specific data needs in such research may exceed the scope of an existing observing system, and this raises the issue of observing system product development."

6) The ECGN network (add article)

7) "supervised at" I propose "commissioned by"

Section 2

8) "the usefulness of THE database in research" (add article)

9) "error estimate", "error", "error", ... Rather "uncertainty" or "standard deviation".

10) "the end of THE 19th century"

C28

11) "one obtainS the absolute uplift"

Section 3:

12) "in THE NKG2005LU model" (add article)

13) Equation (3): I believe that the minus sign should be a plus sign, if the quantities are defined as described in the text. Please check.

14) "The global sea level rise is currently accelerating" this is a simplistic statement. It is not untrue for some value of "currently", but I would choose a more careful formulation. The long-term (interdecadal) trend of sea level is indeed on the rise.

Language nit: it's "sea level" but "sea-level rise".

15) "appendixes", do you mean "supplementary material"? If so, please say so.

---

Interactive comment on Solid Earth Discuss., 6, 377, 2014.