

Reviewer comments on:

"Landscape-scale water balance monitoring with an iGrav superconducting gravimeter in a field enclosure"

by Güntner et al.

This is a really excellent paper. We need exactly such investigations for a better understanding of hydrological induced gravity signals. The quality of content and form is high and I have only some small suggestions. (= minor revision)

1) page 1, line 16

I understand this sentence because I've read the whole paper. But may be it would be good to add also a sentence about the installation - then it's more clear.

2) p2, l11 - l13

different scales are introduces like "...regional to continental scale" or "landscape scale". But how large is a landscape scale? A quantitative hint would be good!

3) p3, l6

sometimes the citation is "..., Van Camp et al., 2016a, presented..."

but more usual to cite: "..., Van Camp et al. (2016a) presented...."

4) figure 1

In the DEM region seems to be some blue text? ...but it's too small and also the scale in the left corner is hard to read.

Not everybody knows where Wetzell is located in Germany. It would be good to add a small map of Germany (in the right corner) with the marked location

5) p5, l11

Richter (1995)

6) p6, l23

how constant is the temperature inside the box?

7) p6, l24+25

the 2 m²: is it experience or modelled or....?

8) p7, l16

here the unit is separated from one line to the next. It should be used as one word!

9) p7, l24+25

do you have any ideas for the reasons of the steps? ...and how big are these steps?

10) p8, l10

is the resulted drift also caused by insufficient step correction? ..or not?

11) p9, l4

stabilized temperature: ...in which range? how stable? (it would be better to argue quantitatively)

12) p11, figure caption

we need a citation after (NLNM) ...Petersen 1993?

13) p11, l11

Bonatz (1967)

14) p12, l5-10

can you say anything about tilt effects of the pillar caused by temperature changes (due to water close to the pillar?)

15) p17, formular

all variables should be explained. This is done six lines later. It would be good if this would be close to the formular!

16) p18, l22

Richter (1995)

17) p22, l16-17

no separation of number and the unit

Reference list:

p25, l17

it should be: "New Mexico, 1993.