**Response to Reviewer 2 Comments:**

We thank you for your constructive and detailed comments. It has improved the readability, clarity, and quality of our manuscript. If you have any information, please don’t hesitate to let us know. Thank you very much again.

**Point 1:** Generally it is a good paper and it was interesting to me. However, comparing with the conclusions (I mean, the computed potential value) the paper is a bit too long. I can accept it, because it is a good explanatory text, however some partially offtopic or superfluous parts (e.g. point 2.1.2 (keeping the Table 1 only), the unified topo data in lines 181-191, the „textbook equations” of the gravity of a prism in page 7 and the textbook adjustment equations in page 8). It is rather an editorial question. The paper is good and acceptable without them, too.

Thank you for your comment. The unified topo data and Equation are used to compute RTM quasi-geoid height. We have added some expressions about the using of unified topo data and equations, which makes us easily misunderstand about the calculation process in the text. Please refer to page 12, Line 402.

**Point 2:** Line 259 refers to a x as a ’parameter’ in Eq 12, I suggest to use ’vector’ or ’parameter vector’ instead.

Thank you. Done. Please refer to page 8, Line 259.

**Point 2:** As a structural suggestion, considerable part of the Results are rather belong to Discussion (thus making the better balance between these two chapters, in extent and in content, too): I suggest point 3.3 (or maybe also 3.2) to Discussion – as they are discussing the already shown results. Conclusion – it shouldn’t be a summary as should be recompiled. The second part of the 3rd paragraph and the 4th paragraph are enough, completed by the estimated error of the main conclusive potantial value.

Thank you for your constructive suggestion. We have moved the discussion part in results to Discussion. The conclusions are recompiled and added according to your suggestions. Please refer to Line 498-550 and Line 551-589.