

## Author's response

Manuscript se-2021-98, Igor Ognev et al.

### "Crustal structure of the Volgo-Uralian subcraton revealed by inverse and forward gravity modeling"

Dear Topical Editor,

Below you will find a point-by-point response to the two remaining comments. Our responses are distinguished from comments [by the blue color](#). We attach the updated manuscript where we also corrected a few minor mistakes in the references, text, and figures.

Thank you for your time and patience,

With best regards,

Authors.

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#### Remaining comments

1. The Moho temperature is taken to be constant at 500 °C. Please discuss that Moho temperature in Earth is not constant at different depths and that this assumption is therefore a simplification.

[Agreed. We added two sentences regarding that and cite \(Mareschal and Jaupart, 2013\) on this issue.](#)

2. Please define DeltaLoad and g in equation 5.

[Added.](#)

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[We thank the reviewers for the thorough analysis of the manuscript. Their analysis and comments helped greatly improve the quality of the paper. We also thank the editor for carefully monitoring the review process.](#)

[With best regards on behalf of all the co-authors,](#)

[Igor Ognev.](#)

## References

Mareschal, J.-C. and Jaupart, C.: Radiogenic heat production, thermal regime and evolution of continental crust, *Tectonophysics*, 609, 524–534, <https://doi.org/10.1016/j.tecto.2012.12.001>, 2013.