14th of June 2022

Dear Editors,

With this letter we would like to submit a revision of our paper *On the origin and structure of haplotype blocks*, which is intended for the upcoming special issue: ecological and evolutionary inferences from long-read sequencing. We are grateful for the feedback from the Editor and three Reviewers and revised the manuscript to address issues highlighted in the review.

The major change in the manuscript is addition of the empirical example, which serves to clarify how haplotype blocks can be visualized, highlights many exciting avenues for further investigation, and demonstrates the utility of the ARG approach. Additionally, we made a substantial changes in writing to improve readability and clarify theoretical background. Due to this substantial reworking, we were not able to track some of the smaller changes in the manuscript. For better readability we also submit final version of the text, as well as detailed response for reviewers.

Thank you for considering this revised manuscript, and we look forward to hearing from you.

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