Global plate model choice impacts reconstructions of the latitudinal biodiversity gradient

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¶ Abstract

# Keywords

Latitudinal biodiversity gradient, marine invertebrates, macroecology, global plate model, palaeogeographic uncertainty,

# Introduction (700 words)

* Could flat, unimodal and bimodal type gradients be observed depending on model choice?
* Is there a temporal relationship?

# Materials and Methods (600 words)

## Occurrence data

* What data was used
* How was it prepared

## Palaeogeographic reconstruction

* Which models were used and details
* How were they implemented

## Quantifying the latitudinal biodiveristy gradient

* Metrics used to quantify the gradient

# Results (500 words)

* Summary of reconstructions (could all points be reconstructed for each model?)
* Summary of results from metrics, do different gradients emerge?

# Discussion (700 words)

* Recap on importance of GPMs for deep time macroecology?
* What have we shown?
* Are some times or areas more problematic than others?
* Importance for other fields beyond palaeobiology?
* Consider importance of GPM choice in future work… or not?

# Data accessibility

# Authors’ contributions

# Funding

# Acknowledgements

# References