

Dear Dr. Tyka:

Thank you for submitting your revised version. I have read it with pleasure, and I am happy to inform you that your paper is now accepted pending some minor technical corrections.

With best regards, Jack Middelburg, Associate editor

Dear Dr. Middelburg,

Thank you for your comments on our manuscript - I'm delighted that you enjoyed it! I've corrected all the issues highlighted, plus a few punctuation errors we found. I also added different line styles to figure 5 to make the different lines more distinguishable for colorblind readers.

With best regards,

Mike

All through: please check the proper use of subscript for CO₂ (including the title), lines 71, 387, 388, 467

All occurrences of CO₂, pCO₂ or ηCO₂ have been properly subscripted.

Line 49: it is nickel in text of Ni as abbreviation.

Changed to lowercase "nickel"

Line 91: please use another term than finer-grained because some of the reader may relate this to grain-size of olivine or other solid phase alkaline substances.

Changed "fine-grained" to "more spatially resolved"

Line 147: bracket missing around 2005

Fixed.

Line 166: brackets missing around 2017

Fixed.

Line 243: closing bracket is missing

Fixed.

Line 407: ...surface ocean can be larger....

Corrected.

Line 416: aragonite
Changed to lowercase.

Line 417: magnesium
Changed to lowercase.

Line 421: subscript for Mg(OH)₂
Subscript fixed.