Reply to: 'Global predictions of coral reef dissolution in the Anthropocene'

Kay L. Davis¹✉, Andrew P. Colefax², James P. Tucker¹, Brendan P. Kelaher¹ & Isaac R. Santos^{1,3}

REPLYING TO K. Wolfe and G. Roff *Communications Earth & Environment* <https://doi.org/10.1038/s43247-022-00363-3> (2022)

Wolfe and Roff have presented a response to our analysis of global coral reef calcification and primary productivity rates. Our earlier publication suggested that coral reef ecosystems could become net dissolving worldwide around 2054. Wolfe and Roff argue that global predictions of coral reef dissolution are increasingly important as climate change and anthropogenic activities continue to impact coral reef ecosystems. Broadly, we agree with Wolfe and Roff that refining those estimates and reducing uncertainties is essential. Our meta-analysis and Wolfe and Roff's comments provide a framework to design new field observations and refine predictions into the future.

Received: 25 August 2021; Accepted: 17 January 2022;
Published online: 25 February 2022

Author contributions

K.L.D., I.R.S., and J.P.T. wrote the Matters Arising response with editing from A.P.C. and B.P.K.

Competing interests

The authors declare no competing interests

Additional information

Correspondence and requests for materials should be addressed to Kay L. Davis.

Reprints and permission information is available at <http://www.nature.com/reprints>

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

© The Author(s) 2022, corrected publication 2022

¹National Marine Science Centre, School of Environment, Science and Engineering, Southern Cross University, Coffs Harbour, NSW, Australia. ²Sci-eye, Goonellabah, NSW, Australia. ³Department of Marine Sciences, University of Gothenburg, Gothenburg, Sweden. ✉email: kay-davis@outlook.com