



Author Correction: Reliability of vegetation resilience estimates depends on biomass density

Correction to: *Nature Ecology & Evolution*
<https://doi.org/10.1038/s41559-023-02194-7>,
published online 14 September 2023.

<https://doi.org/10.1038/s41559-024-02410-y>

Published online: 10 April 2024



Taylor Smith & Niklas Boers

It was recently brought to the authors' attention that there was an error in the code to produce the kernel normalized difference vegetation index (kNDVI) hosted on Zenodo (<https://zenodo.org/records/7550255>)—a simple instead of hyperbolic tangent was used to create the kNDVI data from MODIS NDVI data. In order to correct this error, we have rerun all analyses that involved kNDVI using the corrected formula; the formula has also been corrected on the Zenodo repository.

While there are certainly differences between the original data set used in our analysis and the corrected kNDVI data, they do not impact the overall conclusions of our research. None of the statements we make about the kNDVI specifically or MODIS vegetation indices generally are changed by our updated analysis of the data. For some land covers, the correlation between variance and autocorrelation improves, and for others it becomes worse; there are no substantial changes in the global spatial pattern of kNDVI restoring rates (λ) or its trends. The percentages of pixels showing a resilience gain/loss for kNDVI change only slightly (Kendall-Tau: resilience gain changes from 21% to 19.2%, no change in resilience loss; linear trend: resilience gain changes from 21.2% to 19.4%, resilience loss change from 24.3% to 24.5%).

In order to issue a thorough correction, we provide updated versions of each figure in which kNDVI data was displayed. The figures (or panels) that are replaced are noted in the captions of each figure in the Supplementary Information accompanying this article.

Reference

1. Smith, T. & Boers, N. Robustness of global resilience estimates. *Zenodo* <https://doi.org/10.5281/zenodo.7550255> (2023).

Acknowledgements

The authors acknowledge Yuheng Weng (College of Urban and Environmental Sciences, Peking University) for spotting the error in our code on Zenodo.

Author contributions

T.S. reprocessed all data and wrote up the correction. N.B. contributed to editing.

Additional information

Supplementary information The online version contains supplementary material available at <https://doi.org/10.1038/s41559-024-02410-y>.

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 licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence 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 licence, visit <http://creativecommons.org/licenses/by/4.0/>.

© The Author(s) 2024