

Retraction

# RETRACTED: Morley et al. A Database for the Extraction, Trade, and Use of Sand and Gravel. *Resources* 2022, 11, 38

John D. Morley <sup>1</sup>, Rupert J. Myers <sup>2</sup>, Yves Plancherel <sup>1</sup> and Pablo R. Brito-Parada <sup>1,\*</sup>

<sup>1</sup> Department of Earth Science and Engineering, Imperial College London, London SW7 2AZ, UK; john.morley18@imperial.ac.uk (J.D.M.); y.plancherel@imperial.ac.uk (Y.P.)

<sup>2</sup> Department of Civil and Environmental Engineering, Imperial College London, London SW7 2AZ, UK; r.myers@imperial.ac.uk

\* Correspondence: p.brito-parada@imperial.ac.uk

The published article [1] has been retracted due to an error in how UK trade data are presented in the article.

Specifically, the authors found that Figure 4, as published, is inaccurate. Investigating the issue, the authors found that the problem was due to an error in the Python script that was used to extract data from the published database and plot Figure 4. Unfortunately, this script contained a small indexing error that resulted in data unrelated to the UK being included in the calculation of UK trade flows during processing. This error dramatically inflated the UK trade flows, such that Figure 4 and the related discussion in Section 4.3 are incorrectly presented. Correcting this error shows that imports (5.85 Mt) and exports (1.28 Mt) of sand and gravel for the UK for 2014 are small compared to extraction (120.22 Mt), and that these corrected results are now consistent with the database and official statistics [2,3].

We note that the database originally published in [1] is correct; only the presentation of the data in Figure 4 is erroneous in [1]. The parts of the paper that are incorrect as a result of this coding error are Figure 4, the text related to Figure 4 in Section 4.3 (lines 329–368), 5.1 (lines 376–397), and the statements in the Abstract and Conclusions sections pertaining to the magnitude of UK trade.

Given these findings, the authors decided to retract the paper to avoid future misinterpretations relying on the results shown in Figure 4. The Editorial Board confirmed the extent of the error and its significance to the reported results. The authors sincerely apologize for any inconvenience caused by the retraction of this article.

This retraction was approved by the Editor-in-Chief of the journal.

## References

1. Morley, J.D.; Myers, R.J.; Plancherel, Y.; Brito-Parada, P.R. RETRACTED: A Database for the Extraction, Trade, and Use of Sand and Gravel. *Resources* **2022**, *11*, 38. [CrossRef]
2. Chatham House. resourcetrade.earth. 2018. Available online: <http://resourcetrade.earth/> (accessed on 6 June 2020).
3. Office for National Statistics. Material Flow Accounts. 2021. Available online: [ons.gov.uk](https://ons.gov.uk) (accessed on 6 May 2022).



**Citation:** Morley, J.D.; Myers, R.J.; Plancherel, Y.; Brito-Parada, P.R. RETRACTED: Morley et al. A Database for the Extraction, Trade, and Use of Sand and Gravel. *Resources* **2022**, *11*, 38. *Resources* **2022**, *11*, 50. <https://doi.org/10.3390/resources11050050>

Received: 13 May 2022

Accepted: 17 May 2022

Published: 20 May 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).