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to: Avery Orrall <avery@retractionwatch.com>

date: Dec 2, 2025, 2:49 PM

Hi Avery,

I believe the authors' following comment addresses all your questions, including the one you sent to Leonie Wenz on spatial correlation:

Following discussions with Nature, we are retracting our original study in response to the two Matters Arisings published in August. We broadly agree with the issues raised, and have made corrections to the underlying economic data and to our methodology to address them. These changes are too substantial for a correction of the original article in Nature, which is why we are retracting the study. The qualitative conclusions of our revised (and original) article are in strong consistency with the wider research literature in terms of the following points:

- (i) climate change has substantial impacts on macroeconomic productivity,
- (ii) these impacts outweigh the costs of ambitious climate change mitigation,
- (iii) the countries most impacted have contributed to climate change least and are already poorest.

We would like to emphasise that the correction, that was made open access in August, and that your source is referring to, is not peer reviewed. We plan to resubmit a revised version of the article but cannot give more details on the timeline. The research community is constantly evolving and it is important for us to take these developments into consideration while revising our work.

About the spatial correlation issue your source raised: to account for spatial auto correlation in our data, we updated our assessment of uncertainty. We examined the data directly to assess the strength of the correlations and found that they decay with distance. Based on this, we chose 500 km as the cut-off for our main analysis. But we also show how the uncertainty ranges change when using a 1000 km cut-off or no distance-based cut-off at all, relying instead on clustering by country as the author of the second Matters Arising suggests.