

Suggestions for revision or reasons for rejection

(visible to the public if the article is accepted and published)

The authors have addressed my previous comments very well, and I greatly appreciate their careful revisions. The manuscript has been substantially improved, and I recommend it for publication.

I have only one minor technical question regarding Table 1. In the current table, the data quality categories only range from B to D, while category A is absent. Is this simply a typo, or are there no data that meet the criteria for quality level A? Please clarify this point in the final version.

I have no further comments.

Author response: We sincerely thank the reviewer for the positive assessment and for identifying this issue in Table 1. The absence of category A in the previous version was a table-presentation oversight, rather than indicating that no data met the A-level criterion.

We have revised Table 1 to assign qualitative data-quality ratings explicitly by country and time period. China's lime-production data for 1930–1985 are classified as D because they were reconstructed using limestone proxies and sectoral activity indicators; data for 1986–1995 are classified as C because missing values were linearly interpolated using available literature and statistical data; and directly reported national statistical-yearbook data for 1996–2024 are classified as A. For the additional countries, historical data for 1930–1958 are classified as B–C, while directly reported USGS data are classified as A. For Russia, estimates based on Soviet statistics and Russia's production share during 1959–1991 are classified as B, whereas directly reported USGS data for 1992–2024 are classified as A. We also revised the note below Table 1 to define categories A–D explicitly.