

We thank all three reviewers for their thorough and thoughtful assessment of our manuscript, and for the constructive comments and suggestions they have provided. We found the feedback extremely helpful, and it has allowed us to clarify our aims, strengthen the presentation, and improve the manuscript considerably. We have carefully considered each point and revised the manuscript accordingly; our detailed, point-by-point responses are set out below, with reviewer comments shown in black and our replies beneath each in blue.

Responses to R2

General comments:

This paper presents an extremely detailed and granular inventory of historical weather observations in southeast Asia, which will be invaluable in the prioritisation of data rescue efforts, but also for researchers in other fields with an interest in climate and environmental history. Their research is to be highly commended. It is particularly good to see the breadth of sources considered here, including ships' logbooks, and to see that the inventory reaches across national borders both with respect to geographical coverage and archival repositories. The authors clearly and appropriately identify the significance of the work, insofar as without such inventories there is a risk of "duplicated effort, overlooked sources, and the continued loss of records whose very existence is undocumented".

My specific comments and suggestions below are therefore relatively minor:

- Lines 110-111: Rephrase sentence: "Drawing on nine archives across Vietnam and France, filling a large gap in the regional record."

Made it clearer. Thank you.

- Lines 161-162: The authors note that the data sources are also an "excellent record of socio-economic history of the region". Are the authors able to provide one or two specific examples of this from any of the sources in the inventory, such that an environmental historian could get an idea of whether and how documents containing meteorological observations make any direct observations on weather impacts? This could better illustrate the broader importance of the work beyond the data rescue community. Also, line 161 is missing "an" between "also" and "excellent".

Added an example of FMS Agricultural Bulletin contents which shed light on non-climatic socio-economic issues prevailing in colonial British Malaya. Add 'an'

- Line 217: "All these records were stored in paper form or scanned, but over the time"
- remove "the" between "over" and time"

Removed

- Line 219: Remove "The" before "Table 1"

Removed

- Line 225: Remove "the" before Appendix A.

Removed

- Line 271: Add a colon after "documents"

Added

- Line 312: Change "govt" to "government"

Changed

- Lines 331-332, missing word: "MetOffice UK maintained stations and published weather observations before local weather services were formed, we searched MetOffice UK' National Meteorological archive (NMA) for relevant documents."

Made it clearer

- Line 354: change "were vessel" to "where vessels"

Changed

- Line 545: rephrase "Every secondary record resolve to a valid parent document"

Made it clearer

- The future work section of the paper is particularly interesting and important in a paper like this, though I feel it could go a little further, especially considering the depth of work that the authors have put into it over a long period of time. For example, can the authors say something about the transferable lessons the inventory provides for data rescue efforts in other regions of Asia or the world? And, given that the inventory was assembled over two decades through the persistence of the authors, should inventories be a priority for time and resource investment for researchers working in other regions?

Expanded the Future work and added more applications.

Note that a number of these specific points relate to typos/language errors. I may have missed some of these, so I would recommend the authors give the manuscript another careful read before resubmission.