

Comments on “C-PEAT’s Global Peatland Carbon Database (v.2025)”

2026-07-17

General comments

The authors have addressed most of the raised issues well and I only have few additional points that I recommend addressing before final publication.

Specific comments

1. Point 14 by reviewer 1 (Anonymous Reviewer 2026): “We have added the missing parameters to Table 3.” The version of the manuscript with highlighted changes suggests that only one new row was added to Table 3. Specifically, the full list of parameters that I could extract from the uncalibrated ages and that contain many parameters not yet listed in Table 3 is:

- Activity [pMC]
- Activity std dev [$\pm$]
- Age [a AD/CE]
- Age [a AD/CE] (#0 = below detection, Age, 210Pb)
- Age [a AD/CE] (Age, 210Pb)
- Age [a AD/CE] (Age, tephra-chronostratigraphy)
- Age [a AD/CE] (see Method comment)
- Age [a] (years ago)
- Age dated [ka]
- Age dated [ka] (14C-uncalibrated, Age, 14C AMS)
- Age dated [ka] (Age, 14C uncalibrated)
- Age dated [ka] (calculated, 1 sigma)
- Age dated [ka] (converted age)
- Age dated std dev [$\pm$]
- Age dated std dev [$\pm$] (1 sd, Age, 14C AMS)
- Age dated std dev [$\pm$] (calculated, 1 sigma)
- Age dated unc [$\pm$]
- Age e [$\pm$]
- Age max [a AD/CE] (see Method comment)
- Age min [a AD/CE] (see Method comment)
- Age model [ka]
- Age std dev [$\pm$] (1 sd, Age, 14C AMS)
- Age unc [$\pm$]
- Age unc [$\pm$] (14C age, calculated, 1 sigma)
- Age unc [$\pm$] (Age AD, 210 Pb, calculated, 1...)
- Age unc [$\pm$] (Age AD, Age, 210Pb, calculate...)
- Age unc [$\pm$] (Age AD, Age, tephra-chronostr...)
- Age unc [$\pm$] (Age AD, calculated, 1 sigma)
- Age unc [$\pm$] (see Method comment)

- Cal age [ka BP]
- Cal age [ka BP] (Age, 210Pb)
- Cal age [ka BP] (see Method comment)
- Cal age std dev [$\pm$]
- Comm
- Comment
- Dated material
- Dated material (Type of material (bulk, wood,...))
- Depth bot [m]
- Depth sed [m]
- Depth sed [m] (Sample midpoint depth (rounded))
- Depth sed [m] (Sample midpoint depth of OxCa...)
- Depth sed [m] (Sample midpoint depth)
- Depth top [m]
- F14C
- F14C e [$\pm$]
- Lab label
- Lab label (Radiocarbon lab code)
- Method comm
- Method comm (Dating method)
- Method comm (Further information)
- Samp thick [cm]
- Sample label
- $\Delta 14C$ [‰]
- $\Delta 14C$ std dev [$\pm$]

2. Table 3, parameter Sample thickness [: The measurement unit is still missing.

3. The text repeatedly refers to the original data publications (e.g., in Table 3 in the description of parameter Age, dated, uncertainty [$\pm$]). Do you mean the papers that analyzed the original data or publications of data (in machine readable form) or both (depending on the specific event)?

I am asking because I think that it may be difficult to extract such information at scale if “original data publication” refers to articles, in particular if these are paywalled or if there are several values that could match a parameter — for example, parameter Age, dated, uncertainty [$\pm$] refers to the uncertainty of ages as reported in the “original data publication”, but if this is a paper where there are several reported uncertainties for dated ages (such as standard deviation and some confidence interval)?

While I think that harmonizing such data is necessary in the future (if progress is to be made), I completely understand that this may demand too much from the authors, especially with historical data. However, I think it would be useful for users to understand exactly where they may find the definition of a parameter (what the authors mean by “original data publication”), whether this may include paywalled resources, whether it is always possible to find out what the exact definition of parameters with dataset-specific meaning is (for example Age, dated, uncertainty [$\pm$]) or whether the authors know that for some datasets, there is ambiguity.

References

Anonymous Reviewer. 2026. “Comment on Essd-2026-222.” Peer Review.
<https://doi.org/10.5194/essd-2026-222-RC1>.