Author Response to Referee #1

Monitoring abiotic and biotic parameters of forest regrowth under different management regimes on former wildfire sites in northeastern Germany – data from the PYROPHOB project

Marie-Therese Schmehl et al. Earth Syst. Sci. Data Discuss., doi:10.5194/essd-2025-313

RC: Referee Comment, AR: Author Response

Dear Referee,

thank you very much for your positive response, and for taking the time and effort to examine the manuscript and the data set.

Your comments, even if minor, are very helpful to clarify certain aspects in the manuscript. Especially the detailed revision of the data set improves its quality. Please find a point-by-point reply below.

Kind regards,

Marie-Therese Schmehl (on behalf of the author team)

Comments and responses

RC: On P.1, L.20: "Among the above-mentioned hazards..."

It would be good mentioning that all these drivers of forest stress (listed on L.15) are more or less interlinked. For example, climate change increases intensity and frequency of wildfires.

Also, in the list on L.15, natural disasters are explicitly listed. Isn't a wildfire also a natural disaster?

- AR: Of cause the drivers of forest stress can be interlinked, though in different extents and wild fires are one example to natural desasters. We will adapt the sentence to clarify the above mentioned issues.
- RC: On P.22, L.505: The authors mention 47 student theses that have been written within this project. Are these publicly available? Would it be worthwhile to compile them and upload them as supplementary data with a unique DOI? Otherwise, I would omit mentioning them in this data paper.
- AR: We appreciate this suggestion, but regulations at the involved insitutions differ widely and the respective theses are not fully publically available due to copyright issues. Thus, we will delete the sentence.
- RC: There are three data sets associated with this paper. The data in general seems of high quality. I have

commented some minor issues I had when I reviewed them.

- AR: We appreciate your time and effort revising each one of them. Below we answer to the ones commented different than "good" (they all belong to the main repository)
- RC: 5. Photomonitoring instruments [ok, more information on individual pictures might be helpful]
- AR: We will name the files acording to their date and the english instrument name.
- RC: 6. Photomonitoring thumbnails [site pictures are good, same comment applies for pictures of instruments]
- AR: Same as above.
- RC: 8. Soil condition data [good, dates are not in order]
- AR: We can see your point in ordering all data according to their date, as the data set consists of time series. As the soil condition was investigated only once we found it more practical to order the data according to their plot name (same as soil humus). We formatted all dates the same way, so in case of machine based reading of the data it can be easily rearranged if the dates are preferred for ordering.
- RC: 10. Soil N mineralisation data [see below]

What does "Date_0" and "Date_Exp" mean? It's neither explained in the json file, nor in the article. Seems to be start and end dates?

What does "L" mean in the variable "depth"? Only S and M are explained.

- AR: The interpretation of "Date_0" and "Date_Exp" ist correct. We will add a respective sentence for clarification.
- RC: 11. Soil moisture data [see below]

This might be me, but I don't understand exactly what (0-5|A-F) means. Could you please explain?

Column names in epsilon_series are not explained.

AR: Indeed the suffix (0-5|A-F) in the column names are not intuitive to understand. They refer to the depths of the doubled profiles used for these measurements. We will clarify with an adapted description of the "Technical Details" section.

Same goes for the suffixes in the column names in the epsilon series, where - as you note correctly - the actual variable description is missing. We will add it.

- RC: 13. Soil moisture campaigns data [ok, columns in voltage_epsilon_theta_FDR.txt could be explained a bit more]
- AR: We will add a sentence and refer to the (new) description of the epsilon_series.