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Comment on bg-2021-162

Matt Smith

Community comment on "Mass concentration measurements of autumn bioaerosol using low-cost sensors in a mature temperate woodland free-air carbon dioxide enrichment (FACE) experiment: investigating the role of meteorology and carbon dioxide levels" by Aileen B. Baird et al., Biogeosciences Discuss., <https://doi.org/10.5194/bg-2021-162-CC2>, 2021

The manuscript is well written, and the topic is important because low-cost optical particle counters (OPCs) are likely to have a place in aerobiological monitoring. However, the authors make a number of assumptions about the data that should be addressed.

There are several inherent problems with the use of PM data as a proxy for bioaerosols, as there will be both organic and inorganic particles in the air, even in rural settings. Although the levels of dust in the air during autumn in the UK will not be as noticeable as other parts of the world, such as in Continental or Mediterranean climates, this should also be accounted for. It is even more problematical to say that the particles are 'fungal spores' as there are no fungal spore data available for comparison.