

Interactive comment on “Model-Measurement Consistency and Limits of Bioaerosol Abundance Over the Continental United States” by Maria A. Zawadowicz et al.

Anonymous Referee #2

Received and published: 30 April 2019

In this paper the authors present a nice, succinct study on mapping measured mass spectra to bio-aerosol concentrations which are then compared with a global model.

The paper is written very well and recommend publication when the following general questions are addressed.

In many instances of applying classification routines to historical data, the 'drift' or variable instrument performance can significantly affect performance. Can the authors comment on effective mitigation strategies for this or is this implicitly accounted for in fitting the SVM?

Why is the year 2000 simulated in GLOMAP? Is there much variability in vertical profiles
C1

in the model. If not, is this realistic? I find this to be an important feature that needs expanding on in the paper before publication given the title. I would request the model is re-run.

Im not sure how a variable baseline fluorescence in the WIBS might change results?

Data and code availability. The authors need to add a section on data and model availability following the copernicus guidelines before publication: https://www.atmospheric-chemistry-and-physics.net/about/data_policy.html

Interactive comment on *Atmos. Chem. Phys. Discuss.*, <https://doi.org/10.5194/acp-2019-101>,
2019.