

Comment on amt-2021-439

Anonymous Referee #2

Referee comment on "Measurement of enantiomer percentages for five monoterpenes from six conifer species by cartridge-tube-based passive sampling adsorption–thermal desorption (ps-ATD)" by Ying Wang et al., Atmos. Meas. Tech. Discuss., <https://doi.org/10.5194/amt-2021-439-RC2>, 2022

The manuscript "Measurement of enantiomer ratios for five monoterpenes from six conifer species by cartridge tube-based passive sampling adsorption/thermal desorption (ps-ATD)" by Wang et al., presents a passive sampling desorption technique used to analyze specific VOCs from conifer/plant emissions. Specifically, five monoterpenes and their +/- enantiomers are analyzed.

The manuscript is well presented and well organized. The main strength of this study is the presentation of a method that can be easy to use delivering sound results. The manuscript is overall worthy of publication after addressing a few minor comments.

What would increase the strength of this study is a comparison with existing methods for the detection of plant-emitted chiral biogenic VOCs. This topic is addressed in Table 1 but a discussion within the main text on how the existing methods compare to the proposed method will further highlight the importance of this study. It looks like other works in literature discuss the measurement of the same species measured here. How do they compare? What would make the suggested method better than what has been already used?

Specific comments:

- Line 45. I wouldn't just advertise the method precision as "excellent" unless an objective parameter is given so that the reader can see for himself/herself that the precision is indeed very good.
- Line 74. Please give some example of which solvent are commonly used.
- Line 105. Is the altitude agl or asl?

- Lines 106-108. I wonder if these last two sentences should be moved to the next section.
- Line 143. Please indicate which gas was used as carrier.
- Line 177. Should that "during" be eliminated?
- Line 189-190. Please give more details on why was this assumption considered excellent given that it was unverified.