Comment on amt-2021-254
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Referee comment on "Fill dynamics and sample mixing in the AirCore" by Pieter Tans, Atmos. Meas. Tech. Discuss., https://doi.org/10.5194/amt-2021-254-RC1, 2021

General comments: This article is very clear and I learned a lot about the history of AirCores as well as the dynamics of flows and mixing inside the tubes.

Specific comments:

- Have you tried to calculate the inflow and outflow without the dryer? Is it very different? What about the mixing?
  A first guess on my side: I think the flow would be less turbulent without dryer wo it can generates less mixing.

Technical suggestions:

- Figures 3 and 6: in order to make it a little bit easier to read, maybe add a vertical line of the "half-filtrate point"?
- Still to make it easier to read and compare, maybe add a table to compare the AirCores AC1 and GMD008 (dimensions: length, diameters) + plot figures 1-4 and 5-8 together?