

Interactive comment on “Water vapor $\delta^2\text{H}$ and $\delta^{18}\text{O}$ measurements using off-axis integrated cavity output spectroscopy” by P. Sturm and A. Knohl

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We thank reviewer #3 for the comments and corrections and would like to respond as follows:

We extended the description of our dripping device in Section 2.2. The choice of droplet size in combination with the drop rate and the gas flow rate determines the range of water vapor mixing ratios that can be produced.

Regarding the procedure to change from a water standard to another we refer to comment 8 of the response to reviewer #2.

There might be a small pressure gradient between the pressure controller and the

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cell, but this is expected to be irrelevant, because the pressure in the cell is actually measured and used in the analysis of the instrument software. Increasing the flow rate from 300mL/min to 800mL/min decreases the cell pressure by 0.03hPa, but this has no measurable effect on the isotope ratios.

Indeed, we are not using a common ink-jet printer head. Nevertheless, the microdrop generator that we use is based on simple inkjet technology. To avoid any misunderstanding we replaced in the abstract “ink jet technology” with “a droplet generator”.

p2060, l1 “access” has been replaced by “assess”.

p2060, l18: “. . .where the dispenser head is attached on top of it.” has been replaced by “The dispenser head is attached with a screw-cap on top of the glass flask.”

p2070, l17: “. . .and an according linearity correction was applied...” has been replaced by “. . .and the corresponding correction was applied...”

Beginning of Section 3.2: We use PTFE tubing which is not further specified by the manufacturer (Serto AG, Switzerland). We have replaced “Teflon” with “PTFE” throughout the paper.

p2063, bottom: This is including sample preparation and handling and we have changed the text to “The analytical precision of liquid water measurements that can be obtained by isotope ratio mass spectrometric techniques (including sample preparation and handling) is...”

Interactive comment on Atmos. Meas. Tech. Discuss., 2, 2055, 2009.

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