

Interactive comment on “An Automated Method for Preparing and Calibrating Electrochemical Concentration Cell (ECC) Ozonesondes” by Francis J. Schmidlin and Bruno A. Hoegger

Francis J. Schmidlin and Bruno A. Hoegger

fschmidlin@comcast.net

Received and published: 1 November 2019

Reply to Referee #2

Comment pg 4, lines 92-101: We agree. Text and references added.

Comment pg 4, line 97: Agree. Change made.

Comment pg 4, line 98: We agree that the stoichiometry is important, however it is not our intention to discuss the electro-chemistry of the ECC. Our purpose for showing data is to only demonstrate the potential capability of the digital bench. The list of uncertainties has been up-dated as suggested.

C1

Comment pg 6, lines 159-167: The ECC-sensor flow measurements have been made with both automatic and bubble flow meter methods . . . MeteoSwiss made such tests with their digital bench and bubble flow meter a few years ago and found agreement to 1.1 percent . . . Similar data exists at Wallops with which we plan a statistical comparison, hopefully in time to add the results to the paper. We agree with the referee and have added the reference to Tarasick et al (2016).

Comment pg 8, line 230: We do not believe the use of ‘hacking’ is slang since the present use of the word ‘hack’ is now commonplace global wide. None the less, we have changed the sentence.

Comment pg 9, line 271: We have added. . . pressure and temperature at sea level and use of such calibrations at upper altitudes would be an ill-defined representation.

Comment pg, 10, lines 276-278: Good comment. We have cited Johnson et al (2002).

Comment pg 11, lines 325-325: We have referred to Johnson et al (2002) as suggested.

Comment pg 13, lines 369-370: We agree, the statement is argumentative and we have removed it. Similar comment was made by referee #1.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2019-168, 2019.

C2