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## *Interactive comment on* "Atomic oxygen number densities in the MLT region measured by solid electrolyte sensors on WADIS-2" *by* Martin Eberhart et al.

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The manuscript "Atomic Oxygen Number Densities ..." by Eberhart et al. provides a very detailed description of a sensor adapted for use on a sounding rocket. I find the paper clearly structured and explaining the problems and limitations of the instruments. Apart from a few typos and linguistic suggestions annotated in the attached manuscript, I have the following comments: - Fig. 9, caption: Is the aerodynamic simulation calculated for up- or downleg? - The results from the different detectors are compared to the (standard) atmospheric model MSIS, but also to an on-board photometer (Figs. 11, 12 and 1, left panels). A brief description (one sentence only!) plus a reference should be

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added. The results of the photometer are only shown in the left panels (linear density scale), but are missing in the right panels (semi-logarithmic scale) - are the photometer (reference) results from up or downleg? - Fig. 13, right panel: please add scales to the blow-up insert - the Table A1 lists various uncertainties relevant for the processing of the instrument's data. Could one also add the uncertainty introduced by the Monte-Carlo calculation of the aerodynamics? Given the above comments are addressed, I recommend publication.

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