Thank you to both referees for their prompt responses. All corrections have been made and we are grateful for having them spotted by the referees.

Anonymous Referee #1 – Report 2

L 54: Replace “and” with coma before “Brewer”

Done

L 159: Units are missing in the means

Done

L 162: Replace “global diffuser” with “global irradiance”

Done

L 257: TUV uses a measured extraterrestrial spectrum to calculate the intensities throughout the atmosphere. I don't see how TUV is used to derive the extraterrestrial intensities. I would expect that you used a measured solar spectrum convoluted with slit function(s) of your instrument.

Corrected, we convolve the slit function with the solar spectrum from Chance and Kurucz 2010. We have partially incorporated this function into TUV for simplicity of operation

L 326: How multiple scattering is ignored? You cannot avoid it in the measured spectra and I am sure that in the standard mode of TUV runs multiple scattering is included. Furthermore multiple scattering is not negligible in the direct beam especially when aerosol optical depth is high.

As stated in the text TUV is ran with zero aerosol load and 300 D.U of ozone, this is to be directly compare with the Prede sky radiometer. In the low aerosol optical depth environment of lauder, negligible multiple scattering is a reasonable approximation to make for a proof of concept calculation. A comment that it is restricted to low AOD cases has been added to the text.

Anonymous Referee #2 – Report 1

54: BTS-2048-UV array spectrometer (typo and write precise, this one is a spectroradiometer) --> BTS2048-UV array spectroradiometer. Pandora is a spectrometer since not all are radiometric calibrated, okay. The Brewer is also a spectroradiometer, however the manufacturer calls it spectrophotometer, so okay.

Corrected the BTS-2048-UV case

124: 1-2 percent --> 1% to 2%

Done

195: The wavelength shift plots also highlight the non-linearity of the instrument, showing increasing shifts with increasing wavelength (not easy to read) --> The wavelength shift highlights the functional wavelength deviation of the instrument, showing increasing shifts with increasing wavelength.

Done, agreed, easier to read now

199: and by correcting for non-linearity by aligning the spectra to solar absorption lines (I would not call it non-linearity since a wavelength calibration is always non-linear to a certain level, it's an error or deviation) --> and by correcting for errors by aligning the spectra to solar absorption lines (also a . (dot) is missing after the sentence).

Done, changed non-linearity to wavelength deviation.

335: 400nm and 500nm (sometimes the unit with spaces, sometimes not, please be consistent) --> 400 nm and 500 nm

Corrected, and all cases of unit without spaces

338: The differences at 400 and 412 nm (add unit) --> The differences at 400 nm and 412 nm (same in lines 48, 68 and 84. These are very minor ones, but help some readers)

Corrected, and identified and fixed several other cases

346: 400-412nm --> 400 nm - 412 nm

As above

375: biases of 2.4 and 3.3 for UVB and UVA (missing percent sign?) --> biases of 2.4 % and 3.3 % for UVB and UVA

Correct, added %

376: 6 D.U (remove dot) --> 6 DU

Corrected to DU along with another case of D.U