

We would like to thank the reviewer for their kind comments and suggestions. Please find below our responses and details of corrections made to the manuscript.

1. 2.3 Instrumental techniques. There is no information for the components of the BBCEAS. Because the BBCEAS system for HONO have been originally built up by the authors, the authors should show the company name and products number for the parts of the BBCEAS, especially LED, mirror and detector.

We agree that more technical information should have been provided about the BBCEAS instrument built by Dr Ball and his research group. The following text has been added to section 2.3:

* LED light source: "LEDengin LZ1-10UV00, nominal peak wavelength = 365 nm".

* Mirrors: "a cavity formed by two highly reflective mirrors (Layertec GmbH, 25 mm diameter, 0.5 m radius of curvature, high reflectivity 370 to 395 nm)". And a few lines later: "their measured reflectivity peaked at 99.940 % at 387 nm."

* Spectrometer: "BBCEAS spectra were integrated... using an OceanOptics QEPro spectrometer (instrument line shape = 0.20 nm HWHM)."

2. 3.2.3 HONO emission ratios The definition of "delta"HONO seems to be ambiguous. Does "delta_HONO" mean the background corrected HONO ($\Delta\text{HONO} = \text{HONO}_{\text{tunnel}} - \text{HONO}_{\text{bg}}$), or the background and secondary formation corrected HONO ($\Delta\text{HONO} = \text{HONO}_{\text{tunnel}} - \text{HONO}_{\text{bg}} - \text{HONO}_{\text{secondary formation}}$)? The authors should make clear.

We thank the reviewer for bringing this to our attention. We can see how the use of ΔHONO could be ambiguous here. ΔHONO in this case represents the HONO corrected for background and secondary HONO formation.

We have added the following text at end of section 3.2.2 to clarify this point.

"In the following sections the final HONO dataset (ΔHONO) is corrected for both background HONO levels and the heterogeneous HONO contribution."