This article is about the customization and operation of the Carbon monOxide Measurement from Ames (COMA) instrument onboard NASA's high-altitude WB-57 research aircraft. The paper is well within the scope of AMT. In a good wording, the authors describe a novel technology created to further provide important stratospheric measurements of CO and N2O for altitudes above ~ 12 km that can not be reached by more traditional research aircraft used in field campaigns or commercial aircraft. This technology was deployed in operation during the ACCLIP experiment and presents a unique opportunity to bring to the science community original results on the pollution transport processes within the Asian summer monsoon. I recommend publication with minor revisions to address the questions below :

Line 68 : Please, confirm that COMA is based on the ABB ltd GLA251 Series instrument. I can not find any reference on their commercial website. Please, provide a reference for the original instrument specifications.

Figure 1 : Could you make it bigger? Please, specify the units for the length 17.81 and 12. Also, avoid shortened words if they are not described earlier e.g "cal gas", "Pallet Cross Sect.", "Structure to CL Dist.", etc … Does "regulators (2)", Sample Gas pumps (2)" means that there are 2 regulators (of what) and 2 pumps? In "Clearance below Pallet #4 (6 in.)", for what stands #4? Maybe, you should add more details in the description paragraph below the Figure 1 to better understand what we see.

Section 2.1.2 Flow system : I find the paragraph too minimalist and seams to me incomplete. Please, describe the need of the exhaust diaphragm pump and the internal pump, where goes the air after sampling? What is the required flow for the measurement cell? Do you monitor it?

Figure 4 : It is difficult to see where the arrows point on the photo. Can you make the photo bigger?

Figure 9 : You should plot the ratio or the relative difference of concentrations rather than the absolute concentration time-series. Do you get consistent results for the other flight missions? If not, what could explained it? Were they connected to separate intake inlet?

Conclusion : Please, add more results details. Summary the technical challenges that were solve to successfully operates the COMA instrument up to 18 km.

Line 247 : In the abstract, you wrote 5.9 ppb at (200 ppb) ...