Interactive comment on "Investigating the performance of a greenhouse gas observatory in Hefei, China" *by* Wei Wang et al.

Anonymous Referee #2

The article under consideration introduces a new high-resolution FTIR spectrometer site in Hefei, China. The quality of the presentation is good, and the results presented by the authors indicate that the new station generates useful data. I agree to RC1 that a future regular submission of data collected at the new site to the TCCON data archive would be highly desirable. Concerning the possibility of nonlinearity in the former measurements taken with the InSb detector, it would be advisable to check (in resolution-reduced spectra) for indications of a bias in the zero intensity baseline in the opaque regions of the spectrum between the atmospheric windows. Further, it would be preferrable to replace Figure 3 by an updated version based on results generated with LINEFIT 14.5 (and to follow the recommendations for TCCON cell analysis as described in the examples included in the current version of the distribution). Finally, I would encourage the authors to share and discuss their results for CH4 in addition

to CO_2 and CO, as it is a standard data product of the TCCON analysis and GOSAT provides methane observations which can be used for comparison purpose.