Page 33, Fig. 17: The authors used the HITRAN2016 spectroscopic database for their line-by-line absorption calculations. However, the retrieval of Reichert and Sussmann (2016) that is included in the figure is based on aer_v_3.2, that is provided alongside the LBLRTM model. This line list consists mainly of HITRAN2008. Did the authors consider, that a quantitative description of the water vapor continuum is related to the set of line parameter values used? This should at least be dicussed.

We agree with the Reviewer's comment. Given the standard definition of the continuum as including the contribution from spectral lines outside 25 cm^{-1} from line centre (and their "pedestal" within 25 cm^{-1}) , any attribution of the continuum will depend to some extent on the linelist used. We will therefore include some discussion of this issue within the paper, which is of potential importance for our comparisons with laboratory derivations of the continuum, as well as with Reichert and Sussmann (2016).

The impact of the change between HITRAN2008 and HITRAN2016 on our derived continuum absorption is small in the 2.1 and 1.6 µm windows (see attached Figures, which show the optical depth for the main observational day (18 Sept 2008) in our paper), with a more significant effect in the centre of the 4 µm window. Typically, in the centre of the windows the derived continuum optical depth is of order 0.01. In the centre of the 1.6 and 2.1 µm windows, the choice of HITRAN database affects this derived continuum by less than 20%. In the 4 µm window, the impact reaches 80% at some wavenumbers in the centre of the window, but the effect is around 40% at most wavenumbers. We note however that the advances in laboratory and theoretical studies between the releases of HITRAN2008 and HITRAN2016 indicate that the latter is more likely to be accurate, which gives a slightly weakened continuum in the centre of the 4 µm window compared to HITRAN2008.

HITRAN 2016:
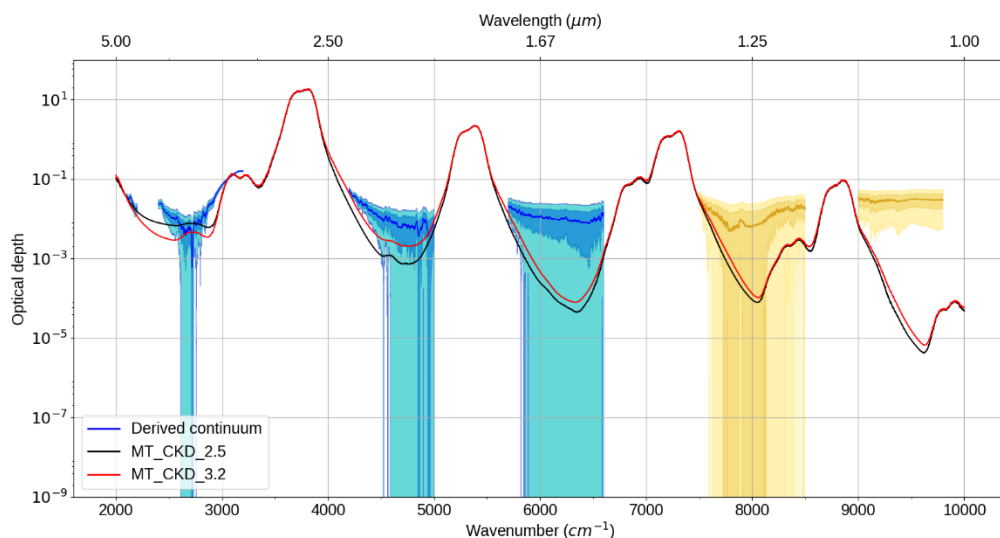
HITRAN 2008:
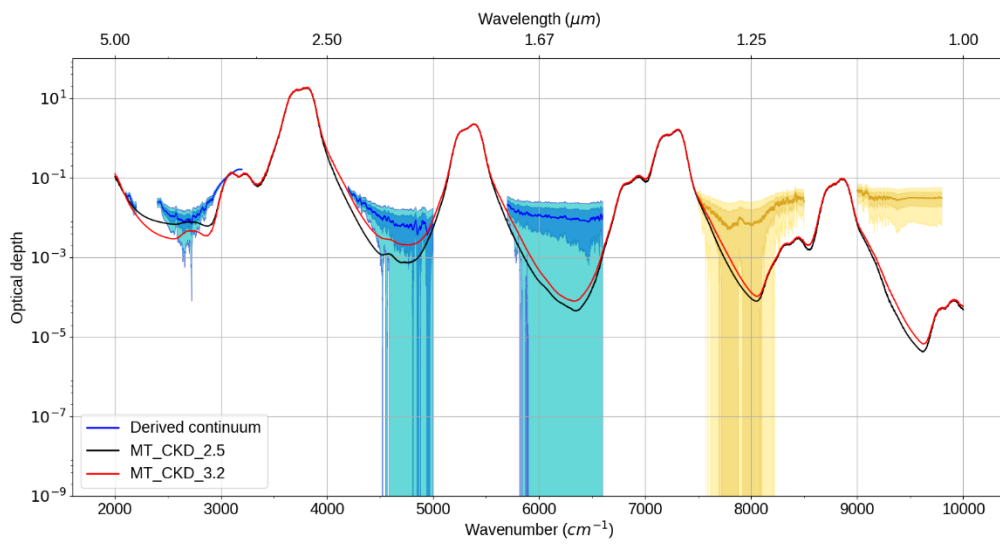
Percentage change going from HITRAN2016 – HITRAN2008