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We thank the referee for the review and the comments. They will be considered in the revised version of the paper. In the following, the original reviewer comments are given in *italics*, our answer in normal font.

This paper presents a new retrieval (FOCAL 3.0) for XCO₂, XCH₄, XH₂O, XCO, HDO, and XN₂O from GOSAT and GOSAT-2. It is exciting to see retrievals from GOSAT-2. The retrievals are validated following standard protocols. I was very interested by the scatter and temporal bias metrics relative to TCCON – they are not usually shown but I found them very instructive. I recommend publication in AMT but suggest that the authors consider the following comments:

1. *The Introduction advertises that comparisons with previous satellite products will be shown but I could not find these comparisons in the text.*

The TCCON comparisons include also comparisons with other GOSAT satellite products using the same reference stations. This allows a direct comparison of results, see Tab. 6 and corresponding figures. We already address this in the related text, but we will clarify this in the revised version.

2. *Equation (1) suggests that methane must be retrieved by the full-physics algorithm in order to derive a proxy estimate but that would erase much of the benefit of the proxy method in enabling successful retrievals when the full-physics method can't.*

Indeed, the XCH₄ proxy product is derived by using as input the results from the XCH₄ full-physics product. However, we use different (more relaxed) post-processing filters for the proxy product. This results in more valid data than all other GOSAT proxy products (see Fig. 1) with good quality (see TCCON comparisons), and it does not require e.g. a dedicated non-scattering retrieval. Retrieving all products with a single retrieval run is actually a main benefit of our method. We will emphasise the latter a bit more in the revised version.

3. *Gradients in Figures 2 and 3 are so washed out as to make the Figures useless.* We will adapt the colour scale of the plots to emphasise the gradients where required. Note that this is somewhat limited as we deliberately use a conceptionally uniform colour table.
4. *Line 390: 'the data sets...are available from the authors'. That's OK at the submission stage but won't do at the publication stage. The data sets should be publicly posted.* We will clarify this with AMT if required. For other recent publications we had no problem with this.