Review of revision of How consistent are top-down hydrocarbon emissions based on formaldehyde observations from GOME-2 and OMI? by Stavrakou et al.

This paper has improved in that it has clarified several areas of potential confusion about the model setup and inversion methodology. The edits to the introduction also present a clearer picture of the goals of this study. I still think the discussion in Sections 7 and 8 is a bit laborious to read, but it sounds like the authors prefer a more in-depth discussion here. I have a few suggested edits below, mostly technical in nature. I recommend publication after these are addressed.

Page 2, lines 81-87: very awkward wording. I think this sentence reads better the way it was written in the previous version.

Page 5, lines 346-348: I think it's fine to not include all sensitivity tests in Fig. 2, but since you listed the vertical transport tests in Table 1, perhaps here you could briefly discuss their impact (if any) on the diurnal profiles of HCHO.

Page 5, line 363: The reference to Table 1 here should now refer to the supplement instead.

Page 8, beginning of Section 5: change "cemical" to "chemical"

Page 8, Section 5: "where $\mathbf{f} = (f_j)$ is a vector of variables to be determined so as to minimize the scalar function J". This statement is rather vague. Based on the equation directly above this statement, it looks like \mathbf{f} is a vector of scaling factors (in log-space) that are applied to the a priori emissions to get the final optimized solution. Is this correct? Please clarify.

Page 9, line 655: I think the global relative isoprene emission decreases mentioned here are still incorrect. Based on the numbers in Table 3, I get decreases of ~8.5% for OMI-HE and ~16% for OMI-DE, not 15% and 30%.

Page 10, line 771: change "suface" to "surface"

Page 13, line 1007: I think the OMI number should be 75.2 Tg based on the numbers in Table 3

Page 14, line 1049: do you mean to reference Fig. 9 here instead of Fig. 12?