We thank Anonymous Referee #1 for a positive and thorough review. In the following, we will respond to the Reviewers comments step by step.

Minor issues: Page 10, line 24: I think "an excellent agreement" is a bit too strong taking into account that there are differences up to 4 ppm (same page, line 20). I recommend to change this to "good agreement" or so.

→ Changed to "good". We also removed the qualitative comparison statement between MACC and CT2013B as it wasn't really too substantiated

Similar on page 11, line 21, with the statement "compare extremely well" already in the first sentence before any comparison results are shown and discussed. I also do not think that agreement within 1 ppm and outliers up to 3 ppm is best characterized by "extremely well" (NOTE: in the text on page 11 the unit ppb is given two times (lines 24 and 25) but I guess this should be ppm!).

→ Removed "extremely" and changed ppb to ppm (old methane habit).

Page 10, line 25: "In some cases, MACC seems to compare somewhat better, . . .". A MACC colleague is co-author but no CarbonTracker colleague. I wonder if NOAA would agree with this statement. I also wonder if NOAA needs to be acknowledged for their data.

→ We removed this statement altogether and added an acknowledgement to that effect, esp. as Andy Jacobson was involved in our discussions but not listed as co-author.

Page 11, line 6: "SCIAMACHY data over the oceans is not yet matured as is has no dedicated Glint mode." Sounds a bit strange (even if "is" typo corrected). I recommend to replace this with "SCIAMACHY data have not been used as it has no dedicated glint mode and the SCIAMACHY products (e.g., Reuter et al., 2011) are limited to retrievals over land". Reuter et al., 2011: "Retrieval of atmospheric CO2 with enhanced accuracy and precision from SCIAMACHY: Validation with FTS measurements and comparison with model results", J. Geophys. Res.

→ done

Page 16, line 8: ". . . indicates that GOSAT compares slightly better overall." Compared to what?

→ removed that sentence and added "comparable to those with models" to the prvious sentence.

Page 21, Tab. 1: Why is the GOSAT sigma only 0.45 ppm (as far as I know the GOSAT XCO2 single measurement precision is about 2 ppm; or have data been averaged?)? Please check and add additional explanation if necessary.

→ Yes, multiple GOSAT soundings are used per HIPPO profile and averaged (as stated before, "For the GOSAT comparison, we require more than 5 co-located GOSAT measurement per HIPPO profile.". We changed that sentence to
"For the GOSAT comparison, we require at least 5 co-located GOSAT measurement per HIPPO profile, all of which are subsequently averaged before comparison against HIPPO". It was also stated before that "For each match, the standard error in the GOSAT XCO2 average is computed using the standard deviation of all corresponding GOSAT colocations divided by the square root of the number of colocations."

Fig. 3: Bottom, middle: Profiles only partially visible as overplotted by legend. Please improve.

→ done

Fig. 5, left: Possibly data points only partially visible as overplotted by legend. Please improve.
→ done

Fig. 6, left: Data points only partially visible as overplotted by legend.
→ done

Please improve. Fig. 7, right: Symbols for models very difficult to see in printout.
→ We would ask the editorial office to check into that issue.

No reference to Figs. 5 and 6 in text (should be somewhere in Sect. 4).
→ Added "In terms of XCO$_2$, both atmospheric models used here compare well against HIPPO, as can be seen in Figures 5 and 6. (at beginning of Sec. 4). Thanks for noticing this!

No reference to Fig. 11 in text (should be somewhere in Sect. 5.2).
→ Added, thanls

Typos: Page 10, line 6: "are usually 162253" ?
→ Typical LaTeX typing error (accidentally copying something without noticing it), apologies.
Caption Tab. 1: "of different compared to" -> "of the difference compared to"
→ Done, thanks