Interactive comment on “Global CO$_2$ fluxes estimated from GOSAT retrievals of total column CO$_2$” by S. Basu et al.

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Some Questions

I was very interested in this paper and I have the following specific questions.

In ch. 3.1.1 authors justify their choice for $x_{fire}^0$ to be fixed in the inversion algorithm by the fact that the uncertainty in $x_{fire}^0$ is much smaller than the uncertainty in $x_{bio}^0$. However, authors also choose to keep fixed the prior estimate of fossil fuel emissions $x_{FF}^0$ in the inversion procedure. Is there some kind of similar justification for such a choice: are the errors in $x_{FF}^0$ small as compared to that of $x_{bio}^0$?

Also how do authors think: whether their method could be used for verifying anthropogenic greenhouse emissions (such as those presented in EDGAR database)?

Thank you in advance,
Ivan Kovalets