

Dear Editor,

On behalf of all co-authors, I thank the Editor and the Reviewers for their comments and suggestions which substantially improved our manuscript. In this final version we have followed the suggestion for a minor correction (now at line 195) and added the following in the Introduction at line 104: "The Beijing-RADI Pandora is included in the data suite which is routinely used for TROPOMI S5P validation." We also made some minor editorial changes in lines 266-267.

Sincerely yours,

Ouyang Liu