

Cross-evaluation of GEMS tropospheric ozone retrieval performance using OMI data and the use of ozonesonde dataset over East Asia for validation

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Dear authors,

After the two reviews and after reading the your answers and revised paper, I am glad to accept the revised paper for publication for AMT. However, before the final edition I would like you to consider some comments from me.

In the abstract: Please, to be consistent with the new title, change « cross-verification » by « cross evaluation ».

In sect. 2.3: please add the information of spectral resolution of GEMS and OMI to show the reader the differences between the two instruments.

Line 486: The end of the sentence is unclear to me. I would say the opposite that the ozonesonde has to verify the retrievals? Please consider also to cut it into two sentences.

Line 567-Line 745: space-born-> space borne and « balloon-born » -> balloon-borne ? Check through the paper if necessary.

Line 675 : This is not clear to me what the vertical resolution represents here (10-14 km in the troposphere) and (7-11 km) in the stratosphere. Is it representing the width of the broad peak of the averaging kernel? (at different levels or for the columns). If yes, I would suggest you to add a typical figure of averaging kernel of GEMS ozone and why not indicating the degree of freedom?

Line 592: There is a space missing between SST and 1.0 and please define SST and KI

Table 1: upper script d is missing in the caption.

All the best,

Jean-Luc Attié