

Review of manuscript "Volcanic SO₂ Layer Height by TROPOMI/S5P; validation against IASI/MetOp and CALIOP/CALIPSO observations." by Koukouli et al.

We thank both reviewers for her/his positive comments on our work and all the suggestions which improve our work. Please find our replies insert in red.

- L.466: missing word: 'by' Iness et al. 2022

Word added.

- L.496-497: double use of 'km'

Double "km" deleted.

- Figures 1 and S1: As explained in the author response (page 3, comment L.261), values below 20 D.U. and 5 km are depicted by the color of the lowest level. To avoid confusion, the color bar in these figures should therefore have the lowest color level depicted as a downward facing triangle.

Up- and downward facing triangles are added to Figures 1 and S1, as well as in all such types of Figures in the supplement.

Please add the country to the last affiliation.

We have added "Italy" to the last affiliation