

Interactive comment on “1.5 years of TROPOMI CO measurements: Comparisons to MOPITT and ATom” by Sara Martínez-Alonso et al.

Anonymous Referee #1

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General Comments:

The authors provided a validation for the TROPOMI CO observations by using MOPITT and Atom CO measurements. I found the paper is well written. The authors demonstrated good agreement between TROPOMI and MOPITT CO observations, which is helpful for people who are interested in the sources and variations of CO from global to regional scales. I recommend the paper for publication after consideration of the minor points below.

Specific Comments:

1. Lines 154-160: It is difficult to follow this paragraph. I checked Section 2 again but didn't find the details to support the direct comparison without transformation. It would

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be better to provide more details here.

2. Section 4.1. The comparison between TROPOMI and MOPITT is very interesting. I have some suggestions, which may be considered in this work or the following study: 1) The differences between two datasets show obvious seasonal variabilities. What are the possible explanations? 2) We know that MOPITT show some latitude-dependence differences relative to surface and aircraft measurements. Do the differences between TROPOMI and MOPITT have similar latitudinal dependence?

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