

Response to Topical Editor Decision: Publish subject to technical corrections (15 Oct 2014)
by Dr Guy Munhoven

Dear Dr. Munhoven,

Thank you so much for comments and suggestion of the manuscript. They are very helpful for the improvement of this work. We have done the corrections accordingly as below.

Again we greatly appreciate your time and help with this manuscript.

All regards

Sincerely,

Xia Zhang

Thank you for uploading the revised manuscript. I have now checked the corrections made, and they appear to respond to all the referees' and my own comments. I am pleased to inform you that I accept your paper for publication in GMD subject to a few technical corrections detailed below. Thank you once again for considering Geoscientific Model Development for the publication of your research work.

Best regards,

Guy Munhoven

Technical details:

(line numbers refer to the manuscript w/o tracked changes)

p. 6, lines 16-21: I suggest to rewrite as follows (please check and amend if necessary):

"FFDAS version 2.0 originally estimates fossil fuel CO₂ emissions at 0.1° annual resolution over the globe. From this product, we have derived a fossil fuel CO₂ emission distribution suitable for use with our model by dividing the annual amounts in each grid cell by 2920 to obtain emissions that are evenly distributed in time, at the temporal resolution of our model (i.e., three hours)."

We checked and rewrote the sentences as suggested.

p. 6, end of the page: formatting problem. The title of section 2.2 is within the previous text paragraph.

We corrected the mistake.

p. 12, lines 9--15 should be rewritten. There is confusion between grid and grid-cells and the text is difficult to read. I suggest the following (please check and amend if necessary):

"TAP is a coastal station (36°43'N, 126°07'E) located in the Tae-ahn Peninsula (Republic of Korea). This site is in close proximity to the cities of Seosan and Taean. TAP is assigned to an ocean grid cell on the PCTM grid. The emissions on this grid-cell are aggregated to adjacent land grid-cells after regridding.

The site is thus located in the negative portion of the emission dipole (emission difference: -24.1 TgC/gridcell/yr)..."

We did the check and rewrote the sentences following the above suggestion.

p. 26, in the legend: "Blue stars" should read "White stars" now/

We corrected it.