Biogeosciences Discuss.,
doi:10.5194/bg-2016-171-AC2, 2016

Biogeosciences Discussions
Open Access
EGU

Interactive comment on "Re-evaluating the 1940s CO_2 plateau" *by* Ana Bastos et al.

Ana Bastos et al.

ana.bastos@lsce.ipsl.fr

Received and published: 5 August 2016

We would like to thank the referee for the careful review and detailed comments, that help improving the quality of the manuscript.

We acknowledge that it is possible that fossil fuel emissions estimates have higher uncertainty during the WW2 period. An alternative estimate of E_{FF} for the 20th century may be found in Mohr et al. (2015). Their estimates for the 1940-1950 differ by about 0.1PgC/yr from the CDIAC ones, i.e. 7.5%, slightly more than the 5% uncertainty range defined by the CDIAC. Quilcaille et al. (2016, conference proceedings) calculate that uncertainty in datasets and the different methodologies to estimate E_{FF} from statistics of fossil fuel extracted may increase total E_{FF} uncertainty up to 11%. Even considering an uncertainty range as high as the one suggested by Quilcaille et al. (2016), the difference would be 0.15PgC/yr, which would not suffice to explain the CO_2 stabilisation in the 1940s. The authors, nevertheless, agree that it is worth including a note about

Printer-friendly version

Discussion paper

the subject in the revised version of the manuscript.

The referee's proposed corrections will also be included in the revision.

References

Mohr, S. H., et al. Projection of world fossil fuels by country. Fuel 141 (2015): 120-135.

Quilcaille, Yann, et al. Uncertainty in projected climate change caused by methodological discrepancy in estimating CO2 emissions from fossil fuel combustion. EGU General Assembly Conference Abstracts. Vol. 18. 2016.

Interactive comment on Biogeosciences Discuss., doi:10.5194/bg-2016-171, 2016.

Printer-friendly version

Discussion paper