

Suggestions for revision or reasons for rejection (will be published if the paper is accepted for final publication)

I believe the paper can be accepted for publication, I only have two very minor comments:

1. As far as I've understood from the response given by the authors to my general comment 3, prior emissions are kept constant for the period 2015-2020. This is a reasonable choice made by the authors, but I believe it would be good to include this information in the manuscript.

**Response:** We have added 5 lines explaining why we kept constant emissions for the period 2015-2019 inversions. Please see manuscript with Track Changes in Lines 258-263.

2. In line 533 "...before and significantly smaller..." there seems to be an "are" missing between "and" and "significantly".

**Response:** We have added the missing "are" at section 3.3 as suggested by the reviewer.