Dear Editor,

The final check before uploading the tracked changes PDF led to some additional changes (post submission of author response). These are as followed:

Added two co-authors (A Weinheimer, GS Diskin)

Pg9:

This technique has been used in previous TOMCAT model studies (<u>Monks2012</u>, <u>Patra2011</u>) -> CO and CH4 tracers with loss determined by offline OH have been used and tested within the previous TOMCAT model studies (<u>Monks2012</u>, <u>Patra2011</u>)

Pg16:

Lower -> larger

Pg21:

It did overly mix -> it overly mixes

Pg 33:

, however, they -> . However, it

Pg 33:

model dependent on differences in chemistry schemes - > dependent on the model chemistry scheme

pg 14:

removed:

', however, it occurs at the same time when CO is also higher than simulated by the other models and observations suggesting it is related to the model chemistry, not transport.'