

## **Referee comment on acp-2009-96**

*Application of  $\phi$ -IASI to IASI: retrieval products evaluation and radiative transfer consistency*, by G. Masiello et al.

When I reviewed the first version of the paper, I found it very interesting and deserving publication. I suggested a few minor changes but I was surprised and troubled by the poor performance of the Niro et al. CO<sub>2</sub> line-mixing tools and the subsequent need for an empirical correction to the associated CO<sub>2</sub> continuum. This seemed contradictory with results by other groups and I mentioned it in my report, suggesting to the authors to check this point with the authors of the current version of the LBLRTM code which is used in the present work. I see from the recently posted comment by G. Masiello et al. that I was right and that after fixing a software bug the results become consistent with what can be expected. I will now be looking forward to reading the revised version of the paper.