

**Short comments: Dr. M. Van Damme**

We are grateful to Dr. M. Van Damme for his time and energy in providing helpful comments and guidance that have improved the manuscript. Detailed responses to the comments are given below (in blue).

This manuscript presents time-series of NH<sub>3</sub> total columns from the IASI satellite instrument. As the authors point out, the retrieved columns for this trace gas are strongly dependent on the meteorological information that is used as input data in the retrieval algorithm (in particular the surface temperature and the temperature profile in the lowest layers of the atmosphere). At present, the publically available IASI-NH<sub>3</sub> product uses the meteorological parameters as provided in EUMETSAT IASI Level 2 data.

The IASI Level 2 data is processed in real time, and there have been several updates to the algorithm since the launch of IASI. We can confirm that in particular, the change from version 5 to version 6 of the EUMETSAT Level 2 data on 30 September 2014 (and not November as stated in the manuscript), causes on average a substantial increase of the retrieved atmospheric NH<sub>3</sub> columns. Hence the conclusions of the authors regarding NH<sub>3</sub> trends should be taken with great care.

We thank M. Van Damme for pointing out the incorrect description in the manuscript, and have corrected it by changing "November 2014" to "September 2014".