

Dear Dr. Van Roozendael,

We corrected the technical issues and changed the text in the result section as requested by the reviewer. Please see paragraph below with red text added to the updated version of the manuscript.

Kind regards,

Hilke Oetjen.

As seen in Fig. 8, ozone over Eastern Asia rose relatively steadily from 2004–2010, but dropped suddenly in 2011. This is also clearly apparent when looking only at the annual maxima in Fig. 7. While ozone has been somewhat increasing once again since 2011, a clear upward trend is not observed and ozone has also not yet reached pre-2011 values. **This drop is significant within the confidence limits of 1.9 ppb for IASI and 2.6 ppb for TES for the monthly mean ozone for Eastern Asia, despite a somewhat large standard deviation of 15 ppb for both instruments.** A similar sharp drop in 2011 can also be observed in ozone sonde data over Hilo, Hawaii (see Fig. 9), a location strongly influenced by outflow of free tropospheric air from Asia (Lin et al., 2014). The ozone mixing ratios measured by the sondes between 681 and 316 hPa, the same pressure range as for TES and IASI, have been averaged and then deseasonalised. We used the full dataset since 1991 to remove the seasonality, but we only show the same years as for the combined TES and IASI time series starting in 2004. **For this time period, the mean standard deviation for the monthly mean ozone from the sondes is 9 ppb and the confidence limits (see eq. 1) are the same since sondes are launched about once per week.**