Interactive comment on “Global and zonal tropospheric ozone variations from 2003–2011 as seen by SCIAMACHY” by F. Ebojie et al.

Anonymous Referee #1

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This descriptive paper investigates tropospheric ozone trends from 2003 to 2011. It uses a data set generated by limb-nadir matching observations. The key figures 7 and 8 highlight regions of significant trends, which the paper tries to explain (tries to motivate why the trend might occur). Generally the paper is well written and illustrated. Sometimes it is hard to understand why figures have been chosen. Figures 3 to 6 are fairly underused (or not really necessary), but I have no objections keeping them in. However, I would like to see a more critical assessment of significance in the conclusions section. Currently the conclusions read like a theory of everything, but it would be nice to have a better idea why some areas of compact correlations are used and others ignored (e.g. west of -90 longitude in figures 7 and 8), and why the authors believe that trends over such a short period might not be decadal variability. I am happy for
the paper to be published in ACP, with a small (self-)critical addition to the conclusions section.

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 24085, 2015.