

Second Review of “Multi-instrumental analysis of ozone vertical profile and total column in South America: comparison between subtropical and equatorial latitudes”

Gabriela Dornelles Bittencourt et al.

This is my second review of this manuscript, and I thank the authors for carefully responding to my first set of comments and for substantially improving the writing in the paper. I support the publication of this paper once my following additional minor and technical comments are addressed.

Minor/Technical Comments:

Line 78: The latitude of SM listed here is different from the abstract. Please check.

Line 81: Suggest deleting the sentence that begins with “It has been operating...”. This is already mentioned previously on this page.

Line 84: Confusion on dates. Ground-based monitoring at NT began in 1979, not 1994, correct?

Line 126: Change “southern tropics” to “tropics to sub-tropics”

Line 148: Change to “SABER *measurements* significantly *overestimate* ozone *compared to* the LiDAR or RS”

Line 184: OMI is written as “IMO”

Line 331: Change to “Figure 8 shows the daily (SM) and monthly (NT) TCO values from ground-based and satellite instruments.” I am still a bit confused why only monthly values are shown for Natal.

Line 353: OMI again written as “IMO”

Lines 363 and 364: Please make clear that these are percent values (if I am correct)

Table 1: This table seems to have disappeared in my copy of the paper. Please check.

Lines 377-380: I strongly disagree that the annual cycle in TCO from Natal is dominated by the stratosphere. The annual cycle of tropospheric ozone alone from the April-May minimum to the biomass burning enhanced September-October-November season is 20 DU (25 DU minimum to 45 DU maximum). See figure below:

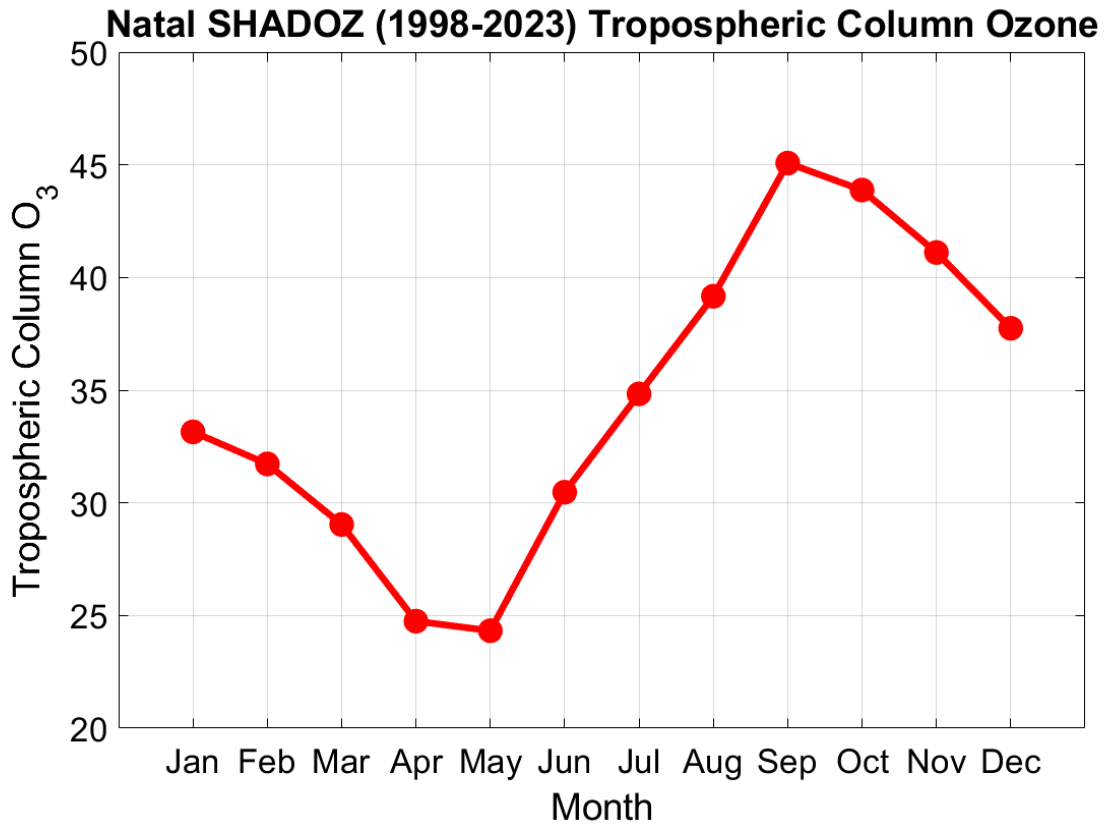


Figure 5 Caption: Typo – “OMI vertical profiles *are* given in ppmv”