

# ***Interactive comment on* “Total column ozone in New Zealand and in the UK in the 1950s” by Stefan Brönnimann and Sylvia Nichol**

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In this study, Brönnimann and Nichol re-evaluate and analyse Dobson total ozone observations at Wellington, New Zealand, and Downham Market, UK, for the pre IPY period. Great care is taken in a re-calibration of the data, as far as possible from the available sources. Historical ozone data are of great value, even if the data quality may be problematic for trend studies, as the day-to-day variability offers independent observations to test upper air re-analyses. The authors do this by correlating the total ozone data sets with results from different re-analysis projects.

The paper is well written and of interest to the readers of Atmos. Chem. Phys. The methods seem to be thorough and sound. Consequently I recommend publication in

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Atmos. Chem. Phys. after consideration of the following, mostly minor, comments:

I.61: I suggest to spell out as “Dobson instrument #17”

I.151: For completeness it would be good to specify also the meaning of  $p$  and  $p_0$  in eq.1.

I.163: “Aerosol scattering can then be neglected” Suggestion: “. . .in which case eq.3 simplifies to: . . .” and then give the corresponding equation.

I.247: would be interesting how much this value differs from the standard value

I.287: “Z ZC” -> “C ZC”

I.328: “the all values” -> “all values”

I.381 and I.487-9: why not using SBUV MOD7 for the 1990s as well? Even if the differences are “marginal”.

I.387: add distance Invercargill-Lauder for comparison here already (180km)

I.427: include “(“

I.582: why not include names of students here?

I.744: something missing here: “for different“ . . . ?

Finally I would like to note that I support the idea of including the data, together with the other historic data sets, as a supplement to this paper.

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