Earth Syst. Sci. Data Discuss., referee comment RC2
https://doi.org/10.5194/essd-2021-39-RC2, 2021


# Comment on essd-2021-39

Anonymous Referee #2

Referee comment on "Total column ozone measurements by the Dobson spectrophotometer at Belsk (Poland) for the period 1963–2019: homogenization and adjustment to the Brewer spectrophotometer" by Janusz W. Krzyścin et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2021-39-RC2, 2021

This paper aims to provide a documentary of the long-term total ozone measurements at Belsk, Poland. This paper is well written and provides a great deal of details about record homogenization and calibration. I have studied stratospheric and tropospheric ozone variabilities for a long time, this manuscript fills me with some measurement history. In terms of data documentation, the material and presentation of the paper is nearly impeccable.

Whereas the authors point out the unexpected CFC emission and 2020 Antarctic ozone hole in the introduction, these issues are not discussed anywhere after the introduction. Since in the research community, the current mainstream seeks to address trends and variability attribution at detailed vertical structure/pressure surfaces, the total ozone measurements are rather handcuffed to answer the questions from a broader perspective. But the CFC emission and 2020 Antarctic ozone hole should be at least discussed further, for example, Belsk is a high latitude location, are the measurements affected by the Antarctic ozone hole in spring of 2020? As far as I recall, I have seen that the impact can be observed by Canadian ozonesonde records.