File Revision Date:
September 1, 2022

Data Set Description:

PI:	Voltaire A. Velazco
Instrument:	Dobson
Site(s):	Hohenpeissenberg, German National Meteorological Service (DWD)
Measurement Quantities:	Total column ozone

Contact Information:

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Data License:

Reference Articles:
U. Koehler, S. Nevas, G. McConville, R. Evans, M. Smid, M. Stanek, A. Redondas, and F. Schoenenborn: Optical Characterization of Three Reference Dobsons in the ATMOZ Project “Verification of G.M.B.. Dobson’s Original Specifications”. QOS2016 joined ACP & AMT Special Issue, AMT, 11, 1989 - 1999, https://doi.org/10.5194/amt-11-1989-2018, 2018.

"Operations handbook - ozone observations with a Dobson spectrophotometer", W.D. Komhyr, Global Ozone Research and Monitoring Project. Report 6, World Meteorological Organization, Geneva, 1980 and Revised Version, R.D. Evans, WMO GAW No. 183, 2008

"Homogenization and re-evaluation of the long-term ozone series at the Meteorological Observatory Hohenpeissenberg". Ulf Koehler, Final report on the DWD-Project K/U 31, Abteilung Forschung Arbeitsergebnisse Nr. 31, 1995.

Instrument Description:
Dobson No. 104.

Algorithm Description:

Uses algorithm set out in "Operations handbook - ozone observations with a Dobson spectrophotometer", W.D. Komhyr, Global Ozone Research and Monitoring Project. Report 6, World Meteorological Organisation, Geneva, 1980.
Uses Bass/Paur (1992) ozone absorption coefficients.

Expected Precision/Accuracy of Instrument:
"Review of the Dobson spectrophotometer and its accuracy", Reid E. Basher, Global Ozone Research and Monitoring Project. Report 13, World Meteorological
Organisation, Geneva,1982.

Instrument History:

1967	Installed in 1967
1968	Start of regular observations
1978	International calibration at Arosa
1986	International calibration at Arosa
1990	International calibration at Arosa
1995	International calibration at Arosa
1996	International calibration at MOHp after optical overhaul
2001	International calibration at MOHp
2002	International calibration at MOHp
2006	International calibration at MOHp
2008	International calibration at MOHp after electronic and optical upgrade
2013	International calibration at MOHp
2018	International calibration at MOHp
2019	International calibration at MOHp
2019	Start of long-term intercomparison with BTS-spectrometer (Gigahertz Optics)
2021	Continuous side-by-side operations with BTS-spectrometer, new PI