File Revision Date:
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Data Set Description:

PI:	Marc Allaart
Instrument:	Brewer MKIII
Site(s):	De Bilt, Royal Netherlands Meteorological Institiute (KNMI)
Measurement Quantities:	Total column ozone

Contact Information:

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Reference Articles:
Brewer, A replacement for the Dobson spectrophotometer, Pure and Applied Geophys., 106-108, 919-927, 1973

Instrument Description:
Brewer MKIII #100 1994-2006
Brewer MKIII #189 2007-now

Algorithm Description:
Original Brewer algorithm as described in manual for Direct Sun observations
Zenith Sky observations are calibrated using a "fit" to Direct Sun obervations
Zenith Sky observations are reported only on days with no Direct Sun observations

Expected Precision/Accuracy of Instrument:
6 dobson units for Direct Sun observations
9 dobson units for Zenith Sky observations

Instrument History:

1994-01	#100 Start observations
1997-08	#100 Calibration IOS
1999-07	#100 Calibration IOS
2001-05	#100 Calibration IOS
2003-05	#100 Calibration IOS
2005-05	#100 Calibration IOS
2006-10	#189 Start observations
2007-09	#100 Observation stopped

2009-06 #189 Calibration K+Z
2012-08 #189 Calibration K+Z
2014-08 #189 Calibration K+Z
2014-12 #158 replaced #189
2015-05 #189 Resumed operations
2017-05 #189 Calibration K+Z
2020-05 #189 Calibration

Note
In the NDACC database, only daily average O3 observations are available.
However,
Brewer #189 performs O3 and SO2 observations in three modes:
DS: Direct Sun
ZS: Zenith Sky
UO: Global irradiance
Individual observations are available in the WOUDC database.
UV aerosol data are not (yet) available

Brewer #189 also performs about hourly UV-scans:
UX: Extended UV wavelength scan
SS: Direct sun UV scan
These data are available on request.

Marc Allaart
2017-11