

# OMI BrO Daily Averages for ARCTAS HDF-EOS5 File Specifications README

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This document lists all swath dimensions, geolocation and data fields, as well as swath and field attributes present in the SAO OMI BrO data product files provided to the ARCTAS data archive. **Release 1 (R1)** of the data were generated with an improved off-line version of the OMBRO PGE (Algorithm Version v2.0; Collection/ Product Version 003) and averaged daily on a uniform longitude×latitude grid of 0.25°×0.25°.

**File name format:** OMI-BrO\_SATELLITE\_YYYYMMDD\_R1\_TotalColumnAverage.hdf

**HDF-EOS5 Swath Name:** “OMI BrO Total Column Daily Average”

**IMPORTANT NOTE:** The data files are written in HDF-EOS5 format, *not* HDF. It is strongly suggested to rename the files from “.hdf” to “.he5”.

## 1. Swath Attributes

Name	Data Type	Dimension	Min. Value	Max Value	Description
AuthorName	STRING	16	—	—	Author of data product
AuthorAffiliation	STRING	37	—	—	Author's institute
AuthorContact	STRING	23	—	—	Author's contact email
Year	INT32	1	2008	2008	Year of data product
Month	INT32	1	3	4	Month of data product
Day	INT32	1	1	31	Day of data product

## 2. Swath Dimensions

Name	Data Type	Dimension	Min. Value	Max Value	Description
nLat	INT32	1	720	720	Number of latitudes in gridded product
nLon	INT32	1	1440	1440	Number of longitudes in gridded product

## 3. Geolocation Fields

Name	Data Type	Dimension	Min. Value	Max Value	Units	Description
Latitudes	FLOAT32	nLat	-90.0	89.75	deg	Lower-left corners of latitude grid box array
Longitudes	FLOAT32	nLon	-180.0	179.75	deg	Lower-left corners of longitude grid box array

## 4. Data Fields

Name	Data Type	Dimension	Min. Value	Max Value	Units	Description
OMI_BrO_Total_Column	FLOAT32	nLon,nLat	-1.0e+30	1.0e+30	mol/cm <sup>2</sup>	BrO daily average total columns
OMI_BrO_Column_Error	FLOAT32	nLon,nLat	-1.0e+30	1.0e+30	mol/cm <sup>2</sup>	BrO daily average total column uncertainties

## 5. Data Field Attributes

Name	Data Type	Dimension	Min. Value	Max Value	Units	Description
ScaleFactor	FLOAT32	1	1.0e+00	1.0e+00	—	Scale factor for BrO columns and uncertainties
MissingValue	FLOAT32	1	-1.0e+30	-1.0e+30	mol/cm <sup>2</sup>	Missing values for BrO columns and uncertainties