

Shortname: OMDOA03G
Longname: OMI/Aura Ozone (O3) DOAS Total Column
Daily L2 Global 0.25deg Lat/Lon Grid
PSF Version: 1.1.0
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PGE Version: 1.1.0
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Description: >

This document specifies the format of the Ozone Monitoring Instrument (OMI) OMDOA03G product, which is the daily Level 2G (L2G) gridded data product that corresponds to the OMDOA03 product. The latter is the Dutch-Finnish total column ozone (based on DOAS) orbital Level 2 (L2) swath data product (Reference 1).

The L2G product contains 24 UTC hours of L2 product subsetted onto a longitude-latitude grid.

An OMI L2G day is defined to be the 24 hours that lie between UTC times of 0 hours, 0 minutes, 0 seconds and 23 hours, 59 minutes, 59.999999 seconds.

The L2G product contains the data for all L2 "scenes" that
1) have observation times that lie within the L2G

day in question,

2) have centers that lie within the L2G grid cell in question, and

3) are "good".

A "good" OMD0A03 L2 scene is defined as one that has
i) a solar zenith angle that is less than or equal to 88.0 degrees, and

ii) a column amount O3 that is not equal to the missing value.

The adopted L2G grid is a 0.25-degree by 0.25-degree grid in longitude and

latitude. The dimensions of this grid are 1440 by 720. The origin of the

grid is at lower left. That is, the grid cell at coordinates (1, 1)

is centered at (longitude = -179.875 , latitude = -89.875),

and the grid cell at coordinates (1440, 720)

is centered at (longitude = 179.875 , latitude = 89.875).

The adopted L2G grid is consistent with the document entitled "Definition

of OMI Grids for Level 3 and Level 4 Data Products" by J.P. Veefkind et al.

(Reference 2).

The L2G product currently excludes L2 data collected in spatial and spectral zoom modes.

Each "good" L2 scene is mapped onto only one L2G grid cell.

The number of L2 scenes that are mapped onto a given

L2G grid cell can range from 0 to 12, and the corresponding data are stored in an additional dimension of the grid.

The L2 data are not averaged or weighted in any way in the L2G product.

The product is stored as one HDF-EOS 5 grid file, and has a size of 80 MB.

The format of the L2G product files is consistent with the document entitled "HDF-EOS Aura File Format Guidelines" by C. Craig et al. (Reference 3).

Global Metadata:

- Metadata Name: EndUTC
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Data Source: PGE
Description: >
UTC at the end of the L2G granule in "YYYY-MM-DDT23:59:59.999999Z" format.

- Metadata Name: FirstLineInOrbit
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1,16
Minimum Value: 1
Maximum Value: 1700
Data Source: PGE
Description: >
The first line number in each L2 orbit that contributes to the L2G granule.

- Metadata Name: GranuleDay
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 1
Maximum Value: 31
Data Source: PGE
Description: The day of the month at the start of the L2G granule.

- Metadata Name: GranuleDayOfYear
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 1
Maximum Value: 366
Data Source: PGE
Description: The day of the year at the start of the L2G granule.

- Metadata Name: GranuleMonth
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 1
Maximum Value: 12
Data Source: PGE
Description: The month of the year at the start of the L2G granule.

- Metadata Name: GranuleYear
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 2000
Maximum Value: 2099

Data Source: PGE
Description: The (four-digit) year at the start of the L2G granule.

- Metadata Name: HDFEOSVersion
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Data Source: HE
Description: >
The version of HDF-EOS 5 used in production.
Example is "HDFEOS_5.1.8".

- Metadata Name: InstrumentName
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Valid: OMI
Data Source: PGE
Description: Actual is "OMI" (see Section 6.1 of Reference 3).

- Metadata Name: LastLineInOrbit
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1,16
Minimum Value: 1
Maximum Value: 1700
Data Source: PGE
Description: >
The last line number in each L2 orbit that contributes to the L2G granule.

- Metadata Name: NumberOfLinesMissingGeolocation
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1,16

Minimum Value: 1
Maximum Value: 1700
Data Source: PGE
Description: >

The number of lines in each L2 orbit that are missing geolocation (a.k.a. number of "bad" lines in each L2 file).

- Metadata Name: OrbitNumber
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1,16
Minimum Value: 1
Maximum Value: 999999
Data Source: L2
Description: The OMI orbit number for each L2 input granule.

- Metadata Name: OrbitPeriod
Mandatory: T
Data Type: HE5T_NATIVE_DOUBLE
Number of Values: 1,16
Minimum Value: 5000.0
Maximum Value: 7000.0
Data Source: PGE
Description: The Aura orbital period for each L2 input granule.

- Metadata Name: Period
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Valid: Daily,Weekly,Monthly
Data Source: PGE
Description: The duration of the L2G granule. Actual is "Daily".

- Metadata Name: PGEVERSION
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Data Source: PCF
Description: Example is "1.0.21.1" (see Appendix K of Reference 4).

- Metadata Name: ProcessLevel
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Valid: 2G
Data Source: PGE
Description: Actual is "2G".

- Metadata Name: QAPercentMissingData
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1,16
Minimum Value: 0
Maximum Value: 100
Data Source: L2
Description: >
The percent of Level 1B calibrated radiance data that is missing from each L2 input granule.

- Metadata Name: QAPercentOutOfBoundsData
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1,16
Minimum Value: 0
Maximum Value: 100
Data Source: L2
Description: >
The percent of data that are out of bounds in

each L2 input granule.

- Metadata Name: StartUTC
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Data Source: PGE
Description: >
UTC at the start of the L2G granule in "YYYY-MM-DDT00:00:00.000000Z" format.

- Metadata Name: TAI93At0zOfGranule
Mandatory: T
Data Type: HE5T_NATIVE_DOUBLE
Number of Values: 1
Minimum Value: 0.0
Maximum Value: 1.0e+30
Data Source: PGE
Description: >
The TAI93 time at 0z of the L2G granule (see Section 6.1 of Reference 3).

Grid Metadata:

- Metadata Name: GCTPProjectionCode
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 0
Maximum Value: 99
Data Source: PGE
Description: >
The GCTP projection code of the L2G grid. Actual is 0, which corresponds to the geographic projection.

- Metadata Name: GridName

Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Valid: ColumnAmount03
Data Source: PGE
Description: Actual is "ColumnAmount03".

- Metadata Name: GridOrigin
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Valid: Center
Data Source: PGE
Description: >

The location of longitude and latitude quoted for each L2G grid cell.

Actual is, on average, "Center" (see Section 6.2 of Reference 3).

- Metadata Name: GridSpacing
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Data Source: PGE
Description: >

Spacing of L2G grid (in degrees). Actual is "(0.25,0.25)".

- Metadata Name: GridSpacingUnit
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Valid: deg
Data Source: PGE
Description: >

Unit for GridSpacing. Actual is "deg".

- Metadata Name: GridSpan
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Data Source: PGE
Description: >
Span of L2G grid (in degrees). Actual is
"(-180,180,-90,90)".

- Metadata Name: GridSpanUnit
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Valid: deg
Data Source: PGE
Description: >
Unit for GridSpan. Actual is "deg".

- Metadata Name:
MaximumNumberOfCandidatesPerGridCell
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 0
Maximum Value: 15
Data Source: PGE
Description: >
The maximum number of L2 scenes per cell in the
L2G grid (this can be as
large as 12).

- Metadata Name:
MinimumNumberOfCandidatesPerGridCell
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 0

Maximum Value: 15

Data Source: PGE

Description: >

The minimum number of L2 scenes per cell in the L2G grid (this is typically 0, because empty L2G grid cells are quite common).

- Metadata Name:

NumberOfDuplicateScenesAcceptedIntoGrid

Mandatory: T

Data Type: HE5T_NATIVE_INT

Number of Values: 1

Minimum Value: 0

Maximum Value: 1500000

Data Source: PGE

Description: >

The number of L2 scenes accepted into L2G grid cells that already contain one or more L2 scenes.

- Metadata Name: NumberOfEmptyGridCells

Mandatory: T

Data Type: HE5T_NATIVE_INT

Number of Values: 1

Minimum Value: 0

Maximum Value: 1036800

Data Source: PGE

Description: >

The number of cells in the L2G grid that do not contain any L2 scenes.

- Metadata Name: NumberOfGridCells

Mandatory: T

Data Type: HE5T_NATIVE_INT

Number of Values: 1

Minimum Value: 1

Maximum Value: 1036800
Data Source: PGE
Description: The total number of cells in the L2G grid.

- Metadata Name: NumberOfLatitudesInGrid
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 1
Maximum Value: 720
Data Source: PGE
Description: The number of latitude bins in the L2G grid.

- Metadata Name: NumberOfLongitudesInGrid
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 1
Maximum Value: 1440
Data Source: PGE
Description: The number of longitude bins in the L2G grid.

- Metadata Name: NumberOfMultiplyPopulatedGridCells
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 0
Maximum Value: 1036800
Data Source: PGE
Description: >
The number of cells in the L2G grid that contain two or more L2 scenes.

- Metadata Name: NumberOfPopulatedGridCells
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 0
Maximum Value: 1036800
Data Source: PGE
Description: >
The number of cells in the L2G grid that contain one or more L2 scenes.

- Metadata Name: NumberOfScenesAcceptedIntoGrid
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 0
Maximum Value: 1500000
Data Source: PGE
Description: The number of L2 scenes accepted into the L2G grid.

- Metadata Name: NumberOfScenesConsideredForGrid
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 0
Maximum Value: 1500000
Data Source: PGE
Description: The number of L2 scenes considered for the L2G grid.

- Metadata Name: NumberOfScenesRejectedFromGrid
Mandatory: T
Data Type: HE5T_NATIVE_INT
Number of Values: 1
Minimum Value: 0
Maximum Value: 1500000

Data Source: PGE
Description: The number of L2 scenes rejected from the L2G grid.

- Metadata Name: Projection
Mandatory: T
Data Type: HE5T_NATIVE_CHAR
Number of Values: 1
Valid: Geographic
Data Source: PGE
Description: >
The map projection of the L2G grid. Actual is "Geographic" (see Section 6.2 of Reference 3).

Grid Dimensions:

- Dimension Name: nCandidate
Data Type: HE5T_NATIVE_INT
Dimension Type: FIXED
Number of Values: 1
Minimum Value: 1
Maximum Value: 15
Data Source: PGE
Description: >
The L2-candidate-scenes dimension of the L2G grid. The size of this dimension is currently set at 15.

- Dimension Name: XDim
Data Type: HE5T_NATIVE_INT
Dimension Type: FIXED
Number of Values: 1
Minimum Value: 1
Maximum Value: 1440
Data Source: PGE
Description: >

The longitudes dimension of the L2G grid. There are currently 1440 0.25-degree-wide bins between longitudes -180.0 and 180.0 degrees.

- Dimension Name: YDim
Data Type: HE5T_NATIVE_INT
Dimension Type: FIXED
Number of Values: 1
Minimum Value: 1
Maximum Value: 720
Data Source: PGE
Description: >

The latitudes dimension of the L2G grid. There are currently 720 0.25-degree-wide bins between latitudes -90.0 and 90.0 degrees.

Geolocation Fields:

- Field Name: GroundPixelQualityFlags
Data Type: HE5T_NATIVE_UINT16
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0
Maximum Value: 65534
Missing Value: 65535
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: L2
Title: Ground Pixel Quality

Flags

Unique Field Definition: OMI-Specific
Description: >
The ground pixel quality flags for each L2 candidate scene in each L2G grid cell:

Bits 0 to 3 together contain the land/water flags:

- 0 - shallow ocean
- 1 - land
- 2 - shallow inland water
- 3 - ocean coastline/lake shoreline
- 4 - ephemeral (intermittent) water
- 5 - deep inland water
- 6 - continental shelf ocean
- 7 - deep ocean
- 8-14 - not used
- 15 - error flag for land/water

Bits 4 to 6 are flags that are set to 0 for FALSE, or 1 for TRUE:

- Bit 4 - sun glint possibility flag
- Bit 5 - solar eclipse possibility flag
- Bit 6 - geolocation error flag

Bit 7 is reserved for future use (currently set to 0).

Bits 8 to 14 together contain the snow/ice flags (based on NISE):

- 0 - snow-free land
- 1-100 - sea ice concentration (percent)
- 101 - permanent ice (Greenland, Antarctica)
- 102 - not used
- 103 - dry snow
- 104 - ocean (NISE-255)
- 105-123 - reserved for future use
- 124 - mixed pixels at coastline (NISE-252)
- 125 - suspect ice value (NISE-253)
- 126 - corners undefined (NISE-254)
- 127 - error

Bit 15 - NISE nearest neighbor filling flag.
(See Section 6.2 of Reference 5 for more details.)

- Field Name: Latitude
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: -90.0
Maximum Value: 90.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: deg
Data Source: L2
Title: Latitude of the center
of the groundpixel
Unique Field Definition: Aura-Shared
Description: >
The geodetic latitude (in degrees) on the ground
at the center of each L2
candidate scene in each L2G grid cell.

- Field Name: LineNumber
Data Type: HE5T_NATIVE_INT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 1
Maximum Value: 1700
Missing Value: -2000000000
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: L2
Title: Line Number of Candidate
Scene
Unique Field Definition: OMI-Specific
Description: >
The line number for each L2 candidate scene in

each L2G grid cell.

- Field Name: Longitude
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: -180.0
Maximum Value: 180.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: deg
Data Source: L2
Title: Longitude of the center
of the groundpixel
Unique Field Definition: Aura-Shared
Description: >
The geodetic longitude (in degrees) on the ground
at the center of each L2
candidate scene in each L2G grid cell.

- Field Name: NumberOfCandidateScenes
Data Type: HE5T_NATIVE_INT
Dimensions: YDim,XDim
Minimum Value: 0
Maximum Value: 15
Missing Value: 0
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: PGE
Title: Number of Candidate
Scenes
Unique Field Definition: OMI-Specific
Description: >
The number of L2 candidate scenes in each L2G
grid cell.

- Field Name: OrbitNumber
 Data Type: HE5T_NATIVE_INT
 Dimensions: nCandidate,YDim,XDim
 Minimum Value: 1
 Maximum Value: 999999
 Missing Value: -2000000000
 Offset: 0.0
 Scale Factor: 1.0
 Units: NoUnits
 Data Source: L2
 Title: Orbit Number of
 Candidate Scene
 Unique Field Definition: OMI-Specific
 Description: >
 The orbit number for each L2 candidate scene in
 each L2G grid cell.

- Field Name: PathLength
 Data Type: HE5T_NATIVE_FLOAT
 Dimensions: nCandidate,YDim,XDim
 Minimum Value: 2.0
 Maximum Value: 100.0
 Missing Value: 1.2676506e+30
 Offset: 0.0
 Scale Factor: 1.0
 Units: NoUnits
 Data Source: PGE
 Title: Path Length
 Unique Field Definition: OMI-Specific
 Description: >
 The path length [= sec(solar zenith angle) +
 sec(viewing zenith angle)] for
 each L2 candidate scene in each L2G grid cell.

- Field Name: SceneNumber
 Data Type: HE5T_NATIVE_INT
 Dimensions: nCandidate,YDim,XDim

Minimum Value: 1
Maximum Value: 60
Missing Value: -2000000000
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: L2
Title: Scene Number of

Candidate Scene

Unique Field Definition: OMI-Specific

Description: >

The cross-track ground-pixel number for each L2 candidate scene in each L2G grid cell.

- Field Name: SolarAzimuthAngle
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: -180.0
Maximum Value: 180.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: deg
Data Source: L2
Title: >

Solar azimuth angle at WGS84 ellipsoid for center co-ordinate of the ground pixel, defined East-of-North

Unique Field Definition: OMI-TES-Shared

Description: >

The solar azimuth angle (in degrees) on the ground at the center of each L2 candidate scene in each L2G grid cell.

- Field Name: SolarZenithAngle
Data Type: HE5T_NATIVE_FLOAT

Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 180.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: deg
Data Source: L2
Title: >

Solar zenith angle at WGS84 ellipsoid for center
co-ordinate of the ground
pixel

Unique Field Definition: Aura-Shared

Description: >

The solar zenith angle (in degrees) on the ground
at the center of each L2
candidate scene in each L2G grid cell.

- Field Name: SpacecraftAltitude
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1.0e+06
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: m
Data Source: L2
Title: Altitude above WGS84

ellipsoid

Unique Field Definition: HIRDLS-OMI-TES-Shared

Description: >

Spacecraft altitude (in m) for each L2 candidate
scene in each L2G grid
cell.

- Field Name: SpacecraftLatitude

Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: -90.0
Maximum Value: 90.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: deg
Data Source: L2
Title: Geodetic Latitude above

WGS84 ellipsoid

Unique Field Definition: HIRDLS-OMI-TES-Shared
Description: >
Spacecraft latitude (in degrees) for each L2
candidate scene in each L2G
grid cell.

- Field Name: SpacecraftLongitude
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: -180.0
Maximum Value: 180.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: deg
Data Source: L2
Title: Geodetic Longitude above

WGS84 ellipsoid

Unique Field Definition: HIRDLS-OMI-TES-Shared
Description: >
Spacecraft longitude (in degrees) for each L2
candidate scene in each L2G
grid cell.

- Field Name: TerrainHeight
Data Type: HE5T_NATIVE_INT16

Dimensions: nCandidate,YDim,XDim
Minimum Value: -200
Maximum Value: 10000
Missing Value: -32767
Offset: 0.0
Scale Factor: 1.0
Units: m
Data Source: L2
Title: >

Terrain height at center co-ordinate of the ground pixel

Unique Field Definition: OMI-Specific
Description: >

The terrain height (in meters) at the center of each L2 candidate scene in each L2G grid cell.

- Field Name: Time
Data Type: HE5T_NATIVE_DOUBLE
Dimensions: nCandidate,YDim,XDim
Minimum Value: -5.0e+09
Maximum Value: 1.0e+10
Missing Value: -1.2676506002282294e+30
Offset: 0.0
Scale Factor: 1.0
Units: s
Data Source: L2
Title: Time at Start of Scan

(s, TAI93)

Unique Field Definition: Aura-Shared
Description: >

The TAI93 time (in seconds) for each L2 candidate scene in each L2G grid cell.

- Field Name: ViewingAzimuthAngle
Data Type: HE5T_NATIVE_FLOAT

Dimensions: nCandidate,YDim,XDim
Minimum Value: -180.0
Maximum Value: 180.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: deg
Data Source: L2
Title: >

Viewing azimuth angle at WGS84 ellipsoid for center co-ordinate of the

ground pixel, defined East-of-North

Unique Field Definition: OMI-Specific

Description: >

Viewing azimuth angle (in degrees) defined East-of-North on the ground at

the center of each L2 candidate scene in each L2G grid cell.

- Field Name: ViewingZenithAngle
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 180.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: deg
Data Source: L2
Title: >

Viewing zenith angle at WGS84 ellipsoid for center co-ordinate of the ground pixel

Unique Field Definition: OMI-Specific

Description: >

The viewing zenith angle (in degrees) on the ground at the center of each L2

candidate scene in each L2G grid cell.

Data Fields:

- Field Name: AirMassFactor
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 100.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: L2
Title: Air Mass Factor
Unique Field Definition: OMI-Specific
Description: >

Air mass factor to compute the vertical column density from the slant column density for each L2 candidate scene in each L2G grid cell.

- Field Name: CloudFraction
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: L2
Title: Effective cloud fraction
Unique Field Definition: OMI-Specific
Description: >

The effective cloud fraction for each L2 candidate scene in each L2G grid

cell.

- Field Name: CloudFractionPrecision
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: L2
Title: Effective cloud fraction
precision
Unique Field Definition: OMI-Specific
Description: >
The precision of the effective cloud fraction for each L2 candidate scene in each L2G grid cell.

- Field Name: CloudPressure
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1200.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: hPa
Data Source: L2
Title: Effective cloud pressure
Unique Field Definition: OMI-Specific
Description: >
The effective cloud pressure for each L2 candidate scene in each L2G grid cell.

- Field Name: CloudPressurePrecision
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1200.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: hPa
Data Source: L2
Title: Effective cloud pressure

precision

Unique Field Definition: OMI-Specific

Description: >

The precision of the effective cloud pressure for each L2 candidate scene in each L2G grid cell.

- Field Name: ColumnAmountO3
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1000.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: DU
Data Source: L2
Title: Ozone vertical column

density

Unique Field Definition: OMI-Specific

Description: >

Ozone vertical column density (total column ozone) in DU for each L2 candidate scene in each L2G grid cell.

- Field Name: ColumnAmountO3Precision

Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1000.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: DU
Data Source: L2
Title: Precision of the ozone
vertical column density
Unique Field Definition: OMI-Specific
Description: >
Precision of the ozone vertical column density in
DU for each L2 candidate
scene in each L2G grid cell.

- Field Name: EffectiveTemperature
Data Type: HE5T_NATIVE_INT8
Dimensions: nCandidate,YDim,XDim
Minimum Value: -100
Maximum Value: 100
Missing Value: -127
Offset: 0.0
Scale Factor: 1.0
Units: degree Celsius
Data Source: L2
Title: Fitted Effective
temperature of the ozone
Unique Field Definition: OMI-Specific
Description: >
Fitted effective temperature of the ozone along
the average path of the
photons for each L2 candidate scene in each L2G
grid cell.

- Field Name:

EffectiveTemperaturePrecision

Data Type: HE5T_NATIVE_INT8
Dimensions: nCandidate,YDim,XDim
Minimum Value: -100
Maximum Value: 100
Missing Value: -127
Offset: 0.0
Scale Factor: 1.0
Units: degree Celsius
Data Source: L2

Title: >

Precision of the Fitted Effective temperature of the ozone

Unique Field Definition: OMI-Specific

Description: >

Precision of the fitted effective temperature of the ozone along the average path of the photons for each L2 candidate scene in each L2G grid cell.

- Field Name: GhostColumnAmountO3
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1000.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: DU
Data Source: L2
Title: Ozone ghost column

density

Unique Field Definition: OMI-Specific

Description: >

Amount of ozone used to correct for cloudy part of the ground pixel (in DU) for each L2 candidate scene in each L2G grid

cell.

- Field Name: InstrumentConfigurationId
Data Type: HE5T_NATIVE_UINT8
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0
Maximum Value: 254
Missing Value: 255
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: L2
Title: >
Unique ID for instrument settings for current measurement
Unique Field Definition: OMI-Specific
Description: >
Instrument Configuration ID for each L2 candidate scene in each L2G grid cell.

- Field Name: MeasurementQualityFlags
Data Type: HE5T_NATIVE_UINT8
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0
Maximum Value: 254
Missing Value: 255
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: L2
Title: Bit level quality flags
at measurement level
Unique Field Definition: OMI-Specific
Description: >
The measurement quality flags for each L2

candidate scene in each L2G grid
cell (Bit value is 0 for not set and 1 for set):

Bit 0 - Measurement Missing Flag: All ground pixels have L1B

PixelQualityFlags bit 0 set.

Bit 1 - Measurement Error Flag: Any of L1B MeasurementQualityFlags bit 0,

1 or 3 are set for radiance or solar product used.

Bit 2 - Measurement Warning Flag: Any of L1B MeasurementQualityFlags

bit 2, 4, 5, 8, 9 are set for radiance or solar product used.

Bit 3 - Rebinned Measurement Flag: L1B radiance MeasurementQualityFlags

bit 7 is set.

Bit 4 - SAA Flag: L1B MeasurementQualityFlags bit 10 is set for radiance

or solar product used.

Bit 5 - Spacecraft Maneuver Flag: L1B MeasurementQualityFlags bit 11 is

set for radiance or solar product used.

Bit 6 - Instrument Setting Error Flag: Values for Earth and solar

InstrumentConfigurationId are not compatible.

Bit 7 - Set if radiance and cloud data are not synchronized.

- Field Name:	ProcessingQualityFlags
Data Type:	HE5T_NATIVE_UINT16
Dimensions:	nCandidate,YDim,XDim
Minimum Value:	0
Maximum Value:	65534
Missing Value:	65535
Offset:	0.0

Scale Factor: 1.0
Units: NoUnits
Data Source: L2
Title: Bit level quality flags
at ground pixel level
Unique Field Definition: OMI-Specific
Description: >
The processing quality flags for each L2
candidate scene in each L2G grid
cell:

Bit 0 - Solar Irradiance Warning Flag
Set if for any of the irradiance pixels
contained in the fitting window:
L1B PixelQualityFlags bit 3-10 is set
wavelengthPrecision >
maxWavelengthPrecision
wavelengthPrecision <= 0
wavelengthPrecision contains fill value
irradiancePrecision >
maxIrradiancePrecision
irradiancePrecision <= 0
irradiancePrecision contains fill value

Bit 1 - Earth Radiance Missing Flag
Set if for the ground pixel the number
of spectral pixels flagged
with L1B PixelQualityFlags bit 0 is
larger than a threshold set
in the OPF, or the number of spectral
pixels is too small to
perform the fitting.

Bit 2 - Earth Radiance Error Flag
Set if for the ground pixel the number
of spectral pixels flagged
with L1B PixelQualityFlags bit 0-2 is
larger than a threshold set
in the OPF, or L1B XTrackQualityFlags

(when present) is 7.

Bit 3 - Earth Radiance Warning Flag
Set if for any of the rad. pixels
contained in the fitting window:
L1B PixelQualityFlags bit 3-10 is set
wavelengthPrecision >
maxWavelengthPrecision
wavelengthPrecision <= 0
wavelengthPrecision contains fill value
radiancePrecision > maxRadiancePrecision
radiancePrecision <= 0
radiancePrecision contains fill value
Any of the radiance or geolocation
fields used are out of bounds
L1B XTrackQualityFlags (when present) is
1, 2, 3, or 4

Bit 4 - Cloud Data Error Flag
Set if the cloud data are missing or
invalid. Note that if the
cloud product is not synchronized, then
the cloud data are invalid.

Bit 5 - Cloud Data Warning Flag
A warning flag for the cloud data.

Bit 6 - Snow/Ice Data Error Flag
Set if Snow/Ice data from cloud product
are missing or invalid.

Bit 7 - SCD Error Flag
Set if SCD fit returned error.

Bit 8 - SCD Warning Flag
Set for any of the following
occurrences:
SCD precision > maxSCDPrecision
RMS Error > RMSErrorFlag
SCD Covariance > maxSCDCovarianceSCD is
less than minSCD, or SCD
is larger than maxSCD

Bit 9 - AMF Error Flag

Set if computation of AMFClear or AMFCloudy failed.

Bit 10 - AMF Warning Flag

Set if computation of AMFs returned warning because of extrapolation of the LUTs.

Bit 11 - Ghost Column Error Flag

Set if Ghost Column could not be computed.

Bit 12 - Ghost Column Warning Flag

Set if the cloud pressure > surface pressure. The ghost column will be set to zero in this case.

Bit 13 - VCD Error Flag

Set if VCD could not be computed.

Bit 14 - VCD Warning Flag

Set for any of the following:

Cloud Data Warning Flag set

SCD Warning Flag set

AMF Warning Flag set

VCD computation returned warning

VCD < minVCD or VCD > maxVCD

VCD precision > maxVCDprecision

Bit 15 - Wavelength Registration Warning Flag

Set when the wavelength registration shift is larger than the value in the OPF.

- Field Name:	RootMeanSquareErrorOfFit
Data Type:	HE5T_NATIVE_FLOAT
Dimensions:	nCandidate,YDim,XDim
Minimum Value:	0.0
Maximum Value:	1.0
Missing Value:	-1.2676506e+30
Offset:	0.0
Scale Factor:	1.0
Units:	NoUnits

Data Source: L2
Title: Root-Mean-Square error
of DOAS fit
Unique Field Definition: OMI-Specific
Description: >
The root-mean-square error of the DOAS fit for
each L2 candidate scene in
each L2G grid cell.

- Field Name: SlantColumnAmountO3
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 10000.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: DU
Data Source: L2
Title: Ozone slant column
density
Unique Field Definition: OMI-Specific
Description: >
Ozone slant column density (in DU) for each L2
candidate scene in each L2G
grid cell.

- Field Name: SlantColumnAmountO3Precision
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 10000.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: DU

Data Source: L2
Title: Precision of the ozone
slant column density
Unique Field Definition: OMI-Specific
Description: >
Precision of the ozone slant column density (in
DU) for each L2 candidate
scene in each L2G grid cell.

- Field Name: TerrainPressure
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1200.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: hPa
Data Source: L2
Title: Pressure of the center
of the ground pixel
Unique Field Definition: OMI-Specific
Description: >
The terrain pressure (in hPa) at the center of
each L2 candidate scene in
each L2G grid cell.

- Field Name: TerrainReflectivity
Data Type: HE5T_NATIVE_FLOAT
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0.0
Maximum Value: 1.0
Missing Value: -1.2676506e+30
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: L2

Title: Reflectivity of the ground pixel
Unique Field Definition: OMI-Specific
Description: >
The reflectivity for each L2 candidate scene in each L2G grid cell.

- Field Name: XTrackQualityFlags
Data Type: HE5T_NATIVE_UINT8
Dimensions: nCandidate,YDim,XDim
Minimum Value: 0
Maximum Value: 254
Missing Value: 255
Offset: 0.0
Scale Factor: 1.0
Units: NoUnits
Data Source: PGE
Title: Across Track Quality

Flags

Unique Field Definition: OMI-Specific
Description: >
The cross-track quality flags assigned to each pixel in OMI L1B data for each L2 candidate scene in each L2G grid cell.
Flags indicate detection of the OMI row anomaly and if the effect has been corrected.

Bits 0 to 2 together indicate row anomaly status:
0 - Not affected
1 - Affected, Not corrected, do not use
2 - Slightly affected, not corrected, use with caution
3 - Affected, corrected, use with caution
4 - Affected, corrected, use pixel
5 - Not used
6 - Not used

- 7 - Error during anomaly detection processing
- Bit 3 - Reserved for future use.
- Bit 4 - Possibly affected by wavelength shift
- Bit 5 - Possibly affected by blockage
- Bit 6 - Possibly affected by stray sunlight
- Bit 7 - Possibly affected by stray earthshine

Core Metadata:

- Metadata Name: AssociatedInstrumentShortName
Mandatory: T
Data Type: VA20
Number of Values: 1
Valid: OMI
Data Source: MCF
Description: Actual is "OMI".
- Metadata Name: AssociatedPlatformShortName
Mandatory: T
Data Type: VA20
Number of Values: 1
Valid: Aura
Data Source: MCF
Description: Actual is "Aura".
- Metadata Name: AssociatedSensorShortName
Mandatory: T
Data Type: VA20
Number of Values: 1
Valid: CCD Ultra Violet, CCD Visible
Data Source: MCF
Description: Actual is "CCD Ultra Violet".
- Metadata Name: AutomaticQualityFlag
Mandatory: T
Data Type: VA20
Number of Values: 1

Valid: Passed,Suspect,Failed
Data Source: PGE
Description: Actual is "Failed".

- Metadata Name: AutomaticQualityFlagExplanation
Mandatory: T
Data Type: VA255
Number of Values: 1
Data Source: PGE
Description: >
Actual is "An automatic quality investigation has not yet been devised."

- Metadata Name: DayNightFlag
Mandatory: T
Data Type: VA5
Number of Values: 1
Valid: Day,Night,Both
Data Source: MCF
Description: Actual is "Day".

- Metadata Name: EastBoundingCoordinate
Mandatory: T
Data Type: LF
Number of Values: 1
Minimum Value: -180.0
Maximum Value: 180.0
Data Source: PGE
Description: >
The terrestrial longitude (in degrees) of the easternmost data in the L2G granule, which is typically 180.0 degrees.

- Metadata Name: EquatorCrossingDate
Mandatory: T
Data Type: D
Number of Values: 1,16

Data Source: L2

Description: >

The date of the ascending equator crossing for each L2 input granule.

- Metadata Name: EquatorCrossingLongitude

Mandatory: T

Data Type: LF

Number of Values: 1,16

Minimum Value: -180.0

Maximum Value: 180.0

Data Source: L2

Description: >

The terrestrial longitude (in degrees) of the ascending equator crossing for each L2 input granule.

- Metadata Name: EquatorCrossingTime

Mandatory: T

Data Type: T

Number of Values: 1,16

Data Source: L2

Description: >

The time of the ascending equator crossing for each L2 input granule.

- Metadata Name: InputPointer

Mandatory: T

Data Type: VA255

Number of Values: 1,16

Data Source: PCF

Description: >

A list of the L2 input granules. Example is
{"OMI-Aura_L2-OMDOA03_2006m0830t2350-
o11311_v002-2006m0831t173134.he5",
"OMI-Aura_L2-OMDOA03_2006m0831t0129-
o11312_v002-2006m0831t170726.he5",

"OMI-Aura_L2-OMD0A03_2006m0831t0308-o11313_v002-2006m0831t173336.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t0447-o11314_v002-2006m0831t175840.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t0625-o11315_v002-2006m0831t193002.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t0804-o11316_v002-2006m0831t193234.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t0943-o11317_v002-2006m0831t201638.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t1122-o11318_v002-2006m0901t155328.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t1301-o11319_v002-2006m0901t165113.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t1440-o11320_v002-2006m0901t160916.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t1619-o11321_v002-2006m0901t161105.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t1758-o11322_v002-2006m0901t154812.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t1937-o11323_v002-2006m0901t155515.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t2115-o11324_v002-2006m0901t155519.he5",
"OMI-Aura_L2-OMD0A03_2006m0831t2254-o11325_v002-2006m0901t171826.he5")

- Metadata Name: LocalGranuleID
Mandatory: T
Data Type: VA80
Number of Values: 1
Data Source: PGE
Description: >

Example is "OMI-Aura_L2G-OMD0A03G_2006m0601_v002-2006m1019t175522.he5"
(see Appendix E of Reference 4).

- Metadata Name: LocalityValue
Mandatory: T
Data Type: VA20
Number of Values: 1
Data Source: MCF
Description: Actual is "Global".

- Metadata Name: LOCALVERSIONID
Mandatory: T
Data Type: VA60
Number of Values: 1
Data Source: PCF
Description: >
MD5 fingerprint of the HDF product file. Example
valids are
"RFC1321 MD5 = not yet calculated" and "RFC1321
MD5 = [0-9,a-f]{32}".

- Metadata Name: NorthBoundingCoordinate
Mandatory: T
Data Type: LF
Number of Values: 1
Minimum Value: -90.0
Maximum Value: 90.0
Data Source: PGE
Description: >
The terrestrial latitude (in degrees) of the
northernmost data in the L2G
granule, which typically lies in the range from
65.0 to 90.0 degrees.

- Metadata Name: OperationalQualityFlag
Mandatory: T
Data Type: VA20
Number of Values: 1
Valid: >
Passed,Failed,Being Investigated,Not

Investigated, Inferred Passed,
Inferred Failed, Suspect
Data Source: PGE
Description: >
Actual is "Passed".

- Metadata Name: OperationalQualityFlagExplanation
Mandatory: T
Data Type: VA255
Number of Values: 1
Data Source: PGE
Description: >
Actual is "This granule passed operational tests that were administered by the OMI SIPS. QA metadata was extracted and the file was successfully read using standard HDF-EOS utilities."

- Metadata Name: OrbitNumber
Mandatory: T
Data Type: I
Number of Values: 1,16
Minimum Value: 1
Maximum Value: 999999
Data Source: L2
Description: The OMI orbit number for each L2 input granule.

- Metadata Name: ParameterName
Mandatory: T
Data Type: VA40
Number of Values: 1
Valid: Ozone Gridded
Data Source: PGE
Description: >
The measured science parameter expressed in the

L2G granule. Actual is
"Ozone Gridded".

- Metadata Name: PGEVERSION
Mandatory: T
Data Type: VA10
Number of Values: 1
Data Source: PCF
Description: Example is "1.0.21.1" (see
Appendix K of Reference 4).

- Metadata Name: ProductionDateTime
Mandatory: T
Data Type: DT
Number of Values: 1
Data Source: TK
Description: The date and time of the Level
2G processing.

- Metadata Name: QAPercentMissingData
Mandatory: T
Data Type: I
Number of Values: 1
Minimum Value: 0
Maximum Value: 100
Data Source: PGE
Description: >
An average for the entire L2G granule of the
percent of missing Level 1B
calibrated radiance data.

- Metadata Name: QAPercentOutOfBoundsData
Mandatory: T
Data Type: I
Number of Values: 1
Minimum Value: 0
Maximum Value: 100

Data Source: PGE

Description: >

An average for the entire L2G granule of the percent of data that are out of bounds.

- Metadata Name: RangeBeginningDate

Mandatory: T

Data Type: D

Number of Values: 1

Data Source: PGE

Description: The year, month and day when the L2G granule begins.

- Metadata Name: RangeBeginningTime

Mandatory: T

Data Type: T

Number of Values: 1

Data Source: PGE

Description: >

The hour, minute, second and fraction of a second when the L2G granule begins.

- Metadata Name: RangeEndingDate

Mandatory: T

Data Type: D

Number of Values: 1

Data Source: PGE

Description: The year, month and day when the L2G granule ends.

- Metadata Name: RangeEndingTime

Mandatory: T

Data Type: T

Number of Values: 1

Data Source: PGE

Description: >

The hour, minute, second and fraction of a second when the L2G granule ends.

- Metadata Name: REPROCESSINGACTUAL

Mandatory: T

Data Type: VA20

Number of Values: 1

Valid: >

processed 1 time,processed 2 times,processed 3 times,processed 4 times

Data Source: PCF

Description: >

An indication of what reprocessing has been performed on the L2G granule.

- Metadata Name: ReprocessingPlanned

Mandatory: T

Data Type: VA40

Number of Values: 1

Valid: >

no further update anticipated,further update is anticipated,

further update anticipated using enhanced PGE

Data Source: DP

Description: Actual is "further update is anticipated".

- Metadata Name: ScienceQualityFlag

Mandatory: T

Data Type: VA20

Number of Values: 1

Valid: >

Passed,Failed,Being Investigated,Not Investigated,Inferred Passed,

Inferred Failed,Suspect

Data Source: DP

- Description: Actual is "Not Investigated".
- Metadata Name: ScienceQualityFlagExplanation
 - Mandatory: T
 - Data Type: VA255
 - Number of Values: 1
 - Data Source: DP
 - Description: >
 - Actual is "An updated science quality flag and explanation is put in the product .met file when a granule has been evaluated. The flag value in this file, Not Investigated, is an automatic default that is put into every granule during production."
 - Metadata Name: ShortName
 - Mandatory: T
 - Data Type: VA8
 - Number of Values: 1
 - Valid: OMDOA03G
 - Data Source: MCF
 - Description: Actual is "OMDOA03G".
 - Metadata Name: SizeMBECSDDataGranule
 - Mandatory: F
 - Data Type: LF
 - Number of Values: 1
 - Minimum Value: 0.0
 - Maximum Value: 10000.0
 - Data Source: DSS
 - Description: >
 - The volume of data (in MB) contained in the L2G granule (this Metadata will not appear in the L2G granule).
 - Metadata Name: SouthBoundingCoordinate

Mandatory: T
Data Type: LF
Number of Values: 1
Minimum Value: -90.0
Maximum Value: 90.0
Data Source: PGE

Description: >

The terrestrial latitude (in degrees) of the southernmost data in the L2G granule, which typically lies in the range from -90.0 to -65.0 degrees.

- Metadata Name: VERSIONID
Mandatory: T
Data Type: SI
Number of Values: 1
Minimum Value: 0
Maximum Value: 999
Data Source: PCF
Description: Example is 2.

- Metadata Name: WestBoundingCoordinate
Mandatory: T
Data Type: LF
Number of Values: 1
Minimum Value: -180.0
Maximum Value: 180.0
Data Source: PGE
Description: >

The terrestrial longitude (in degrees) of the westernmost data in the L2G granule, which is typically -180.0 degrees.

Product Specific Attributes:

- Metadata Name: ExpeditedData
Mandatory: T

Data Type: VA10
Number of Values: 1
Valid: TRUE,FALSE
Data Source: PGE
Description: The indicator for expedited Level 0 data.

- Metadata Name: ExposureTimes
Mandatory: T
Data Type: F
Number of Values: 1,256
Minimum Value: 0.0
Maximum Value: 2000.0
Data Source: PGE
Description: >

An array containing the exposure times in seconds used for the measurements.

- Metadata Name: MasterClockPeriods
Mandatory: T
Data Type: F
Number of Values: 1,128
Minimum Value: 0.0
Maximum Value: 10.0
Data Source: PGE
Description: >

An array containing the master clock periods in seconds used for the measurements.

- Metadata Name: NrMeasurements
Mandatory: T
Data Type: I
Number of Values: 1
Minimum Value: 0
Maximum Value: 30000
Data Source: PGE

Description: >

The number of measurements used to create the L2G granule.

- Metadata Name: NrSpatialZoom
Mandatory: T
Data Type: I
Number of Values: 1
Minimum Value: 0
Maximum Value: 0
Data Source: PGE

Description: >

The number of measurements in spatial zoom mode.
Actual is 0, because
zoom measurements are excluded from the L2G granule.

- Metadata Name: NrSpectralZoom
Mandatory: T
Data Type: I
Number of Values: 1
Minimum Value: 0
Maximum Value: 0
Data Source: PGE

Description: >

The number of measurements in spectral zoom mode.
Actual is 0, because
zoom measurements are excluded from the L2G granule.

- Metadata Name: NrZoom
Mandatory: T
Data Type: I
Number of Values: 1
Minimum Value: 0
Maximum Value: 0
Data Source: PGE

Description: >

The number of measurements in zoom modes. Actual is 0, because zoom measurements are excluded from the L2G granule.

- Metadata Name: SolarEclipse

Mandatory: T

Data Type: VA10

Number of Values: 1

Valid: TRUE,FALSE

Data Source: PGE

Description: >

The indicator that during part of the measurements a solar eclipse occurred.

- Metadata Name: SouthAtlanticAnomalyCrossing

Mandatory: T

Data Type: VA10

Number of Values: 1

Valid: TRUE,FALSE

Data Source: PGE

Description: >

The indicator that during part of the measurements the spacecraft was in the South Atlantic Anomaly.

- Metadata Name: SpacecraftManeuverFlag

Mandatory: T

Data Type: VA10

Number of Values: 1

Valid: TRUE,FALSE,UNKNOWN

Data Source: PGE

Description: >

The indicator that during part of the measurements the spacecraft was performing a maneuver.

Archived Metadata:

- Metadata Name: ESDTDescriptorRevision
Mandatory: T
Data Type: VA10
Number of Values: 1
Data Source: MCF
Description: >

The version of the ESDT descriptor file as determined by ECS.

- Metadata Name: LongName
Mandatory: T
Data Type: VA80
Number of Values: 1
Valid: >

OMI/Aura Ozone (O3) DOAS Total Column Daily L2
Global 0.25deg Lat/Lon Grid

Data Source: MCF

Description: >

Actual is

"OMI/Aura Ozone (O3) DOAS Total Column Daily L2
Global 0.25deg Lat/Lon Grid".

References: >

1. "OMDOA03 README File"
(2009 June 26)
(http://disc.sci.gsfc.nasa.gov/Aura/data-holdings/OMI/omdoao3_v003.shtml)
2. "Definition of OMI Grids for Level 3 and Level 4 Data Products"
(OMI-Grids_L3L4, SD-OMIE-KNMI-443, 2005 January 25)
3. "HDF-EOS Aura File Format Guidelines"

(OMI-AURA-DATA-GUIDE, Version 2.12, 2006 October 24)

4. "OMI Science Software Delivery Guide for Version 0.9"

(OMI-SSDG-0.9.10, Version 0.9.10, 2005 June 22)

5. "OMI GDPS Input/Output Data Specification (IODS) Volume 2"

(OMI-GDPS-IODS-2, SD-OMIE-7200-DS-467, 2004 November 8)

6. "OMDOA03G ECS Metadata Requirements"

(OMI-OMDOA03G_Metadata_RD, Version 0.9.30, In Preparation)

7. "Release 6A Implementation Earth Science Data Model for the ECS Project"

(420-TP-022-002, June 2001)

(<http://edhs1.gsfc.nasa.gov/waisdata/rel6/html/tp4202202.html> and

http://edhs1.gsfc.nasa.gov/waisdata/rel6/html/tp42022_adds.html)