

OBPG OCTS – Pure HDF4 data

OBPG OCTS

OBPG OCTS Level1

- FILENAME:** O1997001011401.L1A_GAC.hdf (ftp link: [here](#)) Filesize=51.4MB.

It is a pure HDF4 file, there are 9 vgroups.

Data field (l1a_data) has 3 dimensions: 8 (bands) x 6624 (lines) x 400 (nsamp)
 Data field (octs_tlm) has 2 dimensions: 3312 (rec) x 120 (instr).
 ...

It has 2-dimensional 'lat' and 'lon' fields: 3312 (rec) x 25 (pxls).

Geo Field Name	AttributeName	AttributeValue	AttributeType	AttributeArraySize
lat	long_name	Scan point latitude	8-bit character	20
lon	long_name	Scan point longitude	8-bit character	21

Data Field Name	AttributeName	AttributeValue	AttributeType	AttributeArraySize
octs_tlm	long_name	OCTS instrument telemetry	8-bit character	26
l1a_data	long_name	Level-1A data	8-bit character	14
	valid_range	0, 1023	16-bit integer	2
...				

Other OBPG_L1A files have similar structure

OBPG OCTS Level2

- FILENAME:** O1996306152450.L2_GAC.hdf (ftp link: [here](#)) Filesize=23.6MB.

It is a pure HDF4 file, there are 4 vgroups.

Data field (nLw412) has 2 dimensions: 2196 (Number of Scan Lines) x 400 (Pixels per Scan Line).

It has 2-dimensional 'Latitude' and 'Longitude' fields: 2196 (Number of Scan Lines) x 51 (Number of Pixel Control Points) and One pair of latitude and longitude for the whole file.

Latitude Units: degrees; Longitude Units: degrees. It does not follow CF conventions.

Users have to do an interpolation for latitude and longitude and make it match the dimension size of data fields.

There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of 0 is possibly used for 'Fill_Value'.

Geo Field Name	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Latitude	units	degrees	8-bit character	8
Longitude	units	degrees	8-bit character	8

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
nLw_412	slope	0.0010	32-bit floating-point	1
	intercept	0.0	32-bit floating-point	1

Other OBPG_L2 files have similar structure

OBPG OCTS Level3

- FILENAME:** O19970011997031.L3m_MO_A520_9.hdf (ftp link: [here](#)) Filesize=8.90MB.

It is a pure HDF4 file containing only one field: l3m_data.

Data field (l3m_data) has 2 dimensions: 2160 (fakeDim0) x 4320 (fakeDim1).

Some data field attributes are stored in file properties, like attribute 'units'

The value of attribute 'units' for data field is blank. Type is 8-bit character and Array Size is 2.

There is no clear latitude and longitude information in the file. File attributes 'Latitude Step', 'Longitude Step', 'SW Point Latitude' and 'SW Point Longitude' should be used to calculate latitude and longitude

There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of 255 is possibly used for 'Fill_Value'.

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
L3m_data	Slope	0.0062992	32-bit floating-point	1
	Intercept	-1.0	32-bit floating-point	1

Other OBPG_L3m files have similar structure