

OBPG CZCS– Pure HDF4 data

OBPG CZCS

OBPG CZCS Level1

- FILENAME:** C1986002141200.L1A\_LAC.hdf (ftp link: [here](#)) Filesize=12.7MB.

It is a pure HDF4 file, there are 3 vgroups.

Data fields have 2 dimensions: 963 (Number of Scan Lines) x 1968 (Pixels per Scan Line).

It has 2-dimensional 'Latitude' and 'Longitude' fields: 963 (Number of Scan Lines) x 247 (Number of Pixel Control Points).

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 255 is commonly 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

Data Field Name	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Band1	long_name	Level-1A band1 data	8-bit character	20
	units	radiance counts	8-bit character	16

Other CZCS\_L1A files have similar structure

OBPG CZCS Level2

- FILENAME:** C1978303124834.L2\_MLAC.hdf (ftp link: [here](#)) Filesize=127MB.

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

Data field (nLw\_443) has 2 dimensions: 2724 (Number of Scan Lines) x 1968 (Pixels per Scan Line).

It has 2-dimensional 'Latitude' and 'Longitude' fields: 2724 (Number of Scan Lines) x 247 (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

Data Field Name	AttributeName	AttributeValue	AttributeType	AttributeArraySize
nLw_443	slope	0.0010	32-bit floating-point	1
	intercept	0.0	32-bit floating-point	1

Other CZCS\_L2 files have similar structure

OBPG CZCS Level3

- FILENAME:** C19860011986008.L3m\_8D\_CHLO\_4.hdf (ftp link: [here](#)) Filesize=71.1MB.

It is a pure HDF4 file containing only one field: l3m\_data.

Data field (l3m\_data) has 2 dimensions: 4320 (fakeDim0) x 8640 (fakeDim1)

Special usage of scale and offset attributes: float value = Base\*\*((Slope\*l3m\_data) + Intercept) = Parameter value, given by data field attribute.

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

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 65535 is possibly used for 'Fill\_Value'.

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
L3m_data	Base	10.0	32-bit floating-point	1
	Slope	5.8137757E-5	32-bit floating-point	1
	Intercept	-2.0	32-bit floating-point	1

Other CZCS\_L3m files have similar structure