

MOPITT

- FILENAME:** MOP01-20000303-L1V3.34.1.hdf(ftp link: [here](#)) (Filesize=106MB)

It is a swath file with 2 groups and 0 V-datasets

The 'Latitude' and 'Longitude' are as mentioned in the Geolocation Fields table.
'Latitude' and 'Longitude' contain 'Fill_Value' -9999.0

There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of -9999.0 is commonly used for 'Fill_Value.'

GROUP1: MOP01

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Latitude		either of 'units,' 'unit' or 'long_name' not there		
Longitude		either of 'units,' 'unit' or 'long_name' not there		

GeoFieldName	#Dimension (DimList)
Latitude	3-D (6350 (ntrack) x 29 (nstare) x 4 (npixels))
Longitude	3-D (6350 (ntrack) x 29 (nstare) x 4 (npixels))
Time	1-D (6350)

DataFieldName	#Dimension (DimList)
Solar Zenith	3-D (6350 (ntrack) x 29 (nstare) x 4 (npixels))
Solar Azimuth	3-D (6350 (ntrack) x 29 (nstare) x 4 (npixels))
MOPITT Radiances	5-D (6350 (ntrack) x 4 (npixels) x 8 (nchan) x 4 (nsector) x 8 (ncalib))
Packet Positions	2-D (6350 (ntrack) x 29 (nstare))

GROUP2: MOP01 DAYDREAMS

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Latitude		either of 'units,' 'unit' or 'long_name' not there		
Longitude		either of 'units,' 'unit' or 'long_name' not there		

GeoFieldName	#Dimension (DimList)
Latitude	2-D (635 (ntrack) x 4 (npixels))
Longitude	2-D (635 (ntrack) x 4 (npixels))
Time	1-D (635)

DataFieldName	#Dimension (DimList)
Solar Zenith	2-D (635 (ntrack) x 4 (npixels))
Solar Azimuth	2-D (635 (ntrack) x 4 (npixels))
MOPITT Radiances	4-D (635 (ntrack) x 4 (npixels) x 8 (nchan) x 6 (nstate))
Engineering Data	3-D (635 (ntrack) x 34 (nengpoints) x 2(neng))

- FILENAME:** MOP02-20000303-L2V5.7.1.val.hdf (ftp link: [here](#)) (Filesize=62.0MB)

It is a swath file with 1 group, 0 V-datasets and 0 dimension maps.

There are 7 dimension names: ntime(unlim), nprs(6), nprs2(21), nwavlen(3), nbound(1), ncoord(1), ntwo (2)

The 'Latitude' and 'Longitude' are as mentioned in the Geolocation Fields table.
The dimension size of 'Latitude' or 'longitude' are same and stored as 1D array

There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of -9999.0 is commonly used for 'Fill_Value.'

GROUP1: MOP02

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Latitude		either of 'units,' 'unit' or 'long_name' not there		
Longitude		either of 'units,' 'unit' or 'long_name' not there		
CH4 Total Column Bench 1		either of 'units,' 'unit' or 'long_name' not there		

GeoFieldName	#Dimension (DimList)
Latitude	1-D (ntime)
Longitude	1-D (ntime)
Time	1-D (ntime)

DataFieldName	#Dimension (DimList)
CO Total Column	2-D (ntime, ntwo)
CH4 Total Column Bench 1	2-D (ntime, ntwo)
CO Mixing Ratio	3-D (ntime, nprs, ntwo)
Ancillary Surface Emissivity	3-D (ntime, nwavlen, ntwo)
Aggregate Bounds	3-D (ntime, ncoord, nbound)
Retrieval Error Covariance Matrix	3-D (ntime, nprs2, ntwo)

3.

FILENAME: MOP03-20000303-L3V1.0.1.hdf (ftp link: [here](#)) (Filesize=6.0MB)

It is a grid file with 1 grid. Namely: MOP03

There are 3 dimension names: nlat(180), nlon(360), nprs(7)

The projection is GEO.

The parameter information is wrong in StructMetadata.
 Parameter 'UpperLeftPoint/LowerRight Mtrs' should be packed in degrees, minutes, seconds format (DDMMSS.SS). In this file, this parameter doesn't follow the DDMMSS.SS format. In DDMMSS.SS format, the value of UpperLeftPoint should be (-18000000.000000,9000000.000000). But in this file, the UpperLeftPointMtrs is (-180.000000,89.500000)', which only shows the degrees. This will generate the wrong latitude and longitude values if one uses the HDF-EOS2 library to retrieve the latitude and longitude values.

There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of -9999.0 is commonly used for 'Fill_Value.'

GROUP1: MOP03

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Latitude		either of 'units,' 'unit' or 'long_name' not there		
Longitude		either of 'units,' 'unit' or 'long_name' not there		
Surface Temperature Day		either of 'units,' 'unit' or 'long_name' not there		

DataFieldName	#Dimension (DimList)
Pressure Grid	1-D (nprs)

	Surface Temperature Day	2-D (nlat, nlon)
	CO Profiles Day	3-D (nlat, nlon, nprs)
	Averaging Kernel Day	4-D (nlat, nlon, nprs, nprs)