TRMM_swath

1.

FILENAME: 1B21_CSI.990906.10217.KORA.6.HDF (ftp link: here) (Filesize=3.75MB)
It is a pseudo hdf-eos2 swath file (there is no structure metadata).
It has one group, called DATA_GRANULE.
DATA_GRANULE contain two V-datasets and a group called SwathData.
SwathData contains four V-datasets (scan_time, pr_scan_status, pr_navigation, powers) and several other types of datasets. The scan_time V-data is a 1-D array of length 219.
Both latitude and longitude are stored in a 3-dimension variable 'geolocation'. Users need to retrieve latitude and longitude values individually.

SwathData

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

DataFieldName	#Dimension
systemNoise	2-D (219*49)
geolocation	3-D (219*49*2)
osBinStart	3-D (219*29*2)
normalSample	3-D (219*49*140)
osSurf	3-D (219*29*5)
osRain	3-D (219*11*28)

Other 1B21_CSI, 1C21_CSI and 1B21, 1C21 files have similar structure

2.

FILENAME: 2A25_CSI.990804.9692.KORA.6.HDF (ftp link: here) (Filesize=6.92MB)
It is a pseudo hdf-eos2 swath file (there is no structure metadata).
It has one group, called DATA_GRANULE.
DATA_GRANULE contain one V-datasets and a group called SwathData.
SwathData contains three V-datasets (scan_time, pr_scan_status, pr_navigation) and several other type of datasets. The scan_time V-data is a 1-D array of length 219.
Both latitude and longitude are stored in a 3-dimension variable 'geolocation'. Users need to retrieve latitude and longitude values individually.
There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of 0 is probably used for 'Fill_Value.'

SwathData

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

DataFieldName	#Dimension
scLocalZenith	2-D (219*49)
geolocation	3-D (219*49*2)
rain	3-D (219*49*80)
attenParmAlpha	3-D (219*49*5)
rangeBinNum	3-D (219*49*7)
pia	3-D (219*49*3)

	Other 2A25_CSI, 2A25 files have similar structure

3.

	FILENAME: 2B31_CSI.990911.10296.KORA.6.HDF (ftp link: here) (Filesize=4.41MB)
	It is a pseudo hdf-eos2 swath file (there is no structure metadata).
	It has one group, called DATA_GRANULE.
	DATA_GRANULE contains a group called SwathData.
	SwathData contains three V-datasets (scan_time, pr_scan_status, pr_navigation) and several other type of datasets. The scan_time V-data is a 1-D array of length 219.
	Both latitude and longitude are stored in a 3-dimension variable 'geolocation'. Users need to retrieve latitude and longitude values individually.
	There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of 0 is probably used for 'Fill_Value.'

SwathData

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

DataFieldName	#Dimension
dHat	2-D (219*49)
geolocation	3-D (219*49*2)
rHat	3-D (219*49*80)
latentHeatHH	3-D (219*49*13)
spare	3-D (219*49*4)

	Other 2B31_CSI, 2B31 files have similar structure

4.

	FILENAME: 2A12.100402.70512.6.HDF (ftp link: here) (Filesize=98.4MB)
	It is a pseudo hdf-eos2 swath file (there is no structure metadata).
	It has one group, called DATA_GRANULE.
	DATA_GRANULE contains a group called SwathData.
	SwathData contains three V-datasets (scan_time, pr_scan_status, pr_navigation) and several other type of datasets. The scan_time V-data is a 1-D array of length 219.
	Both latitude and longitude are stored in a 3-dimension variable 'geolocation'. Users need to retrieve latitude and longitude values individually.
	There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of 0 is probably used for 'Fill_Value.'

SwathData

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

DataFieldName	#Dimension
dHat	2-D (219*49)
geolocation	3-D (219*49*2)
rHat	3-D (219*49*80)
latentHeatHH	3-D (219*49*13)
spare	3-D (219*49*4)

	Other 2A12 files have similar structure

TRMM_grid

5.

	FILENAME: 3A46.080101.2.HDF (ftp link: here) (Filesize=529.0KB)
	It is a pseudo hdf-eos2 grid file (there is no structure metadata).
	It has one group, called DATA_GRANULE.
	DATA_GRANULE contain a group called PlanetaryGrid.
	The informaiton of latitude and longitude can only be found from: http://disc.sci.gsfc.nasa.gov/precipitation/documentation/TRMM_README/TRMM_3A46_readme.shtml
	There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of -9999 is used for 'Fill_Value.'

PlanetaryGrid

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

DataFieldName	#Dimension
ssmiData	4-D (1*2*180*360)

6.

	FILENAME: 3B43.070901.6A.HDF (ftp link: here) (Filesize=4.41MB)
	It is a pseudo hdf-eos2 grid file (there is no structure metadata).
	It has one group, called DATA_GRANULE.
	DATA_GRANULE contain a group called PlanetaryGrid.
	The informaiton of latitude and longitude can only be found from: http://disc.sci.gsfc.nasa.gov/precipitation/documentation/TRMM_README/TRMM_3A46_readme.shtml

PlanetaryGrid

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

DataFieldName	#Dimension
precipitation	3-D (1*1440*400)

	Other 3B43 and 3B42 files have similar structure

7.

	FILENAME: CSH.070901.6.HDF (ftp link: here) (Filesize=7.74MB)
	It is a pseudo hdf-eos2 grid file (there is no structure metadata).
	It has one group, called DATA_GRANULE.
	DATA_GRANULE contain a group called PlanetaryGrid.
	The users are not able to find latitude and longitude information from the file.
	There is neither a 'Fill_Value' attribute nor a 'missing value' attribute. A value of -9999 is used for 'Fill_Value.'

PlanetaryGrid

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

	DataFieldName	#Dimension
	LatentHeating	4-D (1*19*720*148)
TRMM_HDF4		
8.	FILENAME: TRMM_LIS_SC.04.1_1998.002.00555.hdf (ftp link: here) (Filesize=1.1MB)	
	It is a HDF4 special file, which includes point and image.	
	Other TRMM_LIS_SC files have similar structure	