MADRAS	L1A

Estimated Size	for typical [Number_of_Scans]
72.475 Mb	[2467]

Science data group associated attributes

ScienceData

	Attributes			
Index	Name	Value	Type	Size
#1	Product_Identification	MT1MADSL1A__1.00_9_01_I_2012_05_09_0000	H5T_C_S1	84
#2	Organization_Name	ISRO	H5T_C_S1	5
#3	Property_of_data	ISRO_ and_CNES	H5T_C_S1	15
#4	Satellite_Name	MEGHA-TROPIQUES	H5T_C_S1	16
#5	Payload_Name	MADRAS	H5T_C_S1	12
#6	Product_Name	Level-1A-segment wise	H5T_C_S1	35
#7	Product_Format	NCSA-HDF	H5T_C_S1	9
#8	Product_Format_Version	HDF5.1.6.4	H5T_C_S1	11
#9	Product_Generation_Date	2012MAI09	H5T_C_S1	10
#10	Imaging_Date	2012MAI09	H5T_C_S1	10
#11	Date_Format	YYYYMMMDD	H5T_C_S1	10
#12	INS_AuxFile_Version	9_01	H5T_C_S1	5
#13	PRO_AuxFile_Version	9_01	H5T_C_S1	5
#14	RAD_AuxFile_Version	9_01	H5T_C_S1	5
#15	GEO_AuxFile_Version	9_01	H5T_C_S1	5
#16	PCS_AuxFile_Version	9_01	H5T_C_S1	5
#17	SLC_AuxFile_Version	9_01	H5T_C_S1	5
#18	GRB_AuxFile_Version	9_01	H5T_C_S1	5
#19	UCS_AuxFile_Version	9_01	H5T_C_S1	5
#20	Number_of_Channels	9	H5T_C_S1	8
#21	Channel_CentralFrequency	18.7GHz 18.7GHz 23.8GHz 36.5GHz 36.5GHz	H5T_C_S1	74
#22	Channel_Polarization	H V V H V H V H V	H5T_C_S1	18
#23	Channel_Bandwith	100MHz 100MHz 200MHz 500MHz 500MHz 13	H5T_C_S1	67
#24	Number_of_Resolutions	3	H5T_C_S1	8
#25	ChannelList_LF	18.7GHz 23.8GHz 36.5GHz	H5T_C_S1	24
#26	ChannelList_MF	89.0GHz	H5T_C_S1	8
#27	ChannelList_HF	157.0GHz	H5T_C_S1	9
#28	Sample_Size_LF[Across, Along]	[40.00,67.25]km	H5T_C_S1	16
#29	Sample_Size_MF[Across, Along]	[10.00,16.81]km	H5T_C_S1	16
#30	Sample_Size_HF[Across, Along]	[6.0,10.1]km	H5T_C_S1	13
#31	SunGlint_Limits	[0,30]degree	H5T_C_S1	13
#32	Orbit_StartNumber	00001	H5T_C_S1	19
#33	Orbit_EndNumber	00001	H5T_C_S1	17
#34	Orbit_Cycle_Number	01	H5T_C_S1	3
#35	SLConf	100001	H5T_C_S1	7
#36	Nskip	0005	H5T_C_S1	5
#37	ProcessorVersion	1.00	H5T_C_S1	5

#38	MADRAS_QF_Scan_Definition	16-bits array (=0:good, =1:bad) : #15:Scan/row validity flag, #14:pass type , #13:scanning type , #12:scan/row error , #11:datation error , #10:PRT error , #9:encoder error , #8 madras correction flag #7 to 6 blank , # 5 to 3:Payload mod , #2 to 0 :Satellite mod	H5T_C_S1	16x24
#39	MADRAS_QF_Sample_Definition	16-bits array (=0:good / =1:bad):, #15:TB va	H5T_C_S1	16x24
#40	Skip_StartScanNumber	[00000064,00000165,00000266,00000367,00	H5T_C_S1	1*Nskip
#41	Skip_EndScanNumber	[00000066,00000167,00000268,00000370,00	H5T_C_S1	1*Nskip
#42	Flip_StartScanNumber	00000012	H5T_C_S1	9
#43	Flip_EndScanNumber	00000042	H5T_C_S1	9
#44	Maneuver_StartScanNumber	00000011	H5T_C_S1	9
#45	Maneuver_EndScanNumber	00000043	H5T_C_S1	9
#46	FirstScanNumber	00000000	H5T_C_S1	8
#47	Time_Sample_Interval_LF	2	H5T_C_S1	4
#48	Time_Sample_Interval_MF	2	H5T_C_S1	4
#49	Time_Sample_Interval_HF	1	H5T_C_S1	4
#50	Number_of_Samples_LF	480	H5T_C_S1	8
#51	Number_of_Samples_MF	480	H5T_C_S1	8
#52	Number_of_Samples_HF	960	H5T_C_S1	8
#53	ValidEarthSamplesIndex_LF	[012,469]	H5T_C_S1	10
#54	ValidEarthSamplesIndex_MF	[016,466]	H5T_C_S1	10
#55	ValidEarthSamplesIndex_HF	[031,930]	H5T_C_S1	10
#56	Number_of_Scans	00002467	H5T_C_S1	8
#57	QF_Product_%Processed_Scans	099	H5T_C_S1	4

Science data group elements

Estimated size of dataset [Mb]	Index	Name	Type	Typical Value	
0.005		MADRAS_QF_scan	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
	#1	long_name	Quality flag applicable to the scan line	H5T_C_S1	41
			16-bits array (=0:good, =1:bad) : #15:Scan/row validity flag, #14:pass type , #13:scanning type , #12:scan/row error , #11:datation error , #10:PRT error , #9:encoder error , #8 madras correction flag #7 to 6 blank , # 5 to 3:Payload mod , #2 to 0 :Satellite mod		
		comment		H5T_C_S1	29

		Name	Value	Type	Size
		dimension_label	Number_of_Scans	H5T_C_S1	16
		geolocation_label	Scan_FirstSampleAcqTime_LF	H5T_C_S1	54
0.005	#2	Scan_Number	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	Scan Number	H5T_C_S1	12
		valid_range	[0,65535]	H5T_C_S1	10
		min_max	[0,65535]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	scan number from the first scan of the product	H5T_C_S1	47
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.005	#3	Latitude_Nadir	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	latitude of subsatellite point	H5T_C_S1	31
		standard_name	latitude	H5T_C_S1	9
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	-40.0	H5T_C_S1	6
		valid_range	[-40.0,40.0]	H5T_C_S1	13
		min_max	[0,8000]	H5T_C_S1	9
		_FillValue	65535	H5T_C_S1	6
		comment	accuracy 1km	H5T_C_S1	13
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.005	#4	Longitude_Nadir	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	longitude of subsatellite point	H5T_C_S1	32
		standard_name	longitude	H5T_C_S1	10
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,360.0]	H5T_C_S1	12
		min_max	[0,36000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.005	#5	Scan_HotLoadTemperature	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	Hot load temperature	H5T_C_S1	21
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,400.0]	H5T_C_S1	12
		min_max	[0,40000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	Estimated average physical temperature of the hot load used for TB calculation	H5T_C_S1	79
		dimension_label	Number_of_Scans	H5T_C_S1	16
		geolocation_label	Scan_FirstSampleAcqTime_LF	H5T_C_S1	54

		Name	Value	Type	Size
0.085		Scan_Gain	H5T_IEEE_F32LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Estimated gain	H5T_C_S1	15
		units	count/K	H5T_C_S1	8
		scale_factor	1.0	H5T_C_S1	4
		add_offset	0.0	H5T_C_S1	4
	#6	valid_range	[5.0,13.0]	H5T_C_S1	21
		min_max	[5.0,13.0]	H5T_C_S1	21
		_FillValue	3.4E38	H5T_C_S1	7
		comment	Estimated gain value applied to TB calculation for each channels in the following sequence: 18.7H, 18.7V, 23.8 V,36.5H, 36.5V, 89.0H, 89.0V, 157.0H, 157.0V	H5T_C_S1	124
		dimension_label	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.085		Scan_Offset	H5T_IEEE_F32LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Estimated offset	H5T_C_S1	17
		units	Kelvin	H5T_C_S1	7
		scale_factor	1.0	H5T_C_S1	4
		add_offset	0.0	H5T_C_S1	4
	#7	valid_range	[0.0,150.0]	H5T_C_S1	23
		min_max	[0.0,150.0]	H5T_C_S1	23
		_FillValue	3.4E38	H5T_C_S1	7
		comment	Estimated offset value used for TB calculation for each channels in the following sequence: 18.7H, 18.7V, 23.8 V,36.5H, 36.5V, 89.0H, 89.0V, 157.0H, 157.0V	H5T_C_S1	113
		dimension_label	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.002		Scan_FirstSampleAcqTime_LF	H5T_C_S1	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	date of the first sample	H5T_C_S1	45
	#8	standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.002		Scan_FirstSampleAcqTime_MF	H5T_C_S1	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	date of the first sample	H5T_C_S1	45
	#9	standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.002		Scan_FirstSampleAcqTime_HF	H5T_C_S1	Number_of_Scans	
	#10	Attributes			
		Name	Value	Type	Size
		long_name	date of the first sample	H5T_C_S1	45

		Name	Value	Type	Size
		standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
		dimension_label	Number_of_Scans	H5T_C_S1	16
2.259		Latitude_Samples_LF	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
	#11	long_name	latitude of low-resolution (18.7 GHz, 23.8 GHz, 36.5 GHz) samples	H5T_C_S1	77
		standard_name	latitude	H5T_C_S1	9
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	-40.0	H5T_C_S1	6
		valid_range	[-40.0,40.0]	H5T_C_S1	13
		_FillValue	65535	H5T_C_S1	6
		comment	accuracy 1km	H5T_C_S1	13
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	59
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
2.259		Latitude_Samples_MF	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
	#12	long_name	latitude of medium-resolution (89.0 GHz) samples	H5T_C_S1	77
		standard_name	latitude	H5T_C_S1	9
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	-40.0	H5T_C_S1	6
		valid_range	[-40.0,40.0]	H5T_C_S1	13
		_FillValue	65535	H5T_C_S1	6
		comment	accuracy 1km	H5T_C_S1	13
		dimension_label	Number_of_Scans, Number_of_Samples_MF	H5T_C_S1	59
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
4.517		Latitude_Samples_HF	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
	#13	long_name	latitude of high-resolution (157.0 GHz) samples	H5T_C_S1	77
		standard_name	latitude	H5T_C_S1	9
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	-40.0	H5T_C_S1	6
		valid_range	[-40.0,40.0]	H5T_C_S1	13
		_FillValue	65535	H5T_C_S1	6
		comment	accuracy 1km	H5T_C_S1	13
		dimension_label	Number_of_Scans, Number_of_Samples_HF	H5T_C_S1	59
		CLASS	IMAGE	H5T_C_S1	6

		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
2.259		Longitude_Samples_LF	H5T_STD_U16LE	Number_of_Scans›	
		Attributes			
		Name	Value	Type	Size
	#14	long_name	longitude of low-resolution (18.7 GHz, 23.8 GHz, 36.5 GHz) samples	H5T_C_S1	78
		standard_name	longitude	H5T_C_S1	10
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,360.0]	H5T_C_S1	12
		FillValue	65535	H5T_C_S1	6
		comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	59
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,36000]	H5T_STD_U16LE	4
2.259		Longitude_Samples_MF	H5T_STD_U16LE	Number_of_Scans›	
		Attributes			
		Name	Value	Type	Size
	#15	long_name	longitude of medium-resolution (89.0 GHz) samples	H5T_C_S1	78
		standard_name	longitude	H5T_C_S1	10
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,360.0]	H5T_C_S1	12
		FillValue	65535	H5T_C_S1	6
		comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
		dimension_label	Number_of_Scans, Number_of_Samples_MF	H5T_C_S1	59
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,36000]	H5T_STD_U16LE	4
4.517		Longitude_Samples_HF	H5T_STD_U16LE	Number_of_Scans›	
		Attributes			
		Name	Value	Type	Size
	#16	long_name	longitude of high-resolution (157.0 GHz) samples	H5T_C_S1	78
		standard_name	longitude	H5T_C_S1	10
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,360.0]	H5T_C_S1	12
		FillValue	65535	H5T_C_S1	6
		comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
		dimension_label	Number_of_Scans, Number_of_Samples_HF	H5T_C_S1	59
		CLASS	IMAGE	H5T_C_S1	6

		Name	Value	Type	Size
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,36000]	H5T_STD_U16LE	4
1.129		IncidenceAngle_Samples_LF	H5T_STD_I8LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Incidence angle at the center of samples	H5T_C_S1	52
		standard_name	incidence_angle	H5T_C_S1	16
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
	#17	add_offset	53.0	H5T_C_S1	5
		valid_range	[51.72,54.27]	H5T_C_S1	14
		_FillValue	127	H5T_C_S1	4
		comment	angle between zenith and line of sight	H5T_C_S1	39
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	59
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
1.129		IncidenceAngle_Samples_MF	H5T_STD_I8LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Incidence angle at the center of samples	H5T_C_S1	52
		standard_name	incidence_angle	H5T_C_S1	16
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
	#18	add_offset	53.0	H5T_C_S1	5
		valid_range	[51.72,54.27]	H5T_C_S1	14
		_FillValue	127	H5T_C_S1	4
		comment	angle between zenith and line of sight	H5T_C_S1	39
		dimension_label	Number_of_Scans, Number_of_Samples_MF	H5T_C_S1	59
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
2.259		IncidenceAngle_Samples_HF	H5T_STD_I8LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Incidence angle at the center of samples	H5T_C_S1	52
		standard_name	incidence_angle	H5T_C_S1	16
		units	degrees	H5T_C_S1	8
	#19	scale_factor	0.01	H5T_C_S1	5
		add_offset	53.0	H5T_C_S1	5
		valid_range	[51.72,54.27]	H5T_C_S1	14
		_FillValue	127	H5T_C_S1	4
		comment	angle between zenith and line of sight	H5T_C_S1	39
		dimension_label	Number_of_Scans, Number_of_Samples_HF	H5T_C_S1	59
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78

		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
2.259		TB_Samples_18.7_H	H5T_STD_U16LE	Number_of_Scans›	
		Attributes			
		Name	Value	Type	Size
		long_name	Samples brightness temperatures at 18.7_H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
	#20	_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Samples_18.7_H	H5T_C_S1	44
		comment	TB estimated from raw instrumental measurements (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
2.259		TB_Samples_18.7_V	H5T_STD_U16LE	Number_of_Scans›	
		Attributes			
		Name	Value	Type	Size
		long_name	Samples brightness temperatures at 18.7_V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
	#21	_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Samples_18.7_V	H5T_C_S1	44
		comment	TB estimated from raw instrumental measurements (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
2.259		TB_Samples_23.8_V	H5T_STD_U16LE	Number_of_Scans›	
		Attributes			
	#22	Name	Value	Type	Size
		long_name	Samples brightness temperatures at 23.8_V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7

		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Samples_23.8_V	H5T_C_S1	44
		comment	TB estimated from raw instrumental measurements (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
2.259		**TB_Samples_36.5_H**	**H5T_STD_U16LE**	**Number_of_Scans**	
		Attributes			
		Name	*Value*	*Type*	*Size*
		long_name	Samples brightness temperatures at 36.5_H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
	#23	quality_flag	QF__Samples_36.5_H	H5T_C_S1	44
		comment	TB estimated from raw instrumental measurements (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
2.259		**TB_Samples_36.5_V**	**H5T_STD_U16LE**	**Number_of_Scans**	
		Attributes			
		Name	*Value*	*Type*	*Size*
		long_name	Samples brightness temperatures at 36.5_V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
	#24	add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Samples_36.5_V	H5T_C_S1	44
		comment	TB estimated from raw instrumental measurements (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56

		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4

2.259		TB_Samples_89.0_H	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Samples brightness temperatures at 89.0_H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
	#25	_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Samples_89.0_H	H5T_C_S1	44
		comment	TB estimated from raw instrumental measurements (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Samples_MF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_MF, Longitude_Samples_MF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
2.259		TB_Samples_89.0_V	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Samples brightness temperatures at 89.0_V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
	#26	_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Samples_89.0_V	H5T_C_S1	44
		comment	TB estimated from raw instrumental measurements (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Samples_MF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_MF, Longitude_Samples_MF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
4.517		TB_Samples_157.0_H	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
	#27	Name	Value	Type	Size
		long_name	Samples brightness temperatures at 157.0_H	H5T_C_S1	53

		Name	Value	Type	Size
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Samples_157.0_H	H5T_C_S1	44
		comment	TB estimated from raw instrumental measurements (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Samples_HF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_HF, Longitude_Samples_HF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
4.517	#28	TB_Samples_157.0_V	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Samples brightness temperatures at 157.0 V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Samples_157.0_V	H5T_C_S1	44
		comment	TB estimated from raw instrumental measurements (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Samples_HF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_HF, Longitude_Samples_HF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
2.259	#29	QF_Samples_18.7_H	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of sample for channel 18.7_H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1

		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
2.259		QF_Samples_18.7_V	H5T_STD_U16LE	Number_of_Scans⟩	
	#30	Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of sample for channel 18.7 V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
2.259		QF_Samples_23.8_V	H5T_STD_U16LE	Number_of_Scans⟩	
	#31	Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of sample for channel 23.8 V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
2.259		QF_Samples_36.5_H	H5T_STD_U16LE	Number_of_Scans⟩	
	#32	Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of sample for channel 36.5 H	H5T_C_S1	71

		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4

2.259		QF_Samples_36.5_V	H5T_STD_U16LE	Number_of_Scans⟩
		Attributes		
		Name	Value	Type	Size
	#33	long_name	Quality Flag of sample for channel 36.5 V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Samples_LF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_LF, Longitude_Samples_LF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4

2.259		QF_Samples_89.0_H	H5T_STD_U16LE	Number_of_Scans⟩
		Attributes		
		Name	Value	Type	Size
	#34	long_name	Quality Flag of sample for channel 89.0 _H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1

		dimension_label	Number_of_Scans, Number_of_Samples_MF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_MF, Longitude_Samples_MF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
2.259		QF_Samples_89.0_V	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of sample for channel 89.0_V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#35	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Samples_MF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_MF, Longitude_Samples_MF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
4.517		QF_Samples_157.0_H	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of sample for channel 157.0_H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#36	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Samples_HF	H5T_C_S1	56
		geolocation_label	Latitude_Samples_HF, Longitude_Samples_HF	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
4.517		QF_Samples_157.0_V	H5T_STD_U16LE	Number_of_Scans>	
	#37	Attributes			
		Name	Value	Type	Size

long_name	Quality Flag of sample for channel 157.0_V	H5T_C_S1	71
standard_name	quality flag	H5T_C_S1	13
comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
dimension_label	Number_of_Scans, Number_of_Samples_HF	H5T_C_S1	56
geolocation_label	Latitude_Samples_HF, Longitude_Samples_HF	H5T_C_S1	78
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4

MADRAS	L1A2

Estimated Size	for typical [Number_of_Scans]
21.850 Mb	[2467]

Science data group associated attributes

ScienceData

	Attributes			
Index	Name	Value	Type	Size
#1	Product_Identification	MT1MADSL1A2__1.00_9_01_I_2012_05_09_000	H5T_C_S1	84
#2	Organization_Name	ISRO	H5T_C_S1	5
#3	Property_of_data	ISRO_ and_CNES	H5T_C_S1	15
#4	Satellite_Name	MEGHA-TROPIQUES	H5T_C_S1	16
#5	Payload_Name	MADRAS	H5T_C_S1	12
#6	Product_Name	Level-1A2-segment wise	H5T_C_S1	35
#7	Product_Format	NCSA-HDF	H5T_C_S1	9
#8	Product_Format_Version	HDF5.1.6.4	H5T_C_S1	11
#9	Product_Generation_Date	2012MAI09	H5T_C_S1	10
#10	Imaging_Date	2012MAI09	H5T_C_S1	10
#11	Date_Format	YYYYMMMDD	H5T_C_S1	10
#12	INS_AuxFile_Version	9_01	H5T_C_S1	5
#13	PRO_AuxFile_Version	9_01	H5T_C_S1	5
#14	RAD_AuxFile_Version	9_01	H5T_C_S1	5
#15	GEO_AuxFile_Version	9_01	H5T_C_S1	5
#16	PCS_AuxFile_Version	9_01	H5T_C_S1	5
#17	SLC_AuxFile_Version	9_01	H5T_C_S1	5
#18	GRB_AuxFile_Version	9_01	H5T_C_S1	5
#19	UCS_AuxFile_Version	9_01	H5T_C_S1	5
#20	Number_of_Channels	9	H5T_C_S1	8
#21	Channel_CentralFrequency	18.7GHz 18.7GHz 23.8GHz 36.5GHz 36.5GHz	H5T_C_S1	74
#22	Channel_Polarization	H V V H V H V H V	H5T_C_S1	18
#23	Channel_Bandwith	100MHz 100MHz 200MHz 500MHz 500MHz 13	H5T_C_S1	67
#24	Number_of_Resolutions	3	H5T_C_S1	8
#25	ChannelList_LF	18.7GHz 23.8GHz 36.5GHz	H5T_C_S1	24
#26	ChannelList_MF	89.0GHz	H5T_C_S1	8
#27	ChannelList_HF	157.0GHz	H5T_C_S1	9
#28	Pixel_Size_LF	[40.00,67.25]km	H5T_C_S1	16
#29	Pixel_Size_MF	[10.00,16.81]km	H5T_C_S1	16
#30	Pixel_Size_HF	[6.0,10.1]km	H5T_C_S1	13
#31	SunGlint_Limits	[0,30]degree	H5T_C_S1	13
#32	Orbit_StartNumber	00001	H5T_C_S1	19
#33	Orbit_EndNumber	00001	H5T_C_S1	17
#34	Orbit_Cycle_Number	01	H5T_C_S1	3
#35	SLConf	100001	H5T_C_S1	7
#36	Nskip	0005	H5T_C_S1	5
#37	ProcessorVersion	1.00	H5T_C_S1	5

Index	Name	Definition	Type	Size
#38	MADRAS_QF_Scan_Definition	16-bits array (=0:good, =1:bad) : #15:Scan/row validity flag, #14:pass type , #13:scanning type , #12:scan/row error , #11:datation error , #10:PRT error , #9:encoder error , #8 madras correction flag #7 to 6 blank , # 5 to 3:Payload mod , #2 to 0 :Satellite mod	H5T_C_S1	16x24
#39	MADRAS_QF_Pixel_Definition	16-bits array (=0:good / =1:bad):, #15:TB va	H5T_C_S1	16x24
#40	Skip_StartScanNumber	[00000064,00000165,00000266,00000367,00	H5T_C_S1	1*Nskip
#41	Skip_EndScanNumber	[00000066,00000167,00000268,00000370,00	H5T_C_S1	1*Nskip
#42	Flip_StartScanNumber	00000012	H5T_C_S1	9
#43	Flip_EndScanNumber	00000042	H5T_C_S1	9
#44	Maneuver_StartScanNumber	00000011	H5T_C_S1	9
#45	Maneuver_EndScanNumber	00000043	H5T_C_S1	9
#46	FirstScanNumber	00000000	H5T_C_S1	8
#47	Time_Pixel_Interval	4.2	H5T_C_S1	4
#48	Number_of_Pixels	214	H5T_C_S1	8
#49	Number_of_Scans	00002467	H5T_C_S1	8
#50	QF_Product_%Processed_Scans	099	H5T_C_S1	4

Science data group elements

Estimated size of dataset [Mb]	Index	Name	Type	Typical Value	
0.005		MADRAS_QF_scan	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	*Value*	*Type*	*Size*
		long_name	Quality flag applicable to the scan line	H5T_C_S1	41
	#1		16-bits array (=0:good, =1:bad) : #15:Scan/row validity flag, #14:pass type , #13:scanning type , #12:scan/row error , #11:datation error , #10:PRT error , #9:encoder error , #8 madras correction flag #7 to 6 blank , # 5 to 3:Payload mod , #2 to 0 :Satellite mod		
		comment		H5T_C_S1	29
		dimension_label	Number_of_Scans	H5T_C_S1	16
		geolocation_label	Scan_FirstPixelAcqTime	H5T_C_S1	54
0.005		Scan_Number	H5T_STD_U16LE	Number_of_Scans	
	#2	*Attributes*			
		Name	*Value*	*Type*	*Size*
		long_name	Scan Number	H5T_C_S1	12
		valid_range	[0,65535]	H5T_C_S1	10

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		Name	Value	Type	Size
		min_max	[0,65535]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	scan number from the first scan of the product	H5T_C_S1	47
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.005		Latitude_Nadir	H5T_STD_U16LE	Number_of_Scans	
	#3	Attributes			
		Name	Value	Type	Size
		long_name	latitude of subsatellite point	H5T_C_S1	31
		standard_name	latitude	H5T_C_S1	9
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	-40.0	H5T_C_S1	6
		valid_range	[-40.0,40.0]	H5T_C_S1	13
		min_max	[0,8000]	H5T_C_S1	9
		_FillValue	65535	H5T_C_S1	6
		comment	accuracy 1km	H5T_C_S1	13
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.005		Longitude_Nadir	H5T_STD_U16LE	Number_of_Scans	
	#4	Attributes			
		Name	Value	Type	Size
		long_name	longitude of subsatellite point	H5T_C_S1	32
		standard_name	longitude	H5T_C_S1	10
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,360.0]	H5T_C_S1	12
		min_max	[0,36000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.005		Scan_HotLoadTemperature	H5T_STD_U16LE	Number_of_Scans	
	#5	Attributes			
		Name	Value	Type	Size
		long_name	Hot load temperature	H5T_C_S1	21
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,400.0]	H5T_C_S1	12
		min_max	[0,40000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	Estimated average physical temperature of the hot load used for TB calculation	H5T_C_S1	79
		dimension_label	Number_of_Scans	H5T_C_S1	16
		geolocation_label	Scan_FirstPixelAcqTime	H5T_C_S1	54
0.085		Scan_Gain	H5T_IEEE_F32LE	Number_of_Scans>	
	#6	Attributes			
		Name	Value	Type	Size
		long_name	Estimated gain	H5T_C_S1	15
		units	count/K	H5T_C_S1	8
		scale_factor	1.0	H5T_C_S1	4
		add_offset	0.0	H5T_C_S1	4

		Name	Value	Type	Size
		valid_range	[5.0,13.0]	H5T_C_S1	21
		min_max	[5.0,13.0]	H5T_C_S1	21
		_FillValue	3.4E38	H5T_C_S1	7
		comment	Estimated gain value applied to TB calculation for each channels in the following sequence: 18.7H, 18.7V, 23.8V,36.5H, 36.5V, 89.0H, 89.0V, 157.0H, 157.0V	H5T_C_S1	124
		dimension_label	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.085	#7	Scan_Offset	H5T_IEEE_F32LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Estimated offset	H5T_C_S1	17
		units	Kelvin	H5T_C_S1	7
		scale_factor	1.0	H5T_C_S1	4
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,150.0]	H5T_C_S1	23
		min_max	[0.0,150.0]	H5T_C_S1	23
		_FillValue	3.4E38	H5T_C_S1	7
		comment	Estimated offset value used for TB calculation for each channels in the following sequence: 18.7H, 18.7V, 23.8V,36.5H, 36.5V, 89.0H, 89.0V, 157.0H, 157.0V	H5T_C_S1	113
		dimension_label	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.002	#8	Scan_FirstPixelAcqTime_LF	H5T_C_S1	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	date of the first pixel	H5T_C_S1	45
		standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.002	#9	Scan_FirstPixelAcqTime_MF	H5T_C_S1	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	date of the first pixel	H5T_C_S1	45
		standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.002	#10	Scan_FirstPixelAcqTime_HF	H5T_C_S1	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	date of the first pixel	H5T_C_S1	45
		standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
		dimension_label	Number_of_Scans	H5T_C_S1	16
1.007	#11	Latitude_Pixels	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			

Name	Value	Type	Size
long_name	latitude of pixels	H5T_C_S1	77
standard_name	latitude	H5T_C_S1	9
units	degrees	H5T_C_S1	8
scale_factor	0.01	H5T_C_S1	5
add_offset	-40.0	H5T_C_S1	6
valid_range	[-40.0,40.0]	H5T_C_S1	13
_FillValue	65535	H5T_C_S1	6
comment	accuracy 1km	H5T_C_S1	13
dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4

1.007 — #12

Longitude_Pixels	H5T_STD_U16LE	Number_of_Scans⟩

Attributes

Name	Value	Type	Size
long_name	longitude of pixels	H5T_C_S1	78
standard_name	longitude	H5T_C_S1	10
units	degrees	H5T_C_S1	8
scale_factor	0.01	H5T_C_S1	5
add_offset	0.0	H5T_C_S1	4
valid_range	[0.0,360.0]	H5T_C_S1	12
_FillValue	65535	H5T_C_S1	6
comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[0,36000]	H5T_STD_U16LE	4

0.503 — #13

IncidenceAngle_Pixels_LF	H5T_STD_I8LE	Number_of_Scans⟩

Attributes

Name	Value	Type	Size
long_name	Incidence angle at the center of pixels	H5T_C_S1	52
standard_name	incidence_angle	H5T_C_S1	16
units	degrees	H5T_C_S1	8
scale_factor	0.01	H5T_C_S1	5
add_offset	53.0	H5T_C_S1	5
valid_range	[51.72,54.27]	H5T_C_S1	14
_FillValue	127	H5T_C_S1	4
comment	angle between zenith and line of sight	H5T_C_S1	39
dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2

0.503 — #14

IncidenceAngle_Pixels_MF	H5T_STD_I8LE	Number_of_Scans⟩

Attributes

Name	Value	Type	Size
long_name	Incidence angle at the center of pixels	H5T_C_S1	52
standard_name	incidence_angle	H5T_C_S1	16
units	degrees	H5T_C_S1	8
scale_factor	0.01	H5T_C_S1	5
add_offset	53.0	H5T_C_S1	5

		Name	Value	Type	Size
		valid_range	[51.72,54.27]	H5T_C_S1	14
		_FillValue	127	H5T_C_S1	4
		comment	angle between zenith and line of sight	H5T_C_S1	39
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
0.503		IncidenceAngle_Pixels_HF	H5T_STD_I8LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Incidence angle at the center of pixels	H5T_C_S1	52
		standard_name	incidence_angle	H5T_C_S1	16
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
	#15	add_offset	53.0	H5T_C_S1	5
		valid_range	[51.72,54.27]	H5T_C_S1	14
		_FillValue	127	H5T_C_S1	4
		comment	angle between zenith and line of sight	H5T_C_S1	39
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
1.007		TB_Pixels_18.7_H	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 18.7 H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
	#16	valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_18.7_H	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_18.7_V	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
	#17	long_name	Pixels brightness temperatures at 18.7 V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8

		Name	Value	Type	Size
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_18.7_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_23.8_V	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
	#18	long_name	Pixels brightness temperatures at 23.8_V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_23.8_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_36.5_H	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
	#19	long_name	Pixels brightness temperatures at 36.5_H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_36.5_H	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_36.5_V	H5T_STD_U16LE	Number_of_Scans>	
	#20	Attributes			
		Name	Value	Type	Size

		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 36.5 V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_36.5_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007	#21	TB_Pixels_89.0_H	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 89.0 _H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_89.0_H	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007	#22	TB_Pixels_89.0_V	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 89.0 V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_89.0_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78

		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_157.0_H	H5T_STD_U16LE	Number_of_Scans›	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 157.0_H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
	#23	valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_157.0_H	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_157.0_V	H5T_STD_U16LE	Number_of_Scans›	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 157.0_V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
	#24	valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_157.0_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		QF_Pixels_18.7_H	H5T_STD_U16LE	Number_of_Scans›	
	#25	Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 18.7_H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13

			16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag		
		comment		H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007		QF_Pixels_18.7_V	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 18.7_V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#26	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007		QF_Pixels_23.8_V	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 23.8_V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#27	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007	#28	QF_Pixels_36.5_H	H5T_STD_U16LE	Number_of_Scans⟩	

		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 36.5_H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007		QF_Pixels_36.5_V	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 36.5_V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#29	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007		QF_Pixels_89.0_H	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 89.0_H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#30	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78

		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007		QF_Pixels_89.0_V	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 89.0_V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#31	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007		QF_Pixels_157.0_H	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 157.0_H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#32	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007		QF_Pixels_157.0_V	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
	#33	Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 157.0_V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13

comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4

MADRAS	L1A3

Estimated Size	for typical [Number_of_Scans]
21.850 Mb	[2467]

Science data group associated attributes

ScienceData

		Attributes		
Index	Name	Value	Type	Size
#1	Product_Identification	MT1MADSL1A3__1.00_9_01_I_2012_05_09_000	H5T_C_S1	84
#2	Organization_Name	ISRO	H5T_C_S1	5
#3	Property_of_data	ISRO_ and_CNES	H5T_C_S1	15
#4	Satellite_Name	MEGHA-TROPIQUES	H5T_C_S1	16
#5	Payload_Name	MADRAS	H5T_C_S1	12
#6	Product_Name	Level-1A3-segment wise	H5T_C_S1	35
#7	Product_Format	NCSA-HDF	H5T_C_S1	9
#8	Product_Format_Version	HDF5.1.6.4	H5T_C_S1	11
#9	Product_Generation_Date	2012MAI09	H5T_C_S1	10
#10	Imaging_Date	2012MAI09	H5T_C_S1	10
#11	Date_Format	YYYYMMMDD	H5T_C_S1	10
#12	INS_AuxFile_Version	9_01	H5T_C_S1	5
#13	PRO_AuxFile_Version	9_01	H5T_C_S1	5
#14	RAD_AuxFile_Version	9_01	H5T_C_S1	5
#15	GEO_AuxFile_Version	9_01	H5T_C_S1	5
#16	PCS_AuxFile_Version	9_01	H5T_C_S1	5
#17	SLC_AuxFile_Version	9_01	H5T_C_S1	5
#18	GRB_AuxFile_Version	9_01	H5T_C_S1	5
#19	UCS_AuxFile_Version	9_01	H5T_C_S1	5
#20	Number_of_Channels	9	H5T_C_S1	8
#21	Channel_CentralFrequency	18.7GHz 18.7GHz 23.8GHz 36.5GHz 36.5GHz	H5T_C_S1	74
#22	Channel_Polarization	H V V H V H V H V	H5T_C_S1	18
#23	Channel_Bandwith	100MHz 100MHz 200MHz 500MHz 500MHz 13	H5T_C_S1	67
#24	Number_of_Resolutions	3	H5T_C_S1	8
#25	ChannelList_LF	18.7GHz 23.8GHz 36.5GHz	H5T_C_S1	24
#26	ChannelList_MF	89.0GHz	H5T_C_S1	8
#27	ChannelList_HF	157.0GHz	H5T_C_S1	9
#28	Pixel_Size_LF	[40.00,67.25]km	H5T_C_S1	16
#29	Pixel_Size_MF	[10.00,16.81]km	H5T_C_S1	16
#30	Pixel_Size_HF	[6.0,10.1]km	H5T_C_S1	13
#31	SunGlint_Limits	[0,30]degree	H5T_C_S1	13
#32	Orbit_StartNumber	00001	H5T_C_S1	19
#33	Orbit_EndNumber	00001	H5T_C_S1	17
#34	Orbit_Cycle_Number	01	H5T_C_S1	3
#35	SLConf	100001	H5T_C_S1	7
#36	Nskip	0005	H5T_C_S1	5
#37	ProcessorVersion	1.00	H5T_C_S1	5

#38	MADRAS_QF_Scan_Definition	16-bits array (=0:good, =1:bad) : #15:Scan/row validity flag, #14:pass type , #13:scanning type , #12:scan/row error , #11:datation error , #10:PRT error , #9:encoder error , #8 madras correction flag #7 to 6 blank , # 5 to 3:Payload mod , #2 to 0 :Satellite mod	H5T_C_S1	16x24
#39	MADRAS_QF_Pixel_Definition	16-bits array (=0:good / =1:bad):, #15:TB va	H5T_C_S1	16x24
#40	Skip_StartScanNumber	[00000064,00000165,00000266,00000367,00	H5T_C_S1	1*Nskip
#41	Skip_EndScanNumber	[00000066,00000167,00000268,00000370,00	H5T_C_S1	1*Nskip
#42	Flip_StartScanNumber	00000012	H5T_C_S1	9
#43	Flip_EndScanNumber	00000042	H5T_C_S1	9
#44	Maneuver_StartScanNumber	00000011	H5T_C_S1	9
#45	Maneuver_EndScanNumber	00000043	H5T_C_S1	9
#46	FirstScanNumber	00000000	H5T_C_S1	8
#47	Time_Pixel_Interval	4.2	H5T_C_S1	4
#48	Number_of_Pixels	214	H5T_C_S1	8
#49	Number_of_Scans	00002467	H5T_C_S1	8
#50	QF_Product_%Processed_Scans	099	H5T_C_S1	4

Science data group elements

Estimated size of dataset [Mb]	Index	Name	Type	Typical Value	
0.005		MADRAS_QF_scan	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
	#1	long_name	Quality flag applicable to the scan line	H5T_C_S1	41
			16-bits array (=0:good, =1:bad) : #15:Scan/row validity flag, #14:pass type , #13:scanning type , #12:scan/row error , #11:datation error , #10:PRT error , #9:encoder error , #8 madras correction flag #7 to 6 blank , # 5 to 3:Payload mod , #2 to 0 :Satellite mod		
		comment		H5T_C_S1	29
		dimension_label	Number_of_Scans	H5T_C_S1	16
		geolocation_label	Scan_FirstPixelAcqTime	H5T_C_S1	54
0.005	#2	Scan_Number	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	Scan Number	H5T_C_S1	12
		valid_range	[0,65535]	H5T_C_S1	10

		Name	Value	Type	Size
		min_max	[0,65535]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	scan number from the first scan of the product	H5T_C_S1	47
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.005		Latitude_Nadir	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	*Value*	*Type*	*Size*
		long_name	latitude of subsatellite point	H5T_C_S1	31
		standard_name	latitude	H5T_C_S1	9
		units	degrees	H5T_C_S1	8
	#3	scale_factor	0.01	H5T_C_S1	5
		add_offset	-40.0	H5T_C_S1	6
		valid_range	[-40.0,40.0]	H5T_C_S1	13
		min_max	[0,8000]	H5T_C_S1	9
		_FillValue	65535	H5T_C_S1	6
		comment	accuracy 1km	H5T_C_S1	13
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.005		Longitude_Nadir	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	*Value*	*Type*	*Size*
		long_name	longitude of subsatellite point	H5T_C_S1	32
		standard_name	longitude	H5T_C_S1	10
		units	degrees	H5T_C_S1	8
	#4	scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,360.0]	H5T_C_S1	12
		min_max	[0,36000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.005		Scan_HotLoadTemperature	H5T_STD_U16LE	Number_of_Scans	
		Attributes			
		Name	*Value*	*Type*	*Size*
		long_name	Hot load temperature	H5T_C_S1	21
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
	#5	add_offset	0.0	H5T_C_S1	4
		valid_range	[0.0,400.0]	H5T_C_S1	12
		min_max	[0,40000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	Estimated average physical temperature of the hot load used for TB calculation	H5T_C_S1	79
		dimension_label	Number_of_Scans	H5T_C_S1	16
		geolocation_label	Scan_FirstPixelAcqTime	H5T_C_S1	54
0.085		Scan_Gain	H5T_IEEE_F32LE	Number_of_Scans>	
		Attributes			
		Name	*Value*	*Type*	*Size*
	#6	long_name	Estimated gain	H5T_C_S1	15
		units	count/K	H5T_C_S1	8
		scale_factor	1.0	H5T_C_S1	4
		add_offset	0.0	H5T_C_S1	4

		Name	Value	Type	Size
		valid_range	[5.0,13.0]	H5T_C_S1	21
		min_max	[5.0,13.0]	H5T_C_S1	21
		_FillValue	3.4E38	H5T_C_S1	7
		comment	Estimated gain value applied to TB calculation for each channels in the following sequence: 18.7H, 18.7V, 23.8 V,36.5H, 36.5V, 89.0H, 89.0V, 157.0H, 157.0V	H5T_C_S1	124
		dimension_label	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.085		Scan_Offset	H5T_IEEE_F32LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Estimated offset	H5T_C_S1	17
		units	Kelvin	H5T_C_S1	7
		scale_factor	1.0	H5T_C_S1	4
		add_offset	0.0	H5T_C_S1	4
	#7	valid_range	[0.0,150.0]	H5T_C_S1	23
		min_max	[0.0,150.0]	H5T_C_S1	23
		_FillValue	3.4E38	H5T_C_S1	7
		comment	Estimated offset value used for TB calculation for each channels in the following sequence: 18.7H, 18.7V, 23.8 V,36.5H, 36.5V, 89.0H, 89.0V, 157.0H, 157.0V	H5T_C_S1	113
		dimension_label	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.002		Scan_FirstPixelAcqTime_LF	H5T_C_S1	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	date of the first pixel	H5T_C_S1	45
	#8	standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.002		Scan_FirstPixelAcqTime_MF	H5T_C_S1	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	date of the first pixel	H5T_C_S1	45
	#9	standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
		dimension_label	Number_of_Scans	H5T_C_S1	16
0.002		Scan_FirstPixelAcqTime_HF	H5T_C_S1	Number_of_Scans	
		Attributes			
		Name	Value	Type	Size
		long_name	date of the first pixel	H5T_C_S1	45
	#10	standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
		dimension_label	Number_of_Scans	H5T_C_S1	16
1.007	#11	Latitude_Pixels	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			

Name	Value	Type	Size
long_name	latitude of pixels	H5T_C_S1	77
standard_name	latitude	H5T_C_S1	9
units	degrees	H5T_C_S1	8
scale_factor	0.01	H5T_C_S1	5
add_offset	-40.0	H5T_C_S1	6
valid_range	[-40.0,40.0]	H5T_C_S1	13
_FillValue	65535	H5T_C_S1	6
comment	accuracy 1km	H5T_C_S1	13
dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4

1.007 #12

Longitude_Pixels	H5T_STD_U16LE	Number_of_Scans>	
Attributes			
Name	Value	Type	Size
long_name	longitude of pixels	H5T_C_S1	78
standard_name	longitude	H5T_C_S1	10
units	degrees	H5T_C_S1	8
scale_factor	0.01	H5T_C_S1	5
add_offset	0.0	H5T_C_S1	4
valid_range	[0.0,360.0]	H5T_C_S1	12
_FillValue	65535	H5T_C_S1	6
comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[0,36000]	H5T_STD_U16LE	4

0.503 #13

IncidenceAngle_Pixels_LF	H5T_STD_I8LE	Number_of_Scans>	
Attributes			
Name	Value	Type	Size
long_name	Incidence angle at the center of pixels	H5T_C_S1	52
standard_name	incidence_angle	H5T_C_S1	16
units	degrees	H5T_C_S1	8
scale_factor	0.01	H5T_C_S1	5
add_offset	53.0	H5T_C_S1	5
valid_range	[51.72,54.27]	H5T_C_S1	14
_FillValue	127	H5T_C_S1	4
comment	angle between zenith and line of sight	H5T_C_S1	39
dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2

0.503 #14

IncidenceAngle_Pixels_MF	H5T_STD_I8LE	Number_of_Scans>	
Attributes			
Name	Value	Type	Size
long_name	Incidence angle at the center of pixels	H5T_C_S1	52
standard_name	incidence_angle	H5T_C_S1	16
units	degrees	H5T_C_S1	8
scale_factor	0.01	H5T_C_S1	5
add_offset	53.0	H5T_C_S1	5

		Name	Value	Type	Size
		valid_range	[51.72,54.27]	H5T_C_S1	14
		_FillValue	127	H5T_C_S1	4
		comment	angle between zenith and line of sight	H5T_C_S1	39
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
0.503		IncidenceAngle_Pixels_HF		H5T_STD_I8LE	Number_of_Scans⟩
		Attributes			
		Name	Value	Type	Size
		long_name	Incidence angle at the center of pixels	H5T_C_S1	52
		standard_name	incidence_angle	H5T_C_S1	16
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
	#15	add_offset	53.0	H5T_C_S1	5
		valid_range	[51.72,54.27]	H5T_C_S1	14
		_FillValue	127	H5T_C_S1	4
		comment	angle between zenith and line of sight	H5T_C_S1	39
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
1.007		TB_Pixels_18.7_H		H5T_STD_U16LE	Number_of_Scans⟩
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 18.7 H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
	#16	_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_18.7_H	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_18.7_V		H5T_STD_U16LE	Number_of_Scans⟩
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 18.7 V	H5T_C_S1	53
	#17	standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8

		Name	Value	Type	Size
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_18.7_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007	#18	TB_Pixels_23.8_V	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 23.8 _V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_23.8_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007	#19	TB_Pixels_36.5_H	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 36.5 _H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_36.5_H	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007	#20	TB_Pixels_36.5_V	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size

		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 36.5 V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_36.5_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_89.0_H	H5T_STD_U16LE	Number_of_Scans×	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 89.0 _H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
	#21	valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_89.0_H	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_89.0_V	H5T_STD_U16LE	Number_of_Scans×	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 89.0 V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
	#22	add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_89.0_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78

		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_157.0_H	H5T_STD_U16LE	Number_of_Scans>	
	#23	Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 157.0_H	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_157.0_H	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		TB_Pixels_157.0_V	H5T_STD_U16LE	Number_of_Scans>	
	#24	Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 157.0_V	H5T_C_S1	53
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF__Pixels_157.0_V	H5T_C_S1	44
		comment	TB interpolated from L1A1 TB samples (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	88
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.007		QF_Pixels_18.7_H	H5T_STD_U16LE	Number_of_Scans>	
	#25	Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 18.7_H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13

			comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
			dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
			geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			CLASS	IMAGE	H5T_C_S1	6
			IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
			IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007			QF_Pixels_18.7_V	H5T_STD_U16LE	Number_of_Scans⟩
			Attributes		
			Name	Value	Type	Size
			long_name	Quality Flag of pixel for channel 18.7_V	H5T_C_S1	71
			standard_name	quality flag	H5T_C_S1	13
	#26		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
			dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
			geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			CLASS	IMAGE	H5T_C_S1	6
			IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
			IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007			QF_Pixels_23.8_V	H5T_STD_U16LE	Number_of_Scans⟩
			Attributes		
			Name	Value	Type	Size
			long_name	Quality Flag of pixel for channel 23.8_V	H5T_C_S1	71
			standard_name	quality flag	H5T_C_S1	13
	#27		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
			dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
			geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			CLASS	IMAGE	H5T_C_S1	6
			IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
			IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007	#28		QF_Pixels_36.5_H	H5T_STD_U16LE	Number_of_Scans⟩

		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 36.5_H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007		QF_Pixels_36.5_V	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 36.5_V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#29	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007		QF_Pixels_89.0_H	H5T_STD_U16LE	Number_of_Scans⟩	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 89.0_H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
	#30	comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78

		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007	#31	QF_Pixels_89.0_V	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 89.0_V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007	#32	QF_Pixels_157.0_H	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 157.0 _H	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13
		comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
		dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
		geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.007	#33	QF_Pixels_157.0_V	H5T_STD_U16LE	Number_of_Scans>	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of pixel for channel 157.0 _V	H5T_C_S1	71
		standard_name	quality flag	H5T_C_S1	13

comment	16-bits array (=0:good / =1:bad):, #15:TB validity flag, #14:sun glint , #13: Land/Sea contamination, #12: surface type, #11:Channel ON/OFF status, #10:Level 0 count error, #9 Level 0 hot or cold error , #8: geolocation poor estimation, #7-6: calibration flag, #5-4: TB corrected, #3: interpolation quality, #2: AGC/AOC loop, #1-0:ice flag	H5T_C_S1	1
dimension_label	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
geolocation_label	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4

MADRAS	L1B

Estimated Size	for typical [Number_of_Rows_5km, Number_of_Rows_10km]
76.786 Mb	[7674,3837]

Science data group associated attributes

ScienceData

		Attributes		
Index	Name	Value	Type	Size
#1	Product_Identification	MT1MADSL1B__1.00_9_01_I_2012_05_09_0000	H5T_C_S1	84
#2	Organization_Name	ISRO	H5T_C_S1	5
#3	Property_of_data	ISRO_ and_CNES	H5T_C_S1	15
#4	Satellite_Name	MEGHA-TROPIQUES	H5T_C_S1	16
#5	Payload_Name	MADRAS	H5T_C_S1	12
#6	Product_Name	Level-1B-segment wise	H5T_C_S1	35
#7	Product_Format	NCSA-HDF	H5T_C_S1	9
#8	Product_Format_Version	HDF5-1.6.4	H5T_C_S1	11
#9	Product_Generation_Date	2012MAI09	H5T_C_S1	10
#10	Imaging_Date	2012MAI09	H5T_C_S1	10
#11	Date_Format	YYYYMMMDD	H5T_C_S1	10
#12	INS_AuxFile_Version	9_01	H5T_C_S1	5
#13	PRO_AuxFile_Version	9_01	H5T_C_S1	5
#14	RAD_AuxFile_Version	9_01	H5T_C_S1	5
#15	GEO_AuxFile_Version	9_01	H5T_C_S1	5
#16	PCS_AuxFile_Version	9_01	H5T_C_S1	5
#17	SLC_AuxFile_Version	9_01	H5T_C_S1	5
#18	GRB_AuxFile_Version	9_01	H5T_C_S1	5
#19	UCS_AuxFile_Version	9_01	H5T_C_S1	5
#20	Number_of_Channels	9	H5T_C_S1	8
#21	Channel_CentralFrequency	[018.7 GHz,018.7 GHz,023.8 GHz,036.5 GHz,0	H5T_C_S1	92
#22	Channel_Polarization	[H,V,V,H,V,H,V,H,V]	H5T_C_S1	20
#23	Channel_Bandwith	[100 MHz,100 MHz,200 MHz,500 MHz,500 MH	H5T_C_S1	78
#24	Number_of_Resolutions	3	H5T_C_S1	8
#25	ChannelList_LF	[18.7 GHz, 23.8 GHz, 36.5 GHz]	H5T_C_S1	31
#26	ChannelList_MF	[89.0 GHz]	H5T_C_S1	11
#27	ChannelList_HF	[157.0 GHz]	H5T_C_S1	12
#28	GridFrequencyList_5km	[157 GHz]	H5T_C_S1	10
#29	GridFrequencyList_10km	[18.7 GHz,23.8 GHz,36.5 GHz,89.0 GHz]	H5T_C_S1	38
#30	SunGlint_Limits	[0,30]degrees	H5T_C_S1	15
#31	Orbit_StartNumber	00001	H5T_C_S1	19
#32	Orbit_EndNumber	00001	H5T_C_S1	17
#33	Orbit_Cycle_Number	01	H5T_C_S1	3
#34	SLConf	100001	H5T_C_S1	7
#35	Nskip	0005	H5T_C_S1	5
#36	ProcessorVersion	1.00	H5T_C_S1	5

#37	MADRAS_QF_Row_Definition	16-bits array (=0:good, =1:bad) : #15:Scan/row validity flag, #14:pass type , #13:scanning type , #12:scan/row error , #11:datation error , #10:PRT error , #9:encoder error , #8 madras correction flag #7 to 6 blank , # 5 to 3:Payload mod , #2 to 0 :Satellite mod	H5T_C_S1	16x24
#38	MADRAS_QF_Cell_Definition	16-bits array (=0:good / =1:bad):, #15:TB va	H5T_C_S1	16x24
#39	Skip_StartScanNumber	[00000064,00000165,00000266,00000367,00	H5T_C_S1	1*Nskip
#40	Skip_EndScanNumber	[00000066,00000167,00000268,00000370,00	H5T_C_S1	1*Nskip
#41	Flip_StartScanNumber	00000012	H5T_C_S1	9
#42	Flip_EndScanNumber	00000042	H5T_C_S1	9
#43	Maneuver_StartScanNumber	00000011	H5T_C_S1	9
#44	Maneuver_EndScanNumber	00000043	H5T_C_S1	9
#45	Number_of_Rows_5km	7674	H5T_C_S1	8
#46	Number_of_Columns_5km	361	H5T_C_S1	8
#47	Number_of_Rows_10km	3837	H5T_C_S1	8
#48	Number_of_Columns_10km	181	H5T_C_S1	8
#49	Number_of_Processed_Rows_5km	7500	H5T_C_S1	8
#50	Number_of_Processed_Rows_10k	3830	H5T_C_S1	8
#51	QF_Product_%Processed_Rows_5	099	H5T_C_S1	4
#52	QF_Product_%Processed_Rows_1	099	H5T_C_S1	4

Science data group elements

Estimated size of dataset [Mb]	Index	Name	Type	Typical Value	
0.007		Row_MADRAS_QF_10km	H5T_STD_U16LE	Number_of_Rows_	
	#1	Attributes			
		Name	Value	Type	Size
		long_name	Quality flag applicable to the row line	H5T_C_S1	40
		comment	16-bits array (=0:good, =1:bad) : #0: scan/row quality flag validity, #1: pass type, #2: Scanning type, #3: Scan/Row error out of limits, #4: datation error, #5: PRT error, #6: encoder error, #7: AGC/AOC loop, #8-9: Blank, #10-12: payload mode, #13-15: satellite mode	H5T_C_S1	274
		dimension_label	Number_of_Rows_10km	H5T_C_S1	20
		geolocation_label	Row_StartTime_10km_LF	H5T_C_S1	22
0.015	#2	Row_MADRAS_QF_5km	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality flag applicable to the row line	H5T_C_S1	40

		comment	16-bits array (=0:good, =1:bad) : #0: scan/row quality flag validity, #1: pass type, #2: Scanning type, #3: Scan/Row error out of limits, #4: datation error, #5: PRT error, #6: encoder error, #7: AGC/AOC loop, #8-9: Blank, #10-12: payload mode, #13-15: satellite mode	H5T_C_S1	274
		dimension_label	Number_of_Rows_5km	H5T_C_S1	19
		geolocation_label	Row_StartTime_5km_157	H5T_C_S1	22
0.029		Row_Number_5km	H5T_STD_U32LE	Number_of_Rows_	
	#3	Attributes			
		Name	Value	Type	Size
		long_name	Row Number (5km grid)	H5T_C_S1	29
		comment	Row Number (5km grid)	H5T_C_S1	29
		dimension_label	Number_of_Rows_5km	H5T_C_S1	26
0.015		Row_Number_10km	H5T_STD_U32LE	Number_of_Rows_	
	#4	Attributes			
		Name	Value	Type	Size
		long_name	Row Number (10km grid)	H5T_C_S1	29
		comment	Row Number (10km grid)	H5T_C_S1	29
		dimension_label	Number_of_Rows_10km	H5T_C_S1	26
0.004		Row_FirstCellAcqTime_10km_LF	H5T_C_S1	Number_of_Rows_	
	#5	Attributes			
		Name	Value	Type	Size
		long_name	date for the first cell of the row (10km grid) for LF channels	H5T_C_S1	105
		standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	32
		dimension_label	Number_of_Rows_10km	H5T_C_S1	37
0.004		Row_FirstCellAcqTime_10km_MF	H5T_C_S1	Number_of_Rows_	
	#6	Attributes			
		Name	Value	Type	Size
		long_name	date for the first cell of the row (10km grid) for MF channels	H5T_C_S1	105
		standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	32
		dimension_label	Number_of_Rows_10km	H5T_C_S1	37
0.007		Row_FirstCellAcqTime_5km_HF	H5T_C_S1	Number_of_Rows_	
	#7	Attributes			
		Name	Value	Type	Size
		long_name	date for the first cell of the row (5km grid) for HF channels	H5T_C_S1	105
		standard_name	time	H5T_C_S1	5
		units	UTC Time in microseconds	H5T_C_S1	25
		_FillValue	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
		comment	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	32
		dimension_label	Number_of_Rows_5km	H5T_C_S1	37
1.325		Cell_population_10km_18.7H	H5T_STD_U16LE	Number_of_Rows_	
	#8	Attributes			
		Name	Value	Type	Size

		Name	Value	Type	Size
		long_name	Cell population for channel 18.7	H5T_C_S1	52
		_FillValue	65535	H5T_C_S1	6
		comment	number of samples per Cell	H5T_C_S1	40
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,65535]	H5T_STD_U16LE	4
1.325		Cell_population_10km_18.7V	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Cell population for channel 18.7	H5T_C_S1	52
		_FillValue	65535	H5T_C_S1	6
	#9	comment	number of samples per Cell	H5T_C_S1	40
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,65535]	H5T_STD_U16LE	4
1.325		Cell_population_10km_23.8V	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Cell population for channel 23.8	H5T_C_S1	52
		_FillValue	65535	H5T_C_S1	6
	#10	comment	number of samples per Cell	H5T_C_S1	40
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,65535]	H5T_STD_U16LE	4
1.325		Cell_population_10km_36.5H	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Cell population for channel 36.5	H5T_C_S1	52
		_FillValue	65535	H5T_C_S1	6
	#11	comment	number of samples per Cell	H5T_C_S1	40
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,65535]	H5T_STD_U16LE	4
1.325		Cell_population_10km_36.5V	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
	#12	Name	Value	Type	Size
		long_name	Cell population for channel 36.5	H5T_C_S1	52
		_FillValue	65535	H5T_C_S1	6

		Name	Value	Type	Size
		comment	number of samples per Cell	H5T_C_S1	40
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,65535]	H5T_STD_U16LE	4
1.325		Cell_population_10km_89.0H	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Cell population for channel 89.0	H5T_C_S1	52
		_FillValue	65535	H5T_C_S1	6
	#13	comment	number of samples per Cell	H5T_C_S1	40
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,65535]	H5T_STD_U16LE	4
1.325		Cell_population_10km_89.0V	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Cell population for channel 89.0	H5T_C_S1	52
		_FillValue	65535	H5T_C_S1	6
	#14	comment	number of samples per Cell	H5T_C_S1	40
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,65535]	H5T_STD_U16LE	4
5.284		Cell_population_5km_157.0H	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Cell population for channel 157.0	H5T_C_S1	52
		_FillValue	65535	H5T_C_S1	6
	#15	comment	number of samples per Cell	H5T_C_S1	40
		dimension_label	Number_of_Rows_5km, Number_of_Columns_5km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_5km, Longitude_Cells_5km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,65535]	H5T_STD_U16LE	4
5.284		Cell_population_5km_157.0V	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
	#16	Name	Value	Type	Size
		long_name	Cell population for channel 157.0	H5T_C_S1	52
		_FillValue	65535	H5T_C_S1	6
		comment	number of samples per Cell	H5T_C_S1	40

		dimension_label	Number_of_Rows_5km, Number_of_Columns_5km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_5km, Longitude_Cells_5km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,65535]	H5T_STD_U16LE	4
5.284		Latitude_Cells_5km	H5T_STD_U16LE	Number_of_Rows_!	
		Attributes			
		Name	Value	Type	Size
		long_name	latitude of cells (5km grid)	H5T_C_S1	49
		standard_name	latitude	H5T_C_S1	9
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
	#17	add_offset	-40	H5T_C_S1	4
		valid_range	[-40,40]	H5T_C_S1	9
		min_max	[0,8000]	H5T_C_S1	9
		_FillValue	65535	H5T_C_S1	6
		comment	accuracy 1km	H5T_C_S1	13
		dimension_label	Number_of_Rows_5km, Number_of_Columns_5km	H5T_C_S1	56
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.325		Latitude_Cells_10km	H5T_STD_U16LE	Number_of_Rows_!	
		Attributes			
		Name	Value	Type	Size
		long_name	latitude of cells (10km grid)	H5T_C_S1	49
		standard_name	latitude	H5T_C_S1	9
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
	#18	add_offset	-40	H5T_C_S1	4
		valid_range	[-40,40]	H5T_C_S1	9
		min_max	[0,8000]	H5T_C_S1	9
		_FillValue	65535	H5T_C_S1	6
		comment	accuracy 1km	H5T_C_S1	13
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	56
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
5.284		Longitude_Cells_5km	H5T_STD_U16LE	Number_of_Rows_!	
		Attributes			
		Name	Value	Type	Size
		long_name	longitude of cells (5km grid)	H5T_C_S1	50
		standard_name	longitude	H5T_C_S1	10
	#19	units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,360]	H5T_C_S1	8
		min_max	[0,36000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6

		comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
		dimension_label	Number_of_Rows_5km, Number_of_Columns_5km	H5T_C_S1	56
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,36000]	H5T_STD_U16LE	4
1.325		Longitude_Cells_10km	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	longitude of cells (10km grid)	H5T_C_S1	50
		standard_name	longitude	H5T_C_S1	10
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
	#20	valid_range	[0,360]	H5T_C_S1	8
		min_max	[0,36000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		comment	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	56
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,36000]	H5T_STD_U16LE	4
0.662		IncidenceAngle_Cells_10km_LF	H5T_STD_I8LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Incidence angle at the center of the cell for LF channels	H5T_C_S1	83
		standard_name	incidence_angle	H5T_C_S1	16
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	53.0	H5T_C_S1	5
	#21	valid_range	[51.72,54.27]	H5T_C_S1	14
		_FillValue	127	H5T_C_S1	4
		comment	angle between zenith and line of sight	H5T_C_S1	39
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	78
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	84
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
0.662		IncidenceAngle_Cells_10km_MF	H5T_STD_I8LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
	#22	long_name	Incidence angle at the center of the cell for MF channels	H5T_C_S1	83
		standard_name	incidence_angle	H5T_C_S1	16
		units	degrees	H5T_C_S1	8
		scale_factor	0.01	H5T_C_S1	5
		add_offset	53.0	H5T_C_S1	5

			Name	Value	Type	Size
			valid_range	[51.72,54.27]	H5T_C_S1	14
			_FillValue	127	H5T_C_S1	4
			comment	angle between zenith and line of sight	H5T_C_S1	39
			dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	78
			geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	84
			CLASS	IMAGE	H5T_C_S1	6
			IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
			IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
2.642			IncidenceAngle_Cells_5km_HF	H5T_STD_I8LE	Number_of_Rows_!	
		Attributes				
			Name	Value	Type	Size
			long_name	Incidence angle at the center of the cell for HF channels	H5T_C_S1	83
			standard_name	incidence_angle	H5T_C_S1	16
			units	degrees	H5T_C_S1	8
			scale_factor	0.01	H5T_C_S1	5
	#23		add_offset	53.0	H5T_C_S1	5
			valid_range	[51.72,54.27]	H5T_C_S1	14
			_FillValue	127	H5T_C_S1	4
			comment	angle between zenith and line of sight	H5T_C_S1	39
			dimension_label	Number_of_Rows_5km, Number_of_Columns_5km	H5T_C_S1	78
			geolocation_label	Latitude_Cells_5km, Longitude_Cells_5km	H5T_C_S1	84
			CLASS	IMAGE	H5T_C_S1	6
			IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
			IMAGE_MINMAXRANGE	[-128,127]	H5T_STD_I8LE	2
1.325			TB_Cells_18.7_H	H5T_STD_U16LE	Number_of_Rows_!	
		Attributes				
			Name	Value	Type	Size
			long_name	Pixels brightness temperatures at 18.7H	H5T_C_S1	63
			standard_name	brightness_temperature	H5T_C_S1	23
			units	Kelvin	H5T_C_S1	7
			scale_factor	0.01	H5T_C_S1	5
			add_offset	0.0	H5T_C_S1	4
			valid_range	[0,400]	H5T_C_S1	8
			min_max	[0,40000]	H5T_C_S1	10
			_FillValue	65535	H5T_C_S1	6
	#24		quality_flag	QF_cells_18.7_H	H5T_C_S1	52
			comment	TB interpolated on all-instruments common grid (10km grid) (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	149
			dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
			geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			CLASS	IMAGE	H5T_C_S1	6
			IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
			IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.325			TB_Cells_18.7_V	H5T_STD_U16LE	Number_of_Rows_!	
	#25	Attributes				

Name	Value	Type	Size
long_name	Pixels brightness temperatures at 18.7V	H5T_C_S1	63
standard_name	brightness_temperature	H5T_C_S1	23
units	Kelvin	H5T_C_S1	7
scale_factor	0.01	H5T_C_S1	5
add_offset	0.0	H5T_C_S1	4
valid_range	[0,400]	H5T_C_S1	8
min_max	[0,40000]	H5T_C_S1	10
_FillValue	65535	H5T_C_S1	6
quality_flag	QF_cells_18.7_V	H5T_C_S1	52
comment	TB interpolated on all-instruments common grid (10km grid) (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	149
dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4

1.325

TB_Cells_23.8_V	H5T_STD_U16LE	Number_of_Rows_	
Attributes			
Name	Value	Type	Size
long_name	Pixels brightness temperatures at 23.8V	H5T_C_S1	63
standard_name	brightness_temperature	H5T_C_S1	23
units	Kelvin	H5T_C_S1	7
scale_factor	0.01	H5T_C_S1	5
add_offset	0.0	H5T_C_S1	4
valid_range	[0,400]	H5T_C_S1	8
min_max	[0,40000]	H5T_C_S1	10
_FillValue	65535	H5T_C_S1	6
quality_flag	QF_cells_23.8_V	H5T_C_S1	52
comment	TB interpolated on all-instruments common grid (10km grid) (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	149
dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
CLASS	IMAGE	H5T_C_S1	6
IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4

#26

1.325

TB_Cells_36.5_H	H5T_STD_U16LE	Number_of_Rows_	
Attributes			
Name	Value	Type	Size
long_name	Pixels brightness temperatures at 36.5H	H5T_C_S1	63
standard_name	brightness_temperature	H5T_C_S1	23
units	Kelvin	H5T_C_S1	7
scale_factor	0.01	H5T_C_S1	5
add_offset	0.0	H5T_C_S1	4
valid_range	[0,400]	H5T_C_S1	8
min_max	[0,40000]	H5T_C_S1	10
_FillValue	65535	H5T_C_S1	6

#27

		quality_flag	QF_cells_36.5_H	H5T_C_S1	52
		comment	TB interpolated on all-instruments common grid (10km grid) (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	149
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.325	#28	TB_Cells_36.5_V	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 36.5V	H5T_C_S1	63
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		min_max	[0,40000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF_cells_36.5_V	H5T_C_S1	52
		comment	TB interpolated on all-instruments common grid (10km grid) (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	149
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.325	#29	TB_Cells_89.0_H	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 89.0H	H5T_C_S1	63
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		min_max	[0,40000]	H5T_C_S1	10
		_FillValue	65535	H5T_C_S1	6
		quality_flag	QF_cells_89.0_H	H5T_C_S1	52
		comment	TB interpolated on all-instruments common grid (10km grid) (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	149
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6

		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.325		**TB_Cells_89.0_V**	**H5T_STD_U16LE**	**Number_of_Rows_**	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 89.0V	H5T_C_S1	63
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		min_max	[0,40000]	H5T_C_S1	10
	#30	_FillValue	65535	H5T_C_S1	6
		quality_flag	QF_cells_89.0_V	H5T_C_S1	52
		comment	TB interpolated on all-instruments common grid (10km grid) (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	149
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
5.284		**TB_Cells_157.0_H**	**H5T_STD_U16LE**	**Number_of_Rows_**	
		Attributes			
		Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 157.0 H	H5T_C_S1	63
		standard_name	brightness_temperature	H5T_C_S1	23
		units	Kelvin	H5T_C_S1	7
		scale_factor	0.01	H5T_C_S1	5
		add_offset	0.0	H5T_C_S1	4
		valid_range	[0,400]	H5T_C_S1	8
		min_max	[0,40000]	H5T_C_S1	10
	#31	_FillValue	65535	H5T_C_S1	6
		quality_flag	QF_cells_157.0_H	H5T_C_S1	52
		comment	TB interpolated on all-instruments common grid (5km grid) (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	149
		dimension_label	Number_of_Rows_5km, Number_of_Columns_5km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_5km, Longitude_Cells_5km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
5.284		**TB_Cells_157.0_V**	**H5T_STD_U16LE**	**Number_of_Rows_**	
		Attributes			
	#32	Name	Value	Type	Size
		long_name	Pixels brightness temperatures at 157.0 V	H5T_C_S1	63
		standard_name	brightness_temperature	H5T_C_S1	23

			Name	Value	Type	Size
			units	Kelvin	H5T_C_S1	7
			scale_factor	0.01	H5T_C_S1	5
			add_offset	0.0	H5T_C_S1	4
			valid_range	[0,400]	H5T_C_S1	8
			min_max	[0,40000]	H5T_C_S1	10
			_FillValue	65535	H5T_C_S1	6
			quality_flag	QF_cells_157.0_V	H5T_C_S1	52
			comment	TB interpolated on all-instruments common grid (5km grid) (see additionnal geometrical information in attributes of MADRAS)	H5T_C_S1	149
			dimension_label	Number_of_Rows_5km, Number_of_Columns_5km	H5T_C_S1	82
			geolocation_label	Latitude_Cells_5km, Longitude_Cells_5km	H5T_C_S1	88
			CLASS	IMAGE	H5T_C_S1	6
			IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
			IMAGE_MINMAXRANGE	[0,40000]	H5T_STD_U16LE	4
1.325			QF_Cells_18.7_H	H5T_STD_U16LE	Number_of_Rows_	
			Attributes			
			Name	*Value*	*Type*	*Size*
	#33		*long_name*	Quality Flag of cell for channel 18.7H	H5T_C_S1	84
			standard_name	quality flag	H5T_C_S1	13
			comment	16-bits array : #0:quality flag validity , #1:sun glint, #2:land/sea contamination, #3:surface type, #4:TB validity, #5:Level-0 Count Saturated, #6:Level-0 Count poor value, #7: geolocation estimation, #8:calibration failure, #9:partial calibration, #10:hot count error, #11:cold sky count error, #12:interpolation quality, #13: Blank, #14 to #15: Ice flag	H5T_C_S1	358
			dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
			geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			CLASS	IMAGE	H5T_C_S1	6
			IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
			IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.325			QF_Cells_18.7_V	H5T_STD_U16LE	Number_of_Rows_	
			Attributes			
			Name	*Value*	*Type*	*Size*
	#34		*long_name*	Quality Flag of cell for channel 18.7V	H5T_C_S1	84
			standard_name	quality flag	H5T_C_S1	13
			comment	16-bits array : #0:quality flag validity , #1:sun glint, #2:land/sea contamination, #3:surface type, #4:TB validity, #5:Level-0 Count Saturated, #6:Level-0 Count poor value, #7: geolocation estimation, #8:calibration failure, #9:partial calibration, #10:hot count error, #11:cold sky count error, #12:interpolation quality, #13: Blank, #14 to #15: Ice flag	H5T_C_S1	358

		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.325		QF_Cells_23.8_V	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of cell for channel 23.8V	H5T_C_S1	84
		standard_name	quality flag	H5T_C_S1	13
	#35	comment	16-bits array : #0:quality flag validity , #1:sun glint, #2:land/sea contamination, #3:surface type, #4:TB validity, #5:Level-0 Count Saturated, #6:Level-0 Count poor value, #7: geolocation estimation, #8:calibration failure, #9:partial calibration, #10:hot count error, #11:cold sky count error, #12:interpolation quality, #13: Blank, #14 to #15: Ice flag	H5T_C_S1	358
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.325		QF_Cells_36.5_H	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of cell for channel 36.5H	H5T_C_S1	84
		standard_name	quality flag	H5T_C_S1	13
	#36	comment	16-bits array : #0:quality flag validity , #1:sun glint, #2:land/sea contamination, #3:surface type, #4:TB validity, #5:Level-0 Count Saturated, #6:Level-0 Count poor value, #7: geolocation estimation, #8:calibration failure, #9:partial calibration, #10:hot count error, #11:cold sky count error, #12:interpolation quality, #13: Blank, #14 to #15: Ice flag	H5T_C_S1	358
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.325		QF_Cells_36.5_V	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
	#37	Name	Value	Type	Size
		long_name	Quality Flag of cell for channel 36.5V	H5T_C_S1	84
		standard_name	quality flag	H5T_C_S1	13

		comment	16-bits array : #0:quality flag validity , #1:sun glint, #2:land/sea contamination, #3:surface type, #4:TB validity, #5:Level-0 Count Saturated, #6:Level-0 Count poor value, #7: geolocation estimation, #8:calibration failure, #9:partial calibration, #10:hot count error, #11:cold sky count error, #12:interpolation quality, #13: Blank, #14 to #15: Ice flag	H5T_C_S1	358
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.325		QF_Cells_89.0_H	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of cell for channel 89.0H	H5T_C_S1	84
		standard_name	quality flag	H5T_C_S1	13
	#38	comment	16-bits array : #0:quality flag validity , #1:sun glint, #2:land/sea contamination, #3:surface type, #4:TB validity, #5:Level-0 Count Saturated, #6:Level-0 Count poor value, #7: geolocation estimation, #8:calibration failure, #9:partial calibration, #10:hot count error, #11:cold sky count error, #12:interpolation quality, #13: Blank, #14 to #15: Ice flag	H5T_C_S1	358
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
1.325		QF_Cells_89.0_V	H5T_STD_U16LE	Number_of_Rows_	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of cell for channel 89.0V	H5T_C_S1	84
		standard_name	quality flag	H5T_C_S1	13
	#39	comment	16-bits array : #0:quality flag validity , #1:sun glint, #2:land/sea contamination, #3:surface type, #4:TB validity, #5:Level-0 Count Saturated, #6:Level-0 Count poor value, #7: geolocation estimation, #8:calibration failure, #9:partial calibration, #10:hot count error, #11:cold sky count error, #12:interpolation quality, #13: Blank, #14 to #15: Ice flag	H5T_C_S1	358
		dimension_label	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82

			Latitude_Cells_10km,		
		geolocation_label	Longitude_Cells_10km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
5.284		QF_Cells_157.0_H	H5T_STD_U16LE	Number_of_Rows_!	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of cell for channel 157.0H	H5T_C_S1	84
		standard_name	quality flag	H5T_C_S1	13
	#40	comment	16-bits array : #0:quality flag validity , #1:sun glint, #2:land/sea contamination, #3:surface type, #4:TB validity, #5:Level-0 Count Saturated, #6:Level-0 Count poor value, #7: geolocation estimation, #8:calibration failure, #9:partial calibration, #10:hot count error, #11:cold sky count error, #12:interpolation quality, #13: Blank, #14 to #15: Ice flag	H5T_C_S1	358
		dimension_label	Number_of_Rows_5km, Number_of_Columns_5km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_5km, Longitude_Cells_5km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4
5.284		QF_Cells_157.0_V	H5T_STD_U16LE	Number_of_Rows_!	
		Attributes			
		Name	Value	Type	Size
		long_name	Quality Flag of cell for channel 157.0V	H5T_C_S1	84
		standard_name	quality flag	H5T_C_S1	13
	#41	comment	16-bits array : #0:quality flag validity , #1:sun glint, #2:land/sea contamination, #3:surface type, #4:TB validity, #5:Level-0 Count Saturated, #6:Level-0 Count poor value, #7: geolocation estimation, #8:calibration failure, #9:partial calibration, #10:hot count error, #11:cold sky count error, #12:interpolation quality, #13: Blank, #14 to #15: Ice flag	H5T_C_S1	358
		dimension_label	Number_of_Rows_5km, Number_of_Columns_5km	H5T_C_S1	82
		geolocation_label	Latitude_Cells_5km, Longitude_Cells_5km	H5T_C_S1	88
		CLASS	IMAGE	H5T_C_S1	6
		IMAGE_SUBCLASS	IMAGE_GRAYSCALE	H5T_C_S1	16
		IMAGE_MINMAXRANGE	[0,8000]	H5T_STD_U16LE	4