

# SAPHIR

# L1A

Estimated Size

19.664 Mb

for typical [Number\_of\_Scans]

[3736]

Science data group associated attributes

## ScienceData

Attributes

Index	Name	Value	Type	Size
#1	Product_Identification	MT1SAPSL1A_1.00_9_01_ 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	SAPHIR	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	YYYYMMDD	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	6	H5T_C_S1	8
#21	Channel_CentralFrequency	183.31+/-0.2GHz 183.31+/-1.1GHz 183.31+	H5T_C_S1	102
#22	Channel_Bandwidth	200MHz 350MHz 500MHz 700MHz 1200MHz 2	H5T_C_S1	45
#23	SunGlint_Limits	[0,30]degree	H5T_C_S1	14
#24	Orbit_StartNumber	00001	H5T_C_S1	19
#25	Orbit_EndNumber	00001	H5T_C_S1	17
#26	Orbit_Cycle_Number	01	H5T_C_S1	3
#27	SLConf	100001	H5T_C_S1	7
#28	Nskip	0005	H5T_C_S1	5
#29	ProcessorVersion	1.00	H5T_C_S1	5
#30	Sample_Size_AcrossTrack	[+22.596,+22.092,+21.611,+21.151,+20.712	H5T_C_S1	1453
#31	Sample_Size_AlongTrack	[+14.503,+14.361,+14.223,+14.090,+13.960	H5T_C_S1	1450
#32	Sample_IncidenceAngles	[+50.402,+49.786,+49.172,+48.562,+47.955	H5T_C_S1	1420
#33	SAPHIR_QF_Scan_Definition	16-bits array (=0:good/=1:bad);, #15: scan/rc	H5T_C_S1	16x24
#34	SAPHIR_QF_Sample_Definition	16-bits array (=0:good/=1:bad);, #15:TB val	H5T_C_S1	16x24
#35	Skip_StartScanNumber	[00000064,00000165,00000266,00000367,00	H5T_C_S1	1*Nskip
#36	Skip_EndScanNumber	[00000066,00000167,00000268,00000370,00	H5T_C_S1	1*Nskip
#37	Flip_StartScanNumber	00000012	H5T_C_S1	9
#38	Flip_EndScanNumber	00000042	H5T_C_S1	9
#39	Maneuver_StartScanNumber	00000011	H5T_C_S1	9

#40	Maneuver_EndScanNumber	00000043	H5T_C_S1	9
#41	FirstScanNumber	00000000	H5T_C_S1	8
#42	Time_Sample_Interval	4.576	H5T_C_S1	4
#43	Number_of_Samples	182	H5T_C_S1	8
#44	Number_of_Scans	00003736	H5T_C_S1	22
#45	QF_Product_%Processed_Scans	099	H5T_C_S1	4

Science data group elements

Estimated size of dataset [Mb]	Index	Name	Type	Typical Value	
0.007	#1	SAPHIR_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
		comment	16-bits array (=0:good/=1:bad);, #15: scan/row quality flag validity, #14: pass type, #13: Scanning type, #12: Scan/Row error, #11: datation error, #10: PRT Error, #9-8: Blank, #7: CRC Status, #6: Blank, #5-3: Payload Mode, #2-0: Satellite Mode	H5T_C_S1	250
		dimension_label	Number_of_Scans	H5T_C_S1	16
		geolocation_label	Scan_FirstSampleAcqTime	H5T_C_S1	35
0.007		#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
0.007	#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	
0.007	#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	

			<i>scale factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0.0,360.0]	H5T_C_S1	12
			<i>min_max</i>	[0,36000]	H5T_C_S1	10
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
			<i>dimension label</i>	Number_of_Scans	H5T_C_S1	16
0.007			<b>Scan_HotLoadTemperature</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
		#5	<i>long_name</i>	Hot load temperature	H5T_C_S1	21
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0.0,400.0]	H5T_C_S1	12
			<i>min_max</i>	[0,40000]	H5T_C_S1	10
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	Estimated average physical temperature of the hot load used for TB calculation	H5T_C_S1	79
			<i>dimension label</i>	Number_of_Scans	H5T_C_S1	16
			<i>geolocation_label</i>	Scan_FirstSampleAcqTime	H5T_C_S1	54
0.086			<b>Scan_Gain</b>	<b>H5T_IEEE_F32LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
		#6	<i>long_name</i>	Estimated gain	H5T_C_S1	15
			<i>units</i>	count/K	H5T_C_S1	8
			<i>scale factor</i>	1.0	H5T_C_S1	4
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[15.0,28.0]	H5T_C_S1	21
			<i>min_max</i>	[15.0,28.0]	H5T_C_S1	21
			<i>FillValue</i>	3.4E38	H5T_C_S1	7
			<i>comment</i>	Estimated gain value applied to TB calculation for each channels in the following sequence: S1, S2, S3, S4, S5, S6	H5T_C_S1	124
			<i>dimension label</i>	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.086			<b>Scan_Offset</b>	<b>H5T_IEEE_F32LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
		#7	<i>long_name</i>	Estimated offset	H5T_C_S1	17
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale factor</i>	1.0	H5T_C_S1	4
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[1130.0,1620.0]	H5T_C_S1	23
			<i>min_max</i>	[1130.0,1620.0]	H5T_C_S1	23
			<i>FillValue</i>	3.4E38	H5T_C_S1	7
			<i>comment</i>	Estimated offset value used for TB calculation for each channels in the following sequence: S1, S2, S3, S4, S5, S6	H5T_C_S1	113
			<i>dimension label</i>	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.004			<b>Scan_FirstSampleAcqTime</b>	<b>H5T_C_S1</b>	<b>Number_of_Scans</b>	
		#8	<i>Attributes</i>			



1.297	#12	IMAGE_MINMAXRANGE	[-4296,4296]	H5T_STD_U16LE	4	
			TB_Samples_S1	H5T_STD_U16LE	Number_of_Scans	
			Attributes			
			Name	Value	Type	Size
			long_name	Samples brightness temperatures at 183.31 +/- 0.2	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_S1	H5T C S1	44
			comment	TB estimated from raw instrumental measurements (see additional geometrical information in attributes of SAPHIR)	H5T C S1	88
			dimension_label	Number_of_Scans, Number_of_Samples	H5T C S1	56
			geolocation_label	Latitude_Samples, Longitude_Samples	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	
1.297	#13	TB_Samples_S2	H5T_STD_U16LE	Number_of_Scans		
			Attributes			
			Name	Value	Type	Size
			long_name	Samples brightness temperatures at 183.31 +/- 1.1	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_S2	H5T C S1	44
			comment	TB estimated from raw instrumental measurements (see additional geometrical information in attributes of SAPHIR)	H5T C S1	88
			dimension_label	Number_of_Scans, Number_of_Samples	H5T C S1	56
			geolocation_label	Latitude_Samples, Longitude_Samples	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	
1.297	#14	TB_Samples_S3	H5T_STD_U16LE	Number_of_Scans		
			Attributes			
			Name	Value	Type	Size
			long_name	Samples brightness temperatures at 183.31 +/- 2.8	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

			<i>quality_flag</i>	QF_Samples_S3	H5T_C_S1	44
			<i>comment</i>	TB estimated from raw instrumental measurements (see additional geometrical information in attributes of SAPHIR)	H5T_C_S1	88
			<i>dimension_label</i>	Number_of_Scans, Number_of_Samples	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Samples, Longitude_Samples	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,40000]	H5T_STD_U16LE	4
1.297			<b>TB_Samples_S4</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Samples brightness temperatures at 183.31 +/- 4.2	H5T_C_S1	53
			<i>standard_name</i>	brightness_temperature	H5T_C_S1	23
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0,400]	H5T_C_S1	8
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>quality_flag</i>	QF_Samples_S4	H5T_C_S1	44
			<i>comment</i>	TB estimated from raw instrumental measurements (see additional geometrical information in attributes of SAPHIR)	H5T_C_S1	88
			<i>dimension_label</i>	Number_of_Scans, Number_of_Samples	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Samples, Longitude_Samples	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,40000]	H5T_STD_U16LE	4
1.297			<b>TB_Samples_S5</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Samples brightness temperatures at 183.31 +/- 6.8	H5T_C_S1	53
			<i>standard_name</i>	brightness_temperature	H5T_C_S1	23
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0,400]	H5T_C_S1	8
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>quality_flag</i>	QF_Samples_S5	H5T_C_S1	44
			<i>comment</i>	TB estimated from raw instrumental measurements (see additional geometrical information in attributes of SAPHIR)	H5T_C_S1	88
			<i>dimension_label</i>	Number_of_Scans, Number_of_Samples	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Samples, Longitude_Samples	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,40000]	H5T_STD_U16LE	4
1.297			<b>TB_Samples_S6</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>

			<i>long_name</i>	Samples brightness temperatures at 183.31 +/- 11.0	H5T_C_S1	53
			<i>standard_name</i>	brightness_temperature	H5T_C_S1	23
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0,400]	H5T_C_S1	8
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>quality_flag</i>	QF_Samples_S6	H5T_C_S1	44
			<i>comment</i>	TB estimated from raw instrumental measurements (see additional geometrical information in attributes of SAPHIR)	H5T_C_S1	88
			<i>dimension_label</i>	Number_of_Scans, Number_of_Samples	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Samples, Longitude_Samples	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,40000]	H5T_STD_U16LE	4
1.297			<b>QF_Samples_S1</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of sample for channel 183.31 +/- 0.2	H5T_C_S1	71
			<i>standard_name</i>	quality_flag	H5T_C_S1	13
		#18	<i>comment</i>	16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1
			<i>dimension_label</i>	Number_of_Scans, Number_of_Samples	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Samples, Longitude_Samples	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
1.297			<b>QF_Samples_S2</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of sample for channel 183.31 +/- 1.1	H5T_C_S1	71
			<i>standard_name</i>	quality_flag	H5T_C_S1	13
		#19	<i>comment</i>	16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1
			<i>dimension_label</i>	Number_of_Scans, Number_of_Samples	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Samples, Longitude_Samples	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6

			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
1.297			<b>QF_Samples_S3</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of sample for channel 183.31 +/- 2.8	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13
		#20	<i>comment</i>	16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1
			<i>dimension_label</i>	Number_of_Scans, Number_of_Samples	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Samples, Longitude_Samples	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
1.297			<b>QF_Samples_S4</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of sample for channel 183.31 +/- 4.2	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13
		#21	<i>comment</i>	16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1
			<i>dimension_label</i>	Number_of_Scans, Number_of_Samples	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Samples, Longitude_Samples	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
1.297			<b>QF_Samples_S5</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
		#22	<i>long_name</i>	Quality Flag of sample for channel 183.31 +/- 6.8	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13





# SAPHIR

# L1A2

Estimated Size

14.106 Mb

for typical [Number\_of\_Scans]

[3736]

Science data group associated attributes

## ScienceData

Attributes

Index	Name	Value	Type	Size
#1	Product_Identification	MT1SAPSL1A2_1.00_9_01   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	SAPHIR	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	YYYYMMDD	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	6	H5T_C_S1	8
#21	Channel_CentralFrequency	183.31+/-0.2GHz 183.31+/-1.1GHz 183.31+	H5T_C_S1	102
#22	Channel_Bandwidth	200MHz 350MHz 500MHz 700MHz 1200MHz 2	H5T_C_S1	45
#23	SunGlint_Limits	[0,30]degree	H5T_C_S1	14
#24	Orbit_StartNumber	00001	H5T_C_S1	19
#25	Orbit_EndNumber	00001	H5T_C_S1	17
#26	Orbit_Cycle_Number	01	H5T_C_S1	3
#27	SLConf	100001	H5T_C_S1	7
#28	Nskip	0005	H5T_C_S1	5
#29	ProcessorVersion	1.00	H5T_C_S1	5
#30	Pixel_Size_AcrossTrack	[+22.493,+21.800,+21.151,+20.542,+19.970	H5T_C_S1	1038
#31	Pixel_Size_AlongTrack	[+14.474,+14.278,+14.090,+13.909,+13.737	H5T_C_S1	1036
#32	Pixel_IncidenceAngles	[+50.278,+49.417,+48.562,+47.713,+46.869	H5T_C_S1	1016
#33	SAPHIR_QF_Scan_Definition	16-bits array (=0:good/=1:bad);, #15: scan/rc	H5T_C_S1	16x24
#34	SAPHIR_QF_Pixel_Definition	16-bits array (=0:good/=1:bad);, #15:TB val	H5T_C_S1	16x24
#35	Skip_StartScanNumber	[00000064,00000165,00000266,00000367,00	H5T_C_S1	1*Nskip
#36	Skip_EndScanNumber	[00000066,00000167,00000268,00000370,00	H5T_C_S1	1*Nskip
#37	Flip_StartScanNumber	00000012	H5T_C_S1	9
#38	Flip_EndScanNumber	00000042	H5T_C_S1	9
#39	Maneuver_StartScanNumber	00000011	H5T_C_S1	9

#40	Maneuver_EndScanNumber	00000043	H5T_C_S1	9
#41	FirstScanNumber	00000000	H5T_C_S1	8
#42	Time_Pixel_Interval	6.406	H5T_C_S1	4
#43	Number_of_Pixels	130	H5T_C_S1	8
#44	Number_of_Scans	00003736	H5T_C_S1	22
#45	QF_Product_%Processed_Scans	099	H5T_C_S1	4

Science data group elements

Estimated size of dataset [Mb]

0.007

Index

Name

Type

Typical Value

SAPHIR\_QF\_scan

H5T\_STD\_U16LE

Number\_of\_Scans

Attributes

Name

Value

Type

Size

long\_name

Quality flag applicable to the scan line  
16-bits array (=0:good/=1:bad);, #15:  
scan/row quality flag validity, #14:  
pass type, #13: Scanning type, #12:  
Scan/Row error, #11: datation error,  
#10: PRT Error, #9-8: Blank, #7: CRC  
Status, #6: Blank, #5-3: Payload Mode,  
#2-0: Satellite Mode

H5T\_C\_S1

41

#1

comment

H5T\_C\_S1

250

dimension\_label

Number\_of\_Scans

H5T\_C\_S1

16

geolocation\_label

Scan\_FirstPixelAcqTime

H5T\_C\_S1

35

0.007

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

0.007

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

0.007

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

			<i>scale factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0.0,360.0]	H5T_C_S1	12
			<i>min_max</i>	[0,36000]	H5T_C_S1	10
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
			<i>dimension label</i>	Number_of_Scans	H5T_C_S1	16
0.007			<b>Scan_HotLoadTemperature</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Hot load temperature	H5T_C_S1	21
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0.0,400.0]	H5T_C_S1	12
			<i>min_max</i>	[0,40000]	H5T_C_S1	10
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	Estimated average physical temperature of the hot load used for TB calculation	H5T_C_S1	79
			<i>dimension label</i>	Number_of_Scans	H5T_C_S1	16
			<i>geolocation_label</i>	Scan_FirstPixelAcqTime	H5T_C_S1	54
0.086			<b>Scan_Gain</b>	<b>H5T_IEEE_F32LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Estimated gain	H5T_C_S1	15
			<i>units</i>	count/K	H5T_C_S1	8
			<i>scale factor</i>	1.0	H5T_C_S1	4
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[15.0,28.0]	H5T_C_S1	21
			<i>min_max</i>	[15.0,28.0]	H5T_C_S1	21
			<i>FillValue</i>	3.4E38	H5T_C_S1	7
			<i>comment</i>	Estimated gain value applied to TB calculation for each channels in the following sequence: S1, S2, S3, S4, S5, S6	H5T_C_S1	124
			<i>dimension label</i>	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.086			<b>Scan_Offset</b>	<b>H5T_IEEE_F32LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Estimated offset	H5T_C_S1	17
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale factor</i>	1.0	H5T_C_S1	4
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[1130.0,1620.0]	H5T_C_S1	23
			<i>min_max</i>	[1130.0,1620.0]	H5T_C_S1	23
			<i>FillValue</i>	3.4E38	H5T_C_S1	7
			<i>comment</i>	Estimated offset value used for TB calculation for each channels in the following sequence: S1, S2, S3, S4, S5, S6	H5T_C_S1	113
			<i>dimension label</i>	Number_of_Scans, Number_of_Channels	H5T_C_S1	36
0.004			<b>Scan_FirstPixelAcqTime</b>	<b>H5T_C_S1</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			











			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
0.926			<b>QF_Pixels_S3</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of pixel for channel 183.31 +/- 2.8	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13
		#20	<i>comment</i>	16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1
			<i>dimension_label</i>	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
0.926			<b>QF_Pixels_S4</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of pixel for channel 183.31 +/- 4.2	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13
		#21	<i>comment</i>	16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1
			<i>dimension_label</i>	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
0.926			<b>QF_Pixels_S5</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of pixel for channel 183.31 +/- 6.8	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13
		#22	<i>comment</i>	16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1

			<i>dimension_label</i>	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
0.926			<b>QF_Pixels_S6</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of pixel for channel 183.31 +/- 11.0	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13
		#23	<i>comment</i>	16-bits array (=0:good/=1:bad):, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1
			<i>dimension_label</i>	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4

# SAPHIR

# L1A3

Estimated Size

17.140 Mb

for typical [Number\_of\_Scans]

[2467]

Science data group associated attributes

## ScienceData

Attributes				
Index	Name	Value	Type	Size
#1	Product_Identification	MT1SAPSL1A3_1.00_9_01   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	SAPHIR	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	YYYYMMDD	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	6	H5T_C_S1	8
#21	Channel_CentralFrequency	183.31+/-0.2GHz 183.31+/-1.1GHz 183.31+	H5T_C_S1	102
#22	Channel_Bandwidth	200MHz 350MHz 500MHz 700MHz 1200MHz 2	H5T_C_S1	45
#23	SunGlint_Limits	[0,30]degree	H5T_C_S1	14
#24	Orbit_StartNumber	00001	H5T_C_S1	19
#25	Orbit_EndNumber	00001	H5T_C_S1	17
#26	Orbit_Cycle_Number	01	H5T_C_S1	3
#27	SLConf	100001	H5T_C_S1	7
#28	Nskip	0005	H5T_C_S1	5
#29	ProcessorVersion	1.00	H5T_C_S1	5
#30	SAPHIR_QF_Scan_Definition	16-bits array (=0:good/=1:bad);, #15: scan/ro	H5T_C_S1	16x24
#31	SAPHIR_QF_Pixel_Definition	16-bits array (=0:good/=1:bad);, #15:TB val	H5T_C_S1	16x24
#32	Skip_StartScanNumber	[00000064,00000165,00000266,00000367,00	H5T_C_S1	1*Nskip
#33	Skip_EndScanNumber	[00000066,00000167,00000268,00000370,00	H5T_C_S1	1*Nskip
#34	Flip_StartScanNumber	00000012	H5T_C_S1	9
#35	Flip_EndScanNumber	00000042	H5T_C_S1	9
#36	Maneuver_StartScanNumber	00000011	H5T_C_S1	9
#37	Maneuver_EndScanNumber	00000043	H5T_C_S1	9
#38	MADRAS_FirstScanNumber	00000000	H5T_C_S1	8
#39	Number_of_Pixels	214	H5T_C_S1	8

	#40	Number_of_Scans	00002467	H5T_C_S1	22	
	#41	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		#1	SAPHIR_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
			comment	16-bits array (=0:good/=1:bad);, #15: scan/row quality flag validity, #14: pass type, #13: Scanning type, #12: Scan/Row error, #11: datation error, #10: PRT Error, #9-8: Blank, #7: CRC Status, #6: Blank, #5-3: Payload Mode, #2-0: Satellite Mode	H5T C S1	250
			dimension_label	Number_of_Scans	H5T C S1	16
			geolocation_label	Scan_FirstPixelAcqTime	H5T C S1	35
0.005			#2	MADRAS_Scan_Number	H5T_STD_U16LE	Number_of_Scans
		Attributes				
		Name		Value	Type	Size
		long_name		Scan Number	H5T C S1	12
		add_offset		0	H5T C S1	2
		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	

			<i>min_max</i>	[0,36000]	H5T_C_S1	10
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
			<i>dimension label</i>	Number_of_Scans	H5T_C_S1	16
0.002			<b>Scan_FirstPixelAcqTime</b>	<b>H5T_C_S1</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
		#5	<i>long_name</i>	date of the first pixel	H5T_C_S1	45
			<i>standard_name</i>	time	H5T_C_S1	5
			<i>units</i>	UTC Time in microseconds	H5T_C_S1	25
			<i>FillValue</i>	yyyymmdd hhmmssuuuuuu	H5T_C_S1	22
			<i>comment</i>	format: yyyymmdd hhmmssuuuuuu	H5T_C_S1	30
			<i>dimension label</i>	Number_of_Scans	H5T_C_S1	16
2.014			<b>Pixel_AcquisitionTime</b>	<b>H5T_IEEE_F32LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
		#6	<i>long_name</i>	Time between first pixel and current pixel	H5T_C_S1	44
			<i>standard_name</i>	time	H5T_C_S1	5
			<i>units</i>	seconds	H5T_C_S1	9
			<i>FillValue</i>	3.4E38	H5T_C_S1	7
			<i>comment</i>	Average time at pixel centre from first pixel time	H5T_C_S1	52
			<i>dimension label</i>	Number_of_Scans, Number_of_Pixels	H5T_C_S1	37
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	TBD	H5T_IEEE_F32LE	8
1.007			<b>Latitude_Pixels</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
		#7	<i>long_name</i>	latitude of pixels	H5T_C_S1	77
			<i>standard_name</i>	latitude	H5T_C_S1	9
			<i>units</i>	degrees	H5T_C_S1	8
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	-40.0	H5T_C_S1	6
			<i>valid_range</i>	[-40.0,40.0]	H5T_C_S1	13
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	accuracy 1km	H5T_C_S1	13
			<i>dimension label</i>	Number_of_Scans, Number_of_Pixels	H5T_C_S1	59
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
1.007			<b>Longitude_Pixels</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
		#8	<i>long_name</i>	longitude of pixels	H5T_C_S1	78
			<i>standard_name</i>	longitude	H5T_C_S1	10
			<i>units</i>	degrees	H5T_C_S1	8
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0.0,360.0]	H5T_C_S1	12
			<i>FillValue</i>	65535	H5T_C_S1	6

			<i>comment</i>	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T C S1	59
			<i>dimension label</i>	Number_of_Scans, Number_of_Pixels	H5T C S1	59
			<i>CLASS</i>	IMAGE	H5T C S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,36000]	H5T STD U16LE	4
1.007			<b>IncidenceAngle_Pixels</b>	<b>H5T_STD_I16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Incidence angle at the center of pixels	H5T C S1	52
			<i>standard_name</i>	incidence_angle	H5T C S1	16
			<i>units</i>	degrees	H5T C S1	8
			<i>scale_factor</i>	0.01	H5T C S1	5
			<i>valid_range</i>	[0.0,51.0]	H5T C S1	11
			<i>FillValue</i>	32767	H5T C S1	6
		#9	<i>comment</i>	angle between zenith and line of sight	H5T C S1	39
			<i>dimension label</i>	Number_of_Scans, Number_of_Pixels	H5T C S1	37
			<i>geolocation label</i>	Latitude, Longitude	H5T C S1	20
			<i>CLASS</i>	IMAGE	H5T C S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16
			<i>IMAGE_MINMAXRANGE</i>	[-4296,4296]	H5T STD I16LE	4
1.007			<b>TB_Pixels_S1</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Pixels brightness temperatures at 183.31 +/- 0.2	H5T C S1	53
			<i>standard_name</i>	brightness_temperature	H5T C S1	23
			<i>units</i>	Kelvin	H5T C S1	7
			<i>scale_factor</i>	0.01	H5T C S1	5
			<i>add_offset</i>	0.0	H5T C S1	4
			<i>valid_range</i>	[0,400]	H5T C S1	8
			<i>FillValue</i>	65535	H5T C S1	6
			<i>quality flag</i>	QF_Pixels_S1	H5T C S1	44
			<i>comment</i>	TB estimated from raw instrumental measurements (see additional geometrical information in attributes of SAPHIR)	H5T C S1	88
			<i>dimension label</i>	Number_of_Scans, Number_of_Pixels	H5T C S1	56
			<i>geolocation label</i>	Latitude_Pixels, Longitude_Pixels	H5T C S1	78
			<i>CLASS</i>	IMAGE	H5T C S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,40000]	H5T STD U16LE	4
1.007			<b>TB_Pixels_S2</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Pixels brightness temperatures at 183.31 +/- 1.1	H5T C S1	53
			<i>standard_name</i>	brightness_temperature	H5T C S1	23
			<i>units</i>	Kelvin	H5T C S1	7
			<i>scale_factor</i>	0.01	H5T C S1	5
			<i>add_offset</i>	0.0	H5T C S1	4
			<i>valid_range</i>	[0,400]	H5T C S1	8
			<i>FillValue</i>	65535	H5T C S1	6
			<i>quality flag</i>	QF_Pixels_S2	H5T C S1	44







			<i>geolocation_label</i>	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
1.007			<b>QF_Pixels_S2</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of pixel for channel 183.31 +/- 1.1	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13
		#17	<i>comment</i>	16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1
			<i>dimension_label</i>	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
1.007			<b>QF_Pixels_S3</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of pixel for channel 183.31 +/- 2.8	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13
		#18	<i>comment</i>	16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T_C_S1	1
			<i>dimension_label</i>	Number_of_Scans, Number_of_Pixels	H5T_C_S1	56
			<i>geolocation_label</i>	Latitude_Pixels, Longitude_Pixels	H5T_C_S1	78
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
1.007			<b>QF_Pixels_S4</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Quality Flag of pixel for channel 183.31 +/- 4.2	H5T_C_S1	71
			<i>standard_name</i>	quality flag	H5T_C_S1	13

					16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag	H5T C S1	1
				<i>comment</i>			
				<i>dimension label</i>	Number_of_Scans, Number_of_Pixels	H5T C S1	56
				<i>geolocation label</i>	Latitude_Pixels, Longitude_Pixels	H5T C S1	78
				<i>CLASS</i>	IMAGE	H5T C S1	6
				<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16
				<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T STD U16LE	4
1.007				<b>QF_Pixels_S5</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
				<i>Attributes</i>			
				<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
				<i>long_name</i>	Quality Flag of pixel for channel 183.31 +/- 6.8	H5T C S1	71
				<i>standard name</i>	quality flag	H5T C S1	13
					16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag		
			<b>#20</b>	<i>comment</i>		H5T C S1	1
				<i>dimension label</i>	Number_of_Scans, Number_of_Pixels	H5T C S1	56
				<i>geolocation label</i>	Latitude_Pixels, Longitude_Pixels	H5T C S1	78
				<i>CLASS</i>	IMAGE	H5T C S1	6
				<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16
				<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T STD U16LE	4
1.007				<b>QF_Pixels_S6</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Scans</b>	
				<i>Attributes</i>			
				<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
				<i>long_name</i>	Quality Flag of pixel for channel 183.31 +/- 11.0	H5T C S1	71
				<i>standard name</i>	quality flag	H5T C S1	13
					16-bits array (=0:good/=1:bad);, #15: TB validity , #14:sun glint, #13: land/sea contamination, #12:surface type, #11:On/Off Channel, #10:Level-0 Count Saturated, #9:Level-0 Count poor value, #8:geolocation estimation, #7-6: calibration flag, #5:hot count error, #4: cold sky count error, #3: interpolation quality, #2: Blank, #1-0: Ice flag		
			<b>#21</b>	<i>comment</i>		H5T C S1	1
				<i>dimension label</i>	Number_of_Scans, Number_of_Pixels	H5T C S1	56
				<i>geolocation label</i>	Latitude_Pixels, Longitude_Pixels	H5T C S1	78
				<i>CLASS</i>	IMAGE	H5T C S1	6
				<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16
				<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T STD U16LE	4

# SAPHIR

# L1B

Estimated Size

27.843 Mb

for typical [Number\_of\_Rows\_10km]

[3837]

Science data group associated attributes

## ScienceData

Attributes				
Index	Name	Value	Type	Size
#1	Product_Identification	MT1SAPSL1B_1.00_9_01   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	SAPHIR	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	YYYYMMDD	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	6	H5T_C_S1	8
#21	Channel_CentralFrequency	[183.1+/- 0.2 GHz, 183.1+/- 1.1 GHz, 183.1+/-	H5T_C_S1	110
#22	Channel_Bandwidth	[200 MHz,350 MHz,500 MHz,700 MHz,1200 MHz]	H5T_C_S1	52
#23	Sun glint limits	[30,30]degrees	H5T_C_S1	16
#24	Orbit_StartNumber	00001	H5T_C_S1	19
#25	Orbit_EndNumber	00001	H5T_C_S1	17
#26	Orbit_Cycle_Number	01	H5T_C_S1	3
#27	SLConf	100001	H5T_C_S1	7
#28	Nskip	0005	H5T_C_S1	5
#29	ProcessorVersion	1.00	H5T_C_S1	5
#30	SAPHIR_QF_Row_Definition	16-bits array (=0:good/=1:bad);, #15: scan/row	H5T_C_S1	16x24
#31	SAPHIR_QF_Cell_Definition	16-bits array (=0:good/=1:bad);, #15:TB valid	H5T_C_S1	16x24
#32	Skip_StartScanNumber	[00000064,00000165,00000266,00000367,00000468]	H5T_C_S1	1*Nskip
#33	Skip_EndScanNumber	[00000066,00000167,00000268,00000370,00000471]	H5T_C_S1	1*Nskip
#34	Flip_StartScanNumber	00000012	H5T_C_S1	9
#35	Flip_EndScanNumber	00000042	H5T_C_S1	9
#36	Maneuver_StartScanNumber	00000011	H5T_C_S1	9
#37	Maneuver_EndScanNumber	00000043	H5T_C_S1	9
#38	Number_of_Rows_10km	3837	H5T_C_S1	8
#39	Number_of_Columns_10km	181	H5T_C_S1	8

#40	Number_of_Processed_Rows	3836	H5T_C_S1	8
#41	QF_Product_%Processed_Rows	099	H5T_C_S1	4

Science data group elements

Estimated size of dataset [Mb]

0.007

Index

Name

Type

Typical Value

#1

Row\_SAPHIR\_QF\_10km

H5T\_STD\_U16LE

Number\_of\_Rows

Attributes

Name

Value

Type

Size

long\_name

Quality flag applicable to the scan line

H5T C S1

41

comment

16-bits array (=0:good, =1:bad) : #0: scan/row quality flag validity, #1: pass type, #2: Scanning type, #3: Scan/Row error, #4: datation error,#5 PRT error #5-#7: Blank, #8: CRC Status, #9: Blank, #10-12: Payload Mode, #13-15: Satellite Mode

H5T C S1

29

dimension\_label

Number\_of\_Rows\_10km

H5T C S1

20

geolocation\_label

Row\_StartTime\_10km

H5T C S1

19

0.015

#2

Row\_Number\_10km

H5T\_STD\_U32LE

Number\_of\_Rows

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

#3

Row\_FirstCellAcqTime\_10km

H5T\_C\_S1

Number\_of\_Rows

Attributes

Name

Value

Type

Size

long\_name

date for the first cell of the row (10km grid)

H5T C S1

105

standard\_name

time

H5T C S1

5

units

UTC Time in microseconds

H5T C S1

25

FillValue

yyyyymmdd hhmmssuuuuuu

H5T C S1

22

comment

format: yyyyymmdd hhmmssuuuuuu

H5T C S1

32

dimension\_label

Number\_of\_Rows\_10km

H5T C S1

37

1.325

#4

Cell\_population\_10km\_S1

H5T\_STD\_U16LE

Number\_of\_Rows

Attributes

Name

Value

Type

Size

long\_name

Cell population for channel S1

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

#5

Cell\_population\_10km\_S2

H5T\_STD\_U16LE

Number\_of\_Rows

Attributes

Name

Value

Type

Size

long\_name

Cell population for channel S2

H5T C S1

52

			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	number of samples per Cell	H5T_C_S1	40
			<i>dimension label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
			<i>geolocation label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,65535]	H5T_STD_U16LE	4
1.325			<b>Cell_population_10km_S3</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Cell population for channel S3	H5T_C_S1	52
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	number of samples per Cell	H5T_C_S1	40
			<i>dimension label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
			<i>geolocation label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,65535]	H5T_STD_U16LE	4
		#6				
1.325			<b>Cell_population_10km_S4</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Cell population for channel S4	H5T_C_S1	52
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	number of samples per Cell	H5T_C_S1	40
			<i>dimension label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
			<i>geolocation label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,65535]	H5T_STD_U16LE	4
		#7				
1.325			<b>Cell_population_10km_S5</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Cell population for channel S5	H5T_C_S1	52
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	number of samples per Cell	H5T_C_S1	40
			<i>dimension label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
			<i>geolocation label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,65535]	H5T_STD_U16LE	4
		#8				
1.325			<b>Cell_population_10km_S6</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Cell population for channel S6	H5T_C_S1	52
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	number of samples per Cell	H5T_C_S1	40
		#9				

			<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
			<i>geolocation_label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,65535]	H5T_STD_U16LE	4
1.325			<b>Latitude_Cells_10km</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	latitude of cells (10km grid)	H5T_C_S1	49
			<i>standard_name</i>	latitude	H5T_C_S1	9
			<i>units</i>	degrees	H5T_C_S1	8
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	-40	H5T_C_S1	4
			<i>valid_range</i>	[-40,40]	H5T_C_S1	9
			<i>min_max</i>	[0,8000]	H5T_C_S1	9
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	accuracy 1km	H5T_C_S1	13
			<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	56
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4
1.325			<b>Longitude_Cells_10km</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	longitude of cells (10km grid)	H5T_C_S1	50
			<i>standard_name</i>	longitude	H5T_C_S1	10
			<i>units</i>	degrees	H5T_C_S1	8
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0,360]	H5T_C_S1	8
			<i>min_max</i>	[0,36000]	H5T_C_S1	10
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>comment</i>	Longitude [0,360]: 0 is Greenwich meridian (accuracy 1km)	H5T_C_S1	59
			<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	56
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,36000]	H5T_STD_U16LE	4
1.325			<b>IncidenceAngle_Cells_10km</b>	<b>H5T_STD_I16LE</b>	<b>Number_of_Rows</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Incidence angle at the center of the cell	H5T_C_S1	83
			<i>standard_name</i>	incidence_angle	H5T_C_S1	16
			<i>units</i>	degrees	H5T_C_S1	8
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>valid_range</i>	[0.0,51.0]	H5T_C_S1	11
			<i>FillValue</i>	32767	H5T_C_S1	6
			<i>comment</i>	angle between zenith and line of sight	H5T_C_S1	39

			<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T C S1	78
			<i>geolocation_label</i>	Latitude_10km, Longitude_10km	H5T C S1	64
			<i>CLASS</i>	IMAGE	H5T C S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16
			<i>IMAGE_MINMAXRANGE</i>	[-4296,4296]	H5T STD I16LE	4
1.325			<b>TB_Cells_S1</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows_</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Pixels brightness temperatures at S1	H5T C S1	63
			<i>standard_name</i>	brightness_temperature	H5T C S1	23
			<i>units</i>	Kelvin	H5T C S1	7
			<i>scale_factor</i>	0.01	H5T C S1	5
			<i>add_offset</i>	0.0	H5T C S1	4
			<i>valid_range</i>	[0,400]	H5T C S1	8
			<i>min_max</i>	[0,400000]	H5T C S1	10
			<i>FillValue</i>	65535	H5T C S1	6
			<i>quality_flag</i>	QF_cells_S1	H5T C S1	52
			<i>comment</i>	TB interpolated on all-instruments common grid (10km grid) (see additional geometrical information in attributes of SAPHIR)	H5T C S1	149
			<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T C S1	82
			<i>geolocation_label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T C S1	88
			<i>CLASS</i>	IMAGE	H5T C S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,400000]	H5T STD U16LE	4
1.325			<b>TB_Cells_S2</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows_</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Pixels brightness temperatures at S2	H5T C S1	63
			<i>standard_name</i>	brightness_temperature	H5T C S1	23
			<i>units</i>	Kelvin	H5T C S1	7
			<i>scale_factor</i>	0.01	H5T C S1	5
			<i>add_offset</i>	0.0	H5T C S1	4
			<i>valid_range</i>	[0,400]	H5T C S1	8
			<i>min_max</i>	[0,400000]	H5T C S1	10
			<i>FillValue</i>	65535	H5T C S1	6
			<i>quality_flag</i>	QF_cells_S2	H5T C S1	52
			<i>comment</i>	TB interpolated on all-instruments common grid (10km grid) (see additional geometrical information in attributes of SAPHIR)	H5T C S1	149
			<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T C S1	82
			<i>geolocation_label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T C S1	88
			<i>CLASS</i>	IMAGE	H5T C S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,400000]	H5T STD U16LE	4
1.325			<b>TB_Cells_S3</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows_</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>

			<i>long_name</i>	Pixels brightness temperatures at S3	H5T_C_S1	63
			<i>standard_name</i>	brightness_temperature	H5T_C_S1	23
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0,400]	H5T_C_S1	8
			<i>min_max</i>	[0,40000]	H5T_C_S1	10
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>quality_flag</i>	QF_cells_S3	H5T_C_S1	52
			<i>comment</i>	TB interpolated on all-instruments common grid (10km grid) (see additional geometrical information in attributes of SAPHIR)	H5T_C_S1	149
			<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
			<i>geolocation_label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,40000]	H5T_STD_U16LE	4
1.325			<b>TB_Cells_S4</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows_</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Pixels brightness temperatures at S4	H5T_C_S1	63
			<i>standard_name</i>	brightness_temperature	H5T_C_S1	23
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0,400]	H5T_C_S1	8
			<i>min_max</i>	[0,40000]	H5T_C_S1	10
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>quality_flag</i>	QF_cells_S4	H5T_C_S1	52
			<i>comment</i>	TB interpolated on all-instruments common grid (10km grid) (see additional geometrical information in attributes of SAPHIR)	H5T_C_S1	149
			<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T_C_S1	82
			<i>geolocation_label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE_MINMAXRANGE</i>	[0,40000]	H5T_STD_U16LE	4
1.325			<b>TB_Cells_S5</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows_</b>	
			<i>Attributes</i>			
			<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>
			<i>long_name</i>	Pixels brightness temperatures at S5	H5T_C_S1	63
			<i>standard_name</i>	brightness_temperature	H5T_C_S1	23
			<i>units</i>	Kelvin	H5T_C_S1	7
			<i>scale_factor</i>	0.01	H5T_C_S1	5
			<i>add_offset</i>	0.0	H5T_C_S1	4
			<i>valid_range</i>	[0,400]	H5T_C_S1	8
			<i>min_max</i>	[0,40000]	H5T_C_S1	10
			<i>FillValue</i>	65535	H5T_C_S1	6
			<i>quality_flag</i>	QF_cells_S5	H5T_C_S1	52





1.325			#20	<b>QF_Cells_S2</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows</b>		
				<i>Attributes</i>				
				<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>	
				<i>long_name</i>	Quality Flag of cell for channel S2	H5T C S1	84	
				<i>standard_name</i>	quality flag	H5T C S1	13	
				<i>comment</i>	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	
				<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T C S1	82	
				<i>geolocation_label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T C S1	88	
				<i>CLASS</i>	IMAGE	H5T C S1	6	
				<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16	
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T STD U16LE	4		
1.325			#21	<b>QF_Cells_S3</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows</b>		
				<i>Attributes</i>				
				<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>	
				<i>long_name</i>	Quality Flag of cell for channel S3	H5T C S1	84	
				<i>standard_name</i>	quality flag	H5T C S1	13	
				<i>comment</i>	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	
				<i>dimension_label</i>	Number_of_Rows_10km, Number_of_Columns_10km	H5T C S1	82	
				<i>geolocation_label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T C S1	88	
				<i>CLASS</i>	IMAGE	H5T C S1	6	
				<i>IMAGE_SUBCLASS</i>	IMAGE_GRAYSCALE	H5T C S1	16	
			<i>IMAGE_MINMAXRANGE</i>	[0,8000]	H5T STD U16LE	4		
1.325			#22	<b>QF_Cells_S4</b>	<b>H5T_STD_U16LE</b>	<b>Number_of_Rows</b>		
				<i>Attributes</i>				
				<i>Name</i>	<i>Value</i>	<i>Type</i>	<i>Size</i>	
				<i>long_name</i>	Quality Flag of cell for channel S4	H5T C S1	84	
				<i>standard_name</i>	quality flag	H5T C S1	13	



			<i>geolocation label</i>	Latitude_Cells_10km, Longitude_Cells_10km	H5T_C_S1	88
			<i>CLASS</i>	IMAGE	H5T_C_S1	6
			<i>IMAGE SUBCLASS</i>	IMAGE_GRAYSCALE	H5T_C_S1	16
			<i>IMAGE MINMAXRANGE</i>	[0,8000]	H5T_STD_U16LE	4