ICON Data Product 1.1,1.2: MIGHTI Calibrated LOS Winds and Temperature Array

This document describes the data product for ICON MIGHTI-A Level 1.1, 1.2 Calibrated Science Image File, which is in NetCDF4 format.

This file contains MIGHTI phase deltas and IR brightnesses for temperature retrieval

NetCDF files contain **variables** and the **dimensions** over which those variables are defined. First, the dimensions are defined, then all variables in the file are described.

Dimensions

The dimensions used by the variables in this file are given below, along with nominal sizes. Note that the size may vary from file to file. For example, the "Epoch" dimension, which describes the number of time samples contained in this file, will likely have a varying size.

Dimension Name	Nominal Size
ICON_L1_MIGHTI-A_Green_Array_OPD	378
ICON_L1_MIGHTI-A_Vector_XYZ	3
ICON_LO_MIGHTI_A_Image_ROI_Columns	92
ICON_L1_MIGHTI-A_Vector_Roll	3
ICON_L1_MIGHTI-A_IR_Array_Altitudes	20
ICON_L1_MIGHTI-A_IR_Array_Pixel_Index	429
ICON_L1_MIGHTI-A_Red_Array_OPD	429
ICON_L1_MIGHTI-A_Green_Array_Altitudes	82
ICON_L1_MIGHTI-A_Time_Channel	3
Epoch	1
ICON_LO_MIGHTI_A_Image_ROI_Rows	929
ICON_L1_MIGHTI-A_Red_Array_Altitudes	60
ICON_L1_MIGHTI-A_Vector_LLA	3

Variables

Variables in this file are listed below. First, "data" variables are described, followed by the "support_data" variables, and finally the "metadata" variables. The variables classified as "ignore_data" are not shown.

data

Variable Name	Description	Units	Dimensions
ICON_L1_MIGHTI_A_IR_A rray	Brightnesses corresponding to the five IR filters Brightnesses corresponding to the five IR filters	Rel. R	Epoch, ICON_L1_ MIGHTI-A_IR_Arr ay_Altitudes, I CON_L1_MIGHTI-A _IR_Array_Pixel _Index
ICON_L1_MIGHTI_A_Gree n_Phase	Phase difference between the green atmospheric line and the associtaed calibration line minus the corresponding Zero Wind delta - by pixel and altitude Phase difference between the green atmospheric line and the associtaed calibration line minus the corresponding Zero Wind delta - by pixel and altitude	rad	Epoch, ICON_L1_ MIGHTI-A_Green_ Array_Altitudes , ICON_L1_MIGHT I-A_Green_Array _OPD
ICON_L1_MIGHTI_A_Gree n_Envelope	Envelopes of the green atmospheric fringes by pixel and altitude Envelopes of the green atmospheric fringes by pixel and altitude	Counts	Epoch, ICON_L1_ MIGHTI-A_Green_ Array_Altitudes , ICON_L1_MIGHT I-A_Green_Array _OPD
ICON_L1_MIGHTI_A_Gree n_Phase_Uncertainties	Uncertainties of the phases of the green atmospheric line by pixel and altitude Uncertainties of the phase deltas of the green atmospheric line by pixel and altitude	rad	Epoch, ICON_L1_ MIGHTI-A_Green_ Array_Altitudes
ICON_L1_MIGHTI_A_Gree n_Envelope_Uncertaint ies	Uncertainties of the envelopes of the green atmospheric fringes by pixel and altitude Uncertainties of the envelopes of the green atmospheric fringes by pixel and altitude	Counts	Epoch, ICON_L1_ MIGHTI-A_Green_ Array_Altitudes
ICON_L1_MIGHTI_A_Gree n_Tangent_LatLonAlt	Tangent point longitudes, latitudes, and altitudes for green side - middle of FoV, all altitudes Tangent point longitudes, latitudes, and altitudes for green side - middle of FoV, all altitudes	Degree s, Degr ees, km	Epoch, ICON_L1_ MIGHTI-A_Time_C hannel, ICON_L1 _MIGHTI-A_Vecto r_LLA, ICON_L1_ MIGHTI-A_Green_ Array_Altitudes
ICON_L1_MIGHTI_A_Red_ Phase	Phase difference between the red atmospheric line and the associtaed calibration line minus the corresponding Zero Wind delta - by pixel and altitude Phase difference between the red atmospheric line and the associtaed calibration line minus the corresponding Zero Wind delta - by pixel and altitude	rad	Epoch, ICON_L1_ MIGHTI-A_Red_Ar ray_Altitudes, ICON_L1_MIGHTI- A_Red_Array_OPD

Variable Name	Description	Units	Dimensions
ICON_L1_MIGHTI_A_Red_ Envelope	Envelopes of the red atmospheric fringes by pixel and altitude Envelopes of the red atmospheric fringes by pixel and altitude	Counts	Epoch, ICON_L1_ MIGHTI-A_Red_Ar ray_Altitudes, ICON_L1_MIGHTI- A_Red_Array_OPD
ICON_L1_MIGHTI_A_Red_ Phase_Uncertainties	Uncertainties of the phase deltas of the red atmospheric line by pixel and altitude Uncertainties of the phase deltas of the red atmospheric line by pixel and altitude	rad	Epoch, ICON_L1_ MIGHTI-A_Red_Ar ray_Altitudes
ICON_L1_MIGHTI_A_Red_ Envelope_Uncertaintie s	Uncertainties of the envelopes of the red atmospheric fringes by pixel and altitude Uncertainties of the envelopes of the red atmospheric fringes by pixel and altitude	Counts	Epoch, ICON_L1_ MIGHTI-A_Red_Ar ray_Altitudes
ICON_L1_MIGHTI_A_Red_ Tangent_LatLonAlt	Tangent point longitudes, latitudes, and altitudes for red side - middle of FoV, all altitudes Tangent point longitudes, latitudes, and altitudes for red side - middle of FoV, all altitudes	Degree s, Degr ees, km	Epoch, ICON_L1_ MIGHTI-A_Time_C hannel, ICON_L1 _MIGHTI-A_Vecto r_LLA, ICON_L1_ MIGHTI-A_Red_Ar ray_Altitudes
ICON_L1_MIGHTI_A_Gree n_ECEF_Unit_Vectors	ECEF Unit Vectors per pixel representing the green lines of sight ECEF Unit Vectors per pixel representing the green lines of sight		Epoch, ICON_L1_ MIGHTI-A_Vector _XYZ, ICON_L1_M IGHTI-A_Green_A rray_Altitudes, ICON_L1_MIGHTI- A_Green_Array_O PD
ICON_L1_MIGHTI_A_Red_ ECEF_Unit_Vectors	ECEF Unit Vectors per pixel representing the red lines of sight ECEF Unit Vectors per pixel representing the red lines of sight		Epoch, ICON_L1_ MIGHTI-A_Vector _XYZ, ICON_L1_M IGHTI-A_Red_Arr ay_Altitudes, I CON_L1_MIGHTI-A _Red_Array_OPD

Support_Data

Variable Name	Description	Units	Dimensions
ICON_L0_MIGHTI_A_Time _UTC	ISO 9601 formatted UTC timestamp (at middle of image integration).		Epoch
	ISO 9601 formatted UTC timestamp (at middle of image integration).		
	Derived from original GPS values reported from spacecraft (Time_GPS_Seconds and Time_GPS_Subseconds).		
	Time calculation is offset by 615ms (flush time) for the first image in the series and for all other images are adjusted by subtracting (integration time + 308 milliseconds) from the reported GPS time then adding the difference between the readout FRT and the header FRT.		
	Time may be delayed by up to 10 ms due to FSW polling delay.		
	Maximum time is ~2150 UTC and minimum time is ~1970 UTC.		
	All character arrays are NULL terminated (size includes NULL).		
ICON_LO_MIGHTI_A_Time _GPS	Milliseconds since 1980-01-06 00:00:00 TAI (coincident with UTC) at middle of image integration.	millisec onds	Epoch
	Milliseconds since 1980-01-06 00:00:00 TAI (coincident with UTC) at middle of image integration.		
	Derived from original GPS values reported from spacecraft (Time_GPS_Seconds and Time_GPS_Subseconds).		
	Time calculation is offset by 615ms (flush time) for the first image in the series and for all other images are adjusted by subtracting (integration time + 308 milliseconds) from the reported GPS time then adding the difference between the readout FRT and the header FRT.		
	Time may be delayed by up to 10 ms due to FSW polling delay.		
	Maximum time is ~2150 UTC and minimum time is ~1970 UTC.		

Variable Name	Description	Units	Dimensions
ICON_L0_MIGHTI_A_Time _UTC_Start	Milliseconds since 1970-01-01 00:00:00 UTC at start of image integration.	millisec onds	Epoch
	Milliseconds since 1970-01-01 00:00:00 UTC at start of image integration.		
	Derived from original GPS values reported from spacecraft (Time_GPS_Seconds and Time_GPS_Subseconds).		
	Time calculation is offset by 615ms (flush time) for the first image in the series and for all other images are adjusted by subtracting (integration time + 308 milliseconds) from the reported GPS time then adding the difference between the readout FRT and the header FRT.		
	Time may be delayed by up to 10 ms due to FSW polling delay.		
	Maximum time is ~2150 UTC and minimum time is ~1970 UTC.		
ICON_L0_MIGHTI_A_Time _UTC_Stop	Milliseconds since 1970-01-01 00:00:00 UTC at end of image integration.	millisec onds	Epoch
	Milliseconds since 1970-01-01 00:00:00 UTC at end of image integration.		
	Derived from original GPS values reported from spacecraft (Time_GPS_Seconds and Time_GPS_Subseconds).		
	Time calculation is offset by 615ms (flush time) for the first image in the series and for all other images are adjusted by subtracting (integration time + 308 milliseconds) from the reported GPS time then adding the difference between the readout FRT and the header FRT.		
	Time may be delayed by up to 10 ms due to FSW polling delay.		
	Maximum time is ~2150 UTC and minimum time is ~1970 UTC.		
ICON_LO_MIGHTI_A_Time _GPS_Seconds	GPS seconds count when FSW received image packet header.	Second s	Epoch
	GPS seconds count when FSW received image packet header.		
	The FSW received the header of the first image in a series 615ms after start of image processing. Following headers are adjusted by subtracting (integration time + 308 milliseconds) from the reported GPS time then adding the difference between the readout FRT and the header FRT.		
	Time may be delayed by up to 10 ms due to FSW polling delay.		

Variable Name	Description	Units	Dimensions
ICON_LO_MIGHTI_A_Time _GPS_Subseconds	FSW 20MHz clock (50 nanosecond) offset from GPS seconds. FSW 20MHz clock (50 nanosecond) offset from GPS seconds.	50 Nan osecon ds	_
	The FSW received the header of the first image in a series 615ms after start of image processing. Following headers are adjusted by subtracting (integration time + 308 milliseconds) from the reported GPS time then adding the difference between the readout FRT and the header FRT.		
	The offset may be more than 1 second but never 2 or more seconds.		
	Time may be delayed by up to 10 ms due to FSW polling delay.		
ICON_LO_MIGHTI_A_Time _Integration	Time to integrate MIGHTI-A region of interest (ROI) image.	millisec onds	Epoch
ICON_LO_MIGHTI_A_Time _Header_Free_Running_	Free running timer reading for MIGHTI image header.	millisec onds	Epoch
Timer	The FRTs are millisecond free running timers used to calculate the time offset for this image's integration from the observatory GPS time tag. This is only used when it is not the first image in the integration sequence. When the prior image FRT is not known a timing error is generated as a calculation cannot be performed. The base GPS time is used as the start time.		
ICON_LO_MIGHTI_A_Time _Readout_Free_Running _Timer	Free running timer reading for MIGHTI image data readout start. The FRTs are millisecond free running timers used to calculate the time offset for this image's integration from the observatory GPS time tag. This is only used when it is not the first image in the integration sequence. When the prior image FRT is not known a timing error is generated as a calculation cannot be performed. The base GPS time is used as the start time.	millisec onds	Epoch
ICON_LO_MIGHTI_A_Time _Prior_Readout_Free_R unning_Timer	Free running timer reading for MIGHTI prior image data readout start.	millisec onds	Epoch
umiing_iimer	The FRTs are millisecond free running timers used to calculate the time offset for this image's integration from the observatory GPS time tag. This is only used when it is not the first image in the integration sequence. When the prior image FRT is not known a timing error is generated as a calculation cannot be performed. The base GPS time is used as the start time.		

Variable Name	Description	Units	Dimensions
ICON_LO_MIGHTI_A_Time _Prior_Known	Flag indicating prior image's free running timer known.	Flag	Epoch
	The FRTs are millisecond free running timers used to calculate the time offset for this image's integration from the observatory GPS time tag. This is only used when it is not the first image in the integration sequence. When the prior image FRT is not known a timing error is generated as a calculation cannot be performed. The base GPS time is used as the start time.		
ICON_LO_MIGHTI_A_MT_D evice_ID	MIGHTI camera instrument ID (0=MIGHTI-A, 1=MIGHT-B).	Flag	
ICON_LO_MIGHTI_A_MT_D evice_Current_Sense	MIGHTI camera current (power) monitor count.	Count	Epoch
ICON_L0_MIGHTI_A_Cali bration_Lamp_1	MIGHTI camera calibration lamp 1 setting (0=OFF, 1=ON).	Flag	Epoch
ICON_L0_MIGHTI_A_Cali bration_Lamp_2	MIGHTI camera calibration lamp 2 setting (0=OFF, 1=ON).	Flag	Epoch
ICON_L0_MIGHTI_A_Cali bration_Lamp_Current	MIGHTI camera calibration lamp combined current monitor sense count.	Count	Epoch
ICON_LO_MIGHTI_A_Cali bration_Lamp_Temperat ure	MIGHTI camera calibration lamp combined temperature monitor sense count.	Count	Epoch
ICON_LO_MIGHTI_A_Inte rferometer_1_Temperat ure_Sense	MIGHTI interferometer 1 fine temperature sense count.	Count	Epoch
ICON_LO_MIGHTI_A_Inte rferometer_2_Temperat ure_Sense	MIGHTI interferometer 2 fine temperature sense count.	Count	Epoch
ICON_LO_MIGHTI_A_Opti cs_Bench_Temperature_ Forward	MIGHTI optics bench forward temperature sense count.	Count	Epoch
ICON_L0_MIGHTI_A_Opti cs_Bench_Temperature_ Rear	MIGHTI optics bench rear temperature sense count.	Count	Epoch
ICON_LO_MIGHTI_A_Opti cs_Temperature_Aft	MIGHTI optics aft temperature sense count.	Count	Epoch
ICON_LO_MIGHTI_A_TEC_ Current_Input_Count	MIGHTI thermo-electric cooler combined (TEC-A + TEC-B) input current count.	Count	Epoch
ICON_LO_MIGHTI_A_TEC_ Temperature_Cold_Coun t	MIGHTI thermo-electric cooler cold-side temperature sense count.	Count	Epoch
ICON_LO_MIGHTI_A_TEC_ Temperature_Hot_Count	MIGHTI thermo-electric cooler hot-side temperature sense count.	Count	Epoch

Variable Name	Description	Units	Dimensions
ICON_LO_MIGHTI_A_MTA_	MIGHTI-A camera aperture 1 position sense flag.	Flag	Epoch
Aperturel_Position	0=OPEN, 1=CLOSED, 2=15% OPEN, 3=UNKNOWN		
ICON_LO_MIGHTI_A_MTA_	MIGHTI-A camera aperture 2 position sense flag.	Flag	Epoch
Aperture2_Position	0=OPEN, 1=CLOSED, 2=15% OPEN, 3=UNKNOWN		
ICON_LO_MIGHTI_A_MTA_ Aperture1	MIGHTI-A camera aperture 1 switch setting (0=OPEN, 1=CLOSED).	Flag	Epoch
ICON_LO_MIGHTI_A_MTA_ Aperture2	MIGHTI-A camera aperture 2 switch setting (0=OPEN, 1=CLOSED).	Flag	Epoch
ICON_LO_MIGHTI_A_MTB_	MIGHTI-B camera aperture 1 position sense flag.	Flag	Epoch
Aperture1_Position	0=OPEN, 1=CLOSED, 2=15% OPEN, 3=UNKNOWN		
ICON_LO_MIGHTI_A_MTB_	MIGHTI-B camera aperture 2 position sense flag.	Flag	Epoch
Aperture2_Position	0=OPEN, 1=CLOSED, 2=15% OPEN, 3=UNKNOWN		
ICON_LO_MIGHTI_A_MTB_ Aperture1	MIGHTI-B camera aperture 1 switch setting (0=OPEN, 1=CLOSED).	Flag	Epoch
ICON_LO_MIGHTI_A_MTB_ Aperture2	MIGHTI-B camera aperture 2 switch setting (0=OPEN, 1=CLOSED).	Flag	Epoch
ICON_LO_MIGHTI_A_Erro	Error count during compression (per packet).	Count	Epoch
r_Compression	Error count during compression (per packet).		
	Should be zero (for no error) but if it is a non-zero number then the number indicates the number of packets that contained an overflow in the delta bit field during compression.		
ICON_LO_MIGHTI_A_Erro r_Time	Error finding prior image readout FRT (0=GOOD, 1=ERROR).	Flag	Epoch
	Error finding prior image readout FRT (0=GOOD, 1=ERROR).		
	The prior image read out FRT was missing so proper time offset couldn't be calculated correctly. The time will indicate later then the actual time. This only occurs when not the first image of the series.		
ICON_LO_MIGHTI_A_CCD_ CS_Register	CCD CS register value from image header at end of integration.	Flag	Epoch
	CCD CS register value from image header at end of integration.		
	See ICN-ICD-002 (MIGHTI) for more details on this parameter.		

Variable Name	Description	Units	Dimensions
ICON_LO_MIGHTI_A_Hori zontal_Charge_Transfe r_Efficiency_Count	Horizontal charge transfer efficiency register count indicating the horizontal overscan pixel configuration per MIGHTI ICD.	Count	Epoch
	Horizontal charge transfer efficiency register count indicating the horizontal overscan pixel configuration per MIGHTI ICD.		
	See ICN-ICD-002 (MIGHTI) for more details on this parameter.		
ICON_LO_MIGHTI_A_Imag e_BIN_Parameters	MIGHTI binning parameters (BINCOUNTS). MIGHTI binning parameters (BINCOUNTS).	Flag	Epoch
	See ICN-ICD-002 (MIGHTI) for more details on this parameter.		
ICON_LO_MIGHTI_A_Imag e_First	First image in MIGHTI integration sequence (0=NOT FIRST, 1=FIRST).	Flag	Epoch
ICON_LO_MIGHTI_A_Imag e_ROI_Column_Count	MIGHTI region of interest (ROI) pixel column count.	Count	Epoch
ICON_L0_MIGHTI_A_Imag e_ROI_Column_Start	MIGHTI region of interest (ROI) pixel starting column.	Count	Epoch
ICON_LO_MIGHTI_A_Imag e_ROI_Row_Count	MIGHTI region of interest (ROI) pixel row count.	Count	Epoch
ICON_LO_MIGHTI_A_Imag e_ROI_Row_Start	MIGHTI region of interest (ROI) pixel starting row.	Count	Epoch

support_data

Variable Name	Description	Units	Dimensions
Epoch	Milliseconds since 1970-01-01 00:00:00 UTC at middle of image integration	ms	Epoch
	Milliseconds since 1970-01-01 00:00:00 UTC at middle of image integration		
ICON_L1_MIGHTI_A_IR_A rray_Pixel_Index	Pixel indicies corresponding to the five IR filters Pixel indicies corresponding to the five IR filters		Epoch, ICON_L1_ MIGHTI-A_IR_Arr ay_Pixel_Index
ICON_L1_MIGHTI_A_IR_A rray_Altitudes	Altitudes corresponding to the five IR filters Altitudes corresponding to the five IR filters	km	Epoch, ICON_L1_ MIGHTI-A_IR_Arr ay_Altitudes
ICON_L1_MIGHTI_A_Gree n_Quality_Factor	Data quality Factor by altitude for 557nm Data quality Factor by altitude for 557nm. 0 is untrusted data. 0.5 is usable with care. 1.0 is good data.		Epoch, ICON_L1_ MIGHTI-A_Green_ Array_Altitudes
ICON_L1_MIGHTI_A_Gree n_Array_OPD	Optical path differences corresponding to the green fringes Optical path differences corresponding to the green fringes	cm	Epoch, ICON_L1_ MIGHTI-A_Green_ Array_OPD

Variable Name	Description	Units	Dimensions
ICON_L1_MIGHTI_A_Gree n_Array_Altitudes	Altitudes corresponding to the green fringes - middle of integration, middle of FoV Altitudes corresponding to the green fringes - middle of	km	Epoch, ICON_L1_ MIGHTI-A_Green_ Array_Altitudes
	integration, middle of FoV		
ICON_L1_MIGHTI_A_Red_	Data quality Factor by altitude for 630nm		Epoch, ICON_L1_
Quality_Factor	Data quality Factor by altitude for 630nm. 0 is untrusted data. 0.5 is usable with care. 1.0 is good data.		MIGHTI-A_Red_Ar ray_Altitudes
ICON_L1_MIGHTI_A_Red_ Array_OPD	Optical path differences corresponding to the red fringes	cm	Epoch, ICON_L1_ MIGHTI-A_Red_Ar
	Optical path differences corresponding to the red fringes		ray_OPD
ICON_L1_MIGHTI_A_Red_	Altitudes corresponding to the red fringes	km	Epoch, ICON_L1_
Array_Altitudes	Altitudes corresponding to the red fringes		MIGHTI-A_Red_Ar ray_Altitudes
<pre>ICON_L1_MIGHTI_A_SC_P</pre>	Spacecraft Position Vector in ECEF	km	Epoch, ICON_L1_
osition_ECEF	Spacecraft Position Vector in ECEF		MIGHTI-A_Time_C hannel, ICON_L1 _MIGHTI-A_Vecto r_XYZ
ICON_L1_MIGHTI_A_SC_V	ECEF Vector for spacecraft velocity	m/s	Epoch, ICON_L1_
elocity_ECEF	ECEF Vector for spacecraft velocity		MIGHTI-A_Time_C hannel, ICON_L1 _MIGHTI-A_Vecto r_XYZ
ICON_L1_MIGHTI_A_Imag e_Times	Epochs corresponding to the Start, Middle, and Stop of the integration	ms	Epoch, ICON_L1_ MIGHTI-A_Time_C
	Epochs corresponding to the Start, Middle, and Stop of the integration		hannel
ICON_L1_MIGHTI_A_Roll	Roll angles of the field of view	deg	Epoch, ICON_L1_
_Angles	Roll angles of the field of view		MIGHTI-A_Vector _Roll
ICON_L1_MIGHTI_A_Qual ity_Flag_Near_Termina	Quality Flag indicating that terminator is within field of view		Epoch
tor	Quality Flag indicating that terminator is within field of view		
ICON_L1_MIGHTI_A_Qual	Quality Flag indicating low signal to noise		Epoch
ity_Flag_Low_Signal_T o_Noise	Quality Flag indicating low signal to noise		
ICON_L1_MIGHTI_A_Qual ity_Flag_SAA	Quality Flag indicating that the spacecraft is within the South Atlantic Anomoly		Epoch
	Quality Flag indicating that the spacecraft is within the South Atlantic Anomoly		
ICON_L1_MIGHTI_A_Qual ity_Flag_Bad_Calibrat	Quality Flag indicating an inappropriate calibration file has been used or was missing		Epoch
ion	Quality Flag indicating an inappropriate calibration file has been used or was missing		

Variable Name	Description	Units	Dimensions
ICON_L1_MIGHTI_A_SC_A	Spacecraft Attitude Control Register		Epoch
ttitude_Control_Regis ter	Spacecraft Attitude Control Register		
	Bit 0: LVLH NORMAL		
	Bit 1: LVLH Reverse Mode		
	Bit 2: Earth Limb Pointing		
	Bit 3: Inertial Pointing		
	Bit 4: Stellar Pointing		
	Bit 5: Attitude Slew		
	Bit 6: Conjugate Maneuver		
	Bit 7: Nadir Calibration		
	Bit 8: Lunar Calibration		
	Bit 9: Stellar Calibration		

Data

Variable Name	Description	Units	Dimensions
ICON_LO_MIGHTI_A_Imag e_ROI_Pixels	MIGHTI region of interest pixel values layed out [ROWS]x[COLUMNS].	Count	Epoch, ICON_L0_ MIGHTI_A_Image_ ROI_Rows, ICON_ L0_MIGHTI_A_Ima ge_ROI_Columns

metadata

Variable Name	Description	Units	Dimensions
ICON_L1_MIGHTI_A_Vect or_LLA	Vector labels corresponding to the tangent lat, lon, and alt		ICON_L1_MIGHTI- A_Vector_LLA
	Vector labels corresponding to the tangent lat, lon, and alt		
ICON_L1_MIGHTI_A_Vect or_XYZ	Vector labels corresponding to the ECEF lines of sight		ICON_L1_MIGHTI- A_Vector_XYZ
	Vector labels corresponding to the ECEF lines of sight		
ICON_L1_MIGHTI_A_Vect or_Roll	Vector labels corresponding to the field of view roll angles Vector labels corresponding to the field of view roll angles		ICON_L1_MIGHTI- A_Vector_Roll
ICON_L1_MIGHTI_A_Time _Channel	Vector labels corresponding to the time channels Vector labels corresponding to the time channels		ICON_L1_MIGHTI- A_Time_Channel

Software version: ICON SDC > MIGHTI L1 Processor v1.0.0