Telemetry description for MEIS4, 5

facility name	TLM ID	TLM NAME	UNIT	Description	Example
FPEF	TLM_ID	TLM_NAME	UNIT	2010/10/26 22:10:40.000000	
FPEF	J#P0601J03010	P/L ID	ND	Not used	
FPEF	J#P0601J03018	Data ID	ND	Not used	
FPEF	J#P0601J03020	Frame Struc ID	ND	Not used	
FPEF	J#P0601J03027	Termination	ND	Not used	
FPEF	J#P0601J03028	Message Seq Cnt	ND	Not used	
FPEF	J#P0601J03030	Year	year	Not used	
FPEF	J#P0601J03040	Month	month	Not used	
FPEF	J#P0601J03048	Day of month	day	Not used	
FPEF	J#P0601J03050	Hour	hour	Not used	
FPEF	J#P0601J03058	Minute	minute	Not used	
FPEF	J#P0601J03060	Second	second	Not used	
FPEF	J#P0601J03068	PLInternalTimeId	ND	Not used	
FPEF	J#P0601J03070	PLTimeResolution	ND	Not used	
FPEF	J#P0601J03078	Count No.	ND	Not used	
FPEF	J#P0601J03080	Count No.	ND	Not used	
FPEF	J#P0601J03090	Tlm Counter	ND	Not used	
FPEF	J#P0601J03100	Obs Win 2 Temp	deg C	temperature of observation window 2(IR view)	23.401586
FPEF	J#P0601J03110	C-D Amp Temp	deg C	relative temperature amplified "C-D Temp 1", the range is 5[K]	5.000015
FPEF	J#P0601J03120	H-D ITO1 Temp	deg C	Heating disk temperature, ITO sensor 1	18.545482
FPEF	J#P0601J03130	H-D ITO2 Temp	deg C	Heating disk temperature, ITO sensor 2	18.77254
FPEF	J#P0601J03140	InsTC Amp Temp	deg C	relative temperature amplified "InsertionTC Temp", the range is 5[K]	-0.001068
FPEF	J#P0601J03150	S-Lim (Amp2) V	V	voltage of the Amp2 Software Limiter line	0
FPEF	J#P0601J03160	PertierHsidTemp2	deg C	temperature of the peltier heating side sensor 2	36.072867
FPEF	J#P0601J03170	H-Lim2 (Amp2) V	V	voltage of the Amp2 Hardware Limiter line	0
FPEF	J#P0601J03180	Amp 1 Voltage	V	Amp 1 Voltage	-0.029755
FPEF	J#P0601J03190	Amp 1 Current	A	Amp 1 Current	-0.970089
FPEF	J#P0601J03200	Amp 2 Voltage	V	Amp 2 Voltage	-0.006867
FPEF	J#P0601J03210	Amp 2 Current	A	Amp 2 Current	-1.861995
FPEF	J#P0601J03220	Amp 3 Voltage	V	Amp 3 Voltage	-0.025178
FPEF	J#P0601J03230	Amp 3 Current	A	Amp 3 Current	-0.943386
FPEF	J#P0601J03240	Amp 4 Voltage	V	Amp 4 Voltage	0.112155
FPEF	J#P0601J03250	Amp 4 Current	A	Amp 4 Current	-0.888483
FPEF	J#P0601J03260	C-D Temp 1	deg C	cooling disk temperature, thermocouple-1	29.546791
FPEF	J#P0601J03270	C-D Temp 2	deg C	cooling disk temperature, thermocouple-2	19.651473
FPEF	J#P0601J03280	InsertionTC Temp	deg C	temperature of Insertion TC	24.793229
FPEF	J#P0601J03290	ObsWin 1 Temp	deg C	temperature of observation window 1(2D view)	22.112484
FPEF	J#P0601J03300	Pertier Temp 1	deg C	temperature of the peltier heating side, sensor 1	17.607954
FPEF	J#P0601J03310	C-D Temp 3	deg C	cooling disk temperature, thermocouple-3	19.585553
FPEF	J#P0601J03320	TC Comp Temp	deg C	temperature of TC cold junction compensation	21.548502
FPEF	J#P0601J04010	P/L ID	ND	Not used	
FPEF	J#P0601J04018	Data ID	ND	Not used	
FPEF	J#P0601J04020	Frame Struc ID	ND	Not used	
FPEF	J#P0601J04027	Termination	ND	Not used	
FPEF	J#P0601J04028	Message Seq Cnt	ND	Not used	
FPEF	J#P0601J04030	ECInsideGasTemp	deg C	temperature of gas in Experiment Cell	21.812182
FPEF	J#P0601J04040	H-D Pt 1 Temp	deg C	heating disk temperature, platinum sensor 1	20.464485
FPEF	J#P0601J04050	H-D Pt 2 Temp	deg C	heating disk temperature, platinum sensor 2	20.427863
FPEF	J#P0601J04060	H-D Pt 3 Temp	deg C	heating disk temperature, platinum sensor 3	20.786761
FPEF	J#P0601J04078	H-Lim2(Amp4)St	ND	Not used	OFF
FPEF	J#P0601J04079	H-Lim2(Amp3)St	ND	status of Amp 3 hardware limitter-2	OFF
FPEF	J#P0601J0407A	H-Lim1(Amp4)St	ND	Not used	OFF
FPEF	J#P0601J0407B	H-Lim1(Amp3)St	ND	status of Amp 3 hardware limitter-1	OFF
FPEF	J#P0601J04080	PhotoSenr2(CCW)	ND	limit switch status of cooling disk position, heating disk side	OFF
FPEF	J#P0601J04081	Cntl/Ldr ID	ND	Identification of Controller/Loader	Controller
FPEF	J#P0601J04082	Exp Cell ID	ND	Identification of Experiment Cell	Inside 50mm
FPEF	J#P0601J04087	TC AxCW LS9 St	ND	# limit switch status of Insertion TC position # axis direction of liquid bridge # cooling disk side	OFF
FPEF	J#P0601J04088	TC AxCCW LS8 St	ND	# limit switch status of Insertion TC position # axis direction of liquid bridge # heating disk side	OFF
FPEF	J#P0601J0408A	TC RadCCW LS7 St	ND	# limit switch status of Insertion TC position # radial direction of liquid bridge. # far side from liquid bridge	OFF
FPEF	J#P0601J0408B	TC Rad CW LS6 St	ND	# limit switch status of Insertion TC position # radial direction of liquid bridge. # near side to liquid bridge	OFF
FPEF	J#P0601J0408C	L-BShapeCCWLS5St	ND	status of the limit switch-5 for LB shape adjuster	OFF
FPEF	J#P0601J0408D	L-BShapeCW LS4 St	ND	status of the limit switch-4 for LB shape adjuster	OFF
FPEF	J#P0601J0408E	PhotoSenr3(CW)	ND	limit switch status of cooling disk position, cooling disk side	OFF
FPEF	J#P0601J0408F	PhotoSenr1(IntP)	ND	sensor status of cooling disk initial position	ON

Telemetry description for MEIS4, 5

facility name	TLM ID	TLM NAME	UNIT	Description	Example
FPEF	J#P0601J0409F	AuxLight	ND	status of Aux light ON/OFF	OFF
FPEF	J#P0601J04100	Amp 1 V(Setting)	V	voltage setting value of power amp 1	0
FPEF	J#P0601J04110	Amp 2 V(Setting)	V	voltage setting value of power amp 2	0
FPEF	J#P0601J04120	Amp 3 V(Setting)	V	voltage setting value of power amp 3	0
FPEF	J#P0601J04130	Amp 4 V(Setting)	V	voltage setting value of power amp 4	0
FPEF	J#P0601J04140	Amp 1 C(Setting)	A	current setting value of power amp 1	1.00235
FPEF	J#P0601J04150	Amp 2 C(Setting)	A	current setting value of power amp 2	5.003926
FPEF	J#P0601J04160	Amp 3 C(Setting)	A	current setting value of power amp 3	1.00235
FPEF	J#P0601J04170	Amp 4 C(Setting)	A	current setting value of power amp 4	3.007049
FPEF	J#P0601J04189	USER/DO 7	ND	Not used	ON
FPEF	J#P0601J0418A	USER/DO 6	ND	Not used	OFF
FPEF	J#P0601J0418B	USER/DO 5	ND	Not used	ON
FPEF	J#P0601J0418C	USER/DO 4	ND	Not used	ON
FPEF	J#P0601J0418D	USER/DO 3	ND	Not used	OFF
FPEF	J#P0601J0418E	USER/DO 2	ND	Not used	OFF
FPEF	J#P0601J0418F	UVP Status	ND	UVP start/stop command status	Stop
FPEF	J#P0601J0419F	AuxLight(set)	ND	command status of Aux light	OFF
FPEF	J#P0601J04200	C-D Posn	mm	distance between Cooling disk and heating disk	0.009156
FPEF	J#P0601J0420G	C-D - TC Ax Posn	mm	distance between Cooling disk and Insertion TC in an axial direction	0.009156
FPEF	J#P0601J04210	L-B ShapeAdjQty	cc	operating status of LB shape adjuster	-0.297961
FPEF	J#P0601J04220	TC Rad Posn	mm	Insertion TC position in a radial direction	0
FPEF	J#P0601J04230	TC Axis Posn	mm	Insertion TC position in an axial direction	0
FPEF	J#P0601J04244	TC AxInitPosn St	ND	initialization status about an axial position of the insertion TC	Initialized
FPEF	J#P0601J04246	TC Ax Move Statu	ND	moving status of the insertion TC in an axial	Stopped
FPEF	J#P0601J04247	TC Rad IntPosnSt	ND	initialization status about a radial position of the insertion TC	Initialized
FPEF	J#P0601J04249	TC Rad Move Stat	ND	moving status of the insertion TC in a radial direction	Stopped
FPEF	J#P0601J0424C	L-B Shape Adj St	ND	operating status of LB shape adjuster	Stopped
FPEF	J#P0601J0424D	C-D Posn Init St	ND	the initialization status about the position of cooling disk	Initialized
FPEF	J#P0601J0424F	C-D Moving Statu	ND	Cooling Disk Moving status	Stopped
FPEF	J#P0601J04257	Liq Bridge Dia	ND	Liquid Bridge Diameter	50mm
FPEF	J#P0601J04258	ObsWin2 Cntl ch	ND	sensor channel for temperature control of observation window 2	Default
FPEF	J#P0601J0425A	ObsWin1 Cntl ch	ND	sensor channel for temperature control of observation windows 1	Default
FPEF	J#P0601J0425C	H-D Cntl ch	ND	sensor channel for temperature control of heating disk	Default
FPEF	J#P0601J0425D	C-D Cntl ch	ND	sensor channel for temperature control of cooling disk	Default
FPEF	J#P0601J04260	Exp Seq Status	ND	status of the experiment sequence	Not Pause
FPEF	J#P0601J04264	ObsWin2 Hold St	ND	the operating status of temperature control for observation window 2	Not Pause
FPEF	J#P0601J04265	ObsWin1 Hold St	ND	the operating status of temperature control for observation window 1	Not Pause
FPEF	J#P0601J04266	H-D Hold Status	ND	the operating status of heating disk temperature control	Not Pause
FPEF	J#P0601J04267	C-D Hold Status	ND	the operating status of cooling disk temperature control	Not Pause
FPEF	J#P0601J04268	ObsWin2 Prof St	ND	the editing status of temperature profile for observation window 2	Not Edited
FPEF	J#P0601J0426A	ObsWin1 Prof St	ND	the editing status of temperature profile for observation window 1	Not Edited
FPEF	J#P0601J0426C	H-D Temp Prof St	ND	the editing status of heating disk temperature profile	Edited
FPEF	J#P0601J0426E	C-D Temp Prof St	ND	the editing status of cooling disk temperature profile	Not Edited
FPEF	J#P0601J04270	Exp No.	ND	expeiment number (Not used)	
FPEF	J#P0601J04300	IR Temp Get St	ND	status of measuring temperature via IR camera	Not Getting
FPEF	J#P0601J04310	IR MeasurePnt X1	ND	measuring point in IR image, X-coordinate	
FPEF	J#P0601J04320	IR MeasurePnt Y1	ND	measuring point in IR image, Y-coordinate	
FPEF	J#P0601J05010	P/L ID	ND	payload ID (Not used in MEIS)	
FPEF	J#P0601J05018	Data ID	ND	Experiment data ID (Not used in MEIS)	
FPEF	J#P0601J05020	Frame Struc ID	ND	frame structure ID (Not used in MEIS)	
FPEF	J#P0601J05027	Termination	ND	termination (Not used in MEIS)	
FPEF	J#P0601J05028	Message Seq Cnt	ND	message sequence counter (decimal) (Not used in MEIS)	
FPEF	J#P0601J05030	SA5 UVP 1-60	ND	UVP data from first Byte to 60 Byte in this telemetory cycle (Not used in MEIS)	
FPEF	J#P0601J06010	P/L ID	ND	payload ID (Not used in MEIS)	
FPEF	J#P0601J06018	Data ID	ND	Experiment data ID (Not used in MEIS)	
FPEF	J#P0601J06020	Frame Struc ID	ND	frame structure ID (Not used in MEIS)	
FPEF	J#P0601J06027	Termination	ND	termination (Not used in MEIS)	

Telemetry description for MEIS4, 5

facility name	TLM ID	TLM NAME	UNIT	Description	Example
FPEF	J#P0601J06028	Message Seq Cnt	ND	message sequence counter (decimal) (Not used in MEIS)	
FPEF	J#P0601J06030	SA6 UVP 61-120	ND	UVP data from 61 Byte to 120 Byte in this telemetory cycle (Not used in MEIS)	
FPEF	J#P0601J07010	P/L ID	ND	payload ID (Not used in MEIS)	
FPEF	J#P0601J07018	Data ID	ND	Experiment data ID (Not used in MEIS)	
FPEF	J#P0601J07020	Frame Struc ID	ND	frame structure ID (Not used in MEIS)	
FPEF	J#P0601J07027	Termination	ND	termination (Not used in MEIS)	
FPEF	J#P0601J07028	Message Seq Cnt	ND	message sequence counter (decimal) (Not used in MEIS)	
FPEF	J#P0601J07030	SA7 UVP 121-180	ND	UVP data from 121 Byte to 180 Byte in this telemetory cycle (Not used in MEIS)	
FPEF	J#P0601J08010	P/L ID	ND	payload ID (Not used in MEIS)	
FPEF	J#P0601J08018	Data ID	ND	Experiment data ID (Not used in MEIS)	
FPEF	J#P0601J08020	Frame Struc ID	ND	frame structure ID (Not used in MEIS)	
FPEF	J#P0601J08027	Termination	ND	termination (Not used in MEIS)	
FPEF	J#P0601J08028	Message Seq Cnt	ND	message sequence counter (decimal) (Not used in MEIS)	
FPEF	J#P0601J08030	SA8 UVP 181-240	ND	UVP data from 181 Byte to 240 Byte in this telemetory cycle (Not used in MEIS)	
FPEF	J#P0601J09010	P/L ID	ND	payload ID (Not used in MEIS)	
FPEF	J#P0601J09018	Data ID	ND	Experiment data ID (Not used in MEIS)	
FPEF	J#P0601J09020	Frame Struc ID	ND	frame structure ID (Not used in MEIS)	
FPEF	J#P0601J09027	Termination	ND	termination (Not used in MEIS)	
FPEF	J#P0601J09028	Message Seq Cnt	ND	message sequence counter (decimal) (Not used in MEIS)	
FPEF	J#P0601J09030	SA9 UVP 241-Last	ND	UVP data from 241 Byte to last Byte in this telemetory cycle (Not used in MEIS)	
FPEF	J#P0601J24010	P/L ID	ND	payload ID	
FPEF	J#P0601J24018	Data ID	ND	Experiment data ID	
FPEF	J#P0601J24020	Frame Struc ID	ND	frame structure ID	
FPEF	J#P0601J24027	Termination	ND	termination	
FPEF	J#P0601J24028	Message Seq Cnt	ND	message sequence counter (decimal)	
FPEF	J#P0601J24030	Ar Gas Press	kPa	Argon Gas pressure in EC	97.183111
FPEF	J#P0601J24050	+5V Voltage	V	voltage of "+5V" line	4.906642
FPEF	J#P0601J24060	+15V Voltage	V	voltage of "+15V" line	14.897911
FPEF	J#P0601J24070	-15V Voltage	V	voltage of "-15V" line	-15.055997
FPEF	J#P0601J24080	Exp Cell +15V V	V	voltage of "+15V" line in EC	14.938195
FPEF	J#P0601J24090	Exp Cell -15V V	V	voltage of "-15V" line in EC	-14.97848
FPEF	J#P0601J24100	+5V Reg Voltage	V	voltage of "+5V" regulation line	5.014312
FPEF	J#P0601J24110	CoolingWaterTemp	deg C	temperature of cooling water	22.002618
FPEF	J#P0601J24120	IR Camera Temp	deg C	temperature inside IR camera	25.078883
FPEF	J#P0601J24130	CE Pwr Sply Temp	deg C	temperature at power supply part of the FPEF control Equipment	27.151699
FPEF	J#P0601J24140	CE AmpTemp	deg C	temperature at FPEF Amp part	21.929373
FPEF	J#P0601J24150	A/D Ref Voltage1	V	reference voltage1 to convert analog-digital	10.047301
FPEF	J#P0601J24160	A/D Ref Voltage2	V	reference voltage2 to convert analog-digital	2.494582
FPEF	J#P0601J24170	A/D Ref Voltage3	V	reference voltage3 to convert analog-digital	2.493972
FPEF	J#P0601J24180	A/D Ref Voltage4	V	reference voltage4 to convert analog-digital	2.502517
FPEF	J#P0601J24190	Analog Gr Level	mV	analog ground level for user TC	0
FPEF	J#P0601J24208	FCover/StrobeLim	ND	Front cover switch signal, and thermostat signal at strobe lamp house	OFF
FPEF	J#P0601J2420A	Strobe S-Lim	ND	thermostat signal at strobe lamp house	OFF
FPEF	J#P0601J2420B	IHI/MEC S/W St	ND	S/W status for Branch judgment	Application S/W
FPEF	J#P0601J2420C	3D Backward Lim2	ND	limit switch 2 status of the 3D CCD camera moving system, backward side	ON
FPEF	J#P0601J2420D	3D Forward Lim 2	ND	limit switch 2 status of the 3D CCD camera moving system, forward side	OFF
FPEF	J#P0601J2420E	3D Backward Lim1	ND	limit switch 1 status of the 3D CCD camera moving system, backward side	OFF
FPEF	J#P0601J2420F	3D Forward Lim 1	ND	limit switch 1 status of the 3D CCD camera moving system, forward side	OFF
FPEF	J#P0601J2421C	3D Cntl END St	ND	operating status of 3D CCD camera control	END
FPEF	J#P0601J2421D	VSW Cntl End St	ND	operating status of video switcher control	END
FPEF	J#P0601J2421E	Gas Vent Vlv	ND	status of Gas vent valve	Closed
FPEF	J#P0601J2421F	Gas Supply Vlv	ND	status of Gas supply valve	Closed
FPEF	J#P0601J24220	Strobe V(setting	V	voltage of strobe control	6.011758
FPEF	J#P0601J24235	Amp4 Cntl CmdSt	ND	command status for Amp.4 ON/OFF	OFF
FPEF	J#P0601J24236	Amp3 Cntl CmdSt	ND	command status for Amp.3 ON/OFF	OFF
FPEF	J#P0601J24237	Amp2 Cntl CmdSt	ND	command status for Amp.2 ON/OFF	OFF
FPEF	J#P0601J24238	Amp1 Cntl CmdSt	ND	command status for Amp.1 ON/OFF	OFF
FPEF	J#P0601J24239	DC12V2 Pwr CmdSt	ND	command status for DC12V-2 power ON/OFF	ON
FPEF	J#P0601J2423A	DC12V1 Pwr CmdSt	ND	command status for DC12V-1 power ON/OFF	ON
FPEF	J#P0601J2423B	DC24V3 Pwr CmdSt	ND	command status for DC24V-3 power ON/OFF	ON
FPEF	J#P0601J2423C	DC24V2 Pwr CmdSt	ND	command status for DC24V-2 power ON/OFF	ON
FPEF	J#P0601J2423D	+/-15V Pwr CmdSt	ND	command status for +/-15V power ON/OFF	ON

Telemetry description for MEIS4, 5

facility name	TLM ID	TLM NAME	UNIT	Description	Example
FPEF	J#P0601J2423E	DC12V3 Pwr CmdSt	ND	command status for DC12V-3 power ON/OFF	OFF
FPEF	J#P0601J2423F	DC24V1 Pwr CmdSt	ND	command status for DC24V-1 power ON/OFF	OFF
FPEF	J#P0601J2424C	24VAuxLightCmdSt	ND	command status for Aux light power ON/OFF	ON
FPEF	J#P0601J2424D	+24VFPEFVlvCmdSt	ND	command status for FPEF valve power ON/OFF	ON
FPEF	J#P0601J2424E	+-15VGenPw2CmdSt	ND	ON/OFF status of "+/-15V general power-2"for Signal Conditioner Box	ON
FPEF	J#P0601J2424F	+-15VGenPw1CmdSt	ND	ON/OFF status of "+/-15V general power-1"for Signal Conditioner Box	ON
FPEF	J#P0601J2425D	+24V PwrSysCmdSt	ND	ON/OFF status of 24V power system	ON
FPEF	J#P0601J2425E	PwrAmp Sys CmdSt	ND	ON/OFF status of power Amp. system	ON
FPEF	J#P0601J2425F	+12V PwrSysCmdSt	ND	ON/OFF status of +12V power system	ON
FPEF	J#P0601J2426E	GasVentVlv CmdSt	ND	Gas vent valve status	Closed
FPEF	J#P0601J2426F	GasSplyVlv CmdSt	ND	Gas supply valve status	Closed
FPEF	J#P0601J24270	IR Comm Mode	ND	communication mode with IR camera	Idle
FPEF	J#P0601J24280	IR Comm Status	ND	communication status with IR camera	Cal OK
FPEF	J#P0601J24288	IR CommErr Statu	ND	error status of communication with IR camera	Normal
FPEF	J#P0601J24290	IR (X1, Y1)Temp	ND	temperature designated point in IR image, Refer to J#P0601J04310 and J#P0601J04320 for the (X1,Y1) coordinates of data.	20.8
FPEF	J#P0601J24300	IR(X1+1,Y1)Temp	ND	temperature designated point in IR image, Refer to J#P0601J04310 and J#P0601J04320 for the (X1,Y1) coordinates of data.	20.5
FPEF	J#P0601J24310	IR(X1,Y1+1)Temp	ND	temperature designated point in IR image, Refer to J#P0601J04310 and J#P0601J04320 for the (X1,Y1) coordinates of data.	20.5
FPEF	J#P0601J24320	IR(X1+1,Y1+1)Tem	ND	temperature designated point in IR image, Refer to J#P0601J04310 and J#P0601J04320 for the (X1,Y1) coordinates of data.	20.7
FPEF	J#P0601J25010	P/L ID	ND	payload ID	
FPEF	J#P0601J25018	Data ID	ND	Experiment data ID	
FPEF	J#P0601J25020	Frame Struc ID	ND	frame structure ID	
FPEF	J#P0601J25027	Termination	ND	termination	
FPEF	J#P0601J25028	Message Seq Cnt	ND	message sequence counter (decimal)	
FPEF	J#P0601J25030	3D Gain (settig)	dB	3D-camera Gain	8dB
FPEF	J#P0601J25038	3DShutterSpd(set	ND	3D-camera shutter speed	1/60
FPEF	J#P0601J25040	2D Gain(setting)	dB	side view camera Gain	0dB
FPEF	J#P0601J25050	2DShutterSpd(set	ND	side view camera shutter speed	1/60
FPEF	J#P0601J25080	VSW Ch1 InCh(set	ND	Input channel name to Ch1	3DCh1
FPEF	J#P0601J25083	VSW Ch2 InCh(set	ND	Input channel name to Ch2	3DCh2
FPEF	J#P0601J25086	VSW Ch3 InCh(set	ND	Input channel name to Ch3	3DCh3
FPEF	J#P0601J25089	VSW Ch4 InCh(set	ND	Input channel name to Ch4	2D
FPEF	J#P0601J2508C	VSW Ch5 InCh(set	ND	Input channel name to Ch5	IR
FPEF	J#P0601J25090	3D Cam Posn	mm	3D-camera position	-99.999969
FPEF	J#P0601J2510C	Surface/InsideSW	ND	software identification	Surface
FPEF	J#P0601J2510D	3D Posn Init St	ND	Status about 3D-camera position is initialized or not	Not Initialized
FPEF	J#P0601J2510F	3D Moving Status	ND	operating status of 3D-camera moving system	Stopped
FPEF	J#P0601J25110	H-D Temp Timer	sec	time of heating disk temperature profile	0
FPEF	J#P0601J25130	C-D Temp Timer	sec	time of cooling disk temperature profile	0
FPEF	J#P0601J25150	H-D HoldLastTime	sec	most recent time point on heating disk temperature profile	0
FPEF	J#P0601J25170	H-D HoldLastTemp	deg C	most recent temperature point on heating disk temperature profile	20.003046
FPEF	J#P0601J25180	H-D HoldNextTime	sec	next time point on heating disk temperature profile	30
FPEF	J#P0601J25200	H-D HoldNextTemp	deg C	next temperature point on heating disk temperature profile	20.003046
FPEF	J#P0601J25210	H-DHold N2 Time	sec	2 beyond time point on heating disk temperature profile	31
FPEF	J#P0601J25230	H-DHold N2 Temp	deg C	2 beyond temperature point on heating disk temperature profile	60.001812
FPEF	J#P0601J25240	C-D HoldLastTime	sec	most recent time point on cooling disk temperature profile	0
FPEF	J#P0601J25260	C-D HoldLastTemp	deg C	most recent temperature point on cooling disk temperature profile	20.003046
FPEF	J#P0601J25270	C-D HoldNextTime	sec	next time point on cooling disk temperature profile	60
FPEF	J#P0601J25290	C-D HoldNextTemp	deg C	next temperature point on cooling disk temperature profile	20.003046
FPEF	J#P0601J25300	C-DHold N2 Time	sec	2 beyond time point on cooling disk temperature profile	61
FPEF	J#P0601J25320	C-DHold N2 Temp	deg C	2 beyond temperature point on cooling disk temperature profile	15.000453

Telemetry description for MEIS4, 5

facility name	TLM ID	TLM NAME	UNIT	Description	Example
FPEF	J#P0601J26010	P/L ID	ND	payload ID	
FPEF	J#P0601J26018	Data ID	ND	Experiment data ID	
FPEF	J#P0601J26020	Frame Struc ID	ND	frame structure ID	
FPEF	J#P0601J26027	Termination	ND	termination	
FPEF	J#P0601J26028	Message Seq Cnt	ND	message sequence counter (decimal)	
FPEF	J#P0601J26030	SA26VariableData	ND	user defined data (Not used)	
FPEF	IR_Temp_Avg	IR Temp Avg	deg C	average temperature of 4 points ("IR(X1,Y1)Temp", IR(X1+1,Y1)Temp"", "IR(X1,Y1+1)Temp", "IR(X1+1,Y1+1)Tem") in IR image	20.625
FPEF	PseudoDeltaTemp	PseudoDeltaTemp	deg C	temperature: ="H-D ITO1 Temp"-"C-D Temp 1"	-11.001309
FPEF	T_CD3-ECin	T(CD3-ECin)	deg C	temperature: ="C-D Temp 3"-"ECInsideGasTemp"	-2.22663
FPEF	T_ECin-CD1	T(ECin-CD1)	deg C	temperature: ="ECInsideGasTemp"-"C-D Temp 1"	-7.734609
FPEF	T_ECin-CD2	T(ECin-CD2)	deg C	temperature: ="ECInsideGasTemp"-"C-D Temp 2"	2.16071
FPEF	T_ECin-CD3	T(ECin-CD3)	deg C	temperature: ="ECInsideGasTemp"-"C-D Temp 3"	2.22663
FPEF	T_ITO1-ECin	T(ITO1-ECin)	deg C	temperature: ="H-D ITO1 Temp"-"ECInsideGasTemp"	-3.2667
FPEF	T_ITO2-ECin	T(ITO2-ECin)	deg C	temperature: ="H-D ITO2 Temp"-"ECInsideGasTemp"	-3.039643
FPEF	T_ITOAvg-ECin	T(ITOAvg-ECin)	deg C	temperature: =("H-D ITO1 Temp"+"H-D ITO2 Temp")/2-"ECInsideGasTemp"	-3.153171
FPEF	T_ITOCD3Avg-ECin	T(ITOCD3Avg-ECin)	deg C	temperature: =(("H-D ITO1 Temp"+"H-D ITO2 Temp")/2+"C-D Temp 3")/2-"ECInsideGasTemp"	-2.689901
FPEF	T_ITOCDAvg-ECin	T(ITOCDAvg-ECin)	deg C	temperature: =(("H-D ITO1 Temp"+"H-D ITO2 Temp")/2+("C-D Temp 1"+"C-D Temp 2"+"C-D Temp 3")/3)/2-"ECInsideGasTemp"	-1.018708
FPEF	T_Water-CD1	T(Water-CD1)	deg C	temperature: ="CoolingWaterTemp"-"C-D Temp 1"	-7.544173
FPEF	T_Water-CD2	T(Water-CD2)	deg C	temperature: ="CoolingWaterTemp"-"C-D Temp 2"	2.351145
FPEF	T_Water-CD3	T(Water-CD3)	deg C	temperature: ="CoolingWaterTemp"-"C-D Temp 3"	2.417065
FPEF	dT_ITO1-CD1	dT(ITO1-CD1)	deg C	temperature: ="H-D ITO1 Temp"-"C-D Temp 1"	-11.001309
FPEF	dT_ITO1-CD2	dT(ITO1-CD2)	deg C	temperature: ="H-D ITO1 Temp"-"C-D Temp 2"	-1.10599
FPEF	dT_ITO1-CD3	dT(ITO1-CD3)	deg C	temperature: ="H-D ITO1 Temp"-"C-D Temp 3"	-1.04007
FPEF	dT_ITO2-CD1	dT(ITO2-CD1)	deg C	temperature: ="H-D ITO2 Temp"-"C-D Temp 1"	-10.774251
FPEF	dT_ITO2-CD2	dT(ITO2-CD2)	deg C	temperature: ="H-D ITO2 Temp"-"C-D Temp 2"	-0.878933
FPEF	dT_ITO2-CD3	dT(ITO2-CD3)	deg C	temperature: ="H-D ITO2 Temp"-"C-D Temp 3"	-0.813013
FPEF	dT_ITOAvg-CD1	dT(ITOAvg-CD1)	deg C	temperature: =("H-D ITO1 Temp"+"H-D ITO2 Temp")/2-"C-D Temp 1"	-10.88778
FPEF	dT_ITOAvg-CD2	dT(ITOAvg-CD2)	deg C	temperature: =("H-D ITO1 Temp"+"H-D ITO2 Temp")/2-"C-D Temp 2"	-0.992462
FPEF	dT_ITOAvg-CD3	dT(ITOAvg-CD3)	deg C	temperature: =("H-D ITO1 Temp"+"H-D ITO2 Temp")/2-"C-D Temp 3"	-0.926542
FPEF	dT_ITOAvg-CDAvg	dT(ITOAvg-CDAvg)	deg C	temperature: =("H-D ITO1 Temp"+"H-D ITO2 Temp")/2-("C-D Temp 1"+"C-D Temp 2"+"C-D Temp 3")/3	-4.268928

ACRONYM for MEIS 4 and 5 telemetry

Acronym	Meaning	Description
2D	2 Dimension	–
3D	3 Dimension	–
3D-camera	3D flow field observation camera system	–
ADC	video Analog to Digital Converters	–
BIT	Built-In Test	–
CCIR	Comité Consultatif Internationale des Radiocommunications	related standard old neme: CCIR601 related standard new name: ITU-R BT.601
C-D	Cooling Disk	the cooling side of the liquid bridge
CD	Cooling Disk	the cooling side of the liquid bridge
CE	Control Equipment	FPEF Control Equipment
CW	ClockWise	It means moving direction of various mechanism
CCW	CounterClockWise	It means the counter direction of CW
DME	Dual MPEG Encoder	MPEG Enocder board. There are 2 encoders on a board.
EC	Experiment Cell	Unique subsystem for experiment is set and used in FPEF
FPEF	Fluid Physics Experiment Facility	–
GOP	Group Of Picture	the video frame group, are used in MPEG sequence
GOP length	–	one of the encoding parameters of MPEG2
H-D	Heating Disk	the heating side of the liquid bridge
HD	Heating Disk	the heating side of the liquid bridge
HRDL	High Rate Data Link	the communication line in ISS
HX	Heat Exchanger	–
IBIT	Initiated Built-In Test	–
ID	identification	–
IHI/MEC	–	Software components bender name
IP distance	number of B-pictures between I-picture and P-picture	one of the encoding parameters of MPEG2
IPU	Image Processing Unit	Encoding and recording system for movies.
IR	Infrared Imager	–
ITO	Indium Tin Oxide	ITO is used as the temperature sensor coating and the heater coating on the Heating disk.
L-B	Liquid Bridge	–
LB	Liquid Bridge	–
LS	Limit Switch	–
Mbps	Mega bit per second	–
MCS	Master Controller Subsystem	the control system in IPU
MEIS	Marangoni Experiment In Space	This scientific project in the KIBO pressurized module is a microgravity experiment on fluid physics.
MPEG	Moving Picture Expert Group	–
ND	No Definition	–
S/W	SoftWare	–
SIF	Standard Interchange Format	resolution: 352x240 [pixcel], based on NTSC
SW	SoftWare	–
Sw	Switch	–
TAXI	Transparent Asynchronous Transmitter-Receiver Interface	one of the point to point high speed serial interface
TC	ThermoCouple	–
UVP	Ultrasonic Velocity Profile method	The system which measures one-dimensional vector information using an ultrasonic wave
VCS	Video Compression Subsystem	the video system include DMEs in IPU
VRU	Video Record Unit	the video recorder used Motion-JPEG in IPU
VSW	Video SWitcher	Video switcher in FPEF