

SOLAR-B Instrument

**EIS THERMAL SENSOR DESCRIPTIONS AND
LOCATIONS**

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INTRODUCTION

The EUV Imaging Spectrometer instrument temperature will be monitored by groups of thermal sensors. This document names and describes the type of sensors to be used, as well as their locations, for both the Mechanical/Thermal Test Model (MTM/TTM) and Flight Model (FM).

EIS MTM/TTM TEMPERATURE SENSORS (TOTAL 55)

Spacecraft controlled (see Table 1):

- 30 sensors on EIS legs (*EIS-LGXX-01 to 30*).
 - * *XX* refers to what leg the sensor is placed on: *A1* or *B2*, for example.
 - * To be placed and monitored by MELCO.
 - * To be monitored during system tests.

EIS controlled (see Tables 2a, 2b, 2c and Appendix 1):

- 25 component and structure sensors (*EIS-ETS_n-01 to 25*).
 - * To be placed on components, inside the structure, on the outside of the structure and on the outside of the MLI.
 - * To be monitored during system tests.
- 37 component and structure sensors (*EIS-TTS-01 to 25*).
 - * To be placed on components, inside the structure, on the outside of the structure and on the outside of the MLI.
 - * To be monitored during sub-system tests.
 - * The 25 *EIS-ETS_n* sensors for the system test are included in these 37 sub-system test sensors.

EIS FM TEMPERATURE SENSORS (TOTAL 46)

Spacecraft controlled (see Table 3 and Appendix 2):

- 7 sensors to be monitored when EIS is not powered (*EIS-STR-1 to 7*)
- 3 sensors to control survival heater zones (*EIS-SUS_n-1 to 3*)
- 2 sensors for ICU (*EIS-ICU-1 to 2*)

EIS controlled (see Table 4 and Appendix 3):

- 24 sensors placed on components and outside structure (*EIS-ETS_n-01 to 24*)
- 2 sensors for CCD (*EIS-CTS_n-1 to 2*)
- 8 sensors internal to MHC (yet to be assigned) (*EIS-ETS_n-25 to 32*)

TABLE AND APPENDIX CONTENT

- **Tables 1, 2a, 2b, 3 and 4** list all sensor names, types, location descriptions and positions in spacecraft co-ordinates.
- **Table 2c** correlates the 25 *EIS-ETS_n* system test sensors with *EIS-TTS* sub-system test sensors.
- **Table 5** correlates all sensor names with their respective thermal model node numbers.
- **Appendix 1** shows MTM/TTM *EIS-TTS* thermistor placements (and hence *EIS-ETS_n* placements) A.
- **Appendix 2** shows FM *EIS-STR* PRT placements.
- **Appendix 3** shows FM *EIS-ETS_n* thermistor placements (SR tbd).
- **Appendix 4** shows EIS panel numbers (SR 8256).

TABLE 1: MTM/TTM Spacecraft Controlled Temperature Sensors
(Note: EIS-LGA1 refers to sensors on the A1 leg section)

Sensor Name	Sensor Type	Description	Position		
			X (mm)	Y (mm)	Z (mm)
EIS-LGA1-01	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA1-02	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA1-03	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA1-04	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA1-05	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA2-06	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA2-07	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA2-08	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA2-09	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA2-10	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA3-11	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA3-12	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA3-13	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA3-14	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGA3-15	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB1-16	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB1-17	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB1-18	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB1-19	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB1-20	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB2-21	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB2-22	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB2-23	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB2-24	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGB2-25	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGC1-26	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGC1-27	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGC1-28	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGC1-29	Thermocouple	EIS legs	tbd	tbd	tbd
EIS-LGC1-30	Thermocouple	EIS legs	tbd	tbd	tbd

TABLE 2A: MTM/TTM EIS Controlled Temperature Sensors for system tests

(see **Appendix 4** for EIS panel numbers)

Sensor Name	Sensor Type	Position			
		Description (bt=between, P=Panel)	X (mm)	Y (mm)	Z (mm)
EIS-ETSn-01	Wire Thermocouple	Inside, P1 +Y face bt P2, P12A0, P13, P9	129	615	2554
EIS-ETSn-02	Wire Thermocouple	Inside, P1 +Y face bt P2, P14, P15, P11	129	615	1842
EIS-ETSn-03	Wire Thermocouple	Inside, P1 +Y face bt P2, P15, P16, P3	129	615	1108
EIS-ETSn-04	Wire Thermocouple	Inside, P1 +Y face bt P2, P16, P7, P3	129	615	757
EIS-ETSn-05	Wire Thermocouple	Inside, P1 +Y face bt P2, P16, P7, P3	129	615	349
EIS-ETSn-06	Wire Thermocouple	Inside, P7 +Z face centre	183	719	155
EIS-ETSn-07	Wire Thermocouple	Inside, P8 -Z face centre	-94	743	3263
EIS-ETSn-08	Wire Thermocouple	Inside, P1 +Y face bt P9, P8, P12C0, P4	-159	615	3064
EIS-ETSn-09	Wire Thermocouple	Inside, P1 +Y face bt P10, P13, P14, P4	-143	615	2200
EIS-ETSn-10	Wire Thermocouple	Inside, P1 +Y face bt P11, P14, P15, P4	-162	615	1842
EIS-ETSn-11	Wire Thermocouple	Outside, P5 +Y face bt P2, P16, P7, P3	129	608	757
EIS-ETSn-12	Wire Thermocouple	Outside, P6 +Y face bt P2, P12A0, P13, P9	129	608	2554
EIS-ETSn-13	Wire Thermocouple	On MLI, P5 bt P2, P16, P7, P3	139	618	767
EIS-ETSn-14	Wire Thermocouple	On MLI, P6 bt P2, P12A0, P13, P9	173	618	135
EIS-ETSn-15	Wire Thermocouple	On MLI, P7 centre	-84	615	3283
EIS-ETSn-16	Wire Thermocouple	On MLI, P8 centre	294	743	3283
EIS-ETSn-17	Wire Thermocouple	On MLI, P2 bt PP16, P7, P1, P5	294	743	767
EIS-ETSn-18	Wire Thermocouple	On MLI, P4 bt P8, P12CO, P1, P6	-294	743	3074
EIS-ETSn-19	Wire Thermocouple	ROE structure	tbd	tbd	tbd
EIS-ETSn-20	Wire Thermocouple	MHC structure	tbd	tbd	tbd
EIS-ETSn-21	Wire Thermocouple	Mirror centre	tbd	tbd	tbd
EIS-ETSn-22	Wire Thermocouple	CCD	tbd	tbd	tbd
EIS-ETSn-23	Wire Thermocouple	Grating centre	tbd	tbd	tbd
EIS-ETSn-24	Wire Thermocouple	CCD radiator	tbd	tbd	tbd
EIS-ETSn-25	Wire Thermocouple	ROE radiator	tbd	tbd	tbd

TABLE 2B: MTM/TTM EIS Controlled Temperature Sensors for sub-system tests

Sensor Name	Sensor Type	Position			
		Description (bt=between, P=Panel)	X (mm)	Y (mm)	Z (mm)
EIS-TTS-01	Wire Thermocouple	Inside, P1 +Y face bt P2, P12A0, P13, P9	129	615	2554
EIS-TTS-02	Wire Thermocouple	Inside, P1 +Y face bt P2, P13, P14, P10	129	615	2201
EIS-TTS-03	Wire Thermocouple	Inside, P1 +Y face bt P2, P14, P15, P11	129	615	1842
EIS-TTS-04	Wire Thermocouple	Inside, P1 +Y face bt P2, P15, P16, P3	129	615	1423
EIS-TTS-05	Wire Thermocouple	Inside, P1 +Y face bt P2, P15, P16, P3	129	615	1108
EIS-TTS-06	Wire Thermocouple	Inside, P1 +Y face bt P2, P16, P7, P3	129	615	757
EIS-TTS-07	Wire Thermocouple	Inside, P1 +Y face bt P2, P16, P7, P3	129	615	349
EIS-TTS-08	Wire Thermocouple	Inside, P7 +Z face centre	183	719	155
EIS-TTS-09	Wire Thermocouple	Inside, P8 -Z face centre	-94	743	3263
EIS-TTS-10	Wire Thermocouple	Inside, P1 +Y face bt P9, P8, P12C0, P4	-159	615	3064
EIS-TTS-11	Wire Thermocouple	Inside, P1 +Y face bt P9, P12CO, P13, P4	-149	615	2554
EIS-TTS-12	Wire Thermocouple	Inside, P1 +Y face bt P10, P13, P14, P4	-143	615	2200
EIS-TTS-13	Wire Thermocouple	Inside, P1 +Y face bt P11, P14, P15, P4	-162	615	1842
EIS-TTS-14	Wire Thermocouple	Outside, P5 +Y face bt P2, P16, P7, P3	129	608	757
EIS-TTS-15	Wire Thermocouple	Outside, P6 +Y face bt P2, P13, P14, P10	129	608	2201
EIS-TTS-16	Wire Thermocouple	Outside, P6 +Y face bt P2, P12A0, P13, P9	129	608	2554
EIS-TTS-17	Wire Thermocouple	Outside, P6 +Y face bt P9, P8, P12CO, P4	-159	608	3064
EIS-TTS-18	Wire Thermocouple	On MLI, P5 bt P2, P16, P7, P3	139	618	767
EIS-TTS-19	Wire Thermocouple	On MLI, P6 bt P2, P13, P14, P10	139	618	2211
EIS-TTS-20	Wire Thermocouple	On MLI, P6 bt P2, P12A0, P13, P9	139	618	2564
EIS-TTS-21	Wire Thermocouple	On MLI, P6 bt P9, P8, P12C0, P4	-169	618	3074
EIS-TTS-22	Wire Thermocouple	On MLI, P7 centre	173	719	135
EIS-TTS-23	Wire Thermocouple	On MLI, P8 centre	-84	743	3283
EIS-TTS-24	Wire Thermocouple	On MLI, P2 bt PP16, P7, P1, P5	294	743	767
EIS-TTS-25	Wire Thermocouple	On MLI, P2 bt P13, P14, P1, P6	294	743	2211
EIS-TTS-26	Wire Thermocouple	On MLI, P2 bt P12A0, P13, P1, P6	294	743	2564
EIS-TTS-27	Wire Thermocouple	On MLI, P4 bt P8, P12CO, P1, P6	-294	743	3074
EIS-TTS-28	Wire Thermocouple	On MLI, P1 bt P10, P13, P14, P4	139	595	2211
EIS-TTS-29	Wire Thermocouple	ROE structure	tbd	tbd	tbd
EIS-TTS-30	Wire Thermocouple	MHC structure	tbd	tbd	tbd
EIS-TTS-31	Wire Thermocouple	Mirror centre	tbd	tbd	tbd
EIS-TTS-32	Wire Thermocouple	CCD	tbd	tbd	tbd
EIS-TTS-33	Wire Thermocouple	Grating centre	tbd	tbd	tbd
EIS-TTS-34	Wire Thermocouple	CCD radiator	tbd	tbd	tbd
EIS-TTS-35	Wire Thermocouple	ROE radiator	tbd	tbd	tbd
EIS-TTS-36	Wire Thermocouple	Particle shield top	tbd	tbd	tbd
EIS-TTS-37	Wire Thermocouple	Particle shield bottom	tbd	tbd	tbd

TABLE 2C: MTM/TTM Equivalent System and Sub-System Temperature Sensors

System Sensor	Sub-System Sensor	Position			
		Description	X (mm)	Y (mm)	Z (mm)
EIS-ETSn-01	EIS-TTS-01	Inside, P1 +Y face bt P2, P12A0, P13, P9	129	615	2554
EIS-ETSn-02	EIS-TTS-03	Inside, P1 +Y face bt P2, P14, P15, P11	129	615	1842
EIS-ETSn-03	EIS-TTS-05	Inside, P1 +Y face bt P2, P15, P16, P3	129	615	1108
EIS-ETSn-04	EIS-TTS-06	Inside, P1 +Y face bt P2, P16, P7, P3	129	615	757
EIS-ETSn-05	EIS-TTS-07	Inside, P1 +Y face bt P2, P16, P7, P3	129	615	349
EIS-ETSn-06	EIS-TTS-08	Inside, P7 +Z face centre	183	719	155
EIS-ETSn-07	EIS-TTS-09	Inside, P8 -Z face centre	-94	743	3263
EIS-ETSn-08	EIS-TTS-10	Inside, P1 +Y face bt P9, P8, P12C0, P4	-159	615	3064
EIS-ETSn-09	EIS-TTS-12	Inside, P1 +Y face bt P10, P13, P14, P4	-143	615	2200
EIS-ETSn-10	EIS-TTS-13	Inside, P1 +Y face bt P11, P14, P15, P4	-162	615	1842
EIS-ETSn-11	EIS-TTS-14	Outside, P5 +Y face bt P2, P16, P7, P3	129	608	757
EIS-ETSn-12	EIS-TTS-16	Outside, P6 +Y face bt P2, P12A0, P13, P9	129	608	2554
EIS-ETSn-13	EIS-TTS-18	On MLI, P5 bt P2, P16, P7, P3	139	618	767
EIS-ETSn-14	EIS-TTS-20	On MLI, P6 bt P2, P12A0, P13, P9	173	618	135
EIS-ETSn-15	EIS-TTS-22	On MLI, P7 centre	-84	615	3283
EIS-ETSn-16	EIS-TTS-23	On MLI, P8 centre	294	743	3283
EIS-ETSn-17	EIS-TTS-24	On MLI, P2 bt PP16, P7, P1, P5	294	743	767
EIS-ETSn-18	EIS-TTS-27	On MLI, P4 bt P8, P12CO, P1, P6	-294	743	3074
EIS-ETSn-19	EIS-TTS-29	ROE structure	tbd	tbd	tbd
EIS-ETSn-20	EIS-TTS-30	MHC structure	tbd	tbd	tbd
EIS-ETSn-21	EIS-TTS-31	Mirror centre	tbd	tbd	tbd
EIS-ETSn-22	EIS-TTS-32	CCD	tbd	tbd	tbd
EIS-ETSn-23	EIS-TTS-33	Grating centre	tbd	tbd	tbd
EIS-ETSn-24	EIS-TTS-34	CCD radiator	tbd	tbd	tbd
EIS-ETSn-25	EIS-TTS-35	ROE radiator	tbd	tbd	tbd

TABLE 3: FM Spacecraft Controlled Temperature Sensors

Sensor Name	Sensor Type	Position			
		Description	X (mm)	Y (mm)	Z (mm)
EIS-STR-1	HKU TL	HOP activator, front clamshell	45	738	2894
EIS-STR-2	HKU TL	HOP activator, rear clamshell	45	738	2768
EIS-STR-3	HKU TL	Clamshell bulkhead	284	1000	2819
EIS-STR-4	HKU TH1	Particle shield by CCD	96	740	1799
EIS-STR-5	HKU TL	ROE thermal shield	96	681	1889
EIS-STR-6	HKU TL	ROE box	96	631	1909
EIS-STR-7	HKU TL	Base plate by MHC	143	631	2098
EIS-SUSn-1	HKU TL	Mirror back panel	-157	606	3051
EIS-SUSn-2	HKU TL	Grating front panel	-157	731	3274
EIS-SUSn-3	HKU TL	Mirror back panel	-157	606	3051
EIS-ICU-1	HKU TL	Near base datum	0	0	0
EIS-ICU-2	HKU TL	Top of front panel	295	121	0

TABLE 4: FM EIS Controlled Temperature Sensors

Sensor Name	Sensor Type	Position			
		Description	X (mm)	Y (mm)	Z (mm)
EIS-ETS _n -01	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -02	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -03	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -04	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -05	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -06	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -07	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -08	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -09	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -10	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -11	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -12	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -13	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -14	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -15	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -16	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -17	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -18	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -19	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -20	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -21	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -22	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -23	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-ETS _n -24	Wire Thermocouple	tbd	tbd	tbd	tbd
EIS-CTS _n -1	Wire Thermocouple	CCD 1	tbd	tbd	tbd
EIS-CTS _n -2	Wire Thermocouple	CCD 2	tbd	tbd	tbd
EIS-ETS _n -25	Wire Thermocouple	MHC 1	tbd	tbd	tbd
EIS-ETS _n -26	Wire Thermocouple	MHC 2	tbd	tbd	tbd
EIS-ETS _n -27	Wire Thermocouple	MHC 3	tbd	tbd	tbd
EIS-ETS _n -28	Wire Thermocouple	MHC 4	tbd	tbd	tbd
EIS-ETS _n -29	Wire Thermocouple	MHC 5	tbd	tbd	tbd
EIS-ETS _n -30	Wire Thermocouple	MHC 6	tbd	tbd	tbd
EIS-ETS _n -31	Wire Thermocouple	MHC 7	tbd	tbd	tbd
EIS-ETS _n -32	Wire Thermocouple	MHC 8	tbd	tbd	tbd

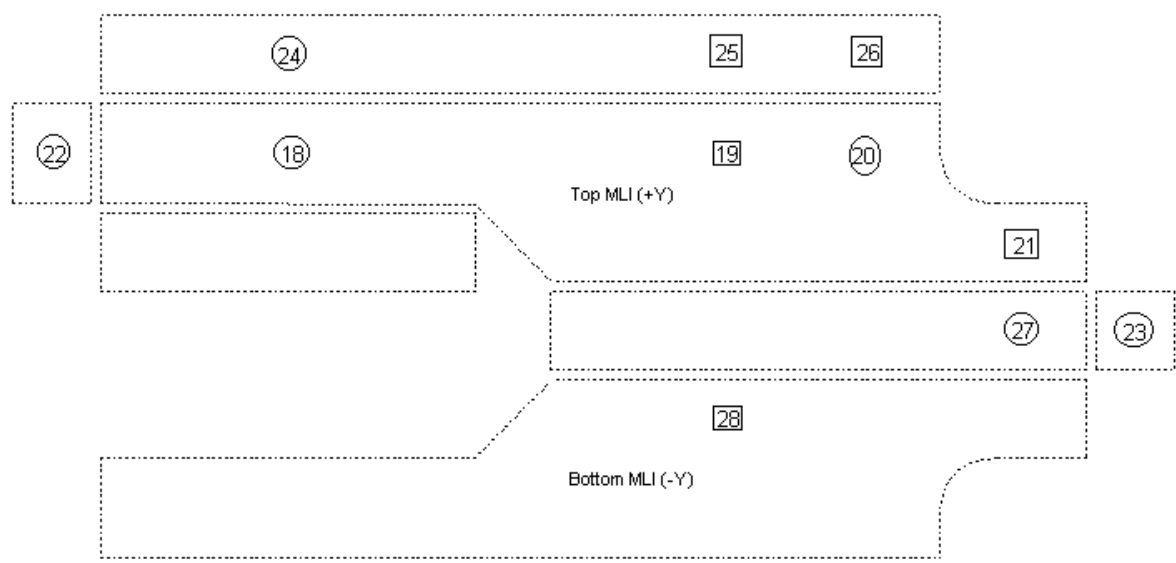
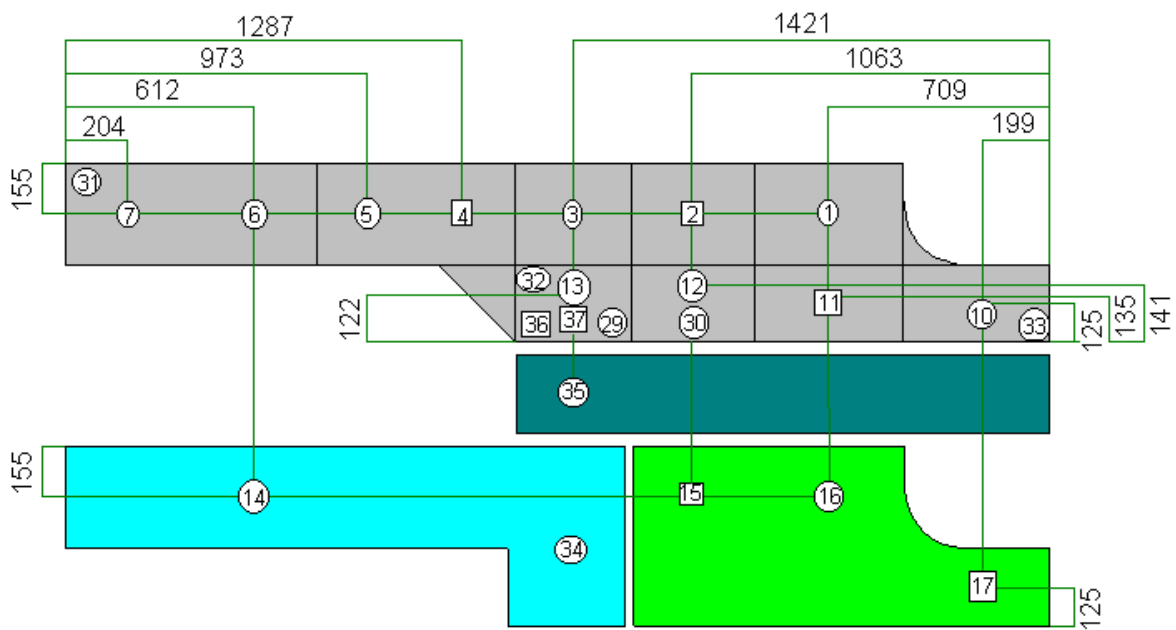
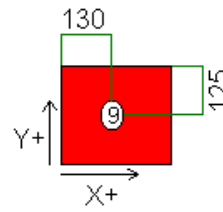
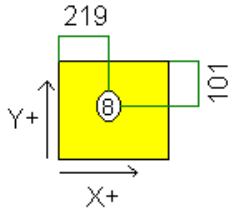
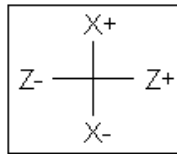
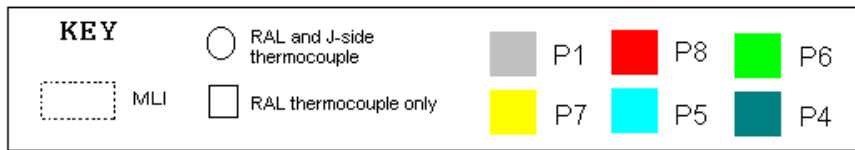
TABLE 5: Sensor Correlation with Thermal Model Node Numbers.

Sensor Name	Corresponding Thermal Model Node Number	Position Description (bt=between, P=Panel)
EIS-LGA1-01	N/A	EIS legs
EIS-LGA1-02	N/A	EIS legs
EIS-LGA1-03	N/A	EIS legs
EIS-LGA1-04	N/A	EIS legs
EIS-LGA1-05	N/A	EIS legs
EIS-LGA2-06	N/A	EIS legs
EIS-LGA2-07	N/A	EIS legs
EIS-LGA2-08	N/A	EIS legs
EIS-LGA2-09	N/A	EIS legs
EIS-LGA2-10	N/A	EIS legs
EIS-LGA3-11	N/A	EIS legs
EIS-LGA3-12	N/A	EIS legs
EIS-LGA3-13	N/A	EIS legs
EIS-LGA3-14	N/A	EIS legs
EIS-LGA3-15	N/A	EIS legs
EIS-LGB1-16	N/A	EIS legs
EIS-LGB1-17	N/A	EIS legs
EIS-LGB1-18	N/A	EIS legs
EIS-LGB1-19	N/A	EIS legs
EIS-LGB1-20	N/A	EIS legs
EIS-LGB2-21	N/A	EIS legs
EIS-LGB2-22	N/A	EIS legs
EIS-LGB2-23	N/A	EIS legs
EIS-LGB2-24	N/A	EIS legs
EIS-LGB2-25	N/A	EIS legs
EIS-LGC1-26	N/A	EIS legs
EIS-LGC1-27	N/A	EIS legs
EIS-LGC1-28	N/A	EIS legs
EIS-LGC1-29	N/A	EIS legs
EIS-LGC1-30	N/A	EIS legs
EIS-ETS _n -01	6032	Inside, P1 +Y face bt P2, P12A0, P13, P9
EIS-ETS _n -02	6009	Inside, P1 +Y face bt P2, P14, P15, P11
EIS-ETS _n -03	6049	Inside, P1 +Y face bt P2, P15, P16, P3
EIS-ETS _n -04	6048	Inside, P1 +Y face bt P2, P16, P7, P3
EIS-ETS _n -05	6047	Inside, P1 +Y face bt P2, P16, P7, P3
EIS-ETS _n -06	6059	Inside, P7 +Z face centre
EIS-ETS _n -07	6028	Inside, P8 -Z face centre
EIS-ETS _n -08	6025	Inside, P1 +Y face bt P9, P8, P12C0, P4
EIS-ETS _n -09	6012	Inside, P1 +Y face bt P10, P13, P14, P4
EIS-ETS _n -10	6010	Inside, P1 +Y face bt P11, P14, P15, P4
EIS-ETS _n -11	6044	Outside, P5 +Y face bt P2, P16, P7, P3
EIS-ETS _n -12	6034	Outside, P6 +Y face bt P2, P12A0, P13, P9
EIS-ETS _n -13	6144	On P5 MLI, bt P2, P16, P7, P3
EIS-ETS _n -14	6134	On P6 MLI, bt P2, P12A0, P13, P9
EIS-ETS _n -15	6159	On P7 MLI, centre
EIS-ETS _n -16	6128	On P8 MLI, centre
EIS-ETS _n -17	6152	On P2 MLI, bt P16, P7, P1, P5
EIS-ETS _n -18	6121	On P4 MLI, bt P8, P12CO, P1, P6
EIS-ETS _n -19	6079	ROE structure
EIS-ETS _n -20	6065	MHC structure

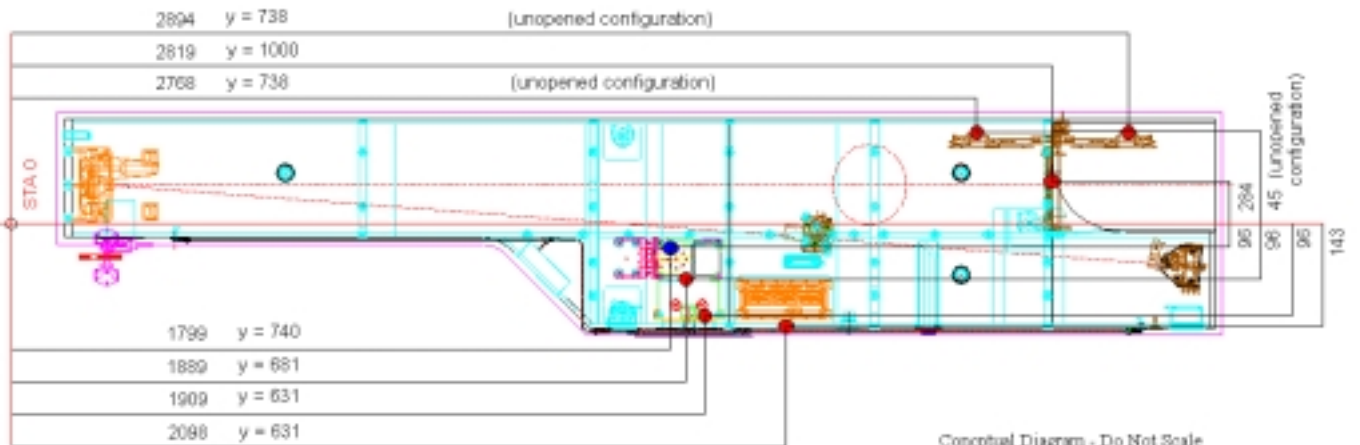
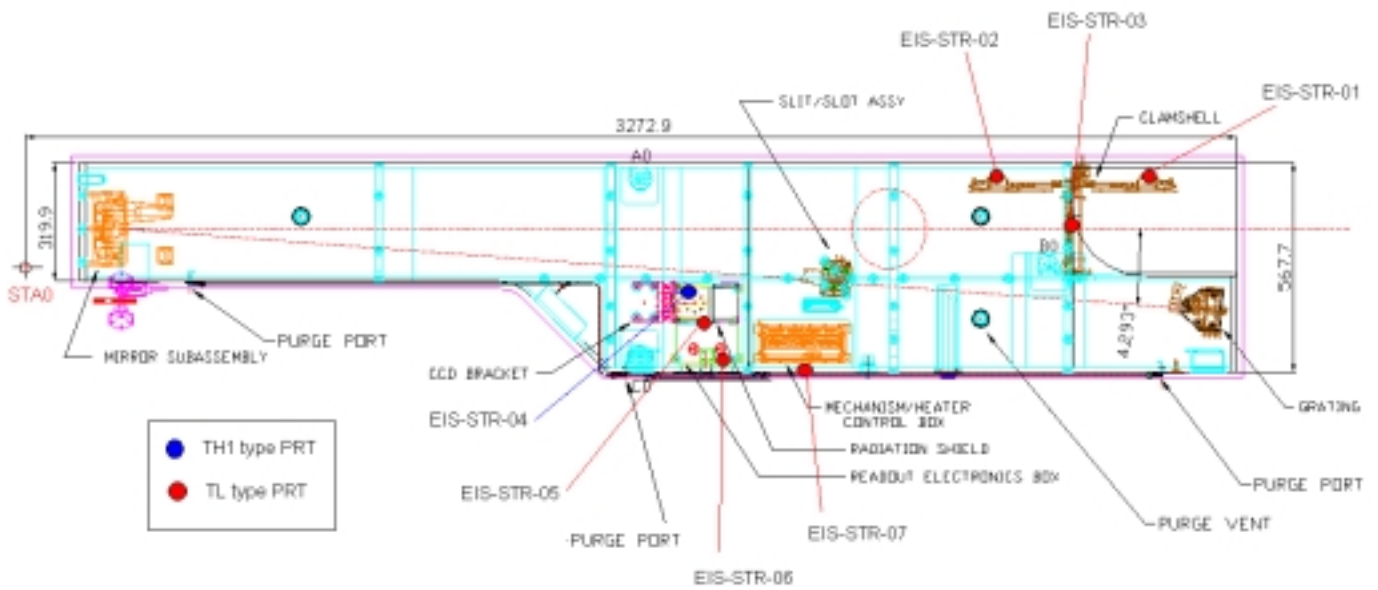
Sensor Name (continued)	Corresponding Thermal Model Node Number	Position Description (bt=between, P=Panel)
EIS-ETSn-21	6063	Mirror centre
EIS-ETSn-22	6070	CCD
EIS-ETSn-23	6064	Grating centre
EIS-ETSn-24	6065	CCD radiator
EIS-ETSn-25	6076	ROE radiator
EIS-TTS-01	6032	Inside, P1 +Y face bt P2, P12A0, P13, P9
EIS-TTS-02	6011	Inside, P1 +Y face bt P2, P13, P14, P10
EIS-TTS-03	6009	Inside, P1 +Y face bt P2, P14, P15, P11
EIS-TTS-04	6050	Inside, P1 +Y face bt P2, P15, P16, P3
EIS-TTS-05	6049	Inside, P1 +Y face bt P2, P15, P16, P3
EIS-TTS-06	6048	Inside, P1 +Y face bt P2, P16, P7, P3
EIS-TTS-07	6047	Inside, P1 +Y face bt P2, P16, P7, P3
EIS-TTS-08	6059	Inside, P7 +Z face centre
EIS-TTS-09	6028	Inside, P8 -Z face centre
EIS-TTS-10	6025	Inside, P1 +Y face bt P9, P8, P12C0, P4
EIS-TTS-11	6024	Inside, P1 +Y face bt P9, P12CO, P13, P4
EIS-TTS-12	6012	Inside, P1 +Y face bt P10, P13, P14, P4
EIS-TTS-13	6010	Inside, P1 +Y face bt P11, P14, P15, P4
EIS-TTS-14	6044	Outside, P5 +Y face bt P2, P16, P7, P3
EIS-TTS-15	6014	Outside, P6 +Y face bt P2, P13, P14, P10
EIS-TTS-16	6034	Outside, P6 +Y face bt P2, P12A0, P13, P9
EIS-TTS-17	6027	Outside, P6 +Y face bt P9, P8, P12CO, P4
EIS-TTS-18	6144	On P5 MLI, bt P2, P16, P7, P3
EIS-TTS-19	6114	On P6 MLI, bt P2, P13, P14, P10
EIS-TTS-20	6134	On P6 MLI, bt P2, P12A0, P13, P9
EIS-TTS-21	6127	On P6 MLI, bt P9, P8, P12C0, P4
EIS-TTS-22	6159	On P7 MLI, centre
EIS-TTS-23	6128	On P8 MLI, centre
EIS-TTS-24	6152	On P2 MLI, bt PP16, P7, P1, P5
EIS-TTS-25	6106	On P2 MLI, bt P13, P14, P1, P6
EIS-TTS-26	6130	On P2 MLI, bt P12A0, P13, P1, P6
EIS-TTS-27	6121	On P4 MLI, bt P8, P12CO, P1, P6
EIS-TTS-28	6112	On P1 MLI, bt P10, P13, P14, P4
EIS-TTS-29	6079	ROE structure
EIS-TTS-30	6065	MHC structure
EIS-TTS-31	6063	Mirror centre
EIS-TTS-32	6070	CCD
EIS-TTS-33	6064	Grating centre
EIS-TTS-34	6065	CCD radiator
EIS-TTS-35	6076	ROE radiator
EIS-TTS-36	6073	Particle shield top
EIS-TTS-37	6080	Particle shield bottom
EIS-STR-1	6061	HOP activator, front clamshell
EIS-STR-2	6060	HOP activator, rear clamshell
EIS-STR-3	6036	Clamshell bulkhead
EIS-STR-4	6073	Particle shield by CCD
EIS-STR-5	6074	ROE thermal shield
EIS-STR-6	6079	ROE box
EIS-STR-7	6012	Base plate by MHC
EIS-SUSn-1	6059	Mirror back panel
EIS-SUSn-2	6028	Grating front panel
EIS-SUSn-3	6059	Mirror back panel

Sensor Name (continued)	Corresponding Thermal Model Node Number	Position Description (bt=between, P=Panel)
EIS-ICU-1	N/A	Near base datum
EIS-ICU-2	N/A	Top of front panel
EIS-ETSn-01	tbd	tbd
EIS-ETSn-02	tbd	tbd
EIS-ETSn-03	tbd	tbd
EIS-ETSn-04	tbd	tbd
EIS-ETSn-05	tbd	tbd
EIS-ETSn-06	tbd	tbd
EIS-ETSn-07	tbd	tbd
EIS-ETSn-08	tbd	tbd
EIS-ETSn-09	tbd	tbd
EIS-ETSn-10	tbd	tbd
EIS-ETSn-11	tbd	tbd
EIS-ETSn-12	tbd	tbd
EIS-ETSn-13	tbd	tbd
EIS-ETSn-14	tbd	tbd
EIS-ETSn-15	tbd	tbd
EIS-ETSn-16	tbd	tbd
EIS-ETSn-17	tbd	tbd
EIS-ETSn-18	tbd	tbd
EIS-ETSn-19	tbd	tbd
EIS-ETSn-20	tbd	tbd
EIS-ETSn-21	tbd	tbd
EIS-ETSn-22	tbd	tbd
EIS-ETSn-23	tbd	tbd
EIS-ETSn-24	tbd	tbd
EIS-CTSn-1	tbd	CCD 1
EIS-CTSn-2	tbd	CCD 2
EIS-ETSN-25	tbd	MHC 1
EIS-ETSN-26	tbd	MHC 2
EIS-ETSN-27	tbd	MHC 3
EIS-ETSN-28	tbd	MHC 4
EIS-ETSN-29	tbd	MHC 5
EIS-ETSN-30	tbd	MHC 6
EIS-ETSN-31	tbd	MHC 7
EIS-ETSN-32	tbd	MHC 8

Appendix 1: MTM/TTM *EIS-TTS* (and *EIS-ETS_n*) thermistor placements



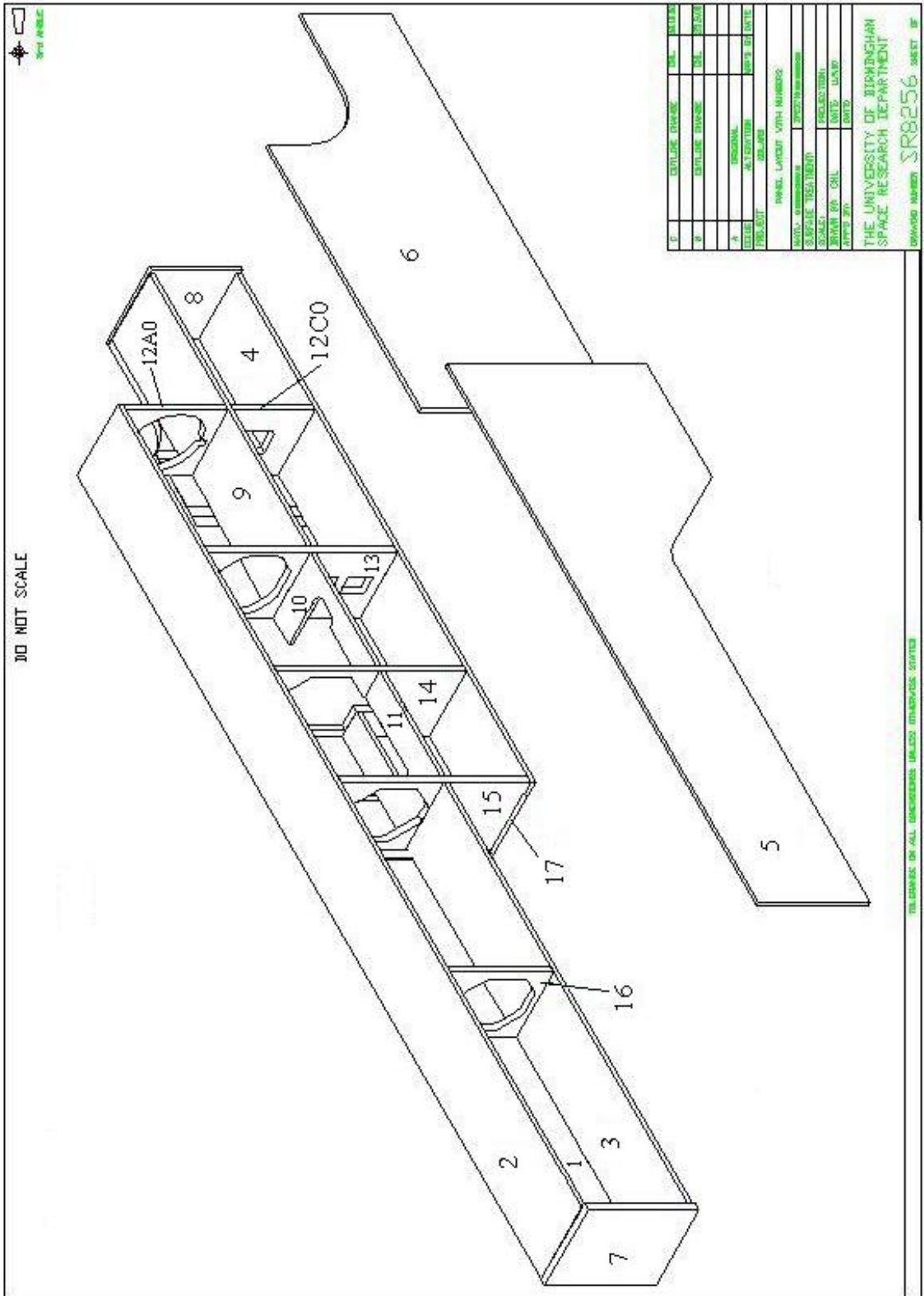
Appendix 2: FM EIS-STR PRT placements



Appendix 3: FM *EIS-ETS*_n thermistor placements

TBD

Appendix 4: EIS panel numbers (SR 8256)



NO.	DATE	DESCRIPTION	BY	CHKD.
1		ENTRANCE DRAWING	DEL.	DEL.
2		ENTRANCE DRAWING	DEL.	DEL.
3		ENTRANCE DRAWING	DEL.	DEL.
4		ENTRANCE DRAWING	DEL.	DEL.
5		ENTRANCE DRAWING	DEL.	DEL.
6		ENTRANCE DRAWING	DEL.	DEL.
7		ENTRANCE DRAWING	DEL.	DEL.
8		ENTRANCE DRAWING	DEL.	DEL.
9		ENTRANCE DRAWING	DEL.	DEL.
10		ENTRANCE DRAWING	DEL.	DEL.
11		ENTRANCE DRAWING	DEL.	DEL.
12		ENTRANCE DRAWING	DEL.	DEL.
13		ENTRANCE DRAWING	DEL.	DEL.
14		ENTRANCE DRAWING	DEL.	DEL.
15		ENTRANCE DRAWING	DEL.	DEL.
16		ENTRANCE DRAWING	DEL.	DEL.
17		ENTRANCE DRAWING	DEL.	DEL.

PROJ. NO. 123456789
 SHEET NO. 123456789
 DATE 12/31/2023
 DRAWN BY J. DOE
 CHECKED BY A. SMITH
 PROJECT NAME: UNIVERSITY OF BIRMINGHAM SPACE RESEARCH DEPARTMENT

UNIVERSITY OF BIRMINGHAM
 SPACE RESEARCH DEPARTMENT

PROJECT NO. SR8256 SHEET 17