

# XRT Timeline to be uploaded on 2022/11/05

Period: 2022/11/05 10:52:00 - 2022/11/10 11:37:00

\* \* \* \* \*

Normal mode

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## XOB #1CDE: HOP393/336 - 4x4 - Full Sun double long/short pair AEC 2/3 - Al-poly - Dark (512ms) - G-band (1x1,512x512,1ms) - Leak (1x1,512x512,1ms) - 7

| Term                            | Pointing (x, y)                         | Comment  |
|---------------------------------|---|--|
| 11/05 11:16:00 - 11/05 14:29:54 | Track ( -40.0, -107.9) @ 11/05 11:02:00 | # OP start + 10min , HOP393  |
| <b>PROG= 10 Inf.-time(s)</b>    |   |  |
| └─ Subr= 1 1-time(s) 2.0sec     |   |  |
| └─ Seqn= 30 1-time(s) 2.0sec    |   |  |
| └─ Open/G-band                  | Open/G-band open                        | Safe Norm 1ms Obs 1x1 512x512 (1024, 1024) Q=90 0 0 2.0sec           |
| └─ Open/G-band                  | Open/G-band close                       | Safe Norm 1ms Obs 1x1 512x512 (1024, 1024) Q=95 0 0 2.0sec           |
| └─ Seqn= 52 1-time(s) 2.0sec    |   |  |
| └─ Al-poly/Open                 | Al-poly/Open close                      | Safe Dark 500ms Obs 4x4 2048x2048 (1024, 1024) DPCM 0 0 2.0sec       |
| └─ Subr= 2 30-time(s) 720.0sec  |   |  |
| └─ Seqn= 97 2-time(s) 2.0sec    |   |  |
| └─ Al-poly/Open                 | med-Be/Open close                       | Safe Norm 125ms Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec       |
| └─ Al-poly/Open                 | med-Be/Open close                       | Safe Norm 500ms Obs 4x4 2048x2048 (1024, 1024) DPCM 2 0 2.0sec       |
| Default Filter                  | Thicker Filter VLS                      | mode image Exp. CCD Bin ROI: size (center) Comp. AEC Buffer Interval |

## XOB #1BA9: AR - Standard Core - (Filter-Ratio with Al/poly and thin-Be long/short pairs) with PFB, 384x384 at 1064 1048, thin-Be, and Al/poly context, with

| Term                            | Pointing (x, y)                         | Comment  |
|---------------------------------|---|--|
| 11/05 14:33:00 - 11/05 17:36:24 | Track ( 498.8, 339.0) @ 11/05 14:30:00  | AR13135 obs  |
| 11/05 17:49:30 - 11/05 18:29:54 | Track ( 519.9, 340.3) @ 11/05 17:46:30  | AR cont  |
| 11/05 18:33:00 - 11/05 22:52:00 | Track ( -472.8, 365.3) @ 11/05 18:30:00 | EIS core study   |
| 11/05 23:15:30 - 11/06 02:19:54 | Track ( 553.4, 342.5) @ 11/05 23:10:00  | AR cont  |
| <b>PROG= 05 Inf.-time(s)</b>    |   |  |
| └─ Subr= 1 1-time(s) 2.0sec     |   |  |
| └─ Seqn= 92 1-time(s) 2.0sec    |   |  |
| └─ Open/G-band                  | Open/G-band open                        | Safe Norm 1ms Obs 1x1 384x384 (1064, 1048) DPCM 0 0 2.0sec           |
| └─ Open/G-band                  | Open/G-band close                       | Safe Norm 1ms Obs 1x1 384x384 (1064, 1048) DPCM 0 0 2.0sec           |
| └─ Open/Ti-poly                 | Open/thick-Al close                     | Safe Dark 16.0s Obs 1x1 384x384 (1064, 1048) Q=98 0 0 2.0sec         |
| └─ Subr= 2 5-time(s) 2.0sec     |   |  |
| └─ Seqn= 47 1-time(s) 2.0sec    |   |  |
| └─ Al-poly/Open                 | thin-Be/Open close                      | Safe Norm 250ms Obs 1x1 384x384 (1064, 1048) Q=95 2 0 2.0sec         |
| └─ Al-poly/Open                 | thin-Be/Open close                      | Safe Norm 250ms Obs 1x1 384x384 (1064, 1048) Q=95 3 0 2.0sec         |
| └─ thin-Be/Open                 | med-Be/Open close                       | Safe Norm 500ms Obs 1x1 384x384 (1064, 1048) Q=95 2 0 2.0sec         |
| └─ thin-Be/Open                 | med-Be/Open close                       | Safe Norm 500ms Obs 1x1 384x384 (1064, 1048) Q=95 3 0 2.0sec         |
| └─ Seqn= 96 8-time(s) 30.0sec   |   |  |
| └─ Al-poly/Open                 | thin-Be/Open close                      | Safe Norm 250ms Obs 1x1 384x384 (1064, 1048) Q=95 1 0 2.0sec         |
| └─ thin-Be/Open                 | med-Be/Open close                       | Safe Norm 500ms Obs 1x1 384x384 (1064, 1048) Q=95 1 0 2.0sec         |
| └─ Al-poly/Open                 | thin-Be/Open close                      | Safe Norm 250ms Obs 1x1 384x384 (1064, 1048) Q=95 1 1 2.0sec         |
| └─ thin-Be/Open                 | med-Be/Open close                       | Safe Norm 500ms Obs 1x1 384x384 (1064, 1048) Q=95 1 1 2.0sec         |
| └─ Al-poly/Open                 | thin-Be/Open close                      | Safe Norm 250ms Obs 1x1 384x384 (1064, 1048) Q=95 1 2 2.0sec         |
| └─ thin-Be/Open                 | med-Be/Open close                       | Safe Norm 500ms Obs 1x1 384x384 (1064, 1048) Q=95 1 2 2.0sec         |
| Default Filter                  | Thicker Filter VLS                      | mode image Exp. CCD Bin ROI: size (center) Comp. AEC Buffer Interval |

## XOB #1CA9: Synoptic Q95 2x2 - Al/mesh(16/181/2048) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 - 1x1 2048x512) + Al-poly(24/362/4096) + T

| Term                            | Pointing (x, y)        | Comment  |
|---------------------------------|------------------------|--|
| 11/05 17:39:30 - 11/05 17:46:24 | Fixed ( 0.0, 0.0)      | synoptic, shifted -23.5 min  |
| 11/06 10:23:00 - 11/06 10:30:10 | Fixed ( 0.0, 0.0)      | #synoptic  |
| <b>PROG= 11 1-time(s)</b>       |                        |  |
| └─ Subr= 1 1-time(s) 2.0sec     |                        |  |
| └─ Seqn= 5 1-time(s) 2.0sec     |                        |  |
| └─ Open/Ti-poly                 | Open/thick-Al close    | Safe Dark 500ms Obs 2x2 2048x2048 (1024, 1024) Q=98 0 0 2.0sec       |
| └─ Open/Ti-poly                 | Open/thick-Al close    | Safe Dark 500ms Obs 4x4 2048x2048 (1024, 1024) Q=98 0 0 2.0sec       |
| └─ Open/Ti-poly                 | Open/thick-Al close    | Safe Dark 500ms Obs 8x8 2048x2048 (1024, 1024) Q=98 0 0 2.0sec       |
| └─ Open/Ti-poly                 | Open/thick-Al close    | Safe Dark 500ms Obs 1x1 2048x512 (1024, 1024) DPCM 0 0 2.0sec        |
| └─ Open/Ti-poly                 | Open/thick-Al close    | Safe Dark 500ms Obs 1x1 512x2048 (1024, 1024) DPCM 0 0 2.0sec        |
| └─ Seqn= 75 1-time(s) 2.0sec    |                        |  |
| └─ Open/Al-mesh                 | Open/Al-mesh close     | Safe Norm 16ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec        |
| └─ Open/Al-mesh                 | Open/Al-mesh close     | Safe Norm 177ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec       |
| └─ Open/Al-mesh                 | Open/Al-mesh close     | Safe Norm 2.00s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec       |
| └─ Seqn= 9 1-time(s) 2.0sec     |                        |  |
| └─ Al-poly/Open                 | Al-poly/Open close     | Safe Norm 24ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec        |
| └─ Al-poly/Open                 | Al-poly/Open close     | Safe Norm 354ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec       |
| └─ Al-poly/Open                 | Al-poly/thick-Al close | Safe Norm 4.00s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec       |
| └─ Seqn= 53 1-time(s) 2.0sec    |                        |  |
| └─ thin-Be/Open                 | thin-Be/Open close     | Safe Norm 177ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec       |
| └─ thin-Be/Open                 | thin-Be/Open close     | Safe Norm 2.00s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec       |
| └─ thin-Be/Open                 | thin-Be/Open close     | Safe Norm 11.3s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec       |
| └─ Seqn= 23 1-time(s) 2.0sec    |                        |  |
| └─ Open/G-band                  | Open/G-band open       | Safe Norm 1ms Obs 1x1 2048x2048 (1024, 1024) Q=90 0 0 2.0sec         |
| └─ Open/G-band                  | Open/G-band close      | Safe Norm 1ms Obs 1x1 2048x2048 (1024, 1024) Q=95 0 0 2.0sec         |
| Default Filter                  | Thicker Filter VLS     | mode image Exp. CCD Bin ROI: size (center) Comp. AEC Buffer Interval |

| XOB #1CE9: HOP442 - 30s Al/poly only 384x384 at 1064 1048 |                |  |      |       |      |      |         |                    |     |                      |            |                 |
|---|----------------|--|------|-------|------|------|---------|--------------------|-----|----------------------|------------|-----------------|
| Term  |                | Pointing (x, y)                        |      |       |      |      | Comment |                    |     |                      |            |                 |
| 11/06 02:23:00 - 11/06 05:35:00                           |                | Track ( 439.5, 313.8) @ 11/06 02:20:00 |      |       |      |      | HOP443  |                    |     |                      |            |                 |
| 11/06 09:23:06 - 11/06 10:19:54                           |                | Track ( 439.5, 313.8) @ 11/06 02:20:00 |      |       |      |      | HOP443  |                    |     |                      |            |                 |
| <b>PROG= 15 Inf.-time(s)</b>                              |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Subr= 1 1-time(s) 2.0sec                                  |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Seqn= 92 1-time(s) 2.0sec                                 |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Open/G-band   |                | Open/G-band                            |      | open  | Safe | Norm | 1ms     | Obs                | 1x1 | 384x384 (1064, 1048) |            | DPCM 0 0 2.0sec |
| Open/G-band   |                | Open/G-band                            |      | close | Safe | Norm | 1ms     | Obs                | 1x1 | 384x384 (1064, 1048) |            | DPCM 0 0 2.0sec |
| Open/Ti-poly  |                | Open/thick-Al                          |      | close | Safe | Dark | 16.0s   | Obs                | 1x1 | 384x384 (1064, 1048) |            | Q=98 0 0 2.0sec |
| Subr= 2 180-time(s) 2.0sec                                |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Seqn= 13 1-time(s) 30.0sec                                |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Al-poly/Open  |                | thin-Be/Open                           |      | close | Safe | Norm | 500ms   | Obs                | 1x1 | 384x384 (1064, 1048) |            | Q=95 3 0 2.0sec |
| Default Filter  | Thicker Filter | VLS                                    | mode | image | Exp. | CCD  | Bin     | ROI: size (center) |     | Comp.                | AEC Buffer | Interval        |

| XOB #1BDC: HOP341 - High cadence (10s Al/poly only) 384x384 at 1064 1048 |                |  |      |       |      |      |         |                    |     |                      |            |                 |
|--|----------------|--|------|-------|------|------|---------|--------------------|-----|----------------------|------------|-----------------|
| Term   |                | Pointing (x, y)                        |      |       |      |      | Comment |                    |     |                      |            |                 |
| 11/06 05:38:06 - 11/06 09:20:00  |                | Track ( 439.5, 313.8) @ 11/06 02:20:00 |      |       |      |      | HOP443  |                    |     |                      |            |                 |
| <b>PROG= 17 Inf.-time(s)</b>   |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Subr= 1 1-time(s) 2.0sec   |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Seqn= 92 1-time(s) 2.0sec  |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Open/G-band  |                | Open/G-band                            |      | open  | Safe | Norm | 1ms     | Obs                | 1x1 | 384x384 (1064, 1048) |            | DPCM 0 0 2.0sec |
| Open/G-band  |                | Open/G-band                            |      | close | Safe | Norm | 1ms     | Obs                | 1x1 | 384x384 (1064, 1048) |            | DPCM 0 0 2.0sec |
| Open/Ti-poly   |                | Open/thick-Al                          |      | close | Safe | Dark | 16.0s   | Obs                | 1x1 | 384x384 (1064, 1048) |            | Q=98 0 0 2.0sec |
| Subr= 2 20-time(s) 2.0sec  |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Seqn= 13 60-time(s) 10.0sec  |                |  |      |       |      |      |         |                    |     |                      |            |                 |
| Al-poly/Open   |                | thin-Be/Open                           |      | close | Safe | Norm | 500ms   | Obs                | 1x1 | 384x384 (1064, 1048) |            | Q=95 3 0 2.0sec |
| Default Filter   | Thicker Filter | VLS                                    | mode | image | Exp. | CCD  | Bin     | ROI: size (center) |     | Comp.                | AEC Buffer | Interval        |

\* \* \* \* \*

**Flare mode**

\* \* \* \* \*

| XOB #1C96: Flare - multifilter 26 sec cadence (Be/thin, Be/med, Be/thick), AEC 3, 384x384 + context (med-Al,thick-Be -384x384 + Al-poly 512x512 2x2) + GB |                |   |      |       |      |      |                             |                    |     |                      |            |                 |
|---|----------------|---|------|-------|------|------|-----------------------------|--------------------|-----|----------------------|------------|-----------------|
| Term  |                | Pointing (x, y)                         |      |       |      |      | Comment                     |                    |     |                      |            |                 |
| 11/05 11:16:00 - 11/05 14:29:54   |                | Track ( -40.0, -107.9) @ 11/05 11:02:00 |      |       |      |      | # OP start + 10min , HOP393 |                    |     |                      |            |                 |
| 11/05 14:33:00 - 11/05 17:36:24   |                | Track ( 498.8, 339.0) @ 11/05 14:30:00  |      |       |      |      | AR13135 obs                 |                    |     |                      |            |                 |
| 11/05 17:49:30 - 11/05 18:29:54   |                | Track ( 519.9, 340.3) @ 11/05 17:46:30  |      |       |      |      | AR cont                     |                    |     |                      |            |                 |
| 11/05 18:33:00 - 11/05 22:52:00   |                | Track ( -472.8, 365.3) @ 11/05 18:30:00 |      |       |      |      | EIS core study              |                    |     |                      |            |                 |
| 11/05 23:15:30 - 11/06 02:19:54   |                | Track ( 553.4, 342.5) @ 11/05 23:10:00  |      |       |      |      | AR cont                     |                    |     |                      |            |                 |
| <b>PROG= 04 30-time(s)</b>  |                |   |      |       |      |      |                             |                    |     |                      |            |                 |
| Subr= 1 20-time(s) 2.0sec   |                |   |      |       |      |      |                             |                    |     |                      |            |                 |
| Seqn= 11 1-time(s) 2.0sec   |                |   |      |       |      |      |                             |                    |     |                      |            |                 |
| Al-poly/Open  |                | Al-poly/thick-Al                        |      | close | Safe | Norm | 125ms                       | Obs                | 2x2 | 512x512 (1024, 1024) |            | Q=95 2 0 2.0sec |
| Seqn= 73 1-time(s) 10.0sec  |                |   |      |       |      |      |                             |                    |     |                      |            |                 |
| thin-Be/Open  |                | med-Be/Open                             |      | close | Safe | Norm | 125ms                       | Obs                | 1x1 | 384x384 (1024, 1024) |            | Q=95 3 0 2.0sec |
| med-Be/Open   |                | Open/thick-Al                           |      | close | Safe | Norm | 250ms                       | Obs                | 1x1 | 384x384 (1024, 1024) |            | Q=95 3 0 2.0sec |
| Open/thick-Be   |                | Open/thick-Be                           |      | close | Safe | Norm | 2.00s                       | Obs                | 1x1 | 384x384 (1024, 1024) |            | Q=95 3 0 2.0sec |
| Subr= 2 1-time(s) 2.0sec  |                |   |      |       |      |      |                             |                    |     |                      |            |                 |
| Seqn= 10 1-time(s) 2.0sec   |                |   |      |       |      |      |                             |                    |     |                      |            |                 |
| med-Al/Open   |                | med-Al/thick-Al                         |      | close | Safe | Norm | 500ms                       | Obs                | 1x1 | 384x384 (1024, 1024) |            | Q=95 3 0 2.0sec |
| Open/thick-Be   |                | Open/thick-Be                           |      | close | Safe | Norm | 2.00s                       | Obs                | 1x1 | 384x384 (1024, 1024) |            | Q=95 3 0 2.0sec |
| Seqn= 11 1-time(s) 2.0sec   |                |   |      |       |      |      |                             |                    |     |                      |            |                 |
| Al-poly/Open  |                | Al-poly/thick-Al                        |      | close | Safe | Norm | 125ms                       | Obs                | 2x2 | 512x512 (1024, 1024) |            | Q=95 2 0 2.0sec |
| Seqn= 87 1-time(s) 2.0sec   |                |   |      |       |      |      |                             |                    |     |                      |            |                 |
| Open/G-band   |                | Open/G-band                             |      | open  | Safe | Norm | 1ms                         | Obs                | 1x1 | 384x384 (1024, 1024) |            | Q=98 0 0 2.0sec |
| Open/G-band   |                | Open/G-band                             |      | close | Safe | Norm | 1ms                         | Obs                | 1x1 | 384x384 (1024, 1024) |            | Q=98 0 0 2.0sec |
| Open/thick-Al   |                | Open/thick-Al                           |      | close | Safe | Dark | 1.00s                       | Obs                | 1x1 | 384x384 (1024, 1024) |            | Q=98 0 0 2.0sec |
| Open/thick-Al   |                | Open/thick-Al                           |      | close | Safe | Dark | 1.00s                       | Obs                | 2x2 | 512x512 (1024, 1024) |            | Q=98 0 0 2.0sec |
| Default Filter  | Thicker Filter | VLS                                     | mode | image | Exp. | CCD  | Bin                         | ROI: size (center) |     | Comp.                | AEC Buffer | Interval        |

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**Active Region Search**

\* \* \* \* \*

NOT USED

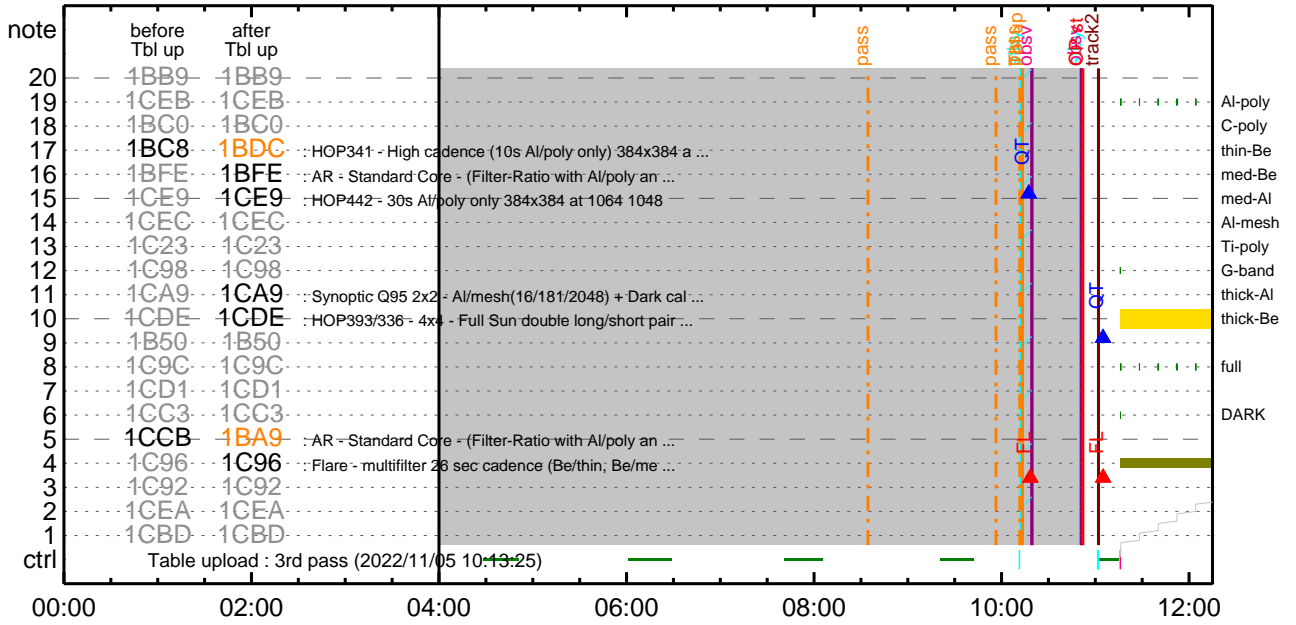
\* \* \* \* \*

**Flare Detection**

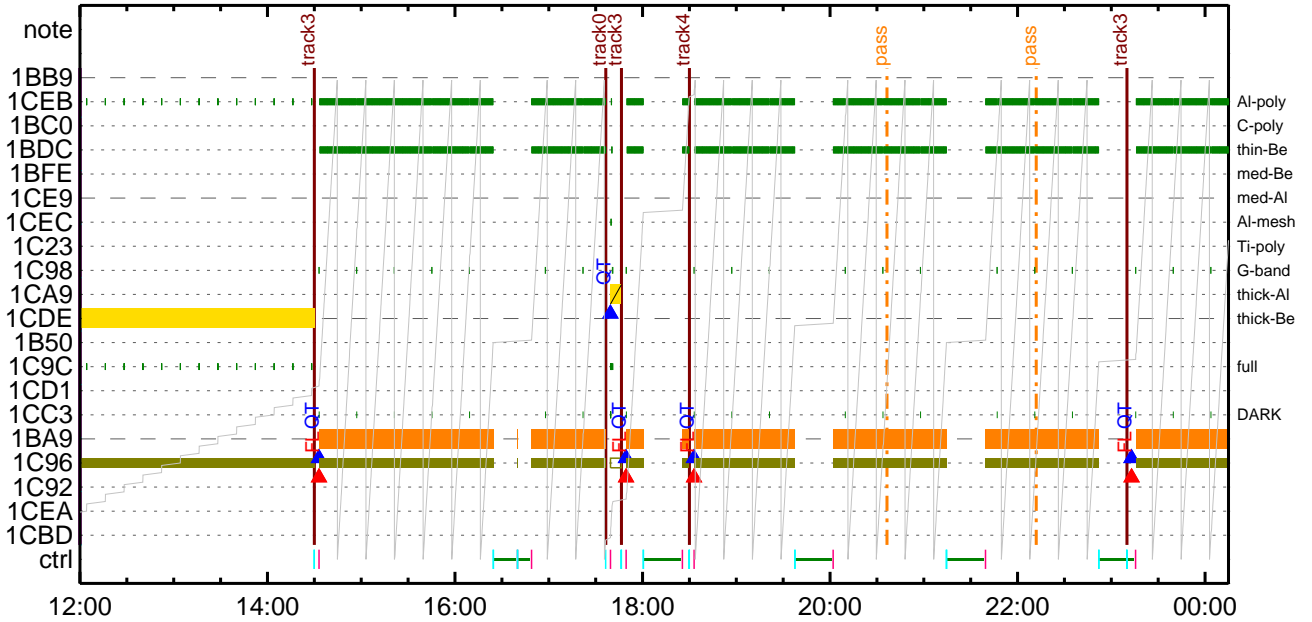
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| FLD Patrol                      |                |  |      |       |      |      |         |                    |     |       |            |            |
|---------------------------------|----------------|--|------|-------|------|------|---------|--------------------|-----|-------|------------|------------|
| Term                            |                | Pointing (x, y)                        |      |       |      |      | Comment |                    |     |       |            |            |
| 11/05 10:14:25 - 11/05 17:36:46 |                | cannot be identified                   |      |       |      |      |         |                    |     |       |            |            |
| 11/05 17:46:48 - 11/06 02:20:18 |                | Track ( 519.9, 340.3) @ 11/05 17:46:30 |      |       |      |      | AR cont |                    |     |       |            |            |
| Al-poly/Open                    |                | Al-poly/Open                           |      | close | Safe | Norm | 8ms     | Obs                | 8x8 |       |            | Q=50 80sec |
| Default Filter                  | Thicker Filter | VLS                                    | mode | image | Exp. | CCD  | Bin     | ROI: size (center) |     | Comp. | AEC Buffer | Interval   |

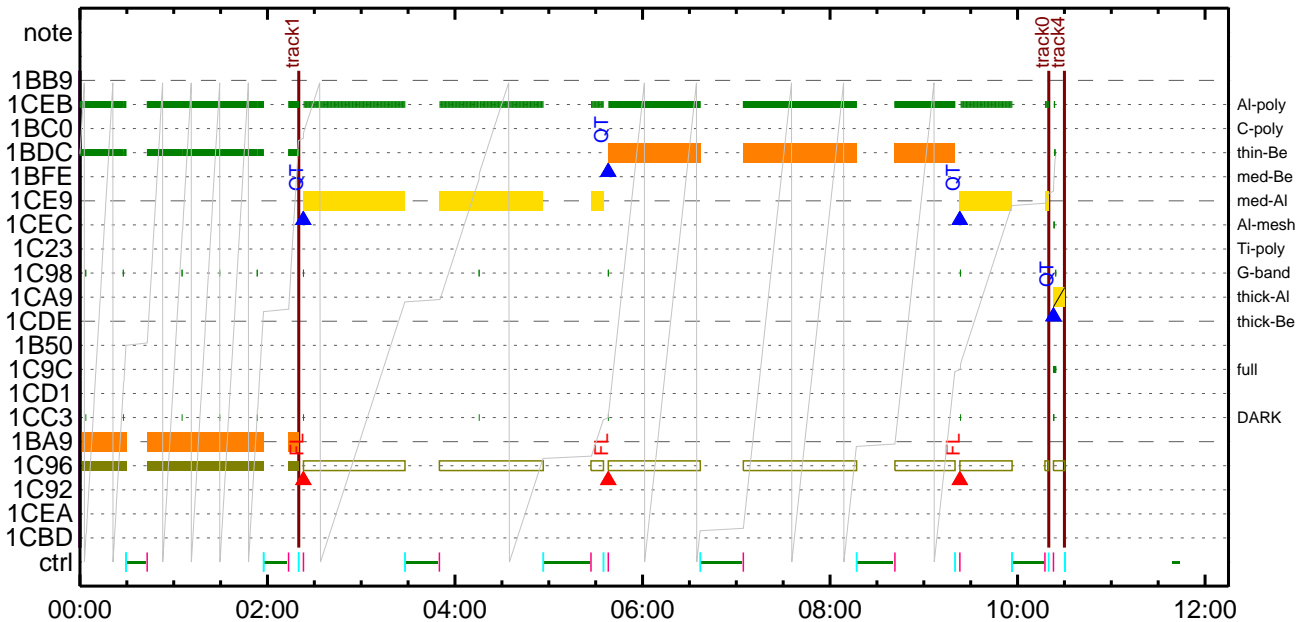
### CMDI #0702 2022/11/05



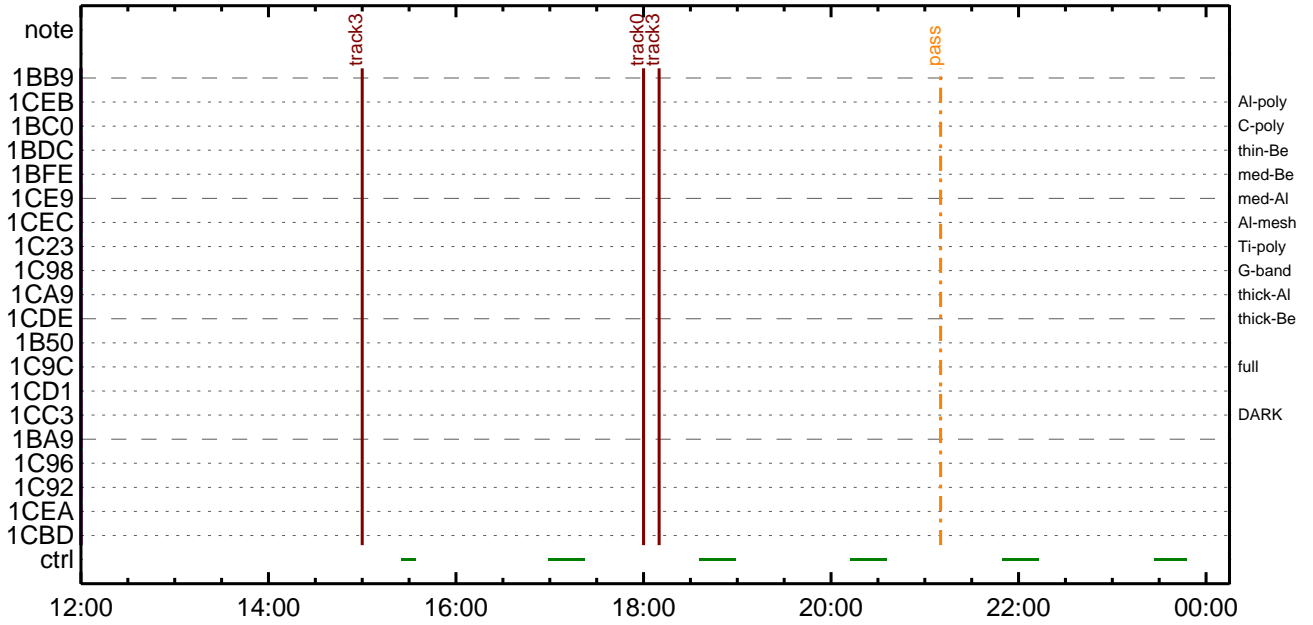
### CMDI #0702 2022/11/05



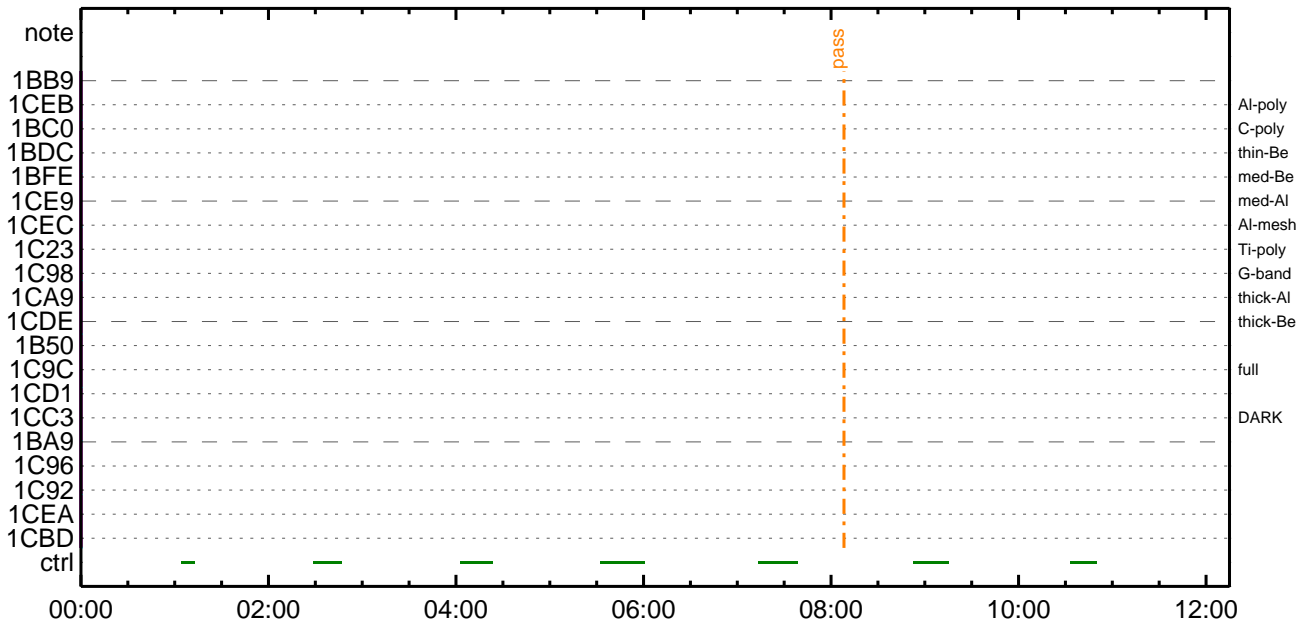
### CMDI #0702 2022/11/06



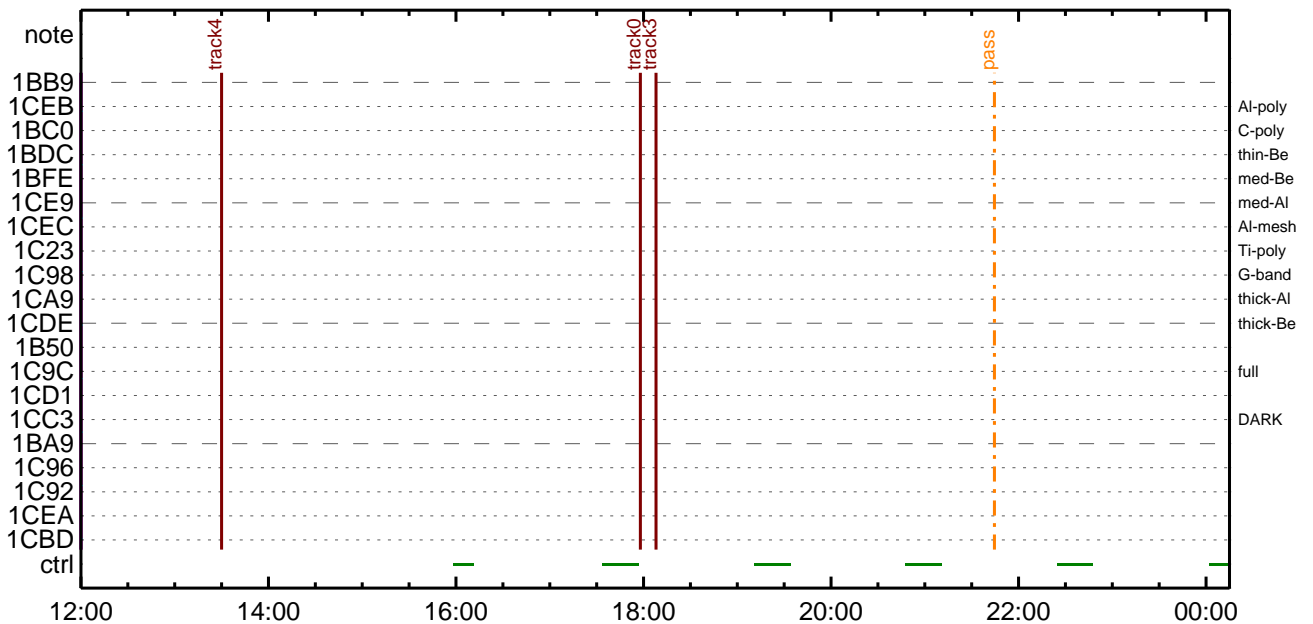
CMDI #0702 2022/11/06



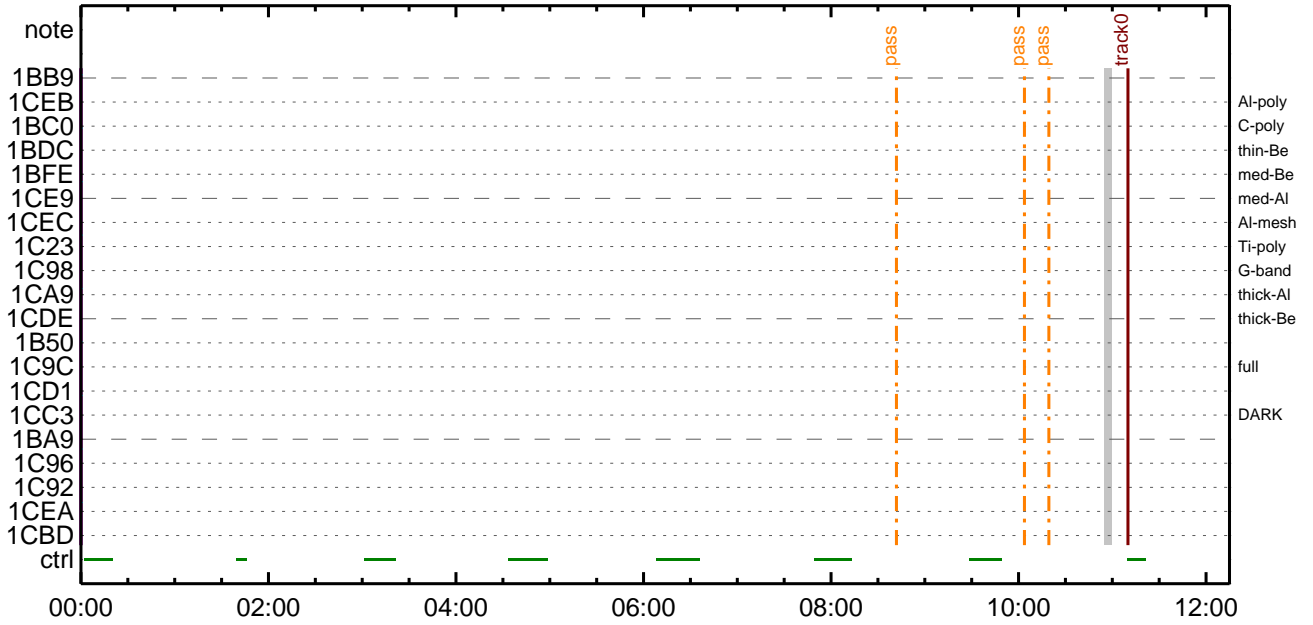
CMDI #0702 2022/11/07



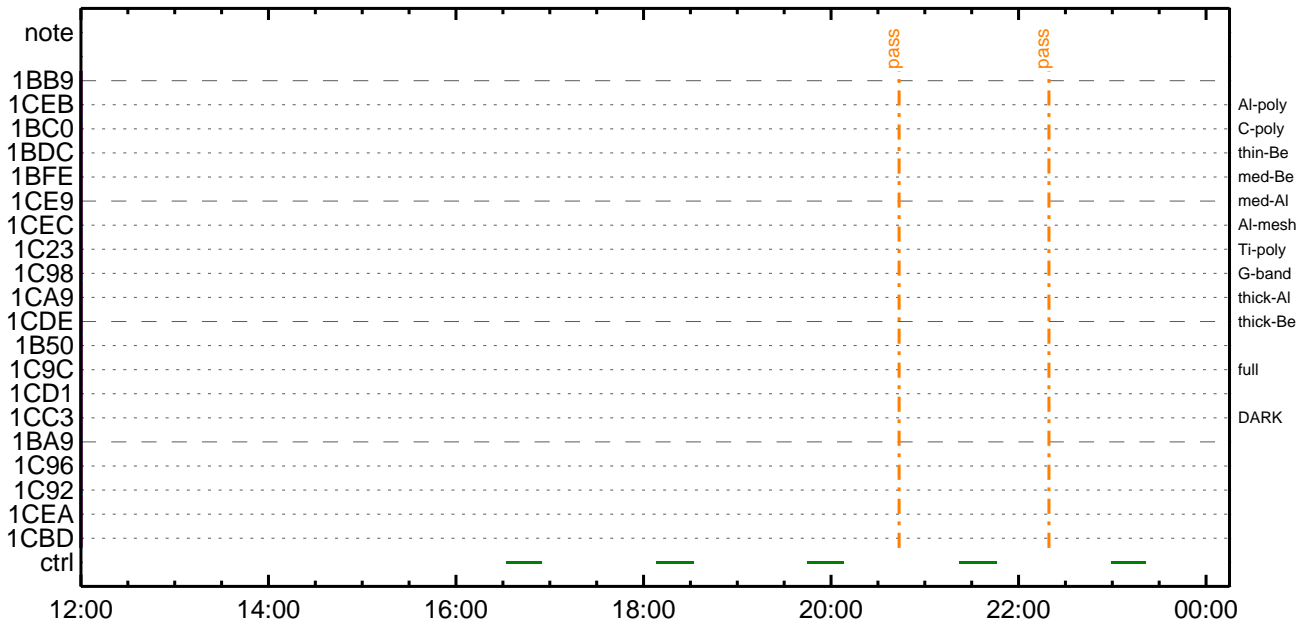
CMDI #0702 2022/11/07



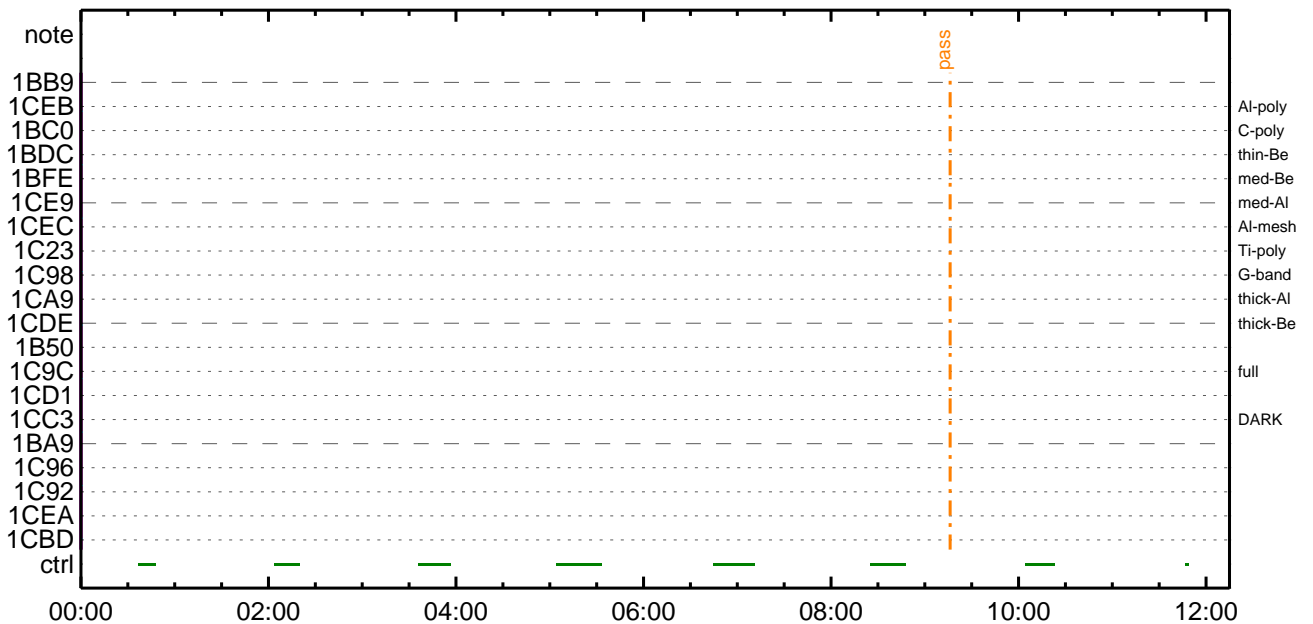
CMDI #0702 2022/11/08



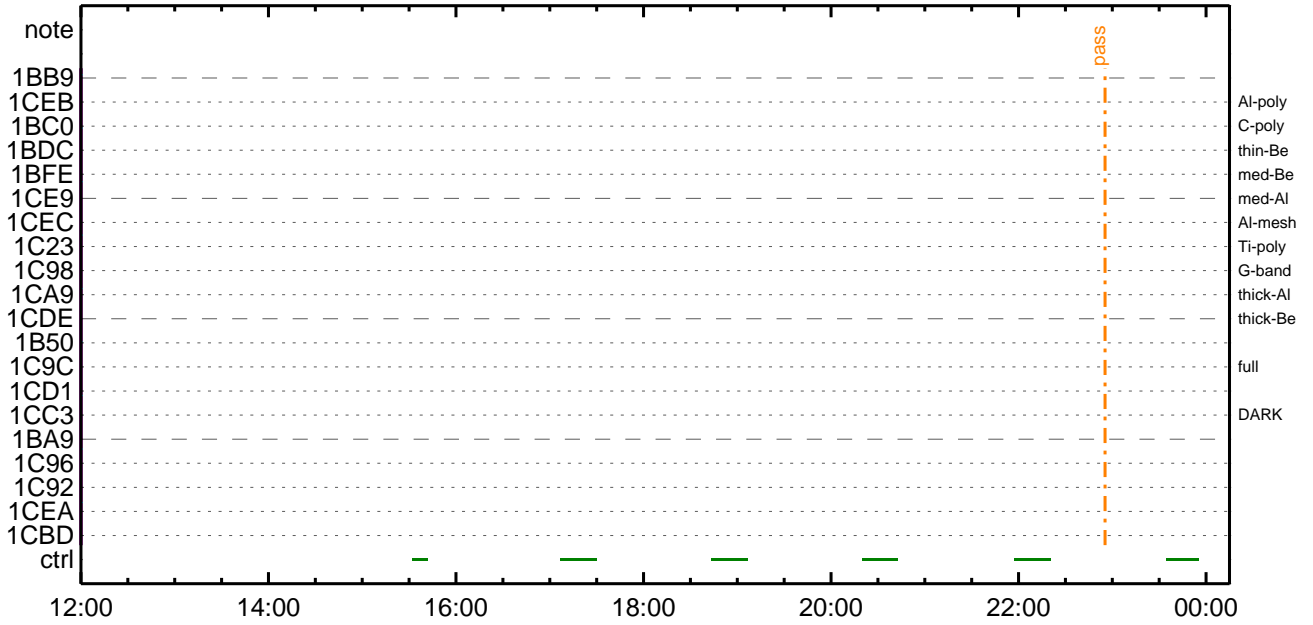
CMDI #0702 2022/11/08



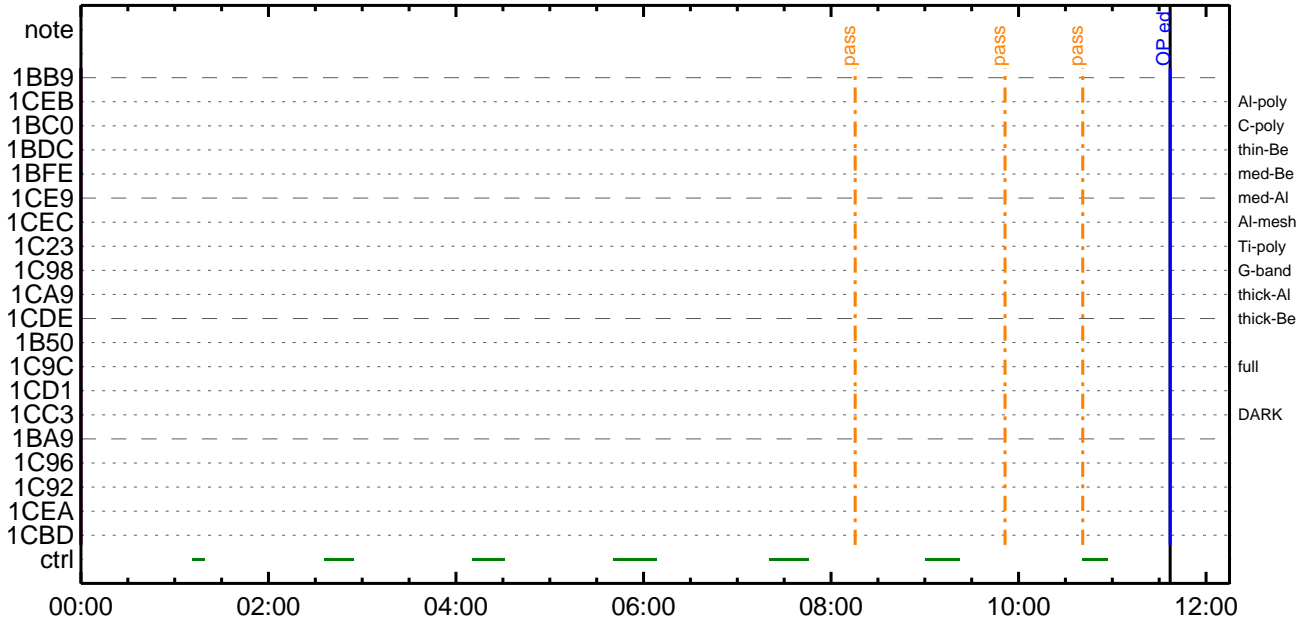
CMDI #0702 2022/11/09



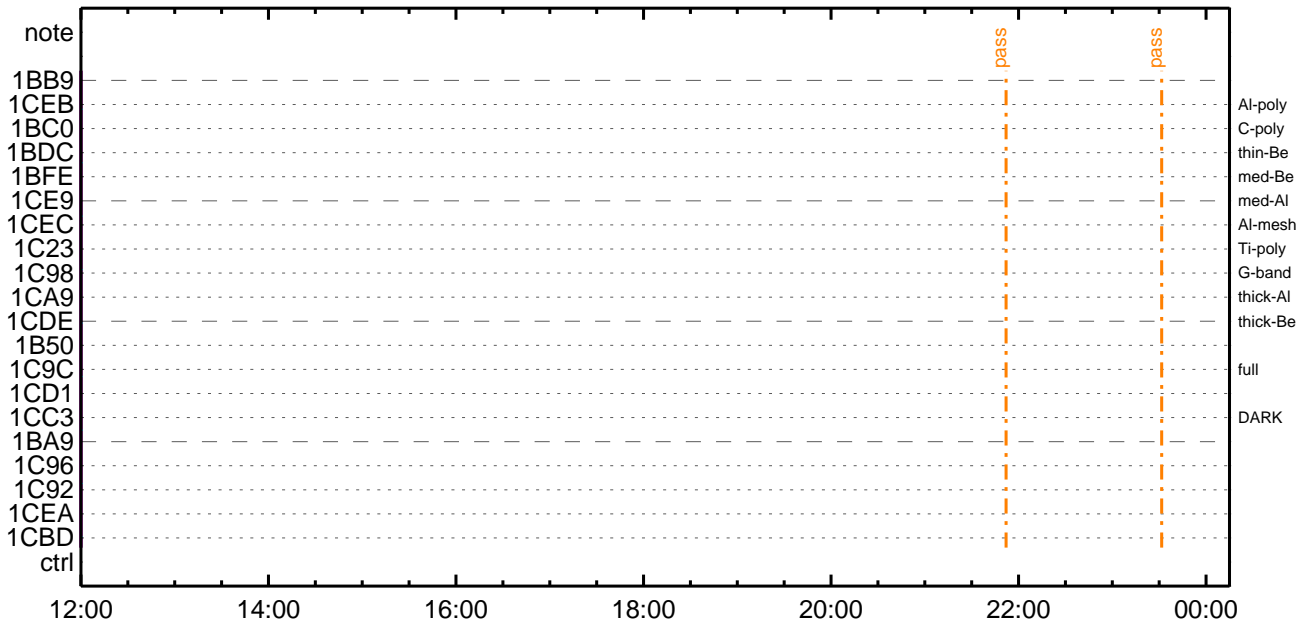
CMDI #0702 2022/11/09



CMDI #0702 2022/11/10



CMDI #0702 2022/11/10





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0096 C.
0097 C.
0098 C. *****
0099 C. OP/OGY1;4YE;|YAYOYx
0100 C. *****
0101 C.
0102 C. ;ãOP/OGY1;4YE;ã
0103 S. OP op-503:OP
0104 ( )
0105 S. OG og-503:OG
0106 ( )
0107 C.
0108 C. ;ãNMOG&OPîî°èYAYOYx;ã
0109 C. NMOG(0x200000-0x207FFF;§ 32 kbyte)
0110 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0111 BC (20 00 7f 01 02)
0112 C. çç[HK1_DMP_TOP_ADRS_1] EQ 40
0113 C. çç[HK1_DMP_TOP_ADRS_0] EQ 0
0114 C. çç[HK1_DMP_BLOCK_NUM] EQ 127
0115 C. çç[HK1_DMP_REPEAT_NUM] EQ 0
0116 C. çç[HK1_DMA_DMP_PIM] EQ DHU
0117 +. DC 01-22 DHU_MODE_CHNG
0118 BC (07 0b f8)
0119 C. çç[HK1_PKT_FORM_NO] EQ 7
0120 C. çç[HK1_PKT_GEN_TIME] EQ 0.25 s
0121 C. çç[HK1_S_TLM_BIT_RATE] EQ 32k
0122 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0123 C. çç[HK1_DMP_CHK_FLG] EQ EXEC
0124 C. YAYOYx½ªî»ò³îÇ§
0125 C. çç[HK1_DMP_CHK_FLG] EQ NON
0126 C. RAM ID=NMOG²î½Ë¹ç•è²îOKò³îÇ§
0127 C.
0128 C. NMOG(0x208000-0x20FFFF;§ 32 kbyte)
0129 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0130 BC (20 80 7f 01 02)
0131 C. çç[HK1_DMP_TOP_ADRS_1] EQ 41
0132 C. çç[HK1_DMP_TOP_ADRS_0] EQ 0
0133 C. çç[HK1_DMP_BLOCK_NUM] EQ 127
0134 C. çç[HK1_DMP_REPEAT_NUM] EQ 0
0135 C. çç[HK1_DMA_DMP_PIM] EQ DHU
0136 +. DC 01-22 DHU_MODE_CHNG
0137 BC (07 0b f8)
0138 C. çç[HK1_PKT_FORM_NO] EQ 7
0139 C. çç[HK1_PKT_GEN_TIME] EQ 0.25 s
0140 C. çç[HK1_S_TLM_BIT_RATE] EQ 32k
0141 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0142 C. çç[HK1_DMP_CHK_FLG] EQ EXEC
0143 C. YAYOYx½ªî»ò³îÇ§
0144 C. çç[HK1_DMP_CHK_FLG] EQ NON
0145 C. RAM ID=NMOG²î½Ë¹ç•è²îOKò³îÇ§
0146 C.
0147 C. NMOG(0x210000-0x2100FF;§ 256byte)+OP(0x210100-0x2141FF: 16.25kbyte)
0148 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0149 BC (21 00 41 01 02)
0150 C. çç[HK1_DMP_TOP_ADRS_1] EQ 42
0151 C. çç[HK1_DMP_TOP_ADRS_0] EQ 0
0152 C. çç[HK1_DMP_BLOCK_NUM] EQ 65
0153 C. çç[HK1_DMP_REPEAT_NUM] EQ 0
0154 C. çç[HK1_DMA_DMP_PIM] EQ DHU
0155 +. DC 01-22 DHU_MODE_CHNG
0156 BC (07 0b f8)
0157 C. çç[HK1_PKT_FORM_NO] EQ 7
0158 C. çç[HK1_PKT_GEN_TIME] EQ 0.25 s
0159 C. çç[HK1_S_TLM_BIT_RATE] EQ 32k
0160 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0161 C. çç[HK1_DMP_CHK_FLG] EQ EXEC
0162 C. YAYOYx½ªî»ò³îÇ§
0163 C. çç[HK1_DMP_CHK_FLG] EQ NON
0164 C. RAM ID=NMOG, RAM ID=OP²î½Ë¹ç•è²îOKò³îÇ§
0165 C.
0166 C. ***** °Ë²¼òî½Ë¹ç•è²îOKò³îÇ§ *****
0167 C. DHUªâ;½YE;Ë½Y½;Yî;½YE;Ëòîã¹
0168 +. DC 01-22 DHU_MODE_CHNG
0169 BC (02 0a f8)
0170 C. çç[HK1_PKT_FORM_NO] EQ 2
0171 C. çç[HK1_PKT_GEN_TIME] EQ 0.5S
0172 C. çç[HK1_S_TLM_BIT_RATE] EQ 32K
0173 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0174 C.
0175 C. *****
0176 C. TI-CMD SET (OPOG STOP/COPY/START)
0177 C. *****
0178 C.
0179 C. NOTICE ;§ OPOG UPLOAD²-Á÷çîNG²î½Ë¹ç•è²îOKò³îÇ§
0180 C. çç[HK1_DMP_CHK_FLG] EQ NON
0181 C.
0182 C. TIY³YbYóYËòðÁDîç(UT)
0183 +. TI 2022-11-05 10:47:00.0
0184 DC 01-B3 DHU_OP_STOP
0185 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP
0186 C.
0187 +. TI 2022-11-05 10:47:01.0
0188 DC 01-B4 DHU_OP_COPY
0189 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP
0190 C.
0191 +. TI 2022-11-05 10:47:01.0
0192 DC 01-B5 DHU_OPOG_COPY
0193 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP

```





(a) Spacecraft Operation Procedure (real-commands)

```
main-504 2022-11-05 12:00:49 85 33 SOLAR-B MAIN //
0001 C.
0002 . C. ***** AOS *****
0003 C.
0004 . C. ;ãAOSYÁY$YÁY~¼Á»Û;ã
0005 C.
0006 C. YÁYB;¼Y³YFYOYÉÁ+¿®
0007 +. DC 00-00 NULL_DUMMY_CMD
0008 C.
0009 . C. ***** AOCS : Reload orbital element (send every contact) *****
0010 C. Áí;È¿¿òÁò•µ°È»Í×ÁÇòÍYçYÁY×Yí;¼YÉ;ÈÈ%µ•íÉ;ÈòÈ¼°ÇÒò•ò¿¼í¹çòÍ;çÁ®, ùò¹òÈòòòÇÁ+¿®ò•òÈòòò³òÈ;f
0011 +. DC 02-8E AOCU_ORB_UPD
0012 C.
0013 C.
0014 . C. ***** AOCS Commands (Tracking Curve Upload) *****
0015 C. Upload the Orbit Element and the Target Attitude
0016 C. RAM-ID:TARGET_ATT
0017 . S. RAM ram-150:TARGET_ATT
0018 ( )
0019 C.
0020 C.
0021 C. Set the dump memory area of TARGET_ATT
0022 +. DC 02-48 AOCU_DUMP_SET
0023 BC (07 00 00 00 18 00)
0024 C.
0025 C. <A_STS1>[MEMORY OPERATE SATUS] ADRS = 070000 [ ]
0026 C.
0027 C.
0028 C. Change the TLMFormatNo for the AOCS Dump Format
0029 +. DC 01-22 DHU_MODE_CHNG
0030 BC (04 0b f8)
0031 C.
0032 C. Wait for AOCSDUMP to end
0033 C.
0034 . C. Check the dump memory
0035 C.
0036 C. Result = OK [ ]
0037 C.
0038 +. DC 01-22 DHU_MODE_CHNG
0039 BC (02 0a f8)
0040 C.
0041 C. <A_***>[TLM STS] FMT = 2 [ ]
0042 C.
0043 +. DC 02-8E AOCU_ORB_UPD
0044 . C.
0045 . C. Load OBSTBL, dump OBSTBL, enable EIS mode changes
0046 +. DC 07-FC EIS_MODE_CHG_ENA
0047 BC (20)
0048 . C. Verify EIS_MODE_CHG_FLG is ENA
0049 +. DC 07-FC EIS_MODE_MANU
0050 BC (21 02)
0051 . C. Verify EIS in MANUAL mode
0052 . C. Estimated OBSTBL upload time is 0ms
0053 C. *****
0054 C. EIS START OBSTBL LOAD
0055 C. *****
0056 . S. RAM ram-821:EIS_OBSTBL
0057 ( )
0058 +. DC 07-FC EIS_DUMP_OBSTBL
0059 BC (07 07 07 00 00 70 00)
0060 C.
0061 C. Execute, after the success of OBSTBL upload.
0062 C. Set EIS TI-commands
0063 +. TI 2022-11-05 10:51:50.0
0064 DC 07-FC EIS_MODE_CHG_ENA
0065 BC (20)
0066 . C. [ ] [HK1_TI_CMD_NUM] EQ 1 COUNTUP
0067 C. *****
0068 C. EIS END OBSTBL LOAD
0069 C. *****
0070 C.
0071 . C. ***** MDP `ûÁîòí»ò¼YòÈÁò¹òÈDCBC•x²è *****
0072 C. (¼á°íYÓYÁYÈYpYÈYáYçYÈòÈ¼°ÇÒò•ò¿¼í¹çòÍ;çÁ»Ûò¹òÈ)
0073 . S. DC-BC dcbc-402:DCBC
0074 (MDP_known_event)
0075 C.
0076 C.
0077 . C. ***** YDÿ¹.İ Daily±¿İÑòÈ`Øò¹òÈDCBC•x²è *****
0078 . S. DC-BC dcbc-153:DCBC
0079 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0080 C.
0081 C.
0082 . C. ;ãLOSÁY$YÁY~¼Á»Û;ã
0083 C.
0084 . C. ***** LOS *****
0085 C.
```



```

0096 C.
0097 C.
0098 C.
0099 C. ***** XRT START *****
0100 C.
0101 +. DC 07-F0 MDP_XRT_CTRL_MANU
0102 BC (c1)
0103 + DC 07-F0 MDP_XRT_MODE_STBY
0104 BC (c3)
0105 . C. ----- Success Verify ? OK / NG____
0106 C.
0107 C. XRT Obs. Table Upload
0108 . S. RAM ram-291:MDP_OBS_X
0109 ( )
0110 C.
0111 +. DC 07-F0 MDP_DUMP_XRTTBL
0112 BC (84 07 00 00 00 3a d4)
0113 . C. ----- Comparison Check ? OK / ERR ____
0114 C.
0115 C.
0116 +. DC 07-F0 MDP_XRT_ROI_SET
0117 BC (cd 01 b1 b1 04 04)
0118 + DC 07-F0 MDP_XRT_ROI_SET
0119 BC (cd 02 b1 b1 08 08)
0120 + DC 07-F0 MDP_XRT_ROI_SET
0121 BC (cd 03 b1 b1 08 08)
0122 + DC 07-F0 MDP_XRT_ROI_SET
0123 BC (cd 04 b1 b1 06 06)
0124 + DC 07-F0 MDP_XRT_ROI_SET
0125 BC (cd 05 85 83 06 06)
0126 + DC 07-F0 MDP_XRT_ROI_SET
0127 BC (cd 06 85 83 06 06)
0128 + DC 07-F0 MDP_XRT_ROI_SET
0129 BC (cd 07 80 80 08 08)
0130 + DC 07-F0 MDP_XRT_ROI_SET
0131 BC (cd 08 80 80 20 20)
0132 + DC 07-F0 MDP_XRT_ROI_SET
0133 BC (cd 09 80 80 20 08)
0134 + DC 07-F0 MDP_XRT_ROI_SET
0135 BC (cd 0a 80 80 08 20)
0136 + DC 07-F0 MDP_XRT_ROI_SET
0137 BC (cd 0f 80 80 06 06)
0138 + DC 07-F0 MDP_XRT_ROI_SET
0139 BC (cd 10 80 80 08 08)
0140 + DC 07-F0 MDP_XRT_FLD_ENA
0141 BC (d8)
0142 + DC 07-F0 MDP_XRT_FLRCTRL_ENA
0143 BC (c8)
0144 + DC 07-F0 MDP_XRT_ARS_DIS
0145 BC (d5)
0146 + DC 07-F0 MDP_XRT_AEC_RESET
0147 BC (d0)
0148 + DC 07-F0 MDP_XRT_FLD_RESET
0149 BC (da)
0150 +. DC 07-F0 MDP_XRT_QT_PROG_SET
0151 BC (c4 10)
0152 +. DC 07-F0 MDP_XRT_FL_PROG_SET
0153 BC (c5 04)
0154 . C. ----- Success Verify ? OK / NG ____
0155 C.
0156 C.
0157 . C. All OK? Yes--> Please Proceed. / No --> Stop here.
0158 C.
0159 +. DC 07-F0 MDP_XRT_MODE_OBSV
0160 BC (c2)
0161 +. TI 2022-11-05 10:51:02.0
0162 DC 07-F0 MDP_XRT_MODE_OBSV
0163 BC (c2)
0164 . C. ----- Success Verify ? OK / NG ____
0165 C.
0166 C. ***** XRT END *****
0167 . C. ===== Begin of AOCs CMD Sequence =====
0168 C.
0169 C. *****
0170 . C. ***** GASÿÇ;¼ÿç¼èÈÀ¼À»Ü *****
0171 . C. *****
0172 C.
0173 . C. *****
0174 . C. MDRV OFF
0175 . C. *****
0176 C.
0177 . C. ***** GASÿâÿËÿç;¼îñçá MTQ¼îÆººi»pÄã»ß *****
0178 +. DC 02-33 AOCU_MDRV-X_OFF
0179 +. DC 02-34 AOCU_MDRV-Y_OFF
0180 +. DC 02-35 AOCU_MDRV-Z_OFF
0181 . C. [ ] <A_AOS> [COMPONENT STS] <MDRV> X = OFF ?
0182 . C. [ ] <A_AOS> [COMPONENT STS] <MDRV> Y = OFF ?
0183 . C. [ ] <A_AOS> [COMPONENT STS] <MDRV> Z = OFF ?
0184 . C.
0185 C.
0186 . C. jüÿÇ;¼ÿç¼èÈÀ¼îñçá;çìó1minÂÔµ;
0187 C.
0188 . C. *****
0189 . C. MDRV ON
0190 . C. *****
0191 C.
0192 . C. ***** MTQ¼îÆººE³« *****
0193 +. DC 02-32 AOCU_MDRV_ON

```

```
0194 . C. [ ] <A_AOS> [COMPONENT STS] <MDRV> X = ON ?
0195 . C. [ ] <A_AOS> [COMPONENT STS] <MDRV> Y = ON ?
0196 . C. [ ] <A_AOS> [COMPONENT STS] <MDRV> Z = ON ?
0197 . C.
0198 . C.
0199 . C. ===== End of AOCs CMD Sequence =====
0200 . C.
0201 . C.
0202 . C. ***** MDP 'úÃîâî»ô¼ÝðÈÄð¹æDCBC•x²è *****
0203 . C. (%ã°îÝÔÝÄÝÈÝÞÝÈÝÁÝçÝèæ¼¼¼¼¼»Û¹æè)
0204 . S. DC-BC dcbc-402:DCBC
0205 (MDP_known_event)
0206 . C.
0207 . C.
0208 . C. ***** ÝÐÝ¹•Ï Daily±¿ÏÑæÈ'Ø¹æèDCBC•x²è *****
0209 . S. DC-BC dcbc-153:DCBC
0210 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0211 . C.
0212 . C.
0213 . C. ;ãLOSÝÁÝ§ÝÄÝ¹¼Ä»Û;ã
0214 . C.
0215 . C. ***** LOS *****
0216 . C.
```

\*\*\* OP Sequence for XRT \*\*\*

|            |            |                                   |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2022/11/05 | 11:01:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 11:01:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 11:01:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 11:01:36.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2022/11/05 | 11:01:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 11:01:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 11:01:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2022/11/05 | 11:02:00.0 | AOCS_ORe-point_Start_1_OG [0x097] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 02 03 a5 02 0c |  |  |  |  |
| 2022/11/05 | 11:02:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2022/11/05 | 11:02:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2022/11/05 | 11:02:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2022/11/05 | 11:02:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2022/11/05 | 11:02:26.0 | XRT_FLD_RESET_434_OG [0x1b2]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 11:04:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2022/11/05 | 11:04:56.0 | XRT_QT_PROG_SET_401_OG [0x191]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0a          |  |  |  |  |
| 2022/11/05 | 11:04:58.0 | XRT_FL_PROG_SET_418_OG [0x1a2]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 04          |  |  |  |  |
| 2022/11/05 | 11:15:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2022/11/05 | 11:16:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2022/11/05 | 14:29:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 14:29:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 14:29:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2022/11/05 | 14:30:00.0 | AOCS_ORe-point_Start_2_OG [0x098] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 03 03 a5 02 0c |  |  |  |  |
| 2022/11/05 | 14:30:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2022/11/05 | 14:30:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2022/11/05 | 14:30:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2022/11/05 | 14:30:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2022/11/05 | 14:30:26.0 | XRT_FLD_RESET_434_OG [0x1b2]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 14:32:56.0 | XRT_QT_PROG_SET_417_OG [0x1a1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 05          |  |  |  |  |
| 2022/11/05 | 14:32:58.0 | XRT_FL_PROG_SET_418_OG [0x1a2]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 04          |  |  |  |  |
| 2022/11/05 | 14:33:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2022/11/05 | 16:24:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 16:24:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 16:24:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 16:24:36.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2022/11/05 | 16:27:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2022/11/05 | 16:39:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2022/11/05 | 16:40:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2022/11/05 | 16:40:00.5 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 16:40:02.5 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 16:40:04.5 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 16:40:06.5 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2022/11/05 | 16:43:14.5 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2022/11/05 | 16:48:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2022/11/05 | 16:49:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2022/11/05 | 17:36:24.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 17:36:26.0 | XRT_FOCUS_POSITION_406_OG [0x196] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |
| 2022/11/05 | 17:36:30.0 | AOCS_ORe-point_Start_3_OG [0x099] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |

|            |            |                                   |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2022/11/05 | 17:36:46.0 | XRT_FLD_DIS_409_OG [0x199]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9             |  |  |  |  |
| 2022/11/05 | 17:36:48.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9             |  |  |  |  |
| 2022/11/05 | 17:36:50.0 | XRT_ARS_DIS_404_OG [0x194]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2022/11/05 | 17:39:28.0 | XRT_QT_PROG_SET_446_OG [0x1be]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0b          |  |  |  |  |
| 2022/11/05 | 17:39:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2022/11/05 | 17:46:24.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 17:46:26.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 17:46:28.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2022/11/05 | 17:46:30.0 | AOCS_ORe-point_Start_2_OG [0x098] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 03 03 a5 02 0c |  |  |  |  |
| 2022/11/05 | 17:46:48.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2022/11/05 | 17:46:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2022/11/05 | 17:46:52.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2022/11/05 | 17:46:54.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2022/11/05 | 17:46:56.0 | XRT_FLD_RESET_434_OG [0x1b2]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 17:49:26.0 | XRT_QT_PROG_SET_417_OG [0x1a1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 05          |  |  |  |  |
| 2022/11/05 | 17:49:28.0 | XRT_FL_PROG_SET_418_OG [0x1a2]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 04          |  |  |  |  |
| 2022/11/05 | 17:49:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2022/11/05 | 18:00:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 18:00:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 18:00:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 18:00:36.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2022/11/05 | 18:03:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2022/11/05 | 18:24:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2022/11/05 | 18:25:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2022/11/05 | 18:29:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 18:29:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 18:29:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2022/11/05 | 18:30:00.0 | AOCS_ORe-point_Start_4_OG [0x09a] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 04 03 a5 02 0c |  |  |  |  |
| 2022/11/05 | 18:30:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2022/11/05 | 18:30:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2022/11/05 | 18:30:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2022/11/05 | 18:30:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2022/11/05 | 18:30:26.0 | XRT_FLD_RESET_434_OG [0x1b2]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 18:32:56.0 | XRT_QT_PROG_SET_417_OG [0x1a1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 05          |  |  |  |  |
| 2022/11/05 | 18:32:58.0 | XRT_FL_PROG_SET_418_OG [0x1a2]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 04          |  |  |  |  |
| 2022/11/05 | 18:33:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2022/11/05 | 19:37:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 19:37:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 19:37:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 19:37:36.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2022/11/05 | 19:40:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2022/11/05 | 20:01:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2022/11/05 | 20:02:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2022/11/05 | 21:14:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 21:14:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2022/11/05 | 21:14:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2022/11/05 | 21:14:36.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2022/11/05 | 21:17:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |

|            |            |                                   |                     |   |       |                |  |  |
|------------|------------|-----------------------------------|---------------------|---|-------|----------------|--|--|
| 2022/11/05 | 21:38:30.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2022/11/05 | 21:39:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |                     |   |       |                |  |  |
| 2022/11/05 | 22:52:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2022/11/05 | 22:52:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/05 | 22:52:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/05 | 22:52:06.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2022/11/05 | 22:55:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2022/11/05 | 23:09:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2022/11/05 | 23:09:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/05 | 23:09:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/05 | 23:10:00.0 | AOCS_Ore-point_Start_2_OG [0x098] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |  |  |
| 2022/11/05 | 23:10:18.0 | XRT_FLD_ENA_411_OG [0x19b]        | AOCU_NM             | 5 | 02-76 | 03 03 a5 02 0c |  |  |
| 2022/11/05 | 23:10:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |  |
| 2022/11/05 | 23:10:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |  |
| 2022/11/05 | 23:10:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |  |
| 2022/11/05 | 23:10:26.0 | XRT_FLD_RESET_434_OG [0x1b2]      | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |
| 2022/11/05 | 23:12:56.0 | XRT_QT_PROG_SET_417_OG [0x1a1]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2022/11/05 | 23:12:58.0 | XRT_FL_PROG_SET_418_OG [0x1a2]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 05          |  |  |
| 2022/11/05 | 23:14:30.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 04          |  |  |
| 2022/11/05 | 23:15:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |                     |   |       |                |  |  |
| 2022/11/06 | 00:29:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2022/11/06 | 00:29:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/06 | 00:29:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/06 | 00:29:36.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2022/11/06 | 00:32:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2022/11/06 | 00:42:00.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2022/11/06 | 00:43:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |                     |   |       |                |  |  |
| 2022/11/06 | 01:57:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2022/11/06 | 01:57:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/06 | 01:57:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/06 | 01:57:36.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2022/11/06 | 02:00:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2022/11/06 | 02:12:30.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2022/11/06 | 02:13:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |                     |   |       |                |  |  |
| 2022/11/06 | 02:19:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2022/11/06 | 02:19:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/06 | 02:19:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/06 | 02:20:00.0 | AOCS_Ore-point_Start_5_OG [0x09b] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |  |  |
| 2022/11/06 | 02:20:18.0 | XRT_FLD_DIS_405_OG [0x195]        | AOCU_NM             | 5 | 02-76 | 01 03 a5 02 0c |  |  |
| 2022/11/06 | 02:22:50.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]    | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |  |  |
| 2022/11/06 | 02:22:52.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |  |  |
| 2022/11/06 | 02:22:54.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |  |
| 2022/11/06 | 02:22:56.0 | XRT_QT_PROG_SET_437_OG [0x1b5]    | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |
| 2022/11/06 | 02:22:58.0 | XRT_FL_PROG_SET_418_OG [0x1a2]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 0f          |  |  |
| 2022/11/06 | 02:23:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 04          |  |  |
| 2022/11/06 | 03:28:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2022/11/06 | 03:28:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2022/11/06 | 03:28:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
|            |            |                                   | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |



|            |            |                                   |   |       |             |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|-------------|--|--|--|--|
| 2022/11/06 | 03:28:06.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2022/11/06 | 03:31:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2022/11/06 | 03:49:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2022/11/06 | 03:50:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2022/11/06 | 04:56:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 04:56:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 04:56:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2022/11/06 | 04:56:36.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2022/11/06 | 04:59:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2022/11/06 | 05:26:00.5 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2022/11/06 | 05:27:00.5 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2022/11/06 | 05:35:00.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 05:35:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 05:35:04.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |             |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00 |  |  |  |  |
| 2022/11/06 | 05:35:24.0 | XRT_FLD_DIS_405_OG [0x195]        |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9          |  |  |  |  |
| 2022/11/06 | 05:37:56.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9          |  |  |  |  |
| 2022/11/06 | 05:37:58.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0          |  |  |  |  |
| 2022/11/06 | 05:38:00.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |             |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5          |  |  |  |  |
| 2022/11/06 | 05:38:02.0 | XRT_QT_PROG_SET_439_OG [0x1b7]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 11       |  |  |  |  |
| 2022/11/06 | 05:38:04.0 | XRT_FL_PROG_SET_418_OG [0x1a2]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 04       |  |  |  |  |
| 2022/11/06 | 05:38:06.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2022/11/06 | 06:37:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 06:37:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 06:37:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2022/11/06 | 06:37:06.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2022/11/06 | 06:40:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2022/11/06 | 07:03:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2022/11/06 | 07:04:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2022/11/06 | 08:17:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 08:17:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 08:17:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2022/11/06 | 08:17:06.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2022/11/06 | 08:20:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2022/11/06 | 08:40:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2022/11/06 | 08:41:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2022/11/06 | 09:20:00.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 09:20:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 09:20:04.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |             |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00 |  |  |  |  |
| 2022/11/06 | 09:20:24.0 | XRT_FLD_DIS_405_OG [0x195]        |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9          |  |  |  |  |
| 2022/11/06 | 09:22:56.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9          |  |  |  |  |
| 2022/11/06 | 09:22:58.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0          |  |  |  |  |
| 2022/11/06 | 09:23:00.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |             |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5          |  |  |  |  |
| 2022/11/06 | 09:23:02.0 | XRT_QT_PROG_SET_437_OG [0x1b5]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0f       |  |  |  |  |
| 2022/11/06 | 09:23:04.0 | XRT_FL_PROG_SET_418_OG [0x1a2]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 04       |  |  |  |  |
| 2022/11/06 | 09:23:06.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2022/11/06 | 09:56:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 09:56:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2022/11/06 | 09:56:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2022/11/06 | 09:56:36.0 | XRT_PREFLR_STRT_436_OG [0x1b4]    |   |       |             |  |  |  |  |

|            |            |   |                      |   |       |                |
|------------|------------|---|----------------------|---|-------|----------------|
| 2022/11/06 | 09:59:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]          | MDP_XRT_PREFLR_STRT  | 1 | 07-F0 | e8             |
| 2022/11/06 | 10:16:30.0 | XRT_Custom_430_OG [0x1ae]               | MDP_XRT_PREFLR_STOP  | 1 | 07-F0 | e9             |
| 2022/11/06 | 10:17:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]            | MDP_XRT_CTRL_AUTO    | 1 | 07-F0 | c0             |
| 2022/11/06 | 10:19:54.0 | XRT_CTRL_MANU_402_OG [0x192]            | MDP_XRT_CTRL_MANU    | 1 | 07-F0 | c1             |
| 2022/11/06 | 10:19:56.0 | XRT_FOCUS_POSITION_406_OG [0x196]       | XRT_FOCUS_POSITION   | 4 | 07-F8 | 22 ff aa 00    |
| 2022/11/06 | 10:20:00.0 | AOCS_ORe-point_Start_3_OG [0x099]       | AOCU_NM              | 5 | 02-76 | 00 00 00 00 00 |
| 2022/11/06 | 10:20:16.0 | XRT_FLD_DIS_409_OG [0x199]              | MDP_XRT_FLD_DIS      | 1 | 07-F0 | d9             |
| 2022/11/06 | 10:20:18.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]          | MDP_XRT_FLRCTRL_DIS  | 1 | 07-F0 | c9             |
| 2022/11/06 | 10:20:20.0 | XRT_ARS_DIS_404_OG [0x194]              | MDP_XRT_ARS_DIS      | 1 | 07-F0 | d5             |
| 2022/11/06 | 10:22:58.0 | XRT_QT_PROG_SET_446_OG [0x1be]          | MDP_XRT_QT_PROG_SET  | 2 | 07-F0 | c4 0b          |
| 2022/11/06 | 10:23:00.0 | XRT_CTRL_AUTO_408_OG [0x198]            | MDP_XRT_CTRL_AUTO    | 1 | 07-F0 | c0             |
| 2022/11/06 | 10:30:00.0 | AOCS_ORe-point_Start_4_OG [0x09a]       | AOCU_NM              | 5 | 02-76 | 04 03 a5 02 0c |
| 2022/11/06 | 10:30:10.0 | XRT_CTRL_MANU_400_OG [0x190]            | MDP_XRT_CTRL_MANU    | 1 | 07-F0 | c1             |
| 2022/11/06 | 10:30:10.5 | XRT_CTRL_MANU_402_OG [0x192]            | MDP_XRT_CTRL_MANU    | 1 | 07-F0 | c1             |
| 2022/11/06 | 10:30:12.0 | XRT_CTRL_MANU_402_OG [0x192]            | MDP_XRT_CTRL_MANU    | 1 | 07-F0 | c1             |
| 2022/11/06 | 10:30:14.0 | XRT_FLD_RESET_415_OG [0x19f]            | MDP_XRT_FLD_RESET    | 1 | 07-F0 | da             |
| 2022/11/06 | 10:30:16.0 | XRT_PREFLR_STRT_436_OG [0x1b4]          | MDP_XRT_PREFLR_STRT  | 1 | 07-F0 | e8             |
| 2022/11/06 | 10:30:20.0 | XRT_CTRL_MANU_402_OG [0x192]            | MDP_XRT_CTRL_MANU    | 1 | 07-F0 | c1             |
| 2022/11/06 | 10:30:30.0 | XRT_TCIB_XRT_S_HTR_A_ENA_426_OG [0x1aa] | TCIB_XRT_S_HTR_A_ENA | 0 | 04-BC |                |
| 2022/11/06 | 10:33:24.0 | XRT_PREFLR_STOP_419_OG [0x1a3]          | MDP_XRT_PREFLR_STOP  | 1 | 07-F0 | e9             |
| 2022/11/06 | 15:00:00.0 | AOCS_ORe-point_Start_2_OG [0x098]       | AOCU_NM              | 5 | 02-76 | 03 03 a5 02 0c |
| 2022/11/06 | 18:00:00.0 | AOCS_ORe-point_Start_3_OG [0x099]       | AOCU_NM              | 5 | 02-76 | 00 00 00 00 00 |
| 2022/11/06 | 18:10:00.0 | AOCS_ORe-point_Start_2_OG [0x098]       | AOCU_NM              | 5 | 02-76 | 03 03 a5 02 0c |
| 2022/11/07 | 13:30:00.0 | AOCS_ORe-point_Start_4_OG [0x09a]       | AOCU_NM              | 5 | 02-76 | 04 03 a5 02 0c |
| 2022/11/07 | 17:58:00.0 | AOCS_ORe-point_Start_3_OG [0x099]       | AOCU_NM              | 5 | 02-76 | 00 00 00 00 00 |
| 2022/11/07 | 18:08:00.0 | AOCS_ORe-point_Start_2_OG [0x098]       | AOCU_NM              | 5 | 02-76 | 03 03 a5 02 0c |
| 2022/11/08 | 11:10:00.0 | AOCS_ORe-point_Start_3_OG [0x099]       | AOCU_NM              | 5 | 02-76 | 00 00 00 00 00 |