

# XRT Timeline to be uploaded on 2019/02/14

Period: 2019/02/14 11:25:00 - 2019/02/19 10:00:00

\* \* \* \* \*

## Normal mode

\* \* \* \* \*

### XOB #1B94: CME watch - 4x4 - AEC 2/3 - 2-filter (Be-thin, Al-poly) - G-band (1x1,512x512,1ms) - Leak (1x1,512x512,1ms) - 180s cad (G-band/Leak first)

| Term                            | Pointing (x, y)   | Comment                                       |
|---------------------------------|---|---|
| 02/14 11:38:00 - 02/14 15:41:54 | Fixed ( 851.0, 366.0)   | # OP start + 10min/ HOP 269 W-limb prominence |
| <b>PROG= 12 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            |   |
| └─ Subr= 2 20-time(s) 180.0sec  |   |   |
| └─ Seqn= 8 1-time(s) 2.0sec     |   |   |
| thin-Be/Open                    | med-Be/Open close Safe Norm 1.00s Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec        |   |
| thin-Be/Open                    | med-Be/Open close Safe Norm 1.41s Obs 4x4 2048x2048 (1024, 1024) DPCM 2 0 2.0sec        |   |
| └─ Seqn= 6 1-time(s) 2.0sec     |   |   |
| Al-poly/Open                    | Al-poly/Open close Safe Norm 125ms Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec       |   |
| Al-poly/Open                    | Al-poly/Open close Safe Norm 1.00s 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 #1B8B: Synoptic Q95 2x2 - Al/mesh(64/512/2048) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 - 1x1 2048x512) + Al-poly(45/512/4096) + T

| Term                            | Pointing (x, y)   | Comment                    |
|---------------------------------|---|----------------------------|
| 02/14 15:45:00 - 02/14 15:53:00 | Fixed ( 0.0, 0.0)   | Synoptic                   |
| 02/15 17:43:00 - 02/15 17:49:54 | Fixed ( 0.0, 0.0)   | Synoptic                   |
| 02/16 06:00:30 - 02/16 06:07:24 | Fixed ( 0.0, 0.0)   | synoptic, shifted -2.5 min |
| <b>PROG= 07 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= 27 1-time(s) 2.0sec    |   |                            |
| Open/Al-mesh                    | Open/Al-mesh close Safe Norm 63ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec        |                            |
| Open/Al-mesh                    | Open/Al-mesh close Safe Norm 500ms 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= 99 1-time(s) 2.0sec    |   |                            |
| Al-poly/Open                    | Al-poly/Open close Safe Norm 44ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec        |                            |
| Al-poly/Open                    | Al-poly/Open close Safe Norm 500ms 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= 85 1-time(s) 2.0sec    |   |                            |
| thin-Be/Open                    | thin-Be/Open close Safe Norm 354ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec       |                            |
| thin-Be/Open                    | thin-Be/Open close Safe Norm 2.83s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec       |                            |
| thin-Be/Open                    | thin-Be/Open close Safe Norm 16.0s 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 #1C2D: CME watch - 4x4 - AEC 2 - 2-filter (Be-thin, Al-poly) - G-band (1x1,1ms) - Leak (1x1,1ms) - 180s cad

| Term                            | Pointing (x, y)        | Comment     |
|---------------------------------|------------------------|-------------|
| 02/14 16:20:00 - 02/14 16:46:54 | Fixed ( -20.0, -979.0) | HOP79 1/20  |
| 02/14 16:50:00 - 02/14 17:29:00 | Fixed ( -20.0, -879.0) | HOP79 2/20  |
| 02/14 17:56:30 - 02/14 18:23:24 | Fixed ( -20.0, -779.0) | HOP79 3/20  |
| 02/14 18:26:30 - 02/14 19:06:00 | Fixed ( -20.0, -679.0) | HOP79 4/20  |
| 02/14 19:33:30 - 02/14 20:00:24 | Fixed ( -20.0, -579.0) | HOP79 5/20  |
| 02/14 20:03:30 - 02/14 20:43:00 | Fixed ( -20.0, -479.0) | HOP79 6/20  |
| 02/14 21:10:30 - 02/14 21:37:24 | Fixed ( -20.0, -379.0) | HOP79 7/20  |
| 02/14 21:40:30 - 02/14 22:20:00 | Fixed ( -20.0, -279.0) | HOP79 8/20  |
| 02/14 22:46:30 - 02/14 23:13:24 | Fixed ( -20.0, -179.0) | HOP79 9/20  |
| 02/14 23:16:30 - 02/14 23:57:30 | Fixed ( -20.0, -79.0)  | HOP79 10/20 |
| 02/15 00:15:00 - 02/15 00:41:54 | Fixed ( -20.0, 11.0)   | HOP79 11/20 |
| 02/15 00:45:00 - 02/15 01:26:30 | Fixed ( -20.0, 111.0)  | HOP79 12/20 |
| 02/15 01:45:00 - 02/15 02:11:54 | Fixed ( -20.0, 211.0)  | HOP79 13/20 |
| 02/15 02:15:00 - 02/15 02:56:30 | Fixed ( -20.0, 311.0)  | HOP79 14/20 |
| 02/15 03:21:00 - 02/15 03:47:54 | Fixed ( -20.0, 411.0)  | HOP79 15/20 |
| 02/15 03:51:00 - 02/15 04:24:30 | Fixed ( -20.0, 511.0)  | HOP79 16/20 |
| 02/15 04:58:00 - 02/15 05:24:54 | Fixed ( -20.0, 611.0)  | HOP79 17/20 |
| 02/15 05:28:00 - 02/15 06:05:00 | Fixed ( -20.0, 711.0)  | HOP79 18/20 |
| 02/15 06:35:00 - 02/15 07:02:24 | Fixed ( -20.0, 811.0)  | HOP79 19/20 |
| 02/15 07:05:30 - 02/15 07:32:24 | Fixed ( -20.0, 911.0)  | HOP79 20/20 |

### PROG= 08 Inf.-time(s)

|                              |  |  |
|------------------------------|--|--|
| └─ 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 |
| <b>Subr= 2</b> | <b>30-time(s)</b> |                  | <b>180.0sec</b> |               |       |       |     |     |                        |       |            |          |        |
|                | <b>Seqn= 95</b>   | <b>1-time(s)</b> |                 | <b>2.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                | thin-Be/Open      | med-Be/Open      | close           | Safe          | Norm  | 4.00s | Obs | 4x4 | 2048x2048 (1024, 1024) | Q=98  | 2          | 0        | 2.0sec |
|                | <b>Seqn= 31</b>   | <b>1-time(s)</b> |                 | <b>2.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                | Al-poly/Open      | thin-Be/Open     | close           | Safe          | Norm  | 500ms | Obs | 4x4 | 2048x2048 (1024, 1024) | Q=98  | 2          | 0        | 2.0sec |
|                | Default Filter    | Thicker Filter   | VLS             | mode          | image | Exp.  | CCD | Bin | ROI: size (center)     | Comp. | AEC Buffer | Interval |        |

**XOB #1BD8: Synoptic 7 Filter w/ Al-mesh(64/512/2897), Al-poly(45/512/4096), Thin-Be(1024/11571/23142) - Thick-Be(65536), Al-poly+Ti-poly(512/8192), Med**

| Term                            | Pointing (x, y)   |                  | Comment       |               |       |       |     |     |                        |       |            |          |        |
|---------------------------------|-------------------|------------------|---------------|---------------|-------|-------|-----|-----|------------------------|-------|------------|----------|--------|
| 02/15 07:35:30 - 02/15 07:42:24 | Fixed ( 0.0, 0.0) |                  | Synoptic      |               |       |       |     |     |                        |       |            |          |        |
| <b>PROG= 20</b>                 | <b>1-time(s)</b>  |                  |               |               |       |       |     |     |                        |       |            |          |        |
| <b>Subr= 1</b>                  | <b>1-time(s)</b>  |                  | <b>2.0sec</b> |               |       |       |     |     |                        |       |            |          |        |
|                                 | <b>Seqn= 5</b>    | <b>1-time(s)</b> |               | <b>2.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                                 | 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 |
|                                 | <b>Seqn= 36</b>   | <b>1-time(s)</b> |               | <b>2.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                                 | Open/Al-mesh      | Open/Al-mesh     | close         | Safe          | Norm  | 63ms  | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
|                                 | Open/Al-mesh      | Open/Al-mesh     | close         | Safe          | Norm  | 500ms | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
|                                 | Open/Al-mesh      | Open/Al-mesh     | close         | Safe          | Norm  | 2.83s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
|                                 | <b>Seqn= 99</b>   | <b>1-time(s)</b> |               | <b>2.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                                 | Al-poly/Open      | Al-poly/Open     | close         | Safe          | Norm  | 44ms  | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
|                                 | Al-poly/Open      | Al-poly/Open     | close         | Safe          | Norm  | 500ms | 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 |
|                                 | <b>Seqn= 33</b>   | <b>1-time(s)</b> |               | <b>2.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                                 | thin-Be/Open      | thin-Be/Open     | close         | Safe          | Norm  | 1.00s | 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 |
|                                 | thin-Be/Open      | thin-Be/Open     | close         | Safe          | Norm  | 22.6s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
|                                 | <b>Seqn= 23</b>   | <b>1-time(s)</b> |               | <b>4.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                                 | 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 |
| <b>Subr= 2</b>                  | <b>1-time(s)</b>  |                  | <b>2.0sec</b> |               |       |       |     |     |                        |       |            |          |        |
|                                 | <b>Seqn= 46</b>   | <b>1-time(s)</b> |               | <b>2.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                                 | Open/thick-Be     | Open/thick-Be    | close         | Safe          | Norm  | 64.0s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
|                                 | <b>Seqn= 17</b>   | <b>1-time(s)</b> |               | <b>2.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                                 | med-Al/Open       | med-Al/Open      | close         | Safe          | Norm  | 5.66s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
|                                 | med-Al/Open       | med-Al/Open      | close         | Safe          | Norm  | 64.0s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
|                                 | <b>Seqn= 25</b>   | <b>1-time(s)</b> |               | <b>2.0sec</b> |       |       |     |     |                        |       |            |          |        |
|                                 | Al-poly/Ti-poly   | Al-poly/thick-Al | close         | Safe          | Norm  | 500ms | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
|                                 | Al-poly/Ti-poly   | Al-poly/thick-Al | close         | Safe          | Norm  | 8.00s | Obs | 2x2 | 2048x2048 (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 |        |

**XOB #1B89: 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       |                |       |       |     |     |                      |       |            |          |        |
|---------------------------------|--|------------------|---------------|----------------|-------|-------|-----|-----|----------------------|-------|------------|----------|--------|
| 02/15 08:10:01 - 02/15 17:39:54 | Track ( -890.9, 96.0) @ 02/15 07:42:30 |                  | #New AR       |                |       |       |     |     |                      |       |            |          |        |
| <b>PROG= 19</b>                 | <b>Inf.-time(s)</b>                    |                  |               |                |       |       |     |     |                      |       |            |          |        |
| <b>Subr= 1</b>                  | <b>1-time(s)</b>                       |                  | <b>2.0sec</b> |                |       |       |     |     |                      |       |            |          |        |
|                                 | <b>Seqn= 92</b>                        | <b>1-time(s)</b> |               | <b>2.0sec</b>  |       |       |     |     |                      |       |            |          |        |
|                                 | 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 |
| <b>Subr= 2</b>                  | <b>5-time(s)</b>                       |                  | <b>2.0sec</b> |                |       |       |     |     |                      |       |            |          |        |
|                                 | <b>Seqn= 75</b>                        | <b>1-time(s)</b> |               | <b>2.0sec</b>  |       |       |     |     |                      |       |            |          |        |
|                                 | 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 |
|                                 | <b>Seqn= 96</b>                        | <b>4-time(s)</b> |               | <b>60.0sec</b> |       |       |     |     |                      |       |            |          |        |
|                                 | 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 #1BDB: AR (Filter-Ratio with Al/poly and thin-Be) with PFB, 512x512 at 1064 1048, thick-Al context, with G-band (1ms/1ms leak), 120s cad**

| Term                            | Pointing (x, y)                         |                  | Comment       |               |  |  |  |  |  |  |  |  |  |
|---------------------------------|---|------------------|---------------|---------------|--|--|--|--|--|--|--|--|--|
| 02/15 17:53:00 - 02/16 01:57:00 | Track ( -845.3, 106.1) @ 02/15 17:50:00 |                  | New AR        |               |  |  |  |  |  |  |  |  |  |
| 02/16 06:10:30 - 02/16 08:21:00 | Track ( -779.1, 117.6) @ 02/16 06:07:30 |                  | #New AR       |               |  |  |  |  |  |  |  |  |  |
| <b>PROG= 09</b>                 | <b>Inf.-time(s)</b>                     |                  |               |               |  |  |  |  |  |  |  |  |  |
| <b>Subr= 1</b>                  | <b>1-time(s)</b>                        |                  | <b>2.0sec</b> |               |  |  |  |  |  |  |  |  |  |
|                                 | <b>Seqn= 92</b>                         | <b>1-time(s)</b> |               | <b>2.0sec</b> |  |  |  |  |  |  |  |  |  |

|                                    |                |       |      |       |       |     |     |                      |       |            |          |        |
|------------------------------------|----------------|-------|------|-------|-------|-----|-----|----------------------|-------|------------|----------|--------|
| 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 |
| <b>Seqn= 71 3-time(s) 2.0sec</b>   |                |       |      |       |       |     |     |                      |       |            |          |        |
| Open/thick-Al                      | Open/thick-Be  | close | Safe | Norm  | 16.0s | Obs | 1x1 | 512x512 (1064, 1048) | Q=98  | 3          | 0        | 2.0sec |
| <b>Subr= 2 30-time(s) 120.0sec</b> |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Seqn= 89 1-time(s) 40.0sec</b>  |                |       |      |       |       |     |     |                      |       |            |          |        |
| thin-Be/Open                       | med-Be/Open    | close | Safe | Norm  | 1.00s | Obs | 1x1 | 512x512 (1064, 1048) | Q=95  | 2          | 0        | 2.0sec |
| Al-poly/Open                       | thin-Be/Open   | close | Safe | Norm  | 500ms | Obs | 1x1 | 512x512 (1064, 1048) | Q=95  | 2          | 0        | 2.0sec |
| <b>Seqn= 58 1-time(s) 40.0sec</b>  |                |       |      |       |       |     |     |                      |       |            |          |        |
| Al-poly/Open                       | thin-Be/Open   | close | Safe | Norm  | 500ms | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 1        | 2.0sec |
| thin-Be/Open                       | med-Be/Open    | close | Safe | Norm  | 1.00s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 1        | 2.0sec |
| <b>Seqn= 48 1-time(s) 2.0sec</b>   |                |       |      |       |       |     |     |                      |       |            |          |        |
| Al-poly/Open                       | thin-Be/Open   | close | Safe | Norm  | 500ms | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 2        | 2.0sec |
| thin-Be/Open                       | med-Be/Open    | close | Safe | Norm  | 1.00s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 2        | 2.0sec |
| Default Filter                     | Thicker Filter | VLS   | mode | image | Exp.  | CCD | Bin | ROI: size (center)   | Comp. | AEC Buffer | Interval |        |

**XOB #1C2C: HOP349 - 3-filter Synoptics (Al-mesh[24/256/2897], Al-poly[45/512/4096], thin-Be[1024/11571/23142] with 512x512 G-band+Leak - 45min cad) +**

| Term                              | Pointing (x, y)        | Comment  |
|-----------------------------------|------------------------|--|
| 02/16 02:16:00 - 02/16 05:57:24   | Fixed ( 0.0, 0.0)      | HOP349   |
| <b>PROG= 06 Inf.-time(s)</b>      |                        |  |
| <b>Subr= 1 1-time(s) 600.0sec</b> |                        |  |
| <b>Seqn= 1 1-time(s) 2.0sec</b>   |                        |  |
| Open/Al-mesh                      | Open/Al-mesh close     | Safe Norm 24ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec            |
| Open/Al-mesh                      | Open/Al-mesh close     | Safe Norm 250ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec           |
| Open/Al-mesh                      | Open/Al-mesh close     | Safe Norm 2.83s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec           |
| <b>Seqn= 99 1-time(s) 2.0sec</b>  |                        |  |
| Al-poly/Open                      | Al-poly/Open close     | Safe Norm 44ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec            |
| Al-poly/Open                      | Al-poly/Open close     | Safe Norm 500ms 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           |
| <b>Seqn= 33 1-time(s) 2.0sec</b>  |                        |  |
| thin-Be/Open                      | thin-Be/Open close     | Safe Norm 1.00s 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           |
| thin-Be/Open                      | thin-Be/Open close     | Safe Norm 22.6s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec           |
| <b>Seqn= 30 1-time(s) 2.0sec</b>  |                        |  |
| 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               |
| <b>Subr= 2 4-time(s) 600.0sec</b> |                        |  |
| <b>Seqn= 8 1-time(s) 2.0sec</b>   |                        |  |
| thin-Be/Open                      | med-Be/Open close      | Safe Norm 1.00s Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec           |
| thin-Be/Open                      | med-Be/Open close      | Safe Norm 1.41s Obs 4x4 2048x2048 (1024, 1024) DPCM 2 0 2.0sec           |
| <b>Seqn= 6 1-time(s) 2.0sec</b>   |                        |  |
| Al-poly/Open                      | Al-poly/Open close     | Safe Norm 125ms Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec           |
| Al-poly/Open                      | Al-poly/Open close     | Safe Norm 1.00s Obs 4x4 2048x2048 (1024, 1024) DPCM 2 0 2.0sec           |
| <b>Seqn= 29 1-time(s) 2.0sec</b>  |                        |  |
| Open/Al-mesh                      | Open/Al-mesh close     | Safe Norm 125ms Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec           |
| Open/Al-mesh                      | Open/Al-mesh close     | Safe Norm 250ms Obs 4x4 2048x2048 (1024, 1024) Q=98 2 0 2.0sec           |
| Default Filter                    | Thicker Filter         | VLS mode image Exp. CCD Bin ROI: size (center) Comp. AEC Buffer Interval |

\* \* \* \* \*

**Flare mode**

\* \* \* \* \*

**XOB #1B8E: Flare - multifilter 26 sec cadence (Be/thin, Be/med, Al/thick), AEC 3(thin-Be AEC2), 384x384 + context (med-Al,thick-Be -384x384 + Al-poly 512**

| Term                            | Pointing (x, y)                         | Comment                                       |
|---------------------------------|---|---|
| 02/14 11:38:00 - 02/14 15:41:54 | Fixed ( 851.0, 366.0)                   | # OP start + 10min/ HOP 269 W-limb prominence |
| 02/14 16:20:00 - 02/14 16:46:54 | Fixed ( -20.0, -979.0)                  | HOP79 1/20                                    |
| 02/14 16:50:00 - 02/14 17:29:00 | Fixed ( -20.0, -879.0)                  | HOP79 2/20                                    |
| 02/14 17:56:30 - 02/14 18:23:24 | Fixed ( -20.0, -779.0)                  | HOP79 3/20                                    |
| 02/14 18:26:30 - 02/14 19:06:00 | Fixed ( -20.0, -679.0)                  | HOP79 4/20                                    |
| 02/14 19:33:30 - 02/14 20:00:24 | Fixed ( -20.0, -579.0)                  | HOP79 5/20                                    |
| 02/14 20:03:30 - 02/14 20:43:00 | Fixed ( -20.0, -479.0)                  | HOP79 6/20                                    |
| 02/14 21:10:30 - 02/14 21:37:24 | Fixed ( -20.0, -379.0)                  | HOP79 7/20                                    |
| 02/14 21:40:30 - 02/14 22:20:00 | Fixed ( -20.0, -279.0)                  | HOP79 8/20                                    |
| 02/14 22:46:30 - 02/14 23:13:24 | Fixed ( -20.0, -179.0)                  | HOP79 9/20                                    |
| 02/14 23:16:30 - 02/14 23:57:30 | Fixed ( -20.0, -79.0)                   | HOP79 10/20                                   |
| 02/15 00:15:00 - 02/15 00:41:54 | Fixed ( -20.0, 11.0)                    | HOP79 11/20                                   |
| 02/15 00:45:00 - 02/15 01:26:30 | Fixed ( -20.0, 111.0)                   | HOP79 12/20                                   |
| 02/15 01:45:00 - 02/15 02:11:54 | Fixed ( -20.0, 211.0)                   | HOP79 13/20                                   |
| 02/15 02:15:00 - 02/15 02:56:30 | Fixed ( -20.0, 311.0)                   | HOP79 14/20                                   |
| 02/15 03:21:00 - 02/15 03:47:54 | Fixed ( -20.0, 411.0)                   | HOP79 15/20                                   |
| 02/15 03:51:00 - 02/15 04:24:30 | Fixed ( -20.0, 511.0)                   | HOP79 16/20                                   |
| 02/15 04:58:00 - 02/15 05:24:54 | Fixed ( -20.0, 611.0)                   | HOP79 17/20                                   |
| 02/15 05:28:00 - 02/15 06:05:00 | Fixed ( -20.0, 711.0)                   | HOP79 18/20                                   |
| 02/15 06:35:00 - 02/15 07:02:24 | Fixed ( -20.0, 811.0)                   | HOP79 19/20                                   |
| 02/15 07:05:30 - 02/15 07:32:24 | Fixed ( -20.0, 911.0)                   | HOP79 20/20                                   |
| 02/15 08:10:01 - 02/15 17:39:54 | Track ( -890.9, 96.0) @ 02/15 07:42:30  | #New AR                                       |
| 02/15 17:53:00 - 02/16 01:57:00 | Track ( -845.3, 106.1) @ 02/15 17:50:00 | New AR  |
| 02/16 02:16:00 - 02/16 05:57:24 | Fixed ( 0.0, 0.0)                       | HOP349  |
| 02/16 06:10:30 - 02/16 08:21:00 | Track ( -779.1, 117.6) @ 02/16 06:07:30 | #New AR                                       |

| PROG= 13 30-time(s)        |                |                  |       |      |       |       |     |     |                      |       |            |          |        |
|----------------------------|----------------|------------------|-------|------|-------|-------|-----|-----|----------------------|-------|------------|----------|--------|
| 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=100 1-time(s) 10.0sec |                |                  |       |      |       |       |     |     |                      |       |            |          |        |
|                            | thin-Be/Open   | med-Be/Open      | close | Safe | Norm  | 125ms | Obs | 1x1 | 384x384 (1024, 1024) | Q=95  | 2          | 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-Al  | Open/thick-Be    | close | Safe | Norm  | 1.00s | 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 |        |

\* \* \* \* \*

### Active Region Search

\* \* \* \* \*

NOT USED

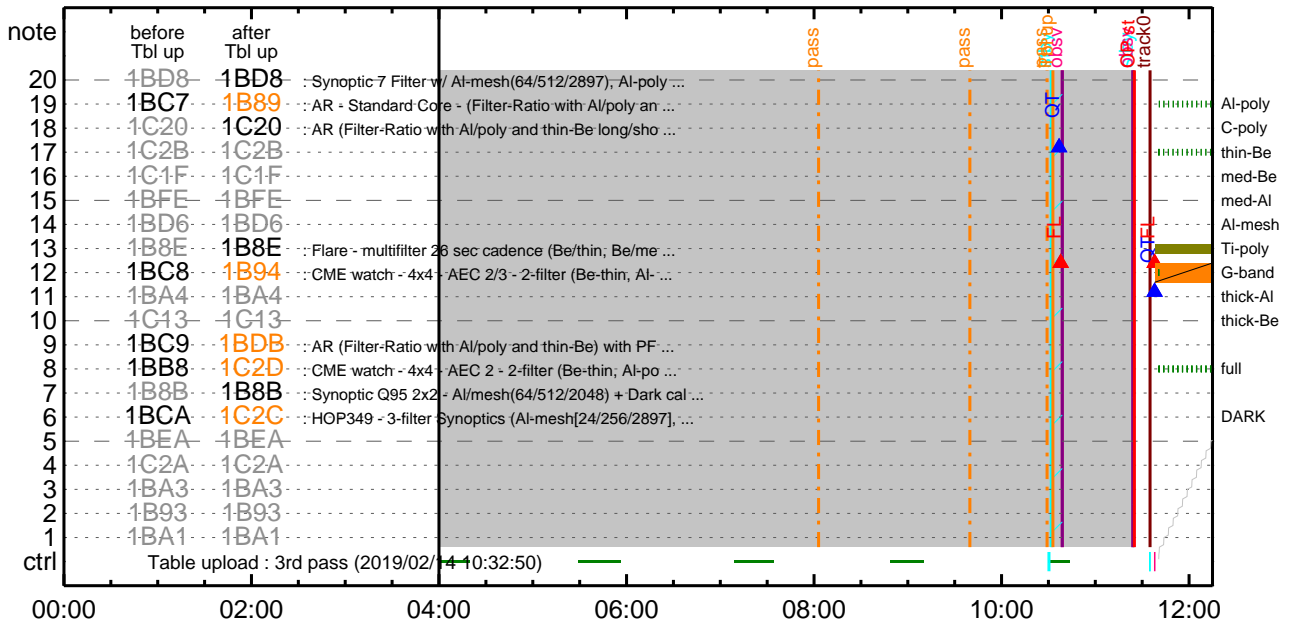
\* \* \* \* \*

### Flare Detection

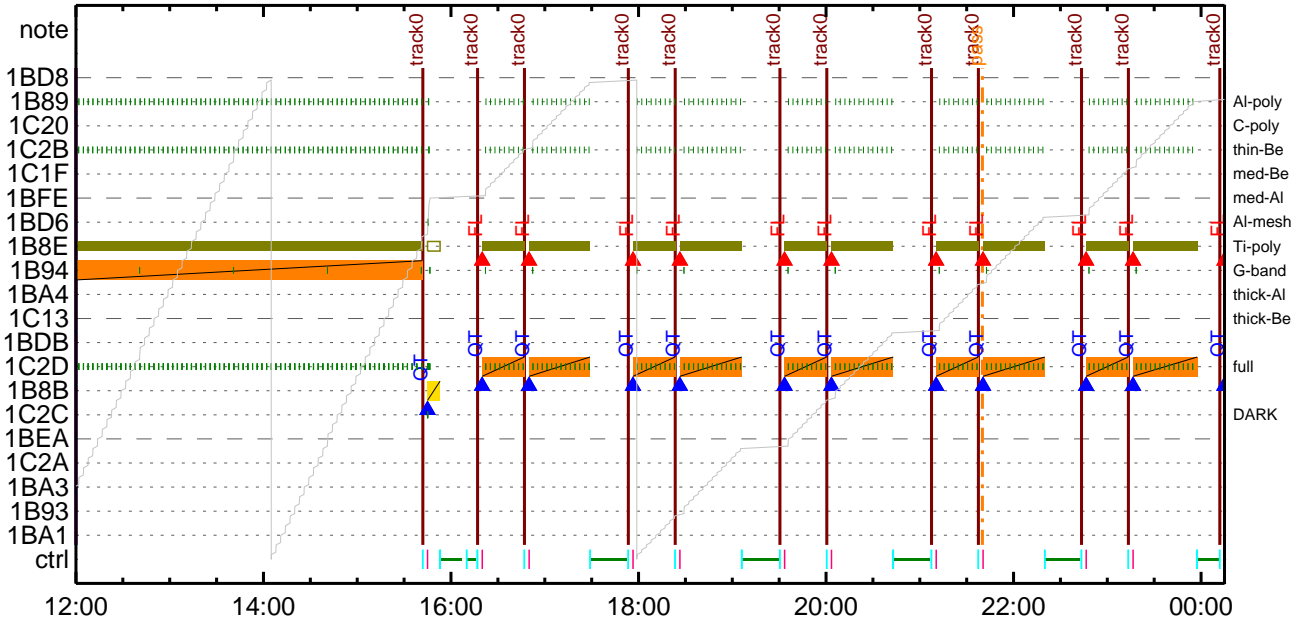
\* \* \* \* \*

| FLD Patrol  |                |                |       |      |       |      |     |     |                    |       |            |          |
|---|----------------|----------------|-------|------|-------|------|-----|-----|--------------------|-------|------------|----------|
| Term  |                |                |       |      |       |      |     |     |                    |       |            |          |
| Pointing (x, y)   |                |                |       |      |       |      |     |     |                    |       |            |          |
| Comment   |                |                |       |      |       |      |     |     |                    |       |            |          |
| 02/14 16:17:18 - 02/15 07:32:48 Fixed ( -20.0, -979.0) HOP79 1/20               |                |                |       |      |       |      |     |     |                    |       |            |          |
| 02/15 07:42:48 - 02/15 17:40:18 Track ( -890.9, 96.0) @ 02/15 07:42:30 #New AR  |                |                |       |      |       |      |     |     |                    |       |            |          |
| 02/15 17:50:18 - 02/16 05:57:48 Track ( -845.3, 106.1) @ 02/15 17:50:00 New AR  |                |                |       |      |       |      |     |     |                    |       |            |          |
| 02/16 06:07:48 - 02/19 10:00:00 Track ( -779.1, 117.6) @ 02/16 06:07:30 #New AR |                |                |       |      |       |      |     |     |                    |       |            |          |
|   | Al-poly/Open   | Al-poly/Open   | close | Safe | Norm  | 8ms  | Obs | 8x8 |                    | Q=50  |            | 30sec    |
|   | Default Filter | Thicker Filter | VLS   | mode | image | Exp. | CCD | Bin | ROI: size (center) | Comp. | AEC Buffer | Interval |

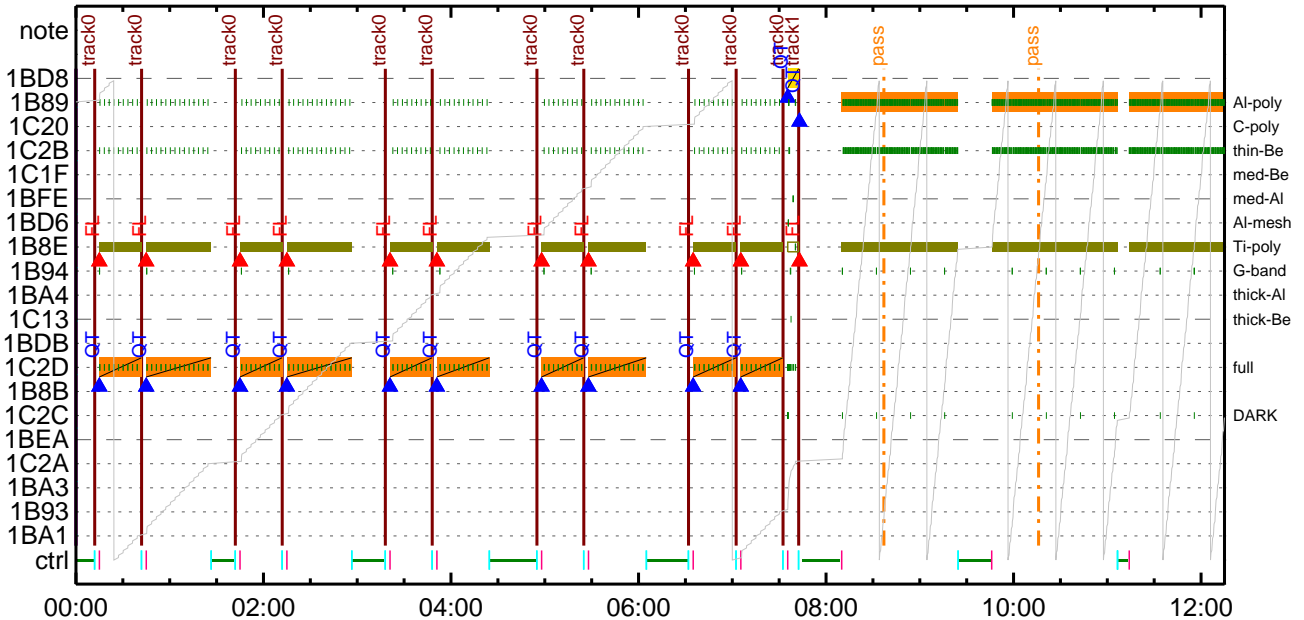
### CMDI #0055 2019/02/14



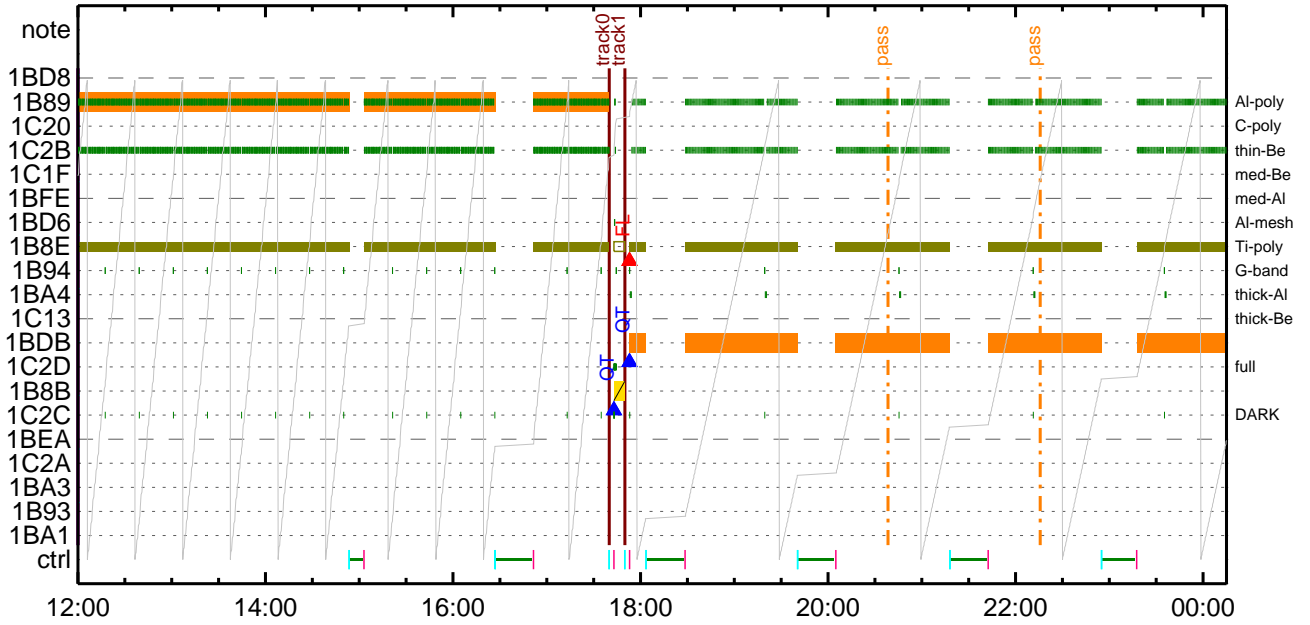
### CMDI #0055 2019/02/14



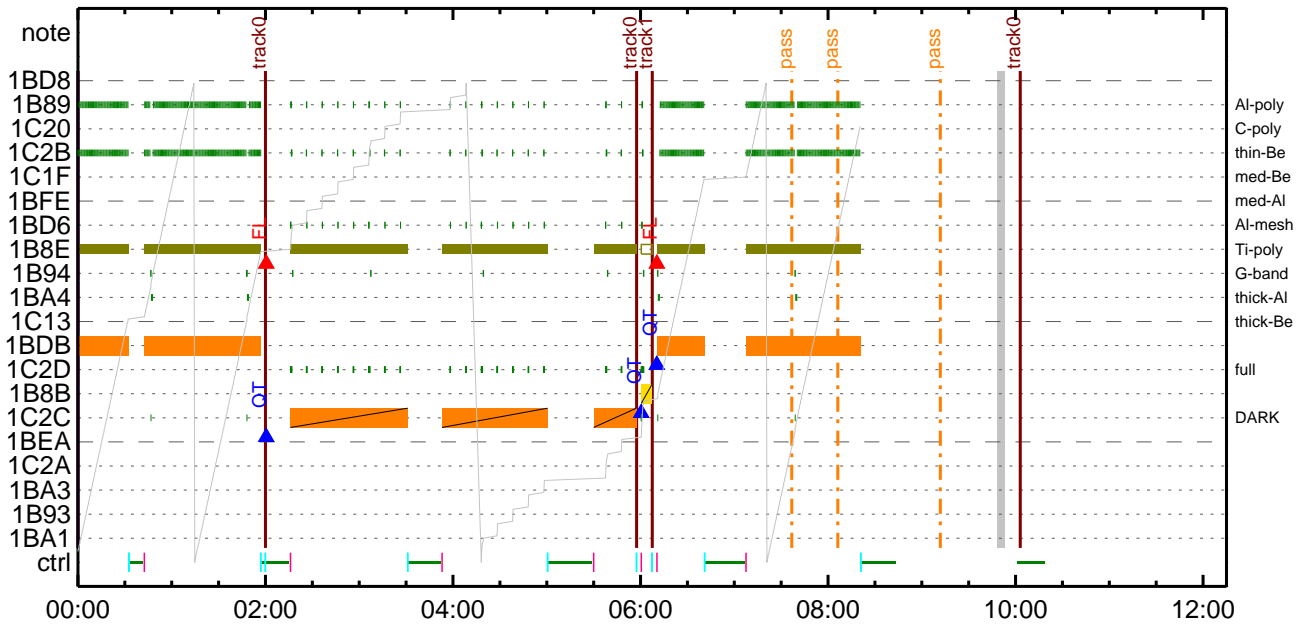
### CMDI #0055 2019/02/15



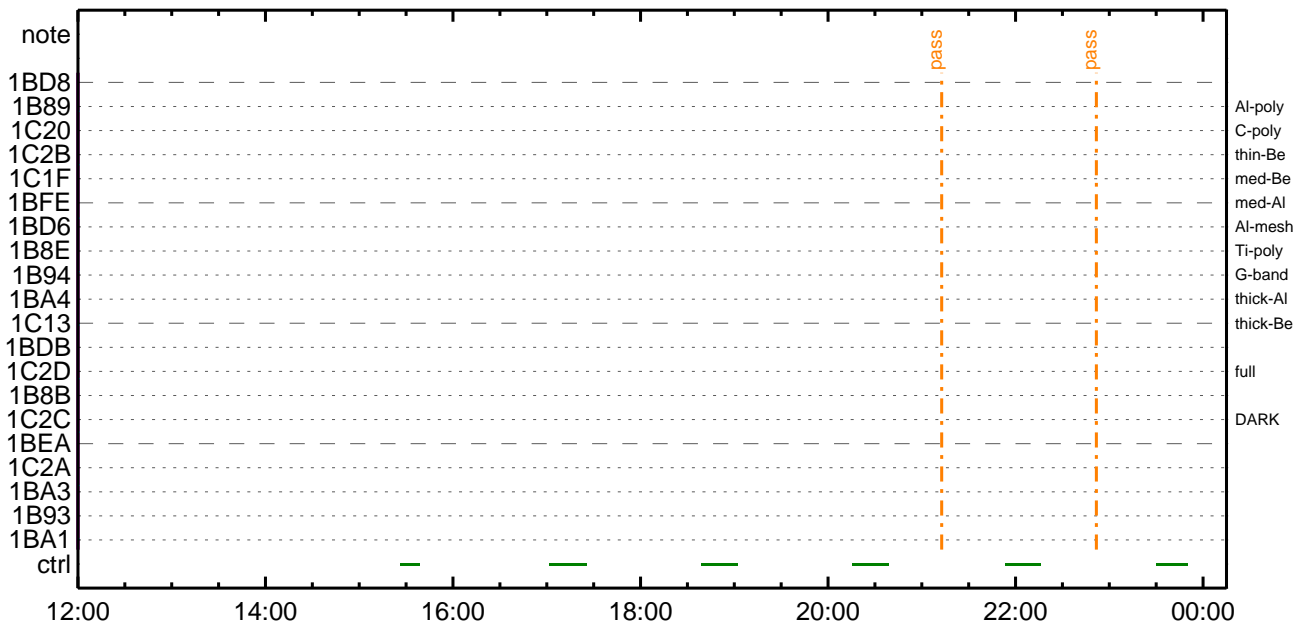
CMDI #0055 2019/02/15



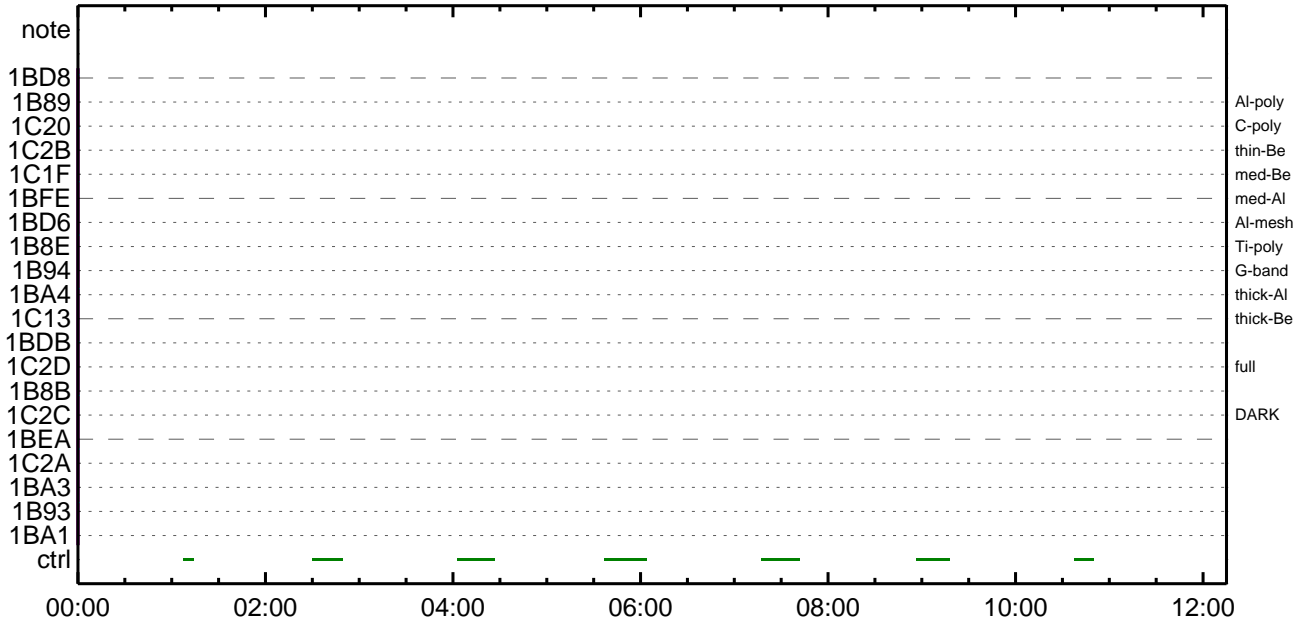
CMDI #0055 2019/02/16



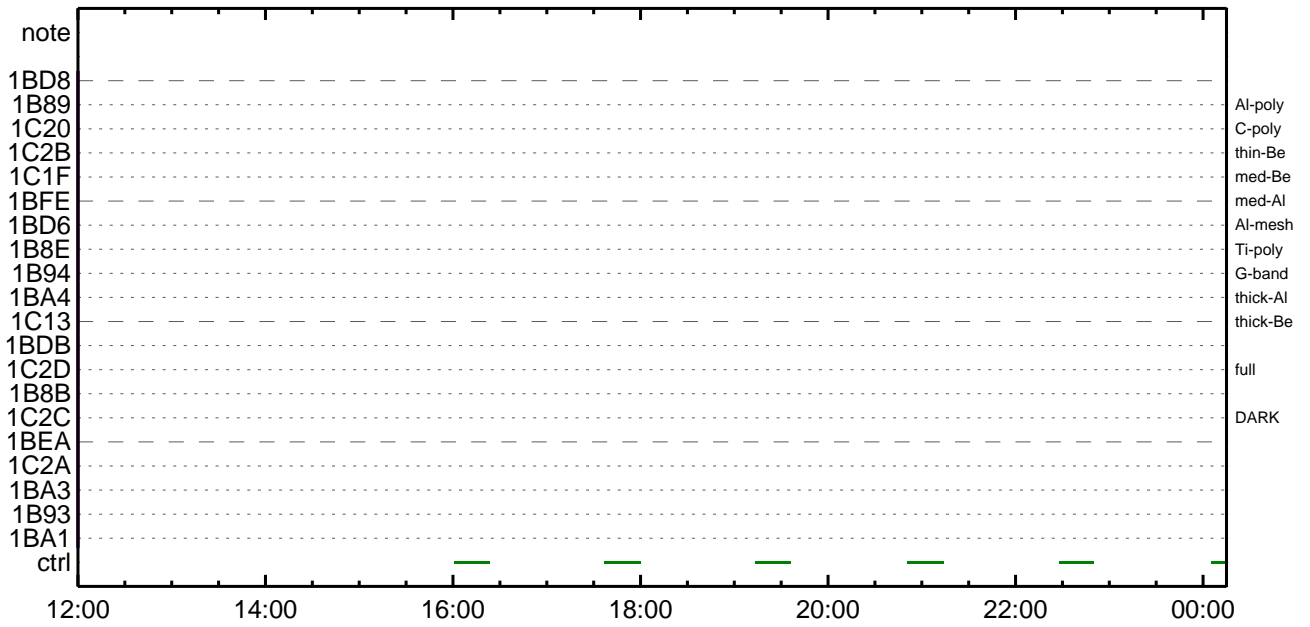
CMDI #0055 2019/02/16



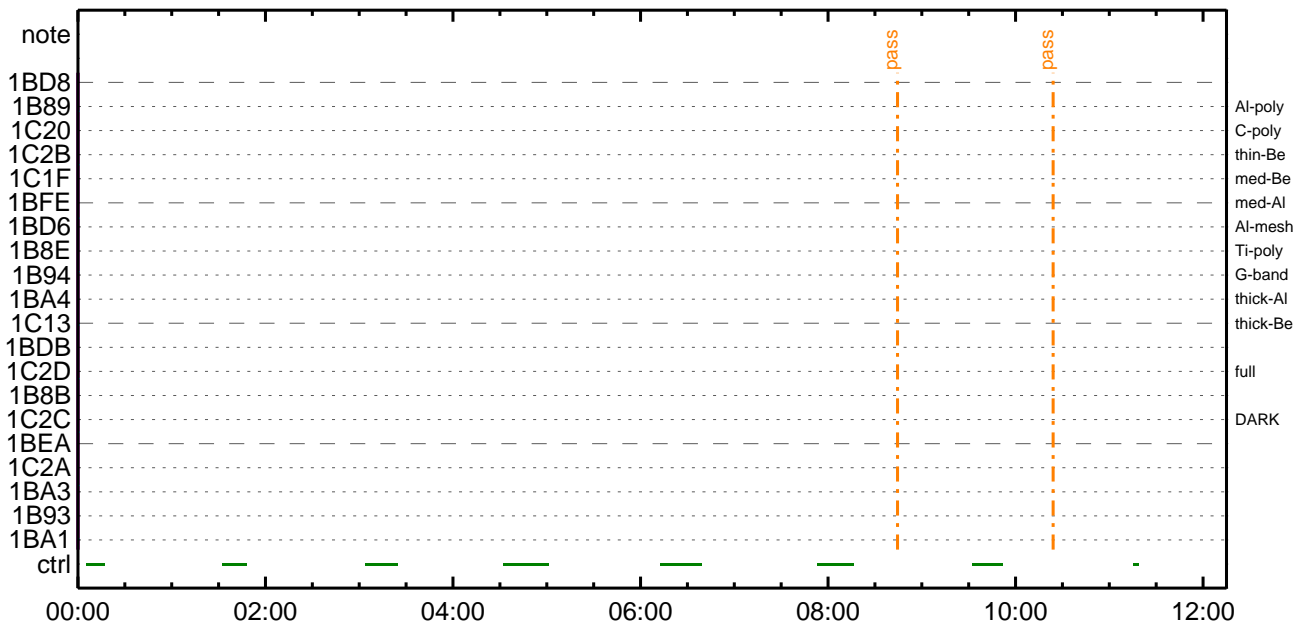
CMDI #0055 2019/02/17



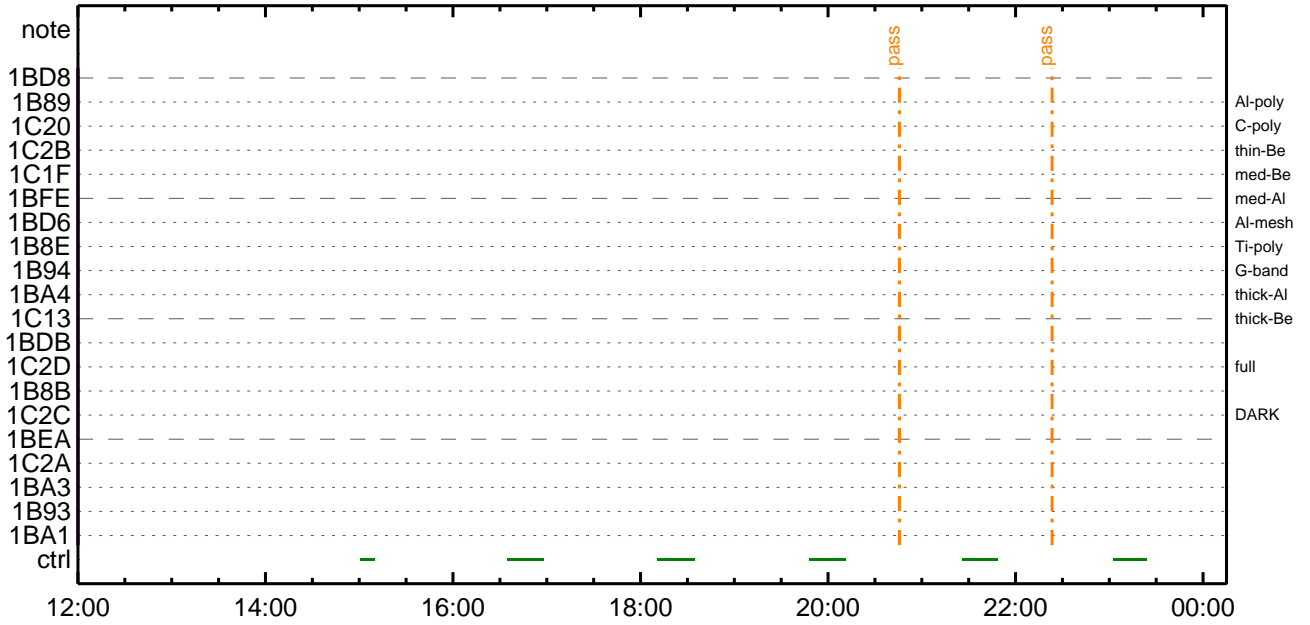
CMDI #0055 2019/02/17



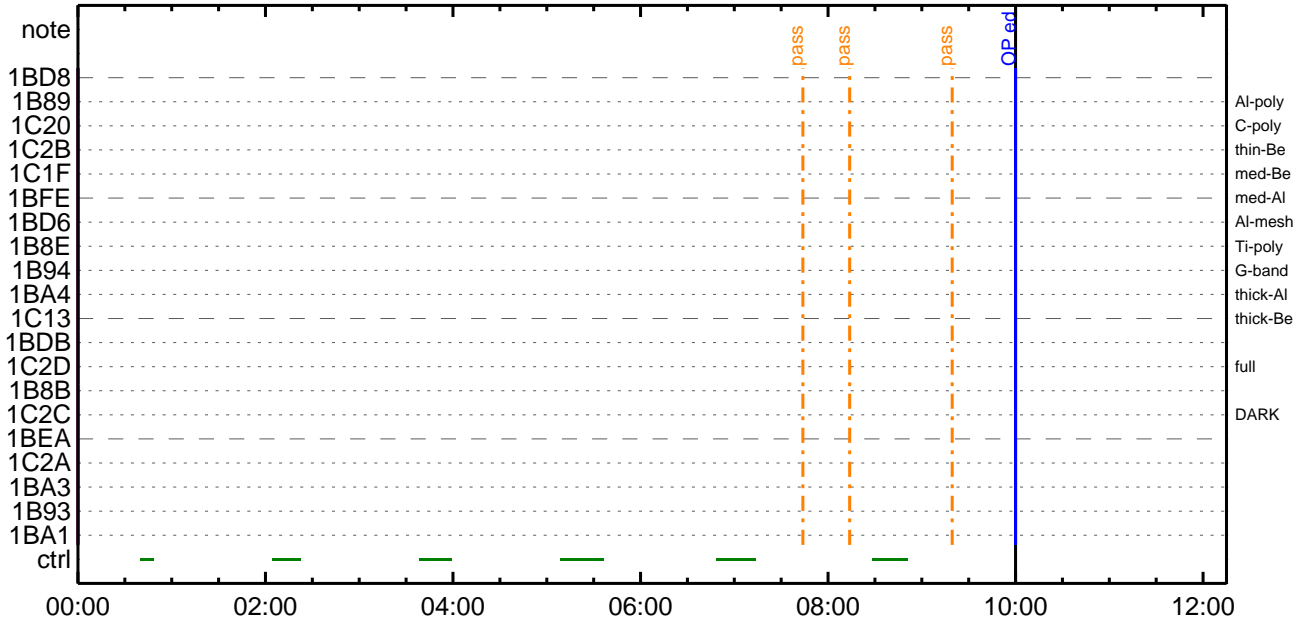
CMDI #0055 2019/02/18



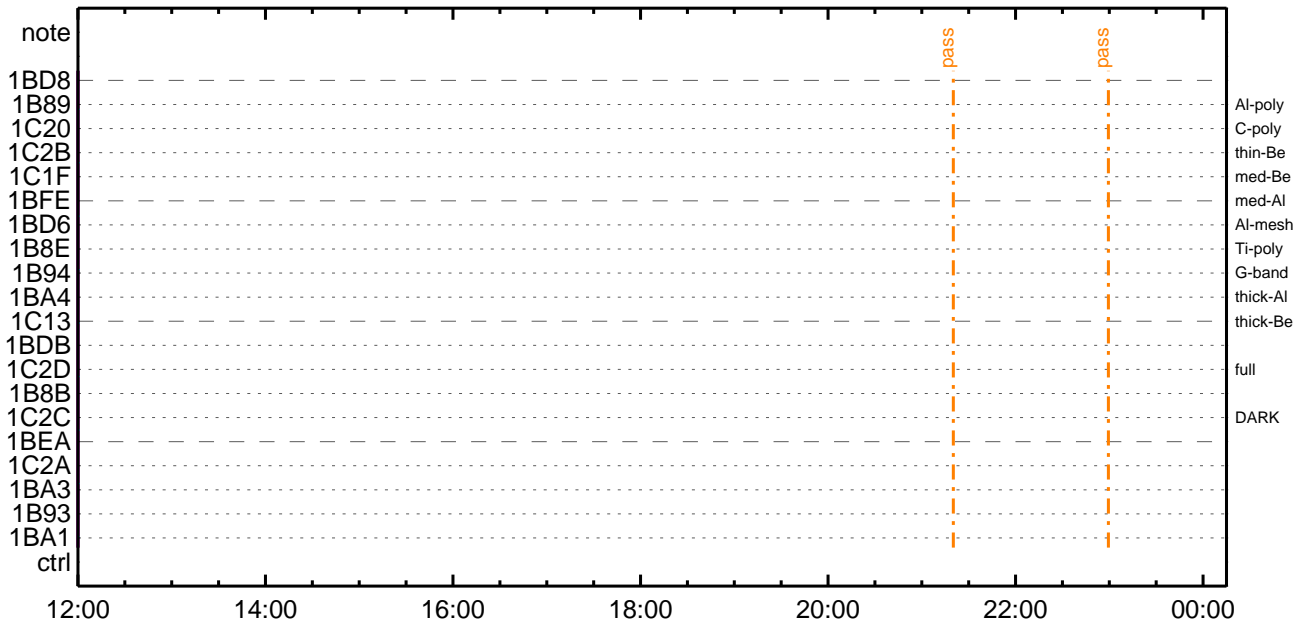
CMDI #0055 2019/02/18



CMDI #0055 2019/02/19



CMDI #0055 2019/02/19

















```
0096 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0097 C.
0098 C.
0099 . C. ;äLOSŸÁŸSŸÄŸ-¼Ä»Û;ä
0100 C.
0101 . C. ***** LOS *****
0102 C.
```

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

```

2019/02/14 11:34:54.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 11:34:56.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 11:34:58.0 XRT_FOCUS_POSITION_406_OG [0x196]
                        XRT_FOCUS_POSITION 4 07-F8 22 ff aa 00
2019/02/14 11:35:00.0 AOCs_OrE-point_Start_1_OG [0x097]
                        AOCU_NM 5 02-76 00 df 75 b4 5b
2019/02/14 11:35:18.0 XRT_FLD_ENA_411_OG [0x19b]
                        MDP_XRT_FLD_ENA 1 07-F0 d8
2019/02/14 11:35:20.0 XRT_FLRCTRL_ENA_412_OG [0x19c]
                        MDP_XRT_FLRCTRL_ENA 1 07-F0 c8
2019/02/14 11:35:22.0 XRT_AEC_RESET_448_OG [0x1c0]
                        MDP_XRT_AEC_RESET 1 07-F0 d0
2019/02/14 11:35:24.0 XRT_ARS_DIS_423_OG [0x1a7]
                        MDP_XRT_ARS_DIS 1 07-F0 d5
2019/02/14 11:35:26.0 XRT_FLD_RESET_434_OG [0x1b2]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2019/02/14 11:37:56.0 XRT_QT_PROG_SET_418_OG [0x1a2]
                        MDP_XRT_QT_PROG_SET 2 07-F0 c4 0c
2019/02/14 11:37:58.0 XRT_FL_PROG_SET_440_OG [0x1b8]
                        MDP_XRT_FL_PROG_SET 2 07-F0 c5 0d
2019/02/14 11:38:00.0 XRT_CTRL_AUTO_408_OG [0x198]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2019/02/14 15:41:54.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 15:41:56.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 15:41:58.0 XRT_FOCUS_POSITION_406_OG [0x196]
                        XRT_FOCUS_POSITION 4 07-F8 22 ff aa 00
2019/02/14 15:42:00.0 AOCs_OrE-point_Start_2_OG [0x098]
                        AOCU_NM 5 02-76 00 00 00 00 00
2019/02/14 15:42:18.0 XRT_FLD_DIS_409_OG [0x199]
                        MDP_XRT_FLD_DIS 1 07-F0 d9
2019/02/14 15:42:20.0 XRT_FLRCTRL_DIS_413_OG [0x19d]
                        MDP_XRT_FLRCTRL_DIS 1 07-F0 c9
2019/02/14 15:42:22.0 XRT_ARS_DIS_443_OG [0x1bb]
                        MDP_XRT_ARS_DIS 1 07-F0 d5
2019/02/14 15:44:58.0 XRT_QT_PROG_SET_414_OG [0x19e]
                        MDP_XRT_QT_PROG_SET 2 07-F0 c4 07
2019/02/14 15:45:00.0 XRT_CTRL_AUTO_408_OG [0x198]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2019/02/14 15:53:00.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 15:53:02.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 15:53:04.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2019/02/14 15:53:06.0 XRT_PREFLR_STRT_428_OG [0x1ac]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2019/02/14 15:56:14.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2019/02/14 16:10:00.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 16:10:02.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 16:10:04.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2019/02/14 16:10:06.0 XRT_PREFLR_STRT_428_OG [0x1ac]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2019/02/14 16:13:14.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2019/02/14 16:16:54.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 16:16:56.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 16:16:58.0 XRT_FOCUS_POSITION_406_OG [0x196]
                        XRT_FOCUS_POSITION 4 07-F8 22 ff aa 00
2019/02/14 16:17:00.0 AOCs_OrE-point_Start_3_OG [0x099]
                        AOCU_NM 5 02-76 00 57 02 01 ca
2019/02/14 16:17:18.0 XRT_FLD_ENA_411_OG [0x19b]
                        MDP_XRT_FLD_ENA 1 07-F0 d8
2019/02/14 16:17:20.0 XRT_FLRCTRL_ENA_412_OG [0x19c]
                        MDP_XRT_FLRCTRL_ENA 1 07-F0 c8
2019/02/14 16:17:22.0 XRT_AEC_RESET_448_OG [0x1c0]
                        MDP_XRT_AEC_RESET 1 07-F0 d0
2019/02/14 16:17:24.0 XRT_ARS_DIS_423_OG [0x1a7]
                        MDP_XRT_ARS_DIS 1 07-F0 d5
2019/02/14 16:17:26.0 XRT_FLD_RESET_434_OG [0x1b2]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2019/02/14 16:19:56.0 XRT_QT_PROG_SET_403_OG [0x193]
                        MDP_XRT_QT_PROG_SET 2 07-F0 c4 08
2019/02/14 16:19:58.0 XRT_FL_PROG_SET_440_OG [0x1b8]
                        MDP_XRT_FL_PROG_SET 2 07-F0 c5 0d
2019/02/14 16:20:00.0 XRT_CTRL_AUTO_408_OG [0x198]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2019/02/14 16:46:54.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 16:46:56.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2019/02/14 16:46:58.0 XRT_FOCUS_POSITION_406_OG [0x196]

```



Feb 14, 19 12:03

## XRT\_OGLIST\_0055.chk

Page 2/11

|            |            |                                   |                     |   |       |    |    |    |       |
|------------|------------|-----------------------------------|---------------------|---|-------|----|----|----|-------|
| 2019/02/14 | 16:47:00.0 | AOCS_ORe-point_Start_4_OG [0x09a] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 | ff | aa | 00    |
|            |            | AOCU_NM                           |                     | 5 | 02-76 | 00 | 4e | 24 | 01 ca |
| 2019/02/14 | 16:47:18.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8 |    |    |       |
| 2019/02/14 | 16:47:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8 |    |    |       |
| 2019/02/14 | 16:47:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0 |    |    |       |
| 2019/02/14 | 16:47:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5 |    |    |       |
| 2019/02/14 | 16:47:26.0 | XRT_FLD_RESET_434_OG [0x1b2]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |    |    |       |
| 2019/02/14 | 16:49:56.0 | XRT_QT_PROG_SET_403_OG [0x193]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 | 08 |    |       |
| 2019/02/14 | 16:49:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 | 0d |    |       |
| 2019/02/14 | 16:50:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0 |    |    |       |
| 2019/02/14 | 17:29:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 17:29:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 17:29:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |    |    |       |
| 2019/02/14 | 17:29:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8 |    |    |       |
| 2019/02/14 | 17:32:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9 |    |    |       |
| 2019/02/14 | 17:53:24.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 17:53:26.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 17:53:28.0 | XRT_FOCUS_POSITION_406_OG [0x196] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 | ff | aa | 00    |
| 2019/02/14 | 17:53:30.0 | AOCS_ORe-point_Start_5_OG [0x09b] | AOCU_NM             | 5 | 02-76 | 00 | 45 | 3f | 01 ca |
| 2019/02/14 | 17:53:48.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8 |    |    |       |
| 2019/02/14 | 17:53:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8 |    |    |       |
| 2019/02/14 | 17:53:52.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0 |    |    |       |
| 2019/02/14 | 17:53:54.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5 |    |    |       |
| 2019/02/14 | 17:53:56.0 | XRT_FLD_RESET_434_OG [0x1b2]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |    |    |       |
| 2019/02/14 | 17:56:26.0 | XRT_QT_PROG_SET_403_OG [0x193]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 | 08 |    |       |
| 2019/02/14 | 17:56:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 | 0d |    |       |
| 2019/02/14 | 17:56:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0 |    |    |       |
| 2019/02/14 | 18:23:24.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 18:23:26.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 18:23:28.0 | XRT_FOCUS_POSITION_406_OG [0x196] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 | ff | aa | 00    |
| 2019/02/14 | 18:23:30.0 | AOCS_ORe-point_Start_6_OG [0x09c] | AOCU_NM             | 5 | 02-76 | 00 | 3c | 5a | 01 ca |
| 2019/02/14 | 18:23:48.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8 |    |    |       |
| 2019/02/14 | 18:23:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8 |    |    |       |
| 2019/02/14 | 18:23:52.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0 |    |    |       |
| 2019/02/14 | 18:23:54.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5 |    |    |       |
| 2019/02/14 | 18:23:56.0 | XRT_FLD_RESET_434_OG [0x1b2]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |    |    |       |
| 2019/02/14 | 18:26:26.0 | XRT_QT_PROG_SET_403_OG [0x193]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 | 08 |    |       |
| 2019/02/14 | 18:26:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 | 0d |    |       |
| 2019/02/14 | 18:26:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0 |    |    |       |
| 2019/02/14 | 19:06:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 19:06:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 19:06:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |    |    |       |
| 2019/02/14 | 19:06:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8 |    |    |       |
| 2019/02/14 | 19:09:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9 |    |    |       |
| 2019/02/14 | 19:30:24.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 19:30:26.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |    |    |       |
| 2019/02/14 | 19:30:28.0 | XRT_FOCUS_POSITION_406_OG [0x196] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 | ff | aa | 00    |

Feb 14, 19 12:03

XRT\_OGLIST\_0055.chk

Page 3/11

|            |            |                                    |   |       |    |    |    |    |             |
|------------|------------|------------------------------------|---|-------|----|----|----|----|-------------|
| 2019/02/14 | 19:30:30.0 | AOCS_OrE-point_Start_7_OG [0x09d]  |   |       |    |    |    |    |             |
|            |            | AOCU_NM                            | 5 | 02-76 | 00 | 33 | 74 | 01 | ca          |
| 2019/02/14 | 19:30:48.0 | XRT_FLD_ENA_411_OG [0x19b]         |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLD_ENA                    | 1 | 07-F0 |    |    |    |    | d8          |
| 2019/02/14 | 19:30:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLRCTRL_ENA                | 1 | 07-F0 |    |    |    |    | c8          |
| 2019/02/14 | 19:30:52.0 | XRT_AEC_RESET_448_OG [0x1c0]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_AEC_RESET                  | 1 | 07-F0 |    |    |    |    | d0          |
| 2019/02/14 | 19:30:54.0 | XRT_ARS_DIS_423_OG [0x1a7]         |   |       |    |    |    |    |             |
|            |            | MDP_XRT_ARS_DIS                    | 1 | 07-F0 |    |    |    |    | d5          |
| 2019/02/14 | 19:30:56.0 | XRT_FLD_RESET_434_OG [0x1b2]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLD_RESET                  | 1 | 07-F0 |    |    |    |    | da          |
| 2019/02/14 | 19:33:26.0 | XRT_QT_PROG_SET_403_OG [0x193]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_QT_PROG_SET                | 2 | 07-F0 |    |    |    |    | c4 08       |
| 2019/02/14 | 19:33:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FL_PROG_SET                | 2 | 07-F0 |    |    |    |    | c5 0d       |
| 2019/02/14 | 19:33:30.0 | XRT_CTRL_AUTO_408_OG [0x198]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_AUTO                  | 1 | 07-F0 |    |    |    |    | c0          |
| 2019/02/14 | 20:00:24.0 | XRT_CTRL_MANU_402_OG [0x192]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_MANU                  | 1 | 07-F0 |    |    |    |    | c1          |
| 2019/02/14 | 20:00:26.0 | XRT_CTRL_MANU_402_OG [0x192]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_MANU                  | 1 | 07-F0 |    |    |    |    | c1          |
| 2019/02/14 | 20:00:28.0 | XRT_FOCUS_POSITION_406_OG [0x196]  |   |       |    |    |    |    |             |
|            |            | XRT_FOCUS_POSITION                 | 4 | 07-F8 |    |    |    |    | 22 ff aa 00 |
| 2019/02/14 | 20:00:30.0 | AOCS_OrE-point_Start_8_OG [0x09e]  |   |       |    |    |    |    |             |
|            |            | AOCU_NM                            | 5 | 02-76 | 00 |    |    |    | 2a 97 01 ca |
| 2019/02/14 | 20:00:48.0 | XRT_FLD_ENA_411_OG [0x19b]         |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLD_ENA                    | 1 | 07-F0 |    |    |    |    | d8          |
| 2019/02/14 | 20:00:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLRCTRL_ENA                | 1 | 07-F0 |    |    |    |    | c8          |
| 2019/02/14 | 20:00:52.0 | XRT_AEC_RESET_448_OG [0x1c0]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_AEC_RESET                  | 1 | 07-F0 |    |    |    |    | d0          |
| 2019/02/14 | 20:00:54.0 | XRT_ARS_DIS_423_OG [0x1a7]         |   |       |    |    |    |    |             |
|            |            | MDP_XRT_ARS_DIS                    | 1 | 07-F0 |    |    |    |    | d5          |
| 2019/02/14 | 20:00:56.0 | XRT_FLD_RESET_434_OG [0x1b2]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLD_RESET                  | 1 | 07-F0 |    |    |    |    | da          |
| 2019/02/14 | 20:03:26.0 | XRT_QT_PROG_SET_403_OG [0x193]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_QT_PROG_SET                | 2 | 07-F0 |    |    |    |    | c4 08       |
| 2019/02/14 | 20:03:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FL_PROG_SET                | 2 | 07-F0 |    |    |    |    | c5 0d       |
| 2019/02/14 | 20:03:30.0 | XRT_CTRL_AUTO_408_OG [0x198]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_AUTO                  | 1 | 07-F0 |    |    |    |    | c0          |
| 2019/02/14 | 20:43:00.0 | XRT_CTRL_MANU_400_OG [0x190]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_MANU                  | 1 | 07-F0 |    |    |    |    | c1          |
| 2019/02/14 | 20:43:02.0 | XRT_CTRL_MANU_402_OG [0x192]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_MANU                  | 1 | 07-F0 |    |    |    |    | c1          |
| 2019/02/14 | 20:43:04.0 | XRT_FLD_RESET_415_OG [0x19f]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLD_RESET                  | 1 | 07-F0 |    |    |    |    | da          |
| 2019/02/14 | 20:43:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_PREFLR_STRT                | 1 | 07-F0 |    |    |    |    | e8          |
| 2019/02/14 | 20:46:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_PREFLR_STOP                | 1 | 07-F0 |    |    |    |    | e9          |
| 2019/02/14 | 21:07:24.0 | XRT_CTRL_MANU_402_OG [0x192]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_MANU                  | 1 | 07-F0 |    |    |    |    | c1          |
| 2019/02/14 | 21:07:26.0 | XRT_CTRL_MANU_402_OG [0x192]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_MANU                  | 1 | 07-F0 |    |    |    |    | c1          |
| 2019/02/14 | 21:07:28.0 | XRT_FOCUS_POSITION_406_OG [0x196]  |   |       |    |    |    |    |             |
|            |            | XRT_FOCUS_POSITION                 | 4 | 07-F8 |    |    |    |    | 22 ff aa 00 |
| 2019/02/14 | 21:07:30.0 | AOCS_OrE-point_Start_9_OG [0x09f]  |   |       |    |    |    |    |             |
|            |            | AOCU_NM                            | 5 | 02-76 | 00 |    |    |    | 21 b2 01 ca |
| 2019/02/14 | 21:07:48.0 | XRT_FLD_ENA_411_OG [0x19b]         |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLD_ENA                    | 1 | 07-F0 |    |    |    |    | d8          |
| 2019/02/14 | 21:07:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLRCTRL_ENA                | 1 | 07-F0 |    |    |    |    | c8          |
| 2019/02/14 | 21:07:52.0 | XRT_AEC_RESET_448_OG [0x1c0]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_AEC_RESET                  | 1 | 07-F0 |    |    |    |    | d0          |
| 2019/02/14 | 21:07:54.0 | XRT_ARS_DIS_423_OG [0x1a7]         |   |       |    |    |    |    |             |
|            |            | MDP_XRT_ARS_DIS                    | 1 | 07-F0 |    |    |    |    | d5          |
| 2019/02/14 | 21:07:56.0 | XRT_FLD_RESET_434_OG [0x1b2]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLD_RESET                  | 1 | 07-F0 |    |    |    |    | da          |
| 2019/02/14 | 21:10:26.0 | XRT_QT_PROG_SET_403_OG [0x193]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_QT_PROG_SET                | 2 | 07-F0 |    |    |    |    | c4 08       |
| 2019/02/14 | 21:10:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FL_PROG_SET                | 2 | 07-F0 |    |    |    |    | c5 0d       |
| 2019/02/14 | 21:10:30.0 | XRT_CTRL_AUTO_408_OG [0x198]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_AUTO                  | 1 | 07-F0 |    |    |    |    | c0          |
| 2019/02/14 | 21:37:24.0 | XRT_CTRL_MANU_402_OG [0x192]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_MANU                  | 1 | 07-F0 |    |    |    |    | c1          |
| 2019/02/14 | 21:37:26.0 | XRT_CTRL_MANU_402_OG [0x192]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_CTRL_MANU                  | 1 | 07-F0 |    |    |    |    | c1          |
| 2019/02/14 | 21:37:28.0 | XRT_FOCUS_POSITION_406_OG [0x196]  |   |       |    |    |    |    |             |
|            |            | XRT_FOCUS_POSITION                 | 4 | 07-F8 |    |    |    |    | 22 ff aa 00 |
| 2019/02/14 | 21:37:30.0 | AOCS_OrE-point_Start_10_OG [0x0a0] |   |       |    |    |    |    |             |
|            |            | AOCU_NM                            | 5 | 02-76 | 00 |    |    |    | 18 cc 01 ca |
| 2019/02/14 | 21:37:48.0 | XRT_FLD_ENA_411_OG [0x19b]         |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLD_ENA                    | 1 | 07-F0 |    |    |    |    | d8          |
| 2019/02/14 | 21:37:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     |   |       |    |    |    |    |             |
|            |            | MDP_XRT_FLRCTRL_ENA                | 1 | 07-F0 |    |    |    |    | c8          |
| 2019/02/14 | 21:37:52.0 | XRT_AEC_RESET_448_OG [0x1c0]       |   |       |    |    |    |    |             |
|            |            | MDP_XRT_AEC_RESET                  | 1 | 07-F0 |    |    |    |    | d0          |
| 2019/02/14 | 21:37:54.0 | XRT_ARS_DIS_423_OG [0x1a7]         |   |       |    |    |    |    |             |
|            |            | MDP_XRT_ARS_DIS                    | 1 | 07-F0 |    |    |    |    | d5          |
| 2019/02/14 | 21:37:56.0 | XRT_FLD_RESET_434_OG [0x1b2]       |   |       |    |    |    |    |             |

|            |            |                                    |                     |   |       |    |             |  |
|------------|------------|------------------------------------|---------------------|---|-------|----|-------------|--|
| 2019/02/14 | 21:40:26.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |             |  |
| 2019/02/14 | 21:40:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 | 08          |  |
| 2019/02/14 | 21:40:30.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 | 0d          |  |
| 2019/02/14 | 22:20:00.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0 |             |  |
| 2019/02/14 | 22:20:02.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/14 | 22:20:04.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/14 | 22:20:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |             |  |
| 2019/02/14 | 22:23:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8 |             |  |
| 2019/02/14 | 22:43:24.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9 |             |  |
| 2019/02/14 | 22:43:26.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/14 | 22:43:28.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/14 | 22:43:30.0 | AOCS_Ore-point_Start_11_OG [0x0a1] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 | ff aa 00    |  |
| 2019/02/14 | 22:43:48.0 | XRT_FLD_ENA_411_OG [0x19b]         | AOCU_NM             | 5 | 02-76 | 00 | 0f e7 01 ca |  |
| 2019/02/14 | 22:43:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8 |             |  |
| 2019/02/14 | 22:43:52.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8 |             |  |
| 2019/02/14 | 22:43:54.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0 |             |  |
| 2019/02/14 | 22:43:56.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5 |             |  |
| 2019/02/14 | 22:46:26.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |             |  |
| 2019/02/14 | 22:46:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 | 08          |  |
| 2019/02/14 | 22:46:30.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 | 0d          |  |
| 2019/02/14 | 23:13:24.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0 |             |  |
| 2019/02/14 | 23:13:26.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/14 | 23:13:28.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/14 | 23:13:30.0 | AOCS_Ore-point_Start_12_OG [0x0a2] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 | ff aa 00    |  |
| 2019/02/14 | 23:13:48.0 | XRT_FLD_ENA_411_OG [0x19b]         | AOCU_NM             | 5 | 02-76 | 00 | 07 02 01 ca |  |
| 2019/02/14 | 23:13:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8 |             |  |
| 2019/02/14 | 23:13:52.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8 |             |  |
| 2019/02/14 | 23:13:54.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0 |             |  |
| 2019/02/14 | 23:13:56.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5 |             |  |
| 2019/02/14 | 23:16:26.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |             |  |
| 2019/02/14 | 23:16:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 | 08          |  |
| 2019/02/14 | 23:16:30.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 | 0d          |  |
| 2019/02/14 | 23:57:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0 |             |  |
| 2019/02/14 | 23:57:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/14 | 23:57:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/14 | 23:57:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |             |  |
| 2019/02/15 | 00:00:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8 |             |  |
| 2019/02/15 | 00:11:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9 |             |  |
| 2019/02/15 | 00:11:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/15 | 00:11:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1 |             |  |
| 2019/02/15 | 00:12:00.0 | AOCS_Ore-point_Start_13_OG [0x0a3] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 | ff aa 00    |  |
| 2019/02/15 | 00:12:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | AOCU_NM             | 5 | 02-76 | 00 | ff 03 01 ca |  |
| 2019/02/15 | 00:12:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8 |             |  |
| 2019/02/15 | 00:12:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8 |             |  |
| 2019/02/15 | 00:12:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0 |             |  |
| 2019/02/15 | 00:12:26.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5 |             |  |
| 2019/02/15 | 00:12:26.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da |             |  |

Feb 14, 19 12:03

XRT\_OGLIST\_0055.chk

Page 5/11

|            |            |                                    |                     |   |       |                |    |
|------------|------------|------------------------------------|---------------------|---|-------|----------------|----|
| 2019/02/15 | 00:14:56.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4             | 08 |
| 2019/02/15 | 00:14:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5             | 0d |
| 2019/02/15 | 00:15:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |    |
| 2019/02/15 | 00:41:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 00:41:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 00:41:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa       | 00 |
| 2019/02/15 | 00:42:00.0 | AOCS_ORe-point_Start_14_OG [0x0a4] | AOCU_NM             | 5 | 02-76 | 00 f6 25 01 ca |    |
| 2019/02/15 | 00:42:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |    |
| 2019/02/15 | 00:42:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |    |
| 2019/02/15 | 00:42:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |    |
| 2019/02/15 | 00:42:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |    |
| 2019/02/15 | 00:42:26.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |    |
| 2019/02/15 | 00:44:56.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4             | 08 |
| 2019/02/15 | 00:44:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5             | 0d |
| 2019/02/15 | 00:45:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |    |
| 2019/02/15 | 01:26:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 01:26:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 01:26:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |    |
| 2019/02/15 | 01:26:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |    |
| 2019/02/15 | 01:29:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |    |
| 2019/02/15 | 01:41:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 01:41:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 01:41:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa       | 00 |
| 2019/02/15 | 01:42:00.0 | AOCS_ORe-point_Start_15_OG [0x0a5] | AOCU_NM             | 5 | 02-76 | 00 ed 40 01 ca |    |
| 2019/02/15 | 01:42:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |    |
| 2019/02/15 | 01:42:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |    |
| 2019/02/15 | 01:42:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |    |
| 2019/02/15 | 01:42:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |    |
| 2019/02/15 | 01:42:26.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |    |
| 2019/02/15 | 01:44:56.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4             | 08 |
| 2019/02/15 | 01:44:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5             | 0d |
| 2019/02/15 | 01:45:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |    |
| 2019/02/15 | 02:11:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 02:11:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 02:11:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa       | 00 |
| 2019/02/15 | 02:12:00.0 | AOCS_ORe-point_Start_16_OG [0x0a6] | AOCU_NM             | 5 | 02-76 | 00 e4 5b 01 ca |    |
| 2019/02/15 | 02:12:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |    |
| 2019/02/15 | 02:12:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |    |
| 2019/02/15 | 02:12:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |    |
| 2019/02/15 | 02:12:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |    |
| 2019/02/15 | 02:12:26.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |    |
| 2019/02/15 | 02:14:56.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4             | 08 |
| 2019/02/15 | 02:14:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5             | 0d |
| 2019/02/15 | 02:15:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |    |
| 2019/02/15 | 02:56:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 02:56:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |    |
| 2019/02/15 | 02:56:34.0 | XRT_FLD_RESET_415_OG [0x19f]       |                     |   |       |                |    |

Feb 14, 19 12:03

## XRT\_OGLIST\_0055.chk

Page 6/11

|            |            |                                    |                     |   |       |                |  |  |
|------------|------------|------------------------------------|---------------------|---|-------|----------------|--|--|
| 2019/02/15 | 02:56:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
|            |            |                                    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2019/02/15 | 02:59:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2019/02/15 | 03:17:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 03:17:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 03:17:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |  |  |
| 2019/02/15 | 03:18:00.0 | AOCS_Ore-point_Start_17_OG [0x0a7] | AOCU_NM             | 5 | 02-76 | 00 db 75 01 ca |  |  |
| 2019/02/15 | 03:18:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |  |
| 2019/02/15 | 03:18:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |  |
| 2019/02/15 | 03:18:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |  |
| 2019/02/15 | 03:18:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |
| 2019/02/15 | 03:18:26.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2019/02/15 | 03:20:56.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 08          |  |  |
| 2019/02/15 | 03:20:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |  |  |
| 2019/02/15 | 03:21:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2019/02/15 | 03:47:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 03:47:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 03:47:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |  |  |
| 2019/02/15 | 03:48:00.0 | AOCS_Ore-point_Start_18_OG [0x0a8] | AOCU_NM             | 5 | 02-76 | 00 d2 98 01 ca |  |  |
| 2019/02/15 | 03:48:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |  |
| 2019/02/15 | 03:48:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |  |
| 2019/02/15 | 03:48:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |  |
| 2019/02/15 | 03:48:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |
| 2019/02/15 | 03:48:26.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2019/02/15 | 03:50:56.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 08          |  |  |
| 2019/02/15 | 03:50:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |  |  |
| 2019/02/15 | 03:51:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2019/02/15 | 04:24:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 04:24:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 04:24:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2019/02/15 | 04:24:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2019/02/15 | 04:27:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2019/02/15 | 04:54:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 04:54:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 04:54:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |  |  |
| 2019/02/15 | 04:55:00.0 | AOCS_Ore-point_Start_19_OG [0x0a9] | AOCU_NM             | 5 | 02-76 | 00 c9 b3 01 ca |  |  |
| 2019/02/15 | 04:55:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |  |
| 2019/02/15 | 04:55:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |  |
| 2019/02/15 | 04:55:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |  |
| 2019/02/15 | 04:55:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |
| 2019/02/15 | 04:55:26.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2019/02/15 | 04:57:56.0 | XRT_QT_PROG_SET_403_OG [0x193]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 08          |  |  |
| 2019/02/15 | 04:57:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |  |  |
| 2019/02/15 | 04:58:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2019/02/15 | 05:24:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 05:24:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2019/02/15 | 05:24:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |  |  |

|            |            |   |   |       |                |
|------------|------------|---|---|-------|----------------|
| 2019/02/15 | 05:25:00.0 | AOCS_ORe-point_Start_20_OG [0x0aa]<br>AOCU_NM           | 5 | 02-76 | 00 c0 cd 01 ca |
| 2019/02/15 | 05:25:18.0 | XRT_FLD_ENA_411_OG [0x19b]<br>MDP_XRT_FLD_ENA           | 1 | 07-F0 | d8             |
| 2019/02/15 | 05:25:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]<br>MDP_XRT_FLRCTRL_ENA   | 1 | 07-F0 | c8             |
| 2019/02/15 | 05:25:22.0 | XRT_AEC_RESET_448_OG [0x1c0]<br>MDP_XRT_AEC_RESET       | 1 | 07-F0 | d0             |
| 2019/02/15 | 05:25:24.0 | XRT_ARS_DIS_423_OG [0x1a7]<br>MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5             |
| 2019/02/15 | 05:25:26.0 | XRT_FLD_RESET_434_OG [0x1b2]<br>MDP_XRT_FLD_RESET       | 1 | 07-F0 | da             |
| 2019/02/15 | 05:27:56.0 | XRT_QT_PROG_SET_403_OG [0x193]<br>MDP_XRT_QT_PROG_SET   | 2 | 07-F0 | c4 08          |
| 2019/02/15 | 05:27:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]<br>MDP_XRT_FL_PROG_SET   | 2 | 07-F0 | c5 0d          |
| 2019/02/15 | 05:28:00.0 | XRT_CTRL_AUTO_408_OG [0x198]<br>MDP_XRT_CTRL_AUTO       | 1 | 07-F0 | c0             |
| 2019/02/15 | 06:05:00.0 | XRT_CTRL_MANU_400_OG [0x190]<br>MDP_XRT_CTRL_MANU       | 1 | 07-F0 | c1             |
| 2019/02/15 | 06:05:02.0 | XRT_CTRL_MANU_402_OG [0x192]<br>MDP_XRT_CTRL_MANU       | 1 | 07-F0 | c1             |
| 2019/02/15 | 06:05:04.0 | XRT_FLD_RESET_415_OG [0x19f]<br>MDP_XRT_FLD_RESET       | 1 | 07-F0 | da             |
| 2019/02/15 | 06:05:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]<br>MDP_XRT_PREFLR_STRT   | 1 | 07-F0 | e8             |
| 2019/02/15 | 06:08:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]<br>MDP_XRT_PREFLR_STOP   | 1 | 07-F0 | e9             |
| 2019/02/15 | 06:31:54.0 | XRT_CTRL_MANU_402_OG [0x192]<br>MDP_XRT_CTRL_MANU       | 1 | 07-F0 | c1             |
| 2019/02/15 | 06:31:56.0 | XRT_CTRL_MANU_402_OG [0x192]<br>MDP_XRT_CTRL_MANU       | 1 | 07-F0 | c1             |
| 2019/02/15 | 06:31:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]<br>XRT_FOCUS_POSITION | 4 | 07-F8 | 22 ff aa 00    |
| 2019/02/15 | 06:32:00.0 | AOCS_ORe-point_Start_21_OG [0x0ab]<br>AOCU_NM           | 5 | 02-76 | 00 b7 e8 01 ca |
| 2019/02/15 | 06:32:18.0 | XRT_FLD_ENA_411_OG [0x19b]<br>MDP_XRT_FLD_ENA           | 1 | 07-F0 | d8             |
| 2019/02/15 | 06:32:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]<br>MDP_XRT_FLRCTRL_ENA   | 1 | 07-F0 | c8             |
| 2019/02/15 | 06:32:22.0 | XRT_AEC_RESET_448_OG [0x1c0]<br>MDP_XRT_AEC_RESET       | 1 | 07-F0 | d0             |
| 2019/02/15 | 06:32:24.0 | XRT_ARS_DIS_423_OG [0x1a7]<br>MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5             |
| 2019/02/15 | 06:32:26.0 | XRT_FLD_RESET_434_OG [0x1b2]<br>MDP_XRT_FLD_RESET       | 1 | 07-F0 | da             |
| 2019/02/15 | 06:34:56.0 | XRT_QT_PROG_SET_403_OG [0x193]<br>MDP_XRT_QT_PROG_SET   | 2 | 07-F0 | c4 08          |
| 2019/02/15 | 06:34:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]<br>MDP_XRT_FL_PROG_SET   | 2 | 07-F0 | c5 0d          |
| 2019/02/15 | 06:35:00.0 | XRT_CTRL_AUTO_408_OG [0x198]<br>MDP_XRT_CTRL_AUTO       | 1 | 07-F0 | c0             |
| 2019/02/15 | 07:02:24.0 | XRT_CTRL_MANU_402_OG [0x192]<br>MDP_XRT_CTRL_MANU       | 1 | 07-F0 | c1             |
| 2019/02/15 | 07:02:26.0 | XRT_CTRL_MANU_402_OG [0x192]<br>MDP_XRT_CTRL_MANU       | 1 | 07-F0 | c1             |
| 2019/02/15 | 07:02:28.0 | XRT_FOCUS_POSITION_406_OG [0x196]<br>XRT_FOCUS_POSITION | 4 | 07-F8 | 22 ff aa 00    |
| 2019/02/15 | 07:02:30.0 | AOCS_ORe-point_Start_22_OG [0x0ac]<br>AOCU_NM           | 5 | 02-76 | 00 af 03 01 ca |
| 2019/02/15 | 07:02:48.0 | XRT_FLD_ENA_411_OG [0x19b]<br>MDP_XRT_FLD_ENA           | 1 | 07-F0 | d8             |
| 2019/02/15 | 07:02:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]<br>MDP_XRT_FLRCTRL_ENA   | 1 | 07-F0 | c8             |
| 2019/02/15 | 07:02:52.0 | XRT_AEC_RESET_448_OG [0x1c0]<br>MDP_XRT_AEC_RESET       | 1 | 07-F0 | d0             |
| 2019/02/15 | 07:02:54.0 | XRT_ARS_DIS_423_OG [0x1a7]<br>MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5             |
| 2019/02/15 | 07:02:56.0 | XRT_FLD_RESET_434_OG [0x1b2]<br>MDP_XRT_FLD_RESET       | 1 | 07-F0 | da             |
| 2019/02/15 | 07:05:26.0 | XRT_QT_PROG_SET_403_OG [0x193]<br>MDP_XRT_QT_PROG_SET   | 2 | 07-F0 | c4 08          |
| 2019/02/15 | 07:05:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]<br>MDP_XRT_FL_PROG_SET   | 2 | 07-F0 | c5 0d          |
| 2019/02/15 | 07:05:30.0 | XRT_CTRL_AUTO_408_OG [0x198]<br>MDP_XRT_CTRL_AUTO       | 1 | 07-F0 | c0             |
| 2019/02/15 | 07:32:24.0 | XRT_CTRL_MANU_402_OG [0x192]<br>MDP_XRT_CTRL_MANU       | 1 | 07-F0 | c1             |
| 2019/02/15 | 07:32:26.0 | XRT_CTRL_MANU_402_OG [0x192]<br>MDP_XRT_CTRL_MANU       | 1 | 07-F0 | c1             |
| 2019/02/15 | 07:32:28.0 | XRT_FOCUS_POSITION_406_OG [0x196]<br>XRT_FOCUS_POSITION | 4 | 07-F8 | 22 ff aa 00    |
| 2019/02/15 | 07:32:30.5 | AOCS_ORe-point_Start_2_OG [0x098]<br>AOCU_NM            | 5 | 02-76 | 00 00 00 00 00 |
| 2019/02/15 | 07:32:48.0 | XRT_FLD_DIS_409_OG [0x199]<br>MDP_XRT_FLD_DIS           | 1 | 07-F0 | d9             |
| 2019/02/15 | 07:32:50.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]<br>MDP_XRT_FLRCTRL_DIS   | 1 | 07-F0 | c9             |
| 2019/02/15 | 07:32:52.0 | XRT_ARS_DIS_443_OG [0x1bb]<br>MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5             |
| 2019/02/15 | 07:35:28.0 | XRT_QT_PROG_SET_447_OG [0x1bf]<br>MDP_XRT_QT_PROG_SET   | 2 | 07-F0 | c4 14          |
| 2019/02/15 | 07:35:30.0 | XRT_CTRL_AUTO_408_OG [0x198]                            |   |       |                |

|            |            |                                    |                           |   |       |                |  |
|------------|------------|------------------------------------|---------------------------|---|-------|----------------|--|
| 2019/02/15 | 07:42:24.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |
| 2019/02/15 | 07:42:26.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 07:42:28.0 | XRT_FOCUS_POSITION_410_OG [0x19a]  | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 07:42:30.0 | AOCS_ORe-point_Start_23_OG [0x0ad] | XRT_FOCUS_POSITION        | 4 | 07-F8 | 22 fe 97 00    |  |
| 2019/02/15 | 07:42:48.0 | XRT_FLD_ENA_411_OG [0x19b]         | AOCU_NM                   | 5 | 02-76 | 01 03 02 01 ca |  |
| 2019/02/15 | 07:42:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLD_ENA           | 1 | 07-F0 | d8             |  |
| 2019/02/15 | 07:42:52.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_FLRCTRL_ENA       | 1 | 07-F0 | c8             |  |
| 2019/02/15 | 07:42:54.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_AEC_RESET         | 1 | 07-F0 | d0             |  |
| 2019/02/15 | 07:42:56.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5             |  |
| 2019/02/15 | 07:42:58.0 | XRT_QT_PROG_SET_437_OG [0x1b5]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |  |
| 2019/02/15 | 07:43:00.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_QT_PROG_SET       | 2 | 07-F0 | c4 13          |  |
| 2019/02/15 | 08:09:01.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_FL_PROG_SET       | 2 | 07-F0 | c5 0d          |  |
| 2019/02/15 | 08:10:01.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |                |  |
| 2019/02/15 | 09:24:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |
| 2019/02/15 | 09:24:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 09:24:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 09:24:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |  |
| 2019/02/15 | 09:27:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8             |  |
| 2019/02/15 | 09:45:00.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9             |  |
| 2019/02/15 | 09:46:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |                |  |
| 2019/02/15 | 11:06:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |
| 2019/02/15 | 11:06:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 11:06:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 11:06:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |  |
| 2019/02/15 | 11:09:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8             |  |
| 2019/02/15 | 11:13:01.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9             |  |
| 2019/02/15 | 11:14:01.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |                |  |
| 2019/02/15 | 14:53:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |
| 2019/02/15 | 14:53:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 14:53:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 14:53:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |  |
| 2019/02/15 | 14:56:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8             |  |
| 2019/02/15 | 15:02:01.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9             |  |
| 2019/02/15 | 15:03:01.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |                |  |
| 2019/02/15 | 16:27:00.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |
| 2019/02/15 | 16:27:02.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 16:27:04.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 16:27:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |  |
| 2019/02/15 | 16:30:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8             |  |
| 2019/02/15 | 16:50:30.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9             |  |
| 2019/02/15 | 16:51:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |                |  |
| 2019/02/15 | 17:39:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |
| 2019/02/15 | 17:39:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 17:39:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |
| 2019/02/15 | 17:40:00.0 | AOCS_ORe-point_Start_2_OG [0x098]  | XRT_FOCUS_POSITION        | 4 | 07-F8 | 22 ff aa 00    |  |
| 2019/02/15 | 17:40:18.0 | XRT_FLD_DIS_409_OG [0x199]         | AOCU_NM                   | 5 | 02-76 | 00 00 00 00 00 |  |
| 2019/02/15 | 17:40:20.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]     | MDP_XRT_FLD_DIS           | 1 | 07-F0 | d9             |  |
| 2019/02/15 | 17:40:22.0 | XRT_ARS_DIS_443_OG [0x1bb]         | MDP_XRT_FLRCTRL_DIS       | 1 | 07-F0 | c9             |  |
| 2019/02/15 | 17:42:58.0 | XRT_QT_PROG_SET_414_OG [0x19e]     | MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5             |  |

Feb 14, 19 12:03

## XRT\_OGLIST\_0055.chk

Page 9/11

|            |            |                                    |                           |   |       |             |          |
|------------|------------|------------------------------------|---------------------------|---|-------|-------------|----------|
| 2019/02/15 | 17:43:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_QT_PROG_SET       | 2 | 07-F0 | c4          | 07       |
| 2019/02/15 | 17:49:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0          |          |
| 2019/02/15 | 17:49:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 17:49:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a]  | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 17:50:00.0 | AOCS_ORe-point_Start_23_OG [0x0ad] | XRT_FOCUS_POSITION        | 4 | 07-F8 | 22          | fe 97 00 |
| 2019/02/15 | 17:50:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | AOCU_NM                   | 5 | 02-76 | 01 03 02 01 | ca       |
| 2019/02/15 | 17:50:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLD_ENA           | 1 | 07-F0 | d8          |          |
| 2019/02/15 | 17:50:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_FLRCTRL_ENA       | 1 | 07-F0 | c8          |          |
| 2019/02/15 | 17:50:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_AEC_RESET         | 1 | 07-F0 | d0          |          |
| 2019/02/15 | 17:50:26.0 | XRT_FLD_RESET_434_OG [0x1b2]       | MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5          |          |
| 2019/02/15 | 17:52:56.0 | XRT_QT_PROG_SET_438_OG [0x1b6]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da          |          |
| 2019/02/15 | 17:52:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_QT_PROG_SET       | 2 | 07-F0 | c4          | 09       |
| 2019/02/15 | 17:53:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_FL_PROG_SET       | 2 | 07-F0 | c5          | 0d       |
| 2019/02/15 | 18:03:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0          |          |
| 2019/02/15 | 18:03:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 18:03:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 18:03:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da          |          |
| 2019/02/15 | 18:06:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8          |          |
| 2019/02/15 | 18:27:30.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9          |          |
| 2019/02/15 | 18:28:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |             |          |
| 2019/02/15 | 19:40:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0          |          |
| 2019/02/15 | 19:40:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 19:40:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 19:40:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da          |          |
| 2019/02/15 | 19:43:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8          |          |
| 2019/02/15 | 20:04:00.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9          |          |
| 2019/02/15 | 20:05:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |             |          |
| 2019/02/15 | 21:18:00.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0          |          |
| 2019/02/15 | 21:18:02.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 21:18:04.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 21:18:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da          |          |
| 2019/02/15 | 21:21:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8          |          |
| 2019/02/15 | 21:41:30.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9          |          |
| 2019/02/15 | 21:42:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |             |          |
| 2019/02/15 | 22:55:00.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0          |          |
| 2019/02/15 | 22:55:02.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 22:55:04.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/15 | 22:55:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da          |          |
| 2019/02/15 | 22:58:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8          |          |
| 2019/02/15 | 23:16:30.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9          |          |
| 2019/02/15 | 23:17:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |             |          |
| 2019/02/16 | 00:32:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0          |          |
| 2019/02/16 | 00:32:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/16 | 00:32:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1          |          |
| 2019/02/16 | 00:32:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da          |          |
| 2019/02/16 | 00:35:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8          |          |
| 2019/02/16 | 00:41:30.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9          |          |
| 2019/02/16 | 00:42:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |             |          |
| 2019/02/16 | 01:57:00.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0          |          |



Feb 14, 19 12:03

## XRT\_OGLIST\_0055.chk

Page 10/11

|            |            |                                    |                           |   |       |                |  |  |
|------------|------------|------------------------------------|---------------------------|---|-------|----------------|--|--|
| 2019/02/16 | 01:57:02.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 01:57:04.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 01:57:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |  |  |
| 2019/02/16 | 01:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8             |  |  |
| 2019/02/16 | 01:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 01:59:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 02:00:00.0 | AOCS_OrE-point_Start_2_OG [0x098]  | XRT_FOCUS_POSITION        | 4 | 07-F8 | 22 ff aa 00    |  |  |
| 2019/02/16 | 02:00:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | AOCU_NM                   | 5 | 02-76 | 00 00 00 00 00 |  |  |
| 2019/02/16 | 02:00:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9             |  |  |
| 2019/02/16 | 02:00:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLD_ENA           | 1 | 07-F0 | d8             |  |  |
| 2019/02/16 | 02:00:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_FLRCTRL_ENA       | 1 | 07-F0 | c8             |  |  |
| 2019/02/16 | 02:00:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_AEC_RESET         | 1 | 07-F0 | d0             |  |  |
| 2019/02/16 | 02:00:26.0 | XRT_FLD_RESET_420_OG [0x1a4]       | MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5             |  |  |
| 2019/02/16 | 02:00:28.0 | XRT_QT_PROG_SET_431_OG [0x1af]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |  |  |
| 2019/02/16 | 02:00:30.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_QT_PROG_SET       | 2 | 07-F0 | c4 06          |  |  |
| 2019/02/16 | 02:15:00.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_FL_PROG_SET       | 2 | 07-F0 | c5 0d          |  |  |
| 2019/02/16 | 02:16:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |                |  |  |
| 2019/02/16 | 03:31:00.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |  |
| 2019/02/16 | 03:31:02.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 03:31:04.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 03:31:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |  |  |
| 2019/02/16 | 03:34:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8             |  |  |
| 2019/02/16 | 03:52:00.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9             |  |  |
| 2019/02/16 | 03:53:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |                |  |  |
| 2019/02/16 | 05:00:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |  |
| 2019/02/16 | 05:00:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 05:00:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 05:00:36.0 | XRT_PREFLR_STRT_428_OG [0x1ac]     | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |  |  |
| 2019/02/16 | 05:03:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8             |  |  |
| 2019/02/16 | 05:29:00.0 | XRT_Custom_430_OG [0x1ae]          | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9             |  |  |
| 2019/02/16 | 05:30:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | XRT_Custom_430_OG [0x1ae] |   |       |                |  |  |
| 2019/02/16 | 05:57:24.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |  |
| 2019/02/16 | 05:57:26.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 05:57:28.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 05:57:30.0 | AOCS_OrE-point_Start_2_OG [0x098]  | XRT_FOCUS_POSITION        | 4 | 07-F8 | 22 ff aa 00    |  |  |
| 2019/02/16 | 05:57:48.0 | XRT_FLD_DIS_409_OG [0x199]         | AOCU_NM                   | 5 | 02-76 | 00 00 00 00 00 |  |  |
| 2019/02/16 | 05:57:50.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]     | MDP_XRT_FLD_DIS           | 1 | 07-F0 | d9             |  |  |
| 2019/02/16 | 05:57:52.0 | XRT_ARS_DIS_443_OG [0x1bb]         | MDP_XRT_FLRCTRL_DIS       | 1 | 07-F0 | c9             |  |  |
| 2019/02/16 | 06:00:28.0 | XRT_QT_PROG_SET_414_OG [0x19e]     | MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5             |  |  |
| 2019/02/16 | 06:00:30.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_QT_PROG_SET       | 2 | 07-F0 | c4 07          |  |  |
| 2019/02/16 | 06:07:24.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |  |  |
| 2019/02/16 | 06:07:26.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 06:07:28.0 | XRT_FOCUS_POSITION_410_OG [0x19a]  | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |  |  |
| 2019/02/16 | 06:07:30.0 | AOCS_OrE-point_Start_23_OG [0x0ad] | XRT_FOCUS_POSITION        | 4 | 07-F8 | 22 fe 97 00    |  |  |
| 2019/02/16 | 06:07:48.0 | XRT_FLD_ENA_411_OG [0x19b]         | AOCU_NM                   | 5 | 02-76 | 01 03 02 01 ca |  |  |
| 2019/02/16 | 06:07:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLD_ENA           | 1 | 07-F0 | d8             |  |  |
| 2019/02/16 | 06:07:52.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_FLRCTRL_ENA       | 1 | 07-F0 | c8             |  |  |
| 2019/02/16 | 06:07:54.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_AEC_RESET         | 1 | 07-F0 | d0             |  |  |

Feb 14, 19 12:03

## XRT\_OGLIST\_0055.chk

Page 11/11

|            |            |                                   |                           |   |       |                |
|------------|------------|-----------------------------------|---------------------------|---|-------|----------------|
| 2019/02/16 | 06:07:56.0 | XRT_FLD_RESET_434_OG [0x1b2]      | MDP_XRT_ARS_DIS           | 1 | 07-F0 | d5             |
| 2019/02/16 | 06:10:26.0 | XRT_QT_PROG_SET_438_OG [0x1b6]    | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |
| 2019/02/16 | 06:10:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_QT_PROG_SET       | 2 | 07-F0 | c4 09          |
| 2019/02/16 | 06:10:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_FL_PROG_SET       | 2 | 07-F0 | c5 0d          |
| 2019/02/16 | 06:41:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |
| 2019/02/16 | 06:41:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |
| 2019/02/16 | 06:41:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |
| 2019/02/16 | 06:41:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]    | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |
| 2019/02/16 | 06:44:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8             |
| 2019/02/16 | 07:06:31.5 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9             |
| 2019/02/16 | 07:07:31.5 | XRT_CTRL_AUTO_424_OG [0x1a8]      | XRT_Custom_430_OG [0x1ae] |   |       |                |
| 2019/02/16 | 08:21:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO         | 1 | 07-F0 | c0             |
| 2019/02/16 | 08:21:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |
| 2019/02/16 | 08:21:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU         | 1 | 07-F0 | c1             |
| 2019/02/16 | 08:21:06.0 | XRT_PREFLR_STRT_428_OG [0x1ac]    | MDP_XRT_FLD_RESET         | 1 | 07-F0 | da             |
| 2019/02/16 | 08:24:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT       | 1 | 07-F0 | e8             |
| 2019/02/16 | 10:03:00.0 | AOCS_ORe-point_Start_2_OG [0x098] | MDP_XRT_PREFLR_STOP       | 1 | 07-F0 | e9             |
|            |            | AOCU_NM                           |                           | 5 | 02-76 | 00 00 00 00 00 |