

# XRT Timeline to be uploaded on 2018/08/23

Period: 2018/08/23 10:34:00 - 2018/08/28 10:15:00

\* \* \* \* \*

Normal mode

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| XOB #1BC7: CCD Monitor During Bakeout - G-band 1ms - 1kx1k - Q90 - 1st Quadrant - Al/mesh(2048ms), Al/Poly(4096ms) - w leak image-1ms |                         |                |       |      |       |       |                       |     |                    |              |       |                     |
|---|-------------------------|----------------|-------|------|-------|-------|-----------------------|-----|--------------------|--------------|-------|---------------------|
| Term  | Pointing (x, y)         |                |       |      |       |       | Comment               |     |                    |              |       |                     |
| 08/23 17:23:00 - 08/23 17:29:54   | Fixed ( -528.4, -528.4) |                |       |      |       |       | XRT post bake out 1/4 |     |                    |              |       |                     |
| <b>PROG= 04 1-time(s)</b>   |                         |                |       |      |       |       |                       |     |                    |              |       |                     |
| └─ Subr= 1 1-time(s) 2.0sec   |                         |                |       |      |       |       |                       |     |                    |              |       |                     |
| └─ Seqn= 51 1-time(s) 2.0sec  |                         |                |       |      |       |       |                       |     |                    |              |       |                     |
|   | Open/G-band             | Open/G-band    | open  | Safe | Norm  | 1ms   | Obs                   | 1x1 | 1024x1024          | (1536, 1536) | Q=90  | 0 0 2.0sec          |
|   | Open/G-band             | Open/G-band    | open  | Safe | Norm  | 1ms   | Obs                   | 1x1 | 1024x1024          | (1536, 1536) | Q=90  | 0 0 2.0sec          |
|   | Open/thick-Be           | Open/thick-Be  | close | Safe | Dark  | 1ms   | Obs                   | 1x1 | 1024x1024          | (1536, 1536) | Q=98  | 0 0 2.0sec          |
|   | Open/thick-Be           | Open/thick-Be  | close | Safe | Dark  | 1ms   | Obs                   | 1x1 | 1024x1024          | (1536, 1536) | Q=98  | 0 0 2.0sec          |
| └─ Subr= 2 1-time(s) 2.0sec   |                         |                |       |      |       |       |                       |     |                    |              |       |                     |
| └─ Seqn= 3 2-time(s) 2.0sec   |                         |                |       |      |       |       |                       |     |                    |              |       |                     |
|   | Open/Al-mesh            | Open/Al-mesh   | close | Safe | Norm  | 2.00s | Obs                   | 2x2 | 2048x2048          | (1024, 1024) | Q=95  | 0 0 2.0sec          |
|   | Al-poly/Open            | Al-poly/Open   | close | Safe | Norm  | 4.00s | Obs                   | 2x2 | 2048x2048          | (1024, 1024) | Q=95  | 0 0 2.0sec          |
| └─ Subr= 3 2-time(s) 2.0sec   |                         |                |       |      |       |       |                       |     |                    |              |       |                     |
| └─ Seqn= 34 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 #1BC8: CCD Monitor During Bakeout - G-Band 1ms - 1kx1k - Q90 - 2nd Quadrant - Al/mesh (2048ms), Al/Poly (4096ms) - w leak image-1 ms |                        |                |       |      |       |       |             |     |                    |              |       |                     |
|--|------------------------|----------------|-------|------|-------|-------|-------------|-----|--------------------|--------------|-------|---------------------|
| Term   | Pointing (x, y)        |                |       |      |       |       | Comment     |     |                    |              |       |                     |
| 08/23 17:33:00 - 08/23 17:39:54  | Fixed ( 528.4, -528.4) |                |       |      |       |       | XRT PBO 2/4 |     |                    |              |       |                     |
| <b>PROG= 20 1-time(s)</b>  |                        |                |       |      |       |       |             |     |                    |              |       |                     |
| └─ Subr= 1 1-time(s) 2.0sec  |                        |                |       |      |       |       |             |     |                    |              |       |                     |
| └─ Seqn= 38 1-time(s) 2.0sec   |                        |                |       |      |       |       |             |     |                    |              |       |                     |
|  | Open/G-band            | Open/G-band    | open  | Safe | Norm  | 1ms   | Obs         | 1x1 | 1024x1024          | (512, 1536)  | Q=90  | 0 0 2.0sec          |
|  | Open/G-band            | Open/G-band    | open  | Safe | Norm  | 1ms   | Obs         | 1x1 | 1024x1024          | (512, 1536)  | Q=90  | 0 0 2.0sec          |
|  | Open/thick-Be          | Open/thick-Be  | close | Safe | Dark  | 1ms   | Obs         | 1x1 | 1024x1024          | (512, 1536)  | Q=98  | 0 0 2.0sec          |
|  | Open/thick-Be          | Open/thick-Be  | close | Safe | Dark  | 1ms   | Obs         | 1x1 | 1024x1024          | (512, 1536)  | Q=98  | 0 0 2.0sec          |
| └─ Subr= 2 1-time(s) 2.0sec  |                        |                |       |      |       |       |             |     |                    |              |       |                     |
| └─ Seqn= 3 2-time(s) 2.0sec  |                        |                |       |      |       |       |             |     |                    |              |       |                     |
|  | Open/Al-mesh           | Open/Al-mesh   | close | Safe | Norm  | 2.00s | Obs         | 2x2 | 2048x2048          | (1024, 1024) | Q=95  | 0 0 2.0sec          |
|  | Al-poly/Open           | Al-poly/Open   | close | Safe | Norm  | 4.00s | Obs         | 2x2 | 2048x2048          | (1024, 1024) | Q=95  | 0 0 2.0sec          |
| └─ Subr= 3 2-time(s) 2.0sec  |                        |                |       |      |       |       |             |     |                    |              |       |                     |
| └─ Seqn= 34 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 #1BC9: CCD Monitor During Bakeout - G-Band 1ms - 1kx1k - Q90 - 3rd Quadrant - Al/mesh (2048ms), Al/Poly (4096ms) - w leak image-1 ms |                       |                |       |      |       |       |             |     |                    |              |       |                     |
|--|-----------------------|----------------|-------|------|-------|-------|-------------|-----|--------------------|--------------|-------|---------------------|
| Term   | Pointing (x, y)       |                |       |      |       |       | Comment     |     |                    |              |       |                     |
| 08/23 17:43:00 - 08/23 17:49:54  | Fixed ( 528.4, 528.4) |                |       |      |       |       | XRT PBO 3/4 |     |                    |              |       |                     |
| <b>PROG= 19 1-time(s)</b>  |                       |                |       |      |       |       |             |     |                    |              |       |                     |
| └─ Subr= 1 1-time(s) 2.0sec  |                       |                |       |      |       |       |             |     |                    |              |       |                     |
| └─ Seqn= 21 1-time(s) 2.0sec   |                       |                |       |      |       |       |             |     |                    |              |       |                     |
|  | Open/G-band           | Open/G-band    | open  | Safe | Norm  | 1ms   | Obs         | 1x1 | 1024x1024          | (512, 512)   | Q=90  | 0 0 2.0sec          |
|  | Open/G-band           | Open/G-band    | open  | Safe | Norm  | 1ms   | Obs         | 1x1 | 1024x1024          | (512, 512)   | Q=90  | 0 0 2.0sec          |
|  | Open/thick-Be         | Open/thick-Be  | close | Safe | Dark  | 1ms   | Obs         | 1x1 | 1024x1024          | (512, 512)   | Q=98  | 0 0 2.0sec          |
|  | Open/thick-Be         | Open/thick-Be  | close | Safe | Dark  | 1ms   | Obs         | 1x1 | 1024x1024          | (512, 512)   | Q=98  | 0 0 2.0sec          |
| └─ Subr= 2 1-time(s) 2.0sec  |                       |                |       |      |       |       |             |     |                    |              |       |                     |
| └─ Seqn= 3 2-time(s) 2.0sec  |                       |                |       |      |       |       |             |     |                    |              |       |                     |
|  | Open/Al-mesh          | Open/Al-mesh   | close | Safe | Norm  | 2.00s | Obs         | 2x2 | 2048x2048          | (1024, 1024) | Q=95  | 0 0 2.0sec          |
|  | Al-poly/Open          | Al-poly/Open   | close | Safe | Norm  | 4.00s | Obs         | 2x2 | 2048x2048          | (1024, 1024) | Q=95  | 0 0 2.0sec          |
| └─ Subr= 3 2-time(s) 2.0sec  |                       |                |       |      |       |       |             |     |                    |              |       |                     |
| └─ Seqn= 34 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 #1BCA: CCD Monitor During Bakeout - G-Band 1ms - 1kx1k - Q90 - 4th Quadrant - Al/mesh (2048ms), Al/Poly (4096ms) - w leak image-1 ms |                        |               |       |      |      |     |             |     |           |             |      |            |
|--|------------------------|---------------|-------|------|------|-----|-------------|-----|-----------|-------------|------|------------|
| Term   | Pointing (x, y)        |               |       |      |      |     | Comment     |     |           |             |      |            |
| 08/23 17:53:00 - 08/23 18:06:24  | Fixed ( -528.4, 528.4) |               |       |      |      |     | XRT PBO 4/4 |     |           |             |      |            |
| <b>PROG= 11 1-time(s)</b>  |                        |               |       |      |      |     |             |     |           |             |      |            |
| └─ Subr= 1 1-time(s) 2.0sec  |                        |               |       |      |      |     |             |     |           |             |      |            |
| └─ Seqn= 14 1-time(s) 2.0sec   |                        |               |       |      |      |     |             |     |           |             |      |            |
|  | Open/G-band            | Open/G-band   | open  | Safe | Norm | 1ms | Obs         | 1x1 | 1024x1024 | (1536, 512) | Q=90 | 0 0 2.0sec |
|  | Open/G-band            | Open/G-band   | open  | Safe | Norm | 1ms | Obs         | 1x1 | 1024x1024 | (1536, 512) | Q=90 | 0 0 2.0sec |
|  | Open/thick-Be          | Open/thick-Be | close | Safe | Dark | 1ms | Obs         | 1x1 | 1024x1024 | (1536, 512) | Q=98 | 0 0 2.0sec |
|  | Open/thick-Be          | Open/thick-Be | close | Safe | Dark | 1ms | Obs         | 1x1 | 1024x1024 | (1536, 512) | Q=98 | 0 0 2.0sec |
| └─ Subr= 2 1-time(s) 2.0sec  |                        |               |       |      |      |     |             |     |           |             |      |            |

|   |  |                 |                |                  |      |               |       |     |     |                    |              |            |          |   |        |  |  |
|---|--|-----------------|----------------|------------------|------|---------------|-------|-----|-----|--------------------|--------------|------------|----------|---|--------|--|--|
| ┌ |  | <b>Seqn= 3</b>  |                | <b>2-time(s)</b> |      | <b>2.0sec</b> |       |     |     |                    |              |            |          |   |        |  |  |
|   |  | Open/Al-mesh    | Open/Al-mesh   | close            | Safe | Norm          | 2.00s | Obs | 2x2 | 2048x2048          | (1024, 1024) | Q=95       | 0        | 0 | 2.0sec |  |  |
|   |  | Al-poly/Open    | Al-poly/Open   | close            | Safe | Norm          | 4.00s | Obs | 2x2 | 2048x2048          | (1024, 1024) | Q=95       | 0        | 0 | 2.0sec |  |  |
| └ |  | <b>Subr= 3</b>  |                | <b>2-time(s)</b> |      | <b>2.0sec</b> |       |     |     |                    |              |            |          |   |        |  |  |
| ┌ |  | <b>Seqn= 34</b> |                | <b>1-time(s)</b> |      | <b>2.0sec</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 |  |  |
|   |  | Default Filter  | Thicker Filter | VLS              | mode | image         | Exp.  | CCD | Bin | ROI: size (center) | Comp.        | AEC Buffer | Interval |   |        |  |  |

**XOB #1BD9: Synoptic Q95 2x2 - Al/mesh(64/512/2897) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 - 1x1 2048x512) + Al-poly(45/512/4096) + T**

| Term                            | Pointing (x, y)   | Comment                    |
|---------------------------------|-------------------|----------------------------|
| 08/23 18:09:30 - 08/23 18:16:24 | Fixed ( 0.0, 0.0) | synoptic, shifted 6.5 min  |
| 08/24 05:55:00 - 08/24 06:01:54 | Fixed ( 0.0, 0.0) | synoptic, shifted -8.0 min |
| 08/24 17:57:00 - 08/24 18:03:54 | Fixed ( 0.0, 0.0) | synoptic, shifted -6.0 min |
| 08/25 06:03:00 - 08/25 06:09:54 | Fixed ( 0.0, 0.0) | synoptic + HOP349          |

|   |  |                 |                  |                  |      |               |       |     |     |                    |              |            |          |   |        |  |  |
|---|--|-----------------|------------------|------------------|------|---------------|-------|-----|-----|--------------------|--------------|------------|----------|---|--------|--|--|
| ┌ |  | <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>2.0sec</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 |  |  |
|   |  | Default Filter  | Thicker Filter   | VLS              | mode | image         | Exp.  | CCD | Bin | ROI: size (center) | Comp.        | AEC Buffer | Interval |   |        |  |  |

**XOB #1BBA: 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                          |
|---------------------------------|--|----------------------------------|
| 08/23 18:19:30 - 08/23 23:59:54 | Track ( 56.0, -286.3) <sup>Ⓢ</sup> 08/23 18:16:30  | # AR obs + HOP362 CH jetsAR obs. |
| 08/24 18:07:00 - 08/25 02:59:54 | Track ( 267.2, -282.3) <sup>Ⓢ</sup> 08/24 18:04:00 | # AR obs                         |
| 08/25 06:13:00 - 08/25 10:32:00 | Track ( 370.0, -277.9) <sup>Ⓢ</sup> 08/25 06:10:00 | # AR obs.                        |

|   |  |                 |                |                  |      |                 |       |     |     |                    |              |            |          |   |        |  |  |
|---|--|-----------------|----------------|------------------|------|-----------------|-------|-----|-----|--------------------|--------------|------------|----------|---|--------|--|--|
| ┌ |  | <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>120.0sec</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 #1BCB: AR (Filter-Ratio with Al/poly and thin-Be) with PFB, 512x512 at 1064 1048, thick-Al context, with G-band (1ms/1ms leak), 30s cad**

| Term                            | Pointing (x, y)                                   | Comment                          |
|---------------------------------|---|----------------------------------|
| 08/24 00:03:00 - 08/24 05:51:54 | Track ( 56.0, -286.3) <sup>Ⓢ</sup> 08/23 18:16:30 | # AR obs + HOP362 CH jetsAR obs. |

|   |  |                 |               |                  |      |               |       |     |     |         |              |      |   |   |        |  |  |
|---|--|-----------------|---------------|------------------|------|---------------|-------|-----|-----|---------|--------------|------|---|---|--------|--|--|
| ┌ |  | <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</b> |               | <b>3-time(s)</b> |      | <b>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 90-time(s) 30.0sec</b> |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Seqn= 86 1-time(s) 2.0sec</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) 2.0sec</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 |
|                                   | Default Filter | Thicker Filter | VLS   | mode | image | Exp.  | CCD | Bin | ROI: size (center)   | Comp. | AEC Buffer | Interval |        |

**XOB #1AEC: G-Band Alignment with North Pole Q90 2x2 (G-band and VLS=CLS) - 1msec (Al/poly) - 4096msec - 5min cadence - Partial Sun-wNGT**

|                                    |                |                |       |      |       |       |     |     |                        |       |            |          |        |
|------------------------------------|----------------|----------------|-------|------|-------|-------|-----|-----|------------------------|-------|------------|----------|--------|
| <b>Term</b>                        |                |                |       |      |       |       |     |     |                        |       |            |          |        |
| 08/24 06:17:05 - 08/24 08:01:54    |                |                |       |      |       |       |     |     |                        |       |            |          |        |
| <b>Pointing (x, y)</b>             |                |                |       |      |       |       |     |     |                        |       |            |          |        |
| Fixed ( 0.0, 930.0)                |                |                |       |      |       |       |     |     |                        |       |            |          |        |
| <b>Comment</b>                     |                |                |       |      |       |       |     |     |                        |       |            |          |        |
| Coalignment North                  |                |                |       |      |       |       |     |     |                        |       |            |          |        |
| <b>PROG= 07 1-time(s)</b>          |                |                |       |      |       |       |     |     |                        |       |            |          |        |
| <b>Subr= 1 24-time(s) 300.0sec</b> |                |                |       |      |       |       |     |     |                        |       |            |          |        |
| <b>Seqn= 98 1-time(s) 2.0sec</b>   |                |                |       |      |       |       |     |     |                        |       |            |          |        |
|                                    | Open/G-band    | Open/G-band    | open  | Safe | Norm  | 1ms   | Obs | 2x2 | 1024x1024 (1536, 1536) | Q=90  | 0          | 0        | 2.0sec |
| <b>Seqn= 63 1-time(s) 2.0sec</b>   |                |                |       |      |       |       |     |     |                        |       |            |          |        |
|                                    | Open/G-band    | Open/G-band    | close | Safe | Norm  | 1ms   | Obs | 2x2 | 1024x1024 (1536, 1536) | Q=90  | 0          | 0        | 2.0sec |
| <b>Seqn= 45 1-time(s) 2.0sec</b>   |                |                |       |      |       |       |     |     |                        |       |            |          |        |
|                                    | Al-poly/Open   | med-Be/Open    | close | Safe | Norm  | 4.00s | Obs | 2x2 | 1024x1024 (1536, 1536) | Q=95  | 0          | 0        | 2.0sec |
|                                    | Default Filter | Thicker Filter | VLS   | mode | image | Exp.  | CCD | Bin | ROI: size (center)     | Comp. | AEC Buffer | Interval |        |

**XOB #1AED: G-Band Alignment with East limb Q90 2x2 (G-band and VLS=CLS) - 1msec - (Al/poly) 1443msec - 8 min cadence-wNGT**

|                                    |                |                |       |      |       |       |     |     |                       |       |            |          |        |
|------------------------------------|----------------|----------------|-------|------|-------|-------|-----|-----|-----------------------|-------|------------|----------|--------|
| <b>Term</b>                        |                |                |       |      |       |       |     |     |                       |       |            |          |        |
| 08/24 08:17:00 - 08/24 09:39:30    |                |                |       |      |       |       |     |     |                       |       |            |          |        |
| <b>Pointing (x, y)</b>             |                |                |       |      |       |       |     |     |                       |       |            |          |        |
| Fixed ( -970.0, 0.0)               |                |                |       |      |       |       |     |     |                       |       |            |          |        |
| <b>Comment</b>                     |                |                |       |      |       |       |     |     |                       |       |            |          |        |
| Coalignment East                   |                |                |       |      |       |       |     |     |                       |       |            |          |        |
| <b>PROG= 01 1-time(s)</b>          |                |                |       |      |       |       |     |     |                       |       |            |          |        |
| <b>Subr= 1 15-time(s) 480.0sec</b> |                |                |       |      |       |       |     |     |                       |       |            |          |        |
| <b>Seqn= 19 1-time(s) 2.0sec</b>   |                |                |       |      |       |       |     |     |                       |       |            |          |        |
|                                    | Open/G-band    | Open/G-band    | open  | Safe | Norm  | 1ms   | Obs | 2x2 | 1024x1024 (512, 1536) | Q=90  | 0          | 0        | 2.0sec |
| <b>Seqn= 43 1-time(s) 2.0sec</b>   |                |                |       |      |       |       |     |     |                       |       |            |          |        |
|                                    | Open/G-band    | Open/G-band    | close | Safe | Norm  | 1ms   | Obs | 2x2 | 1024x1024 (512, 1536) | Q=90  | 0          | 0        | 2.0sec |
| <b>Seqn= 70 1-time(s) 2.0sec</b>   |                |                |       |      |       |       |     |     |                       |       |            |          |        |
|                                    | Al-poly/Open   | med-Be/Open    | close | Safe | Norm  | 1.41s | Obs | 2x2 | 1024x1024 (512, 1536) | Q=95  | 0          | 0        | 2.0sec |
|                                    | Default Filter | Thicker Filter | VLS   | mode | image | Exp.  | CCD | Bin | ROI: size (center)    | Comp. | AEC Buffer | Interval |        |

**XOB #1B93: HOP81/206 2-filter - Al/poly 6s, Al/mesh 4s 30s cadence, G-band - 384x384 1ms**

|                                   |                |                |       |      |       |       |     |     |                      |       |            |          |        |
|-----------------------------------|----------------|----------------|-------|------|-------|-------|-----|-----|----------------------|-------|------------|----------|--------|
| <b>Term</b>                       |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| 08/24 10:11:00 - 08/24 17:53:54   |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Pointing (x, y)</b>            |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| Fixed ( -18.0, 844.0)             |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Comment</b>                    |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| #HOP 206 Polar Panorama North     |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>PROG= 10 Inf.-time(s)</b>      |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Subr= 1 1-time(s) 2.0sec</b>   |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Seqn= 16 2-time(s) 2.0sec</b>  |                |                |       |      |       |       |     |     |                      |       |            |          |        |
|                                   | Open/G-band    | Open/G-band    | close | Safe | Norm  | 1ms   | Obs | 1x1 | 384x384 (1064, 1048) | DPCM  | 0          | 0        | 2.0sec |
| <b>Subr= 2 1-time(s) 2.0sec</b>   |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Seqn= 90 1-time(s) 30.0sec</b> |                |                |       |      |       |       |     |     |                      |       |            |          |        |
|                                   | Open/G-band    | Open/G-band    | open  | Safe | Norm  | 1ms   | Obs | 1x1 | 384x384 (1064, 1048) | Q=90  | 0          | 0        | 2.0sec |
| <b>Subr= 3 60-time(s) 2.0sec</b>  |                |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Seqn= 57 1-time(s) 30.0sec</b> |                |                |       |      |       |       |     |     |                      |       |            |          |        |
|                                   | Open/Al-mesh   | Open/Al-mesh   | close | Safe | Norm  | 4.00s | Obs | 1x1 | 384x384 (1064, 1048) | Q=90  | 0          | 0        | 2.0sec |
|                                   | Al-poly/Open   | Al-poly/Open   | close | Safe | Norm  | 5.66s | Obs | 1x1 | 384x384 (1064, 1048) | Q=90  | 0          | 0        | 2.0sec |
|                                   | Default Filter | Thicker Filter | VLS   | mode | image | Exp.  | CCD | Bin | ROI: size (center)   | Comp. | AEC Buffer | Interval |        |

**XOB #1C08: HOP349 - 3-filter Synoptics (Al-mesh[64/512/2897], Al-poly[45/512/4096], thin-Be[1024/11571/23142] with 512x512 G-band 1ms+Leak - 90min ca**

|                                    |              |                  |       |      |      |       |     |     |                        |      |   |   |        |
|------------------------------------|--------------|------------------|-------|------|------|-------|-----|-----|------------------------|------|---|---|--------|
| <b>Term</b>                        |              |                  |       |      |      |       |     |     |                        |      |   |   |        |
| 08/25 03:03:00 - 08/25 05:59:54    |              |                  |       |      |      |       |     |     |                        |      |   |   |        |
| <b>Pointing (x, y)</b>             |              |                  |       |      |      |       |     |     |                        |      |   |   |        |
| Fixed ( 0.0, 0.0)                  |              |                  |       |      |      |       |     |     |                        |      |   |   |        |
| <b>Comment</b>                     |              |                  |       |      |      |       |     |     |                        |      |   |   |        |
| synoptic + HOP349                  |              |                  |       |      |      |       |     |     |                        |      |   |   |        |
| <b>PROG= 08 Inf.-time(s)</b>       |              |                  |       |      |      |       |     |     |                        |      |   |   |        |
| <b>Subr= 1 1-time(s) 300.0sec</b>  |              |                  |       |      |      |       |     |     |                        |      |   |   |        |
| <b>Seqn= 36 1-time(s) 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 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 | 1024x1024 (512, 512)   | Q=90 | 0 | 0 | 2.0sec |
|                                    | Open/G-band  | Open/G-band      | close | Safe | Norm | 1ms   | Obs | 1x1 | 1024x1024 (512, 512)   | Q=95 | 0 | 0 | 2.0sec |
| <b>Subr= 2 18-time(s) 300.0sec</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                          |
|---------------------------------|--|----------------------------------|
| 08/23 18:19:30 - 08/23 23:59:54 | Track ( 56.0, -286.3) <sup>Ⓢ 08/23 18:16:30</sup>  | # AR obs + HOP362 CH jetsAR obs. |
| 08/24 00:03:00 - 08/24 05:51:54 | Track ( 56.0, -286.3) <sup>Ⓢ 08/23 18:16:30</sup>  | # AR obs + HOP362 CH jetsAR obs. |
| 08/24 10:11:00 - 08/24 17:53:54 | Fixed ( -18.0, 844.0)                              | #HOP 206 Polar Panorama North    |
| 08/24 18:07:00 - 08/25 02:59:54 | Track ( 267.2, -282.3) <sup>Ⓢ 08/24 18:04:00</sup> | # AR obs                         |
| 08/25 03:03:00 - 08/25 05:59:54 | Fixed ( 0.0, 0.0)                                  | synoptic + HOP349                |
| 08/25 06:13:00 - 08/25 10:32:00 | Track ( 370.0, -277.9) <sup>Ⓢ 08/25 06:10:00</sup> | # AR obs.                        |

#### PROG= 13 30-time(s)

|                                   |                  |       |      |       |       |     |     |                      |       |            |          |        |
|-----------------------------------|------------------|-------|------|-------|-------|-----|-----|----------------------|-------|------------|----------|--------|
| <b>Subr= 1 20-time(s) 2.0sec</b>  |                  |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Seqn= 11 1-time(s) 2.0sec</b>  |                  |       |      |       |       |     |     |                      |       |            |          |        |
| Al-poly/Open                      | Al-poly/thick-Al | close | Safe | Norm  | 125ms | Obs | 2x2 | 512x512 (1024, 1024) | Q=95  | 2          | 0        | 2.0sec |
| <b>Seqn=100 1-time(s) 10.0sec</b> |                  |       |      |       |       |     |     |                      |       |            |          |        |
| 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 |
| <b>Subr= 2 1-time(s) 2.0sec</b>   |                  |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Seqn= 10 1-time(s) 2.0sec</b>  |                  |       |      |       |       |     |     |                      |       |            |          |        |
| 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 |
| <b>Seqn= 11 1-time(s) 2.0sec</b>  |                  |       |      |       |       |     |     |                      |       |            |          |        |
| Al-poly/Open                      | Al-poly/thick-Al | close | Safe | Norm  | 125ms | Obs | 2x2 | 512x512 (1024, 1024) | Q=95  | 2          | 0        | 2.0sec |
| <b>Seqn= 87 1-time(s) 2.0sec</b>  |                  |       |      |       |       |     |     |                      |       |            |          |        |
| 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

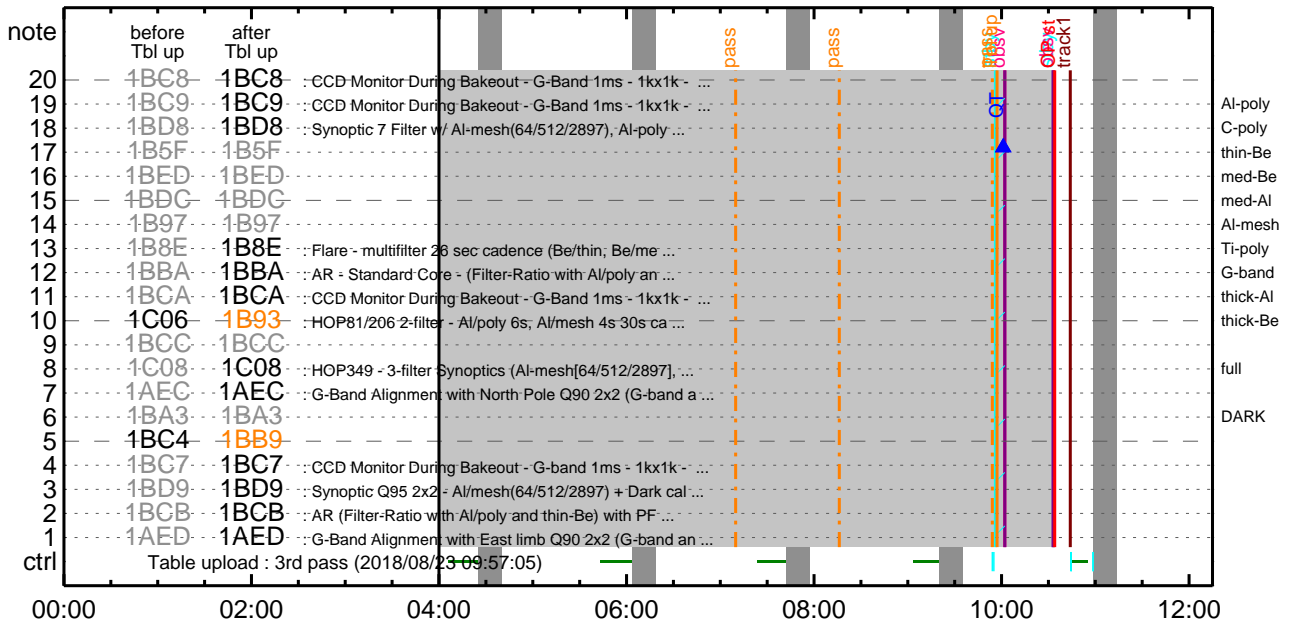
\* \* \* \* \*

### Flare Detection

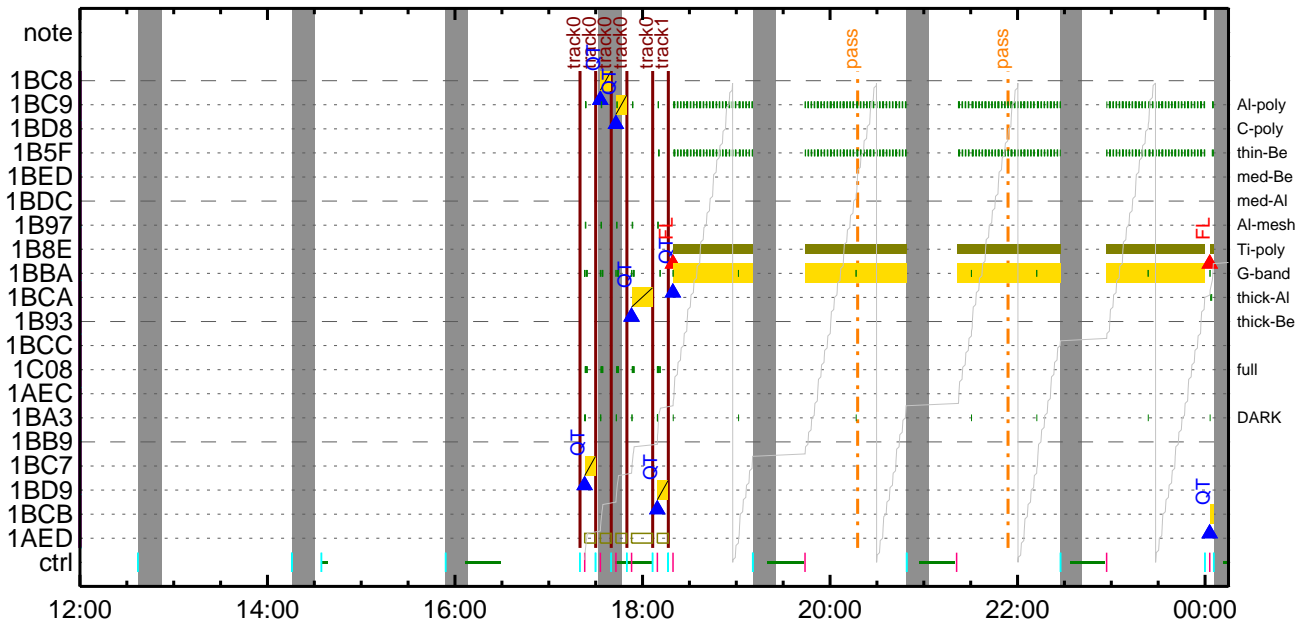
\* \* \* \* \*

| FLD Patrol                      |  |                                  |      |       |      |     |     |                    |       |            |          |       |
|---------------------------------|--|----------------------------------|------|-------|------|-----|-----|--------------------|-------|------------|----------|-------|
| Term                            | Pointing (x, y)                                    | Comment                          |      |       |      |     |     |                    |       |            |          |       |
| 08/23 18:16:48 - 08/24 05:52:18 | Track ( 56.0, -286.3) <sup>Ⓢ 08/23 18:16:30</sup>  | # AR obs + HOP362 CH jetsAR obs. |      |       |      |     |     |                    |       |            |          |       |
| 08/24 10:02:18 - 08/24 17:54:18 | Fixed ( -18.0, 844.0)                              | #HOP 206 Polar Panorama North    |      |       |      |     |     |                    |       |            |          |       |
| 08/24 18:04:18 - 08/25 06:00:18 | Track ( 267.2, -282.3) <sup>Ⓢ 08/24 18:04:00</sup> | # AR obs                         |      |       |      |     |     |                    |       |            |          |       |
| 08/25 06:10:18 - 08/28 10:15:00 | Track ( 370.0, -277.9) <sup>Ⓢ 08/25 06:10:00</sup> | # AR obs.                        |      |       |      |     |     |                    |       |            |          |       |
| 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 |       |

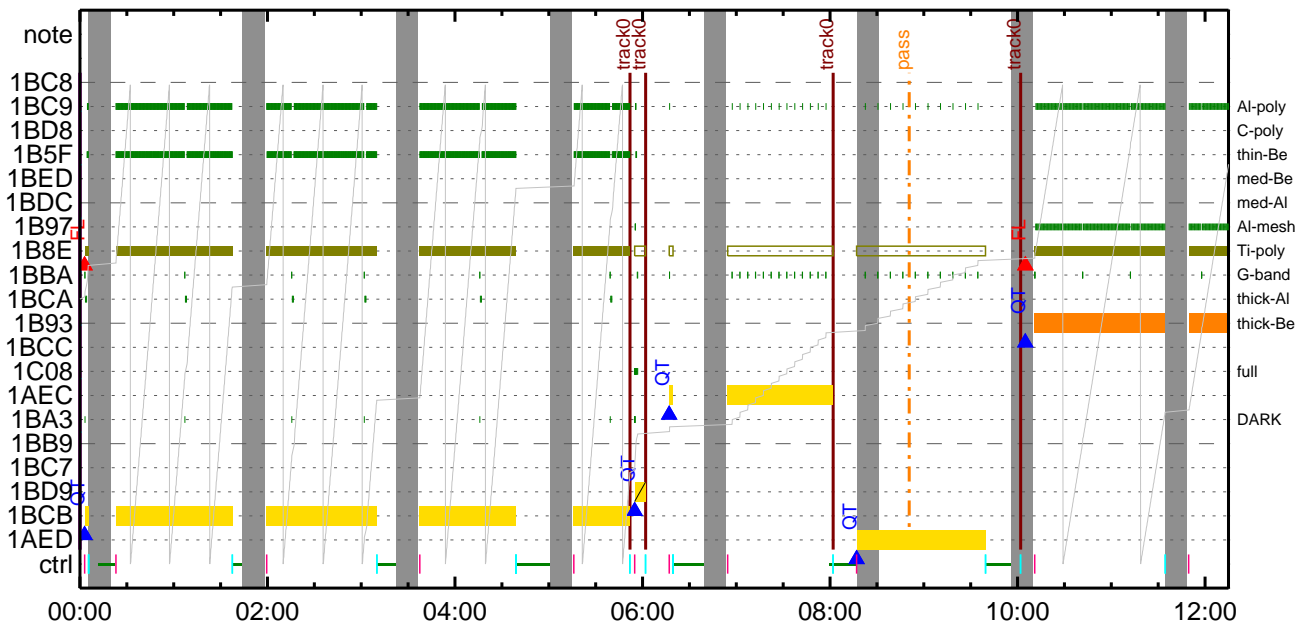
### CMDI #0708 2018/08/23



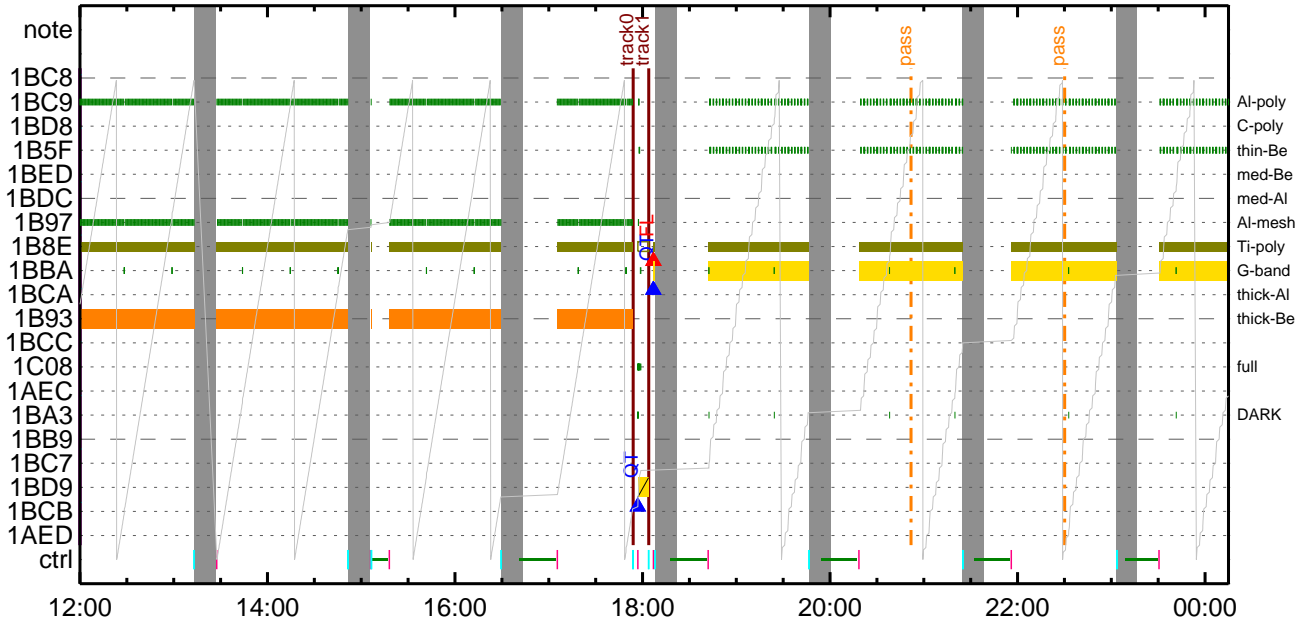
### CMDI #0708 2018/08/23



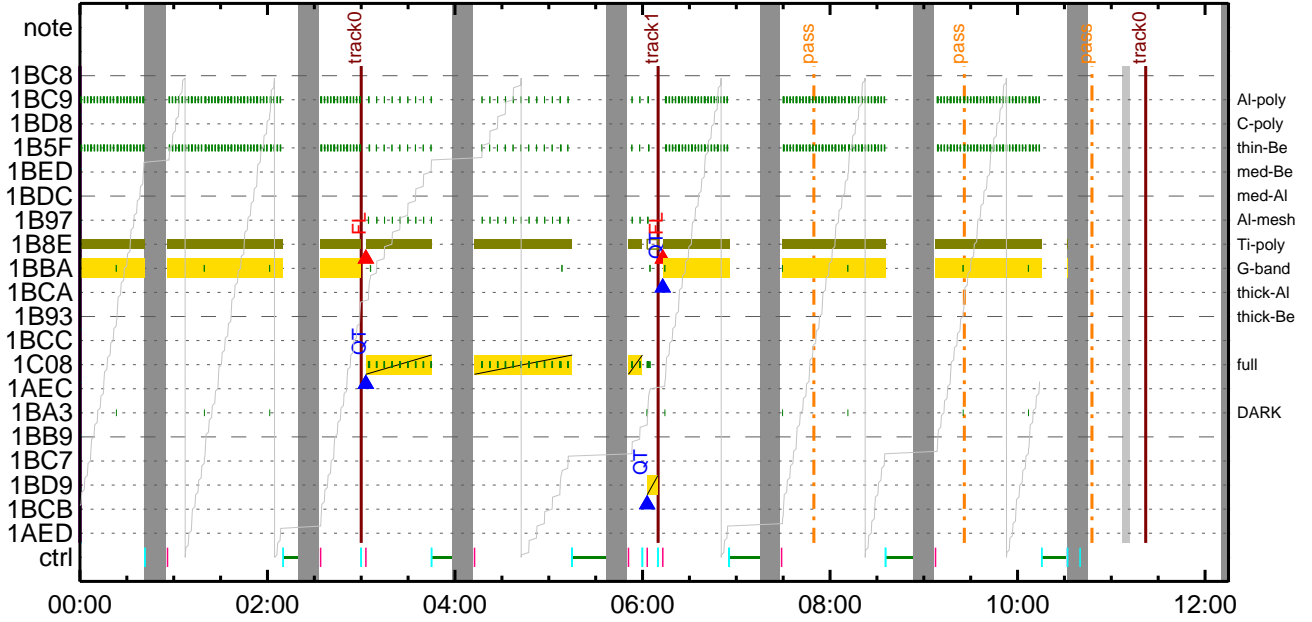
### CMDI #0708 2018/08/24



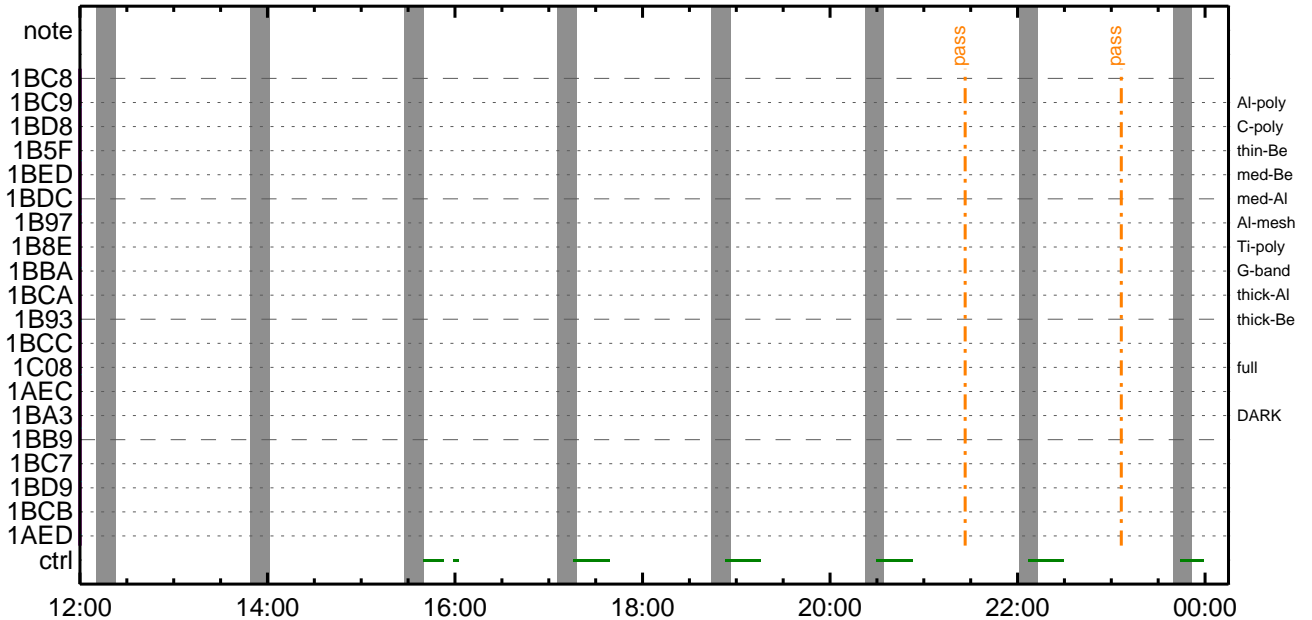
CMDI #0708 2018/08/24



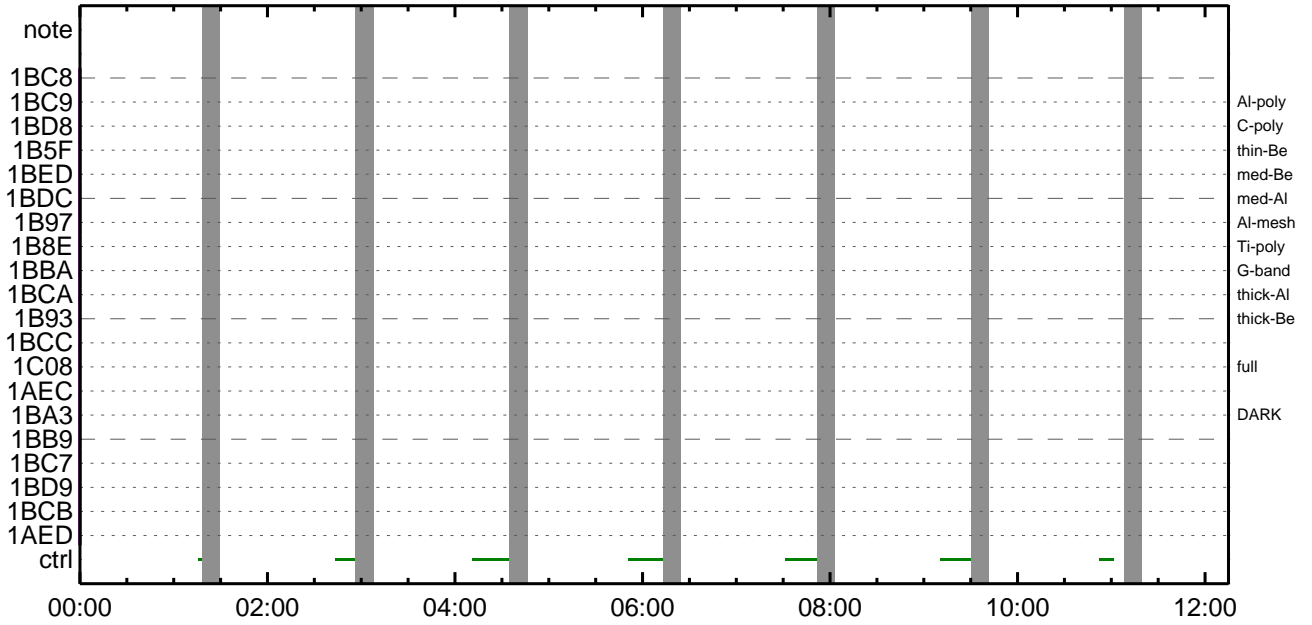
CMDI #0708 2018/08/25



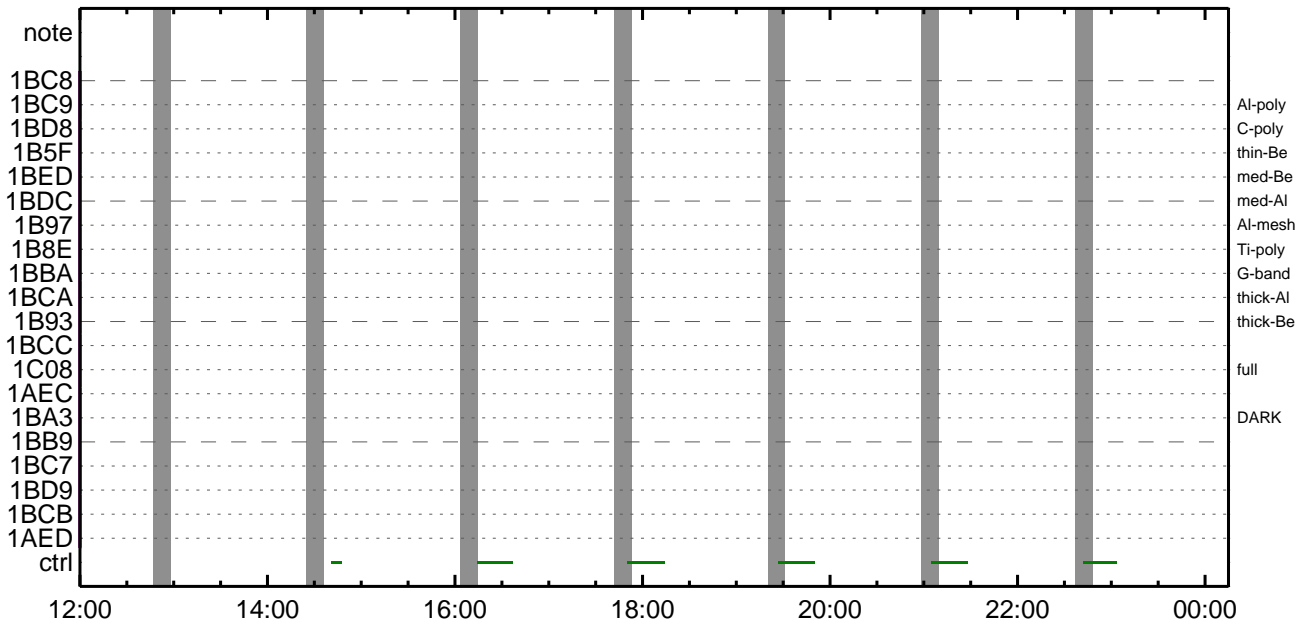
CMDI #0708 2018/08/25



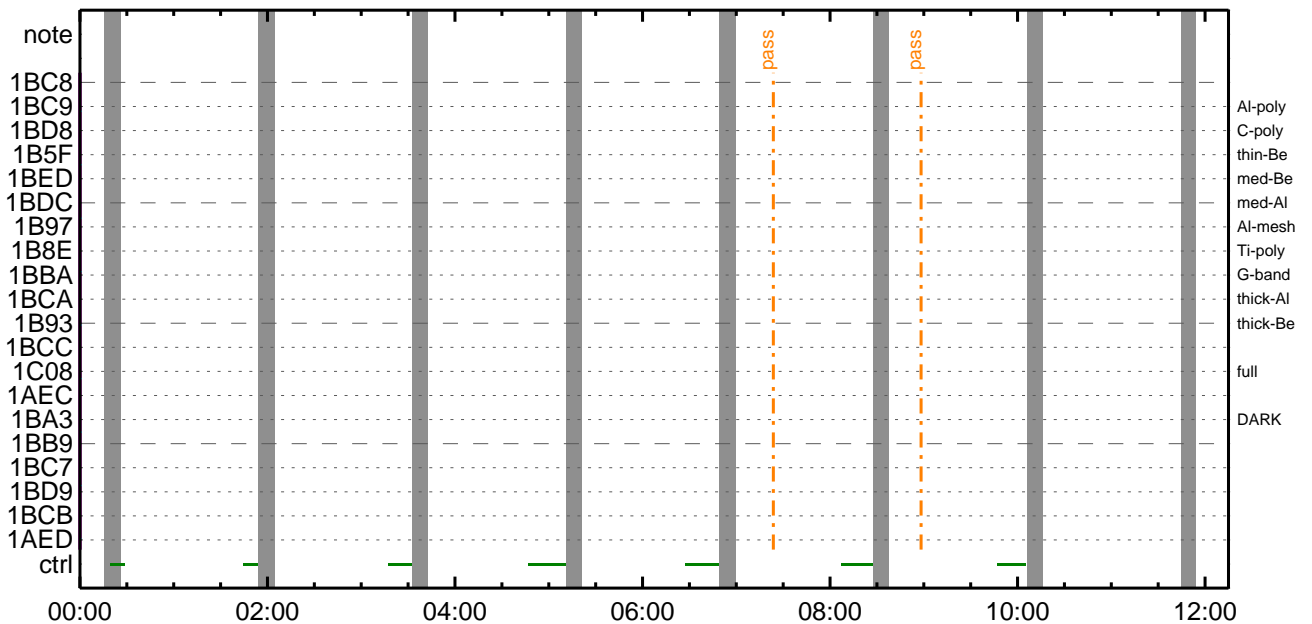
CMDI #0708 2018/08/26



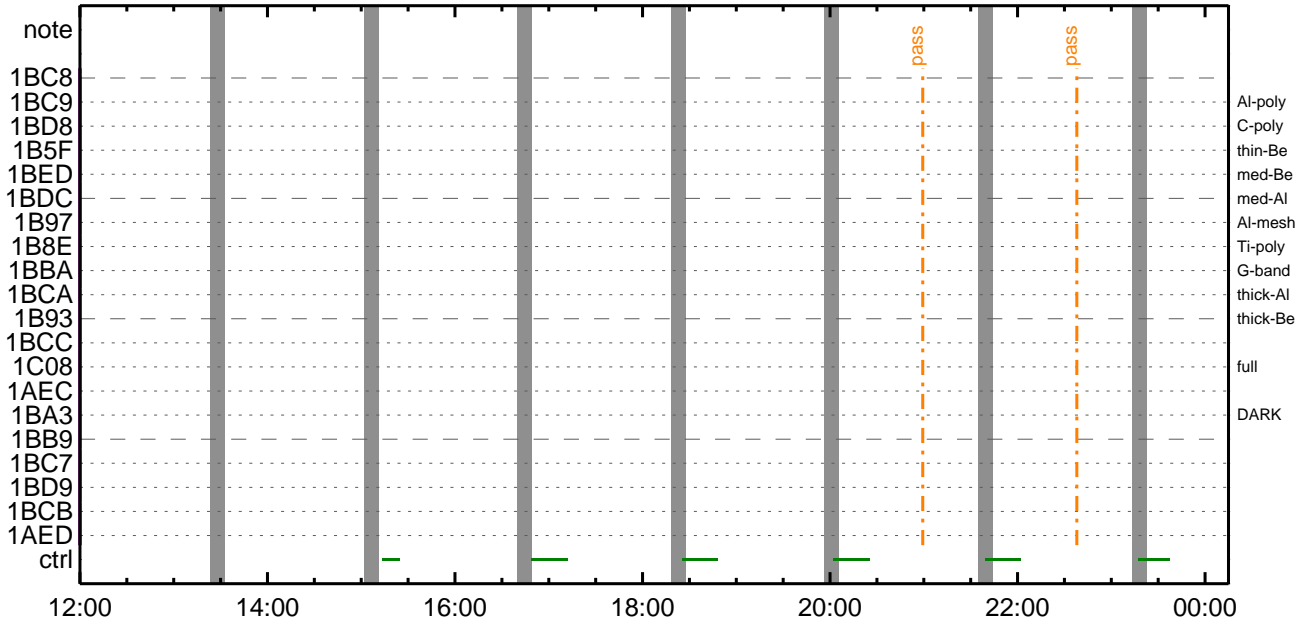
CMDI #0708 2018/08/26



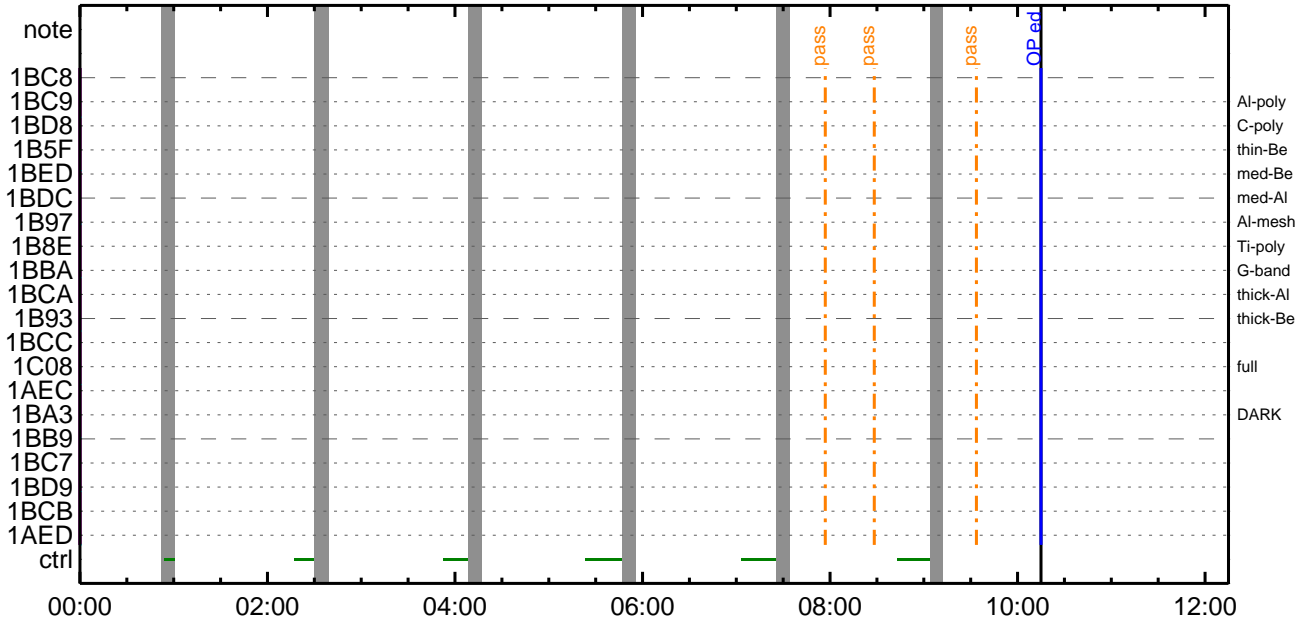
CMDI #0708 2018/08/27



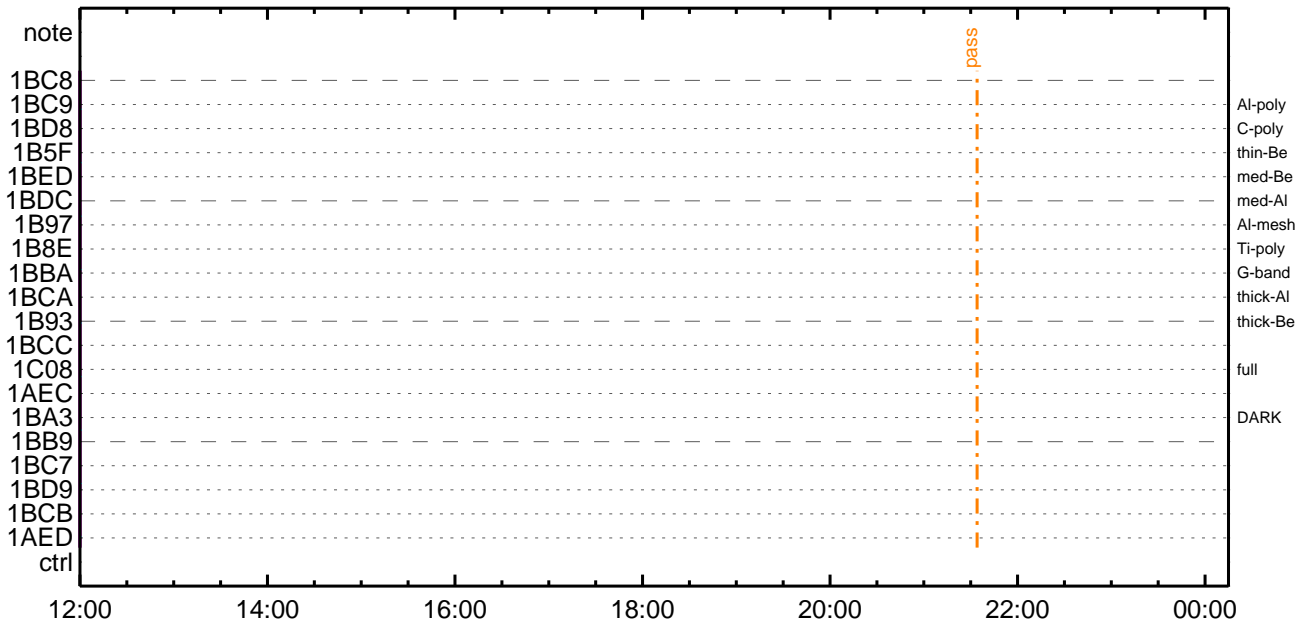
CMDI #0708 2018/08/27



CMDI #0708 2018/08/28



CMDI #0708 2018/08/28









```
0194 (MDP_known_event)
0195 C.
0196 C.
0197 . C. ***** ¥ÐŸ!•İ Daily±;İÑøĒ'Øσ¹αēDCBC•x²è *****
0198 . S. DC-BC dcbc-153:DCBC
0199 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0200 C.
0201 C.
0202 . C. ;ãLOS¥Á¥S¥Ã¥~¼Â»Ü;ä
0203 C.
0204 . C. ***** LOS *****
0205 C.
```







```

0096 C.
0097 C.
0098 . C. *****
0099 C. SOT table upload
0100 C. *****
0101 . C. < Stop SP table >
0102 +. DC 07-F0 MDP_SP_CTRL_MANU
0103 BC (61)
0104 C. -----
0105 C. MDP_SP_CTRL_MODE = MANU [ ]
0106 C. -----
0107 C.
0108 . C. <Upload SP Observation Table>
0109 . S. RAM ram-289:MDP_OBS_S
0110 ( )
0111 C.
0112 . C. < Dump RAMID=MDP_OBS_S >
0113 +. DC 07-F0 MDP_DUMP_SPTBL
0114 BC (83 07 00 00 00 38 b8)
0115 C. -----
0116 C. MDP_OBS_S verify = OK/NG [ ]
0117 C. -----
0118 C.
0119 C. *****
0120 C. SOT TI command set
0121 C. *****
0122 C. Execute, after the success of TBL upload.
0123 +. TI 2018-08-23 10:33:18.0
0124 DC 07-F0 MDP_SOT_MODE_OBSV
0125 BC (40)
0126 . C. -----
0127 C. HK1_TI_CMD_NUM = 1 CNTUP [ ]
0128 C. -----
0129 C.
0130 C.
0131 C. ***** XRT START *****
0132 C.
0133 +. DC 07-F0 MDP_XRT_CTRL_MANU
0134 BC (c1)
0135 +. DC 07-F0 MDP_XRT_CTRL_MANU
0136 BC (c1)
0137 + DC 07-F0 MDP_XRT_MODE_STBY
0138 BC (c3)
0139 . C. ----- Success Verify ? OK / NG____
0140 C.
0141 C. XRT Obs. Table Upload
0142 . S. RAM ram-291:MDP_OBS_X
0143 ( )
0144 C.
0145 +. DC 07-F0 MDP_DUMP_XRTTBL
0146 BC (84 07 00 00 00 3a d4)
0147 . C. ----- Comparison Check ? OK / ERR ____
0148 C.
0149 C.
0150 +. DC 07-F0 MDP_XRT_ROI_SET
0151 BC (cd 01 b1 b1 04 04)
0152 + DC 07-F0 MDP_XRT_ROI_SET
0153 BC (cd 02 b1 b1 08 08)
0154 + DC 07-F0 MDP_XRT_ROI_SET
0155 BC (cd 03 b1 b1 08 08)
0156 + DC 07-F0 MDP_XRT_ROI_SET
0157 BC (cd 04 b1 b1 06 06)
0158 + DC 07-F0 MDP_XRT_ROI_SET
0159 BC (cd 05 85 83 06 06)
0160 + DC 07-F0 MDP_XRT_ROI_SET
0161 BC (cd 06 80 80 20 20)
0162 + DC 07-F0 MDP_XRT_ROI_SET
0163 BC (cd 07 80 80 20 08)
0164 + DC 07-F0 MDP_XRT_ROI_SET
0165 BC (cd 08 80 80 08 20)
0166 + DC 07-F0 MDP_XRT_ROI_SET
0167 BC (cd 09 c0 c0 10 10)
0168 + DC 07-F0 MDP_XRT_ROI_SET
0169 BC (cd 0a 40 c0 10 10)
0170 + DC 07-F0 MDP_XRT_ROI_SET
0171 BC (cd 0b 40 40 10 10)
0172 + DC 07-F0 MDP_XRT_ROI_SET
0173 BC (cd 0c c0 40 10 10)
0174 + DC 07-F0 MDP_XRT_ROI_SET
0175 BC (cd 0d 85 83 06 06)
0176 + DC 07-F0 MDP_XRT_ROI_SET
0177 BC (cd 0e 85 83 08 08)
0178 + DC 07-F0 MDP_XRT_ROI_SET
0179 BC (cd 0f 80 80 06 06)
0180 + DC 07-F0 MDP_XRT_ROI_SET
0181 BC (cd 10 80 80 08 08)
0182 + DC 07-F0 MDP_XRT_FLD_ENA
0183 BC (d8)
0184 + DC 07-F0 MDP_XRT_FLRCTRL_ENA
0185 BC (c8)
0186 + DC 07-F0 MDP_XRT_ARS_DIS
0187 BC (d5)
0188 + DC 07-F0 MDP_XRT_AEC_RESET
0189 BC (d0)
0190 + DC 07-F0 MDP_XRT_FLD_RESET
0191 BC (da)
0192 +. DC 07-F0 MDP_XRT_QT_PROG_SET
0193 BC (c4 12)

```

0194 . C. ----- Success Verify ? OK / NG \_\_\_\_  
0195 C.  
0196 C.  
0197 . C. All OK? Yes--> Please Proceed. / No --> Stop here.  
0198 C.  
0199 +. DC 07-F0 MDP\_XRT\_MODE\_OBSV  
0200 BC (c2)  
0201 +. TI 2018-08-23 10:33:02.0  
0202 DC 07-F0 MDP\_XRT\_MODE\_OBSV  
0203 BC (c2)  
0204 . C. ----- Success Verify ? OK / NG \_\_\_\_  
0205 C.  
0206 C. \*\*\*\*\* XRT END \*\*\*\*\*  
0207 C.  
0208 . C. \*\*\*\*\* MDP `úÃîŕî»ö¼ÝŕÊÂĐŕ¹ŕëDCBC•x²è \*\*\*\*\*  
0209 C. (¼ã°îÏÓŸÄŸÊŸŒŸËŸáŸçŸèŕ¼ŕŕ¼Ä»Ûŕ¹ŕé)  
0210 . S. DC-BC dcbc-402:DCBC  
0211 (MDP\_known\_event)  
0212 C.  
0213 C.  
0214 . C. \*\*\*\*\* ŸĐŸ¹•Ï Daily±¿ÎÑŕË´Øŕ¹ŕëDCBC•x²è \*\*\*\*\*  
0215 . S. DC-BC dcbc-153:DCBC  
0216 (SPECIAL-CMD\_DAILY\_OPERATIN\_DCB)  
0217 C.  
0218 C.  
0219 . C. ;ãLOSŸÁŸŸŸÄŸ⁻¼Ä»Û;ä  
0220 C.  
0221 . C. \*\*\*\*\* LOS \*\*\*\*\*  
0222 C.



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

```

2018/08/23 10:44:00.0 AOCs_OrE-point_Start_1_OG [0x097]
                        AOCU_NM 5 02-76 01 00 00 00 00
2018/08/23 10:44:00.5 XRT_TCIB_XRT_S_HTR_A_DIS_436_OG [0x1b4]
                        TCIB_XRT_S_HTR_A_DIS 0 04-C0
2018/08/23 10:44:30.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 10:44:32.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 10:44:34.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2018/08/23 10:44:36.0 XRT_PREFLR_STRT_437_OG [0x1b5]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2018/08/23 10:47:44.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2018/08/23 10:58:30.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 10:58:32.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 10:58:34.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2018/08/23 10:58:36.0 XRT_PREFLR_STRT_437_OG [0x1b5]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2018/08/23 11:01:44.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2018/08/23 12:37:00.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 12:37:02.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 12:37:04.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2018/08/23 12:37:06.0 XRT_PREFLR_STRT_437_OG [0x1b5]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2018/08/23 12:40:14.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2018/08/23 14:15:30.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 14:15:32.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 14:15:34.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2018/08/23 14:15:36.0 XRT_PREFLR_STRT_437_OG [0x1b5]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2018/08/23 14:18:44.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2018/08/23 14:34:30.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 14:34:32.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 14:34:34.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2018/08/23 14:34:36.0 XRT_PREFLR_STRT_437_OG [0x1b5]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2018/08/23 14:37:44.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2018/08/23 15:54:00.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 15:54:02.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 15:54:04.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2018/08/23 15:54:06.0 XRT_PREFLR_STRT_437_OG [0x1b5]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2018/08/23 15:57:14.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2018/08/23 17:19:54.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 17:19:56.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 17:19:58.0 XRT_FOCUS_POSITION_422_OG [0x1a6]
                        XRT_FOCUS_POSITION 4 07-F8 22 ff aa 00
2018/08/23 17:20:00.0 AOCs_OrE-point_Start_2_OG [0x098]
                        AOCU_NM 5 02-76 00 2e f9 2e f9
2018/08/23 17:20:18.0 XRT_FLD_DIS_425_OG [0x1a9]
                        MDP_XRT_FLD_DIS 1 07-F0 d9
2018/08/23 17:20:20.0 XRT_FLRCTRL_DIS_417_OG [0x1a1]
                        MDP_XRT_FLRCTRL_DIS 1 07-F0 c9
2018/08/23 17:22:56.0 XRT_ARS_DIS_418_OG [0x1a2]
                        MDP_XRT_ARS_DIS 1 07-F0 d5
2018/08/23 17:22:58.0 XRT_QT_PROG_SET_427_OG [0x1ab]
                        MDP_XRT_QT_PROG_SET 2 07-F0 c4 04
2018/08/23 17:23:00.0 XRT_CTRL_AUTO_408_OG [0x198]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2018/08/23 17:29:54.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 17:29:56.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2018/08/23 17:29:58.0 XRT_FOCUS_POSITION_422_OG [0x1a6]
                        XRT_FOCUS_POSITION 4 07-F8 22 ff aa 00
2018/08/23 17:30:00.0 AOCs_OrE-point_Start_3_OG [0x099]
                        AOCU_NM 5 02-76 00 2e f9 d1 07
2018/08/23 17:30:18.0 XRT_FLD_DIS_425_OG [0x1a9]

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|            |            |                                   |                     |   |       |                |
|------------|------------|-----------------------------------|---------------------|---|-------|----------------|
| 2018/08/23 | 17:30:20.5 | XRT_FLRCTRL_DIS_417_OG [0x1a1]    | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |
| 2018/08/23 | 17:32:56.5 | XRT_ARS_DIS_445_OG [0x1bd]        | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |
| 2018/08/23 | 17:32:58.5 | XRT_QT_PROG_SET_429_OG [0x1ad]    | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |
| 2018/08/23 | 17:33:00.5 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 14          |
| 2018/08/23 | 17:39:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/23 | 17:39:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 | 17:39:58.0 | XRT_FOCUS_POSITION_422_OG [0x1a6] | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 | 17:40:00.0 | AOCS_OrE-point_Start_4_OG [0x09a] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |
| 2018/08/23 | 17:40:18.0 | XRT_FLD_DIS_425_OG [0x1a9]        | AOCU_NM             | 5 | 02-76 | 00 d1 07 d1 07 |
| 2018/08/23 | 17:40:20.0 | XRT_FLRCTRL_DIS_417_OG [0x1a1]    | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |
| 2018/08/23 | 17:42:56.0 | XRT_ARS_DIS_445_OG [0x1bd]        | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |
| 2018/08/23 | 17:42:58.0 | XRT_QT_PROG_SET_447_OG [0x1bf]    | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |
| 2018/08/23 | 17:43:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 13          |
| 2018/08/23 | 17:49:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/23 | 17:49:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 | 17:49:58.0 | XRT_FOCUS_POSITION_422_OG [0x1a6] | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 | 17:50:00.0 | AOCS_OrE-point_Start_5_OG [0x09b] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |
| 2018/08/23 | 17:50:18.0 | XRT_FLD_DIS_425_OG [0x1a9]        | AOCU_NM             | 5 | 02-76 | 00 d1 07 2e f9 |
| 2018/08/23 | 17:50:20.0 | XRT_FLRCTRL_DIS_417_OG [0x1a1]    | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |
| 2018/08/23 | 17:52:56.0 | XRT_ARS_DIS_445_OG [0x1bd]        | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |
| 2018/08/23 | 17:52:58.0 | XRT_QT_PROG_SET_443_OG [0x1bb]    | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |
| 2018/08/23 | 17:53:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 0b          |
| 2018/08/23 | 18:06:24.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/23 | 18:06:26.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 | 18:06:28.0 | XRT_FOCUS_POSITION_406_OG [0x196] | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 | 18:06:30.0 | AOCS_OrE-point_Start_6_OG [0x09c] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |
| 2018/08/23 | 18:06:48.0 | XRT_FLD_DIS_409_OG [0x199]        | AOCU_NM             | 5 | 02-76 | 00 00 00 00 00 |
| 2018/08/23 | 18:06:50.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]    | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |
| 2018/08/23 | 18:06:52.0 | XRT_ARS_DIS_414_OG [0x19e]        | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |
| 2018/08/23 | 18:09:28.0 | XRT_QT_PROG_SET_449_OG [0x1c1]    | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |
| 2018/08/23 | 18:09:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 03          |
| 2018/08/23 | 18:16:24.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/23 | 18:16:26.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 | 18:16:28.0 | XRT_FOCUS_POSITION_410_OG [0x19a] | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 | 18:16:30.0 | AOCS_OrE-point_Start_1_OG [0x097] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |
| 2018/08/23 | 18:16:48.0 | XRT_FLD_ENA_411_OG [0x19b]        | AOCU_NM             | 5 | 02-76 | 01 00 00 00 00 |
| 2018/08/23 | 18:16:50.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |
| 2018/08/23 | 18:16:52.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |
| 2018/08/23 | 18:16:54.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |
| 2018/08/23 | 18:16:56.0 | XRT_FLD_RESET_432_OG [0x1b0]      | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |
| 2018/08/23 | 18:19:26.0 | XRT_QT_PROG_SET_405_OG [0x195]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2018/08/23 | 18:19:28.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 0c          |
| 2018/08/23 | 18:19:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |
| 2018/08/23 | 19:10:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/23 | 19:10:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 | 19:10:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/23 |            |                                   | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |

|            |            |                                   |   |       |             |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|-------------|--|--|--|--|
| 2018/08/23 | 19:10:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2018/08/23 | 19:13:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2018/08/23 | 19:43:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2018/08/23 | 19:44:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2018/08/23 | 20:49:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/23 | 20:49:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/23 | 20:49:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2018/08/23 | 20:49:06.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2018/08/23 | 20:52:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2018/08/23 | 21:20:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2018/08/23 | 21:21:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2018/08/23 | 22:27:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/23 | 22:27:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/23 | 22:27:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2018/08/23 | 22:27:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2018/08/23 | 22:30:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2018/08/23 | 22:56:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2018/08/23 | 22:57:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2018/08/23 | 23:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/23 | 23:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/23 | 23:59:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |             |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00 |  |  |  |  |
| 2018/08/24 | 00:00:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8          |  |  |  |  |
| 2018/08/24 | 00:00:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8          |  |  |  |  |
| 2018/08/24 | 00:00:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0          |  |  |  |  |
| 2018/08/24 | 00:00:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |             |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5          |  |  |  |  |
| 2018/08/24 | 00:00:26.0 | XRT_FLD_RESET_432_OG [0x1b0]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2018/08/24 | 00:02:56.0 | XRT_QT_PROG_SET_431_OG [0x1af]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 02       |  |  |  |  |
| 2018/08/24 | 00:02:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d       |  |  |  |  |
| 2018/08/24 | 00:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2018/08/24 | 00:05:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/24 | 00:05:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/24 | 00:05:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2018/08/24 | 00:05:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2018/08/24 | 00:08:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2018/08/24 | 00:22:01.0 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2018/08/24 | 00:23:01.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2018/08/24 | 01:37:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/24 | 01:37:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/24 | 01:37:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2018/08/24 | 01:37:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2018/08/24 | 01:40:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2018/08/24 | 01:58:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2018/08/24 | 01:59:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0          |  |  |  |  |
| 2018/08/24 | 03:10:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/24 | 03:10:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1          |  |  |  |  |
| 2018/08/24 | 03:10:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |             |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da          |  |  |  |  |
| 2018/08/24 | 03:10:06.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8          |  |  |  |  |
| 2018/08/24 | 03:13:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |             |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9          |  |  |  |  |
| 2018/08/24 | 03:36:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |             |  |  |  |  |
| 2018/08/24 | 03:37:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |             |  |  |  |  |

|            |            |                                   |                                   |   |       |                   |  |  |  |
|------------|------------|-----------------------------------|-----------------------------------|---|-------|-------------------|--|--|--|
| 2018/08/24 | 04:39:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0                |  |  |  |
| 2018/08/24 | 04:39:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1                |  |  |  |
| 2018/08/24 | 04:39:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1                |  |  |  |
| 2018/08/24 | 04:39:06.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da                |  |  |  |
| 2018/08/24 | 04:42:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8                |  |  |  |
| 2018/08/24 | 05:15:01.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9                |  |  |  |
| 2018/08/24 | 05:16:01.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | XRT_Custom_430_OG [0x1ae]         |   |       |                   |  |  |  |
| 2018/08/24 | 05:51:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0                |  |  |  |
| 2018/08/24 | 05:51:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1                |  |  |  |
| 2018/08/24 | 05:51:58.0 | XRT_FOCUS_POSITION_406_OG [0x196] | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1                |  |  |  |
| 2018/08/24 | 05:52:00.0 | AOCS_Ore-point_Start_6_OG [0x09c] | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00       |  |  |  |
| 2018/08/24 | 05:52:18.0 | XRT_FLD_DIS_409_OG [0x199]        | AOCS_Ore-point_Start_6_OG [0x09c] |   |       |                   |  |  |  |
| 2018/08/24 | 05:52:20.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]    | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00    |  |  |  |
| 2018/08/24 | 05:52:22.0 | XRT_ARS_DIS_414_OG [0x19e]        | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9                |  |  |  |
| 2018/08/24 | 05:54:58.0 | XRT_QT_PROG_SET_449_OG [0x1c1]    | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9                |  |  |  |
| 2018/08/24 | 05:55:00.5 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5                |  |  |  |
| 2018/08/24 | 06:01:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 03             |  |  |  |
| 2018/08/24 | 06:01:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0                |  |  |  |
| 2018/08/24 | 06:01:58.0 | XRT_FOCUS_POSITION_441_OG [0x1b9] | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1                |  |  |  |
| 2018/08/24 | 06:02:00.0 | AOCS_Ore-point_Start_7_OG [0x09d] | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00       |  |  |  |
| 2018/08/24 | 06:02:18.0 | XRT_ROI_A_446_OG [0x1be]          | AOCS_Ore-point_Start_7_OG [0x09d] |   |       |                   |  |  |  |
|            |            |                                   | AOCU_NM                           | 5 | 02-76 | 00 ad 59 00 00    |  |  |  |
|            |            |                                   | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 06 80 80 20 20 |  |  |  |
|            |            |                                   | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 07 80 80 20 08 |  |  |  |
|            |            |                                   | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 08 80 80 20 08 |  |  |  |
|            |            |                                   | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 09 80 60 20 18 |  |  |  |
|            |            |                                   | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 0a a0 80 18 20 |  |  |  |
|            |            |                                   | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 0b 80 80 08 08 |  |  |  |
|            |            |                                   | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 0d 85 83 06 06 |  |  |  |
|            |            |                                   | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 0f 80 80 06 06 |  |  |  |
| 2018/08/24 | 06:02:18.5 | XRT_ROI_B_407_OG [0x197]          | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 0f 80 80 06 06 |  |  |  |
|            |            |                                   | MDP_XRT_ROI_SET                   | 6 | 07-F0 | cd 10 80 80 08 08 |  |  |  |
| 2018/08/24 | 06:02:23.5 | XRT_FLD_DIS_428_OG [0x1ac]        | XRT_FLD_DIS_428_OG [0x1ac]        |   |       |                   |  |  |  |
| 2018/08/24 | 06:16:59.5 | XRT_FLRCTRL_DIS_434_OG [0x1b2]    | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9                |  |  |  |
| 2018/08/24 | 06:17:01.5 | XRT_ARS_DIS_445_OG [0x1bd]        | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9                |  |  |  |
| 2018/08/24 | 06:17:03.5 | XRT_QT_PROG_SET_439_OG [0x1b7]    | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5                |  |  |  |
| 2018/08/24 | 06:17:05.5 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 07             |  |  |  |
| 2018/08/24 | 06:19:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0                |  |  |  |
| 2018/08/24 | 06:19:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1                |  |  |  |
| 2018/08/24 | 06:19:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1                |  |  |  |
| 2018/08/24 | 06:19:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da                |  |  |  |
| 2018/08/24 | 06:22:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8                |  |  |  |
| 2018/08/24 | 06:53:30.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9                |  |  |  |
| 2018/08/24 | 06:54:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | XRT_Custom_430_OG [0x1ae]         |   |       |                   |  |  |  |
| 2018/08/24 | 08:01:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0                |  |  |  |
| 2018/08/24 | 08:01:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1                |  |  |  |
| 2018/08/24 | 08:01:58.0 | XRT_FOCUS_POSITION_441_OG [0x1b9] | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1                |  |  |  |
| 2018/08/24 | 08:02:00.0 | AOCS_Ore-point_Start_8_OG [0x09e] | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00       |  |  |  |
| 2018/08/24 | 08:02:18.0 | XRT_FLD_DIS_428_OG [0x1ac]        | AOCS_Ore-point_Start_8_OG [0x09e] |   |       |                   |  |  |  |
|            |            |                                   | AOCU_NM                           | 5 | 02-76 | 00 00 00 56 35    |  |  |  |
| 2018/08/24 | 08:16:54.0 | XRT_FLRCTRL_DIS_434_OG [0x1b2]    | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9                |  |  |  |
| 2018/08/24 | 08:16:56.0 | XRT_ARS_DIS_445_OG [0x1bd]        | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9                |  |  |  |
| 2018/08/24 | 08:16:58.0 | XRT_QT_PROG_SET_444_OG [0x1bc]    | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5                |  |  |  |
| 2018/08/24 | 08:17:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 01             |  |  |  |
|            |            |                                   | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0                |  |  |  |

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|            |            |                                   |                     |   |       |                |  |  |
|------------|------------|-----------------------------------|---------------------|---|-------|----------------|--|--|
| 2018/08/24 | 09:39:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 09:39:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 09:39:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/08/24 | 09:39:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2018/08/24 | 09:42:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2018/08/24 | 10:01:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 10:01:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 10:01:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |  |  |
| 2018/08/24 | 10:02:00.0 | AOCS_Or-point_Start_9_OG [0x09f]  | AOCU_NM             | 5 | 02-76 | 00 b4 fe 01 99 |  |  |
| 2018/08/24 | 10:02:18.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |  |
| 2018/08/24 | 10:02:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |  |
| 2018/08/24 | 10:02:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |  |
| 2018/08/24 | 10:02:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |
| 2018/08/24 | 10:02:26.0 | XRT_FLD_RESET_432_OG [0x1b0]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/08/24 | 10:04:56.0 | XRT_QT_PROG_SET_426_OG [0x1aa]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 0a          |  |  |
| 2018/08/24 | 10:04:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |  |  |
| 2018/08/24 | 10:10:00.0 | XRT_Custom_430_OG [0x1ae]         |                     |   |       |                |  |  |
| 2018/08/24 | 10:11:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/08/24 | 11:34:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 11:34:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 11:34:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/08/24 | 11:34:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2018/08/24 | 11:37:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2018/08/24 | 11:48:30.0 | XRT_Custom_430_OG [0x1ae]         |                     |   |       |                |  |  |
| 2018/08/24 | 11:49:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/08/24 | 13:13:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 13:13:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 13:13:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/08/24 | 13:13:06.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2018/08/24 | 13:16:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2018/08/24 | 13:26:30.0 | XRT_Custom_430_OG [0x1ae]         |                     |   |       |                |  |  |
| 2018/08/24 | 13:27:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/08/24 | 14:51:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 14:51:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 14:51:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/08/24 | 14:51:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2018/08/24 | 14:54:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2018/08/24 | 15:05:00.0 | XRT_Custom_430_OG [0x1ae]         |                     |   |       |                |  |  |
| 2018/08/24 | 15:06:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/08/24 | 15:06:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 15:06:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 15:06:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/08/24 | 15:06:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2018/08/24 | 15:09:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2018/08/24 | 15:17:00.0 | XRT_Custom_430_OG [0x1ae]         |                     |   |       |                |  |  |
| 2018/08/24 | 15:18:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/08/24 | 16:29:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 16:29:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/08/24 | 16:29:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |

|            |            |                                    |                     |   |       |                |  |
|------------|------------|------------------------------------|---------------------|---|-------|----------------|--|
| 2018/08/24 | 16:29:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]     | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |
| 2018/08/24 | 16:32:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |
| 2018/08/24 | 17:04:30.0 | XRT_Custom_430_OG [0x1ae]          |                     |   |       |                |  |
| 2018/08/24 | 17:05:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/08/24 | 17:53:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 17:53:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 17:53:58.0 | XRT_FOCUS_POSITION_406_OG [0x196]  | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |  |
| 2018/08/24 | 17:54:00.0 | AOCS_Or-e-point_Start_6_OG [0x09c] | AOCU_NM             | 5 | 02-76 | 00 00 00 00 00 |  |
| 2018/08/24 | 17:54:18.0 | XRT_FLD_DIS_409_OG [0x199]         | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |  |
| 2018/08/24 | 17:54:20.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]     | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |  |
| 2018/08/24 | 17:54:22.0 | XRT_ARS_DIS_414_OG [0x19e]         | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |
| 2018/08/24 | 17:56:58.0 | XRT_QT_PROG_SET_449_OG [0x1c1]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 03          |  |
| 2018/08/24 | 17:57:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/08/24 | 18:03:54.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 18:03:56.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 18:03:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a]  | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |  |
| 2018/08/24 | 18:04:00.0 | AOCS_Or-e-point_Start_1_OG [0x097] | AOCU_NM             | 5 | 02-76 | 01 00 00 00 00 |  |
| 2018/08/24 | 18:04:18.0 | XRT_FLD_ENA_411_OG [0x19b]         | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |
| 2018/08/24 | 18:04:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]     | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |
| 2018/08/24 | 18:04:22.0 | XRT_AEC_RESET_448_OG [0x1c0]       | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |
| 2018/08/24 | 18:04:24.0 | XRT_ARS_DIS_423_OG [0x1a7]         | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |
| 2018/08/24 | 18:04:26.0 | XRT_FLD_RESET_432_OG [0x1b0]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |
| 2018/08/24 | 18:06:56.0 | XRT_QT_PROG_SET_405_OG [0x195]     | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 0c          |  |
| 2018/08/24 | 18:06:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]     | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |  |
| 2018/08/24 | 18:07:00.0 | XRT_CTRL_AUTO_408_OG [0x198]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/08/24 | 18:08:00.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 18:08:02.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 18:08:04.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |
| 2018/08/24 | 18:08:06.0 | XRT_PREFLR_STRT_437_OG [0x1b5]     | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |
| 2018/08/24 | 18:11:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |
| 2018/08/24 | 18:41:00.0 | XRT_Custom_430_OG [0x1ae]          |                     |   |       |                |  |
| 2018/08/24 | 18:42:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/08/24 | 19:46:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 19:46:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 19:46:34.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |
| 2018/08/24 | 19:46:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]     | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |
| 2018/08/24 | 19:49:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |
| 2018/08/24 | 20:17:30.0 | XRT_Custom_430_OG [0x1ae]          |                     |   |       |                |  |
| 2018/08/24 | 20:18:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/08/24 | 21:25:00.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 21:25:02.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 21:25:04.0 | XRT_FLD_RESET_415_OG [0x19f]       | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |
| 2018/08/24 | 21:25:06.0 | XRT_PREFLR_STRT_437_OG [0x1b5]     | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |
| 2018/08/24 | 21:28:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]     | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |
| 2018/08/24 | 21:55:00.0 | XRT_Custom_430_OG [0x1ae]          |                     |   |       |                |  |
| 2018/08/24 | 21:56:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]       | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/08/24 | 23:03:30.0 | XRT_CTRL_MANU_400_OG [0x190]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 23:03:32.0 | XRT_CTRL_MANU_402_OG [0x192]       | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/08/24 | 23:03:34.0 | XRT_FLD_RESET_415_OG [0x19f]       |                     |   |       |                |  |

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|            |            |                                   |                     |   |       |                |
|------------|------------|-----------------------------------|---------------------|---|-------|----------------|
| 2018/08/24 | 23:03:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2018/08/24 | 23:06:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2018/08/24 | 23:29:30.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2018/08/24 | 23:30:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/25 | 00:41:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 00:41:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 00:41:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2018/08/25 | 00:41:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2018/08/25 | 00:44:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2018/08/25 | 00:55:00.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/25 | 00:56:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 02:10:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 02:10:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 02:10:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2018/08/25 | 02:10:06.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2018/08/25 | 02:13:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2018/08/25 | 02:33:00.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/25 | 02:34:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 02:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 02:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 02:59:58.0 | XRT_FOCUS_POSITION_406_OG [0x196] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |
| 2018/08/25 | 03:00:00.0 | AOCS_Or-point_Start_6_OG [0x09c]  | AOCU_NM             | 5 | 02-76 | 00 00 00 00 00 |
| 2018/08/25 | 03:00:18.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |
| 2018/08/25 | 03:00:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |
| 2018/08/25 | 03:00:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |
| 2018/08/25 | 03:00:24.0 | XRT_ARS_DIS_404_OG [0x194]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |
| 2018/08/25 | 03:02:54.0 | XRT_FLD_RESET_420_OG [0x1a4]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2018/08/25 | 03:02:56.0 | XRT_QT_PROG_SET_403_OG [0x193]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 08          |
| 2018/08/25 | 03:02:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |
| 2018/08/25 | 03:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/25 | 03:45:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 03:45:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 03:45:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2018/08/25 | 03:45:06.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2018/08/25 | 03:48:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2018/08/25 | 04:11:30.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/25 | 04:12:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 05:15:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 05:15:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 05:15:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2018/08/25 | 05:15:06.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2018/08/25 | 05:18:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2018/08/25 | 05:50:00.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2018/08/25 | 05:51:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 05:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 05:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2018/08/25 | 05:59:58.0 | XRT_FOCUS_POSITION_406_OG [0x196] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |
| 2018/08/25 | 06:00:18.0 | XRT_FLD_DIS_409_OG [0x199]        | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |
| 2018/08/25 | 06:00:20.0 | XRT_FLRCTRL_DIS_413_OG [0x19d]    |                     |   |       |                |

|            |            |                                   |                              |   |       |                |
|------------|------------|-----------------------------------|------------------------------|---|-------|----------------|
| 2018/08/25 | 06:00:22.0 | XRT_ARS_DIS_414_OG [0x19e]        | MDP_XRT_FLRCTRL_DIS          | 1 | 07-F0 | c9             |
| 2018/08/25 | 06:02:58.0 | XRT_QT_PROG_SET_449_OG [0x1c1]    | MDP_XRT_ARS_DIS              | 1 | 07-F0 | d5             |
| 2018/08/25 | 06:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_QT_PROG_SET          | 2 | 07-F0 | c4 03          |
| 2018/08/25 | 06:09:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO            | 1 | 07-F0 | c0             |
| 2018/08/25 | 06:09:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 06:09:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 06:10:00.0 | AOCS_OrE-point_Start_1_OG [0x097] | XRT_FOCUS_POSITION           | 4 | 07-F8 | 22 fe 97 00    |
| 2018/08/25 | 06:10:18.0 | XRT_FLD_ENA_411_OG [0x19b]        | AOCU_NM                      | 5 | 02-76 | 01 00 00 00 00 |
| 2018/08/25 | 06:10:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLD_ENA              | 1 | 07-F0 | d8             |
| 2018/08/25 | 06:10:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_FLRCTRL_ENA          | 1 | 07-F0 | c8             |
| 2018/08/25 | 06:10:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_AEC_RESET            | 1 | 07-F0 | d0             |
| 2018/08/25 | 06:10:26.0 | XRT_FLD_RESET_432_OG [0x1b0]      | MDP_XRT_ARS_DIS              | 1 | 07-F0 | d5             |
| 2018/08/25 | 06:12:56.0 | XRT_QT_PROG_SET_405_OG [0x195]    | MDP_XRT_FLD_RESET            | 1 | 07-F0 | da             |
| 2018/08/25 | 06:12:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_QT_PROG_SET          | 2 | 07-F0 | c4 0c          |
| 2018/08/25 | 06:13:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_FL_PROG_SET          | 2 | 07-F0 | c5 0d          |
| 2018/08/25 | 06:55:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO            | 1 | 07-F0 | c0             |
| 2018/08/25 | 06:55:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 06:55:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 06:55:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_FLD_RESET            | 1 | 07-F0 | da             |
| 2018/08/25 | 06:58:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT          | 1 | 07-F0 | e8             |
| 2018/08/25 | 07:28:00.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP          | 1 | 07-F0 | e9             |
| 2018/08/25 | 07:29:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | XRT_Custom_430_OG [0x1ae]    |   |       |                |
| 2018/08/25 | 08:35:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO            | 1 | 07-F0 | c0             |
| 2018/08/25 | 08:35:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 08:35:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 08:35:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_FLD_RESET            | 1 | 07-F0 | da             |
| 2018/08/25 | 08:38:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT          | 1 | 07-F0 | e8             |
| 2018/08/25 | 09:06:30.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP          | 1 | 07-F0 | e9             |
| 2018/08/25 | 09:07:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | XRT_Custom_430_OG [0x1ae]    |   |       |                |
| 2018/08/25 | 10:15:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO            | 1 | 07-F0 | c0             |
| 2018/08/25 | 10:15:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 10:15:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 10:15:36.0 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_FLD_RESET            | 1 | 07-F0 | da             |
| 2018/08/25 | 10:18:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT          | 1 | 07-F0 | e8             |
| 2018/08/25 | 10:31:00.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP          | 1 | 07-F0 | e9             |
| 2018/08/25 | 10:32:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | XRT_Custom_430_OG [0x1ae]    |   |       |                |
| 2018/08/25 | 10:32:00.5 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO            | 1 | 07-F0 | c0             |
| 2018/08/25 | 10:32:02.5 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 10:32:04.5 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
| 2018/08/25 | 10:32:06.5 | XRT_PREFLR_STRT_437_OG [0x1b5]    | MDP_XRT_FLD_RESET            | 1 | 07-F0 | da             |
| 2018/08/25 | 10:35:14.5 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT          | 1 | 07-F0 | e8             |
| 2018/08/25 | 10:40:00.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_PREFLR_STOP          | 1 | 07-F0 | e9             |
| 2018/08/25 | 11:22:00.0 | AOCS_OrE-point_Start_6_OG [0x09c] | XRT_CTRL_MANU_402_OG [0x192] |   |       |                |
|            |            | AOCU_NM                           | MDP_XRT_CTRL_MANU            | 1 | 07-F0 | c1             |
|            |            |                                   | AOCU_NM                      | 5 | 02-76 | 00 00 00 00 00 |