

# XRT Timeline to be uploaded on 2018/04/10

Period: 2018/04/10 10:47:00 - 2018/04/14 11:29:00

\* \* \* \* \*

Normal mode

\* \* \* \* \*

## XOB #1B8C: CME watch - 4x4 - AEC 1/2/3 - Al-poly - G-band (1x1,512x512,1ms) - Leak (1x1,512x512,1ms) - 90s cad (G-band/Leak first)

| Term                            | Pointing (x, y)                                    | Comment                                      |
|---------------------------------|--|--|
| 04/10 11:00:00 - 04/10 17:59:54 | Track ( 2.1, -442.0) <sup>@ 04/10 10:57:00</sup>   | # OP start + 10min - Quiet Sun emerging flux |
| 04/10 18:13:00 - 04/10 19:59:54 | Track ( 54.8, -442.5) <sup>@ 04/10 18:10:00</sup>  | # Quiet Sun emerging flux                    |
| 04/12 05:48:00 - 04/12 10:29:54 | Track ( 307.0, -449.8) <sup>@ 04/12 05:45:00</sup> | # Quiet Sun emerging flux                    |

**PROG= 16 1-time(s)**

- Subr= 1 1-time(s) 2.0sec
  - Seqn= 30 1-time(s) 2.0sec
    - Open/G-band Open/G-band open Safe Norm 1ms Obs 1x1 512x512 (1024, 1024) Q=90 0 0 2.0sec
    - Open/G-band Open/G-band close Safe Norm 1ms Obs 1x1 512x512 (1024, 1024) Q=95 0 0 2.0sec
- Subr= 2 40-time(s) 90.0sec
  - Seqn= 60 1-time(s) 2.0sec
    - Al-poly/Open Al-poly/Open close Safe Norm 500ms Obs 4x4 2048x2048 (1024, 1024) DPCM 1 0 2.0sec
    - Al-poly/Open Al-poly/Open close Safe Norm 125ms Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec
    - Al-poly/Open Al-poly/Open close Safe Norm 1.00s Obs 4x4 2048x2048 (1024, 1024) DPCM 2 0 2.0sec

| Default Filter | Thicker Filter | VLS | mode | image | Exp. | CCD | Bin | ROI: size (center) | Comp. | AEC Buffer | Interval |
|----------------|----------------|-----|------|-------|------|-----|-----|--------------------|-------|------------|----------|
|                |                |     |      |       |      |     |     |                    |       |            |          |

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

| Term                            | Pointing (x, y)   | Comment  |
|---------------------------------|-------------------|----------|
| 04/10 18:03:00 - 04/10 18:09:54 | Fixed ( 0.0, 0.0) | synoptic |

**PROG= 18 1-time(s)**

- Subr= 1 1-time(s) 2.0sec
  - Seqn= 5 1-time(s) 2.0sec
    - Open/Ti-poly Open/thick-Al close Safe Dark 500ms Obs 2x2 2048x2048 (1024, 1024) Q=98 0 0 2.0sec
    - Open/Ti-poly Open/thick-Al close Safe Dark 500ms Obs 4x4 2048x2048 (1024, 1024) Q=98 0 0 2.0sec
    - Open/Ti-poly Open/thick-Al close Safe Dark 500ms Obs 8x8 2048x2048 (1024, 1024) Q=98 0 0 2.0sec
    - Open/Ti-poly Open/thick-Al close Safe Dark 500ms Obs 1x1 2048x512 (1024, 1024) DPCM 0 0 2.0sec
    - Open/Ti-poly Open/thick-Al close Safe Dark 500ms Obs 1x1 512x2048 (1024, 1024) DPCM 0 0 2.0sec
  - Seqn= 36 1-time(s) 2.0sec
    - Open/Al-mesh Open/Al-mesh close Safe Norm 63ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
    - Open/Al-mesh Open/Al-mesh close Safe Norm 500ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
    - Open/Al-mesh Open/Al-mesh close Safe Norm 2.83s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
  - Seqn= 99 1-time(s) 2.0sec
    - Al-poly/Open Al-poly/Open close Safe Norm 44ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
    - Al-poly/Open Al-poly/Open close Safe Norm 500ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
    - Al-poly/Open Al-poly/thick-Al close Safe Norm 4.00s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
  - Seqn= 33 1-time(s) 2.0sec
    - 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
  - Seqn= 23 1-time(s) 4.0sec
    - 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
- Subr= 2 1-time(s) 2.0sec
  - Seqn= 46 1-time(s) 2.0sec
    - Open/thick-Be Open/thick-Be close Safe Norm 64.0s Obs 2x2 2048x2048 (1024, 1024) Q=98 0 0 2.0sec
  - Seqn= 17 1-time(s) 2.0sec
    - med-Al/Open med-Al/Open close Safe Norm 5.66s Obs 2x2 2048x2048 (1024, 1024) Q=98 0 0 2.0sec
    - med-Al/Open med-Al/Open close Safe Norm 64.0s Obs 2x2 2048x2048 (1024, 1024) Q=98 0 0 2.0sec
  - Seqn= 25 1-time(s) 2.0sec
    - Al-poly/Ti-poly Al-poly/thick-Al close Safe Norm 500ms Obs 2x2 2048x2048 (1024, 1024) Q=98 0 0 2.0sec
    - Al-poly/Ti-poly Al-poly/thick-Al close Safe Norm 8.00s Obs 2x2 2048x2048 (1024, 1024) Q=98 0 0 2.0sec

| Default Filter | Thicker Filter | VLS | mode | image | Exp. | CCD | Bin | ROI: size (center) | Comp. | AEC Buffer | Interval |
|----------------|----------------|-----|------|-------|------|-----|-----|--------------------|-------|------------|----------|
|                |                |     |      |       |      |     |     |                    |       |            |          |

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

| Term                            | Pointing (x, y)     | Comment               |
|---------------------------------|---------------------|-----------------------|
| 04/10 20:15:00 - 04/10 21:59:54 | Fixed ( 0.0, 930.0) | # Co-alignment N pole |

**PROG= 20 1-time(s)**

- Subr= 1 24-time(s) 300.0sec
  - Seqn= 98 1-time(s) 2.0sec
    - Open/G-band Open/G-band open Safe Norm 1ms Obs 2x2 2048x1536 (1024, 768) Q=90 0 0 2.0sec
  - Seqn= 63 1-time(s) 2.0sec
    - Open/G-band Open/G-band close Safe Norm 1ms Obs 2x2 2048x1536 (1024, 768) Q=90 0 0 2.0sec
  - Seqn= 45 1-time(s) 2.0sec
    - Al-poly/Open med-Be/Open close Safe Norm 4.00s Obs 2x2 2048x1536 (1024, 768) 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

| Term                            | Pointing (x, y)      | Comment               |
|---------------------------------|----------------------|-----------------------|
| 04/10 22:15:00 - 04/10 23:59:54 | Fixed ( -970.0, 0.0) | # Co-alignment E limb |

**PROG= 07 1-time(s)**

|                                    |                |                |       |      |       |       |     |     |                    |              |            |            |
|------------------------------------|----------------|----------------|-------|------|-------|-------|-----|-----|--------------------|--------------|------------|------------|
| <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 | 1536x2048          | (1280, 1024) | 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 | 1536x2048          | (1280, 1024) | 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 | 1536x2048          | (1280, 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 #1BE8: HOP349 - 3-filter Synoptics (Al-mesh[512/2048/4096], Al-poly[512/4096/8192], thin-Be[3897/16384/32768] with 512x512 G-band+Leak - 45 min**

| Term                            | Pointing (x, y)   | Comment   |
|---------------------------------|-------------------|-----------|
| 04/11 00:03:00 - 04/11 02:59:54 | Fixed ( 0.0, 0.0) | # HOP 349 |
| 04/11 23:03:00 - 04/12 01:59:54 | Fixed ( 0.0, 0.0) | # HOP 349 |

|                                    |                |                  |       |      |       |       |     |     |                    |              |            |            |
|------------------------------------|----------------|------------------|-------|------|-------|-------|-----|-----|--------------------|--------------|------------|------------|
| <b>PROG= 09 Inf.-time(s)</b>       |                |                  |       |      |       |       |     |     |                    |              |            |            |
| <b>Subr= 1 1-time(s) 300.0sec</b>  |                |                  |       |      |       |       |     |     |                    |              |            |            |
| <b>Seqn= 12 1-time(s) 2.0sec</b>   |                |                  |       |      |       |       |     |     |                    |              |            |            |
|                                    | Open/Al-mesh   | Open/Al-mesh     | close | Safe | Norm  | 500ms | Obs | 2x2 | 2048x2048          | (1024, 1024) | Q=95       | 0 0 2.0sec |
|                                    | Open/Al-mesh   | Open/Al-mesh     | close | Safe | Norm  | 2.00s | Obs | 2x2 | 2048x2048          | (1024, 1024) | Q=95       | 0 0 2.0sec |
|                                    | Open/Al-mesh   | Open/Al-mesh     | close | Safe | Norm  | 4.00s | Obs | 2x2 | 2048x2048          | (1024, 1024) | Q=95       | 0 0 2.0sec |
| <b>Seqn= 82 1-time(s) 2.0sec</b>   |                |                  |       |      |       |       |     |     |                    |              |            |            |
|                                    | 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 |
|                                    | Al-poly/Open   | Al-poly/Open     | close | Safe | Norm  | 8.00s | Obs | 2x2 | 2048x2048          | (1024, 1024) | Q=95       | 0 0 2.0sec |
| <b>Seqn= 52 1-time(s) 2.0sec</b>   |                |                  |       |      |       |       |     |     |                    |              |            |            |
|                                    | thin-Be/Open   | thin-Be/Open     | close | Safe | Norm  | 2.83s | Obs | 2x2 | 2048x2048          | (1024, 1024) | Q=95       | 0 0 2.0sec |
|                                    | thin-Be/Open   | thin-Be/Open     | close | Safe | Norm  | 16.0s | Obs | 2x2 | 2048x2048          | (1024, 1024) | Q=95       | 0 0 2.0sec |
|                                    | thin-Be/Open   | thin-Be/Open     | close | Safe | Norm  | 32.0s | Obs | 2x2 | 2048x2048          | (1024, 1024) | Q=95       | 0 0 2.0sec |
| <b>Seqn= 30 1-time(s) 2.0sec</b>   |                |                  |       |      |       |       |     |     |                    |              |            |            |
|                                    | Open/G-band    | Open/G-band      | open  | Safe | Norm  | 1ms   | Obs | 1x1 | 512x512            | (1024, 1024) | Q=90       | 0 0 2.0sec |
|                                    | Open/G-band    | Open/G-band      | close | Safe | Norm  | 1ms   | Obs | 1x1 | 512x512            | (1024, 1024) | Q=95       | 0 0 2.0sec |
| <b>Subr= 2 18-time(s) 150.0sec</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   |

**XOB #1BE9: HOP81/206 2-filter - Al/poly 16s, Al/mesh 12s 30s cadence, G-band - 384x384 1ms**

| Term                            | Pointing (x, y)      | Comment                      |
|---------------------------------|----------------------|------------------------------|
| 04/11 03:03:00 - 04/11 06:02:54 | Fixed ( 0.0, -950.0) | # South pole jet observation |
| 04/11 06:16:00 - 04/11 12:59:54 | Fixed ( 0.0, -950.0) | # South pole jet observation |
| 04/11 20:03:00 - 04/11 22:59:54 | Fixed ( 0.0, -950.0) | # South pole jet observation |
| 04/12 02:03:00 - 04/12 05:34:54 | Fixed ( 0.0, -950.0) | # South pole jet observation |

|                                   |                |                |       |      |       |       |     |     |                    |              |            |            |
|-----------------------------------|----------------|----------------|-------|------|-------|-------|-----|-----|--------------------|--------------|------------|------------|
| <b>PROG= 19 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= 39 1-time(s) 30.0sec</b> |                |                |       |      |       |       |     |     |                    |              |            |            |
|                                   | Open/Al-mesh   | Open/Al-mesh   | close | Safe | Norm  | 11.3s | Obs | 1x1 | 384x384            | (1064, 1048) | Q=90       | 0 0 2.0sec |
|                                   | Al-poly/Open   | Al-poly/Open   | close | Safe | Norm  | 16.0s | 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 #1BE7: Synoptic Q95 2x2 - Al/mesh(512/2048/4096) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 - 1x1 2048x512) + Al-poly(512/4096/8192)**

| Term                            | Pointing (x, y)   | Comment                     |
|---------------------------------|-------------------|-----------------------------|
| 04/11 06:06:00 - 04/11 06:12:54 | Fixed ( 0.0, 0.0) | synoptic, shifted 3.0 min   |
| 04/11 18:08:00 - 04/11 18:14:54 | Fixed ( 0.0, 0.0) | synoptic, shifted 5.0 min   |
| 04/12 05:38:00 - 04/12 05:44:54 | Fixed ( 0.0, 0.0) | synoptic, shifted -25.0 min |

|                                  |              |               |       |      |      |       |     |     |           |              |      |            |
|----------------------------------|--------------|---------------|-------|------|------|-------|-----|-----|-----------|--------------|------|------------|
| <b>PROG= 08 1-time(s)</b>        |              |               |       |      |      |       |     |     |           |              |      |            |
| <b>Subr= 1 1-time(s) 2.0sec</b>  |              |               |       |      |      |       |     |     |           |              |      |            |
| <b>Seqn= 5 1-time(s) 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= 12 1-time(s) 2.0sec</b> |              |               |       |      |      |       |     |     |           |              |      |            |
|                                  | Open/Al-mesh | Open/Al-mesh  | close | Safe | Norm | 500ms | Obs | 2x2 | 2048x2048 | (1024, 1024) | Q=95 | 0 0 2.0sec |
|                                  | Open/Al-mesh | Open/Al-mesh  | close | Safe | Norm | 2.00s | Obs | 2x2 | 2048x2048 | (1024, 1024) | Q=95 | 0 0 2.0sec |

|                                  |                  |       |      |       |       |     |     |                        |       |            |          |        |
|----------------------------------|------------------|-------|------|-------|-------|-----|-----|------------------------|-------|------------|----------|--------|
| Open/Al-mesh                     | Open/Al-mesh     | close | Safe | Norm  | 4.00s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
| <b>Seqn= 82 1-time(s) 2.0sec</b> |                  |       |      |       |       |     |     |                        |       |            |          |        |
| 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 |
| Al-poly/Open                     | Al-poly/Open     | close | Safe | Norm  | 8.00s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
| <b>Seqn= 52 1-time(s) 2.0sec</b> |                  |       |      |       |       |     |     |                        |       |            |          |        |
| thin-Be/Open                     | thin-Be/Open     | close | Safe | Norm  | 2.83s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
| thin-Be/Open                     | thin-Be/Open     | close | Safe | Norm  | 16.0s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
| thin-Be/Open                     | thin-Be/Open     | close | Safe | Norm  | 32.0s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
| <b>Seqn= 23 1-time(s) 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 #1BA4: AR Standard-A(Filter-Ratio with Al/poly and thin-Be) with PFB, 384x384 at 1064 1048, thin-Be, thick-Al, Al/Poly context, with G-band (1ms/1ms)**

| Term                            | Pointing (x, y)        | Comment      |
|---------------------------------|------------------------|--------------|
| 04/11 13:03:00 - 04/11 18:04:54 | Fixed ( 935.0, -196.0) | # ALMA-C5 #9 |
| 04/11 18:18:00 - 04/11 19:59:54 | Fixed ( 935.0, -196.0) | # ALMA-C5 #9 |

**PROG= 01 Inf.-time(s)**

|                                   |                |       |      |       |       |     |     |                      |       |            |          |        |
|-----------------------------------|----------------|-------|------|-------|-------|-----|-----|----------------------|-------|------------|----------|--------|
| <b>Subr= 1 1-time(s) 2.0sec</b>   |                |       |      |       |       |     |     |                      |       |            |          |        |
| <b>Seqn= 92 1-time(s) 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= 42 1-time(s) 2.0sec</b>  |                |       |      |       |       |     |     |                      |       |            |          |        |
| Al-poly/Open                      | thin-Be/Open   | close | Safe | Norm  | 500ms | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec |
| thin-Be/Open                      | med-Be/Open    | close | Safe | Norm  | 5.66s | Obs | 1x1 | 512x512 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec |
| Open/thick-Al                     | Open/thick-Al  | close | Safe | Norm  | 16.0s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec |
| <b>Seqn= 96 40-time(s) 2.0sec</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 |        |

\* \* \* \* \*

**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 512x512)**

| Term                            | Pointing (x, y)                         | Comment                                      |
|---------------------------------|---|--|
| 04/10 11:00:00 - 04/10 17:59:54 | Track ( 2.1, -442.0) @ 04/10 10:57:00   | # OP start + 10min - Quiet Sun emerging flux |
| 04/10 18:13:00 - 04/10 19:59:54 | Track ( 54.8, -442.5) @ 04/10 18:10:00  | # Quiet Sun emerging flux                    |
| 04/11 00:03:00 - 04/11 02:59:54 | Fixed ( 0.0, 0.0)                       | # HOP 349                                    |
| 04/11 03:03:00 - 04/11 06:02:54 | Fixed ( 0.0, -950.0)                    | # South pole jet observation                 |
| 04/11 06:16:00 - 04/11 12:59:54 | Fixed ( 0.0, -950.0)                    | # South pole jet observation                 |
| 04/11 13:03:00 - 04/11 18:04:54 | Fixed ( 935.0, -196.0)                  | # ALMA-C5 #9                                 |
| 04/11 18:18:00 - 04/11 19:59:54 | Fixed ( 935.0, -196.0)                  | # ALMA-C5 #9                                 |
| 04/11 20:03:00 - 04/11 22:59:54 | Fixed ( 0.0, -950.0)                    | # South pole jet observation                 |
| 04/11 23:03:00 - 04/12 01:59:54 | Fixed ( 0.0, 0.0)                       | # HOP 349                                    |
| 04/12 02:03:00 - 04/12 05:34:54 | Fixed ( 0.0, -950.0)                    | # South pole jet observation                 |
| 04/12 05:48:00 - 04/12 10:29:54 | Track ( 307.0, -449.8) @ 04/12 05:45:00 | # Quiet Sun emerging flux                    |

**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= 81 1-time(s) 2.0sec</b>  |                  |       |      |       |       |     |     |                      |       |            |          |        |
| Open/G-band                       | Open/G-band      | open  | Safe | Norm  | 63ms  | Obs | 1x1 | 512x512 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
| Open/thick-Al                     | Open/thick-Al    | close | Safe | Dark  | 1.00s | Obs | 1x1 | 512x512 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
| Open/thick-Al                     | Open/thick-Al    | close | Safe | Dark  | 1.00s | Obs | 1x1 | 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

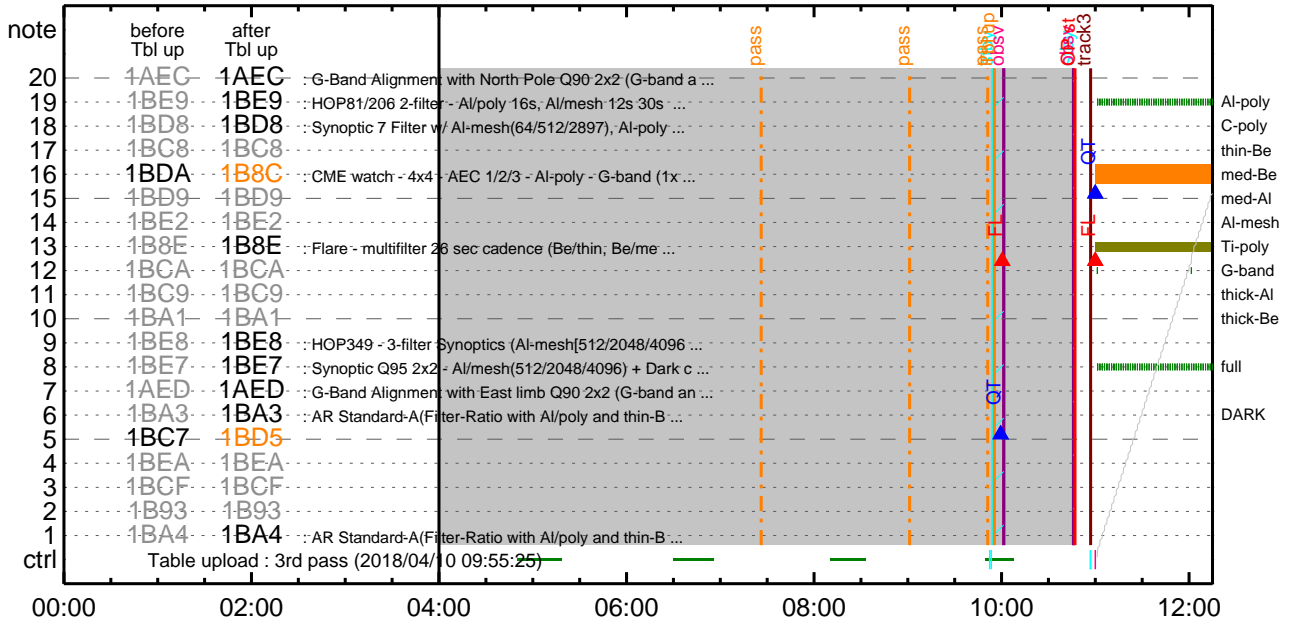
\* \* \* \* \*

**Flare Detection**

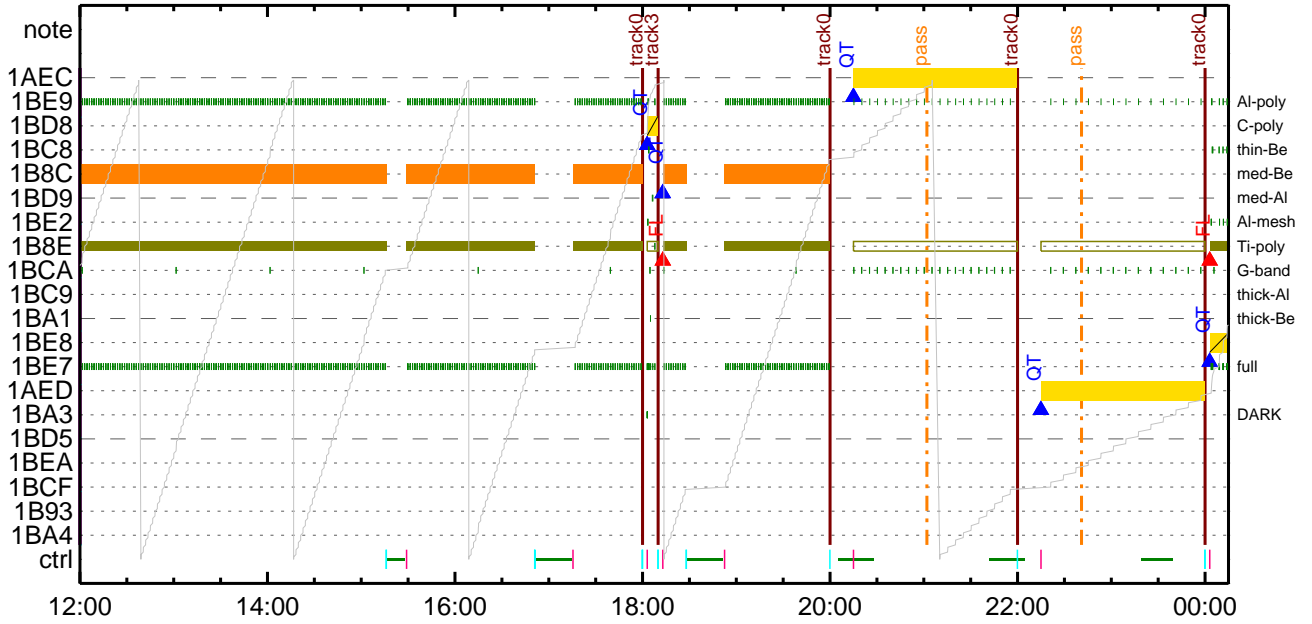
\* \* \* \* \*

| FLD Patrol                      |                |  |      |       |      |     |     |                              |       |            |          |
|---------------------------------|----------------|--|------|-------|------|-----|-----|------------------------------|-------|------------|----------|
| Term                            |                | Pointing (x, y)                                    |      |       |      |     |     | Comment                      |       |            |          |
| 04/10 18:10:18 - 04/10 20:00:16 |                | Track ( 54.8, -442.5) <sup>@ 04/10 18:10:00</sup>  |      |       |      |     |     | # Quiet Sun emerging flux    |       |            |          |
| 04/11 00:00:18 - 04/11 06:03:18 |                | Fixed ( 0.0, 0.0)                                  |      |       |      |     |     | # HOP 349                    |       |            |          |
| 04/11 06:13:18 - 04/11 18:05:18 |                | Fixed ( 0.0, -950.0)                               |      |       |      |     |     | # South pole jet observation |       |            |          |
| 04/11 18:15:18 - 04/12 05:35:18 |                | Fixed ( 935.0, -196.0)                             |      |       |      |     |     | # ALMA-C5 #9                 |       |            |          |
| 04/12 05:45:18 - 04/14 11:29:00 |                | Track ( 307.0, -449.8) <sup>@ 04/12 05:45:00</sup> |      |       |      |     |     | # Quiet Sun emerging flux    |       |            |          |
| AI-poly/Open                    | AI-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 |

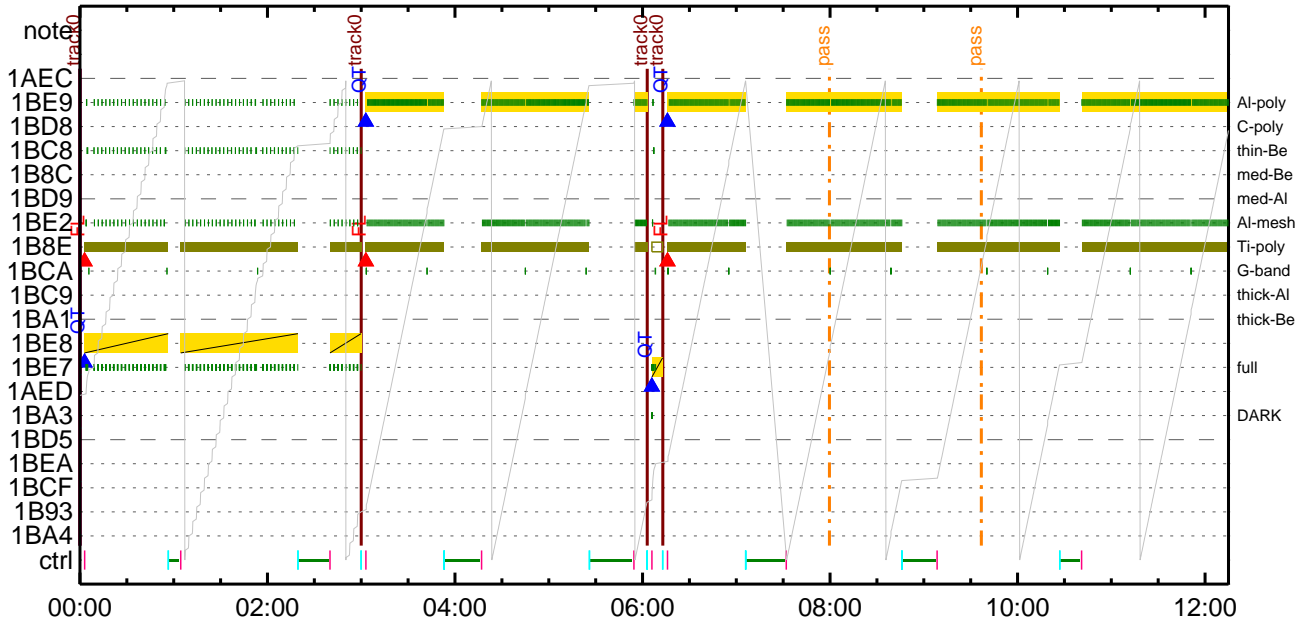
### CMDI #0422 2018/04/10



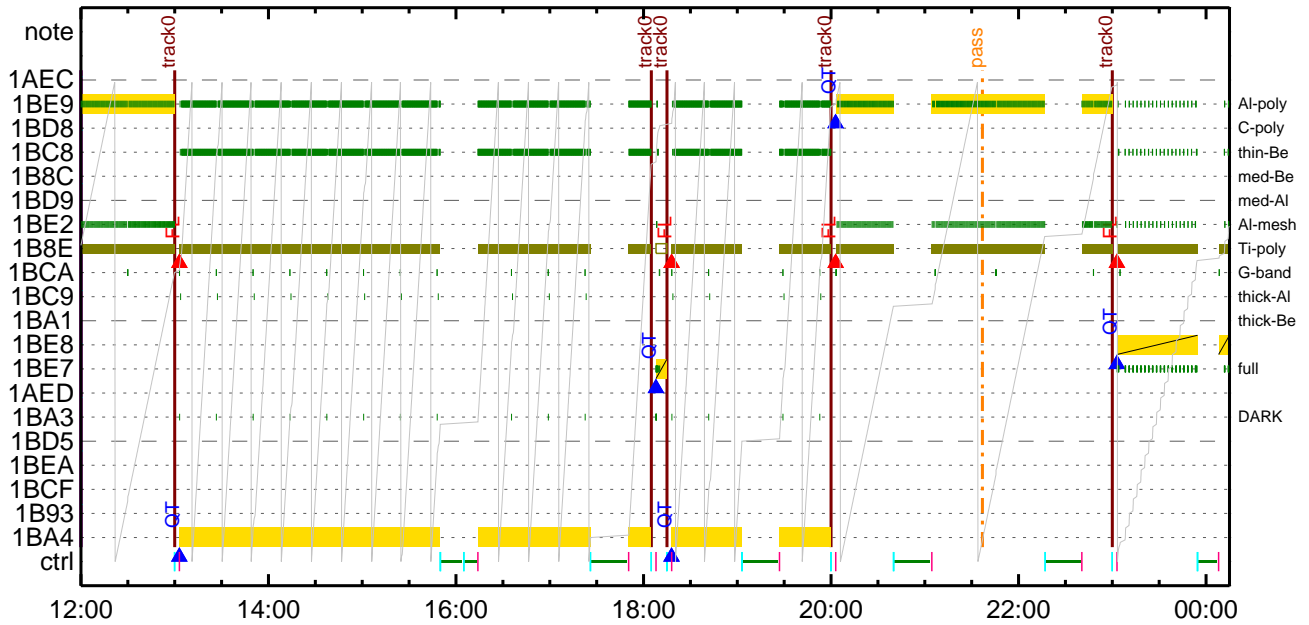
### CMDI #0422 2018/04/10



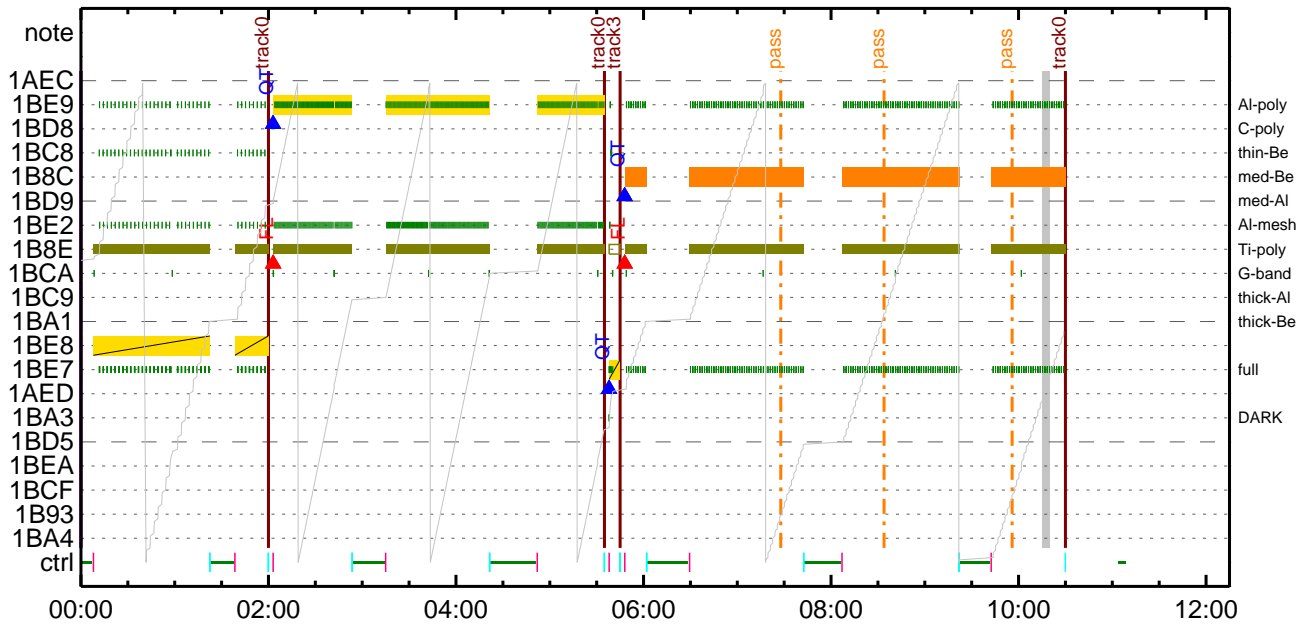
### CMDI #0422 2018/04/11



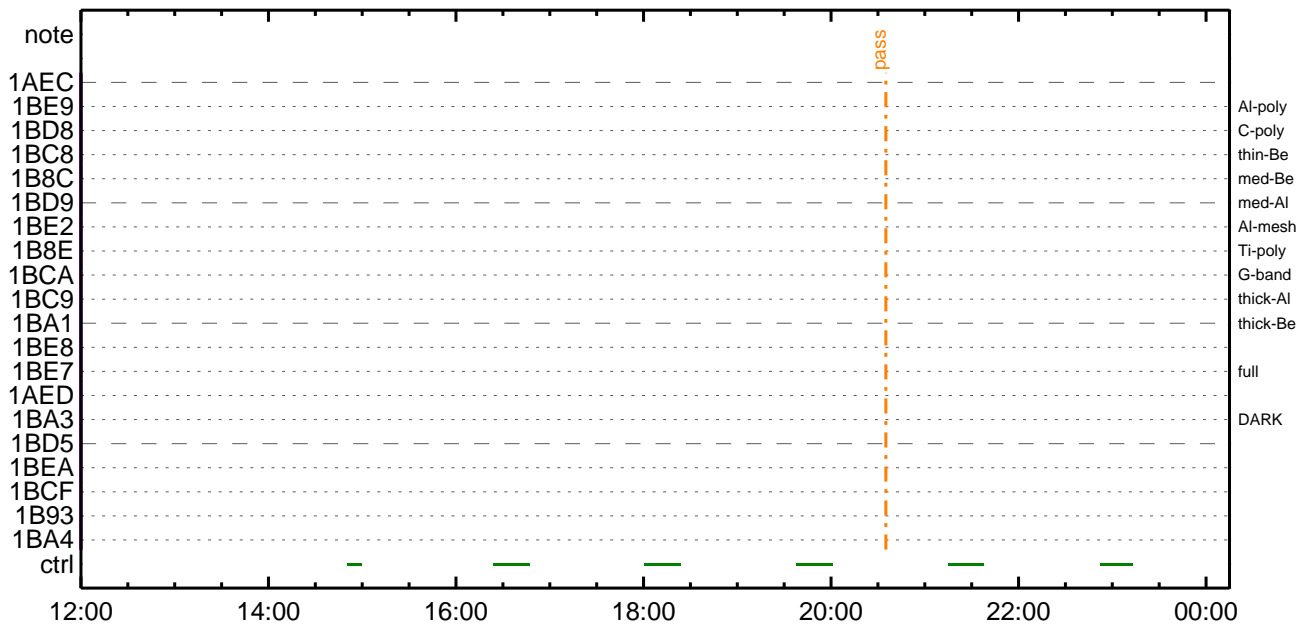
CMDI #0422 2018/04/11



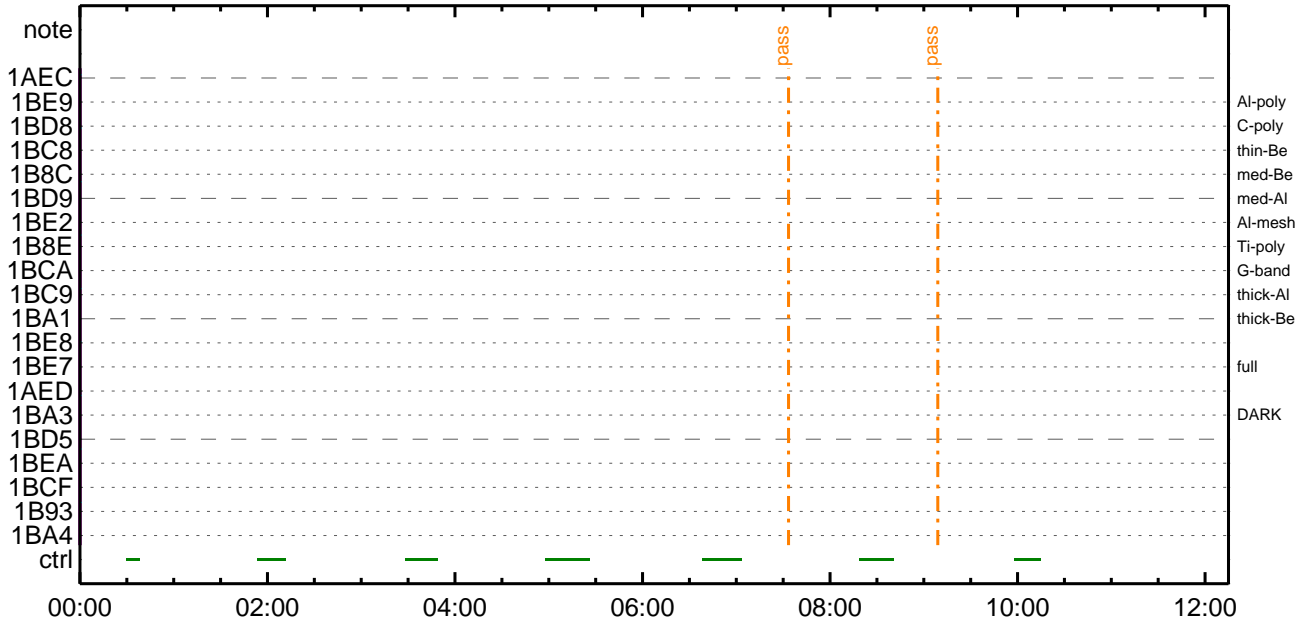
CMDI #0422 2018/04/12



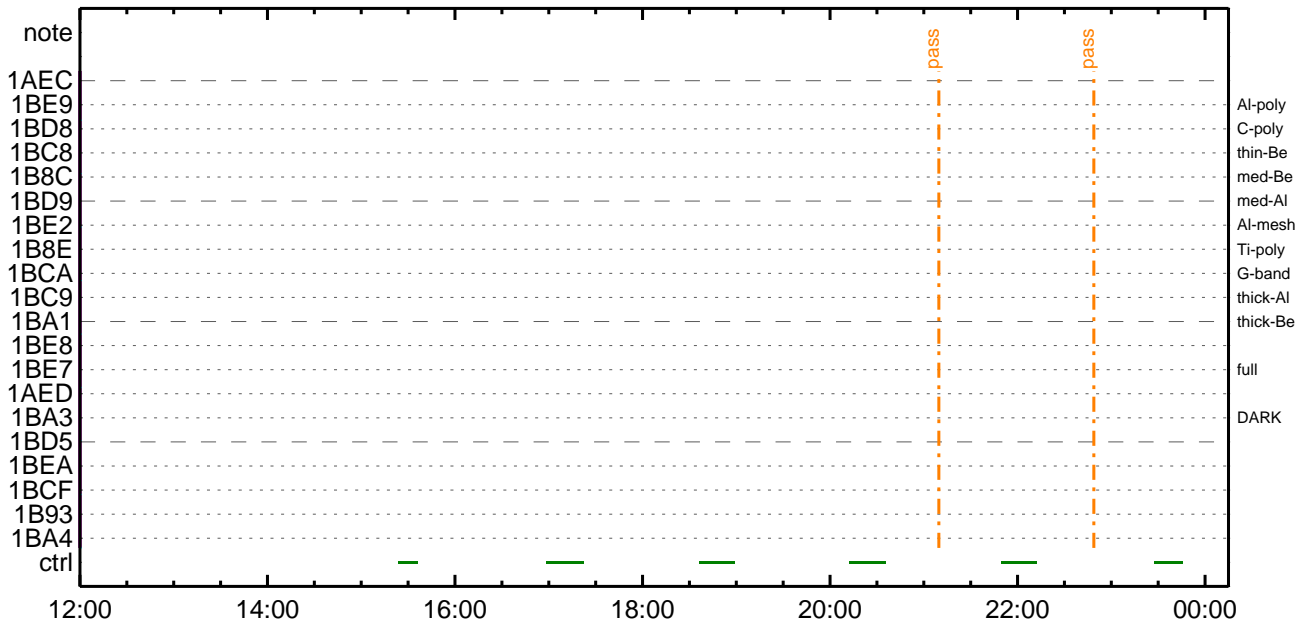
CMDI #0422 2018/04/12



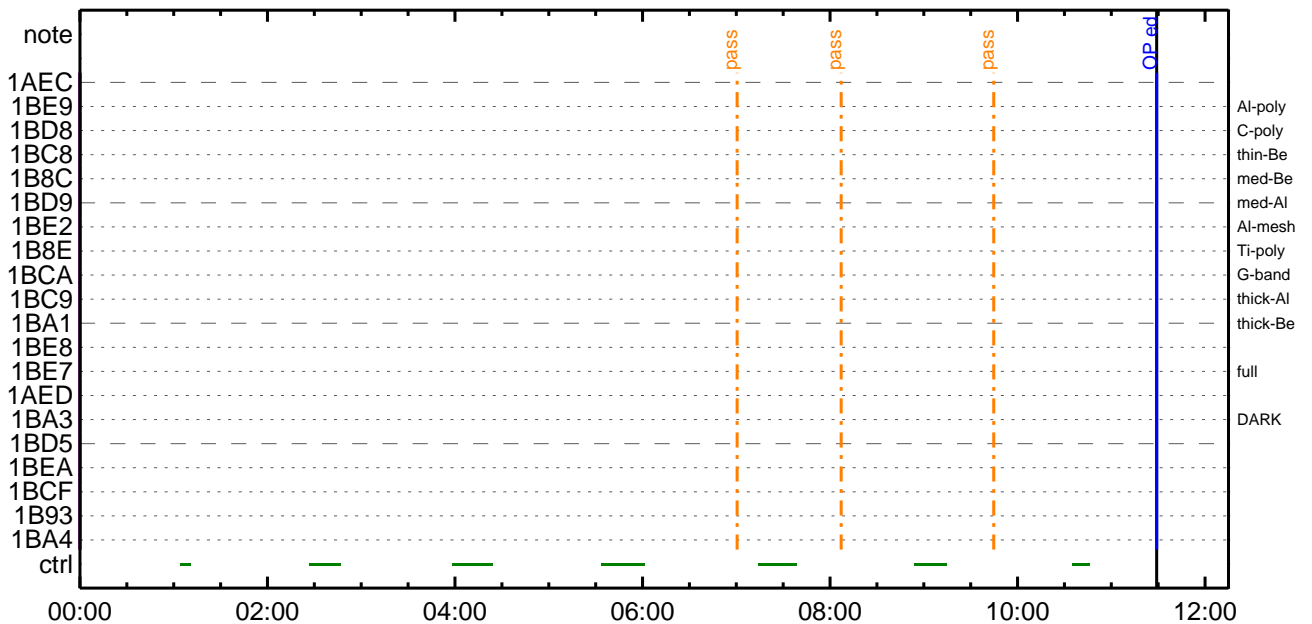
CMDI #0422 2018/04/13

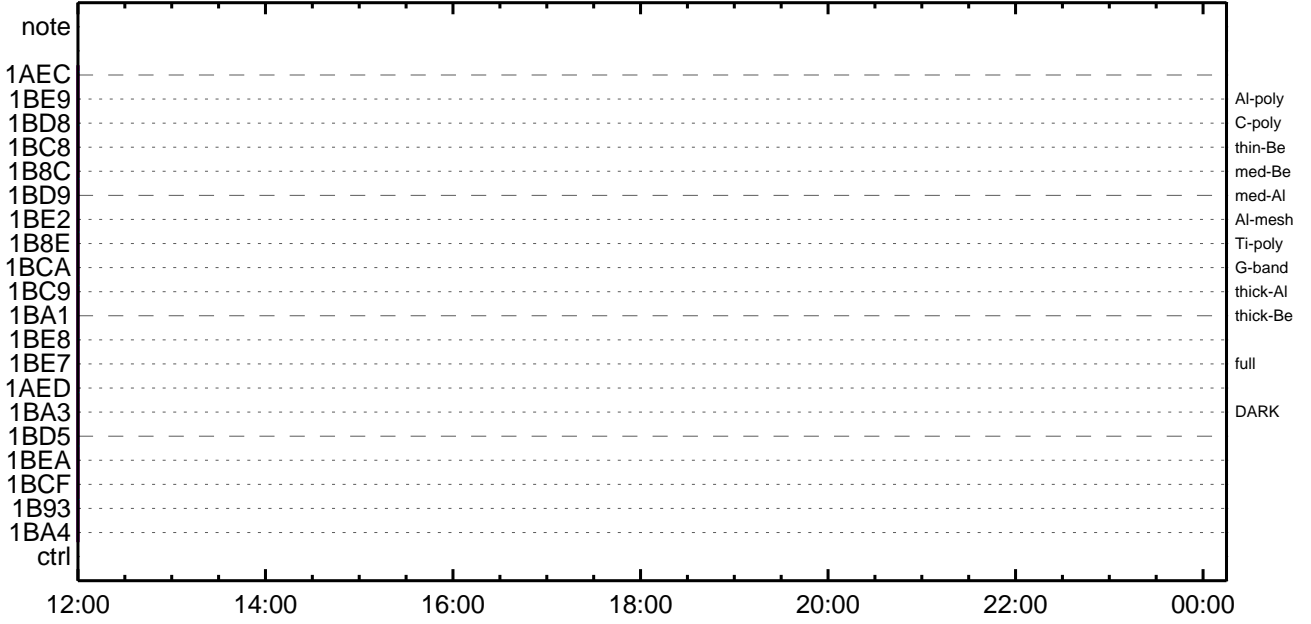


CMDI #0422 2018/04/13



CMDI #0422 2018/04/14









```

0096 C.
0097 C.
0098 C. *****
0099 C. OP/OGY1;4YE;|YAYOYx
0100 C. *****
0101 C.
0102 C. ;ãOP/OGY1;4YE;ã
0103 S. OP op-294:OP
0104 ( )
0105 S. OG og-294:OG
0106 ( )
0107 C.
0108 C. ;ãNMOG&OPîî°èYAYOYx;ã
0109 C. NMOG(0x200000-0x207FFF;§ 32 kbyte)
0110 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0111 BC (20 00 7f 01 02)
0112 C. çç[HK1_DMP_TOP_ADRS_1] EQ 40
0113 C. çç[HK1_DMP_TOP_ADRS_0] EQ 0
0114 C. çç[HK1_DMP_BLOCK_NUM] EQ 127
0115 C. çç[HK1_DMP_REPEAT_NUM] EQ 0
0116 C. çç[HK1_DMA_DMP_PIM] EQ DHU
0117 +. DC 01-22 DHU_MODE_CHNG
0118 BC (07 0b f8)
0119 C. çç[HK1_PKT_FORM_NO] EQ 7
0120 C. çç[HK1_PKT_GEN_TIME] EQ 0.25 s
0121 C. çç[HK1_S_TLM_BIT_RATE] EQ 32k
0122 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0123 C. çç[HK1_DMP_CHK_FLG] EQ EXEC
0124 C. YAYOYx½ªî»ò³îÇ§
0125 C. çç[HK1_DMP_CHK_FLG] EQ NON
0126 C. RAM ID=NMOG²î¼È¹ç•è²îOKò³îÇ§
0127 C.
0128 C. NMOG(0x208000-0x20FFFF;§ 32 kbyte)
0129 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0130 BC (20 80 7f 01 02)
0131 C. çç[HK1_DMP_TOP_ADRS_1] EQ 41
0132 C. çç[HK1_DMP_TOP_ADRS_0] EQ 0
0133 C. çç[HK1_DMP_BLOCK_NUM] EQ 127
0134 C. çç[HK1_DMP_REPEAT_NUM] EQ 0
0135 C. çç[HK1_DMA_DMP_PIM] EQ DHU
0136 +. DC 01-22 DHU_MODE_CHNG
0137 BC (07 0b f8)
0138 C. çç[HK1_PKT_FORM_NO] EQ 7
0139 C. çç[HK1_PKT_GEN_TIME] EQ 0.25 s
0140 C. çç[HK1_S_TLM_BIT_RATE] EQ 32k
0141 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0142 C. çç[HK1_DMP_CHK_FLG] EQ EXEC
0143 C. YAYOYx½ªî»ò³îÇ§
0144 C. çç[HK1_DMP_CHK_FLG] EQ NON
0145 C. RAM ID=NMOG²î¼È¹ç•è²îOKò³îÇ§
0146 C.
0147 C. NMOG(0x210000-0x2100FF;§ 256byte)+OP(0x210100-0x2141FF: 16.25kbyte)
0148 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0149 BC (21 00 41 01 02)
0150 C. çç[HK1_DMP_TOP_ADRS_1] EQ 42
0151 C. çç[HK1_DMP_TOP_ADRS_0] EQ 0
0152 C. çç[HK1_DMP_BLOCK_NUM] EQ 65
0153 C. çç[HK1_DMP_REPEAT_NUM] EQ 0
0154 C. çç[HK1_DMA_DMP_PIM] EQ DHU
0155 +. DC 01-22 DHU_MODE_CHNG
0156 BC (07 0b f8)
0157 C. çç[HK1_PKT_FORM_NO] EQ 7
0158 C. çç[HK1_PKT_GEN_TIME] EQ 0.25 s
0159 C. çç[HK1_S_TLM_BIT_RATE] EQ 32k
0160 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0161 C. çç[HK1_DMP_CHK_FLG] EQ EXEC
0162 C. YAYOYx½ªî»ò³îÇ§
0163 C. çç[HK1_DMP_CHK_FLG] EQ NON
0164 C. RAM ID=NMOG, RAM ID=OP²î¼È¹ç•è²îOKò³îÇ§
0165 C.
0166 C. ***** °È²¼òî¼Ã´¶Á°òÈÈ¬ò°Á÷¿@ (¼âµ-YAYOYx½ªè¼çòðÁÔÃæç¼ª°¬òè¼î¹çòçðâ) *****
0167 C. DHUYâ;4YE;È¼Y½;Yî;4YE;Èòðîã¹
0168 +. DC 01-22 DHU_MODE_CHNG
0169 BC (02 0a f8)
0170 C. çç[HK1_PKT_FORM_NO] EQ 2
0171 C. çç[HK1_PKT_GEN_TIME] EQ 0.5S
0172 C. çç[HK1_S_TLM_BIT_RATE] EQ 32K
0173 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0174 C.
0175 C. *****
0176 C. TI-CMD SET (OPOG STOP/COPY/START)
0177 C. *****
0178 C.
0179 C. NOTICE ;§ OPOG UPLOAD²-Á÷¿@NG²î¼î¹ç;ç°È²¼òîTI-CMDÁ÷¿@²î¼Á¹Ô²•²È²²²³²È;f
0180 C. ²²²¿;çSET²ÈDUMP²îÆ±²îYÑY¹²ç¹Ô²|²³²È;f
0181 C.
0182 C. TIY³Y²YóYÈ²òðÁDî¿(UT)
0183 +. TI 2018-04-10 10:42:00.0
0184 DC 01-B3 DHU_OP_STOP
0185 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP
0186 C.
0187 +. TI 2018-04-10 10:42:01.0
0188 DC 01-B4 DHU_OP_COPY
0189 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP
0190 C.
0191 +. TI 2018-04-10 10:42:01.0
0192 DC 01-B5 DHU_OPOG_COPY
0193 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP

```





```

0096 C.
0097 C.
0098 . C. ***** AOCs Commands (Tracking Curve Upload) *****
0099 C. Upload the Orbit Element and the Target Attitude
0100 C. RAM-ID:TARGET_ATT
0101 . S. RAM ram-150:TARGET_ATT
0102 ( )
0103 C.
0104 C.
0105 C. Set the dump memory area of TARGET_ATT
0106 +. DC 02-48 AOCU_DUMP_SET
0107 BC (07 00 00 00 18 00)
0108 C.
0109 C. <A_STS1>[MEMORY OPERATE STATUS] ADRS = 070000 [ ]
0110 C.
0111 C.
0112 C. Change the TLMFormatNo for the AOCs Dump Format
0113 +. DC 01-22 DHU_MODE_CHNG
0114 BC (04 0b f8)
0115 C.
0116 C. Wait for AOCSDUMP to end
0117 C.
0118 . C. Check the dump memory
0119 C.
0120 C. Result = OK [ ]
0121 C.
0122 +. DC 01-22 DHU_MODE_CHNG
0123 BC (02 0a f8)
0124 C.
0125 C. <A_***>[TLM STS] FMT = 2 [ ]
0126 C.
0127 +. DC 02-8E AOCU_ORB_UPD
0128 . C.
0129 . C. ***** AOCs Commands (Orbital Element Update) *****
0130 C. Update the orbital element
0131 +. DC 02-50 AOCU_ORB_PRPGT_START
0132 BC (16)
0133 +. DC 02-8E AOCU_ORB_UPD
0134 C.
0135 C. <A_ORB>[ORBIT] EPC = 3314332.3 +- 1.0 (s) [ ]
0136 C.
0137 . C.
0138 C.
0139 . C. ***** MDP `ûÃîñî»ò%ÿñÊÂð¹ñèDCBC•x²è *****
0140 C. (%â°îÿÓÿÃÿÈÿPÿËÿâÿçÿèñÊ%¼ñ¼Ã»Û¹ñè)
0141 . S. DC-BC dcbc-402:DCBC
0142 (MDP_known_event)
0143 C.
0144 C.
0145 . C. ***** ÿDÿ¹•Ï Daily±;îÑñÊ´Ø¹ñèDCBC•x²è *****
0146 . S. DC-BC dcbc-153:DCBC
0147 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0148 C.
0149 C.
0150 . C. ;ãLOSÿÃÿSÿÿÃÿ~¼Ã»Û;ã
0151 C.
0152 . C. ***** LOS *****
0153 C.

```

(a) Spacecraft Operation Procedure (real-commands)

```
main-296 2018-04-10 11:27:31 138 33 SOLAR-B MAIN //
0001 C.
0002 . C. ***** AOS *****
0003 C.
0004 . C. ;ãAOSYÁY$YÁY~¼Á»Û;ã
0005 C.
0006 C. YÀY$;¼Y³YFYóYÉÁ+¿®
0007 +. DC 00-00 NULL_DUMMY_CMD
0008 C.
0009 . C. ***** AOCS : Reload orbital element (send every contact) *****
0010 C. ÁíÈ¿òÀò•µ°È»Í×ÁÇóÍYçYÁY×Yí;¼YÉ;ÈÈèµ•íÍÈ;ÈòÈ¼°ÇÒà•ò¿¼í¹çòÍ;çÀ®, ùò¹òèòòçÁ+¿®à•òÈòòò³òÈ;f
0011 +. DC 02-8E AOCU_ORB_UPD
0012 C.
0013 C.
0014 . C. *****
0015 C. SOT table upload
0016 C. *****
0017 . C. < Stop SP table >
0018 +. DC 07-F0 MDP_SP_CTRL_MANU
0019 BC (61)
0020 C. -----
0021 C. MDP_SP_CTRL_MODE = MANU [ ]
0022 C. -----
0023 C.
0024 . C. <Upload SP Observation Table>
0025 . S. RAM ram-281:MDP_OBS_S
0026 ()
0027 C.
0028 . C. < Dump RAMID=MDP_OBS_S >
0029 +. DC 07-F0 MDP_DUMP_SPTBL
0030 BC (83 07 00 00 00 38 b8)
0031 C. -----
0032 C. MDP_OBS_S verify = OK/NG [ ]
0033 C. -----
0034 C.
0035 C. *****
0036 C. SOT TI command set
0037 C. *****
0038 C. Execute, after the success of TBL upload.
0039 +. TI 2018-04-10 10:46:18.0
0040 DC 07-F0 MDP_SOT_MODE_OBSV
0041 BC (40)
0042 C. -----
0043 C. HK1_TI_CMD_NUM = 1 CNTUP [ ]
0044 C. -----
0045 C.
0046 C.
0047 C. ***** XRT START *****
0048 C.
0049 +. DC 07-F0 MDP_XRT_CTRL_MANU
0050 BC (c1)
0051 +. DC 07-F0 MDP_XRT_CTRL_MANU
0052 BC (c1)
0053 +. DC 07-F0 MDP_XRT_MODE_STBY
0054 BC (c3)
0055 . C. ----- Success Verify ? OK / NG_____
0056 C.
0057 C. XRT Obs. Table Upload
0058 . S. RAM ram-291:MDP_OBS_X
0059 ()
0060 C.
0061 +. DC 07-F0 MDP_DUMP_XRTTBL
0062 BC (84 07 00 00 00 3a d4)
0063 . C. ----- Comparison Check ? OK / ERR _____
0064 C.
0065 C.
0066 +. DC 07-F0 MDP_XRT_ROI_SET
0067 BC (cd 01 b1 b1 04 04)
0068 + DC 07-F0 MDP_XRT_ROI_SET
0069 BC (cd 02 b1 b1 08 08)
0070 + DC 07-F0 MDP_XRT_ROI_SET
0071 BC (cd 03 b1 b1 08 08)
0072 + DC 07-F0 MDP_XRT_ROI_SET
0073 BC (cd 04 b1 b1 06 06)
0074 + DC 07-F0 MDP_XRT_ROI_SET
0075 BC (cd 05 85 83 06 06)
0076 + DC 07-F0 MDP_XRT_ROI_SET
0077 BC (cd 06 85 83 06 06)
0078 + DC 07-F0 MDP_XRT_ROI_SET
0079 BC (cd 07 85 83 08 08)
0080 + DC 07-F0 MDP_XRT_ROI_SET
0081 BC (cd 08 80 80 08 08)
0082 + DC 07-F0 MDP_XRT_ROI_SET
0083 BC (cd 09 80 80 20 20)
0084 + DC 07-F0 MDP_XRT_ROI_SET
0085 BC (cd 0a 80 80 20 08)
0086 + DC 07-F0 MDP_XRT_ROI_SET
0087 BC (cd 0b 80 80 08 20)
0088 + DC 07-F0 MDP_XRT_ROI_SET
0089 BC (cd 0c 80 60 20 18)
0090 + DC 07-F0 MDP_XRT_ROI_SET
0091 BC (cd 0d a0 80 18 20)
0092 + DC 07-F0 MDP_XRT_ROI_SET
0093 BC (cd 0f 80 80 06 06)
0094 + DC 07-F0 MDP_XRT_ROI_SET
0095 BC (cd 10 80 80 08 08)
```

```
0096 + DC 07-F0 MDP_XRT_FLD_ENA
0097 BC (d8)
0098 + DC 07-F0 MDP_XRT_FLRCTRL_ENA
0099 BC (c8)
0100 + DC 07-F0 MDP_XRT_ARS_DIS
0101 BC (d5)
0102 + DC 07-F0 MDP_XRT_AEC_RESET
0103 BC (d0)
0104 + DC 07-F0 MDP_XRT_FLD_RESET
0105 BC (da)
0106 +. DC 07-F0 MDP_XRT_QT_PROG_SET
0107 BC (c4 06)
0108 +. DC 07-F0 MDP_XRT_FL_PROG_SET
0109 BC (c5 0d)
0110 . C. ----- Success Verify ? OK / NG ____
0111 C.
0112 C.
0113 . C. All OK? Yes--> Please Proceed. / No --> Stop here.
0114 C.
0115 +. DC 07-F0 MDP_XRT_MODE_OBSV
0116 BC (c2)
0117 +. TI 2018-04-10 10:46:02.0
0118 DC 07-F0 MDP_XRT_MODE_OBSV
0119 BC (c2)
0120 . C. ----- Success Verify ? OK / NG ____
0121 C.
0122 C. ***** XRT END *****
0123 C.
0124 . C. ***** MDP 'ûÃîñî»ö%ÿñÊÂðñ¹ñèDCBC•x²è *****
0125 C. (%ã°îÿÓÿÃÿÈÿPÿËÿãÿçÿèñ%¼ññ¼Ã»Ûñ¹ñè)
0126 . S. DC-BC dcbc-402:DCBC
0127 (MDP_known_event)
0128 C.
0129 C.
0130 . C. ***** ÿDÿ¹•î Daily±;îññÊ'Øñ¹ñèDCBC•x²è *****
0131 . S. DC-BC dcbc-153:DCBC
0132 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0133 C.
0134 C.
0135 . C. ;ãLOSÿÃÿSÿËÿ-¼Ã»Û;ã
0136 C.
0137 . C. ***** LOS *****
0138 C.
```

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

|            |            |                                   |   |       |                |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|
| 2018/04/10 | 10:56:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 10:56:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 10:56:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |
| 2018/04/10 | 10:57:00.0 | AOCS_Orе-point_Start_1_OG [0x097] |   |       |                |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 03 00 00 00 00 |  |  |
| 2018/04/10 | 10:57:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |
| 2018/04/10 | 10:57:20.5 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |
| 2018/04/10 | 10:57:22.5 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |
| 2018/04/10 | 10:57:24.5 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |
| 2018/04/10 | 10:57:26.5 | XRT_FLD_RESET_433_OG [0x1b1]      |   |       |                |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |
| 2018/04/10 | 10:59:56.5 | XRT_QT_PROG_SET_446_OG [0x1be]    |   |       |                |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 10          |  |  |
| 2018/04/10 | 10:59:58.5 | XRT_FL_PROG_SET_440_OG [0x1b8]    |   |       |                |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |  |  |
| 2018/04/10 | 11:00:00.5 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |
| 2018/04/10 | 15:16:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 15:16:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 15:16:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |
| 2018/04/10 | 15:16:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |
| 2018/04/10 | 15:19:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |
| 2018/04/10 | 15:28:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |
| 2018/04/10 | 15:29:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |
| 2018/04/10 | 16:51:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 16:51:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 16:51:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |
| 2018/04/10 | 16:51:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |
| 2018/04/10 | 16:54:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |
| 2018/04/10 | 17:14:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |
| 2018/04/10 | 17:15:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |
| 2018/04/10 | 17:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 17:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 17:59:58.0 | XRT_FOCUS_POSITION_403_OG [0x193] |   |       |                |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |  |  |
| 2018/04/10 | 18:00:00.0 | AOCS_Orе-point_Start_2_OG [0x098] |   |       |                |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |
| 2018/04/10 | 18:00:18.0 | XRT_FLD_DIS_425_OG [0x1a9]        |   |       |                |  |  |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9             |  |  |
| 2018/04/10 | 18:02:54.0 | XRT_FLRCTRL_DIS_405_OG [0x195]    |   |       |                |  |  |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9             |  |  |
| 2018/04/10 | 18:02:56.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |
| 2018/04/10 | 18:02:58.0 | XRT_QT_PROG_SET_434_OG [0x1b2]    |   |       |                |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 12          |  |  |
| 2018/04/10 | 18:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |
| 2018/04/10 | 18:09:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 18:09:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 18:09:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |
| 2018/04/10 | 18:10:00.0 | AOCS_Orе-point_Start_1_OG [0x097] |   |       |                |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 03 00 00 00 00 |  |  |
| 2018/04/10 | 18:10:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |
| 2018/04/10 | 18:10:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |
| 2018/04/10 | 18:10:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |
| 2018/04/10 | 18:10:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |
| 2018/04/10 | 18:10:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      |   |       |                |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |
| 2018/04/10 | 18:12:56.0 | XRT_QT_PROG_SET_446_OG [0x1be]    |   |       |                |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 10          |  |  |
| 2018/04/10 | 18:12:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    |   |       |                |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |  |  |
| 2018/04/10 | 18:13:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |



|            |            |                                   |                     |   |       |                |  |  |
|------------|------------|-----------------------------------|---------------------|---|-------|----------------|--|--|
| 2018/04/10 | 18:28:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
|            |            |                                   | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 18:28:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 18:28:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/04/10 | 18:28:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2018/04/10 | 18:31:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2018/04/10 | 18:51:30.0 | XRT_Custom_430_OG [0x1ae]         |                     |   |       |                |  |  |
| 2018/04/10 | 18:52:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/04/10 | 19:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 19:59:56.0 | XRT_FOCUS_POSITION_439_OG [0x1b7] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |  |  |
| 2018/04/10 | 20:00:00.0 | AOCS_OrE-point_Start_3_OG [0x099] | AOCU_NM             | 5 | 02-76 | 00 ad 59 00 00 |  |  |
| 2018/04/10 | 20:00:16.0 | XRT_FLD_DIS_422_OG [0x1a6]        | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |  |  |
| 2018/04/10 | 20:14:54.0 | XRT_FLRCTRL_DIS_427_OG [0x1ab]    | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |  |  |
| 2018/04/10 | 20:14:56.0 | XRT_ARS_DIS_445_OG [0x1bd]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |
| 2018/04/10 | 20:14:58.0 | XRT_QT_PROG_SET_431_OG [0x1af]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 14          |  |  |
| 2018/04/10 | 20:15:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/04/10 | 21:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 21:59:56.0 | XRT_FOCUS_POSITION_439_OG [0x1b7] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |  |  |
| 2018/04/10 | 22:00:00.0 | AOCS_OrE-point_Start_4_OG [0x09a] | AOCU_NM             | 5 | 02-76 | 00 00 00 56 35 |  |  |
| 2018/04/10 | 22:00:16.0 | XRT_FLD_DIS_422_OG [0x1a6]        | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |  |  |
| 2018/04/10 | 22:14:54.0 | XRT_FLRCTRL_DIS_427_OG [0x1ab]    | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |  |  |
| 2018/04/10 | 22:14:56.0 | XRT_ARS_DIS_445_OG [0x1bd]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |
| 2018/04/10 | 22:14:58.0 | XRT_QT_PROG_SET_442_OG [0x1ba]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 07          |  |  |
| 2018/04/10 | 22:15:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/04/10 | 23:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 23:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/10 | 23:59:58.0 | XRT_FOCUS_POSITION_403_OG [0x193] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |  |  |
| 2018/04/11 | 00:00:00.0 | AOCS_OrE-point_Start_2_OG [0x098] | AOCU_NM             | 5 | 02-76 | 00 00 00 00 00 |  |  |
| 2018/04/11 | 00:00:18.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |  |
| 2018/04/11 | 00:00:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |  |
| 2018/04/11 | 00:00:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |  |
| 2018/04/11 | 00:00:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |
| 2018/04/11 | 00:00:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/04/11 | 00:02:56.0 | XRT_QT_PROG_SET_417_OG [0x1a1]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 09          |  |  |
| 2018/04/11 | 00:02:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |  |  |
| 2018/04/11 | 00:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/04/11 | 00:56:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/11 | 00:56:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/11 | 00:56:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/04/11 | 00:56:36.0 | XRT_PREFLR_STRT_406_OG [0x196]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2018/04/11 | 00:59:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |
| 2018/04/11 | 01:03:30.0 | XRT_Custom_430_OG [0x1ae]         |                     |   |       |                |  |  |
| 2018/04/11 | 01:04:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |
| 2018/04/11 | 02:19:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/11 | 02:19:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |
| 2018/04/11 | 02:19:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |
| 2018/04/11 | 02:19:36.0 | XRT_PREFLR_STRT_406_OG [0x196]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |
| 2018/04/11 | 02:22:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |

|            |            |                                   |   |       |                |
|------------|------------|-----------------------------------|---|-------|----------------|
| 2018/04/11 | 02:39:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |
| 2018/04/11 | 02:40:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2018/04/11 | 02:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 02:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 02:59:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |
| 2018/04/11 | 03:00:00.0 | AOCS_Ore-point_Start_5_OG [0x09b] |   |       |                |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 54 72 00 00 |
| 2018/04/11 | 03:00:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |
| 2018/04/11 | 03:00:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |
| 2018/04/11 | 03:00:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |
| 2018/04/11 | 03:00:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |
| 2018/04/11 | 03:00:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2018/04/11 | 03:02:56.0 | XRT_QT_PROG_SET_409_OG [0x199]    |   |       |                |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 13          |
| 2018/04/11 | 03:02:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    |   |       |                |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |
| 2018/04/11 | 03:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2018/04/11 | 03:53:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 03:53:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 03:53:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2018/04/11 | 03:53:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2018/04/11 | 03:56:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2018/04/11 | 04:16:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |
| 2018/04/11 | 04:17:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2018/04/11 | 05:26:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 05:26:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 05:26:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2018/04/11 | 05:26:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2018/04/11 | 05:29:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2018/04/11 | 05:53:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |
| 2018/04/11 | 05:54:30.5 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2018/04/11 | 06:02:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 06:02:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 06:02:58.0 | XRT_FOCUS_POSITION_403_OG [0x193] |   |       |                |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |
| 2018/04/11 | 06:03:00.0 | AOCS_Ore-point_Start_2_OG [0x098] |   |       |                |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |
| 2018/04/11 | 06:03:18.0 | XRT_FLD_DIS_425_OG [0x1a9]        |   |       |                |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9             |
| 2018/04/11 | 06:05:54.0 | XRT_FLRCTRL_DIS_405_OG [0x195]    |   |       |                |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9             |
| 2018/04/11 | 06:05:56.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |
| 2018/04/11 | 06:05:58.0 | XRT_QT_PROG_SET_443_OG [0x1bb]    |   |       |                |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 08          |
| 2018/04/11 | 06:06:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2018/04/11 | 06:12:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 06:12:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2018/04/11 | 06:12:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |
| 2018/04/11 | 06:13:00.0 | AOCS_Ore-point_Start_5_OG [0x09b] |   |       |                |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 54 72 00 00 |
| 2018/04/11 | 06:13:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |
| 2018/04/11 | 06:13:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |
| 2018/04/11 | 06:13:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |
| 2018/04/11 | 06:13:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |
| 2018/04/11 | 06:13:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2018/04/11 | 06:15:56.0 | XRT_QT_PROG_SET_409_OG [0x199]    |   |       |                |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 13          |
| 2018/04/11 | 06:15:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    |   |       |                |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |

|            |            |                                   |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2018/04/11 | 06:16:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 07:06:00.5 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 07:06:02.5 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 07:06:04.5 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 07:06:06.5 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 07:09:14.5 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/11 | 07:31:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2018/04/11 | 07:32:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 08:46:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 08:46:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 08:46:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 08:46:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 08:49:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/11 | 09:07:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2018/04/11 | 09:08:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 10:27:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 10:27:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 10:27:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 10:27:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 10:30:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/11 | 10:40:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2018/04/11 | 10:41:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 12:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 12:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 12:59:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2018/04/11 | 13:00:00.0 | AOCS_Ore-point_Start_6_OG [0x09c] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 11 68 ac e6 |  |  |  |  |
| 2018/04/11 | 13:00:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2018/04/11 | 13:00:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2018/04/11 | 13:00:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2018/04/11 | 13:00:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2018/04/11 | 13:00:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 13:02:56.0 | XRT_QT_PROG_SET_435_OG [0x1b3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 01          |  |  |  |  |
| 2018/04/11 | 13:02:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |  |  |  |  |
| 2018/04/11 | 13:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 15:50:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 15:50:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 15:50:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 15:50:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 15:53:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/11 | 16:05:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 16:05:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 16:05:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 16:05:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 16:08:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/11 | 16:13:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2018/04/11 | 16:14:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 17:26:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 17:26:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 17:26:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |

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|            |            |                                   |                     |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---------------------|---|-------|----------------|--|--|--|--|
| 2018/04/11 | 17:26:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 17:29:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 17:49:30.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/11 | 17:50:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 18:04:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 18:04:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 18:04:58.0 | XRT_FOCUS_POSITION_403_OG [0x193] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |
| 2018/04/11 | 18:05:00.0 | AOCS_Ore-point_Start_2_OG [0x098] | AOCU_NM             | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |
| 2018/04/11 | 18:05:18.0 | XRT_FLD_DIS_425_OG [0x1a9]        | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |  |  |  |  |
| 2018/04/11 | 18:07:54.0 | XRT_FLRCTRL_DIS_405_OG [0x195]    | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |  |  |  |  |
| 2018/04/11 | 18:07:56.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |  |  |
| 2018/04/11 | 18:07:58.0 | XRT_QT_PROG_SET_443_OG [0x1bb]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 08          |  |  |  |  |
| 2018/04/11 | 18:08:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 18:14:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 18:14:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 18:14:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2018/04/11 | 18:15:00.0 | AOCS_Ore-point_Start_6_OG [0x09c] | AOCU_NM             | 5 | 02-76 | 00 11 68 ac e6 |  |  |  |  |
| 2018/04/11 | 18:15:18.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |  |  |  |
| 2018/04/11 | 18:15:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |  |  |  |
| 2018/04/11 | 18:15:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |  |  |  |
| 2018/04/11 | 18:15:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |  |  |
| 2018/04/11 | 18:15:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 18:17:56.0 | XRT_QT_PROG_SET_435_OG [0x1b3]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 01          |  |  |  |  |
| 2018/04/11 | 18:17:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |  |  |  |  |
| 2018/04/11 | 18:18:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 19:03:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 19:03:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 19:03:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 19:03:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 19:06:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/11 | 19:26:00.0 | XRT_Custom_430_OG [0x1ae]         |                     |   |       |                |  |  |  |  |
| 2018/04/11 | 19:27:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 19:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 19:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 19:59:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2018/04/11 | 20:00:00.0 | AOCS_Ore-point_Start_5_OG [0x09b] | AOCU_NM             | 5 | 02-76 | 00 54 72 00 00 |  |  |  |  |
| 2018/04/11 | 20:00:18.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |  |  |  |
| 2018/04/11 | 20:00:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |  |  |  |
| 2018/04/11 | 20:00:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |  |  |  |
| 2018/04/11 | 20:00:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |  |  |  |
| 2018/04/11 | 20:00:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 20:02:56.0 | XRT_QT_PROG_SET_409_OG [0x199]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 13          |  |  |  |  |
| 2018/04/11 | 20:02:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |  |  |  |  |
| 2018/04/11 | 20:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 20:40:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 20:40:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 20:40:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |  |  |  |

|            |            |                                   |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2018/04/11 | 20:40:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 20:43:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/11 | 21:03:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2018/04/11 | 21:04:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 22:17:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 22:17:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 22:17:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 22:17:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 22:20:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/11 | 22:39:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2018/04/11 | 22:40:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 22:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 22:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 22:59:58.0 | XRT_FOCUS_POSITION_403_OG [0x193] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |
| 2018/04/11 | 23:00:00.0 | AOCS_Orе-point_Start_2_OG [0x098] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |
| 2018/04/11 | 23:00:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2018/04/11 | 23:00:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2018/04/11 | 23:00:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2018/04/11 | 23:00:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2018/04/11 | 23:00:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 23:02:56.0 | XRT_QT_PROG_SET_417_OG [0x1a1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 09          |  |  |  |  |
| 2018/04/11 | 23:02:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |  |  |  |  |
| 2018/04/11 | 23:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/11 | 23:54:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 23:54:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/11 | 23:54:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/11 | 23:54:36.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/11 | 23:57:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/12 | 00:07:00.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2018/04/12 | 00:08:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/12 | 01:22:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/12 | 01:22:32.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/12 | 01:22:34.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/12 | 01:22:36.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/12 | 01:25:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/12 | 01:37:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2018/04/12 | 01:38:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/12 | 01:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/12 | 01:59:56.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/12 | 01:59:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2018/04/12 | 02:00:00.0 | AOCS_Orе-point_Start_5_OG [0x09b] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 54 72 00 00 |  |  |  |  |
| 2018/04/12 | 02:00:18.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2018/04/12 | 02:00:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2018/04/12 | 02:00:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2018/04/12 | 02:00:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2018/04/12 | 02:00:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/12 | 02:02:56.0 | XRT_QT_PROG_SET_409_OG [0x199]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 13          |  |  |  |  |
| 2018/04/12 | 02:02:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |  |  |  |  |
| 2018/04/12 | 02:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |

|            |            |                                   |                     |   |       |                |  |
|------------|------------|-----------------------------------|---------------------|---|-------|----------------|--|
| 2018/04/12 | 02:53:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/04/12 | 02:53:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 02:53:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 02:53:36.0 | XRT_PREFLR_STRT_406_OG [0x196]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |
| 2018/04/12 | 02:56:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |
| 2018/04/12 | 03:14:00.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |
| 2018/04/12 | 03:15:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/04/12 | 04:21:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 04:21:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 04:21:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 04:21:36.0 | XRT_PREFLR_STRT_406_OG [0x196]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |
| 2018/04/12 | 04:24:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |
| 2018/04/12 | 04:51:00.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |
| 2018/04/12 | 04:52:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/04/12 | 05:34:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 05:34:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 05:34:58.0 | XRT_FOCUS_POSITION_403_OG [0x193] | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 05:35:00.0 | AOCS_ORe-point_Start_2_OG [0x098] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 ff aa 00    |  |
| 2018/04/12 | 05:35:18.0 | XRT_FLD_DIS_425_OG [0x1a9]        | AOCU_NM             | 5 | 02-76 | 00 00 00 00 00 |  |
| 2018/04/12 | 05:37:54.0 | XRT_FLRCTRL_DIS_405_OG [0x195]    | MDP_XRT_FLD_DIS     | 1 | 07-F0 | d9             |  |
| 2018/04/12 | 05:37:56.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_FLRCTRL_DIS | 1 | 07-F0 | c9             |  |
| 2018/04/12 | 05:37:58.0 | XRT_QT_PROG_SET_443_OG [0x1bb]    | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |
| 2018/04/12 | 05:38:00.5 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 08          |  |
| 2018/04/12 | 05:44:54.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/04/12 | 05:44:56.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 05:44:58.0 | XRT_FOCUS_POSITION_410_OG [0x19a] | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 05:45:00.0 | AOCS_ORe-point_Start_1_OG [0x097] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |  |
| 2018/04/12 | 05:45:18.0 | XRT_FLD_ENA_411_OG [0x19b]        | AOCU_NM             | 5 | 02-76 | 03 00 00 00 00 |  |
| 2018/04/12 | 05:45:20.0 | XRT_FLRCTRL_ENA_412_OG [0x19c]    | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |  |
| 2018/04/12 | 05:45:22.0 | XRT_AEC_RESET_448_OG [0x1c0]      | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |  |
| 2018/04/12 | 05:45:24.0 | XRT_ARS_DIS_423_OG [0x1a7]        | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |  |
| 2018/04/12 | 05:45:26.0 | XRT_FLD_RESET_433_OG [0x1b1]      | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |  |
| 2018/04/12 | 05:47:56.0 | XRT_QT_PROG_SET_446_OG [0x1be]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |
| 2018/04/12 | 05:47:58.0 | XRT_FL_PROG_SET_440_OG [0x1b8]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 10          |  |
| 2018/04/12 | 05:48:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |  |
| 2018/04/12 | 06:02:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/04/12 | 06:02:02.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 06:02:04.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 06:02:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |
| 2018/04/12 | 06:05:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |
| 2018/04/12 | 06:28:30.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |
| 2018/04/12 | 06:29:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |  |
| 2018/04/12 | 07:42:30.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 07:42:32.0 | XRT_CTRL_MANU_402_OG [0x192]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 07:42:34.0 | XRT_FLD_RESET_415_OG [0x19f]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |  |
| 2018/04/12 | 07:42:36.0 | XRT_PREFLR_STRT_406_OG [0x196]    | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |  |
| 2018/04/12 | 07:45:44.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |  |
| 2018/04/12 | 08:06:00.0 | XRT_Custom_430_OG [0x1ae]         | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |  |

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|            |            |                                   |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2018/04/12 | 08:07:00.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/12 | 09:22:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/12 | 09:22:02.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/12 | 09:22:04.0 | XRT_FLD_RESET_415_OG [0x19f]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2018/04/12 | 09:22:06.0 | XRT_PREFLR_STRT_406_OG [0x196]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2018/04/12 | 09:25:14.0 | XRT_PREFLR_STOP_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2018/04/12 | 09:41:30.0 | XRT_Custom_430_OG [0x1ae]         |   |       |                |  |  |  |  |
| 2018/04/12 | 09:42:30.0 | XRT_CTRL_AUTO_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2018/04/12 | 10:29:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2018/04/12 | 10:30:00.0 | AOCS_ORe-point_Start_2_OG [0x098] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |