

# XRT Timeline to be uploaded on 2011/09/15

Period: 2011/09/15 09:24:00 - 2011/09/19 10:26:00

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Normal mode

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| <b>XOB #18A6: North pole+AR - Ti/poly 512ms, G-band - 2x2-fov2048x1024-center(1024,640)-75sec</b> |                     |                |       |      |       |       |     |  |                       |       |            |          |        |
|---|---------------------|----------------|-------|------|-------|-------|-----|--|-----------------------|-------|------------|----------|--------|
| Term  | Pointing (x, y)     |                |       |      |       |       |     | Comment  |                       |       |            |          |        |
| 09/15 09:49:30 - 09/15 10:59:54   | Fixed ( 0.0, 920.0) |                |       |      |       |       |     | # OP start + 10min, HOP 200, Alfven waves on spicules, with SST. |                       |       |            |          |        |
| <b>PROG= 19 Inf.-time(s)</b>  |                     |                |       |      |       |       |     |  |                       |       |            |          |        |
| └─ Subr= 1 1-time(s) 2.0sec   |                     |                |       |      |       |       |     |  |                       |       |            |          |        |
| └─ Seqn= 34 1-time(s) 2.0sec  |                     |                |       |      |       |       |     |  |                       |       |            |          |        |
|   | Open/G-band         | Open/G-band    | open  | Safe | Norm  | 12ms  | Obs | 2x2  | 2048x1024 (1024, 640) | Q=95  | 0          | 0        | 2.0sec |
| └─ Subr= 2 24-time(s) 2.0sec  |                     |                |       |      |       |       |     |  |                       |       |            |          |        |
| └─ Seqn= 16 2-time(s) 75.0sec   |                     |                |       |      |       |       |     |  |                       |       |            |          |        |
|   | Open/Ti-poly        | Open/thick-Al  | close | Safe | Norm  | 500ms | Obs | 2x2  | 2048x1024 (1024, 640) | Q=95  | 0          | 0        | 2.0sec |
|   | Default Filter      | Thicker Filter | VLS   | mode | image | Exp.  | CCD | Bin  | ROI: size (center)    | Comp. | AEC Buffer | Interval |        |

| <b>XOB #18AA: AR Standard-A(Filter-Ratio) with PFB, shorter thin-Be, thick Al and Al/Poly context, 384x384 at 1064 1048, 150s cad</b> |  |                |       |      |       |       |     |                   |                      |       |            |          |         |
|---|--|----------------|-------|------|-------|-------|-----|-------------------|----------------------|-------|------------|----------|---------|
| Term  | Pointing (x, y)                                    |                |       |      |       |       |     | Comment           |                      |       |            |          |         |
| 09/15 11:03:00 - 09/15 17:45:54   | Track ( -569.8, 243.1) <sup>Ⓞ 09/15 11:00:00</sup> |                |       |      |       |       |     | * Track AR 11295. |                      |       |            |          |         |
| 09/15 17:59:00 - 09/16 05:59:54   | Track ( -523.1, 238.7) <sup>Ⓞ 09/15 17:56:00</sup> |                |       |      |       |       |     | # Cont.           |                      |       |            |          |         |
| 09/16 06:13:00 - 09/16 07:59:54   | Track ( -435.2, 231.9) <sup>Ⓞ 09/16 06:10:00</sup> |                |       |      |       |       |     | # Cont.           |                      |       |            |          |         |
| <b>PROG= 14 Inf.-time(s)</b>  |  |                |       |      |       |       |     |                   |                      |       |            |          |         |
| └─ Subr= 1 1-time(s) 2.0sec   |  |                |       |      |       |       |     |                   |                      |       |            |          |         |
| └─ Seqn= 19 1-time(s) 2.0sec  |  |                |       |      |       |       |     |                   |                      |       |            |          |         |
|   | Open/Ti-poly                                       | Open/thick-Al  | close | Safe | Dark  | 16.0s | Obs | 1x1               | 384x384 (1064, 1048) | Q=98  | 0          | 0        | 2.0sec  |
|   | Open/G-band  | Open/G-band    | open  | Safe | Norm  | 63ms  | Obs | 1x1               | 384x384 (1064, 1048) | Q=98  | 0          | 0        | 2.0sec  |
| └─ Seqn= 15 4-time(s) 2.0sec  |  |                |       |      |       |       |     |                   |                      |       |            |          |         |
|   | Al-poly/Open                                       | thin-Be/Open   | close | Safe | Norm  | 500ms | Obs | 1x1               | 512x512 (1024, 1024) | Q=95  | 3          | 0        | 2.0sec  |
|   | Open/Ti-poly                                       | Open/thick-Be  | close | Safe | Norm  | 1.00s | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec  |
|   | thin-Be/Open                                       | med-Be/Open    | close | Safe | Norm  | 5.66s | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec  |
|   | Open/thick-Al                                      | Open/thick-Al  | close | Safe | Norm  | 16.0s | Obs | 1x1               | 512x512 (1024, 1024) | Q=95  | 3          | 0        | 2.0sec  |
| └─ Subr= 2 1-time(s) 2.0sec   |  |                |       |      |       |       |     |                   |                      |       |            |          |         |
| └─ Seqn= 62 15-time(s) 150.0sec   |  |                |       |      |       |       |     |                   |                      |       |            |          |         |
|   | thin-Be/Open                                       | Open/thick-Al  | close | Safe | Norm  | 500ms | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec  |
|   | Open/Ti-poly                                       | Open/thick-Be  | close | Safe | Norm  | 1.00s | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 15.0sec |
|   | thin-Be/Open                                       | Open/thick-Al  | close | Safe | Norm  | 500ms | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 1        | 2.0sec  |
|   | Open/Ti-poly                                       | Open/thick-Be  | close | Safe | Norm  | 1.00s | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 1        | 15.0sec |
|   | thin-Be/Open                                       | Open/thick-Al  | close | Safe | Norm  | 500ms | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 2        | 2.0sec  |
|   | Open/Ti-poly                                       | Open/thick-Be  | close | Safe | Norm  | 1.00s | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 2        | 15.0sec |
|   | thin-Be/Open                                       | Open/thick-Al  | close | Safe | Norm  | 500ms | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 3        | 2.0sec  |
|   | Open/Ti-poly                                       | Open/thick-Be  | close | Safe | Norm  | 1.00s | Obs | 1x1               | 384x384 (1064, 1048) | Q=95  | 3          | 3        | 15.0sec |
|   | Default Filter                                     | Thicker Filter | VLS   | mode | image | Exp.  | CCD | Bin               | ROI: size (center)   | Comp. | AEC Buffer | Interval |         |

| <b>XOB #18A8: Synoptic Q95 2x2 - Al/mesh(16/1024) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 -1x1 2048x512) + Ti-poly(33/2048) + Thin-Be(18)</b> |                   |                |       |      |       |       |     |                             |                        |       |            |          |        |
|---|-------------------|----------------|-------|------|-------|-------|-----|-----------------------------|------------------------|-------|------------|----------|--------|
| Term  | Pointing (x, y)   |                |       |      |       |       |     | Comment                     |                        |       |            |          |        |
| 09/15 17:49:00 - 09/15 17:55:54   | Fixed ( 0.0, 0.0) |                |       |      |       |       |     | synoptic, shifted -14.0 min |                        |       |            |          |        |
| 09/16 06:03:00 - 09/16 06:09:54   | Fixed ( 0.0, 0.0) |                |       |      |       |       |     | synoptic                    |                        |       |            |          |        |
| <b>PROG= 11 1-time(s)</b>   |                   |                |       |      |       |       |     |                             |                        |       |            |          |        |
| └─ Subr= 1 1-time(s) 12.0sec  |                   |                |       |      |       |       |     |                             |                        |       |            |          |        |
| └─ Seqn= 7 1-time(s) 4.0sec   |                   |                |       |      |       |       |     |                             |                        |       |            |          |        |
|   | Open/Al-mesh      | Open/Al-mesh   | close | Safe | Norm  | 16ms  | Obs | 2x2                         | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
|   | Open/Al-mesh      | Open/Al-mesh   | close | Safe | Norm  | 1.00s | Obs | 2x2                         | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 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= 8 1-time(s) 4.0sec   |                   |                |       |      |       |       |     |                             |                        |       |            |          |        |
|   | Open/Ti-poly      | Open/Ti-poly   | close | Safe | Norm  | 32ms  | Obs | 2x2                         | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
|   | Open/Ti-poly      | Open/Ti-poly   | close | Safe | Norm  | 2.00s | Obs | 2x2                         | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
| └─ Seqn= 91 1-time(s) 2.0sec  |                   |                |       |      |       |       |     |                             |                        |       |            |          |        |
|   | thin-Be/Open      | thin-Be/Open   | close | Safe | Norm  | 177ms | Obs | 2x2                         | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
|   | thin-Be/Open      | thin-Be/Open   | close | Safe | Norm  | 2.83s | Obs | 2x2                         | 2048x2048 (1024, 1024) | Q=95  | 0          | 0        | 2.0sec |
| └─ Seqn= 4 1-time(s) 2.0sec   |                   |                |       |      |       |       |     |                             |                        |       |            |          |        |
|   | Open/G-band       | Open/G-band    | open  | Safe | Norm  | 16ms  | Obs | 2x2                         | 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 |        |

| <b>XOB #18A9: Coronal cavity (6 filters)-HOP114 with ARs-DPCM 2x2-768FOV-AEC0-3min cad</b> |                       |              |       |      |      |       |     |            |                      |      |   |   |        |
|--|-----------------------|--------------|-------|------|------|-------|-----|------------|----------------------|------|---|---|--------|
| Term   | Pointing (x, y)       |              |       |      |      |       |     | Comment    |                      |      |   |   |        |
| 09/16 08:03:00 - 09/16 08:28:00  | Fixed ( 533.0, 750.0) |              |       |      |      |       |     | * HOP 200. |                      |      |   |   |        |
| <b>PROG= 03 Inf.-time(s)</b>   |                       |              |       |      |      |       |     |            |                      |      |   |   |        |
| └─ Subr= 1 5-time(s) 180.0sec  |                       |              |       |      |      |       |     |            |                      |      |   |   |        |
| └─ Seqn= 42 1-time(s) 4.0sec   |                       |              |       |      |      |       |     |            |                      |      |   |   |        |
|  | Open/Al-mesh          | Open/Al-mesh | close | Safe | Norm | 2.00s | Obs | 2x2        | 768x768 (1064, 1048) | DPCM | 0 | 0 | 2.0sec |

|                 |                  |                  |      |               |       |     |     |                        |       |            |          |        |
|-----------------|------------------|------------------|------|---------------|-------|-----|-----|------------------------|-------|------------|----------|--------|
| Al-poly/Open    | Al-poly/Open     | close            | Safe | Norm          | 2.83s | Obs | 2x2 | 768x768 (1064, 1048)   | DPCM  | 0          | 0        | 2.0sec |
| C-poly/Open     | C-poly/Open      | close            | Safe | Norm          | 4.00s | Obs | 2x2 | 768x768 (1064, 1048)   | DPCM  | 0          | 0        | 2.0sec |
| Open/Ti-poly    | Open/thick-Al    | close            | Safe | Norm          | 4.00s | Obs | 2x2 | 768x768 (1064, 1048)   | DPCM  | 0          | 0        | 2.0sec |
| Al-poly/Ti-poly | Al-poly/thick-Al | close            | Safe | Norm          | 5.66s | Obs | 2x2 | 768x768 (1064, 1048)   | DPCM  | 0          | 0        | 2.0sec |
| thin-Be/Open    | thin-Be/Open     | close            | Safe | Norm          | 5.66s | Obs | 2x2 | 768x768 (1064, 1048)   | DPCM  | 0          | 0        | 2.0sec |
| <b>Subr= 2</b>  |                  | <b>1-time(s)</b> |      | <b>2.0sec</b> |       |     |     |                        |       |            |          |        |
| <b>Seqn= 57</b> |                  | <b>1-time(s)</b> |      | <b>4.0sec</b> |       |     |     |                        |       |            |          |        |
| Open/G-band     | Open/G-band      | open             | Safe | Norm          | 16ms  | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=90  | 0          | 0        | 2.0sec |
| Default Filter  | Thicker Filter   | VLS              | mode | image         | Exp.  | CCD | Bin | ROI: size (center)     | Comp. | AEC Buffer | Interval |        |

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### Flare mode

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#### XOB #1869: Flare standard obs. multifilter (thin-Be,med-Al,thick-Be 384x384 - Al-poly 512x512 2x2)

| Term                            | Pointing (x, y)                         | Comment  |
|---------------------------------|---|--|
| 09/15 09:49:30 - 09/15 10:59:54 | Fixed ( 0.0, 920.0)                     | # OP start + 10min, HOP 200, Alfven waves on spicules, with SST. |
| 09/15 11:03:00 - 09/15 17:45:54 | Track ( -569.8, 243.1) @ 09/15 11:00:00 | * Track AR 11295.  |
| 09/15 17:59:00 - 09/16 05:59:54 | Track ( -523.1, 238.7) @ 09/15 17:56:00 | # Cont.  |
| 09/16 06:13:00 - 09/16 07:59:54 | Track ( -435.2, 231.9) @ 09/16 06:10:00 | # Cont.  |
| 09/16 08:03:00 - 09/16 08:28:00 | Fixed ( 533.0, 750.0)                   | * HOP 200.   |

#### PROG= 13 1-time(s)

|                 |                  |                   |      |                 |       |     |     |                      |       |            |          |        |
|-----------------|------------------|-------------------|------|-----------------|-------|-----|-----|----------------------|-------|------------|----------|--------|
| <b>Subr= 1</b>  |                  | <b>4-time(s)</b>  |      | <b>2.0sec</b>   |       |     |     |                      |       |            |          |        |
| <b>Seqn= 55</b> |                  | <b>45-time(s)</b> |      | <b>20.0sec</b>  |       |     |     |                      |       |            |          |        |
| thin-Be/Open    | med-Be/Open      | close             | Safe | Norm            | 250ms | Obs | 1x1 | 384x384 (1024, 1024) | Q=95  | 3          | 0        | 2.0sec |
| med-Al/Open     | med-Al/thick-Al  | close             | Safe | Norm            | 500ms | Obs | 1x1 | 384x384 (1024, 1024) | Q=95  | 3          | 0        | 2.0sec |
| Open/thick-Be   | Open/thick-Be    | close             | Safe | Norm            | 2.00s | Obs | 1x1 | 384x384 (1024, 1024) | Q=95  | 3          | 0        | 2.0sec |
| Al-poly/Open    | Al-poly/thick-Al | close             | Safe | Norm            | 125ms | Obs | 2x2 | 512x512 (1024, 1024) | Q=95  | 2          | 0        | 2.0sec |
| <b>Seqn= 90</b> |                  | <b>1-time(s)</b>  |      | <b>2.0sec</b>   |       |     |     |                      |       |            |          |        |
| Open/G-band     | Open/G-band      | open              | Safe | Norm            | 63ms  | Obs | 1x1 | 384x384 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
| Open/thick-Al   | Open/thick-Al    | close             | Safe | Dark            | 1.00s | Obs | 1x1 | 384x384 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
| Open/thick-Al   | Open/thick-Al    | close             | Safe | Dark            | 1.00s | Obs | 2x2 | 512x512 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
| <b>Subr= 2</b>  |                  | <b>1-time(s)</b>  |      | <b>600.0sec</b> |       |     |     |                      |       |            |          |        |
| <b>Seqn= 89</b> |                  | <b>1-time(s)</b>  |      | <b>2.0sec</b>   |       |     |     |                      |       |            |          |        |
| Open/Al-mesh    | Open/thick-Al    | close             | Safe | Norm            | 500ms | Obs | 1x1 | 384x384 (1024, 1024) | Q=95  | 1          | 0        | 2.0sec |
| Open/Ti-poly    | Open/thick-Be    | close             | Safe | Norm            | 500ms | Obs | 1x1 | 384x384 (1024, 1024) | Q=95  | 1          | 0        | 2.0sec |
| Open/G-band     | Open/G-band      | open              | Safe | Norm            | 63ms  | Obs | 1x1 | 384x384 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
| Open/Al-mesh    | Open/Al-mesh     | close             | Safe | Dark            | 1.00s | Obs | 1x1 | 384x384 (1024, 1024) | Q=98  | 0          | 0        | 2.0sec |
| Default Filter  | Thicker Filter   | VLS               | mode | image           | Exp.  | CCD | Bin | ROI: size (center)   | Comp. | AEC Buffer | Interval |        |

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### Active Region Search

\* \* \* \* \*

NOT USED

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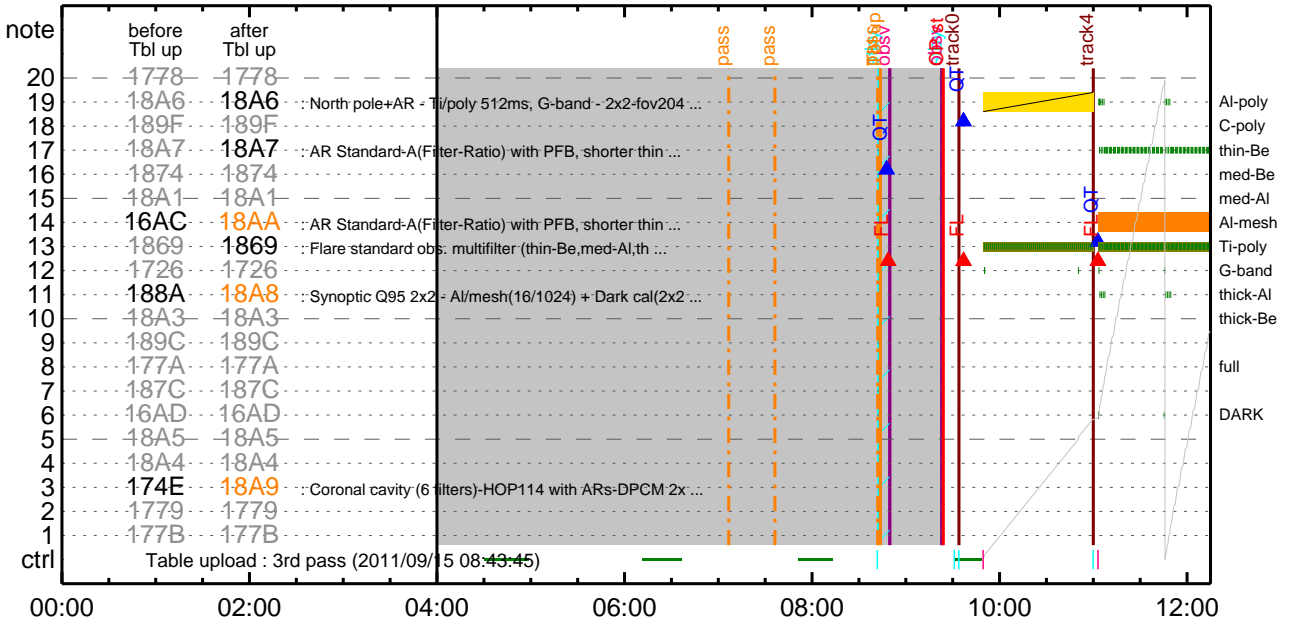
### Flare Detection

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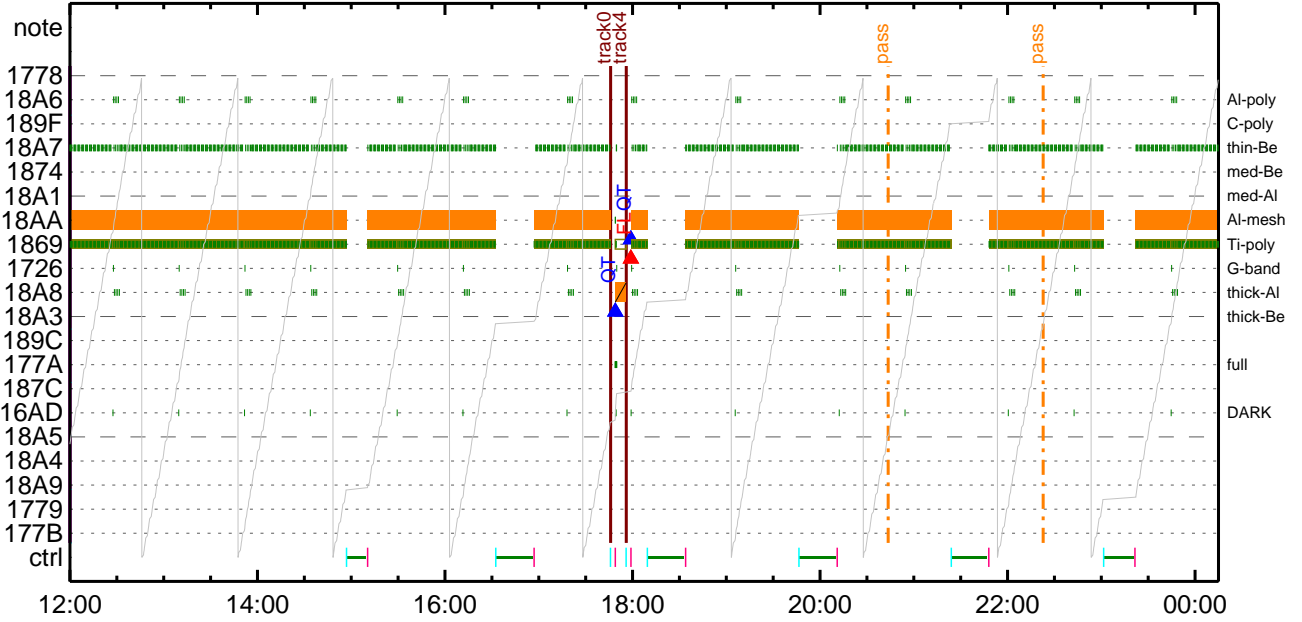
#### FLD Patrol

| Term                            | Pointing (x, y)                         | Comment |      |       |      |     |     |                    |       |            |          |  |
|---------------------------------|---|---------|------|-------|------|-----|-----|--------------------|-------|------------|----------|--|
| 09/15 17:58:46 - 09/16 06:00:16 | Track ( -523.1, 238.7) @ 09/15 17:56:00 | # Cont. |      |       |      |     |     |                    |       |            |          |  |
| 09/16 06:12:46 - 09/19 10:26:00 | Track ( -435.2, 231.9) @ 09/16 06:10:00 | # Cont. |      |       |      |     |     |                    |       |            |          |  |
| Open/Ti-poly                    | Open/thick-Al                           | 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 |  |

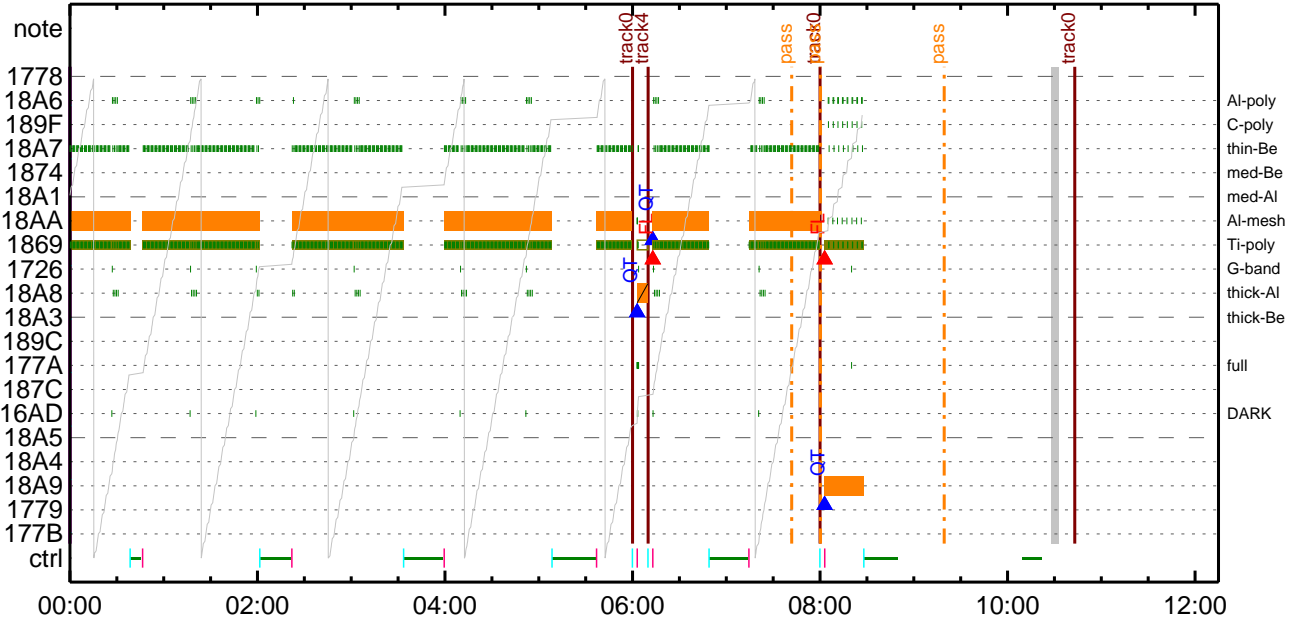
### CMDI #0147 2011/09/15



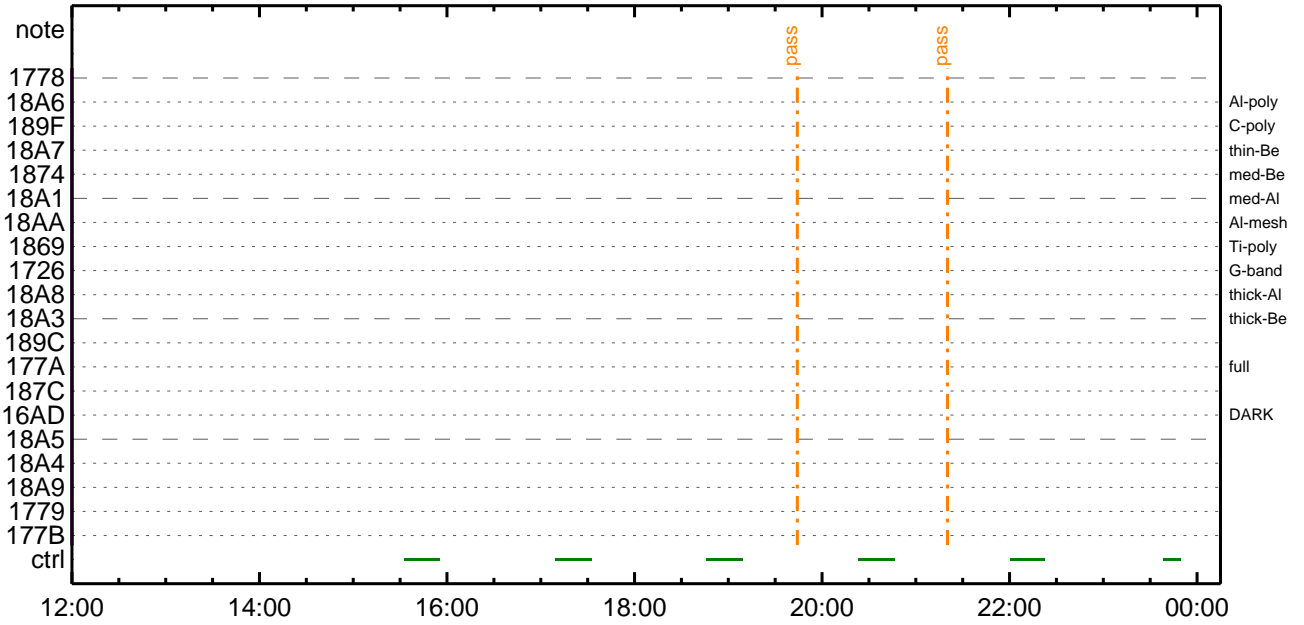
### CMDI #0147 2011/09/15



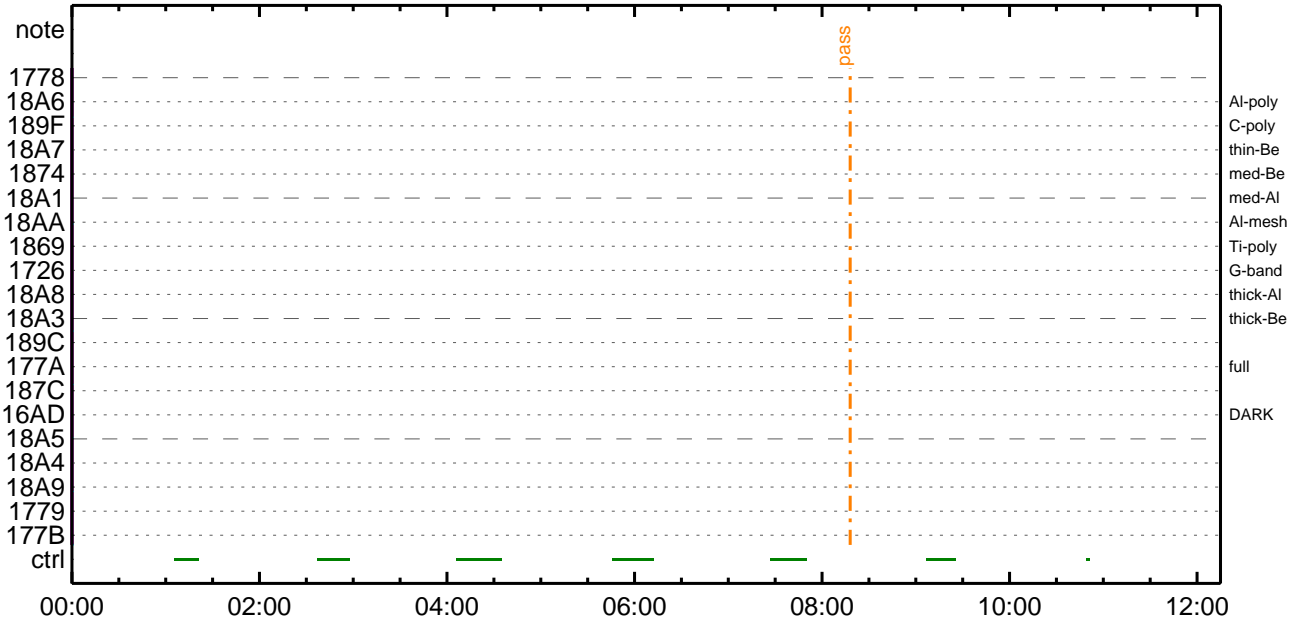
### CMDI #0147 2011/09/16



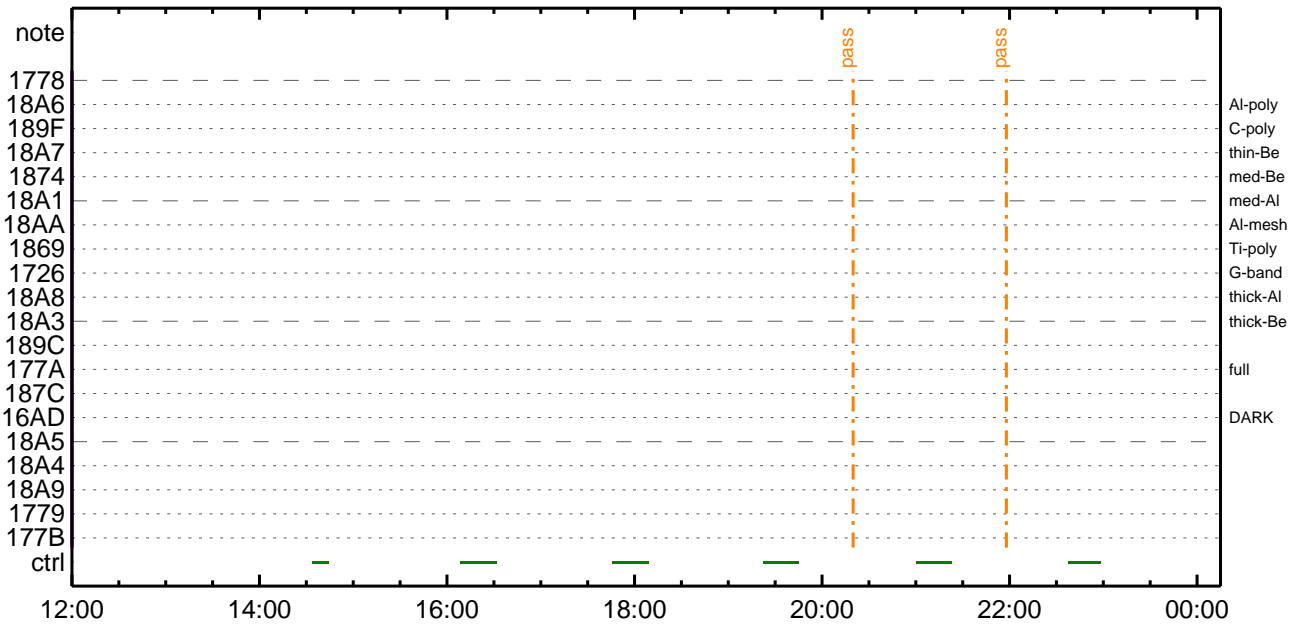
### CMDI #0147 2011/09/16



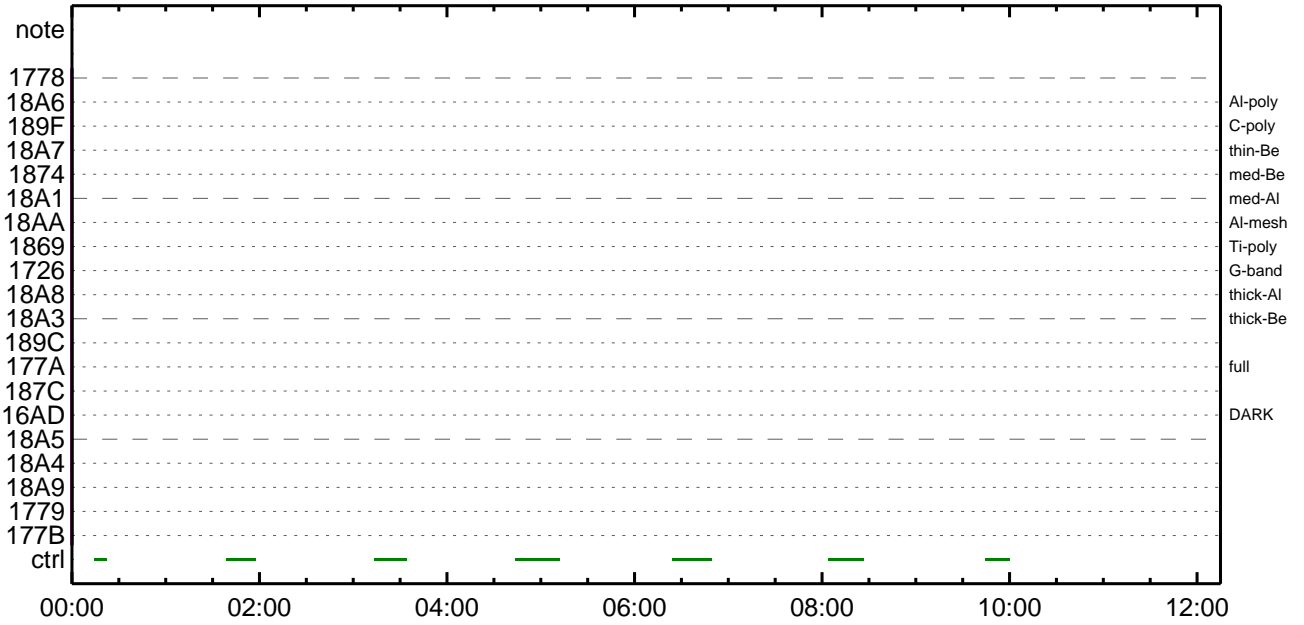
### CMDI #0147 2011/09/17



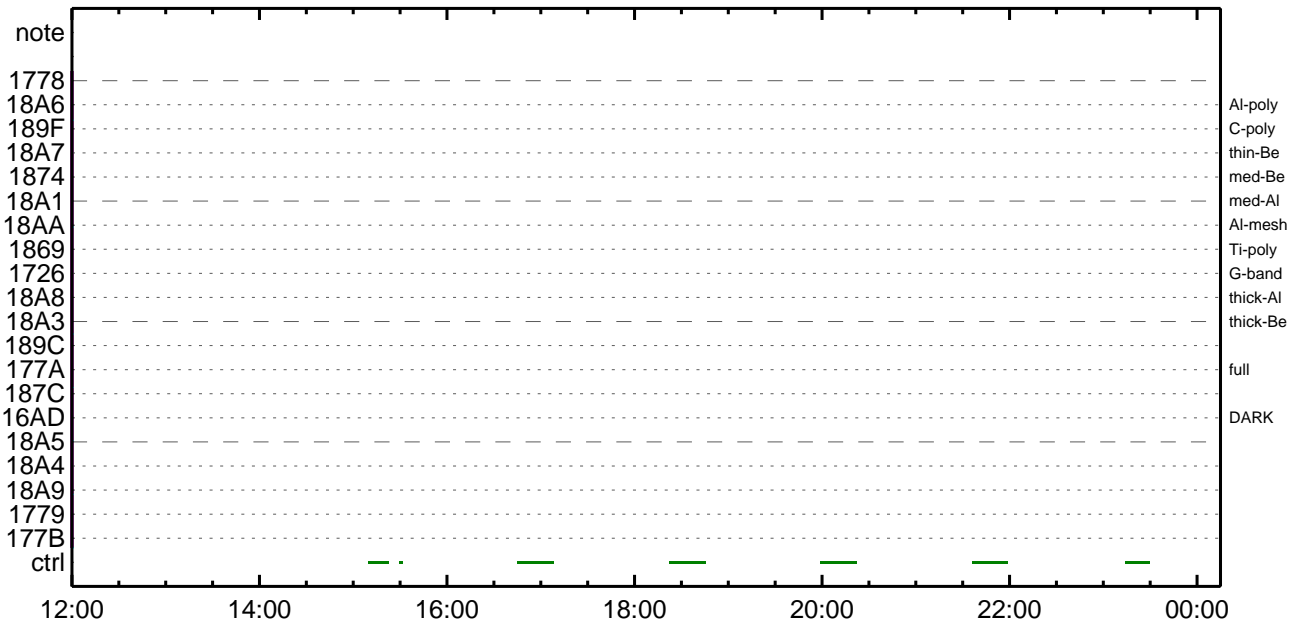
### CMDI #0147 2011/09/17



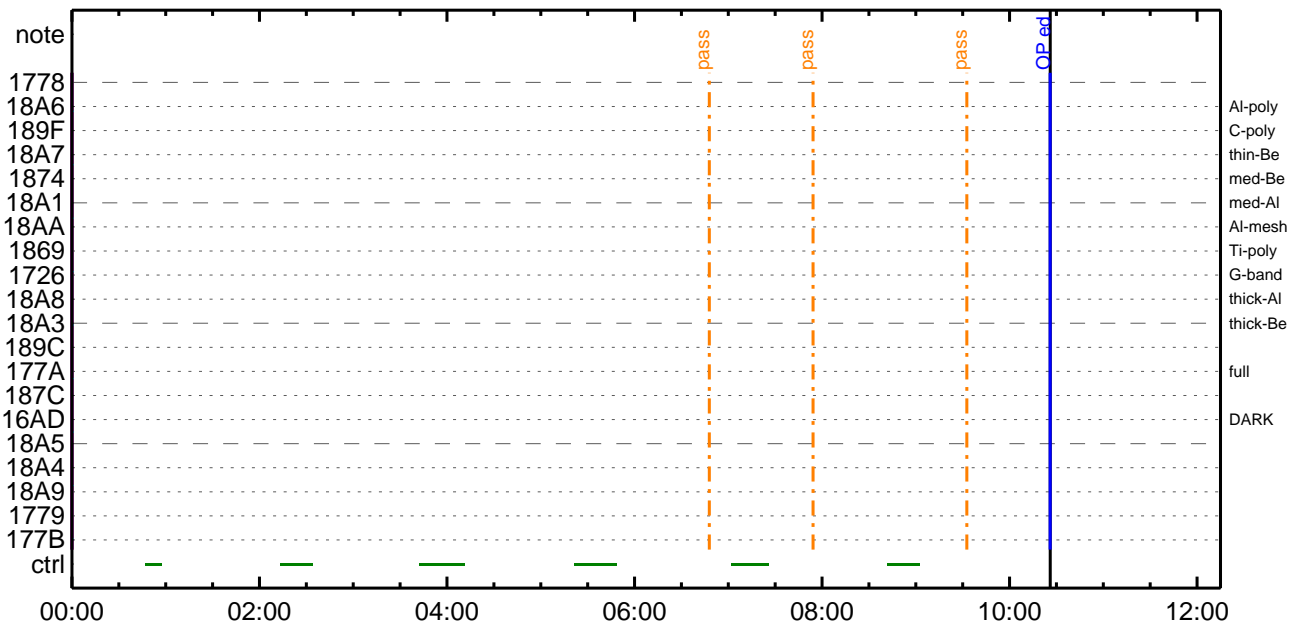
### CMDI #0147 2011/09/18



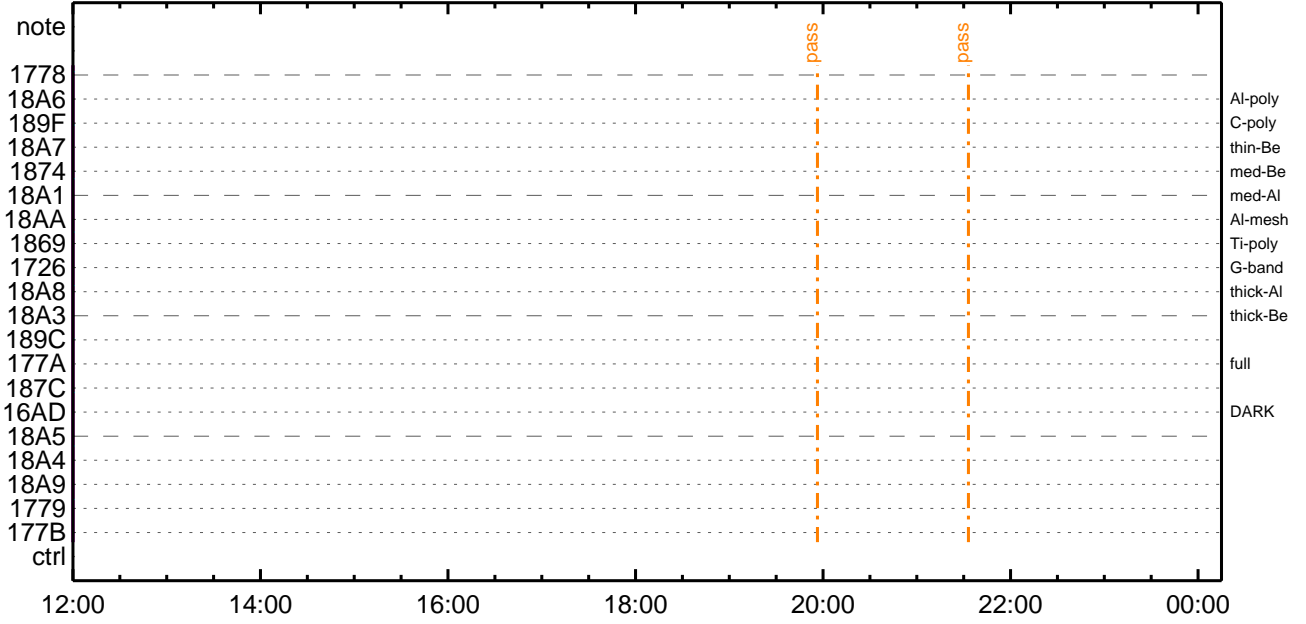
### CMDI #0147 2011/09/18



### CMDI #0147 2011/09/19



CMDI #0147 2011/09/19









```
0194 C.
0195 +. TI 2011-09-15 09:23:59.5
0196 DC 01-B2 DHU_OP_START
0197 C.          꺹꺹[HK1_TI_CMD_NUM]          EQ      1COUNTUP
0198 C.
0199 C. °Ê²¼□İÄê%İİñ□İŲÄŲ§ŲÄŲ⁻¹àİŰ
0200 C.          꺹꺹[HK1_TI_CMD_ENA/DIS]      EQ      ENA
0201 C.          꺹꺹[HK1_TI_CMD_NUM]          EQ      4
0202 C.          꺹꺹[HK1_NEXT_EXEC_PIM]       EQ      DHU
0203 C.          꺹꺹[HK1_NEXT_EXEC_DC]       EQ      0xB3
0204 C.
0205 . C. *****
0206 C. TIİİ°èŲÄŲÖŲ×
0207 C. *****
0208 C.
0209 C. TI_TBL(0x03AB00-0x03AEFF;§ 1024byte)
0210 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0211 BC      (03 ab 03 01 02)
0212 C.          꺹꺹[HK1_DMP_TOP_ADRS_1]     EQ      07
0213 C.          꺹꺹[HK1_DMP_TOP_ADRS_0]     EQ      2B
0214 C.          꺹꺹[HK1_DMP_BLOCK_NUM]      EQ      3
0215 C.          꺹꺹[HK1_DMP_REPEAT_NUM]     EQ      0
0216 C.          꺹꺹[HK1_DMA_DMP_PIM]       EQ      DHU
0217 +. DC 01-22 DHU_MODE_CHNG
0218 BC      (07 0b f8)
0219 C.          꺹꺹[HK1_PKT_FORM_NO]       EQ      7
0220 C.          꺹꺹[HK1_PKT_GEN_TIME]       EQ      0.25 s
0221 C.          꺹꺹[HK1_S_TLM_BIT_RATE]    EQ      32k
0222 C.          꺹꺹[HK1_X_TLM_BIT_RATE]    EQ      4M
0223 C.          꺹꺹[HK1_DMP_CHK_FLG]       EQ      EXEC
0224 C.
0225 . C. ŲÄŲÖŲ×½¹İ»□ò³İÇ§
0226 C.          꺹꺹[HK1_DMP_CHK_FLG]       EQ      NON
0227 C.
0228 . C. RAM ID=TI_TBL□İŲÈ¹ç•è²İOK□ò³İÇ§
0229 C.
0230 . C. DHUŲâ;¼ŲÈ;Ê¼Ų¼.Ųİ;¼ŲÈ;Ë□òİā□¹
0231 +. DC 01-22 DHU_MODE_CHNG
0232 BC      (02 0a f8)
0233 C.          꺹꺹[HK1_PKT_FORM_NO]       EQ      2
0234 C.          꺹꺹[HK1_PKT_GEN_TIME]       EQ      0.5S
0235 C.          꺹꺹[HK1_S_TLM_BIT_RATE]    EQ      32K
0236 C.          꺹꺹[HK1_X_TLM_BIT_RATE]    EQ      4M
0237 C.
0238 C. *****
0239 C. SOT TI command set
0240 C. *****
0241 C. Execute, after the success of OP upload.
0242 +. TI 2011-09-15 09:23:16.0
0243 DC 07-F0 MDP_SOT_MODE_STBY
0244 BC      (41)
0245 . C. -----
0246 C.      HK1_TI_CMD_NUM            = 1 CNTUP [ ]
0247 C. -----
0248 C. ***** SOT END *****
0249 . C. Stop EIS observation and temporarily disable EIS mode changes
0250 C.
0251 C.
0252 C. ***** Start EIS operation (TI set) *****
0253 C. Execute, after the success of OP upload.
0254 C. Set EIS TI-commands
0255 +. TI 2011-09-15 09:23:30.0
0256 DC 07-FC EIS_MODE_MANU
0257 BC      (21 02)
0258 +. TI 2011-09-15 09:23:40.0
0259 DC 07-FC EIS_MODE_CHG_DIS
0260 BC      (22)
0261 . C.          [ ] [HK1_TI_CMD_NUM]     EQ      2 COUNTUP
0262 C. ***** End EIS operation (TI set) *****
0263 C.
0264 C.
0265 C.
0266 C. ***** XRT START *****
0267 C. Execute, after the success of OP upload.
0268 +. TI 2011-09-15 09:23:00.0
0269 DC 07-F0 MDP_XRT_MODE_STBY
0270 BC      (c3)
0271 . C.          [ ] [HK1_TI_CMD_NUM]     EQ      1COUNTUP
0272 C.
0273 C. ***** XRT END *****
0274 C.
0275 . C. ***** MDP `ûÄİāİ»ö¼Ų□ÈÄ□¹□èDCBC•x²è *****
0276 C. (%ā°İŲÖŲÄŲÈŲŲŲÈŲáŲçŲè□È¼□□¼Ä»Ű□¹□è)
0277 . S. DC-BC dcbc-402:DCBC
0278 (MDP_known_event)
0279 C.
0280 C.
0281 . C. ***** ŲĐŲ¹•İ Daily±çİñ□È'□¹□èDCBC•x²è *****
0282 . S. DC-BC dcbc-153:DCBC
0283 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0284 C.
0285 C.
0286 . C. ;ãLOSŲÄŲ§ŲÄŲ⁻¼Ä»Ű;ã
0287 C.
0288 . C. ***** LOS *****
0289 C.
```

(a) Spacecraft Operation Procedure (real-commands)

```
main-336 2011-09-15 13:40:17 82 33 SOLAR-B MAIN //
0001 C.
0002 . C. ***** AOS *****
0003 C.
0004 . C. ;ãAOSYÁY$YÁY-¼Ä»Û;ã
0005 C.
0006 C. YÀYB;¼Y³YFÝÓYÉÄ+¿®
0007 +. DC 00-00 NULL_DUMMY_CMD
0008 C.
0009 . C. ***** AOCS : Reload orbital element (send every contact) *****
0010 C. Áí;Èø¿øÄø•µ°È»Í×ÁÇøÍYçYÁY×Yí;¼YÉ;ÈÈ%µ•íÉ;ÈøÈ¼°ÇÖø•ø¿¼í¹çøí;çÀ®, ùø¹øÈøÈøÇÁ+¿®ø•øÈøøø³øÈ;f
0011 +. DC 02-8E AOCS_ORB_UPD
0012 C.
0013 C.
0014 . C. ***** AOCS Commands (Tracking Curve Upload) *****
0015 C. Upload the Orbit Element and the Target Attitude
0016 C. RAM-ID:TARGET_ATT
0017 . S. RAM ram-150:TARGET_ATT
0018 ( )
0019 C.
0020 C.
0021 C. Set the dump memory area of TARGET_ATT
0022 +. DC 02-48 AOCS_DUMP_SET
0023 BC (07 00 00 00 18 00)
0024 C.
0025 C. <A_STs1>[MEMORY OPERATE SATUS] ADRS = 070000 [ ]
0026 C.
0027 C.
0028 C. Change the TLMFormatNo for the AOCS Dump Format
0029 +. DC 01-22 DHU_MODE_CHNG
0030 BC (04 0b f8)
0031 C.
0032 C. Wait for AOCS_DUMP to end
0033 C.
0034 . C. Check the dump memory
0035 C.
0036 C. Result = OK [ ]
0037 C.
0038 +. DC 01-22 DHU_MODE_CHNG
0039 BC (02 0a f8)
0040 C.
0041 C. <A_***>[TLM STS] FMT = 2 [ ]
0042 C.
0043 +. DC 02-8E AOCS_ORB_UPD
0044 . C.
0045 . C. Load OBSTBL, dump OBSTBL, enable EIS mode changes
0046 +. DC 07-FC EIS_MODE_MANU
0047 BC (21 02)
0048 . C. Verify EIS in MANUAL mode
0049 . C. Estimated OBSTBL upload time is 900ms
0050 C. *****
0051 C. EIS START OBSTBL LOAD
0052 C. *****
0053 . S. RAM ram-820:EIS_OBSTBL
0054 ( )
0055 +. DC 07-FC EIS_DUMP_OBSTBL
0056 BC (07 07 07 00 00 70 00)
0057 C.
0058 C. Execute, after the success of OBSTBL upload.
0059 C. Set EIS TI-commands
0060 +. TI 2011-09-15 09:23:50.0
0061 DC 07-FC EIS_MODE_CHG_ENA
0062 BC (20)
0063 . C. [ ] [HK1_TI_CMD_NUM] EQ 1 COUNTUP
0064 C. *****
0065 C. EIS END OBSTBL LOAD
0066 C. *****
0067 C.
0068 . C. ***** MDP `ûÃîôî»ó¼YøÈÄø¹øÈDCBC•x²è *****
0069 C. (¼á°íYÓYÁYÈYËYÉYáYçYÈøÈ¼°ÇÖø•ø¿¼í¹çøí;çÀ®, ùø¹øÈøÈøÇÁ+¿®ø•øÈøøø³øÈ;f)
0070 . S. DC-BC dcbc-402:DCBC
0071 (MDP_known_event)
0072 C.
0073 C.
0074 . C. ***** YDÝ¹.Ï Daily±¿ÍÑøÈ´øø¹øÈDCBC•x²è *****
0075 . S. DC-BC dcbc-153:DCBC
0076 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0077 C.
0078 C.
0079 . C. ;ãLOSÁY$YÁY-¼Ä»Û;ã
0080 C.
0081 . C. ***** LOS *****
0082 C.
```



```

0096 C.
0097 C.
0098 C.
0099 C. ***** XRT START *****
0100 C.
0101 +. DC 07-F0 MDP_XRT_CTRL_MANU
0102 BC (c1)
0103 + DC 07-F0 MDP_XRT_MODE_STBY
0104 BC (c3)
0105 . C. ----- Success Verify ? OK / NG____
0106 C.
0107 C. XRT Obs. Table Upload
0108 . S. RAM ram-291:MDP_OBS_X
0109 ( )
0110 C.
0111 +. DC 07-F0 MDP_DUMP_XRTTBL
0112 BC (84 07 00 00 00 3a d4)
0113 . C. ----- Comparison Check ? OK / ERR ____
0114 C.
0115 C.
0116 +. DC 07-F0 MDP_XRT_ROI_SET
0117 BC (cd 01 b1 b1 04 04)
0118 + DC 07-F0 MDP_XRT_ROI_SET
0119 BC (cd 02 b1 b1 08 08)
0120 + DC 07-F0 MDP_XRT_ROI_SET
0121 BC (cd 03 b1 b1 08 08)
0122 + DC 07-F0 MDP_XRT_ROI_SET
0123 BC (cd 04 b1 b1 06 06)
0124 + DC 07-F0 MDP_XRT_ROI_SET
0125 BC (cd 05 85 83 06 06)
0126 + DC 07-F0 MDP_XRT_ROI_SET
0127 BC (cd 06 85 83 06 06)
0128 + DC 07-F0 MDP_XRT_ROI_SET
0129 BC (cd 07 80 80 08 08)
0130 + DC 07-F0 MDP_XRT_ROI_SET
0131 BC (cd 08 80 50 20 10)
0132 + DC 07-F0 MDP_XRT_ROI_SET
0133 BC (cd 09 80 80 20 20)
0134 + DC 07-F0 MDP_XRT_ROI_SET
0135 BC (cd 0a 80 80 20 08)
0136 + DC 07-F0 MDP_XRT_ROI_SET
0137 BC (cd 0b 80 80 08 20)
0138 + DC 07-F0 MDP_XRT_ROI_SET
0139 BC (cd 0c 85 83 0c 0c)
0140 + DC 07-F0 MDP_XRT_ROI_SET
0141 BC (cd 0f 80 80 06 06)
0142 + DC 07-F0 MDP_XRT_ROI_SET
0143 BC (cd 10 80 80 08 08)
0144 + DC 07-F0 MDP_XRT_FLD_ENA
0145 BC (d8)
0146 + DC 07-F0 MDP_XRT_FLRCTRL_ENA
0147 BC (c8)
0148 +. DC 07-F0 MDP_XRT_AEC_RESET
0149 BC (d0)
0150 + DC 07-F0 MDP_XRT_ARS_DIS
0151 BC (d5)
0152 +. DC 07-F0 MDP_XRT_FLD_RESET
0153 BC (da)
0154 +. DC 07-F0 MDP_XRT_QT_PROG_SET
0155 BC (c4 11)
0156 +. DC 07-F0 MDP_XRT_FL_PROG_SET
0157 BC (c5 0d)
0158 . C. ----- Success Verify ? OK / NG ____
0159 C.
0160 C.
0161 . C. All OK? Yes--> Please Proceed. / No --> Stop here.
0162 C.
0163 +. DC 07-F0 MDP_XRT_MODE_OBSV
0164 BC (c2)
0165 +. TI 2011-09-15 09:23:02.0
0166 DC 07-F0 MDP_XRT_MODE_OBSV
0167 BC (c2)
0168 . C. ----- Success Verify ? OK / NG ____
0169 C.
0170 C. ***** XRT END *****
0171 . C. *****
0172 C. SOT table upload
0173 . C. *****
0174 . C. < Stop FG table >
0175 +. DC 07-F0 MDP_FG_CTRL_MANU
0176 BC (51)
0177 . C. -----
0178 C. MDP_FG_CTRL_MODE = MANU [ ]
0179 C. -----
0180 C.
0181 . C. <Upload FG Observation Table>
0182 . S. RAM ram-266:MDP_OBS_F
0183 ( )
0184 C.
0185 . C. < Dump RAMID=MDP_OBS_F >
0186 +. DC 07-F0 MDP_DUMP_FGTBL
0187 BC (82 07 00 00 00 38 b8)
0188 C. -----
0189 C. MDP_OBS_F verify = OK/NG [ ]
0190 C. -----
0191 C.
0192 C. *****
0193 C. SOT TI command set

```

```

0194 . C. *****
0195 . C. Execute, after the success of TBL upload.
0196 +. TI 2011-09-15 09:23:18.0
0197 . DC 07-F0 MDP_SOT_MODE_OBSV
0198 . BC (40)
0199 . C. -----
0200 . C. HK1_TI_CMD_NUM = 1 CNTUP [ ]
0201 . C. -----
0202 . C.
0203 . C.
0204 . C. ***** MDP 'ũÄîñî»ò¼ŸñÊÄð¹ñèDCBC•×²è *****
0205 . C. (%ã°îŸÓŸÄŸÈŸPŸÈŸÄŸçŸèñ¼¼¼Ä»Û¹ñè)
0206 . S. DC-BC dcbc-402:DCBC
0207 . (MDP_known_event)
0208 . C.
0209 . C.
0210 . C. ***** ŸDŸ¹•İ Daily±çİÑñË'Ø¹ñèDCBC•×²è *****
0211 . S. DC-BC dcbc-153:DCBC
0212 . (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0213 . C.
0214 . C.
0215 . C. ;ãLOSŸÄŸSŸÄŸ-¼Ä»Û;ã
0216 . C.
0217 . C. ***** LOS *****
0218 . C.

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XRT\_OGLIST\_0147.chk

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

|            |            |                                   |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2011/09/15 | 09:31:00.0 | XRT_CTRL_MANU_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2011/09/15 | 09:31:02.0 | XRT_FLD_RESET_412_OG [0x19c]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2011/09/15 | 09:31:04.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2011/09/15 | 09:33:54.0 | XRT_CTRL_MANU_439_OG [0x1b7]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2011/09/15 | 09:34:00.0 | AOCS_ORe-point_Start_1_OG [0x097] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 ae 36 00 00 |  |  |  |  |
| 2011/09/15 | 09:34:14.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2011/09/15 | 09:36:26.0 | XRT_FOCUS_POSITION_401_OG [0x191] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |
| 2011/09/15 | 09:36:46.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2011/09/15 | 09:36:48.0 | XRT_FLRCTRL_ENA_413_OG [0x19d]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2011/09/15 | 09:36:50.0 | XRT_AEC_RESET_443_OG [0x1bb]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2011/09/15 | 09:36:52.0 | XRT_ARS_DIS_431_OG [0x1af]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2011/09/15 | 09:36:54.0 | XRT_FLD_RESET_412_OG [0x19c]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2011/09/15 | 09:36:56.0 | XRT_QT_PROG_SET_429_OG [0x1ad]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 13          |  |  |  |  |
| 2011/09/15 | 09:36:58.0 | XRT_FL_PROG_SET_420_OG [0x1a4]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |  |  |  |  |
| 2011/09/15 | 09:48:30.0 | XRT_Custom_418_OG [0x1a2]         |   |       |                |  |  |  |  |
| 2011/09/15 | 09:49:30.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2011/09/15 | 10:59:54.0 | XRT_CTRL_MANU_439_OG [0x1b7]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2011/09/15 | 11:00:00.0 | AOCS_ORe-point_Start_2_OG [0x098] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 04 00 00 00 00 |  |  |  |  |
| 2011/09/15 | 11:02:26.0 | XRT_FOCUS_POSITION_409_OG [0x199] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2011/09/15 | 11:02:46.0 | XRT_FLD_ENA_411_OG [0x19b]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2011/09/15 | 11:02:48.0 | XRT_FLRCTRL_ENA_413_OG [0x19d]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2011/09/15 | 11:02:50.0 | XRT_AEC_RESET_443_OG [0x1bb]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2011/09/15 | 11:02:52.0 | XRT_ARS_DIS_431_OG [0x1af]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2011/09/15 | 11:02:54.0 | XRT_FLD_RESET_412_OG [0x19c]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2011/09/15 | 11:02:56.0 | XRT_QT_PROG_SET_437_OG [0x1b5]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0e          |  |  |  |  |
| 2011/09/15 | 11:02:58.0 | XRT_FL_PROG_SET_420_OG [0x1a4]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |  |  |  |  |
| 2011/09/15 | 11:03:00.0 | XRT_CTRL_AUTO_406_OG [0x196]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2011/09/15 | 14:57:00.0 | XRT_CTRL_MANU_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2011/09/15 | 14:57:02.0 | XRT_FLD_RESET_412_OG [0x19c]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2011/09/15 | 14:57:04.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2011/09/15 | 15:00:14.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2011/09/15 | 15:09:30.0 | XRT_Custom_418_OG [0x1a2]         |   |       |                |  |  |  |  |
| 2011/09/15 | 15:10:30.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2011/09/15 | 16:32:30.0 | XRT_CTRL_MANU_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2011/09/15 | 16:32:32.0 | XRT_FLD_RESET_412_OG [0x19c]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2011/09/15 | 16:32:34.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2011/09/15 | 16:35:44.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2011/09/15 | 16:56:00.0 | XRT_Custom_418_OG [0x1a2]         |   |       |                |  |  |  |  |
| 2011/09/15 | 16:57:00.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2011/09/15 | 17:45:54.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2011/09/15 | 17:45:56.0 | XRT_FOCUS_POSITION_401_OG [0x191] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |
| 2011/09/15 | 17:46:00.0 | AOCS_ORe-point_Start_3_OG [0x099] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |
| 2011/09/15 | 17:46:16.0 | XRT_FLD_DIS_402_OG [0x192]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9             |  |  |  |  |
| 2011/09/15 | 17:46:18.0 | XRT_FLRCTRL_DIS_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9             |  |  |  |  |
| 2011/09/15 | 17:46:20.0 | XRT_ARS_DIS_438_OG [0x1b6]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2011/09/15 | 17:48:58.0 | XRT_QT_PROG_SET_441_OG [0x1b9]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0b          |  |  |  |  |
| 2011/09/15 | 17:49:00.0 | XRT_CTRL_AUTO_406_OG [0x196]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |

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|            |            |                                   |                     |   |       |                |
|------------|------------|-----------------------------------|---------------------|---|-------|----------------|
| 2011/09/15 | 17:55:54.0 | XRT_CTRL_MANU_439_OG [0x1b7]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2011/09/15 | 17:56:00.0 | AOCS_Orе-point_Start_2_OG [0x098] | AOCU_NM             | 5 | 02-76 | 04 00 00 00 00 |
| 2011/09/15 | 17:58:26.0 | XRT_FOCUS_POSITION_409_OG [0x199] | XRT_FOCUS_POSITION  | 4 | 07-F8 | 22 fe 97 00    |
| 2011/09/15 | 17:58:46.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA     | 1 | 07-F0 | d8             |
| 2011/09/15 | 17:58:48.0 | XRT_FLRCTRL_ENA_413_OG [0x19d]    | MDP_XRT_FLRCTRL_ENA | 1 | 07-F0 | c8             |
| 2011/09/15 | 17:58:50.0 | XRT_AEC_RESET_443_OG [0x1bb]      | MDP_XRT_AEC_RESET   | 1 | 07-F0 | d0             |
| 2011/09/15 | 17:58:52.0 | XRT_ARS_DIS_431_OG [0x1af]        | MDP_XRT_ARS_DIS     | 1 | 07-F0 | d5             |
| 2011/09/15 | 17:58:54.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2011/09/15 | 17:58:56.0 | XRT_QT_PROG_SET_437_OG [0x1b5]    | MDP_XRT_QT_PROG_SET | 2 | 07-F0 | c4 0e          |
| 2011/09/15 | 17:58:58.0 | XRT_FL_PROG_SET_420_OG [0x1a4]    | MDP_XRT_FL_PROG_SET | 2 | 07-F0 | c5 0d          |
| 2011/09/15 | 17:59:00.0 | XRT_CTRL_AUTO_406_OG [0x196]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2011/09/15 | 18:09:30.0 | XRT_CTRL_MANU_408_OG [0x198]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2011/09/15 | 18:09:32.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2011/09/15 | 18:09:34.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2011/09/15 | 18:12:44.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2011/09/15 | 18:33:00.0 | XRT_Custom_418_OG [0x1a2]         |                     |   |       |                |
| 2011/09/15 | 18:34:00.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2011/09/15 | 19:46:30.0 | XRT_CTRL_MANU_408_OG [0x198]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2011/09/15 | 19:46:32.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2011/09/15 | 19:46:34.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2011/09/15 | 19:49:44.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2011/09/15 | 20:10:00.0 | XRT_Custom_418_OG [0x1a2]         |                     |   |       |                |
| 2011/09/15 | 20:11:00.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2011/09/15 | 21:24:00.0 | XRT_CTRL_MANU_408_OG [0x198]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2011/09/15 | 21:24:02.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2011/09/15 | 21:24:04.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2011/09/15 | 21:27:14.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2011/09/15 | 21:47:00.0 | XRT_Custom_418_OG [0x1a2]         |                     |   |       |                |
| 2011/09/15 | 21:48:00.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2011/09/15 | 23:01:30.0 | XRT_CTRL_MANU_408_OG [0x198]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2011/09/15 | 23:01:32.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2011/09/15 | 23:01:34.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2011/09/15 | 23:04:44.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2011/09/15 | 23:20:30.0 | XRT_Custom_418_OG [0x1a2]         |                     |   |       |                |
| 2011/09/15 | 23:21:30.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2011/09/16 | 00:38:30.0 | XRT_CTRL_MANU_408_OG [0x198]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2011/09/16 | 00:38:32.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2011/09/16 | 00:38:34.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2011/09/16 | 00:41:44.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2011/09/16 | 00:45:30.0 | XRT_Custom_418_OG [0x1a2]         |                     |   |       |                |
| 2011/09/16 | 00:46:30.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2011/09/16 | 02:01:30.0 | XRT_CTRL_MANU_408_OG [0x198]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2011/09/16 | 02:01:32.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2011/09/16 | 02:01:34.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    | MDP_XRT_PREFLR_STRT | 1 | 07-F0 | e8             |
| 2011/09/16 | 02:04:44.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    | MDP_XRT_PREFLR_STOP | 1 | 07-F0 | e9             |
| 2011/09/16 | 02:21:00.0 | XRT_Custom_418_OG [0x1a2]         |                     |   |       |                |
| 2011/09/16 | 02:22:00.5 | XRT_CTRL_AUTO_419_OG [0x1a3]      | MDP_XRT_CTRL_AUTO   | 1 | 07-F0 | c0             |
| 2011/09/16 | 03:33:30.0 | XRT_CTRL_MANU_408_OG [0x198]      | MDP_XRT_CTRL_MANU   | 1 | 07-F0 | c1             |
| 2011/09/16 | 03:33:32.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET   | 1 | 07-F0 | da             |
| 2011/09/16 | 03:33:34.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    |                     |   |       |                |

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|            |            |                                   |                                   |   |       |                |  |  |  |  |  |
|------------|------------|-----------------------------------|-----------------------------------|---|-------|----------------|--|--|--|--|--|
| 2011/09/16 | 03:36:44.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e8             |  |  |  |  |  |
| 2011/09/16 | 03:58:30.0 | XRT_Custom_418_OG [0x1a2]         | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |  |
| 2011/09/16 | 03:59:30.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |  |
| 2011/09/16 | 05:08:30.0 | XRT_CTRL_MANU_408_OG [0x198]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |  |
| 2011/09/16 | 05:08:32.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |  |
| 2011/09/16 | 05:08:34.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |  |
| 2011/09/16 | 05:11:44.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |  |
| 2011/09/16 | 05:36:00.0 | XRT_Custom_418_OG [0x1a2]         | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |  |
| 2011/09/16 | 05:37:00.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |  |
| 2011/09/16 | 05:59:54.0 | XRT_CTRL_MANU_400_OG [0x190]      | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |  |
| 2011/09/16 | 05:59:56.0 | XRT_FOCUS_POSITION_401_OG [0x191] | AOCS_Ore-point_Start_3_OG [0x099] | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |  |
| 2011/09/16 | 06:00:00.0 | AOCS_Ore-point_Start_3_OG [0x099] | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |  |
| 2011/09/16 | 06:00:16.0 | XRT_FLD_DIS_402_OG [0x192]        | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9             |  |  |  |  |  |
| 2011/09/16 | 06:00:18.0 | XRT_FLRCTRL_DIS_433_OG [0x1b1]    | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9             |  |  |  |  |  |
| 2011/09/16 | 06:00:20.0 | XRT_ARS_DIS_438_OG [0x1b6]        | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |  |
| 2011/09/16 | 06:02:58.0 | XRT_QT_PROG_SET_441_OG [0x1b9]    | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0b          |  |  |  |  |  |
| 2011/09/16 | 06:03:00.0 | XRT_CTRL_AUTO_406_OG [0x196]      | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |  |
| 2011/09/16 | 06:09:54.0 | XRT_CTRL_MANU_439_OG [0x1b7]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |  |
| 2011/09/16 | 06:10:00.0 | AOCS_Ore-point_Start_2_OG [0x098] | AOCU_NM                           | 5 | 02-76 | 04 00 00 00 00 |  |  |  |  |  |
| 2011/09/16 | 06:12:26.0 | XRT_FOCUS_POSITION_409_OG [0x199] | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |  |
| 2011/09/16 | 06:12:46.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |  |
| 2011/09/16 | 06:12:48.0 | XRT_FLRCTRL_ENA_413_OG [0x19d]    | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |  |
| 2011/09/16 | 06:12:50.0 | XRT_AEC_RESET_443_OG [0x1bb]      | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |  |
| 2011/09/16 | 06:12:52.0 | XRT_ARS_DIS_431_OG [0x1af]        | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |  |
| 2011/09/16 | 06:12:54.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |  |
| 2011/09/16 | 06:12:56.0 | XRT_QT_PROG_SET_437_OG [0x1b5]    | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0e          |  |  |  |  |  |
| 2011/09/16 | 06:12:58.0 | XRT_FL_PROG_SET_420_OG [0x1a4]    | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |  |  |  |  |  |
| 2011/09/16 | 06:13:00.0 | XRT_CTRL_AUTO_406_OG [0x196]      | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |  |
| 2011/09/16 | 06:49:00.0 | XRT_CTRL_MANU_408_OG [0x198]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |  |
| 2011/09/16 | 06:49:02.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |  |
| 2011/09/16 | 06:49:04.0 | XRT_PREFLR_STRT_422_OG [0x1a6]    | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |  |
| 2011/09/16 | 06:52:14.0 | XRT_PREFLR_STOP_424_OG [0x1a8]    | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |  |
| 2011/09/16 | 07:13:30.0 | XRT_Custom_418_OG [0x1a2]         | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |  |
| 2011/09/16 | 07:14:30.0 | XRT_CTRL_AUTO_419_OG [0x1a3]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |  |
| 2011/09/16 | 07:59:54.0 | XRT_CTRL_MANU_439_OG [0x1b7]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |  |
| 2011/09/16 | 08:00:00.0 | AOCS_Ore-point_Start_4_OG [0x09a] | AOCU_NM                           | 5 | 02-76 | 00 bd 59 d0 9c |  |  |  |  |  |
| 2011/09/16 | 08:02:26.0 | XRT_FOCUS_POSITION_409_OG [0x199] | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |  |
| 2011/09/16 | 08:02:46.0 | XRT_FLD_ENA_411_OG [0x19b]        | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |  |
| 2011/09/16 | 08:02:48.0 | XRT_FLRCTRL_ENA_413_OG [0x19d]    | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |  |
| 2011/09/16 | 08:02:50.0 | XRT_AEC_RESET_443_OG [0x1bb]      | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |  |
| 2011/09/16 | 08:02:52.0 | XRT_ARS_DIS_431_OG [0x1af]        | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |  |
| 2011/09/16 | 08:02:54.0 | XRT_FLD_RESET_412_OG [0x19c]      | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |  |
| 2011/09/16 | 08:02:56.0 | XRT_QT_PROG_SET_442_OG [0x1ba]    | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 03          |  |  |  |  |  |
| 2011/09/16 | 08:02:58.0 | XRT_FL_PROG_SET_420_OG [0x1a4]    | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 0d          |  |  |  |  |  |
| 2011/09/16 | 08:03:00.0 | XRT_CTRL_AUTO_406_OG [0x196]      | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |  |
| 2011/09/16 | 08:28:00.0 | XRT_CTRL_MANU_400_OG [0x190]      | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |  |
| 2011/09/16 | 10:43:00.0 | AOCS_Ore-point_Start_3_OG [0x099] | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |  |