

# XRT Timeline to be uploaded on 2013/01/12

Period: 2013/01/12 10:26:00 - 2013/01/17 10:47:00

\* \* \* \* \*

## Normal mode

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### XOB #195F: AR Standard-B(Morphology) with PFB, thin-Be + multifilter context, 384x384 at 1064 1048, 60s-cad, shorter G-band (32ms) w/ G-Band VLS Clo

| Term                            | Pointing (x, y)                         | Comment                                               |
|---------------------------------|-----------------------------------------|-------------------------------------------------------|
| 01/12 10:39:00 - 01/12 17:59:54 | Track ( -474.9, 186.7) @ 01/12 10:36:00 | # OP start + 10min, Track AR 11654, Major Flare Watch |
| 01/12 18:13:00 - 01/13 06:15:54 | Track ( -411.8, 189.7) @ 01/12 18:10:00 | # Cont.                                               |
| 01/13 06:29:00 - 01/13 17:39:00 | Track ( -304.7, 193.7) @ 01/13 06:26:00 | # Cont.                                               |

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

| Subr= 1         | 1-time(s)         | 2.0sec        |      |      |       |     |     |                      |      |   |   |         |
|-----------------|-------------------|---------------|------|------|-------|-----|-----|----------------------|------|---|---|---------|
| <b>Seqn=100</b> | <b>1-time(s)</b>  | <b>2.0sec</b> |      |      |       |     |     |                      |      |   |   |         |
| 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 | 32ms  | Obs | 1x1 | 384x384 (1064, 1048) | Q=98 | 0 | 0 | 2.0sec  |
| <b>Seqn= 19</b> | <b>1-time(s)</b>  | <b>2.0sec</b> |      |      |       |     |     |                      |      |   |   |         |
| Open/G-band     | Open/G-band       | close         | Safe | Norm | 63ms  | Obs | 1x1 | 384x384 (1064, 1048) | DPCM | 0 | 0 | 2.0sec  |
| <b>Seqn= 65</b> | <b>4-time(s)</b>  | <b>2.0sec</b> |      |      |       |     |     |                      |      |   |   |         |
| Open/Ti-poly    | Open/thick-Al     | close         | Safe | Norm | 500ms | Obs | 1x1 | 384x384 (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  |
| Al-poly/Open    | Al-poly/thick-Be  | close         | Safe | Norm | 250ms | Obs | 1x1 | 384x384 (1064, 1048) | Q=95 | 3 | 0 | 2.0sec  |
| C-poly/Open     | C-poly/thick-Al   | close         | Safe | Norm | 250ms | Obs | 1x1 | 384x384 (1064, 1048) | Q=95 | 3 | 0 | 2.0sec  |
| thin-Be/Open    | med-Be/Open       | close         | Safe | Norm | 1.00s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95 | 3 | 0 | 2.0sec  |
| med-Be/Open     | med-Be/Open       | close         | Safe | Norm | 16.0s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95 | 3 | 0 | 2.0sec  |
| med-Al/Open     | med-Al/thick-Al   | close         | Safe | Norm | 16.0s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95 | 3 | 0 | 2.0sec  |
| <b>Subr= 2</b>  | <b>1-time(s)</b>  | <b>2.0sec</b> |      |      |       |     |     |                      |      |   |   |         |
| <b>Seqn= 94</b> | <b>70-time(s)</b> | <b>2.0sec</b> |      |      |       |     |     |                      |      |   |   |         |
| thin-Be/Open    | med-Be/Open       | close         | Safe | Norm | 1.41s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95 | 3 | 0 | 15.0sec |
| thin-Be/Open    | med-Be/Open       | close         | Safe | Norm | 1.41s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95 | 3 | 1 | 15.0sec |
| thin-Be/Open    | med-Be/Open       | close         | Safe | Norm | 1.41s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95 | 3 | 2 | 15.0sec |
| thin-Be/Open    | med-Be/Open       | close         | Safe | Norm | 1.41s | 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

### XOB #192F: Synoptic Q95 2x2 - Al/mesh(33/1024) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 -1x1 2048x512) + Ti-poly(64/1443) + Thin-Be(18

| Term                            | Pointing (x, y)   | Comment                     |
|---------------------------------|-------------------|-----------------------------|
| 01/12 18:03:00 - 01/12 18:09:54 | Fixed ( 0.0, 0.0) | synoptic                    |
| 01/13 06:19:00 - 01/13 06:25:54 | Fixed ( 0.0, 0.0) | synoptic, shifted 16.0 min  |
| 01/13 18:05:30 - 01/13 18:12:24 | Fixed ( 0.0, 0.0) | synoptic, shifted 2.5 min   |
| 01/14 05:57:00 - 01/14 05:59:54 | Fixed ( 0.0, 0.0) | synoptic, shifted -10.0 min |
| 01/14 17:55:30 - 01/14 18:02:24 | Fixed ( 0.0, 0.0) | synoptic, shifted -7.5 min  |
| 01/15 06:03:00 - 01/15 06:09:54 | Fixed ( 0.0, 0.0) | synoptic                    |

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

| Subr= 1         | 1-time(s)        | 14.0sec       |      |      |       |     |     |                        |      |   |   |        |
|-----------------|------------------|---------------|------|------|-------|-----|-----|------------------------|------|---|---|--------|
| <b>Seqn= 64</b> | <b>1-time(s)</b> | <b>4.0sec</b> |      |      |       |     |     |                        |      |   |   |        |
| Open/Al-mesh    | Open/Ti-poly     | close         | Safe | Norm | 32ms  | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95 | 0 | 0 | 2.0sec |
| Open/Al-mesh    | Open/Ti-poly     | close         | Safe | Norm | 1.00s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95 | 0 | 0 | 2.0sec |
| <b>Seqn= 6</b>  | <b>1-time(s)</b> | <b>2.0sec</b> |      |      |       |     |     |                        |      |   |   |        |
| Open/Ti-poly    | Open/thick-Al    | close         | Safe | Dark | 500ms | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=98 | 0 | 0 | 2.0sec |
| Open/Ti-poly    | Open/thick-Al    | close         | Safe | Dark | 500ms | Obs | 4x4 | 2048x2048 (1024, 1024) | Q=98 | 0 | 0 | 2.0sec |
| Open/Ti-poly    | Open/thick-Al    | close         | Safe | Dark | 500ms | Obs | 8x8 | 2048x2048 (1024, 1024) | Q=98 | 0 | 0 | 2.0sec |
| Open/Ti-poly    | Open/thick-Al    | close         | Safe | Dark | 500ms | Obs | 1x1 | 2048x512 (1024, 1024)  | DPCM | 0 | 0 | 2.0sec |
| Open/Ti-poly    | Open/thick-Al    | close         | Safe | Dark | 500ms | Obs | 1x1 | 512x2048 (1024, 1024)  | DPCM | 0 | 0 | 2.0sec |
| <b>Seqn= 70</b> | <b>1-time(s)</b> | <b>4.0sec</b> |      |      |       |     |     |                        |      |   |   |        |
| Open/Ti-poly    | Open/Ti-poly     | close         | Safe | Norm | 63ms  | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95 | 0 | 0 | 2.0sec |
| Open/Ti-poly    | Open/Ti-poly     | close         | Safe | Norm | 1.41s | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95 | 0 | 0 | 2.0sec |
| <b>Seqn= 67</b> | <b>1-time(s)</b> | <b>2.0sec</b> |      |      |       |     |     |                        |      |   |   |        |
| 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 |
| <b>Seqn= 69</b> | <b>1-time(s)</b> | <b>2.0sec</b> |      |      |       |     |     |                        |      |   |   |        |
| Open/G-band     | Open/G-band      | open          | Safe | Norm | 8ms   | Obs | 2x2 | 2048x2048 (1024, 1024) | Q=95 | 0 | 0 | 2.0sec |
| <b>Subr= 2</b>  | <b>1-time(s)</b> | <b>2.0sec</b> |      |      |       |     |     |                        |      |   |   |        |
| <b>Seqn= 68</b> | <b>1-time(s)</b> | <b>2.0sec</b> |      |      |       |     |     |                        |      |   |   |        |
| Open/G-band     | Open/G-band      | close         | Safe | Norm | 32ms  | Obs | 1x1 | 2048x2048 (1024, 1024) | DPCM | 0 | 0 | 2.0sec |

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

### XOB #1962: AR Standard-B(Morphology) with PFB, thin-Be + multifilter context, 384x384 at 1064 1048, 120s-cad, shorter G-band (33ms) w/ G-Band VLS Cl

| Term                            | Pointing (x, y)                         | Comment |
|---------------------------------|-----------------------------------------|---------|
| 01/13 18:15:30 - 01/14 05:49:54 | Track ( -197.9, 196.8) @ 01/13 18:12:30 | # Cont. |
| 01/14 06:03:00 - 01/14 17:52:24 | Track ( -88.3, 198.9) @ 01/14 06:00:00  | # Cont. |
| 01/14 18:05:30 - 01/15 05:59:54 | Track ( 24.8, 200.0) @ 01/14 18:02:30   | # Cont. |
| 01/15 06:13:00 - 01/15 09:36:35 | Track ( 138.3, 200.1) @ 01/15 06:10:00  | # Cont. |

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

| Subr= 1         | 1-time(s)        | 2.0sec        |      |      |       |     |     |                      |      |   |   |        |
|-----------------|------------------|---------------|------|------|-------|-----|-----|----------------------|------|---|---|--------|
| <b>Seqn=100</b> | <b>1-time(s)</b> | <b>2.0sec</b> |      |      |       |     |     |                      |      |   |   |        |
| 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 | 32ms  | Obs | 1x1 | 384x384 (1064, 1048) | Q=98 | 0 | 0 | 2.0sec |
| <b>Seqn= 19</b> | <b>1-time(s)</b> | <b>2.0sec</b> |      |      |       |     |     |                      |      |   |   |        |

|                                     |                  |       |      |       |       |     |     |                      |       |            |          |         |
|-------------------------------------|------------------|-------|------|-------|-------|-----|-----|----------------------|-------|------------|----------|---------|
| Open/G-band                         | Open/G-band      | close | Safe | Norm  | 63ms  | Obs | 1x1 | 384x384 (1064, 1048) | DPCM  | 0          | 0        | 2.0sec  |
| <b>Seqn= 65 4-time(s) 2.0sec</b>    |                  |       |      |       |       |     |     |                      |       |            |          |         |
| Open/Ti-poly                        | Open/thick-Al    | close | Safe | Norm  | 500ms | Obs | 1x1 | 384x384 (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  |
| Al-poly/Open                        | Al-poly/thick-Be | close | Safe | Norm  | 250ms | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec  |
| C-poly/Open                         | C-poly/thick-Al  | close | Safe | Norm  | 250ms | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec  |
| thin-Be/Open                        | med-Be/Open      | close | Safe | Norm  | 1.00s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec  |
| med-Be/Open                         | med-Be/Open      | close | Safe | Norm  | 16.0s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec  |
| med-Al/Open                         | med-Al/thick-Al  | close | Safe | Norm  | 16.0s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 2.0sec  |
| <b>Subr= 2 1-time(s) 2.0sec</b>     |                  |       |      |       |       |     |     |                      |       |            |          |         |
| <b>Seqn= 73 70-time(s) 120.0sec</b> |                  |       |      |       |       |     |     |                      |       |            |          |         |
| thin-Be/Open                        | med-Be/Open      | close | Safe | Norm  | 1.41s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 0        | 12.5sec |
| thin-Be/Open                        | med-Be/Open      | close | Safe | Norm  | 1.41s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 1        | 12.5sec |
| thin-Be/Open                        | med-Be/Open      | close | Safe | Norm  | 1.41s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 2        | 12.5sec |
| thin-Be/Open                        | med-Be/Open      | close | Safe | Norm  | 1.41s | Obs | 1x1 | 384x384 (1064, 1048) | Q=95  | 3          | 3        | 12.5sec |
| Default Filter                      | Thicker Filter   | VLS   | mode | image | Exp.  | CCD | Bin | ROI: size (center)   | Comp. | AEC Buffer | Interval |         |

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### Flare mode

\* \* \* \* \*

#### XOB #1920: Flare obs. dynamics - thin-Be high cadence + context (med-Al,thick-Be -384x384 + Al-poly 512x512 2x2)-Gband (45ms)-15 loops

| Term                              | Pointing (x, y)                         | Comment                                                                  |
|-----------------------------------|-----------------------------------------|--------------------------------------------------------------------------|
| 01/12 10:39:00 - 01/12 17:59:54   | Track ( -474.9, 186.7) @ 01/12 10:36:00 | # OP start + 10min, Track AR 11654, Major Flare Watch                    |
| 01/12 18:13:00 - 01/13 06:15:54   | Track ( -411.8, 189.7) @ 01/12 18:10:00 | # Cont.                                                                  |
| 01/13 06:29:00 - 01/13 17:39:00   | Track ( -304.7, 193.7) @ 01/13 06:26:00 | # Cont.                                                                  |
| 01/13 18:15:30 - 01/14 05:49:54   | Track ( -197.9, 196.8) @ 01/13 18:12:30 | # Cont.                                                                  |
| 01/14 06:03:00 - 01/14 17:52:24   | Track ( -88.3, 198.9) @ 01/14 06:00:00  | # Cont.                                                                  |
| 01/14 18:05:30 - 01/15 05:59:54   | Track ( 24.8, 200.0) @ 01/14 18:02:30   | # Cont.                                                                  |
| 01/15 06:13:00 - 01/15 09:36:35   | Track ( 138.3, 200.1) @ 01/15 06:10:00  | # Cont.                                                                  |
| <b>PROG= 16 15-time(s)</b>        |                                         |                                                                          |
| <b>Subr= 1 45-time(s) 10.0sec</b> |                                         |                                                                          |
| <b>Seqn= 35 1-time(s) 2.0sec</b>  |                                         |                                                                          |
| thin-Be/Open                      | med-Be/Open                             | close Safe Norm 250ms Obs 1x1 384x384 (1024, 1024) Q=95 3 0 2.0sec       |
| <b>Subr= 2 1-time(s) 10.0sec</b>  |                                         |                                                                          |
| <b>Seqn= 36 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= 37 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= 38 1-time(s) 2.0sec</b>  |                                         |                                                                          |
| Open/G-band                       | Open/G-band                             | open Safe Norm 44ms Obs 1x1 384x384 (1024, 1024) Q=98 0 0 2.0sec         |
| Open/thick-Al                     | Open/thick-Al                           | close Safe Dark 1.00s Obs 1x1 384x384 (1024, 1024) Q=98 0 0 2.0sec       |
| Open/thick-Al                     | Open/thick-Al                           | close Safe Dark 1.00s Obs 2x2 512x512 (1024, 1024) Q=98 0 0 2.0sec       |
| Default Filter                    | Thicker Filter                          | VLS mode image Exp. CCD Bin ROI: size (center) Comp. AEC Buffer Interval |

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### Active Region Search

\* \* \* \* \*

NOT USED

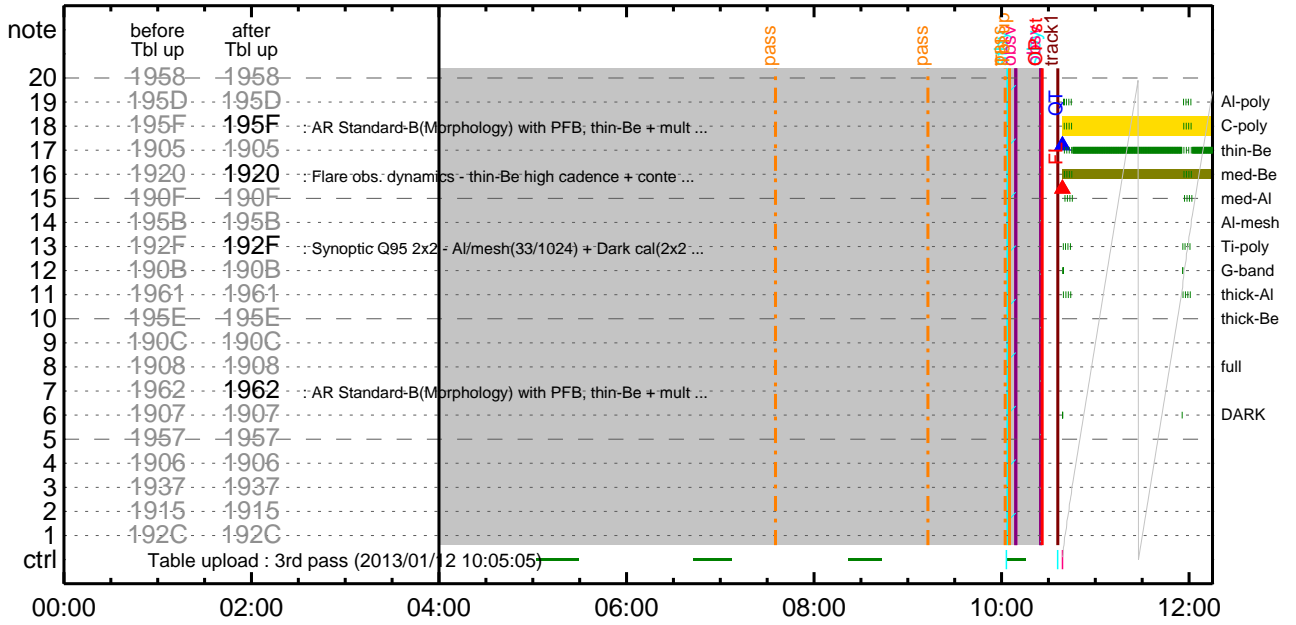
\* \* \* \* \*

### Flare Detection

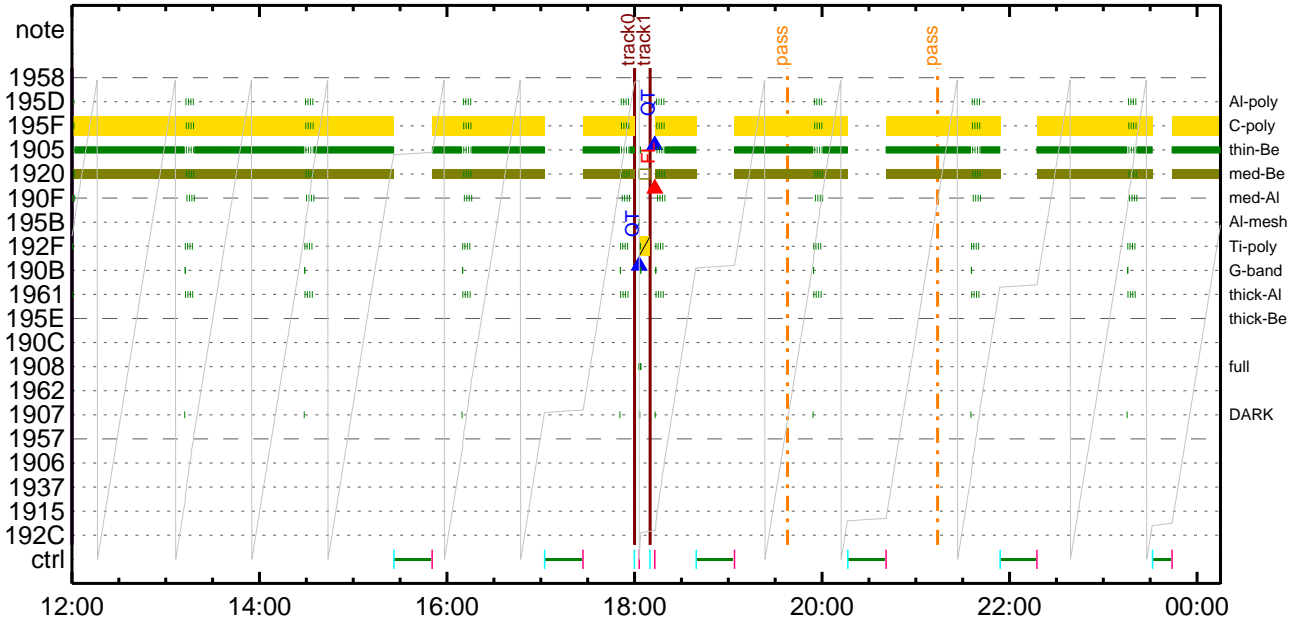
\* \* \* \* \*

| Term                            | Pointing (x, y)                         | Comment                                                                  |
|---------------------------------|-----------------------------------------|--------------------------------------------------------------------------|
| 01/12 18:10:16 - 01/13 06:16:16 | Track ( -411.8, 189.7) @ 01/12 18:10:00 | # Cont.                                                                  |
| 01/13 06:26:16 - 01/13 18:02:46 | Track ( -304.7, 193.7) @ 01/13 06:26:00 | # Cont.                                                                  |
| 01/13 18:12:46 - 01/14 05:54:16 | Track ( -197.9, 196.8) @ 01/13 18:12:30 | # Cont.                                                                  |
| 01/14 06:00:16 - 01/14 17:52:46 | Track ( -88.3, 198.9) @ 01/14 06:00:00  | # Cont.                                                                  |
| 01/14 18:02:46 - 01/15 06:00:16 | Track ( 24.8, 200.0) @ 01/14 18:02:30   | # Cont.                                                                  |
| 01/15 06:10:16 - 01/17 10:47:00 | Track ( 138.3, 200.1) @ 01/15 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 |

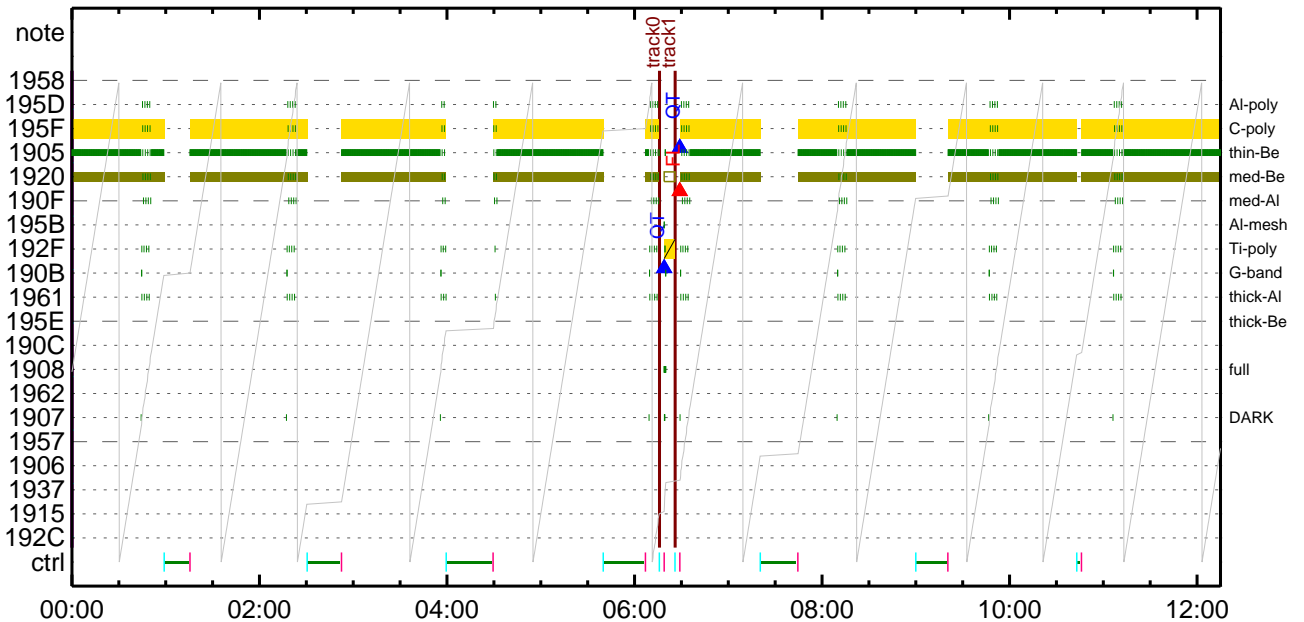
### CMDI #0177 2013/01/12



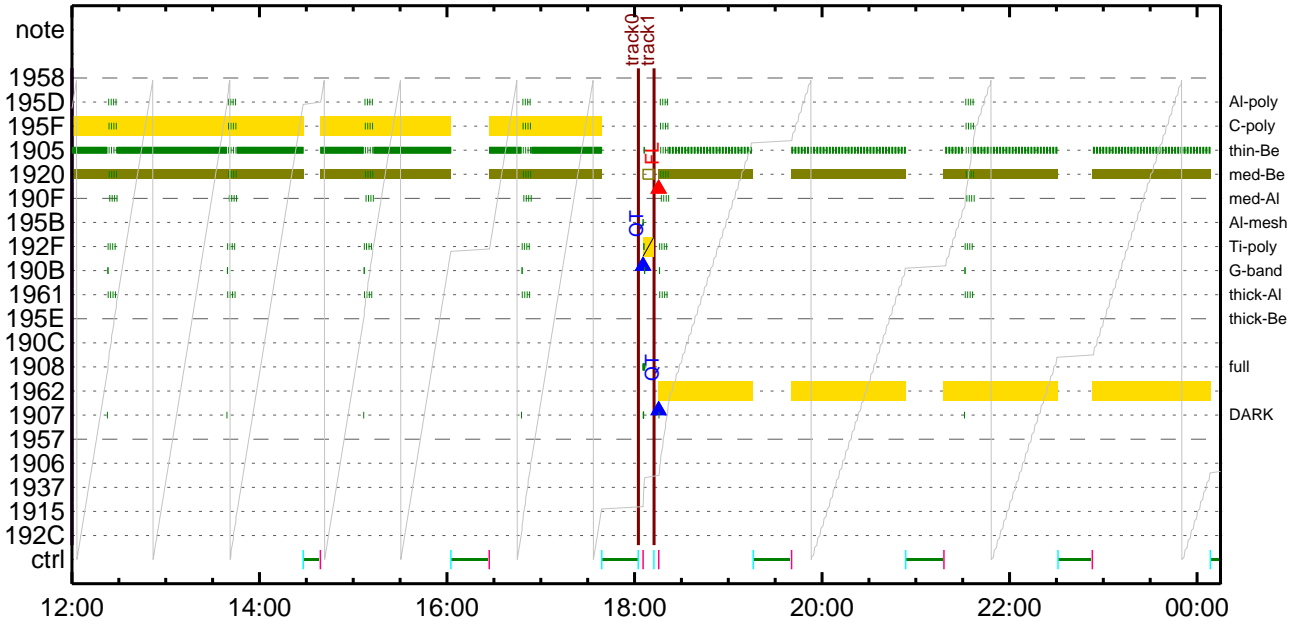
### CMDI #0177 2013/01/12



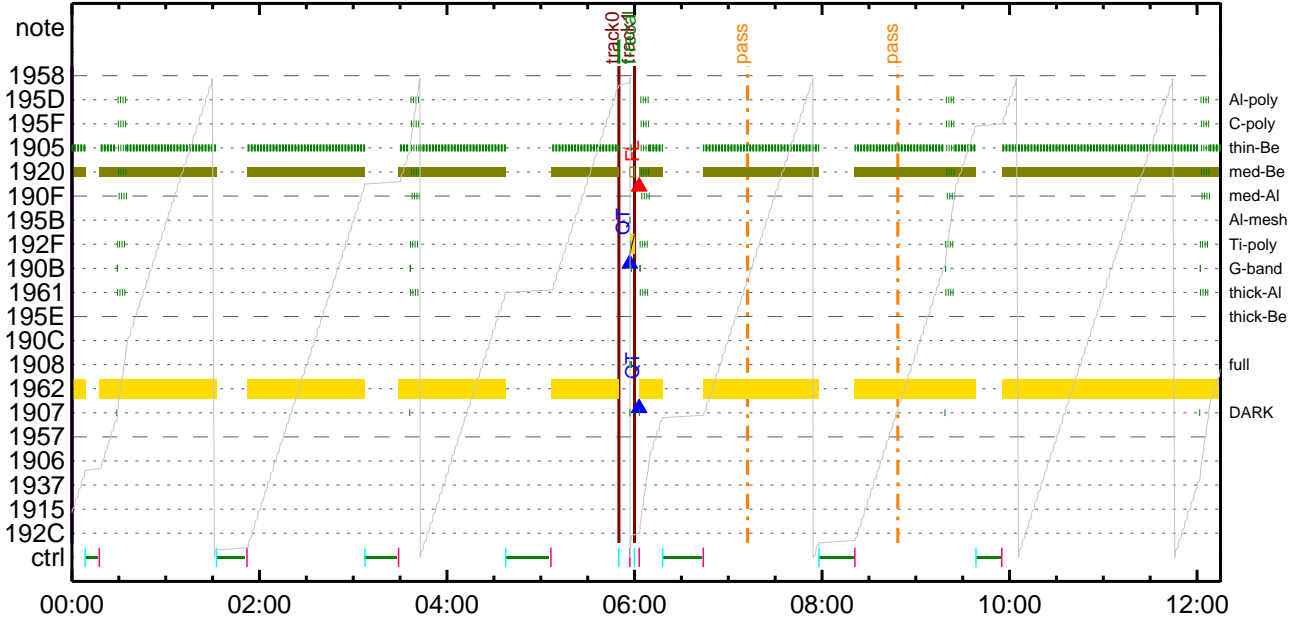
### CMDI #0177 2013/01/13



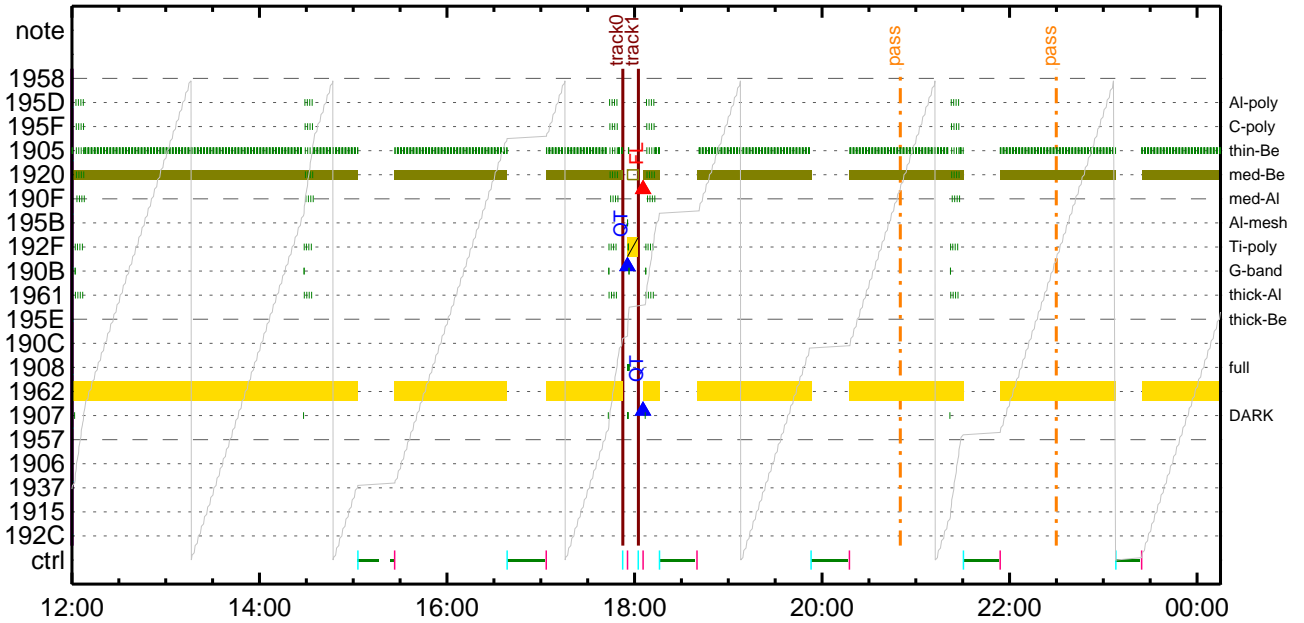
### CMDI #0177 2013/01/13



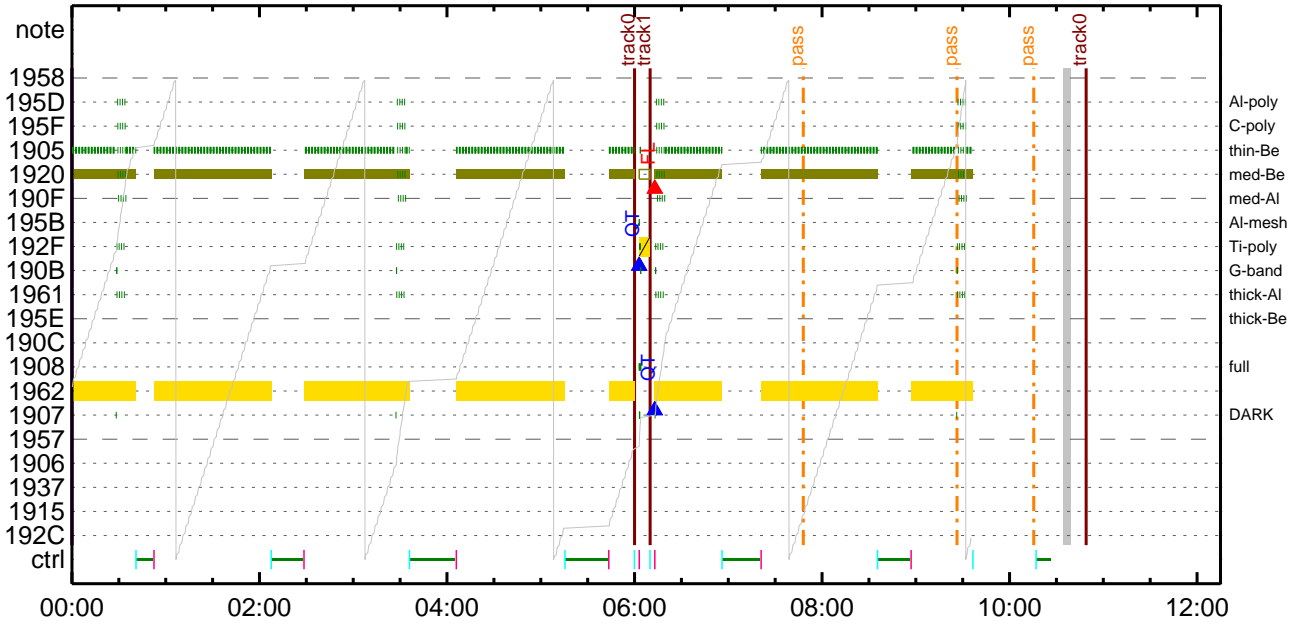
### CMDI #0177 2013/01/14



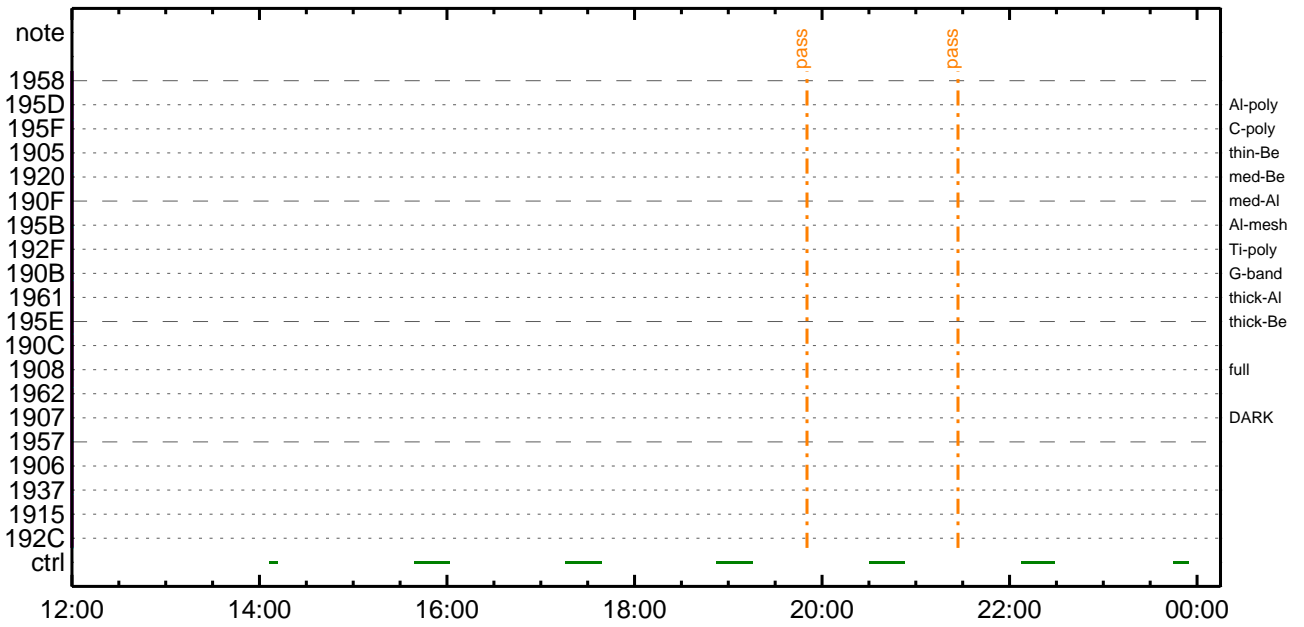
### CMDI #0177 2013/01/14



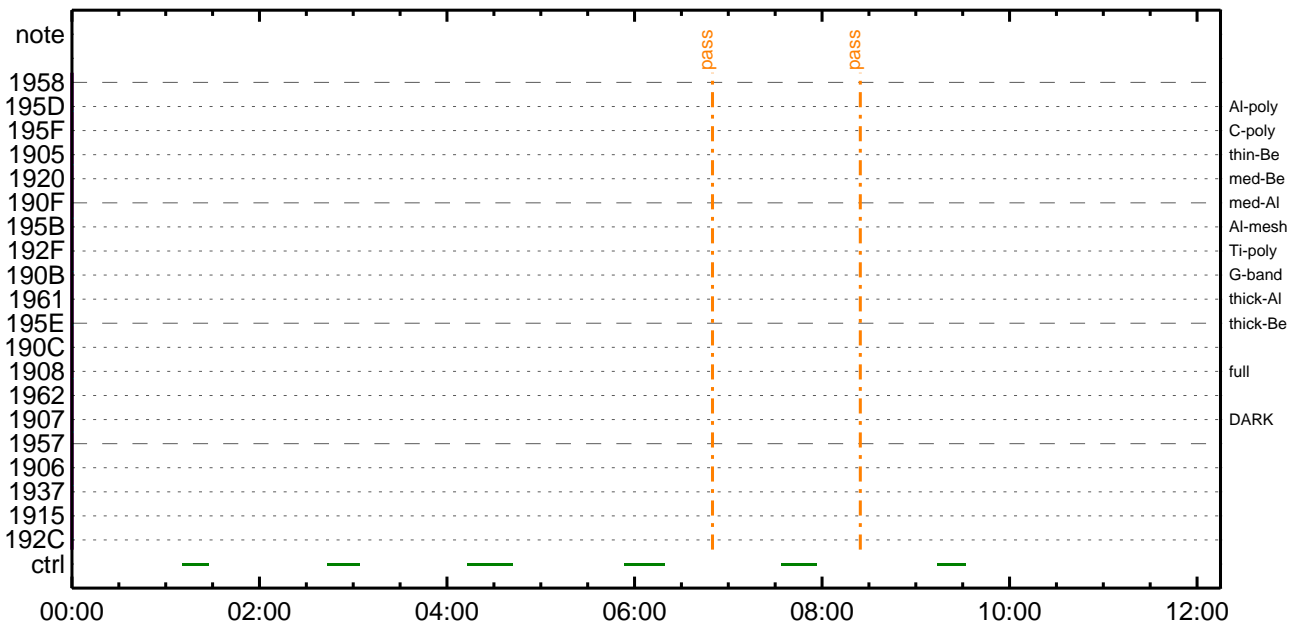
### CMDI #0177 2013/01/15



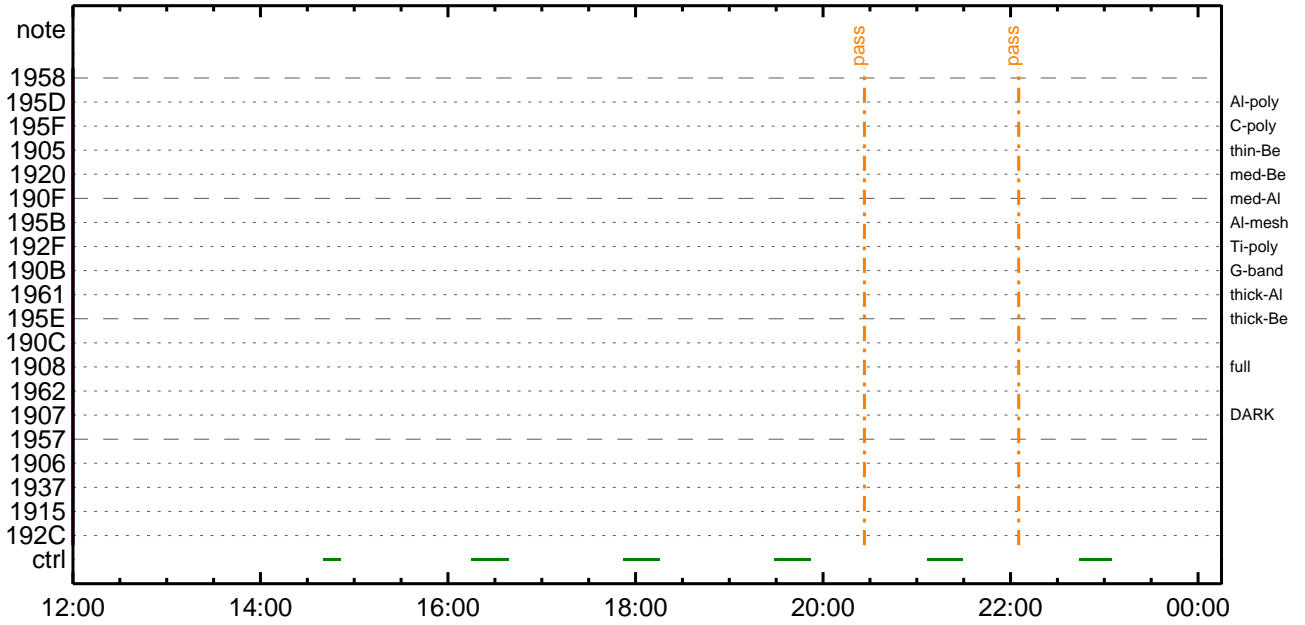
### CMDI #0177 2013/01/15



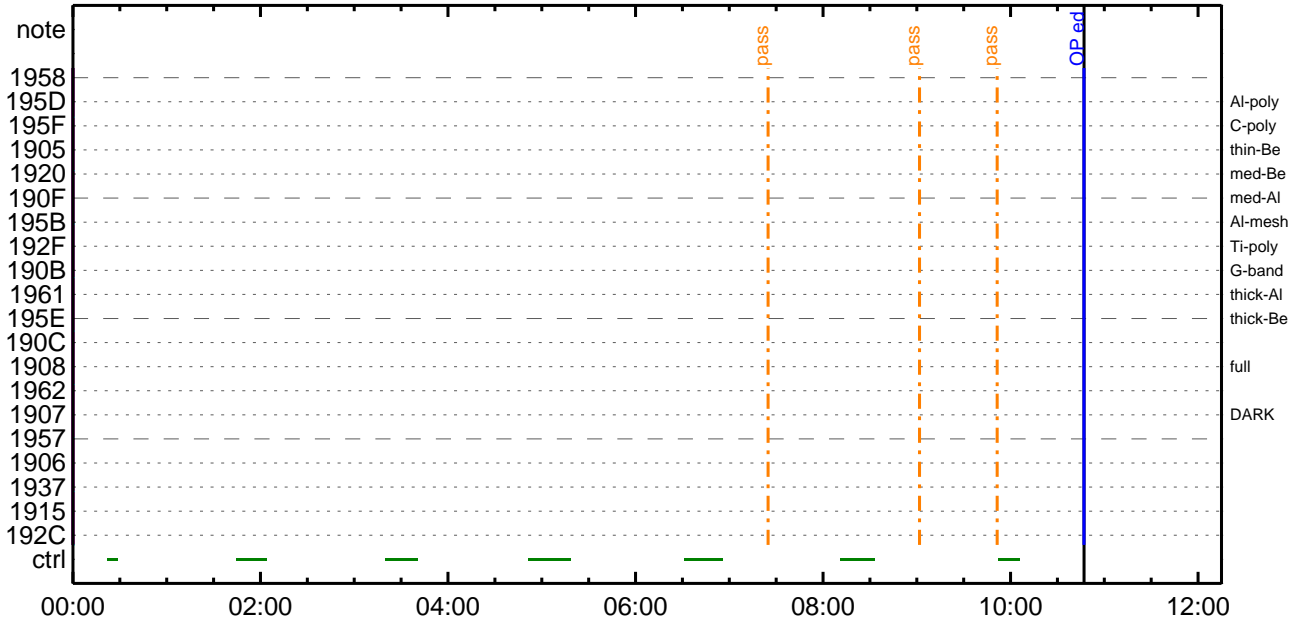
### CMDI #0177 2013/01/16



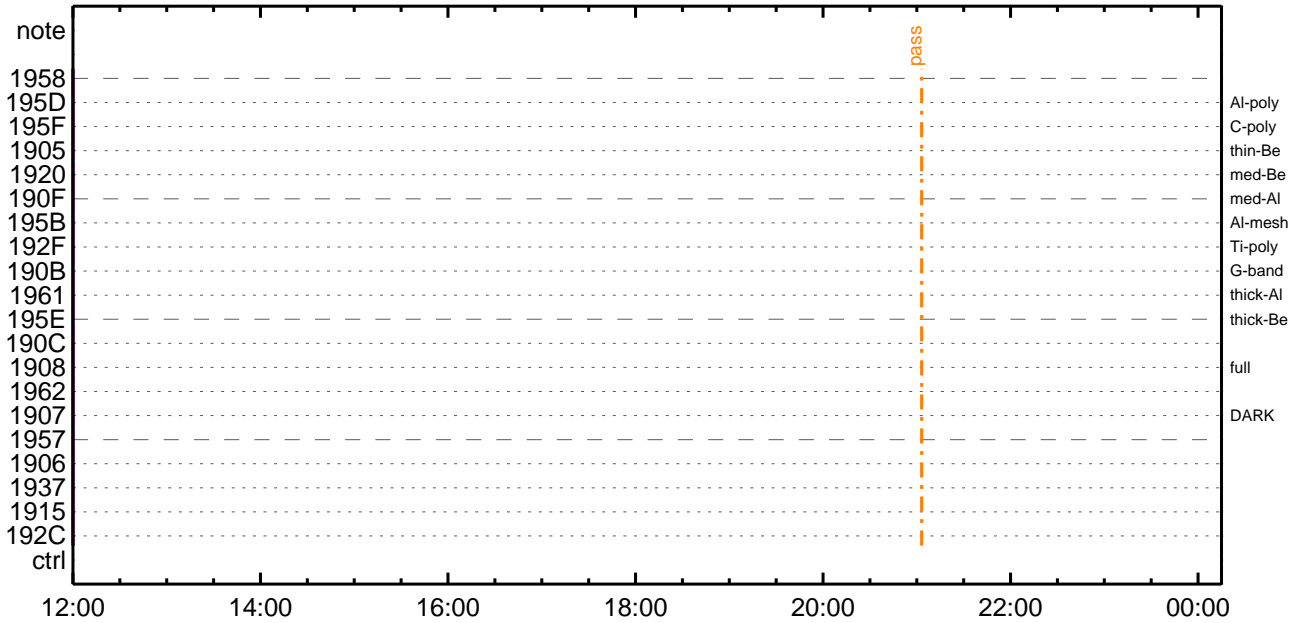
### CMDI #0177 2013/01/16



### CMDI #0177 2013/01/17



### CMDI #0177 2013/01/17





0096 C.  
0097 C.  
0098 . C. \*\*\*\*\*  
0099 C. OP/OGY1;YÉ;YAYOYx  
0100 C. \*\*\*\*\*  
0101 C.  
0102 . C. ;ãOP/OGY1;YÉ;ã  
0103 . S. OP op-386:OP  
0104 ( )  
0105 . S. OG og-386: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=NMOGªî¼E¹ç.ë²îOKªò³îÇ§  
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=NMOGªî¼E¹ç.ë²îOKªò³îÇ§  
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=OPªî¼E¹ç.ë²îOKªò³îÇ§  
0165 C.  
0166 . C. \*\*\*\*\* °E²¼ªî¼Ã·¶ÁªòEÉ-ª°Ã÷¿® (¼ãµ-YAYOYx½ê¼çªòÃÓÃæªç¼ª°ª»¼i¹çªçªâ) \*\*\*\*\*  
0167 C. DHUYâ;YÉ;ÊY¼, Y;YÉ;Ëªòîãª¹  
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 UPLOADª-Ã÷¿ªNGªî¼i¹ç;ç°E²¼ªîTI-CMDÃ÷¿ªî¼Ã¹Ôª.ªÊªªª³ªE;f  
0180 C. ªªª;çSETªEEDUMªîEª±ªY¹ªç¹Ôªªªª³ªE;f  
0181 C.  
0182 . C. TIY³YþYóYÉªòÃî¿¿(UT)  
0183 +. TI 2013-01-12 10:21:00.0  
0184 DC 01-B3 DHU\_OP\_STOP  
0185 C. çç[HK1\_TI\_CMD\_NUM] EQ 1COUNTUP  
0186 C.  
0187 +. TI 2013-01-12 10:21:01.0  
0188 DC 01-B4 DHU\_OP\_COPY  
0189 C. çç[HK1\_TI\_CMD\_NUM] EQ 1COUNTUP  
0190 C.  
0191 +. TI 2013-01-12 10:21:01.0  
0192 DC 01-B5 DHU\_OPOG\_COPY  
0193 C. çç[HK1\_TI\_CMD\_NUM] EQ 1COUNTUP



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0194 C.
0195 +. TI 2013-01-12 10:25:59.5
0196 DC 01-B2 DHU_OP_START
0197 C.          çç[HK1_TI_CMD_NUM]          EQ          1COUNTUP
0198 C.
0199 C. °È²¼αîÄè%îíñòîîŷÄŷ§ŷÄŷ-¹àîÜ
0200 C.          çç[HK1_TI_CMD_ENA/DIS]      EQ          ENA
0201 C.          çç[HK1_TI_CMD_NUM]          EQ          4
0202 C.          çç[HK1_NEXT_EXEC_PIM]       EQ          DHU
0203 C.          çç[HK1_NEXT_EXEC_DC]        EQ          0xB3
0204 C.
0205 . C. *****
0206 C. TIîî°èŷÄŷÖŷ×
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.          çç[HK1_DMP_TOP_ADRS_1]     EQ          07
0213 C.          çç[HK1_DMP_TOP_ADRS_0]     EQ          2B
0214 C.          çç[HK1_DMP_BLOCK_NUM]      EQ          3
0215 C.          çç[HK1_DMP_REPEAT_NUM]     EQ          0
0216 C.          çç[HK1_DMA_DMP_PIM]        EQ          DHU
0217 +. DC 01-22 DHU_MODE_CHNG
0218 BC      (07 0b f8)
0219 C.          çç[HK1_PKT_FORM_NO]        EQ          7
0220 C.          çç[HK1_PKT_GEN_TIME]       EQ          0.25 s
0221 C.          çç[HK1_S_TLM_BIT_RATE]     EQ          32k
0222 C.          çç[HK1_X_TLM_BIT_RATE]     EQ          4M
0223 C.          çç[HK1_DMP_CHK_FLG]        EQ          EXEC
0224 C.
0225 . C. ŷÄŷÖŷ×½ªî»ò³îÇ§
0226 C.          çç[HK1_DMP_CHK_FLG]        EQ          NON
0227 C.
0228 . C. RAM ID=TI_TBLαîîÈ¹ç•è²îOKò³îÇ§
0229 C.
0230 . C. DHUŷâ;¼ŷÈ;È¼ŷ¼.ŷî;¼ŷÈ;Èòðîäα¹
0231 +. DC 01-22 DHU_MODE_CHNG
0232 BC      (02 0a f8)
0233 C.          çç[HK1_PKT_FORM_NO]        EQ          2
0234 C.          çç[HK1_PKT_GEN_TIME]       EQ          0.5S
0235 C.          çç[HK1_S_TLM_BIT_RATE]     EQ          32K
0236 C.          çç[HK1_X_TLM_BIT_RATE]     EQ          4M
0237 C.
0238 . C. Stop EIS observation and temporarily disable EIS mode changes
0239 C.
0240 C.
0241 C. ***** Start EIS operation (TI set) *****
0242 C. Execute, after the success of OP upload.
0243 C. Set EIS TI-commands
0244 +. TI 2013-01-12 10:25:30.0
0245 DC 07-FC EIS_MODE_MANU
0246 BC      (21 02)
0247 +. TI 2013-01-12 10:25:40.0
0248 DC 07-FC EIS_MODE_CHG_DIS
0249 BC      (22)
0250 . C.          [ ] [HK1_TI_CMD_NUM]      EQ          2 COUNTUP
0251 C. ***** End EIS operation (TI set) *****
0252 C.
0253 C.
0254 C.
0255 C. ***** XRT START *****
0256 C. Execute, after the success of OP upload.
0257 +. TI 2013-01-12 10:25:00.0
0258 DC 07-F0 MDP_XRT_MODE_STBY
0259 BC      (c3)
0260 . C.          [ ] [HK1_TI_CMD_NUM]      EQ          1COUNTUP
0261 C.
0262 C. ***** XRT END *****
0263 C.
0264 . C. ***** MDP `ûÄîòî»ò¼ŷòÈÄò¹òèDCBC•×²è *****
0265 C. (¼ª°îŷÖŷÄŷÈŷŷŷÈŷâŷçŷèòÈ¼α¼Ä»Ûα¹òè)
0266 . S. DC-BC dcbc-402:DCBC
0267 (MDP_known_event)
0268 C.
0269 C.
0270 . C. ***** ŷĐŷ¹.İ Daily±;îñòÈ´Øα¹òèDCBC•×²è *****
0271 . S. DC-BC dcbc-153:DCBC
0272 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0273 C.
0274 C.
0275 . C. îäLOSŷÄŷŷŷÄŷ-¼Ä»Û;ä
0276 C.
0277 . C. ***** LOS *****
0278 C.

```





(a) Spacecraft Operation Procedure (real-commands)

```
main-388 2013-01-12 15:03:38 92 33 SOLAR-B MAIN //
0001 C.
0002 . C. ***** AOS *****
0003 C.
0004 . C. ;ãAOSYÁY$YÁY-¼Á»Û;ã
0005 C.
0006 C. YÁY$;¼Y³YF¥ÓYÉÁ+¿®
0007 +. DC 00-00 NULL_DUMMY_CMD
0008 C.
0009 . C. ***** AOCs : Reload orbital element (send every contact) *****
0010 C. Áí;Èø¿òÁø•µ°È»Í×ÁÇøíYçYÁY×Yí;¼YÉ;ÈÈèµ•ííÉ;ÈøÈ¼°ÇÒø•ø¿¼í¹çøí;çÁ®, ùø¹øèøøøçÁ+¿®ø•øÈøøøøøÈ;f
0011 +. DC 02-8E AOCU_ORB_UPD
0012 C.
0013 C.
0014 C.
0015 C. ***** XRT START *****
0016 C.
0017 +. DC 07-F0 MDP_XRT_CTRL_MANU
0018 BC (c1)
0019 + DC 07-F0 MDP_XRT_MODE_STBY
0020 BC (c3)
0021 . C. ----- Success Verify ? OK / NG ____
0022 C.
0023 C. XRT Obs. Table Upload
0024 . S. RAM ram-291:MDP_OBS_X
0025 ( )
0026 C.
0027 +. DC 07-F0 MDP_DUMP_XRTTBL
0028 BC (84 07 00 00 00 3a d4)
0029 . C. ----- Comparison Check ? OK / ERR ____
0030 C.
0031 C.
0032 +. DC 07-F0 MDP_XRT_ROI_SET
0033 BC (cd 01 b1 b1 04 04)
0034 + DC 07-F0 MDP_XRT_ROI_SET
0035 BC (cd 02 b1 b1 08 08)
0036 + DC 07-F0 MDP_XRT_ROI_SET
0037 BC (cd 03 b1 b1 08 08)
0038 + DC 07-F0 MDP_XRT_ROI_SET
0039 BC (cd 04 b1 b1 06 06)
0040 + DC 07-F0 MDP_XRT_ROI_SET
0041 BC (cd 05 85 83 06 06)
0042 + DC 07-F0 MDP_XRT_ROI_SET
0043 BC (cd 06 85 83 06 06)
0044 + DC 07-F0 MDP_XRT_ROI_SET
0045 BC (cd 07 80 80 20 20)
0046 + DC 07-F0 MDP_XRT_ROI_SET
0047 BC (cd 08 80 80 20 08)
0048 + DC 07-F0 MDP_XRT_ROI_SET
0049 BC (cd 09 80 80 08 20)
0050 + DC 07-F0 MDP_XRT_ROI_SET
0051 BC (cd 0f 80 80 06 06)
0052 + DC 07-F0 MDP_XRT_ROI_SET
0053 BC (cd 10 80 80 08 08)
0054 + DC 07-F0 MDP_XRT_FLD_ENA
0055 BC (d8)
0056 + DC 07-F0 MDP_XRT_FLRCTRL_ENA
0057 BC (c8)
0058 + DC 07-F0 MDP_XRT_AEC_RESET
0059 BC (d0)
0060 + DC 07-F0 MDP_XRT_ARS_DIS
0061 BC (d5)
0062 + DC 07-F0 MDP_XRT_FLD_RESET
0063 BC (da)
0064 . C. ----- Success Verify ? OK / NG ____
0065 C.
0066 C.
0067 . C. All OK? Yes--> Please Proceed. / No --> Stop here.
0068 C.
0069 +. DC 07-F0 MDP_XRT_MODE_OBSV
0070 BC (c2)
0071 +. TI 2013-01-12 10:25:02.0
0072 DC 07-F0 MDP_XRT_MODE_OBSV
0073 BC (c2)
0074 . C. ----- Success Verify ? OK / NG ____
0075 C.
0076 C. ***** XRT END *****
0077 C.
0078 . C. ***** MDP `úÁíøí»ö¼YøÈÁøø¹øèDCBC•x²è *****
0079 C. (¼á°íYÓYÁYÉY¥YÉYáYçYÈ¼ø¼¼Á»Ûø¹øé)
0080 . S. DC-BC dcbc-402:DCBC
0081 (MDP_known_event)
0082 C.
0083 C.
0084 . C. ***** YD¥¹•í Daily±¿íÑøÉ'øø¹øèDCBC•x²è *****
0085 . S. DC-BC dcbc-153:DCBC
0086 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0087 C.
0088 C.
0089 . C. ;ãLOS¥ÁY$YÁY-¼Á»Û;ã
0090 C.
0091 . C. ***** LOS *****
0092 C.
```

Jan 12, 13 15:03

XRT\_OGLIST\_0177.chk

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

|            |            |                                   |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2013/01/12 | 10:35:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/12 | 10:35:56.0 | XRT_FOCUS_POSITION_420_OG [0x1a4] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2013/01/12 | 10:36:00.0 | AOCS_Ore-point_Start_1_OG [0x097] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 01 00 00 00 00 |  |  |  |  |
| 2013/01/12 | 10:36:16.0 | XRT_FLD_ENA_428_OG [0x1ac]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2013/01/12 | 10:36:18.0 | XRT_FLRCTRL_ENA_429_OG [0x1ad]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2013/01/12 | 10:36:20.0 | XRT_AEC_RESET_423_OG [0x1a7]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2013/01/12 | 10:36:22.0 | XRT_ARS_DIS_437_OG [0x1b5]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2013/01/12 | 10:38:54.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/12 | 10:38:56.0 | XRT_QT_PROG_SET_422_OG [0x1a6]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 12          |  |  |  |  |
| 2013/01/12 | 10:38:58.0 | XRT_FL_PROG_SET_444_OG [0x1bc]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 10          |  |  |  |  |
| 2013/01/12 | 10:39:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/12 | 15:26:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/12 | 15:26:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/12 | 15:26:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/12 | 15:29:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/12 | 15:49:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/12 | 15:50:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/12 | 17:02:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/12 | 17:02:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/12 | 17:02:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/12 | 17:05:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/12 | 17:26:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/12 | 17:27:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/12 | 17:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/12 | 17:59:56.0 | XRT_FOCUS_POSITION_403_OG [0x193] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |
| 2013/01/12 | 18:00:00.0 | AOCS_Ore-point_Start_2_OG [0x098] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |
| 2013/01/12 | 18:00:16.0 | XRT_FLD_DIS_404_OG [0x194]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9             |  |  |  |  |
| 2013/01/12 | 18:00:18.0 | XRT_FLRCTRL_DIS_405_OG [0x195]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9             |  |  |  |  |
| 2013/01/12 | 18:00:20.0 | XRT_ARS_DIS_406_OG [0x196]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2013/01/12 | 18:02:58.0 | XRT_QT_PROG_SET_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0d          |  |  |  |  |
| 2013/01/12 | 18:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/12 | 18:09:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/12 | 18:09:56.0 | XRT_FOCUS_POSITION_420_OG [0x1a4] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2013/01/12 | 18:10:00.0 | AOCS_Ore-point_Start_1_OG [0x097] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 01 00 00 00 00 |  |  |  |  |
| 2013/01/12 | 18:10:16.0 | XRT_FLD_ENA_428_OG [0x1ac]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2013/01/12 | 18:10:18.0 | XRT_FLRCTRL_ENA_429_OG [0x1ad]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2013/01/12 | 18:10:20.0 | XRT_AEC_RESET_423_OG [0x1a7]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2013/01/12 | 18:10:22.0 | XRT_ARS_DIS_437_OG [0x1b5]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2013/01/12 | 18:12:54.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/12 | 18:12:56.0 | XRT_QT_PROG_SET_422_OG [0x1a6]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 12          |  |  |  |  |
| 2013/01/12 | 18:12:58.0 | XRT_FL_PROG_SET_444_OG [0x1bc]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 10          |  |  |  |  |
| 2013/01/12 | 18:13:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/12 | 18:39:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/12 | 18:39:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/12 | 18:39:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/12 | 18:42:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/12 | 19:03:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |

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|            |            |                                   |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2013/01/12 | 19:04:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/12 | 20:16:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/12 | 20:16:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/12 | 20:16:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/12 | 20:19:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/12 | 20:40:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/12 | 20:41:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/12 | 21:54:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/12 | 21:54:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/12 | 21:54:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/12 | 21:57:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/12 | 22:16:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/12 | 22:17:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/12 | 23:31:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/12 | 23:31:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/12 | 23:31:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/12 | 23:34:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/12 | 23:43:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/12 | 23:44:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/13 | 00:59:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/13 | 00:59:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/13 | 00:59:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/13 | 01:02:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/13 | 01:14:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/13 | 01:15:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/13 | 02:30:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/13 | 02:30:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/13 | 02:30:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/13 | 02:33:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/13 | 02:51:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/13 | 02:52:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/13 | 03:59:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/13 | 03:59:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/13 | 03:59:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/13 | 04:02:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/13 | 04:28:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/13 | 04:29:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/13 | 05:40:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/13 | 05:40:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/13 | 05:40:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/13 | 05:43:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/13 | 06:06:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/13 | 06:07:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/13 | 06:15:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/13 | 06:15:56.0 | XRT_FOCUS_POSITION_403_OG [0x193] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |
| 2013/01/13 | 06:16:00.0 | AOCS_Ore-point_Start_2_OG [0x098] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |
| 2013/01/13 | 06:16:16.0 | XRT_FLD_DIS_404_OG [0x194]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9             |  |  |  |  |
| 2013/01/13 | 06:16:18.0 | XRT_FLRCTRL_DIS_405_OG [0x195]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9             |  |  |  |  |
| 2013/01/13 | 06:16:20.0 | XRT_ARS_DIS_406_OG [0x196]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2013/01/13 | 06:18:58.0 | XRT_QT_PROG_SET_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0d          |  |  |  |  |

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|            |            |                                   |   |       |                |
|------------|------------|-----------------------------------|---|-------|----------------|
| 2013/01/13 | 06:19:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/13 | 06:25:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/13 | 06:25:56.0 | XRT_FOCUS_POSITION_420_OG [0x1a4] |   |       |                |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |
| 2013/01/13 | 06:26:00.0 | AOCS_ORe-point_Start_1_OG [0x097] |   |       |                |
|            |            | AOCU_NM                           | 5 | 02-76 | 01 00 00 00 00 |
| 2013/01/13 | 06:26:16.0 | XRT_FLD_ENA_428_OG [0x1ac]        |   |       |                |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |
| 2013/01/13 | 06:26:18.0 | XRT_FLRCTRL_ENA_429_OG [0x1ad]    |   |       |                |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |
| 2013/01/13 | 06:26:20.0 | XRT_AEC_RESET_423_OG [0x1a7]      |   |       |                |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |
| 2013/01/13 | 06:26:22.0 | XRT_ARS_DIS_437_OG [0x1b5]        |   |       |                |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |
| 2013/01/13 | 06:28:54.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/13 | 06:28:56.0 | XRT_QT_PROG_SET_422_OG [0x1a6]    |   |       |                |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 12          |
| 2013/01/13 | 06:28:58.0 | XRT_FL_PROG_SET_444_OG [0x1bc]    |   |       |                |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 10          |
| 2013/01/13 | 06:29:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/13 | 07:20:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/13 | 07:20:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/13 | 07:20:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/13 | 07:23:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/13 | 07:43:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/13 | 07:44:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/13 | 09:00:00.5 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/13 | 09:00:02.5 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/13 | 09:00:04.5 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/13 | 09:03:14.5 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/13 | 09:19:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/13 | 09:20:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/13 | 10:43:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/13 | 10:43:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/13 | 10:43:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/13 | 10:45:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/13 | 10:46:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/13 | 10:46:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/13 | 14:28:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/13 | 14:28:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/13 | 14:28:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/13 | 14:31:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/13 | 14:38:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/13 | 14:39:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/13 | 16:02:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/13 | 16:02:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/13 | 16:02:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/13 | 16:05:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/13 | 16:26:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/13 | 16:27:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/13 | 17:39:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/13 | 17:39:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/13 | 17:39:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/13 | 17:42:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/13 | 18:02:24.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/13 | 18:02:26.0 | XRT_FOCUS_POSITION_403_OG [0x193] |   |       |                |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |
| 2013/01/13 | 18:02:30.0 | AOCS_ORe-point_Start_2_OG [0x098] |   |       |                |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |

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|            |            |                                   |   |       |    |    |    |    |    |
|------------|------------|-----------------------------------|---|-------|----|----|----|----|----|
| 2013/01/13 | 18:02:46.0 | XRT_FLD_DIS_404_OG [0x194]        |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9 |    |    |    |    |
| 2013/01/13 | 18:02:48.0 | XRT_FLRCTRL_DIS_405_OG [0x195]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9 |    |    |    |    |
| 2013/01/13 | 18:02:50.0 | XRT_ARS_DIS_406_OG [0x196]        |   |       |    |    |    |    |    |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5 |    |    |    |    |
| 2013/01/13 | 18:05:28.0 | XRT_QT_PROG_SET_419_OG [0x1a3]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 | 0d |    |    |    |
| 2013/01/13 | 18:05:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0 |    |    |    |    |
| 2013/01/13 | 18:12:24.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1 |    |    |    |    |
| 2013/01/13 | 18:12:26.0 | XRT_FOCUS_POSITION_420_OG [0x1a4] |   |       |    |    |    |    |    |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 | fe | 97 | 00 |    |
| 2013/01/13 | 18:12:30.0 | AOCs_Ore-point_Start_1_OG [0x097] |   |       |    |    |    |    |    |
|            |            | AOCU_NM                           | 5 | 02-76 | 01 | 00 | 00 | 00 | 00 |
| 2013/01/13 | 18:12:46.0 | XRT_FLD_ENA_428_OG [0x1ac]        |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8 |    |    |    |    |
| 2013/01/13 | 18:12:48.0 | XRT_FLRCTRL_ENA_429_OG [0x1ad]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8 |    |    |    |    |
| 2013/01/13 | 18:12:50.0 | XRT_AEC_RESET_423_OG [0x1a7]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0 |    |    |    |    |
| 2013/01/13 | 18:12:52.0 | XRT_ARS_DIS_437_OG [0x1b5]        |   |       |    |    |    |    |    |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5 |    |    |    |    |
| 2013/01/13 | 18:15:24.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da |    |    |    |    |
| 2013/01/13 | 18:15:26.0 | XRT_QT_PROG_SET_430_OG [0x1ae]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 | 07 |    |    |    |
| 2013/01/13 | 18:15:28.0 | XRT_FL_PROG_SET_444_OG [0x1bc]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 | 10 |    |    |    |
| 2013/01/13 | 18:15:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0 |    |    |    |    |
| 2013/01/13 | 19:16:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1 |    |    |    |    |
| 2013/01/13 | 19:16:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da |    |    |    |    |
| 2013/01/13 | 19:16:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8 |    |    |    |    |
| 2013/01/13 | 19:19:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9 |    |    |    |    |
| 2013/01/13 | 19:39:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |    |    |    |    |    |
| 2013/01/13 | 19:40:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0 |    |    |    |    |
| 2013/01/13 | 20:53:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1 |    |    |    |    |
| 2013/01/13 | 20:53:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da |    |    |    |    |
| 2013/01/13 | 20:53:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8 |    |    |    |    |
| 2013/01/13 | 20:56:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9 |    |    |    |    |
| 2013/01/13 | 21:17:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |    |    |    |    |    |
| 2013/01/13 | 21:18:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0 |    |    |    |    |
| 2013/01/13 | 22:31:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1 |    |    |    |    |
| 2013/01/13 | 22:31:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da |    |    |    |    |
| 2013/01/13 | 22:31:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8 |    |    |    |    |
| 2013/01/13 | 22:34:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9 |    |    |    |    |
| 2013/01/13 | 22:52:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |    |    |    |    |    |
| 2013/01/13 | 22:53:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0 |    |    |    |    |
| 2013/01/14 | 00:08:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1 |    |    |    |    |
| 2013/01/14 | 00:08:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da |    |    |    |    |
| 2013/01/14 | 00:08:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8 |    |    |    |    |
| 2013/01/14 | 00:11:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9 |    |    |    |    |
| 2013/01/14 | 00:16:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |    |    |    |    |    |
| 2013/01/14 | 00:17:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0 |    |    |    |    |
| 2013/01/14 | 01:32:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1 |    |    |    |    |
| 2013/01/14 | 01:32:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da |    |    |    |    |
| 2013/01/14 | 01:32:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8 |    |    |    |    |
| 2013/01/14 | 01:35:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9 |    |    |    |    |
| 2013/01/14 | 01:51:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |    |    |    |    |    |
| 2013/01/14 | 01:52:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0 |    |    |    |    |
| 2013/01/14 | 03:07:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1 |    |    |    |    |
| 2013/01/14 | 03:07:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |    |    |    |    |    |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da |    |    |    |    |
| 2013/01/14 | 03:07:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |    |    |    |    |    |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8 |    |    |    |    |



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|            |            |                                      |   |       |                |  |  |  |  |
|------------|------------|--------------------------------------|---|-------|----------------|--|--|--|--|
| 2013/01/14 | 03:10:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP                  | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 03:28:00.0 | XRT_Custom_434_OG [0x1b2]            |   |       |                |  |  |  |  |
| 2013/01/14 | 03:29:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                    | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 04:37:30.0 | XRT_CTRL_MANU_400_OG [0x190]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                    | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 04:37:32.0 | XRT_FLD_RESET_424_OG [0x1a8]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                    | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 04:37:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT                  | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/14 | 04:40:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP                  | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 05:05:30.0 | XRT_Custom_434_OG [0x1b2]            |   |       |                |  |  |  |  |
| 2013/01/14 | 05:06:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                    | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 05:49:54.0 | XRT_CTRL_MANU_402_OG [0x192]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                    | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 05:49:56.0 | XRT_FOCUS_RECALIBRATE_425_OG [0x1a9] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_RECAL                      | 2 | 07-F8 | 78 00          |  |  |  |  |
| 2013/01/14 | 05:50:00.0 | AOCS_Ore-point_Start_2_OG [0x098]    |   |       |                |  |  |  |  |
|            |            | AOCU_NM                              | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |
| 2013/01/14 | 05:53:56.0 | XRT_FOCUS_POSITION_403_OG [0x193]    |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                   | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |
| 2013/01/14 | 05:54:16.0 | XRT_FLD_DIS_404_OG [0x194]           |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_DIS                      | 1 | 07-F0 | d9             |  |  |  |  |
| 2013/01/14 | 05:54:18.0 | XRT_FLRCTRL_DIS_405_OG [0x195]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_DIS                  | 1 | 07-F0 | c9             |  |  |  |  |
| 2013/01/14 | 05:54:20.0 | XRT_ARS_DIS_406_OG [0x196]           |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                      | 1 | 07-F0 | d5             |  |  |  |  |
| 2013/01/14 | 05:56:58.0 | XRT_QT_PROG_SET_419_OG [0x1a3]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET                  | 2 | 07-F0 | c4 0d          |  |  |  |  |
| 2013/01/14 | 05:57:00.0 | XRT_CTRL_AUTO_408_OG [0x198]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                    | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 05:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                    | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 05:59:56.0 | XRT_FOCUS_POSITION_420_OG [0x1a4]    |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                   | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2013/01/14 | 06:00:00.0 | AOCS_Ore-point_Start_1_OG [0x097]    |   |       |                |  |  |  |  |
|            |            | AOCU_NM                              | 5 | 02-76 | 01 00 00 00 00 |  |  |  |  |
| 2013/01/14 | 06:00:16.0 | XRT_FLD_ENA_428_OG [0x1ac]           |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                      | 1 | 07-F0 | d8             |  |  |  |  |
| 2013/01/14 | 06:00:18.0 | XRT_FLRCTRL_ENA_429_OG [0x1ad]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA                  | 1 | 07-F0 | c8             |  |  |  |  |
| 2013/01/14 | 06:00:20.0 | XRT_AEC_RESET_423_OG [0x1a7]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                    | 1 | 07-F0 | d0             |  |  |  |  |
| 2013/01/14 | 06:00:22.0 | XRT_ARS_DIS_437_OG [0x1b5]           |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                      | 1 | 07-F0 | d5             |  |  |  |  |
| 2013/01/14 | 06:02:54.0 | XRT_FLD_RESET_424_OG [0x1a8]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                    | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 06:02:56.0 | XRT_QT_PROG_SET_430_OG [0x1ae]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET                  | 2 | 07-F0 | c4 07          |  |  |  |  |
| 2013/01/14 | 06:02:58.0 | XRT_FL_PROG_SET_444_OG [0x1bc]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET                  | 2 | 07-F0 | c5 10          |  |  |  |  |
| 2013/01/14 | 06:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                    | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 06:18:00.0 | XRT_CTRL_MANU_400_OG [0x190]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                    | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 06:18:02.0 | XRT_FLD_RESET_424_OG [0x1a8]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                    | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 06:18:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT                  | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/14 | 06:21:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP                  | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 06:43:00.0 | XRT_Custom_434_OG [0x1b2]            |   |       |                |  |  |  |  |
| 2013/01/14 | 06:44:00.5 | XRT_CTRL_AUTO_413_OG [0x19d]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                    | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 07:58:00.0 | XRT_CTRL_MANU_400_OG [0x190]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                    | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 07:58:02.0 | XRT_FLD_RESET_424_OG [0x1a8]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                    | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 07:58:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT                  | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/14 | 08:01:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP                  | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 08:20:00.0 | XRT_Custom_434_OG [0x1b2]            |   |       |                |  |  |  |  |
| 2013/01/14 | 08:21:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                    | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 09:38:30.0 | XRT_CTRL_MANU_400_OG [0x190]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                    | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 09:38:32.0 | XRT_FLD_RESET_424_OG [0x1a8]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                    | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 09:38:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT                  | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/14 | 09:41:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]       |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP                  | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 09:54:00.0 | XRT_Custom_434_OG [0x1b2]            |   |       |                |  |  |  |  |
| 2013/01/14 | 09:55:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                    | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 15:03:00.0 | XRT_CTRL_MANU_400_OG [0x190]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                    | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 15:03:02.0 | XRT_FLD_RESET_424_OG [0x1a8]         |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                    | 1 | 07-F0 | da             |  |  |  |  |

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|            |            |                                   |   |       |                |  |  |  |  |
|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2013/01/14 | 15:03:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/14 | 15:06:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 15:25:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/14 | 15:26:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 16:38:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 16:38:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 16:38:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/14 | 16:41:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 17:02:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/14 | 17:03:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 17:52:24.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 17:52:26.0 | XRT_FOCUS_POSITION_403_OG [0x193] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |  |  |  |  |
| 2013/01/14 | 17:52:30.0 | AOCS_Ore-point_Start_2_OG [0x098] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |
| 2013/01/14 | 17:52:46.0 | XRT_FLD_DIS_404_OG [0x194]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9             |  |  |  |  |
| 2013/01/14 | 17:52:48.0 | XRT_FLRCTRL_DIS_405_OG [0x195]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9             |  |  |  |  |
| 2013/01/14 | 17:52:50.0 | XRT_ARS_DIS_406_OG [0x196]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2013/01/14 | 17:55:28.0 | XRT_QT_PROG_SET_419_OG [0x1a3]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0d          |  |  |  |  |
| 2013/01/14 | 17:55:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 18:02:24.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 18:02:26.0 | XRT_FOCUS_POSITION_420_OG [0x1a4] |   |       |                |  |  |  |  |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |  |  |  |  |
| 2013/01/14 | 18:02:30.0 | AOCS_Ore-point_Start_1_OG [0x097] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 01 00 00 00 00 |  |  |  |  |
| 2013/01/14 | 18:02:46.0 | XRT_FLD_ENA_428_OG [0x1ac]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |  |  |  |  |
| 2013/01/14 | 18:02:48.0 | XRT_FLRCTRL_ENA_429_OG [0x1ad]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |  |  |  |  |
| 2013/01/14 | 18:02:50.0 | XRT_AEC_RESET_423_OG [0x1a7]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |  |  |  |  |
| 2013/01/14 | 18:02:52.0 | XRT_ARS_DIS_437_OG [0x1b5]        |   |       |                |  |  |  |  |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |  |  |  |  |
| 2013/01/14 | 18:05:24.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 18:05:26.0 | XRT_QT_PROG_SET_430_OG [0x1ae]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 07          |  |  |  |  |
| 2013/01/14 | 18:05:28.0 | XRT_FL_PROG_SET_444_OG [0x1bc]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 10          |  |  |  |  |
| 2013/01/14 | 18:05:30.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 18:16:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 18:16:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 18:16:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/14 | 18:19:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 18:39:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/14 | 18:40:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 19:53:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 19:53:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 19:53:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/14 | 19:56:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 20:16:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/14 | 20:17:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 21:30:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 21:30:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/14 | 21:30:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/14 | 21:33:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/14 | 21:53:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/14 | 21:54:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/14 | 23:08:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/14 | 23:08:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |

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|            |            |                                   |   |       |                |
|------------|------------|-----------------------------------|---|-------|----------------|
| 2013/01/14 | 23:08:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/14 | 23:11:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/14 | 23:23:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/14 | 23:24:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/15 | 00:41:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/15 | 00:41:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/15 | 00:41:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/15 | 00:44:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/15 | 00:51:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/15 | 00:52:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/15 | 02:07:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/15 | 02:07:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/15 | 02:07:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/15 | 02:10:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/15 | 02:27:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/15 | 02:28:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/15 | 03:36:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/15 | 03:36:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/15 | 03:36:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/15 | 03:39:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/15 | 04:05:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/15 | 04:06:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/15 | 05:15:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/15 | 05:15:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/15 | 05:15:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |
| 2013/01/15 | 05:18:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |
| 2013/01/15 | 05:42:30.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |
| 2013/01/15 | 05:43:30.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/15 | 05:59:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/15 | 05:59:56.0 | XRT_FOCUS_POSITION_403_OG [0x193] |   |       |                |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 ff aa 00    |
| 2013/01/15 | 06:00:00.0 | AOCS_OrE-point_Start_2_OG [0x098] |   |       |                |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |
| 2013/01/15 | 06:00:16.0 | XRT_FLD_DIS_404_OG [0x194]        |   |       |                |
|            |            | MDP_XRT_FLD_DIS                   | 1 | 07-F0 | d9             |
| 2013/01/15 | 06:00:18.0 | XRT_FLRCTRL_DIS_405_OG [0x195]    |   |       |                |
|            |            | MDP_XRT_FLRCTRL_DIS               | 1 | 07-F0 | c9             |
| 2013/01/15 | 06:00:20.0 | XRT_ARS_DIS_406_OG [0x196]        |   |       |                |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |
| 2013/01/15 | 06:02:58.0 | XRT_QT_PROG_SET_419_OG [0x1a3]    |   |       |                |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 0d          |
| 2013/01/15 | 06:03:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/15 | 06:09:54.0 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/15 | 06:09:56.0 | XRT_FOCUS_POSITION_420_OG [0x1a4] |   |       |                |
|            |            | XRT_FOCUS_POSITION                | 4 | 07-F8 | 22 fe 97 00    |
| 2013/01/15 | 06:10:00.0 | AOCS_OrE-point_Start_1_OG [0x097] |   |       |                |
|            |            | AOCU_NM                           | 5 | 02-76 | 01 00 00 00 00 |
| 2013/01/15 | 06:10:16.0 | XRT_FLD_ENA_428_OG [0x1ac]        |   |       |                |
|            |            | MDP_XRT_FLD_ENA                   | 1 | 07-F0 | d8             |
| 2013/01/15 | 06:10:18.0 | XRT_FLRCTRL_ENA_429_OG [0x1ad]    |   |       |                |
|            |            | MDP_XRT_FLRCTRL_ENA               | 1 | 07-F0 | c8             |
| 2013/01/15 | 06:10:20.0 | XRT_AEC_RESET_423_OG [0x1a7]      |   |       |                |
|            |            | MDP_XRT_AEC_RESET                 | 1 | 07-F0 | d0             |
| 2013/01/15 | 06:10:22.0 | XRT_ARS_DIS_437_OG [0x1b5]        |   |       |                |
|            |            | MDP_XRT_ARS_DIS                   | 1 | 07-F0 | d5             |
| 2013/01/15 | 06:12:54.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |
| 2013/01/15 | 06:12:56.0 | XRT_QT_PROG_SET_430_OG [0x1ae]    |   |       |                |
|            |            | MDP_XRT_QT_PROG_SET               | 2 | 07-F0 | c4 07          |
| 2013/01/15 | 06:12:58.0 | XRT_FL_PROG_SET_444_OG [0x1bc]    |   |       |                |
|            |            | MDP_XRT_FL_PROG_SET               | 2 | 07-F0 | c5 10          |
| 2013/01/15 | 06:13:00.0 | XRT_CTRL_AUTO_408_OG [0x198]      |   |       |                |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |
| 2013/01/15 | 06:56:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |
| 2013/01/15 | 06:56:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |

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|------------|------------|-----------------------------------|---|-------|----------------|--|--|--|--|
| 2013/01/15 | 06:56:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/15 | 06:59:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/15 | 07:20:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/15 | 07:21:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/15 | 08:35:30.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/15 | 08:35:32.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/15 | 08:35:34.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/15 | 08:38:44.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/15 | 08:56:00.0 | XRT_Custom_434_OG [0x1b2]         |   |       |                |  |  |  |  |
| 2013/01/15 | 08:57:00.0 | XRT_CTRL_AUTO_413_OG [0x19d]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_AUTO                 | 1 | 07-F0 | c0             |  |  |  |  |
| 2013/01/15 | 09:36:35.5 | XRT_CTRL_MANU_402_OG [0x192]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/15 | 10:17:00.0 | XRT_CTRL_MANU_400_OG [0x190]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_CTRL_MANU                 | 1 | 07-F0 | c1             |  |  |  |  |
| 2013/01/15 | 10:17:02.0 | XRT_FLD_RESET_424_OG [0x1a8]      |   |       |                |  |  |  |  |
|            |            | MDP_XRT_FLD_RESET                 | 1 | 07-F0 | da             |  |  |  |  |
| 2013/01/15 | 10:17:04.0 | XRT_PREFLR_STRT_432_OG [0x1b0]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STRT               | 1 | 07-F0 | e8             |  |  |  |  |
| 2013/01/15 | 10:20:14.0 | XRT_PREFLR_STOP_433_OG [0x1b1]    |   |       |                |  |  |  |  |
|            |            | MDP_XRT_PREFLR_STOP               | 1 | 07-F0 | e9             |  |  |  |  |
| 2013/01/15 | 10:49:00.0 | AOCS_ORe-point_Start_2_OG [0x098] |   |       |                |  |  |  |  |
|            |            | AOCU_NM                           | 5 | 02-76 | 00 00 00 00 00 |  |  |  |  |