XRT Timeline to be uploaded on 2016/12/24

Period: 2016/12/24 10:41:00 - 2016/12/29 12:29:00

* * * * * **Normal mode** * * * * *

XOB #1B62: QS (Filter-Ratio with Al/poly and Al/mesh), 512x384FOV at 1064, 1048 with G-band (3ms/3ms leak) 30s cad - AEC0

Term	Pointing (x, y)	Comment
12/24 10:54:00 - 12/24 12:48:54	Fixed (0.0, 920.0)	# OP start + 10min N-pole
12/24 18:11:30 - 12/25 05:20:00	Fixed (0.0, 920.0)	# N-pole
12/25 06:13:00 - 12/25 12:49:54	Fixed (0.0, 920.0)	# N-pole
12/25 20:23:00 - 12/26 05:28:54	Fixed (0.0, 920.0)	# N-pole
12/26 05:42:00 - 12/26 17:55:00	Fixed (0.0, 920.0)	# N-pole

PROG= 02 Inf.-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 56 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec
Open/G-band	Open/G-band	close	Safe	Norm	3ms	Obs	1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	16.0s	Obs	1x1	384x384 (1064, 1048)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 14 1-time(s) 30.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Al-mesh	Open/Al-mesh	close	Safe	Dark	8.00s	Obs	1x1	512x384 (1064, 1048)	Q=98	0	0	2.0sec
Open/Al-mesh	Open/Al-mesh	close	Safe	Dark	5.66s	Obs	1x1	512x384 (1064, 1048)	Q=98	0	0	2.0sec

Seqn= 90 30-time(s) 30.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Al-mesh	Open/thick-Al	close	Safe	Norm	5.66s	Obs	1x1	512x384 (1064, 1048)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	8.00s	Obs	1x1	512x384 (1064, 1048)	Q=95	0	0	2.0sec

XOB #1B5B: QS (Filter-Ratio with Al/poly and Al/mesh), 384FOV at 1064, 1048 with G-band (3ms/3ms leak) 30s cad - AEC0- HOP328-2

Term	Pointing (x, y)	Comment
12/24 12:52:00 - 12/24 17:58:24	Fixed (0.0, 920.0)	# HOP 328 with ALMA (13-16 UT), N-pole
12/25 12:53:00 - 12/25 20:09:54	Fixed (890.0, -310.0)	# HOP 328 with ALMA
12/26 18:31:30 - 12/27 06:02:54	Fixed (0.0, 920.0)	# N-pole
12/27 06:16:00 - 12/27 09:53:54	Fixed (0.0, 920.0)	# N-pole

PROG= 20 Inf.-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 56 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec
Open/G-band	Open/G-band	close	Safe	Norm	3ms	Obs	1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	16.0s	Obs	1x1	384x384 (1064, 1048)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 37 30-time(s) 30.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Al-mesh	Open/thick-Al	close	Safe	Norm	5.66s	Obs	1x1	384x384 (1064, 1048)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	8.00s	Obs	1x1	384x384 (1064, 1048)	Q=95	0	0	2.0sec

XOB #1B14: Synoptic Q95 2x2 - Al/mesh(24/256/2897) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 - 1x1 2048x512) + Al-poly(45/512/4096) + Th

Term	Pointing (x, y)	Comment
12/24 18:01:30 - 12/24 18:08:24	Fixed (0.0, 0.0)	synoptic, shifted -1.5 min
12/25 06:03:00 - 12/25 06:09:54	Fixed (0.0, 0.0)	synoptic
12/25 20:13:00 - 12/25 20:19:54	Fixed (0.0, 0.0)	synoptic
12/26 05:32:00 - 12/26 05:38:54	Fixed (0.0, 0.0)	synoptic, shifted -31.0 min
12/26 18:21:30 - 12/26 18:28:24	Fixed (0.0, 0.0)	synoptic, shifted 18.5 min
12/27 06:06:00 - 12/27 06:12:54	Fixed (0.0, 0.0)	synoptic, shifted 3.0 min

PROG= 14 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 5 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	4x4	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	8x8	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	1x1	2048x512 (1024, 1024)	DPCM	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	1x1	512x2048 (1024, 1024)	DPCM	0	0	2.0sec

Seqn= 1 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	24ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	250ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	2.83s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 99 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Al-poly/Open	Al-poly/Open	close	Safe	Norm	44ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/Open	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 67 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
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	2.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
thin-Be/Open	thin-Be/Open	close	Safe	Norm	11.3s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 54 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	2048x2048 (1024, 1024)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	close	Safe	Norm	3ms	Obs	1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

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XOB #1AE7: Flare - multifilter 26 sec cadence (Be/thin, Be/med, Al/thick), AEC 3(thin-Be AEC2), 384x384 + context (med-Al,thick-Be -384x384 + Al-poly 512

Term	Pointing (x, y)	Comment
12/24 10:54:00 - 12/24 12:48:54	Fixed (0.0, 920.0)	# OP start + 10min N-pole
12/24 12:52:00 - 12/24 17:58:24	Fixed (0.0, 920.0)	# HOP 328 with ALMA (13-16 UT), N-pole
12/24 18:11:30 - 12/25 05:20:00	Fixed (0.0, 920.0)	# N-pole
12/25 06:13:00 - 12/25 12:49:54	Fixed (0.0, 920.0)	# N-pole
12/25 12:53:00 - 12/25 20:09:54	Fixed (890.0, -310.0)	# HOP 328 with ALMA
12/25 20:23:00 - 12/26 05:28:54	Fixed (0.0, 920.0)	# N-pole
12/26 05:42:00 - 12/26 17:55:00	Fixed (0.0, 920.0)	# N-pole
12/26 18:31:30 - 12/27 06:02:54	Fixed (0.0, 920.0)	# N-pole
12/27 06:16:00 - 12/27 09:53:54	Fixed (0.0, 920.0)	# N-pole

PROG= 07 30-time(s)

Subr= 1 20-time(s) 2.0sec

Seqn= 11 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	125ms	Obs	2x2	512x512 (1024, 1024)	Q=95	2	0	2.0sec

Seqn=100 1-time(s) 10.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
thin-Be/Open	med-Be/Open	close	Safe	Norm	125ms	Obs	1x1	384x384 (1024, 1024)	Q=95	2	0	2.0sec
med-Be/Open	Open/thick-Al	close	Safe	Norm	250ms	Obs	1x1	384x384 (1024, 1024)	Q=95	3	0	2.0sec
Open/thick-Al	Open/thick-Be	close	Safe	Norm	1.00s	Obs	1x1	384x384 (1024, 1024)	Q=95	3	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 10 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
med-Al/Open	med-Al/thick-Al	close	Safe	Norm	500ms	Obs	1x1	384x384 (1024, 1024)	Q=95	3	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Norm	2.00s	Obs	1x1	384x384 (1024, 1024)	Q=95	3	0	2.0sec

Seqn= 11 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	125ms	Obs	2x2	512x512 (1024, 1024)	Q=95	2	0	2.0sec

Seqn= 84 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	384x384 (1024, 1024)	Q=98	0	0	2.0sec
Open/G-band	Open/G-band	close	Safe	Norm	3ms	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

✲ ✲ ✲ ✲ ✲ Active Region Search ✲ ✲ ✲ ✲ ✲

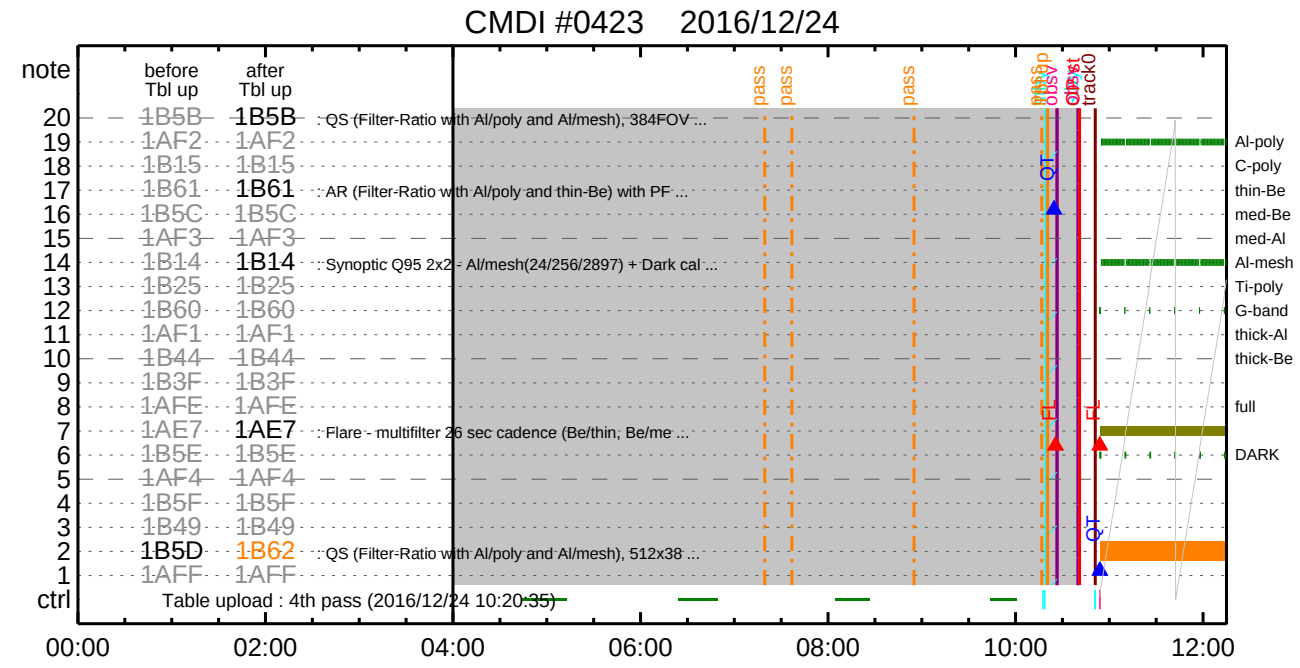
NOT USED

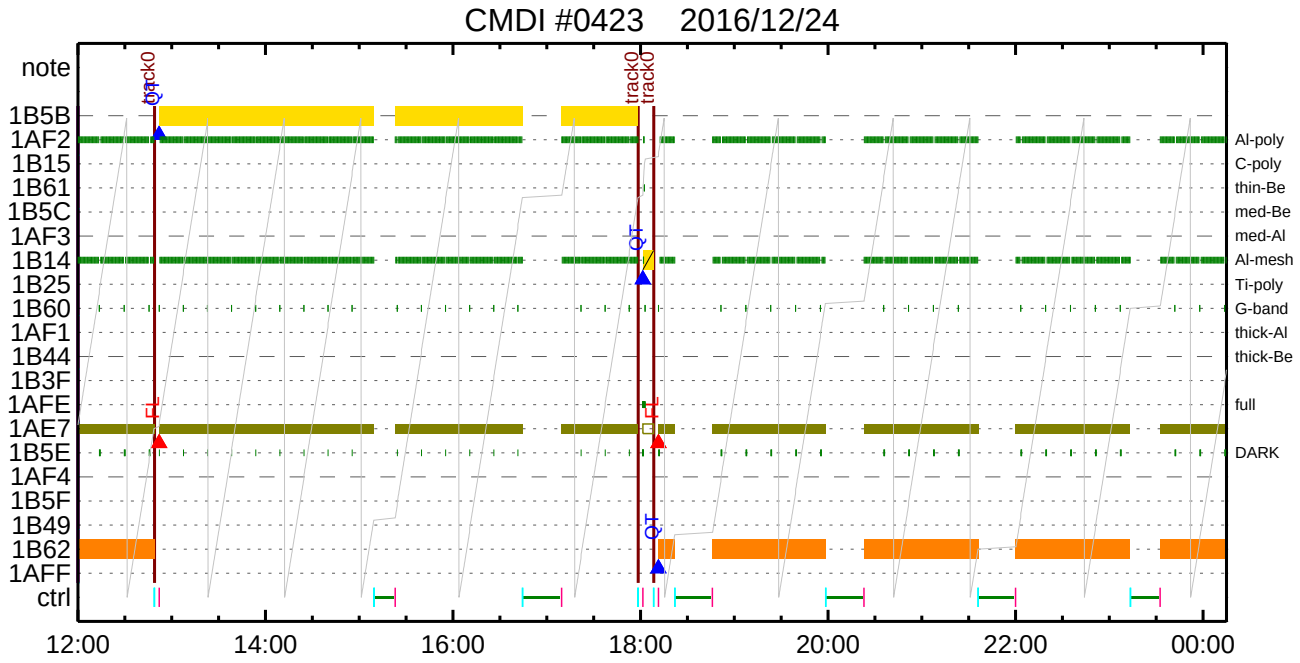
✲ ✲ ✲ ✲ ✲ Flare Detection ✲ ✲ ✲ ✲ ✲

FLD Patrol

Term	Pointing (x, y)	Comment
12/24 18:08:48 - 12/25 06:00:18	Fixed (0.0, 920.0)	# N-pole
12/25 06:10:18 - 12/25 20:10:18	Fixed (0.0, 920.0)	# N-pole
12/25 20:20:18 - 12/26 05:29:18	Fixed (0.0, 920.0)	# N-pole
12/26 05:39:18 - 12/26 18:18:48	Fixed (0.0, 920.0)	# N-pole
12/26 18:28:48 - 12/27 06:03:18	Fixed (0.0, 920.0)	# N-pole
12/27 06:13:18 - 12/29 12:29:00	Fixed (0.0, 920.0)	# N-pole

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8ms	Obs	8x8		Q=50			30sec


CMDI #0423 2016/12/24
note
before Tbl up
after Tbl up
1B5B
1AF2
1B15
1B61
1B5C
1AF3
1B14
1B25
1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B5D
1B62
1AFF
ctrl
:QS (Filter-Ratio with Al/poly and Al/mesh), 384FOV ...
:AR (Filter-Ratio with Al/poly and thin-Be) with PF ...
:Synoptic Q95 2x2 - Al/mesh(24/256/2897) + Dark cal ...
:Flare - multifilter 26 sec cadence (Be/thin, Be/me ...
:QS (Filter-Ratio with Al/poly and Al/mesh), 512x38 ...
Table upload : 4th pass (2016/12/24 10:20:35)
pass
pass
pass
track0
QT
FL
FL
QT
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0423 2016/12/24
note
track0
track0
track0
QT
FL
FL
QT
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
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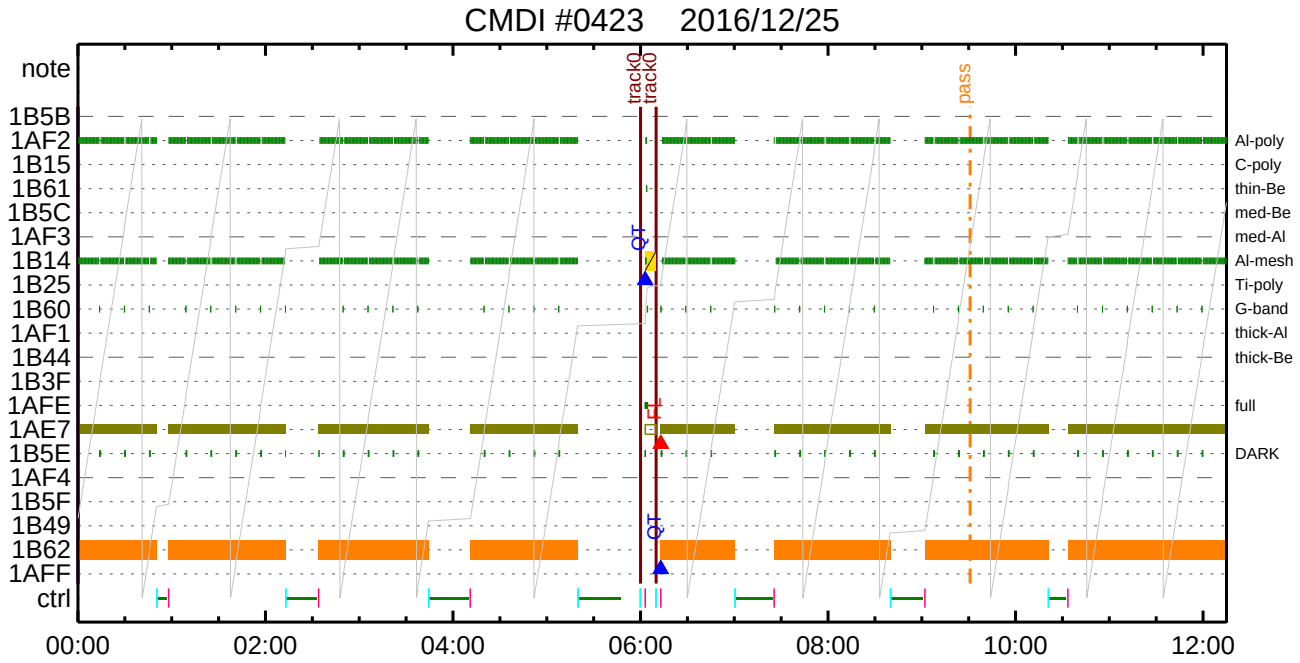
CMDI #0423 2016/12/25
note
track0
track0
pass
QT
FL
QT
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
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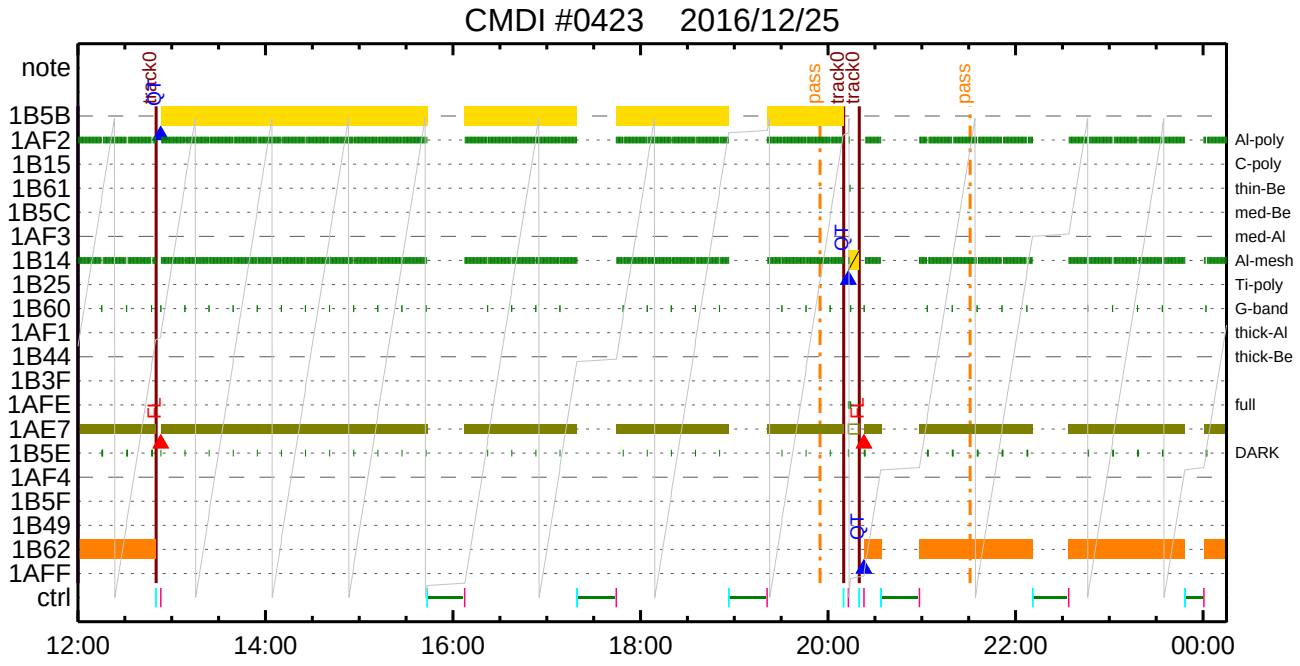
12:00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note
1B5B
1AF2
1B15
1B61
1B5C
1AF3
1B14
1B25
1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B62
1AFF
ctrl
track0
pass
QT
FL
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
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18:00
20:00
22:00
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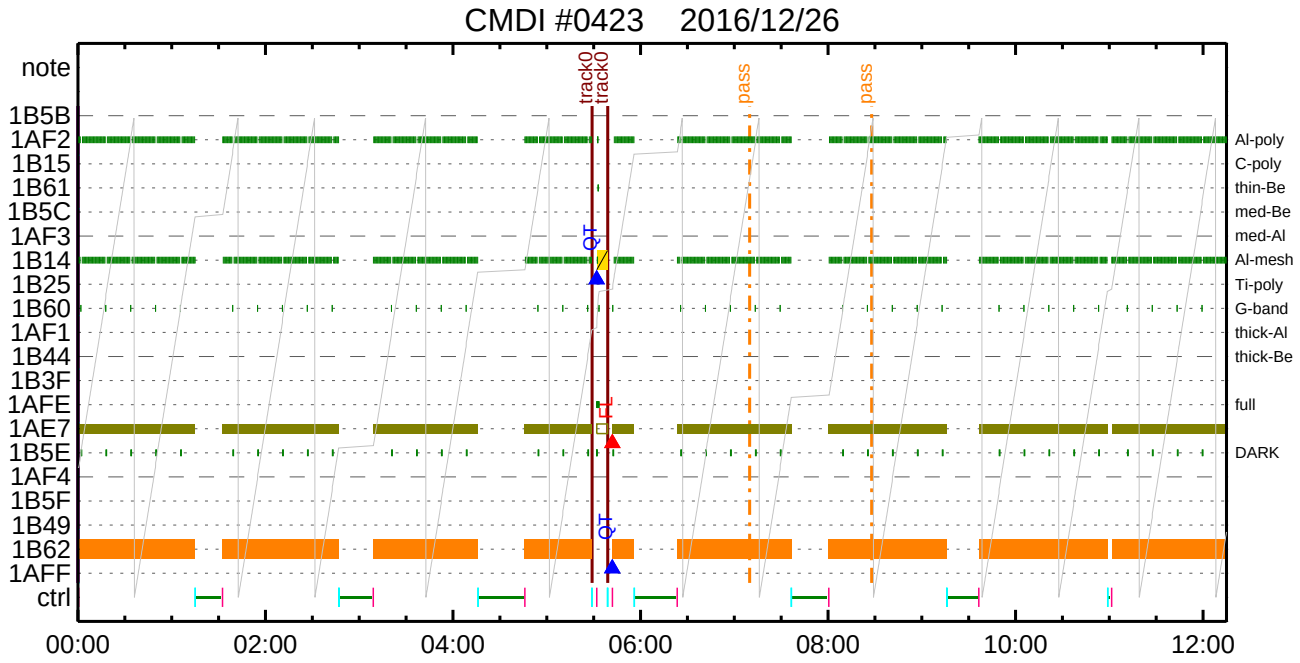
CMDI #0423 2016/12/26
note
1B5B
1AF2
1B15
1B61
1B5C
1AF3
1B14
1B25
1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B62
1AFF
ctrl
track0
pass
QT
FL
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
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04:00
06:00
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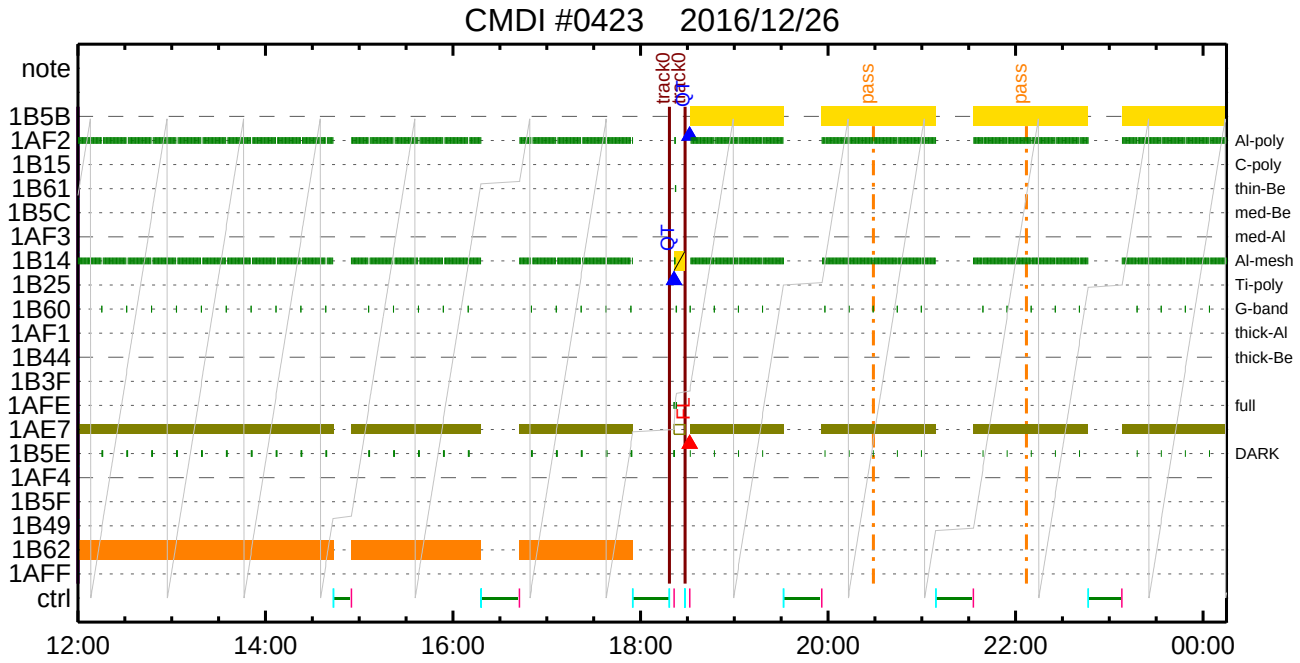
10:00
12:00


CMDI #0423 2016/12/26
note
1B5B
1AF2
1B15
1B61
1B5C
1AF3
1B14
1B25
1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B62
1AFF
ctrl
track0
pass
QT
FL
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
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16:00
18:00
20:00
22:00
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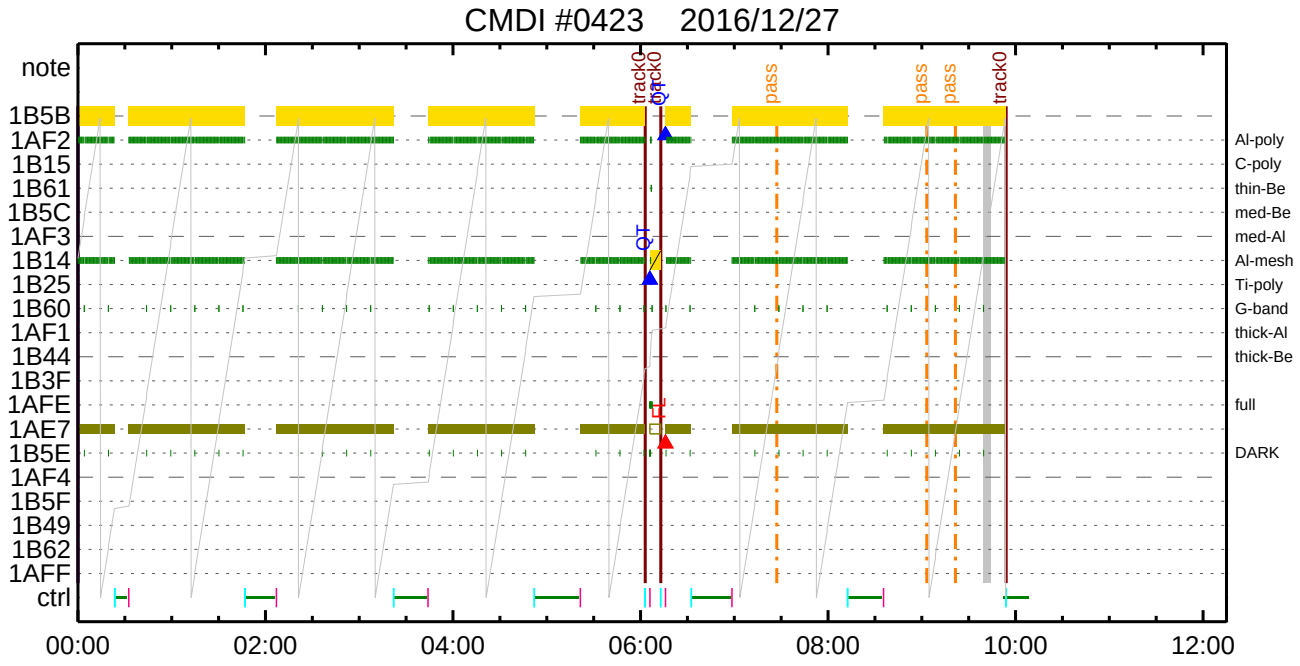
CMDI #0423 2016/12/27
note
1B5B
1AF2
1B15
1B61
1B5C
1AF3
1B14
1B25
1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B62
1AFF
ctrl
track0
track0
QT
pass
pass
pass
track0
QT
QT
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
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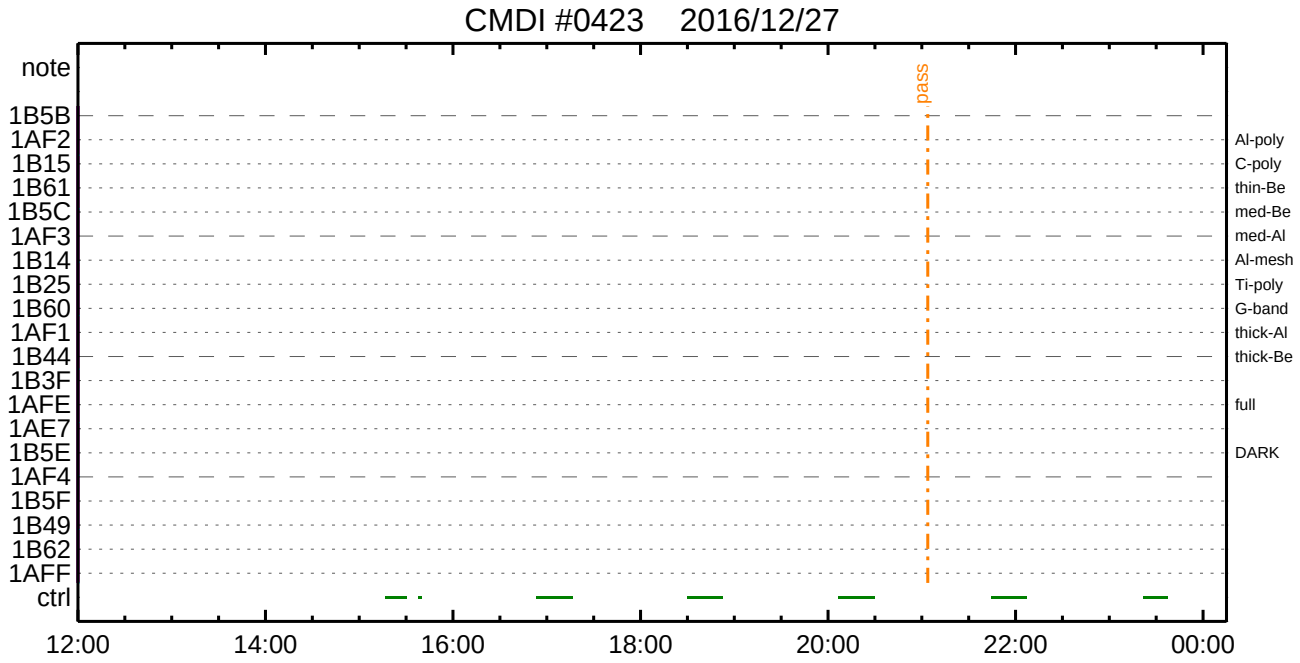
CMDI #0423 2016/12/27
note
1B5B
1AF2
1B15
1B61
1B5C
1AF3
1B14
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1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B62
1AFF
ctrl
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
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DARK
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16:00
18:00
20:00
22:00
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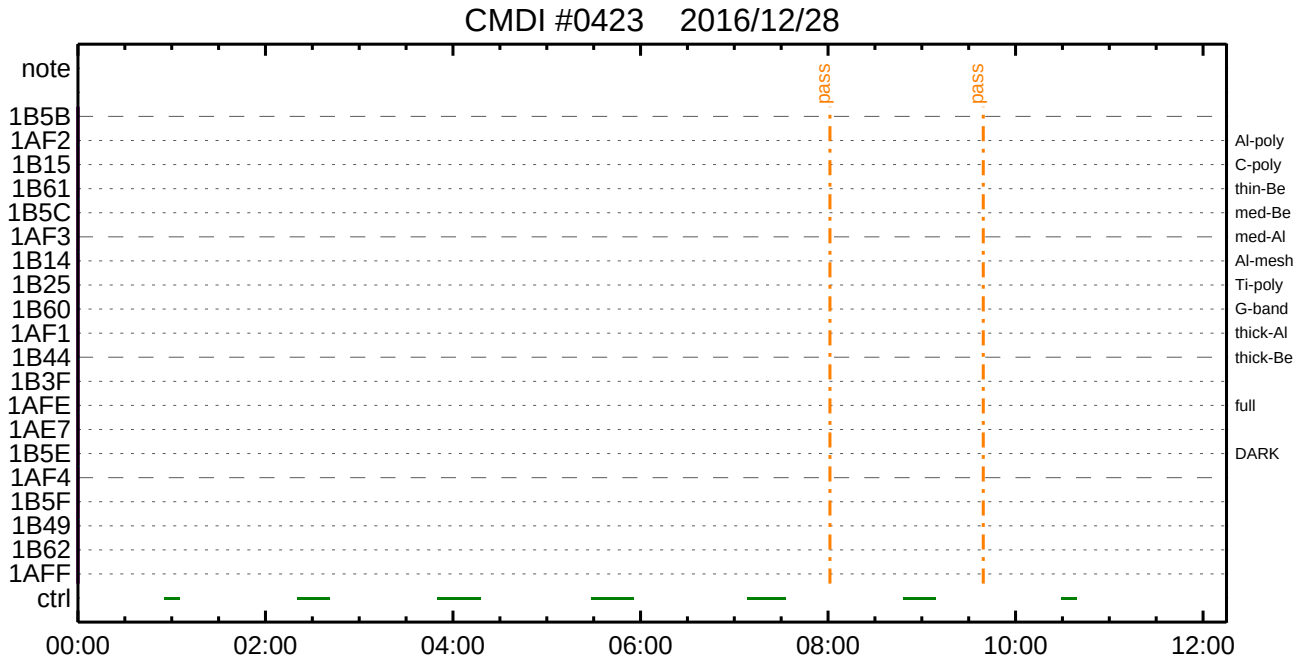
CMDI #0423 2016/12/28
note
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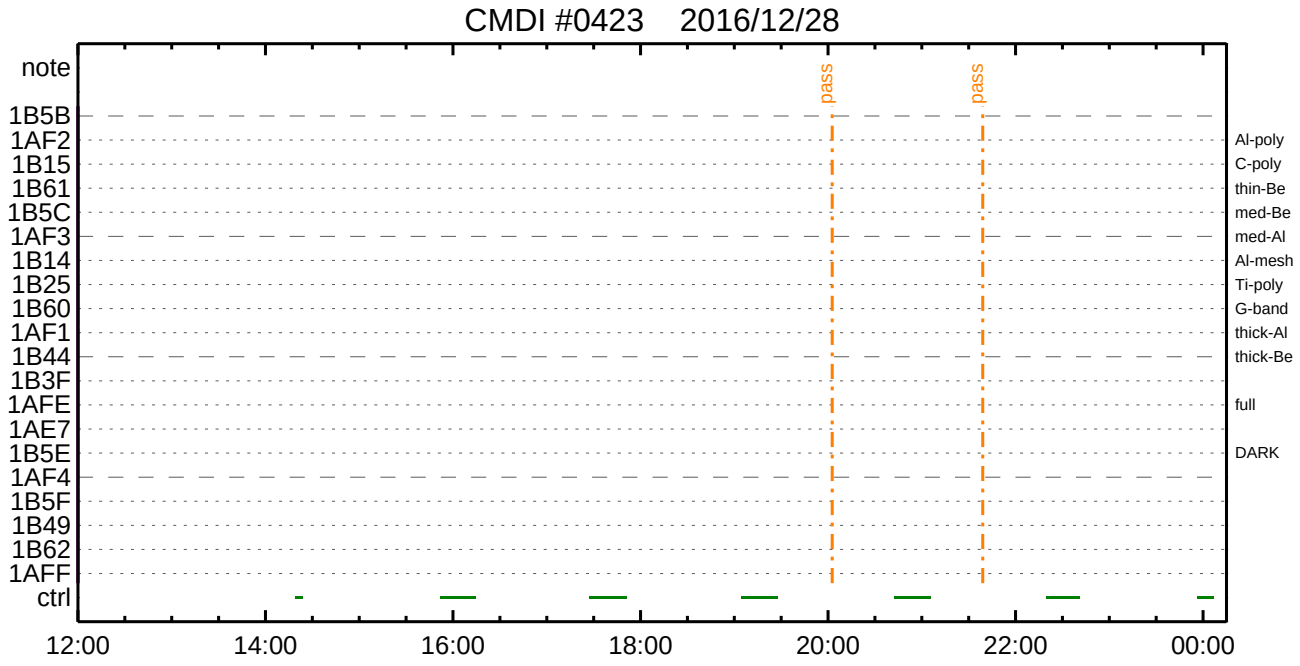
1AF2
1B15
1B61
1B5C
1AF3
1B14
1B25
1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B62
1AFF
ctrl
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0423 2016/12/28
note
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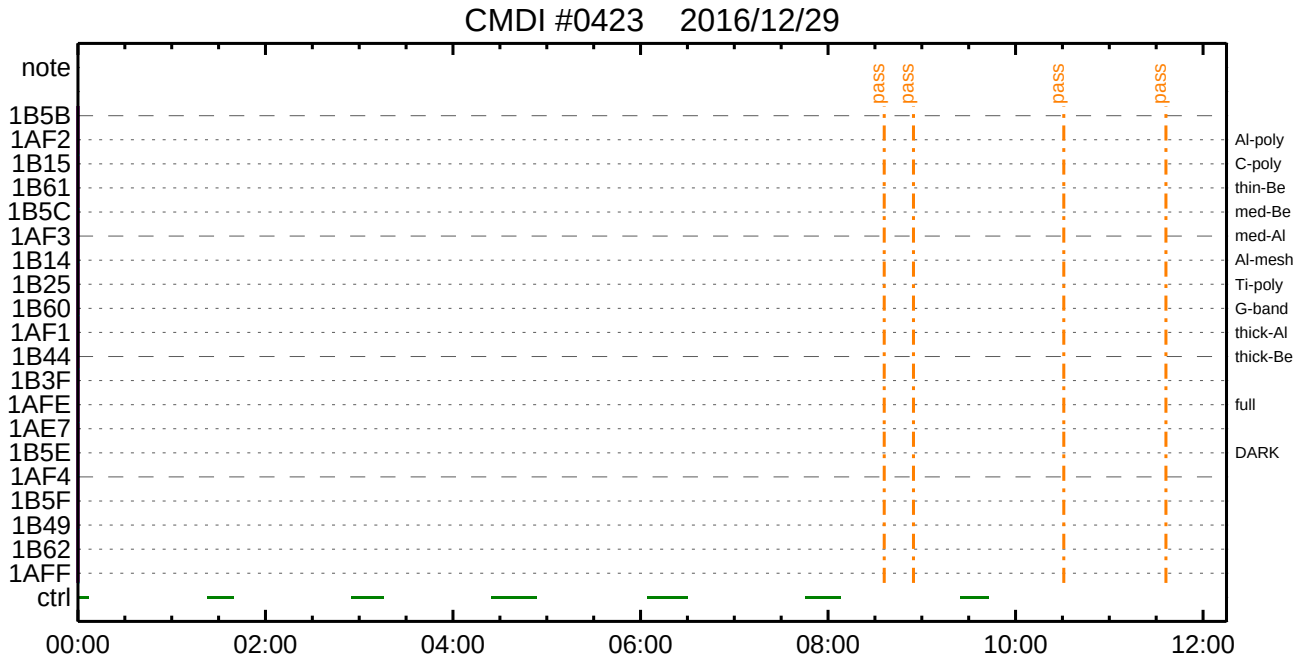
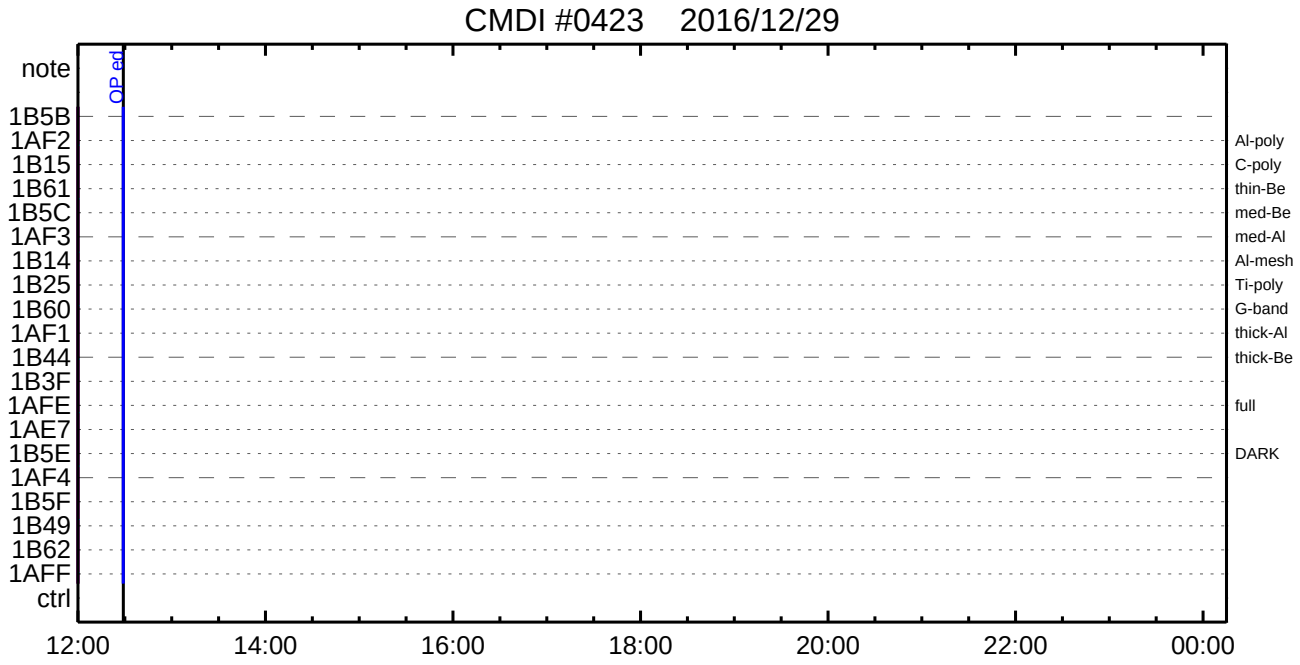
1B61
1B5C
1AF3
1B14
1B25
1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B62
1AFF
ctrl
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00


CMDI #0423 2016/12/29
note
1B5B
1AF2
1B15
1B61
1B5C
1AF3
1B14
1B25
1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B62
1AFF
ctrl
pass
pass
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0423 2016/12/29
note
OP end
1B5B
1AF2
1B15
1B61
1B5C
1AF3
1B14
1B25
1B60
1AF1
1B44
1B3F
1AFE
1AE7
1B5E
1AF4
1B5F
1B49
1B62
1AFF
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00

```
(a) Spacecraft Operation Procedure (real-commands)

main-322 2016-12-24 15:24:23 278 33 SOLAR-B MAIN //
0001     C.
0002    . C. *********** AOS ***********
0003     C.
0004    . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007    +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009    . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ËËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011    +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014    . C. ****************************
0015     C. XÁ÷¿®µ¡ON
0016     C. ****************************
0017     C. ¢¨ ºÆÀ¸ Í×ÈÝ¤äLOS¤Þ¤ÇÎ»þ´Ö¤ò¹ÍÎ¸ ¤•¡¢ÉÔÍ×¤ÊXÂÓON¤Ï¹Ô¤Ê¤ï¤Ê¤¤¤³¤È¡£
0018     C.
0019    +. DC 03-B4 TCIA_XPA_ON/HI
0020     M. WAIT_SEC   1
0021    +  DC 03-84 TCIA_XMOD_ON
0022     M. WAIT_SEC   1
0023    +  DC 03-95 TCIA_XMOD_QPSK
0024     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     ON
0025     C.                      ¢¢[HK1_XPA_PWR_HI/LO]           EQ     HI
0026     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     ON
0027     C.                      ¢¢[HK1_XMOD_QPSK/PM]            EQ     QPSK
0028     C.
0029    . C. X¥Ð¥ó¥É¥í¥Ã¥¯¾õÂÖ¤¬°ÂÄê¤•¤¿¤é¡¢°Ê²¼¤ÎºÆÀ¸ ¼ê½ç¤ò¼Â¹Ô¤¹¤ë¡£
0030     C.
0031    . C. ***************
0032     C. DR PT1 ÄÌ¾ïºÆÀ¸
0033     C. ***************
0034     C. ¢¨ RESTART¡ÊPT1¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-150¤Ø¿Ê¤à¡£
0035     C.
0036    . C. ¡ãPT1ºÆÀ¸ ³«»Ï¡ä
0037    +. DC 01-29 DHU_S/X_VC4_OFF
0038    +  DC 06-C8 DR_PT1_REP_SEL
0039     BC       (01 00)
0040    +  DC 06-B3 DR_REP_START
0041    +  DC 01-32 DHU_X_VC4_ON
0042     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0043     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0044     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0045     C.
0046    . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Ä°²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0047    +. DC 06-B3 DR_REP_START
0048    +  DC 01-32 DHU_X_VC4_ON
0049     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0050     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0051     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0052     C.
0053     C.
0054    . C. PT1ºÆÀ¸ ¤¬¼«Æ°Ää»ß¤•¤¿¸å¡¢¢°Ê²¼¤ò¼Â¹Ô¤¹¤ë¡£
0055     C. ¥¢¥ó¥Æ¥ÈÀÚÂØ¤äÅ•Ä°²óÈò¤¬¶á¤¤¾ì¹ç¤Ï´°Î»¤¹¤ë¤Þ¤ÇÂÔ¤Ä¡£
0056     C.
0057    . C. ***************
0058     C. DR PT2 ÄÌ¾ïºÆÀ¸
0059     C. ***************
0060     C. ¢¨ RESTART¡ÊPT2¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-151¤Ø¿Ê¤à¡£
0061     C.
0062    . C. ¡ãPT2ºÆÀ¸ ³«»Ï¡ä
0063    +. DC 01-29 DHU_S/X_VC4_OFF
0064    +  DC 06-C8 DR_PT2_REP_SEL
0065     BC       (02 00)
0066    +  DC 06-B3 DR_REP_START
0067    +  DC 01-32 DHU_X_VC4_ON
0068     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0069     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0070     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0071     C.
0072    . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Ä°²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0073    +. DC 06-B3 DR_REP_START
0074    +  DC 01-32 DHU_X_VC4_ON
0075     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0076     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0077     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0078     C.
0079    . C. ****************************
0080     C. DRºÆÀ¸ Ää»ß¡¢XÁ÷¿®µ¡OFF
0081     C. ****************************
0082     C.
0083    . C. ¡ãDRºÆÀ¸ Ää»ß¡ä
0084    +. DC 06-B4 DR_REP_STOP
0085    +  DC 01-29 DHU_S/X_VC4_OFF
0086     C.                      ¢¢[HK1_REP_STA/STP]             EQ     STOP
0087     C.                      ¢¢[HK1_S_VC4_ON/OFF]            EQ     OFF
0088     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     OFF
0089     C.
0090    . C. ¡ãXÁ÷¿®µ¡OFF¡ä
0091    +. DC 03-85 TCIA_XMOD_OFF
0092     M. WAIT_SEC   1
0093    +  DC 03-B5 TCIA_XPA_OFF
0094     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     OFF
0095     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     OFF
```

```
    C.
    C.
  . C. ****************************
    C. OP/OG¥í¡¼¥É¡¦¥À¥ó¥×
    C. ****************************
    C.
  . C. ¡ãOP/OG¥í¡¼¥É¡ä
  . S. OP    op-322:OP
    ()
  . S. OG    og-322:OG
    ()
    C.
  . C. ¡ãNMOG&OPÎÎ°è¥À¥ó¥×¡ä
    C. NMOG(0x200000-0x207FFF¡§ 32 kbyte)
 +. DC 01-23 DHU_DMA_DMP_PRM_SET
    BC       (20 00 7f 01 02)
    C.                     ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     40
    C.                     ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
    C.                     ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
    C.                     ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
    C.                     ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
 +. DC 01-22 DHU_MODE_CHNG
    BC       (07 0b f8)
    C.                     ¢¢[HK1_PKT_FORM_NO]             EQ     7
    C.                     ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
    C.                     ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
    C.                     ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
  . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
  . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
    C.
    C. NMOG(0x208000-0x20FFFF¡§ 32 kbyte)
 +. DC 01-23 DHU_DMA_DMP_PRM_SET
    BC       (20 80 7f 01 02)
    C.                     ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     41
    C.                     ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
    C.                     ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
    C.                     ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
    C.                     ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
 +. DC 01-22 DHU_MODE_CHNG
    BC       (07 0b f8)
    C.                     ¢¢[HK1_PKT_FORM_NO]             EQ     7
    C.                     ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
    C.                     ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
    C.                     ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
  . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
  . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
    C.
    C. NMOG(0x210000-0x2100FF¡§ 256byte)+OP(0x210100-0x2141FF: 16.25kbyte)
 +. DC 01-23 DHU_DMA_DMP_PRM_SET
    BC       (21 00 41 01 02)
    C.                     ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     42
    C.                     ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
    C.                     ¢¢[HK1_DMP_BLOCK_NUM]           EQ     65
    C.                     ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
    C.                     ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
 +. DC 01-22 DHU_MODE_CHNG
    BC       (07 0b f8)
    C.                     ¢¢[HK1_PKT_FORM_NO]             EQ     7
    C.                     ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
    C.                     ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
    C.                     ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
  . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
  . C. RAM ID=NMOG,RAM ID=OP¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
    C.
  . C. ***** °Ê²¼¤Ï¾Ã´¶Á°¤ËÉ¬¤ºÁ÷¿® (¾åµ-¥À¥ó¥×¼ê½ç¤òÅÓÃæ¤Ç½ª¤¨¤ë¾ì¹ç¤Ç¤â) *****
    C. DHU¥â¡¼¥É¡ÊÉ¼ý½¸¥ì¡¼¥È¡Ë¤ÒÌá¤¹
 +. DC 01-22 DHU_MODE_CHNG
    BC       (02 0a f8)
    C.                     ¢¢[HK1_PKT_FORM_NO]             EQ     2
    C.                     ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
    C.                     ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
    C.                     ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
    C.
  . C. *********************************
    C. TI-CMD SET (OPOG STOP/COPY/START)
    C. *********************************
    C.
  . C. NOTICE ¡§ OPOG UPLOAD¤¬Á÷¿®NG¤Î¾ì¹ç¡¢°Ê²¼¤ÎTI-CMDÁ÷¿®¤Ï¼Â¹Ô¤•¤Ê¤¤¤³¤È¡£
    C.           ¤Þ¤¿¡¢SET¤ÈDUMP¤ÏÆ±°ì¥Ñ¥¹¤Ç¹Ô¤¦¤³¤È¡£
    C.
  . C. TI¥³¥Þ¥ó¥É¤òÅÐÏ¿(UT)
 +. TI 2016-12-24 10:36:00.0
    DC 01-B3 DHU_OP_STOP
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
    C.
 +. TI 2016-12-24 10:36:01.0
    DC 01-B4 DHU_OP_COPY
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
    C.
 +. TI 2016-12-24 10:36:01.0
    DC 01-B5 DHU_OPOG_COPY
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
```

```
0194     C.
0195   +. TI 2016-12-24 10:40:59.5
0196     DC 01-B2 DHU_OP_START
0197     C.                        ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0198     C.
0199     C. °Ê²¼¤ÏÄê¾ïÍÑ¤Î¥Á¥§¥Ã¥¯¹àÌÜ
0200     C.                        ¢¢[HK1_TI_CMD_ENA/DIS]          EQ     ENA
0201     C.                        ¢¢[HK1_TI_CMD_NUM]              EQ     4
0202     C.                        ¢¢[HK1_NEXT_EXEC_PIM]           EQ     DHU
0203     C.                        ¢¢[HK1_NEXT_EXEC_DC]            EQ     0xB3
0204     C.
0205    . C. ****************************
0206     C. TIÎÎ°è¥À¥ó¥×
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.                        ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     07
0213     C.                        ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     2B
0214     C.                        ¢¢[HK1_DMP_BLOCK_NUM]           EQ     3
0215     C.                        ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0216     C.                        ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0217   +. DC 01-22 DHU_MODE_CHNG
0218     BC       (07 0b f8)
0219     C.                        ¢¢[HK1_PKT_FORM_NO]             EQ     7
0220     C.                        ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0221     C.                        ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0222     C.                        ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0223     C.                        ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0224     C.
0225    . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0226     C.                        ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0227     C.
0228    . C. RAM ID=TI_TBL¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0229     C.
0230    . C. DHU¥â¡¼¥É¡Ê¼ý½¸¥ì¡¼¥È¡Ë¤òÌá¤¹
0231   +. DC 01-22 DHU_MODE_CHNG
0232     BC       (02 0a f8)
0233     C.                        ¢¢[HK1_PKT_FORM_NO]             EQ     2
0234     C.                        ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
0235     C.                        ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
0236     C.                        ¢¢[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 2016-12-24 10:40:30.0
0245     DC 07-FC EIS_MODE_MANU
0246     BC       (21 02)
0247   +. TI 2016-12-24 10:40:40.0
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 2016-12-24 10:40:00.0
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 ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0265     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0266    . S. DC-BC dcbc-402:DCBC
0267     (MDP_known_event)
0268     C.
0269     C.
0270    . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0271    . S. DC-BC dcbc-153:DCBC
0272     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0273     C.
0274     C.
0275    . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0276     C.
0277    . C. ********** LOS **********
0278     C.
```

(a) Spacecraft Operation Procedure (real-commands)

```
main-323 2016-12-24 15:24:23 140 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007   +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ÊËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011   +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014   . C. Enable mode change command
0015   +. DC 07-FC EIS_MODE_CHG_ENA
0016     BC       (20)
0017     C.  Confirm EIS_MODE_CHG_FLG = ENA
0018   . C. Change mode to STBY
0019   +. DC 07-FC EIS_MODE_STBY
0020     BC       (21 01)
0021     C.  Wait 5sec and confirm EIS_MODE = STBY
0022     C. Reset the ICU and perform code loading from EEPROM 0 to RAM
0023     C. The reset command must be send twice, no pause - Critical command
0024   . C. RESET ICU
0025   +. DC 07-FC EIS_ICU_SOFT_RESET
0026     BC       (f5)
0027   +  DC 07-FC EIS_ICU_SOFT_RESET
0028     BC       (f5)
0029   . C. Confirm that the ICU is in BOOT mode (EIS_MODE = BOOT)
0030     C. Copy ICU software from EEPROM 0 to ICU RAM
0031   +. DC 07-FC EIS_COPY_ICU_SW0
0032     BC       (2b 00)
0033     C. Confirm EIS_CMD_BC1/_BC2 = 0x 2B 00
0034     C.
0035     C. Change EIS mode to STBY
0036   +. DC 07-FC EIS_MODE_STBY
0037     BC       (21 01)
0038     C.  Confirm EIS_MODE = STBY
0039     C.  Confirm ICU_SW_MAIN_ID=0x02, ICU_SW_SUB_ID=0x03
0040     C.
0041   +. DC 07-F0 MDP_STS_EIS_ERR_CLR
0042     BC       (f0)
0043     C. Confirm MDP_STS_EIS_ERR = OK
0044     C.
0045   +. DC 07-FC EIS_ICU_MON_DIS
0046     BC       (25 02)
0047     C.  Confirm EIS_ICU_MON_FLG = DIS
0048     C.
0049   . C.  ###  STS_CHK OFF ###
0050   +. DC 07-FC EIS_DUMP_HKTBL
0051     BC       (0f 07 00 00 00 02 80)
0052     C. Error happens in comparison at ISAS EGSE.
0053   . C. Register dumped data to ISAS EGSE as default HK memory data
0054     C. Upload RAM-sub ID= 881 (EIS_HKTBL)
0055   . S. RAM   ram-881:EIS_HKTBL
0056     ()
0057     C.
0058   +. DC 07-FC EIS_DUMP_HKTBL
0059     BC       (0f 07 00 00 00 02 80)
0060   . C. OK
0061     C. Error must not happen.
0062   . C. ### STS_CHK ON ###
0063     C.
0064   +. DC 07-FC EIS_ICU_MON_ENA
0065     BC       (25 01)
0066     C.  Confirm EIS_ICU_MON_FLG = ENA
0067     C.
0068   . C.  Load ICU MHC parameters
0069   +. DC 07-FC EIS_SET_MHC_OPEPAR
0070     BC       (87 02 58 00 01 e0 70 00)
0071     BC       (00 80 fc 41)
0072     BC       (33 14 6d 00 96 02 bc 06)
0073     BC       (f4 01 27)
0074     C.  Confirm parameters 0x 00 96 with EIS Java-QL in ISAS 2F operation room
0075     C.
0076   . C.  Enable mode change command
0077   +. DC 07-FC EIS_MODE_CHG_ENA
0078     BC       (20)
0079     C.  Confirm EIS_MODE_CHG_FLG = ENA
0080     C. Change EIS mode to MANU
0081   . C. Change mode to Manual
0082   +. DC 07-FC EIS_MODE_MANU
0083     BC       (21 02)
0084     C.  Confirm EIS_MODE = MANU
0085     C.
0086   +. DC 07-FC EIS_CAM_IDLE
0087     BC       (41)
0088     C.  Confirm EIS_CAM_VLD_FLG = VLD
0089     C.
0090     C.  MHC in PROM mode
0091   +. DC 07-FC EIS_MHC_WATDOG_ENA
0092     BC       (76 c0 a9 00 02 00 01)
0093     C.
0094   . C.  End RESET ICU and MANU MODE in MHC PROM mode
0095     C.
```

```
0096   . C. LOAD MHC code from EEPROM bank 3d to MHC RAM
0097  +. DC 07-FC EIS_LOAD_MHC_SOFT3
0098     BC       (2c 03)
0099     C.  Confirm EIS_MHC_LOAD_STS = LOAD
0100   . C. It takes 2 min to complete.
0101     C. Confirm EIS_MHC_LOAD_STS = IDLE
0102     C.
0103  +. DC 07-FC EIS_DUMP_MHCRAM
0104     BC       (0a 07 00 00 00 80 00)
0105     C. Confirm EIS_MEM_DUMP_STS = DUMP
0106   . C. It takes 2 min to complete.
0107     C. New: Confirm EIS_MEM_DUMP_STS = IDLE
0108     C.
0109  +. DC 07-FC EIS_MHC_MODE_RAM
0110     BC       (6b 88 11 00 02 ff ff)
0111     C. Wait 10sec: interval is required after EIS_MHC_MODE_RAM.
0112     C.
0113  +. DC 07-FC EIS_MHC_ABORT
0114     BC       (51 e8 81)
0115     C.
0116     C.  Confirm EIS_MHC_VLD_FLG = VLD, EIS_MHC_MEM_MODE = RAM
0117     C.
0118  +. DC 07-FC EIS_CLR_ICU_ERR
0119     BC       (23)
0120     C.  Confirm EIS_MHC_IF_ERR= 0x0000
0121     C.  Confirm EIS_CAM_IF_ERR= 0x0000
0122     C.
0123  +. DC 07-FC EIS_MHC_WATDOG_ENA
0124     BC       (76 c0 a9 00 02 00 01)
0125     C.
0126   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0127     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0128   . S. DC-BC dcbc-402:DCBC
0129     (MDP_known_event)
0130     C.
0131     C.
0132   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0133   . S. DC-BC dcbc-153:DCBC
0134     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0135     C.
0136     C.
0137   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0138     C.
0139   . C. ********** LOS **********
0140     C.
```

```
(a) Spacecraft Operation Procedure (real-commands)

main-324 2016-12-24 15:24:23 268 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007   +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ËËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011   +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014   . C. ****************************
0015     C. XÁ÷¿®µ¡ON
0016     C. ****************************
0017     C. ¢¨ ºÆÀ¸ Í×ÈÝ¤äLOS¤Þ¤ÇÎ»þ´Ö¤ò¹ÍÎ¸ ¤•¡¢ÉÔÍ×¤ÊXÂÓON¤Ï¹Ô¤Ê¤ï¤Ê¤¤¤³¤È¡£
0018     C.
0019   +. DC 03-B4 TCIA_XPA_ON/HI
0020     M. WAIT_SEC   1
0021   +  DC 03-84 TCIA_XMOD_ON
0022     M. WAIT_SEC   1
0023   +  DC 03-95 TCIA_XMOD_QPSK
0024     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     ON
0025     C.                      ¢¢[HK1_XPA_PWR_HI/LO]           EQ     HI
0026     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     ON
0027     C.                      ¢¢[HK1_XMOD_QPSK/PM]            EQ     QPSK
0028     C.
0029   . C. X¥Ð¥ó¥É¥í¥Ã¥¯¾õÂÖ¤¬°ÂÄê¤•¤¿¤é¡¢°Ê²¼¤ÎºÆÀ¸ ¼ê½ç¤ò¼Â¹Ô¤¹¤ë¡£
0030     C.
0031   . C. ***************
0032     C. DR PT1 ÄÌ¾ïºÆÀ¸
0033     C. ***************
0034     C. ¢¨ RESTART¡ÊPT1¡Ë¤•¤¿¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-150¤Ø¿Ê¤à¡£
0035     C.
0036   . C. ¡ãPT1ºÆÀ¸ ³«»Ï¡ä
0037   +. DC 01-29 DHU_S/X_VC4_OFF
0038   +  DC 06-C8 DR_PT1_REP_SEL
0039     BC       (01 00)
0040   +  DC 06-B3 DR_REP_START
0041   +  DC 01-32 DHU_X_VC4_ON
0042     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0043     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0044     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0045     C.
0046   . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Äº²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0047   +. DC 06-B3 DR_REP_START
0048   +  DC 01-32 DHU_X_VC4_ON
0049     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0050     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0051     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0052     C.
0053     C.
0054   . C. PT1ºÆÀ¸ ¤¬¼«Æ°Ää»ß¤•¤¿¸ å¡¢°Ê²¼¤ò¼Â¹Ô¤¹¤ë¡£
0055     C. ¥¢¥ó¥Æ¥ÈÀÚÂØ¤äÅ•Äº²óÈò¤¬¶á¤¤¾ì¹ç¤Ï´°Î»¤¹¤ë¤Þ¤ÇÂÔ¤Ä¡£
0056     C.
0057   . C. ***************
0058     C. DR PT2 ÄÌ¾ïºÆÀ¸
0059     C. ***************
0060     C. ¢¨ RESTART¡ÊPT2¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-151¤Ø¿Ê¤à¡£
0061     C.
0062   . C. ¡ãPT2ºÆÀ¸ ³«»Ï¡ä
0063   +. DC 01-29 DHU_S/X_VC4_OFF
0064   +  DC 06-C8 DR_PT2_REP_SEL
0065     BC       (02 00)
0066   +  DC 06-B3 DR_REP_START
0067   +  DC 01-32 DHU_X_VC4_ON
0068     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0069     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0070     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0071     C.
0072   . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Äº²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0073   +. DC 06-B3 DR_REP_START
0074   +  DC 01-32 DHU_X_VC4_ON
0075     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0076     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0077     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0078     C.
0079   . C. ****************************
0080     C. DRºÆÀ¸ Ää»ß¡¢XÁ÷¿®µ¡OFF
0081     C. ****************************
0082     C.
0083   . C. ¡ãDRºÆÀ¸ Ää»ß¡ä
0084   +. DC 06-B4 DR_REP_STOP
0085   +  DC 01-29 DHU_S/X_VC4_OFF
0086     C.                      ¢¢[HK1_REP_STA/STP]             EQ     STOP
0087     C.                      ¢¢[HK1_S_VC4_ON/OFF]            EQ     OFF
0088     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     OFF
0089     C.
0090   . C. ¡ãXÁ÷¿®µ¡OFF¡ä
0091   +. DC 03-85 TCIA_XMOD_OFF
0092     M. WAIT_SEC   1
0093   +  DC 03-B5 TCIA_XPA_OFF
0094     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     OFF
0095     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     OFF
```

```
    C.
    C.
  . C. ***** AOCS Commands (Tracking Curve Upload) ******
    C. Upload the Orbit Element and the Target Attitude
    C. RAM-ID:TARGET_ATT
  . S. RAM   ram-150:TARGET_ATT
    ()
    C.
    C.
    C. Set the dump memory area of TARGET_ATT
 +. DC 02-48 AOCU_DUMP_SET
    BC       (07 00 00 00 18 00)
    C.
    C.    <A_STS1>[MEMORY OPERATE SATUS] ADRS = 070000 [ ]
    C.
    C.
    C. Change the TLMFormatNo for the AOCS Dump Format
 +. DC 01-22 DHU_MODE_CHNG
    BC       (04 0b f8)
    C.
    C. Wait for AOCSDUMP to end
    C.
  . C. Check the dump memory
    C.
    C.                                      Result = OK [ ]
    C.
 +. DC 01-22 DHU_MODE_CHNG
    BC       (02 0a f8)
    C.
    C.                         <A_***>[TLM STS] FMT = 2 [ ]
    C.
 +. DC 02-8E AOCU_ORB_UPD
  . C.
  . C. LOAD MHC code from EEPROM bank 3d to MHC RAM
 +. DC 07-FC EIS_LOAD_MHC_SOFT3
    BC       (2c 03)
    C.  Confirm EIS_MHC_LOAD_STS = LOAD
  . C. It takes 2 min to complete.
    C. Confirm EIS_MHC_LOAD_STS = IDLE
    C.
 +. DC 07-FC EIS_DUMP_MHCRAM
    BC       (0a 07 00 00 00 80 00)
    C. Confirm EIS_MEM_DUMP_STS = DUMP
  . C. It takes 2 min to complete.
    C. New: Confirm EIS_MEM_DUMP_STS = IDLE
    C.
 +. DC 07-FC EIS_MHC_MODE_RAM
    BC       (6b 88 11 00 02 ff ff)
    C. Wait 10sec: interval is required after EIS_MHC_MODE_RAM.
    C.
 +. DC 07-FC EIS_MHC_ABORT
    BC       (51 e8 81)
    C.
    C.  Confirm EIS_MHC_VLD_FLG = VLD, EIS_MHC_MEM_MODE = RAM
    C.
 +. DC 07-FC EIS_CLR_ICU_ERR
    BC       (23)
    C.  Confirm EIS_MHC_IF_ERR= 0x0000
    C.  Confirm EIS_CAM_IF_ERR= 0x0000
    C.
 +. DC 07-FC EIS_MHC_WATDOG_ENA
    BC       (76 c0 a9 00 02 00 01)
    C.  Config MHC heaters - Default setting -
 +. DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 21 2e 24)
    BC       (92)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 c9 af 36)
    BC       (db)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 a9 30 24)
    BC       (92)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 41 b1 36)
    BC       (db)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 81 b2 12)
    BC       (49)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 69 33 24)
    BC       (92)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 e1 b4 12)
    BC       (49)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 09 35 1b)
    BC       (6d)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 c9 36 09)
    BC       (24)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 21 b7 09)
    BC       (24)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 21 b8 24)
    BC       (92)
 +  DC 07-FC EIS_UPLOAD_MHCPAR
    BC       (6f c0 95 00 04 c9 39 00)
```

```
0194     BC       (00)
0195     C.  Set heaters duty cycle
0196     C.
0197  +. DC 07-FC EIS_UPLOAD_MHCPAR
0198     BC       (6f c0 95 00 04 09 3a 03)
0199     BC       (e8)
0200     C.
0201     C. Dump MHC parameter table
0202  +. DC 07-FC EIS_DUMP_MHCPAR
0203     BC       (0c 07 02 00 00 00 cc)
0204     C.
0205  +. DC 07-FC EIS_OPE_HTR_ALL_ON
0206     BC       (6a 28 8d 00 02 0f ff)
0207     C. Confirm EIS_OPE_HTR##_PWR = sometimes ON
0208     C.  Enable MHC safe mode (auto-safe)
0209  +. DC 07-FC EIS_MHC_SAFE_ENA
0210     BC       (5f c0 9a 00 02 00 01)
0211     C.
0212     C. The next daily plan MUST start with mhc_init, default_htrs1_6, default_htrs7_12, and trace_dump
0213   . C.  Initialize the on-board OBSTBL to all 0XFFs in any case
0214     C. Initialize the on-board OBSTBL data to all 0xFF
0215  +. DC 07-FC EIS_LOAD_INIT_TBL1
0216     BC       (26 01)
0217     C.  Confirm EIS_CMD_BC1/_BC2 = 0x 26 01
0218     C.
0219     C. Dump on-board OBSTBL to the ground
0220  +. DC 07-FC EIS_DUMP_OBSTBL
0221     BC       (07 07 07 00 00 70 00)
0222     C.  Confirm EIS_MEM_DUMP_STS = DUMP
0223     C. Error happens in comparison at ISAS EGSE.
0224     C.
0225   . C. ### Register dumped data to ISAS EGSE as default OBSTBL memory data ###
0226   . C. Confirm the registration of OBSTBL in the ISAS EGSE to the operator.
0227     C.
0228   . C. Load OBSTBL, dump OBSTBL, enable EIS mode changes
0229  +. DC 07-FC EIS_MODE_CHG_ENA
0230     BC       (20)
0231   . C. Verify EIS_MODE_CHG_FLG is ENA
0232  +. DC 07-FC EIS_MODE_MANU
0233     BC       (21 02)
0234   . C. Verify EIS in MANUAL mode
0235   . C. Estimated OBSTBL upload time is 4s
0236     C. ********************************
0237     C. EIS START OBSTBL LOAD
0238     C. ********************************
0239   . S. RAM   ram-820:EIS_OBSTBL
0240     ()
0241  +. DC 07-FC EIS_DUMP_OBSTBL
0242     BC       (07 07 07 00 00 70 00)
0243     C.
0244     C. Execute, after the success of OBSTBL upload.
0245     C. Set EIS TI-commands
0246  +. TI 2016-12-24 10:40:50.0
0247     DC 07-FC EIS_MODE_CHG_ENA
0248     BC       (20)
0249   . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1 COUNTUP
0250     C. ********************************
0251     C. EIS END OBSTBL LOAD
0252     C. ********************************
0253     C.
0254   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0255     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0256   . S. DC-BC dcbc-402:DCBC
0257     (MDP_known_event)
0258     C.
0259     C.
0260   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0261   . S. DC-BC dcbc-153:DCBC
0262     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0263     C.
0264     C.
0265   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0266     C.
0267   . C. ********** LOS **********
0268     C.
```

```
(a) Spacecraft Operation Procedure (real-commands)

main-325 2016-12-24 15:24:23 228 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007   +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ÊËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
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_CTRL_MANU
0020     BC       (c1)
0021   +  DC 07-F0 MDP_XRT_MODE_STBY
0022     BC       (c3)
0023   . C. ----------- Success Verify ?              OK / NG____
0024     C.
0025     C. XRT Obs. Table Upload
0026   . S. RAM   ram-291:MDP_OBS_X
0027     ()
0028     C.
0029   +. DC 07-F0 MDP_DUMP_XRTTBL
0030     BC       (84 07 00 00 00 3a d4)
0031   . C. ----------- Comparison Check ?                       OK / ERR ____
0032     C.
0033     C.
0034   +. DC 07-F0 MDP_XRT_ROI_SET
0035     BC       (cd 01 b1 b1 04 04)
0036   +  DC 07-F0 MDP_XRT_ROI_SET
0037     BC       (cd 02 b1 b1 08 08)
0038   +  DC 07-F0 MDP_XRT_ROI_SET
0039     BC       (cd 03 b1 b1 08 08)
0040   +  DC 07-F0 MDP_XRT_ROI_SET
0041     BC       (cd 04 b1 b1 06 06)
0042   +  DC 07-F0 MDP_XRT_ROI_SET
0043     BC       (cd 05 85 83 06 06)
0044   +  DC 07-F0 MDP_XRT_ROI_SET
0045     BC       (cd 06 85 83 06 06)
0046   +  DC 07-F0 MDP_XRT_ROI_SET
0047     BC       (cd 07 85 83 08 08)
0048   +  DC 07-F0 MDP_XRT_ROI_SET
0049     BC       (cd 08 9b 7b 08 08)
0050   +  DC 07-F0 MDP_XRT_ROI_SET
0051     BC       (cd 09 85 83 08 06)
0052   +  DC 07-F0 MDP_XRT_ROI_SET
0053     BC       (cd 0a 80 80 20 20)
0054   +  DC 07-F0 MDP_XRT_ROI_SET
0055     BC       (cd 0b 80 80 20 08)
0056   +  DC 07-F0 MDP_XRT_ROI_SET
0057     BC       (cd 0c 80 80 08 20)
0058   +  DC 07-F0 MDP_XRT_ROI_SET
0059     BC       (cd 0f 80 80 06 06)
0060   +  DC 07-F0 MDP_XRT_ROI_SET
0061     BC       (cd 10 80 80 08 08)
0062   +  DC 07-F0 MDP_XRT_FLD_ENA
0063     BC       (d8)
0064   +  DC 07-F0 MDP_XRT_FLRCTRL_ENA
0065     BC       (c8)
0066   +  DC 07-F0 MDP_XRT_ARS_DIS
0067     BC       (d5)
0068   +  DC 07-F0 MDP_XRT_AEC_RESET
0069     BC       (d0)
0070   +  DC 07-F0 MDP_XRT_FLD_RESET
0071     BC       (da)
0072   +  DC 07-F0 MDP_XRT_QT_PROG_SET
0073     BC       (c4 11)
0074   +  DC 07-F0 MDP_XRT_FL_PROG_SET
0075     BC       (c5 07)
0076   . C. ---------- Success Verify ?            OK / NG ____
0077     C.
0078     C.
0079   . C. All OK?   Yes--> Please Proceed. / No --> Stop here.
0080     C.
0081   +. DC 07-F0 MDP_XRT_MODE_OBSV
0082     BC       (c2)
0083   +. TI 2016-12-24 10:40:02.0
0084     DC 07-F0 MDP_XRT_MODE_OBSV
0085     BC       (c2)
0086   . C. ---------- Success Verify ?            OK / NG ____
0087     C.
0088     C. ************ XRT END ***********
0089   . C. LOAD MHC code from EEPROM bank 3d to MHC RAM
0090   +. DC 07-FC EIS_LOAD_MHC_SOFT3
0091     BC       (2c 03)
0092     C.  Confirm EIS_MHC_LOAD_STS = LOAD
0093   . C. It takes 2 min to complete.
0094     C. Confirm EIS_MHC_LOAD_STS = IDLE
0095     C.
```

```
0096  +. DC 07-FC EIS_DUMP_MHCRAM
0097     BC       (0a 07 00 00 00 80 00)
0098     C. Confirm EIS_MEM_DUMP_STS = DUMP
0099   . C. It takes 2 min to complete.
0100     C. New: Confirm EIS_MEM_DUMP_STS = IDLE
0101     C.
0102  +. DC 07-FC EIS_MHC_MODE_RAM
0103     BC       (6b 88 11 00 02 ff ff)
0104     C. Wait 10sec: interval is required after EIS_MHC_MODE_RAM.
0105     C.
0106  +. DC 07-FC EIS_MHC_ABORT
0107     BC       (51 e8 81)
0108     C.
0109     C.  Confirm EIS_MHC_VLD_FLG = VLD, EIS_MHC_MEM_MODE = RAM
0110     C.
0111  +. DC 07-FC EIS_CLR_ICU_ERR
0112     BC       (23)
0113     C.  Confirm EIS_MHC_IF_ERR= 0x0000
0114     C.  Confirm EIS_CAM_IF_ERR= 0x0000
0115     C.
0116  +. DC 07-FC EIS_MHC_WATDOG_ENA
0117     BC       (76 c0 a9 00 02 00 01)
0118     C.  Config MHC heaters - Default setting -
0119  +. DC 07-FC EIS_UPLOAD_MHCPAR
0120     BC       (6f c0 95 00 04 21 2e 24)
0121     BC       (92)
0122  +  DC 07-FC EIS_UPLOAD_MHCPAR
0123     BC       (6f c0 95 00 04 c9 af 36)
0124     BC       (db)
0125  +  DC 07-FC EIS_UPLOAD_MHCPAR
0126     BC       (6f c0 95 00 04 a9 30 24)
0127     BC       (92)
0128  +  DC 07-FC EIS_UPLOAD_MHCPAR
0129     BC       (6f c0 95 00 04 41 b1 36)
0130     BC       (db)
0131  +  DC 07-FC EIS_UPLOAD_MHCPAR
0132     BC       (6f c0 95 00 04 81 b2 12)
0133     BC       (49)
0134  +  DC 07-FC EIS_UPLOAD_MHCPAR
0135     BC       (6f c0 95 00 04 69 33 24)
0136     BC       (92)
0137  +  DC 07-FC EIS_UPLOAD_MHCPAR
0138     BC       (6f c0 95 00 04 e1 b4 12)
0139     BC       (49)
0140  +  DC 07-FC EIS_UPLOAD_MHCPAR
0141     BC       (6f c0 95 00 04 09 35 1b)
0142     BC       (6d)
0143  +  DC 07-FC EIS_UPLOAD_MHCPAR
0144     BC       (6f c0 95 00 04 c9 36 09)
0145     BC       (24)
0146  +  DC 07-FC EIS_UPLOAD_MHCPAR
0147     BC       (6f c0 95 00 04 21 b7 09)
0148     BC       (24)
0149  +  DC 07-FC EIS_UPLOAD_MHCPAR
0150     BC       (6f c0 95 00 04 21 b8 24)
0151     BC       (92)
0152  +  DC 07-FC EIS_UPLOAD_MHCPAR
0153     BC       (6f c0 95 00 04 c9 39 00)
0154     BC       (00)
0155     C.  Set heaters duty cycle
0156     C.
0157  +. DC 07-FC EIS_UPLOAD_MHCPAR
0158     BC       (6f c0 95 00 04 09 3a 03)
0159     BC       (e8)
0160     C.
0161     C. Dump MHC parameter table
0162  +. DC 07-FC EIS_DUMP_MHCPAR
0163     BC       (0c 07 02 00 00 00 cc)
0164     C.
0165  +. DC 07-FC EIS_OPE_HTR_ALL_ON
0166     BC       (6a 28 8d 00 02 0f ff)
0167     C. Confirm EIS_OPE_HTR##_PWR = sometimes ON
0168     C.  Enable MHC safe mode (auto-safe)
0169  +. DC 07-FC EIS_MHC_SAFE_ENA
0170     BC       (5f c0 9a 00 02 00 01)
0171     C.
0172     C. The next daily plan MUST start with mhc_init, default_htrs1_6, default_htrs7_12, and trace_dump
0173   . C.  Initialize the on-board OBSTBL to all 0XFFs in any case
0174     C. Initialize the on-board OBSTBL data to all 0xFF
0175  +. DC 07-FC EIS_LOAD_INIT_TBL1
0176     BC       (26 01)
0177     C.  Confirm EIS_CMD_BC1/_BC2 = 0x 26 01
0178     C.
0179     C. Dump on-board OBSTBL to the ground
0180  +. DC 07-FC EIS_DUMP_OBSTBL
0181     BC       (07 07 07 00 00 70 00)
0182     C.  Confirm EIS_MEM_DUMP_STS = DUMP
0183     C. Error happens in comparison at ISAS EGSE.
0184     C.
0185   . C. ### Register dumped data to ISAS EGSE as default OBSTBL memory data ###
0186   . C. Confirm the registration of OBSTBL in the ISAS EGSE to the operator.
0187     C.
0188   . C. Load OBSTBL, dump OBSTBL, enable EIS mode changes
0189  +. DC 07-FC EIS_MODE_CHG_ENA
0190     BC       (20)
0191   . C. Verify EIS_MODE_CHG_FLG is ENA
0192  +. DC 07-FC EIS_MODE_MANU
0193     BC       (21 02)
```

```
0194   . C. Verify EIS in MANUAL mode
0195   . C. Estimated OBSTBL upload time is 4s
0196     C. ********************************
0197     C. EIS START OBSTBL LOAD
0198     C. ********************************
0199   . S. RAM   ram-820:EIS_OBSTBL
0200     ()
0201  +. DC 07-FC EIS_DUMP_OBSTBL
0202     BC       (07 07 07 00 00 70 00)
0203     C.
0204     C. Execute, after the success of OBSTBL upload.
0205     C. Set EIS TI-commands
0206  +. TI 2016-12-24 10:40:50.0
0207     DC 07-FC EIS_MODE_CHG_ENA
0208     BC       (20)
0209   . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1 COUNTUP
0210     C. ********************************
0211     C. EIS END OBSTBL LOAD
0212     C. ********************************
0213     C.
0214   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0215     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0216   . S. DC-BC dcbc-402:DCBC
0217     (MDP_known_event)
0218     C.
0219     C.
0220   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0221   . S. DC-BC dcbc-153:DCBC
0222     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0223     C.
0224     C.
0225   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0226     C.
0227   . C. *********** LOS ***********
0228     C.
```

```
*** OP Sequence for XRT ***

2016/12/24  10:50:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  10:50:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  10:50:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/24  10:51:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 00 ae 36 00 00
2016/12/24  10:51:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/24  10:51:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/24  10:51:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/24  10:51:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/24  10:51:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/24  10:53:56.0  XRT_QT_PROG_SET_438_OG [0x1b6]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 02
2016/12/24  10:53:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/24  10:54:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/24  12:48:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  12:48:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  12:48:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/24  12:49:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 00 ae 36 00 00
2016/12/24  12:49:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/24  12:49:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/24  12:49:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/24  12:49:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/24  12:49:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/24  12:51:56.0  XRT_QT_PROG_SET_446_OG [0x1be]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2016/12/24  12:51:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/24  12:52:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/24  15:09:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  15:09:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  15:09:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/24  15:09:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/24  15:12:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/24  15:22:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/24  15:23:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/24  16:44:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  16:44:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  16:44:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/24  16:44:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/24  16:47:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/24  17:08:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/24  17:09:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/24  17:58:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  17:58:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  17:58:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/24  17:58:30.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
2016/12/24  17:58:48.0  XRT_FLD_DIS_406_OG [0x196]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/24  18:01:24.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/24  18:01:26.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/24  18:01:28.0  XRT_QT_PROG_SET_417_OG [0x1a1]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0e
2016/12/24  18:01:30.0  XRT_CTRL_AUTO_408_OG [0x198]
```

```
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/24  18:08:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  18:08:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  18:08:28.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/24  18:08:30.0  AOCS_ORe-point_Start_1_OG [0x097]
                                        AOCU_NM              5 02-76 00 ae 36 00 00
2016/12/24  18:08:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/24  18:08:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/24  18:08:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/24  18:08:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/24  18:08:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/24  18:11:26.0  XRT_QT_PROG_SET_438_OG [0x1b6]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 02
2016/12/24  18:11:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/24  18:11:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/24  18:22:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  18:22:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  18:22:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/24  18:22:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/24  18:25:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/24  18:45:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/24  18:46:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/24  19:58:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  19:58:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  19:58:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/24  19:58:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/24  20:01:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/24  20:22:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/24  20:23:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/24  21:36:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  21:36:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  21:36:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/24  21:36:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/24  21:39:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/24  21:59:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/24  22:00:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/24  23:13:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  23:13:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/24  23:13:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/24  23:13:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/24  23:16:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/24  23:31:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/24  23:32:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  00:50:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  00:50:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  00:50:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  00:50:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  00:53:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  00:57:00.5  XRT_Custom_430_OG [0x1ae]
2016/12/25  00:58:00.5  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  02:13:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  02:13:02.0  XRT_CTRL_MANU_402_OG [0x192]
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                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  02:13:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  02:13:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  02:16:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  02:33:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  02:34:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  03:44:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  03:44:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  03:44:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  03:44:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  03:47:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  04:10:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  04:11:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  05:20:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  05:20:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  05:20:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  05:20:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  05:23:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  05:59:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  05:59:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  05:59:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/25  06:00:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                        AOCU_NM              5 02-76 00 00 00 00 00
2016/12/25  06:00:18.0  XRT_FLD_DIS_406_OG [0x196]
                                        MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/25  06:02:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                        MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/25  06:02:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/25  06:02:58.0  XRT_QT_PROG_SET_417_OG [0x1a1]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 0e
2016/12/25  06:03:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  06:09:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  06:09:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  06:09:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/25  06:10:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                        AOCU_NM              5 02-76 00 ae 36 00 00
2016/12/25  06:10:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/25  06:10:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/25  06:10:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/25  06:10:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/25  06:10:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  06:12:56.0  XRT_QT_PROG_SET_438_OG [0x1b6]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 02
2016/12/25  06:12:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/25  06:13:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  07:00:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  07:00:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  07:00:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  07:00:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  07:03:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  07:24:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  07:25:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  08:40:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  08:40:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  08:40:04.0  XRT_FLD_RESET_415_OG [0x19f]
```

```
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  08:40:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  08:43:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  09:01:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  09:02:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  10:21:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  10:21:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  10:21:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  10:21:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  10:24:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  10:32:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  10:33:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  12:49:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  12:49:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  12:49:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/25  12:50:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                        AOCU_NM              5 02-76 00 1b 8d b0 e6
2016/12/25  12:50:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/25  12:50:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/25  12:50:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/25  12:50:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/25  12:50:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  12:52:56.0  XRT_QT_PROG_SET_446_OG [0x1be]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2016/12/25  12:52:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/25  12:53:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  15:43:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  15:43:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  15:43:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  15:43:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  15:46:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  16:06:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  16:07:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  17:19:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  17:19:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  17:19:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  17:19:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  17:22:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  17:43:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  17:44:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  18:56:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  18:56:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  18:56:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  18:56:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  18:59:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  19:20:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  19:21:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  20:09:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  20:09:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  20:09:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/25  20:10:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                        AOCU_NM              5 02-76 00 00 00 00 00
2016/12/25  20:10:18.0  XRT_FLD_DIS_406_OG [0x196]
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                                        MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/25  20:12:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                        MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/25  20:12:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/25  20:12:58.0  XRT_QT_PROG_SET_417_OG [0x1a1]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 0e
2016/12/25  20:13:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  20:19:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  20:19:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  20:19:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/25  20:20:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                        AOCU_NM              5 02-76 00 ae 36 00 00
2016/12/25  20:20:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/25  20:20:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/25  20:20:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/25  20:20:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/25  20:20:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  20:22:56.0  XRT_QT_PROG_SET_438_OG [0x1b6]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 02
2016/12/25  20:22:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/25  20:23:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  20:34:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  20:34:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  20:34:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  20:34:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  20:37:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  20:57:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  20:58:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  22:11:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  22:11:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  22:11:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  22:11:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  22:14:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  22:33:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/25  22:34:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/25  23:48:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  23:48:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/25  23:48:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/25  23:48:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/25  23:51:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/25  23:59:30.5  XRT_Custom_430_OG [0x1ae]
2016/12/26  00:00:30.5  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  01:15:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  01:15:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  01:15:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  01:15:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  01:18:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  01:31:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  01:32:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  02:47:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  02:47:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  02:47:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  02:47:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
```

```
2016/12/26  02:50:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  03:08:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  03:09:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  04:16:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  04:16:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  04:16:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  04:16:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  04:19:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  04:45:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  04:46:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  05:28:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  05:28:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  05:28:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/26  05:29:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
2016/12/26  05:29:18.0  XRT_FLD_DIS_406_OG [0x196]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/26  05:31:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/26  05:31:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/26  05:31:58.0  XRT_QT_PROG_SET_417_OG [0x1a1]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0e
2016/12/26  05:32:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  05:38:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  05:38:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  05:38:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/26  05:39:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 00 ae 36 00 00
2016/12/26  05:39:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/26  05:39:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/26  05:39:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/26  05:39:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/26  05:39:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  05:41:56.0  XRT_QT_PROG_SET_438_OG [0x1b6]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 02
2016/12/26  05:41:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/26  05:42:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  05:56:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  05:56:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  05:56:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  05:56:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  05:59:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  06:22:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  06:23:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  07:36:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  07:36:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  07:36:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  07:36:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  07:39:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  07:59:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  08:00:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  09:16:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  09:16:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  09:16:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  09:16:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
```

```
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  09:19:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  09:35:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  09:36:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  10:59:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  10:59:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  10:59:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  10:59:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  11:00:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  11:01:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  11:02:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  14:43:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  14:43:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  14:43:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  14:43:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  14:46:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  14:54:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  14:55:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  16:18:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  16:18:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  16:18:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  16:18:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  16:21:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  16:41:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  16:42:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  17:55:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  17:55:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  17:55:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  17:55:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  17:58:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  18:18:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  18:18:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  18:18:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/26  18:18:30.0  AOCS_ORe-point_Start_2_OG [0x098]
                                        AOCU_NM              5 02-76 00 00 00 00 00
2016/12/26  18:18:48.0  XRT_FLD_DIS_406_OG [0x196]
                                        MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/26  18:21:24.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                        MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/26  18:21:26.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/26  18:21:28.0  XRT_QT_PROG_SET_417_OG [0x1a1]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 0e
2016/12/26  18:21:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  18:28:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  18:28:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  18:28:28.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/26  18:28:30.0  AOCS_ORe-point_Start_1_OG [0x097]
                                        AOCU_NM              5 02-76 00 ae 36 00 00
2016/12/26  18:28:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/26  18:28:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/26  18:28:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/26  18:28:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/26  18:28:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  18:31:26.0  XRT_QT_PROG_SET_446_OG [0x1be]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
```

```
2016/12/26  18:31:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/26  18:31:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  19:31:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  19:31:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  19:31:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  19:31:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  19:34:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  19:55:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  19:56:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  21:09:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  21:09:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  21:09:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  21:09:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  21:12:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  21:32:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  21:33:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/26  22:46:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  22:46:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/26  22:46:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/26  22:46:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/26  22:49:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/26  23:07:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/26  23:08:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/27  00:23:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  00:23:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  00:23:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/27  00:23:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/27  00:26:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/27  00:31:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/27  00:32:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/27  01:47:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  01:47:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  01:47:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/27  01:47:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/27  01:50:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/27  02:06:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/27  02:07:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/27  03:22:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  03:22:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  03:22:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/27  03:22:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/27  03:25:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/27  03:43:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/27  03:44:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/27  04:52:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  04:52:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  04:52:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/27  04:52:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/27  04:55:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/27  05:20:30.0  XRT_Custom_430_OG [0x1ae]
```

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2016/12/27  05:21:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/27  06:02:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  06:02:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  06:02:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/27  06:03:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
2016/12/27  06:03:18.0  XRT_FLD_DIS_406_OG [0x196]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/27  06:05:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/27  06:05:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/27  06:05:58.0  XRT_QT_PROG_SET_417_OG [0x1a1]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0e
2016/12/27  06:06:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/27  06:12:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  06:12:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  06:12:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/27  06:13:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 00 ae 36 00 00
2016/12/27  06:13:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/27  06:13:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/27  06:13:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/27  06:13:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/27  06:13:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/27  06:15:56.0  XRT_QT_PROG_SET_446_OG [0x1be]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2016/12/27  06:15:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/27  06:16:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/27  06:32:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  06:32:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  06:32:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/27  06:32:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/27  06:35:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/27  06:57:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/27  06:58:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/27  08:12:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  08:12:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  08:12:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/27  08:12:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/27  08:15:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/27  08:34:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/27  08:35:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/27  09:53:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  09:53:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/27  09:54:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
```