XRT Timeline to be uploaded on 2016/05/03

Period: 2016/05/03 10:16:00 - 2016/05/07 10:59:00

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

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
05/03 10:33:00 - 05/03 10:36:00	Fixed (0.0, 0.0)	# OP start + 10min, synoptic and XRT mercury transit test
05/04 16:53:00 - 05/04 17:08:30	Fixed (0.0, 0.0)	synoptic, shifted 6.0 min
05/05 05:39:00 - 05/05 05:45:54	Fixed (0.0, 0.0)	synoptic, shifted -24.0 min

PROG= 15 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

XOB #1B2B: Mercury transit DC-pnt with offset readout in Al-poly

Term	Pointing (x, y)	Comment
05/03 10:39:06 - 05/03 11:25:54	Fixed (0.0, 0.0)	# OP start + 10min, synoptic and XRT mercury transit test

PROG= 04 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 81 1-time(s) 60.0sec

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	1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	8.00s	Obs	1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	16.0s	Obs	1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 88 28-time(s) 30.0sec

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	4.00s	Obs	1x1	768x384 (504, 704)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	11.3s	Obs	1x1	768x384 (504, 704)	Q=95	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 81 1-time(s) 60.0sec

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	1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	8.00s	Obs	1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	16.0s	Obs	1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 47 28-time(s) 30.0sec

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	4.00s	Obs	1x1	768x384 (1328, 704)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	11.3s	Obs	1x1	768x384 (1328, 704)	Q=95	0	0	2.0sec

XOB #1AAC: HOP81/206 2-filter - Al/poly 6s, Al/mesh 4s 60s cadence, G-band - 384x384 3ms

Term	Pointing (x, y)	Comment
05/03 12:02:00 - 05/03 16:33:00	Fixed (-18.0, 863.0)	# HOP 81 (N Pole).

PROG= 09 Inf.-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 9 2-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	close	Safe	Norm	3ms	Obs	1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 7 1-time(s) 30.0sec

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)	Q=90	0	0	2.0sec

Subr= 3 30-time(s) 2.0sec

Seqn= 57 1-time(s) 60.0sec

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	4.00s	Obs	1x1	384x384 (1064, 1048)	Q=90	0	0	2.0sec
Al-poly/Open	Al-poly/Open	close	Safe	Norm	5.66s	Obs	1x1	384x384 (1064, 1048)	Q=90	0	0	2.0sec

XOB #1B2C: HOP308 - Thin-Be AEC 2/3 with PFB, 384x384 at 1064 1048, thin-Be, and Al/poly context, with G-band (3ms/3ms VLS=CLS), 10 cad

Term	Pointing (x, y)	Comment
05/03 17:23:00 - 05/03 23:06:30	Track (-35.8, 293.2) @ 05/03 17:20:00	# HOP 308 (AR 12539) 16.30-22UT.

05/04 17:54:06 - 05/04 22:03:30 Track (176.7, 290.4) @ 05/04 17:20:00 # HOP 308 (AR 12539) 17.20-22.15UT.

PROG= 13 Inf.-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 56 1-time(s) 2.0sec

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 12-time(s) 2.0sec

Seqn= 89 15-time(s) 10.0sec

thin-Be/Open	med-Be/Open	close	Safe	Norm	1.00s	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	1.00s	Obs	1x1	384x384 (1064, 1048)	Q=95	2	0	2.0sec

Seqn= 96 4-time(s) 30.0sec

Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	0	15.0sec
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	1	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	1	15.0sec
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	2	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	2	2.0sec

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

XOB #1AF1: CCD Monitor During Bakeout - G-band 3ms - 1kx1k - Q90 - 1st Quadrant -Al/mesh(512ms), Al/Poly(1443ms) - w leak image-3ms

Term	Pointing (x, y)	Comment
05/03 23:38:00 - 05/03 23:44:54	Fixed (-528.4, -528.4)	# XRT quadra pointing 1/4

PROG= 05 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 86 1-time(s) 2.0sec

Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	1024x1024 (1536, 1536)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	1024x1024 (1536, 1536)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	3ms	Obs	1x1	1024x1024 (1536, 1536)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	3ms	Obs	1x1	1024x1024 (1536, 1536)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 55 2-time(s) 2.0sec

Open/Al-mesh	Open/Ti-poly	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	med-Be/Open	close	Safe	Norm	1.41s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 54 1-time(s) 2.0sec

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

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

XOB #1AF2: CCD Monitor During Bakeout - G-Band 3ms - 1kx1k - Q90 - 2nd Quadrant - Al/mesh (512ms), Al/Poly (1443ms) - w leak image-3 ms

Term	Pointing (x, y)	Comment
05/03 23:48:05 - 05/03 23:54:54	Fixed (528.4, -528.4)	2/4

PROG= 16 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 15 1-time(s) 2.0sec

Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	1024x1024 (512, 1536)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	1024x1024 (512, 1536)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	3ms	Obs	1x1	1024x1024 (512, 1536)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	3ms	Obs	1x1	1024x1024 (512, 1536)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 55 2-time(s) 2.0sec

Open/Al-mesh	Open/Ti-poly	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	med-Be/Open	close	Safe	Norm	1.41s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 54 1-time(s) 2.0sec

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

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

XOB #1AF3: CCD Monitor During Bakeout - G-Band 3ms - 1kx1k - Q90 - 3rd Quadrant - Al/mesh (512ms), Al/Poly (1443ms) - w leak image-3 ms

Term	Pointing (x, y)	Comment
05/03 23:58:00 - 05/04 00:04:54	Fixed (528.4, 528.4)	3/4

PROG= 03 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 35 1-time(s) 2.0sec

Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	768x384 (504, 704)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	768x384 (504, 704)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	3ms	Obs	1x1	768x384 (504, 704)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	3ms	Obs	1x1	768x384 (504, 704)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 55 2-time(s) 2.0sec

Open/Al-mesh	Open/Ti-poly	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	med-Be/Open	close	Safe	Norm	1.41s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 54 1-time(s) 2.0sec

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

XOB #1AF4: CCD Monitor During Bakeout - G-Band 3ms - 1kx1k - Q90 - 4th Quadrant - Al/mesh (512ms), Al/Poly (1443ms) - w leak image-3 ms

Term	Pointing (x, y)	Comment
05/04 00:08:00 - 05/04 00:14:54	Fixed (-528.4, 528.4)	4/4

PROG= 20 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 3 1-time(s) 2.0sec

Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	768x384 (1328, 704)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	768x384 (1328, 704)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	3ms	Obs	1x1	768x384 (1328, 704)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	3ms	Obs	1x1	768x384 (1328, 704)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 55 2-time(s) 2.0sec

Open/Al-mesh	Open/Ti-poly	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	med-Be/Open	close	Safe	Norm	1.41s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 54 1-time(s) 2.0sec

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

XOB #1B02: AR - Standard Core - (Filter-Ratio with Al/poly and thin-Be long/short pairs) with PFB, 384x384 at 1064 1048, thin-Be, and Al/poly context, with

Term	Pointing (x, y)	Comment
05/04 00:18:00 - 05/04 05:27:00	Track (25.8, 292.7) @ 05/04 00:15:00	# AR12539
05/04 06:17:00 - 05/04 16:49:54	Track (78.9, 292.1) @ 05/04 06:14:00	# AR 12539.

PROG= 17 Inf.-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 56 1-time(s) 2.0sec

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 5-time(s) 2.0sec

Seqn= 75 1-time(s) 2.0sec

Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	2	0	2.0sec
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	2	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec

Seqn= 79 4-time(s) 120.0sec

Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	0	34.0sec
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	1	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	1	34.0sec
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	2	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	2	2.0sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval

XOB #1B15: Synoptic 7 Filter w/ Al-mesh(24/256/2897), Al-poly(45/512/4096), Thin-Be(181/2048/11571) - Thick-Be(65536), Al-poly+Ti-poly(512/4096), Med-Al

Term	Pointing (x, y)	Comment
05/04 06:07:00 - 05/04 06:13:54	Fixed (0.0, 0.0)	synoptic, shifted 4.0 min

PROG= 08 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 5 1-time(s) 2.0sec

Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	4x4	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	8x8	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	1x1	2048x512 (1024, 1024)	DPCM	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	1x1	512x2048 (1024, 1024)	DPCM	0	0	2.0sec

Seqn= 1 1-time(s) 2.0sec

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

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

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) 4.0sec

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

Subr= 2 1-time(s) 2.0sec

Seqn= 46 2-time(s) 2.0sec

Open/thick-Be	Open/thick-Be	close	Safe	Norm	64.0s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec

Seqn= 4 2-time(s) 2.0sec													
Al-poly/Ti-poly	Al-poly/thick-Al	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Al-poly/Ti-poly	Al-poly/thick-Al	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Seqn= 71 2-time(s) 2.0sec													
med-Al/Open	med-Al/Open	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
med-Al/Open	med-Al/Open	close	Safe	Norm	32.0s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval	

XOB #1AFB: AR - Standard Core - (Filter-Ratio with Al/poly and thin-Be long/short pairs) with PFB, 384x384 at 1064 1048, thin-Be, and Al/poly context, with

Term	Pointing (x, y)	Comment
05/04 22:43:06 - 05/05 05:35:54	Track (176.7, 290.4) @ 05/04 17:20:00	# HOP 308 (AR 12539) 17.20-22.15UT.
05/05 05:49:00 - 05/05 09:23:30	Track (283.8, 287.7) @ 05/05 05:46:00	# AR 12539.

PROG= 02 Inf.-time(s)													
Subr= 1 1-time(s) 2.0sec													
Seqn= 56 1-time(s) 2.0sec													
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 4-time(s) 2.0sec													
Seqn= 75 1-time(s) 2.0sec													
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	2	0	2.0sec
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	2	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
Seqn= 24 4-time(s) 240.0sec													
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	0	75.0sec
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	1	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	1	75.0sec
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	2	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	2	2.0sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval	

* * * * * Flare mode * * * * *

XOB #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
05/03 10:39:06 - 05/03 11:25:54	Fixed (0.0, 0.0)	# OP start + 10min, synoptic and XRT mercury transit test
05/03 12:02:00 - 05/03 16:33:00	Fixed (-18.0, 863.0)	# HOP 81 (N Pole).
05/03 17:23:00 - 05/03 23:06:30	Track (-35.8, 293.2) @ 05/03 17:20:00	# HOP 308 (AR 12539) 16.30-22UT.
05/04 00:18:00 - 05/04 05:27:00	Track (25.8, 292.7) @ 05/04 00:15:00	# AR12539
05/04 06:17:00 - 05/04 16:49:54	Track (78.9, 292.1) @ 05/04 06:14:00	# AR 12539.
05/04 17:54:06 - 05/04 22:03:30	Track (176.7, 290.4) @ 05/04 17:20:00	# HOP 308 (AR 12539) 17.20-22.15UT.
05/04 22:43:06 - 05/05 05:35:54	Track (176.7, 290.4) @ 05/04 17:20:00	# HOP 308 (AR 12539) 17.20-22.15UT.
05/05 05:49:00 - 05/05 09:23:30	Track (283.8, 287.7) @ 05/05 05:46:00	# AR 12539.

PROG= 07 30-time(s)													
Subr= 1 20-time(s) 2.0sec													
Seqn= 11 1-time(s) 2.0sec													
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													
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													
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													
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													
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
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval	

* * * * * Active Region Search * * * * *

NOT USED

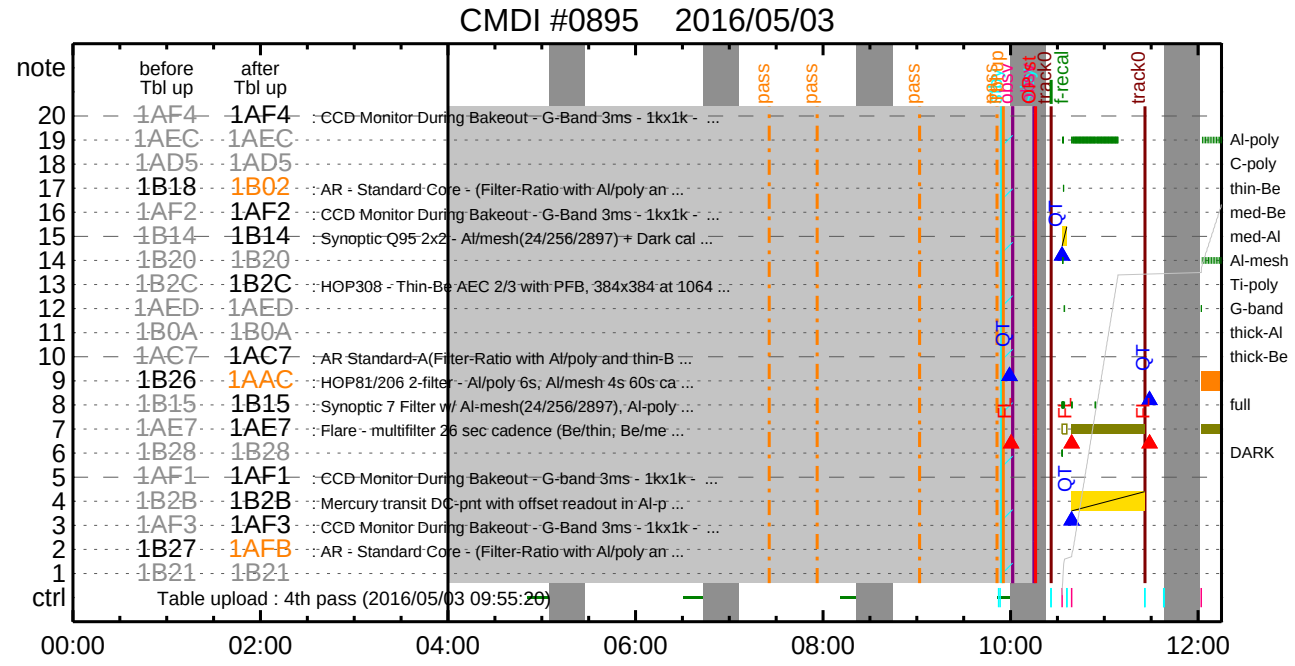
* * * * * Flare Detection * * * * *

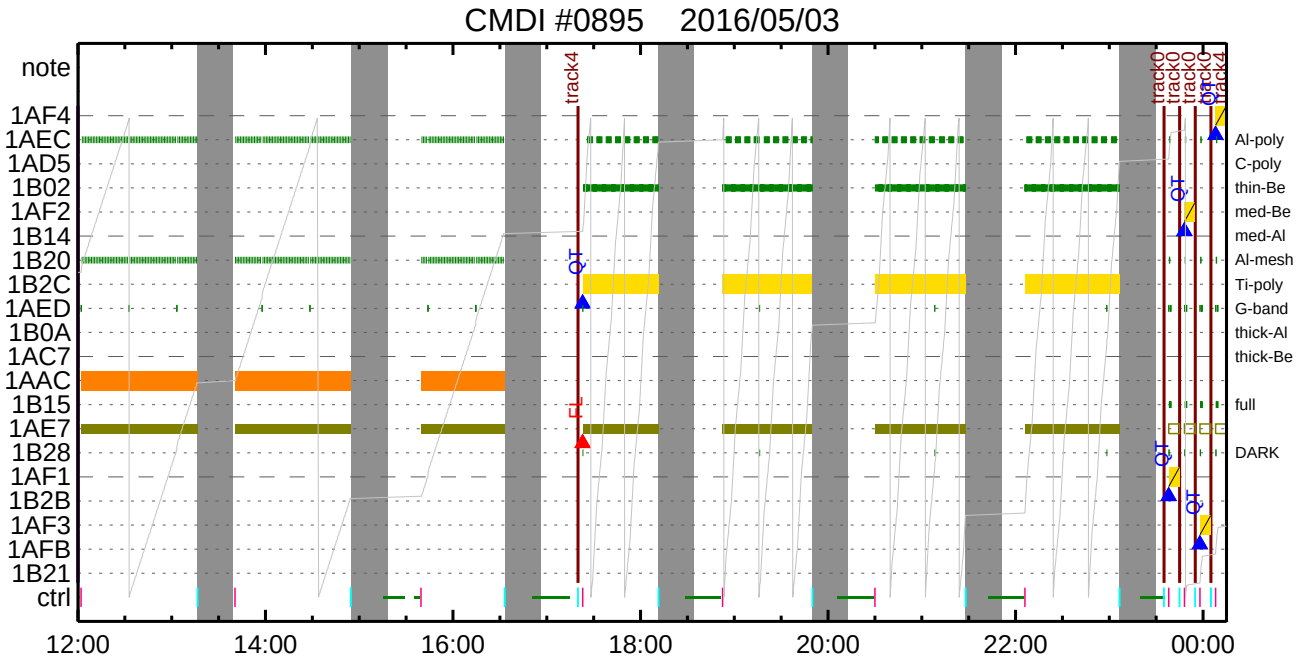
FLD Patrol

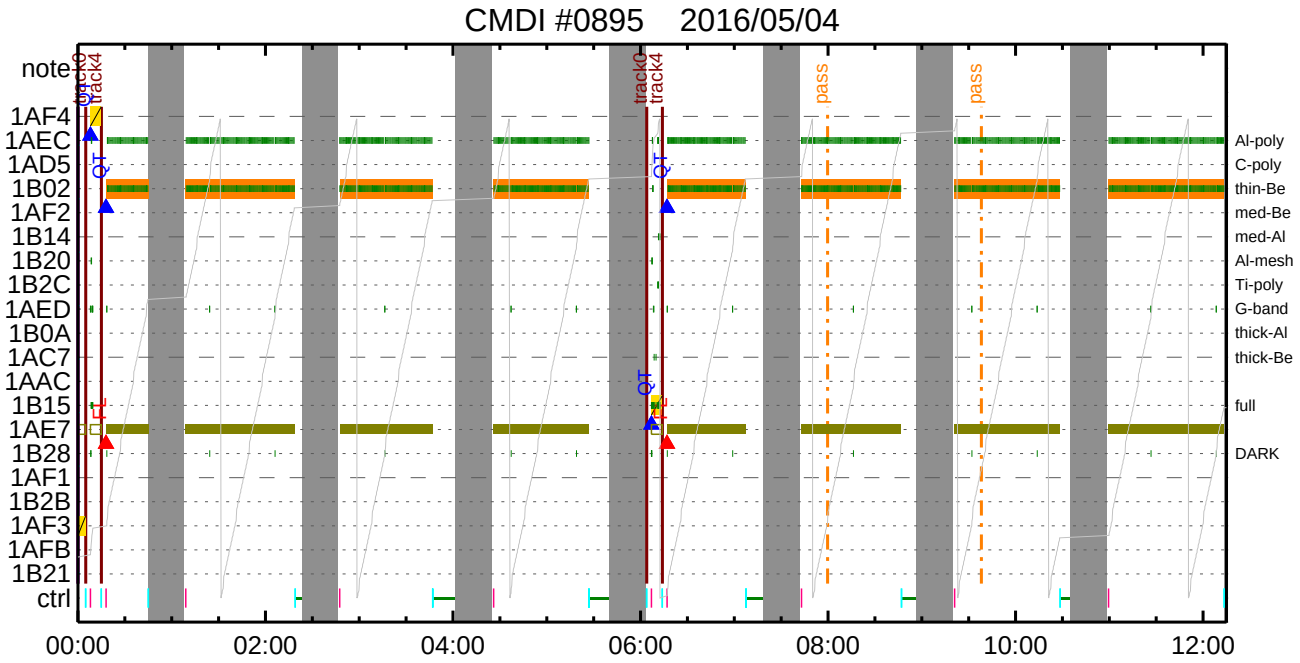
Term	Pointing (x, y)	Comment
05/03 10:36:24 - 05/03 23:35:18	Fixed (0.0, 0.0)	# OP start + 10min, synoptic and XRT mercury transit test
05/04 00:15:18 - 05/04 06:04:18	Track (25.8, 292.7) @ 05/04 00:15:00	# AR12539
05/04 06:14:18 - 05/04 16:50:18	Track (78.9, 292.1) @ 05/04 06:14:00	# AR 12539.

05/04 17:51:24 - 05/05 05:36:18 Track (176.7, 290.4) @ 05/04 17:20:00 # HOP 308 (AR 12539) 17.20-22.15UT.
05/05 05:46:18 - 05/07 10:59:00 Track (283.8, 287.7) @ 05/05 05:46:00 # AR 12539.

Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8ms	Obs	8x8		Q=50		80sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer	Interval


CMDI #0895 2016/05/03
note
before Tbl up
after Tbl up
20 1AF4 1AF4 : CCD Monitor During Bakeout - G-Band 3ms - 1kx1k - ...
19 1AEC 1AEC
18 1AD5 1AD5
17 1B18 1B02 : AR - Standard Core - (Filter-Ratio with Al/poly an ...
16 1AF2 1AF2 : CCD Monitor During Bakeout - G-Band 3ms - 1kx1k - ...
15 1B14 1B14 : Synoptic Q95 2x2 - Al/mesh(24/256/2897) + Dark cal ...
14 1B20 1B20
13 1B2C 1B2C : HOP308 - Thin-Be AEC 2/3 with PFB, 384x384 at 1064 ...
12 1AED 1AED
11 1B0A 1B0A
10 1AC7 1AC7 : AR Standard-A(Filter-Ratio with Al/poly and thin-B ...
9 1B26 1AAC : HOP81/206 2-filter - Al/poly 6s, Al/mesh 4s 60s ca ...
8 1B15 1B15 : Synoptic 7 Filter w/ Al-mesh(24/256/2897), Al-poly ...
7 1AE7 1AE7 : Flare - multifilter 26 sec cadence (Be/thin, Be/me ...
6 1B28 1B28
5 1AF1 1AF1 : CCD Monitor During Bakeout - G-band 3ms - 1kx1k - ...
4 1B2B 1B2B : Mercury transit DC-pnt with offset readout in Al-p ...
3 1AF3 1AF3 : CCD Monitor During Bakeout - G-Band 3ms - 1kx1k - ...
2 1B27 1AFB : AR - Standard Core - (Filter-Ratio with Al/poly an ...
1 1B21 1B21
ctrl Table upload : 4th pass (2016/05/03 09:55:20)
pass
pass
pass
track0
track0
track0
F-recal
track0
QT
QT
QT
FL
FL
FL
QT
00:00
02:00
04:00
06:00
08:00
10:00
12:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK


CMDI #0895 2016/05/03
note
1AF4
1AEC
1AD5
1B02
1AF2
1B14
1B20
1B2C
1AED
1B0A
1AC7
1AAC
1B15
1AE7
1B28
1AF1
1B2B
1AF3
1AFB
1B21
ctrl
track4
QT
FL
track0
track0
track0
track0
track4
QT
QT
QT
12:00
14:00
16:00
18:00
20:00
22:00
00:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK


CMDI #0895 2016/05/04
note
1AF4
1AEC
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1B02
1AF2
1B14
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1B2C
1AED
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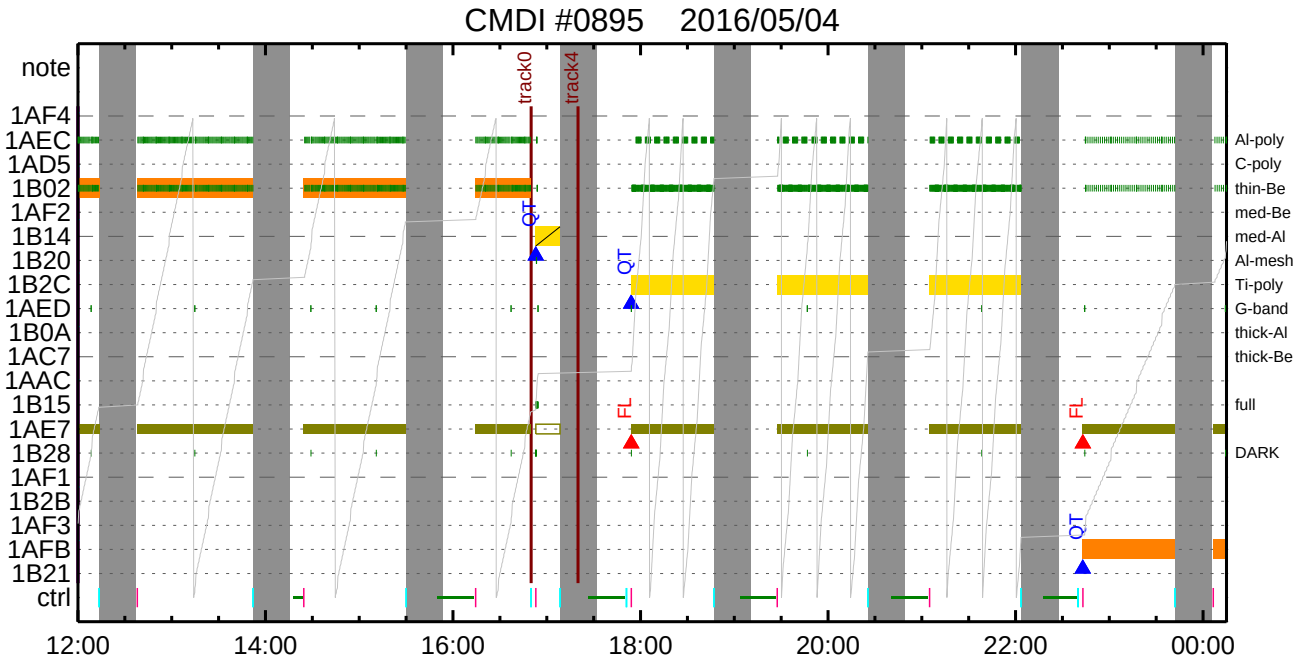
1AC7
1AAC
1B15
1AE7
1B28
1AF1
1B2B
1AF3
1AFB
1B21
ctrl
track0
track4
QT
FL
track0
track4
QT
QT
pass
pass
00:00
02:00
04:00
06:00
08:00
10:00
12:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK


CMDI #0895 2016/05/04
note
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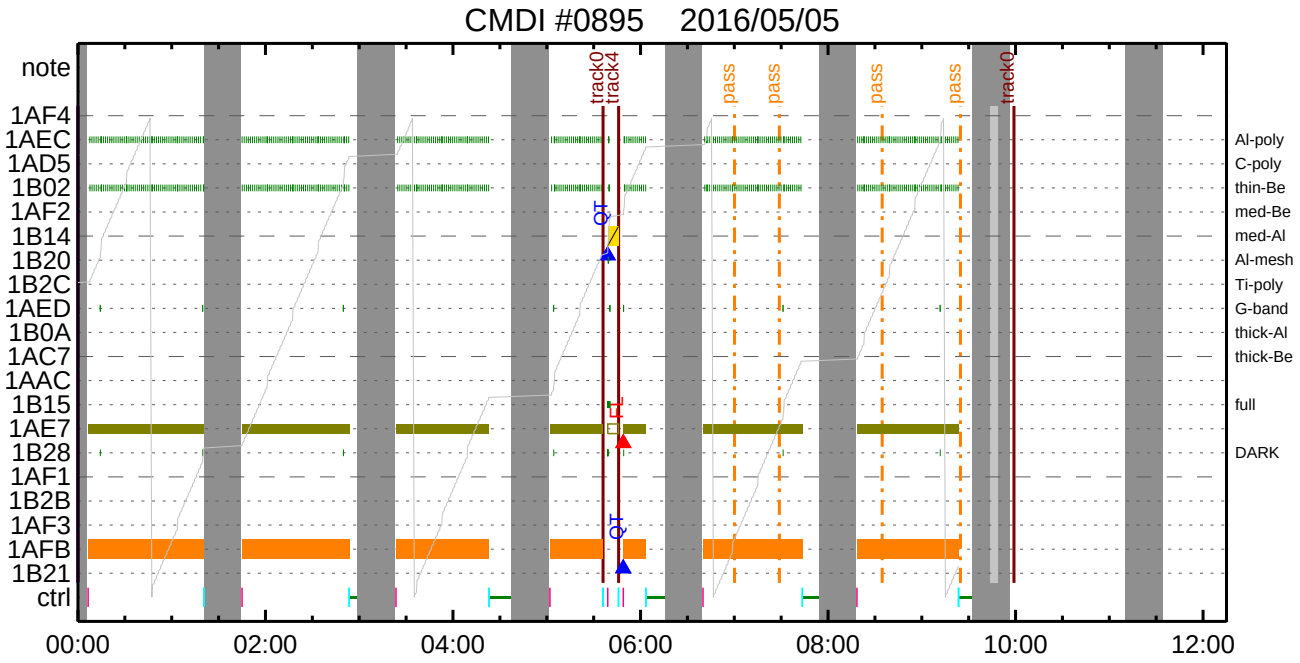
1AEC
1AD5
1B02
1AF2
1B14
1B20
1B2C
1AED
1B0A
1AC7
1AAC
1B15
1AE7
1B28
1AF1
1B2B
1AF3
1AFB
1B21
ctrl
track0
track4
QT
QT
FL
FL
QT
12:00
14:00
16:00
18:00
20:00
22:00
00:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK


CMDI #0895 2016/05/05
note
1AF4
1AEC
1AD5
1B02
1AF2
1B14
1B20
1B2C
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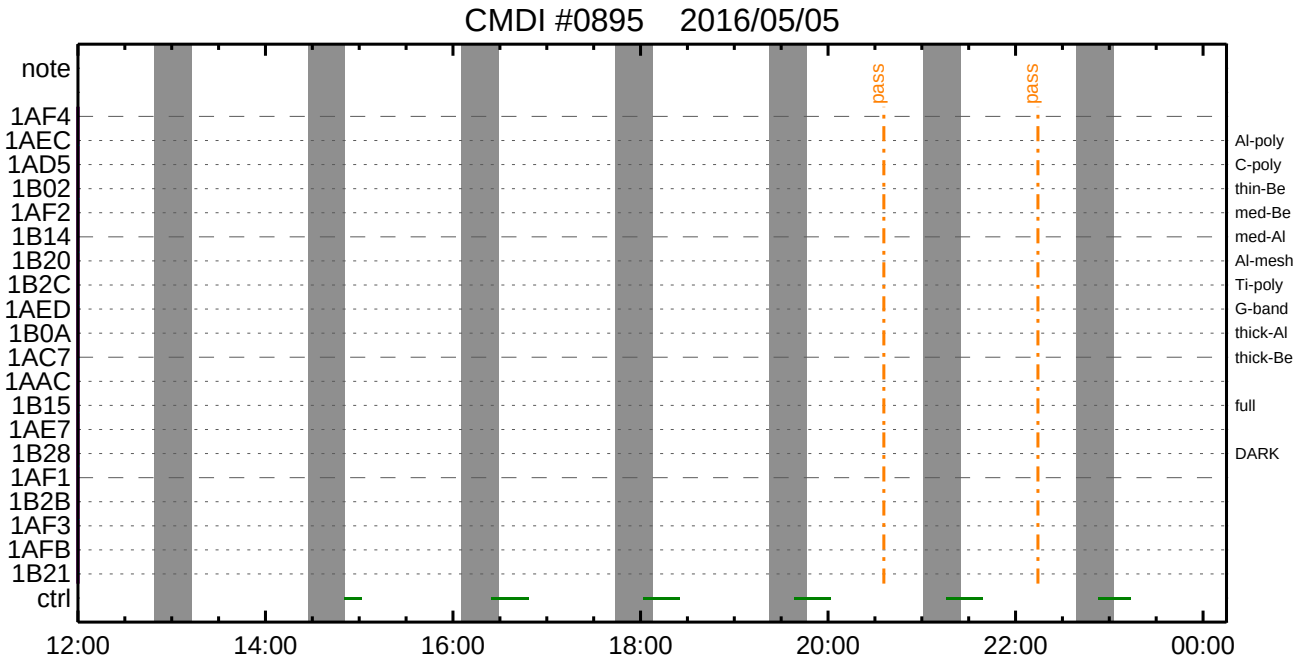
1AC7
1AAC
1B15
1AE7
1B28
1AF1
1B2B
1AF3
1AFB
1B21
ctrl
track0
track4
pass
pass
pass
pass
track0
QT
FL
QT
00:00
02:00
04:00
06:00
08:00
10:00
12:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK


CMDI #0895 2016/05/05
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1AF2
1B14
1B20
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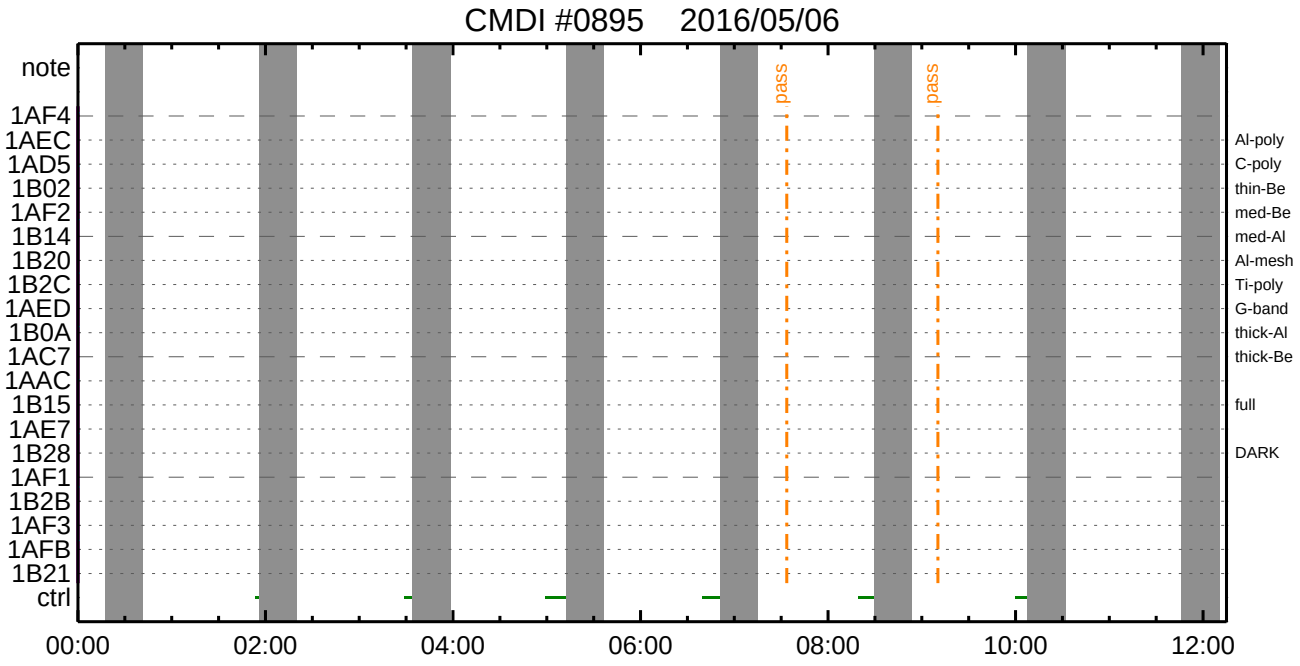
1AED
1B0A
1AC7
1AAC
1B15
1AE7
1B28
1AF1
1B2B
1AF3
1AFB
1B21
ctrl
pass
pass
12:00
14:00
16:00
18:00
20:00
22:00
00:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK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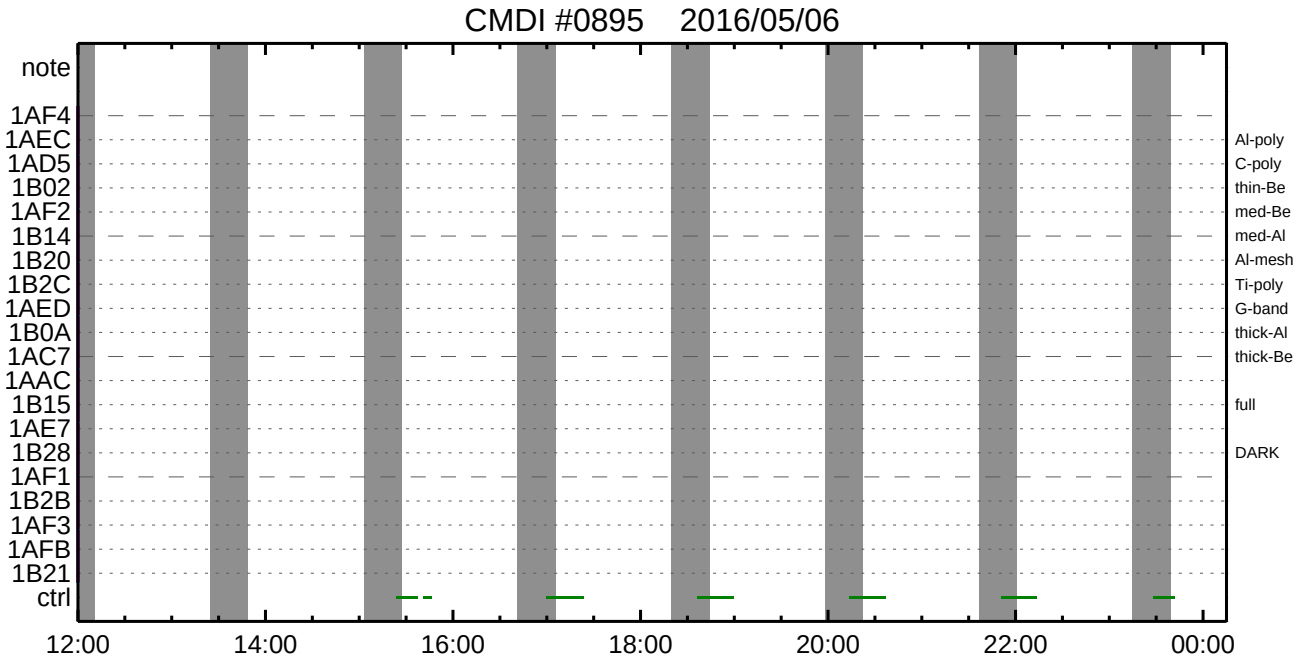
1AC7
1AAC
1B15
1AE7
1B28
1AF1
1B2B
1AF3
1AFB
1B21
ctrl
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00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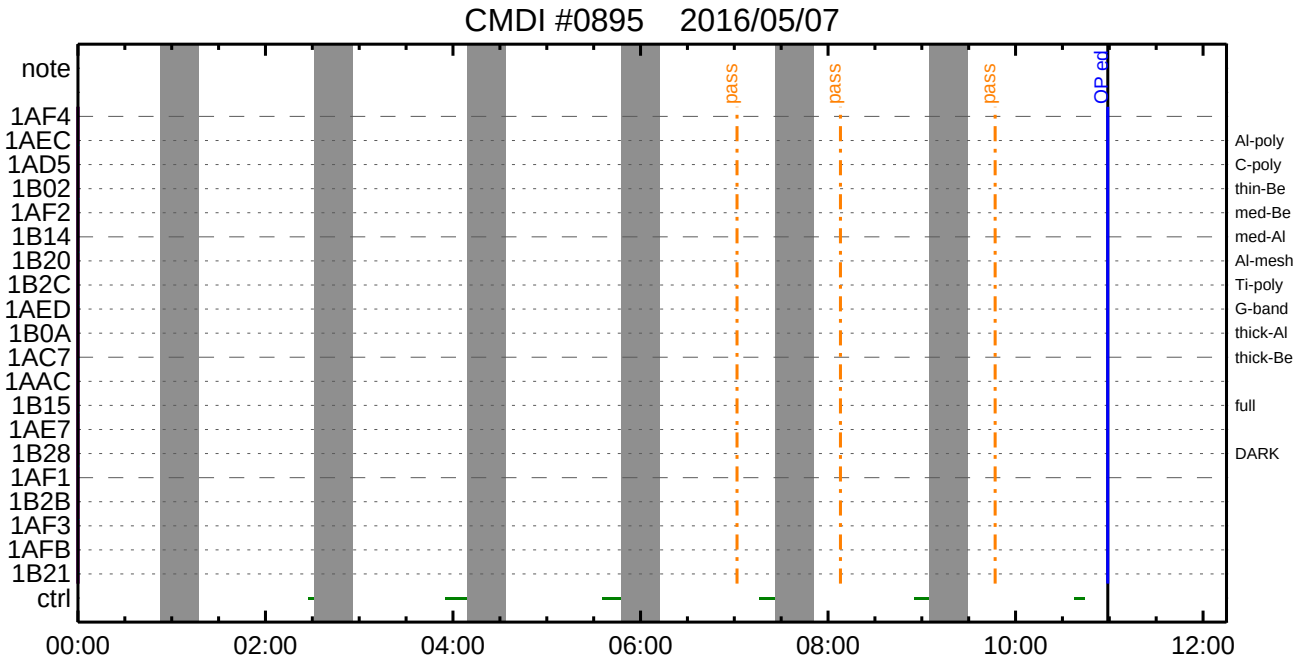
1AED
1B0A
1AC7
1AAC
1B15
1AE7
1B28
1AF1
1B2B
1AF3
1AFB
1B21
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00


CMDI #0895 2016/05/07
note
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1B02
1AF2
1B14
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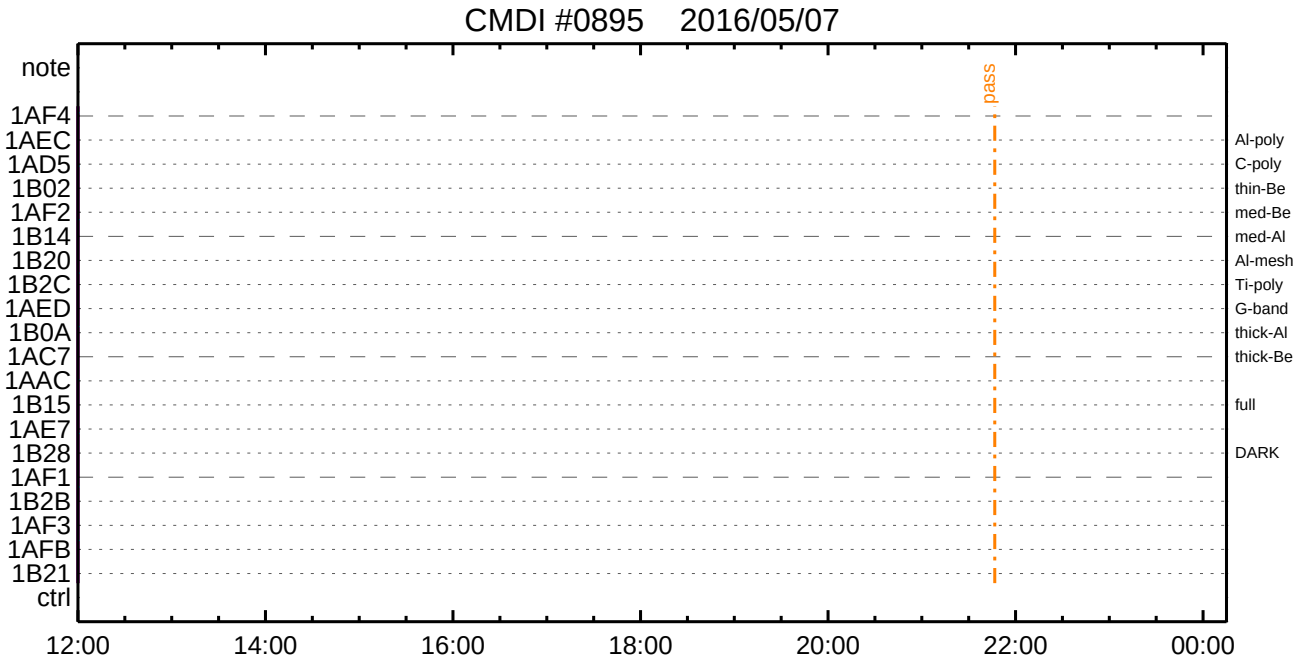
1B2C
1AED
1B0A
1AC7
1AAC
1B15
1AE7
1B28
1AF1
1B2B
1AF3
1AFB
1B21
ctrl
pass
pass
pass
OP ed
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0895 2016/05/07
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1AED
1B0A
1AC7
1AAC
1B15
1AE7
1B28
1AF1
1B2B
1AF3
1AFB
1B21
ctrl
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

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

main-828 2016-05-03 12:38:20 289 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¤ÇºÎ»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¥ÊÀÚÂØ¡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¥ÊÀÚÂØ¤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¥ÊÀÚÂØ¡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
```

```
0096     C.
0097     C.
0098   . C. ****************************
0099     C. OP/OG¥í¡¼¥É¡¦¥À¥ó¥×
0100     C. ****************************
0101     C.
0102   . C. ¡ãOP/OG¥í¡¼¥É¡ä
0103   . S. OP    op-828:OP
0104     ()
0105   . S. OG    og-828:OG
0106     ()
0107     C.
0108   . C. ¡ãNMOG&OPÎÎ°è¥À¥ó¥×¡ä
0109     C. NMOG(0x200000-0x207FFF¡§ 32 kbyte)
0110  +. DC 01-23 DHU_DMA_DMP_PRM_SET
0111     BC       (20 00 7f 01 02)
0112     C.                       ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     40
0113     C.                       ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0114     C.                       ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
0115     C.                       ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0116     C.                       ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0117  +. DC 01-22 DHU_MODE_CHNG
0118     BC       (07 0b f8)
0119     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     7
0120     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0121     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0122     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0123     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0124   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0125     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0126   . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0127     C.
0128     C. NMOG(0x208000-0x20FFFF¡§ 32 kbyte)
0129  +. DC 01-23 DHU_DMA_DMP_PRM_SET
0130     BC       (20 80 7f 01 02)
0131     C.                       ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     41
0132     C.                       ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0133     C.                       ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
0134     C.                       ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0135     C.                       ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0136  +. DC 01-22 DHU_MODE_CHNG
0137     BC       (07 0b f8)
0138     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     7
0139     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0140     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0141     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0142     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0143   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0144     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0145   . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0146     C.
0147     C. NMOG(0x210000-0x2100FF¡§ 256byte)+OP(0x210100-0x2141FF: 16.25kbyte)
0148  +. DC 01-23 DHU_DMA_DMP_PRM_SET
0149     BC       (21 00 41 01 02)
0150     C.                       ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     42
0151     C.                       ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0152     C.                       ¢¢[HK1_DMP_BLOCK_NUM]           EQ     65
0153     C.                       ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0154     C.                       ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0155  +. DC 01-22 DHU_MODE_CHNG
0156     BC       (07 0b f8)
0157     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     7
0158     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0159     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0160     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0161     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0162   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0163     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0164   . C. RAM ID=NMOG,RAM ID=OP¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0165     C.
0166   . C. ***** °Ê²¼¤Ï¾Ã´¶Á°¤ËÉ¬¤ºÁ÷¿® (¾åµ-¥À¥ó¥×¼ê½ç¤òÅÓÃæ¤Ç½ª¤¨¤ë¾ì¹ç¤Ç¤â) *****
0167     C. DHU¥â¡¼¥É¡Ê¼ý¸¸¥ì¡¼¥È¡Ë¤òÌá¤¹
0168  +. DC 01-22 DHU_MODE_CHNG
0169     BC       (02 0a f8)
0170     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     2
0171     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
0172     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
0173     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0174     C.
0175   . C. ********************************
0176     C. TI-CMD SET (OPOG STOP/COPY/START)
0177     C. ********************************
0178     C.
0179   . C. NOTICE ¡§ OPOG UPLOAD¤¬Á÷¿®NG¤Î¾ì¹ç¡¢°Ê²¼¤ÎTI-CMDÁ÷¿®¤Ï¼Â¹Ô¤•¤Ê¤¤¤³¤È¡£
0180     C.           ¤Þ¤¿¡¢SET¤ÈDUMP¤ÏÆ±°ì¥Ñ¥¿¼Ç¹Ô¤¦¤³¤È¡£
0181     C.
0182   . C. TI¥³¥Þ¥ó¥É¤òÅÐÏ¿(UT)
0183  +. TI 2016-05-03 10:11:00.0
0184     DC 01-B3 DHU_OP_STOP
0185     C.                       ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0186     C.
0187  +. TI 2016-05-03 10:11:01.0
0188     DC 01-B4 DHU_OP_COPY
0189     C.                       ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0190     C.
0191  +. TI 2016-05-03 10:11:01.0
0192     DC 01-B5 DHU_OPOG_COPY
0193     C.                       ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
```

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0194     C.
0195   +. TI 2016-05-03 10:15:59.5
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. ********************************
0239     C.  SOT TI command set
0240     C. ********************************
0241     C. Execute, after the success of OP upload.
0242   +. TI 2016-05-03 10:15:16.0
0243     DC 07-F0 MDP_SOT_MODE_STBY
0244     BC       (41)
0245    . C. ------------------------------------
0246     C.   HK1_TI_CMD_NUM       = 1 CNTUP [ ]
0247     C. ------------------------------------
0248     C. ************ SOT END ***********
0249    . C. Stop EIS observation and temporarily disable EIS mode changes
0250     C.
0251     C.
0252     C. ********** Start EIS operation (TI set) **********
0253     C. Execute, after the success of OP upload.
0254     C. Set EIS TI-commands
0255   +. TI 2016-05-03 10:15:30.0
0256     DC 07-FC EIS_MODE_MANU
0257     BC       (21 02)
0258   +. TI 2016-05-03 10:15:40.0
0259     DC 07-FC EIS_MODE_CHG_DIS
0260     BC       (22)
0261    . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    2 COUNTUP
0262     C. ************ End EIS operation (TI set) ***********
0263     C.
0264     C.
0265     C.
0266     C. ************ XRT START ***********
0267     C. Execute, after the success of OP upload.
0268   +. TI 2016-05-03 10:15:00.0
0269     DC 07-F0 MDP_XRT_MODE_STBY
0270     BC       (c3)
0271    . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1COUNTUP
0272     C.
0273     C. ************ XRT END ***********
0274     C.
0275    . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0276     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0277    . S. DC-BC dcbc-402:DCBC
0278     (MDP_known_event)
0279     C.
0280     C.
0281    . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0282    . S. DC-BC dcbc-153:DCBC
0283     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0284     C.
0285     C.
0286    . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0287     C.
0288    . C. ********** LOS **********
0289     C.
```

(a) Spacecraft Operation Procedure (real-commands)

```
main-829 2016-05-03 12:38:20 29 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. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0016     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0017   . S. DC-BC dcbc-402:DCBC
0018     (MDP_known_event)
0019     C.
0020     C.
0021   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0022   . S. DC-BC dcbc-153:DCBC
0023     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0024     C.
0025     C.
0026   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0027     C.
0028   . C. *********** LOS ***********
0029     C.
```

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

main-830 2016-05-03 12:38:20 178 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¤ÇºÎ»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
```

```
0096     C.
0097     C.
0098   . C. ***** AOCS Commands (Tracking Curve Upload) ******
0099     C. Upload the Orbit Element and the Target Attitude
0100     C. RAM-ID:TARGET_ATT
0101   . S. RAM   ram-150:TARGET_ATT
0102     ()
0103     C.
0104     C.
0105     C. Set the dump memory area of TARGET_ATT
0106   +. DC 02-48 AOCU_DUMP_SET
0107     BC       (07 00 00 00 18 00)
0108     C.
0109     C.    <A_STS1>[MEMORY OPERATE SATUS] ADRS = 070000 [ ]
0110     C.
0111     C.
0112     C. Change the TLMFormatNo for the AOCS Dump Format
0113   +. DC 01-22 DHU_MODE_CHNG
0114     BC       (04 0b f8)
0115     C.
0116     C. Wait for AOCSDUMP to end
0117     C.
0118   . C. Check the dump memory
0119     C.
0120     C.                                      Result = OK [ ]
0121     C.
0122   +. DC 01-22 DHU_MODE_CHNG
0123     BC       (02 0a f8)
0124     C.
0125     C.                         <A_***>[TLM STS] FMT = 2 [ ]
0126     C.
0127   +. DC 02-8E AOCU_ORB_UPD
0128   . C.
0129   . C. ***** AOCS Commands (Orbital Element Update) *****
0130     C. Update the orbital element
0131   +. DC 02-50 AOCU_ORB_PRPGT_START
0132     BC       (16)
0133   +  DC 02-8E AOCU_ORB_UPD
0134     C.
0135     C.       <A_ORB>[ORBIT] EPC =  895330.0 +- 1.0 (s) [ ]
0136     C.
0137   . C.
0138   . C. Load OBSTBL, dump OBSTBL, enable EIS mode changes
0139   +. DC 07-FC EIS_MODE_CHG_ENA
0140     BC       (20)
0141   . C. Verify EIS_MODE_CHG_FLG is ENA
0142   +. DC 07-FC EIS_MODE_MANU
0143     BC       (21 02)
0144   . C. Verify EIS in MANUAL mode
0145   . C. Estimated OBSTBL upload time is 55s
0146     C. ********************************
0147     C. EIS START OBSTBL LOAD
0148     C. ********************************
0149   . S. RAM   ram-820:EIS_OBSTBL
0150     ()
0151   +. DC 07-FC EIS_DUMP_OBSTBL
0152     BC       (07 07 07 00 00 70 00)
0153     C.
0154     C. Execute, after the success of OBSTBL upload.
0155     C. Set EIS TI-commands
0156   +. TI 2016-05-03 10:15:50.0
0157     DC 07-FC EIS_MODE_CHG_ENA
0158     BC       (20)
0159   . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1 COUNTUP
0160     C. ********************************
0161     C. EIS END OBSTBL LOAD
0162     C. ********************************
0163     C.
0164   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0165     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0166   . S. DC-BC dcbc-402:DCBC
0167     (MDP_known_event)
0168     C.
0169     C.
0170   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0171   . S. DC-BC dcbc-153:DCBC
0172     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0173     C.
0174     C.
0175   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0176     C.
0177   . C. ********** LOS **********
0178     C.
```

(a) Spacecraft Operation Procedure (real-commands)

```
main-831 2016-05-03 12:38:20 140 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¡¼¼É¡ÊËè½µ•îÍË¡Ë¤¼ºÇÔ¤•¤¿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.  SOT table upload
0016     C. ********************************
0017   . C. < Stop SP table >
0018   +. DC 07-F0 MDP_SP_CTRL_MANU
0019     BC       (61)
0020     C. ------------------------------------
0021     C.  MDP_SP_CTRL_MODE      = MANU    [ ]
0022     C. ------------------------------------
0023     C.
0024   . C. <Upload SP Observation Table>
0025   . S. RAM   ram-282:MDP_OBS_S
0026     ()
0027     C.
0028   . C. < Dump RAMID=MDP_OBS_S >
0029   +. DC 07-F0 MDP_DUMP_SPTBL
0030     BC       (83 07 00 00 00 38 b8)
0031     C. ------------------------------------
0032     C.  MDP_OBS_S verify = OK/NG        [ ]
0033     C. ------------------------------------
0034     C.
0035     C. ********************************
0036     C.  SOT TI command set
0037     C. ********************************
0038     C. Execute, after the success of TBL upload.
0039   +. TI 2016-05-03 10:15:18.0
0040     DC 07-F0 MDP_SOT_MODE_OBSV
0041     BC       (40)
0042   . C. ------------------------------------
0043     C.   HK1_TI_CMD_NUM       = 1 CNTUP [ ]
0044     C. ------------------------------------
0045     C.
0046     C.
0047     C. ************ XRT START ************
0048     C.
0049   +. DC 07-F0 MDP_XRT_CTRL_MANU
0050     BC       (c1)
0051   +. DC 07-F0 MDP_XRT_CTRL_MANU
0052     BC       (c1)
0053   +  DC 07-F0 MDP_XRT_MODE_STBY
0054     BC       (c3)
0055   . C. ------------ Success Verify ?              OK / NG____
0056     C.
0057     C. XRT Obs. Table Upload
0058   . S. RAM   ram-291:MDP_OBS_X
0059     ()
0060     C.
0061   +. DC 07-F0 MDP_DUMP_XRTTBL
0062     BC       (84 07 00 00 00 3a d4)
0063   . C. ------------ Comparison Check ?                        OK / ERR ____
0064     C.
0065     C.
0066   +. DC 07-F0 MDP_XRT_ROI_SET
0067     BC       (cd 01 b1 b1 04 04)
0068   +  DC 07-F0 MDP_XRT_ROI_SET
0069     BC       (cd 02 b1 b1 08 08)
0070   +  DC 07-F0 MDP_XRT_ROI_SET
0071     BC       (cd 03 b1 b1 08 08)
0072   +  DC 07-F0 MDP_XRT_ROI_SET
0073     BC       (cd 04 b1 b1 06 06)
0074   +  DC 07-F0 MDP_XRT_ROI_SET
0075     BC       (cd 05 85 83 06 06)
0076   +  DC 07-F0 MDP_XRT_ROI_SET
0077     BC       (cd 06 85 83 06 06)
0078   +  DC 07-F0 MDP_XRT_ROI_SET
0079     BC       (cd 07 85 83 08 08)
0080   +  DC 07-F0 MDP_XRT_ROI_SET
0081     BC       (cd 08 80 80 20 20)
0082   +  DC 07-F0 MDP_XRT_ROI_SET
0083     BC       (cd 09 80 80 20 08)
0084   +  DC 07-F0 MDP_XRT_ROI_SET
0085     BC       (cd 0a 80 80 08 20)
0086   +  DC 07-F0 MDP_XRT_ROI_SET
0087     BC       (cd 0b 3f 58 0c 06)
0088   +  DC 07-F0 MDP_XRT_ROI_SET
0089     BC       (cd 0c a6 58 0c 06)
0090   +  DC 07-F0 MDP_XRT_ROI_SET
0091     BC       (cd 0d c0 c0 10 10)
0092   +  DC 07-F0 MDP_XRT_ROI_SET
0093     BC       (cd 0e 40 c0 10 10)
0094   +  DC 07-F0 MDP_XRT_ROI_SET
0095     BC       (cd 0f 80 80 06 06)
```

```
0096  +  DC 07-F0 MDP_XRT_ROI_SET
0097     BC       (cd 10 80 80 08 08)
0098  +  DC 07-F0 MDP_XRT_FLD_ENA
0099     BC       (d8)
0100  +  DC 07-F0 MDP_XRT_FLRCTRL_ENA
0101     BC       (c8)
0102  +  DC 07-F0 MDP_XRT_ARS_DIS
0103     BC       (d5)
0104  +. DC 07-F0 MDP_XRT_AEC_RESET
0105     BC       (d0)
0106  +. DC 07-F0 MDP_XRT_FLD_RESET
0107     BC       (da)
0108  +. DC 07-F0 MDP_XRT_QT_PROG_SET
0109     BC       (c4 0a)
0110  +. DC 07-F0 MDP_XRT_FL_PROG_SET
0111     BC       (c5 07)
0112   . C. ---------- Success Verify ?            OK / NG ____
0113     C.
0114     C.
0115   . C. All OK?   Yes--> Please Proceed. / No --> Stop here.
0116     C.
0117  +. DC 07-F0 MDP_XRT_MODE_OBSV
0118     BC       (c2)
0119  +. TI 2016-05-03 10:15:02.0
0120     DC 07-F0 MDP_XRT_MODE_OBSV
0121     BC       (c2)
0122   . C. ---------- Success Verify ?            OK / NG ____
0123     C.
0124     C. ************ XRT END ***********
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.
```

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

2016/05/03  10:25:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  10:25:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  10:25:58.0  XRT_FOCUS_RECALIBRATE_445_OG [0x1bd]
                                XRT_FOCUS_RECAL      2 07-F8 78 00
2016/05/03  10:26:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 00 00 00 00 00
2016/05/03  10:29:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/05/03  10:30:18.0  XRT_FLD_DIS_406_OG [0x196]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2016/05/03  10:32:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/05/03  10:32:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/03  10:32:58.0  XRT_QT_PROG_SET_434_OG [0x1b2]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0f
2016/05/03  10:33:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  10:36:00.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  10:36:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  10:36:04.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/05/03  10:36:24.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2016/05/03  10:36:26.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/05/03  10:36:28.0  XRT_AEC_RESET_448_OG [0x1c0]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2016/05/03  10:36:30.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/03  10:36:32.0  XRT_FLD_RESET_433_OG [0x1b1]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  10:39:02.0  XRT_QT_PROG_SET_418_OG [0x1a2]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 04
2016/05/03  10:39:04.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/05/03  10:39:06.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  11:25:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  11:25:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  11:25:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/05/03  11:26:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 b3 4c 01 99
2016/05/03  11:26:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2016/05/03  11:26:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/05/03  11:26:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2016/05/03  11:26:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/03  11:26:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  11:28:56.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/05/03  11:28:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/05/03  11:38:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  11:38:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  11:38:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  11:38:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/03  11:41:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/03  12:01:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/03  12:02:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  13:16:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  13:16:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  13:16:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  13:16:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/03  13:19:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/03  13:39:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/03  13:40:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  14:54:30.0  XRT_CTRL_MANU_400_OG [0x190]
```

```
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  14:54:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  14:54:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  14:54:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/03  14:57:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/03  15:38:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/03  15:39:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  16:33:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  16:33:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  16:33:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  16:33:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/03  16:36:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/03  17:19:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  17:19:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  17:19:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/05/03  17:20:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                        AOCU_NM              5 02-76 04 00 00 00 00
2016/05/03  17:20:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/05/03  17:20:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/05/03  17:20:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/05/03  17:20:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/03  17:20:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  17:22:56.0  XRT_QT_PROG_SET_439_OG [0x1b7]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 0d
2016/05/03  17:22:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/05/03  17:23:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  18:11:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  18:11:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  18:11:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  18:11:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/03  18:14:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/03  18:51:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/03  18:52:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  19:50:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  19:50:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  19:50:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  19:50:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/03  19:53:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/03  20:29:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/03  20:30:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  21:28:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  21:28:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  21:28:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  21:28:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/03  21:31:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/03  22:05:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/03  22:06:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  23:06:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  23:06:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  23:06:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/03  23:06:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
```

```
2016/05/03  23:09:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/03  23:34:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  23:34:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  23:34:58.0  XRT_FOCUS_POSITION_413_OG [0x19d]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/05/03  23:35:00.0  AOCS_ORe-point_Start_4_OG [0x09a]
                                AOCU_NM              5 02-76 00 2e f9 2e f9
2016/05/03  23:35:18.0  XRT_FLD_DIS_422_OG [0x1a6]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2016/05/03  23:35:20.0  XRT_FLRCTRL_DIS_437_OG [0x1b5]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/05/03  23:37:56.0  XRT_ARS_DIS_435_OG [0x1b3]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/03  23:37:58.0  XRT_QT_PROG_SET_407_OG [0x197]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 05
2016/05/03  23:38:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  23:44:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  23:44:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  23:44:58.0  XRT_FOCUS_POSITION_413_OG [0x19d]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/05/03  23:45:00.0  AOCS_ORe-point_Start_5_OG [0x09b]
                                AOCU_NM              5 02-76 00 2e f9 d1 07
2016/05/03  23:45:18.0  XRT_FLD_DIS_422_OG [0x1a6]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2016/05/03  23:45:20.0  XRT_FLRCTRL_DIS_437_OG [0x1b5]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/05/03  23:47:56.0  XRT_ARS_DIS_435_OG [0x1b3]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/03  23:47:58.0  XRT_ROI_A_426_OG [0x1aa]
                                MDP_XRT_ROI_SET      6 07-F0 cd 05 85 83 06 06
                                MDP_XRT_ROI_SET      6 07-F0 cd 06 85 83 06 06
                                MDP_XRT_ROI_SET      6 07-F0 cd 07 85 83 08 08
                                MDP_XRT_ROI_SET      6 07-F0 cd 08 80 80 20 20
                                MDP_XRT_ROI_SET      6 07-F0 cd 09 80 80 20 08
                                MDP_XRT_ROI_SET      6 07-F0 cd 0a 80 80 08 20
                                MDP_XRT_ROI_SET      6 07-F0 cd 0b 40 40 10 10
                                MDP_XRT_ROI_SET      6 07-F0 cd 0c c0 40 10 10
2016/05/03  23:47:58.5  XRT_ROI_B_417_OG [0x1a1]
                                MDP_XRT_ROI_SET      6 07-F0 cd 0c c0 40 10 10
                                MDP_XRT_ROI_SET      6 07-F0 cd 0e 40 c0 10 10
                                MDP_XRT_ROI_SET      6 07-F0 cd 0f 80 80 06 06
                                MDP_XRT_ROI_SET      6 07-F0 cd 10 80 80 08 08
2016/05/03  23:48:03.5  XRT_QT_PROG_SET_414_OG [0x19e]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 10
2016/05/03  23:48:05.5  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/03  23:54:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  23:54:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/03  23:54:58.0  XRT_FOCUS_POSITION_413_OG [0x19d]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/05/03  23:55:00.0  AOCS_ORe-point_Start_6_OG [0x09c]
                                AOCU_NM              5 02-76 00 d1 07 d1 07
2016/05/03  23:55:18.0  XRT_FLD_DIS_422_OG [0x1a6]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2016/05/03  23:55:20.0  XRT_FLRCTRL_DIS_437_OG [0x1b5]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/05/03  23:57:56.0  XRT_ARS_DIS_435_OG [0x1b3]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/03  23:57:58.0  XRT_QT_PROG_SET_443_OG [0x1bb]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 03
2016/05/03  23:58:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  00:04:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  00:04:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  00:04:58.0  XRT_FOCUS_POSITION_413_OG [0x19d]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/05/04  00:05:00.0  AOCS_ORe-point_Start_7_OG [0x09d]
                                AOCU_NM              5 02-76 00 d1 07 2e f9
2016/05/04  00:05:18.0  XRT_FLD_DIS_422_OG [0x1a6]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2016/05/04  00:05:20.0  XRT_FLRCTRL_DIS_437_OG [0x1b5]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/05/04  00:07:56.0  XRT_ARS_DIS_435_OG [0x1b3]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/04  00:07:58.0  XRT_QT_PROG_SET_446_OG [0x1be]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2016/05/04  00:08:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  00:14:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  00:14:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  00:14:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
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                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/05/04  00:15:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                        AOCU_NM              5 02-76 04 00 00 00 00
2016/05/04  00:15:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/05/04  00:15:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/05/04  00:15:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/05/04  00:15:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/04  00:15:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  00:17:56.0  XRT_QT_PROG_SET_428_OG [0x1ac]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 11
2016/05/04  00:17:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/05/04  00:18:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  00:45:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  00:45:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  00:45:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  00:45:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  00:48:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  01:08:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  01:09:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  02:19:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  02:19:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  02:19:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  02:19:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  02:22:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  02:46:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  02:47:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  03:47:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  03:47:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  03:47:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  03:47:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  03:50:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  04:25:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  04:26:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  05:27:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  05:27:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  05:27:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  05:27:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  05:30:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  06:03:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  06:03:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  06:03:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/05/04  06:04:00.5  AOCS_ORe-point_Start_1_OG [0x097]
                                        AOCU_NM              5 02-76 00 00 00 00 00
2016/05/04  06:04:18.0  XRT_FLD_DIS_406_OG [0x196]
                                        MDP_XRT_FLD_DIS      1 07-F0 d9
2016/05/04  06:06:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                        MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/05/04  06:06:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/04  06:06:58.0  XRT_QT_PROG_SET_431_OG [0x1af]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 08
2016/05/04  06:07:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  06:13:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  06:13:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  06:13:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/05/04  06:14:00.0  AOCS_ORe-point_Start_3_OG [0x099]
```

```
                                    AOCU_NM              5 02-76 04 00 00 00 00
2016/05/04  06:14:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2016/05/04  06:14:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/05/04  06:14:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2016/05/04  06:14:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/04  06:14:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  06:16:56.0  XRT_QT_PROG_SET_428_OG [0x1ac]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 11
2016/05/04  06:16:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                    MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/05/04  06:17:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  07:07:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  07:07:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  07:07:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  07:07:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  07:10:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  07:42:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  07:43:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  08:47:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  08:47:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  08:47:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  08:47:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  08:50:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  09:20:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  09:21:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  10:28:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  10:28:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  10:28:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  10:28:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  10:31:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  10:58:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  10:59:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  12:13:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  12:13:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  12:13:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  12:13:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  12:16:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  12:37:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  12:38:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  13:52:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  13:52:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  13:52:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  13:52:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  13:55:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  14:23:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  14:24:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  15:30:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  15:30:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  15:30:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  15:30:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  15:33:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  16:13:30.0  XRT_Custom_430_OG [0x1ae]
```

```
2016/05/04  16:14:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  16:49:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  16:49:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  16:49:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/05/04  16:50:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 00 00 00 00 00
2016/05/04  16:50:18.0  XRT_FLD_DIS_406_OG [0x196]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2016/05/04  16:52:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/05/04  16:52:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/04  16:52:58.0  XRT_QT_PROG_SET_434_OG [0x1b2]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0f
2016/05/04  16:53:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  17:08:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  17:08:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  17:08:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  17:08:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  17:11:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  17:20:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                AOCU_NM              5 02-76 04 00 00 00 00
2016/05/04  17:51:00.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  17:51:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  17:51:04.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/05/04  17:51:24.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2016/05/04  17:51:26.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/05/04  17:51:28.0  XRT_AEC_RESET_448_OG [0x1c0]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2016/05/04  17:51:30.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/04  17:51:32.0  XRT_FLD_RESET_433_OG [0x1b1]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  17:54:02.0  XRT_QT_PROG_SET_439_OG [0x1b7]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0d
2016/05/04  17:54:04.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/05/04  17:54:06.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  18:47:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  18:47:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  18:47:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  18:47:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  18:50:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  19:26:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  19:27:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  20:25:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  20:25:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  20:25:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  20:25:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  20:28:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  21:04:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/04  21:05:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  22:03:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  22:03:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  22:03:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  22:03:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  22:06:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/04  22:40:00.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  22:40:02.0  XRT_CTRL_MANU_402_OG [0x192]
```

```
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  22:40:04.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/05/04  22:40:24.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/05/04  22:40:26.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/05/04  22:40:28.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/05/04  22:40:30.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/04  22:40:32.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  22:43:02.0  XRT_QT_PROG_SET_427_OG [0x1ab]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 02
2016/05/04  22:43:04.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/05/04  22:43:06.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/04  23:42:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  23:42:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/04  23:42:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/04  23:42:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/04  23:45:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/05  00:05:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/05  00:06:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/05  01:20:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  01:20:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  01:20:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/05  01:20:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/05  01:23:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/05  01:44:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/05  01:45:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/05  02:53:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  02:53:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  02:53:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/05  02:53:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/05  02:56:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/05  03:22:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/05  03:23:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/05  04:23:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  04:23:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  04:23:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/05  04:23:06.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/05  04:26:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/05  05:01:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/05  05:02:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/05  05:35:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  05:35:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  05:35:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/05/05  05:36:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                        AOCU_NM              5 02-76 00 00 00 00 00
2016/05/05  05:36:18.0  XRT_FLD_DIS_406_OG [0x196]
                                        MDP_XRT_FLD_DIS      1 07-F0 d9
2016/05/05  05:38:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                        MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/05/05  05:38:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/05  05:38:58.0  XRT_QT_PROG_SET_434_OG [0x1b2]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 0f
2016/05/05  05:39:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/05  05:45:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  05:45:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
```

```
2016/05/05  05:45:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/05/05  05:46:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                AOCU_NM              5 02-76 04 00 00 00 00
2016/05/05  05:46:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2016/05/05  05:46:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/05/05  05:46:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2016/05/05  05:46:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2016/05/05  05:46:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/05  05:48:56.0  XRT_QT_PROG_SET_427_OG [0x1ab]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 02
2016/05/05  05:48:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/05/05  05:49:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/05  06:03:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  06:03:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  06:03:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/05  06:03:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/05  06:06:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/05  06:39:00.0  XRT_Custom_430_OG [0x1ae]
2016/05/05  06:40:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/05  07:43:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  07:43:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  07:43:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/05  07:43:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/05  07:46:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/05  08:17:30.0  XRT_Custom_430_OG [0x1ae]
2016/05/05  08:18:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/05/05  09:23:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  09:23:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/05/05  09:23:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2016/05/05  09:23:36.0  XRT_PREFLR_STRT_432_OG [0x1b0]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/05/05  09:26:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/05/05  09:59:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 00 00 00 00 00
```