XRT Timeline to be uploaded on 2016/12/13

Period: 2016/12/13 10:29:00 - 2016/12/17 10:55:00

✲ ✲ ✲ ✲ ✲ **Normal mode** ✲ ✲ ✲ ✲ ✲

XOB #1AFE: 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
12/13 10:42:00 - 12/13 11:59:54	Fixed (-950.0, 150.0)	# OP start + 10min AR observation
12/14 02:03:00 - 12/14 05:59:54	Track (-781.9, 139.2) @ 12/14 02:00:00	AR observation (East limb)
12/14 16:03:00 - 12/14 18:01:54	Track (-814.8, 153.0) @ 12/14 16:00:00	AR observations with IRIS.
12/14 18:15:00 - 12/15 05:31:54	Track (-803.7, 153.4) @ 12/14 18:12:00	AR observations with IRIS.
12/15 05:45:00 - 12/15 09:51:45	Track (-603.5, 144.0) @ 12/15 05:42:00	AR obs.

	Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
PROG= 08 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= 53 4-time(s) 180.0sec													
	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	55.0sec
	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	55.0sec
	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

XOB #1AFF: 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
12/13 12:03:00 - 12/13 16:19:54	Fixed (-950.0, 211.0)	HOP 328 with ALMA (East limb)(12:47-15:51)
12/13 16:43:00 - 12/13 20:01:30	Fixed (-950.0, 211.0)	HOP 328 with ALMA (East limb) (17:00-20:04)

	Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
PROG= 01 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= 96 4-time(s) 60.0sec													
	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

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
12/13 16:23:00 - 12/13 16:39:54	Fixed (0.0, 0.0)	synoptic , shifted a few hours

	Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
PROG= 18 1-time(s)													
Subr= 1 1-time(s) 2.0sec													
Seqn= 5 1-time(s) 2.0sec													
	Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
	Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	4x4	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
	Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	8x8	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
	Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	1x1	2048x512 (1024, 1024)	DPCM	0	0	2.0sec
	Open/Ti-poly	Open/thick-Al	close	Safe	Dark	500ms	Obs	1x1	512x2048 (1024, 1024)	DPCM	0	0	2.0sec
Seqn= 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= 58 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 #1B3F: CME watch - 4x4 - AEC 2/3 - 2-filter (Be-thin, Al-poly) - G-band (2x2,1ms) - Leak (2x2,1ms) - 90s cad (G-band/Leak first)

Term	Pointing (x, y)	Comment
12/13 20:33:00 - 12/13 20:46:54	Fixed (936.0, 0.0)	HOP 130 1/15
12/13 20:50:00 - 12/13 21:02:54	Fixed (468.0, 0.0)	2/15
12/13 21:06:00 - 12/13 21:18:54	Fixed (0.0, 0.0)	3/15
12/13 21:22:00 - 12/13 21:39:00	Fixed (-468.0, 0.0)	4/15
12/13 22:10:30 - 12/13 22:23:24	Fixed (-936.0, 0.0)	5/15
12/13 22:26:30 - 12/13 22:33:24	Fixed (815.0, 470.0)	6/15
12/13 22:36:30 - 12/13 22:49:24	Fixed (411.0, 847.0)	7/15
12/13 22:52:30 - 12/13 23:16:00	Fixed (0.0, 941.0)	8/15
12/13 23:42:30 - 12/14 00:05:24	Fixed (-411.0, 847.0)	9/15
12/14 00:08:30 - 12/14 00:15:24	Fixed (815.0, -470.0)	11/15
12/14 00:18:30 - 12/14 00:31:24	Fixed (411.0, -847.0)	12/15
12/14 00:34:30 - 12/14 00:51:30	Fixed (0.0, -941.0)	13/15
12/14 01:09:00 - 12/14 01:21:54	Fixed (-411.0, -847.0)	14/15
12/14 01:25:00 - 12/14 01:59:54	Fixed (-815.0, -471.0)	HOP 130 15/15

PROG= 09 Inf.-time(s)

Subr= 1 1-time(s) 2.0sec														
Seqn= 26 1-time(s) 2.0sec														
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	2x2	2048x2048 (1024, 1024)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	close	Safe	Norm	1ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Subr= 2 40-time(s) 90.0sec														
Seqn= 8 1-time(s) 2.0sec														
thin-Be/Open	med-Be/Open	close	Safe	Norm	1.00s	Obs	4x4	2048x2048 (1024, 1024)	Q=98	3	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	1.41s	Obs	4x4	2048x2048 (1024, 1024)	DPCM	2	0	2.0sec
Seqn= 6 1-time(s) 2.0sec														
Al-poly/Open	Al-poly/Open	close	Safe	Norm	125ms	Obs	4x4	2048x2048 (1024, 1024)	Q=98	3	0	2.0sec
Al-poly/Open	Al-poly/Open	close	Safe	Norm	1.00s	Obs	4x4	2048x2048 (1024, 1024)	DPCM	2	0	2.0sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer		Interval

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

Term	Pointing (x, y)	Comment
12/14 06:03:00 - 12/14 06:29:54	Fixed (0.0, 0.0)	synoptic
12/14 18:05:00 - 12/14 18:11:54	Fixed (0.0, 0.0)	synoptic, shifted 2.0 min
12/15 05:35:00 - 12/15 05:41:54	Fixed (0.0, 0.0)	synoptic, shifted -28.0 min

PROG= 14 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) 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 #1B4D: HOP81/206 2-filter - Al/poly 8s, Al/mesh 6s 60s cadence, G-band - 384x384 3ms

Term	Pointing (x, y)	Comment
12/14 06:33:00 - 12/14 11:59:54	Track (379.8, 73.2) @ 12/14 06:30:00	CH observations.

PROG= 04 Inf.-time(s)

- **Subr= 1 1-time(s) 2.0sec**
  - **Seqn= 9 2-time(s) 2.0sec**
    - 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**
    - 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= 24 1-time(s) 60.0sec**
    - Open/Al-mesh Open/thick-Al close Safe Norm 5.66s Obs 1x1 384x384 (1064, 1048) Q=90 0 0 2.0sec
    - Al-poly/Open Al-poly/Open close Safe Norm 8.00s Obs 1x1 384x384 (1064, 1048) Q=90 0 0 2.0sec

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

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

Term	Pointing (x, y)	Comment
12/14 12:03:00 - 12/14 15:46:30	Fixed (0.0, -980.0)	HOP 328 with ALMA (South pole)(12:48-15:51)

PROG= 20 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 1-time(s) 2.0sec**
  - **Seqn= 37 30-time(s) 30.0sec**
    - Open/Al-mesh Open/thick-Al close Safe Norm 5.66s Obs 1x1 384x384 (1064, 1048) Q=95 0 0 2.0sec
    - Al-poly/Open Al-poly/thick-Al close Safe Norm 8.00s Obs 1x1 384x384 (1064, 1048) Q=95 0 0 2.0sec

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
12/13 10:42:00 - 12/13 11:59:54	Fixed (-950.0, 150.0)	# OP start + 10min AR observation
12/13 12:03:00 - 12/13 16:19:54	Fixed (-950.0, 211.0)	HOP 328 with ALMA (East limb)(12:47-15:51)
12/13 16:43:00 - 12/13 20:01:30	Fixed (-950.0, 211.0)	HOP 328 with ALMA (East limb) (17:00-20:04)
12/13 20:33:00 - 12/13 20:46:54	Fixed (936.0, 0.0)	HOP 130 1/15
12/13 20:50:00 - 12/13 21:02:54	Fixed (468.0, 0.0)	2/15
12/13 21:06:00 - 12/13 21:18:54	Fixed (0.0, 0.0)	3/15
12/13 21:22:00 - 12/13 21:39:00	Fixed (-468.0, 0.0)	4/15
12/13 22:10:30 - 12/13 22:23:24	Fixed (-936.0, 0.0)	5/15
12/13 22:26:30 - 12/13 22:33:24	Fixed (815.0, 470.0)	6/15
12/13 22:36:30 - 12/13 22:49:24	Fixed (411.0, 847.0)	7/15
12/13 22:52:30 - 12/13 23:16:00	Fixed (0.0, 941.0)	8/15
12/13 23:42:30 - 12/14 00:05:24	Fixed (-411.0, 847.0)	9/15
12/14 00:08:30 - 12/14 00:15:24	Fixed (815.0, -470.0)	11/15
12/14 00:18:30 - 12/14 00:31:24	Fixed (411.0, -847.0)	12/15
12/14 00:34:30 - 12/14 00:51:30	Fixed (0.0, -941.0)	13/15
12/14 01:09:00 - 12/14 01:21:54	Fixed (-411.0, -847.0)	14/15
12/14 01:25:00 - 12/14 01:59:54	Fixed (-815.0, -471.0)	HOP 130 15/15
12/14 02:03:00 - 12/14 05:59:54	Track (-781.9, 139.2) @ 12/14 02:00:00	AR observation (East limb)
12/14 06:33:00 - 12/14 11:59:54	Track (379.8, 73.2) @ 12/14 06:30:00	CH observations.
12/14 12:03:00 - 12/14 15:46:30	Fixed (0.0, -980.0)	HOP 328 with ALMA (South pole)(12:48-15:51)
12/14 16:03:00 - 12/14 18:01:54	Track (-814.8, 153.0) @ 12/14 16:00:00	AR observations with IRIS.
12/14 18:15:00 - 12/15 05:31:54	Track (-803.7, 153.4) @ 12/14 18:12:00	AR observations with IRIS.
12/15 05:45:00 - 12/15 09:51:45	Track (-603.5, 144.0) @ 12/15 05:42:00	AR obs.

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** ✲ ✲ ✲ ✲ ✲

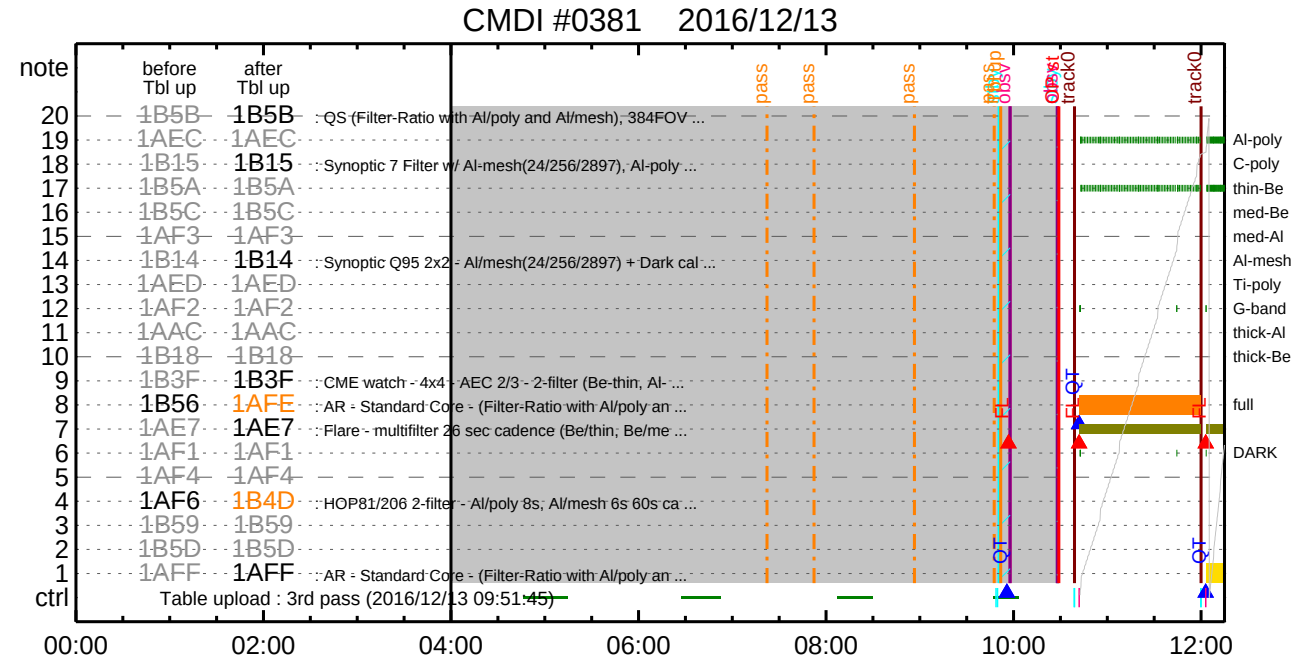
NOT USED

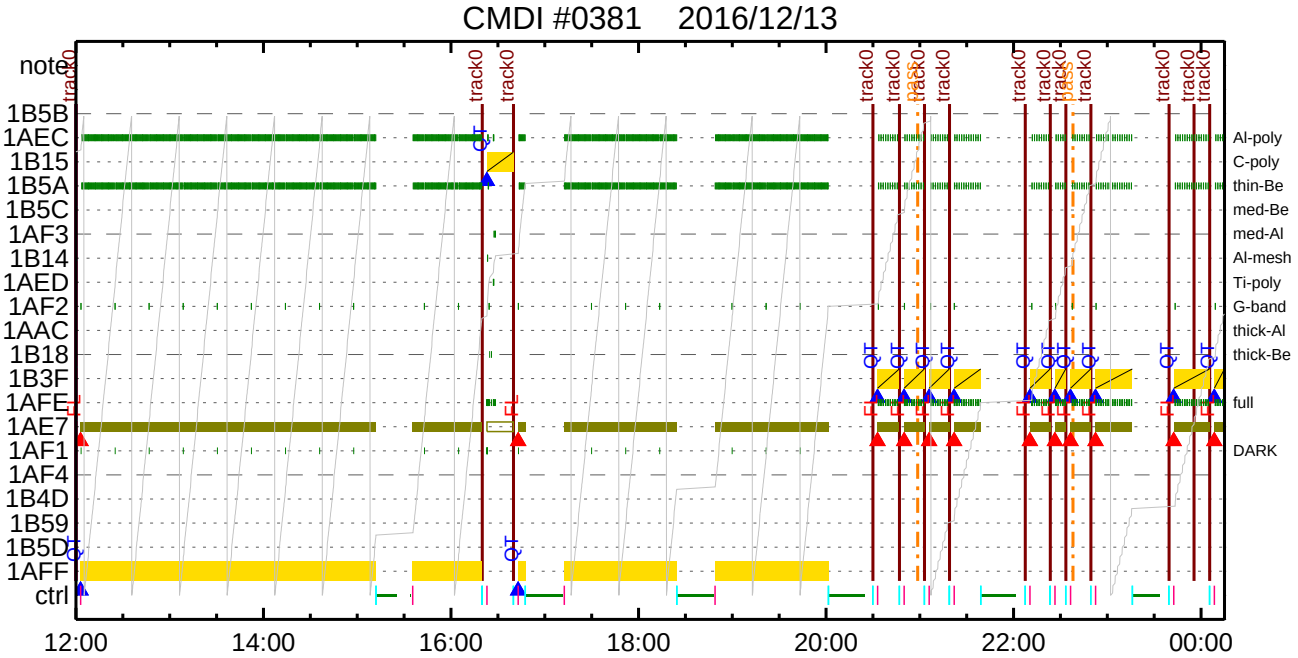
✲ ✲ ✲ ✲ ✲ **Flare Detection** ✲ ✲ ✲ ✲ ✲

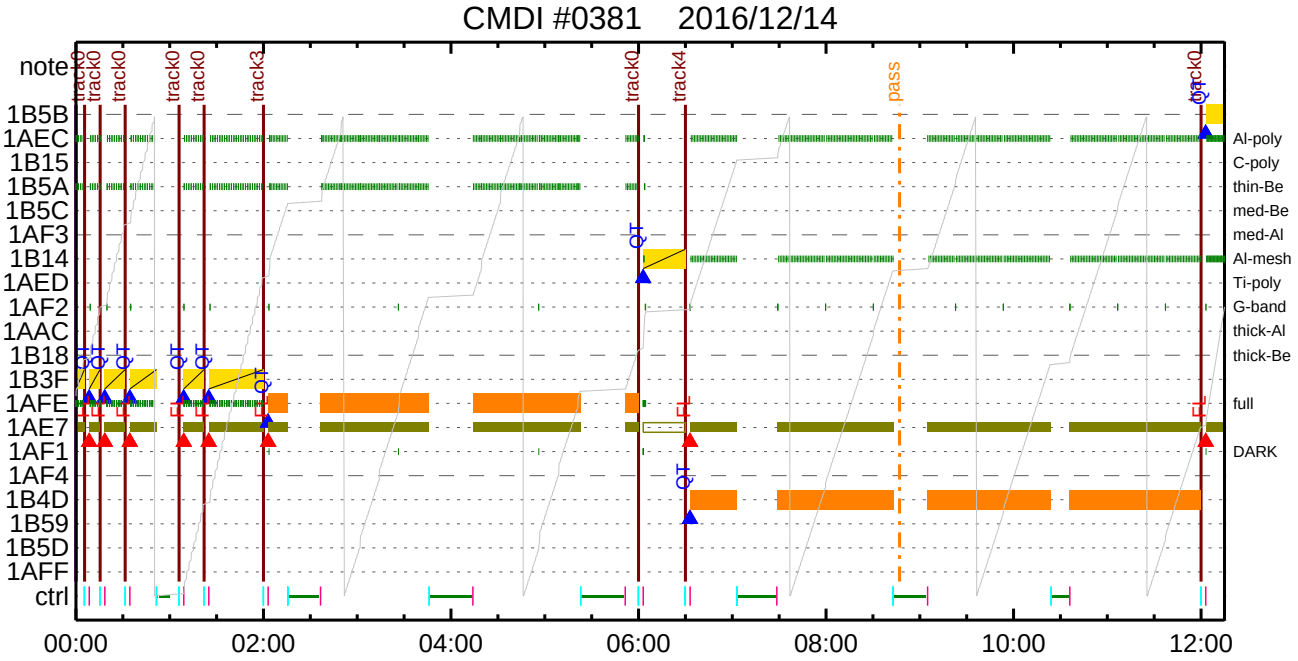
FLD Patrol

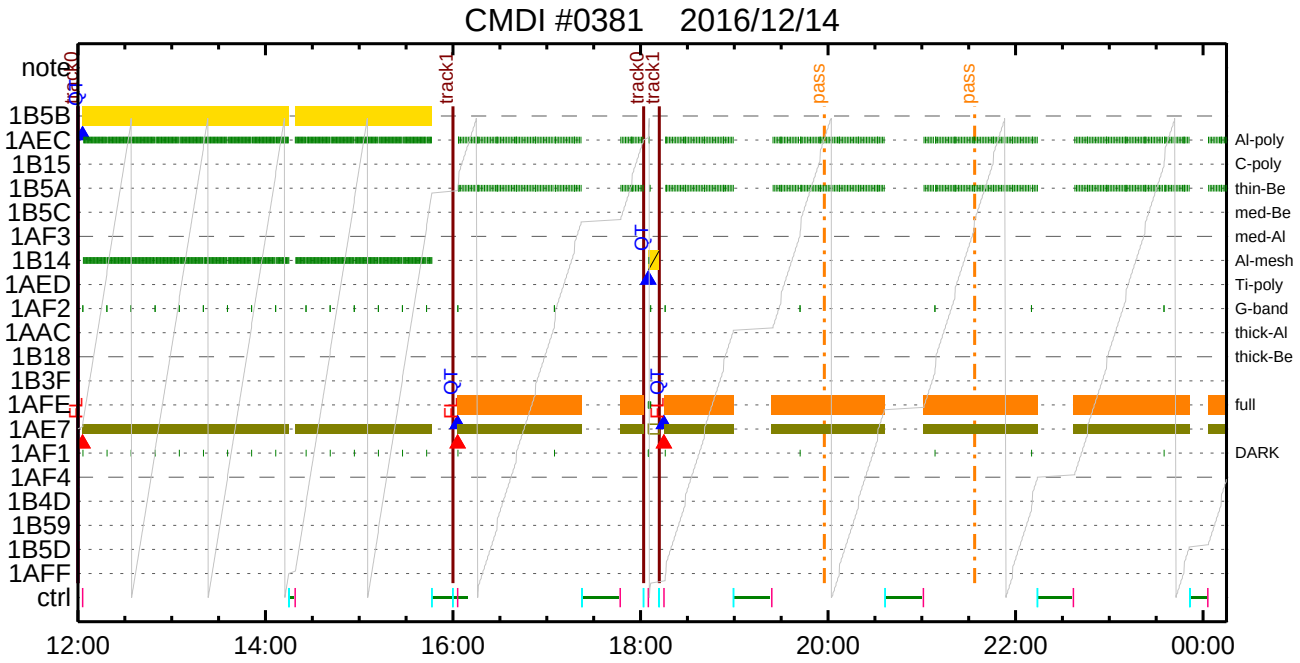
Term	Pointing (x, y)	Comment
12/13 16:40:18 - 12/14 06:00:18	Fixed (-950.0, 211.0)	HOP 328 with ALMA (East limb) (17:00-20:04)
12/14 06:30:18 - 12/14 18:02:18	Track (379.8, 73.2) @ 12/14 06:30:00	CH observations.
12/14 18:12:18 - 12/15 05:32:18	Track (-803.7, 153.4) @ 12/14 18:12:00	AR observations with IRIS.
12/15 05:42:18 - 12/17 10:55:00	Track (-603.5, 144.0) @ 12/15 05:42:00	AR obs.

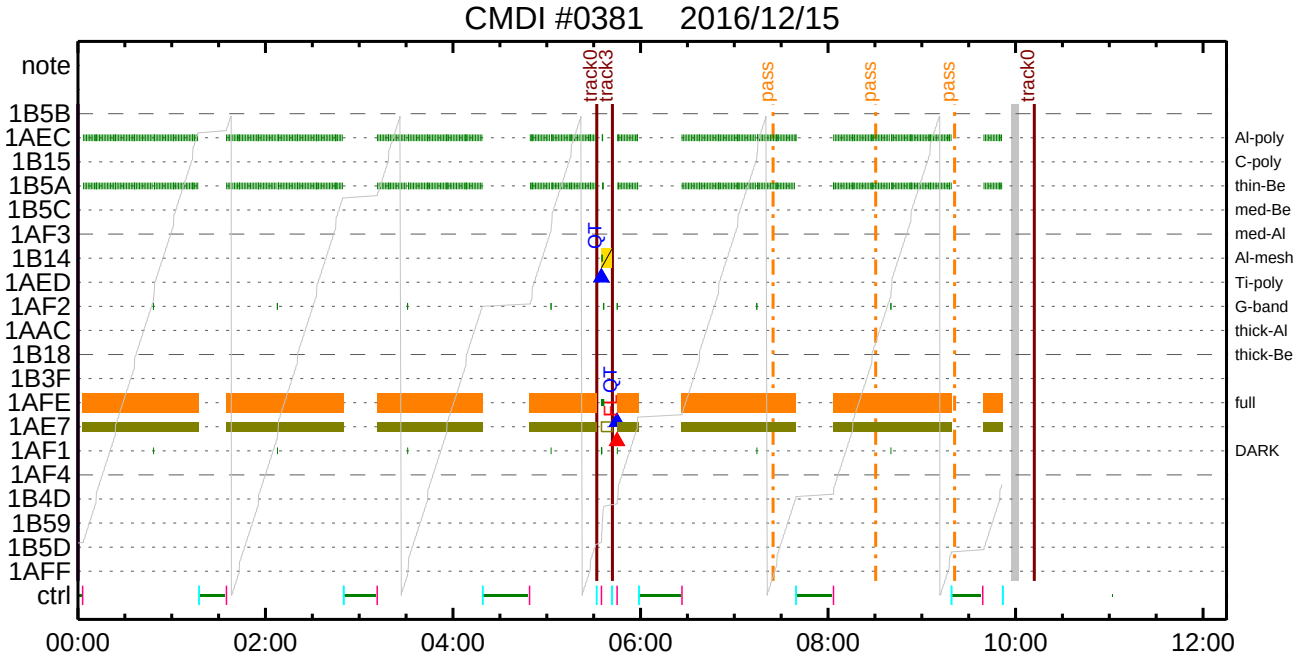
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer	Interval
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8ms	Obs	8x8		Q=50		30sec

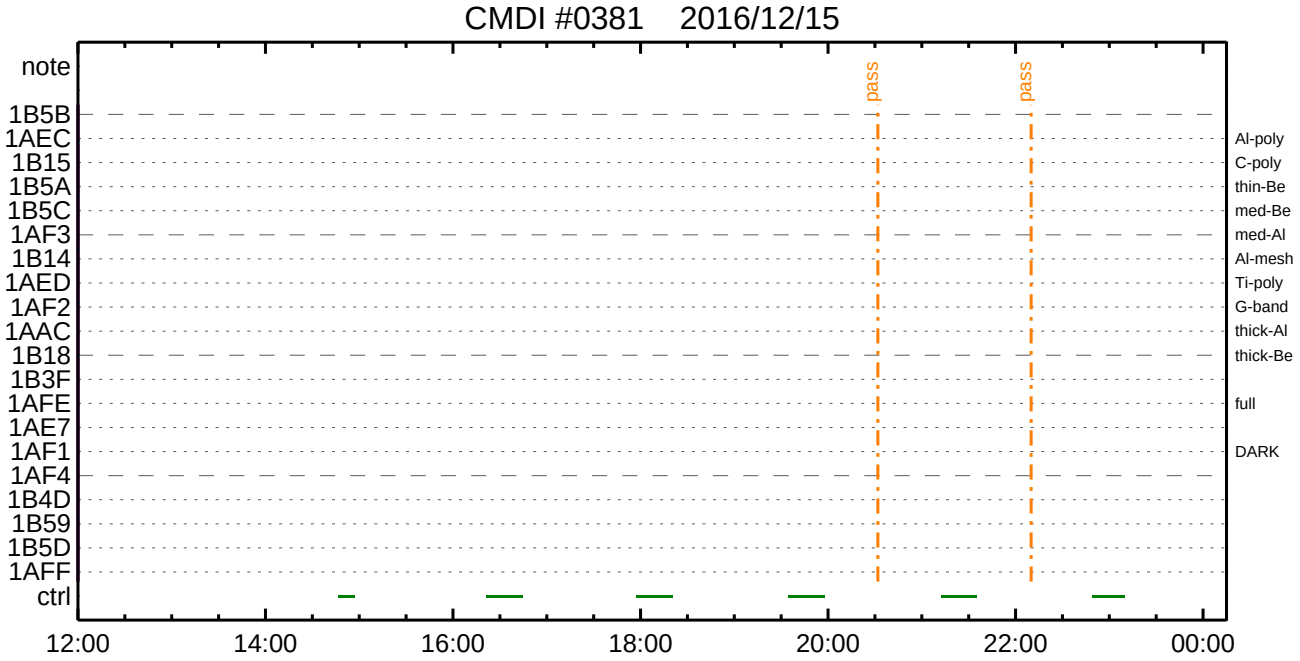

CMDI #0381 2016/12/13
note
before Tbl up
after Tbl up
20 1B5B 1B5B : QS (Filter-Ratio with Al/poly and Al/mesh), 384FOV ...
19 1AEC 1AEC
18 1B15 1B15 : Synoptic 7 Filter w/ Al-mesh(24/256/2897), Al-poly ...
17 1B5A 1B5A
16 1B5C 1B5C
15 1AF3 1AF3
14 1B14 1B14 : Synoptic Q95 2x2 - Al/mesh(24/256/2897) + Dark cal ...
13 1AED 1AED
12 1AF2 1AF2
11 1AAC 1AAC
10 1B18 1B18
9 1B3F 1B3F : CME watch - 4x4 - AEC 2/3 - 2-filter (Be-thin, Al- ...
8 1B56 1AFE : AR - Standard Core - (Filter-Ratio with Al/poly an ...
7 1AE7 1AE7 : Flare - multifilter 26 sec cadence (Be/thin, Be/me ...
6 1AF1 1AF1
5 1AF4 1AF4
4 1AF6 1B4D : HOP81/206 2-filter - Al/poly 8s, Al/mesh 6s 60s ca ...
3 1B59 1B59
2 1B5D 1B5D
1 1AFF 1AFF : AR - Standard Core - (Filter-Ratio with Al/poly an ...
ctrl Table upload : 3rd pass (2016/12/13 09:51:45)
pass
track0
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

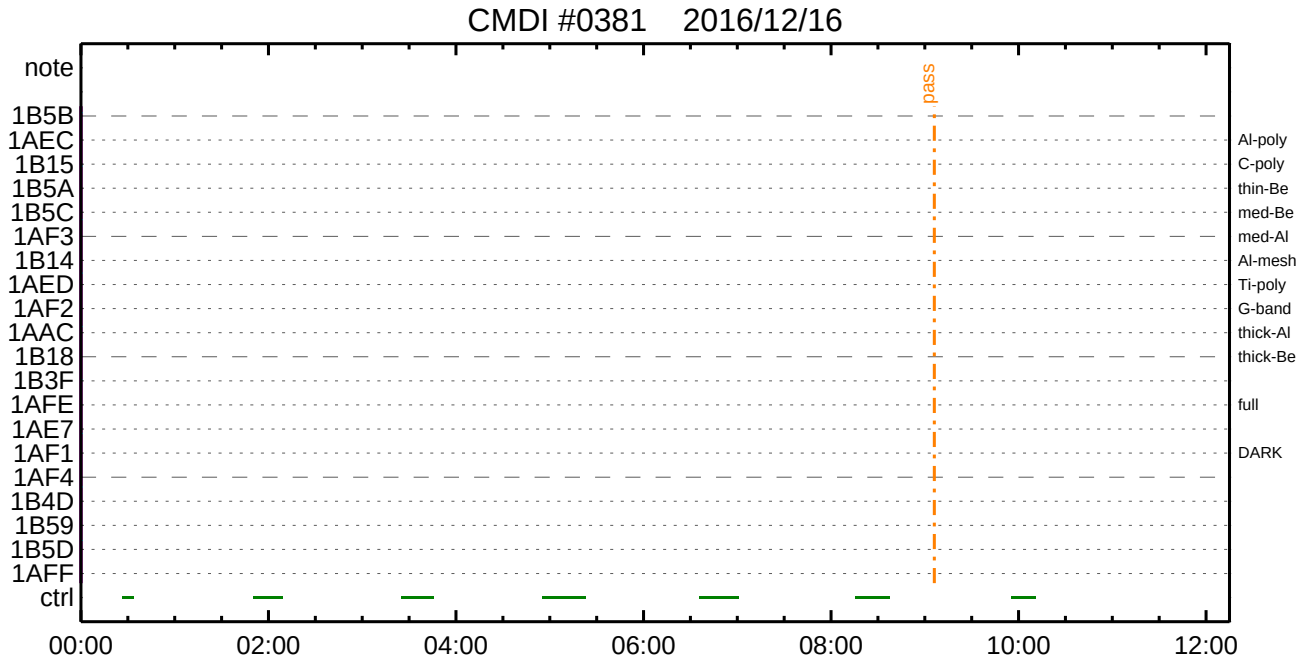

CMDI #0381 2016/12/13
note
1B5B
1AEC
1B15
1B5A
1B5C
1AF3
1B14
1AED
1AF2
1AAC
1B18
1B3F
1AFE
1AE7
1AF1
1AF4
1B4D
1B59
1B5D
1AFF
ctrl
track0
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00

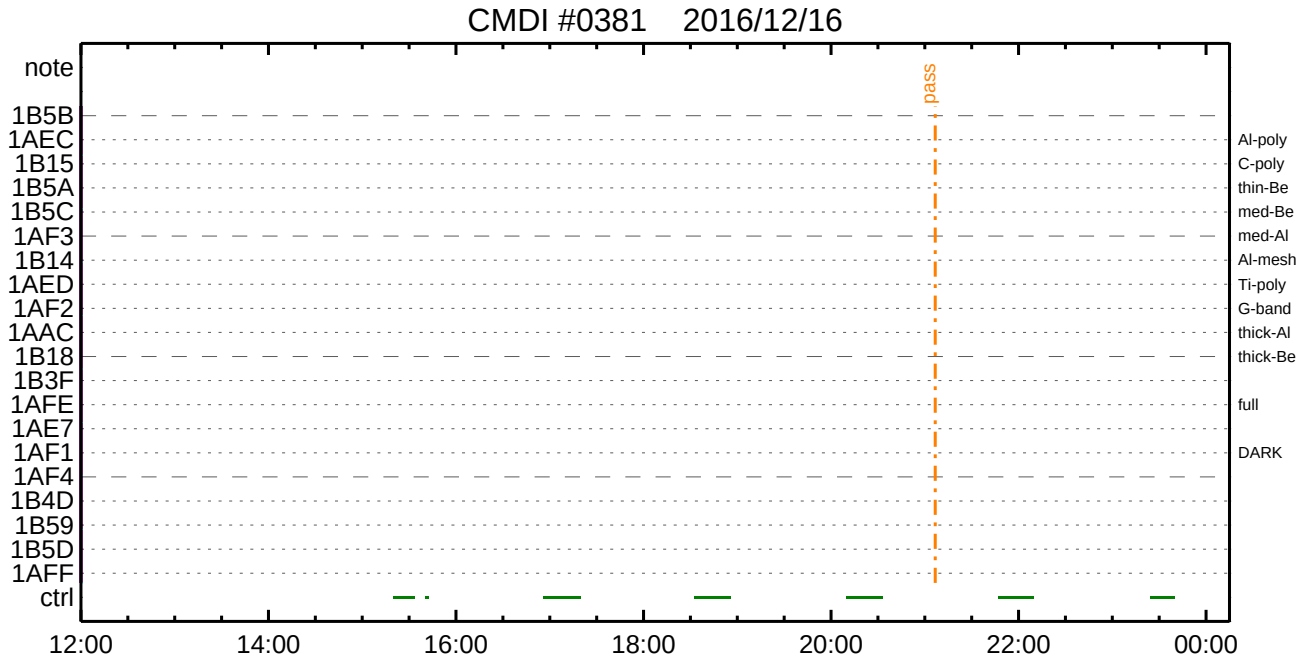

CMDI #0381 2016/12/14
note
1B5B
1AEC
1B15
1B5A
1B5C
1AF3
1B14
1AED
1AF2
1AAC
1B18
1B3F
1AFE
1AE7
1AF1
1AF4
1B4D
1B59
1B5D
1AFF
ctrl
track0
track3
track4
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00

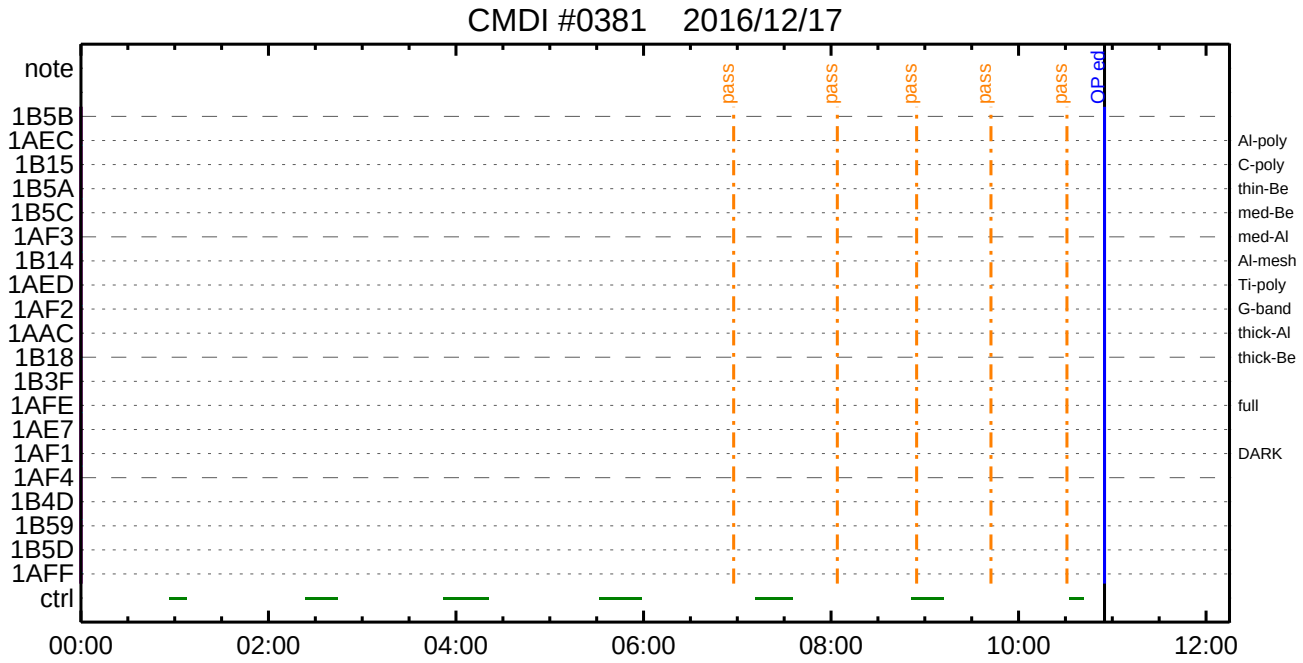

CMDI #0381 2016/12/14
note
1B5B
1AEC
1B15
1B5A
1B5C
1AF3
1B14
1AED
1AF2
1AAC
1B18
1B3F
1AFE
1AE7
1AF1
1AF4
1B4D
1B59
1B5D
1AFF
ctrl
track0
track1
pass
QT
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00


CMDI #0381 2016/12/15
note
1B5B
1AEC
1B15
1B5A
1B5C
1AF3
1B14
1AED
1AF2
1AAC
1B18
1B3F
1AFE
1AE7
1AF1
1AF4
1B4D
1B59
1B5D
1AFF
ctrl
track0
track3
pass
QT
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00

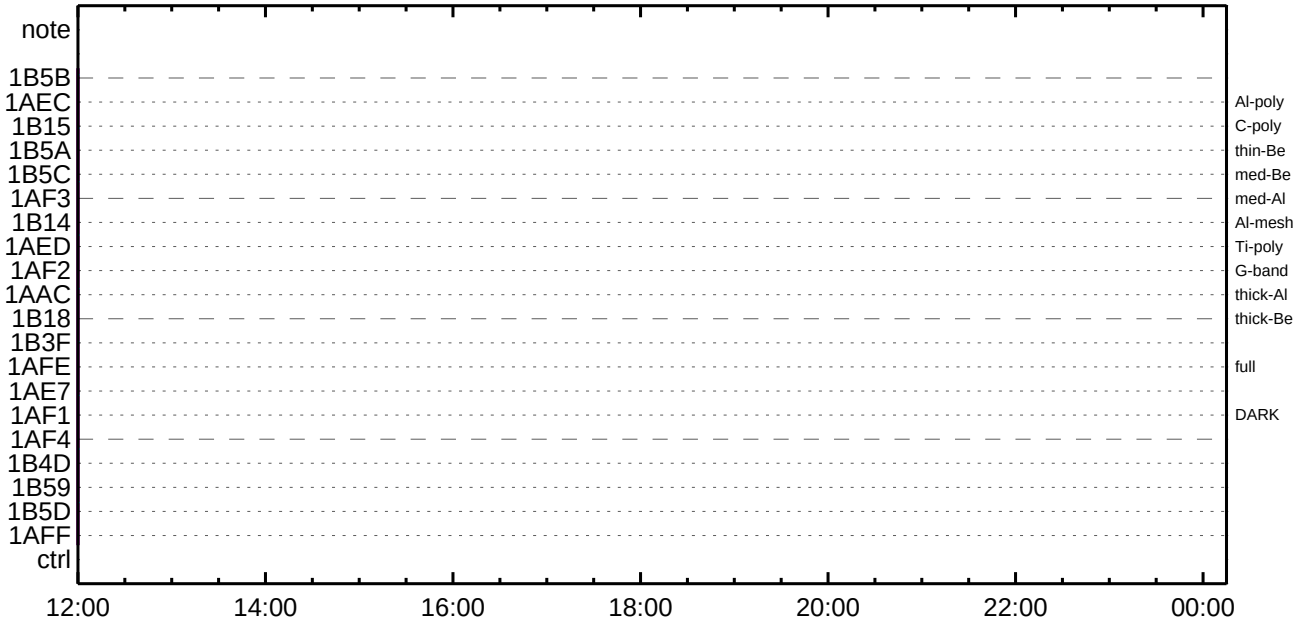

CMDI #0381 2016/12/15
note
1B5B
1AEC
1B15
1B5A
1B5C
1AF3
1B14
1AED
1AF2
1AAC
1B18
1B3F
1AFE
1AE7
1AF1
1AF4
1B4D
1B59
1B5D
1AFF
ctrl
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00


CMDI #0381 2016/12/16
note
1B5B
1AEC
1B15
1B5A
1B5C
1AF3
1B14
1AED
1AF2
1AAC
1B18
1B3F
1AFE
1AE7
1AF1
1AF4
1B4D
1B59
1B5D
1AFF
ctrl
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0381 2016/12/16
note
1B5B
1AEC
1B15
1B5A
1B5C
1AF3
1B14
1AED
1AF2
1AAC
1B18
1B3F
1AFE
1AE7
1AF1
1AF4
1B4D
1B59
1B5D
1AFF
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


CMDI #0381 2016/12/17
note
1B5B
1AEC
1B15
1B5A
1B5C
1AF3
1B14
1AED
1AF2
1AAC
1B18
1B3F
1AFE
1AE7
1AF1
1AF4
1B4D
1B59
1B5D
1AFF
ctrl
pass
pass
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 #0381 2016/12/17



(a) Spacecraft Operation Procedure (real-commands)

```
main-298 2016-12-13 14:02:01 205 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. OP/OG¥í¡¼¥É¡¦¥À¥ó¥×
0016     C. ****************************
0017     C.
0018   . C. ¡ãOP/OG¥í¡¼¥É¡ä
0019   . S. OP    op-298:OP
0020     ()
0021   . S. OG    og-298:OG
0022     ()
0023     C.
0024   . C. ¡ãNMOG&OPÎÎ°è¥À¥ó¥×¡ä
0025     C. NMOG(0x200000-0x207FFF¡§ 32 kbyte)
0026  +. DC 01-23 DHU_DMA_DMP_PRM_SET
0027     BC       (20 00 7f 01 02)
0028     C.                    ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     40
0029     C.                    ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0030     C.                    ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
0031     C.                    ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0032     C.                    ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0033  +. DC 01-22 DHU_MODE_CHNG
0034     BC       (07 0b f8)
0035     C.                    ¢¢[HK1_PKT_FORM_NO]             EQ     7
0036     C.                    ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0037     C.                    ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0038     C.                    ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0039     C.                    ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0040   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0041     C.                    ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0042   . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0043     C.
0044     C. NMOG(0x208000-0x20FFFF¡§ 32 kbyte)
0045  +. DC 01-23 DHU_DMA_DMP_PRM_SET
0046     BC       (20 80 7f 01 02)
0047     C.                    ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     41
0048     C.                    ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0049     C.                    ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
0050     C.                    ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0051     C.                    ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0052  +. DC 01-22 DHU_MODE_CHNG
0053     BC       (07 0b f8)
0054     C.                    ¢¢[HK1_PKT_FORM_NO]             EQ     7
0055     C.                    ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0056     C.                    ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0057     C.                    ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0058     C.                    ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0059   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0060     C.                    ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0061   . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0062     C.
0063     C. NMOG(0x210000-0x2100FF¡§ 256byte)+OP(0x210100-0x2141FF: 16.25kbyte)
0064  +. DC 01-23 DHU_DMA_DMP_PRM_SET
0065     BC       (21 00 41 01 02)
0066     C.                    ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     42
0067     C.                    ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0068     C.                    ¢¢[HK1_DMP_BLOCK_NUM]           EQ     65
0069     C.                    ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0070     C.                    ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0071  +. DC 01-22 DHU_MODE_CHNG
0072     BC       (07 0b f8)
0073     C.                    ¢¢[HK1_PKT_FORM_NO]             EQ     7
0074     C.                    ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0075     C.                    ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0076     C.                    ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0077     C.                    ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0078   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0079     C.                    ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0080   . C. RAM ID=NMOG,RAM ID=OP¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0081     C.
0082   . C. ***** °Ê²¼¤Ï¾Ã´¶Á°¤ËÉ¬¤ºÁ÷¿® (¾åµ-¥À¥ó¥×¼ê½ç¤òÅÓÃæ¤Ç½ª¤¨¤ë¾ì¹ç¤Ç¤â) *****
0083     C. DHU¥â¡¼¥É¡Ê¼ý½¸¥ì¡¼¥È¡Ë¤òÌá¤¹
0084  +. DC 01-22 DHU_MODE_CHNG
0085     BC       (02 0a f8)
0086     C.                    ¢¢[HK1_PKT_FORM_NO]             EQ     2
0087     C.                    ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
0088     C.                    ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
0089     C.                    ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0090     C.
0091   . C. ********************************
0092     C. TI-CMD SET (OPOG STOP/COPY/START)
0093     C. ********************************
0094     C.
0095   . C. NOTICE ¡§ OPOG UPLOAD¤¬Á÷¿®NG¤Î¾ì¹ç¡¢°Ê²¼¤ÎTI-CMDÁ÷¿®¤Ï¼Â¹Ô¤•¤Ê¤¤¤³¤È¡£
```

```
0096     C.           ¤Þ¤¿¡¢SET¤ÈDUMP¤ÏÆ±°ì¥Ñ¥¹¤Ç¹Ô¤¦¤³¤È¡£
0097     C.
0098   . C. TI¥³¥Þ¥ó¥É¤òÅÐÏ¿(UT)
0099  +. TI 2016-12-13 10:24:00.0
0100     DC 01-B3 DHU_OP_STOP
0101     C.                      ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0102     C.
0103  +. TI 2016-12-13 10:24:01.0
0104     DC 01-B4 DHU_OP_COPY
0105     C.                      ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0106     C.
0107  +. TI 2016-12-13 10:24:01.0
0108     DC 01-B5 DHU_OPOG_COPY
0109     C.                      ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0110     C.
0111  +. TI 2016-12-13 10:28:59.5
0112     DC 01-B2 DHU_OP_START
0113     C.                      ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0114     C.
0115     C. °Ê²¼¤ÏÄê¾ïÍÑ¤Î¥Á¥§¥Ã¥¯¹àÌÜ
0116     C.                      ¢¢[HK1_TI_CMD_ENA/DIS]          EQ     ENA
0117     C.                      ¢¢[HK1_TI_CMD_NUM]              EQ     4
0118     C.                      ¢¢[HK1_NEXT_EXEC_PIM]           EQ     DHU
0119     C.                      ¢¢[HK1_NEXT_EXEC_DC]            EQ     0xB3
0120     C.
0121   . C. ****************************
0122     C. TIÎÎ°è¥À¥ó¥×
0123     C. ****************************
0124     C.
0125     C. TI_TBL(0x03AB00-0x03AEFF¡§ 1024byte)
0126  +. DC 01-23 DHU_DMA_DMP_PRM_SET
0127     BC       (03 ab 03 01 02)
0128     C.                      ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     07
0129     C.                      ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     2B
0130     C.                      ¢¢[HK1_DMP_BLOCK_NUM]           EQ     3
0131     C.                      ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0132     C.                      ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0133  +. DC 01-22 DHU_MODE_CHNG
0134     BC       (07 0b f8)
0135     C.                      ¢¢[HK1_PKT_FORM_NO]             EQ     7
0136     C.                      ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0137     C.                      ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0138     C.                      ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0139     C.                      ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0140     C.
0141   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0142     C.                      ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0143     C.
0144   . C. RAM ID=TI_TBL¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0145     C.
0146   . C. DHU¥â¡¼¥É¡Ê¼ý½¸¥ì¡¼¥È¡Ë¤òÌá¤¹
0147  +. DC 01-22 DHU_MODE_CHNG
0148     BC       (02 0a f8)
0149     C.                      ¢¢[HK1_PKT_FORM_NO]             EQ     2
0150     C.                      ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
0151     C.                      ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
0152     C.                      ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0153     C.
0154     C. ********************************
0155     C.  SOT TI command set
0156     C. ********************************
0157     C. Execute, after the success of OP upload.
0158  +. TI 2016-12-13 10:28:16.0
0159     DC 07-F0 MDP_SOT_MODE_STBY
0160     BC       (41)
0161   . C. ------------------------------------
0162     C.   HK1_TI_CMD_NUM       = 1 CNTUP [ ]
0163     C. ------------------------------------
0164     C. ************ SOT END ***********
0165   . C. Stop EIS observation and temporarily disable EIS mode changes
0166     C.
0167     C.
0168     C. ********** Start EIS operation (TI set) **********
0169     C. Execute, after the success of OP upload.
0170     C. Set EIS TI-commands
0171  +. TI 2016-12-13 10:28:30.0
0172     DC 07-FC EIS_MODE_MANU
0173     BC       (21 02)
0174  +. TI 2016-12-13 10:28:40.0
0175     DC 07-FC EIS_MODE_CHG_DIS
0176     BC       (22)
0177   . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    2 COUNTUP
0178     C. *********** End EIS operation (TI set) ***********
0179     C.
0180     C.
0181     C.
0182     C. ************ XRT START ***********
0183     C. Execute, after the success of OP upload.
0184  +. TI 2016-12-13 10:28:00.0
0185     DC 07-F0 MDP_XRT_MODE_STBY
0186     BC       (c3)
0187   . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1COUNTUP
0188     C.
0189     C. ************ XRT END ***********
0190     C.
0191   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0192     C. (¾å°Ì¥Ó¥Ã¥Ë¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0193   . S. DC-BC dcbc-402:DCBC
```

```
0194     (MDP_known_event)
0195     C.
0196     C.
0197   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0198   . S. DC-BC dcbc-153:DCBC
0199     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0200     C.
0201     C.
0202   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0203     C.
0204   . C. *********** LOS ***********
0205     C.
```

(a) Spacecraft Operation Procedure (real-commands)

```
main-299 2016-12-13 14:02:01 94 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. ***** AOCS Commands (Tracking Curve Upload) ******
0015     C. Upload the Orbit Element and the Target Attitude
0016     C. RAM-ID:TARGET_ATT
0017   . S. RAM   ram-150:TARGET_ATT
0018     ()
0019     C.
0020     C.
0021     C. Set the dump memory area of TARGET_ATT
0022  +. DC 02-48 AOCU_DUMP_SET
0023     BC       (07 00 00 00 18 00)
0024     C.
0025     C.    <A_STS1>[MEMORY OPERATE SATUS] ADRS = 070000 [ ]
0026     C.
0027     C.
0028     C. Change the TLMFormatNo for the AOCS Dump Format
0029  +. DC 01-22 DHU_MODE_CHNG
0030     BC       (04 0b f8)
0031     C.
0032     C. Wait for AOCSDUMP to end
0033     C.
0034   . C. Check the dump memory
0035     C.
0036     C.                                      Result = OK [ ]
0037     C.
0038  +. DC 01-22 DHU_MODE_CHNG
0039     BC       (02 0a f8)
0040     C.
0041     C.                        <A_***>[TLM STS] FMT = 2 [ ]
0042     C.
0043  +. DC 02-8E AOCU_ORB_UPD
0044   . C.
0045   . C. ***** AOCS Commands (Orbital Element Update) *****
0046     C. Update the orbital element
0047  +. DC 02-50 AOCU_ORB_PRPGT_START
0048     BC       (16)
0049  +  DC 02-8E AOCU_ORB_UPD
0050     C.
0051     C.       <A_ORB>[ORBIT] EPC = 3525856.0 +- 1.0 (s) [ ]
0052     C.
0053   . C.
0054   . C. Load OBSTBL, dump OBSTBL, enable EIS mode changes
0055  +. DC 07-FC EIS_MODE_CHG_ENA
0056     BC       (20)
0057   . C. Verify EIS_MODE_CHG_FLG is ENA
0058  +. DC 07-FC EIS_MODE_MANU
0059     BC       (21 02)
0060   . C. Verify EIS in MANUAL mode
0061   . C. Estimated OBSTBL upload time is 26s
0062     C. ********************************
0063     C. EIS START OBSTBL LOAD
0064     C. ********************************
0065   . S. RAM   ram-820:EIS_OBSTBL
0066     ()
0067  +. DC 07-FC EIS_DUMP_OBSTBL
0068     BC       (07 07 07 00 00 70 00)
0069     C.
0070     C. Execute, after the success of OBSTBL upload.
0071     C. Set EIS TI-commands
0072  +. TI 2016-12-13 10:28:50.0
0073     DC 07-FC EIS_MODE_CHG_ENA
0074     BC       (20)
0075   . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1 COUNTUP
0076     C. ********************************
0077     C. EIS END OBSTBL LOAD
0078     C. ********************************
0079     C.
0080   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0081     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0082   . S. DC-BC dcbc-402:DCBC
0083     (MDP_known_event)
0084     C.
0085     C.
0086   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0087   . S. DC-BC dcbc-153:DCBC
0088     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0089     C.
0090     C.
0091   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0092     C.
0093   . C. *********** LOS ***********
0094     C.
```

(a) Spacecraft Operation Procedure (real-commands)

```
main-300 2016-12-13 14:02:01 128 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.  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-283: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 2016-12-13 10:28:18.0
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 06 85 83 06 06)
0076  +  DC 07-F0 MDP_XRT_ROI_SET
0077     BC       (cd 07 80 80 20 20)
0078  +  DC 07-F0 MDP_XRT_ROI_SET
0079     BC       (cd 08 80 80 20 08)
0080  +  DC 07-F0 MDP_XRT_ROI_SET
0081     BC       (cd 09 80 80 08 20)
0082  +  DC 07-F0 MDP_XRT_ROI_SET
0083     BC       (cd 0f 80 80 06 06)
0084  +  DC 07-F0 MDP_XRT_ROI_SET
0085     BC       (cd 10 80 80 08 08)
0086  +  DC 07-F0 MDP_XRT_FLD_ENA
0087     BC       (d8)
0088  +  DC 07-F0 MDP_XRT_FLRCTRL_ENA
0089     BC       (c8)
0090  +  DC 07-F0 MDP_XRT_ARS_DIS
0091     BC       (d5)
0092  +  DC 07-F0 MDP_XRT_AEC_RESET
0093     BC       (d0)
0094  +  DC 07-F0 MDP_XRT_FLD_RESET
0095     BC       (da)
```

```
0096  +  DC 07-F0 MDP_XRT_QT_PROG_SET
0097     BC       (c4 01)
0098  +  DC 07-F0 MDP_XRT_FL_PROG_SET
0099     BC       (c5 07)
0100   . C. ---------- Success Verify ?            OK / NG ____
0101     C.
0102     C.
0103   . C. All OK?   Yes--> Please Proceed. / No --> Stop here.
0104     C.
0105  +. DC 07-F0 MDP_XRT_MODE_OBSV
0106     BC       (c2)
0107  +. TI 2016-12-13 10:28:02.0
0108     DC 07-F0 MDP_XRT_MODE_OBSV
0109     BC       (c2)
0110   . C. ---------- Success Verify ?            OK / NG ____
0111     C.
0112     C. ************ XRT END ***********
0113     C.
0114   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0115     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0116   . S. DC-BC dcbc-402:DCBC
0117     (MDP_known_event)
0118     C.
0119     C.
0120   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0121   . S. DC-BC dcbc-153:DCBC
0122     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0123     C.
0124     C.
0125   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0126     C.
0127   . C. *********** LOS ***********
0128     C.
```

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

2016/12/13  10:38:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  10:38:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  10:38:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/13  10:39:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                        AOCU_NM              5 02-76 00 f2 a8 54 72
2016/12/13  10:39:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  10:39:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  10:39:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  10:39:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  10:39:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  10:41:56.0  XRT_QT_PROG_SET_434_OG [0x1b2]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 08
2016/12/13  10:41:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  10:42:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  11:59:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  11:59:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  11:59:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/13  12:00:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                        AOCU_NM              5 02-76 00 ed 40 54 72
2016/12/13  12:00:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  12:00:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  12:00:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  12:00:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  12:00:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  12:02:56.0  XRT_QT_PROG_SET_425_OG [0x1a9]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 01
2016/12/13  12:02:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  12:03:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  15:12:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  15:12:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  15:12:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  15:12:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/13  15:15:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/13  15:34:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/13  15:35:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  16:19:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  16:19:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  16:19:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  16:20:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                        AOCU_NM              5 02-76 00 00 00 00 00
2016/12/13  16:20:18.0  XRT_FLD_DIS_406_OG [0x196]
                                        MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/13  16:22:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                        MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/13  16:22:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  16:22:58.0  XRT_QT_PROG_SET_442_OG [0x1ba]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 12
2016/12/13  16:23:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  16:39:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  16:39:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  16:39:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/13  16:40:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                        AOCU_NM              5 02-76 00 ed 40 54 72
2016/12/13  16:40:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  16:40:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
```

```
2016/12/13  16:40:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  16:40:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  16:40:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  16:42:56.0  XRT_QT_PROG_SET_425_OG [0x1a9]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 01
2016/12/13  16:42:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  16:43:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  16:47:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  16:47:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  16:47:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  16:47:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/13  16:50:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/13  17:11:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/13  17:12:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  18:24:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  18:24:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  18:24:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  18:24:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/13  18:27:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/13  18:48:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/13  18:49:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  20:01:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  20:01:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  20:01:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  20:01:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/13  20:04:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/13  20:29:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  20:29:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  20:29:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  20:30:00.0  AOCS_ORe-point_Start_4_OG [0x09a]
                                        AOCU_NM              5 02-76 00 00 00 ac cd
2016/12/13  20:30:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  20:30:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  20:30:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  20:30:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  20:30:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  20:32:56.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/13  20:32:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  20:33:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  20:46:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  20:46:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  20:46:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  20:47:00.0  AOCS_ORe-point_Start_5_OG [0x09b]
                                        AOCU_NM              5 02-76 00 00 00 d6 67
2016/12/13  20:47:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  20:47:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  20:47:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  20:47:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  20:47:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  20:49:56.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/13  20:49:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
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                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  20:50:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  21:02:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  21:02:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  21:02:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  21:03:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                        AOCU_NM              5 02-76 00 00 00 00 00
2016/12/13  21:03:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  21:03:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  21:03:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  21:03:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  21:03:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  21:05:56.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/13  21:05:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  21:06:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  21:18:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  21:18:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  21:18:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  21:19:00.0  AOCS_ORe-point_Start_6_OG [0x09c]
                                        AOCU_NM              5 02-76 00 00 00 29 99
2016/12/13  21:19:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  21:19:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  21:19:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  21:19:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  21:19:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  21:21:56.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/13  21:21:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  21:22:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  21:39:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  21:39:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  21:39:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  21:39:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/13  21:42:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/13  22:07:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  22:07:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  22:07:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  22:07:30.0  AOCS_ORe-point_Start_7_OG [0x09d]
                                        AOCU_NM              5 02-76 00 00 00 53 33
2016/12/13  22:07:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  22:07:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  22:07:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  22:07:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  22:07:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  22:10:26.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/13  22:10:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  22:10:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  22:23:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  22:23:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  22:23:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  22:23:30.0  AOCS_ORe-point_Start_8_OG [0x09e]
                                        AOCU_NM              5 02-76 00 d6 36 b7 8e
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2016/12/13  22:23:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  22:23:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  22:23:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  22:23:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  22:23:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  22:26:26.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/13  22:26:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                    MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  22:26:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  22:33:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  22:33:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  22:33:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  22:33:30.0  AOCS_ORe-point_Start_9_OG [0x09f]
                                    AOCU_NM              5 02-76 00 b4 b5 db 75
2016/12/13  22:33:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  22:33:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  22:33:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  22:33:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  22:33:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  22:36:26.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/13  22:36:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                    MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  22:36:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  22:49:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  22:49:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  22:49:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  22:49:30.0  AOCS_ORe-point_Start_10_OG [0x0a0]
                                    AOCU_NM              5 02-76 00 ac 5b 00 00
2016/12/13  22:49:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  22:49:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  22:49:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  22:49:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  22:49:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  22:52:26.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/13  22:52:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                    MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  22:52:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  23:16:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  23:16:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  23:16:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  23:16:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/13  23:19:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/13  23:39:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  23:39:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/13  23:39:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/13  23:39:30.0  AOCS_ORe-point_Start_11_OG [0x0a1]
                                    AOCU_NM              5 02-76 00 b4 b5 24 8b
2016/12/13  23:39:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/13  23:39:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/13  23:39:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/13  23:39:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/13  23:39:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/13  23:42:26.0  XRT_QT_PROG_SET_420_OG [0x1a4]
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                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/13  23:42:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/13  23:42:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/13  23:55:30.0  AOCS_ORe-point_Start_12_OG [0x0a2]
                                        AOCU_NM              5 02-76 00 d6 36 48 72
2016/12/14  00:05:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  00:05:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  00:05:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/14  00:05:30.0  AOCS_ORe-point_Start_13_OG [0x0a3]
                                        AOCU_NM              5 02-76 00 29 ca b7 8e
2016/12/14  00:05:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  00:05:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  00:05:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  00:05:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  00:05:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  00:08:26.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/14  00:08:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  00:08:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  00:15:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  00:15:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  00:15:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/14  00:15:30.0  AOCS_ORe-point_Start_14_OG [0x0a4]
                                        AOCU_NM              5 02-76 00 4b 4b db 75
2016/12/14  00:15:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  00:15:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  00:15:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  00:15:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  00:15:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  00:18:26.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/14  00:18:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  00:18:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  00:31:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  00:31:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  00:31:28.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/14  00:31:30.0  AOCS_ORe-point_Start_15_OG [0x0a5]
                                        AOCU_NM              5 02-76 00 53 a5 00 00
2016/12/14  00:31:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  00:31:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  00:31:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  00:31:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  00:31:56.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  00:34:26.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/14  00:34:28.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  00:34:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  00:51:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  00:51:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  00:51:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  00:51:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  00:54:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  01:05:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  01:05:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
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2016/12/14  01:05:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/14  01:06:00.0  AOCS_ORe-point_Start_16_OG [0x0a6]
                                    AOCU_NM              5 02-76 00 4b 4b 24 8b
2016/12/14  01:06:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  01:06:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  01:06:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  01:06:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  01:06:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  01:08:56.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/14  01:08:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                    MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  01:09:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  01:21:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  01:21:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  01:21:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/14  01:22:00.0  AOCS_ORe-point_Start_17_OG [0x0a7]
                                    AOCU_NM              5 02-76 00 29 db 48 72
2016/12/14  01:22:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  01:22:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  01:22:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  01:22:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  01:22:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  01:24:56.0  XRT_QT_PROG_SET_420_OG [0x1a4]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2016/12/14  01:24:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                    MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  01:25:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  01:59:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  01:59:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  01:59:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                    XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/14  02:00:00.0  AOCS_ORe-point_Start_18_OG [0x0a8]
                                    AOCU_NM              5 02-76 03 00 00 00 00
2016/12/14  02:00:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  02:00:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  02:00:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  02:00:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  02:00:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  02:02:56.0  XRT_QT_PROG_SET_434_OG [0x1b2]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 08
2016/12/14  02:02:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                    MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  02:03:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  02:15:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  02:15:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  02:15:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  02:15:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  02:18:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  02:35:31.5  XRT_Custom_430_OG [0x1ae]
2016/12/14  02:36:31.5  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  03:46:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  03:46:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  03:46:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  03:46:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  03:49:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  04:13:01.0  XRT_Custom_430_OG [0x1ae]
2016/12/14  04:14:01.0  XRT_CTRL_AUTO_424_OG [0x1a8]
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                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  05:23:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  05:23:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  05:23:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  05:23:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  05:26:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  05:50:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/14  05:51:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  05:59:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  05:59:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  05:59:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/14  06:00:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                        AOCU_NM              5 02-76 00 00 00 00 00
2016/12/14  06:00:18.0  XRT_FLD_DIS_406_OG [0x196]
                                        MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/14  06:02:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                        MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/14  06:02:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  06:02:58.0  XRT_QT_PROG_SET_417_OG [0x1a1]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 0e
2016/12/14  06:03:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  06:29:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  06:29:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  06:29:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/14  06:30:00.0  AOCS_ORe-point_Start_19_OG [0x0a9]
                                        AOCU_NM              5 02-76 04 00 00 00 00
2016/12/14  06:30:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  06:30:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  06:30:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  06:30:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  06:30:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  06:32:56.0  XRT_QT_PROG_SET_418_OG [0x1a2]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 04
2016/12/14  06:32:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  06:33:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  07:03:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  07:03:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  07:03:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  07:03:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  07:06:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  07:27:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/14  07:28:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  08:43:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  08:43:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  08:43:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  08:43:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  08:46:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  09:04:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/14  09:05:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  10:24:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  10:24:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  10:24:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  10:24:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  10:27:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  10:35:00.0  XRT_Custom_430_OG [0x1ae]
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2016/12/14  10:36:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                  MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  11:59:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  11:59:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  11:59:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                  XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/14  12:00:00.0  AOCS_ORe-point_Start_20_OG [0x0aa]
                                  AOCU_NM              5 02-76 00 57 1a 00 00
2016/12/14  12:00:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                  MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  12:00:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                  MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  12:00:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                  MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  12:00:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                  MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  12:00:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                  MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  12:02:56.0  XRT_QT_PROG_SET_446_OG [0x1be]
                                  MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2016/12/14  12:02:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                  MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  12:03:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                  MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  14:15:01.0  XRT_CTRL_MANU_400_OG [0x190]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  14:15:03.0  XRT_CTRL_MANU_402_OG [0x192]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  14:15:05.0  XRT_FLD_RESET_415_OG [0x19f]
                                  MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  14:15:07.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                  MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  14:18:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/14  14:18:15.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                  MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  14:19:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                  MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  15:46:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  15:46:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  15:46:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                  MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  15:46:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                  MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  15:49:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                  MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  15:59:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  15:59:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  15:59:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                  XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/14  16:00:00.0  AOCS_ORe-point_Start_21_OG [0x0ab]
                                  AOCU_NM              5 02-76 01 00 00 00 00
2016/12/14  16:00:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                  MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  16:00:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                  MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  16:00:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                  MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  16:00:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                  MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  16:00:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                  MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  16:02:56.0  XRT_QT_PROG_SET_434_OG [0x1b2]
                                  MDP_XRT_QT_PROG_SET  2 07-F0 c4 08
2016/12/14  16:02:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                  MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  16:03:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                  MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  17:22:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  17:22:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  17:22:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                  MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  17:22:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                  MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  17:25:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                  MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  17:46:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/14  17:47:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                  MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  18:01:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  18:01:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                  MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  18:01:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                  XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/14  18:02:00.0  AOCS_ORe-point_Start_3_OG [0x099]
```

```
                                        AOCU_NM              5 02-76 00 00 00 00 00
2016/12/14  18:02:18.0  XRT_FLD_DIS_406_OG [0x196]
                                        MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/14  18:04:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                        MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/14  18:04:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  18:04:58.0  XRT_QT_PROG_SET_417_OG [0x1a1]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 0e
2016/12/14  18:05:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  18:11:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  18:11:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  18:11:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/14  18:12:00.0  AOCS_ORe-point_Start_21_OG [0x0ab]
                                        AOCU_NM              5 02-76 01 00 00 00 00
2016/12/14  18:12:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/14  18:12:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/14  18:12:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/14  18:12:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/14  18:12:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  18:14:56.0  XRT_QT_PROG_SET_434_OG [0x1b2]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 08
2016/12/14  18:14:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/14  18:15:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  18:59:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  18:59:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  18:59:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  18:59:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  19:02:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  19:23:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/14  19:24:00.5  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  20:36:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  20:36:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  20:36:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  20:36:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  20:39:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  21:00:01.0  XRT_Custom_430_OG [0x1ae]
2016/12/14  21:01:01.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  22:14:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  22:14:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  22:14:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  22:14:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  22:17:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/14  22:36:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/14  22:37:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/14  23:51:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  23:51:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/14  23:51:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/14  23:51:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/14  23:54:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/15  00:02:01.0  XRT_Custom_430_OG [0x1ae]
2016/12/15  00:03:01.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/15  01:17:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  01:17:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  01:17:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
```

```
2016/12/15  01:17:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/15  01:20:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/15  01:34:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/15  01:35:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/15  02:50:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  02:50:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  02:50:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/15  02:50:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/15  02:53:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/15  03:10:31.0  XRT_Custom_430_OG [0x1ae]
2016/12/15  03:11:31.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/15  04:19:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  04:19:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  04:19:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/15  04:19:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/15  04:22:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/15  04:48:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/15  04:49:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/15  05:31:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  05:31:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  05:31:58.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2016/12/15  05:32:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                    AOCU_NM              5 02-76 00 00 00 00 00
2016/12/15  05:32:18.0  XRT_FLD_DIS_406_OG [0x196]
                                    MDP_XRT_FLD_DIS      1 07-F0 d9
2016/12/15  05:34:54.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                    MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2016/12/15  05:34:56.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/15  05:34:58.0  XRT_QT_PROG_SET_417_OG [0x1a1]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 0e
2016/12/15  05:35:00.5  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/15  05:41:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  05:41:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  05:41:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                    XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2016/12/15  05:42:00.0  AOCS_ORe-point_Start_18_OG [0x0a8]
                                    AOCU_NM              5 02-76 03 00 00 00 00
2016/12/15  05:42:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2016/12/15  05:42:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2016/12/15  05:42:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2016/12/15  05:42:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2016/12/15  05:42:26.0  XRT_FLD_RESET_433_OG [0x1b1]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/15  05:44:56.0  XRT_QT_PROG_SET_434_OG [0x1b2]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 08
2016/12/15  05:44:58.0  XRT_FL_PROG_SET_436_OG [0x1b4]
                                    MDP_XRT_FL_PROG_SET  2 07-F0 c5 07
2016/12/15  05:45:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/15  05:59:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  05:59:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  05:59:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/15  05:59:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/15  06:02:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/15  06:25:31.0  XRT_Custom_430_OG [0x1ae]
2016/12/15  06:26:31.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/15  07:39:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  07:39:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  07:39:34.0  XRT_FLD_RESET_415_OG [0x19f]
```

```
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/15  07:39:36.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/15  07:42:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/15  08:02:30.0  XRT_Custom_430_OG [0x1ae]
2016/12/15  08:03:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/15  09:19:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  09:19:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  09:19:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2016/12/15  09:19:06.0  XRT_PREFLR_STRT_414_OG [0x19e]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2016/12/15  09:22:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2016/12/15  09:38:00.0  XRT_Custom_430_OG [0x1ae]
2016/12/15  09:39:00.5  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2016/12/15  09:51:45.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  09:51:47.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2016/12/15  10:12:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                        AOCU_NM              5 02-76 00 00 00 00 00
```