XRT Timeline to be uploaded on 2020/02/04

Period: 2020/02/04 11:25:00 - 2020/02/08 11:02:00

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

XOB #1BC7: CCD Monitor During Bakeout - G-band 1ms - 1kx1k - Q90 - 1st Quadrant -Al/mesh(2048ms), Al/Poly(4096ms) - w leak image-1ms

Term	Pointing (x, y)	Comment
02/05 14:03:00 - 02/05 14:09:54	Fixed (-528.4, -528.4)	XRT 4 quadrant pointing (1/4)

PROG= 04 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 51 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	1x1	1024x1024 (1536, 1536)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	1x1	1024x1024 (1536, 1536)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	1ms	Obs	1x1	1024x1024 (1536, 1536)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	1ms	Obs	1x1	1024x1024 (1536, 1536)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 3 2-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	2.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/Open	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 34 1-time(s) 2.0sec

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

XOB #1BC8: CCD Monitor During Bakeout - G-Band 1ms - 1kx1k - Q90 - 2nd Quadrant - Al/mesh (2048ms), Al/Poly (4096ms) - w leak image-1 ms

Term	Pointing (x, y)	Comment
02/05 14:13:00 - 02/05 14:19:54	Fixed (528.4, -528.4)	XRT 4 quadrant pointing (2/4)

PROG= 09 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 38 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	1x1	1024x1024 (512, 1536)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	1x1	1024x1024 (512, 1536)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	1ms	Obs	1x1	1024x1024 (512, 1536)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	1ms	Obs	1x1	1024x1024 (512, 1536)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 3 2-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	2.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/Open	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 34 1-time(s) 2.0sec

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

XOB #1BC9: CCD Monitor During Bakeout - G-Band 1ms - 1kx1k - Q90 - 3rd Quadrant - Al/mesh (2048ms), Al/Poly (4096ms) - w leak image-1 ms

Term	Pointing (x, y)	Comment
02/05 14:23:00 - 02/05 14:29:54	Fixed (528.4, 528.4)	XRT 4 quadrant pointing (3/4)

PROG= 05 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 21 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	1x1	1024x1024 (512, 512)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	1x1	1024x1024 (512, 512)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	1ms	Obs	1x1	1024x1024 (512, 512)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	1ms	Obs	1x1	1024x1024 (512, 512)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 3 2-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	2.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/Open	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 34 1-time(s) 2.0sec

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

XOB #1BCA: CCD Monitor During Bakeout - G-Band 1ms - 1kx1k - Q90 - 4th Quadrant - Al/mesh (2048ms), Al/Poly (4096ms) - w leak image-1 ms

Term	Pointing (x, y)	Comment
02/05 14:33:00 - 02/05 14:39:54	Fixed (-528.4, 528.4)	XRT 4 quadrant pointing (4/4)

PROG= 10 1-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 14 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	1x1	1024x1024 (1536, 512)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	1x1	1024x1024 (1536, 512)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	1ms	Obs	1x1	1024x1024 (1536, 512)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	1ms	Obs	1x1	1024x1024 (1536, 512)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

- **Seqn= 3 2-time(s) 2.0sec**
  - Open/Al-mesh Open/Al-mesh close Safe Norm 2.00s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
  - Al-poly/Open Al-poly/Open close Safe Norm 4.00s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
- **Subr= 3 2-time(s) 2.0sec**
  - **Seqn= 34 1-time(s) 2.0sec**
    - Open/G-band Open/G-band open Safe Norm 1ms Obs 1x1 2048x2048 (1024, 1024) Q=90 0 0 2.0sec
    - Open/G-band Open/G-band close Safe Norm 1ms 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 #1C60: AR (Filter-Ratio with Al/poly and thin-Be) with PFB, 512x512 at 1064 1048, thick-Al context, with G-band (1ms/1ms leak), 60s cad

Term	Pointing (x, y)	Comment
02/05 14:43:00 - 02/05 17:59:54	Track (679.0, -483.3) @ 02/05 14:40:00	AR tracking
02/05 18:13:00 - 02/06 06:10:24	Track (693.0, -485.5) @ 02/05 18:10:00	AR tracking
02/06 06:23:30 - 02/06 10:17:30	Track (735.8, -493.8) @ 02/06 06:20:30	AR tracking

PROG= 20 Inf.-time(s)

- **Subr= 1 1-time(s) 2.0sec**
  - **Seqn= 92 1-time(s) 2.0sec**
    - Open/G-band Open/G-band open Safe Norm 1ms Obs 1x1 384x384 (1064, 1048) DPCM 0 0 2.0sec
    - Open/G-band Open/G-band close Safe Norm 1ms 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
  - **Seqn= 71 3-time(s) 2.0sec**
    - Open/thick-Al Open/thick-Be close Safe Norm 16.0s Obs 1x1 512x512 (1064, 1048) Q=98 3 0 2.0sec
- **Subr= 2 30-time(s) 60.0sec**
  - **Seqn= 15 1-time(s) 24.0sec**
    - thin-Be/Open med-Be/Open close Safe Norm 1.00s Obs 1x1 512x512 (1064, 1048) Q=95 2 0 2.0sec
    - Al-poly/Open thin-Be/Open close Safe Norm 500ms Obs 1x1 512x512 (1064, 1048) Q=95 2 0 2.0sec
  - **Seqn= 58 1-time(s) 24.0sec**
    - Al-poly/Open thin-Be/Open close Safe Norm 500ms Obs 1x1 384x384 (1064, 1048) Q=95 3 1 2.0sec
    - thin-Be/Open med-Be/Open close Safe Norm 1.00s Obs 1x1 384x384 (1064, 1048) Q=95 3 1 2.0sec
  - **Seqn= 48 1-time(s) 2.0sec**
    - Al-poly/Open thin-Be/Open close Safe Norm 500ms Obs 1x1 384x384 (1064, 1048) Q=95 3 2 2.0sec
    - thin-Be/Open med-Be/Open close Safe Norm 1.00s Obs 1x1 384x384 (1064, 1048) Q=95 3 2 2.0sec

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

XOB #1C31: Synoptic Q95 2x2 - Al/mesh(64/512/2897) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 - 1x1 2048x512) + Al-poly(181/1024/8192) +

Term	Pointing (x, y)	Comment
02/05 18:03:00 - 02/05 18:09:54	Fixed (0.0, 0.0)	synoptic
02/06 06:13:30 - 02/06 06:20:24	Fixed (0.0, 0.0)	synoptic, shifted 10.5 min

PROG= 15 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= 36 1-time(s) 2.0sec**
    - Open/Al-mesh Open/Al-mesh close Safe Norm 63ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
    - Open/Al-mesh Open/Al-mesh close Safe Norm 500ms 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= 93 1-time(s) 2.0sec**
    - Al-poly/Open Al-poly/Open close Safe Norm 177ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
    - Al-poly/Open Al-poly/Open close Safe Norm 1.00s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
    - Al-poly/Open Al-poly/Open close Safe Norm 8.00s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
  - **Seqn= 33 1-time(s) 2.0sec**
    - thin-Be/Open thin-Be/Open close Safe Norm 1.00s 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
    - thin-Be/Open thin-Be/Open close Safe Norm 22.6s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
  - **Seqn= 23 1-time(s) 2.0sec**
    - Open/G-band Open/G-band open Safe Norm 1ms Obs 1x1 2048x2048 (1024, 1024) Q=90 0 0 2.0sec
    - Open/G-band Open/G-band close Safe Norm 1ms 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

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

XOB #1B8E: 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
02/05 14:43:00 - 02/05 17:59:54	Track (679.0, -483.3) @ 02/05 14:40:00	AR tracking
02/05 18:13:00 - 02/06 06:10:24	Track (693.0, -485.5) @ 02/05 18:10:00	AR tracking
02/06 06:23:30 - 02/06 10:17:30	Track (735.8, -493.8) @ 02/06 06:20:30	AR tracking

PROG= 13 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= 87 1-time(s) 2.0sec												
Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs	1x1	384x384 (1024, 1024)	Q=98	0	0	2.0sec
Open/G-band	Open/G-band	close	Safe	Norm	1ms	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

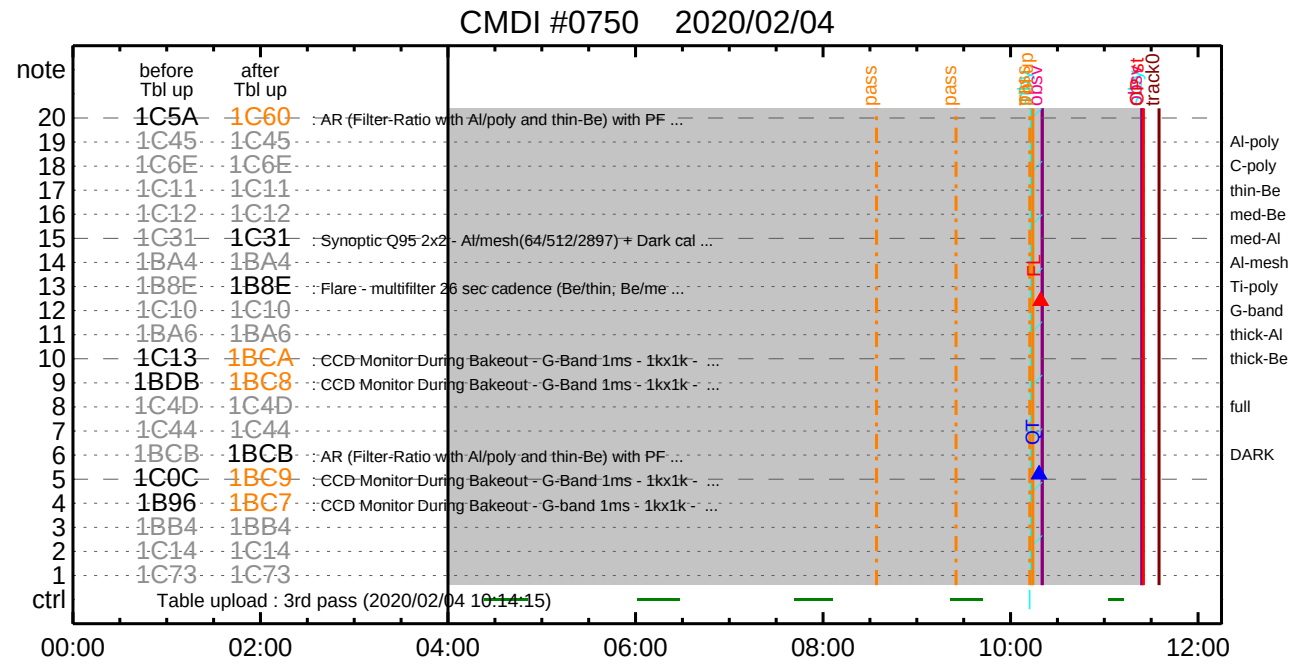
NOT USED

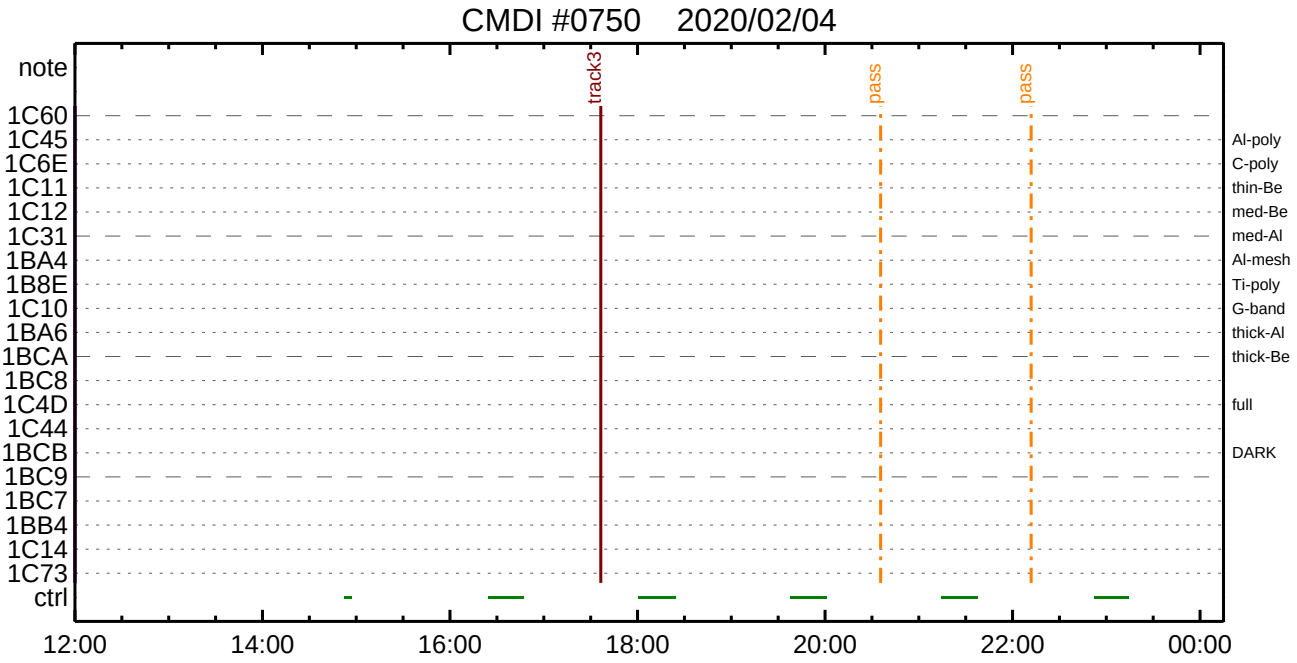
Flare Detection

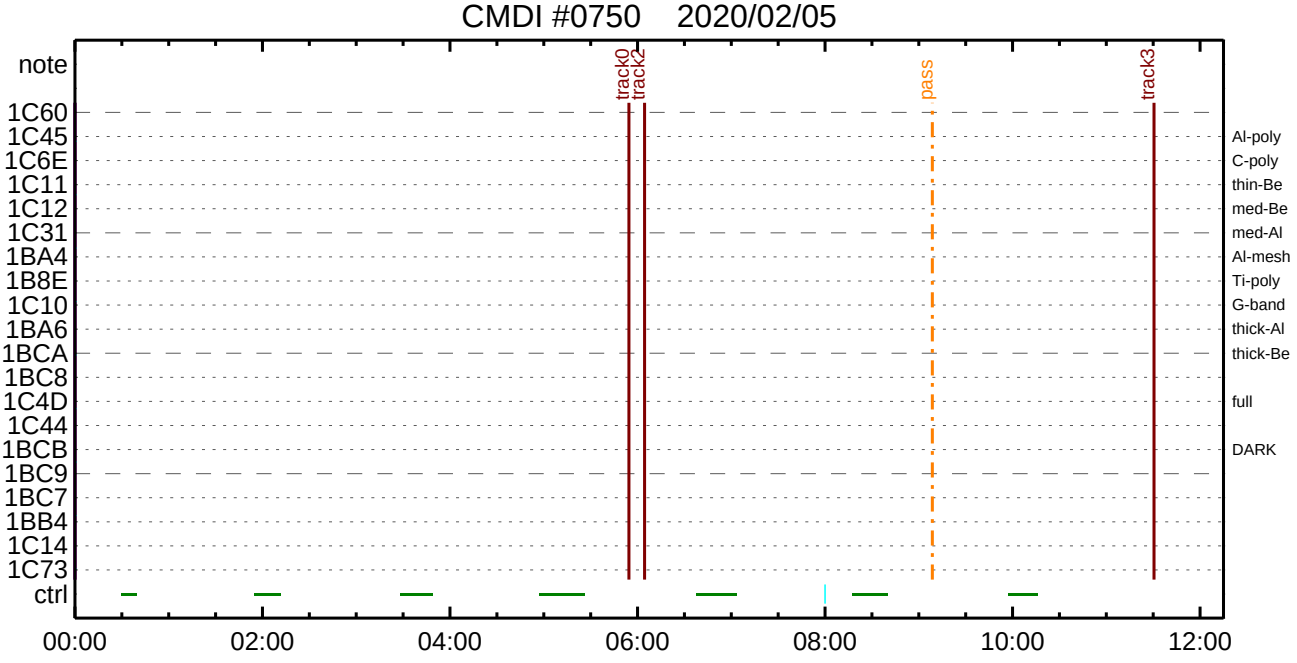
FLD Patrol

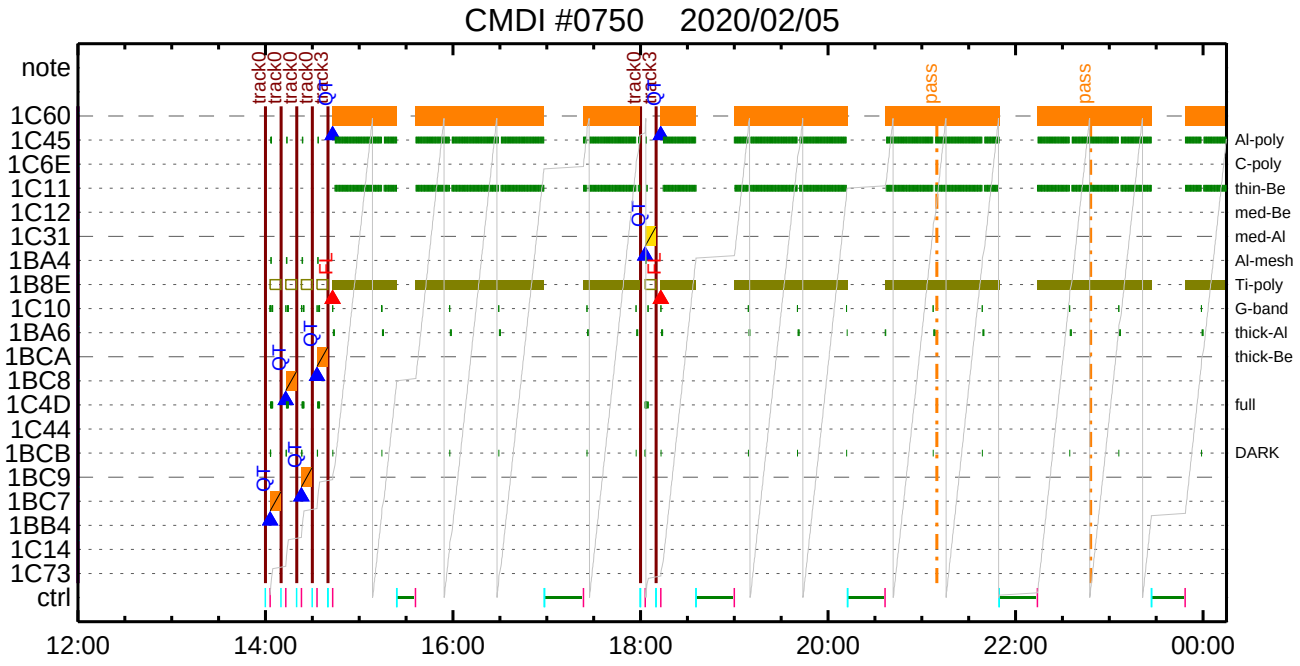
Term	Pointing (x, y)	Comment
02/05 14:40:18 - 02/05 18:00:18	Track (679.0, -483.3) @ 02/05 14:40:00	AR tracking
02/05 18:10:18 - 02/06 06:10:48	Track (693.0, -485.5) @ 02/05 18:10:00	AR tracking
02/06 06:20:48 - 02/08 11:02:00	Track (735.8, -493.8) @ 02/06 06:20:30	AR tracking

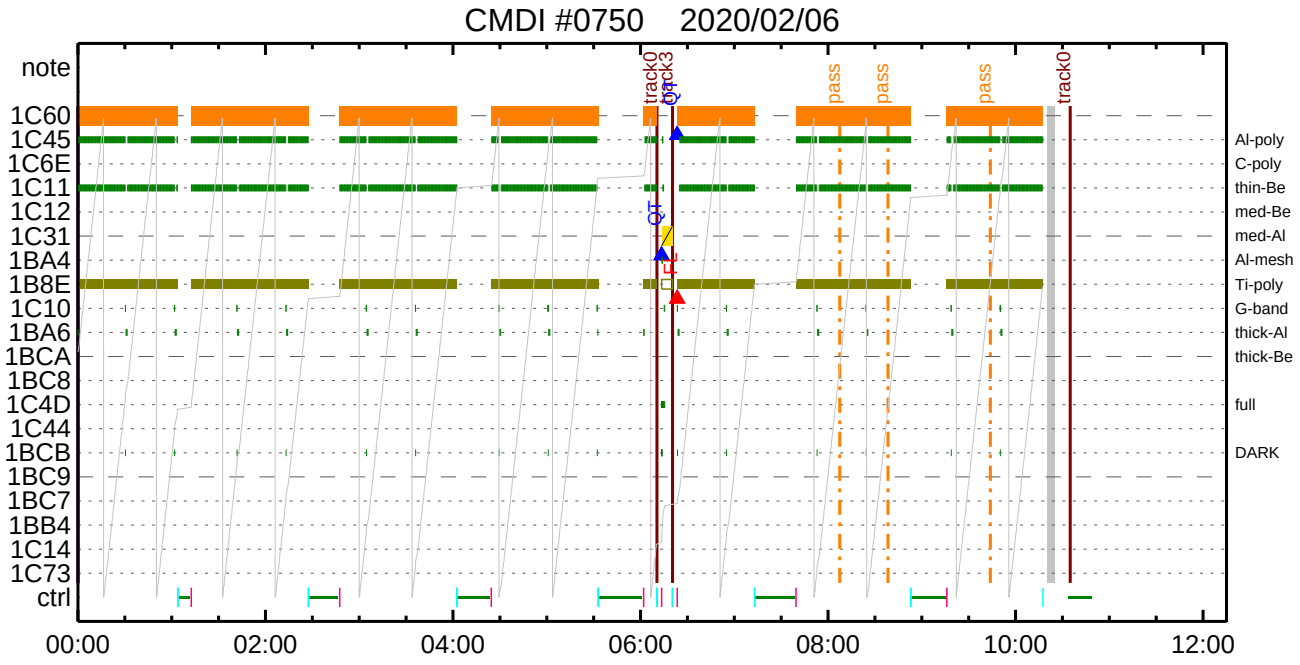
Al-poly/Open	Al-poly/Open	close	Safe	Norm	8ms	Obs	8x8		Q=50			30sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval

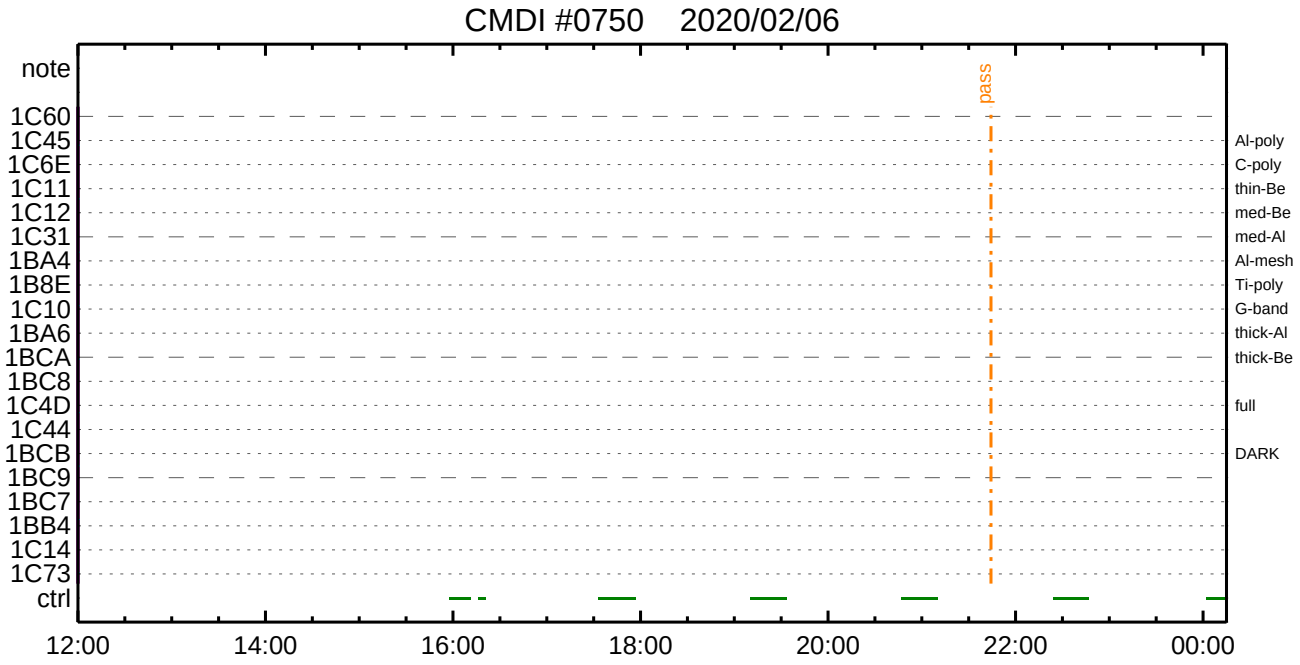

CMDI #0750 2020/02/04
note
before Tbl up
after Tbl up
20 1C5A 1C60 : AR (Filter-Ratio with Al/poly and thin-Be) with PF ...
19 1C45 1C45
18 1C6E 1C6E
17 1C11 1C11
16 1C12 1C12
15 1C31 1C31 : Synoptic Q95 2x2 - Al/mesh(64/512/2897) + Dark cal ...
14 1BA4 1BA4
13 1B8E 1B8E : Flare - multifilter 26 sec cadence (Be/thin, Be/me ...
12 1C10 1C10
11 1BA6 1BA6
10 1C13 1BCA : CCD Monitor During Bakeout - G-Band 1ms - 1kx1k - ...
9 1BDB 1BC8 : CCD Monitor During Bakeout - G-Band 1ms - 1kx1k - ...
8 1C4D 1C4D
7 1C44 1C44
6 1BCB 1BCB : AR (Filter-Ratio with Al/poly and thin-Be) with PF ...
5 1C0C 1BC9 : CCD Monitor During Bakeout - G-Band 1ms - 1kx1k - ...
4 1B96 1BC7 : CCD Monitor During Bakeout - G-band 1ms - 1kx1k - ...
3 1BB4 1BB4
2 1C14 1C14
1 1C73 1C73
ctrl Table upload : 3rd pass (2020/02/04 10:14:15)
pass
pass
obsv
obsv
track0
FL
OT
00:00
02:00
04:00
06:00
08:00
10:00
12:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK

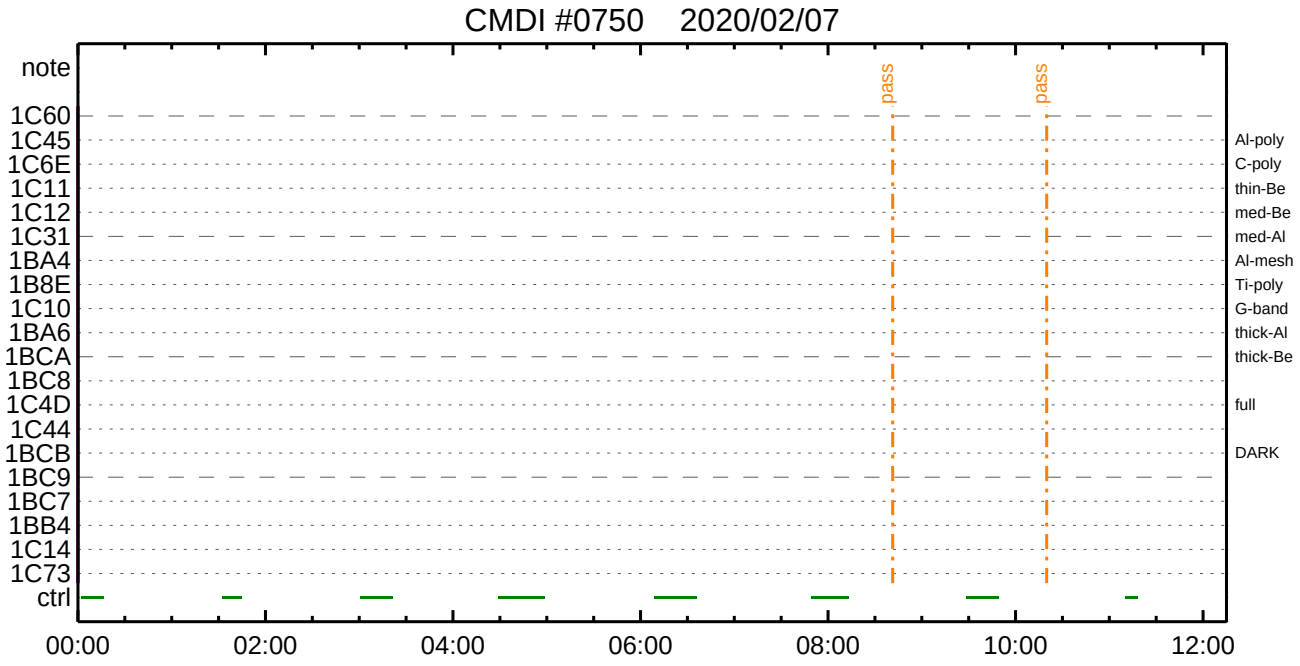

CMDI #0750 2020/02/04
note
1C60
1C45
1C6E
1C11
1C12
1C31
1BA4
1B8E
1C10
1BA6
1BCA
1BC8
1C4D
1C44
1BCB
1BC9
1BC7
1BB4
1C14
1C73
ctrl
track3
pass
pass
12:00
14:00
16:00
18:00
20:00
22:00
00:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK

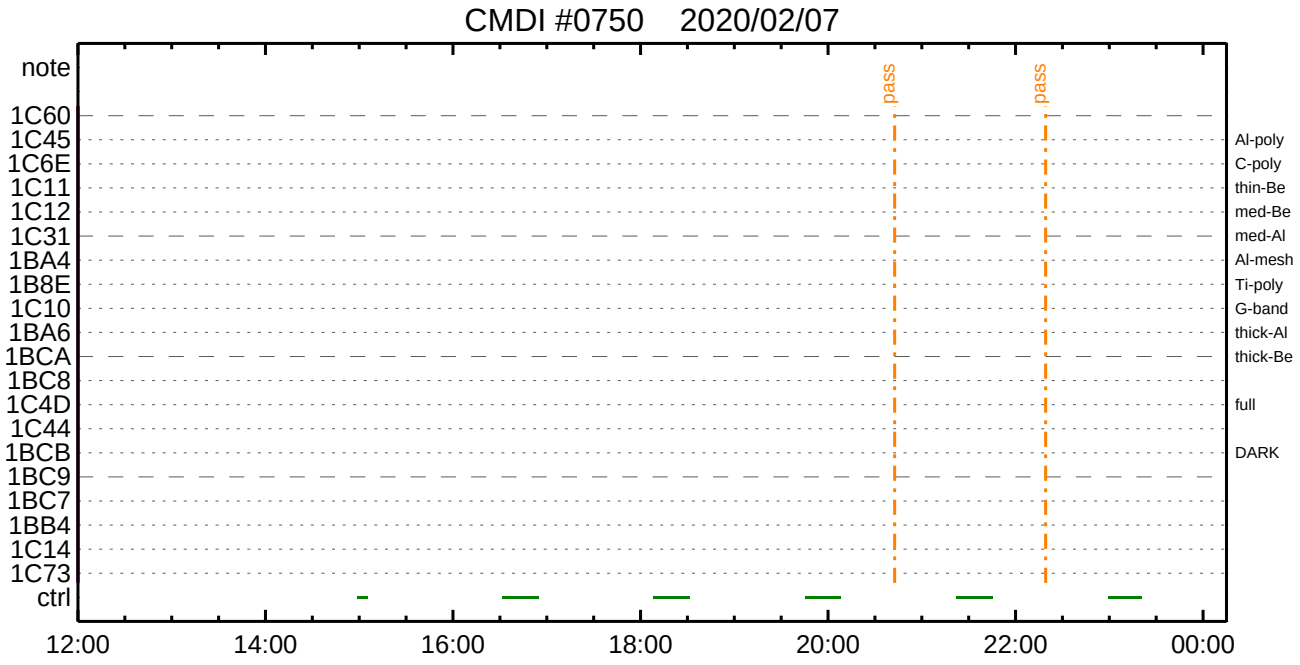

CMDI #0750 2020/02/05
note
1C60
1C45
1C6E
1C11
1C12
1C31
1BA4
1B8E
1C10
1BA6
1BCA
1BC8
1C4D
1C44
1BCB
1BC9
1BC7
1BB4
1C14
1C73
ctrl
track0
track2
pass
track3
00:00
02:00
04:00
06:00
08:00
10:00
12:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK

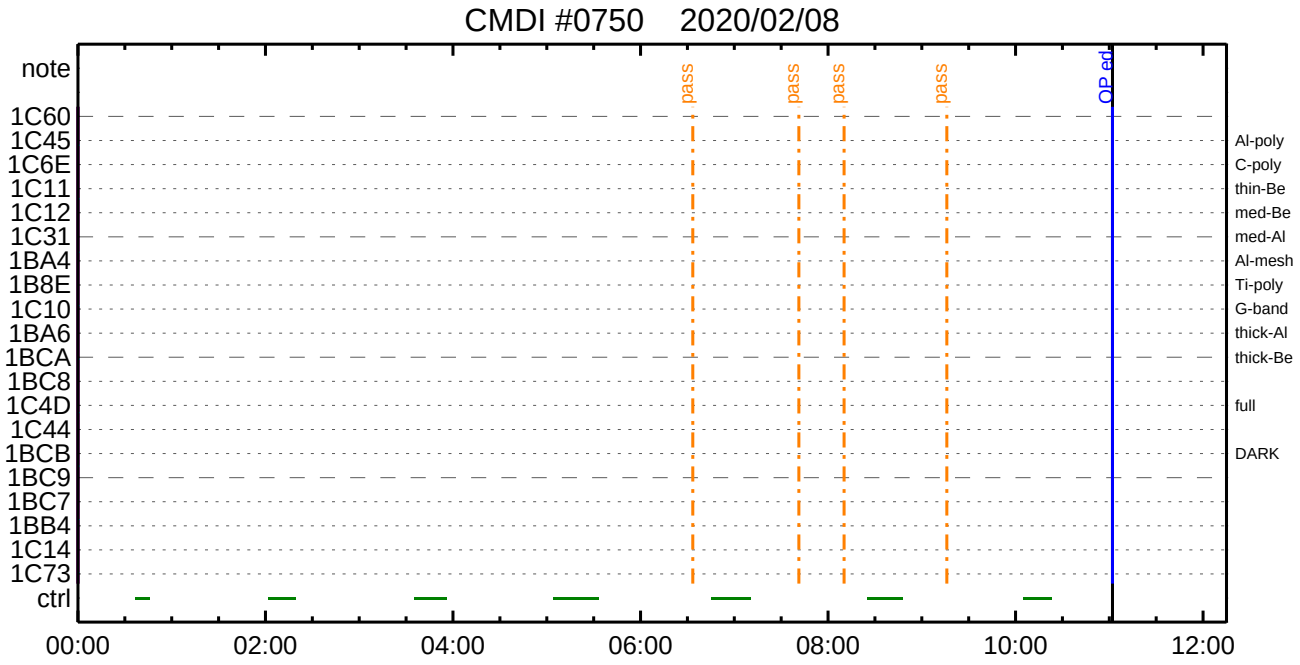

CMDI #0750 2020/02/05
note
1C60
1C45
1C6E
1C11
1C12
1C31
1BA4
1B8E
1C10
1BA6
1BCA
1BC8
1C4D
1C44
1BCB
1BC9
1BC7
1BB4
1C14
1C73
ctrl
track0
track3
QT
FE
pass
12:00
14:00
16:00
18:00
20:00
22:00
00:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK

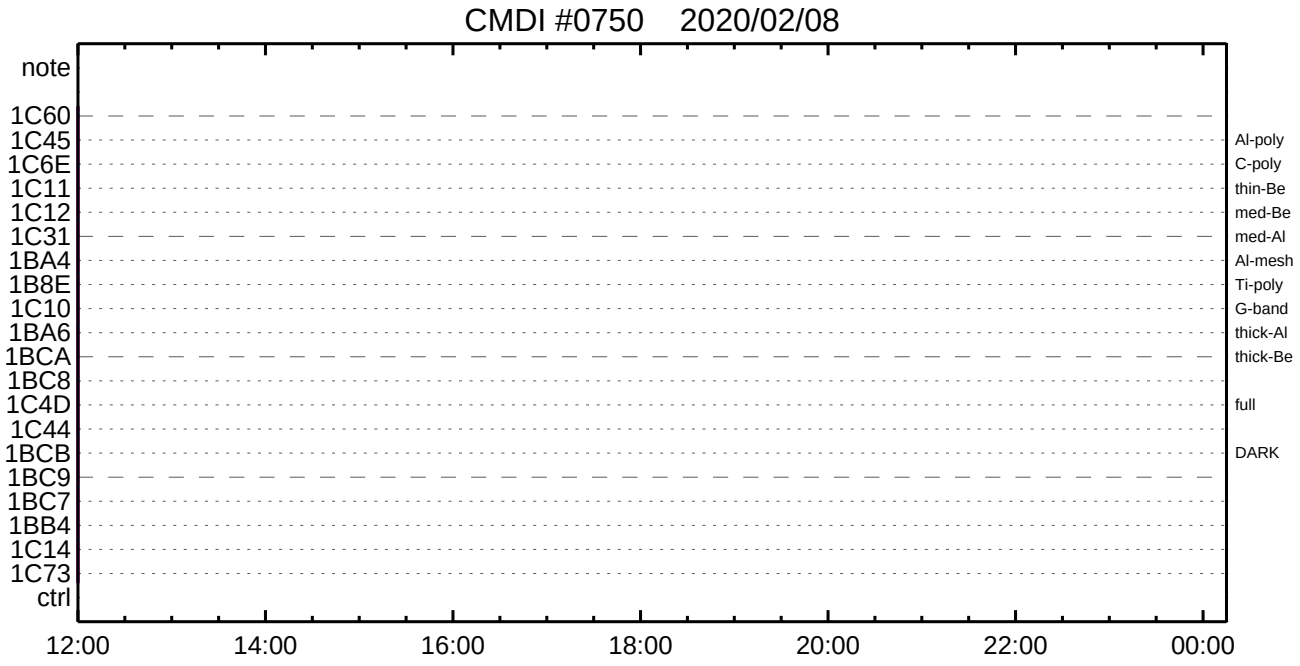

CMDI #0750 2020/02/06
note
1C60
1C45
1C6E
1C11
1C12
1C31
1BA4
1B8E
1C10
1BA6
1BCA
1BC8
1C4D
1C44
1BCB
1BC9
1BC7
1BB4
1C14
1C73
ctrl
track0
track3
QT
FE
pass
00:00
02:00
04:00
06:00
08:00
10:00
12:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK


CMDI #0750 2020/02/06
note
1C60
1C45
1C6E
1C11
1C12
1C31
1BA4
1B8E
1C10
1BA6
1BCA
1BC8
1C4D
1C44
1BCB
1BC9
1BC7
1BB4
1C14
1C73
ctrl
pass
12:00
14:00
16:00
18:00
20:00
22:00
00:00
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK


CMDI #0750 2020/02/07
note
1C60
1C45
1C6E
1C11
1C12
1C31
1BA4
1B8E
1C10
1BA6
1BCA
1BC8
1C4D
1C44
1BCB
1BC9
1BC7
1BB4
1C14
1C73
ctrl
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0750 2020/02/07
note
1C60
1C45
1C6E
1C11
1C12
1C31
1BA4
1B8E
1C10
1BA6
1BCA
1BC8
1C4D
1C44
1BCB
1BC9
1BC7
1BB4
1C14
1C73
ctrl
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00


CMDI #0750 2020/02/08
note
1C60
1C45
1C6E
1C11
1C12
1C31
1BA4
1B8E
1C10
1BA6
1BCA
1BC8
1C4D
1C44
1BCB
1BC9
1BC7
1BB4
1C14
1C73
ctrl
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 #0750 2020/02/08
note
1C60
1C45
1C6E
1C11
1C12
1C31
1BA4
1B8E
1C10
1BA6
1BCA
1BC8
1C4D
1C44
1BCB
1BC9
1BC7
1BB4
1C14
1C73
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00

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

main-593 2020-02-04 11:12:31 278 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007   +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡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. XÁ÷¿®µ¡ON
0016     C. ****************************
0017     C. ¢¨ ºÆÀ¸ Í×ÈÝ¤äLOS¤Þ¤ÇºÎ»Þ´Ö¤ò¹ÍÎ¸ ¤•¡¢ÉÔÍ×¤ÊXÂÓON¤Ï¹Ô¤Ê¤ï¤Ê¤¤¤³¤È¡£
0018     C.
0019   +. DC 03-B4 TCIA_XPA_ON/HI
0020     M. WAIT_SEC   1
0021   +  DC 03-84 TCIA_XMOD_ON
0022     M. WAIT_SEC   1
0023   +  DC 03-95 TCIA_XMOD_QPSK
0024     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     ON
0025     C.                      ¢¢[HK1_XPA_PWR_HI/LO]           EQ     HI
0026     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     ON
0027     C.                      ¢¢[HK1_XMOD_QPSK/PM]            EQ     QPSK
0028     C.
0029   . C. X¥Ð¥ó¥É¥í¥Ã¥¯¾õÂÖ¤¬°ÂÄê¤•¤¿¤é¡¢°Ê²¼¤ÎºÆÀ¸ ¼ê½ç¤ò¼Â¹Ô¤¹¤ë¡£
0030     C.
0031   . C. ***************
0032     C. DR PT1 ÄÌ¾ïºÆÀ¸
0033     C. ***************
0034     C. ¢¨ RESTART¡ÊPT1¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-150¤Ø¿Ê¤à¡£
0035     C.
0036   . C. ¡ãPT1ºÆÀ¸ ³«»Ï¡ä
0037   +. DC 01-29 DHU_S/X_VC4_OFF
0038   +  DC 06-C8 DR_PT1_REP_SEL
0039     BC       (01 00)
0040   +  DC 06-B3 DR_REP_START
0041   +  DC 01-32 DHU_X_VC4_ON
0042     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0043     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0044     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0045     C.
0046   . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Äº²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0047   +. DC 06-B3 DR_REP_START
0048   +  DC 01-32 DHU_X_VC4_ON
0049     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0050     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0051     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0052     C.
0053     C.
0054   . C. PT1ºÆÀ¸ ¤¬¼«Æ°Ää»ß¤•¤¿¸å¡¢¢°Ê²¼¤ò¼Â¹Ô¤¹¤ë¡£
0055     C. ¥¢¥ó¥Æ¥ÈÀÚÂØ¤äÅ•Äº²óÈò¤¬¶á¤¤¾ì¹ç¤Ï´°Î»¤¹¤ë¤Þ¤ÇÂÔ¤Ä¡£
0056     C.
0057   . C. ***************
0058     C. DR PT2 ÄÌ¾ïºÆÀ¸
0059     C. ***************
0060     C. ¢¨ RESTART¡ÊPT2¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-151¤Ø¿Ê¤à¡£
0061     C.
0062   . C. ¡ãPT2ºÆÀ¸ ³«»Ï¡ä
0063   +. DC 01-29 DHU_S/X_VC4_OFF
0064   +  DC 06-C8 DR_PT2_REP_SEL
0065     BC       (02 00)
0066   +  DC 06-B3 DR_REP_START
0067   +  DC 01-32 DHU_X_VC4_ON
0068     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0069     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0070     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0071     C.
0072   . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Äº²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0073   +. DC 06-B3 DR_REP_START
0074   +  DC 01-32 DHU_X_VC4_ON
0075     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0076     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0077     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0078     C.
0079   . C. ****************************
0080     C. DRºÆÀ¸ Ää»ß¡¢XÁ÷¿®µ¡OFF
0081     C. ****************************
0082     C.
0083   . C. ¡ãDRºÆÀ¸ Ää»ß¡ä
0084   +. DC 06-B4 DR_REP_STOP
0085   +  DC 01-29 DHU_S/X_VC4_OFF
0086     C.                      ¢¢[HK1_REP_STA/STP]             EQ     STOP
0087     C.                      ¢¢[HK1_S_VC4_ON/OFF]            EQ     OFF
0088     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     OFF
0089     C.
0090   . C. ¡ãXÁ÷¿®µ¡OFF¡ä
0091   +. DC 03-85 TCIA_XMOD_OFF
0092     M. WAIT_SEC   1
0093   +  DC 03-B5 TCIA_XPA_OFF
0094     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     OFF
0095     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     OFF
```

```
0096     C.
0097     C.
0098   . C. ****************************
0099     C. OP/OG¥í¡¼¥É¡¦¥À¥ó¥×
0100     C. ****************************
0101     C.
0102   . C. ¡ãOP/OG¥í¡¼¥É¡ä
0103   . S. OP    op-593:OP
0104     ()
0105   . S. OG    og-593:OG
0106     ()
0107     C.
0108   . C. ¡ãNMOG&OPÎÎ°è¥À¥ó¥×¡ä
0109     C. NMOG(0x200000-0x207FFF¡§ 32 kbyte)
0110   +. DC 01-23 DHU_DMA_DMP_PRM_SET
0111     BC       (20 00 7f 01 02)
0112     C.                       ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     40
0113     C.                       ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0114     C.                       ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
0115     C.                       ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0116     C.                       ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0117   +. DC 01-22 DHU_MODE_CHNG
0118     BC       (07 0b f8)
0119     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     7
0120     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0121     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0122     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0123     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0124   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0125     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0126   . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0127     C.
0128     C. NMOG(0x208000-0x20FFFF¡§ 32 kbyte)
0129   +. DC 01-23 DHU_DMA_DMP_PRM_SET
0130     BC       (20 80 7f 01 02)
0131     C.                       ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     41
0132     C.                       ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0133     C.                       ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
0134     C.                       ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0135     C.                       ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0136   +. DC 01-22 DHU_MODE_CHNG
0137     BC       (07 0b f8)
0138     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     7
0139     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0140     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0141     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0142     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0143   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0144     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0145   . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0146     C.
0147     C. NMOG(0x210000-0x2100FF¡§ 256byte)+OP(0x210100-0x2141FF: 16.25kbyte)
0148   +. DC 01-23 DHU_DMA_DMP_PRM_SET
0149     BC       (21 00 41 01 02)
0150     C.                       ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     42
0151     C.                       ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0152     C.                       ¢¢[HK1_DMP_BLOCK_NUM]           EQ     65
0153     C.                       ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0154     C.                       ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0155   +. DC 01-22 DHU_MODE_CHNG
0156     BC       (07 0b f8)
0157     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     7
0158     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0159     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0160     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0161     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0162   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0163     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0164   . C. RAM ID=NMOG,RAM ID=OP¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0165     C.
0166   . C. ***** °Ê²¼¤Ï¾Ã´¶Á°¤ËÉ¬¤ºÁ÷¿® (¾åµ-¥À¥ó¥×¼ê½ç¤òÅÓÃæ¤Ç½ª¤¨¤ë¾ì¹ç¤Ç¤â) *****
0167     C. DHU¥â¡¼¥É¡Ê¼ý¸¸¥ì¡¼¥È¡Ë¤òÌá¤¹
0168   +. DC 01-22 DHU_MODE_CHNG
0169     BC       (02 0a f8)
0170     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     2
0171     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
0172     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
0173     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0174     C.
0175   . C. ********************************
0176     C. TI-CMD SET (OPOG STOP/COPY/START)
0177     C. ********************************
0178     C.
0179   . C. NOTICE ¡§ OPOG UPLOAD¤¬Á÷¿®NG¤Î¾ì¹ç¡¢°Ê²¼¤ÎTI-CMDÁ÷¿®¤Ï¼Â¹Ô¤•¤Ê¤¤¤³¤È¡£
0180     C.           ¤Þ¤¿¡¢¢SET¤ÈDUMP¤ÏÆ±°ì¥Ñ¥¹¤Ç¹Ô¤¦¤³¤È¡£
0181     C.
0182   . C. TI¥³¥Þ¥ó¥É¤òÅÐÏ¿(UT)
0183   +. TI 2020-02-04 11:20:00.0
0184     DC 01-B3 DHU_OP_STOP
0185     C.                       ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0186     C.
0187   +. TI 2020-02-04 11:20:01.0
0188     DC 01-B4 DHU_OP_COPY
0189     C.                       ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0190     C.
0191   +. TI 2020-02-04 11:20:01.0
0192     DC 01-B5 DHU_OPOG_COPY
0193     C.                       ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
```

```
0194     C.
0195   +. TI 2020-02-04 11:24:59.5
0196     DC 01-B2 DHU_OP_START
0197     C.                      ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0198     C.
0199     C. °Ê²¼¤ÏÄê¾ïÍÑ¤Î¥Á¥§¥Ã¥¯¹àÌÜ
0200     C.                      ¢¢[HK1_TI_CMD_ENA/DIS]          EQ     ENA
0201     C.                      ¢¢[HK1_TI_CMD_NUM]              EQ     4
0202     C.                      ¢¢[HK1_NEXT_EXEC_PIM]           EQ     DHU
0203     C.                      ¢¢[HK1_NEXT_EXEC_DC]            EQ     0xB3
0204     C.
0205    . C. ****************************
0206     C. TIÎÎ°è¥À¥ó¥×
0207     C. ****************************
0208     C.
0209     C. TI_TBL(0x03AB00-0x03AEFF¡§ 1024byte)
0210   +. DC 01-23 DHU_DMA_DMP_PRM_SET
0211     BC       (03 ab 03 01 02)
0212     C.                      ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     07
0213     C.                      ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     2B
0214     C.                      ¢¢[HK1_DMP_BLOCK_NUM]           EQ     3
0215     C.                      ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0216     C.                      ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0217   +. DC 01-22 DHU_MODE_CHNG
0218     BC       (07 0b f8)
0219     C.                      ¢¢[HK1_PKT_FORM_NO]             EQ     7
0220     C.                      ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0221     C.                      ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0222     C.                      ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0223     C.                      ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0224     C.
0225    . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0226     C.                      ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0227     C.
0228    . C. RAM ID=TI_TBL¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0229     C.
0230    . C. DHU¥â¡¼¥É¡Ê¼ý½¸¥ì¡¼¥È¡Ë¤òÌá¤¹
0231   +. DC 01-22 DHU_MODE_CHNG
0232     BC       (02 0a f8)
0233     C.                      ¢¢[HK1_PKT_FORM_NO]             EQ     2
0234     C.                      ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
0235     C.                      ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
0236     C.                      ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0237     C.
0238    . C. Stop EIS observation and temporarily disable EIS mode changes
0239     C.
0240     C.
0241     C. ********** Start EIS operation (TI set) **********
0242     C. Execute, after the success of OP upload.
0243     C. Set EIS TI-commands
0244   +. TI 2020-02-04 11:24:30.0
0245     DC 07-FC EIS_MODE_MANU
0246     BC       (21 02)
0247   +. TI 2020-02-04 11:24:40.0
0248     DC 07-FC EIS_MODE_CHG_DIS
0249     BC       (22)
0250    . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    2 COUNTUP
0251     C. ************ End EIS operation (TI set) ***********
0252     C.
0253     C.
0254     C.
0255     C. ************ XRT START ***********
0256     C. Execute, after the success of OP upload.
0257   +. TI 2020-02-04 11:24:00.0
0258     DC 07-F0 MDP_XRT_MODE_STBY
0259     BC       (c3)
0260    . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1COUNTUP
0261     C.
0262     C. ************ XRT END ***********
0263     C.
0264    . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0265     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0266    . S. DC-BC dcbc-402:DCBC
0267     (MDP_known_event)
0268     C.
0269     C.
0270    . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0271    . S. DC-BC dcbc-153:DCBC
0272     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0273     C.
0274     C.
0275    . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0276     C.
0277    . C. ********** LOS **********
0278     C.
```

(a) Spacecraft Operation Procedure (real-commands)

```
main-594 2020-02-04 11:12:31 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 = 2050505.6 +- 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 12s
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 2020-02-04 11:24:50.0
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-595 2020-02-04 11:12:31 190 33 SOLAR-B MAIN //
0001     C.
0002    . C. *********** AOS ***********
0003     C.
0004    . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007    +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009    . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ËËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011    +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014    . C. ****************************
0015     C. XÁ÷¿®µ¡ON
0016     C. ****************************
0017     C. ¢¨ ºÆÀ¸ Í×ÈÝ¤äLOS¤Þ¤ÇÎ»þ´Ö¤ò¹ÍÎ¸ ¤•¡¢ÉÔÍ×¤ÊXÂÓON¤Ï¹Ô¤Ê¤ï¤Ê¤¤¤³¤È¡£
0018     C.
0019    +. DC 03-B4 TCIA_XPA_ON/HI
0020     M. WAIT_SEC   1
0021    +  DC 03-84 TCIA_XMOD_ON
0022     M. WAIT_SEC   1
0023    +  DC 03-95 TCIA_XMOD_QPSK
0024     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     ON
0025     C.                      ¢¢[HK1_XPA_PWR_HI/LO]           EQ     HI
0026     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     ON
0027     C.                      ¢¢[HK1_XMOD_QPSK/PM]            EQ     QPSK
0028     C.
0029    . C. X¥Ð¥ó¥É¥í¥Ã¥¯¾õÂÖ¤¬°ÂÄê¤•¤¿¤é¡¢°Ê²¼¤ÎºÆÀ¸ ¼ê½ç¤ò¼Â¹Ô¤¹¤ë¡£
0030     C.
0031    . C. ***************
0032     C. DR PT1 ÄÌ¾ïºÆÀ¸
0033     C. ***************
0034     C. ¢¨ RESTART¡ÊPT1¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-150¤Ø¿Ê¤à¡£
0035     C.
0036    . C. ¡ãPT1ºÆÀ¸ ³«»Ï¡ä
0037    +. DC 01-29 DHU_S/X_VC4_OFF
0038    +  DC 06-C8 DR_PT1_REP_SEL
0039     BC       (01 00)
0040    +  DC 06-B3 DR_REP_START
0041    +  DC 01-32 DHU_X_VC4_ON
0042     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0043     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0044     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0045     C.
0046    . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Äº²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0047    +. DC 06-B3 DR_REP_START
0048    +  DC 01-32 DHU_X_VC4_ON
0049     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0050     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0051     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0052     C.
0053     C.
0054    . C. PT1ºÆÀ¸ ¤¬¼«Æ°Ää»ß¤•¤¿¸ å¡¢°Ê²¼¤ò¼Â¹Ô¤¹¤ë¡£
0055     C. ¥¢¥ó¥Æ¥ÈÀÚÂØ¤äÅ•Äº²óÈò¤¬¶á¤¤¾ì¹ç¤Ï´°Î»¤¹¤ë¤Þ¤ÇÂÔ¤Ä¡£
0056     C.
0057    . C. ***************
0058     C. DR PT2 ÄÌ¾ïºÆÀ¸
0059     C. ***************
0060     C. ¢¨ RESTART¡ÊPT2¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-151¤Ø¿Ê¤à¡£
0061     C.
0062    . C. ¡ãPT2ºÆÀ¸ ³«»Ï¡ä
0063    +. DC 01-29 DHU_S/X_VC4_OFF
0064    +  DC 06-C8 DR_PT2_REP_SEL
0065     BC       (02 00)
0066    +  DC 06-B3 DR_REP_START
0067    +  DC 01-32 DHU_X_VC4_ON
0068     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0069     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0070     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0071     C.
0072    . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Äº²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0073    +. DC 06-B3 DR_REP_START
0074    +  DC 01-32 DHU_X_VC4_ON
0075     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0076     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0077     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0078     C.
0079    . C. ****************************
0080     C. DRºÆÀ¸ Ää»ß¡¢XÁ÷¿®µ¡OFF
0081     C. ****************************
0082     C.
0083    . C. ¡ãDRºÆÀ¸ Ää»ß¡ä
0084    +. DC 06-B4 DR_REP_STOP
0085    +  DC 01-29 DHU_S/X_VC4_OFF
0086     C.                      ¢¢[HK1_REP_STA/STP]             EQ     STOP
0087     C.                      ¢¢[HK1_S_VC4_ON/OFF]            EQ     OFF
0088     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     OFF
0089     C.
0090    . C. ¡ãXÁ÷¿®µ¡OFF¡ä
0091    +. DC 03-85 TCIA_XMOD_OFF
0092     M. WAIT_SEC   1
0093    +  DC 03-B5 TCIA_XPA_OFF
0094     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     OFF
0095     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     OFF
```

```
0096     C.
0097     C.
0098     C.
0099     C. ************ XRT START ************
0100     C.
0101  +. DC 07-F0 MDP_XRT_CTRL_MANU
0102     BC       (c1)
0103  +  DC 07-F0 MDP_XRT_MODE_STBY
0104     BC       (c3)
0105   . C. ----------- Success Verify ?              OK / NG____
0106     C.
0107     C. XRT Obs. Table Upload
0108   . S. RAM   ram-291:MDP_OBS_X
0109     ()
0110     C.
0111  +. DC 07-F0 MDP_DUMP_XRTTBL
0112     BC       (84 07 00 00 00 3a d4)
0113   . C. ----------- Comparison Check ?                      OK / ERR ____
0114     C.
0115     C.
0116  +. DC 07-F0 MDP_XRT_ROI_SET
0117     BC       (cd 01 b1 b1 04 04)
0118  +  DC 07-F0 MDP_XRT_ROI_SET
0119     BC       (cd 02 b1 b1 08 08)
0120  +  DC 07-F0 MDP_XRT_ROI_SET
0121     BC       (cd 03 b1 b1 08 08)
0122  +  DC 07-F0 MDP_XRT_ROI_SET
0123     BC       (cd 04 b1 b1 06 06)
0124  +  DC 07-F0 MDP_XRT_ROI_SET
0125     BC       (cd 05 85 83 06 06)
0126  +  DC 07-F0 MDP_XRT_ROI_SET
0127     BC       (cd 06 85 83 06 06)
0128  +  DC 07-F0 MDP_XRT_ROI_SET
0129     BC       (cd 07 85 83 08 08)
0130  +  DC 07-F0 MDP_XRT_ROI_SET
0131     BC       (cd 08 c0 c0 10 10)
0132  +  DC 07-F0 MDP_XRT_ROI_SET
0133     BC       (cd 09 80 80 20 20)
0134  +  DC 07-F0 MDP_XRT_ROI_SET
0135     BC       (cd 0a 40 c0 10 10)
0136  +  DC 07-F0 MDP_XRT_ROI_SET
0137     BC       (cd 0b 40 40 10 10)
0138  +  DC 07-F0 MDP_XRT_ROI_SET
0139     BC       (cd 0c c0 40 10 10)
0140  +  DC 07-F0 MDP_XRT_ROI_SET
0141     BC       (cd 0d 80 80 20 08)
0142  +  DC 07-F0 MDP_XRT_ROI_SET
0143     BC       (cd 0e 80 80 08 20)
0144  +  DC 07-F0 MDP_XRT_ROI_SET
0145     BC       (cd 0f 80 80 06 06)
0146  +  DC 07-F0 MDP_XRT_ROI_SET
0147     BC       (cd 10 80 80 08 08)
0148  +  DC 07-F0 MDP_XRT_FLD_ENA
0149     BC       (d8)
0150  +  DC 07-F0 MDP_XRT_FLRCTRL_ENA
0151     BC       (c8)
0152  +  DC 07-F0 MDP_XRT_ARS_DIS
0153     BC       (d5)
0154  +  DC 07-F0 MDP_XRT_AEC_RESET
0155     BC       (d0)
0156  +  DC 07-F0 MDP_XRT_FLD_RESET
0157     BC       (da)
0158  +. DC 07-F0 MDP_XRT_QT_PROG_SET
0159     BC       (c4 06)
0160  +. DC 07-F0 MDP_XRT_FL_PROG_SET
0161     BC       (c5 0d)
0162   . C. ---------- Success Verify ?           OK / NG ____
0163     C.
0164     C.
0165   . C. All OK?   Yes--> Please Proceed. / No --> Stop here.
0166     C.
0167  +. DC 07-F0 MDP_XRT_MODE_OBSV
0168     BC       (c2)
0169  +. TI 2020-02-04 11:24:02.0
0170     DC 07-F0 MDP_XRT_MODE_OBSV
0171     BC       (c2)
0172   . C. ---------- Success Verify ?           OK / NG ____
0173     C.
0174     C. ************ XRT END ************
0175     C.
0176   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0177     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0178   . S. DC-BC dcbc-402:DCBC
0179     (MDP_known_event)
0180     C.
0181     C.
0182   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0183   . S. DC-BC dcbc-153:DCBC
0184     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0185     C.
0186     C.
0187   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0188     C.
0189   . C. *********** LOS ***********
0190     C.
```

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

2020/02/04  11:35:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 00 b3 75 01 f3
2020/02/04  17:36:30.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 03 00 00 00 00
2020/02/05  05:54:30.0  AOCS_ORe-point_Start_3_OG [0x099]
                                AOCU_NM              5 02-76 00 00 00 00 00
2020/02/05  06:04:30.0  AOCS_ORe-point_Start_4_OG [0x09a]
                                AOCU_NM              5 02-76 02 00 00 00 00
2020/02/05  08:00:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  08:00:02.0  XRT_TCIB_XRT_S_HTR_A_DIS_429_OG [0x1ad]
                                TCIB_XRT_S_HTR_A_DIS 0 04-C0
2020/02/05  11:30:30.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 03 00 00 00 00
2020/02/05  13:59:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  13:59:56.0  XRT_FOCUS_POSITION_439_OG [0x1b7]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2020/02/05  14:00:00.0  AOCS_ORe-point_Start_5_OG [0x09b]
                                AOCU_NM              5 02-76 00 2e f9 2e f9
2020/02/05  14:02:52.0  XRT_ARS_DIS_444_OG [0x1bc]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2020/02/05  14:02:54.0  XRT_FLRCTRL_DIS_428_OG [0x1ac]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2020/02/05  14:02:56.0  XRT_FLD_DIS_407_OG [0x197]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2020/02/05  14:02:58.0  XRT_QT_PROG_SET_442_OG [0x1ba]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 04
2020/02/05  14:03:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  14:09:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  14:09:56.0  XRT_FOCUS_POSITION_439_OG [0x1b7]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2020/02/05  14:10:00.0  AOCS_ORe-point_Start_6_OG [0x09c]
                                AOCU_NM              5 02-76 00 2e f9 d1 07
2020/02/05  14:12:52.0  XRT_ARS_DIS_444_OG [0x1bc]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2020/02/05  14:12:54.0  XRT_FLRCTRL_DIS_428_OG [0x1ac]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2020/02/05  14:12:56.0  XRT_FLD_DIS_407_OG [0x197]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2020/02/05  14:12:58.0  XRT_QT_PROG_SET_449_OG [0x1c1]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 09
2020/02/05  14:13:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  14:19:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  14:19:56.0  XRT_FOCUS_POSITION_439_OG [0x1b7]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2020/02/05  14:20:00.0  AOCS_ORe-point_Start_7_OG [0x09d]
                                AOCU_NM              5 02-76 00 d1 07 d1 07
2020/02/05  14:22:52.0  XRT_ARS_DIS_444_OG [0x1bc]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2020/02/05  14:22:54.0  XRT_FLRCTRL_DIS_428_OG [0x1ac]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2020/02/05  14:22:56.0  XRT_FLD_DIS_407_OG [0x197]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2020/02/05  14:22:58.0  XRT_QT_PROG_SET_421_OG [0x1a5]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 05
2020/02/05  14:23:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  14:29:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  14:29:56.0  XRT_FOCUS_POSITION_439_OG [0x1b7]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2020/02/05  14:30:00.0  AOCS_ORe-point_Start_8_OG [0x09e]
                                AOCU_NM              5 02-76 00 d1 07 2e f9
2020/02/05  14:32:52.0  XRT_ARS_DIS_444_OG [0x1bc]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2020/02/05  14:32:54.0  XRT_FLRCTRL_DIS_428_OG [0x1ac]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2020/02/05  14:32:56.0  XRT_FLD_DIS_407_OG [0x197]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2020/02/05  14:32:58.0  XRT_QT_PROG_SET_433_OG [0x1b1]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0a
2020/02/05  14:33:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  14:39:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  14:39:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  14:39:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2020/02/05  14:40:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 03 00 00 00 00
2020/02/05  14:40:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2020/02/05  14:40:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2020/02/05  14:40:22.0  XRT_AEC_RESET_448_OG [0x1c0]
```

```
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2020/02/05  14:40:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2020/02/05  14:40:26.0  XRT_FLD_RESET_434_OG [0x1b2]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/05  14:42:56.0  XRT_QT_PROG_SET_445_OG [0x1bd]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2020/02/05  14:42:58.0  XRT_FL_PROG_SET_440_OG [0x1b8]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 0d
2020/02/05  14:43:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  15:24:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  15:24:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  15:24:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/05  15:24:06.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/05  15:27:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/05  15:35:00.0  XRT_Custom_430_OG [0x1ae]
2020/02/05  15:36:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  16:58:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  16:58:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  16:58:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/05  16:58:36.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/05  17:01:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/05  17:22:30.0  XRT_Custom_430_OG [0x1ae]
2020/02/05  17:23:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  17:59:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  17:59:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  17:59:58.0  XRT_FOCUS_POSITION_406_OG [0x196]
                                        XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2020/02/05  18:00:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                        AOCU_NM              5 02-76 00 00 00 00 00
2020/02/05  18:00:18.0  XRT_FLD_DIS_409_OG [0x199]
                                        MDP_XRT_FLD_DIS      1 07-F0 d9
2020/02/05  18:00:20.0  XRT_FLRCTRL_DIS_413_OG [0x19d]
                                        MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2020/02/05  18:00:22.0  XRT_ARS_DIS_443_OG [0x1bb]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2020/02/05  18:02:58.0  XRT_QT_PROG_SET_401_OG [0x191]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 0f
2020/02/05  18:03:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  18:09:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  18:09:56.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  18:09:58.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2020/02/05  18:10:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                        AOCU_NM              5 02-76 03 00 00 00 00
2020/02/05  18:10:18.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2020/02/05  18:10:20.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2020/02/05  18:10:22.0  XRT_AEC_RESET_448_OG [0x1c0]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2020/02/05  18:10:24.0  XRT_ARS_DIS_423_OG [0x1a7]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2020/02/05  18:10:26.0  XRT_FLD_RESET_434_OG [0x1b2]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/05  18:12:56.0  XRT_QT_PROG_SET_445_OG [0x1bd]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2020/02/05  18:12:58.0  XRT_FL_PROG_SET_440_OG [0x1b8]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 0d
2020/02/05  18:13:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  18:35:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  18:35:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  18:35:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/05  18:35:36.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/05  18:38:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/05  18:59:00.5  XRT_Custom_430_OG [0x1ae]
2020/02/05  19:00:00.5  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  20:12:30.0  XRT_CTRL_MANU_400_OG [0x190]
```

```
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  20:12:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  20:12:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/05  20:12:36.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/05  20:15:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/05  20:35:30.0  XRT_Custom_430_OG [0x1ae]
2020/02/05  20:36:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  21:49:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  21:49:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  21:49:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/05  21:49:36.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/05  21:52:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/05  22:13:00.0  XRT_Custom_430_OG [0x1ae]
2020/02/05  22:14:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/05  23:27:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  23:27:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/05  23:27:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/05  23:27:06.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/05  23:30:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/05  23:47:30.0  XRT_Custom_430_OG [0x1ae]
2020/02/05  23:48:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/06  01:04:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  01:04:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  01:04:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/06  01:04:06.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/06  01:07:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/06  01:11:30.0  XRT_Custom_430_OG [0x1ae]
2020/02/06  01:12:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/06  02:27:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  02:27:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  02:27:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/06  02:27:36.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/06  02:30:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/06  02:46:30.0  XRT_Custom_430_OG [0x1ae]
2020/02/06  02:47:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/06  04:02:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  04:02:32.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  04:02:34.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/06  04:02:36.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/06  04:05:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/06  04:23:30.5  XRT_Custom_430_OG [0x1ae]
2020/02/06  04:24:30.5  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/06  05:33:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  05:33:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  05:33:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/06  05:33:06.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/06  05:36:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/06  06:01:00.0  XRT_Custom_430_OG [0x1ae]
2020/02/06  06:02:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/06  06:10:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  06:10:26.0  XRT_CTRL_MANU_402_OG [0x192]
```

```
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  06:10:28.0  XRT_FOCUS_POSITION_406_OG [0x196]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2020/02/06  06:10:30.0  AOCS_ORe-point_Start_3_OG [0x099]
                                    AOCU_NM              5 02-76 00 00 00 00 00
2020/02/06  06:10:48.0  XRT_FLD_DIS_409_OG [0x199]
                                    MDP_XRT_FLD_DIS      1 07-F0 d9
2020/02/06  06:10:50.0  XRT_FLRCTRL_DIS_413_OG [0x19d]
                                    MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2020/02/06  06:10:52.0  XRT_ARS_DIS_443_OG [0x1bb]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2020/02/06  06:13:28.0  XRT_QT_PROG_SET_401_OG [0x191]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 0f
2020/02/06  06:13:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/06  06:20:24.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  06:20:26.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  06:20:28.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                    XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2020/02/06  06:20:30.0  AOCS_ORe-point_Start_2_OG [0x098]
                                    AOCU_NM              5 02-76 03 00 00 00 00
2020/02/06  06:20:48.0  XRT_FLD_ENA_411_OG [0x19b]
                                    MDP_XRT_FLD_ENA      1 07-F0 d8
2020/02/06  06:20:50.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                    MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2020/02/06  06:20:52.0  XRT_AEC_RESET_448_OG [0x1c0]
                                    MDP_XRT_AEC_RESET    1 07-F0 d0
2020/02/06  06:20:54.0  XRT_ARS_DIS_423_OG [0x1a7]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2020/02/06  06:20:56.0  XRT_FLD_RESET_434_OG [0x1b2]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/06  06:23:26.0  XRT_QT_PROG_SET_445_OG [0x1bd]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2020/02/06  06:23:28.0  XRT_FL_PROG_SET_440_OG [0x1b8]
                                    MDP_XRT_FL_PROG_SET  2 07-F0 c5 0d
2020/02/06  06:23:30.0  XRT_CTRL_AUTO_408_OG [0x198]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/06  07:13:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  07:13:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  07:13:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/06  07:13:06.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/06  07:16:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/06  07:38:30.0  XRT_Custom_430_OG [0x1ae]
2020/02/06  07:39:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/06  08:53:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  08:53:02.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  08:53:04.0  XRT_FLD_RESET_415_OG [0x19f]
                                    MDP_XRT_FLD_RESET    1 07-F0 da
2020/02/06  08:53:06.0  XRT_PREFLR_STRT_435_OG [0x1b3]
                                    MDP_XRT_PREFLR_STRT  1 07-F0 e8
2020/02/06  08:56:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                    MDP_XRT_PREFLR_STOP  1 07-F0 e9
2020/02/06  09:15:00.0  XRT_Custom_430_OG [0x1ae]
2020/02/06  09:16:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2020/02/06  10:17:30.0  XRT_CTRL_MANU_402_OG [0x192]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2020/02/06  10:35:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                    AOCU_NM              5 02-76 00 00 00 00 00
```