XRT Timeline to be uploaded on 2013/04/18

Period: 2013/04/18 10:49:00 - 2013/04/23 10:38:00

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

XOB #196B: Synoptic Q95 2x2 - Al/mesh(44/1024) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 -1x1 2048x512) + Ti-poly(88/2048) + Thin-Be(25

Term	Pointing (x, y)	Comment
04/19 17:38:00 - 04/19 17:45:00	Fixed (0.0, 0.0)	synoptic, shifted -25.0 min
04/20 06:00:00 - 04/20 06:06:54	Fixed (0.0, 0.0)	synoptic, shifted -3.0 min

PROG= 08 1-time(s)

Subr= 1 1-time(s) 14.0sec

Seqn= 16 1-time(s) 4.0sec

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	44ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	1.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 5 1-time(s) 2.0sec

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

Seqn= 26 1-time(s) 4.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Ti-poly	Open/Ti-poly	close	Safe	Norm	86ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Ti-poly	Open/Ti-poly	close	Safe	Norm	2.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 19 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
thin-Be/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
thin-Be/Open	thin-Be/Open	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	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	8ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 12 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	close	Safe	Norm	32ms	Obs	1x1	2048x2048 (1024, 1024)	DPCM	0	0	2.0sec

XOB #1982: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 1st Quadrant - Al/mesh, Ti/Poly-long - w leak image-33 ms

Term	Pointing (x, y)	Comment
04/19 18:28:00 - 04/19 18:34:54	Fixed (-528.4, -528.4)	# XRT quadrant observations 1/4

PROG= 03 1-time(s)

Subr= 1 1-time(s) 12.0sec

Seqn= 1 1-time(s) 12.0sec

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	44ms	Obs	1x1	1024x1024 (1536, 1536)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	44ms	Obs	1x1	1024x1024 (1536, 1536)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	1024x1024 (1536, 1536)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	1024x1024 (1536, 1536)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 6 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/Ti-poly	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 12 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	close	Safe	Norm	32ms	Obs	1x1	2048x2048 (1024, 1024)	DPCM	0	0	2.0sec

Seqn= 7 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	12ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

XOB #1983: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 2nd Quadrant - Al/mesh, Ti/Poly-long - w leak image-33 ms

Term	Pointing (x, y)	Comment
04/19 18:38:00 - 04/19 18:44:54	Fixed (528.4, -528.4)	# 2/4

PROG= 20 1-time(s)

Subr= 1 1-time(s) 12.0sec

Seqn= 2 1-time(s) 12.0sec

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	44ms	Obs	1x1	1024x1024 (512, 1536)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	44ms	Obs	1x1	1024x1024 (512, 1536)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	1024x1024 (512, 1536)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	1024x1024 (512, 1536)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 6 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/Ti-poly	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 12 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	close	Safe	Norm	32ms	Obs	1x1	2048x2048 (1024, 1024)	DPCM	0	0	2.0sec

Seqn= 7 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	12ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

XOB #1984: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 3rd Quadrant - Al/mesh, Ti/Poly-long - w leak image-33 ms

Term	Pointing (x, y)	Comment
04/19 18:48:00 - 04/19 18:54:54	Fixed (528.4, 528.4)	# 3/4

PROG= 19 1-time(s)

Subr= 1 1-time(s) 12.0sec

Seqn= 3 1-time(s) 12.0sec

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	44ms	Obs	1x1	1024x1024 (512, 512)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	44ms	Obs	1x1	1024x1024 (512, 512)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	1024x1024 (512, 512)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	1024x1024 (512, 512)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 6 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/Ti-poly	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 2-time(s) 2.0sec

Seqn= 12 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	close	Safe	Norm	32ms	Obs	1x1	2048x2048 (1024, 1024)	DPCM	0	0	2.0sec

Seqn= 7 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	12ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

XOB #1985: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 4th Quadrant - Al/mesh, Ti/Poly-long - w leak image-33 ms

Term	Pointing (x, y)	Comment
04/19 18:58:00 - 04/19 19:04:54	Fixed (-528.4, 528.4)	# 4/4

PROG= 04 1-time(s)

Subr= 1 1-time(s) 12.0sec

Seqn= 4 1-time(s) 12.0sec

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	44ms	Obs	1x1	1024x1024 (1536, 512)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	44ms	Obs	1x1	1024x1024 (1536, 512)	Q=90	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	1024x1024 (1536, 512)	Q=98	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	1024x1024 (1536, 512)	Q=98	0	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 6 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/Ti-poly	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Subr= 3 1-time(s) 2.0sec

Seqn= 12 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	close	Safe	Norm	32ms	Obs	1x1	2048x2048 (1024, 1024)	DPCM	0	0	2.0sec

Seqn= 7 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	12ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

XOB #196C: AR Standard-B(Morphology) with PFB 384 FOV, thin-Be (384FOV) + multifilter (512FOV) context, at 1064 1048, 24s-cad - shorter G-band (33ms

Term	Pointing (x, y)	Comment
04/19 19:08:00 - 04/20 05:56:54	Track (401.9, -260.0) @ 04/19 19:05:00	# AR 11723.
04/20 06:10:00 - 04/20 09:09:00	Track (483.5, -264.7) @ 04/20 06:07:00	# AR 11723.

PROG= 02 Inf.-time(s)

Subr= 1 1-time(s) 2.0sec

Seqn= 18 1-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	16.0s	Obs	1x1	512x512 (1064, 1048)	Q=98	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	32ms	Obs	1x1	512x512 (1064, 1048)	Q=98	0	0	2.0sec

Seqn= 13 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	close	Safe	Norm	63ms	Obs	1x1	512x512 (1064, 1048)	DPCM	0	0	2.0sec

Seqn= 17 4-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	500ms	Obs	1x1	512x512 (1064, 1048)	Q=95	3	0	2.0sec
Open/thick-Al	Open/thick-Al	close	Safe	Norm	16.0s	Obs	1x1	512x512 (1064, 1048)	Q=95	3	0	2.0sec
Al-poly/Open	Al-poly/thick-Be	close	Safe	Norm	250ms	Obs	1x1	512x512 (1064, 1048)	Q=95	3	0	2.0sec
C-poly/Open	C-poly/thick-Al	close	Safe	Norm	250ms	Obs	1x1	512x512 (1064, 1048)	Q=95	3	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	1.00s	Obs	1x1	512x512 (1064, 1048)	Q=95	3	0	2.0sec
med-Be/Open	med-Be/Open	close	Safe	Norm	16.0s	Obs	1x1	512x512 (1064, 1048)	Q=95	3	0	2.0sec
med-Al/Open	med-Al/thick-Al	close	Safe	Norm	16.0s	Obs	1x1	512x512 (1064, 1048)	Q=95	3	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 20 150-time(s) 2.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
thin-Be/Open	med-Be/Open	close	Safe	Norm	1.41s	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	6.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	1.41s	Obs	1x1	384x384 (1064, 1048)	Q=95	3	1	6.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	1.41s	Obs	1x1	384x384 (1064, 1048)	Q=95	3	2	6.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	1.41s	Obs	1x1	384x384 (1064, 1048)	Q=95	3	3	6.0sec

Flare mode

XOB #1980: Flare obs. dynamics - thin-Be high cadence + context (med-Al,thick-Be -384x384 + Al-poly 512x512 2x2)-Gband (45ms)-15 loops-2

Term	Pointing (x, y)	Comment
04/19 19:08:00 - 04/20 05:56:54	Track (401.9, -260.0) @ 04/19 19:05:00	# AR 11723.
04/20 06:10:00 - 04/20 09:09:00	Track (483.5, -264.7) @ 04/20 06:07:00	# AR 11723.

PROG= 05 15-time(s)

Subr= 1 45-time(s) 10.0sec

Seqn= 9 1-time(s) 2.0sec

thin-Be/Open	med-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1024, 1024)	Q=95	3	0	2.0sec
Subr= 2 1-time(s) 10.0sec												
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= 15 1-time(s) 2.0sec												
Open/G-band	Open/G-band	open	Safe	Norm	44ms	Obs	1x1	384x384 (1024, 1024)	Q=98	0	0	2.0sec
Open/thick-Al	Open/thick-Al	close	Safe	Dark	1.00s	Obs	1x1	384x384 (1024, 1024)	Q=98	0	0	2.0sec
Open/thick-Al	Open/thick-Al	close	Safe	Dark	1.00s	Obs	2x2	512x512 (1024, 1024)	Q=98	0	0	2.0sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval

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

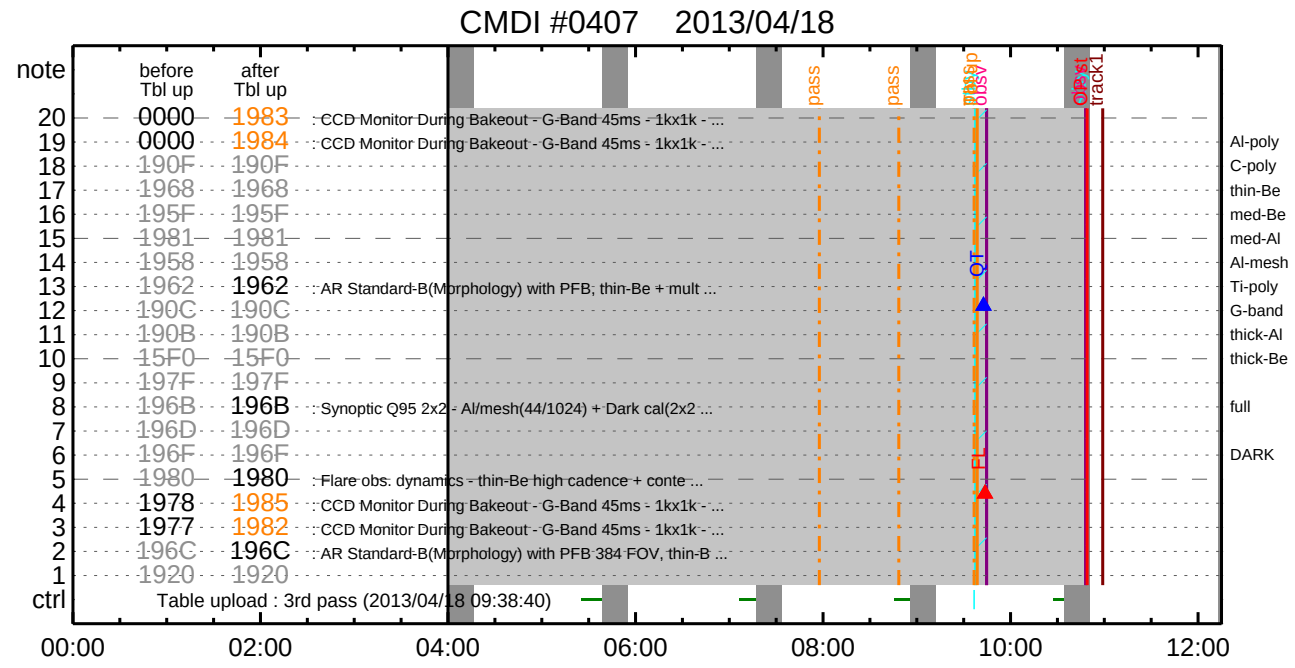
NOT USED

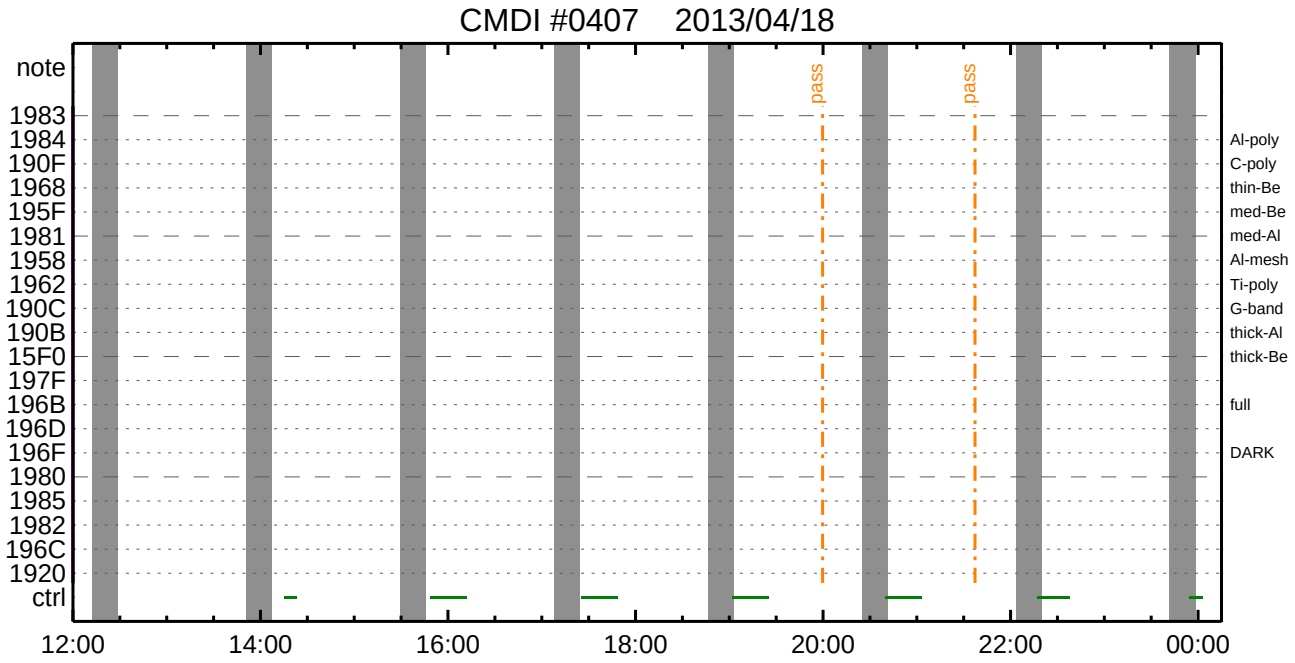
* * * * * Flare Detection * * * * *

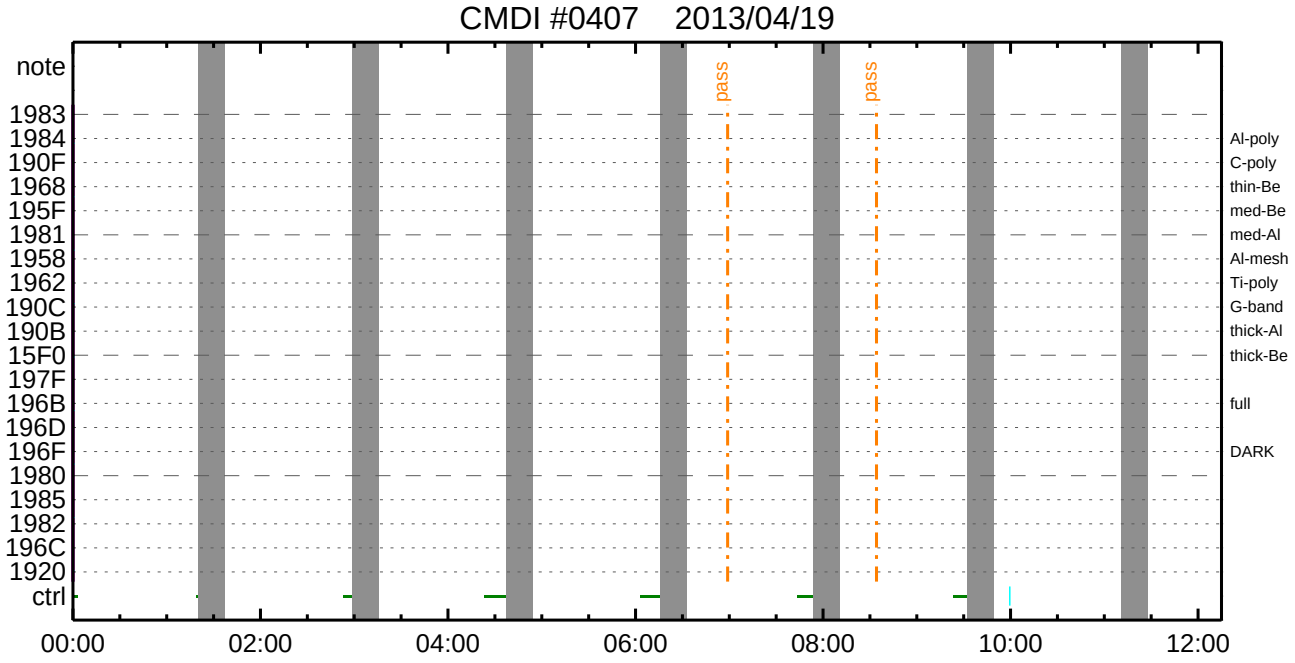
FLD Patrol

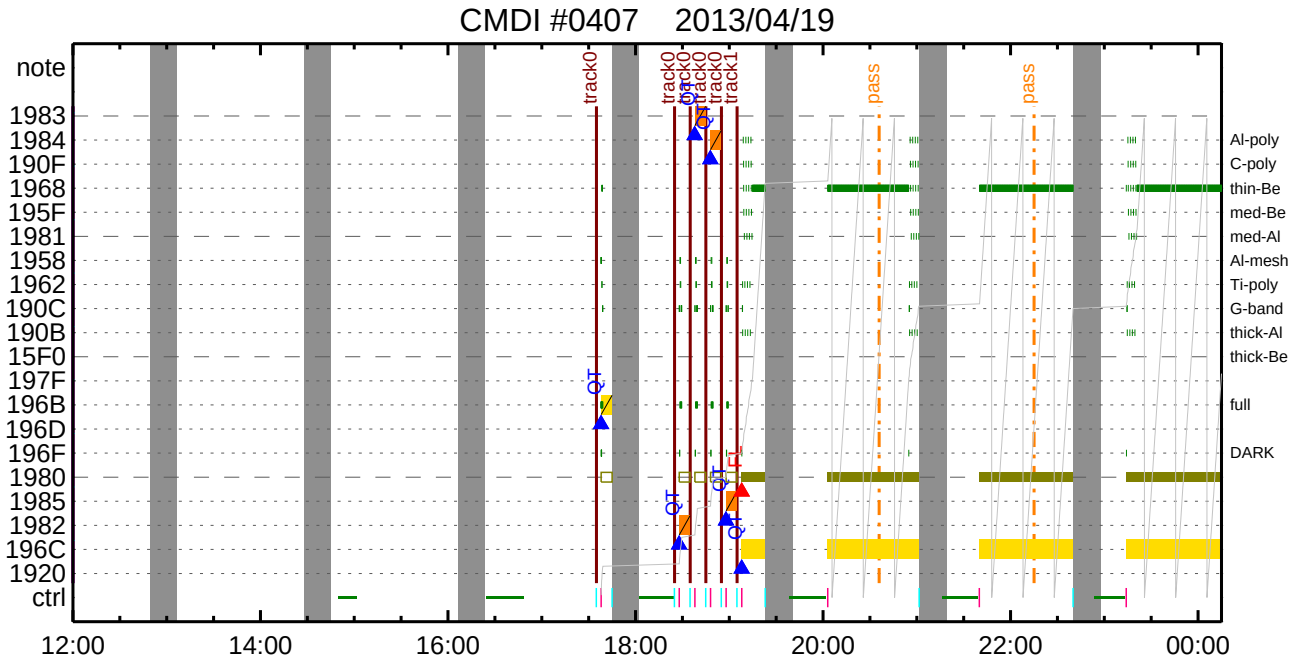
Term	Pointing (x, y)		Comment
04/19 19:05:16 - 04/20 05:57:16	Track (401.9, -260.0)	@ 04/19 19:05:00	# AR 11723.
04/20 06:07:16 - 04/23 10:38:00	Track (483.5, -264.7)	@ 04/20 06:07:00	# AR 11723.

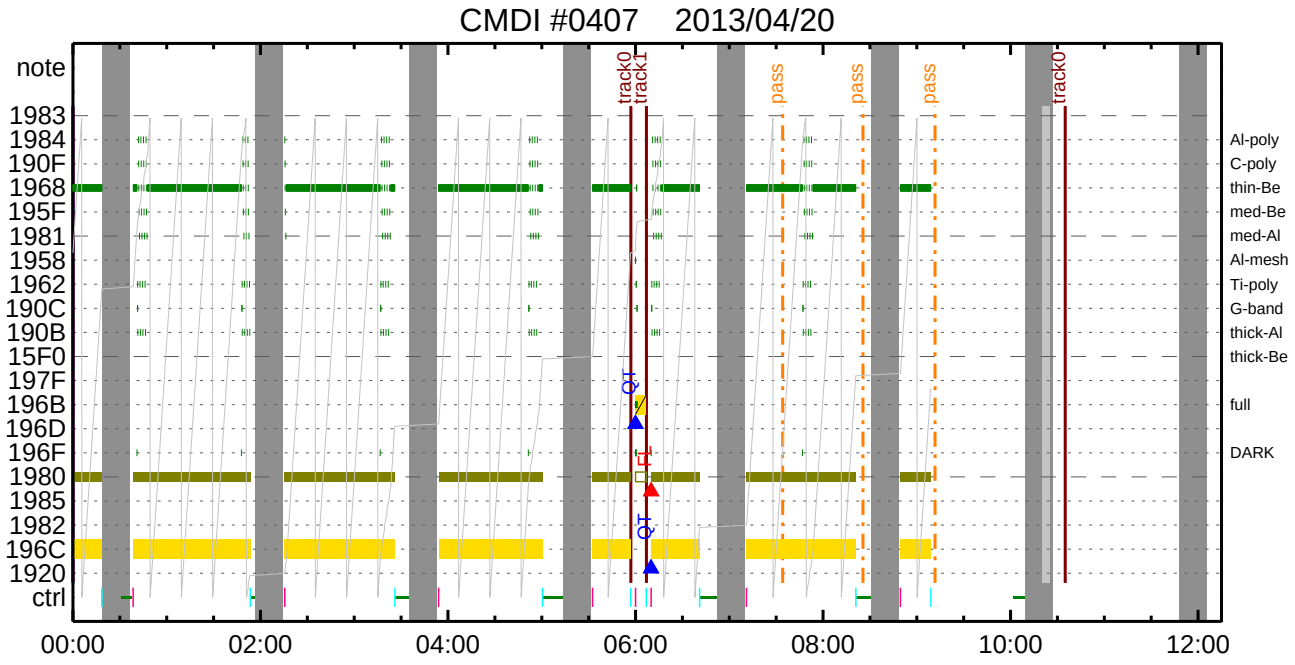
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8ms	Obs	8x8		Q=50			30sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval

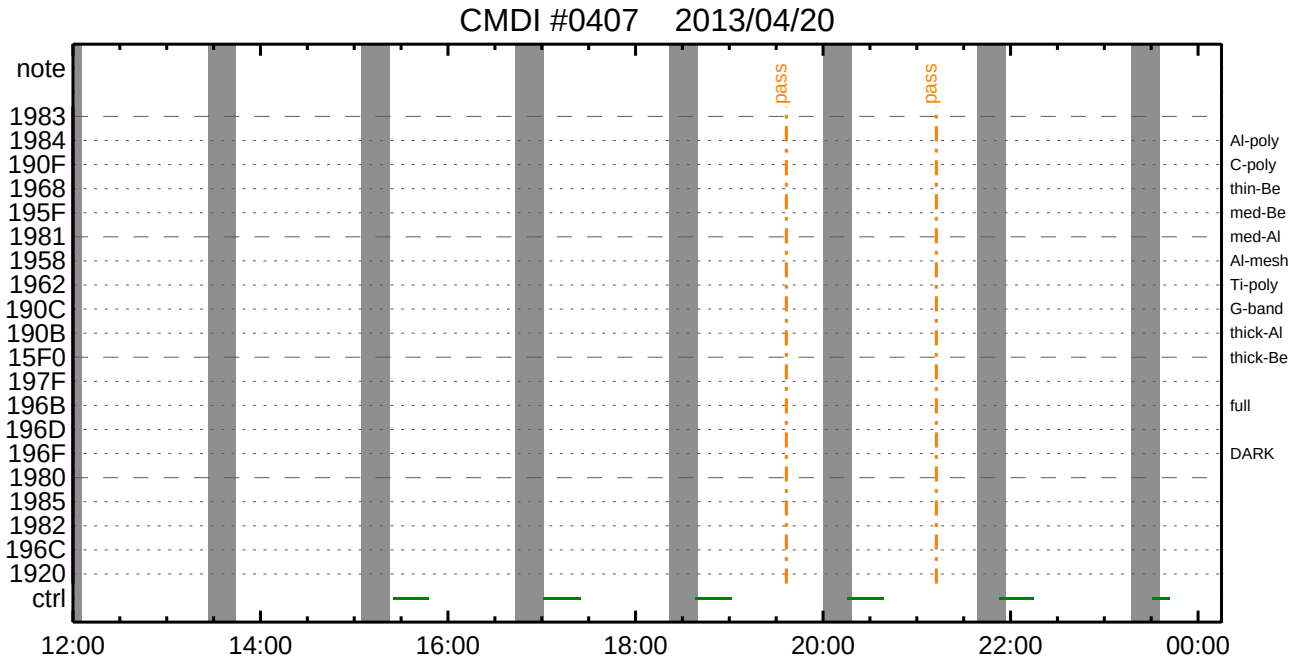

CMDI #0407 2013/04/18
note
before Tbl up
after Tbl up
20 0000 1983 : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
19 0000 1984 : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
18 190F 190F
17 1968 1968
16 195F 195F
15 1981 1981
14 1958 1958
13 1962 1962 : AR Standard-B(Morphology) with PFB, thin-Be + mult ...
12 190C 190C
11 190B 190B
10 15F0 15F0
9 197F 197F
8 196B 196B : Synoptic Q95 2x2 - Al/mesh(44/1024) + Dark cal(2x2 ...
7 196D 196D
6 196F 196F
5 1980 1980 : Flare obs. dynamics - thin-Be high cadence + conte ...
4 1978 1985 : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
3 1977 1982 : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
2 196C 196C : AR Standard-B(Morphology) with PFB 384 FOV, thin-B ...
1 1920 1920
ctrl Table upload : 3rd pass (2013/04/18 09:38:40)
pass
pass
QT
FL
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00

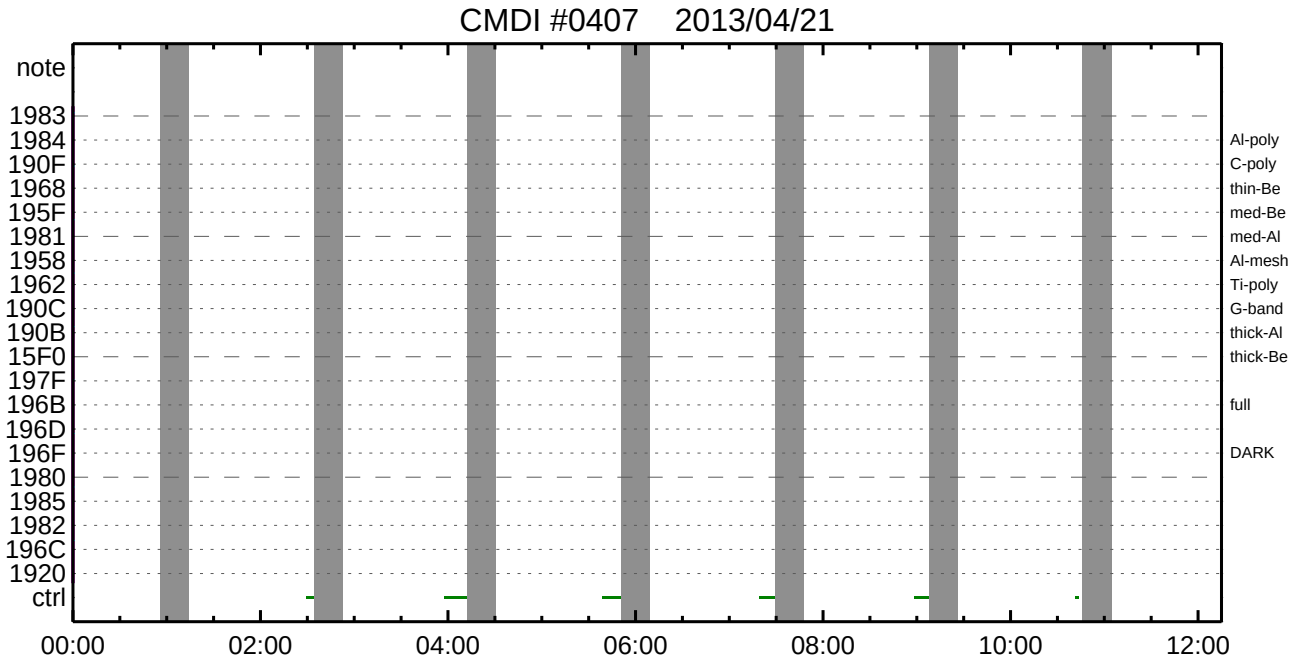

CMDI #0407 2013/04/18
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
ctrl
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00

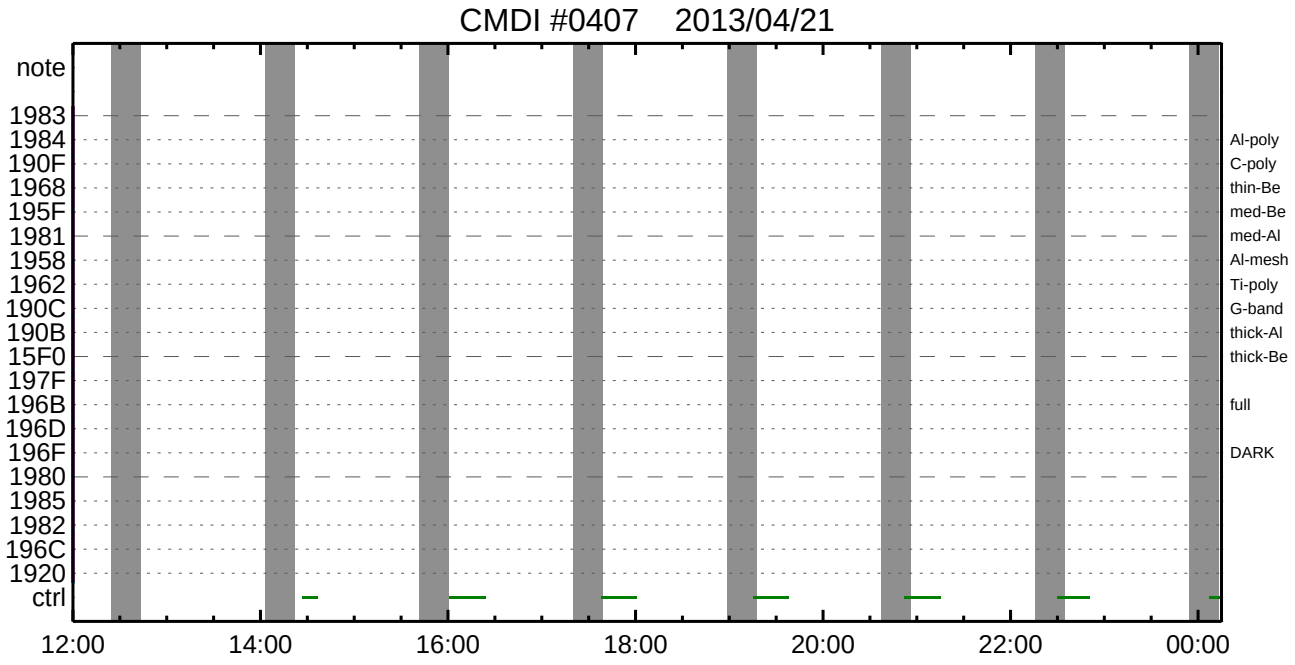

CMDI #0407 2013/04/19
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
ctrl
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00

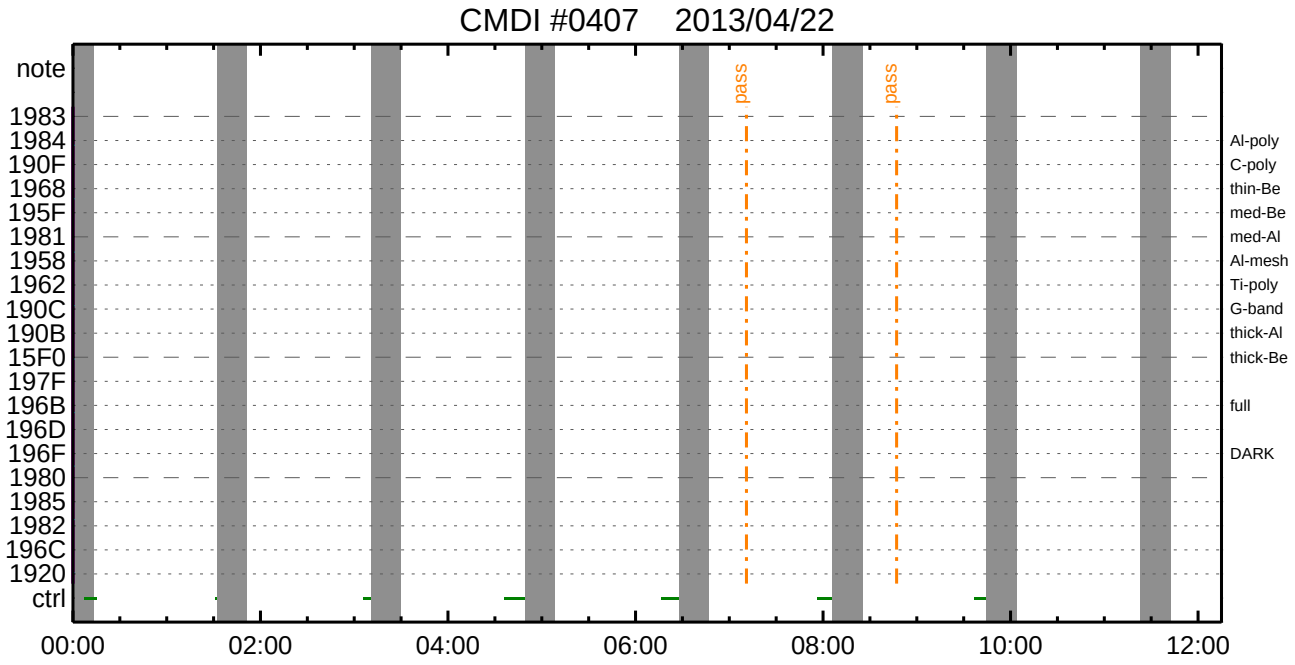

CMDI #0407 2013/04/19
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
ctrl
track0
track1
pass
QT
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00

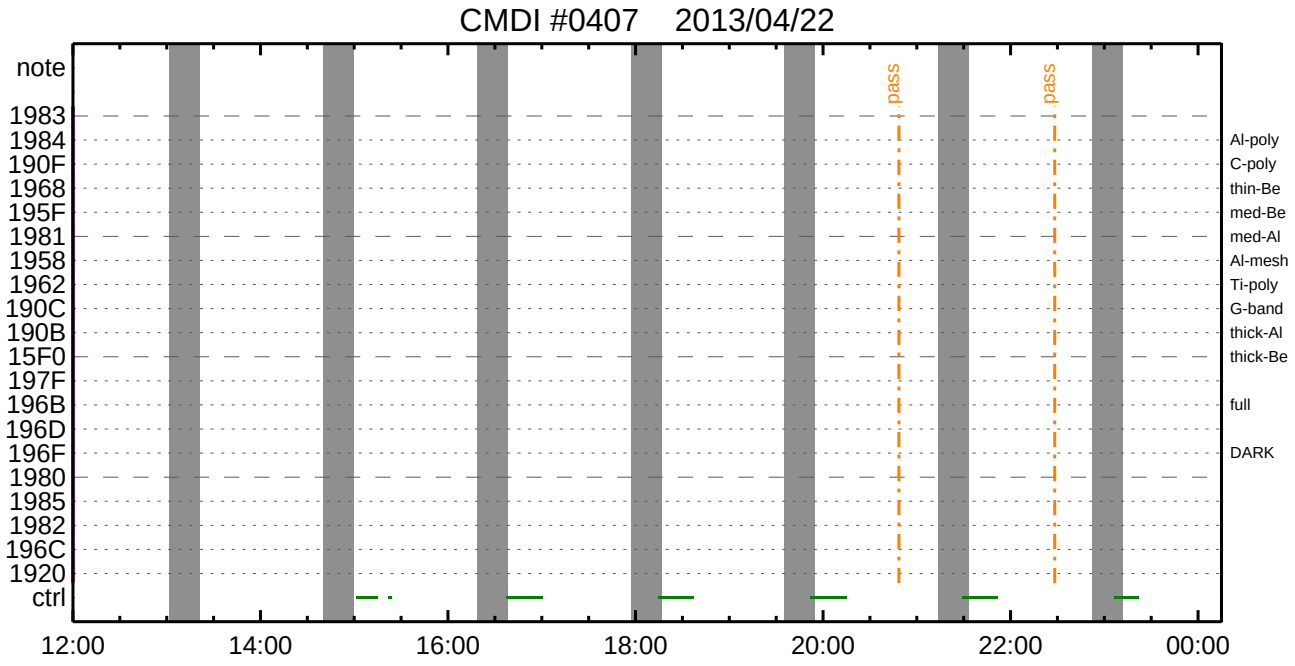

CMDI #0407 2013/04/20
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
ctrl
track0
track1
pass
QT
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00

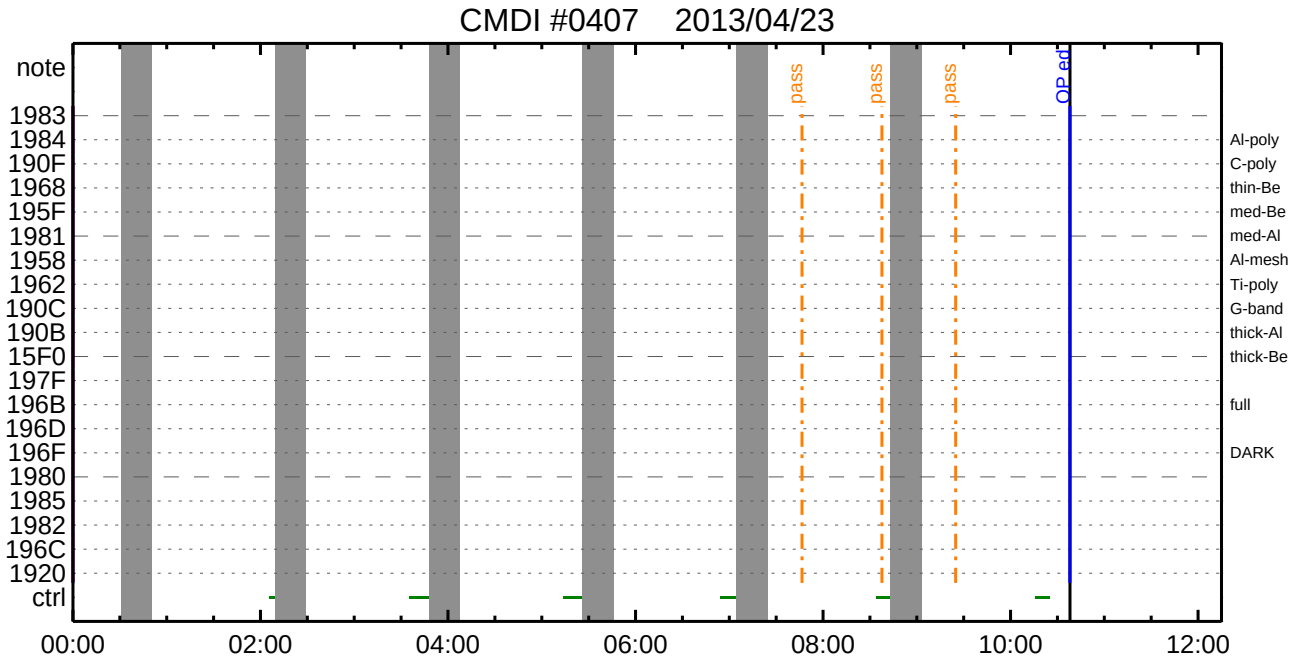

CMDI #0407 2013/04/20
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
ctrl
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00

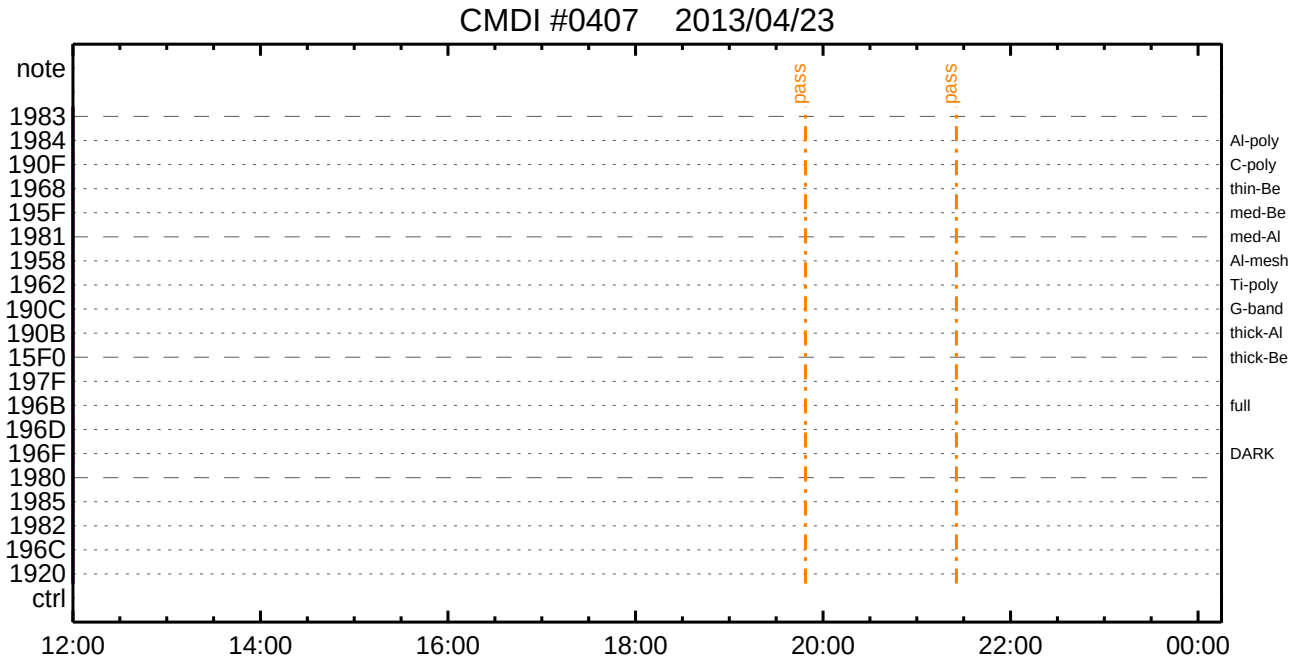

CMDI #0407 2013/04/21
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0407 2013/04/21
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00


CMDI #0407 2013/04/22
note
pass
pass
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
ctrl
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 #0407 2013/04/22
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
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 #0407 2013/04/23
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
ctrl
pass
pass
pass
OP end
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 #0407 2013/04/23
note
1983
1984
190F
1968
195F
1981
1958
1962
190C
190B
15F0
197F
196B
196D
196F
1980
1985
1982
196C
1920
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

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

main-594 2013-04-18 15:16:22 278 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007   +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ËËè½µ•îÍË¡Ë¤Ë¼ÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011   +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014   . C. ****************************
0015     C. XÁ÷¿®µ¡ON
0016     C. ****************************
0017     C. ¢¨ ºÆÀ¸ Í×ÈÝ¤äLOS¤Þ¤ÇÎ»þ´Ö¤ò¹ÍÎ¸ ¤•¡¢ÉÔÍ×¤ÊXÂÓON¤Ï¹Ô¤Ê¤ï¤Ê¤¤¤³¤È¡£
0018     C.
0019   +. DC 03-B4 TCIA_XPA_ON/HI
0020     M. WAIT_SEC   1
0021   +  DC 03-84 TCIA_XMOD_ON
0022     M. WAIT_SEC   1
0023   +  DC 03-95 TCIA_XMOD_QPSK
0024     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     ON
0025     C.                      ¢¢[HK1_XPA_PWR_HI/LO]           EQ     HI
0026     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     ON
0027     C.                      ¢¢[HK1_XMOD_QPSK/PM]            EQ     QPSK
0028     C.
0029   . C. X¥Ð¥ó¥É¥í¥Ã¥¯¾õÂÖ¤¬°ÂÄê¤•¤¿¤é¡¢°Ê²¼¤ÎºÆÀ¸ ¼ê½ç¤ò¼Â¹Ô¤¹¤ë¡£
0030     C.
0031   . C. ***************
0032     C. DR PT1 ÄÌ¾ïºÆÀ¸
0033     C. ***************
0034     C. ¢¨ RESTART¡ÊPT1¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-150¤Ø¿Ê¤à¡£
0035     C.
0036   . C. ¡ãPT1ºÆÀ¸ ³«»Ï¡ä
0037   +. DC 01-29 DHU_S/X_VC4_OFF
0038   +  DC 06-C8 DR_PT1_REP_SEL
0039     BC       (01 00)
0040   +  DC 06-B3 DR_REP_START
0041   +  DC 01-32 DHU_X_VC4_ON
0042     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0043     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0044     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0045     C.
0046   . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Äº²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0047   +. DC 06-B3 DR_REP_START
0048   +  DC 01-32 DHU_X_VC4_ON
0049     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0050     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0051     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0052     C.
0053     C.
0054   . C. PT1ºÆÀ¸ ¤¬¼«Æ°Ää»ß¤•¤¿¸ å¡¢°Ê²¼¤ò¼Â¹Ô¤¹¤ë¡£
0055     C. ¥¢¥ó¥Æ¥ÈÀÚÂØ¤äÅ•Äº²óÈò¤¬¶á¤¤¾ì¹ç¤Ï´°Î»¤¹¤ë¤Þ¤ÇÂÔ¤Ä¡£
0056     C.
0057   . C. ***************
0058     C. DR PT2 ÄÌ¾ïºÆÀ¸
0059     C. ***************
0060     C. ¢¨ RESTART¡ÊPT2¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-151¤Ø¿Ê¤à¡£
0061     C.
0062   . C. ¡ãPT2ºÆÀ¸ ³«»Ï¡ä
0063   +. DC 01-29 DHU_S/X_VC4_OFF
0064   +  DC 06-C8 DR_PT2_REP_SEL
0065     BC       (02 00)
0066   +  DC 06-B3 DR_REP_START
0067   +  DC 01-32 DHU_X_VC4_ON
0068     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0069     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0070     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0071     C.
0072   . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Äº²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0073   +. DC 06-B3 DR_REP_START
0074   +  DC 01-32 DHU_X_VC4_ON
0075     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0076     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0077     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0078     C.
0079   . C. ****************************
0080     C. DRºÆÀ¸ Ää»ß¡¢XÁ÷¿®µ¡OFF
0081     C. ****************************
0082     C.
0083   . C. ¡ãDRºÆÀ¸ Ää»ß¡ä
0084   +. DC 06-B4 DR_REP_STOP
0085   +  DC 01-29 DHU_S/X_VC4_OFF
0086     C.                      ¢¢[HK1_REP_STA/STP]             EQ     STOP
0087     C.                      ¢¢[HK1_S_VC4_ON/OFF]            EQ     OFF
0088     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     OFF
0089     C.
0090   . C. ¡ãXÁ÷¿®µ¡OFF¡ä
0091   +. DC 03-85 TCIA_XMOD_OFF
0092     M. WAIT_SEC   1
0093   +  DC 03-B5 TCIA_XPA_OFF
0094     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     OFF
0095     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     OFF
```

```
    C.
    C.
  . C. ****************************
    C. OP/OG¥í¡¼¥É¡¦¥À¥ó¥×
    C. ****************************
    C.
  . C. ¡ãOP/OG¥í¡¼¥É¡ä
  . S. OP    op-594:OP
    ()
  . S. OG    og-594:OG
    ()
    C.
  . C. ¡ãNMOG&OPÎÎºè¥À¥ó¥×¡ä
    C. NMOG(0x200000-0x207FFF¡§ 32 kbyte)
 +. DC 01-23 DHU_DMA_DMP_PRM_SET
    BC       (20 00 7f 01 02)
    C.                     ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     40
    C.                     ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
    C.                     ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
    C.                     ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
    C.                     ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
 +. DC 01-22 DHU_MODE_CHNG
    BC       (07 0b f8)
    C.                     ¢¢[HK1_PKT_FORM_NO]             EQ     7
    C.                     ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
    C.                     ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
    C.                     ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
  . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
  . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
    C.
    C. NMOG(0x208000-0x20FFFF¡§ 32 kbyte)
 +. DC 01-23 DHU_DMA_DMP_PRM_SET
    BC       (20 80 7f 01 02)
    C.                     ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     41
    C.                     ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
    C.                     ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
    C.                     ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
    C.                     ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
 +. DC 01-22 DHU_MODE_CHNG
    BC       (07 0b f8)
    C.                     ¢¢[HK1_PKT_FORM_NO]             EQ     7
    C.                     ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
    C.                     ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
    C.                     ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
  . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
  . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
    C.
    C. NMOG(0x210000-0x2100FF¡§ 256byte)+OP(0x210100-0x2141FF: 16.25kbyte)
 +. DC 01-23 DHU_DMA_DMP_PRM_SET
    BC       (21 00 41 01 02)
    C.                     ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     42
    C.                     ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
    C.                     ¢¢[HK1_DMP_BLOCK_NUM]           EQ     65
    C.                     ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
    C.                     ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
 +. DC 01-22 DHU_MODE_CHNG
    BC       (07 0b f8)
    C.                     ¢¢[HK1_PKT_FORM_NO]             EQ     7
    C.                     ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
    C.                     ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
    C.                     ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
  . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
  . C. RAM ID=NMOG,RAM ID=OP¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
    C.
  . C. ***** °Ê²¼¤Ï¾Ã´¶Á°¤ËÉ¬¤ºÁ÷¿® (¾åµ-¥À¥ó¥×¼ê½ç¤òÅÓÃæ¤Ç½ª¤¨¤ë¾ì¹ç¤Ç¤â) *****
    C. DHU¥â¡¼¥É¡Ê¼ý½¸¥ì¡¼¥È¡Ë¤ÎÌá¤¹
 +. DC 01-22 DHU_MODE_CHNG
    BC       (02 0a f8)
    C.                     ¢¢[HK1_PKT_FORM_NO]             EQ     2
    C.                     ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
    C.                     ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
    C.                     ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
    C.
  . C. *********************************
    C. TI-CMD SET (OPOG STOP/COPY/START)
    C. *********************************
    C.
  . C. NOTICE ¡§ OPOG UPLOAD¤¬Á÷¿®NG¤Î¾ì¹ç¡¢°Ê²¼¤ÎTI-CMDÁ÷¿®¤Ï¼Â¹Ô¤•¤Ê¤¤¤³¤È¡£
    C.           ¤Þ¤¿¡¢SET¤ÈDUMP¤ÏÆ±°ì¥Ñ¥¹¤Ç¹Ô¤¦¤³¤È¡£
    C.
  . C. TI¥³¥Þ¥ó¥É¤òÅÐÏ¿(UT)
 +. TI 2013-04-18 10:44:00.0
    DC 01-B3 DHU_OP_STOP
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
    C.
 +. TI 2013-04-18 10:44:01.0
    DC 01-B4 DHU_OP_COPY
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
    C.
 +. TI 2013-04-18 10:44:01.0
    DC 01-B5 DHU_OPOG_COPY
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
```

```
0194     C.
0195   +. TI 2013-04-18 10:48:59.5
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 2013-04-18 10:48:30.0
0245     DC 07-FC EIS_MODE_MANU
0246     BC       (21 02)
0247   +. TI 2013-04-18 10:48:40.0
0248     DC 07-FC EIS_MODE_CHG_DIS
0249     BC       (22)
0250    . C.                        [   ]  [HK1_TI_CMD_NUM]     EQ    2 COUNTUP
0251     C. ************ End EIS operation (TI set) ************
0252     C.
0253     C.
0254     C.
0255     C. ************ XRT START ************
0256     C. Execute, after the success of OP upload.
0257   +. TI 2013-04-18 10:48:00.0
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-595 2013-04-18 15:16:22 82 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. Load OBSTBL, dump OBSTBL, enable EIS mode changes
0046   +. DC 07-FC EIS_MODE_MANU
0047     BC       (21 02)
0048    . C. Verify EIS in MANUAL mode
0049    . C. Estimated OBSTBL upload time is 25s
0050     C. ********************************
0051     C. EIS START OBSTBL LOAD
0052     C. ********************************
0053    . S. RAM   ram-820:EIS_OBSTBL
0054     ()
0055   +. DC 07-FC EIS_DUMP_OBSTBL
0056     BC       (07 07 07 00 00 70 00)
0057     C.
0058     C. Execute, after the success of OBSTBL upload.
0059     C. Set EIS TI-commands
0060   +. TI 2013-04-18 10:48:50.0
0061     DC 07-FC EIS_MODE_CHG_ENA
0062     BC       (20)
0063    . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1 COUNTUP
0064     C. ********************************
0065     C. EIS END OBSTBL LOAD
0066     C. ********************************
0067     C.
0068    . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0069     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0070    . S. DC-BC dcbc-402:DCBC
0071     (MDP_known_event)
0072     C.
0073     C.
0074    . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0075    . S. DC-BC dcbc-153:DCBC
0076     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0077     C.
0078     C.
0079    . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0080     C.
0081    . C. *********** LOS ***********
0082     C.
```

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

main-596 2013-04-18 15:16:22 190 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¤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. ************ 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 80 80 20 20)
0130  +  DC 07-F0 MDP_XRT_ROI_SET
0131     BC       (cd 08 80 80 20 08)
0132  +  DC 07-F0 MDP_XRT_ROI_SET
0133     BC       (cd 09 80 80 08 20)
0134  +  DC 07-F0 MDP_XRT_ROI_SET
0135     BC       (cd 0a c0 c0 10 10)
0136  +  DC 07-F0 MDP_XRT_ROI_SET
0137     BC       (cd 0b 40 c0 10 10)
0138  +  DC 07-F0 MDP_XRT_ROI_SET
0139     BC       (cd 0c 40 40 10 10)
0140  +  DC 07-F0 MDP_XRT_ROI_SET
0141     BC       (cd 0d c0 40 10 10)
0142  +  DC 07-F0 MDP_XRT_ROI_SET
0143     BC       (cd 0e 85 83 08 08)
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_AEC_RESET
0153     BC       (d0)
0154  +  DC 07-F0 MDP_XRT_ARS_DIS
0155     BC       (d5)
0156  +  DC 07-F0 MDP_XRT_FLD_RESET
0157     BC       (da)
0158  +. DC 07-F0 MDP_XRT_QT_PROG_SET
0159     BC       (c4 0d)
0160  +. DC 07-F0 MDP_XRT_FL_PROG_SET
0161     BC       (c5 05)
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 2013-04-18 10:48:02.0
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 ***

2013/04/18  10:59:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 01 00 00 00 00
2013/04/19  09:59:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  09:59:32.0  XRT_TCIB_XRT_S_HTR_A_DIS_401_OG [0x191]
                                TCIB_XRT_S_HTR_A_DIS 0 04-C0
2013/04/19  17:34:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  17:34:56.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2013/04/19  17:35:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
2013/04/19  17:35:16.0  XRT_FLD_DIS_404_OG [0x194]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2013/04/19  17:35:18.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2013/04/19  17:35:20.0  XRT_ARS_DIS_406_OG [0x196]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2013/04/19  17:37:58.0  XRT_QT_PROG_SET_426_OG [0x1aa]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 08
2013/04/19  17:38:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/19  17:45:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  17:45:02.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/19  17:45:04.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/19  17:48:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/19  18:24:54.0  XRT_CTRL_MANU_420_OG [0x1a4]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  18:25:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                AOCU_NM              5 02-76 00 2e f9 2e f9
2013/04/19  18:27:32.0  XRT_FOCUS_POSITION_421_OG [0x1a5]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2013/04/19  18:27:52.0  XRT_QT_PROG_SET_449_OG [0x1c1]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 03
2013/04/19  18:27:54.0  XRT_FLD_DIS_404_OG [0x194]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2013/04/19  18:27:56.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2013/04/19  18:27:58.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2013/04/19  18:28:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/19  18:34:54.0  XRT_CTRL_MANU_420_OG [0x1a4]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  18:35:00.0  AOCS_ORe-point_Start_4_OG [0x09a]
                                AOCU_NM              5 02-76 00 2e f9 d1 07
2013/04/19  18:37:32.0  XRT_FOCUS_POSITION_421_OG [0x1a5]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2013/04/19  18:37:52.0  XRT_QT_PROG_SET_407_OG [0x197]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2013/04/19  18:37:54.0  XRT_FLD_DIS_404_OG [0x194]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2013/04/19  18:37:56.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2013/04/19  18:37:58.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2013/04/19  18:38:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/19  18:44:54.0  XRT_CTRL_MANU_420_OG [0x1a4]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  18:45:00.0  AOCS_ORe-point_Start_5_OG [0x09b]
                                AOCU_NM              5 02-76 00 d1 07 d1 07
2013/04/19  18:47:32.0  XRT_FOCUS_POSITION_421_OG [0x1a5]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2013/04/19  18:47:52.0  XRT_QT_PROG_SET_409_OG [0x199]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 13
2013/04/19  18:47:54.0  XRT_FLD_DIS_404_OG [0x194]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2013/04/19  18:47:56.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2013/04/19  18:47:58.0  XRT_ARS_DIS_423_OG [0x1a7]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2013/04/19  18:48:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/19  18:54:54.0  XRT_CTRL_MANU_420_OG [0x1a4]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  18:55:00.0  AOCS_ORe-point_Start_6_OG [0x09c]
                                AOCU_NM              5 02-76 00 d1 07 2e f9
2013/04/19  18:57:32.0  XRT_FOCUS_POSITION_421_OG [0x1a5]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2013/04/19  18:57:52.0  XRT_QT_PROG_SET_427_OG [0x1ab]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 04
2013/04/19  18:57:54.0  XRT_FLD_DIS_404_OG [0x194]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2013/04/19  18:57:56.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2013/04/19  18:57:58.0  XRT_ARS_DIS_423_OG [0x1a7]
```

```
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2013/04/19  18:58:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/19  19:04:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  19:04:56.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                        XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2013/04/19  19:05:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                        AOCU_NM              5 02-76 01 00 00 00 00
2013/04/19  19:05:16.0  XRT_FLD_ENA_411_OG [0x19b]
                                        MDP_XRT_FLD_ENA      1 07-F0 d8
2013/04/19  19:05:18.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                        MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2013/04/19  19:05:20.0  XRT_AEC_RESET_413_OG [0x19d]
                                        MDP_XRT_AEC_RESET    1 07-F0 d0
2013/04/19  19:05:22.0  XRT_ARS_DIS_414_OG [0x19e]
                                        MDP_XRT_ARS_DIS      1 07-F0 d5
2013/04/19  19:07:54.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/19  19:07:56.0  XRT_QT_PROG_SET_416_OG [0x1a0]
                                        MDP_XRT_QT_PROG_SET  2 07-F0 c4 02
2013/04/19  19:07:58.0  XRT_FL_PROG_SET_431_OG [0x1af]
                                        MDP_XRT_FL_PROG_SET  2 07-F0 c5 05
2013/04/19  19:08:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/19  19:23:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  19:23:02.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/19  19:23:04.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/19  19:26:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/19  20:02:00.0  XRT_Custom_430_OG [0x1ae]
2013/04/19  20:03:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/19  21:01:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  21:01:32.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/19  21:01:34.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/19  21:04:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/19  21:39:00.0  XRT_Custom_430_OG [0x1ae]
2013/04/19  21:40:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/19  22:40:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/19  22:40:02.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/19  22:40:04.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/19  22:43:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/19  23:13:00.0  XRT_Custom_430_OG [0x1ae]
2013/04/19  23:14:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/20  00:18:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/20  00:18:32.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/20  00:18:34.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/20  00:21:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/20  00:37:30.0  XRT_Custom_430_OG [0x1ae]
2013/04/20  00:38:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/20  01:53:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/20  01:53:32.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/20  01:53:34.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/20  01:56:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/20  02:14:30.0  XRT_Custom_430_OG [0x1ae]
2013/04/20  02:15:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/20  03:26:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/20  03:26:02.0  XRT_FLD_RESET_415_OG [0x19f]
                                        MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/20  03:26:04.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                        MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/20  03:29:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                        MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/20  03:53:00.0  XRT_Custom_430_OG [0x1ae]
2013/04/20  03:54:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                        MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/20  05:00:30.0  XRT_CTRL_MANU_400_OG [0x190]
                                        MDP_XRT_CTRL_MANU    1 07-F0 c1
```

```
2013/04/20  05:00:32.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/20  05:00:34.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/20  05:03:44.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/20  05:31:30.0  XRT_Custom_430_OG [0x1ae]
2013/04/20  05:32:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/20  05:56:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/20  05:56:56.0  XRT_FOCUS_POSITION_403_OG [0x193]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2013/04/20  05:57:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
2013/04/20  05:57:16.0  XRT_FLD_DIS_404_OG [0x194]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2013/04/20  05:57:18.0  XRT_FLRCTRL_DIS_405_OG [0x195]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2013/04/20  05:57:20.0  XRT_ARS_DIS_406_OG [0x196]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2013/04/20  05:59:58.0  XRT_QT_PROG_SET_426_OG [0x1aa]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 08
2013/04/20  06:00:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/20  06:06:54.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/20  06:06:56.0  XRT_FOCUS_POSITION_410_OG [0x19a]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2013/04/20  06:07:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 01 00 00 00 00
2013/04/20  06:07:16.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2013/04/20  06:07:18.0  XRT_FLRCTRL_ENA_412_OG [0x19c]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2013/04/20  06:07:20.0  XRT_AEC_RESET_413_OG [0x19d]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2013/04/20  06:07:22.0  XRT_ARS_DIS_414_OG [0x19e]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2013/04/20  06:09:54.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/20  06:09:56.0  XRT_QT_PROG_SET_416_OG [0x1a0]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 02
2013/04/20  06:09:58.0  XRT_FL_PROG_SET_431_OG [0x1af]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 05
2013/04/20  06:10:00.0  XRT_CTRL_AUTO_408_OG [0x198]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/20  06:41:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/20  06:41:02.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/20  06:41:04.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/20  06:44:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/20  07:10:00.0  XRT_Custom_430_OG [0x1ae]
2013/04/20  07:11:00.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/20  08:21:00.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/20  08:21:02.0  XRT_FLD_RESET_415_OG [0x19f]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2013/04/20  08:21:04.0  XRT_PREFLR_STRT_418_OG [0x1a2]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2013/04/20  08:24:14.0  XRT_PREFLR_STOP_419_OG [0x1a3]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2013/04/20  08:48:30.0  XRT_Custom_430_OG [0x1ae]
2013/04/20  08:49:30.0  XRT_CTRL_AUTO_424_OG [0x1a8]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2013/04/20  09:09:00.0  XRT_CTRL_MANU_402_OG [0x192]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2013/04/20  10:35:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
```