XRT Timeline to be uploaded on 2012/04/03

Period: 2012/04/03 10:54:00 - 2012/04/07 09:34:00

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

XOB #174E: HOP81 2-filter - Ti/poly 8s, Al/mesh 4s, G-band - 384x384

Term	Pointing (x, y)	Comment
04/03 11:07:00 - 04/03 17:55:24	Fixed (-13.0, -938.0)	# OP start + 10min: HOP 206 Polar Panorama at South Pole

PROG= 20 Inf.-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	63ms	Obs	1x1	384x384 (1064, 1048)	Q=90	0	0	2.0sec

Subr= 2 30-time(s) 2.0sec

Seqn= 58 2-time(s) 30.0sec

Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval
Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	4.00s	Obs	1x1	384x384 (1064, 1048)	Q=90	0	0	2.0sec
Open/Ti-poly	Open/Ti-poly	close	Safe	Norm	8.00s	Obs	1x1	384x384 (1064, 1048)	Q=90	0	0	2.0sec

XOB #187C: Synoptic Q95 2x2 - Al/mesh(45/2048) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 -1x1 2048x512) + Ti-poly(88/2897) + Thin-Be(362

Term	Pointing (x, y)	Comment
04/03 17:58:30 - 04/03 18:05:24	Fixed (0.0, 0.0)	synoptic, shifted -4.5 min
04/05 06:38:00 - 04/05 06:46:30	Fixed (0.0, 0.0)	synoptic

PROG= 01 1-time(s)

Subr= 1 1-time(s) 12.0sec

Seqn= 44 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	2.00s	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	2.83s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 35 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	354ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
thin-Be/Open	thin-Be/Open	close	Safe	Norm	2.83s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 4 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	16ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

XOB #18E4: AR Standard-B(Morphology) with PFB, thin-Be + multifilter context, 512x512 at 1064 1048, 24s-cad

Term	Pointing (x, y)	Comment
04/03 18:08:30 - 04/04 00:00:00	Track (-333.7, 373.7) @ 04/03 18:05:30	# AR 11451: HOP 208
04/05 07:12:06 - 04/05 10:07:30	Track (-18.6, 379.2) @ 04/05 06:45:00	# AR 11451: HOP 208

PROG= 07 Inf.-time(s)

Subr= 1 1-time(s) 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
Open/Ti-poly	Open/thick-Al	close	Safe	Dark	16.0s	Obs	1x1	384x384 (1064, 1048)	Q=98	0	0	2.0sec
Open/G-band	Open/G-band	open	Safe	Norm	63ms	Obs	1x1	384x384 (1064, 1048)	Q=98	0	0	2.0sec

Seqn= 29 2-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	384x384 (1064, 1048)	Q=95	3	0	2.0sec
Open/thick-Al	Open/thick-Al	close	Safe	Norm	16.0s	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
Al-poly/Open	Al-poly/thick-Be	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
C-poly/Open	C-poly/thick-Al	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
thin-Be/Open	med-Be/Open	close	Safe	Norm	1.00s	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
med-Be/Open	med-Be/Open	close	Safe	Norm	16.0s	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
med-Al/Open	med-Al/thick-Al	close	Safe	Norm	16.0s	Obs	1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec

Subr= 2 1-time(s) 2.0sec

Seqn= 28 150-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	512x512 (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

XOB #1778: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 1st Quadrant - Al/mesh, Ti/Poly-long

Term	Pointing (x, y)	Comment
04/05 05:58:00 - 04/05 06:04:54	Fixed (-528.4, -528.4)	# XRT Quadrant pointing #1

PROG= 10 1-time(s)

Subr= 1 1-time(s) 12.0sec

Seqn= 38 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= 93 2-time(s) 2.0sec

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

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

XOB #1779: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 2nd Quadrant - Al/mesh,Ti/Poly -long

Term	Pointing (x, y)	Comment
04/05 06:08:00 - 04/05 06:14:54	Fixed (528.4, -528.4)	# XRT Quadrant pointing #2

PROG= 12 1-time(s)

Subr= 1 1-time(s) 12.0sec

Seqn= 36 1-time(s) 12.0sec

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= 93 2-time(s) 2.0sec

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

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

XOB #177A: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 3rd Quadrant- Al/mesh, Ti/Poly-long

Term	Pointing (x, y)	Comment
04/05 06:18:00 - 04/05 06:24:54	Fixed (528.4, 528.4)	# XRT Quadrant pointing #3

PROG= 19 1-time(s)

Subr= 1 1-time(s) 12.0sec

Seqn= 39 1-time(s) 12.0sec

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= 93 2-time(s) 2.0sec

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

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

XOB #177B: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 4th Quadrant - Al/mesh, Ti/Poly-long

Term	Pointing (x, y)	Comment
04/05 06:28:00 - 04/05 06:34:54	Fixed (-528.4, 528.4)	# XRT Quadrant pointing #4

PROG= 05 1-time(s)

Subr= 1 1-time(s) 12.0sec

Seqn= 40 1-time(s) 12.0sec

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= 93 2-time(s) 2.0sec

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

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

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

XOB #18C2: Flare standard obs. multifilter - thin-Be + (med-Al,thick-Be) 384x384 + (Al-poly 512x512 2x2)-no interval context-12 loops

Term	Pointing (x, y)	Comment
04/03 11:07:00 - 04/03 17:55:24	Fixed (-13.0, -938.0)	# OP start + 10min: HOP 206 Polar Panorama at South Pole
04/03 18:08:30 - 04/04 00:00:00	Track (-333.7, 373.7) @ 04/03 18:05:30	# AR 11451: HOP 208
04/05 07:12:06 - 04/05 10:07:30	Track (-18.6, 379.2) @ 04/05 06:45:00	# AR 11451: HOP 208

PROG= 03 12-time(s)

Subr= 1 45-time(s) 10.0sec

Seqn= 20 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

Seqn= 63 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= 77 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

Subr= 2 1-time(s) 10.0sec

Seqn= 90 1-time(s) 2.0sec

Open/G-band	Open/G-band	open	Safe	Norm	63ms	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

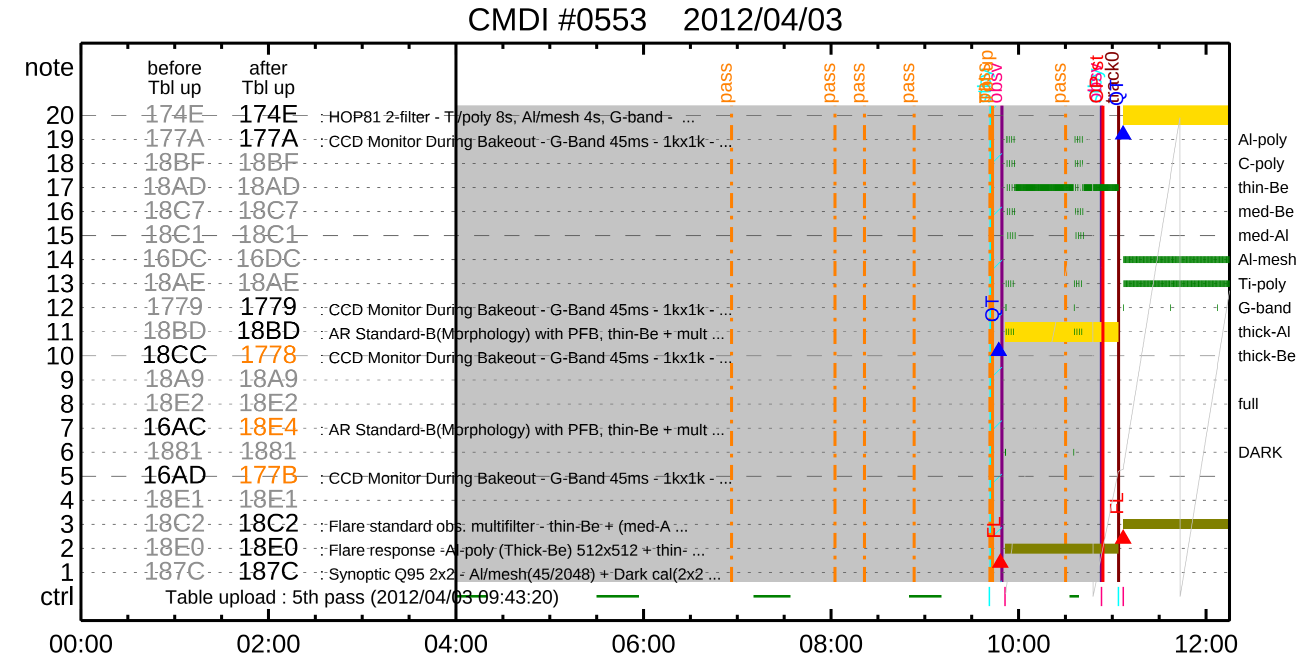
NOT USED

Flare Detection

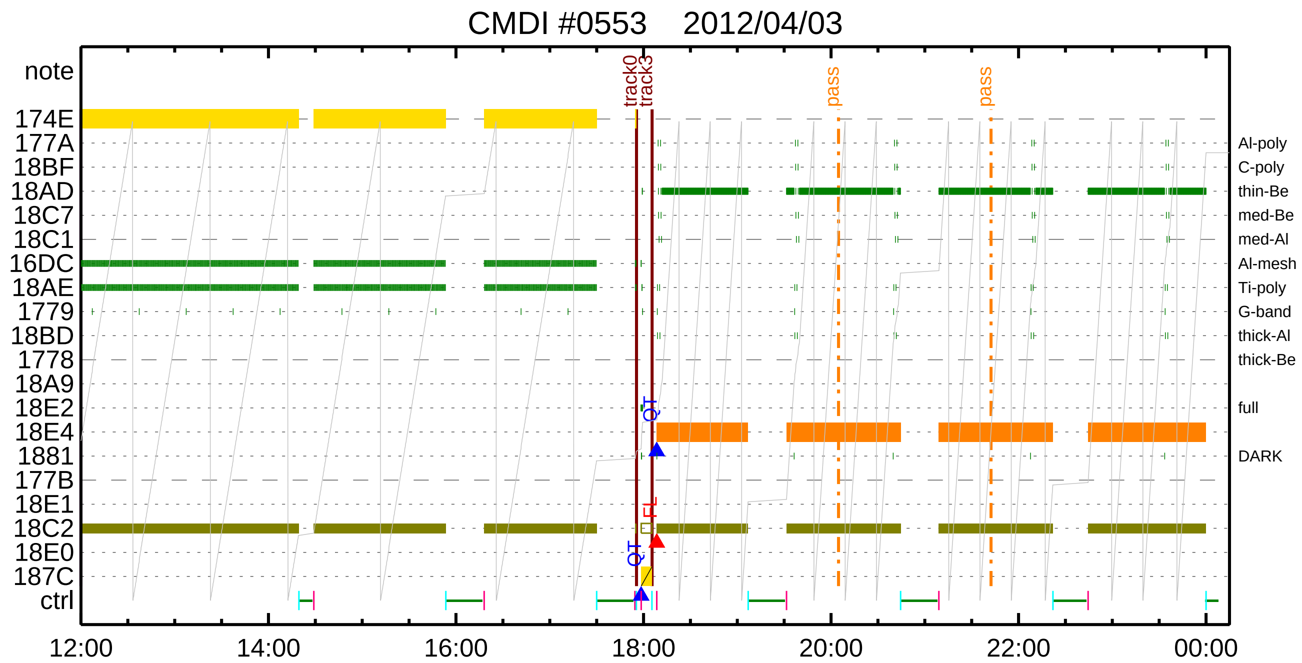
FLD Patrol

Term	Pointing (x, y)	Comment
04/03 18:08:16 - 04/05 05:57:54	Track (-333.7, 373.7) @ 04/03 18:05:30	# AR 11451: HOP 208
04/05 07:11:52 - 04/07 09:34:00	Track (-18.6, 379.2) @ 04/05 06:45:00	# AR 11451: HOP 208

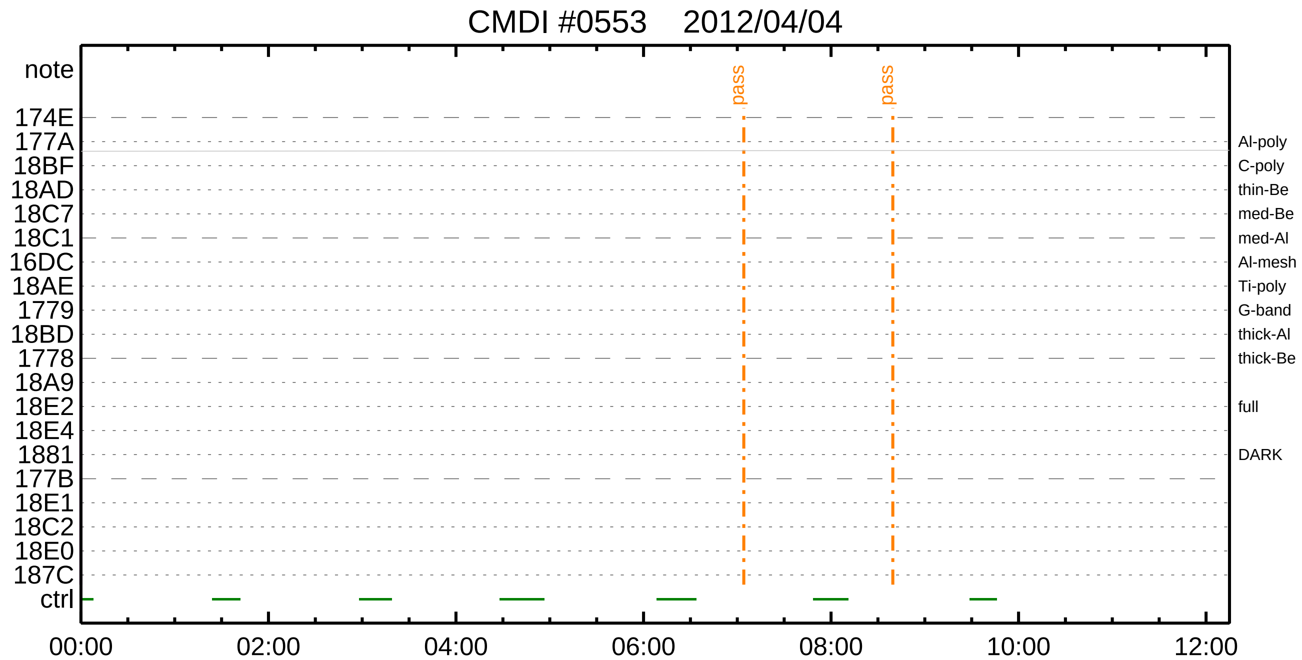
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8ms	Obs	8x8		Q=50			30sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer		Interval



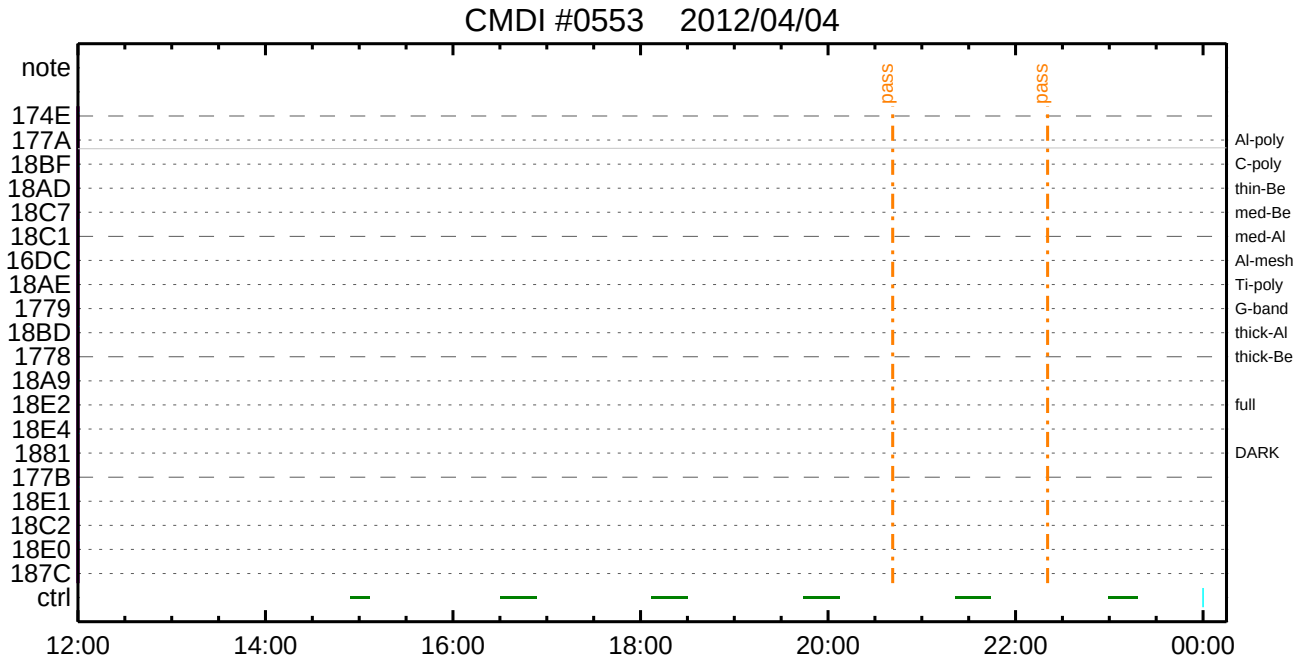
CMDI #0553 2012/04/03
note
before Tbl up
after Tbl up
20 174E 174E : HOP81 2-filter - Ti/poly 8s, Al/mesh 4s, G-band - ...
19 177A 177A : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
18 18BF 18BF
17 18AD 18AD
16 18C7 18C7
15 18C1 18C1
14 16DC 16DC
13 18AE 18AE
12 1779 1779 : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
11 18BD 18BD : AR Standard-B(Morphology) with PFB, thin-Be + mult ...
10 18CC 1778 : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
9 18A9 18A9
8 18E2 18E2
7 16AC 18E4 : AR Standard-B(Morphology) with PFB, thin-Be + mult ...
6 1881 1881
5 16AD 177B : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
4 18E1 18E1
3 18C2 18C2 : Flare standard obs. multifilter - thin-Be + (med-A ...
2 18E0 18E0 : Flare response - Al-poly (Thick-Be) 512x512 + thin- ...
1 187C 187C : Synoptic Q95 2x2 - Al/mesh(45/2048) + Dark cal(2x2 ...
ctrl
Table upload : 5th pass (2012/04/03 09:43:20)
pass
obsv
OT
FL
track0
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00

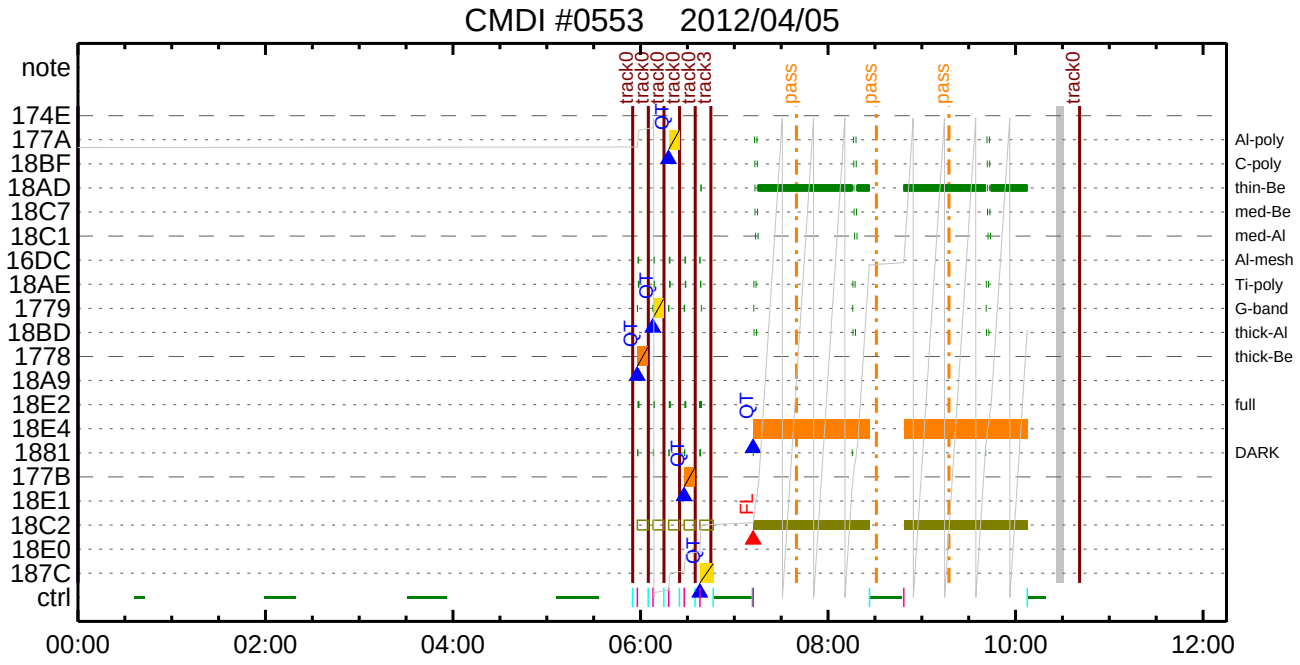


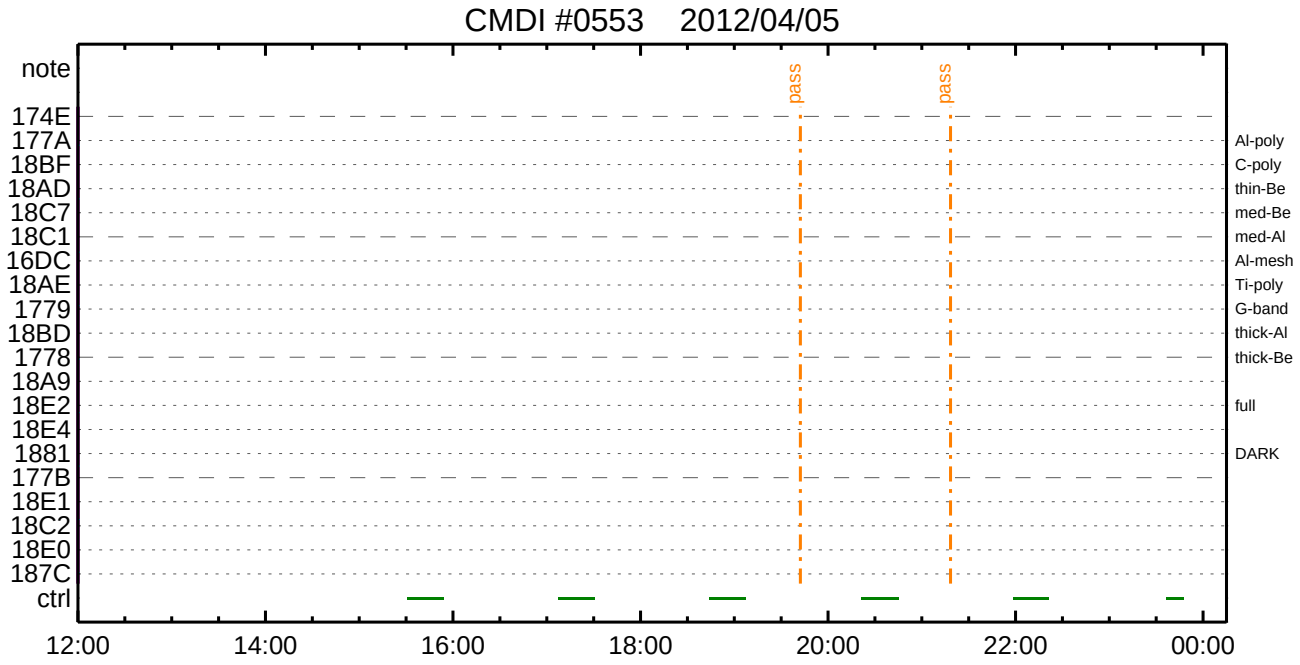
CMDI #0553 2012/04/03
note
174E
177A
18BF
18AD
18C7
18C1
16DC
18AE
1779
18BD
1778
18A9
18E2
18E4
1881
177B
18E1
18C2
18E0
187C
ctrl
track0
track3
pass
OT
FL
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00

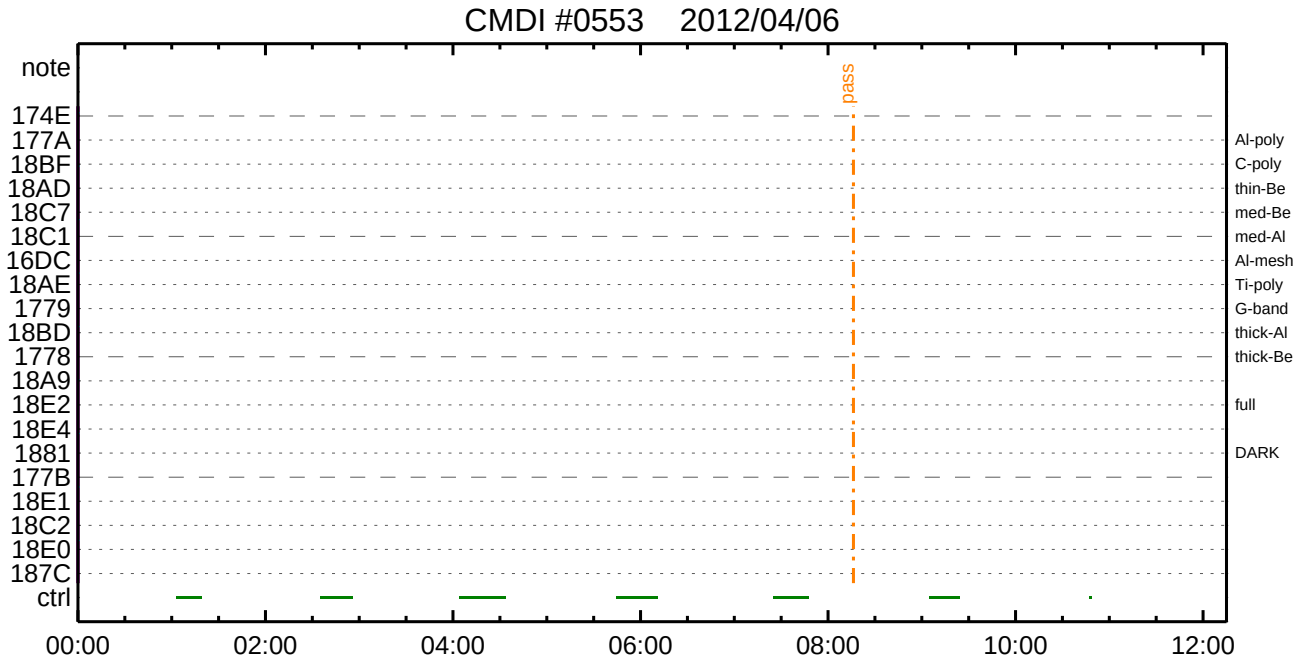


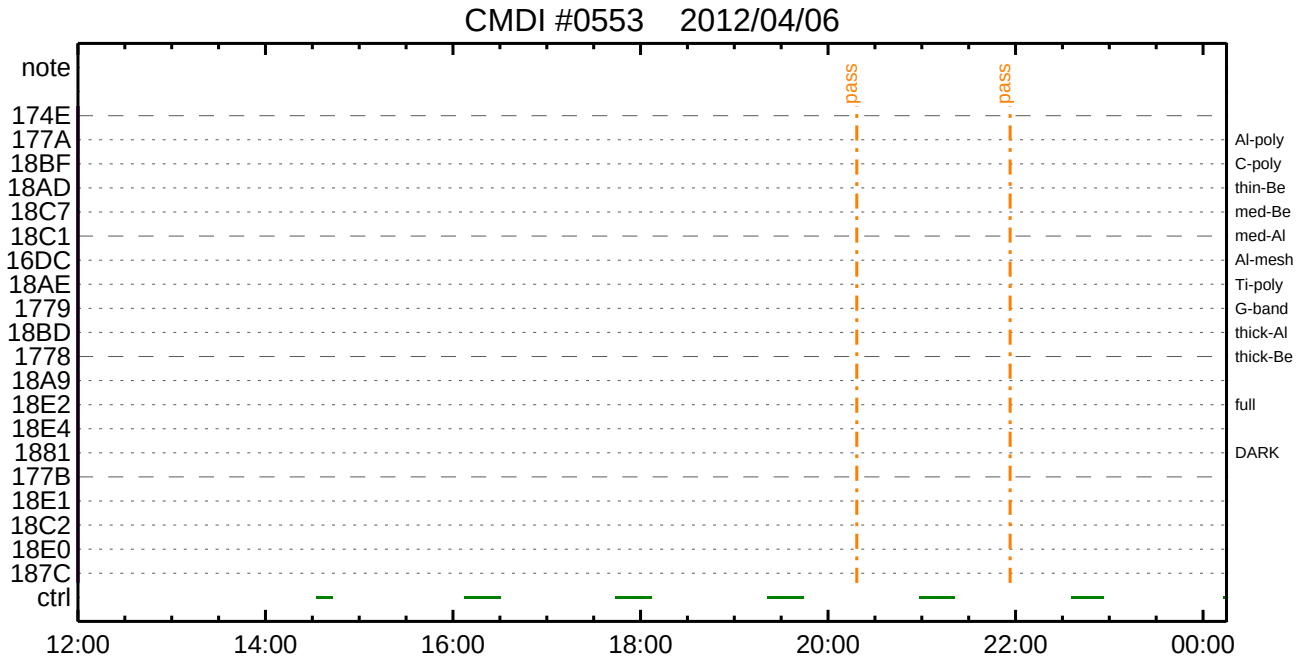
CMDI #0553 2012/04/04
note
174E
177A
18BF
18AD
18C7
18C1
16DC
18AE
1779
18BD
1778
18A9
18E2
18E4
1881
177B
18E1
18C2
18E0
187C
ctrl
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00

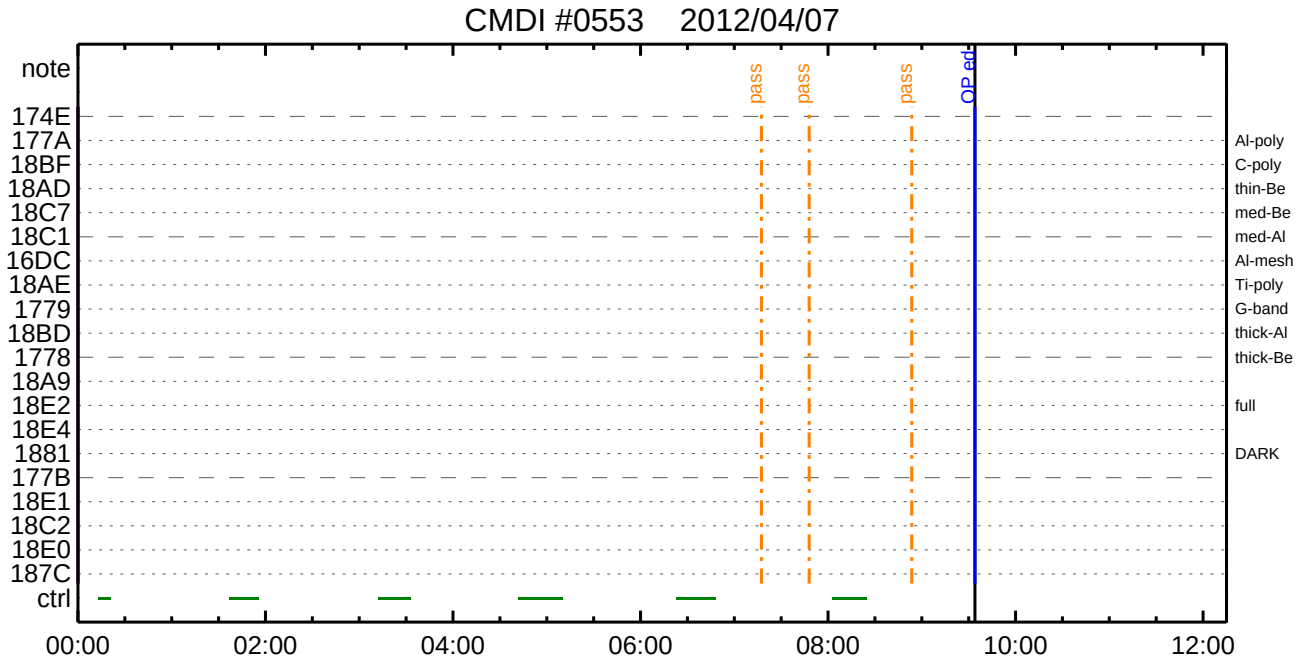

CMDI #0553 2012/04/04
note
174E
177A
18BF
18AD
18C7
18C1
16DC
18AE
1779
18BD
1778
18A9
18E2
18E4
1881
177B
18E1
18C2
18E0
187C
ctrl
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
16:00
18:00
20:00
22:00
00:00

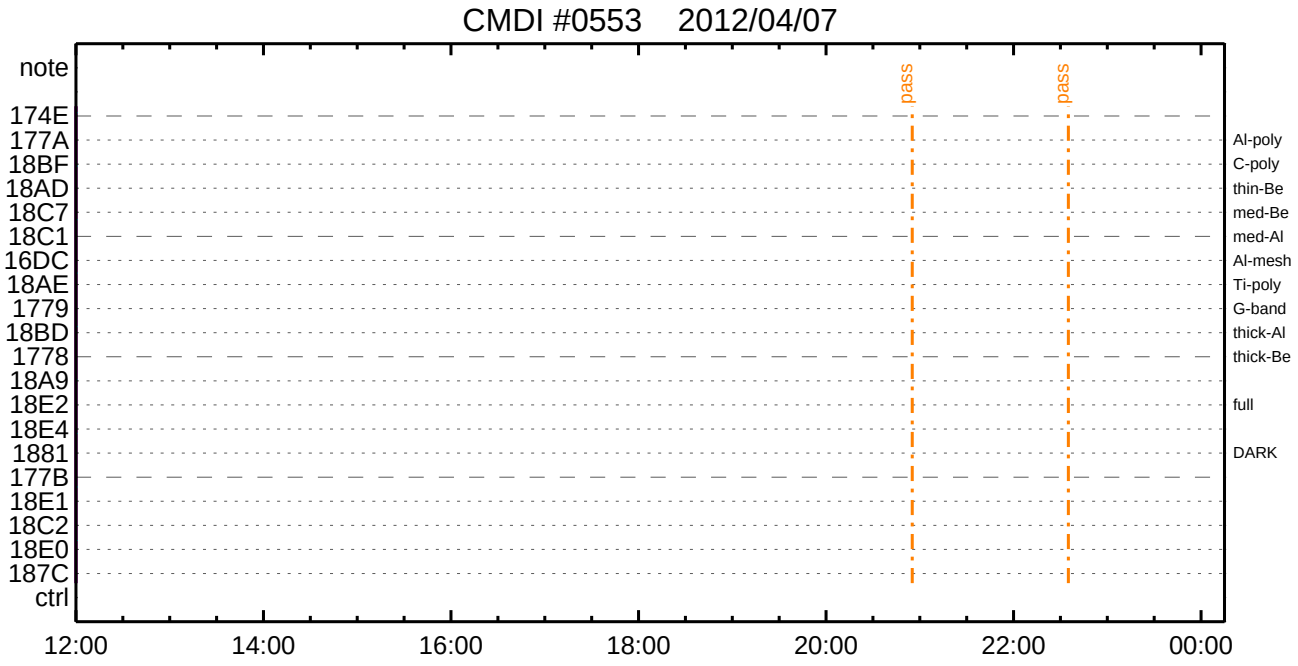

CMDI #0553 2012/04/05
note
174E
177A
18BF
18AD
18C7
18C1
16DC
18AE
1779
18BD
1778
18A9
18E2
18E4
1881
177B
18E1
18C2
18E0
187C
ctrl
track0
track0
track0
track0
track3
QT
QT
QT
QT
QT
FL
pass
pass
pass
track0
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0553 2012/04/05
note
174E
177A
18BF
18AD
18C7
18C1
16DC
18AE
1779
18BD
1778
18A9
18E2
18E4
1881
177B
18E1
18C2
18E0
187C
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 #0553 2012/04/06
note
174E
177A
18BF
18AD
18C7
18C1
16DC
18AE
1779
18BD
1778
18A9
18E2
18E4
1881
177B
18E1
18C2
18E0
187C
ctrl
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0553 2012/04/06
note
174E
177A
18BF
18AD
18C7
18C1
16DC
18AE
1779
18BD
1778
18A9
18E2
18E4
1881
177B
18E1
18C2
18E0
187C
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 #0553 2012/04/07
note
174E
177A
18BF
18AD
18C7
18C1
16DC
18AE
1779
18BD
1778
18A9
18E2
18E4
1881
177B
18E1
18C2
18E0
187C
ctrl
pass
pass
pass
OP ed
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
02:00
04:00
06:00
08:00
10:00
12:00


CMDI #0553 2012/04/07
note
174E
177A
18BF
18AD
18C7
18C1
16DC
18AE
1779
18BD
1778
18A9
18E2
18E4
1881
177B
18E1
18C2
18E0
187C
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-786 2012-04-03 14:41:52 185 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007   +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ÊËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011   +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014   . C. ****************************
0015     C. OP/OG¥í¡¼¥É¡¦¥À¥ó¥×
0016     C. ****************************
0017     C.
0018   . C. ¡ãOP/OG¥í¡¼¥É¡ä
0019   . S. OP    op-786:OP
0020     ()
0021   . S. OG    og-786:OG
0022     ()
0023     C.
0024   . C. ¡ãNMOG&OPÎÎ°è¥À¥ó¥×¡ä
0025     C. NMOG(0x200000-0x207FFF¡§ 32 kbyte)
0026   +. DC 01-23 DHU_DMA_DMP_PRM_SET
0027     BC       (20 00 7f 01 02)
0028     C.                       ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     40
0029     C.                       ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0030     C.                       ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
0031     C.                       ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0032     C.                       ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0033   +. DC 01-22 DHU_MODE_CHNG
0034     BC       (07 0b f8)
0035     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     7
0036     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0037     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0038     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0039     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0040   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0041     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0042   . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0043     C.
0044     C. NMOG(0x208000-0x20FFFF¡§ 32 kbyte)
0045   +. DC 01-23 DHU_DMA_DMP_PRM_SET
0046     BC       (20 80 7f 01 02)
0047     C.                       ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     41
0048     C.                       ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0049     C.                       ¢¢[HK1_DMP_BLOCK_NUM]           EQ     127
0050     C.                       ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0051     C.                       ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0052   +. DC 01-22 DHU_MODE_CHNG
0053     BC       (07 0b f8)
0054     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     7
0055     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0056     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0057     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0058     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0059   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0060     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0061   . C. RAM ID=NMOG¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0062     C.
0063     C. NMOG(0x210000-0x2100FF¡§ 256byte)+OP(0x210100-0x2141FF: 16.25kbyte)
0064   +. DC 01-23 DHU_DMA_DMP_PRM_SET
0065     BC       (21 00 41 01 02)
0066     C.                       ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     42
0067     C.                       ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     0
0068     C.                       ¢¢[HK1_DMP_BLOCK_NUM]           EQ     65
0069     C.                       ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0070     C.                       ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0071   +. DC 01-22 DHU_MODE_CHNG
0072     BC       (07 0b f8)
0073     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     7
0074     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0075     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0076     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0077     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0078   . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0079     C.                       ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0080   . C. RAM ID=NMOG,RAM ID=OP¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0081     C.
0082   . C. ***** °Ê²¼¤Ï¾Ã´¶Á°¤ËÉ¬¤ºÁ÷¿® (¾åµ-¥À¥ó¥×¼ê½ç¤òÅÓÃæ¤Ç½ª¤¨¤ë¾ì¹ç¤Ç¤â) *****
0083     C. DHU¥â¡¼¥É¡Ê¼ý¸¥ì¡¼¥È¡Ë¤òÌá¤¹
0084   +. DC 01-22 DHU_MODE_CHNG
0085     BC       (02 0a f8)
0086     C.                       ¢¢[HK1_PKT_FORM_NO]             EQ     2
0087     C.                       ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
0088     C.                       ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
0089     C.                       ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0090     C.
0091   . C. ********************************
0092     C. TI-CMD SET (OPOG STOP/COPY/START)
0093     C. ********************************
0094     C.
0095   . C. NOTICE ¡§ OPOG UPLOAD¤¬Á÷¿®NG¤Î¾ì¹ç¡¢°Ê²¼¤ÎTI-CMDÁ÷¿®¤Ï¼Â¹Ô¤•¤Ê¤¤¤³¤È¡£
```

```
    C.           ¤Þ¤¿¡¢SET¤ÈDUMP¤ÏÆ±°ì¥Ñ¥¹¤Ç¹Ô¤¦¤³¤È¡£
    C.
  . C. TI¥³¥Þ¥ó¥É¤òÅÐÏ¿(UT)
 +. TI 2012-04-03 10:49:00.0
    DC 01-B3 DHU_OP_STOP
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
    C.
 +. TI 2012-04-03 10:49:01.0
    DC 01-B4 DHU_OP_COPY
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
    C.
 +. TI 2012-04-03 10:49:01.0
    DC 01-B5 DHU_OPOG_COPY
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
    C.
 +. TI 2012-04-03 10:53:59.5
    DC 01-B2 DHU_OP_START
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
    C.
    C. °Ê²¼¤ÏÄê¾ïÍÑ¤Î¥Á¥§¥Ã¥¯¹àÌÜ
    C.                     ¢¢[HK1_TI_CMD_ENA/DIS]          EQ     ENA
    C.                     ¢¢[HK1_TI_CMD_NUM]              EQ     4
    C.                     ¢¢[HK1_NEXT_EXEC_PIM]           EQ     DHU
    C.                     ¢¢[HK1_NEXT_EXEC_DC]            EQ     0xB3
    C.
  . C. ****************************
    C. TIÎÎ°è¥À¥ó¥×
    C. ****************************
    C.
    C. TI_TBL(0x03AB00-0x03AEFF¡§ 1024byte)
 +. DC 01-23 DHU_DMA_DMP_PRM_SET
    BC       (03 ab 03 01 02)
    C.                     ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     07
    C.                     ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     2B
    C.                     ¢¢[HK1_DMP_BLOCK_NUM]           EQ     3
    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.
  . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
    C.                     ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
    C.
  . C. RAM ID=TI_TBL¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
    C.
  . C. DHU¥â¡¼¥É¡Ê¼ý½¸¥ì¡¼¥È¡Ë¤òÌá¤¹
 +. DC 01-22 DHU_MODE_CHNG
    BC       (02 0a f8)
    C.                     ¢¢[HK1_PKT_FORM_NO]             EQ     2
    C.                     ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
    C.                     ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
    C.                     ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
    C.
  . C. Stop EIS observation and temporarily disable EIS mode changes
    C.
    C.
    C. ********** Start EIS operation (TI set) **********
    C. Execute, after the success of OP upload.
    C. Set EIS TI-commands
 +. TI 2012-04-03 10:53:30.0
    DC 07-FC EIS_MODE_MANU
    BC       (21 02)
 +. TI 2012-04-03 10:53:40.0
    DC 07-FC EIS_MODE_CHG_DIS
    BC       (22)
  . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    2 COUNTUP
    C. *********** End EIS operation (TI set) ***********
    C.
    C.
    C.
  . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
    C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
  . S. DC-BC dcbc-402:DCBC
    (MDP_known_event)
    C.
    C.
  . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
  . S. DC-BC dcbc-153:DCBC
    (SPECIAL-CMD_DAILY_OPERATIN_DCB)
    C.
    C.
  . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
    C.
  . C. *********** LOS ***********
    C.
```

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

main-787 2012-04-03 14:41:52 133 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¤ÇÇ¤Î»þ´Ö¤ò¹ÍÎ¸ ¤•¡¢ÉÔÍ×¤ÊXÂÓON¤Ï¹Ô¤Ê¤ï¤Ê¤¤¤³¤È¡£
0018     C.
0019   +. DC 03-B4 TCIA_XPA_ON/HI
0020     M. WAIT_SEC   1
0021   +  DC 03-84 TCIA_XMOD_ON
0022     M. WAIT_SEC   1
0023   +  DC 03-95 TCIA_XMOD_QPSK
0024     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     ON
0025     C.                      ¢¢[HK1_XPA_PWR_HI/LO]           EQ     HI
0026     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     ON
0027     C.                      ¢¢[HK1_XMOD_QPSK/PM]            EQ     QPSK
0028     C.
0029   . C. X¥Ð¥ó¥É¥í¥Ã¥¯¾õÂÖ¤¬°ÂÄê¤•¤¿¤é¡¢°Ê²¼¤ÎºÆÀ¸ ¼ê½ç¤ò¼Â¹Ô¤¹¤ë¡£
0030     C.
0031   . C. ***************
0032     C. DR PT1 ÄÌ¾ïºÆÀ¸
0033     C. ***************
0034     C. ¢¨ RESTART¡ÊPT1¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢¢DCBC-150¤Ø¿Ê¤à¡£
0035     C.
0036   . C. ¡ãPT1ºÆÀ¸ ³«»Ï¡ä
0037   +. DC 01-29 DHU_S/X_VC4_OFF
0038   +  DC 06-C8 DR_PT1_REP_SEL
0039     BC       (01 00)
0040   +  DC 06-B3 DR_REP_START
0041   +  DC 01-32 DHU_X_VC4_ON
0042     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0043     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0044     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0045     C.
0046   . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Ä°²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0047   +. DC 06-B3 DR_REP_START
0048   +  DC 01-32 DHU_X_VC4_ON
0049     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0050     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0051     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0052     C.
0053     C.
0054   . C. PT1ºÆÀ¸ ¤¬¼«Æ°Ää»ß¤•¤¿¸å¡¢¢Ê²¼¤ò¼Â¹Ô¤¹¤ë¡£
0055     C. ¥¢¥ó¥Æ¥ÈÀÚÂØ¤äÅ•Ä°²óÈò¤¬¶á¤¤¾ì¹ç¤Ï´°Î»¤¹¤ë¤Þ¤ÇÂÔ¤Ä¡£
0056     C.
0057   . C. ***************
0058     C. DR PT2 ÄÌ¾ïºÆÀ¸
0059     C. ***************
0060     C. ¢¨ RESTART¡ÊPT2¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢¢DCBC-151¤Ø¿Ê¤à¡£
0061     C.
0062   . C. ¡ãPT2ºÆÀ¸ ³«»Ï¡ä
0063   +. DC 01-29 DHU_S/X_VC4_OFF
0064   +  DC 06-C8 DR_PT2_REP_SEL
0065     BC       (02 00)
0066   +  DC 06-B3 DR_REP_START
0067   +  DC 01-32 DHU_X_VC4_ON
0068     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0069     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0070     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0071     C.
0072   . C. ¡ã¥¢¥ó¥Æ¥ÈÀÚÂØ¡ÊÅ•Ä°²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0073   +. DC 06-B3 DR_REP_START
0074   +  DC 01-32 DHU_X_VC4_ON
0075     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0076     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0077     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0078     C.
0079   . C. ****************************
0080     C. DRºÆÀ¸ Ää»ß¡¢XÁ÷¿®µ¡OFF
0081     C. ****************************
0082     C.
0083   . C. ¡ãDRºÆÀ¸ Ää»ß¡ä
0084   +. DC 06-B4 DR_REP_STOP
0085   +  DC 01-29 DHU_S/X_VC4_OFF
0086     C.                      ¢¢[HK1_REP_STA/STP]             EQ     STOP
0087     C.                      ¢¢[HK1_S_VC4_ON/OFF]            EQ     OFF
0088     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     OFF
0089     C.
0090   . C. ¡ãXÁ÷¿®µ¡OFF¡ä
0091   +. DC 03-85 TCIA_XMOD_OFF
0092     M. WAIT_SEC   1
0093   +  DC 03-B5 TCIA_XPA_OFF
0094     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     OFF
0095     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     OFF
```

```
0096     C.
0097     C.
0098     C. ******************************
0099     C.  SOT TI command set
0100     C. ******************************
0101     C. Execute, after the success of OP upload.
0102  +. TI 2012-04-03 10:53:16.0
0103     DC 07-F0 MDP_SOT_MODE_STBY
0104     BC       (41)
0105   . C. ------------------------------------
0106     C.   HK1_TI_CMD_NUM       = 1 CNTUP [ ]
0107     C. ------------------------------------
0108     C. ************ SOT END ***********
0109     C.
0110     C. ************ XRT START ***********
0111     C. Execute, after the success of OP upload.
0112  +. TI 2012-04-03 10:53:00.0
0113     DC 07-F0 MDP_XRT_MODE_STBY
0114     BC       (c3)
0115   . C.                       [   ]  [HK1_TI_CMD_NUM]     EQ    1COUNTUP
0116     C.
0117     C. ************ XRT END ***********
0118     C.
0119   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0120     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0121   . S. DC-BC dcbc-402:DCBC
0122     (MDP_known_event)
0123     C.
0124     C.
0125   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0126   . S. DC-BC dcbc-153:DCBC
0127     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0128     C.
0129     C.
0130   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0131     C.
0132   . C. *********** LOS ***********
0133     C.
```

(a) Spacecraft Operation Procedure (real-commands)

```
main-788 2012-04-03 14:41:52 29 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007  +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ÊËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011  +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014     C.
0015   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0016     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0017   . S. DC-BC dcbc-402:DCBC
0018     (MDP_known_event)
0019     C.
0020     C.
0021   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0022   . S. DC-BC dcbc-153:DCBC
0023     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0024     C.
0025     C.
0026   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0027     C.
0028   . C. *********** LOS ***********
0029     C.
```

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

main-789 2012-04-03 14:41:52 123 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¤¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011   +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014   . C. ***** 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 = 6340145.1 +- 1.0 (s) [ ]
0052     C.
0053   . C.
0054   . C. ********************************
0055     C.  SOT table upload
0056     C. ********************************
0057   . C. < Stop FG table >
0058   +. DC 07-F0 MDP_FG_CTRL_MANU
0059     BC       (51)
0060   . C. ------------------------------------
0061     C.  MDP_FG_CTRL_MODE      = MANU    [ ]
0062     C. ------------------------------------
0063     C.
0064   . C. <Upload FG Observation Table>
0065   . S. RAM   ram-269:MDP_OBS_F
0066     ()
0067     C.
0068   . C. < Dump RAMID=MDP_OBS_F >
0069   +. DC 07-F0 MDP_DUMP_FGTBL
0070     BC       (82 07 00 00 00 38 b8)
0071     C. ------------------------------------
0072     C.  MDP_OBS_F verify = OK/NG        [ ]
0073     C. ------------------------------------
0074     C.
0075     C. ********************************
0076     C.  SOT TI command set
0077     C. ********************************
0078     C. Execute, after the success of TBL upload.
0079   +. TI 2012-04-03 10:53:18.0
0080     DC 07-F0 MDP_SOT_MODE_OBSV
0081     BC       (40)
0082   . C. ------------------------------------
0083     C.   HK1_TI_CMD_NUM       = 1 CNTUP [ ]
0084     C. ------------------------------------
0085     C.
0086   . C. Load OBSTBL, dump OBSTBL, enable EIS mode changes
0087   +. DC 07-FC EIS_MODE_MANU
0088     BC       (21 02)
0089   . C. Verify EIS in MANUAL mode
0090   . C. Estimated OBSTBL upload time is 39s
0091     C. ********************************
0092     C. EIS START OBSTBL LOAD
0093     C. ********************************
0094   . S. RAM   ram-820:EIS_OBSTBL
0095     ()
```

```
0096  +. DC 07-FC EIS_DUMP_OBSTBL
0097     BC       (07 07 07 00 00 70 00)
0098     C.
0099     C. Execute, after the success of OBSTBL upload.
0100     C. Set EIS TI-commands
0101  +. TI 2012-04-03 10:53:50.0
0102     DC 07-FC EIS_MODE_CHG_ENA
0103     BC       (20)
0104   . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1 COUNTUP
0105     C. ******************************
0106     C. EIS END OBSTBL LOAD
0107     C. ******************************
0108     C.
0109   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0110     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0111   . S. DC-BC dcbc-402:DCBC
0112     (MDP_known_event)
0113     C.
0114     C.
0115   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0116   . S. DC-BC dcbc-153:DCBC
0117     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0118     C.
0119     C.
0120   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0121     C.
0122   . C. ********** LOS **********
0123     C.
```

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

main-790 2012-04-03 14:41:52 195 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¥ÊÀÚÂØ¡ÊÅ•Ä°²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0047   +. DC 06-B3 DR_REP_START
0048   +  DC 01-32 DHU_X_VC4_ON
0049     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0050     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0051     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0052     C.
0053     C.
0054   . C. PT1ºÆÀ¸ ¤¬¼«Æ°Ää»ß¤•¤¿¸å¡¢°Ê²¼¤ò¼Â¹Ô¤¹¤ë¡£
0055     C. ¥¢¥ó¥Æ¥ÊÀÚÂØ¤äÅ•Ä°²óÈò¤¬¶á¤¤¾ì¹ç¤Ï´°Î»¤¹¤ë¤Þ¤ÇÂÔ¤Ä¡£
0056     C.
0057   . C. ***************
0058     C. DR PT2 ÄÌ¾ïºÆÀ¸
0059     C. ***************
0060     C. ¢¨ RESTART¡ÊPT2¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-151¤Ø¿Ê¤à¡£
0061     C.
0062   . C. ¡ãPT2ºÆÀ¸ ³«»Ï¡ä
0063   +. DC 01-29 DHU_S/X_VC4_OFF
0064   +  DC 06-C8 DR_PT2_REP_SEL
0065     BC       (02 00)
0066   +  DC 06-B3 DR_REP_START
0067   +  DC 01-32 DHU_X_VC4_ON
0068     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0069     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0070     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0071     C.
0072   . C. ¡ã¥¢¥ó¥Æ¥ÊÀÚÂØ¡ÊÅ•Ä°²óÈò¡Ë¸å¤ÎºÆÀ¸ ºÆ³«¡ä
0073   +. DC 06-B3 DR_REP_START
0074   +  DC 01-32 DHU_X_VC4_ON
0075     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT2    (¼Â¹Ô¸¡¾Ú)
0076     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0077     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0078     C.
0079   . C. ****************************
0080     C. DRºÆÀ¸ Ää»ß¡¢XÁ÷¿®µ¡OFF
0081     C. ****************************
0082     C.
0083   . C. ¡ãDRºÆÀ¸ Ää»ß¡ä
0084   +. DC 06-B4 DR_REP_STOP
0085   +  DC 01-29 DHU_S/X_VC4_OFF
0086     C.                      ¢¢[HK1_REP_STA/STP]             EQ     STOP
0087     C.                      ¢¢[HK1_S_VC4_ON/OFF]            EQ     OFF
0088     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     OFF
0089     C.
0090   . C. ¡ãXÁ÷¿®µ¡OFF¡ä
0091   +. DC 03-85 TCIA_XMOD_OFF
0092     M. WAIT_SEC   1
0093   +  DC 03-B5 TCIA_XPA_OFF
0094     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     OFF
0095     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     OFF
```

```
0096     C.
0097     C.
0098     C.
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 85 83 08 08)
0136  +  DC 07-F0 MDP_XRT_ROI_SET
0137     BC       (cd 0b c0 c0 10 10)
0138  +  DC 07-F0 MDP_XRT_ROI_SET
0139     BC       (cd 0c 40 c0 10 10)
0140  +  DC 07-F0 MDP_XRT_ROI_SET
0141     BC       (cd 0d 40 40 10 10)
0142  +  DC 07-F0 MDP_XRT_ROI_SET
0143     BC       (cd 0e c0 40 10 10)
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 0b)
0160  +. DC 07-F0 MDP_XRT_FL_PROG_SET
0161     BC       (c5 02)
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 2012-04-03 10:53:02.0
0170     DC 07-F0 MDP_XRT_MODE_OBSV
0171     BC       (c2)
0172  +. DC 07-F0 MDP_XRT_CTRL_AUTO
0173     BC       (c0)
0174  +. TI 2012-04-03 10:53:04.0
0175     DC 07-F0 MDP_XRT_CTRL_AUTO
0176     BC       (c0)
0177   . C. ---------- Success Verify ?            OK / NG ____
0178     C.
0179     C. ************ XRT END ***********
0180     C.
0181   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0182     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0183   . S. DC-BC dcbc-402:DCBC
0184     (MDP_known_event)
0185     C.
0186     C.
0187   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0188   . S. DC-BC dcbc-153:DCBC
0189     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0190     C.
0191     C.
0192   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0193     C.
```

```
0194    . C. ********** LOS **********
0195      C.
```

(a) Spacecraft Operation Procedure (real-commands)

```
main-791 2012-04-03 14:41:52 29 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007  +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ÊËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011  +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014     C.
0015   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0016     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0017   . S. DC-BC dcbc-402:DCBC
0018     (MDP_known_event)
0019     C.
0020     C.
0021   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0022   . S. DC-BC dcbc-153:DCBC
0023     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0024     C.
0025     C.
0026   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0027     C.
0028   . C. *********** LOS ***********
0029     C.
```

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

2012/04/03  11:03:54.0  XRT_CTRL_MANU_439_OG [0x1b7]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/03  11:04:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 00 53 64 01 26
2012/04/03  11:06:26.0  XRT_FOCUS_POSITION_409_OG [0x199]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2012/04/03  11:06:46.0  XRT_FLD_ENA_435_OG [0x1b3]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2012/04/03  11:06:48.0  XRT_FLRCTRL_ENA_449_OG [0x1c1]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2012/04/03  11:06:50.0  XRT_AEC_RESET_443_OG [0x1bb]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2012/04/03  11:06:52.0  XRT_ARS_DIS_431_OG [0x1af]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2012/04/03  11:06:54.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/03  11:06:56.0  XRT_QT_PROG_SET_445_OG [0x1bd]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 14
2012/04/03  11:06:58.0  XRT_FL_PROG_SET_414_OG [0x19e]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 03
2012/04/03  11:07:00.0  XRT_CTRL_AUTO_406_OG [0x196]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/03  14:19:30.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/03  14:19:32.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/03  14:19:34.0  XRT_PREFLR_STRT_422_OG [0x1a6]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2012/04/03  14:22:44.0  XRT_PREFLR_STOP_424_OG [0x1a8]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2012/04/03  14:28:00.0  XRT_Custom_418_OG [0x1a2]
2012/04/03  14:29:00.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/03  15:53:30.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/03  15:53:32.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/03  15:53:34.0  XRT_PREFLR_STRT_422_OG [0x1a6]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2012/04/03  15:56:44.0  XRT_PREFLR_STOP_424_OG [0x1a8]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2012/04/03  16:17:00.0  XRT_Custom_418_OG [0x1a2]
2012/04/03  16:18:00.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/03  17:30:00.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/03  17:30:02.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/03  17:30:04.0  XRT_PREFLR_STRT_422_OG [0x1a6]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2012/04/03  17:33:14.0  XRT_PREFLR_STOP_424_OG [0x1a8]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2012/04/03  17:53:30.0  XRT_Custom_418_OG [0x1a2]
2012/04/03  17:54:30.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/03  17:55:24.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/03  17:55:26.0  XRT_FOCUS_POSITION_401_OG [0x191]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2012/04/03  17:55:30.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
2012/04/03  17:55:46.0  XRT_FLD_DIS_402_OG [0x192]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2012/04/03  17:55:48.0  XRT_FLRCTRL_DIS_433_OG [0x1b1]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2012/04/03  17:55:50.0  XRT_ARS_DIS_438_OG [0x1b6]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2012/04/03  17:58:28.0  XRT_QT_PROG_SET_444_OG [0x1bc]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 01
2012/04/03  17:58:30.0  XRT_CTRL_AUTO_406_OG [0x196]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/03  18:05:24.0  XRT_CTRL_MANU_439_OG [0x1b7]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/03  18:05:30.0  AOCS_ORe-point_Start_3_OG [0x099]
                                AOCU_NM              5 02-76 03 00 00 00 00
2012/04/03  18:07:56.0  XRT_FOCUS_POSITION_409_OG [0x199]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2012/04/03  18:08:16.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2012/04/03  18:08:18.0  XRT_FLRCTRL_ENA_413_OG [0x19d]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2012/04/03  18:08:20.0  XRT_AEC_RESET_443_OG [0x1bb]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2012/04/03  18:08:22.0  XRT_ARS_DIS_431_OG [0x1af]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2012/04/03  18:08:24.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/03  18:08:26.0  XRT_QT_PROG_SET_441_OG [0x1b9]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 07
2012/04/03  18:08:28.0  XRT_FL_PROG_SET_414_OG [0x19e]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 03
```

```
2012/04/03  18:08:30.0  XRT_CTRL_AUTO_406_OG [0x196]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/03  19:07:00.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/03  19:07:02.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/03  19:07:04.0  XRT_PREFLR_STRT_422_OG [0x1a6]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2012/04/03  19:10:14.0  XRT_PREFLR_STOP_424_OG [0x1a8]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2012/04/03  19:30:30.0  XRT_Custom_418_OG [0x1a2]
2012/04/03  19:31:30.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/03  20:44:30.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/03  20:44:32.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/03  20:44:34.0  XRT_PREFLR_STRT_422_OG [0x1a6]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2012/04/03  20:47:44.0  XRT_PREFLR_STOP_424_OG [0x1a8]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2012/04/03  21:08:00.0  XRT_Custom_418_OG [0x1a2]
2012/04/03  21:09:00.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/03  22:22:00.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/03  22:22:02.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/03  22:22:04.0  XRT_PREFLR_STRT_422_OG [0x1a6]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2012/04/03  22:25:14.0  XRT_PREFLR_STOP_424_OG [0x1a8]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2012/04/03  22:43:30.0  XRT_Custom_418_OG [0x1a2]
2012/04/03  22:44:30.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/04  00:00:00.0  XRT_CTRL_MANU_442_OG [0x1ba]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/04  00:00:30.0  XRT_TCIB_XRT_S_HTR_A_ENA_426_OG [0x1aa]
                                TCIB_XRT_S_HTR_A_ENA 0 04-BC
2012/04/05  00:00:00.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/05  00:00:02.0  XRT_TCIB_XRT_S_HTR_A_DIS_436_OG [0x1b4]
                                TCIB_XRT_S_HTR_A_DIS 0 04-C0
2012/04/05  05:54:54.0  XRT_CTRL_MANU_430_OG [0x1ae]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/05  05:55:00.0  AOCS_ORe-point_Start_4_OG [0x09a]
                                AOCU_NM              5 02-76 00 2e f9 2e f9
2012/04/05  05:57:32.0  XRT_FOCUS_POSITION_427_OG [0x1ab]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2012/04/05  05:57:52.0  XRT_QT_PROG_SET_440_OG [0x1b8]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0a
2012/04/05  05:57:54.0  XRT_FLD_DIS_402_OG [0x192]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2012/04/05  05:57:56.0  XRT_FLRCTRL_DIS_433_OG [0x1b1]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2012/04/05  05:57:58.0  XRT_ARS_DIS_431_OG [0x1af]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2012/04/05  05:58:00.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/05  06:04:54.0  XRT_CTRL_MANU_430_OG [0x1ae]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/05  06:05:00.0  AOCS_ORe-point_Start_5_OG [0x09b]
                                AOCU_NM              5 02-76 00 2e f9 d1 07
2012/04/05  06:07:32.0  XRT_FOCUS_POSITION_427_OG [0x1ab]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2012/04/05  06:07:52.0  XRT_QT_PROG_SET_403_OG [0x193]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0c
2012/04/05  06:07:54.0  XRT_FLD_DIS_402_OG [0x192]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2012/04/05  06:07:56.0  XRT_FLRCTRL_DIS_433_OG [0x1b1]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2012/04/05  06:07:58.0  XRT_ARS_DIS_431_OG [0x1af]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2012/04/05  06:08:00.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/05  06:14:54.0  XRT_CTRL_MANU_430_OG [0x1ae]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/05  06:15:00.0  AOCS_ORe-point_Start_6_OG [0x09c]
                                AOCU_NM              5 02-76 00 d1 07 d1 07
2012/04/05  06:17:32.0  XRT_FOCUS_POSITION_427_OG [0x1ab]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2012/04/05  06:17:52.0  XRT_QT_PROG_SET_407_OG [0x197]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 13
2012/04/05  06:17:54.0  XRT_FLD_DIS_402_OG [0x192]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2012/04/05  06:17:56.0  XRT_FLRCTRL_DIS_433_OG [0x1b1]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2012/04/05  06:17:58.0  XRT_ARS_DIS_431_OG [0x1af]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2012/04/05  06:18:00.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/05  06:24:54.0  XRT_CTRL_MANU_430_OG [0x1ae]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
```

```
2012/04/05  06:25:00.0  AOCS_ORe-point_Start_7_OG [0x09d]
                                AOCU_NM              5 02-76 00 d1 07 2e f9
2012/04/05  06:27:32.0  XRT_FOCUS_POSITION_427_OG [0x1ab]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2012/04/05  06:27:52.0  XRT_QT_PROG_SET_415_OG [0x19f]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 05
2012/04/05  06:27:54.0  XRT_FLD_DIS_402_OG [0x192]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2012/04/05  06:27:56.0  XRT_FLRCTRL_DIS_433_OG [0x1b1]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2012/04/05  06:27:58.0  XRT_ARS_DIS_431_OG [0x1af]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2012/04/05  06:28:00.0  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/05  06:34:54.0  XRT_CTRL_MANU_400_OG [0x190]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/05  06:34:56.0  XRT_FOCUS_POSITION_401_OG [0x191]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2012/04/05  06:35:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
2012/04/05  06:35:16.0  XRT_FLD_DIS_402_OG [0x192]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2012/04/05  06:35:18.0  XRT_FLRCTRL_DIS_433_OG [0x1b1]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2012/04/05  06:35:20.0  XRT_ARS_DIS_438_OG [0x1b6]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2012/04/05  06:37:58.0  XRT_QT_PROG_SET_444_OG [0x1bc]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 01
2012/04/05  06:38:00.0  XRT_CTRL_AUTO_406_OG [0x196]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/05  06:45:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                AOCU_NM              5 02-76 03 00 00 00 00
2012/04/05  06:46:30.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/05  06:46:32.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/05  06:46:34.0  XRT_PREFLR_STRT_422_OG [0x1a6]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2012/04/05  06:49:44.0  XRT_PREFLR_STOP_424_OG [0x1a8]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2012/04/05  07:11:30.0  XRT_CTRL_MANU_429_OG [0x1ad]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/05  07:11:32.0  XRT_FOCUS_POSITION_409_OG [0x199]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2012/04/05  07:11:52.0  XRT_FLD_ENA_411_OG [0x19b]
                                MDP_XRT_FLD_ENA      1 07-F0 d8
2012/04/05  07:11:54.0  XRT_FLRCTRL_ENA_413_OG [0x19d]
                                MDP_XRT_FLRCTRL_ENA  1 07-F0 c8
2012/04/05  07:11:56.0  XRT_AEC_RESET_443_OG [0x1bb]
                                MDP_XRT_AEC_RESET    1 07-F0 d0
2012/04/05  07:11:58.0  XRT_ARS_DIS_431_OG [0x1af]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2012/04/05  07:12:00.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/05  07:12:02.0  XRT_QT_PROG_SET_441_OG [0x1b9]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 07
2012/04/05  07:12:04.0  XRT_FL_PROG_SET_414_OG [0x19e]
                                MDP_XRT_FL_PROG_SET  2 07-F0 c5 03
2012/04/05  07:12:06.0  XRT_CTRL_AUTO_406_OG [0x196]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/05  08:26:30.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/05  08:26:32.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/05  08:26:34.0  XRT_PREFLR_STRT_422_OG [0x1a6]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2012/04/05  08:29:44.0  XRT_PREFLR_STOP_424_OG [0x1a8]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2012/04/05  08:47:30.5  XRT_Custom_418_OG [0x1a2]
2012/04/05  08:48:30.5  XRT_CTRL_AUTO_419_OG [0x1a3]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2012/04/05  10:07:30.0  XRT_CTRL_MANU_408_OG [0x198]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2012/04/05  10:07:32.0  XRT_FLD_RESET_412_OG [0x19c]
                                MDP_XRT_FLD_RESET    1 07-F0 da
2012/04/05  10:07:34.0  XRT_PREFLR_STRT_422_OG [0x1a6]
                                MDP_XRT_PREFLR_STRT  1 07-F0 e8
2012/04/05  10:10:44.0  XRT_PREFLR_STOP_424_OG [0x1a8]
                                MDP_XRT_PREFLR_STOP  1 07-F0 e9
2012/04/05  10:41:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 00 00 00 00 00
```