XRT Timeline to be uploaded on 2009/04/02

Period: 2009/04/02 11:07:00 - 2009/04/07 10:57:00

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

XOB #1563: CCD Monitor During Bakeout - G-band + dark - wide FOV

Term	Pointing (x, y)	Comment
04/02 14:44:30 - 04/02 17:03:40	Track (76.8, 539.5) @ 04/02 14:00:00	* Track bright region in N.

PROG= 20 Inf.-time(s)
Subr= 1 1-time(s) 600.0sec
Seqn= 98 1-time(s) 4.0sec

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	2048x256 (1024, 1024)	DPCM	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	2048x256 (1024, 1024)	DPCM	0	0	2.0sec

XOB #1565: CCD Monitor During Bakeout - G-band + dark - wide FOV - lower cadence (30min)

Term	Pointing (x, y)	Comment
04/02 17:06:50 - 04/02 20:54:30	Track (76.8, 539.5) @ 04/02 14:00:00	* Track bright region in N.

PROG= 11 Inf.-time(s)
Subr= 1 1-time(s) 1800.0sec
Seqn= 98 1-time(s) 4.0sec

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	2048x256 (1024, 1024)	DPCM	0	0	2.0sec
Open/thick-Be	Open/thick-Be	close	Safe	Dark	44ms	Obs	1x1	2048x256 (1024, 1024)	DPCM	0	0	2.0sec

XOB #164F: Synoptic Q95 2x2 - Al/mesh(512/5795) + Dark cal(2x2 4x4 8x8 512 Q98) + Ti-poly(723/11571) + G-band(16)-2

Term	Pointing (x, y)	Comment
04/03 05:57:00 - 04/03 06:03:54	Fixed (0.0, 0.0)	synoptic, shifted -6.0 min
04/04 06:03:00 - 04/07 10:57:00	Fixed (0.0, 0.0)	synoptic

PROG= 19 1-time(s)
Subr= 1 1-time(s) 12.0sec
Seqn= 47 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/Ti-poly	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Al-mesh	Open/Ti-poly	close	Safe	Norm	5.66s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	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/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

Seqn= 88 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/thick-Al	close	Safe	Norm	707ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	11.3s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Seqn= 92 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 #15A8: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 1st Quadrant

Term	Pointing (x, y)	Comment
04/03 06:07:00 - 04/03 06:14:54	Fixed (-528.4, -528.4)	# XRT post-bakeout four-quadrant pointings.

PROG= 08 1-time(s)
Subr= 1 1-time(s) 12.0sec
Seqn= 28 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

XOB #15A9: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 2nd Quadrant

Term	Pointing (x, y)	Comment
04/03 06:18:00 - 04/03 06:24:54	Fixed (528.4, -528.4)	* Cont.

PROG= 07 1-time(s)
Subr= 1 1-time(s) 12.0sec
Seqn= 41 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

XOB #15AB: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 4th Quadrant

Term	Pointing (x, y)	Comment
04/03 06:28:00 - 04/03 06:34:54	Fixed (-528.4, 528.4)	* Cont.

PROG= 15 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
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval

XOB #15AA: CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - Q90 - 3rd Quadrant

Term	Pointing (x, y)	Comment
04/03 06:38:00 - 04/03 06:44:54	Fixed (528.4, 528.4)	* Last four quadrant.

PROG= 04 1-time(s)

└ **Subr= 1 1-time(s) 12.0sec**

└ **Seqn= 8 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
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval

XOB #1670: AR Watch 512x512 - C/Poly + Thin-Be + Med-Be - 1x1 - AEC2

Term	Pointing (x, y)	Comment
04/03 06:48:00 - 04/03 12:55:54	Track (207.9, 536.3) @ 04/03 06:45:00	* Track bright region in N, fast maps over 13-15 UT.
04/03 15:03:06 - 04/03 17:56:24	Track (207.9, 536.3) @ 04/03 06:45:00	* Track bright region in N, fast maps over 13-15 UT.
04/03 20:10:00 - 04/04 05:59:54	Track (308.9, 532.1) @ 04/03 20:07:00	# Track bright region in N.

PROG= 17 Inf.-time(s)

├ **Subr= 1 120-time(s) 180.0sec**

├ **Seqn= 96 1-time(s) 240.0sec**

C-poly/Open	thin-Be/Open	close	Safe	Norm	2.83s	Obs	1x1	512x512 (1024, 1024)	DPCM	2	0	28.0sec

└ **Seqn= 70 1-time(s) 240.0sec**

thin-Be/Open	thin-Be/Open	close	Safe	Norm	8.00s	Obs	1x1	512x512 (1024, 1024)	DPCM	2	0	22.0sec

└ **Subr= 2 1-time(s) 60.0sec**

└ **Seqn= 32 1-time(s) 30.0sec**

Open/G-band	Open/G-band	open	Safe	Norm	63ms	Obs	1x1	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

XOB #1672: AR-Ti/poly 1x1 384 FOV movie

Term	Pointing (x, y)	Comment
04/03 12:59:00 - 04/03 14:55:30	Track (207.9, 536.3) @ 04/03 06:45:00	* Track bright region in N, fast maps over 13-15 UT.

PROG= 18 Inf.-time(s)

└ **Subr= 1 180-time(s) 10.0sec**

└ **Seqn= 69 1-time(s) 10.0sec**

Open/Ti-poly	Open/Ti-poly	close	Safe	Norm	4.00s	Obs	1x1	384x384 (1024, 1024)	DPCM	2	0	2.0sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC	Buffer	Interval

XOB #1638: Synoptic 9 Filter- 2x2 Q98 Longer exp

Term	Pointing (x, y)	Comment
04/03 17:59:30 - 04/03 20:06:54	Fixed (0.0, 0.0)	synoptic, shifted -3.0 min, and two hours at disk center for SOT flat fields.

PROG= 16 1-time(s)

├ **Subr= 1 1-time(s) 180.0sec**

├ **Seqn= 81 1-time(s) 30.0sec**

Open/Al-mesh	Open/Ti-poly	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Al-mesh	Open/Ti-poly	close	Safe	Norm	5.66s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec

├ **Seqn= 33 1-time(s) 30.0sec**

Open/Ti-poly	Open/thick-Al	close	Safe	Norm	707ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	11.3s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec

├ **Seqn=100 1-time(s) 30.0sec**

Al-poly/Open	Al-poly/Open	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	5.66s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec

├ **Seqn= 85 1-time(s) 30.0sec**

C-poly/Open	C-poly/Open	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
C-poly/Open	med-Be/Open	close	Safe	Norm	16.0s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec

├ **Seqn= 18 1-time(s) 30.0sec**

Al-poly/Ti-poly	Al-poly/thick-Al	close	Safe	Norm	16.0s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec

└ **Seqn= 66 1-time(s) 30.0sec**

thin-Be/Open	thin-Be/Open	close	Safe	Norm	32.0s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec

└ **Subr= 2 1-time(s) 360.0sec**

├ **Seqn= 20 1-time(s) 4.0sec**

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

├ **Seqn= 45 1-time(s) 4.0sec**

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

├ **Seqn= 50 1-time(s) 4.0sec**

Open/Al-mesh	Open/Al-mesh	close	Safe	Dark	250ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec

└ **Seqn= 92 1-time(s) 4.0sec**

Open/G-band	Open/G-band	open	Safe	Norm	16ms	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** * * * * *

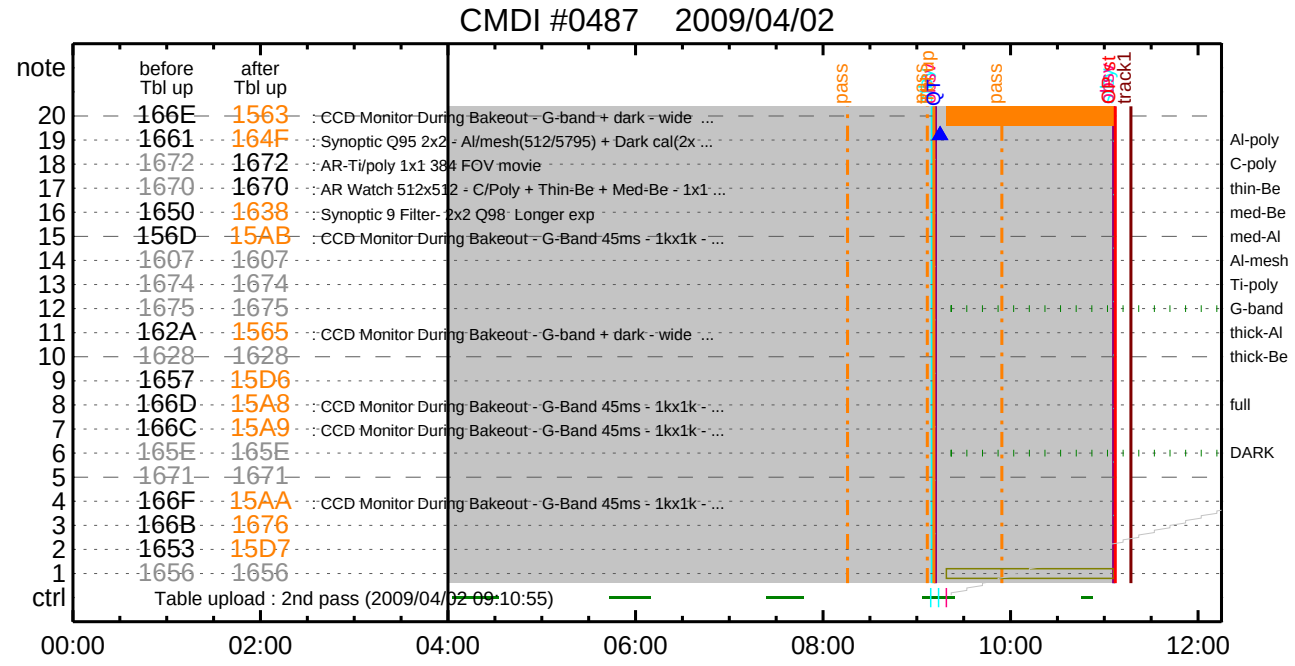
NOT USED

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

NOT USED

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

NOT USED


CMDI #0487 2009/04/02
note
before Tbl up
after Tbl up
20 166E 1563 : CCD Monitor During Bakeout - G-band + dark - wide ...
19 1661 164F : Synoptic Q95 2x2 - Al/mesh(512/5795) + Dark cal(2x ...
18 1672 1672 : AR-Ti/poly 1x1 384 FOV movie
17 1670 1670 : AR Watch 512x512 - C/Poly + Thin-Be + Med-Be - 1x1 ...
16 1650 1638 : Synoptic 9 Filter- 2x2 Q98 Longer exp
15 156D 15AB : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
14 1607 1607
13 1674 1674
12 1675 1675
11 162A 1565 : CCD Monitor During Bakeout - G-band + dark - wide ...
10 1628 1628
9 1657 15D6
8 166D 15A8 : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
7 166C 15A9 : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
6 165E 165E
5 1671 1671
4 166F 15AA : CCD Monitor During Bakeout - G-Band 45ms - 1kx1k - ...
3 166B 1676
2 1653 15D7
1 1656 1656
ctrl Table upload : 2nd pass (2009/04/02 09:10:55)
pass
QT
track1
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
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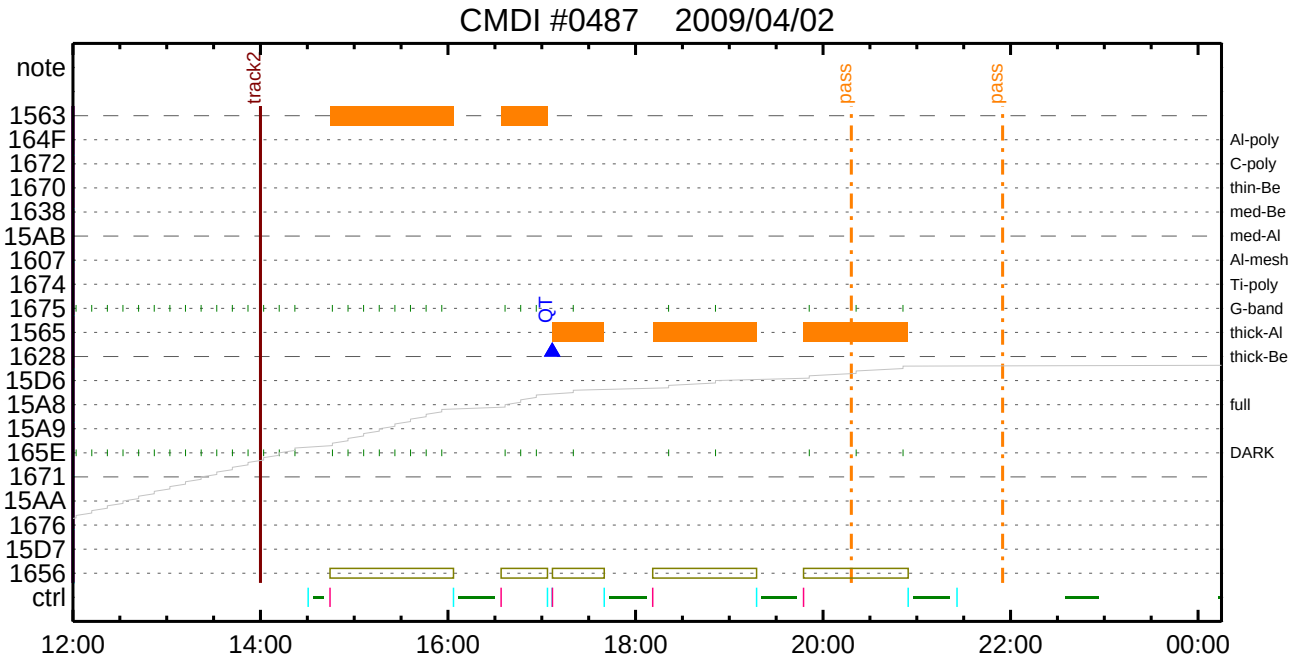
12:00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note
track2
pass
QT
1563
164F
1672
1670
1638
15AB
1607
1674
1675
1565
1628
15D6
15A8
15A9
165E
1671
15AA
1676
15D7
1656
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
14:00
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18:00
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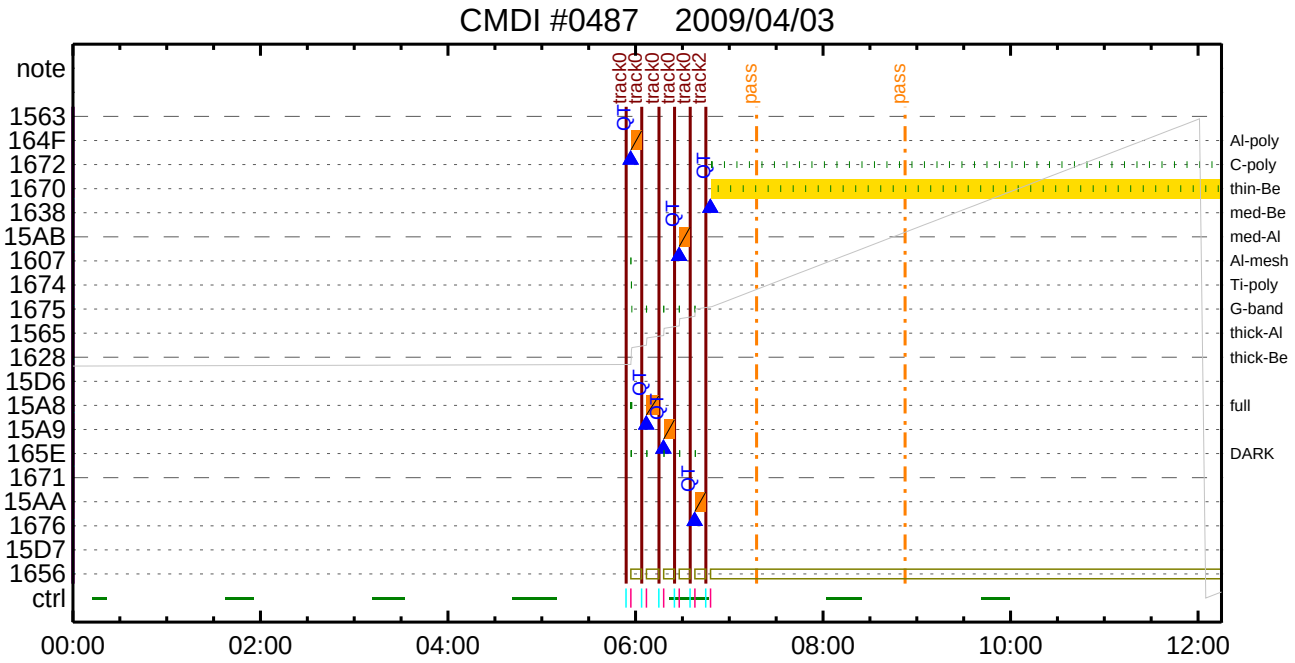
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track0
track2
pass
QT
1563
164F
1672
1670
1638
15AB
1607
1674
1675
1565
1628
15D6
15A8
15A9
165E
1671
15AA
1676
15D7
1656
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
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06:00
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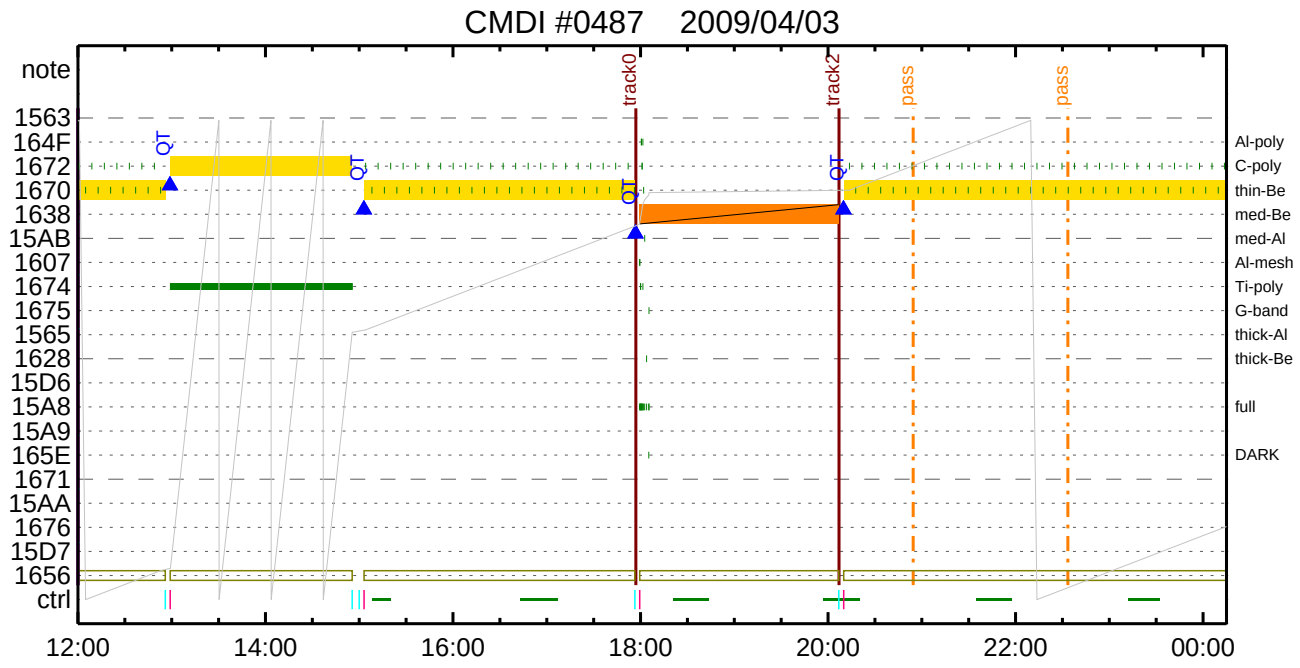
CMDI #0487 2009/04/03
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1563
164F
1672
1670
1638
15AB
1607
1674
1675
1565
1628
15D6
15A8
15A9
165E
1671
15AA
1676
15D7
1656
ctrl
OT
track0
track2
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
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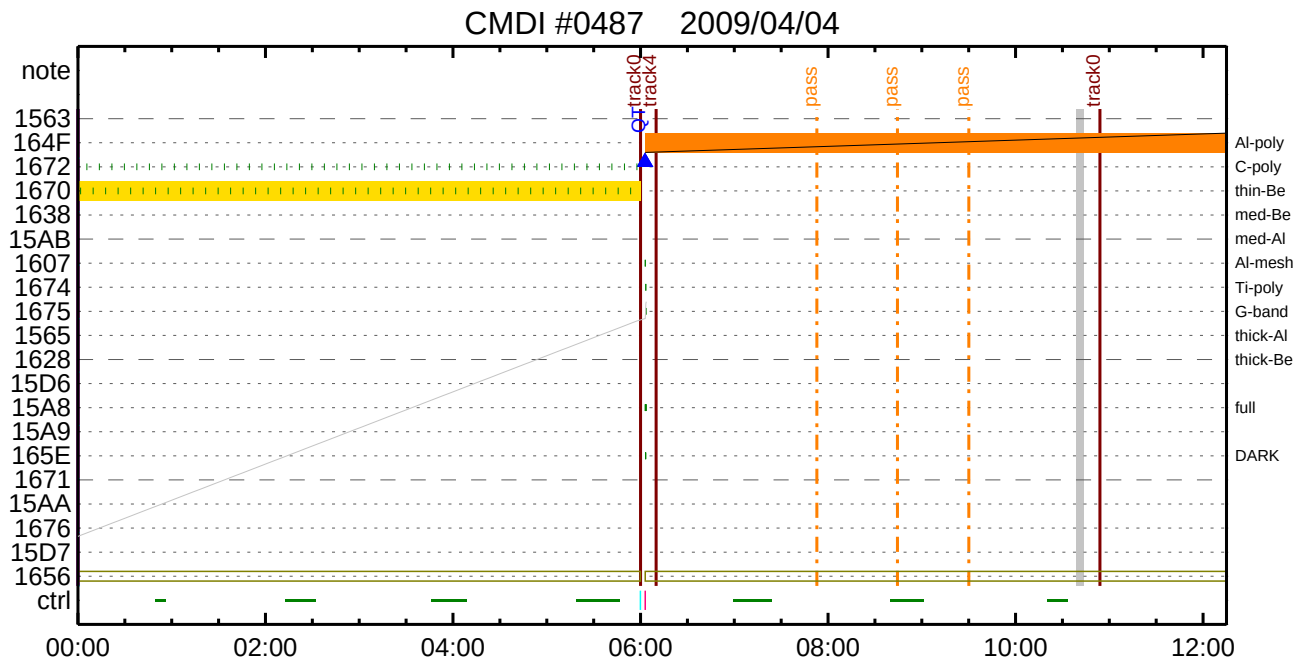
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1563
164F
1672
1670
1638
15AB
1607
1674
1675
1565
1628
15D6
15A8
15A9
165E
1671
15AA
1676
15D7
1656
ctrl
OT
track0
track4
pass
pass
pass
track0
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
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04:00
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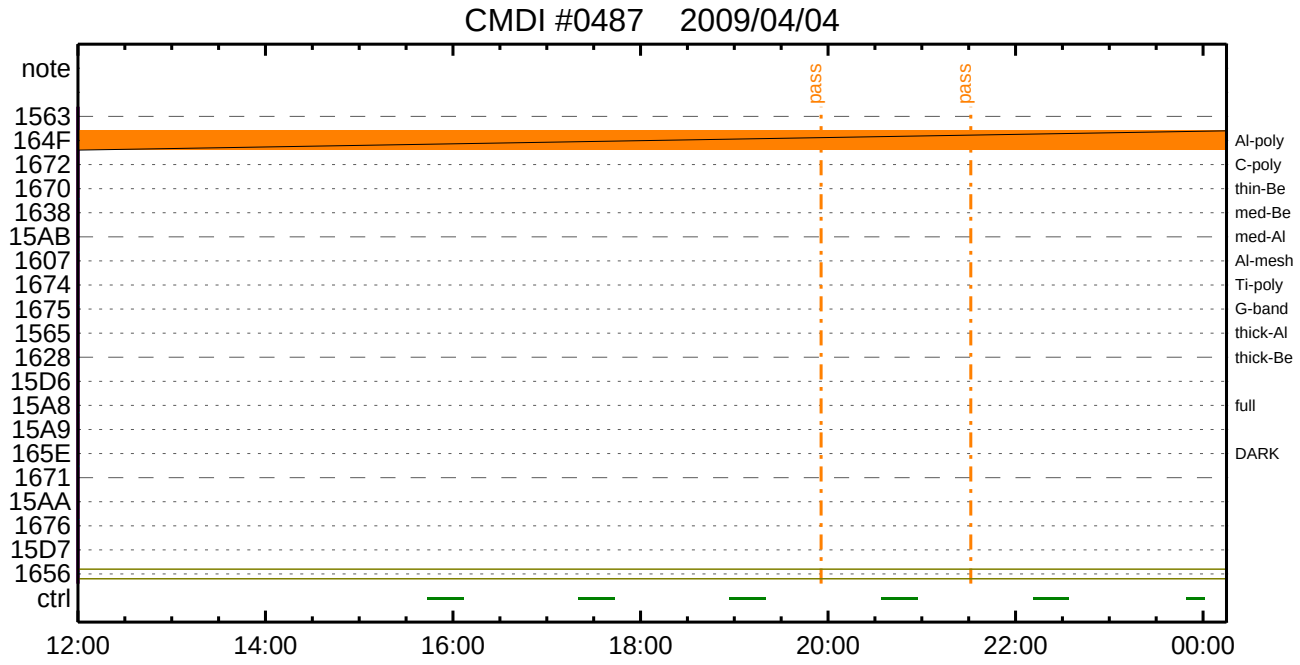
CMDI #0487 2009/04/04
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1563
164F
1672
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15AB
1607
1674
1675
1565
1628
15D6
15A8
15A9
165E
1671
15AA
1676
15D7
1656
ctrl
pass
pass
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
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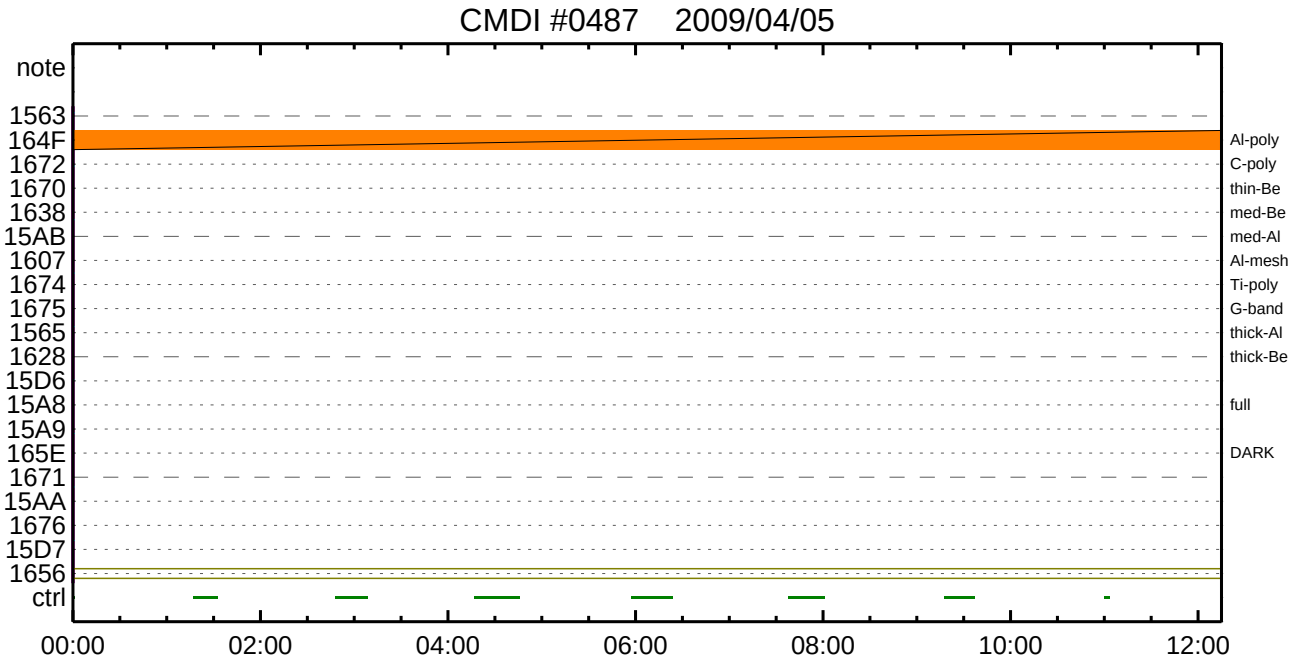
CMDI #0487 2009/04/05
note
1563
164F
1672
1670
1638
15AB
1607
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1675
1565
1628
15D6
15A8
15A9
165E
1671
15AA
1676
15D7
1656
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
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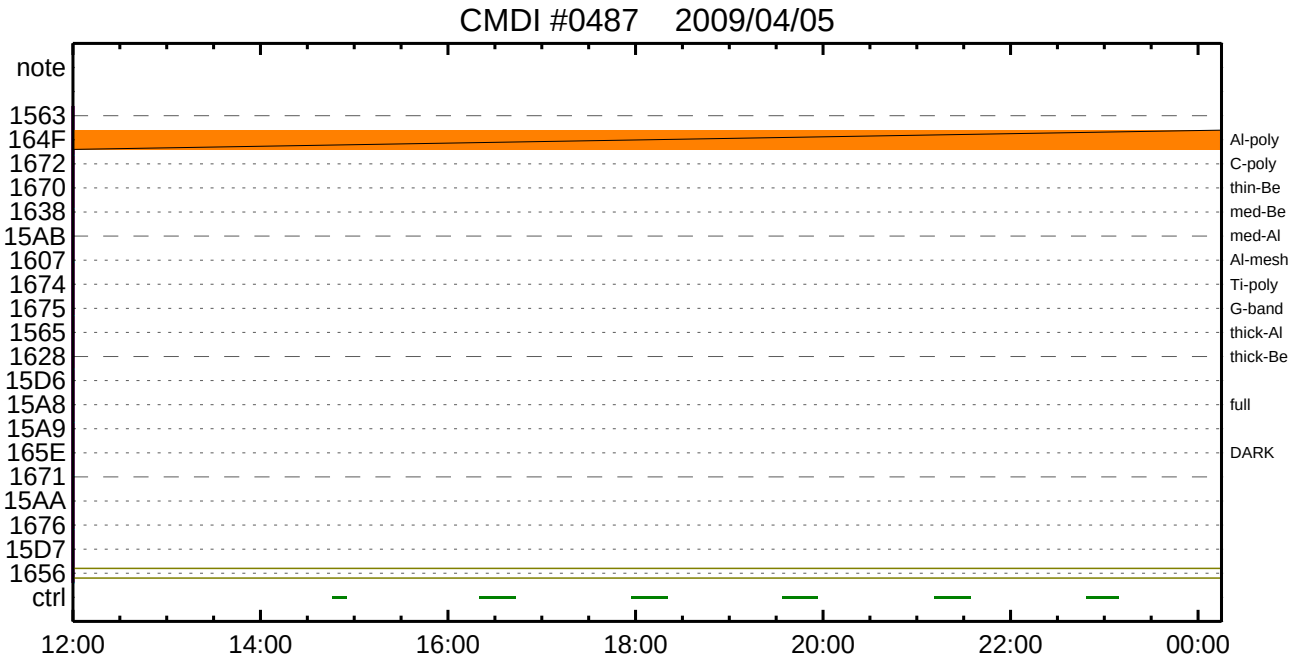
CMDI #0487 2009/04/05
note
1563
164F
1672
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1638
15AB
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1674
1675
1565
1628
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15A8
15A9
165E
1671
15AA
1676
15D7
1656
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
12:00
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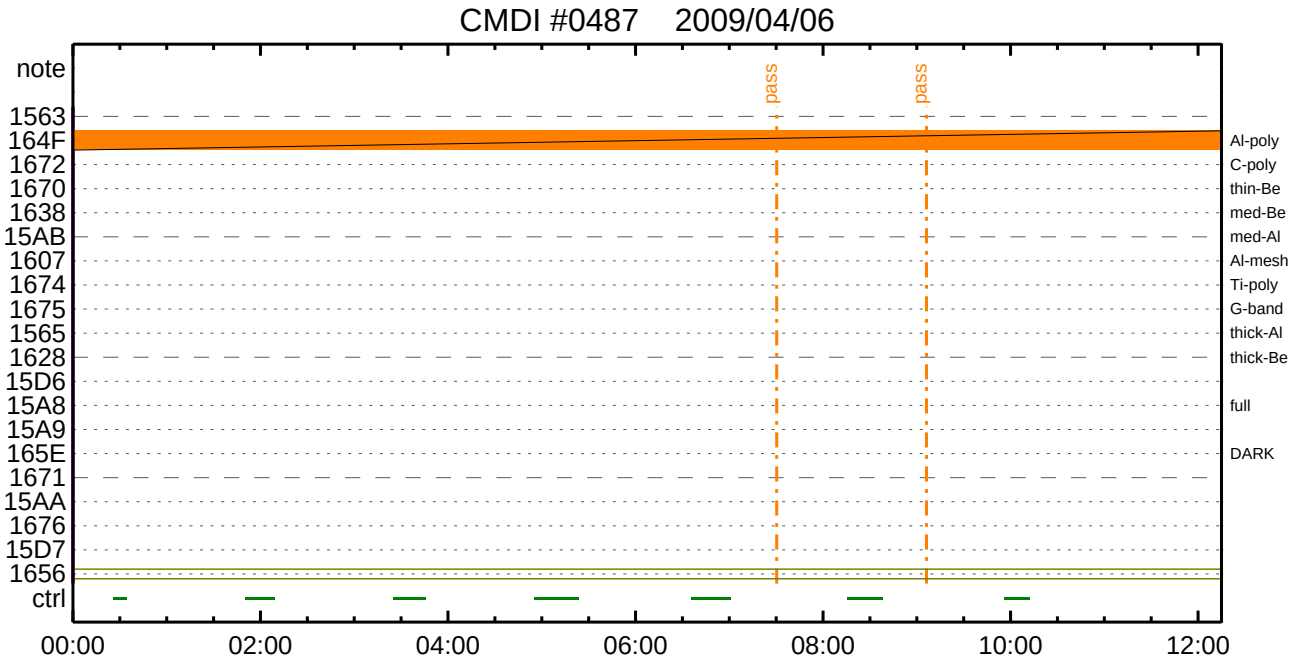
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1674
1675
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15A8
15A9
165E
1671
15AA
1676
15D7
1656
ctrl
Al-poly
C-poly
thin-Be
med-Be
med-Al
Al-mesh
Ti-poly
G-band
thick-Al
thick-Be
full
DARK
00:00
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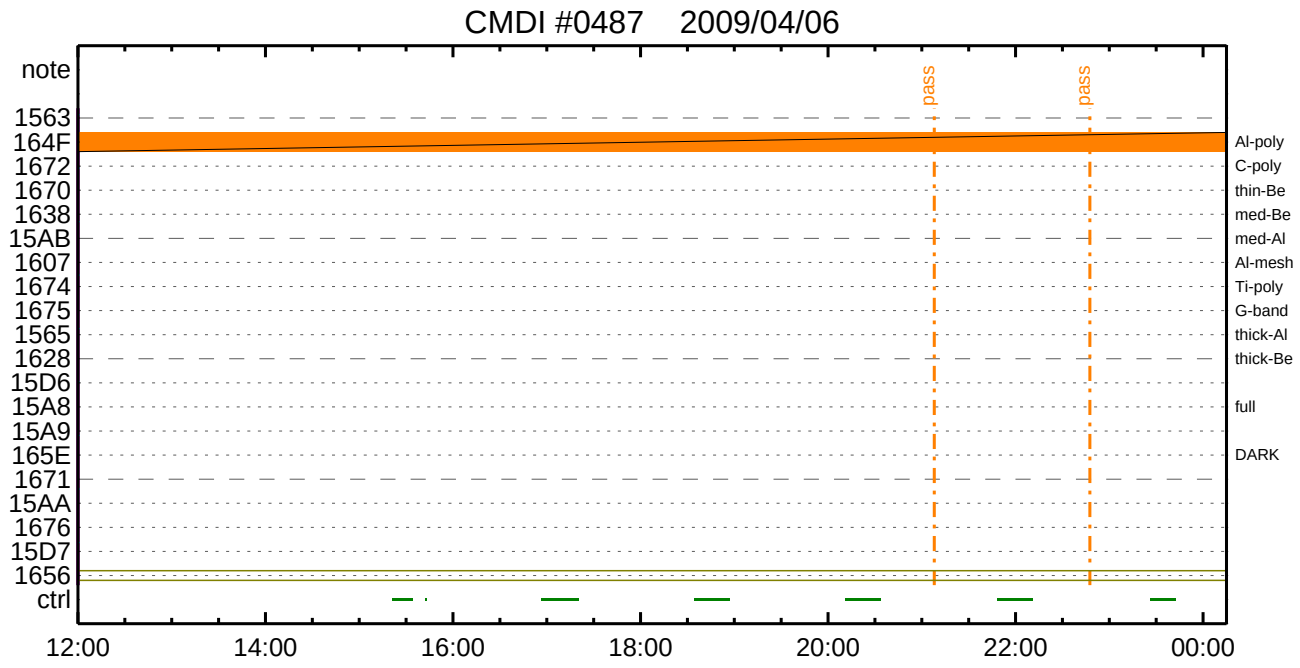
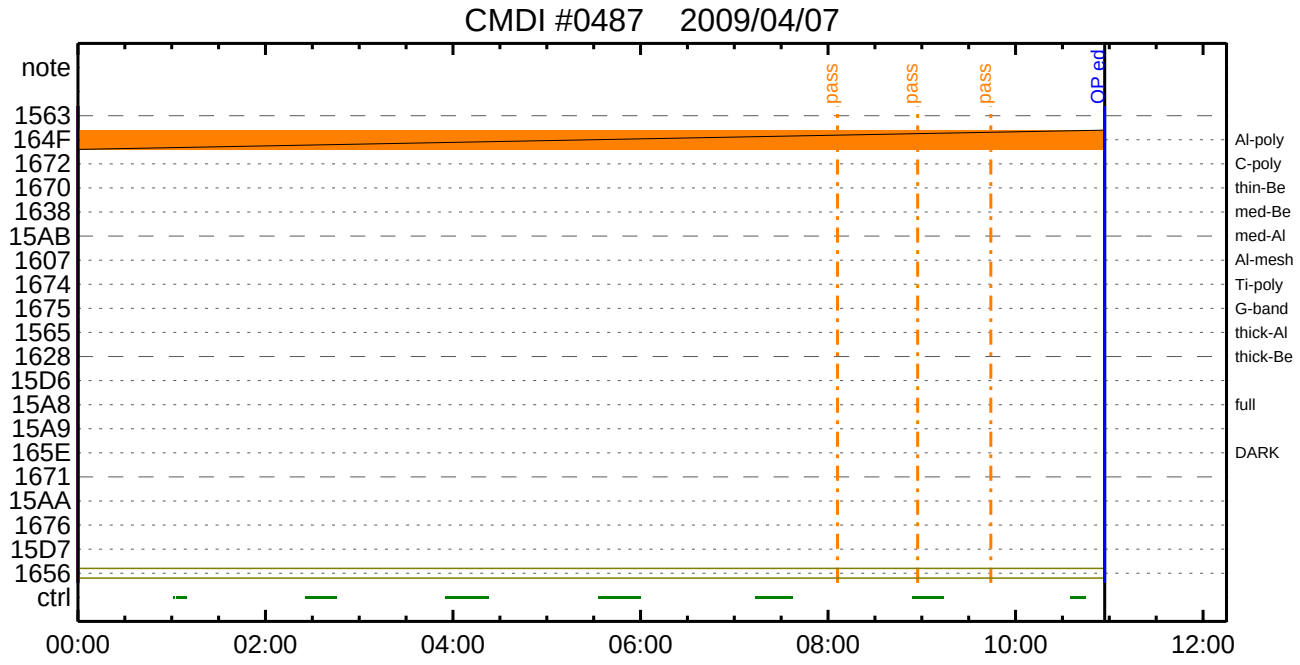
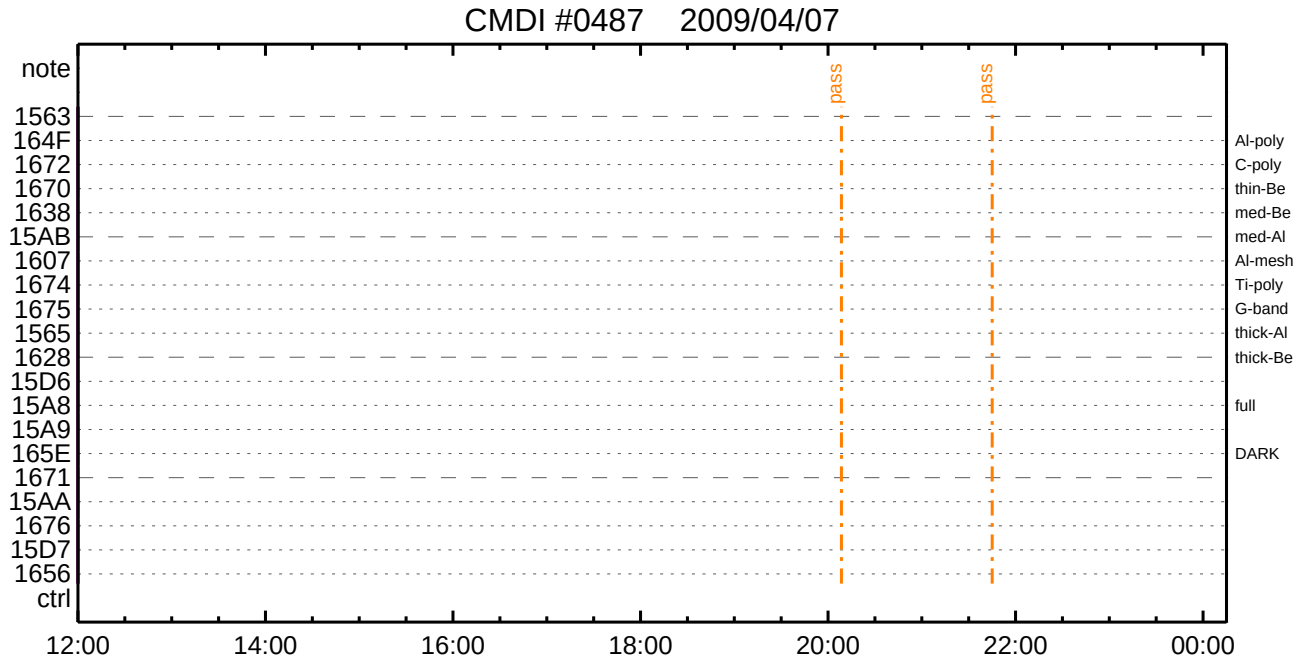
10:00
12:00


CMDI #0487 2009/04/06
note
1563
164F
1672
1670
1638
15AB
1607
1674
1675
1565
1628
15D6
15A8
15A9
165E
1671
15AA
1676
15D7
1656
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 #0487 2009/04/07
note
1563
164F
1672
1670
1638
15AB
1607
1674
1675
1565
1628
15D6
15A8
15A9
165E
1671
15AA
1676
15D7
1656
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 #0487 2009/04/07
note
1563
164F
1672
1670
1638
15AB
1607
1674
1675
1565
1628
15D6
15A8
15A9
165E
1671
15AA
1676
15D7
1656
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-509 2009-04-02 13:10:01 289 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007   +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ËËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011   +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014   . C. ****************************
0015     C. XÁ÷¿®µ¡ON
0016     C. ****************************
0017     C. ¢¨ ºÆÀ¸ Í×ÈÝ¤äLOS¤Þ¤ÇºÎ»Þ´Ö¤ò¹ÍÎ¸ ¤•¡¢ÉÔÍ×¤ÊXÂÓON¤Ï¹Ô¤Ê¤ï¤Ê¤¤¤³¤È¡£
0018     C.
0019   +. DC 03-B4 TCIA_XPA_ON/HI
0020     M. WAIT_SEC   1
0021   +  DC 03-84 TCIA_XMOD_ON
0022     M. WAIT_SEC   1
0023   +  DC 03-95 TCIA_XMOD_QPSK
0024     C.                      ¢¢[HK1_XPA_ON/OFF]              EQ     ON
0025     C.                      ¢¢[HK1_XPA_PWR_HI/LO]           EQ     HI
0026     C.                      ¢¢[HK1_XMOD_ON/OFF]             EQ     ON
0027     C.                      ¢¢[HK1_XMOD_QPSK/PM]            EQ     QPSK
0028     C.
0029   . C. X¥Ð¥ó¥É¥í¥Ã¥¯¾õÂÖ¤¬°ÂÄê¤•¤¿¤é¡¢°Ê²¼¤ÎºÆÀ¸ ¼ê½ç¤ò¼Â¹Ô¤¹¤ë¡£
0030     C.
0031   . C. ***************
0032     C. DR PT1 ÄÌ¾ïºÆÀ¸
0033     C. ***************
0034     C. ¢¨ RESTART¡ÊPT1¡Ë¤•¤¿¤¤¾ì¹ç¤Ï¡¢°Ê²¼¤Ï¼Â¹Ô¤»¤º¡¢DCBC-150¤Ø¿Ê¤à¡£
0035     C.
0036   . C. ¡ãPT1ºÆÀ¸ ³«»Ï¡ä
0037   +. DC 01-29 DHU_S/X_VC4_OFF
0038   +  DC 06-C8 DR_PT1_REP_SEL
0039     BC       (01 00)
0040   +  DC 06-B3 DR_REP_START
0041   +  DC 01-32 DHU_X_VC4_ON
0042     C.                      ¢¢[HK1_REP_PT_1/2]              EQ     PT1    (¼Â¹Ô¸¡¾Ú)
0043     C.                      ¢¢[HK1_REP_STA/STP]             EQ     START  (¼Â¹Ô¸¡¾Ú)
0044     C.                      ¢¢[HK1_X_VC4_ON/OFF]            EQ     ON     (¼Â¹Ô¸¡¾Ú)
0045     C.
0046   . C. ¡ã¥¢¥ó¥Æ¥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
```

```
     C.
     C.
   . C. ****************************
     C. OP/OG¥í¡¼¥É¡¦¥À¥ó¥×
     C. ****************************
     C.
   . C. ¡ãOP/OG¥í¡¼¥É¡ä
   . S. OP    op-509:OP
     ()
   . S. OG    og-509:OG
     ()
     C.
   . C. ¡ãNMOG&OPÎÎ°è¥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¤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. *********************************
     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 2009-04-02 11:02:00.0
     DC 01-B3 DHU_OP_STOP
     C.                      ¢¢[HK1_TI_CMD_NUM]               EQ     1COUNTUP
     C.
  +. TI 2009-04-02 11:02:01.0
     DC 01-B4 DHU_OP_COPY
     C.                      ¢¢[HK1_TI_CMD_NUM]               EQ     1COUNTUP
     C.
  +. TI 2009-04-02 11:02:01.0
     DC 01-B5 DHU_OPOG_COPY
     C.                      ¢¢[HK1_TI_CMD_NUM]               EQ     1COUNTUP
```

```
0194     C.
0195   +. TI 2009-04-02 11:06:59.5
0196     DC 01-B2 DHU_OP_START
0197     C.                      ¢¢[HK1_TI_CMD_NUM]              EQ     1COUNTUP
0198     C.
0199     C. °Ê²¼¤ÏÄê¾ïÍÑ¤Î¥Á¥§¥Ã¥¯¹àÌÜ
0200     C.                      ¢¢[HK1_TI_CMD_ENA/DIS]          EQ     ENA
0201     C.                      ¢¢[HK1_TI_CMD_NUM]              EQ     4
0202     C.                      ¢¢[HK1_NEXT_EXEC_PIM]           EQ     DHU
0203     C.                      ¢¢[HK1_NEXT_EXEC_DC]            EQ     0xB3
0204     C.
0205    . C. ****************************
0206     C. TIÎÎ°è¥À¥ó¥×
0207     C. ****************************
0208     C.
0209     C. TI_TBL(0x03AB00-0x03AEFF¡§ 1024byte)
0210   +. DC 01-23 DHU_DMA_DMP_PRM_SET
0211     BC       (03 ab 03 01 02)
0212     C.                      ¢¢[HK1_DMP_TOP_ADRS_1]          EQ     07
0213     C.                      ¢¢[HK1_DMP_TOP_ADRS_0]          EQ     2B
0214     C.                      ¢¢[HK1_DMP_BLOCK_NUM]           EQ     3
0215     C.                      ¢¢[HK1_DMP_REPEAT_NUM]          EQ     0
0216     C.                      ¢¢[HK1_DMA_DMP_PIM]             EQ     DHU
0217   +. DC 01-22 DHU_MODE_CHNG
0218     BC       (07 0b f8)
0219     C.                      ¢¢[HK1_PKT_FORM_NO]             EQ     7
0220     C.                      ¢¢[HK1_PKT_GEN_TIME]            EQ     0.25 s
0221     C.                      ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32k
0222     C.                      ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0223     C.                      ¢¢[HK1_DMP_CHK_FLG]             EQ     EXEC
0224     C.
0225    . C. ¥À¥ó¥×½ªÎ»¤ò³ÎÇ§
0226     C.                      ¢¢[HK1_DMP_CHK_FLG]             EQ     NON
0227     C.
0228    . C. RAM ID=TI_TBL¤Î¾È¹ç•ë²ÌOK¤ò³ÎÇ§
0229     C.
0230    . C. DHU¥â¡¼¥É¡Ê¼ý½¸¥ì¡¼¥È¡Ë¤òÌá¤¹
0231   +. DC 01-22 DHU_MODE_CHNG
0232     BC       (02 0a f8)
0233     C.                      ¢¢[HK1_PKT_FORM_NO]             EQ     2
0234     C.                      ¢¢[HK1_PKT_GEN_TIME]            EQ     0.5S
0235     C.                      ¢¢[HK1_S_TLM_BIT_RATE]          EQ     32K
0236     C.                      ¢¢[HK1_X_TLM_BIT_RATE]          EQ     4M
0237     C.
0238     C. ********************************
0239     C.  SOT TI command set
0240     C. ********************************
0241     C. Execute, after the success of OP upload.
0242   +. TI 2009-04-02 11:06:16.0
0243     DC 07-F0 MDP_SOT_MODE_STBY
0244     BC       (41)
0245    . C. ------------------------------------
0246     C.   HK1_TI_CMD_NUM       = 1 CNTUP [ ]
0247     C. ------------------------------------
0248     C. ************ SOT END ***********
0249    . C. Stop EIS observation and temporarily disable EIS mode changes
0250     C.
0251     C.
0252     C. ********** Start EIS operation (TI set) **********
0253     C. Execute, after the success of OP upload.
0254     C. Set EIS TI-commands
0255   +. TI 2009-04-02 11:06:30.0
0256     DC 07-FC EIS_MODE_MANU
0257     BC       (21 02)
0258   +. TI 2009-04-02 11:06:40.0
0259     DC 07-FC EIS_MODE_CHG_DIS
0260     BC       (22)
0261    . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    2 COUNTUP
0262     C. ************ End EIS operation (TI set) ***********
0263     C.
0264     C.
0265     C.
0266     C. ************ XRT START ***********
0267     C. Execute, after the success of OP upload.
0268   +. TI 2009-04-02 11:06:00.0
0269     DC 07-F0 MDP_XRT_MODE_STBY
0270     BC       (c3)
0271    . C.                      [   ]  [HK1_TI_CMD_NUM]     EQ    1COUNTUP
0272     C.
0273     C. ************ XRT END ***********
0274     C.
0275    . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0276     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0277    . S. DC-BC dcbc-402:DCBC
0278     (MDP_known_event)
0279     C.
0280     C.
0281    . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0282    . S. DC-BC dcbc-153:DCBC
0283     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0284     C.
0285     C.
0286    . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0287     C.
0288    . C. ********** LOS **********
0289     C.
```

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

main-510 2009-04-02 13:10:01 177 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¡¼¾Ê¡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. ***** 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 18s
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 2009-04-02 11:06:50.0
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. ************ XRT START ************
0069     C.
0070   +. DC 07-F0 MDP_XRT_CTRL_MANU
0071     BC       (c1)
0072   +  DC 07-F0 MDP_XRT_MODE_STBY
0073     BC       (c3)
0074    . C. ------------ Success Verify ?              OK / NG____
0075     C.
0076     C. XRT Obs. Table Upload
0077    . S. RAM   ram-291:MDP_OBS_X
0078     ()
0079     C.
0080   +. DC 07-F0 MDP_DUMP_XRTTBL
0081     BC       (84 07 00 00 00 3a d4)
0082    . C. ------------ Comparison Check ?                        OK / ERR ____
0083     C.
0084     C.
0085   +. DC 07-F0 MDP_XRT_ROI_SET
0086     BC       (cd 01 b1 b1 04 04)
0087   +  DC 07-F0 MDP_XRT_ROI_SET
0088     BC       (cd 02 b1 b1 08 08)
0089   +  DC 07-F0 MDP_XRT_ROI_SET
0090     BC       (cd 03 b1 b1 08 08)
0091   +  DC 07-F0 MDP_XRT_ROI_SET
0092     BC       (cd 04 b1 b1 06 06)
0093   +  DC 07-F0 MDP_XRT_ROI_SET
0094     BC       (cd 06 80 80 20 04)
0095   +  DC 07-F0 MDP_XRT_ROI_SET
```

```
0096     BC       (cd 07 80 80 20 20)
0097  +  DC 07-F0 MDP_XRT_ROI_SET
0098     BC       (cd 08 c0 c0 10 10)
0099  +  DC 07-F0 MDP_XRT_ROI_SET
0100     BC       (cd 09 40 c0 10 10)
0101  +  DC 07-F0 MDP_XRT_ROI_SET
0102     BC       (cd 0a c0 40 10 10)
0103  +  DC 07-F0 MDP_XRT_ROI_SET
0104     BC       (cd 0b 40 40 10 10)
0105  +  DC 07-F0 MDP_XRT_ROI_SET
0106     BC       (cd 0c 80 80 08 08)
0107  +  DC 07-F0 MDP_XRT_ROI_SET
0108     BC       (cd 0d 80 80 06 06)
0109  +  DC 07-F0 MDP_XRT_ROI_SET
0110     BC       (cd 0f 80 80 04 04)
0111  +  DC 07-F0 MDP_XRT_ROI_SET
0112     BC       (cd 10 80 80 10 10)
0113   . C. ---------- Success Verify ?            OK / NG ____
0114     C.
0115     C.
0116   . C. All OK?   Yes--> Please Proceed. / No --> Stop here.
0117     C.
0118  +. DC 07-F0 MDP_XRT_MODE_OBSV
0119     BC       (c2)
0120  +. TI 2009-04-02 11:06:02.0
0121     DC 07-F0 MDP_XRT_MODE_OBSV
0122     BC       (c2)
0123   . C. ---------- Success Verify ?            OK / NG ____
0124     C.
0125     C. ************ XRT END ***********
0126     C. ************************************************
0127     C.  START of XRT_CCD_HEATER_ON operation
0128     C. ************************************************
0129     C.
0130  +. DC 07-F0 MDP_XRT_CTRL_MANU
0131     BC       (c1)
0132     C. ---------- Success Verify ?           OK / NG;
0133     C.
0134  +. DC 07-F0 MDP_XRT_QT_PROG_SET
0135     BC       (c4 14)
0136  +  DC 07-F0 MDP_XRT_FLD_DIS
0137     BC       (d9)
0138  +  DC 07-F0 MDP_XRT_FLRCTRL_DIS
0139     BC       (c9)
0140  +  DC 07-F0 MDP_XRT_ARS_DIS
0141     BC       (d5)
0142     C. ---------- Success Verify ?            OK / NG ____
0143     C.
0144     C.
0145     C. All OK?   Yes--> Please Proceed. / No --> Stop here.
0146     C.
0147  +. DC 07-F0 MDP_XRT_CTRL_AUTO
0148     BC       (c0)
0149     C. ---------- Success Verify ?           OK / NG;
0150     C.
0151  +. DC 04-BC TCIB_XRT_S_HTR_A_ENA
0152     C. ---------- Success Verify ?           OK / NG;
0153     C.
0154     C. ---------------------------------------
0155     C. If anomalous situation appeared, execute TCIB_XRT_S_HTR_A_DIS using DCBC-441 (line 24)
0156     C. ---------------------------------------
0157     C. ************************************************
0158     C.  END of XRT_CCD_HEATER_ON operation
0159     C. ************************************************
0160     C.
0161     C.
0162     C.
0163   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0164     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0165   . S. DC-BC dcbc-402:DCBC
0166     (MDP_known_event)
0167     C.
0168     C.
0169   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0170   . S. DC-BC dcbc-153:DCBC
0171     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0172     C.
0173     C.
0174   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0175     C.
0176   . C. *********** LOS ***********
0177     C.
```

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

main-511 2009-04-02 13:10:01 178 33 SOLAR-B MAIN //
0001     C.
0002   . C. *********** AOS ***********
0003     C.
0004   . C. ¡ãAOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0005     C.
0006     C. ¥À¥ß¡¼¥³¥Þ¥ó¥ÉÁ÷¿®
0007   +. DC 00-00 NULL_DUMMY_CMD
0008     C.
0009   . C. ***** AOCS : Reload orbital element (send every contact) *****
0010     C.  Ãí¡Ë¤¿¤À¤•µ°Æ»Í×ÁÇ¤Î¥¢¥Ã¥×¥í¡¼¥É¡ËËè½µ•îÍË¡Ë¤Ë¼ºÇÔ¤•¤¿¾ì¹ç¤Ï¡¢À®¸ù¤¹¤ë¤Þ¤ÇÁ÷¿®¤•¤Ê¤¤¤³¤È¡£
0011   +. DC 02-8E AOCU_ORB_UPD
0012     C.
0013     C.
0014   . C. ****************************
0015     C. XÁ÷¿®µ¡ON
0016     C. ****************************
0017     C. ¢¨ ºÆÀ¸ Í×ÈÝ¤äLOS¤Þ¤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•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 table upload
0100     C. ********************************
0101   . C. < Stop FG table >
0102  +. DC 07-F0 MDP_FG_CTRL_MANU
0103     BC       (51)
0104   . C. ------------------------------------
0105     C.  MDP_FG_CTRL_MODE      = MANU    [ ]
0106     C. ------------------------------------
0107     C.
0108   . C. <Upload FG Observation Table>
0109   . S. RAM   ram-268:MDP_OBS_F
0110     ()
0111     C.
0112   . C. < Dump RAMID=MDP_OBS_F >
0113  +. DC 07-F0 MDP_DUMP_FGTBL
0114     BC       (82 07 00 00 00 38 b8)
0115     C. ------------------------------------
0116     C.  MDP_OBS_F verify = OK/NG        [ ]
0117     C. ------------------------------------
0118     C.
0119   . C. < Stop SP table >
0120  +. DC 07-F0 MDP_SP_CTRL_MANU
0121     BC       (61)
0122     C. ------------------------------------
0123     C.  MDP_SP_CTRL_MODE      = MANU    [ ]
0124     C. ------------------------------------
0125     C.
0126   . C. <Upload SP Observation Table>
0127   . S. RAM   ram-287:MDP_OBS_S
0128     ()
0129     C.
0130   . C. < Dump RAMID=MDP_OBS_S >
0131  +. DC 07-F0 MDP_DUMP_SPTBL
0132     BC       (83 07 00 00 00 38 b8)
0133     C. ------------------------------------
0134     C.  MDP_OBS_S verify = OK/NG        [ ]
0135     C. ------------------------------------
0136     C.
0137   . C. < Resume FG table (auto mode) >
0138  +. DC 07-F0 MDP_FG_CTRL_AUTO
0139     BC       (50)
0140   . C. ------------------------------------
0141     C.  MDP_FG_CTRL_MODE      = AUTO    [ ]
0142     C. ------------------------------------
0143     C.
0144     C. ********************************
0145     C.  SOT TI command set
0146     C. ********************************
0147     C. Execute, after the success of TBL upload.
0148  +. TI 2009-04-02 11:06:18.0
0149     DC 07-F0 MDP_SOT_MODE_OBSV
0150     BC       (40)
0151   . C. ------------------------------------
0152     C.   HK1_TI_CMD_NUM       = 1 CNTUP [ ]
0153     C. ------------------------------------
0154     C.
0155     C. Only when FG_CTRL_AUTO is used in RT.
0156  +. TI 2009-04-02 11:06:20.0
0157     DC 07-F0 MDP_FG_CTRL_AUTO
0158     BC       (50)
0159   . C. ------------------------------------
0160     C.   HK1_TI_CMD_NUM       = 1 CNTUP [ ]
0161     C. ------------------------------------
0162     C. ************ SOT END ***********
0163     C.
0164   . C. ***** MDP ´ûÃÎ¤Î»ö¾Ý¤ËÂÐ¤¹¤ëDCBC•×²è *****
0165     C. (¾å°Ì¥Ó¥Ã¥È¥Þ¥Ë¥å¥¢¥ë¤Ë½¾¤¤¼Â»Ü¤¹¤ë)
0166   . S. DC-BC dcbc-402:DCBC
0167     (MDP_known_event)
0168     C.
0169     C.
0170   . C. ***** ¥Ð¥¹•Ï Daily±¿ÍÑ¤Ë´Ø¤¹¤ëDCBC•×²è *****
0171   . S. DC-BC dcbc-153:DCBC
0172     (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0173     C.
0174     C.
0175   . C. ¡ãLOS¥Á¥§¥Ã¥¯¼Â»Ü¡ä
0176     C.
0177   . C. ********** LOS **********
0178     C.
```

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

2009/04/02  11:17:00.0  AOCS_ORe-point_Start_1_OG [0x097]
                                AOCU_NM              5 02-76 01 00 00 00 00
2009/04/02  14:00:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 02 00 00 00 00
2009/04/02  14:30:30.0  XRT_CTRL_MANU_435_OG [0x1b3]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/02  14:43:30.0  XRT_Custom_430_OG [0x1ae]
2009/04/02  14:44:30.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/02  16:03:30.0  XRT_CTRL_MANU_435_OG [0x1b3]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/02  16:33:00.0  XRT_Custom_430_OG [0x1ae]
2009/04/02  16:34:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/02  17:03:40.0  XRT_CTRL_MANU_428_OG [0x1ac]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/02  17:06:40.0  XRT_CTRL_MANU_428_OG [0x1ac]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/02  17:06:42.0  XRT_QT_PROG_SET_421_OG [0x1a5]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 0b
2009/04/02  17:06:44.0  XRT_ARS_DIS_422_OG [0x1a6]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/02  17:06:46.0  XRT_FLD_DIS_445_OG [0x1bd]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/02  17:06:48.0  XRT_FLRCTRL_DIS_416_OG [0x1a0]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/02  17:06:50.0  XRT_CTRL_AUTO_403_OG [0x193]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/02  17:40:00.0  XRT_CTRL_MANU_435_OG [0x1b3]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/02  18:10:00.0  XRT_Custom_430_OG [0x1ae]
2009/04/02  18:11:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/02  19:17:30.0  XRT_CTRL_MANU_435_OG [0x1b3]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/02  19:46:30.0  XRT_Custom_430_OG [0x1ae]
2009/04/02  19:47:30.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/02  20:54:30.0  XRT_CTRL_MANU_435_OG [0x1b3]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/02  21:25:44.0  XRT_CTRL_MANU_435_OG [0x1b3]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/02  21:25:46.0  XRT_TCIB_XRT_S_HTR_A_DIS_417_OG [0x1a1]
                                TCIB_XRT_S_HTR_A_DIS 0 04-C0
2009/04/03  05:53:54.0  XRT_CTRL_MANU_439_OG [0x1b7]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  05:54:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                AOCU_NM              5 02-76 00 00 00 00 00
2009/04/03  05:56:32.0  XRT_FOCUS_POSITION_442_OG [0x1ba]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2009/04/03  05:56:52.0  XRT_QT_PROG_SET_401_OG [0x191]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 13
2009/04/03  05:56:54.0  XRT_FLD_DIS_419_OG [0x1a3]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  05:56:56.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  05:56:58.0  XRT_ARS_DIS_418_OG [0x1a2]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  05:57:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/03  06:03:54.0  XRT_CTRL_MANU_448_OG [0x1c0]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  06:04:00.0  AOCS_ORe-point_Start_4_OG [0x09a]
                                AOCU_NM              5 02-76 00 2e f9 2e f9
2009/04/03  06:06:32.0  XRT_FOCUS_POSITION_442_OG [0x1ba]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2009/04/03  06:06:52.0  XRT_QT_PROG_SET_412_OG [0x19c]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 08
2009/04/03  06:06:54.0  XRT_FLD_DIS_419_OG [0x1a3]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  06:06:56.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  06:06:58.0  XRT_ARS_DIS_418_OG [0x1a2]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  06:07:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/03  06:14:54.0  XRT_CTRL_MANU_448_OG [0x1c0]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  06:15:00.0  AOCS_ORe-point_Start_5_OG [0x09b]
                                AOCU_NM              5 02-76 00 2e f9 d1 07
2009/04/03  06:17:32.0  XRT_FOCUS_POSITION_442_OG [0x1ba]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2009/04/03  06:17:52.0  XRT_QT_PROG_SET_408_OG [0x198]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 07
2009/04/03  06:17:54.0  XRT_FLD_DIS_419_OG [0x1a3]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  06:17:56.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  06:17:58.0  XRT_ARS_DIS_418_OG [0x1a2]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  06:18:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
```

```
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/03  06:24:54.0  XRT_CTRL_MANU_448_OG [0x1c0]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  06:25:00.0  AOCS_ORe-point_Start_6_OG [0x09c]
                                    AOCU_NM              5 02-76 00 d1 07 2e f9
2009/04/03  06:27:32.0  XRT_FOCUS_POSITION_442_OG [0x1ba]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2009/04/03  06:27:52.0  XRT_QT_PROG_SET_409_OG [0x199]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 0f
2009/04/03  06:27:54.0  XRT_FLD_DIS_419_OG [0x1a3]
                                    MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  06:27:56.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                    MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  06:27:58.0  XRT_ARS_DIS_418_OG [0x1a2]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  06:28:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/03  06:34:54.0  XRT_CTRL_MANU_448_OG [0x1c0]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  06:35:00.0  AOCS_ORe-point_Start_7_OG [0x09d]
                                    AOCU_NM              5 02-76 00 d1 07 d1 07
2009/04/03  06:37:32.0  XRT_FOCUS_POSITION_442_OG [0x1ba]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2009/04/03  06:37:52.0  XRT_QT_PROG_SET_413_OG [0x19d]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 04
2009/04/03  06:37:54.0  XRT_FLD_DIS_419_OG [0x1a3]
                                    MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  06:37:56.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                    MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  06:37:58.0  XRT_ARS_DIS_418_OG [0x1a2]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  06:38:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/03  06:44:54.0  XRT_CTRL_MANU_448_OG [0x1c0]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  06:45:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                    AOCU_NM              5 02-76 02 00 00 00 00
2009/04/03  06:47:32.0  XRT_FOCUS_POSITION_434_OG [0x1b2]
                                    XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2009/04/03  06:47:52.0  XRT_QT_PROG_SET_423_OG [0x1a7]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 11
2009/04/03  06:47:54.0  XRT_FLD_DIS_419_OG [0x1a3]
                                    MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  06:47:56.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                    MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  06:47:58.0  XRT_ARS_DIS_418_OG [0x1a2]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  06:48:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/03  12:55:54.0  XRT_CTRL_MANU_448_OG [0x1c0]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  12:58:32.0  XRT_FOCUS_POSITION_434_OG [0x1b2]
                                    XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2009/04/03  12:58:52.0  XRT_QT_PROG_SET_424_OG [0x1a8]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 12
2009/04/03  12:58:54.0  XRT_FLD_DIS_419_OG [0x1a3]
                                    MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  12:58:56.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                    MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  12:58:58.0  XRT_ARS_DIS_418_OG [0x1a2]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  12:59:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/03  14:55:30.0  XRT_CTRL_MANU_428_OG [0x1ac]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  15:00:00.5  XRT_CTRL_MANU_448_OG [0x1c0]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  15:02:38.5  XRT_FOCUS_POSITION_434_OG [0x1b2]
                                    XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2009/04/03  15:02:58.5  XRT_QT_PROG_SET_423_OG [0x1a7]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 11
2009/04/03  15:03:00.5  XRT_FLD_DIS_419_OG [0x1a3]
                                    MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  15:03:02.5  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                    MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  15:03:04.5  XRT_ARS_DIS_418_OG [0x1a2]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  15:03:06.5  XRT_CTRL_AUTO_432_OG [0x1b0]
                                    MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/03  17:56:24.0  XRT_CTRL_MANU_428_OG [0x1ac]
                                    MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  17:56:26.0  XRT_FOCUS_POSITION_442_OG [0x1ba]
                                    XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2009/04/03  17:56:46.0  XRT_QT_PROG_SET_404_OG [0x194]
                                    MDP_XRT_QT_PROG_SET  2 07-F0 c4 10
2009/04/03  17:56:48.0  XRT_FLD_DIS_419_OG [0x1a3]
                                    MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  17:56:50.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                    MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  17:56:52.0  XRT_ARS_DIS_410_OG [0x19a]
                                    MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  17:57:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                    AOCU_NM              5 02-76 00 00 00 00 00
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2009/04/03  17:59:30.0  XRT_CTRL_AUTO_444_OG [0x1bc]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/03  20:06:54.0  XRT_CTRL_MANU_448_OG [0x1c0]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/03  20:07:00.0  AOCS_ORe-point_Start_2_OG [0x098]
                                AOCU_NM              5 02-76 02 00 00 00 00
2009/04/03  20:09:32.0  XRT_FOCUS_POSITION_434_OG [0x1b2]
                                XRT_FOCUS_POSITION   4 07-F8 22 fe 97 00
2009/04/03  20:09:52.0  XRT_QT_PROG_SET_423_OG [0x1a7]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 11
2009/04/03  20:09:54.0  XRT_FLD_DIS_419_OG [0x1a3]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/03  20:09:56.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/03  20:09:58.0  XRT_ARS_DIS_418_OG [0x1a2]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/03  20:10:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/04  05:59:54.0  XRT_CTRL_MANU_439_OG [0x1b7]
                                MDP_XRT_CTRL_MANU    1 07-F0 c1
2009/04/04  06:00:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                AOCU_NM              5 02-76 00 00 00 00 00
2009/04/04  06:02:32.0  XRT_FOCUS_POSITION_442_OG [0x1ba]
                                XRT_FOCUS_POSITION   4 07-F8 22 ff aa 00
2009/04/04  06:02:52.0  XRT_QT_PROG_SET_401_OG [0x191]
                                MDP_XRT_QT_PROG_SET  2 07-F0 c4 13
2009/04/04  06:02:54.0  XRT_FLD_DIS_419_OG [0x1a3]
                                MDP_XRT_FLD_DIS      1 07-F0 d9
2009/04/04  06:02:56.0  XRT_FLRCTRL_DIS_447_OG [0x1bf]
                                MDP_XRT_FLRCTRL_DIS  1 07-F0 c9
2009/04/04  06:02:58.0  XRT_ARS_DIS_418_OG [0x1a2]
                                MDP_XRT_ARS_DIS      1 07-F0 d5
2009/04/04  06:03:00.0  XRT_CTRL_AUTO_432_OG [0x1b0]
                                MDP_XRT_CTRL_AUTO    1 07-F0 c0
2009/04/04  06:10:00.0  AOCS_ORe-point_Start_8_OG [0x09e]
                                AOCU_NM              5 02-76 04 00 00 00 00
2009/04/04  10:54:00.0  AOCS_ORe-point_Start_3_OG [0x099]
                                AOCU_NM              5 02-76 00 00 00 00 00
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