

# XRT Timeline to be uploaded on 2023/03/11

Period: 2023/03/11 11:03:00 - 2023/03/16 11:47:00

\* \* \* \* \*

**Normal mode**

\* \* \* \* \*

<b>XOB #1CD6: High cadence (10s thin-Be only) 384x384 at 1064 1048</b>												
Term	Pointing (x, y)							Comment				
03/11 11:25:30 - 03/11 17:47:24	Track ( 269.1, -322.5) <sup>© 03/11 11:13:00</sup>	# OP start + 10min + AR13245										
<b>PROG= 01 Inf.-time(s)</b>												
└─ <b>Subr= 1 1-time(s) 2.0sec</b>												
└─ <b>Seqn= 92 1-time(s) 2.0sec</b>												
	Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs 1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec
	Open/G-band	Open/G-band	close	Safe	Norm	1ms	Obs 1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec
	Open/Ti-poly	Open/thick-Al	close	Safe	Dark	16.0s	Obs 1x1	384x384 (1064, 1048)	Q=98	0	0	2.0sec
└─ <b>Subr= 2 1-time(s) 2.0sec</b>												
└─ <b>Seqn= 22 250-time(s) 10.0sec</b>												
	thin-Be/Open	med-Be/Open	close	Safe	Norm	1.00s	Obs 1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
	Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer	Interval

<b>XOB #1CEE: Synoptic 8 Filter w/ Al-mesh(5/128/723), Al-poly(12/181/1443), Thin-Be(33/512/4096), Thick-Be(32768), Med-Al(512/8192/32768), Med-Be(128/512/4096) 2048x2048 at 1024 1024</b>												
Term	Pointing (x, y)							Comment				
03/11 17:50:30 - 03/11 17:57:24	Fixed ( 0.0, 0.0)	synoptic, shifted -12.5 min										
03/12 06:02:30 - 03/12 06:09:40	Fixed ( 0.0, 0.0)	HOP 349 + synoptic										
<b>PROG= 20 1-time(s)</b>												
└─ <b>Subr= 1 1-time(s) 2.0sec</b>												
└─ <b>Seqn= 5 1-time(s) 2.0sec</b>												
	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
└─ <b>Seqn= 26 1-time(s) 2.0sec</b>												
	Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	5ms	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	125ms	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	Open/Al-mesh	Open/Al-mesh	close	Safe	Norm	707ms	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
└─ <b>Seqn= 15 1-time(s) 2.0sec</b>												
	Al-poly/Open	Al-poly/Open	close	Safe	Norm	12ms	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	Al-poly/Open	Al-poly/Open	close	Safe	Norm	177ms	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	1.41s	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
└─ <b>Seqn= 83 1-time(s) 2.0sec</b>												
	thin-Be/Open	thin-Be/Open	close	Safe	Norm	32ms	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	thin-Be/Open	thin-Be/Open	close	Safe	Norm	500ms	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	thin-Be/Open	thin-Be/Open	close	Safe	Norm	4.00s	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
└─ <b>Seqn= 23 1-time(s) 4.0sec</b>												
	Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs 1x1	2048x2048 (1024, 1024)	Q=90	0	0	2.0sec
	Open/G-band	Open/G-band	close	Safe	Norm	1ms	Obs 1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
└─ <b>Subr= 2 1-time(s) 2.0sec</b>												
└─ <b>Seqn= 41 1-time(s) 2.0sec</b>												
	Open/thick-Be	Open/thick-Be	close	Safe	Norm	32.0s	Obs 2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
└─ <b>Seqn= 17 1-time(s) 2.0sec</b>												
	med-Al/Open	med-Al/thick-Al	close	Safe	Norm	250ms	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	med-Al/Open	med-Al/thick-Al	close	Safe	Norm	8.00s	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	med-Al/Open	med-Al/Open	close	Safe	Norm	32.0s	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
└─ <b>Seqn= 33 1-time(s) 2.0sec</b>												
	med-Be/Open	Open/thick-Al	close	Safe	Norm	125ms	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	med-Be/Open	med-Be/Open	close	Safe	Norm	5.66s	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
	med-Be/Open	med-Be/Open	close	Safe	Norm	22.6s	Obs 2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
└─ <b>Seqn= 56 1-time(s) 2.0sec</b>												
	Al-poly/Ti-poly	Al-poly/thick-Al	close	Safe	Norm	63ms	Obs 2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
	Al-poly/Ti-poly	Al-poly/thick-Al	close	Safe	Norm	2.00s	Obs 2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
	Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer	Interval

<b>XOB #1BA9: AR - Standard Core - (Filter-Ratio with Al/poly and thin-Be long/short pairs) with PFB, 384x384 at 1064 1048, thin-Be, and Al/poly context, with 384x384 at 1064 1048</b>												
Term	Pointing (x, y)							Comment				
03/11 18:00:30 - 03/12 03:38:30	Track ( 321.6, -325.0) <sup>© 03/11 17:57:30</sup>	AR 13245										
<b>PROG= 12 Inf.-time(s)</b>												
└─ <b>Subr= 1 1-time(s) 2.0sec</b>												
└─ <b>Seqn= 92 1-time(s) 2.0sec</b>												
	Open/G-band	Open/G-band	open	Safe	Norm	1ms	Obs 1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec
	Open/G-band	Open/G-band	close	Safe	Norm	1ms	Obs 1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec
	Open/Ti-poly	Open/thick-Al	close	Safe	Dark	16.0s	Obs 1x1	384x384 (1064, 1048)	Q=98	0	0	2.0sec
└─ <b>Subr= 2 5-time(s) 2.0sec</b>												
└─ <b>Seqn= 47 1-time(s) 2.0sec</b>												
	Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs 1x1	384x384 (1064, 1048)	Q=95	2	0	2.0sec
	Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs 1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
	thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs 1x1	384x384 (1064, 1048)	Q=95	2	0	2.0sec
	thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs 1x1	384x384 (1064, 1048)	Q=95	3	0	2.0sec
	Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer	Interval

Seqn= 96	8-time(s)	30.0sec																		
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	0	2.0sec								
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	0	2.0sec								
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	1	2.0sec								
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	1	2.0sec								
Al-poly/Open	thin-Be/Open	close	Safe	Norm	250ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	2	2.0sec								
thin-Be/Open	med-Be/Open	close	Safe	Norm	500ms	Obs	1x1	384x384 (1064, 1048)	Q=95	1	2	2.0sec								
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer	Interval									

**XOB #1CC8: HOP349 - 3-filter Synoptics (Al-mesh[2/128/723], Al-poly[12/181/1443], thin-Be[24/512/3897] with 512x512 G-band+Leak - 72min cad) + CME wa**

Term	Pointing (x, y)	Comment
03/12 04:03:00 - 03/12 05:59:24	Fixed ( 0.0, 0.0)	HOP 349 + synoptic
<b>PROG= 02 Inf.-time(s)</b>		
<b>Subr= 1 1-time(s) 300.0sec</b>		
<b>Seqn= 55 1-time(s) 2.0sec</b>		
Open/Al-mesh	Open/Al-mesh close	Safe Norm 2ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
Open/Al-mesh	Open/Al-mesh close	Safe Norm 125ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
Open/Al-mesh	Open/Al-mesh close	Safe Norm 707ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
<b>Seqn= 15 1-time(s) 2.0sec</b>		
Al-poly/Open	Al-poly/Open close	Safe Norm 12ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
Al-poly/Open	Al-poly/Open close	Safe Norm 177ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
Al-poly/Open	Al-poly/thick-Al close	Safe Norm 1.41s Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
<b>Seqn= 79 1-time(s) 2.0sec</b>		
thin-Be/Open	thin-Be/Open close	Safe Norm 16ms Obs 2x2 2048x2048 (1024, 1024) Q=95 0 0 2.0sec
thin-Be/Open	thin-Be/Open close	Safe Norm 500ms 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
<b>Seqn= 30 1-time(s) 2.0sec</b>		
Open/G-band	Open/G-band open	Safe Norm 1ms Obs 1x1 512x512 (1024, 1024) Q=90 0 0 2.0sec
Open/G-band	Open/G-band close	Safe Norm 1ms Obs 1x1 512x512 (1024, 1024) Q=95 0 0 2.0sec
<b>Subr= 2 18-time(s) 240.0sec</b>		
<b>Seqn= 8 1-time(s) 2.0sec</b>		
thin-Be/Open	med-Be/Open close	Safe Norm 1.00s Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec
thin-Be/Open	med-Be/Open close	Safe Norm 1.41s Obs 4x4 2048x2048 (1024, 1024) DPCM 2 0 2.0sec
<b>Seqn= 74 1-time(s) 2.0sec</b>		
med-Be/Open	med-Be/Open close	Safe Norm 500ms Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec
med-Be/Open	med-Be/Open close	Safe Norm 2.00s Obs 4x4 2048x2048 (1024, 1024) Q=98 2 0 2.0sec
<b>Seqn= 6 1-time(s) 2.0sec</b>		
Al-poly/Open	Al-poly/Open close	Safe Norm 125ms Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec
Al-poly/Open	Al-poly/Open close	Safe Norm 1.00s Obs 4x4 2048x2048 (1024, 1024) DPCM 2 0 2.0sec
<b>Seqn= 29 1-time(s) 2.0sec</b>		
Open/Al-mesh	Open/Al-mesh close	Safe Norm 125ms Obs 4x4 2048x2048 (1024, 1024) Q=98 3 0 2.0sec
Open/Al-mesh	Open/Al-mesh close	Safe Norm 250ms Obs 4x4 2048x2048 (1024, 1024) Q=98 2 0 2.0sec
Default Filter	Thicker Filter	VLS mode image Exp. CCD Bin ROI: size (center) Comp. AEC Buffer Interval

\* \* \* \* \* **Flare mode** \* \* \* \* \*

**XOB #1C96: Flare - multifilter 26 sec cadence (Be/thin, Be/med, Be/thick), AEC 3, 384x384 + context (med-Al,thick-Be -384x384 + Al-poly 512x512 2x2) + G**

Term	Pointing (x, y)	Comment
03/11 11:25:30 - 03/11 17:47:24	Track ( 269.1, -322.5) @ 03/11 11:13:00	# OP start + 10min + AR13245
03/11 18:00:30 - 03/12 03:38:30	Track ( 321.6, -325.0) @ 03/11 17:57:30	AR 13245
03/12 04:03:00 - 03/12 05:59:24	Fixed ( 0.0, 0.0)	HOP 349 + synoptic
<b>PROG= 04 30-time(s)</b>		
<b>Subr= 1 20-time(s) 2.0sec</b>		
<b>Seqn= 11 1-time(s) 2.0sec</b>		
Al-poly/Open	Al-poly/thick-Al close	Safe Norm 125ms Obs 2x2 512x512 (1024, 1024) Q=95 2 0 2.0sec
<b>Seqn= 73 1-time(s) 10.0sec</b>		
thin-Be/Open	med-Be/Open close	Safe Norm 125ms Obs 1x1 384x384 (1024, 1024) Q=95 3 0 2.0sec
med-Be/Open	Open/thick-Al close	Safe Norm 250ms Obs 1x1 384x384 (1024, 1024) Q=95 3 0 2.0sec
Open/thick-Be	Open/thick-Be close	Safe Norm 2.00s Obs 1x1 384x384 (1024, 1024) Q=95 3 0 2.0sec
<b>Subr= 2 1-time(s) 2.0sec</b>		
<b>Seqn= 10 1-time(s) 2.0sec</b>		
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
<b>Seqn= 11 1-time(s) 2.0sec</b>		
Al-poly/Open	Al-poly/thick-Al close	Safe Norm 125ms Obs 2x2 512x512 (1024, 1024) Q=95 2 0 2.0sec
<b>Seqn= 87 1-time(s) 2.0sec</b>		
Open/G-band	Open/G-band open	Safe Norm 1ms Obs 1x1 384x384 (1024, 1024) Q=98 0 0 2.0sec
Open/G-band	Open/G-band close	Safe Norm 1ms Obs 1x1 384x384 (1024, 1024) Q=98 0 0 2.0sec
Open/thick-Al	Open/thick-Al close	Safe Dark 1.00s Obs 1x1 384x384 (1024, 1024) Q=98 0 0 2.0sec
Open/thick-Al	Open/thick-Al close	Safe Dark 1.00s Obs 2x2 512x512 (1024, 1024) Q=98 0 0 2.0sec
Default Filter	Thicker Filter	VLS mode image Exp. CCD Bin ROI: size (center) Comp. AEC Buffer Interval

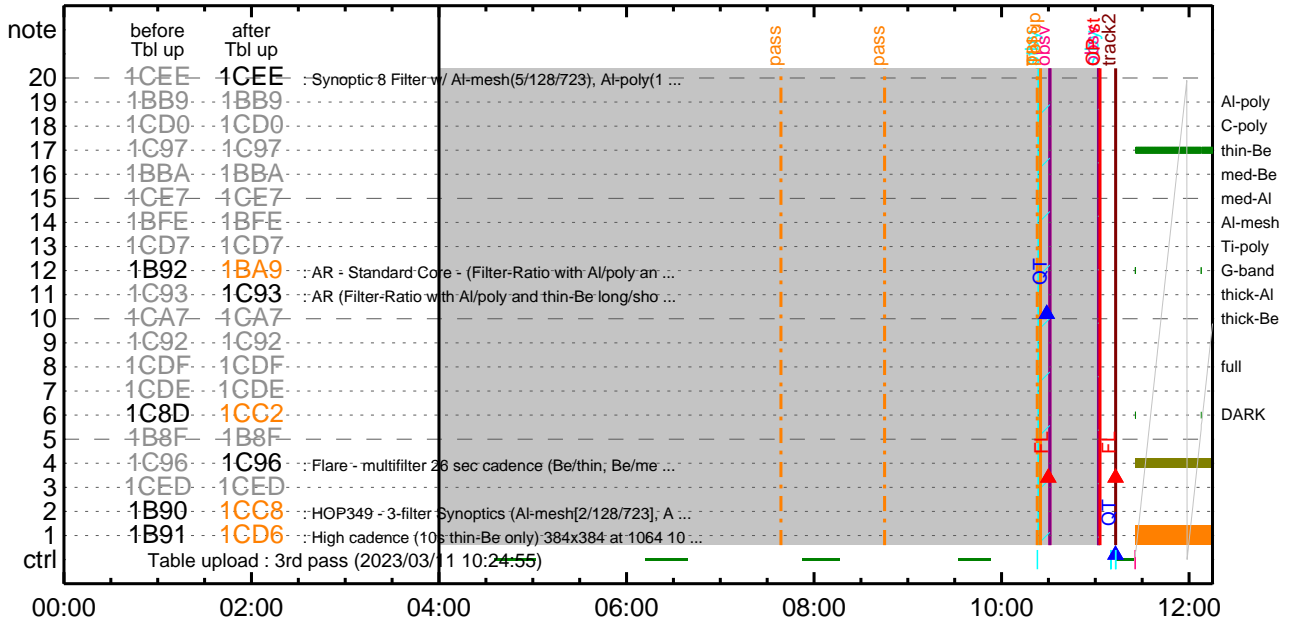
\* \* \* \* \* **Active Region Search** \* \* \* \* \*

NOT USED

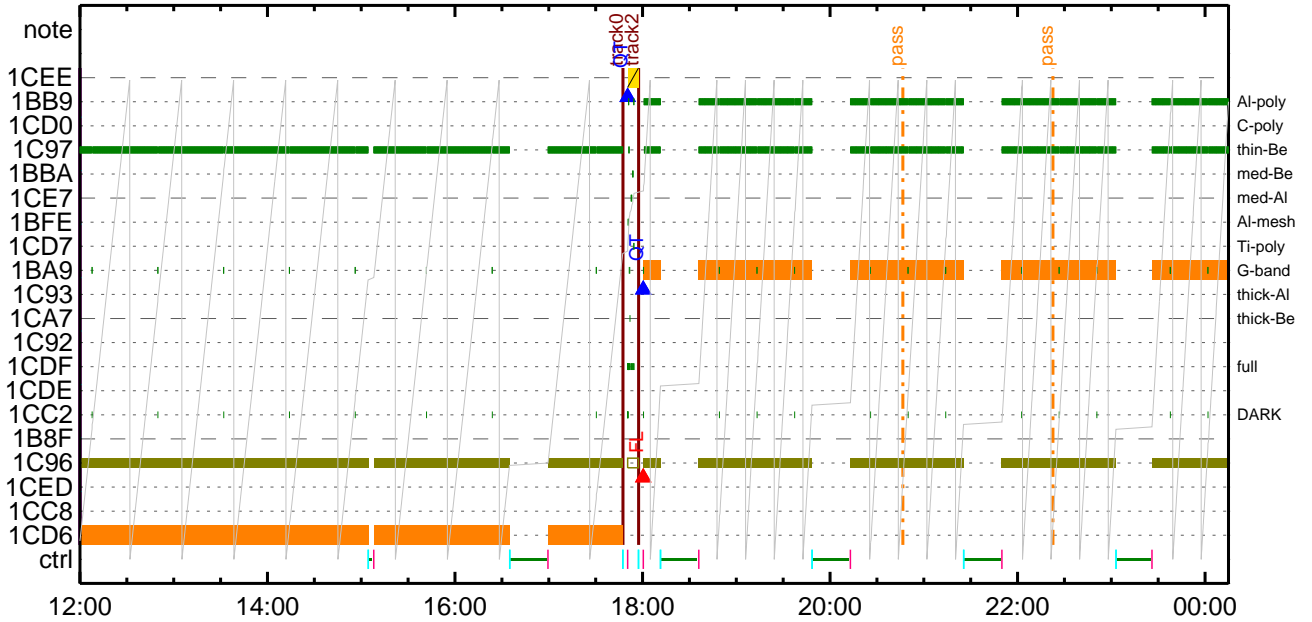
\* \* \* \* \* **Flare Detection** \* \* \* \* \*

FLD Patrol											
Term		Pointing (x, y)						Comment			
03/11 10:25:55 - 03/11 17:47:48		cannot be identified									
03/11 17:57:48 - 03/12 05:59:48		Track ( 321.6, -325.0) @ 03/11 17:57:30 AR 13245									
Al-poly/Open	Al-poly/Open	close	Safe	Norm	4ms	Obs	8x8	Q=50	30sec		
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer	Interval

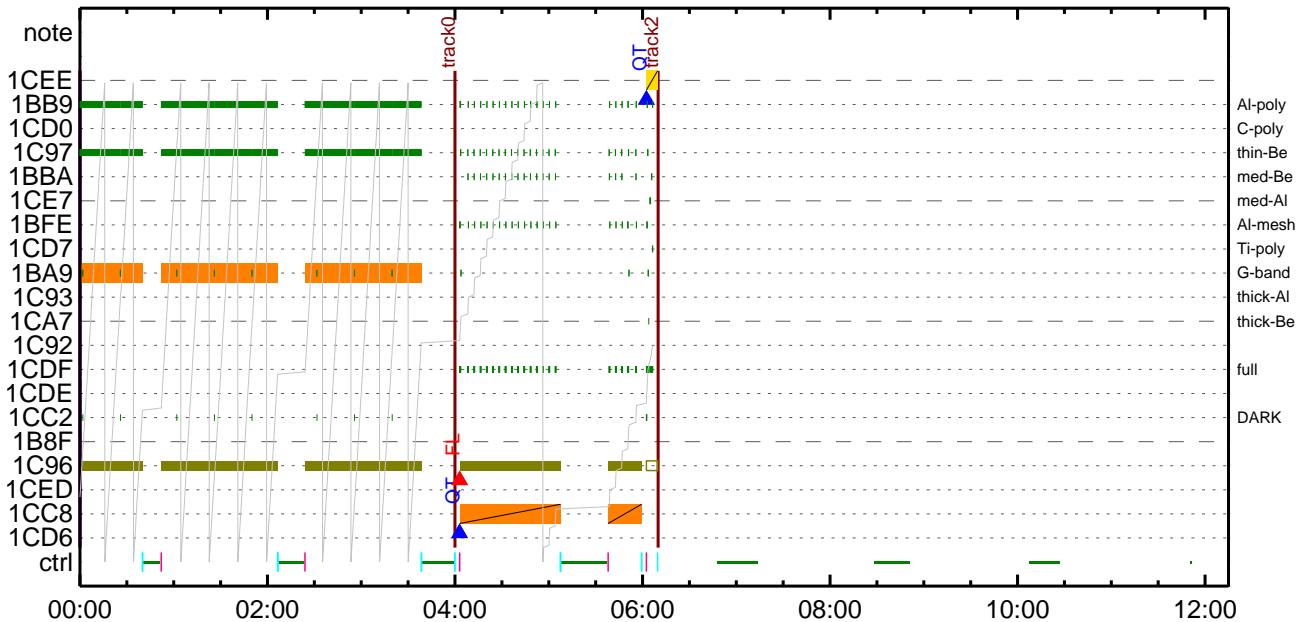
### CMDI #0941 2023/03/11



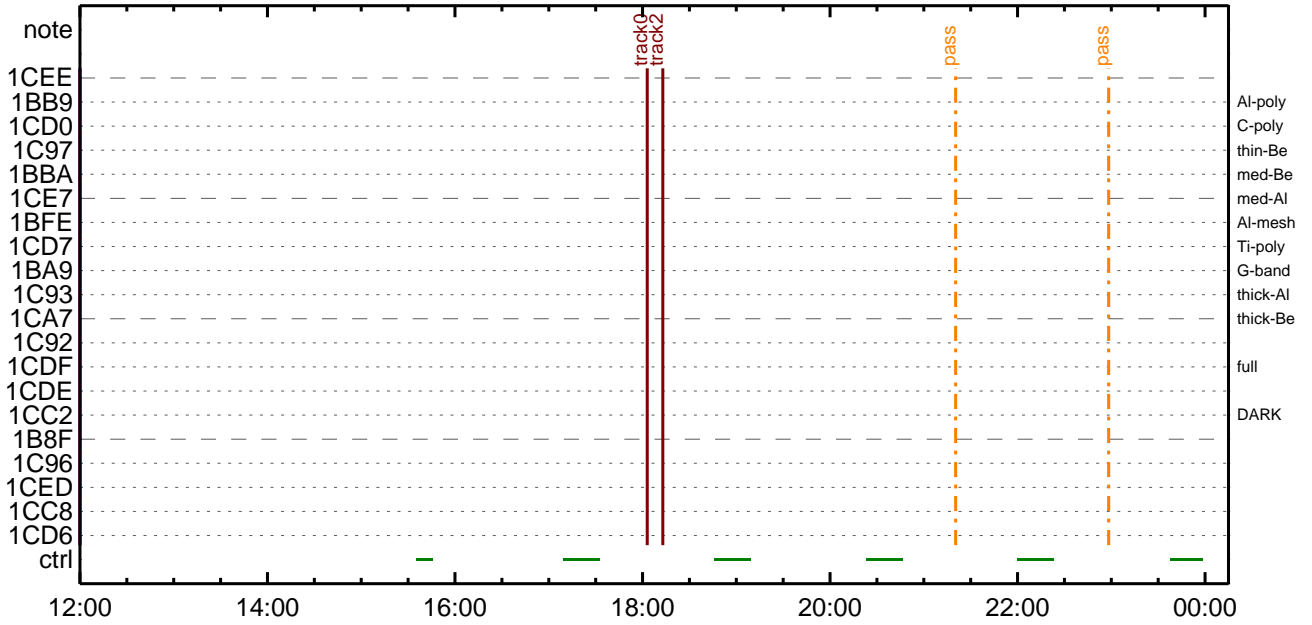
### CMDI #0941 2023/03/11



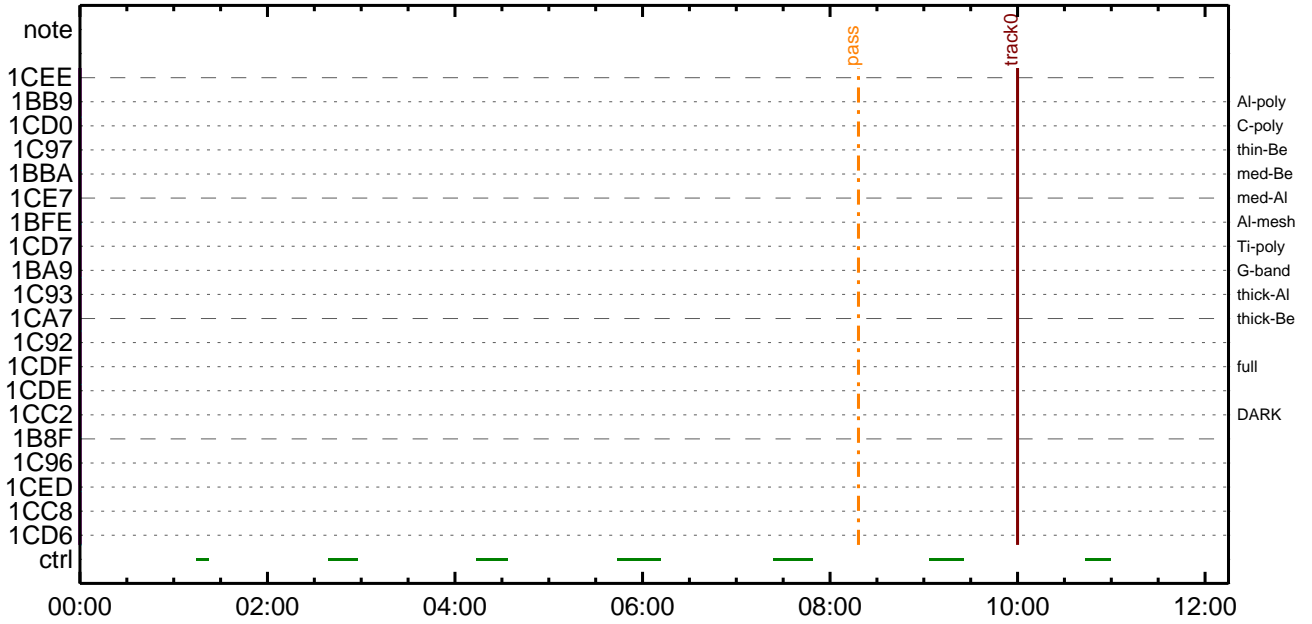
### CMDI #0941 2023/03/12



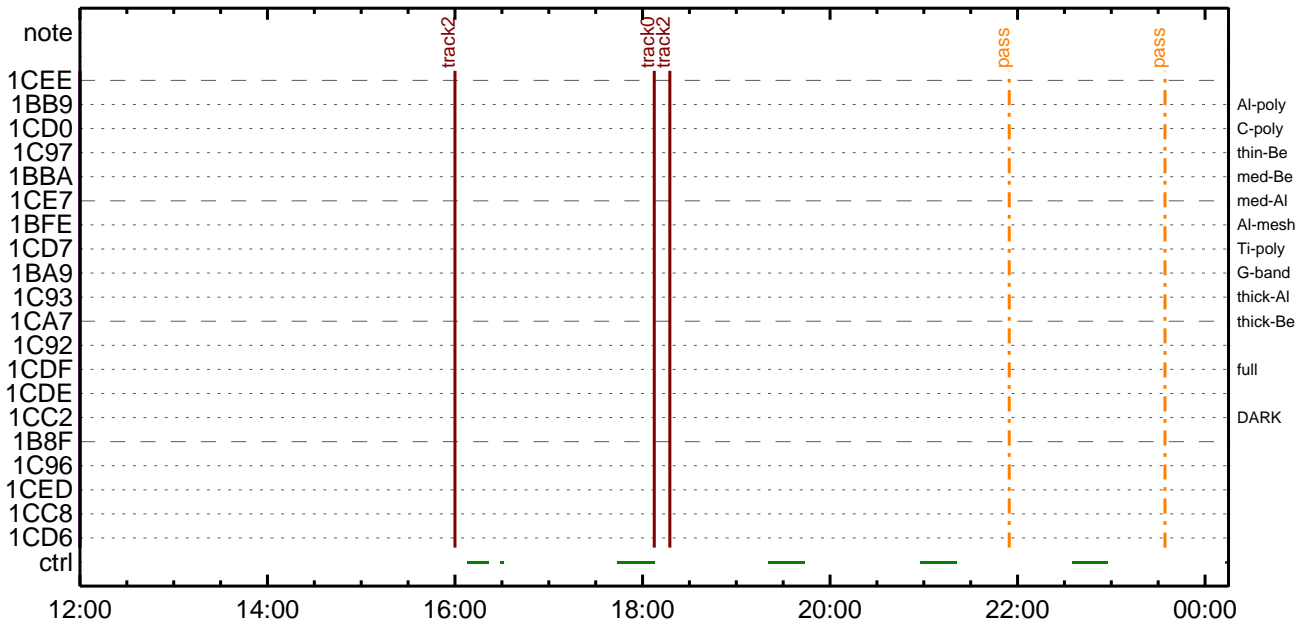
CMDI #0941 2023/03/12



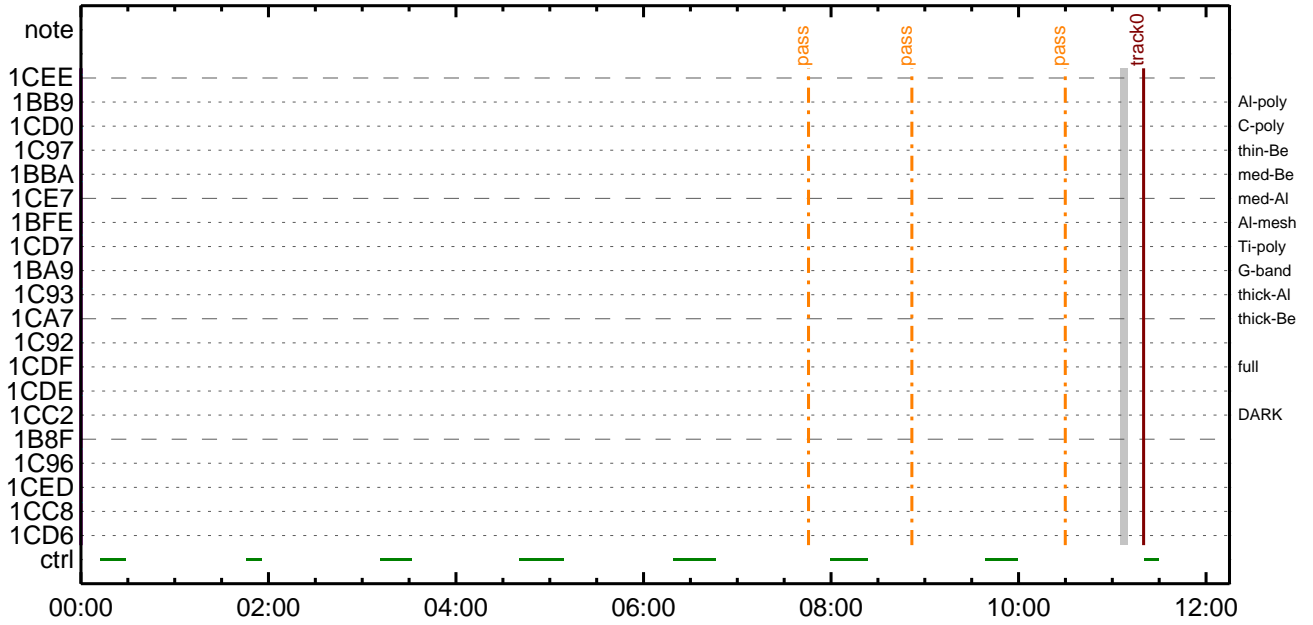
CMDI #0941 2023/03/13



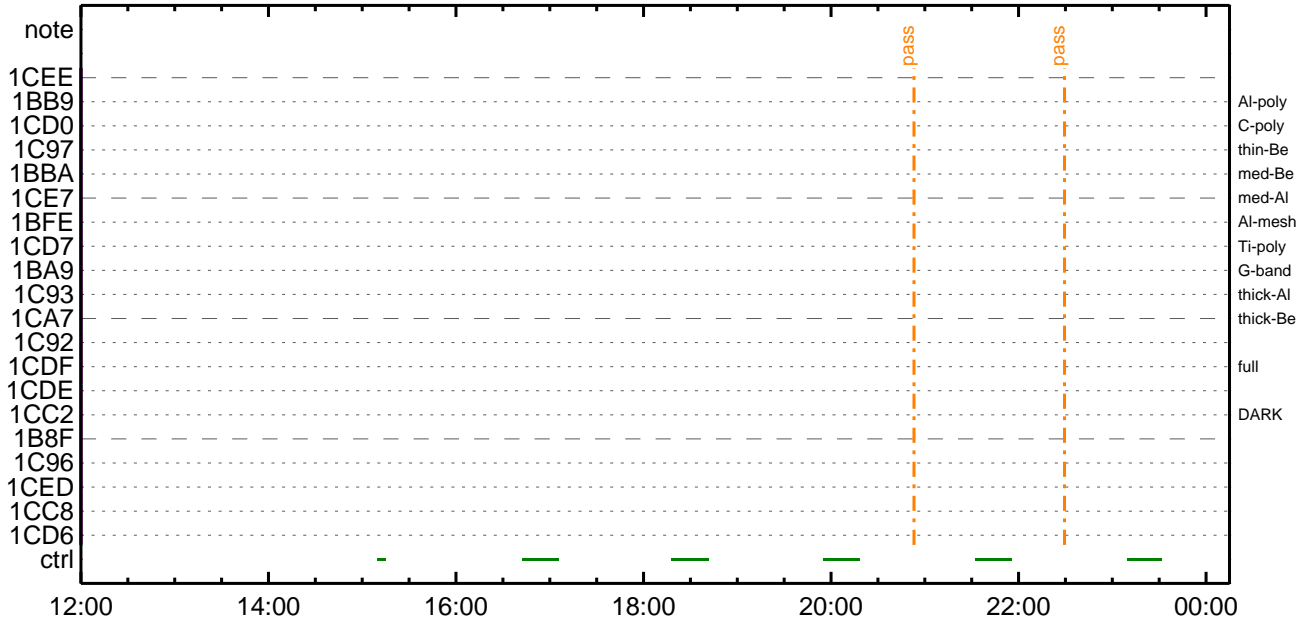
CMDI #0941 2023/03/13



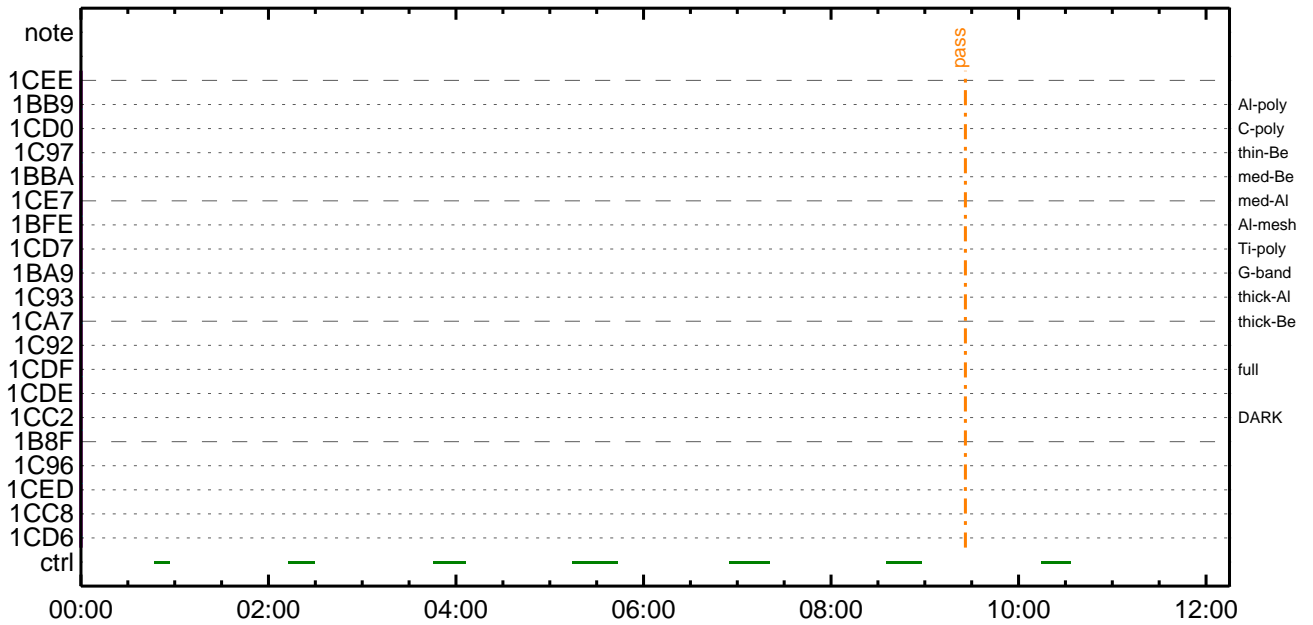
CMDI #0941 2023/03/14



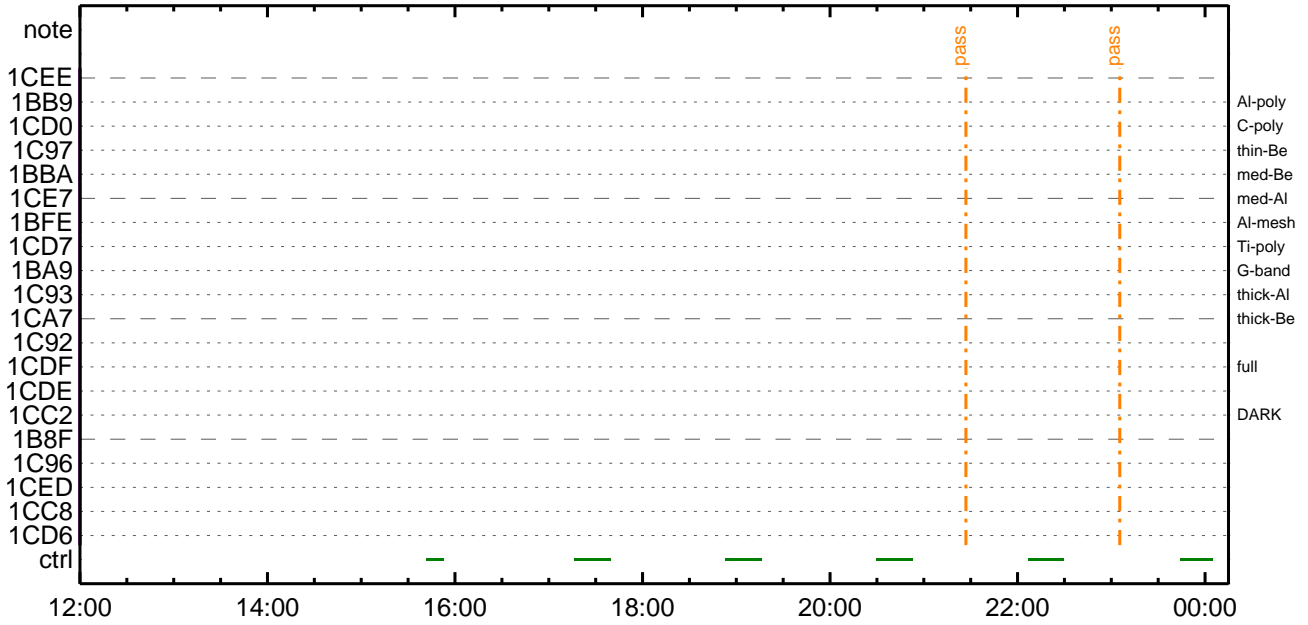
CMDI #0941 2023/03/14



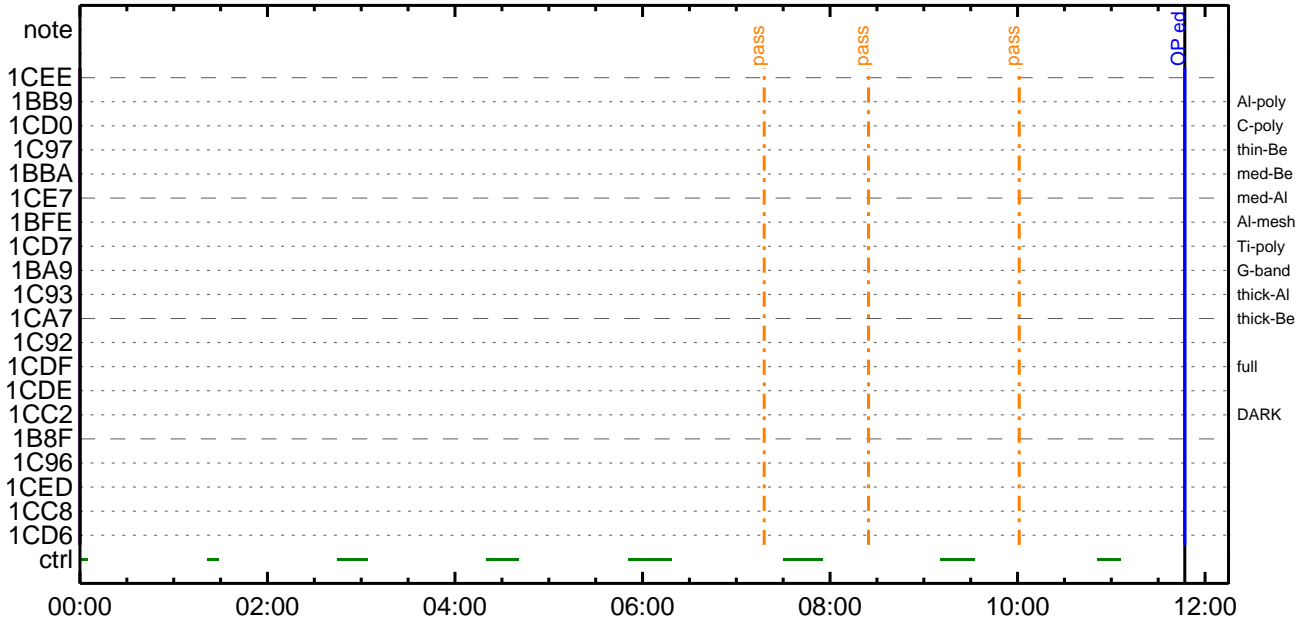
CMDI #0941 2023/03/15



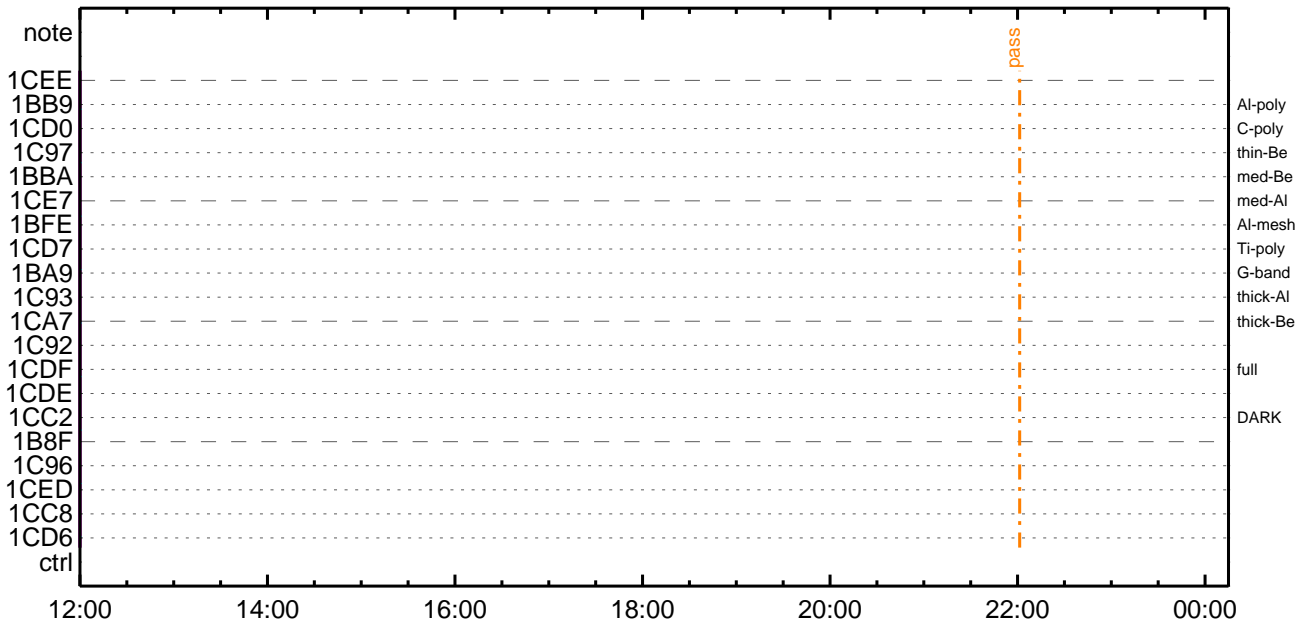
CMDI #0941 2023/03/15



CMDI #0941 2023/03/16



CMDI #0941 2023/03/16



(a) Spacecraft Operation Procedure (real-commands)

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main-728 2023-03-11 12:02:35 194 33 SOLAR-B MAIN //
0001  . C.
0002  . C. ***** AOS *****
0003  . C.
0004  . C. ;ãAOSYÃYSYÃY~¼Ä»Û;ä
0005  . C.
0006  . C. YÃYË;¼Y³YFYÖYÉÄ+¿®
0007  +. DC 00-00 NULL_DUMMY_CMD
0008  . C.
0009  . C. ***** AOCs : Reload orbital element (send every contact) *****
0010  . C.  Āí;È□¿□Ä□•μ°Æ»İ×ÄÇ□İYÇYÃY×Yİ;¼YÉ;ÈÈë¼μ•İÍÈ;È□È¼°CÖ□•□¿¼İ¹Ç□İ;çÄ®, ù□¹□È□□ÇÄ+¿®□•□È□□□³□È;f
0011  +. DC 02-8E AOCU_ORB_UPD
0012  . C.
0013  . C.
0014  . C. *****
0015  . C. OP/OGYİ;¼YÉ;|YÃYÖY×
0016  . C. *****
0017  . C.
0018  . C. ;ãOP/OGYİ;¼YÉ;ä
0019  . S. OP      op-728:OP
0020  . C.
0021  . S. OG      og-728:OG
0022  . C.
0023  . C.
0024  . C. ;ãNMOG&OPİ°èYÃYÖY×;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.               çç[HK1_DMP_TOP_ADRS_1]           EQ        40
0029  . C.               çç[HK1_DMP_TOP_ADRS_0]           EQ         0
0030  . C.               çç[HK1_DMP_BLOCK_NUM]            EQ       127
0031  . C.               çç[HK1_DMP_REPEAT_NUM]           EQ         0
0032  . C.               çç[HK1_DMA_DMP_PIM]              EQ       DHU
0033  +. DC 01-22 DHU_MODE_CHNG
0034  BC      (07 0b f8)
0035  . C.               çç[HK1_PKT_FORM_NO]              EQ         7
0036  . C.               çç[HK1_PKT_GEN_TIME]              EQ       0.25 s
0037  . C.               çç[HK1_S_TLM_BIT_RATE]            EQ       32k
0038  . C.               çç[HK1_X_TLM_BIT_RATE]            EQ        4M
0039  . C.               çç[HK1_DMP_CHK_FLG]               EQ       EXEC
0040  . C.  YÃYÖY×¼ª İ»□ð³İÇ§
0041  . C.               çç[HK1_DMP_CHK_FLG]               EQ       NON
0042  . C. RAM ID=NMOG□İ¼È¹ç•è²İOK□ð³İÇ§
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.               çç[HK1_DMP_TOP_ADRS_1]           EQ        41
0048  . C.               çç[HK1_DMP_TOP_ADRS_0]           EQ         0
0049  . C.               çç[HK1_DMP_BLOCK_NUM]            EQ       127
0050  . C.               çç[HK1_DMP_REPEAT_NUM]           EQ         0
0051  . C.               çç[HK1_DMA_DMP_PIM]              EQ       DHU
0052  +. DC 01-22 DHU_MODE_CHNG
0053  BC      (07 0b f8)
0054  . C.               çç[HK1_PKT_FORM_NO]              EQ         7
0055  . C.               çç[HK1_PKT_GEN_TIME]              EQ       0.25 s
0056  . C.               çç[HK1_S_TLM_BIT_RATE]            EQ       32k
0057  . C.               çç[HK1_X_TLM_BIT_RATE]            EQ        4M
0058  . C.               çç[HK1_DMP_CHK_FLG]               EQ       EXEC
0059  . C.  YÃYÖY×¼ª İ»□ð³İÇ§
0060  . C.               çç[HK1_DMP_CHK_FLG]               EQ       NON
0061  . C. RAM ID=NMOG□İ¼È¹ç•è²İOK□ð³İÇ§
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.               çç[HK1_DMP_TOP_ADRS_1]           EQ        42
0067  . C.               çç[HK1_DMP_TOP_ADRS_0]           EQ         0
0068  . C.               çç[HK1_DMP_BLOCK_NUM]            EQ        65
0069  . C.               çç[HK1_DMP_REPEAT_NUM]           EQ         0
0070  . C.               çç[HK1_DMA_DMP_PIM]              EQ       DHU
0071  +. DC 01-22 DHU_MODE_CHNG
0072  BC      (07 0b f8)
0073  . C.               çç[HK1_PKT_FORM_NO]              EQ         7
0074  . C.               çç[HK1_PKT_GEN_TIME]              EQ       0.25 s
0075  . C.               çç[HK1_S_TLM_BIT_RATE]            EQ       32k
0076  . C.               çç[HK1_X_TLM_BIT_RATE]            EQ        4M
0077  . C.               çç[HK1_DMP_CHK_FLG]               EQ       EXEC
0078  . C.  YÃYÖY×¼ª İ»□ð³İÇ§
0079  . C.               çç[HK1_DMP_CHK_FLG]               EQ       NON
0080  . C. RAM ID=NMOG, RAM ID=OP□İ¼È¹ç•è²İOK□ð³İÇ§
0081  . C.
0082  . C. *****  øÈ²¼□İ¼Ä´İ°□ÈÈ¬□Ä+¿® (¼¼μ-YÃYÖY×¼È¼Ç□ðÄÖÄæ□Ç¼ª □¬□È¼İ¹Ç□Ç□ä) *****
0083  . C. DHUÿä;¼YÉ;È¼Y¼;Yİ;¼YÉ;È□ðİá□¹
0084  +. DC 01-22 DHU_MODE_CHNG
0085  BC      (02 0a f8)
0086  . C.               çç[HK1_PKT_FORM_NO]              EQ         2
0087  . C.               çç[HK1_PKT_GEN_TIME]              EQ       0.5S
0088  . C.               çç[HK1_S_TLM_BIT_RATE]            EQ       32K
0089  . C.               çç[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□-Ä+¿®NG□İ¼İ¹ç; ç°È²¼□İTI-CMDÄ+¿®□İ¼Ä¹Ö□□È□□□³□È;f

```



```

0096 C.                0p0z;çSET0EDUMP0IÆ±°iYÑY¹0Ç¹00|0³0E;f
0097 C.
0098 . C. TIY³YF¥6YÉ00dÁDİ¿(UT)
0099 +. TI 2023-03-11 10:58:00.0
0100 DC 01-B3 DHU_OP_STOP
0101 C.                çç[HK1_TI_CMD_NUM]                EQ        1COUNTUP
0102 C.
0103 +. TI 2023-03-11 10:58:01.0
0104 DC 01-B4 DHU_OP_COPY
0105 C.                çç[HK1_TI_CMD_NUM]                EQ        1COUNTUP
0106 C.
0107 +. TI 2023-03-11 10:58:01.0
0108 DC 01-B5 DHU_OPOG_COPY
0109 C.                çç[HK1_TI_CMD_NUM]                EQ        1COUNTUP
0110 C.
0111 +. TI 2023-03-11 11:02:59.5
0112 DC 01-B2 DHU_OP_START
0113 C.                çç[HK1_TI_CMD_NUM]                EQ        1COUNTUP
0114 C.
0115 C. °E²¼0IÄè%îÍÑ0IYÁY$YÁY-¹àÛ
0116 C.                çç[HK1_TI_CMD_ENA/DIS]              EQ        ENA
0117 C.                çç[HK1_TI_CMD_NUM]                EQ        4
0118 C.                çç[HK1_NEXT_EXEC_PIM]              EQ        DHU
0119 C.                çç[HK1_NEXT_EXEC_DC]               EQ        0xB3
0120 C.
0121 . C. *****
0122 C. TIÎÎ°èYÀYÓY×
0123 C. *****
0124 C.
0125 C. TI_TBL(0x03AB00-0x03AEFF;§ 1024byte)
0126 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0127 BC (03 ab 03 01 02)
0128 C.                çç[HK1_DMP_TOP_ADRS_1]              EQ        07
0129 C.                çç[HK1_DMP_TOP_ADRS_0]              EQ        2B
0130 C.                çç[HK1_DMP_BLOCK_NUM]               EQ        3
0131 C.                çç[HK1_DMP_REPEAT_NUM]              EQ        0
0132 C.                çç[HK1_DMA_DMP_PIM]                EQ        DHU
0133 +. DC 01-22 DHU_MODE_CHNG
0134 BC (07 0b f8)
0135 C.                çç[HK1_PKT_FORM_NO]                 EQ        7
0136 C.                çç[HK1_PKT_GEN_TIME]                 EQ        0.25 s
0137 C.                çç[HK1_S_TLM_BIT_RATE]               EQ        32k
0138 C.                çç[HK1_X_TLM_BIT_RATE]               EQ        4M
0139 C.                çç[HK1_DMP_CHK_FLG]                 EQ        EXEC
0140 C.
0141 . C. YÀYÓY×½ªI»0ð³IÇ$
0142 C.                çç[HK1_DMP_CHK_FLG]                 EQ        NON
0143 C.
0144 . C. RAM ID=TI_TBL0I%È¹Ç•è²I0K0ð³IÇ$
0145 C.
0146 . C. DHUYâ;¼YÉ;È¼Y½,¥i;¼YÈ;Ë0ðIã0¹
0147 +. DC 01-22 DHU_MODE_CHNG
0148 BC (02 0a f8)
0149 C.                çç[HK1_PKT_FORM_NO]                 EQ        2
0150 C.                çç[HK1_PKT_GEN_TIME]                 EQ        0.5S
0151 C.                çç[HK1_S_TLM_BIT_RATE]               EQ        32K
0152 C.                çç[HK1_X_TLM_BIT_RATE]               EQ        4M
0153 C.
0154 . C. Stop EIS observation and temporarily disable EIS mode changes
0155 C.
0156 C.
0157 C. ***** Start EIS operation (TI set) *****
0158 C. Execute, after the success of OP upload.
0159 C. Set EIS TI-commands
0160 +. TI 2023-03-11 11:02:30.0
0161 DC 07-FC EIS_MODE_MANU
0162 BC (21 02)
0163 +. TI 2023-03-11 11:02:40.0
0164 DC 07-FC EIS_MODE_CHG_DIS
0165 BC (22)
0166 . C.                [ ] [HK1_TI_CMD_NUM]                EQ        2 COUNTUP
0167 C. ***** End EIS operation (TI set) *****
0168 C.
0169 C.
0170 C.
0171 C. ***** XRT START *****
0172 C. Execute, after the success of OP upload.
0173 +. TI 2023-03-11 11:02:00.0
0174 DC 07-F0 MDP_XRT_MODE_STBY
0175 BC (c3)
0176 . C.                [ ] [HK1_TI_CMD_NUM]                EQ        1COUNTUP
0177 C.
0178 C. ***** XRT END *****
0179 C.
0180 C. ***** MDP ´úÃî0I»0¼Y0EÄ00¹0èDCBC•x²è *****
0181 C. (%ã°iYÓYÁYÉY¥YÉYÁYÇYè0E¼000¼Á»Û0¹0è)
0182 . S. DC-BC dcbc-402:DCBC
0183 (MDP_known_event)
0184 C.
0185 C.
0186 . C. ***** YD¥¹•İ Daily±¿IÑ0E'00¹0èDCBC•x²è *****
0187 . S. DC-BC dcbc-153:DCBC
0188 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0189 C.
0190 C.
0191 . C. ;ãLOS¥ÁY$YÁY-¼Á»Û;ã
0192 C.
0193 . C. ***** LOS *****

```



(a) Spacecraft Operation Procedure (real-commands)

```
main-729 2023-03-11 12:02:35 169 33 SOLAR-B MAIN //
0001 C.
0002 . C. ***** AOS *****
0003 C.
0004 . C. ;ãAOSYÁYŞYÁY-¼Ä»Û;ä
0005 C.
0006 C. YÀYß;¼Y³YÞYÓYÉÄ+ç®
0007 +. DC 00-00 NULL_DUMMY_CMD
0008 C.
0009 . C. ***** AOCs : Reload orbital element (send every contact) *****
0010 C. Áí;ÈçðÄá•µ°È»Í×ÁÇçÍYçYÁY×Yí;¼YÉ;ÈÈÈµ•íÉ;ÈÈÈ¼°ÇÖá•ç¼í¹ççí;çÄ®, ùá¹áèááçÄ+ç®á•áèááááè; f
0011 +. DC 02-8E AOCU_ORB_UPD
0012 C.
0013 C.
0014 . C. *****
0015 C. XÁ+çµ;ON
0016 C. *****
0017 C. ç“ °ÄÄ, Í×ÈYáÄLOSááççí»p´Öáá¹íí, á•; çÉÖÍ×áÈXÁÖONáí¹Öáááèááááè; f
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. çç[HK1_XPA_ON/OFF] EQ ON
0025 C. çç[HK1_XPA_PWR_HI/LO] EQ HI
0026 C. çç[HK1_XMOD_ON/OFF] EQ ON
0027 C. çç[HK1_XMOD_QPSK/PM] EQ QPSK
0028 C.
0029 . C. XYDÝÓYÉYíYÁY-¾ÖÁÖá•áÄááçç; ç°È²¼áí°ÄÄ, ¼È¼ççáá¼Ä¹Öáááè; f
0030 C.
0031 . C. *****
0032 C. DR PT1 Äí¼í°ÄÄ,
0033 C. *****
0034 C. ç“ RESTART; ÈPT1; Èá•áççáá¼í¹ççí; ç°È²¼áí°ÄÄ¹Öáá»°; çDCBC-150ááççÈáá; f
0035 C.
0036 . C. ;ãPT1°ÄÄ, ³«»í;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. çç[HK1_REP_PT_1/2] EQ PT1 (¼Ä¹Ö, ;¼Ú)
0043 C. çç[HK1_REP_STA/STP] EQ START (¼Ä¹Ö, ;¼Ú)
0044 C. çç[HK1_X_VC4_ON/OFF] EQ ON (¼Ä¹Ö, ;¼Ú)
0045 C.
0046 . C. ;ãYçYóYÁYÈÄÚÁÖ; ÈÄ•Ä°²óÈð; È, ááí°ÄÄ, °È³«; ä
0047 +. DC 06-B3 DR_REP_START
0048 + DC 01-32 DHU_X_VC4_ON
0049 C. çç[HK1_REP_PT_1/2] EQ PT1 (¼Ä¹Ö, ;¼Ú)
0050 C. çç[HK1_REP_STA/STP] EQ START (¼Ä¹Ö, ;¼Ú)
0051 C. çç[HK1_X_VC4_ON/OFF] EQ ON (¼Ä¹Ö, ;¼Ú)
0052 C.
0053 C.
0054 . C. PT1°ÄÄ, á-¼«ÄÄ»ßá•áçç; á; ç°È²¼áá¼Ä¹Öáááè; f
0055 C. YçYóYÁYÈÄÚÁÖááÄ•Ä°²óÈðá•¼ááá¼í¹ççí´°í»áá¹áèááççÄÖáá; f
0056 C.
0057 . C. *****
0058 C. DR PT2 Äí¼í°ÄÄ,
0059 C. *****
0060 C. ç“ RESTART; ÈPT2; Èá•áççáá¼í¹ççí; ç°È²¼áí°ÄÄ¹Öáá»°; çDCBC-151ááççÈáá; f
0061 C.
0062 . C. ;ãPT2°ÄÄ, ³«»í;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. çç[HK1_REP_PT_1/2] EQ PT2 (¼Ä¹Ö, ;¼Ú)
0069 C. çç[HK1_REP_STA/STP] EQ START (¼Ä¹Ö, ;¼Ú)
0070 C. çç[HK1_X_VC4_ON/OFF] EQ ON (¼Ä¹Ö, ;¼Ú)
0071 C.
0072 . C. ;ãYçYóYÁYÈÄÚÁÖ; ÈÄ•Ä°²óÈð; È, ááí°ÄÄ, °È³«; ä
0073 +. DC 06-B3 DR_REP_START
0074 + DC 01-32 DHU_X_VC4_ON
0075 C. çç[HK1_REP_PT_1/2] EQ PT2 (¼Ä¹Ö, ;¼Ú)
0076 C. çç[HK1_REP_STA/STP] EQ START (¼Ä¹Ö, ;¼Ú)
0077 C. çç[HK1_X_VC4_ON/OFF] EQ ON (¼Ä¹Ö, ;¼Ú)
0078 C.
0079 . C. *****
0080 C. DR°ÄÄ, ÄÄ»ß; çXÁ+çµ;OFF
0081 C. *****
0082 C.
0083 . C. ;ãDR°ÄÄ, ÄÄ»ß; ä
0084 +. DC 06-B4 DR_REP_STOP
0085 + DC 01-29 DHU_S/X_VC4_OFF
0086 C. çç[HK1_REP_STA/STP] EQ STOP
0087 C. çç[HK1_S_VC4_ON/OFF] EQ OFF
0088 C. çç[HK1_X_VC4_ON/OFF] EQ OFF
0089 C.
0090 . C. ;ãXÁ+çµ;OFF; ä
0091 +. DC 03-85 TCIA_XMOD_OFF
0092 M. WAIT_SEC 1
0093 + DC 03-B5 TCIA_XPA_OFF
0094 C. çç[HK1_XMOD_ON/OFF] EQ OFF
0095 C. çç[HK1_XPA_ON/OFF] EQ OFF
```

```

0096 C.
0097 C.
0098 . C. ***** AOCS Commands (Tracking Curve Upload) *****
0099 C. Upload the Orbit Element and the Target Attitude
0100 C. RAM-ID:TARGET_ATT
0101 . S. RAM ram-150:TARGET_ATT
0102 ( )
0103 C.
0104 C.
0105 C. Set the dump memory area of TARGET_ATT
0106 +. DC 02-48 AOCS_DUMP_SET
0107 BC (07 00 00 00 18 00)
0108 C.
0109 C. <A_STS1>[MEMORY OPERATE SATUS] ADRS = 070000 [ ]
0110 C.
0111 C.
0112 C. Change the TLMFormatNo for the AOCS Dump Format
0113 +. DC 01-22 DHU_MODE_CHNG
0114 BC (04 0b f8)
0115 C.
0116 C. Wait for AOCS DUMP to end
0117 C.
0118 . C. Check the dump memory
0119 C.
0120 C. Result = OK [ ]
0121 C.
0122 +. DC 01-22 DHU_MODE_CHNG
0123 BC (02 0a f8)
0124 C.
0125 C. <A_***>[TLM STS] FMT = 2 [ ]
0126 C.
0127 +. DC 02-8E AOCS_ORB_UPD
0128 . C.
0129 . C. Load OBSTBL, dump OBSTBL, enable EIS mode changes
0130 +. DC 07-FC EIS_MODE_CHG_ENA
0131 BC (20)
0132 . C. Verify EIS_MODE_CHG_FLG is ENA
0133 +. DC 07-FC EIS_MODE_MANU
0134 BC (21 02)
0135 . C. Verify EIS in MANUAL mode
0136 . C. Estimated OBSTBL upload time is 17s
0137 C. *****
0138 C. EIS START OBSTBL LOAD
0139 C. *****
0140 . S. RAM ram-820:EIS_OBSTBL
0141 ( )
0142 +. DC 07-FC EIS_DUMP_OBSTBL
0143 BC (07 07 07 00 00 70 00)
0144 C.
0145 C. Execute, after the success of OBSTBL upload.
0146 C. Set EIS TI-commands
0147 +. TI 2023-03-11 11:02:50.0
0148 DC 07-FC EIS_MODE_CHG_ENA
0149 BC (20)
0150 . C. [ ] [HK1_TI_CMD_NUM] EQ 1 COUNTUP
0151 C. *****
0152 C. EIS END OBSTBL LOAD
0153 C. *****
0154 C.
0155 . C. ***** MDP 'UÃîâî»ö¼ÝðÊÂð¹ñèDCBC•x²è *****
0156 C. (¼ã°î¼ÝðÊÂð¹ñèDCBC•x²è *****
0157 . S. DC-BC dcbc-402:DCBC
0158 (MDP_known_event)
0159 C.
0160 C.
0161 . C. ***** ¼D¼¹•î Daily±¼îÑñÉ'ð¹ñèDCBC•x²è *****
0162 . S. DC-BC dcbc-153:DCBC
0163 (SPECIAL-CMD_DAILY_OPERATING_DCB)
0164 C.
0165 C.
0166 . C. ;ãLOS¼Á¼S¼Y¼Ä¼-¼Ä»Ü;ã
0167 C.
0168 . C. ***** LOS *****
0169 C.

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\*\*\* OP Sequence for XRT \*\*\*

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2023/03/11 11:09:54.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 11:09:56.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 11:09:58.0 XRT_FOCUS_POSITION_410_OG [0x19a]
                        XRT_FOCUS_POSITION 4 07-F8 22 fe 97 00
2023/03/11 11:10:18.0 XRT_FLD_ENA_411_OG [0x19b]
                        MDP_XRT_FLD_ENA 1 07-F0 d8
2023/03/11 11:10:20.0 XRT_FLRCTRL_ENA_412_OG [0x19c]
                        MDP_XRT_FLRCTRL_ENA 1 07-F0 c8
2023/03/11 11:10:22.0 XRT_AEC_RESET_448_OG [0x1c0]
                        MDP_XRT_AEC_RESET 1 07-F0 d0
2023/03/11 11:10:24.0 XRT_ARS_DIS_423_OG [0x1a7]
                        MDP_XRT_ARS_DIS 1 07-F0 d5
2023/03/11 11:10:26.0 XRT_FLD_RESET_434_OG [0x1b2]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2023/03/11 11:12:56.0 XRT_QT_PROG_SET_447_OG [0x1bf]
                        MDP_XRT_QT_PROG_SET 2 07-F0 c4 01
2023/03/11 11:12:58.0 XRT_FL_PROG_SET_418_OG [0x1a2]
                        MDP_XRT_FL_PROG_SET 2 07-F0 c5 04
2023/03/11 11:13:00.5 AOCs_OrE-point_Start_1_OG [0x097]
                        AOCU_NM 5 02-76 02 03 74 01 db
2023/03/11 11:13:01.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 11:13:03.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 11:13:05.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2023/03/11 11:13:07.0 XRT_PREFLR_STRT_436_OG [0x1b4]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2023/03/11 11:16:15.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2023/03/11 11:24:30.0 XRT_Custom_430_OG [0x1ae]
2023/03/11 11:25:30.0 XRT_CTRL_AUTO_424_OG [0x1a8]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2023/03/11 15:04:30.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 15:04:32.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 15:04:34.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2023/03/11 15:04:36.0 XRT_PREFLR_STRT_436_OG [0x1b4]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2023/03/11 15:07:44.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2023/03/11 15:08:00.0 XRT_CTRL_AUTO_408_OG [0x198]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2023/03/11 16:35:00.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 16:35:02.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 16:35:04.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2023/03/11 16:35:06.0 XRT_PREFLR_STRT_436_OG [0x1b4]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2023/03/11 16:38:14.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2023/03/11 16:58:30.0 XRT_Custom_430_OG [0x1ae]
2023/03/11 16:59:30.0 XRT_CTRL_AUTO_424_OG [0x1a8]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2023/03/11 17:47:24.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 17:47:26.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 17:47:28.0 XRT_FOCUS_POSITION_406_OG [0x196]
                        XRT_FOCUS_POSITION 4 07-F8 22 ff aa 00
2023/03/11 17:47:30.0 AOCs_OrE-point_Start_2_OG [0x098]
                        AOCU_NM 5 02-76 00 00 00 00 00
2023/03/11 17:47:48.0 XRT_FLD_DIS_409_OG [0x199]
                        MDP_XRT_FLD_DIS 1 07-F0 d9
2023/03/11 17:47:50.0 XRT_FLRCTRL_DIS_413_OG [0x19d]
                        MDP_XRT_FLRCTRL_DIS 1 07-F0 c9
2023/03/11 17:47:52.0 XRT_ARS_DIS_421_OG [0x1a5]
                        MDP_XRT_ARS_DIS 1 07-F0 d5
2023/03/11 17:50:28.0 XRT_QT_PROG_SET_438_OG [0x1b6]
                        MDP_XRT_QT_PROG_SET 2 07-F0 c4 14
2023/03/11 17:50:30.0 XRT_CTRL_AUTO_408_OG [0x198]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2023/03/11 17:57:24.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 17:57:26.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2023/03/11 17:57:28.0 XRT_FOCUS_POSITION_410_OG [0x19a]
                        XRT_FOCUS_POSITION 4 07-F8 22 fe 97 00
2023/03/11 17:57:30.5 AOCs_OrE-point_Start_1_OG [0x097]
                        AOCU_NM 5 02-76 02 03 74 01 db
2023/03/11 17:57:48.0 XRT_FLD_ENA_411_OG [0x19b]
                        MDP_XRT_FLD_ENA 1 07-F0 d8
2023/03/11 17:57:50.0 XRT_FLRCTRL_ENA_412_OG [0x19c]
                        MDP_XRT_FLRCTRL_ENA 1 07-F0 c8
2023/03/11 17:57:52.0 XRT_AEC_RESET_448_OG [0x1c0]

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2023/03/11	17:57:54.0	XRT_ARS_DIS_423_OG [0x1a7]	MDP_XRT_AEC_RESET	1	07-F0	d0
2023/03/11	17:57:56.0	XRT_FLD_RESET_434_OG [0x1b2]	MDP_XRT_ARS_DIS	1	07-F0	d5
2023/03/11	18:00:26.0	XRT_QT_PROG_SET_431_OG [0x1af]	MDP_XRT_FLD_RESET	1	07-F0	da
2023/03/11	18:00:28.0	XRT_FL_PROG_SET_418_OG [0x1a2]	MDP_XRT_QT_PROG_SET	2	07-F0	c4 0c
2023/03/11	18:00:30.0	XRT_CTRL_AUTO_408_OG [0x198]	MDP_XRT_FL_PROG_SET	2	07-F0	c5 04
2023/03/11	18:11:30.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_AUTO	1	07-F0	c0
2023/03/11	18:11:32.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/11	18:11:34.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/11	18:11:36.0	XRT_PREFLR_STRT_436_OG [0x1b4]	MDP_XRT_FLD_RESET	1	07-F0	da
2023/03/11	18:14:44.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STRT	1	07-F0	e8
2023/03/11	18:35:00.0	XRT_Custom_430_OG [0x1ae]	MDP_XRT_PREFLR_STOP	1	07-F0	e9
2023/03/11	18:36:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]	XRT_Custom_430_OG [0x1ae]			
2023/03/11	19:48:30.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_AUTO	1	07-F0	c0
2023/03/11	19:48:32.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/11	19:48:34.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/11	19:48:36.0	XRT_PREFLR_STRT_436_OG [0x1b4]	MDP_XRT_FLD_RESET	1	07-F0	da
2023/03/11	19:51:44.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STRT	1	07-F0	e8
2023/03/11	20:12:00.0	XRT_Custom_430_OG [0x1ae]	MDP_XRT_PREFLR_STOP	1	07-F0	e9
2023/03/11	20:13:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]	XRT_Custom_430_OG [0x1ae]			
2023/03/11	21:25:30.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_AUTO	1	07-F0	c0
2023/03/11	21:25:32.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/11	21:25:34.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/11	21:25:36.0	XRT_PREFLR_STRT_436_OG [0x1b4]	MDP_XRT_FLD_RESET	1	07-F0	da
2023/03/11	21:28:44.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STRT	1	07-F0	e8
2023/03/11	21:49:00.0	XRT_Custom_430_OG [0x1ae]	MDP_XRT_PREFLR_STOP	1	07-F0	e9
2023/03/11	21:50:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]	XRT_Custom_430_OG [0x1ae]			
2023/03/11	23:03:00.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_AUTO	1	07-F0	c0
2023/03/11	23:03:02.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/11	23:03:04.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/11	23:03:06.0	XRT_PREFLR_STRT_436_OG [0x1b4]	MDP_XRT_FLD_RESET	1	07-F0	da
2023/03/11	23:06:14.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STRT	1	07-F0	e8
2023/03/11	23:25:00.0	XRT_Custom_430_OG [0x1ae]	MDP_XRT_PREFLR_STOP	1	07-F0	e9
2023/03/11	23:26:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]	XRT_Custom_430_OG [0x1ae]			
2023/03/12	00:40:00.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_AUTO	1	07-F0	c0
2023/03/12	00:40:02.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/12	00:40:04.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/12	00:40:06.0	XRT_PREFLR_STRT_436_OG [0x1b4]	MDP_XRT_FLD_RESET	1	07-F0	da
2023/03/12	00:43:14.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STRT	1	07-F0	e8
2023/03/12	00:51:00.0	XRT_Custom_430_OG [0x1ae]	MDP_XRT_PREFLR_STOP	1	07-F0	e9
2023/03/12	00:52:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]	XRT_Custom_430_OG [0x1ae]			
2023/03/12	02:06:30.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_AUTO	1	07-F0	c0
2023/03/12	02:06:32.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/12	02:06:34.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/12	02:06:36.0	XRT_PREFLR_STRT_436_OG [0x1b4]	MDP_XRT_FLD_RESET	1	07-F0	da
2023/03/12	02:09:44.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STRT	1	07-F0	e8
2023/03/12	02:23:00.0	XRT_Custom_430_OG [0x1ae]	MDP_XRT_PREFLR_STOP	1	07-F0	e9
2023/03/12	02:24:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]	XRT_Custom_430_OG [0x1ae]			
2023/03/12	03:38:30.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_AUTO	1	07-F0	c0
2023/03/12	03:38:32.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1
2023/03/12			MDP_XRT_CTRL_MANU	1	07-F0	c1



2023/03/12	03:38:34.0	XRT_FLD_RESET_415_OG [0x19f]							
		MDP_XRT_FLD_RESET	1	07-F0	da				
2023/03/12	03:38:36.0	XRT_PREFLR_STRT_436_OG [0x1b4]							
		MDP_XRT_PREFLR_STRT	1	07-F0	e8				
2023/03/12	03:41:44.0	XRT_PREFLR_STOP_419_OG [0x1a3]							
		MDP_XRT_PREFLR_STOP	1	07-F0	e9				
2023/03/12	03:59:54.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2023/03/12	03:59:56.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2023/03/12	03:59:58.0	XRT_FOCUS_POSITION_406_OG [0x196]							
		XRT_FOCUS_POSITION	4	07-F8	22 ff aa 00				
2023/03/12	04:00:00.0	AOCS_Ore-point_Start_2_OG [0x098]							
		AOCU_NM	5	02-76	00 00 00 00 00				
2023/03/12	04:00:18.0	XRT_FLD_ENA_411_OG [0x19b]							
		MDP_XRT_FLD_ENA	1	07-F0	d8				
2023/03/12	04:00:20.0	XRT_FLRCTRL_ENA_412_OG [0x19c]							
		MDP_XRT_FLRCTRL_ENA	1	07-F0	c8				
2023/03/12	04:00:22.0	XRT_AEC_RESET_448_OG [0x1c0]							
		MDP_XRT_AEC_RESET	1	07-F0	d0				
2023/03/12	04:00:24.0	XRT_ARS_DIS_423_OG [0x1a7]							
		MDP_XRT_ARS_DIS	1	07-F0	d5				
2023/03/12	04:00:26.0	XRT_FLD_RESET_434_OG [0x1b2]							
		MDP_XRT_FLD_RESET	1	07-F0	da				
2023/03/12	04:02:56.0	XRT_QT_PROG_SET_414_OG [0x19e]							
		MDP_XRT_QT_PROG_SET	2	07-F0	c4 02				
2023/03/12	04:02:58.0	XRT_FL_PROG_SET_418_OG [0x1a2]							
		MDP_XRT_FL_PROG_SET	2	07-F0	c5 04				
2023/03/12	04:03:00.0	XRT_CTRL_AUTO_408_OG [0x198]							
		MDP_XRT_CTRL_AUTO	1	07-F0	c0				
2023/03/12	05:07:30.0	XRT_CTRL_MANU_400_OG [0x190]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2023/03/12	05:07:32.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2023/03/12	05:07:34.0	XRT_FLD_RESET_415_OG [0x19f]							
		MDP_XRT_FLD_RESET	1	07-F0	da				
2023/03/12	05:07:36.0	XRT_PREFLR_STRT_436_OG [0x1b4]							
		MDP_XRT_PREFLR_STRT	1	07-F0	e8				
2023/03/12	05:10:44.0	XRT_PREFLR_STOP_419_OG [0x1a3]							
		MDP_XRT_PREFLR_STOP	1	07-F0	e9				
2023/03/12	05:37:00.0	XRT_Custom_430_OG [0x1ae]							
2023/03/12	05:38:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]							
		MDP_XRT_CTRL_AUTO	1	07-F0	c0				
2023/03/12	05:59:24.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2023/03/12	05:59:26.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2023/03/12	05:59:28.0	XRT_FOCUS_POSITION_406_OG [0x196]							
		XRT_FOCUS_POSITION	4	07-F8	22 ff aa 00				
2023/03/12	05:59:48.0	XRT_FLD_DIS_409_OG [0x199]							
		MDP_XRT_FLD_DIS	1	07-F0	d9				
2023/03/12	05:59:50.0	XRT_FLRCTRL_DIS_413_OG [0x19d]							
		MDP_XRT_FLRCTRL_DIS	1	07-F0	c9				
2023/03/12	05:59:52.0	XRT_ARS_DIS_421_OG [0x1a5]							
		MDP_XRT_ARS_DIS	1	07-F0	d5				
2023/03/12	06:02:28.0	XRT_QT_PROG_SET_438_OG [0x1b6]							
		MDP_XRT_QT_PROG_SET	2	07-F0	c4 14				
2023/03/12	06:02:30.0	XRT_CTRL_AUTO_408_OG [0x198]							
		MDP_XRT_CTRL_AUTO	1	07-F0	c0				
2023/03/12	06:09:40.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2023/03/12	06:09:50.0	XRT_TCIB_XRT_S_HTR_A_ENA_416_OG [0x1a0]							
		TCIB_XRT_S_HTR_A_ENA	0	04-BC					
2023/03/12	06:10:00.0	AOCS_Ore-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 03 74 01 db				
2023/03/12	18:03:00.0	AOCS_Ore-point_Start_2_OG [0x098]							
		AOCU_NM	5	02-76	00 00 00 00 00				
2023/03/12	18:13:00.0	AOCS_Ore-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 03 74 01 db				
2023/03/13	10:00:00.0	AOCS_Ore-point_Start_3_OG [0x099]							
		AOCU_NM	5	02-76	00 55 3f 01 db				
2023/03/13	16:00:00.0	AOCS_Ore-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 03 74 01 db				
2023/03/13	18:07:30.0	AOCS_Ore-point_Start_2_OG [0x098]							
		AOCU_NM	5	02-76	00 00 00 00 00				
2023/03/13	18:17:30.0	AOCS_Ore-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 03 74 01 db				
2023/03/14	11:20:00.0	AOCS_Ore-point_Start_2_OG [0x098]							
		AOCU_NM	5	02-76	00 00 00 00 00				