

# XRT Timeline to be uploaded on 2017/04/22

Period: 2017/04/22 10:35:00 - 2017/04/27 10:16:00

\* \* \* \* \*

Normal mode

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## XOB #1B7D: 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

Term	Pointing (x, y)	Comment
04/22 10:48:00 - 04/22 13:59:54	Track ( -417.0, 222.7) <sup>Ⓞ 04/22 10:45:00</sup>	# OP start + 10min, AR12651
04/22 14:03:00 - 04/22 15:59:54	Track ( -300.1, 233.1) <sup>Ⓞ 04/22 14:00:00</sup>	# HOP330
04/22 16:03:00 - 04/22 17:51:54	Track ( -372.0, 223.8) <sup>Ⓞ 04/22 16:00:00</sup>	AR12651
04/22 18:40:06 - 04/23 05:59:54	Track ( -354.3, 224.2) <sup>Ⓞ 04/22 18:02:00</sup>	# Cont,

**PROG= 03 Inf.-time(s)**

Subr= 1 1-time(s) 2.0sec										
Seqn= 56 1-time(s) 2.0sec										
Open/G-band Open/G-band open	Safe	Norm	3ms	Obs	1x1	384x384 (1064, 1048)	DPCM	0	0	2.0sec
Open/G-band Open/G-band close	Safe	Norm	3ms	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
Subr= 2 5-time(s) 2.0sec										
Seqn= 75 1-time(s) 2.0sec										
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
Seqn= 96 4-time(s) 45.0sec										
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 #1B64: Synoptic Q95 2x2 - Al/mesh(64/512/2048) + Dark cal(2x2 4x4 8x8 512 Q98) + Dark cal(1x1 512x2048 - 1x1 2048x512) + Al-poly(45/512/4096) + Ti

Term	Pointing (x, y)	Comment
04/22 17:55:00 - 04/22 18:03:00	Fixed ( 0.0, 0.0)	synoptic, shifted -8.0 min

**PROG= 11 1-time(s)**

Subr= 1 1-time(s) 2.0sec										
Seqn= 5 1-time(s) 2.0sec										
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	4x4	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	8x8	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	1x1	2048x512 (1024, 1024)	DPCM	0	0	2.0sec
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	1x1	512x2048 (1024, 1024)	DPCM	0	0	2.0sec
Seqn= 27 1-time(s) 2.0sec										
Open/Al-mesh Open/Al-mesh close	Safe	Norm	63ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Al-mesh Open/Al-mesh close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Al-mesh Open/Al-mesh close	Safe	Norm	2.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Seqn= 99 1-time(s) 2.0sec										
Al-poly/Open Al-poly/Open close	Safe	Norm	44ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open Al-poly/Open close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open Al-poly/thick-Al close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Seqn= 85 1-time(s) 2.0sec										
thin-Be/Open thin-Be/Open close	Safe	Norm	354ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
thin-Be/Open thin-Be/Open close	Safe	Norm	2.83s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
thin-Be/Open thin-Be/Open close	Safe	Norm	16.0s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Seqn= 54 1-time(s) 2.0sec										
Open/G-band Open/G-band open	Safe	Norm	3ms	Obs	1x1	2048x2048 (1024, 1024)	Q=90	0	0	2.0sec
Open/G-band Open/G-band close	Safe	Norm	3ms	Obs	1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

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

## XOB #1B66: Synoptic 7 Filter w/ Al-mesh(64/512/2897), Al-poly(45/512/4096), Thin-Be(512/8192/23142) - Thick-Be(65536), Al-poly+Ti-poly(256/5795), Med-Al

Term	Pointing (x, y)	Comment
04/23 06:03:00 - 04/23 06:10:00	Fixed ( 0.0, 0.0)	synoptic

**PROG= 12 1-time(s)**

Subr= 1 1-time(s) 2.0sec										
Seqn= 5 1-time(s) 2.0sec										
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	4x4	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	8x8	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	1x1	2048x512 (1024, 1024)	DPCM	0	0	2.0sec
Open/Ti-poly Open/thick-Al close	Safe	Dark	500ms	Obs	1x1	512x2048 (1024, 1024)	DPCM	0	0	2.0sec
Seqn= 1 1-time(s) 2.0sec										
Open/Al-mesh Open/Al-mesh close	Safe	Norm	24ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Al-mesh Open/Al-mesh close	Safe	Norm	250ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Open/Al-mesh Open/Al-mesh close	Safe	Norm	2.83s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Seqn= 99 1-time(s) 2.0sec										
Al-poly/Open Al-poly/Open close	Safe	Norm	44ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec

Al-poly/Open	Al-poly/Open	close	Safe	Norm	500ms	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
Al-poly/Open	Al-poly/thick-Al	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
<b>Seqn= 94</b>		<b>1-time(s)</b>		<b>2.0sec</b>								
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	8.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
thin-Be/Open	thin-Be/Open	close	Safe	Norm	22.6s	Obs	2x2	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
<b>Seqn= 54</b>		<b>1-time(s)</b>		<b>4.0sec</b>								
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	2048x2048 (1024, 1024)	Q=90	0	0	2.0sec
Open/G-band	Open/G-band	close	Safe	Norm	3ms	Obs	1x1	2048x2048 (1024, 1024)	Q=95	0	0	2.0sec
<b>Subr= 2</b>		<b>1-time(s)</b>		<b>2.0sec</b>								
<b>Seqn= 46</b>		<b>1-time(s)</b>		<b>2.0sec</b>								
Open/thick-Be	Open/thick-Be	close	Safe	Norm	64.0s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
<b>Seqn= 20</b>		<b>1-time(s)</b>		<b>2.0sec</b>								
med-Al/Open	med-Al/Open	close	Safe	Norm	4.00s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
med-Al/Open	med-Al/Open	close	Safe	Norm	64.0s	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
<b>Seqn= 40</b>		<b>1-time(s)</b>		<b>2.0sec</b>								
Al-poly/Ti-poly	Al-poly/thick-Al	close	Safe	Norm	250ms	Obs	2x2	2048x2048 (1024, 1024)	Q=98	0	0	2.0sec
Al-poly/Ti-poly	Al-poly/thick-Al	close	Safe	Norm	5.66s	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	

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### Flare mode

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<b>XOB #1AE7: Flare - multifilter 26 sec cadence (Be/thin, Be/med, Al/thick), AEC 3(thin-Be AEC2), 384x384 + context (med-Al,thick-Be -384x384 + Al-poly 512x512)</b>												
Term	Pointing (x, y)		Comment									
04/22 10:48:00 - 04/22 13:59:54	Track ( -417.0, 222.7)		# OP start + 10min, AR12651									
04/22 14:03:00 - 04/22 15:59:54	Track ( -300.1, 233.1)		# HOP330									
04/22 16:03:00 - 04/22 17:51:54	Track ( -372.0, 223.8)		AR12651									
04/22 18:40:06 - 04/23 05:59:54	Track ( -354.3, 224.2)		# Cont,									
<b>PROG= 07 30-time(s)</b>												
<b>Subr= 1</b>		<b>20-time(s)</b>		<b>2.0sec</b>								
<b>Seqn= 11</b>		<b>1-time(s)</b>		<b>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=100</b>		<b>1-time(s)</b>		<b>10.0sec</b>								
thin-Be/Open	med-Be/Open	close	Safe	Norm	125ms	Obs	1x1	384x384 (1024, 1024)	Q=95	2	0	2.0sec
med-Be/Open	Open/thick-Al	close	Safe	Norm	250ms	Obs	1x1	384x384 (1024, 1024)	Q=95	3	0	2.0sec
Open/thick-Al	Open/thick-Be	close	Safe	Norm	1.00s	Obs	1x1	384x384 (1024, 1024)	Q=95	3	0	2.0sec
<b>Subr= 2</b>		<b>1-time(s)</b>		<b>2.0sec</b>								
<b>Seqn= 10</b>		<b>1-time(s)</b>		<b>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</b>		<b>1-time(s)</b>		<b>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= 84</b>		<b>1-time(s)</b>		<b>2.0sec</b>								
Open/G-band	Open/G-band	open	Safe	Norm	3ms	Obs	1x1	384x384 (1024, 1024)	Q=98	0	0	2.0sec
Open/G-band	Open/G-band	close	Safe	Norm	3ms	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	

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### Active Region Search

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NOT USED

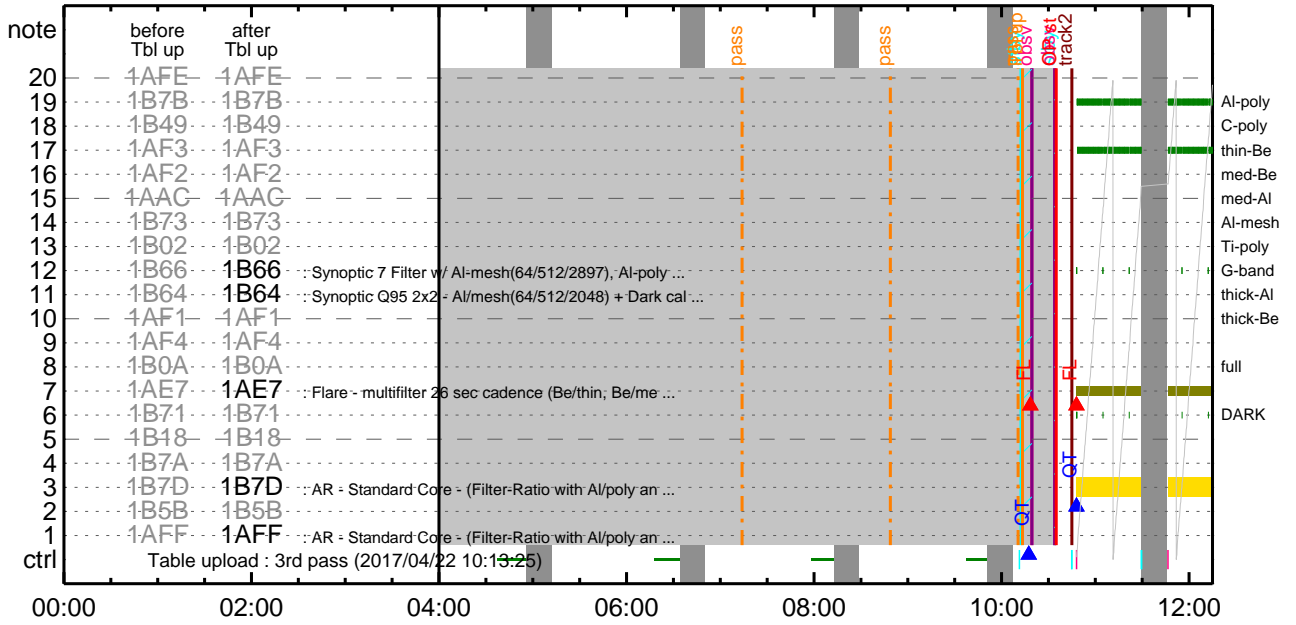
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### Flare Detection

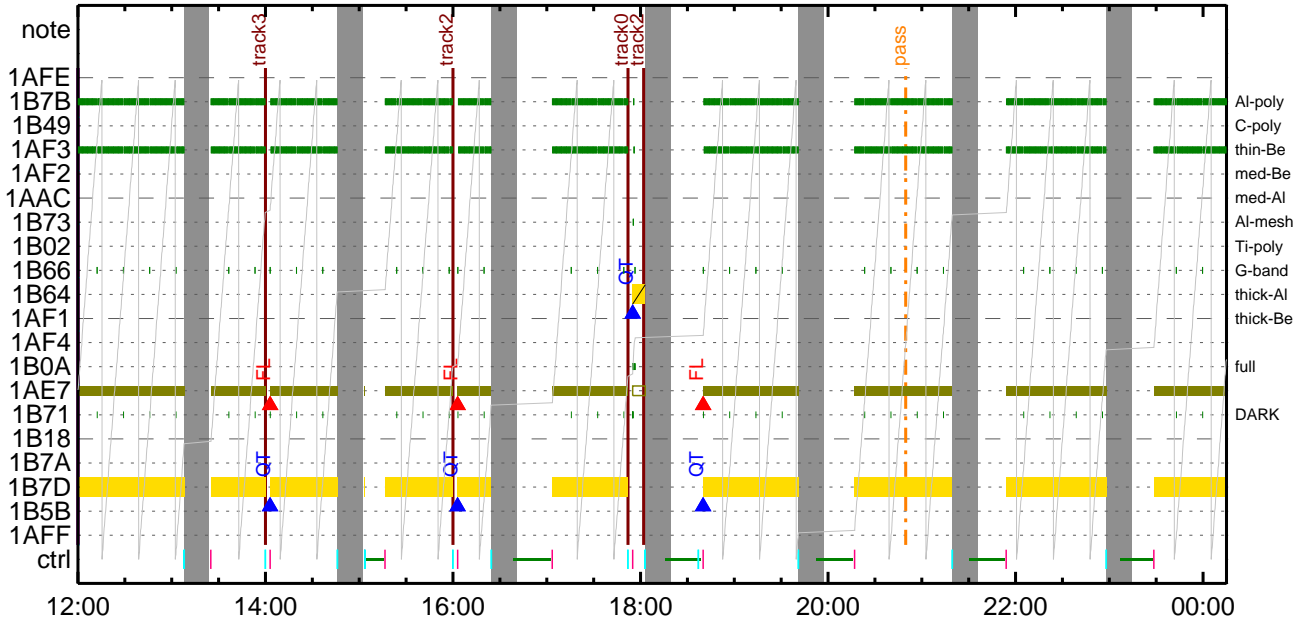
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<b>FLD Patrol</b>												
Term	Pointing (x, y)		Comment									
04/22 18:37:24 - 04/23 06:00:18	Track ( -354.3, 224.2)		# Cont,									
Open/Ti-poly	Open/thick-Al	close	Safe	Norm	8ms	Obs	8x8		Q=50			30sec
Default Filter	Thicker Filter	VLS	mode	image	Exp.	CCD	Bin	ROI: size (center)	Comp.	AEC Buffer	Interval	

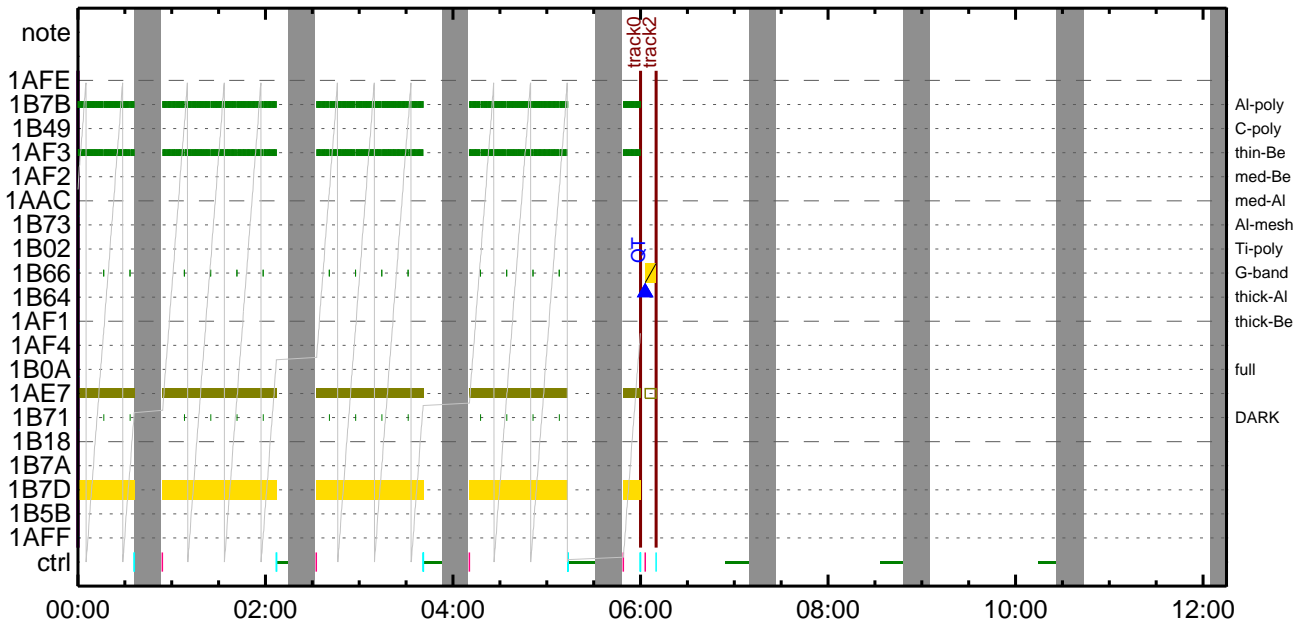
CMDI #0699 2017/04/22



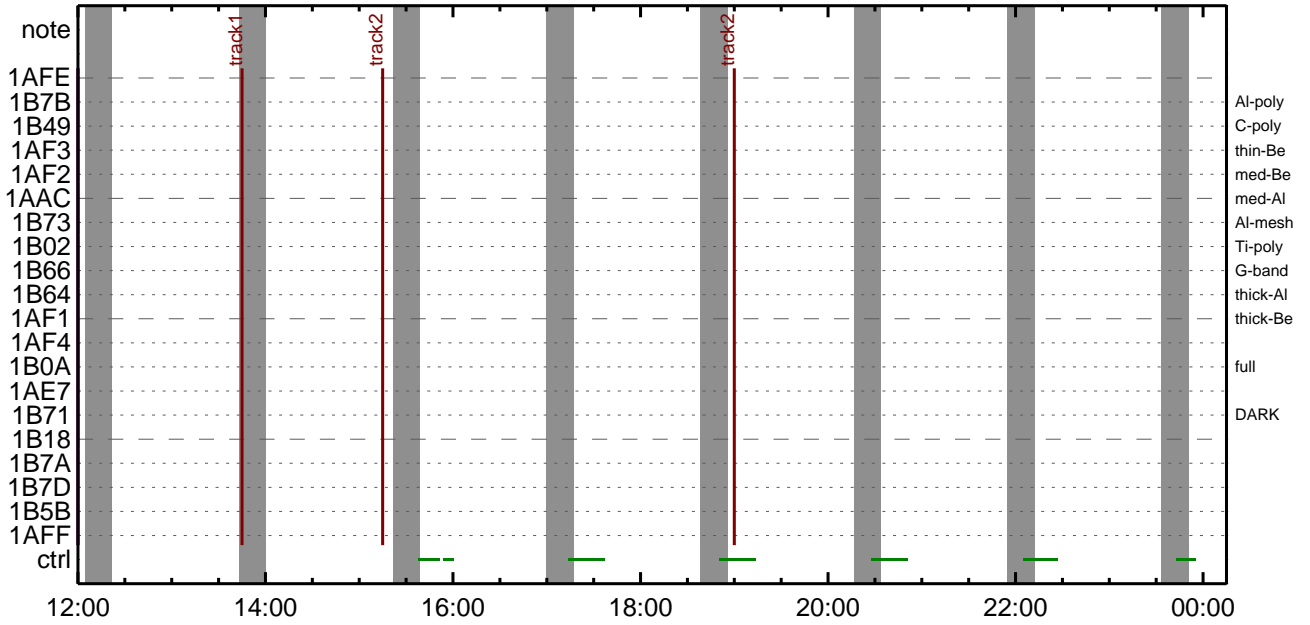
CMDI #0699 2017/04/22



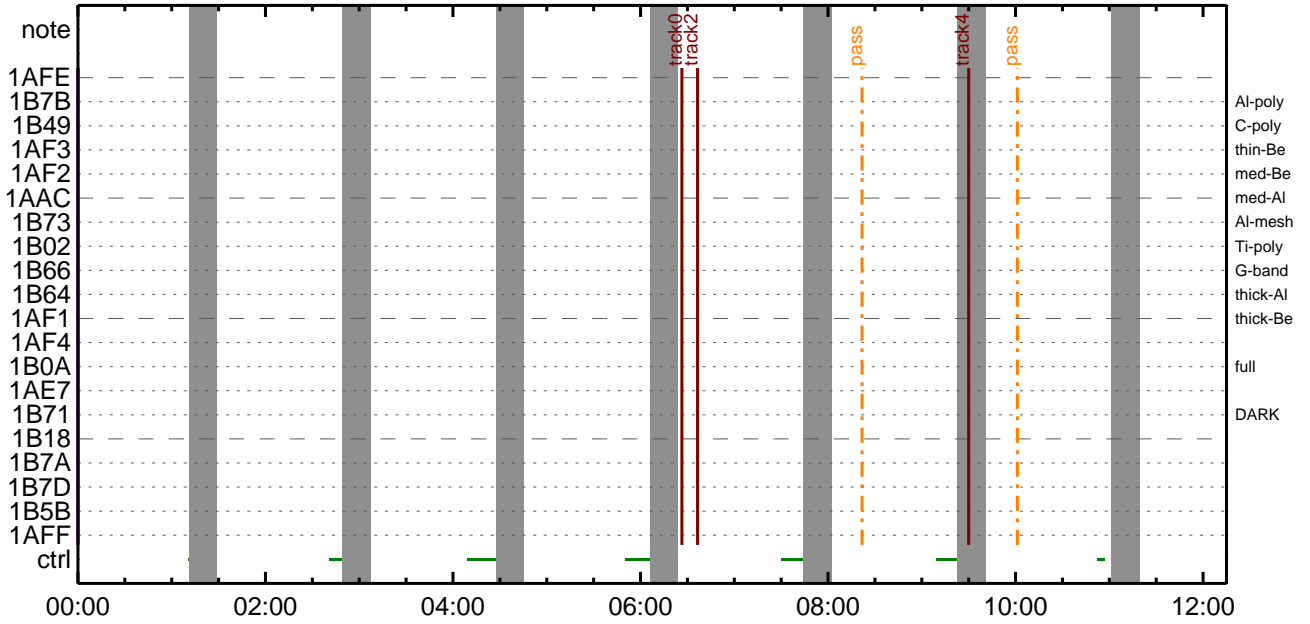
CMDI #0699 2017/04/23



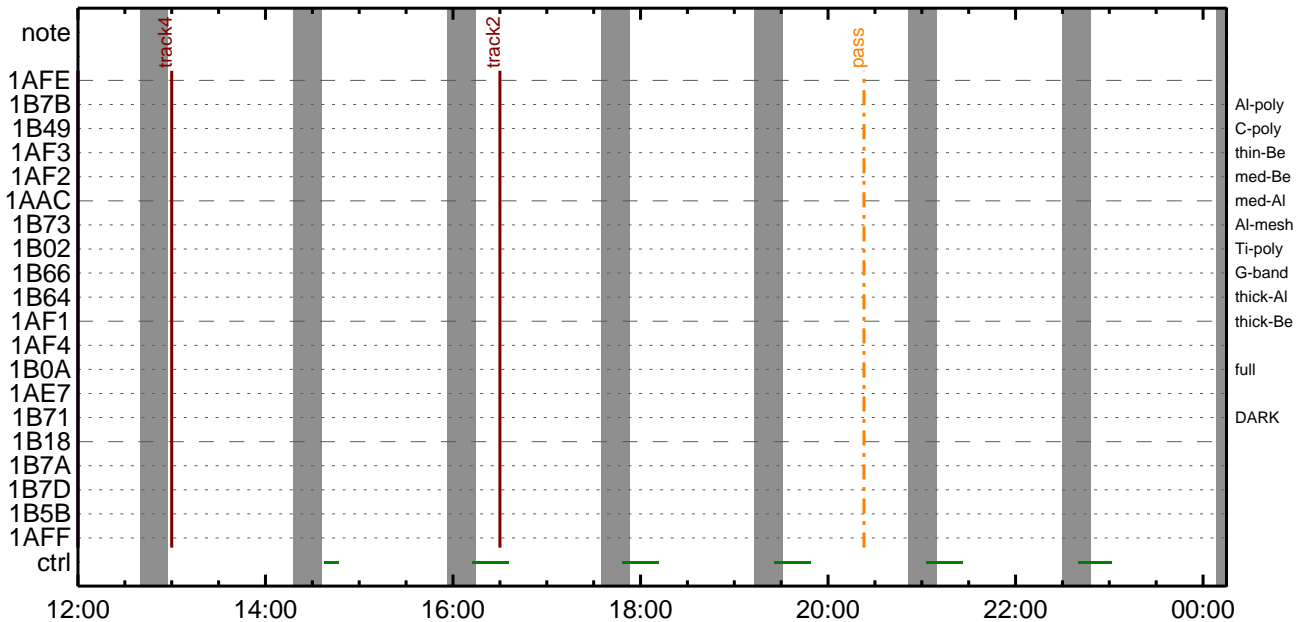
CMDI #0699 2017/04/23



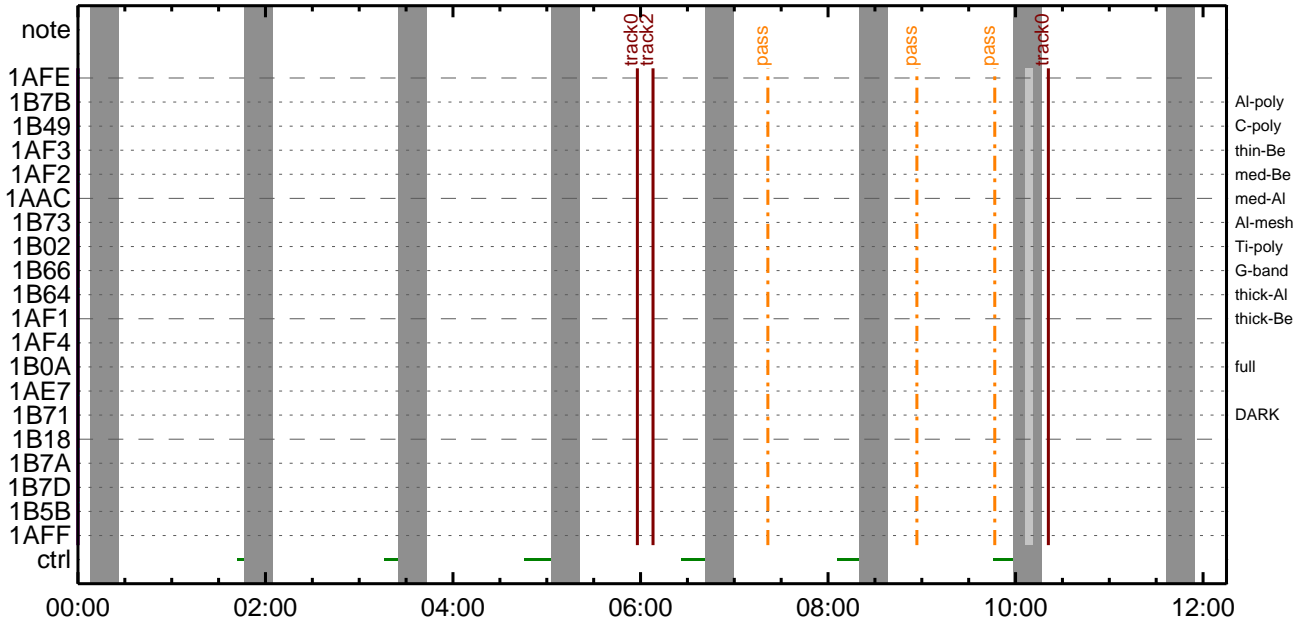
CMDI #0699 2017/04/24



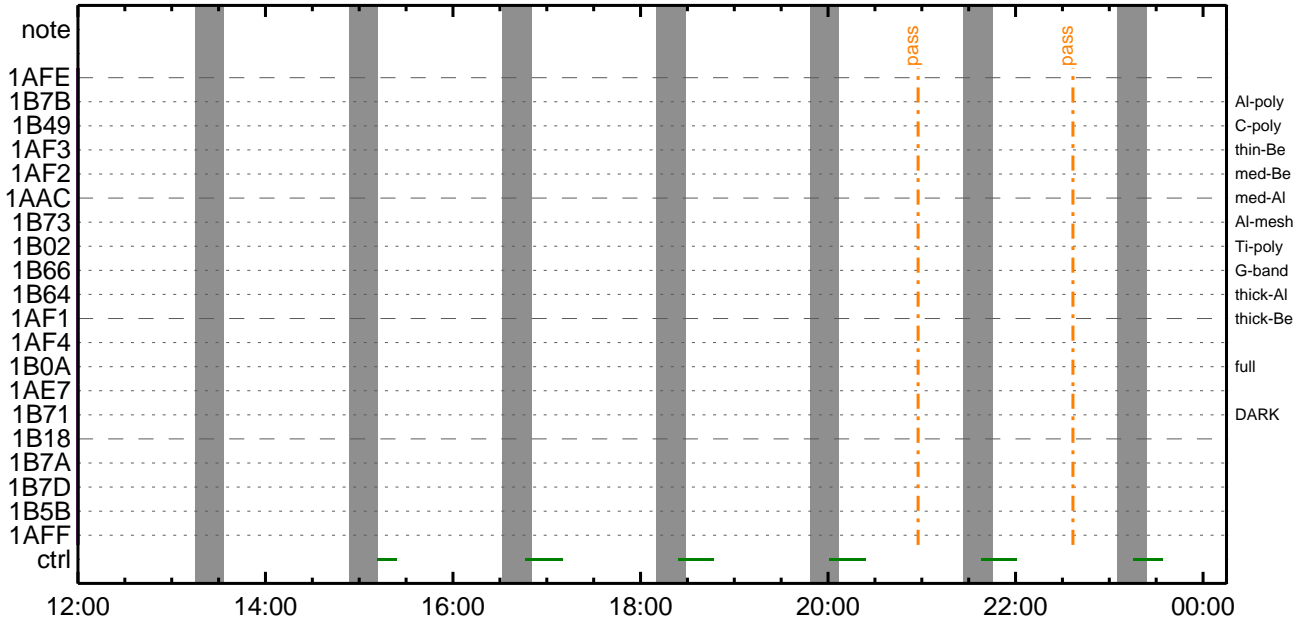
CMDI #0699 2017/04/24



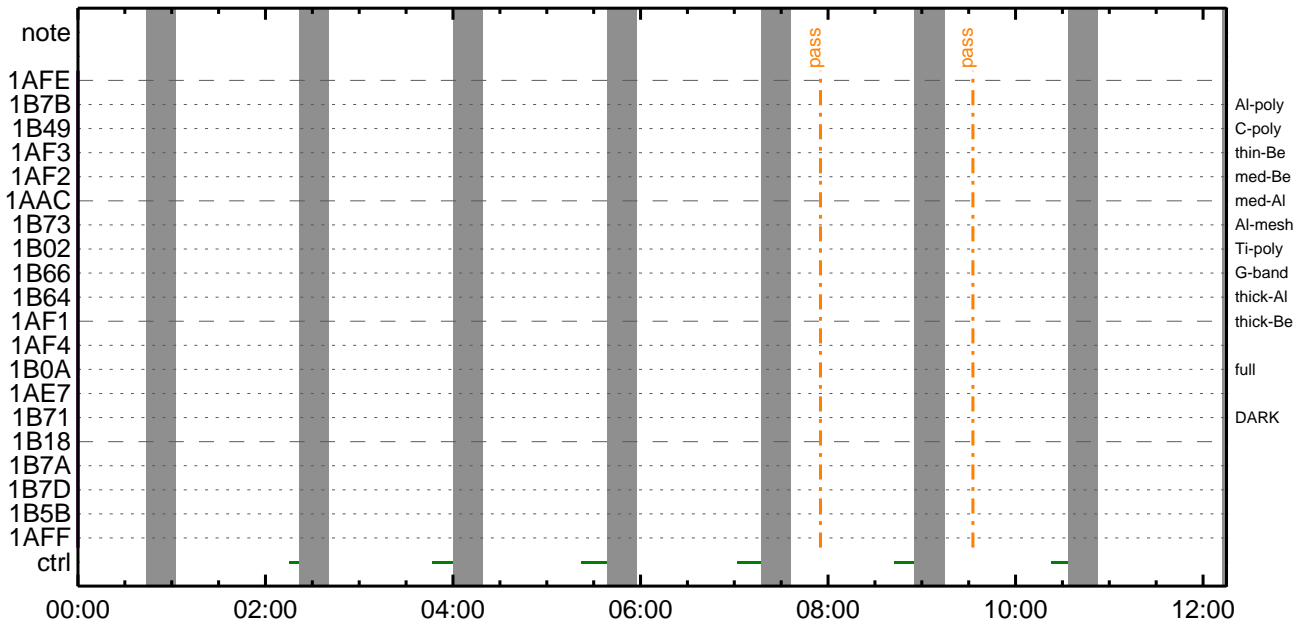
CMDI #0699 2017/04/25



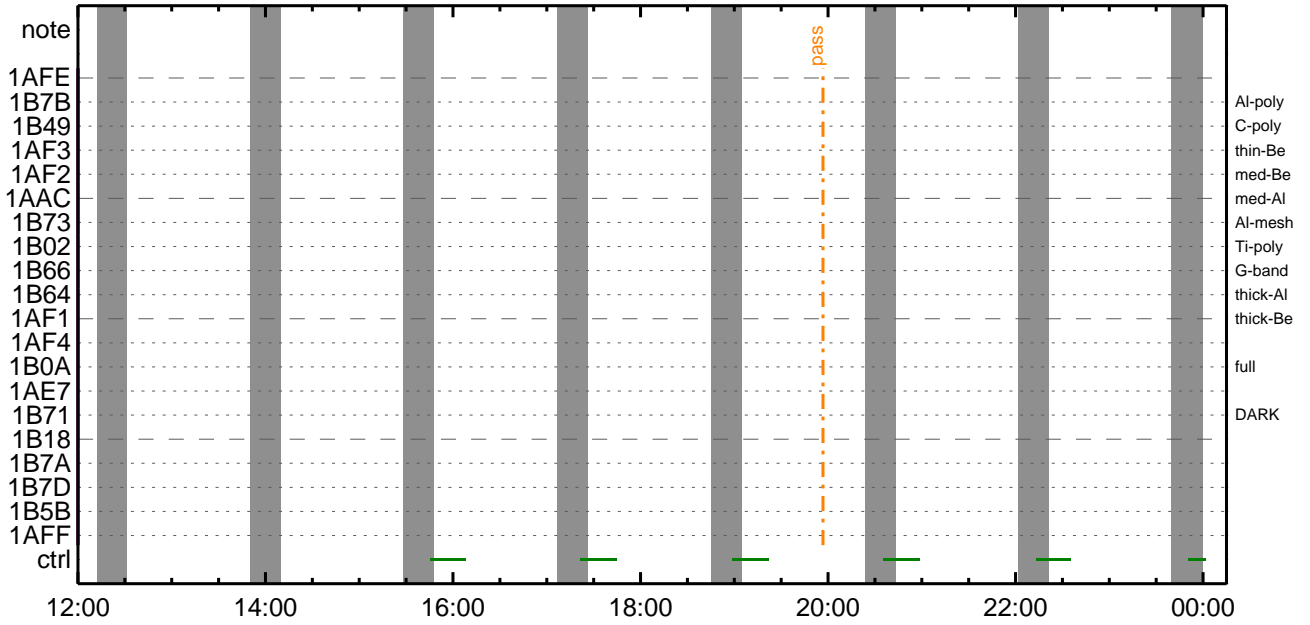
CMDI #0699 2017/04/25



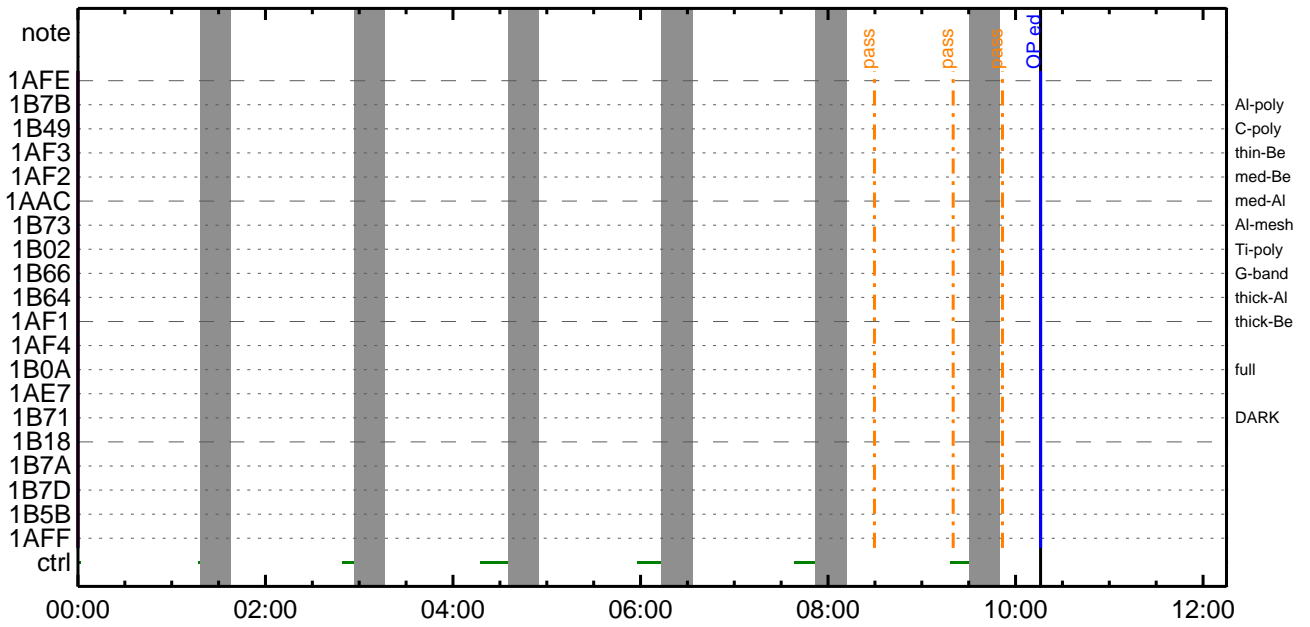
CMDI #0699 2017/04/26



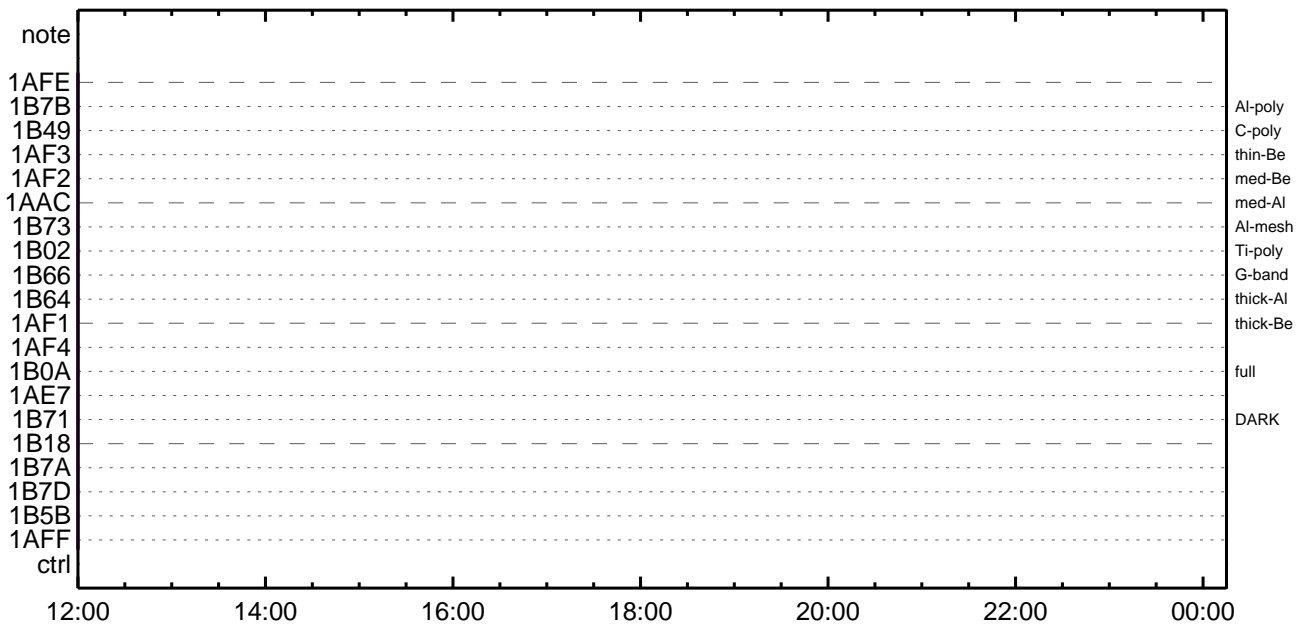
CMDI #0699 2017/04/26



CMDI #0699 2017/04/27



CMDI #0699 2017/04/27





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0096 C.
0097 C.
0098 C. *****
0099 C. OP/OGY1;4YE;ã
0100 C. *****
0101 C.
0102 C. ;ãOP/OGY1;4YE;ã
0103 S. OP op-562:OP
0104 ( )
0105 S. OG og-562:OG
0106 ( )
0107 C.
0108 C. ;ãNMOG&OPfî°èYAYôYx;ã
0109 C. NMOG(0x200000-0x207FFF;§ 32 kbyte)
0110 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0111 BC (20 00 7f 01 02)
0112 C. çç[HK1_DMP_TOP_ADRS_1] EQ 40
0113 C. çç[HK1_DMP_TOP_ADRS_0] EQ 0
0114 C. çç[HK1_DMP_BLOCK_NUM] EQ 127
0115 C. çç[HK1_DMP_REPEAT_NUM] EQ 0
0116 C. çç[HK1_DMA_DMP_PIM] EQ DHU
0117 +. DC 01-22 DHU_MODE_CHNG
0118 BC (07 0b f8)
0119 C. çç[HK1_PKT_FORM_NO] EQ 7
0120 C. çç[HK1_PKT_GEN_TIME] EQ 0.25 s
0121 C. çç[HK1_S_TLM_BIT_RATE] EQ 32k
0122 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0123 C. çç[HK1_DMP_CHK_FLG] EQ EXEC
0124 C. YAYôYx½ªî»ò³îÇ§
0125 C. çç[HK1_DMP_CHK_FLG] EQ NON
0126 C. RAM ID=NMOG²î¼E¹ç•è²îOKò³îÇ§
0127 C.
0128 C. NMOG(0x208000-0x20FFFF;§ 32 kbyte)
0129 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0130 BC (20 80 7f 01 02)
0131 C. çç[HK1_DMP_TOP_ADRS_1] EQ 41
0132 C. çç[HK1_DMP_TOP_ADRS_0] EQ 0
0133 C. çç[HK1_DMP_BLOCK_NUM] EQ 127
0134 C. çç[HK1_DMP_REPEAT_NUM] EQ 0
0135 C. çç[HK1_DMA_DMP_PIM] EQ DHU
0136 +. DC 01-22 DHU_MODE_CHNG
0137 BC (07 0b f8)
0138 C. çç[HK1_PKT_FORM_NO] EQ 7
0139 C. çç[HK1_PKT_GEN_TIME] EQ 0.25 s
0140 C. çç[HK1_S_TLM_BIT_RATE] EQ 32k
0141 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0142 C. çç[HK1_DMP_CHK_FLG] EQ EXEC
0143 C. YAYôYx½ªî»ò³îÇ§
0144 C. çç[HK1_DMP_CHK_FLG] EQ NON
0145 C. RAM ID=NMOG²î¼E¹ç•è²îOKò³îÇ§
0146 C.
0147 C. NMOG(0x210000-0x2100FF;§ 256byte)+OP(0x210100-0x2141FF: 16.25kbyte)
0148 +. DC 01-23 DHU_DMA_DMP_PRM_SET
0149 BC (21 00 41 01 02)
0150 C. çç[HK1_DMP_TOP_ADRS_1] EQ 42
0151 C. çç[HK1_DMP_TOP_ADRS_0] EQ 0
0152 C. çç[HK1_DMP_BLOCK_NUM] EQ 65
0153 C. çç[HK1_DMP_REPEAT_NUM] EQ 0
0154 C. çç[HK1_DMA_DMP_PIM] EQ DHU
0155 +. DC 01-22 DHU_MODE_CHNG
0156 BC (07 0b f8)
0157 C. çç[HK1_PKT_FORM_NO] EQ 7
0158 C. çç[HK1_PKT_GEN_TIME] EQ 0.25 s
0159 C. çç[HK1_S_TLM_BIT_RATE] EQ 32k
0160 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0161 C. çç[HK1_DMP_CHK_FLG] EQ EXEC
0162 C. YAYôYx½ªî»ò³îÇ§
0163 C. çç[HK1_DMP_CHK_FLG] EQ NON
0164 C. RAM ID=NMOG, RAM ID=OP²î¼E¹ç•è²îOKò³îÇ§
0165 C.
0166 C. ***** °E²¼òî¼Ä´¶Á°òEÉ¬ò°Á÷¿@ (¼âµ-YAYôYx½ªî»ò³îÇ§²¼òî¼Ä´¶Á°òEÉ¬ò°Á÷¿@) *****
0167 C. DHUYâ;4YE;E¼Y½;Yi;4YE;Eòðîã¹
0168 +. DC 01-22 DHU_MODE_CHNG
0169 BC (02 0a f8)
0170 C. çç[HK1_PKT_FORM_NO] EQ 2
0171 C. çç[HK1_PKT_GEN_TIME] EQ 0.5S
0172 C. çç[HK1_S_TLM_BIT_RATE] EQ 32K
0173 C. çç[HK1_X_TLM_BIT_RATE] EQ 4M
0174 C.
0175 C. *****
0176 C. TI-CMD SET (OPOG STOP/COPY/START)
0177 C. *****
0178 C.
0179 C. NOTICE ;§ OPOG UPLOAD²¬Á÷¿@NG²î¼E¹ç;ç°E²¼òî¼TI-CMDÁ÷¿@²¼î¼Ä´¶Á°òEÉ¬ò°Á÷¿@²¼E¹ç;
0180 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP
0181 C.
0182 C. TIY³YpYôYÉòðÄî¿¿(UT)
0183 +. TI 2017-04-22 10:30:00.0
0184 DC 01-B3 DHU_OP_STOP
0185 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP
0186 C.
0187 +. TI 2017-04-22 10:30:01.0
0188 DC 01-B4 DHU_OP_COPY
0189 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP
0190 C.
0191 +. TI 2017-04-22 10:30:01.0
0192 DC 01-B5 DHU_OPOG_COPY
0193 C. çç[HK1_TI_CMD_NUM] EQ 1COUNTUP

```



```

0194 C.
0195 +. TI 2017-04-22 10:34:59.5
0196 DC 01-B2 DHU_OP_START
0197 C.          çç[HK1_TI_CMD_NUM]          EQ      1COUNTUP
0198 C.
0199 C. °È²¼ºíÄè%ííñºîŷÄŷ§ŷÄŷ-¹àîŮ
0200 C.          çç[HK1_TI_CMD_ENA/DIS]       EQ      ENA
0201 C.          çç[HK1_TI_CMD_NUM]          EQ      4
0202 C.          çç[HK1_NEXT_EXEC_PIM]       EQ      DHU
0203 C.          çç[HK1_NEXT_EXEC_DC]       EQ      0xB3
0204 C.
0205 C. *****
0206 C. TIîî°èŷÄŷÖŷ×
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.          çç[HK1_DMP_TOP_ADRS_1]     EQ      07
0213 C.          çç[HK1_DMP_TOP_ADRS_0]     EQ      2B
0214 C.          çç[HK1_DMP_BLOCK_NUM]      EQ      3
0215 C.          çç[HK1_DMP_REPEAT_NUM]     EQ      0
0216 C.          çç[HK1_DMA_DMP_PIM]       EQ      DHU
0217 +. DC 01-22 DHU_MODE_CHNG
0218 BC      (07 0b f8)
0219 C.          çç[HK1_PKT_FORM_NO]        EQ      7
0220 C.          çç[HK1_PKT_GEN_TIME]       EQ      0.25 s
0221 C.          çç[HK1_S_TLM_BIT_RATE]    EQ      32k
0222 C.          çç[HK1_X_TLM_BIT_RATE]    EQ      4M
0223 C.          çç[HK1_DMP_CHK_FLG]       EQ      EXEC
0224 C.
0225 C. ŷÄŷÖŷ×½ªî»º³îÇ§
0226 C.          çç[HK1_DMP_CHK_FLG]       EQ      NON
0227 C.
0228 C. RAM ID=TI_TBLºîîÈ¹çªè²îOKº³îÇ§
0229 C.
0230 C. DHUŷª;¼ŷÈ;È¼ŷ¼.ŷî;¼ŷÈ;Èº³îª¹
0231 +. DC 01-22 DHU_MODE_CHNG
0232 BC      (02 0a f8)
0233 C.          çç[HK1_PKT_FORM_NO]        EQ      2
0234 C.          çç[HK1_PKT_GEN_TIME]       EQ      0.5S
0235 C.          çç[HK1_S_TLM_BIT_RATE]    EQ      32K
0236 C.          çç[HK1_X_TLM_BIT_RATE]    EQ      4M
0237 C.
0238 C. Stop EIS observation and temporarily disable EIS mode changes
0239 C.
0240 C.
0241 C. ***** Start EIS operation (TI set) *****
0242 C. Execute, after the success of OP upload.
0243 C. Set EIS TI-commands
0244 +. TI 2017-04-22 10:34:30.0
0245 DC 07-FC EIS_MODE_MANU
0246 BC      (21 02)
0247 +. TI 2017-04-22 10:34:40.0
0248 DC 07-FC EIS_MODE_CHG_DIS
0249 BC      (22)
0250 C.          [ ] [HK1_TI_CMD_NUM]      EQ      2 COUNTUP
0251 C. ***** End EIS operation (TI set) *****
0252 C.
0253 C.
0254 C.
0255 C. ***** XRT START *****
0256 C. Execute, after the success of OP upload.
0257 +. TI 2017-04-22 10:34:00.0
0258 DC 07-F0 MDP_XRT_MODE_STBY
0259 BC      (c3)
0260 C.          [ ] [HK1_TI_CMD_NUM]      EQ      1COUNTUP
0261 C.
0262 C. ***** XRT END *****
0263 C.
0264 C. ***** MDP ´ûÃîºî»ò¼ŷºîÈÄº¹ºèDCBCª²è *****
0265 C. (¼ªºîŷÖŷÄŷÈŷŷŷÈŷªŷçŷèºè¼ºª¼ª»Ůº¹ºè)
0266 S. DC-BC dcbc-402:DCBC
0267 (MDP_known_event)
0268 C.
0269 C.
0270 C. ***** ŷDŷ¹.İ Daily±;îñºè´º¹ºèDCBCª²è *****
0271 S. DC-BC dcbc-153:DCBC
0272 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0273 C.
0274 C.
0275 C. ºªLOSŷÄŷŷŷÄŷ-¼ª»Ů;ª
0276 C.
0277 C. ***** LOS *****
0278 C.

```

(a) Spacecraft Operation Procedure (real-commands)

```
main-563 2017-04-22 12:55:55 169 33 SOLAR-B MAIN //
0001 C.
0002 . C. ***** AOS *****
0003 C.
0004 . C. ;ãAOSYÄYÏYÄY-¼Ä»Û;ä
0005 C.
0006 C. YÄYË;¼Y³YËYÖYÉÄ+ç®
0007 +. DC 00-00 NULL_DUMMY_CMD
0008 C.
0009 . C. ***** AOCs : Reload orbital element (send every contact) *****
0010 C. Äí;Ëççãâ•µ°®»í×ÁÇçíYçYÄY×Yí;¼YË;ËËÈ%µ•ííË;Ë°Ë¼°ÇÖã•çç¼í¹ççí;çÄ®, ùç¹ãÈçãçÄ+ç®ã•ãÈããã³ãÈ;f
0011 +. DC 02-8E AOCU_ORB_UPD
0012 C.
0013 C.
0014 . C. *****
0015 C. XÄ+ç®µ;ON
0016 C. *****
0017 C. ç" °ÄÄ, í×ËYããLOSãçãçã»p´Öãð¹íí, ç; çËÖí×ãËXÄÖONãí¹ÖãÈíãÈããã³ãÈ;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. XYDYÖYÉYíYÄY-¾ÖÄÖã-°ÄÄÈã•ççç; ç°È²¼çí°ÄÄ, ¼È¼ççç¼Ä¹Öç¹çç;f
0030 C.
0031 . C. *****
0032 C. DR PT1 Äí¼í°ÄÄ,
0033 C. *****
0034 C. ç" RESTART;ËPT1;Ëã•ççç¼í¹ççí; ç°È²¼çí°ÄÄ¹Öã»°; çDCBC-150çççÈççã;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. ;ãYçYÖYËYËÄÜÄÖ;ËÄ•Ä°²öÈð;Ë, äãí°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, ç-¼«È°ÄÄ»Ïã•ççç; ä; ç°È²¼çç¼Ä¹Öççç;f
0055 C. YçYÖYËYËÄÜÄÖãÄ•Ä°²öÈðã-¼ãçç¼í¹ççí°ÄÄ¹Öã»°ãççãççÄÖãÄ;f
0056 C.
0057 . C. *****
0058 C. DR PT2 Äí¼í°ÄÄ,
0059 C. *****
0060 C. ç" RESTART;ËPT2;Ëã•ççç¼í¹ççí; ç°È²¼çí°ÄÄ¹Öã»°; çDCBC-151çççÈççã;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. ;ãYçYÖYËYËÄÜÄÖ;ËÄ•Ä°²öÈð;Ë, äãí°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, Äã»Ï;çXÄ+ç®µ;OFF
0081 C. *****
0082 C.
0083 . C. ;ãDR°ÄÄ, Äã»Ï;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. ;ãXÄ+ç®µ;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. ***** APCS 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 AOCU_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 APCS Dump Format
0113 +. DC 01-22 DHU_MODE_CHNG
0114   BC      (04 0b f8)
0115   C.
0116   C. Wait for AOCSDUMP 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 AOCU_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 20s
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 2017-04-22 10:34:50.0
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 'úÃîáî»ö¼ÝñÈÀðñ¹ñèDCBC•x²è *****
0156   C. (¼á°î¥Ö¥Á¥É¥Ï¥È¥á¥ç¥èñÈ¼ñ¼¼Á»Ûñ¹ñè)
0157   . S. DC-BC dcbc-402:DCBC
0158   (MDP_known_event)
0159   C.
0160   C.
0161   . C. ***** ¥D¥¹•İ Daily±çİÑñÈ'Øñ¹ñèDCBC•x²è *****
0162   . S. DC-BC dcbc-153:DCBC
0163   (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0164   C.
0165   C.
0166   . C. ;ãLOS¥Á¥§¥Ä¥¹-¼¼Á»Û;ã
0167   C.
0168   . C. ***** LOS *****
0169   C.

```

(a) Spacecraft Operation Procedure (real-commands)

```
main-564 2017-04-22 12:55:55 94 33 SOLAR-B MAIN //
0001 C.
0002 . C. ***** AOS *****
0003 C.
0004 . C. ;ãAOSYÁYŞYÁY-¼Á»Û;ã
0005 C.
0006 C. YÁYB;¼Y³YFÝÓYÉÁ+¿®
0007 +. DC 00-00 NULL_DUMMY_CMD
0008 C.
0009 . C. ***** AOCs : Reload orbital element (send every contact) *****
0010 C. Áí;Èø¿øÀø•µ°È×ÁÇøÁYçYÁY×Yí;¼YÉ;ÈÈèµ•ííÈ;ÈøÈ¼°ÇÔø•ø¿¼ì¹çøÍ;çÀ®. ùø¹øÈøÈøøÇÁ+¿®ø•øÈøøøøøøÈ;f
0011 +. DC 02-8E AOCU_ORB_UPD
0012 C.
0013 C.
0014 C.
0015 C. ***** XRT START *****
0016 C.
0017 +. DC 07-F0 MDP_XRT_CTRL_MANU
0018 BC (c1)
0019 + DC 07-F0 MDP_XRT_MODE_STBY
0020 BC (c3)
0021 . C. ----- Success Verify ? OK / NG____
0022 C.
0023 C. XRT Obs. Table Upload
0024 . S. RAM ram-291:MDP_OBS_X
0025 ( )
0026 C.
0027 +. DC 07-F0 MDP_DUMP_XRTTBL
0028 BC (84 07 00 00 00 3a d4)
0029 . C. ----- Comparison Check ? OK / ERR ____
0030 C.
0031 C.
0032 +. DC 07-F0 MDP_XRT_ROI_SET
0033 BC (cd 01 b1 b1 04 04)
0034 + DC 07-F0 MDP_XRT_ROI_SET
0035 BC (cd 02 b1 b1 08 08)
0036 + DC 07-F0 MDP_XRT_ROI_SET
0037 BC (cd 03 b1 b1 08 08)
0038 + DC 07-F0 MDP_XRT_ROI_SET
0039 BC (cd 04 b1 b1 06 06)
0040 + DC 07-F0 MDP_XRT_ROI_SET
0041 BC (cd 06 85 83 06 06)
0042 + DC 07-F0 MDP_XRT_ROI_SET
0043 BC (cd 07 80 80 20 20)
0044 + DC 07-F0 MDP_XRT_ROI_SET
0045 BC (cd 08 80 80 20 08)
0046 + DC 07-F0 MDP_XRT_ROI_SET
0047 BC (cd 09 80 80 08 20)
0048 + DC 07-F0 MDP_XRT_ROI_SET
0049 BC (cd 0f 80 80 06 06)
0050 + DC 07-F0 MDP_XRT_ROI_SET
0051 BC (cd 10 80 80 08 08)
0052 + DC 07-F0 MDP_XRT_FLD_ENA
0053 BC (d8)
0054 + DC 07-F0 MDP_XRT_FLRCTRL_ENA
0055 BC (c8)
0056 + DC 07-F0 MDP_XRT_ARS_DIS
0057 BC (d5)
0058 + DC 07-F0 MDP_XRT_AEC_RESET
0059 BC (d0)
0060 + DC 07-F0 MDP_XRT_FLD_RESET
0061 BC (da)
0062 +. DC 07-F0 MDP_XRT_QT_PROG_SET
0063 BC (c4 01)
0064 +. DC 07-F0 MDP_XRT_FL_PROG_SET
0065 BC (c5 07)
0066 . C. ----- Success Verify ? OK / NG ____
0067 C.
0068 C.
0069 . C. All OK? Yes--> Please Proceed. / No --> Stop here.
0070 C.
0071 +. DC 07-F0 MDP_XRT_MODE_OBSV
0072 BC (c2)
0073 +. TI 2017-04-22 10:34:02.0
0074 DC 07-F0 MDP_XRT_MODE_OBSV
0075 BC (c2)
0076 . C. ----- Success Verify ? OK / NG ____
0077 C.
0078 C. ***** XRT END *****
0079 C.
0080 . C. ***** MDP ´ûÁíøí»ò¼YøÈÁøø¹øÈDCBC•x²è *****
0081 C. (¼á°íYÓYÁYÈYþYÈYáYçYÈøÈ¼°ÇÔø•ø¿¼ì¹çøÍ;çÀ®)
0082 . S. DC-BC dcbc-402:DCBC
0083 (MDP_known_event)
0084 C.
0085 C.
0086 . C. ***** YÐY¹•İ Daily±¿ÍÑøÈ´Øø¹øÈDCBC•x²è *****
0087 . S. DC-BC dcbc-153:DCBC
0088 (SPECIAL-CMD_DAILY_OPERATIN_DCB)
0089 C.
0090 C.
0091 . C. ;ãLOSÁYŞYÁY-¼Á»Û;ã
0092 C.
0093 . C. ***** LOS *****
0094 C.
```

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

```

2017/04/22 10:44:54.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 10:44:56.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 10:44:58.0 XRT_FOCUS_POSITION_410_OG [0x19a]
                        XRT_FOCUS_POSITION 4 07-F8 22 fe 97 00
2017/04/22 10:45:00.0 AOCs_OrE-point_Start_1_OG [0x097]
                        AOCU_NM 5 02-76 02 00 00 05 ca
2017/04/22 10:45:18.0 XRT_FLD_ENA_411_OG [0x19b]
                        MDP_XRT_FLD_ENA 1 07-F0 d8
2017/04/22 10:45:20.0 XRT_FLRCTRL_ENA_412_OG [0x19c]
                        MDP_XRT_FLRCTRL_ENA 1 07-F0 c8
2017/04/22 10:45:22.0 XRT_AEC_RESET_448_OG [0x1c0]
                        MDP_XRT_AEC_RESET 1 07-F0 d0
2017/04/22 10:45:24.0 XRT_ARS_DIS_423_OG [0x1a7]
                        MDP_XRT_ARS_DIS 1 07-F0 d5
2017/04/22 10:45:26.0 XRT_FLD_RESET_433_OG [0x1b1]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2017/04/22 10:47:56.0 XRT_QT_PROG_SET_407_OG [0x197]
                        MDP_XRT_QT_PROG_SET 2 07-F0 c4 03
2017/04/22 10:47:58.0 XRT_FL_PROG_SET_436_OG [0x1b4]
                        MDP_XRT_FL_PROG_SET 2 07-F0 c5 07
2017/04/22 10:48:00.0 XRT_CTRL_AUTO_408_OG [0x198]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2017/04/22 11:29:30.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 11:29:32.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 11:29:34.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2017/04/22 11:29:36.0 XRT_PREFLR_STRT_414_OG [0x19e]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2017/04/22 11:32:44.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2017/04/22 11:45:30.0 XRT_Custom_430_OG [0x1ae]
2017/04/22 11:46:30.0 XRT_CTRL_AUTO_424_OG [0x1a8]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2017/04/22 13:08:00.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 13:08:02.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 13:08:04.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2017/04/22 13:08:06.0 XRT_PREFLR_STRT_414_OG [0x19e]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2017/04/22 13:11:14.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2017/04/22 13:24:00.0 XRT_Custom_430_OG [0x1ae]
2017/04/22 13:25:00.0 XRT_CTRL_AUTO_424_OG [0x1a8]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2017/04/22 13:59:54.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 13:59:56.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 13:59:58.0 XRT_FOCUS_POSITION_410_OG [0x19a]
                        XRT_FOCUS_POSITION 4 07-F8 22 fe 97 00
2017/04/22 14:00:00.0 AOCs_OrE-point_Start_2_OG [0x098]
                        AOCU_NM 5 02-76 03 00 00 00 00
2017/04/22 14:00:18.0 XRT_FLD_ENA_411_OG [0x19b]
                        MDP_XRT_FLD_ENA 1 07-F0 d8
2017/04/22 14:00:20.0 XRT_FLRCTRL_ENA_412_OG [0x19c]
                        MDP_XRT_FLRCTRL_ENA 1 07-F0 c8
2017/04/22 14:00:22.0 XRT_AEC_RESET_448_OG [0x1c0]
                        MDP_XRT_AEC_RESET 1 07-F0 d0
2017/04/22 14:00:24.0 XRT_ARS_DIS_423_OG [0x1a7]
                        MDP_XRT_ARS_DIS 1 07-F0 d5
2017/04/22 14:00:26.0 XRT_FLD_RESET_433_OG [0x1b1]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2017/04/22 14:02:56.0 XRT_QT_PROG_SET_407_OG [0x197]
                        MDP_XRT_QT_PROG_SET 2 07-F0 c4 03
2017/04/22 14:02:58.0 XRT_FL_PROG_SET_436_OG [0x1b4]
                        MDP_XRT_FL_PROG_SET 2 07-F0 c5 07
2017/04/22 14:03:00.0 XRT_CTRL_AUTO_408_OG [0x198]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2017/04/22 14:46:00.0 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 14:46:02.0 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 14:46:04.0 XRT_FLD_RESET_415_OG [0x19f]
                        MDP_XRT_FLD_RESET 1 07-F0 da
2017/04/22 14:46:06.0 XRT_PREFLR_STRT_414_OG [0x19e]
                        MDP_XRT_PREFLR_STRT 1 07-F0 e8
2017/04/22 14:49:14.0 XRT_PREFLR_STOP_419_OG [0x1a3]
                        MDP_XRT_PREFLR_STOP 1 07-F0 e9
2017/04/22 15:02:30.0 XRT_Custom_430_OG [0x1ae]
2017/04/22 15:03:30.0 XRT_CTRL_AUTO_424_OG [0x1a8]
                        MDP_XRT_CTRL_AUTO 1 07-F0 c0
2017/04/22 15:03:30.5 XRT_CTRL_MANU_400_OG [0x190]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1
2017/04/22 15:03:32.5 XRT_CTRL_MANU_402_OG [0x192]
                        MDP_XRT_CTRL_MANU 1 07-F0 c1

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2017/04/22	15:03:34.5	XRT_FLD_RESET_415_OG [0x19f]							
		MDP_XRT_FLD_RESET	1	07-F0	da				
2017/04/22	15:03:36.5	XRT_PREFLR_STRT_414_OG [0x19e]							
		MDP_XRT_PREFLR_STRT	1	07-F0	e8				
2017/04/22	15:06:44.5	XRT_PREFLR_STOP_419_OG [0x1a3]							
		MDP_XRT_PREFLR_STOP	1	07-F0	e9				
2017/04/22	15:15:30.0	XRT_Custom_430_OG [0x1ae]							
2017/04/22	15:16:30.0	XRT_CTRL_AUTO_424_OG [0x1a8]							
		MDP_XRT_CTRL_AUTO	1	07-F0	c0				
2017/04/22	15:59:54.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	15:59:56.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	15:59:58.0	XRT_FOCUS_POSITION_410_OG [0x19a]							
		XRT_FOCUS_POSITION	4	07-F8	22 fe 97 00				
2017/04/22	16:00:00.0	AOCS_OrE-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 00 00 05 ca				
2017/04/22	16:00:18.0	XRT_FLD_ENA_411_OG [0x19b]							
		MDP_XRT_FLD_ENA	1	07-F0	d8				
2017/04/22	16:00:20.0	XRT_FLRCTRL_ENA_412_OG [0x19c]							
		MDP_XRT_FLRCTRL_ENA	1	07-F0	c8				
2017/04/22	16:00:22.0	XRT_AEC_RESET_448_OG [0x1c0]							
		MDP_XRT_AEC_RESET	1	07-F0	d0				
2017/04/22	16:00:24.0	XRT_ARS_DIS_423_OG [0x1a7]							
		MDP_XRT_ARS_DIS	1	07-F0	d5				
2017/04/22	16:00:26.0	XRT_FLD_RESET_433_OG [0x1b1]							
		MDP_XRT_FLD_RESET	1	07-F0	da				
2017/04/22	16:02:56.0	XRT_QT_PROG_SET_407_OG [0x197]							
		MDP_XRT_QT_PROG_SET	2	07-F0	c4 03				
2017/04/22	16:02:58.0	XRT_FL_PROG_SET_436_OG [0x1b4]							
		MDP_XRT_FL_PROG_SET	2	07-F0	c5 07				
2017/04/22	16:03:00.0	XRT_CTRL_AUTO_408_OG [0x198]							
		MDP_XRT_CTRL_AUTO	1	07-F0	c0				
2017/04/22	16:24:30.0	XRT_CTRL_MANU_400_OG [0x190]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	16:24:32.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	16:24:34.0	XRT_FLD_RESET_415_OG [0x19f]							
		MDP_XRT_FLD_RESET	1	07-F0	da				
2017/04/22	16:24:36.0	XRT_PREFLR_STRT_414_OG [0x19e]							
		MDP_XRT_PREFLR_STRT	1	07-F0	e8				
2017/04/22	16:27:44.0	XRT_PREFLR_STOP_419_OG [0x1a3]							
		MDP_XRT_PREFLR_STOP	1	07-F0	e9				
2017/04/22	17:02:30.0	XRT_Custom_430_OG [0x1ae]							
2017/04/22	17:03:30.0	XRT_CTRL_AUTO_424_OG [0x1a8]							
		MDP_XRT_CTRL_AUTO	1	07-F0	c0				
2017/04/22	17:51:54.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	17:51:56.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	17:51:58.0	XRT_FOCUS_POSITION_403_OG [0x193]							
		XRT_FOCUS_POSITION	4	07-F8	22 ff aa 00				
2017/04/22	17:52:00.0	AOCS_OrE-point_Start_3_OG [0x099]							
		AOCU_NM	5	02-76	00 00 00 00 00				
2017/04/22	17:52:18.0	XRT_FLD_DIS_406_OG [0x196]							
		MDP_XRT_FLD_DIS	1	07-F0	d9				
2017/04/22	17:54:54.0	XRT_FLRCTRL_DIS_405_OG [0x195]							
		MDP_XRT_FLRCTRL_DIS	1	07-F0	c9				
2017/04/22	17:54:56.0	XRT_ARS_DIS_423_OG [0x1a7]							
		MDP_XRT_ARS_DIS	1	07-F0	d5				
2017/04/22	17:54:58.0	XRT_QT_PROG_SET_449_OG [0x1c1]							
		MDP_XRT_QT_PROG_SET	2	07-F0	c4 0b				
2017/04/22	17:55:00.0	XRT_CTRL_AUTO_408_OG [0x198]							
		MDP_XRT_CTRL_AUTO	1	07-F0	c0				
2017/04/22	18:02:00.0	AOCS_OrE-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 00 00 05 ca				
2017/04/22	18:03:00.0	XRT_CTRL_MANU_400_OG [0x190]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	18:03:02.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	18:03:04.0	XRT_FLD_RESET_415_OG [0x19f]							
		MDP_XRT_FLD_RESET	1	07-F0	da				
2017/04/22	18:03:06.0	XRT_PREFLR_STRT_414_OG [0x19e]							
		MDP_XRT_PREFLR_STRT	1	07-F0	e8				
2017/04/22	18:06:14.0	XRT_PREFLR_STOP_419_OG [0x1a3]							
		MDP_XRT_PREFLR_STOP	1	07-F0	e9				
2017/04/22	18:37:00.5	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	18:37:02.5	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/22	18:37:04.5	XRT_FOCUS_POSITION_410_OG [0x19a]							
		XRT_FOCUS_POSITION	4	07-F8	22 fe 97 00				
2017/04/22	18:37:24.5	XRT_FLD_ENA_411_OG [0x19b]							
		MDP_XRT_FLD_ENA	1	07-F0	d8				
2017/04/22	18:37:26.5	XRT_FLRCTRL_ENA_412_OG [0x19c]							
		MDP_XRT_FLRCTRL_ENA	1	07-F0	c8				
2017/04/22	18:37:28.5	XRT_AEC_RESET_448_OG [0x1c0]							
		MDP_XRT_AEC_RESET	1	07-F0	d0				
2017/04/22	18:37:30.5	XRT_ARS_DIS_423_OG [0x1a7]							
		MDP_XRT_ARS_DIS	1	07-F0	d5				
2017/04/22	18:37:32.5	XRT_FLD_RESET_433_OG [0x1b1]							
		MDP_XRT_FLD_RESET	1	07-F0	da				
2017/04/22	18:40:02.5	XRT_QT_PROG_SET_407_OG [0x197]							

2017/04/22	18:40:04.5	XRT_FL_PROG_SET_436_OG [0x1b4]	MDP_XRT_QT_PROG_SET	2	07-F0	c4	03
			MDP_XRT_FL_PROG_SET	2	07-F0	c5	07
2017/04/22	18:40:06.5	XRT_CTRL_AUTO_408_OG [0x198]	MDP_XRT_CTRL_AUTO	1	07-F0	c0	
2017/04/22	19:41:00.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/22	19:41:02.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/22	19:41:04.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_FLD_RESET	1	07-F0	da	
2017/04/22	19:41:06.0	XRT_PREFLR_STRT_414_OG [0x19e]	MDP_XRT_PREFLR_STRT	1	07-F0	e8	
2017/04/22	19:44:14.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STOP	1	07-F0	e9	
2017/04/22	20:16:00.0	XRT_Custom_430_OG [0x1ae]					
2017/04/22	20:17:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]	MDP_XRT_CTRL_AUTO	1	07-F0	c0	
2017/04/22	21:19:30.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/22	21:19:32.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/22	21:19:34.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_FLD_RESET	1	07-F0	da	
2017/04/22	21:19:36.0	XRT_PREFLR_STRT_414_OG [0x19e]	MDP_XRT_PREFLR_STRT	1	07-F0	e8	
2017/04/22	21:22:44.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STOP	1	07-F0	e9	
2017/04/22	21:53:00.0	XRT_Custom_430_OG [0x1ae]					
2017/04/22	21:54:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]	MDP_XRT_CTRL_AUTO	1	07-F0	c0	
2017/04/22	22:58:00.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/22	22:58:02.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/22	22:58:04.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_FLD_RESET	1	07-F0	da	
2017/04/22	22:58:06.0	XRT_PREFLR_STRT_414_OG [0x19e]	MDP_XRT_PREFLR_STRT	1	07-F0	e8	
2017/04/22	23:01:14.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STOP	1	07-F0	e9	
2017/04/22	23:27:30.0	XRT_Custom_430_OG [0x1ae]					
2017/04/22	23:28:30.5	XRT_CTRL_AUTO_424_OG [0x1a8]	MDP_XRT_CTRL_AUTO	1	07-F0	c0	
2017/04/23	00:36:00.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/23	00:36:02.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/23	00:36:04.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_FLD_RESET	1	07-F0	da	
2017/04/23	00:36:06.0	XRT_PREFLR_STRT_414_OG [0x19e]	MDP_XRT_PREFLR_STRT	1	07-F0	e8	
2017/04/23	00:39:14.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STOP	1	07-F0	e9	
2017/04/23	00:53:00.0	XRT_Custom_430_OG [0x1ae]					
2017/04/23	00:54:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]	MDP_XRT_CTRL_AUTO	1	07-F0	c0	
2017/04/23	02:07:00.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/23	02:07:02.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/23	02:07:04.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_FLD_RESET	1	07-F0	da	
2017/04/23	02:07:06.0	XRT_PREFLR_STRT_414_OG [0x19e]	MDP_XRT_PREFLR_STRT	1	07-F0	e8	
2017/04/23	02:10:14.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STOP	1	07-F0	e9	
2017/04/23	02:31:30.0	XRT_Custom_430_OG [0x1ae]					
2017/04/23	02:32:30.0	XRT_CTRL_AUTO_424_OG [0x1a8]	MDP_XRT_CTRL_AUTO	1	07-F0	c0	
2017/04/23	03:41:00.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/23	03:41:02.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/23	03:41:04.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_FLD_RESET	1	07-F0	da	
2017/04/23	03:41:06.0	XRT_PREFLR_STRT_414_OG [0x19e]	MDP_XRT_PREFLR_STRT	1	07-F0	e8	
2017/04/23	03:44:14.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STOP	1	07-F0	e9	
2017/04/23	04:09:30.0	XRT_Custom_430_OG [0x1ae]					
2017/04/23	04:10:30.0	XRT_CTRL_AUTO_424_OG [0x1a8]	MDP_XRT_CTRL_AUTO	1	07-F0	c0	
2017/04/23	05:13:30.0	XRT_CTRL_MANU_400_OG [0x190]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/23	05:13:32.0	XRT_CTRL_MANU_402_OG [0x192]	MDP_XRT_CTRL_MANU	1	07-F0	c1	
2017/04/23	05:13:34.0	XRT_FLD_RESET_415_OG [0x19f]	MDP_XRT_FLD_RESET	1	07-F0	da	
2017/04/23	05:13:36.0	XRT_PREFLR_STRT_414_OG [0x19e]	MDP_XRT_PREFLR_STRT	1	07-F0	e8	
2017/04/23	05:16:44.0	XRT_PREFLR_STOP_419_OG [0x1a3]	MDP_XRT_PREFLR_STOP	1	07-F0	e9	

2017/04/23	05:48:00.0	XRT_Custom_430_OG [0x1ae]							
2017/04/23	05:49:00.0	XRT_CTRL_AUTO_424_OG [0x1a8]							
		MDP_XRT_CTRL_AUTO	1	07-F0	c0				
2017/04/23	05:59:54.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/23	05:59:56.0	XRT_CTRL_MANU_402_OG [0x192]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/23	05:59:58.0	XRT_FOCUS_POSITION_403_OG [0x193]							
		XRT_FOCUS_POSITION	4	07-F8	22 ff aa 00				
2017/04/23	06:00:00.0	AOCS_ORe-point_Start_3_OG [0x099]							
		AOCU_NM	5	02-76	00 00 00 00 00				
2017/04/23	06:00:18.0	XRT_FLD_DIS_406_OG [0x196]							
		MDP_XRT_FLD_DIS	1	07-F0	d9				
2017/04/23	06:02:54.0	XRT_FLRCTRL_DIS_405_OG [0x195]							
		MDP_XRT_FLRCTRL_DIS	1	07-F0	c9				
2017/04/23	06:02:56.0	XRT_ARS_DIS_423_OG [0x1a7]							
		MDP_XRT_ARS_DIS	1	07-F0	d5				
2017/04/23	06:02:58.0	XRT_QT_PROG_SET_429_OG [0x1ad]							
		MDP_XRT_QT_PROG_SET	2	07-F0	c4 0c				
2017/04/23	06:03:00.0	XRT_CTRL_AUTO_408_OG [0x198]							
		MDP_XRT_CTRL_AUTO	1	07-F0	c0				
2017/04/23	06:10:00.0	AOCS_ORe-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 00 00 00 05 ca				
2017/04/23	06:10:00.5	XRT_CTRL_MANU_431_OG [0x1af]							
		MDP_XRT_CTRL_MANU	1	07-F0	c1				
2017/04/23	06:10:30.5	XRT_TCIB_XRT_S_HTR_A_ENA_441_OG [0x1b9]							
		TCIB_XRT_S_HTR_A_ENA	0	04-BC					
2017/04/23	13:45:00.0	AOCS_ORe-point_Start_4_OG [0x09a]							
		AOCU_NM	5	02-76	01 00 00 00 00				
2017/04/23	15:15:00.0	AOCS_ORe-point_Start_5_OG [0x09b]							
		AOCU_NM	5	02-76	02 00 00 00 00				
2017/04/23	19:00:00.0	AOCS_ORe-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 00 00 00 05 ca				
2017/04/24	06:26:30.5	AOCS_ORe-point_Start_3_OG [0x099]							
		AOCU_NM	5	02-76	00 00 00 00 00				
2017/04/24	06:36:30.0	AOCS_ORe-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 00 00 00 05 ca				
2017/04/24	09:30:00.0	AOCS_ORe-point_Start_6_OG [0x09c]							
		AOCU_NM	5	02-76	04 00 00 00 00				
2017/04/24	13:00:00.0	AOCS_ORe-point_Start_7_OG [0x09d]							
		AOCU_NM	5	02-76	04 00 00 00 e7 8e				
2017/04/24	16:30:00.0	AOCS_ORe-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 00 00 00 05 ca				
2017/04/25	05:58:00.0	AOCS_ORe-point_Start_3_OG [0x099]							
		AOCU_NM	5	02-76	00 00 00 00 00				
2017/04/25	06:08:00.0	AOCS_ORe-point_Start_1_OG [0x097]							
		AOCU_NM	5	02-76	02 00 00 00 05 ca				
2017/04/25	10:21:00.0	AOCS_ORe-point_Start_3_OG [0x099]							
		AOCU_NM	5	02-76	00 00 00 00 00				