「あすか」 OPERATION REPORT Ver.1.5

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Cyg X-1, BGF(posi.5,6), SN1993J

	PASS 1	PASS 2	PASS 3	PASS 4	PASS 5
Pass No.	931022–1547	931023–0103	931023–0206	931023–0310	931023–0413
Operation	X-REP RANGE OP/OG-WRT ACS E.-RST STCTLG-W/C ObserveMode OP-START RNG-OFF	X-REP STC-WRT/CHK OBS-MODE	X-REP ADRS-8-BC's BDR-STOP BDR-STOP	X-REP SBR-RNG ADRS-ON ADRS-OFF RNG-OFF	X-REP ADRS-8-BC's ADRS-ON ADRS-OFF
Target	BGF(Posi.5)	Cyg X-1	Cyg X-1	Cyg X-1	Cyg X-1
AOS(UT)	23:28:33	01:10:00	02:51:29	04:33:38	06:16:11
LOS(UT)	23:41:38	01:23:27	03:05:18	04:46:29	06:26:36
Max-El	34.29	78.47	Zenith	44.74	14.26
Time	23:34:40	01:16:12	—	04:39:36	06:20:52
Rep-band(stat.)	X (Completed)	X (Completed)	X (Completed)	X (Completed)	X (Completed)
Rep-start	23:30:06	01:11:10	02:52:59/02:58:41	04:34:45	06:17:08
DP-mode	OBS	OBS/ACS/OBS	OBS	OBS	OBS
ACS-mode	Normal–Pointing	Normal–Pointing	Normal–Pointing	Normal–Pointing	Normal–Pointing
ACS-spn/θ_s	19.9°	8.3°	8.3°	8.2°	8.2°
Attitude	$\begin{bmatrix} 281.168 \\ 93.604 \\ 180.147 \end{bmatrix}$	$\begin{bmatrix} 299.782 \\ 54.720 \\ 189.794 \end{bmatrix}$	$\begin{bmatrix} 299.782 \\ 54.720 \\ 189.794 \end{bmatrix}$	$\begin{bmatrix} 299.782 \\ 54.721 \\ 189.793 \end{bmatrix}$	$\begin{bmatrix} 299.782 \\ 54.721 \\ 189.793 \end{bmatrix}$
OP-start(CE)	23:38:42 (00h)	Cont (0Eh)	Cont (16h)	Cont (1Eh)	Cont (24h)
SIS-mode	Faint/Faint 0123/0123	Bright/Bright 1111/3333	Bright/Bright 1111/3333	Bright/Bright 1111/3333	Bright/Bright 1111/3333
S0/1-TECT	−44.48/−44.63	−44.34/−44.48	−44.09/−44.34	−43.61/−43.85	−42.93/−43.27
S0/1-CCDT	−61.67/−61.81	−61.67/−61.81	−61.67/−61.77	−61.67/−61.77	−61.67/−61.77
GIS-mode	PH	PH	PH	PH	PH
GIS LD Hit	22cps/20cps	164cps/194cps	163cps/197cps	165ps/196cps	216cps/190cps

P X Y R S	Pos	MErr	HV_HL	Gain	RT-L	RT-U	Temp	RBMT	CalPk	RT Pk	CalCnt/time
10 8 8 5 0	FLF	—	3/4	48	159	218	12.0	11.4	412.11	183.77	4508
Pass: 9310221547			3/4	40	159	218	6.0		427.29	181.47	4153

GIS Mode Changes: 10-8-8-5-0-0(BGF pos.5)→10-8-8-0-0-5(Cyg X1)→10-8-8-5-0-0(BGF pos.6)

Battery Condition (min/max)

BAT_V–A	BAT_V–B	BAT_I–A	BAT_I–B	BAT_T–A	BAT_T–B
20.40/23.50	20.40/23.50	−3.99/4.73	−4.21/4.76	4.82/8.74	4.82/8.46

Manoeuvre Operation

Start Time	Target Name	#	(α, δ)	(ϕ, θ, ψ)
10/23 00:05	Cyg X-1	2	(299.59 , 35.20)	(−60.22 , 54.72 , −170.21)
10/24 01:45	BGF(Posi.6)	3	(280.52 , −3.52)	(−79.25 , 93.39 , −179.82)
10/24 14:20	SN1993J	4	(148.85 , 69.02)	(147.89 , 20.94 , −25.31)

Comment: 本日の運用:

Cyg X-1 is observed. To avoid the saturation of telemetry, the central region was neglected by using area discr of 120 x 80 pixels. It is elongated horizontally, because the images migrate on the focal plane mainly horizontally about 1 arcmin due to the bending of the satellite. The counting rate is ~80 c/s/GIS(r<30).
Peak Position of Cyg X-1 : Rev.2 SIS0(190,204), SIS1(226,200). Rev.3 SIS0(188,200), SIS1(222,198). Rev.4

SIS0(229,202), SIS1(263,197). Rev.5 SIS0(219,203), SIS1(253,197). Address discri. is set as SIS0 H(150-270), V(162-242). SIS1 H(184-304), V(160-240).
２週間の運用当番の最後に、位置を KSC で見て Address Discri を変えると言う運用らしい運用がありました。挙げ句に X 線源の位置が 4 周目にずれていることが分かり最後に打ち直しをするなど、久しぶりに緊張しました。（国枝）
今日になってやっと自分の存在意義を見い出しました。しかし、これほどまでに首振り運動をしているとは。明日は日曜ですので気楽に過ごさせてもらいます。（松葉）