

「あすか」 OPERATION REPORT Rev.5 Ver 3.1

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ALGOL_1 → 4U_1630-472

	PASS 1	PASS 2	PASS 3	PASS 4	PASS 5												
Pass No.	980225-0824	980225-0928	980225-1031	980225-1134	980225-1238												
Operation	X-REP OP/OG-09 WRT TCU-MEM ACS-ERR-RST OP-START	X-REP SBR-A-RNG STAR-03 WRT S-CTLG-CHK OBSERVE RNG-OFF	X-REP CPU2/3-STOP CPU2/3-RST BDR-STOP X-REP BDR-STOP ACS-ERR-RST	X-REP BDR-STOP X-REP BDR-STOP	X-REP SBR-A-RNG CPU2/3-STOP CPU2/3-RST GIS-MEM RNG-OFF												
Target	ALGOL_1	ALGOL_1	ALGOL_1	ALGOL_1	4U_1630-472												
AOS(UT)	11:51:44	13:32:12	15:13:37	16:55:10	18:36:33												
LOS(UT)	12:03:05	13:45:03	15:26:25	17:07:40	18:48:34												
Max-El	12.291°	40.211°	Zenith	Zenith	35.181°												
Time	11:57:18	13:38:13	—	—	18:42:04												
Rep-band(stat.)	X (Complete)	X (Complete)	X (Complete)	X (Complete)	X (Complete)												
Rep-start	11:52:47	13:33:18	15:14:28/15:20:08	16:55:54/17:01:16	18:37:29												
DP-mode	OBS/TCU/OBS	OBS/ACS/OBS	OBS	OBS	OBS												
ACS-mode	Normal-Pointing	Normal-Pointing	Normal-Pointing	Normal-Pointing	Normal-Pointing												
SUN-pos θ_s/ϕ_s	—/—	—/—	—/—	—/—	—/—												
Attitude	$\begin{bmatrix} 47.2344^\circ \\ 48.8991^\circ \\ 205.8026^\circ \end{bmatrix}$	$\begin{bmatrix} 47.2340^\circ \\ 48.8993^\circ \\ 205.8040^\circ \end{bmatrix}$	$\begin{bmatrix} 47.2339^\circ \\ 48.8995^\circ \\ 205.8021^\circ \end{bmatrix}$	$\begin{bmatrix} 47.2345^\circ \\ 48.8997^\circ \\ 205.8022^\circ \end{bmatrix}$	$\begin{bmatrix} 248.2433^\circ \\ 137.4110^\circ \\ 349.5885^\circ \end{bmatrix}$												
OP-start(CE)	11:59:05 (00h)	Cont (09h)	Cont (13h)	Cont (1Dh)	Cont (2Dh)												
GIS HAM ERR	—	—	ERR → Reset	—	—												
ACS ERR	(SH)MOMCHG → Reset	—	(SH)MOMCHG → Reset	—	—												
SIS-mode	Faint 1111/3333	Faint 1111/3333	Faint 1111/3333	Faint 1111/3333	Bright 1111/3333												
S0/1-TECT	−34.30/−34.18°C	−34.78/−34.62°C	−34.88/−34.72°C	−35.17/−35.01°C	−35.41/−35.40°												
S0/1-CCDT	−61.34/−61.11°C	−61.38/−61.11°C	−61.34/−61.16°C	−61.34/−61.06°C	−61.29/−61.02°												
GIS-mode	PH(10-8-8-5-0)	PH(10-8-8-5-0)	PH(10-8-8-5-0)	PH(10-8-8-5-0)	PH(10-8-8-5-0)												
GIS LD Hit	22.7/24.1 c s ^{−1}	26.4/24.7 c s ^{−1}	30.2/31.4 c s ^{−1}	33.9/32.3 c s ^{−1}	88.2/96.7 c s ^{−1}												
P	X	Y	R	S	Pos	MErr	HV_HL	Gain	RT-L	RT-U	Temp	RBMT	CalPk	CalCnt	CalTim	RT	Pk
10	8	8	5	0	FLF	1	3/4	48	159	218	14.2	13.6	375.27	195	4094	183.69	
Pass: 980225-0824							3/4	40	159	218	7.6		399.98	182	4094	180.53	

SIS Mode Changes: ALGOL_1 1CCD(1111/3333) F/B LVL off ADRS off
4U_1630-472 1CCD(1111/3333) B/B LVL off ADRS off

GIS Mode Changes: ALGOL_1 & 4U_1630-472: PH (10-8-8-5-0)

Battery Condition (min/max)

BAT_V-A	BAT_V-B	BAT_I-A	BAT_I-B	BAT_T-A	BAT_T-B
18.60/23.20	18.70/23.30	−4.72/4.73	−5.03/4.76	4.82/8.74	4.55/8.17

Maneuver Operation

Start Time	Target Name	#	(α, δ)	(ϕ, θ, ψ)
02/25 17:50	4U_1630-472	2	(248.505, −47.393)	(248.2442, 137.4105, 349.5892)

Comment: 本日の運用: ASCA observed ALGOL_1 (ESJ; J. Schmitt) and 4U_1630-472 (TOO). Count rate of ALGOL_1 is 0.80 counts/sec/GIS and 1.5 counts/sec/SIS. 4U_1630-472 is fairly bright in the ASCA band and 35.4 counts/sec/GIS and 16.2 counts/sec/SIS. The X-ray spectrum of 4U_1630-472 was well fitted by the heavily absorbed ($\simeq 1.0 \times 10^{23} \text{ cm}^{-2}$) power-law with photon index of $\simeq 2.89$ whereas low energy excess was seen only in SIS spectra. No significant time variation was observed during the short time observation ($\sim 20\text{min}$).

初めての TOO でわくわくしました。ソースは非常に明るく quick look が楽しかったです。20 分しかなかったけど、スペクトルもちゃんとかけました (これで 40ksec もあつめるとはぜいたくですねえ; 宮田)。

今日は、5 パス中に MNV があり、前後の二つの天体とも非常に明るいもので、解析で白熱してしまいました。結局、4 時間も解析してる、、。毎日、ニュースばかりでなかなか眠れなくて眠いです。XRT の綺麗な蝶々の PSF をこんなに真近で経験できて嬉しい限りです。(松本縁)