

「あすか」 OPERATION REPORT Ver.1.5

93 年 5 月 10 日 Y+ 79 KSC 当番: 長瀬、池辺

Mkn421 → M51

	PASS 1		PASS 2		PASS 3		PASS 4		PASS 5						
Pass No.	930510-0516		930510-0619		930510-0723		930510-0826		930510-0929						
Operation	X-Rep OPOG-WRT 01-FAINT ERR-CODE-RST OP-START		X-Rep		S-Rep BDR-STOP S-REP BDR-STOP		X-Rep RANG CPU23-STOP CPU23-RESET		X-Rep						
Target	Mkn421		Mkn421		Mkn421		Mkn421		Mkn421						
AOS(UT)	7:40:32		9:22:45		11: 3:40		12:46:05		14:27:39						
LOS(UT)	7:52:48		9:34:43		11:16:31		12:58:05		14:38:43						
Max-El Time	19.476 7:46:47		56.811 9:28:09		Zenith —		62.110 12:51:27		21.694 14:32:49						
Rep-band	X		X		S		X		X						
Rep-start	7:42:40		9:23:24		11: 4:58/11:10:42		12:58:05		14:28:40						
Rep-status	Completed		Completed		Interrupted		Completed		Completed						
DP-mode	OBS		OBS		OBS		OBS		OBS						
ACS-mode	Normal-Pointing		Normal-Pointing		Normal-Pointing		Normal-Pointing		Normal-Pointing						
ACS-spn/ θ_s	10.1°		10.1°		10.0°		9.9°		night						
Attitude	$\begin{bmatrix} 166.460 \\ 51.808 \\ 147.157 \end{bmatrix}$		$\begin{bmatrix} 166.460 \\ 51.808 \\ 147.157 \end{bmatrix}$		$\begin{bmatrix} 166.460 \\ 51.808 \\ 147.157 \end{bmatrix}$		$\begin{bmatrix} 166.460 \\ 51.808 \\ 147.157 \end{bmatrix}$		$\begin{bmatrix} 166.460 \\ 51.808 \\ 147.157 \end{bmatrix}$						
OP-start	9:50:02		continue		continue		Cont.		Cont.						
start CE	A1h		06h		0Ch		14h		1Bh						
SIS-mode	Brt-Fnt/Brt-Fnt 4CCD		Fant/Fant 4CCD		Fant/Fant 4CCD		Fant/Fant 4CCD		Fant/Fant 4CCD						
S0/1-TECT	-43.32/-43.08		-42.64/-42.35		-41.86/-41.57		-41.14/-40.89		-40.75/-40.40						
S0/1-CCDT	-61.76/-61.86		-61.71/-61.86		-61.76/-61.86		-61.71/-61.86		-61.71/-61.81						
GIS-mode	PH MES		PH MES		PH MES		PH MES		PH MES						
GIS LD Hit	25cps/25cps		25cps/27cps		29cps/28cps		32cps/33cps		28cps/28cps						
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	12.5	13.1	413.7	183.89	2990cts
Pass: s9305100516							3/4	40	159	218	7.1		434.8	182.05	2842cts
GIS Mode Changes: no															

Battery Condition (min/max)

BAT_V-A	BAT_V-B	BAT_I-A	BAT_I-B	BAT_T-A	BAT_T-B	Charge/Discharge
20.30/23.50	20.40/23.50	-4.03/4.73	-4.21/4.76	4.82/8.74	4.82/8.46	1.04/1.05

Comment: 本日の運用 :

The BL Lac object Mkn 421 is seen near the center of GIS FOV. The flux is approximately 2.4 counts/sec/GIS (two times brighter than yesterday's source NGC3227). It shows an extremely steep power law spectrum with a photon index of about 3.1 and no local feature is conspicuous.

Modelling of background count rate as a function of cutoff rigidity is clearly required to get a reliable X-ray light curve.

Mkn421 の強度は 2.4c/s/GIS でした、スペクトルは大変ソフトで (BL LAC です)GIS のスペクトルの冪は fitting によると 3.1 になりました。これまで何度か fitting 結果をレポートしてきましたが、Crab nebula の fitting を行なうと、冪は 2.2 という答えになっています。GIS+XRT のレスポンスはまだその程度の調整しかできていないということを認識しておいて下さい。