

# 「あすか」 OPERATION REPORT Rev.5 Ver 3.1

95 年 5 月 9 日 Y+ 808 KSC 当番: M.Hirayama, H.Awaki and K.Kawashima

RXJ 10313+5053 #3, CYG X-1, NGC4151

|                           | PASS 1                                                           | PASS 2                                                                    | PASS 3                                                      | PASS 4                                                                     | PASS 5                                                      |      |      |        |            |        |
|---------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------|------|------|--------|------------|--------|
| Pass No.                  | 950509-0722                                                      | 950509-0826                                                               | 950509-0929                                                 | 950509-1033                                                                | 950509-1136                                                 |      |      |        |            |        |
| Operation                 | X REP<br>OP/OG-03 WRT<br>TCU MEM MOD<br>ERR CODE RST<br>OP START | X REP<br>SBR-A RNG<br>S-CTLG WRT<br>S-CTLG CHK<br>OBSERVE MODE<br>RNG OFF | X REP<br>BDR STOP<br>X REP<br>BDR STOP                      | X REP<br>SBR-A RNG<br>CPU2/3 STOP<br>CPU2/3 RST<br>GIS MEM MODE<br>RNG OFF | X REP                                                       |      |      |        |            |        |
| Target                    | RXJ 10313+5053<br>#3                                             | RXJ 10313+5053<br>#3                                                      | CYG X-1                                                     | CYG X-1                                                                    | CYG X-1                                                     |      |      |        |            |        |
| AOS(UT)                   | 10:58:00                                                         | 12:39:52                                                                  | 14:20:51                                                    | 16:02:45                                                                   | 17:44:05                                                    |      |      |        |            |        |
| LOS(UT)                   | 11:10:23                                                         | 12:51:47                                                                  | 14:33:31                                                    | 16:14:48                                                                   | 17:55:08                                                    |      |      |        |            |        |
| Max-El                    | 22.153                                                           | 62.042                                                                    | (89.739)                                                    | 56.605                                                                     | 18.800                                                      |      |      |        |            |        |
| Time                      | 11:04:03                                                         | 12:45:15                                                                  | (14:26:43)                                                  | 16:08:09                                                                   | 17:49:17                                                    |      |      |        |            |        |
| Rep-band(stat.)           | X ( Complete )                                                   | X ( Complete )                                                            | X ( Complete )                                              | X ( Complete )                                                             | X ( Complete )                                              |      |      |        |            |        |
| Rep-start                 | 10:59:50                                                         | 12:40:31                                                                  | 14:21:26/14:27:16                                           | 16:03:26                                                                   | 17:44:42                                                    |      |      |        |            |        |
| DP-mode                   | OBS                                                              | OBS/ACS/OBS                                                               | OBS                                                         | OBS                                                                        | OBS                                                         |      |      |        |            |        |
| ACS-mode                  | Normal-Pointing                                                  | Normal-Pointing                                                           | Normal-Pointing                                             | Normal-Pointing                                                            | Normal-Pointing                                             |      |      |        |            |        |
| SUN-pos $\theta_s/\phi_s$ | 2.45/277.55                                                      | 2.55/280.78                                                               | —/—                                                         | —/—                                                                        | —/—                                                         |      |      |        |            |        |
| Attitude                  | $\begin{bmatrix} 158.147 \\ 39.146 \\ 149.599 \end{bmatrix}$     | $\begin{bmatrix} 158.147 \\ 39.145 \\ 149.601 \end{bmatrix}$              | $\begin{bmatrix} 299.541 \\ 54.950 \\ 31.115 \end{bmatrix}$ | $\begin{bmatrix} 299.533 \\ 54.948 \\ 31.116 \end{bmatrix}$                | $\begin{bmatrix} 299.540 \\ 54.950 \\ 31.115 \end{bmatrix}$ |      |      |        |            |        |
| OP-start(CE)              | 11:07:14 ( 00h )                                                 | Cont ( 08h )                                                              | Cont ( 15h )                                                | Cont ( 1Eh )                                                               | Cont ( 26h )                                                |      |      |        |            |        |
| GIS HAM ERR               | Normal                                                           | Normal                                                                    | Normal                                                      | ERR RST                                                                    | Normal                                                      |      |      |        |            |        |
| ACS ERR                   | (SH)MOMCHG                                                       | —                                                                         | —                                                           | —                                                                          | —                                                           |      |      |        |            |        |
| SIS-mode                  | Faint/Faint<br>1111/3333                                         | Faint/Faint<br>1111/3333                                                  | Bright/Bright<br>1111/3333                                  | Fast/Bright<br>1111/3333                                                   | Bright/Fast<br>1111/3333                                    |      |      |        |            |        |
| S0/1-TECT                 | −44.04/−43.85                                                    | −44.19/−44.05                                                             | −44.04/−44.04                                               | −44.34/−44.44                                                              | −44.58/−44.63                                               |      |      |        |            |        |
| S0/1-CCDT                 | −61.71/−61.81                                                    | −61.71/−61.81                                                             | −61.71/−61.81                                               | −61.67/−61.81                                                              | −61.71/−61.81                                               |      |      |        |            |        |
| 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                | 25/25 cps                                                        | 29/30 cps                                                                 | 183/179 cps                                                 | 191/190 cps                                                                | 170/155 cps                                                 |      |      |        |            |        |
| P X Y R S                 | Pos                                                              | MErr                                                                      | HV_HL                                                       | Gain                                                                       | RT-L RT-U                                                   | Temp | RBMT | CalPk  | CalCnt/sec | RT Pk  |
| 10 8 8 5 0                | FLF                                                              | No                                                                        | 3/4                                                         | 48                                                                         | 159 218                                                     | 13.1 | 13.1 | 394.73 | 0.113      | 183.77 |
| Pass: 950509-0722         |                                                                  |                                                                           | 3/4                                                         | 40                                                                         | 159 218                                                     | 6.5  |      | 420.36 | 0.105      | 181.18 |

SIS Mode Changes: F/F 1111/3333 Lvl:0.41 keV(RXJ10313+5053 #3) Fa/B 1111/3333 Lvl:off (CYG X-1)

GIS Mode Changes: None

## Battery Condition (min/max)

| BAT_V-A     | BAT_V-B     | BAT_I-A    | BAT_I-B    | BAT_T-A   | BAT_T-B   |
|-------------|-------------|------------|------------|-----------|-----------|
| 20.00/23.30 | 20.00/23.20 | -4.29/4.73 | -4.12/4.76 | 4.82/9.03 | 5.37/6.48 |

## Maneuver Operation

| Start Time | Target Name | # | $(\alpha, \delta)$     | $(\phi, \theta, \psi)$         |
|------------|-------------|---|------------------------|--------------------------------|
| 5/9 13:20  | CYG X-1     | 6 | ( 299.5900 , 35.2017 ) | ( 299.541 , 54.950 , 31.115 )  |
| 5/10 2:40  | NGC4151     | 1 | ( 182.6353 , 39.4058 ) | ( 182.883 , 50.666 , 140.794 ) |

**Comment:** 本日の運用: RXJ 10313+5053 and Cyg X-1 were observed and their count rates were 0.51 cts/s/SIS and 0.25 cts/s/GIS for RXJ 10313+5053 and 69.5 cts/s/GIS for Cyg X-1. SIS and GIS spectra of RXJ 10313+5053 are well represented by a power law model with a photon index  $\sim 2.5$ . GIS spectra of CYG X-1 is represented by a power law model with a photon index  $\sim 1.87$ .

1パスの頃は「あけぼの」「ようこう」「あすか」の人々でにぎわうSAテレメータも、5パスの時間帯には「あすか」関係者だけになる。5パス消感後、メーカーさん達が帰った後のひっそりとした雰囲気の中でQL解析をしていると、なんだか居残り勉強させられているような気分になる。(消感します平山)

久しぶりのKSC。しばらくこないうちに、いろいろ変わってますねー。(思い出すのに時間がかかっている栗木)

上位ビットが交代されて、やっと半分という感じです。(川嶋)