

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

95 年 3 月 23 日 Y+ 761 KSC 当番: R. Fujimoto and K. Sasaki

GC (0', -100') → EXO 055620-382

|                           | PASS 1                                                     | PASS 2                                                                    | PASS 3                                                                                                                                  | PASS 4                                                                                          | PASS 5                                                            |      |       |      |      |      |      |      |        |            |        |
|---------------------------|------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------|-------|------|------|------|------|------|--------|------------|--------|
| Pass No.                  | 950323-0720                                                | 950323-0824                                                               | 950323-0927                                                                                                                             | 950323-1030                                                                                     | 950323-1134                                                       |      |       |      |      |      |      |      |        |            |        |
| Operation                 | (SFU)                                                      | X REP<br>SBR A RNG<br>OP/OG 10 WRT<br>TCU MEM MODE<br>OP START<br>RNG OFF | X REP<br>S-CTLG 03 WRT<br>S-CTLG CHK<br>OBSERVE MODE<br>CPU2 STOP<br>CPU3 STOP<br>CPU2 RST<br>CPU3 RST<br>BDR STOP<br>X REP<br>BDR STOP | X-REP<br>SBR A RNG<br>CPU2 STOP<br>CPU3 STOP<br>CPU2 RST<br>CPU3 RST<br>GIS MEM MODE<br>RNG OFF | X-REP                                                             |      |       |      |      |      |      |      |        |            |        |
| Target                    |                                                            | GC 0-100                                                                  | GC 0-100                                                                                                                                | GC 0-100                                                                                        | GC 0-100                                                          |      |       |      |      |      |      |      |        |            |        |
| AOS(UT)                   |                                                            | 11:33:05                                                                  | 13:13:42                                                                                                                                | 14:55:50                                                                                        | 16:37:03                                                          |      |       |      |      |      |      |      |        |            |        |
| LOS(UT)                   |                                                            | 11:45:07                                                                  | 13:26:52                                                                                                                                | 15:08:23                                                                                        | 16:49:01                                                          |      |       |      |      |      |      |      |        |            |        |
| Max-El<br>Time            |                                                            | 57.087<br>11:38:21                                                        | Zenith (89.728)<br>(13:19:50)                                                                                                           | 63.735<br>15:01:22                                                                              | 23.747<br>16:42:38                                                |      |       |      |      |      |      |      |        |            |        |
| Rep-band(stat.)           | ( )                                                        | X ( Complete )                                                            | X ( Complete )                                                                                                                          | X ( Complete )                                                                                  | X ( Complete )                                                    |      |       |      |      |      |      |      |        |            |        |
| Rep-start                 |                                                            | 11:33:39                                                                  | 13:14:33/13:20:27                                                                                                                       | 14:56:25                                                                                        | 16:37:41                                                          |      |       |      |      |      |      |      |        |            |        |
| DP-mode                   |                                                            | OBS                                                                       | OBS/ACS/OBS                                                                                                                             | OBS                                                                                             | OBS                                                               |      |       |      |      |      |      |      |        |            |        |
| ACS-mode                  |                                                            | Normal-Pointing                                                           | Normal-Pointing                                                                                                                         | Normal-Pointing                                                                                 | Normal-Pointing                                                   |      |       |      |      |      |      |      |        |            |        |
| SUN-pos $\theta_s/\phi_s$ |                                                            | —/—                                                                       | —/—                                                                                                                                     | —/—                                                                                             | —/—                                                               |      |       |      |      |      |      |      |        |            |        |
| Attitude                  | $\begin{bmatrix} \phantom{0} \\ \phantom{0} \end{bmatrix}$ | $\begin{bmatrix} 267.76340 \\ 119.92963 \\ 0.67615 \end{bmatrix}$         | $\begin{bmatrix} 267.76377 \\ 119.92917 \\ 0.67740 \end{bmatrix}$                                                                       | $\begin{bmatrix} 267.76329 \\ 119.92955 \\ 0.67244 \end{bmatrix}$                               | $\begin{bmatrix} 267.76283 \\ 119.92933 \\ 0.67633 \end{bmatrix}$ |      |       |      |      |      |      |      |        |            |        |
| OP-start(CE)              | ( )                                                        | 11:42:25 ( 00h )                                                          | Cont ( 0Ah )                                                                                                                            | Cont ( 14h )                                                                                    | Cont ( 1Eh )                                                      |      |       |      |      |      |      |      |        |            |        |
| GIS HAM ERR               |                                                            | Normal                                                                    | ERR RST                                                                                                                                 | Normal                                                                                          | Normal                                                            |      |       |      |      |      |      |      |        |            |        |
| ACS ERR                   |                                                            | —                                                                         | —                                                                                                                                       | —                                                                                               | —                                                                 |      |       |      |      |      |      |      |        |            |        |
| SIS-mode                  |                                                            | Faint/Faint<br>0123/2301                                                  | Faint/Faint<br>0123/2301                                                                                                                | Faint/Faint<br>0123/2301                                                                        | Faint/Faint<br>0123/2301                                          |      |       |      |      |      |      |      |        |            |        |
| S0/1-TECT                 |                                                            | -38.61/-38.94                                                             | -38.47/-38.80                                                                                                                           | -38.66/-38.90                                                                                   | -39.05/-39.28                                                     |      |       |      |      |      |      |      |        |            |        |
| S0/1-CCDT                 |                                                            | -61.67/-61.77                                                             | -61.67/-61.77                                                                                                                           | -61.67/-61.77                                                                                   | -61.67/-61.77                                                     |      |       |      |      |      |      |      |        |            |        |
| 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)                                                    |      |       |      |      |      |      |      |        |            |        |
| GIS LD Hit                |                                                            | 25/26 cps                                                                 | 31/31 cps                                                                                                                               | 29/30 cps                                                                                       | 30/27 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  | 14.2 | 14.1 | 390.72 | 0.113      | 183.66 |
| Pass: 950323-0824         |                                                            |                                                                           |                                                                                                                                         |                                                                                                 |                                                                   |      | 3/4   | 40   | 159  | 218  | 14.1 |      | 418.02 | 0.109      | 180.89 |

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   |
| 20.00/23.50 | 20.00/23.40 | -4.34/4.75 | -4.47/4.78 | 4.82/9.03 | 7.04/8.74 |

## Manoeuvre Operation

| Start Time | Target Name    | # | ( $\alpha, \delta$ )   | ( $\phi, \theta, \psi$ )          |
|------------|----------------|---|------------------------|-----------------------------------|
| 3/23 20:50 | EXO 055620-382 | 3 | ( 89.5071 , -38.3339 ) | ( 89.7643 , 128.2954 , 171.8659 ) |

**Comment:** 本日の運用: Today's target is GC (0', -100') (PI:Maeda, JPN). The intensity is 0.66 c/s/GIS ( $R < 16'$ ) and about 0.7 c/s/SIS. Single temperature model cannot explain the GIS spectra well. Maybe two temperatures are needed. Iron line energy is 6.8 keV, which suggests the contribution of hydrogen-like ion is large.

一連の銀河中心の観測は、3箇所とも全く異なったスペクトルをしていました。今後に期待。前田君、解析頑張ってね。3パス目入感直前、MSがハングアップしました。KSC、SSOCとも異常は見られなかったのですが、NECの人は回線の問題ではないかと言っていました。鹿児島地方を襲った強い雨と関係あるかもしれません。

宇宙研のハードディスクがまた一台、壊れたらしい。そのうちいいこともあるさ、な、小谷君。(藤本)  
ここでの仕事にも慣れましたが、けっこう重労働だと思います。(ちょっと疲れてきた佐々木)