

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

95 年 4 月 3 日    Y+ 772    KSC 当番: T.Mihara and K.Hashimotodani

LMC X-1 → HD104237

|                           | PASS 1                                                                            | PASS 2                                                                      | PASS 3                                                                | PASS 4                                                                     | PASS 5                                                              |      |       |      |      |      |      |      |        |            |        |
|---------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------|------|-------|------|------|------|------|------|--------|------------|--------|
| Pass No.                  | 950403-0309                                                                       | 950403-0412                                                                 | 950403-0516                                                           | 950403-0619                                                                | 950403-0722                                                         |      |       |      |      |      |      |      |        |            |        |
| Operation                 | X REP<br>OP/OG-03 WRT<br>TCU MEM MODE<br>ERRCODE RST<br>CPU2/3 STOP<br>CPU2/3 RST | X REP<br>SBR-A RNG<br>S-CTLG 1 WRT<br>S-CTLG CHK<br>OBSERVE MODE<br>RNG OFF | X REP<br>CPU 2/3 STOP<br>CPU 2/3 RST<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<br>ACS MODE<br>OBSERVE MODE                                   |      |       |      |      |      |      |      |        |            |        |
| Target                    | LMC X-1                                                                           | LMC X-1                                                                     | LMC X-1                                                               | LMC X-1                                                                    | HD104237                                                            |      |       |      |      |      |      |      |        |            |        |
| AOS(UT)                   | 04:12:30                                                                          | 05:53:54                                                                    | 07:34:55                                                              | 09:16:39                                                                   | 10:58:10                                                            |      |       |      |      |      |      |      |        |            |        |
| LOS(UT)                   | 04:23:46                                                                          | 06:05:48                                                                    | 07:47:22                                                              | 09:28:46                                                                   | 11:09:44                                                            |      |       |      |      |      |      |      |        |            |        |
| Max-El<br>Time            | 14.762<br>04:18:06                                                                | 46.410<br>05:59:13                                                          | (87.3)<br>(07:40:40)                                                  | 72.491<br>09:22:07                                                         | 27.758<br>11:03:23                                                  |      |       |      |      |      |      |      |        |            |        |
| Rep-band(stat.)           | X ( Complete )                                                                    | X ( Complete )                                                              | X ( Complete )                                                        | X ( Complete )                                                             | X ( Complete )                                                      |      |       |      |      |      |      |      |        |            |        |
| Rep-start                 | 04:13:06                                                                          | 05:54:30                                                                    | 07:35:46/07:47:22                                                     | 09:17:44                                                                   | 10:59:04                                                            |      |       |      |      |      |      |      |        |            |        |
| DP-mode                   | OBS/ACS/OBS                                                                       | OBS                                                                         | OBS                                                                   | OBS                                                                        | OBS/ACS/OBS                                                         |      |       |      |      |      |      |      |        |            |        |
| ACS-mode                  | Normal-Pointing                                                                   | Normal-Pointing                                                             | Normal-Pointing                                                       | Normal-Pointing                                                            | Normal-Pointing                                                     |      |       |      |      |      |      |      |        |            |        |
| SUN-pos $\theta_s/\phi_s$ | 11.30/275.04                                                                      | 11.25/275.06                                                                | 11.17/274.95                                                          | 11.11/274.85                                                               | 20.09/148.28                                                        |      |       |      |      |      |      |      |        |            |        |
| Attitude                  | $\begin{bmatrix} 85.49800 \\ 159.77959 \\ 151.38541 \end{bmatrix}$                | $\begin{bmatrix} 85.49595 \\ 159.77897 \\ 151.38328 \end{bmatrix}$          | $\begin{bmatrix} 85.49544 \\ 159.77902 \\ 151.38304 \end{bmatrix}$    | $\begin{bmatrix} 85.49619 \\ 159.77911 \\ 151.38288 \end{bmatrix}$         | $\begin{bmatrix} 179.61054 \\ 167.98884 \\ 267.60265 \end{bmatrix}$ |      |       |      |      |      |      |      |        |            |        |
| OP-start(CE)              | 04:20:24 ( 00h )                                                                  | cont ( 08h )                                                                | cont ( 10h )                                                          | Cont ( 18h )                                                               | Cont ( 26h )                                                        |      |       |      |      |      |      |      |        |            |        |
| GIS HAM ERR               | ERR RST                                                                           | Normal                                                                      | ERR RST                                                               | Normal                                                                     | Normal                                                              |      |       |      |      |      |      |      |        |            |        |
| ACS ERR                   | (SH)MOMCHG                                                                        | ---                                                                         | ---                                                                   | ---                                                                        | ---                                                                 |      |       |      |      |      |      |      |        |            |        |
| SIS-mode                  | Faint/Faint<br>1111/3333                                                          | Faint/Faint<br>1111/3333                                                    | Faint/Faint<br>1111/3333                                              | Faint/Faint<br>1111/3333                                                   | Faint/Faint<br>1111/3333                                            |      |       |      |      |      |      |      |        |            |        |
| S0/1-TECT                 | -36.53/-36.32                                                                     | -36.14/-35.93                                                               | -35.02/-34.91                                                         | -34.20/-34.18                                                              | -34.15/-34.23                                                       |      |       |      |      |      |      |      |        |            |        |
| S0/1-CCDT                 | -61.62/-61.34                                                                     | -61.62/-61.48                                                               | -61.62/-61.39                                                         | -61.53/-61.20                                                              | -61.29/-60.92                                                       |      |       |      |      |      |      |      |        |            |        |
| 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                | 41/37 cps                                                                         | 43/42 cps                                                                   | 46/44 cps                                                             | 44/49 cps                                                                  | 28/27 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 | 13.6 | 386.17 | 0.096      | 183.81 |
| Pass: 950403-0309         |                                                                                   |                                                                             |                                                                       |                                                                            |                                                                     |      | 3/4   | 40   | 159  | 218  | 8.2  |      | 411.75 | 0.079      | 181.01 |

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    |
|-------------|-------------|------------|------------|-----------|------------|
| 19.90/23.50 | 19.90/23.40 | -4.34/4.75 | -4.38/4.78 | 5.10/9.03 | 8.74/10.77 |

## Manoeuvre Operation

| Start Time | Target Name | # | $(\alpha, \delta)$        | $(\phi, \theta, \psi)$             |
|------------|-------------|---|---------------------------|------------------------------------|
| 4/3 10:40  | HD104237    | 3 | ( 180.02083 , -78.19278 ) | ( 179.6097 , 167.9903 , 267.6020 ) |

**Comment:** 本日の運用: The count rate of LMC X-1 is 21 c/s/SIS and 12 c/s/GIS. The spectrum is fitted by a diskbb ( $kT = 0.83/0.84$  keV) and a power law ( $\alpha = 2.4/3.0$ ) with  $\log N_H = 0.58/0.76 \times 10^{22} \text{ cm}^{-2}$  (values by SIS/GIS).  
 古里温泉に初めて行きました。開聞岳も見えて良かったです。鹿屋-内之浦のバスにも初めて乗りました。(三原)  
 初めて見た桜島には圧倒されました、火山灰にも。古里温泉の露天風呂も気持ち良かったです。でも浴衣着てお風呂に入ると浴衣が重くなって大変。濡れた服は十分溺死の原因になると思いました。三原さんご馳走さまでした。(橋本谷)