## V&V Summary Report L2 ASCDS Version: 8.3.2.1

Observation 1199 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date: Sep 16 2010

See axaff01199N002\_VV001\_vvref2.pdf for the full report

| V&V Scientist              | Joy Nichols |
|----------------------------|-------------|
| V&V Date (YYYY-MM-DD)      | 2010.10.01  |
| V&V Edition                | 1           |
| V&V Disposition and Status | OK          |
| V&V Charge Time            | 2.071       |

## Comments

Charge time for this ObsId remains at original value of 2.071 ks, although

with the current processing the charge time would have been 2.092 ksec. ===

This obsid has several problems. There is significant data corruption during the first 20-35 ksec of the observation. The observation began with the HETG inserted. The HETG was retracted with hardware commands, then a procedure was run to insert and retract the HETG with software commands. This procedure failed, so HETG was inserted and retracted with hardware commands. This resulted in 2 separate intervals of HETG data. The data corruption at the beginning of the observation affected the bias files. The data corruption only occurred on the SSR playback. The realtime data were good and were used

to produce the bias files. MTA records indicate HETG was inserted 52364700-52368000 and 52371000-52373400, that is Aug 30,1999 01:43:57 to 02:38:57 and 03:28:57 to 04:08:57. Due to data corruption during the first

part of this obsid, this processing only includes the second period when the

HETG was inserted. It should be noted that there is a short period between

included in this processing.

The focal plane temperature is approximately  $-100~\mathrm{C}$  during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T\_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.

|          | T                   | T  |
|----------|---------------------|--|
| seq_num  | 280149              | Sequence number                          |
| obs_id   | 1199                | Observation id                           |
| title    | <b>&amp;</b> #160   | Proposal title                           |
| observer | Dr. CXC Calibration | Principal investigator                   |
| object   | CAPELLA             | Source name                              |
| dtycycle | 0                   | <b>&amp;</b> #160                        |
| cycle    | P                   | events from which exps? Prim/Second/Both |
| ra_targ  | 79.17625            | Observer's specified target RA           |
| dec_targ | 45.997889           | Observer's specified target Dec          |
| ra_nom   | 79.182043921641     | Nominal RA                               |
| dec_nom  | 45.999303244269     | Nominal Dec                              |
| roll_nom | 88.577224516037     | Nominal Roll                             |
| revision | 4                   | Processing version of data               |
| ontime   | 2092.6361611634     | Sum of GTIs [s]                          |
| livetime | 2066.1379420566     | Livetime [s]                             |
| ontime4  | 2067.5658103302     | Sum of GTIs [s]                          |
| ontime5  | 2082.913200736      | Sum of GTIs [s]                          |
| ontime6  | 2080.4064912498     | Sum of GTIs [s]                          |
| ontime7  | 2092.6361611634     | Sum of GTIs [s]                          |
| ontime8  | 2076.4313900247     | Sum of GTIs [s]                          |
| ontime9  | 2089.3952008933     | Sum of GTIs [s]                          |
| 12events | 30789               | Number of level 2 events                 |

