V&V Summary Report L2 ASCDS Version: 8.3.3.1

Observation 1457 - L2 Version 6 Chandra X-Ray Center

L2 Processing Date: Dec 6 2010

See axaff01457N003_VV001_vvref2.pdf for the full report

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2010.12.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.184

Comments

A spatial region of the original bias map for CCD = 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (84.74504, -69.79830), (84.75591, -69.80187), (84.86291, -69.76271), (84.85204, -69.75915).

==

Target is off-axis on chip I3.

==

Charge time for this observation remains at previous value of 1.184 ksec,

although with the current processing the charge time would have been 1.180 ksec.

==

The focal plane temperature is approximately $-110\ \text{C}$ 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 chip (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.

1	
480407	Sequence number
1457	Observation id
& #160	Proposal title
Dr. CXC Calibration	Principal investigator
LMC X-1 - I3	Source name
0	& #160
P	events from which exps? Prim/Second/Both
84.914583	Observer's specified target RA
-69.743611	Observer's specified target Dec
84.644916106258	Nominal RA
-69.57890201008	Nominal Dec
46.473121052059	Nominal Roll
6	Processing version of data
1180.8000010997	Sum of GTIs [s]
1165.8480004934	Livetime [s]
1180.8000010997	Sum of GTIs [s]
1180.8000010997	Sum of GTIs [s]
1180.8000010997	Sum of GTIs [s]
1180.8000010997	Sum of GTIs [s]
1180.8000010997	Sum of GTIs [s]
41561	Number of level 2 events
	1457 Dr. CXC Calibration LMC X-1 - I3 0 P 84.914583 -69.743611 84.644916106258 -69.57890201008 46.473121052059 6 1180.8000010997 1165.8480004934 1180.8000010997 1180.8000010997 1180.8000010997 1180.8000010997

