V&V Summary Report L2 ASCDS Version: 7.6.10

Observation 1701 - L2 Version 6 Chandra X-Ray Center

L2 Processing Date: Sep 22 2007

See axaff01701N002_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.83

Comments

ACIS was commanded to make timed

exposures of 0.1 and 0.7 seconds with a 1:9 duty cycle. Since 6 CCDs were

used, the $0.1\ \text{second}$ exposures violated a minimum exposure time constraint

-- 'e >= 0.04104*(n-1)' -- where 'e' is the primary or secondary exposure

time and 'n' the number of CCDs. The flight s/w reacts to a violation of the rule by setting the appropriate

exposure time to zero. The effect, in the case of OBSID 1701, was to reduce $\ensuremath{\text{red}}$

the events in the 0.1 second exposure frames to those few that were collected

during the 0.04104-sec-per-frame smear interval. There is no usable dispersed

spectral data in the primary exposure (e1).==================

Zeroth order piled up. Standard data processing software did not correctly

locate the zeroth order due to pileup of the secondary exposure set. Manual intervention was used

to input the correct sky coordinates (x=4032.91, y=4135.49) into the *src1a.fits file table. These corrected coordinates were determined using

a software tool developed by CXC called findzero, which is expected to be

released in CIAO (currently in ISIS). The tool calculates the point of intersection of the

readout streak and the meg arm (preferred position), or the readout streak

and the heg arm. The zeroth order source position determined by the standard

pipeline processing using the tool tgdetect was not used in this processing. The same zeroth order position was used in the processing of both the primary and secondary datasets, although the primary dataset has no dispersed spectral data or zeroth order. Note that these corrected coordinates of the zeroth order cannot be reproduced by running

tgdetect on the data.

seq_num	400110
obs_id	1701
title	CHANDRA ACIS/LETG OBSERVATIONS OF THE LEAST ABSORBED X-RAY NOVA: XTE J1118+48
observer	Dr. Jeffrey McClintock
object	XTE J1118+48
dtycycle	0
cycle	P
ra_targ	169.545
dec_targ	48.036389
ra_nom	169.53195789997
	48.031442711828
roll_nom	220.26444274594
revision	6
ontime	2930.0342755169
livetime	373.19572492318
ontime4	2930.067823112
ontime5	2929.9932355136
ontime6	2929.9521955252
ontime7	2930.0342755169
ontime8	2929.9111555219
ontime9	2929.8701155186
12events	2467

