V&V Summary Report
L2 ASCDS Version : 8.4.5

Observation 1701 - L2 Version 7
Chandra X-Ray Center

L2 Processing Date : Nov 9 2012

See axaff01701N003_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.11
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 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 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).
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This is an interleaved-mode observation. The primary exposure (e1) is
shorter than the secondary exposure (e2). Therefore the longer exposure
was used to determine the zeroth order position, then that position was
applied to both exposures.
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e2 zeroth order piled up. Standard data processing software did not
correctly locate the zeroth order due to pileup. Manual intervention was
used to input the correct sky coordinates (x=4032.96, y=4135.51) into
the *src1a.fits file table. These corrected coordinates were determined
using a software tool developed by CXC called tg_findzo, available in

CIAO. The tool calculates the point of intersection of the readout streak and the leg arm. The zeroth order source position determined by the standard pipeline processing using the tool tgdetect was not used in this processing. The newly determined zeroth order coordinates have been placed in the *src1a.fits file, replacing the coordinates determined by tgdetect. Note that these corrected coordinates of the zeroth order cannot be reproduced by running tgdetect on the data.

seq_num	400110	Sequence number
obs_id	1701	Observation id
title	CHANDRA ACIS/LETG OBSERVATIONS OF THE LEAST ABSORBED X-RAY NOVA: XTE J1118+48	Proposal title
observer	Dr. Jeffrey McClintock	Principal investigator
object	XTE J1118+48	Source name
dtycycle	0	&#160
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	169.545	Observer's specified target RA [deg]
dec_targ	48.036389	Observer's specified target Dec [deg]
ra_nom	169.53195789997	Nominal RA [deg]
dec_nom	48.031442711828	Nominal Dec [deg]
roll_nom	220.26444274594	Nominal Roll [deg]
revision	7	Processing version of data
ontime	2929.9092755169	Sum of GTIs [s]
livetime	373.17980379011	Livetime [s]
ontime4	2929.9503155202	Sum of GTIs [s]
ontime5	2929.8682355136	Sum of GTIs [s]
ontime6	2929.8271955252	Sum of GTIs [s]
ontime7	2929.9092755169	Sum of GTIs [s]
ontime8	2929.7861555219	Sum of GTIs [s]
ontime9	2929.7451155186	Sum of GTIs [s]
l2events	2458	Number of level 2 events