

# V&V Summary Report

## L2 ASCDS Version : 8.4.5

Observation 861 - L2 Version 6  
Chandra X-Ray Center

L2 Processing Date : Nov 4 2012

See axaff00861N002\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	75.152

## Comments

During obi=1, an ACIS Threshold-Plane Anomaly occurred for CCD chips 1 and 3. The flight s/w is intended to delay 'start events' until after 'end bias dump'. For some unknown reason, it occasionally fails to do so, and if the overlap lasts for more than a minute or so, one or more FEPs experience a firmware latch-up that renders them useless until they are power cycled. No event data were recorded for chips 1 and 3; the bright pixels on these chips are due to previously known hot pixels with the applied dither correction. In addition to chips 1 and 3, other chips were affected to varying degrees. CCD I1/FEP 0 and CCD I3/FEP 3 were reporting a large number of bogus events, more than 1,000 events per frame. This caused massive telemetry saturation, which eliminated many of the events from S3, I2, and S4. In the case of telemetry saturation, the BI CCDs will always get more of their frames into the telemetry stream than the FI CCDs.

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Level 2 events from both obi observations have been combined in this processing. However, the level2 combined events for all chips except chip 7 should not be used because the obi=1 data are corrupted by the T-plane anomaly. Obi=0 data should be analyzed alone, starting with the Level 1 data. Note that the target is on chip 7, which is unaffected by the anomaly.

seq_num	700166	Sequence number
obs_id	861	Observation id
title	WIDE SEPARATION QUASARS: PAIRS OR LENSES?	Proposal title
observer	Dr. Paul Green	Principal investigator
object	Q2345+007	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	357.081667	Observer's specified target RA [deg]
dec_targ	0.955861	Observer's specified target Dec [deg]
ra_nom	357.07527751234	Nominal RA [deg]
dec_nom	0.97595116038076	Nominal Dec [deg]
roll_nom	112.71573273658	Nominal Roll [deg]
revision	6	Processing version of data
ontime	75147.343787804	Sum of GTIs [s]
livetime	74195.782872465	Livetime [s]
ontime1	34364.395836011	Sum of GTIs [s]
ontime2	46503.469728351	Sum of GTIs [s]
ontime3	36830.827279449	Sum of GTIs [s]
ontime6	50266.386042535	Sum of GTIs [s]
ontime7	75147.343787804	Sum of GTIs [s]
ontime8	50920.981129989	Sum of GTIs [s]
l2events	412152	Number of level 2 events

