

# V&V Summary Report

## L2 ASCDS Version : 10.0.1

Observation 14516 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Dec 30 2014

See axaff14516N004\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2014.12.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.055999789298

## Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.

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The variation in exposure time from chip to chip is due to the loss of frames of data from telemetry saturation. This problem does not affect ACIS-S3, the aim-point chip. Since the proposed science seems to be strictly related to the source on ACIS-S3 and since the gratings were not used (i.e. there are no source events on the other chips), the scientific utility of the data should not be impaired due to the loss frames. The charged time is set to the time for the aim-point chip.

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MANUAL INTERVENTION: There were a large number of horizontal streaks on ACIS-S4, which were not initially removed by destreak using the default parameter settings for this tool. The data were reprocessed using destreak with max\_rowloss\_fraction=0.5. Use of such a high value for this parameter does not seem to have been a problem for this observation since there is no evidence of a bright source on ACIS-S4 that could have had a significant fraction of its source events removed as a result.

seq_num	702753	Sequence number
obs_id	14516	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	Q2237+0305	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	340.12625	Observer's specified target RA [deg]
dec_targ	3.358	Observer's specified target Dec [deg]
ra_nom	340.12883347628	Nominal RA [deg]
dec_nom	3.3564193548043	Nominal Dec [deg]
roll_nom	270.94089829049	Nominal Roll [deg]
revision	4	Processing version of data
ontime	30055.999789298	Sum of GTIs [s]
livetime	29347.516221227	Livetime [s]
ontime2	18049.830744147	Sum of GTIs [s]
ontime3	18461.224801004	Sum of GTIs [s]
ontime6	15393.484336793	Sum of GTIs [s]
ontime7	30055.999789298	Sum of GTIs [s]
ontime8	22388.483237028	Sum of GTIs [s]
l2events	120745	Number of level 2 events

