

V&V Summary Report

L2 ASCDS Version : 8.5.1.1

Observation 15543 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Dec 30 2014

See axaff15543N004_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	58.600539389491

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 ACIS-S4 CCD has a relatively high horizontal streak rate, particularly during the first half of the observation. The mean fraction of the exposure time that is lost per row on ACIS-S4 is about $6.0e-4$. (The peak fraction of the lost exposure time $< 2.0e-3$, which is too small to be a concern.) Since the default value of the maximum allowed fractional loss rate `max_rowloss_fraction=5e-05`, many streak events were included in the original version of the event data file. Therefore, the data were reprocessed with `max_rowloss_fraction=2.0e-3`. This setting seems to have removed all of the streaks on ACIS-S4 and yields a Level 2 background count rate for ACIS-S4 (0.470 events/s) that is essentially the same as the background count rate for ACIS-S2 (0.460 events/s). For these reasons, the larger value of `max_rowloss_fraction` for this observation seems to have removed the extraneous streak events and does not adversely affect the scientific utility of the data. This report was verified with the ACIS Team.

seq_num	501824	Sequence number
obs_id	15543	Observation id
title	A Legacy Study of the Relativistic Shocks of PWNe	Proposal title
observer	Prof. Roger Romani	Principal investigator
object	PSR J1741-2054	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.49	Observer's specified target RA [deg]
dec_targ	-20.89	Observer's specified target Dec [deg]
ra_nom	265.48719615943	Nominal RA [deg]
dec_nom	-20.888500334569	Nominal Dec [deg]
roll_nom	92.72468633264	Nominal Roll [deg]
revision	4	Processing version of data
ontime	58600.539389491	Sum of GTIs [s]
livetime	57219.200571001	Livetime [s]
ontime5	58600.498349488	Sum of GTIs [s]
ontime6	58596.975229204	Sum of GTIs [s]
ontime7	58600.539389491	Sum of GTIs [s]
ontime8	58598.675229311	Sum of GTIs [s]
l2events	321597	Number of level 2 events

