

V&V Summary Report

L2 ASCDS Version : 8.4.3

Observation 13206 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Feb 6 2012

See axaff13206N002_VV001_vvref2.pdf for the full report

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5

Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.

=====

Charge time: ONTIME of 3328.4568318129 seconds is less than 85% of expected scheduled time of 5000 seconds. The LIVETIME of 580.795 s is much shorter than the ONTIME of 3330.629 s because the frame time of 0.2 s is shorter than the minimum time that it takes to read out the detector (about 0.9 s) in the specified configuration. Therefore, there is a flush of 0.90588 s preceding each frame. This flush time is dead

time. The source appears to be bright enough to saturate telemetry. After the first 347 frames of data, only about 70% of the remaining frames contain data. Since an image of the source is apparent in the bad events, the source is most likely piled.

=====

Charge time has been edited to reflect the scheduled time.

seq_num	501544	Sequence number
obs_id	13206	Observation id
title	Monitoring of the Crab Nebula	Proposal title
observer	Dr. Martin Weisskopf	Principal investigator
object	Crab	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.631667	Observer's specified target RA [deg]
dec_targ	22.015667	Observer's specified target Dec [deg]
ra_nom	83.63008289965	Nominal RA [deg]
dec_nom	22.012810078754	Nominal Dec [deg]
roll_nom	272.71092466756	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3328.4568321705	Sum of GTIs [s]
liveltime	580.41656474219	Livetime [s]
ontime7	3328.4568321705	Sum of GTIs [s]
l2events	1698437	Number of level 2 events

