

V&V Summary Report

L2 ASCDS Version : 10.5.4

Observation 19708 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Jun 1 2017

See axaff19708N001_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.06.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.765083854437

Comments

The ACA has the capability to devote one or more of the eight image slots to "monitor" particular sky locations. This allows simultaneous optical photometry of one or more targets in the ACA field of view. These optical sources can be slightly fainter than the ACA guide star limit of $m_{ACA} = 10.2$ mag. The bright-end limit for monitor star photometry is $m_{ACA}=6.2$ mag. However, since there are a fixed number of image slots, devoting a slot to photometry instead of tracking a guide star results in a degradation of the image reconstruction and celestial location accuracy (Section 5.4). Using one monitor slot represents a 15 - 25% increase in the aspect image reconstruction RMS diameter, depending on the particular guide star configuration. Two monitor slots would increase the diameter by about 50 - 60%, but this configuration is not operationally allowed under normal circumstances. The photometric accuracy which can be achieved depends primarily on the star magnitude, integration time, CCD dark current, CCD read noise, sky background, and the CCD dark current uncertainty.

seq_num	201148	Sequence number
obs_id	19708	Observation id
title	A deep LETGS observation of Proxima Centauri	Proposal title
observer	Peter Predehl	Principal investigator
object	Proxima Centauri	Source name
ra_targ	217.39	Observer's specified target RA [deg]
dec_targ	-62.675861	Observer's specified target Dec [deg]
ra_nom	217.41284378878	Nominal RA [deg]
dec_nom	-62.677555254306	Nominal Dec [deg]
roll_nom	315.08762954203	Nominal Roll [deg]
revision	1	Processing version of data
ontime	44765.083854437	[s]
livetime	44349.073646757	Ontime multiplied by DTCOR
l2events	3711538	Number of level 2 events

