

V&V Summary Report

L2 ASCDS Version : 10.5.4

Observation 20084 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Jun 3 2017

See axaff20084N001_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.06.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.766129853368

Comments

Monitor star in slot 7. 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	20084	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	217.41218533192	Nominal RA [deg]
dec_nom	-62.677440314411	Nominal Dec [deg]
roll_nom	315.08704318226	Nominal Roll [deg]
revision	1	Processing version of data
ontime	29766.129853368	[s]
livetime	29479.973757976	Ontime multiplied by DTCOR
l2events	2587317	Number of level 2 events

