

V&V Summary Report

L2 ASCDS Version : 10.9.2

Observation 21058 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Oct 25 2020

See [axaff21058N002_VV001_vvref2.pdf](#) for the full report

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.779732121468

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	703675	Sequence number
obs_id	21058	Observation id
title	Determining the emission region of VHE gamma-rays in radio galaxy 3C 264	Proposal title
observer	Marcos Santander	Principal investigator
object	3C 264	Source name
ra_targ	176.270833	Observer's specified target RA [deg]
dec_targ	19.606306	Observer's specified target Dec [deg]
ra_nom	176.26852083736	Nominal RA [deg]
dec_nom	19.605459116283	Nominal Dec [deg]
roll_nom	215.38964056555	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14779.73211205	[s]
liveltime	14580.425157426	Ontime multiplied by DTCOR
l2events	1729551	Number of level 2 events

