

V&V Summary Report

L2 ASCDS Version : 10.9.1

Observation 5427 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Oct 8 2020

See axaff05427N004_VV001_vvref2.pdf for the full report

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.95839

Comments

Joint proposal with HST.

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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	200360	Sequence number
obs_id	5427	Observation id
title	Planet-Induced Activity Enhancements in the HD 179949 System	Propo
observer	Steven Saar	Principal investigator
object	HD 179949	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	288.888333	Observer's specified target RA [deg]
dec_targ	-24.179361	Observer's specified target Dec [deg]
ra_nom	288.89324124453	Nominal RA [deg]
dec_nom	-24.177063788515	Nominal Dec [deg]
roll_nom	95.658112706873	Nominal Roll [deg]
revision	4	Processing version of data
ontime	29958.399888396	Sum of GTIs [s]
livetime	29579.048590227	Livetime [s]
ontime2	29945.435937285	Sum of GTIs [s]
ontime3	29948.572558582	Sum of GTIs [s]
ontime5	29958.377549618	Sum of GTIs [s]
ontime6	29958.336509615	Sum of GTIs [s]
ontime7	29958.399888396	Sum of GTIs [s]
ontime8	29958.254429638	Sum of GTIs [s]
l2events	269561	Number of level 2 events

