

V&V Summary Report

L2 ASCDS Version : 10.7.1

Observation 21191 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Jan 9 2019

See [axaff21191N001_VV001_vvref2.pdf](#) for the full report

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.01.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.0151002528667

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	201245	Sequence number
obs_id	21191	Observation id
title	Testing X-ray activity as an age indicator	Proposal title
observer	Christian Schneider	Principal investigator
object	HD 146413	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	243.987917	Observer's specified target RA [deg]
dec_targ	7.357028	Observer's specified target Dec [deg]
ra_nom	243.98604018787	Nominal RA [deg]
dec_nom	7.3601935718851	Nominal Dec [deg]
roll_nom	55.665151084548	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9015.1002528667	Sum of GTIs [s]
livetime	8802.5952475954	Livetime [s]
ontime2	9015.1002528667	Sum of GTIs [s]
ontime3	9015.1002528667	Sum of GTIs [s]
ontime6	9015.1002528667	Sum of GTIs [s]
ontime7	9015.1002528667	Sum of GTIs [s]
ontime8	9015.1002528667	Sum of GTIs [s]
l2events	33130	Number of level 2 events

