

# V&V Summary Report

## L2 ASCDS Version : 10.7.1

Observation 21193 - L2 Version 1  
Chandra X-Ray Center

L2 Processing Date : Mar 27 2019

See axaff21193N001\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2019.03.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.979600476265

## Comments

Target optically monitored during observation. 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	201247	Sequence number
obs_id	21193	Observation id
title	Testing X-ray activity as an age indicator	Proposal title
observer	Christian Schneider	Principal investigator
object	HD 201796	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	318.094583	Observer's specified target RA [deg]
dec_targ	-15.000306	Observer's specified target Dec [deg]
ra_nom	318.09056321989	Nominal RA [deg]
dec_nom	-14.99915816224	Nominal Dec [deg]
roll_nom	102.15559728836	Nominal Roll [deg]
revision	1	Processing version of data
ontime	16979.600476265	Sum of GTIs [s]
livetime	16579.355333393	Livetime [s]
ontime2	16976.118585229	Sum of GTIs [s]
ontime3	16976.118465781	Sum of GTIs [s]
ontime6	16977.859446168	Sum of GTIs [s]
ontime7	16979.600476265	Sum of GTIs [s]
ontime8	16979.600476265	Sum of GTIs [s]
l2events	67588	Number of level 2 events

