

V&V Summary Report

L2 ASCDS Version : 10.7.1

Observation 21681 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : May 22 2019

See axaff21681N003_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2019.05.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.01730023098

Comments

The aspect data files were trimmed at the beginning of the observation by about 13.25 sec to eliminate some bad data. Aspect data only at/after 674099389.372 was used in this processing.

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The target is optically monitored 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	201260	Sequence number
obs_id	21681	Observation id
title	Identifying Accretion at a Key Stage of Pre-main Sequence Stellar Evolution	Proposal title
observer	Dr. Claude Canizares	Principal investigator
object	SZ 96	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	242.052667	Observer's specified target RA [deg]
dec_targ	-39.142633	Observer's specified target Dec [deg]
ra_nom	242.05403642369	Nominal RA [deg]
dec_nom	-39.138043129291	Nominal Dec [deg]
roll_nom	21.157494587047	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30017.30023098	Sum of GTIs [s]
livetime	29625.102105047	Livetime [s]
ontime5	30017.30023098	Sum of GTIs [s]
ontime6	30011.018070102	Sum of GTIs [s]
ontime7	30017.30023098	Sum of GTIs [s]
ontime8	30014.159160733	Sum of GTIs [s]
l2events	331461	Number of level 2 events

