

# V&V Summary Report

## L2 ASCDS Version : 10.5.2

Observation 17764 - L2 Version 1  
Chandra X-Ray Center

L2 Processing Date : Jan 9 2017

See axaff17764N001\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.01.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.973200299859

## Comments

The fid slot 1 radial offset of 0.555 arcsec is acceptable for aspect.  
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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	201073	Sequence number
obs_id	17764	Observation id
title	What are the dust properties around young stars?	Proposal title
observer	Hans Guenther	Principal investigator
object	RW Aur	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	76.956542	Observer's specified target RA [deg]
dec_targ	30.401439	Observer's specified target Dec [deg]
ra_nom	76.959877238639	Nominal RA [deg]
dec_nom	30.398981075452	Nominal Dec [deg]
roll_nom	262.84494346934	Nominal Roll [deg]
revision	1	Processing version of data
ontime	38973.200299859	Sum of GTIs [s]
liveltime	38463.986746289	Livetime [s]
ontime2	38973.200299859	Sum of GTIs [s]
ontime3	38973.200299859	Sum of GTIs [s]
ontime7	38973.200299859	Sum of GTIs [s]
l2events	192236	Number of level 2 events

