## V&V Summary Report L2 ASCDS Version: 10.7

Observation 21176 - L2 Version 1 Chandra X-Ray Center

L2 Processing Date: Nov 25 2018

See axaff21176N001\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2018.11.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	55.023196720243

## Comments

Comments for Obi 0 Fid in slot 1 has an RMS deviation > 0.050000 arcsec Fid in slot 1 radial offset > 0.700000 arcsec ++++

Software status was HOLD; another discontinuity in roll about 42 ks after start of observation.

## for final report:

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 mACA = 10.2 mag. The bright-end limit for monitor star photometry is mACA=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. 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	201230	Sequence number
obs_id	21176	Observation id
title	Did RW Aur just swallow a planet?	Proposal title
observer	Hans Guenther	Principal investigator
object	RW Aur	Source name
dtycycle	0	<b>&amp;</b> #160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	76.95625	Observer's specified target RA [deg]
dec_targ	30.401389	Observer's specified target Dec [deg]
ra_nom	76.952035971527	Nominal RA [deg]
dec_nom	30.401126607218	Nominal Dec [deg]
roll_nom	118.85485774932	Nominal Roll [deg]
revision	1	Processing version of data
ontime	55023.196720243	Sum of GTIs [s]
livetime	49903.135062799	Livetime [s]
ontime7	55023.196720243	Sum of GTIs [s]
12events	36441	Number of level 2 events

