

V&V Summary Report

L2 ASCDS Version : 10.5

Observation 18889 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Jul 26 2016

See axaff18889N001_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.07.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.02775

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	300392	Sequence number
obs_id	18889	Observation id
title	Down with the King: FO Aqr in an Extended Low State	Proposal title
observer	Mark Kennedy	Principal investigator
object	FO Aqr	Source name
ra_targ	334.48075	Observer's specified target RA [deg]
dec_targ	-8.351083	Observer's specified target Dec [deg]
ra_nom	334.47832285459	Nominal RA [deg]
dec_nom	-8.3518086893664	Nominal Dec [deg]
roll_nom	114.7034998192	Nominal Roll [deg]
revision	1	Processing version of data
ontime	18027.75	Sum of GTIs [s]
livetime	17957.329101562	Livetime [s]
ontime7	18027.75	Sum of GTIs [s]
l2events	88846	Number of level 2 events

