

V&V Summary Report

L2 ASCDS Version : 10.9.1

Observation 6772 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Oct 11 2020

See [axaff06772N003_VV001_vvref2.pdf](#) for the full report

V&V Scientist	Francesca Civano
V&V Date (YYYY-MM-DD)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.5962

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	701190	Sequence number
obs_id	6772	Observation id
title	Exploring the X-Ray Properties of Active Galactic Nuclei with Double-Peaked Balmer Lines	Proposal title
observer	Gordon Garmire	Principal investigator
object	SDSS J140720.70+023553.1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	211.83625	Observer's specified target RA [deg]
dec_targ	2.598083	Observer's specified target Dec [deg]
ra_nom	211.84015224975	Nominal RA [deg]
dec_nom	2.5945347812456	Nominal Dec [deg]
roll_nom	56.492134334362	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5596.2000370622	Sum of GTIs [s]
livetime	5471.4509552818	Livetime [s]
ontime2	5596.2000370622	Sum of GTIs [s]
ontime3	5596.2000370622	Sum of GTIs [s]
ontime5	5596.2000370622	Sum of GTIs [s]
ontime6	5596.2000370622	Sum of GTIs [s]
ontime7	5596.2000370622	Sum of GTIs [s]
ontime8	5596.2000370622	Sum of GTIs [s]
l2events	40410	Number of level 2 events

