

# V&V Summary Report

## L2 ASCDS Version : 10.5

Observation 17766 - L2 Version 1  
Chandra X-Ray Center

L2 Processing Date : Jun 14 2016

See [axaff17766N001\\_VV001\\_vvref2.pdf](#) for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.06.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.455600149751

## 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. 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	201074	Sequence number
obs_id	17766	Observation id
title	Heating the Primordial Soup: X-raying the Circumstellar Disk of RY Lupi	Proposal title
observer	David Principe	Principal investigator
object	RY Lup	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	239.868333	Observer's specified target RA [deg]
dec_targ	-40.364222	Observer's specified target Dec [deg]
ra_nom	239.87169614438	Nominal RA [deg]
dec_nom	-40.363491402525	Nominal Dec [deg]
roll_nom	306.11846649877	Nominal Roll [deg]
revision	1	Processing version of data
ontime	19455.600149751	Sum of GTIs [s]
livetime	19201.39841079	Livetime [s]
ontime5	19455.600149751	Sum of GTIs [s]
ontime6	19455.600149751	Sum of GTIs [s]
ontime7	19455.600149751	Sum of GTIs [s]
ontime8	19452.459049106	Sum of GTIs [s]
l2events	182356	Number of level 2 events

