

V&V Summary Report

L2 ASCDS Version : 8.4.5

Observation 2414 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Sep 6 2012

See axaff02414N002_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.09.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.756

Comments

This is a solar system object. X-ray events will be in the reference frame of the Earth. The user will need to run `sso_freeze` or similar software to redistribute the events spatially the reference frame of Venus.

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A spatial exclusion window was specified for this observation on chip S2.

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The observations of Venus caused the aspect camera to not track some guide stars and fid lights. This is thought to be because of excessive light from Venus on the aspect camera focal plane, even though the star catalogs had been constructed to minimize such problems. One of 3 fiducial lights and 2 of 5 guide stars were excluded from the pointing solution due to poor data quality and insufficient tracking accuracy. The 2 remaining fid lights should be adequate for bore sight alignment, but the aspect solution is probably affected to some degree by the use of only 3 guide stars. The 3 guide stars that were used have a discontinuity in y-position after about 1 ksec of the observation. This is probably related to the fact that the spacecraft roll is off by 20

degrees during the first portion of the observation, then is corrected and steady for the rest of the observation. The investigator is advised to work with Level 1 data and evaluate whether events with bad grades should be eliminated. It appears that some source events were removed in the Level 2 version of the event data.

seq_num	100026	Sequence number
obs_id	2414	Observation id
title	VENUS AND MARS: THE CLOSEST PLANETARY ANALOGUES TO COMETS	Proposal
observer	Dr. Konrad Dennerl	Principal investigator
object	VENUS	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	339.68718	Observer's specified target RA [deg]
dec_targ	-9.42834	Observer's specified target Dec [deg]
ra_nom	339.72424185968	Nominal RA [deg]
dec_nom	-9.398475591084	Nominal Dec [deg]
roll_nom	291.38879964955	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5753.5818227679	Sum of GTIs [s]
livetime	5680.7265053369	Livetime [s]
ontime4	5750.3590451032	Sum of GTIs [s]
ontime5	5753.5407827646	Sum of GTIs [s]
ontime6	5753.4997427762	Sum of GTIs [s]
ontime7	5753.5818227679	Sum of GTIs [s]
ontime8	5750.2177425176	Sum of GTIs [s]
ontime9	5750.1766726077	Sum of GTIs [s]
l2events	49136	Number of level 2 events

