## V&V Summary Report L2 ASCDS Version : 8.4.5

## Observation 598 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date : Sep 5 2012

See axaff00598N002\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.26

## Comments

## FOR PRIMARY EXPOSURE ONLY:

The livetime for each chip is about 177.75s instead of 1395.6s for each chip because the use of a 0.1 s frame time for the selection of chips and rows used during the observation is shorter than the time it takes to read out one frame of data. The frame time must be at least 0.7 s to avoid 'flushing' the detector before each frame of data is collected. The time required to flush the detector is specified on p. 120 of the ACIS Science Instrument Software User's Guide:

http://acis.mit.edu/swuserA/swuser.pdf Events that occur during such a flush are discarded onboard. The flush time is effectively 'dead time.' For this reason, most of the 1395.6s of the observation was spent flushing the detectors instead of collecting data. Had the frame time been 0.7 s or longer, there would have been about 1395.6s of exposure instead of only about 177.75s.

seq_num	500084	Sequence number
obs_id	598	Observation id
title	X-RAY POSITIONS AND AFTERGLOWS OF GAMMA-RAY BURSTS	Proposal title
observer	Dr Luigi Piro	Principal investigator
object	GRB000926	Source name
dtycycle	0	
cycle	Р	events are from which exps? P[rimary] S[econdar
ra_targ	256.040417	Observer's specified target RA [deg]
dec_targ	51.786389	Observer's specified target Dec [deg]
ra_nom	256.04247697029	Nominal RA [deg]
dec_nom	51.776568921181	Nominal Dec [deg]
roll_nom	287.92399363184	Nominal Roll [deg]
revision	4	Processing version of data
ontime	1395.6159579307	Sum of GTIs [s]
livetime	177.75829910468	Livetime [s]
ontime4	1395.6159579307	Sum of GTIs [s]
ontime5	1395.6159579307	Sum of GTIs [s]
ontime6	1395.6460442394	Sum of GTIs [s]
ontime7	1395.6159579307	Sum of GTIs [s]
ontime8	1395.6870842427	Sum of GTIs [s]
ontime9	1395.728124246	Sum of GTIs [s]
12events	381	Number of level 2 events

