## V&V Summary Report L2 ASCDS Version : 10.4

## Observation 16711 - L2 Version 1 Chandra X-Ray Center

L2 Processing Date : Jun 11 2015

See axaff16711N001\_VV001\_vvref2.pdf for the full report

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2015.06.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	115.14785988176

## Comments

Zeroth order events were filtered so that only 1 in 10 events was recorded. This was done to limit telemetry saturation. In fact, telemetry saturation did occur for chips 6 and 7, but the GTI excludes the times for telemetry saturation.

For ACIS/CC-mode w/ HETG, at with no SIM-Z offset, there are no MEG even order counts. MEG even orders overlap with HEG orders in energy, but MEG even order efficiencies are very low. Since HEG and MEG cannot be spatially separated, events are preferentially assigned to HEG. (MEG odd orders can be resolved.) For observations with a SIM-Z offset, MEG negative and MEG positive orders will be missing (off the array), and remove some of the ambiguity.

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As of November 1, 2009, events with a flight grade of 66 were added to the telemetry stream for continuous-clocking mode observations because it was found that a significant fraction of real X-ray events have this flight grade in this mode. To prevent these events from being discarded from Level 2 event files, the CALDB grade file was modified to change the 'ASCA' grade for these events from 7 (a bad grade) to 2 (a good grade). The new grade file has been used in standard pipeline processing for code versions DS 10.3 and later (i.e. 2014 Oct 30 and later). Since the calibration products for continuous-clocking mode observations are appropriate for data that includes flight grade 66 events, data obtained on or after 2009 Nov 1, but that were processed using an earlier version of the pipeline code, should be reprocessed with CIAO using version 4.7 (i.e. 2014 December) or later. Note that it is not possible to fix the data obtained before 2009 Nov 1. Since these earlier continuous-clocking observations are not calibrated at present, spectral analyses of these data may yield inaccurate results.

seq_num	401633	Sequence number
obs_id	16711	Observation id
title	The Ins and Outs of Disk Accetion in Black Hole Transient	Proposal
observer	Dr. Jon Miller	Principal investigator
object	GRS 1915+105	Source name
ra_targ	288.798125	Observer's specified target RA [deg]
dec_targ	10.945781	Observer's specified target Dec [deg]
ra_nom	288.79260039179	Nominal RA [deg]
dec_nom	10.946107254281	Nominal Dec [deg]
roll_nom	137.51428036039	Nominal Roll [deg]
revision	1	Processing version of data
ontime	115147.85988176	Sum of GTIs [s]
livetime	114698.0635541	Livetime [s]
ontime4	120065.5	Sum of GTIs [s]
ontime5	120065.5	Sum of GTIs [s]
ontime6	119289.21215081	Sum of GTIs [s]
ontime7	115147.85988176	Sum of GTIs [s]
ontime8	120065.5	Sum of GTIs [s]
ontime9	120052.36968911	Sum of GTIs [s]
l2events	21254703	Number of level 2 events

