V&V Summary Report
L2 ASCDS Version : 10

Observation 1456 - L2 Version 6
Chandra X-Ray Center

L2 Processing Date : Jul 19 2013

See axaff01456N003_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.07.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.803

Comments

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WARNING: This is a multi-obi gratings observation which will require
special handling by the investigator. While the Level 2 data products
for each of the two obi's have been combined in this processing, this is
not the best method for pursuing analysis. Each obi should be treated
as a separate observation so that the responses are appropriate for each
observation. TGCat intends to provide these separate products in the
near future.
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For the data products associated with this current processing: ===(1.)
roll_nom will be the same for both obi's. If analysis software is used
on these products that uses roll_nom in calculations, the investigator
needs to modify the obi=2 roll_nom value either manually or with a
header correction, ===(2.) Ideally, each obi should be considered a
separate observation and processed separately from Level 1.5. The
responses will be different for the 2 obi's, and additionally (and more
importantly) the object was in different states for these 2 obi's. The
dispersed spectral data should
only be combined after extracting the spectra individually from level 1
and deriving individual arfs and rmfs. If the 2 obi's are treated as
separate observations and run through Level 2 in CIAO separately, (1)
above does not apply. ===(3.) Both obis are piled up in the zeroth
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order and have significant readout streaks. The zeroth order for obi=0
was found successfully with the tool tg_findzo, which calculates the
point of intersection of the readout streak and the meg arm. However,
because tg_findzo uses the keyword roll_nom, it failed to find the
correct zeroth order for obi=2. Nevertheless, if one uses the same
coordinates for the zeroth order as obi=0, the zeroth order position for
obi=2 is within the tolerance. ===(4.) The evt2 and pha2 were merged
over obis in this processing. Generation of responses, necessary for
analysis, will require use of the individual OBI files. OBI 0 and OBI 2
should be processed with zeroth order sky coordinates of (x=4073.015,
y=4131.956) manually inserted in the processing.
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Note: Spectral arms are also piled up at the hard X-ray region.
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In this version of the processing, the Special Processing Comment in the
gratings L1.5 log gives the incorrect zeroth order coordinates. The
coordinates stated in this V&V report are accurate for this processing.

seq_num	400014	Sequence number
obs_id	1456	Observation id
title	OBSERVATIONS OF ACTIVE, COMPACT, LOW-MASS X-RAY BINARIES WITH LETGS	&#160
observer	DR. ALBERT BRINKMAN	Principal investigator
object	CYG X-3	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	308.10625	Observer's specified target RA [deg]
dec_targ	40.957694	Observer's specified target Dec [deg]
ra_nom	308.103107	Nominal RA [deg]
dec_nom	40.952866	Nominal Dec [deg]
roll_nom	268.821531	Nominal Roll [deg]
revision	6	Processing version of data
ontime	20796.800019369	Sum of GTIs [s]
livetime	20533.458415194	Livetime [s]
ontime5	20796.800019369	Sum of GTIs [s]
ontime6	20796.800019369	Sum of GTIs [s]
ontime7	20796.800019369	Sum of GTIs [s]
ontime8	20796.800019369	Sum of GTIs [s]
ontime9	20796.800019369	Sum of GTIs [s]
l2events	663768	Number of level 2 events