

# V&V Summary Report

## L2 ASCDS Version : 8.4.5

Observation 3407 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Sep 28 2012

See axaff03407N002\_VV001\_vvref2.pdf for the full report

|                            |                    |
|----------------------------|--------------------|
| V&V Scientist              | David Huenemoerder |
| V&V Date (YYYY-MM-DD)      | 2012.10.03         |
| V&V Edition                | 1                  |
| V&V Disposition and Status | OK                 |
| V&V Charge Time            | 30.07              |

## Comments

Charge time:

Using time from longest-exposed chip; telemetry saturation reduces effective exposure on other chips; observation was done for planned duration.

New charge time is less than existing charge time used in previously distributed version

NEW CHARGE TIME = 16.130711 ks, 1 Obis

EXISTING CHARGE TIME = 30.000000 ks, 1 Obis.

Variation in Chips > 15% threshold.

Low Chip 6, ONTIME=12822.721582 seconds

High Chip 5, ONTIME=30076.000000 seconds

Chip 8, ONTIME=14636.494213 seconds is less than 80% of scheduled time=30000.000000 seconds

Chip 7, ONTIME=16130.711362 seconds is less than 80% of scheduled time=30000.000000 seconds

Chip 6, ONTIME=12822.721582 seconds is less than 80% of scheduled time=30000.000000 seconds

ONTIME of 16130.711361632 seconds is less than 85% of expected scheduled time of 30000 seconds

|           |                              |                                       |
|-----------|------------------------------|---------------------------------------|
| seq_num   | 400234                       | Sequence number                       |
| obs_id    | 3407                         | Observation id                        |
| title     | CYGNUS X-1 IN THE HIGH STATE | Proposal title                        |
| observer  | Dr. Wei Cui                  | Principal investigator                |
| object    | CYG X-1                      | Source name                           |
| ra_targ   | 299.59                       | Observer's specified target RA [deg]  |
| dec_targ  | 35.202                       | Observer's specified target Dec [deg] |
| ra_nom    | 299.59512594528              | Nominal RA [deg]                      |
| dec_nom   | 35.176022386443              | Nominal Dec [deg]                     |
| roll_nom  | 282.98879502832              | Nominal Roll [deg]                    |
| revision  | 4                            | Processing version of data            |
| ontime    | 16130.711361632              | Sum of GTIs [s]                       |
| liveltime | 16067.700770375              | Livetime [s]                          |
| ontime4   | 25425.664110154              | Sum of GTIs [s]                       |
| ontime5   | 30076.0                      | Sum of GTIs [s]                       |
| ontime6   | 12822.721581757              | Sum of GTIs [s]                       |
| ontime7   | 16130.711361632              | Sum of GTIs [s]                       |
| ontime8   | 14636.494212821              | Sum of GTIs [s]                       |
| ontime9   | 25768.571356565              | Sum of GTIs [s]                       |
| l2events  | 10406821                     | Number of level 2 events              |

