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

Observation 2601 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date: Sep 30 2012

See axaff02601N003\_VV001\_vvref2.pdf for the full report

| V&V Scientist              | Joy Nichols |
|----------------------------|-------------|
| V&V Date (YYYY-MM-DD)      | 2012.10.04  |
| V&V Edition                | 1           |
| V&V Disposition and Status | OK          |
| V&V Charge Time            | 9.547       |

## Comments

Target is very off-axis and therefore asymmetric and extended. The point spread function is signficantly extended by this off-axis position. The zeroth order position was not found by the software and the processing software defaulted to the coordinates supplied by the user for the position of the zeroth order for the grating spectral extraction. The off-axis position yields a minus side spectrum with energies beyond 100 A. The plus side spectrum is truncated. === WARNING: there are no standard CIAO tools for analysis of grating spectra from extended sources. The shape of an emission 'line' will be the shape of the zero order spatial structure convolved with the instrumental LSF. Grating extractions can be used, but need to be combined with custom spatial-spectral analysis, since wavelength is multi-valued at any particular diffraction angle. WARNING: The user will need to deconvolve the PSF of the off-axis source to get an accurate determination of the zeroth order position, then use software tools such as CIAO to specify the coordinates of the zeroth order before running the tools to resolve the dispersed events.

| seq_num  | 290157   | Sequence number                       |
|----------|--|---------------------------------------|
| obs_id   | 2601   | Observation id                        |
| title    | AO3 LETG/HRC-I CALIBRATION OBSERVATIONS<br>OF HZ43 | Proposal title                        |
| observer | Dr. CXC Calibration                                | Principal investigator                |
| object   | HZ43   | Source name                           |
| ra_targ  | 199.092083   | Observer's specified target RA [deg]  |
| dec_targ | 29.099   | Observer's specified target Dec [deg] |
| ra_nom   | 199.02805497186                                    | Nominal RA [deg]                      |
| dec_nom  | 28.946248453499                                    | Nominal Dec [deg]                     |
| roll_nom | 69.234298017318                                    | Nominal Roll [deg]                    |
| revision | 4  | Processing version of data            |
| ontime   | 9550.1816336662                                    | [s]                                   |
| livetime | 9488.4222374332                                    | Ontime multiplied by DTCOR            |
| 12events | 394587   | Number of level 2 events              |

