

# V&V Summary Report

## L2 ASCDS Version : 8.4.5

Observation 1793 - L2 Version 10  
Chandra X-Ray Center

L2 Processing Date : Dec 27 2012

See axaff01793N007\_VV001\_vvref2.pdf for the full report

|                            |                    |
|----------------------------|--------------------|
| V&V Scientist              | David Huenemoerder |
| V&V Date (YYYY-MM-DD)      | 2013.01.15         |
| V&V Edition                | 1                  |
| V&V Disposition and Status | OK                 |
| V&V Charge Time            | 21.161             |

## Comments

far off-axis --- required custom region parameters (detailed below);

Warning: the grating line-spread-function is not calibrated off-axis;  
there is no valid grating RMF data for this observation.

Target very off-axis. In `tg_create_mask`, the zeroth order region needs to be decreased; off-axis, the default size is too large and causes short wavelengths to be omitted from grating region. In `tgextract`, the off-axis source extent

requires the `tg_d` range to be increased. === Reprocess using the following method: Columns `x`, `y`, `r`, `w` give parameters for `tg_create_mask` Columns `s1`, `s2`, `d1`, `d2`, `u1`, `u2` give paramters for `tgextract`. Customized parts of the usage are as follows: `tg_create_mask use_user_pars = yes`  
`sA_zero_x = $x sA_zero_y = $y sA_zero_rad = $r sA_width_heg = $w`  
`sA_width_meg = $w sA_width_leg = $w tgextract min_tg_d = $s1`  
`max_tg_d = $s2 min_downbkg_tg_d = $d1 max_downbkg_tg_d = $d2`  
`min_upbkg_tg_d = $u1 max_upbkg_tg_d = $u2` PKS 2155 series (LETG/ACIS):  
# obsid x y r w s1 s2 d1 d2 u1 u2 1791 3242.07 4497.14 47.96 598.78  
-3.401e-03 3.401e-03 -2.592e-02 -3.887e-03 3.887e-03 2.592e-02

|          |   |   |
|----------|---|---|
| seq_num  | 390011  | Sequence number                             |
| obs_id   | 1793  | Observation id                              |
| title    | GRATINGS CALIBRATION OBSERVATIONS OF<br>PKS2155-304 | Proposal title                              |
| observer | Dr. CXC Calibration                                 | Principal investigator                      |
| object   | PKS2155-304   | Source name                                 |
| dtcycle  | 0   | &#160                                       |
| cycle    | P   | events from which exps?<br>Prim/Second/Both |
| ra_targ  | 329.716667  | Observer's specified<br>target RA [deg]     |
| dec_targ | -30.225556  | Observer's specified<br>target Dec [deg]    |
| ra_nom   | 329.514151618                                       | Nominal RA [deg]                            |
| dec_nom  | -30.313392343199                                    | Nominal Dec [deg]                           |
| roll_nom | 26.244106104089                                     | Nominal Roll [deg]                          |
| revision | 10  | Processing version of<br>data               |
| ontime   | 21160.155836657                                     | Sum of GTIs [s]                             |
| livetime | 20892.213202337                                     | Livetime [s]                                |
| ontime4  | 21160.237886757                                     | Sum of GTIs [s]                             |
| ontime5  | 21160.155836657                                     | Sum of GTIs [s]                             |
| ontime6  | 21160.114796668                                     | Sum of GTIs [s]                             |
| ontime7  | 21160.196846753                                     | Sum of GTIs [s]                             |
| ontime8  | 21160.073756665                                     | Sum of GTIs [s]                             |
| ontime9  | 21160.032686755                                     | Sum of GTIs [s]                             |
| l2events | 292266  | Number of level 2 events                    |

