V&V Summary Report L2 ASCDS Version : 8.5.1.1

Observation 2010 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date : Jan 3 2013

See axaff02010N002_VV001_vvref2.pdf for the full report

| V&V Scientist | Joy Nichols |
|----------------------------|-------------|
| V&V Date (YYYY-MM-DD) | 2013.01.25 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 19.276 |

Comments

During obi=0, an ACIS Threshold-Plane Anomaly occurred for CCD chip 6. The flight s/w is intended to delay 'start events' until after 'end bias dump'. For some unknown reason, it occasionally fails to do so, and if the overlap lasts for more than a minute or so, one or more FEPs experience a firmware latch-up that renders them useless until they are power cycled. No event data were recorded for chip 6; the bright pixels on this chip is due to previously known hot pixels with the applied dither correction. In addition to chip 6, other FI chips were affected to varying degrees. CCD 6 was reporting a large number of bogus events. This caused massive telemetry saturation, which eliminated many of the events from other FI chips. In the case of telemetry saturation, the BI CCDs will always get more of their frames into the telemetry stream than the FI CCDs. === Level 2 events from both obi observations have been combined in this processing. However, the level2 combined events for all chips except chip 7 should not be used because the obi=0 data are corrupted by the T-plane anomaly. Obi=1 data should be analyzed alone, starting with the Level 1 data. Note that the target is on chip 7, which is unaffected by the anomaly.

| seq_num | 500187 | Sequence number |
|----------|--|---|
| obs_id | 2010 | Observation id |
| title | LET US EXAMINE SOME NEW ISOLATED NEUTRON STARS WITH CHANDRA | Propos |
| observer | Hakki Ogelman | Principal investigator |
| object | PSR0628-28 | Source name |
| dtycycle | 0 | |
| cycle | Р | events from which exps? Prim/Second/Both |
| ra_targ | 97.70625 | Observer's specified target RA [deg] |
| dec_targ | -28.578778 | Observer's specified target Dec [deg] |
| ra_nom | 97.71335061924 | Nominal RA [deg] |
| dec_nom | -28.571403959133 | Nominal Dec [deg] |
| roll_nom | 59.653085969403 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 19277.499895543 | Sum of GTIs [s] |
| livetime | 18584.142435933 | Livetime [s] |
| ontime2 | 18169.752314463 | Sum of GTIs [s] |
| ontime3 | 18342.211331755 | Sum of GTIs [s] |
| ontime5 | 19277.499895543 | Sum of GTIs [s] |
| ontime6 | 18498.188028246 | Sum of GTIs [s] |
| ontime7 | 19277.499895543 | Sum of GTIs [s] |
| ontime8 | 18504.277230307 | Sum of GTIs [s] |
| l2events | 125097 | Number of level 2 events |

