V&V Summary Report L2 ASCDS Version : 10.4.3.1

Observation 18276 - L2 Version 2 Chandra X-Ray Center

L2 Processing Date : Mar 11 2016

See axaff18276N002_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.03.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	85.298339212656

Comments

This observation was executing during the swap back to the A-side HRMA heaters.

The swap was necessary because of an earlier electronics glitch on the spacecraft. Specifically, the heaters were off for part of this observation and then the heaters were commanded on. This procedure caused a sharp drop in temperature in the forward section of the HRMA about 73 ks into the observation. All HRMA termperature readings are discontinuous at that point. Such a temperature differential in the HRMA has not occurred previously in the mission, so we spent considerable effort to verify that the PSFs of the sources in this image

are entirely consistent with all other observations for this program. We find no indication that the image quality is affected by the HRMA temperature excursions.

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A spatial region of the original bias map for CCD = 2 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 2 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (194.57592, 28.13340), (194.57150, 28.13065), (194.62107, 28.06841), (194.62548, 28.07116).

seq_num	801595	Sequence number
obs_id	18276	Observation id
title	Probing ICM on mean free path scales	Proposal title
observer	Dr Irina Zhuravleva	Principal investigator
object	Coma cluster	Source name
dtycycle	0	
cycle	Р	events from which exps? Prim/Second/Both
ra_targ	194.649583	Observer's specified target RA [deg]
dec_targ	28.074806	Observer's specified target Dec [deg]
ra_nom	194.64272906882	Nominal RA [deg]
dec_nom	28.078842605307	Nominal Dec [deg]
roll_nom	125.05910298713	Nominal Roll [deg]
revision	2	Processing version of data
ontime	85298.339212656	Sum of GTIs [s]
livetime	84183.853615119	Livetime [s]
ontime0	85304.498222828	Sum of GTIs [s]
ontime1	85298.257102251	Sum of GTIs [s]
ontime2	85295.157102108	Sum of GTIs [s]
ontime3	85298.339212656	Sum of GTIs [s]
12events	449888	Number of level 2 events

