

V&V Summary Report

L2 ASCDS Version : 10

Observation 15561 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Dec 6 2014

See [axaff15561N003_VV001_vvref2.pdf](#) for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	70.563199737191

Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.

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There are many dispersed spectra visible on this observation from the many X-ray sources in the field. The extracted spectral data supplied with this processing are of the source at ra=00:42:38.615, dec=+41:16:03.66. This source is somewhat off-axis. Spectra of other sources in the field can be extracted using CIAO tools.

Cross-contamination is a possibility with these dispersed spectra and should be considered in the analysis. === A spatial region of the original bias map for CCD = 9 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 = 9 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:
 (10.90842,40.94729) , (10.91159,40.94414) , (10.96821,40.97652) , (10.96231,40.97811) .

seq_num	601077	Sequence number
obs_id	15561	Observation id
title	High Resolution Spectroscopy of X-ray Sources in M 31	Proposal tit
observer	Prof Claude Canizares	Principal investigator
object	M 31 North	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.684583	Observer's specified target RA [deg]
dec_targ	41.285417	Observer's specified target Dec [deg]
ra_nom	10.680568137615	Nominal RA [deg]
dec_nom	41.285162310195	Nominal Dec [deg]
roll_nom	127.27938682909	Nominal Roll [deg]
revision	3	Processing version of data
ontime	70563.199737191	Sum of GTIs [s]
livetime	69669.686014061	Livetime [s]
ontime4	70563.199737191	Sum of GTIs [s]
ontime5	70563.199737191	Sum of GTIs [s]
ontime6	70563.199737191	Sum of GTIs [s]
ontime7	70563.199737191	Sum of GTIs [s]
ontime8	70559.958716869	Sum of GTIs [s]
ontime9	70563.199737191	Sum of GTIs [s]
l2events	664827	Number of level 2 events

