

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 14989 - L2 Version 2
Chandra X-Ray Center

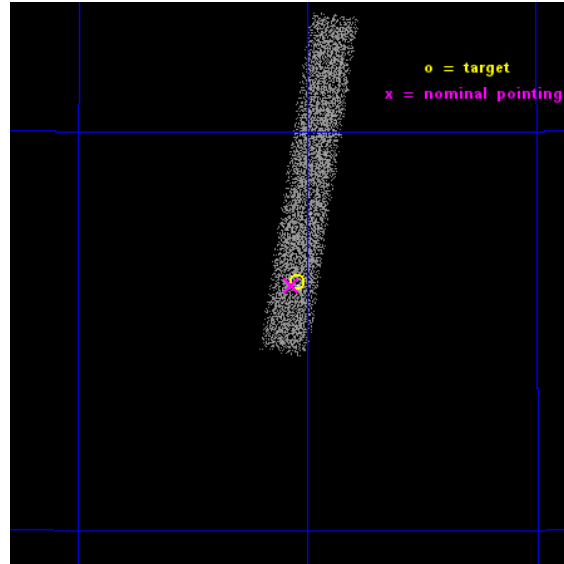
L2 Processing Date : Dec 8 2014

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1 Front

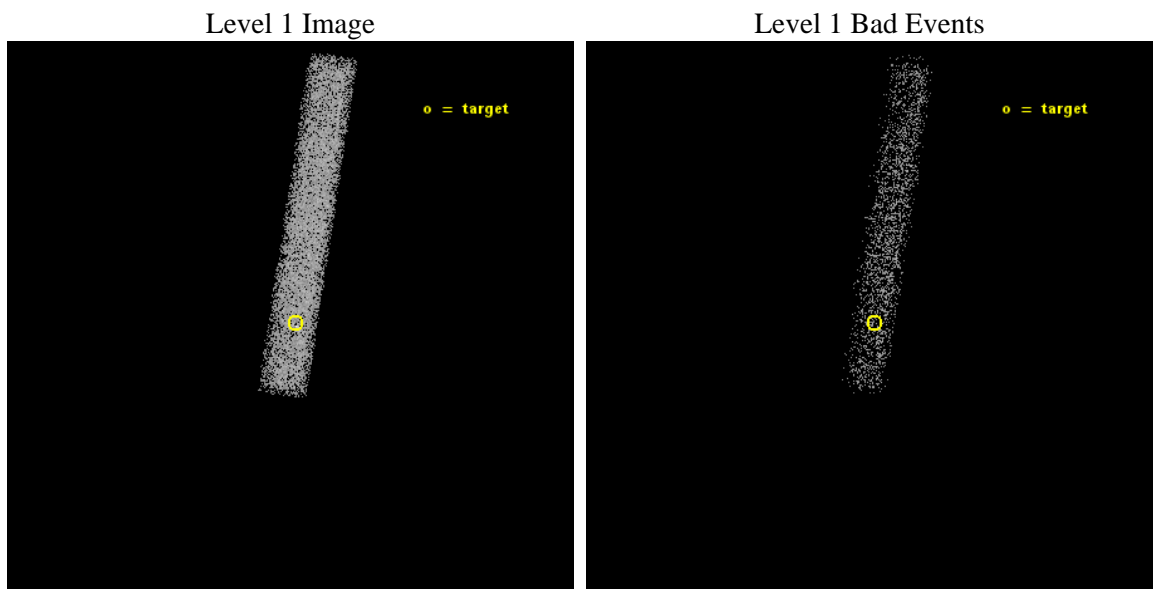
seq_num	702797	Sequence number
obs_id	14989	Observation id
title	Chandra Confirmation of Candidate Inspirling, Binary, or Recoiling Black Holes in Nearby Galaxies	Proposal title
observer	Jeremy Darling	Principal investigator
object	4C+66.24	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.260417	Observer's specified target RA [deg]
dec_targ	66.437056	Observer's specified target Dec [deg]
ra_nom	329.26732841355	Nominal RA [deg]
dec_nom	66.435848343033	Nominal Dec [deg]
roll_nom	278.96266523464	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20069.598803759	Sum of GTIs [s]
livetime	18202.066754724	Livetime [s]
ontime7	20069.598803759	Sum of GTIs [s]
l2events	8364	Number of level 2 events



2 OBI

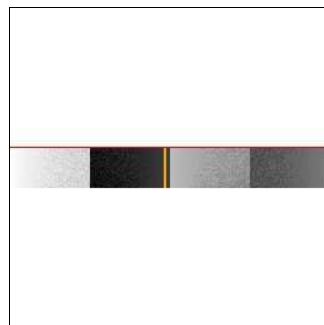
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	20069.598803759	Sum of GTIs [s]
caldbver	4.6.4	 	ontime7	20069.598803759	Sum of GTIs [s]
date	2014-12-08T05:20:00	Date and time of file creation	l1events	17820	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

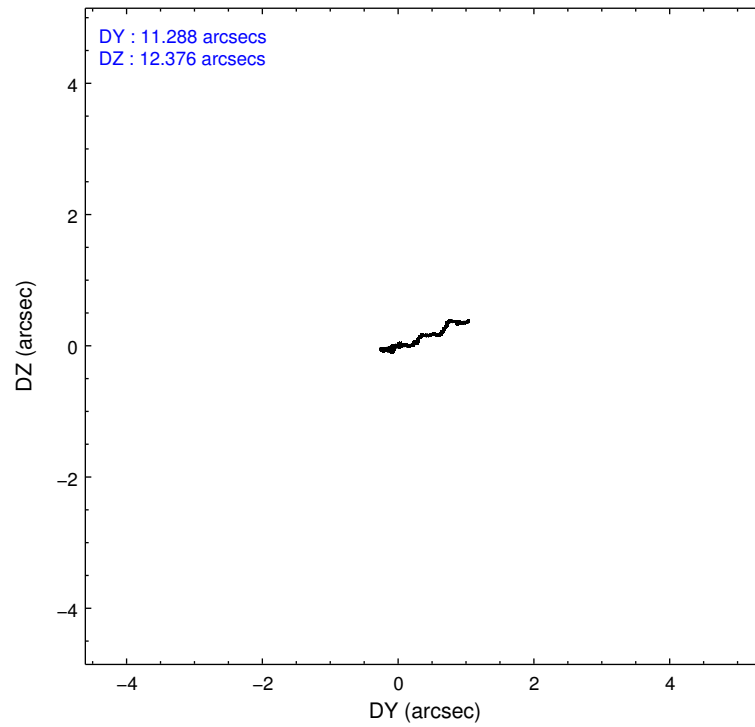
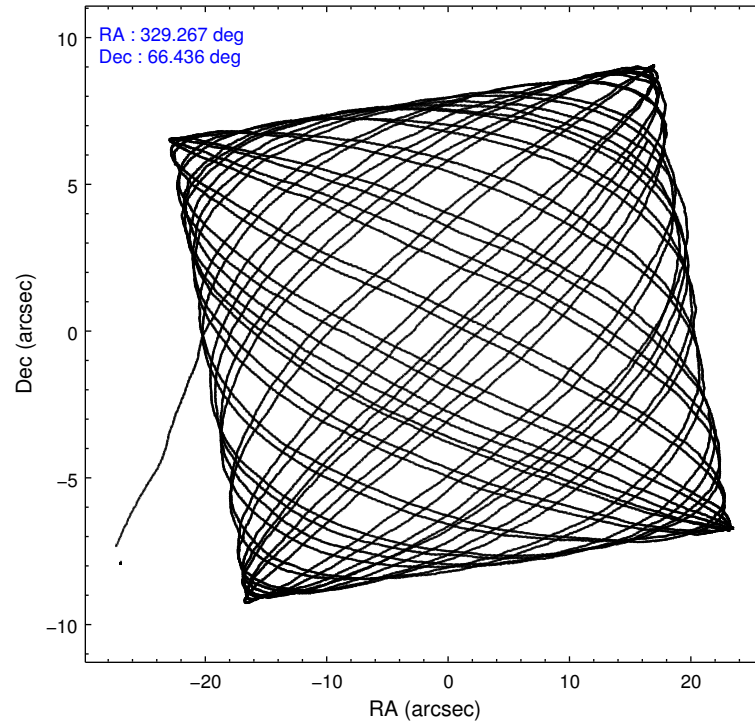
	ccd 7
level 1 events	17820
rejected events	9093
rejected %	51%

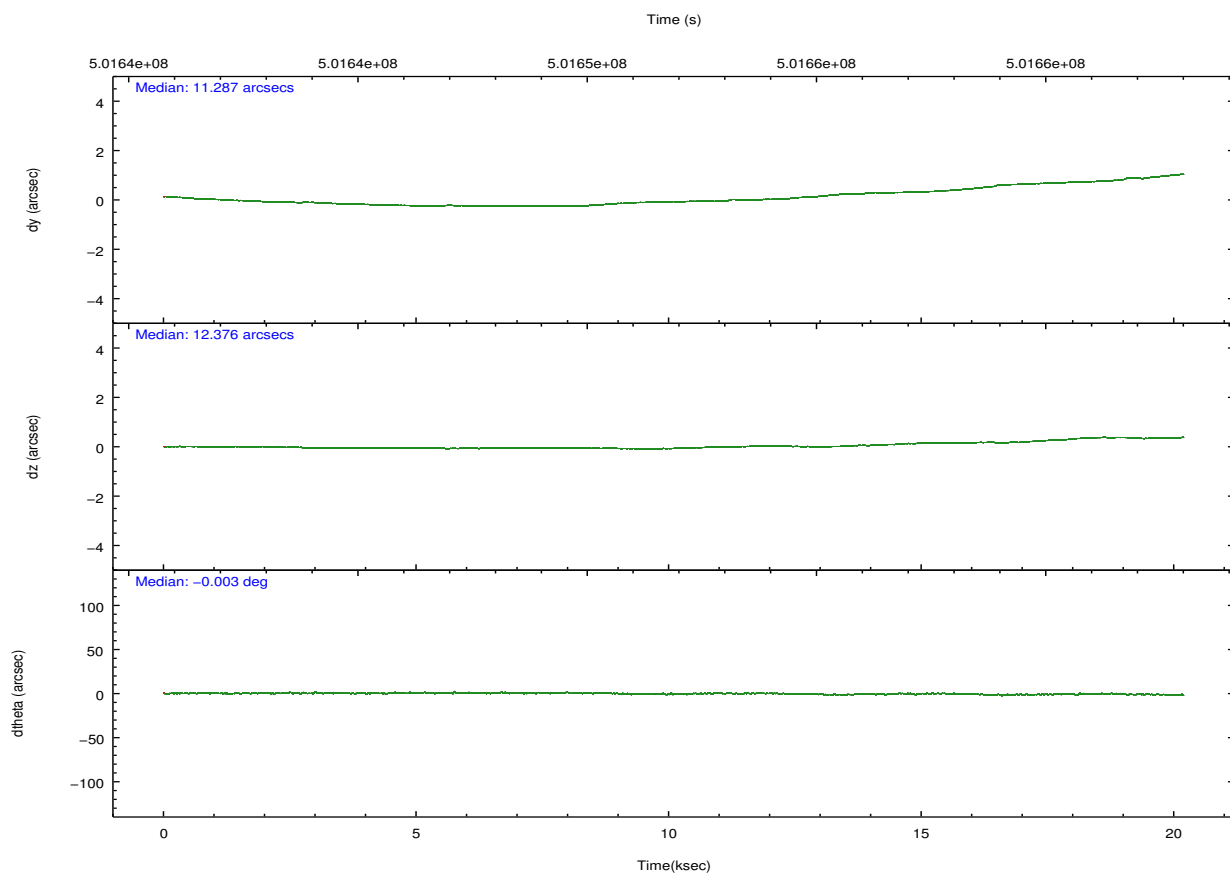
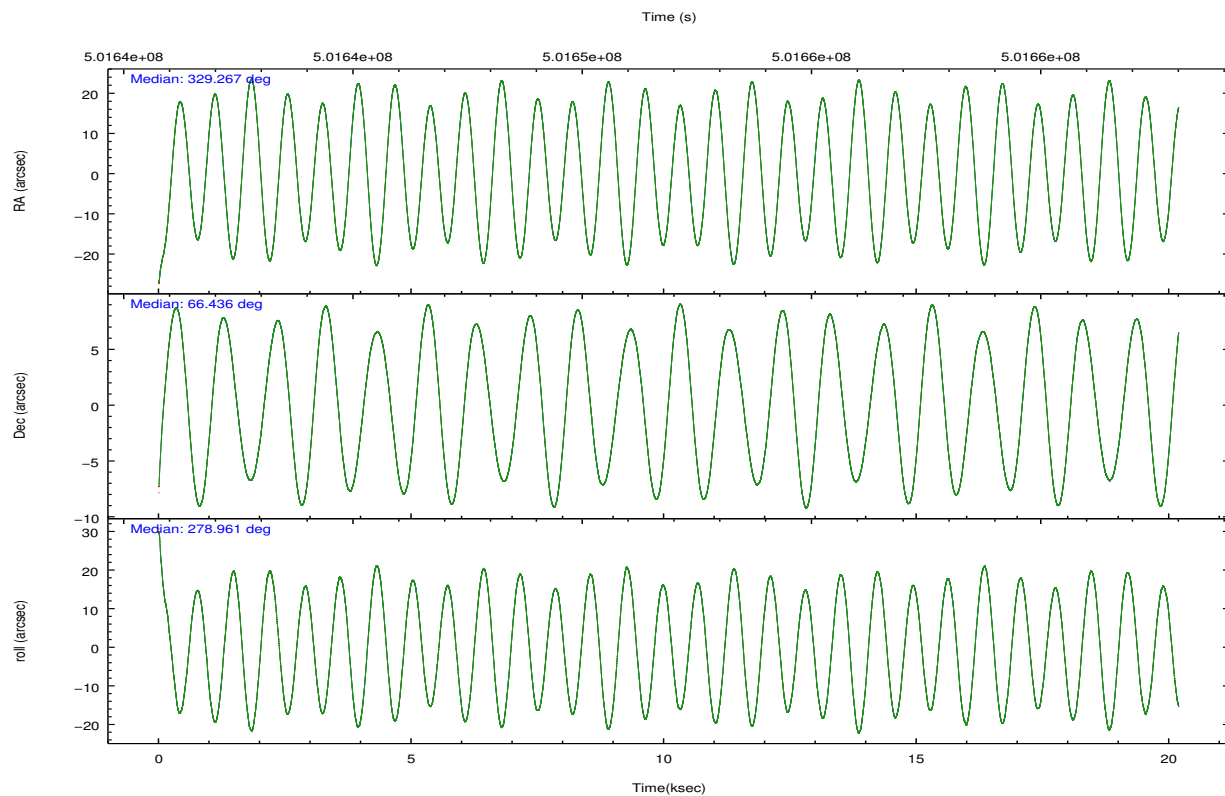
	ccd 7
grade 0 events	919
	5%
grade 1 events	17
	0%
grade 2 events	1604
	9%
grade 3 events	1188
	6%
grade 4 events	1091
	6%
grade 5 events	1810
	10%
grade 6 events	3925
	22%
grade 7 events	7266
	40%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	329.223595	329.2673284135507	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	66.456878	66.43584834303314	Subarray start row	449	449
[deg] Pointing Roll	278.846123	278.962665234637	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	501641989.184000	501641072.33901			
Observation start date	2013-11-24T00:58:42	2013-11-24T00:44:32			
[s] Observation end time (MET)	501661989.184000	501663021.69021			
Observation end date	2013-11-24T06:32:02	2013-11-24T06:50:21			
Read mode	TIMED	TIMED			

2.3 Aspect



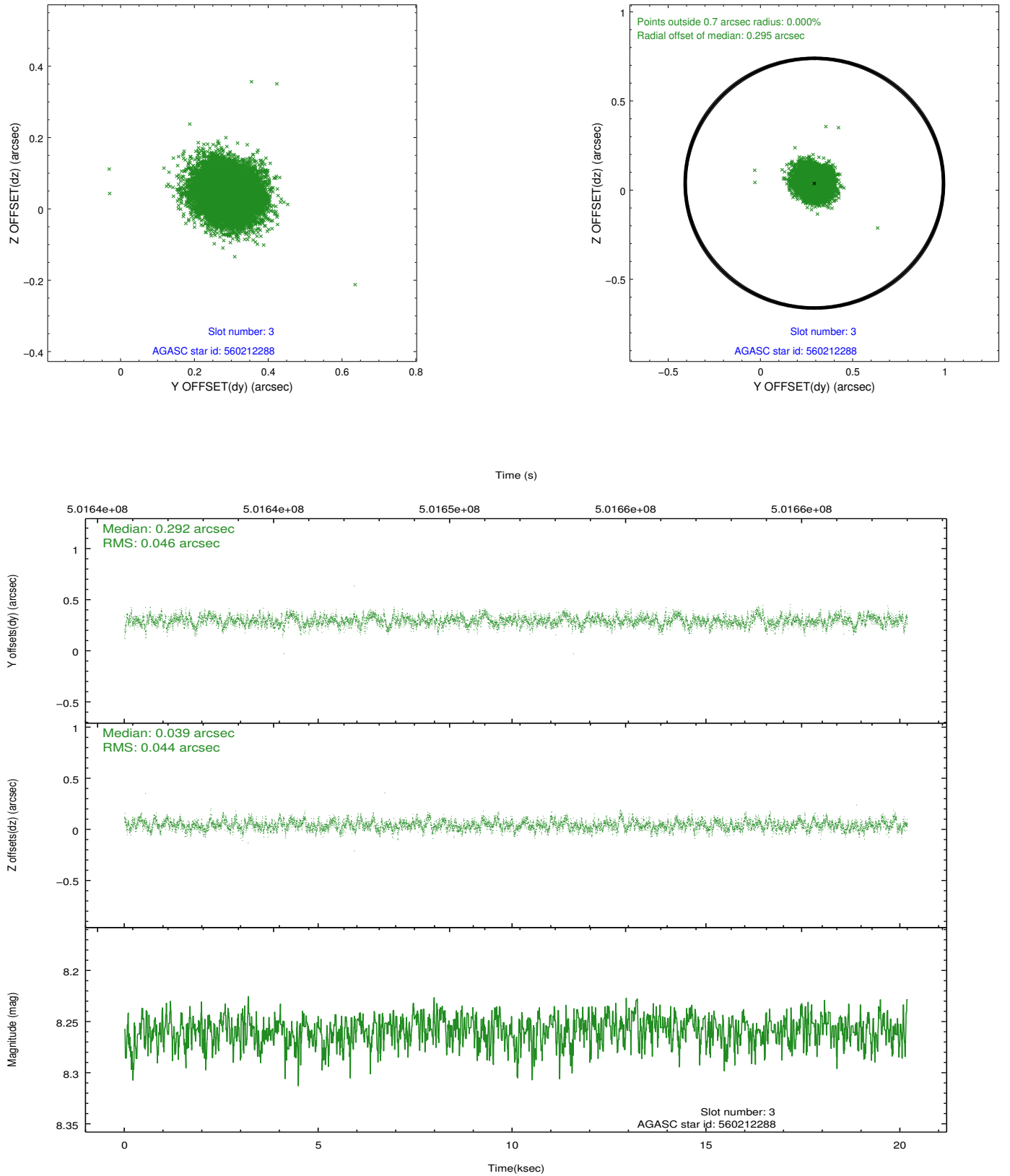


Slot Statistics

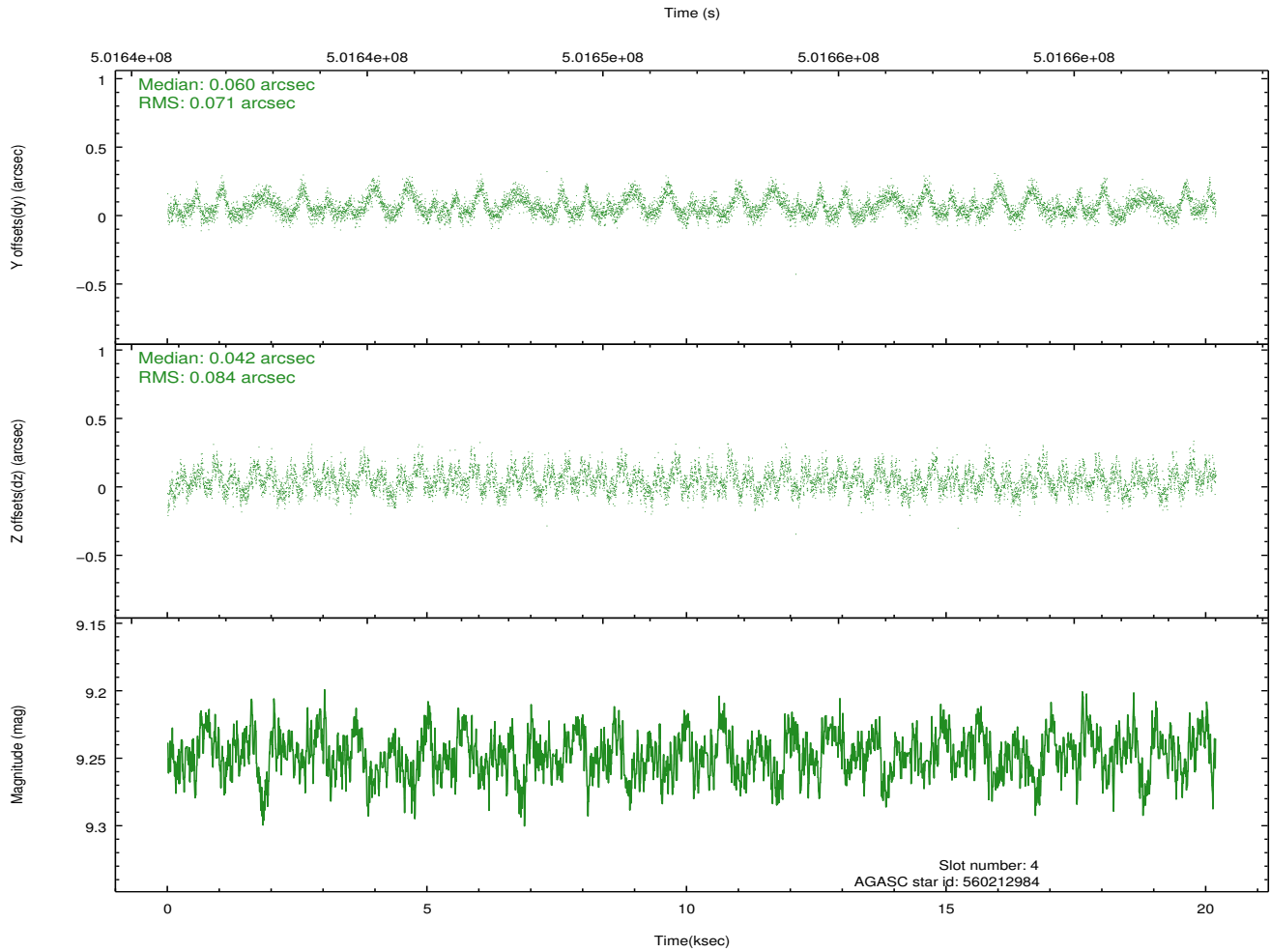
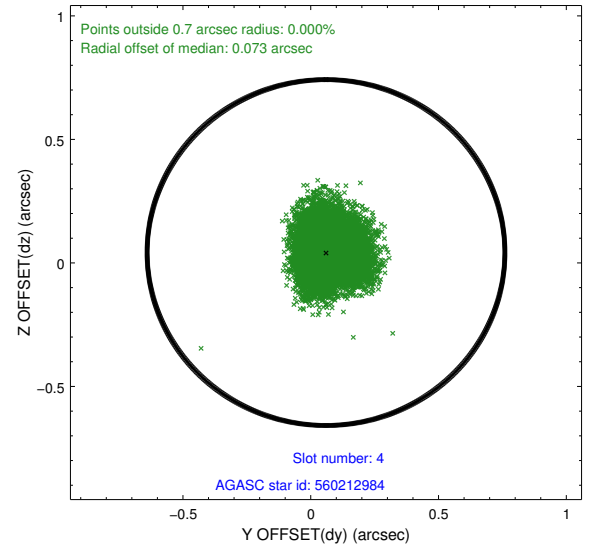
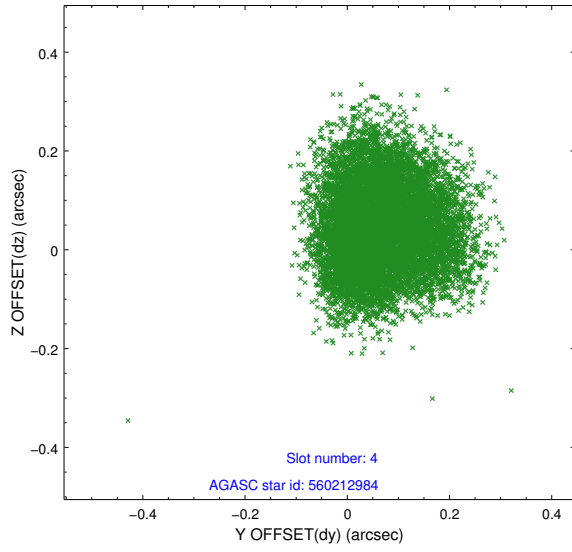
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.06	4925	-0.057	-0.035	0.011	0.023	0.000000	0.000000	-764.36	-1733.71
1	FID		ACIS-S-4	7.15	4925	0.170	0.037	0.011	0.018	0.000000	0.000000	2149.08	174.61
2	FID		ACIS-S-5	7.18	4925	-0.145	0.007	0.009	0.019	0.000000	0.000000	-1817.04	168.52
3	GUIDE	used	560212288	8.26	9847	0.292	0.039	0.068	0.109	328.880943	66.696274	-927.32	-349.31
4	GUIDE	used	560212984	9.25	9843	0.060	0.042	0.119	0.184	327.368282	66.828239	-1763.39	-2384.91
5	GUIDE	used	560213648	8.02	9848	-0.109	-0.076	0.082	0.128	329.953455	66.143932	1270.50	877.59
6	GUIDE	used	560347304	7.12	9847	-0.234	-0.165	0.069	0.103	330.706527	66.064288	1704.17	1927.10
7	GUIDE	used	560215464	9.17	9844	-0.019	0.150	0.092	0.146	327.687723	66.853632	-1771.32	-1923.08

2.4 Star Slots

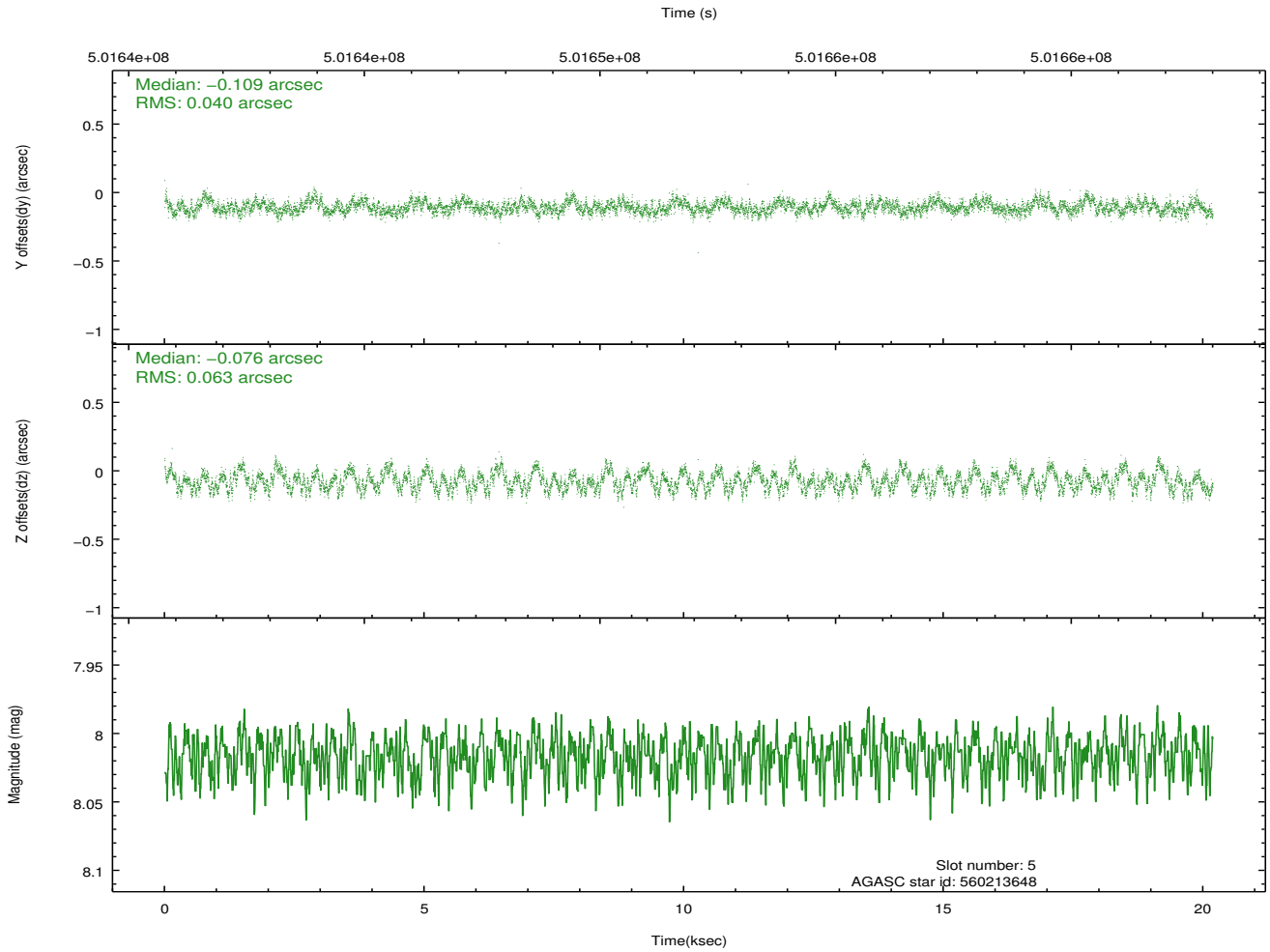
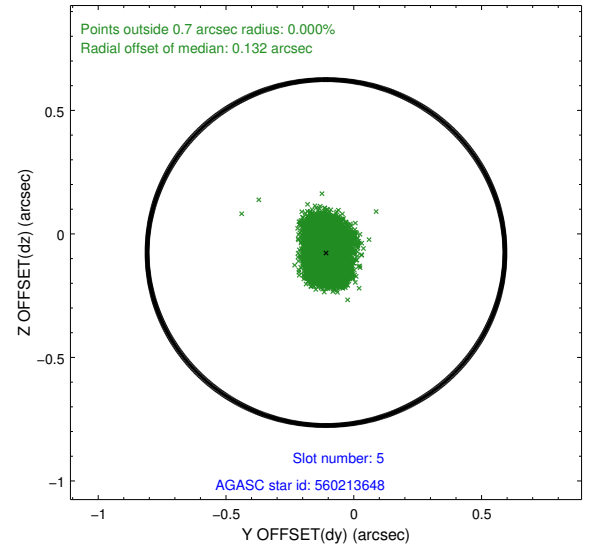
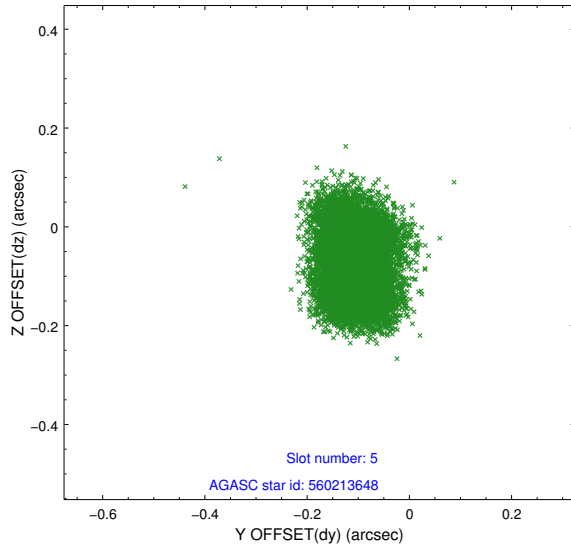
2.4.1 Slot 3



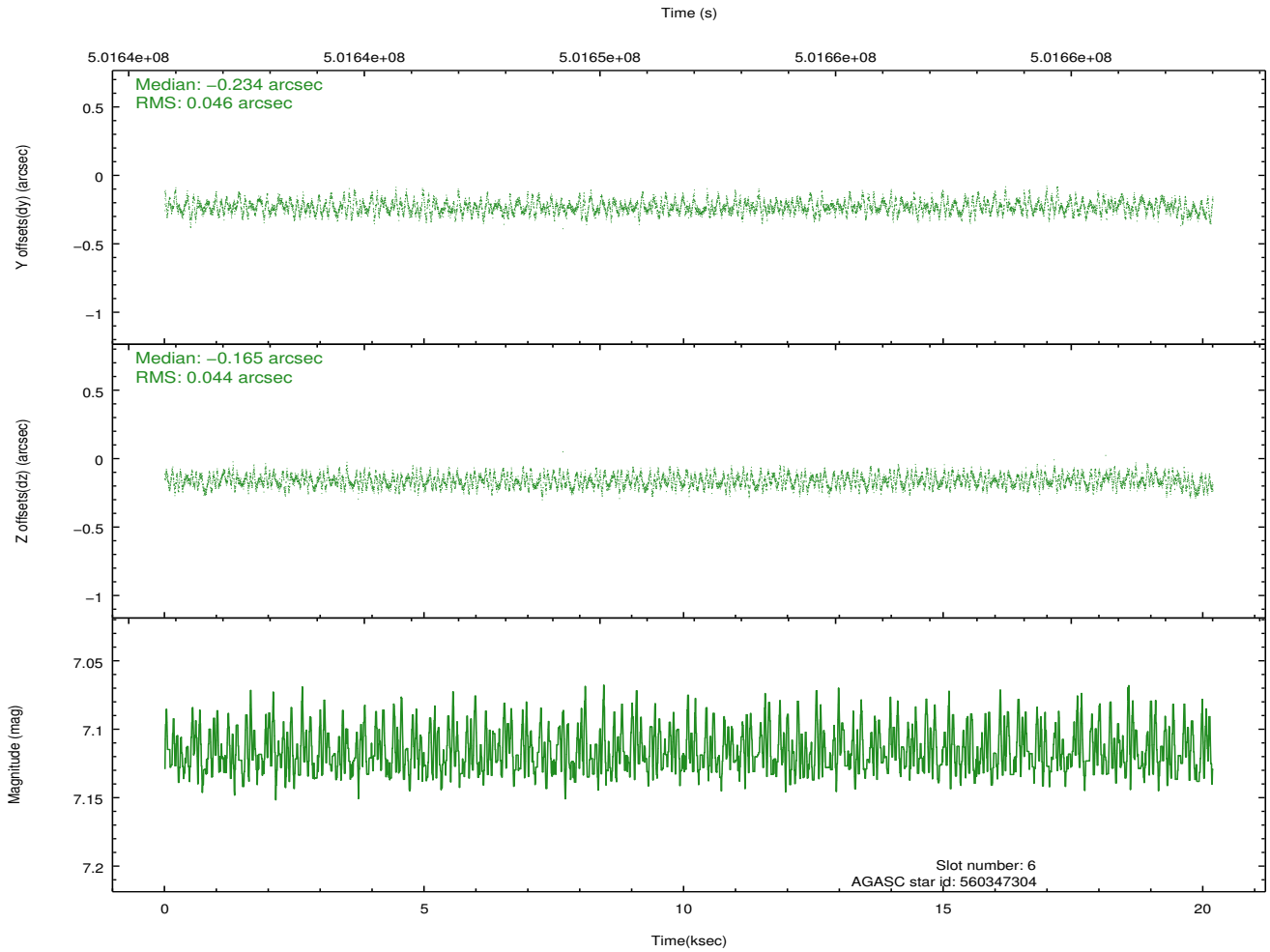
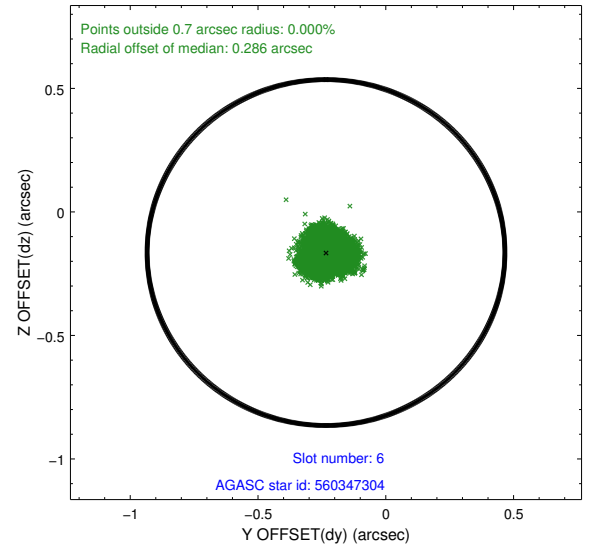
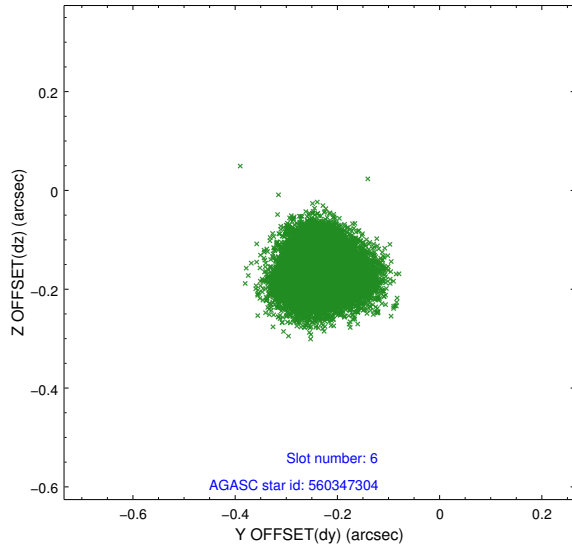
2.4.2 Slot 4



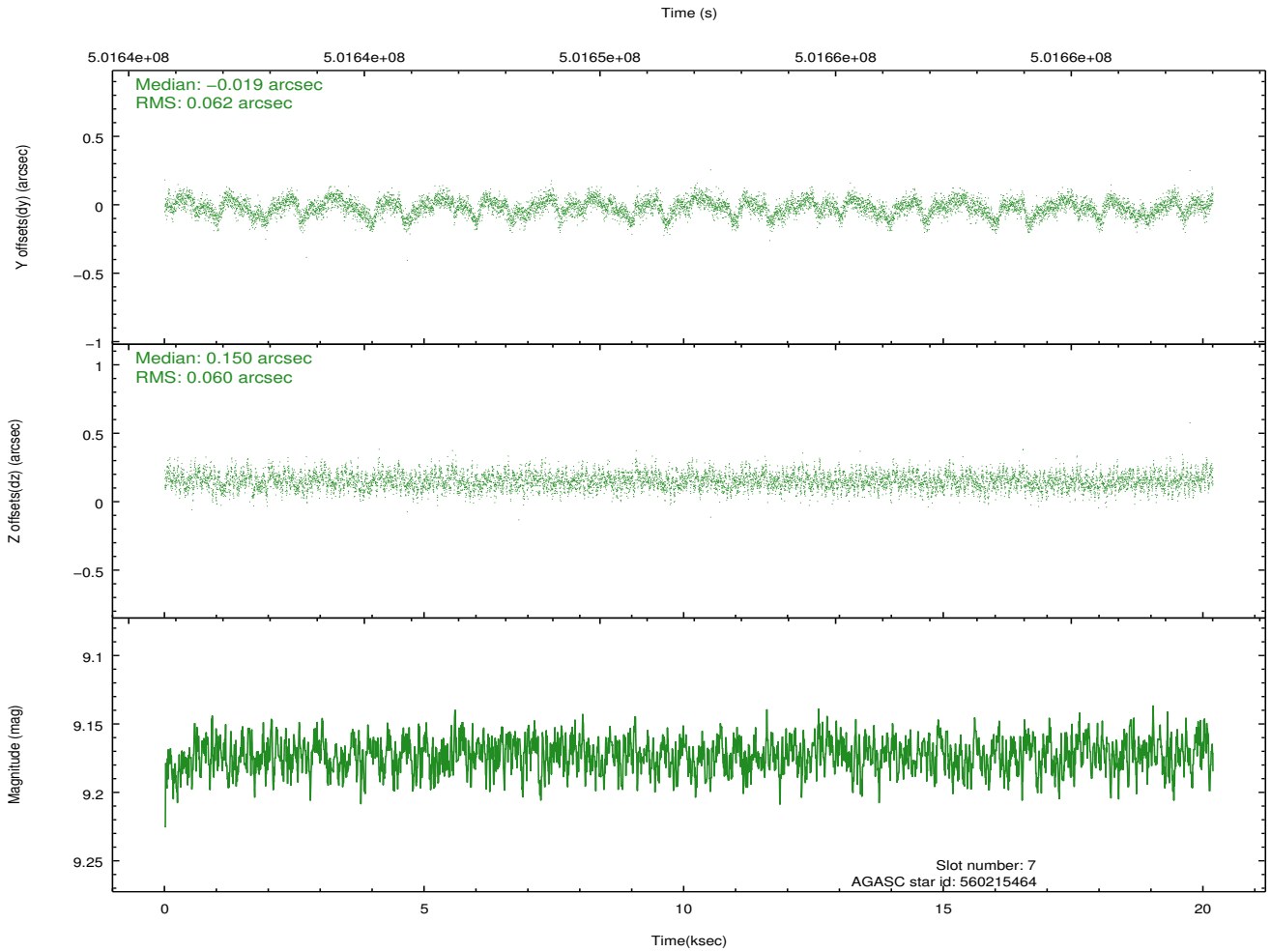
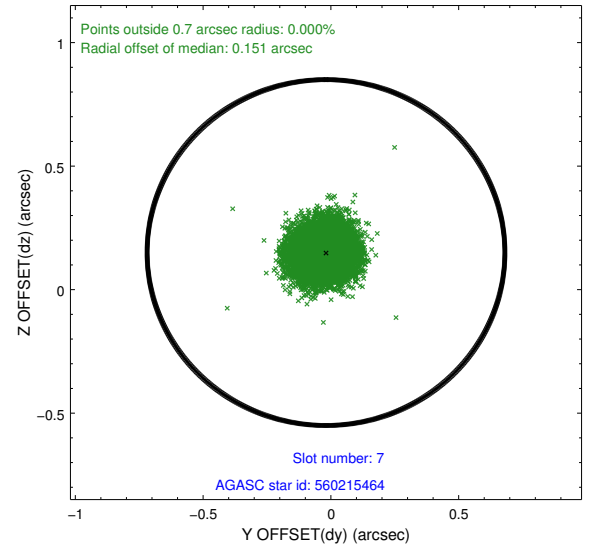
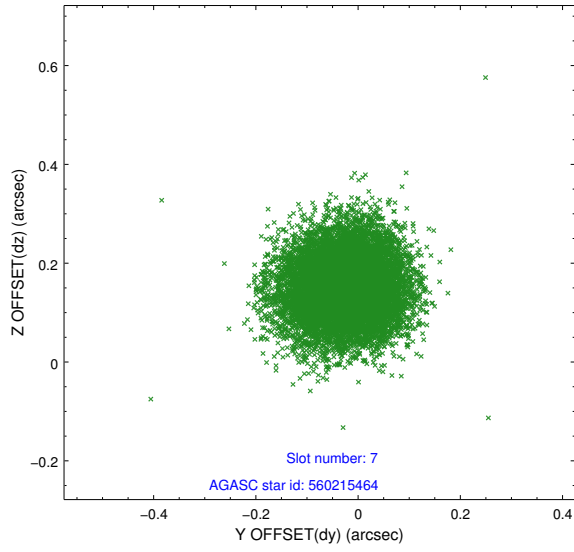
2.4.3 Slot 5



2.4.4 Slot 6

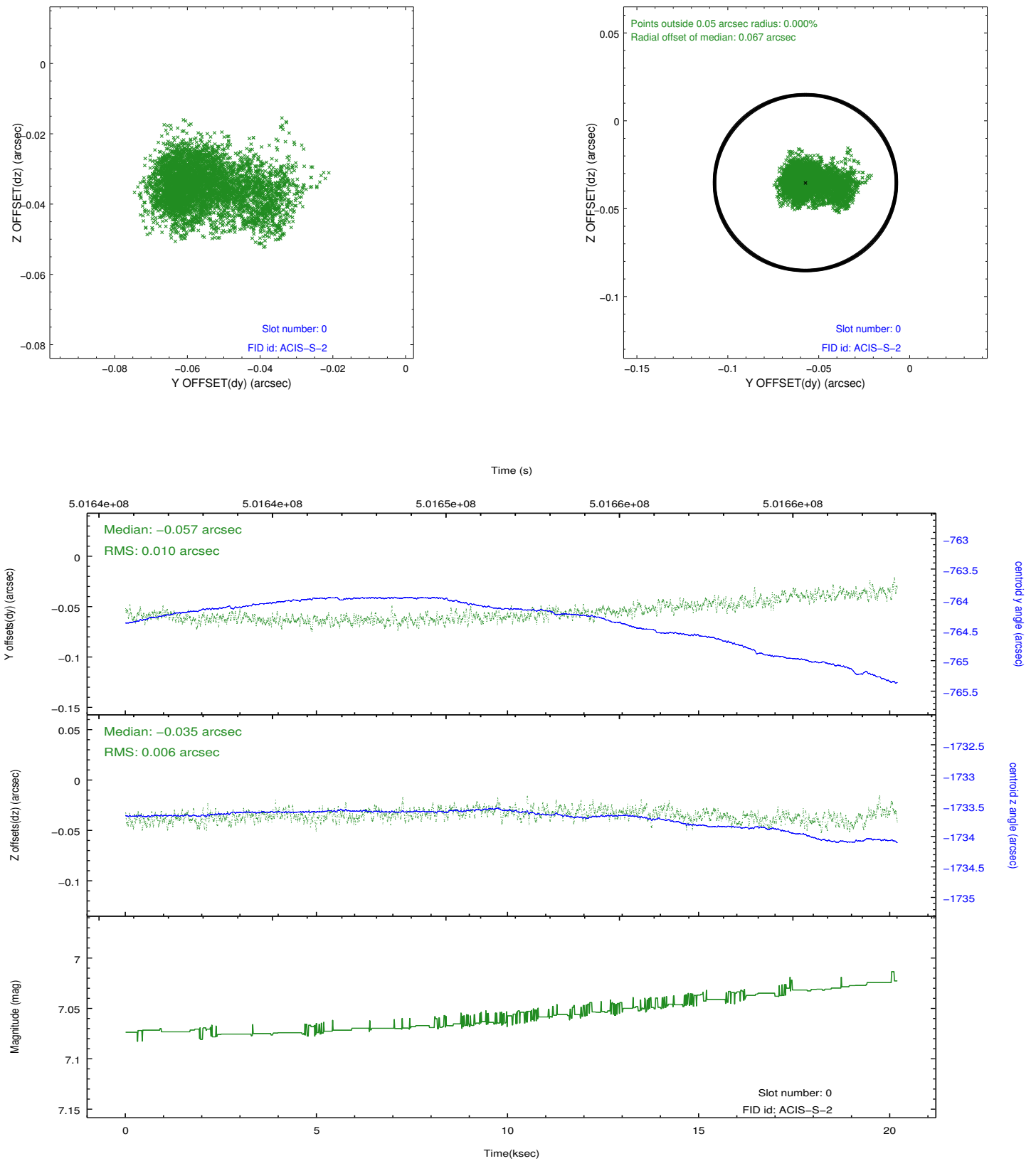


2.4.5 Slot 7

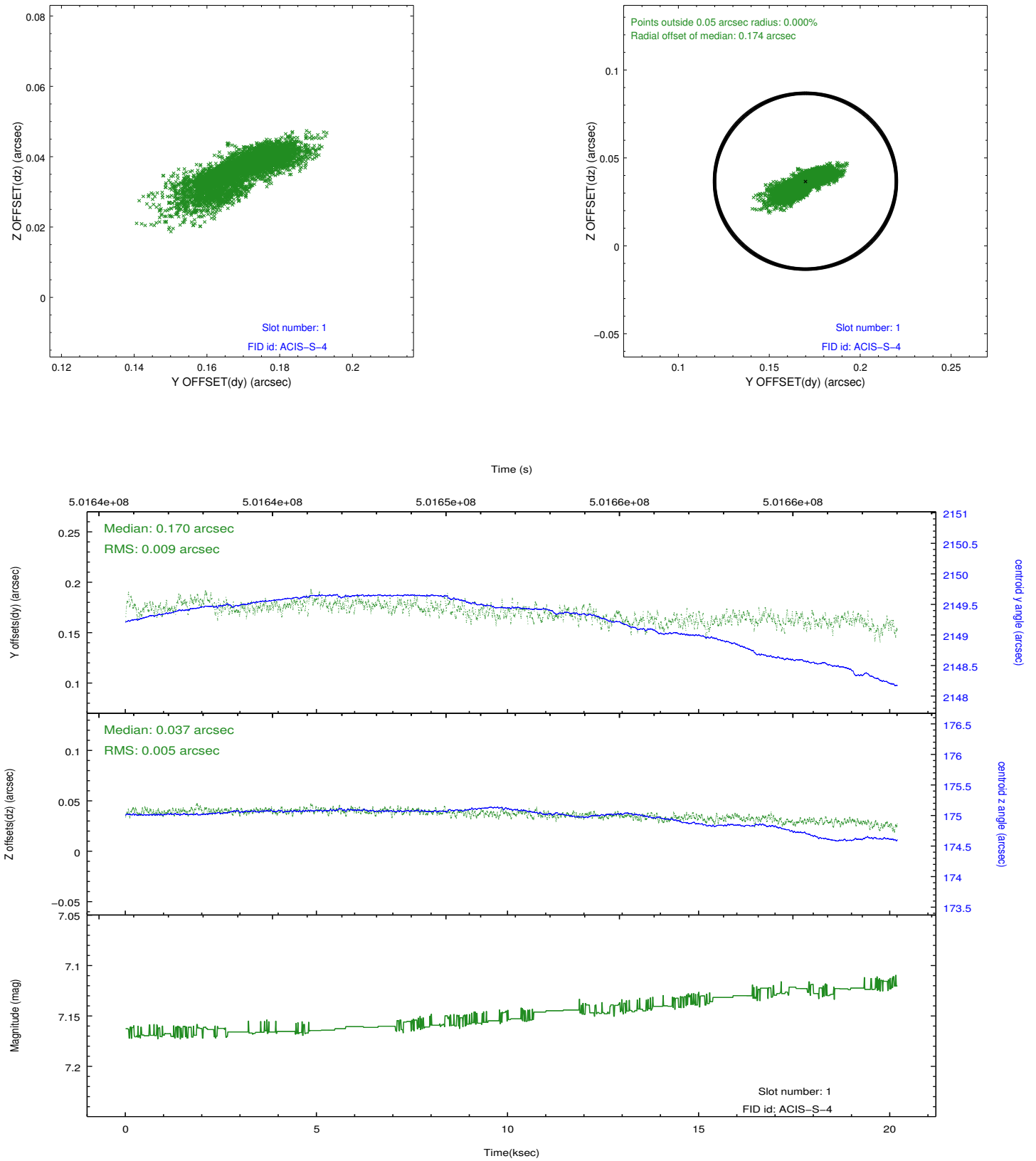


2.5 FID Slots

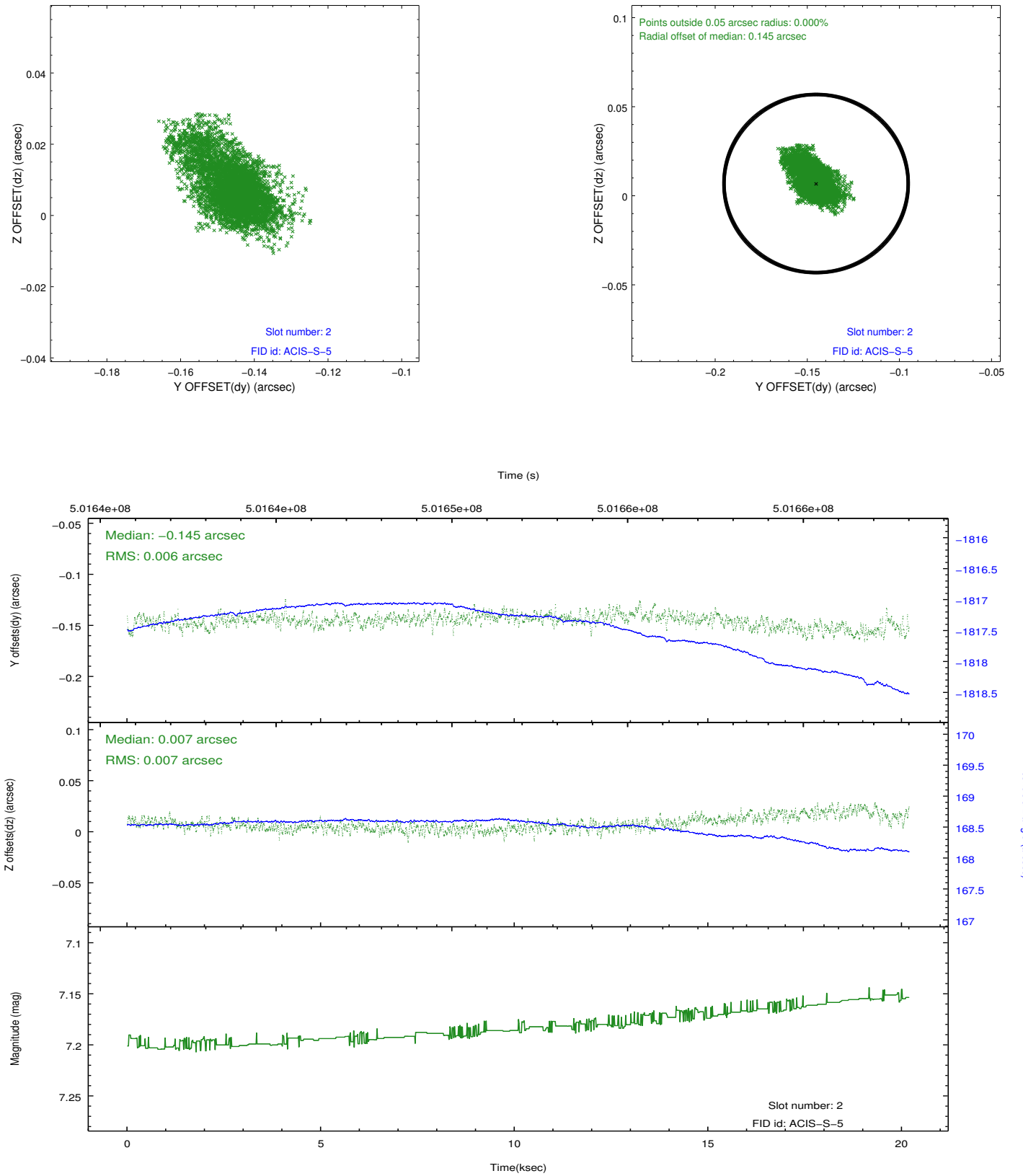
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.069598803759

A.2 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.