

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12461 - L2 Version 2
Chandra X-Ray Center

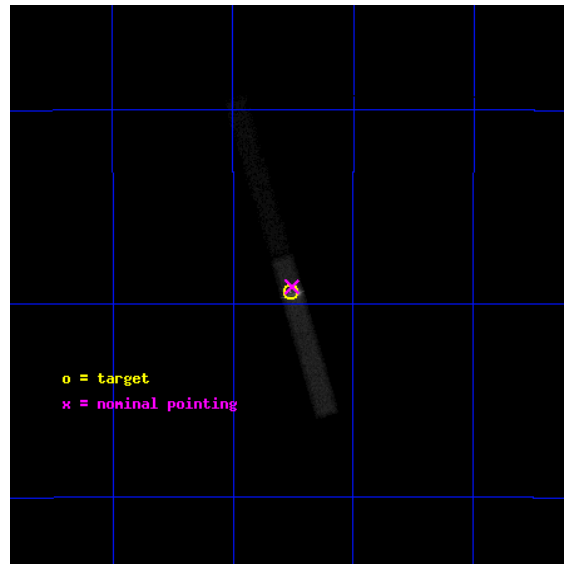
L2 Processing Date : Feb 11 2012

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1 Front

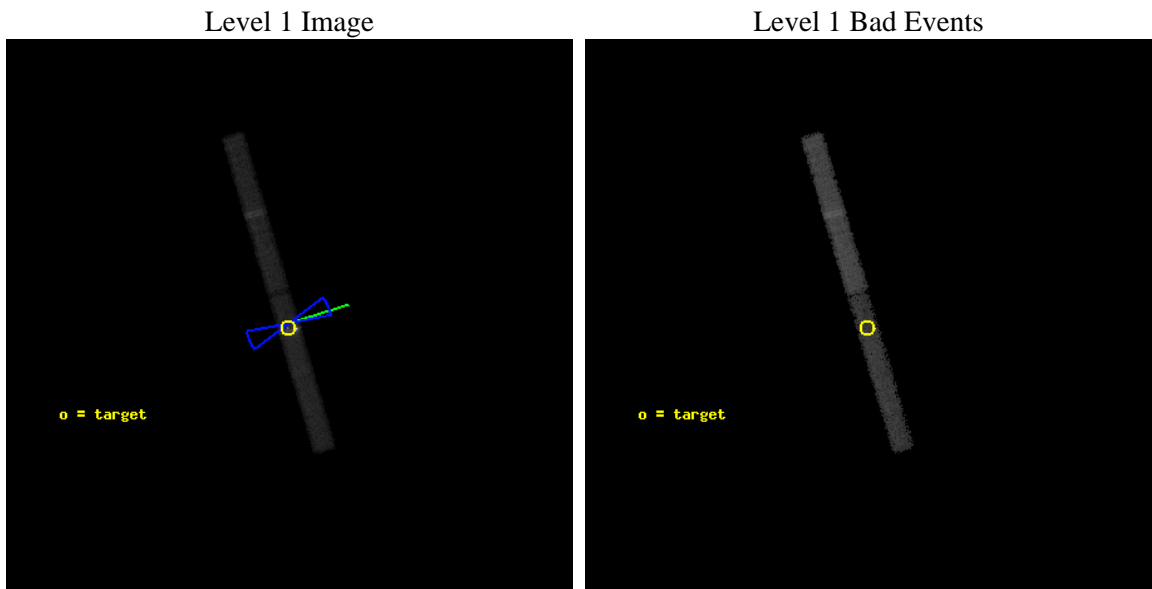
seq_num	401202	Sequence number
obs_id	12461	Observation id
title	The Unusual X-ray Binaries of the Globular Cluster NGC 6652	Propos
observer	Prof. Craig Heinke	Principal investigator
object	NGC 6652	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.940417	Observer's specified target RA [deg]
dec_targ	-32.990278	Observer's specified target Dec [deg]
ra_nom	278.93890258359	Nominal RA [deg]
dec_nom	-32.985589065955	Nominal Dec [deg]
roll_nom	73.453050158902	Nominal Roll [deg]
revision	2	Processing version of data
ontime	49044.0	Sum of GTIs [s]
livetime	45323.82078959	Livetime [s]
ontime6	49044.0	Sum of GTIs [s]
ontime7	49044.0	Sum of GTIs [s]
l2events	109329	Number of level 2 events



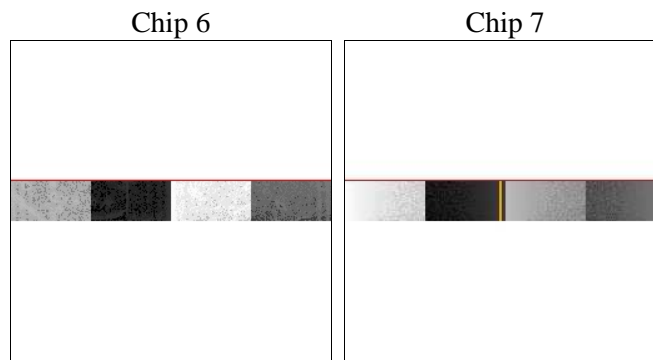
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	48995.587000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	49044.0	Sum of GTIs [s]
caldsver	4.4.7	 	ontime6	49044.0	Sum of GTIs [s]
date	2012-02-11T18:05:50	Date and time of file creation	ontime7	49044.0	Sum of GTIs [s]
revision	2	Processing version of data	l1events	230255	Number of level 1 events

2.1.4 Events

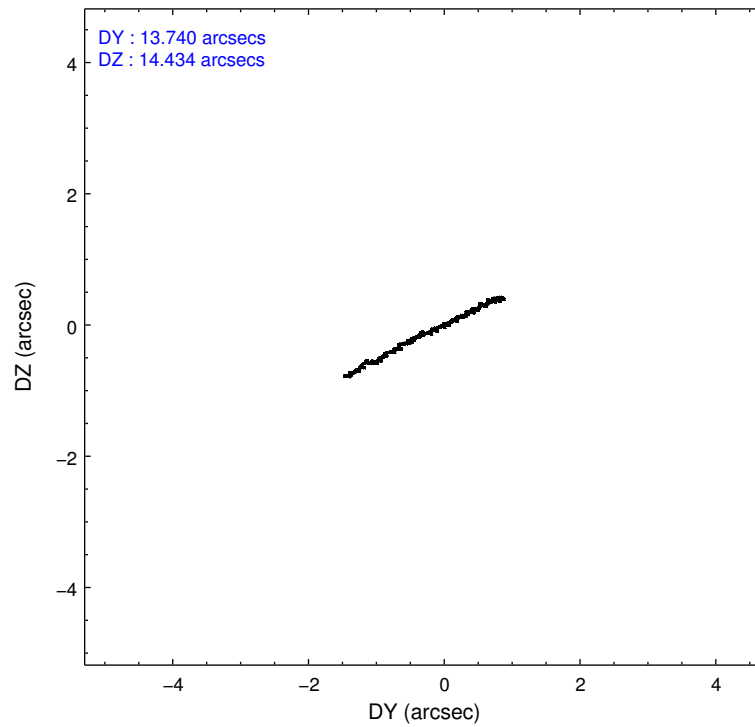
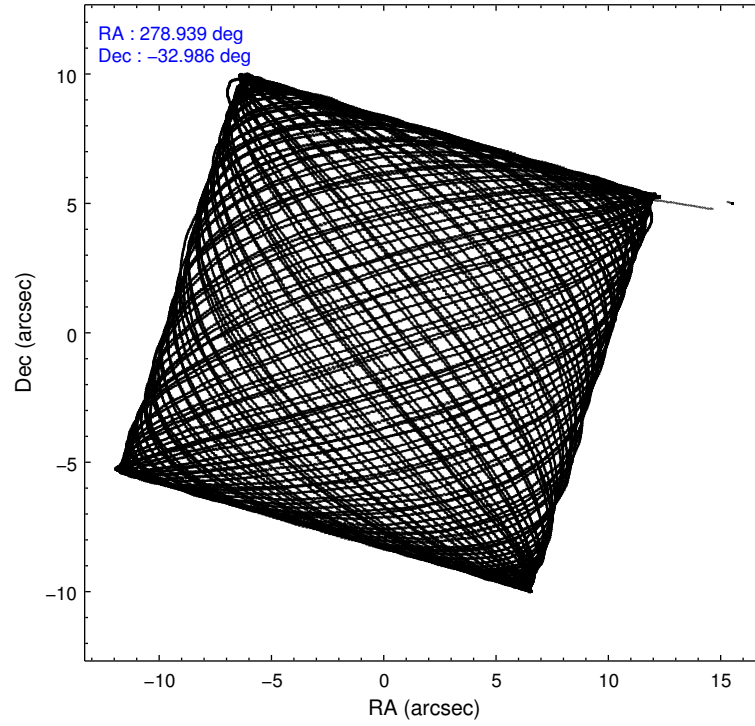
	ccd 6	ccd 7
level 1 events	56602	173653
rejected events	49654	64695
rejected %	87%	37%

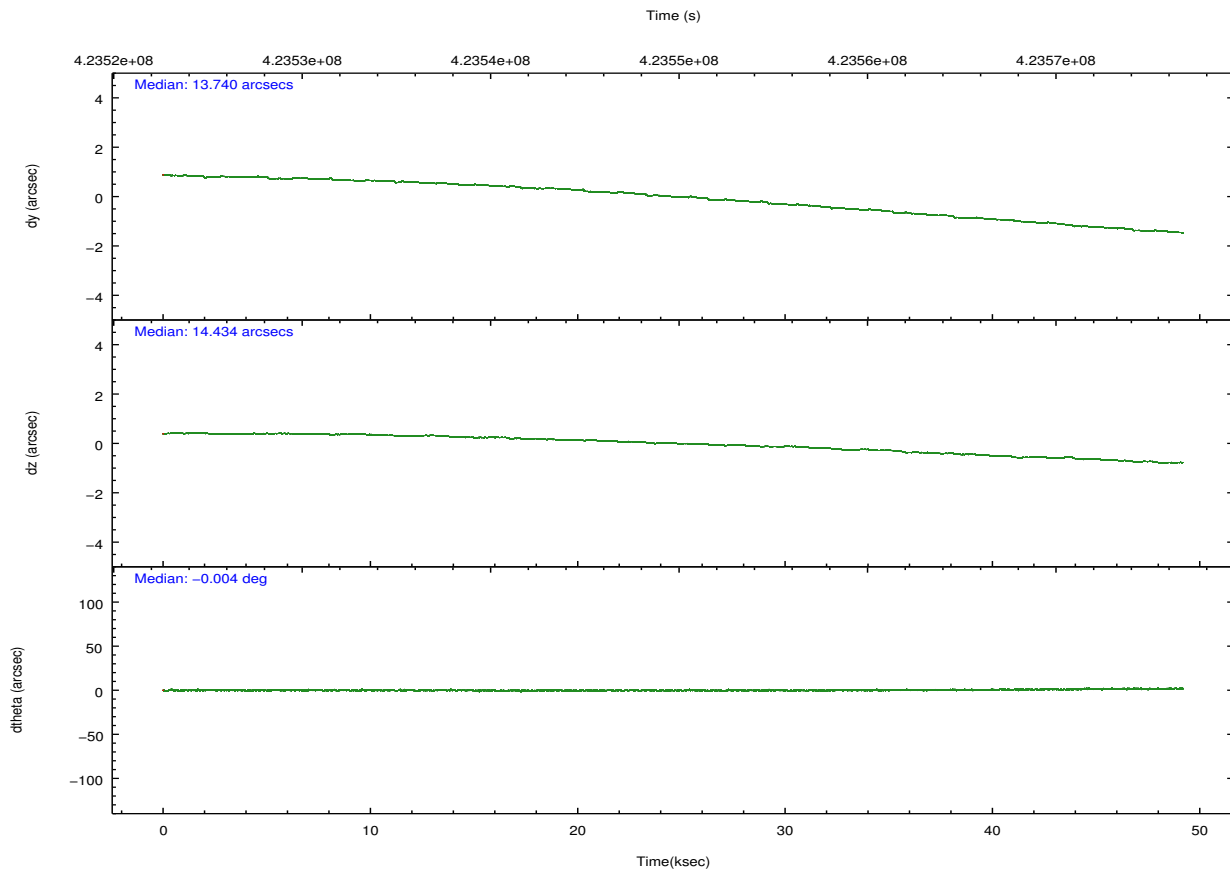
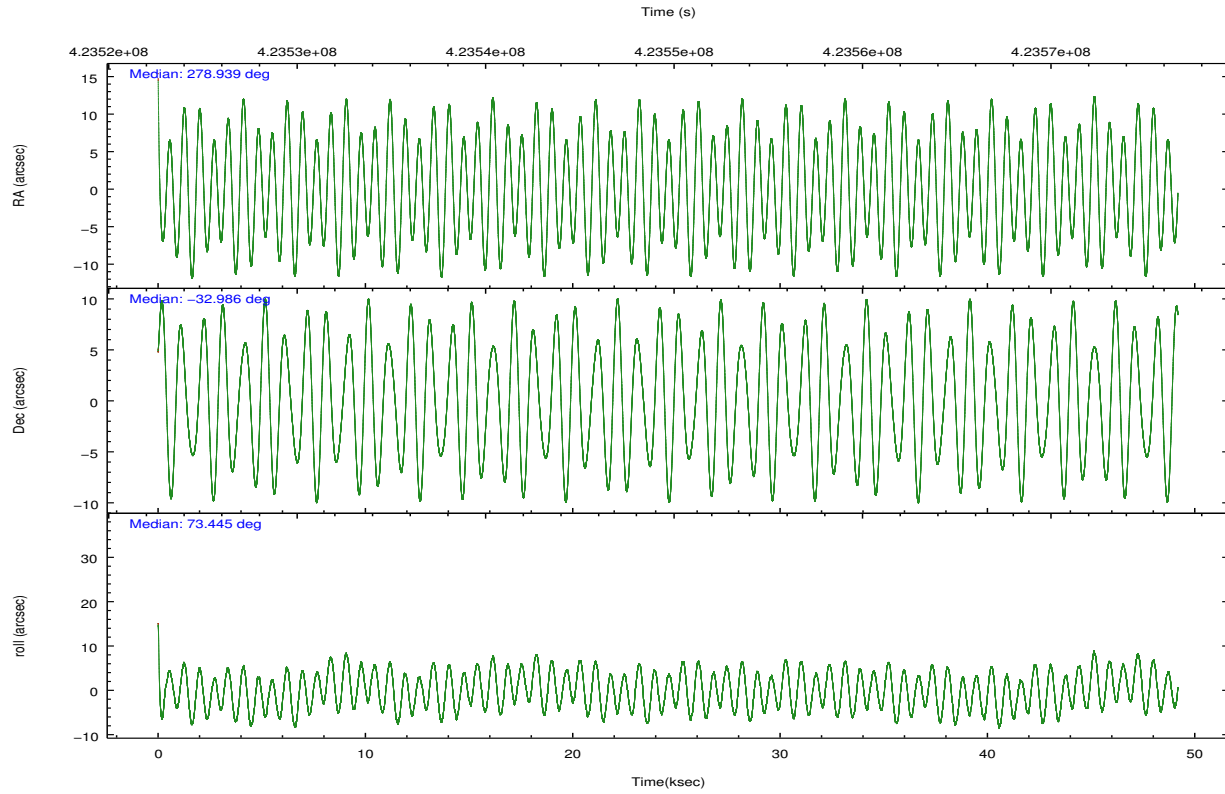
	ccd 6	ccd 7
grade 0 events	2181	17312
	3%	9%
grade 1 events	20	2133
	0%	1%
grade 2 events	1077	23519
	1%	13%
grade 3 events	1253	11544
	2%	6%
grade 4 events	1270	11148
	2%	6%
grade 5 events	1872	16496
	3%	9%
grade 6 events	1167	45443
	2%	26%
grade 7 events	47762	46058
	84%	26%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-67	ACIS-67	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	278.946926	278.9389025835869	CCD I2 on	N	N
[deg] Pointing Dec	-33.012108	-32.98558906595536	CCD I3 on	N	N
[deg] Pointing Roll	73.300790	73.45305015890172	CCD S0 on	N	N
[deg] Roll angle	66.500000	66.500000	CCD S1 on	N	N
[deg] Roll tolerance	13.500000	13.500000	CCD S2 on	O1	Y
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S4 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S5 on	N	N
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	Number of optional ACIS chips dropped	0	0
[mm] SIM translation stage offset	0	0.00754346686406393	On-chip summing requested	N	N
[s] Observation start time (MET)	423525282.184000	423524194.63663	Subarray requested	CUSTOM	1/8
Observation start date	2011-06-03T21:53:36	2011-06-03T21:36:34	Subarray start row	449	449
[s] Observation end time (MET)	423574278.184000	423574503.68925	Subarray row count	128	128
Observation end date	2011-06-04T11:30:12	2011-06-04T11:35:03	Alternating exposures requested	N	N
Read mode	TIMED	TIMED	[s] Primary exposure time	0.000000	0.5

2.3 Aspect



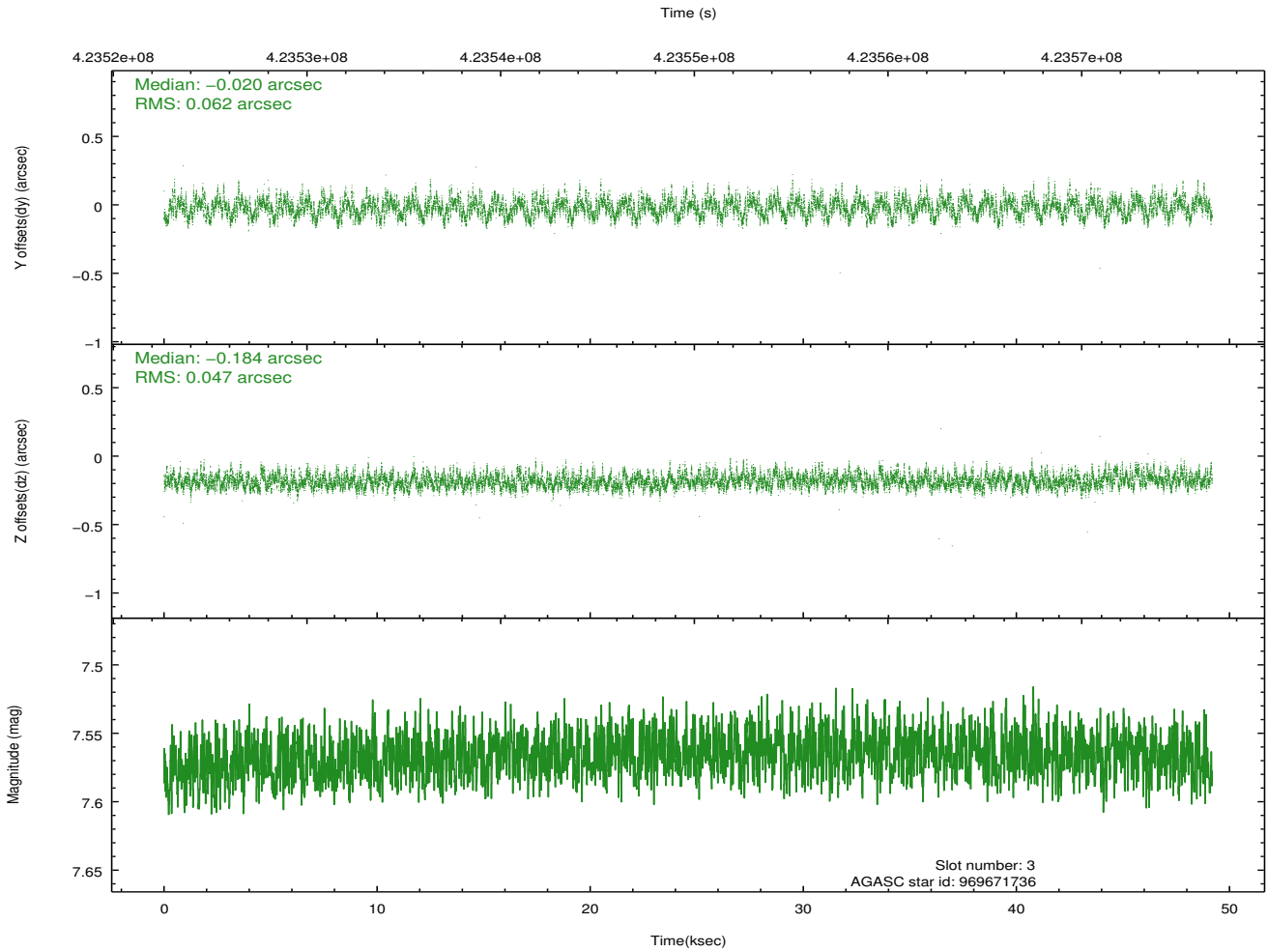
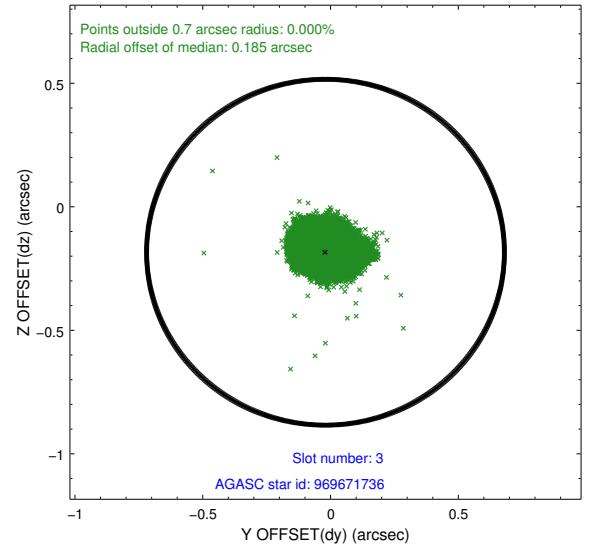
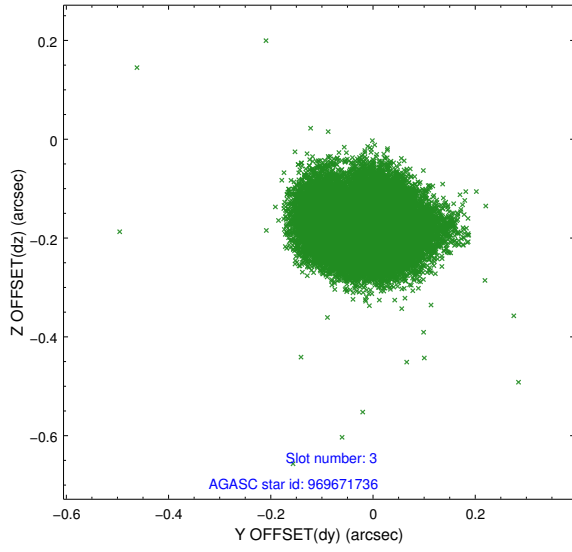


Slot Statistics

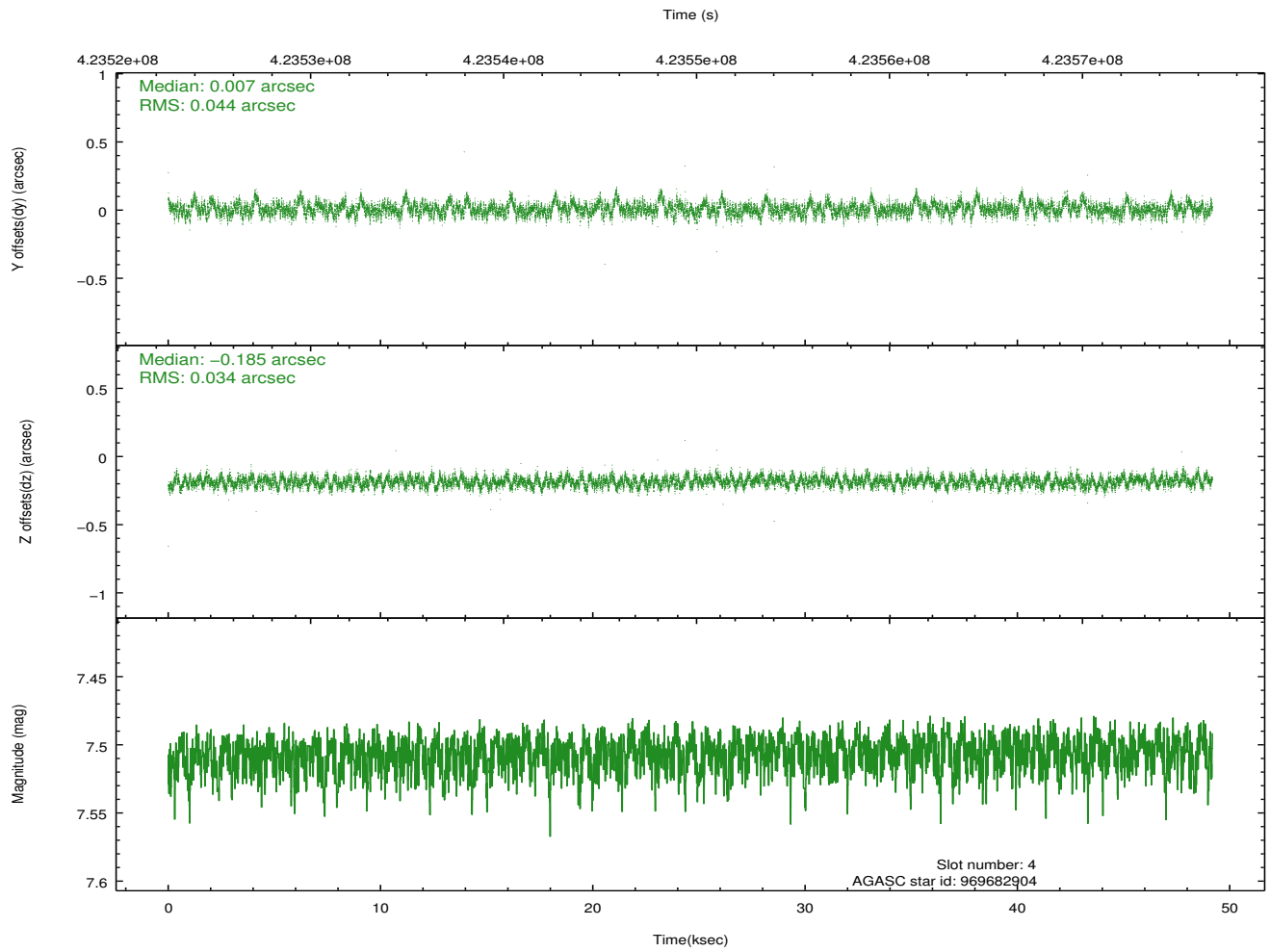
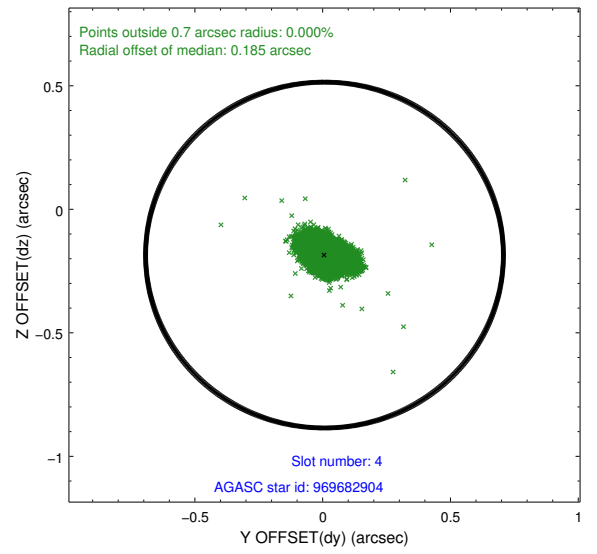
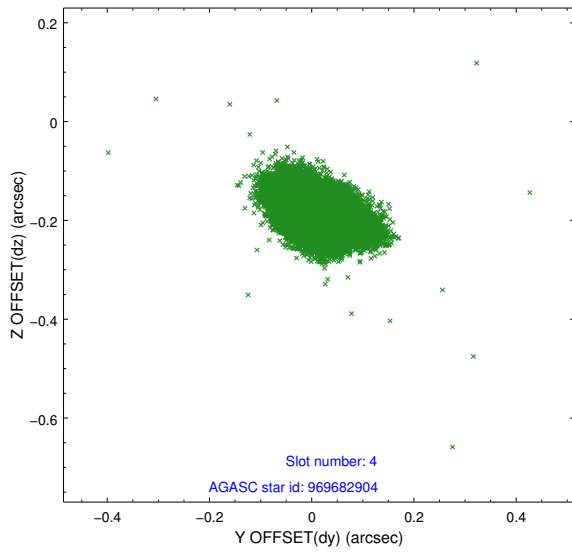
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.99	11997	-0.067	-0.052	0.029	0.037	0.000000	0.000000	-766.62	-1735.80
1	FID	ACIS-S-4	7.08	11996	0.213	0.048	0.028	0.065	0.000000	0.000000	2146.91	172.81
2	FID	ACIS-S-5	7.10	11997	-0.166	0.020	0.021	0.028	0.000000	0.000000	-1819.60	166.41
3	GUIDE	969671736	7.57	23985	-0.020	-0.184	0.084	0.131	278.521339	-32.961135	-196.17	1283.25
4	GUIDE	969682904	7.51	23989	0.007	-0.185	0.058	0.097	278.298892	-33.428263	-2000.29	1432.49
5	GUIDE	969683232	7.66	23990	0.087	0.035	0.056	0.089	278.971327	-33.175159	-541.13	-238.81
6	GUIDE	971423352	7.50	23993	-0.157	0.084	0.074	0.124	279.582511	-32.685816	1671.77	-1508.68
7	GUIDE	971381680	9.14	23972	0.082	0.252	0.095	0.153	279.401665	-33.691839	-1954.76	-2008.77

2.4 Star Slots

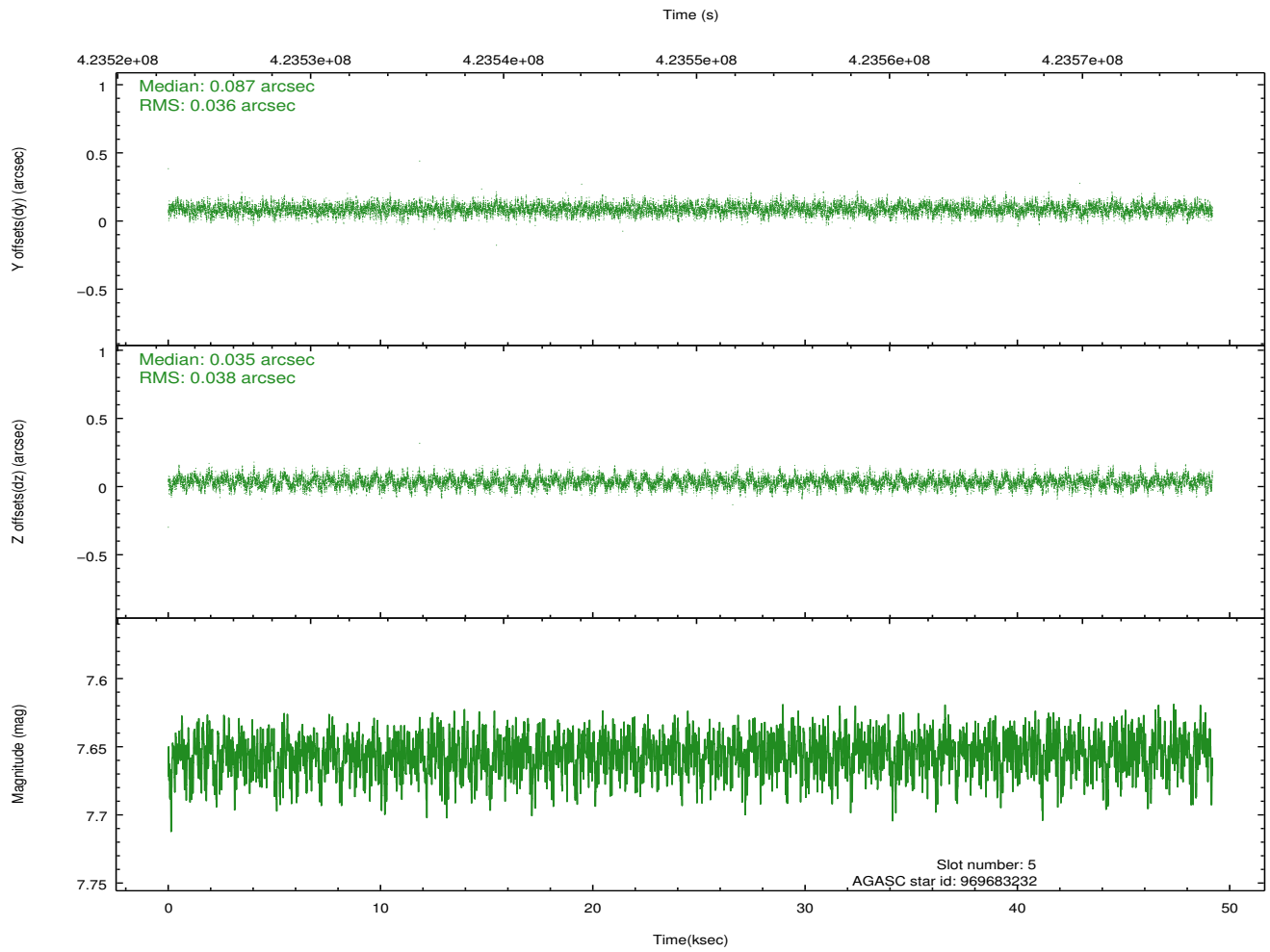
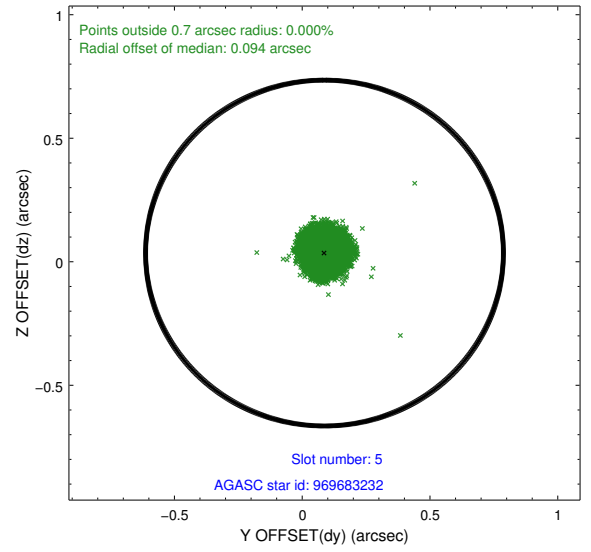
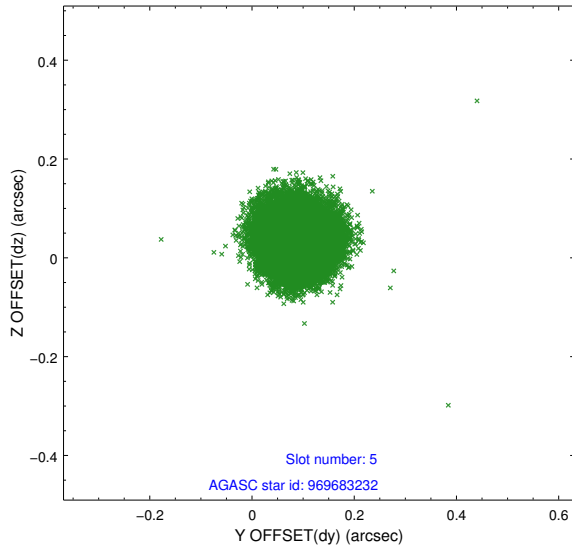
2.4.1 Slot 3



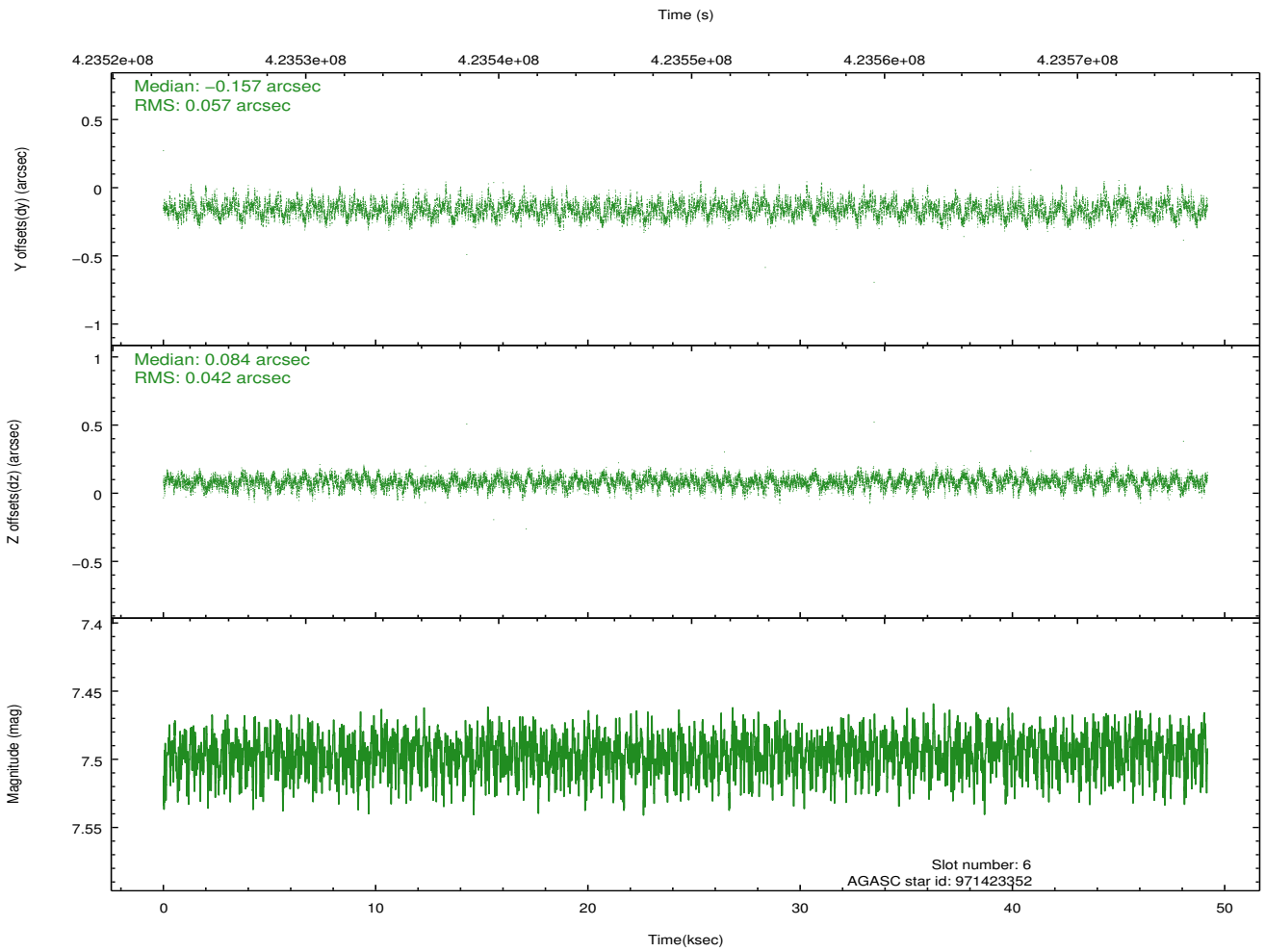
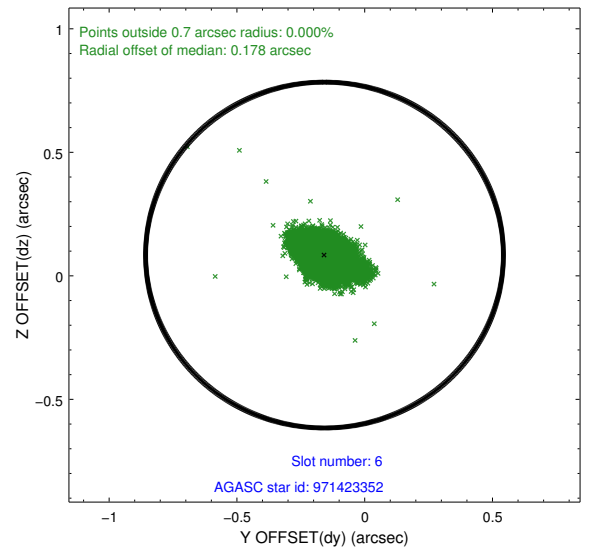
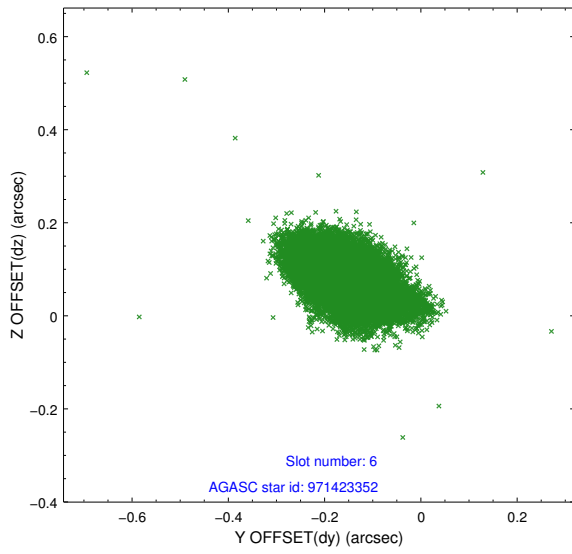
2.4.2 Slot 4



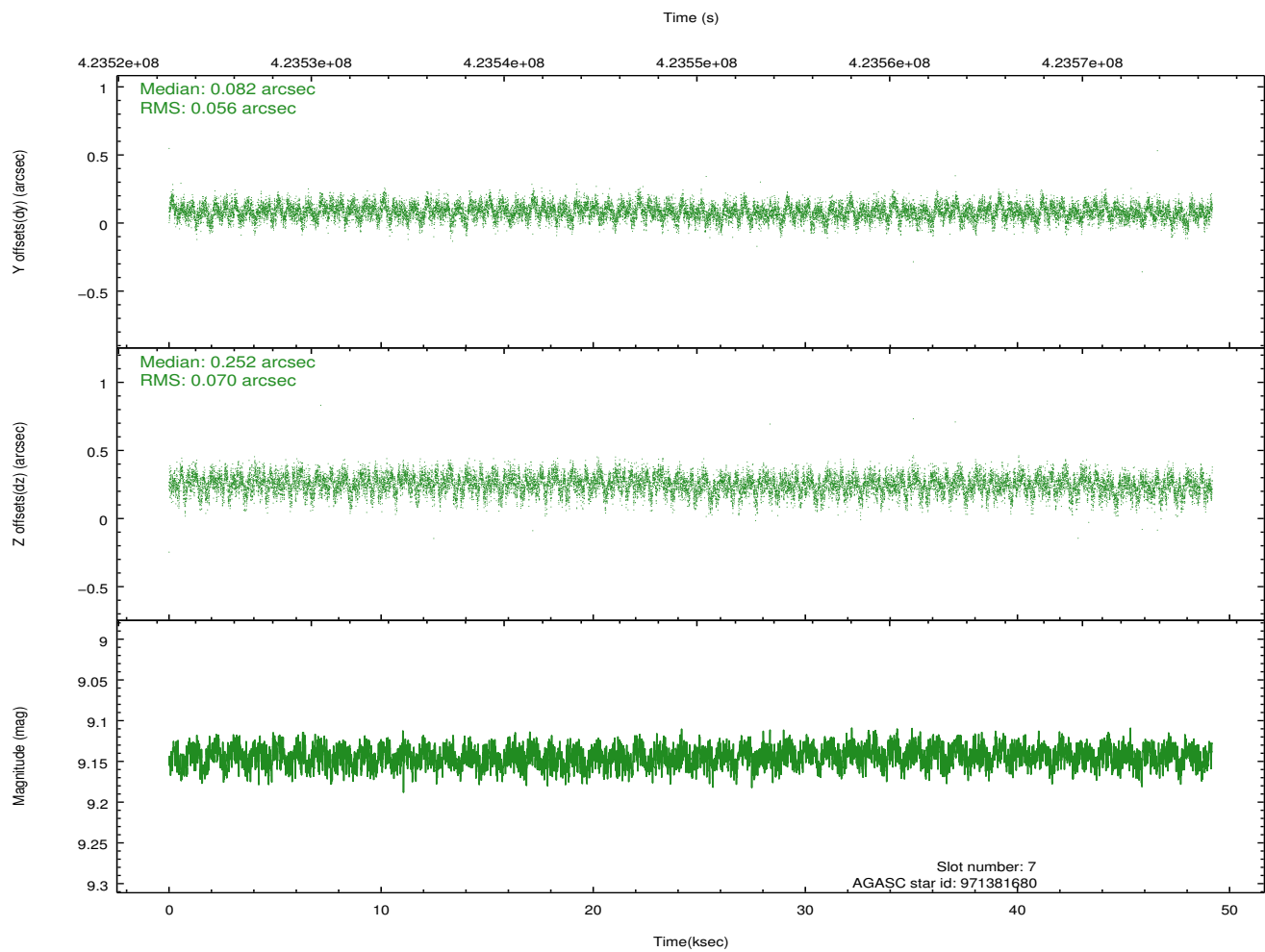
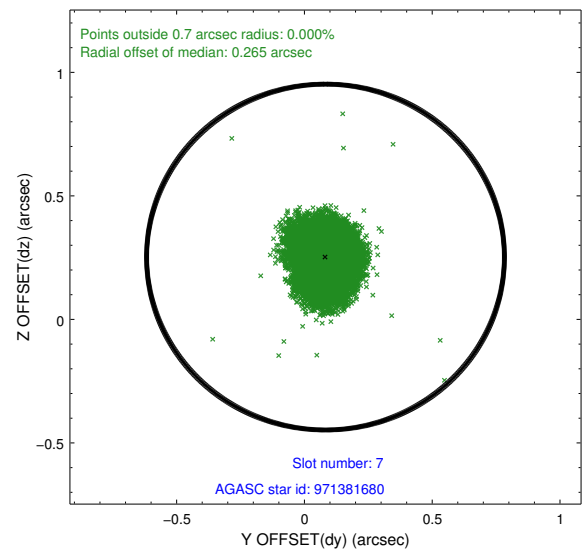
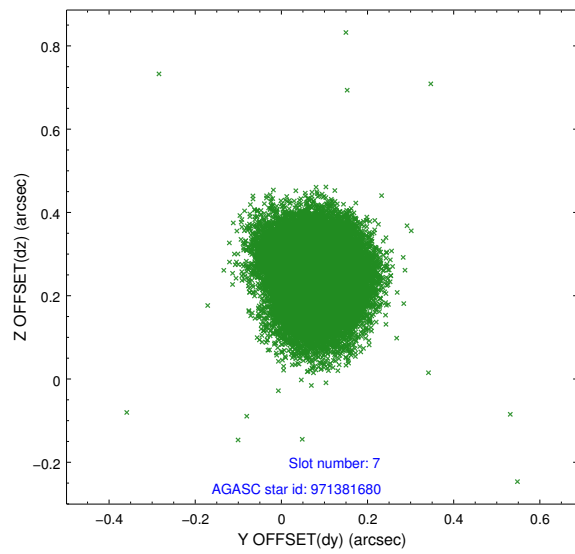
2.4.3 Slot 5



2.4.4 Slot 6

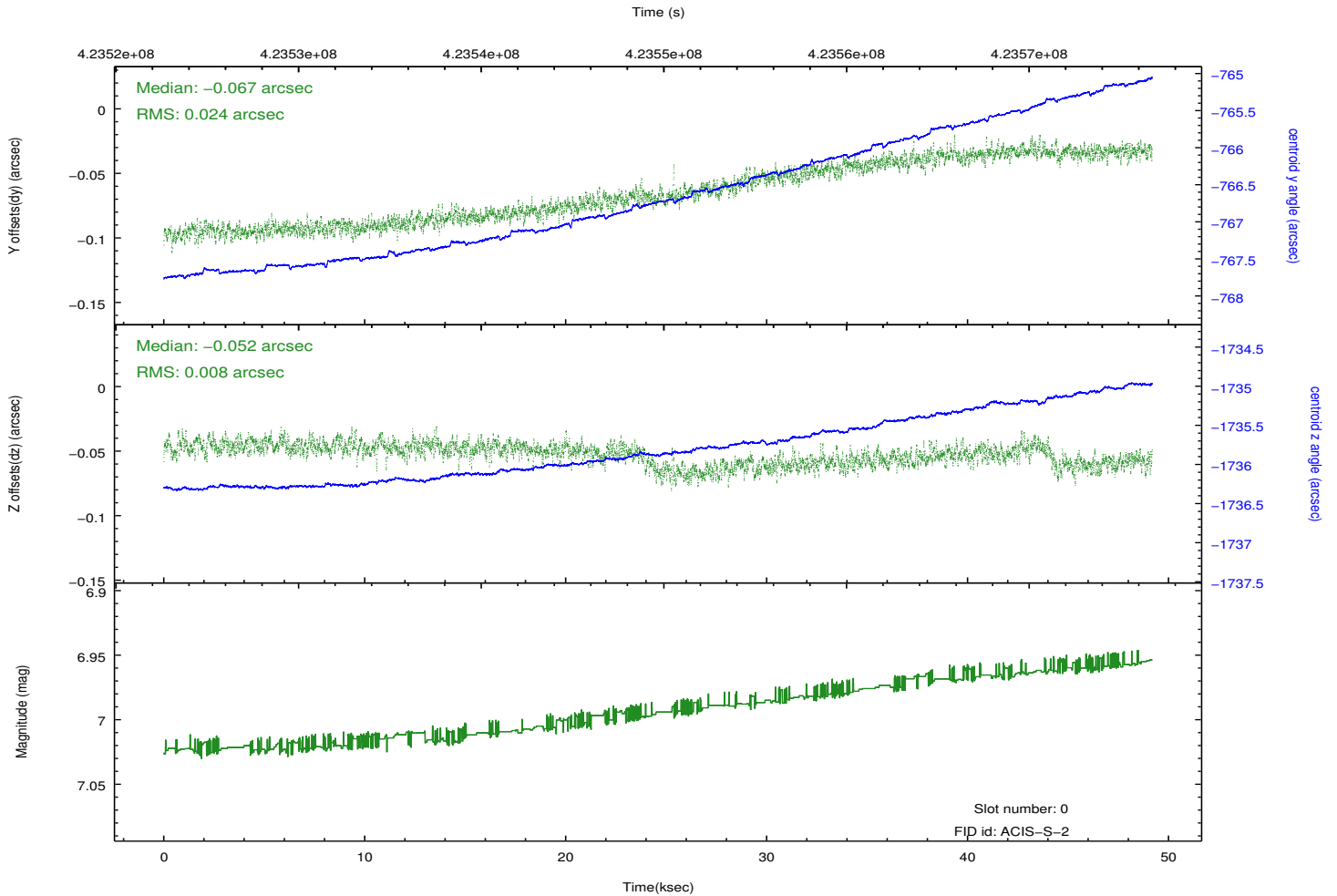
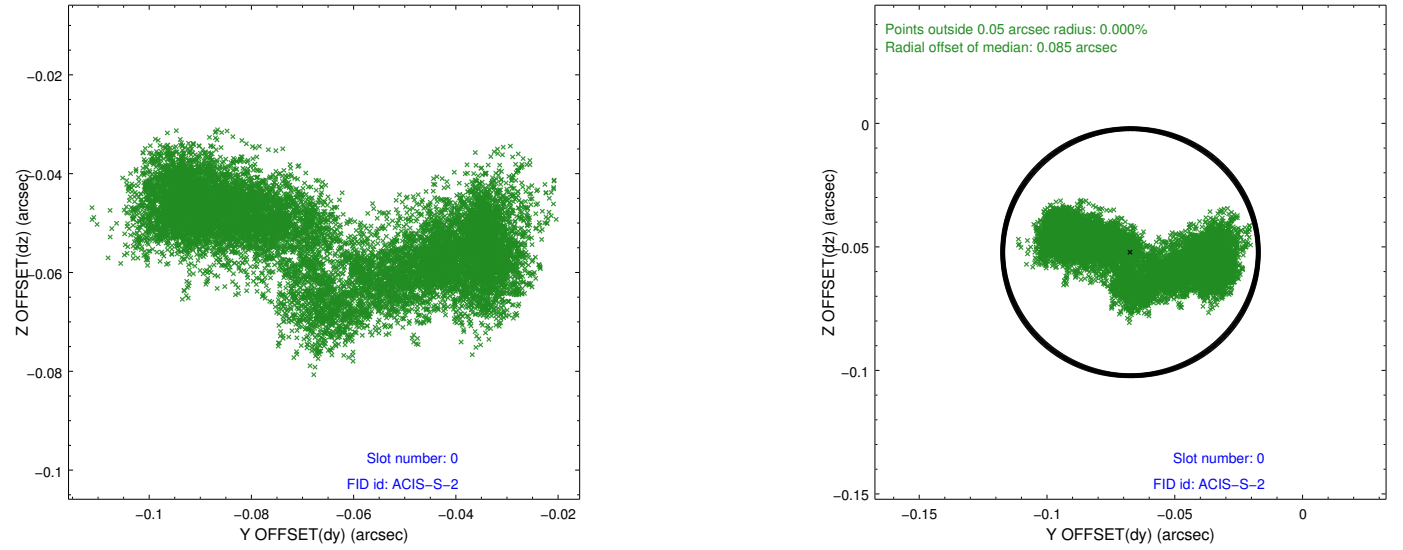


2.4.5 Slot 7

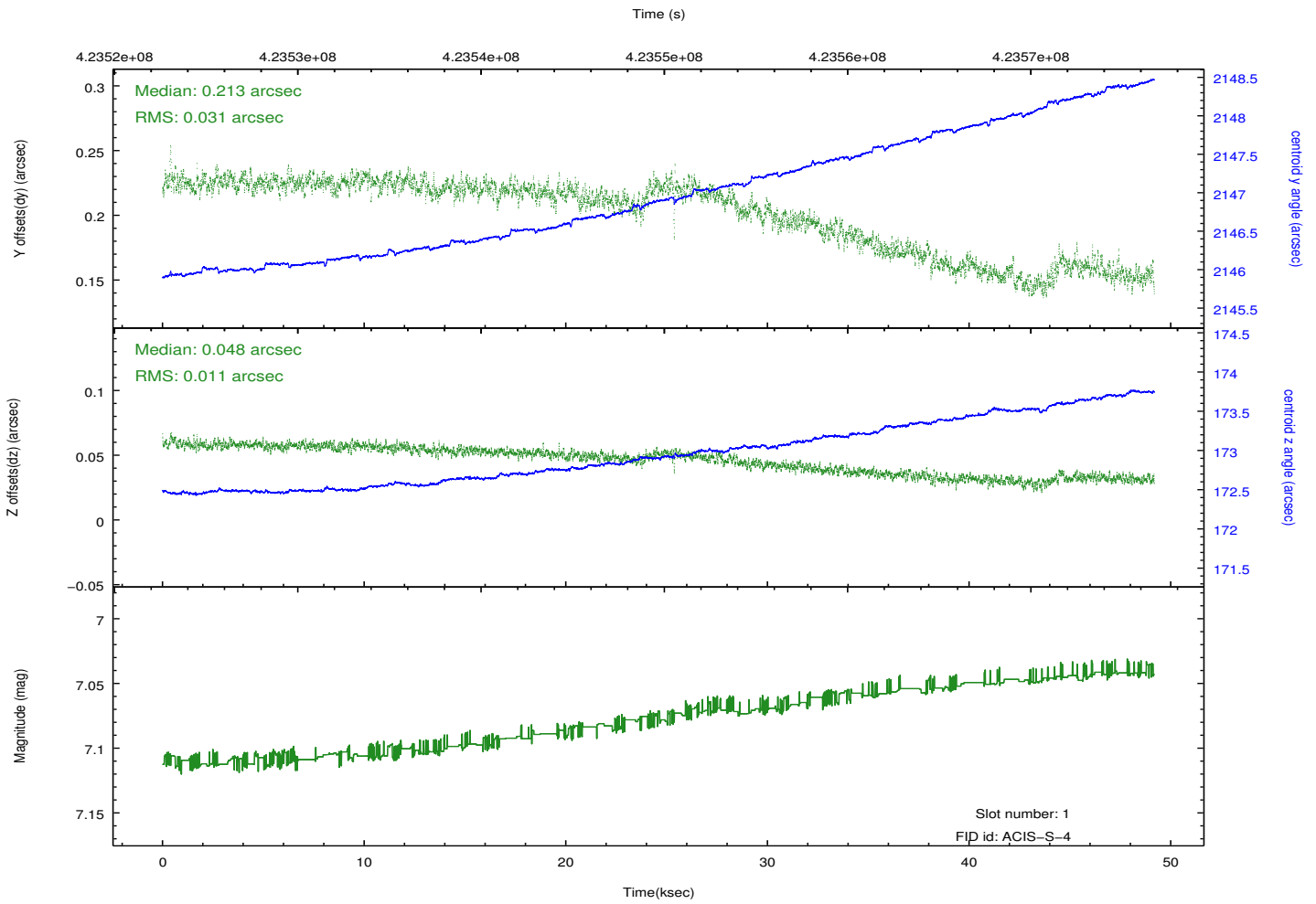
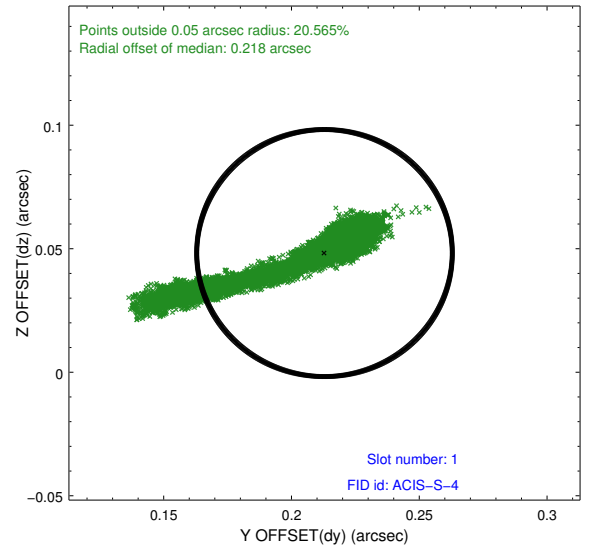
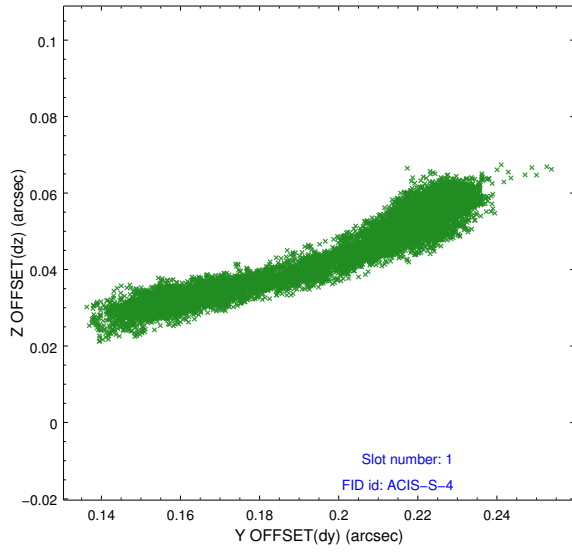


2.5 FID Slots

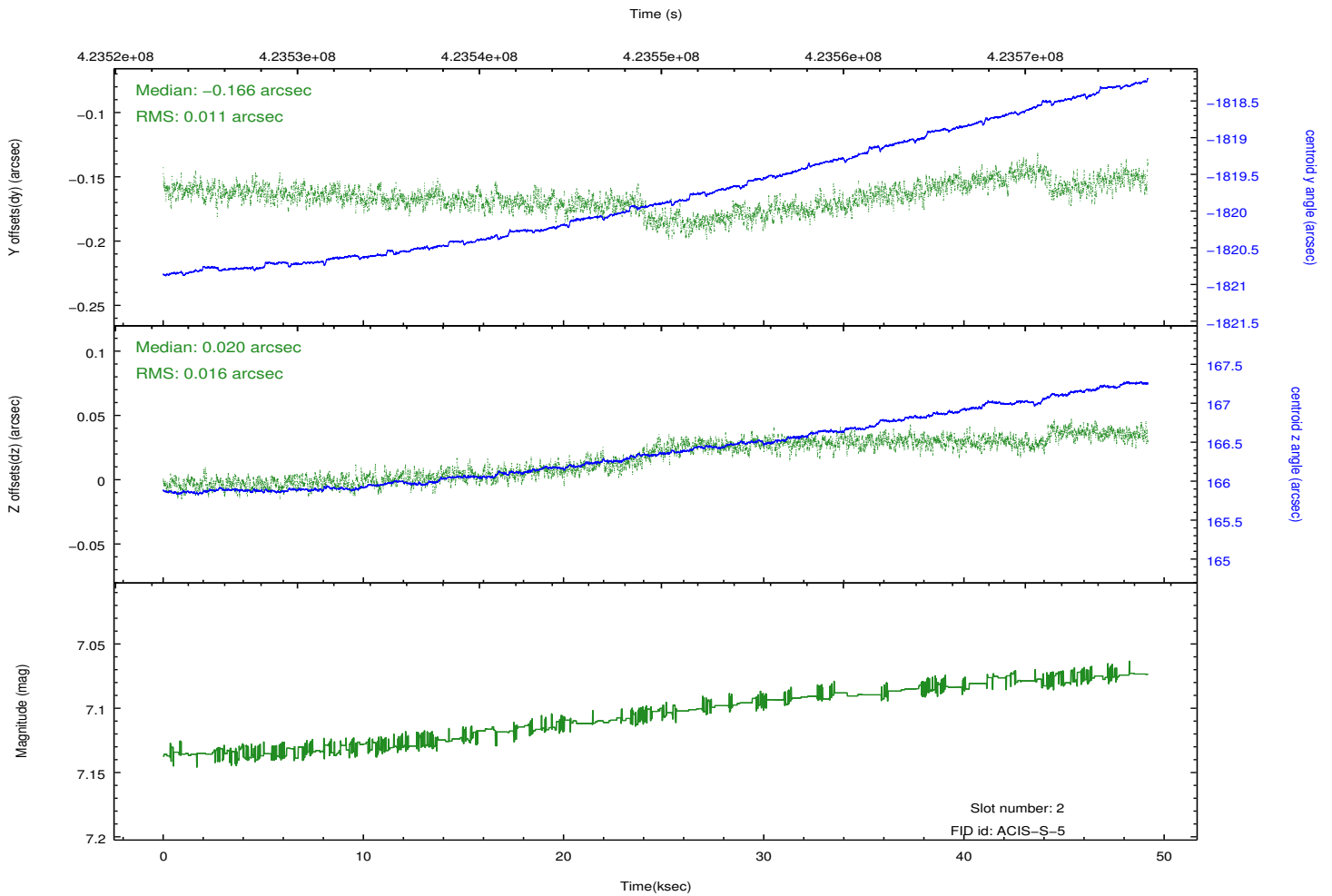
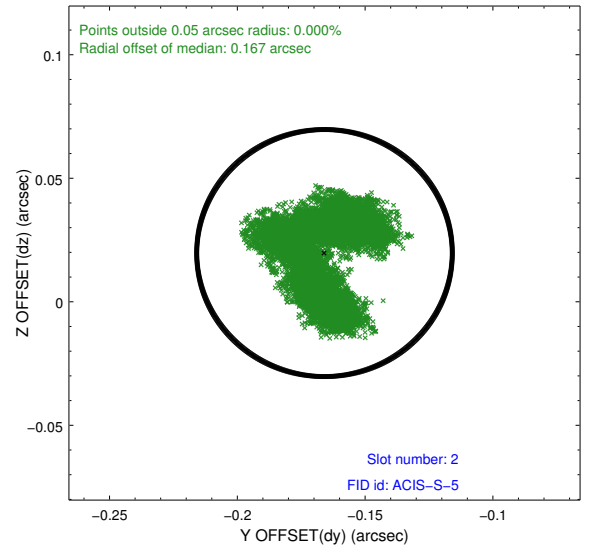
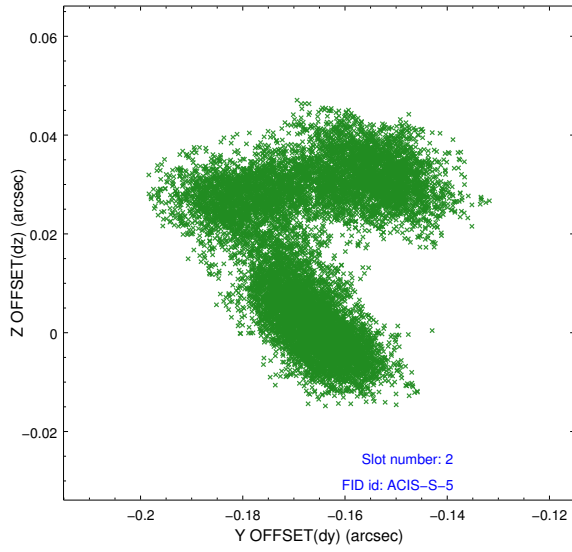
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.044

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.

=====

Roll constraint met.