

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12967 - L2 Version 2
Chandra X-Ray Center

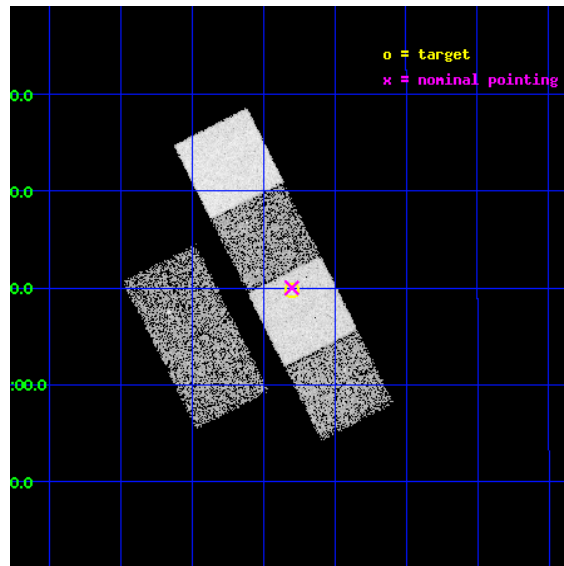
L2 Processing Date : Feb 2 2012

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1 Front

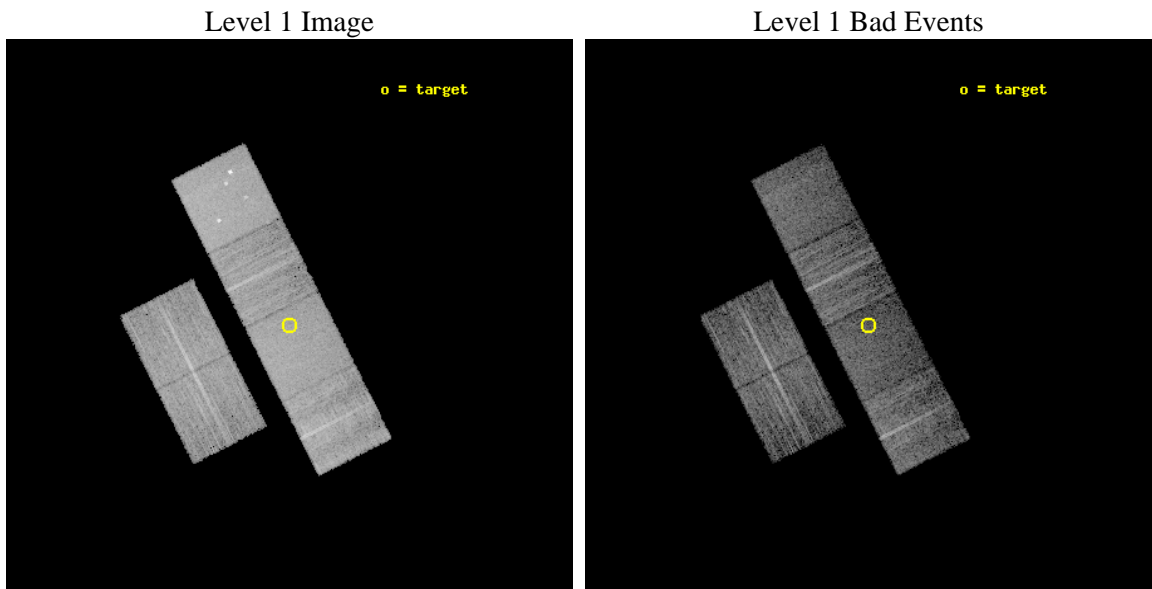
seq_num	600935	Sequence number
obs_id	12967	Observation id
title	X-rays from Isolated Elliptical Galaxies	Proposal title
observer	Dr. DAVID BUOTE	Principal investigator
object	PGC 57841	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	244.950417	Observer's specified target RA [deg]
dec_targ	5.162194	Observer's specified target Dec [deg]
ra_nom	244.94998471108	Nominal RA [deg]
dec_nom	5.1669773292042	Nominal Dec [deg]
roll_nom	63.156643955865	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7545.5999719501	Sum of GTIs [s]
livetime	7450.0530416904	Livetime [s]
ontime2	7545.5999719501	Sum of GTIs [s]
ontime3	7545.5999719501	Sum of GTIs [s]
ontime5	7545.5999719501	Sum of GTIs [s]
ontime6	7545.5999719501	Sum of GTIs [s]
ontime7	7545.5999719501	Sum of GTIs [s]
ontime8	7545.5999719501	Sum of GTIs [s]
l2events	90658	Number of level 2 events



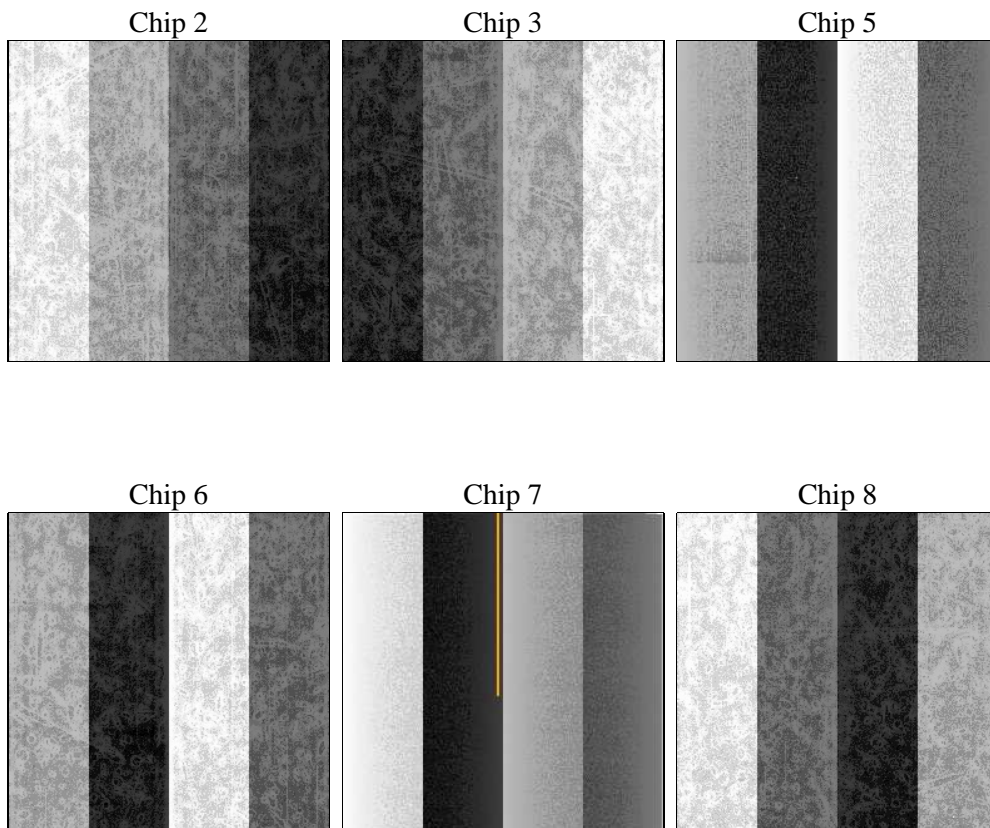
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	7545.5999719501	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	7545.5999719501	Sum of GTIs [s]
date	2012-02-03T00:28:38	Date and time of file creation	ontime3	7545.5999719501	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	7545.5999719501	Sum of GTIs [s]
			ontime6	7545.5999719501	Sum of GTIs [s]
			ontime7	7545.5999719501	Sum of GTIs [s]
			ontime8	7545.5999719501	Sum of GTIs [s]
			l1events	387201	Number of level 1 events

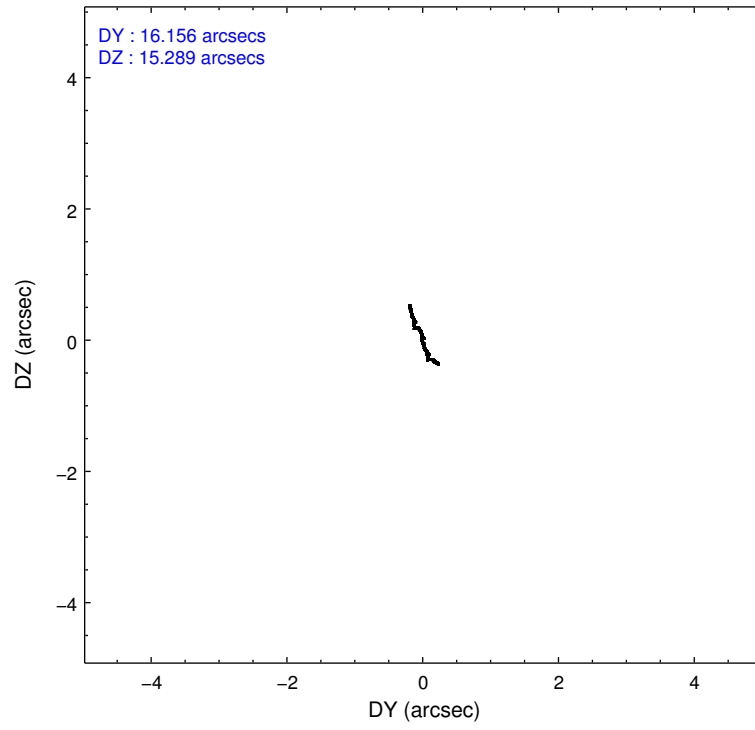
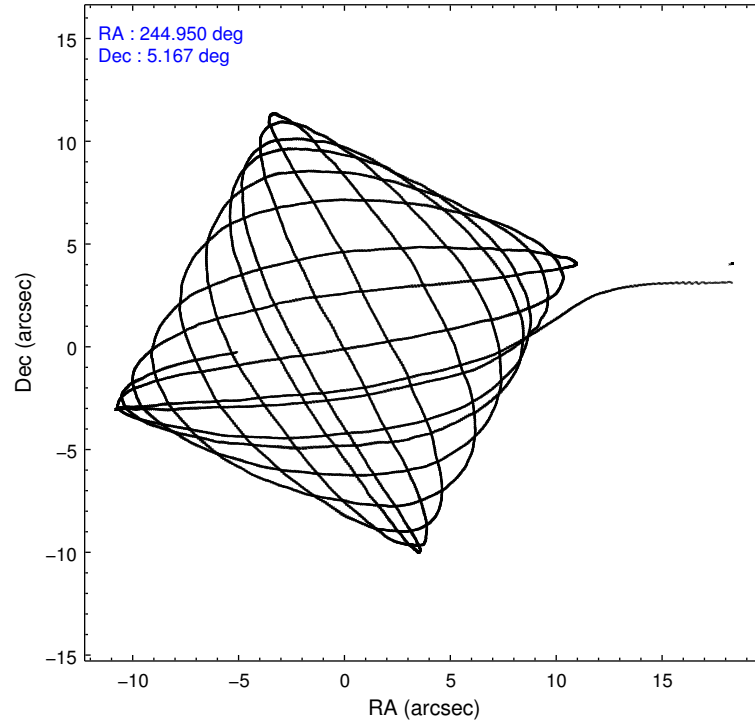
2.1.4 Events

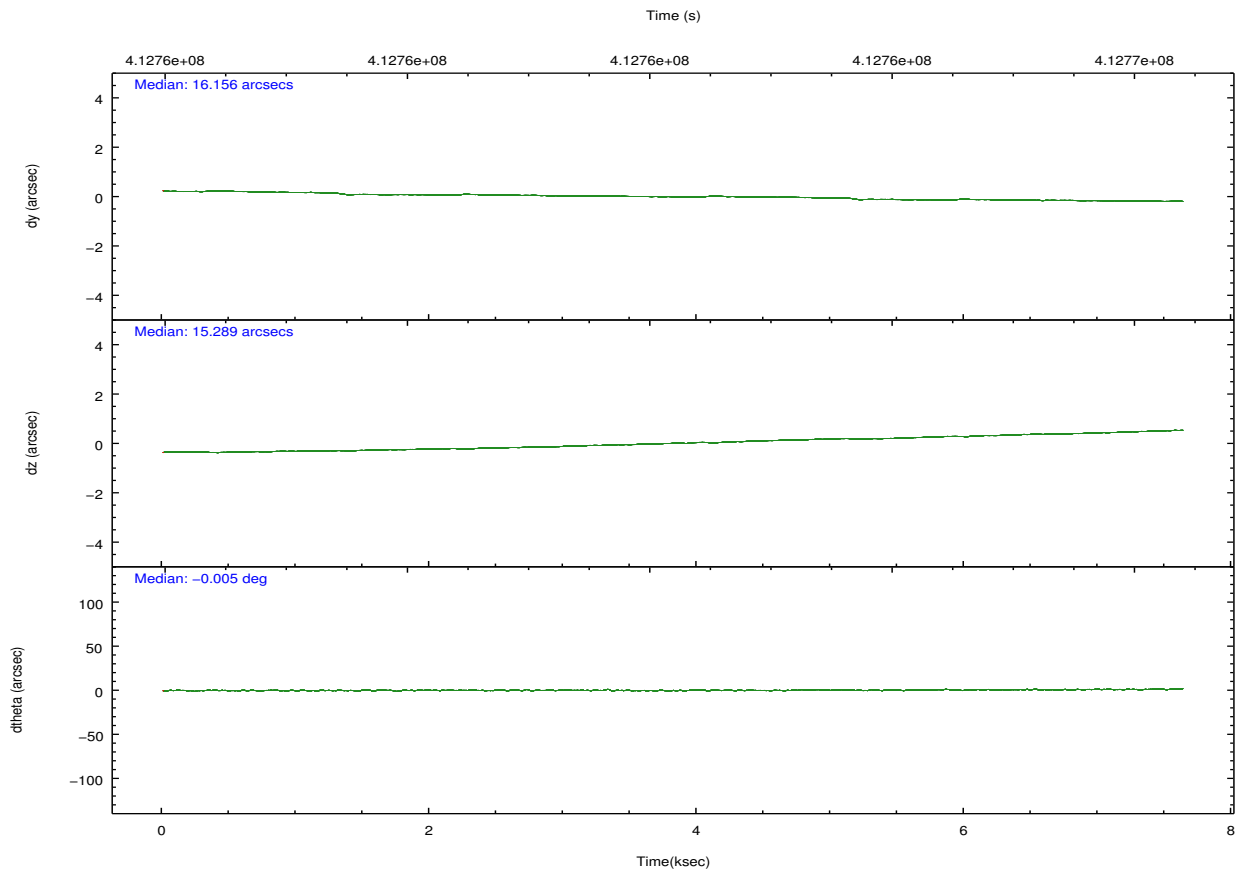
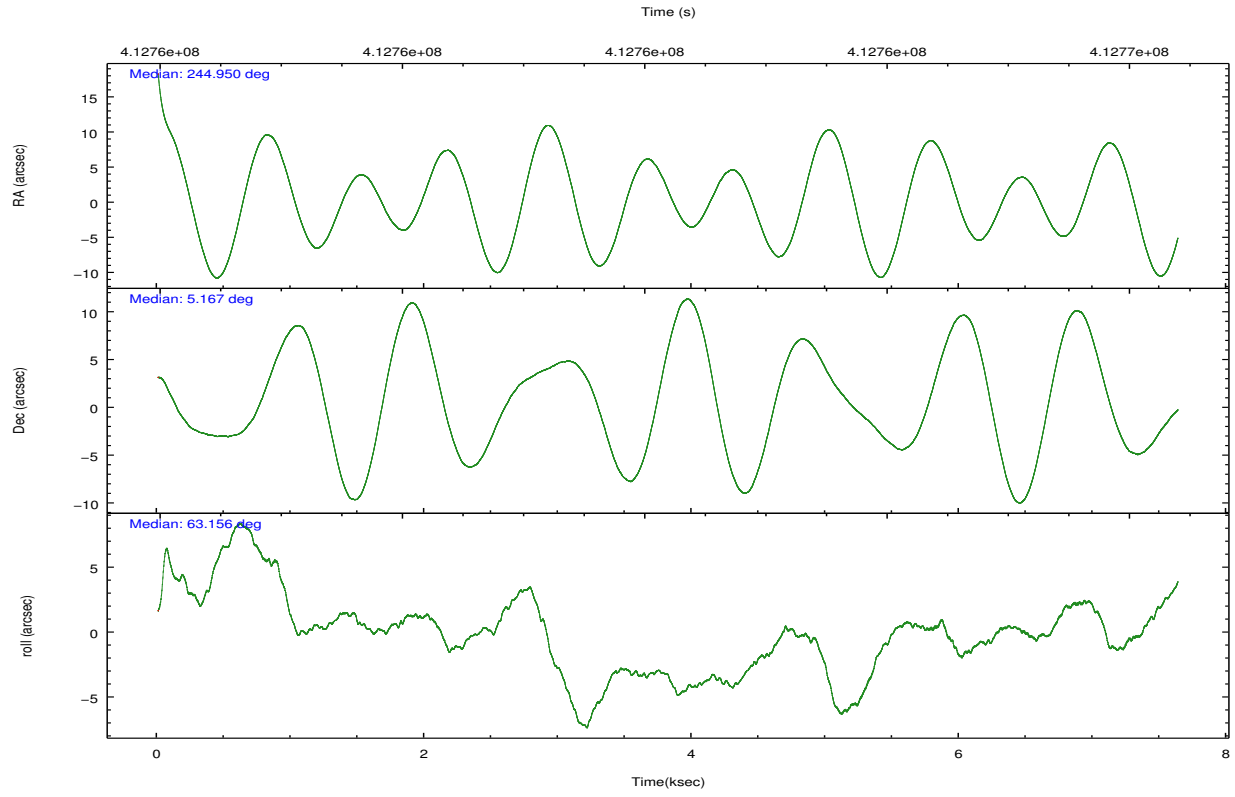
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	57005	52343	86630	55472	67480	68271	grade 0 events	2220	2051	5614	2334	2945	4992
rejected events	51038	46691	42807	49202	36848	50754		3%	3%	6%	4%	4%	7%
rejected %	89%	89%	49%	88%	54%	74%	grade 1 events	39	32	188	33	113	41
								0%	0%	0%	0%	0%	0%
							grade 2 events	1403	1224	13201	1334	6357	4211
								2%	2%	15%	2%	9%	6%
							grade 3 events	617	639	1501	624	2614	1903
								1%	1%	1%	1%	3%	2%
							grade 4 events	594	619	1412	598	2675	1706
								1%	1%	1%	1%	3%	2%
							grade 5 events	2138	2444	6146	2554	6975	3609
								3%	4%	7%	4%	10%	5%
							grade 6 events	1138	1120	22135	1387	16067	4706
								1%	2%	25%	2%	23%	6%
							grade 7 events	48856	44214	36433	46608	29734	47103
								85%	84%	42%	84%	44%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	244.951894	244.9499847110847	CCD I2 on	O2	Y
[deg] Pointing Dec	5.139749	5.166977329204248	CCD I3 on	Y	Y
[deg] Pointing Roll	62.999871	63.15664395586476	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O1	Y
[s] Observation start time (MET)	412758512.184000	412757306.05336	CCD S5 on	N	N
Observation start date	2011-01-30T07:07:26	2011-01-30T06:48:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	412766012.184000	412766973.34136	On-chip summing requested	N	N
Observation end date	2011-01-30T09:12:26	2011-01-30T09:29:33	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



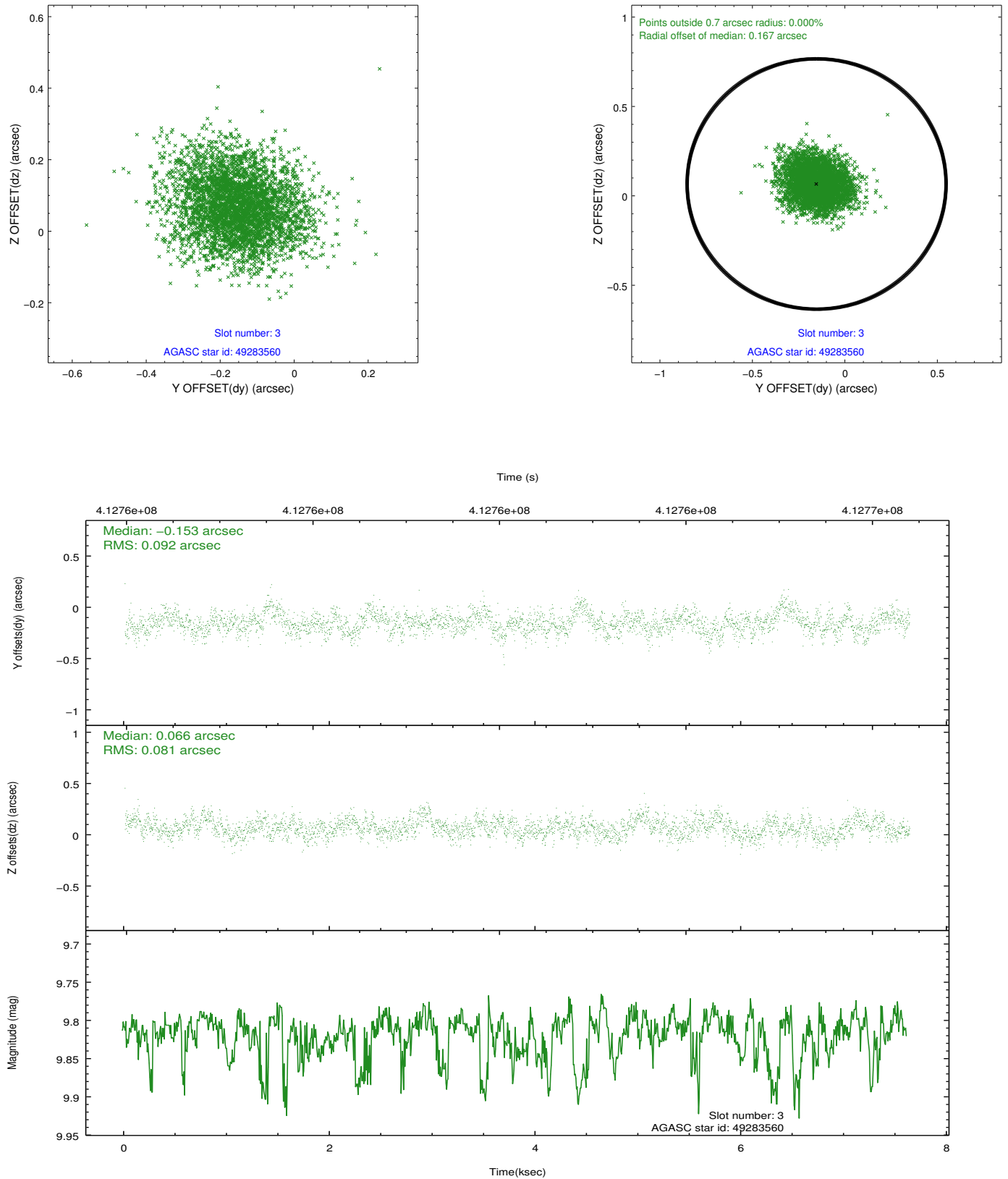


Slot Statistics

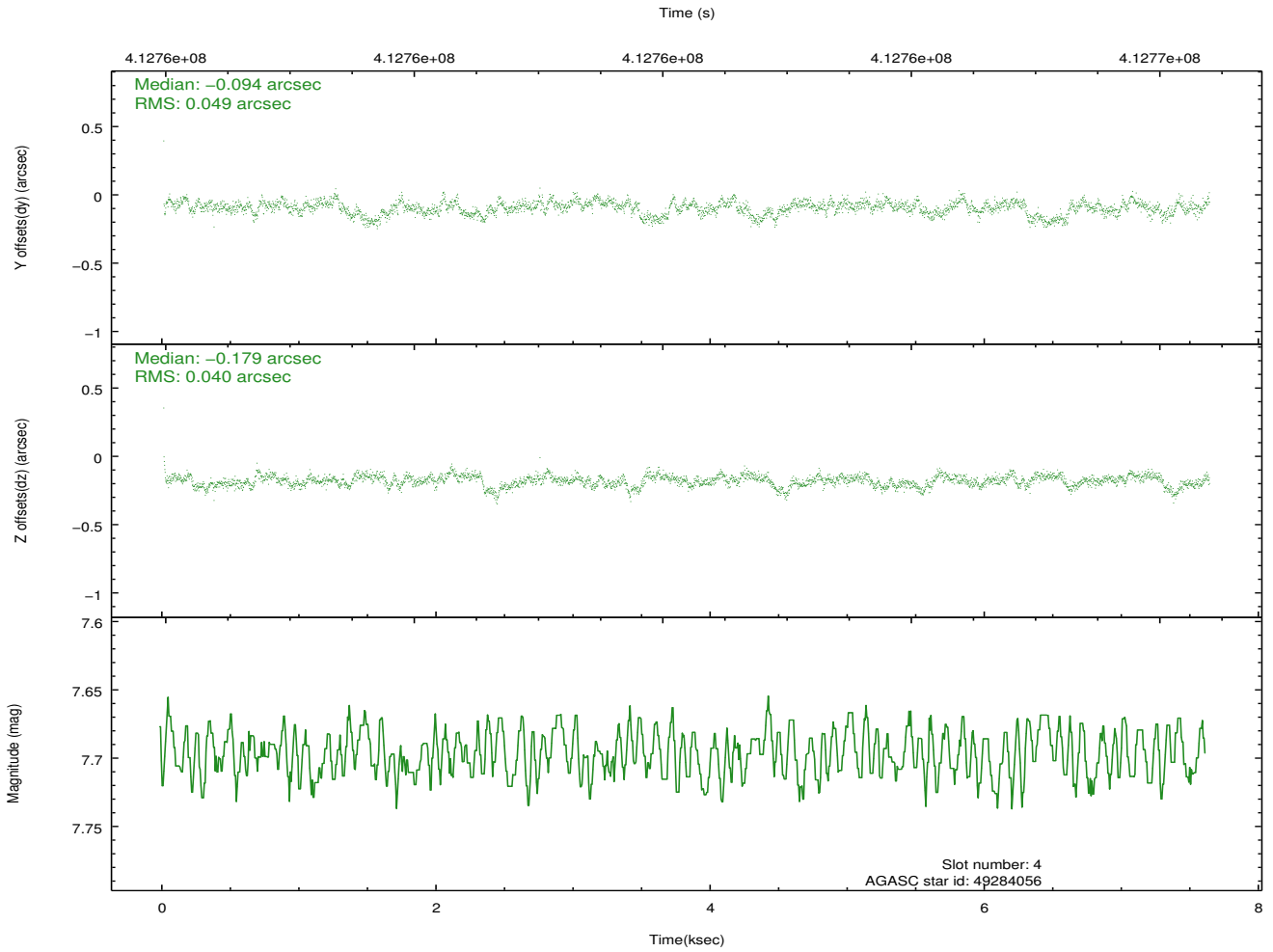
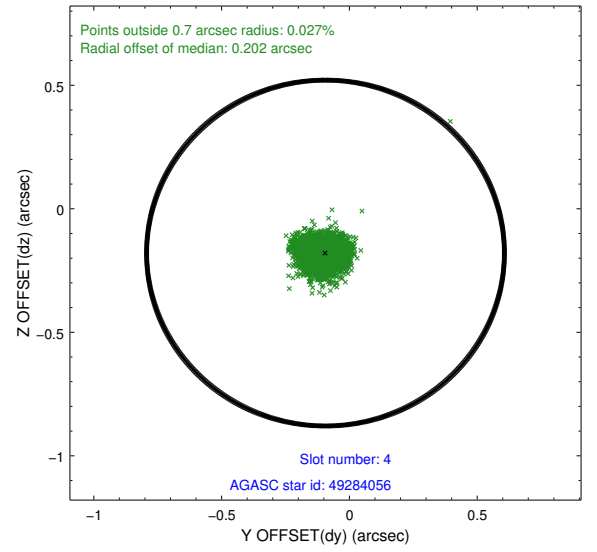
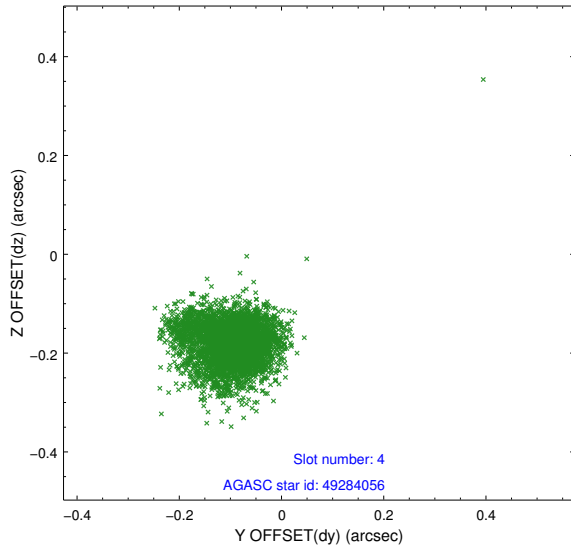
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.02	1862	-0.108	-0.033	0.008	0.013	0.000000	0.000000	-769.25	-1736.68
1	FID	ACIS-S-4	7.10	1862	0.204	0.061	0.006	0.010	0.000000	0.000000	2143.99	171.15
2	FID	ACIS-S-5	7.13	1862	-0.126	-0.020	0.008	0.014	0.000000	0.000000	-1821.17	165.55
3	GUIDE	49283560	9.82	3717	-0.153	0.066	0.132	0.211	245.551305	5.510254	2164.97	-1307.50
4	GUIDE	49284056	7.70	3723	-0.094	-0.179	0.066	0.110	244.857947	5.538119	1125.71	950.99
5	GUIDE	49286696	9.33	3715	-0.121	0.062	0.109	0.170	245.299701	5.018445	178.25	-1308.86
6	GUIDE	49288936	9.57	3717	-0.035	0.185	0.124	0.213	245.491800	5.437703	1835.58	-1236.39
7	GUIDE	49295072	9.71	3714	0.413	-0.130	0.126	0.219	244.485964	4.655001	-2311.89	697.44

2.4 Star Slots

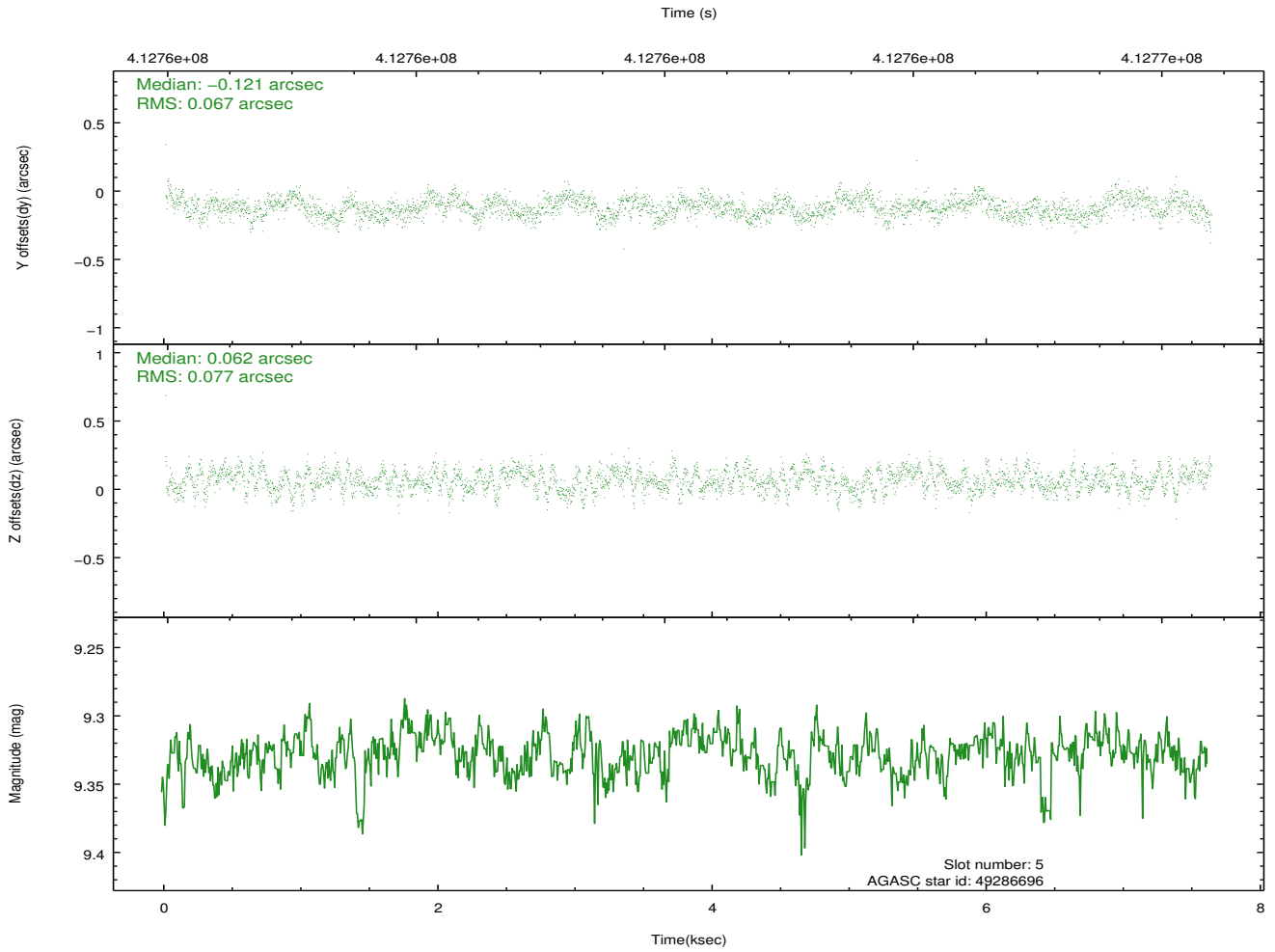
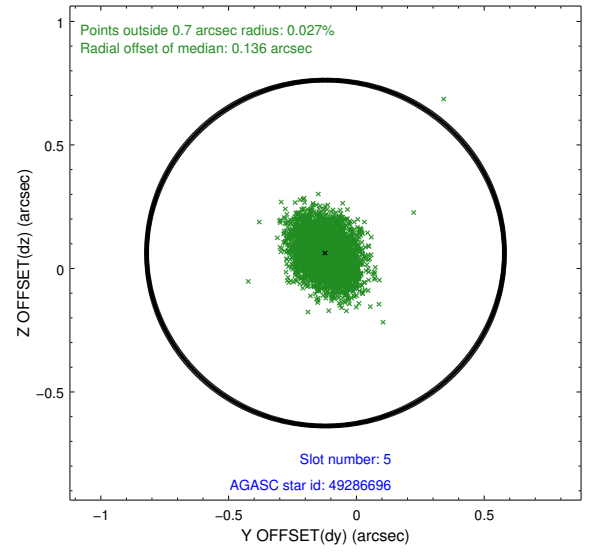
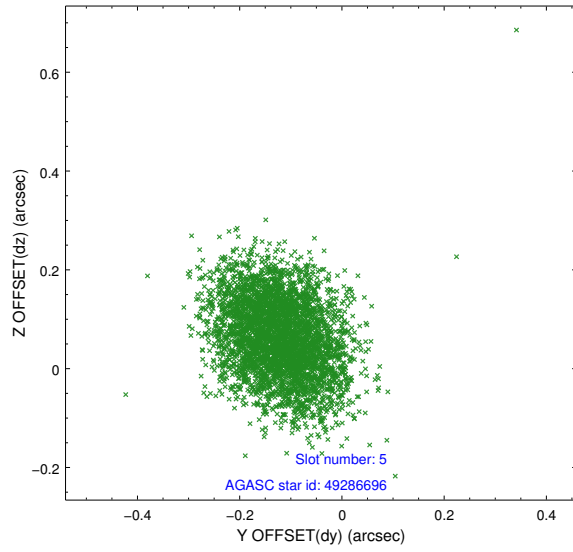
2.4.1 Slot 3



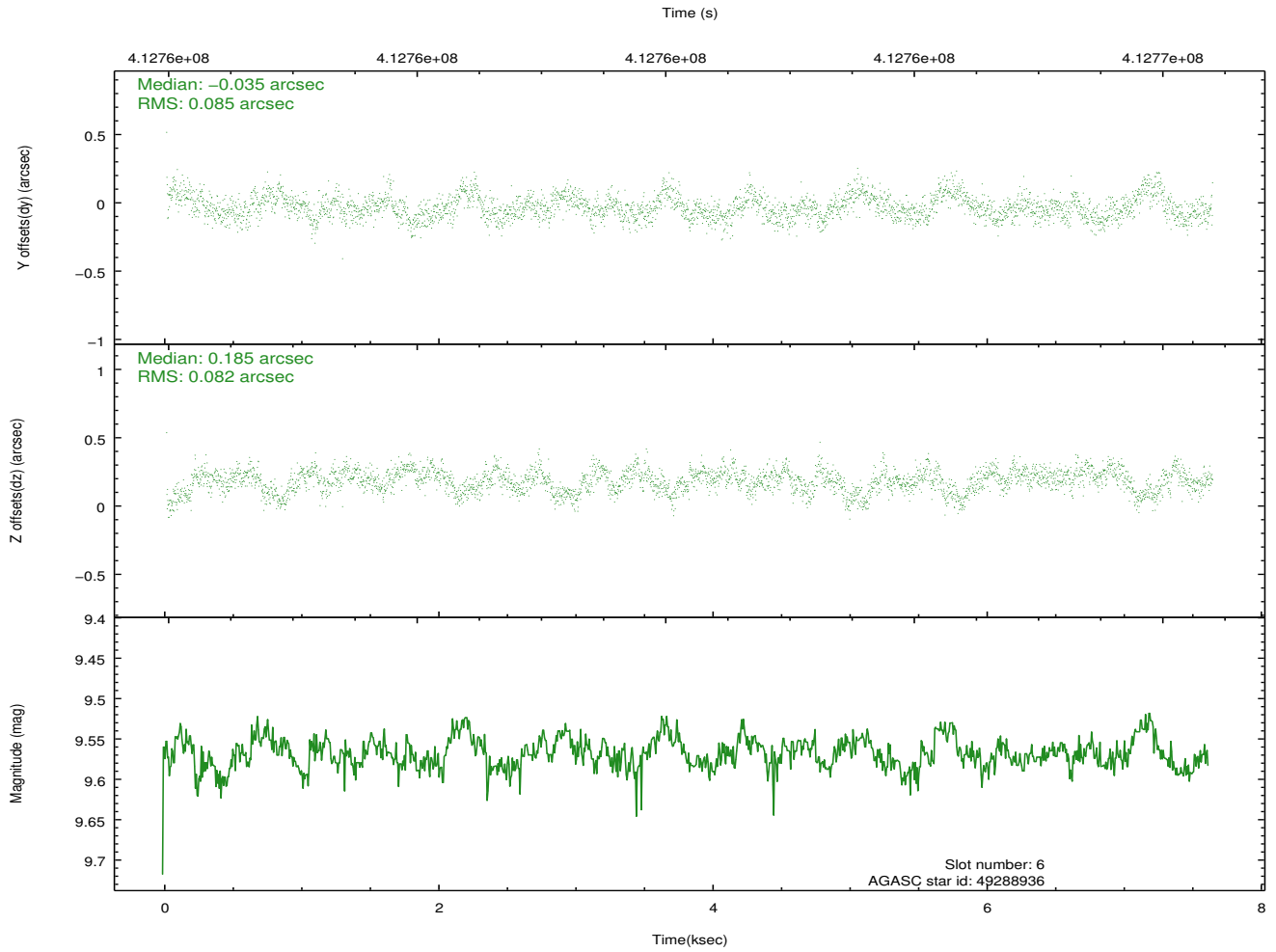
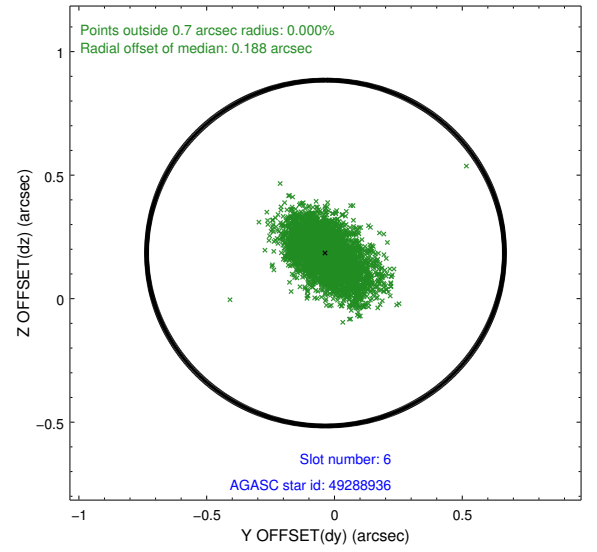
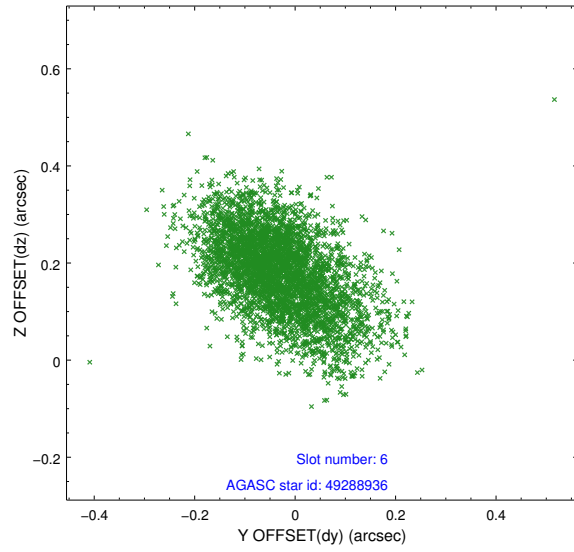
2.4.2 Slot 4



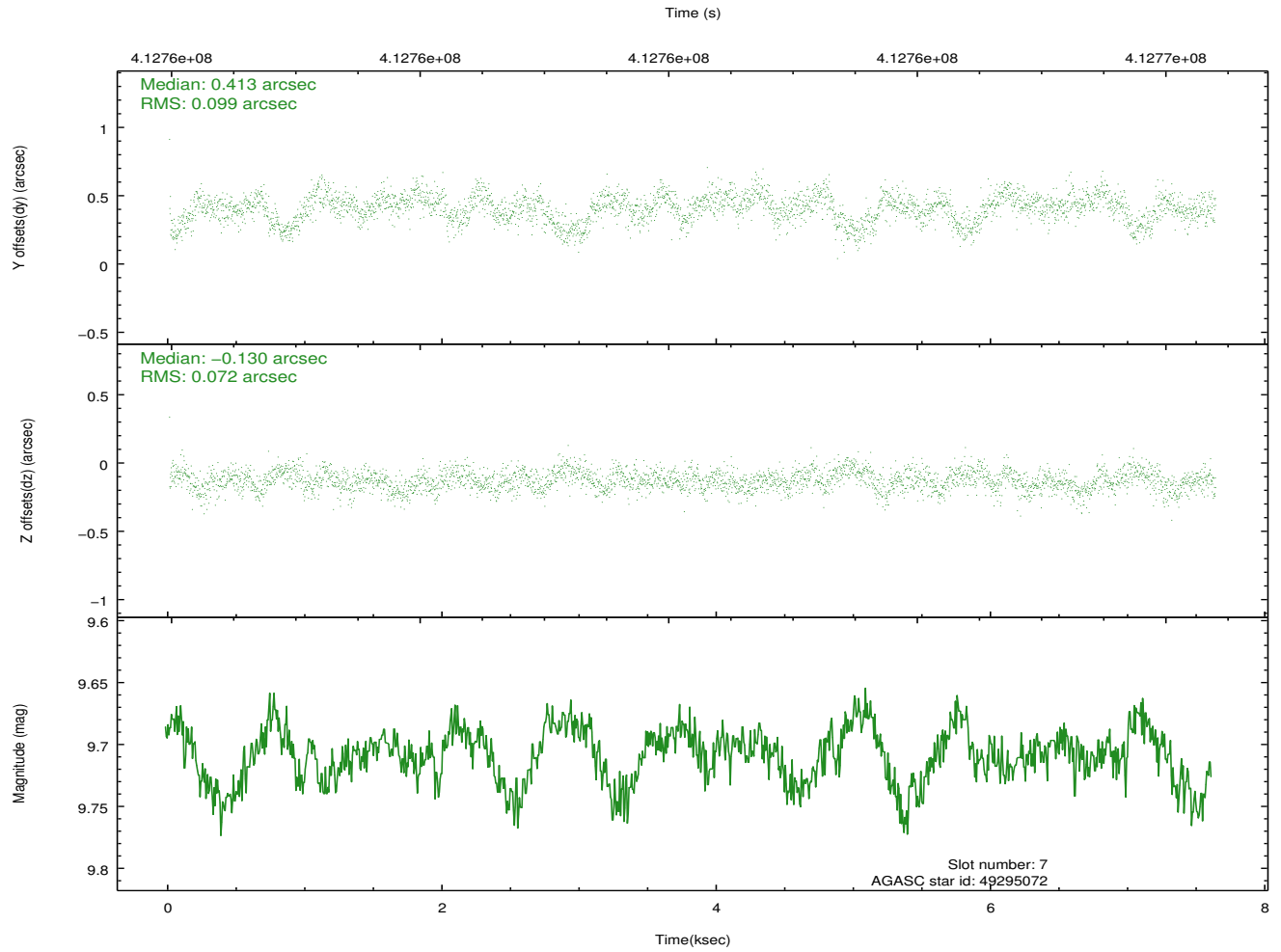
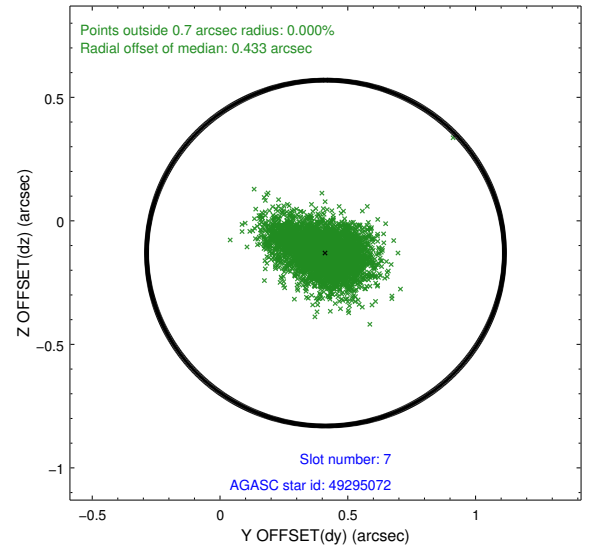
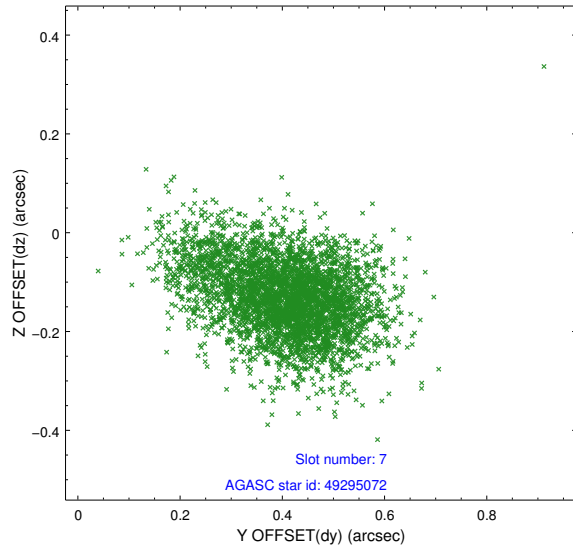
2.4.3 Slot 5



2.4.4 Slot 6

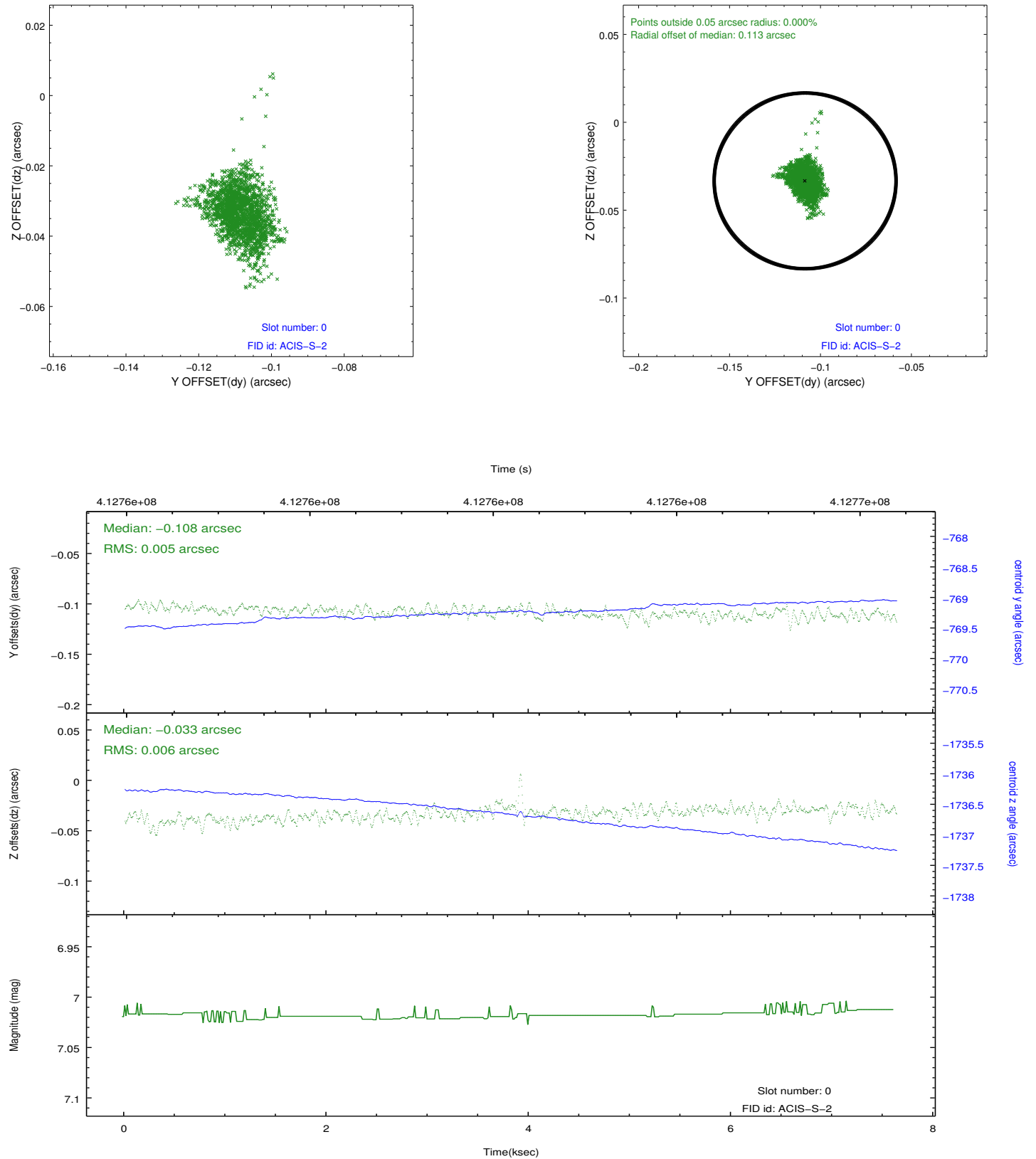


2.4.5 Slot 7

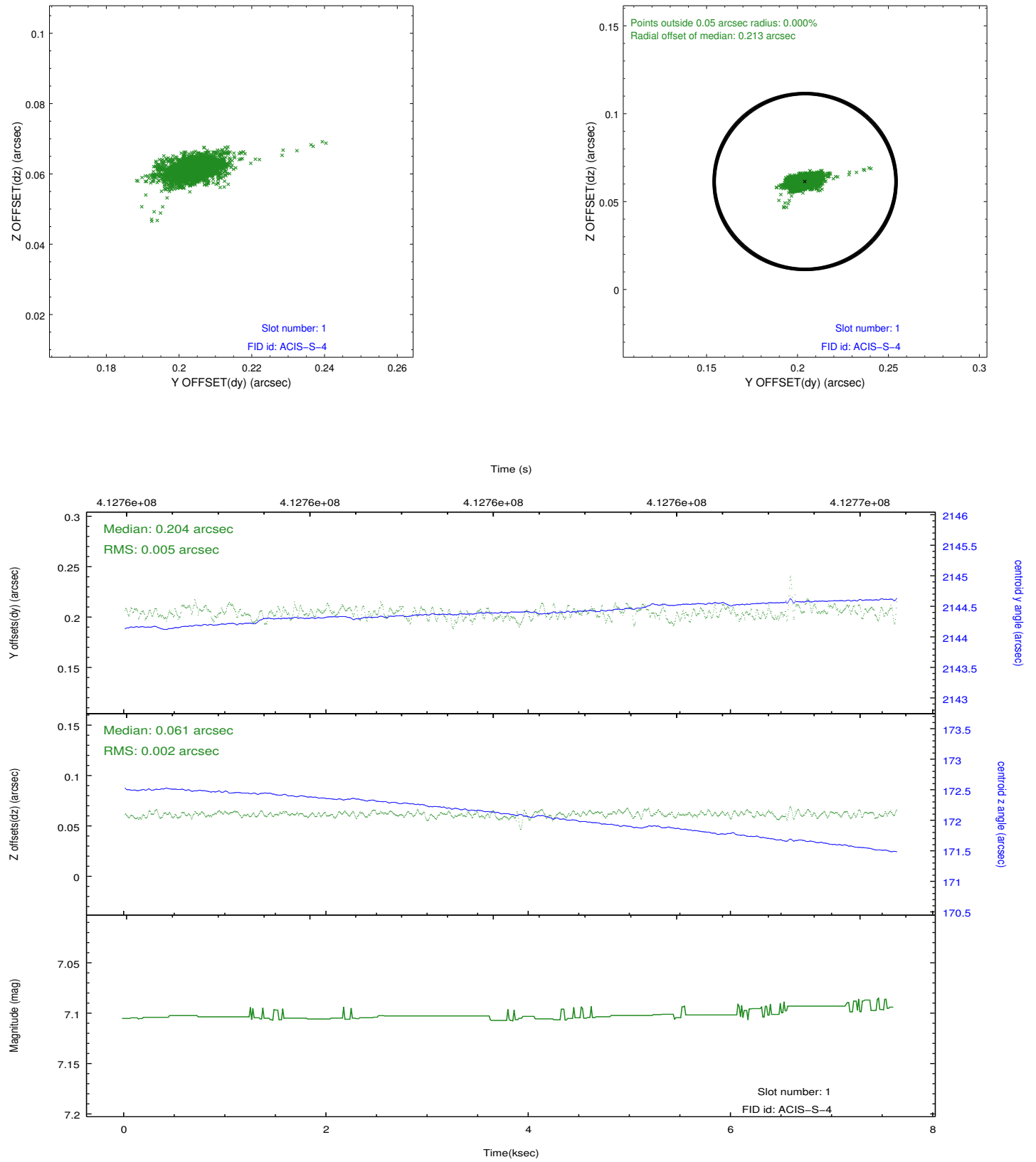


2.5 FID Slots

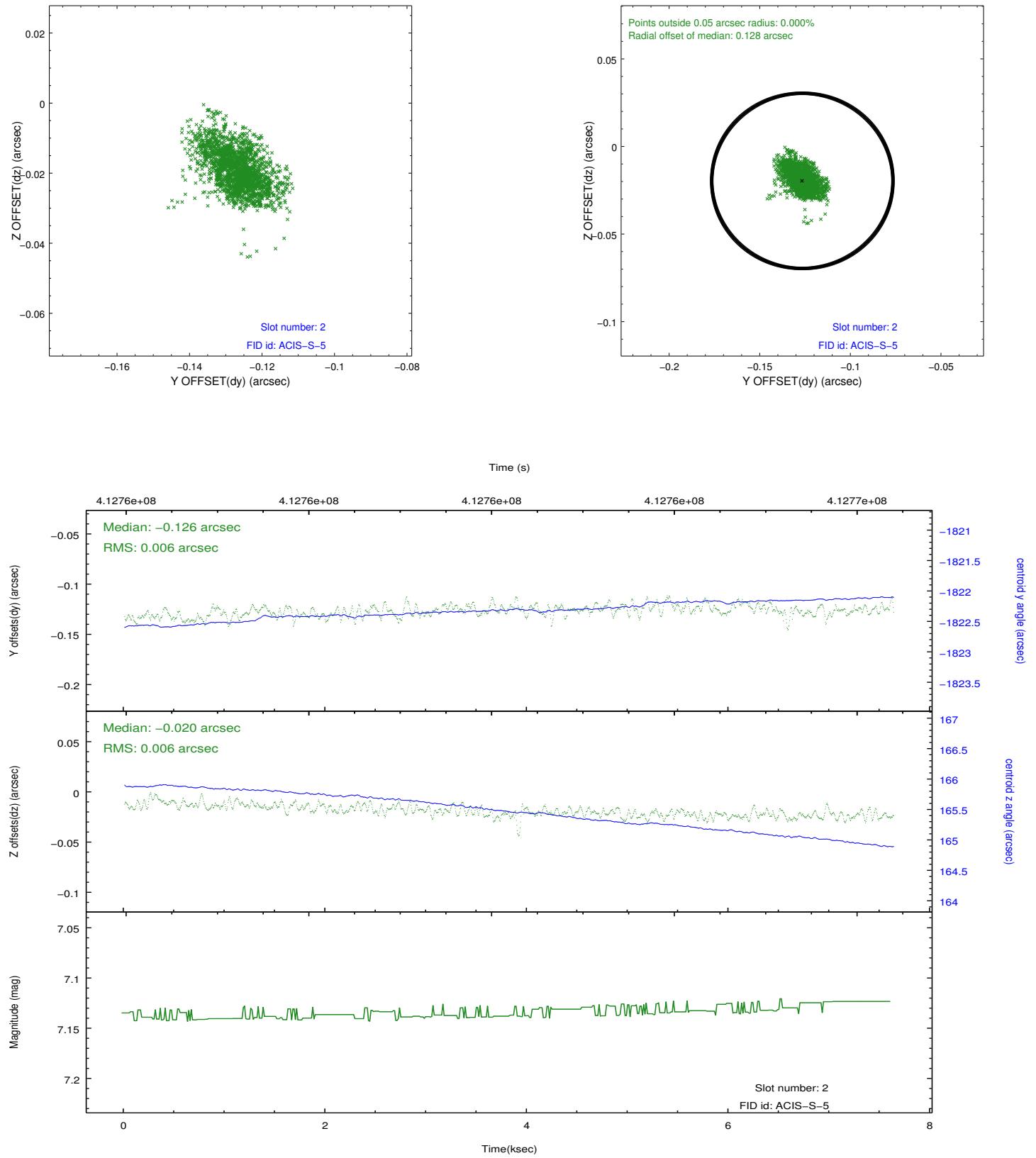
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.5455999719501

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.