

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13133 - L2 Version 2
Chandra X-Ray Center

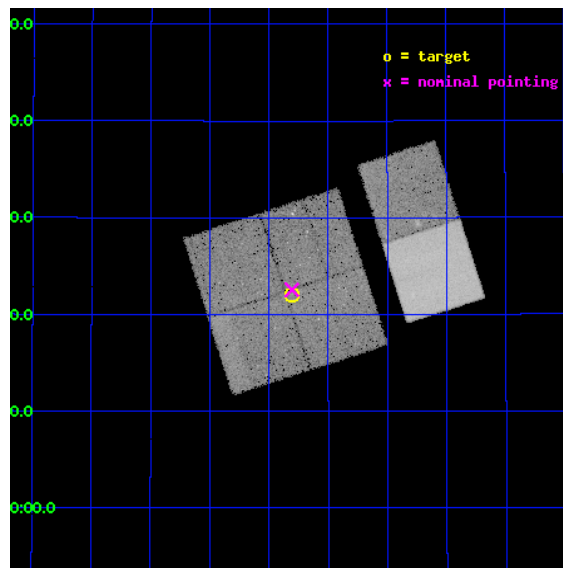
L2 Processing Date : Feb 2 2012

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1 Front

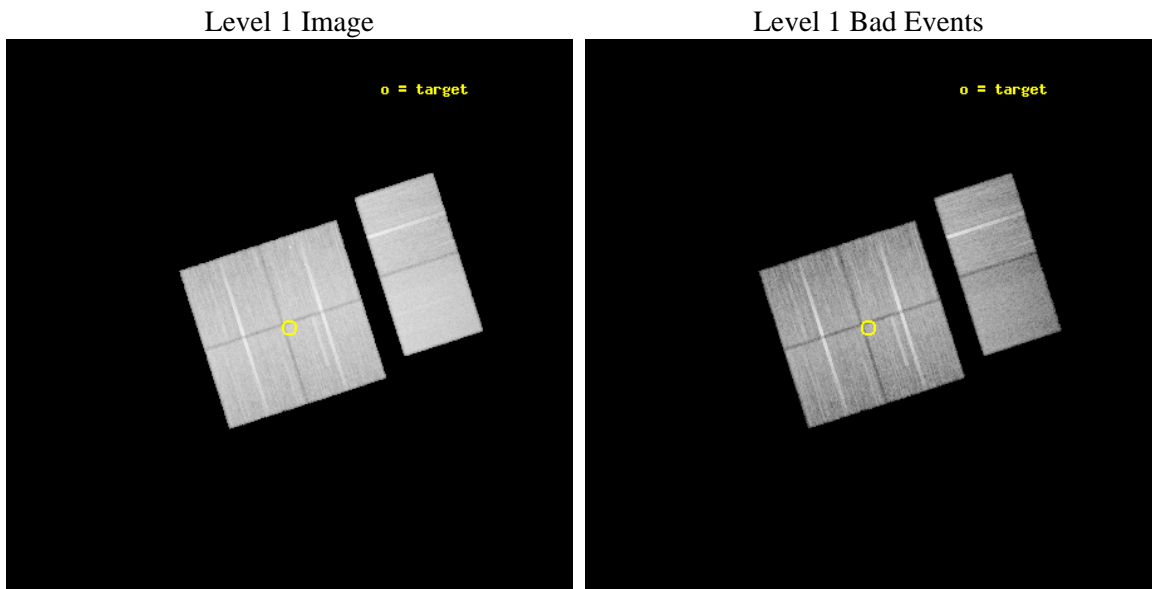
seq_num	702509	Sequence number
obs_id	13133	Observation id
title	Detailed X-ray spectra of IR-selected AGN in the Bootes field	Prop
observer	Dr Stephen Murray	Principal investigator
object	XBootes IRAGN Field 2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	217.326667	Observer's specified target RA [deg]
dec_targ	34.367889	Observer's specified target Dec [deg]
ra_nom	217.32676353991	Nominal RA [deg]
dec_nom	34.375968276356	Nominal Dec [deg]
roll_nom	72.151873427093	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29633.750237644	Sum of GTIs [s]
livetime	29258.509848833	Livetime [s]
ontime0	29630.386127293	Sum of GTIs [s]
ontime1	29627.186126888	Sum of GTIs [s]
ontime2	29633.70919764	Sum of GTIs [s]
ontime3	29633.750237644	Sum of GTIs [s]
ontime6	29633.83231765	Sum of GTIs [s]
ontime7	29633.791277647	Sum of GTIs [s]
l2events	212887	Number of level 2 events



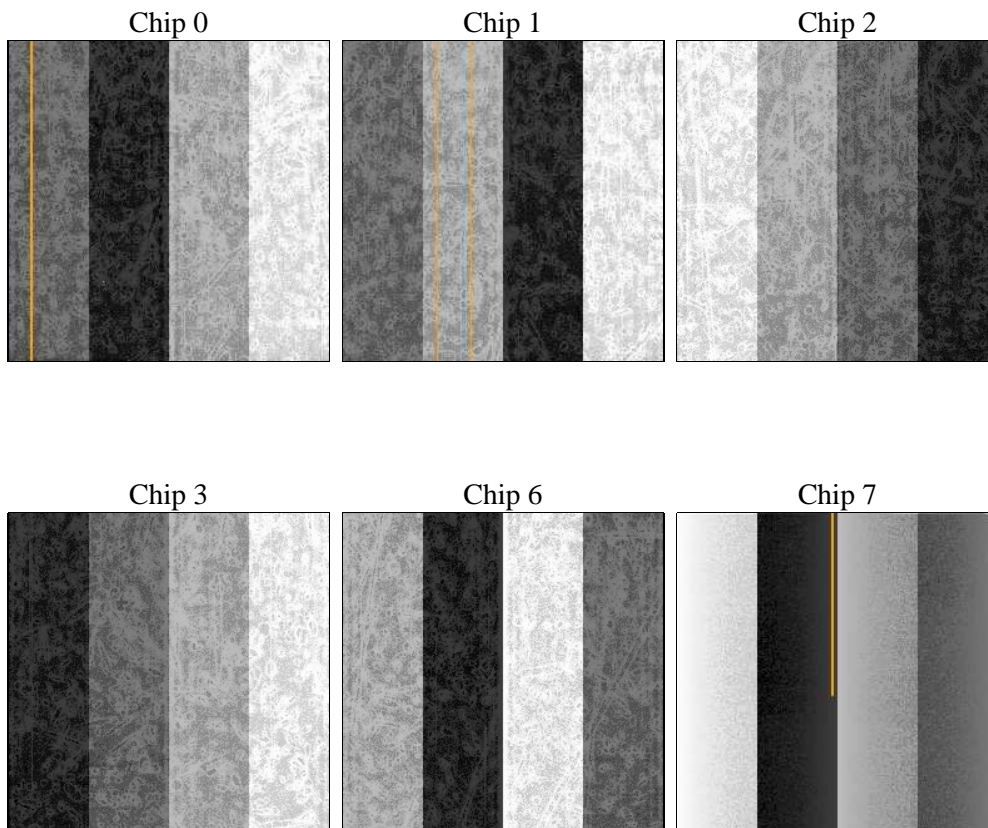
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29583.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	29633.750237644	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	29630.386127293	Sum of GTIs [s]
date	2012-02-02T23:27:23	Date and time of file creation	ontime1	29627.186126888	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	29633.70919764	Sum of GTIs [s]
			ontime3	29633.750237644	Sum of GTIs [s]
			ontime6	29633.83231765	Sum of GTIs [s]
			ontime7	29633.791277647	Sum of GTIs [s]
			l1events	1289485	Number of level 1 events

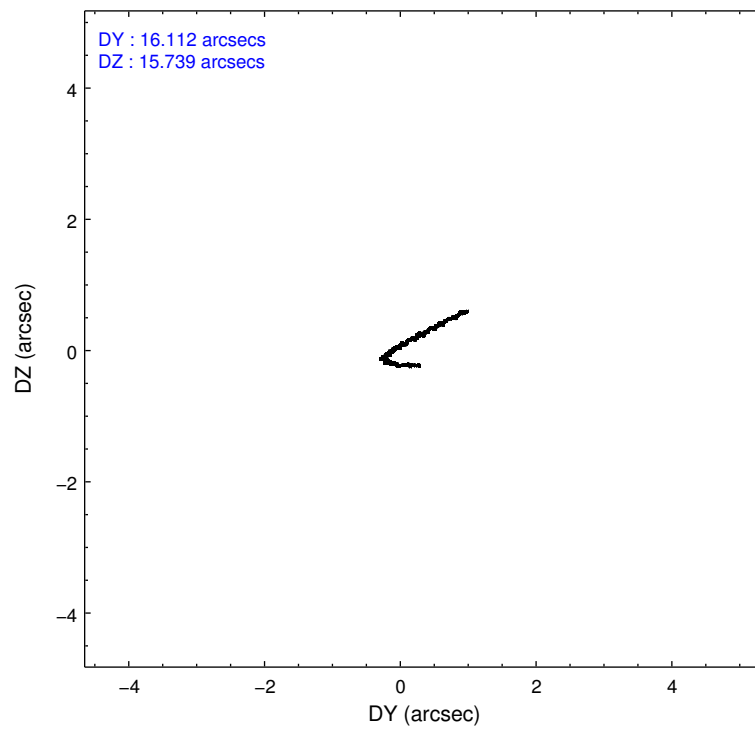
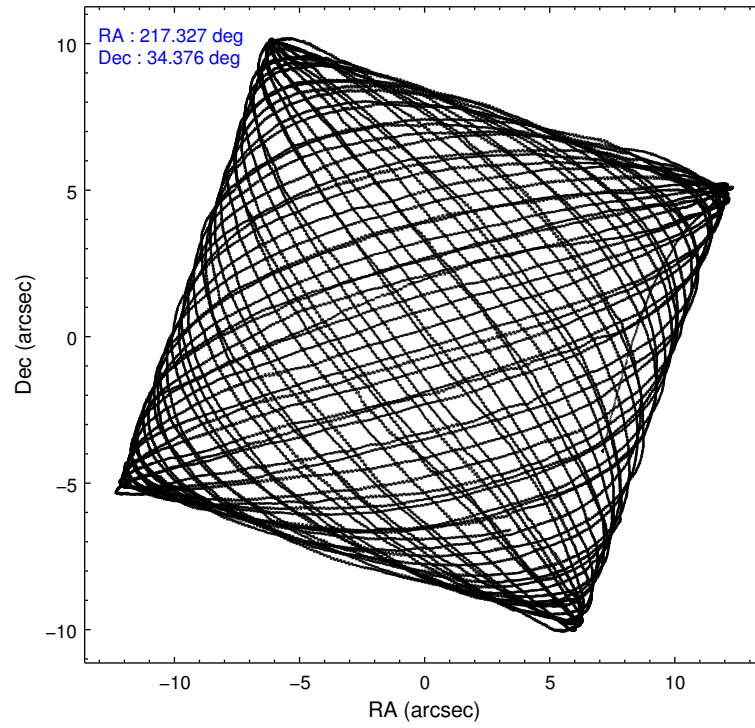
2.1.4 Events

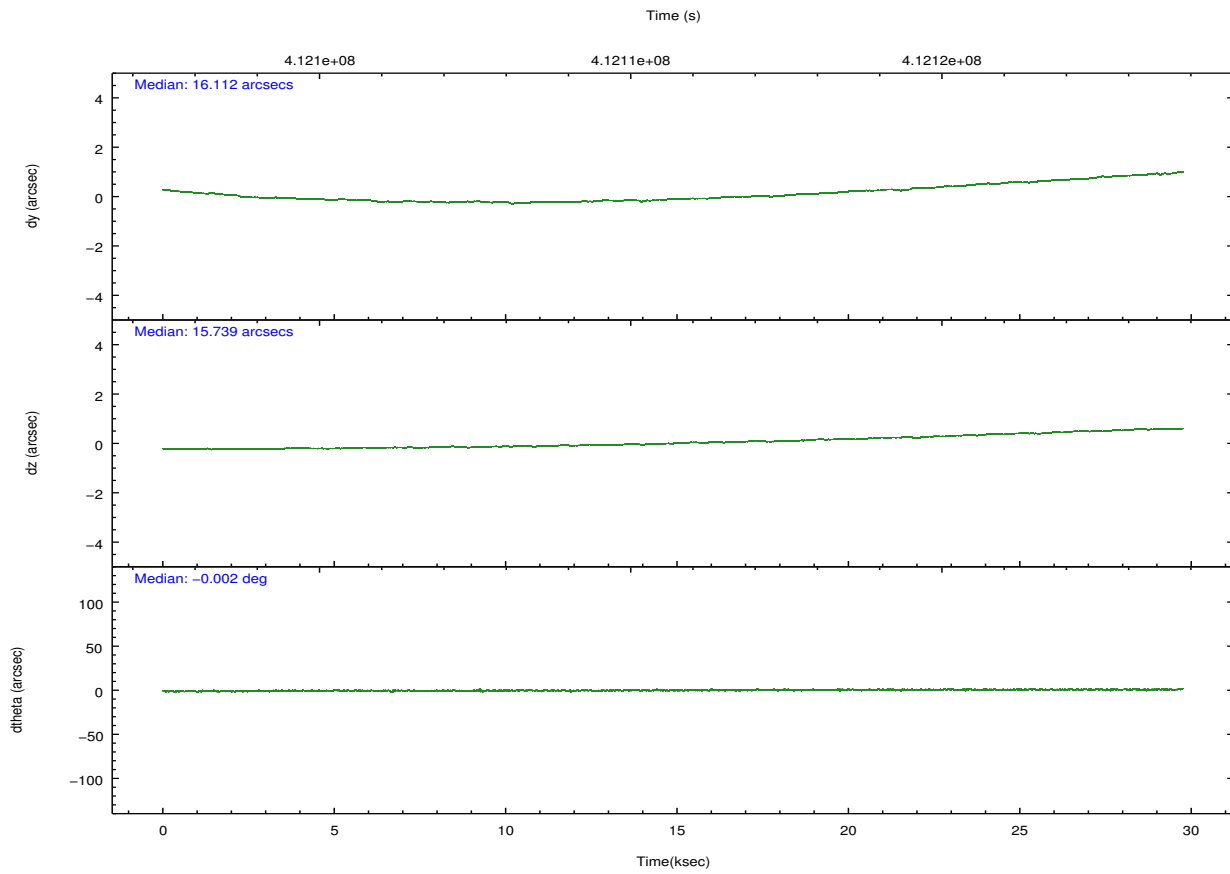
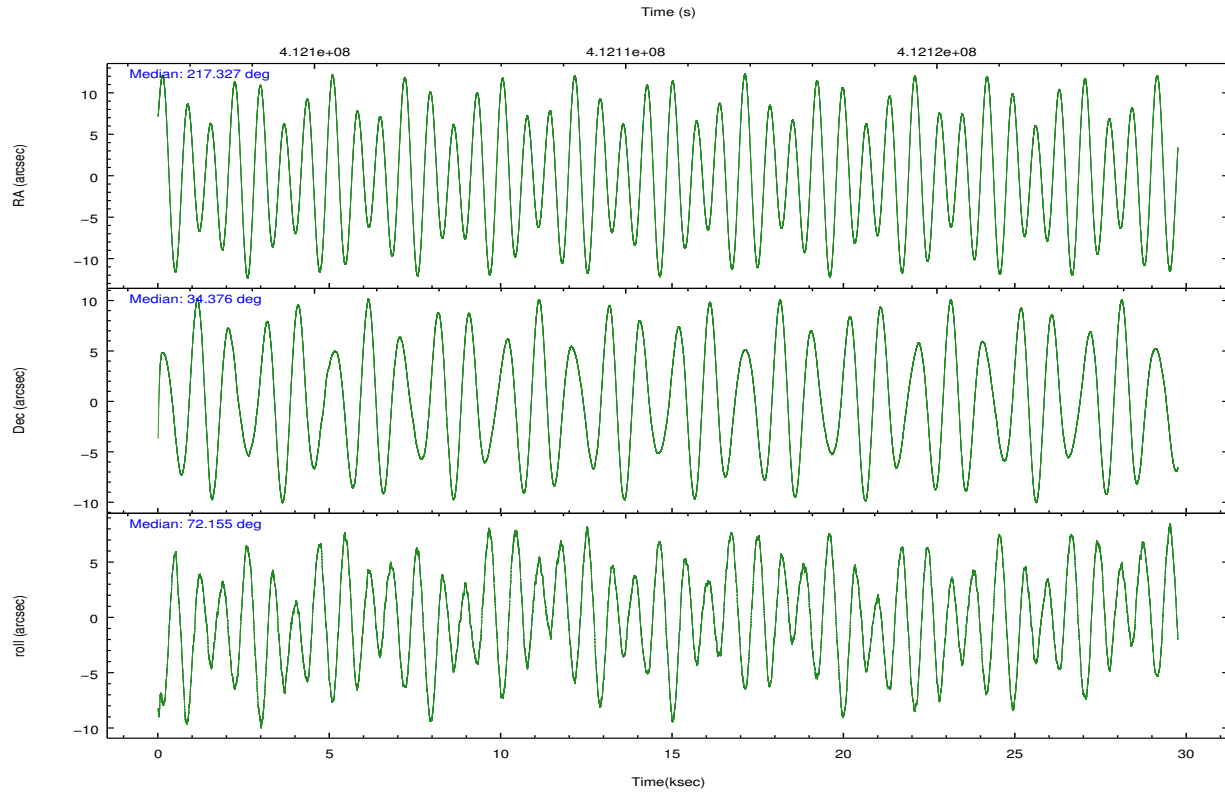
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	194892	194270	216747	202609	219774	261193	grade 0 events	7978	8972	8532	8039	8467	10423
rejected events	171727	168664	193631	180286	195366	144858		4%	4%	3%	3%	3%	3%
rejected %	88%	86%	89%	88%	88%	55%	grade 1 events	122	108	133	123	129	308
								0%	0%	0%	0%	0%	0%
							grade 2 events	5761	6172	5478	4922	5535	23690
								2%	3%	2%	2%	2%	9%
							grade 3 events	2470	2573	2346	2433	2503	10208
								1%	1%	1%	1%	1%	3%
							grade 4 events	2311	2657	2348	2403	2452	9917
								1%	1%	1%	1%	1%	3%
							grade 5 events	8784	9186	8094	9821	9844	27128
								4%	4%	3%	4%	4%	10%
							grade 6 events	4652	5239	4419	4529	5455	62113
								2%	2%	2%	2%	2%	23%
							grade 7 events	162814	159363	185397	170339	185389	117406
								83%	82%	85%	84%	84%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	217.333905	217.326763539909	CCD I2 on	Y	Y
[deg] Pointing Dec	34.349116	34.37596827635611	CCD I3 on	Y	Y
[deg] Pointing Roll	71.939157	72.15187342709291	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	412096655.184000	412095611.63163	CCD S5 on	N	N
Observation start date	2011-01-22T15:16:29	2011-01-22T15:00:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	412126238.184000	412126816.22074	On-chip summing requested	N	N
Observation end date	2011-01-22T23:29:32	2011-01-22T23:40:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





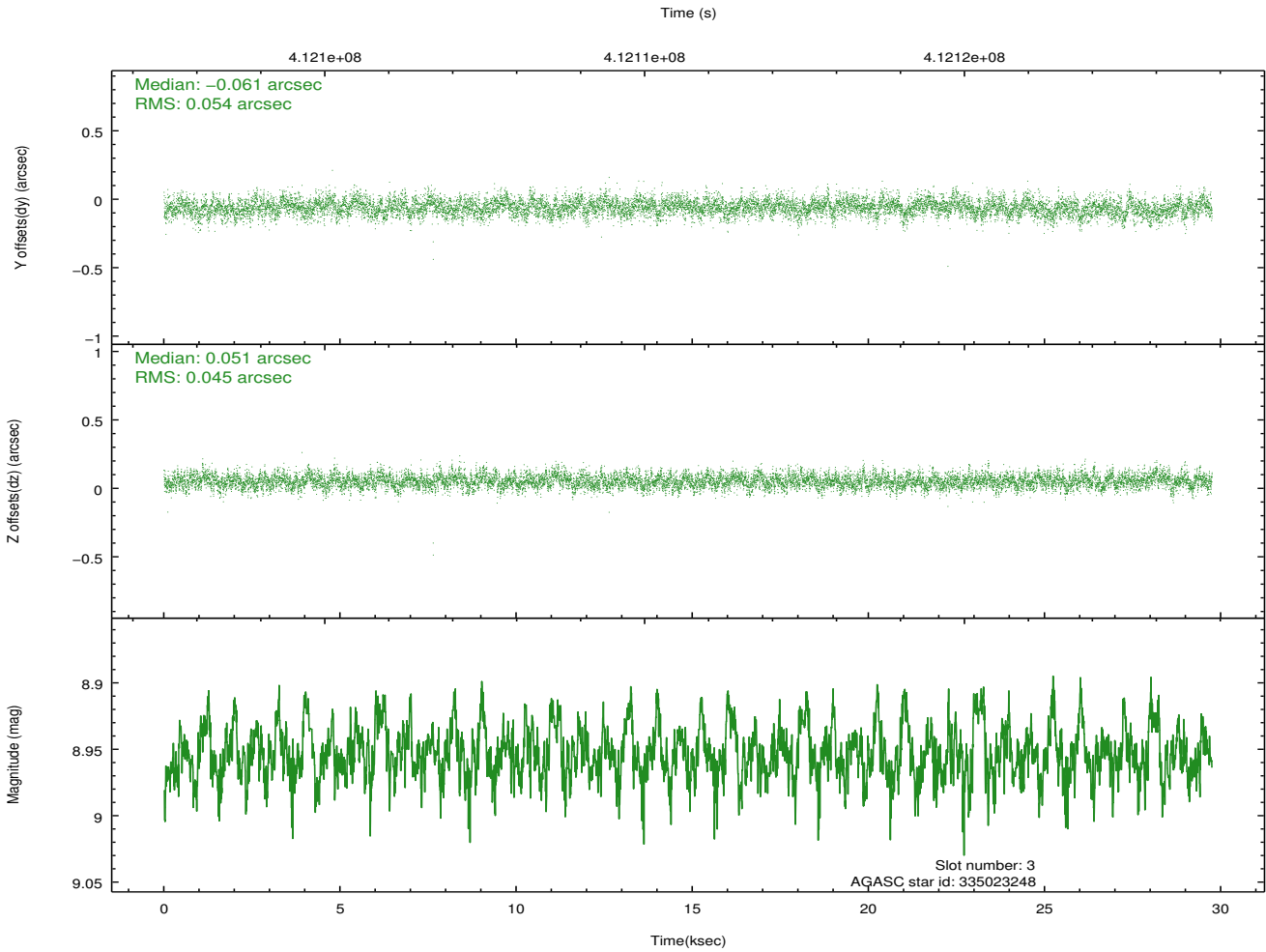
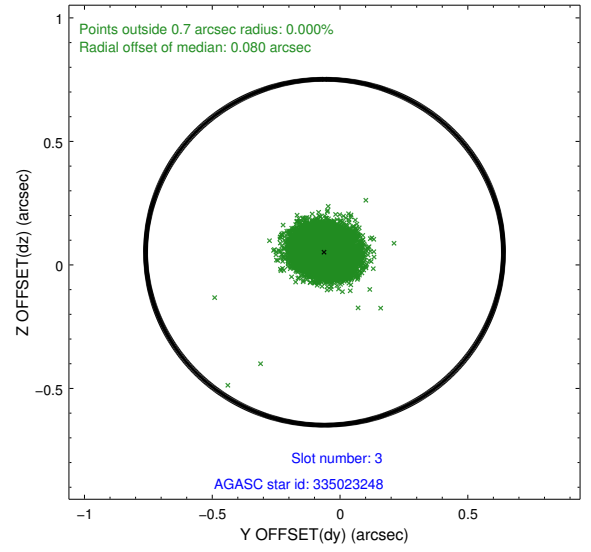
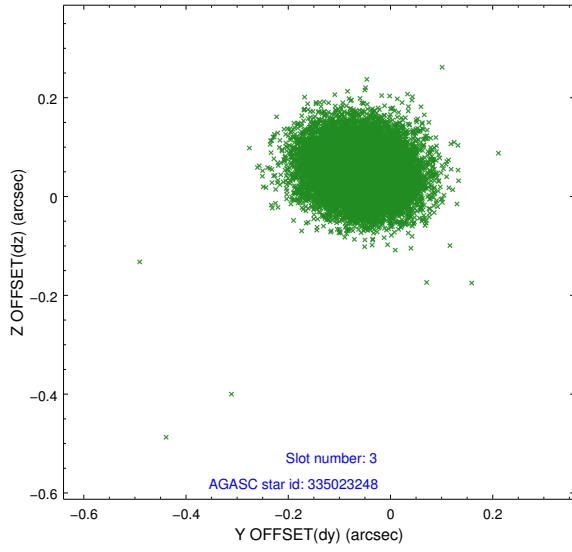
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.11	7254	0.054	-0.046	0.012	0.028	0.000000	0.000000	923.23	-839.47
1	FID	ACIS-I-5	7.10	7256	-0.229	0.047	0.009	0.019	0.000000	0.000000	-1825.12	1058.07
2	FID	ACIS-I-6	7.11	7256	0.084	0.070	0.009	0.015	0.000000	0.000000	388.72	1702.68
3	GUIDE	335023248	8.95	14501	-0.061	0.051	0.074	0.121	217.634832	34.944512	2314.57	-178.99
4	GUIDE	335025848	9.71	14415	0.553	0.023	0.157	0.247	217.530531	33.778292	-1769.91	-1195.78
5	GUIDE	335028696	9.17	14504	0.052	0.480	0.111	0.176	217.260519	33.844112	-1796.22	-354.07
6	GUIDE	335030384	8.82	14498	-0.224	-0.521	0.096	0.152	216.806407	34.722197	796.91	1901.43
7	GUIDE	335417968	9.38	14456	-0.319	-0.036	0.128	0.209	217.358149	35.055285	2439.16	720.66

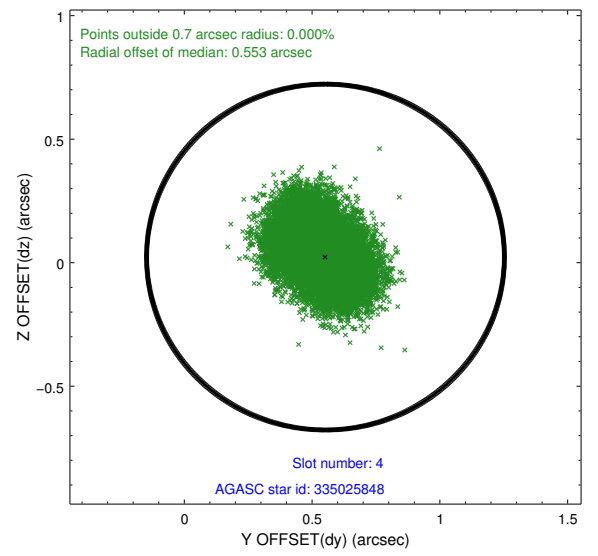
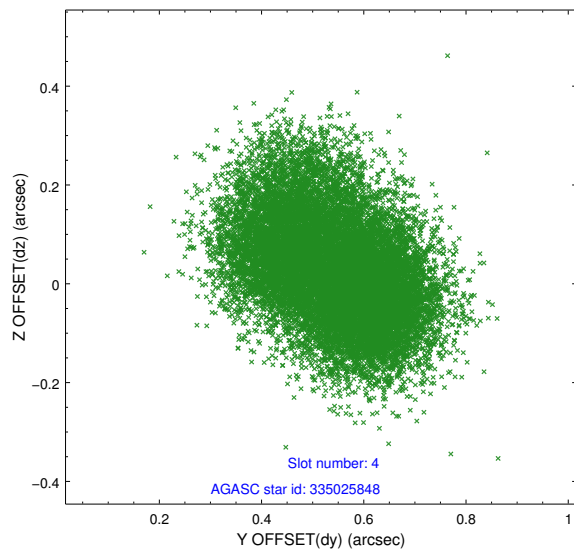
∞

2.4 Star Slots

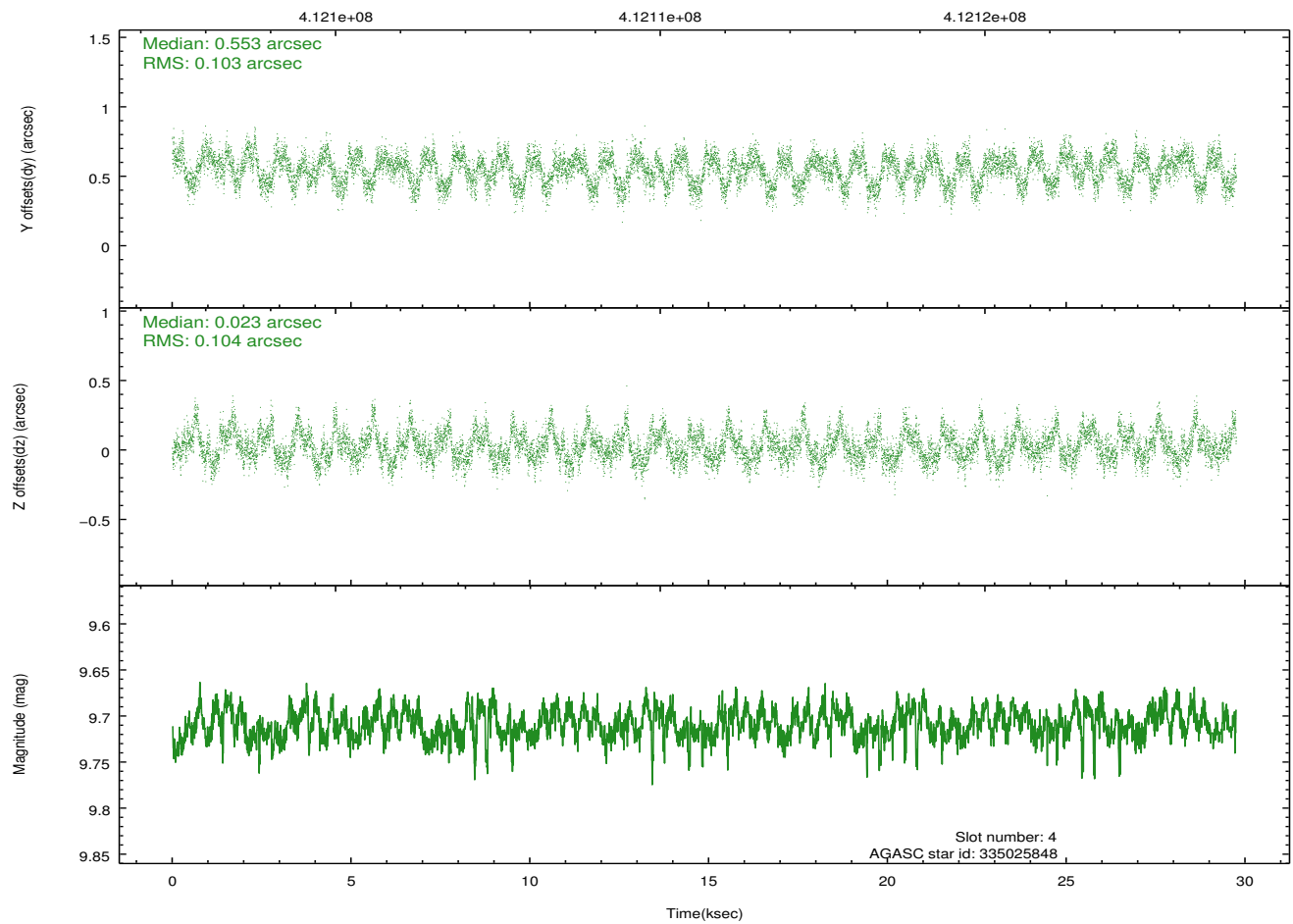
2.4.1 Slot 3



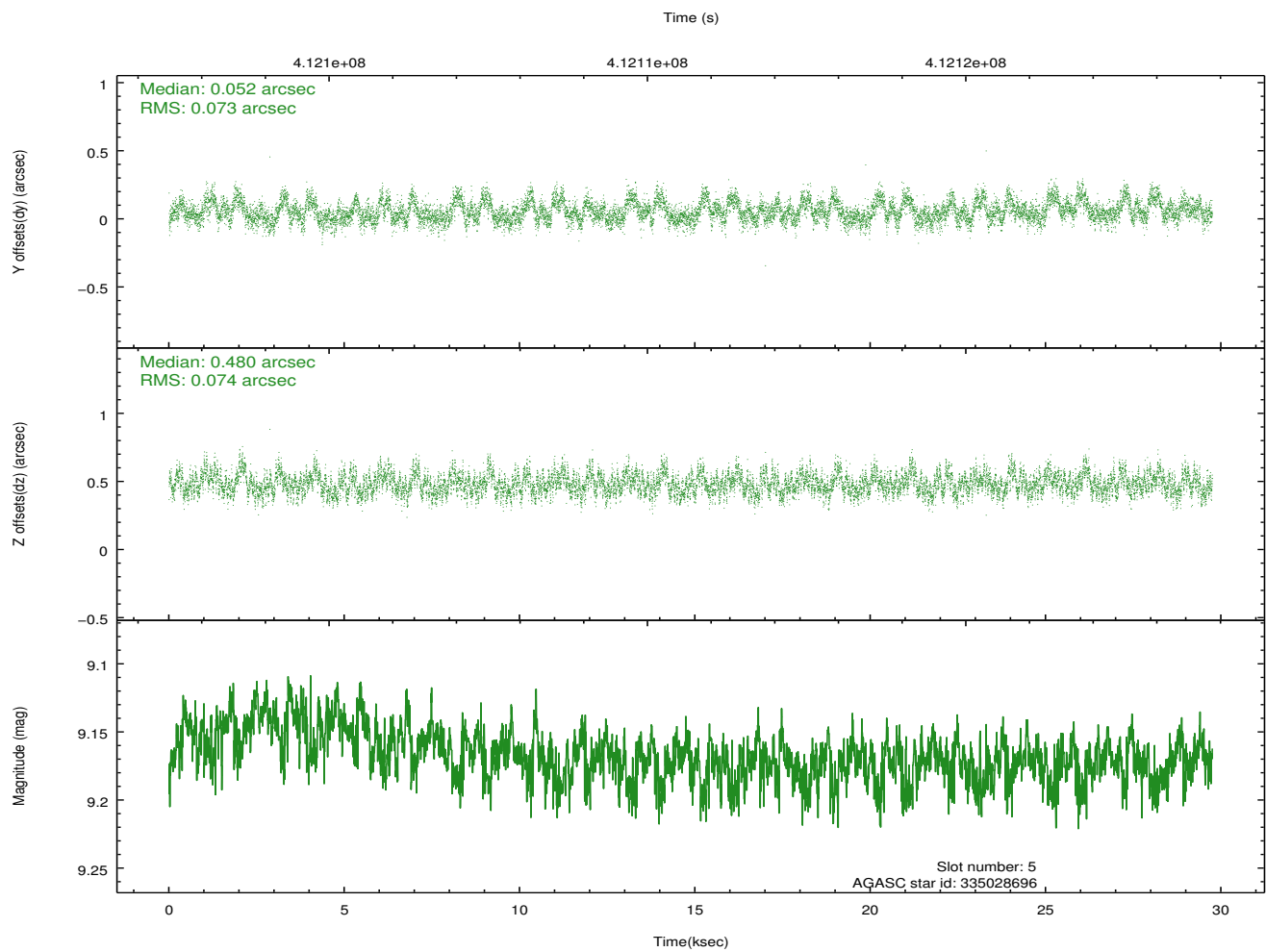
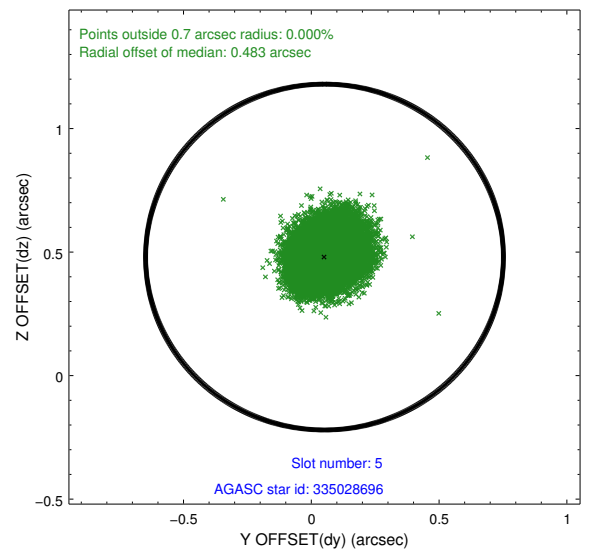
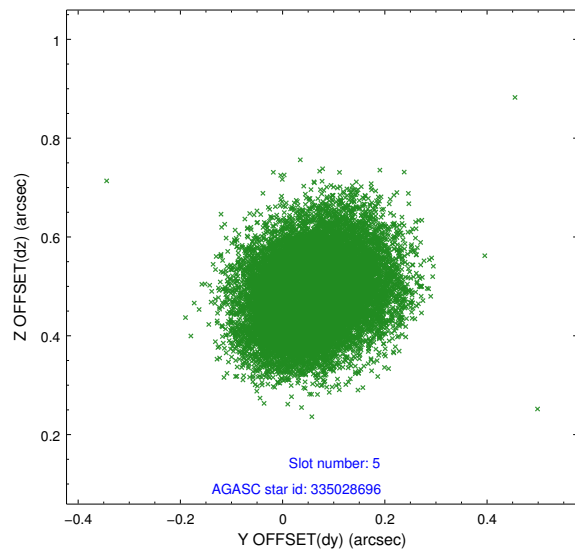
2.4.2 Slot 4



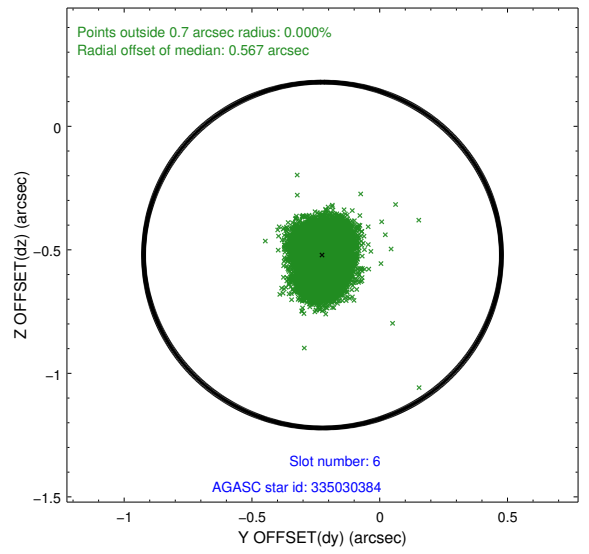
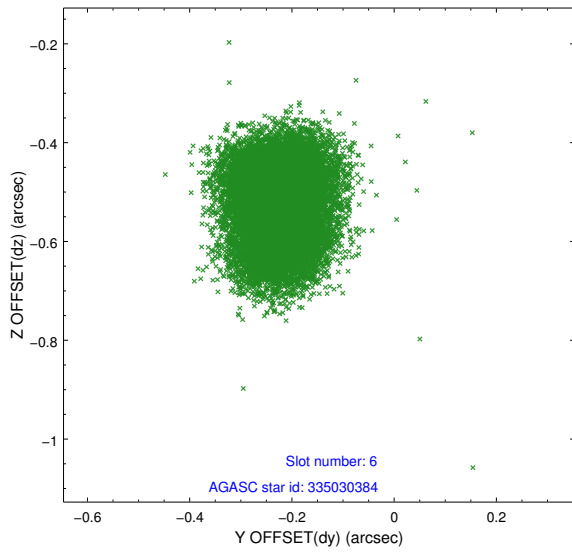
Time (s)



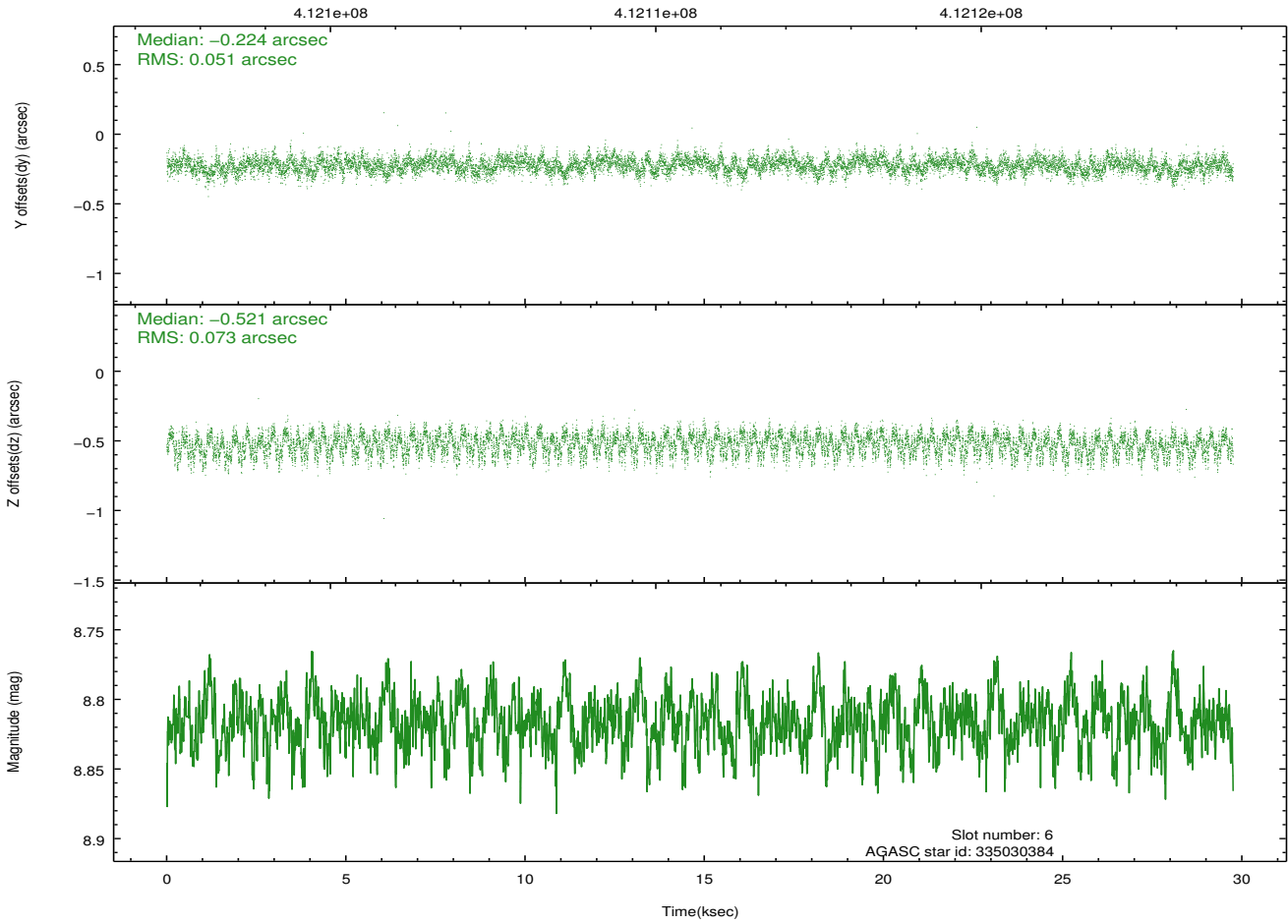
2.4.3 Slot 5



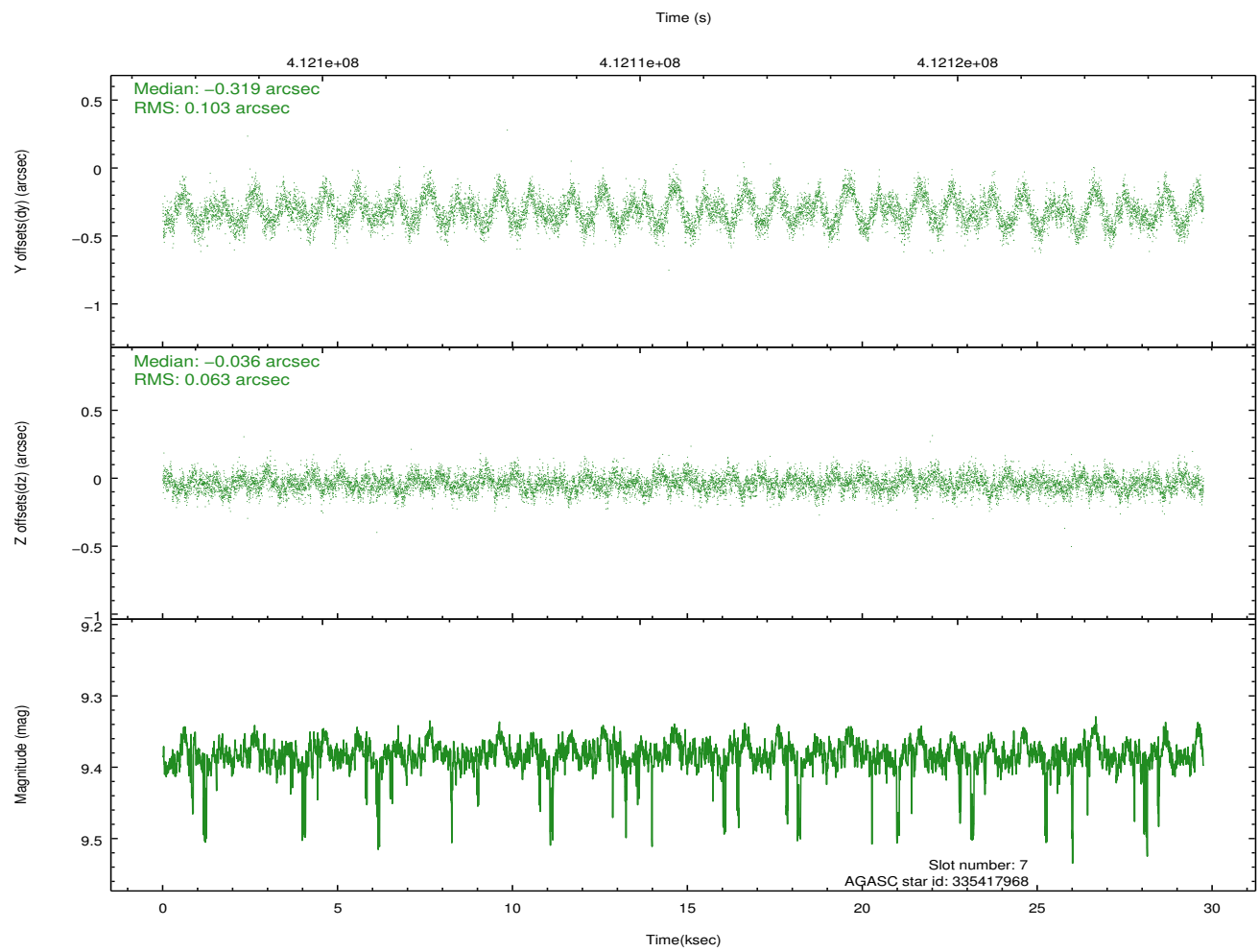
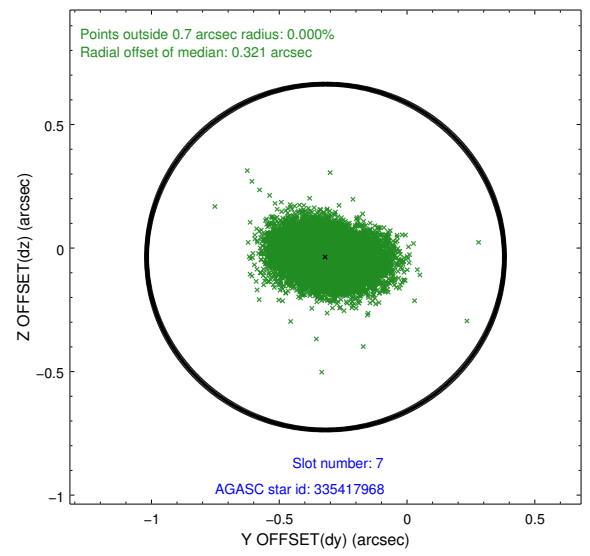
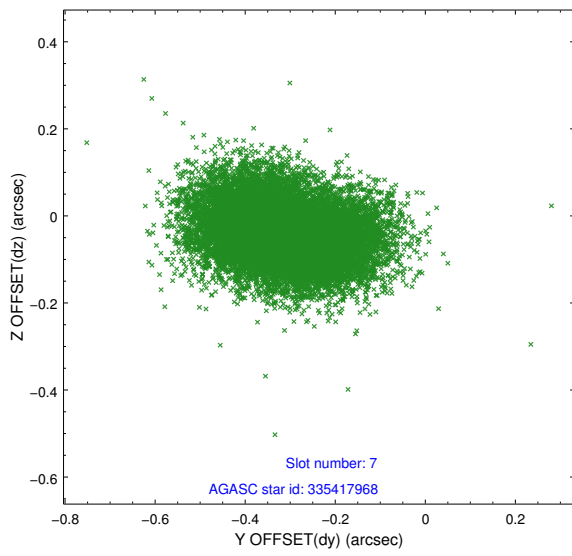
2.4.4 Slot 6



Time (s)

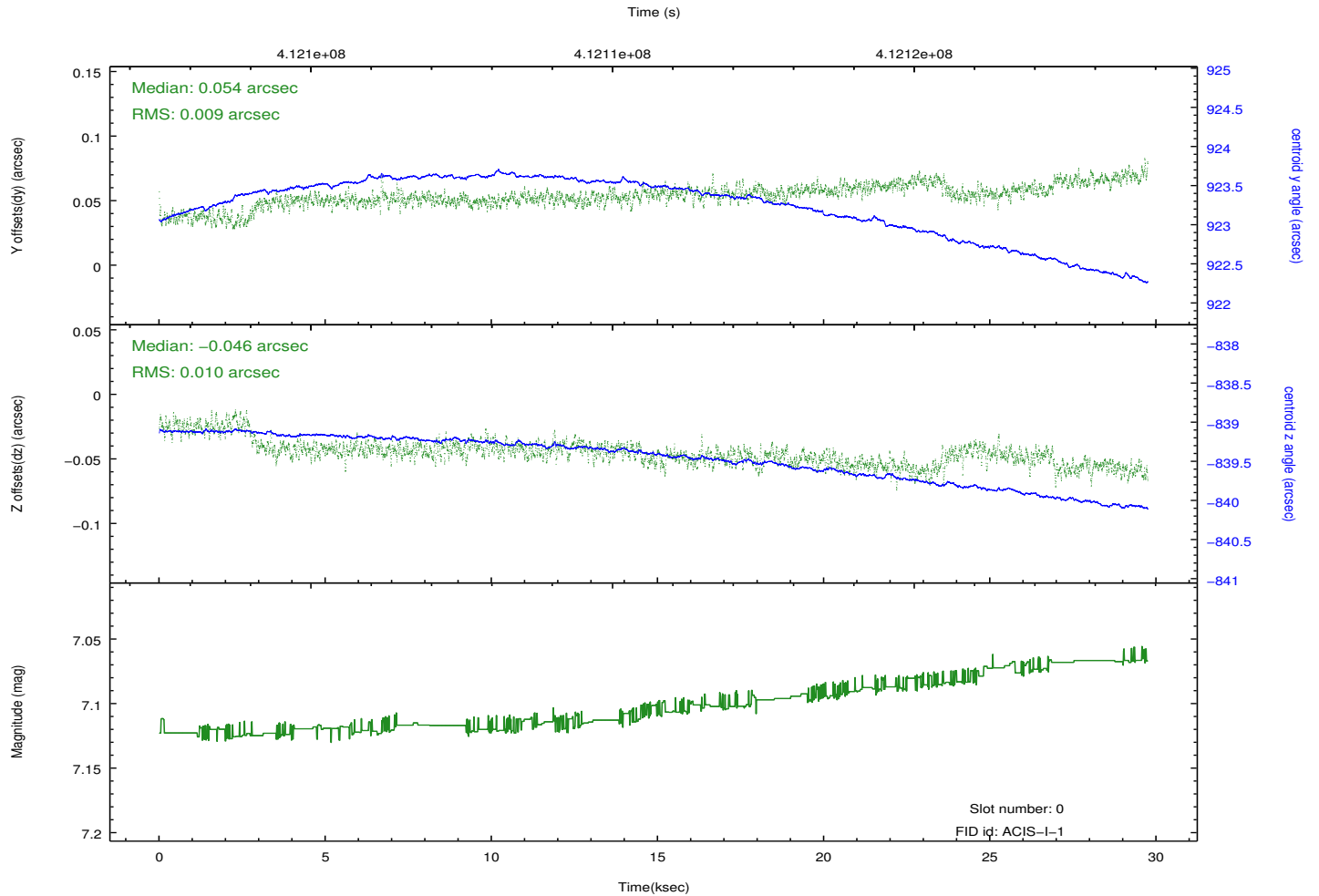
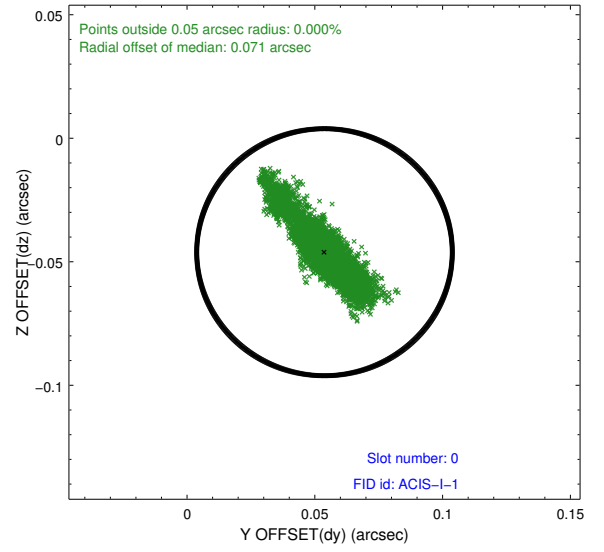
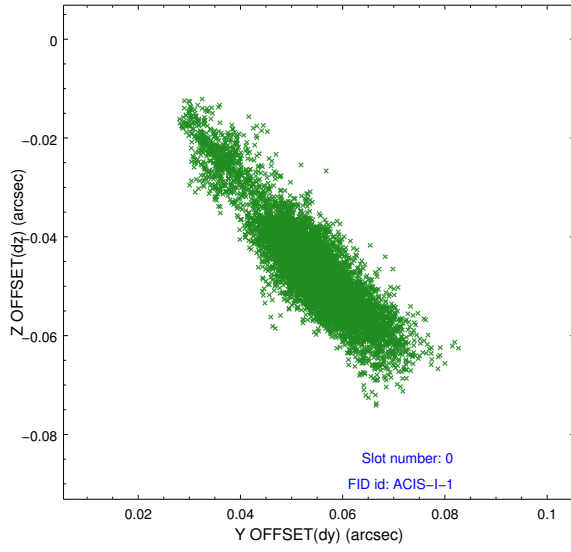


2.4.5 Slot 7

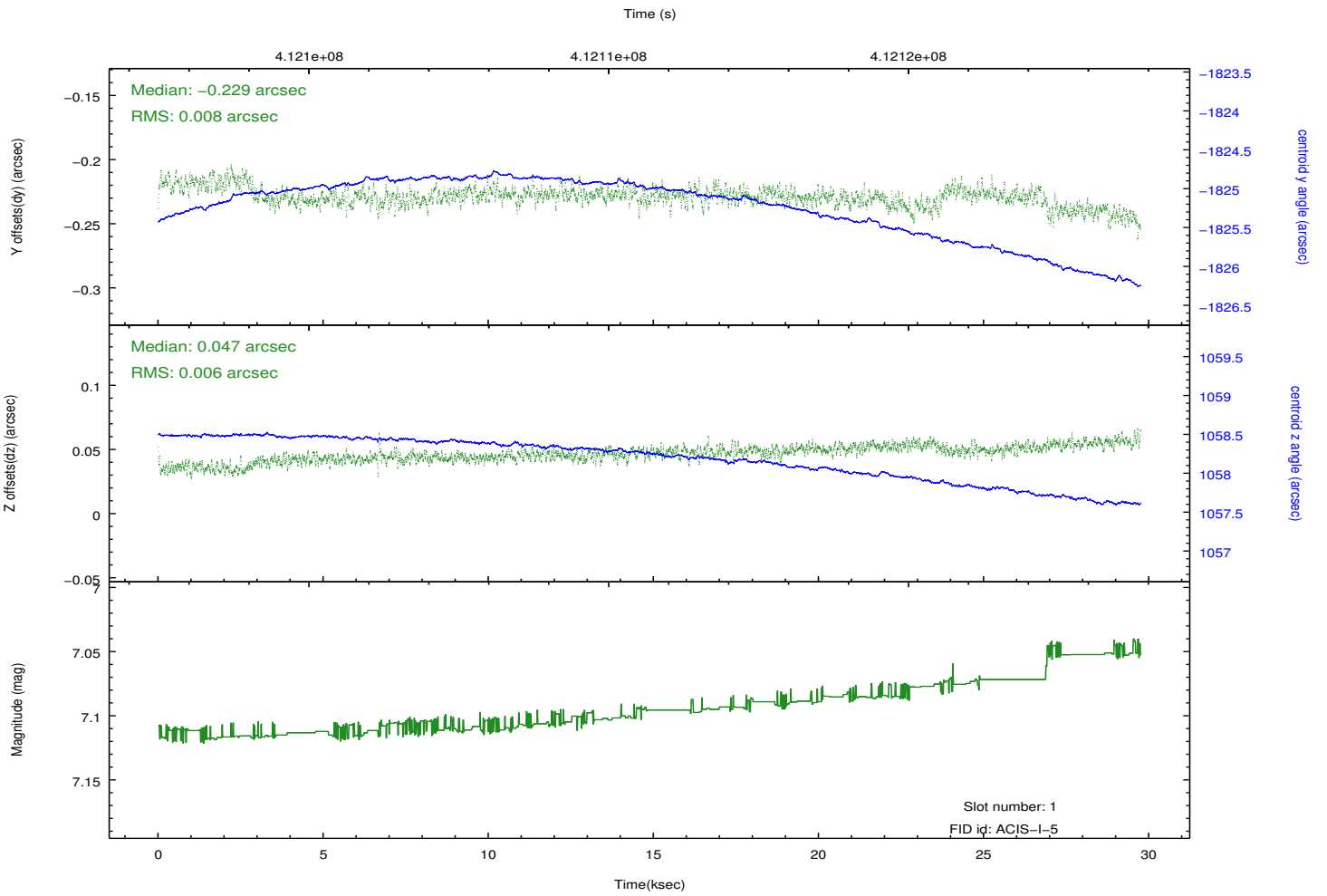
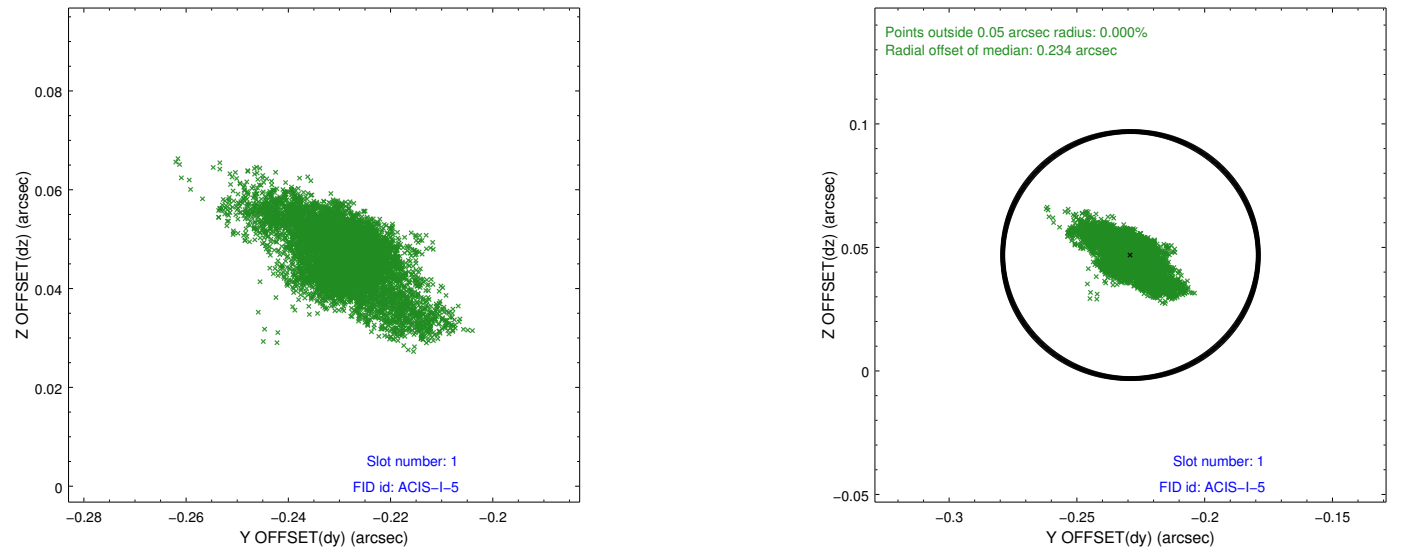


2.5 FID Slots

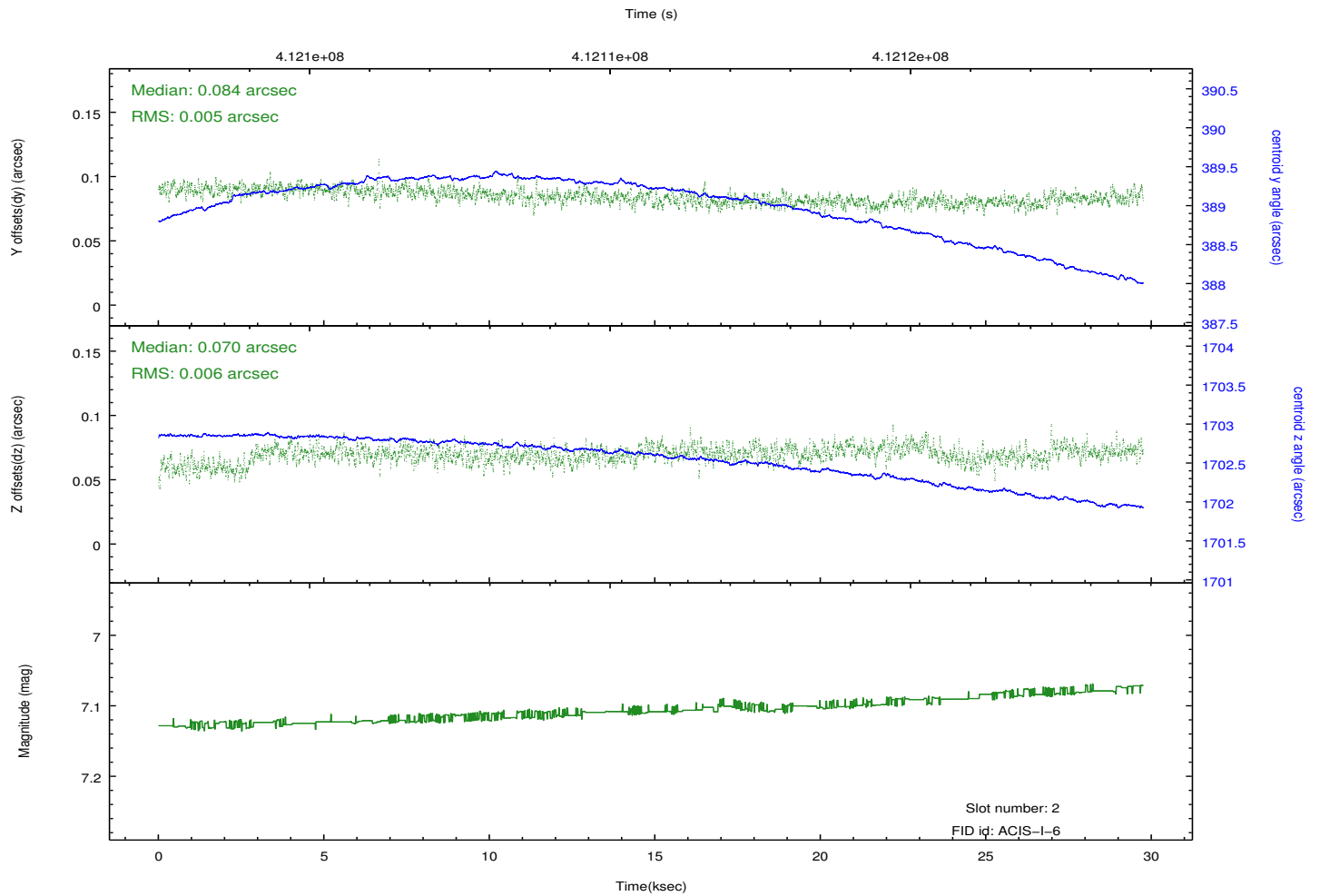
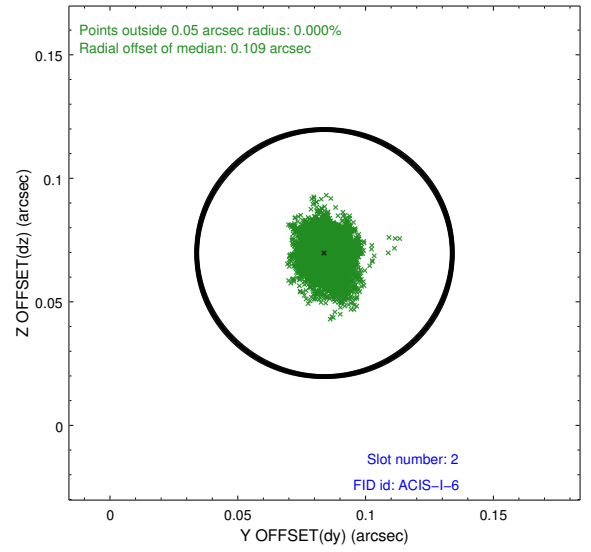
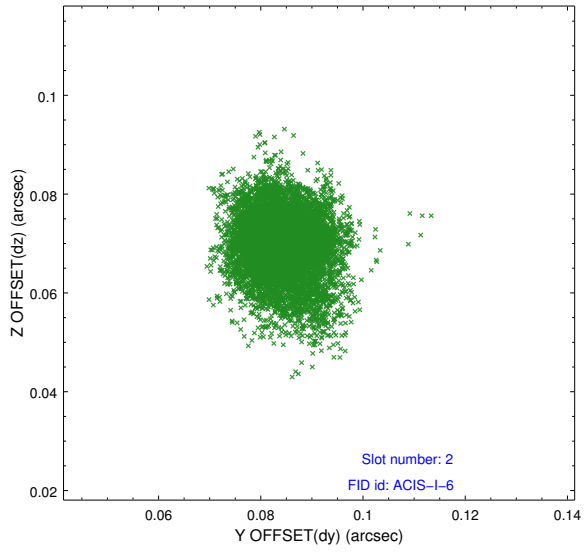
2.5.1 Slot 0



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	29.633750234246

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.