

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12818 - L2 Version 2
Chandra X-Ray Center

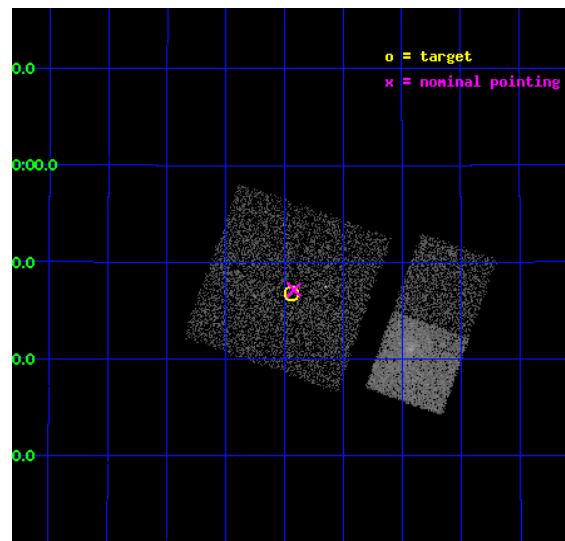
L2 Processing Date : Feb 2 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

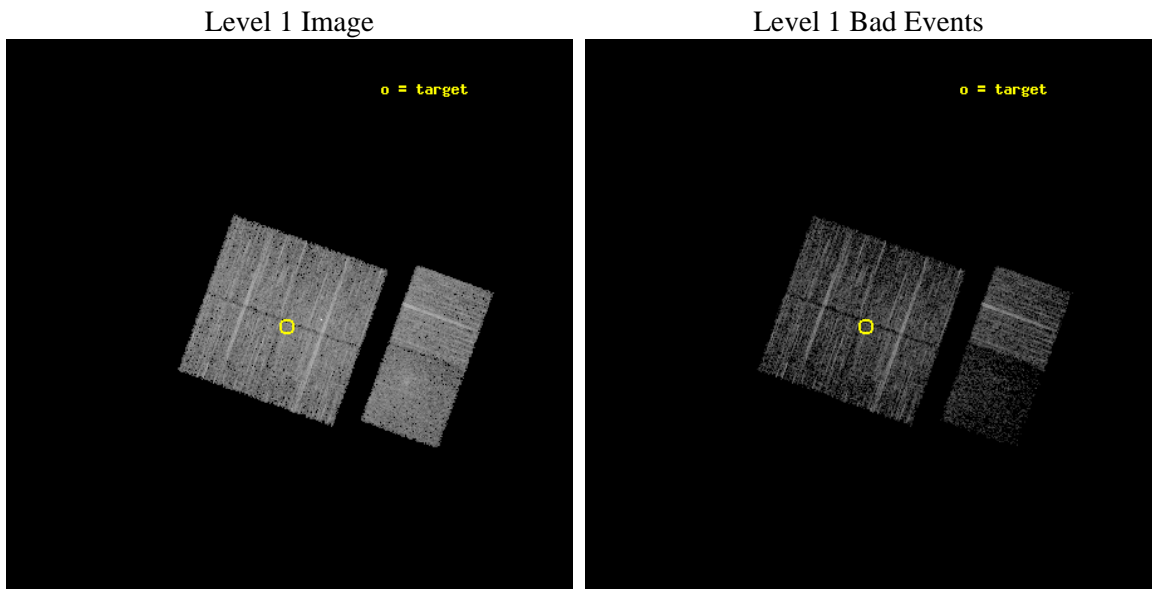
seq_num	702454	Sequence number
obs_id	12818	Observation id
title	A Systematic Chandra Survey of AGN in Major Mergers -- How many Binary AGN are out there?	Proposal title
observer	DR. Kevin Schawinski	Principal investigator
object	GZ_merger_AGN_8	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	155.735833	Observer's specified target RA [deg]
dec_targ	34.779694	Observer's specified target Dec [deg]
ra_nom	155.72998353992	Nominal RA [deg]
dec_nom	34.786105471397	Nominal Dec [deg]
roll_nom	109.80755695102	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4959.8555511236	Sum of GTIs [s]
livetime	4897.0508736688	Livetime [s]
ontime0	4959.7324311137	Sum of GTIs [s]
ontime1	4959.773471117	Sum of GTIs [s]
ontime2	4959.8145111203	Sum of GTIs [s]
ontime3	4959.8555511236	Sum of GTIs [s]
ontime6	4959.9376311302	Sum of GTIs [s]
ontime7	4959.8965911269	Sum of GTIs [s]
l2events	23914	Number of level 2 events



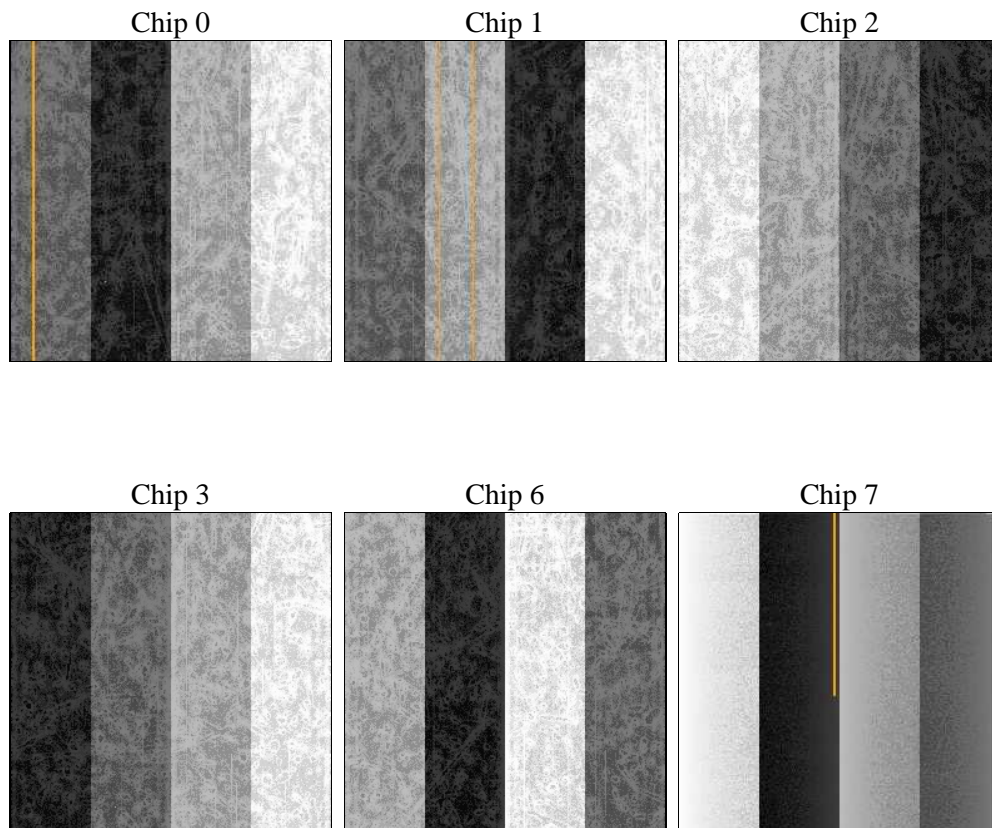
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	4959.8555511236	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	4959.7324311137	Sum of GTIs [s]
date	2012-02-02T22:29:15	Date and time of file creation	ontime1	4959.7734711117	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4959.8145111203	Sum of GTIs [s]
			ontime3	4959.8555511236	Sum of GTIs [s]
			ontime6	4959.9376311302	Sum of GTIs [s]
			ontime7	4959.8965911269	Sum of GTIs [s]
			l1events	160988	Number of level 1 events

2.1.4 Events

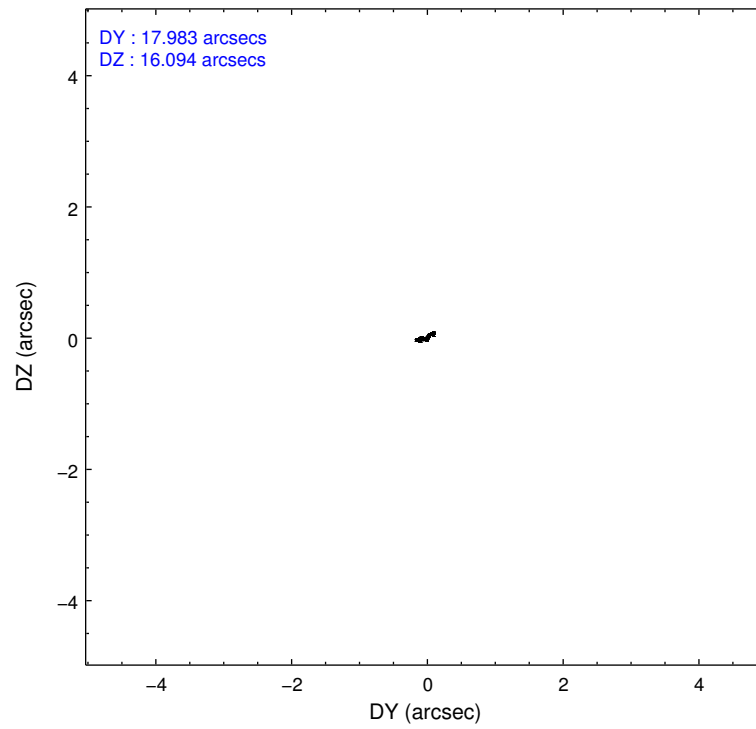
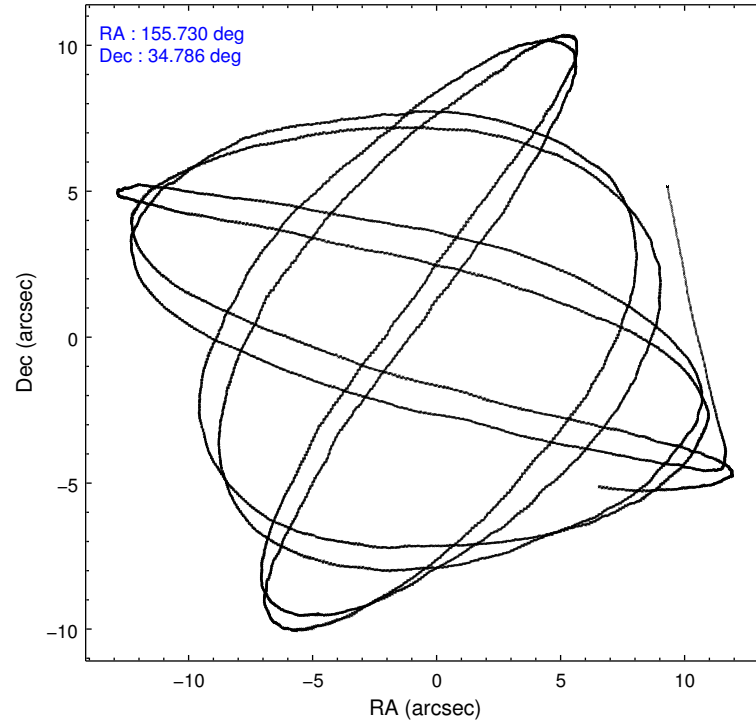
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	28111	26654	28542	27480	29526	20675
rejected events	25278	23661	25185	24851	26472	8366
rejected %	89%	88%	88%	90%	89%	40%

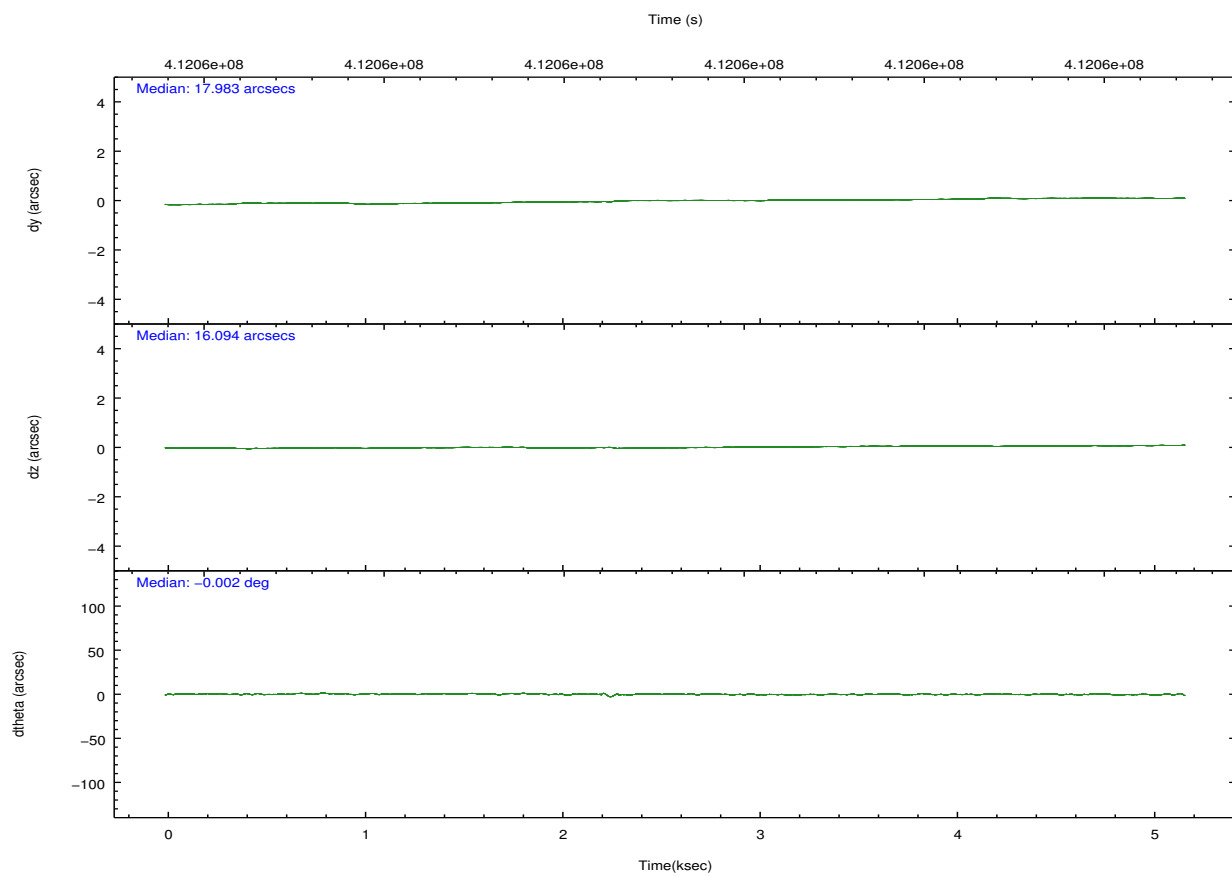
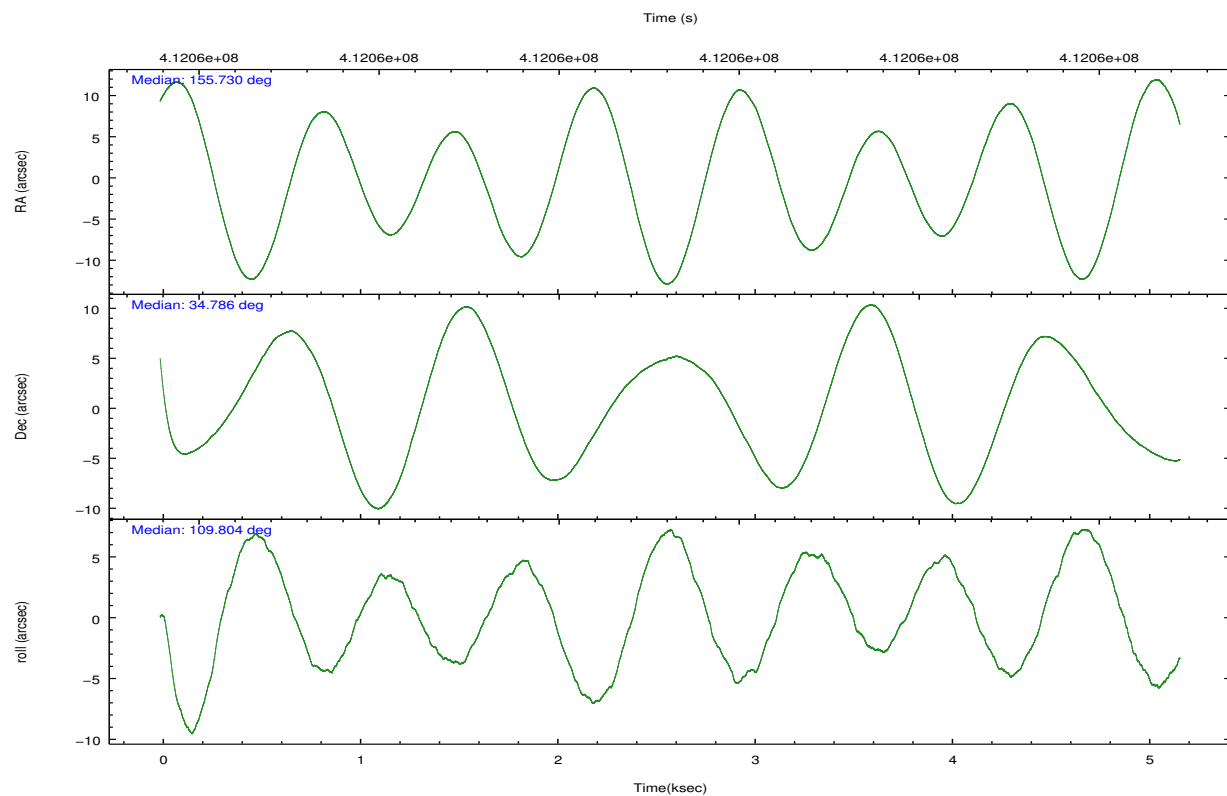
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1134	1088	1614	1099	1237	1865
	4%	4%	5%	3%	4%	9%
grade 1 events	17	11	48	13	17	41
	0%	0%	0%	0%	0%	0%
grade 2 events	707	711	727	557	718	2995
	2%	2%	2%	2%	2%	14%
grade 3 events	296	343	290	275	327	1204
	1%	1%	1%	1%	1%	5%
grade 4 events	257	309	309	259	262	1184
	0%	1%	1%	0%	0%	5%
grade 5 events	608	661	563	717	706	1953
	2%	2%	1%	2%	2%	9%
grade 6 events	442	542	427	440	512	5076
	1%	2%	1%	1%	1%	24%
grade 7 events	24650	22989	24564	24120	25747	6357
	87%	86%	86%	87%	87%	30%

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	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	155.755558	155.7299835399248	CCD I2 on	Y	Y
[deg] Pointing Dec	34.768481	34.78610547139721	CCD I3 on	Y	Y
[deg] Pointing Roll	109.584260	109.8075569510162	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	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	412059193.184000	412058147.87969	CCD S5 on	N	N
Observation start date	2011-01-22T04:52:07	2011-01-22T04:35:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	412064193.184000	412064817.55504	On-chip summing requested	N	N
Observation end date	2011-01-22T06:15:27	2011-01-22T06:26:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



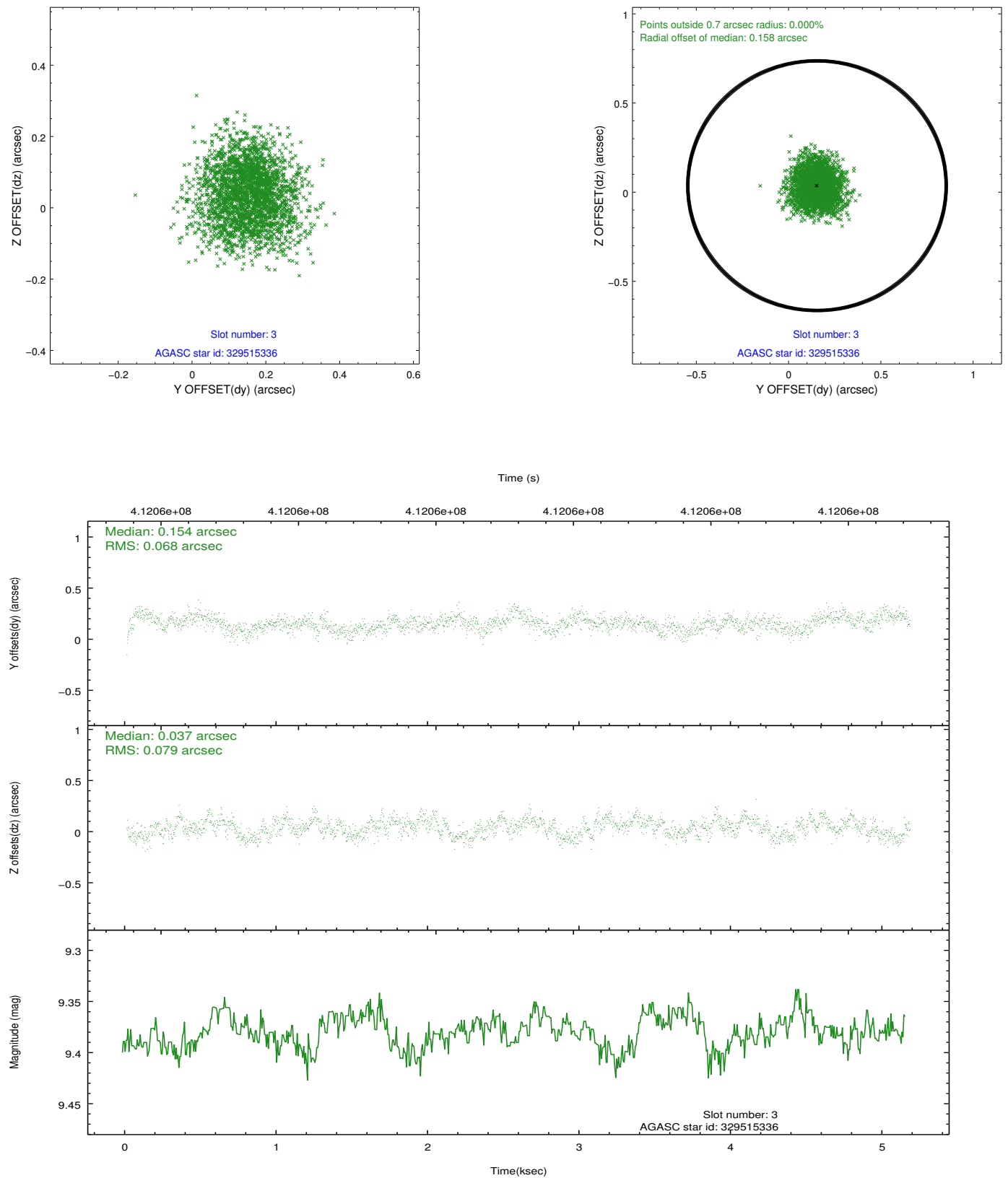


Slot Statistics

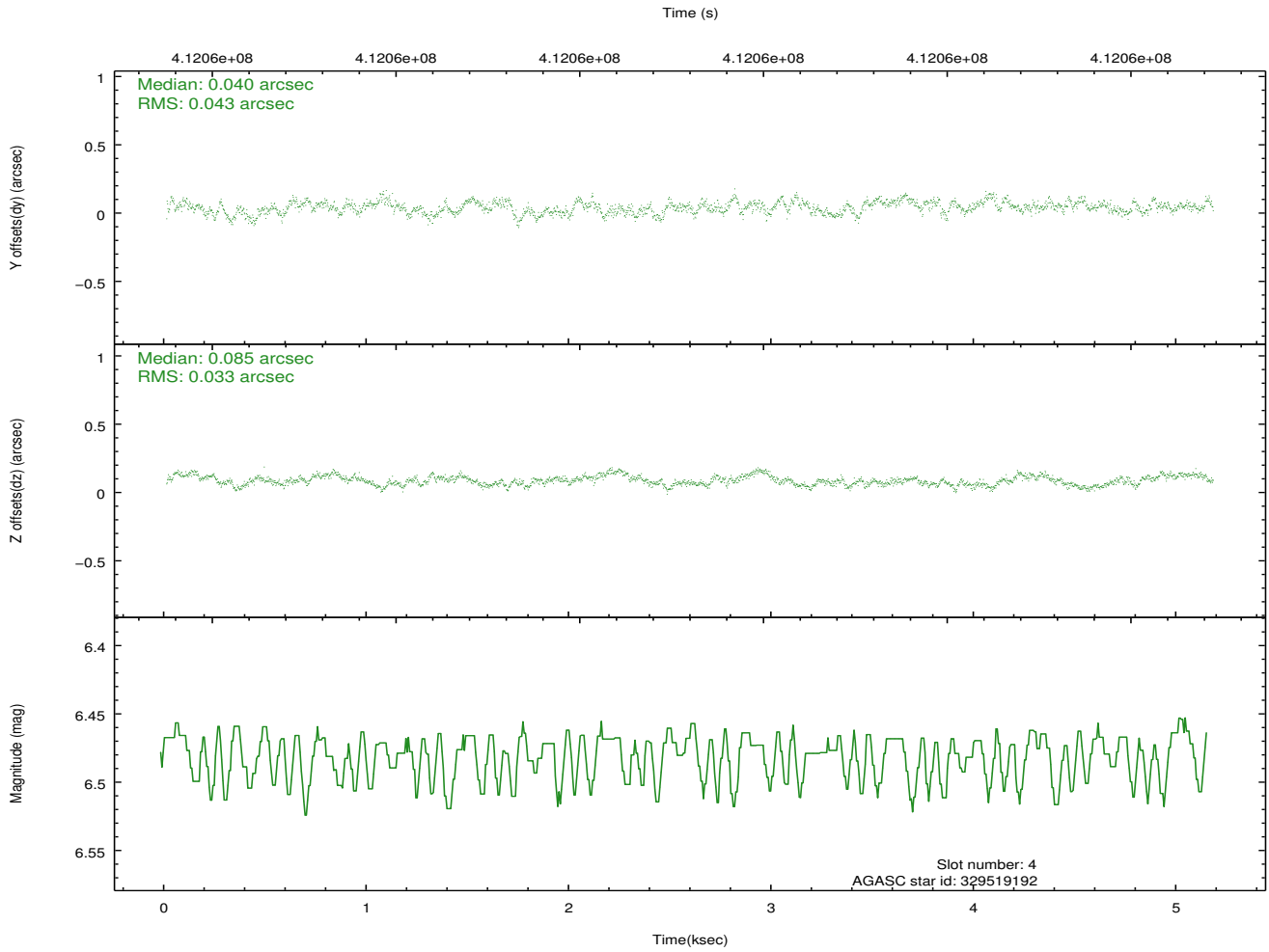
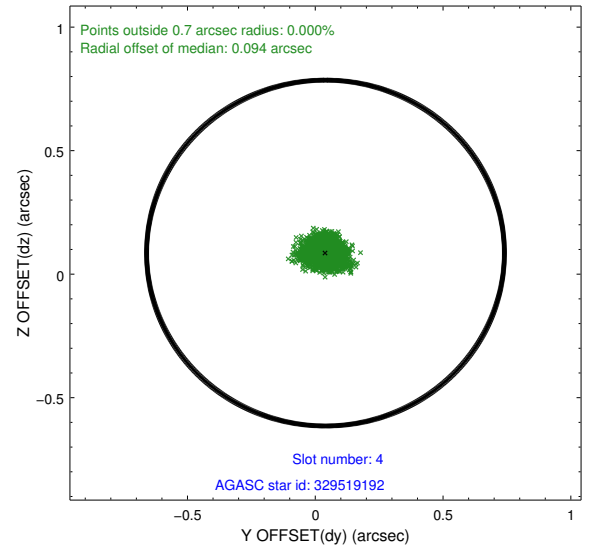
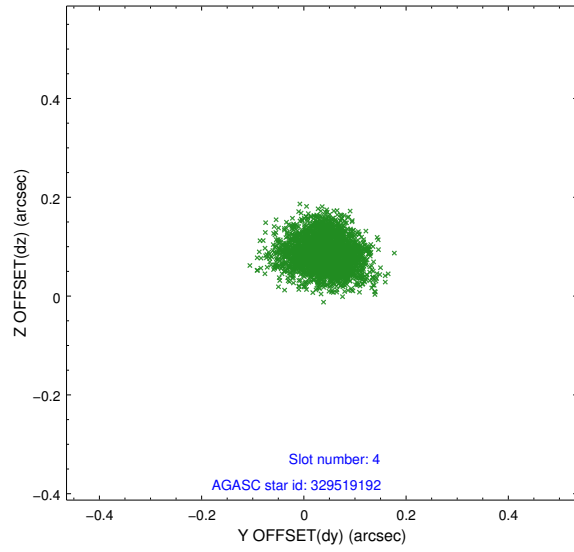
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.10	1261	0.060	-0.042	0.010	0.016	0.000000	0.000000	921.47	-839.77
1	FID	ACIS-I-5	7.09	1261	-0.251	0.048	0.008	0.013	0.000000	0.000000	-1826.30	1057.22
2	FID	ACIS-I-6	7.11	1261	0.100	0.064	0.009	0.016	0.000000	0.000000	385.78	1703.07
3	GUIDE	329515336	9.38	2517	0.154	0.037	0.112	0.178	156.232851	34.541736	-1239.98	-1060.91
4	GUIDE	329519192	6.48	2523	0.040	0.085	0.058	0.091	156.025335	34.193219	-2219.53	-62.95
5	GUIDE	329785216	7.48	2522	0.055	-0.067	0.112	0.163	155.772079	35.217613	1506.74	-586.86
6	GUIDE	329909104	8.49	2522	0.029	0.013	0.114	0.190	156.160535	35.006557	410.63	-1412.93
7	BAD	329522600	5.61	1576	-0.416	-0.117	0.054	0.087	156.092465	34.176399	-2342.40	-231.92

2.4 Star Slots

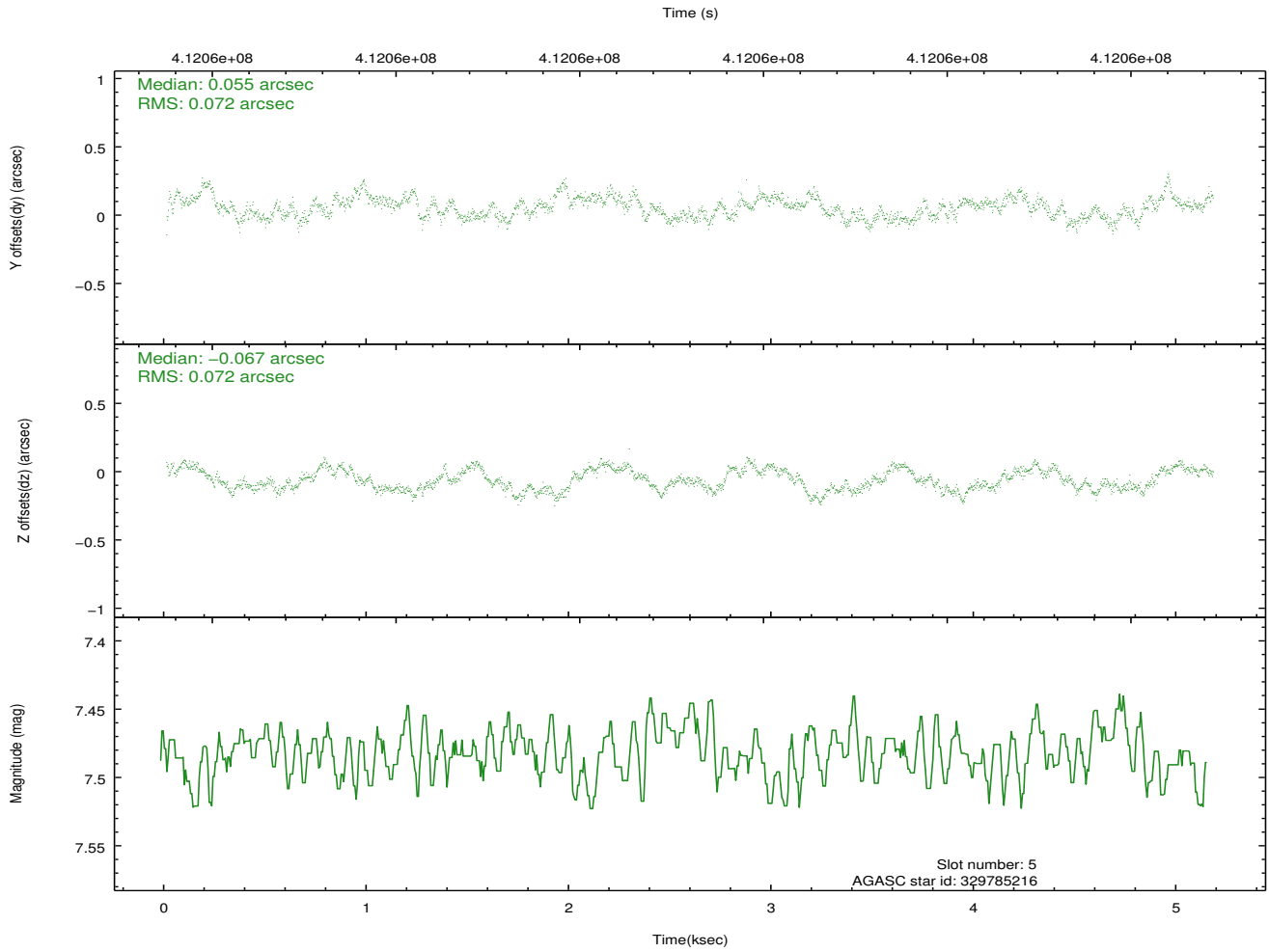
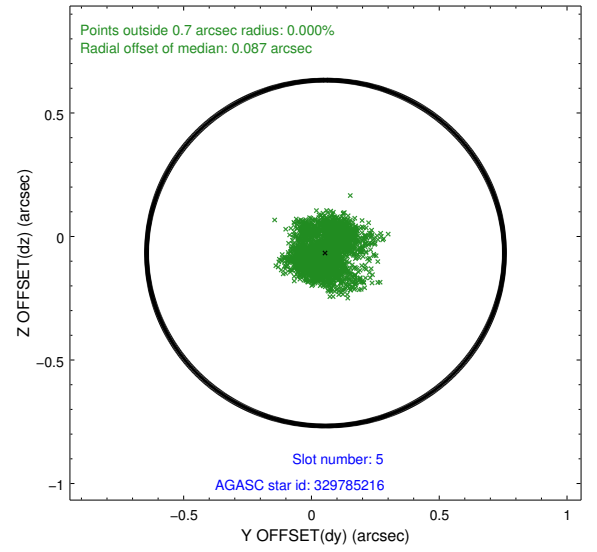
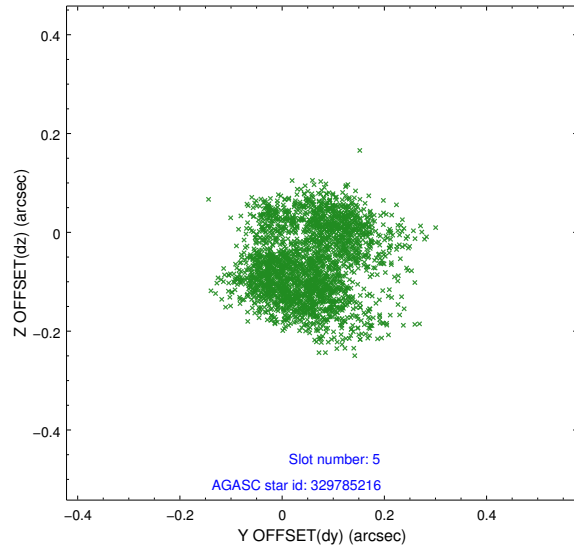
2.4.1 Slot 3



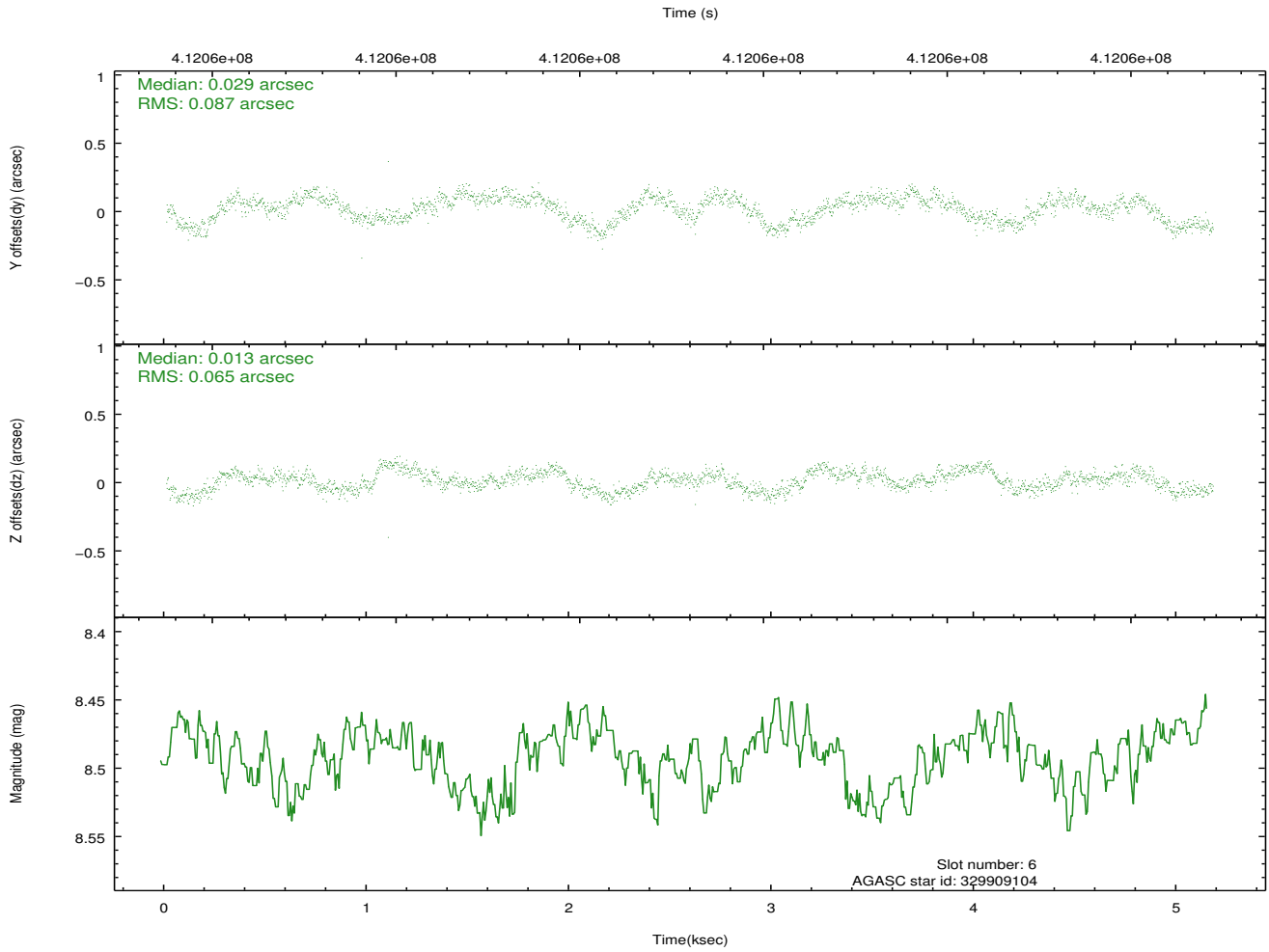
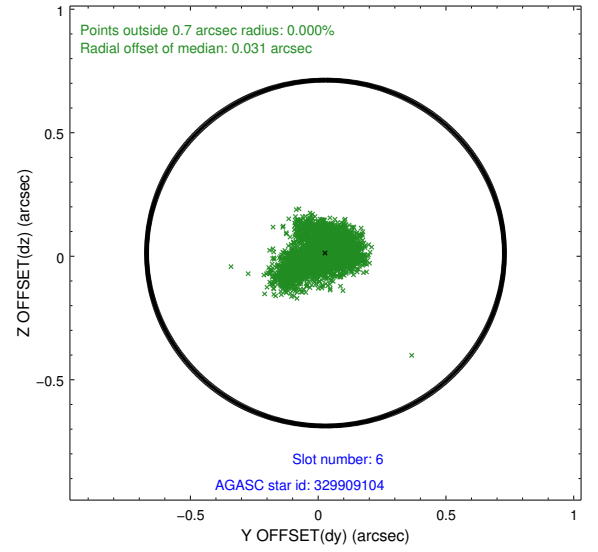
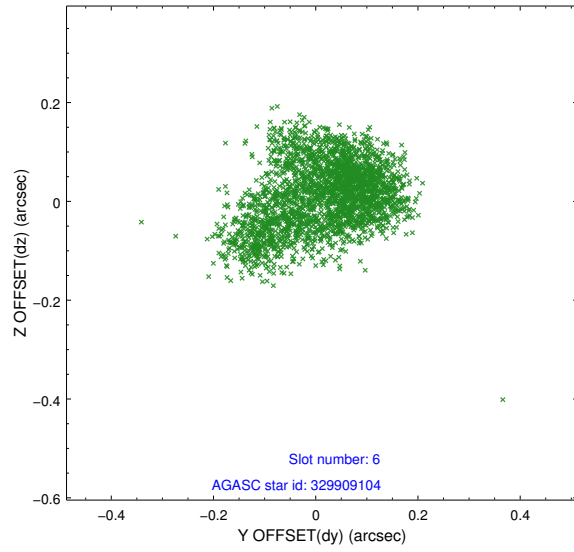
2.4.2 Slot 4



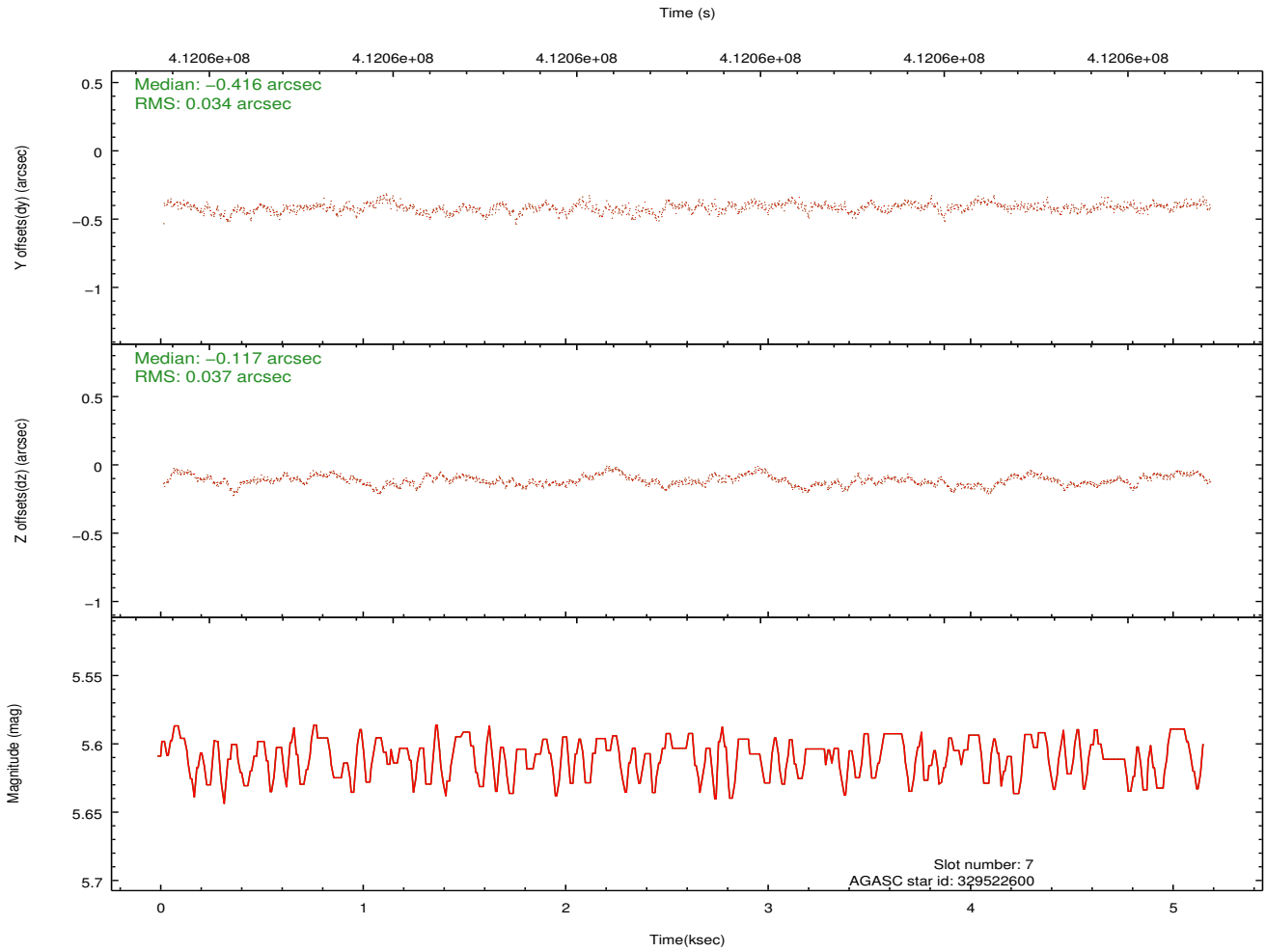
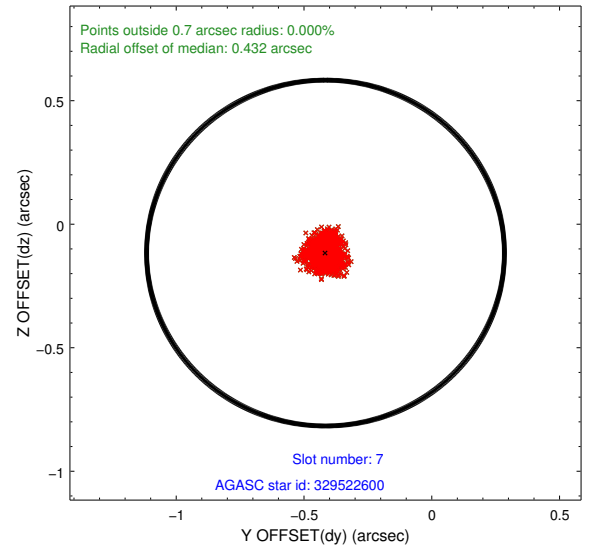
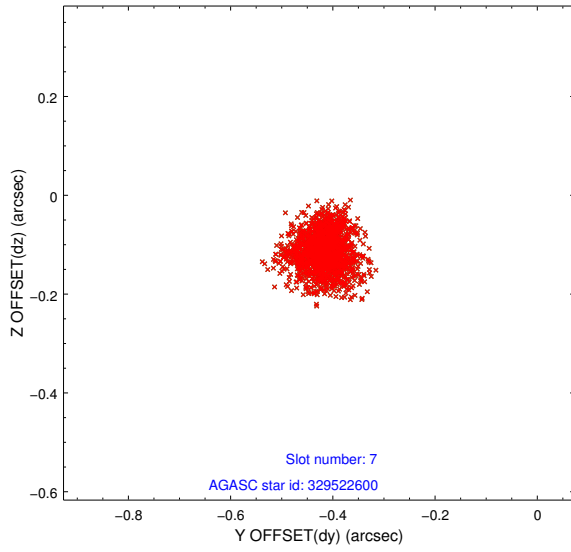
2.4.3 Slot 5



2.4.4 Slot 6

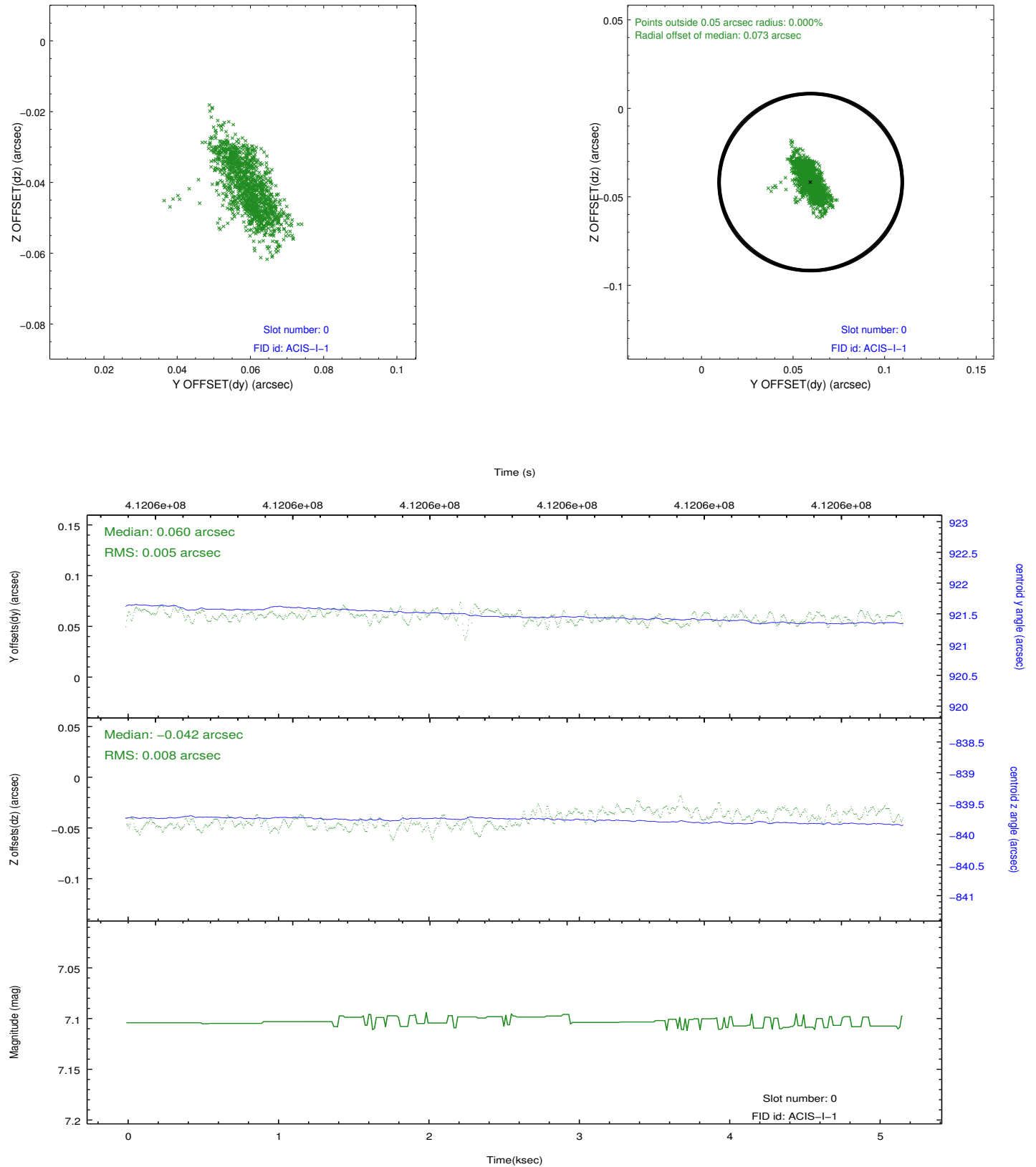


2.4.5 Slot 7

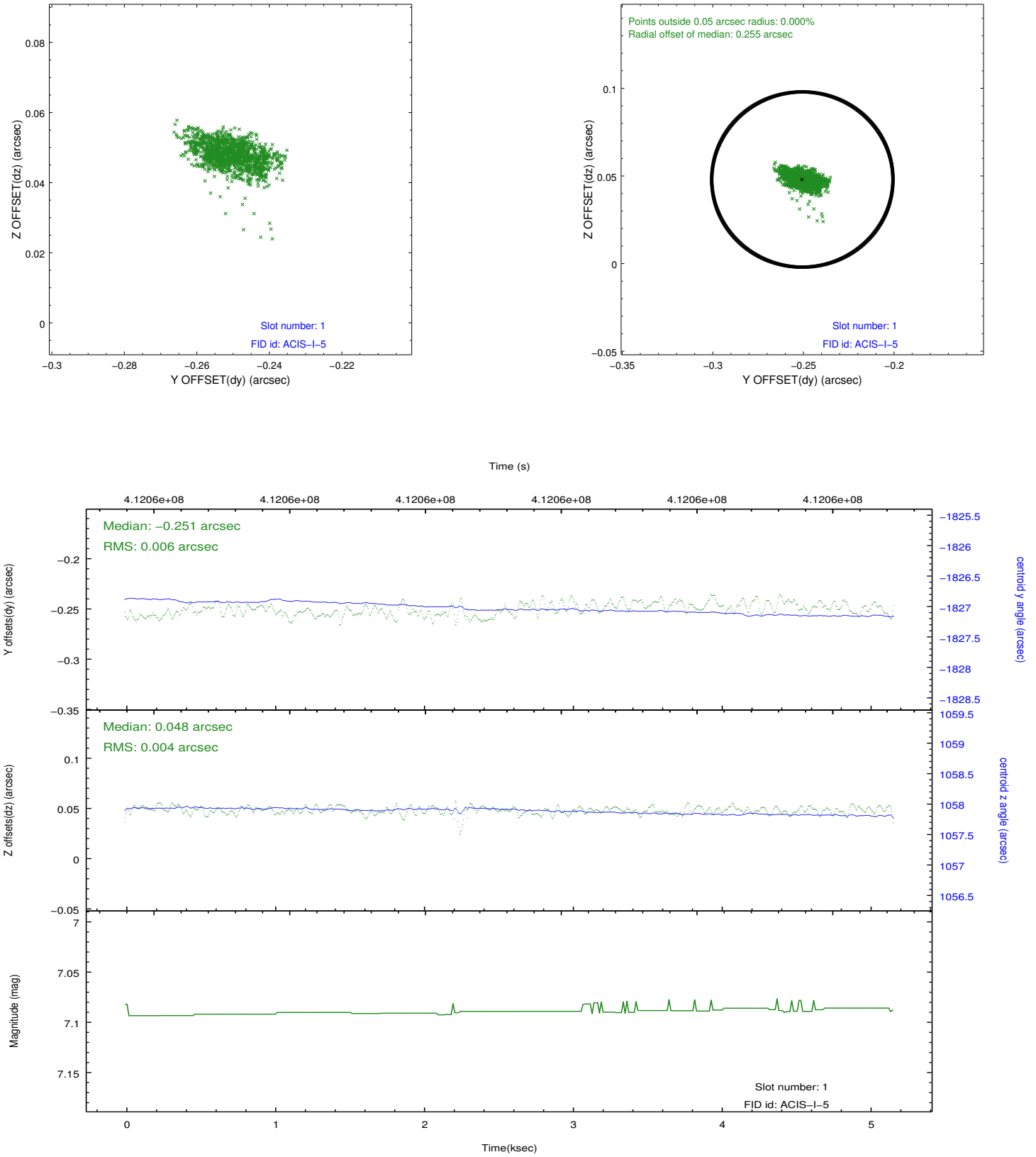


2.5 FID Slots

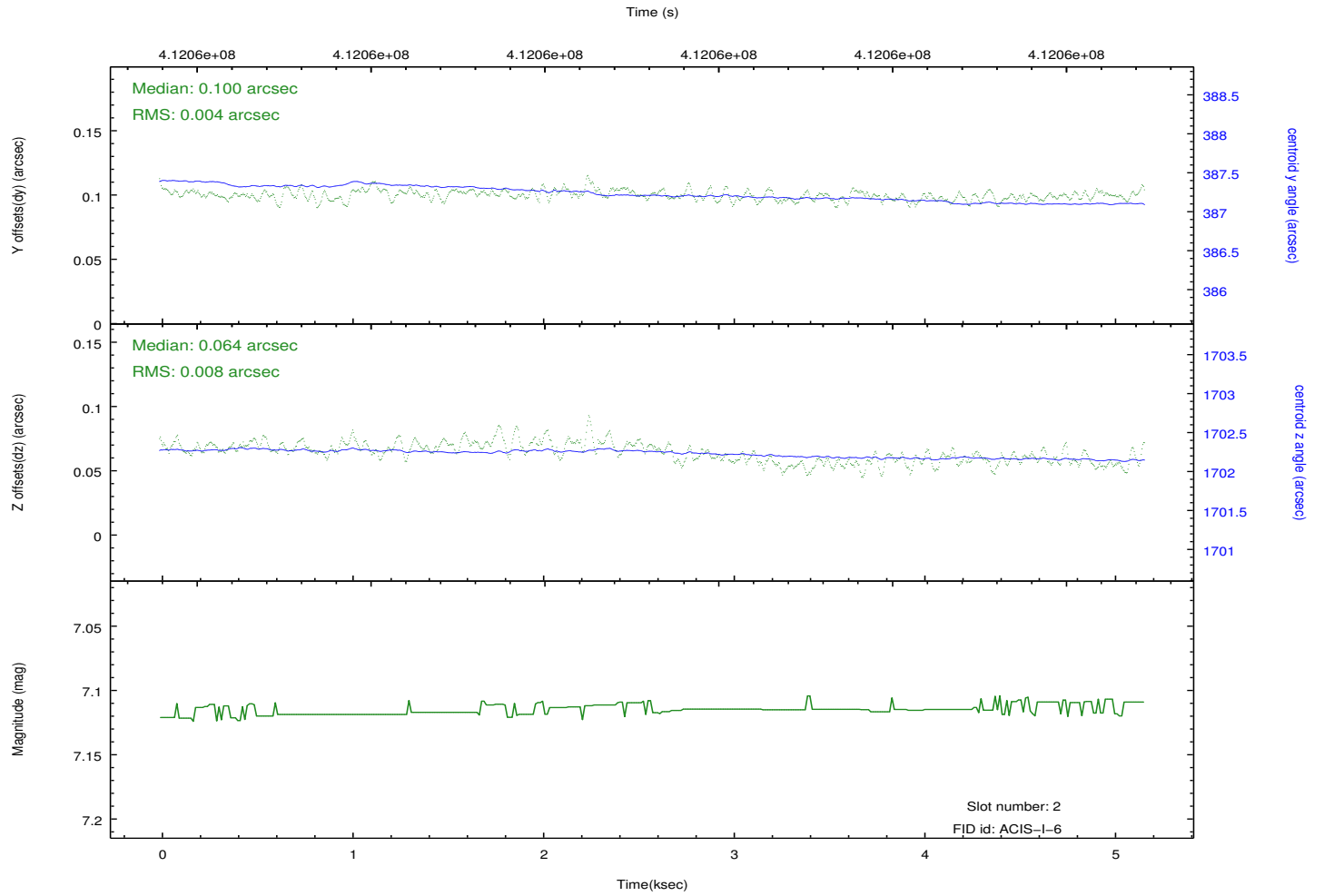
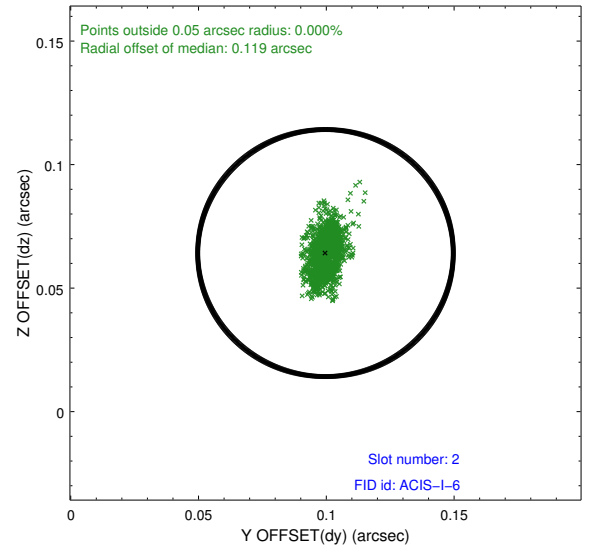
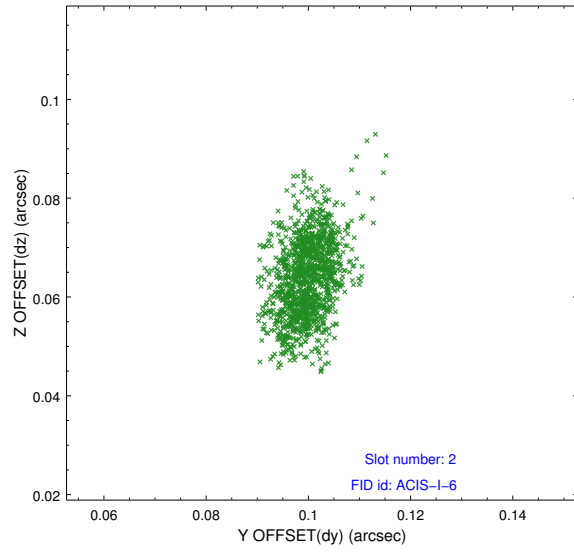
2.5.1 Slot 0



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	4.959855556488

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.