

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12821 - L2 Version 2
Chandra X-Ray Center

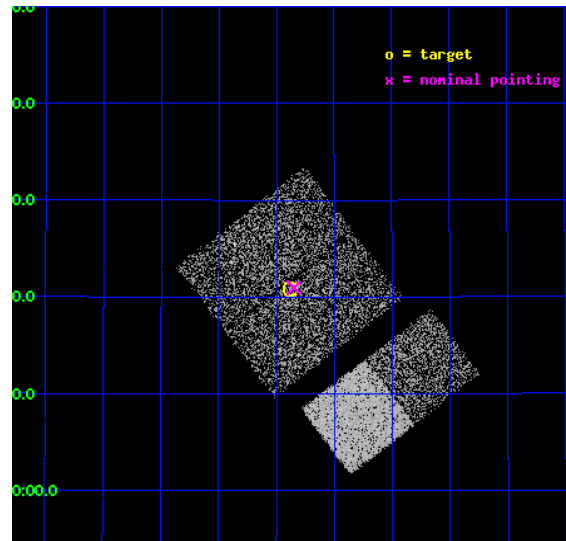
L2 Processing Date : Feb 3 2012

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1 Front

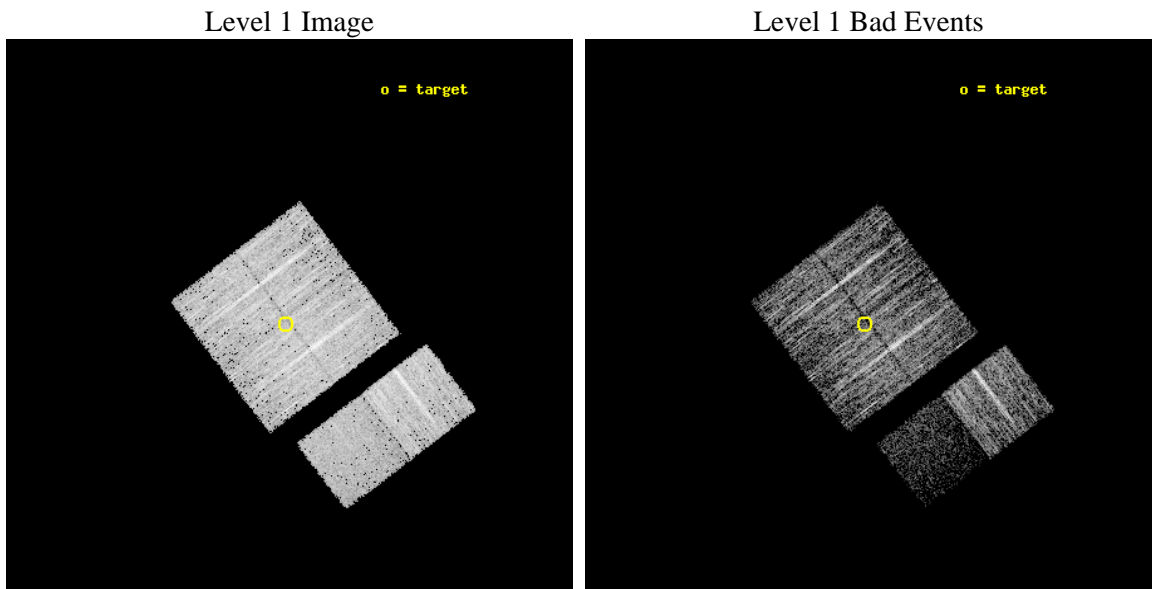
seq_num	702457	Sequence number
obs_id	12821	Observation id
title	A Systematic Chandra Survey of AGN in Major Mergers -- How many Binary AGN are out there?	Proposal title
observer	DR. Kevin Schawinski	Principal investigator
object	GZ_merger_AGN_11	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	149.471667	Observer's specified target RA [deg]
dec_targ	36.3465	Observer's specified target Dec [deg]
ra_nom	149.46227246424	Nominal RA [deg]
dec_nom	36.349229521544	Nominal Dec [deg]
roll_nom	142.69402383826	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4962.993403554	Sum of GTIs [s]
livetime	4900.1489927223	Livetime [s]
ontime0	4962.8702835441	Sum of GTIs [s]
ontime1	4962.9113235474	Sum of GTIs [s]
ontime2	4962.9523635507	Sum of GTIs [s]
ontime3	4962.993403554	Sum of GTIs [s]
ontime6	4963.0754835606	Sum of GTIs [s]
ontime7	4963.0344435573	Sum of GTIs [s]
l2events	21908	Number of level 2 events



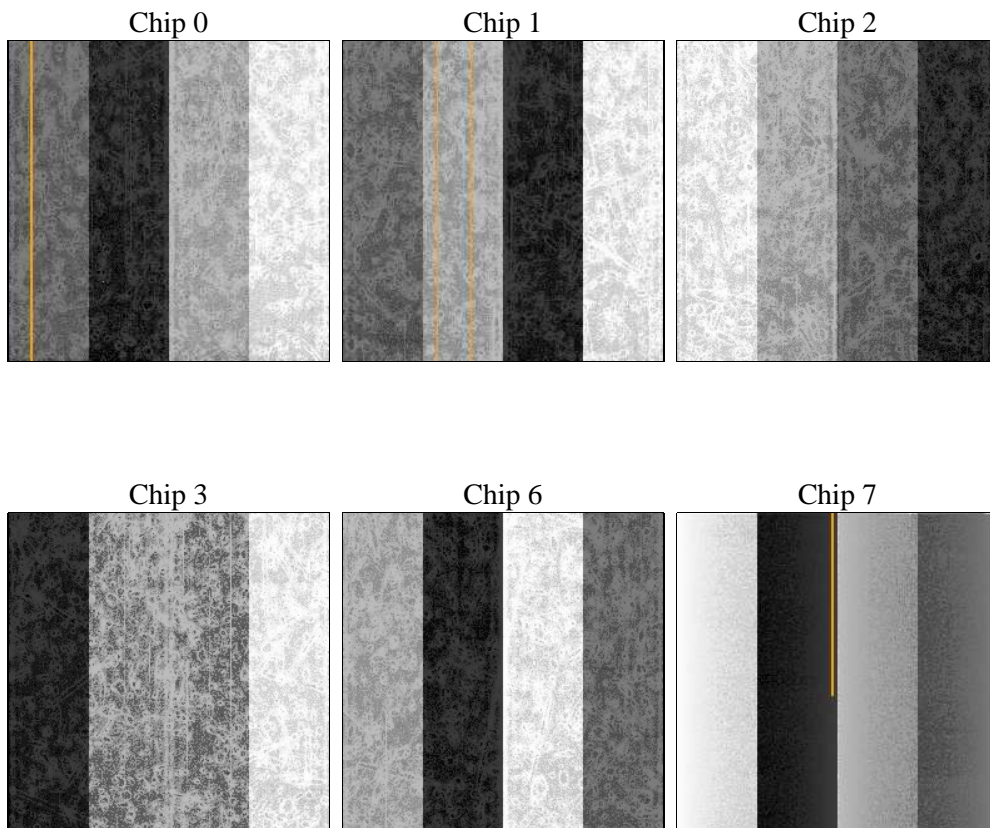
2 OBI

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	4962.993403554	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	4962.8702835441	Sum of GTIs [s]
date	2012-02-03T14:15:56	Date and time of file creation	ontime1	4962.9113235474	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4962.9523635507	Sum of GTIs [s]
			ontime3	4962.993403554	Sum of GTIs [s]
			ontime6	4963.0754835606	Sum of GTIs [s]
			ontime7	4963.0344435573	Sum of GTIs [s]
			l1events	158568	Number of level 1 events

2.1.4 Events

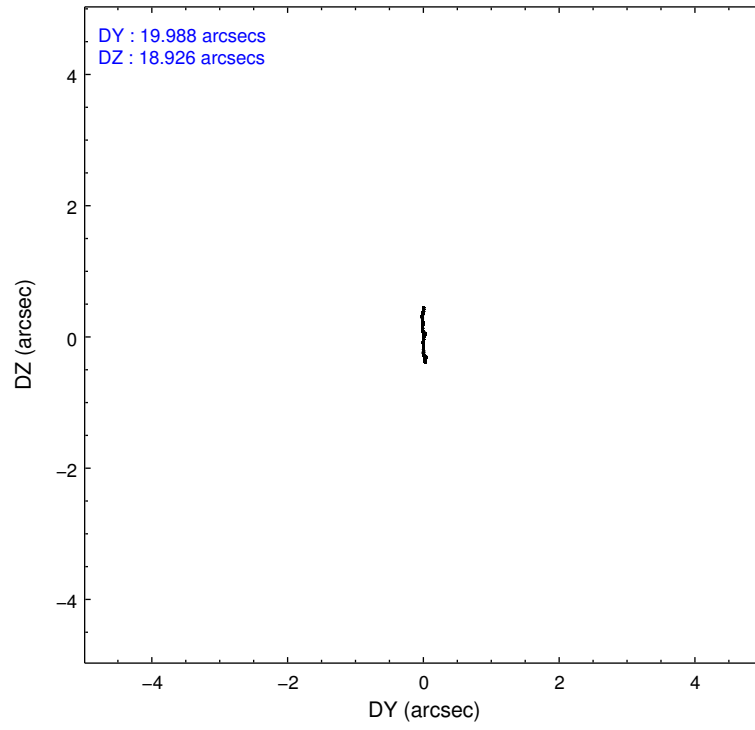
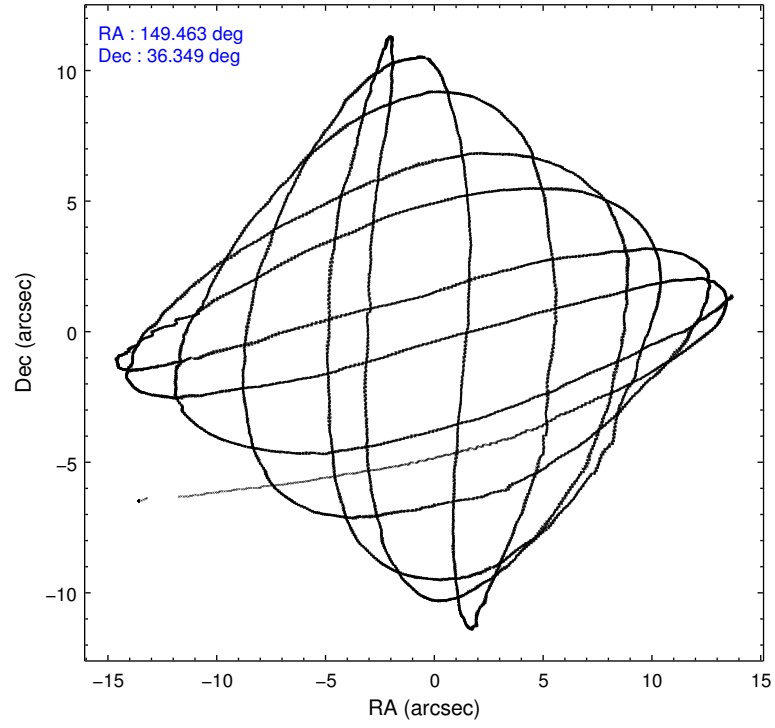
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	26360	27717	28330	27595	29692	18874
rejected events	23413	24740	25548	24942	26706	8012
rejected %	88%	89%	90%	90%	89%	42%

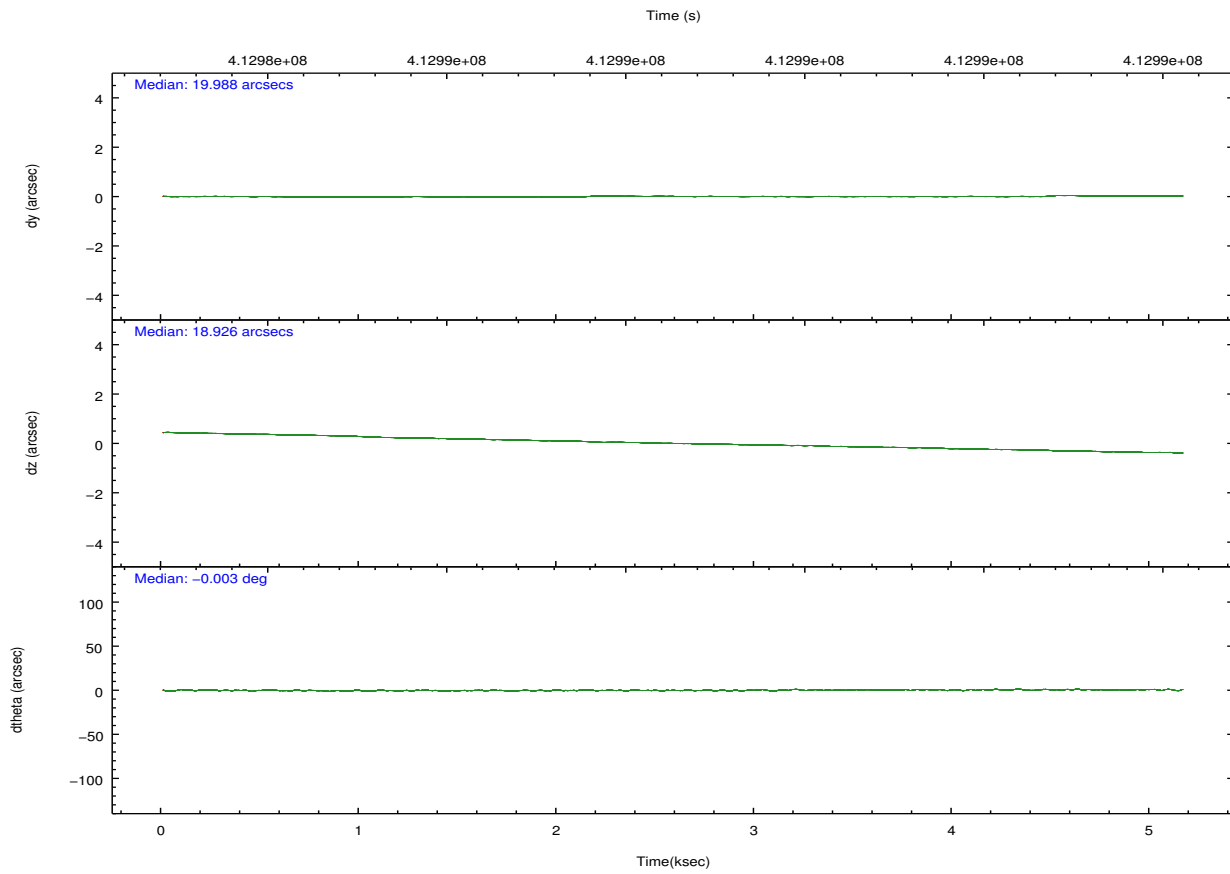
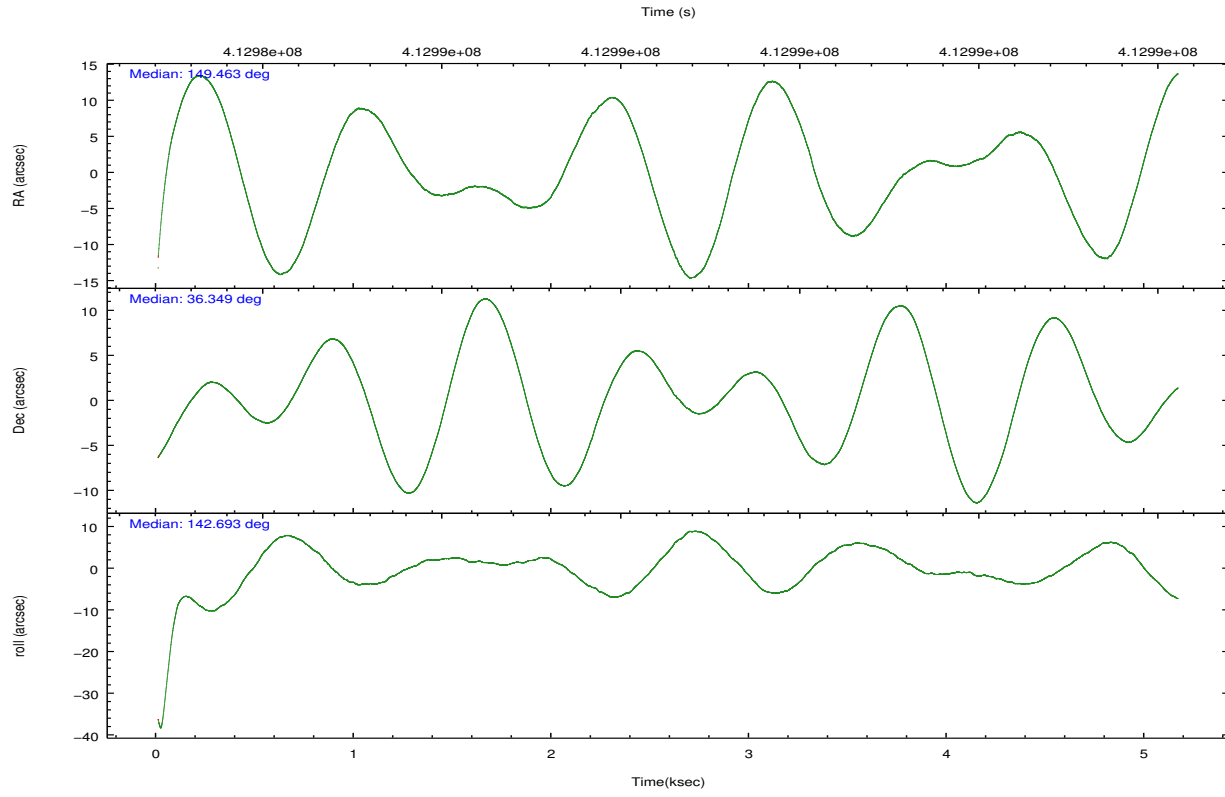
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1212	1157	1116	1169	1205	1404
	4%	4%	3%	4%	4%	7%
grade 1 events	20	20	19	14	25	52
	0%	0%	0%	0%	0%	0%
grade 2 events	686	692	664	562	688	2682
	2%	2%	2%	2%	2%	14%
grade 3 events	329	342	291	249	312	1039
	1%	1%	1%	0%	1%	5%
grade 4 events	308	307	299	243	296	1071
	1%	1%	1%	0%	0%	5%
grade 5 events	584	629	565	659	701	1953
	2%	2%	1%	2%	2%	10%
grade 6 events	416	486	413	436	488	4679
	1%	1%	1%	1%	1%	24%
grade 7 events	22805	24084	24963	24263	25977	5994
	86%	86%	88%	87%	87%	31%

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	149.496121	149.4622724642383	CCD I2 on	Y	Y
[deg] Pointing Dec	36.345879	36.34922952154437	CCD I3 on	Y	Y
[deg] Pointing Roll	142.465381	142.6940238382637	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)	412984846.184000	412983829.01508	CCD S5 on	N	N
Observation start date	2011-02-01T21:59:40	2011-02-01T21:43:49	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	412989846.184000	412990797.47794	On-chip summing requested	N	N
Observation end date	2011-02-01T23:23:00	2011-02-01T23:39:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



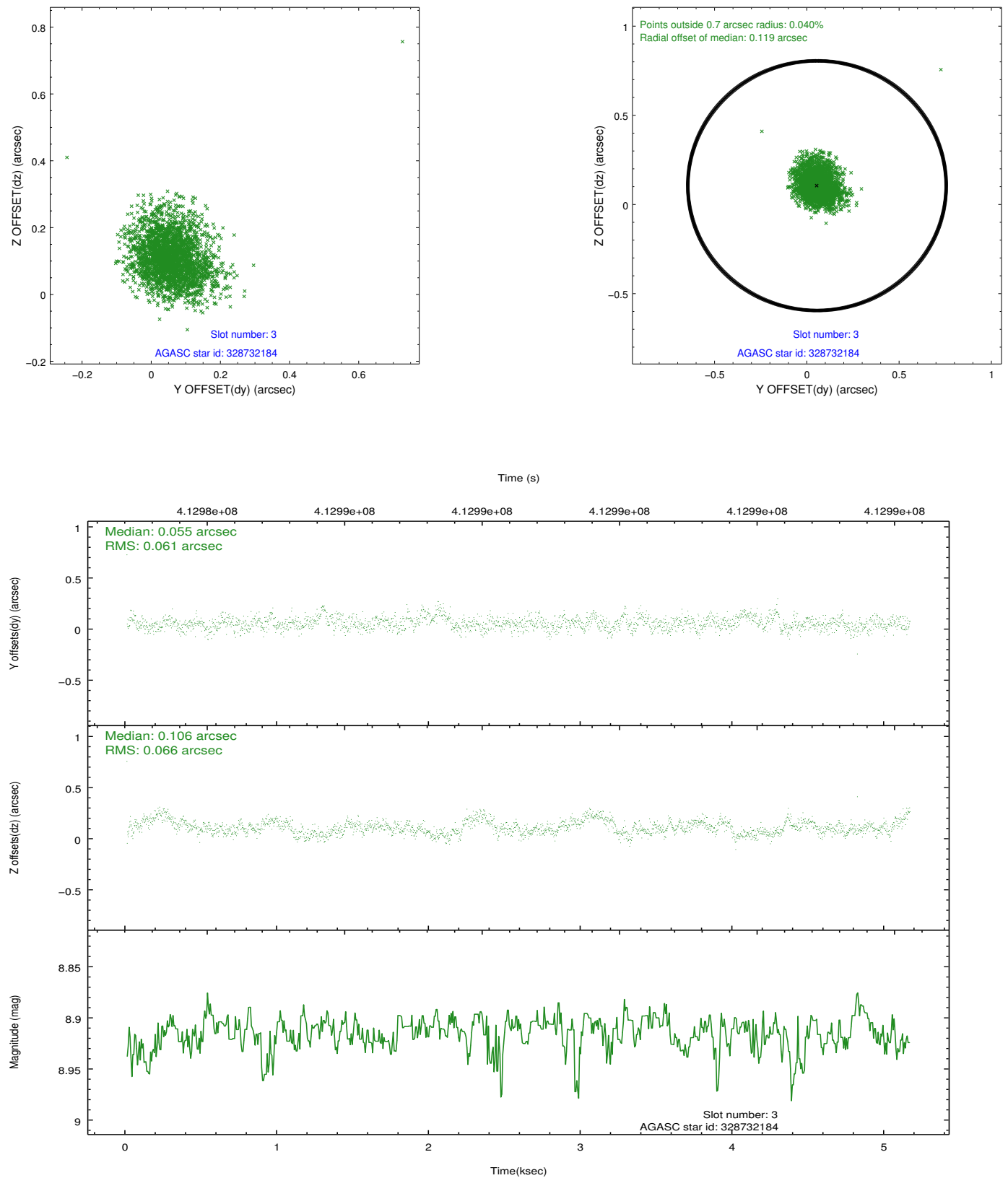


Slot Statistics

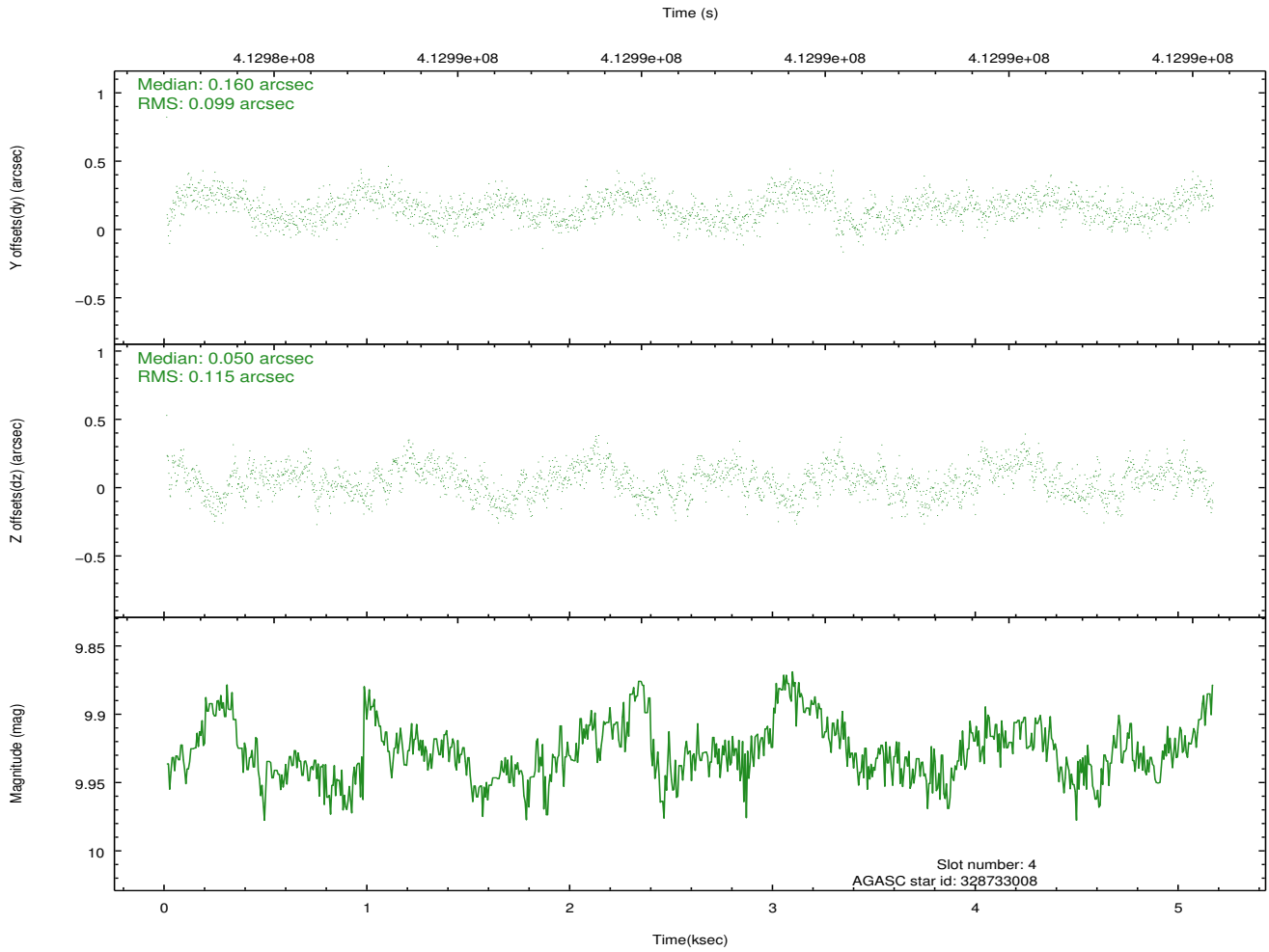
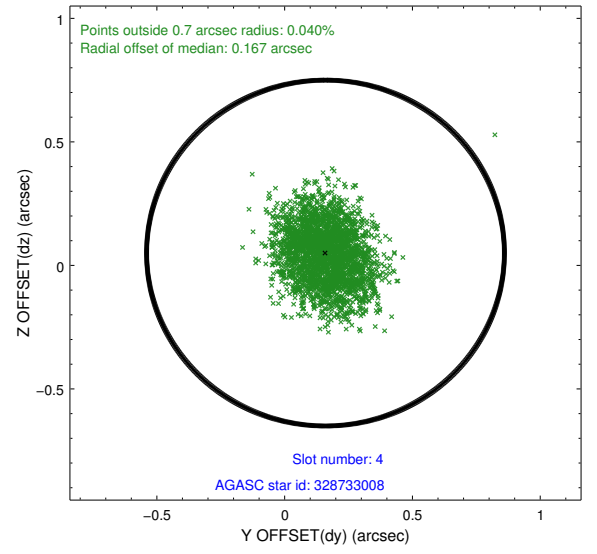
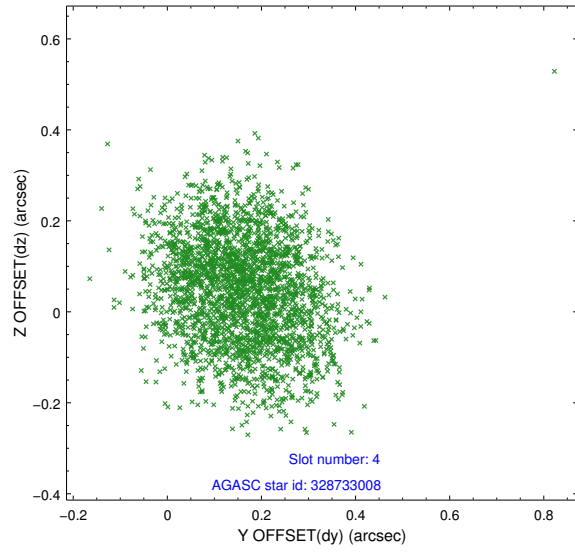
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	1259	0.019	0.052	0.007	0.012	0.000000	0.000000	919.37	-842.57
1	FID	ACIS-I-5	6.99	1259	-0.224	0.032	0.006	0.010	0.000000	0.000000	-1828.38	1054.24
2	FID	ACIS-I-6	7.02	1259	0.114	-0.014	0.009	0.016	0.000000	0.000000	383.67	1700.08
3	GUIDE	328732184	8.91	2516	0.055	0.106	0.093	0.153	149.197726	36.777984	1631.55	-710.04
4	GUIDE	328733008	9.93	2515	0.160	0.050	0.163	0.254	149.791070	36.442094	-463.62	-795.26
5	GUIDE	328736992	9.48	2511	-0.221	-0.295	0.131	0.221	149.322136	36.236293	160.83	620.40
6	GUIDE	328737440	9.73	2518	0.128	0.029	0.143	0.229	149.715410	36.304343	-594.31	-268.92
7	GUIDE	328868256	8.22	2517	-0.119	0.112	0.090	0.146	150.387039	36.510915	-1674.77	-2050.34

2.4 Star Slots

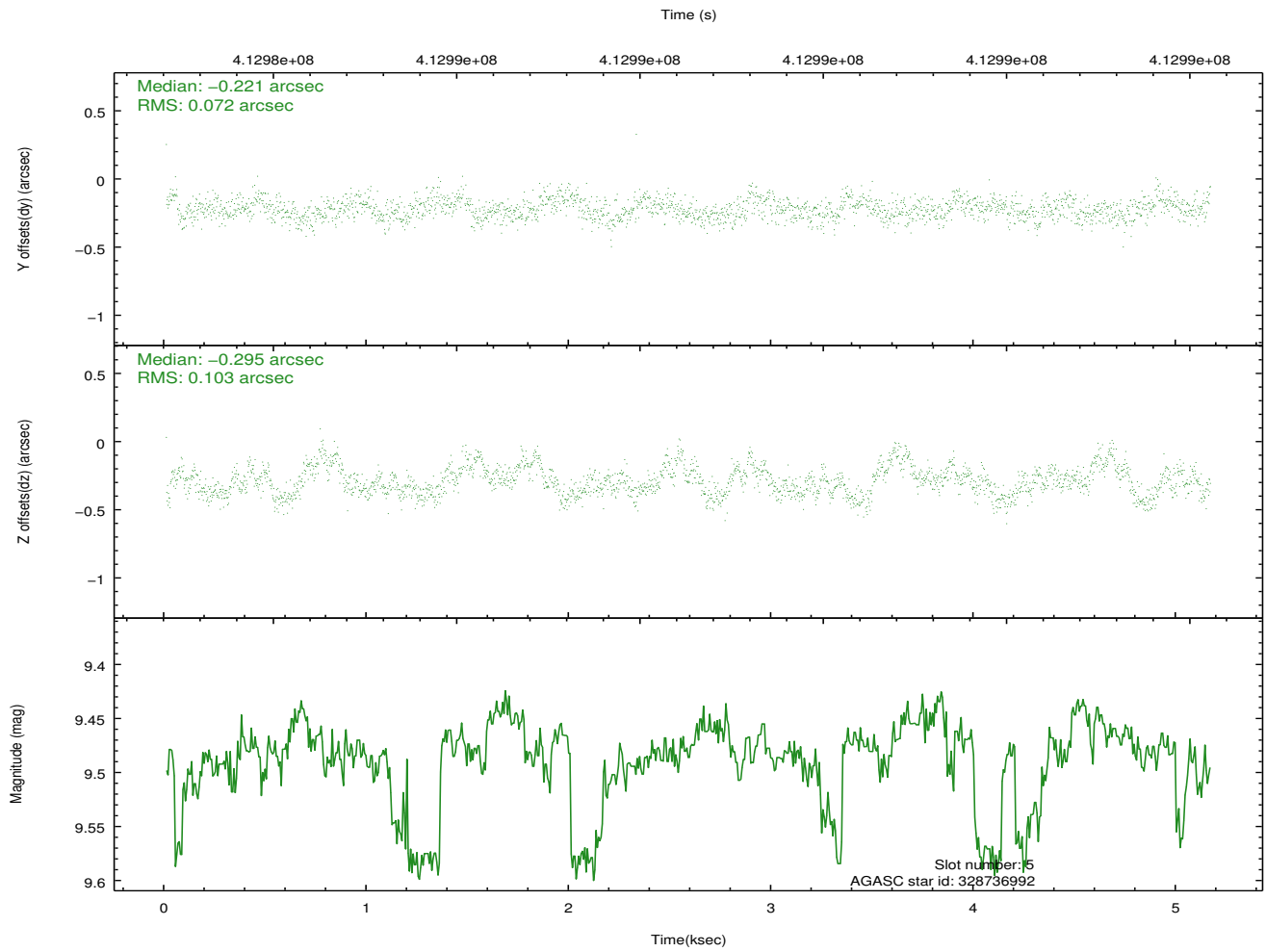
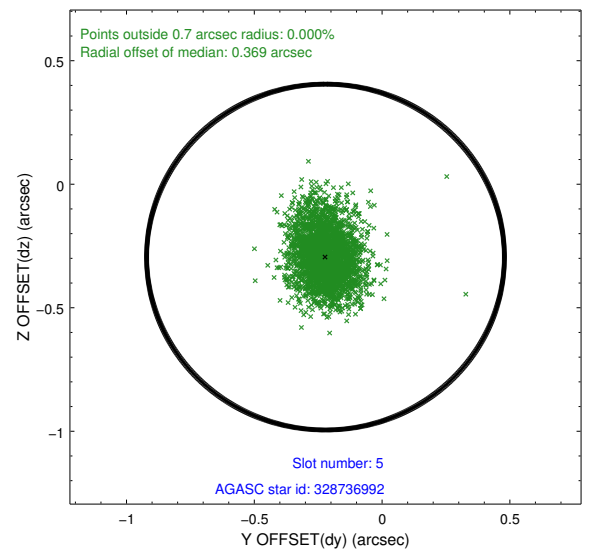
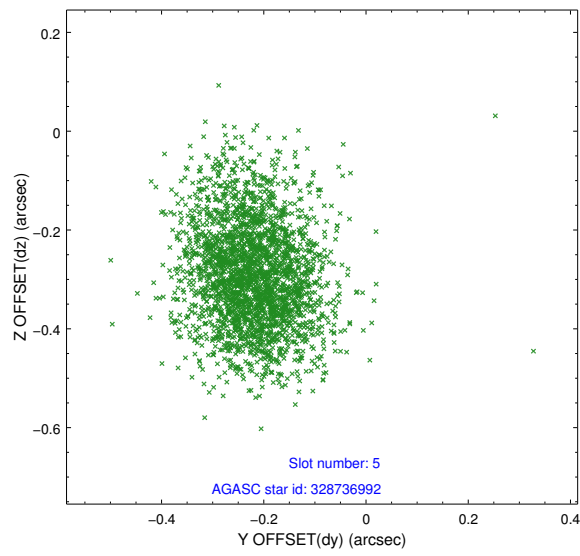
2.4.1 Slot 3



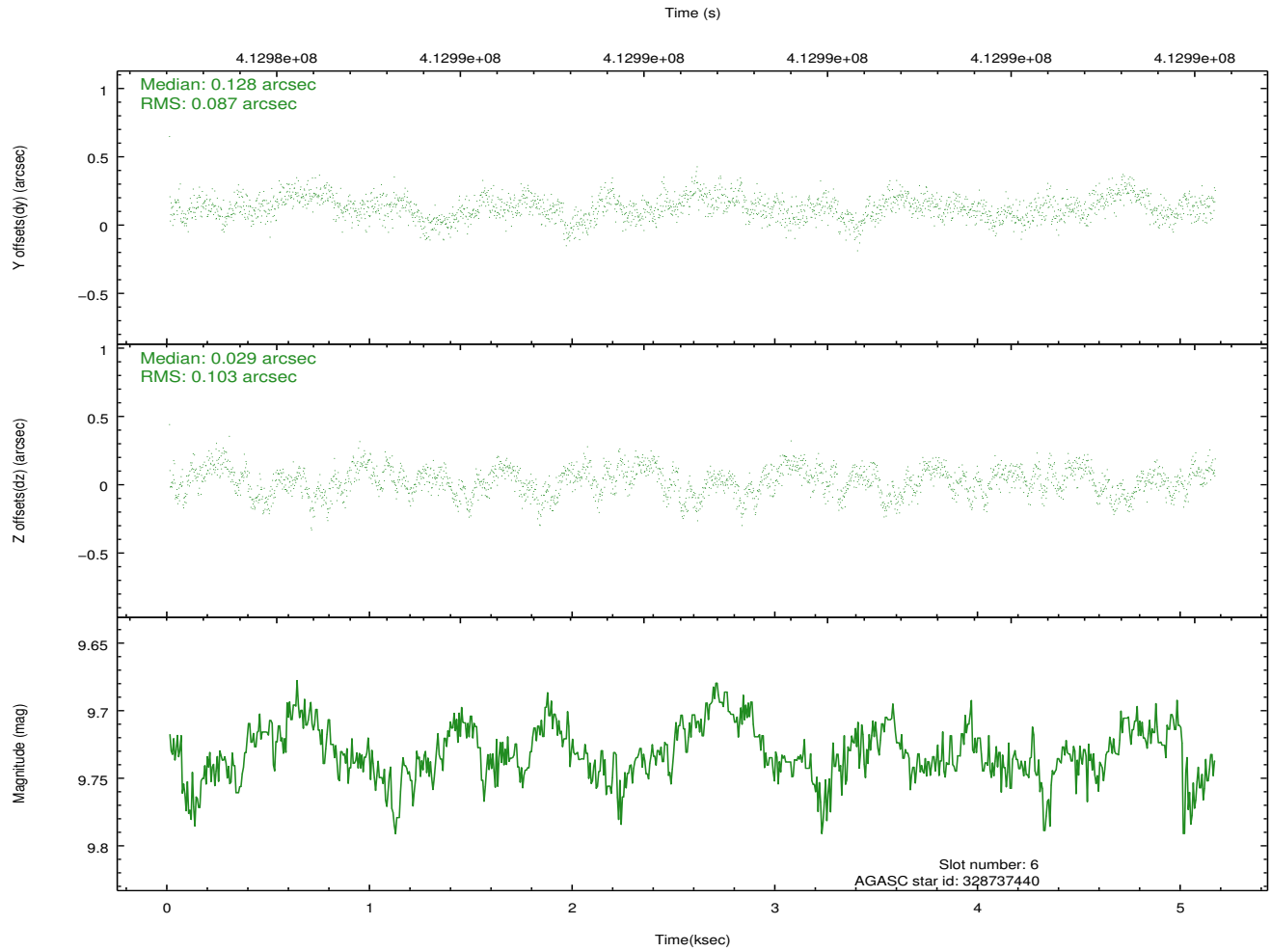
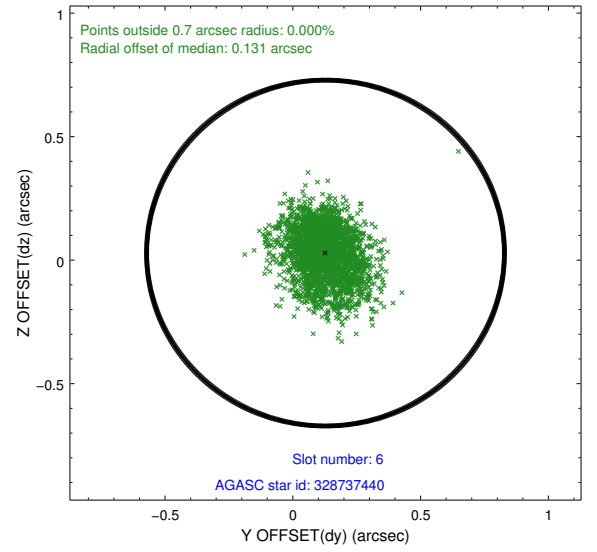
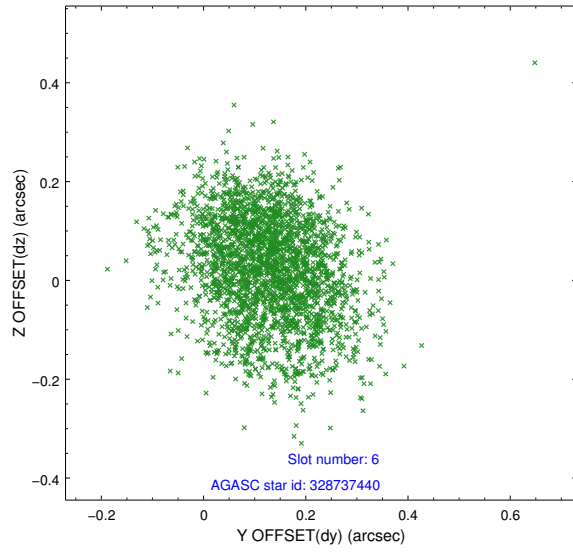
2.4.2 Slot 4



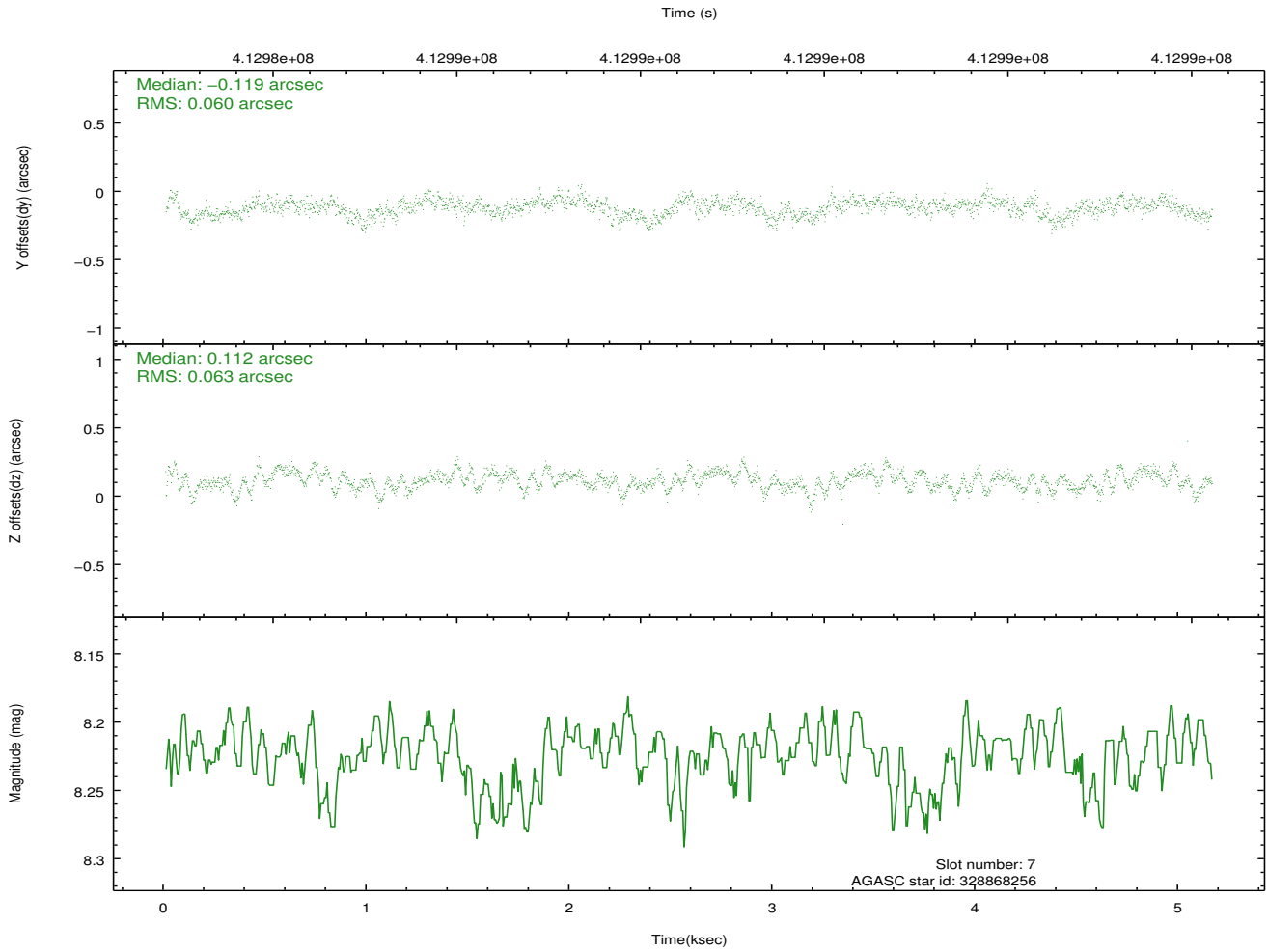
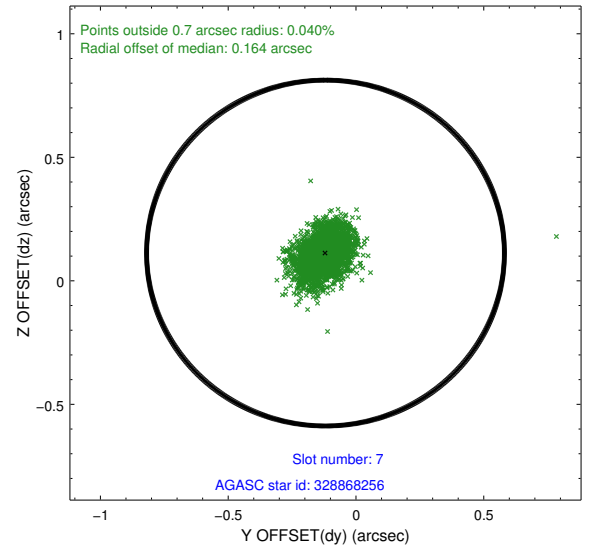
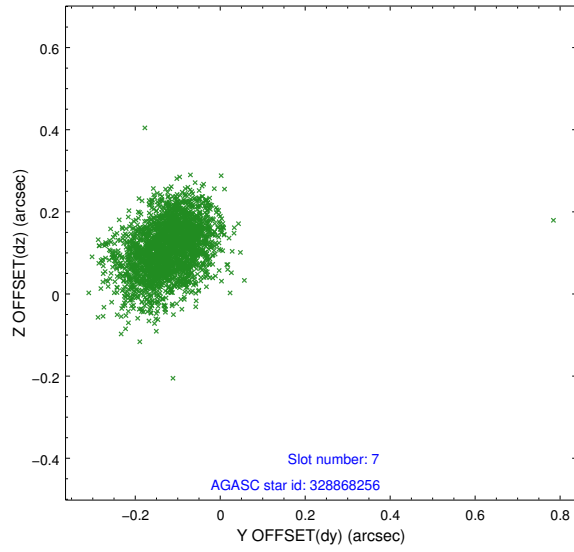
2.4.3 Slot 5



2.4.4 Slot 6

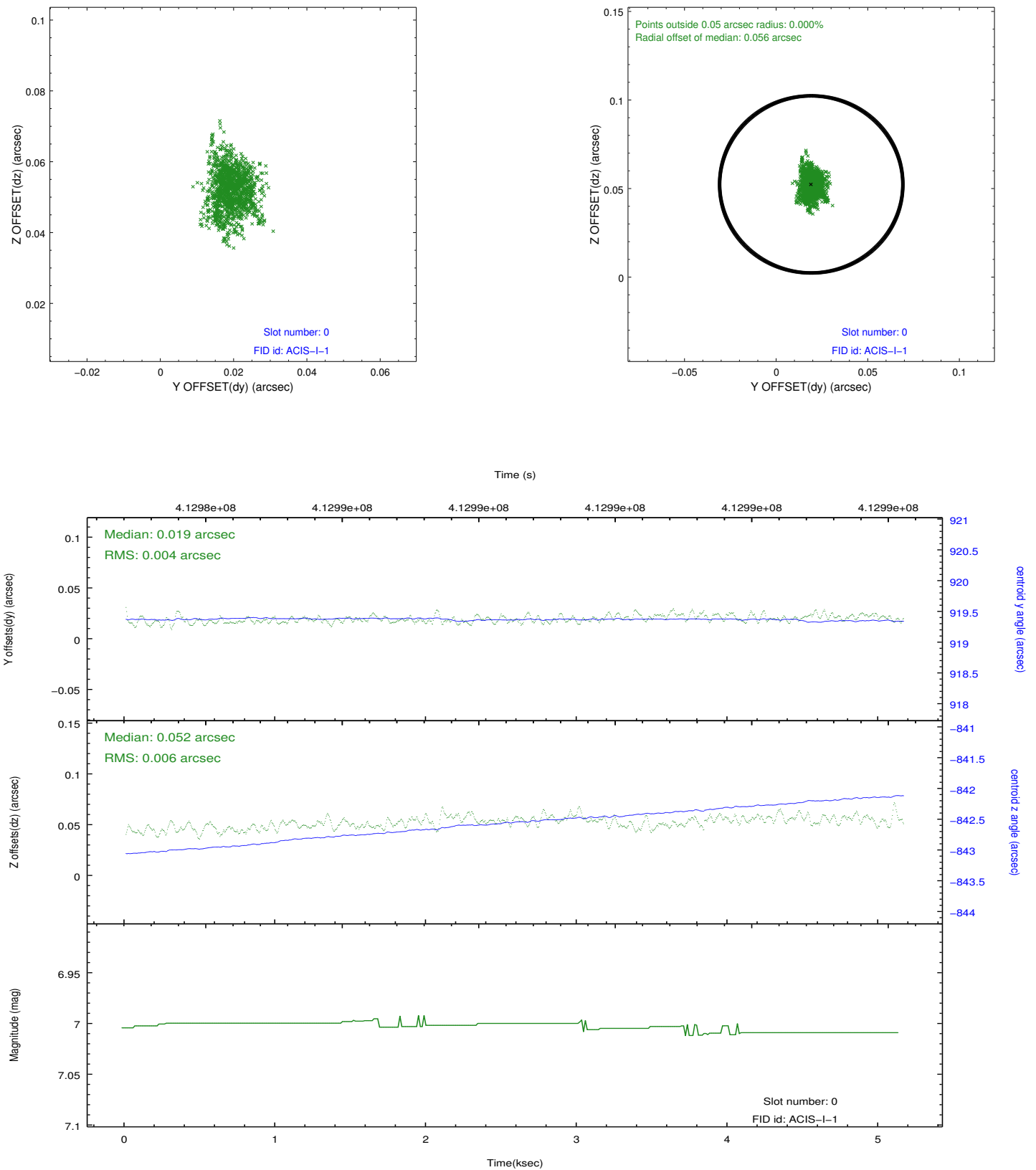


2.4.5 Slot 7

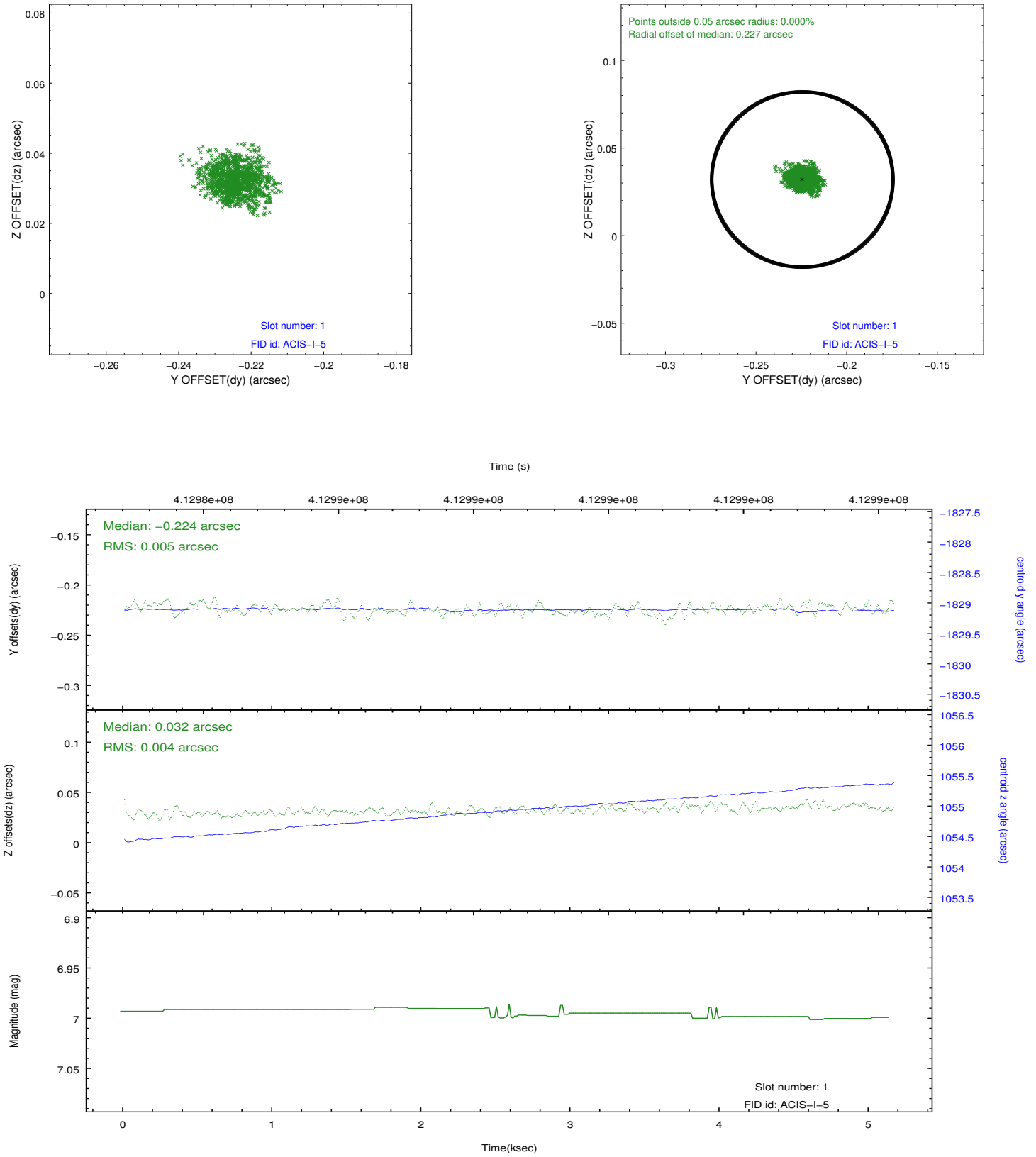


2.5 FID Slots

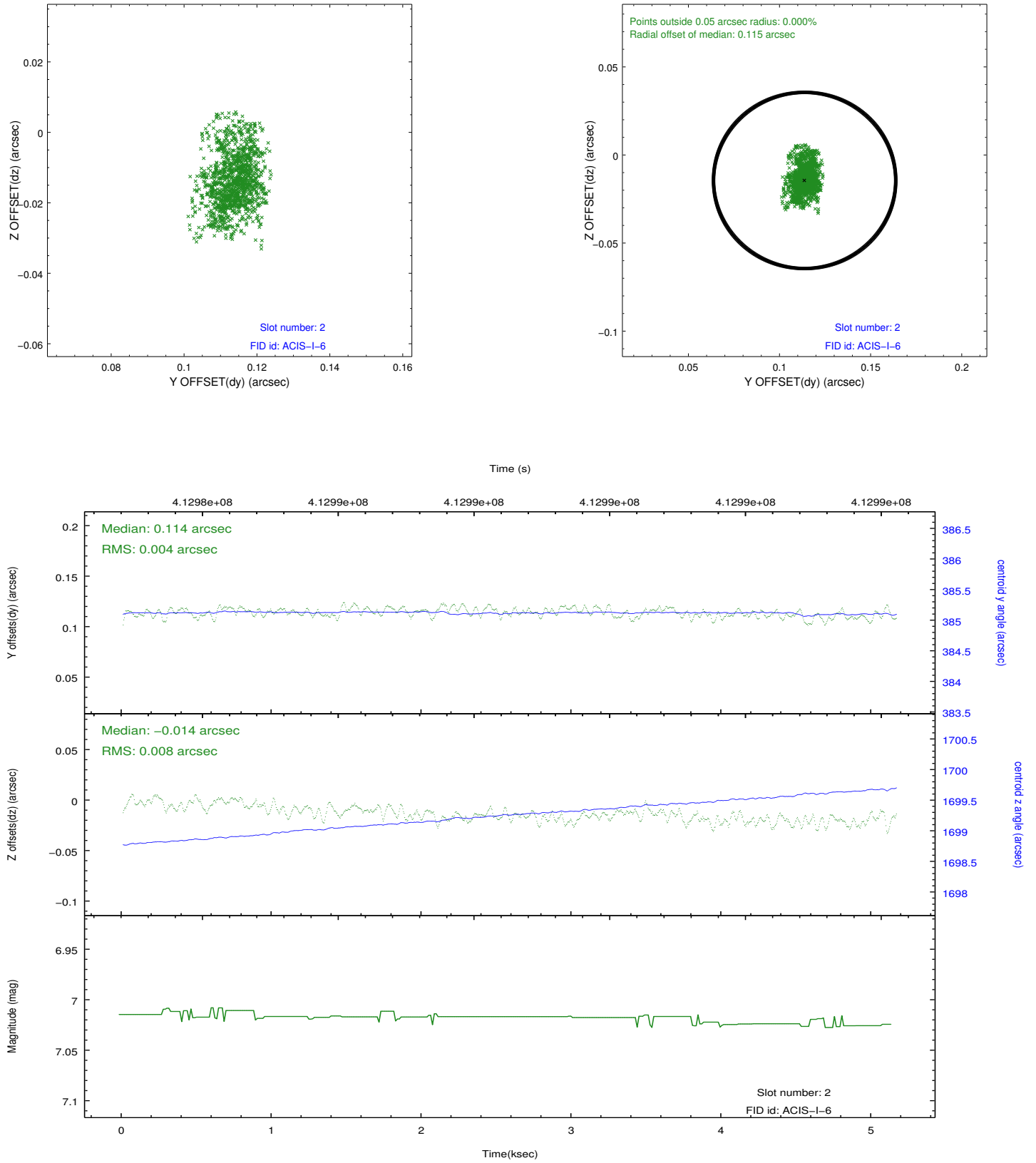
2.5.1 Slot 0



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)	2012.02.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9629934010506

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.