

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12813 - L2 Version 2
Chandra X-Ray Center

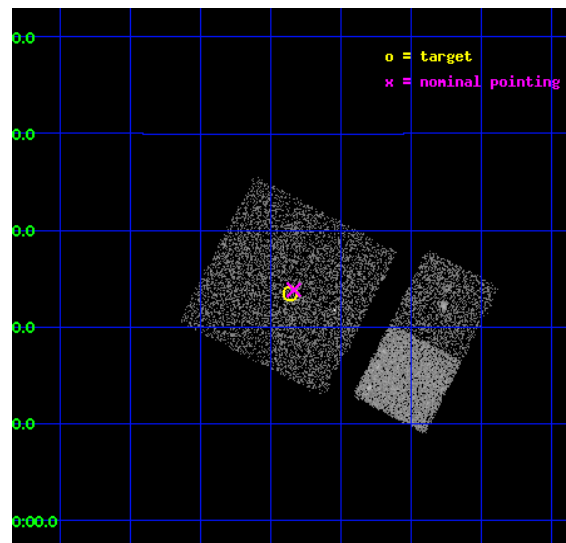
L2 Processing Date : Feb 7 2012

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

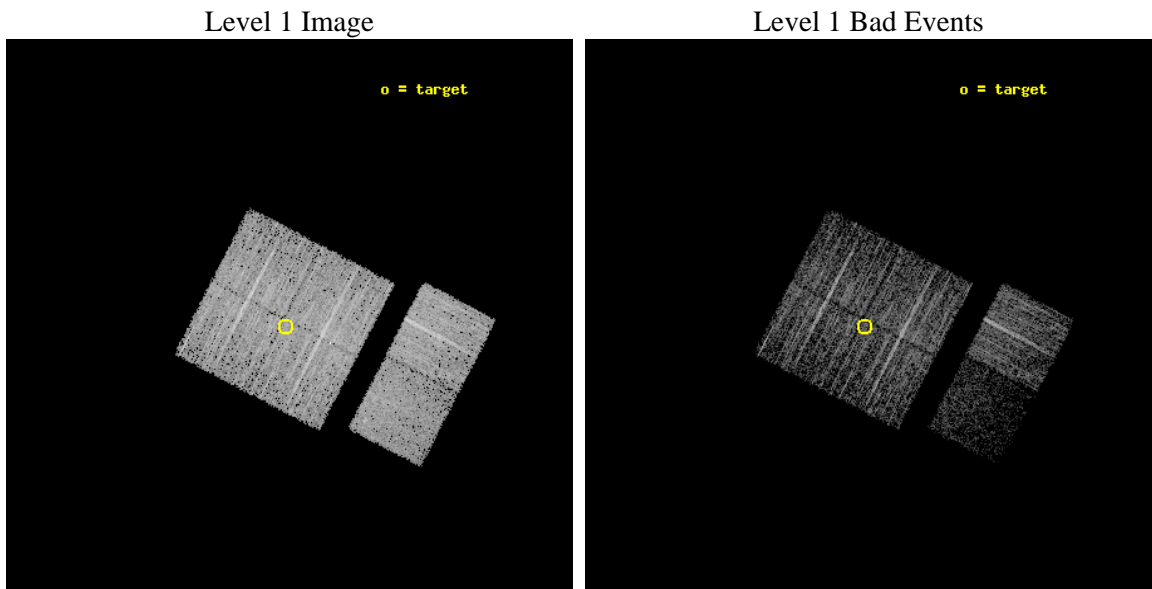
seq_num	702449	Sequence number
obs_id	12813	Observation id
title	A Systematic Chandra Survey of AGN in Major Mergers -- How many Binary AGN are out there?	Proposal title
observer	DR. Kevin Schawinski	Principal investigator
object	GZ_merger_AGN_3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	227.839583	Observer's specified target RA [deg]
dec_targ	11.392028	Observer's specified target Dec [deg]
ra_nom	227.8337828855	Nominal RA [deg]
dec_nom	11.397723461866	Nominal Dec [deg]
roll_nom	117.45290109812	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4963.1999815702	Sum of GTIs [s]
livetime	4900.3529549234	Livetime [s]
ontime0	4963.1999815702	Sum of GTIs [s]
ontime1	4963.1999815702	Sum of GTIs [s]
ontime2	4963.1999815702	Sum of GTIs [s]
ontime3	4963.1999815702	Sum of GTIs [s]
ontime6	4963.1999815702	Sum of GTIs [s]
ontime7	4963.1999815702	Sum of GTIs [s]
l2events	20633	Number of level 2 events



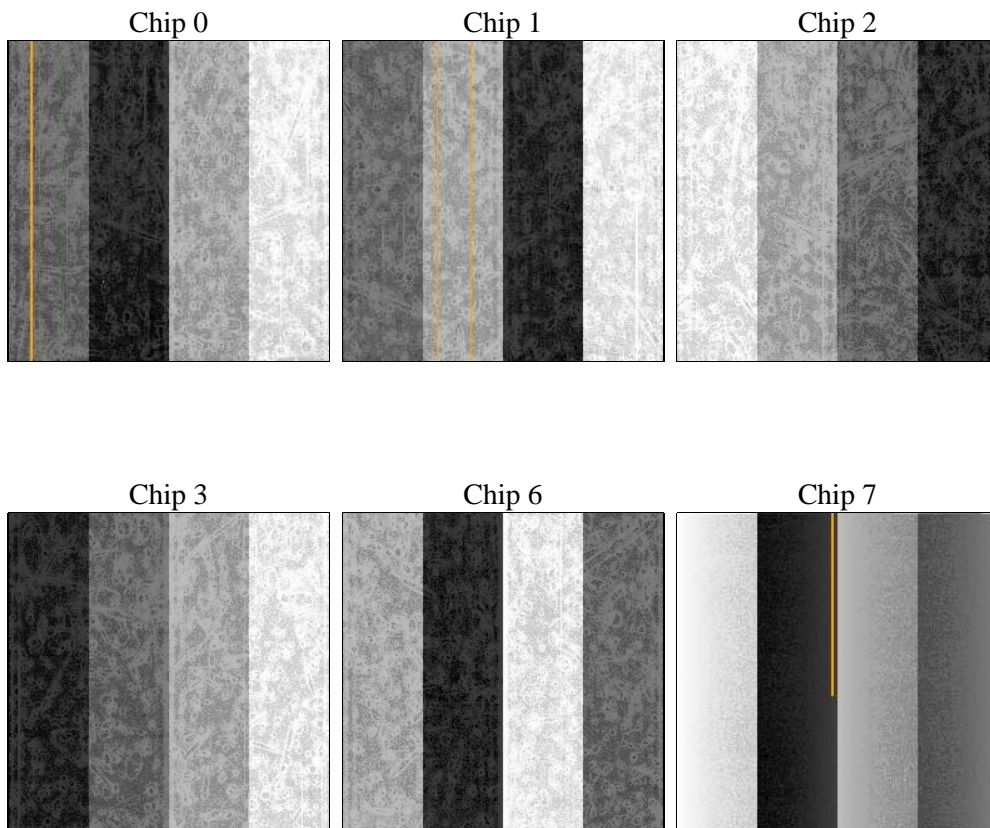
2 OBI

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	4963.1999815702	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	4963.1999815702	Sum of GTIs [s]
date	2012-02-07T14:00:00	Date and time of file creation	ontime1	4963.1999815702	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4963.1999815702	Sum of GTIs [s]
			ontime3	4963.1999815702	Sum of GTIs [s]
			ontime6	4963.1999815702	Sum of GTIs [s]
			ontime7	4963.1999815702	Sum of GTIs [s]
			l1events	137466	Number of level 1 events

2.1.4 Events

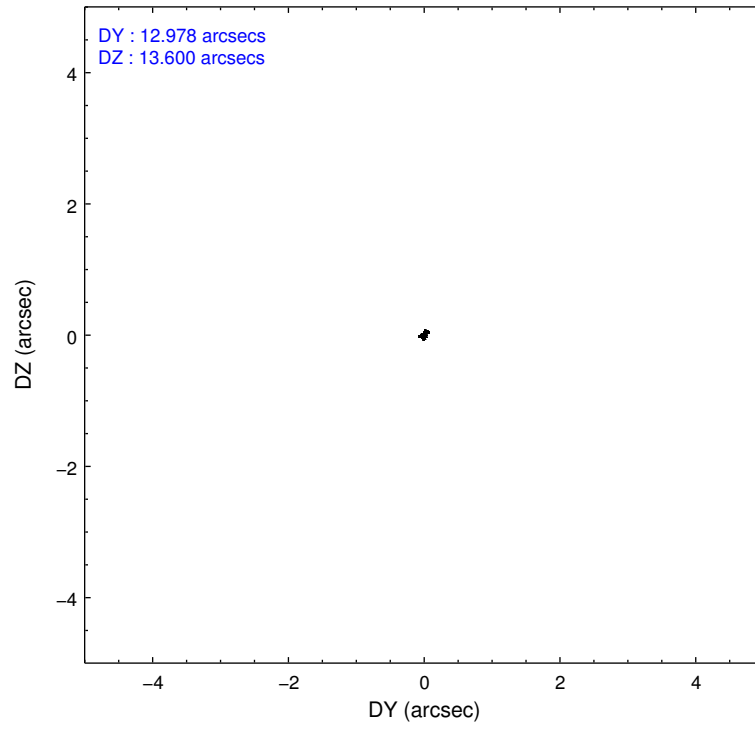
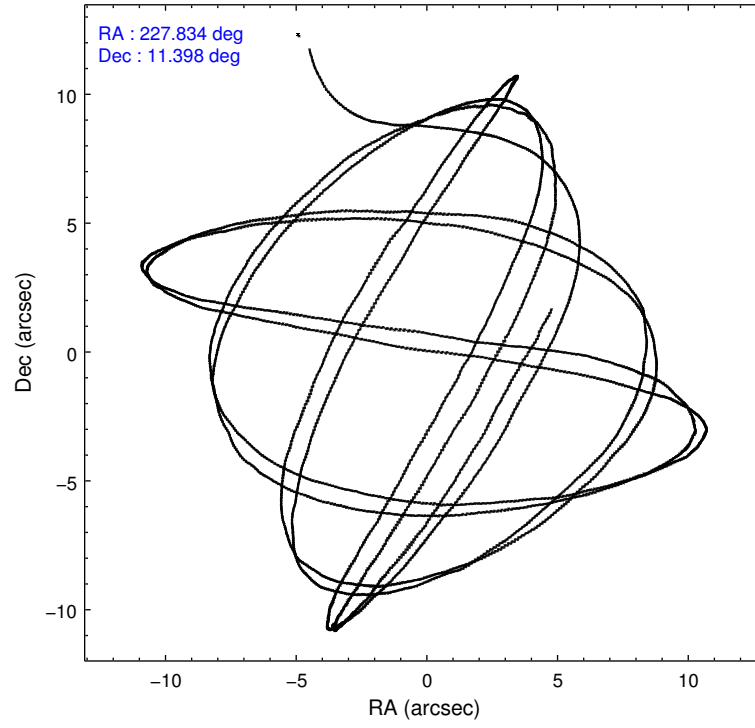
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	22332	22992	25912	23122	25477	17631
rejected events	19726	20368	23319	20465	22653	7552
rejected %	88%	88%	89%	88%	88%	42%

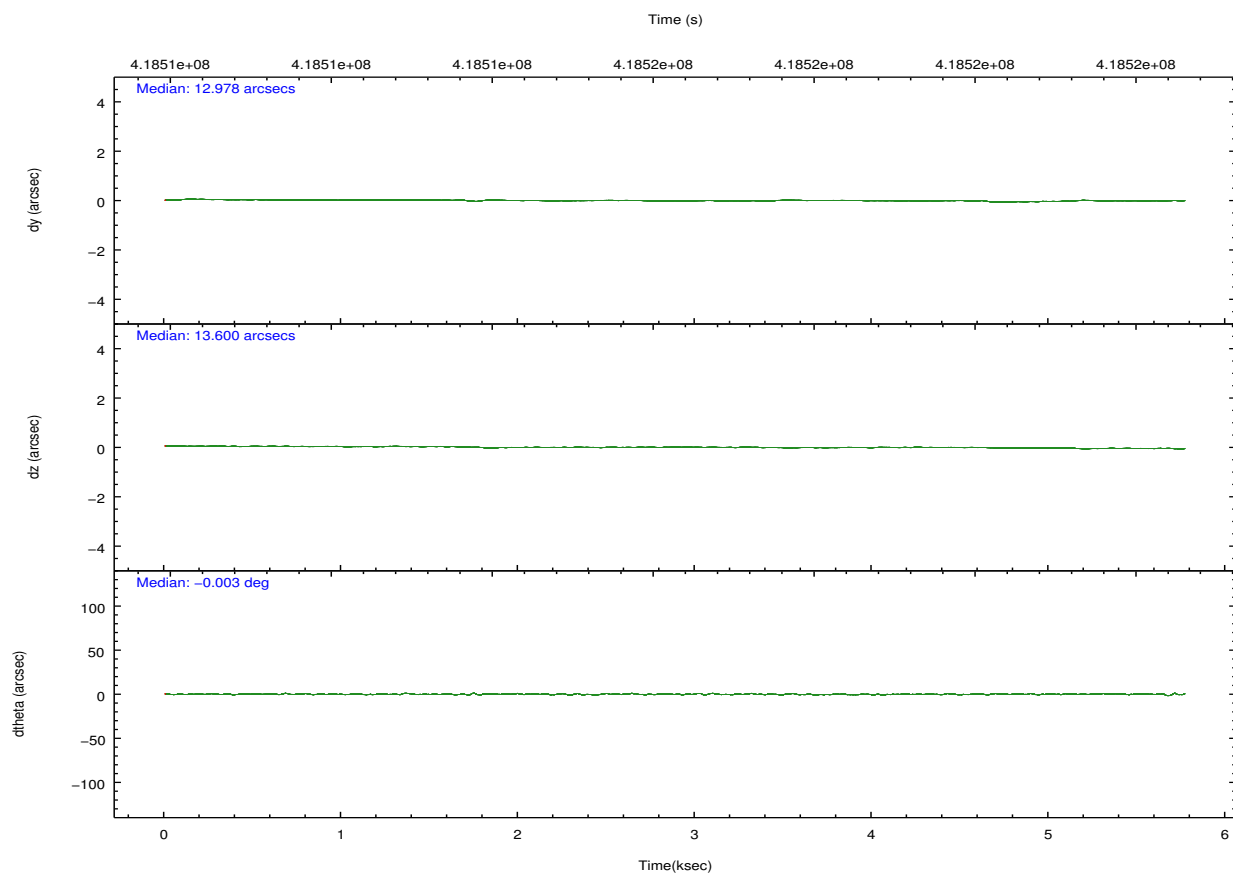
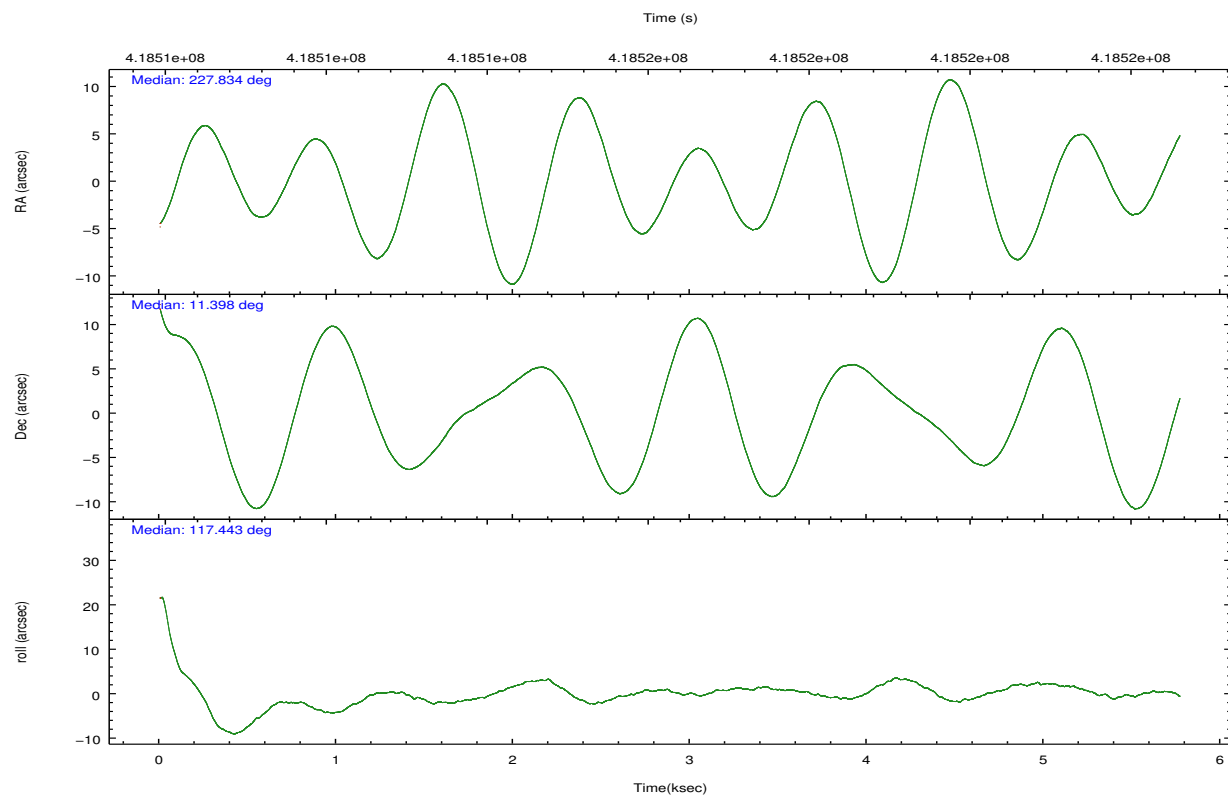
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1091	1022	1142	1261	1215	1392
	4%	4%	4%	5%	4%	7%
grade 1 events	13	14	16	18	26	37
	0%	0%	0%	0%	0%	0%
grade 2 events	612	602	609	527	618	2479
	2%	2%	2%	2%	2%	14%
grade 3 events	277	291	250	248	254	957
	1%	1%	0%	1%	0%	5%
grade 4 events	231	254	236	265	292	949
	1%	1%	0%	1%	1%	5%
grade 5 events	523	608	460	631	668	1787
	2%	2%	1%	2%	2%	10%
grade 6 events	398	456	357	357	447	4309
	1%	1%	1%	1%	1%	24%
grade 7 events	19187	19745	22842	19815	21957	5721
	85%	85%	88%	85%	86%	32%

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	227.857489	227.8337828855016	CCD I2 on	Y	Y
[deg] Pointing Dec	11.383069	11.39772346186579	CCD I3 on	Y	Y
[deg] Pointing Roll	117.239499	117.4529010981205	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)	418513031.184000	418511781.40136	CCD S5 on	N	N
Observation start date	2011-04-06T21:36:05	2011-04-06T21:16:21	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	418518031.184000	418518756.52672	On-chip summing requested	N	N
Observation end date	2011-04-06T22:59:25	2011-04-06T23:12:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



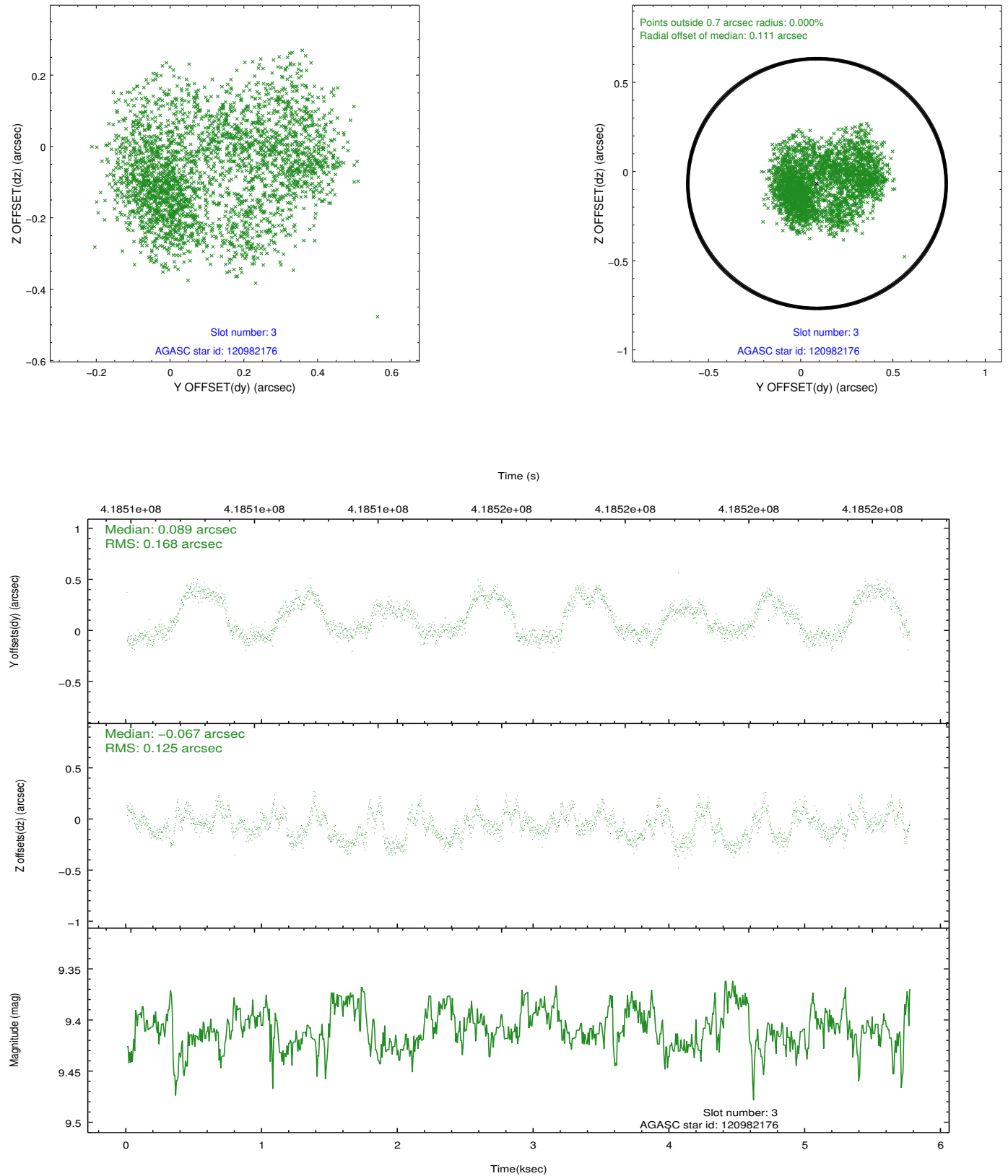


Slot Statistics

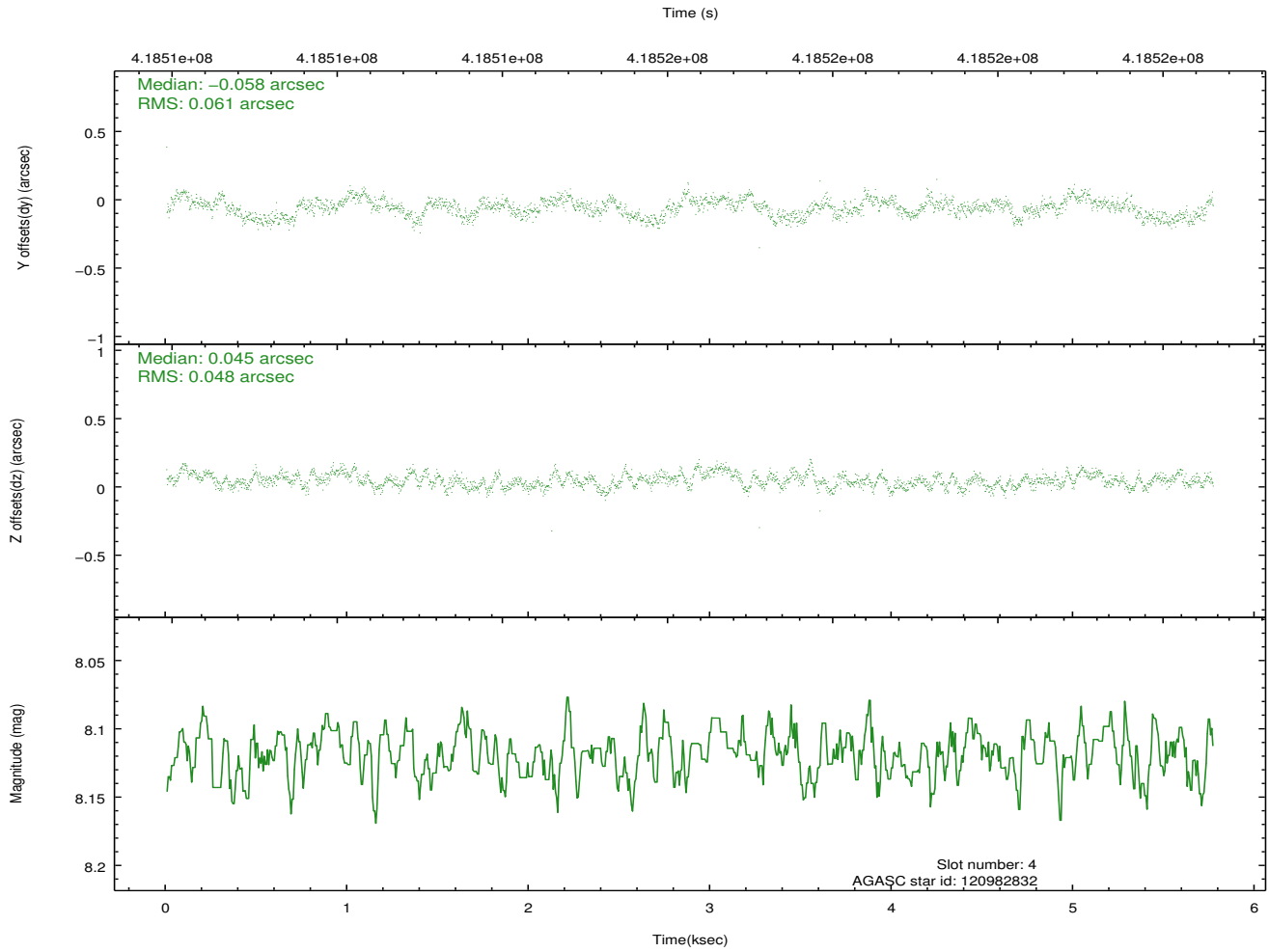
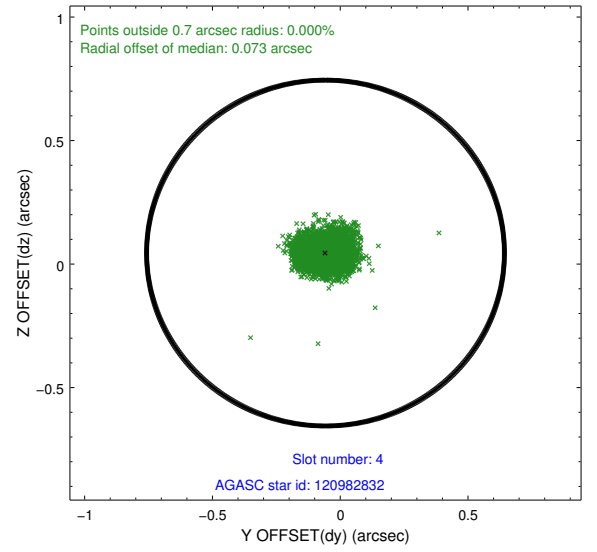
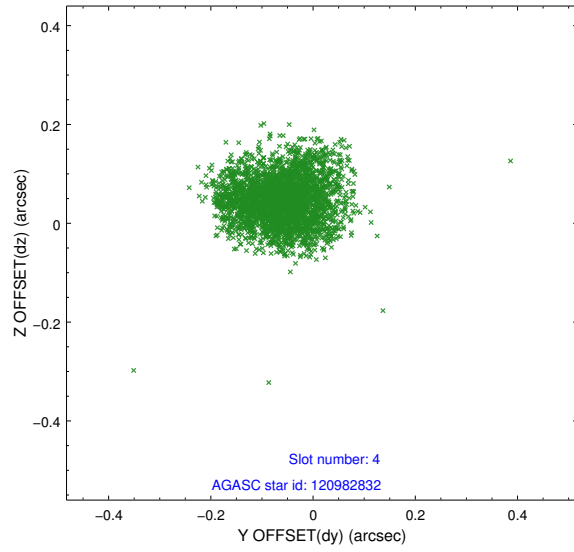
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.17	1407	0.068	-0.017	0.006	0.010	0.000000	0.000000	926.61	-837.17
1	FID	ACIS-I-5	7.17	1407	-0.242	0.066	0.006	0.011	0.000000	0.000000	-1821.26	1059.85
2	FID	ACIS-I-6	7.17	1407	0.083	0.022	0.006	0.011	0.000000	0.000000	391.01	1705.51
3	GUIDE	120982176	9.41	2811	0.089	-0.067	0.228	0.335	228.419111	11.467513	-634.04	-1901.74
4	GUIDE	120982832	8.12	2808	-0.058	0.045	0.084	0.128	227.958027	11.475227	133.61	-467.35
5	GUIDE	120984224	9.60	2807	-0.129	0.152	0.171	0.268	228.392971	11.623096	-93.86	-2074.74
6	GUIDE	120984928	9.40	2812	0.007	-0.019	0.164	0.243	228.427906	11.550580	-382.65	-2065.98
7	GUIDE	120985856	9.26	2810	0.088	-0.119	0.109	0.173	227.800180	11.007244	-1110.13	798.45

2.4 Star Slots

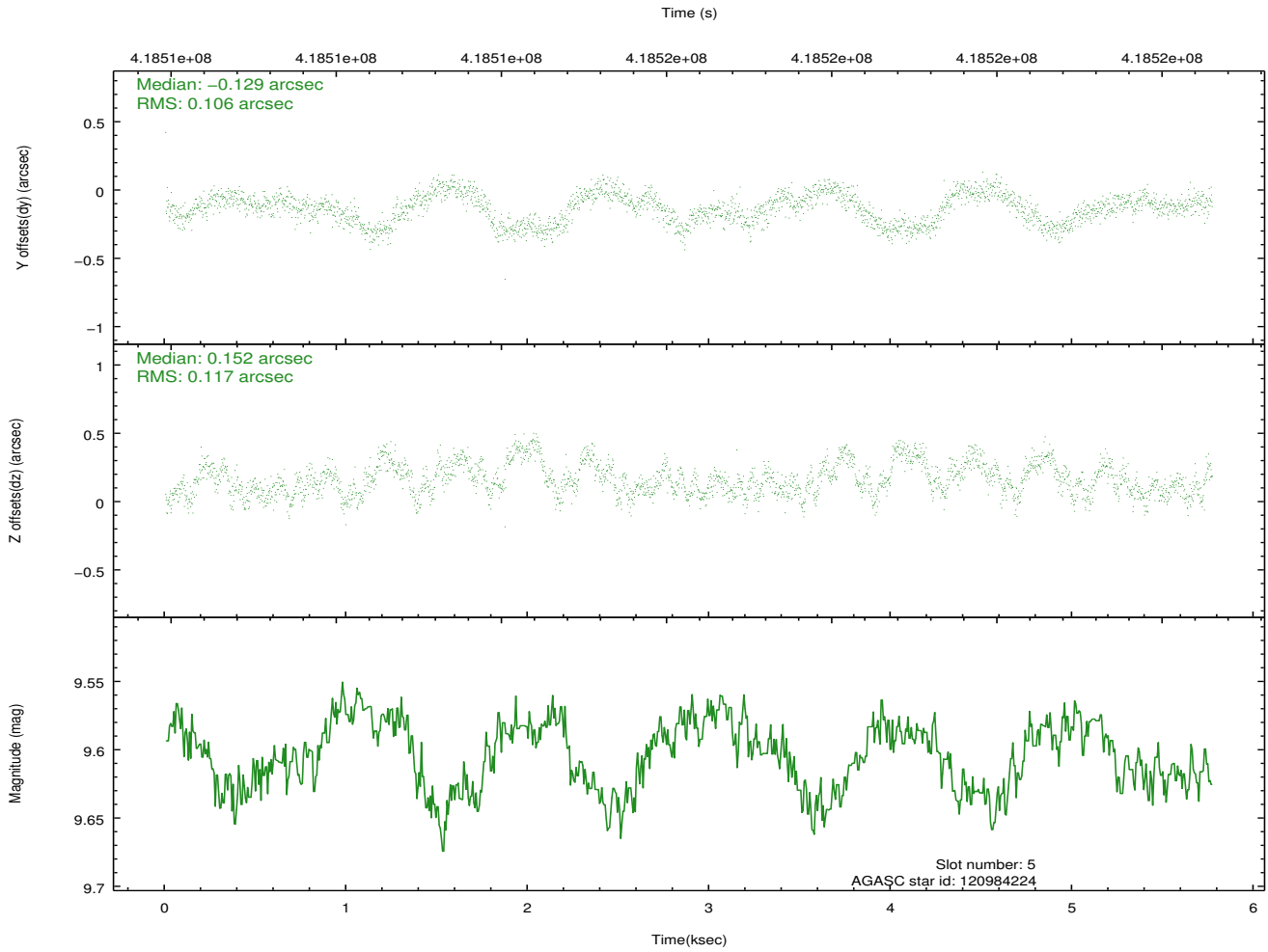
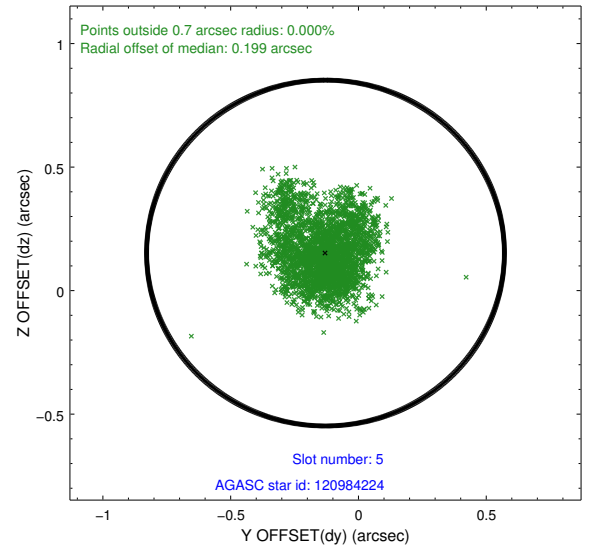
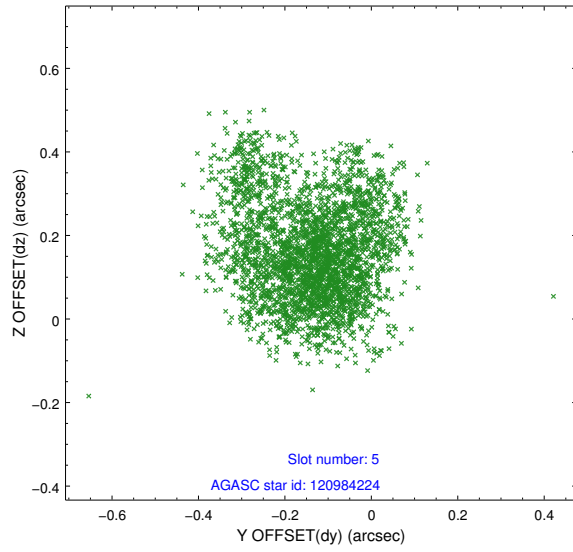
2.4.1 Slot 3



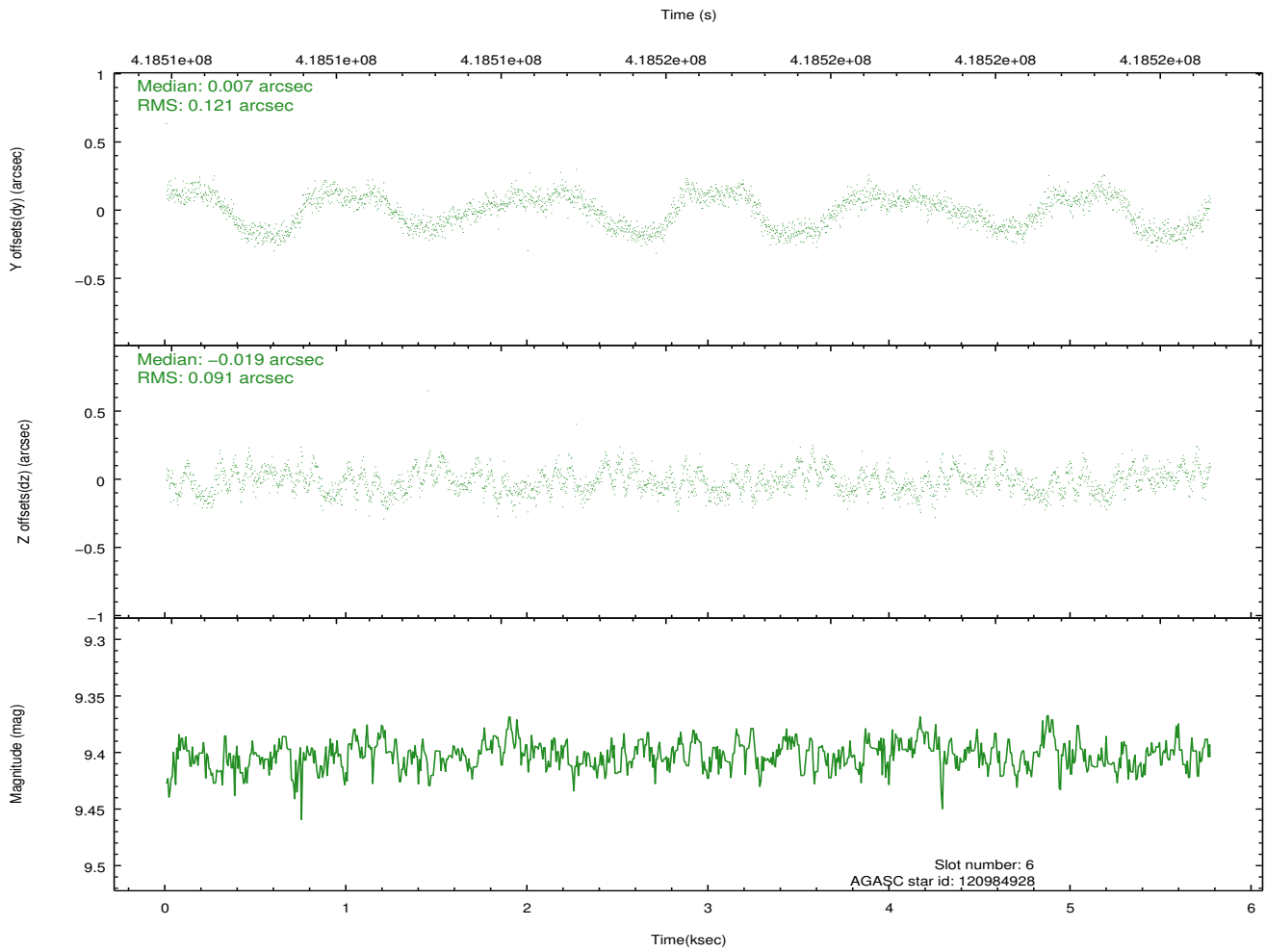
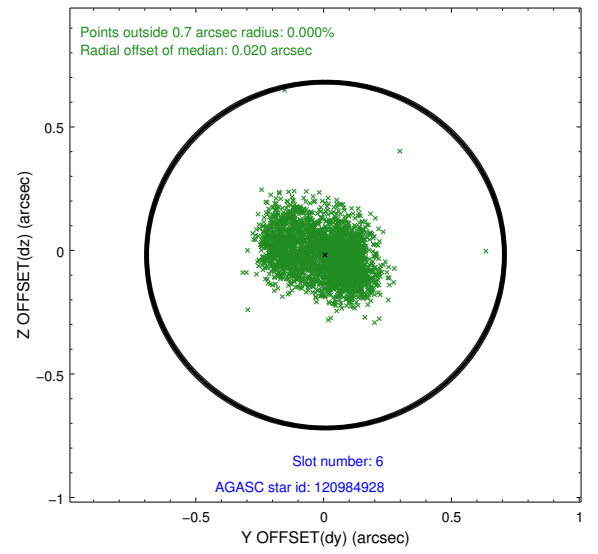
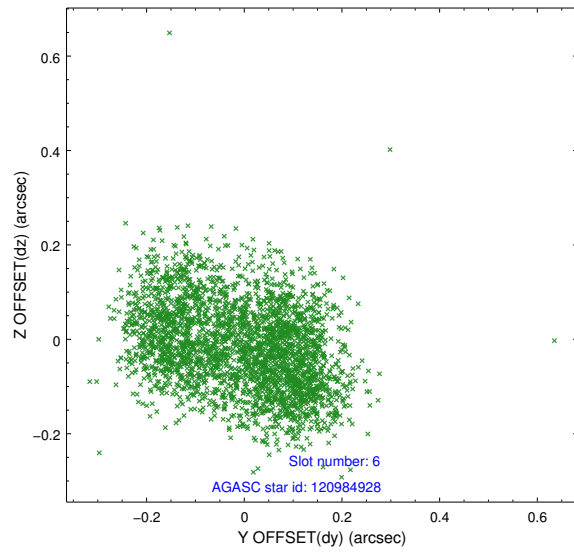
2.4.2 Slot 4



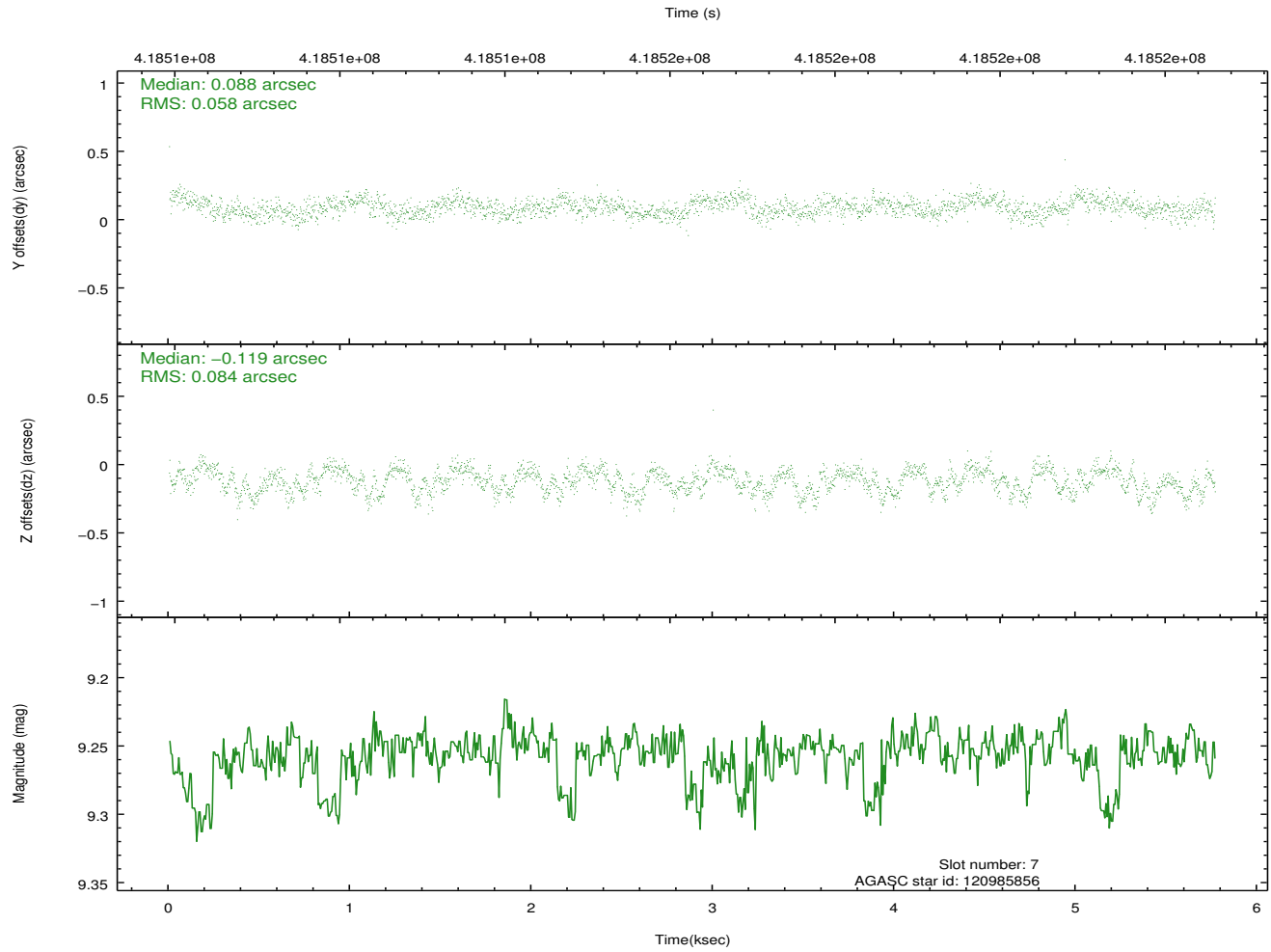
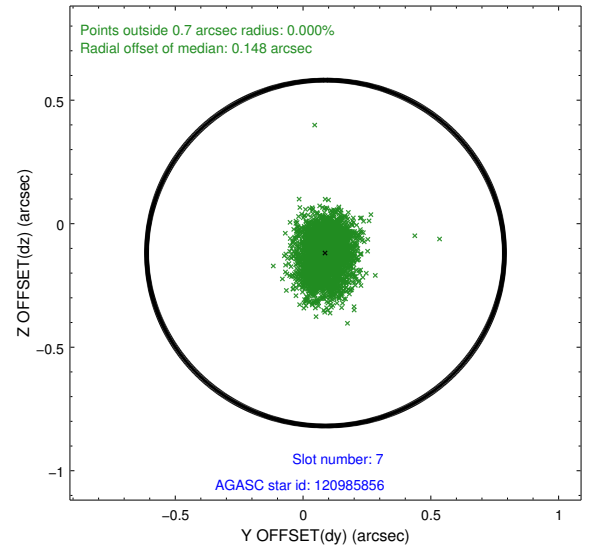
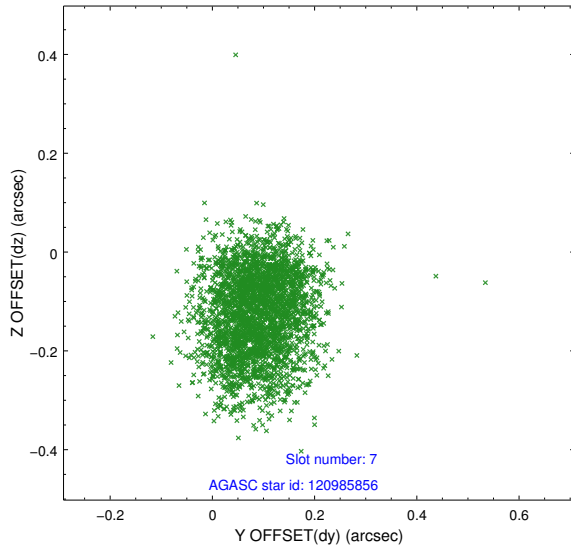
2.4.3 Slot 5



2.4.4 Slot 6

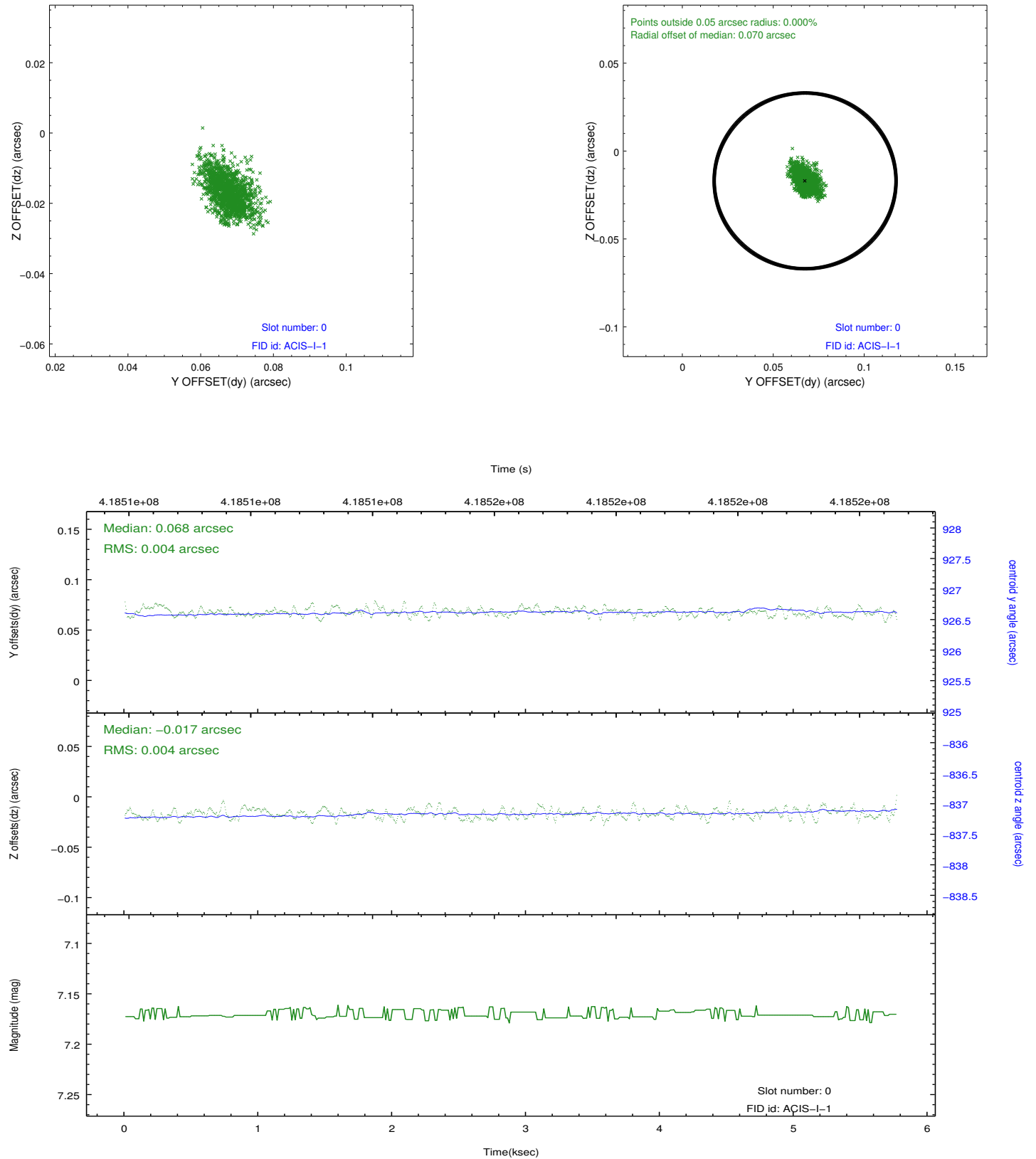


2.4.5 Slot 7

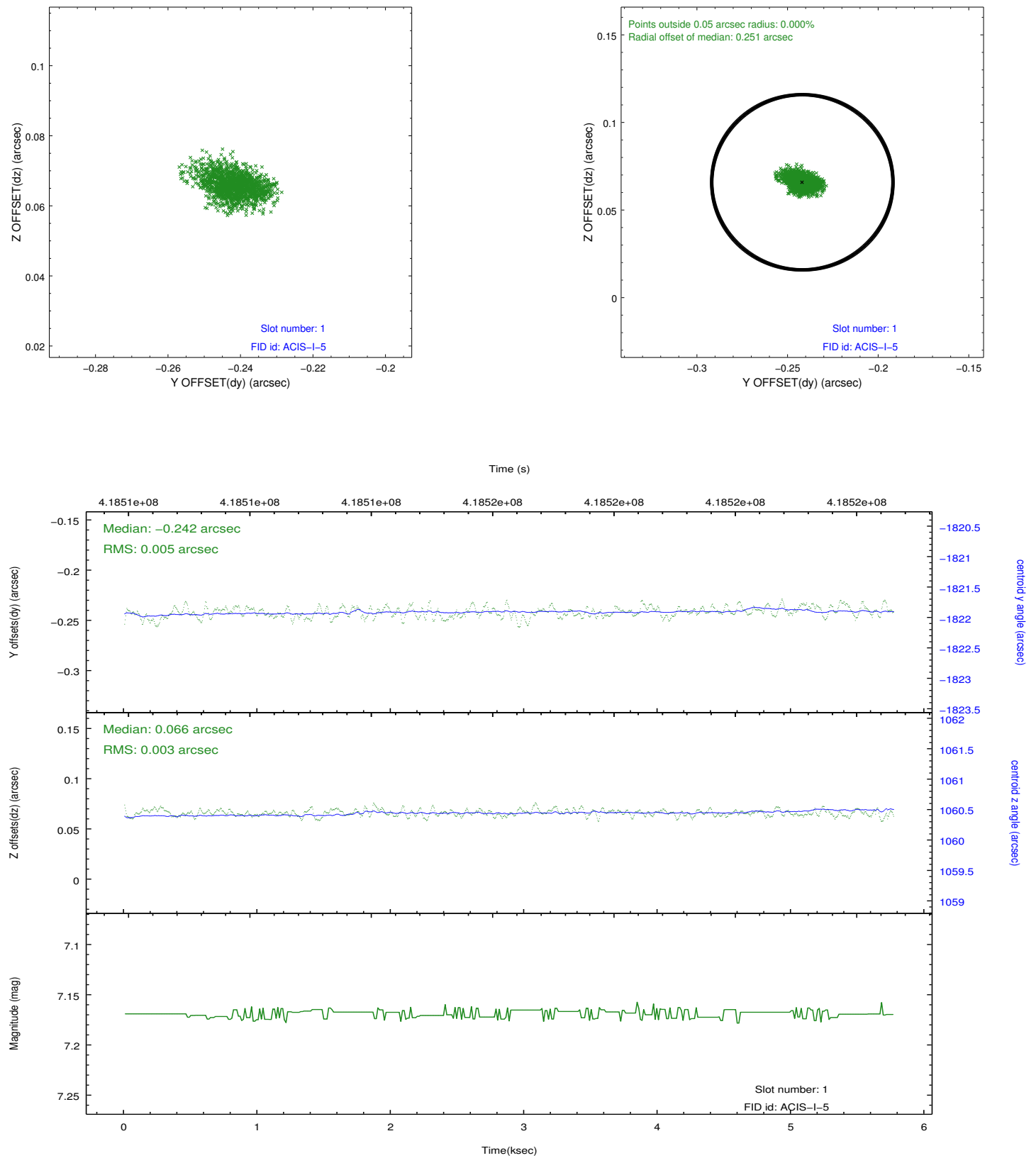


2.5 FID Slots

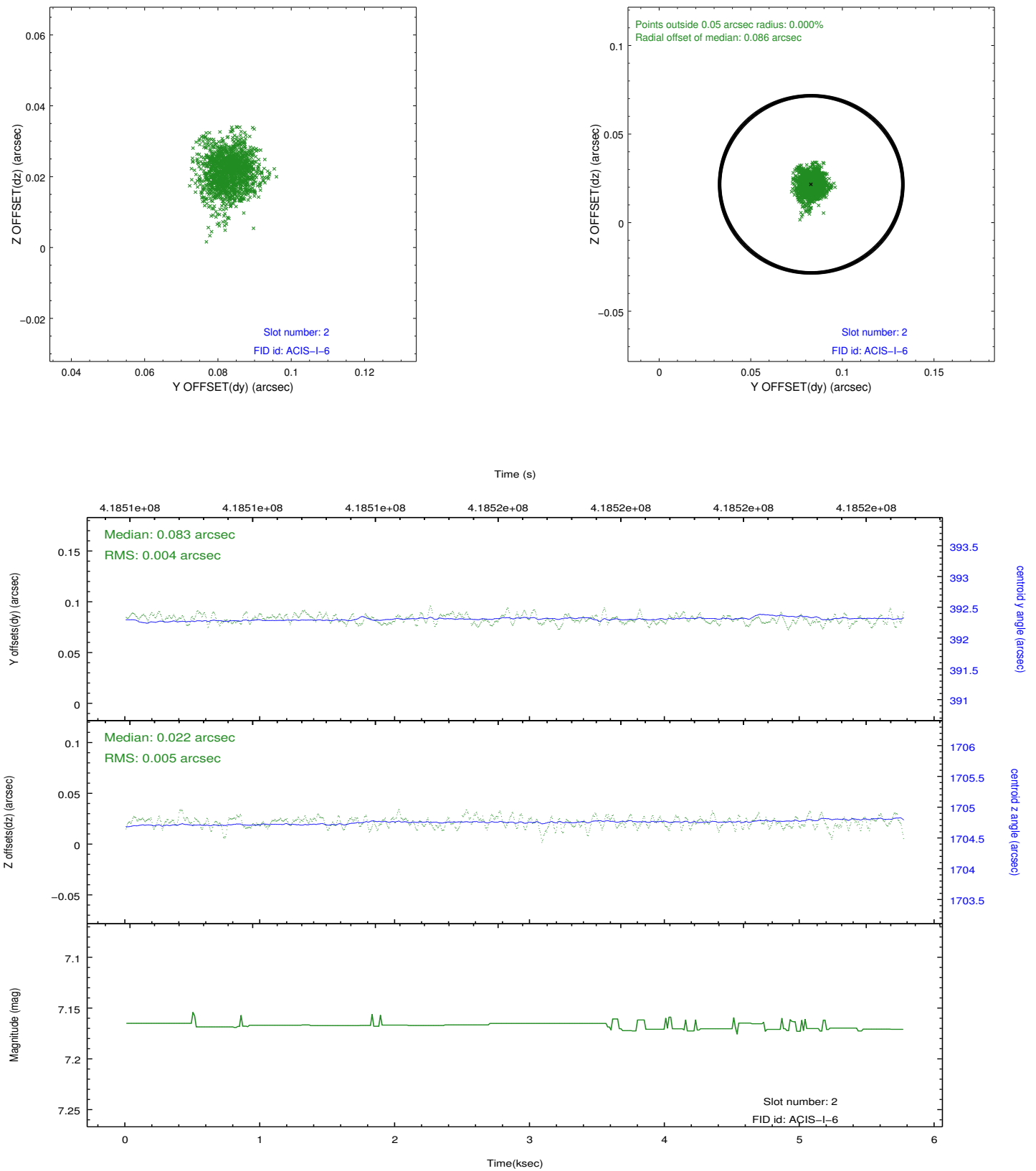
2.5.1 Slot 0



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)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9631999815702

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.