

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12767 - L2 Version 2
Chandra X-Ray Center

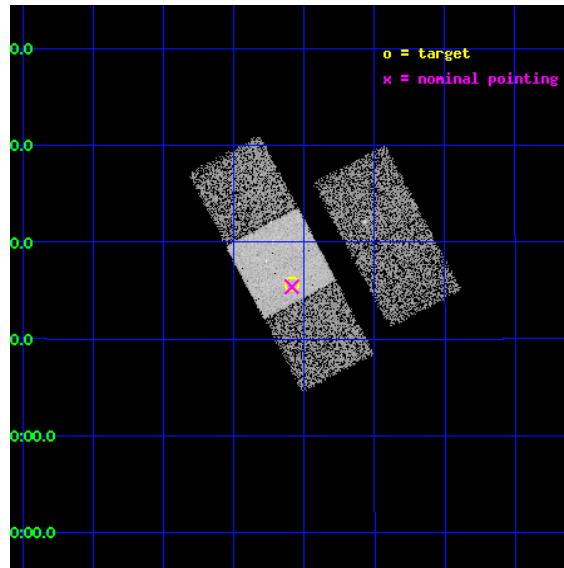
L2 Processing Date : Feb 8 2012

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1 Front

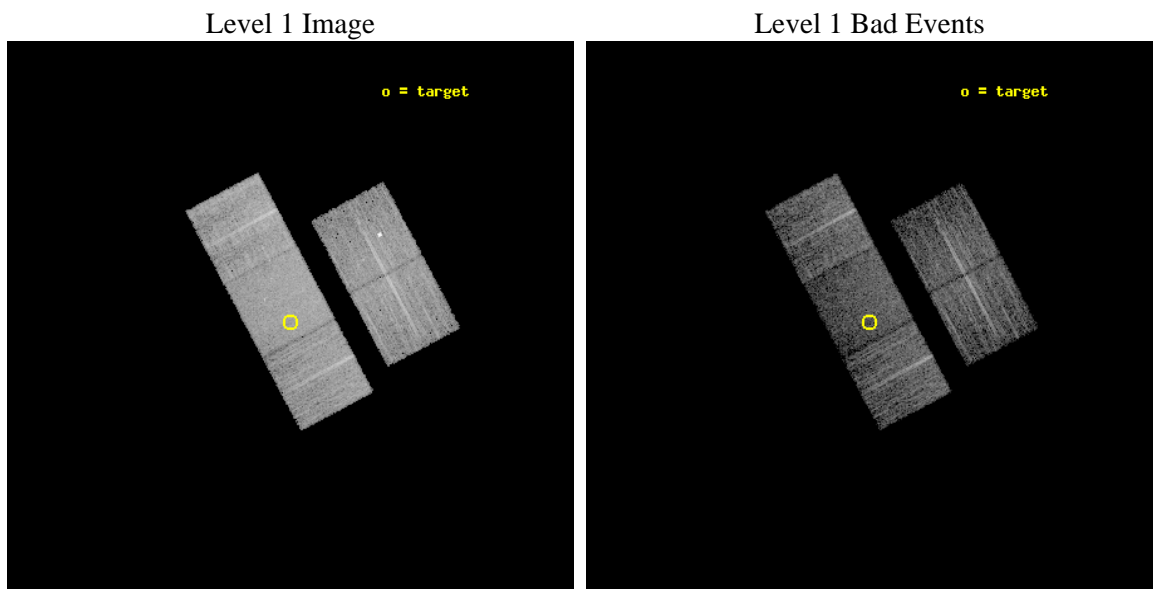
seq_num	702403	Sequence number
obs_id	12767	Observation id
title	X-ray Properties of 2MASS Selected BALQSOs	Proposal title
observer	Dr. Xinyu Dai	Principal investigator
object	SDSSJ110505.15+111541.0	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	166.271667	Observer's specified target RA [deg]
dec_targ	11.261417	Observer's specified target Dec [deg]
ra_nom	166.2720251362	Nominal RA [deg]
dec_nom	11.256526505114	Nominal Dec [deg]
roll_nom	242.00552048051	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7041.9471073151	Sum of GTIs [s]
livetime	6949.938884152	Livetime [s]
ontime2	7041.7829473019	Sum of GTIs [s]
ontime3	7041.8650273085	Sum of GTIs [s]
ontime6	7041.9060673118	Sum of GTIs [s]
ontime7	7041.9471073151	Sum of GTIs [s]
ontime8	7041.8239873052	Sum of GTIs [s]
l2events	43076	Number of level 2 events



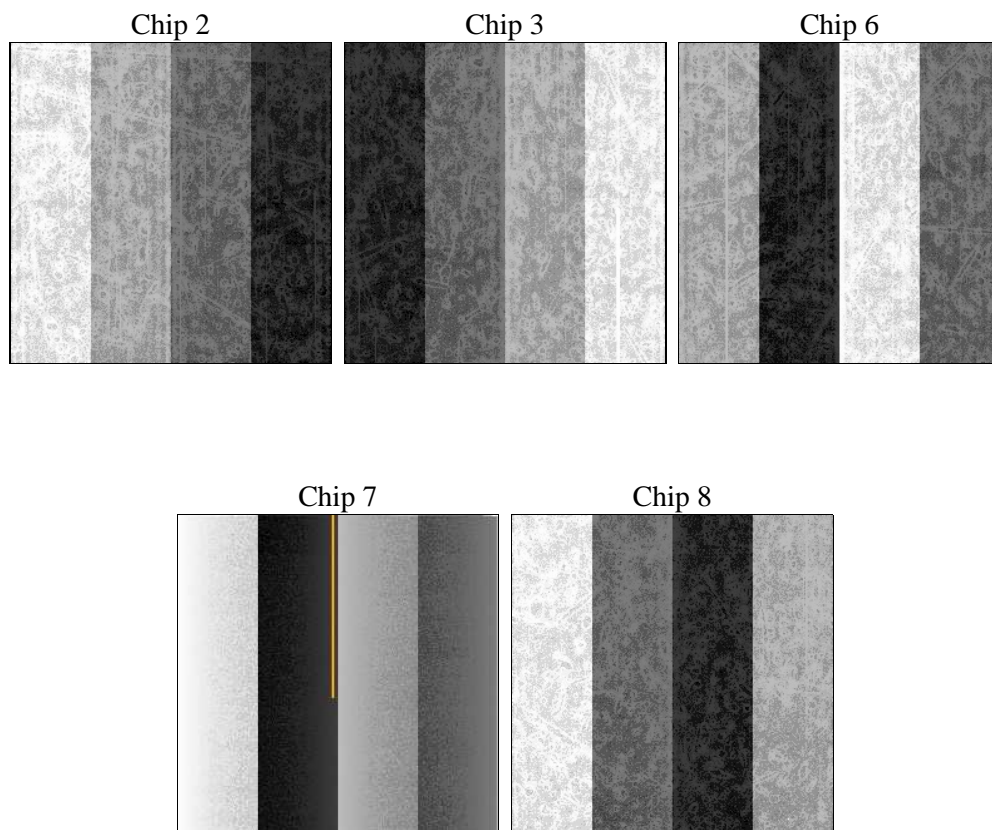
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	7041.9471073151	Sum of GTIs [s]
caldsver	4.4.7	 	ontime2	7041.7829473019	Sum of GTIs [s]
date	2012-02-08T03:44:58	Date and time of file creation	ontime3	7041.8650273085	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	7041.9060673118	Sum of GTIs [s]
			ontime7	7041.9471073151	Sum of GTIs [s]
			ontime8	7041.8239873052	Sum of GTIs [s]
			l1events	255487	Number of level 1 events

2.1.4 Events

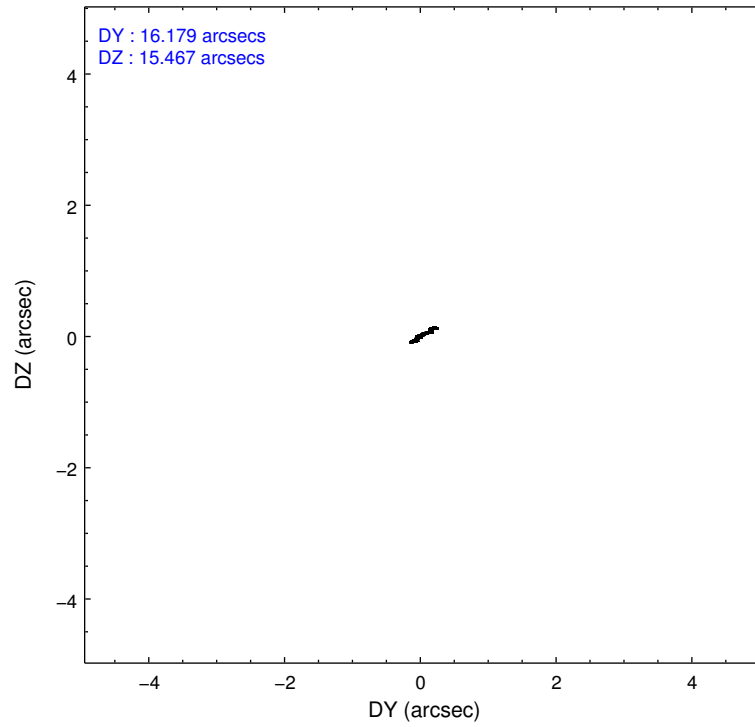
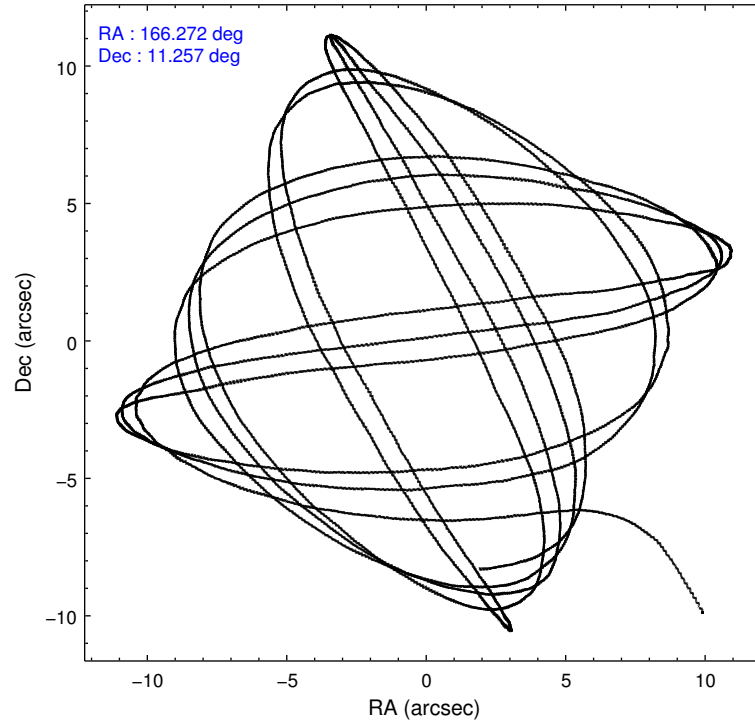
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	45247	45130	46755	58098	60257
rejected events	40281	38196	41411	32422	45803
rejected %	89%	84%	88%	55%	76%

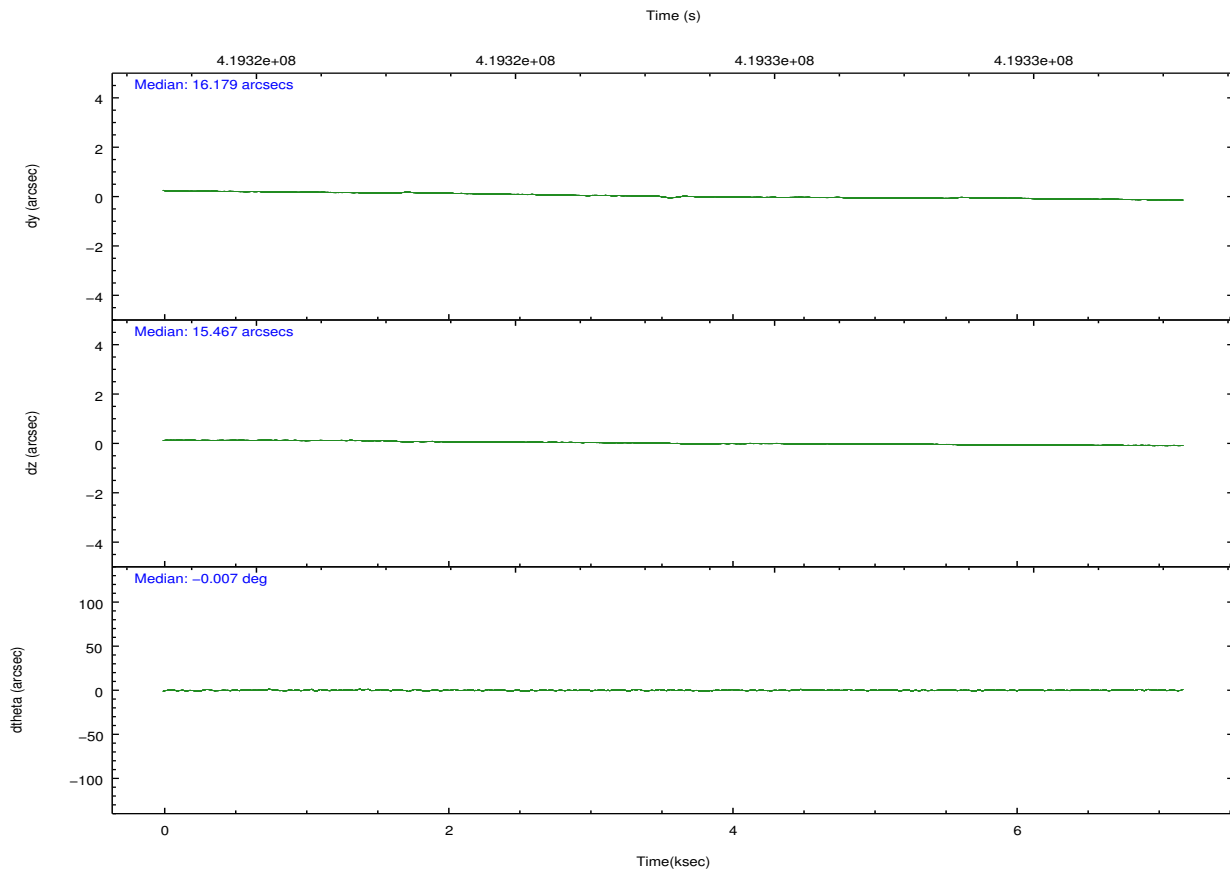
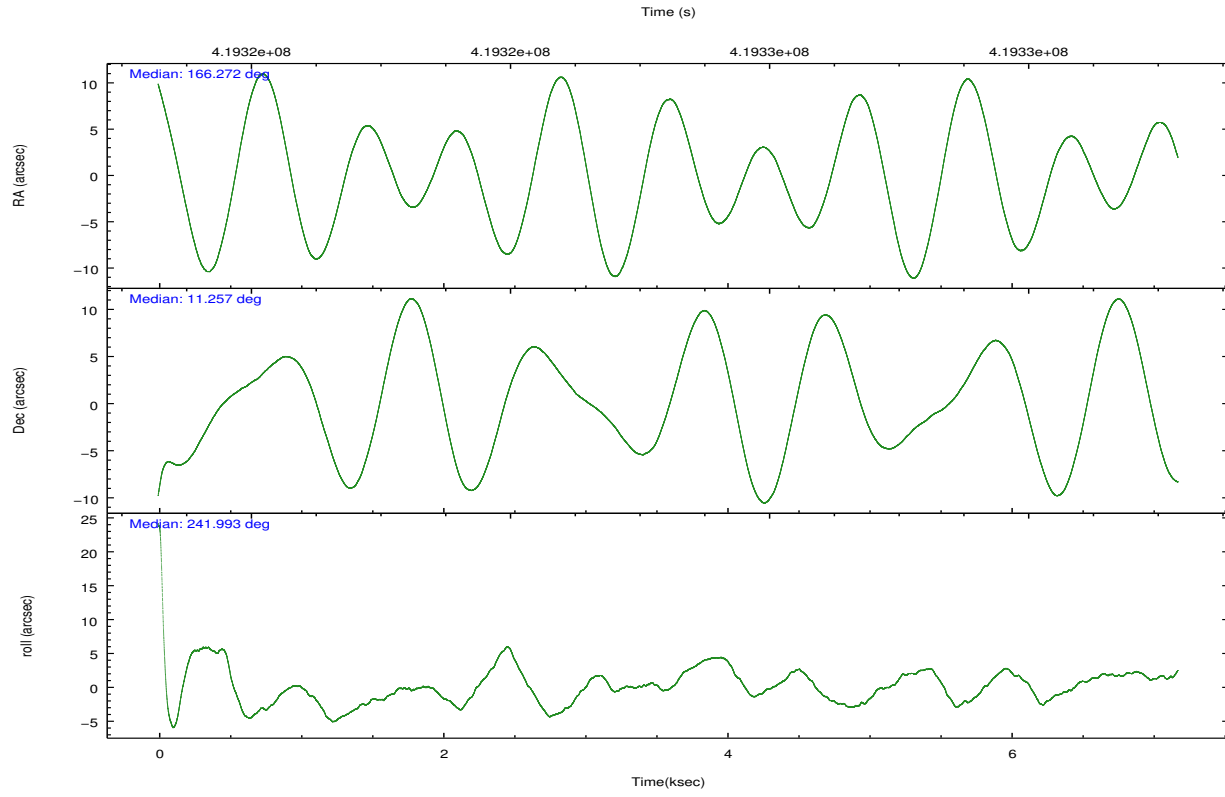
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1754	3845	1881	2377	3925
	3%	8%	4%	4%	6%
grade 1 events	22	38	21	76	40
	0%	0%	0%	0%	0%
grade 2 events	1138	1038	1123	5274	3433
	2%	2%	2%	9%	5%
grade 3 events	533	519	507	2226	1524
	1%	1%	1%	3%	2%
grade 4 events	573	558	576	2260	1388
	1%	1%	1%	3%	2%
grade 5 events	1816	2218	2111	5866	3199
	4%	4%	4%	10%	5%
grade 6 events	973	977	1261	13554	4188
	2%	2%	2%	23%	6%
grade 7 events	38438	35937	39275	26465	42560
	84%	79%	84%	45%	70%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	166.270631	166.2720251361966	CCD I2 on	O4	Y
[deg] Pointing Dec	11.283886	11.25652650511396	CCD I3 on	O3	Y
[deg] Pointing Roll	241.849095	242.0055204805108	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O1	Y
[s] Observation start time (MET)	419321800.184000	419320474.66831	CCD S5 on	N	N
Observation start date	2011-04-16T06:15:34	2011-04-16T05:54:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	419328800.184000	419329671.48129	On-chip summing requested	N	N
Observation end date	2011-04-16T08:12:14	2011-04-16T08:27:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



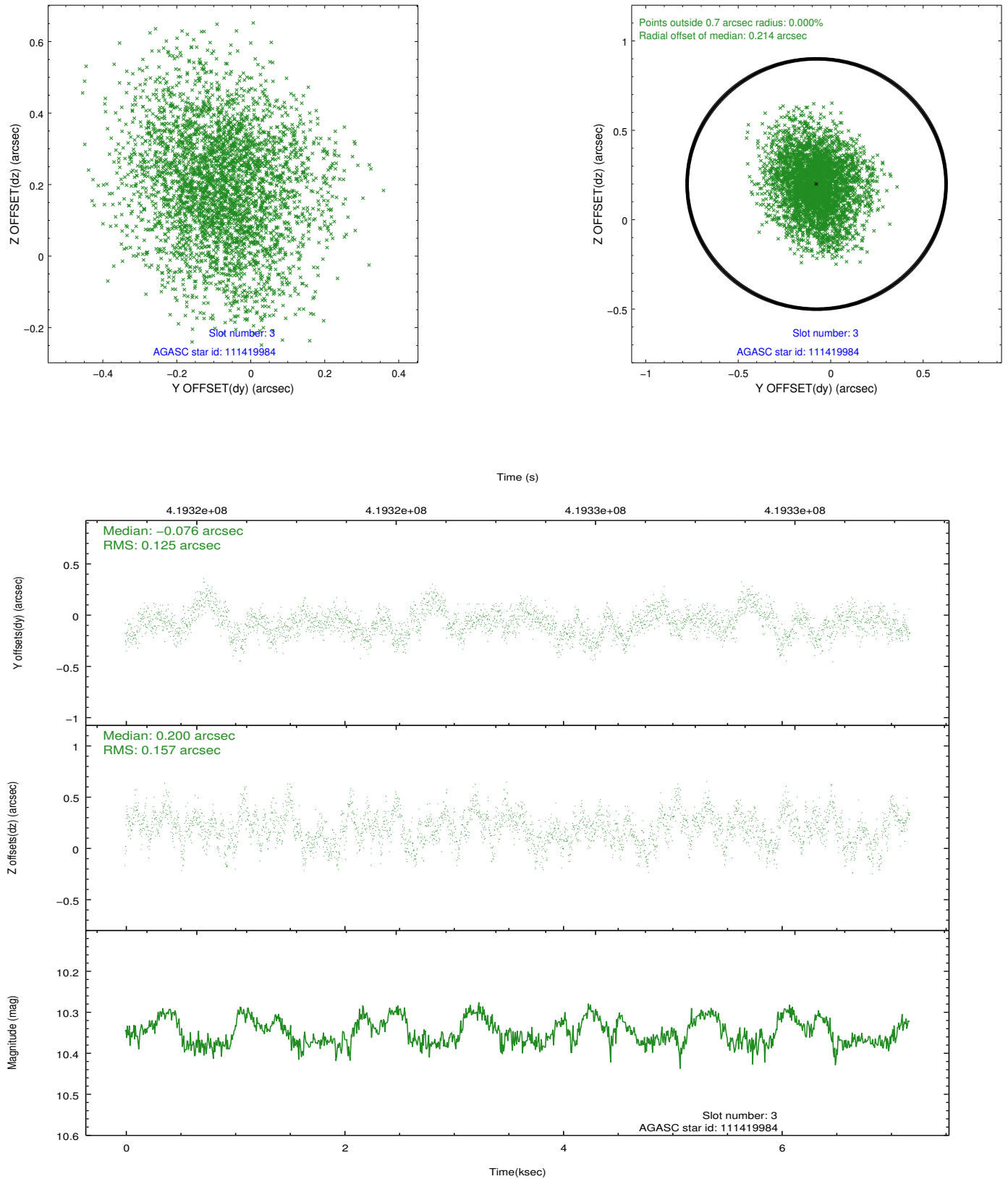


Slot Statistics

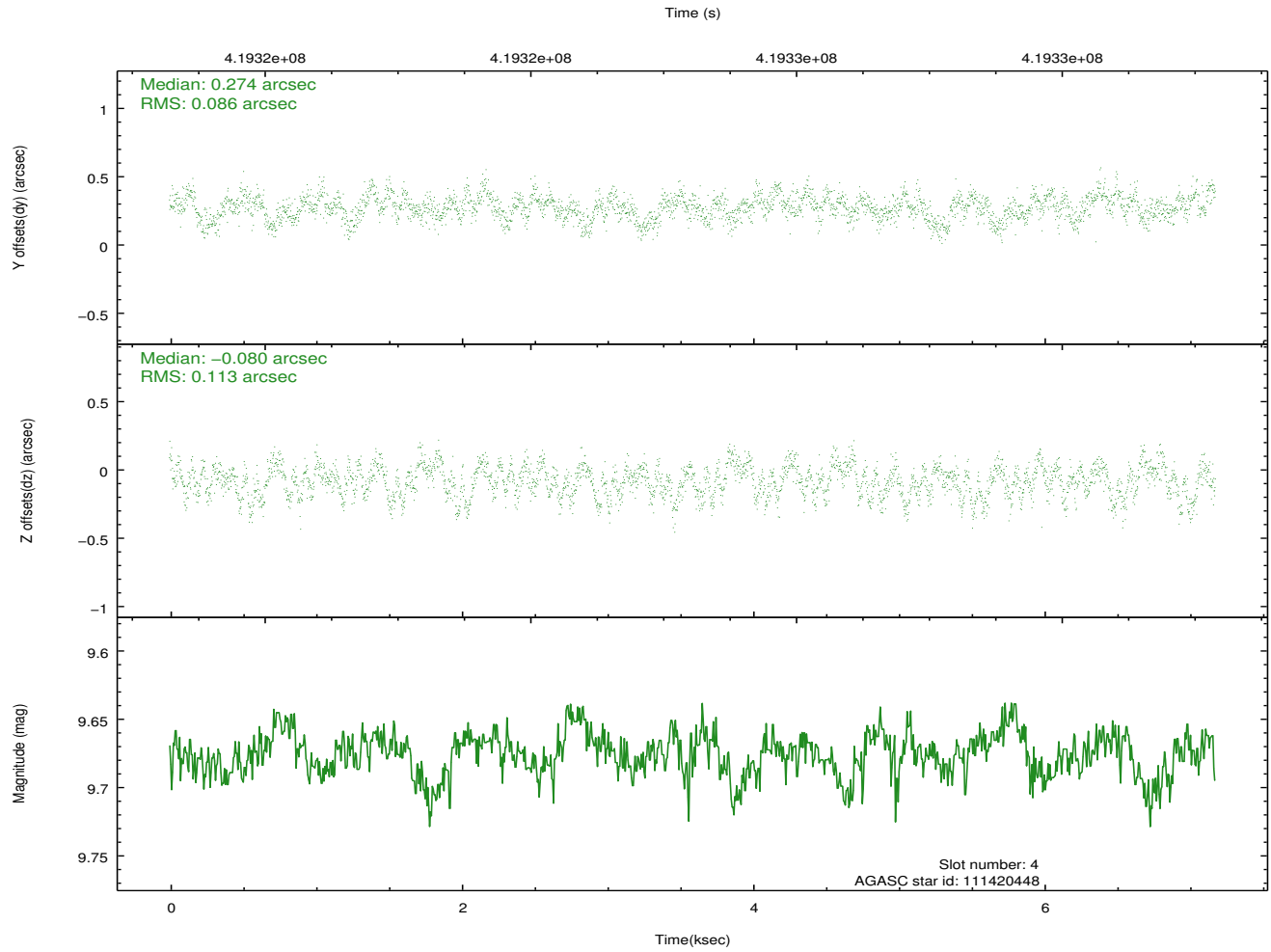
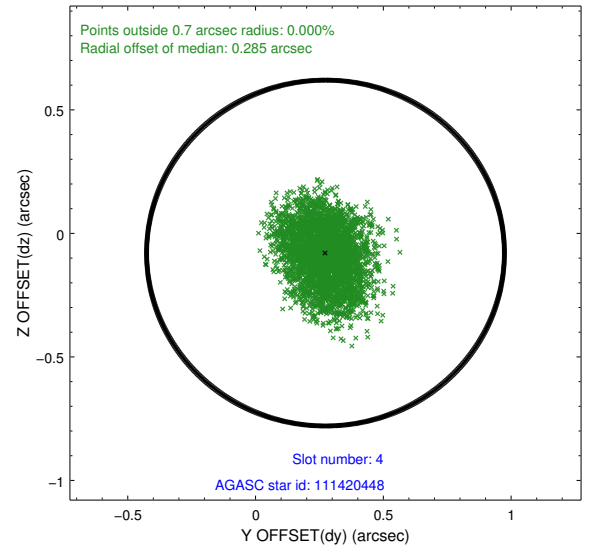
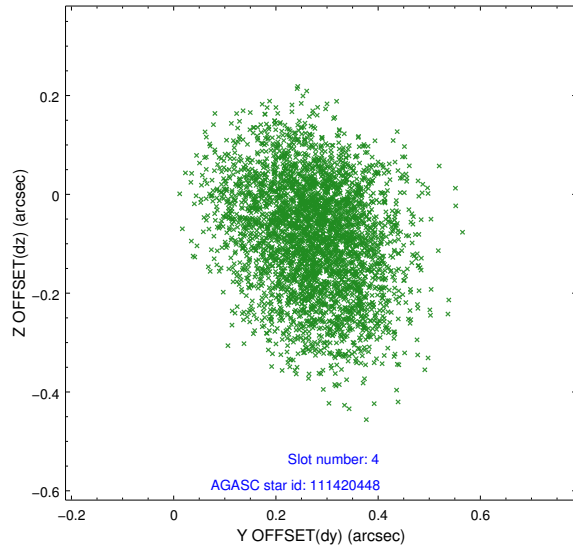
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.07	1751	0.067	-0.083	0.010	0.017	0.000000	0.000000	926.93	-1732.57
1	FID	ACIS-S-5	7.12	1751	-0.101	0.041	0.006	0.011	0.000000	0.000000	-1821.83	164.22
2	FID	ACIS-S-6	7.23	1751	0.013	0.054	0.009	0.015	0.000000	0.000000	391.50	809.15
3	GUIDE	111419984	10.35	3495	-0.076	0.200	0.219	0.347	165.942238	11.766129	-984.33	-1839.31
4	GUIDE	111420448	9.68	3499	0.274	-0.080	0.154	0.241	165.919412	11.485019	-53.72	-1435.00
5	GUIDE	111543176	10.17	3501	-0.056	0.106	0.179	0.289	166.235135	11.966187	-2106.32	-1269.86
6	GUIDE	111546168	9.78	3501	-0.025	-0.164	0.203	0.311	166.269202	11.246606	120.36	59.58
7	GUIDE	111543792	9.92	3480	-0.072	-0.036	0.179	0.287	167.091501	11.389789	-1706.33	2372.07

2.4 Star Slots

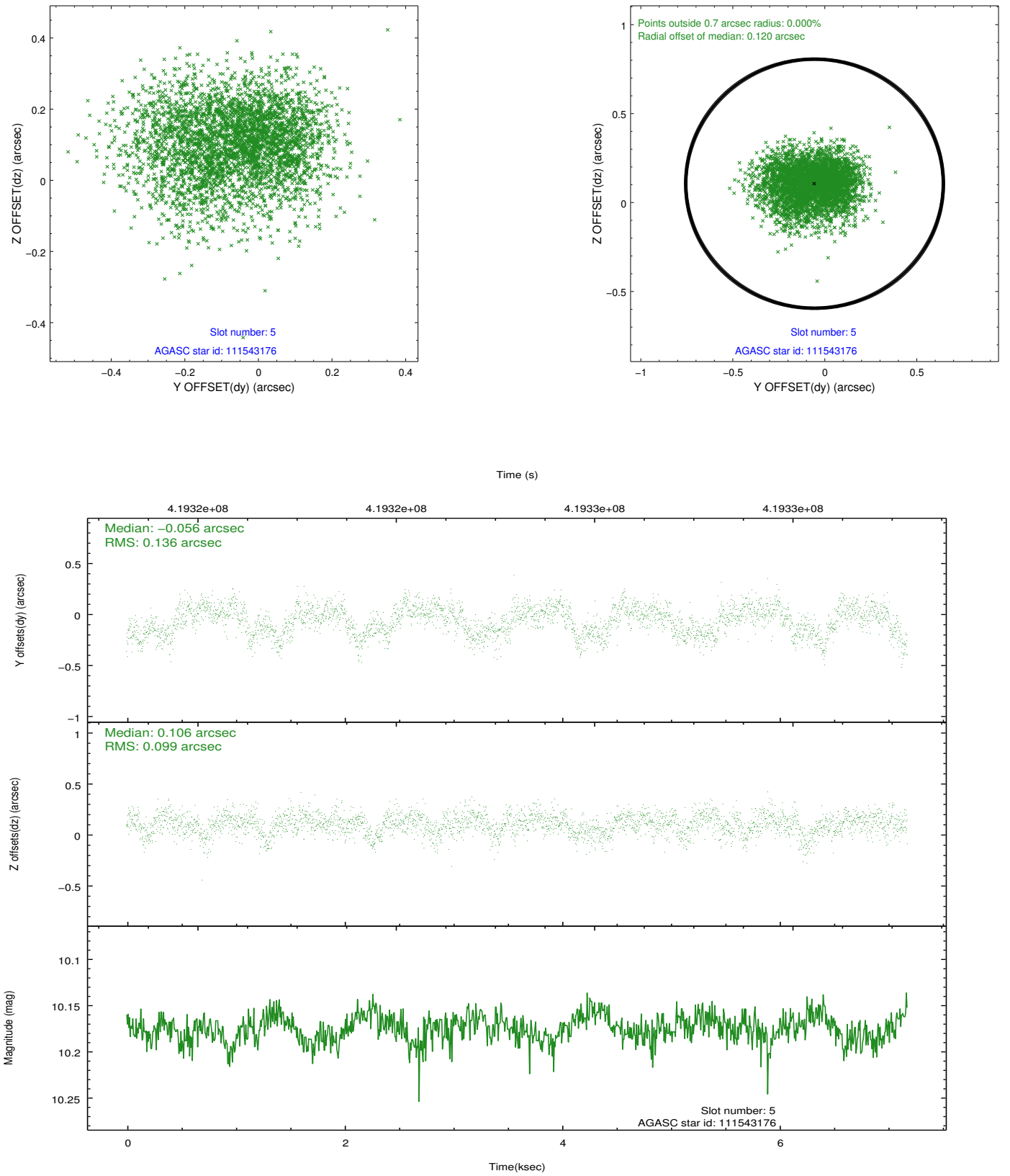
2.4.1 Slot 3



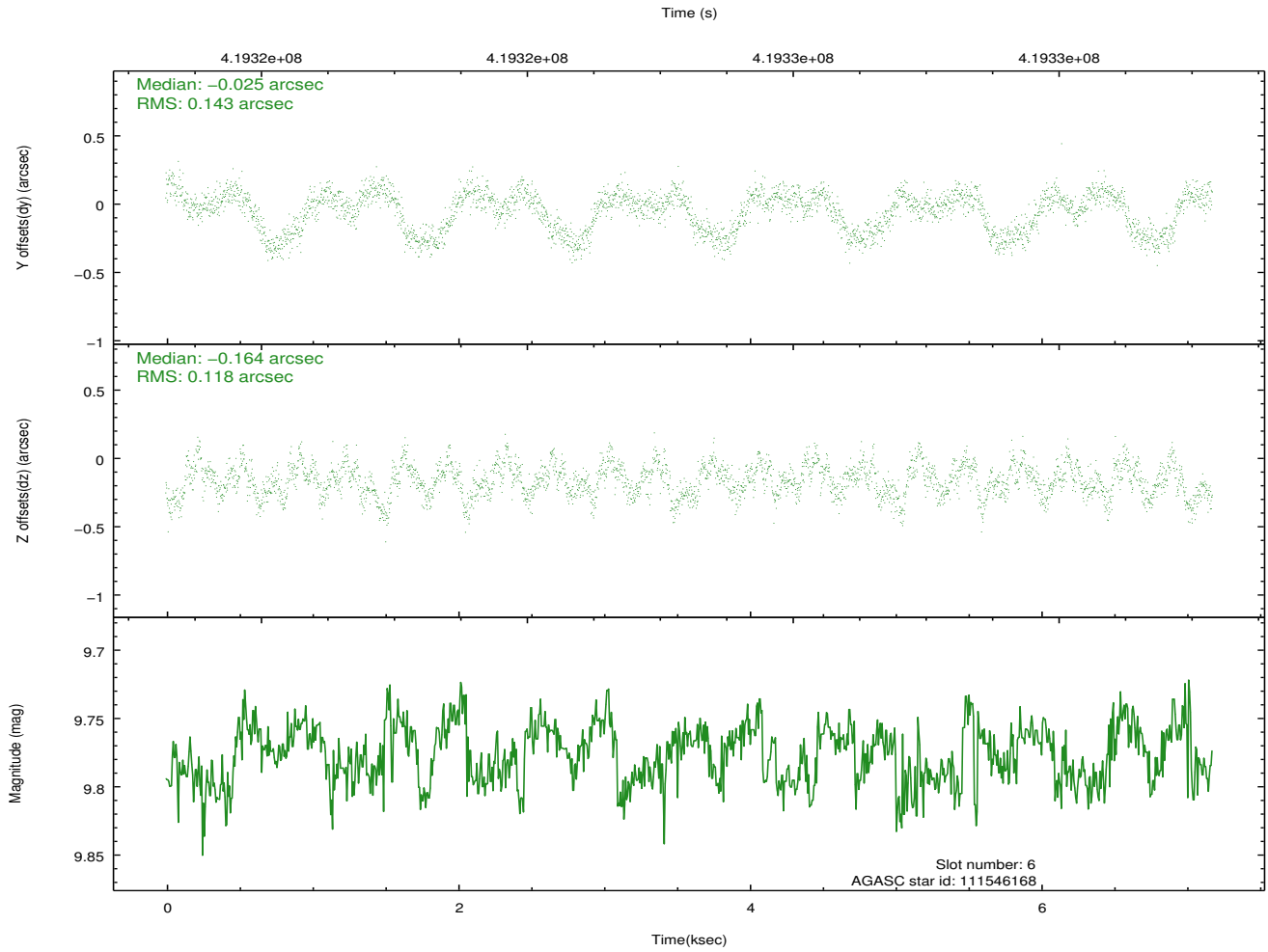
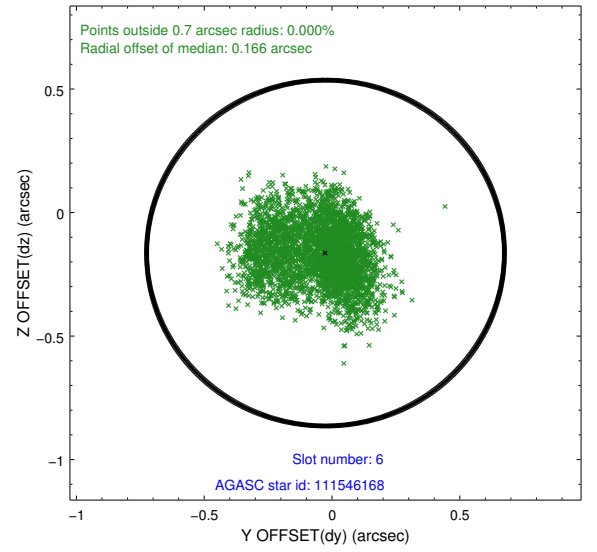
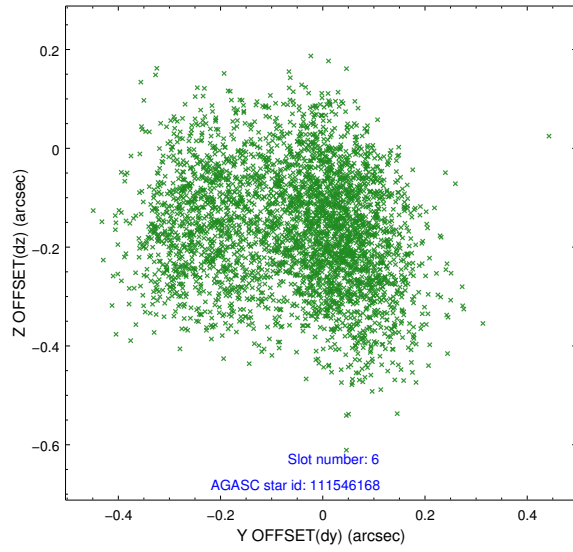
2.4.2 Slot 4



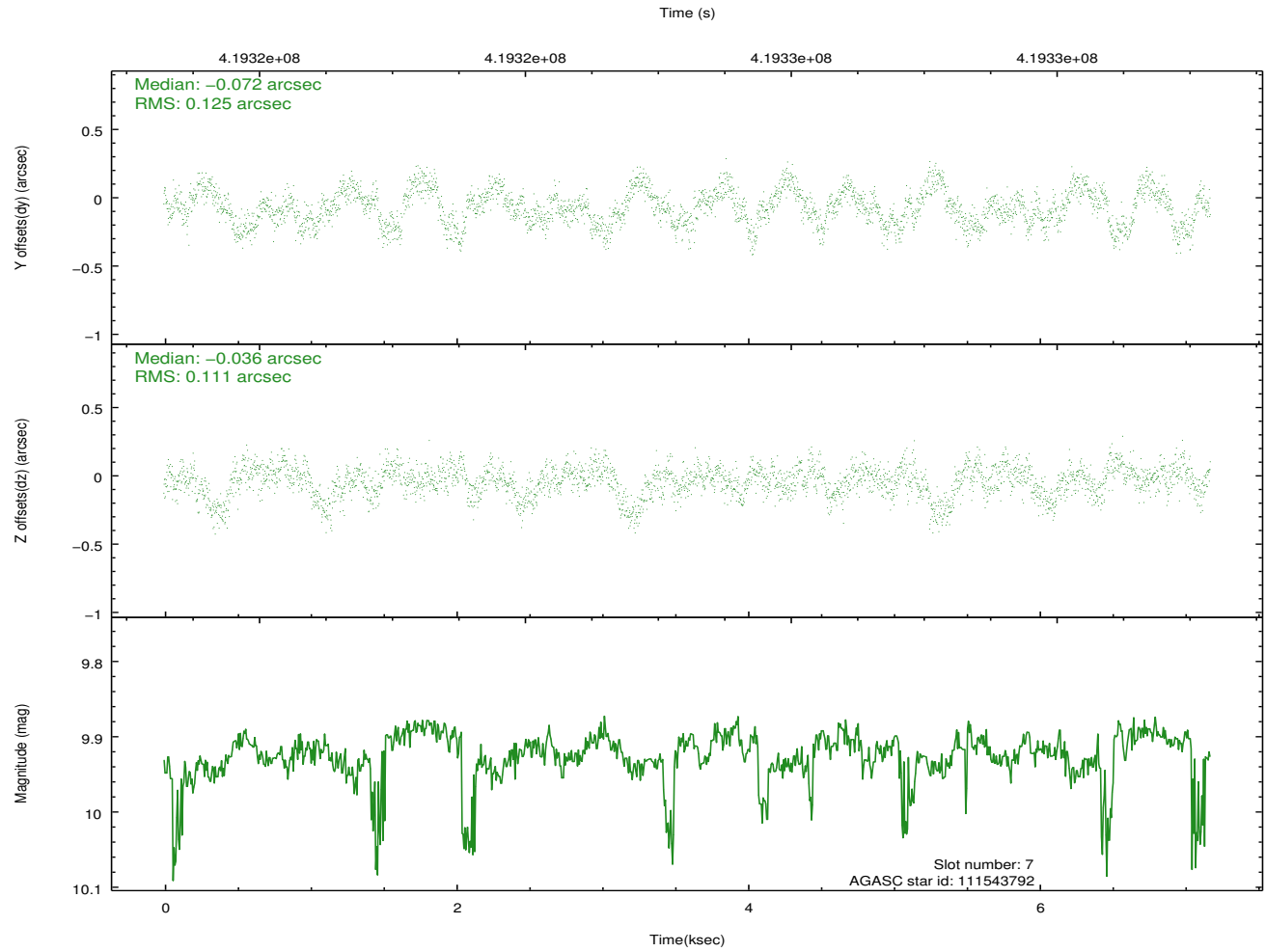
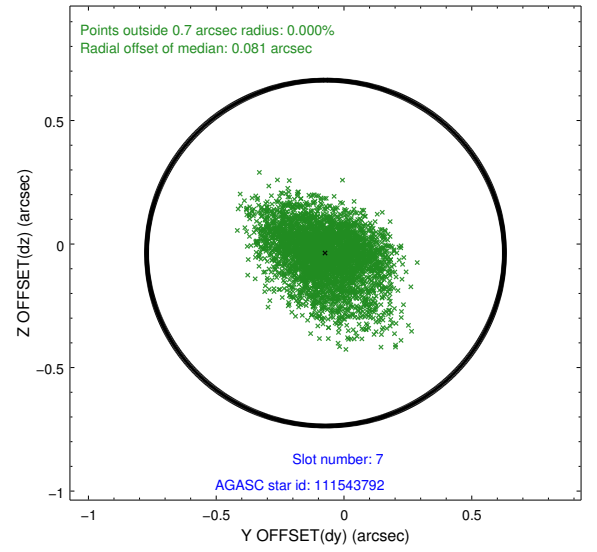
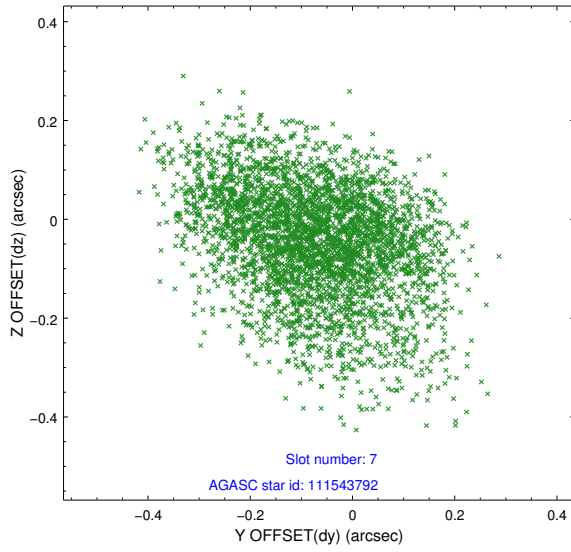
2.4.3 Slot 5



2.4.4 Slot 6

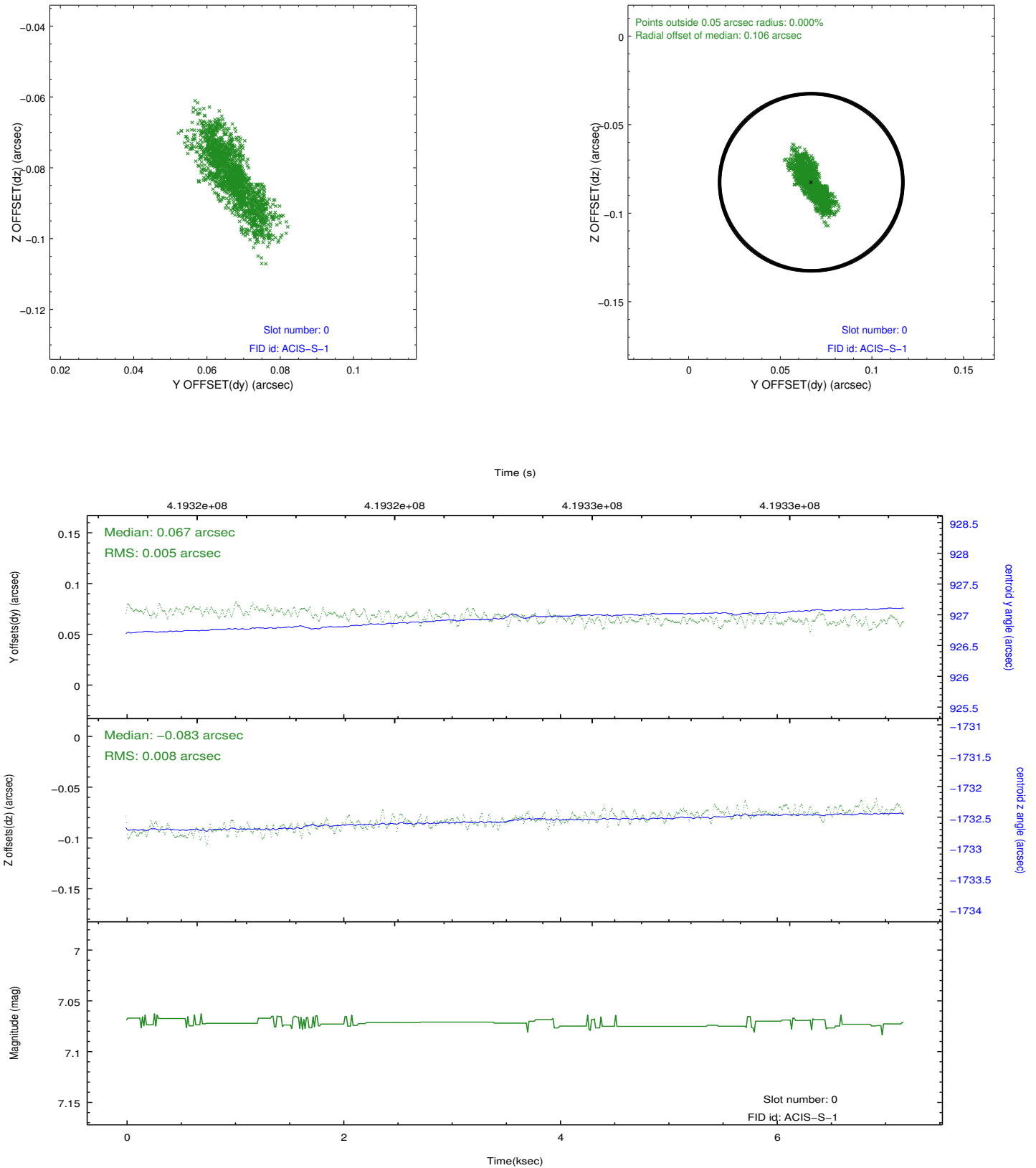


2.4.5 Slot 7

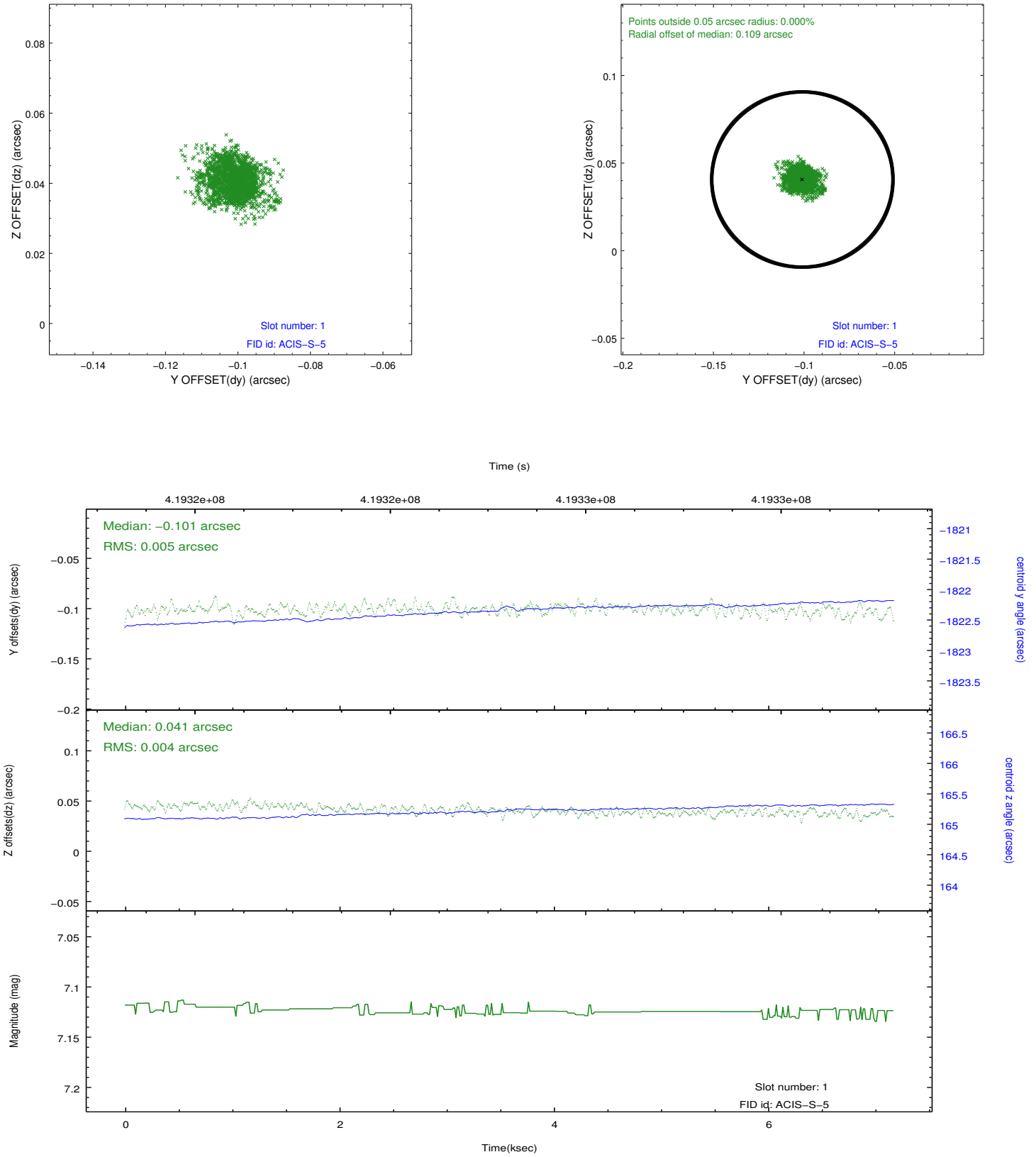


2.5 FID Slots

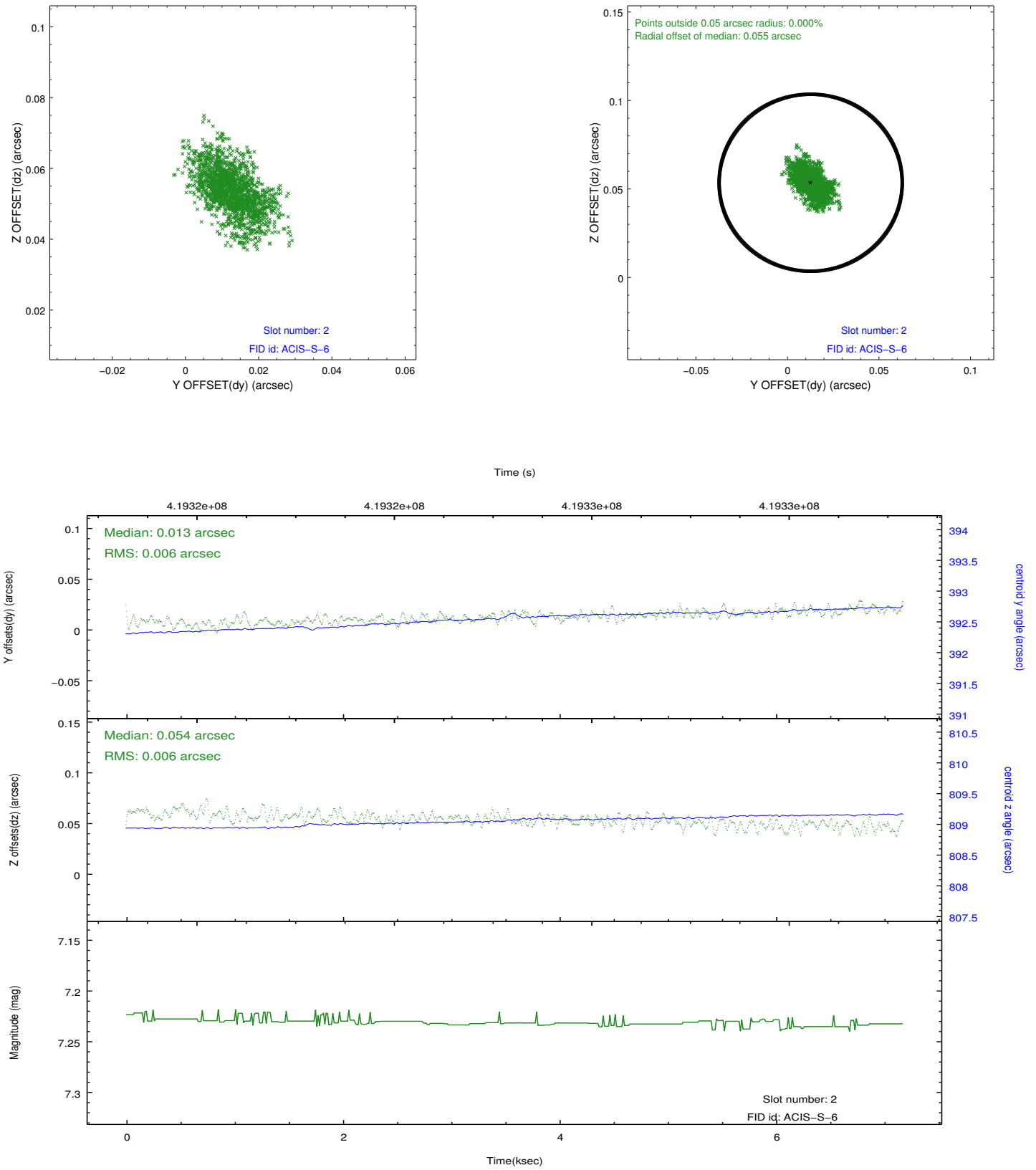
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.0419471050501

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.