

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12793 - L2 Version 2
Chandra X-Ray Center

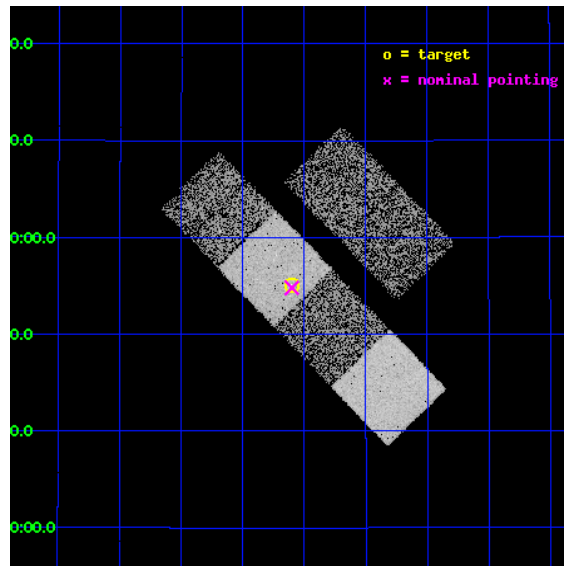
L2 Processing Date : Feb 5 2012

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1 Front

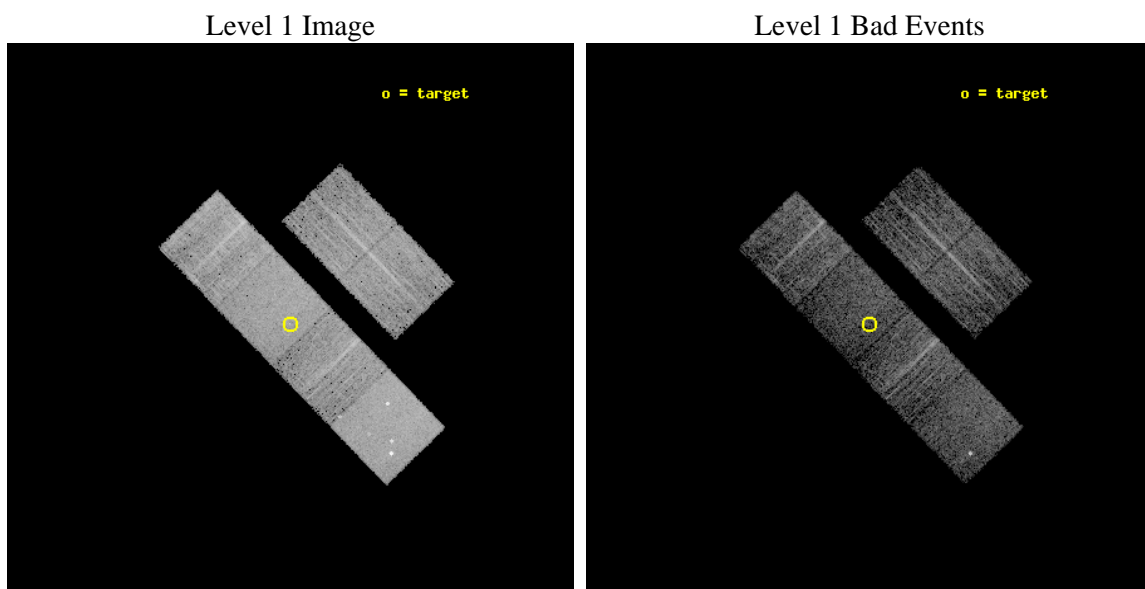
seq_num	702429	Sequence number
obs_id	12793	Observation id
title	Exploratory X-ray Monitoring of z>4 Radio-Quiet Quasars	Proposal t
observer	Prof. Ohad Shemmer	Principal investigator
object	PSS 0926+3055	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	141.65125	Observer's specified target RA [deg]
dec_targ	30.918028	Observer's specified target Dec [deg]
ra_nom	141.65007768311	Nominal RA [deg]
dec_nom	30.9133431936	Nominal Dec [deg]
roll_nom	225.86589532046	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5046.3999812603	Sum of GTIs [s]
livetime	4982.4994261203	Livetime [s]
ontime2	5046.3999812603	Sum of GTIs [s]
ontime3	5046.3999812603	Sum of GTIs [s]
ontime5	5046.3999812603	Sum of GTIs [s]
ontime6	5046.3999812603	Sum of GTIs [s]
ontime7	5046.3999812603	Sum of GTIs [s]
ontime8	5046.3999812603	Sum of GTIs [s]
l2events	59224	Number of level 2 events



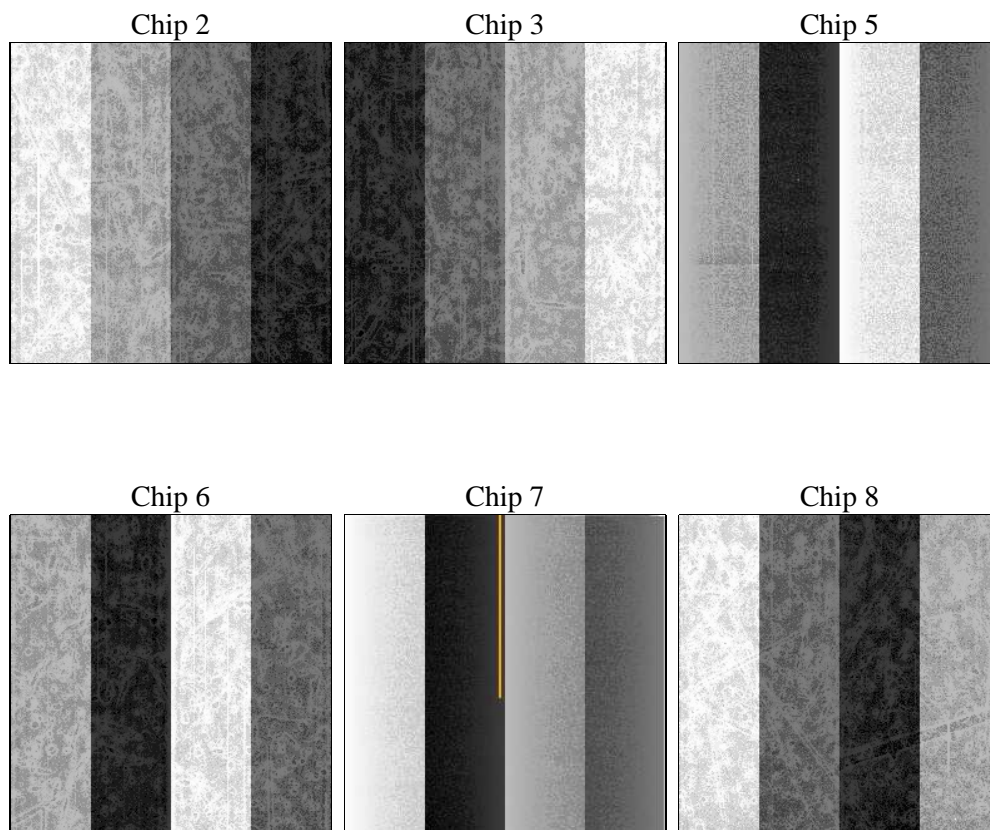
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.392000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	5046.3999812603	Sum of GTIs [s]
caldsver	4.4.7	 	ontime2	5046.3999812603	Sum of GTIs [s]
date	2012-02-05T14:00:42	Date and time of file creation	ontime3	5046.3999812603	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	5046.3999812603	Sum of GTIs [s]
			ontime6	5046.3999812603	Sum of GTIs [s]
			ontime7	5046.3999812603	Sum of GTIs [s]
			ontime8	5046.3999812603	Sum of GTIs [s]
			l1events	249081	Number of level 1 events

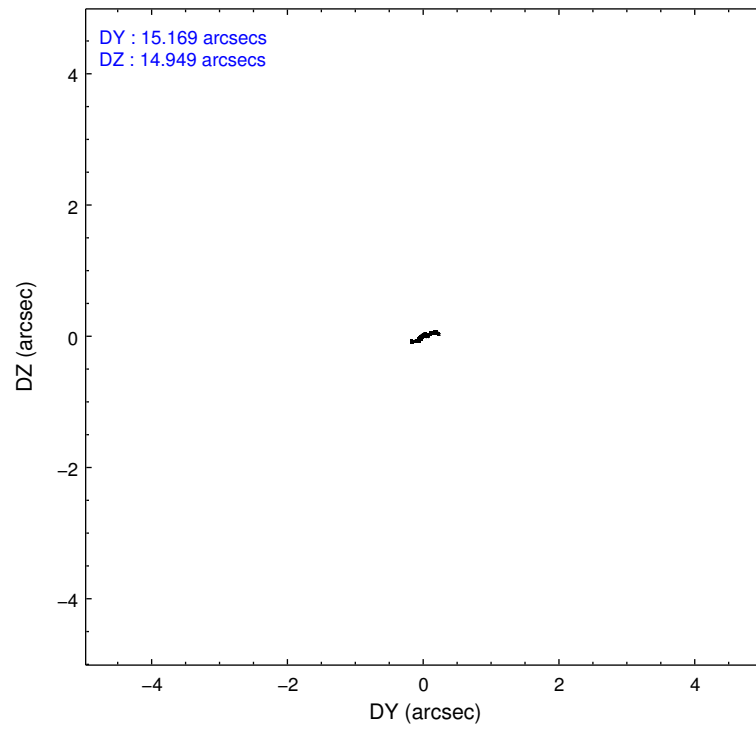
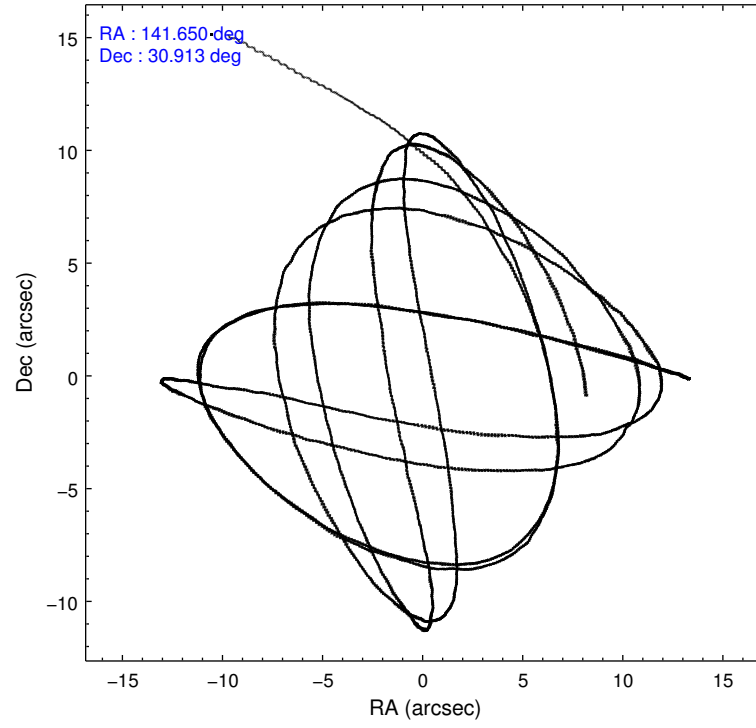
2.1.4 Events

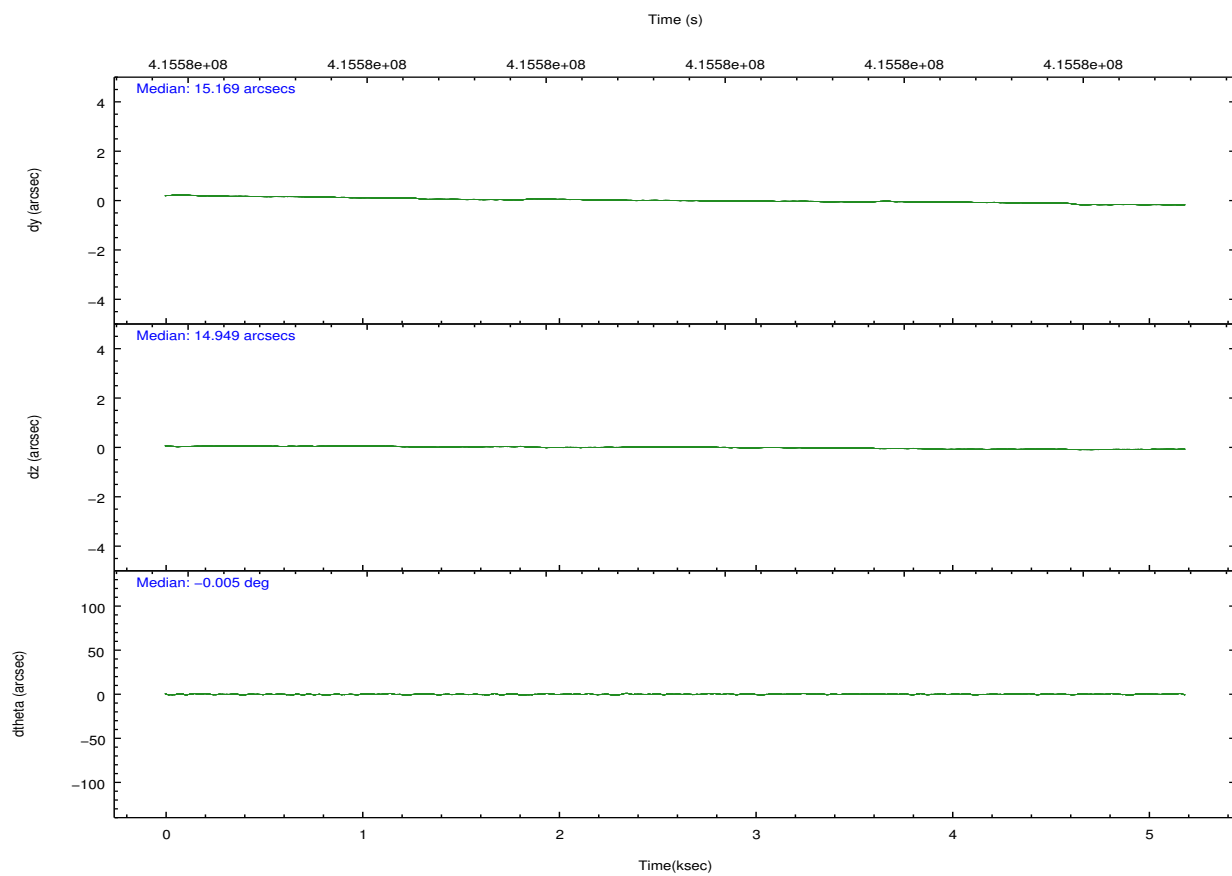
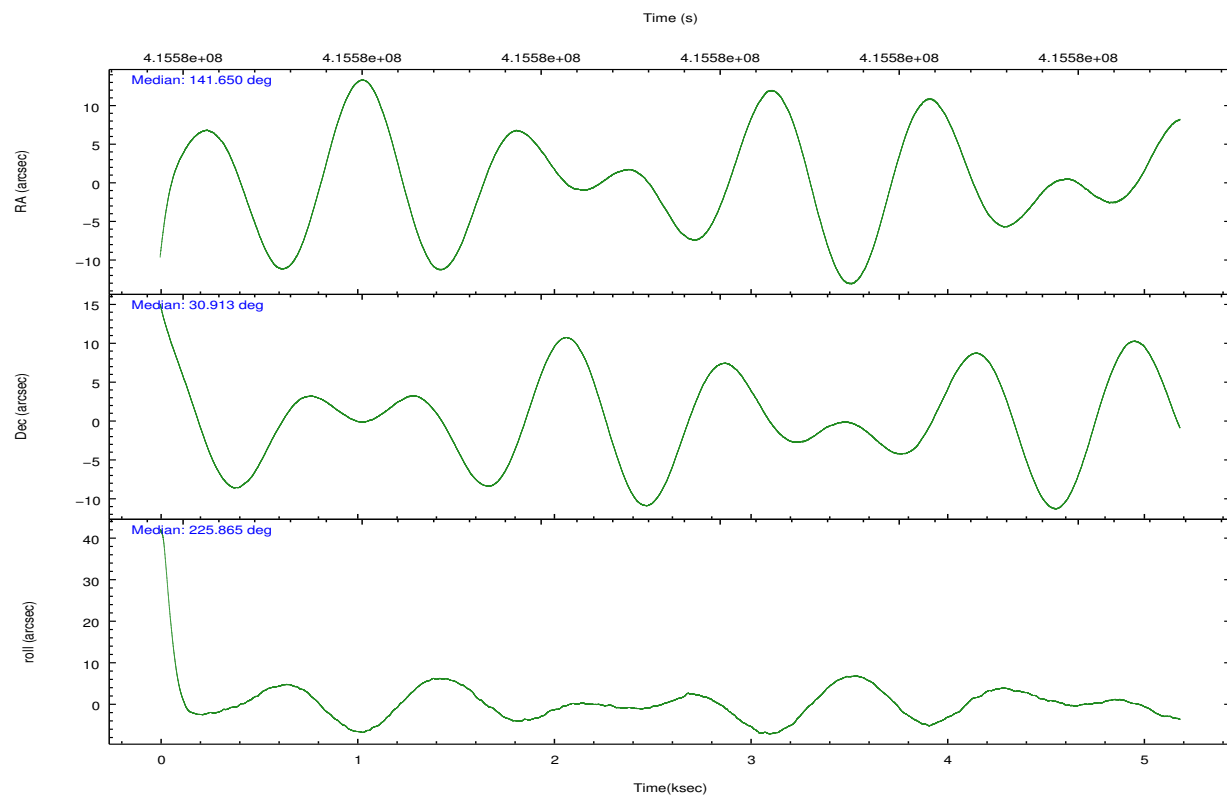
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	34832	33114	56439	34439	44211	46046	grade 0 events	1470	1373	3699	1520	1902	3526
rejected events	30831	29423	27895	30246	23998	33675		4%	4%	6%	4%	4%	7%
rejected %	88%	88%	49%	87%	54%	73%	grade 1 events	33	22	87	25	59	37
								0%	0%	0%	0%	0%	0%
							grade 2 events	952	842	8493	934	4112	2988
								2%	2%	15%	2%	9%	6%
							grade 3 events	393	398	1014	399	1839	1264
								1%	1%	1%	1%	4%	2%
							grade 4 events	430	364	922	405	1800	1215
								1%	1%	1%	1%	4%	2%
							grade 5 events	1372	1554	4117	1609	4567	2324
								3%	4%	7%	4%	10%	5%
							grade 6 events	767	719	14439	938	10585	3394
								2%	2%	25%	2%	23%	7%
							grade 7 events	29415	27842	23668	28609	19347	31298
								84%	84%	41%	83%	43%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	141.657392	141.650077683106	CCD I2 on	O2	Y
[deg] Pointing Dec	30.939889	30.91334319359967	CCD I3 on	O1	Y
[deg] Pointing Roll	225.705409	225.8658953204626	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	415576308.184000	415574737.53669	CCD S5 on	N	N
Observation start date	2011-03-03T21:50:42	2011-03-03T21:25:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	415581309.184000	415581534.31204	On-chip summing requested	N	N
Observation end date	2011-03-03T23:14:03	2011-03-03T23:18:54	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



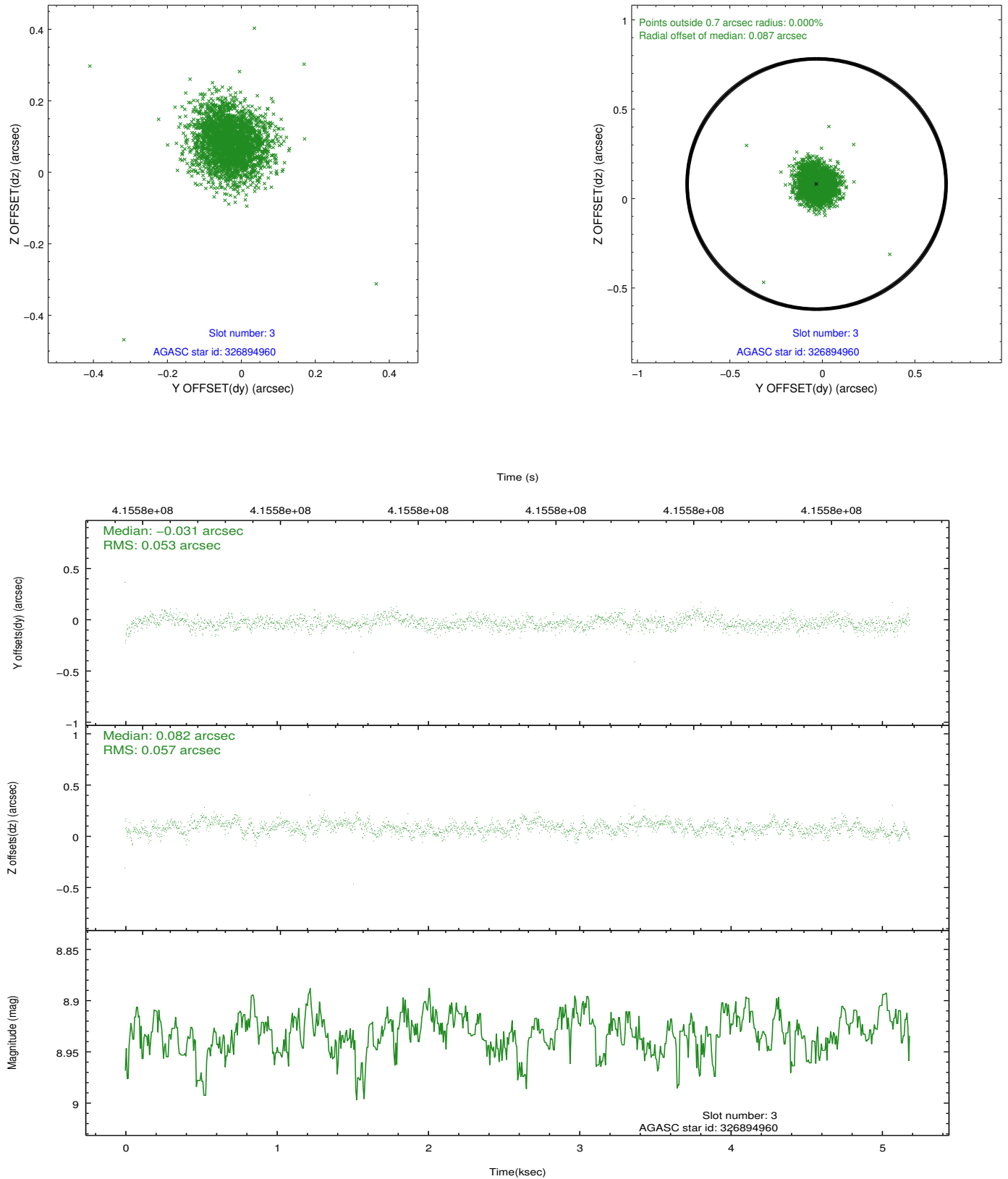


Slot Statistics

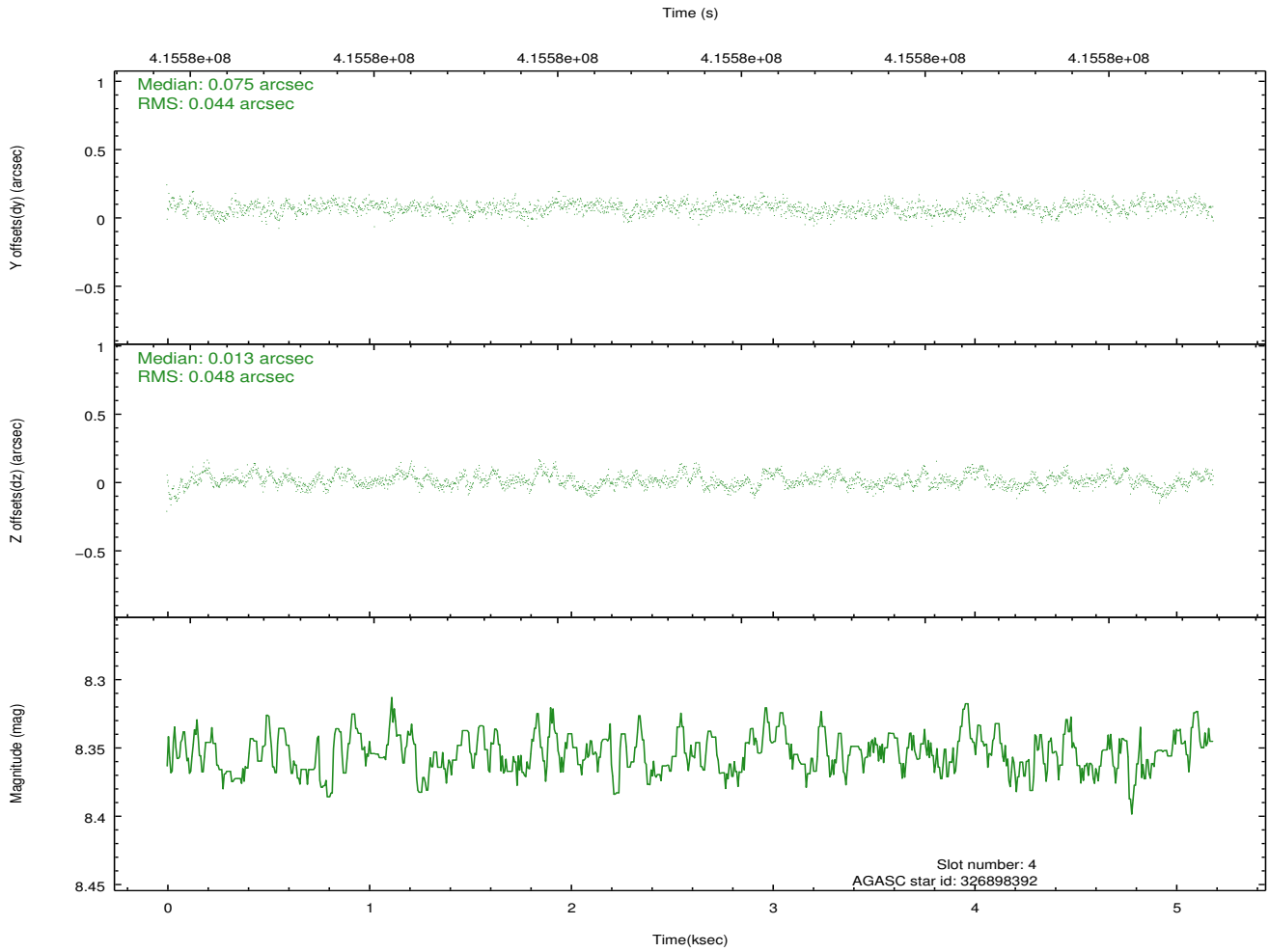
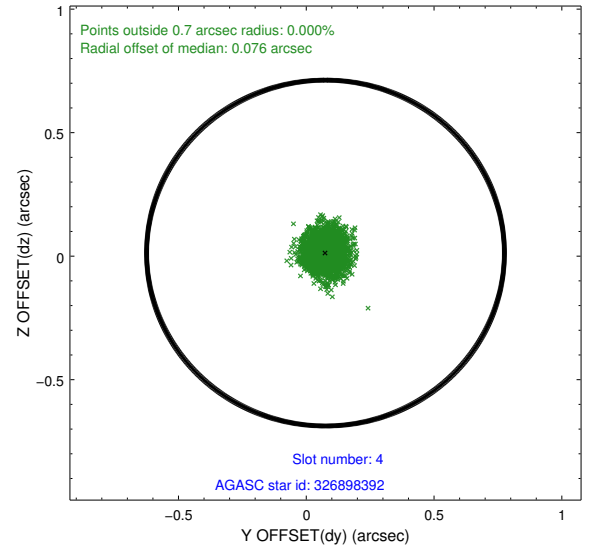
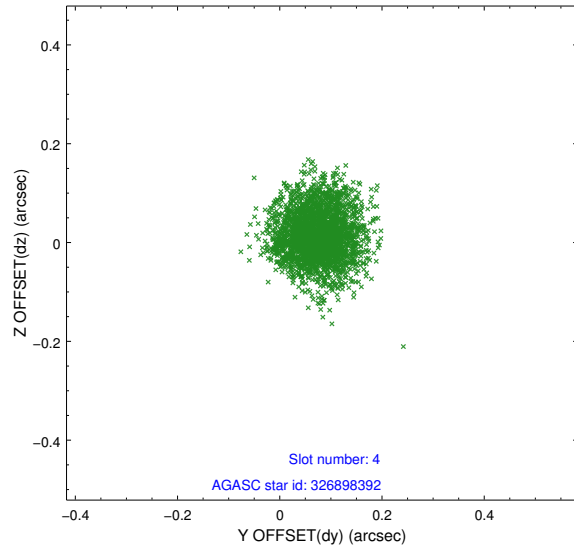
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.92	1265	-0.104	-0.033	0.006	0.011	0.000000	0.000000	-768.24	-1736.36
1	FID	ACIS-S-4	7.00	1265	0.214	0.059	0.007	0.011	0.000000	0.000000	2144.80	171.04
2	FID	ACIS-S-5	7.03	1265	-0.141	-0.017	0.007	0.012	0.000000	0.000000	-1819.64	165.92
3	GUIDE	326894960	8.93	2528	-0.031	0.082	0.080	0.130	141.736989	30.296358	1486.20	1795.69
4	GUIDE	326898392	8.35	2530	0.075	0.013	0.070	0.112	141.640946	31.182886	-589.63	-645.67
5	GUIDE	326899216	9.22	2529	-0.008	-0.035	0.094	0.152	141.627351	30.776310	486.63	344.65
6	GUIDE	326899384	8.94	2531	0.018	0.031	0.088	0.140	141.976290	31.465042	-2036.61	-619.51
7	GUIDE	326903944	7.61	2530	-0.056	-0.097	0.062	0.099	141.372366	30.493208	1768.30	491.25

2.4 Star Slots

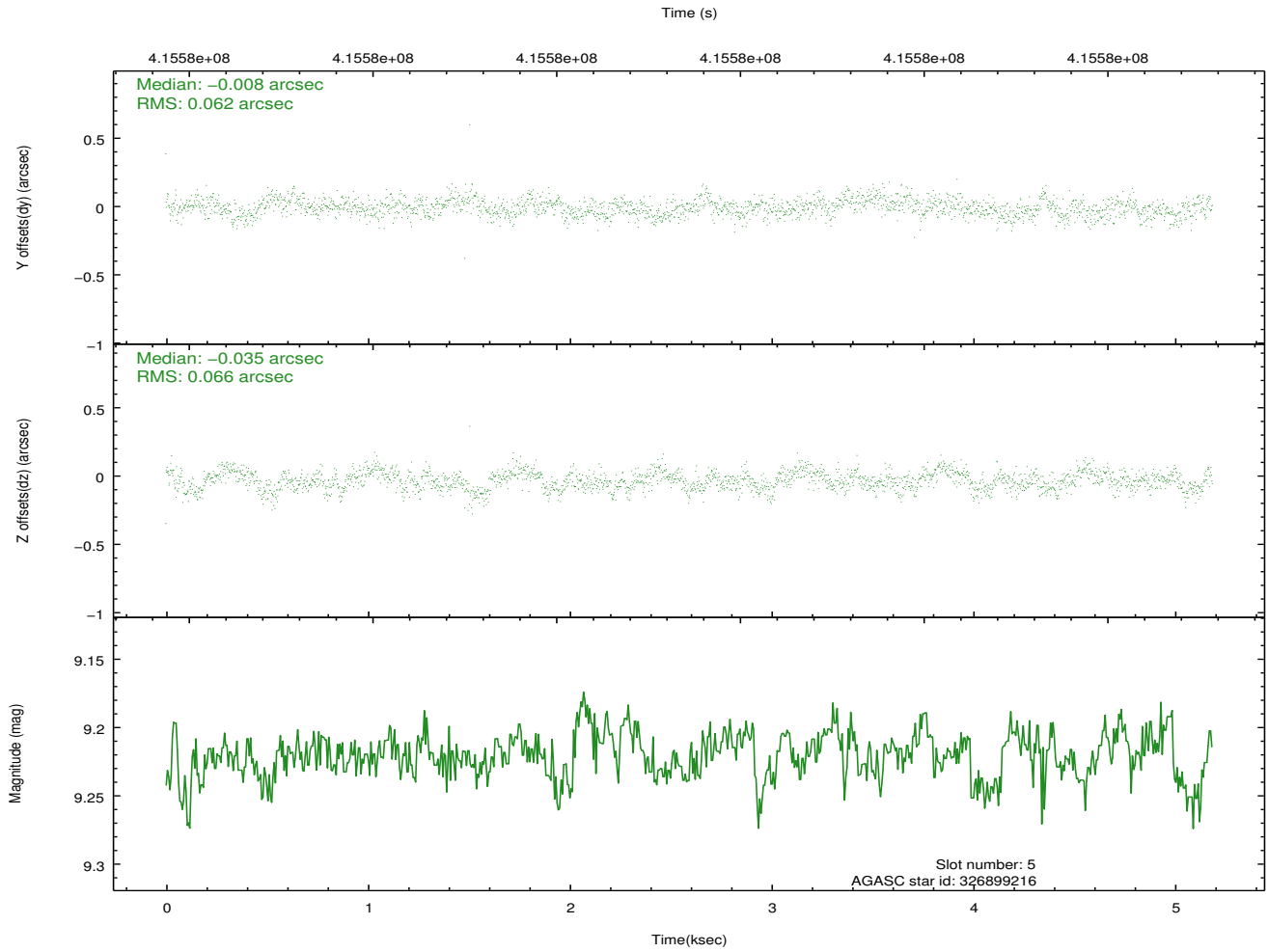
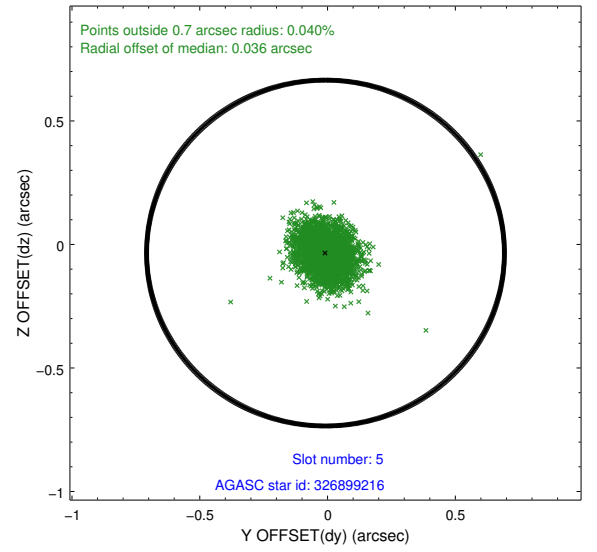
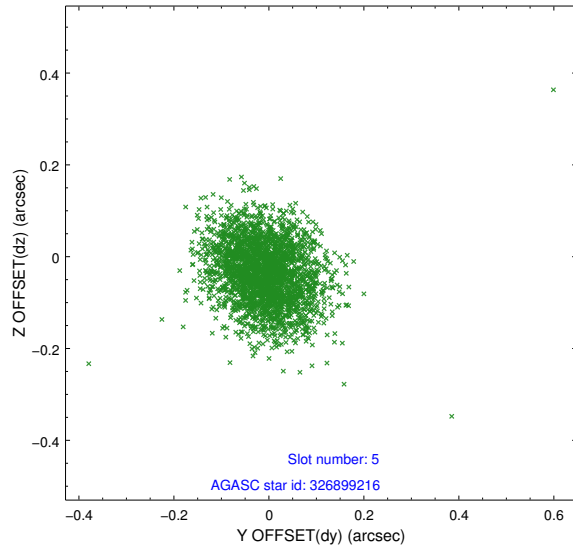
2.4.1 Slot 3



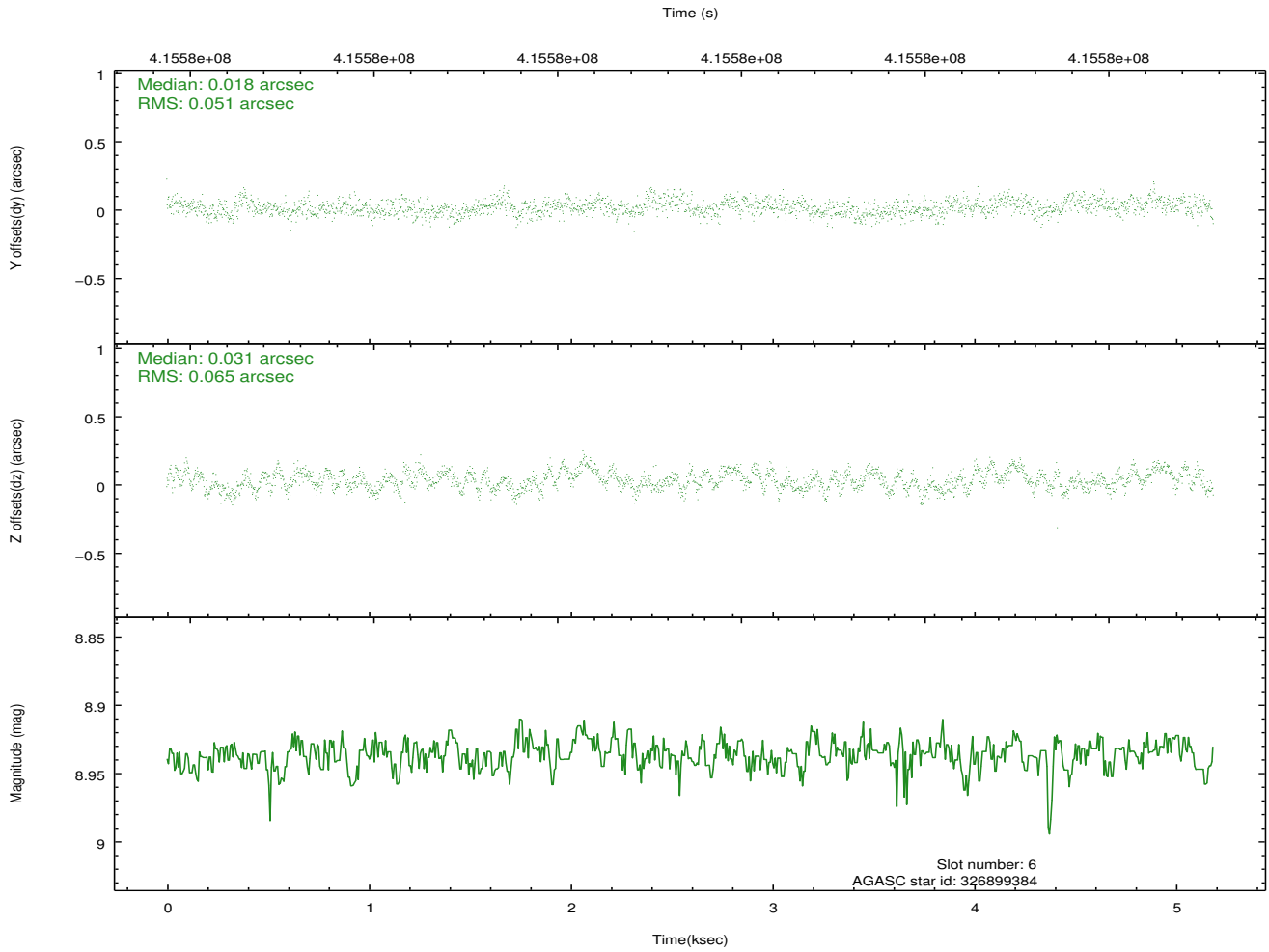
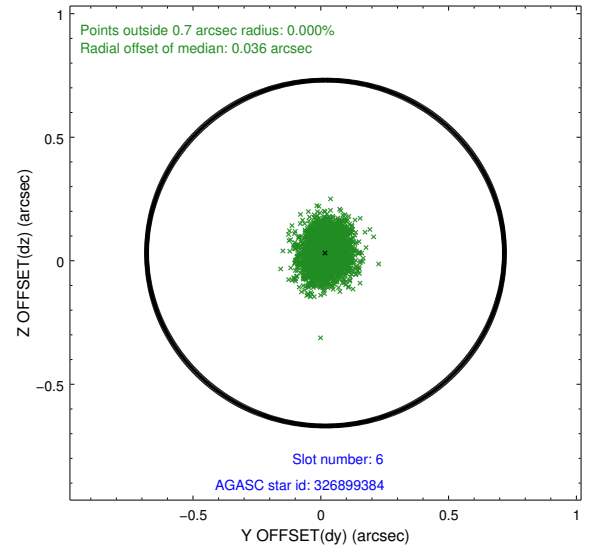
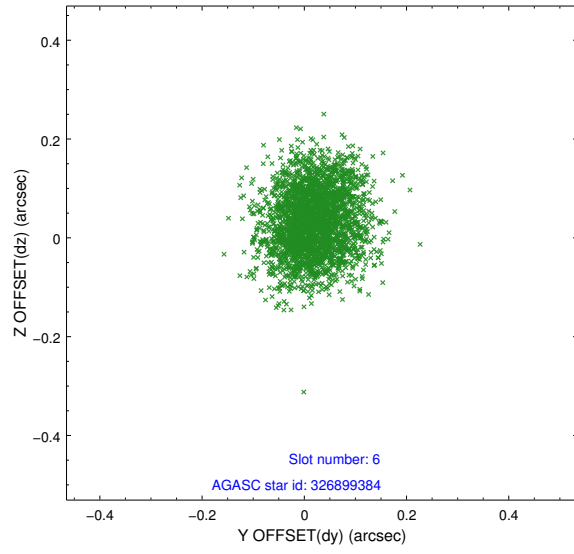
2.4.2 Slot 4



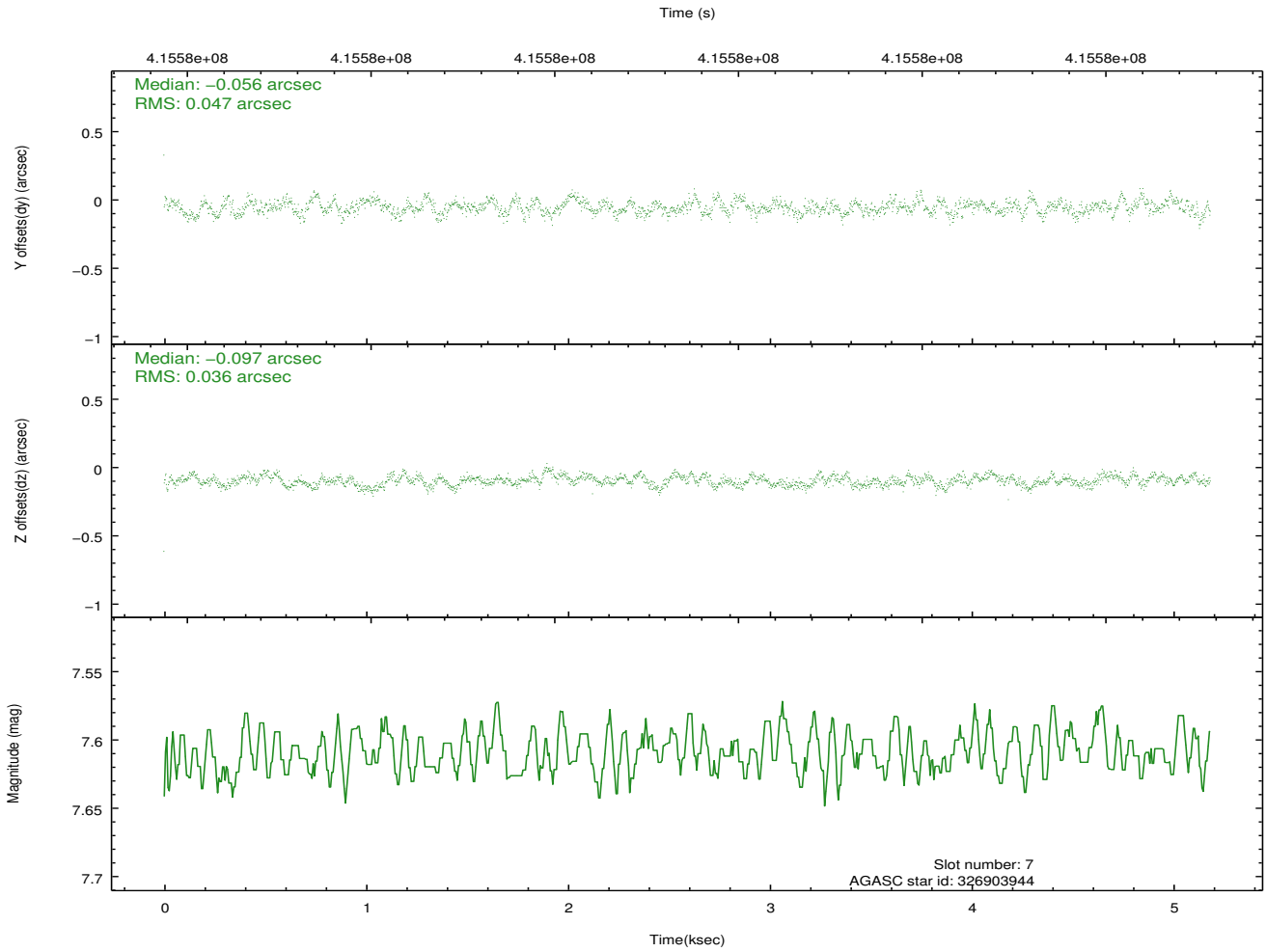
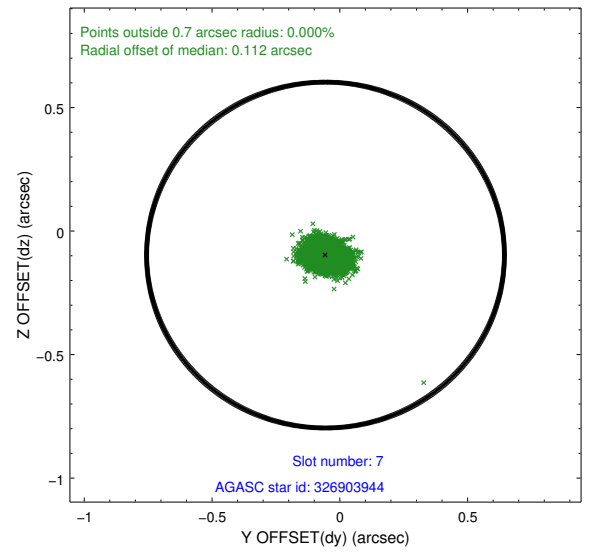
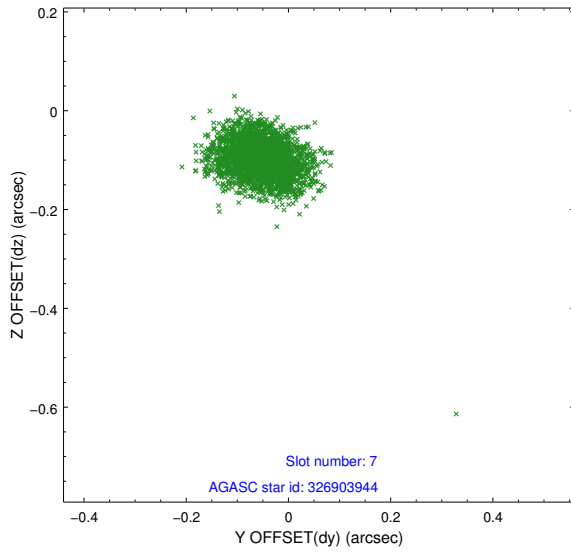
2.4.3 Slot 5



2.4.4 Slot 6

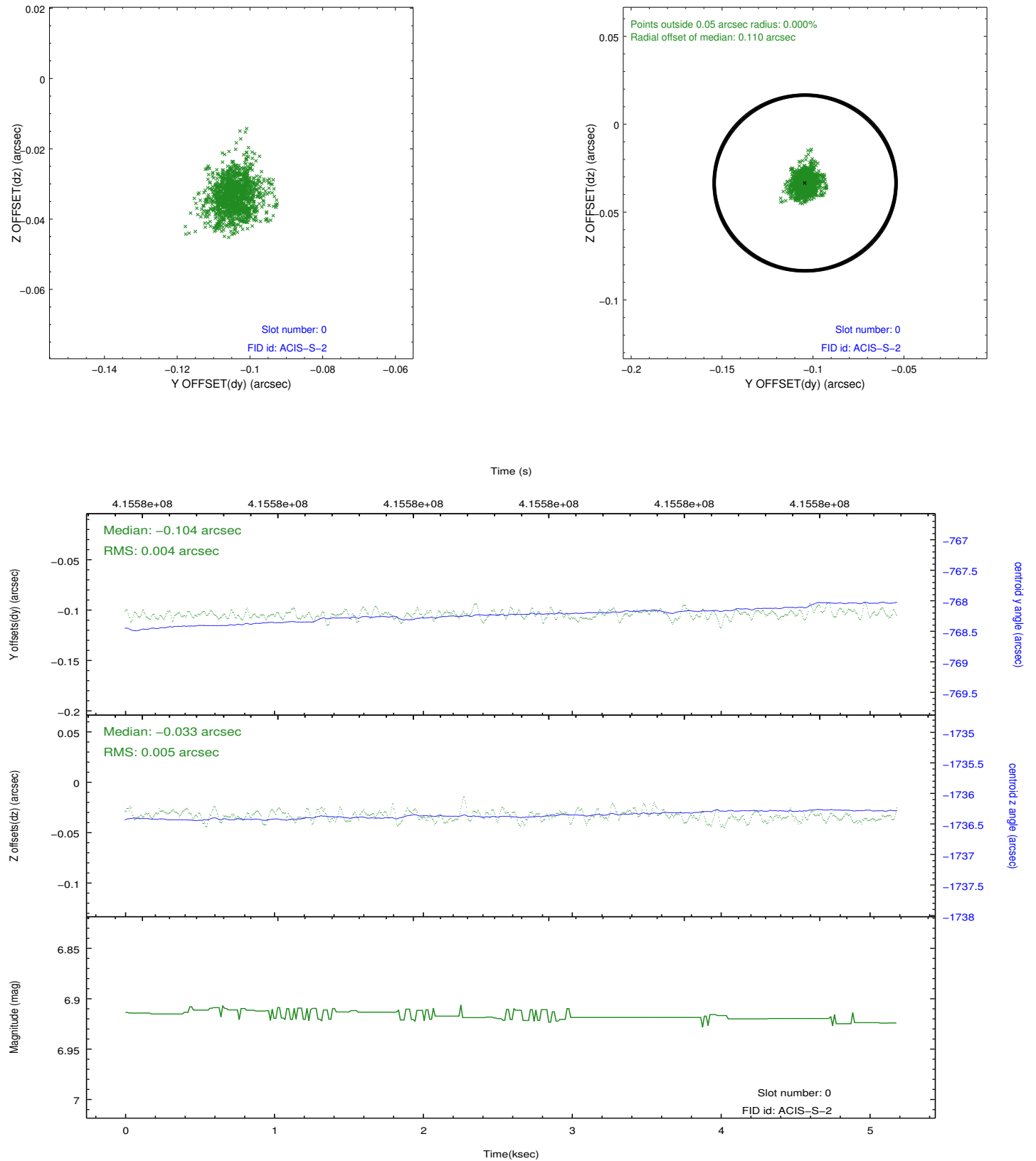


2.4.5 Slot 7

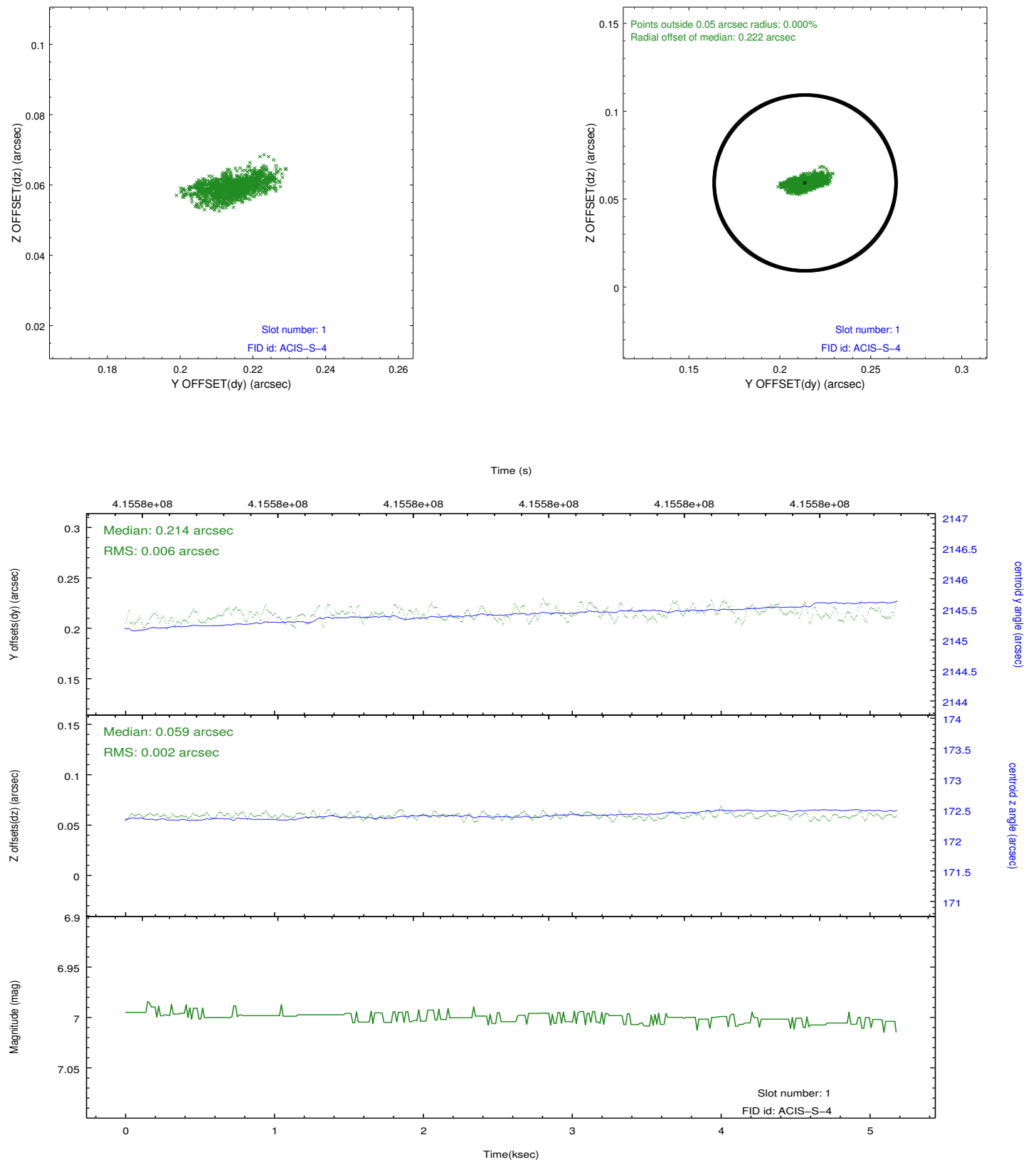


2.5 FID Slots

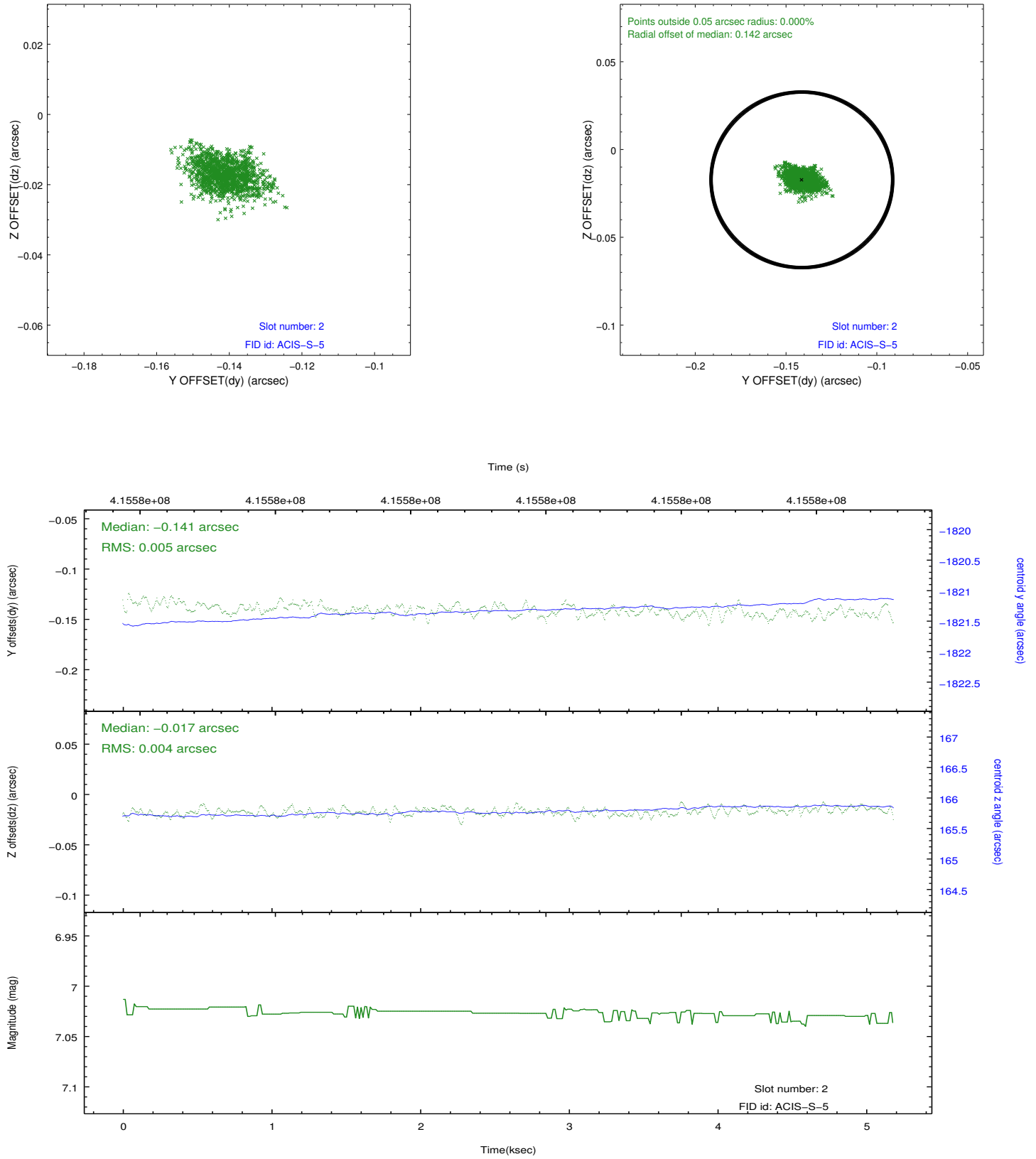
2.5.1 Slot 0



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)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0463999812603

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.