

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12304 - L2 Version 2
Chandra X-Ray Center

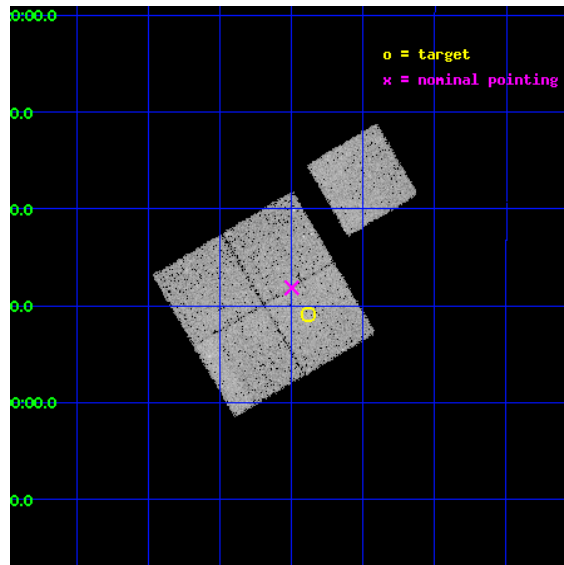
L2 Processing Date : Feb 5 2012

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

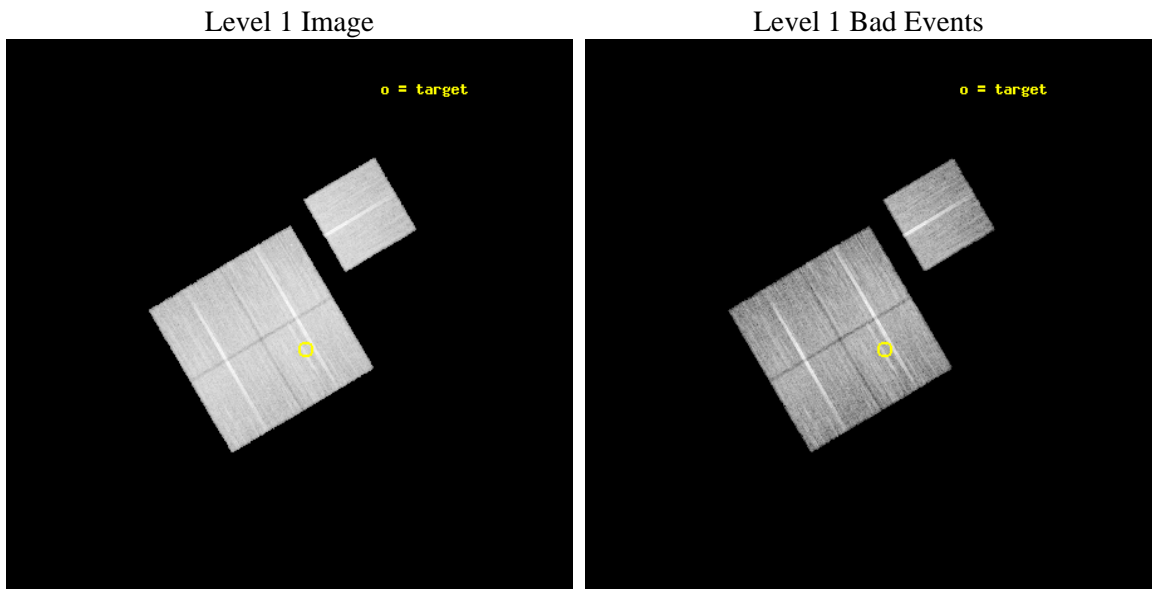
seq_num	801009	Sequence number
obs_id	12304	Observation id
title	The X-ray Properties of Weak-Lensing Selected Galaxy Clusters	Prop
observer	MR Paul Giles	Principal investigator
object	SLJ1204.4-0351	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	181.095417	Observer's specified target RA [deg]
dec_targ	-3.848611	Observer's specified target Dec [deg]
ra_nom	181.1247674637	Nominal RA [deg]
dec_nom	-3.802755952505	Nominal Dec [deg]
roll_nom	59.448833670963	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23053.917752564	Sum of GTIs [s]
livetime	22752.701345079	Livetime [s]
ontime0	23053.794632554	Sum of GTIs [s]
ontime1	23044.412671685	Sum of GTIs [s]
ontime2	23047.594691992	Sum of GTIs [s]
ontime3	23053.917752564	Sum of GTIs [s]
ontime6	23047.471561909	Sum of GTIs [s]
l2events	77817	Number of level 2 events



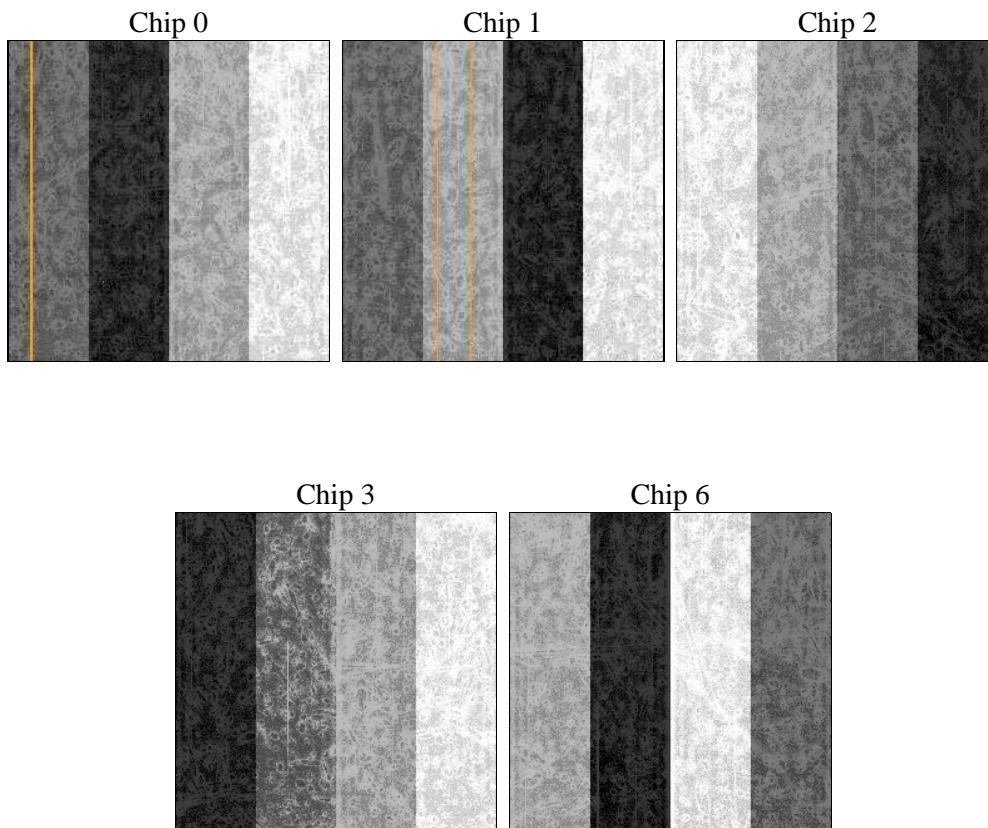
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	23053.917752564	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	23053.794632554	Sum of GTIs [s]
date	2012-02-05T14:37:12	Date and time of file creation	ontime1	23044.412671685	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	23047.594691992	Sum of GTIs [s]
			ontime3	23053.917752564	Sum of GTIs [s]
			ontime6	23047.471561909	Sum of GTIs [s]
			l1events	806978	Number of level 1 events

2.1.4 Events

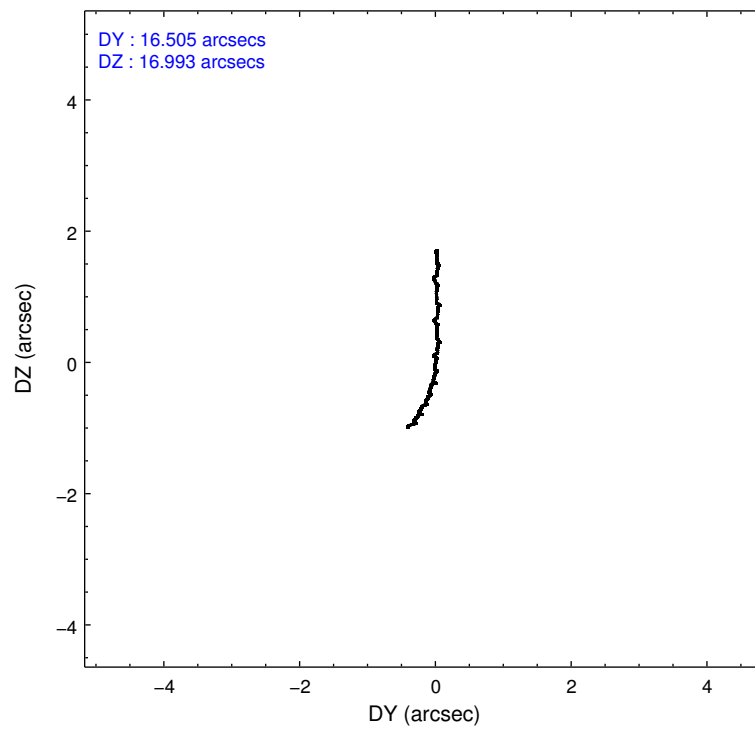
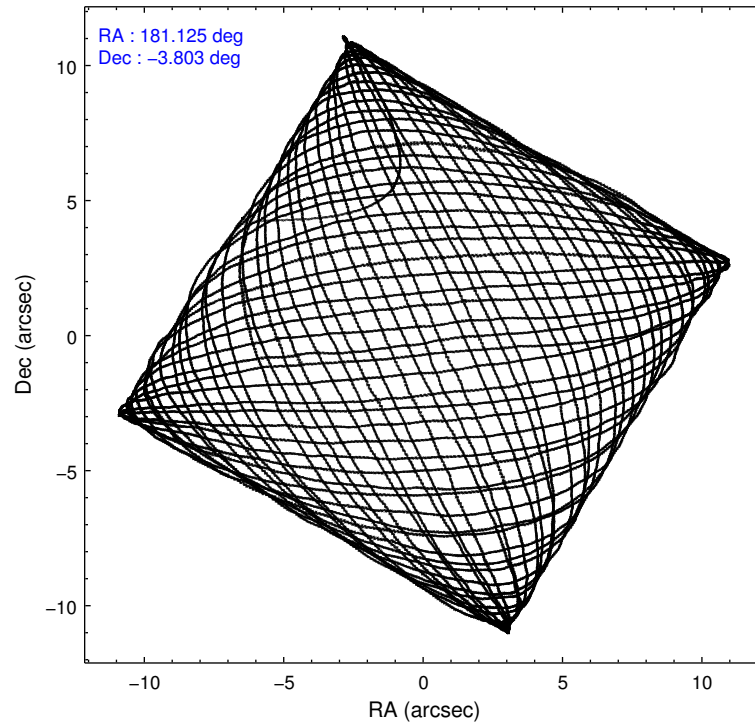
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	149490	154979	171016	165667	165826
rejected events	131390	134770	153139	148057	147126
rejected %	87%	86%	89%	89%	88%

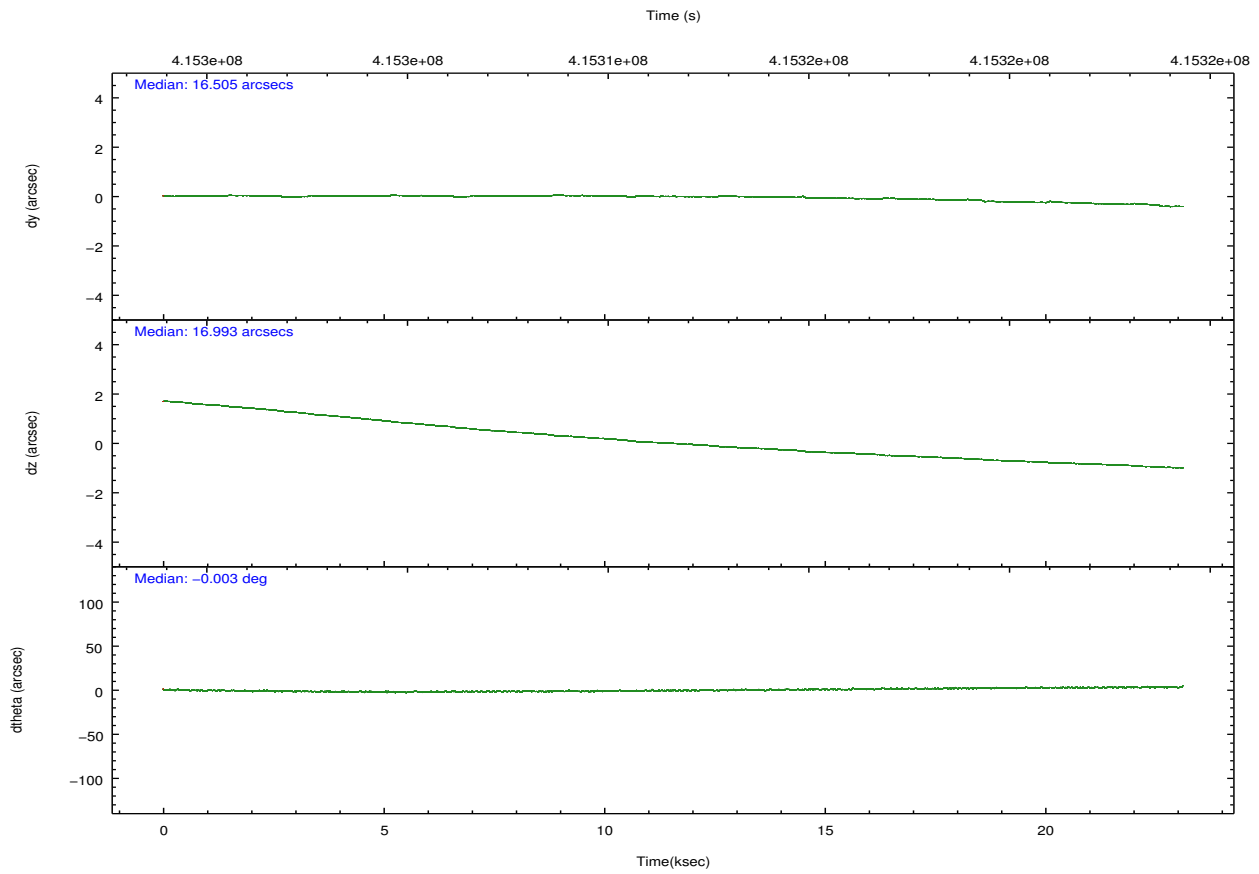
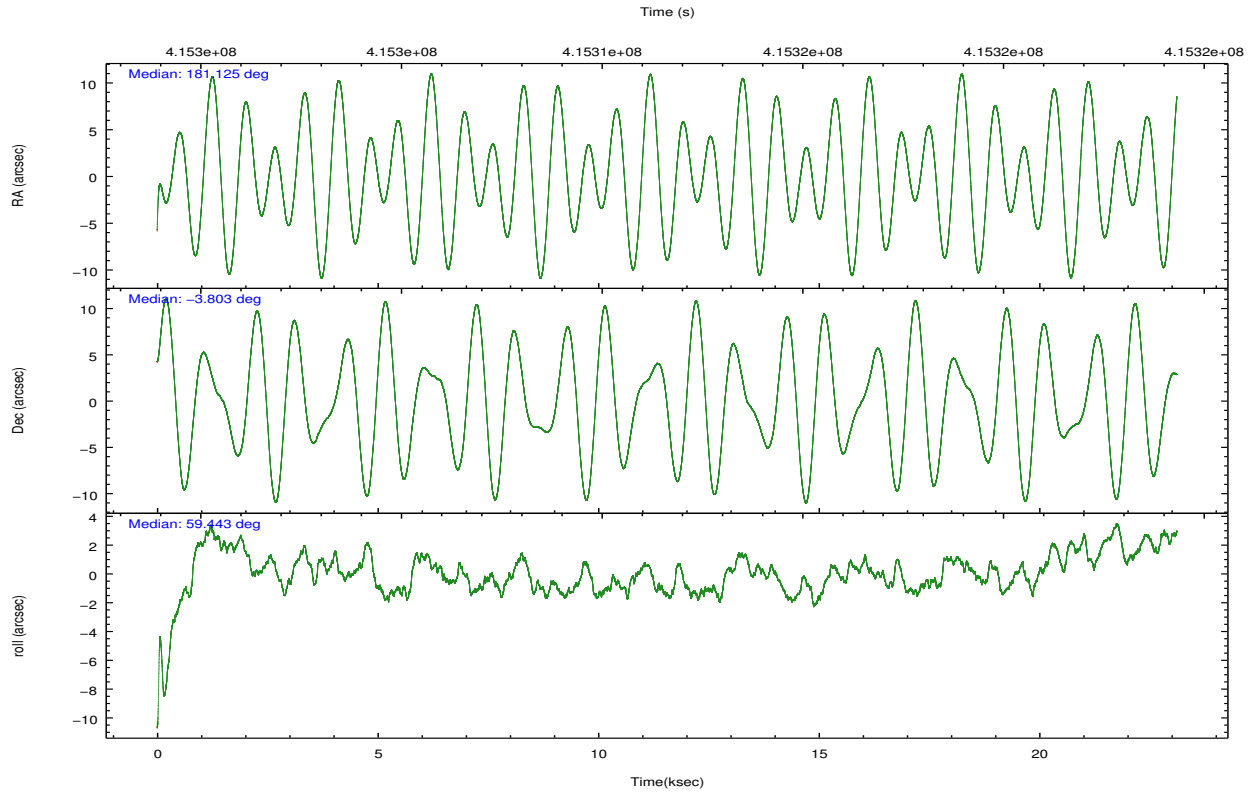
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6091	7118	6391	6193	6595
	4%	4%	3%	3%	3%
grade 1 events	70	90	101	97	87
	0%	0%	0%	0%	0%
grade 2 events	4503	4861	4371	3943	4085
	3%	3%	2%	2%	2%
grade 3 events	1955	2027	1908	1942	1918
	1%	1%	1%	1%	1%
grade 4 events	1919	2070	1807	1887	1964
	1%	1%	1%	1%	1%
grade 5 events	6956	7393	6530	7742	7648
	4%	4%	3%	4%	4%
grade 6 events	3638	4133	3401	3649	4142
	2%	2%	1%	2%	2%
grade 7 events	124358	127287	146507	140214	139387
	83%	82%	85%	84%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	181.124628	181.124767463704	Subarray requested	NONE	NONE
[deg] Pointing Dec	-3.830271	-3.80275595250496	Alternating exposures requested	N	N
[deg] Pointing Roll	59.240139	59.44883367096312	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-225.792463	-225.7829997647864			
[mm] SIM translation stage offset	-7.8	-7.809453238143249			
[s] Observation start time (MET)	415300172.184000	415298928.9849			
Observation start date	2011-02-28T17:08:26	2011-02-28T16:48:48			
[s] Observation end time (MET)	415323172.184000	415323990.2362			
Observation end date	2011-02-28T23:31:46	2011-02-28T23:46:30			
Read mode	TIMED	TIMED			

2.3 Aspect



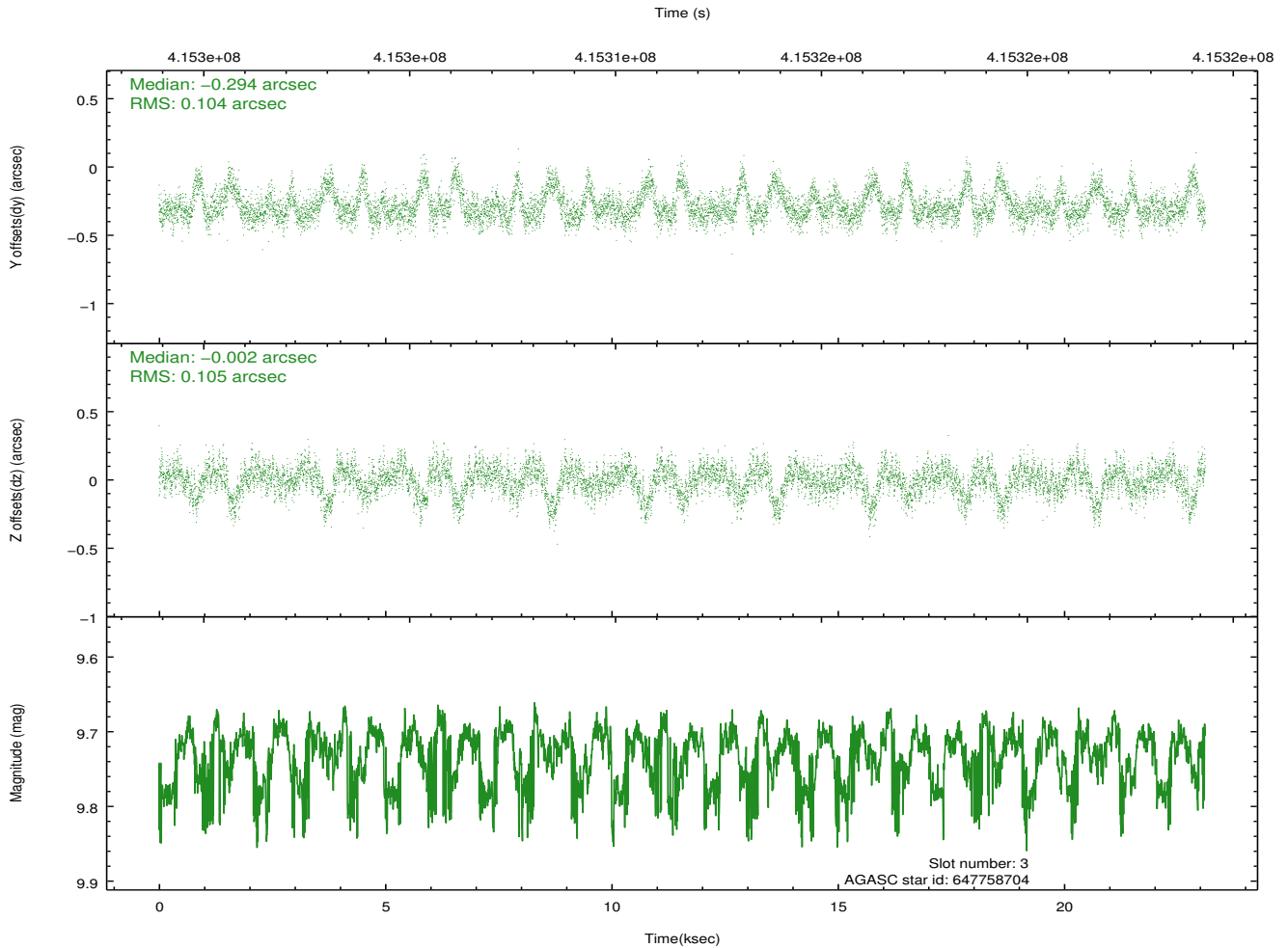
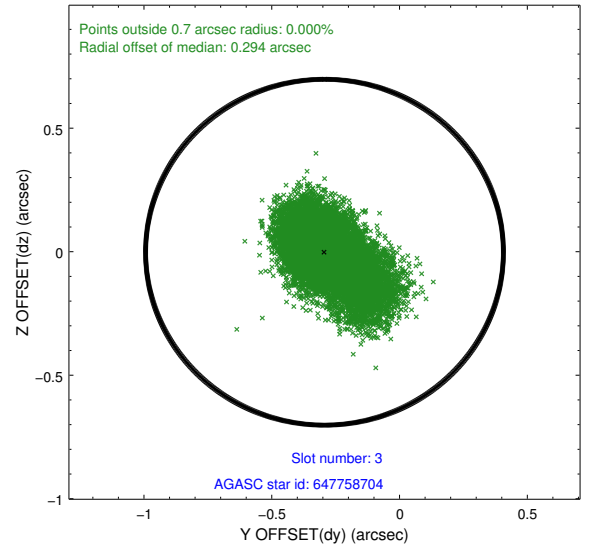
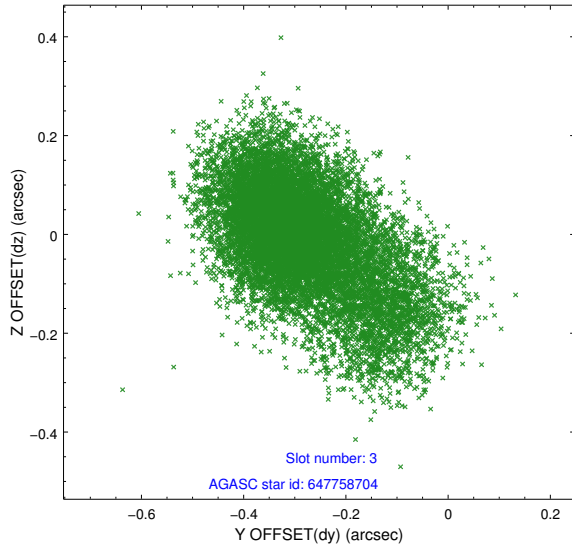


Slot Statistics

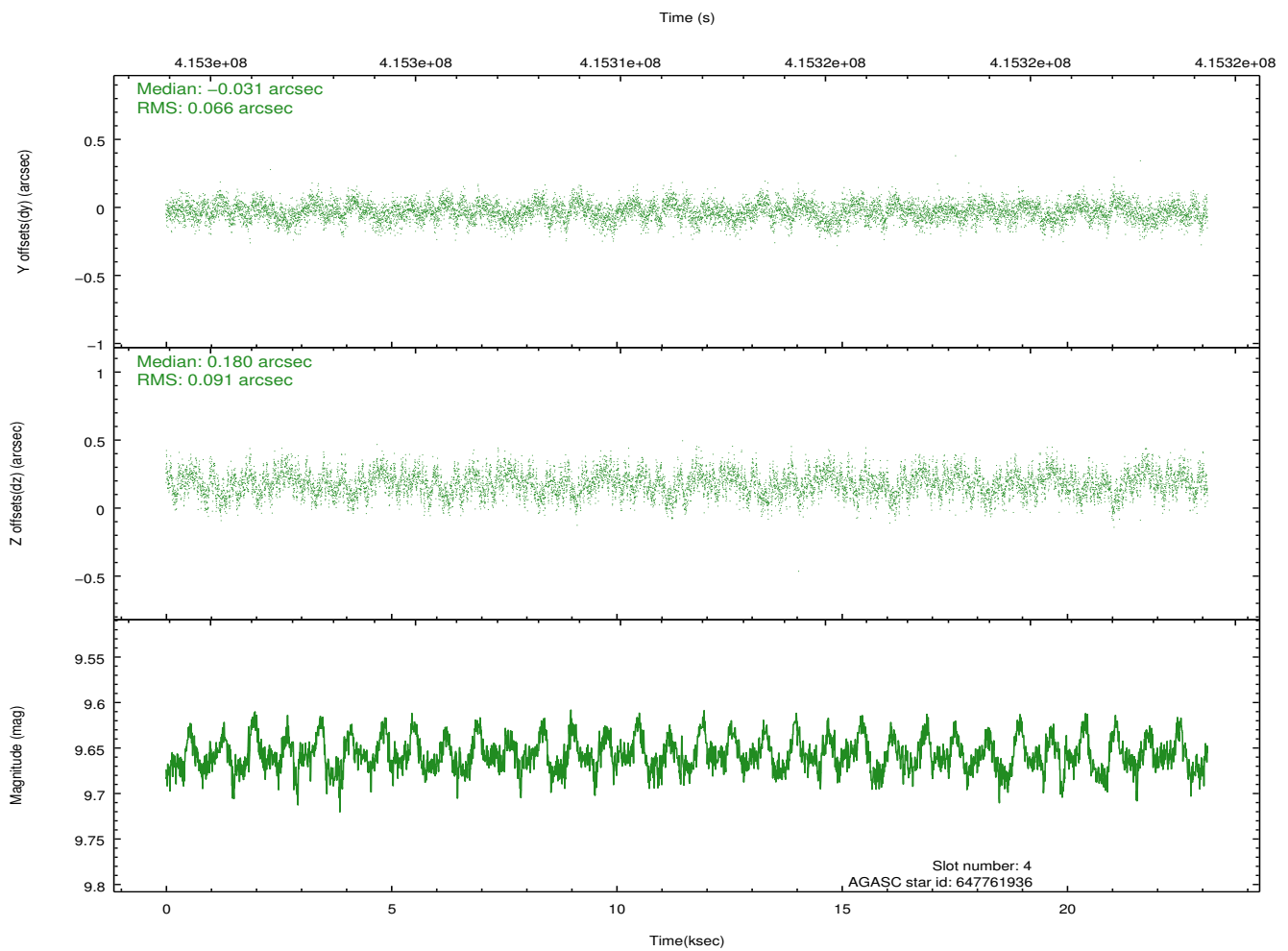
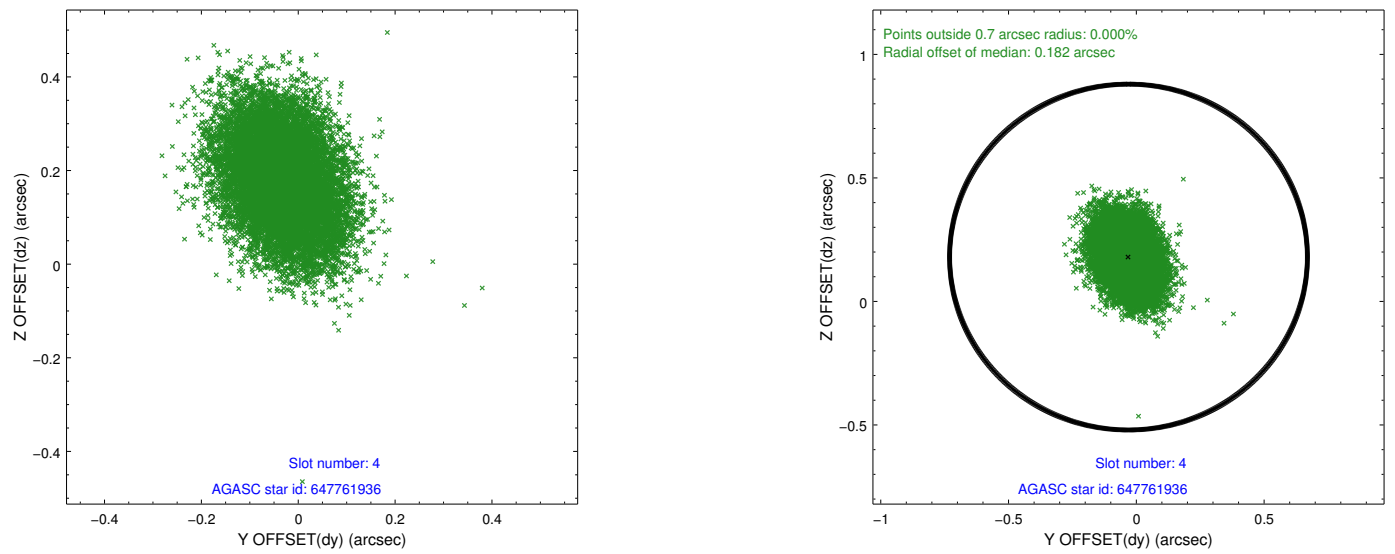
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.02	5639	0.111	-0.067	0.021	0.034	0.000000	0.000000	922.97	-1001.15
1	FID	ACIS-I-5	7.01	5639	-0.237	0.107	0.020	0.028	0.000000	0.000000	-1825.46	896.35
2	FID	ACIS-I-6	7.03	5639	0.033	0.029	0.014	0.022	0.000000	0.000000	388.22	1540.99
3	GUIDE	647758704	9.73	11206	-0.294	-0.002	0.148	0.280	181.156581	-3.382953	1442.43	725.24
4	GUIDE	647761936	9.66	11267	-0.031	0.180	0.120	0.193	181.259040	-4.326635	-1288.32	-1328.24
5	GUIDE	647762544	9.12	11236	0.166	0.020	0.125	0.198	180.997114	-4.117053	-1121.84	-134.38
6	GUIDE	647762608	9.68	11201	0.187	-0.158	0.212	0.326	181.253470	-4.036988	-402.78	-777.97
7	GUIDE	647764008	9.49	11259	-0.031	-0.009	0.164	0.302	181.726957	-3.617928	1762.79	-1468.58

2.4 Star Slots

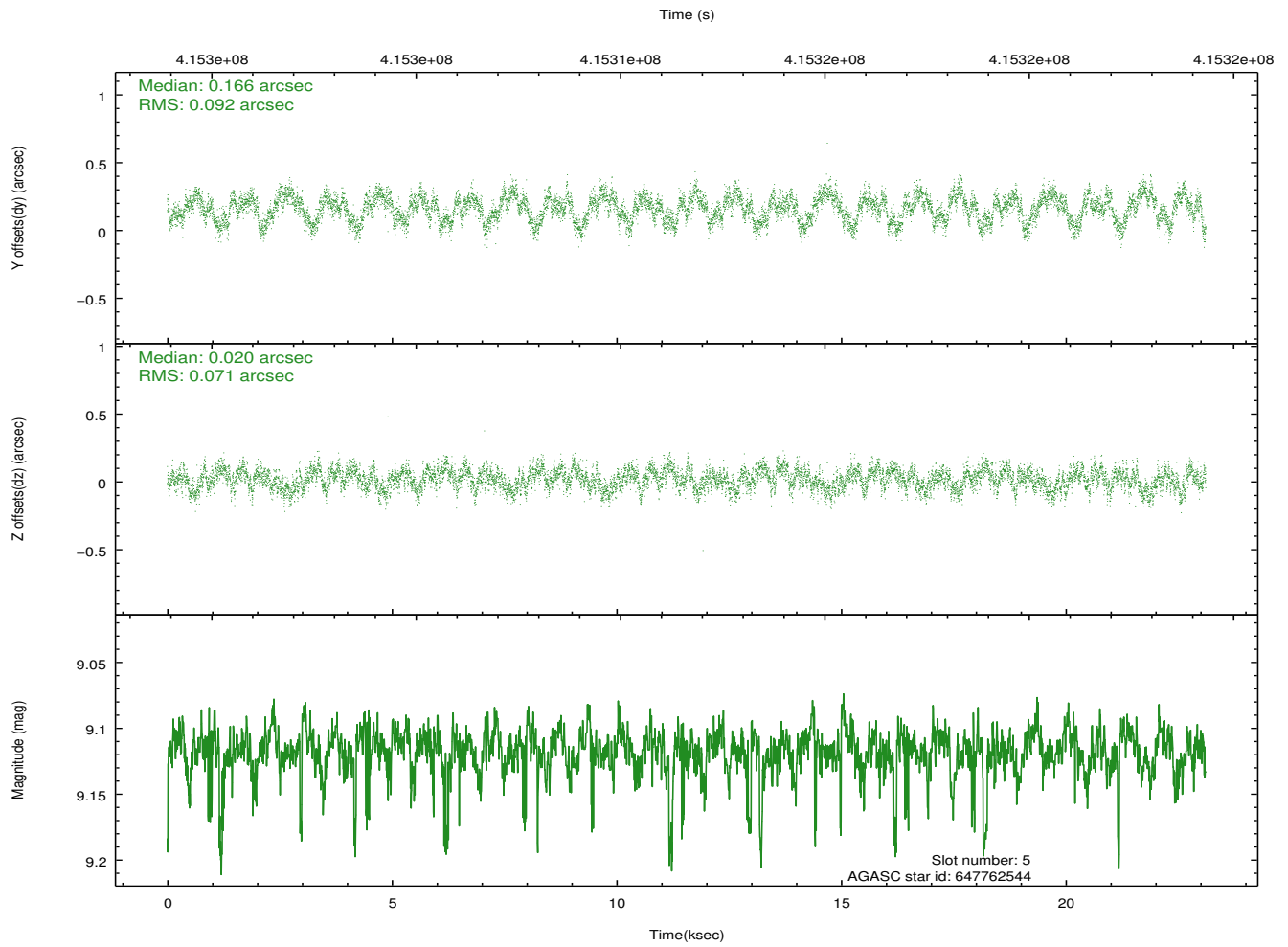
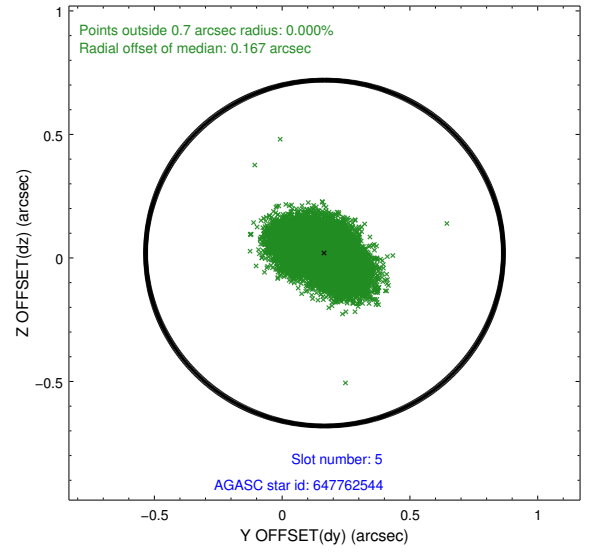
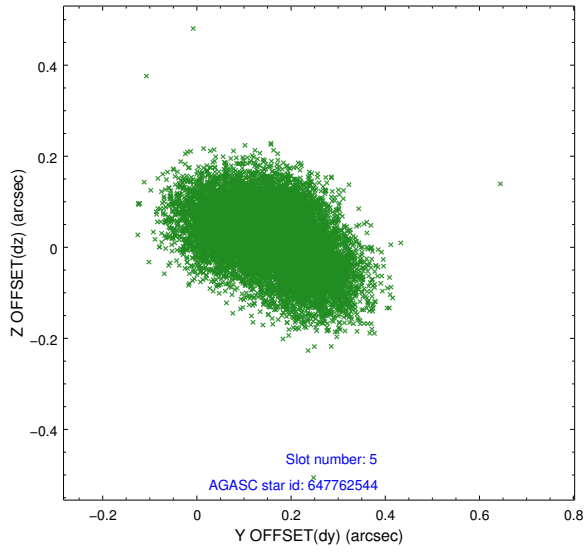
2.4.1 Slot 3



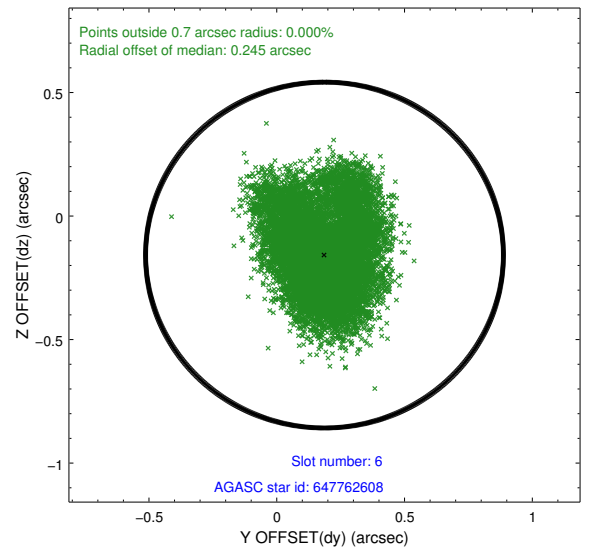
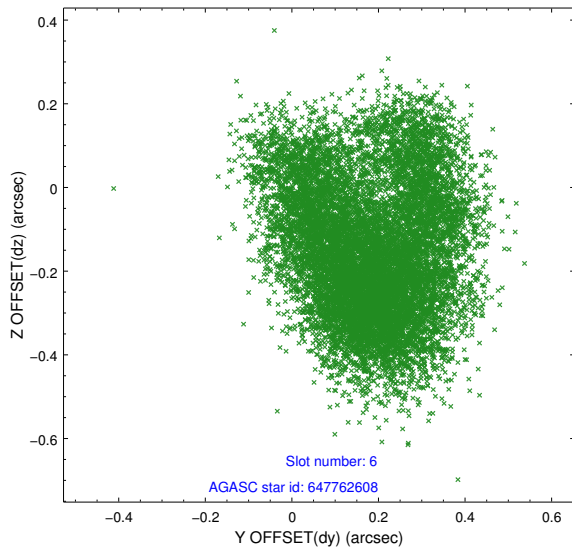
2.4.2 Slot 4



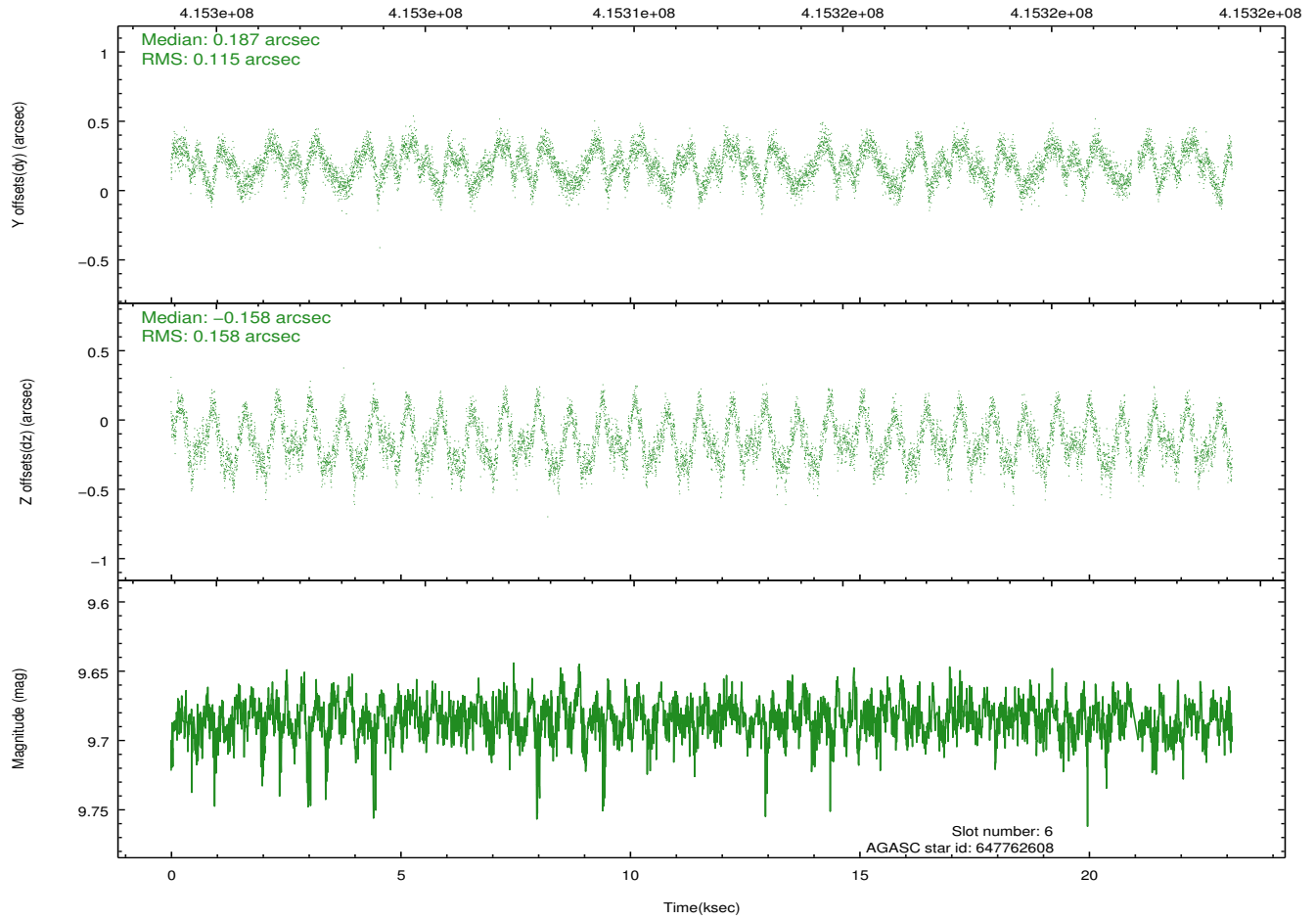
2.4.3 Slot 5



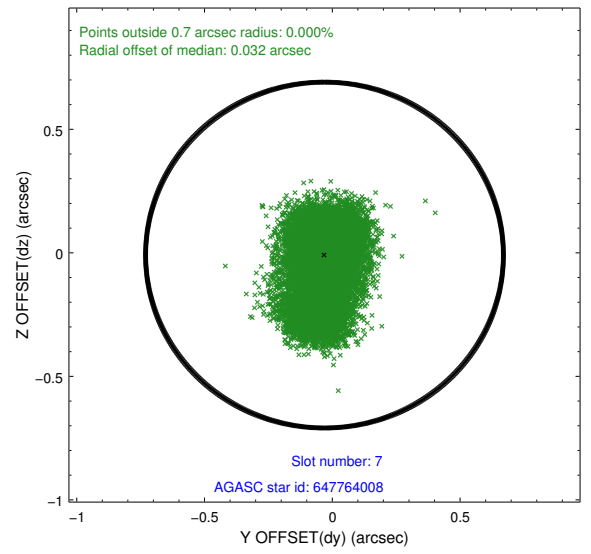
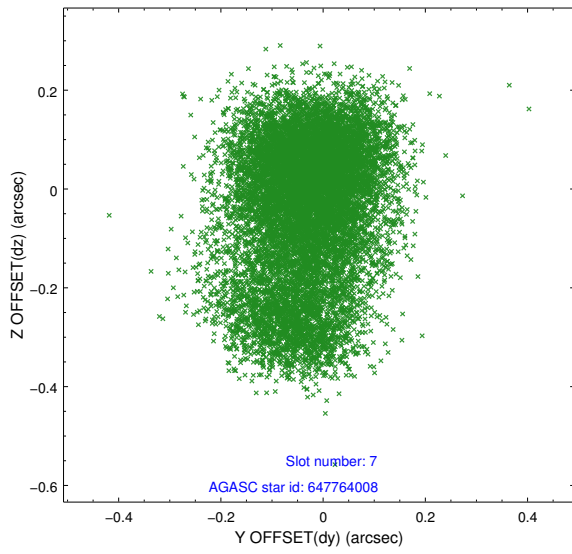
2.4.4 Slot 6



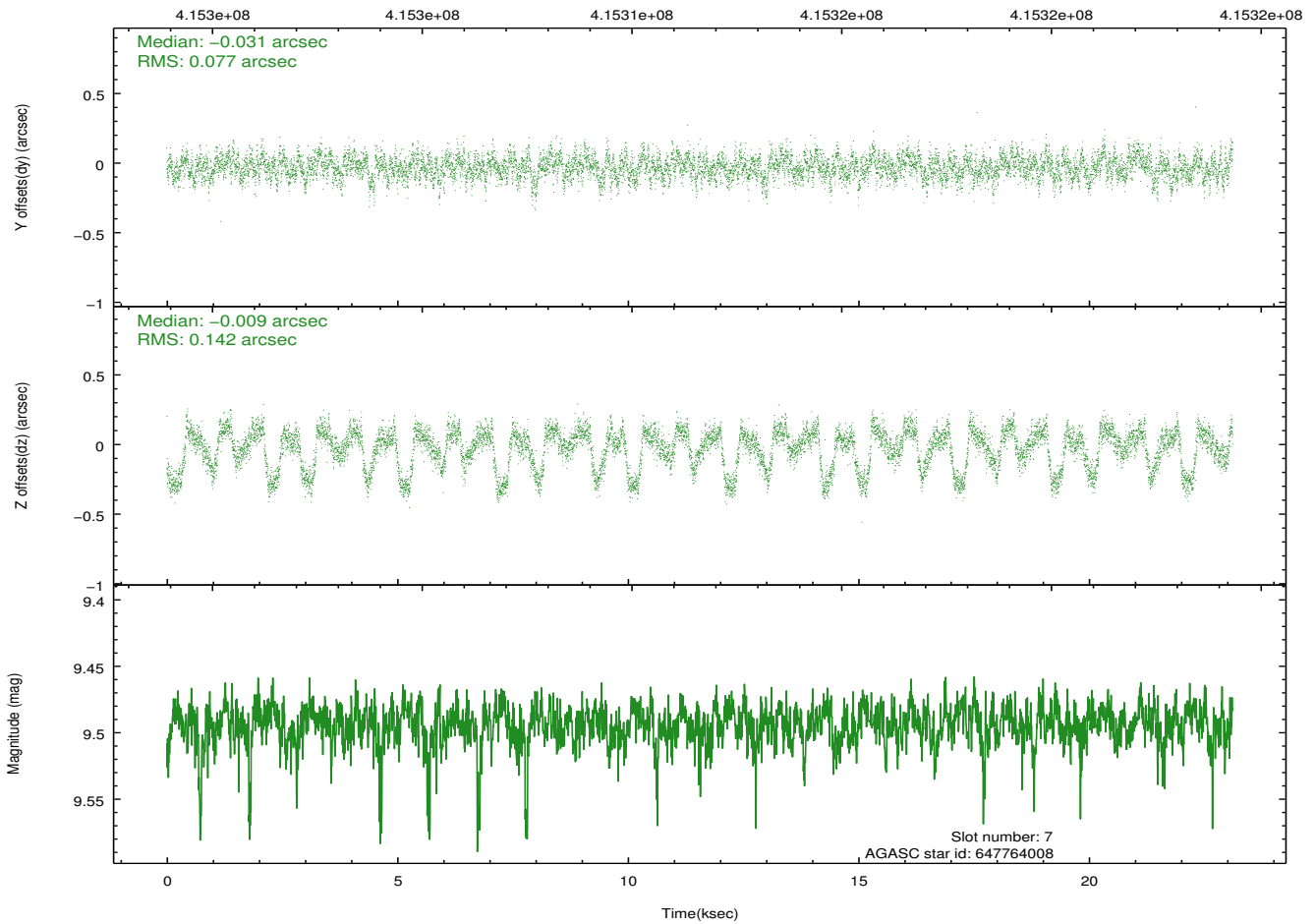
Time (s)



2.4.5 Slot 7

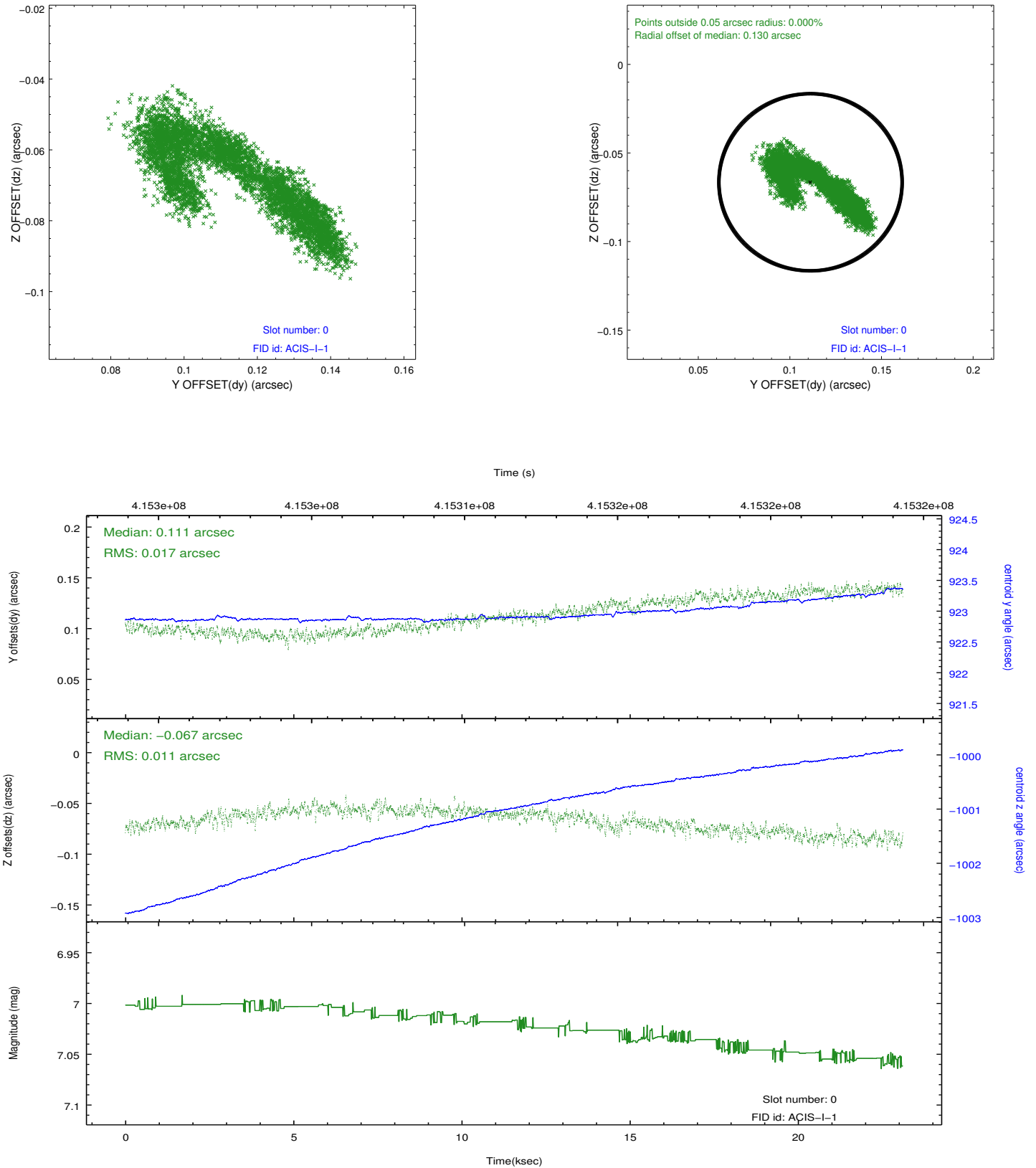


Time (s)

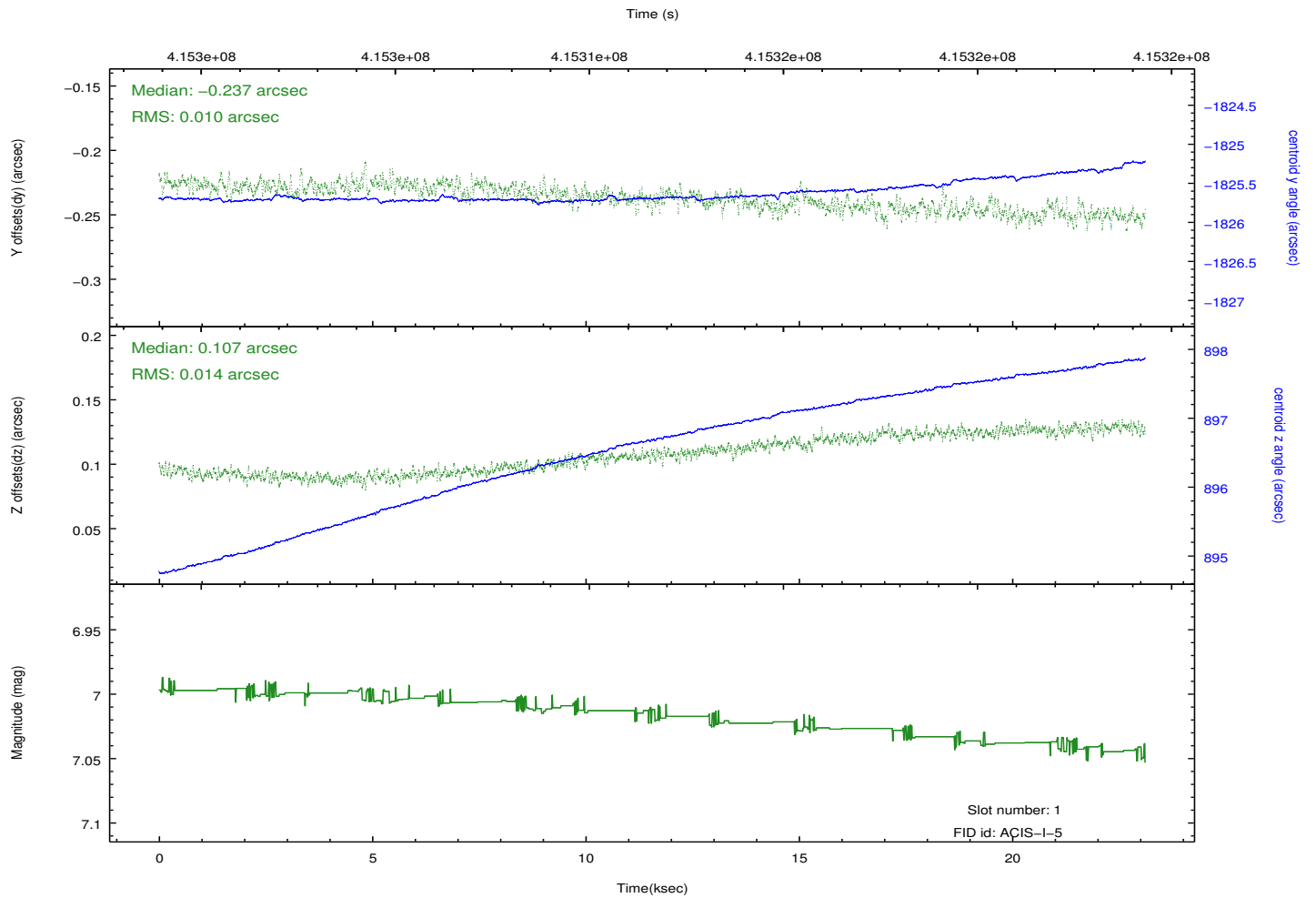
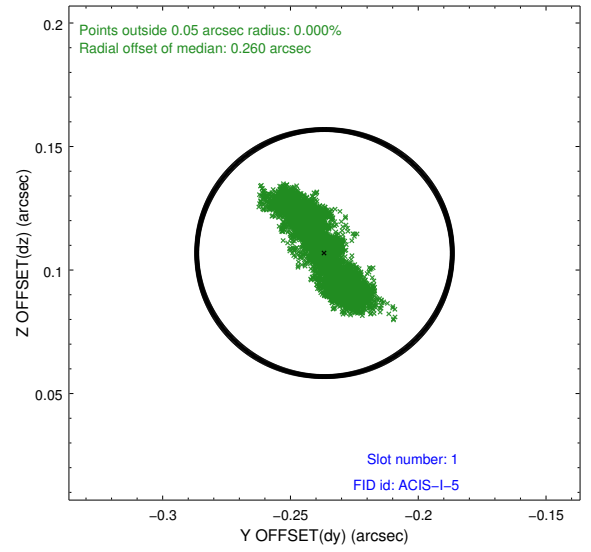
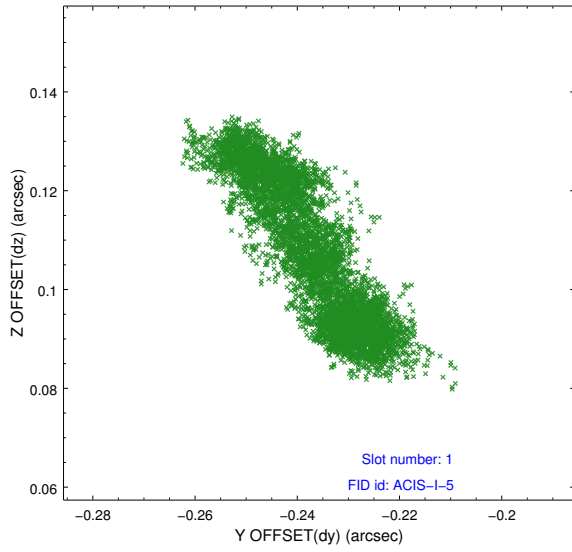


2.5 FID Slots

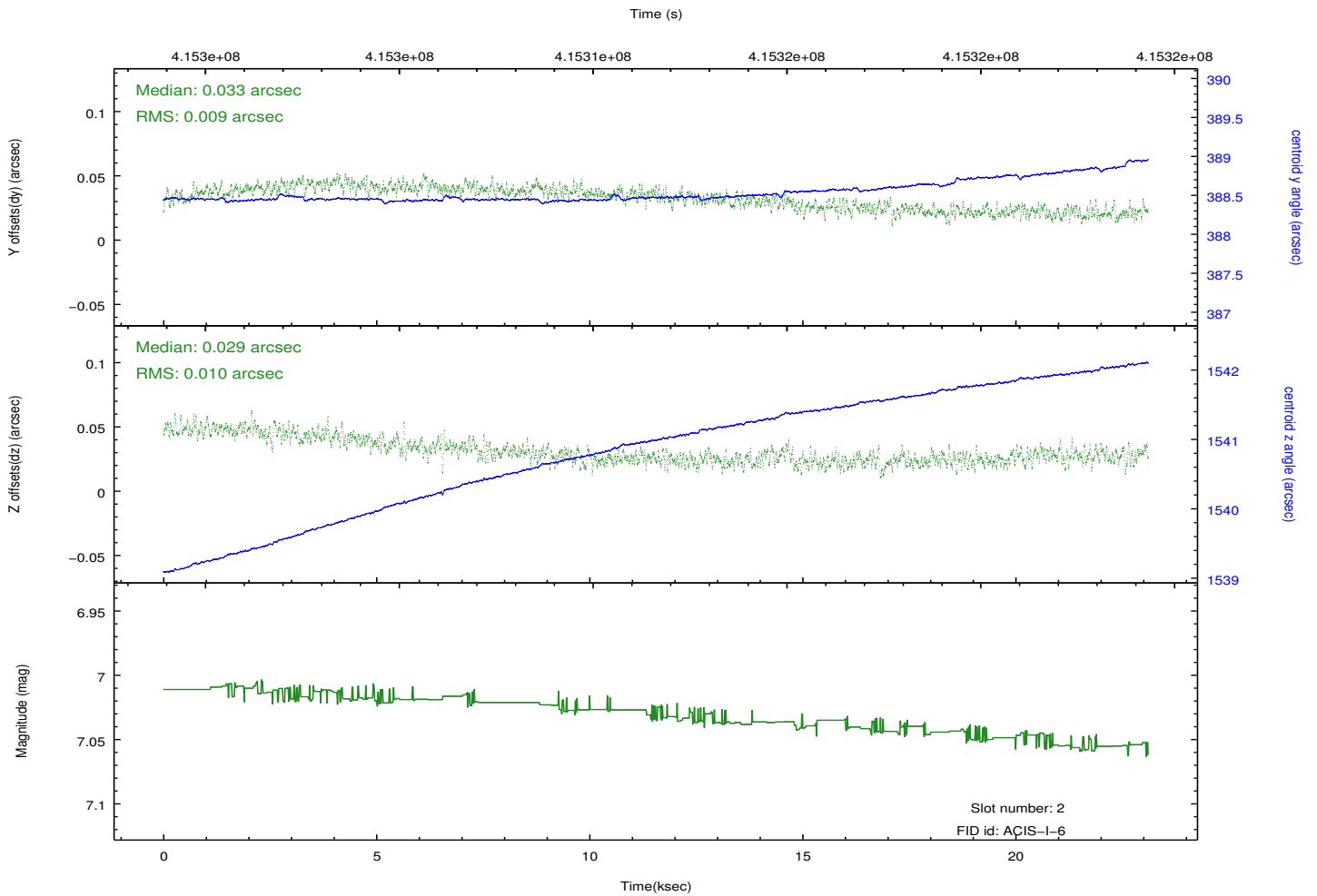
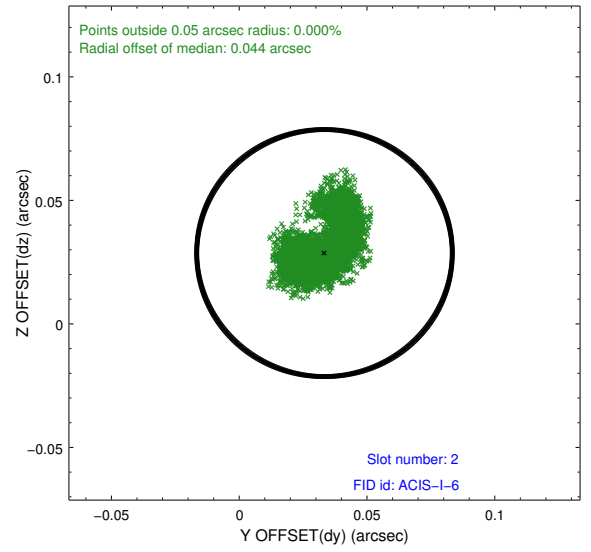
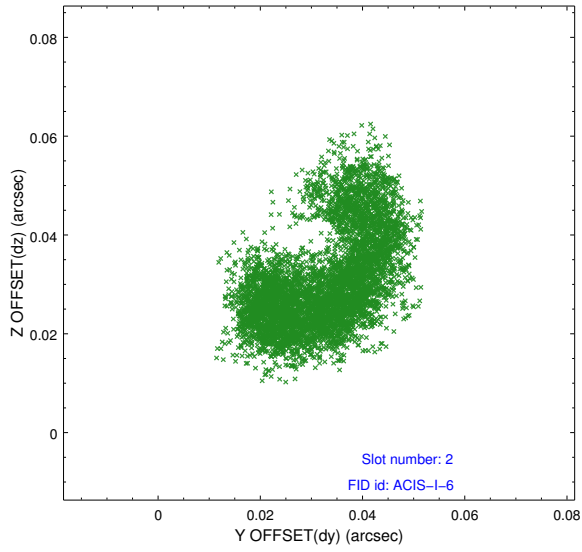
2.5.1 Slot 0



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	23.053917758763

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.