

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13444 - L2 Version 3
Chandra X-Ray Center

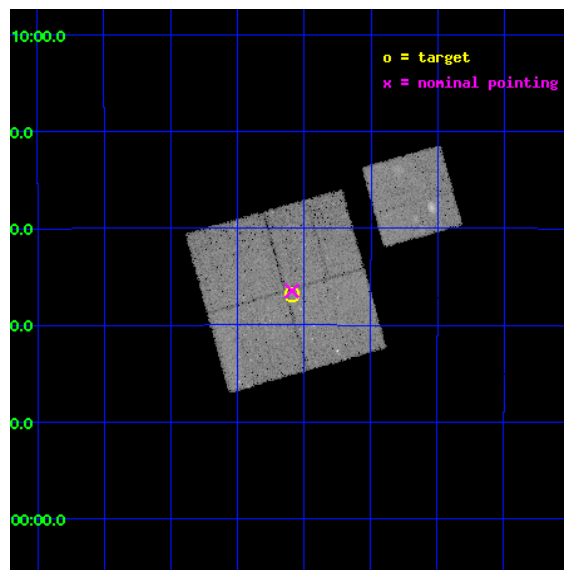
L2 Processing Date : Feb 22 2012

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1 Front

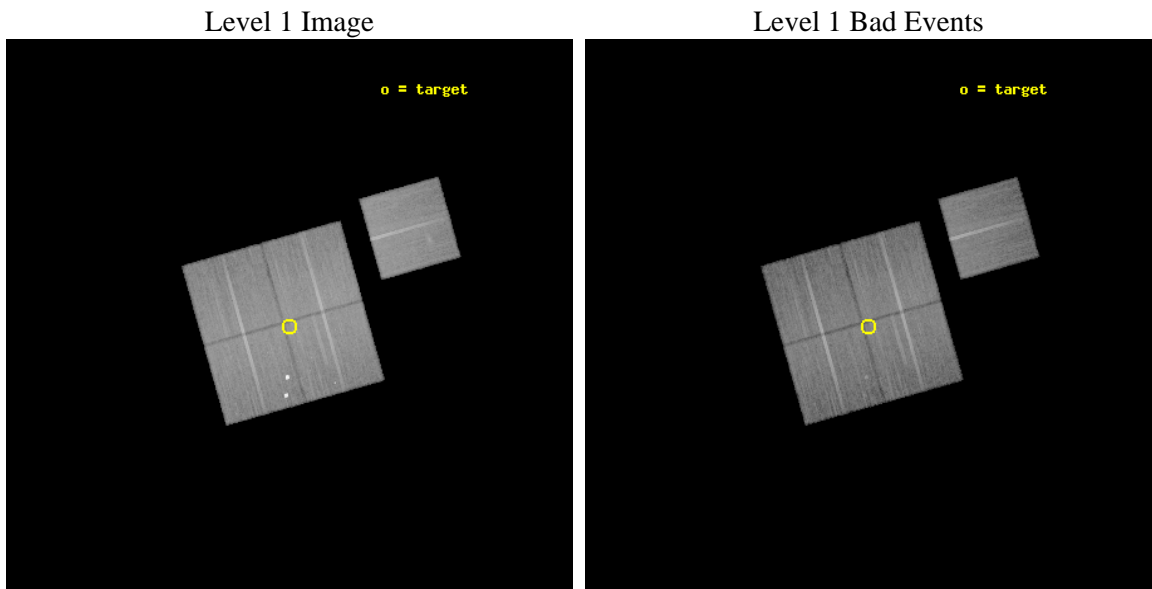
seq_num	801095	Sequence number
obs_id	13444	Observation id
title	CHANDRA EXPLORATION OF THE COSMIC MELTING POT IN THE VIRIALIZATION REGION OF A RICH GALAXY CLUSTER	Proposal title
observer	Dr. Alexey Vikhlinin	Principal investigator
object	A133-2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	15.774093	Observer's specified target RA [deg]
dec_targ	-21.613411	Observer's specified target Dec [deg]
ra_nom	15.773136812354	Nominal RA [deg]
dec_nom	-21.607729350022	Nominal Dec [deg]
roll_nom	74.208336185671	Nominal Roll [deg]
revision	3	Processing version of data
ontime	38762.318217695	Sum of GTIs [s]
livetime	38255.859993777	Livetime [s]
ontime0	38765.459257841	Sum of GTIs [s]
ontime1	38768.600298166	Sum of GTIs [s]
ontime2	38762.318217695	Sum of GTIs [s]
ontime3	38762.318217695	Sum of GTIs [s]
ontime6	38762.31822747	Sum of GTIs [s]
l2events	120367	Number of level 2 events



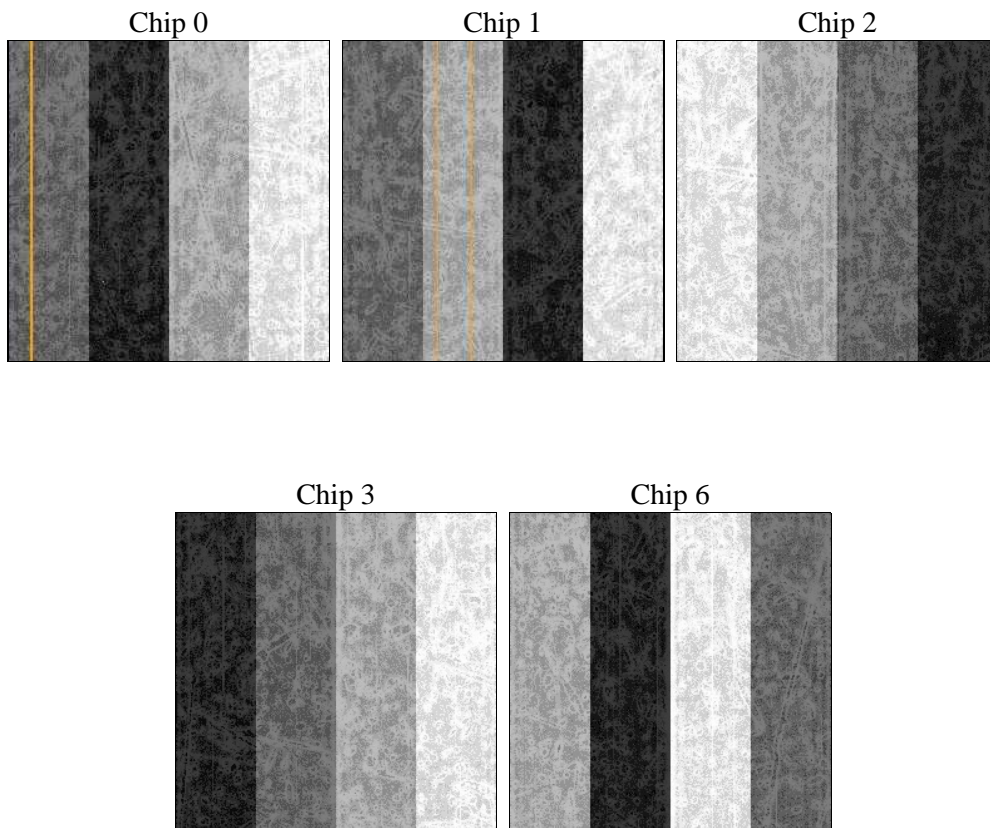
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	38762.318217695	Sum of GTIs [s]
caldbver	4.4.8	 	ontime0	38765.459257841	Sum of GTIs [s]
date	2012-02-22T22:42:14	Date and time of file creation	ontime1	38768.600298166	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	38762.318217695	Sum of GTIs [s]
			ontime3	38762.318217695	Sum of GTIs [s]
			ontime6	38762.31822747	Sum of GTIs [s]
			l1events	1229716	Number of level 1 events

2.1.4 Events

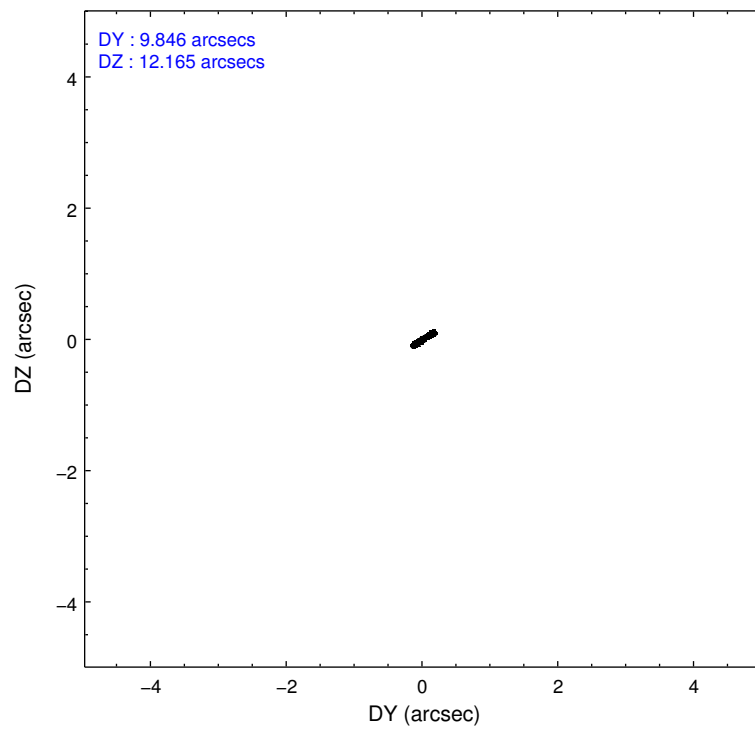
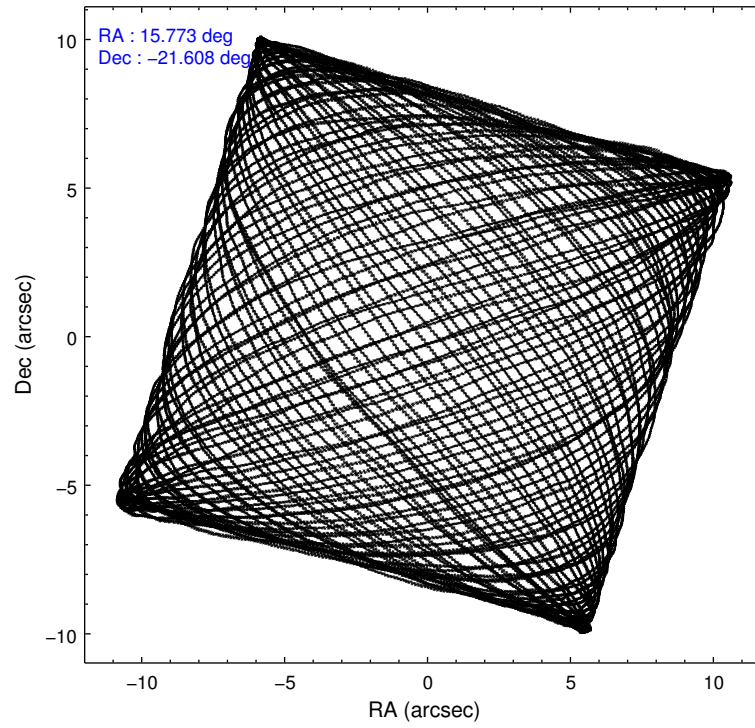
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	225215	260497	254748	244124	245132
rejected events	197912	202582	228034	216105	215692
rejected %	87%	77%	89%	88%	87%

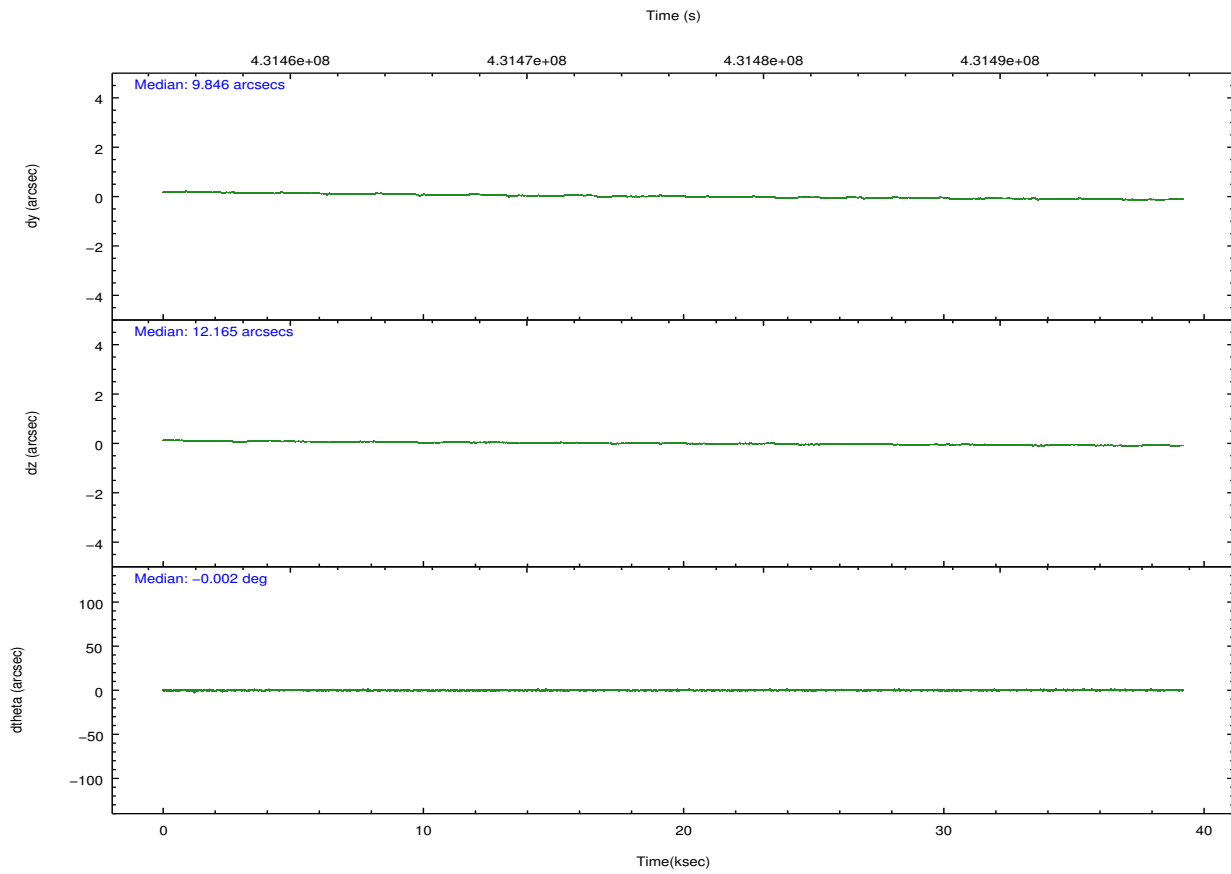
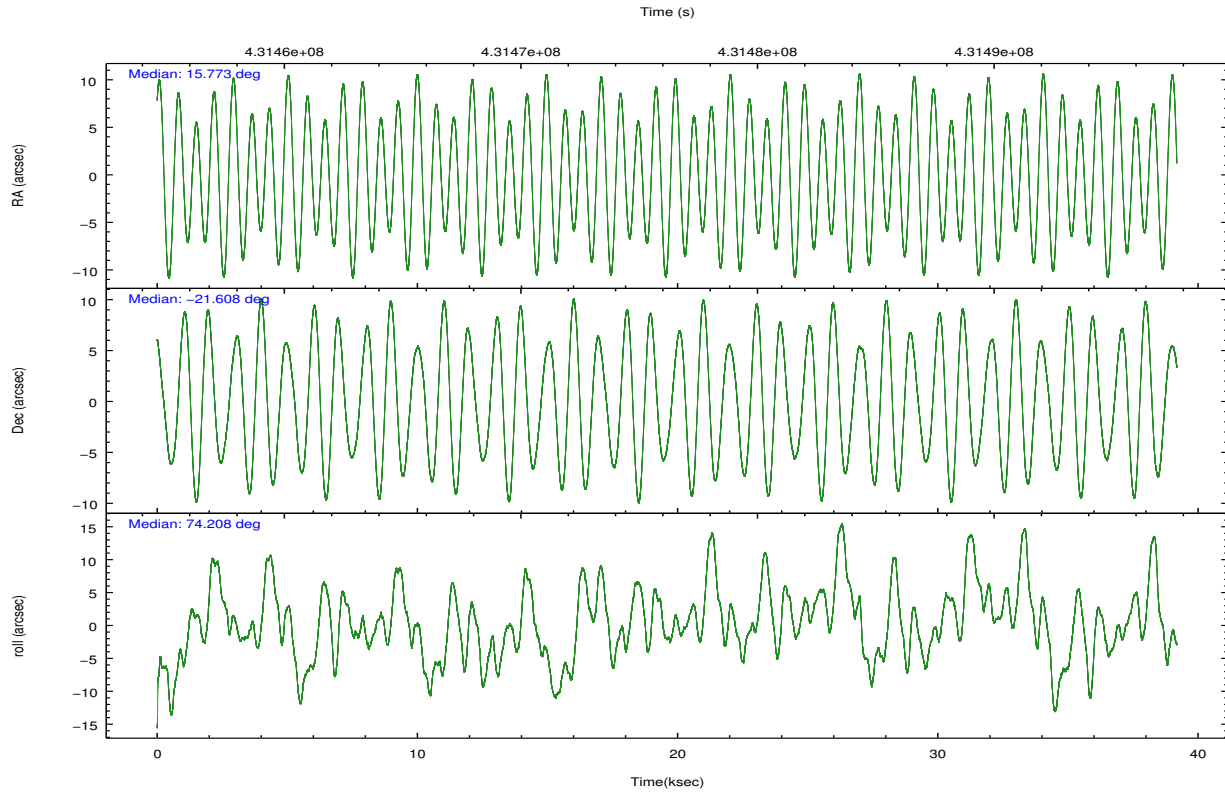
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9428	23291	9447	10362	10958
	4%	8%	3%	4%	4%
grade 1 events	159	198	155	170	137
	0%	0%	0%	0%	0%
grade 2 events	6820	22081	6583	6183	6242
	3%	8%	2%	2%	2%
grade 3 events	2974	3114	2751	2982	3006
	1%	1%	1%	1%	1%
grade 4 events	2724	2986	2802	2924	2901
	1%	1%	1%	1%	1%
grade 5 events	10904	11466	9951	11907	11263
	4%	4%	3%	4%	4%
grade 6 events	5359	6452	5135	5569	6337
	2%	2%	2%	2%	2%
grade 7 events	186847	190909	217924	204027	204288
	82%	73%	85%	83%	83%

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	15.780501	15.77313681235358	CCD I2 on	Y	Y
[deg] Pointing Dec	-21.634359	-21.60772935002207	CCD I3 on	Y	Y
[deg] Pointing Roll	74.002364	74.20833618567143	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	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	431456765.184000	431456388.8288	CCD S5 on	N	N
Observation start date	2011-09-03T17:04:59	2011-09-03T16:59:48	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	431495765.184000	431496553.96841	On-chip summing requested	N	N
Observation end date	2011-09-04T03:54:59	2011-09-04T04:09:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



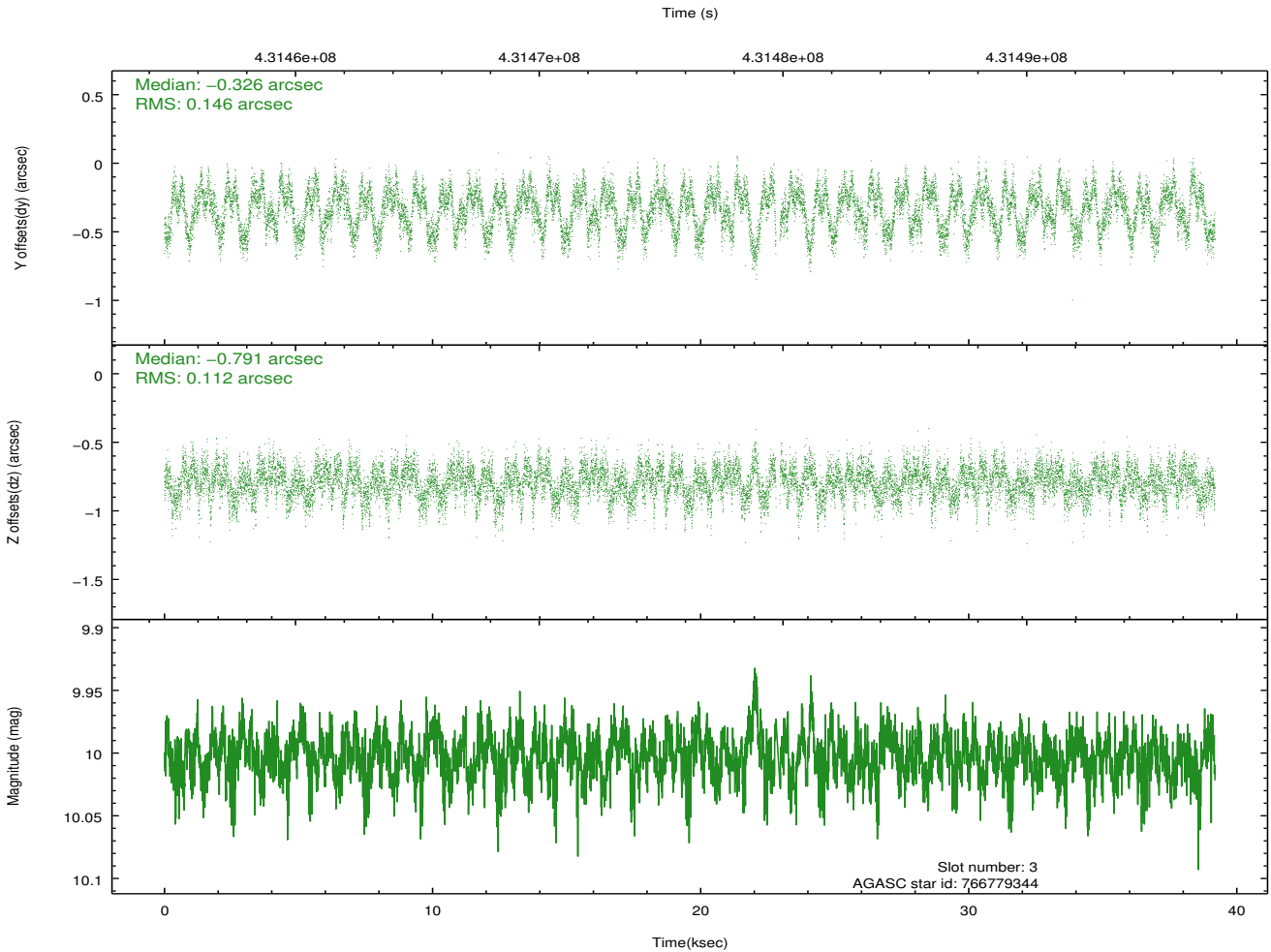
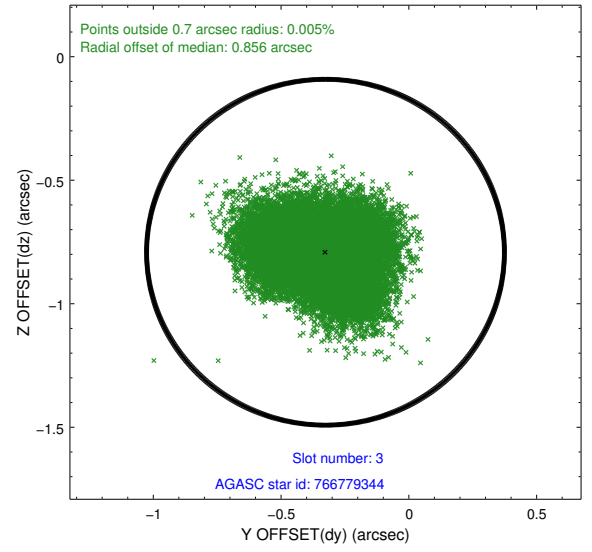
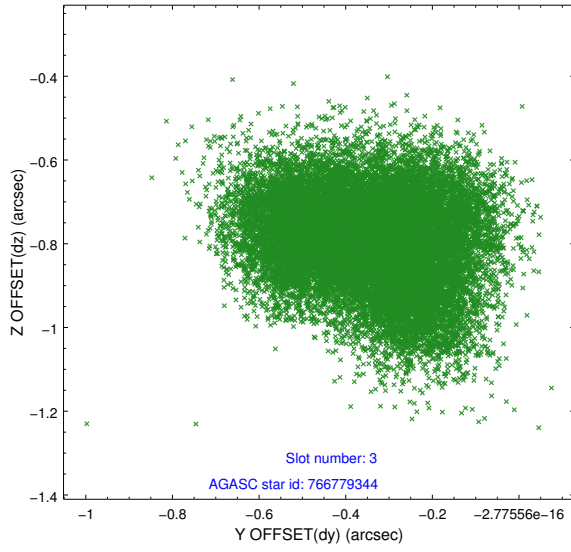


Slot Statistics

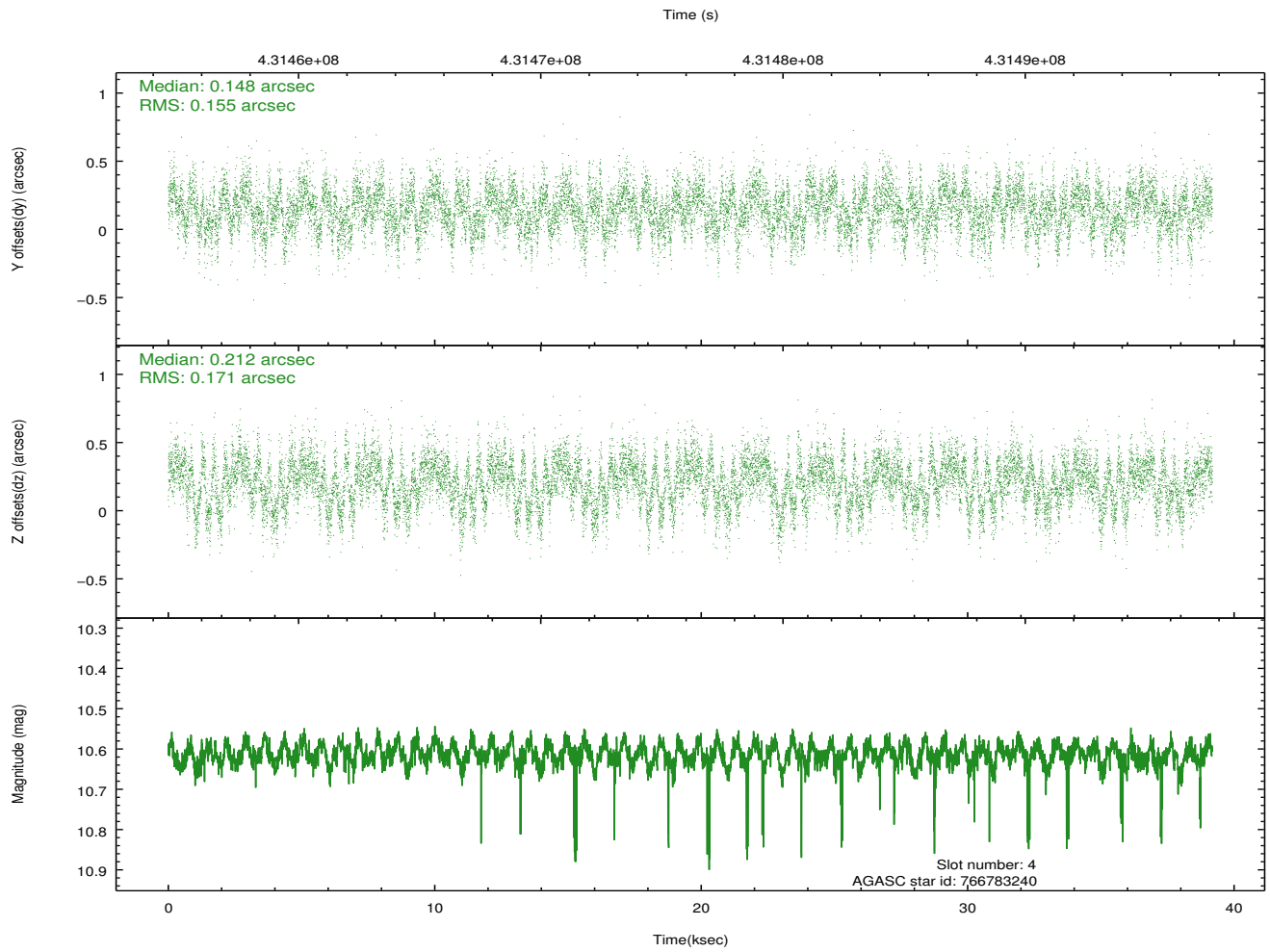
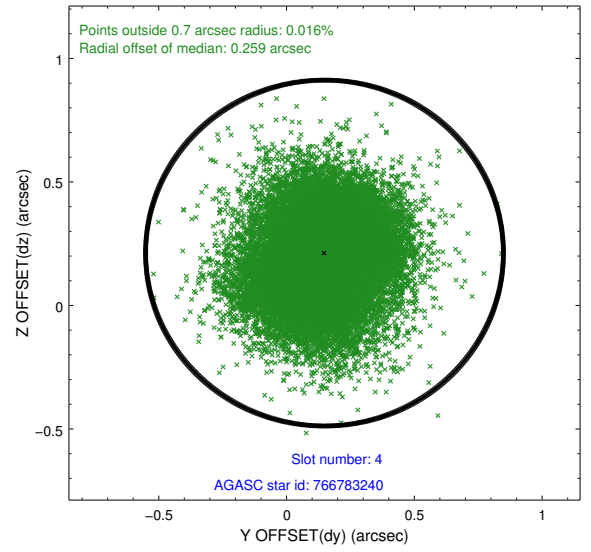
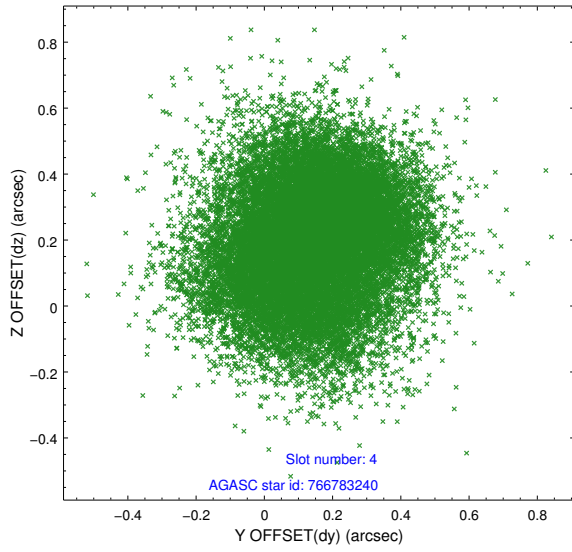
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.13	9559	0.087	-0.042	0.006	0.012	0.000000	0.000000	929.82	-835.74
1	FID	ACIS-I-5	7.12	9558	-0.225	0.087	0.006	0.011	0.000000	0.000000	-1818.57	1061.88
2	FID	ACIS-I-6	7.12	9556	0.047	0.025	0.007	0.011	0.000000	0.000000	395.32	1706.33
3	GUIDE	766779344	10.00	19016	-0.326	-0.791	0.201	0.305	15.380905	-21.452302	259.36	1466.38
4	GUIDE	766783240	10.61	19039	0.148	0.212	0.246	0.393	15.855651	-22.290573	-2201.27	-891.64
5	GUIDE	767171568	9.96	19090	0.014	-0.086	0.205	0.306	16.035890	-22.108834	-1407.70	-1289.92
6	GUIDE	766777184	7.88	19116	0.168	0.677	0.115	0.175	15.615560	-21.610598	-69.48	551.84
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

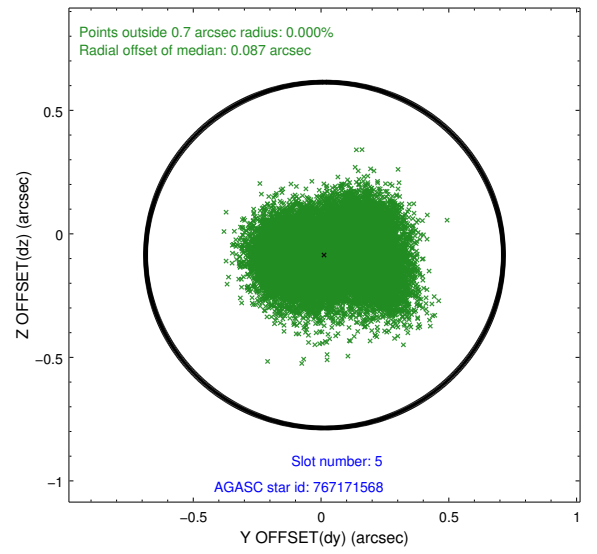
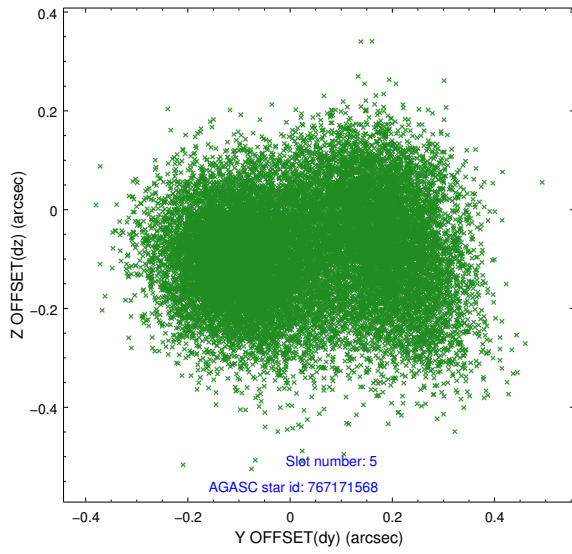
2.4.1 Slot 3



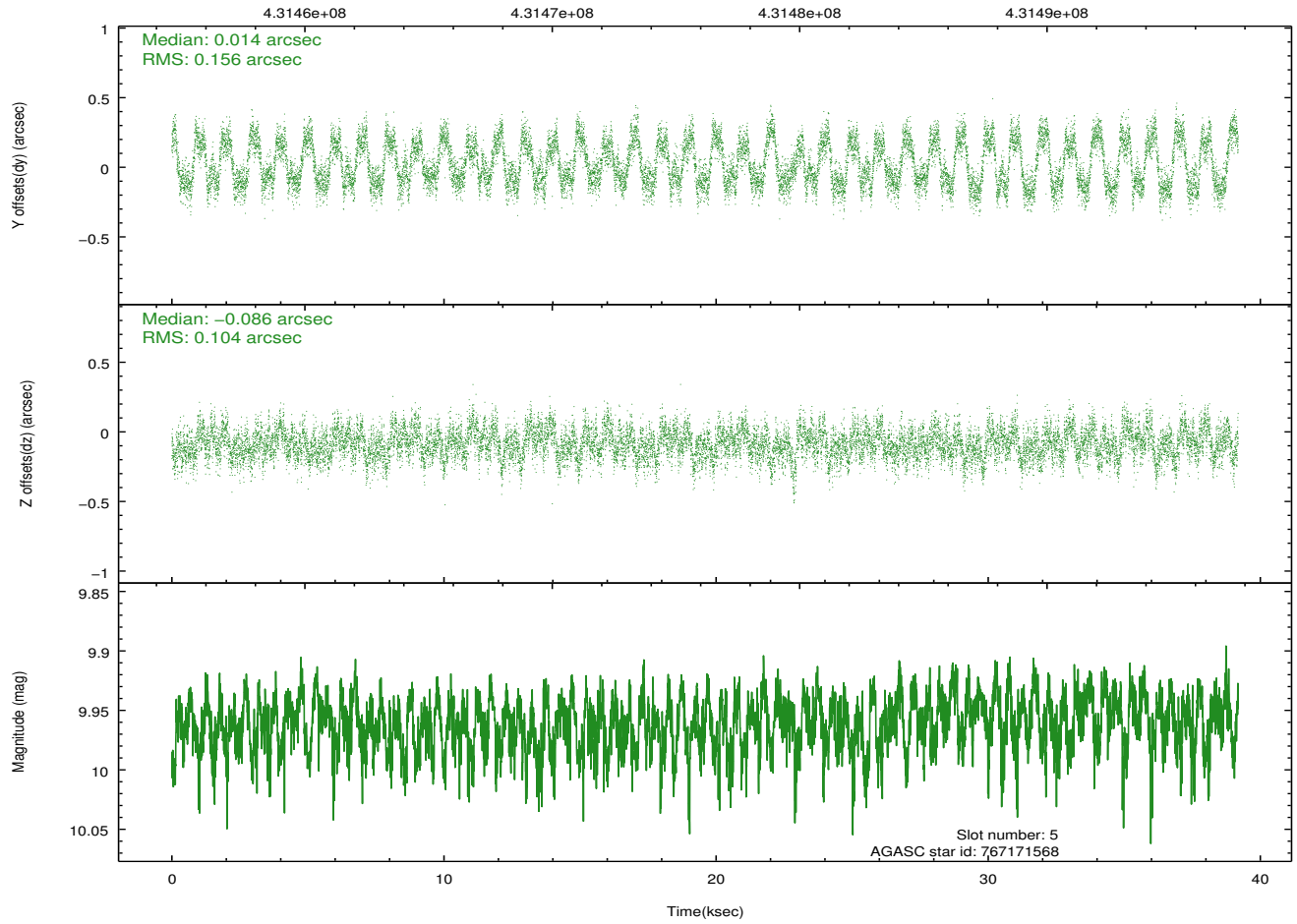
2.4.2 Slot 4



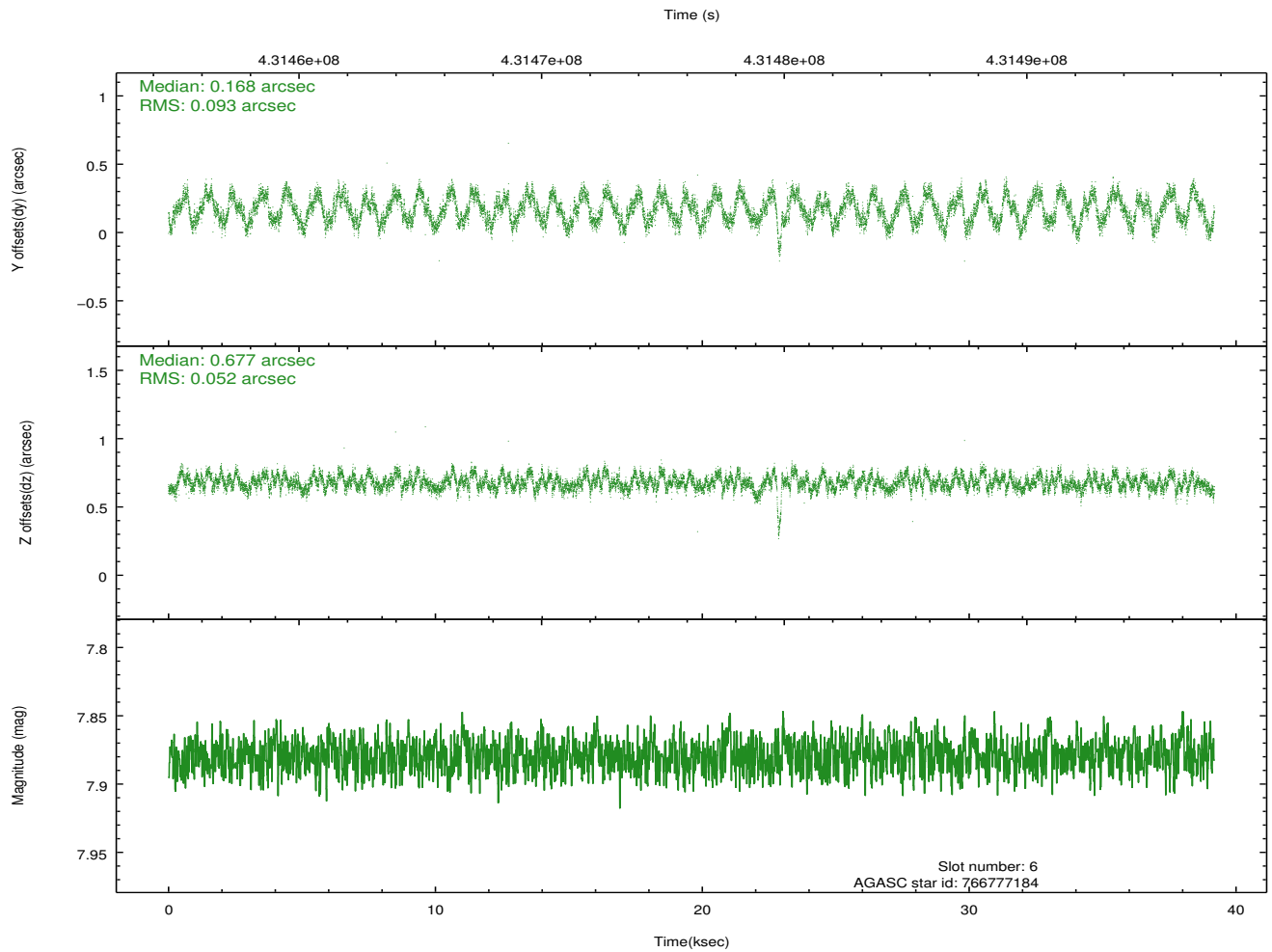
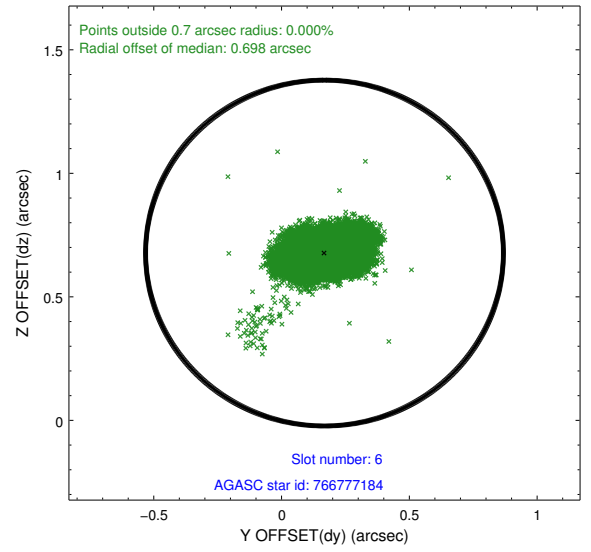
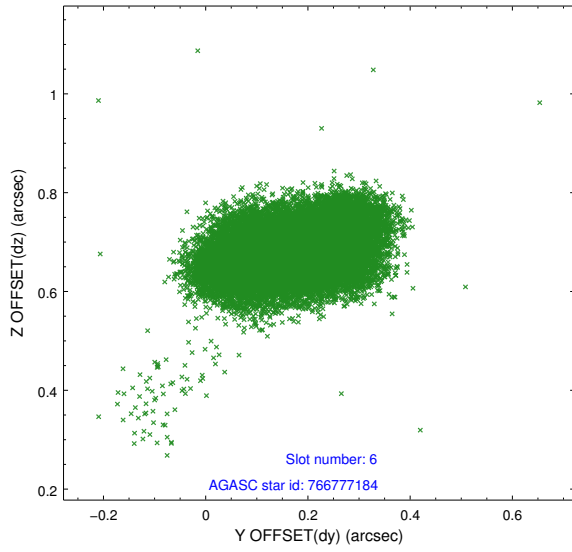
2.4.3 Slot 5



Time (s)

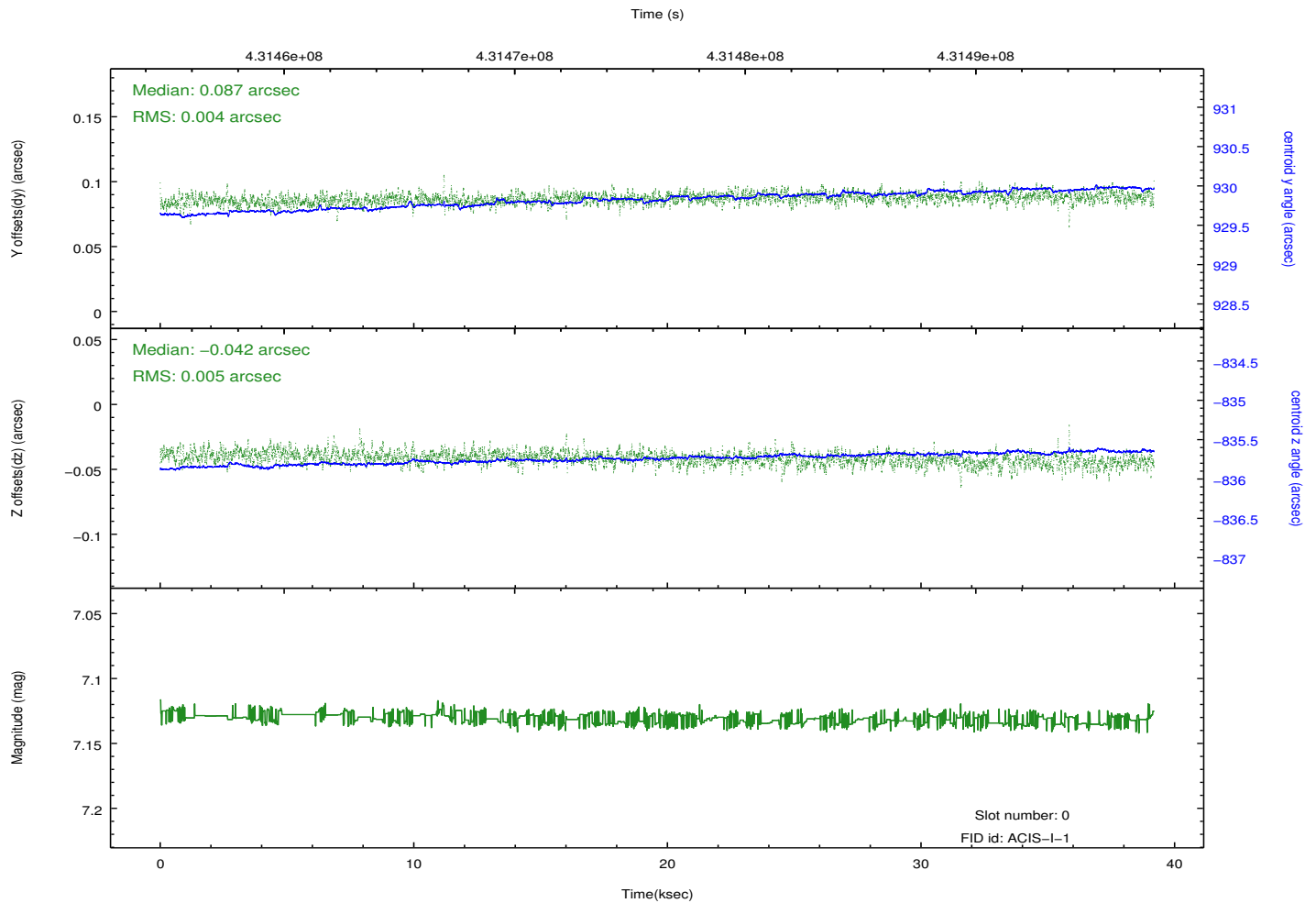
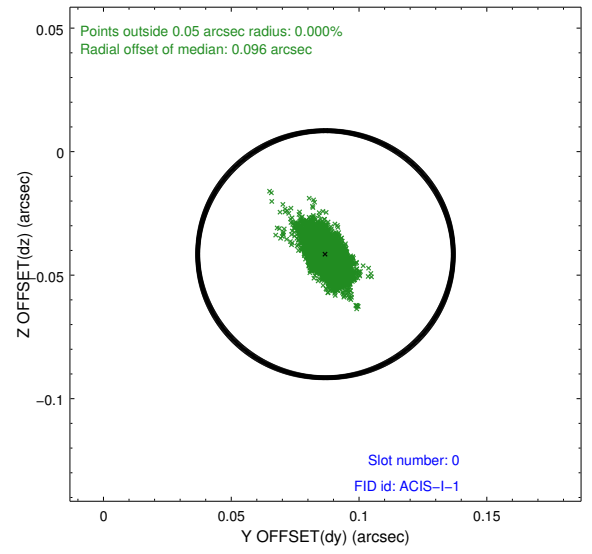
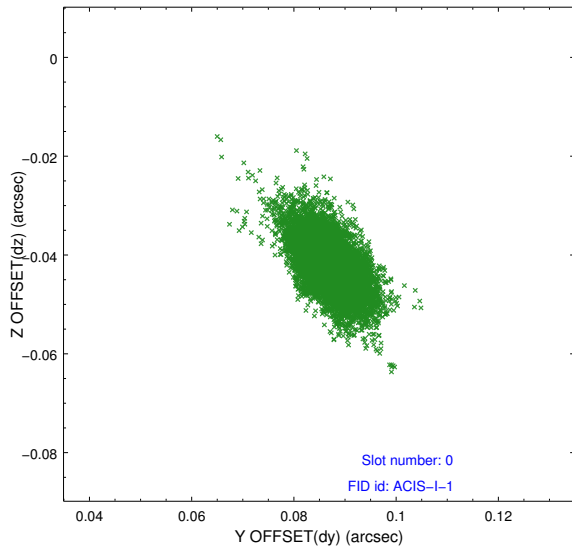


2.4.4 Slot 6

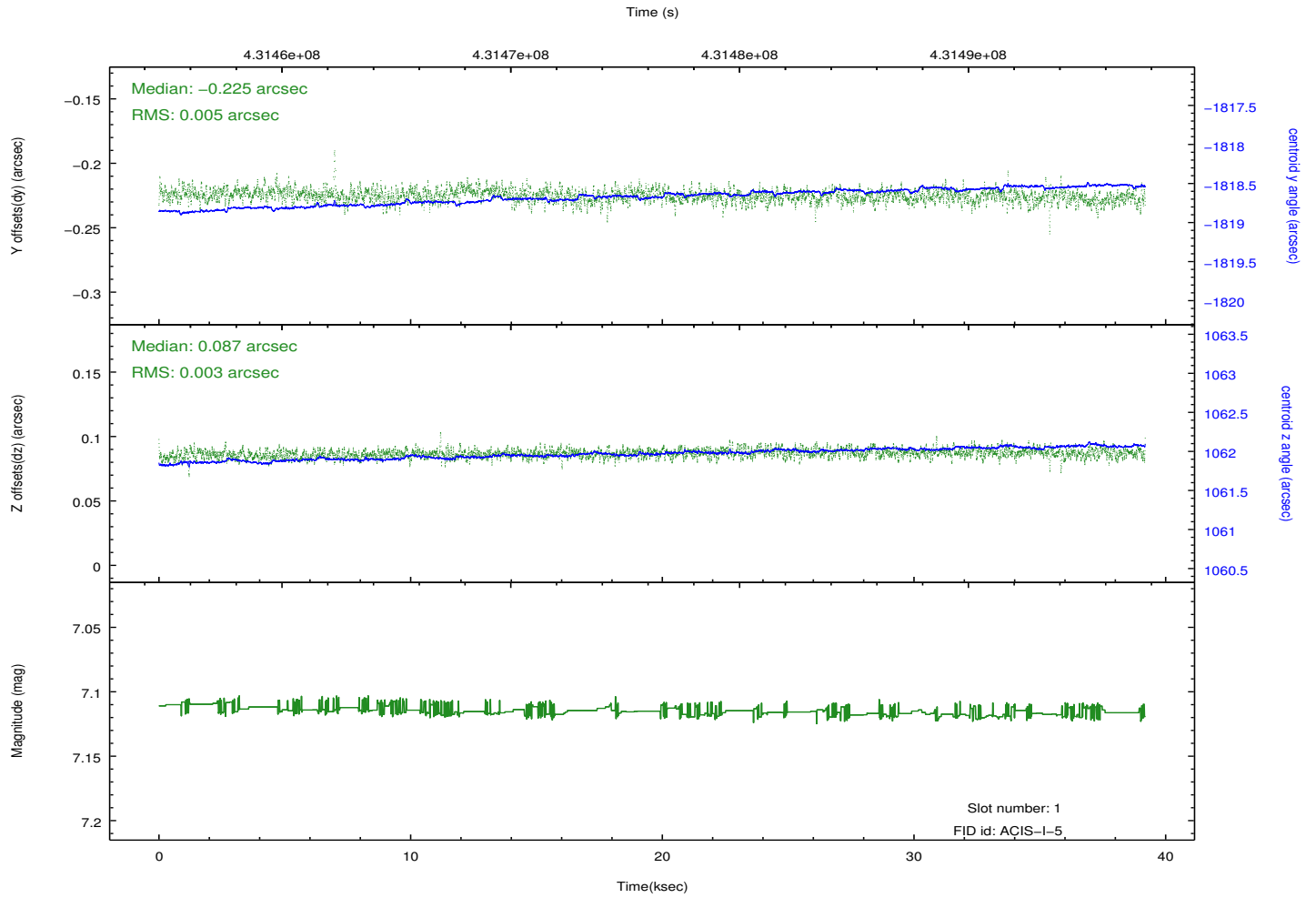
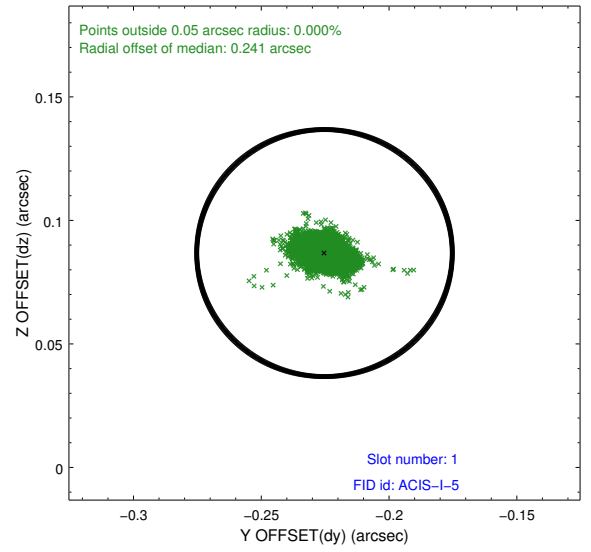
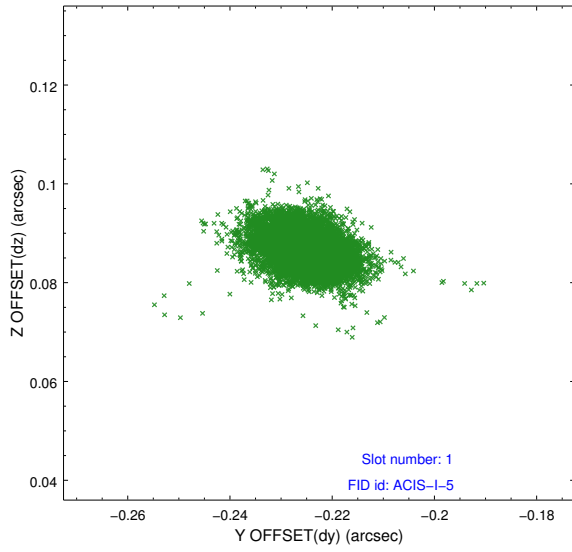


2.5 FID Slots

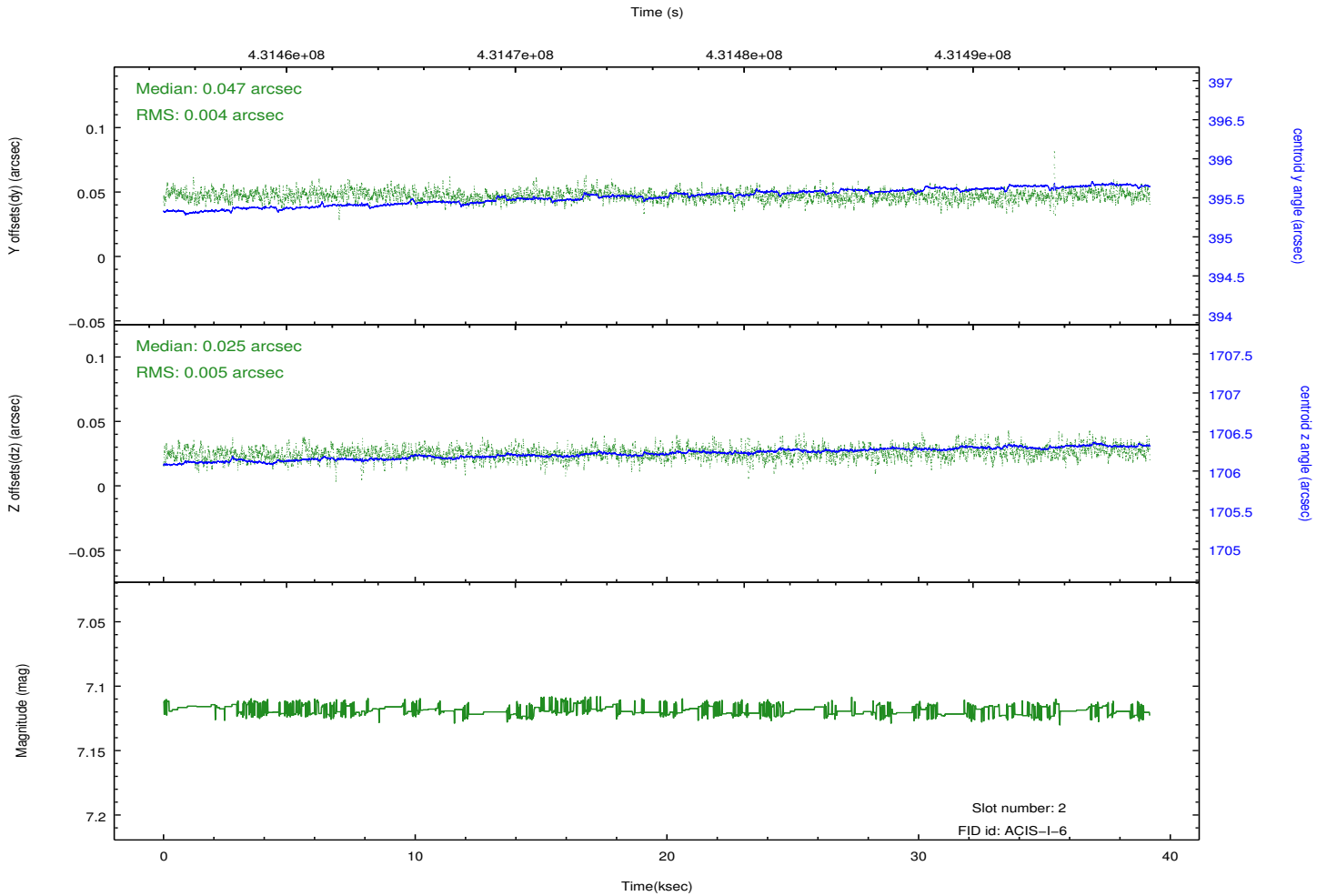
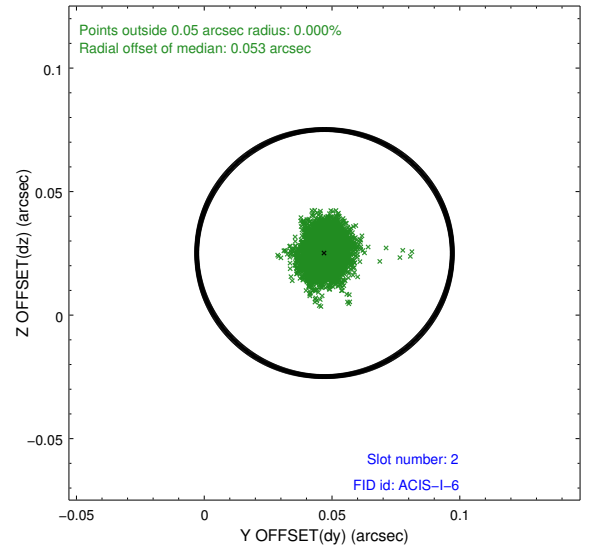
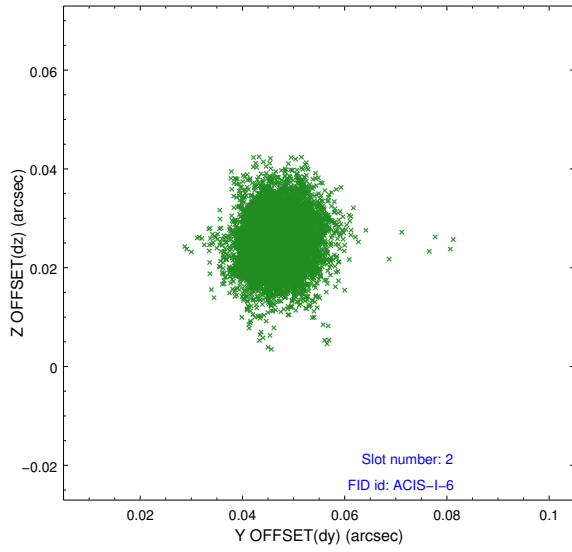
2.5.1 Slot 0



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)	2012.02.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.762318217635

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one fid light or guide star from the solution.