

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13214 - L2 Version 2
Chandra X-Ray Center

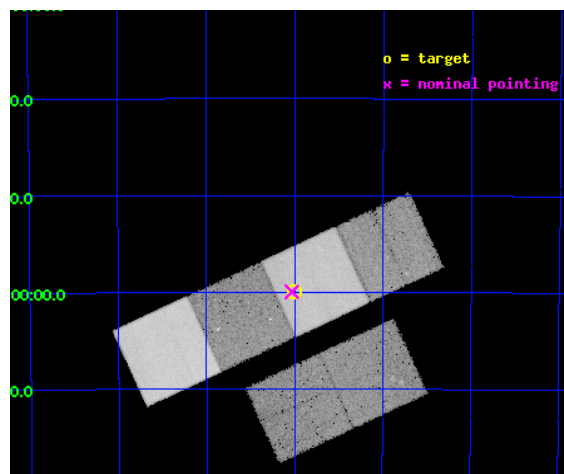
L2 Processing Date : Feb 2 2012

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1 Front

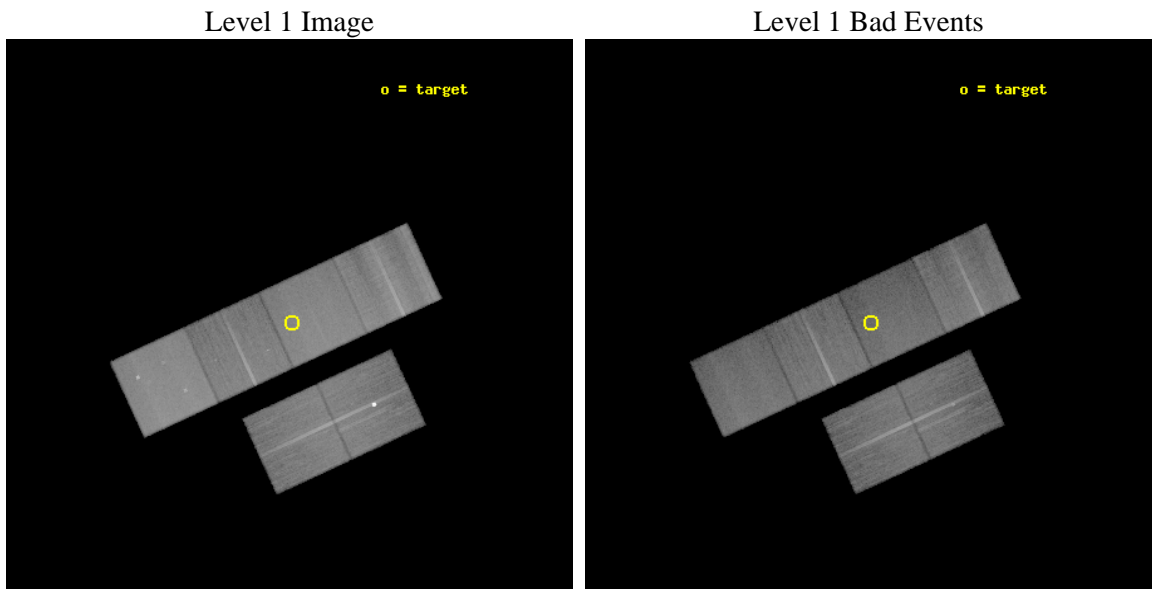
seq_num	900956	Sequence number
obs_id	13214	Observation id
title	Properties of the Warm-Hot Intergalactic Medium Using X-ray/SZ Cross-Correlation	Proposal title
observer	Dr. Massimiliano Galeazzi	Principal investigator
object	Blanco Cosmological Survey	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.25	Observer's specified target RA [deg]
dec_targ	-52.0	Observer's specified target Dec [deg]
ra_nom	79.257806061044	Nominal RA [deg]
dec_nom	-51.999432900388	Nominal Dec [deg]
roll_nom	335.16278067007	Nominal Roll [deg]
revision	2	Processing version of data
ontime	35046.243303716	Sum of GTIs [s]
livetime	34602.46666869	Livetime [s]
ontime2	35046.284343719	Sum of GTIs [s]
ontime3	35046.120183706	Sum of GTIs [s]
ontime5	35046.202263713	Sum of GTIs [s]
ontime6	35046.16122371	Sum of GTIs [s]
ontime7	35046.243303716	Sum of GTIs [s]
ontime8	35046.079143703	Sum of GTIs [s]
l2events	397218	Number of level 2 events



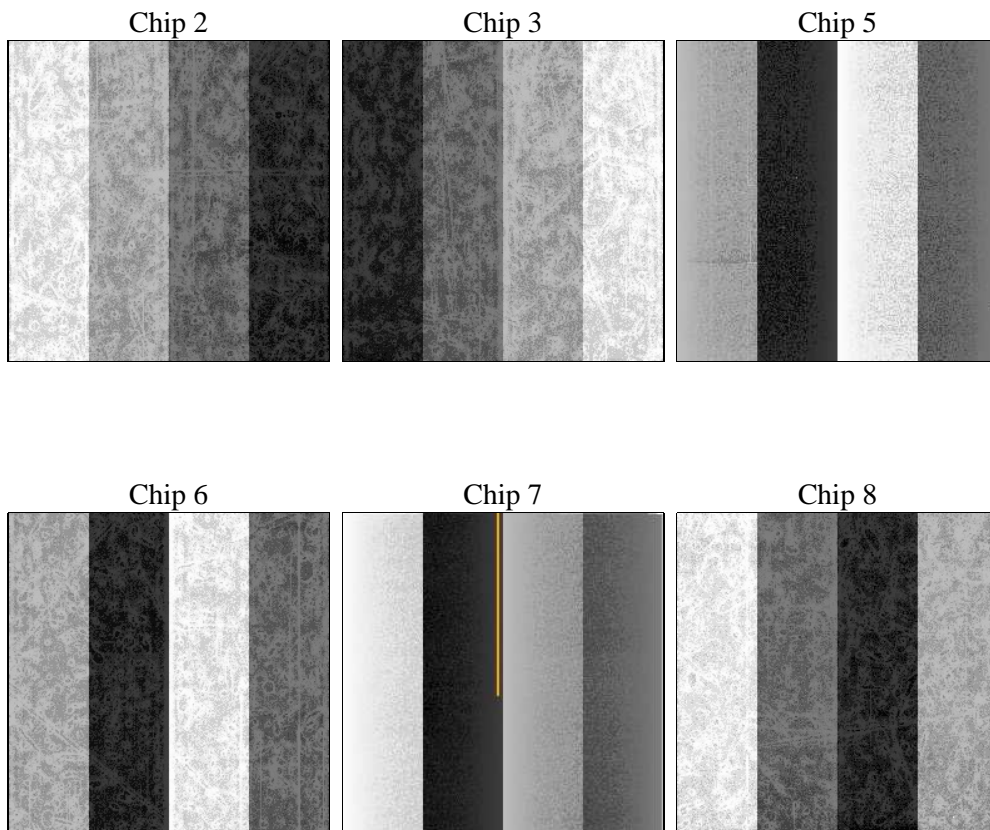
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	35046.243303716	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	35046.284343719	Sum of GTIs [s]
date	2012-02-02T05:20:37	Date and time of file creation	ontime3	35046.120183706	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	35046.202263713	Sum of GTIs [s]
			ontime6	35046.16122371	Sum of GTIs [s]
			ontime7	35046.243303716	Sum of GTIs [s]
			ontime8	35046.079143703	Sum of GTIs [s]
			l1events	1736194	Number of level 1 events

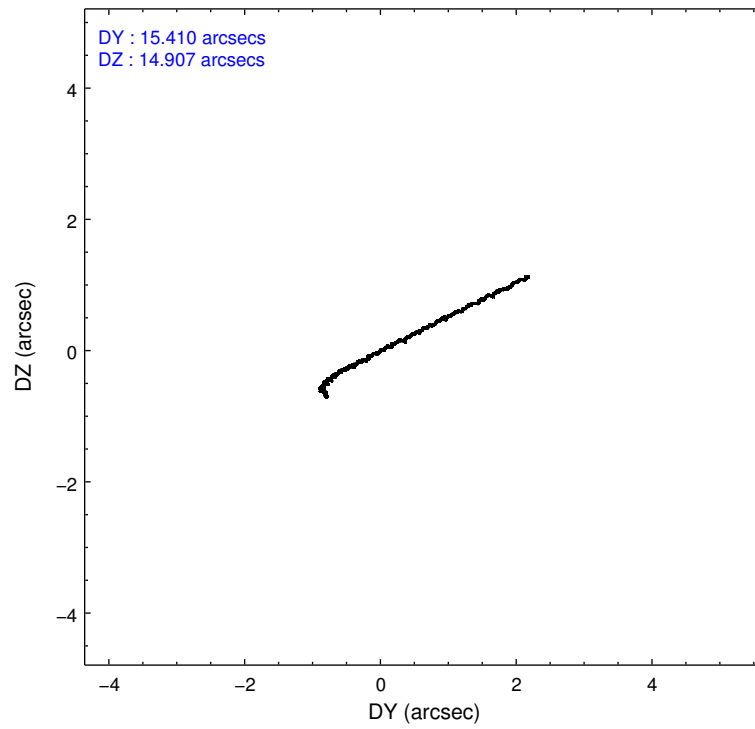
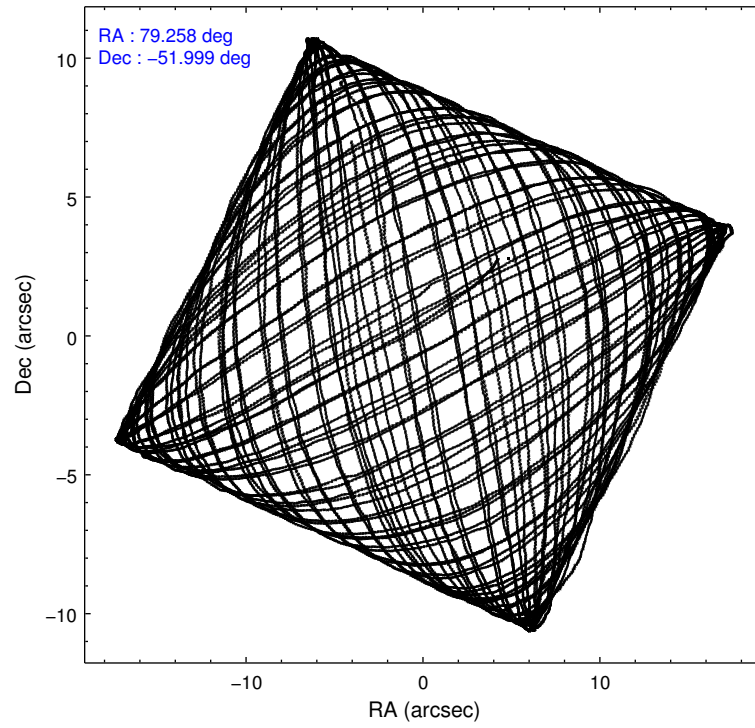
2.1.4 Events

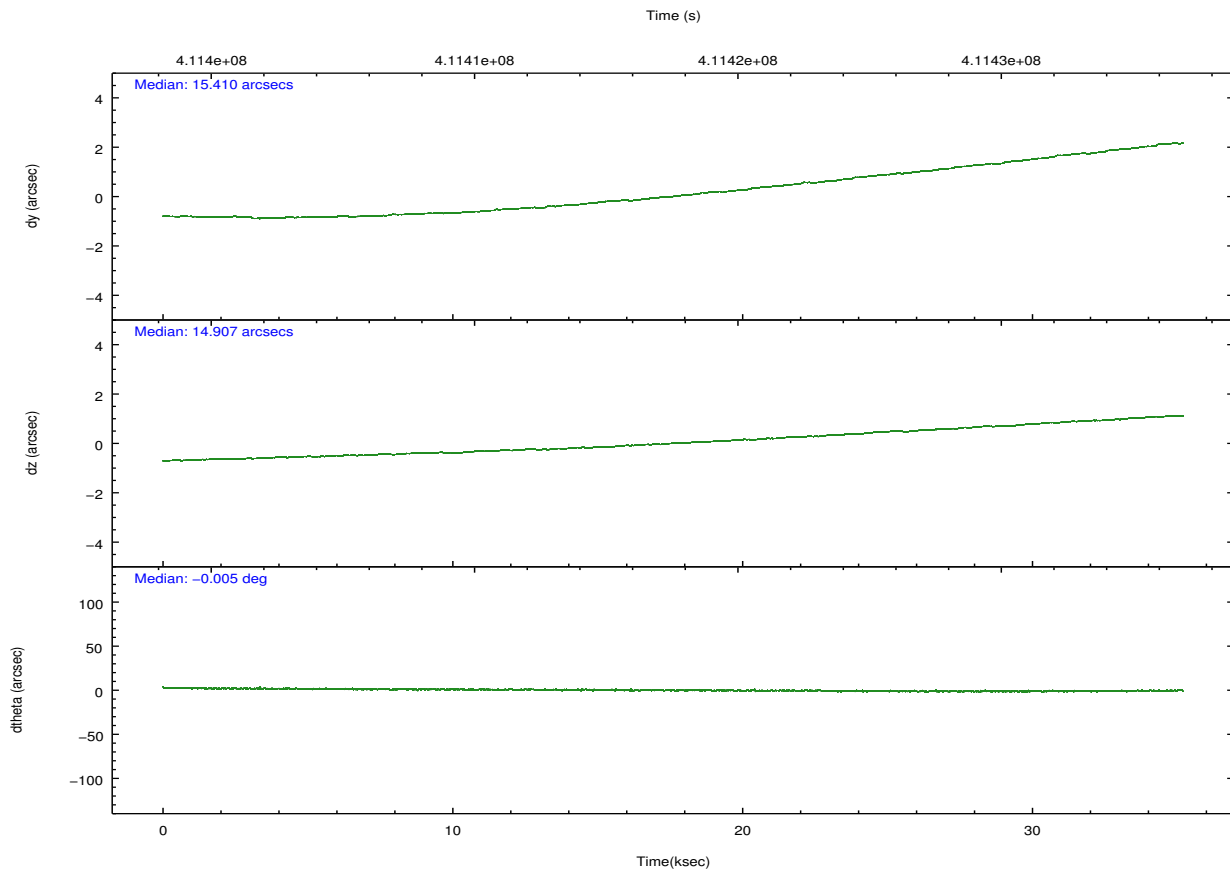
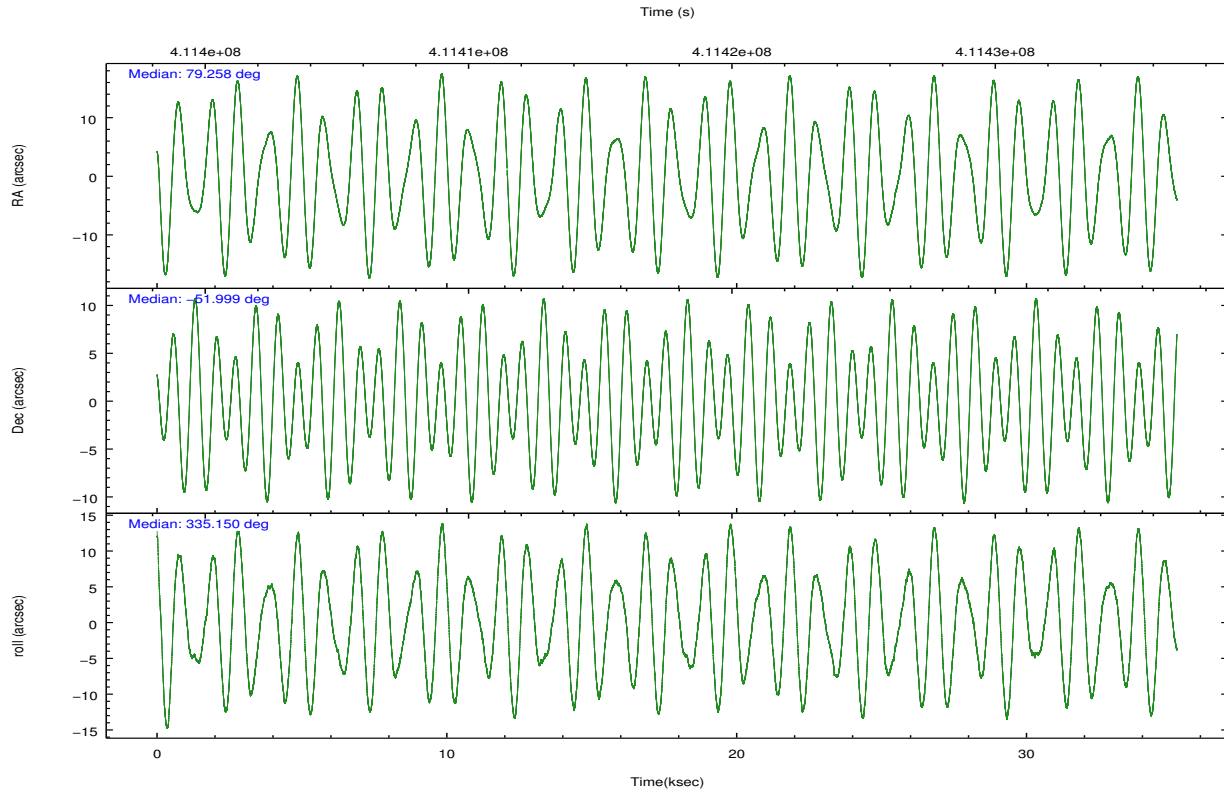
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	242647	264357	369001	244841	301029	314319	grade 0 events	8999	8775	14170	9911	11982	24481
rejected events	216730	208594	189025	216969	166837	232175		3%	3%	3%	4%	3%	7%
rejected %	89%	78%	51%	88%	55%	73%	grade 1 events	143	131	687	123	358	241
								0%	0%	0%	0%	0%	0%
							grade 2 events	6475	36255	55186	6132	27360	18653
								2%	13%	14%	2%	9%	5%
							grade 3 events	2751	2783	7004	2932	11763	8962
								1%	1%	1%	1%	3%	2%
							grade 4 events	2778	2747	6592	2833	11613	8203
								1%	1%	1%	1%	3%	2%
							grade 5 events	9719	11072	28536	11233	31443	16295
								4%	4%	7%	4%	10%	5%
							grade 6 events	4918	5213	97061	6071	71499	21852
								2%	1%	26%	2%	23%	6%
							grade 7 events	206864	197381	159765	205606	135011	215632
								85%	74%	43%	83%	44%	68%

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	79.213640	79.25780606104405	CCD I2 on	O1	Y
[deg] Pointing Dec	-52.002241	-51.99943290038765	CCD I3 on	Y	Y
[deg] Pointing Roll	334.971354	335.1627806700678	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	411400127.184000	411399115.38313	CCD S5 on	N	N
Observation start date	2011-01-14T13:47:41	2011-01-14T13:31:55	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	411435127.184000	411436094.31004	On-chip summing requested	N	N
Observation end date	2011-01-14T23:31:01	2011-01-14T23:48:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



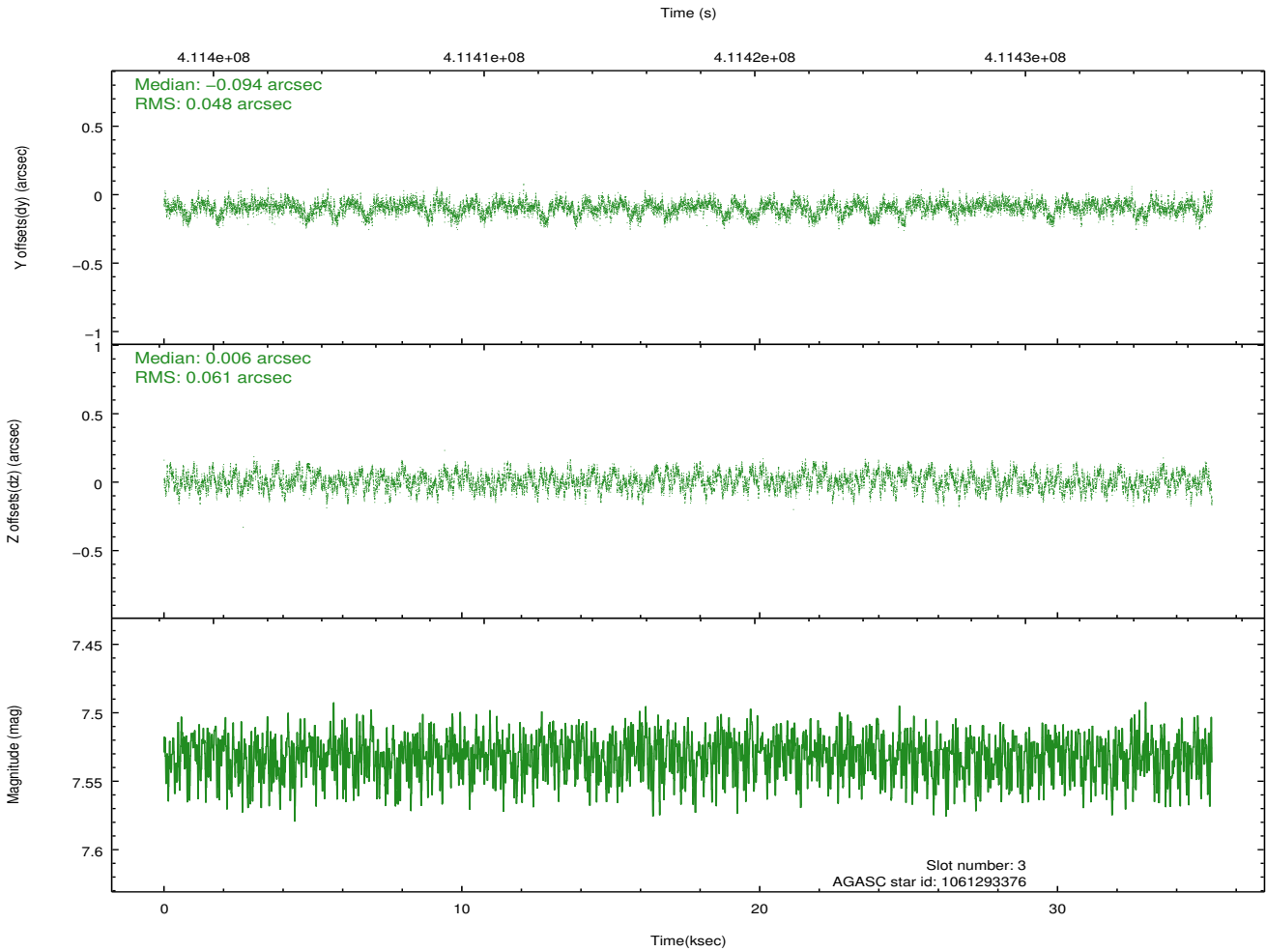
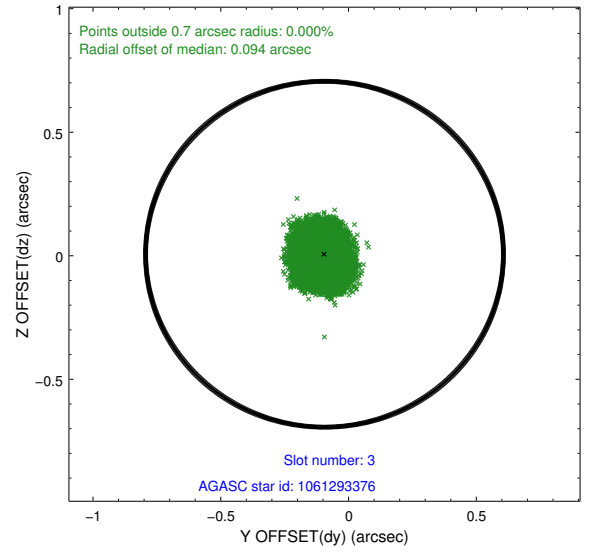
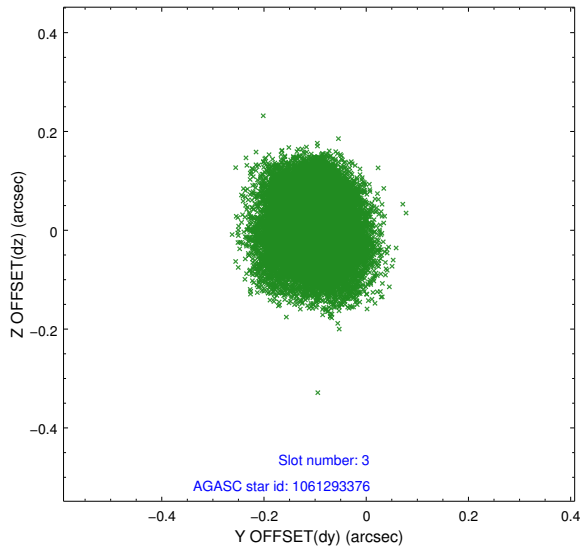


Slot Statistics

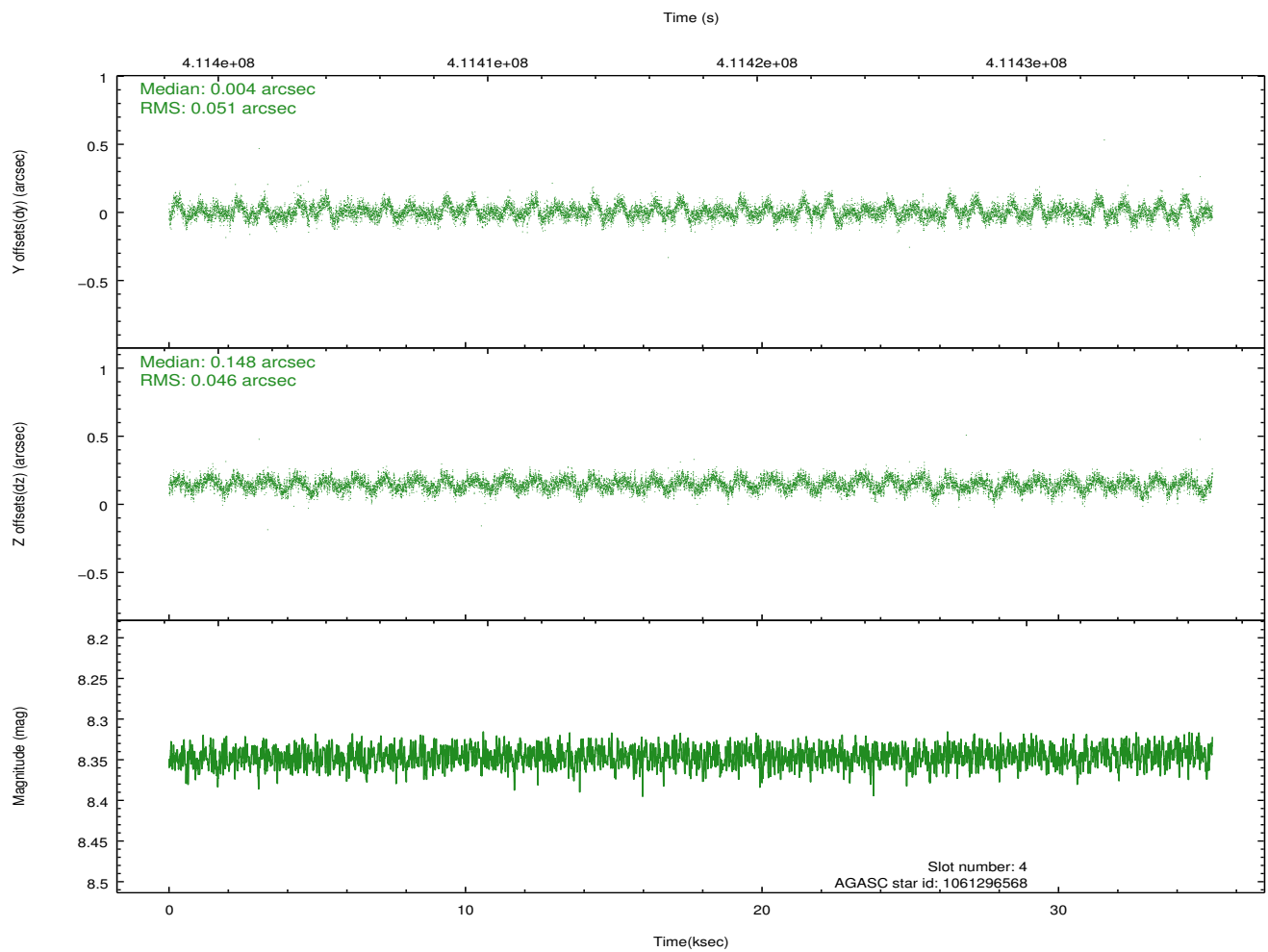
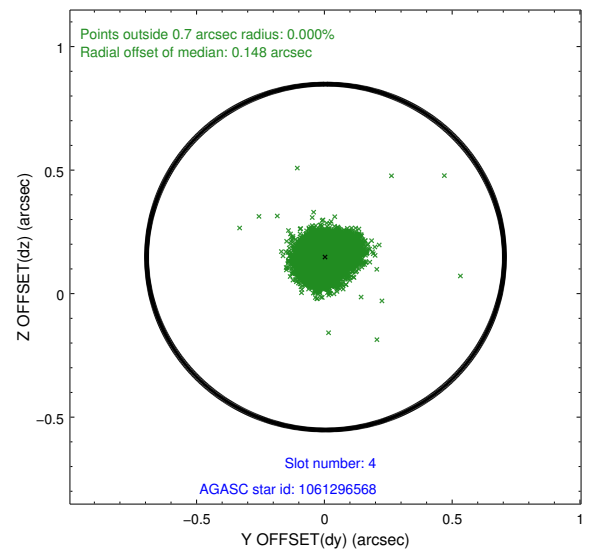
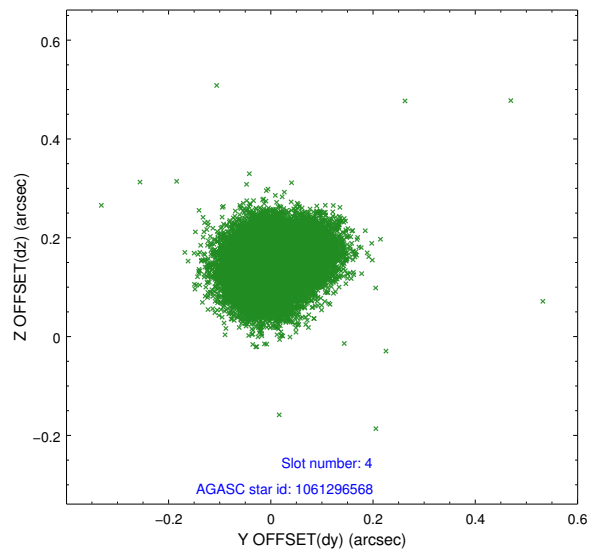
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.99	8582	-0.094	-0.036	0.019	0.026	0.000000	0.000000	-768.71	-1736.36
1	FID	ACIS-S-4	7.07	8582	0.208	0.057	0.013	0.027	0.000000	0.000000	2144.83	172.20
2	FID	ACIS-S-5	7.10	8581	-0.142	-0.014	0.022	0.033	0.000000	0.000000	-1821.57	165.81
3	GUIDE	1061293376	7.53	17163	-0.094	0.006	0.084	0.133	79.729126	-51.579452	402.62	1863.69
4	GUIDE	1061296568	8.35	17160	0.004	0.148	0.073	0.115	79.123429	-51.476040	-984.71	1630.56
5	GUIDE	1061297288	8.42	17160	-0.123	-0.034	0.081	0.129	79.226530	-52.452693	712.24	-1457.07
6	GUIDE	1115554592	9.53	17113	0.108	0.100	0.141	0.221	79.560833	-52.777038	1867.03	-2208.63
7	GUIDE	1061293080	8.32	17158	0.109	-0.208	0.076	0.125	79.617415	-51.426985	-53.34	2255.71

2.4 Star Slots

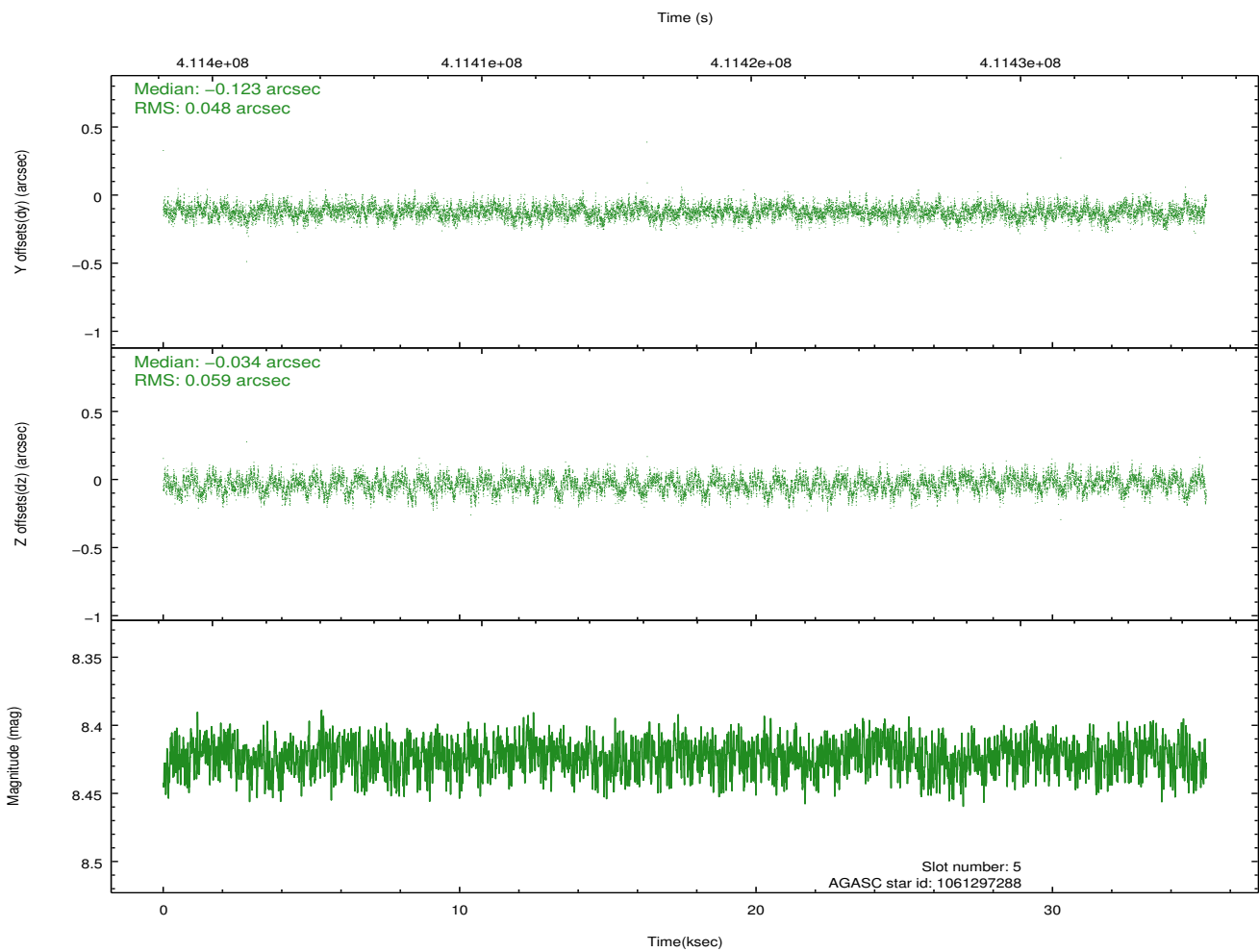
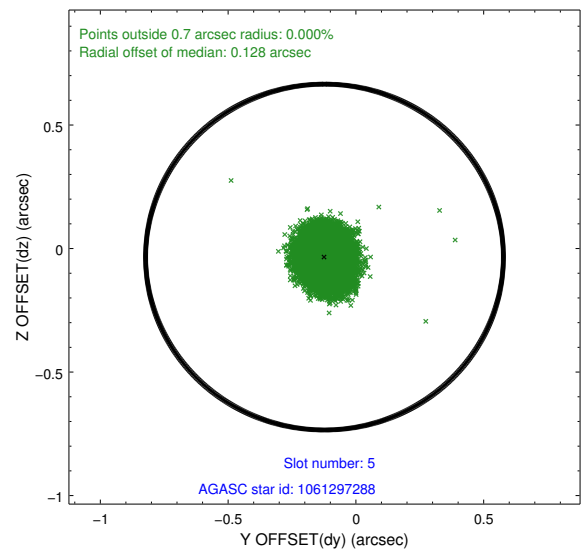
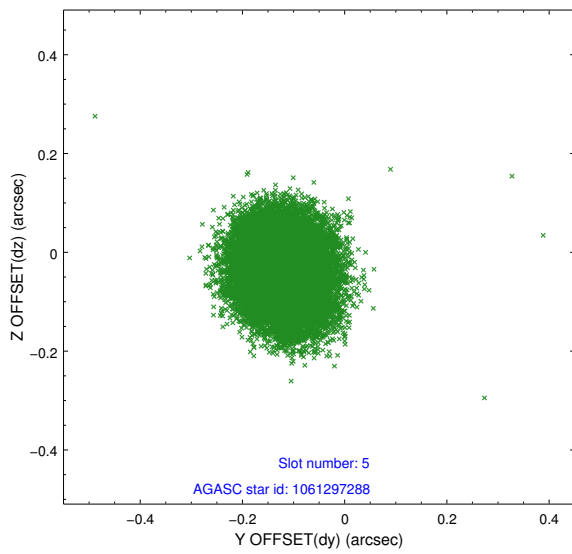
2.4.1 Slot 3



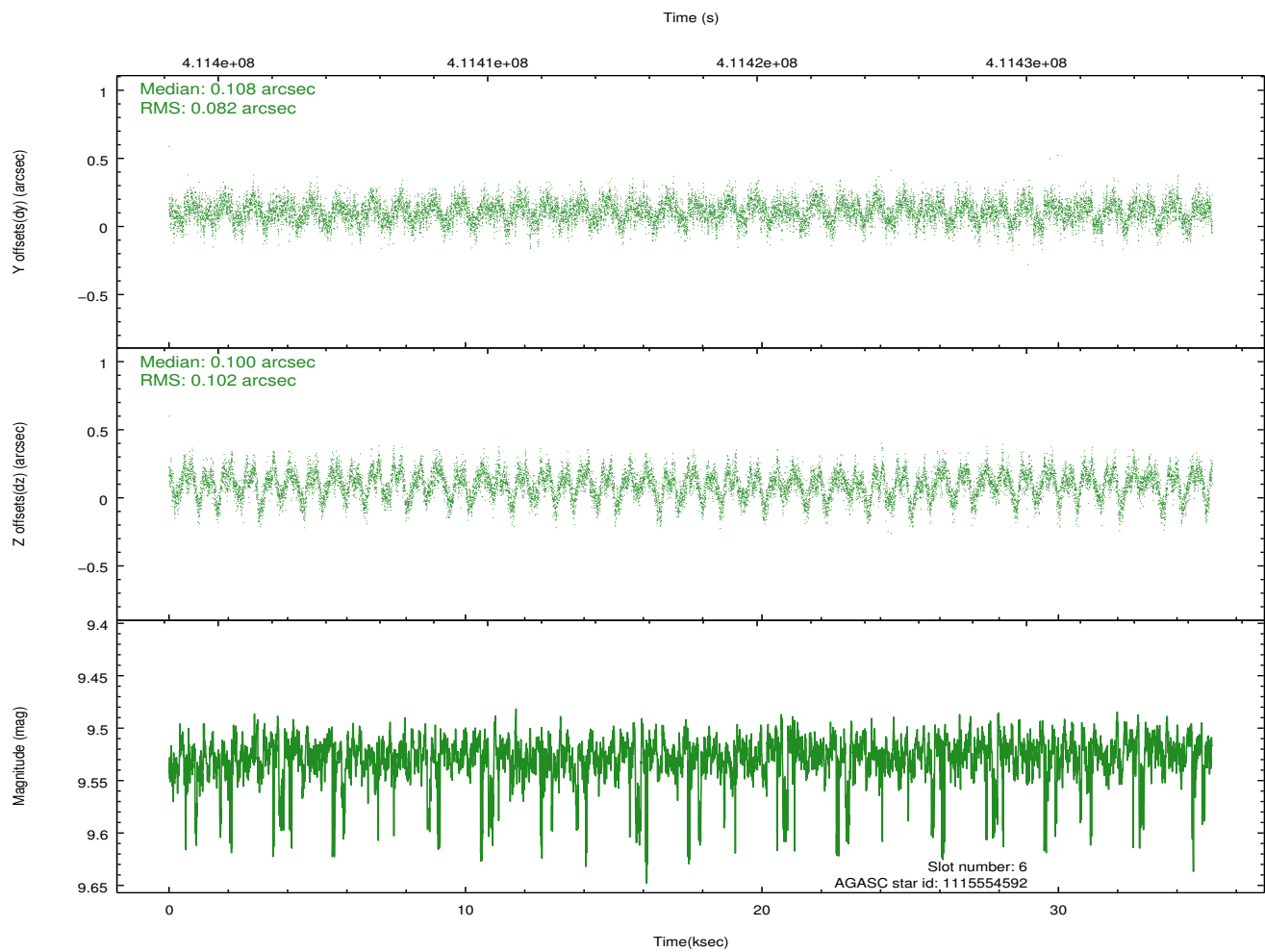
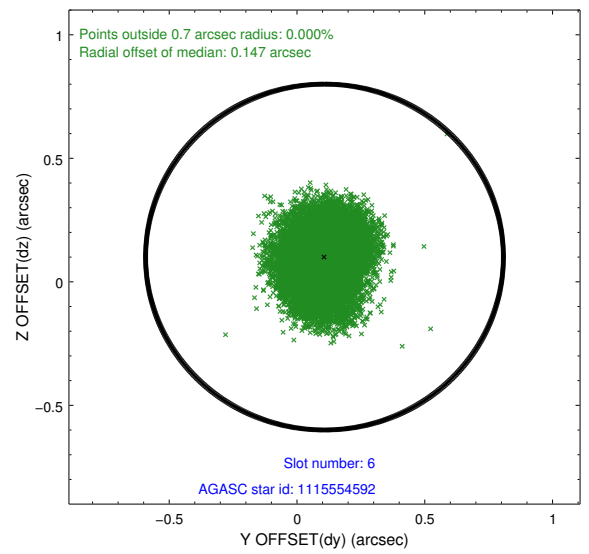
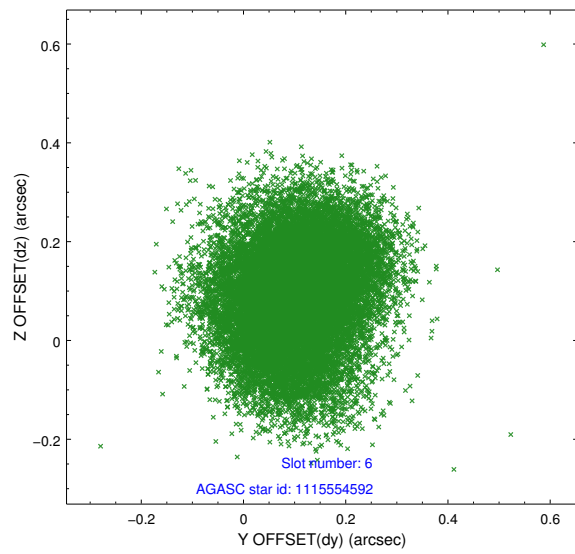
2.4.2 Slot 4



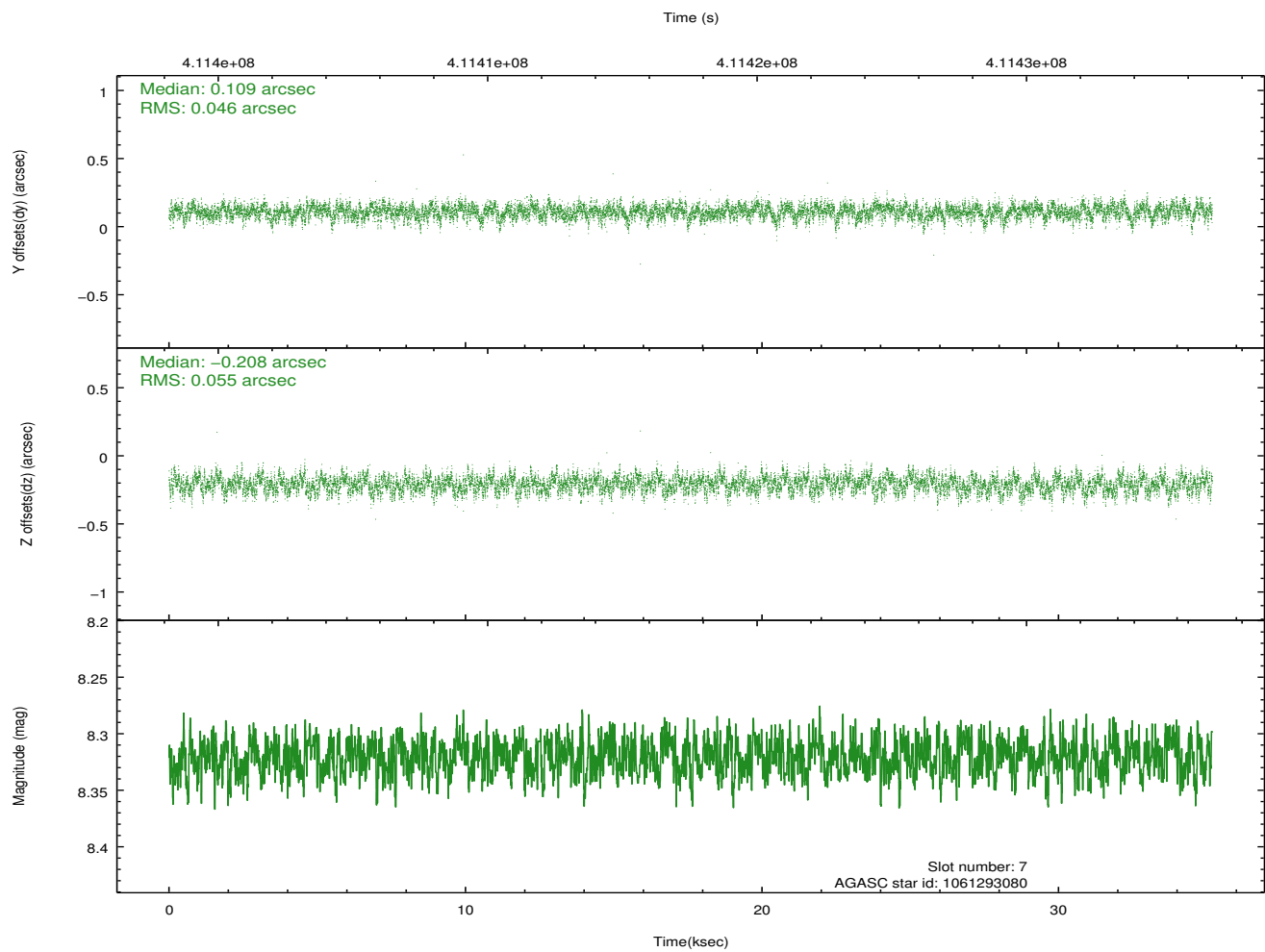
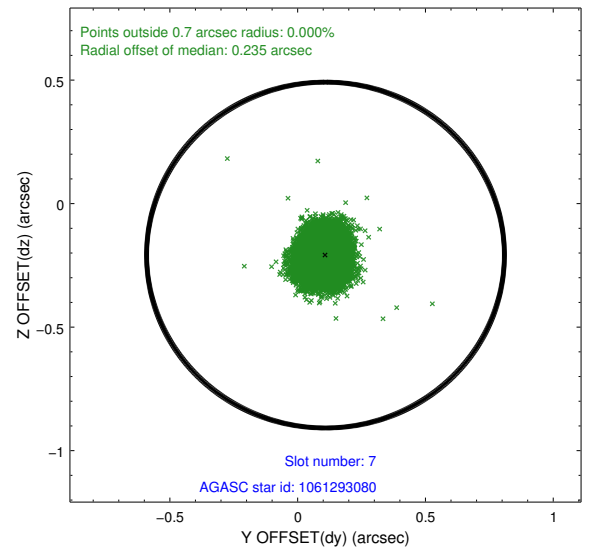
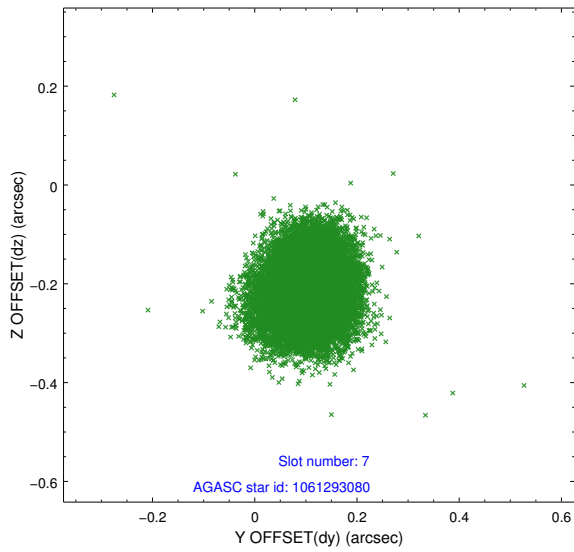
2.4.3 Slot 5



2.4.4 Slot 6

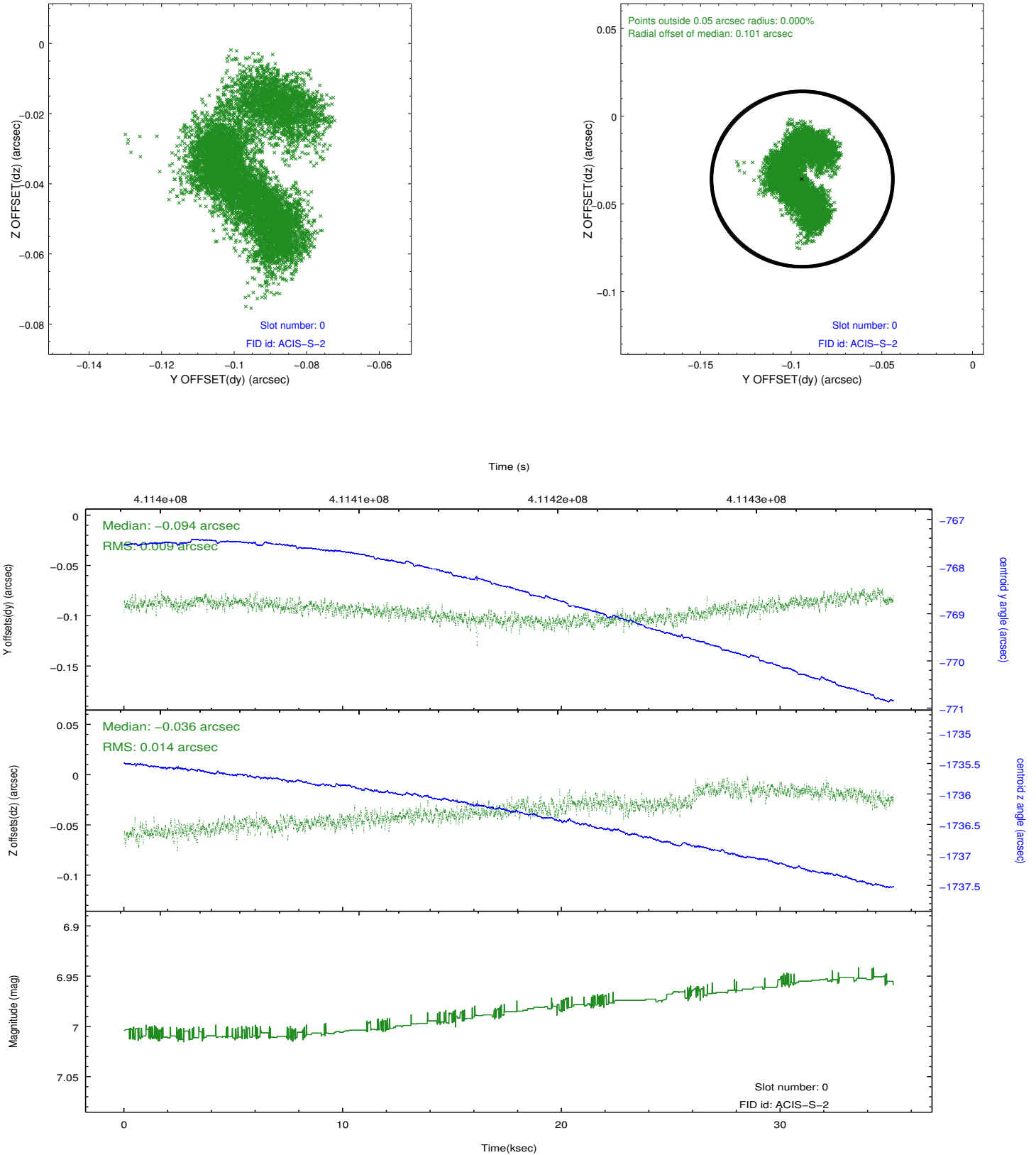


2.4.5 Slot 7

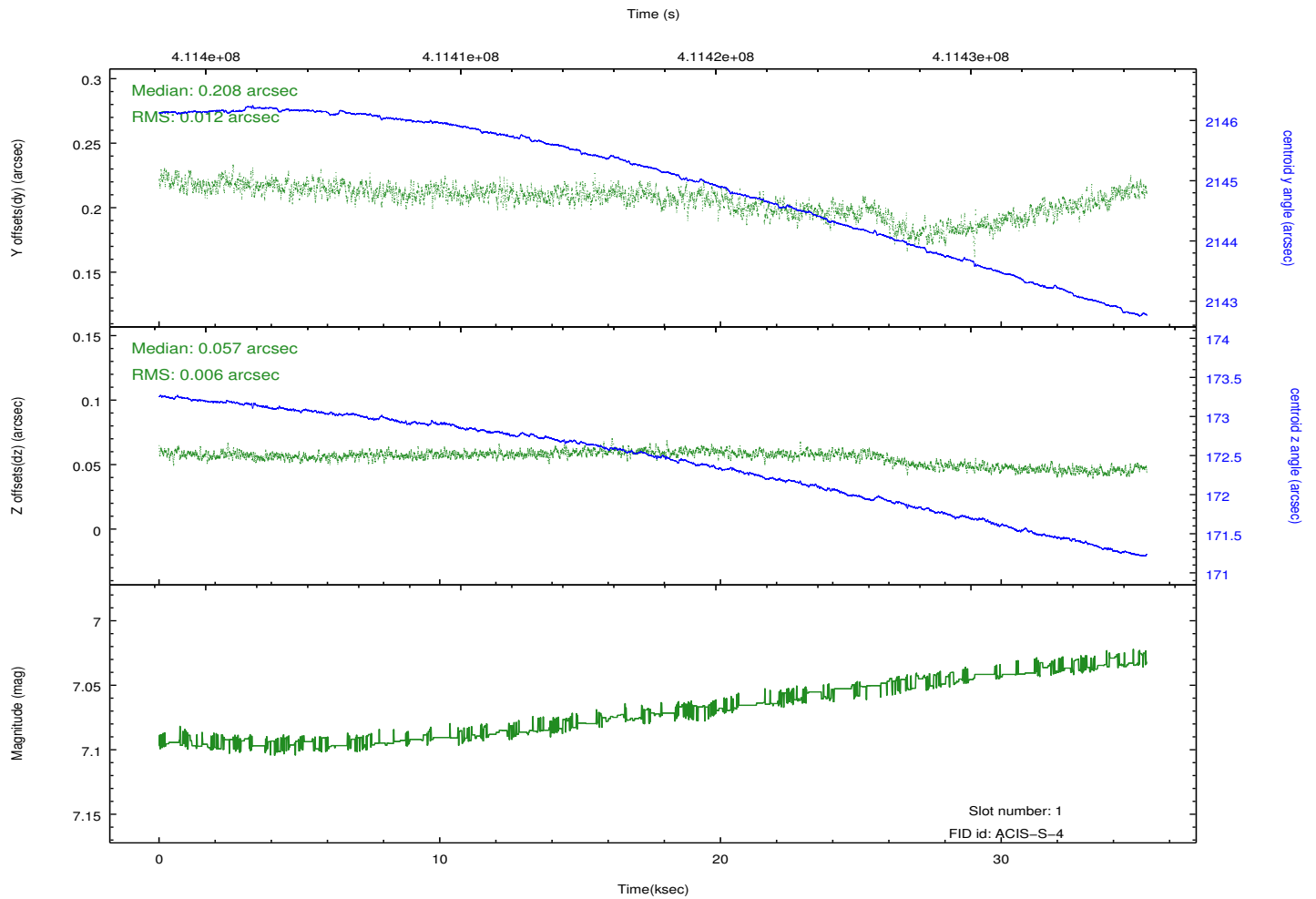
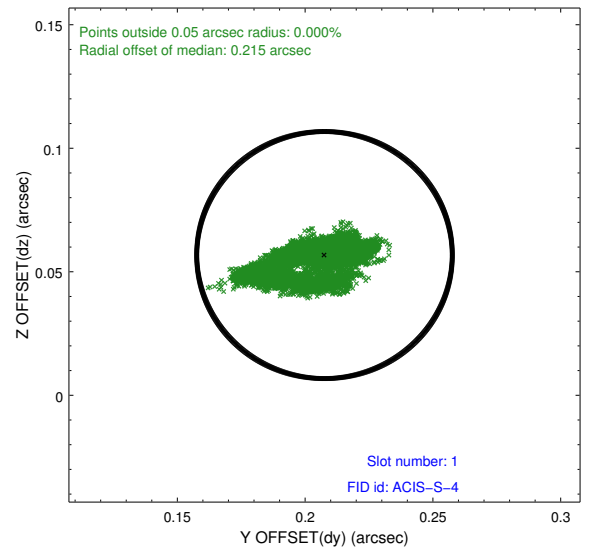
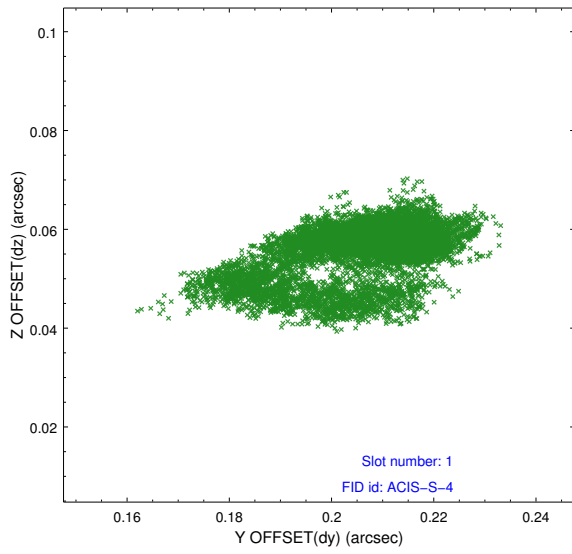


2.5 FID Slots

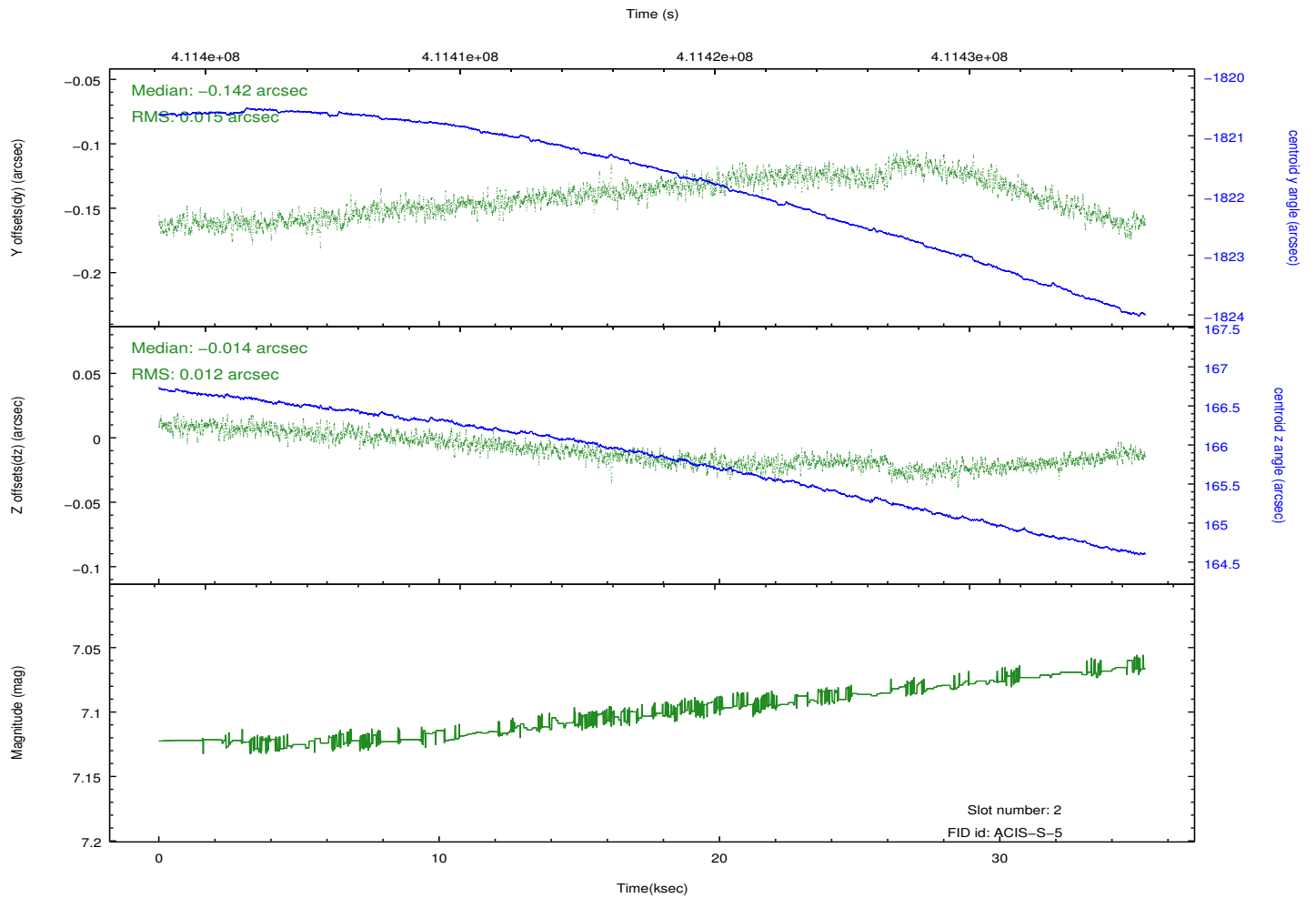
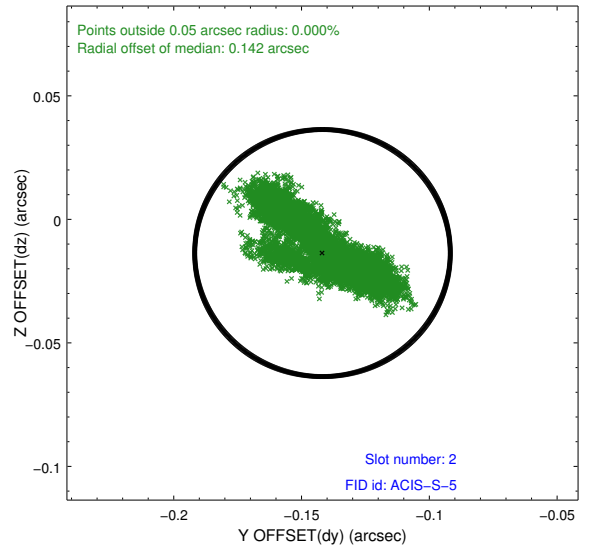
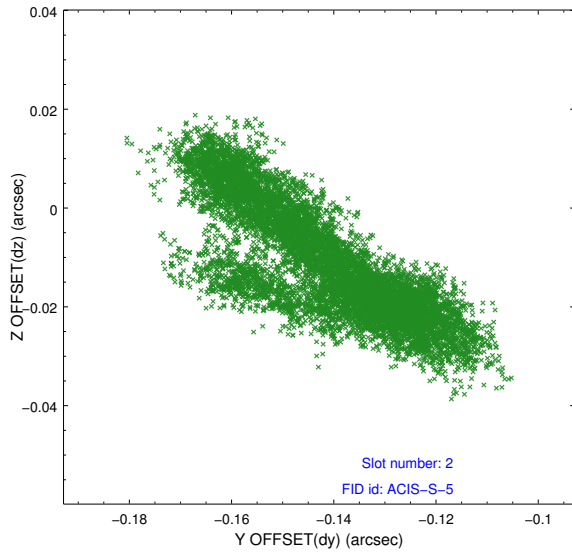
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.046243303478

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.