

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12269 - L2 Version 2
Chandra X-Ray Center

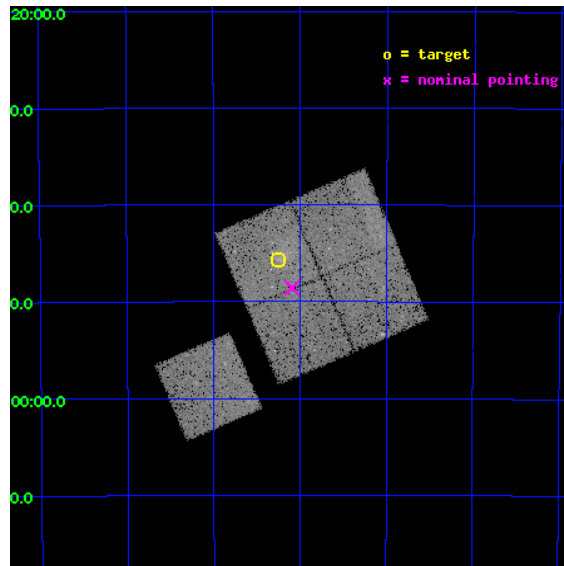
L2 Processing Date : Feb 4 2012

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1 Front

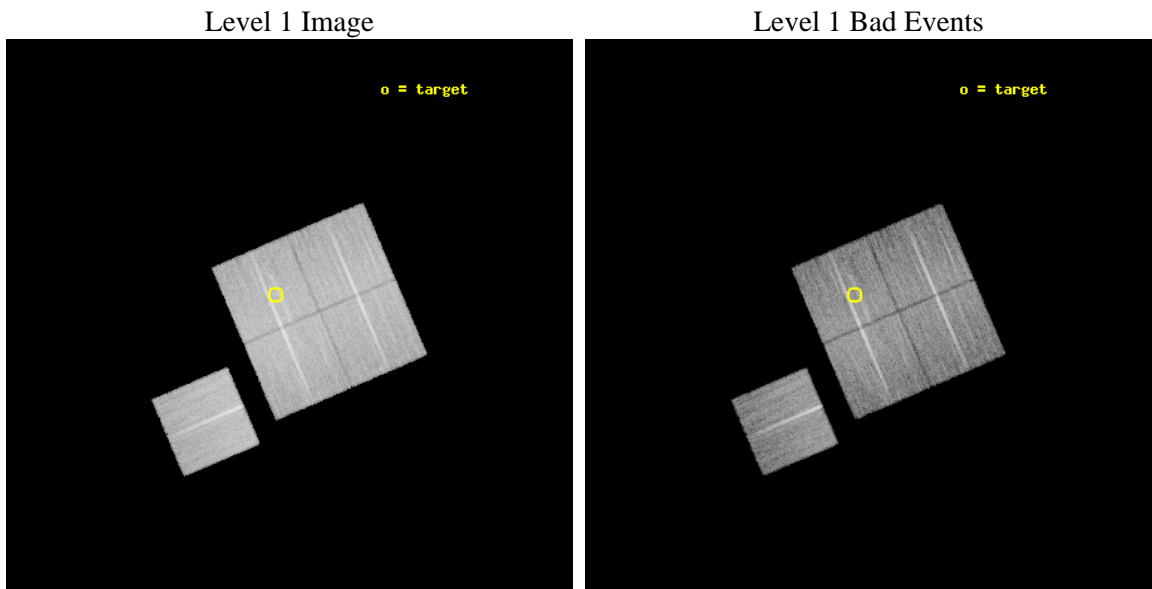
seq_num	800988	Sequence number
obs_id	12269	Observation id
title	Chandra Observations of the ACT Sample of SZE-Selected Galaxy Clusters	Proposal title
observer	Prof John Hughes	Principal investigator
object	ACT J0217-5245	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	34.312083	Observer's specified target RA [deg]
dec_targ	-52.7605	Observer's specified target Dec [deg]
ra_nom	34.2738663087	Nominal RA [deg]
dec_nom	-52.80973793453	Nominal Dec [deg]
roll_nom	246.88942213674	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20050.343556523	Sum of GTIs [s]
livetime	19788.371057109	Livetime [s]
ontime0	20053.361406803	Sum of GTIs [s]
ontime1	20050.261486411	Sum of GTIs [s]
ontime2	20050.302526474	Sum of GTIs [s]
ontime3	20050.343556523	Sum of GTIs [s]
ontime6	20053.3203668	Sum of GTIs [s]
l2events	71500	Number of level 2 events



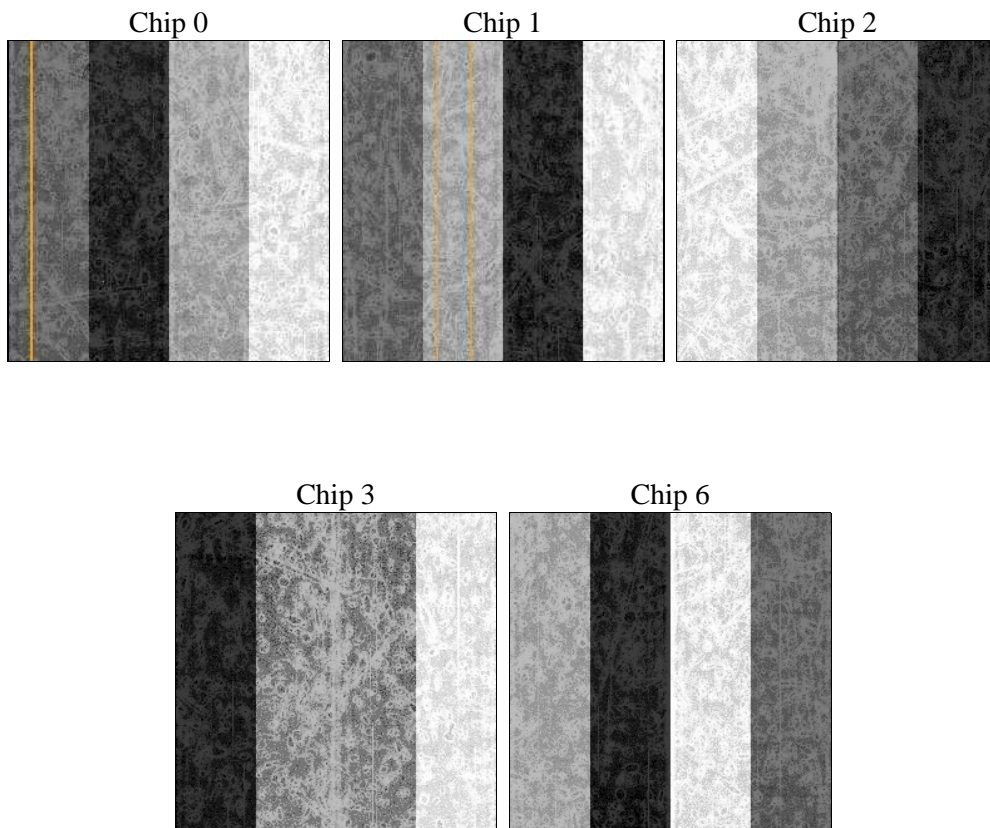
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	20050.343556523	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	20053.361406803	Sum of GTIs [s]
date	2012-02-04T20:14:59	Date and time of file creation	ontime1	20050.261486411	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20050.302526474	Sum of GTIs [s]
			ontime3	20050.343556523	Sum of GTIs [s]
			ontime6	20053.3203668	Sum of GTIs [s]
			l1events	708052	Number of level 1 events

2.1.4 Events

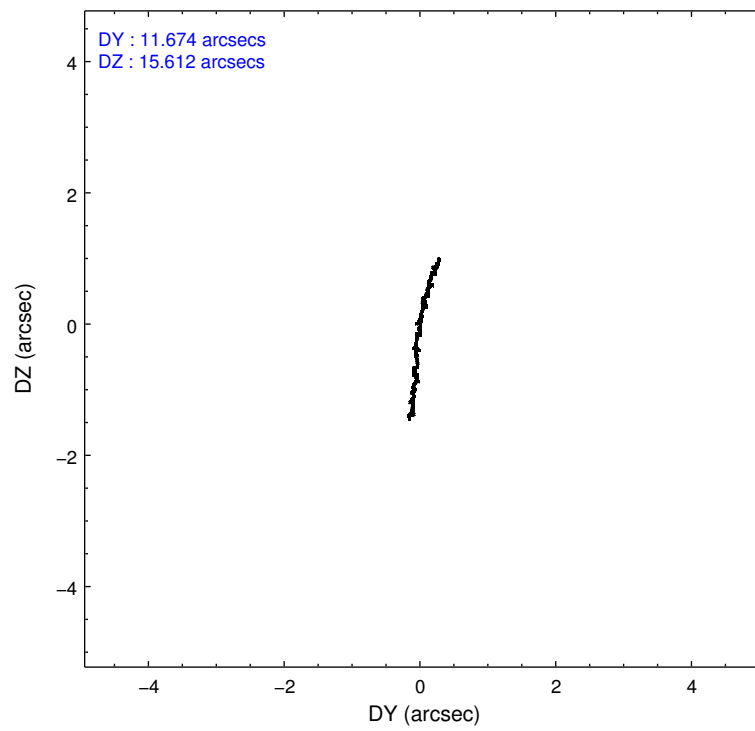
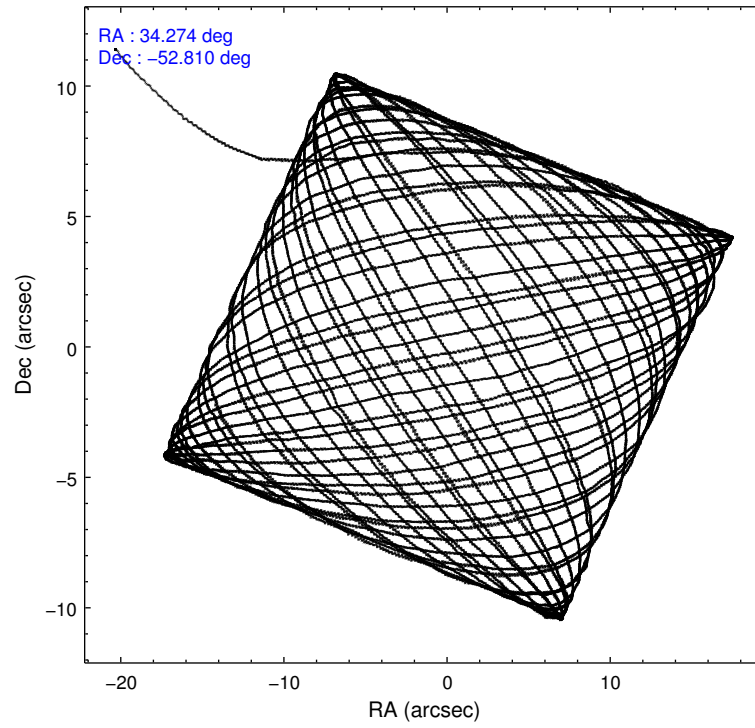
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	131914	137106	145073	147794	146165
rejected events	115743	118904	129238	129443	129771
rejected %	87%	86%	89%	87%	88%

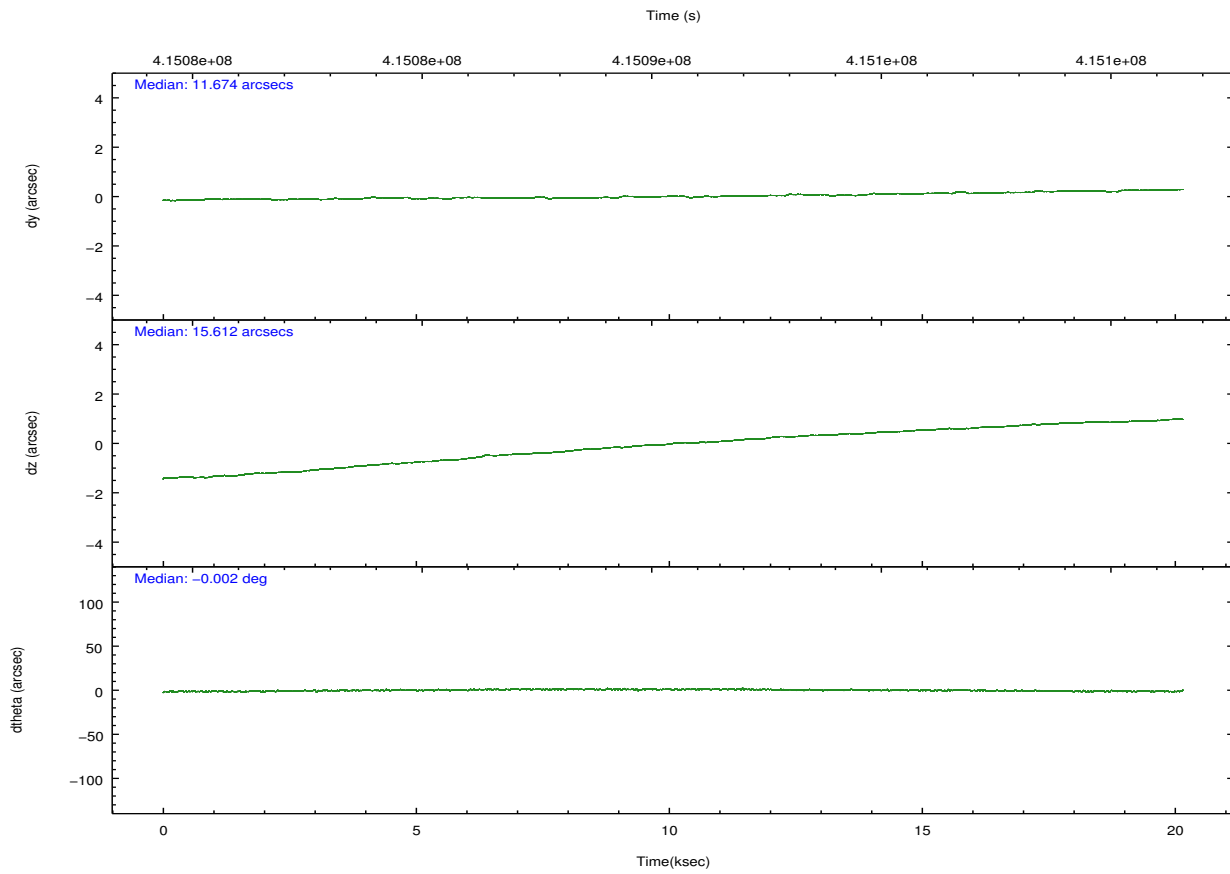
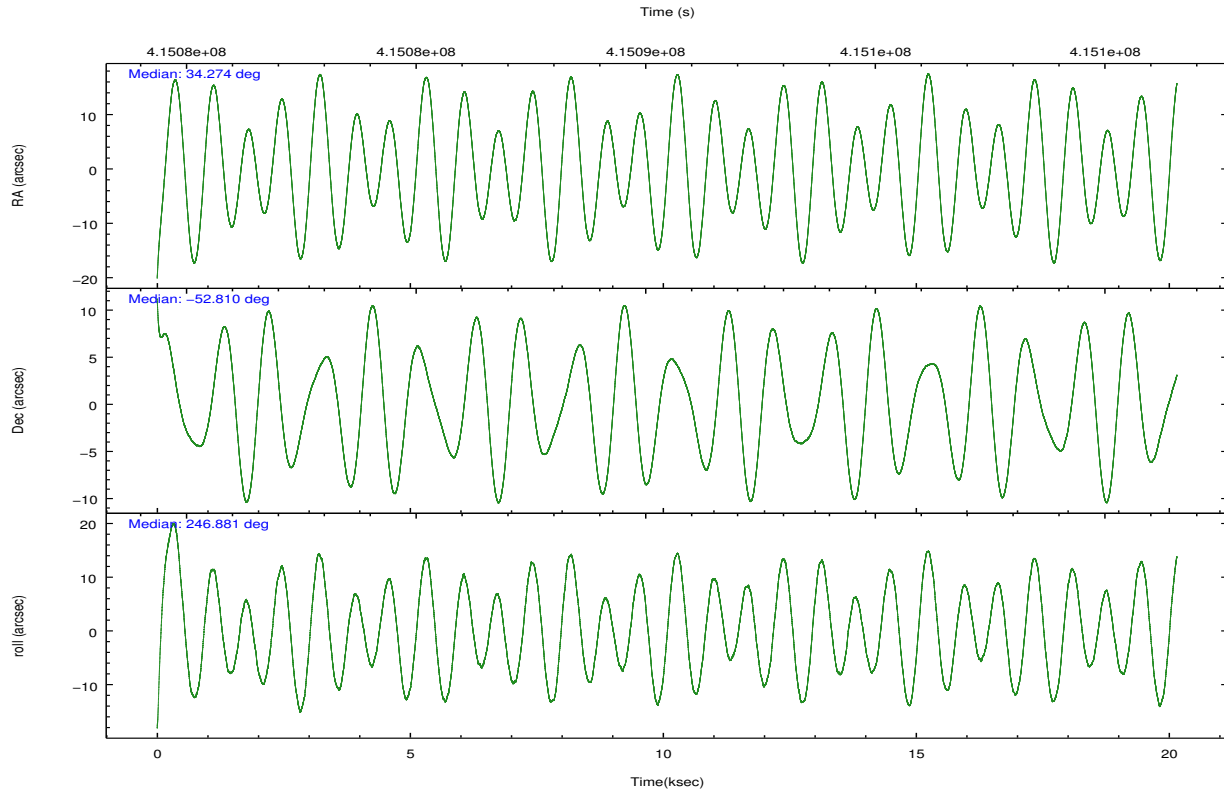
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5724	6483	5632	7902	5712
	4%	4%	3%	5%	3%
grade 1 events	80	95	88	102	58
	0%	0%	0%	0%	0%
grade 2 events	3950	4396	3862	3664	3701
	2%	3%	2%	2%	2%
grade 3 events	1708	1852	1620	1717	1725
	1%	1%	1%	1%	1%
grade 4 events	1616	1722	1664	1739	1614
	1%	1%	1%	1%	1%
grade 5 events	6214	6587	5678	6773	6415
	4%	4%	3%	4%	4%
grade 6 events	3174	3754	3066	3334	3644
	2%	2%	2%	2%	2%
grade 7 events	109448	112217	123463	122563	123296
	82%	81%	85%	82%	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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	34.268244	34.2738663086996	CCD I2 on	Y	Y
[deg] Pointing Dec	-52.782466	-52.8097379345298	CCD I3 on	Y	Y
[deg] Pointing Roll	246.676274	246.8894221367409	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	-225.792463	-225.7829997647864	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.8	-7.809453238143249	CCD S4 on	N	N
[s] Observation start time (MET)	415080535.184000	415079520.03605	CCD S5 on	N	N
Observation start date	2011-02-26T04:07:49	2011-02-26T03:52:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	415100535.184000	415100994.81216	On-chip summing requested	N	N
Observation end date	2011-02-26T09:41:09	2011-02-26T09:49:54	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



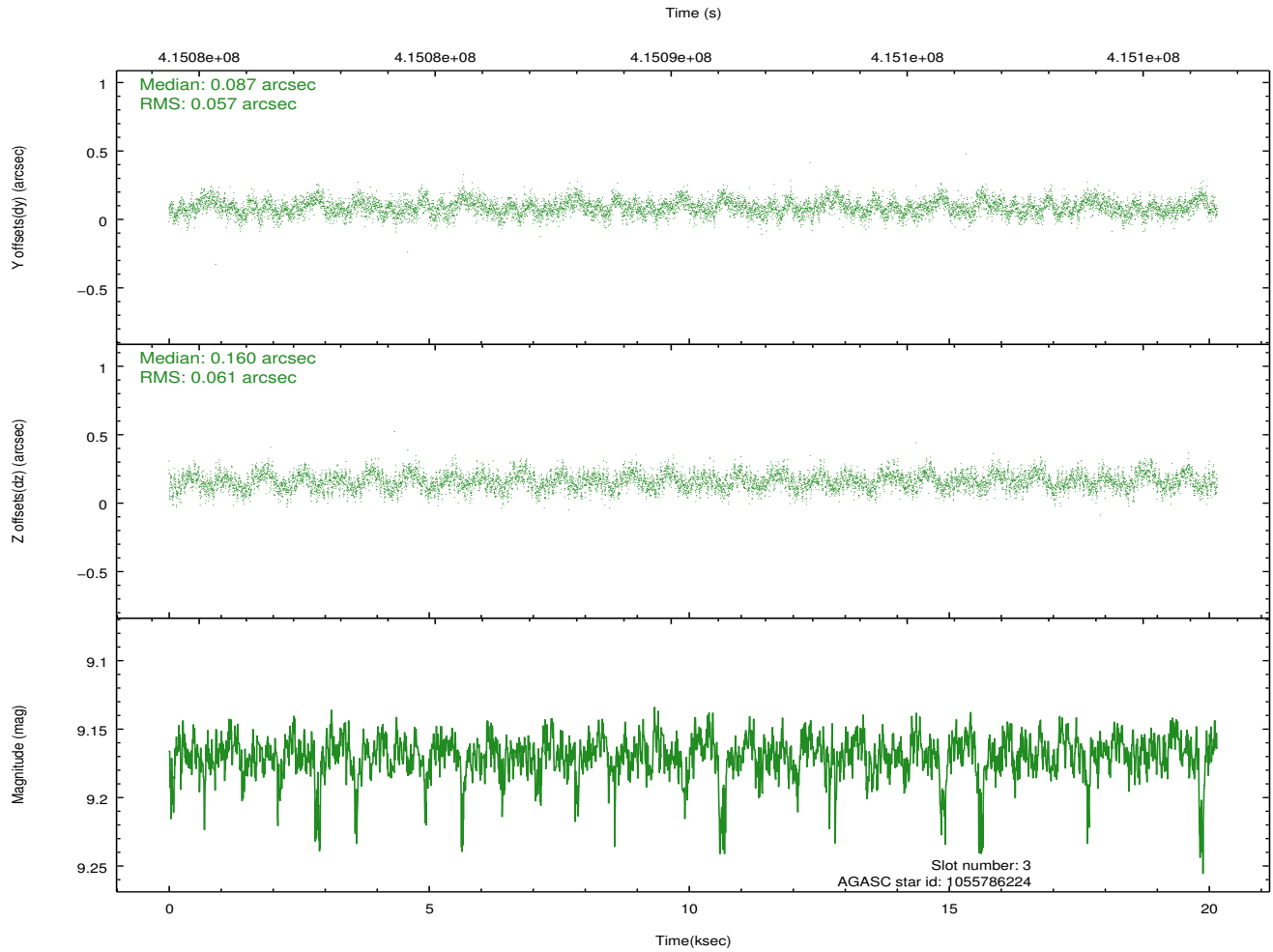
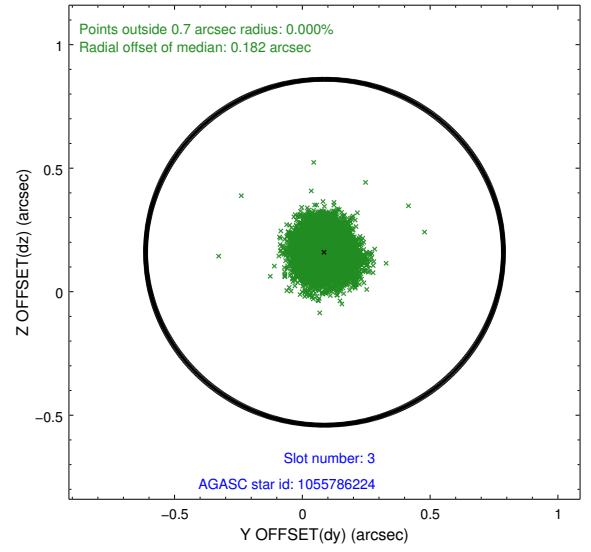
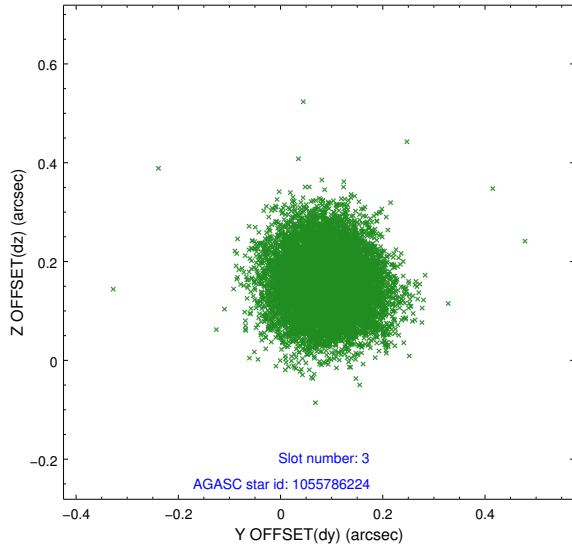


Slot Statistics

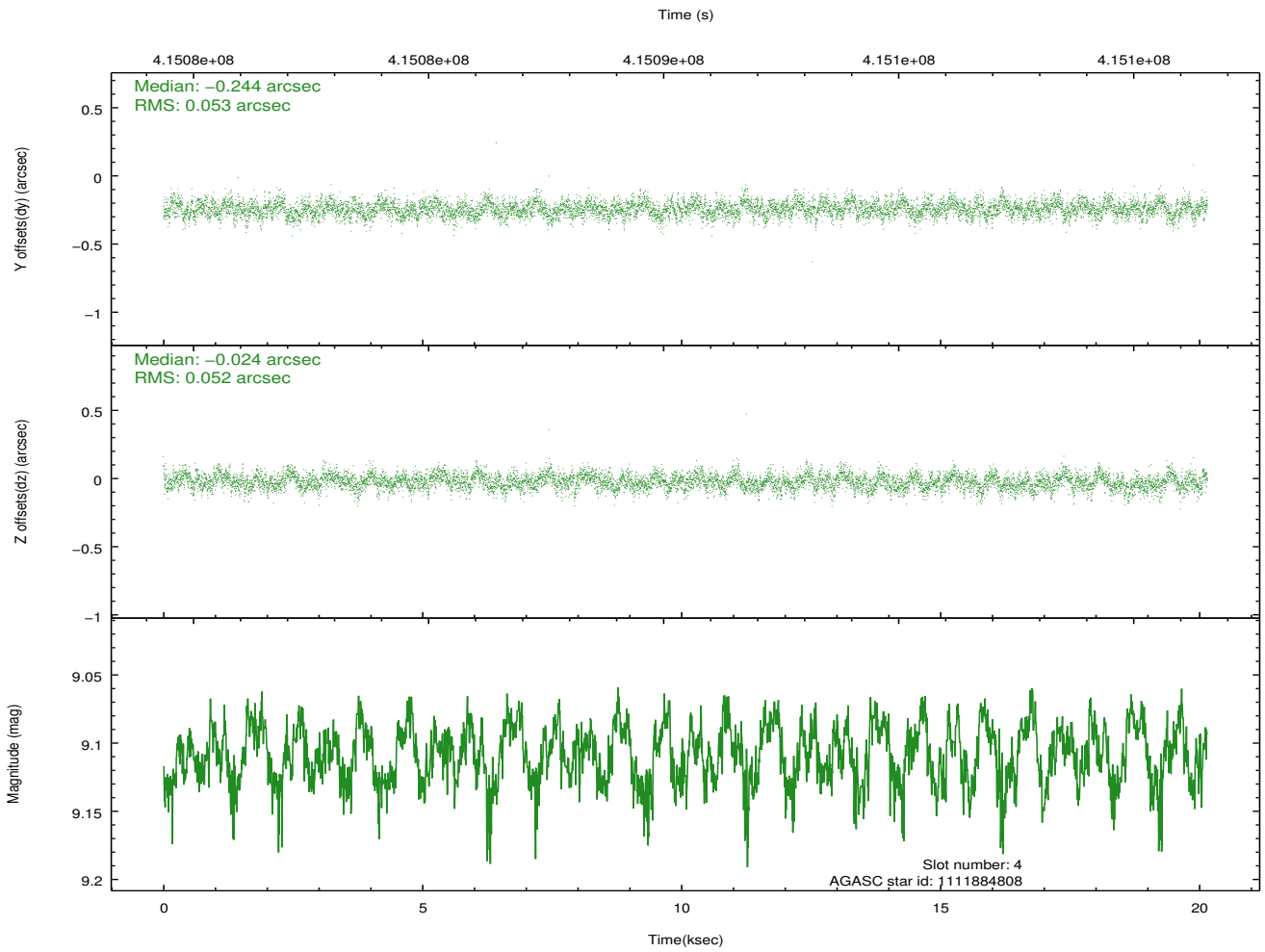
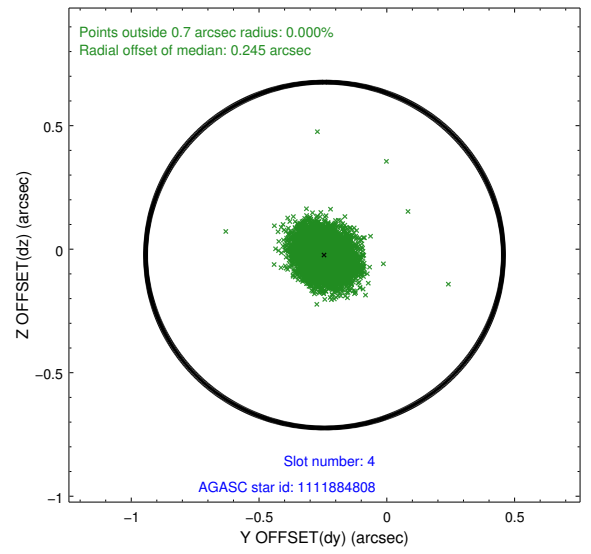
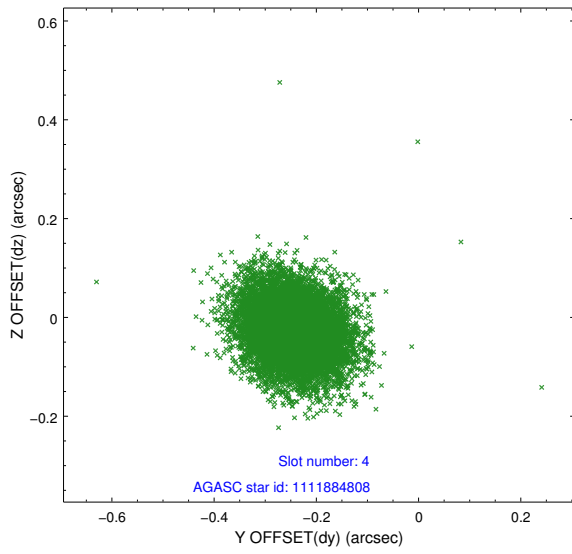
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.05	4916	0.119	-0.095	0.017	0.033	0.000000	0.000000	927.83	-999.52
1	FID	ACIS-I-5	7.03	4915	-0.215	0.114	0.012	0.019	0.000000	0.000000	-1820.53	898.02
2	FID	ACIS-I-6	7.06	4915	0.004	0.047	0.017	0.032	0.000000	0.000000	393.04	1542.70
3	GUIDE	1055786224	9.17	9825	0.087	0.160	0.090	0.141	33.857438	-52.268103	-1339.57	-1562.93
4	GUIDE	1111884808	9.11	9824	-0.244	-0.024	0.078	0.129	35.256175	-52.692496	-1137.69	1856.89
5	GUIDE	1111885992	8.51	9832	0.049	-0.142	0.062	0.102	34.025683	-53.391750	2221.15	391.34
6	GUIDE	1111890632	7.93	9830	0.079	-0.119	0.075	0.120	35.224545	-52.963787	-208.19	2167.18
7	GUIDE	1111893736	7.34	9832	0.023	0.127	0.068	0.111	34.011769	-52.888712	573.06	-359.42

2.4 Star Slots

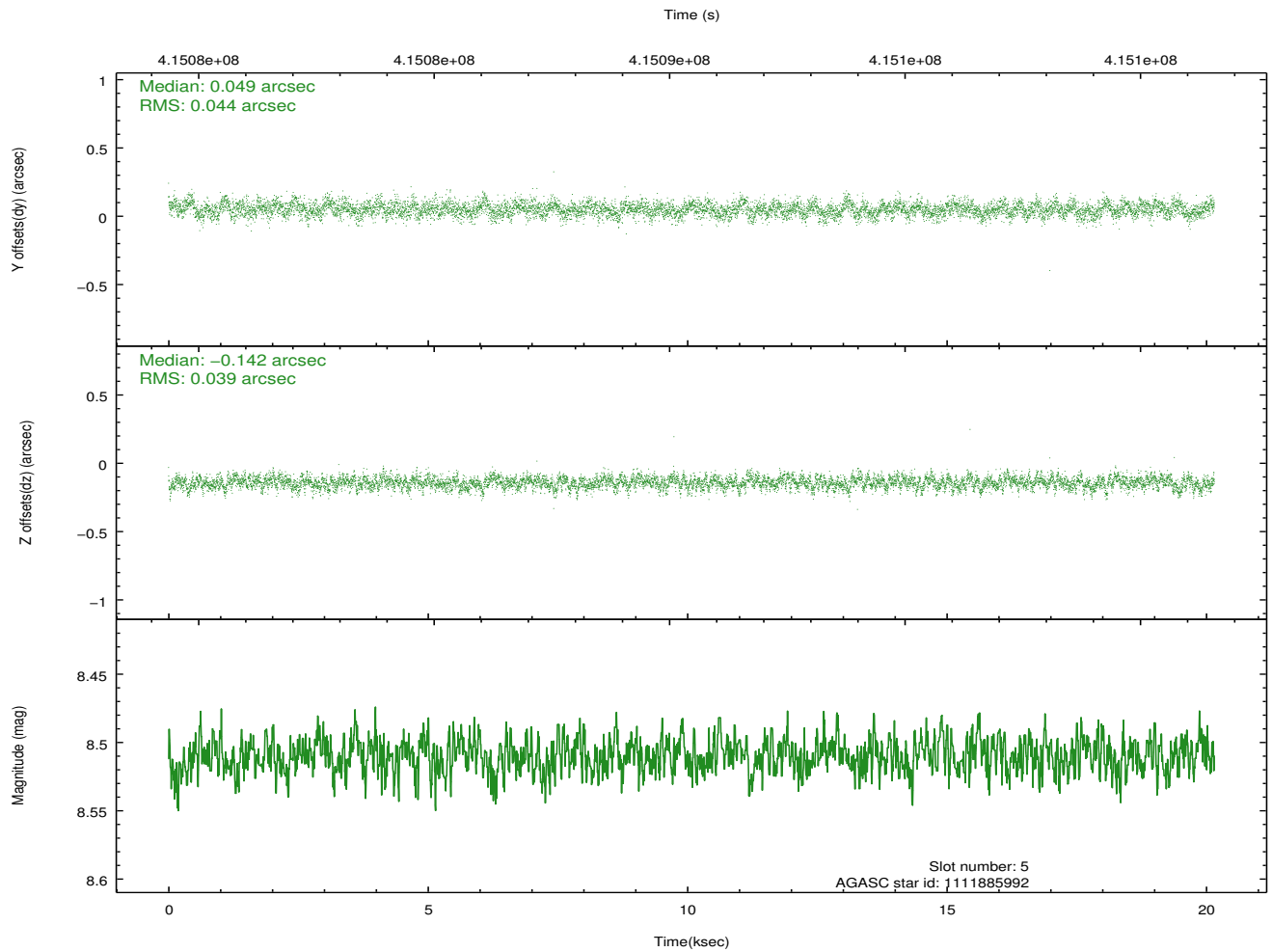
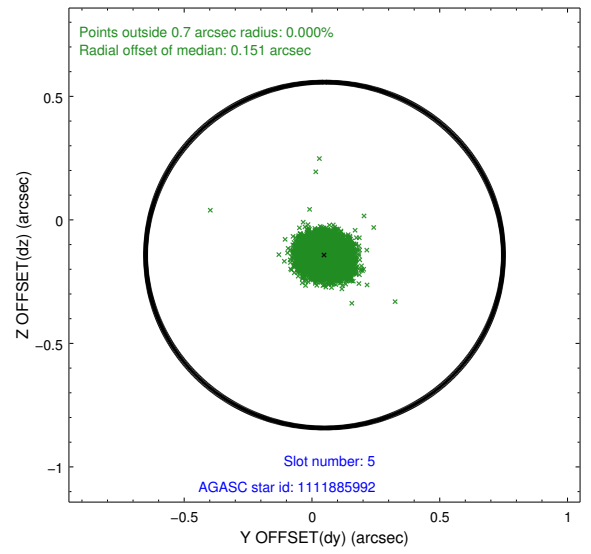
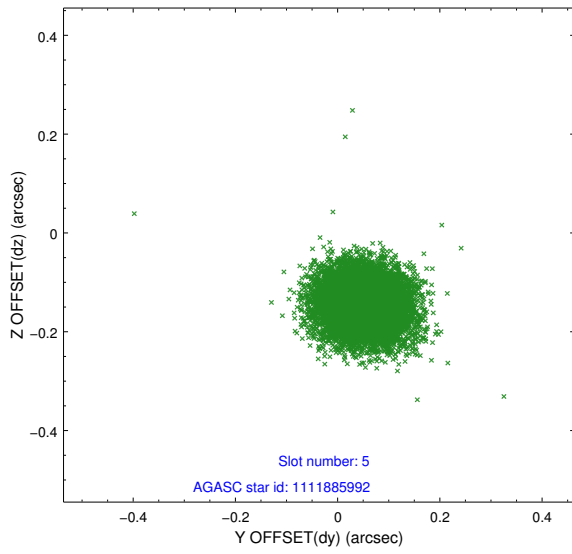
2.4.1 Slot 3



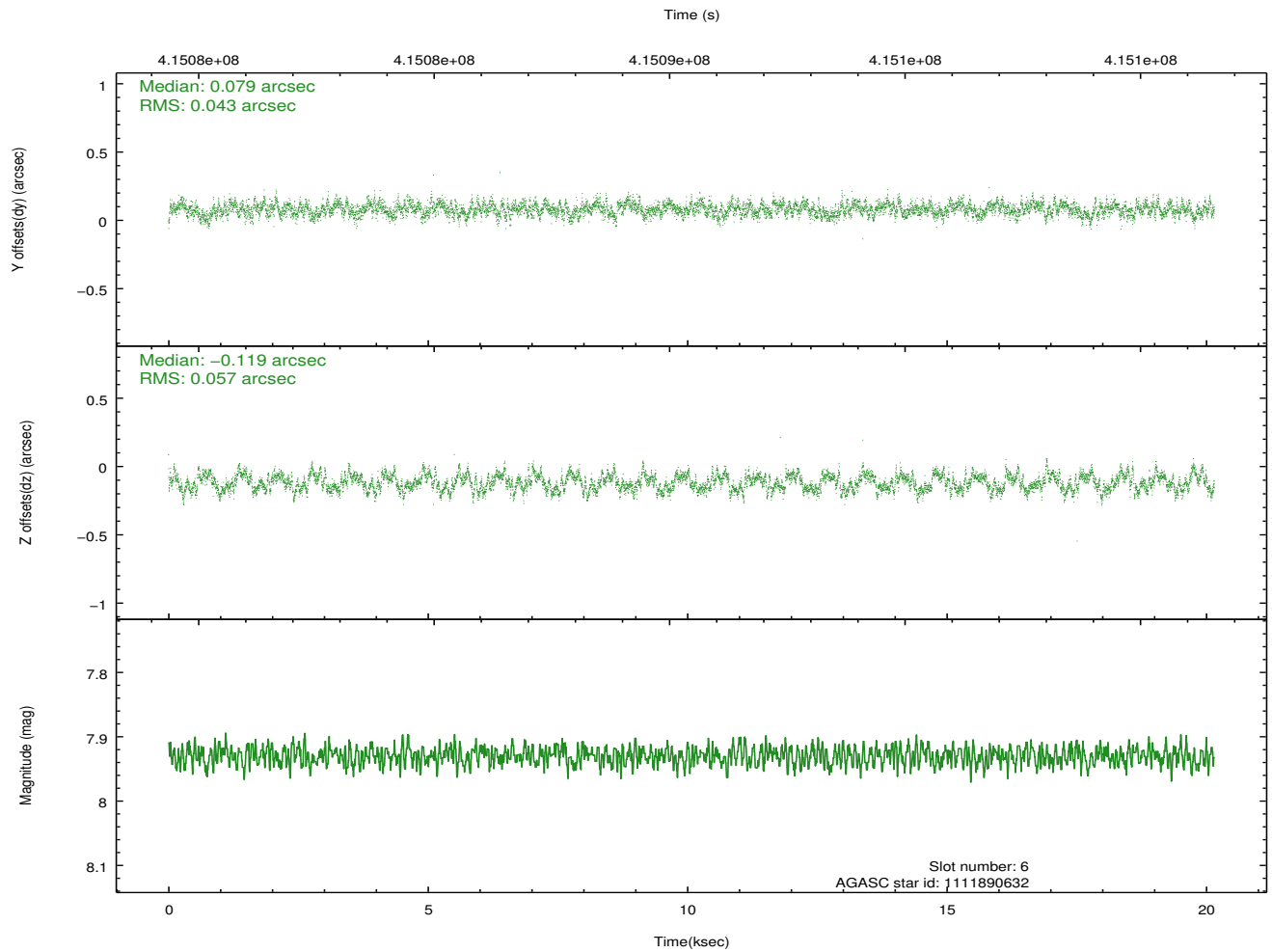
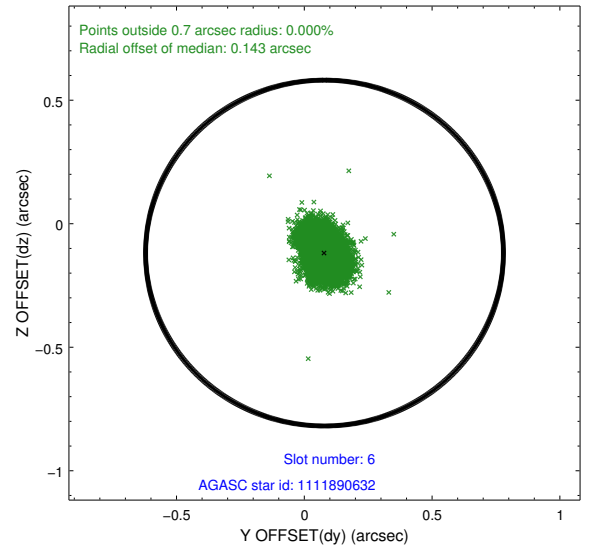
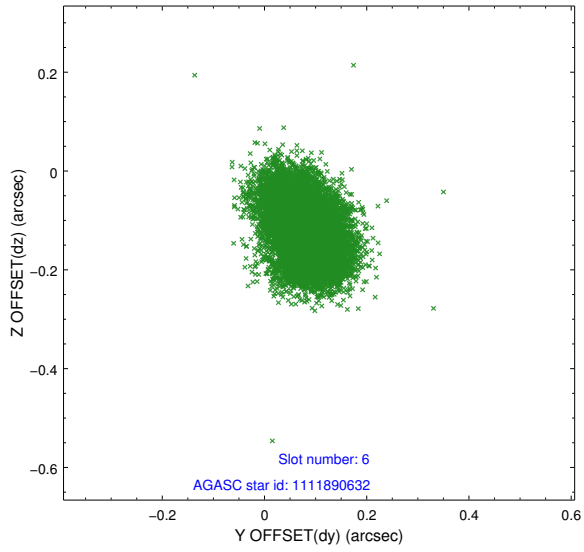
2.4.2 Slot 4



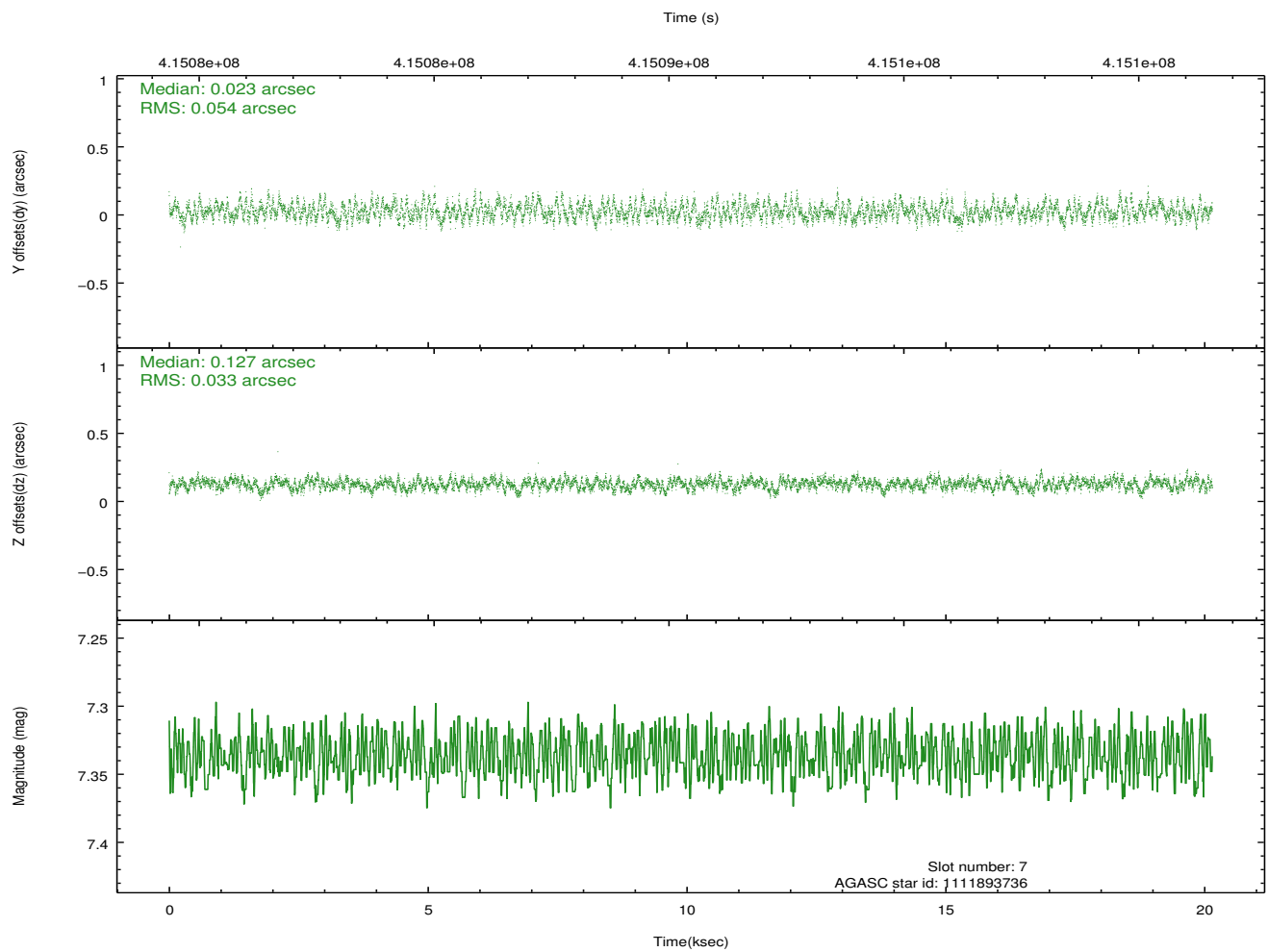
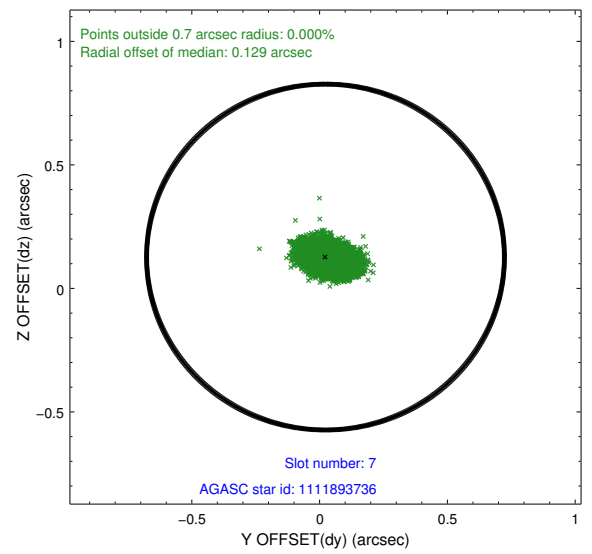
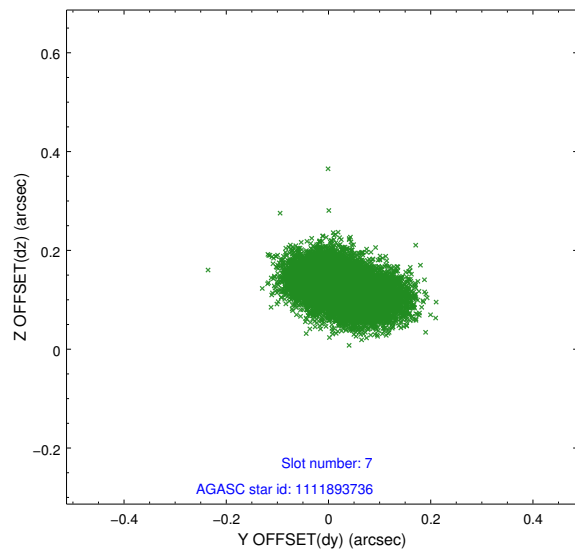
2.4.3 Slot 5



2.4.4 Slot 6

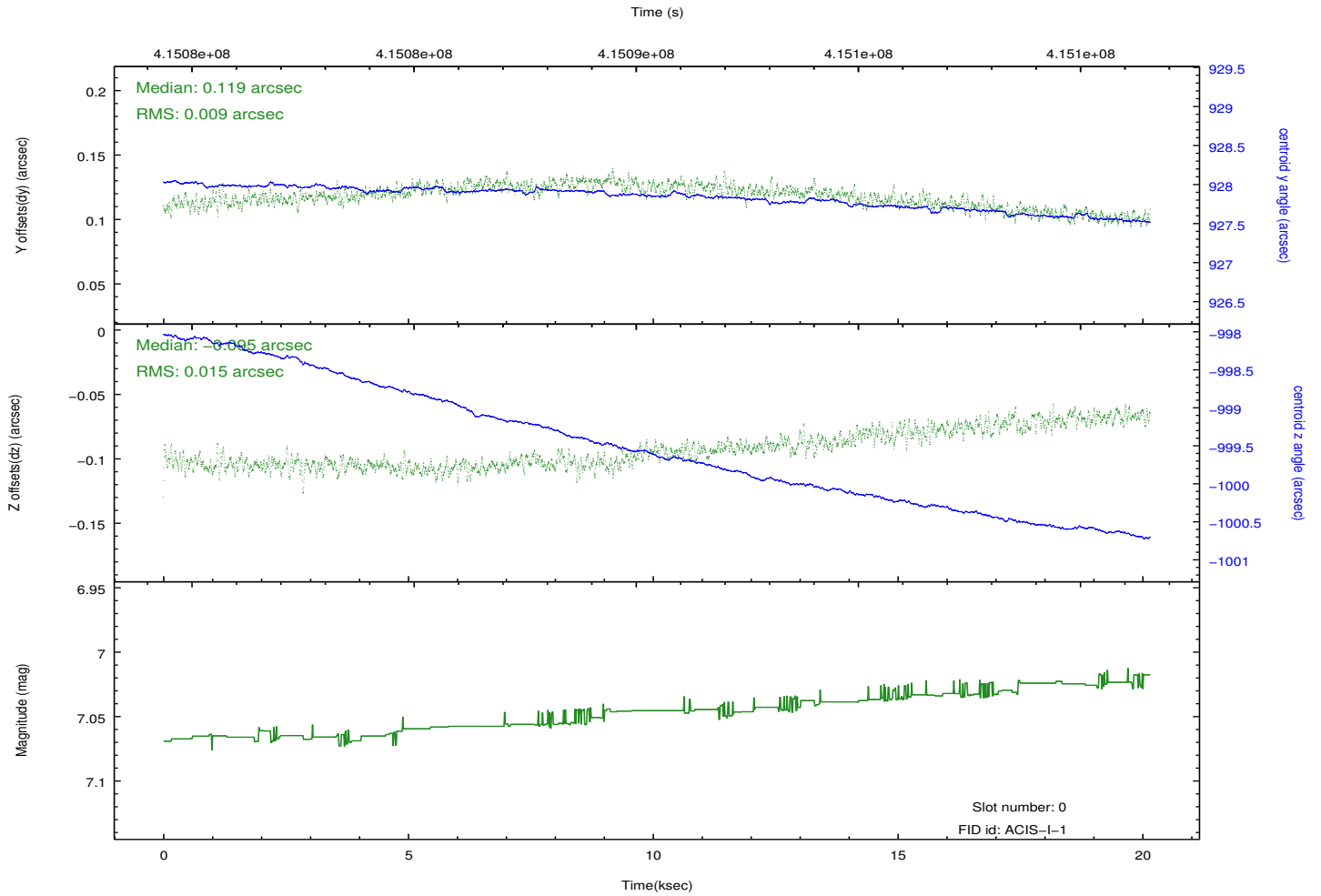
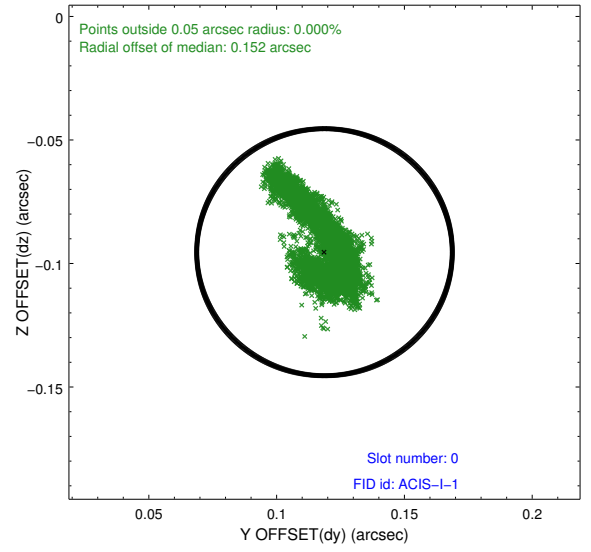
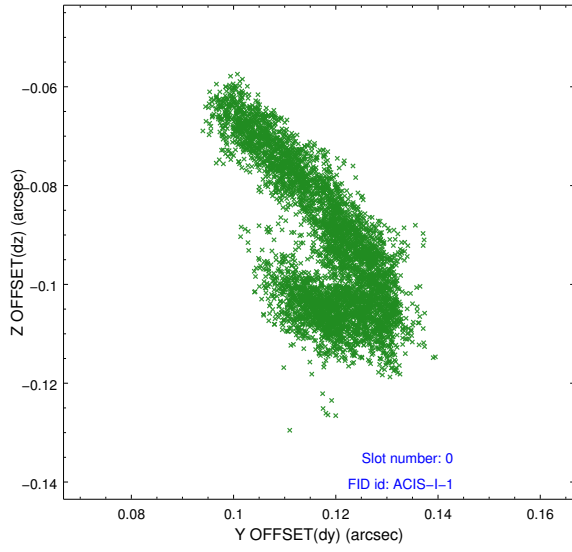


2.4.5 Slot 7

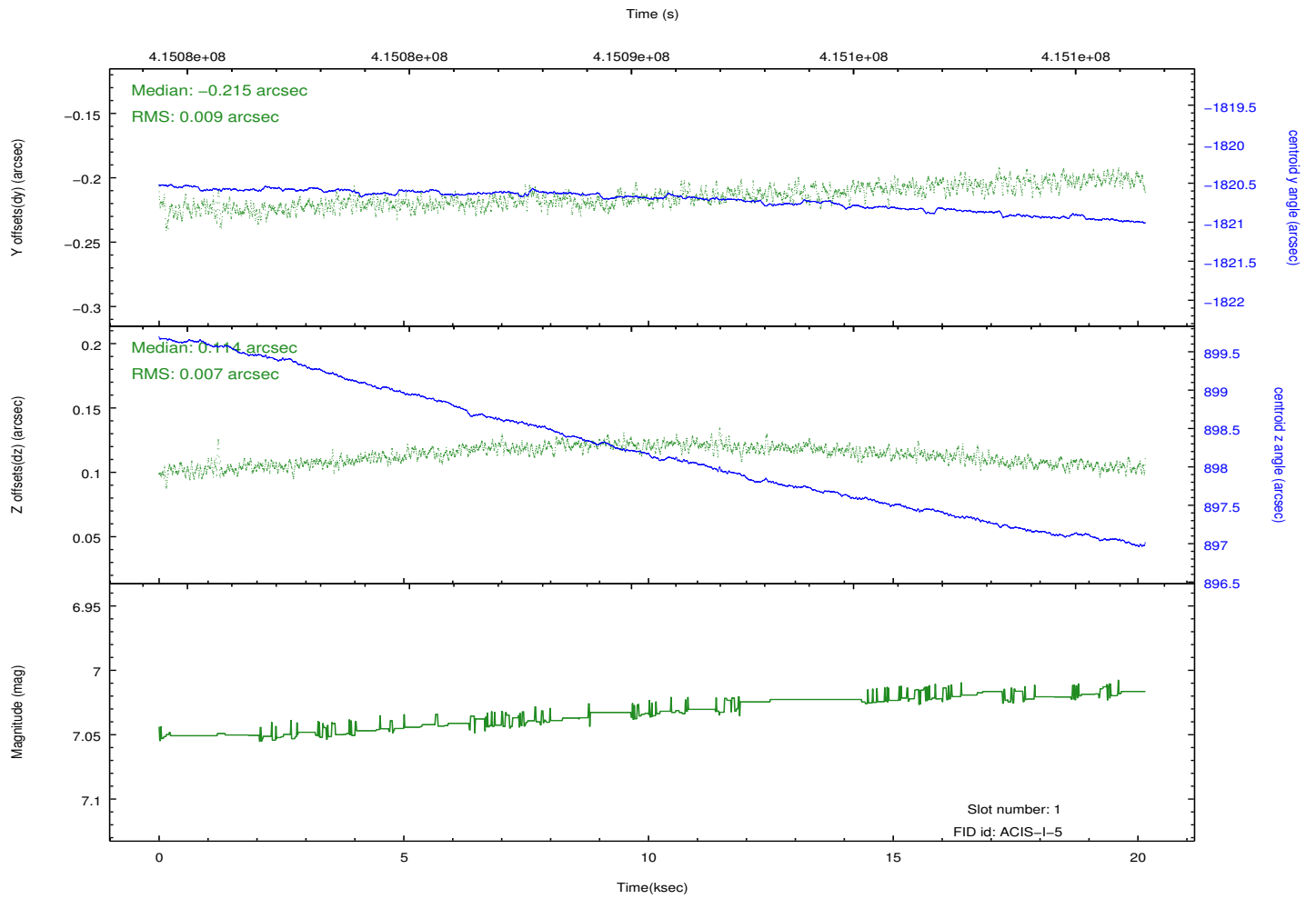
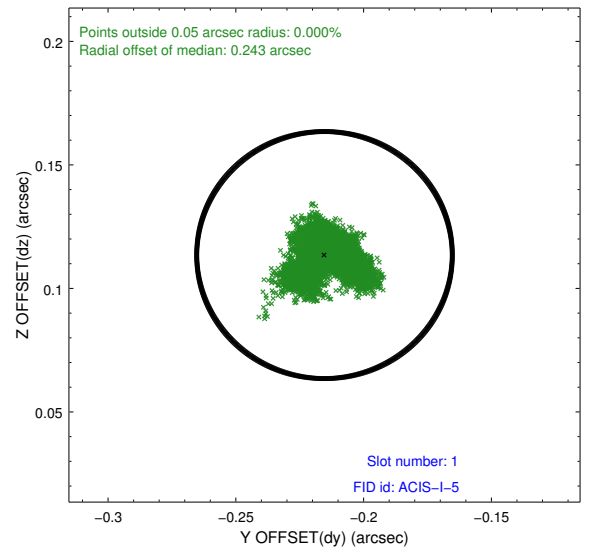
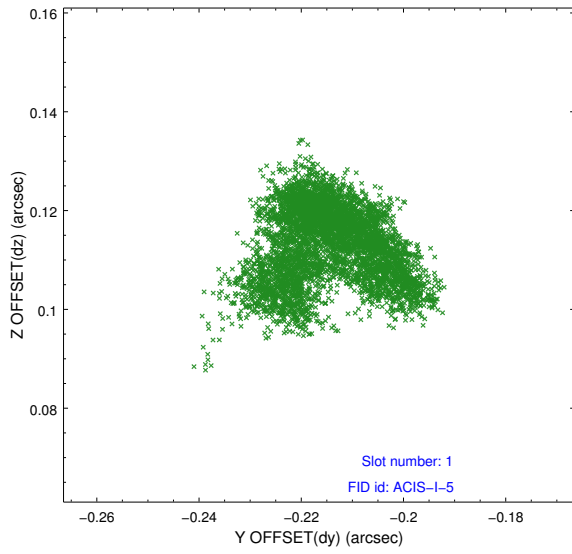


2.5 FID Slots

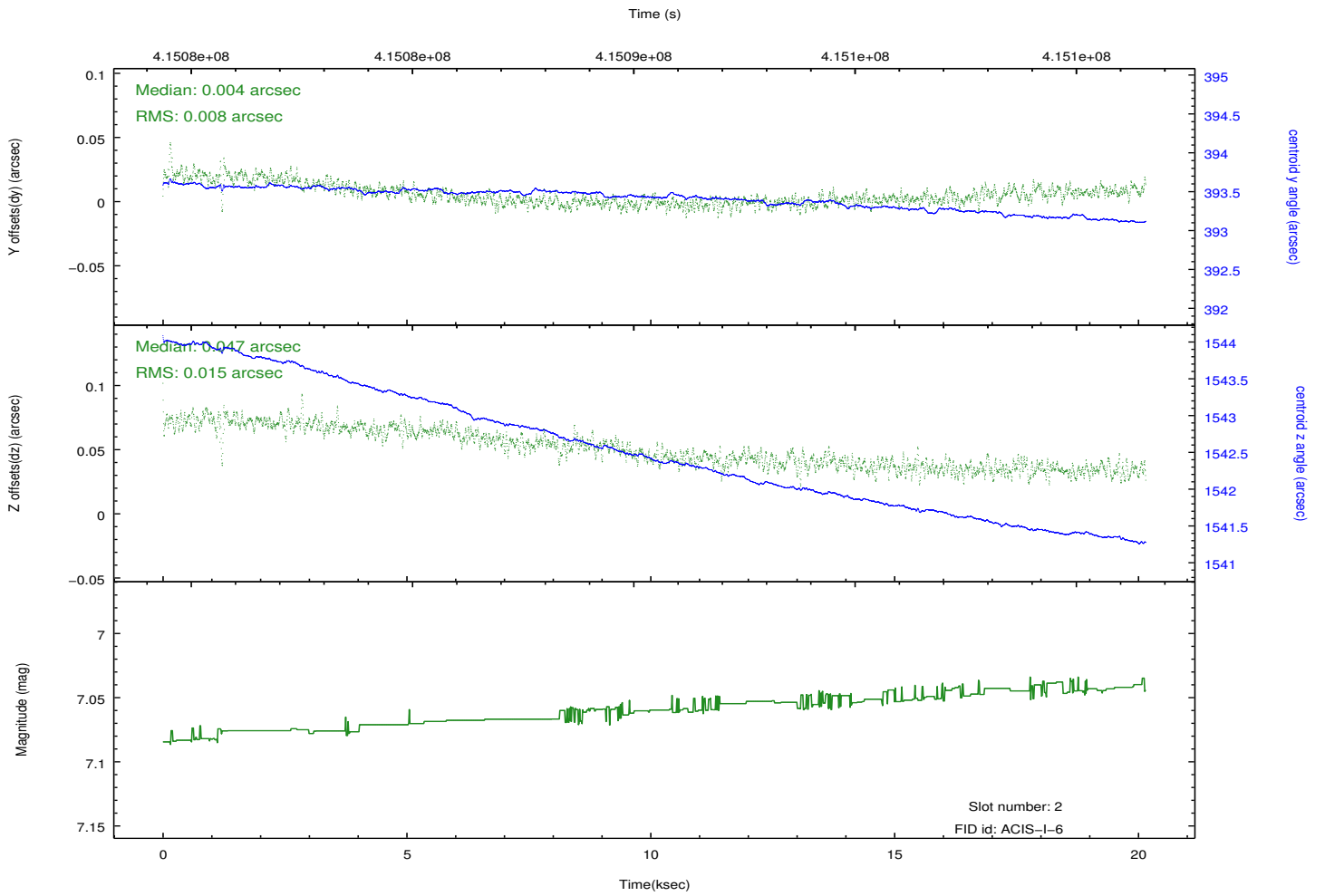
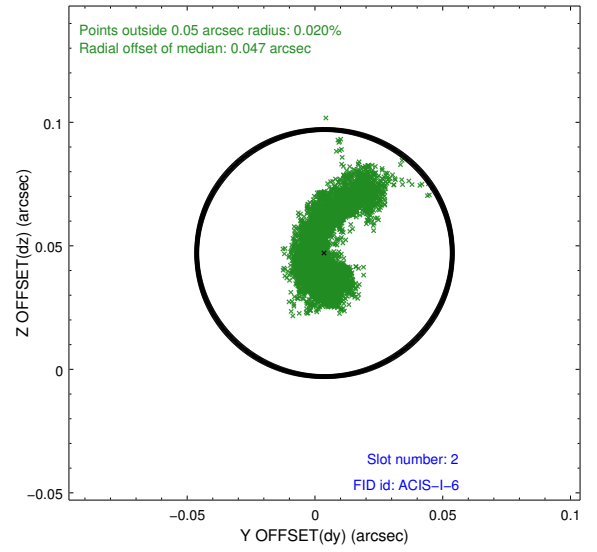
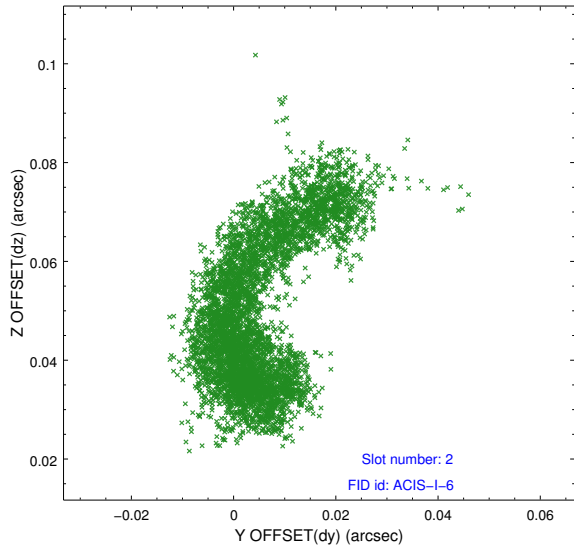
2.5.1 Slot 0



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)	2012.02.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.050343553662

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.