

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12717 - L2 Version 2
Chandra X-Ray Center

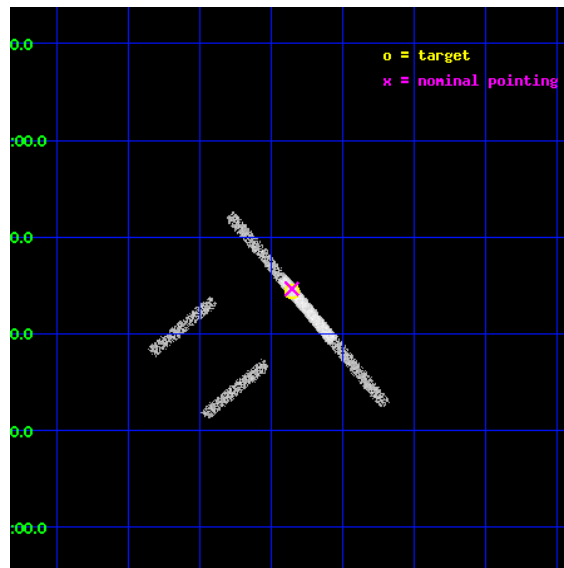
L2 Processing Date : Feb 2 2012

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1 Front

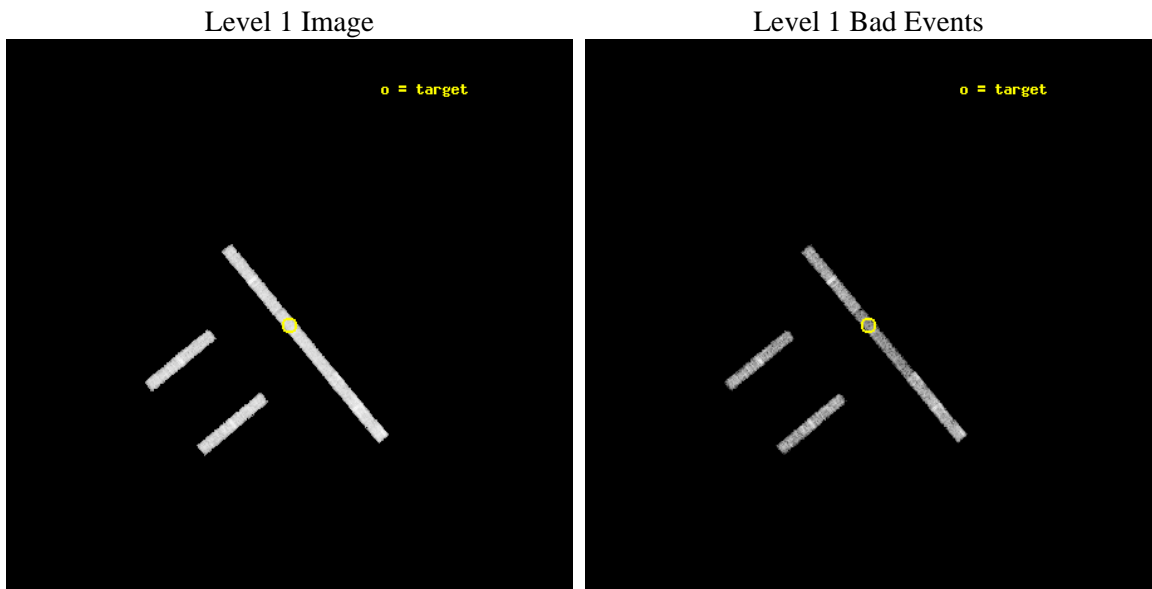
seq_num	702353	Sequence number
obs_id	12717	Observation id
title	First X-ray observations of Low-Power Compact Steep Spectrum Sources	
observer	Dr Magdalena Kunert-Bajraszewska	Principal investigator
object	0907+049	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	137.462917	Observer's specified target RA [deg]
dec_targ	4.739472	Observer's specified target Dec [deg]
ra_nom	137.4635575775	Nominal RA [deg]
dec_nom	4.7443102266121	Nominal Dec [deg]
roll_nom	50.287007354928	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10063.899828553	Sum of GTIs [s]
livetime	9506.5446939264	Livetime [s]
ontime2	10063.899828553	Sum of GTIs [s]
ontime3	10063.899828553	Sum of GTIs [s]
ontime6	10063.899828553	Sum of GTIs [s]
ontime7	10063.899828553	Sum of GTIs [s]
ontime8	10063.899828553	Sum of GTIs [s]
l2events	9386	Number of level 2 events



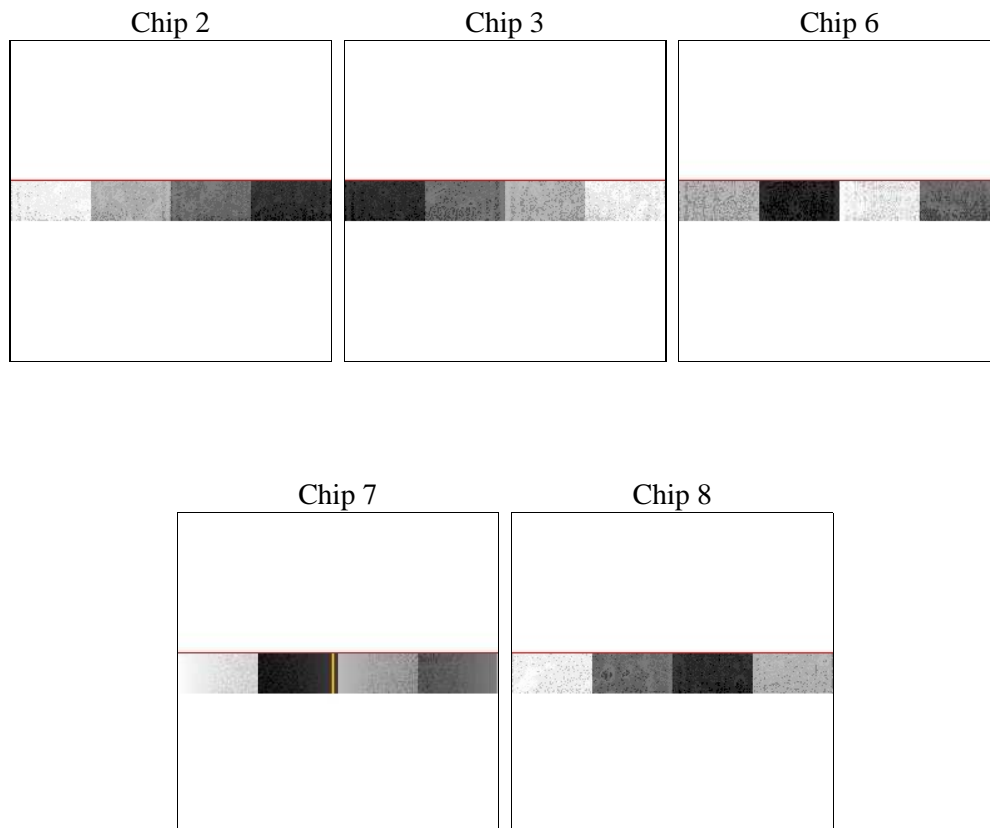
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	10063.899828553	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	10063.899828553	Sum of GTIs [s]
date	2012-02-02T03:53:17	Date and time of file creation	ontime3	10063.899828553	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10063.899828553	Sum of GTIs [s]
			ontime7	10063.899828553	Sum of GTIs [s]
			ontime8	10063.899828553	Sum of GTIs [s]
			l1events	62946	Number of level 1 events

2.1.4 Events

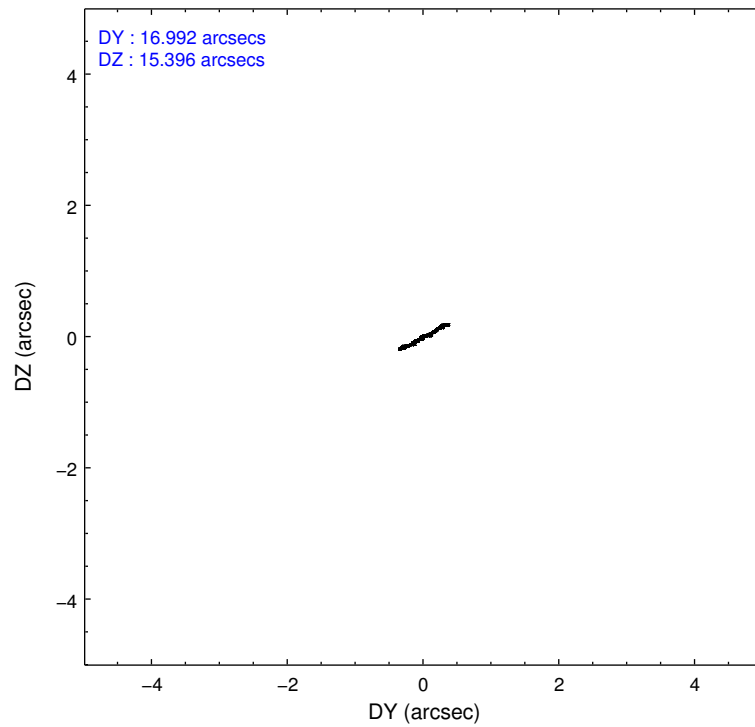
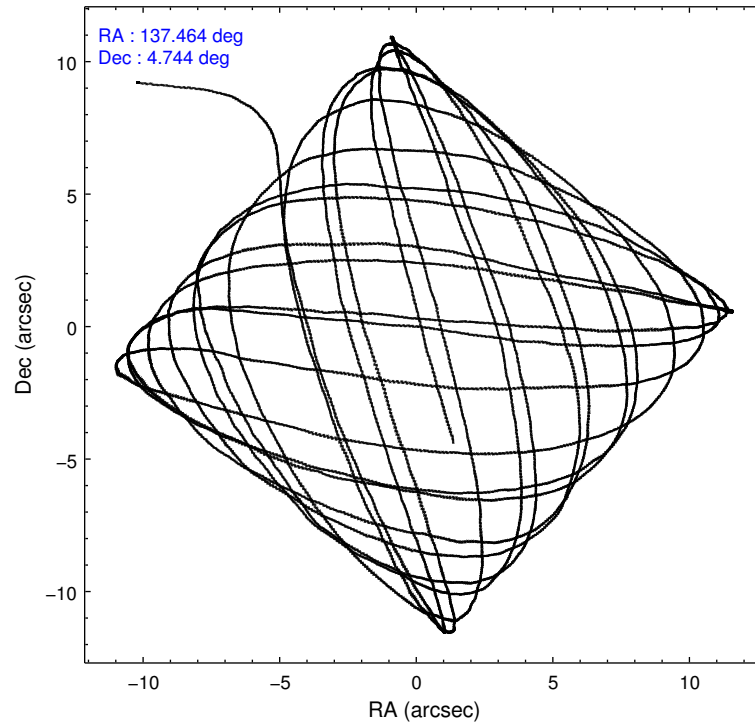
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	11067	11461	11796	12003	16619
rejected events	9861	10292	10425	6387	13081
rejected %	89%	89%	88%	53%	78%

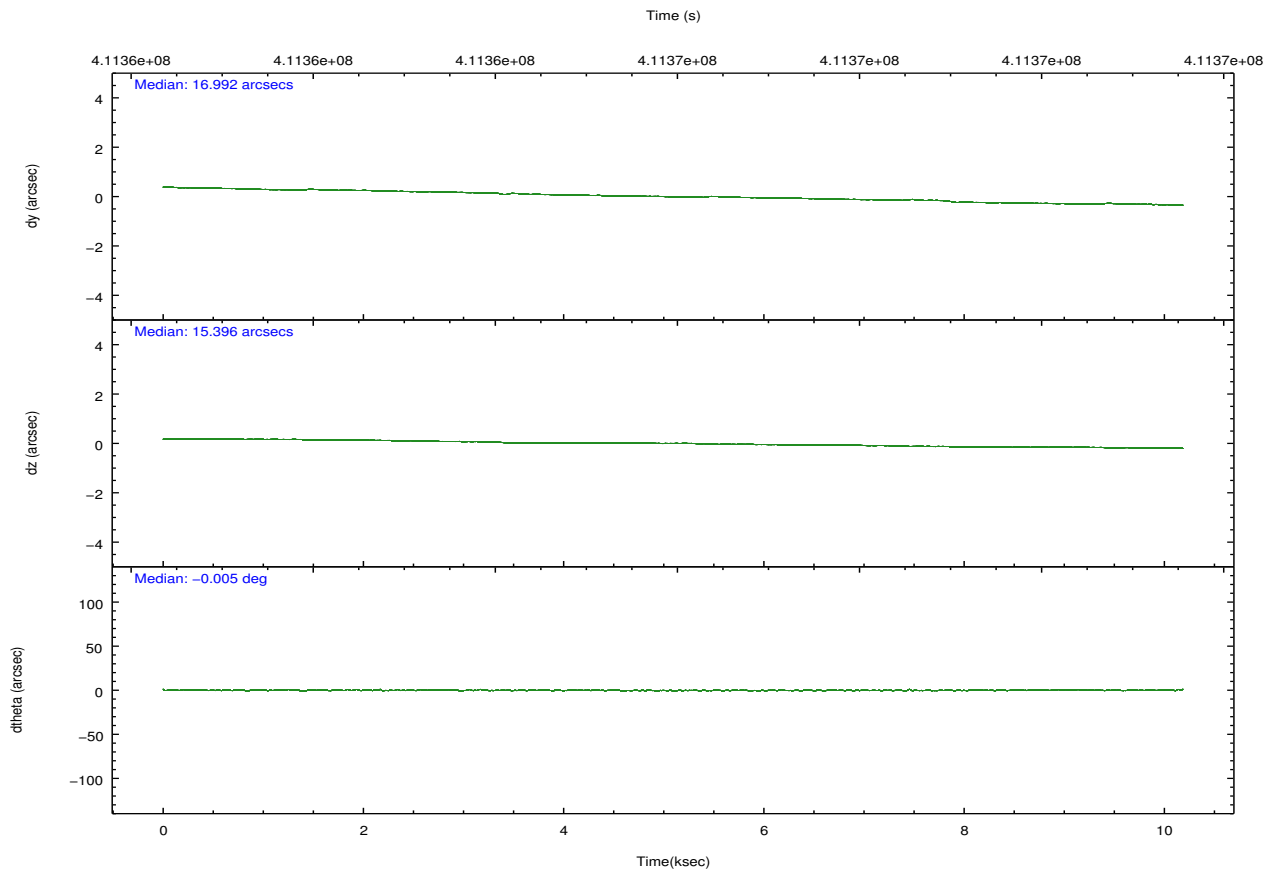
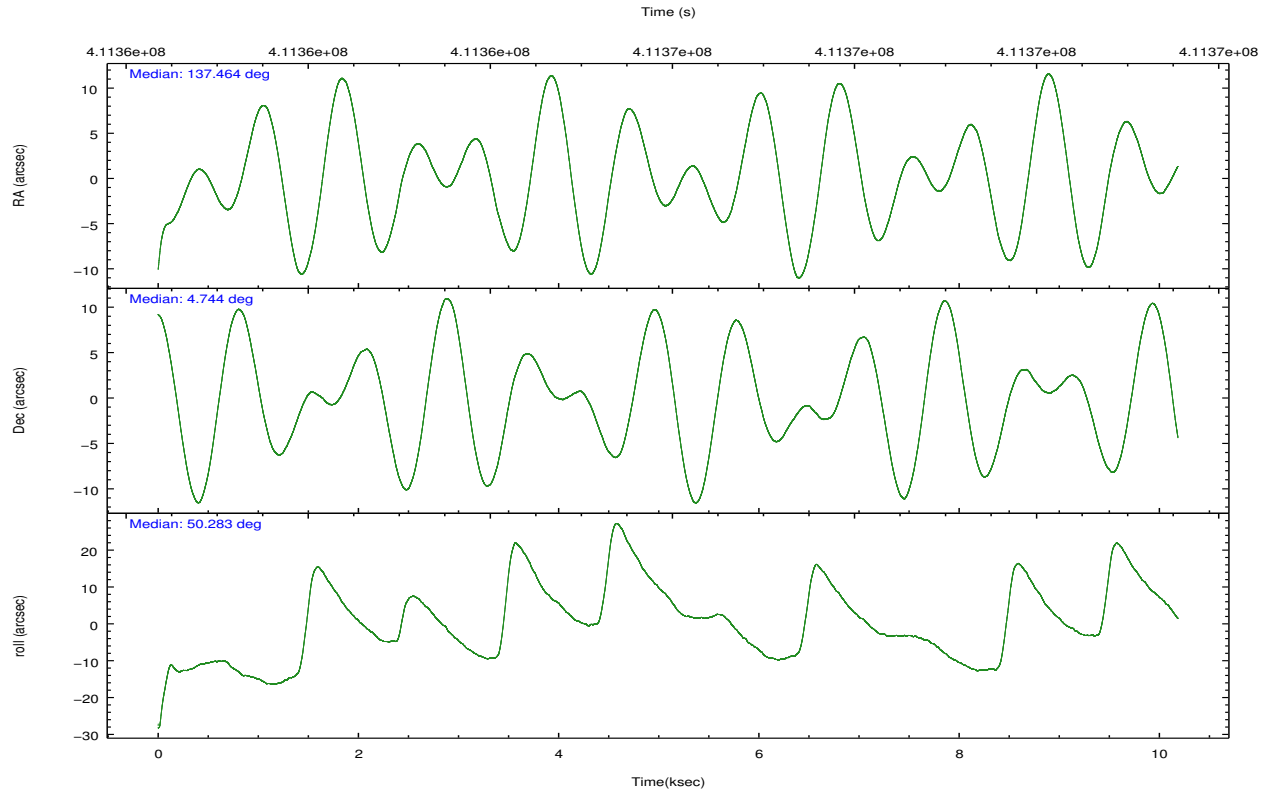
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	351	331	386	607	825
	3%	2%	3%	5%	4%
grade 1 events	2	6	5	17	4
	0%	0%	0%	0%	0%
grade 2 events	230	223	251	1135	833
	2%	1%	2%	9%	5%
grade 3 events	209	205	249	650	340
	1%	1%	2%	5%	2%
grade 4 events	227	209	216	606	345
	2%	1%	1%	5%	2%
grade 5 events	335	429	452	1282	681
	3%	3%	3%	10%	4%
grade 6 events	191	201	269	2619	1195
	1%	1%	2%	21%	7%
grade 7 events	9522	9857	9968	5087	12396
	86%	86%	84%	42%	74%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	137.459340	137.4635575774983	CCD I2 on	O4	Y
[deg] Pointing Dec	4.717264	4.744310226612074	CCD I3 on	O2	Y
[deg] Pointing Roll	50.130735	50.28700735492832	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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	O3	Y
[s] Observation start time (MET)	411361049.184000	411360270.44363	CCD S5 on	N	N
Observation start date	2011-01-14T02:56:23	2011-01-14T02:44:30	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	411371049.184000	411372076.39424	On-chip summing requested	N	N
Observation end date	2011-01-14T05:43:03	2011-01-14T06:01:16	Subarray requested	CUSTOM	1/8
Read mode	TIMED	TIMED	Subarray start row	449	449
			Subarray row count	128	128
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.7

2.3 Aspect



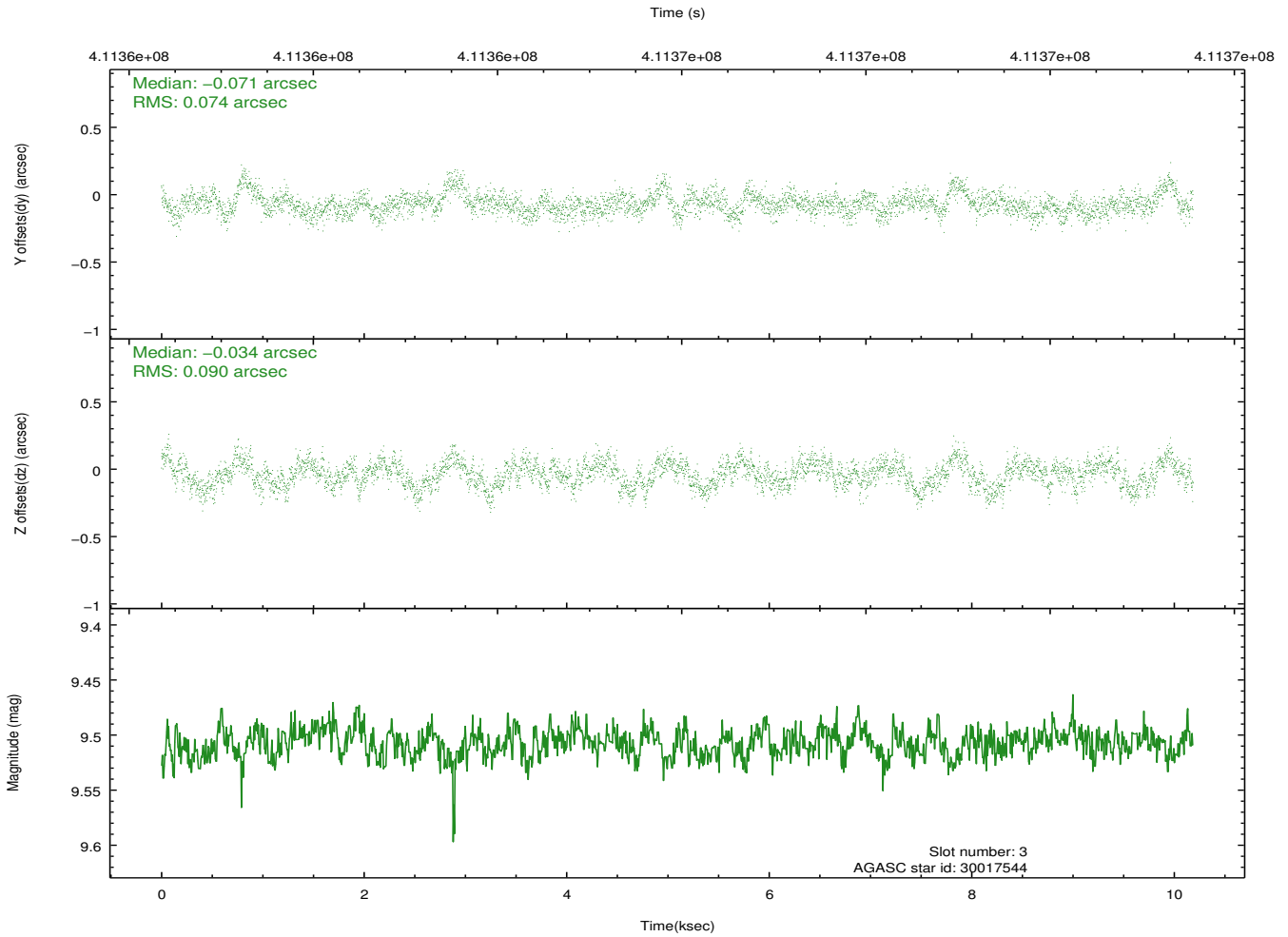
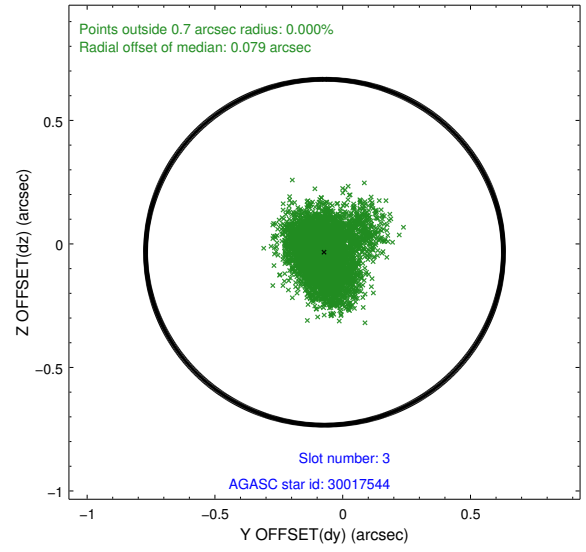
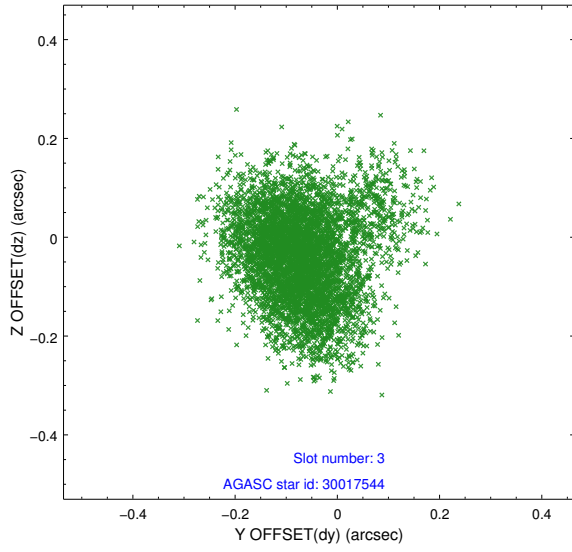


Slot Statistics

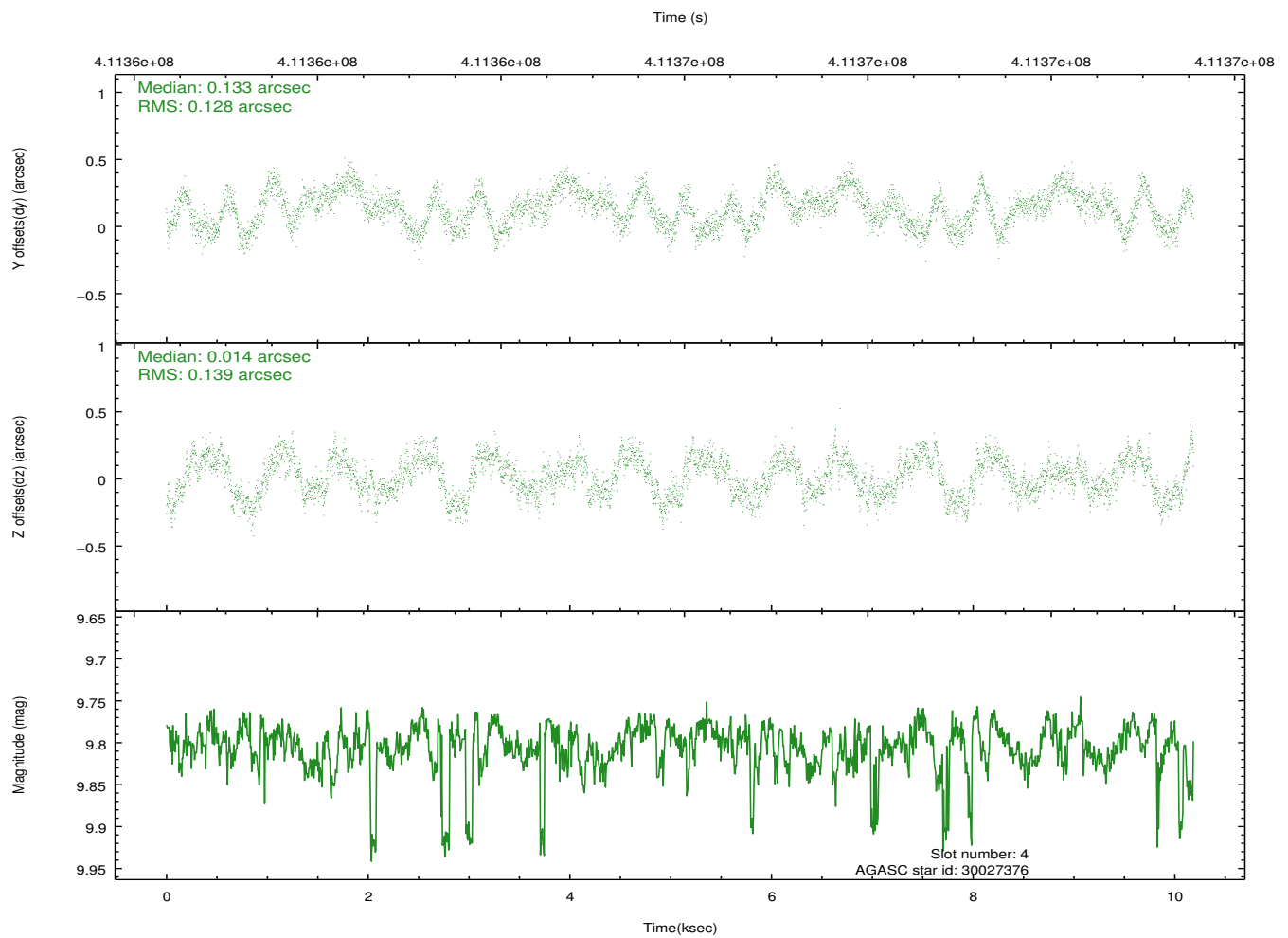
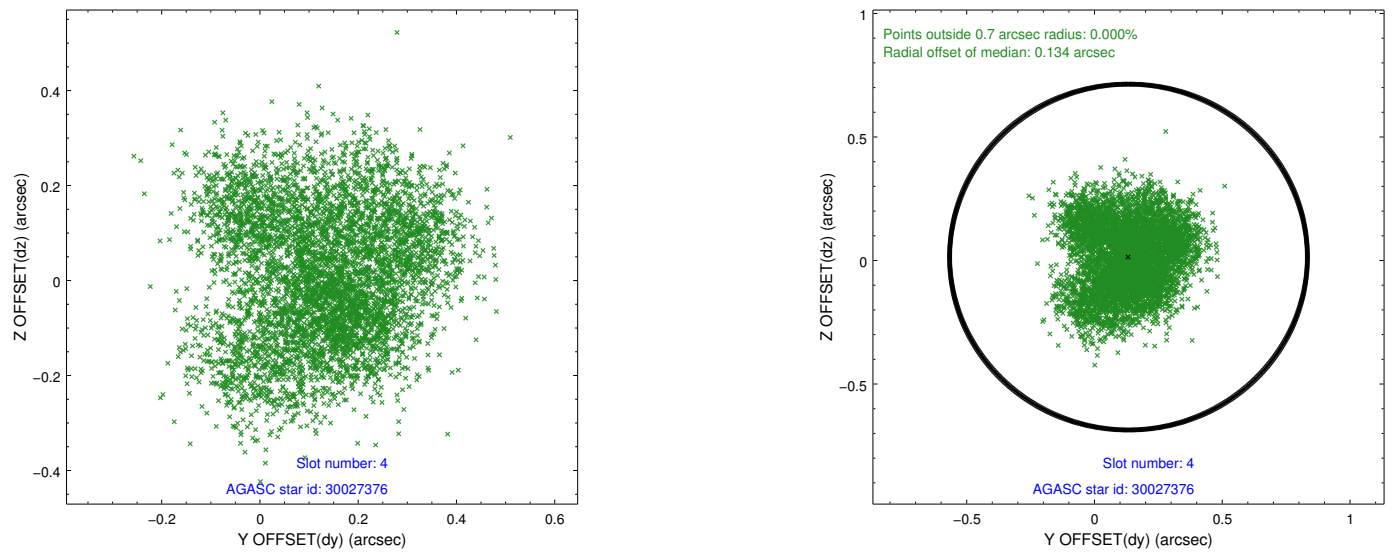
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.98	2484	-0.100	-0.027	0.008	0.014	0.000000	0.000000	-770.10	-1736.76
1	FID	ACIS-S-4	7.07	2484	0.209	0.056	0.009	0.015	0.000000	0.000000	2143.22	171.30
2	FID	ACIS-S-5	7.10	2485	-0.139	-0.020	0.010	0.017	0.000000	0.000000	-1822.34	165.44
3	GUIDE	30017544	9.51	4966	-0.071	-0.034	0.124	0.204	137.036168	4.828280	-666.01	1421.45
4	GUIDE	30027376	9.80	4962	0.133	0.014	0.209	0.306	137.069145	4.794035	-684.82	1251.97
5	GUIDE	30033912	9.65	4951	0.063	-0.041	0.188	0.293	137.124336	4.844401	-418.84	1216.03
6	GUIDE	30151904	9.80	4828	0.102	0.193	0.204	0.298	137.671650	4.047979	-1360.51	-2129.43
7	GUIDE	30424560	8.20	4968	-0.235	-0.108	0.102	0.165	137.475525	5.203485	1379.61	1077.41

2.4 Star Slots

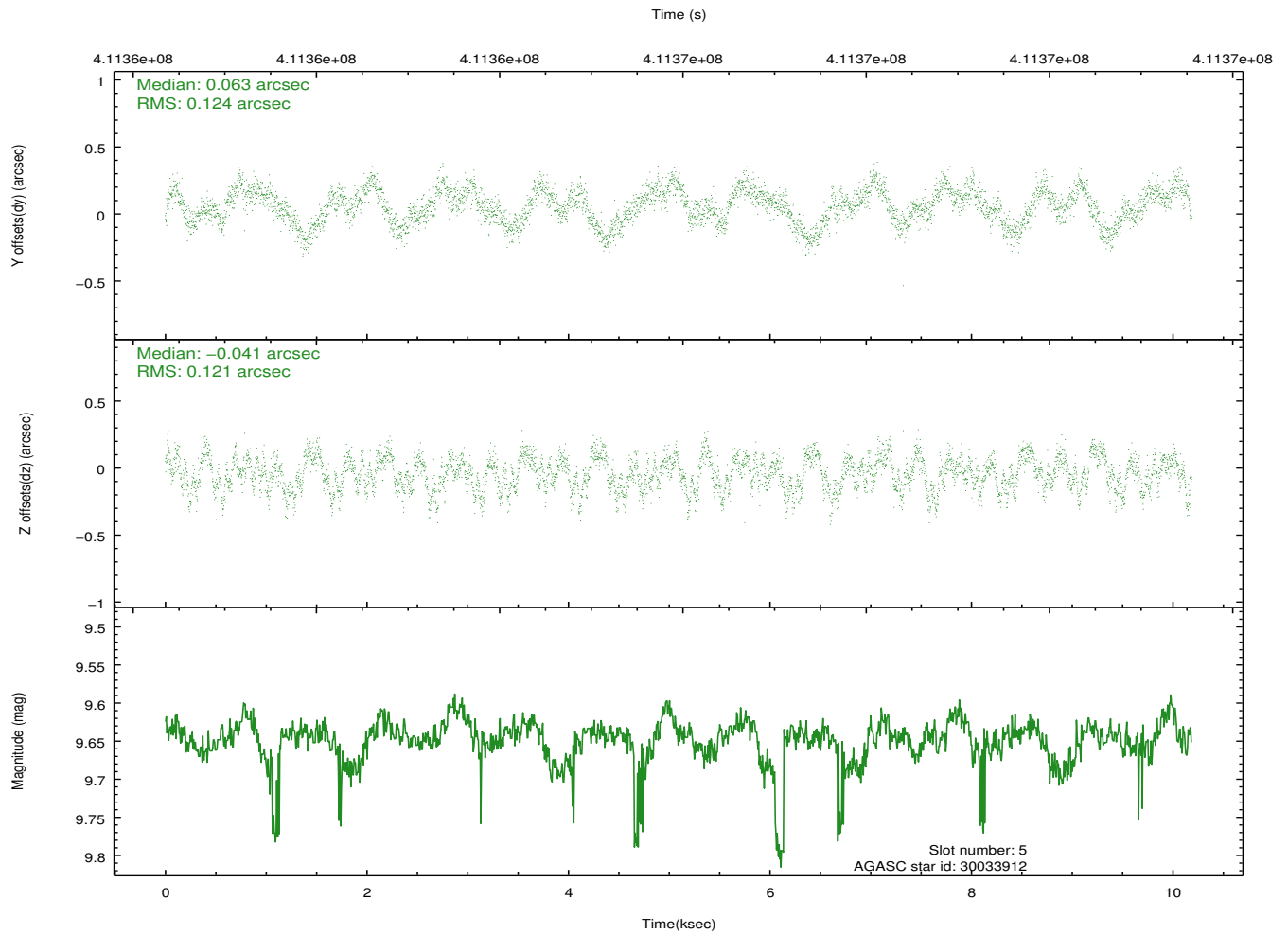
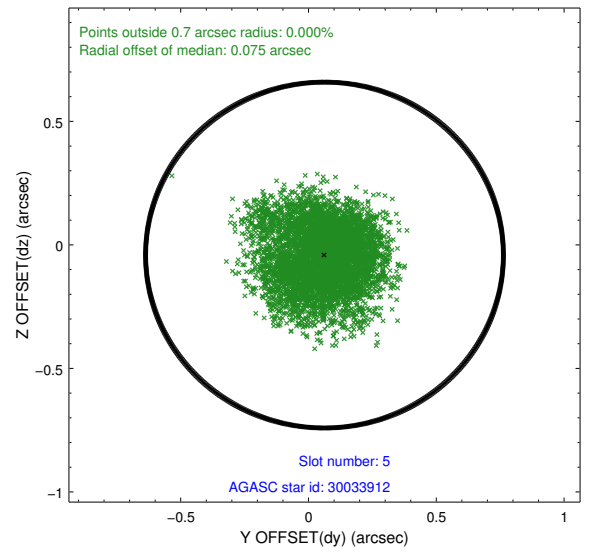
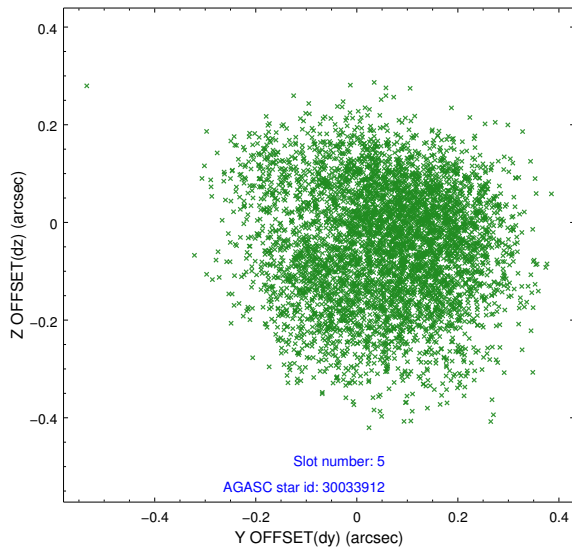
2.4.1 Slot 3



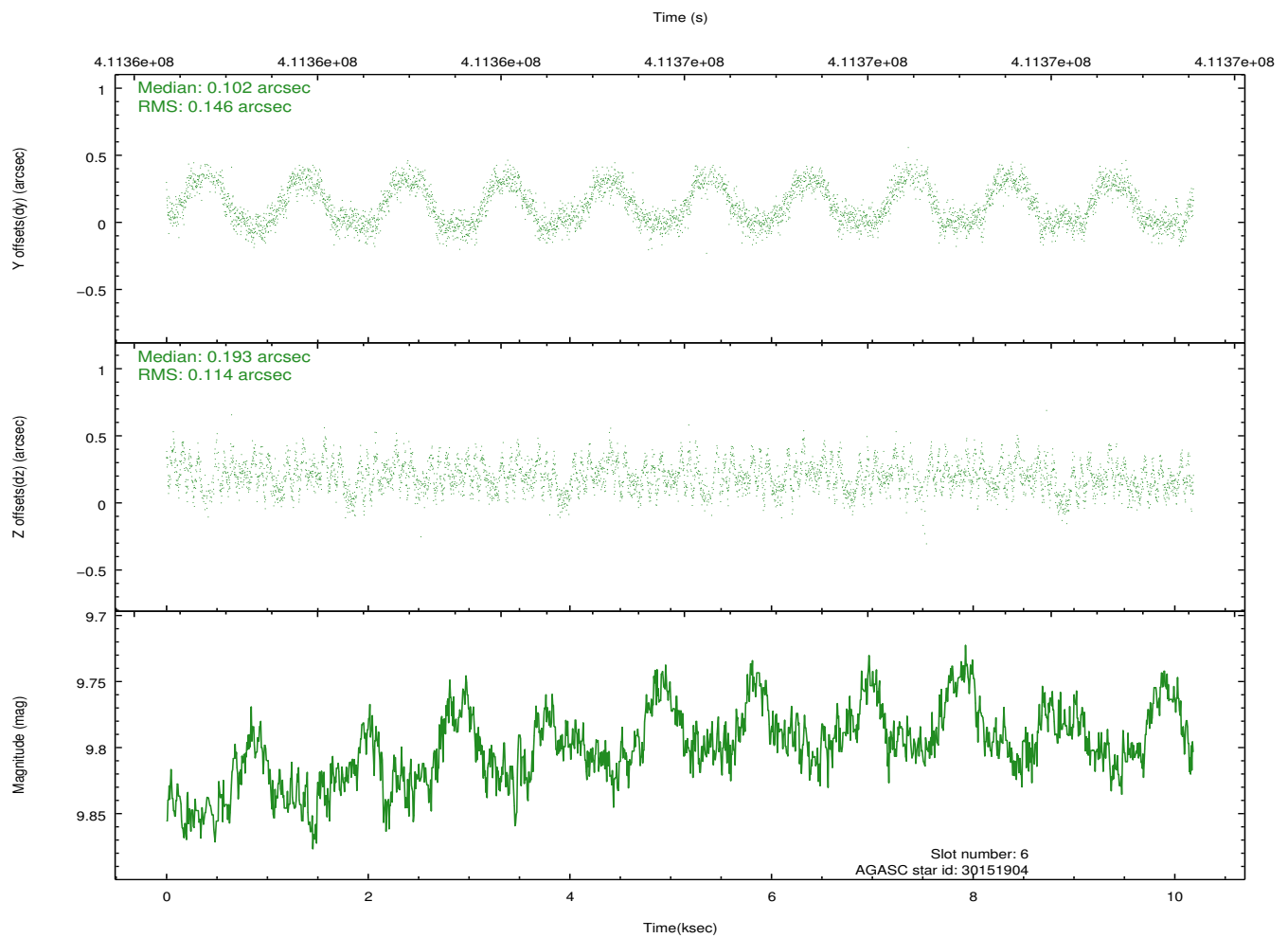
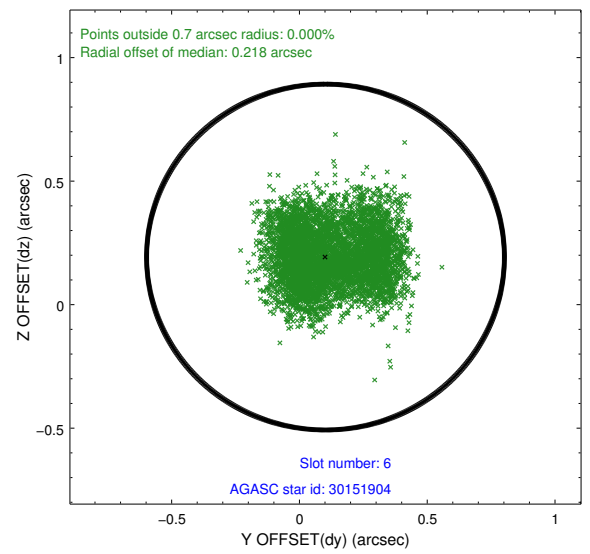
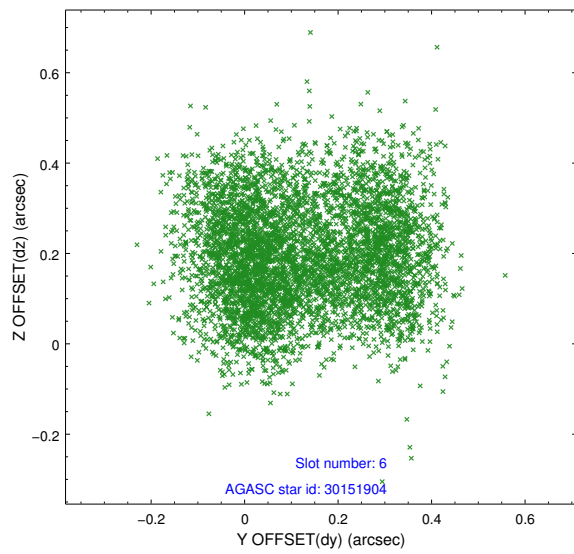
2.4.2 Slot 4



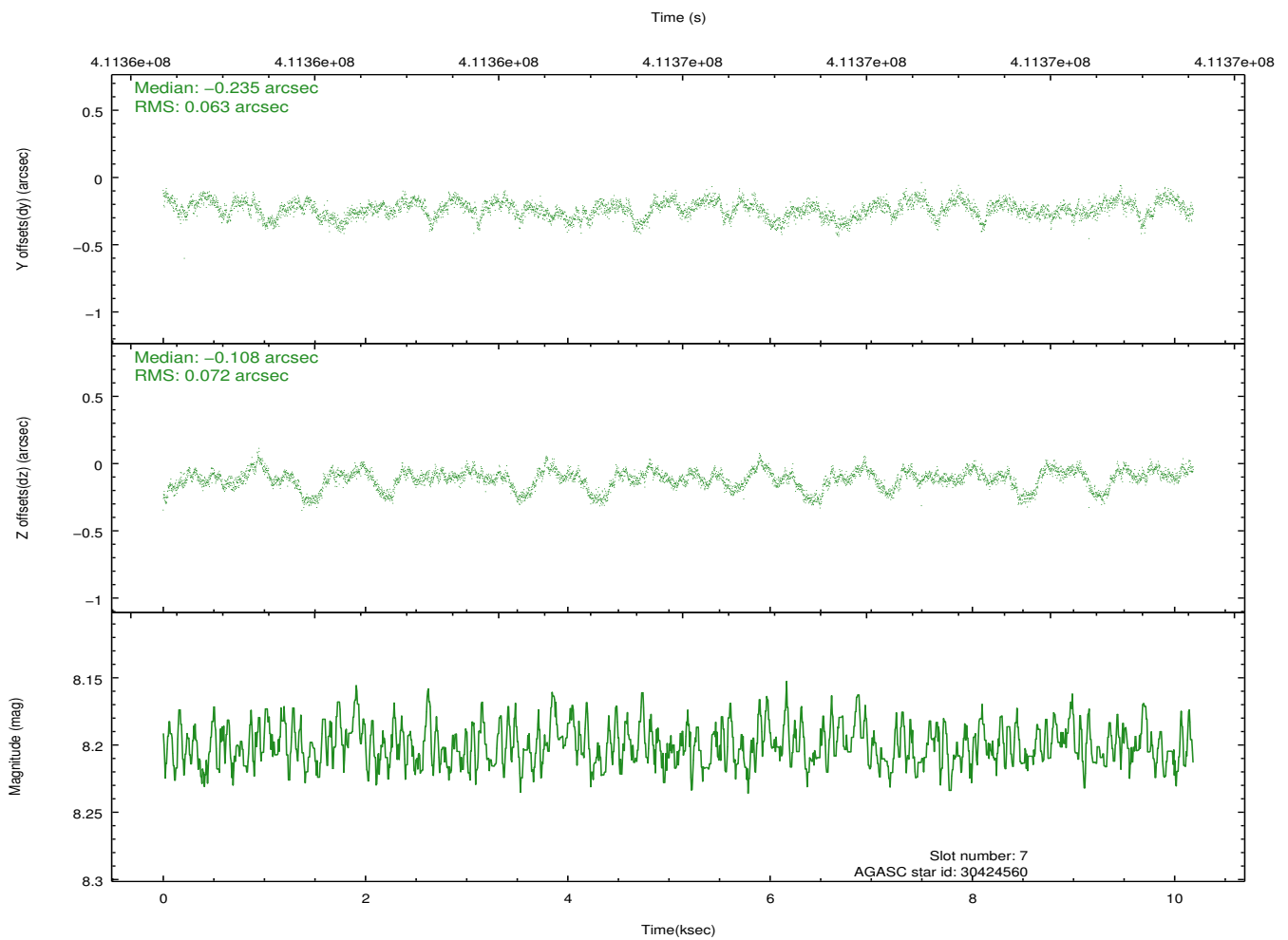
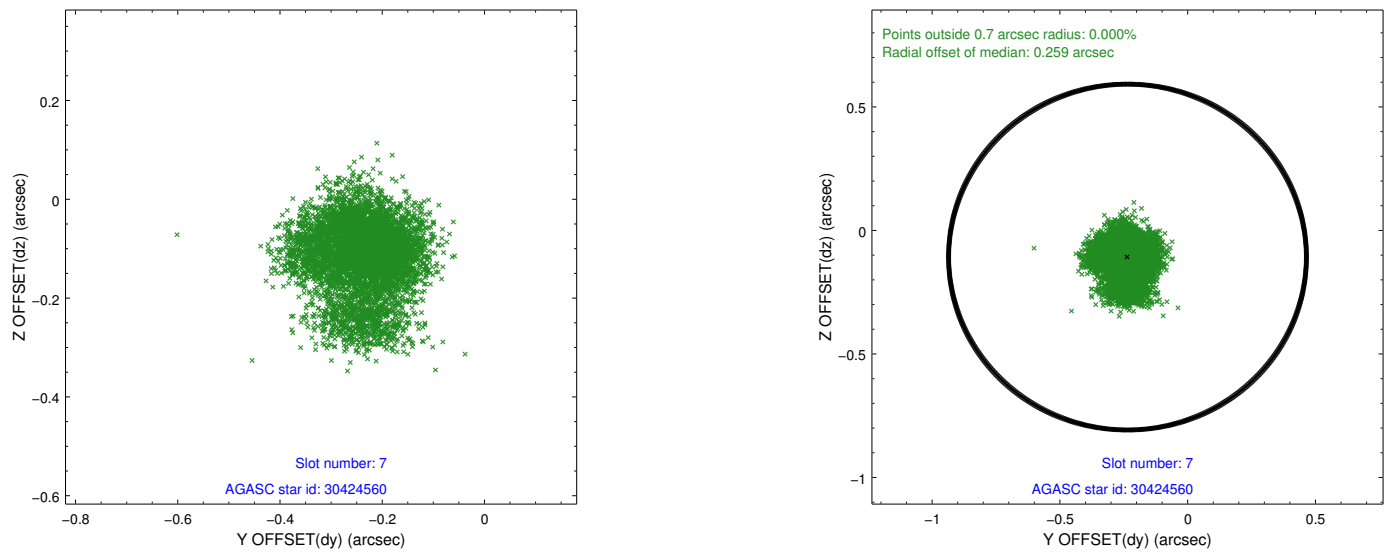
2.4.3 Slot 5



2.4.4 Slot 6

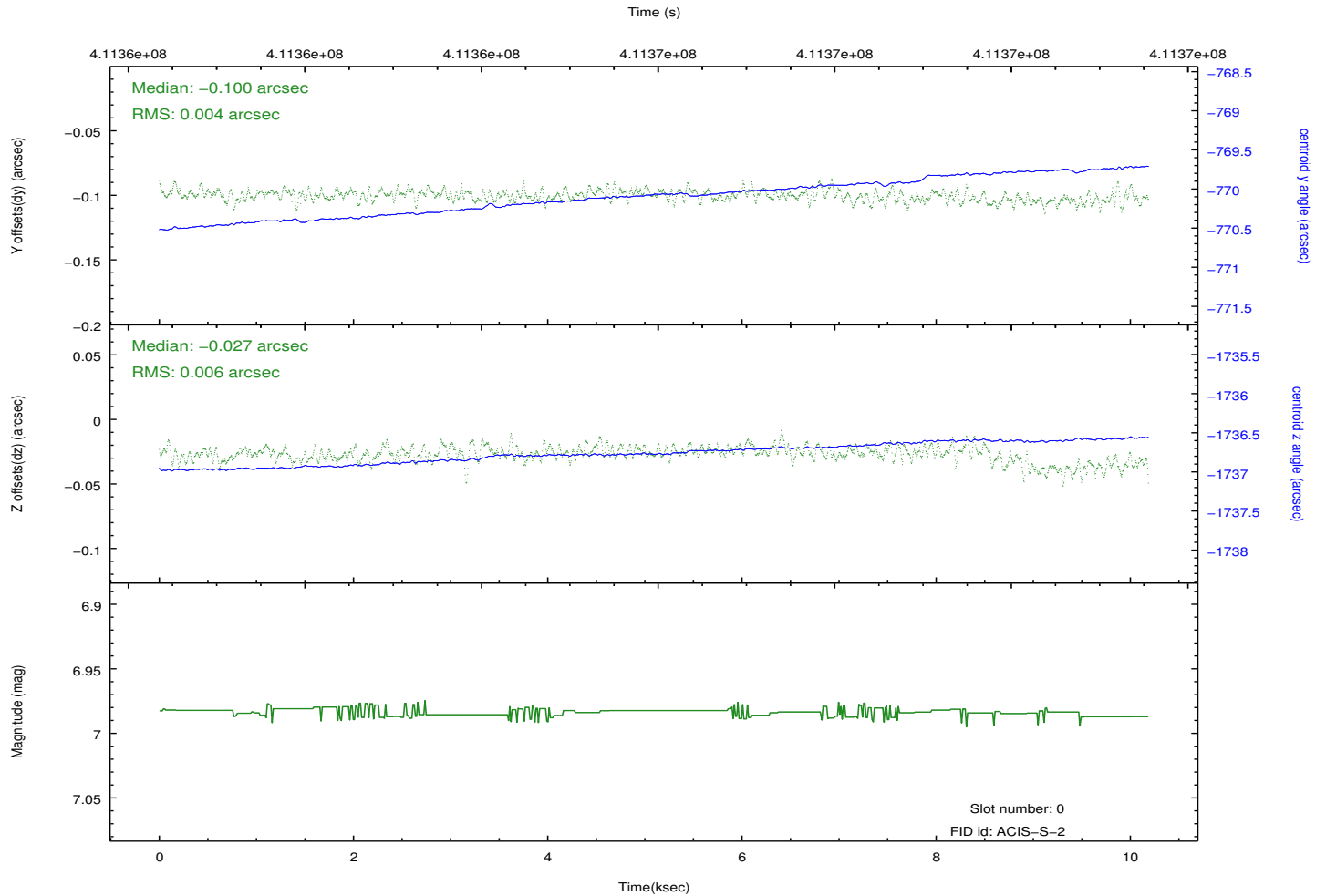
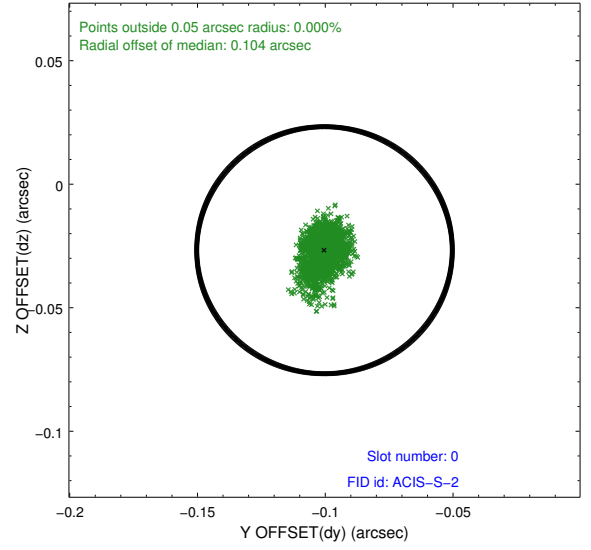
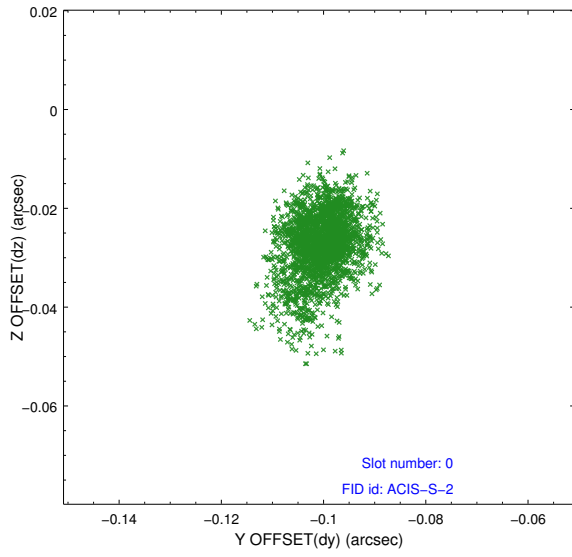


2.4.5 Slot 7

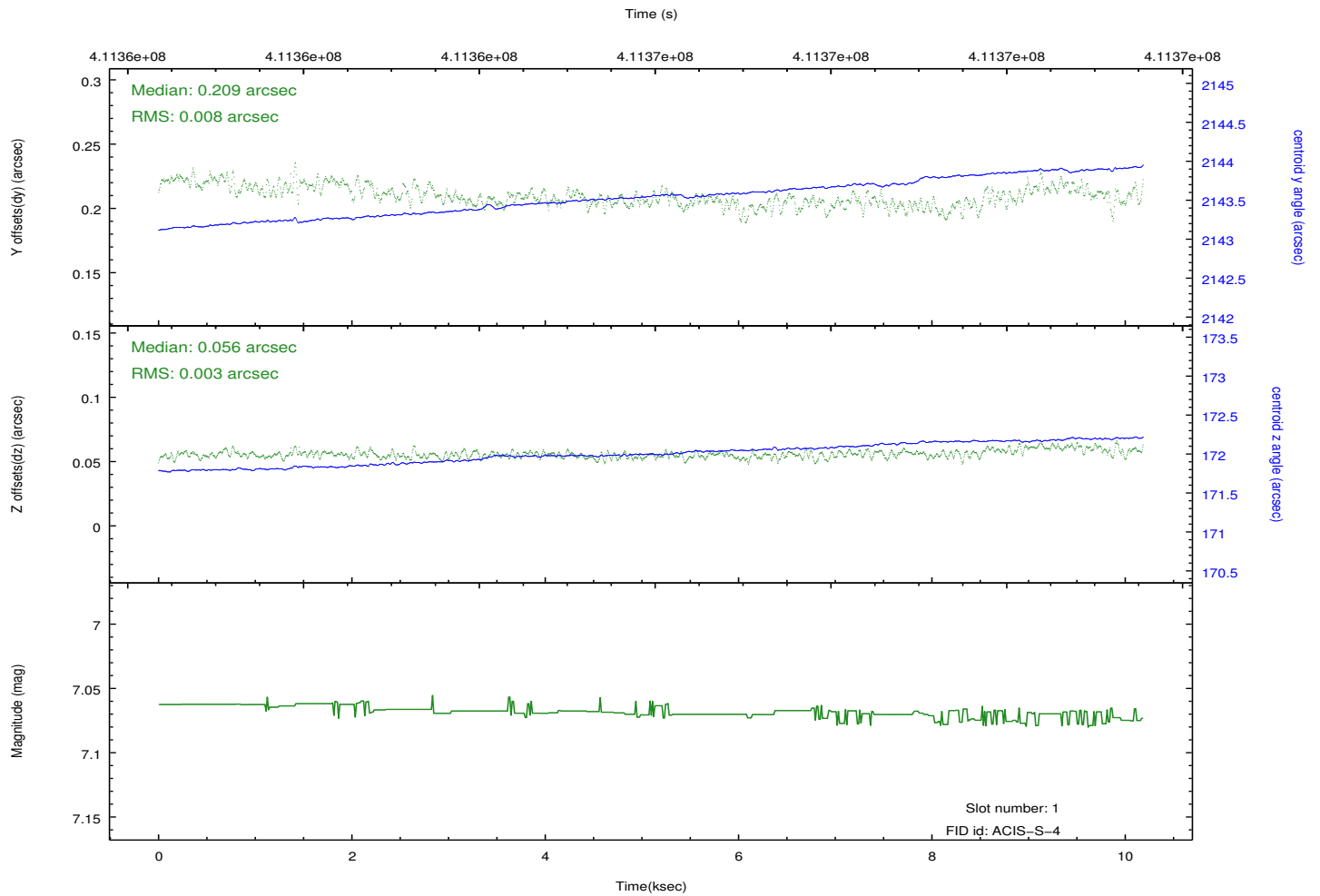
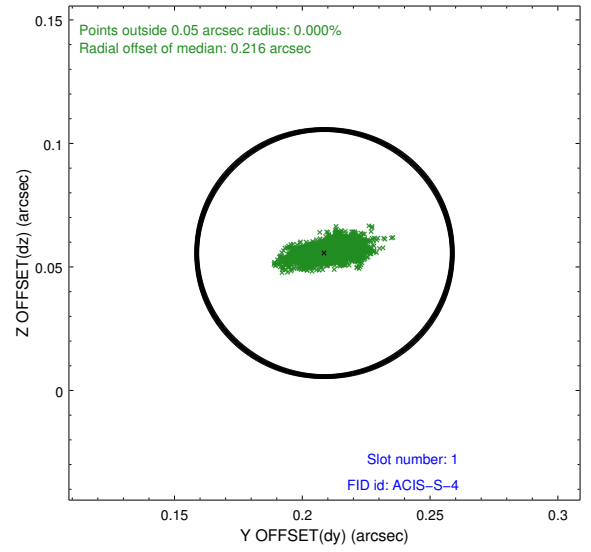
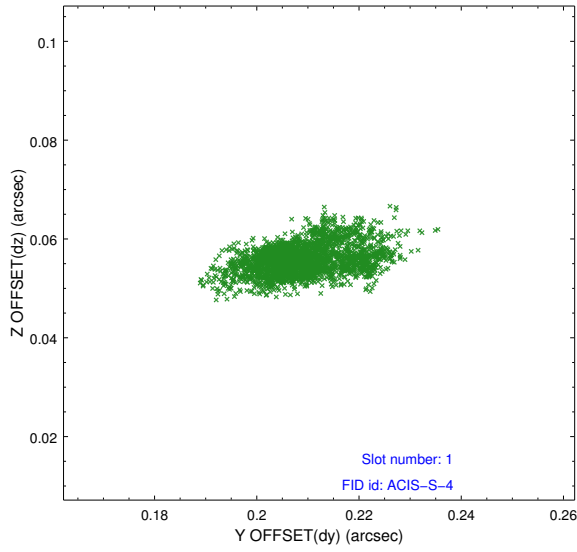


2.5 FID Slots

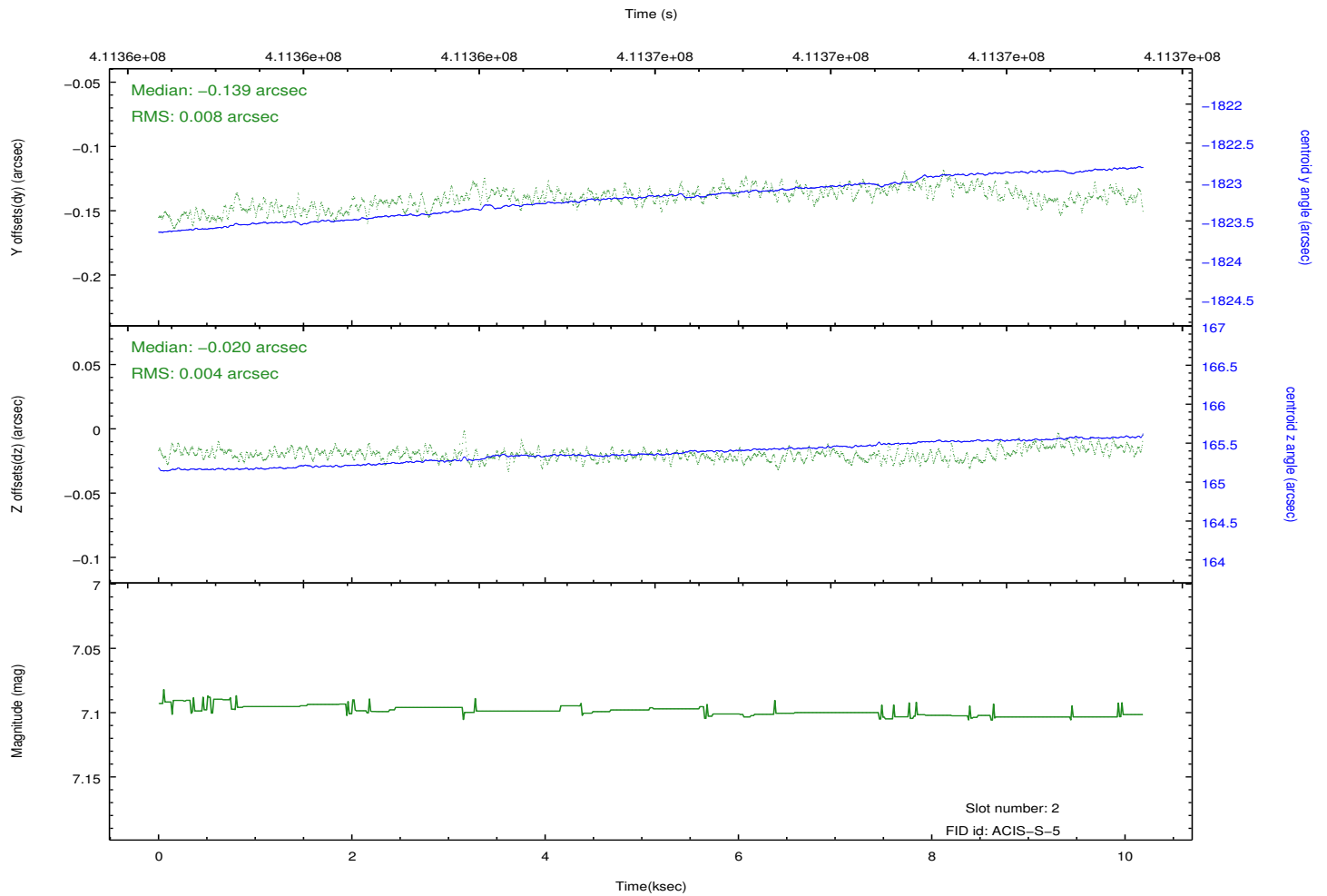
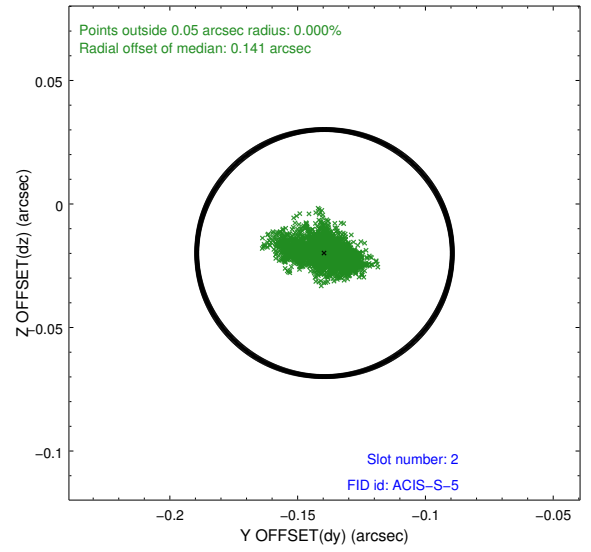
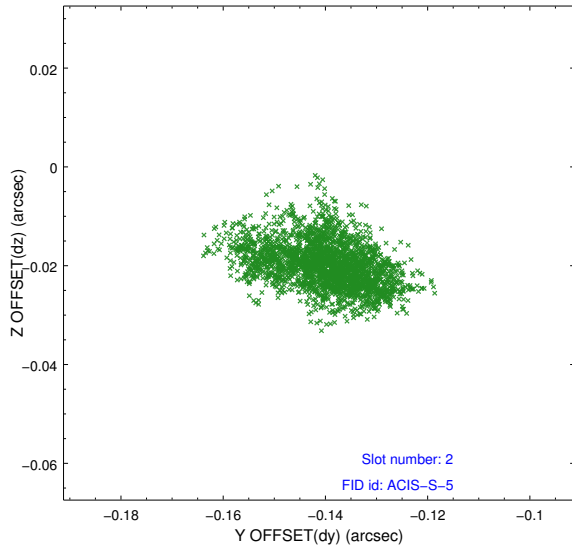
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.063899828553

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.