

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12906 - L2 Version 2
Chandra X-Ray Center

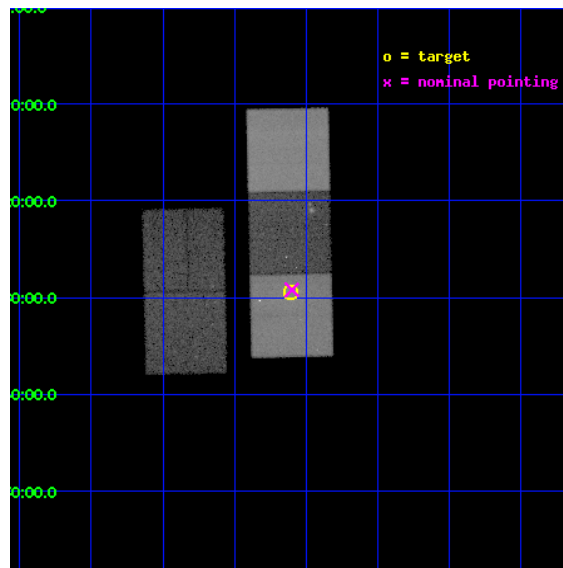
L2 Processing Date : Feb 6 2012

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1 Front

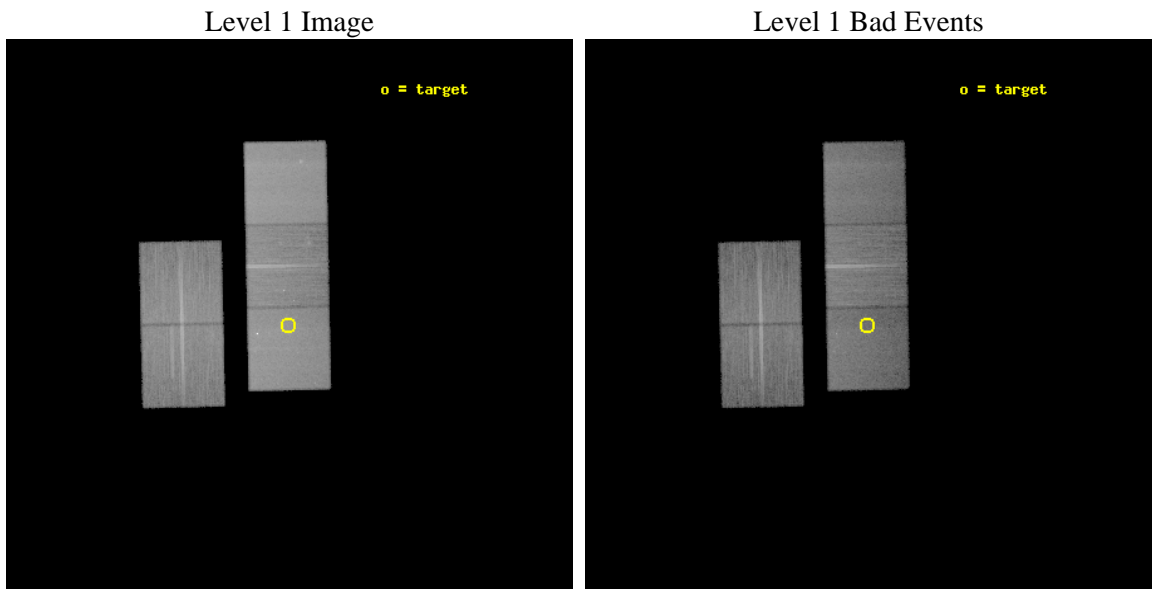
seq_num	801043	Sequence number
obs_id	12906	Observation id
title	Abell 1882: A Proto-cluster at Low Redshift	Proposal title
observer	Professor Christopher Miller	Principal investigator
object	A1882a	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	213.7775	Observer's specified target RA [deg]
dec_targ	-0.491	Observer's specified target Dec [deg]
ra_nom	213.77503666771	Nominal RA [deg]
dec_nom	-0.48681876339946	Nominal Dec [deg]
roll_nom	88.816821611107	Nominal Roll [deg]
revision	2	Processing version of data
ontime	33373.313779831	Sum of GTIs [s]
livetime	32937.266866221	Livetime [s]
ontime2	33373.149619818	Sum of GTIs [s]
ontime3	33373.190659821	Sum of GTIs [s]
ontime5	33373.272739828	Sum of GTIs [s]
ontime6	33373.231699824	Sum of GTIs [s]
ontime7	33373.313779831	Sum of GTIs [s]
l2events	361219	Number of level 2 events



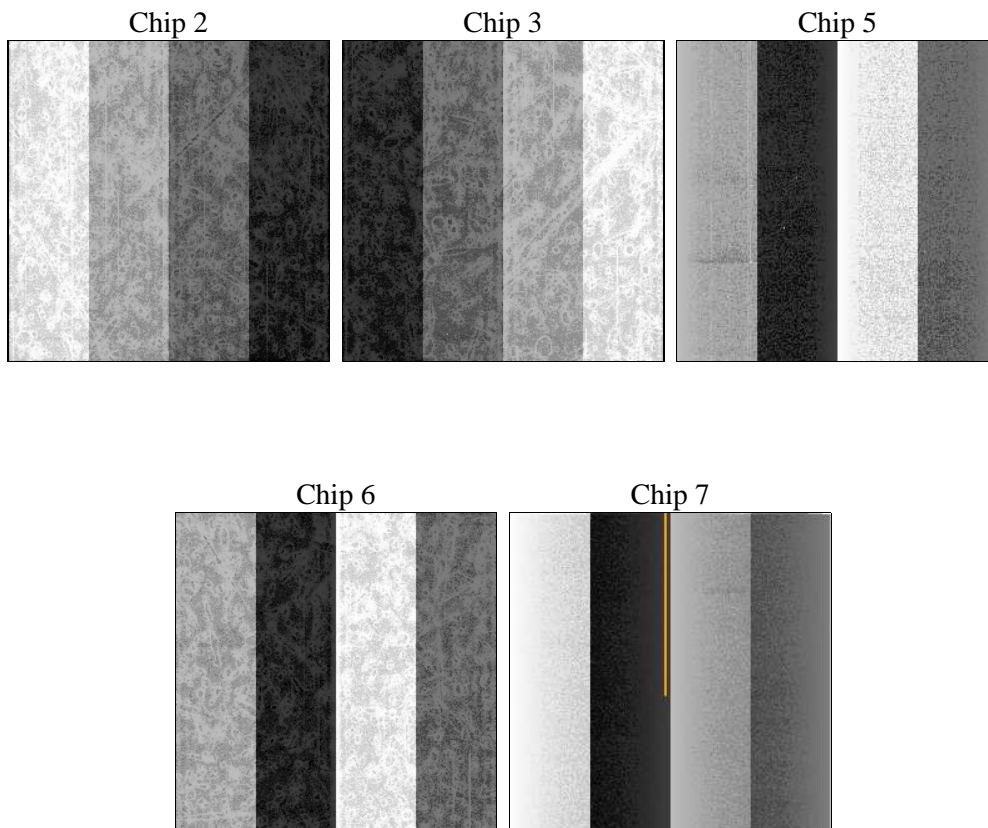
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33333.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	33373.313779831	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	33373.149619818	Sum of GTIs [s]
date	2012-02-06T10:22:18	Date and time of file creation	ontime3	33373.190659821	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	33373.272739828	Sum of GTIs [s]
			ontime6	33373.231699824	Sum of GTIs [s]
			ontime7	33373.313779831	Sum of GTIs [s]
			l1events	1336031	Number of level 1 events

2.1.4 Events

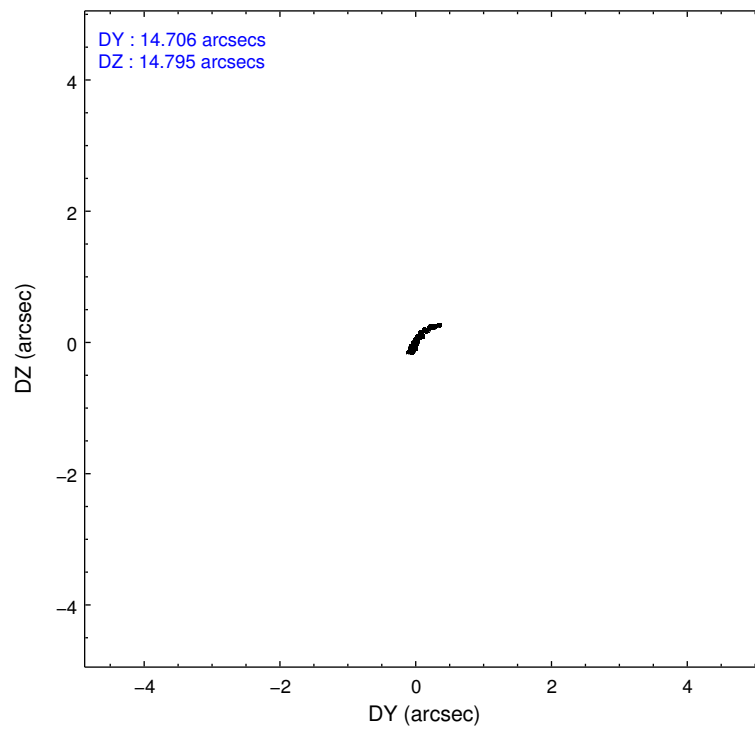
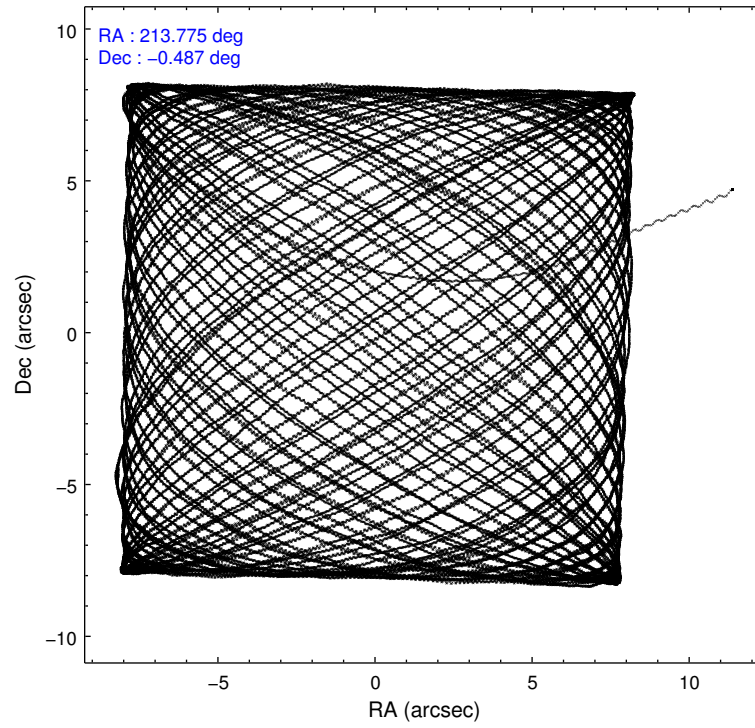
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	234369	218851	348345	238007	296459
rejected events	210363	194958	181966	209522	160702
rejected %	89%	89%	52%	88%	54%

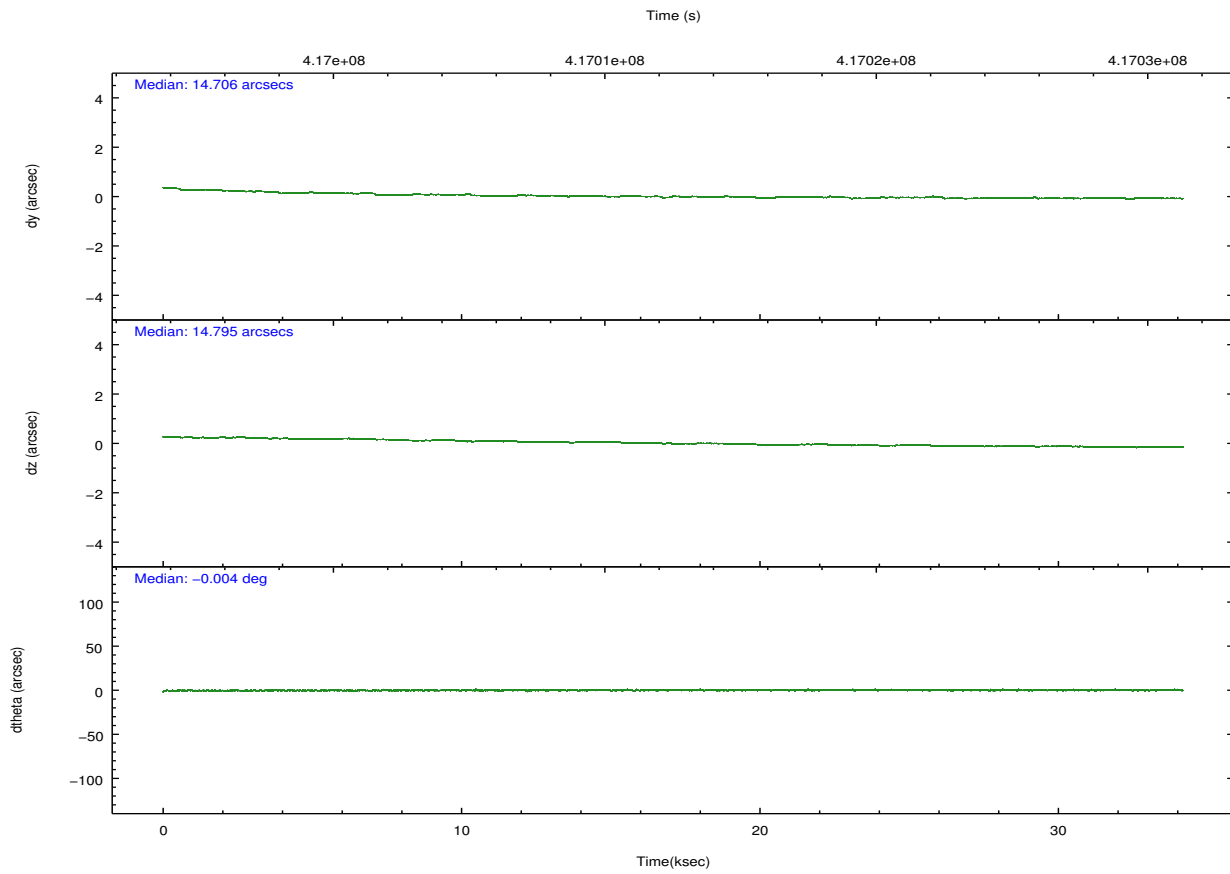
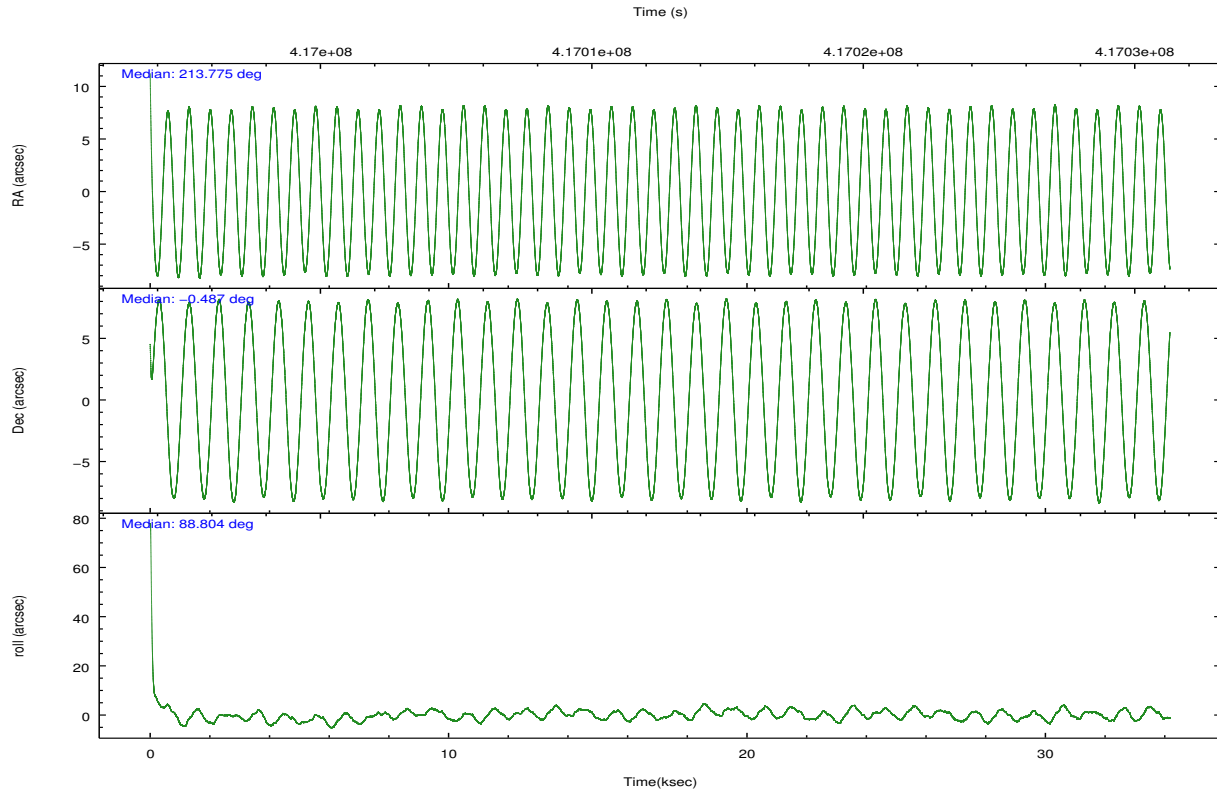
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	8507	8519	10113	10991	14124
	3%	3%	2%	4%	4%
grade 1 events	103	130	625	133	355
	0%	0%	0%	0%	0%
grade 2 events	5817	5192	50489	6099	28346
	2%	2%	14%	2%	9%
grade 3 events	2622	2690	5988	2810	11897
	1%	1%	1%	1%	4%
grade 4 events	2496	2660	5824	2643	11750
	1%	1%	1%	1%	3%
grade 5 events	8584	10613	25888	10556	29451
	3%	4%	7%	4%	9%
grade 6 events	4566	4832	93986	5944	69649
	1%	2%	26%	2%	23%
grade 7 events	201674	184215	155432	198831	130887
	86%	84%	44%	83%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	213.788542	213.7750366677126	CCD I2 on	O1	Y
[deg] Pointing Dec	-0.510599	-0.4868187633994554	CCD I3 on	Y	Y
[deg] Pointing Roll	88.660287	88.81682161110747	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	416996265.184000	416993825.5102	CCD S5 on	N	N
Observation start date	2011-03-20T08:16:39	2011-03-20T07:37:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	417029598.184000	417030058.23708	On-chip summing requested	N	N
Observation end date	2011-03-20T17:32:12	2011-03-20T17:40:58	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



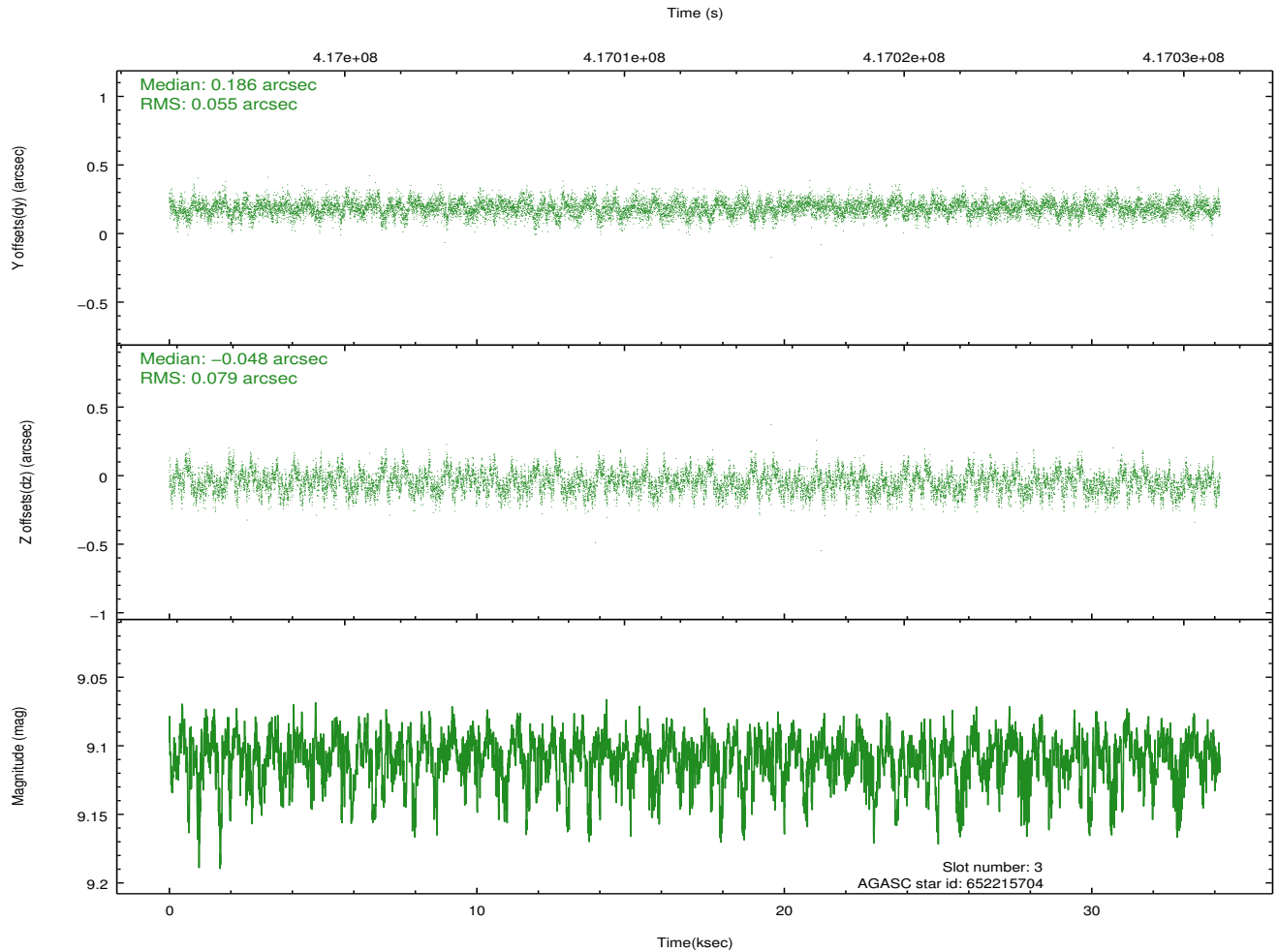
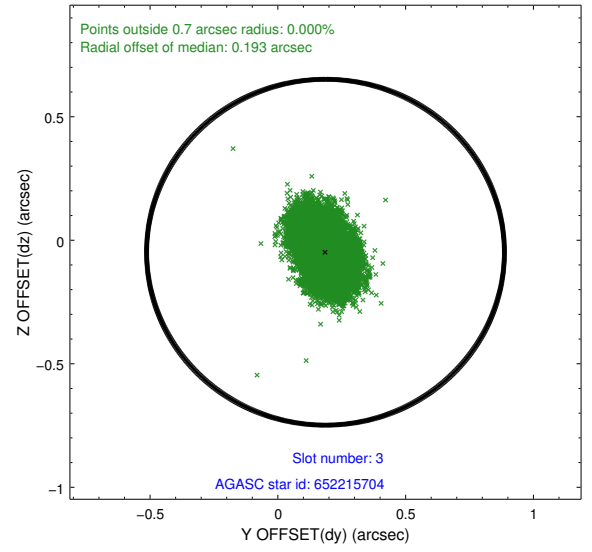
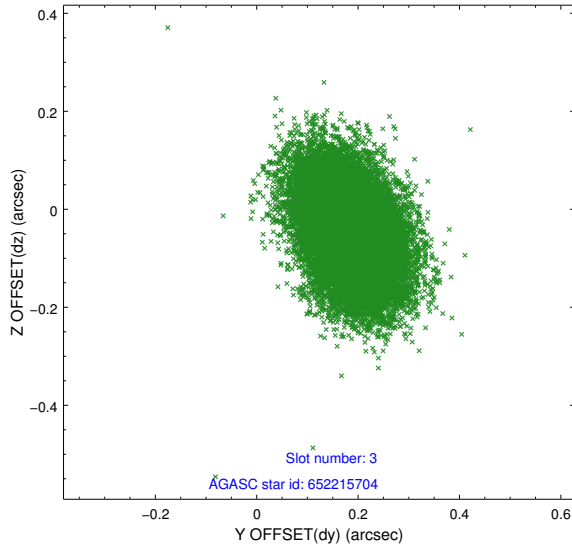


Slot Statistics

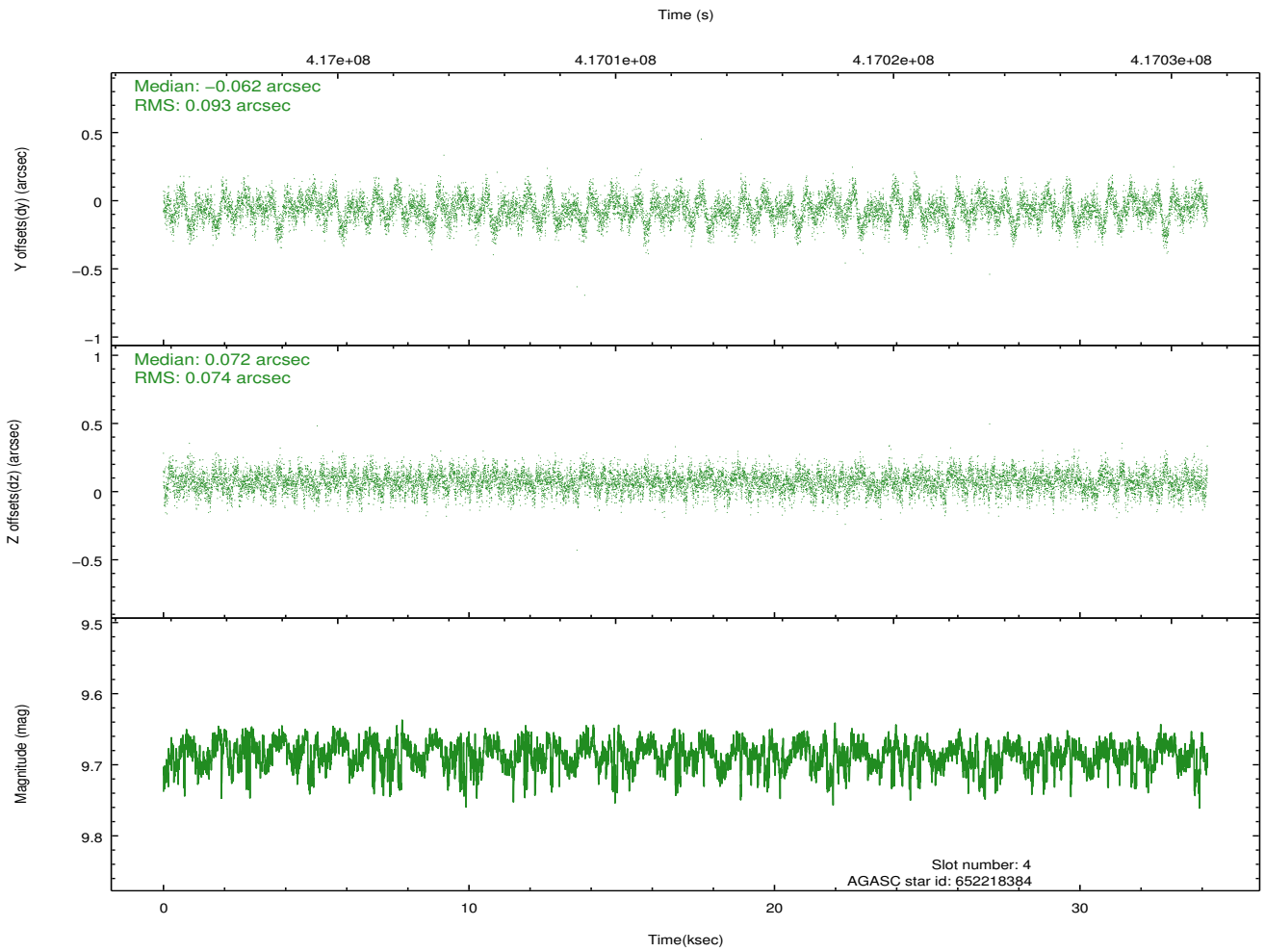
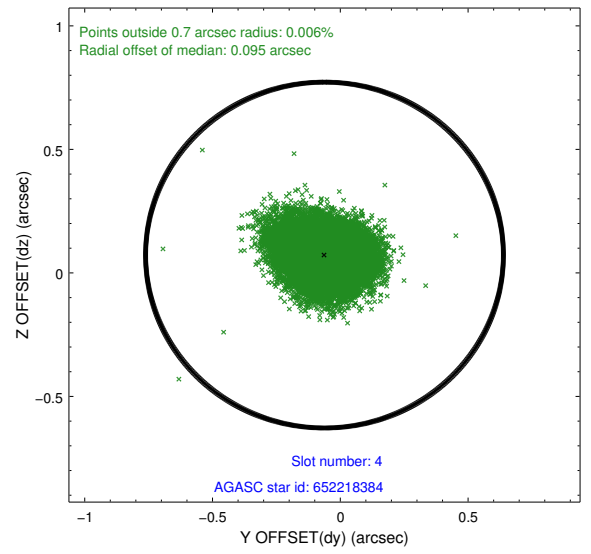
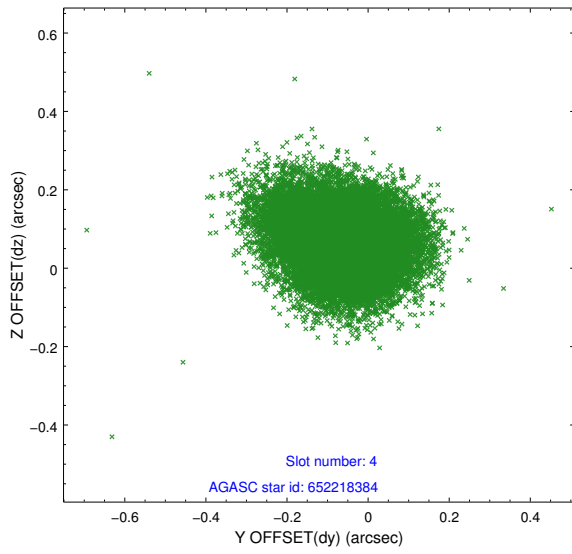
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.98	8335	-0.099	-0.044	0.009	0.014	0.000000	0.000000	-767.78	-1736.24
1	FID	ACIS-S-4	7.07	8335	0.224	0.060	0.007	0.012	0.000000	0.000000	2145.78	172.32
2	FID	ACIS-S-5	7.09	8335	-0.156	-0.006	0.008	0.014	0.000000	0.000000	-1820.64	165.95
3	GUIDE	652215704	9.11	16646	0.186	-0.048	0.102	0.169	213.594661	-0.601169	-341.88	690.13
4	GUIDE	652218384	9.69	16650	-0.062	0.072	0.127	0.203	214.051812	-0.360037	564.44	-934.55
5	GUIDE	652223856	9.14	16661	-0.136	0.072	0.110	0.184	214.256332	-0.079315	1590.58	-1647.55
6	GUIDE	652224488	6.08	16671	0.071	-0.227	0.103	0.162	213.419957	-0.845464	-1237.59	1295.32
7	GUIDE	652223976	10.37	16633	-0.070	0.137	0.196	0.372	214.287184	-0.125851	1426.90	-1761.64

2.4 Star Slots

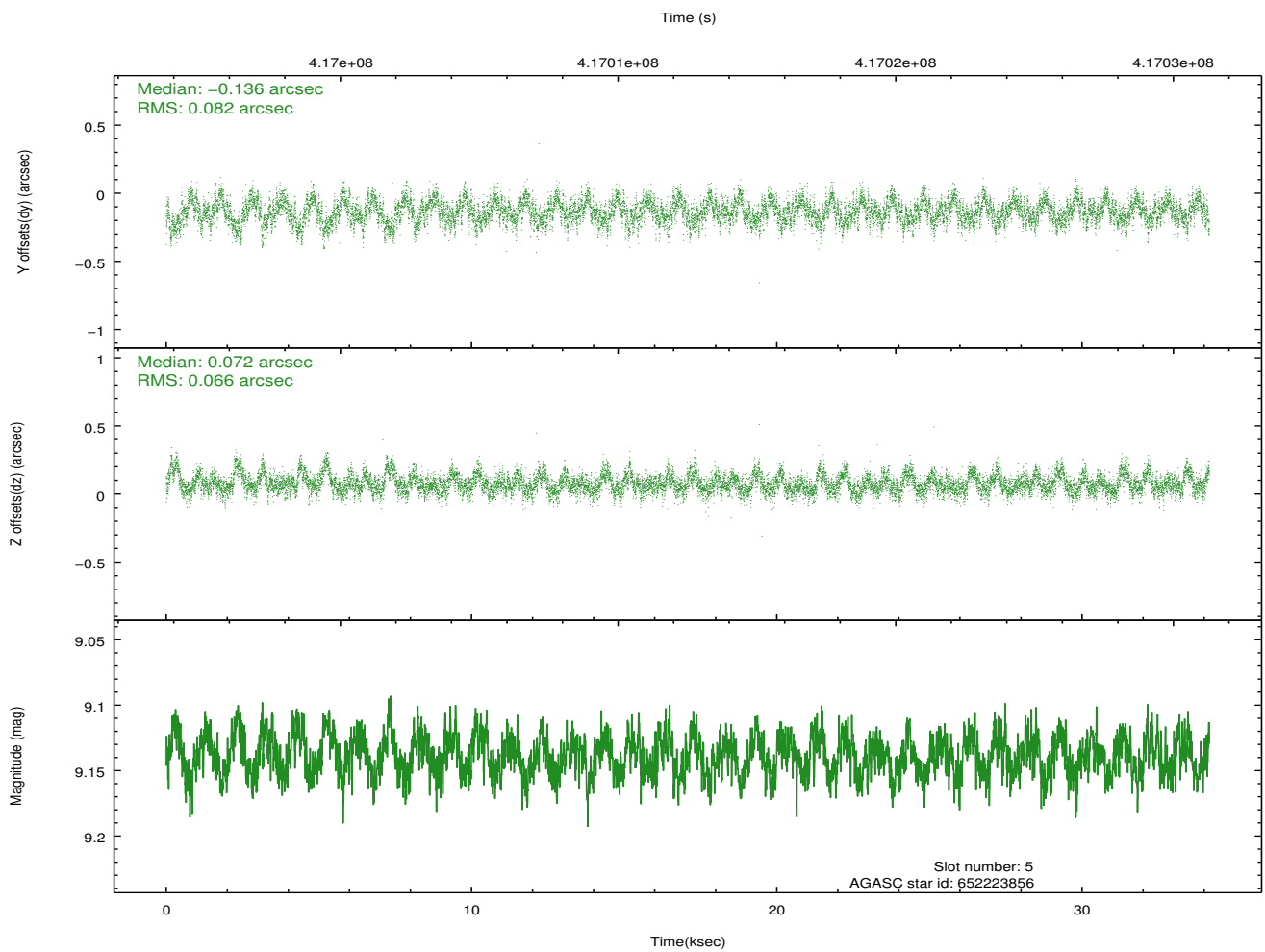
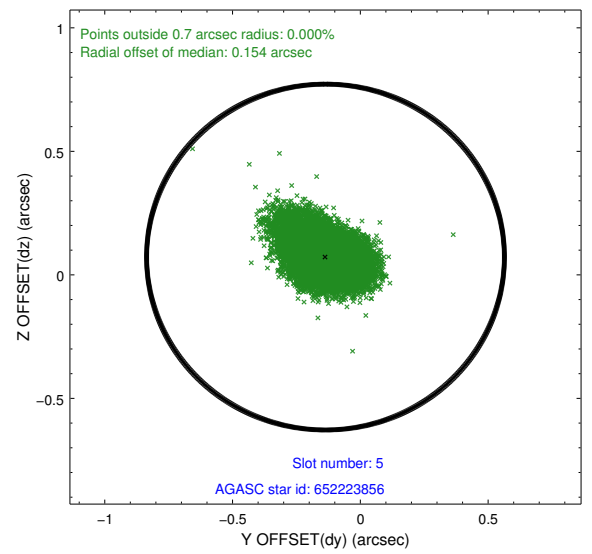
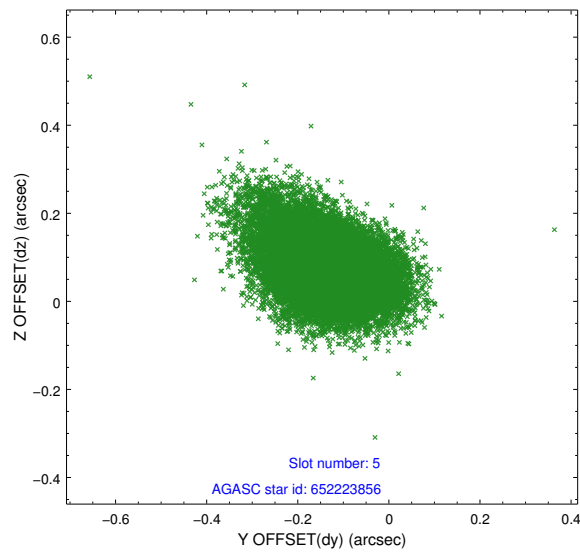
2.4.1 Slot 3



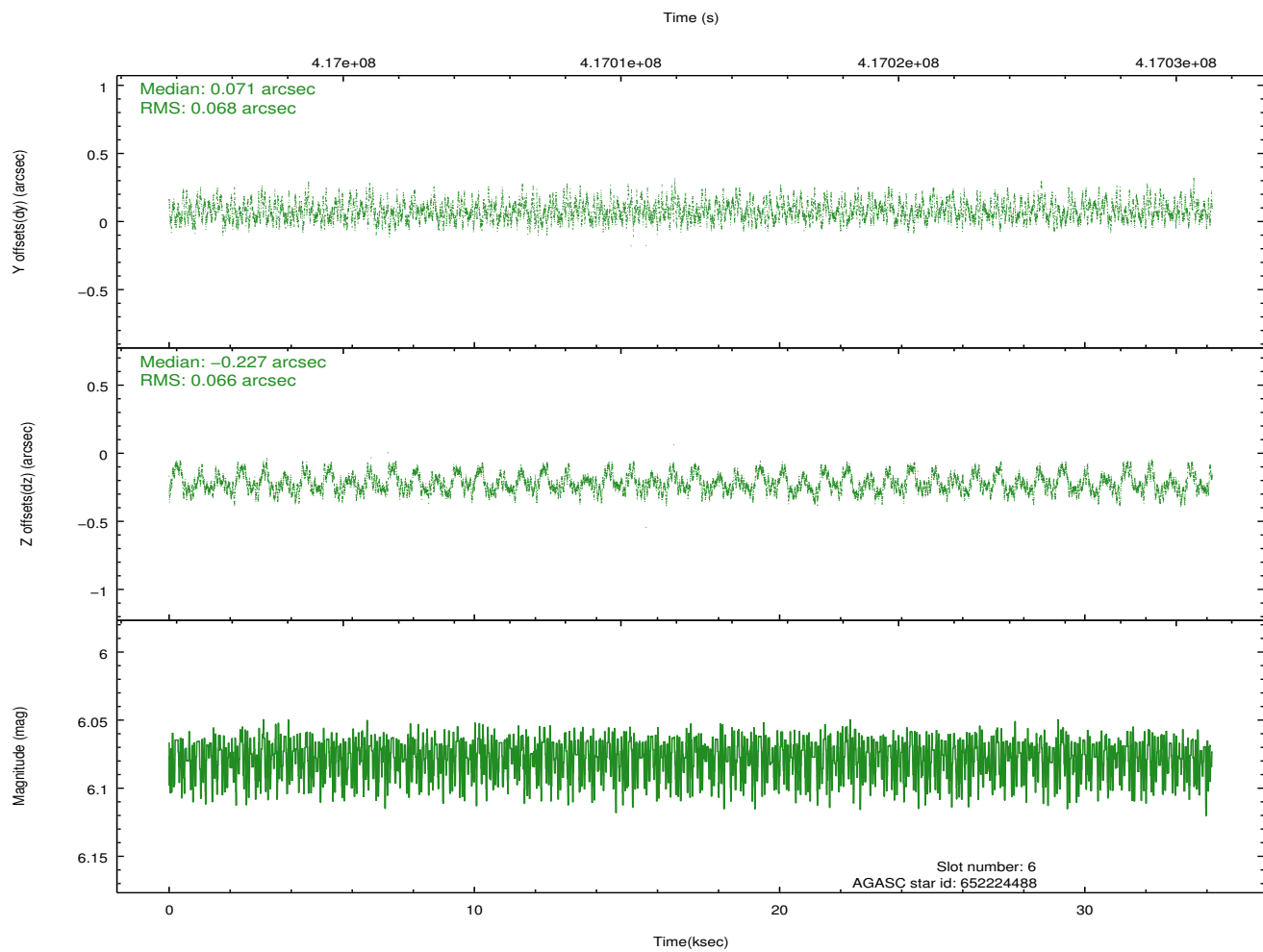
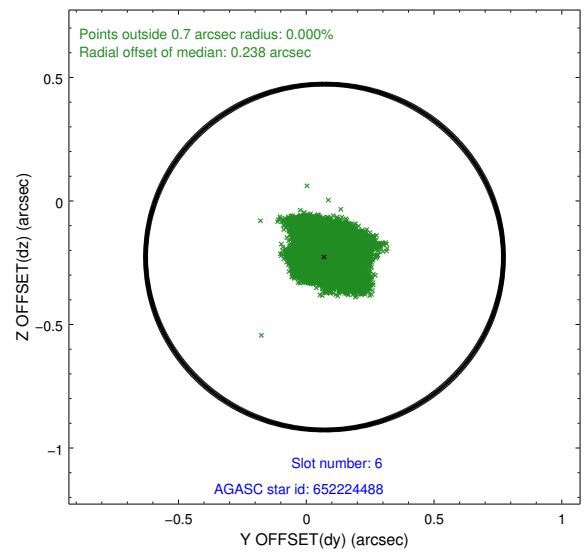
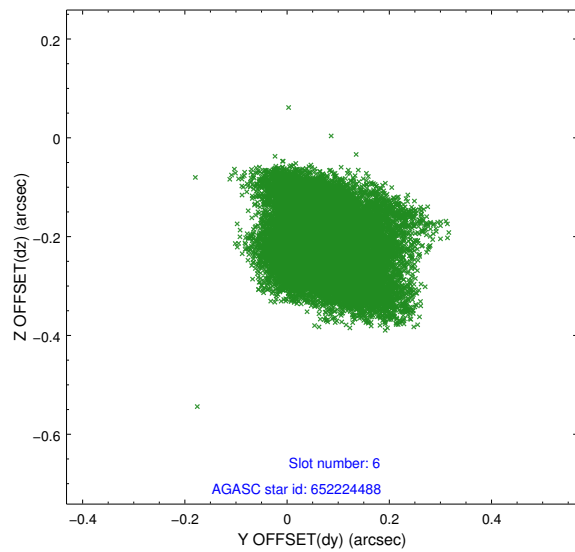
2.4.2 Slot 4



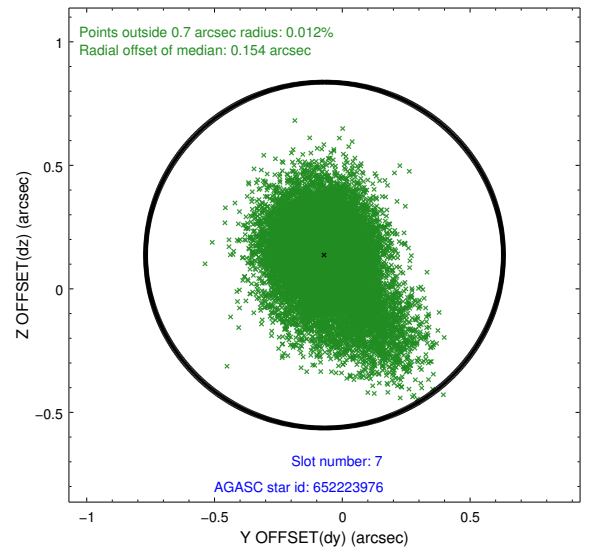
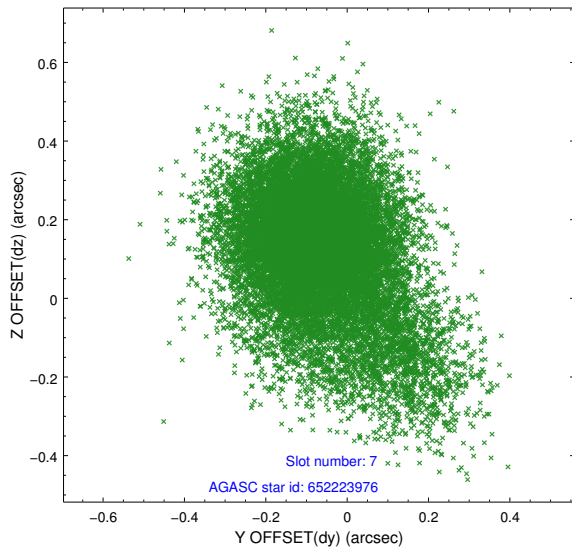
2.4.3 Slot 5



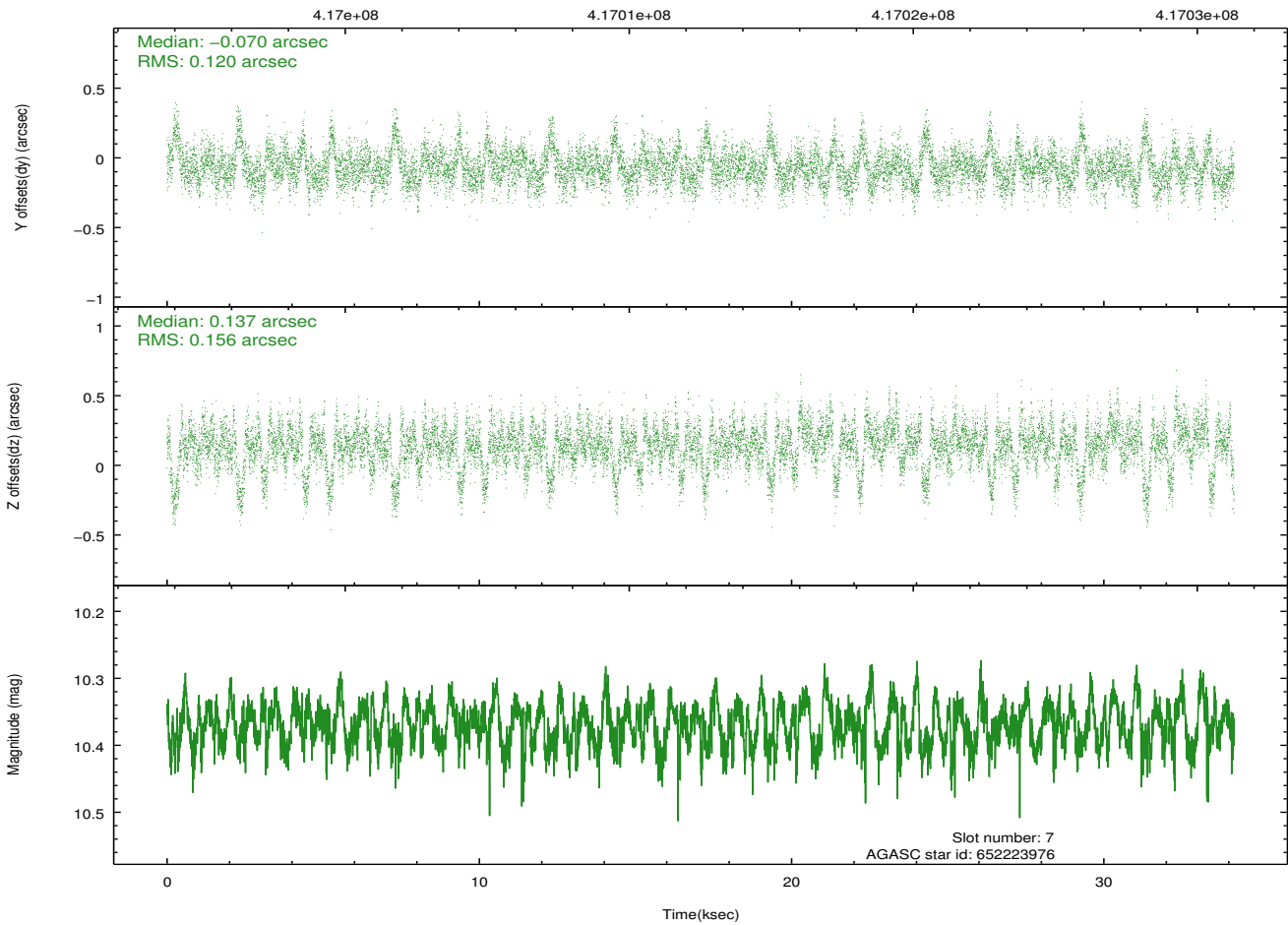
2.4.4 Slot 6



2.4.5 Slot 7

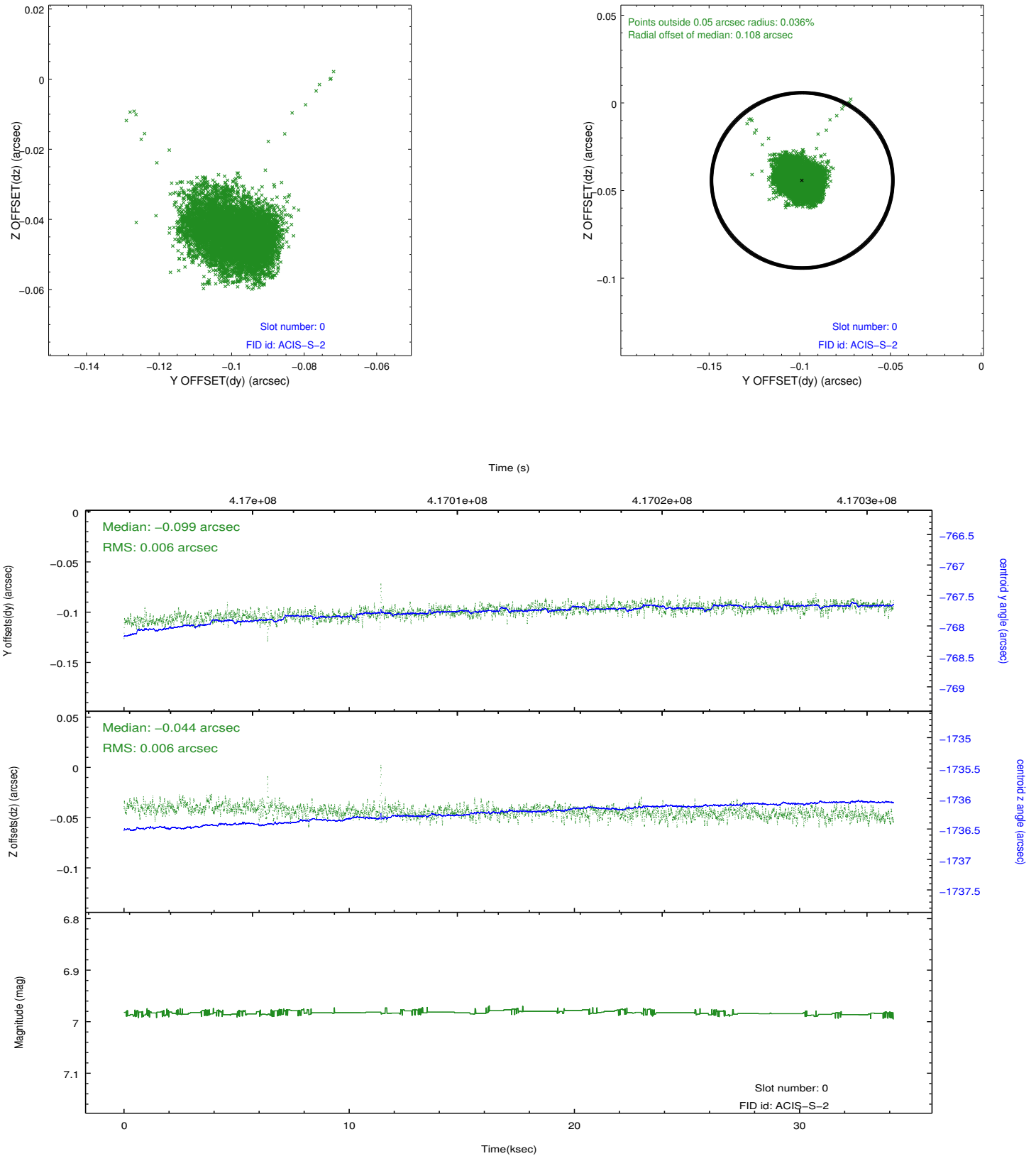


Time (s)

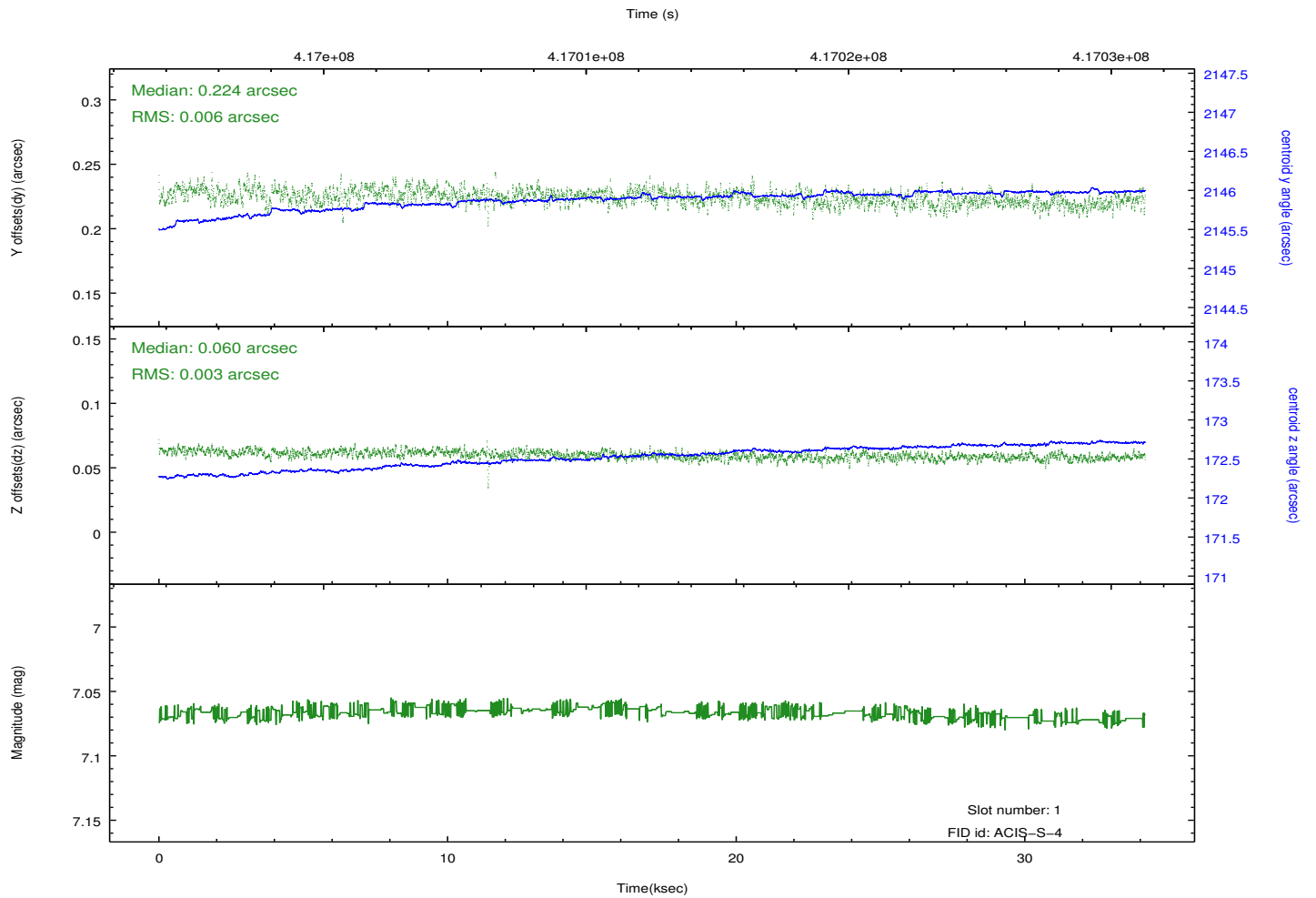
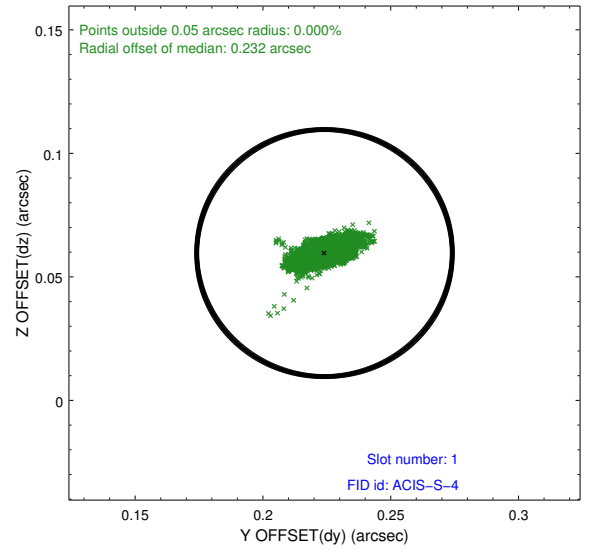
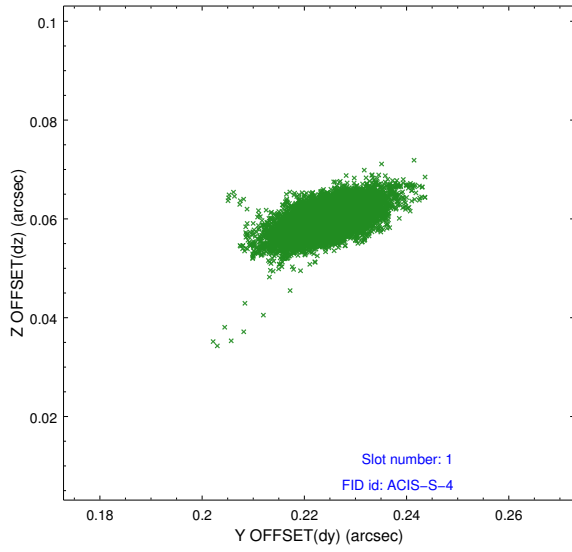


2.5 FID Slots

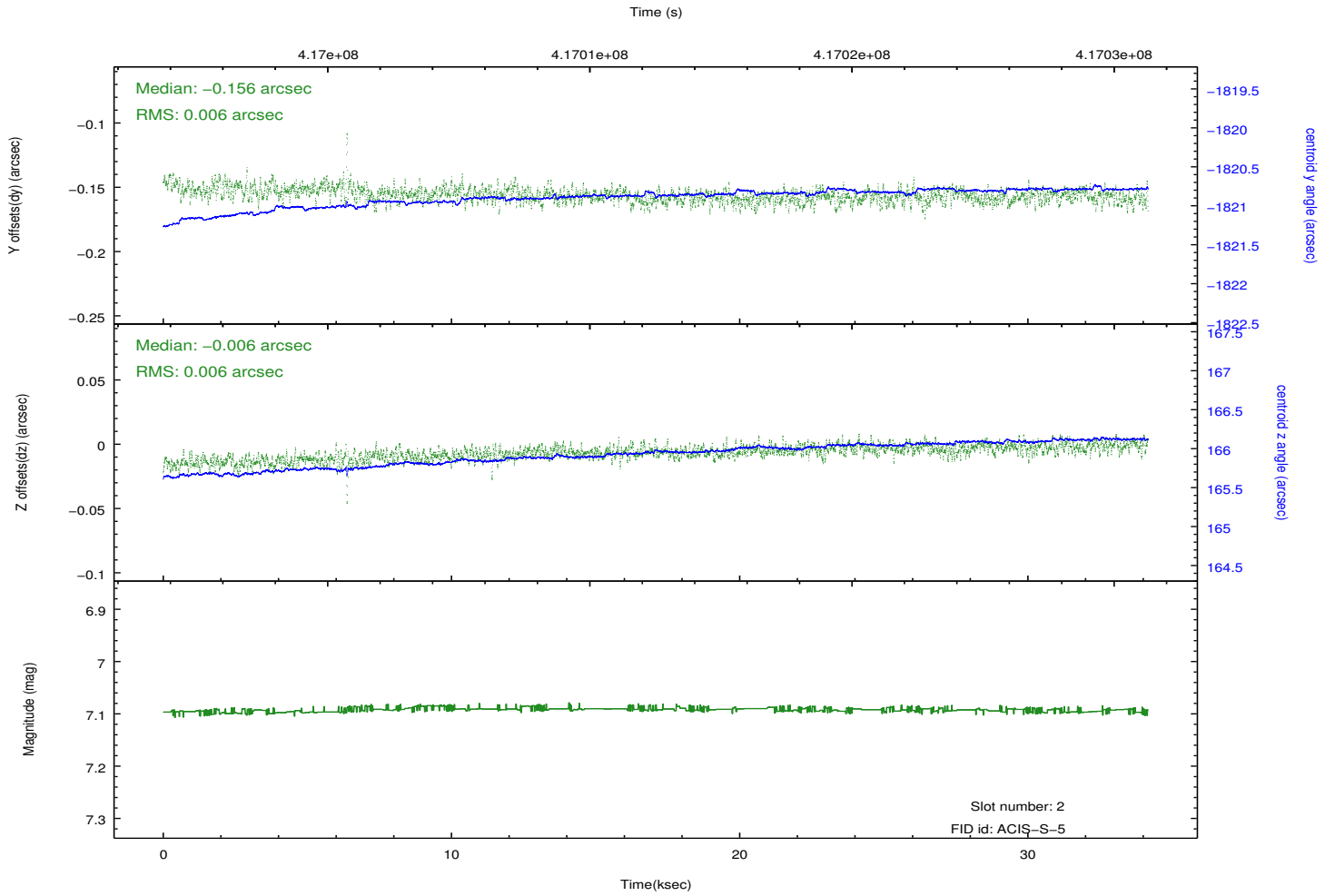
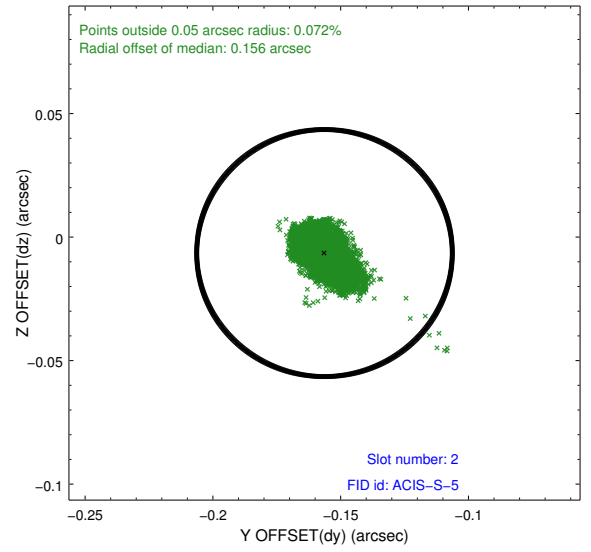
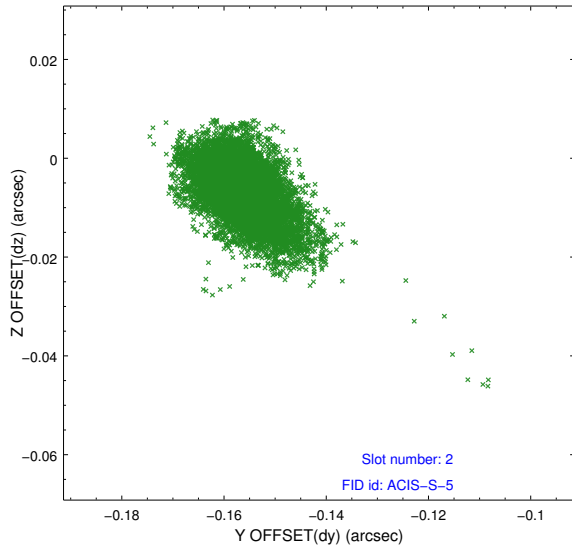
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.373313779235

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.