

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12912 - L2 Version 2
Chandra X-Ray Center

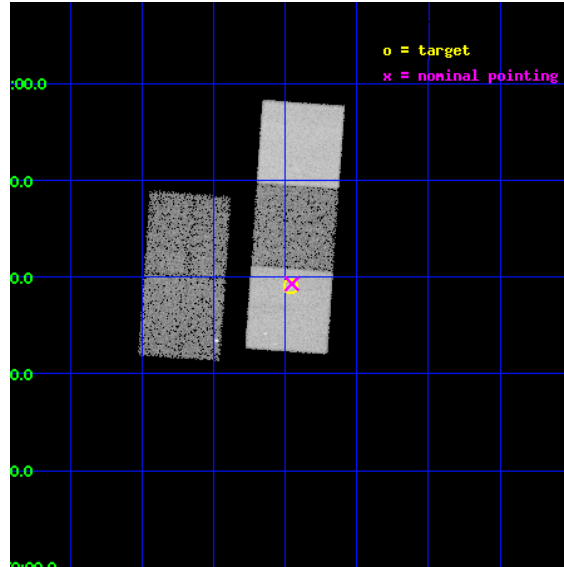
L2 Processing Date : Feb 6 2012

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1 Front

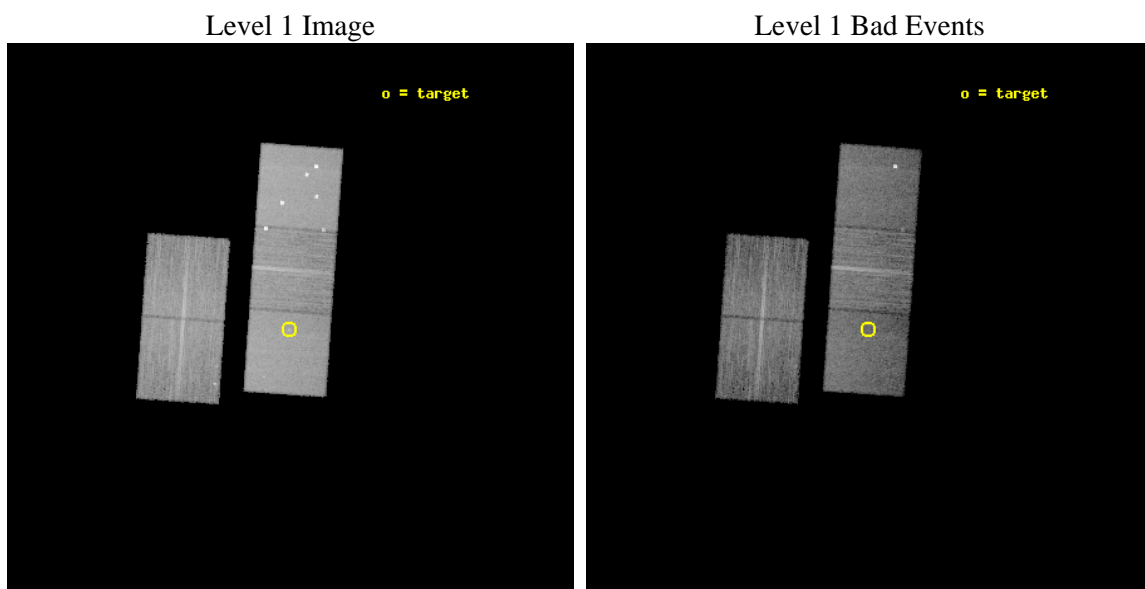
seq_num	801049	Sequence number
obs_id	12912	Observation id
title	Abell 1882: A Proto-cluster at Low Redshift	Proposal title
observer	Professor Christopher Miller	Principal investigator
object	A1882c	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	213.74125	Observer's specified target RA [deg]
dec_targ	-0.348806	Observer's specified target Dec [deg]
ra_nom	213.73840726354	Nominal RA [deg]
dec_nom	-0.34486491221725	Nominal Dec [deg]
roll_nom	94.035684106471	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16437.936922133	Sum of GTIs [s]
livetime	16223.163174812	Livetime [s]
ontime2	16428.349661112	Sum of GTIs [s]
ontime3	16437.813812017	Sum of GTIs [s]
ontime5	16437.895892024	Sum of GTIs [s]
ontime6	16434.713821769	Sum of GTIs [s]
ontime7	16437.936922133	Sum of GTIs [s]
l2events	173513	Number of level 2 events



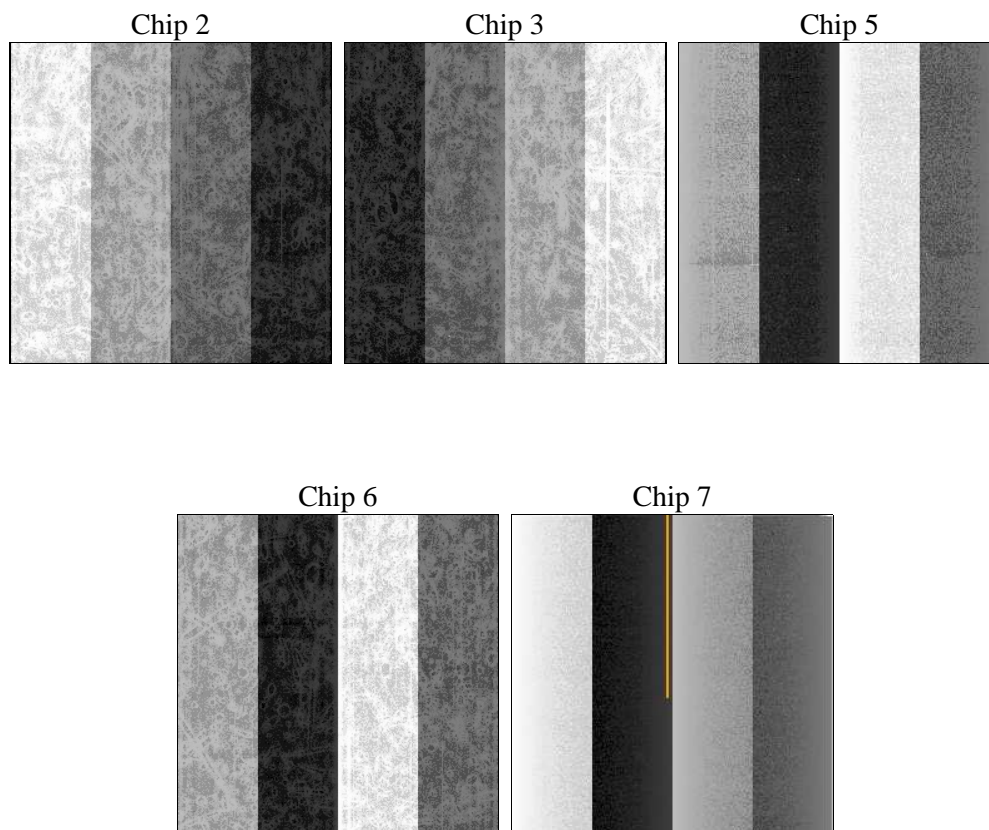
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16667.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	16437.936922133	Sum of GTIs [s]
caldsver	4.4.7	 	ontime2	16428.349661112	Sum of GTIs [s]
date	2012-02-06T22:14:58	Date and time of file creation	ontime3	16437.813812017	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	16437.895892024	Sum of GTIs [s]
			ontime6	16434.713821769	Sum of GTIs [s]
			ontime7	16437.936922133	Sum of GTIs [s]
			l1events	671472	Number of level 1 events

2.1.4 Events

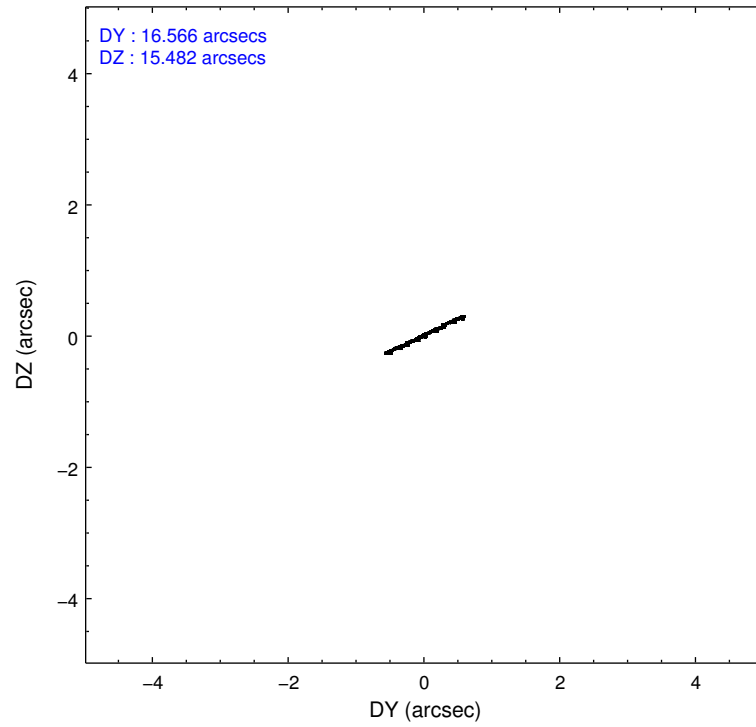
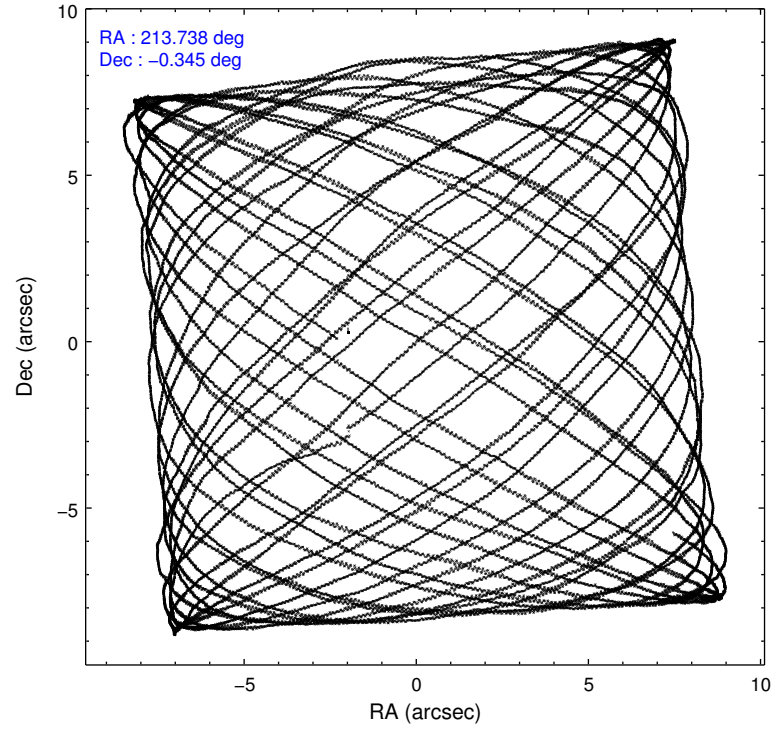
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	111835	108747	187373	120356	143161
rejected events	99925	96723	92106	102269	79193
rejected %	89%	88%	49%	84%	55%

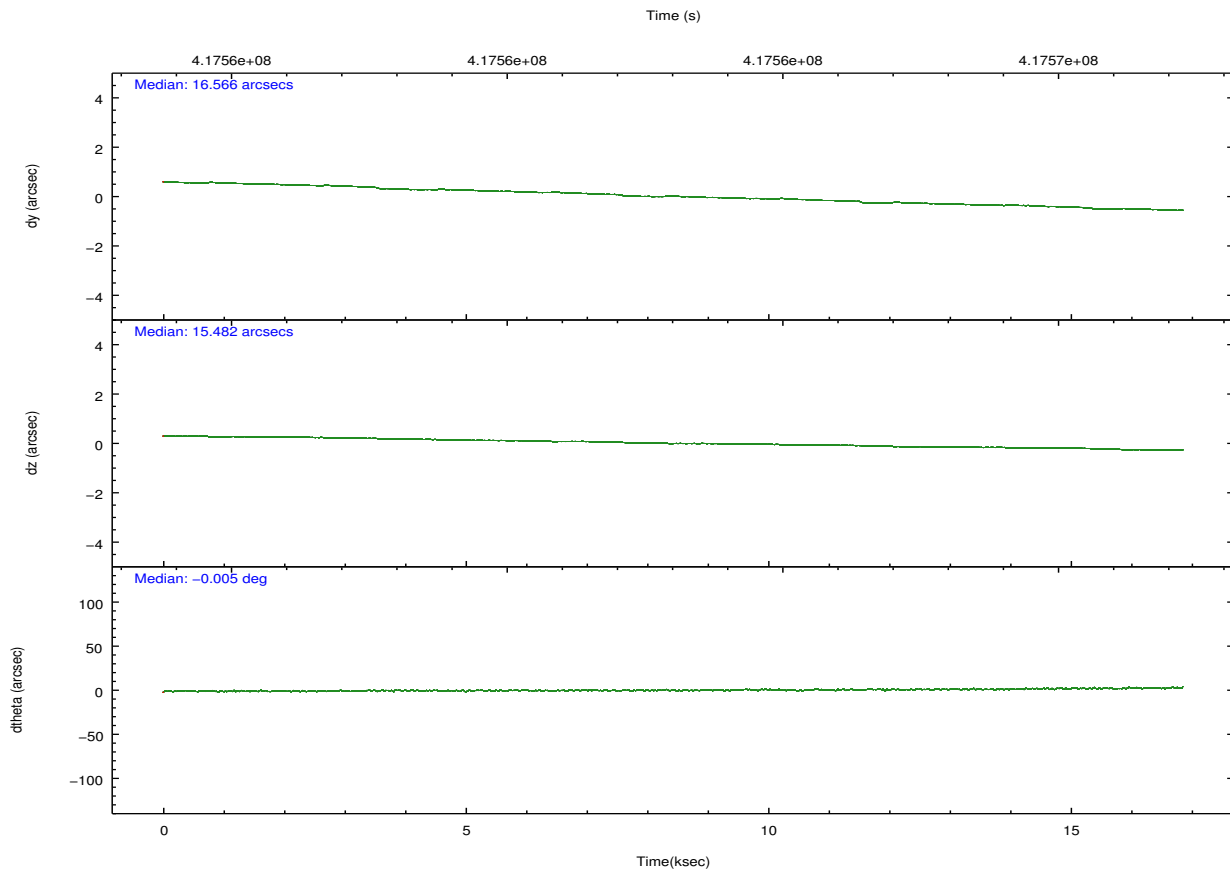
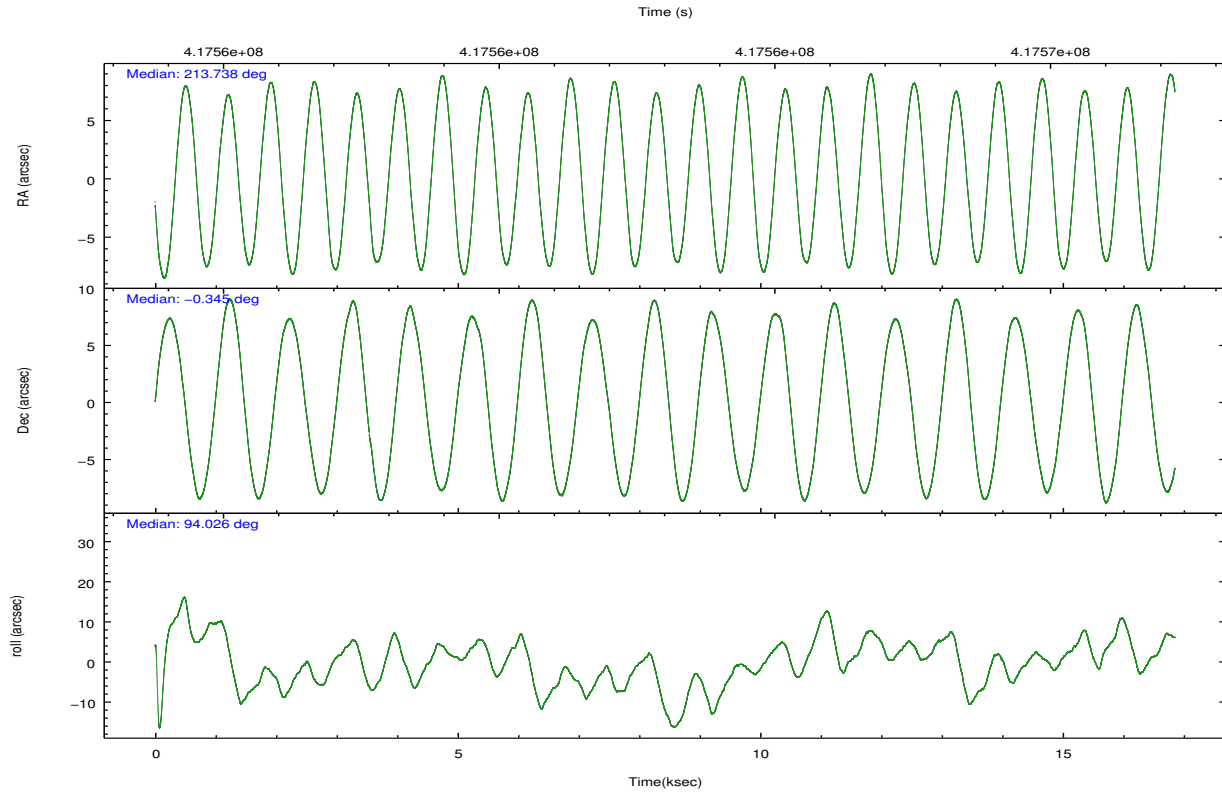
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	4243	4403	16818	4532	6089
	3%	4%	8%	3%	4%
grade 1 events	52	60	401	51	189
	0%	0%	0%	0%	0%
grade 2 events	2887	2645	27090	7999	13076
	2%	2%	14%	6%	9%
grade 3 events	1226	1346	2996	1339	5688
	1%	1%	1%	1%	3%
grade 4 events	1281	1301	2937	1352	5680
	1%	1%	1%	1%	3%
grade 5 events	4482	5228	13852	5316	14778
	4%	4%	7%	4%	10%
grade 6 events	2282	2334	45462	2870	33457
	2%	2%	24%	2%	23%
grade 7 events	95382	91430	77817	96897	64204
	85%	84%	41%	80%	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	213.754031	213.7384072635384	CCD I2 on	O1	Y
[deg] Pointing Dec	-0.367322	-0.3448649122172519	CCD I3 on	Y	Y
[deg] Pointing Roll	93.879135	94.03568410647124	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	N	N
[s] Observation start time (MET)	417554768.184000	417554392.40174	CCD S5 on	N	N
Observation start date	2011-03-26T19:25:02	2011-03-26T19:19:52	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	417571435.184000	417572212.54016	On-chip summing requested	N	N
Observation end date	2011-03-27T00:02:49	2011-03-27T00:16:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



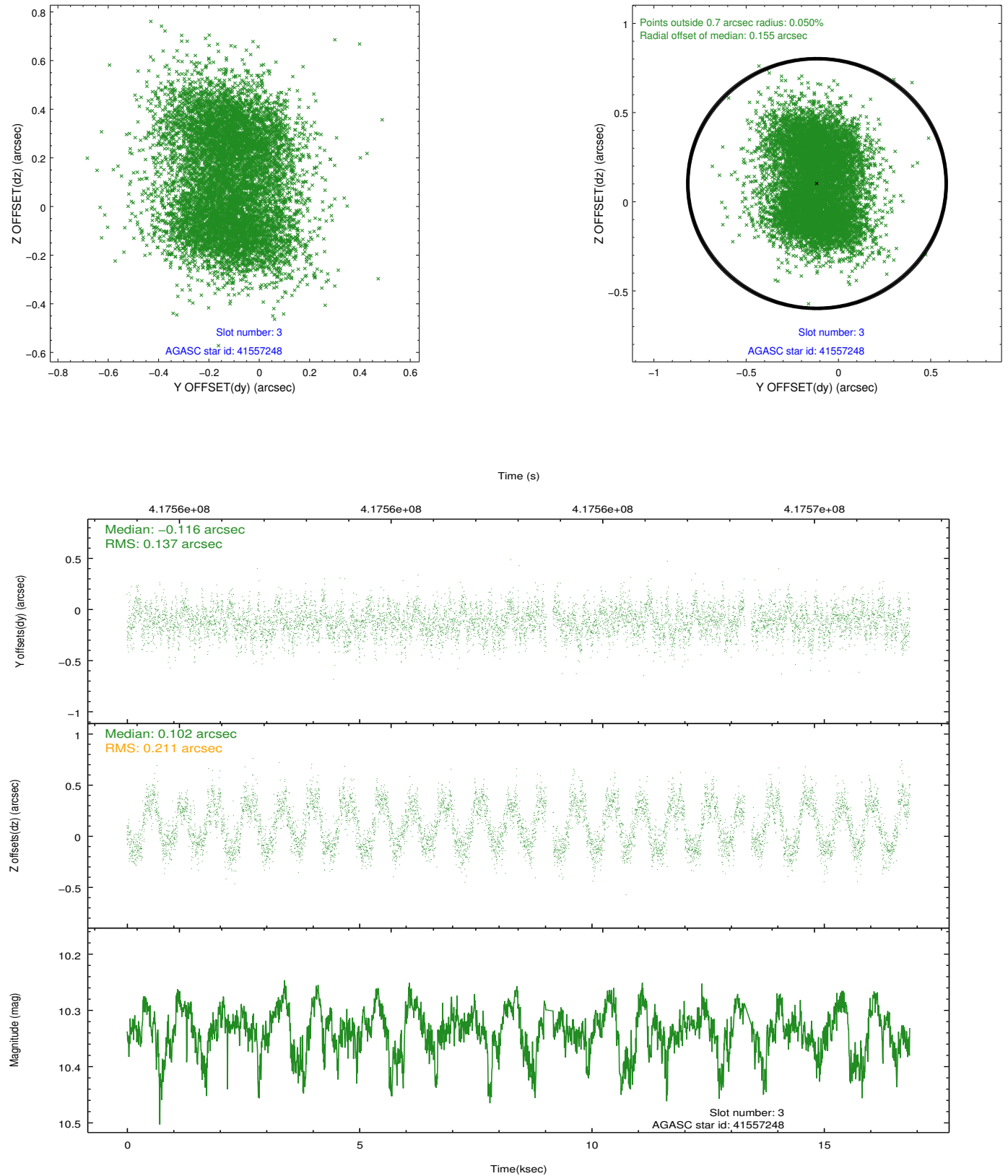


Slot Statistics

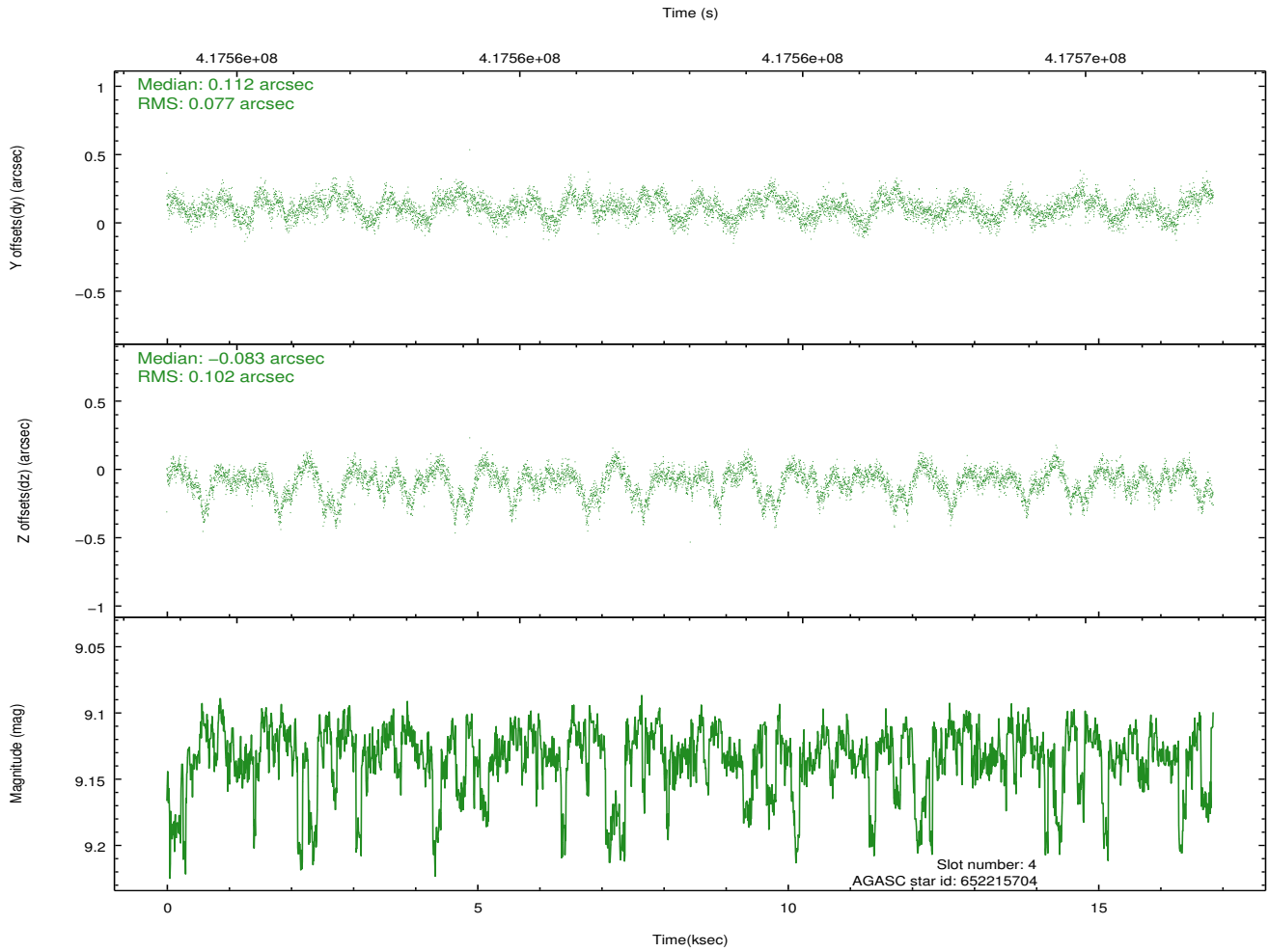
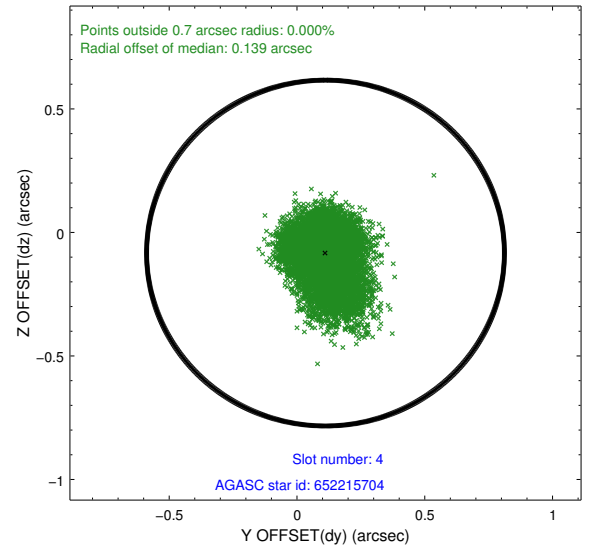
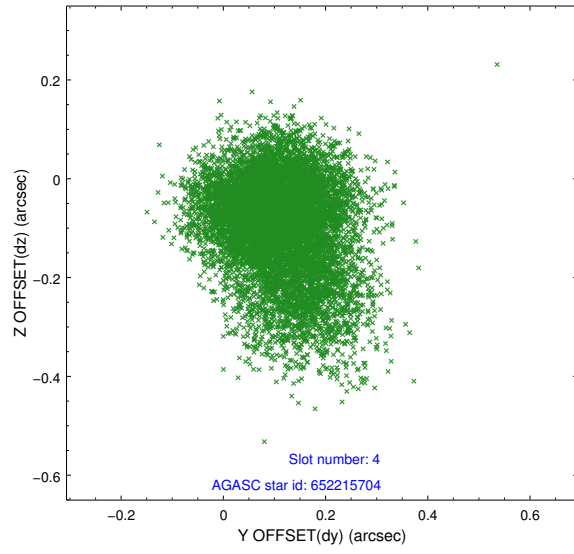
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	4111	-0.040	-0.045	0.008	0.014	0.000000	0.000000	-769.60	-1736.90
1	FID	ACIS-S-5	7.09	4111	-0.055	-0.020	0.009	0.016	0.000000	0.000000	-1822.88	164.82
2	FID	ACIS-S-6	7.19	4110	0.069	0.073	0.010	0.015	0.000000	0.000000	391.80	809.14
3	GUIDE	41557248	10.34	8060	-0.116	0.102	0.274	0.406	214.013538	0.272936	2236.56	-1087.71
4	GUIDE	652215704	9.13	8205	0.112	-0.083	0.132	0.226	213.594661	-0.601169	-800.82	629.02
5	GUIDE	652223856	9.12	8199	-0.146	0.134	0.116	0.181	214.256332	-0.079315	910.51	-1874.49
6	GUIDE	652224488	6.08	8222	-0.078	-0.201	0.097	0.161	213.419957	-0.845464	-1638.04	1313.30
7	GUIDE	652216152	10.24	8011	0.228	0.056	0.198	0.310	213.322009	-0.517912	-435.96	1588.48

2.4 Star Slots

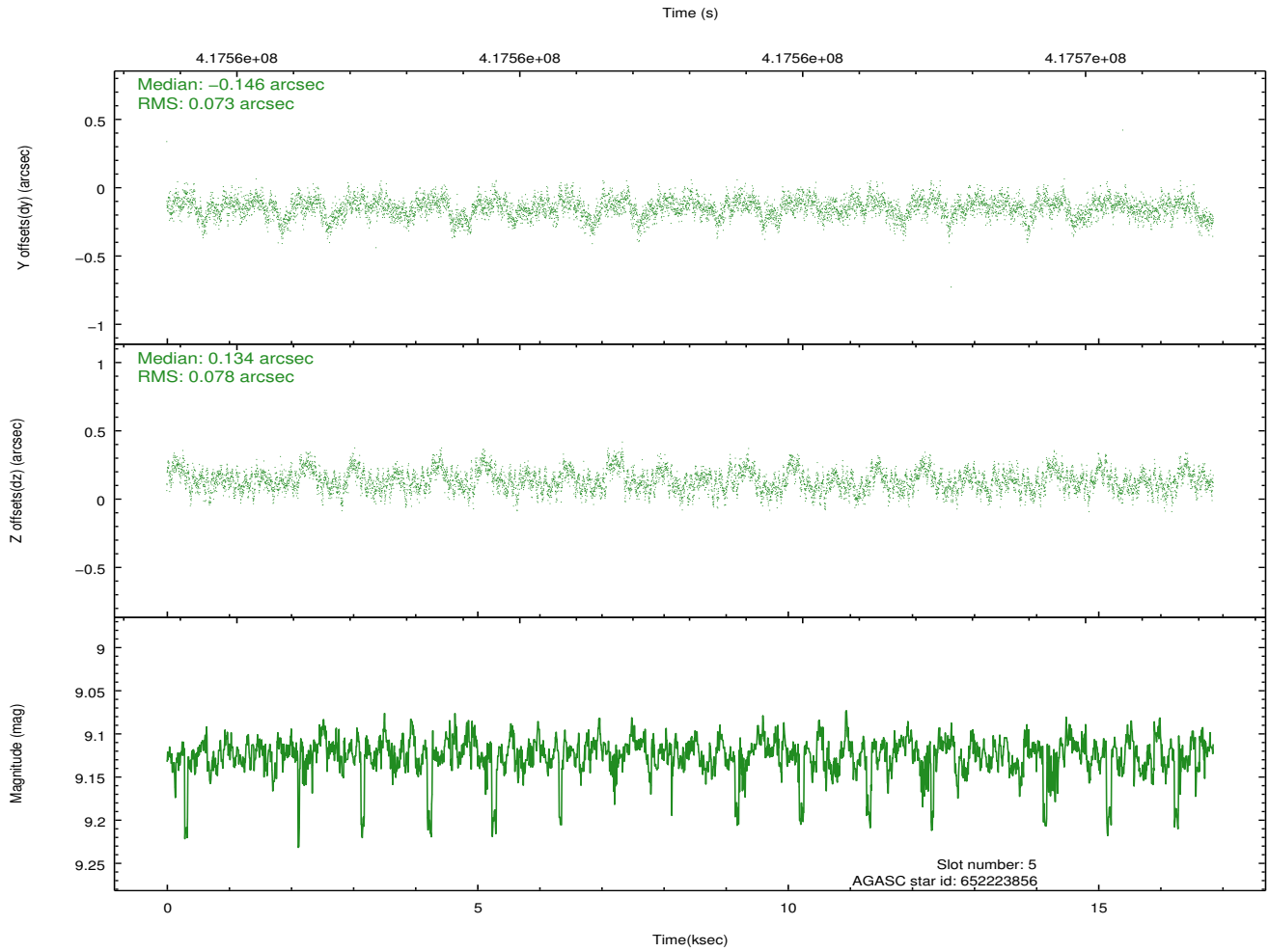
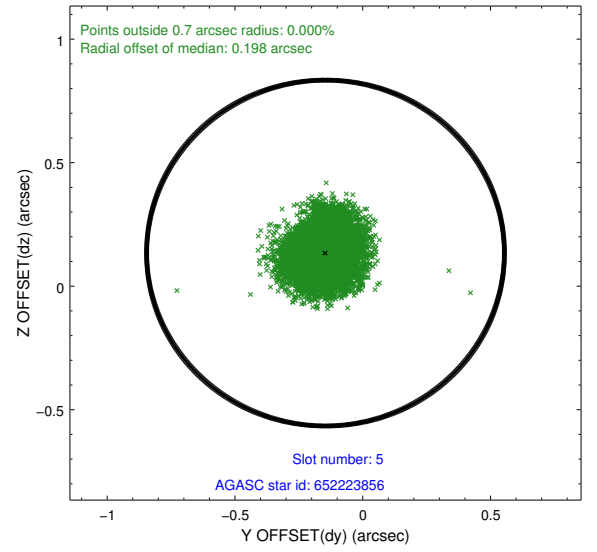
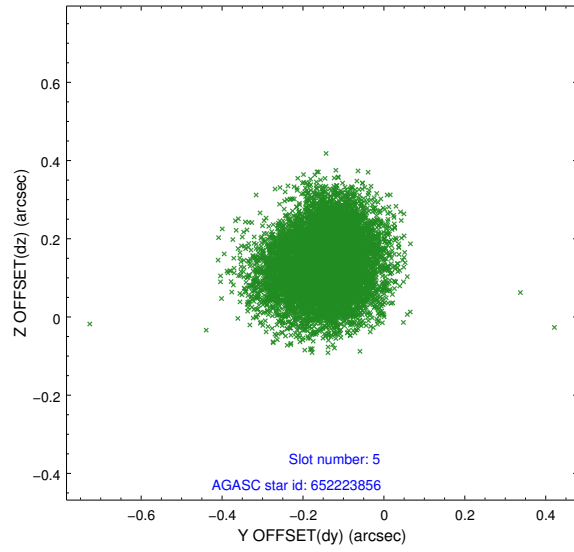
2.4.1 Slot 3



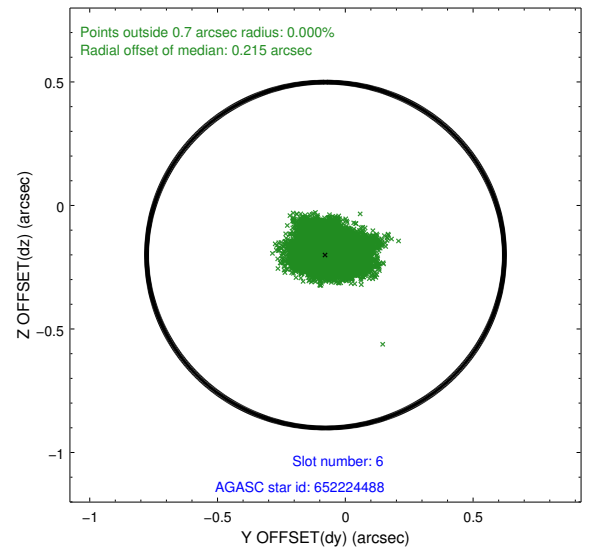
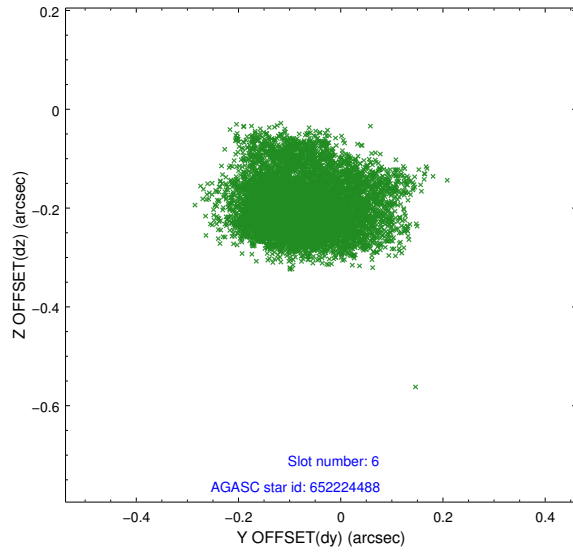
2.4.2 Slot 4



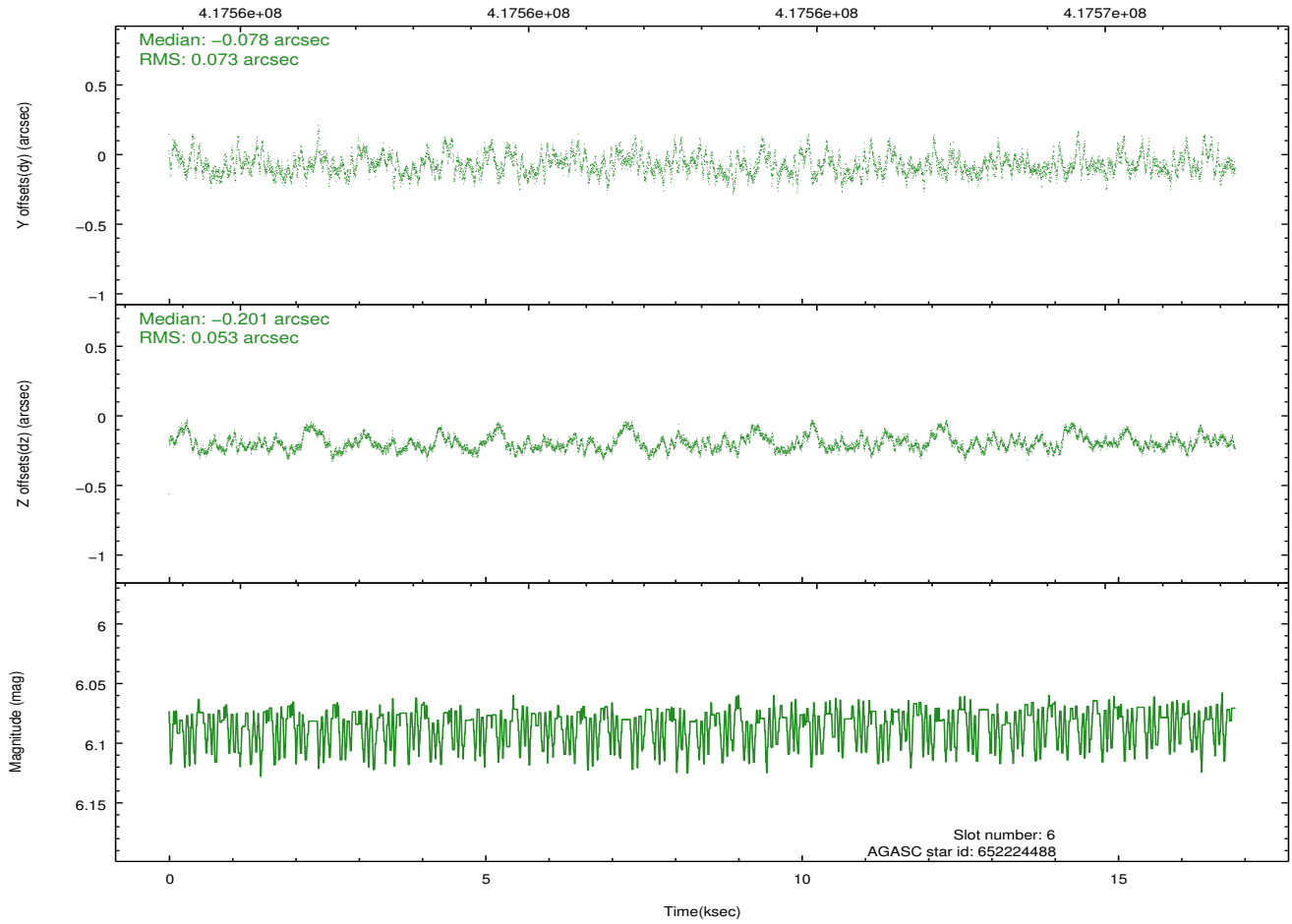
2.4.3 Slot 5



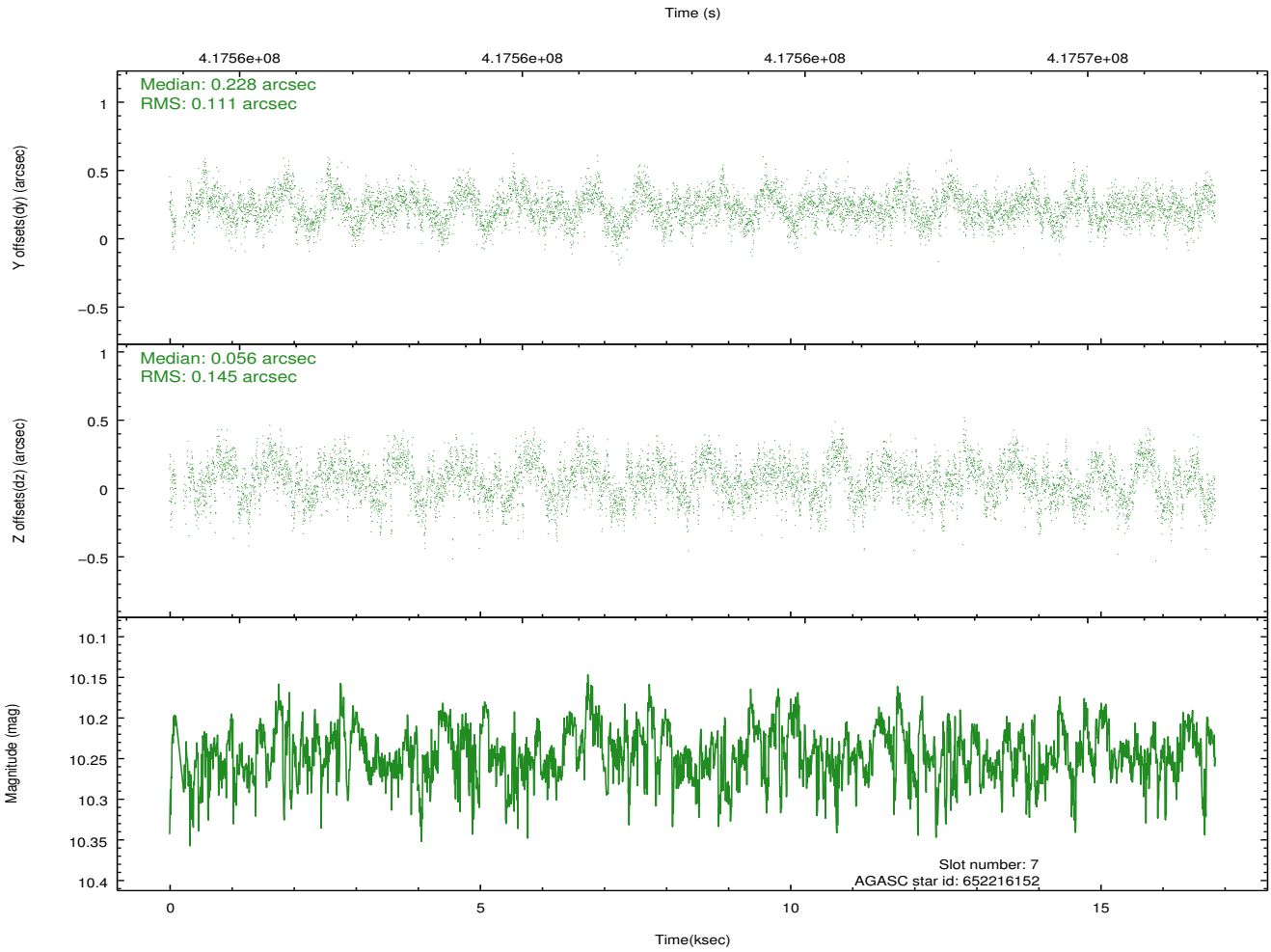
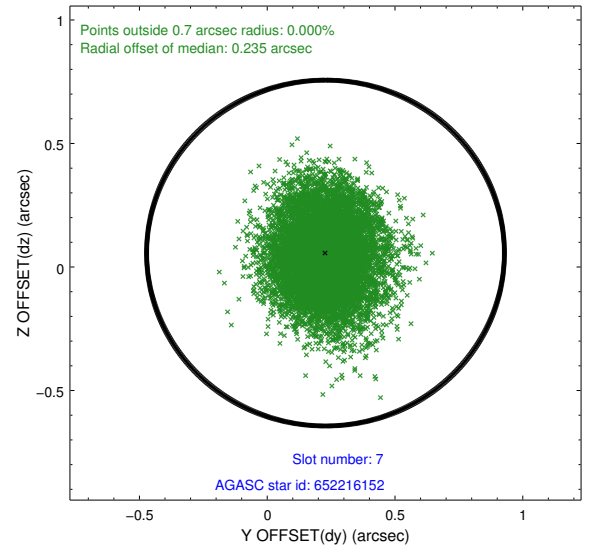
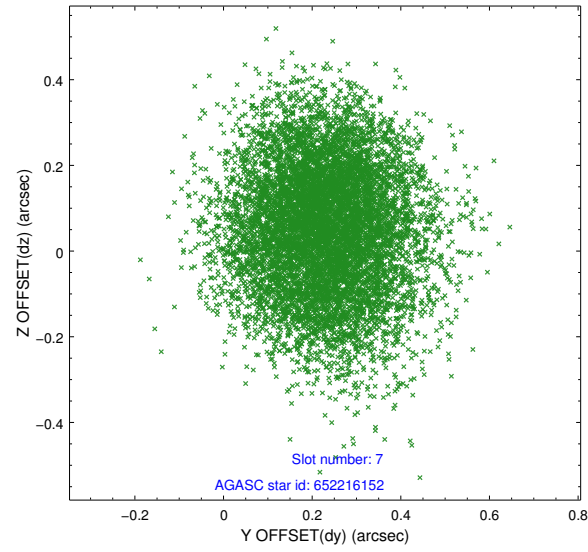
2.4.4 Slot 6



Time (s)

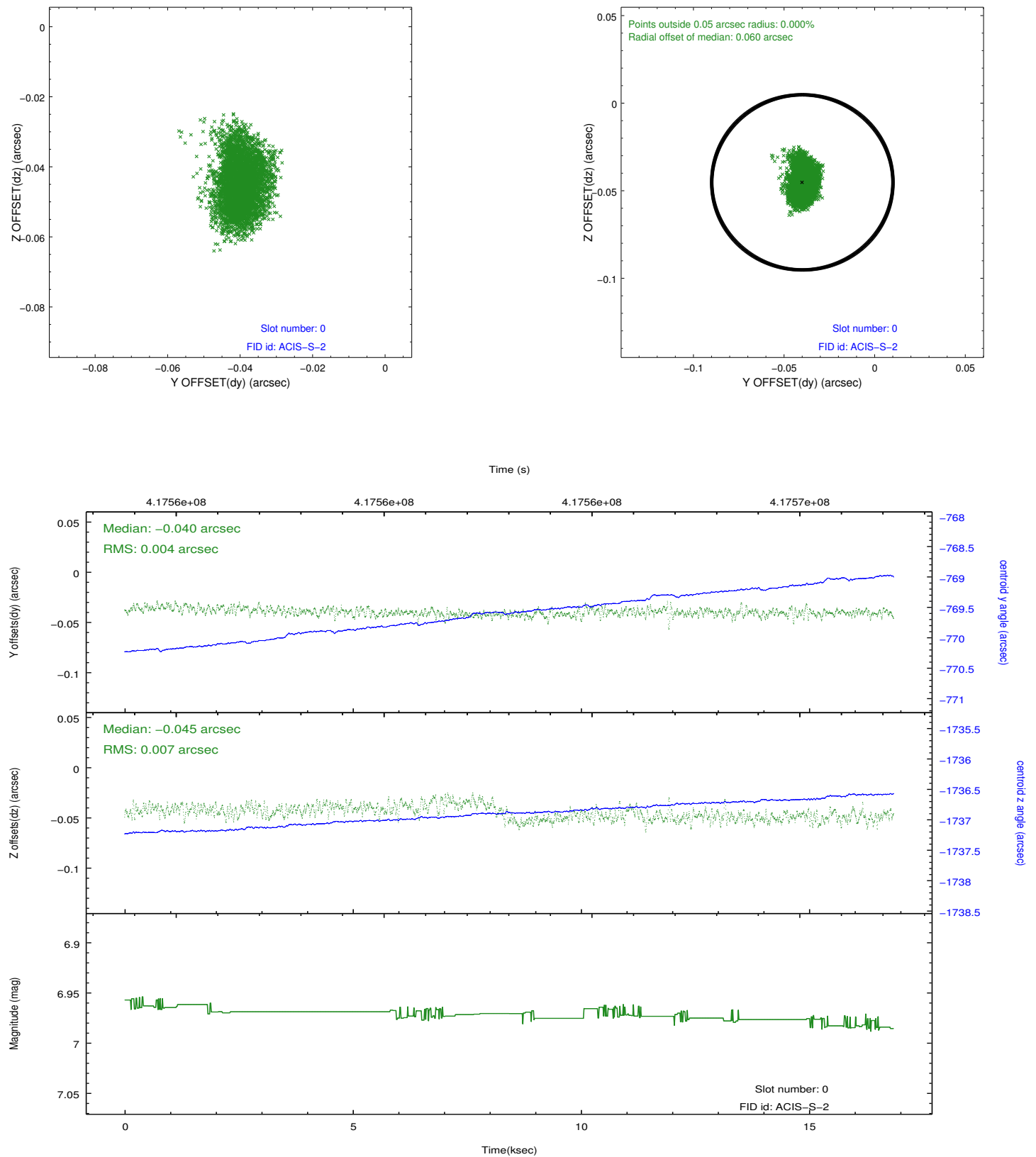


2.4.5 Slot 7

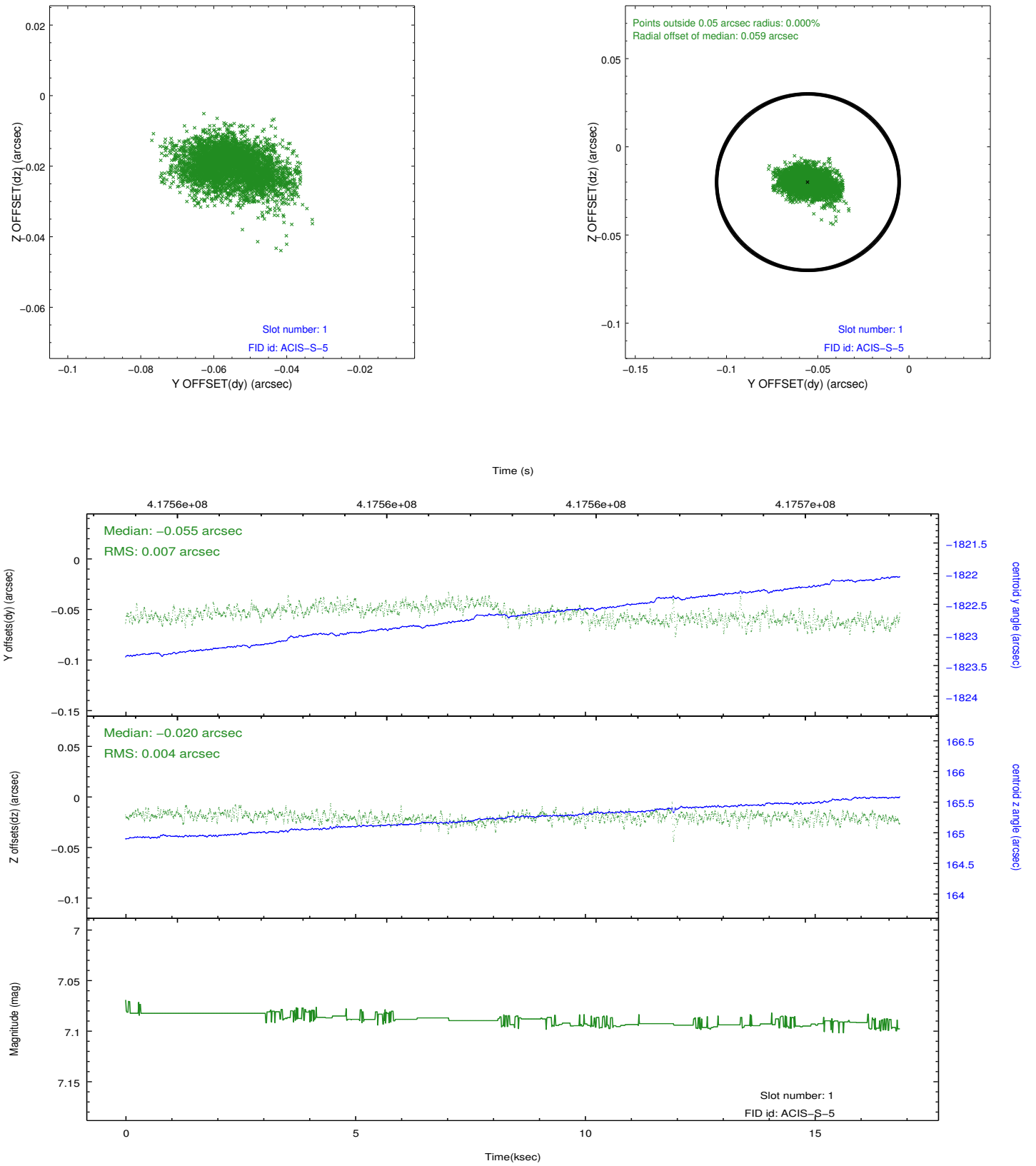


2.5 FID Slots

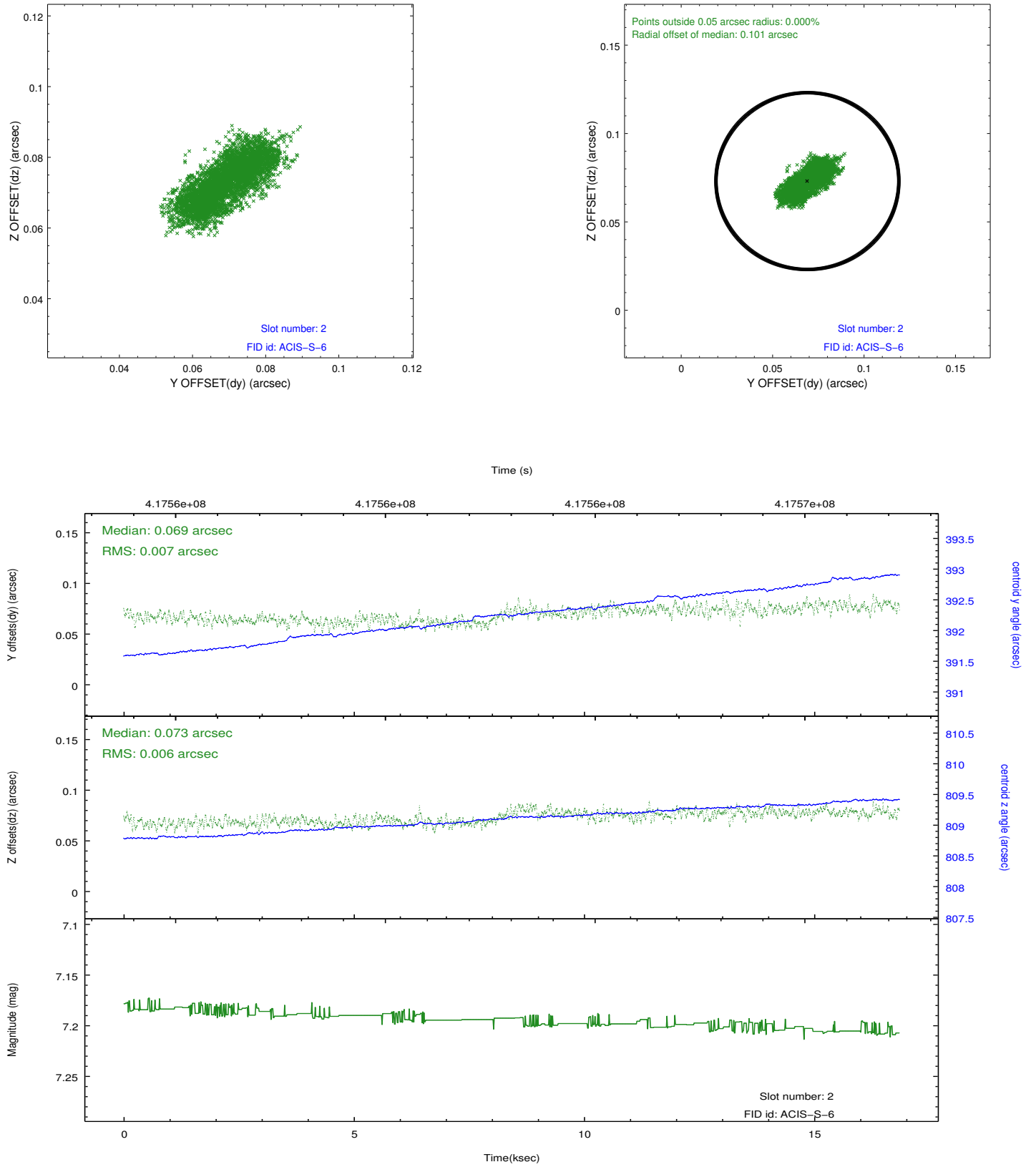
2.5.1 Slot 0



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)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.43793691808

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.