

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 6216 - L2 Version 002
Chandra X-Ray Center

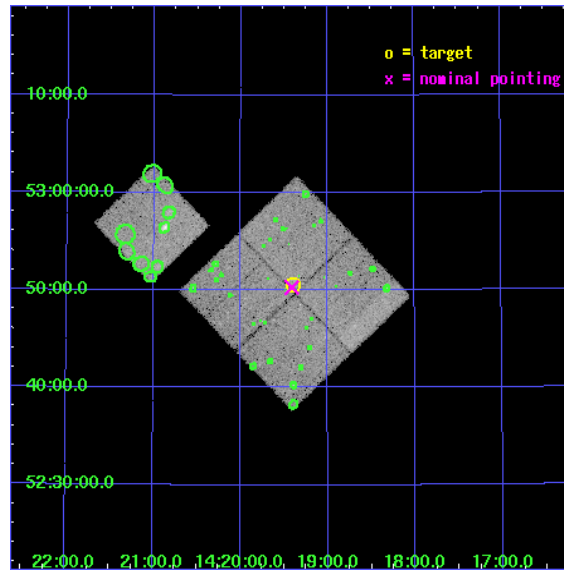
L2 Processing Date : Mar 25 2006

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1 Front

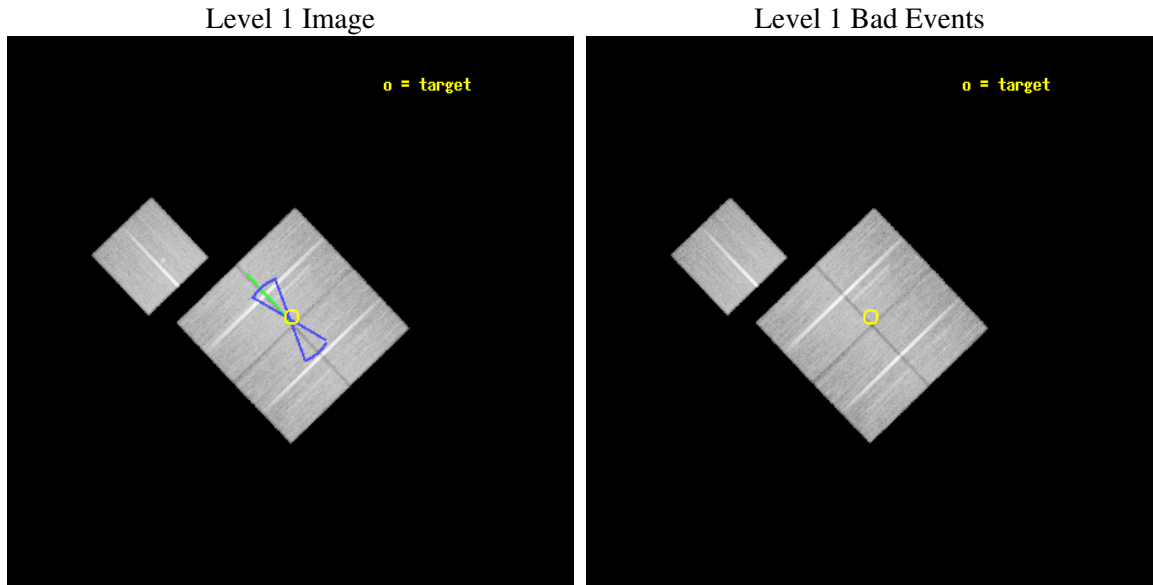
seq_num	900351
obs_id	6216
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies
observer	Professor Kirpal Nandra
object	EGS-4
dtcycle	0
cycle	P
ra_targ	214.849579
dec_targ	52.842415
ra_nom	214.85258518851
dec_nom	52.83815958071
roll_nom	316.2062902532
revision	2
ontime	50133.158943325
livetime	49478.132314236
ontime0	50117.454002529
ontime1	50126.87691322
ontime2	50126.877052695
ontime3	50133.158943325
ontime6	50133.158933342
l2events	122989



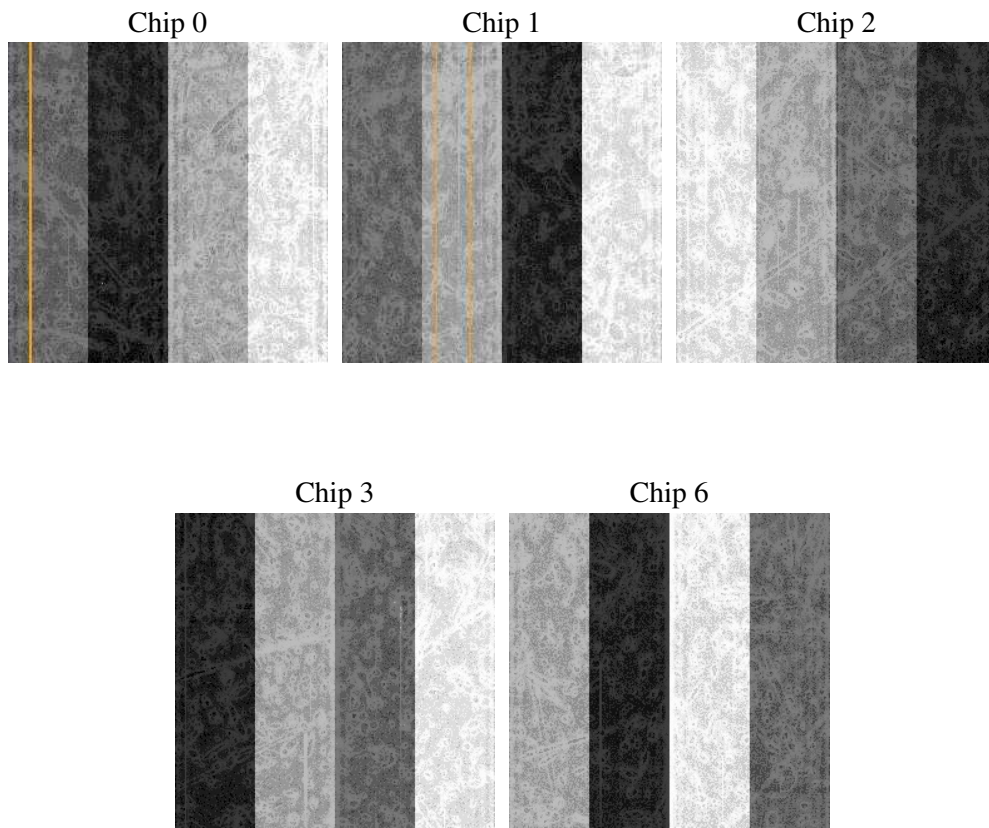
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-03-25T21:18:15
revision	2

sched_exp_time	50000.000000
ontime	50585.850806355
ontime0	50573.286875665
ontime1	50582.709786355
ontime2	50582.70992583
ontime3	50585.850806355
ontime6	50588.991806477
l1events	1370229

2.1.4 Events

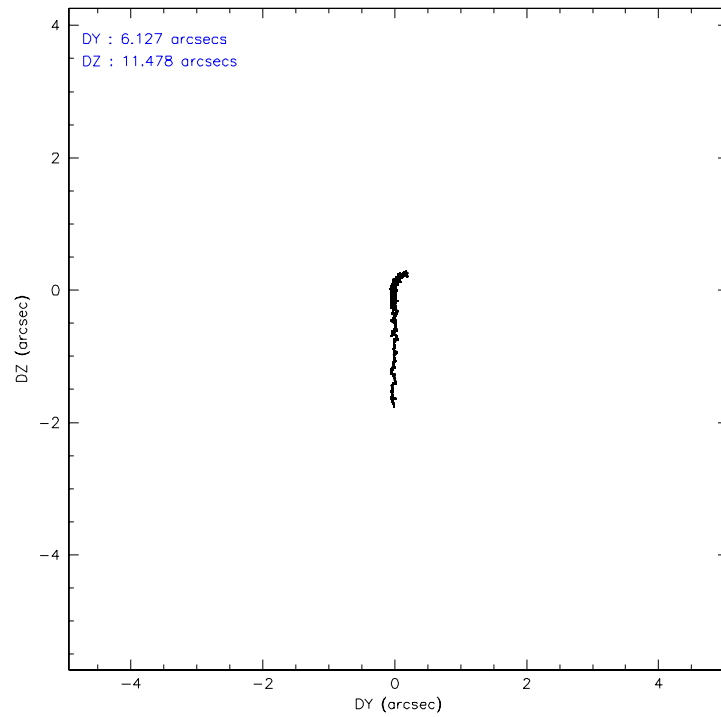
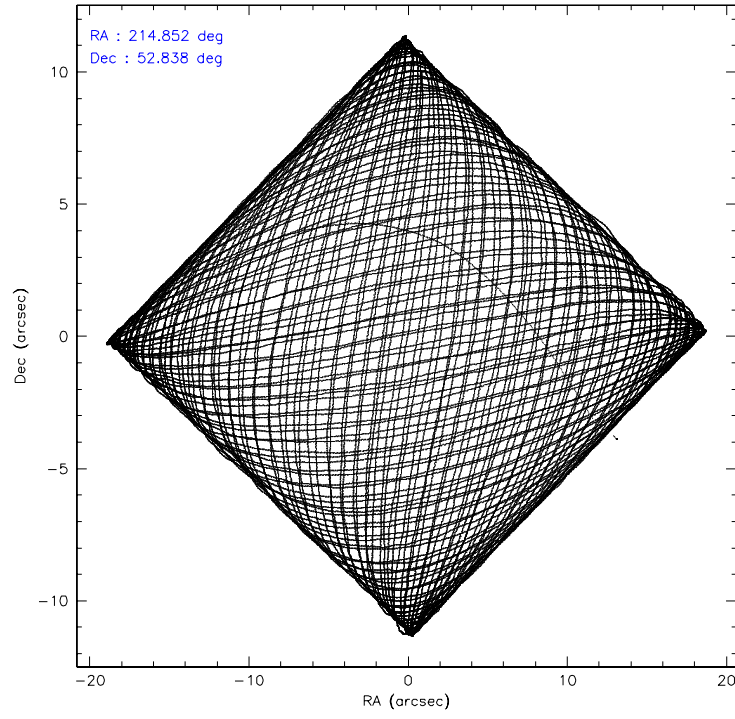
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	264556	263093	289586	275223	277771
rejected events	235526	230988	260583	248147	246760
rejected %	89%	87%	89%	90%	88%

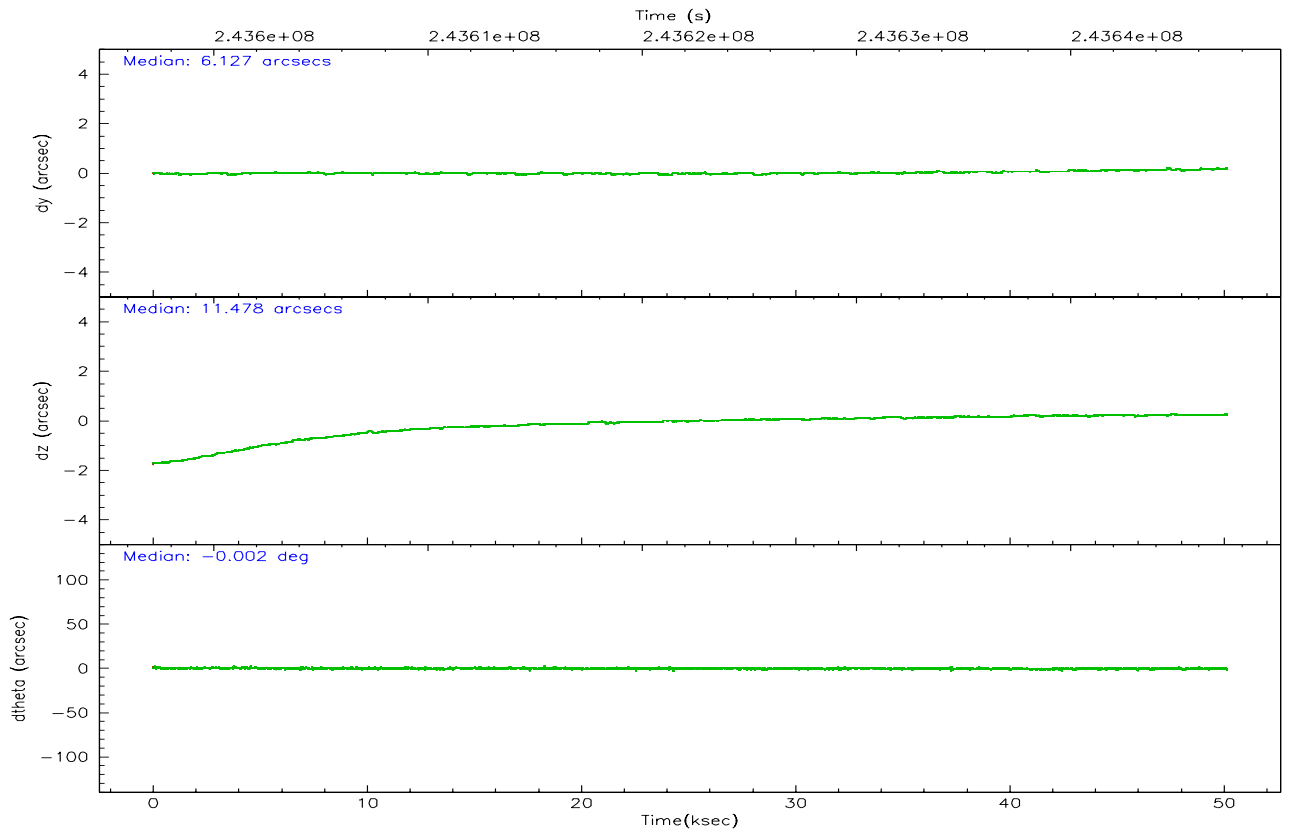
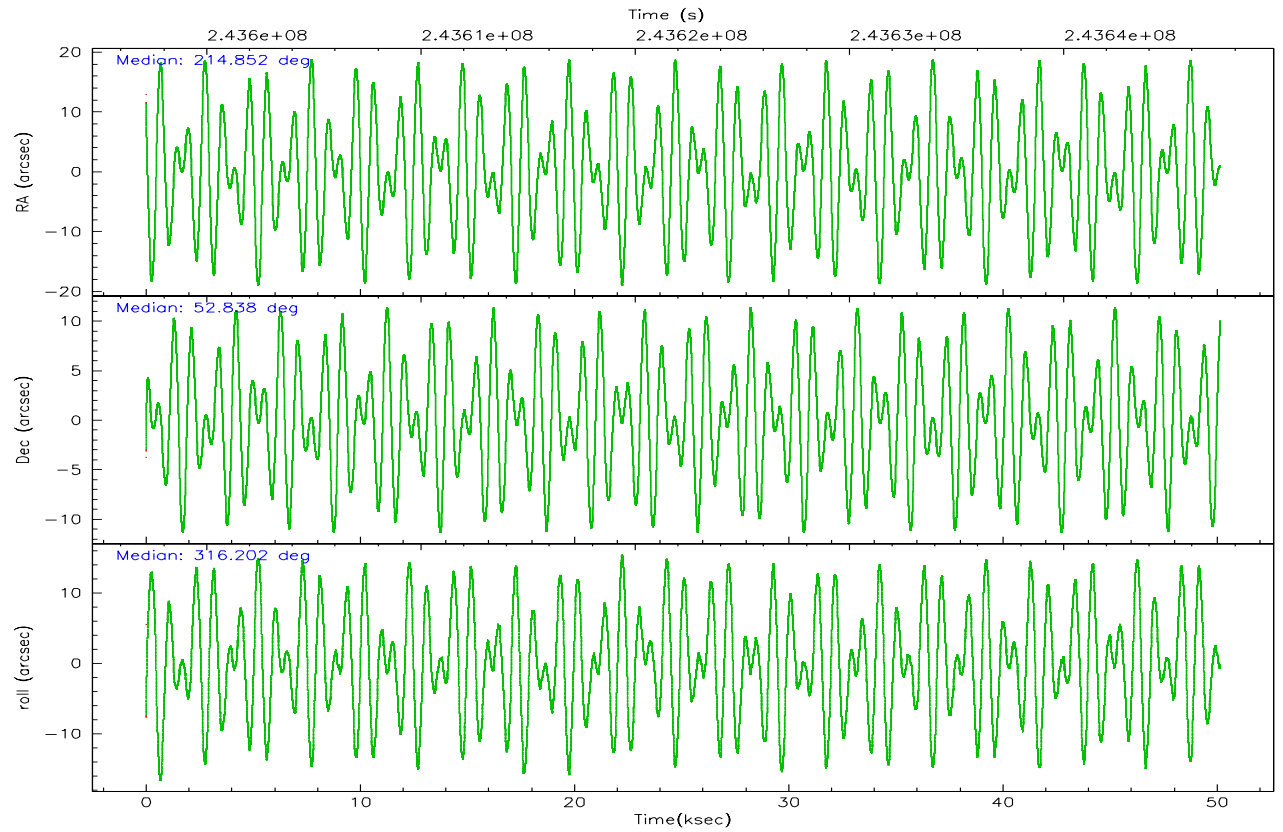
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10292	11589	10513	9732	11534
	3%	4%	3%	3%	4%
grade 1 events	125	117	147	134	122
	0%	0%	0%	0%	0%
grade 2 events	7088	7123	6888	5748	6667
	2%	2%	2%	2%	2%
grade 3 events	3258	3535	3146	3264	3380
	1%	1%	1%	1%	1%
grade 4 events	3051	3546	3238	3084	3297
	1%	1%	1%	1%	1%
grade 5 events	9725	10893	9365	11370	11593
	3%	4%	3%	4%	4%
grade 6 events	5602	6641	5483	5495	6405
	2%	2%	1%	1%	2%
grade 7 events	225415	219649	250806	236396	234773
	85%	83%	86%	85%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	214.808533	214.8525851885124	Alternating exposures requested	N	N
Pointing Dec	52.844568	52.83815958070991	Primary exposure time	0.000000	3.1
Pointing Roll	316.032711	316.2062902532025			
Roll angle	50.756000	50.756000			
Roll tolerance	20.000000	20.000000			
Roll constraint allows 180D rotation	Y	Y			
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	243597310.184000	243596113.98186			
Observation start date	2005-09-20T09:54:06	2005-09-20T09:35:13			
Observation end time	243647310.184000	243648916.85929			
Observation end date	2005-09-20T23:47:26	2005-09-21T00:15:16			
Read mode	TIMED	TIMED			

2.3 Aspect



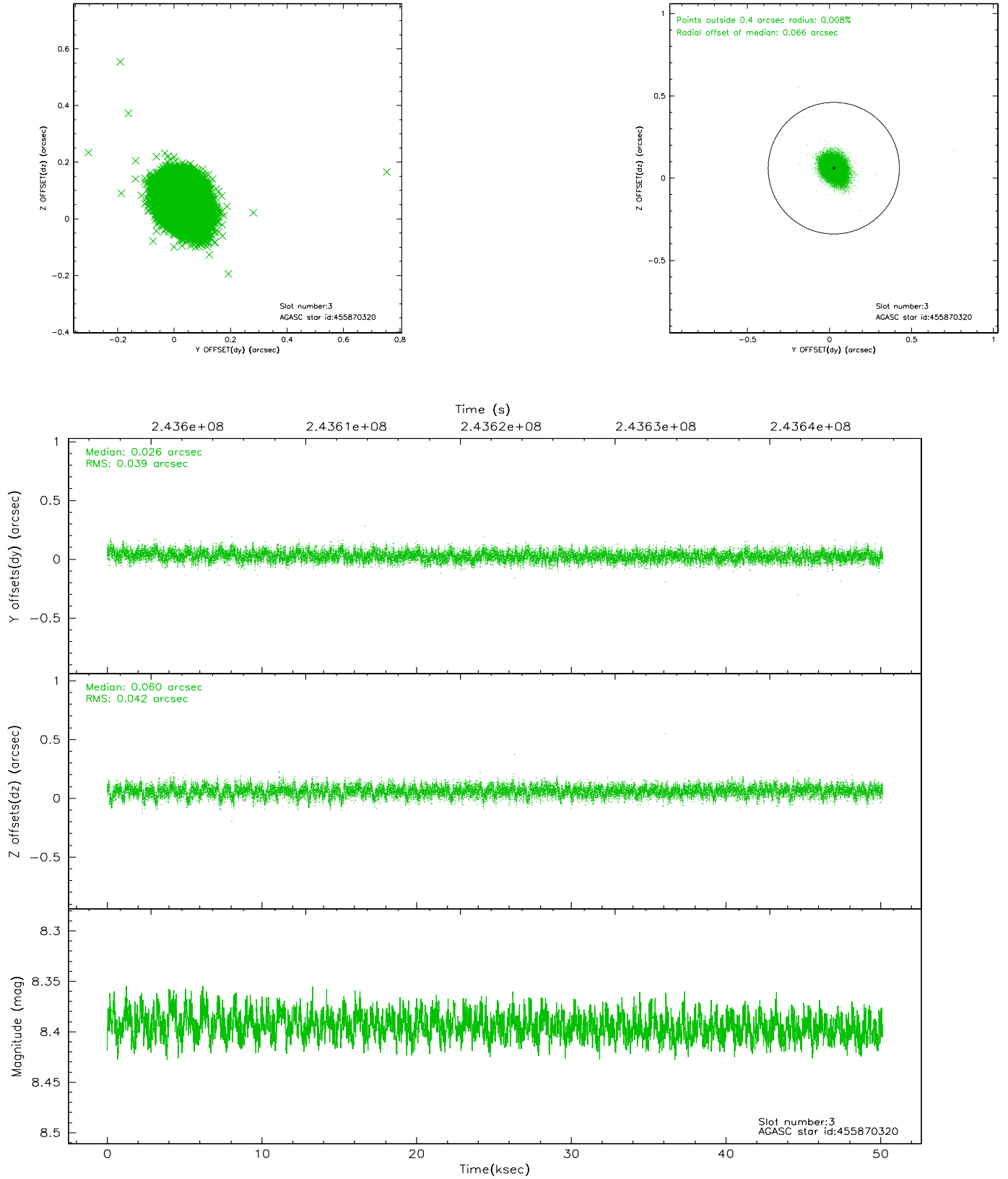


Slot Statistics

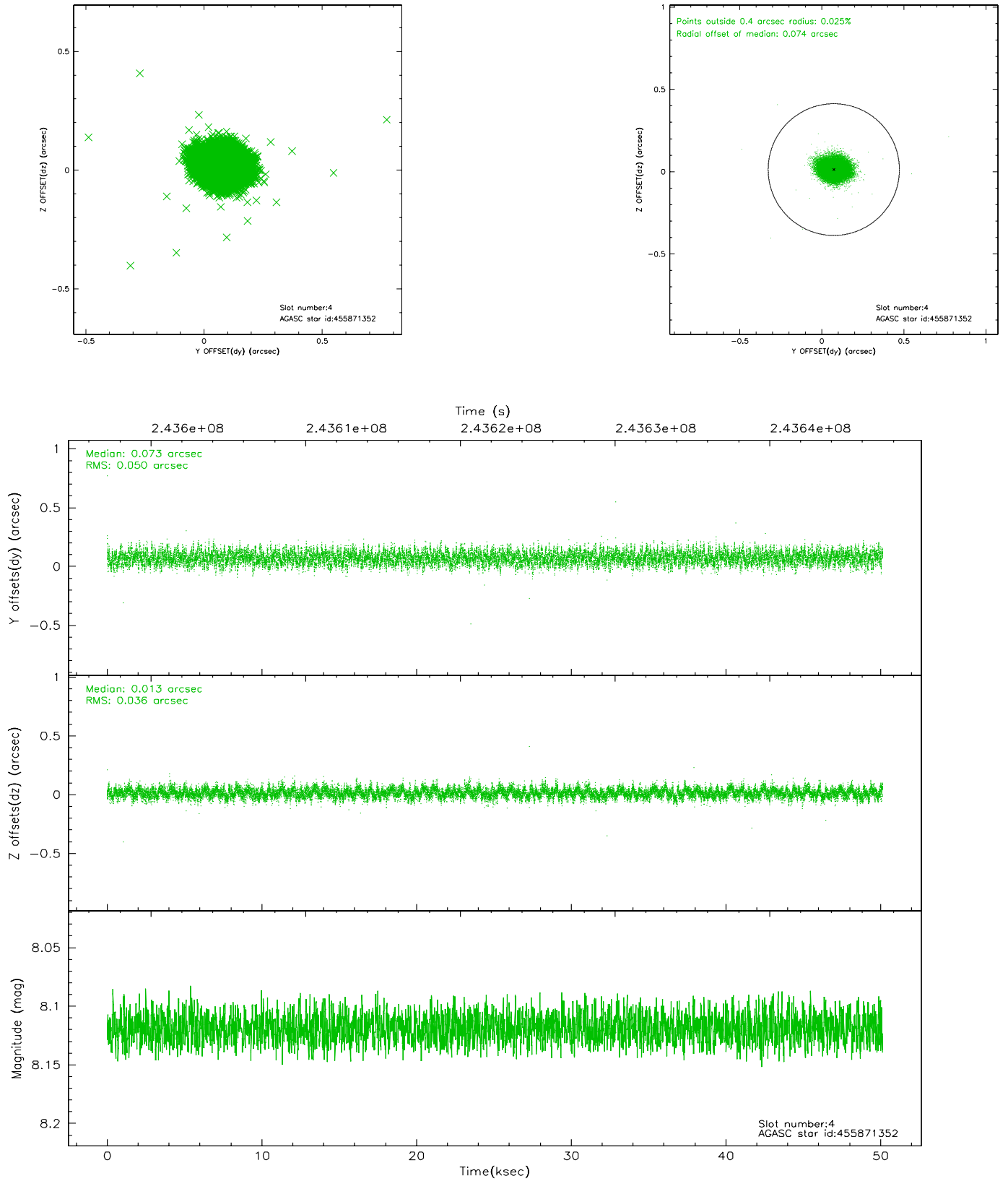
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.14	12229	-0.059	-0.084	0.013	0.033	0.000000	0.000000	-760.67	-841.23
1	FID	ACIS-I-4	7.17	12229	0.052	0.063	0.009	0.022	0.000000	0.000000	2153.51	1065.09
2	FID	ACIS-I-5	7.22	12231	-0.093	0.090	0.014	0.034	0.000000	0.000000	-1814.56	1062.95
3	GUIDE	455870320	8.39	24459	0.026	0.060	0.060	0.100	214.874440	52.401638	1211.74	-1046.71
4	GUIDE	455871352	8.12	24459	0.073	0.013	0.065	0.104	215.099961	52.172669	2142.10	-1292.92
5	GUIDE	505812088	8.14	24460	0.072	-0.046	0.066	0.102	214.186617	53.263562	-2014.54	160.11
6	GUIDE	505812376	7.65	24460	-0.190	0.041	0.059	0.093	214.039537	52.937930	-1440.20	-909.78
7	GUIDE	455870296	7.34	24460	0.018	-0.068	0.074	0.118	214.629779	52.033323	1742.85	-2376.23

2.4 Star Slots

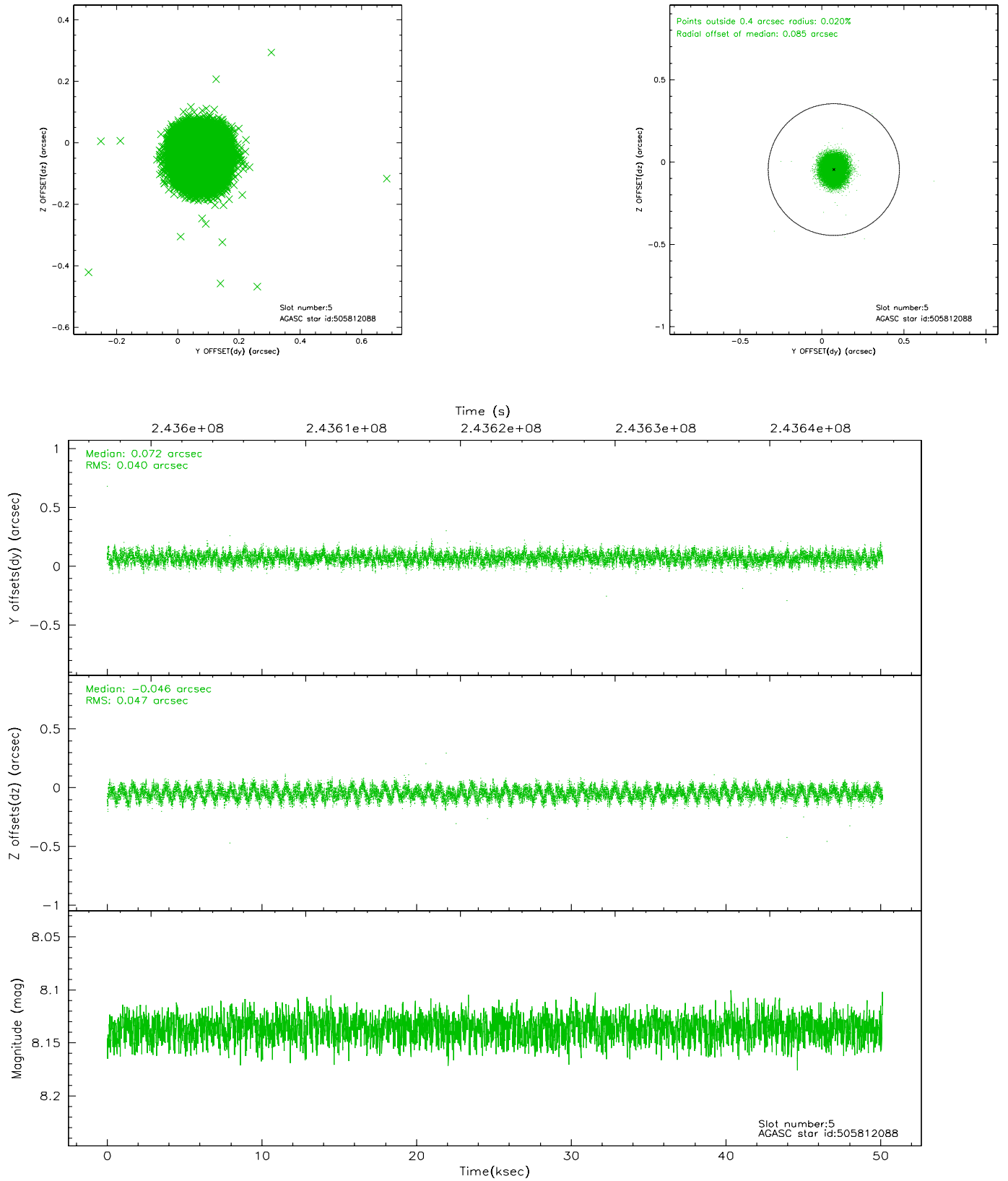
2.4.1 Slot 3



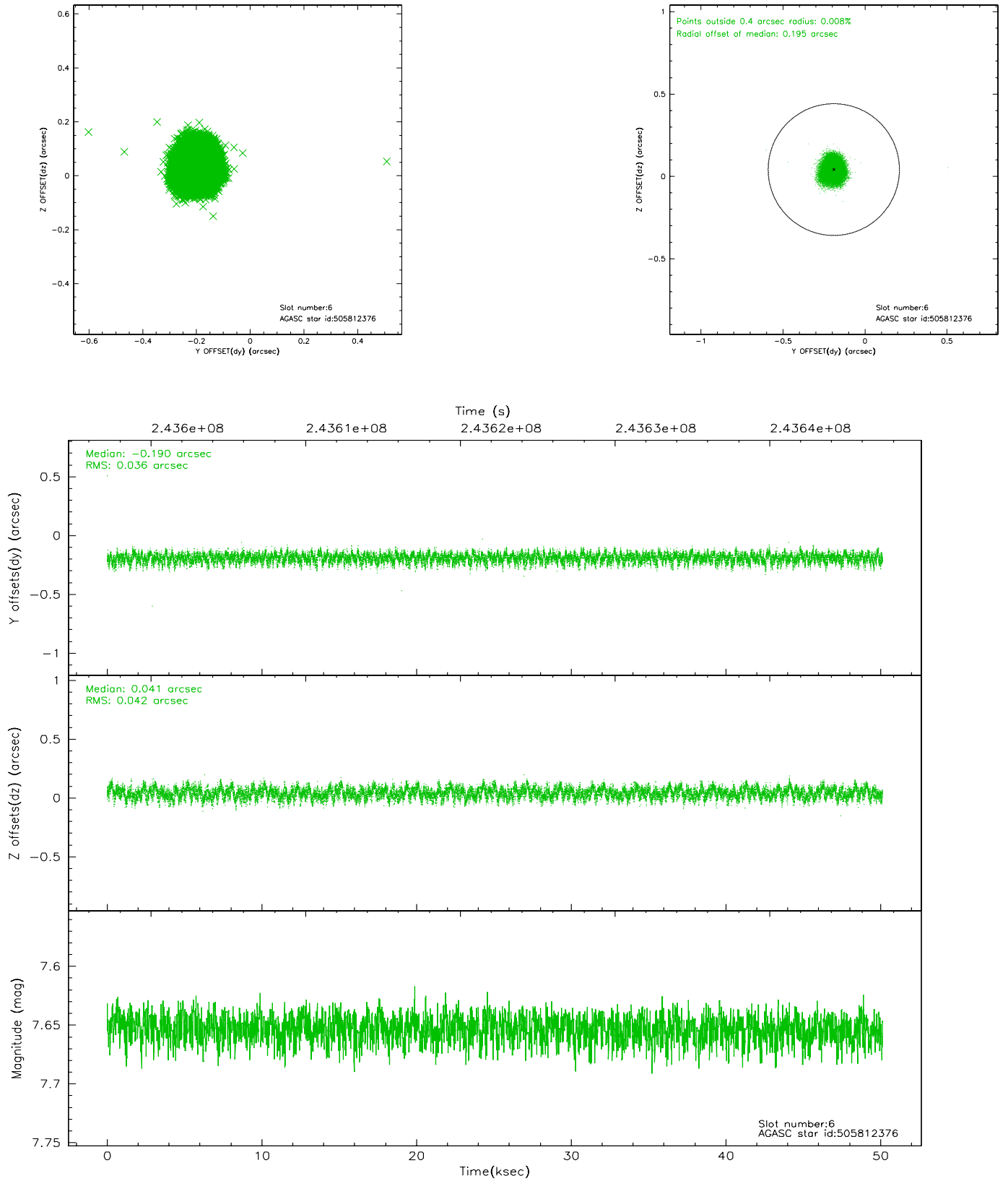
2.4.2 Slot 4



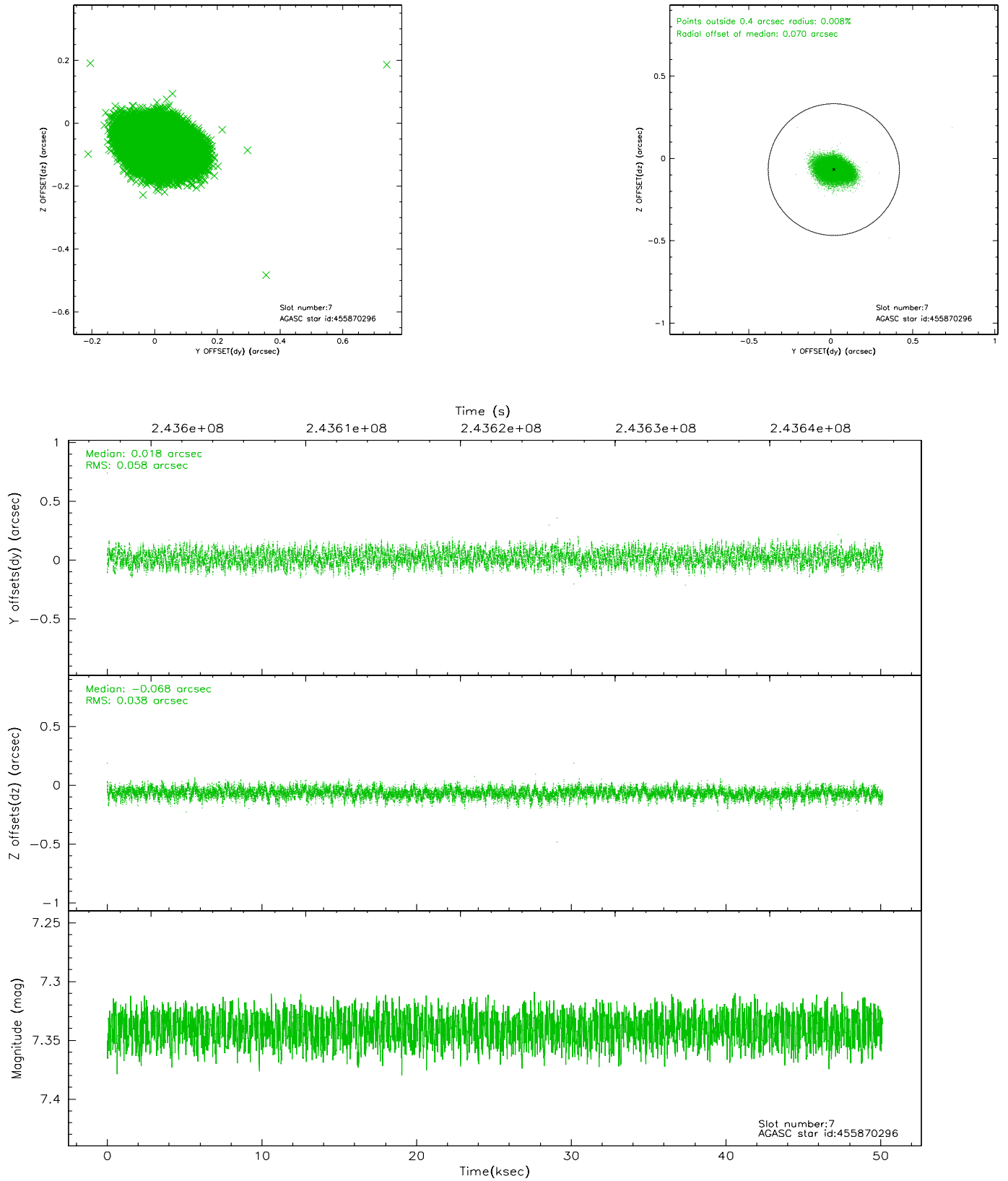
2.4.3 Slot 5



2.4.4 Slot 6

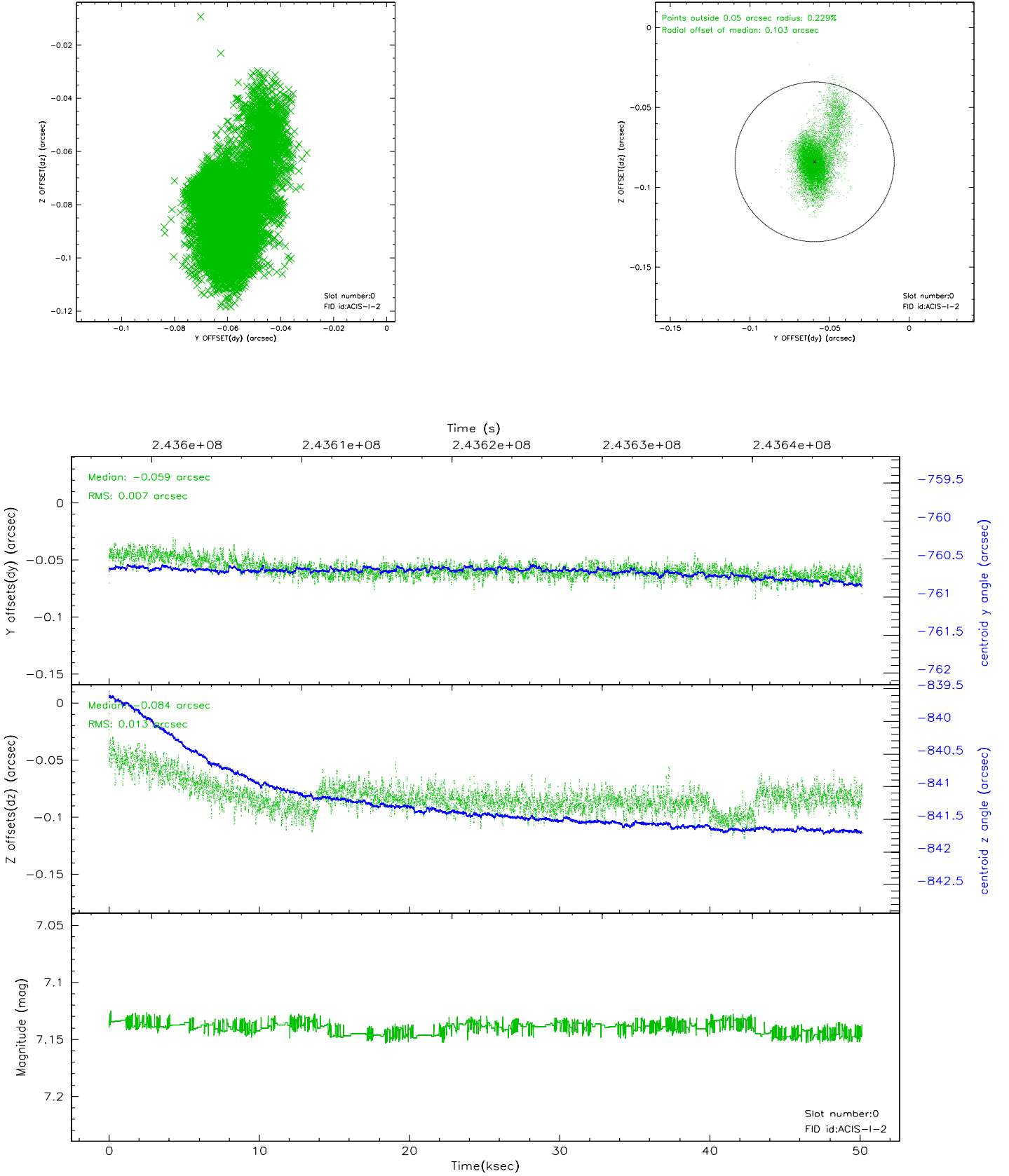


2.4.5 Slot 7

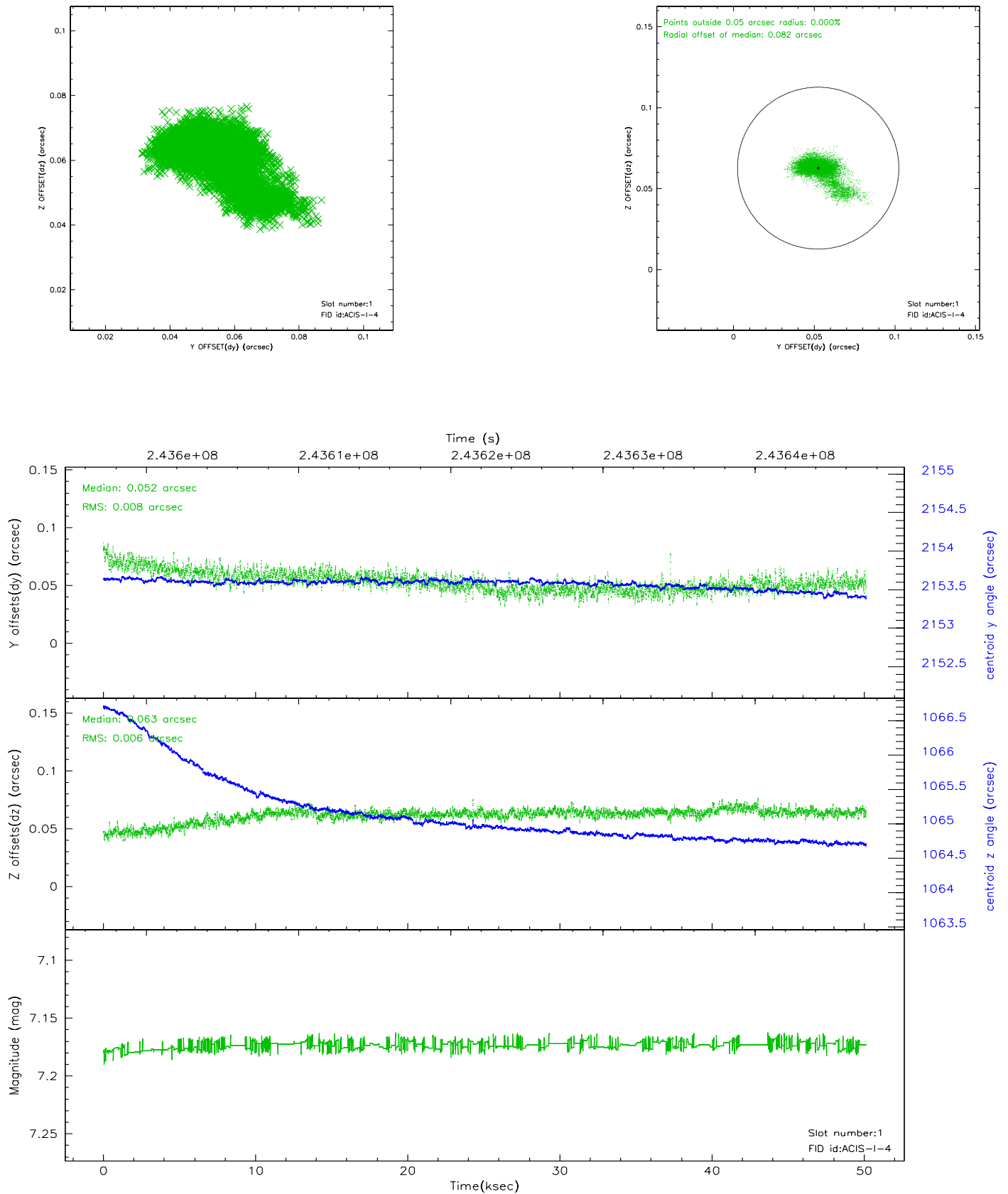


2.5 FID Slots

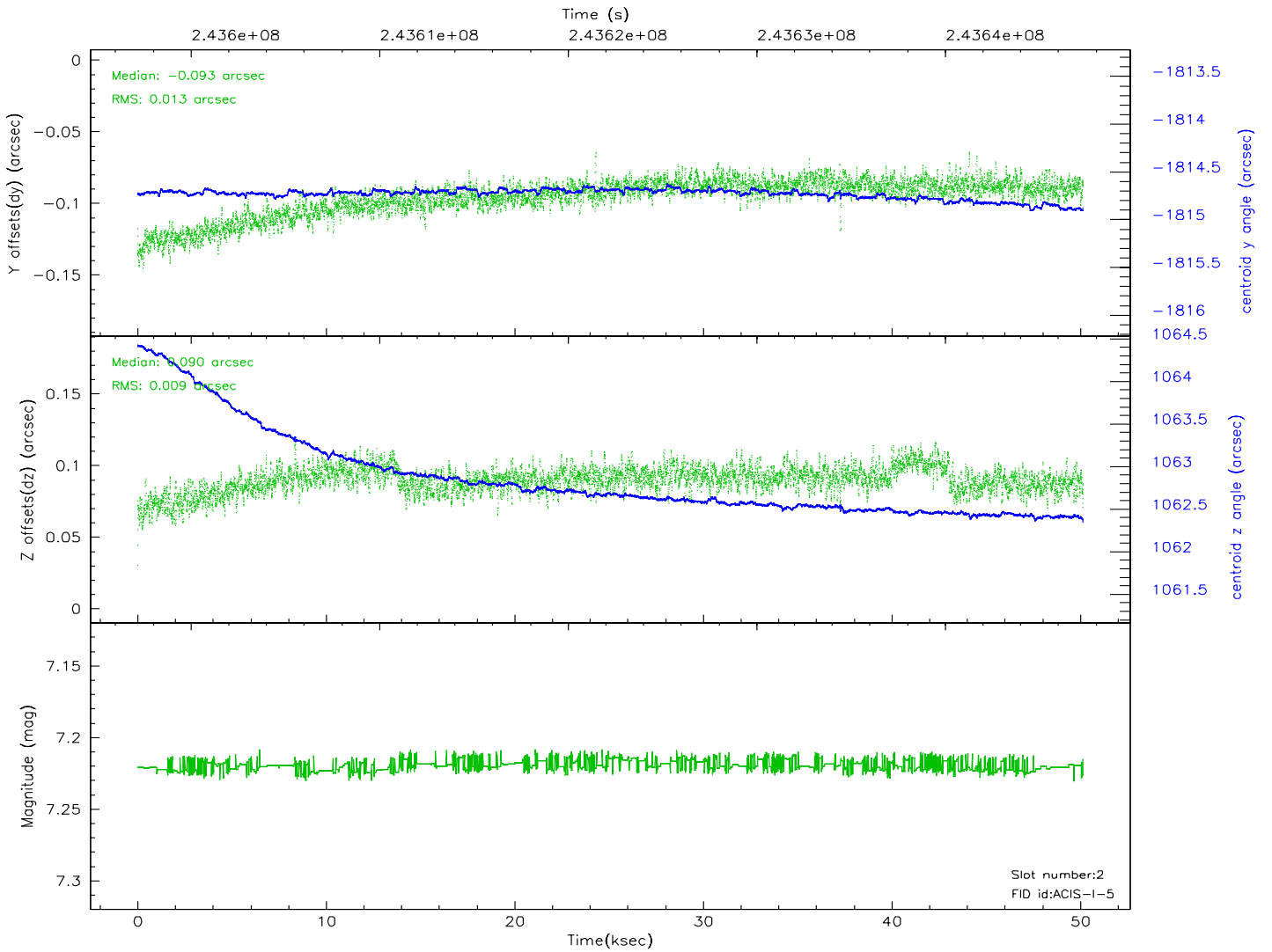
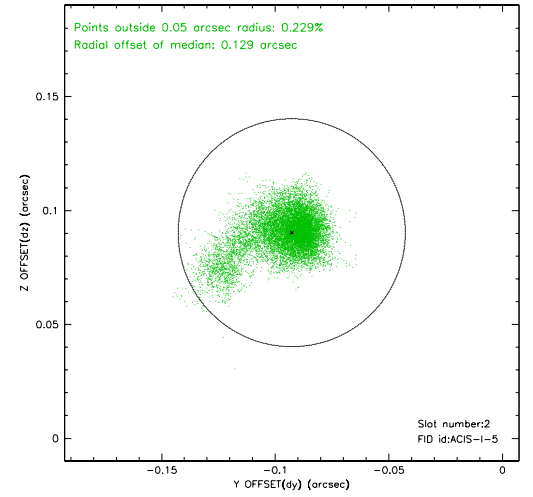
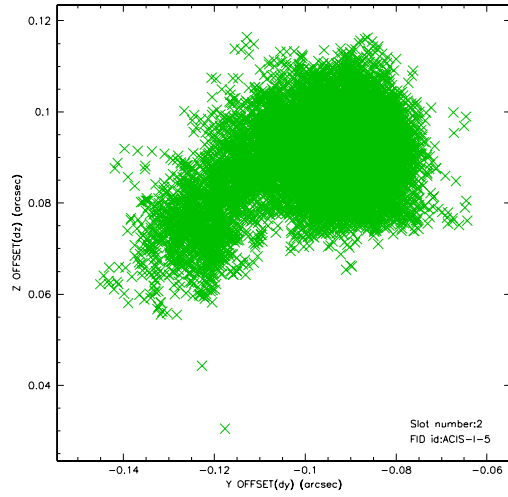
2.5.1 Slot 0



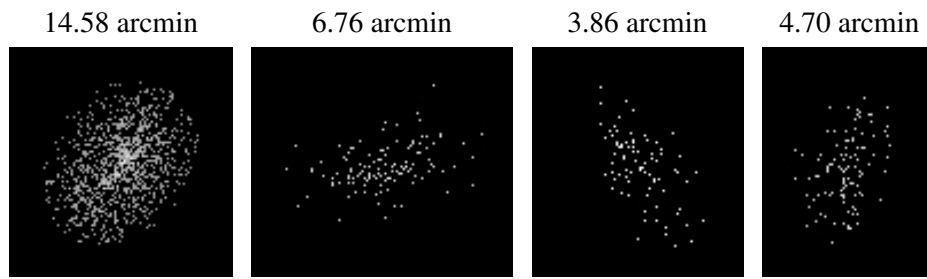
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.03.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.13315

A.2 Comments

Roll constraint met. Focal plane temperature change ~3 deg over the course of the observation.

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. GOs should subtract 1.3 degrees from the reported temperature to determine the true temperature. In addition the FP temperature was not regulating during this period. The FP temperature fluctuated between -121.3 C and -118.8 C during this time. For analysis of line-dominated spectra from the FI CCDs, GOs might notice a systematic gain shift by up to 0.5%, either towards higher/lower energies depending on if the FP temperature was colder/warmer than -119.7 C. Analysis of line-dominated spectra on S3 are mostly unaffected (where mostly unaffected means that the changes are smaller than the current uncertainties in the calibration). Analysis of continuum-dominated spectra on both the FI and BI CCDs are mostly unaffected. Imaging analysis on both the FI and BI CCDs are mostly unaffected.