

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 6391 - L2 Version 002
Chandra X-Ray Center

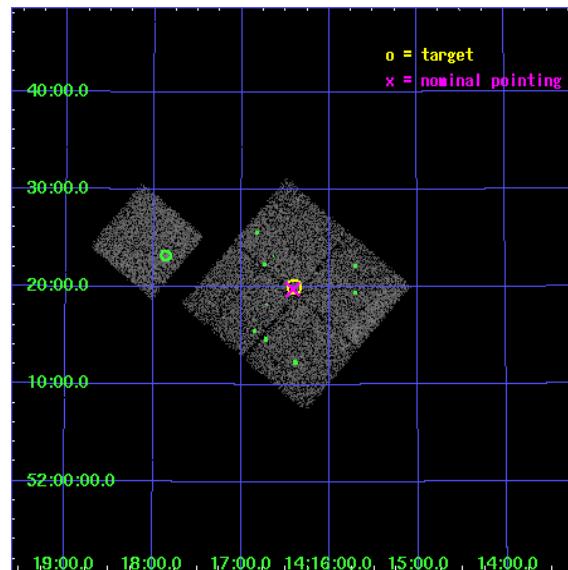
L2 Processing Date : Mar 25 2006

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Point Sources	17
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

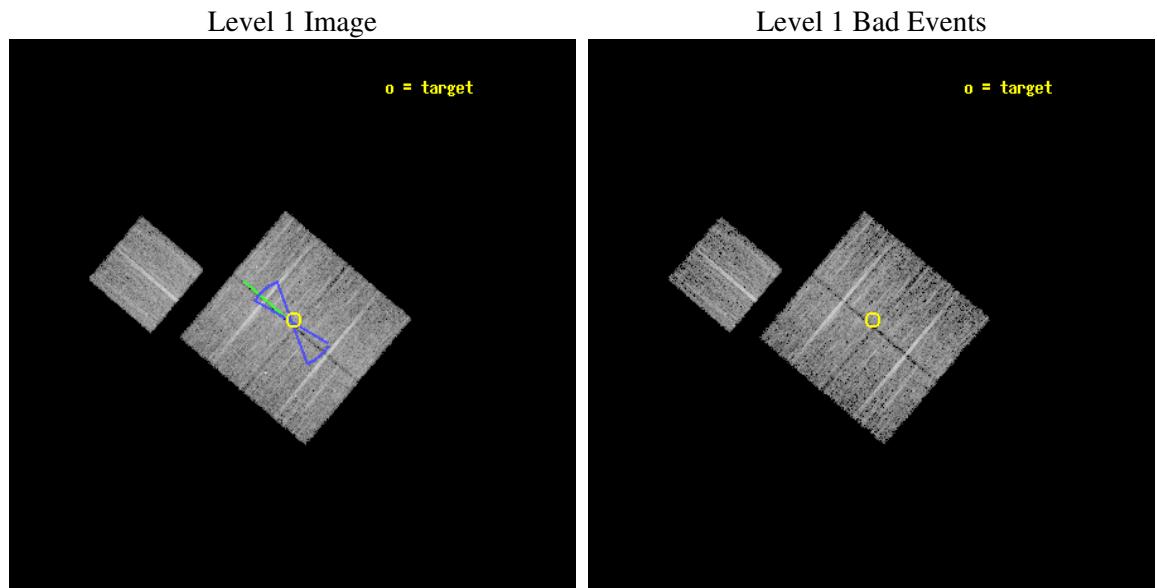
seq_num	900353
obs_id	6391
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies
observer	Professor Kirpal Nandra
object	EGS-6
dtycycle	0
cycle	P
ra_targ	214.102081
dec_targ	52.334053
ra_nom	214.10440327916
dec_nom	52.329562460616
roll_nom	310.20684696952
revision	2
ontime	8565.2999835312
livetime	8453.3880335643
ontime0	8565.2999835312
ontime1	8565.2999835312
ontime2	8565.2999835312
ontime3	8565.2999835312
ontime6	8565.2999835312
l2events	28425



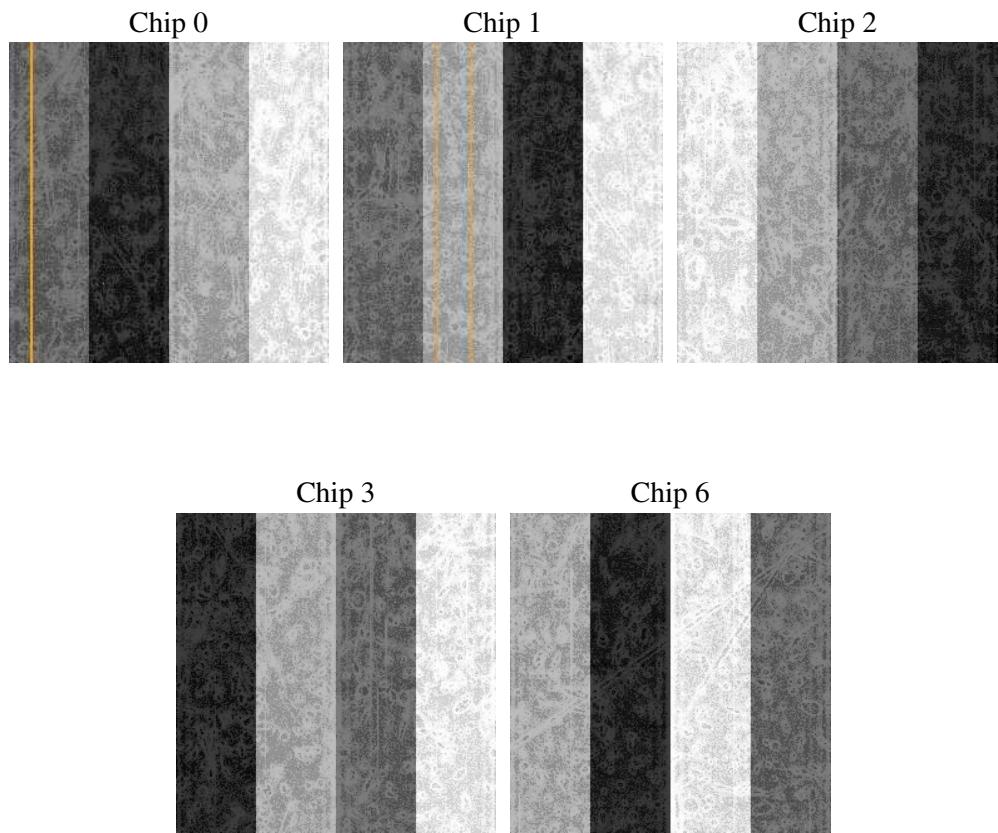
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-03-25T18:58:11
revision	2

sched_exp_time	8389.742000
ontime	8835.654486388
ontime0	8835.654486388
ontime1	8835.654486388
ontime2	8835.6544564366
ontime3	8835.654486388
ontime6	8835.654486388
l1events	232171

2.1.4 Events

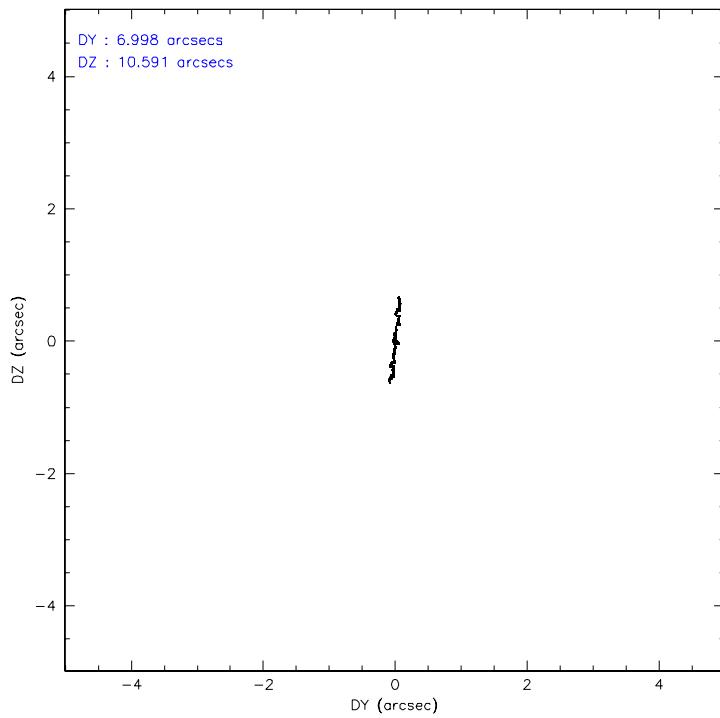
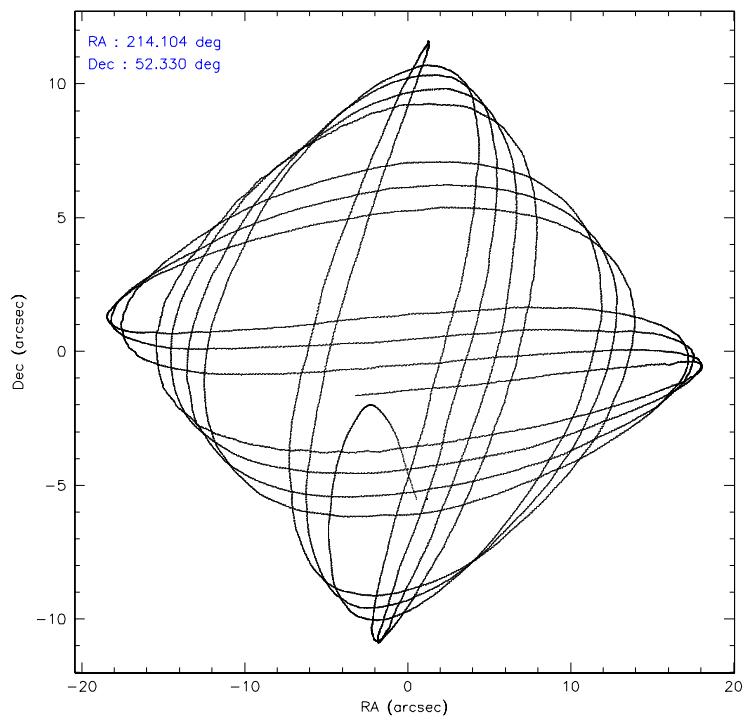
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	44050	44254	48337	47813	47717
rejected events	37476	37062	41841	41749	40372
rejected %	85%	83%	86%	87%	84%

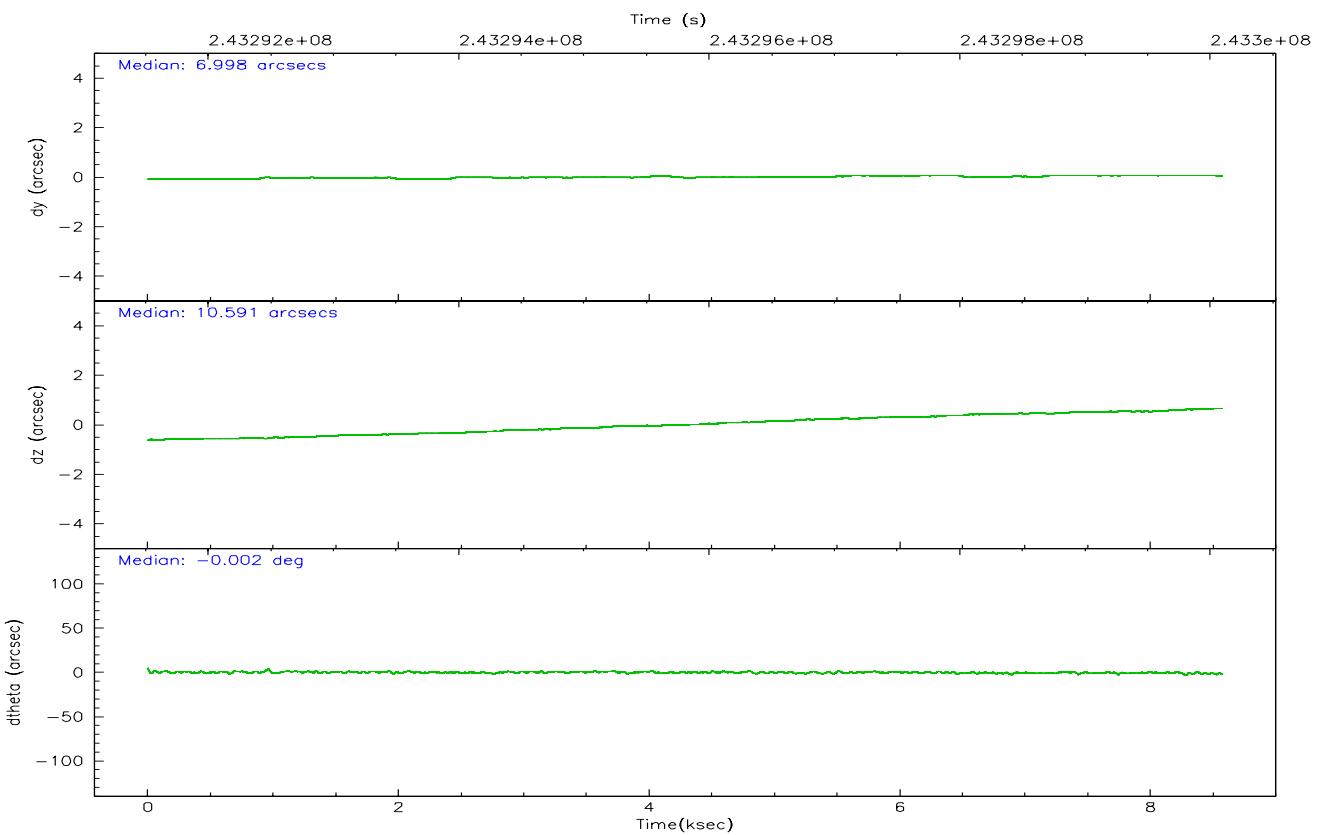
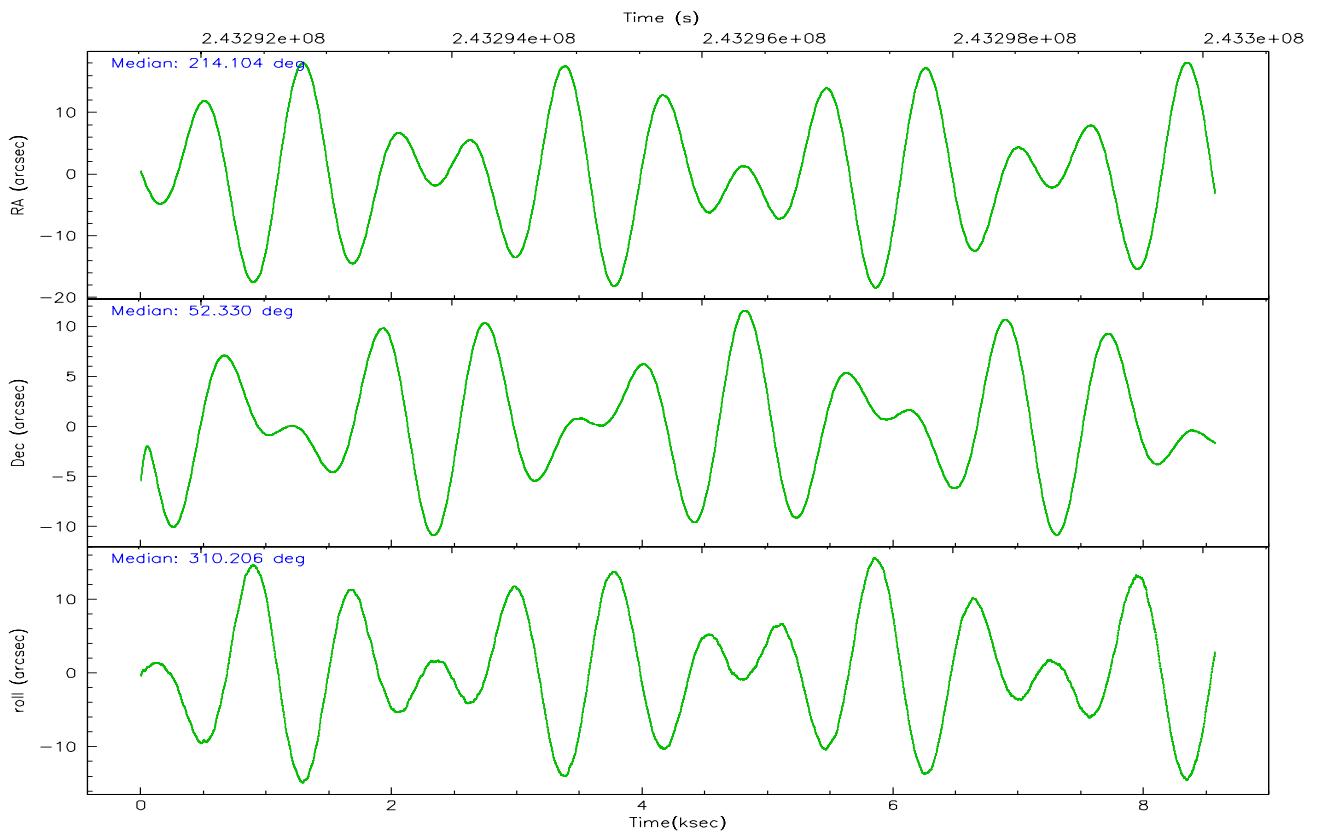
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3044	3319	3092	2746	3639
	6%	7%	6%	5%	7%
grade 1 events	34	21	27	32	31
	0%	0%	0%	0%	0%
grade 2 events	1476	1512	1439	1184	1362
	3%	3%	2%	2%	2%
grade 3 events	589	647	548	640	617
	1%	1%	1%	1%	1%
grade 4 events	556	616	596	539	586
	1%	1%	1%	1%	1%
grade 5 events	1597	1713	1455	1792	1816
	3%	3%	3%	3%	3%
grade 6 events	1066	1304	984	1106	1300
	2%	2%	2%	2%	2%
grade 7 events	35688	35122	40196	39774	38366
	81%	79%	83%	83%	80%

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	214.062099	214.104403279156	Alternating exposures requested	N	N
Pointing Dec	52.338792	52.32956246061622	Primary exposure time	0.000000	3.1
Pointing Roll	310.031650	310.2068469695241			
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	243291703.184000	243290581.96781			
Observation start date	2005-09-16T21:00:39	2005-09-16T20:43:01			
Observation end time	243300093.184000	243300326.13076			
Observation end date	2005-09-16T23:20:29	2005-09-16T23:25:26			
Read mode	TIMED	TIMED			

2.3 Aspect





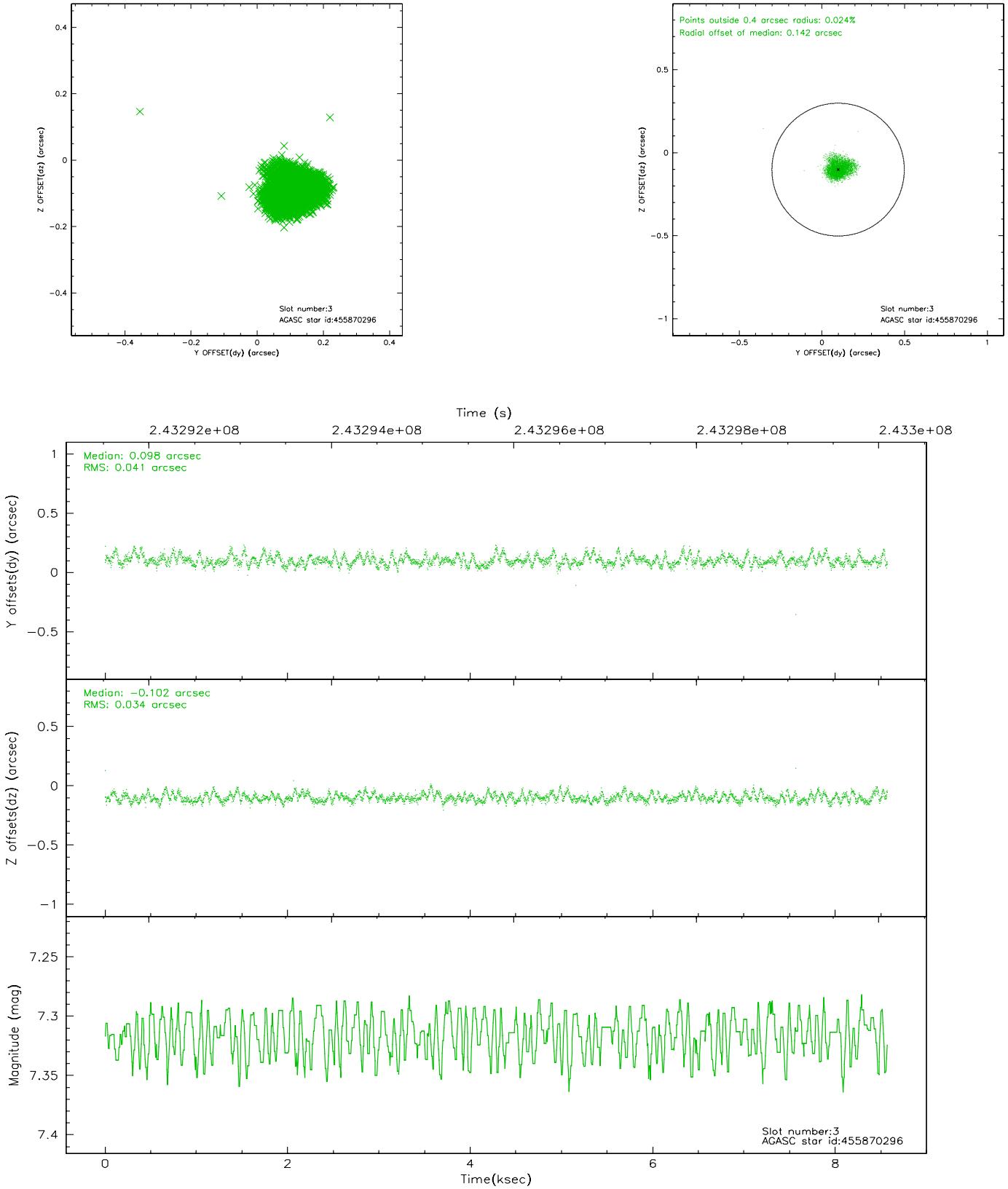
Slot Statistics

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	2091	-0.104	-0.046	0.010	0.016	0.000000	0.000000	-761.60	-840.50
1	FID	ACIS-I-4	7.18	2091	0.032	0.054	0.012	0.021	0.000000	0.000000	2152.31	1065.44
2	FID	ACIS-I-6	7.26	2091	-0.028	0.054	0.014	0.026	0.000000	0.000000	399.40	1708.37
3	GUIDE	455870296	7.32	4182	0.098	-0.102	0.056	0.091	214.629779	52.033323	1646.77	258.59
4	GUIDE	455871352	8.10	4181	0.039	0.141	0.049	0.079	215.099961	52.172669	1919.35	1380.78
5	GUIDE	505806936	7.02	4182	-0.030	-0.192	0.069	0.112	213.820815	52.535927	-883.75	52.80
6	GUIDE	505812376	7.63	4181	-0.144	-0.143	0.059	0.095	214.039537	52.937930	-1683.66	1349.92
7	GUIDE	504894728	8.82	4181	0.028	0.288	0.061	0.101	213.220892	52.722550	-2246.39	-508.18

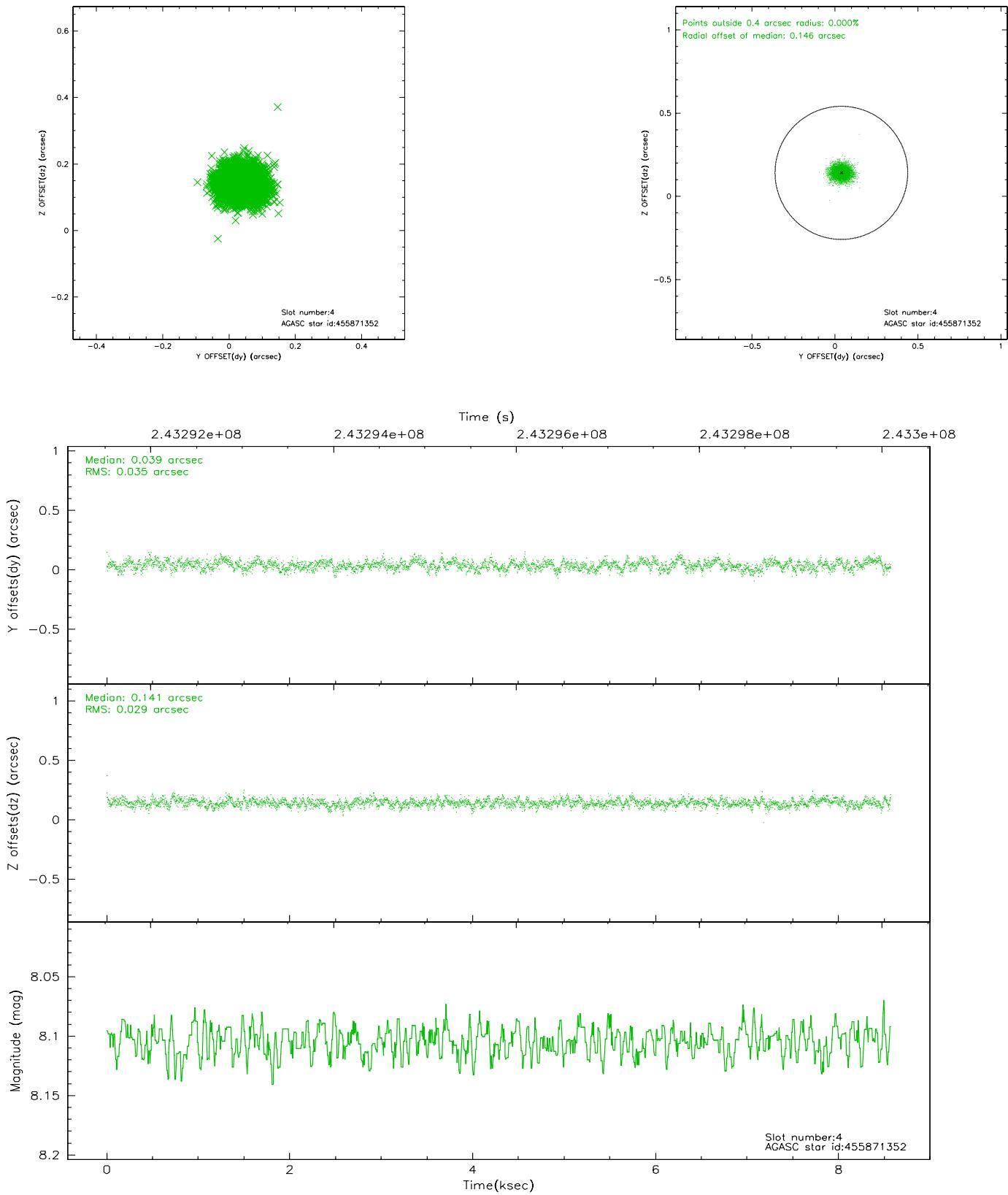
∞

2.4 Star Slots

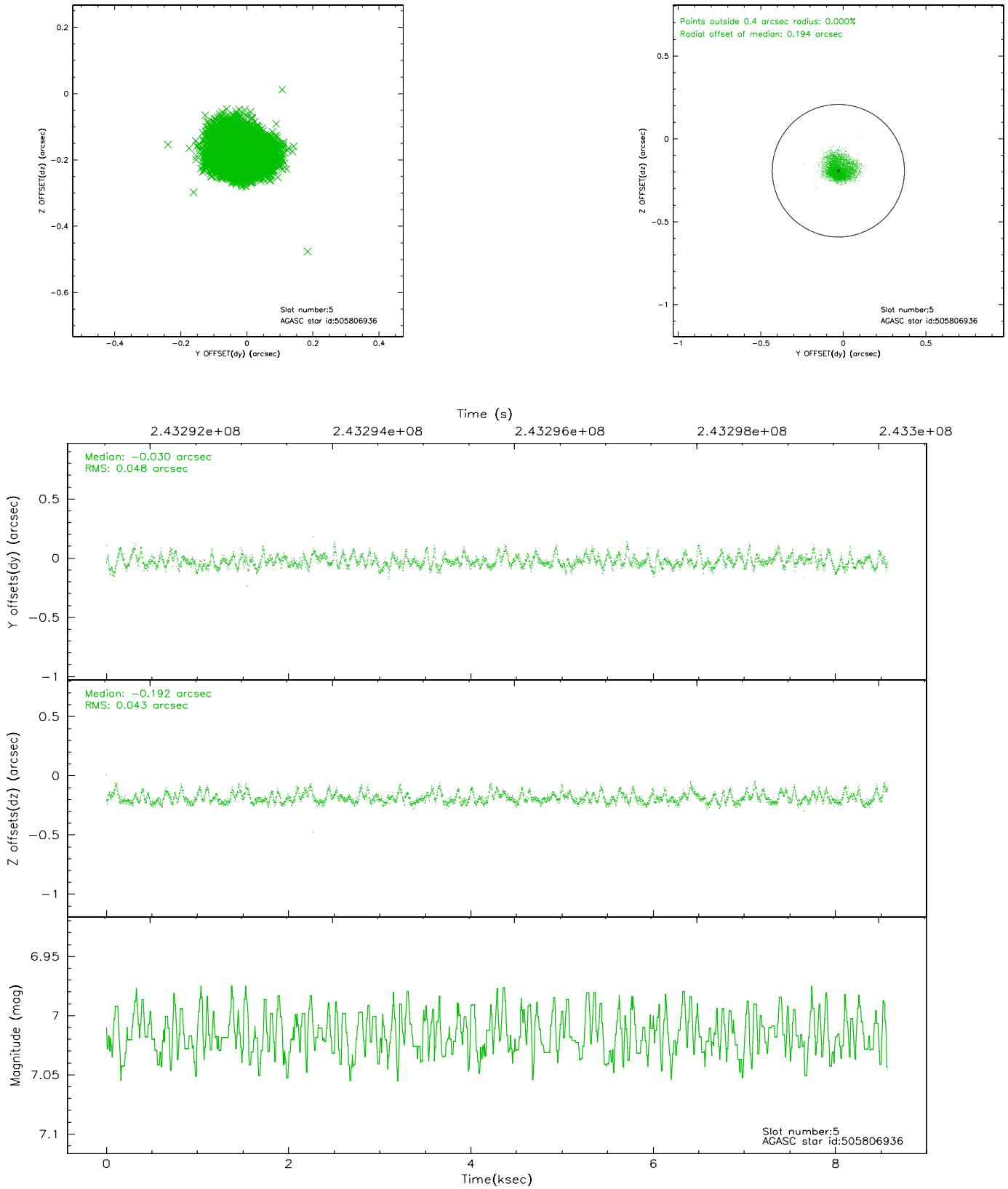
2.4.1 Slot 3



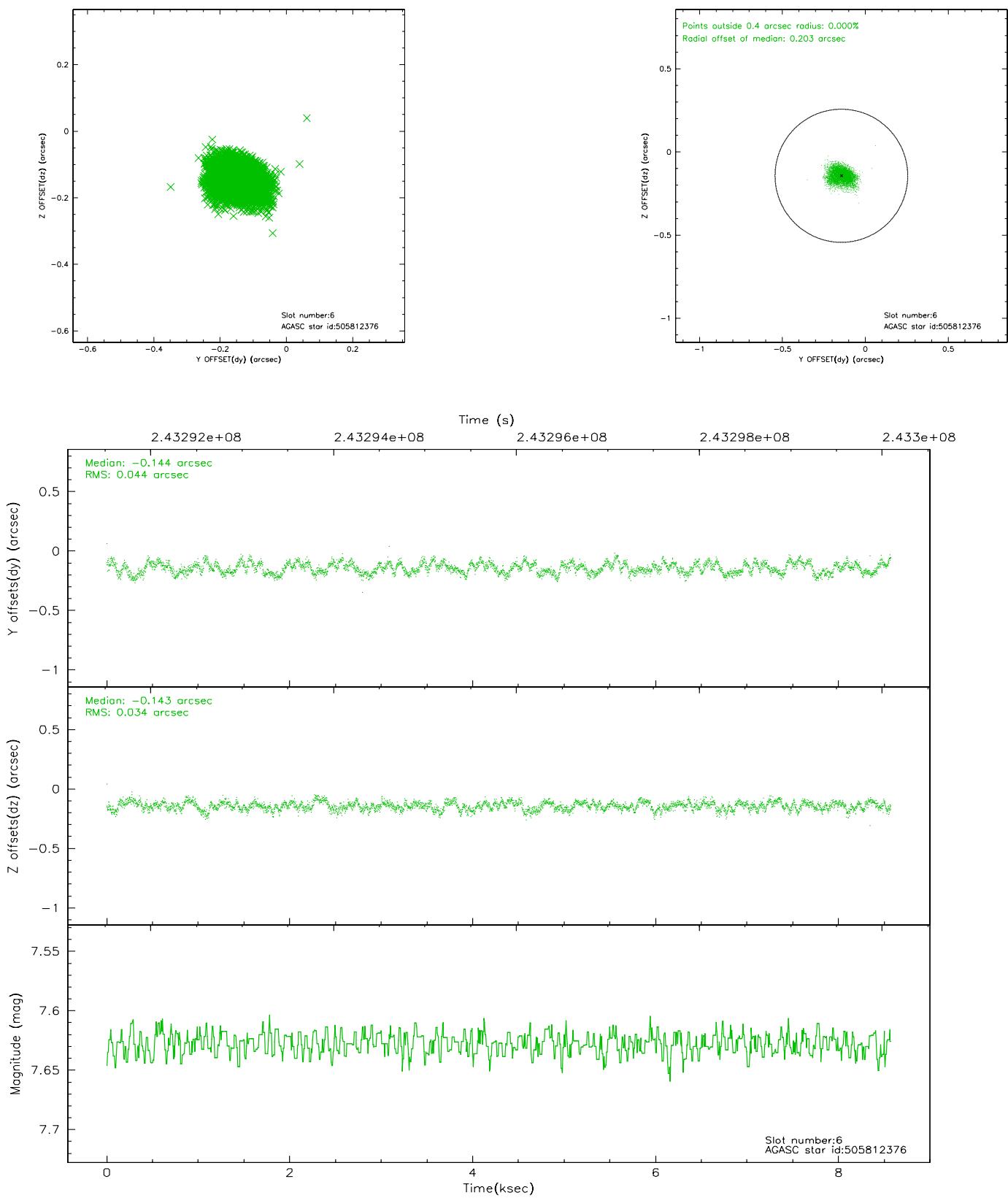
2.4.2 Slot 4



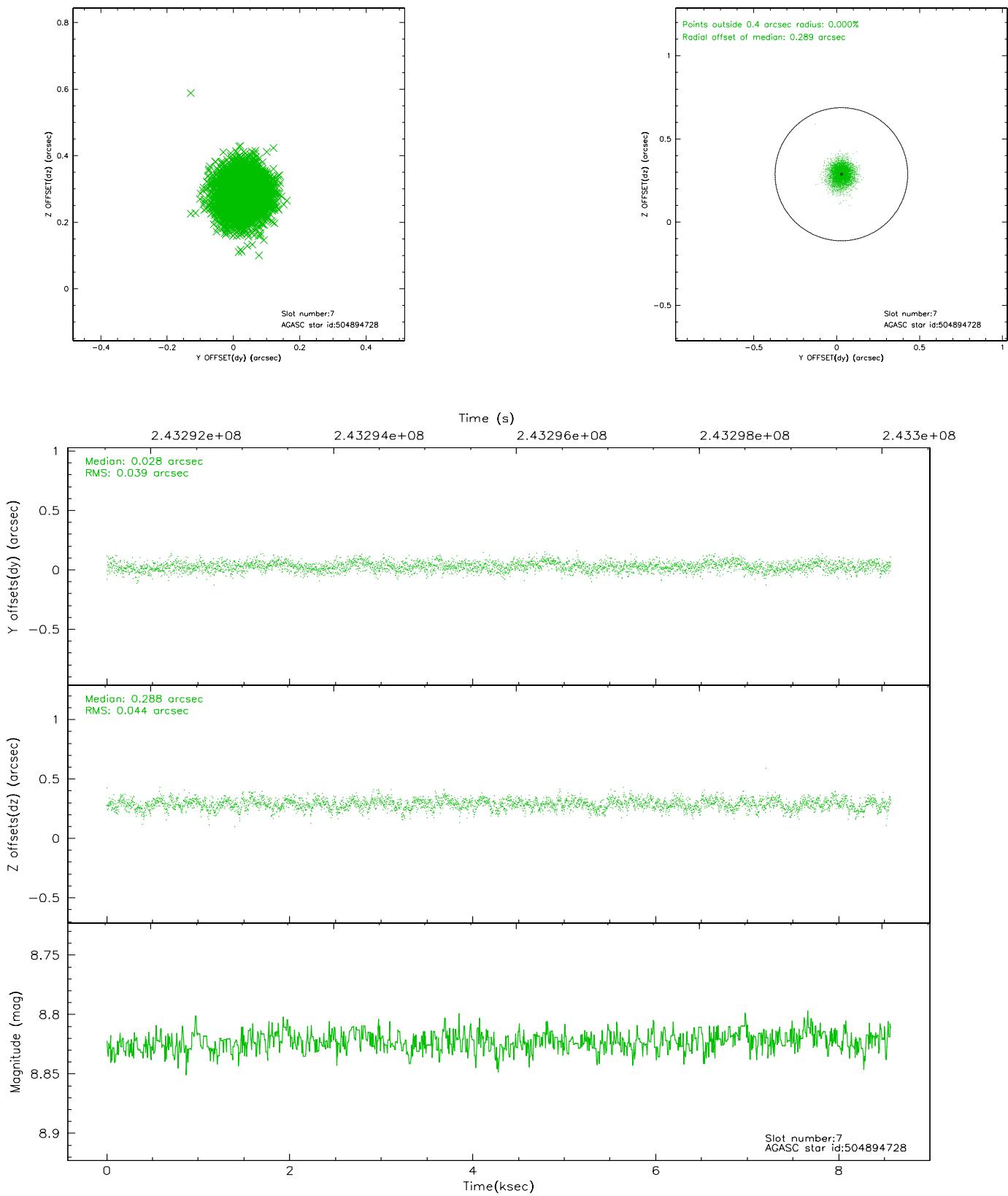
2.4.3 Slot 5



2.4.4 Slot 6

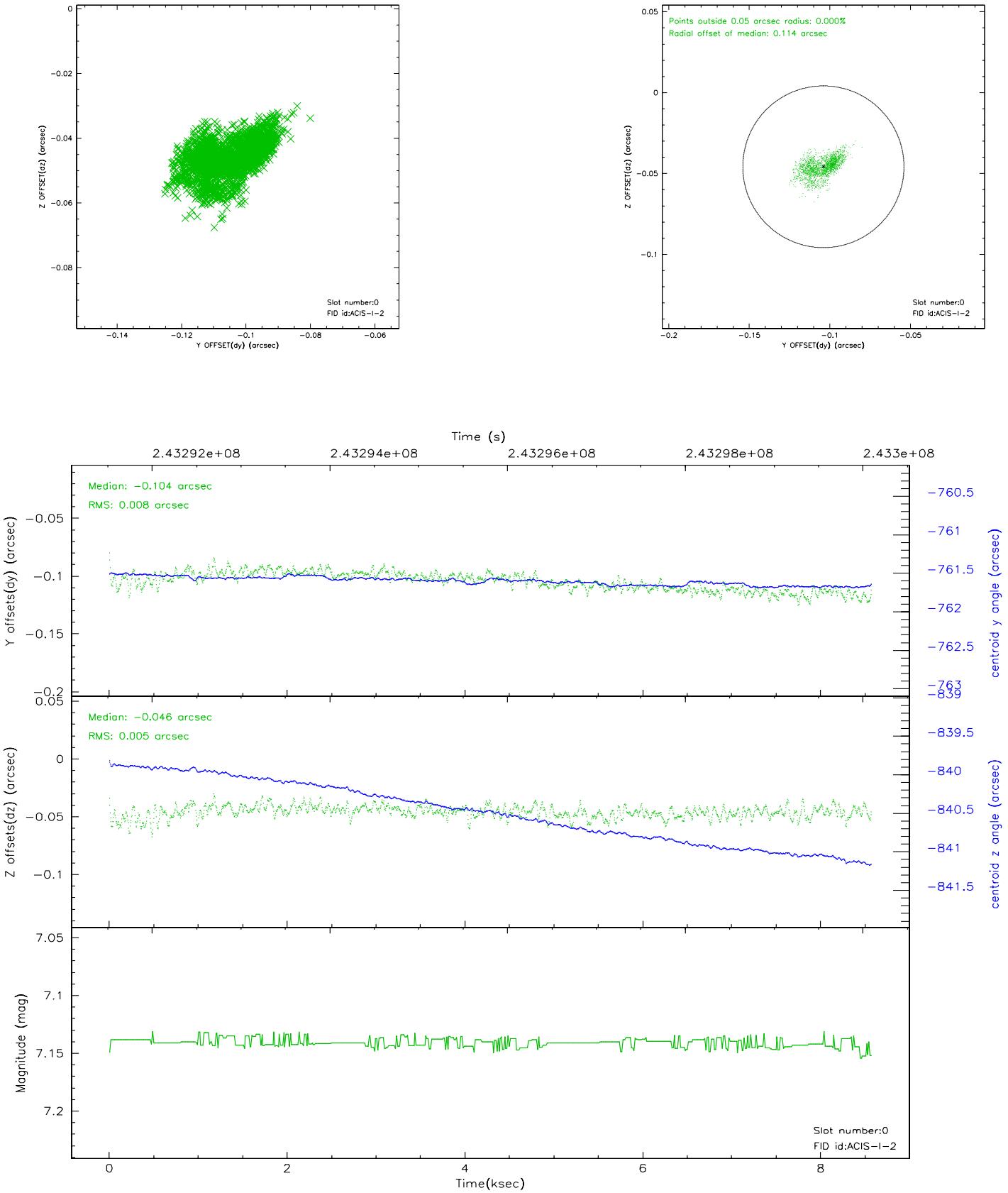


2.4.5 Slot 7

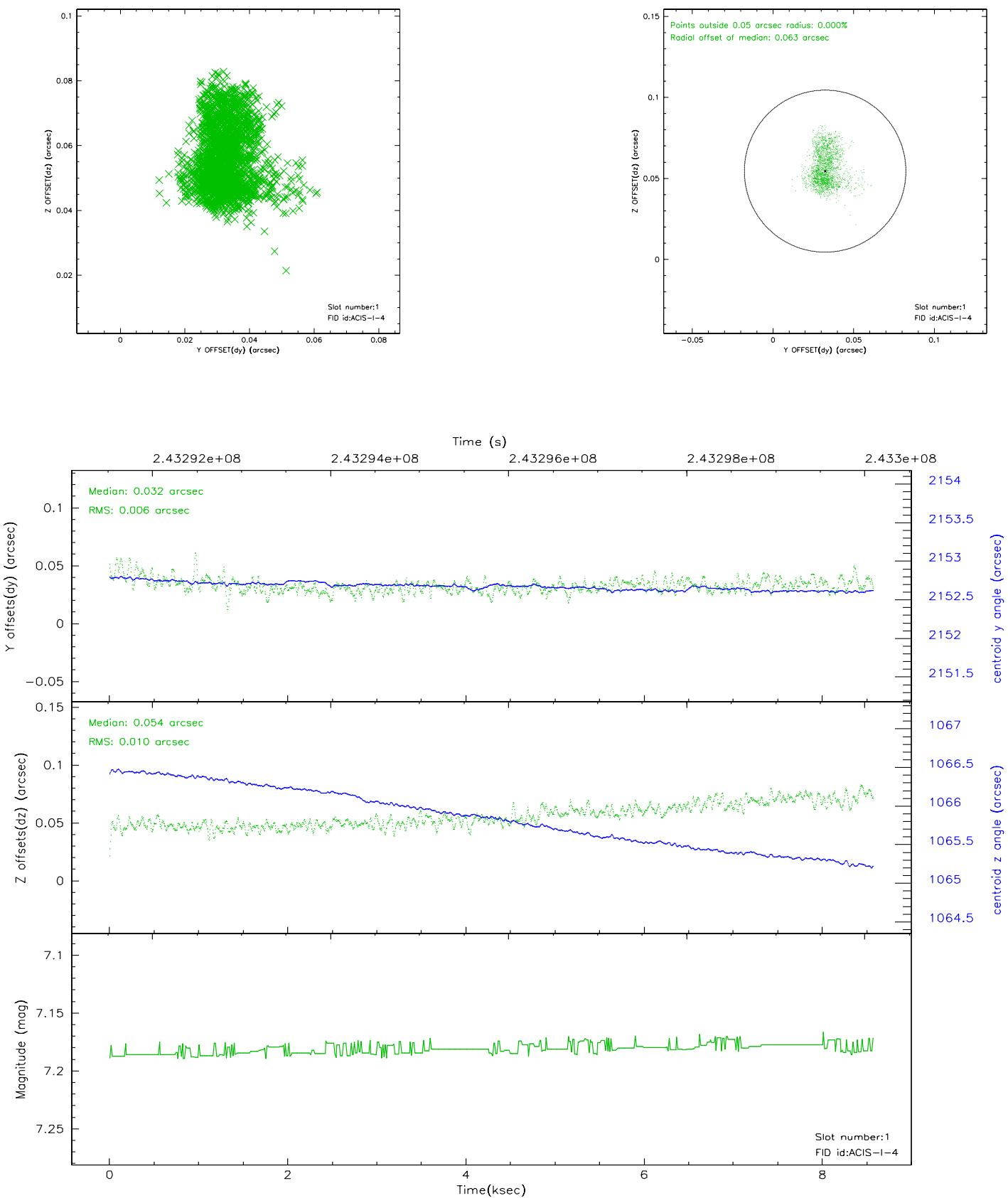


2.5 FID Slots

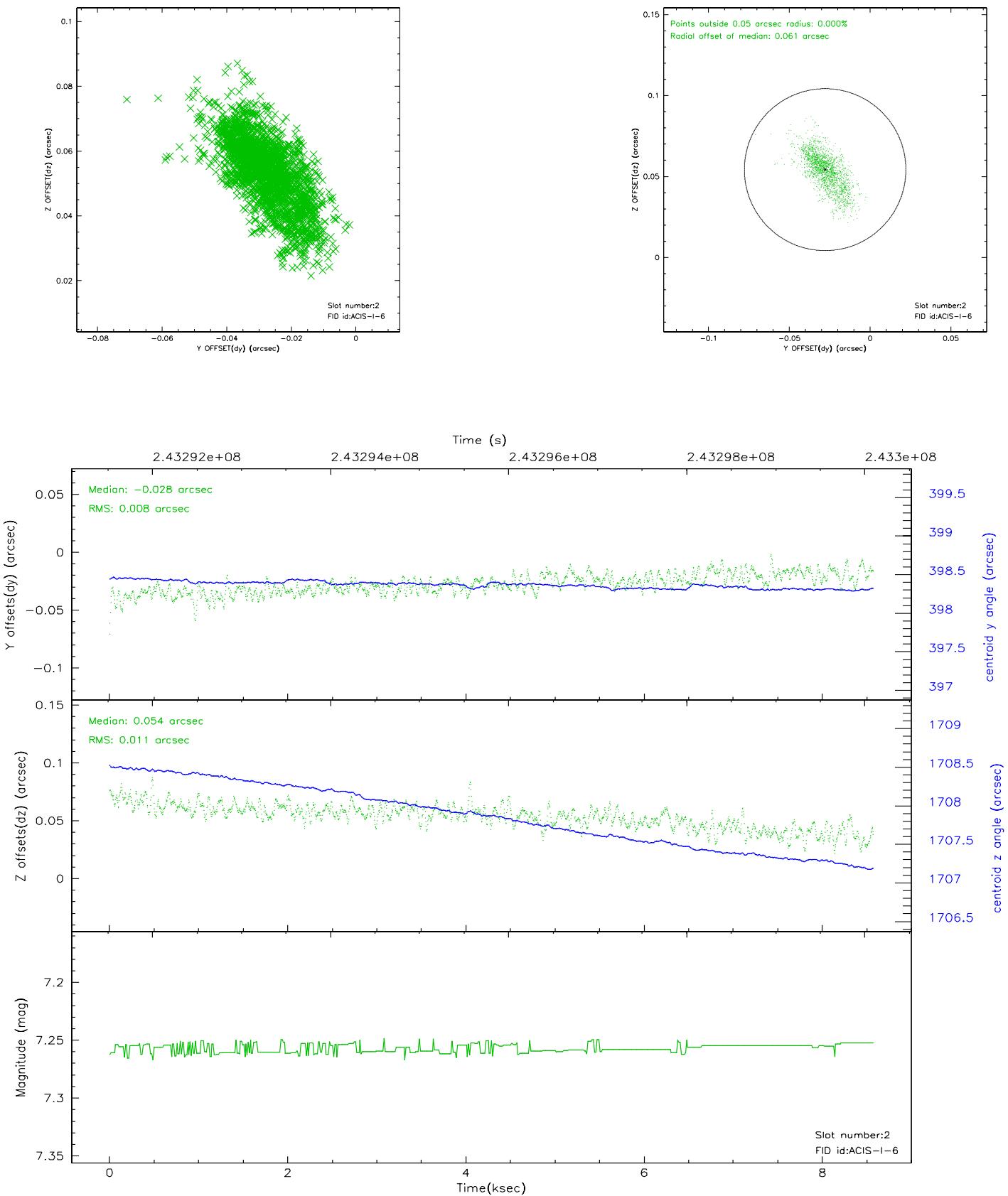
2.5.1 Slot 0



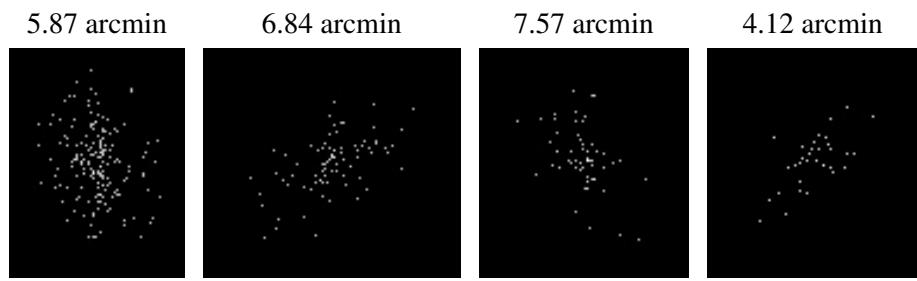
2.5.2 Slot 1



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	8.565299

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), 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.

Roll constraint met.