

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 5841 - L2 Version 3  
Chandra X-Ray Center

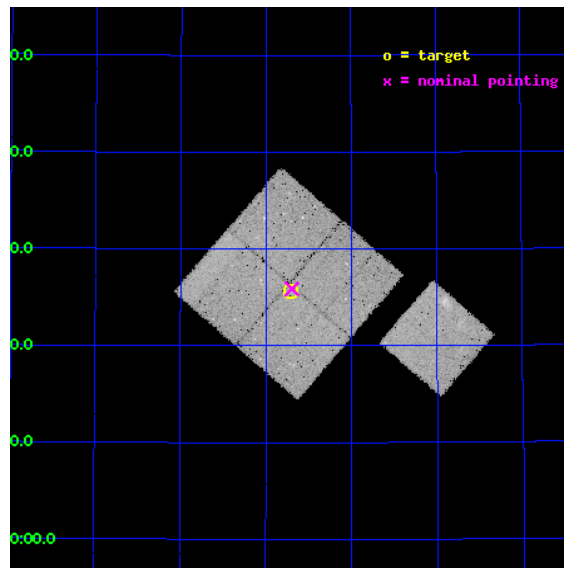
L2 Processing Date : Dec 18 2012

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# 1 Front

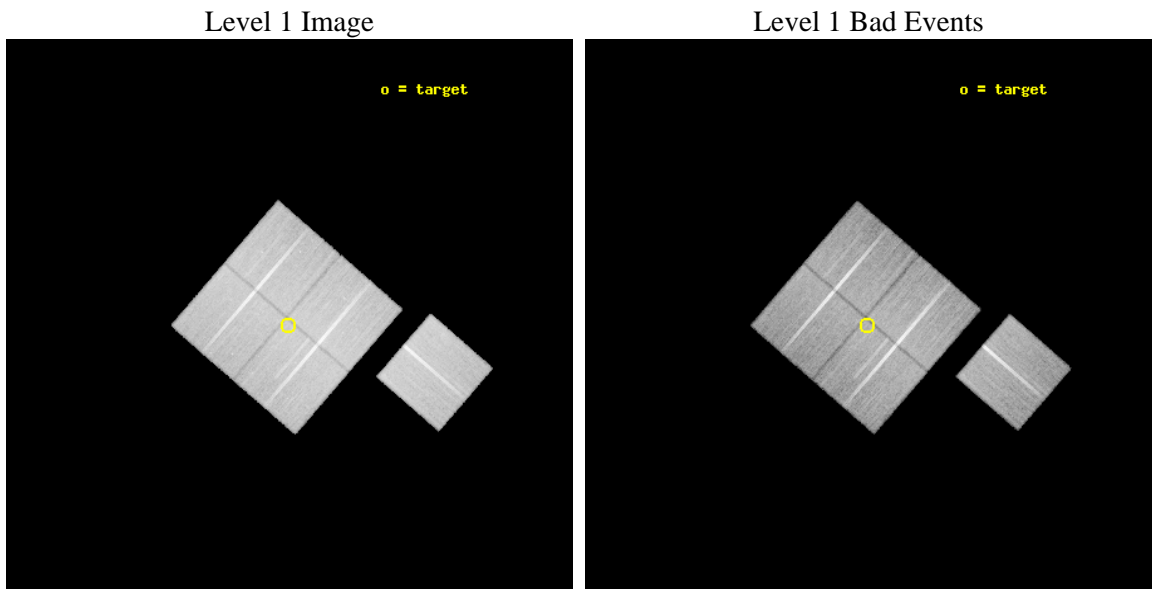
seq_num	900348	Sequence number
obs_id	5841	Observation id
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	EGS-1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	215.676254	Observer's specified target RA [deg]
dec_targ	53.427086	Observer's specified target Dec [deg]
ra_nom	215.67383219812	Nominal RA [deg]
dec_nom	53.431514148828	Nominal Dec [deg]
roll_nom	130.89350333955	Nominal Roll [deg]
revision	3	Processing version of data
ontime	45039.776982635	Sum of GTIs [s]
livetime	44451.299138556	Livetime [s]
ontime0	45042.917932957	Sum of GTIs [s]
ontime1	45042.917932928	Sum of GTIs [s]
ontime2	45042.917952865	Sum of GTIs [s]
ontime3	45039.776982635	Sum of GTIs [s]
ontime6	45046.058913171	Sum of GTIs [s]
l2events	117841	Number of level 2 events



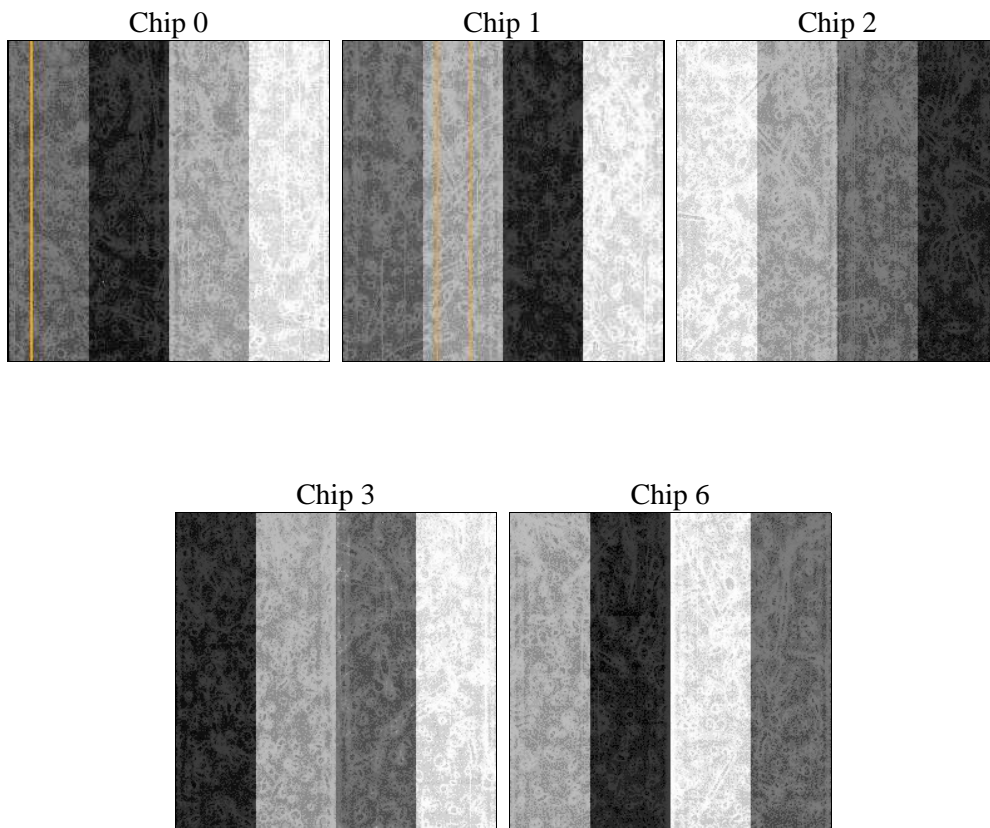
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	45039.776982635	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime0	45042.917932957	Sum of GTIs [s]
date	2012-12-18T09:11:43	Date and time of file creation	ontime1	45042.917932928	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	45042.917952865	Sum of GTIs [s]
			ontime3	45039.776982635	Sum of GTIs [s]
			ontime6	45046.058913171	Sum of GTIs [s]
			l1events	1393605	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	266291	263370	299379	281499	283066	grade 0 events	9945	11209	9606	8947	10451
rejected events	237927	232000	272001	255407	253804		3%	4%	3%	3%	3%
rejected %	89%	88%	90%	90%	89%	grade 1 events	134	130	163	144	129
							0%	0%	0%	0%	0%
						grade 2 events	6660	6834	6568	5788	6313
							2%	2%	2%	2%	2%
						grade 3 events	3251	3569	3021	3083	3284
							1%	1%	1%	1%	1%
						grade 4 events	3081	3470	3096	3033	3169
							1%	1%	1%	1%	1%
						grade 5 events	10147	10825	9449	11361	11358
							3%	4%	3%	4%	4%
						grade 6 events	5435	6299	5096	5245	6050
							2%	2%	1%	1%	2%
						grade 7 events	227638	221034	262380	243898	242312
							85%	83%	87%	86%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	215.717341	215.6738321981197	Subarray requested	NONE	NONE
[deg] Pointing Dec	53.422622	53.43151414882757	Alternating exposures requested	N	N
[deg] Pointing Roll	130.649875	130.893503339553	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	50.756000	50.756000			
[deg] Roll tolerance	20.000000	20.000000			
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	227146887.184000	227145849.79322			
Observation start date	2005-03-14T00:20:23	2005-03-14T00:04:09			
[s] Observation end time (MET)	227191887.184000	227192814.78285			
Observation end date	2005-03-14T12:50:23	2005-03-14T13:06:54			
Read mode	TIMED	TIMED			

## 2.3 Aspect

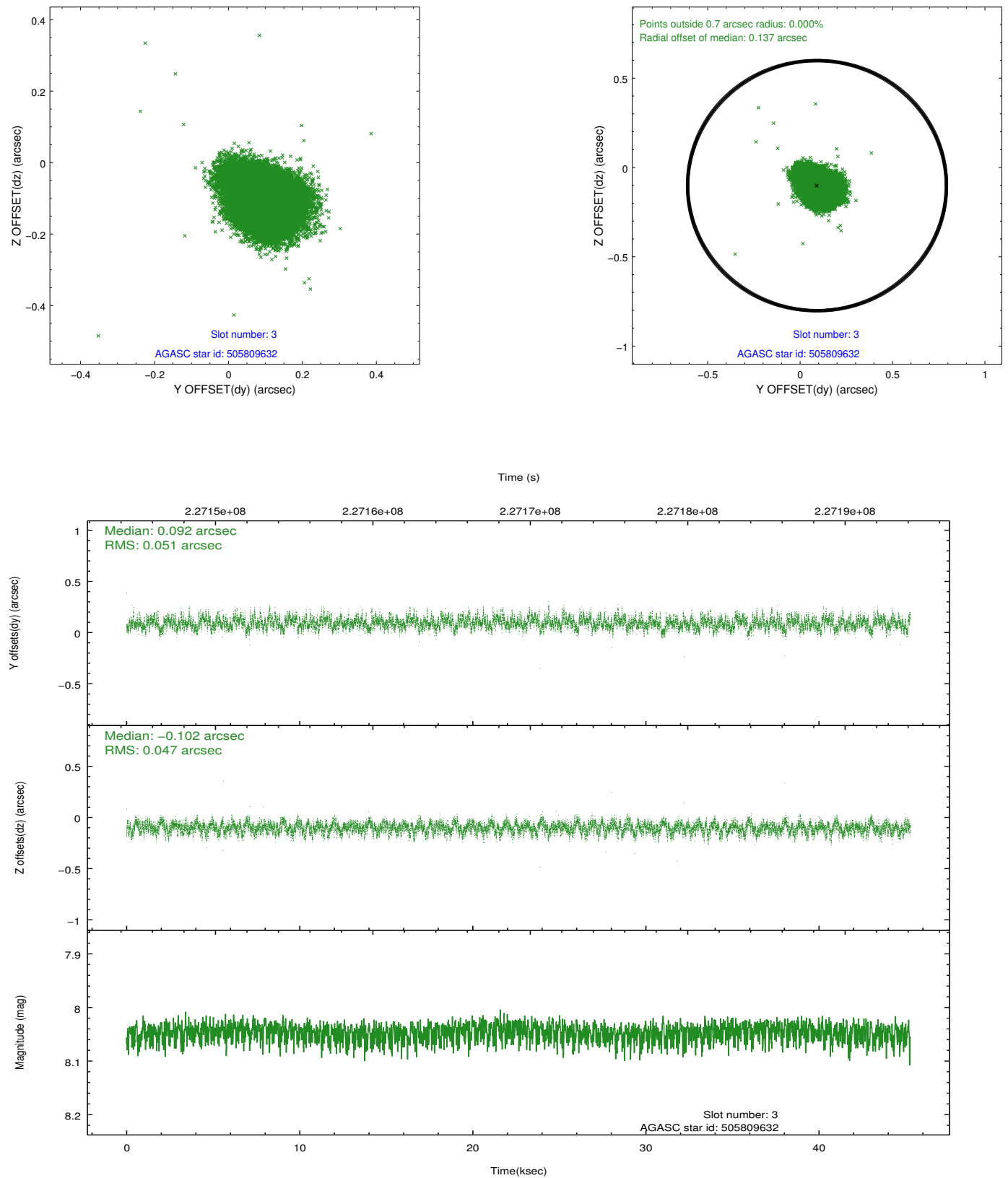


### Slot Statistics

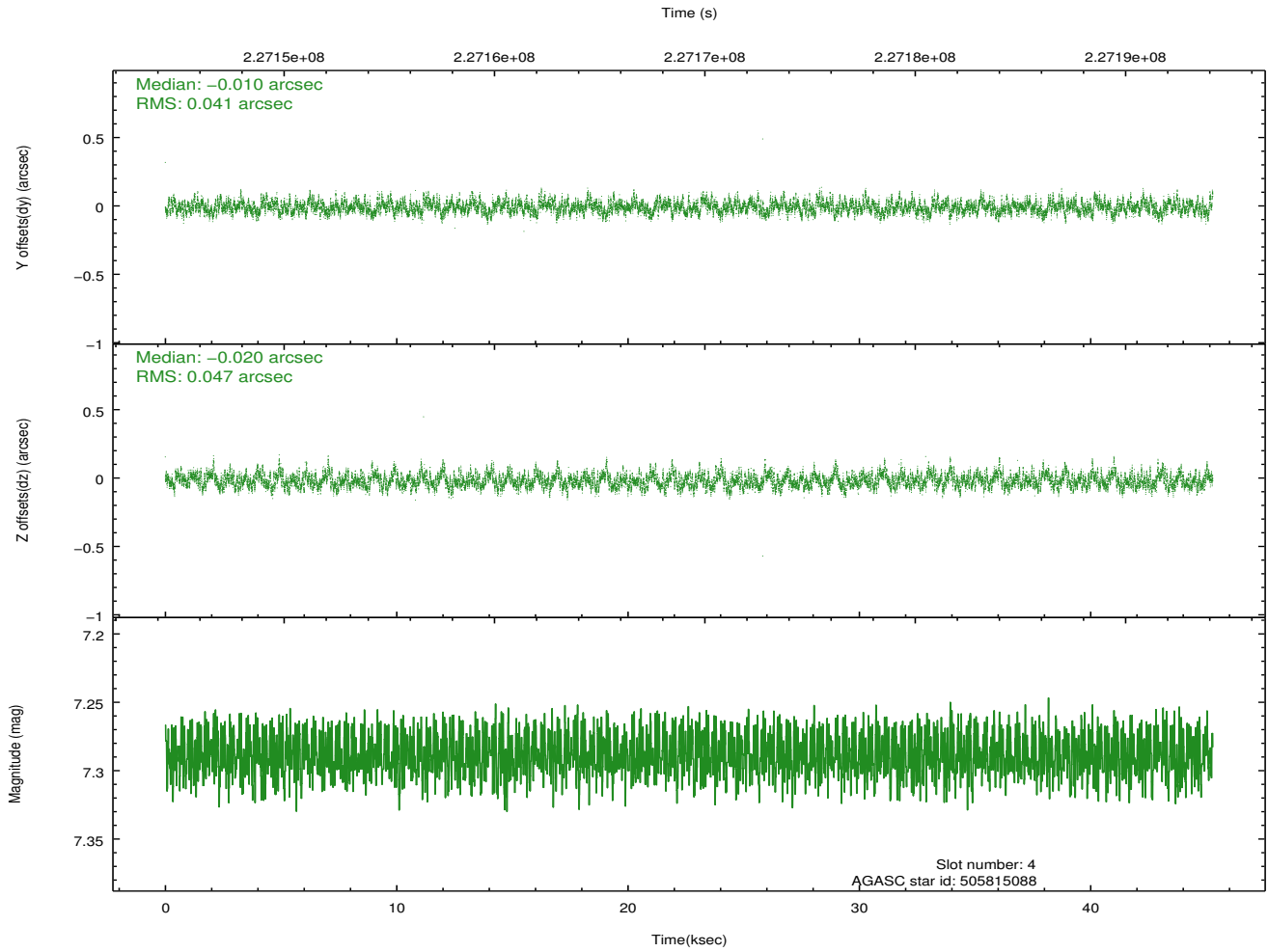
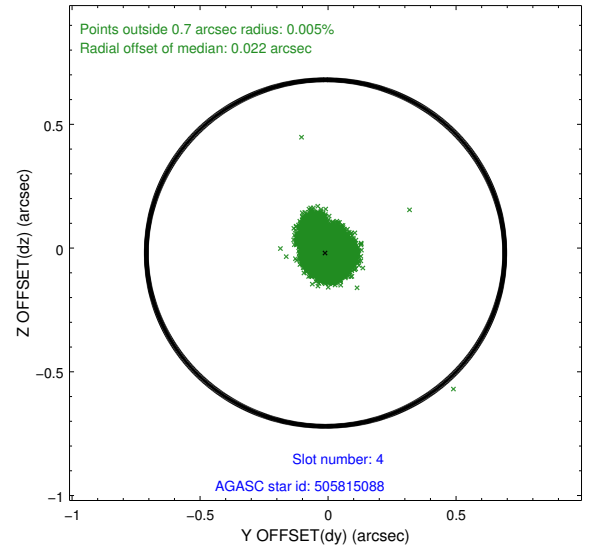
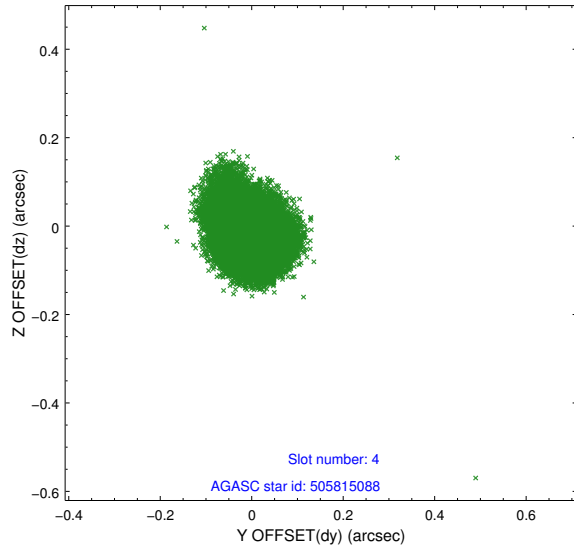
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.13	11045	-0.056	-0.060	0.011	0.019	0.000000	0.000000	-760.10	-839.18
1	FID	ACIS-I-4	7.18	11045	0.134	0.055	0.015	0.030	0.000000	0.000000	2154.15	1067.10
2	FID	ACIS-I-5	7.22	11045	-0.176	0.075	0.012	0.020	0.000000	0.000000	-1814.04	1064.97
3	GUIDE	505809632	8.05	22090	0.092	-0.102	0.074	0.119	215.499426	53.521185	573.81	122.65
4	GUIDE	505815088	7.29	22089	-0.010	-0.020	0.066	0.107	216.315963	53.584954	-386.13	-1354.52
5	GUIDE	505817176	8.26	22082	0.023	0.147	0.075	0.120	216.408138	53.717379	-147.57	-1811.88
6	GUIDE	505817384	8.07	22081	-0.066	0.063	0.070	0.116	216.827424	53.311152	-1844.62	-1562.19
7	GUIDE	505814280	10.37	22072	-0.037	-0.077	0.229	0.376	215.666550	52.589481	-2203.51	2038.15

## 2.4 Star Slots

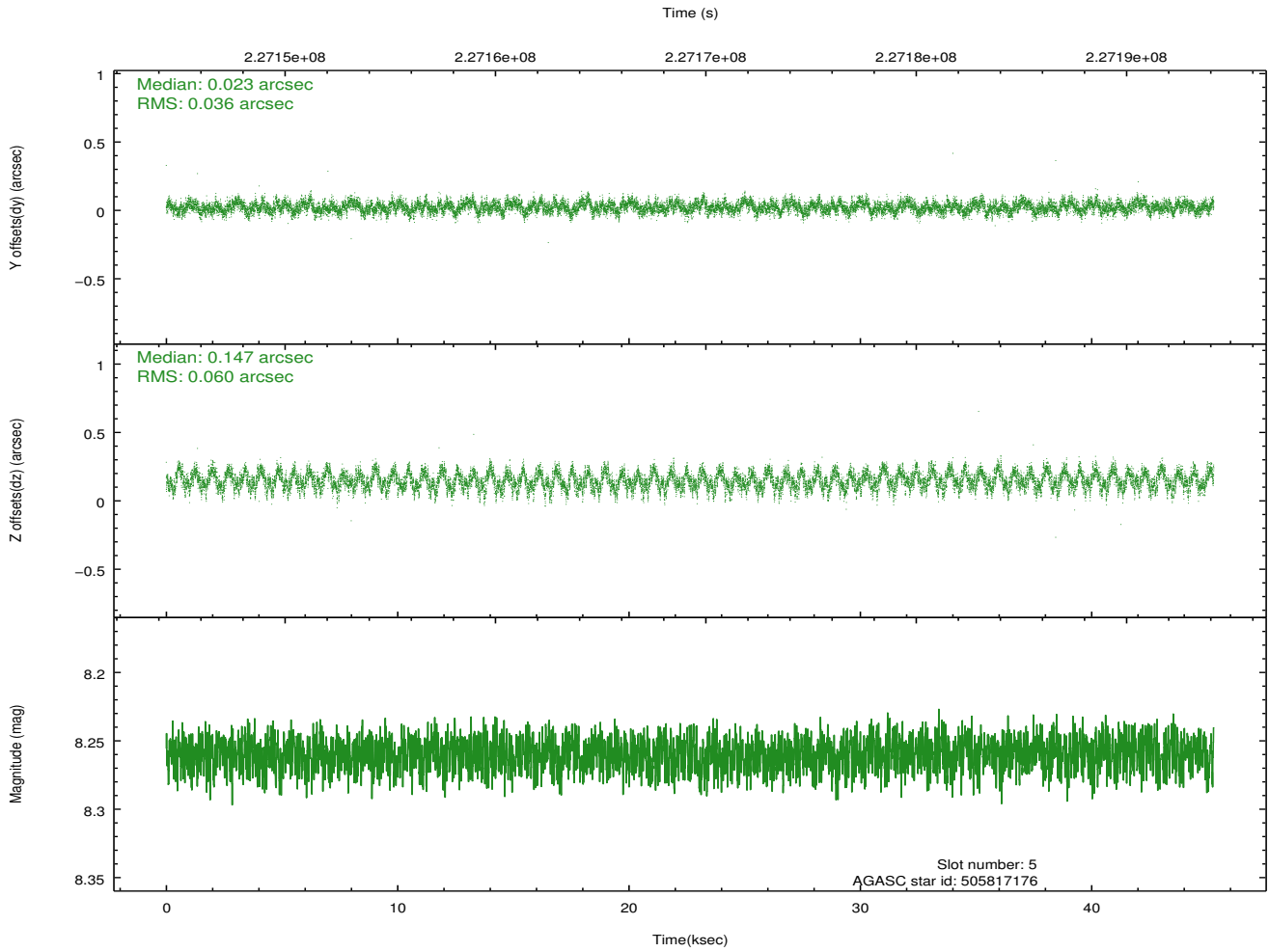
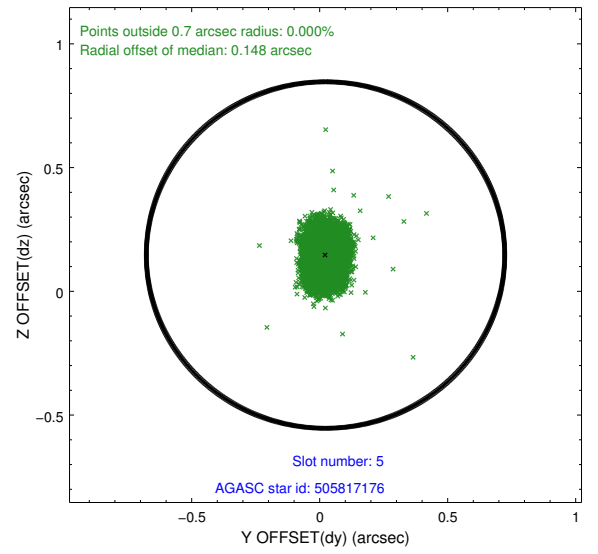
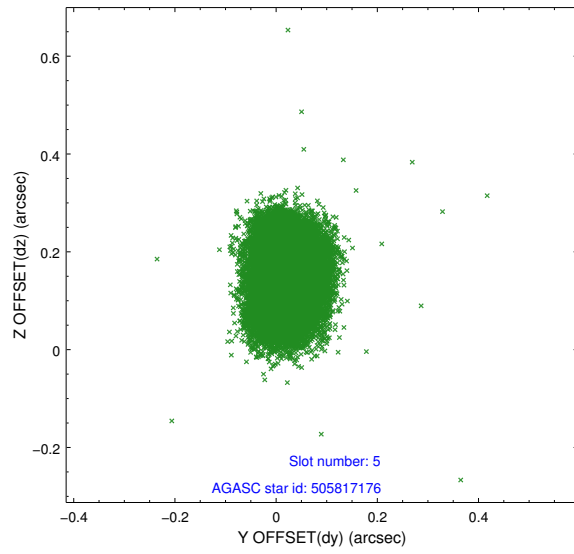
### 2.4.1 Slot 3



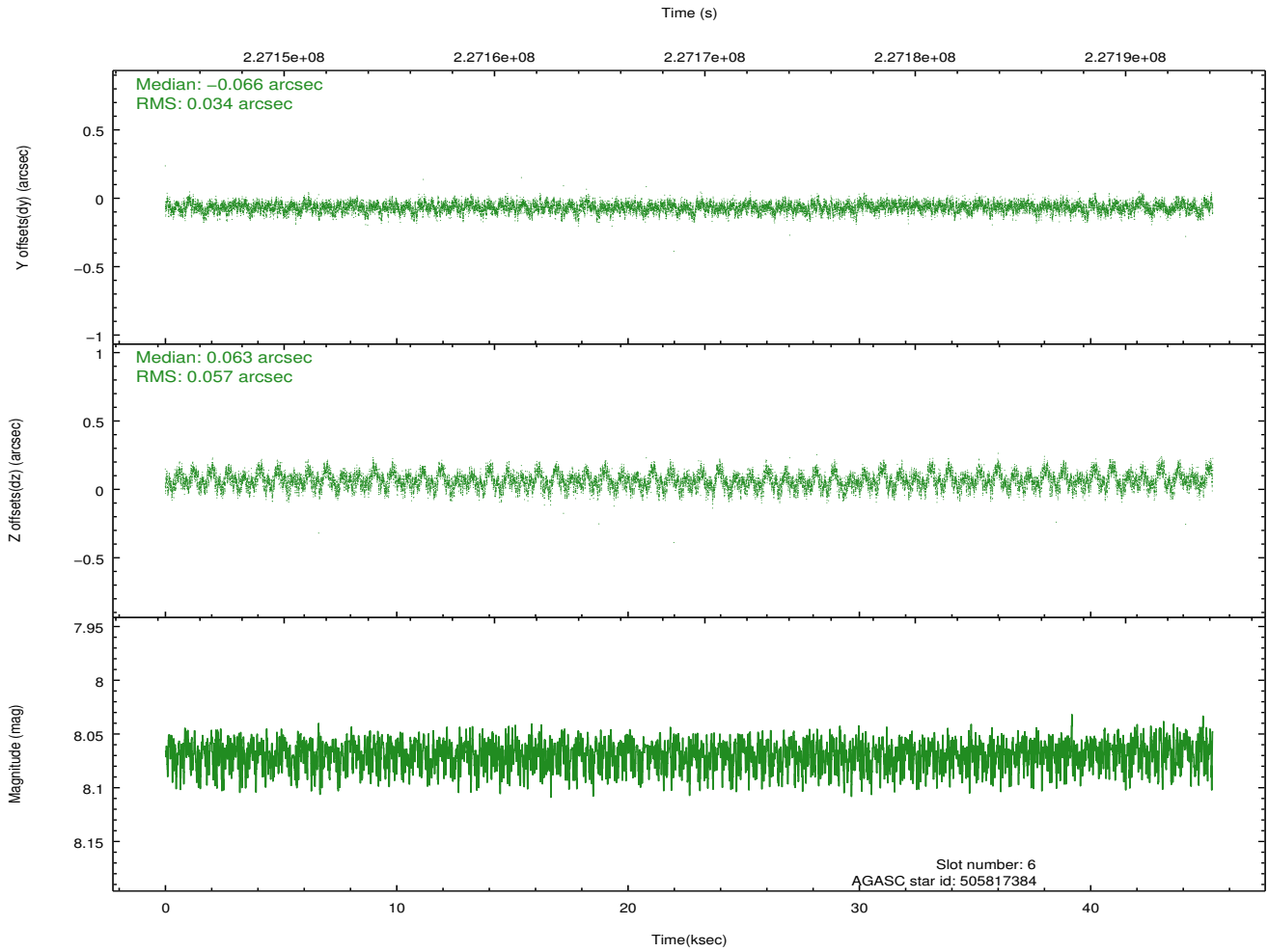
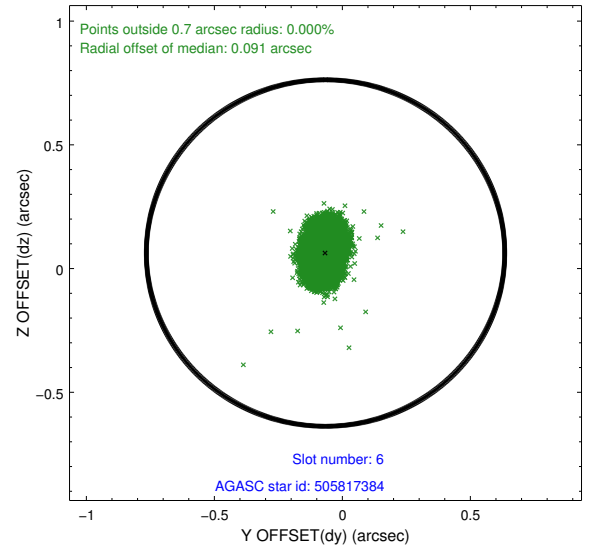
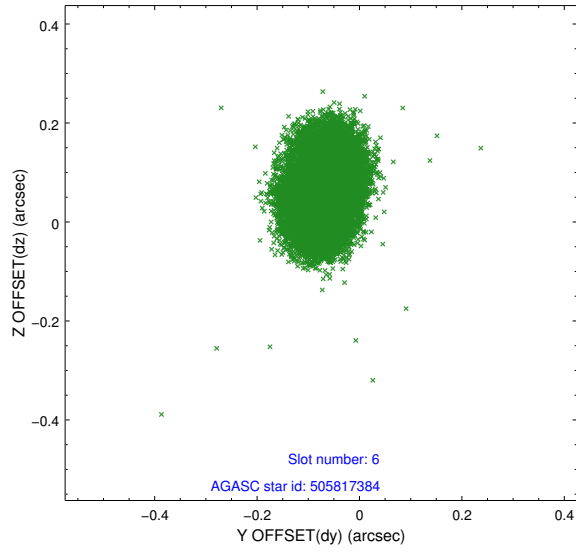
## 2.4.2 Slot 4



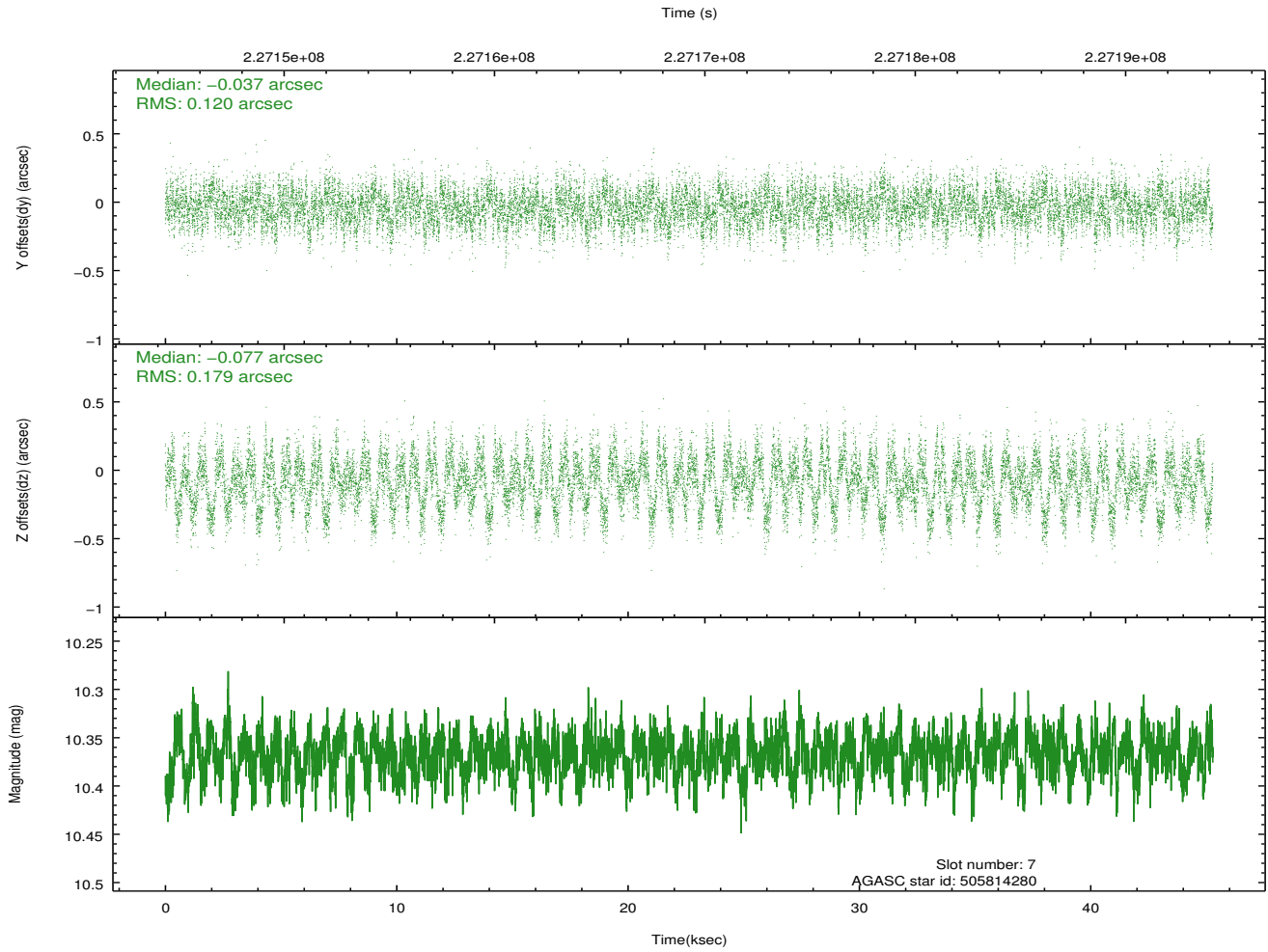
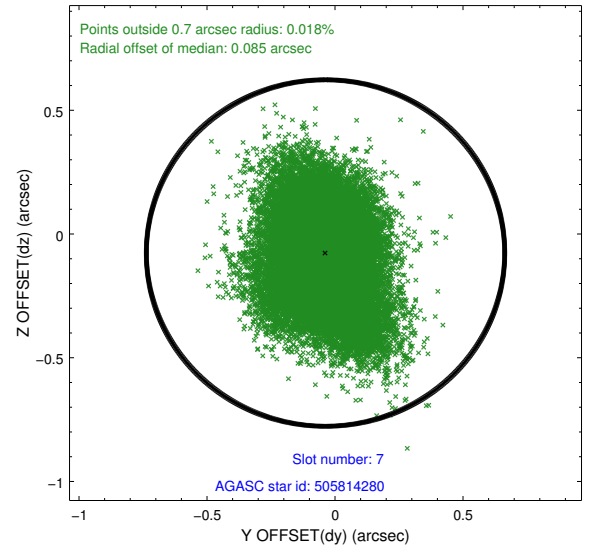
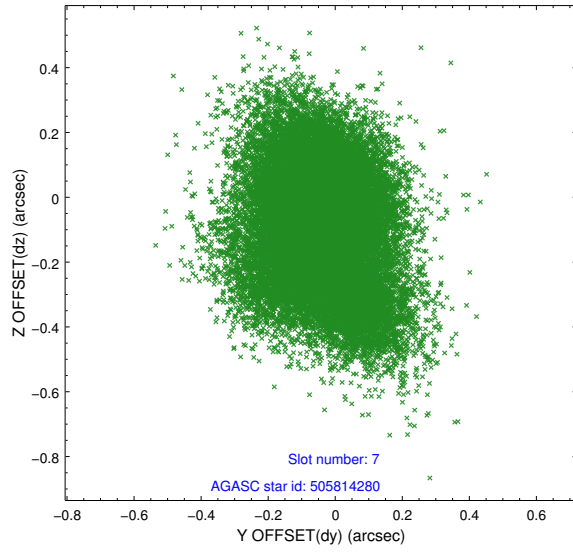
### 2.4.3 Slot 5



## 2.4.4 Slot 6

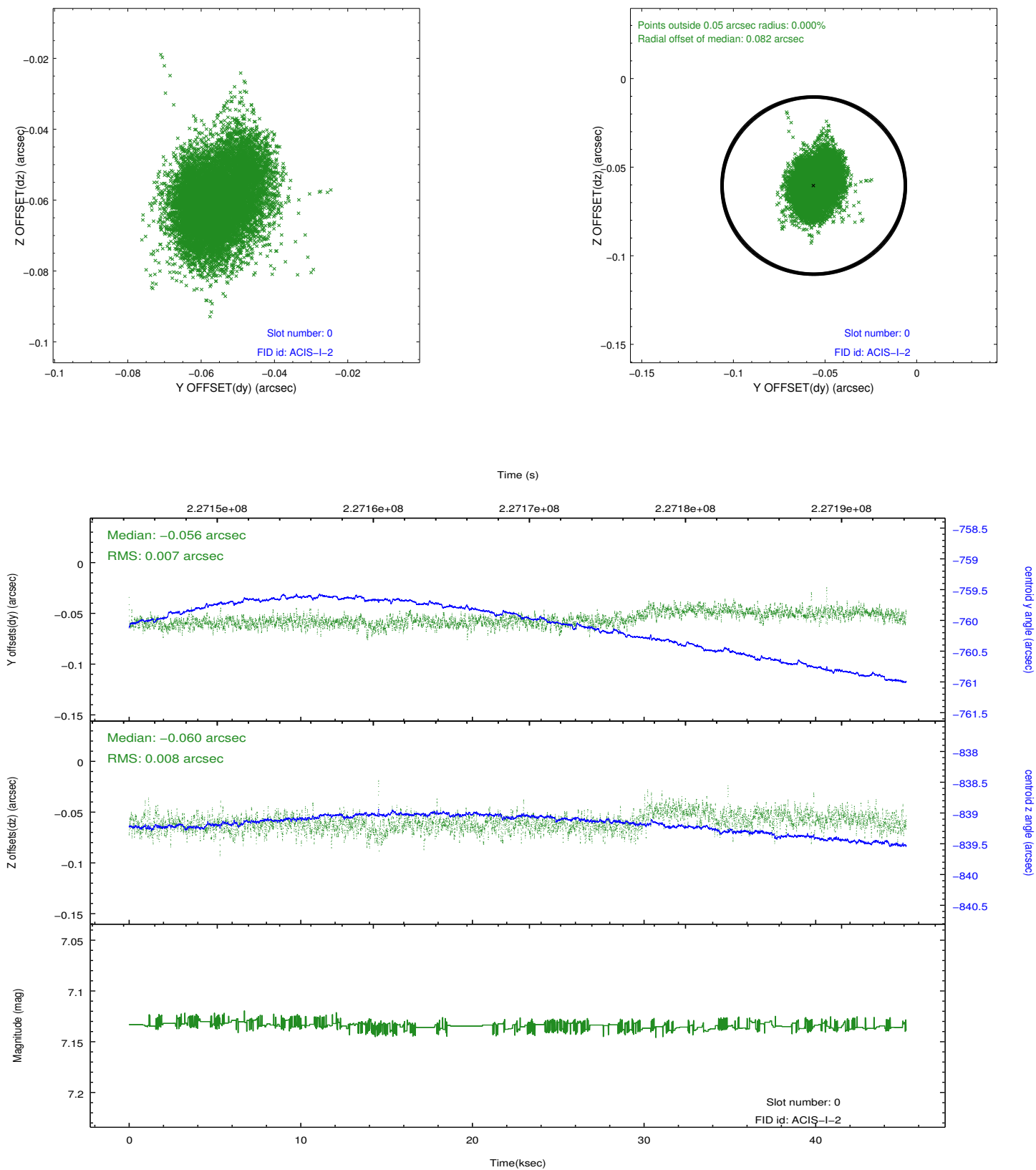


## 2.4.5 Slot 7

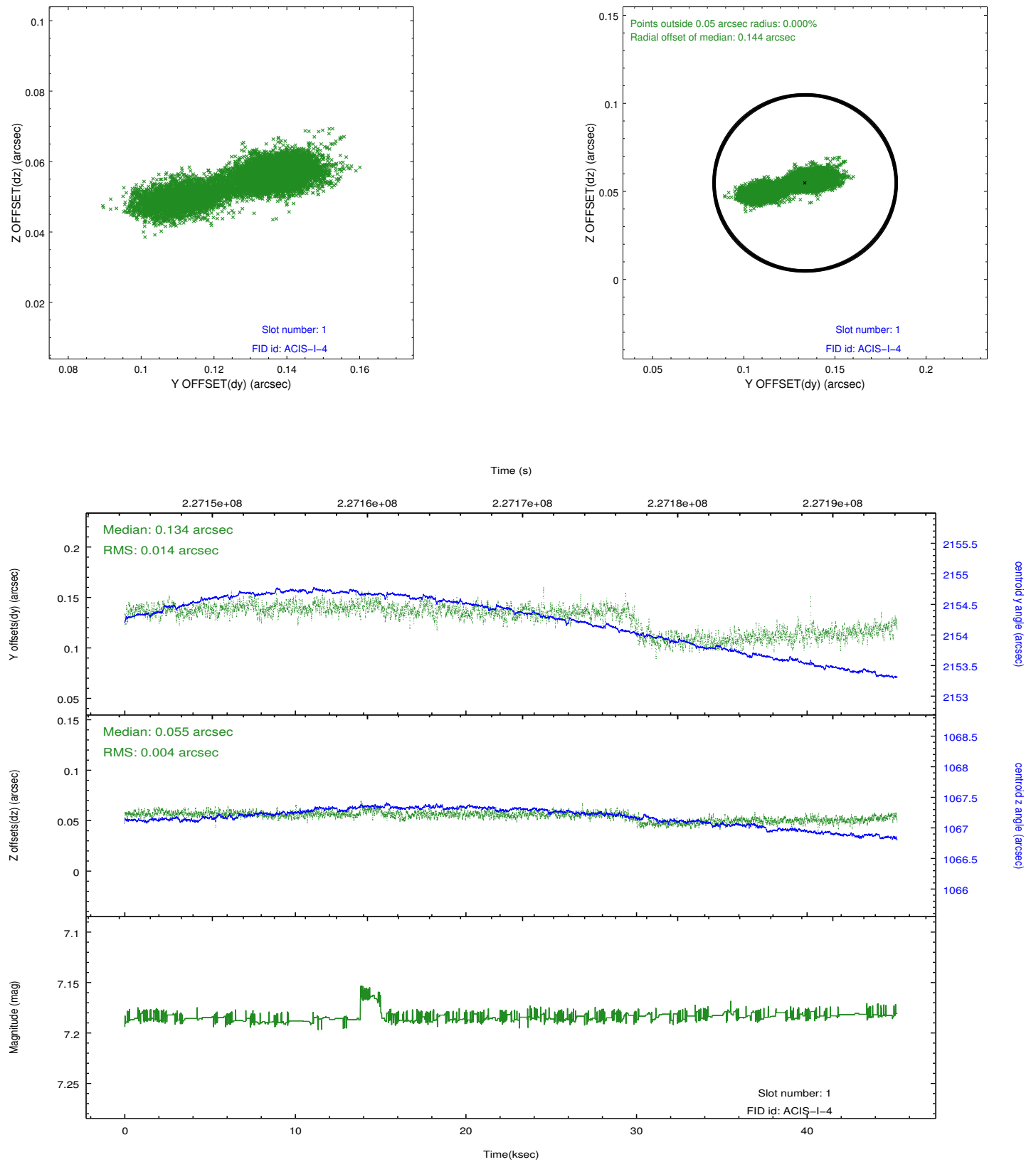


## 2.5 FID Slots

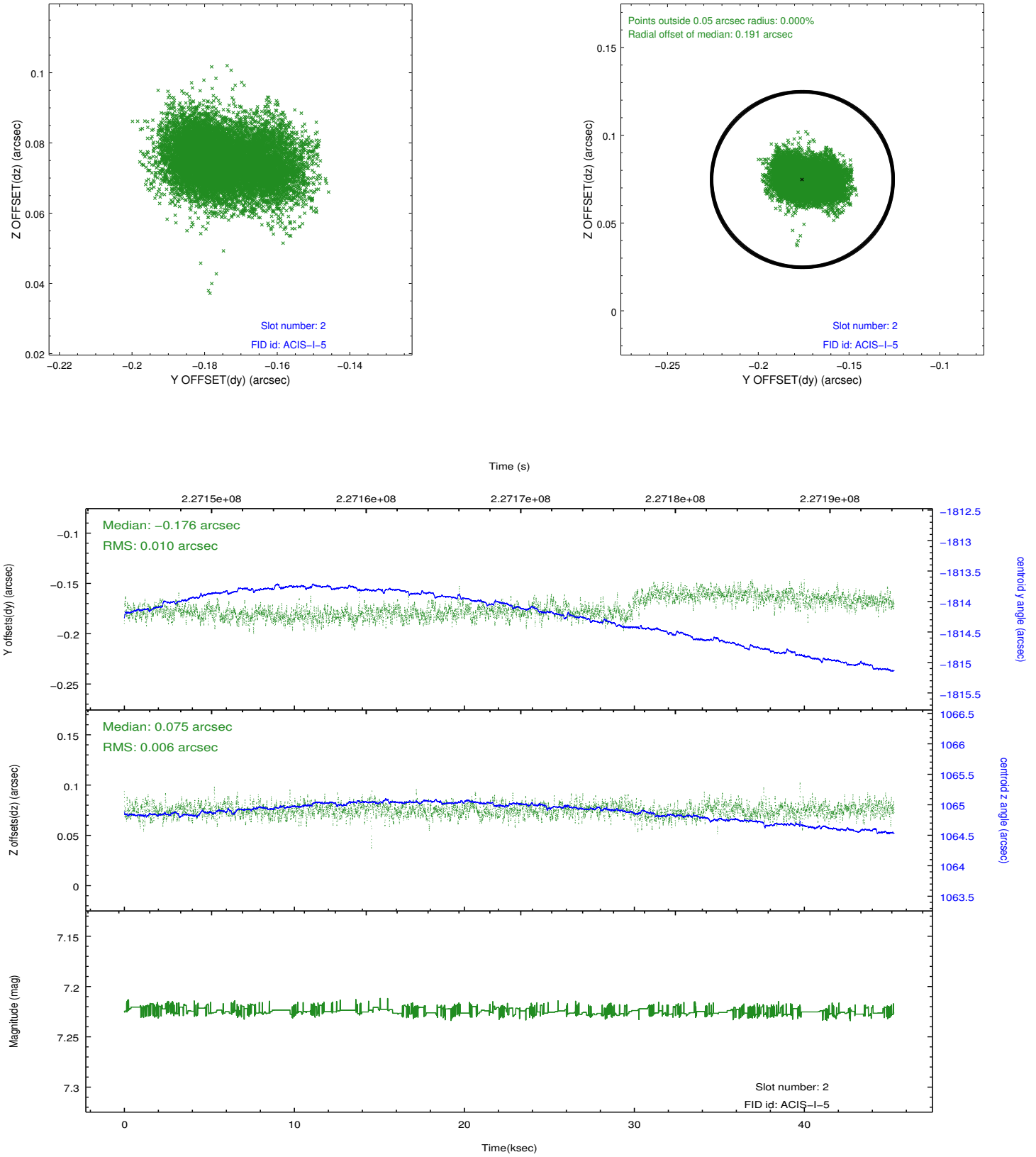
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.01.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.03977

### A.2 Comments

Roll constraint satisfied.