

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 6220 - L2 Version 3  
Chandra X-Ray Center

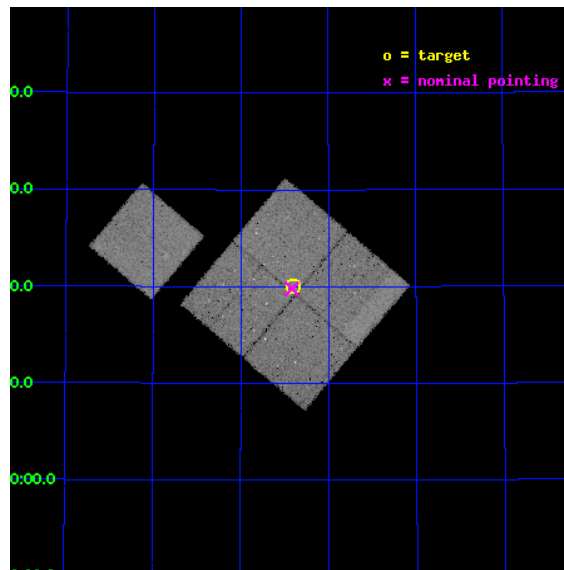
L2 Processing Date : Dec 29 2012

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# 1 Front

seq_num	900353	Sequence number
obs_id	6220	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-6	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.102081	Observer's specified target RA [deg]
dec_targ	52.334053	Observer's specified target Dec [deg]
ra_nom	214.10433597067	Nominal RA [deg]
dec_nom	52.329612238702	Nominal Dec [deg]
roll_nom	310.20689262576	Nominal Roll [deg]
revision	3	Processing version of data
ontime	38123.799926668	Sum of GTIs [s]
livetime	37625.684414293	Livetime [s]
ontime0	38123.799926668	Sum of GTIs [s]
ontime1	38123.799926668	Sum of GTIs [s]
ontime2	38123.799926668	Sum of GTIs [s]
ontime3	38123.799926668	Sum of GTIs [s]
ontime6	38123.799926668	Sum of GTIs [s]
l2events	130744	Number of level 2 events

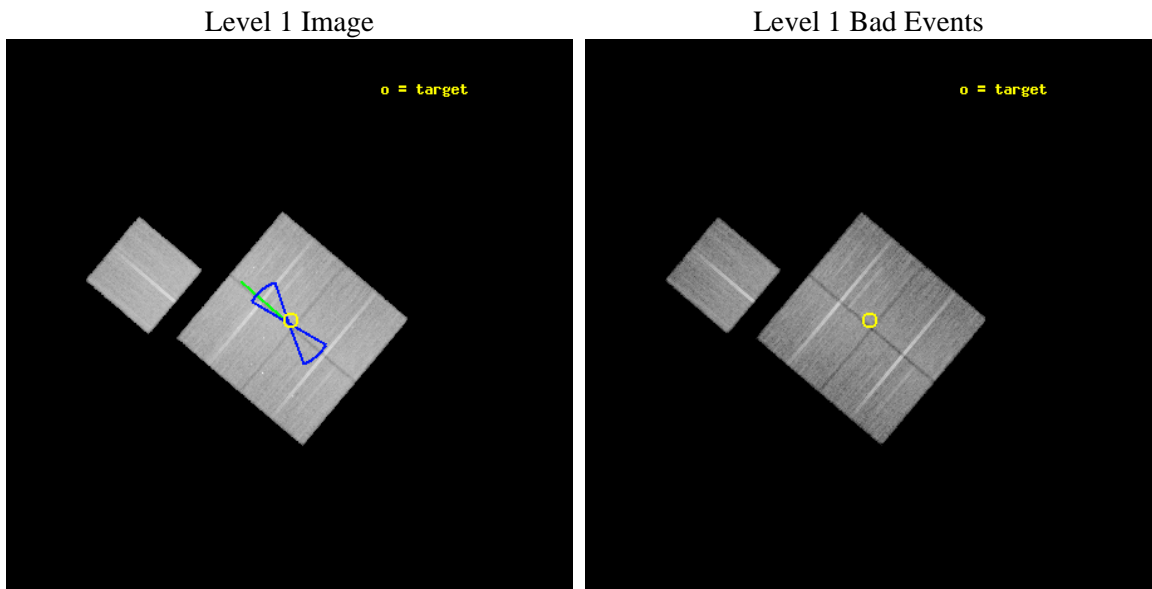




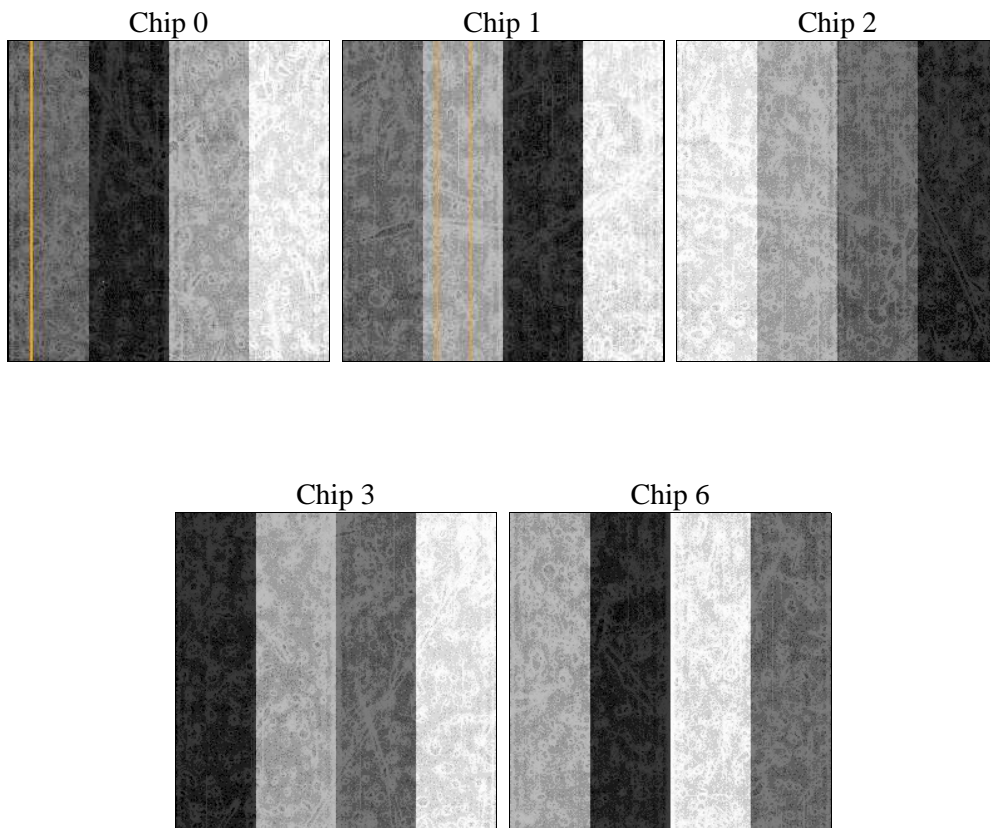
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	38123.799926668	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime0	38123.799926668	Sum of GTIs [s]
date	2012-12-28T22:55:45	Date and time of file creation	ontime1	38123.799926668	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	38123.799926668	Sum of GTIs [s]
			ontime3	38123.799926668	Sum of GTIs [s]
			ontime6	38123.799926668	Sum of GTIs [s]
			l1events	1046978	Number of level 1 events

### 2.1.4 Events

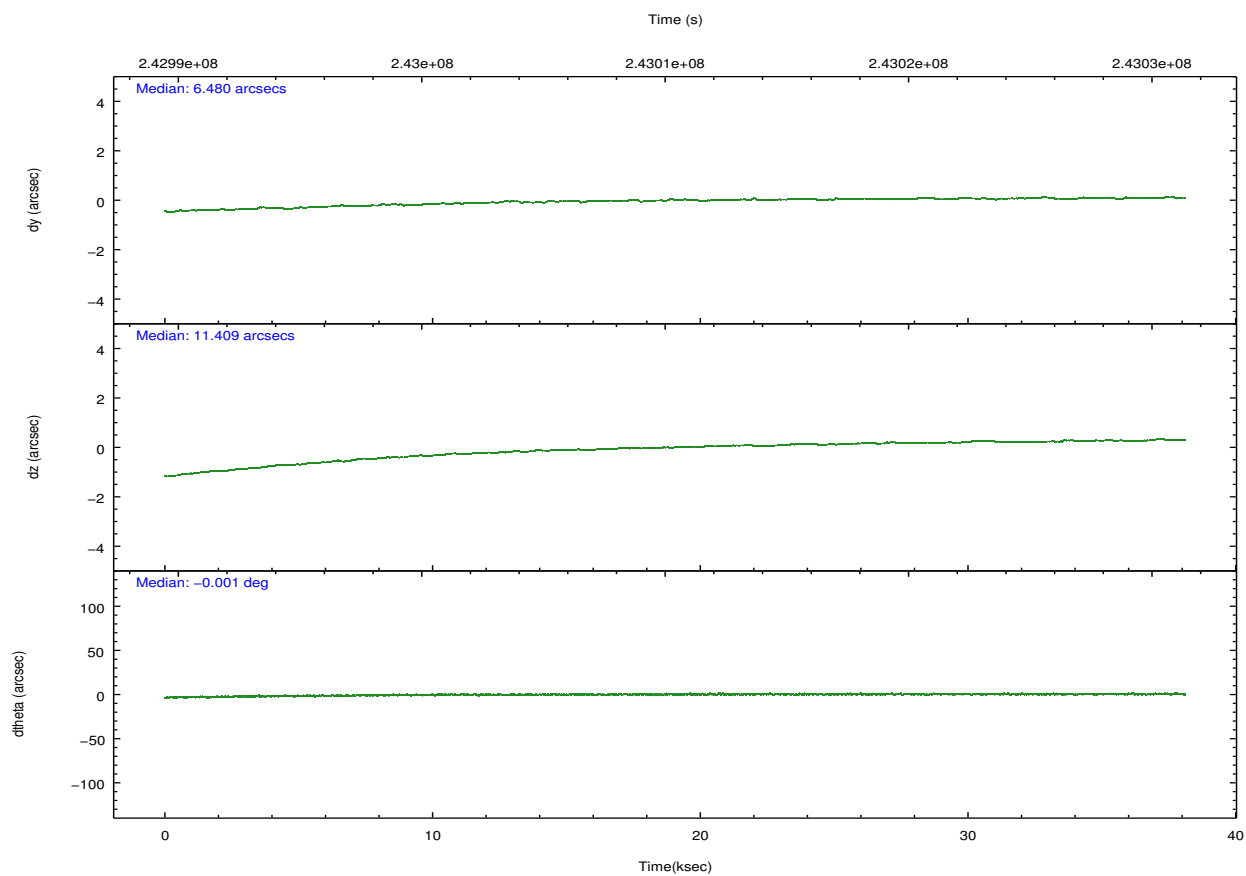
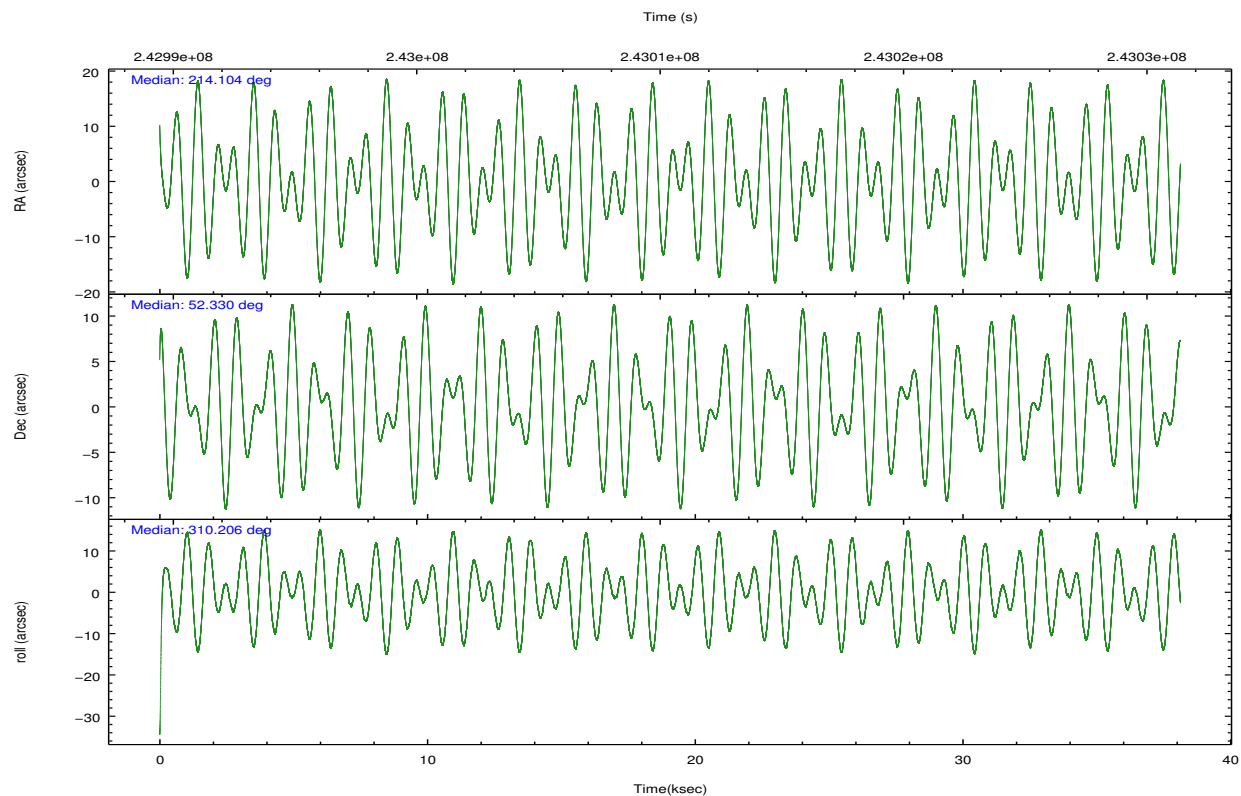
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	195492	194832	225629	212566	218459	grade 0 events	12428	13332	13620	11852	12905
rejected events	165583	162654	193398	183481	185903		6%	6%	6%	5%	5%
rejected %	84%	83%	85%	86%	85%	grade 1 events	108	134	143	129	118
							0%	0%	0%	0%	0%
						grade 2 events	6707	6857	7253	5898	6694
							3%	3%	3%	2%	3%
						grade 3 events	2715	2933	2629	2768	2882
							1%	1%	1%	1%	1%
						grade 4 events	2607	2888	3048	2701	2860
							1%	1%	1%	1%	1%
						grade 5 events	6551	7229	6213	7620	7514
							3%	3%	2%	3%	3%
						grade 6 events	5669	6440	5915	6081	7452
							2%	3%	2%	2%	3%
						grade 7 events	158707	155019	186808	175517	178034
							81%	79%	82%	82%	81%

## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	214.062099	214.104335970668
[deg] Pointing Dec	52.338792	52.32961223870192
[deg] Pointing Roll	310.031650	310.2068926257584
[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)	242991467.184000	242990221.59151
Observation start date	2005-09-13T09:36:43	2005-09-13T09:17:01
[s] Observation end time (MET)	243029467.184000	243029836.30583
Observation end date	2005-09-13T20:10:03	2005-09-13T20:17:16
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect

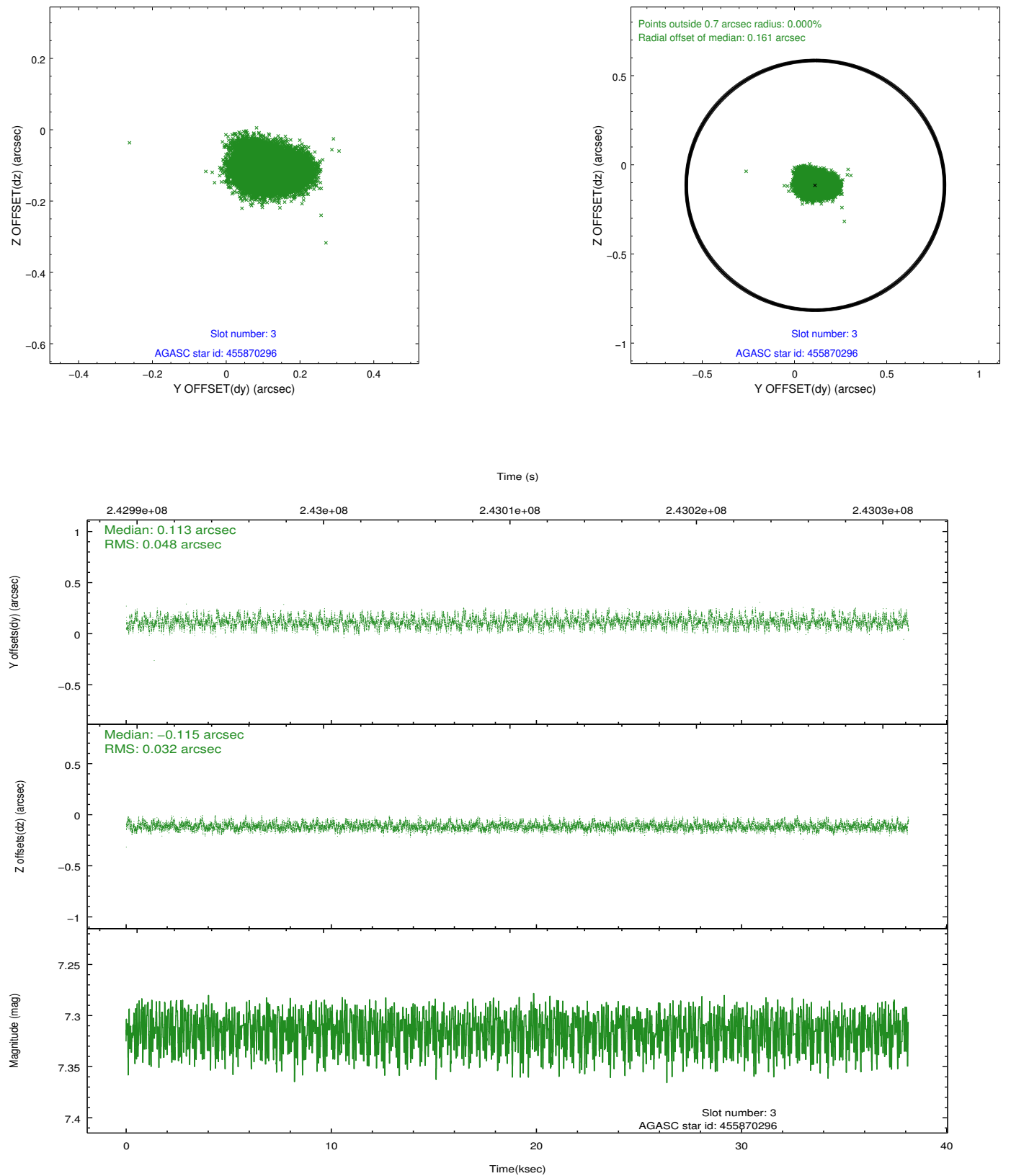


### Slot Statistics

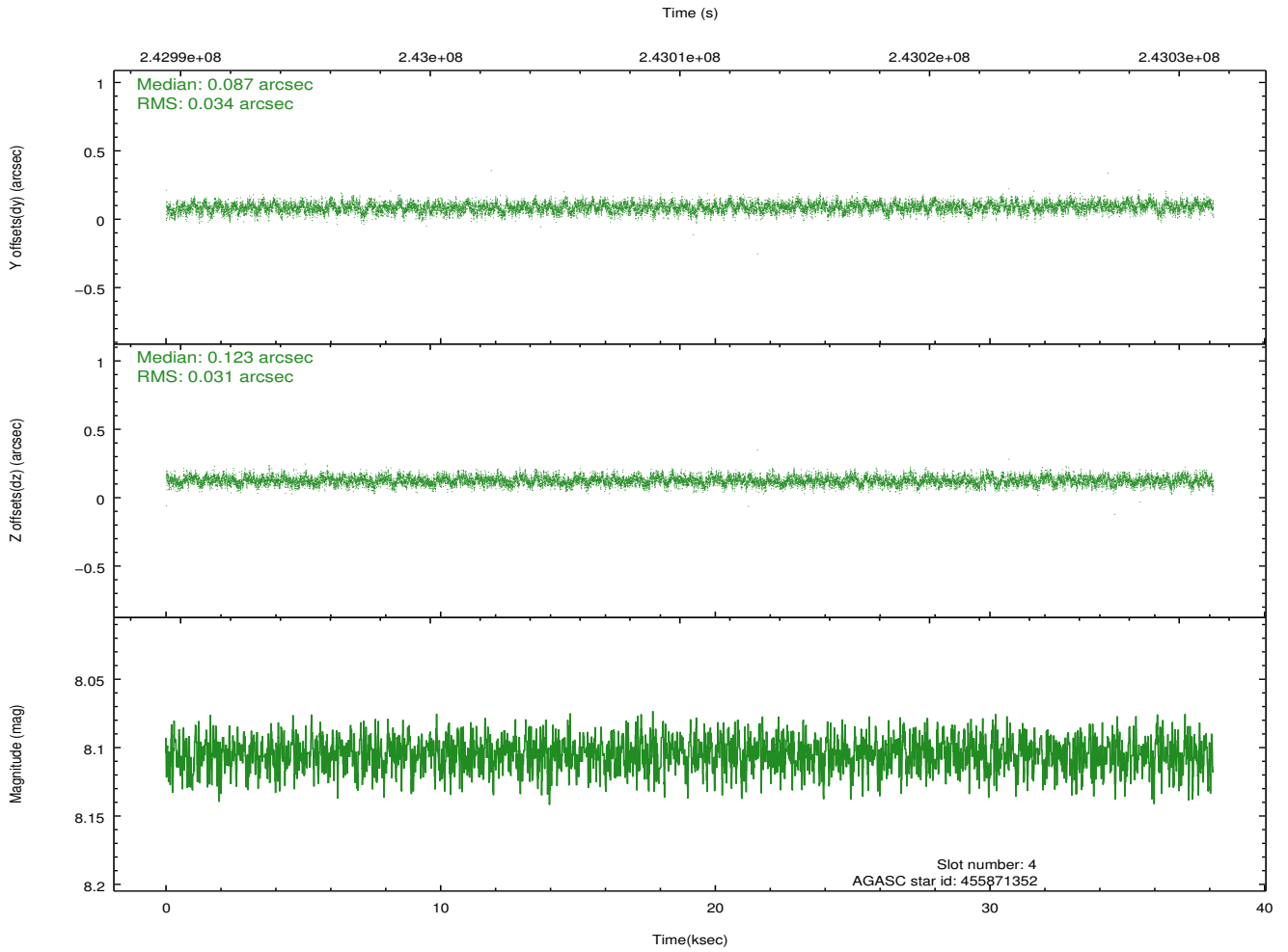
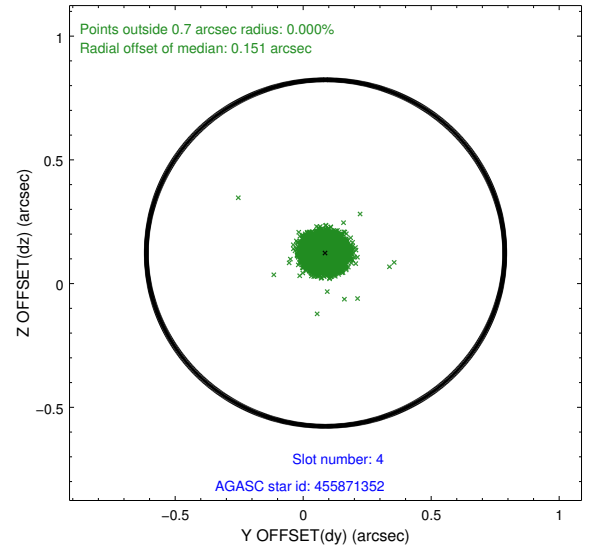
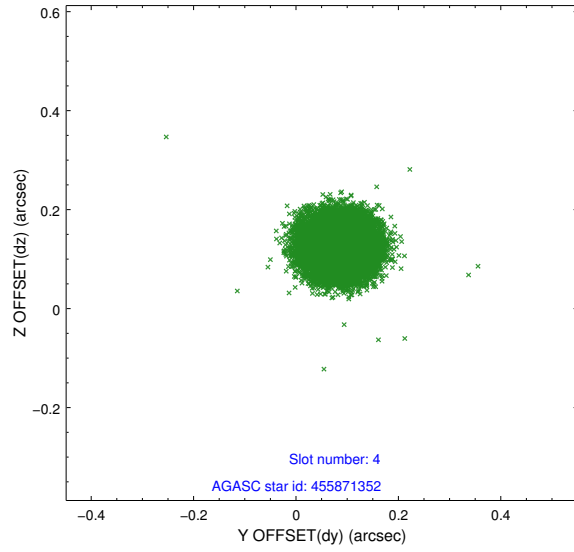
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	9301	0.042	-0.022	0.009	0.030	0.000000	0.000000	933.30	-834.83
1	FID	ACIS-I-5	7.23	9301	-0.165	0.057	0.009	0.023	0.000000	0.000000	-1814.96	1062.78
2	FID	ACIS-I-6	7.25	9301	0.033	0.037	0.010	0.019	0.000000	0.000000	398.86	1707.25
3	GUIDE	455870296	7.31	18602	0.113	-0.115	0.062	0.100	214.629779	52.033323	1646.98	258.62
4	GUIDE	455871352	8.10	18601	0.087	0.123	0.049	0.078	215.099961	52.172669	1919.29	1380.76
5	GUIDE	505806936	7.02	18602	-0.030	-0.135	0.071	0.116	213.820815	52.535927	-883.90	52.63
6	GUIDE	505812376	7.60	18600	-0.109	-0.056	0.058	0.091	214.039537	52.937930	-1683.26	1350.02
7	GUIDE	505812088	8.17	18542	-0.073	0.177	0.086	0.141	214.186617	53.263562	-2377.17	2347.34

## 2.4 Star Slots

### 2.4.1 Slot 3

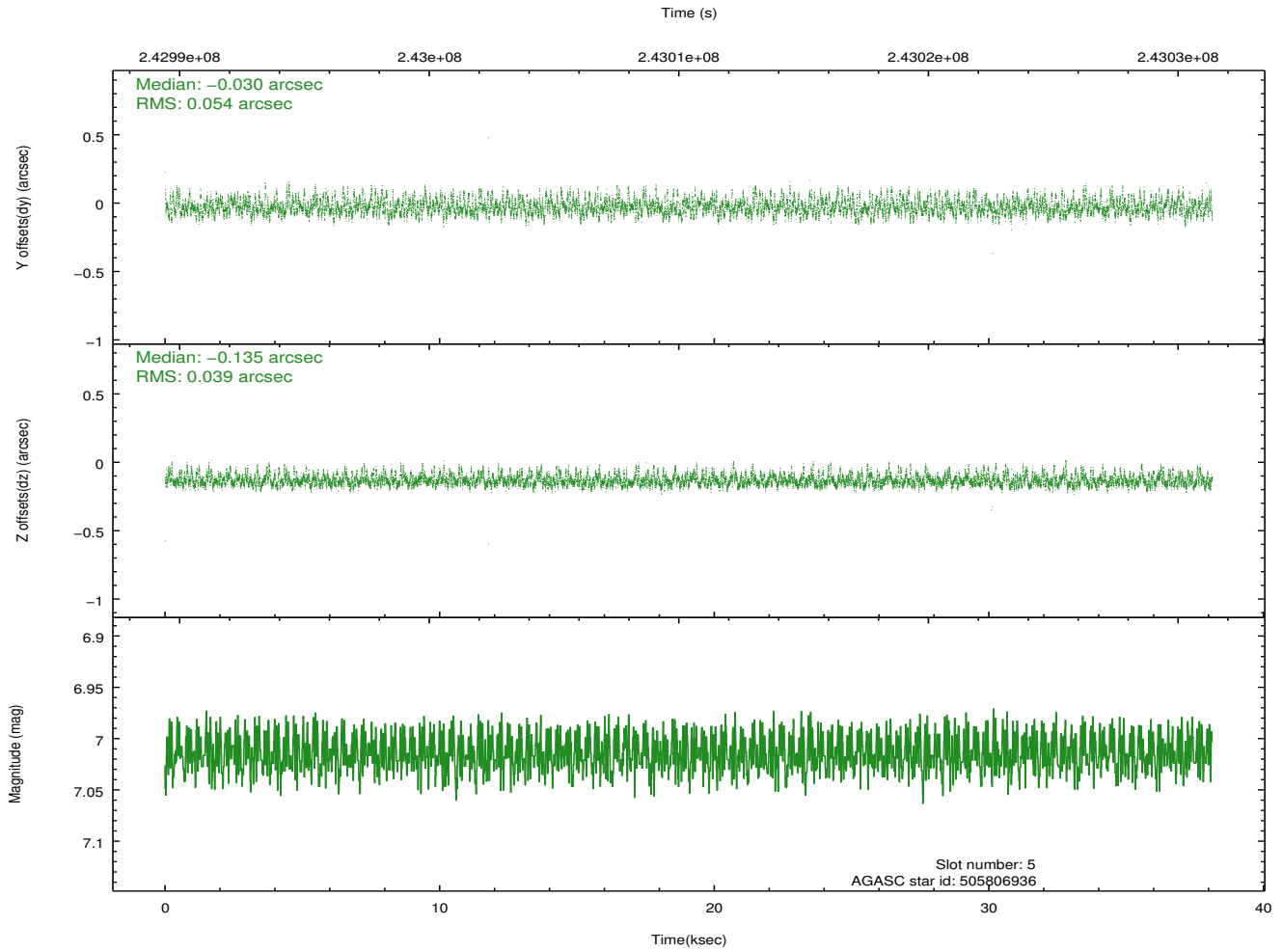
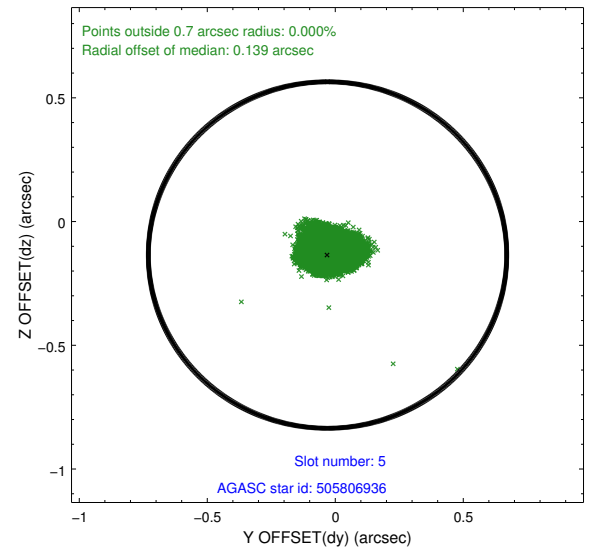
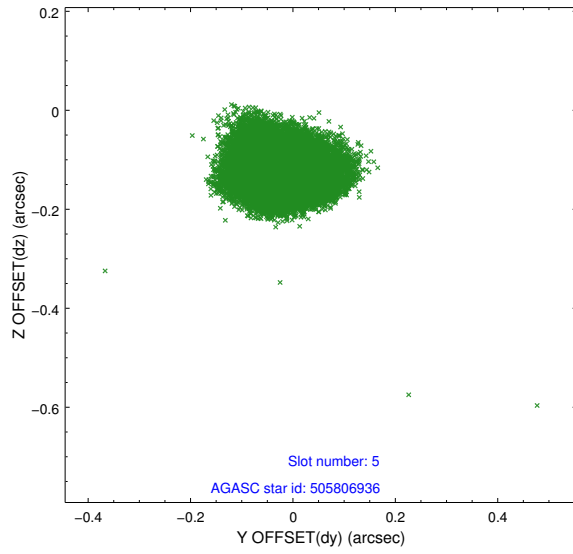


## 2.4.2 Slot 4

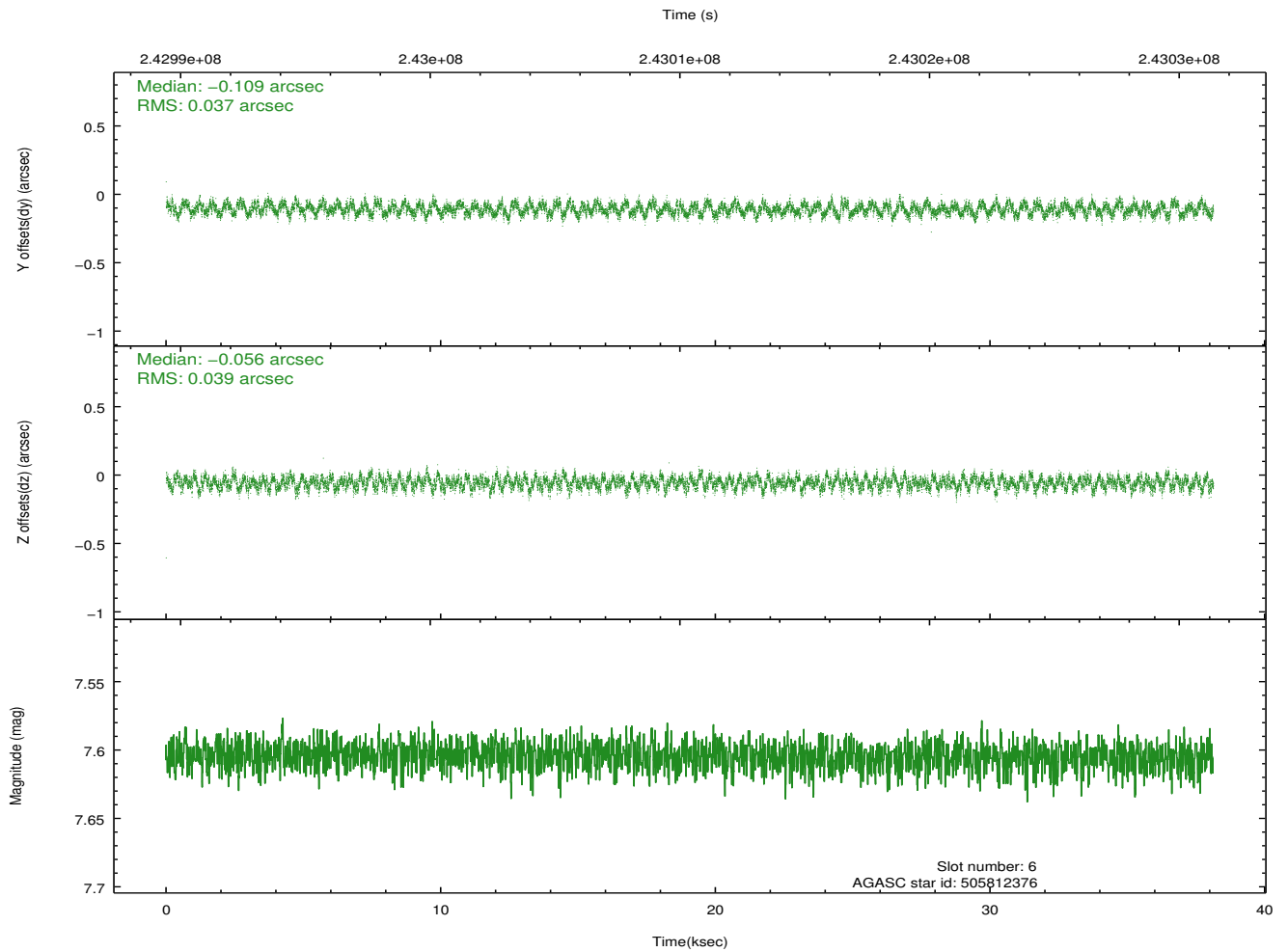
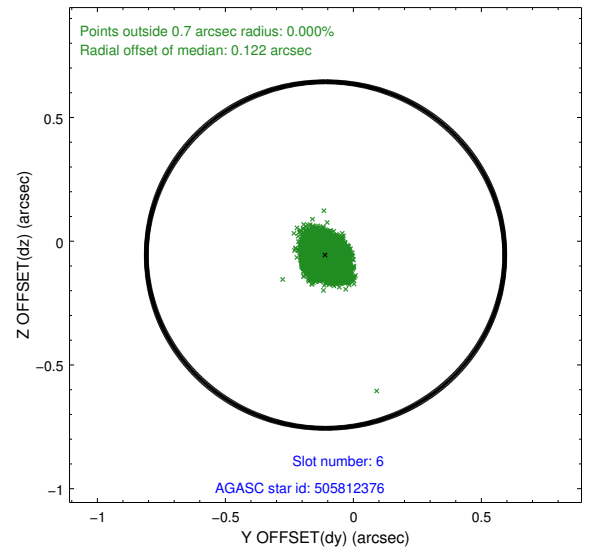
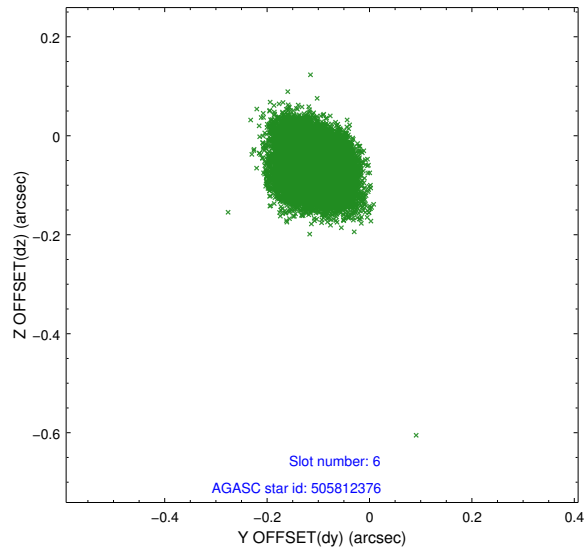




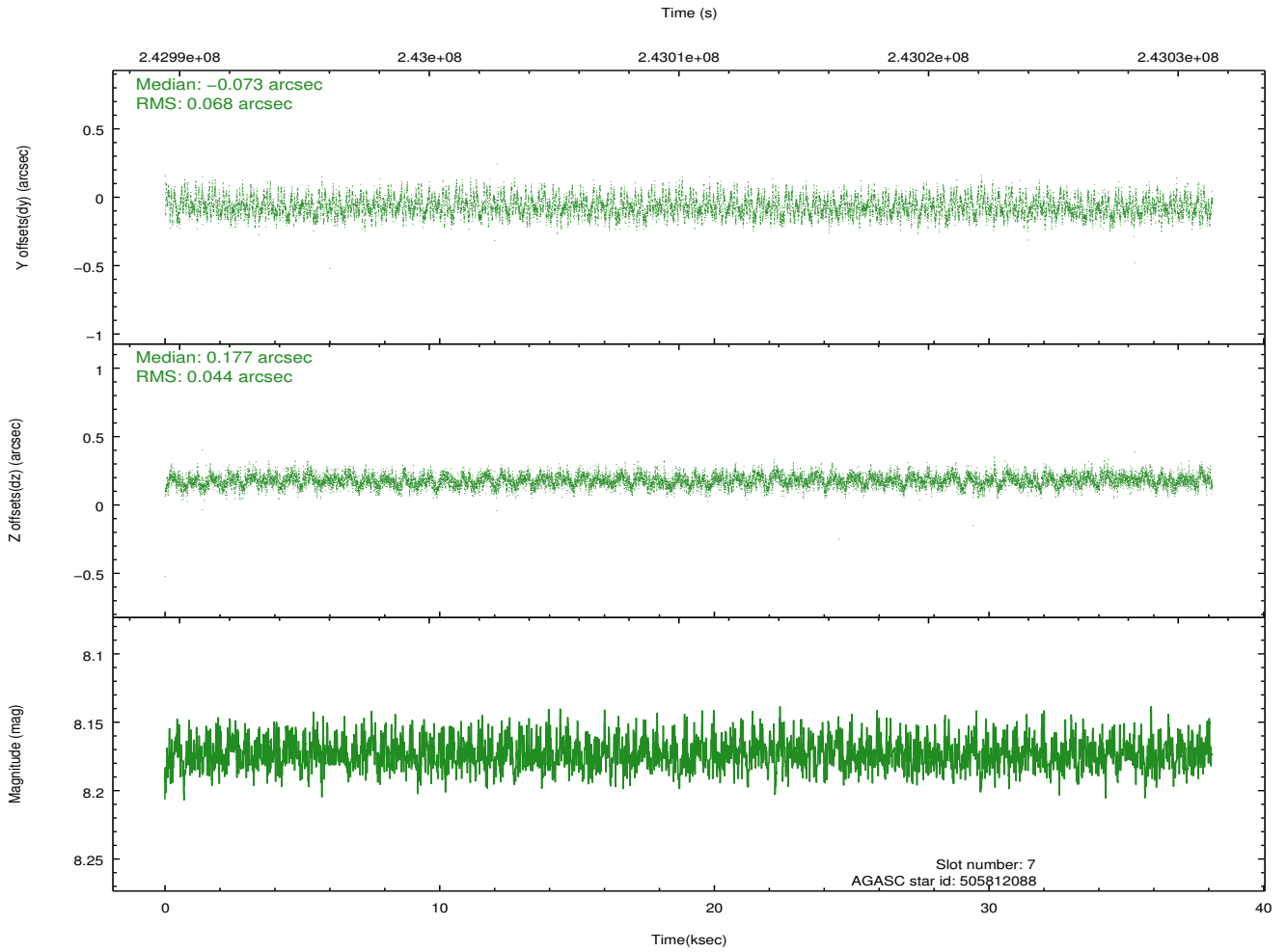
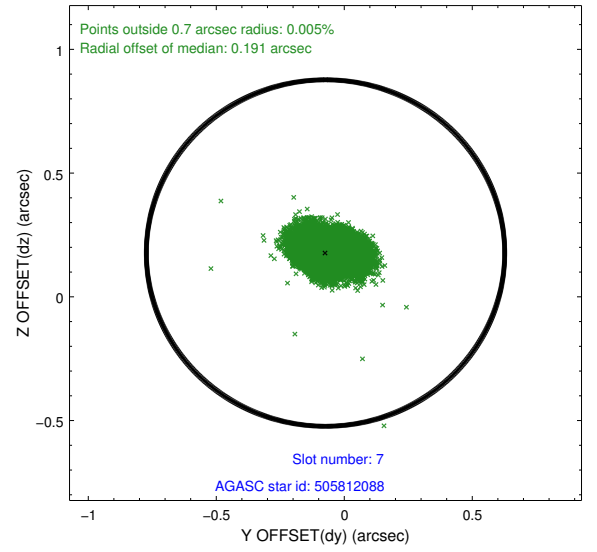
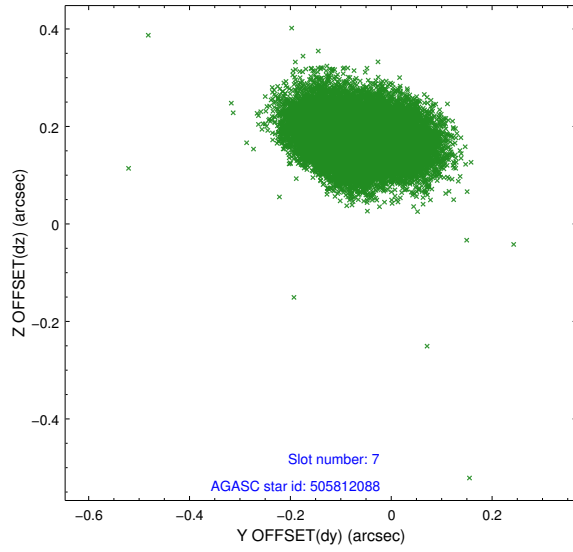
### 2.4.3 Slot 5



## 2.4.4 Slot 6

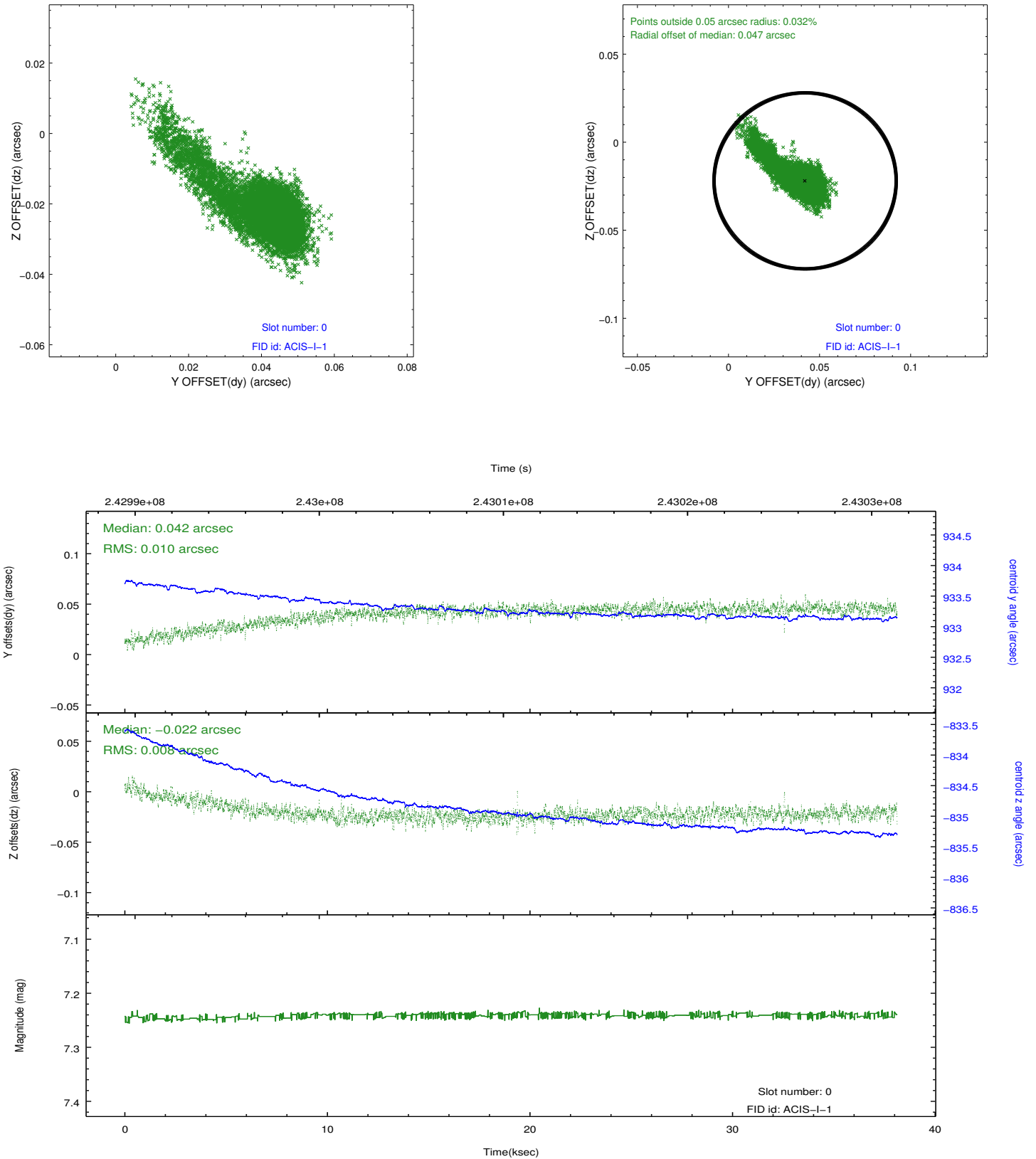


## 2.4.5 Slot 7

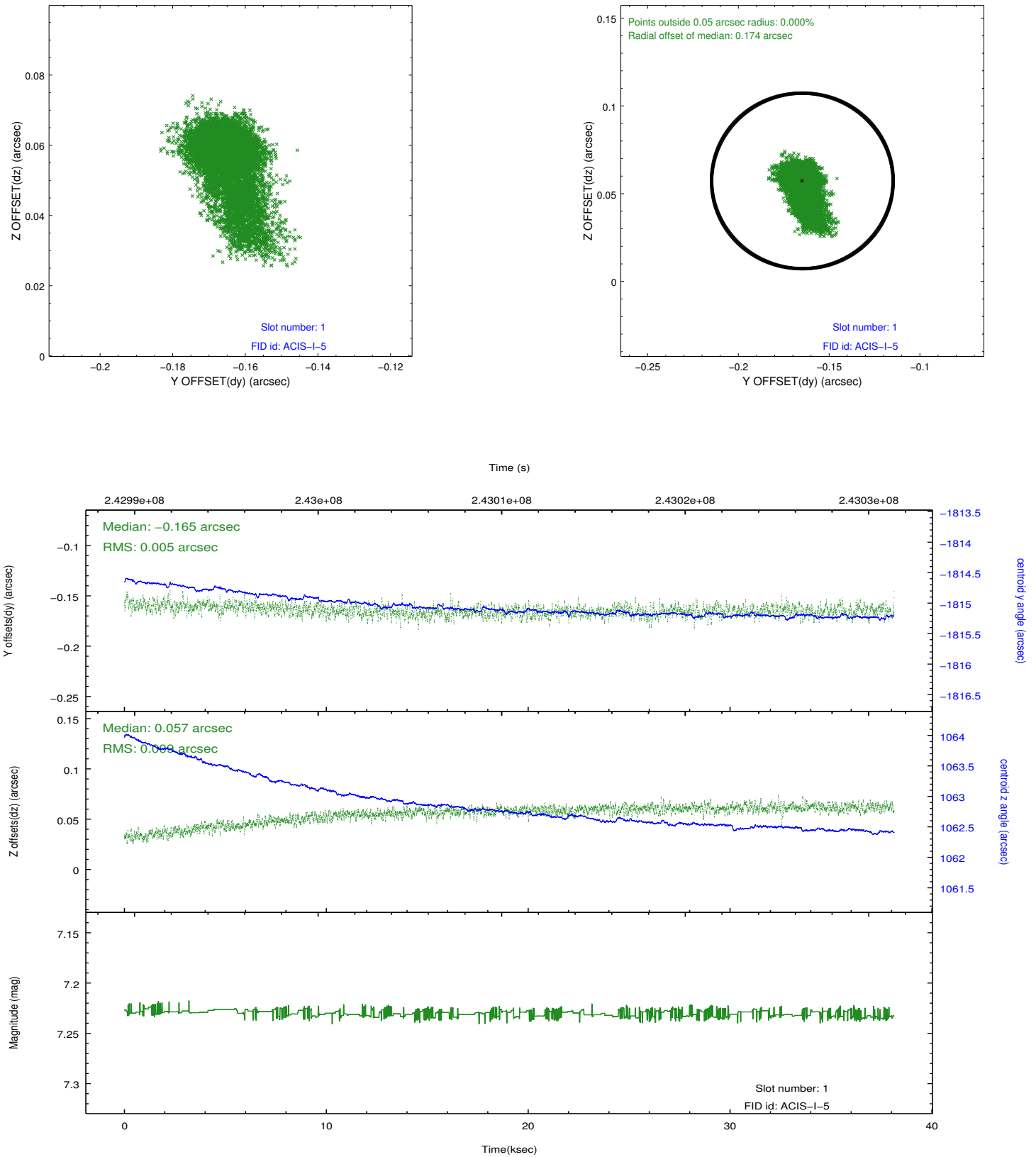


## 2.5 FID Slots

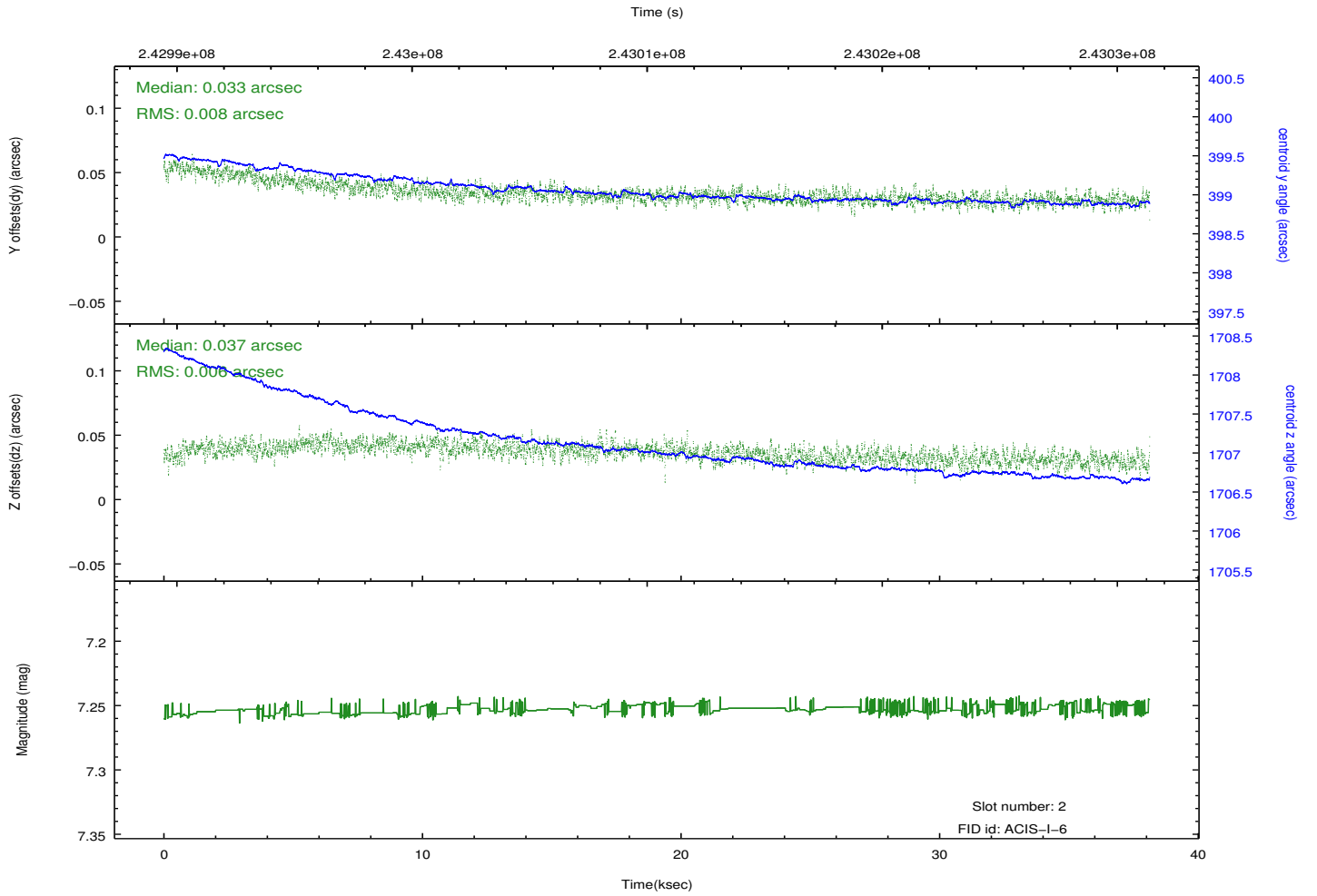
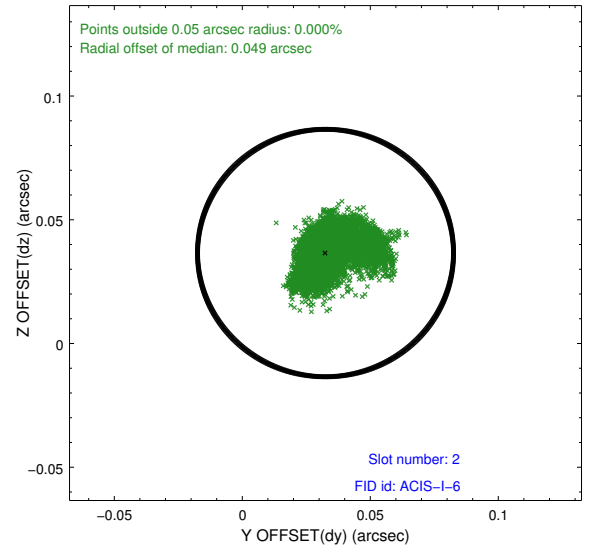
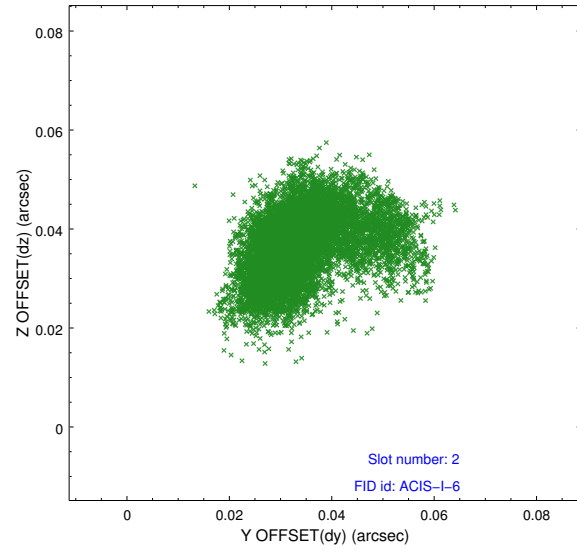
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.01.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.12379

### A.2 Comments

Roll preference met.