

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 5852 - L2 Version 2  
Chandra X-Ray Center

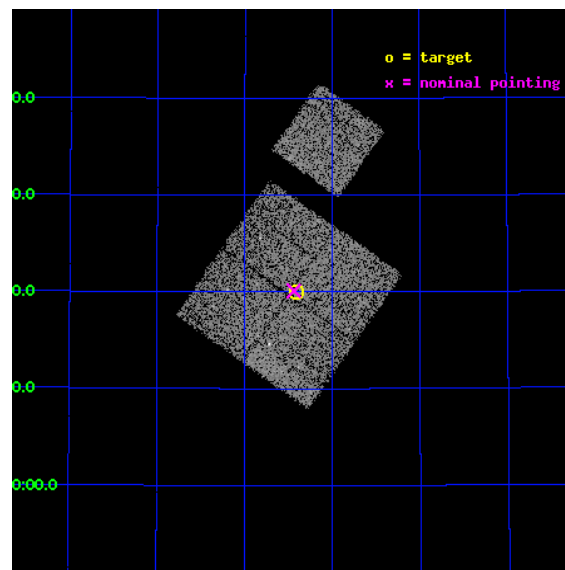
L2 Processing Date : Mar 18 2012

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# 1 Front

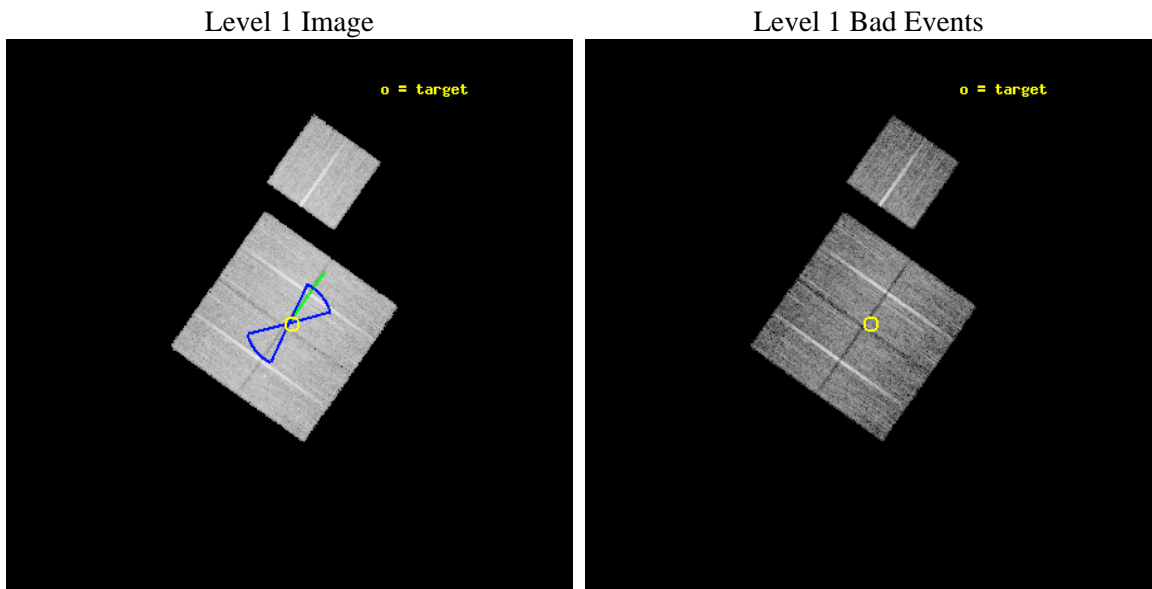
seq_num	900353	Sequence number
obs_id	5852	Observation id
title	Deep Chandra Imaging of the Extended Groth Strip: The Co-evolution of Black Holes and Galaxies	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	EGS-6	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.102081	Observer's specified target RA [deg]
dec_targ	52.334053	Observer's specified target Dec [deg]
ra_nom	214.10954081654	Nominal RA [deg]
dec_nom	52.335074301622	Nominal Dec [deg]
roll_nom	35.202779530925	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10758.60480395	Sum of GTIs [s]
livetime	10618.035711816	Livetime [s]
ontime0	10764.763644367	Sum of GTIs [s]
ontime1	10761.663694203	Sum of GTIs [s]
ontime2	10764.845604867	Sum of GTIs [s]
ontime3	10758.60480395	Sum of GTIs [s]
ontime6	10761.581594259	Sum of GTIs [s]
l2events	30610	Number of level 2 events



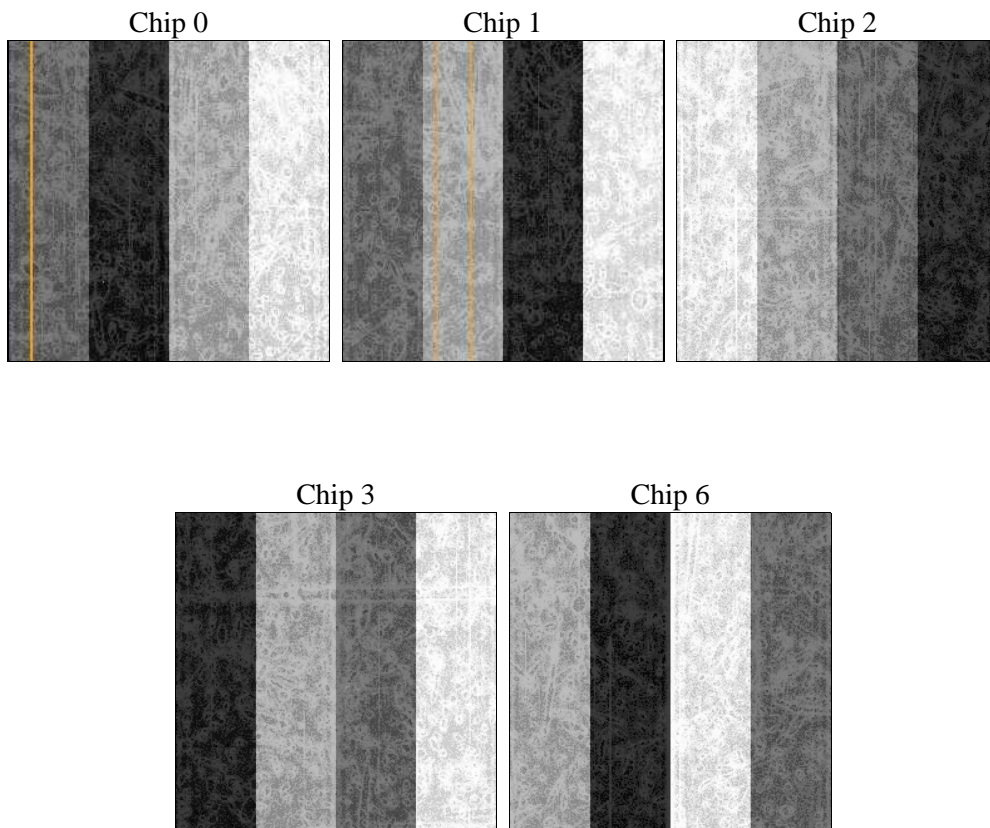
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	10758.60480395	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime0	10764.763644367	Sum of GTIs [s]
date	2012-03-18T08:39:46	Date and time of file creation	ontime1	10761.663694203	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10764.845604867	Sum of GTIs [s]
			ontime3	10758.60480395	Sum of GTIs [s]
			ontime6	10761.581594259	Sum of GTIs [s]
			l1events	352661	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	66405	68074	74808	72106	71268
rejected events	59246	59698	67781	65089	63981
rejected %	89%	87%	90%	90%	89%

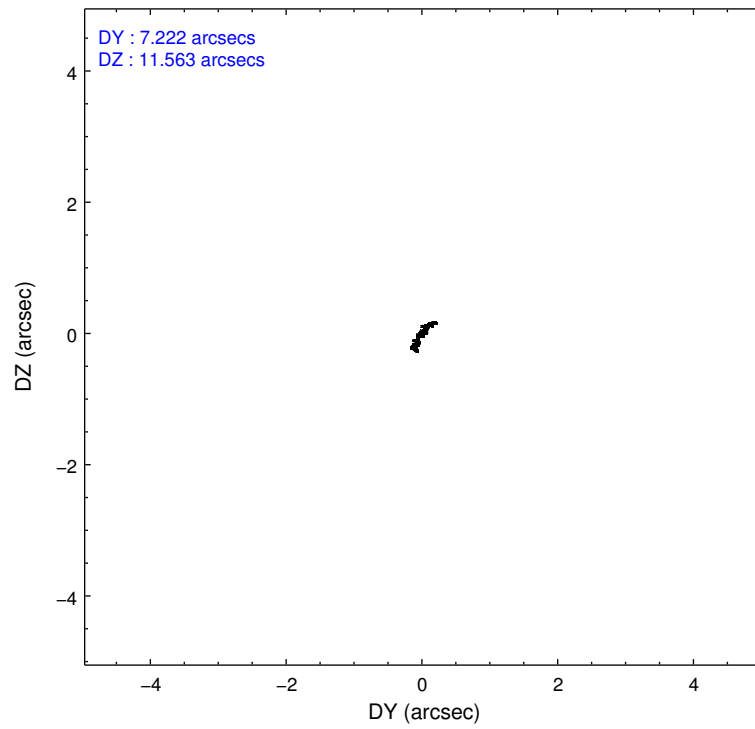
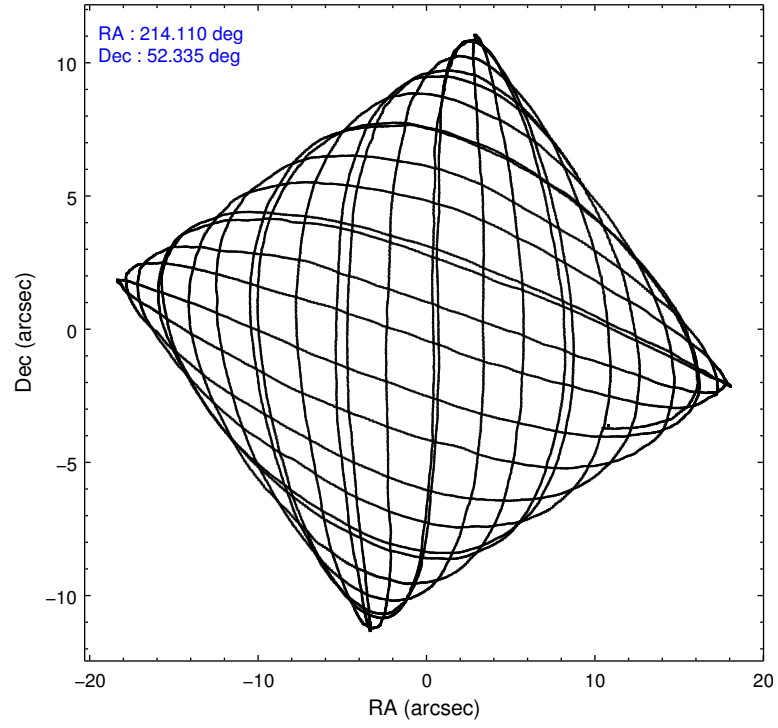
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2634	3143	2581	2544	2529
	3%	4%	3%	3%	3%
grade 1 events	44	32	43	43	20
	0%	0%	0%	0%	0%
grade 2 events	1689	1810	1692	1537	1579
	2%	2%	2%	2%	2%
grade 3 events	852	972	741	760	802
	1%	1%	0%	1%	1%
grade 4 events	705	885	782	800	823
	1%	1%	1%	1%	1%
grade 5 events	2455	2764	2281	2882	2910
	3%	4%	3%	3%	4%
grade 6 events	1281	1567	1233	1379	1557
	1%	2%	1%	1%	2%
grade 7 events	56745	56901	65455	62161	61048
	85%	83%	87%	86%	85%

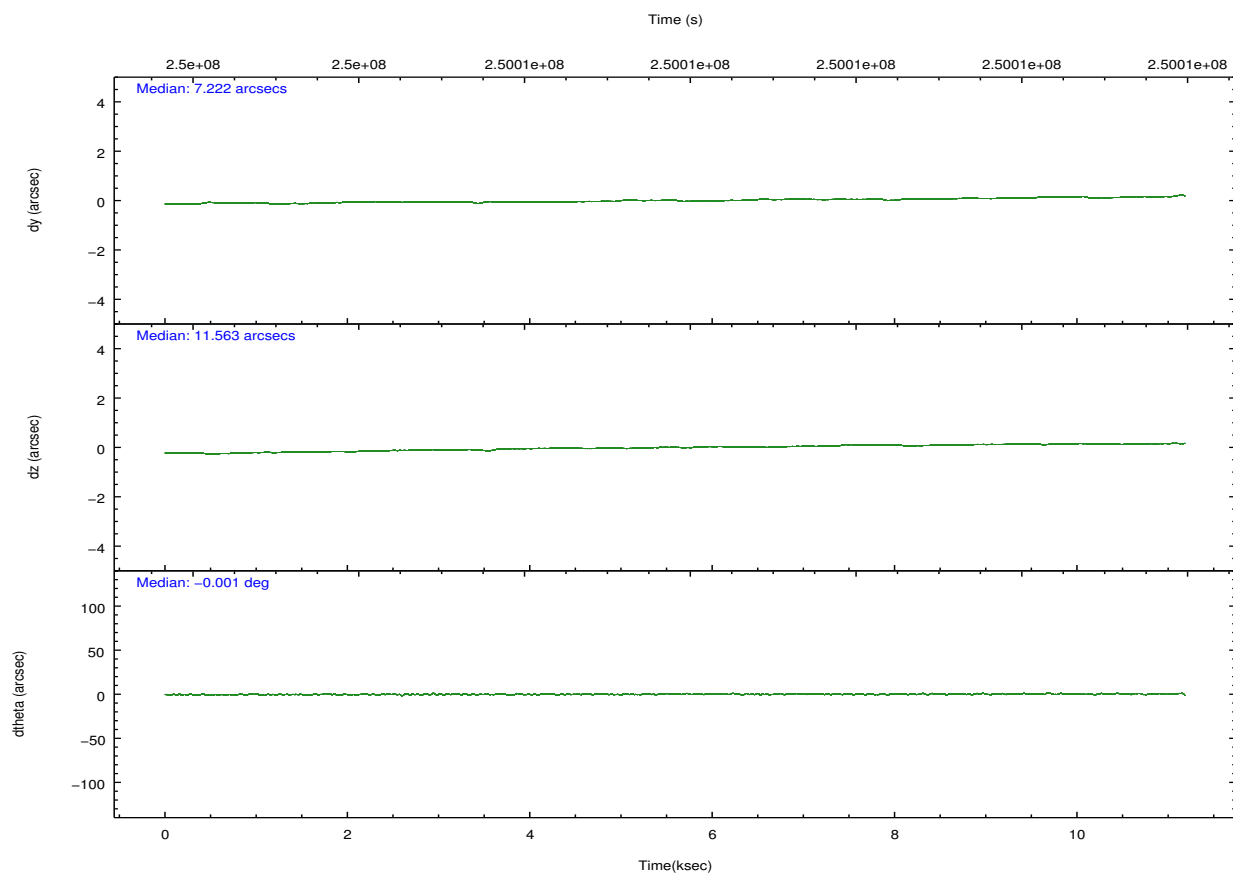
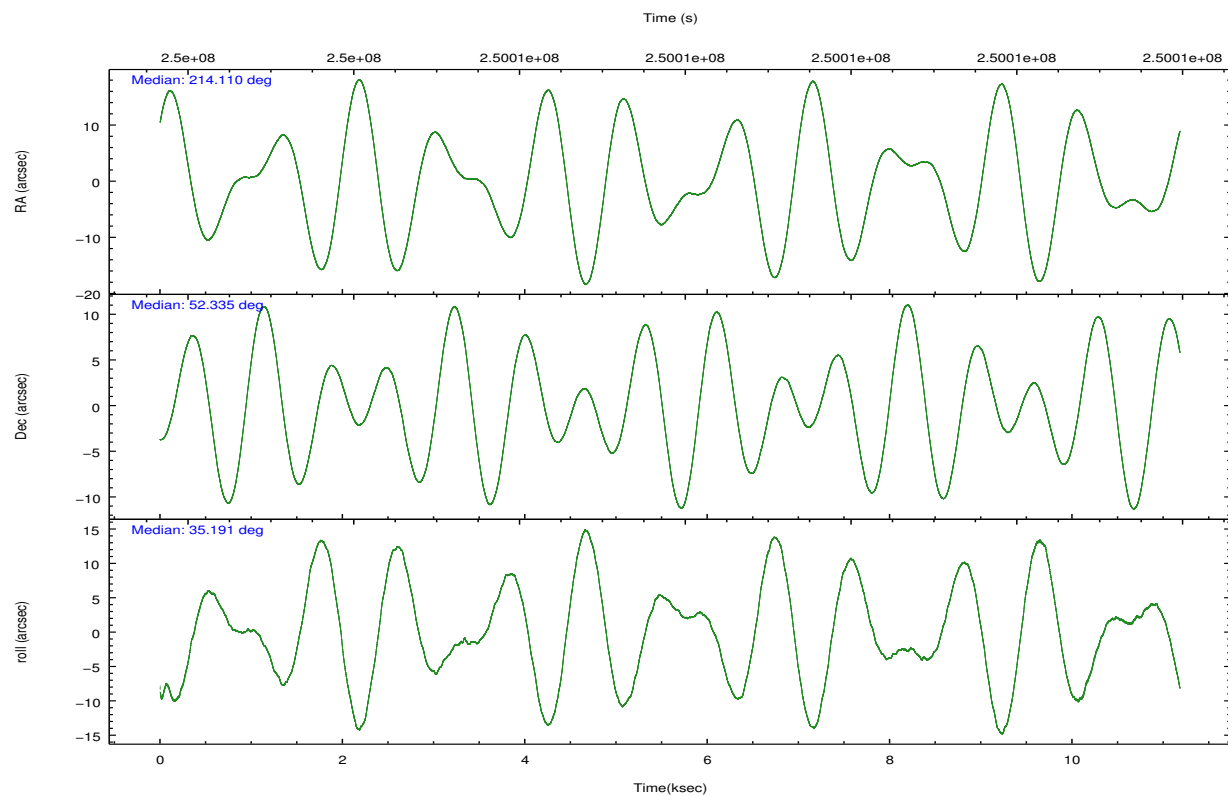


## 2.2 Compared Parameters

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	214.090878	214.1095408165383	Subarray requested	NONE	NONE
[deg] Pointing Dec	52.310136	52.33507430162227	Alternating exposures requested	N	N
[deg] Pointing Roll	35.008870	35.20277953092533	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	50.756000	50.756000			
[deg] Roll tolerance	25.000000	25.000000			
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)	250002409.184000	250002033.20218			
Observation start date	2005-12-03T13:05:45	2005-12-03T13:00:33			
[s] Observation end time (MET)	250013409.184000	250014286.56524			
Observation end date	2005-12-03T16:09:05	2005-12-03T16:24:46			
Read mode	TIMED	TIMED			

## 2.3 Aspect



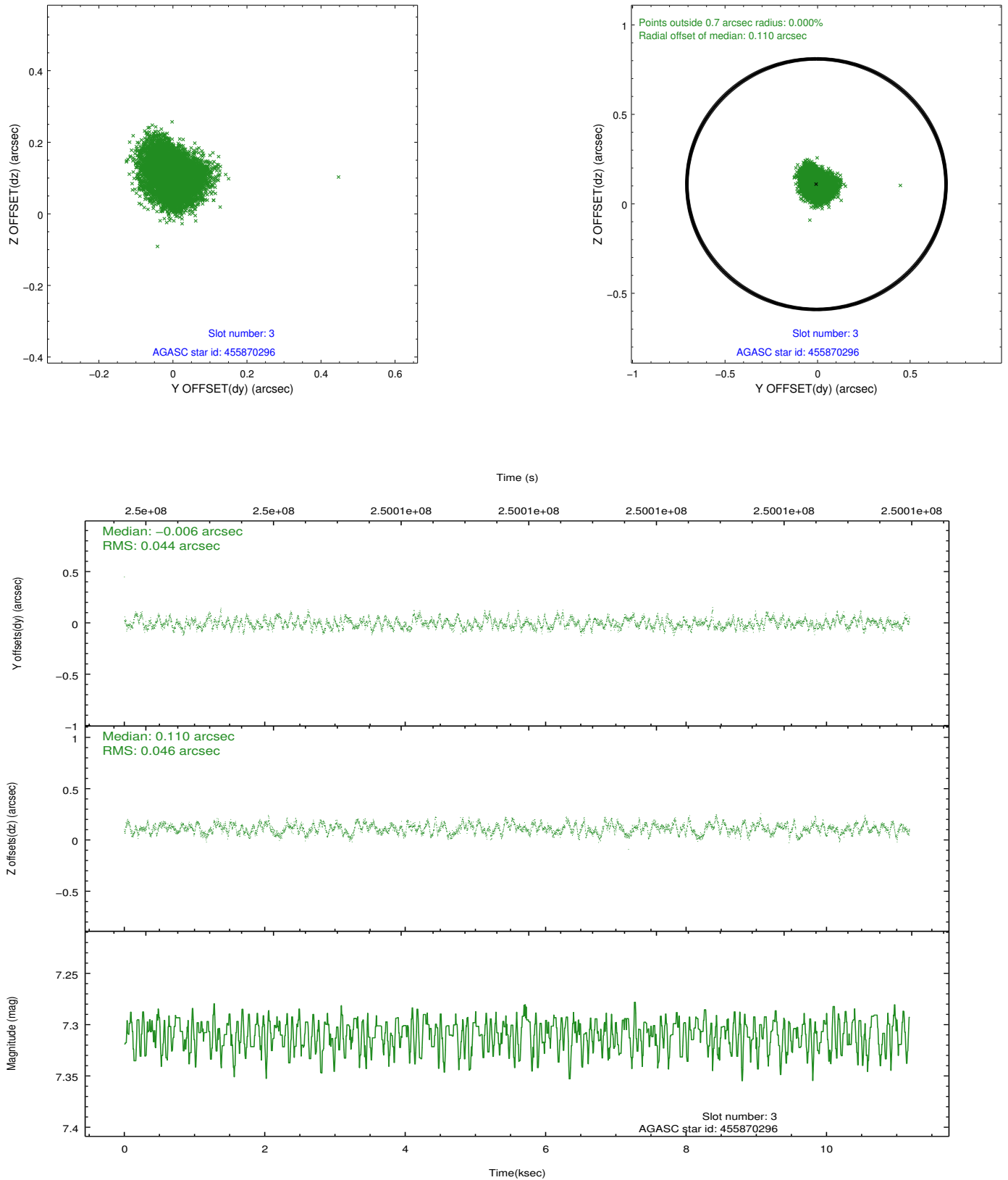


### Slot Statistics

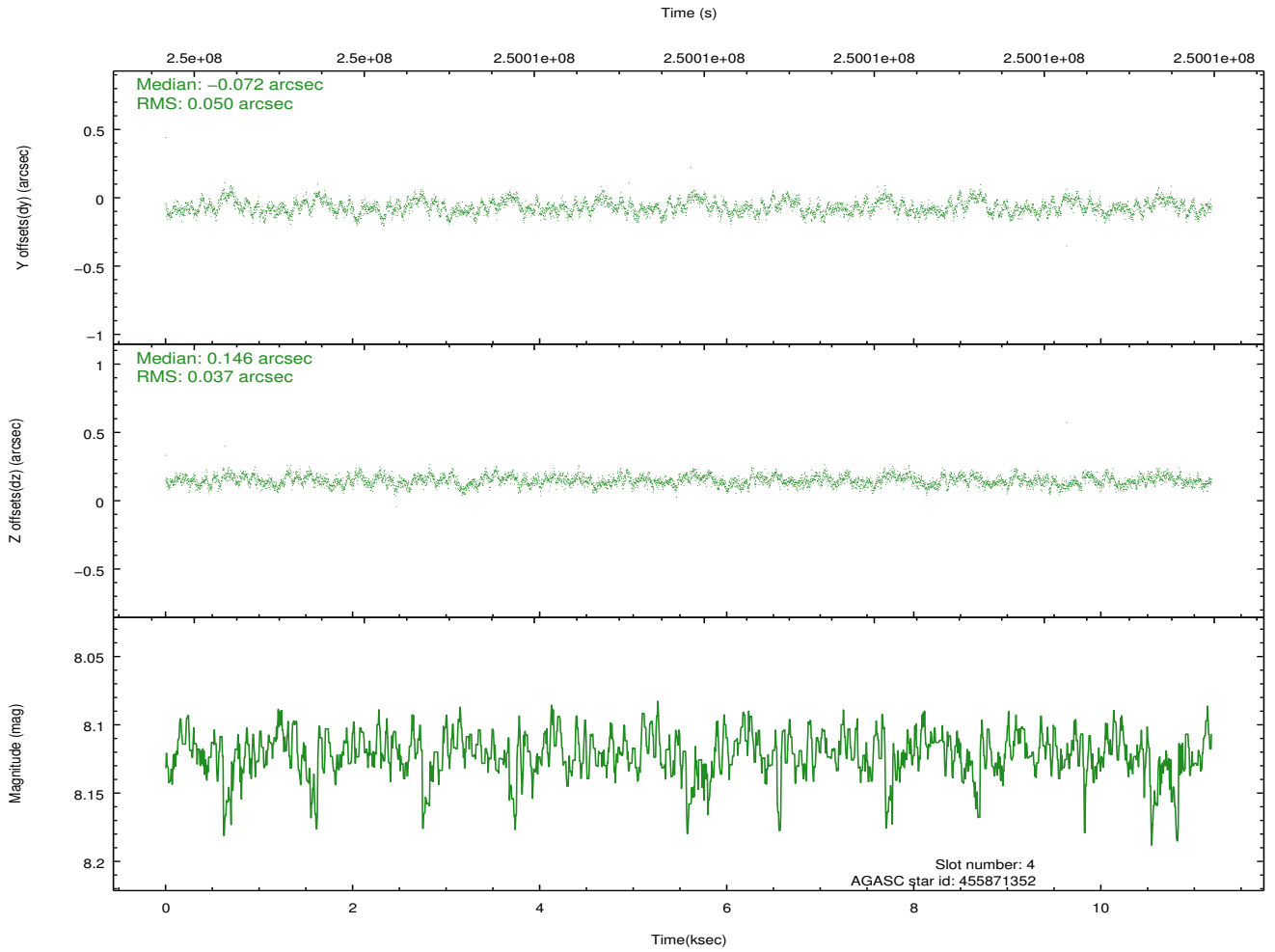
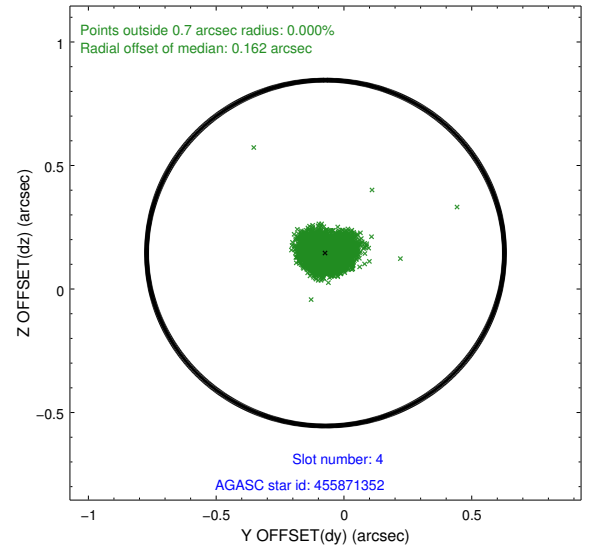
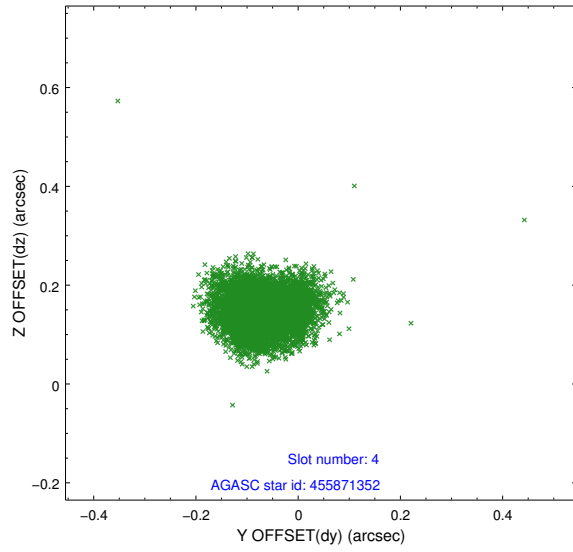
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	2725	0.047	-0.026	0.007	0.012	0.000000	0.000000	932.47	-835.11
1	FID	ACIS-I-5	7.23	2725	-0.166	0.063	0.007	0.012	0.000000	0.000000	-1815.55	1062.31
2	FID	ACIS-I-6	7.25	2725	0.027	0.035	0.007	0.013	0.000000	0.000000	397.56	1707.25
3	GUIDE	455870296	7.31	5451	-0.006	0.110	0.070	0.104	214.629779	52.033323	408.85	-1497.12
4	GUIDE	455871352	8.12	5450	-0.072	0.146	0.066	0.106	215.099961	52.172669	1550.23	-1670.58
5	GUIDE	504894728	8.82	5450	0.280	-0.186	0.079	0.126	213.220892	52.722550	-695.17	2313.04
6	GUIDE	505806936	7.00	5449	0.047	0.001	0.068	0.114	213.820815	52.535927	-17.54	1006.36
7	GUIDE	505812376	7.57	5450	-0.263	-0.067	0.055	0.085	214.039537	52.937930	1204.91	1915.45

## 2.4 Star Slots

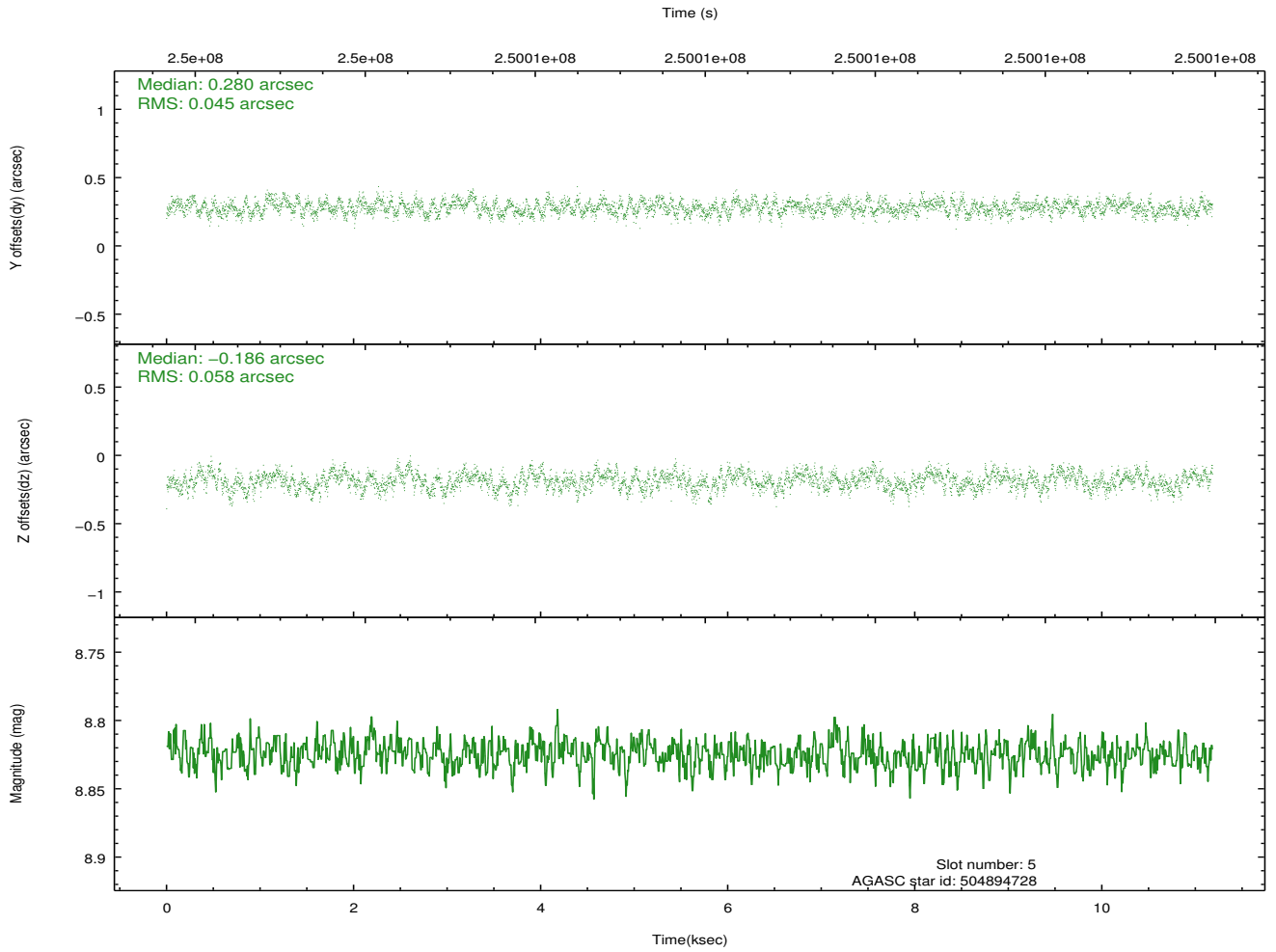
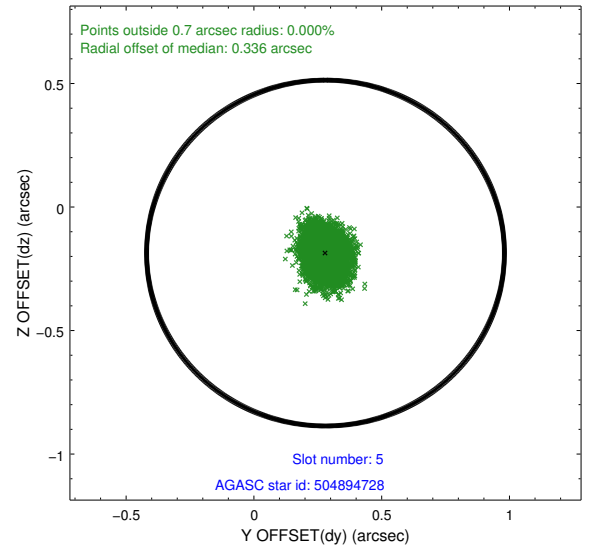
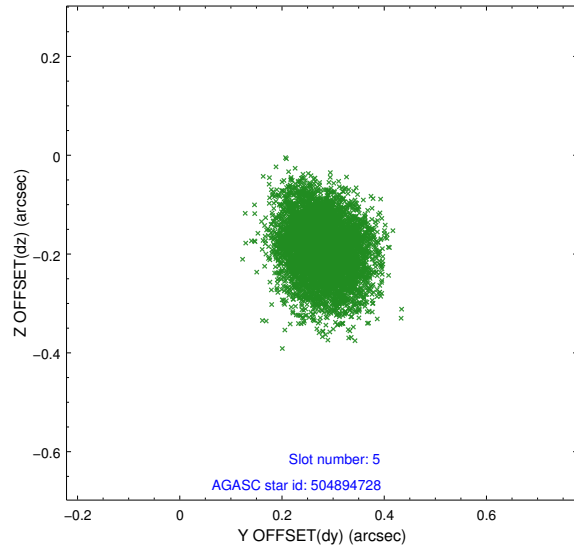
### 2.4.1 Slot 3



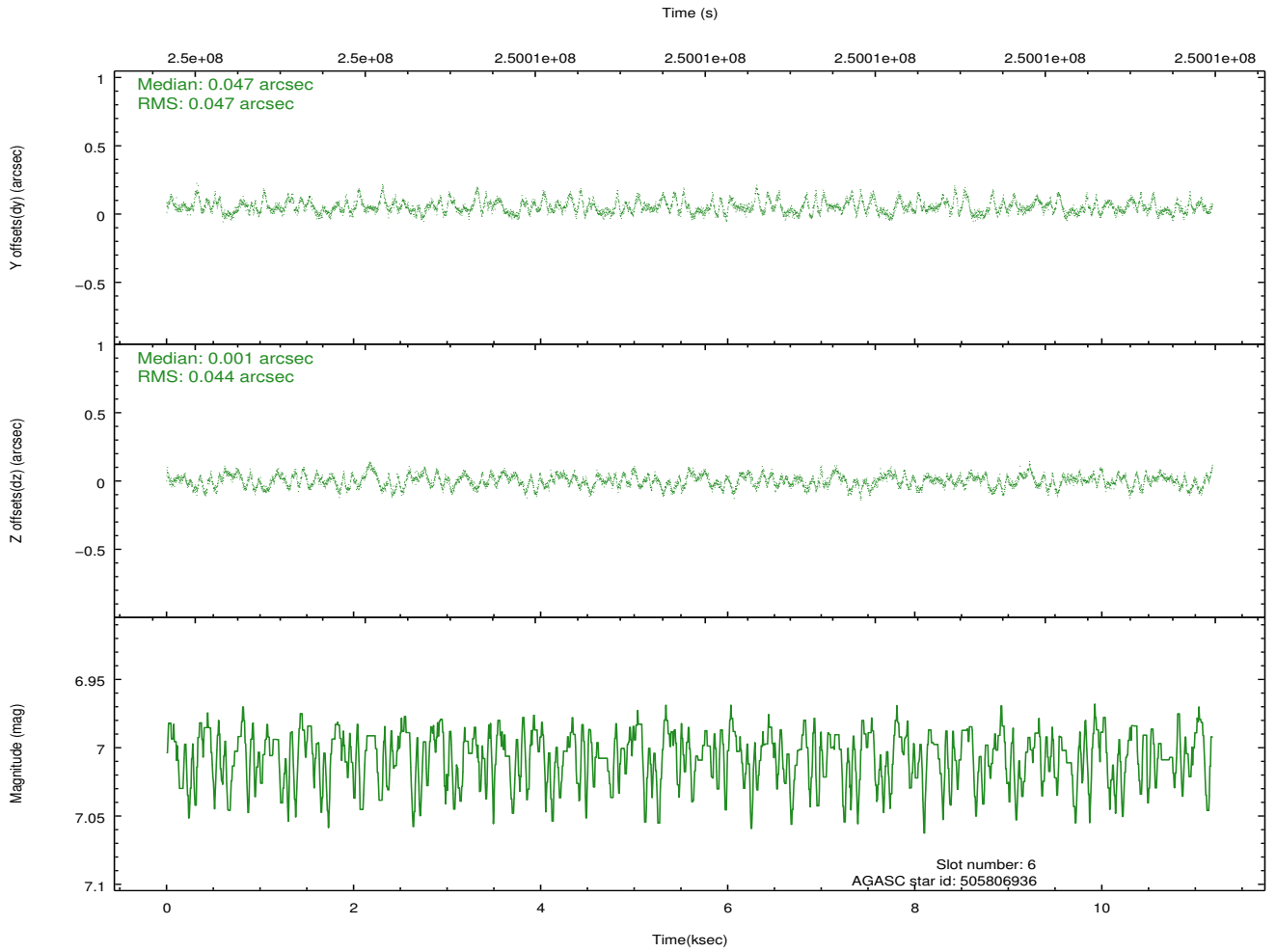
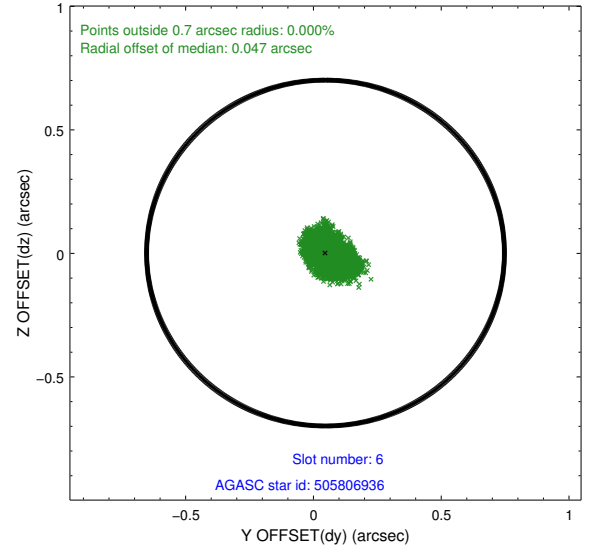
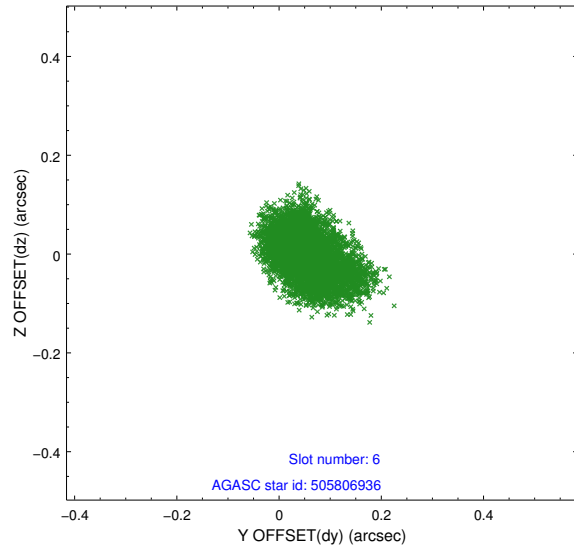
## 2.4.2 Slot 4



### 2.4.3 Slot 5

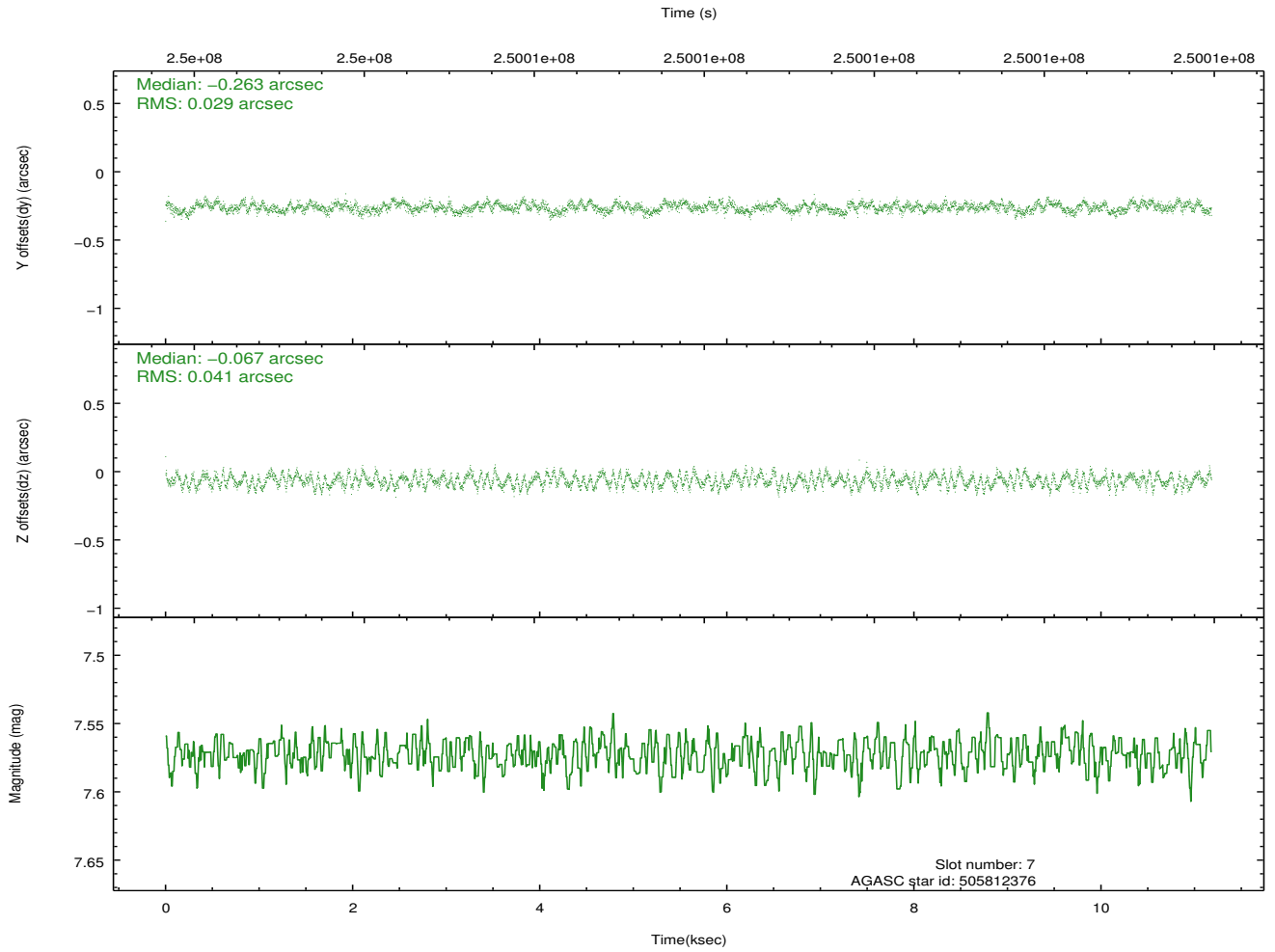
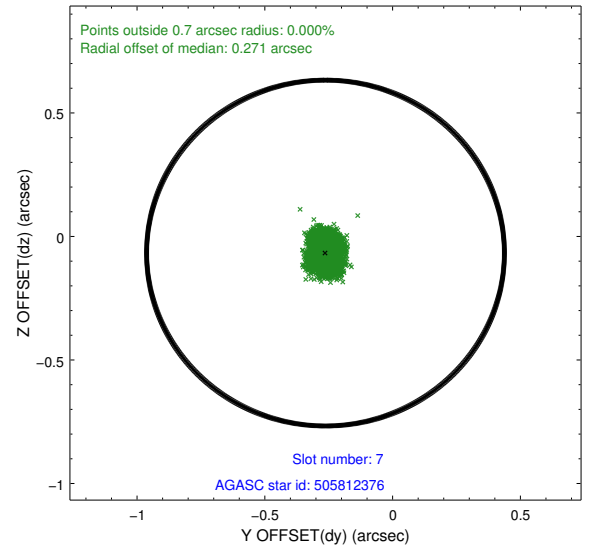
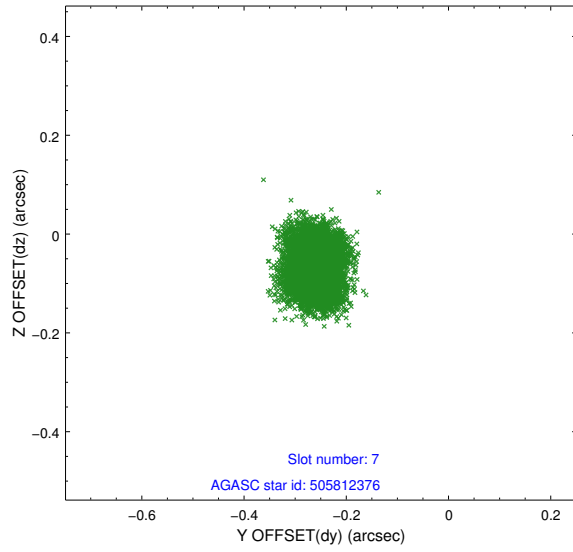


## 2.4.4 Slot 6



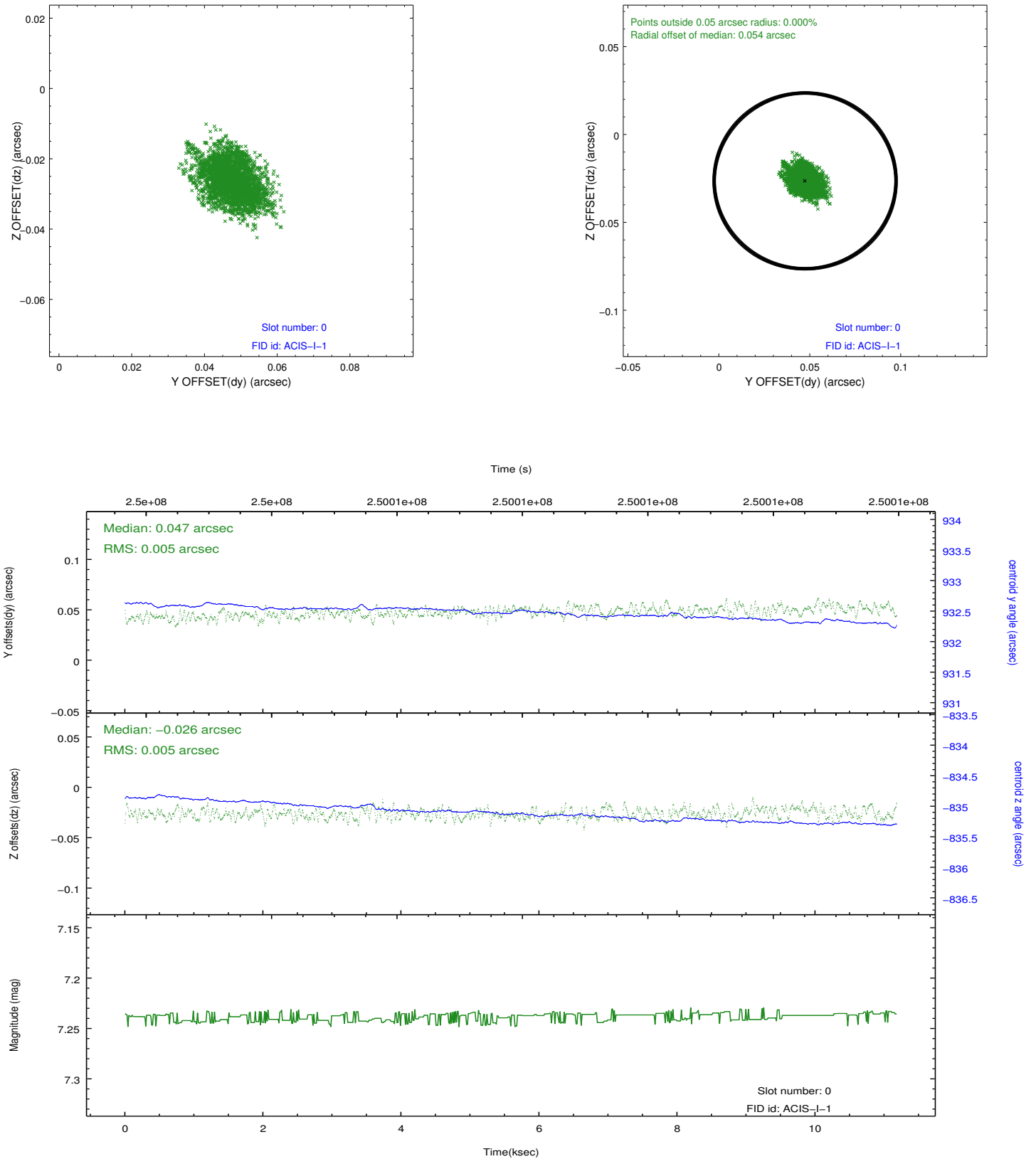


## 2.4.5 Slot 7

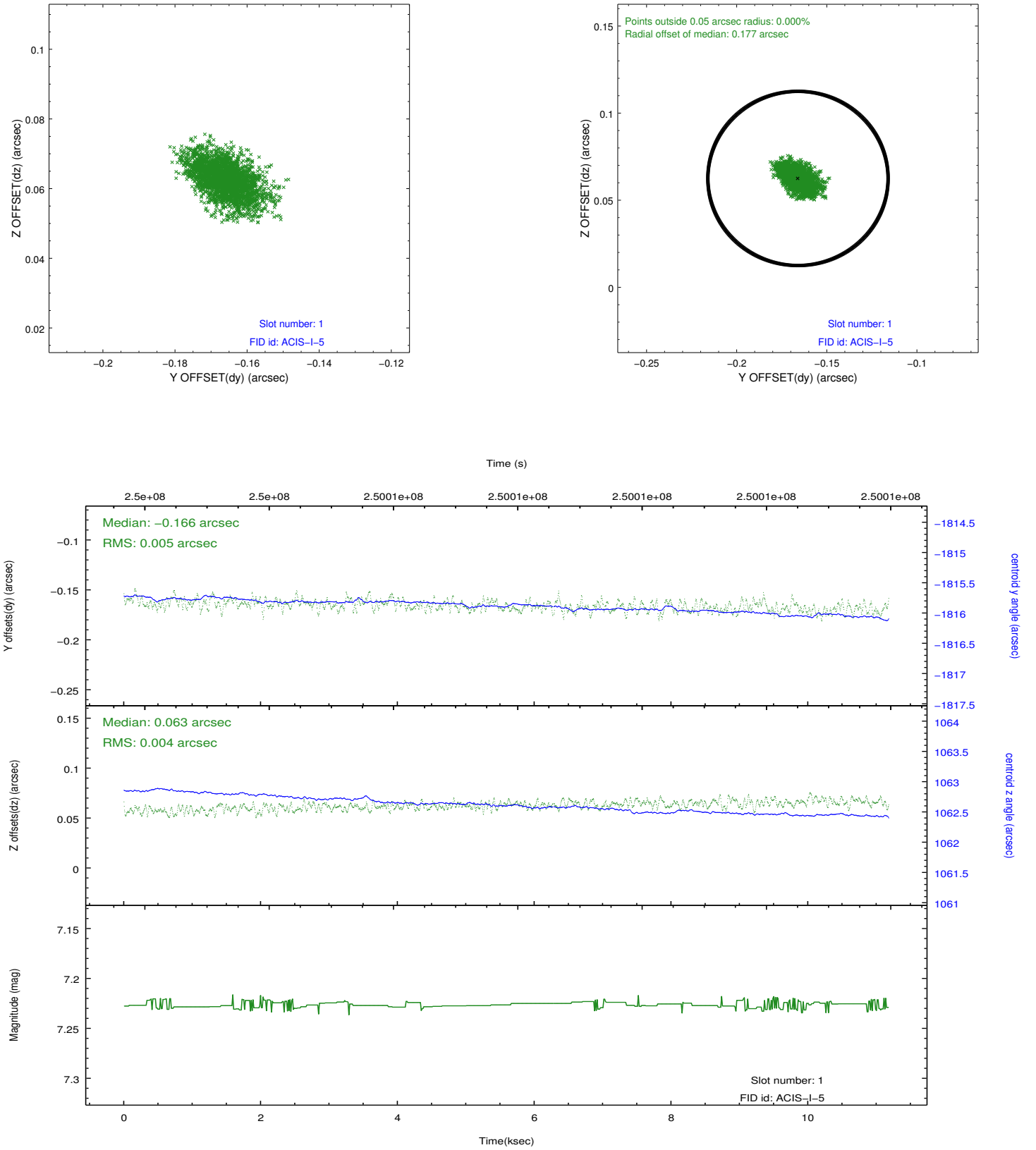


## 2.5 FID Slots

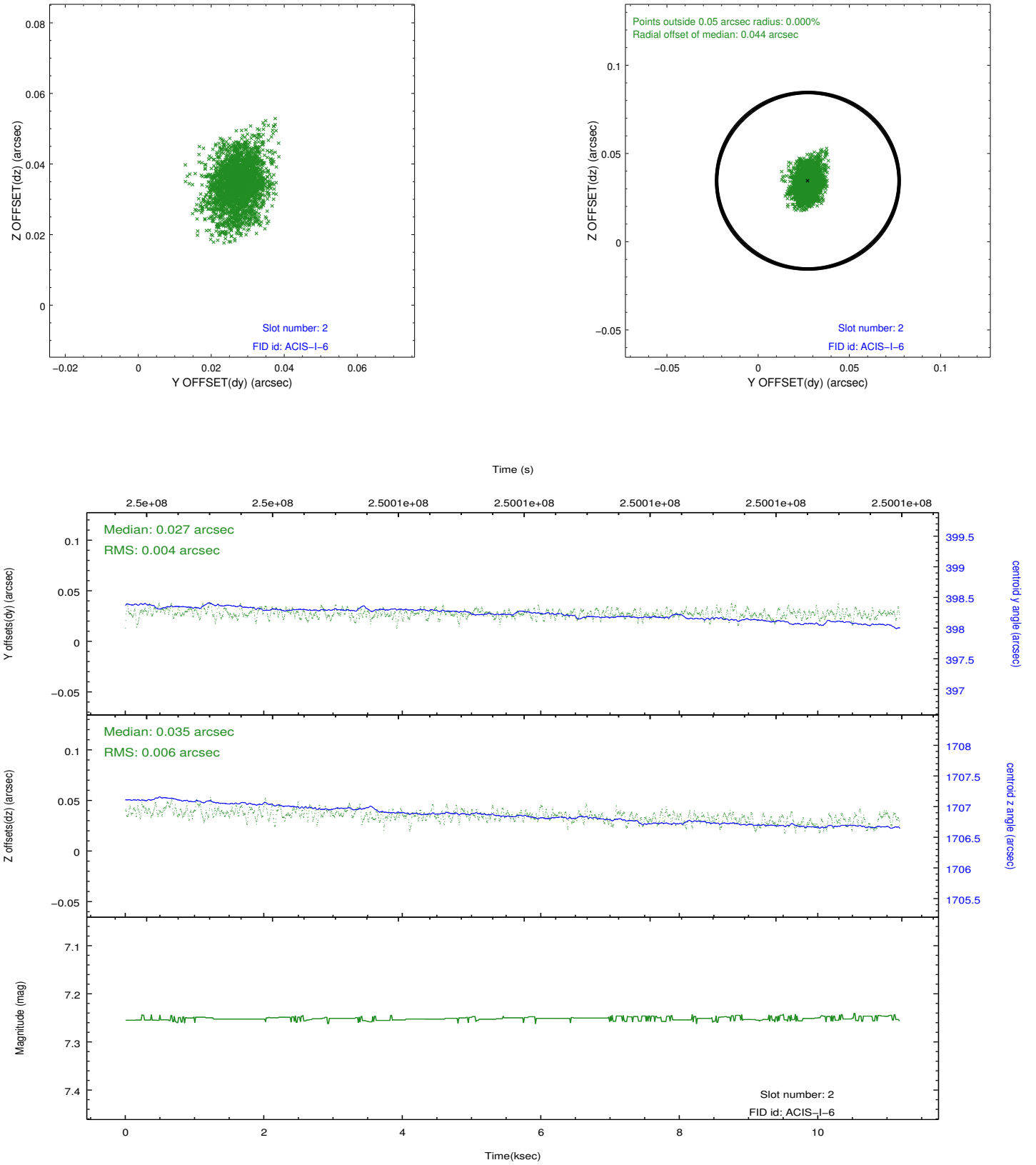
### 2.5.1 Slot 0



## 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)	2012.03.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.75993

### A.2 Comments

Roll constraint met.