

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2453 - L2 Version 3  
Chandra X-Ray Center

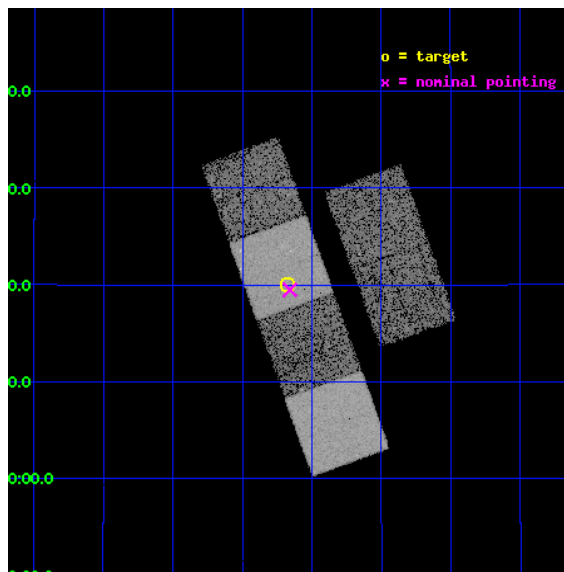
L2 Processing Date : Sep 15 2012

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# 1 Front

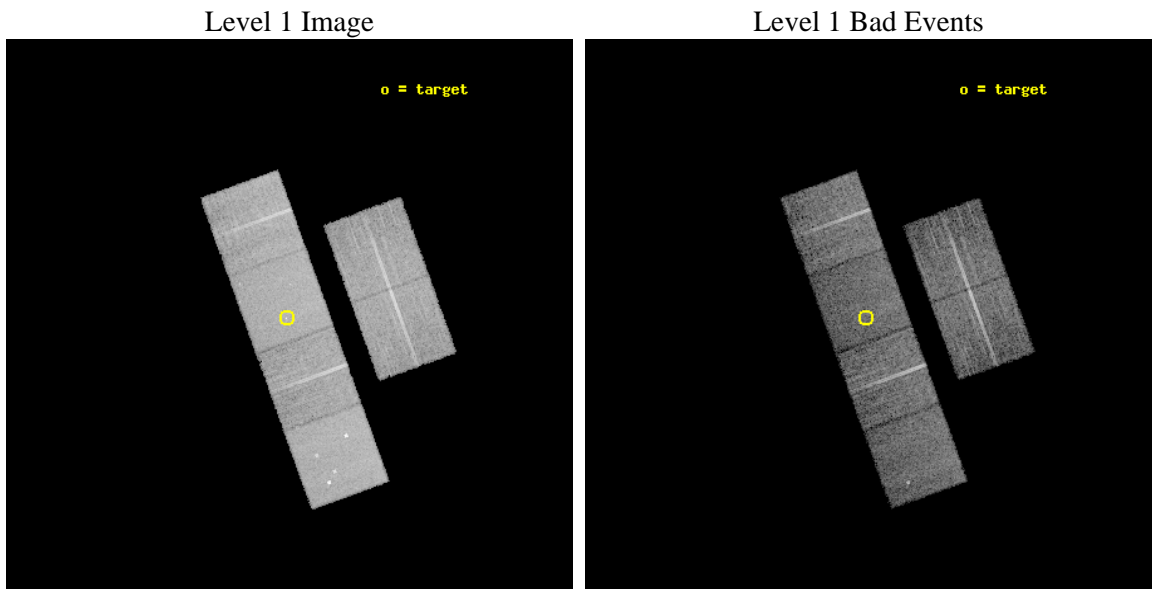
seq_num	700285	Sequence number
obs_id	2453	Observation id
title	X-RAY STRUCTURES IN AND AROUND POWERFUL RADIO SOURCES	Proposal tit
observer	Prof Diana Worrall	Principal investigator
object	3C 228	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	147.544583	Observer's specified target RA [deg]
dec_targ	14.333361	Observer's specified target Dec [deg]
ra_nom	147.5394981819	Nominal RA [deg]
dec_nom	14.32487145927	Nominal Dec [deg]
roll_nom	250.09307771312	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10745.600009993	Sum of GTIs [s]
livetime	10609.532752443	Livetime [s]
ontime2	10745.600009993	Sum of GTIs [s]
ontime3	10745.600009993	Sum of GTIs [s]
ontime5	10745.600009993	Sum of GTIs [s]
ontime6	10745.600009993	Sum of GTIs [s]
ontime7	10745.600009993	Sum of GTIs [s]
ontime8	10745.600009993	Sum of GTIs [s]
l2events	104988	Number of level 2 events



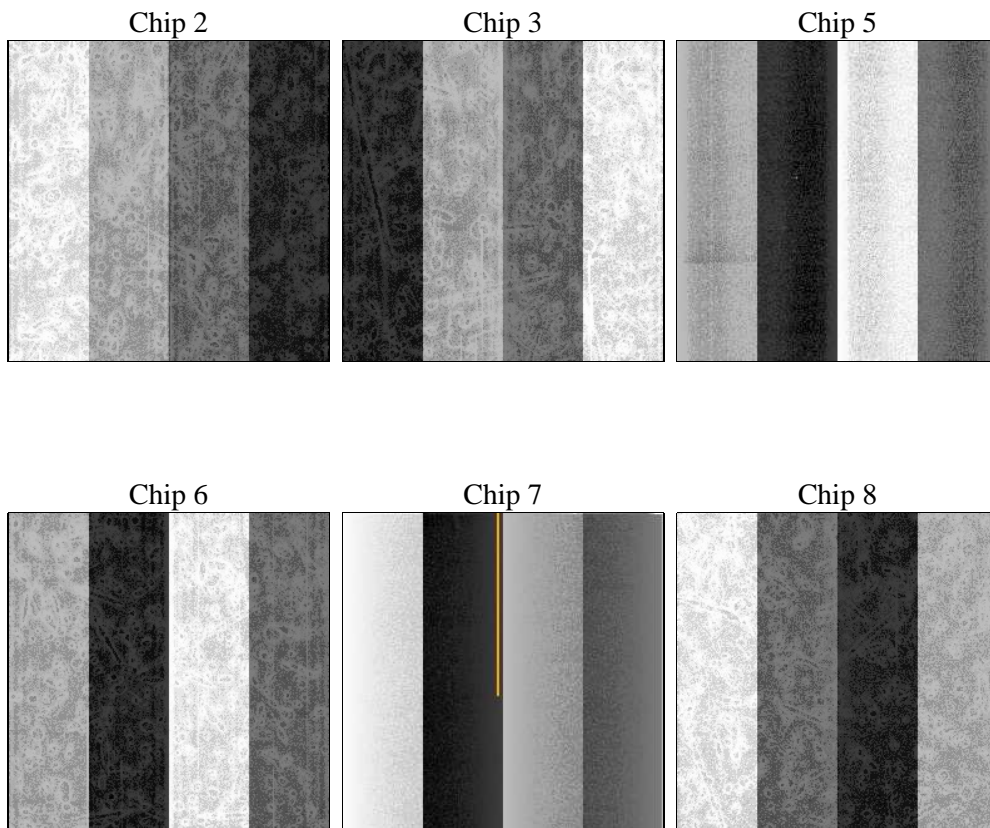
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10801.530000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10745.600009993	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	10745.600009993	Sum of GTIs [s]
date	2012-09-15T14:50:18	Date and time of file creation	ontime3	10745.600009993	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	10745.600009993	Sum of GTIs [s]
			ontime6	10745.600009993	Sum of GTIs [s]
			ontime7	10745.600009993	Sum of GTIs [s]
			ontime8	10745.600009993	Sum of GTIs [s]
			l1events	468207	Number of level 1 events

### 2.1.4 Events

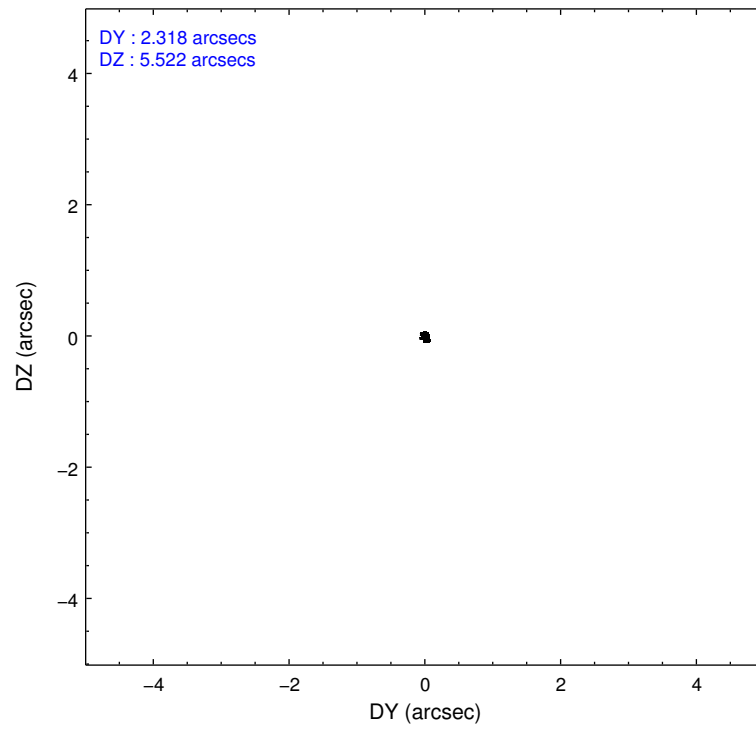
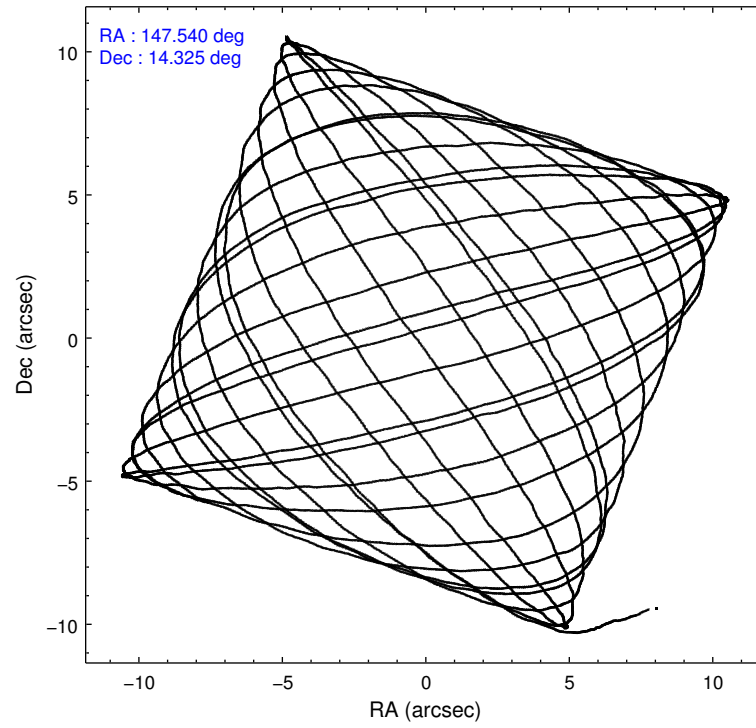
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	67423	65898	95380	68586	86549	84371	grade 0 events	3370	3312	5978	3238	3910	5696
rejected events	59733	58269	50136	60719	49108	66953		4%	5%	6%	4%	4%	6%
rejected %	88%	88%	52%	88%	56%	79%	grade 1 events	25	35	100	30	61	51
								0%	0%	0%	0%	0%	0%
							grade 2 events	1583	1541	13264	1618	7453	3847
								2%	2%	13%	2%	8%	4%
							grade 3 events	736	733	1992	788	3516	1869
								1%	1%	2%	1%	4%	2%
							grade 4 events	703	707	1799	767	3325	1768
								1%	1%	1%	1%	3%	2%
							grade 5 events	2349	2548	7094	2860	7889	3446
								3%	3%	7%	4%	9%	4%
							grade 6 events	1303	1339	22224	1457	19247	4242
								1%	2%	23%	2%	22%	5%
							grade 7 events	57354	55683	42929	57828	41148	63452
								85%	84%	45%	84%	47%	75%

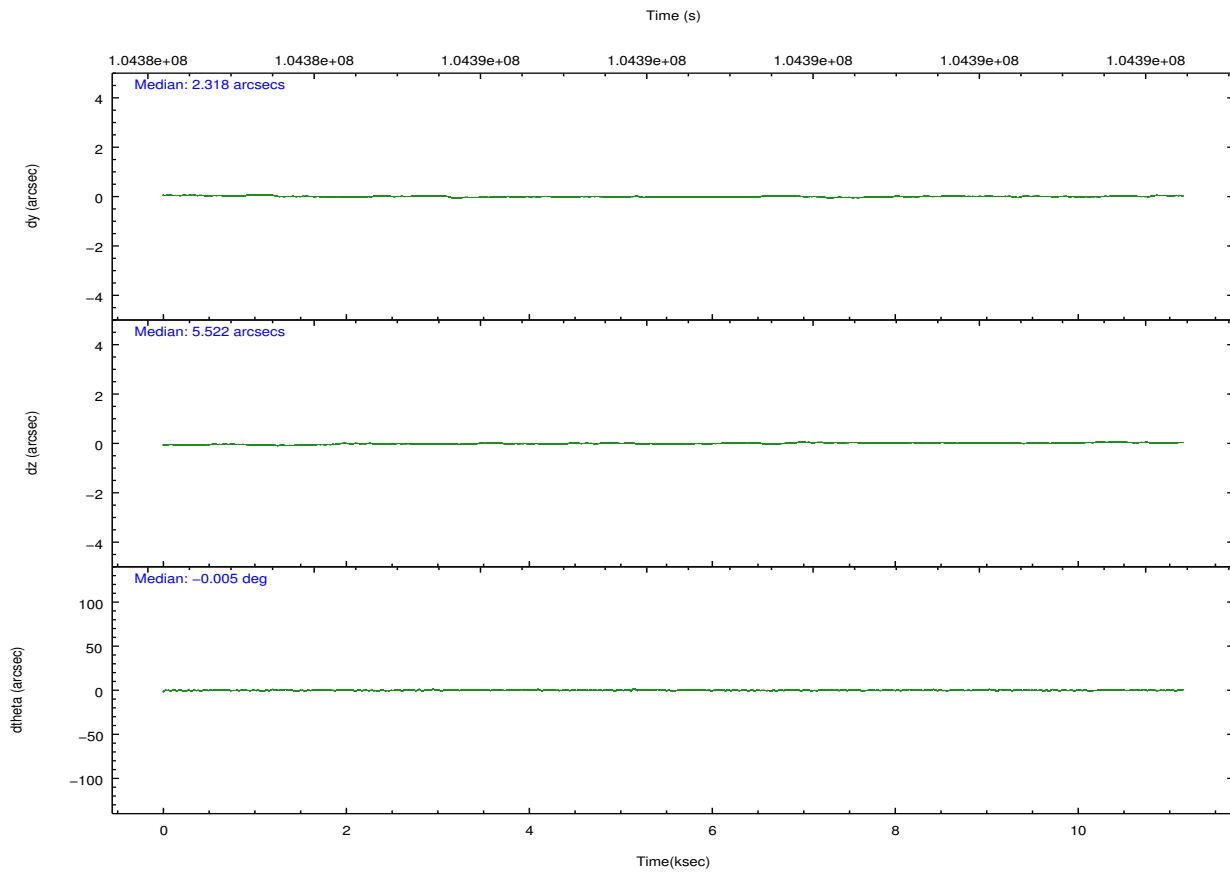
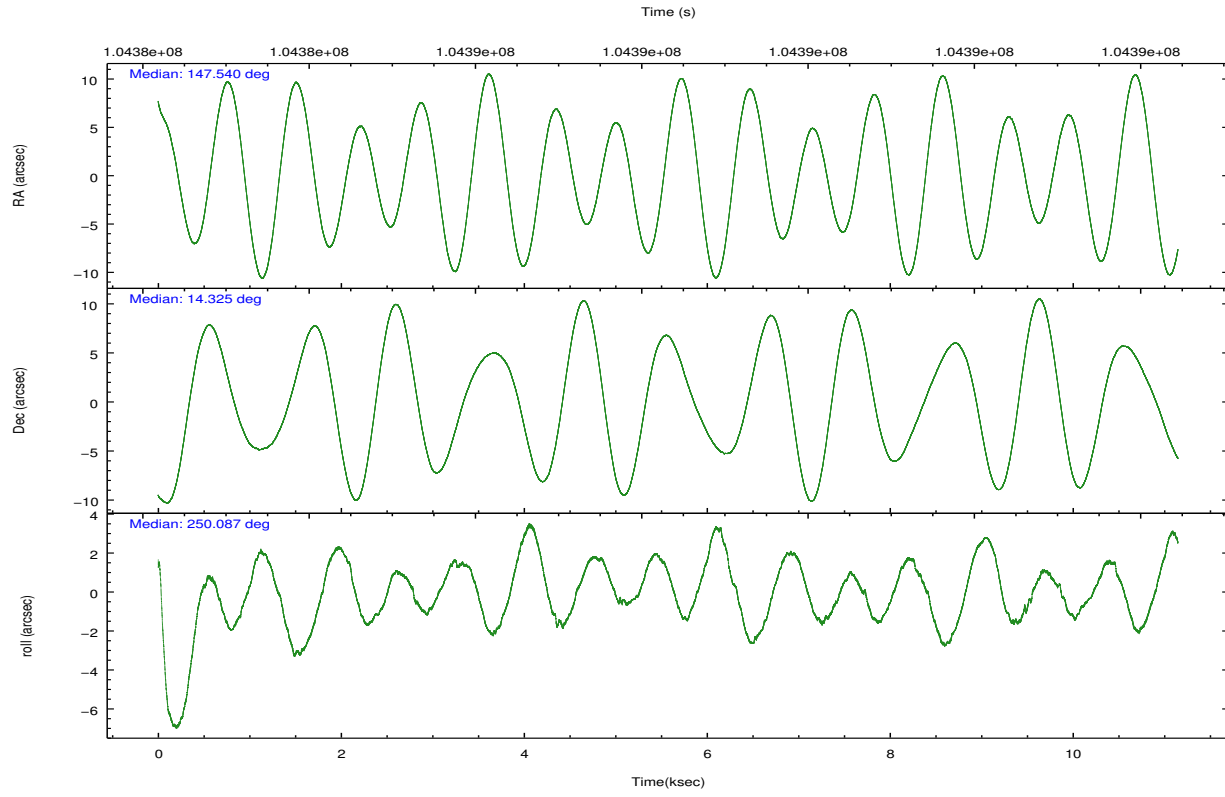


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	147.534287	147.5394981819019	Subarray requested	NONE	NONE
[deg] Pointing Dec	14.351731	14.32487145927045	Alternating exposures requested	N	N
[deg] Pointing Roll	249.937736	250.0930777131208	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	104383088.184000	104382047.66258			
Observation start date	2001-04-23T03:17:04	2001-04-23T03:00:47			
[s] Observation end time (MET)	104393889.184000	104394204.16305			
Observation end date	2001-04-23T06:17:05	2001-04-23T06:23:24			
Read mode	TIMED	TIMED			

## 2.3 Aspect



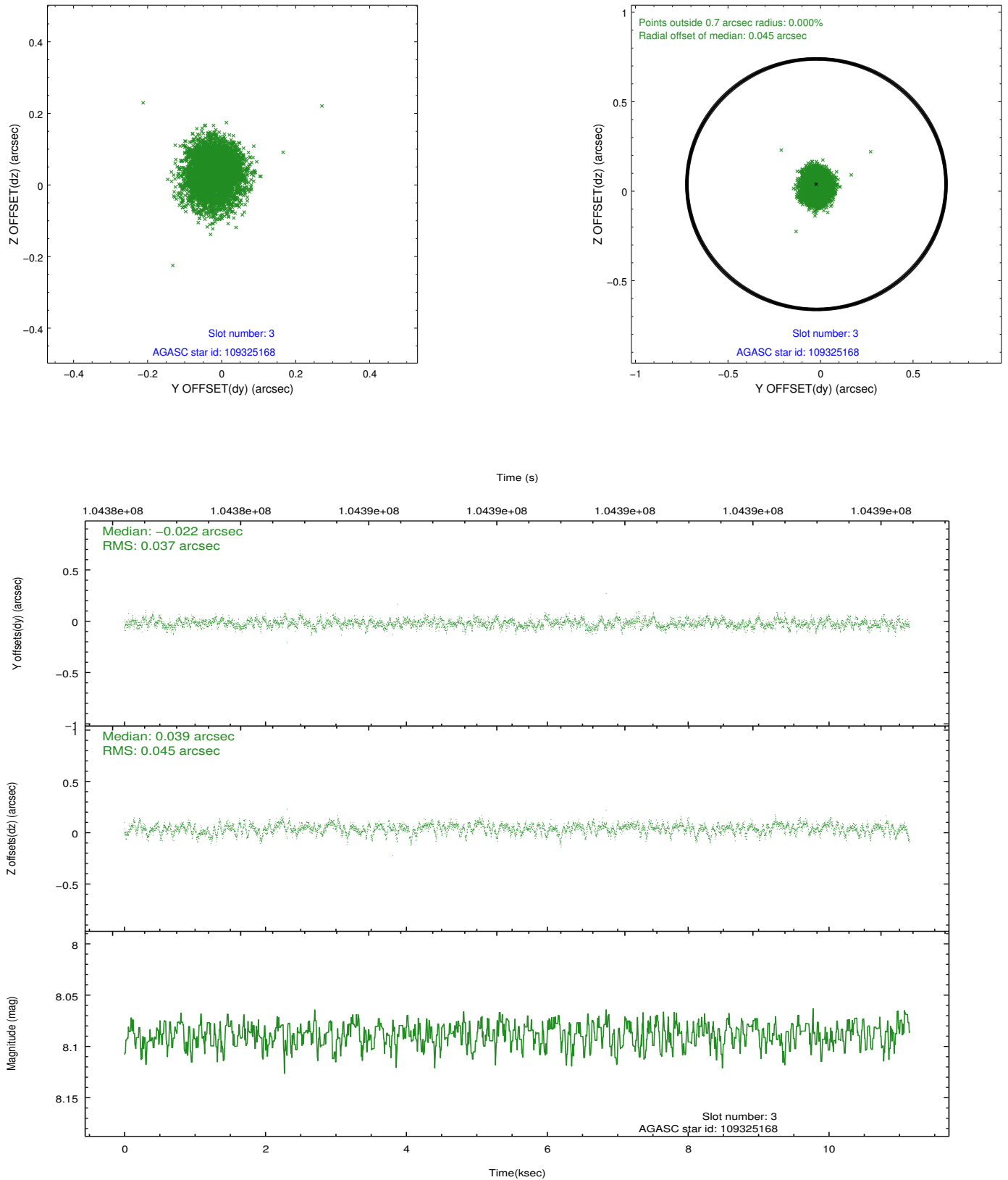


### Slot Statistics

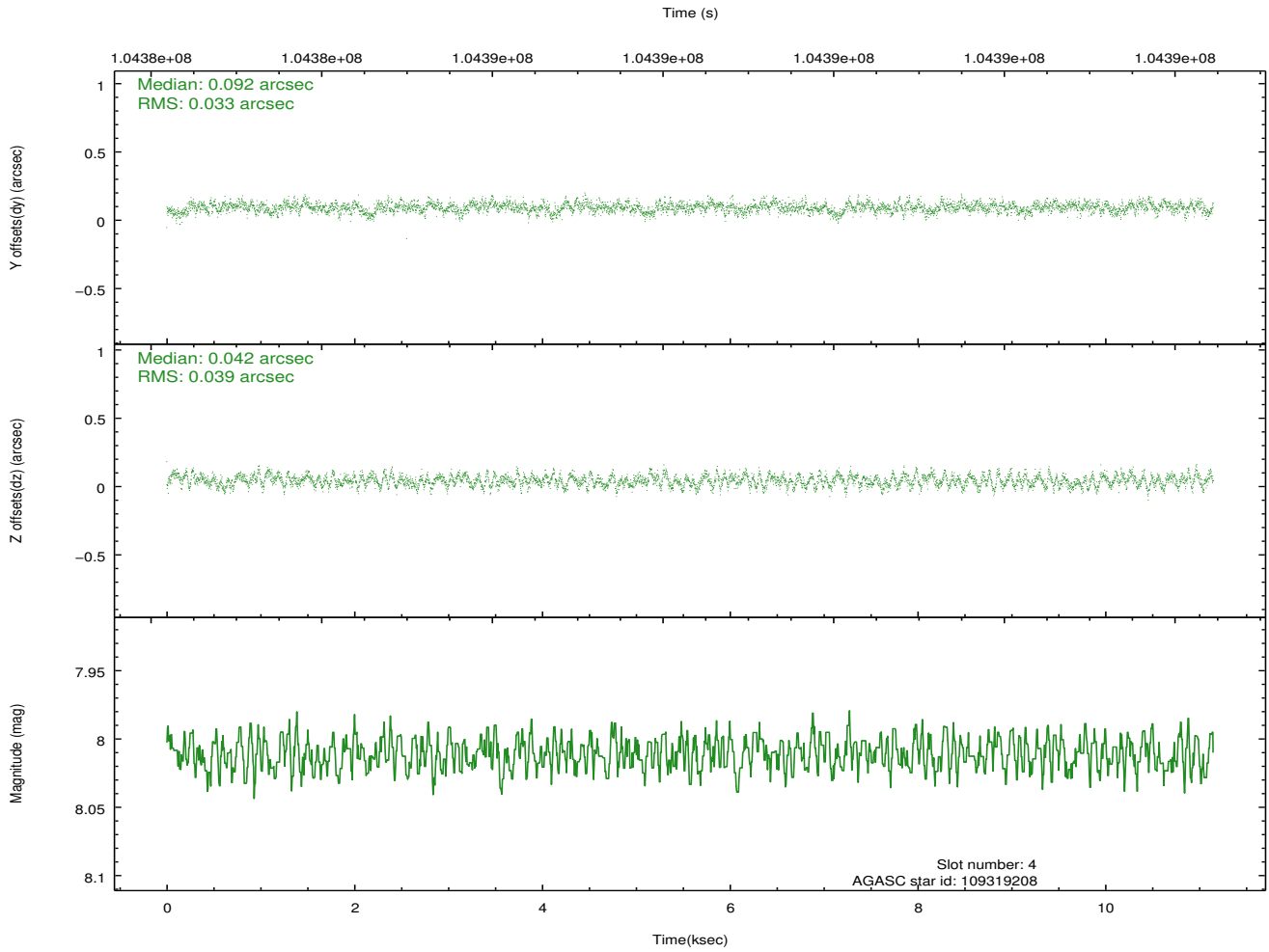
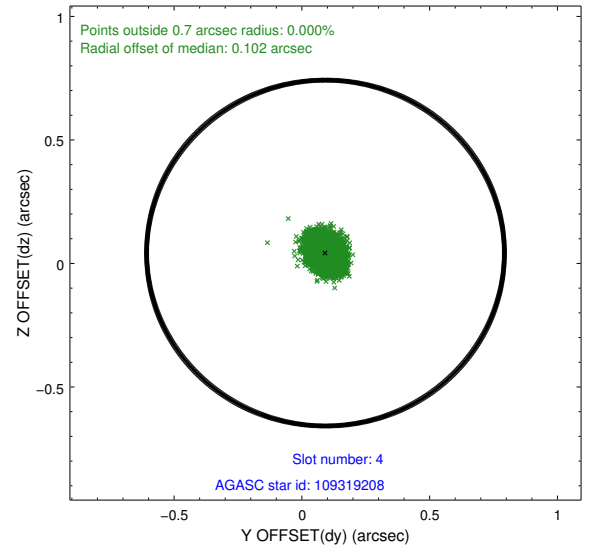
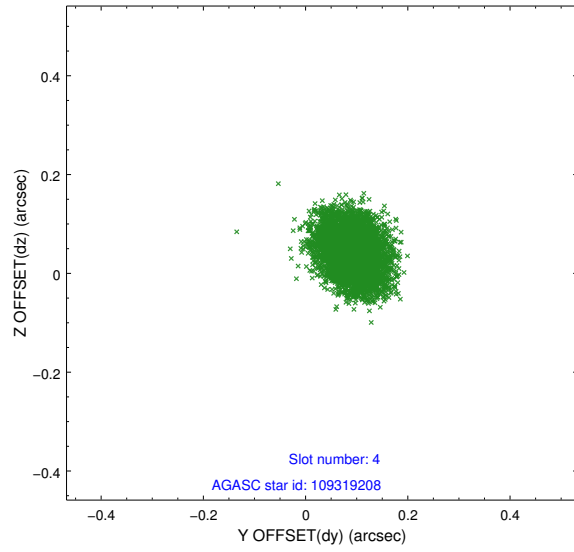
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	2719	-0.041	-0.006	0.006	0.011	0.000000	0.000000	-754.94	-1726.67
1	FID	ACIS-S-4	7.20	2719	-0.022	0.021	0.005	0.010	0.000000	0.000000	2158.10	181.44
2	FID	ACIS-S-5	7.24	2719	0.032	-0.007	0.006	0.011	0.000000	0.000000	-1807.16	175.51
3	GUIDE	109325168	8.09	5438	-0.022	0.039	0.061	0.103	147.482941	14.562637	-650.63	-428.79
4	GUIDE	109319208	8.01	5437	0.092	0.042	0.055	0.088	147.710270	14.120752	571.10	862.04
5	GUIDE	109324784	8.61	5439	-0.101	-0.122	0.075	0.117	147.303028	14.957479	-1771.55	-1504.14
6	GUIDE	109455448	8.78	5439	-0.127	0.182	0.083	0.133	148.378447	14.717182	-2248.81	2307.31
7	GUIDE	109320368	9.05	5438	0.163	-0.141	0.085	0.136	146.751214	14.131748	1678.70	-2297.60

## 2.4 Star Slots

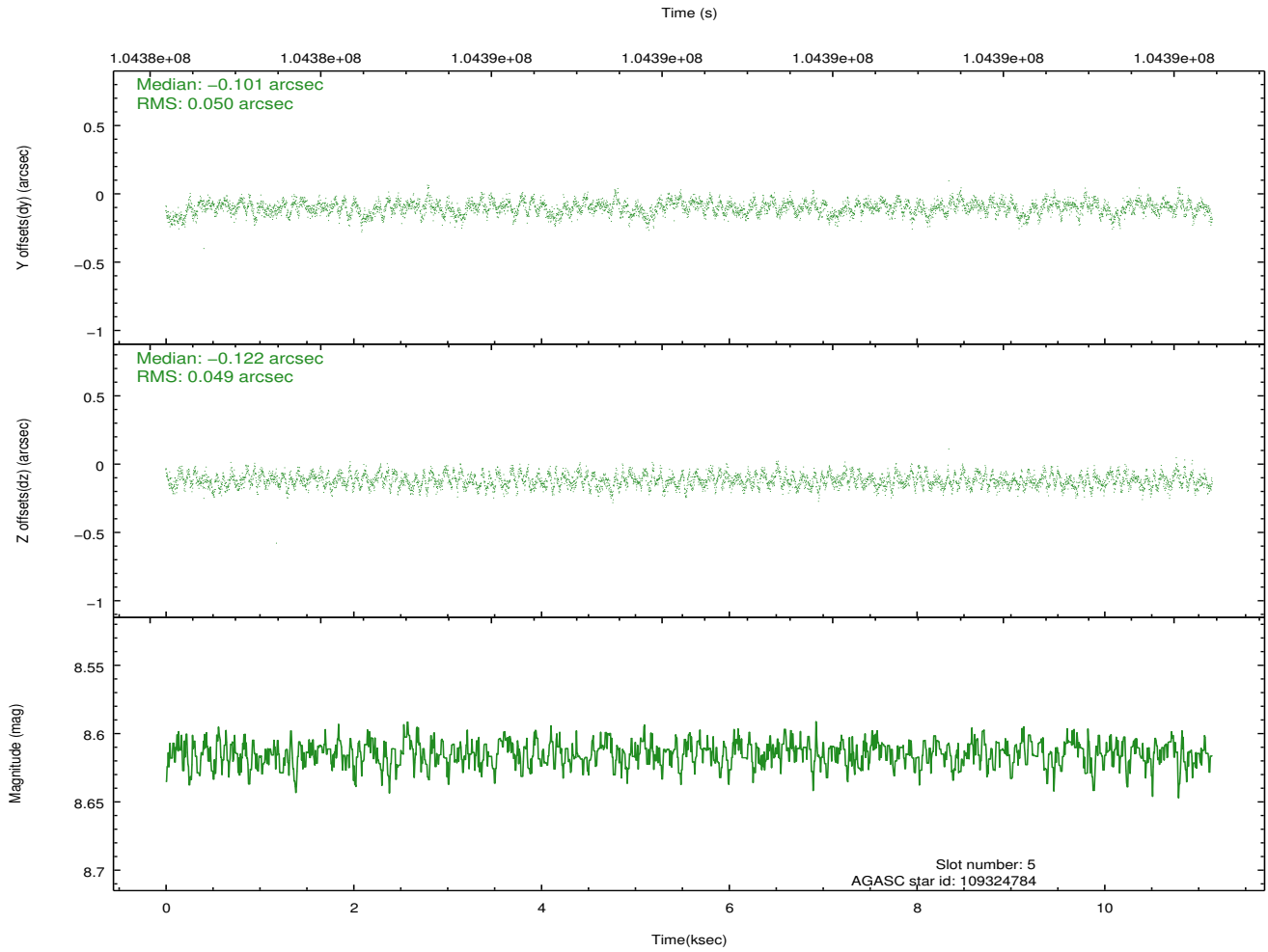
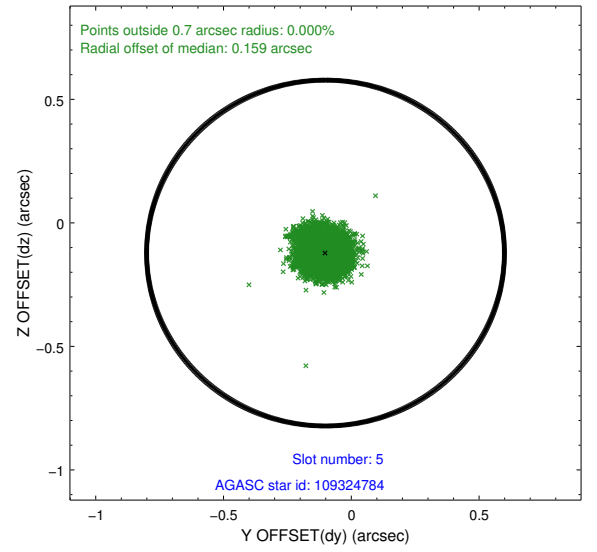
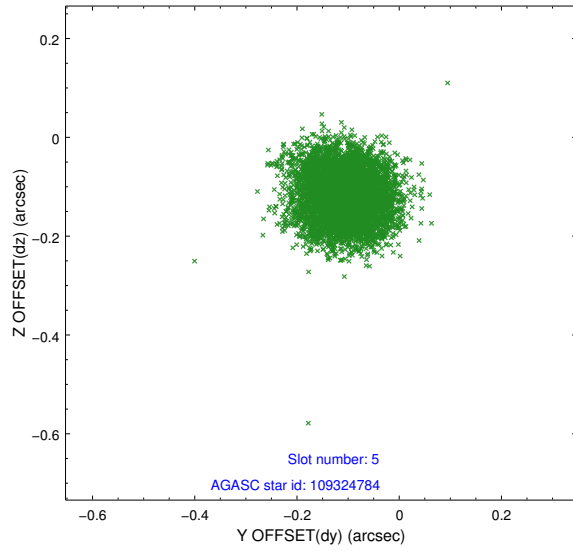
### 2.4.1 Slot 3



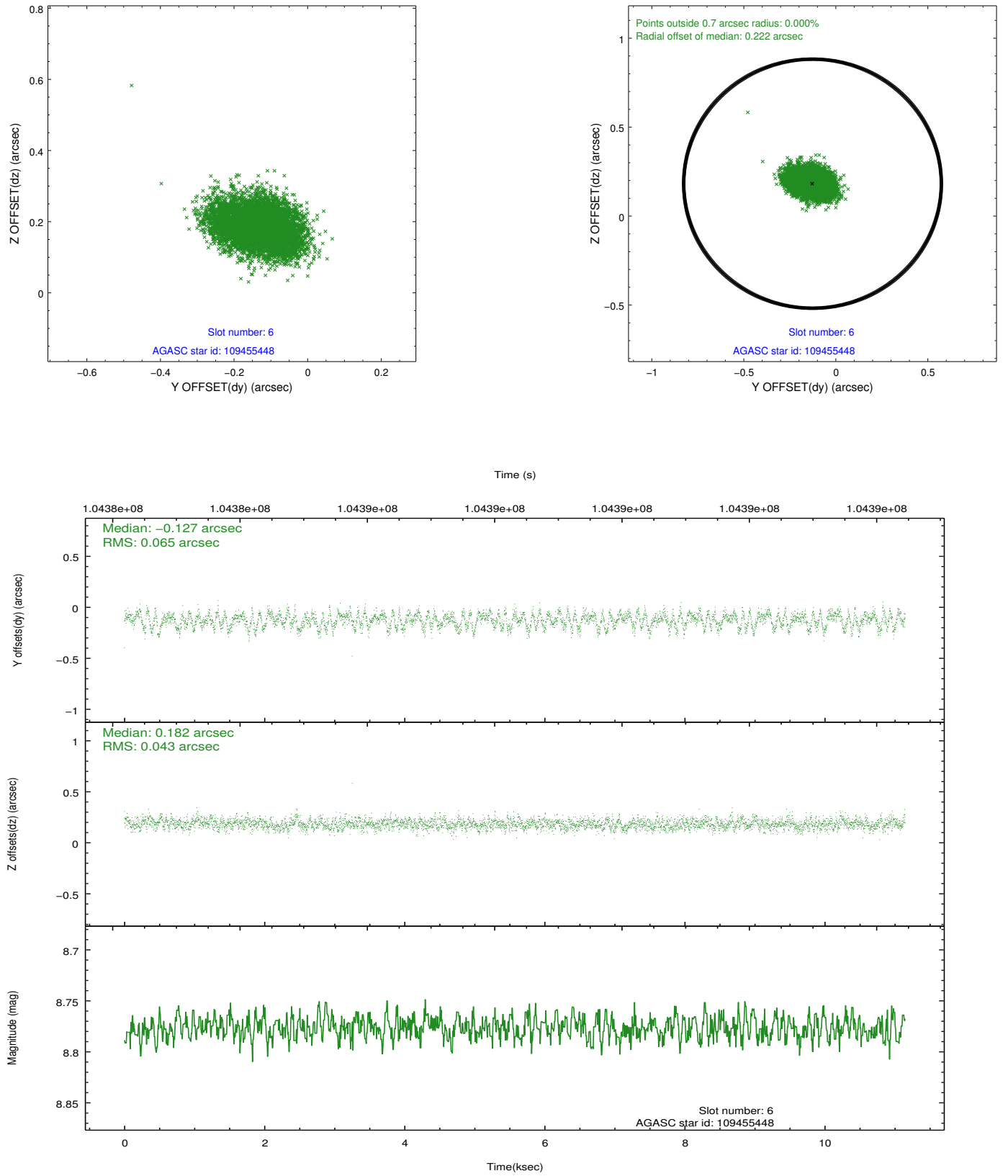
## 2.4.2 Slot 4



### 2.4.3 Slot 5

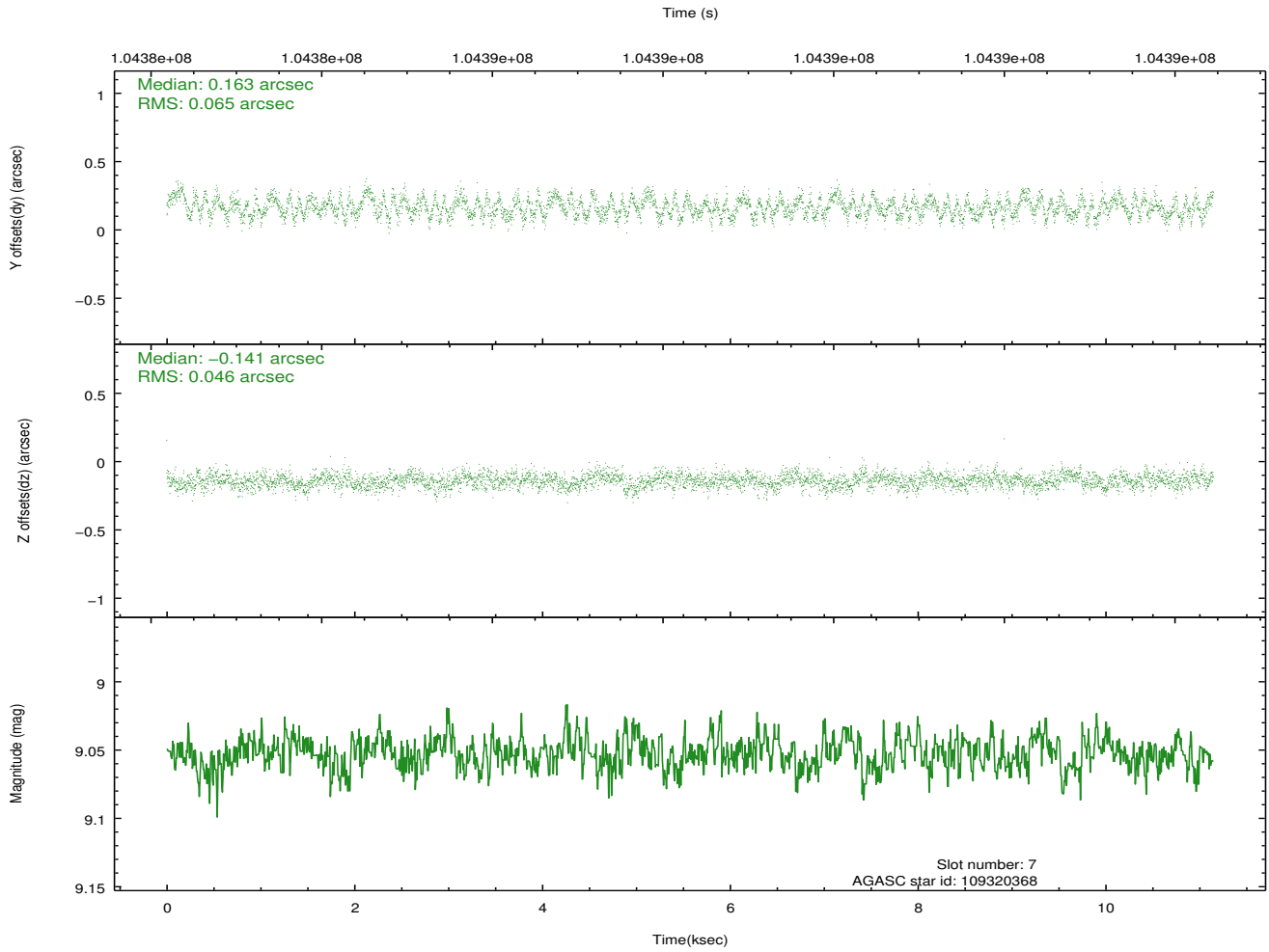
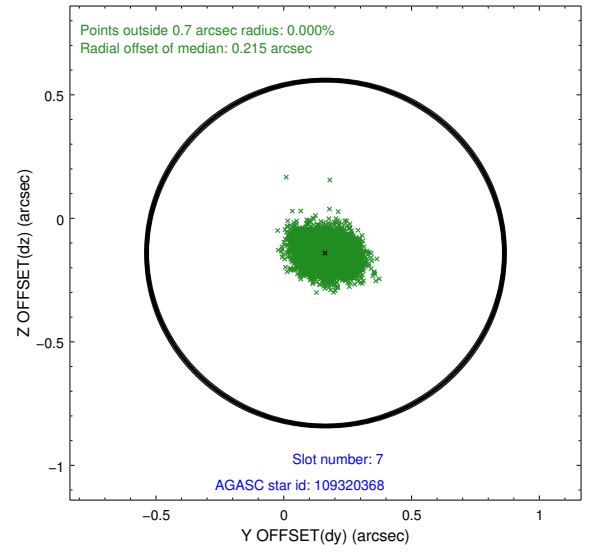
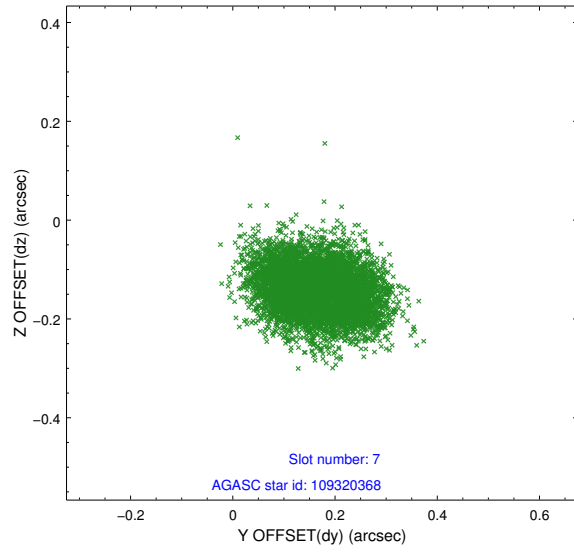


## 2.4.4 Slot 6



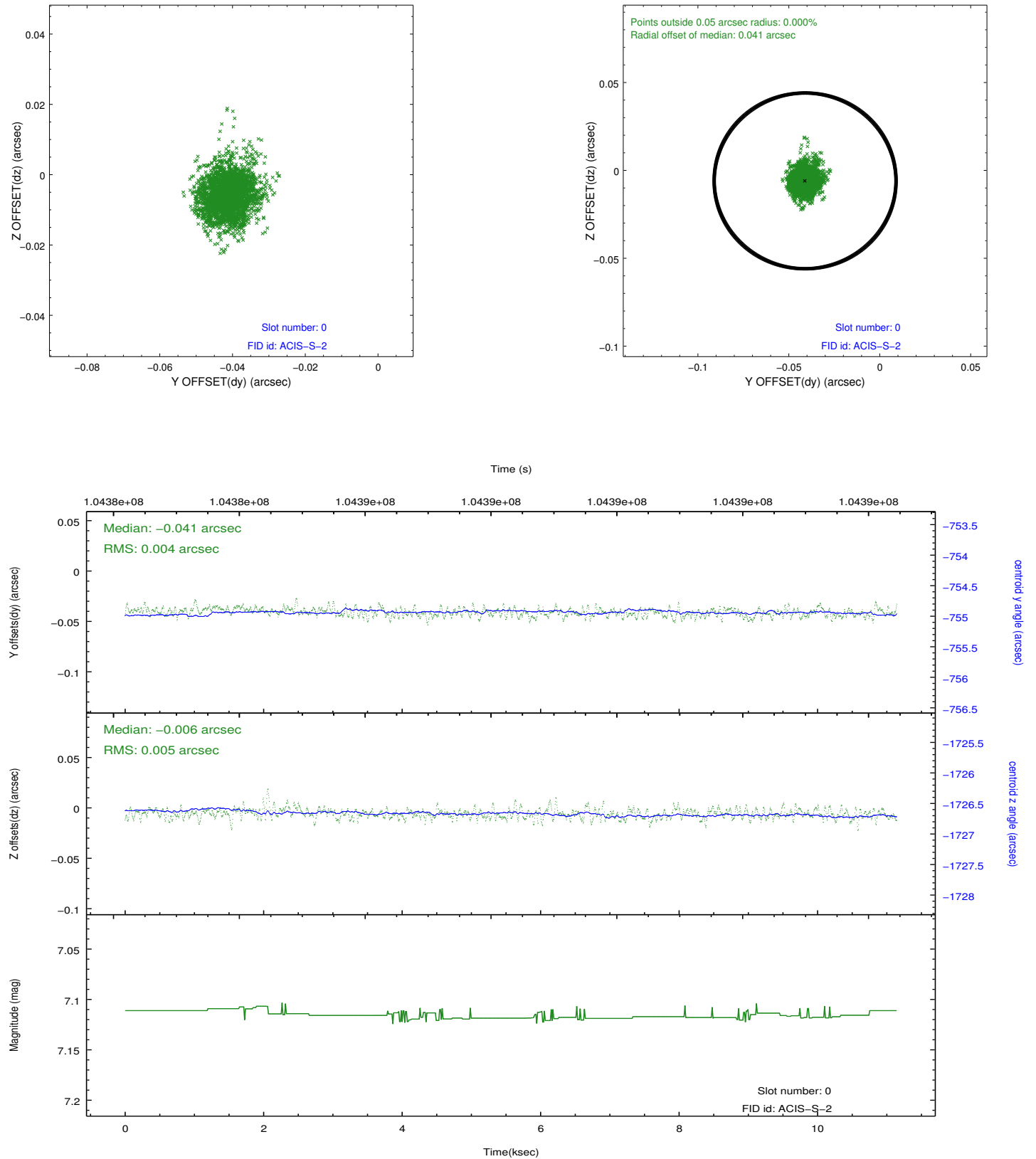


## 2.4.5 Slot 7

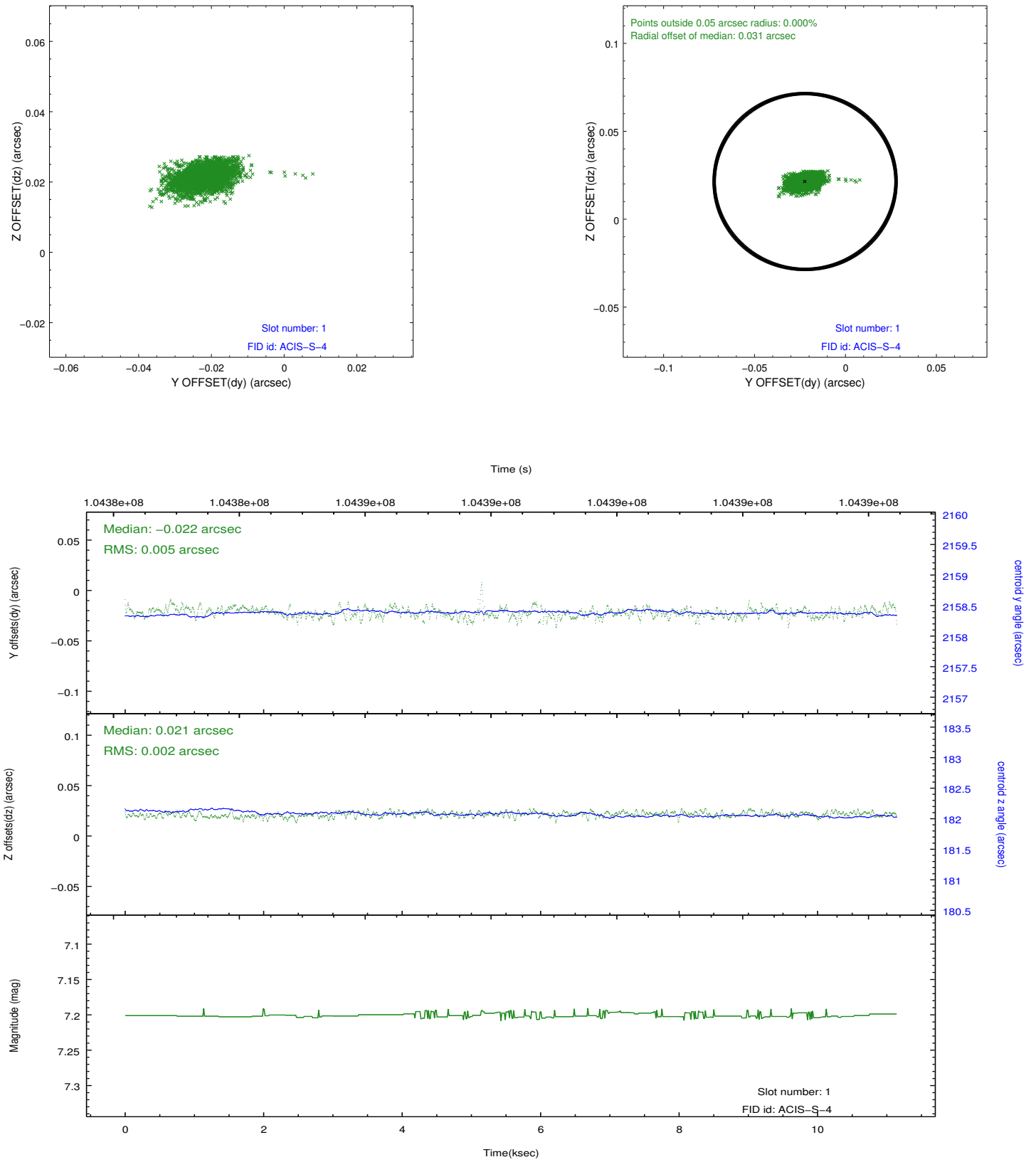


## 2.5 FID Slots

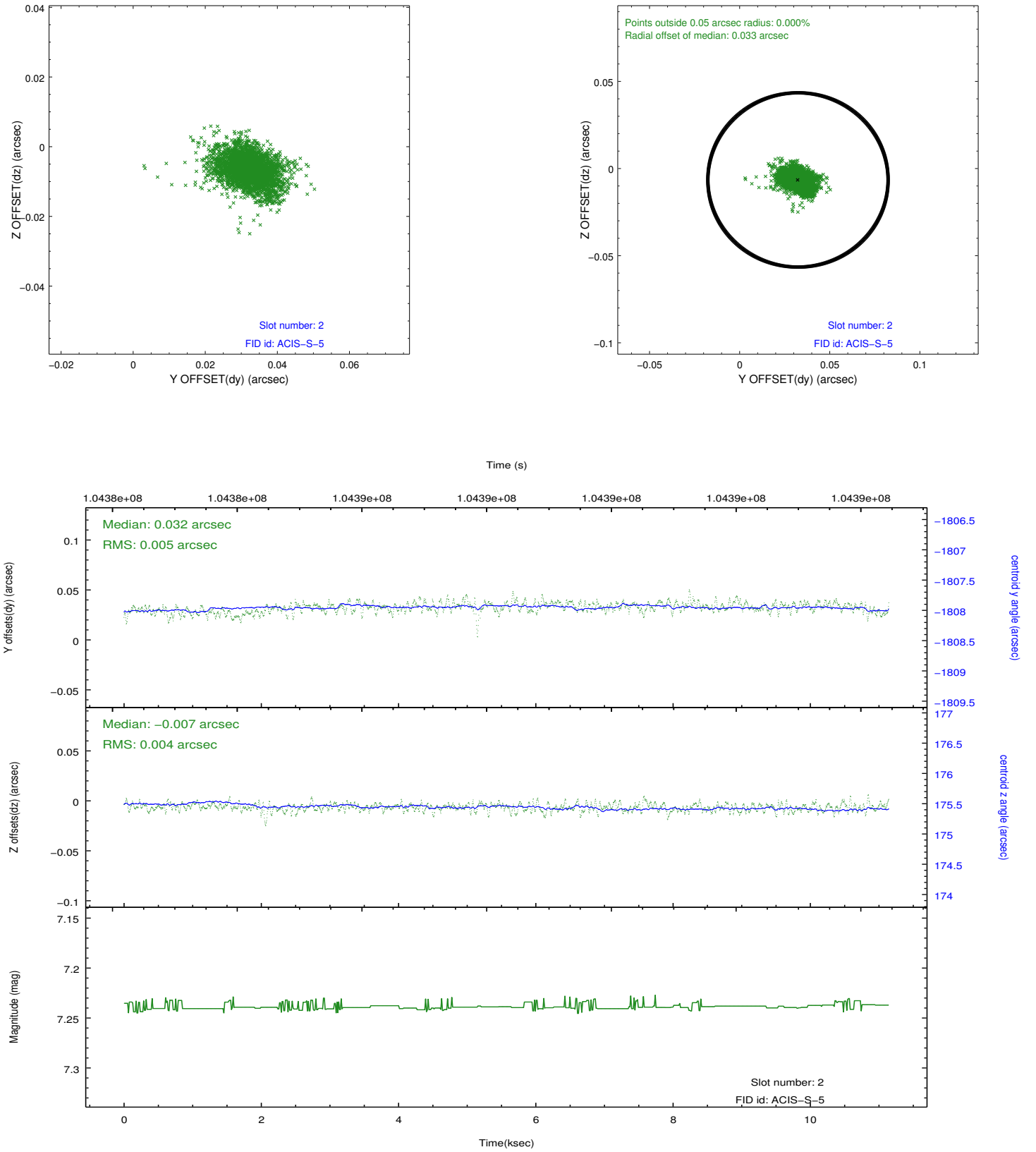
### 2.5.1 Slot 0



## 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)	2012.09.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.8

### A.2 Comments

Charge time for this ObsId remains at previous value of 10.8 ks although with the current processing the charge time would have been 10.75 ksec.