

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2842 - L2 Version 3  
Chandra X-Ray Center

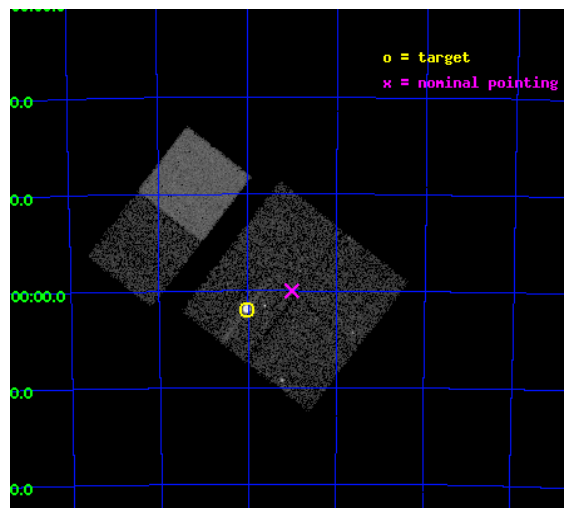
L2 Processing Date : Sep 28 2012

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# 1 Front

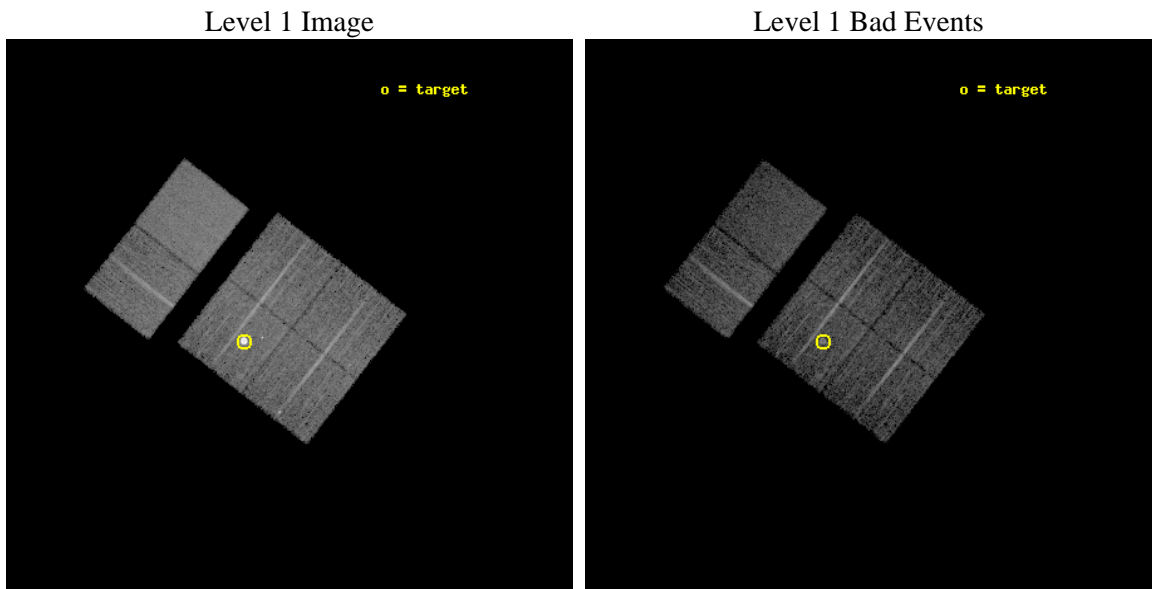
seq_num	590231	Sequence number
obs_id	2842	Observation id
title	AO3A ACIS-I CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip I2, T=120, Offsets=4,2,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.751836953581	Nominal RA [deg]
dec_nom	-72.000173567143	Nominal Dec [deg]
roll_nom	307.85704295922	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7558.4000070244	Sum of GTIs [s]
livetime	7462.6909950134	Livetime [s]
ontime0	7558.4000070244	Sum of GTIs [s]
ontime1	7558.4000070244	Sum of GTIs [s]
ontime2	7558.4000070244	Sum of GTIs [s]
ontime3	7558.4000070244	Sum of GTIs [s]
ontime6	7558.4000070244	Sum of GTIs [s]
ontime7	7558.4000070244	Sum of GTIs [s]
l2events	77808	Number of level 2 events



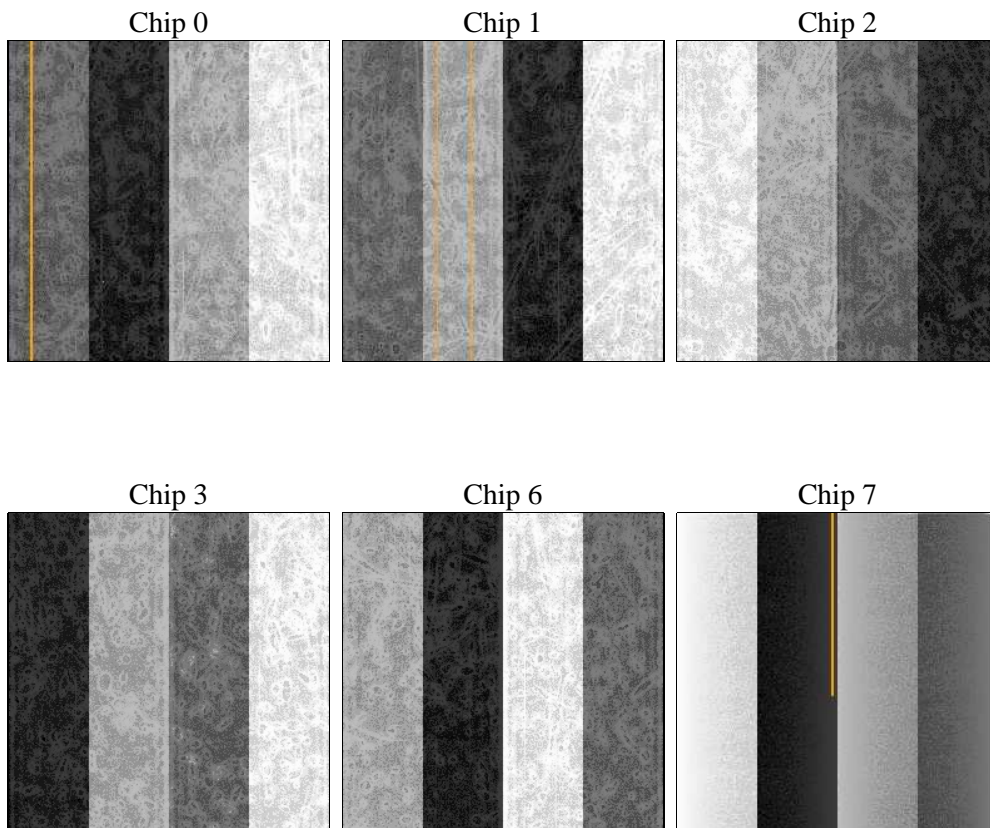
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7558.4000070244	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	7558.4000070244	Sum of GTIs [s]
date	2012-09-28T06:38:24	Date and time of file creation	ontime1	7558.4000070244	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	7558.4000070244	Sum of GTIs [s]
			ontime3	7558.4000070244	Sum of GTIs [s]
			ontime6	7558.4000070244	Sum of GTIs [s]
			ontime7	7558.4000070244	Sum of GTIs [s]
			l1events	320597	Number of level 1 events

### 2.1.4 Events

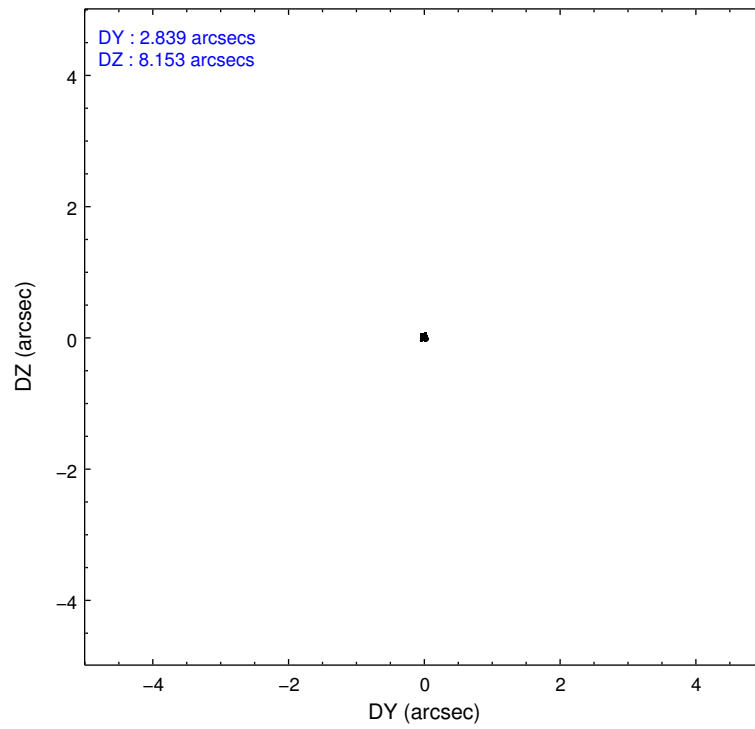
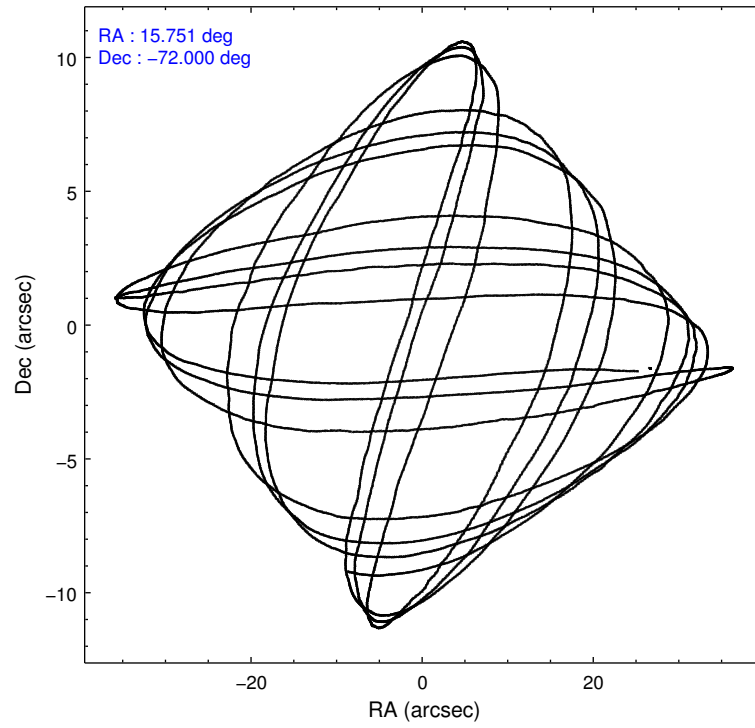
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	43361	44587	75395	46953	47491	62810	grade 0 events	2836	2588	26335	2471	2274	2592
rejected events	37207	38439	43050	41362	41847	36182		6%	5%	34%	5%	4%	4%
rejected %	85%	86%	57%	88%	88%	57%	grade 1 events	25	25	234	18	27	67
								0%	0%	0%	0%	0%	0%
							grade 2 events	1256	1260	3039	1107	1161	5232
								2%	2%	4%	2%	2%	8%
							grade 3 events	581	608	941	552	551	2353
								1%	1%	1%	1%	1%	3%
							grade 4 events	518	600	966	549	555	2394
								1%	1%	1%	1%	1%	3%
							grade 5 events	1712	1842	1791	1880	2050	6031
								3%	4%	2%	4%	4%	9%
							grade 6 events	969	1098	1102	918	1112	14079
								2%	2%	1%	1%	2%	22%
							grade 7 events	35464	36566	40987	39458	39761	30062
								81%	82%	54%	84%	83%	47%

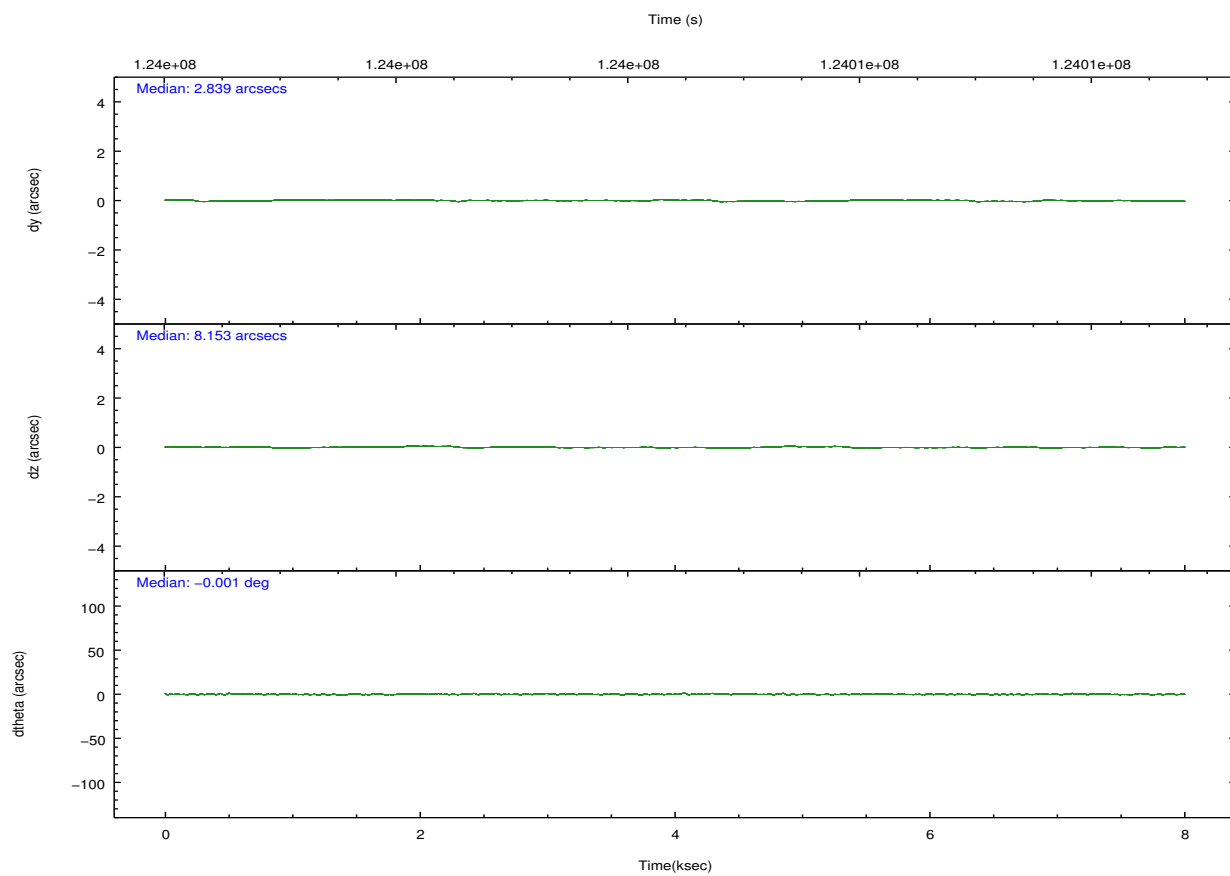
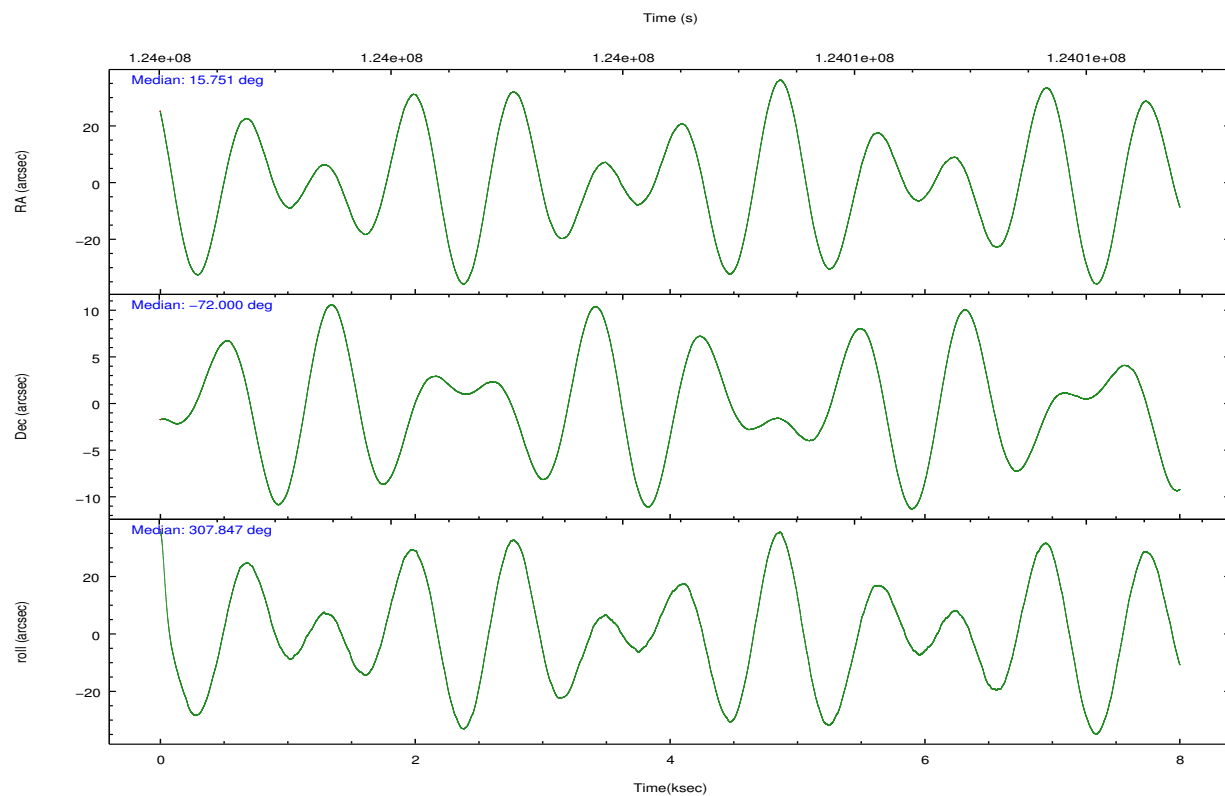


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	15.669645	15.75183695358135	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.989852	-72.00017356714322	Alternating exposures requested	N	N
[deg] Pointing Roll	307.570156	307.8570429592165	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	123552064.184000	123552064.184000			
[s] Window stop time (MET)	126144064.184000	126144064.184000			
[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)	124000609.184000	124000233.24747			
Observation start date	2001-12-06T04:35:45	2001-12-06T04:30:33			
[s] Observation end time (MET)	124008409.184000	124008558.8103			
Observation end date	2001-12-06T06:45:45	2001-12-06T06:49:18			
Read mode	TIMED	TIMED			

## 2.3 Aspect



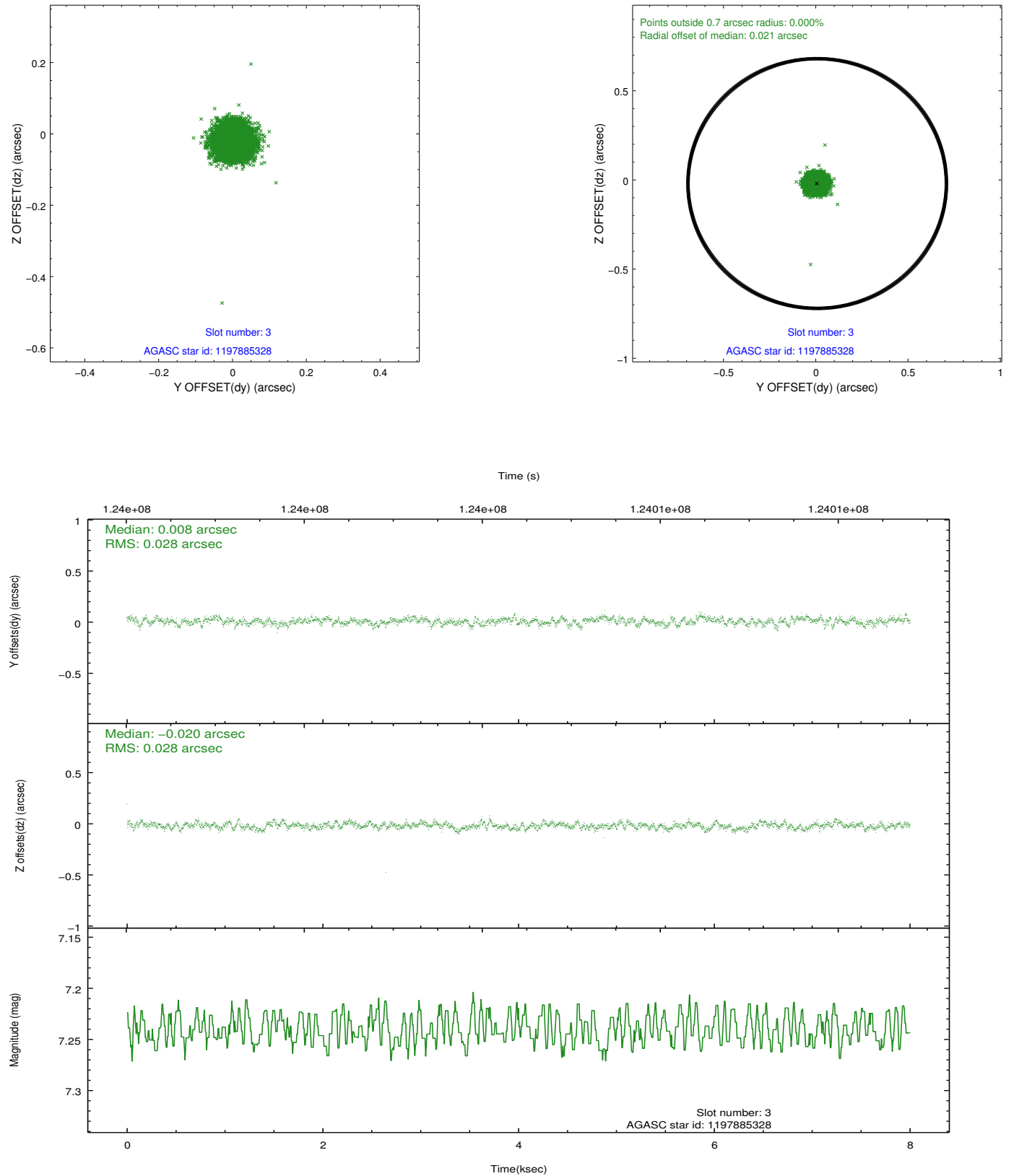


### Slot Statistics

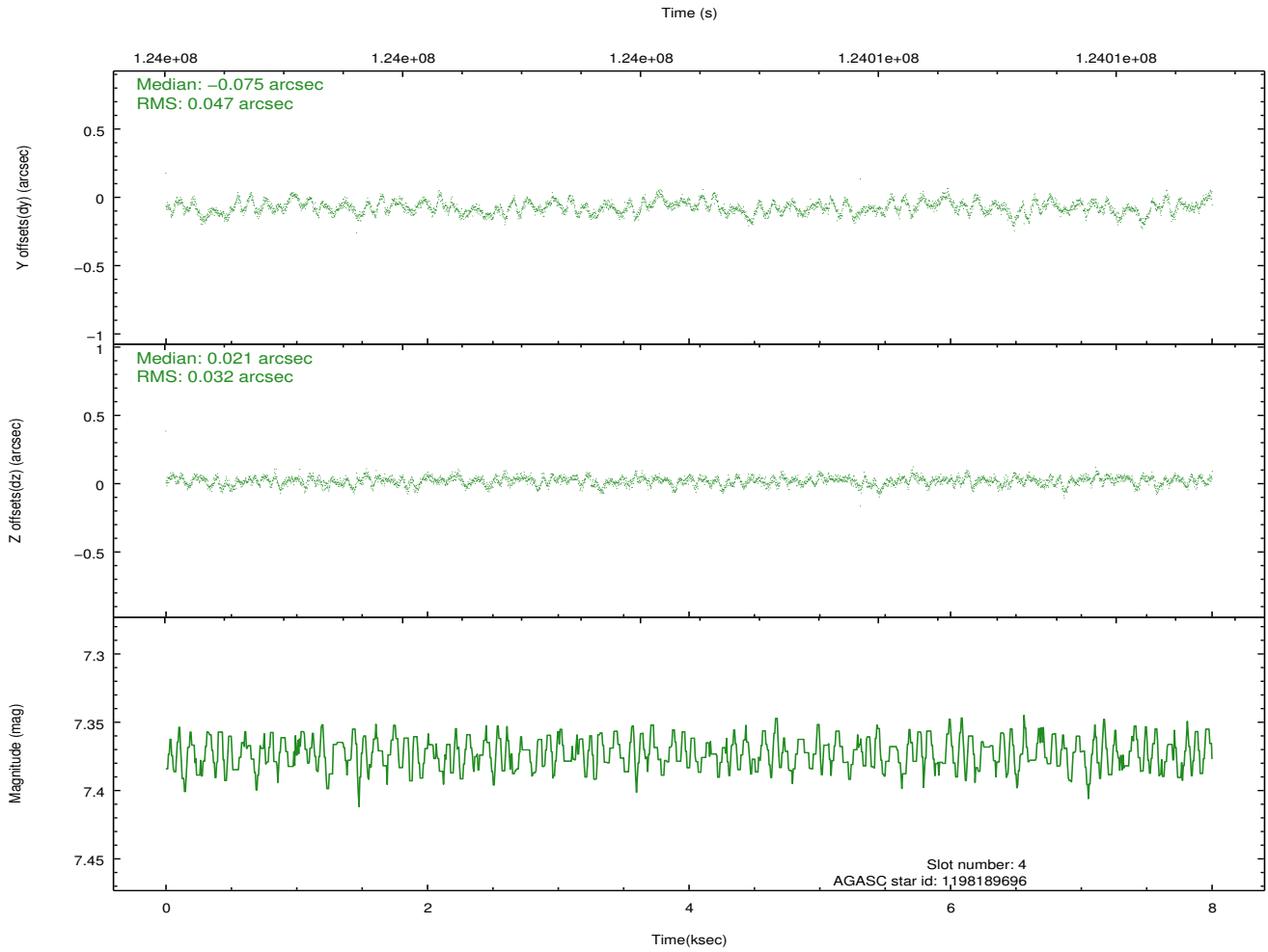
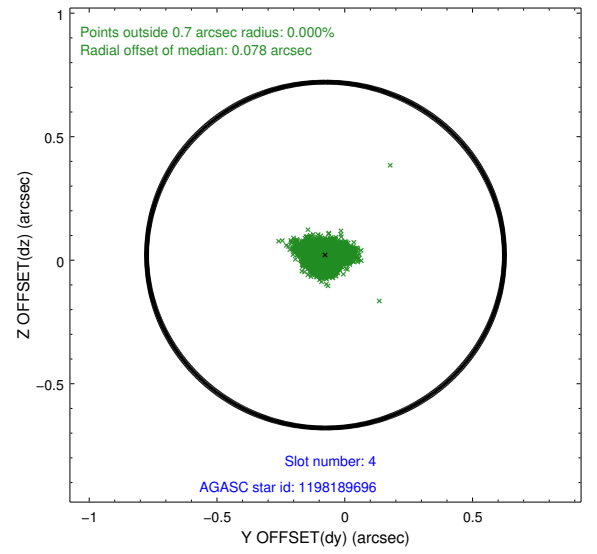
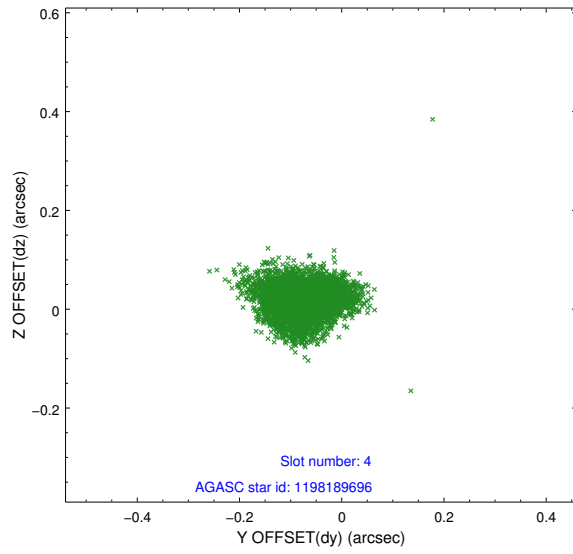
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1953	-0.024	0.062	0.006	0.011	0.000000	0.000000	936.93	-831.53
1	FID	ACIS-I-5	7.24	1952	-0.041	0.038	0.006	0.011	0.000000	0.000000	-1810.79	1065.62
2	FID	ACIS-I-6	7.26	1952	-0.026	-0.030	0.007	0.011	0.000000	0.000000	401.74	1710.83
3	GUIDE	1197885328	7.24	3904	0.008	-0.020	0.042	0.066	16.283090	-71.733943	-305.38	1108.86
4	GUIDE	1198189696	7.37	3905	-0.075	0.021	0.060	0.096	15.223750	-72.697522	1729.92	-1931.80
5	GUIDE	1197750936	7.56	3905	-0.059	-0.032	0.052	0.084	15.387940	-71.549550	-1451.00	711.36
6	GUIDE	1197884536	8.50	3905	0.058	0.029	0.060	0.096	17.160729	-71.835289	595.18	1653.72
7	GUIDE	1197749416	10.28	3895	0.071	0.006	0.117	0.195	13.610513	-71.871242	-1712.74	-1590.69

## 2.4 Star Slots

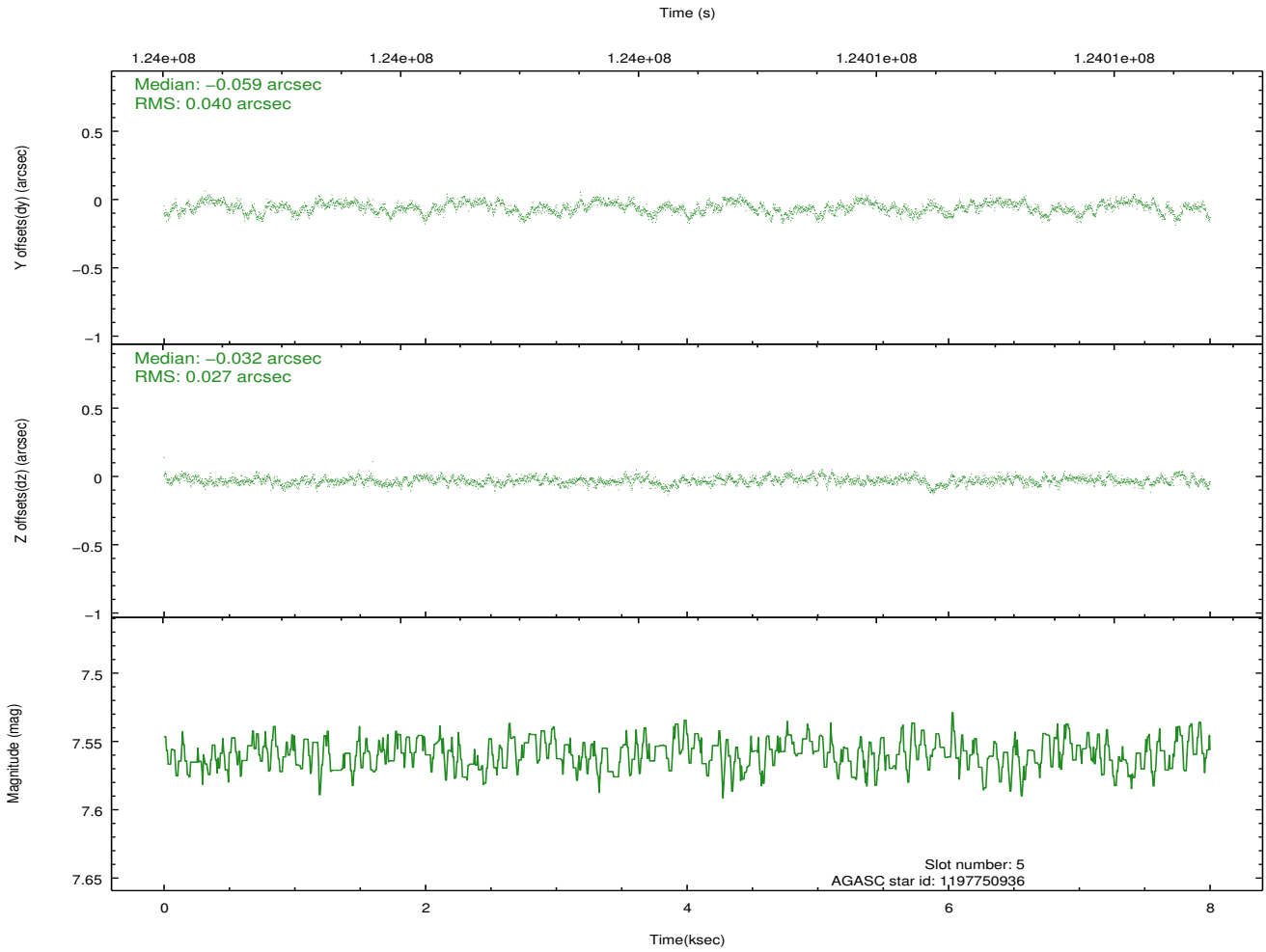
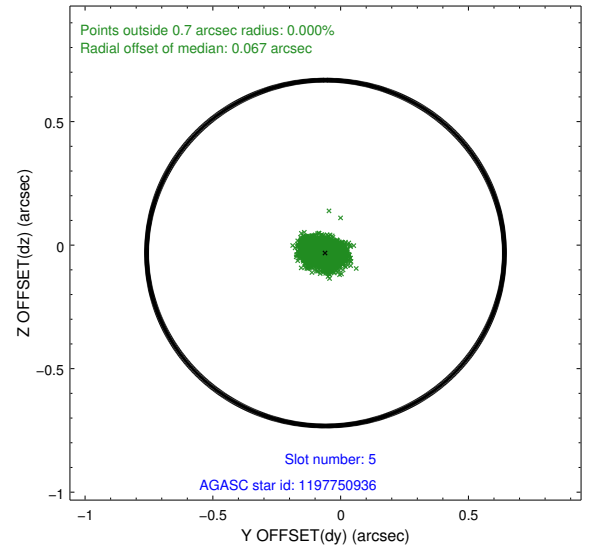
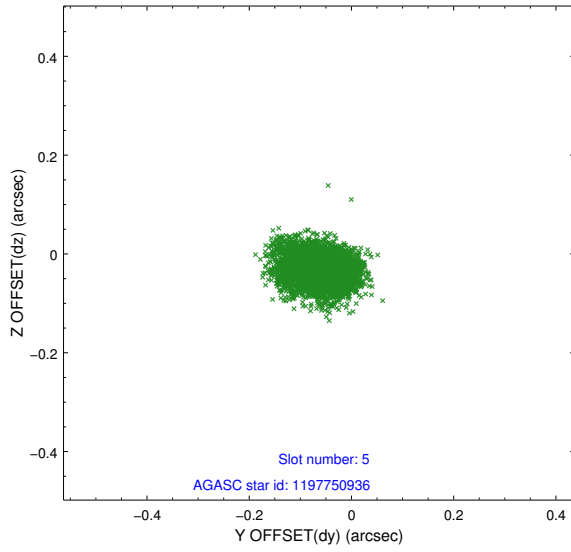
### 2.4.1 Slot 3



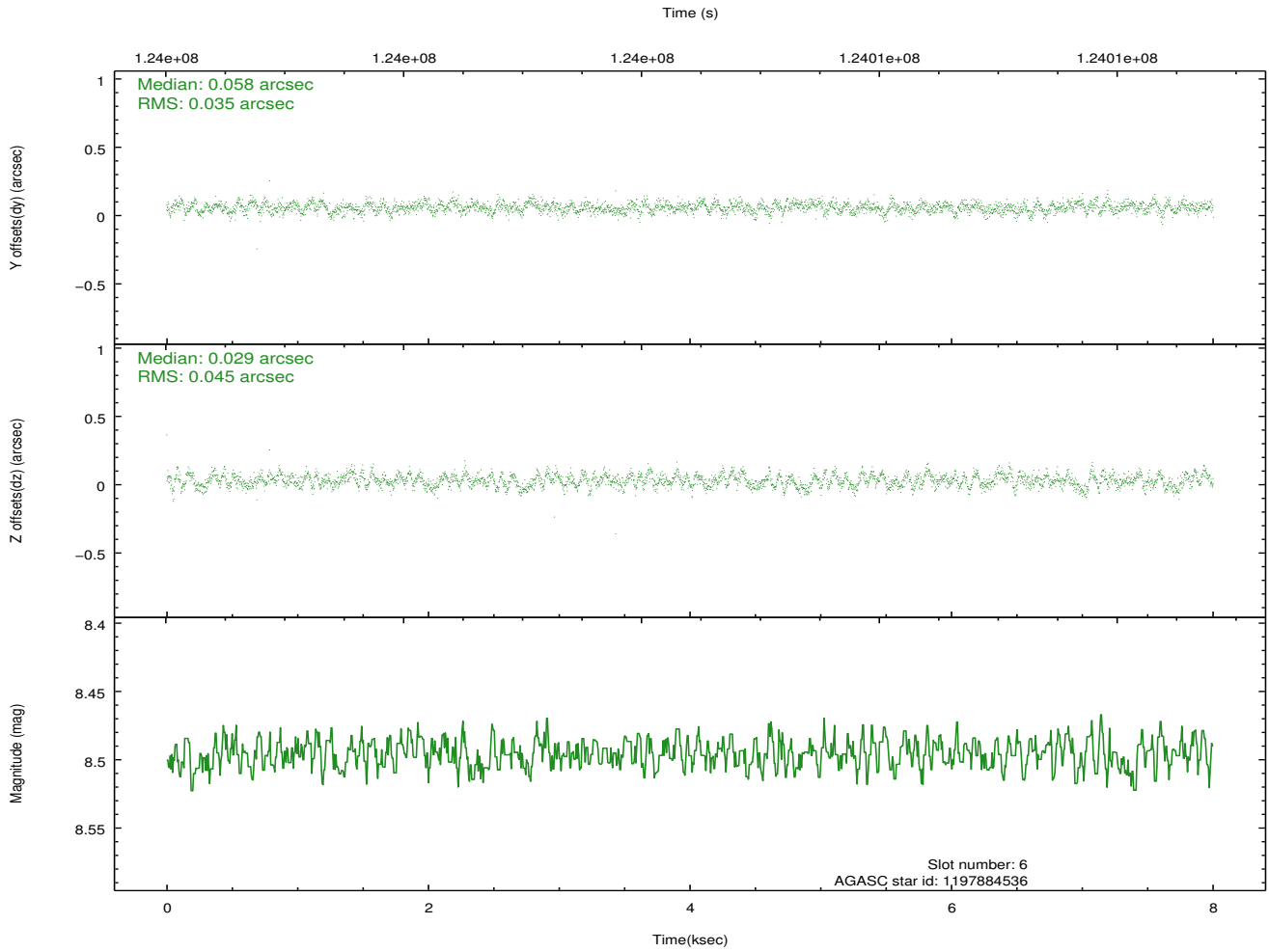
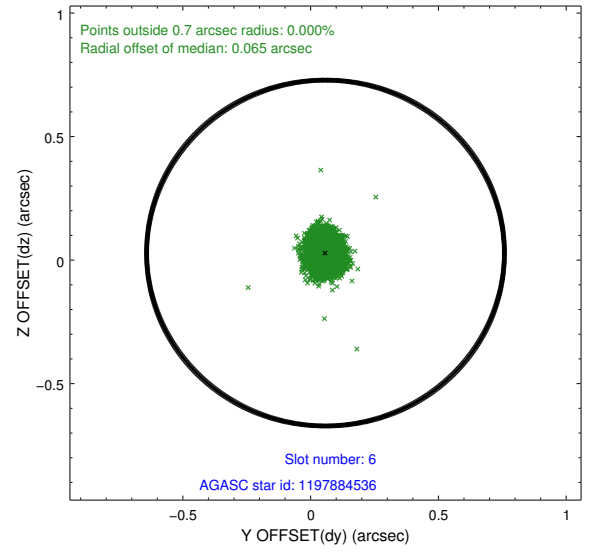
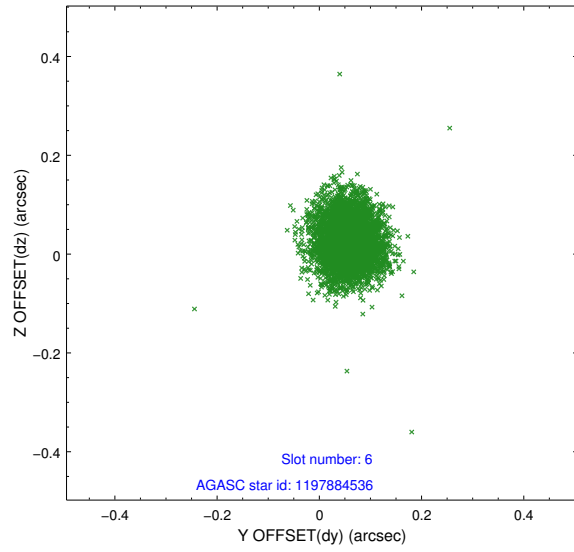
## 2.4.2 Slot 4



### 2.4.3 Slot 5

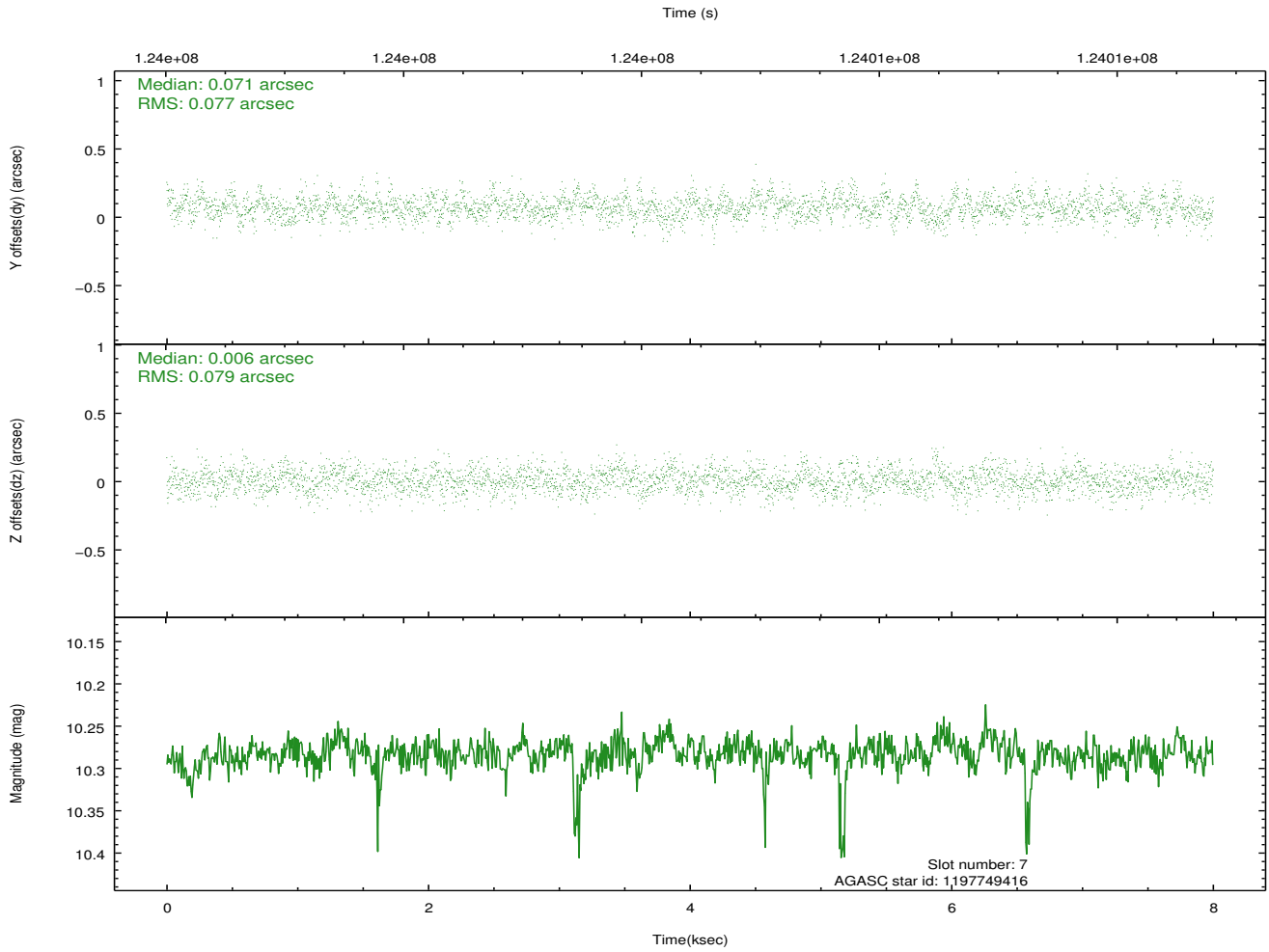
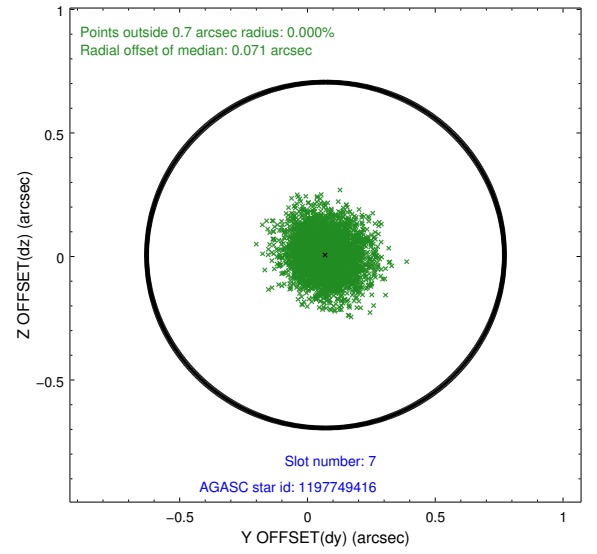
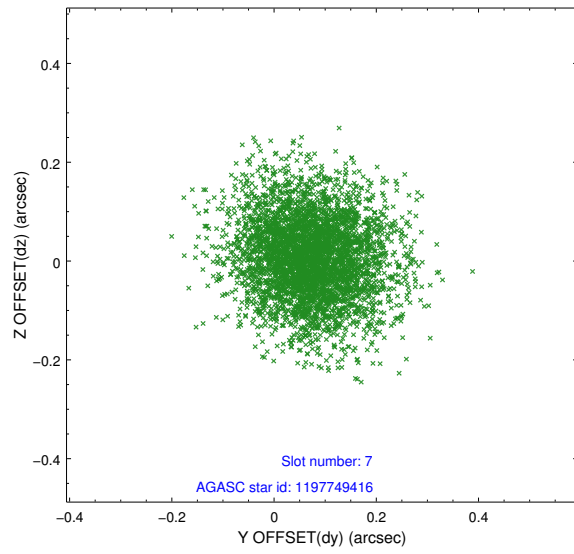


## 2.4.4 Slot 6



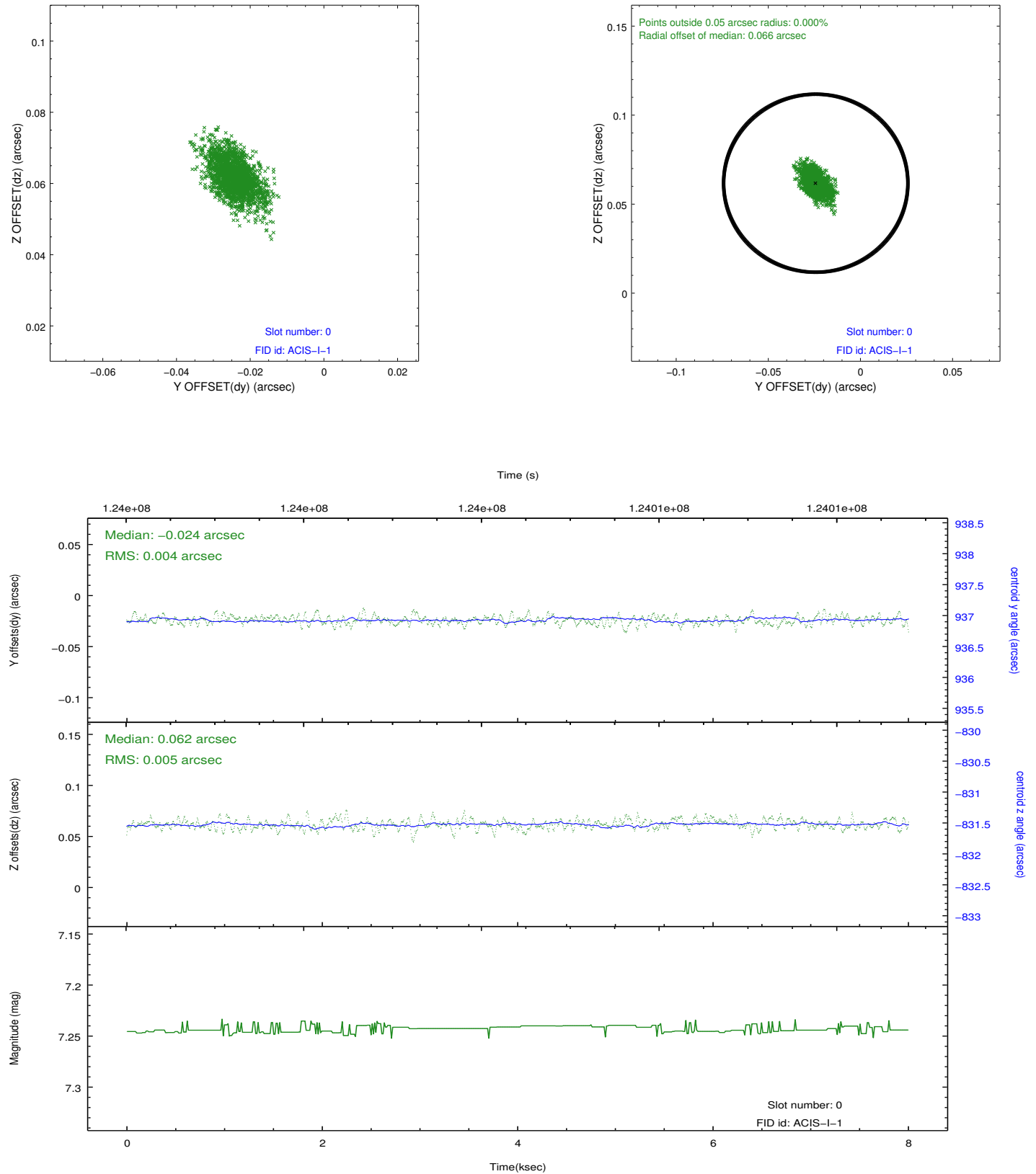


## 2.4.5 Slot 7

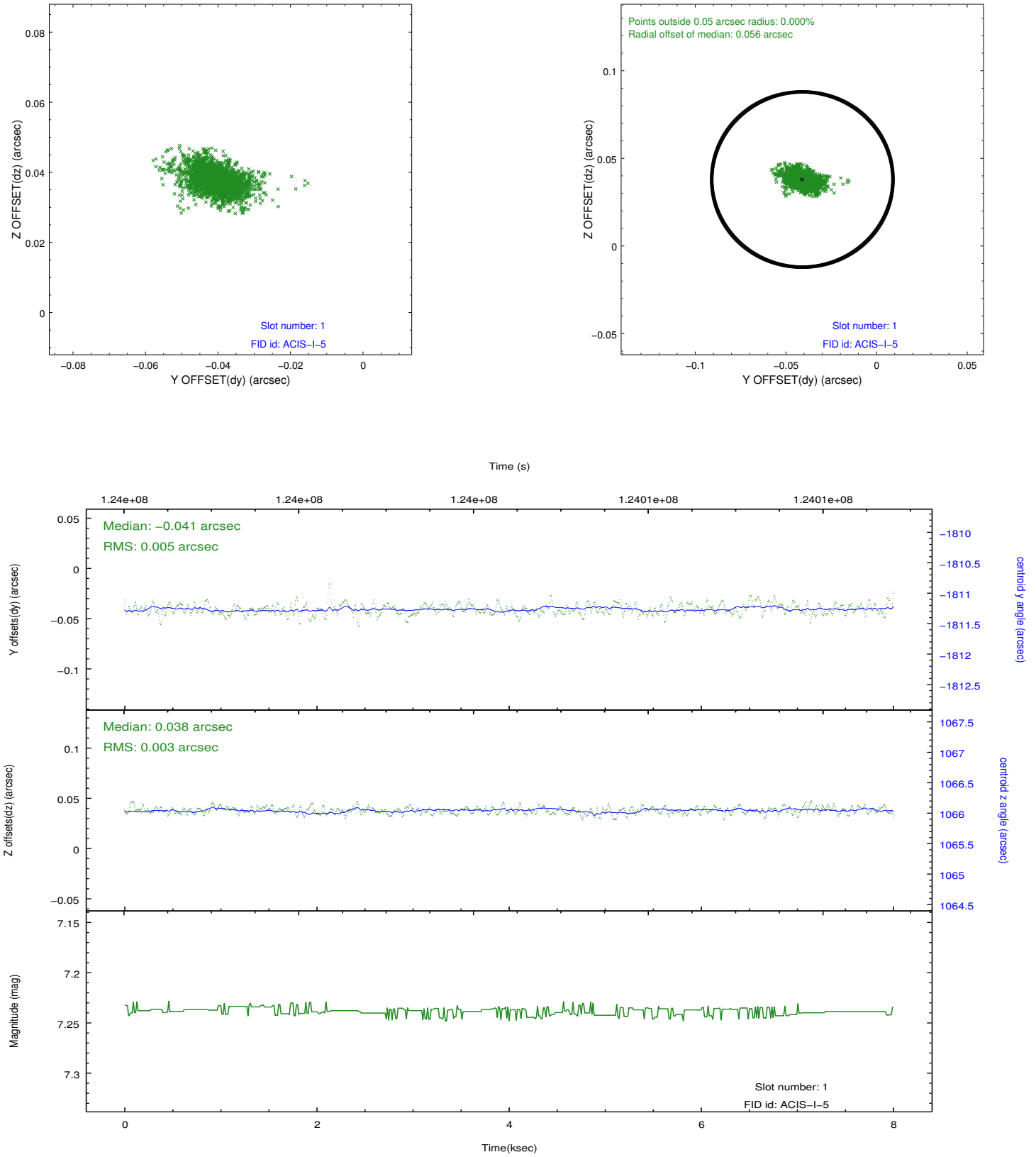


## 2.5 FID Slots

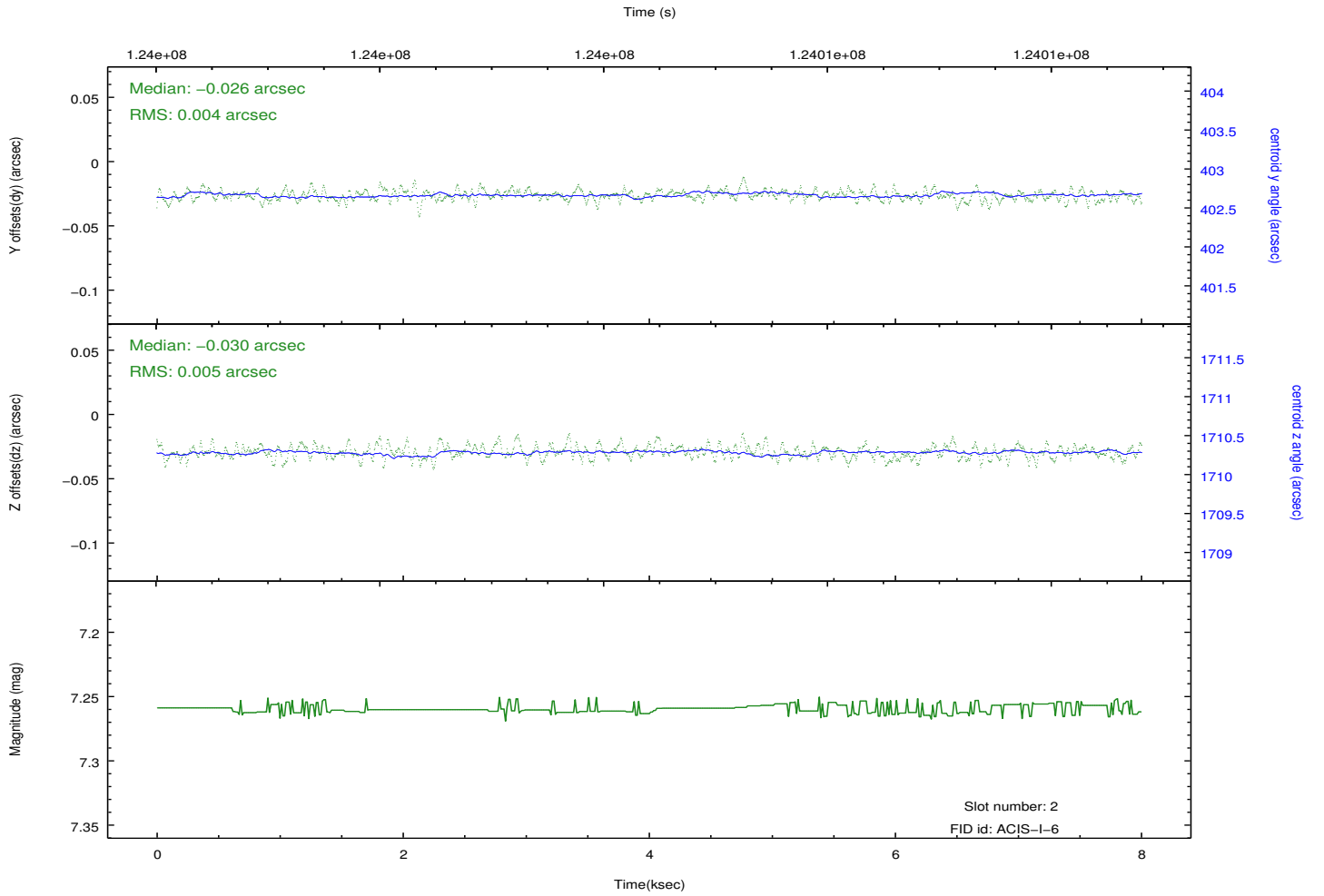
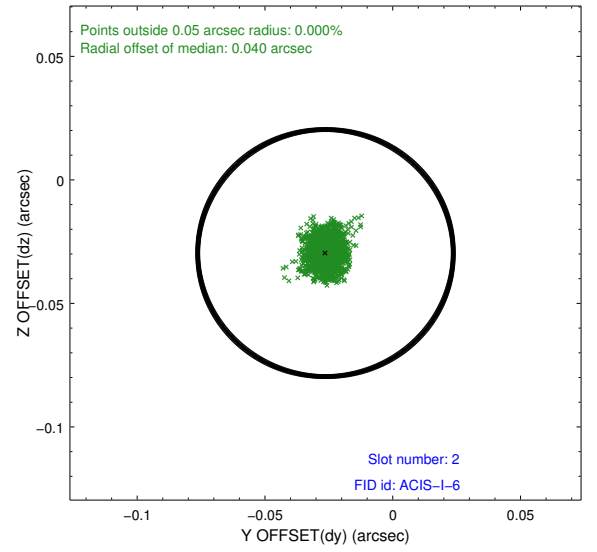
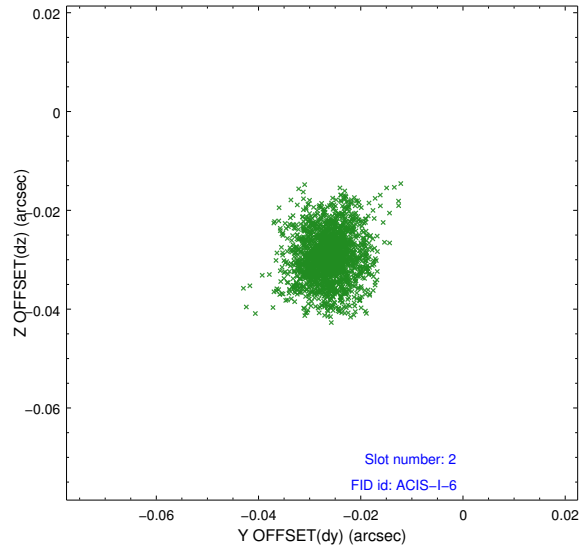
### 2.5.1 Slot 0



## 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)	2012.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.561

### A.2 Comments

Window constraint met.