

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2840 - L2 Version 4  
Chandra X-Ray Center

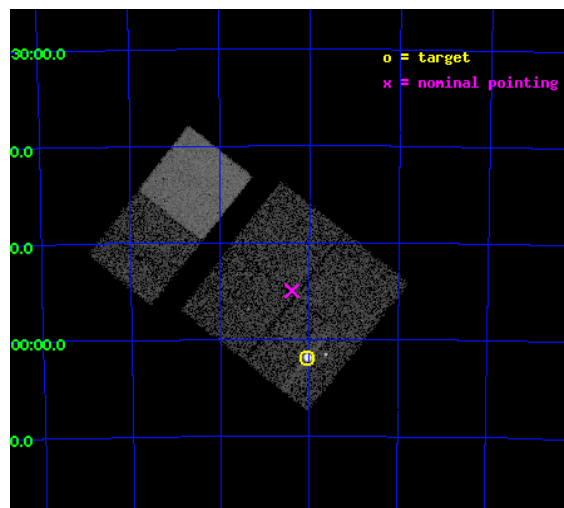
L2 Processing Date : Sep 28 2012

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# 1 Front

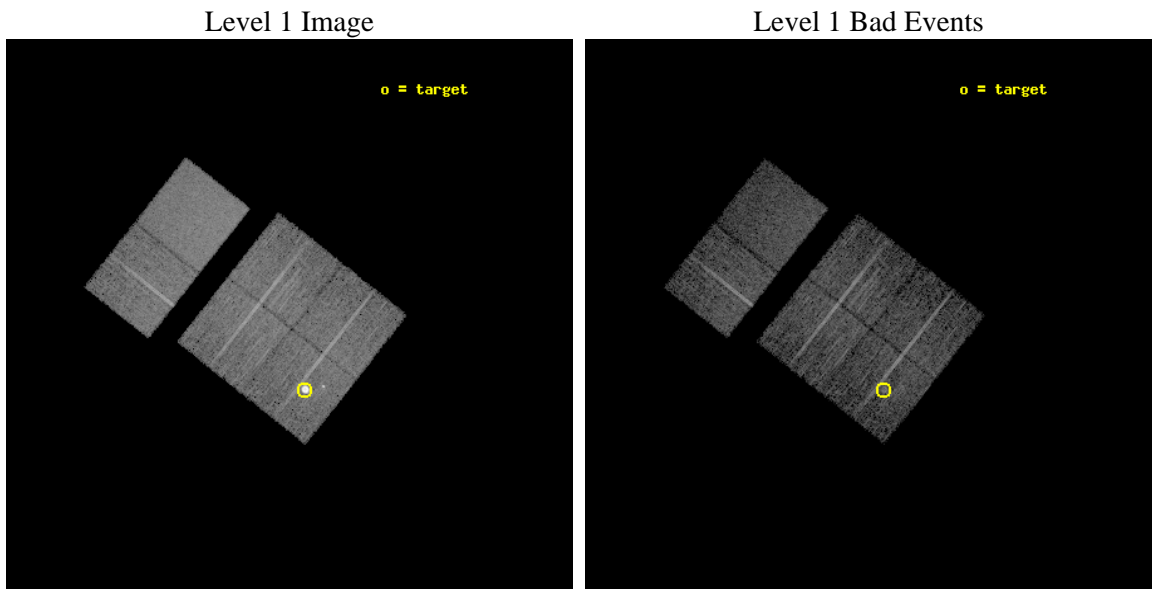
seq_num	590229	Sequence number
obs_id	2840	Observation id
title	AO3A ACIS-I CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip I0, T=120, Offsets=4,-5,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.098480930498	Nominal RA [deg]
dec_nom	-71.916480898909	Nominal Dec [deg]
roll_nom	308.36936968969	Nominal Roll [deg]
revision	4	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	75343	Number of level 2 events



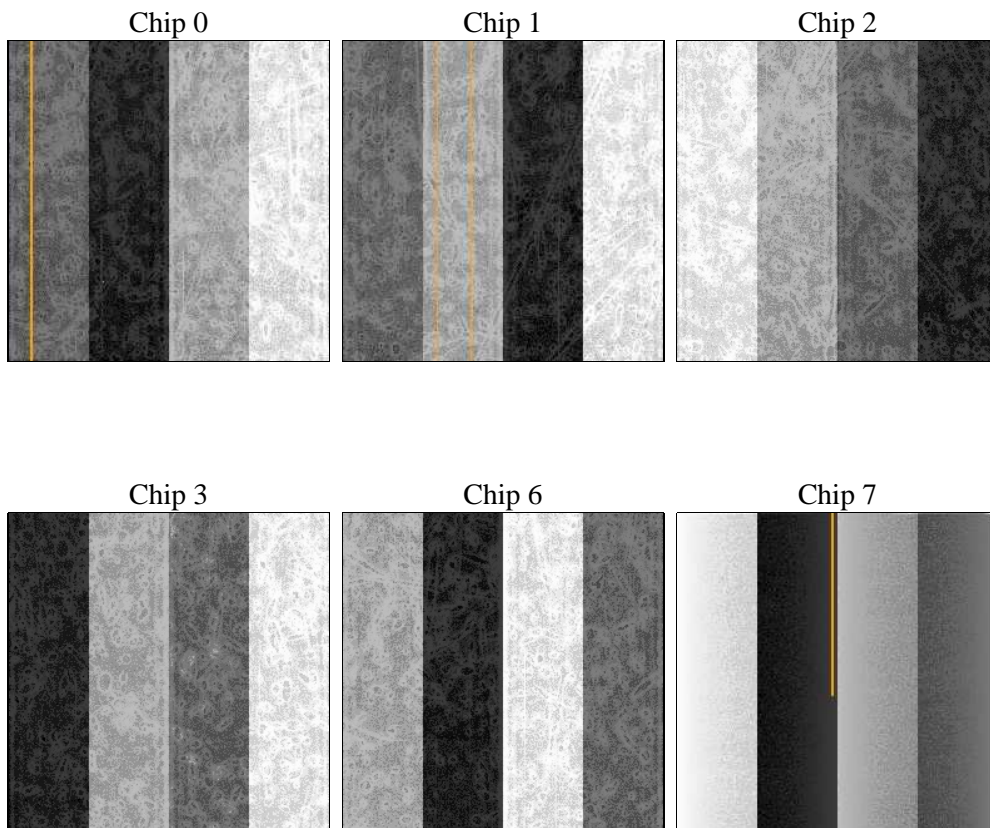
## 2 OBI

### 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	2012-09-28T06:29:44	Date and time of file creation	ontime1	7558.4000070244	Sum of GTIs [s]
revision	4	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	324387	Number of level 1 events

### 2.1.4 Events

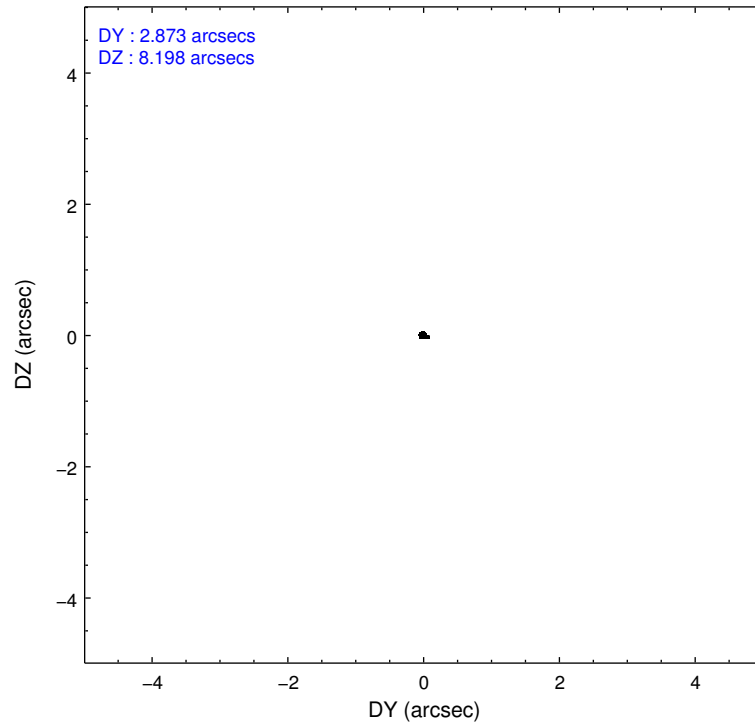
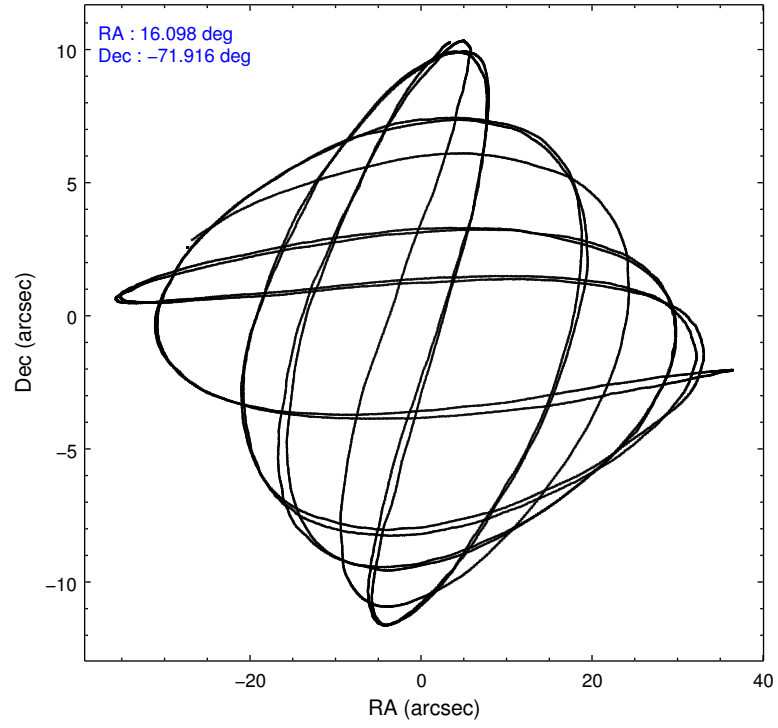
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	68919	44223	49911	47749	50851	62734	grade 0 events	24587	2574	2450	2302	2316	2509
rejected events	38122	38028	44203	42193	45103	36539		35%	5%	4%	4%	4%	3%
rejected %	55%	85%	88%	88%	88%	58%	grade 1 events	175	19	30	14	21	56
								0%	0%	0%	0%	0%	0%
							grade 2 events	3060	1257	1275	1116	1220	5177
								4%	2%	2%	2%	2%	8%
							grade 3 events	977	666	513	567	552	2349
								1%	1%	1%	1%	1%	3%
							grade 4 events	932	578	515	515	541	2357
								1%	1%	1%	1%	1%	3%
							grade 5 events	1897	1813	1682	1846	2121	6014
								2%	4%	3%	3%	4%	9%
							grade 6 events	1267	1125	962	1061	1122	13825
								1%	2%	1%	2%	2%	22%
							grade 7 events	36024	36191	42484	40328	42958	30447
								52%	81%	85%	84%	84%	48%

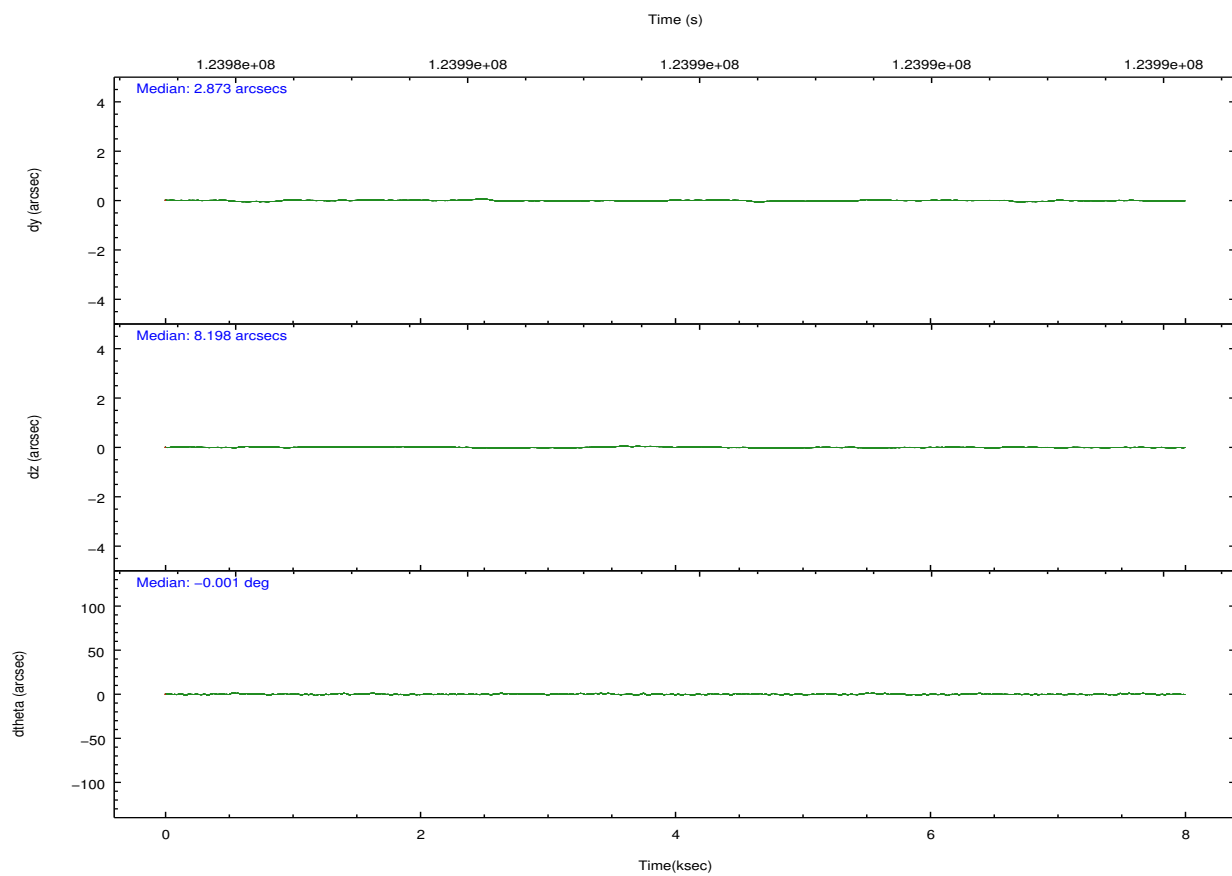
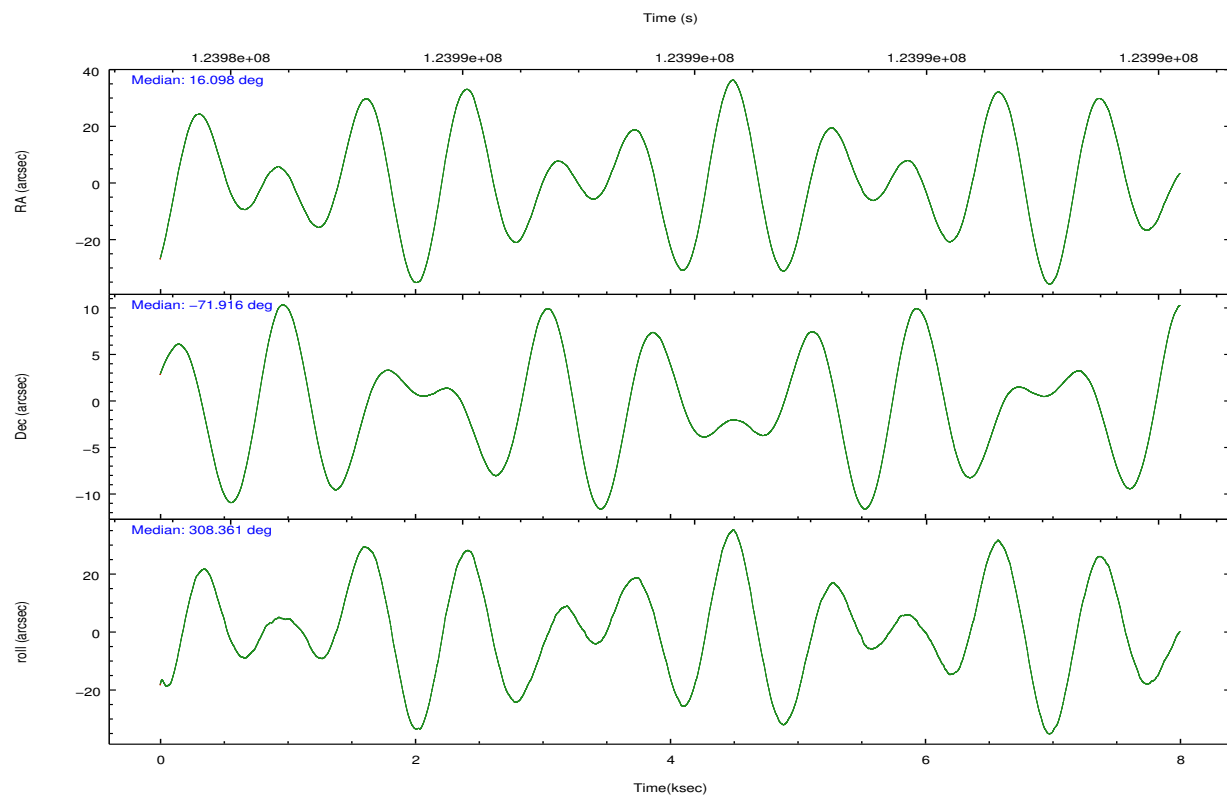


## 2.2 Compared Parameters

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	16.016294	16.09848093049807	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.906417	-71.91648089890924	Alternating exposures requested	N	N
[deg] Pointing Roll	308.082532	308.3693696896922	[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)	123983989.184000	123983612.8718			
Observation start date	2001-12-05T23:58:45	2001-12-05T23:53:32			
[s] Observation end time (MET)	123991789.184000	123991923.05963			
Observation end date	2001-12-06T02:08:45	2001-12-06T02:12:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect



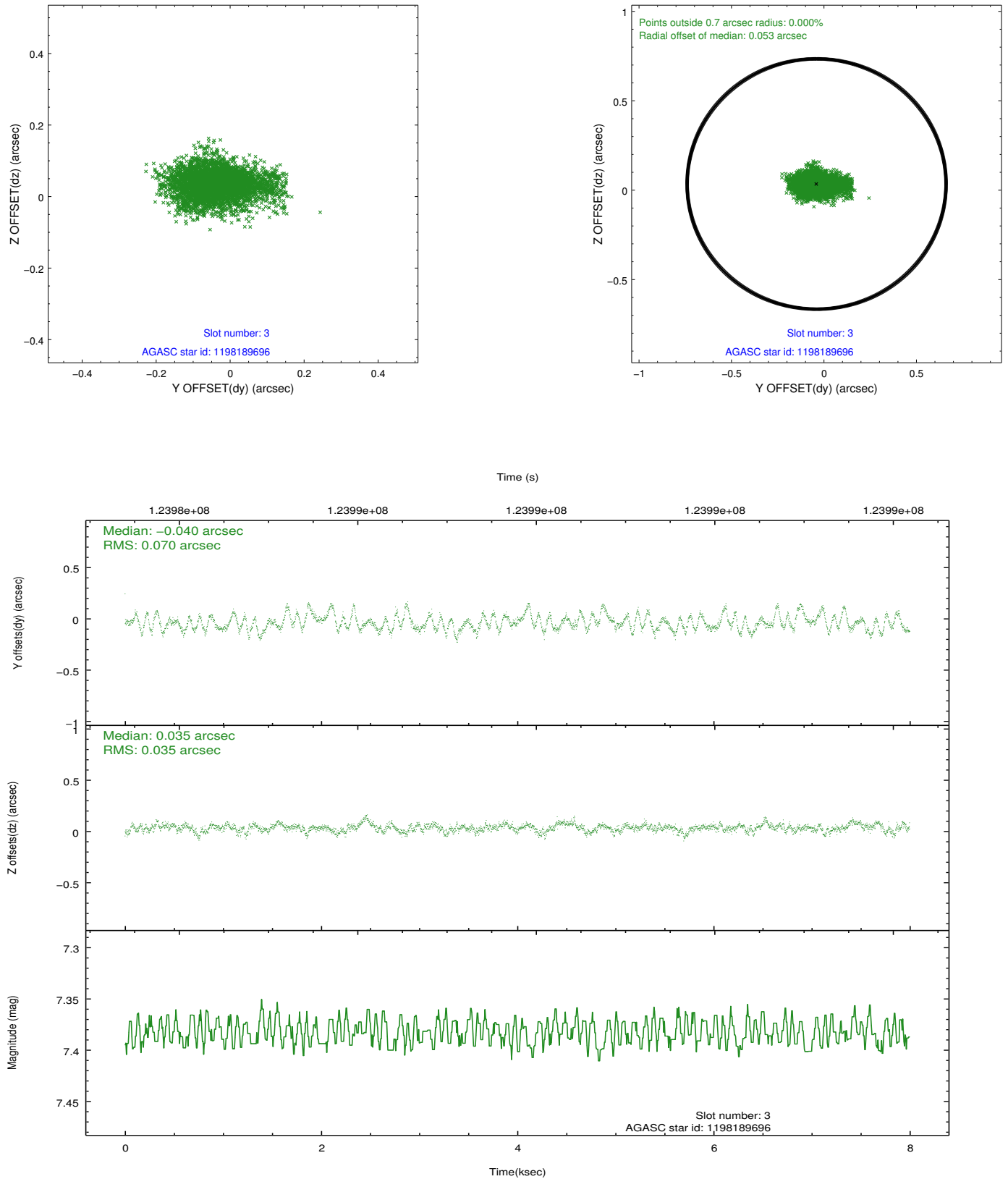


### Slot Statistics

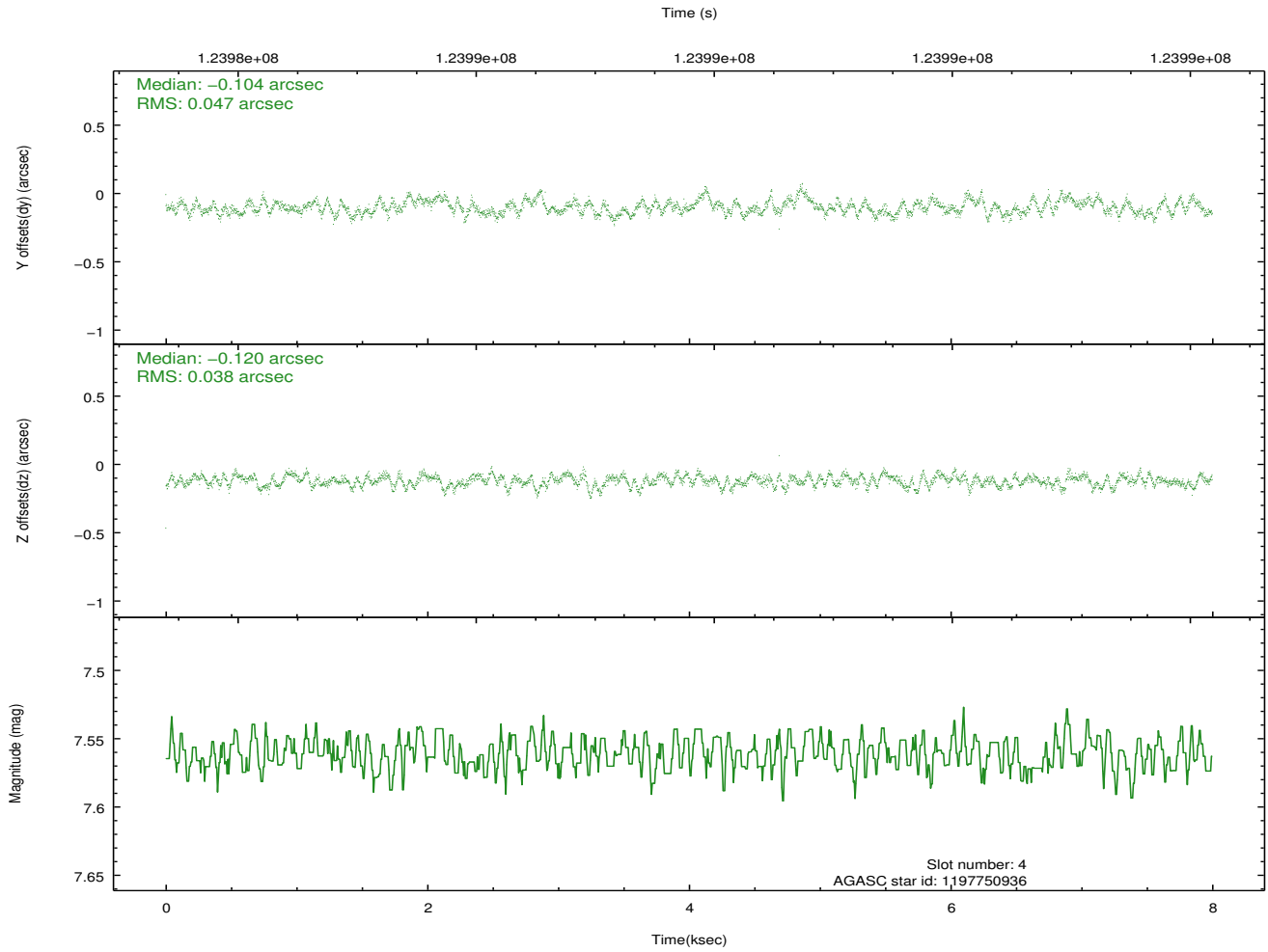
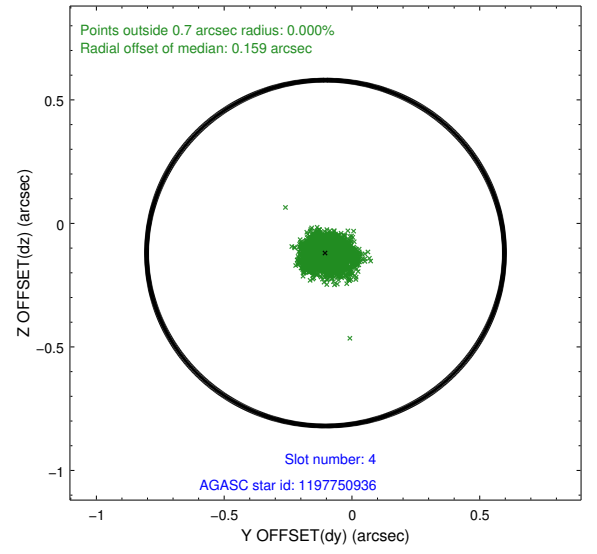
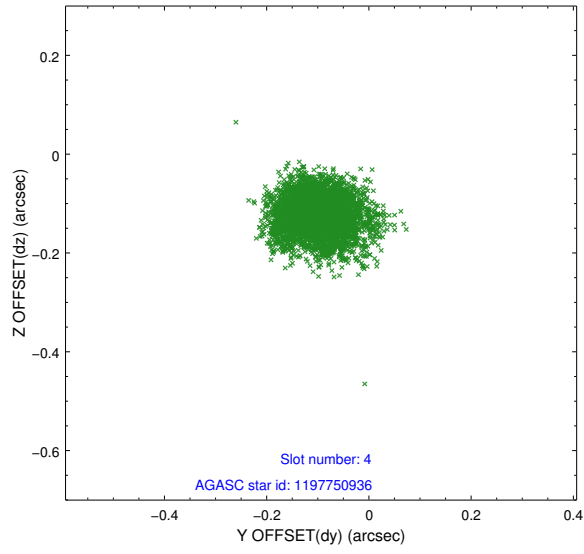
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1952	-0.024	0.061	0.006	0.012	0.000000	0.000000	936.89	-831.57
1	FID	ACIS-I-5	7.24	1951	-0.041	0.038	0.006	0.010	0.000000	0.000000	-1810.82	1065.57
2	FID	ACIS-I-6	7.26	1951	-0.027	-0.028	0.007	0.012	0.000000	0.000000	401.70	1710.78
3	GUIDE	1198189696	7.38	3901	-0.040	0.035	0.080	0.145	15.223750	-72.697522	1723.09	-2427.34
4	GUIDE	1197750936	7.56	3902	-0.104	-0.120	0.064	0.104	15.387940	-71.549550	-1449.51	226.07
5	GUIDE	1197884536	8.49	3901	0.012	0.044	0.076	0.120	17.160729	-71.835289	599.66	1161.96
6	GUIDE	1197878768	9.62	3900	0.098	-0.037	0.123	0.201	16.656786	-71.304581	-1246.58	1916.32
7	GUIDE	1197749416	10.25	3883	0.039	0.076	0.193	0.314	13.610513	-71.871242	-1719.14	-2074.74

## 2.4 Star Slots

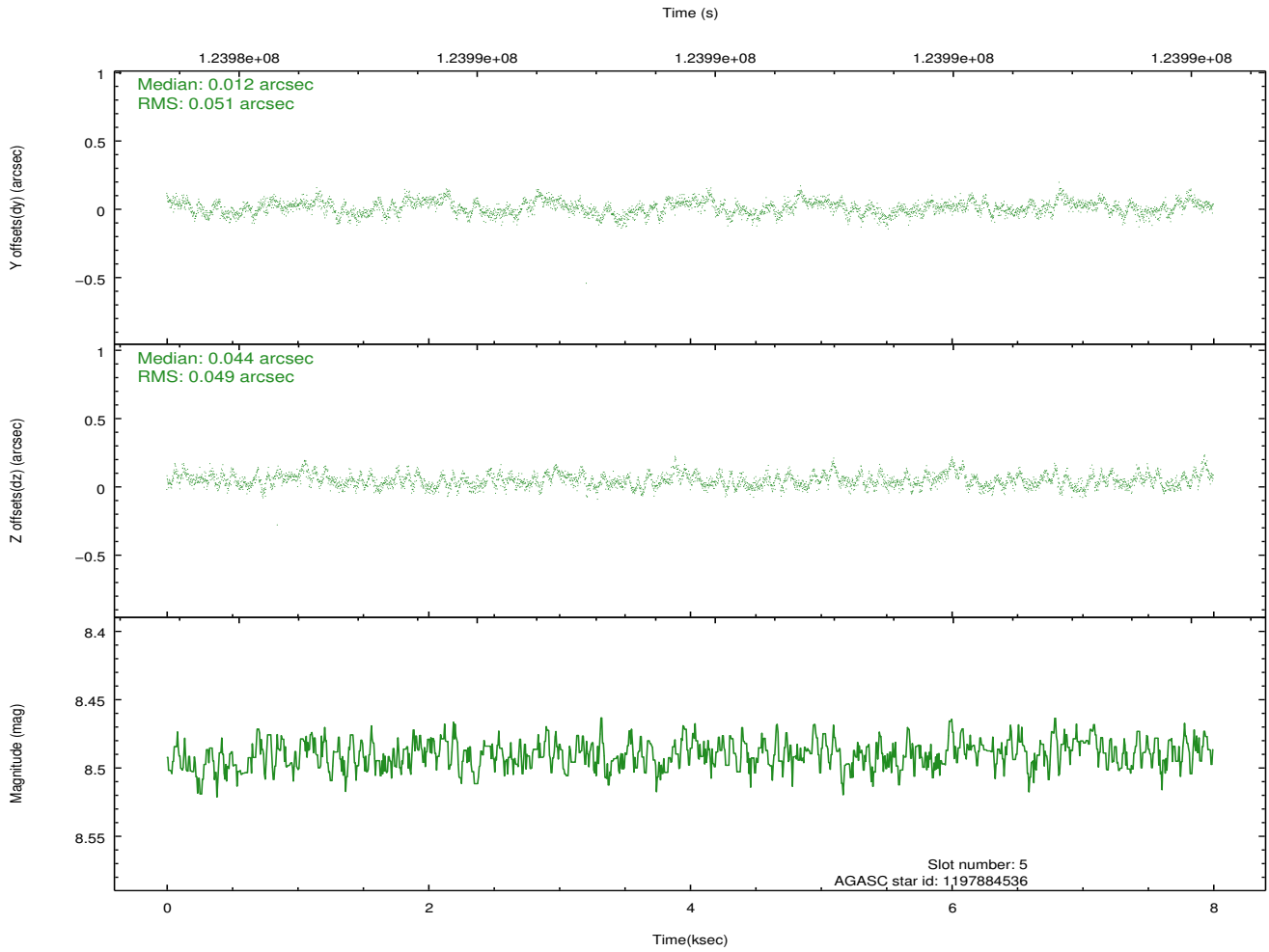
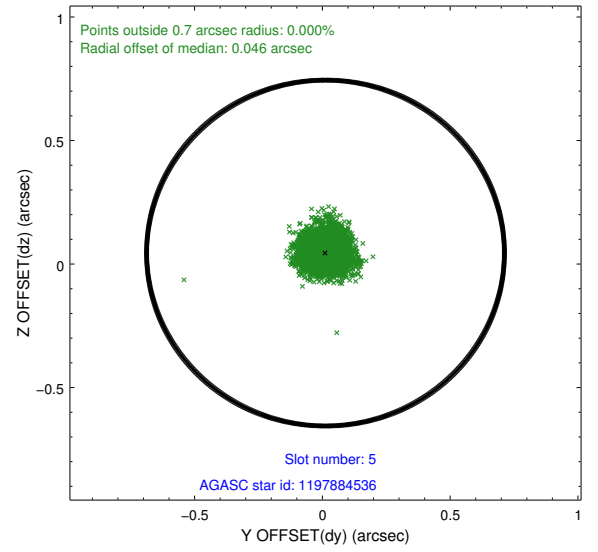
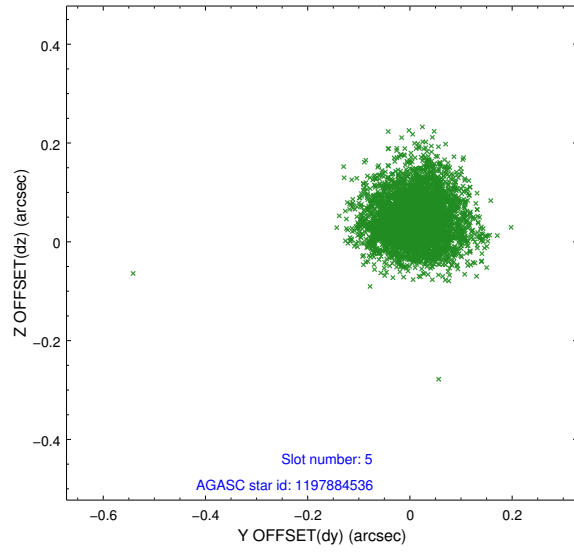
### 2.4.1 Slot 3



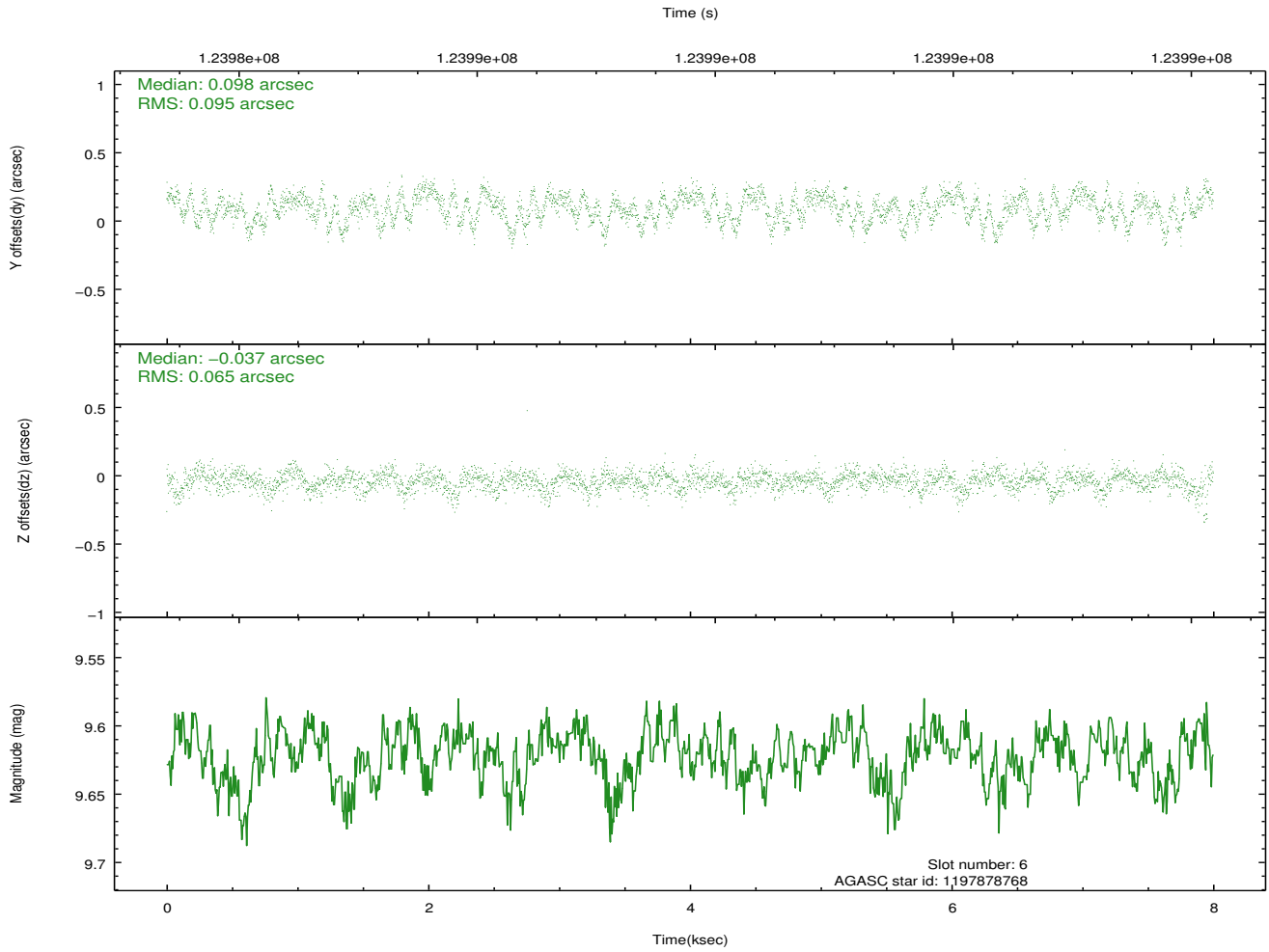
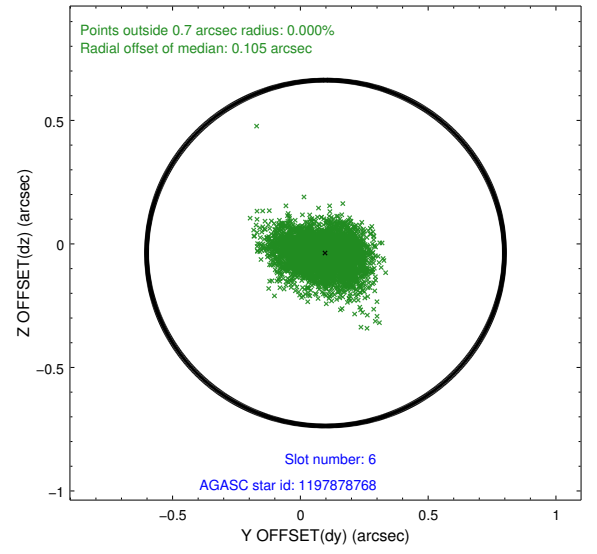
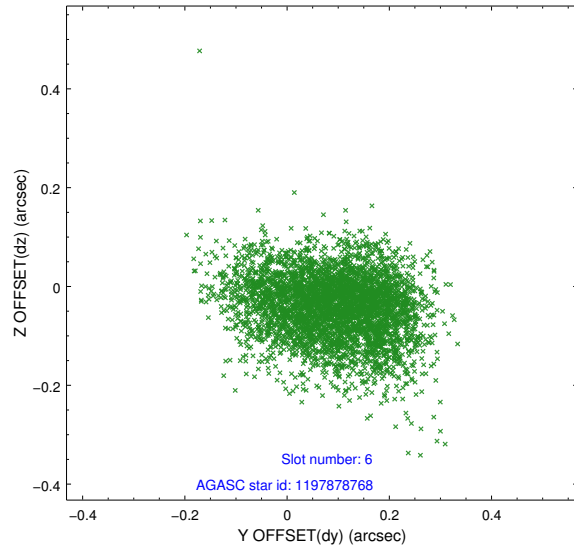
## 2.4.2 Slot 4



### 2.4.3 Slot 5

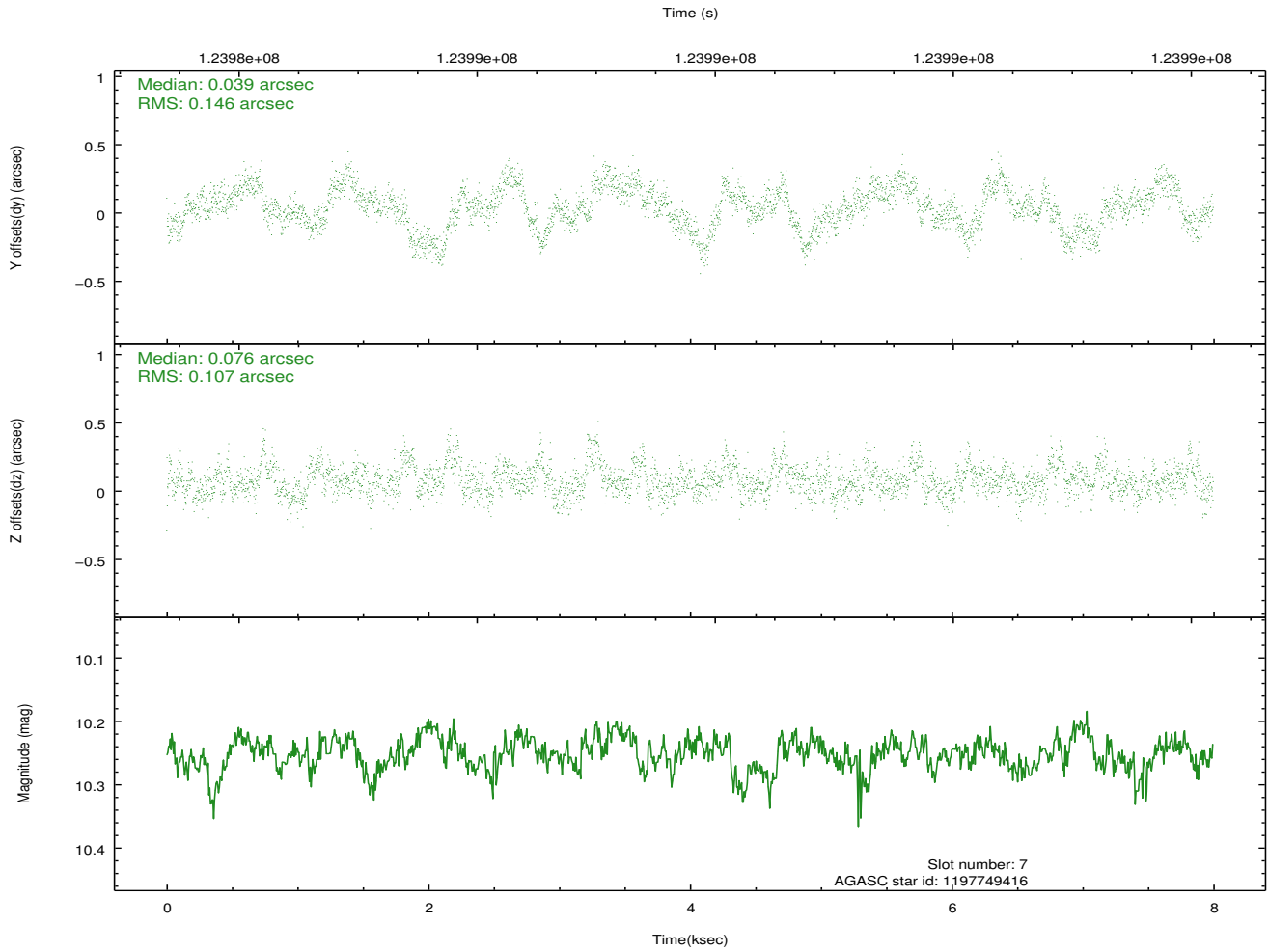
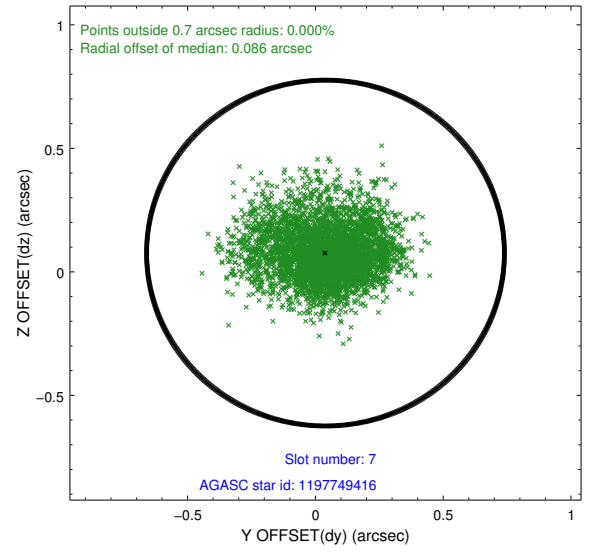
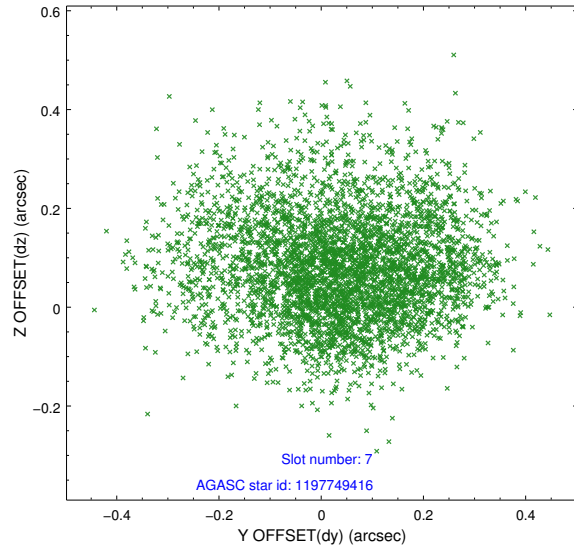


## 2.4.4 Slot 6



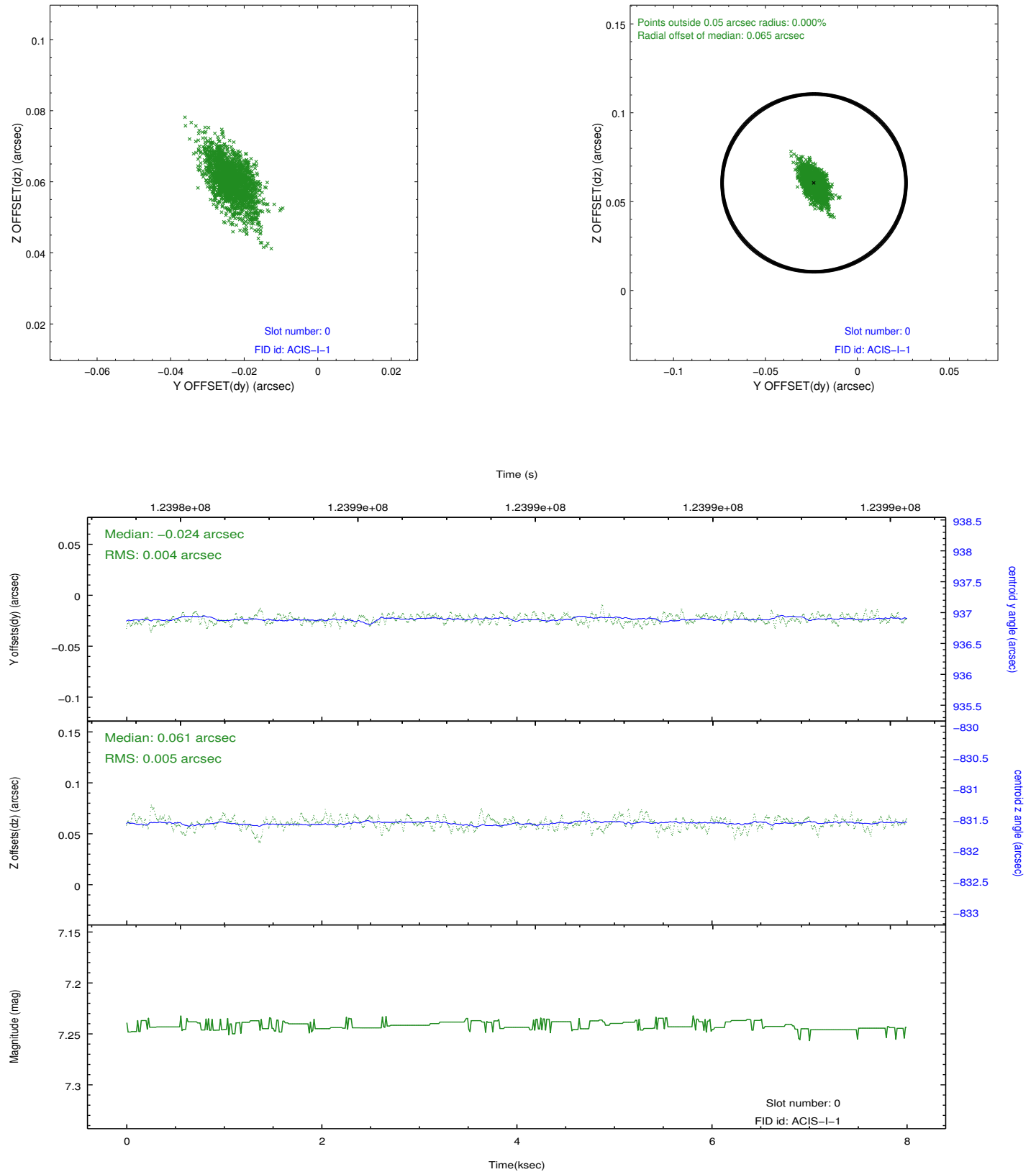


## 2.4.5 Slot 7

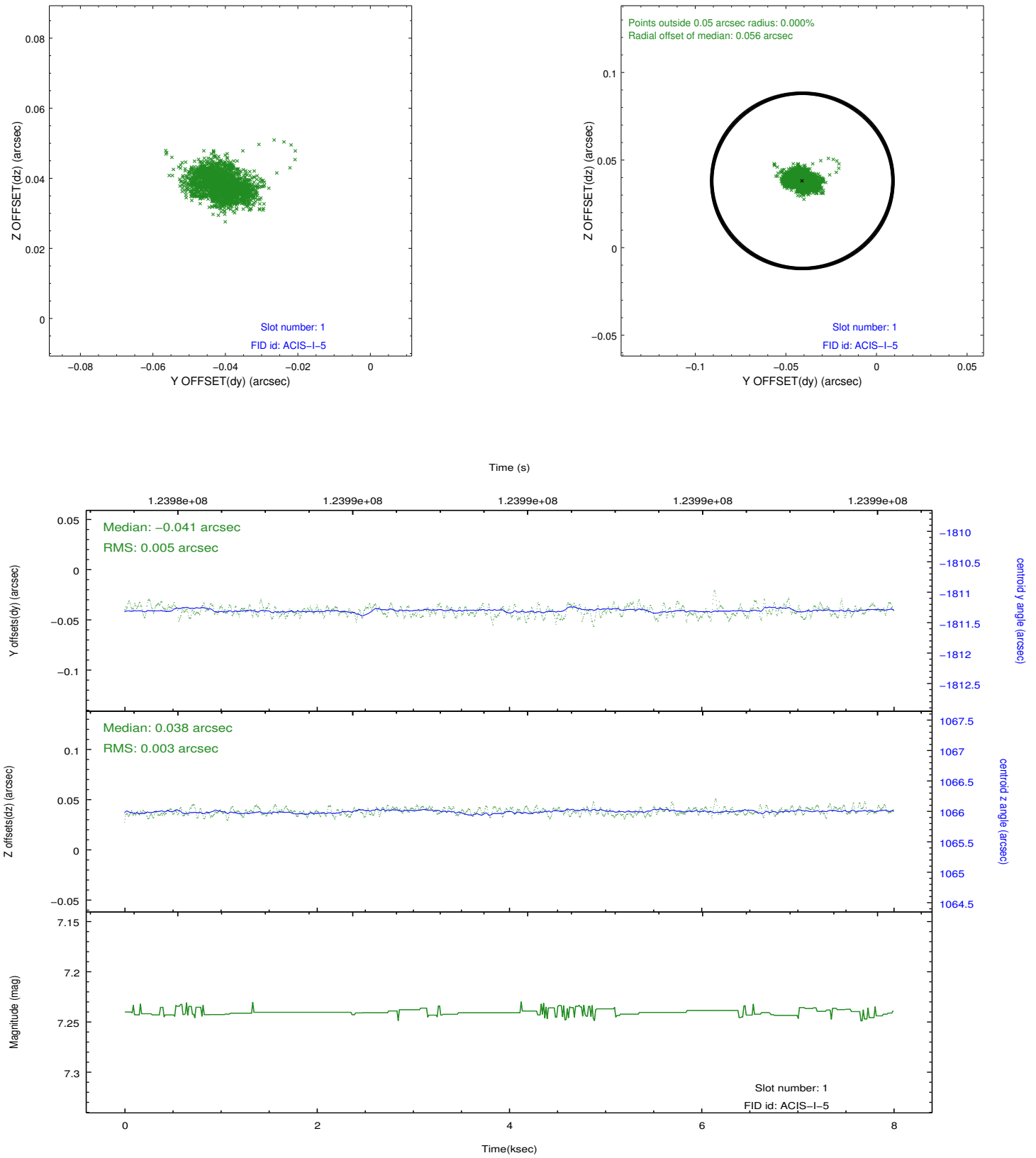


## 2.5 FID Slots

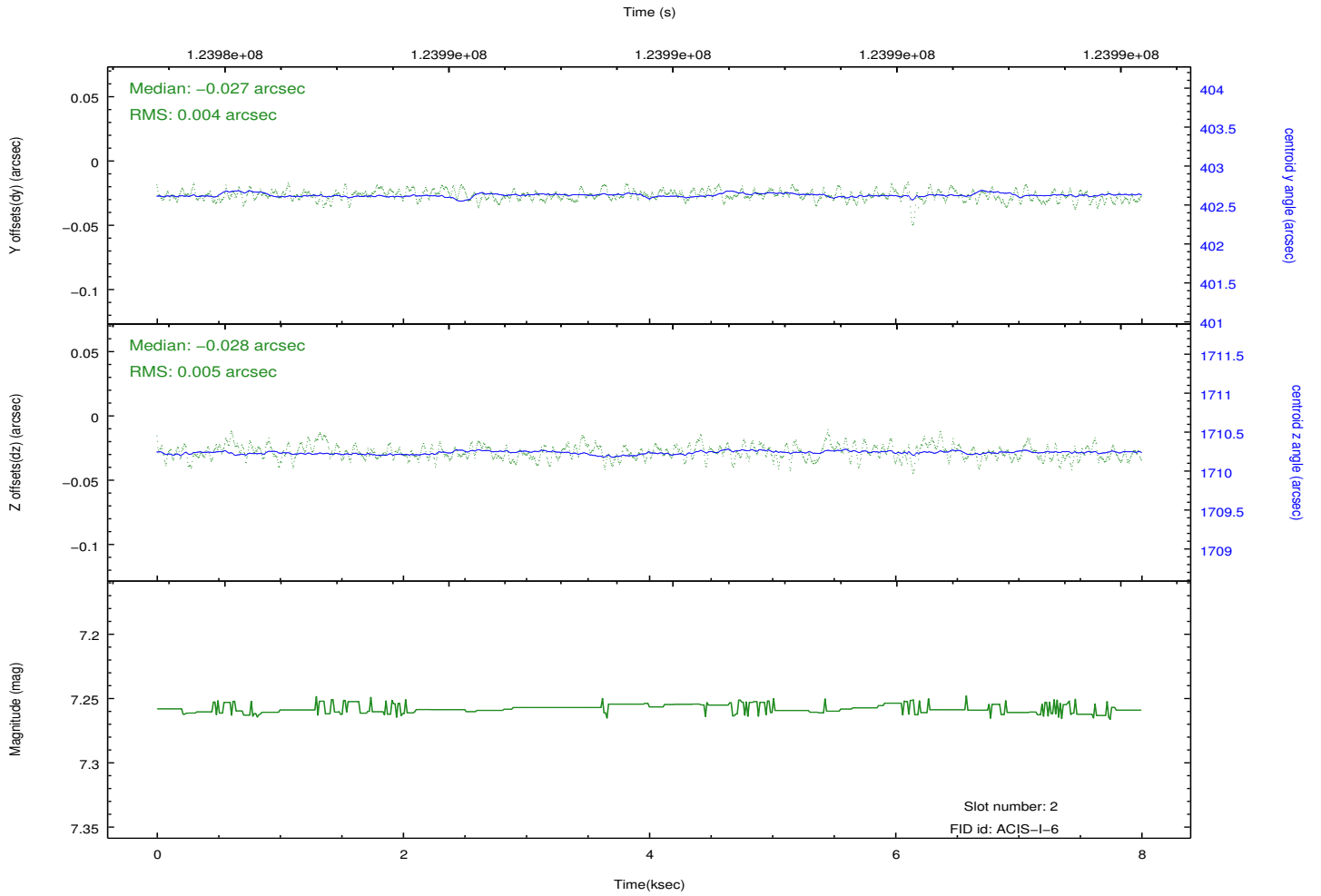
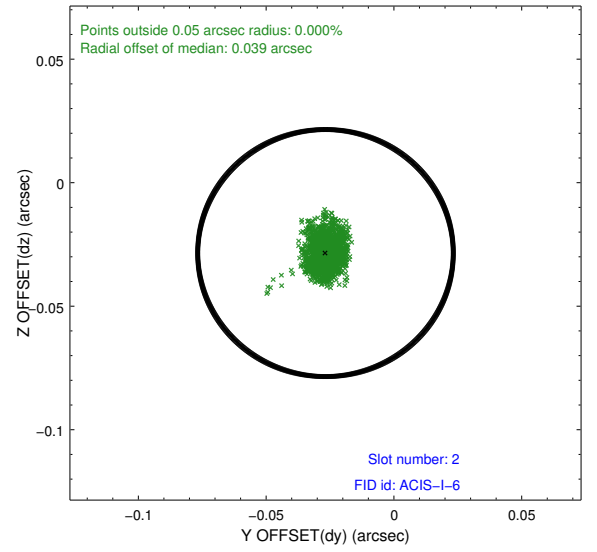
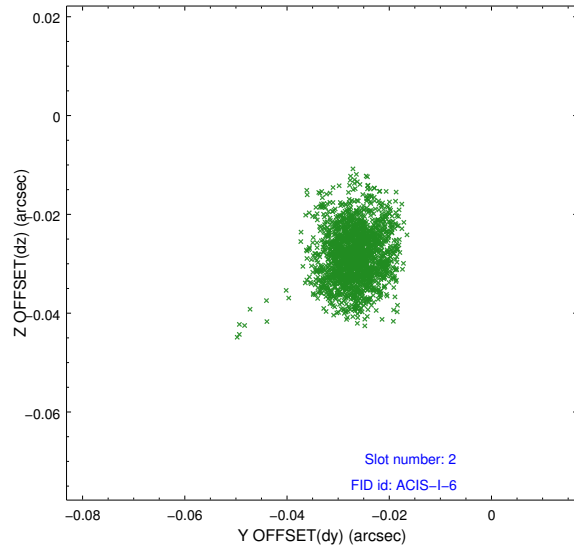
### 2.5.1 Slot 0



## 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.