

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3537 - L2 Version 3  
Chandra X-Ray Center

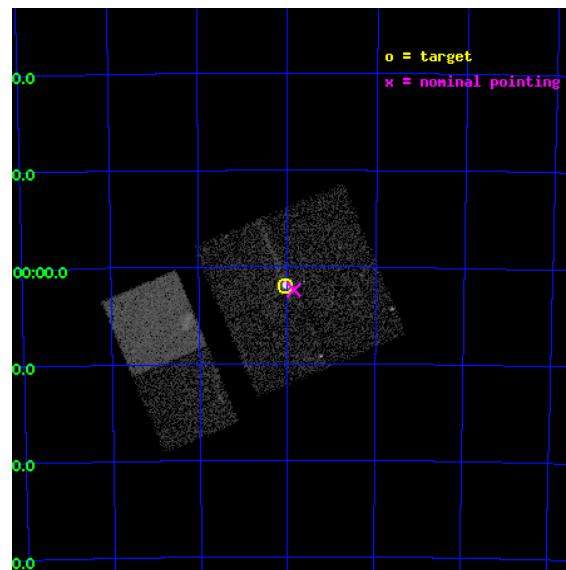
L2 Processing Date : Oct 22 2012

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# 1 Front

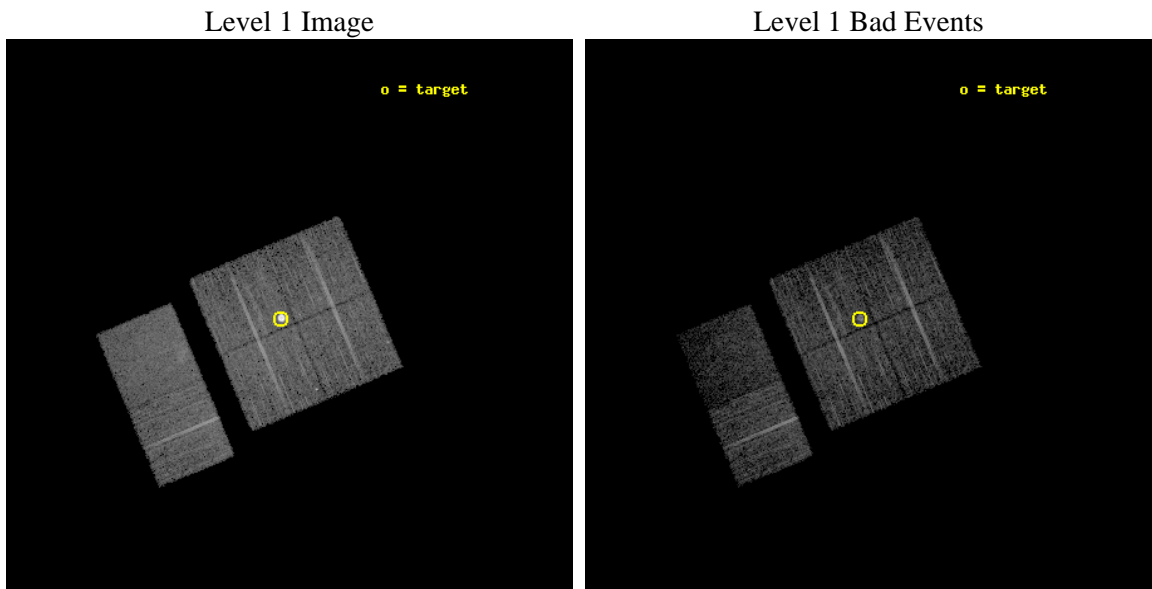
seq_num	590292	Sequence number
obs_id	3537	Observation id
title	AO4A ACIS-I CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[I3,-120,-0.5,0.5,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.963677474805	Nominal RA [deg]
dec_nom	-72.039675531212	Nominal Dec [deg]
roll_nom	247.13871745823	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7731.199971199	Sum of GTIs [s]
livetime	7633.302861994	Livetime [s]
ontime0	7727.9590009451	Sum of GTIs [s]
ontime1	7731.199971199	Sum of GTIs [s]
ontime2	7731.199971199	Sum of GTIs [s]
ontime3	7731.199971199	Sum of GTIs [s]
ontime6	7731.199971199	Sum of GTIs [s]
ontime7	7731.199971199	Sum of GTIs [s]
l2events	60869	Number of level 2 events



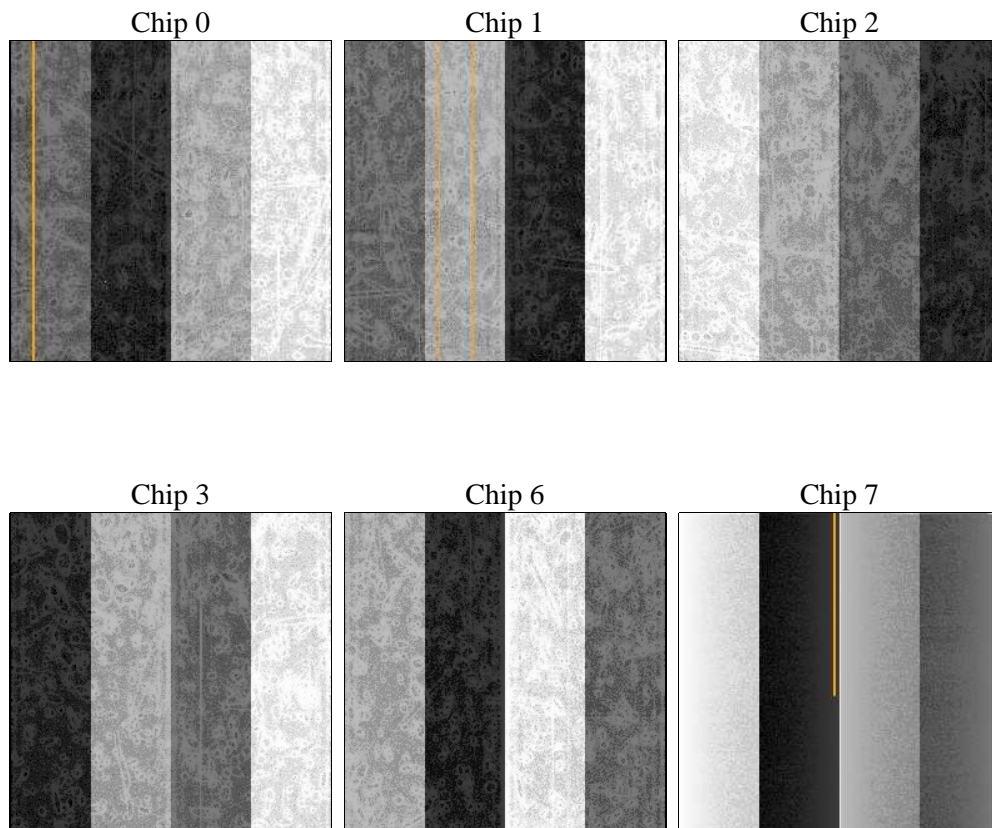
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7973.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7731.199971199	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	7727.9590009451	Sum of GTIs [s]
date	2012-10-22T04:03:12	Date and time of file creation	ontime1	7731.199971199	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	7731.199971199	Sum of GTIs [s]
			ontime3	7731.199971199	Sum of GTIs [s]
			ontime6	7731.199971199	Sum of GTIs [s]
			ontime7	7731.199971199	Sum of GTIs [s]
			l1events	244434	Number of level 1 events

### 2.1.4 Events

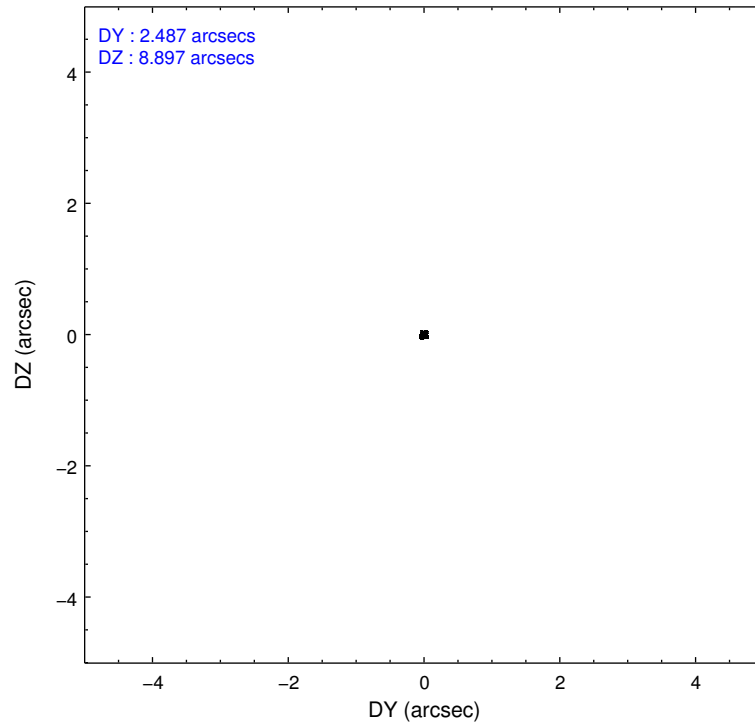
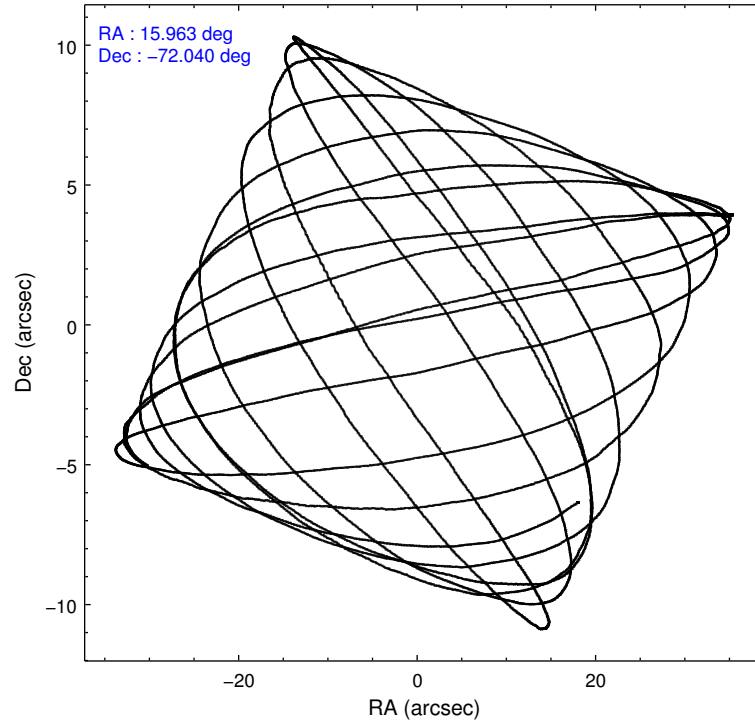
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	34660	33491	40279	62417	38157	35430	grade 0 events	1754	1588	2138	25392	1648	2005
rejected events	30529	29540	35750	32187	34009	17512		5%	4%	5%	40%	4%	5%
rejected %	88%	88%	88%	51%	89%	49%	grade 1 events	13	20	19	305	18	32
								0%	0%	0%	0%	0%	0%
							grade 2 events	862	820	942	2479	825	3812
								2%	2%	2%	3%	2%	10%
							grade 3 events	450	456	435	809	444	1801
								1%	1%	1%	1%	1%	5%
							grade 4 events	426	435	397	782	436	1728
								1%	1%	0%	1%	1%	4%
							grade 5 events	1050	1142	1011	1223	1208	3745
								3%	3%	2%	1%	3%	10%
							grade 6 events	639	654	618	777	796	8577
								1%	1%	1%	1%	2%	24%
							grade 7 events	29466	28376	34719	30650	32782	13730
								85%	84%	86%	49%	85%	38%

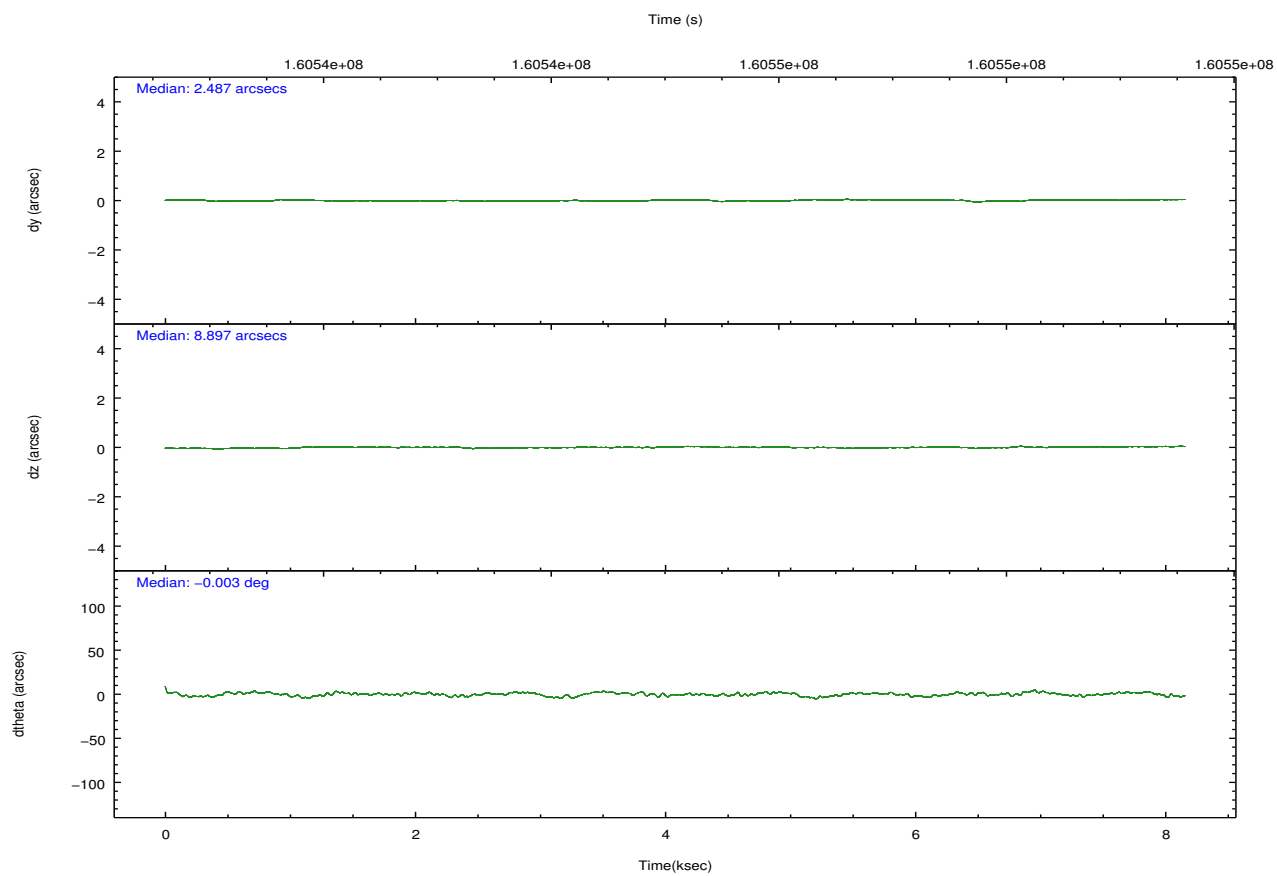
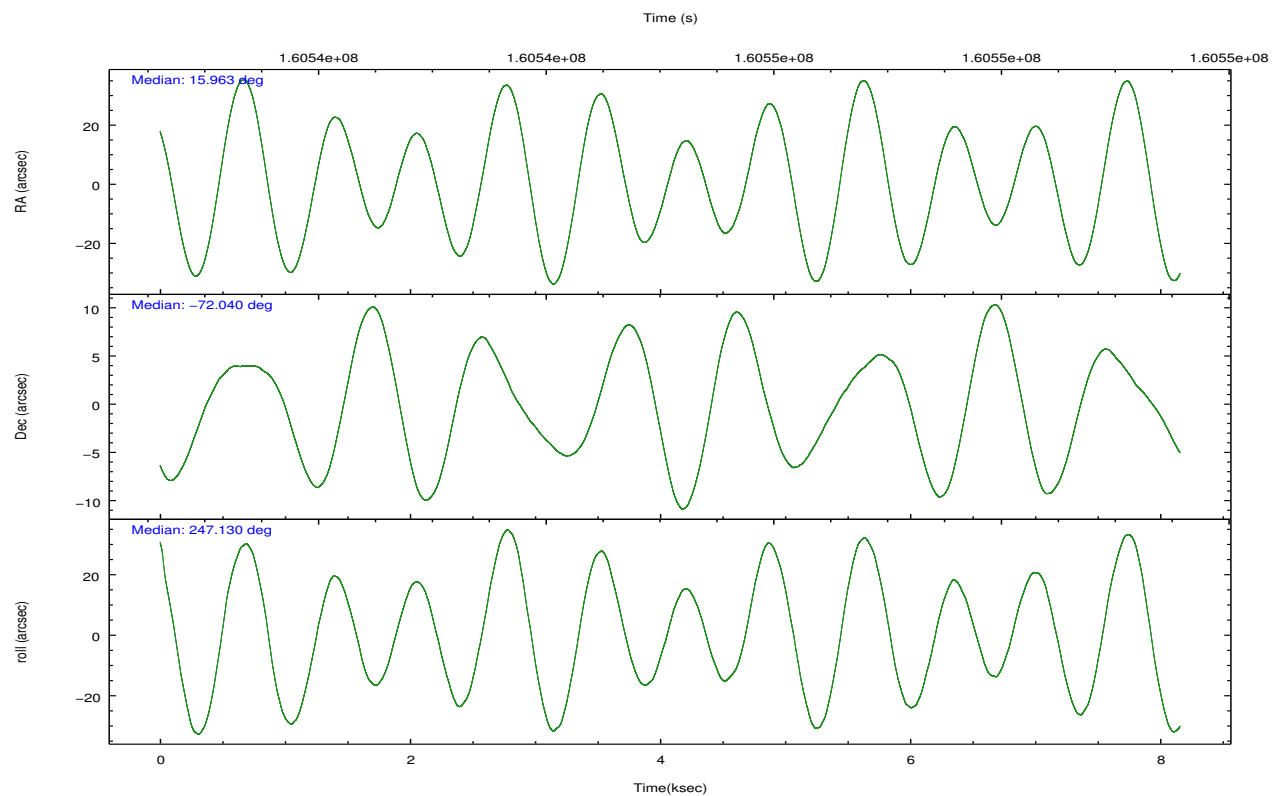


## 2.2 Compared Parameters

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	15.952401	15.96367747480511	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.012491	-72.03967553121242	Alternating exposures requested	N	N
[deg] Pointing Roll	246.919307	247.1387174582297	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	158976064.184000	158976064.184000			
[s] Window stop time (MET)	161654464.184000	161654464.184000			
[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)	160541188.184000	160540812.34593			
Observation start date	2003-02-02T02:45:24	2003-02-02T02:40:12			
[s] Observation end time (MET)	160549161.184000	160549295.24629			
Observation end date	2003-02-02T04:58:17	2003-02-02T05:01:35			
Read mode	TIMED	TIMED			

## 2.3 Aspect



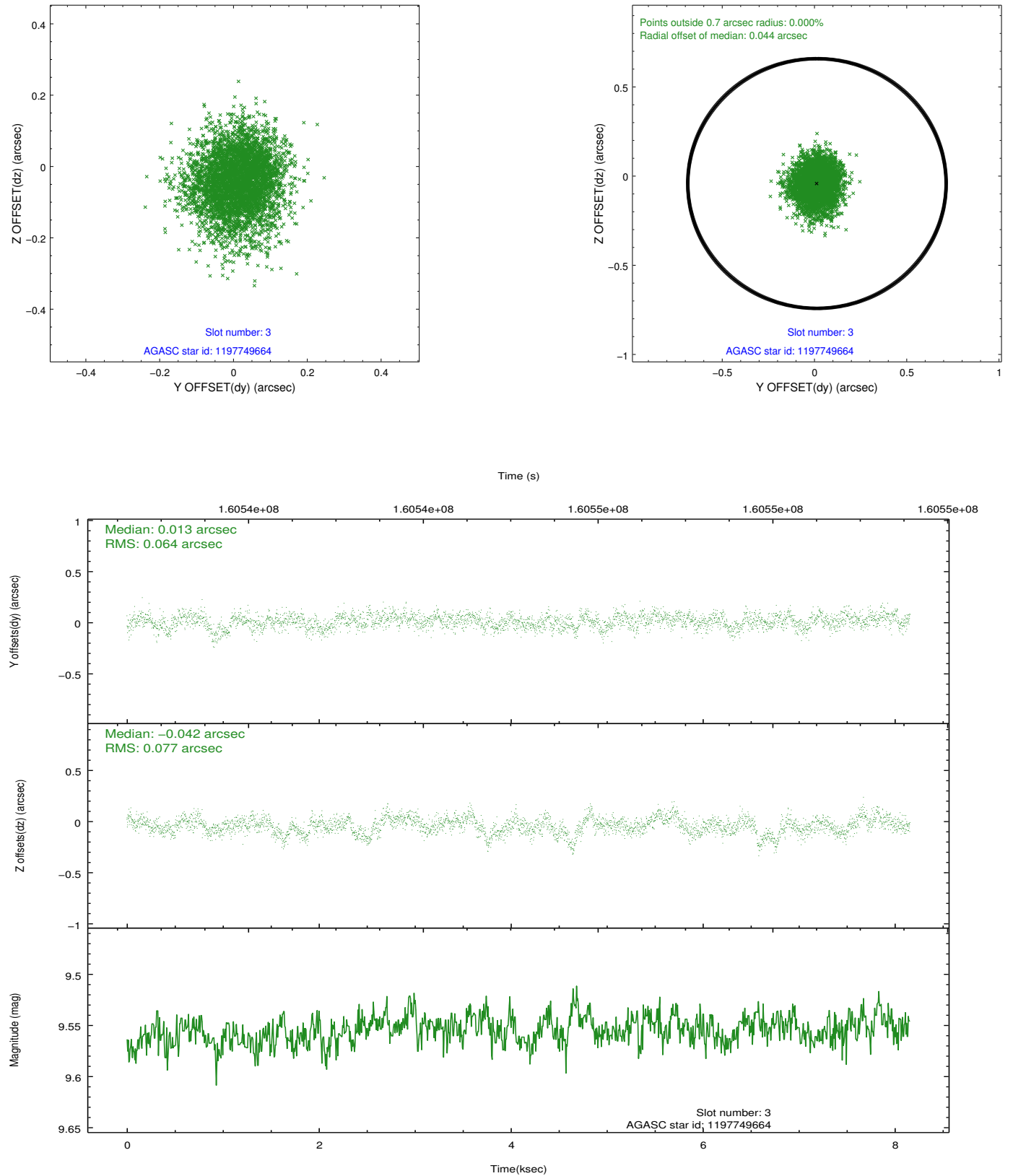


### Slot Statistics

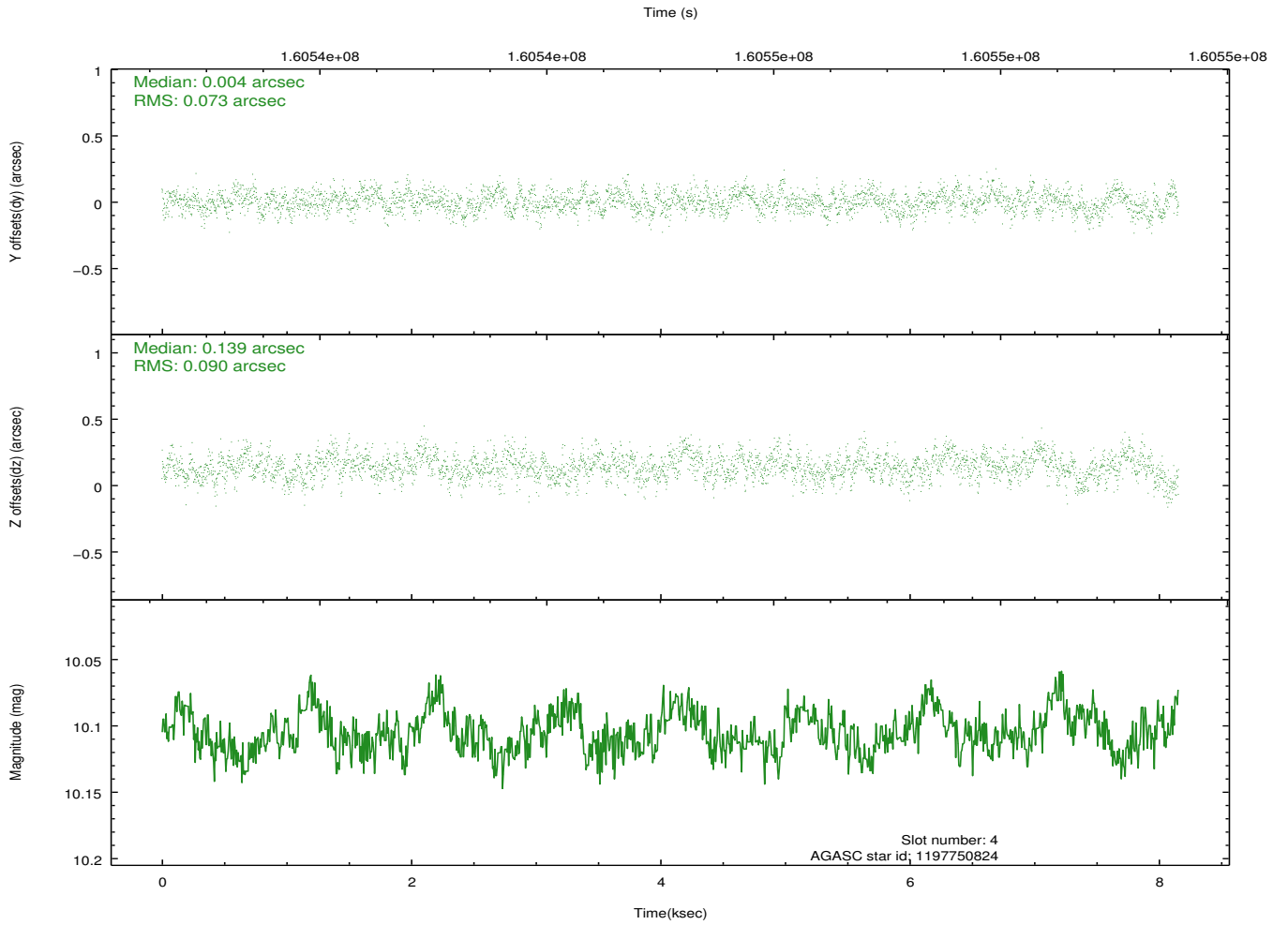
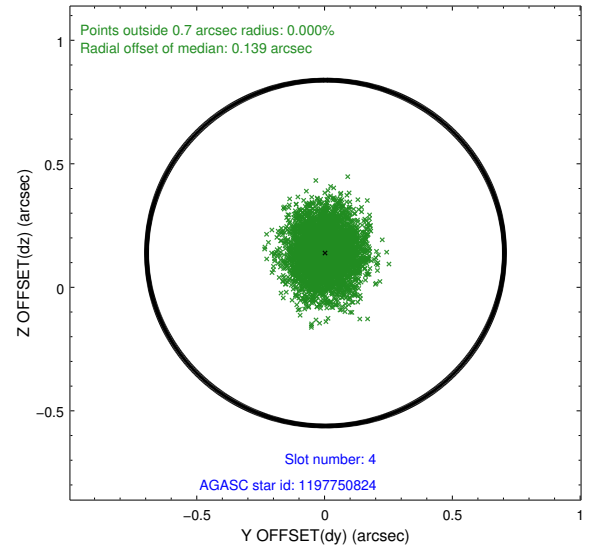
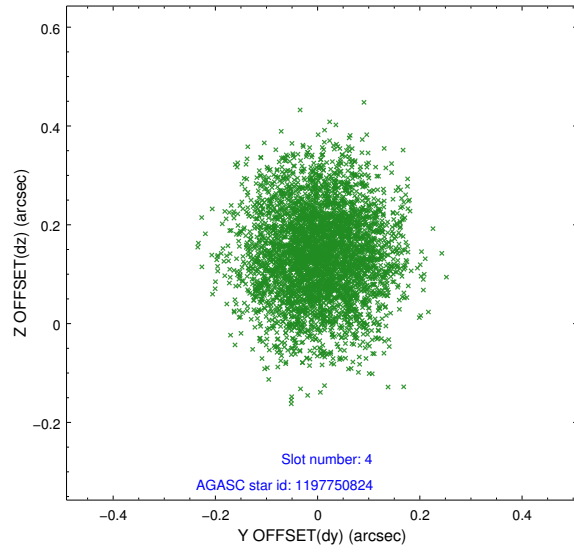
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1990	-0.113	0.088	0.012	0.021	0.000000	0.000000	937.22	-832.24
1	FID	ACIS-I-2	7.15	1990	-0.036	-0.062	0.007	0.012	0.000000	0.000000	-756.41	-839.19
2	FID	ACIS-I-4	7.18	1990	0.051	0.042	0.011	0.020	0.000000	0.000000	2156.93	1067.19
3	GUIDE	1197749664	9.55	3964	0.013	-0.042	0.105	0.176	15.809015	-72.366369	1233.35	356.11
4	GUIDE	1197750824	10.11	3979	0.004	0.139	0.125	0.201	14.791487	-71.393477	-1515.00	-2095.04
5	GUIDE	1197885104	9.38	3980	-0.053	-0.158	0.108	0.164	17.845067	-72.189368	-201.54	2178.93
6	GUIDE	1198190968	10.01	3979	0.046	0.078	0.112	0.180	15.749622	-72.545972	1852.85	552.78
7	GUIDE	1197750936	7.56	3978	-0.014	-0.018	0.062	0.106	15.387940	-71.549550	-1277.61	-1243.54

## 2.4 Star Slots

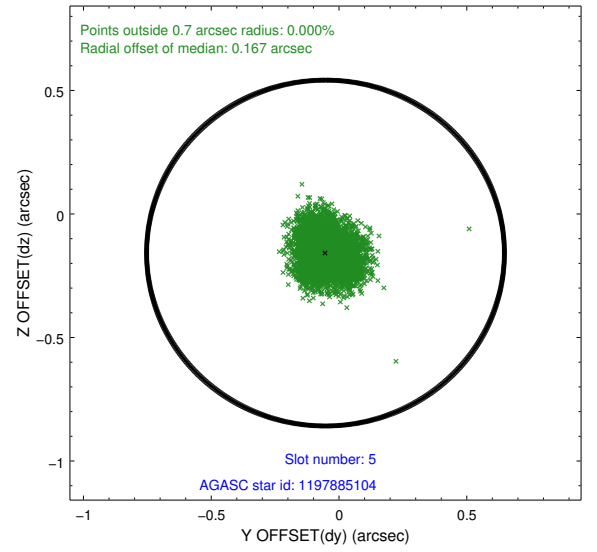
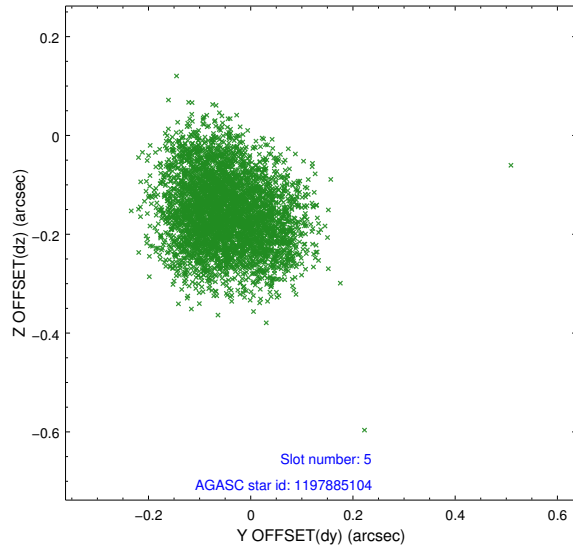
### 2.4.1 Slot 3



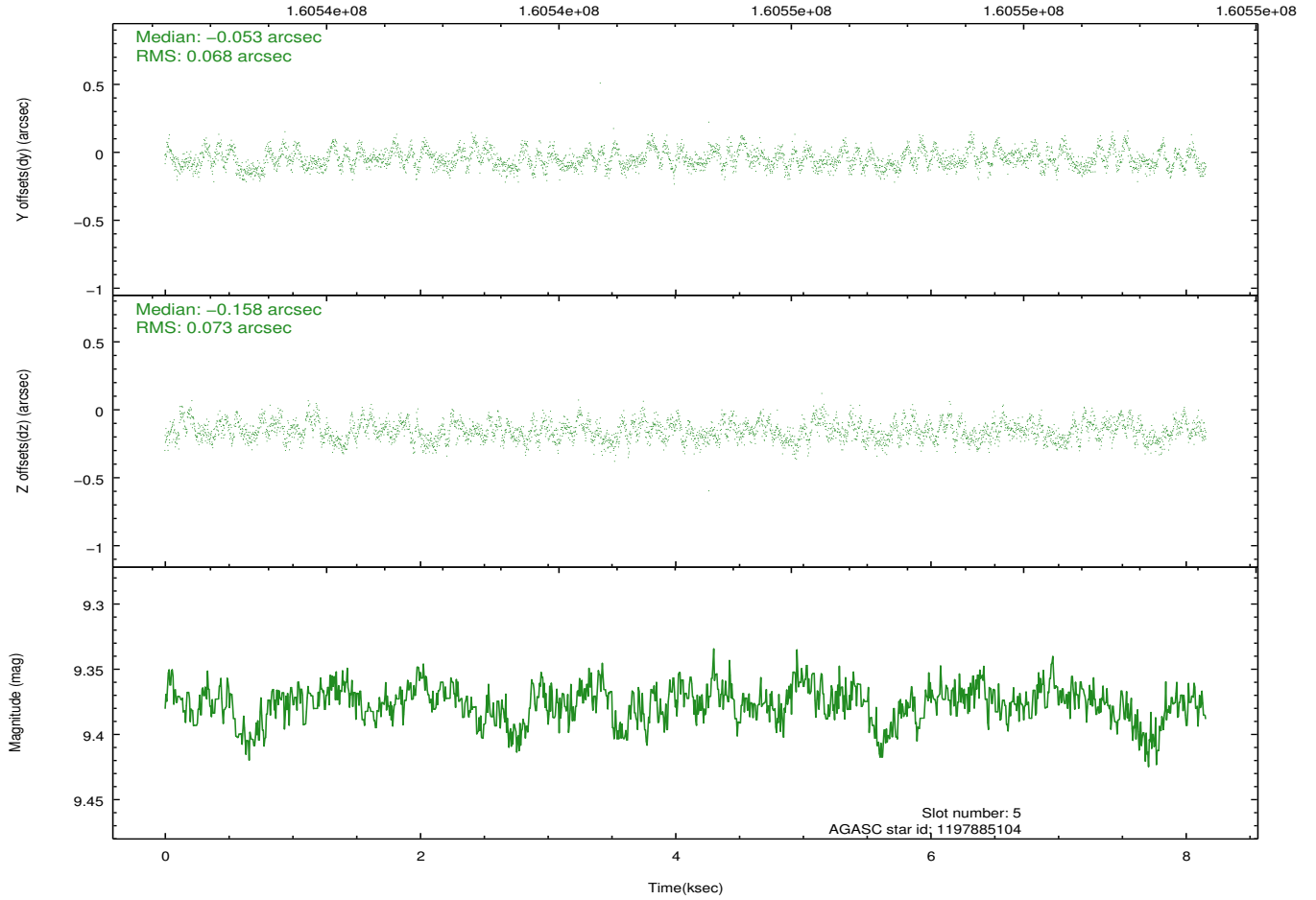
## 2.4.2 Slot 4



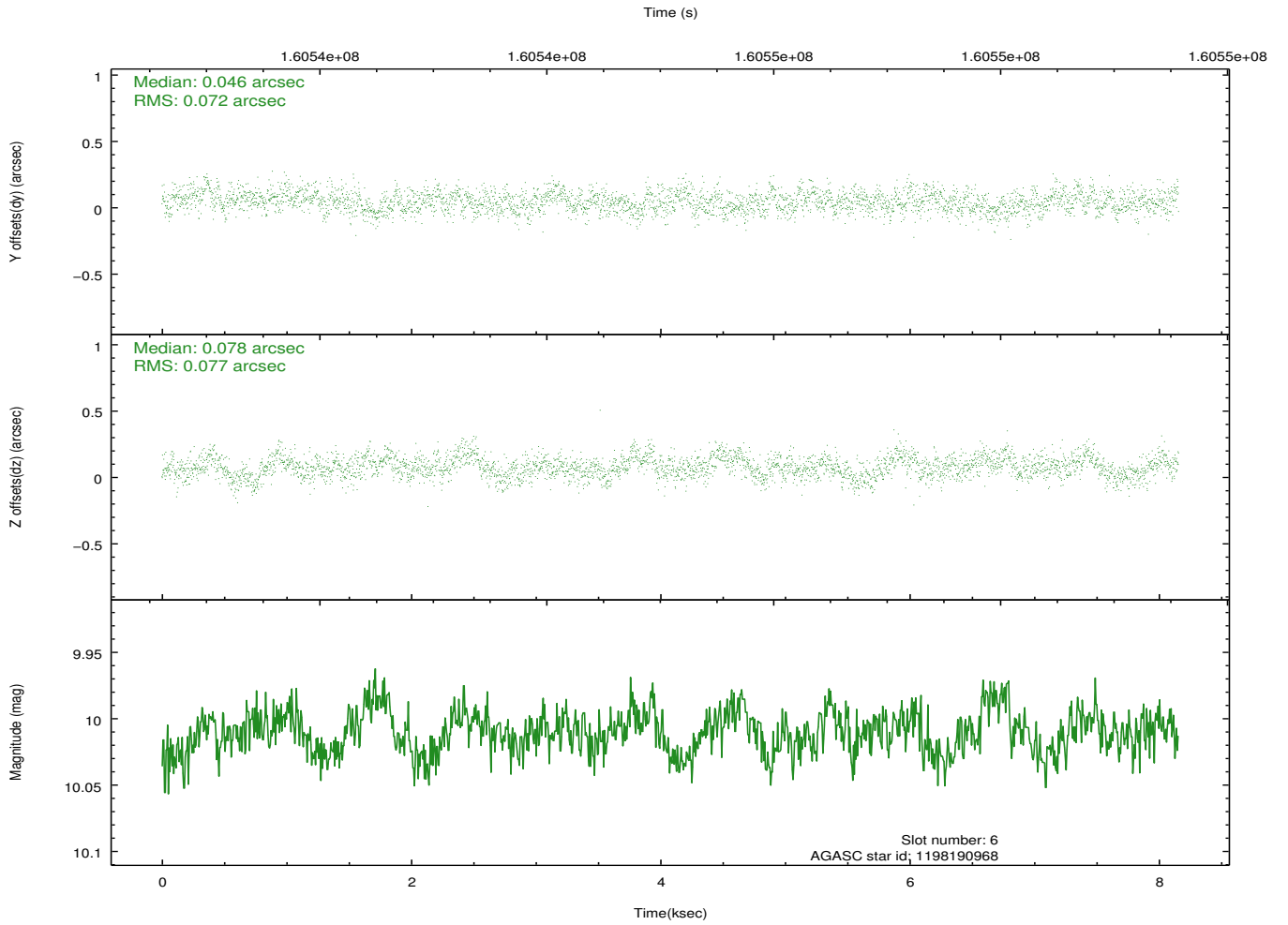
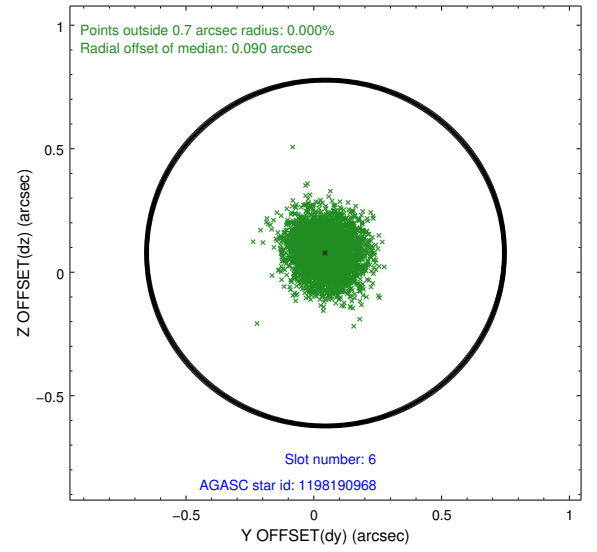
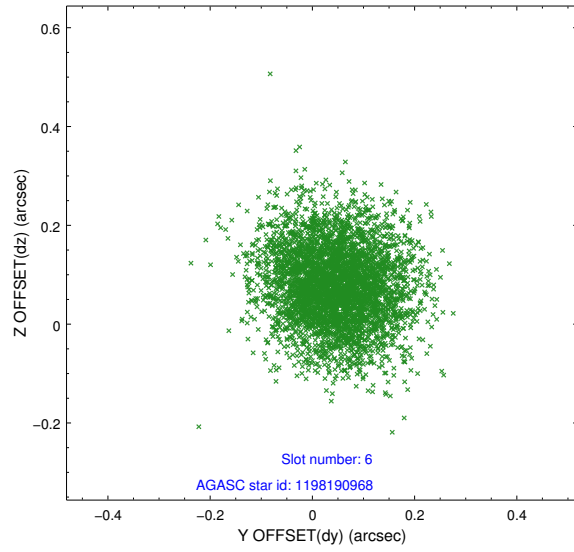
### 2.4.3 Slot 5



Time (s)

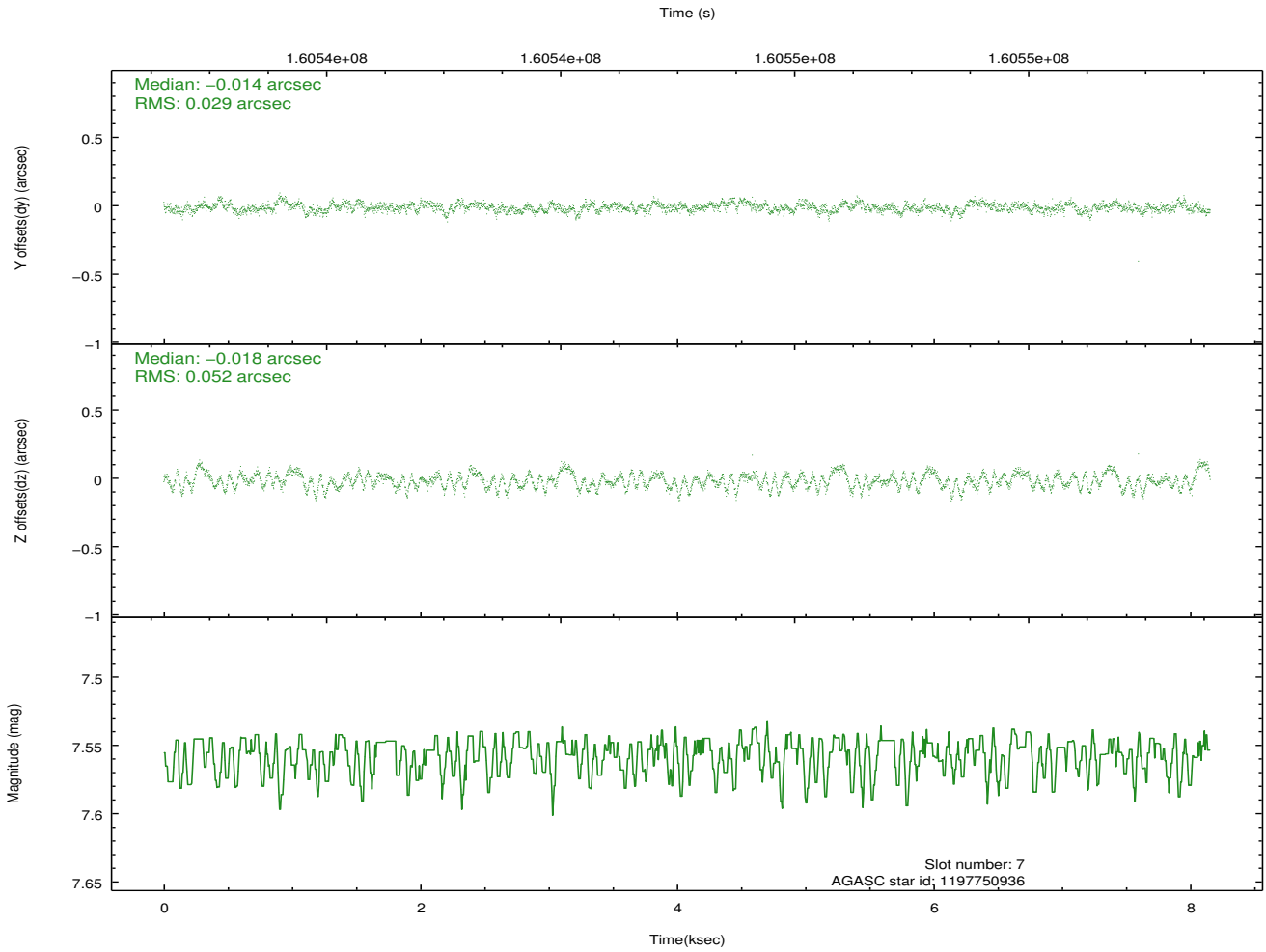
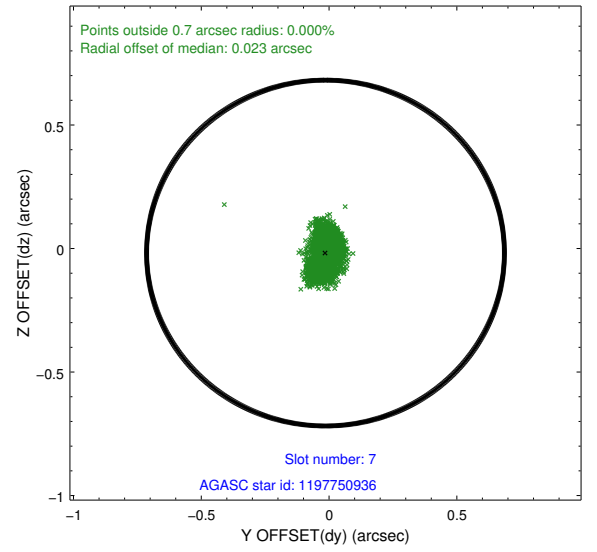
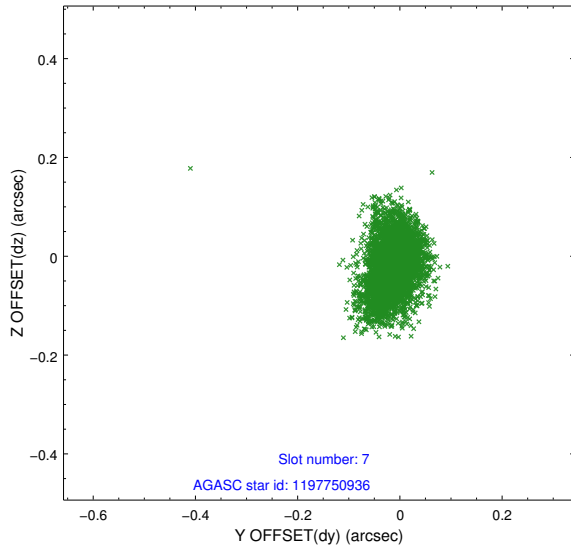


## 2.4.4 Slot 6



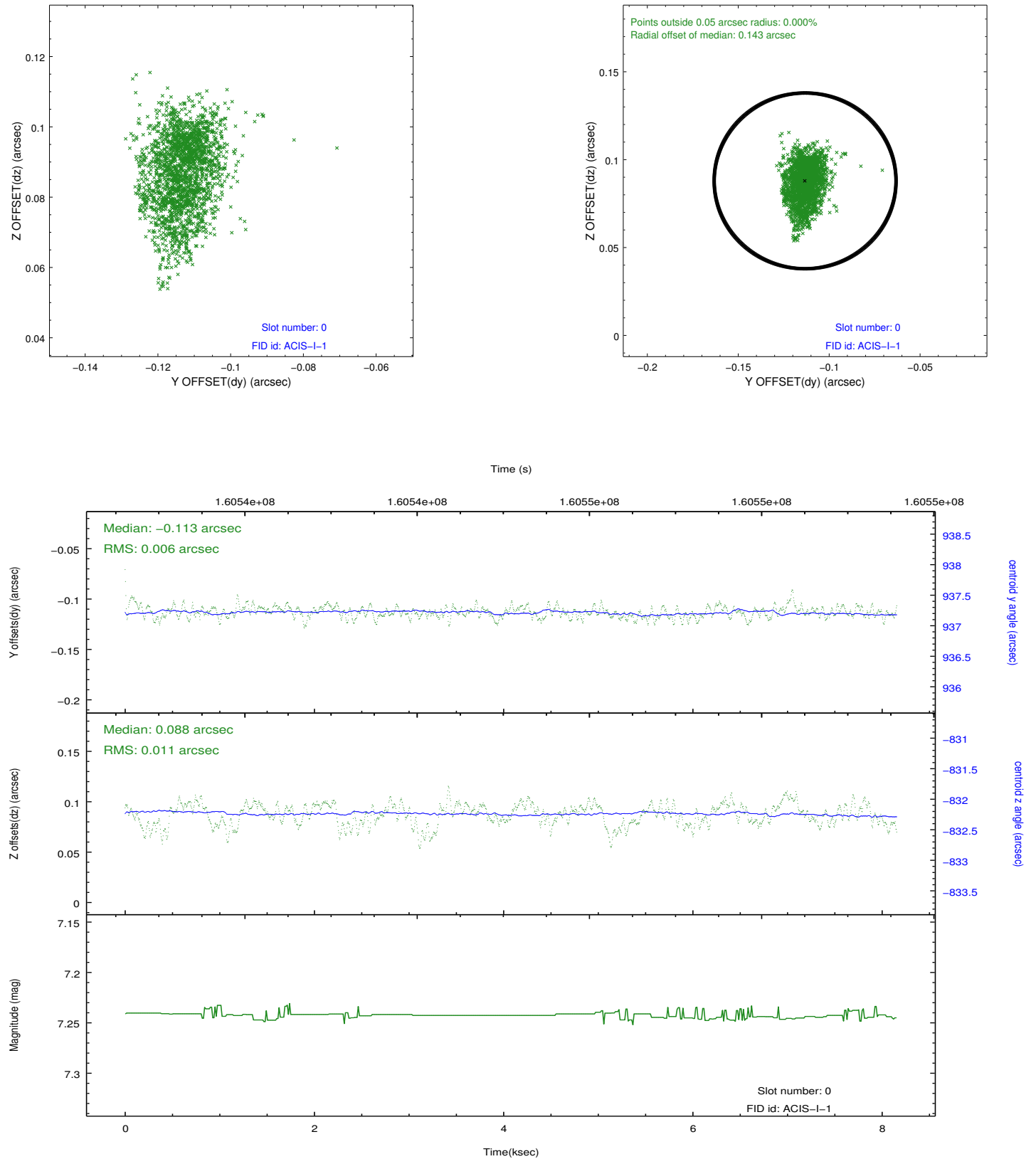


## 2.4.5 Slot 7

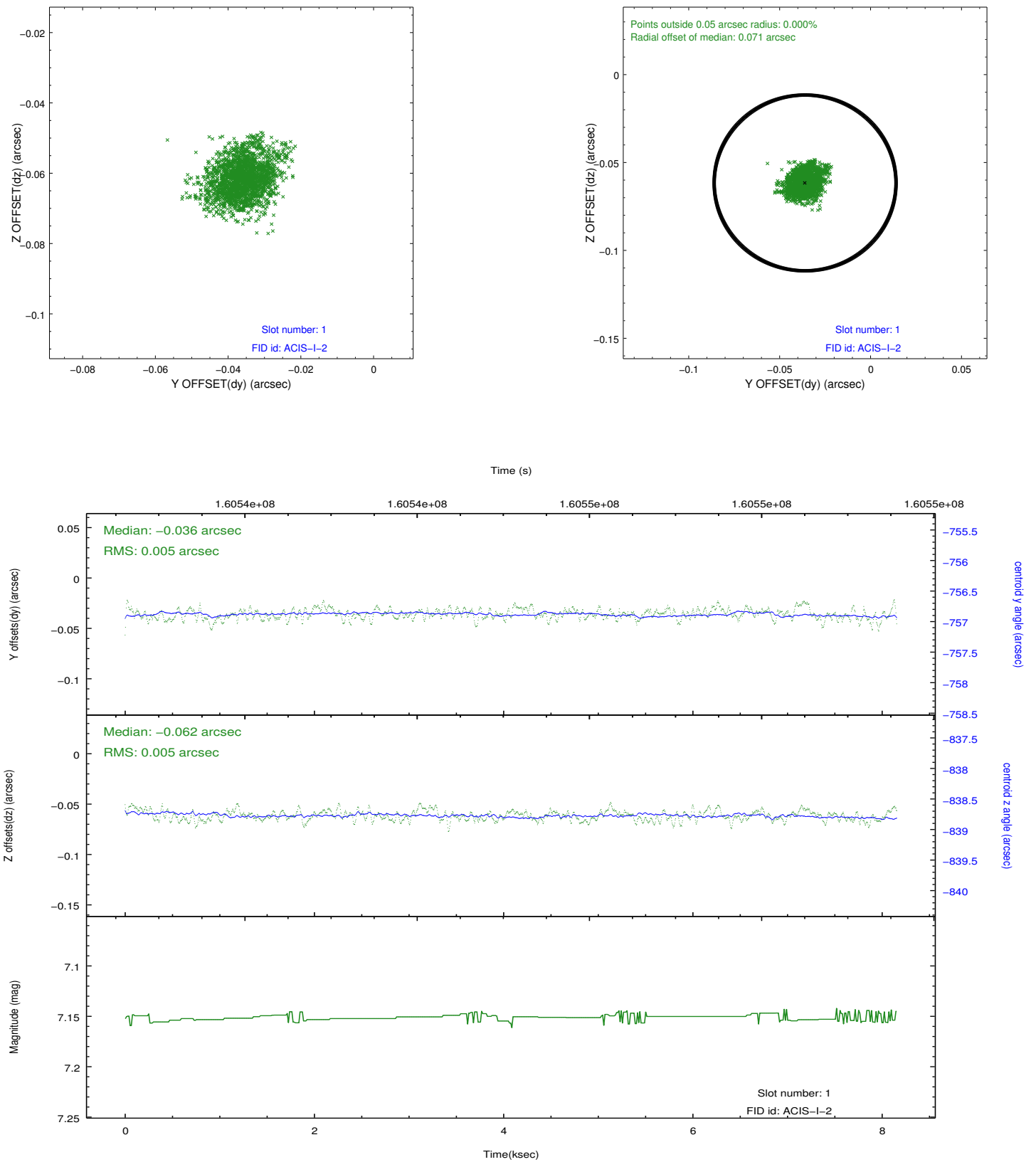


## 2.5 FID Slots

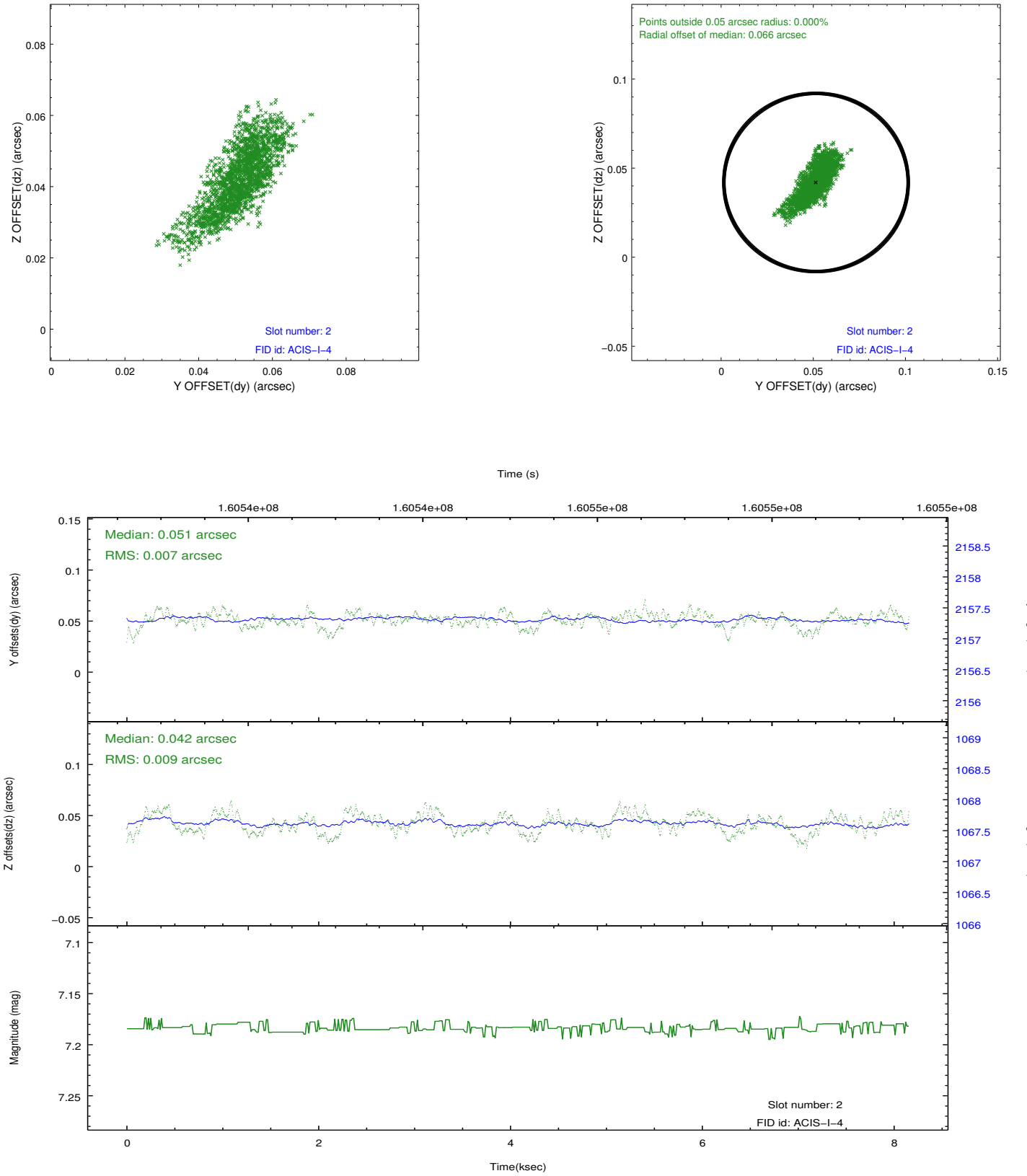
### 2.5.1 Slot 0



## 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)	2012.11.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.734

### A.2 Comments

Window constraint satisfied.