

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3539 - L2 Version 3  
Chandra X-Ray Center

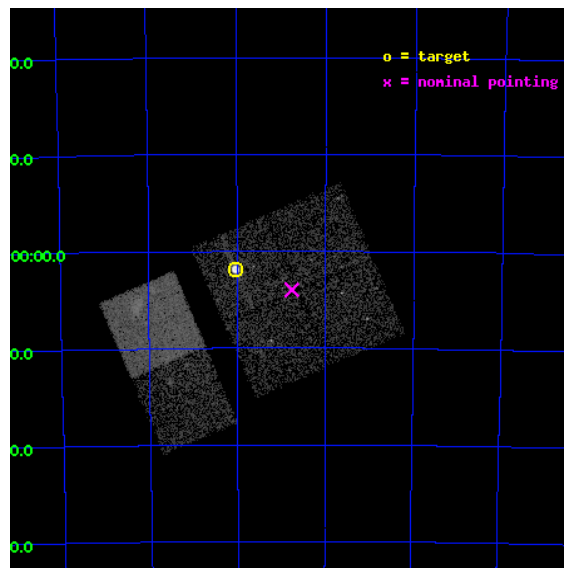
L2 Processing Date : Oct 22 2012

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# 1 Front

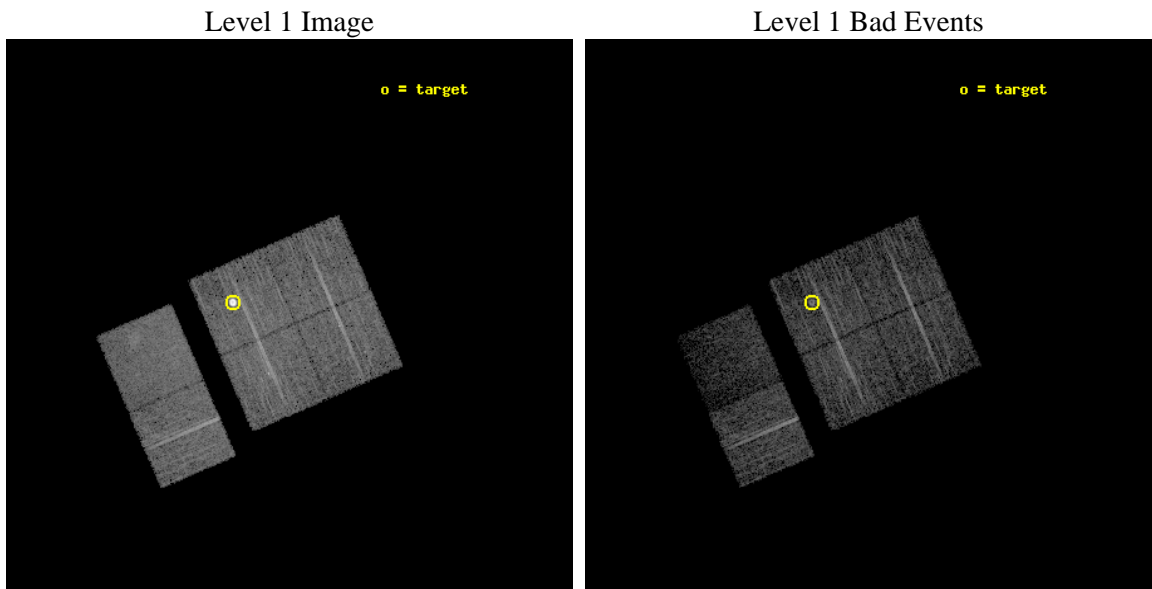
seq_num	590294	Sequence number
obs_id	3539	Observation id
title	AO4A ACIS-I CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[I3,-120,-4.0,4.5,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.68979051819	Nominal RA [deg]
dec_nom	-72.066607175207	Nominal Dec [deg]
roll_nom	246.63423251405	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7731.199971199	Sum of GTIs [s]
livetime	7633.302861994	Livetime [s]
ontime0	7731.199971199	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	59026	Number of level 2 events



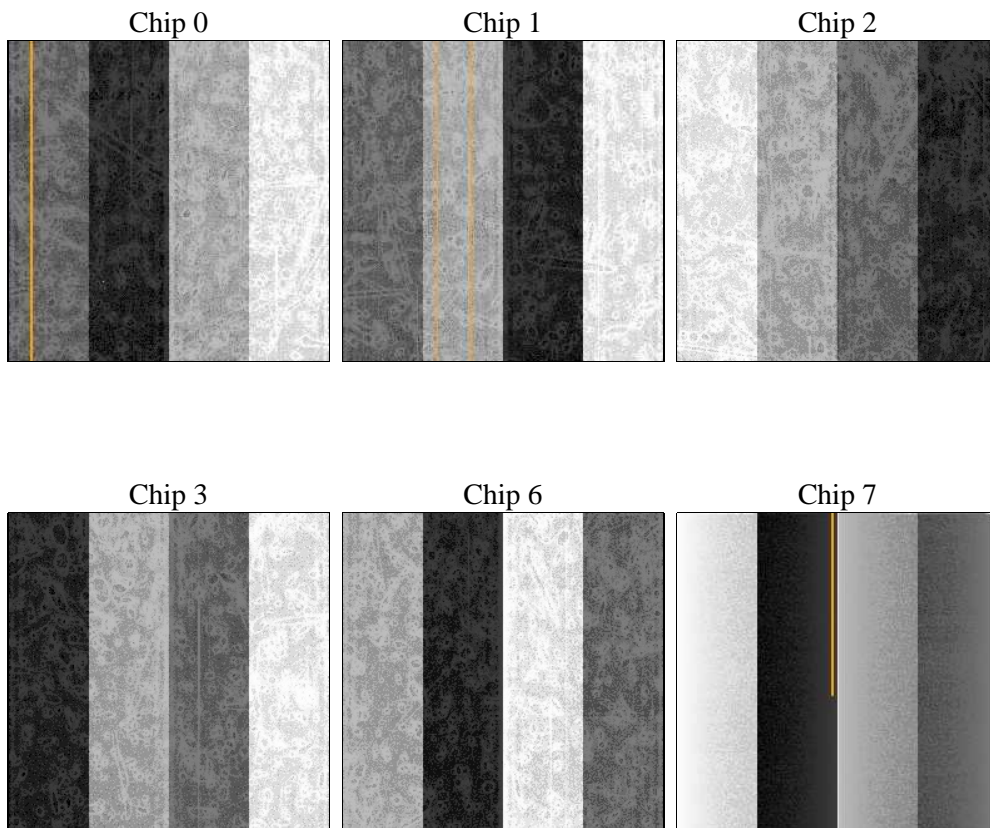
## 2 OBI

### 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]
caldsver	4.5.2	&#160	ontime0	7731.199971199	Sum of GTIs [s]
date	2012-10-22T04:01:01	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	246995	Number of level 1 events

### 2.1.4 Events

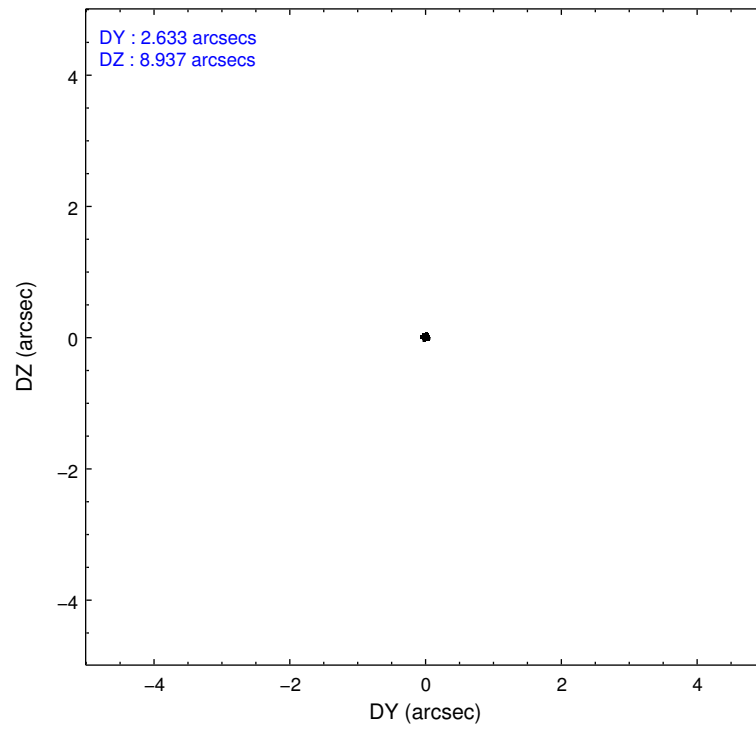
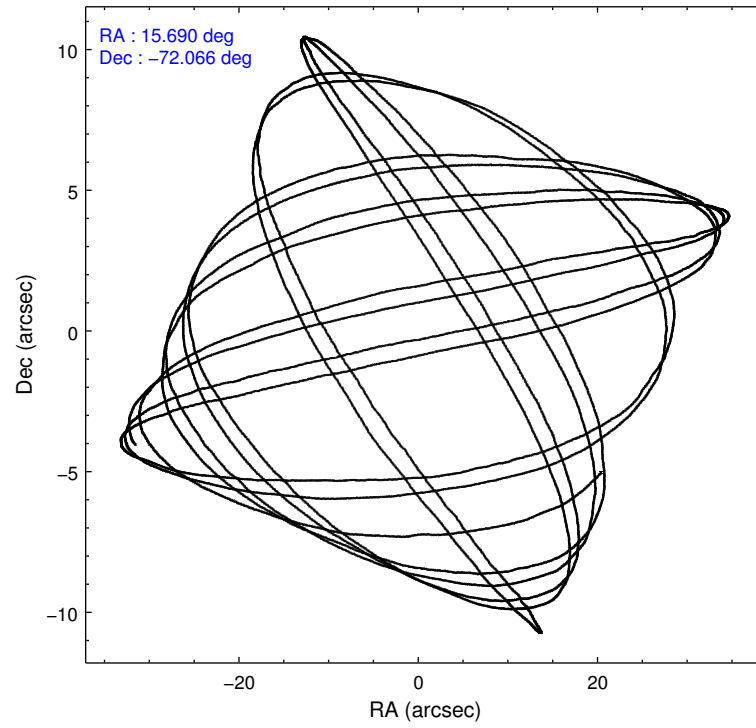
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	34681	34693	39648	62866	39146	35961	grade 0 events	1819	1615	1955	23231	1679	2243
rejected events	30544	30596	35436	34740	34984	17480		5%	4%	4%	36%	4%	6%
rejected %	88%	88%	89%	55%	89%	48%	grade 1 events	23	18	29	206	20	34
								0%	0%	0%	0%	0%	0%
							grade 2 events	895	820	856	2460	905	3939
								2%	2%	2%	3%	2%	10%
							grade 3 events	426	487	407	813	414	1875
								1%	1%	1%	1%	1%	5%
							grade 4 events	420	458	409	802	408	1796
								1%	1%	1%	1%	1%	4%
							grade 5 events	1078	1166	952	1284	1244	3673
								3%	3%	2%	2%	3%	10%
							grade 6 events	582	717	586	830	758	8633
								1%	2%	1%	1%	1%	24%
							grade 7 events	29438	29412	34454	33240	33718	13768
								84%	84%	86%	52%	86%	38%

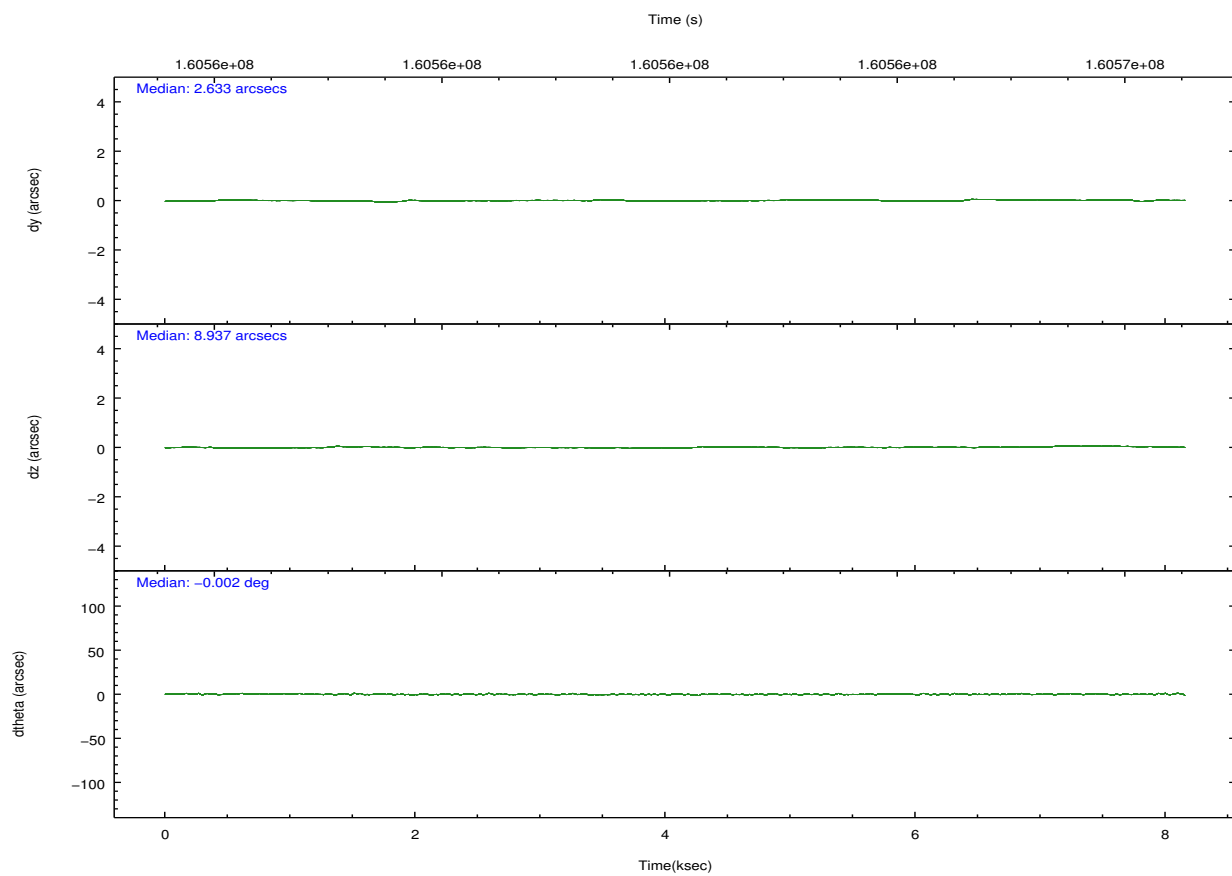
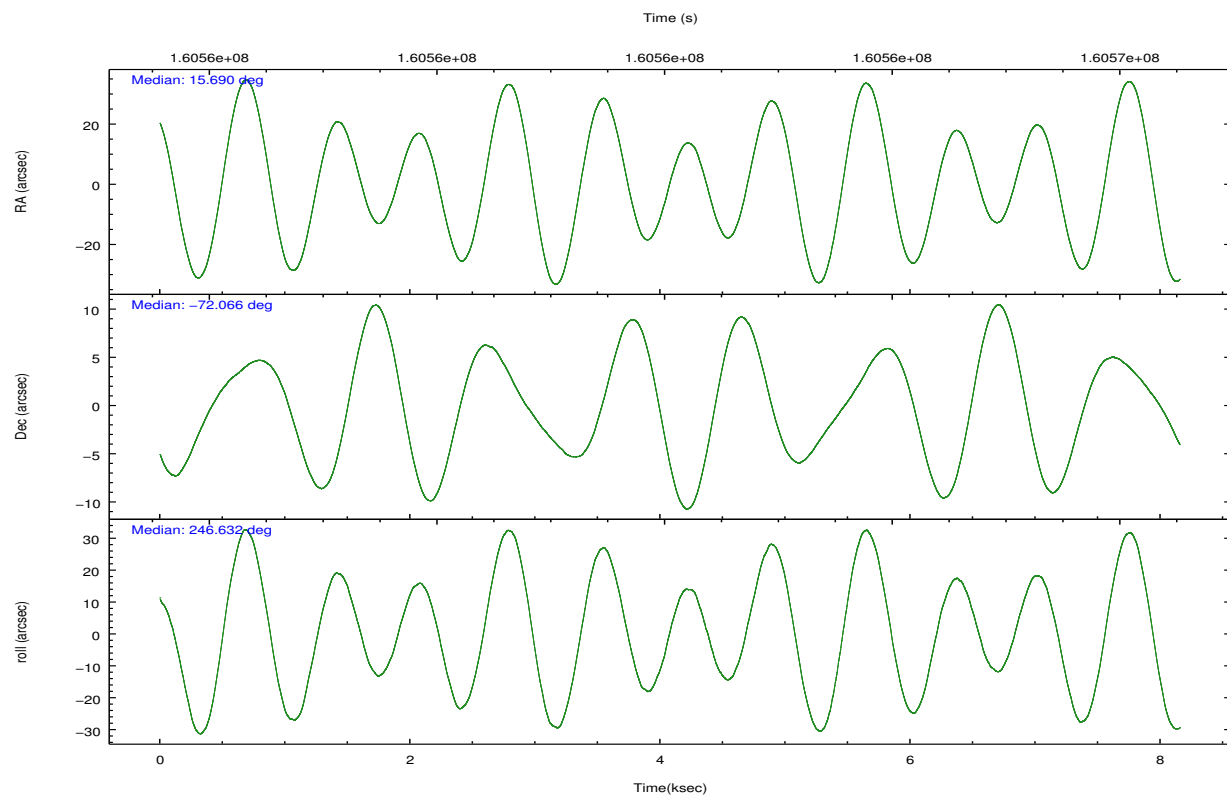


## 2.2 Compared Parameters

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	15.679241	15.68979051818976	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.039435	-72.06660717520683	Alternating exposures requested	N	N
[deg] Pointing Roll	246.415518	246.634232514045	[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)	160558154.184000	160557778.14664			
Observation start date	2003-02-02T07:28:10	2003-02-02T07:22:58			
[s] Observation end time (MET)	160566127.184000	160566261.047			
Observation end date	2003-02-02T09:41:03	2003-02-02T09:44:21			
Read mode	TIMED	TIMED			

## 2.3 Aspect



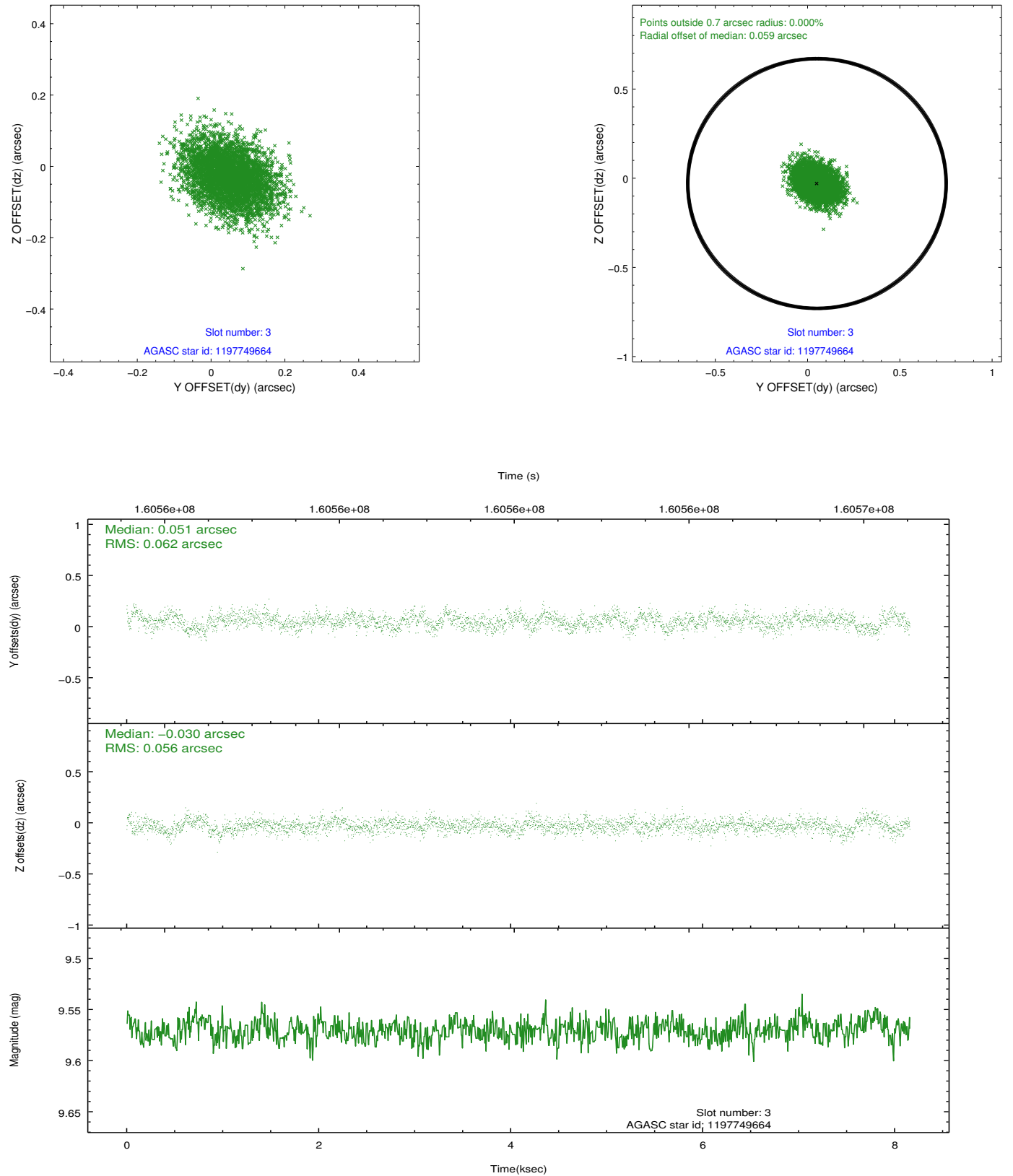


### Slot Statistics

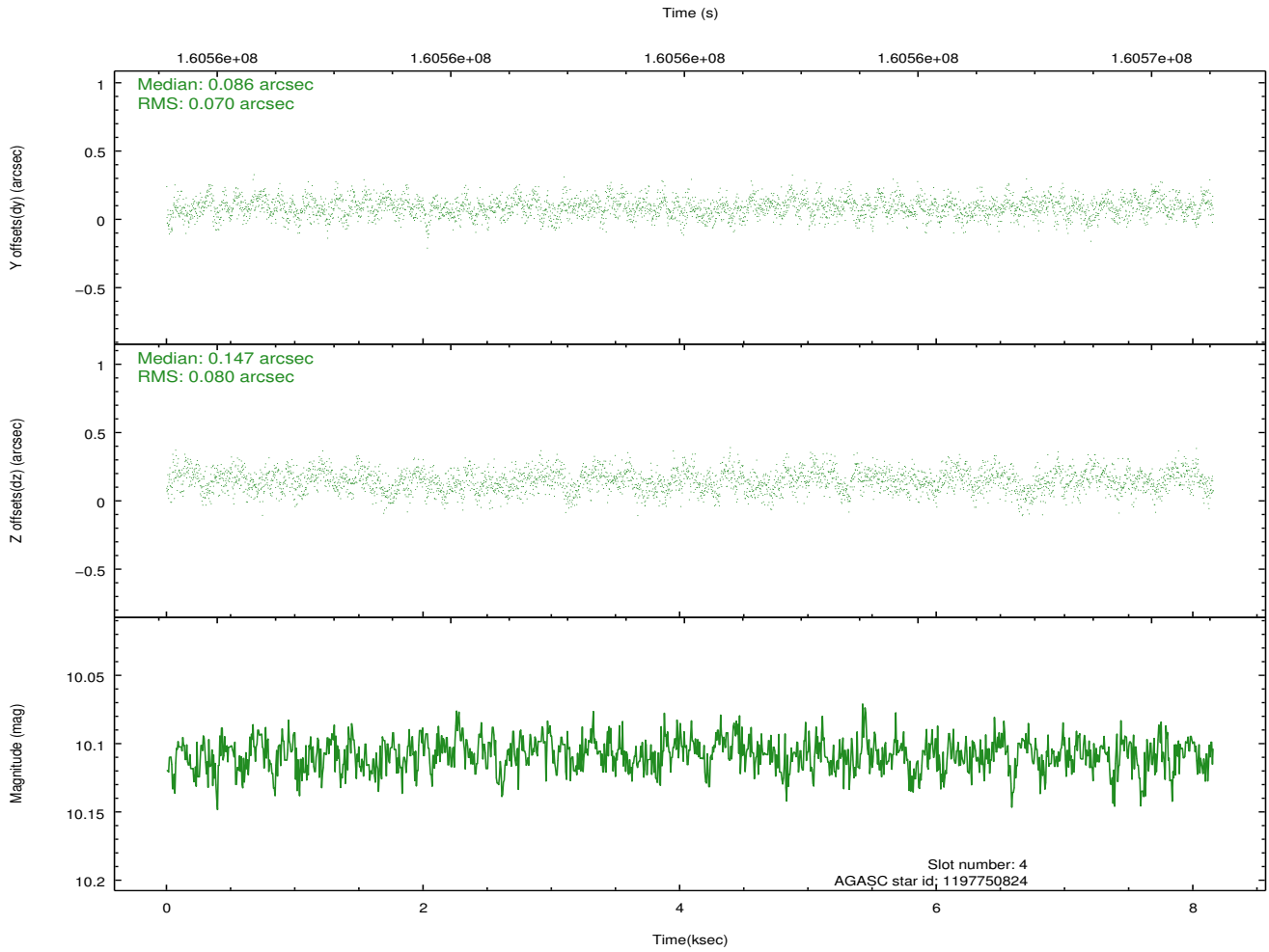
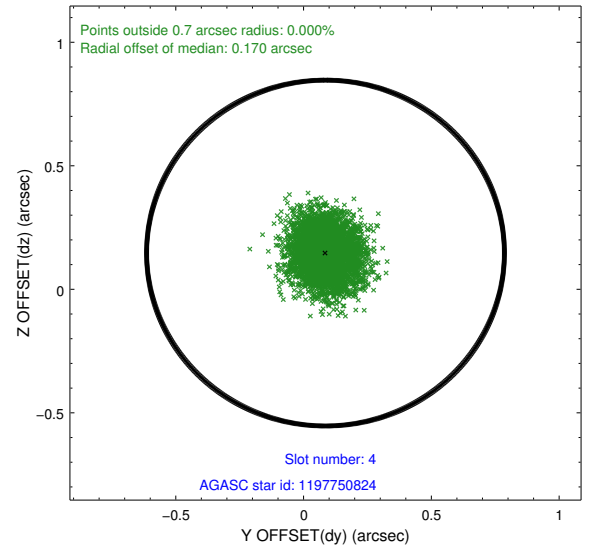
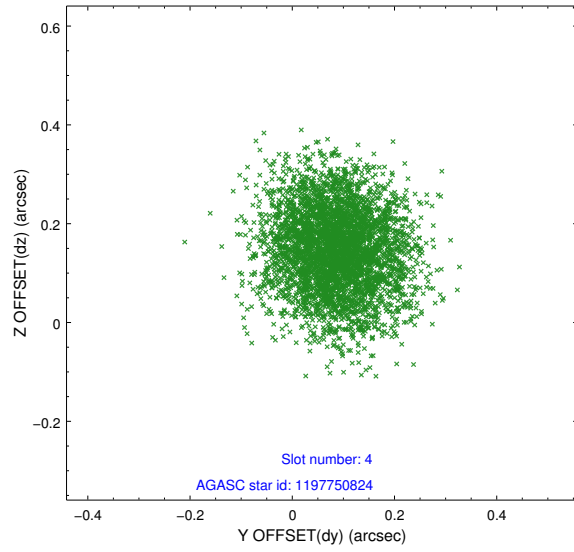
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	1990	-0.034	0.066	0.006	0.012	0.000000	0.000000	937.14	-832.31
1	FID	ACIS-I-5	7.24	1990	-0.058	0.023	0.006	0.010	0.000000	0.000000	-1810.62	1064.77
2	FID	ACIS-I-6	7.26	1989	-0.000	-0.018	0.007	0.011	0.000000	0.000000	401.96	1710.03
3	GUIDE	1197749664	9.57	3979	0.051	-0.030	0.088	0.147	15.809015	-72.366369	1022.40	601.06
4	GUIDE	1197750824	10.11	3974	0.086	0.147	0.114	0.183	14.791487	-71.393477	-1715.73	-1861.41
5	GUIDE	1197884536	8.51	3978	0.049	0.017	0.068	0.110	17.160729	-71.835289	-1320.18	1237.63
6	GUIDE	1197885328	7.23	3980	0.013	-0.123	0.056	0.084	16.283090	-71.733943	-1277.73	186.50
7	GUIDE	1198189696	7.37	3979	-0.196	-0.010	0.049	0.075	15.223750	-72.697522	2367.77	502.21

## 2.4 Star Slots

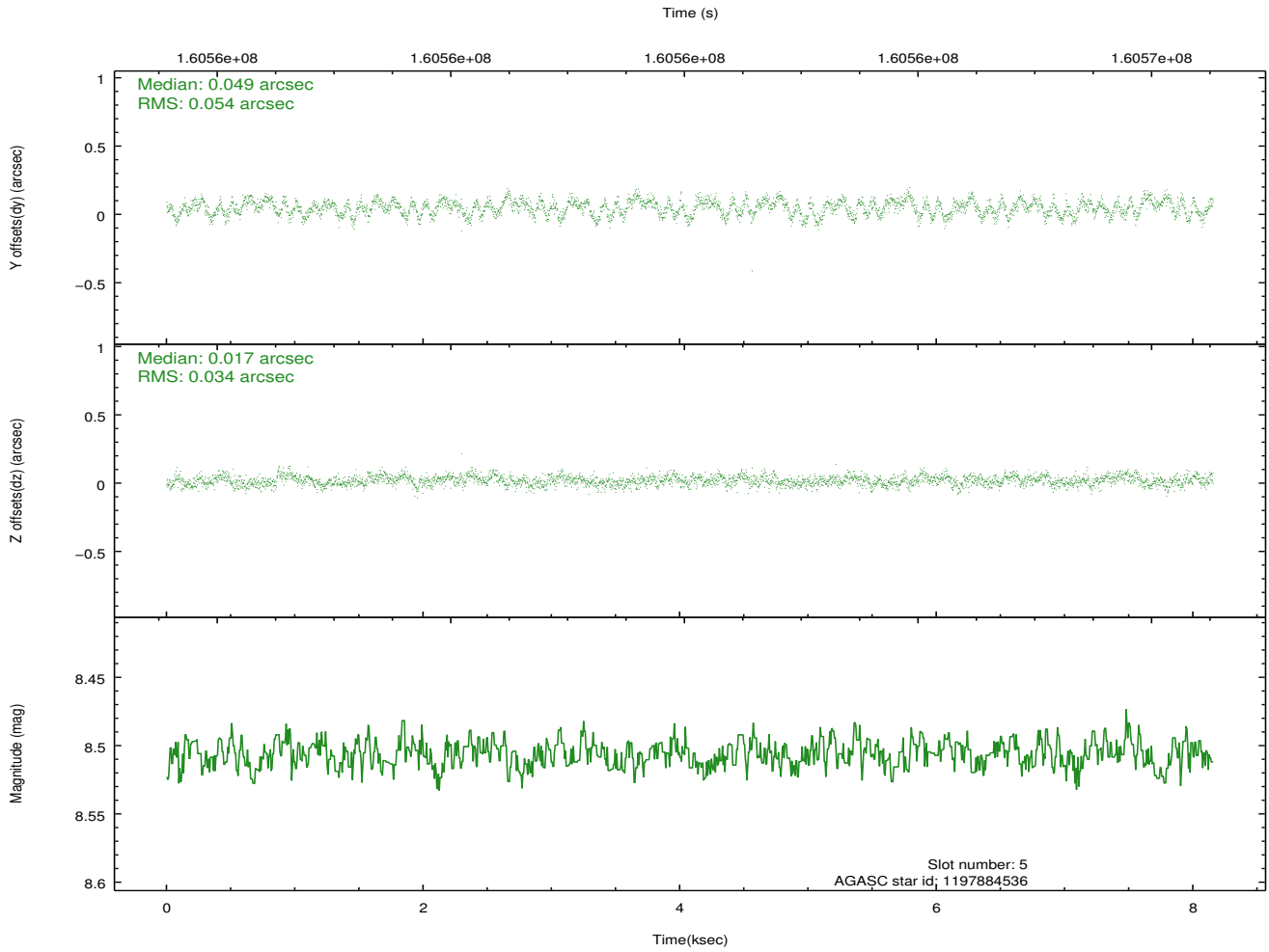
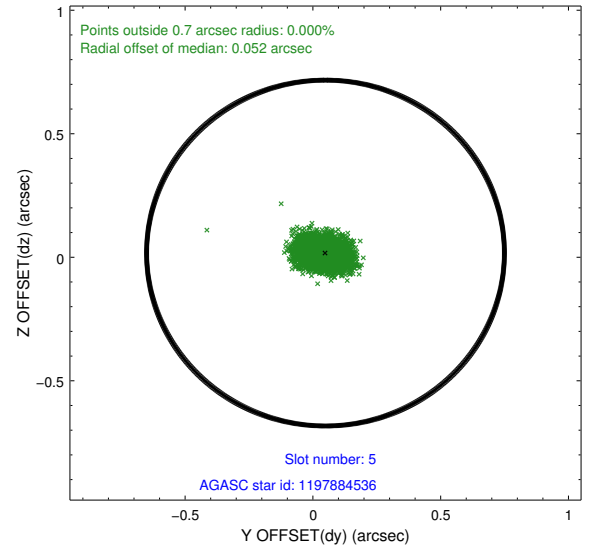
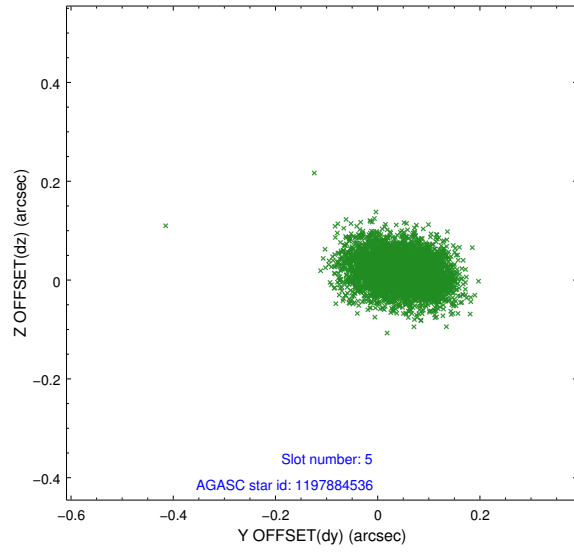
### 2.4.1 Slot 3



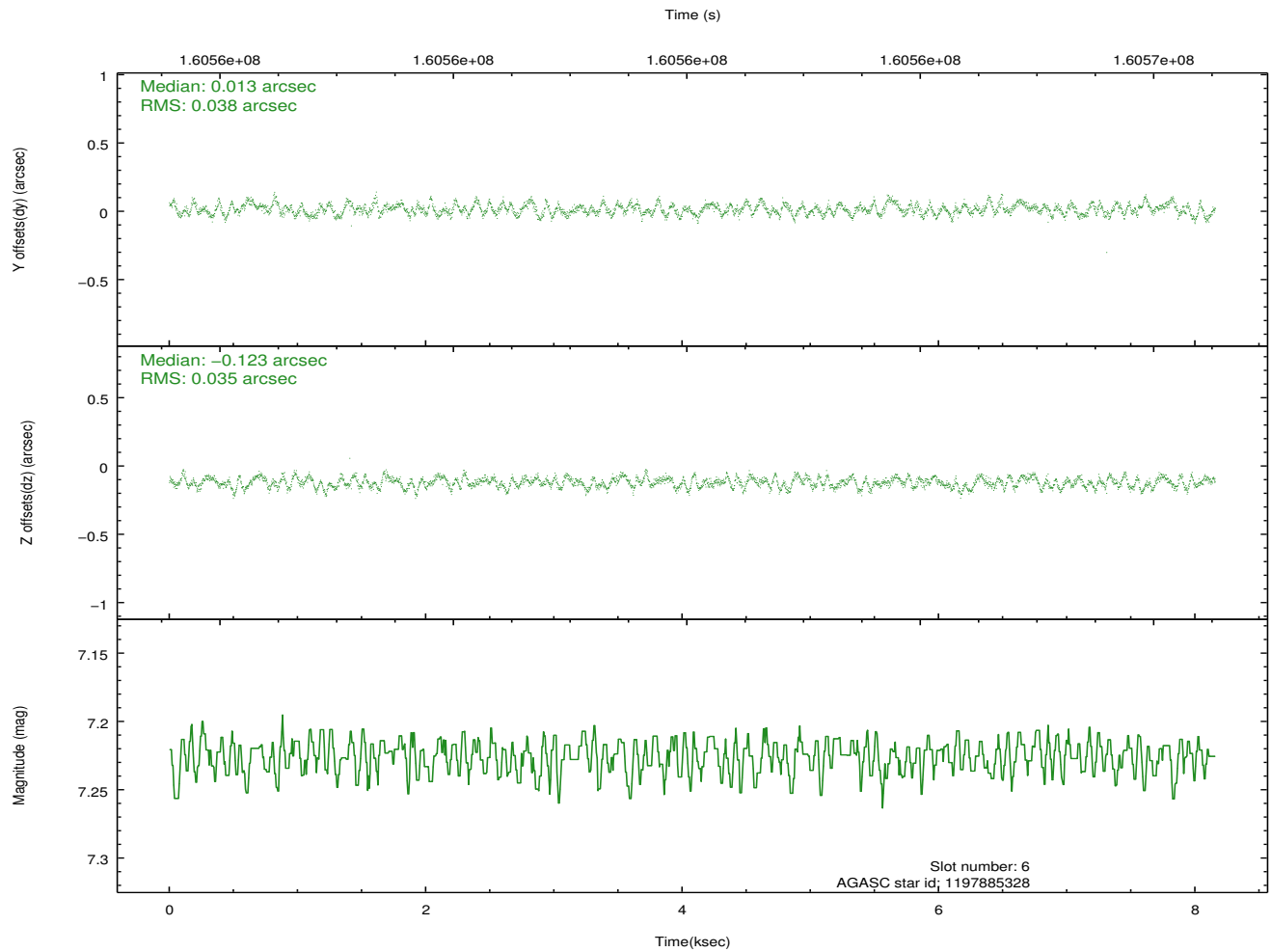
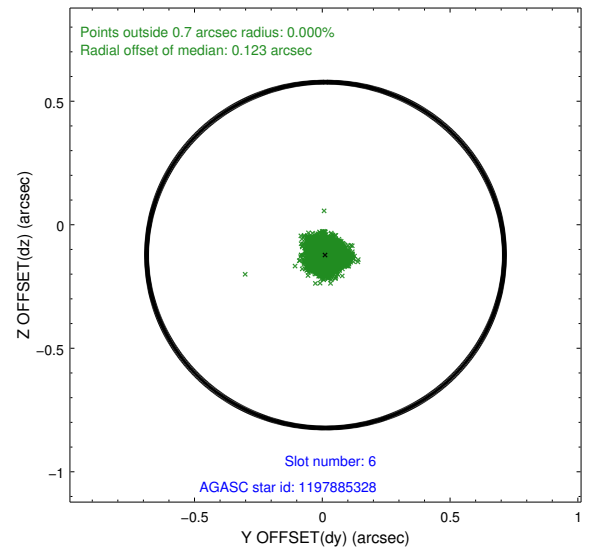
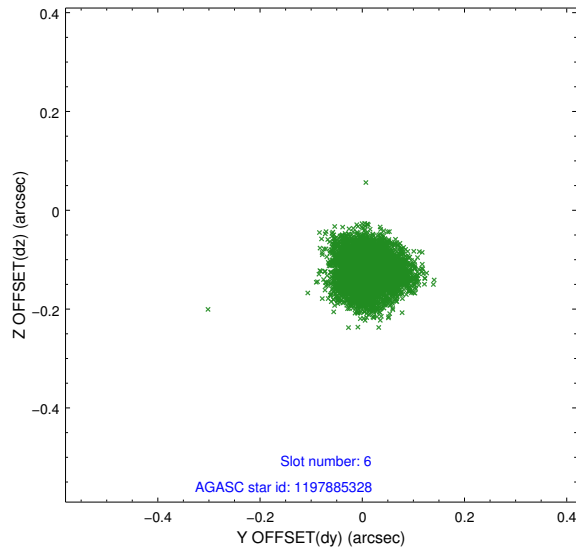
## 2.4.2 Slot 4



### 2.4.3 Slot 5

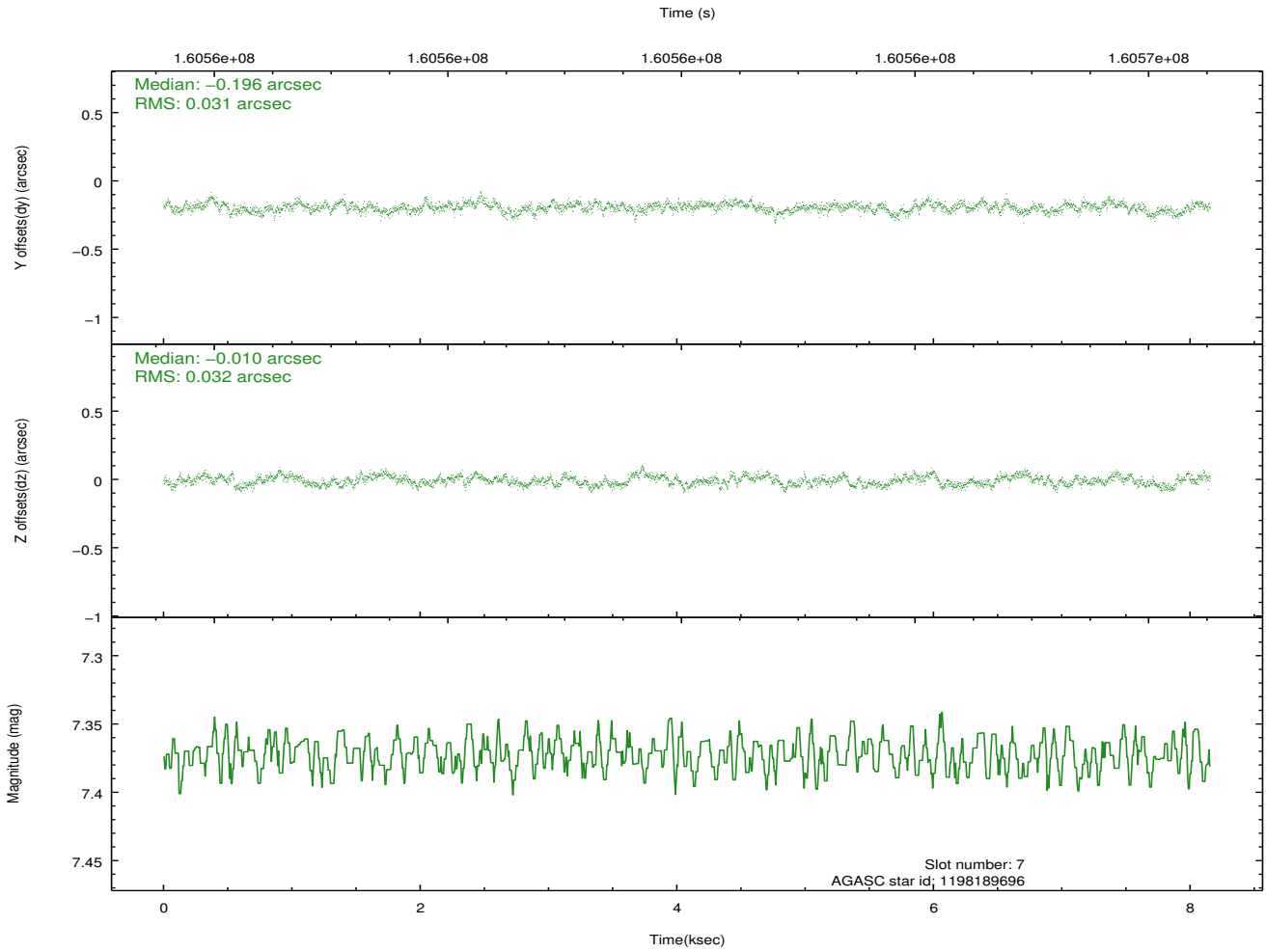
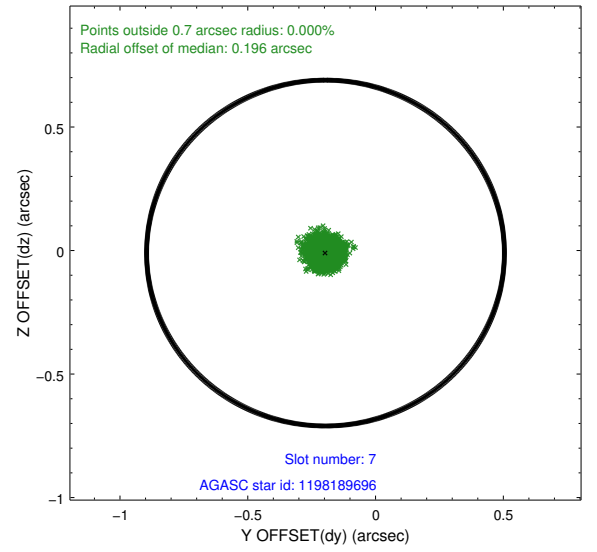
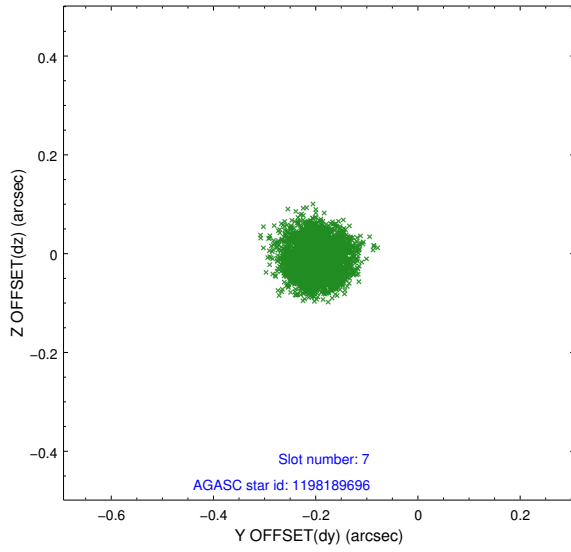


## 2.4.4 Slot 6



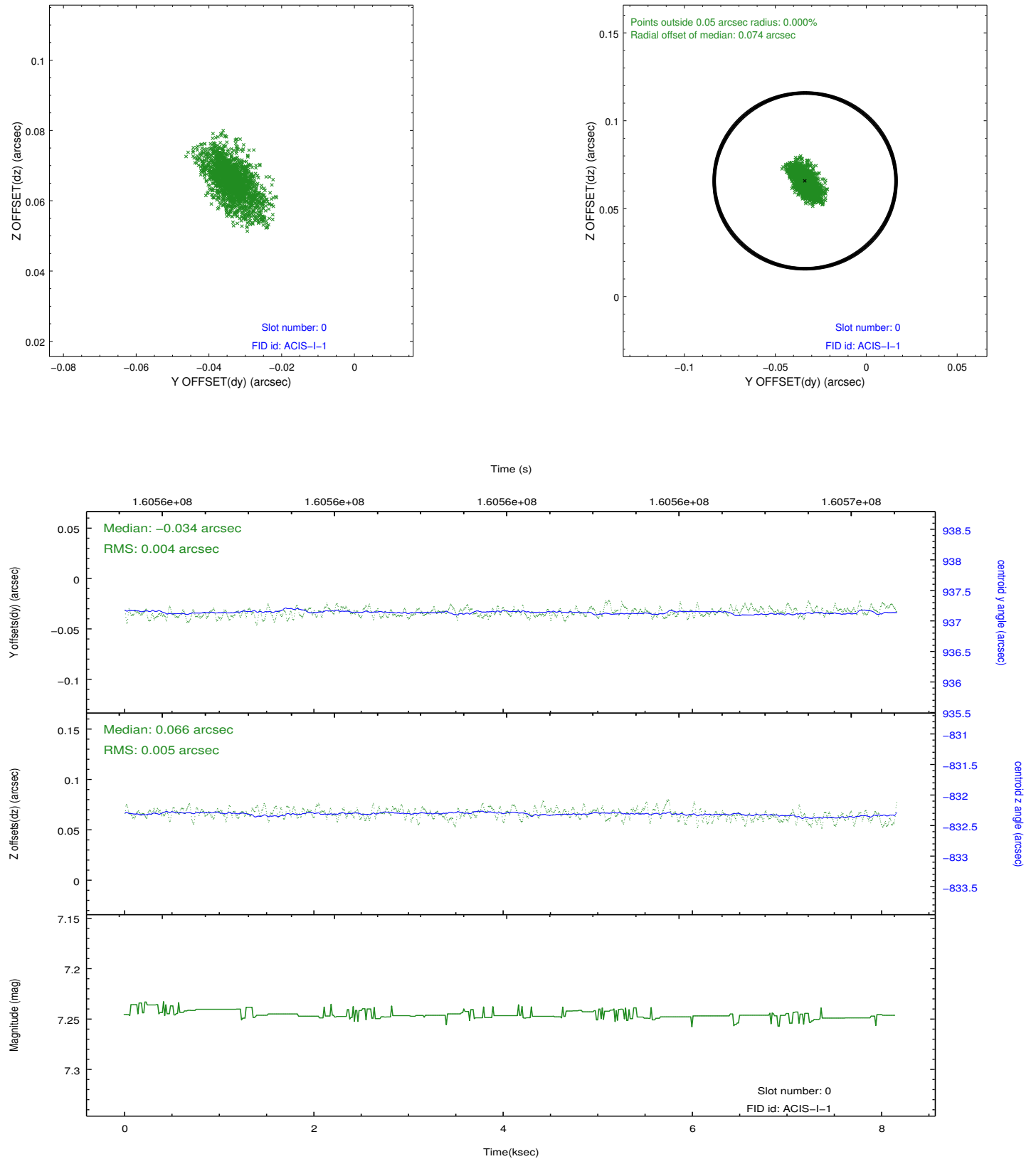


## 2.4.5 Slot 7

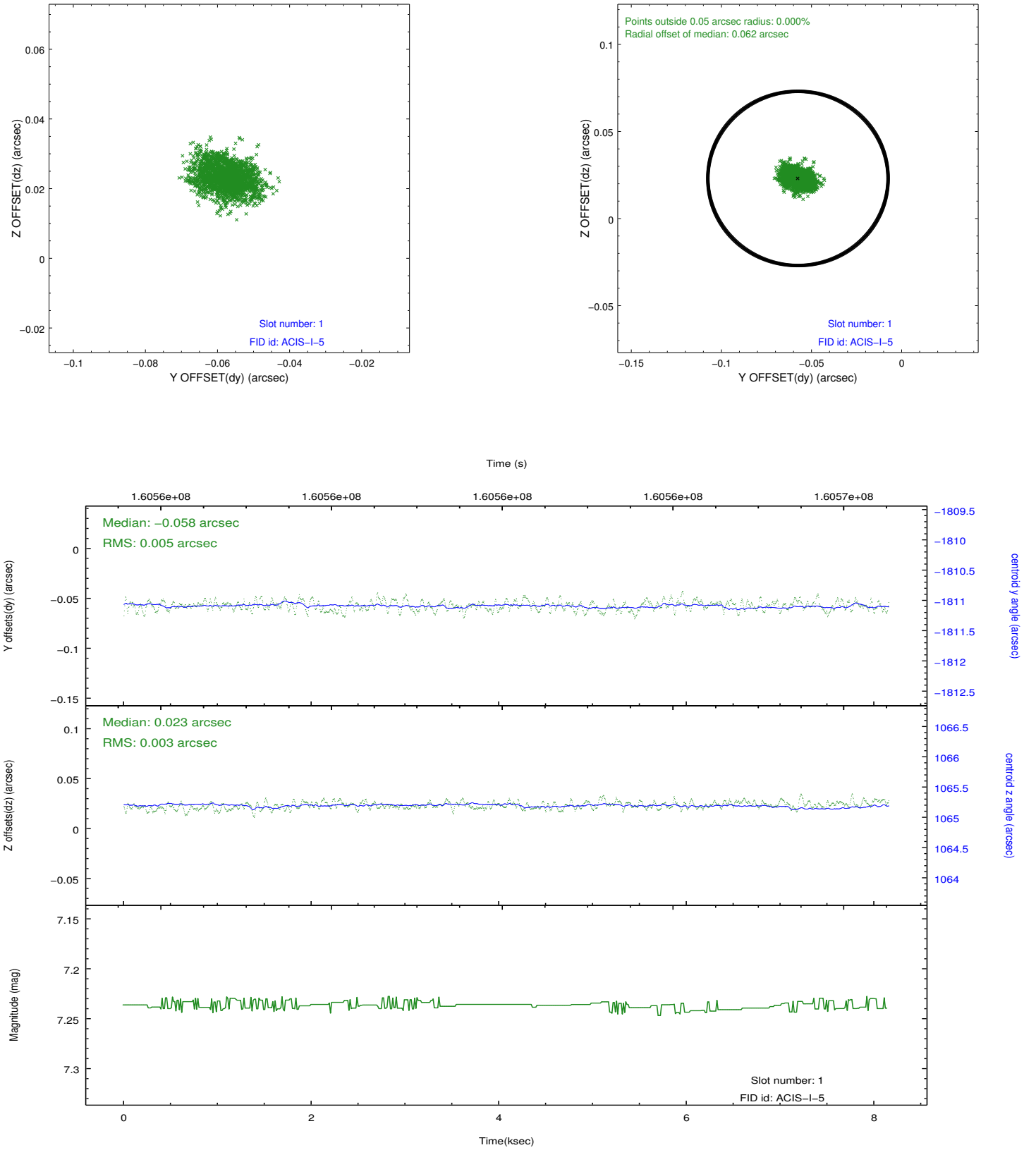


## 2.5 FID Slots

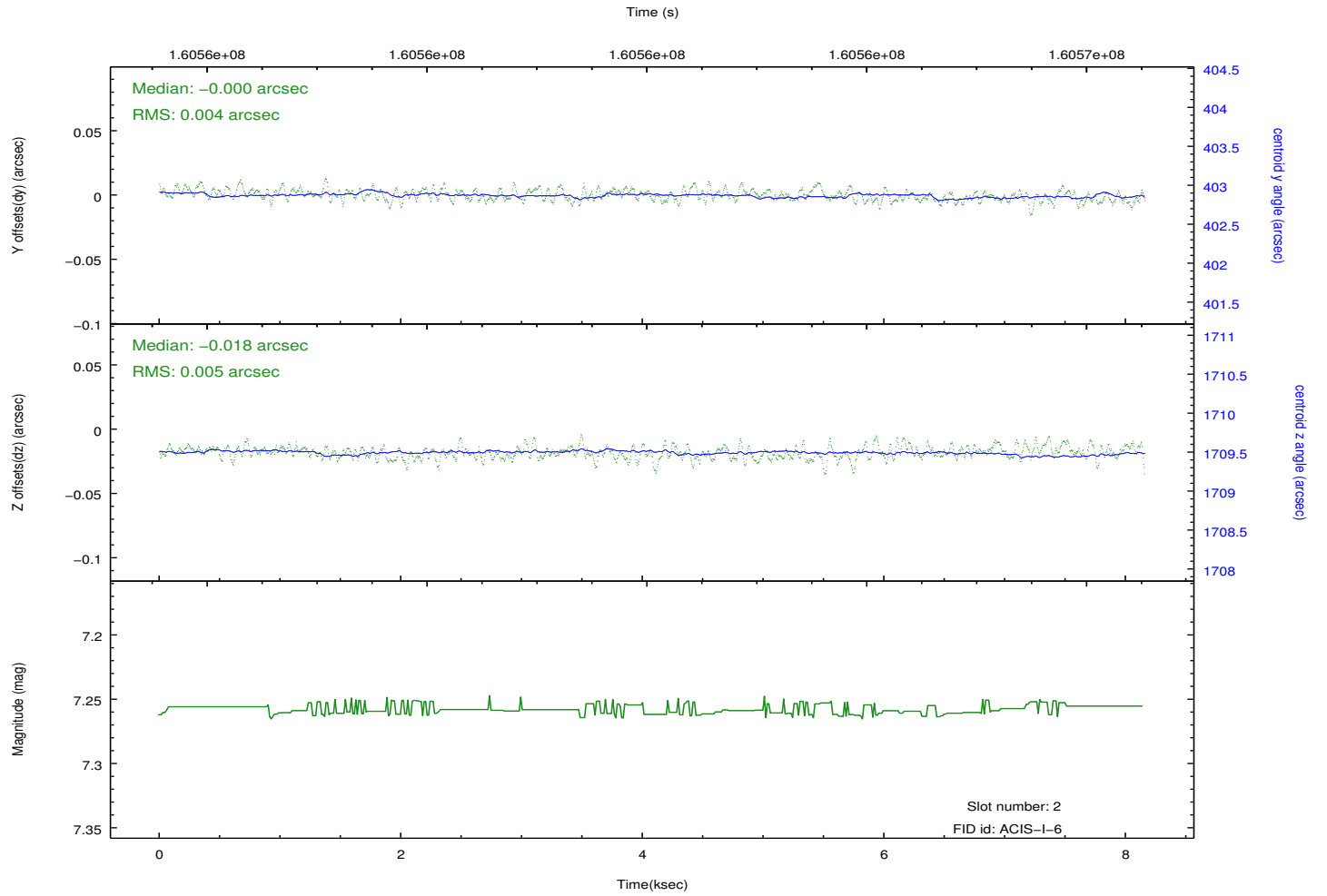
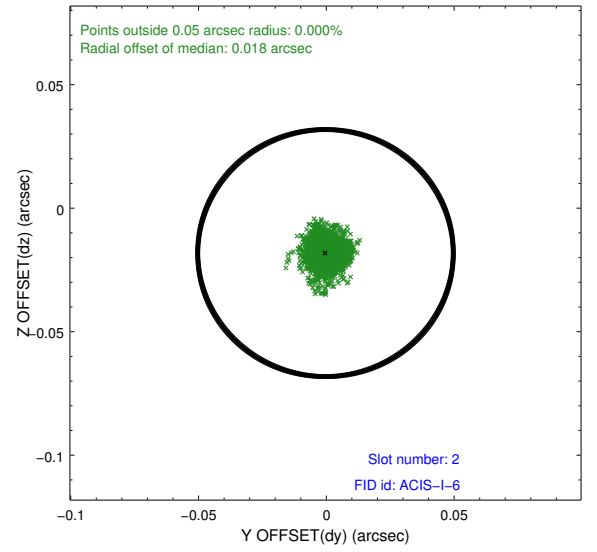
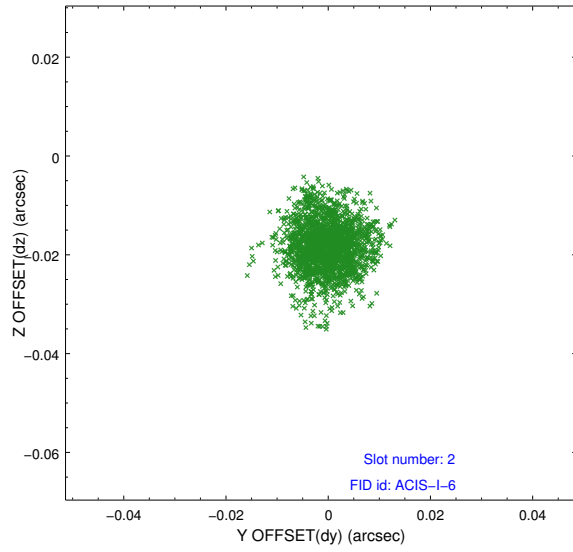
### 2.5.1 Slot 0



## 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)	2012.11.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.735

### A.2 Comments

Window constraint met.