

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3542 - L2 Version 3  
Chandra X-Ray Center

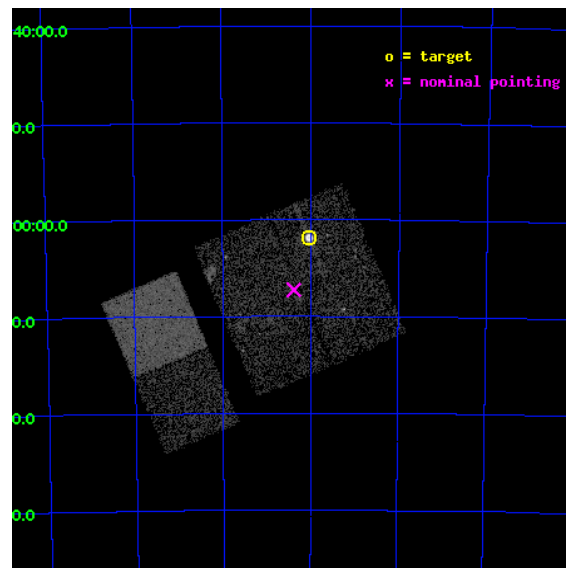
L2 Processing Date : Oct 22 2012

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# 1 Front

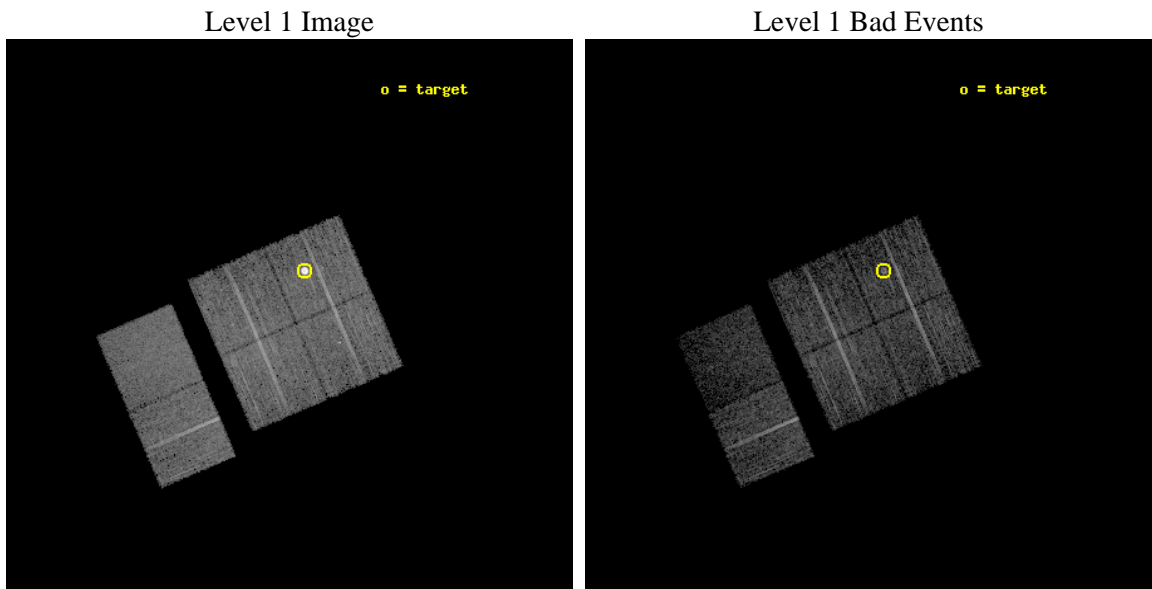
seq_num	590297	Sequence number
obs_id	3542	Observation id
title	AO4A ACIS-I CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[I1,-120,-4.0,-3.68,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.095268113787	Nominal RA [deg]
dec_nom	-72.120828199392	Nominal Dec [deg]
roll_nom	246.69704617415	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	57803	Number of level 2 events



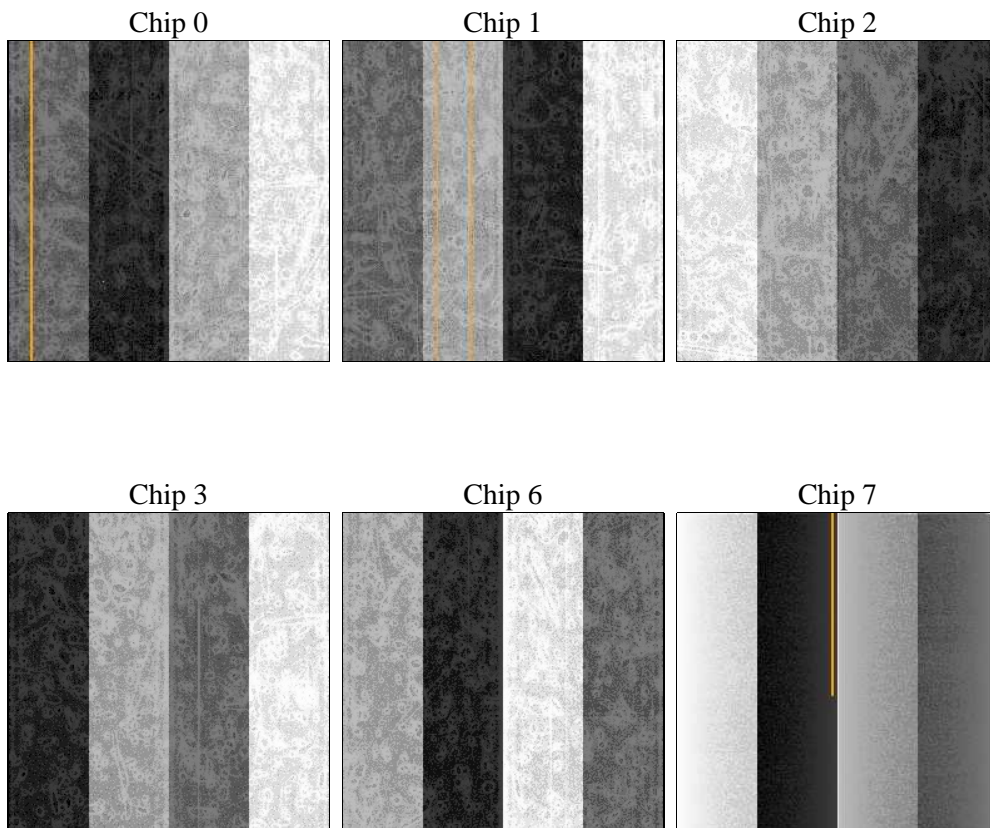
## 2 OBI

### 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	2012-10-22T04:01:58	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	245253	Number of level 1 events

### 2.1.4 Events

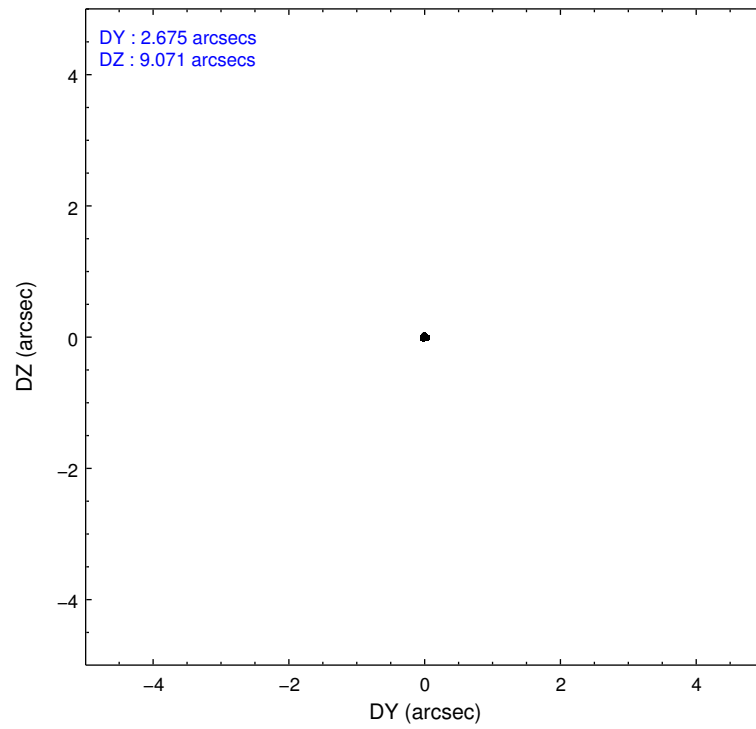
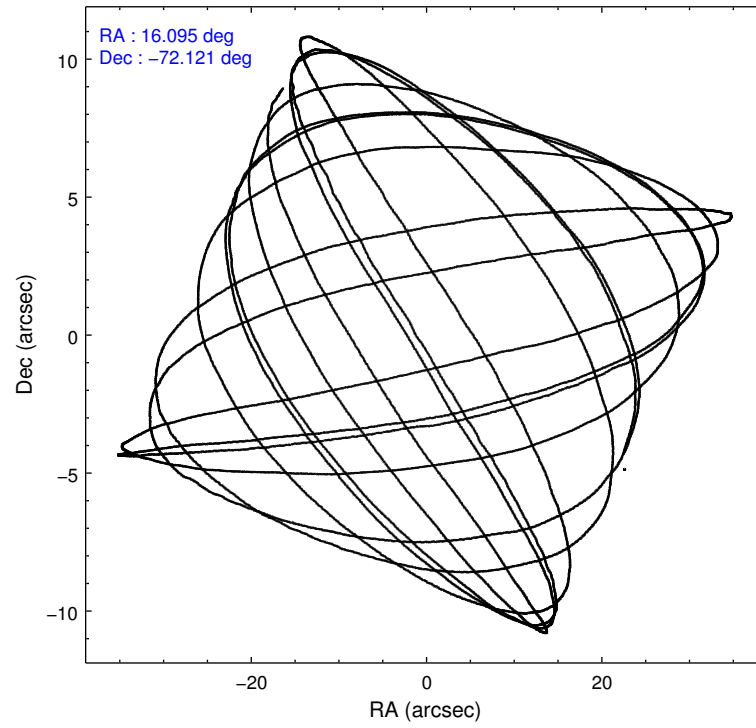
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	36119	60414	39643	36290	37568	35219	grade 0 events	1830	23600	1881	2007	1516	1838
rejected events	31825	31557	35528	32052	33724	17811		5%	39%	4%	5%	4%	5%
rejected %	88%	52%	89%	88%	89%	50%	grade 1 events	21	198	18	21	15	51
								0%	0%	0%	0%	0%	0%
							grade 2 events	936	2652	798	761	806	3765
								2%	4%	2%	2%	2%	10%
							grade 3 events	462	898	445	424	422	1709
								1%	1%	1%	1%	1%	4%
							grade 4 events	408	864	383	424	406	1727
								1%	1%	0%	1%	1%	4%
							grade 5 events	1106	1203	1012	1170	1249	3698
								3%	1%	2%	3%	3%	10%
							grade 6 events	661	860	612	623	695	8377
								1%	1%	1%	1%	1%	23%
							grade 7 events	30695	30139	34494	30860	32459	14054
								84%	49%	87%	85%	86%	39%

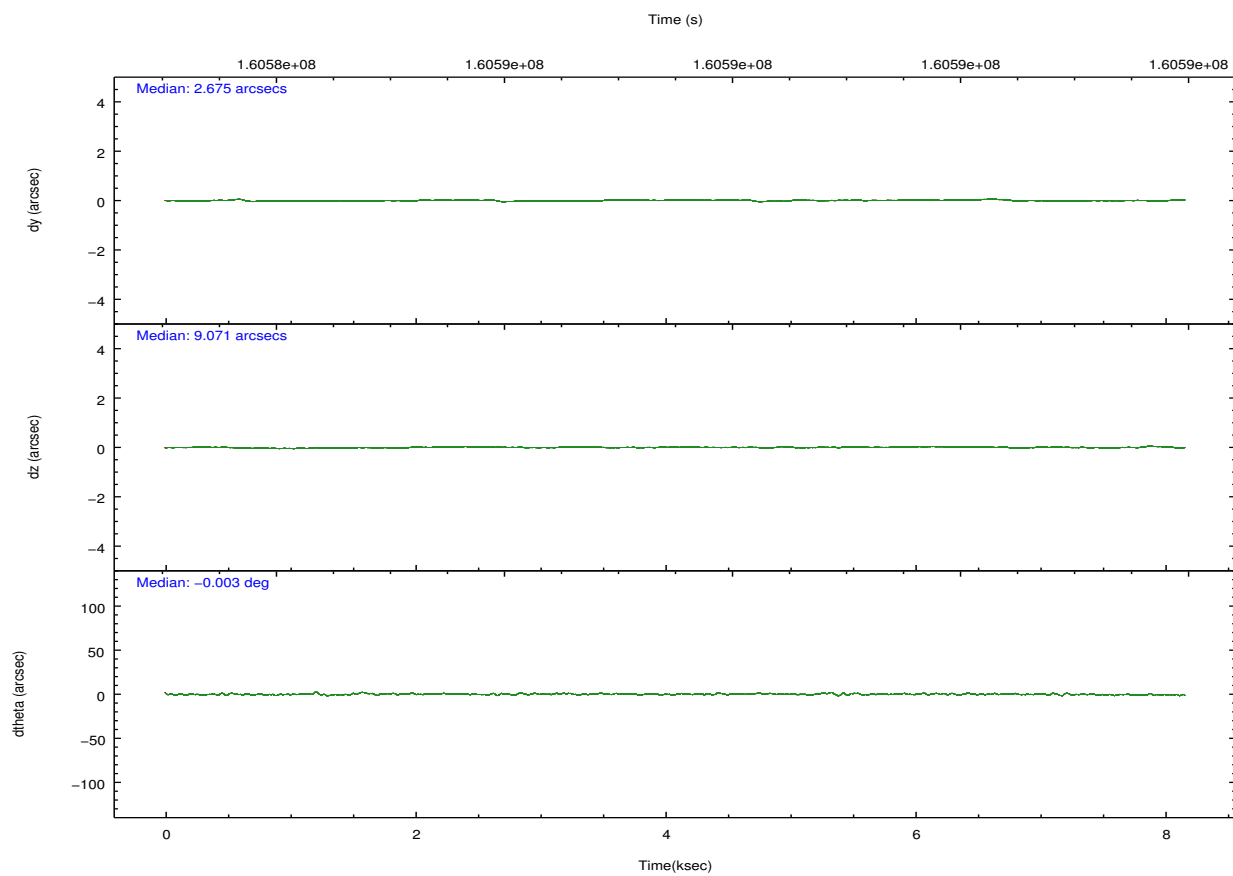
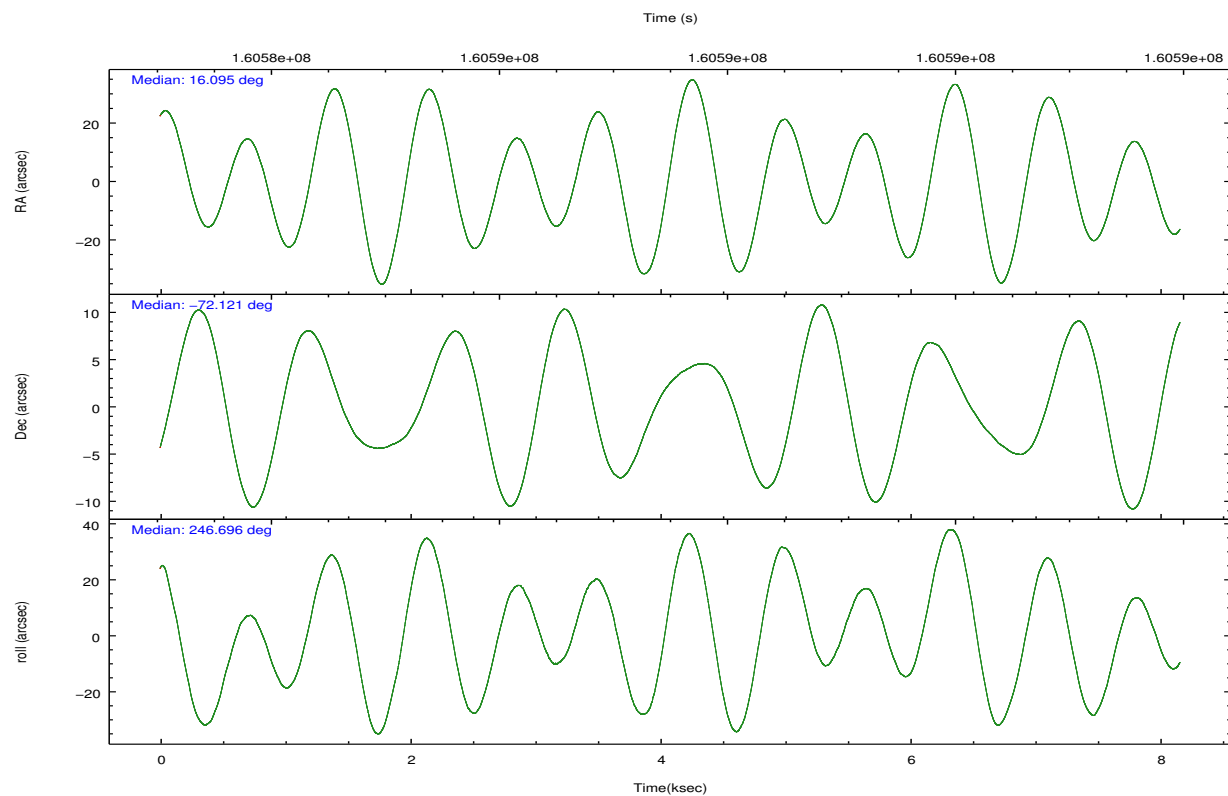


## 2.2 Compared Parameters

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	16.084509	16.0952681137874	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.093685	-72.12082819939189	Alternating exposures requested	N	N
[deg] Pointing Roll	246.478136	246.6970461741488	[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)	160583603.184000	160583227.36021			
Observation start date	2003-02-02T14:32:19	2003-02-02T14:27:07			
[s] Observation end time (MET)	160591576.184000	160591710.26057			
Observation end date	2003-02-02T16:45:12	2003-02-02T16:48:30			
Read mode	TIMED	TIMED			

## 2.3 Aspect



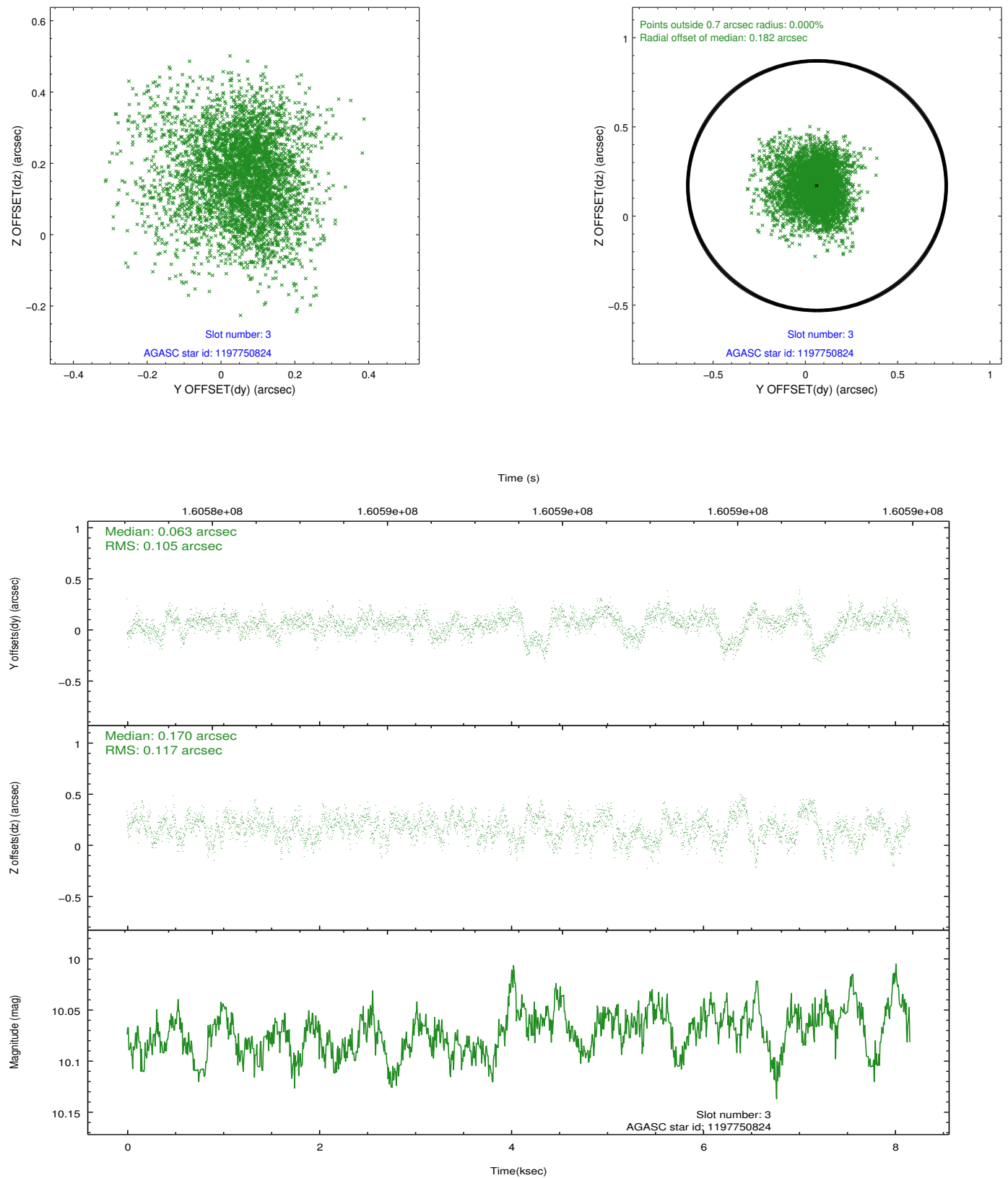


### Slot Statistics

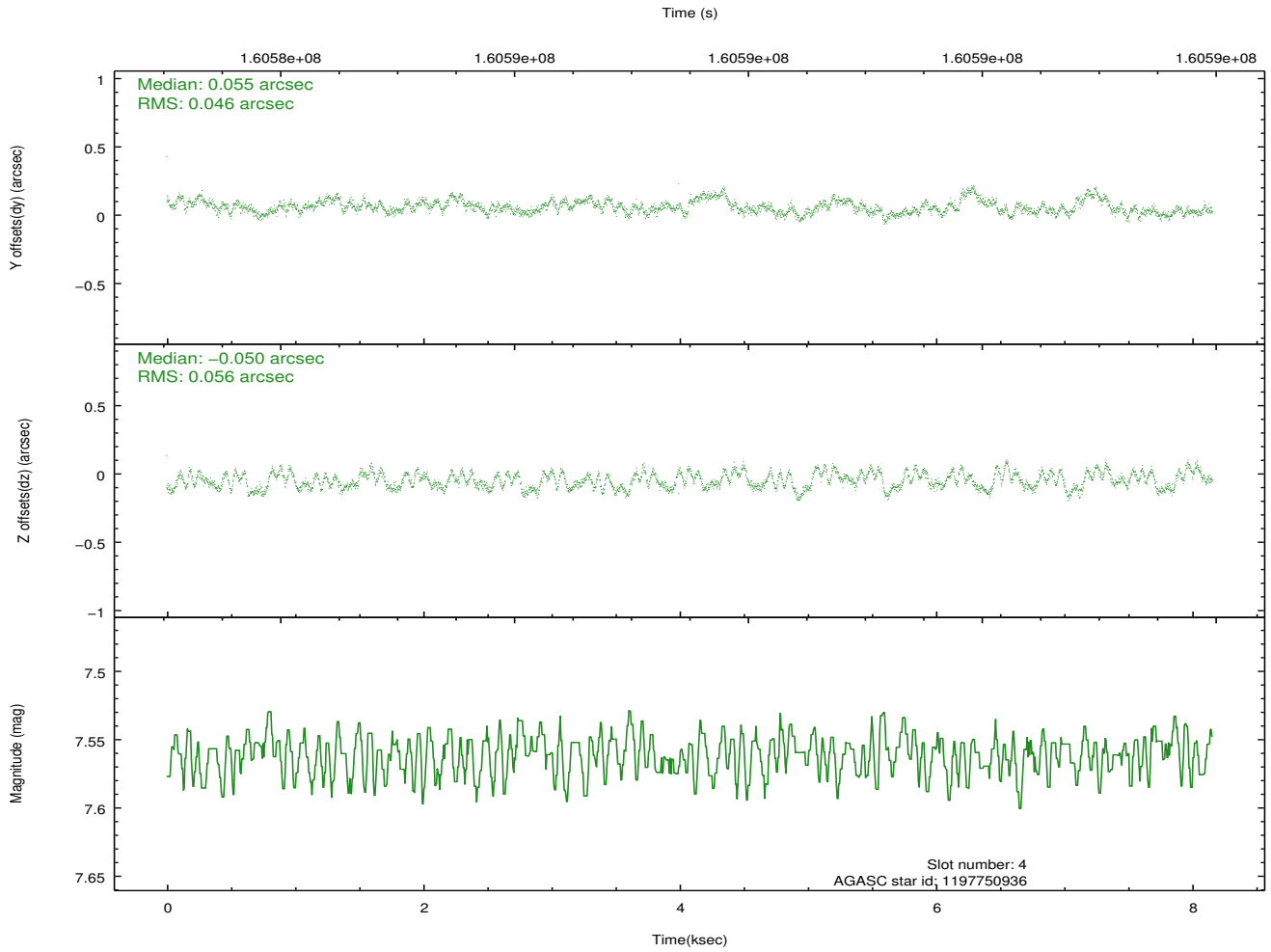
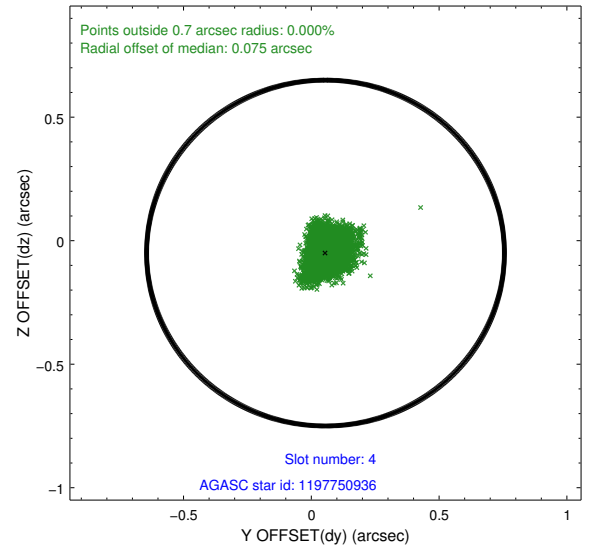
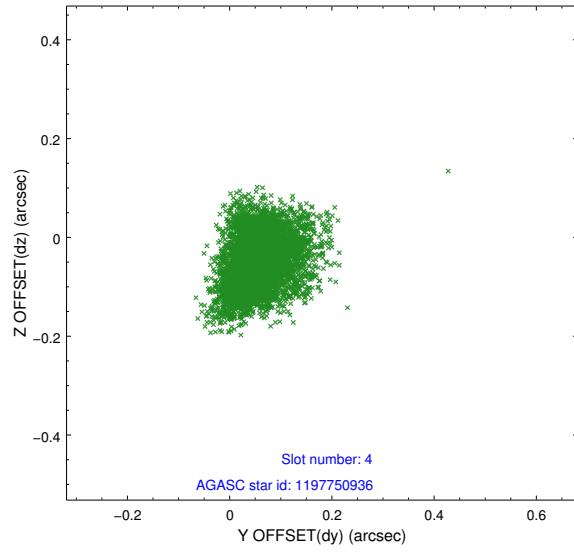
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	1991	-0.041	-0.050	0.009	0.015	0.000000	0.000000	-757.08	-838.94
1	FID	ACIS-I-4	7.19	1990	0.057	0.044	0.006	0.010	0.000000	0.000000	2156.75	1067.02
2	FID	ACIS-I-5	7.23	1991	-0.117	0.074	0.009	0.014	0.000000	0.000000	-1810.12	1065.63
3	GUIDE	1197750824	10.07	3973	0.063	0.170	0.165	0.282	14.791487	-71.393477	-1703.62	-2360.96
4	GUIDE	1197750936	7.56	3979	0.055	-0.050	0.078	0.123	15.387940	-71.549550	-1475.10	-1507.88
5	GUIDE	1197884712	8.30	3981	0.021	-0.061	0.057	0.099	16.087398	-72.252690	523.60	231.31
6	GUIDE	1197885104	9.37	3979	0.025	-0.074	0.098	0.154	17.845067	-72.189368	-431.07	1926.38
7	GUIDE	1198189696	7.38	3980	-0.160	0.021	0.061	0.096	15.223750	-72.697522	2367.13	26.14

## 2.4 Star Slots

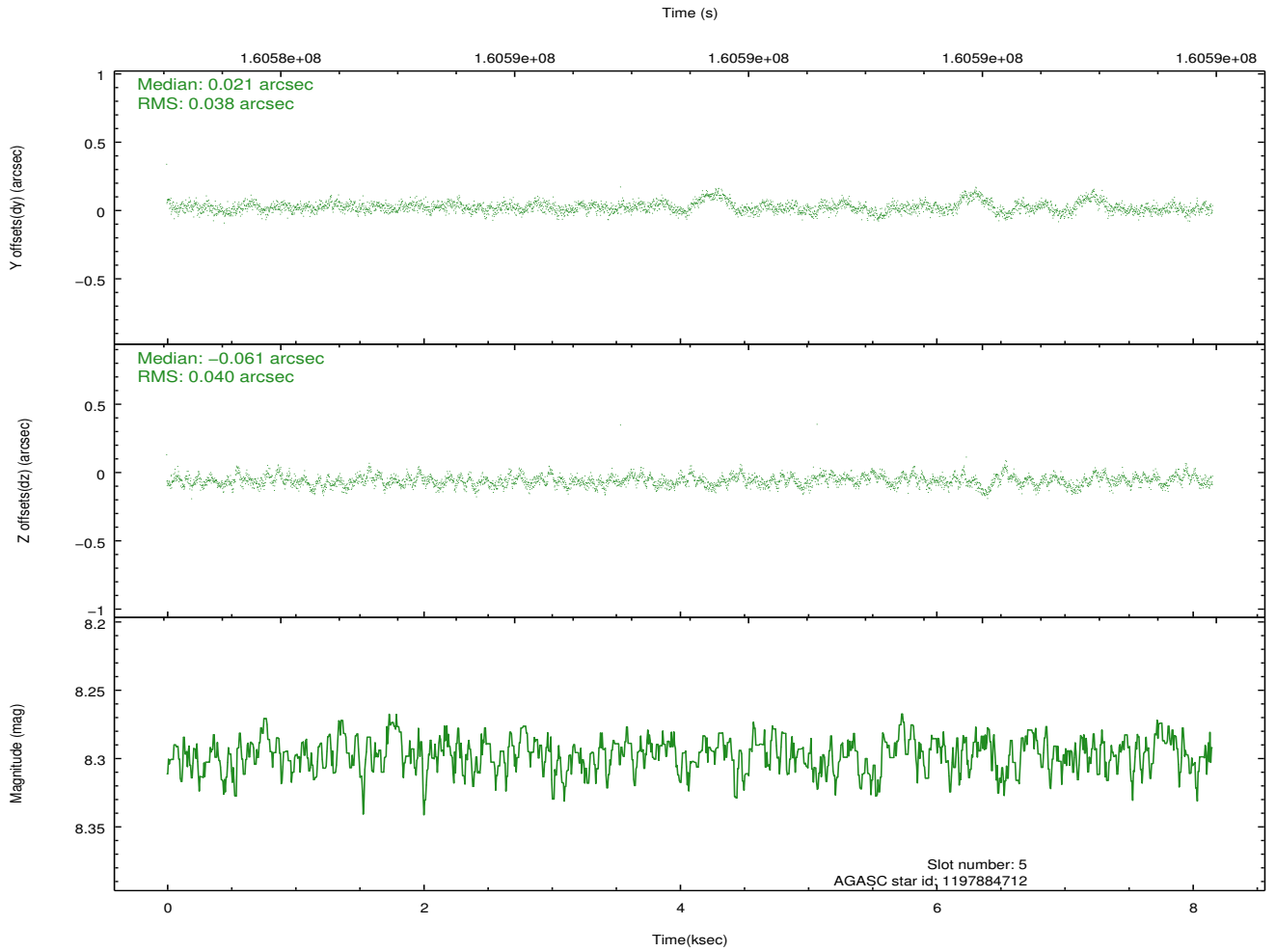
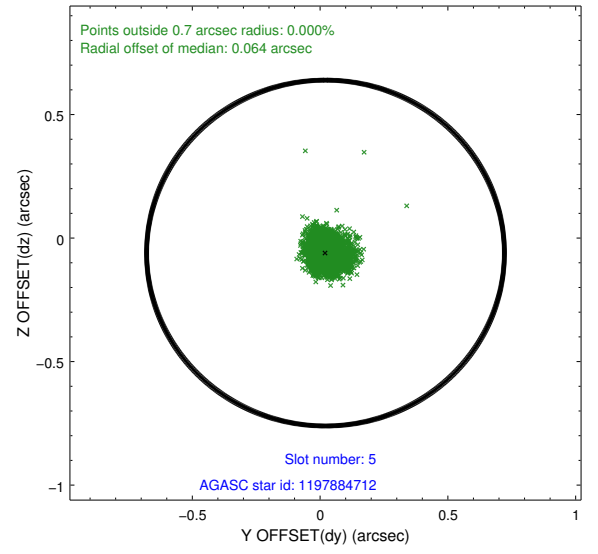
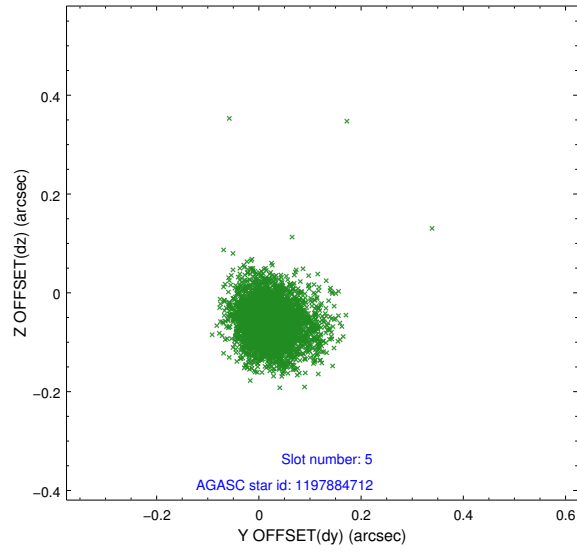
### 2.4.1 Slot 3



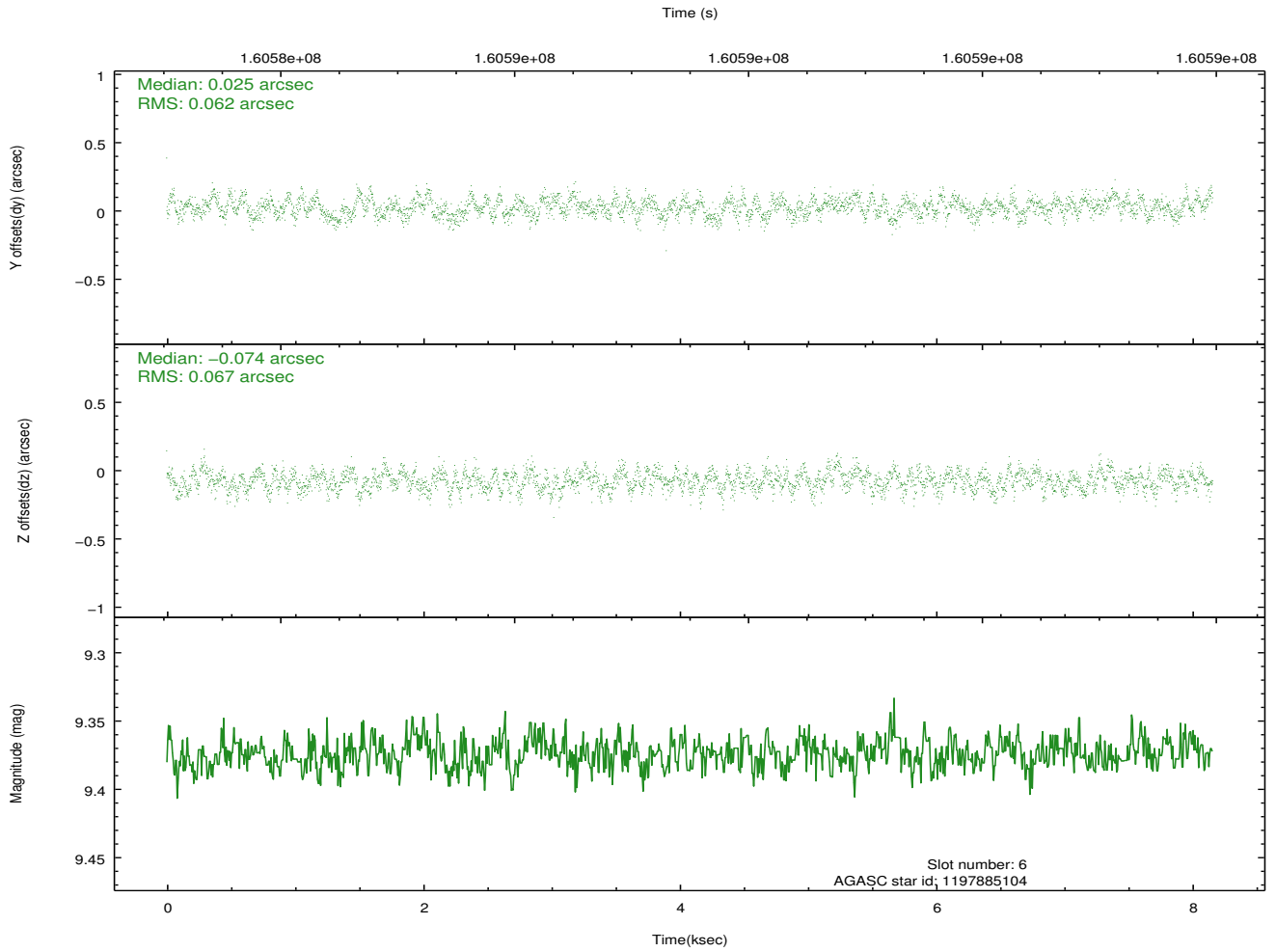
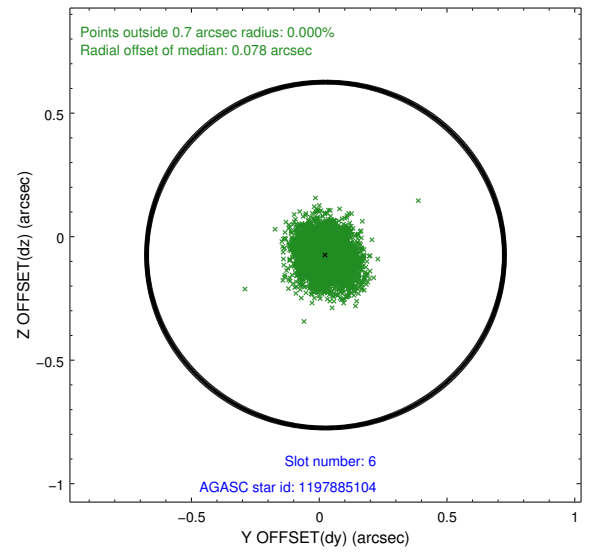
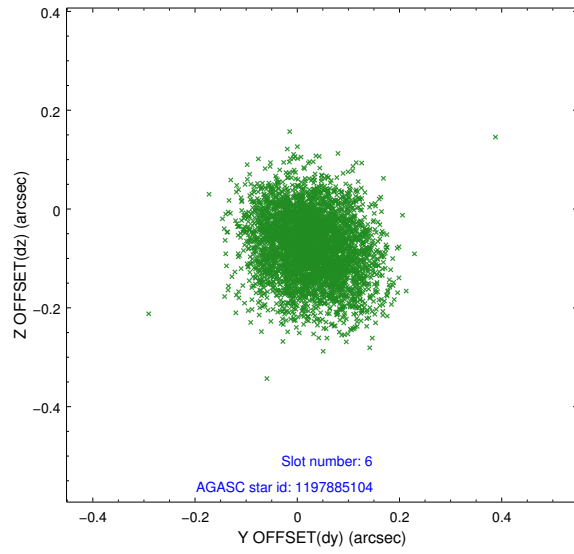
## 2.4.2 Slot 4



### 2.4.3 Slot 5

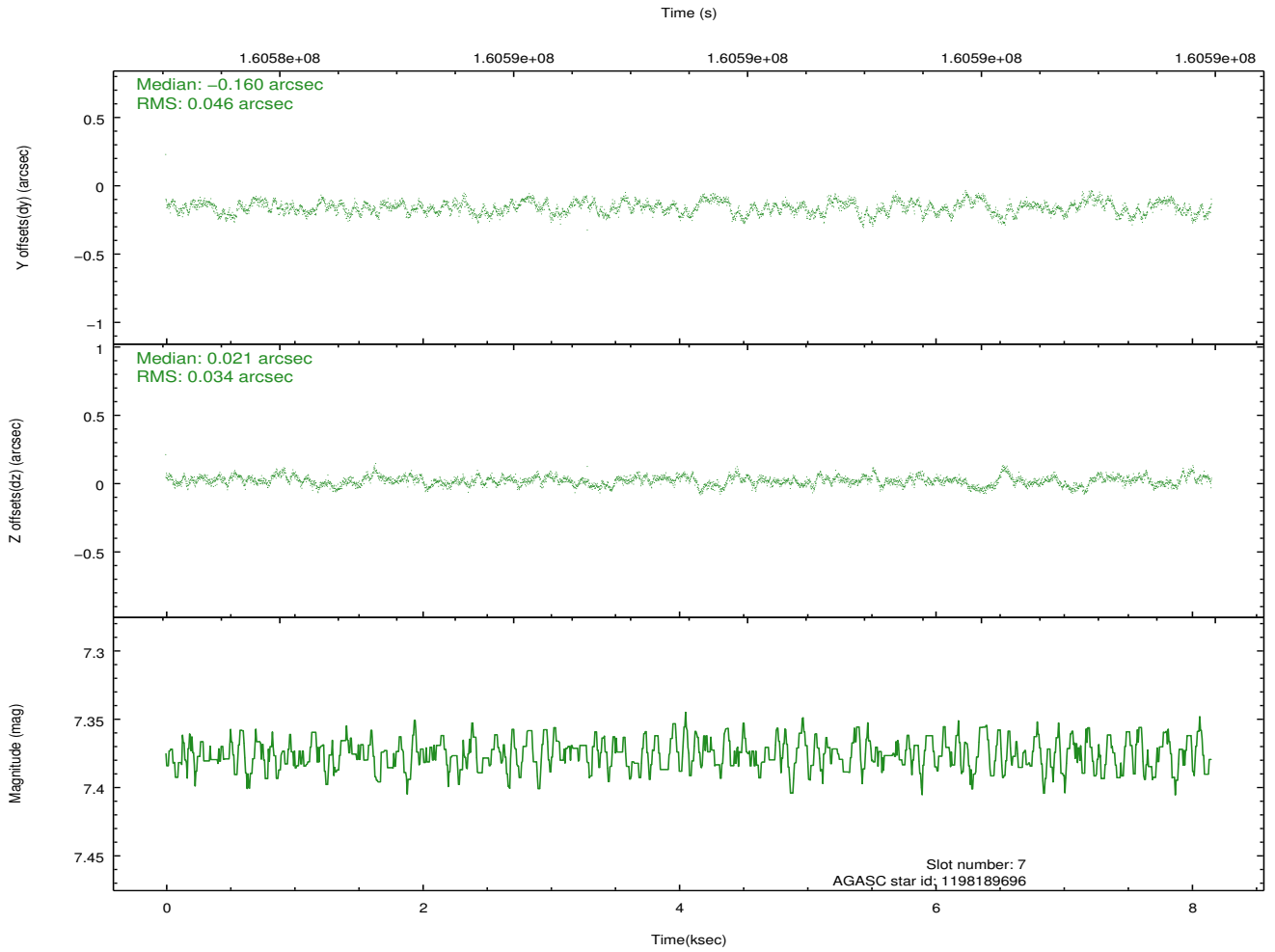
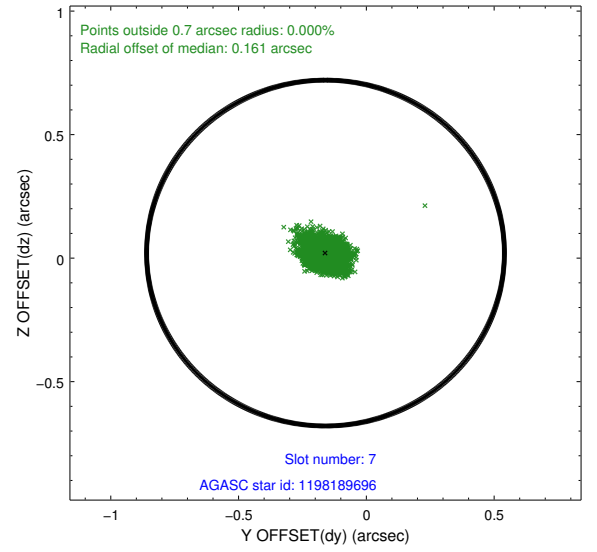
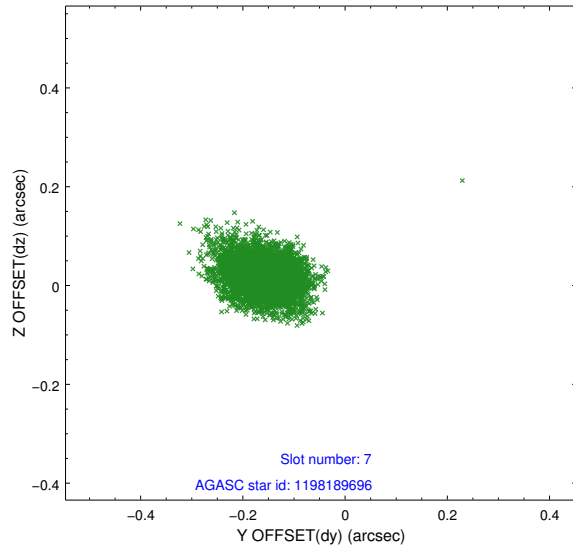


## 2.4.4 Slot 6



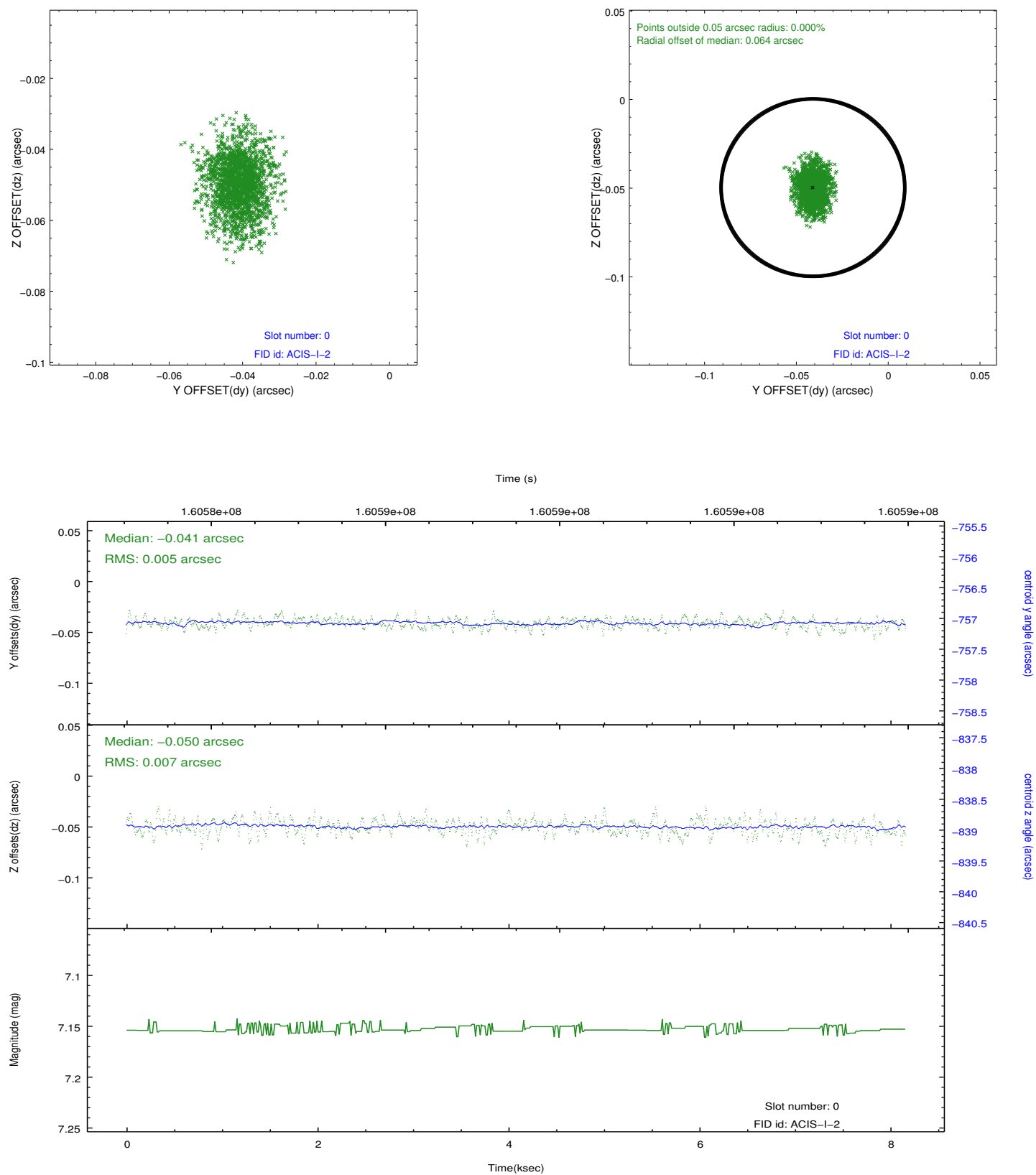


## 2.4.5 Slot 7

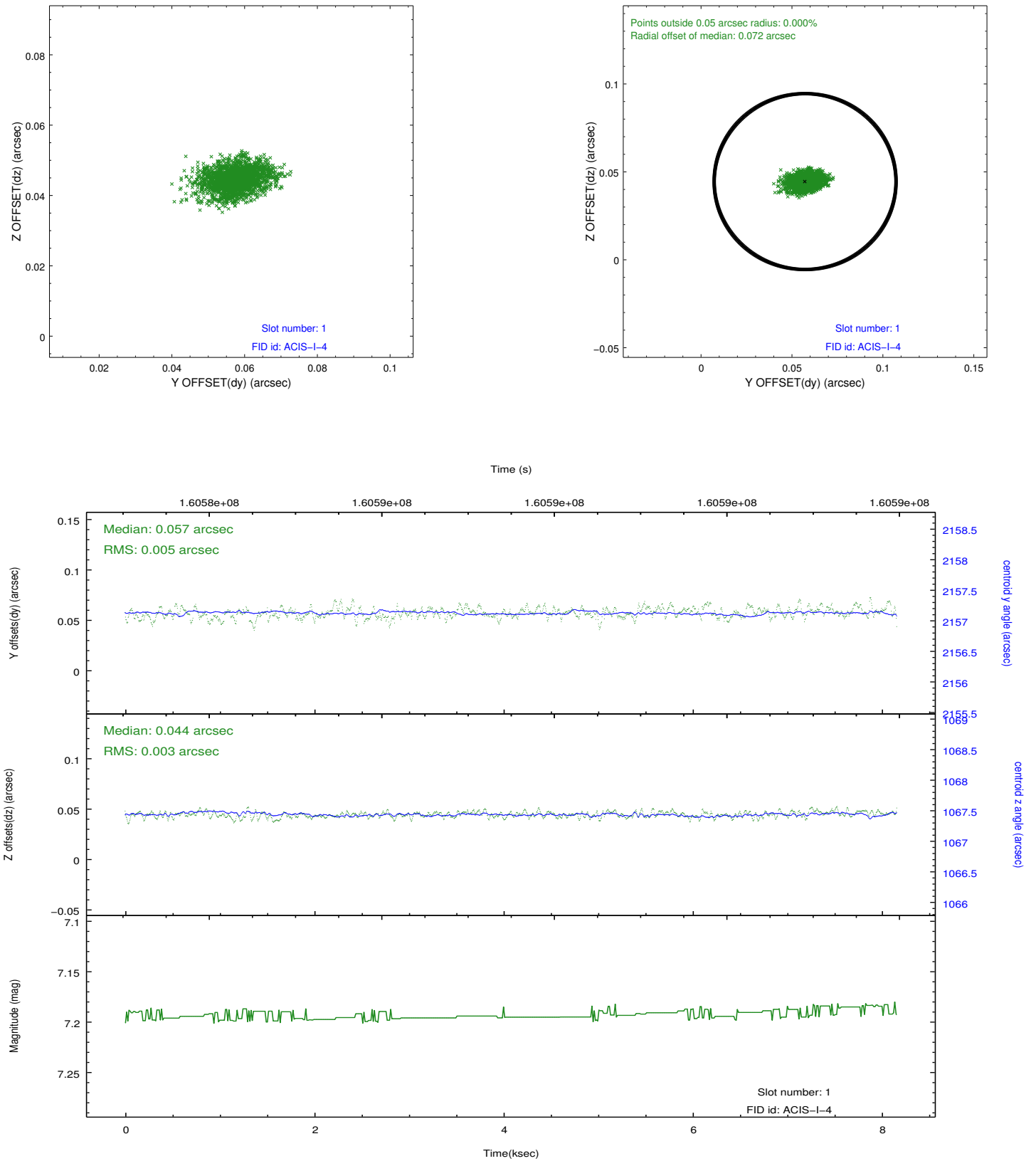


## 2.5 FID Slots

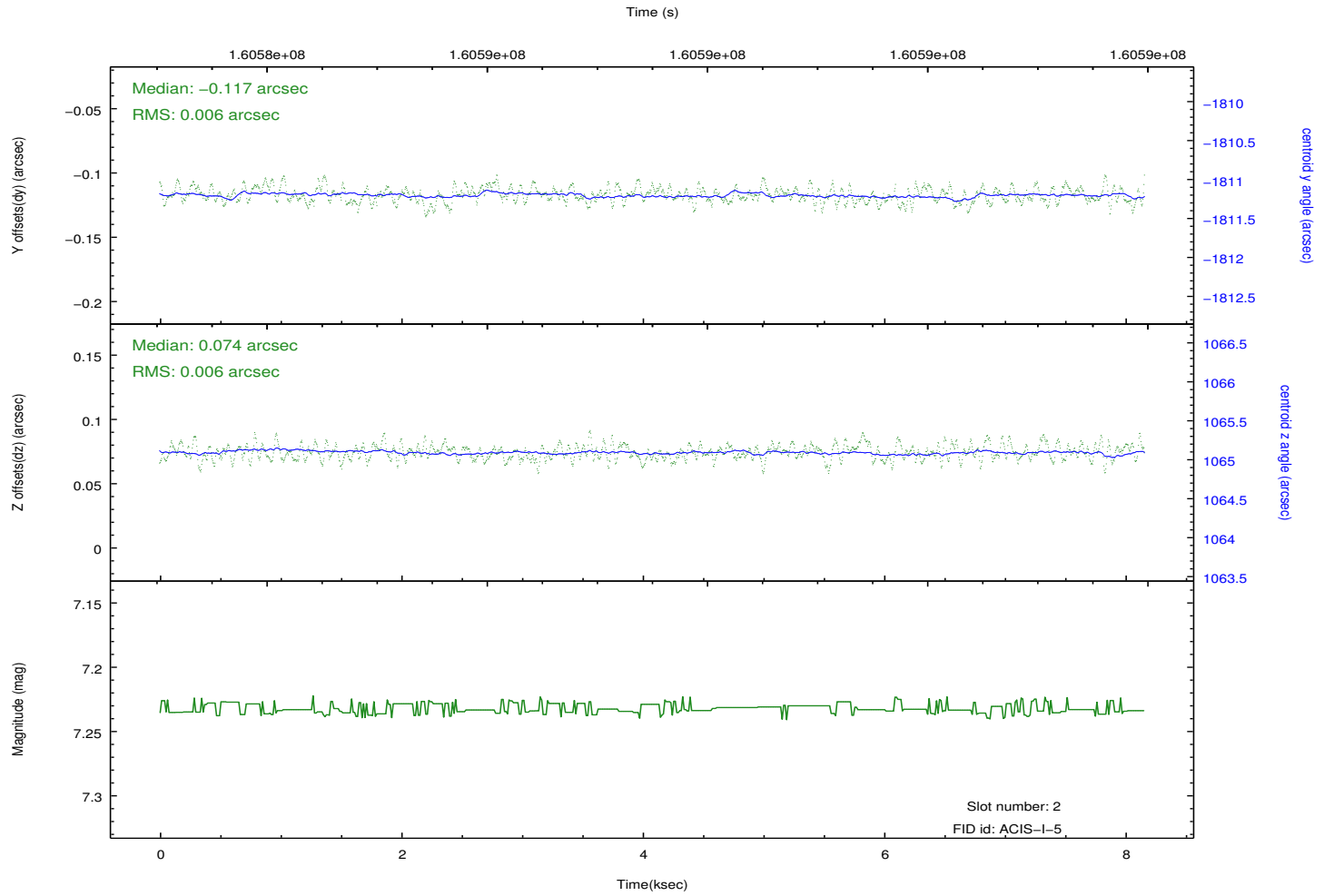
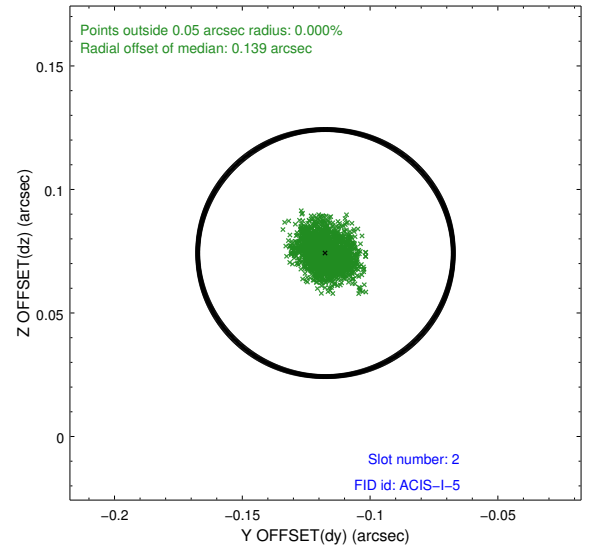
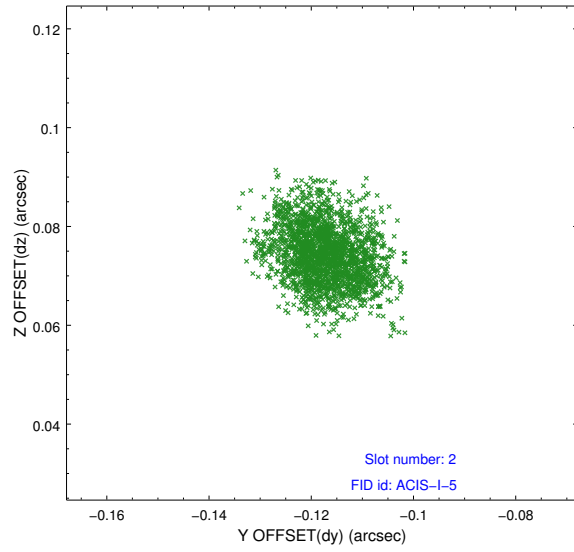
### 2.5.1 Slot 0



## 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	7.734

### A.2 Comments

Window constraint satisfied.