

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3528 - L2 Version 3  
Chandra X-Ray Center

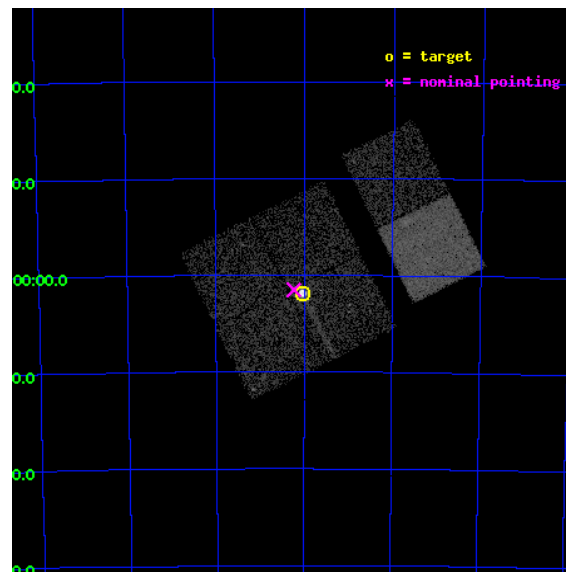
L2 Processing Date : Nov 3 2012

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# 1 Front

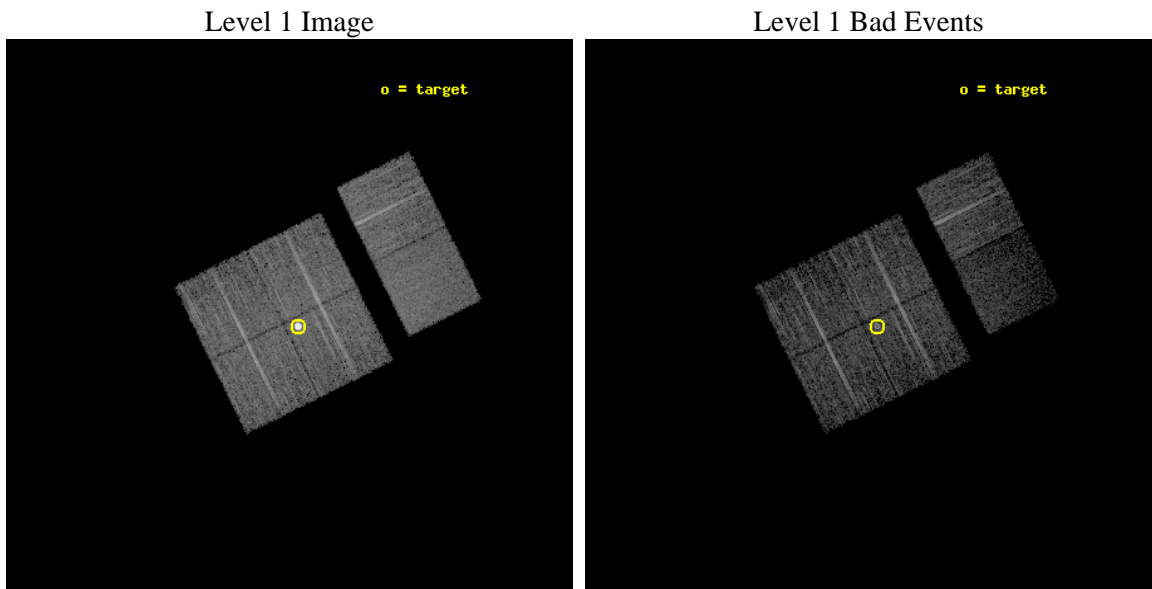
seq_num	590283	Sequence number
obs_id	3528	Observation id
title	AO4B ACIS-I CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[I3,-120,-0.5,0.5,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.05762545437	Nominal RA [deg]
dec_nom	-72.025249808624	Nominal Dec [deg]
roll_nom	63.683656065185	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7961.5590000451	Sum of GTIs [s]
livetime	7860.7449461112	Livetime [s]
ontime0	7964.7999703288	Sum of GTIs [s]
ontime1	7964.7999703288	Sum of GTIs [s]
ontime2	7958.3179899752	Sum of GTIs [s]
ontime3	7961.5590000451	Sum of GTIs [s]
ontime6	7964.7999703288	Sum of GTIs [s]
ontime7	7964.7999703288	Sum of GTIs [s]
l2events	62002	Number of level 2 events



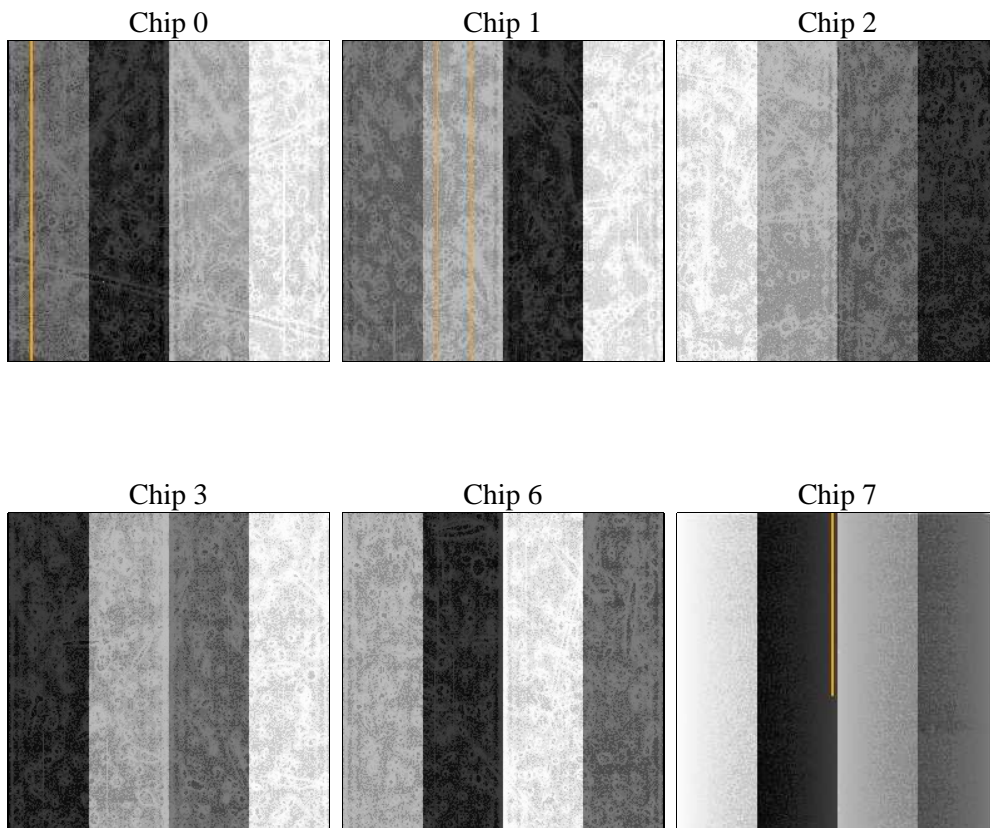
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7961.5590000451	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	7964.7999703288	Sum of GTIs [s]
date	2012-11-03T14:30:08	Date and time of file creation	ontime1	7964.7999703288	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	7958.3179899752	Sum of GTIs [s]
			ontime3	7961.5590000451	Sum of GTIs [s]
			ontime6	7964.7999703288	Sum of GTIs [s]
			ontime7	7964.7999703288	Sum of GTIs [s]
			l1events	257215	Number of level 1 events

### 2.1.4 Events

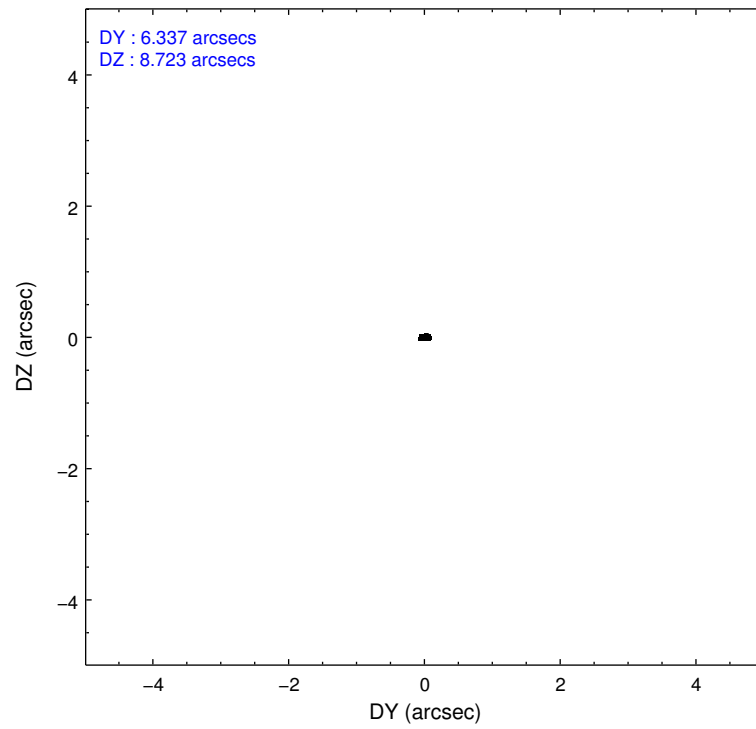
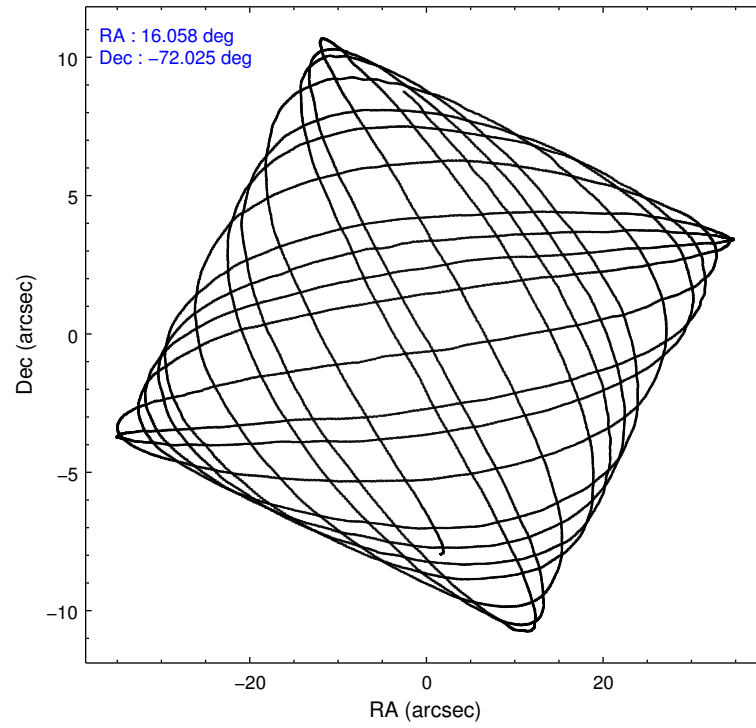
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	35879	37396	41064	65073	40886	36917	grade 0 events	1648	1975	1552	25708	1495	2029
rejected events	31731	32740	37210	34387	36926	18099		4%	5%	3%	39%	3%	5%
rejected %	88%	87%	90%	52%	90%	49%	grade 1 events	18	20	28	289	22	34
								0%	0%	0%	0%	0%	0%
							grade 2 events	906	905	832	2573	810	3951
								2%	2%	2%	3%	1%	10%
							grade 3 events	484	482	398	801	434	1865
								1%	1%	0%	1%	1%	5%
							grade 4 events	394	479	395	812	431	1878
								1%	1%	0%	1%	1%	5%
							grade 5 events	1086	1212	1049	1397	1382	3891
								3%	3%	2%	2%	3%	10%
							grade 6 events	716	817	679	806	793	9104
								1%	2%	1%	1%	1%	24%
							grade 7 events	30627	31506	36131	32687	35519	14165
								85%	84%	87%	50%	86%	38%

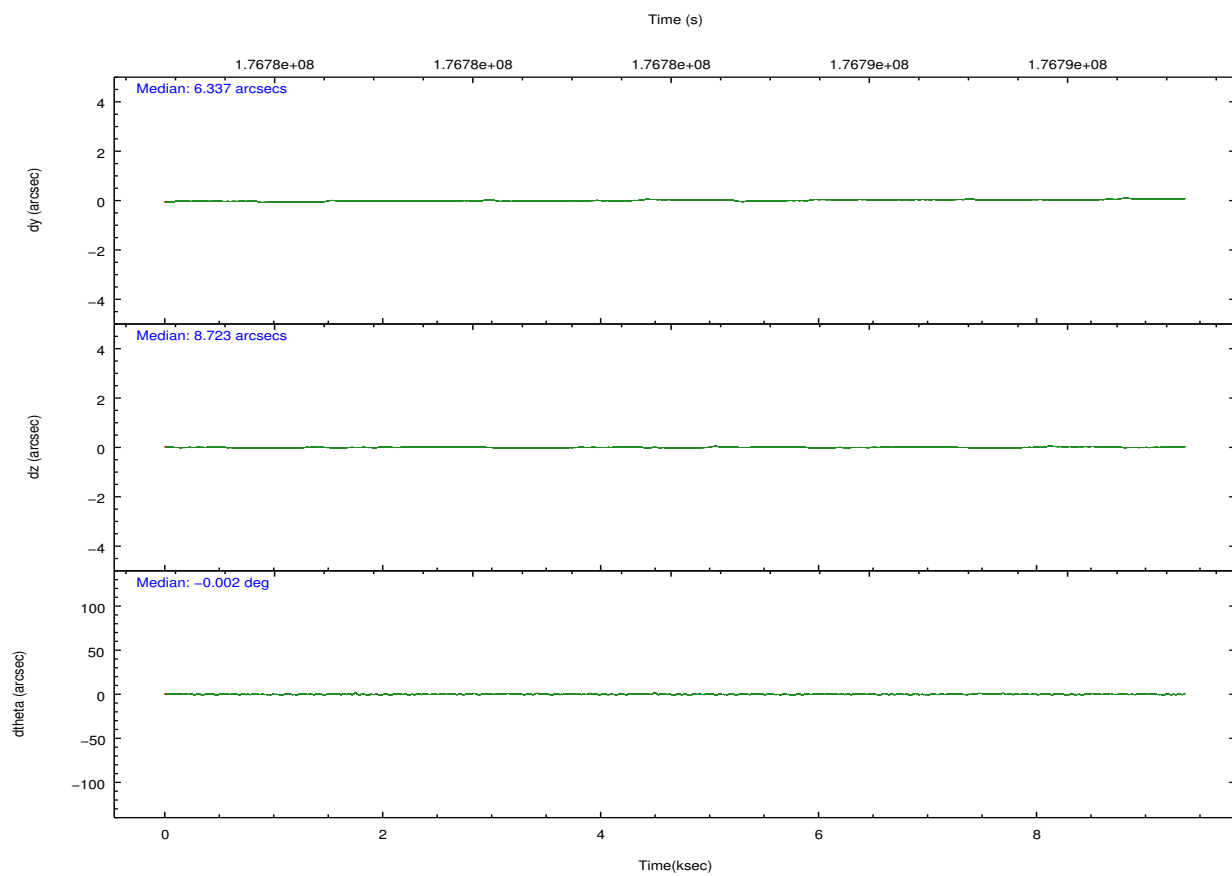
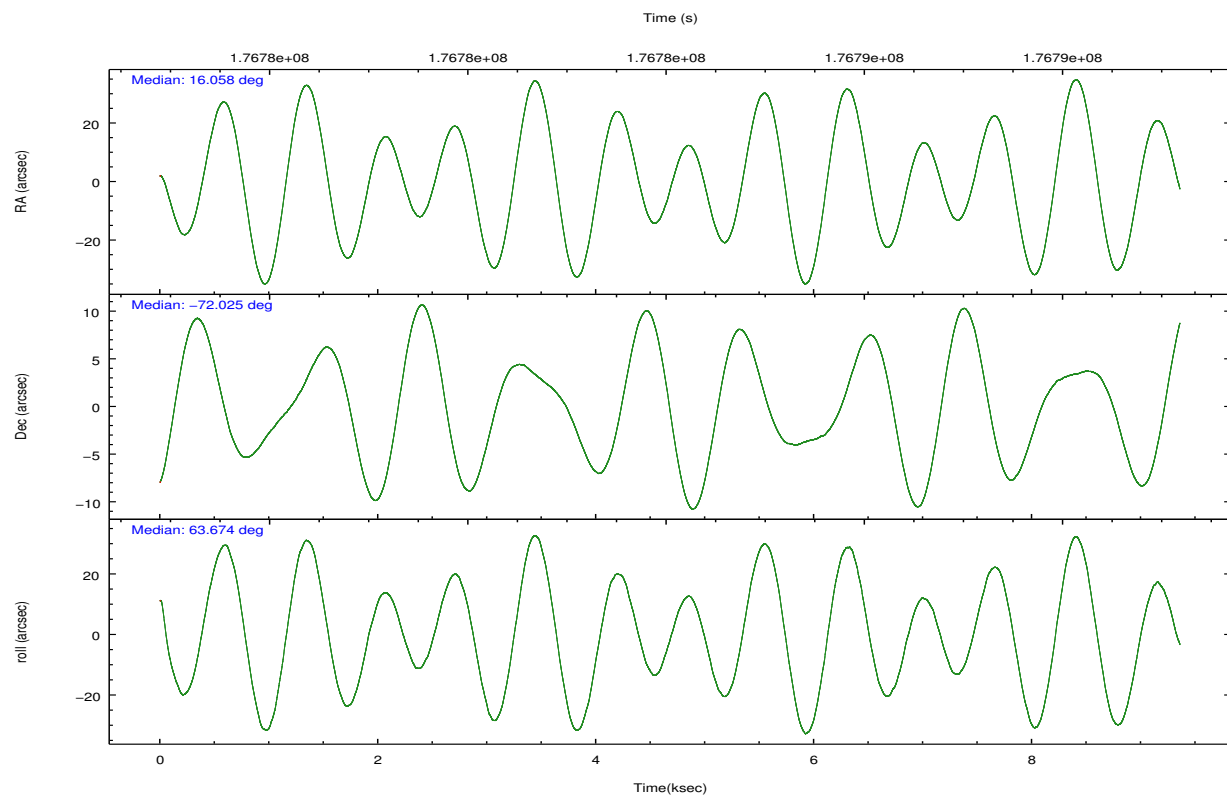


## 2.2 Compared Parameters

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	16.063701	16.05762545437019	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.052606	-72.02524980862373	Alternating exposures requested	N	N
[deg] Pointing Roll	63.480730	63.68365606518495	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	174614464.184000	174614464.184000			
[s] Window stop time (MET)	177292864.184000	177292864.184000			
[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)	176780723.184000	176779177.7082			
Observation start date	2003-08-09T01:44:19	2003-08-09T01:19:37			
[s] Observation end time (MET)	176788723.184000	176788857.29611			
Observation end date	2003-08-09T03:57:39	2003-08-09T04:00:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



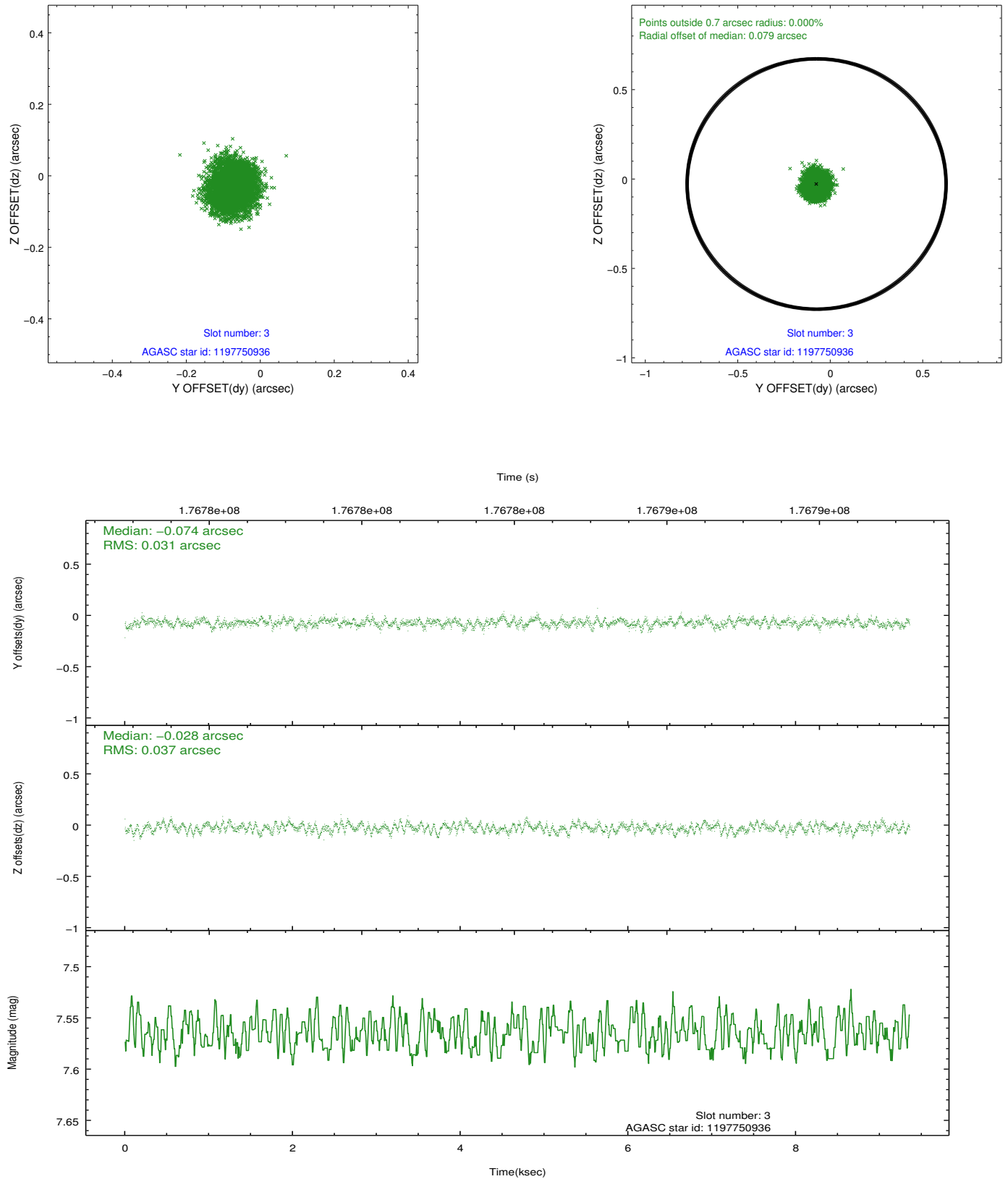


### Slot Statistics

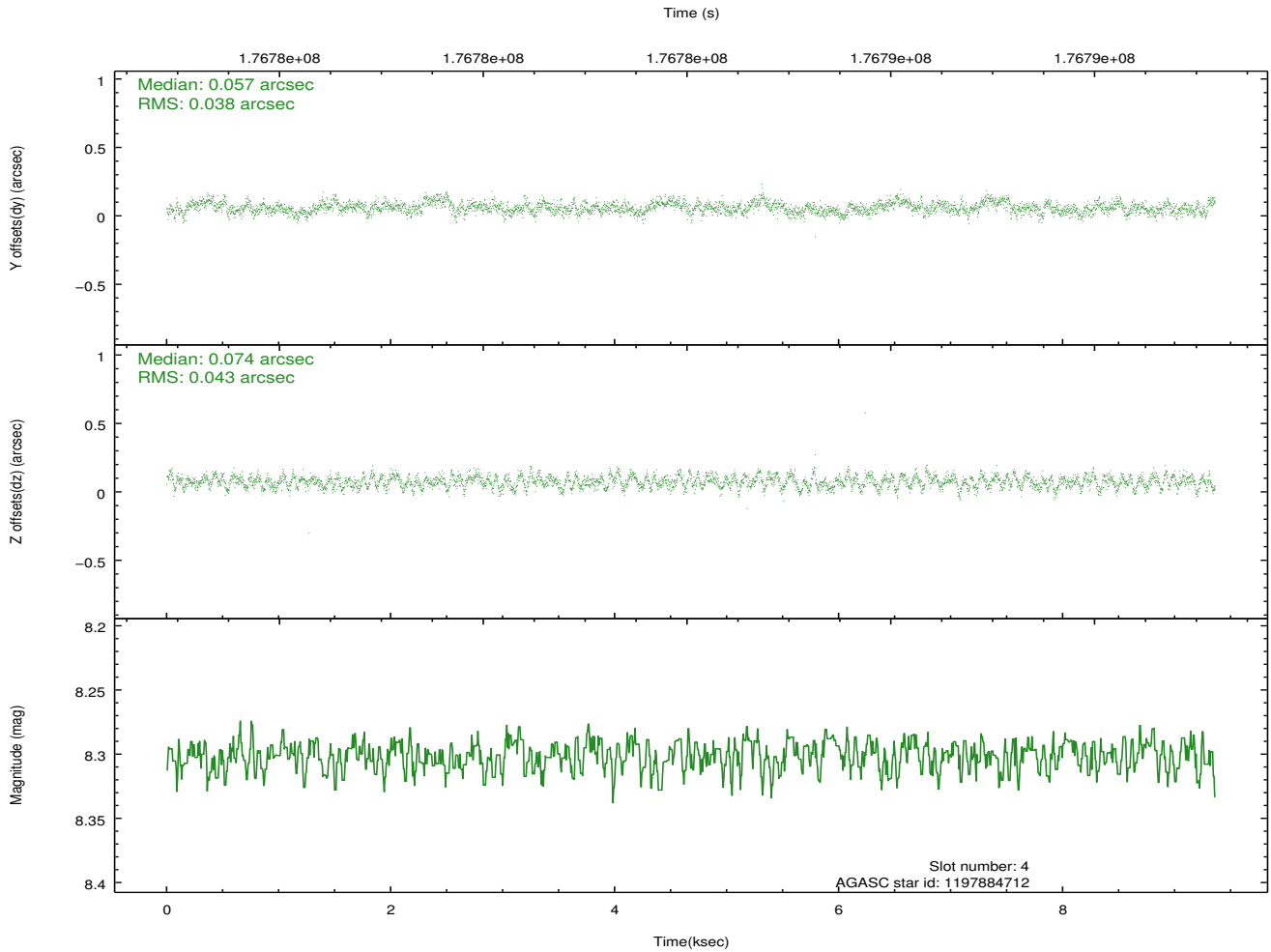
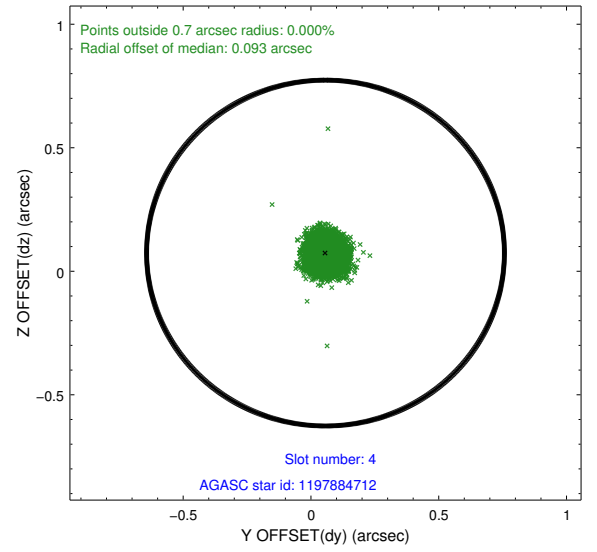
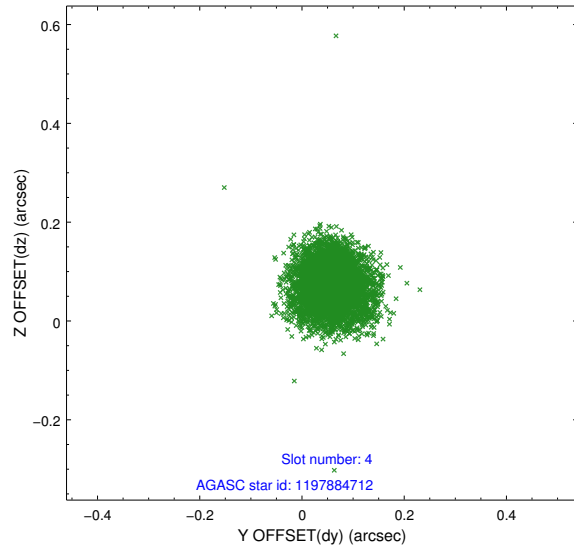
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	2283	0.006	0.040	0.006	0.011	0.000000	0.000000	933.36	-832.12
1	FID	ACIS-I-5	7.23	2282	-0.140	0.039	0.006	0.010	0.000000	0.000000	-1814.57	1065.08
2	FID	ACIS-I-6	7.26	2283	0.042	-0.008	0.006	0.011	0.000000	0.000000	398.32	1710.19
3	GUIDE	1197750936	7.56	4565	-0.074	-0.028	0.052	0.083	15.387940	-71.549550	1272.56	1495.68
4	GUIDE	1197884712	8.30	4564	0.057	0.074	0.061	0.096	16.087398	-72.252690	-632.38	-344.62
5	GUIDE	1197885104	9.35	4564	-0.046	0.015	0.085	0.137	17.845067	-72.189368	409.22	-1987.65
6	GUIDE	1197885328	7.23	4566	-0.048	-0.146	0.057	0.089	16.283090	-71.733943	1137.07	289.86
7	GUIDE	1197884536	8.50	4564	0.108	0.085	0.049	0.080	17.160729	-71.835289	1240.32	-756.94

## 2.4 Star Slots

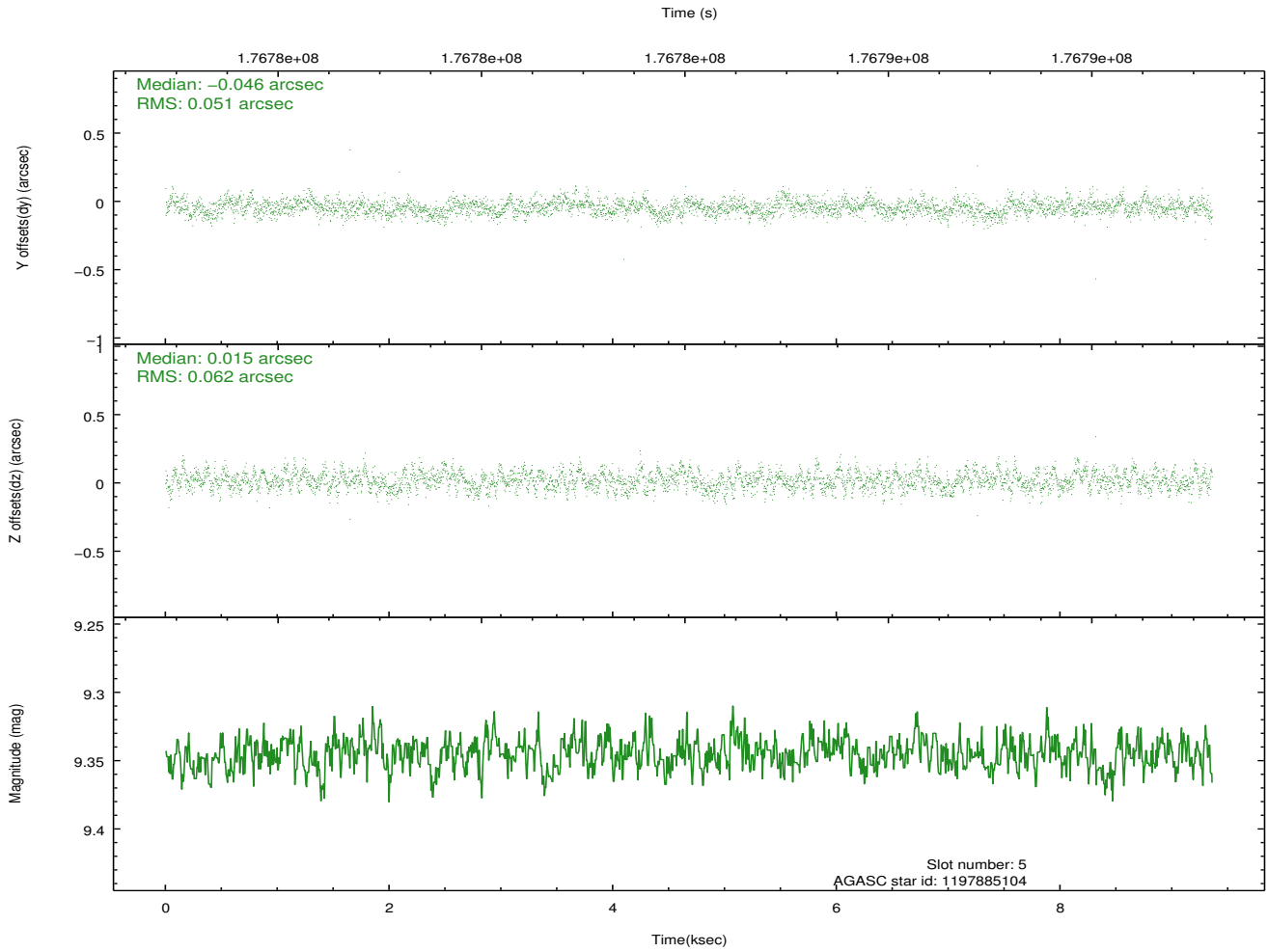
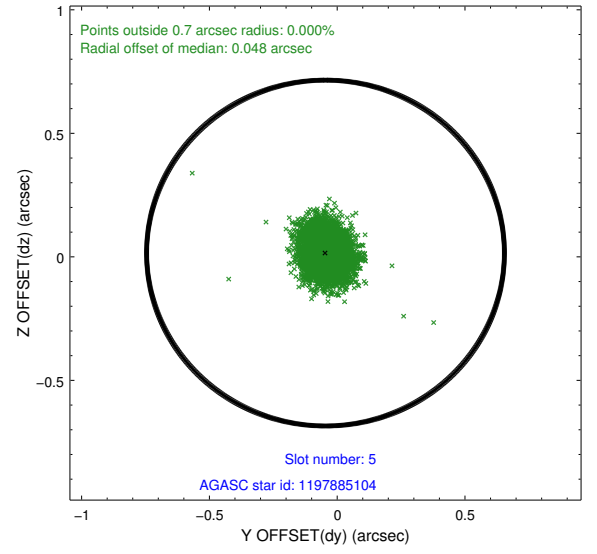
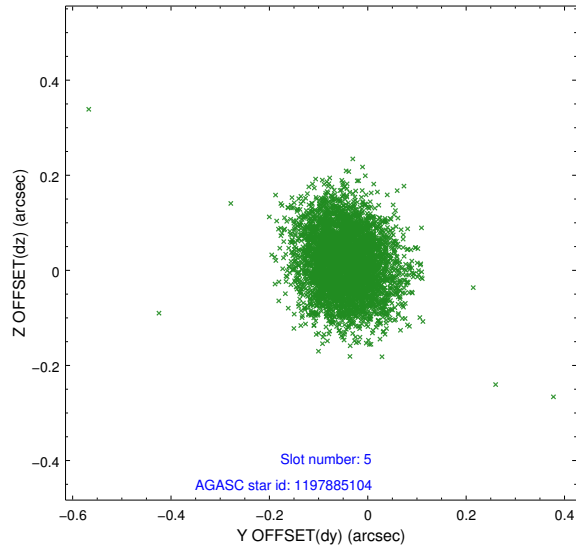
### 2.4.1 Slot 3



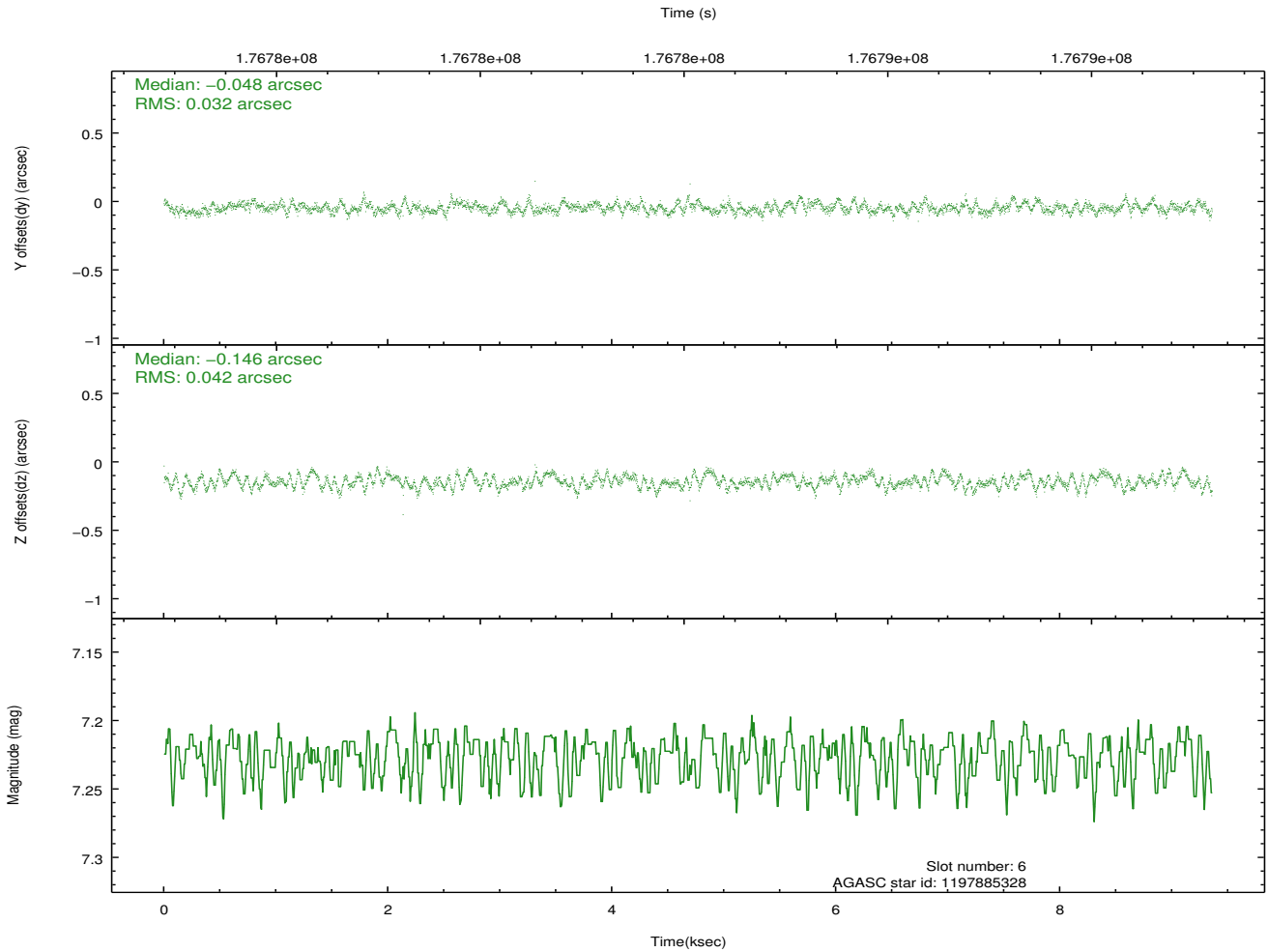
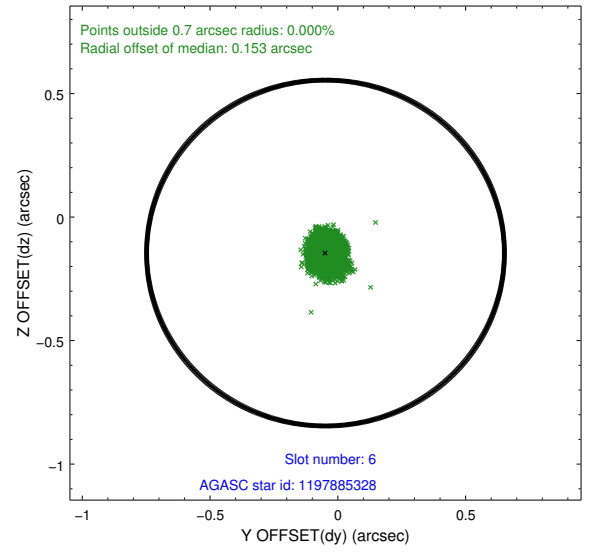
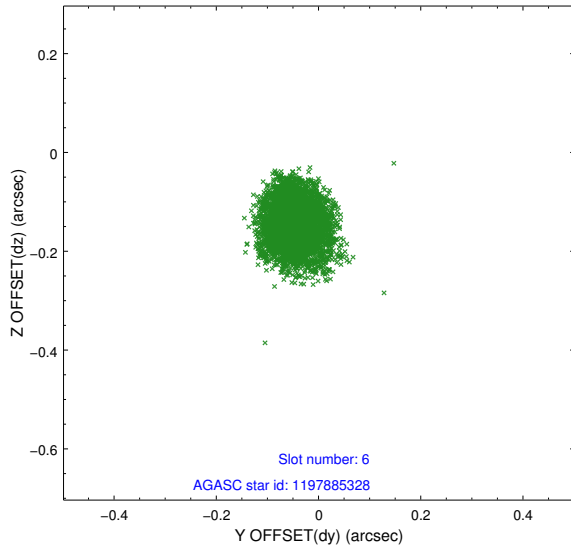
## 2.4.2 Slot 4



### 2.4.3 Slot 5

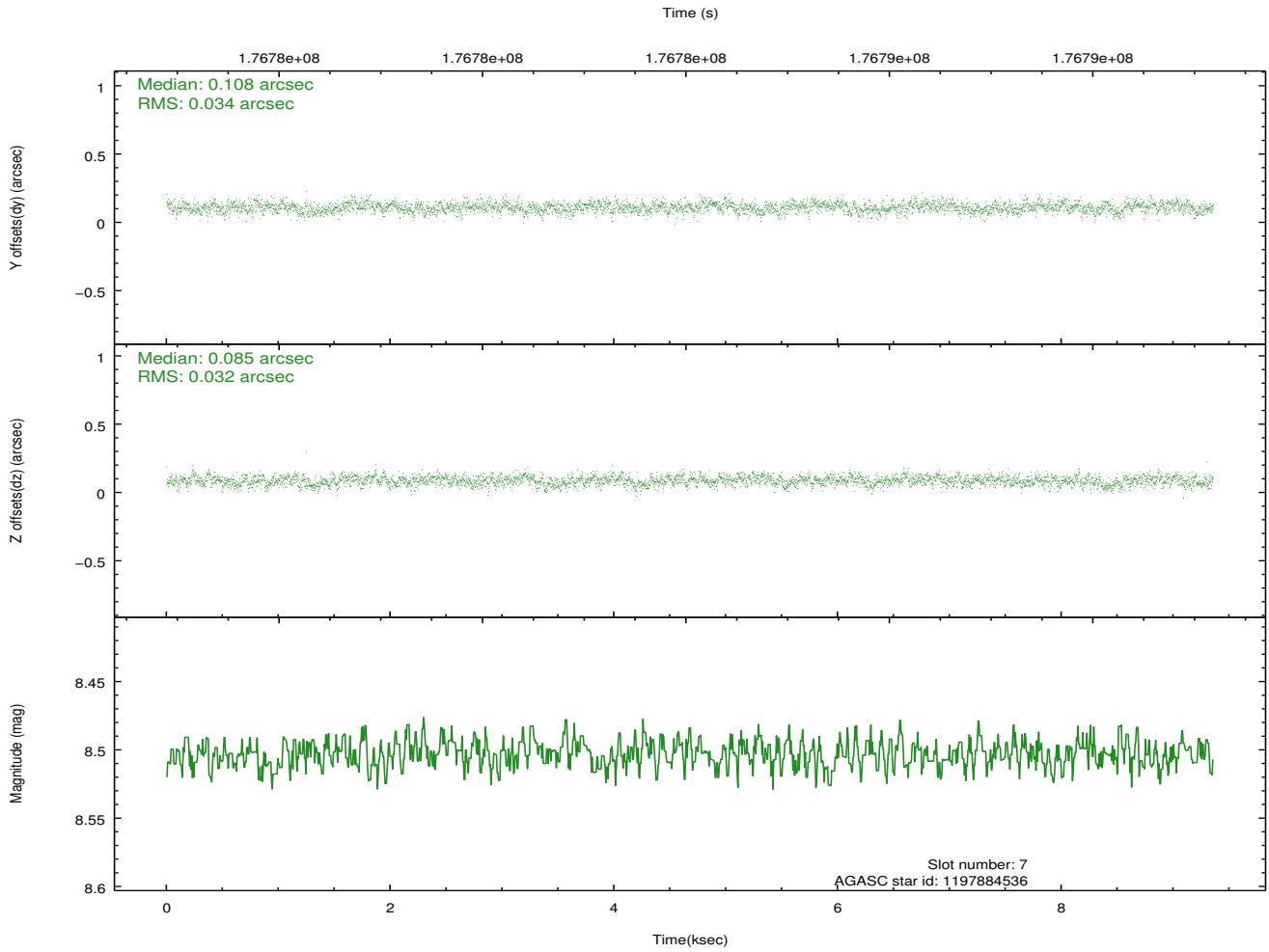
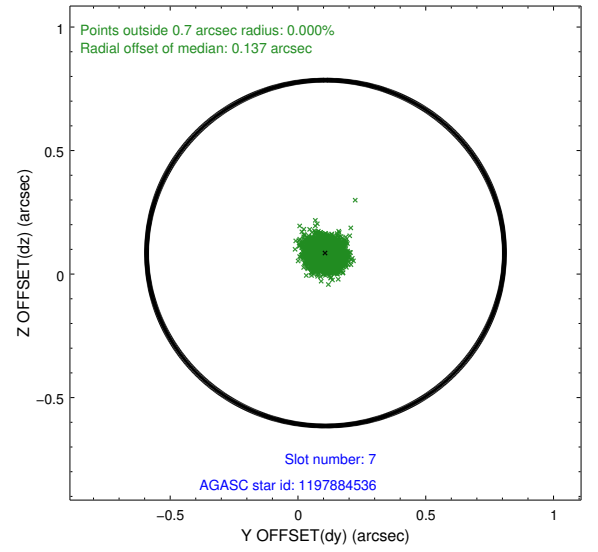
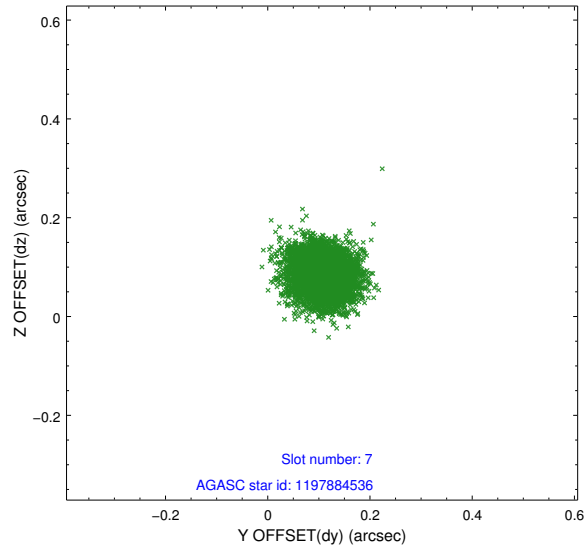


## 2.4.4 Slot 6



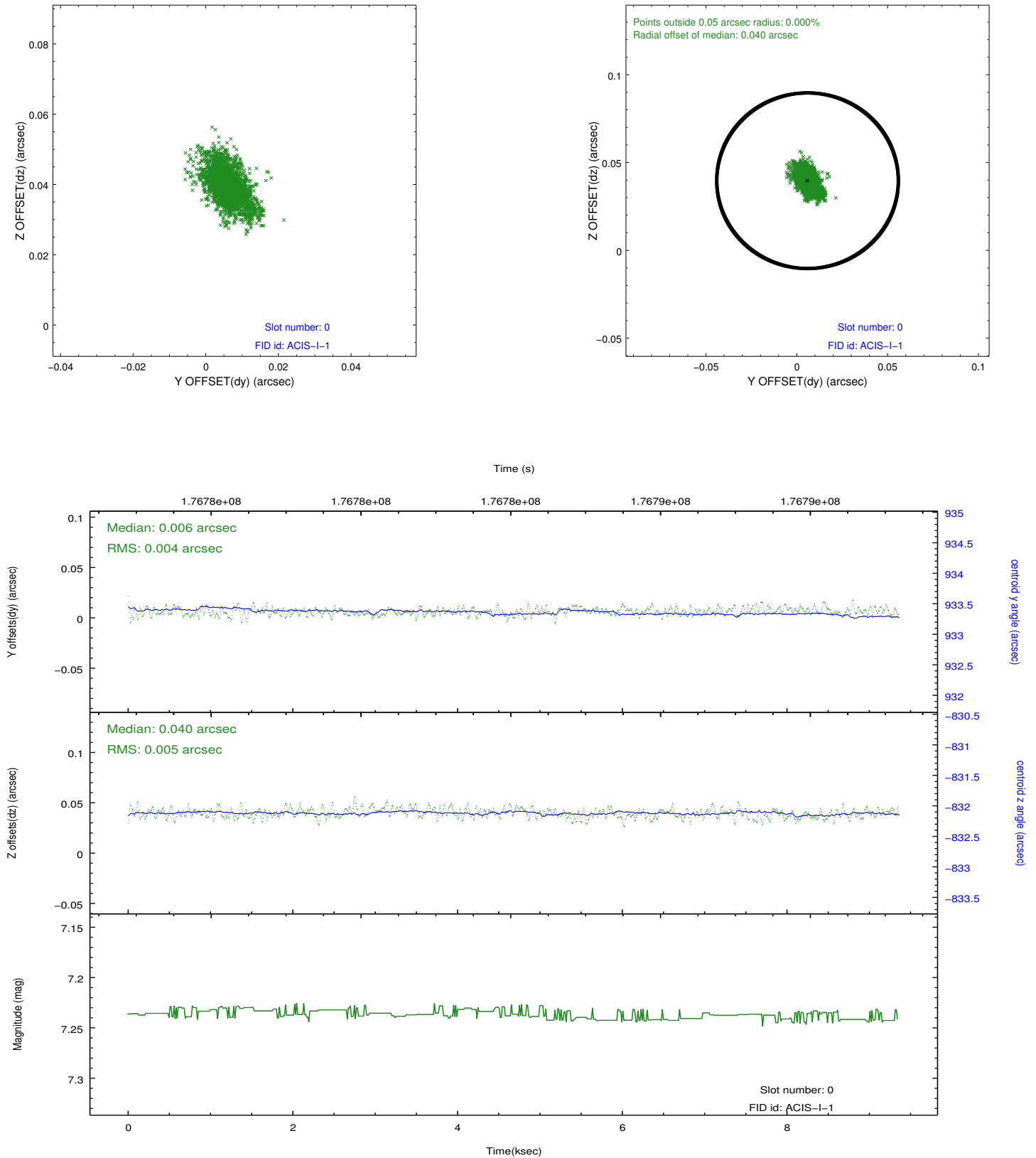


## 2.4.5 Slot 7

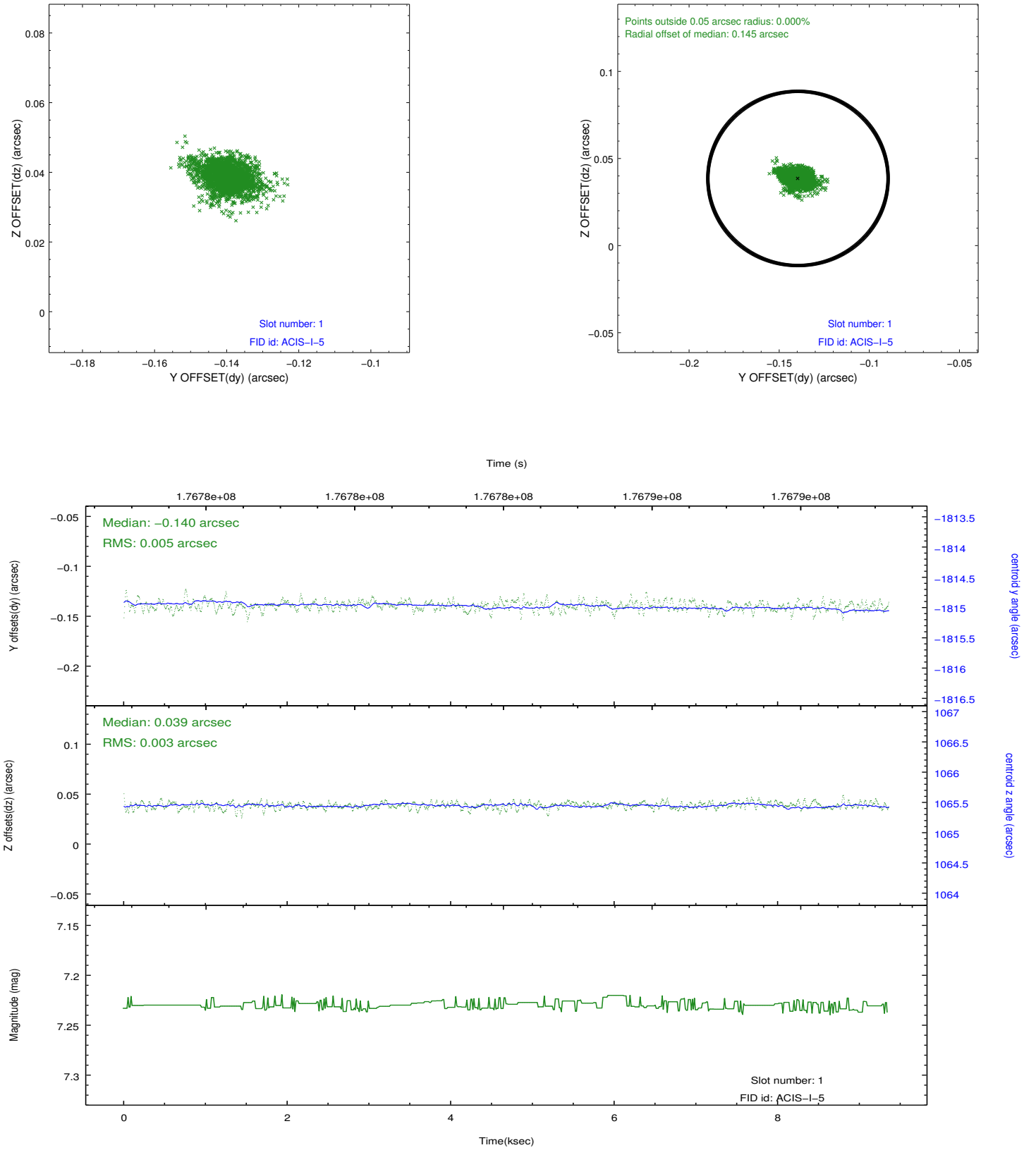


## 2.5 FID Slots

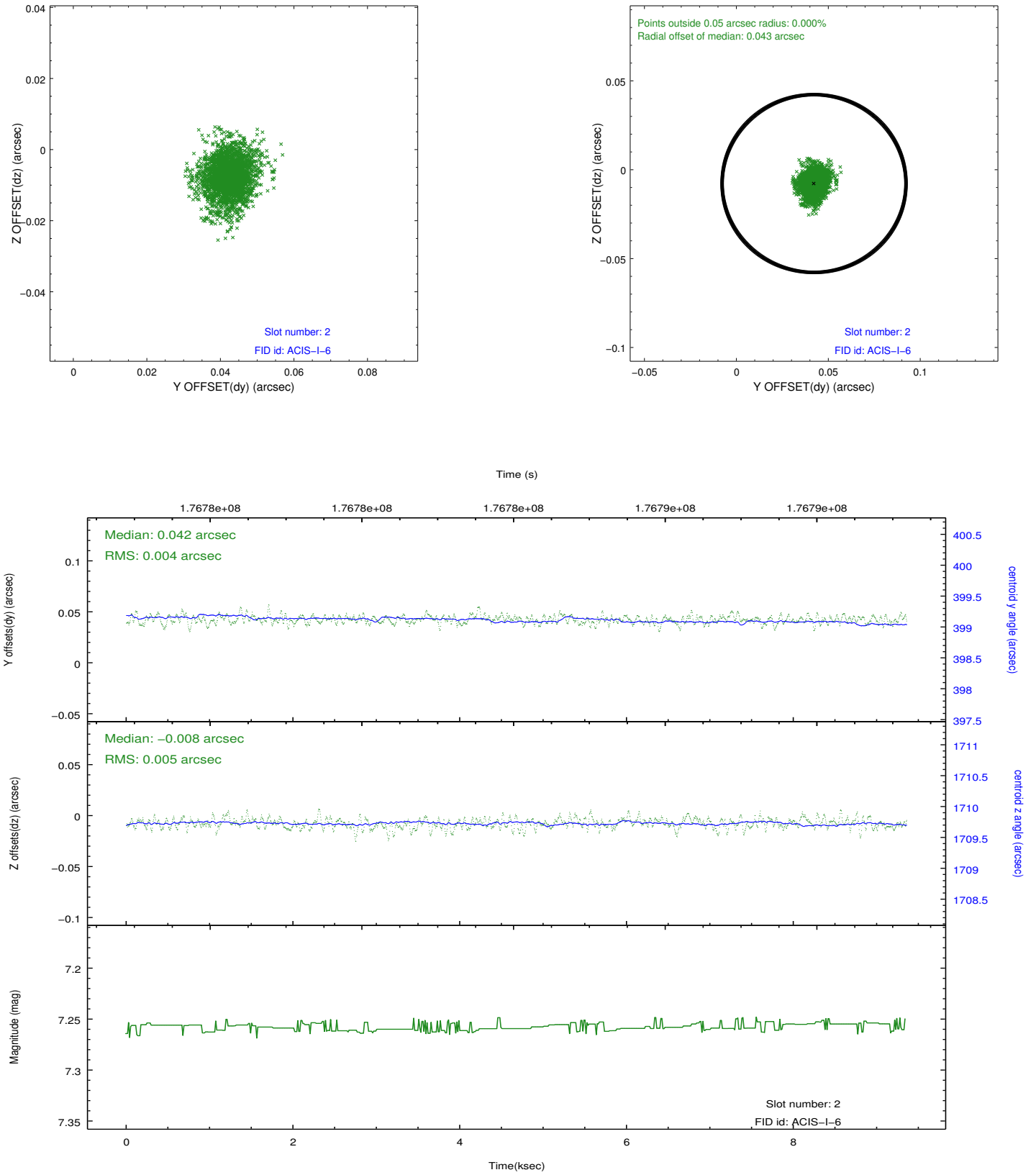
### 2.5.1 Slot 0



## 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)	2012.11.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.967

### A.2 Comments

Window constraint met.