

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3548 - L2 Version 3  
Chandra X-Ray Center

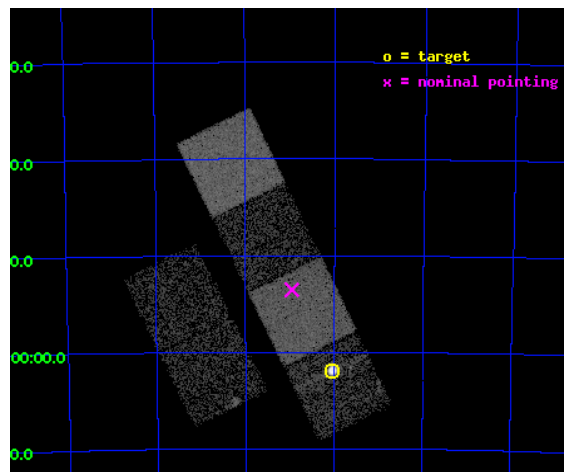
L2 Processing Date : Nov 3 2012

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# 1 Front

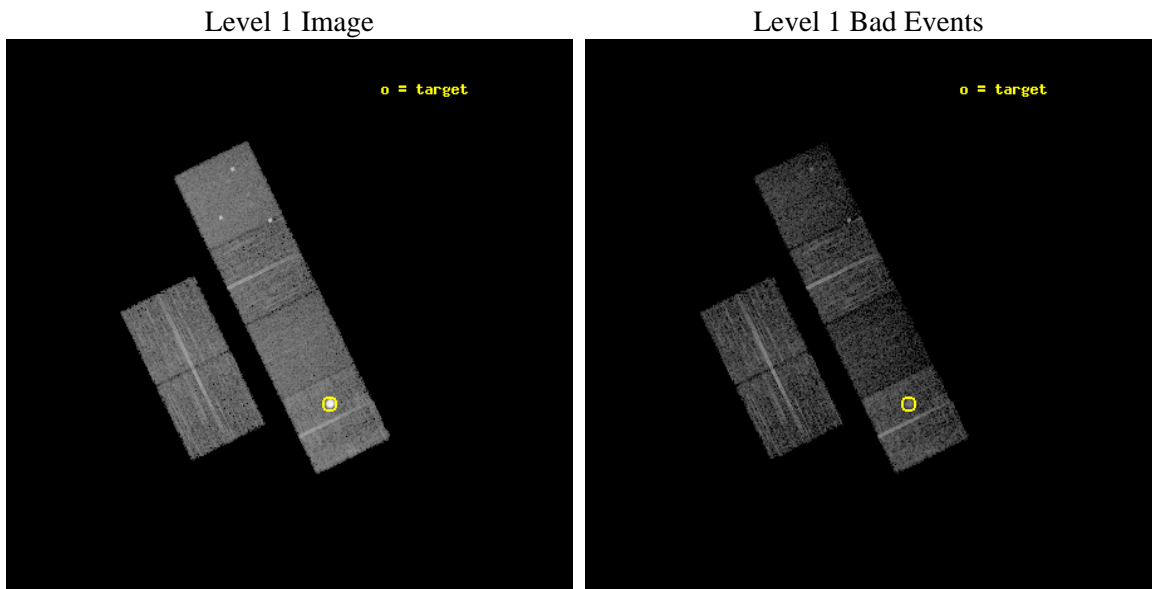
seq_num	590303	Sequence number
obs_id	3548	Observation id
title	AO4B ACIS-S CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[S4,-120,-9.15,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.238583679765	Nominal RA [deg]
dec_nom	-71.892374209167	Nominal Dec [deg]
roll_nom	63.97611309699	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7753.5590207577	Sum of GTIs [s]
livetime	7655.3787878041	Livetime [s]
ontime2	7753.5590904653	Sum of GTIs [s]
ontime3	7756.7999711037	Sum of GTIs [s]
ontime5	7756.7999711037	Sum of GTIs [s]
ontime6	7756.7999711037	Sum of GTIs [s]
ontime7	7756.7999711037	Sum of GTIs [s]
ontime8	7753.5590207577	Sum of GTIs [s]
l2events	78002	Number of level 2 events



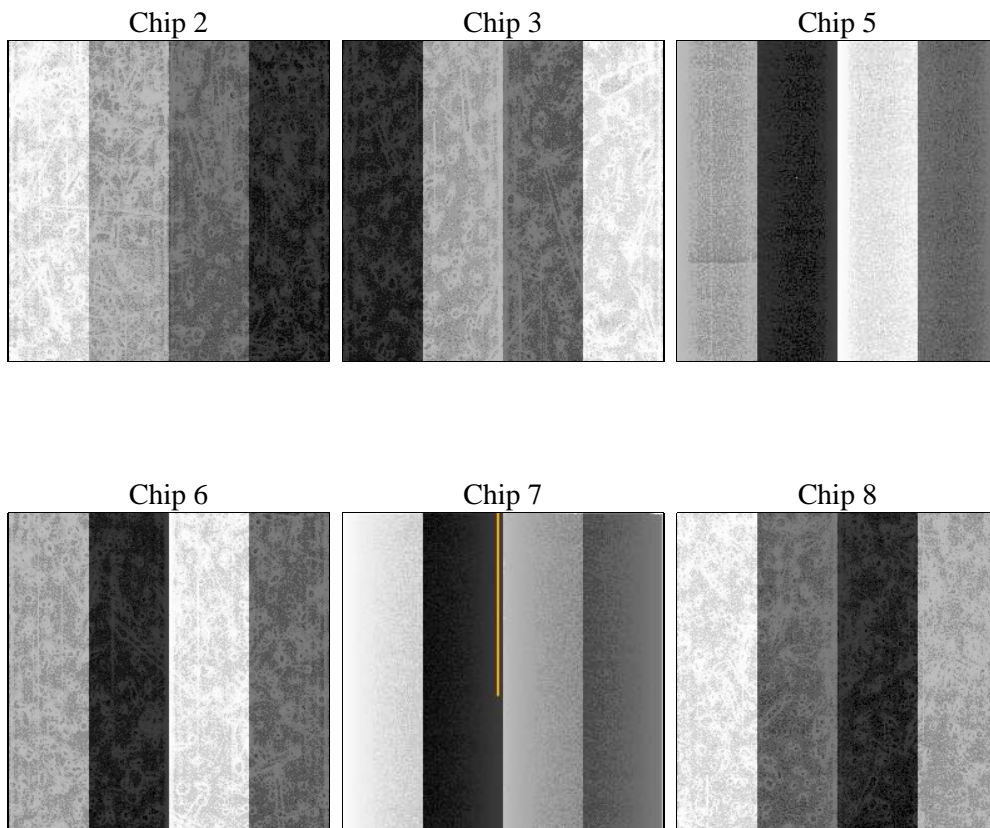
## 2 OBI

### 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	7753.5590207577	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	7753.5590904653	Sum of GTIs [s]
date	2012-11-03T14:26:46	Date and time of file creation	ontime3	7756.7999711037	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	7756.7999711037	Sum of GTIs [s]
			ontime6	7756.7999711037	Sum of GTIs [s]
			ontime7	7756.7999711037	Sum of GTIs [s]
			ontime8	7753.5590207577	Sum of GTIs [s]
			l1events	272115	Number of level 1 events

### 2.1.4 Events

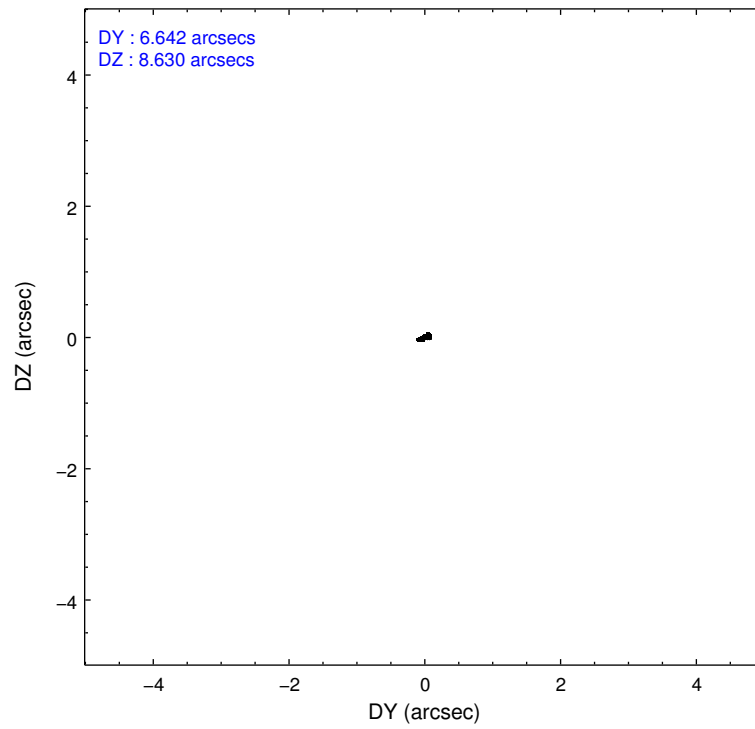
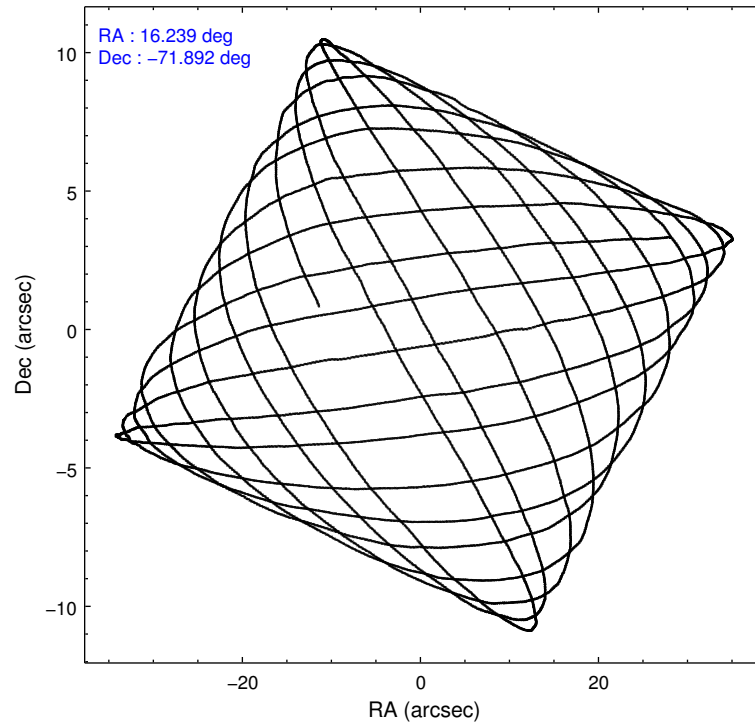
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	40641	37814	46911	36633	35586	74530	grade 0 events	1387	1390	3786	1432	1868	25714
rejected events	37011	34306	21326	32733	17821	38511		3%	3%	8%	3%	5%	34%
rejected %	91%	90%	45%	89%	50%	51%	grade 1 events	26	18	279	10	36	218
								0%	0%	0%	0%	0%	0%
							grade 2 events	830	682	7010	816	3786	4164
								2%	1%	14%	2%	10%	5%
							grade 3 events	382	403	1184	423	1744	1611
								0%	1%	2%	1%	4%	2%
							grade 4 events	413	398	1298	442	1720	1505
								1%	1%	2%	1%	4%	2%
							grade 5 events	1074	1192	3869	1273	3911	1930
								2%	3%	8%	3%	10%	2%
							grade 6 events	618	636	12314	790	8658	3051
								1%	1%	26%	2%	24%	4%
							grade 7 events	35911	33095	17171	31447	13863	36337
								88%	87%	36%	85%	38%	48%

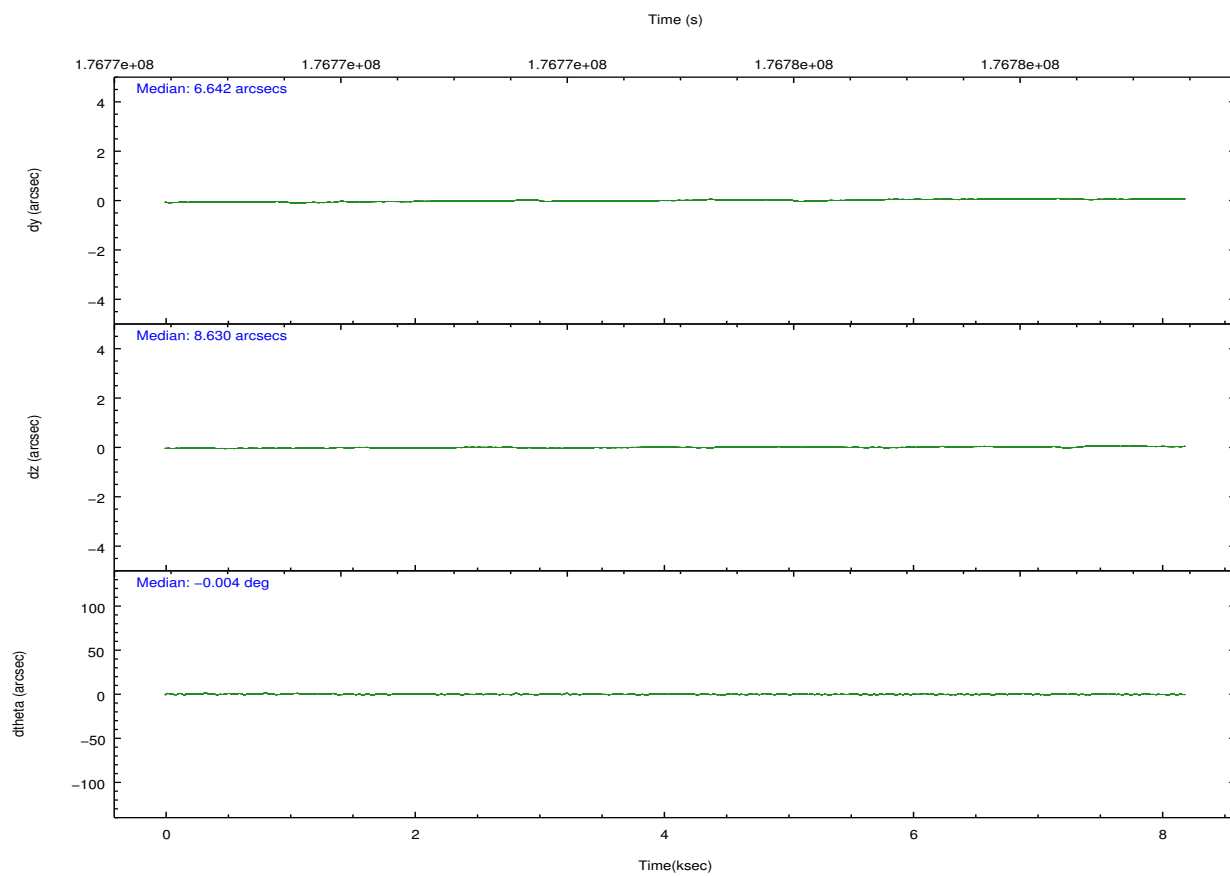
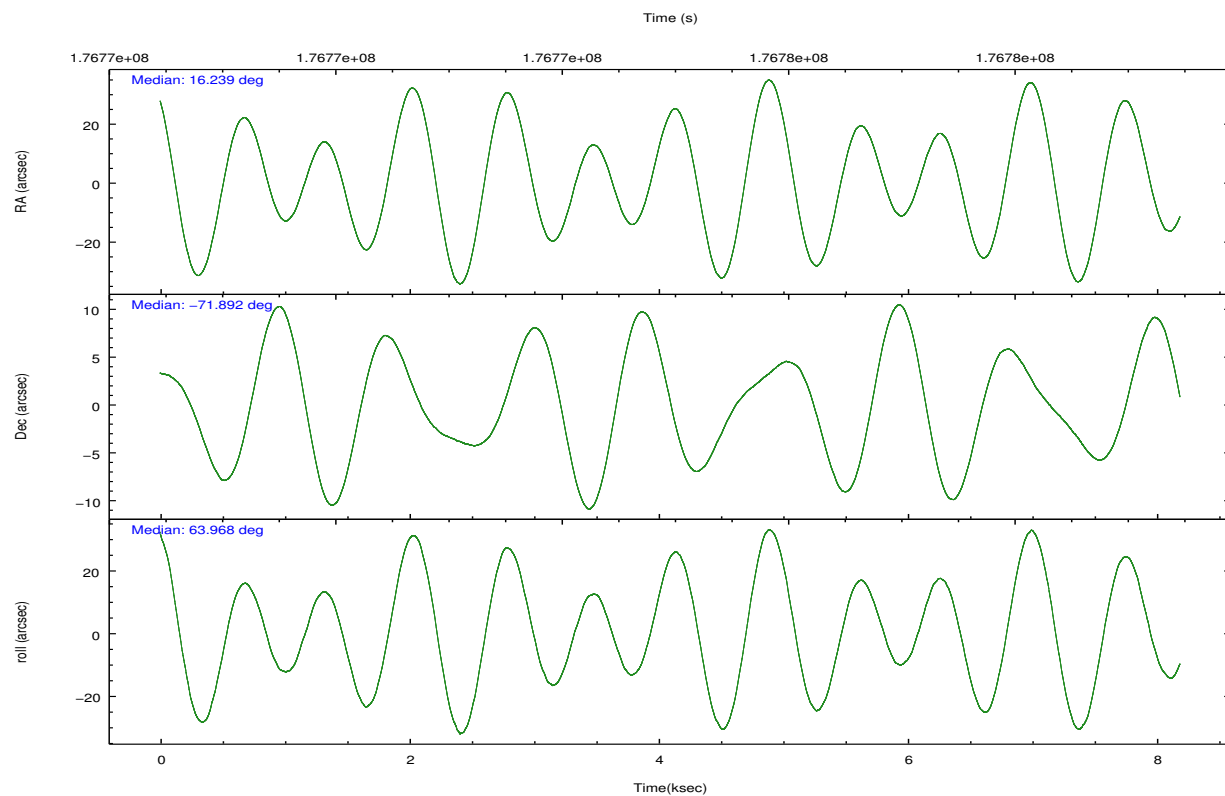


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	16.245999	16.23858367976468	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.919581	-71.89237420916655	Alternating exposures requested	N	N
[deg] Pointing Roll	63.826533	63.97611309699002	[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	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	176771043.184000	176770667.13284			
Observation start date	2003-08-08T23:02:59	2003-08-08T22:57:47			
[s] Observation end time (MET)	176779043.184000	176779177.7082			
Observation end date	2003-08-09T01:16:19	2003-08-09T01:19:37			
Read mode	TIMED	TIMED			

## 2.3 Aspect



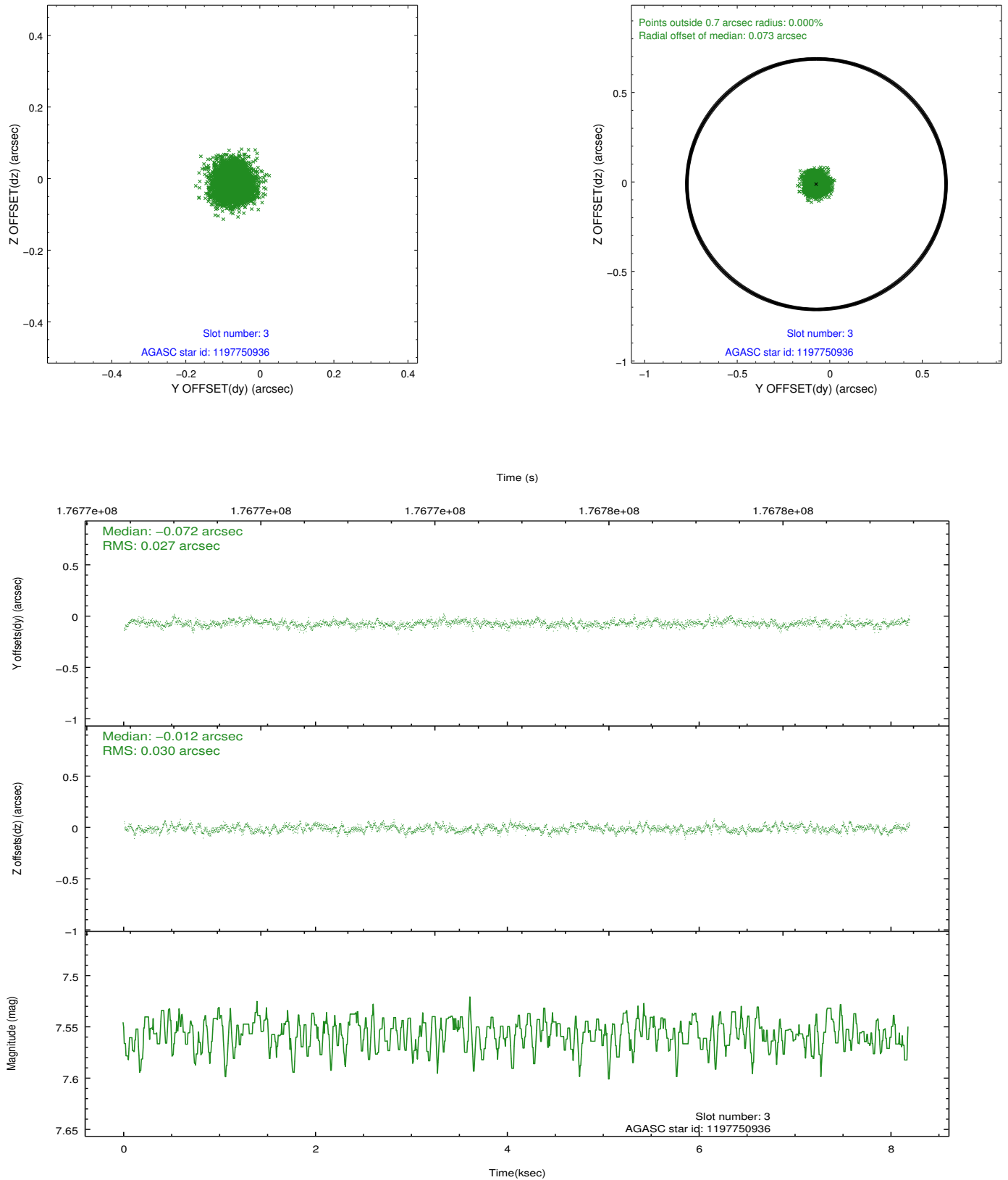


### Slot Statistics

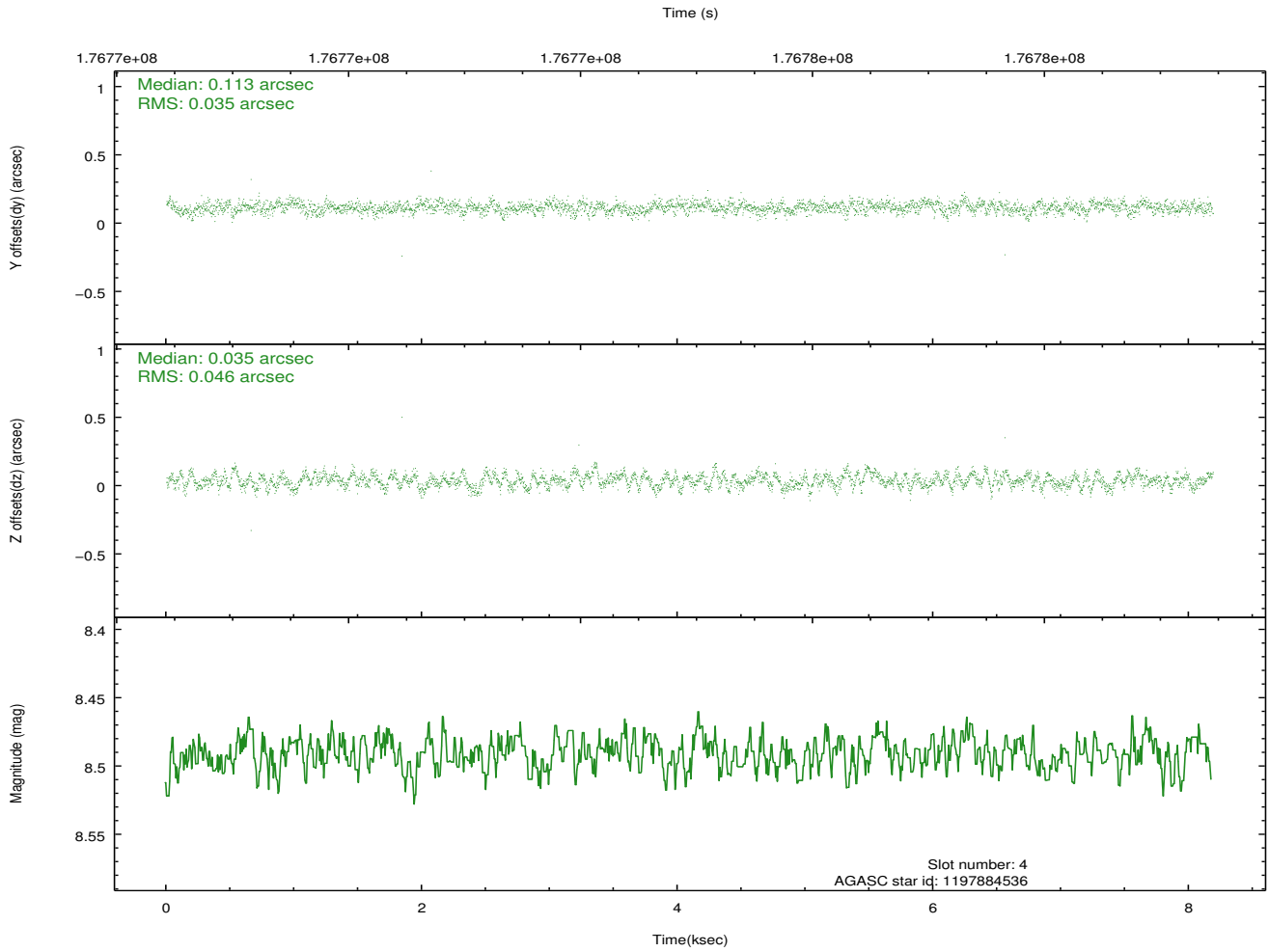
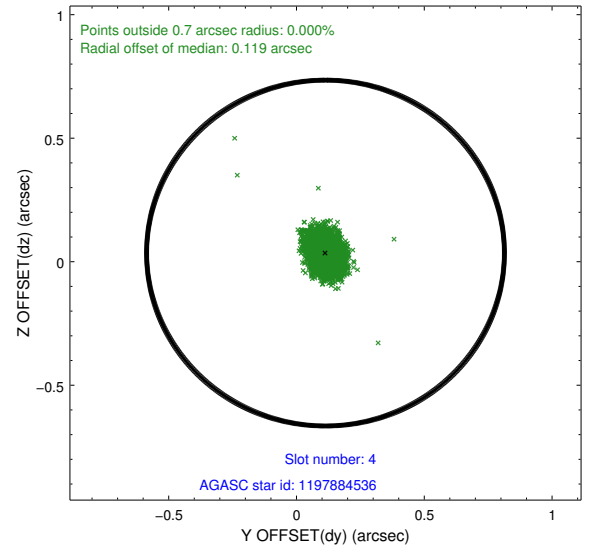
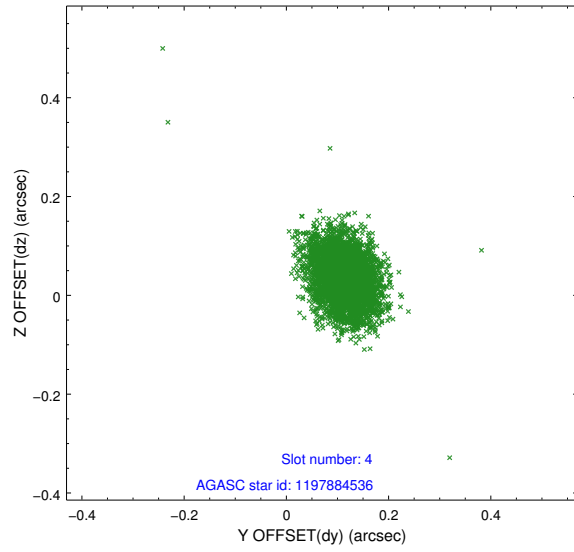
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1997	-0.033	-0.042	0.007	0.011	0.000000	0.000000	-759.43	-1729.88
1	FID	ACIS-S-4	7.20	1997	0.058	0.027	0.005	0.011	0.000000	0.000000	2153.64	177.96
2	FID	ACIS-S-5	7.23	1998	-0.056	0.024	0.006	0.012	0.000000	0.000000	-1811.40	172.42
3	GUIDE	1197750936	7.56	3995	-0.072	-0.012	0.043	0.069	15.387940	-71.549550	757.76	1461.77
4	GUIDE	1197884536	8.49	3993	0.113	0.035	0.060	0.099	17.160729	-71.835289	718.62	-790.48
5	GUIDE	1197884712	8.30	3995	-0.020	0.114	0.053	0.084	16.087398	-72.252690	-1152.95	-373.22
6	GUIDE	1197885328	7.22	3995	-0.040	-0.183	0.045	0.070	16.283090	-71.733943	618.24	256.66
7	GUIDE	1197885104	9.38	3991	0.018	0.050	0.088	0.148	17.845067	-72.189368	-115.81	-2018.76

## 2.4 Star Slots

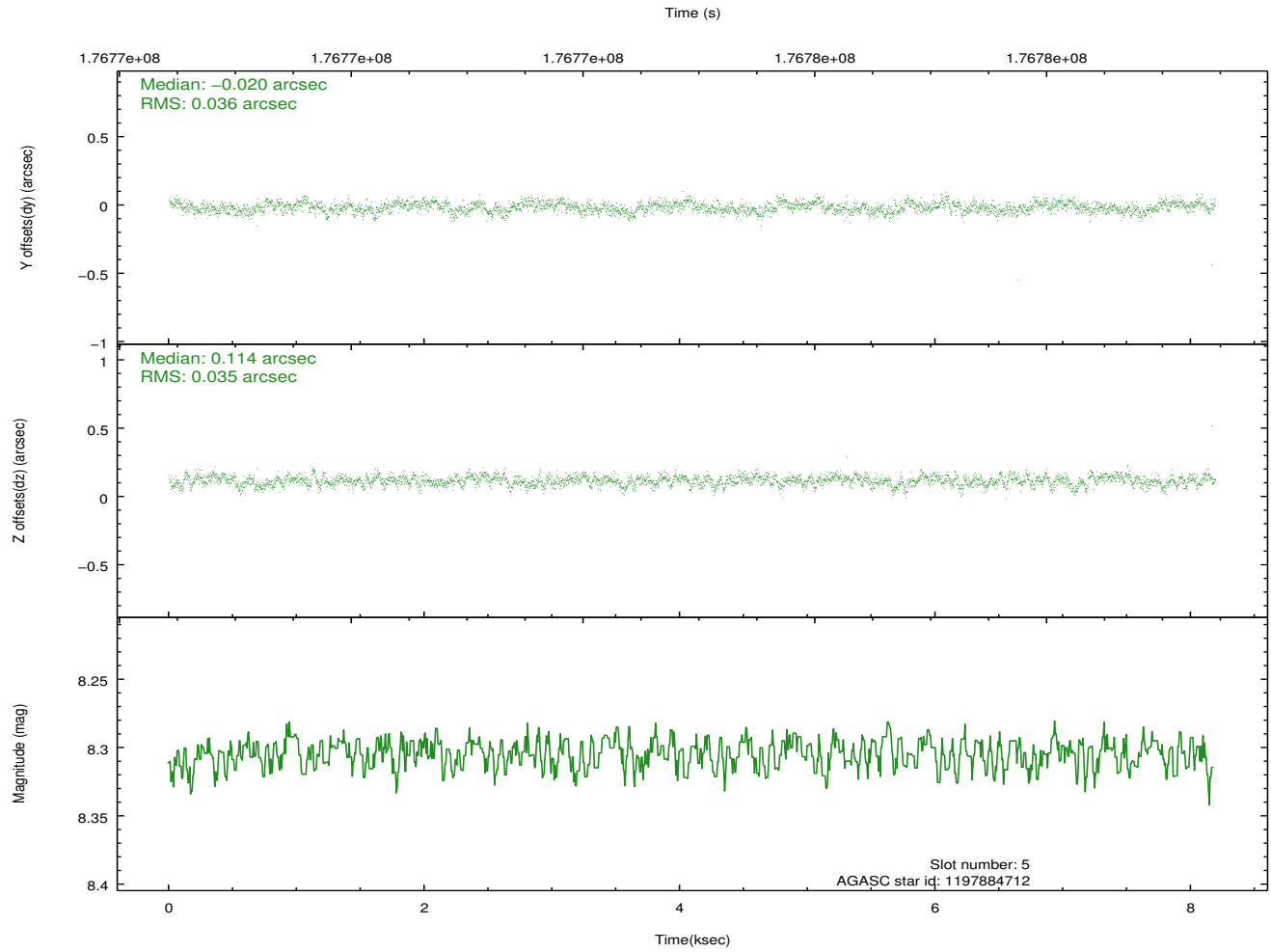
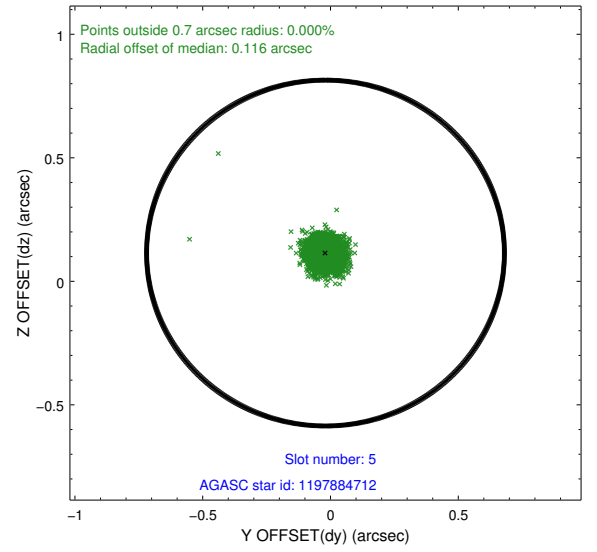
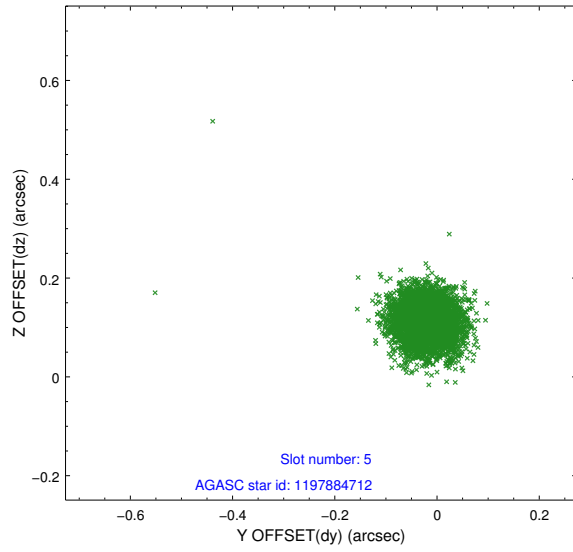
### 2.4.1 Slot 3



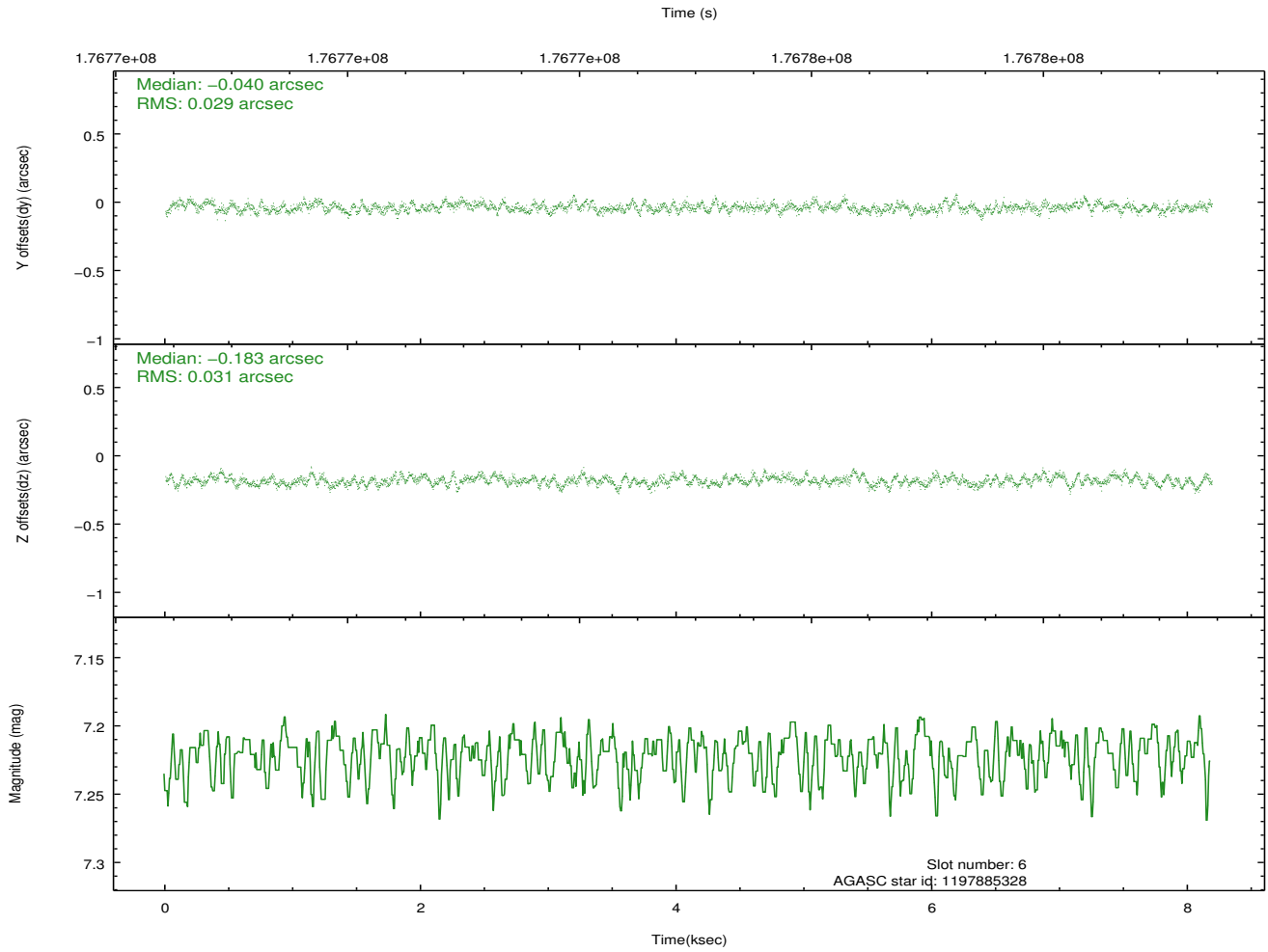
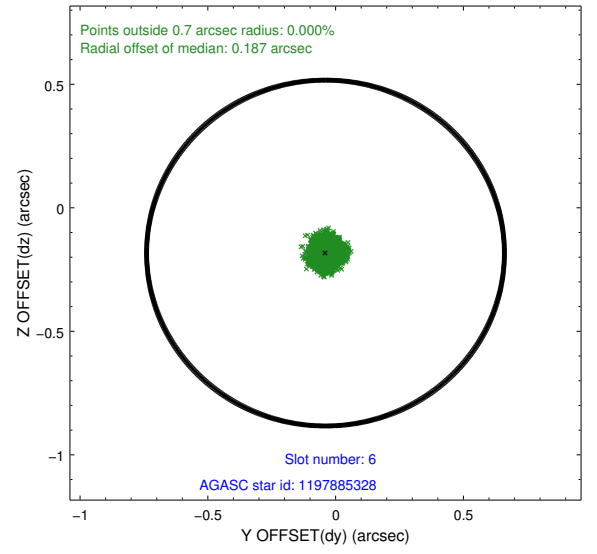
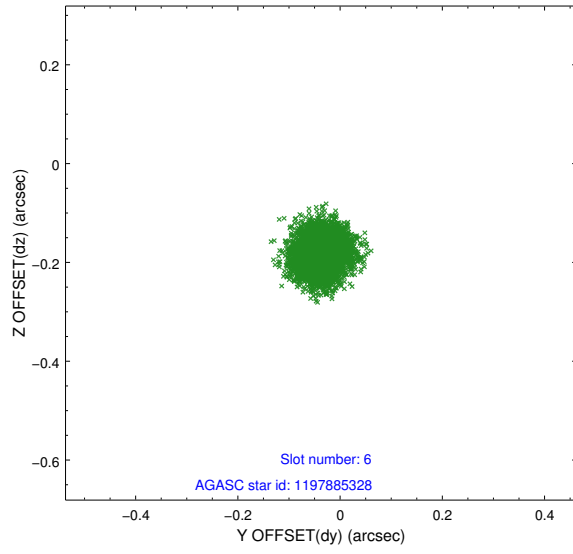
## 2.4.2 Slot 4



### 2.4.3 Slot 5

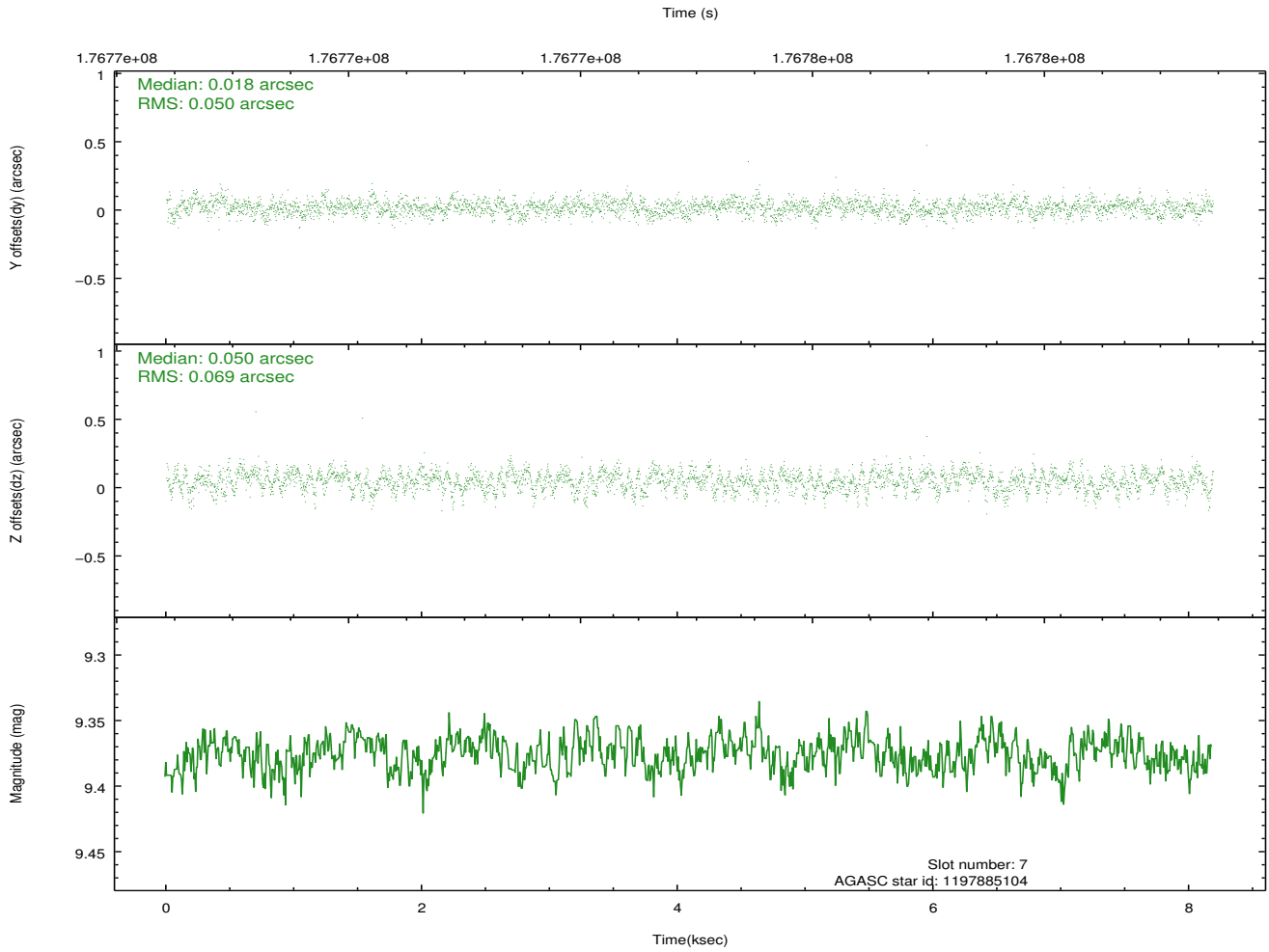
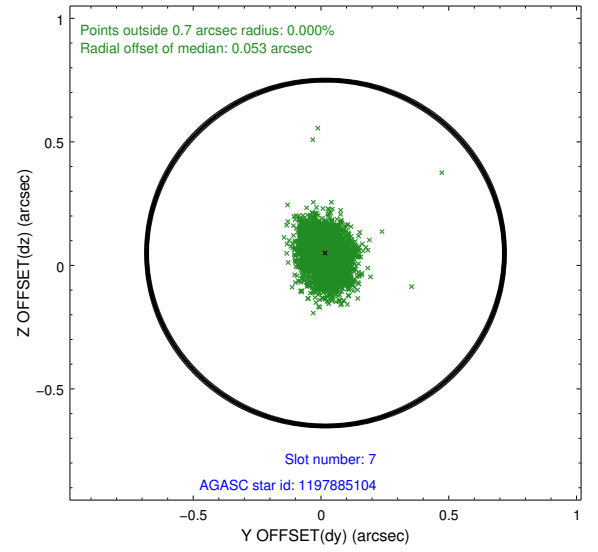
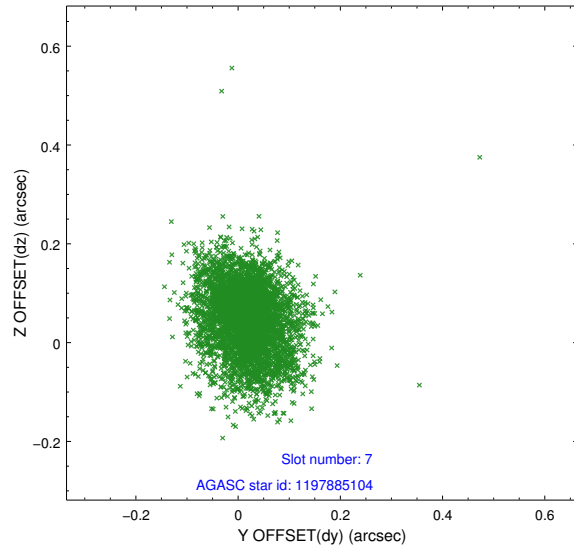


## 2.4.4 Slot 6



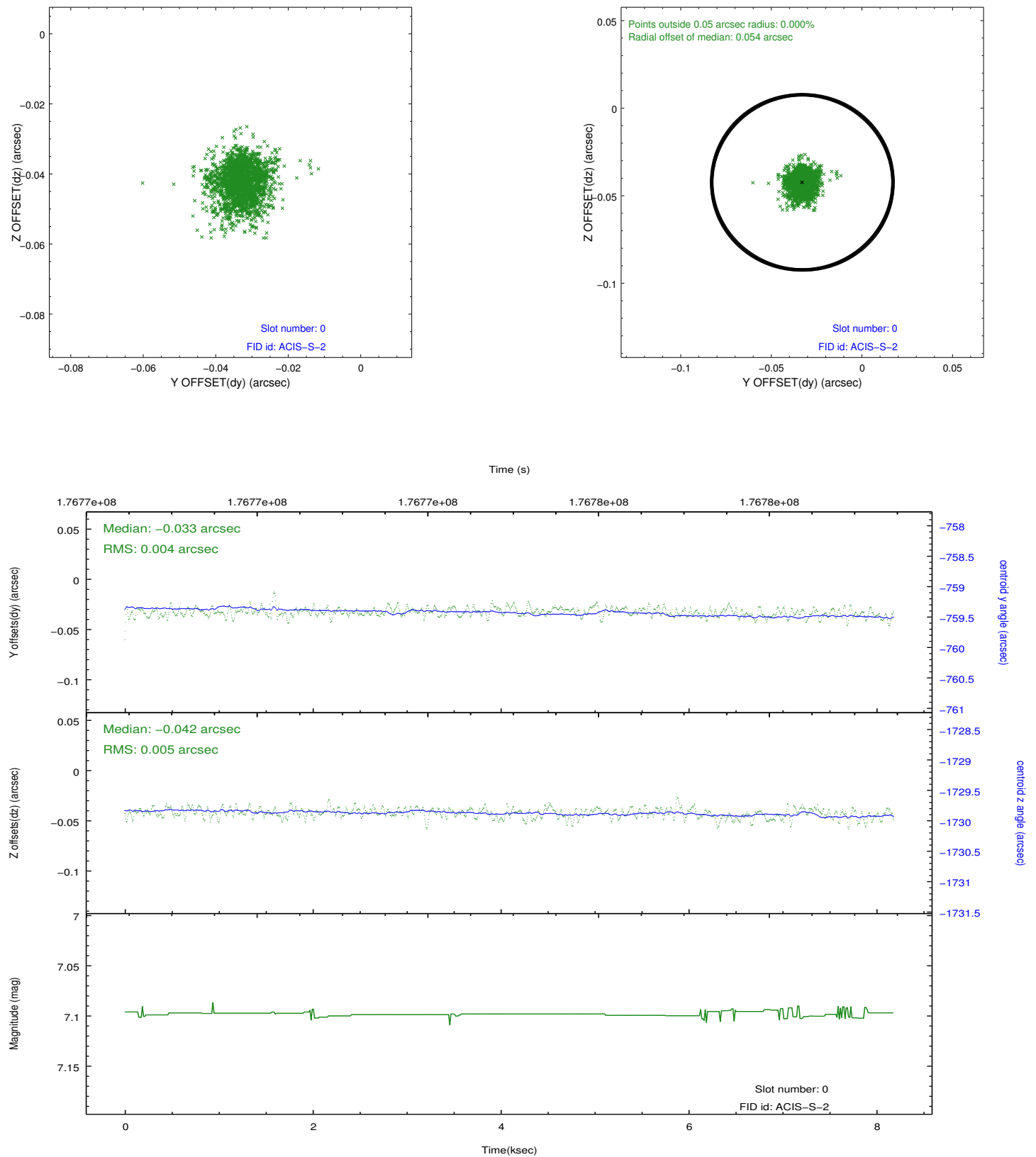


## 2.4.5 Slot 7

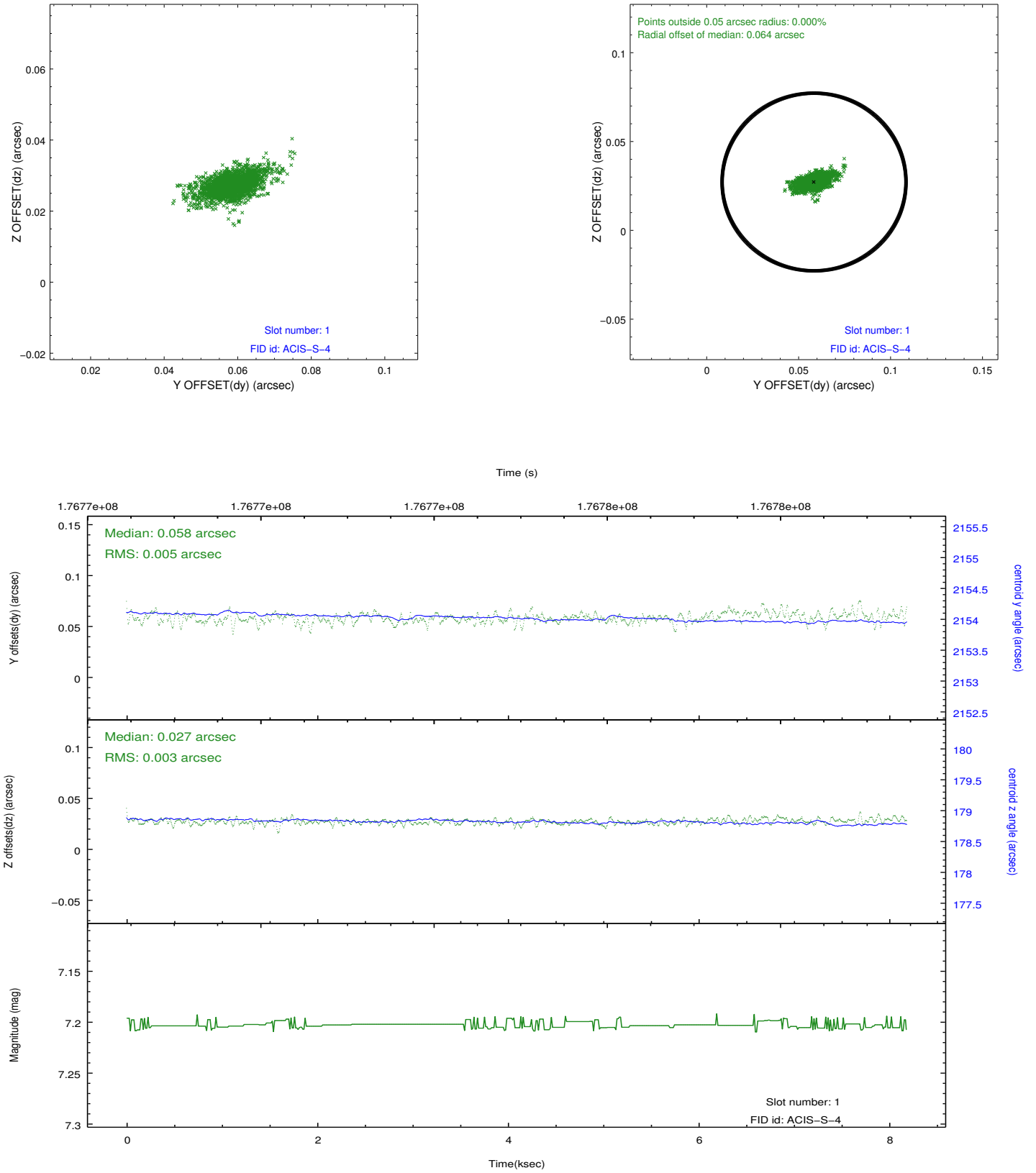


## 2.5 FID Slots

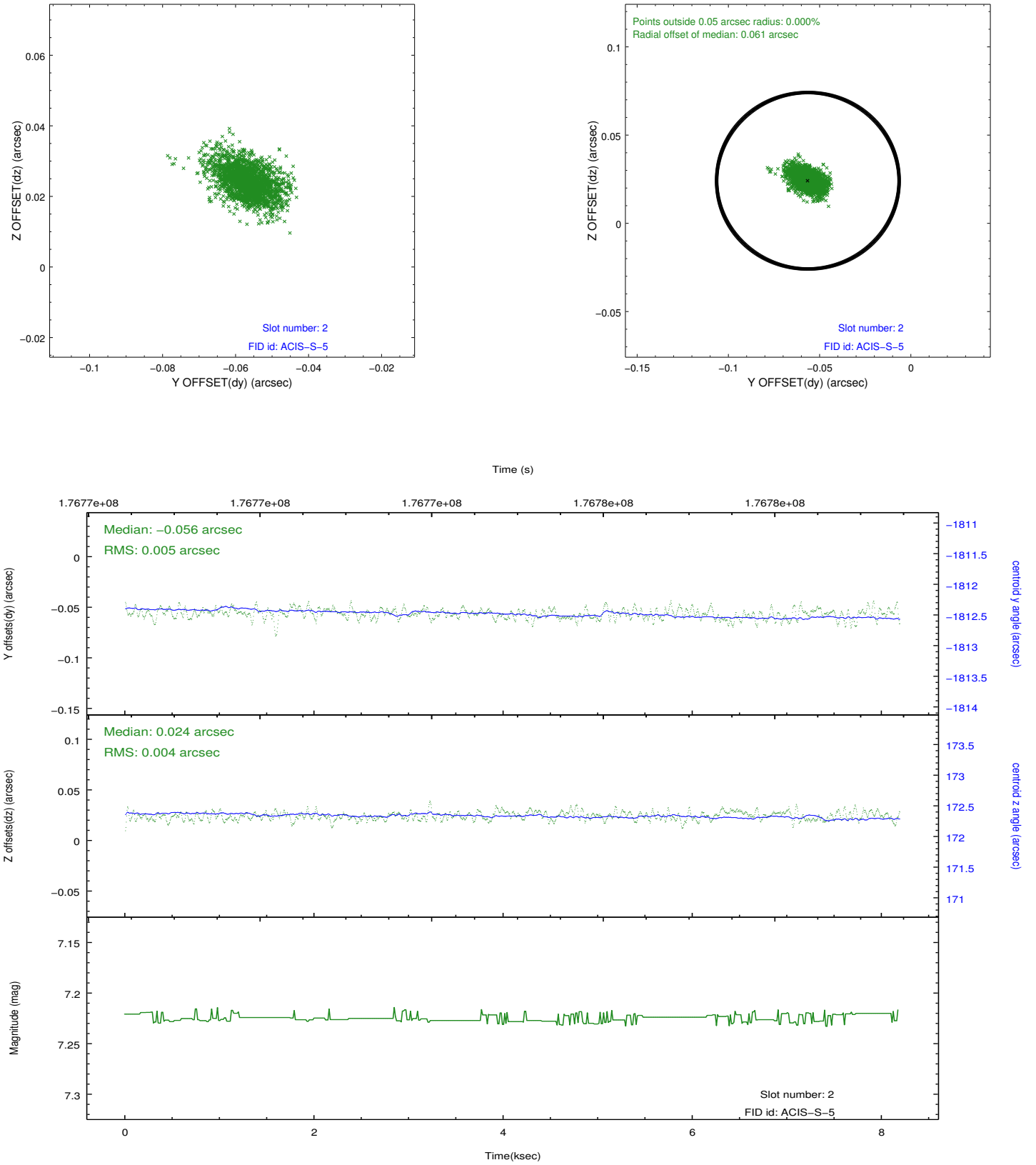
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.11.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.756

### A.2 Comments

Window preference met.