

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7847 - L2 Version 2  
Chandra X-Ray Center

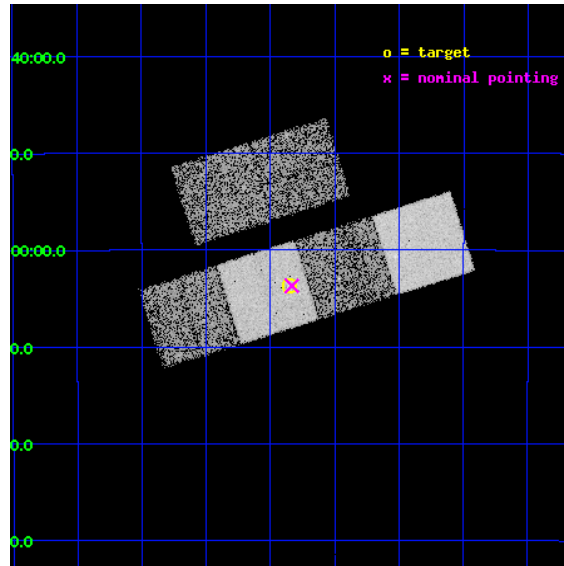
L2 Processing Date : Apr 25 2012

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# 1 Front

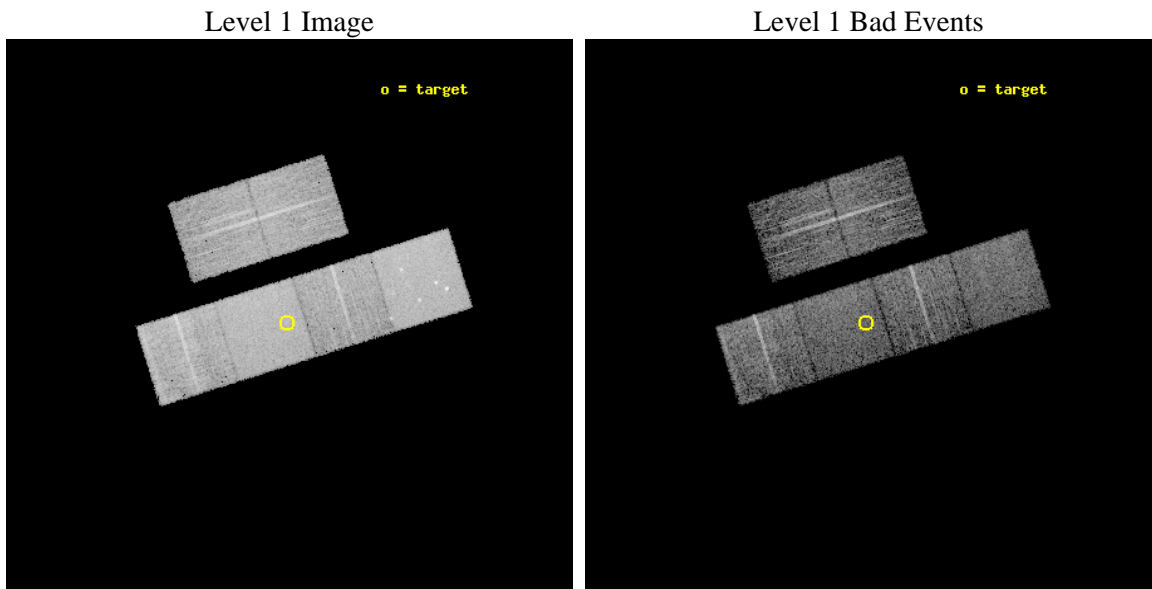
seq_num	701511	Sequence number
obs_id	7847	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	NGC 1302	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.963333	Observer's specified target RA [deg]
dec_targ	-26.060583	Observer's specified target Dec [deg]
ra_nom	49.958190202579	Nominal RA [deg]
dec_nom	-26.061709513099	Nominal Dec [deg]
roll_nom	162.64555097964	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4953.2879834771	Sum of GTIs [s]
livetime	4890.5664685184	Livetime [s]
ontime2	4950.0880532265	Sum of GTIs [s]
ontime3	4953.1648634672	Sum of GTIs [s]
ontime5	4953.2469434738	Sum of GTIs [s]
ontime6	4953.2059034705	Sum of GTIs [s]
ontime7	4953.2879834771	Sum of GTIs [s]
ontime8	4953.1238234639	Sum of GTIs [s]
l2events	76453	Number of level 2 events



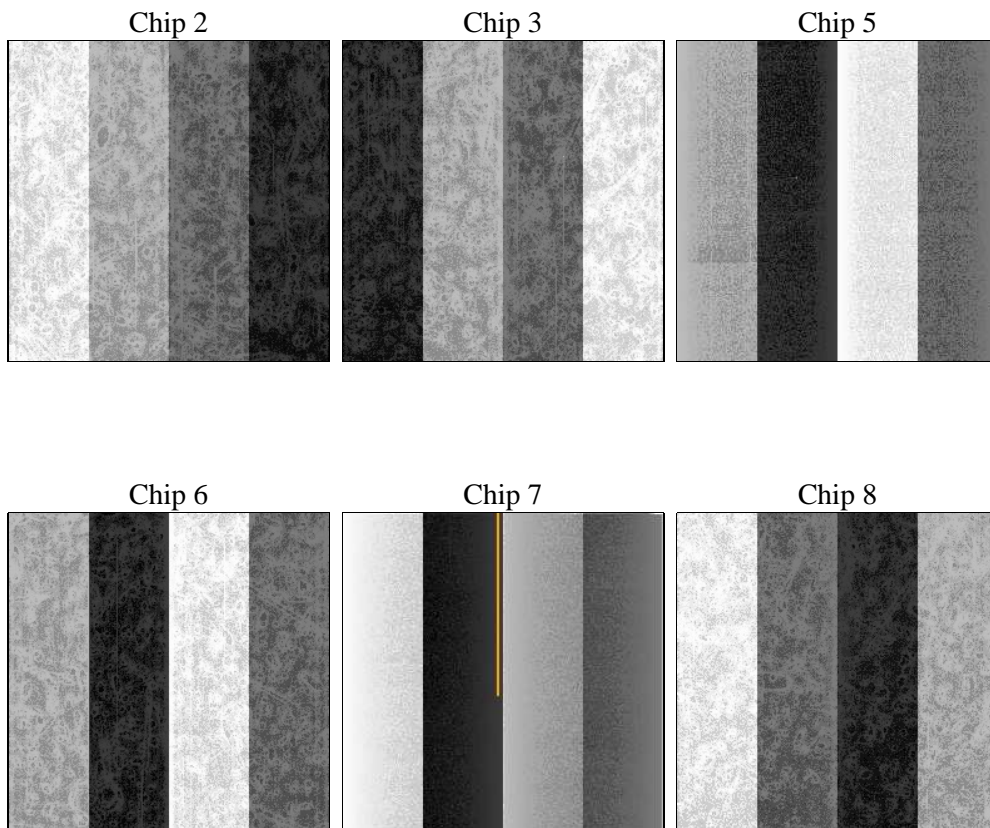
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	4953.2879834771	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	4950.0880532265	Sum of GTIs [s]
date	2012-04-25T09:24:27	Date and time of file creation	ontime3	4953.1648634672	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	4953.2469434738	Sum of GTIs [s]
			ontime6	4953.2059034705	Sum of GTIs [s]
			ontime7	4953.2879834771	Sum of GTIs [s]
			ontime8	4953.1238234639	Sum of GTIs [s]
			l1events	332834	Number of level 1 events

### 2.1.4 Events

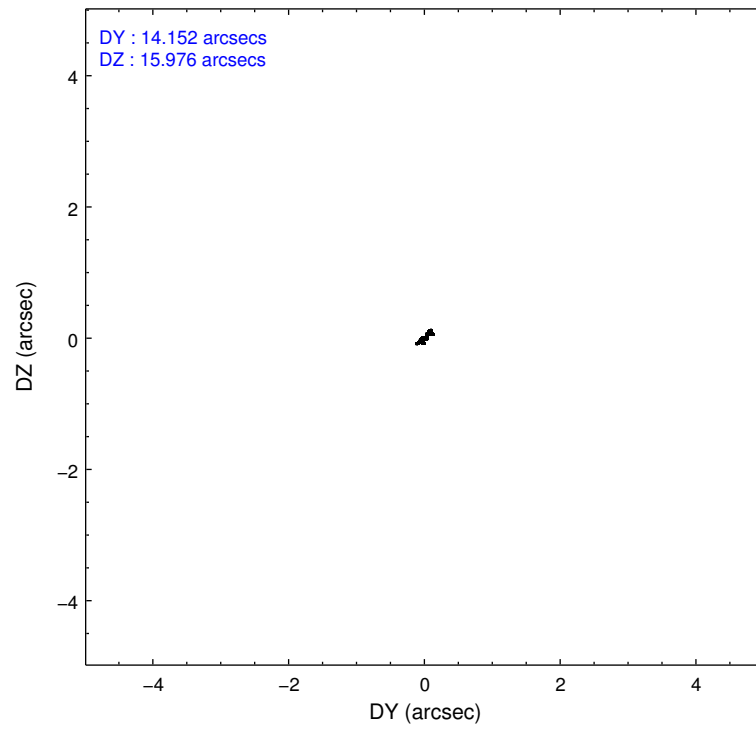
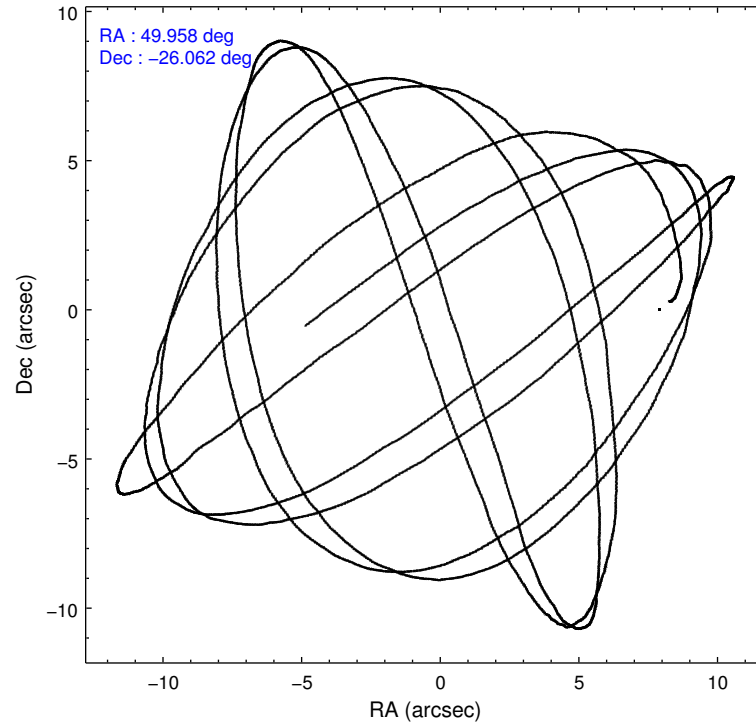
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	47111	45023	71876	45660	64254	58910	grade 0 events	2508	2415	3675	2219	2290	4140
rejected events	41569	39551	38616	40102	37604	45306		5%	5%	5%	4%	3%	7%
rejected %	88%	87%	53%	87%	58%	76%	grade 1 events	32	35	122	20	67	49
								0%	0%	0%	0%	0%	0%
							grade 2 events	1108	1065	9885	1166	5420	2999
								2%	2%	13%	2%	8%	5%
							grade 3 events	516	528	1183	517	2274	1479
								1%	1%	1%	1%	3%	2%
							grade 4 events	550	520	1162	529	2272	1335
								1%	1%	1%	1%	3%	2%
							grade 5 events	1880	2076	5100	2191	6179	2852
								3%	4%	7%	4%	9%	4%
							grade 6 events	869	958	17398	1133	14437	3664
								1%	2%	24%	2%	22%	6%
							grade 7 events	39648	37426	33351	37885	31315	42392
								84%	83%	46%	82%	48%	71%

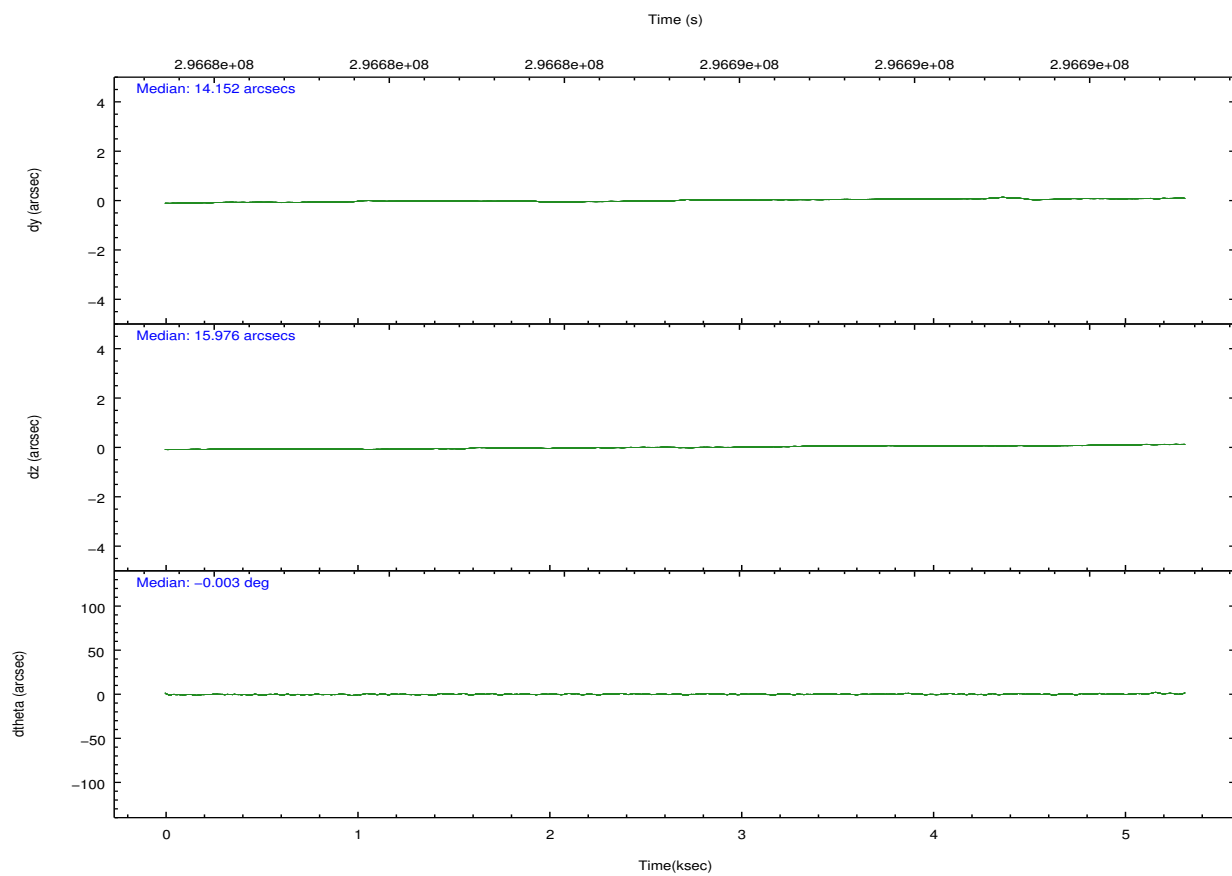
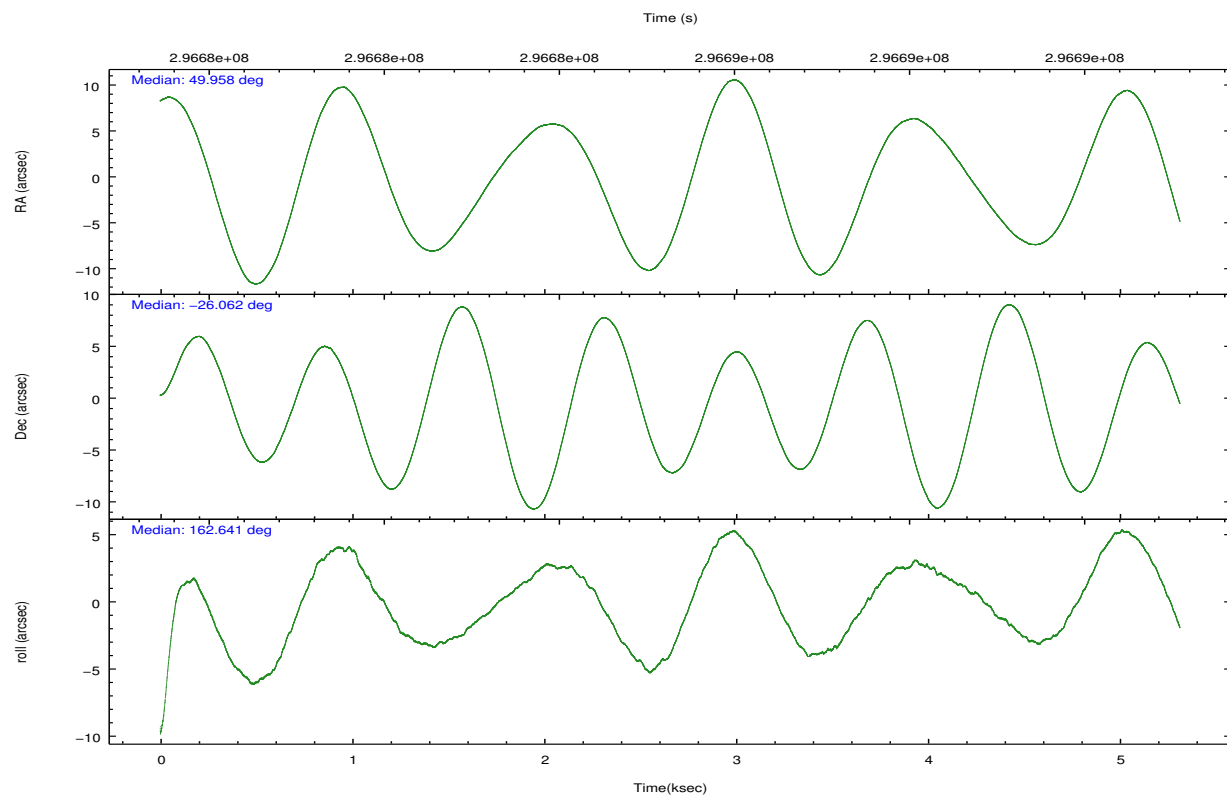


## 2.2 Compared Parameters

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	49.987700	49.95819020257923	Subarray requested	NONE	NONE
[deg] Pointing Dec	-26.055431	-26.06170951309909	Alternating exposures requested	N	N
[deg] Pointing Roll	162.501904	162.6455509796443	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	296683286.184000	296682260.47108			
Observation start date	2007-05-27T20:00:21	2007-05-27T19:44:20			
[s] Observation end time (MET)	296688286.184000	296688944.4964			
Observation end date	2007-05-27T21:23:41	2007-05-27T21:35:44			
Read mode	TIMED	TIMED			

## 2.3 Aspect



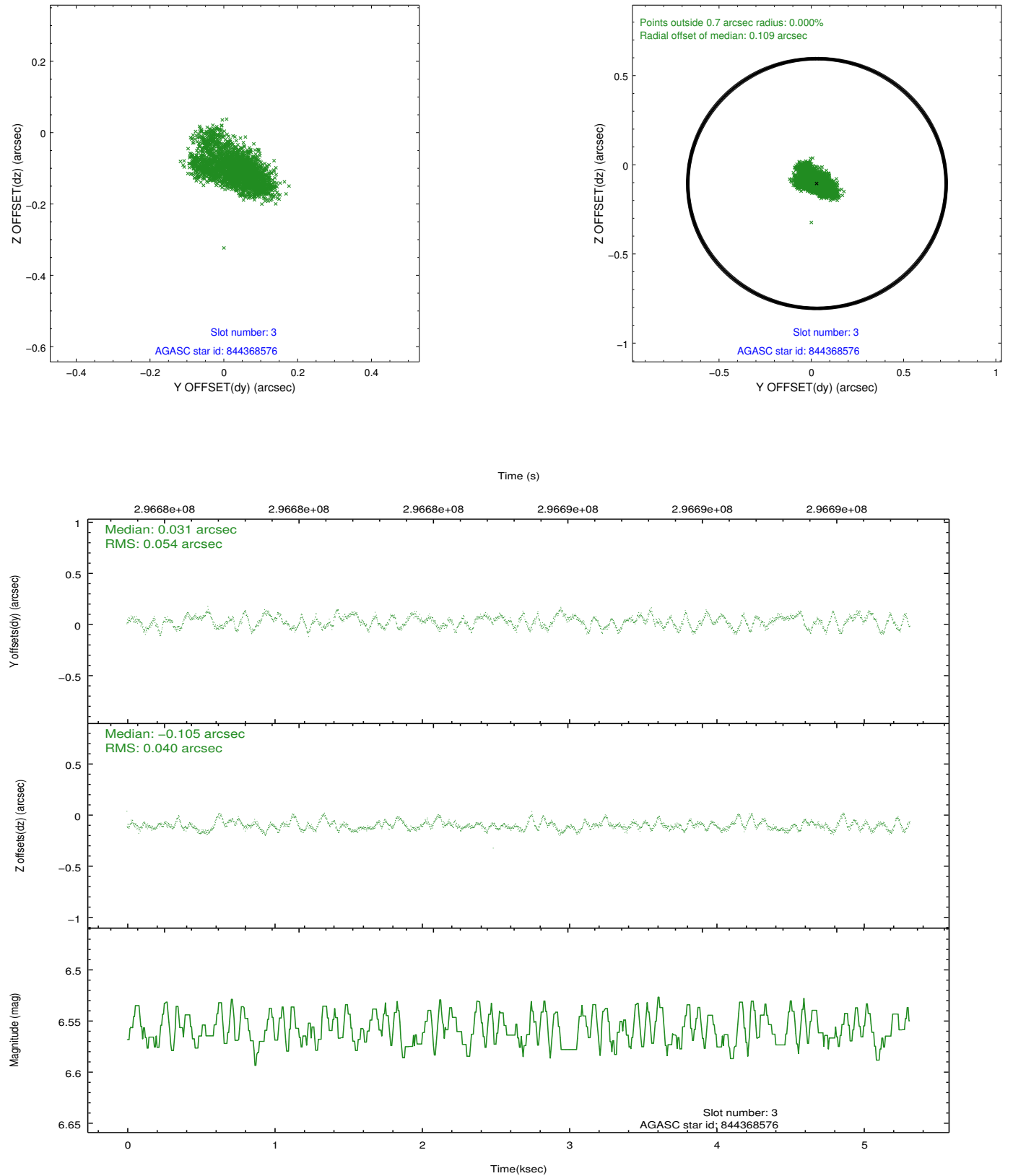


### Slot Statistics

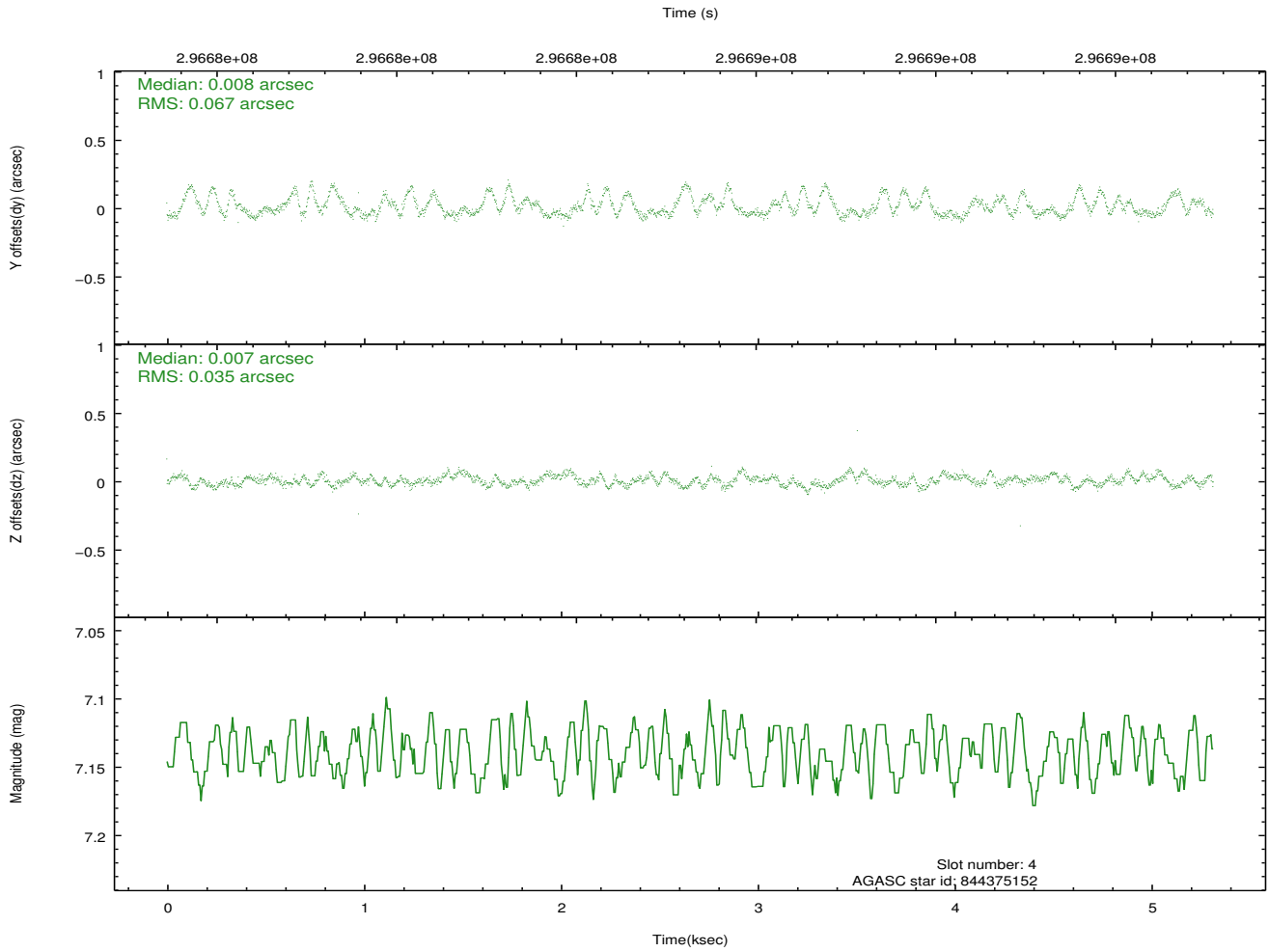
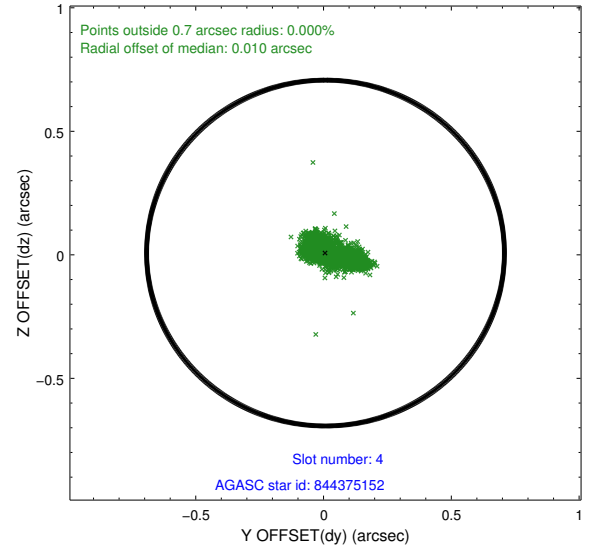
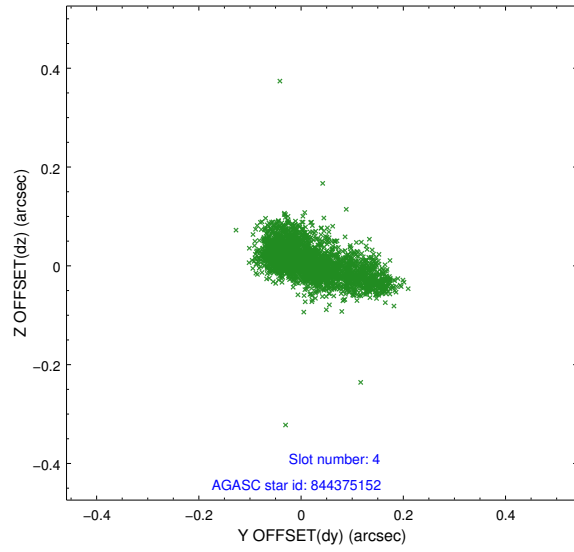
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1297	-0.109	-0.073	0.005	0.009	0.000000	0.000000	-767.25	-1737.39
1	FID	ACIS-S-4	7.19	1297	0.124	0.054	0.006	0.010	0.000000	0.000000	2145.78	169.98
2	FID	ACIS-S-6	7.33	1295	-0.042	0.026	0.007	0.011	0.000000	0.000000	396.31	808.68
3	GUIDE	844368576	6.56	2594	0.031	-0.105	0.074	0.117	50.188347	-26.606505	-1212.70	1698.49
4	GUIDE	844375152	7.14	2594	0.008	0.007	0.073	0.143	50.185770	-26.287797	-861.56	606.12
5	GUIDE	844375520	7.70	2594	-0.069	-0.024	0.052	0.086	49.461655	-26.352417	1295.38	1534.05
6	GUIDE	845289720	8.27	2594	0.013	-0.052	0.056	0.092	50.473644	-26.276997	-1735.99	292.85
7	GUIDE	845293880	6.83	2593	0.009	0.175	0.058	0.094	50.567859	-25.587804	-1291.95	-2167.26

## 2.4 Star Slots

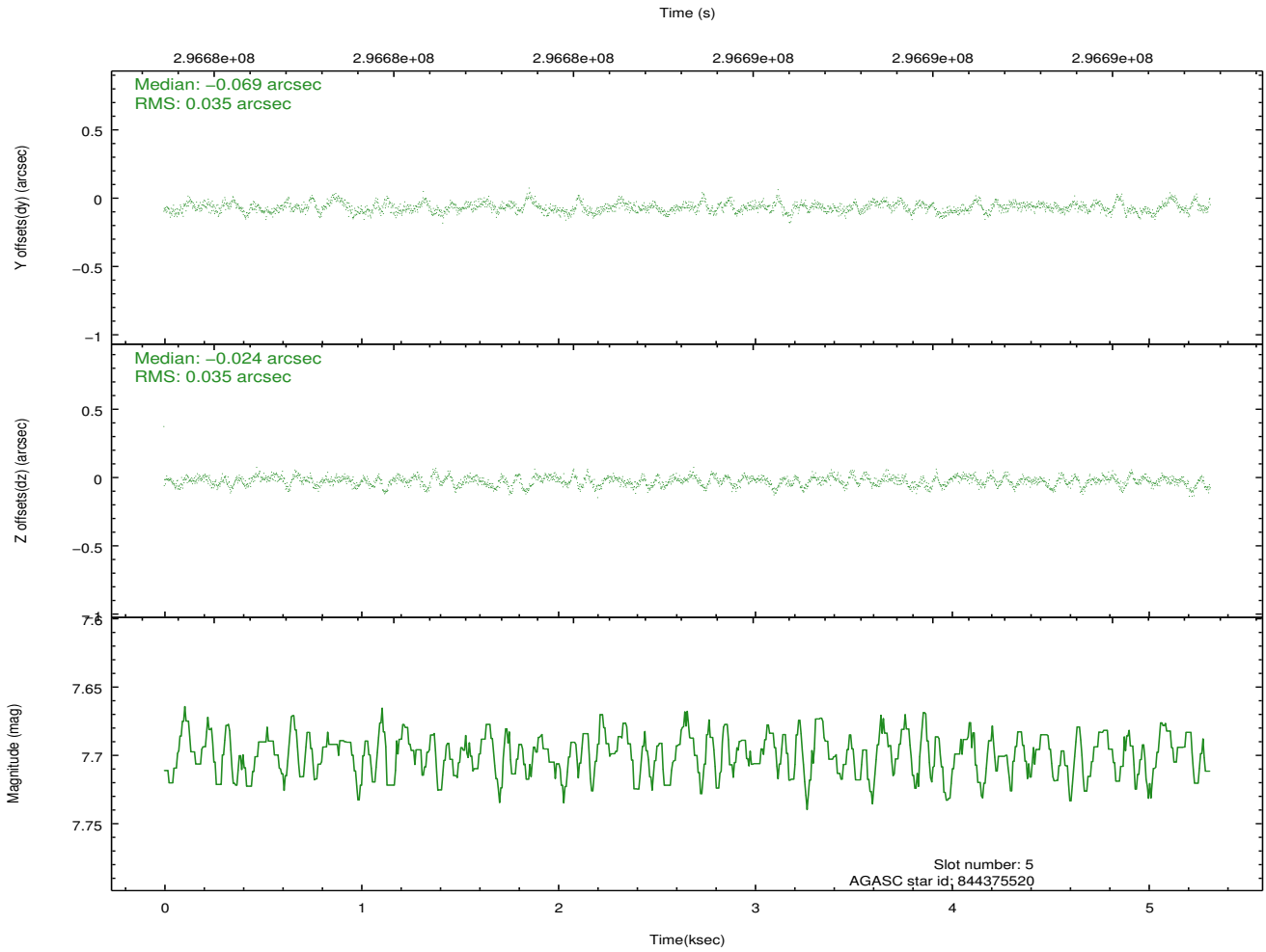
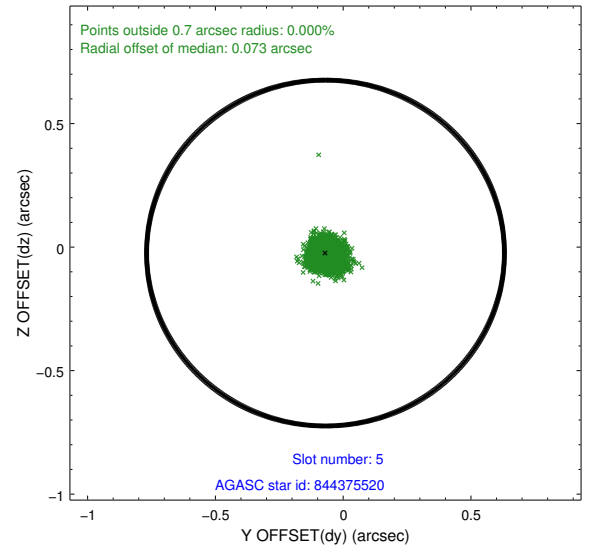
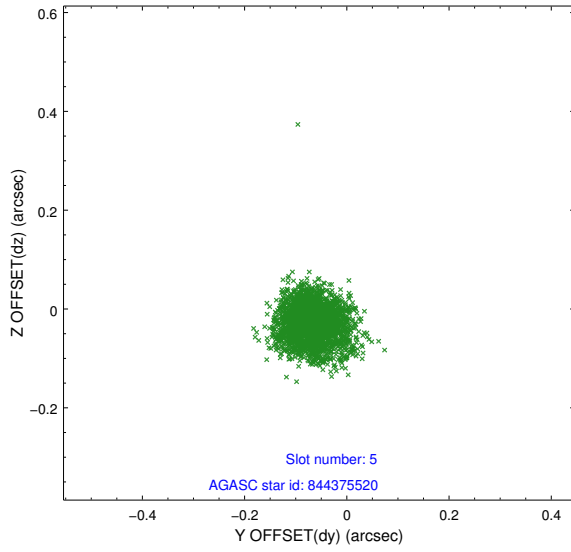
### 2.4.1 Slot 3



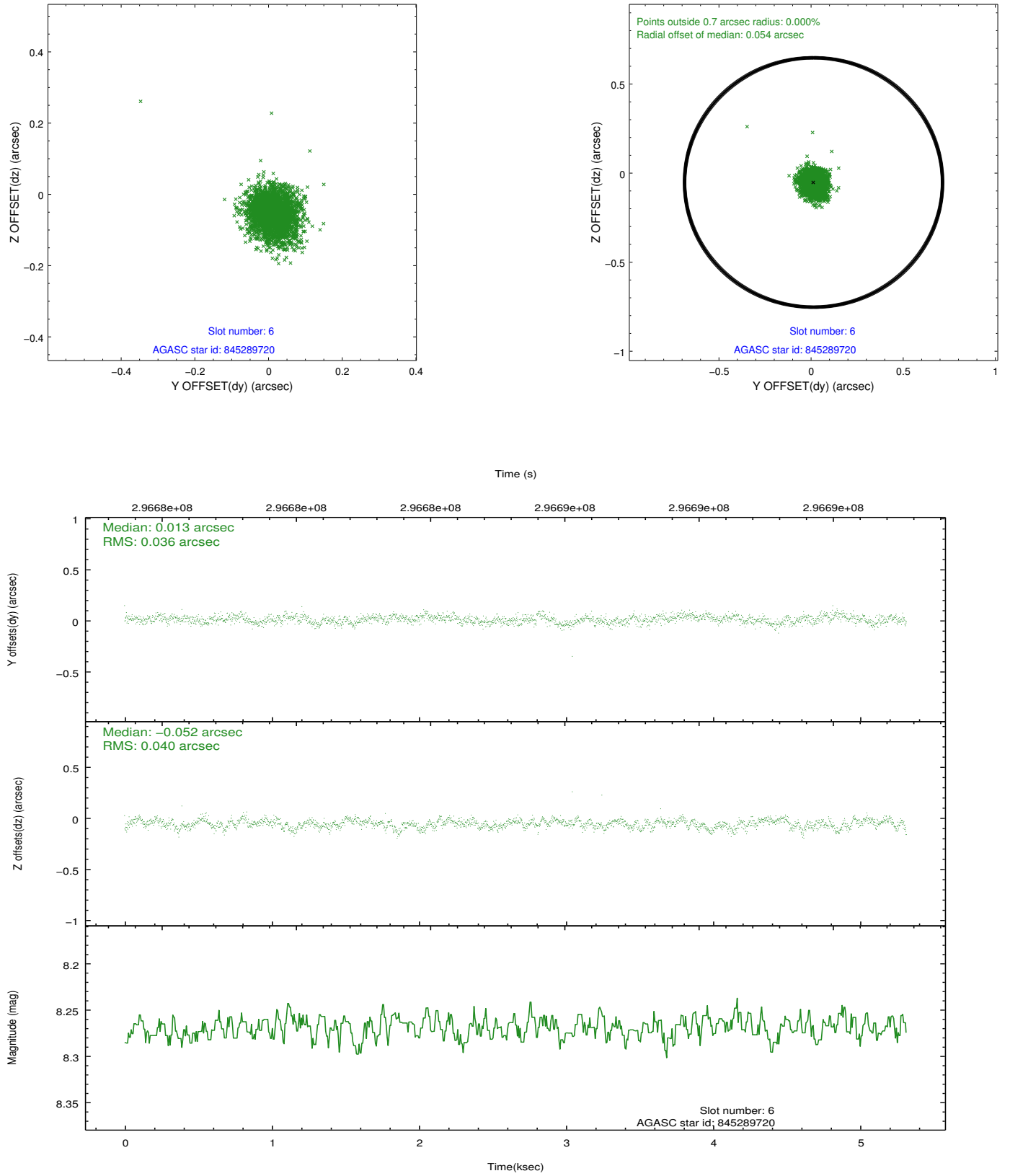
## 2.4.2 Slot 4



### 2.4.3 Slot 5

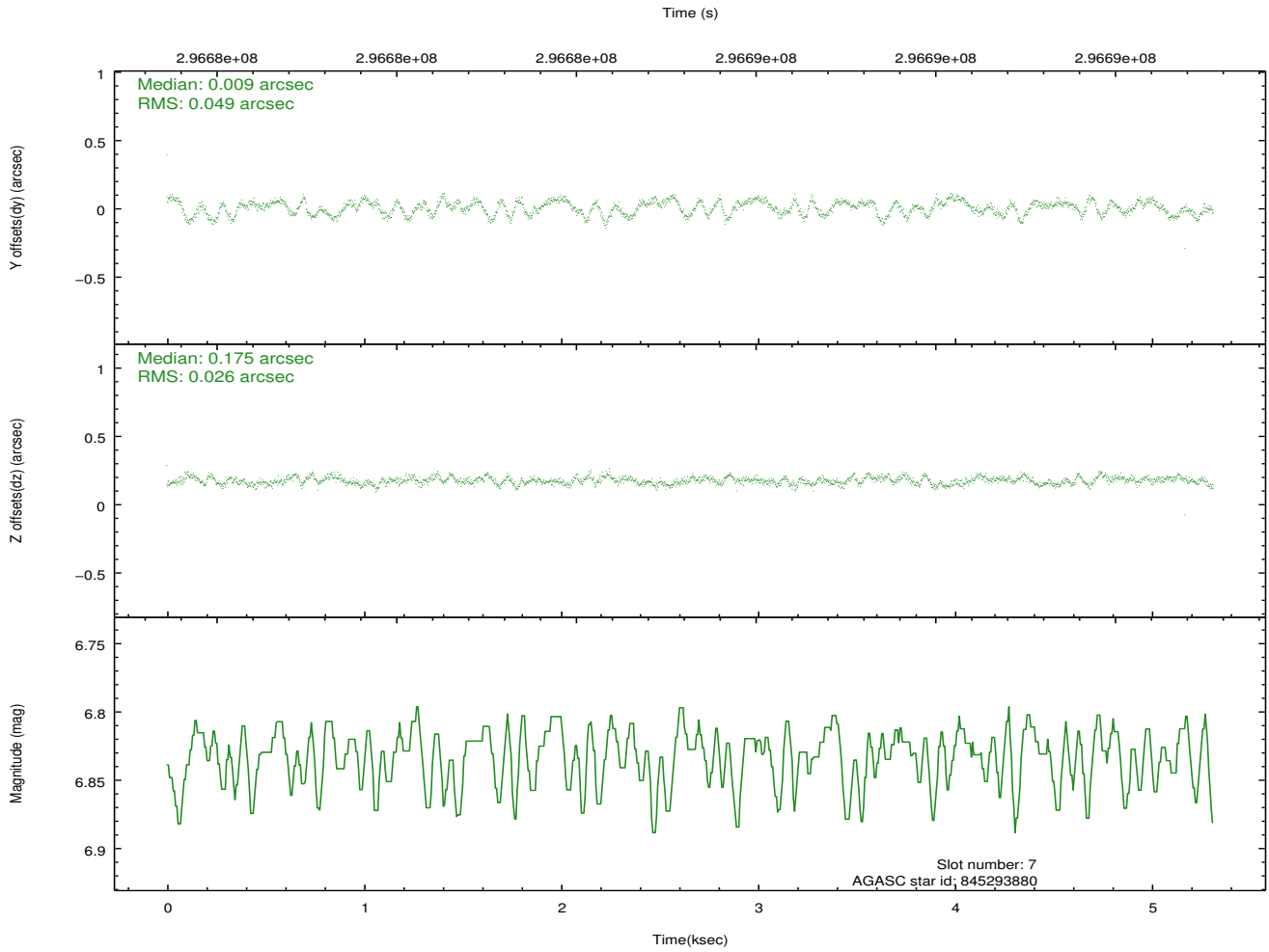
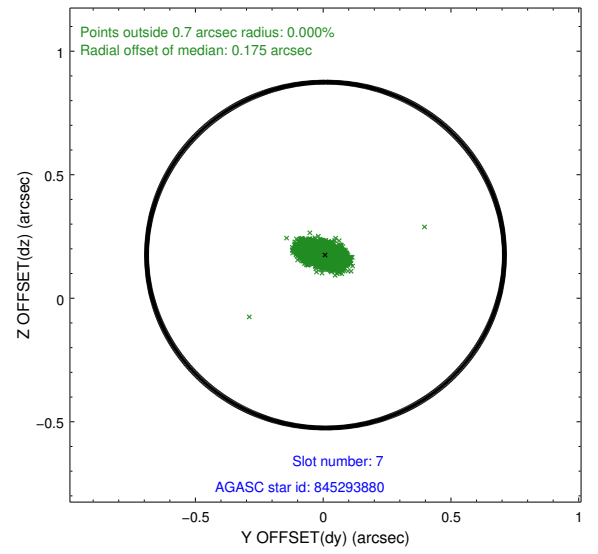
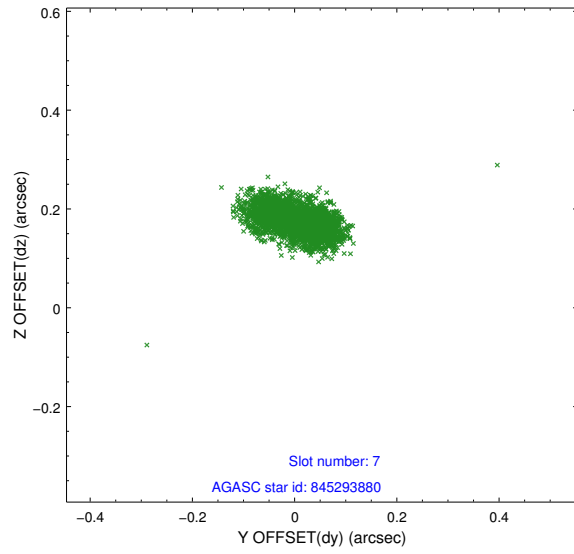


## 2.4.4 Slot 6



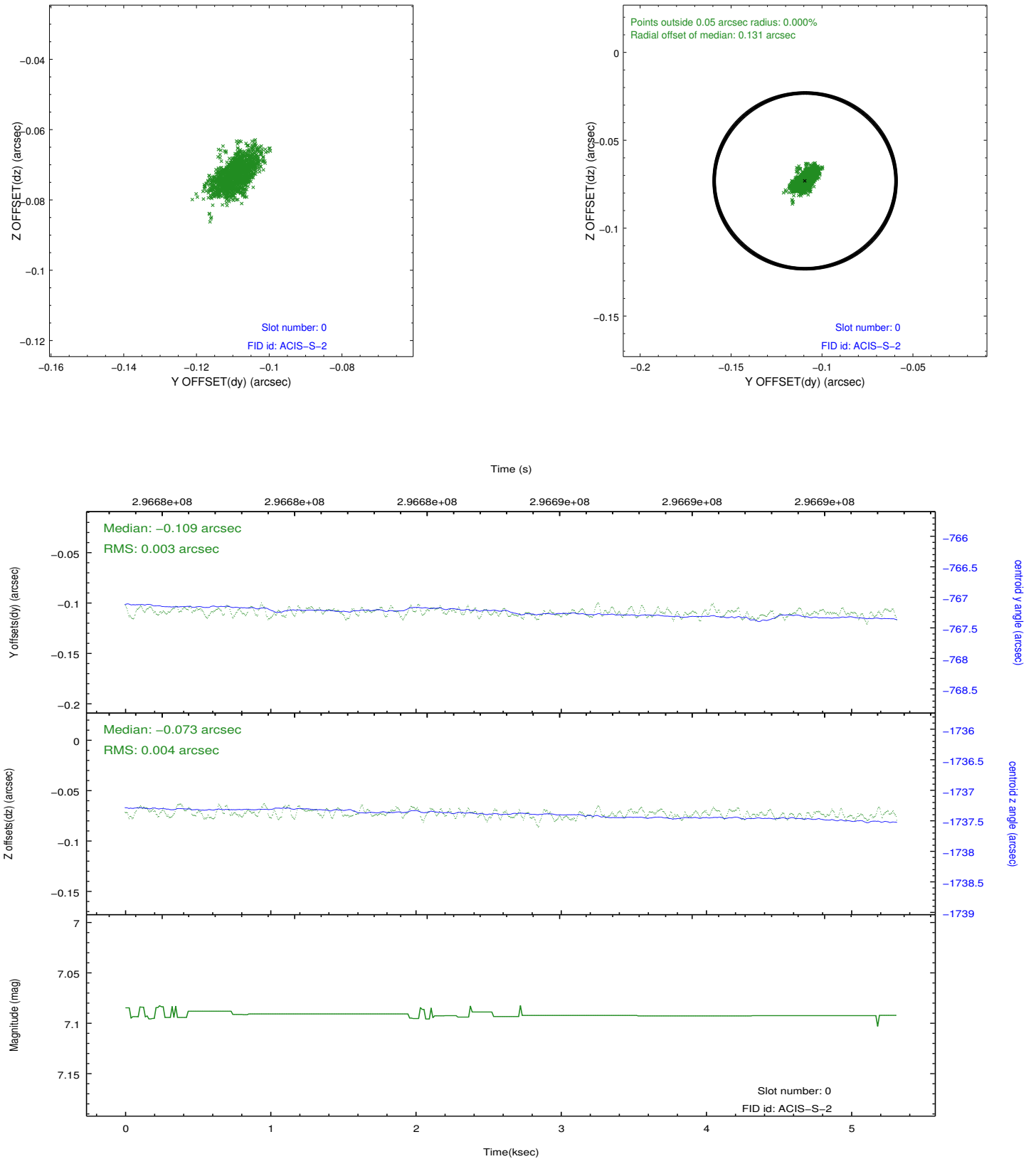


## 2.4.5 Slot 7

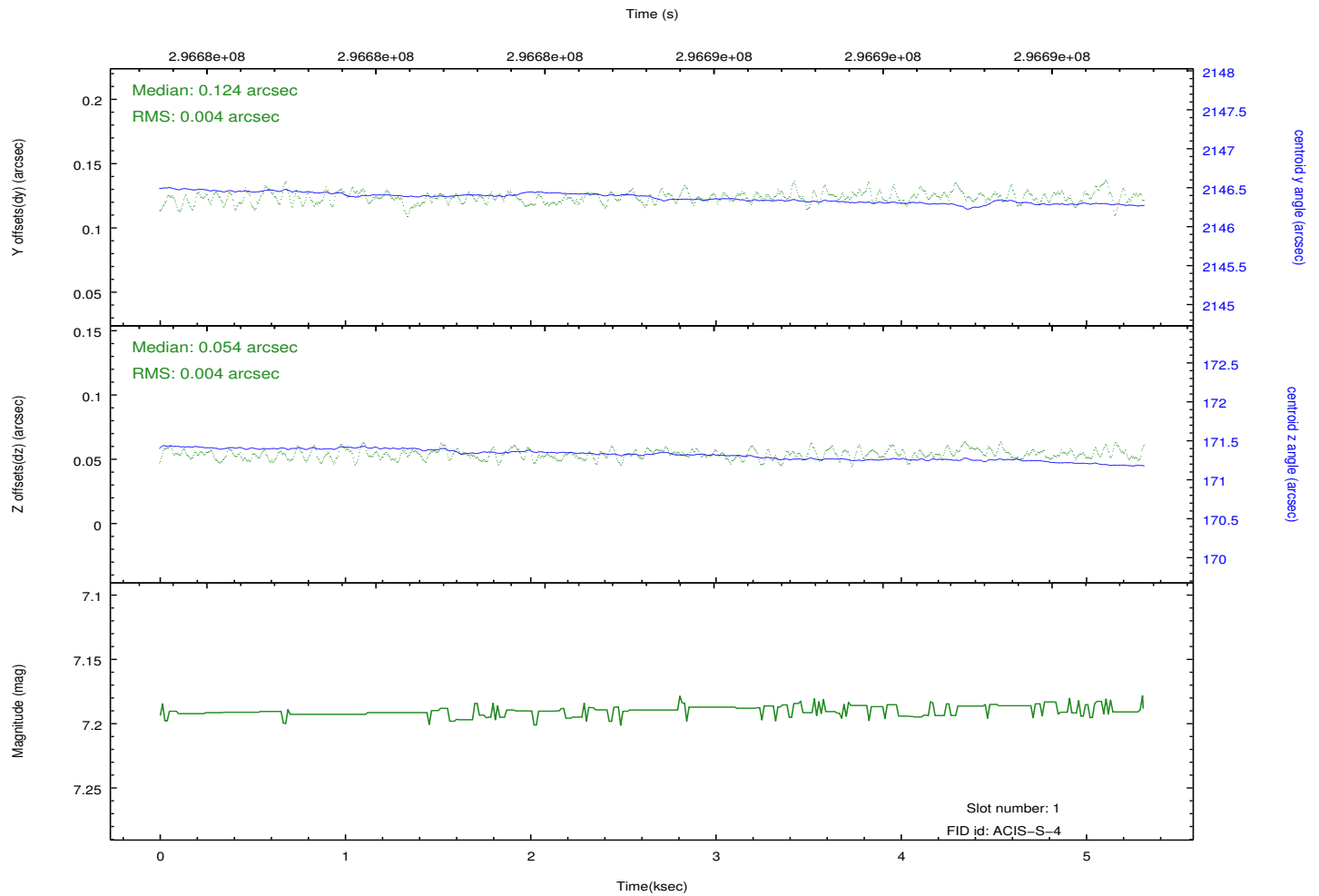
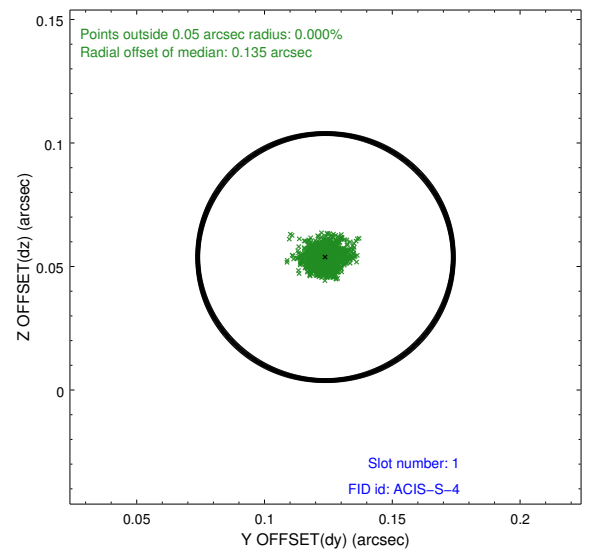
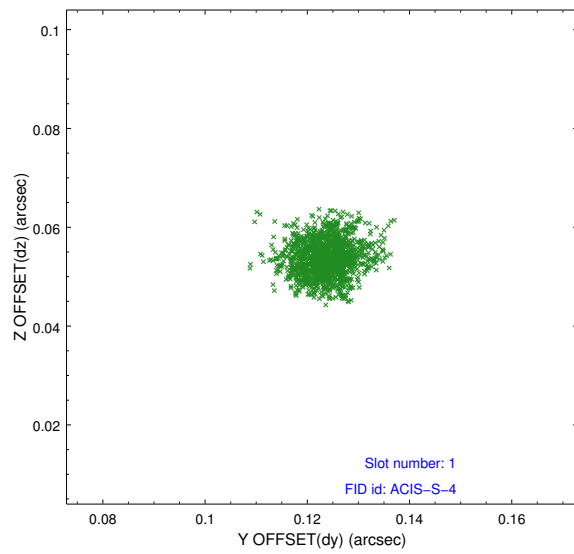


## 2.5 FID Slots

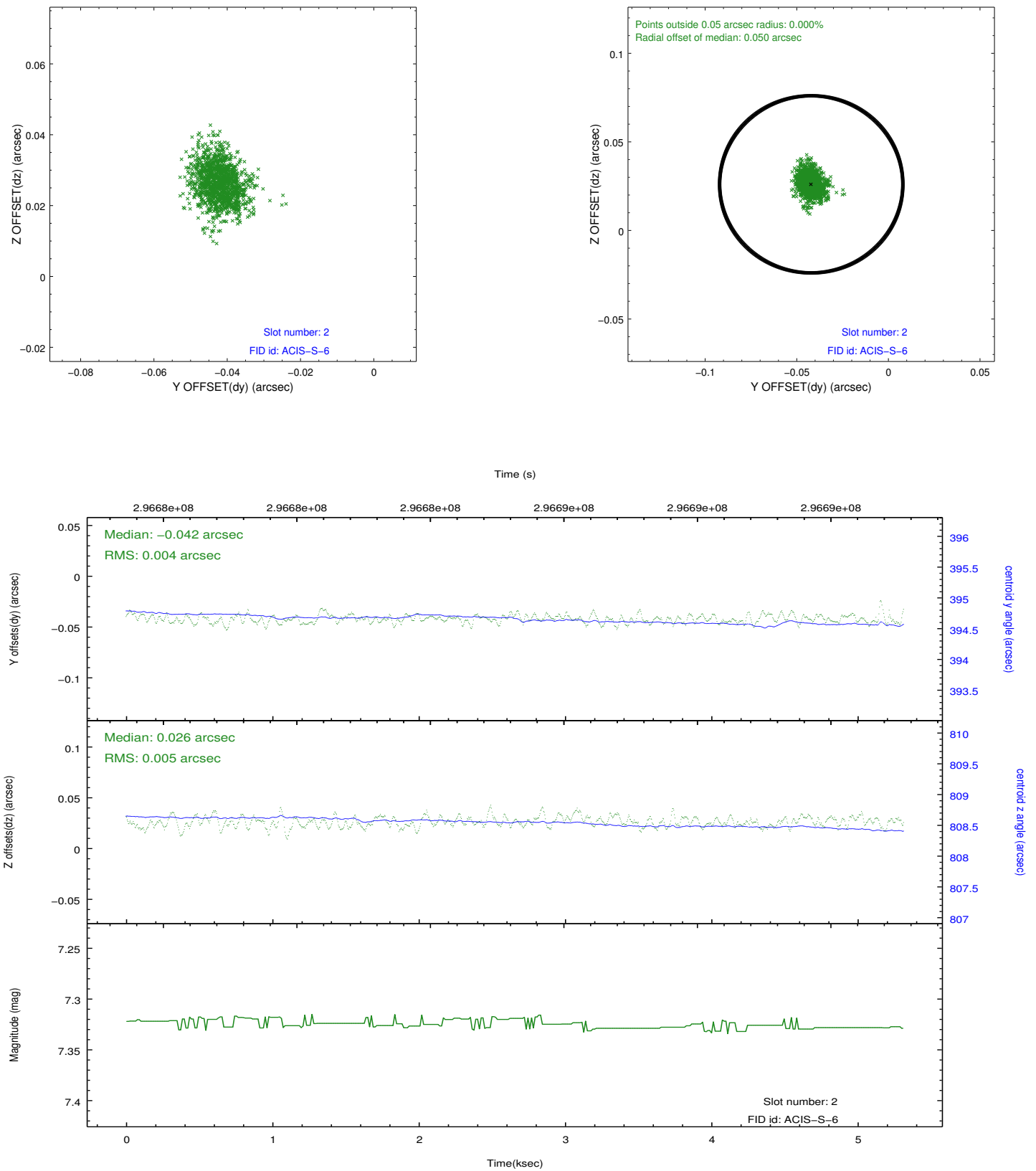
### 2.5.1 Slot 0



## 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)	2012.04.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.95359998

### A.2 Comments