

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7844 - L2 Version 2  
Chandra X-Ray Center

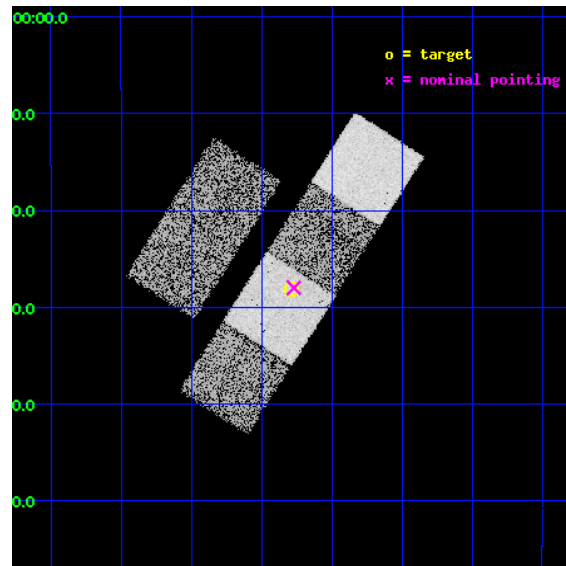
L2 Processing Date : Apr 25 2012

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# 1 Front

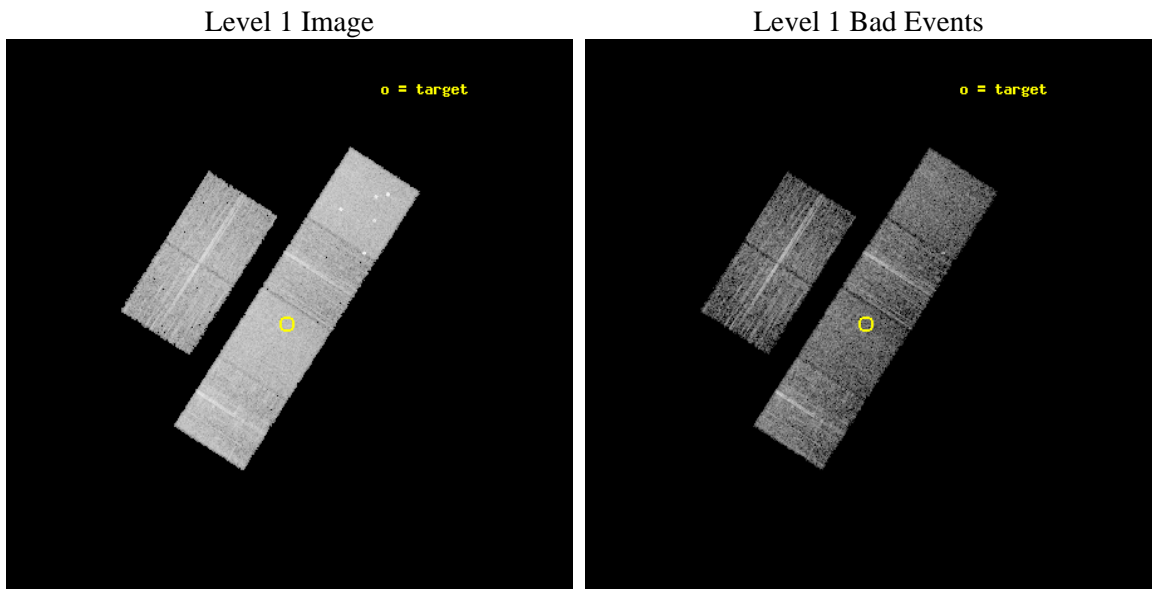
seq_num	701508	Sequence number
obs_id	7844	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	NGC 255	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	11.947083	Observer's specified target RA [deg]
dec_targ	-11.468694	Observer's specified target Dec [deg]
ra_nom	11.942568698043	Nominal RA [deg]
dec_nom	-11.466637272945	Nominal Dec [deg]
roll_nom	122.64029716206	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4751.999982357	Sum of GTIs [s]
livetime	4691.8272972696	Livetime [s]
ontime2	4751.999982357	Sum of GTIs [s]
ontime3	4751.999982357	Sum of GTIs [s]
ontime5	4751.999982357	Sum of GTIs [s]
ontime6	4751.999982357	Sum of GTIs [s]
ontime7	4751.999982357	Sum of GTIs [s]
ontime8	4748.7590121031	Sum of GTIs [s]
l2events	72780	Number of level 2 events



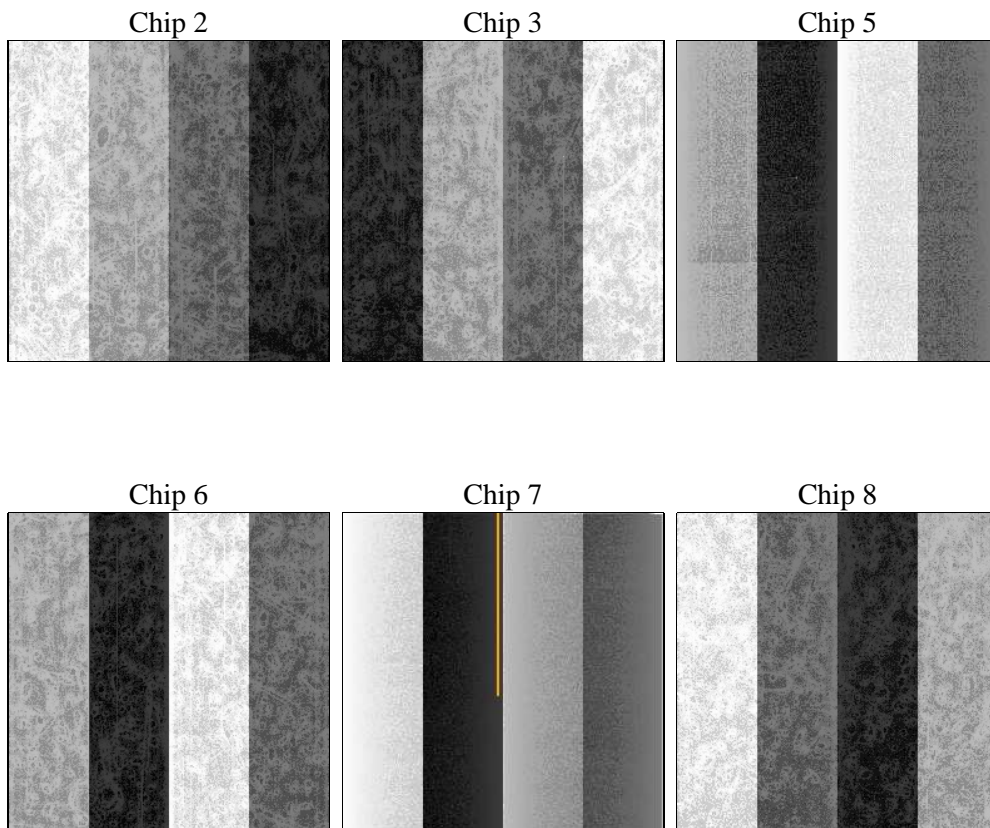
## 2 OBI

### 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	4751.999982357	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	4751.999982357	Sum of GTIs [s]
date	2012-04-25T09:23:57	Date and time of file creation	ontime3	4751.999982357	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	4751.999982357	Sum of GTIs [s]
			ontime6	4751.999982357	Sum of GTIs [s]
			ontime7	4751.999982357	Sum of GTIs [s]
			ontime8	4748.7590121031	Sum of GTIs [s]
			l1events	322626	Number of level 1 events

### 2.1.4 Events

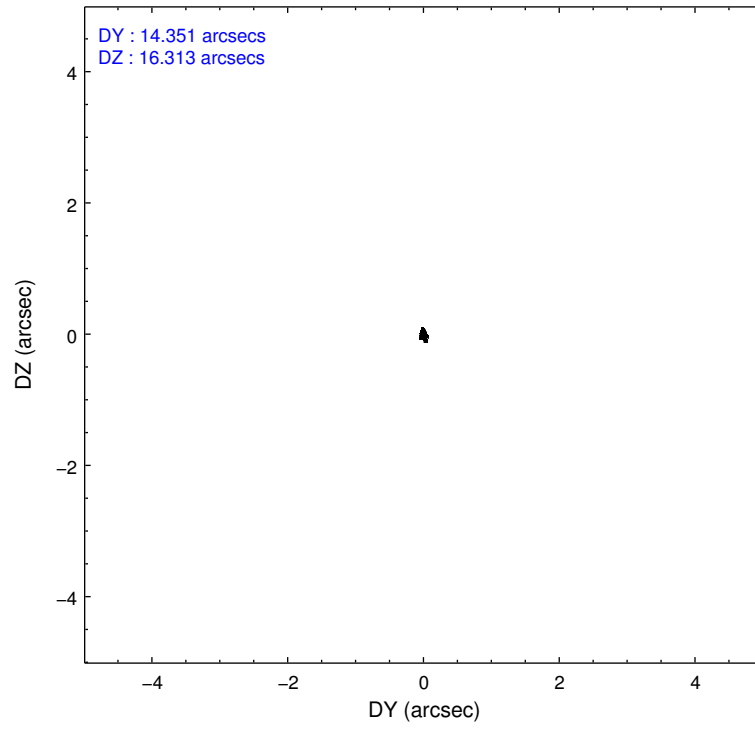
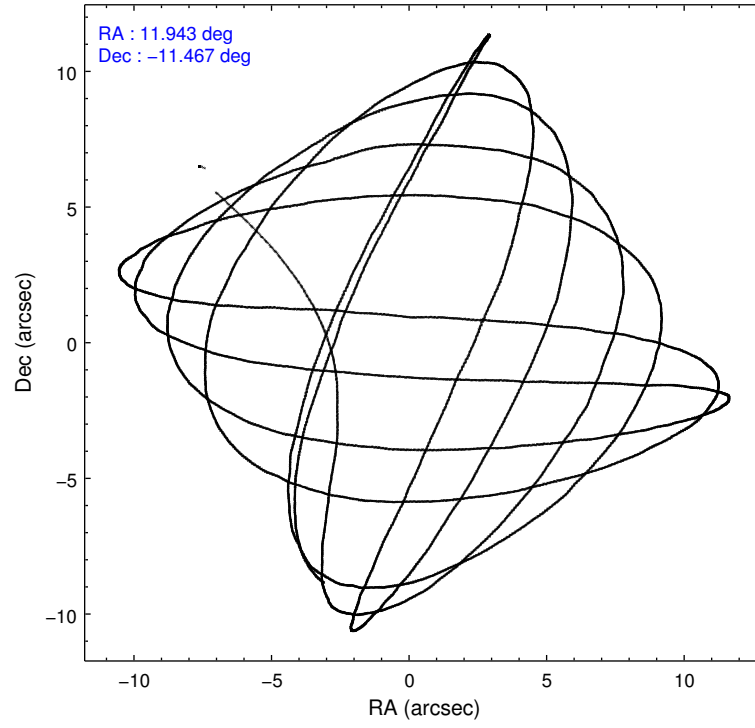
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	44474	42941	68911	45448	60996	59856	grade 0 events	2398	2292	3631	2125	2169	3813
rejected events	39072	37738	36979	40137	35749	47503		5%	5%	5%	4%	3%	6%
rejected %	87%	87%	53%	88%	58%	79%	grade 1 events	26	26	183	26	71	40
								0%	0%	0%	0%	0%	0%
							grade 2 events	1127	943	9572	1197	5128	2714
								2%	2%	13%	2%	8%	4%
							grade 3 events	463	513	1191	488	2137	1369
								1%	1%	1%	1%	3%	2%
							grade 4 events	533	529	1135	475	2171	1204
								1%	1%	1%	1%	3%	2%
							grade 5 events	1725	1959	4886	2184	5701	2757
								3%	4%	7%	4%	9%	4%
							grade 6 events	885	933	16456	1031	13656	3292
								1%	2%	23%	2%	22%	5%
							grade 7 events	37317	35746	31857	37922	29963	44667
								83%	83%	46%	83%	49%	74%

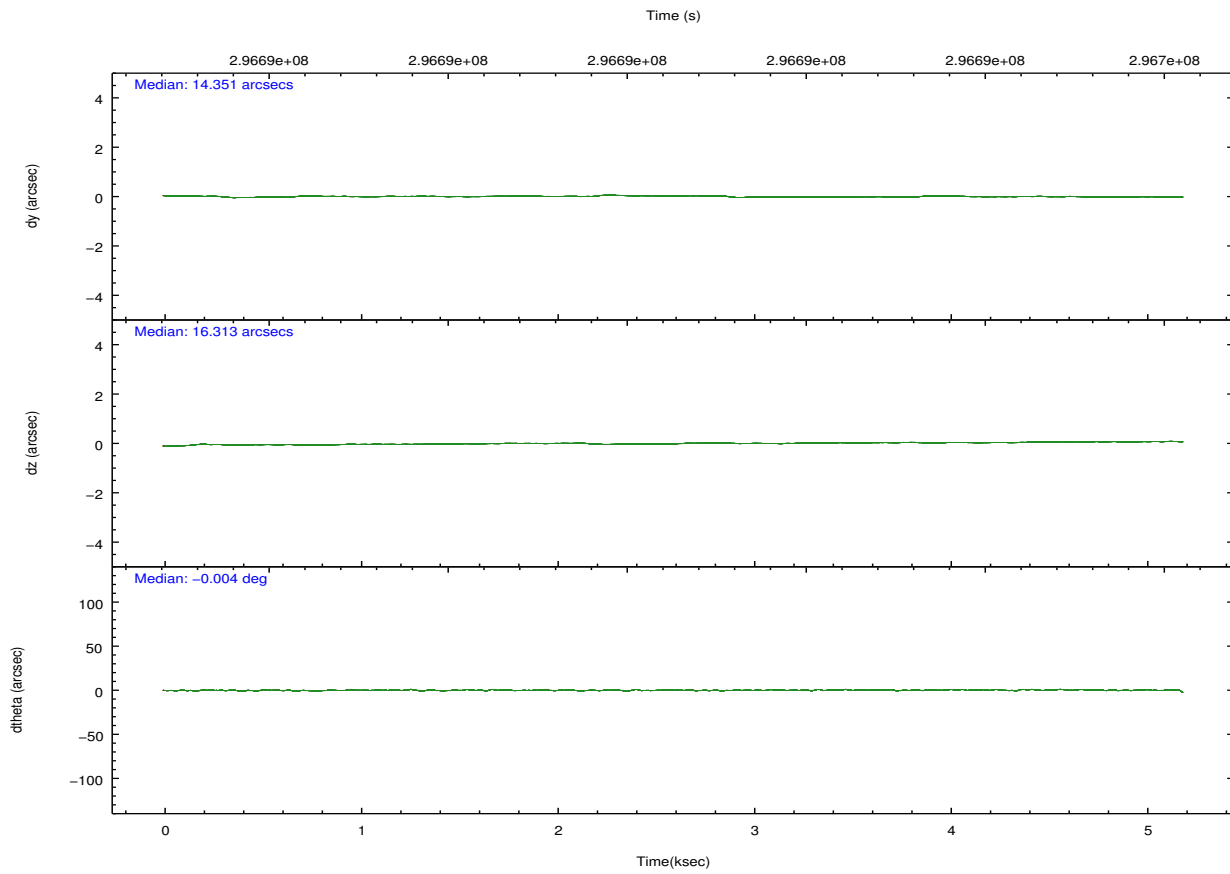
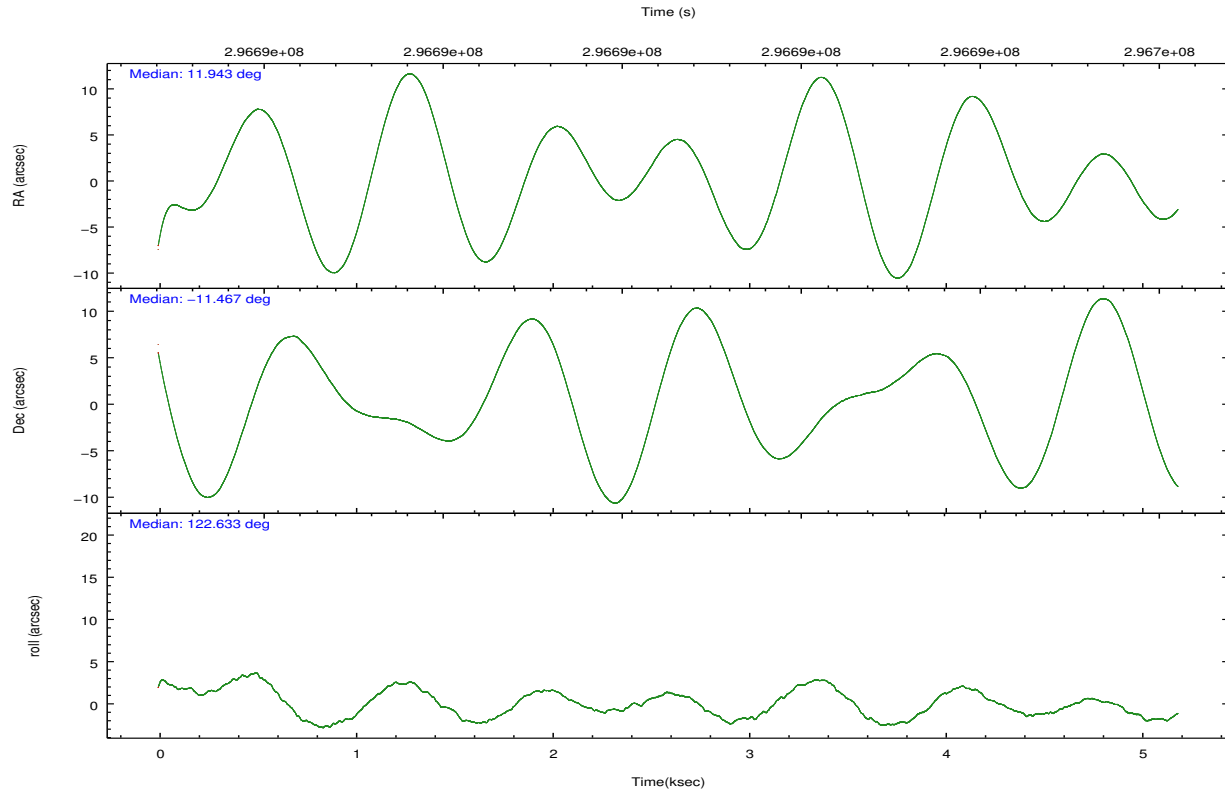


## 2.2 Compared Parameters

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	11.967573	11.94256869804306	Subarray requested	NONE	NONE
[deg] Pointing Dec	-11.478824	-11.46663727294516	Alternating exposures requested	N	N
[deg] Pointing Roll	122.488642	122.6402971620624	[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)	296689844.184000	296688944.4964			
Observation start date	2007-05-27T21:49:39	2007-05-27T21:35:44			
[s] Observation end time (MET)	296694844.184000	296695877.08423			
Observation end date	2007-05-27T23:12:59	2007-05-27T23:31:17			
Read mode	TIMED	TIMED			

## 2.3 Aspect



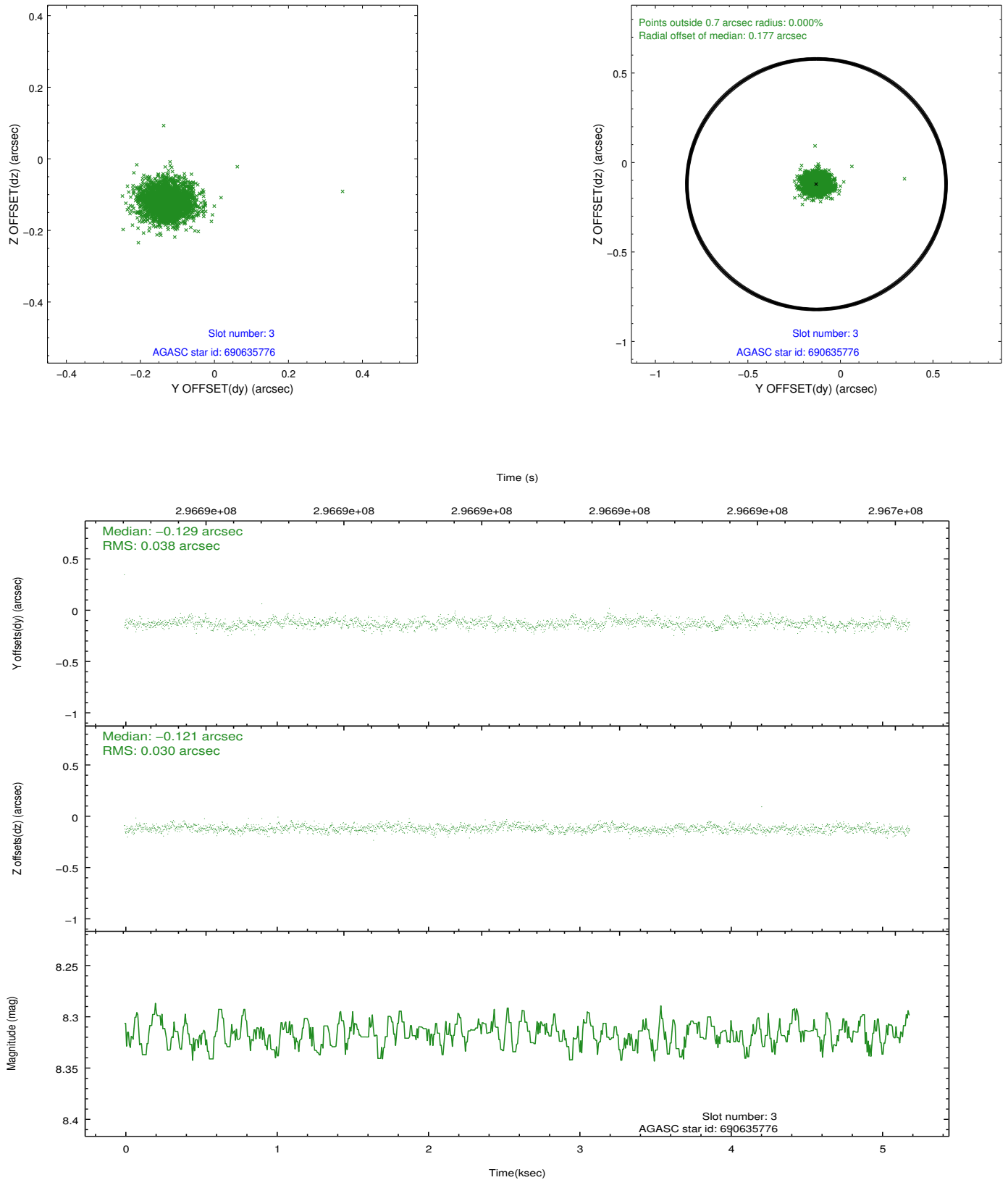


### Slot Statistics

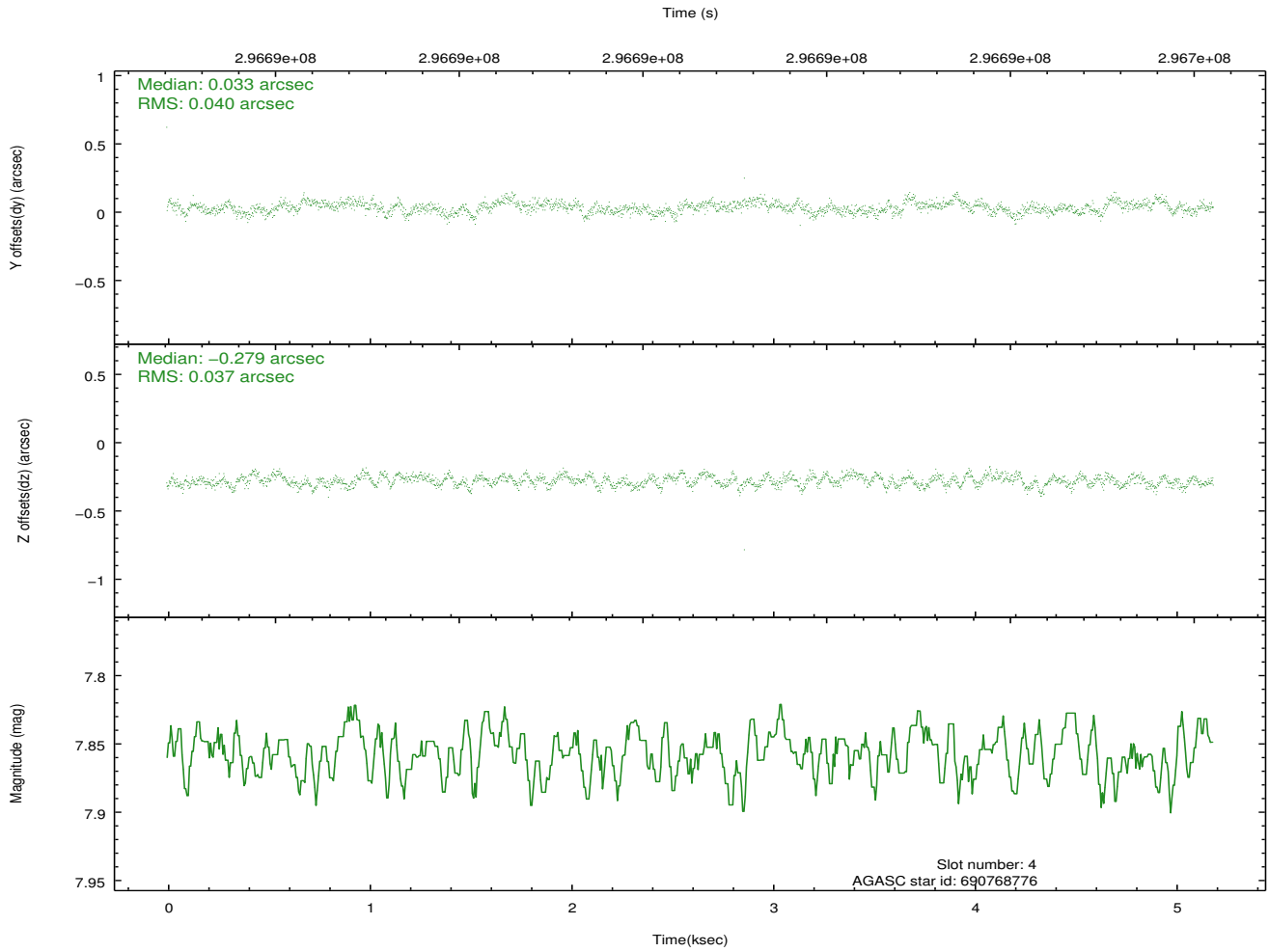
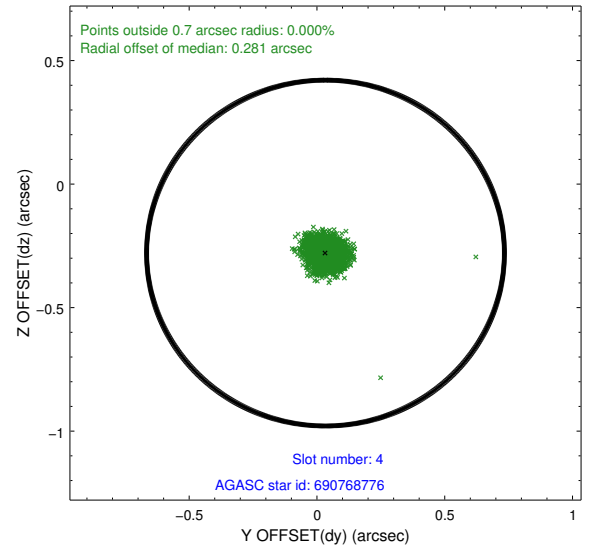
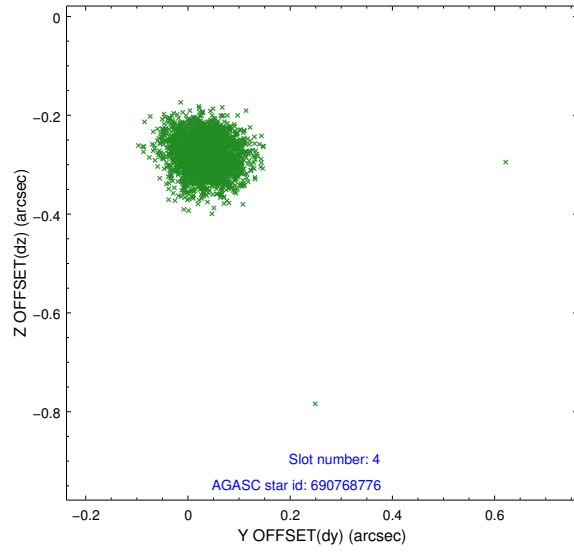
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1266	-0.070	-0.031	0.006	0.011	0.000000	0.000000	-767.38	-1737.70
1	FID	ACIS-S-4	7.19	1266	0.199	0.043	0.005	0.010	0.000000	0.000000	2145.64	169.63
2	FID	ACIS-S-5	7.22	1266	-0.160	-0.002	0.006	0.011	0.000000	0.000000	-1818.81	164.60
3	GUIDE	690635776	8.32	2530	-0.129	-0.121	0.050	0.081	11.392410	-11.095121	2254.10	973.25
4	GUIDE	690768776	7.86	2532	0.033	-0.279	0.056	0.090	11.742148	-11.162917	1387.91	60.99
5	GUIDE	690768856	7.41	2532	-0.058	0.312	0.063	0.100	12.394423	-10.961349	761.10	-2272.59
6	GUIDE	690769472	7.40	2531	-0.096	0.155	0.057	0.091	11.959553	-10.904184	1760.82	-1088.18
7	GUIDE	691020760	9.29	2529	0.251	-0.065	0.079	0.131	12.351590	-11.753742	-1561.25	-610.42

## 2.4 Star Slots

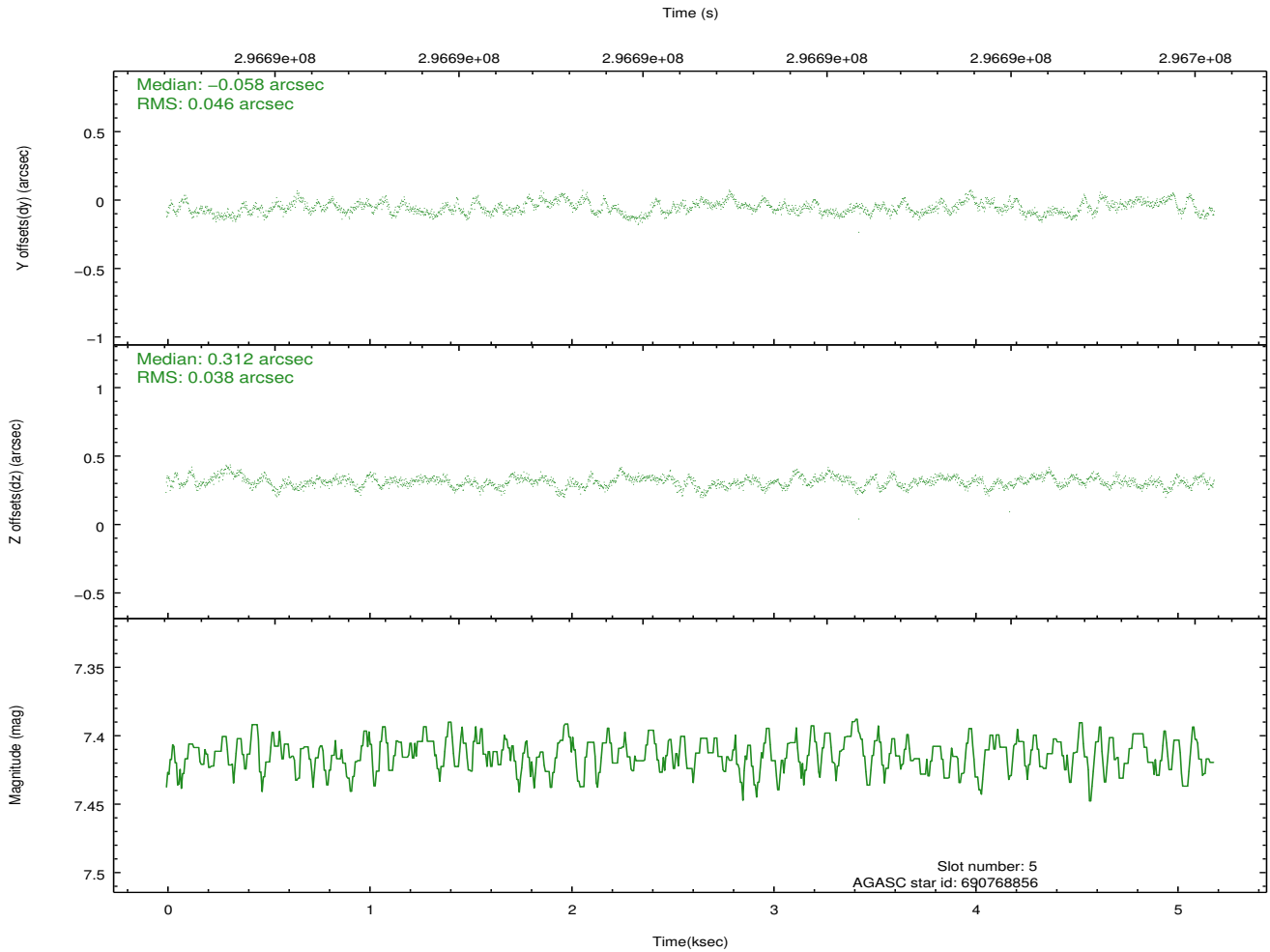
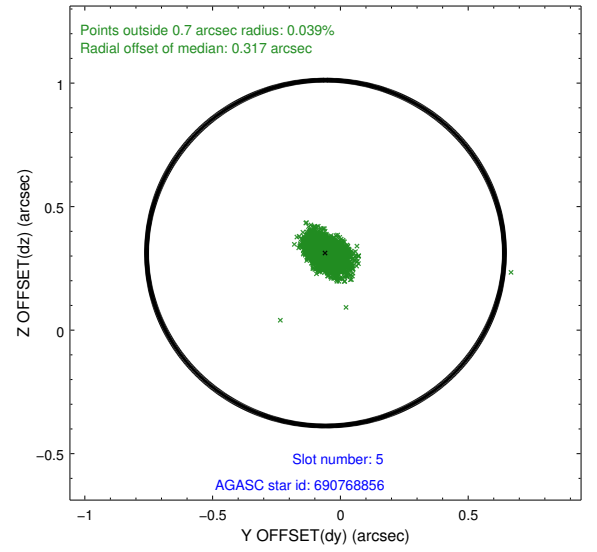
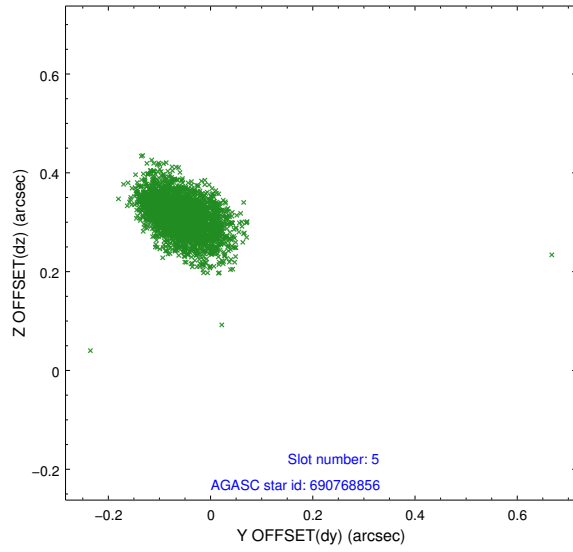
### 2.4.1 Slot 3



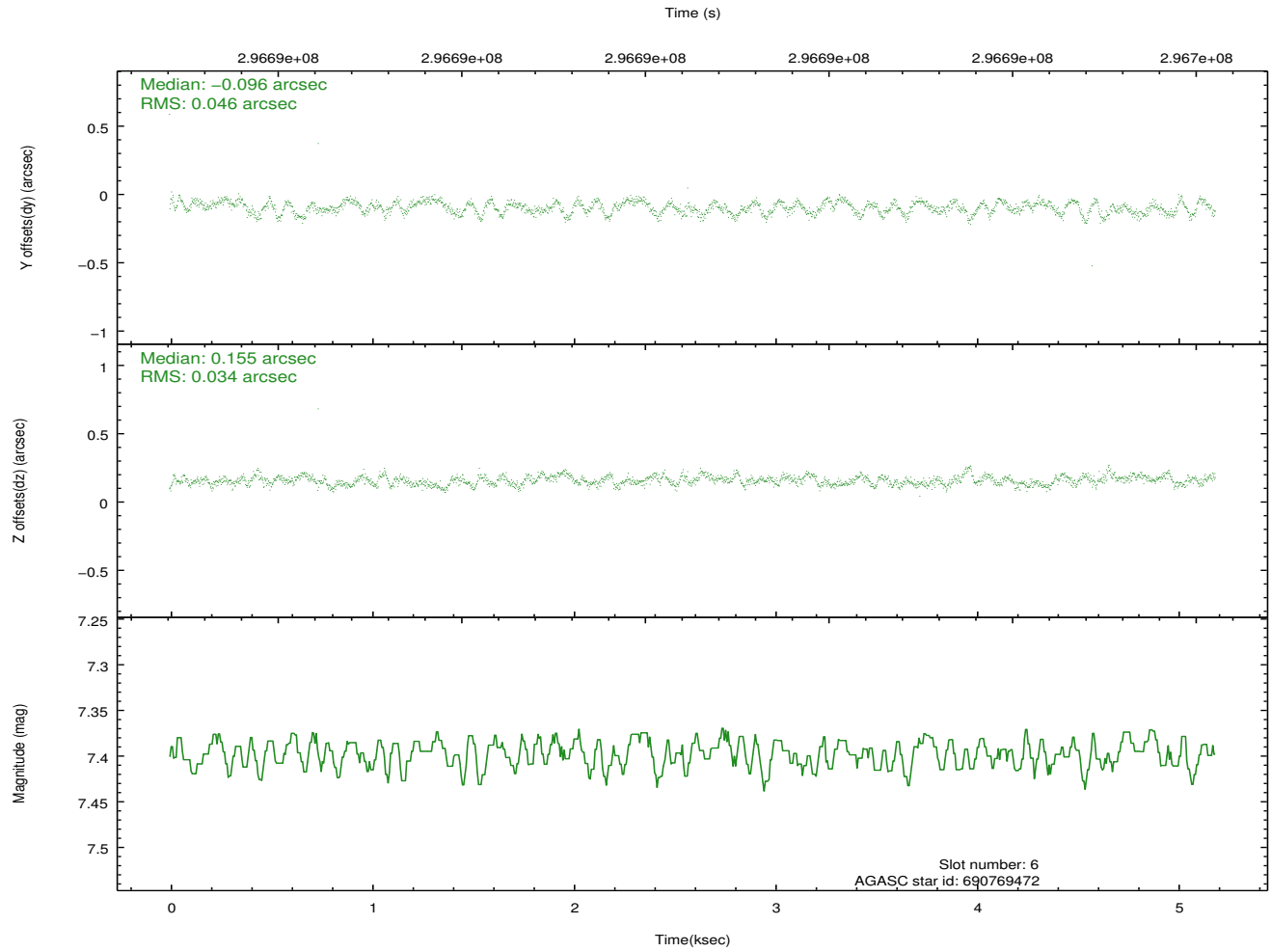
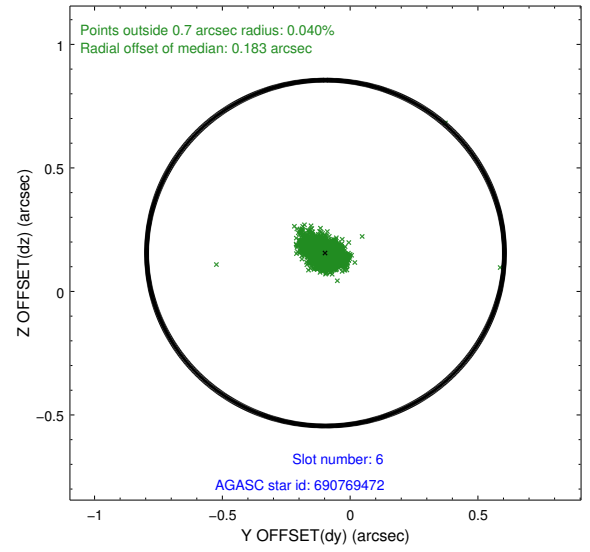
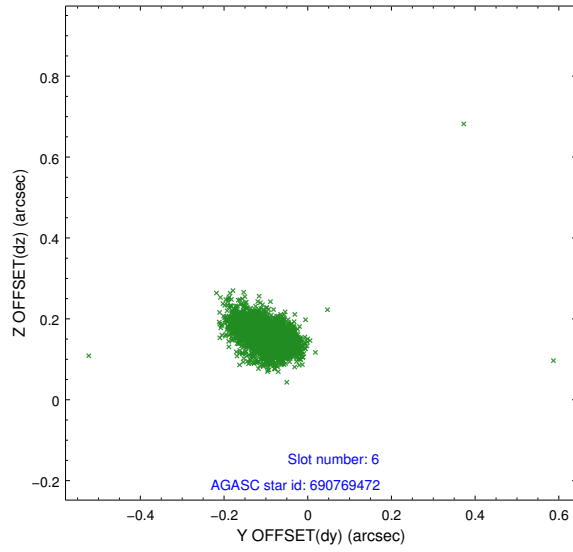
## 2.4.2 Slot 4



### 2.4.3 Slot 5

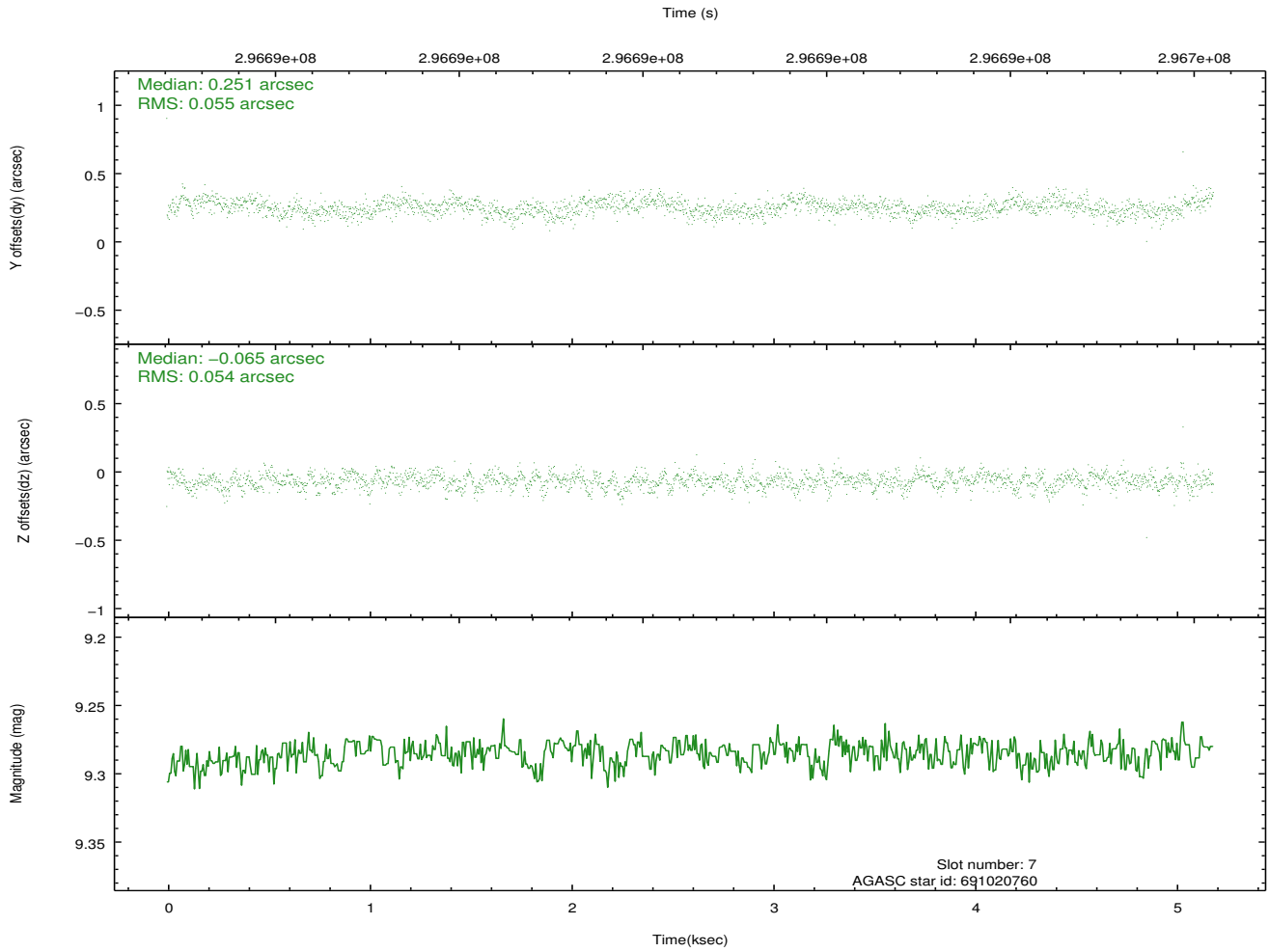
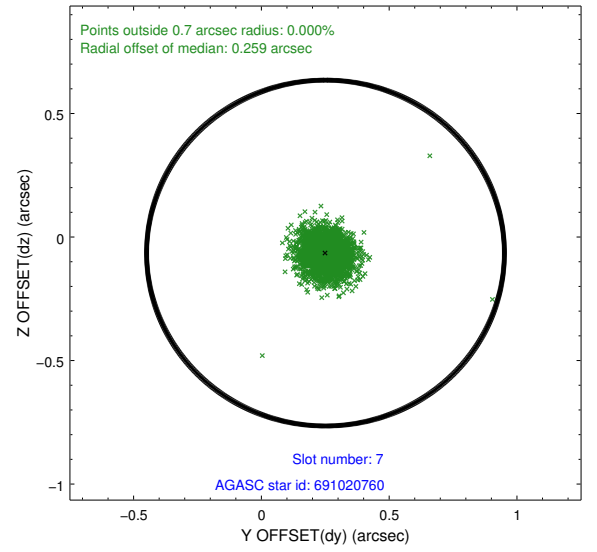
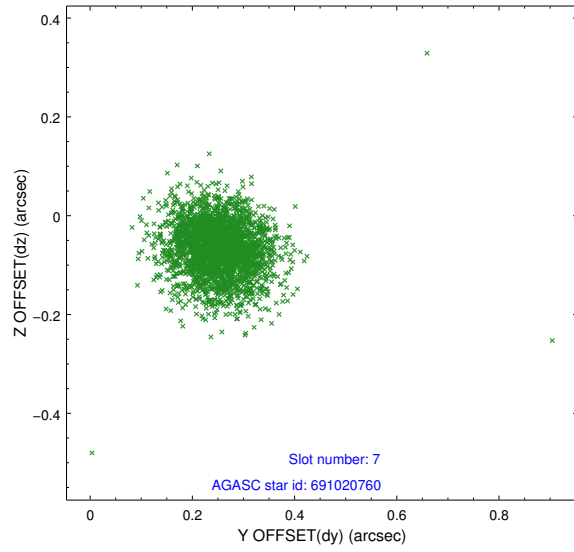


## 2.4.4 Slot 6



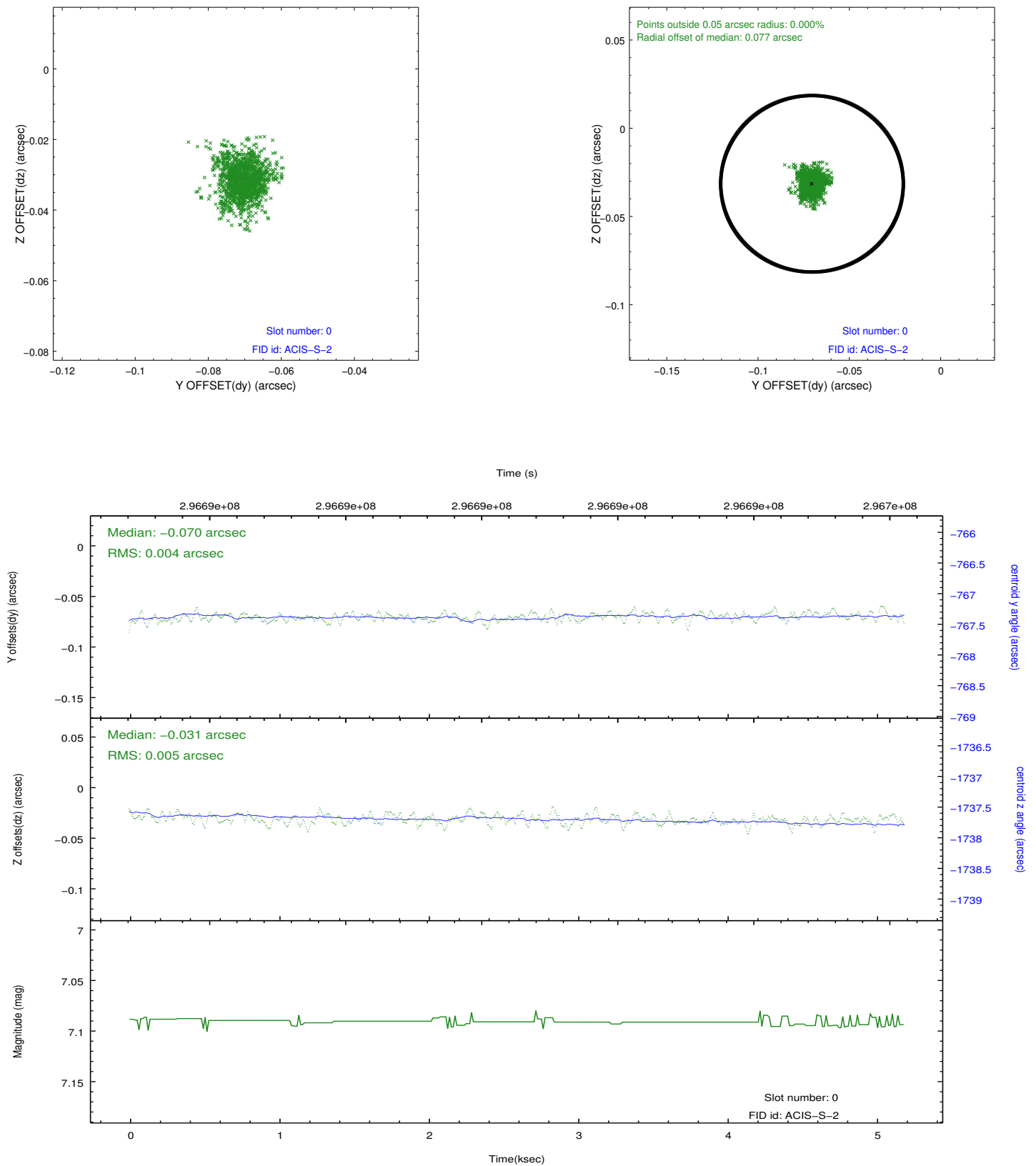


## 2.4.5 Slot 7

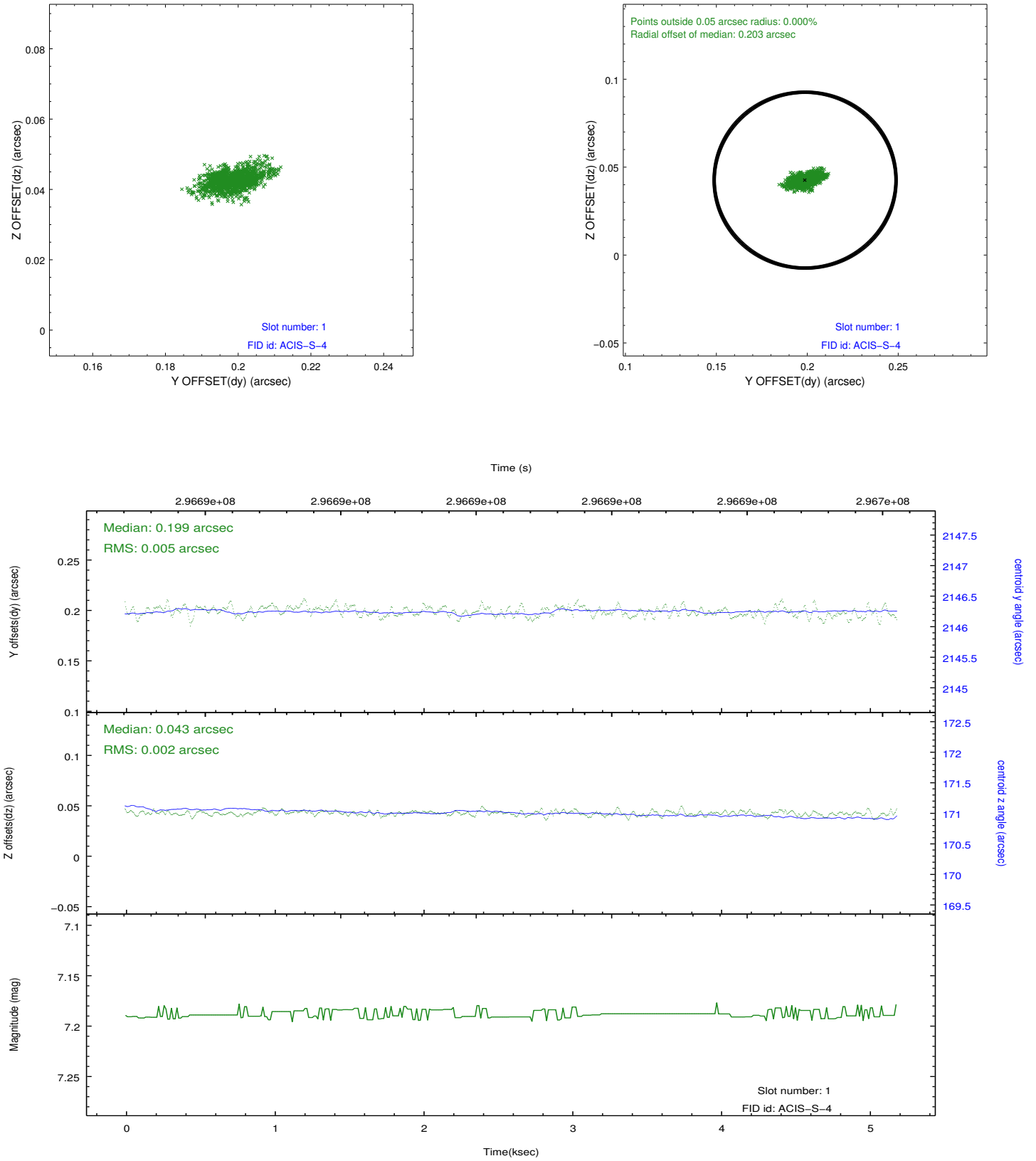


## 2.5 FID Slots

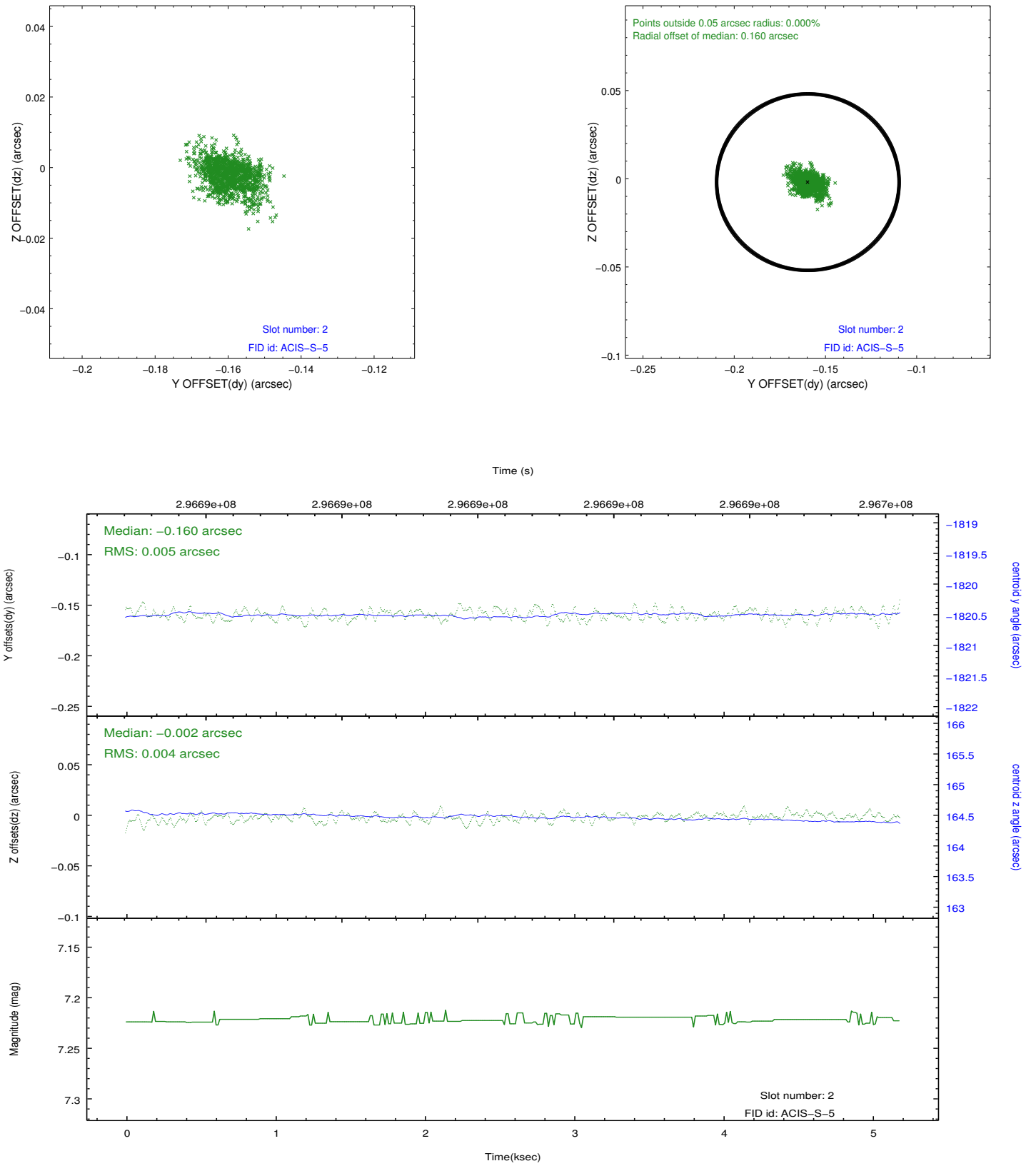
### 2.5.1 Slot 0



## 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	4.75199998

### **A.2 Comments**