

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1663 - L2 Version 3  
Chandra X-Ray Center

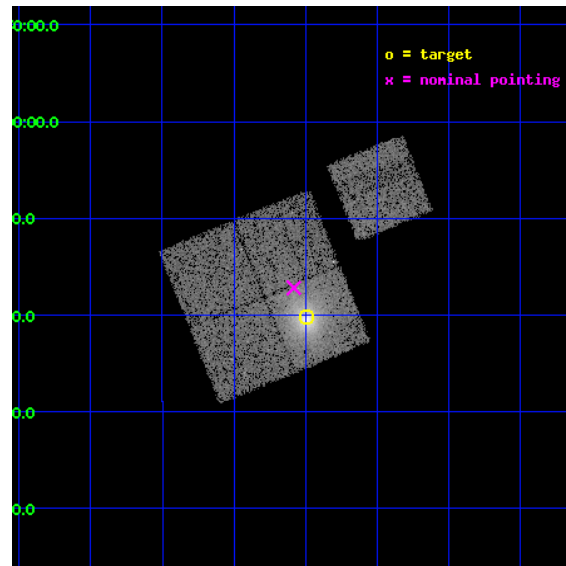
L2 Processing Date : Sep 6 2012

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# 1 Front

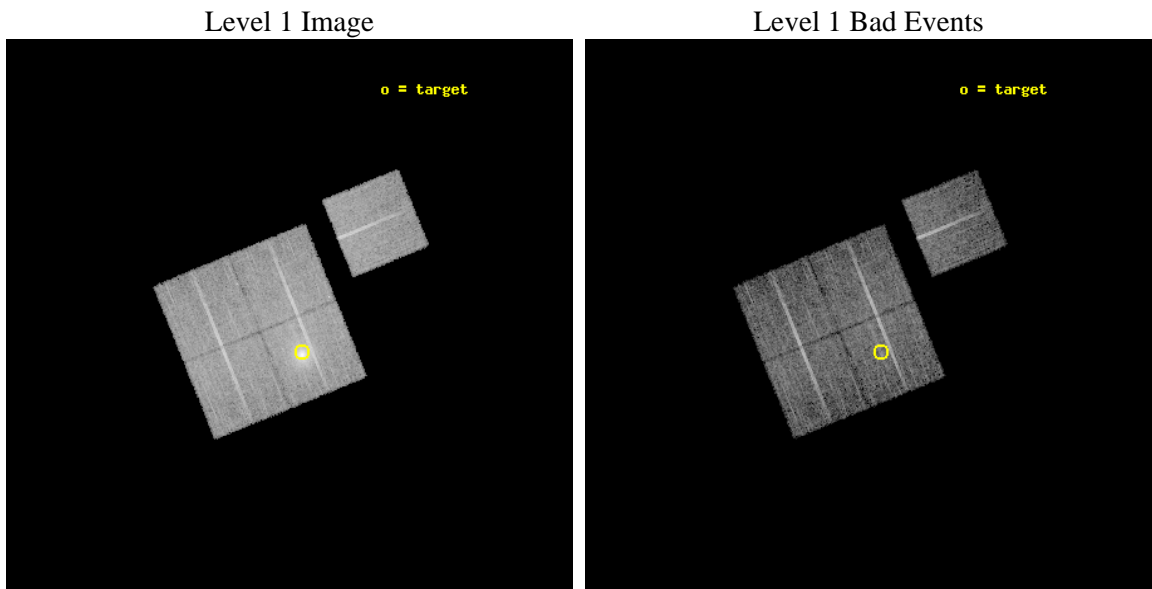
seq_num	800131	Sequence number
obs_id	1663	Observation id
title	DETERMINATION OF H0 AND Q0, 2000 PART 1	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	A1689	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	197.872917	Observer's specified target RA [deg]
dec_targ	-1.336	Observer's specified target Dec [deg]
ra_nom	197.89539921738	Nominal RA [deg]
dec_nom	-1.2863567204577	Nominal Dec [deg]
roll_nom	67.828173353973	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10868.599979103	Sum of GTIs [s]
livetime	10726.593719029	Livetime [s]
ontime0	10865.458998933	Sum of GTIs [s]
ontime1	10868.599979103	Sum of GTIs [s]
ontime2	10868.599979103	Sum of GTIs [s]
ontime3	10868.599979103	Sum of GTIs [s]
ontime6	10868.599979103	Sum of GTIs [s]
l2events	68486	Number of level 2 events



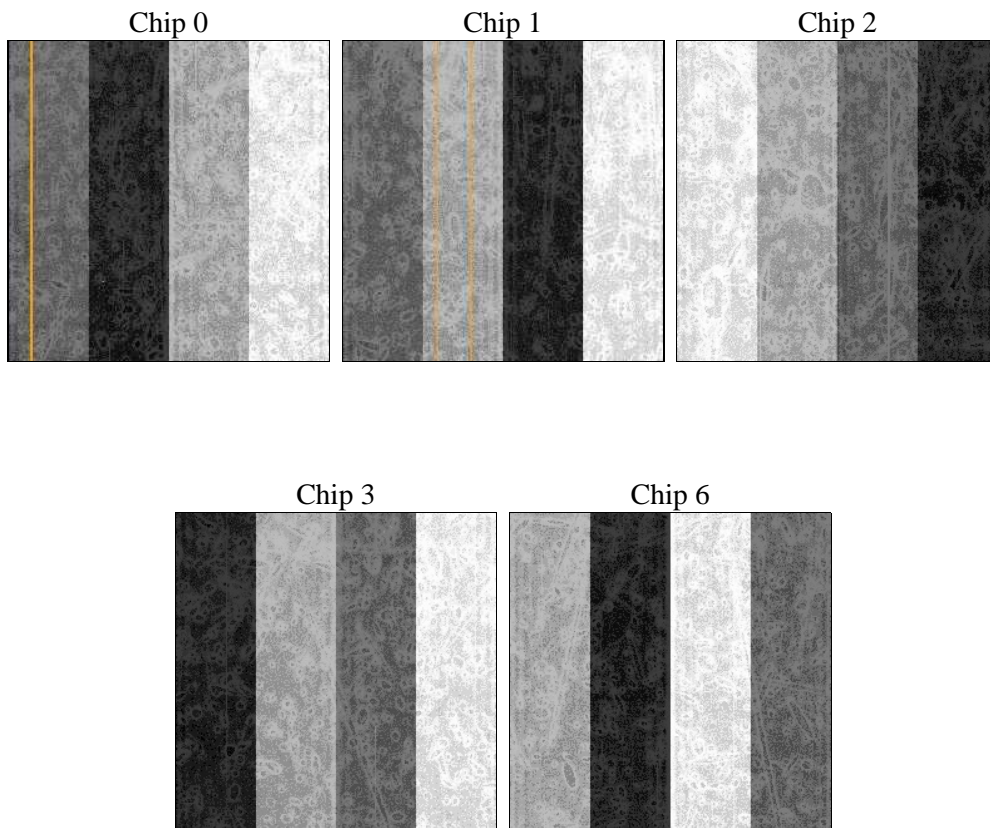
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10956.829000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10868.599979103	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	10865.458998933	Sum of GTIs [s]
date	2012-09-06T09:28:07	Date and time of file creation	ontime1	10868.599979103	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10868.599979103	Sum of GTIs [s]
			ontime3	10868.599979103	Sum of GTIs [s]
			ontime6	10868.599979103	Sum of GTIs [s]
			l1events	411555	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	73003	74361	78945	106986	78260
rejected events	63415	64169	68984	70217	69077
rejected %	86%	86%	87%	65%	88%

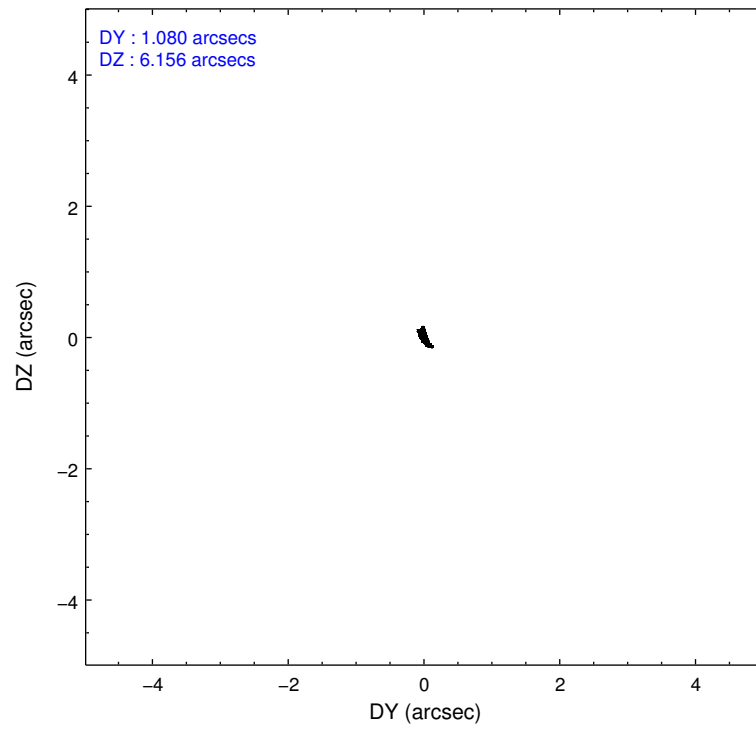
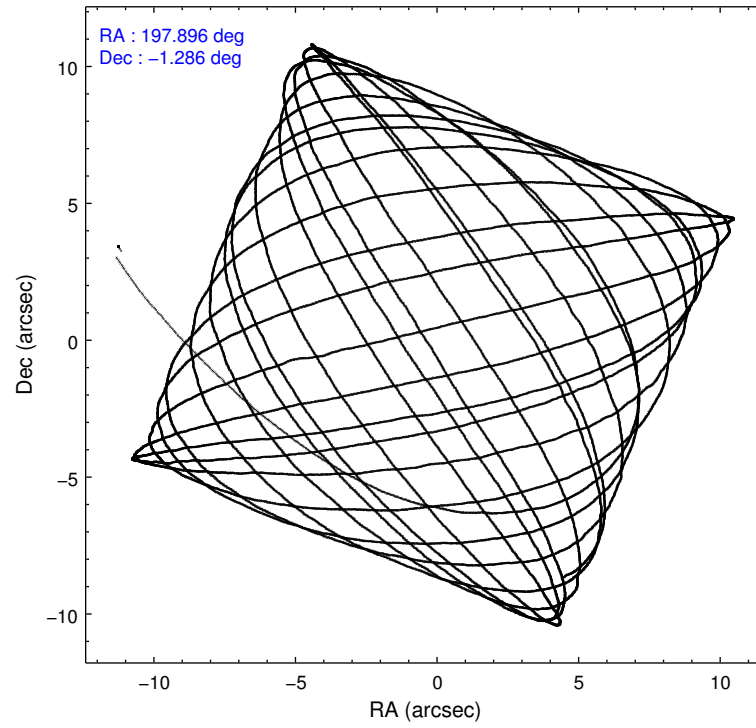
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4689	4752	5175	27075	4163
	6%	6%	6%	25%	5%
grade 1 events	27	31	35	117	37
	0%	0%	0%	0%	0%
grade 2 events	2502	2614	2384	5191	2377
	3%	3%	3%	4%	3%
grade 3 events	876	962	883	1649	893
	1%	1%	1%	1%	1%
grade 4 events	844	968	851	1715	868
	1%	1%	1%	1%	1%
grade 5 events	2675	2925	2512	2946	3061
	3%	3%	3%	2%	3%
grade 6 events	1840	2035	1864	2553	1971
	2%	2%	2%	2%	2%
grade 7 events	59550	60074	65241	65740	64890
	81%	80%	82%	61%	82%

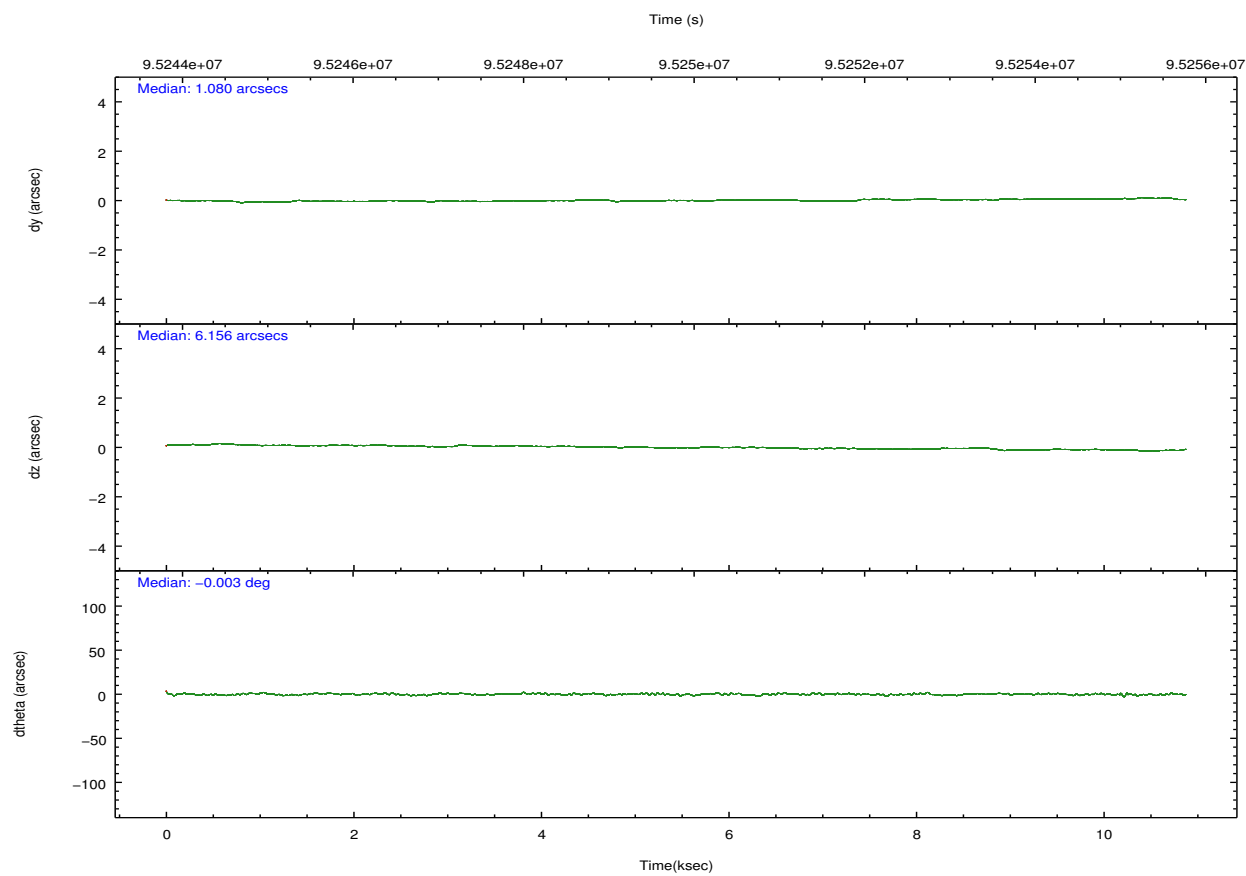
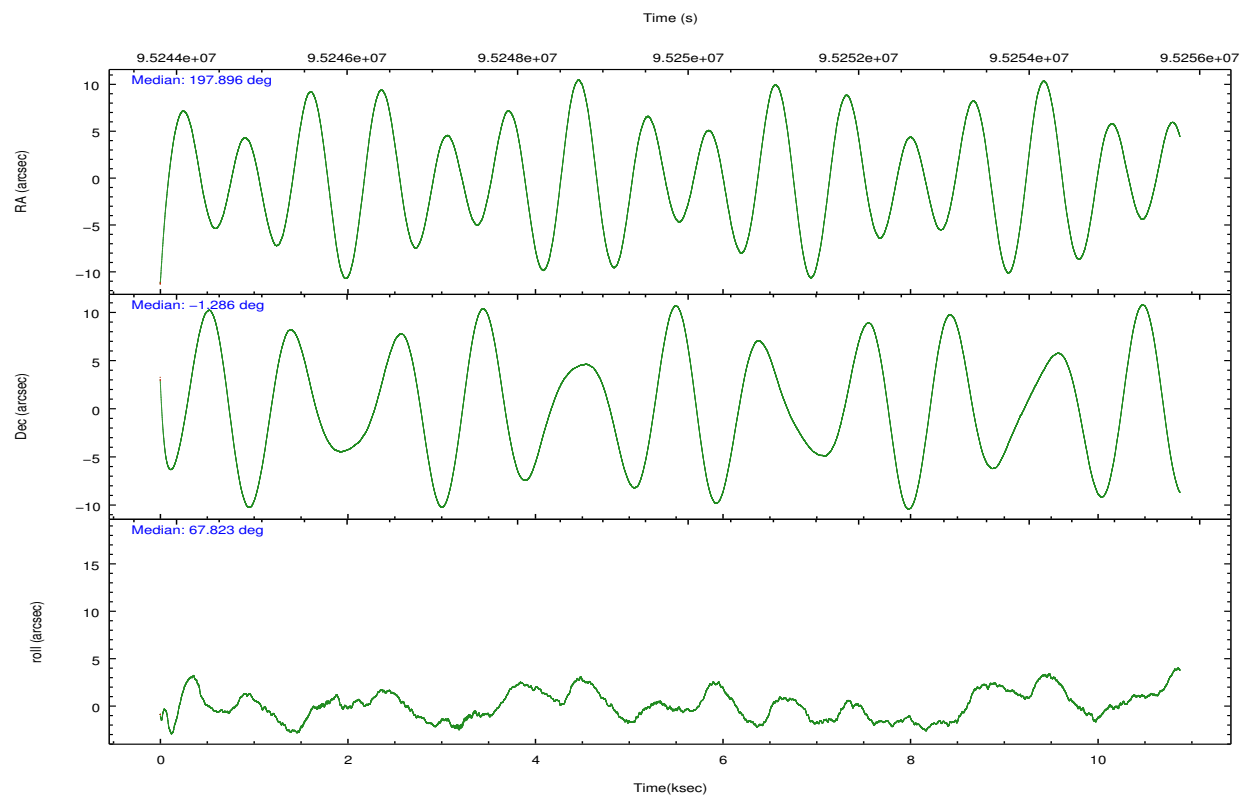


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	197.899087	197.8953992173802	Subarray requested	NONE	NONE
[deg] Pointing Dec	-1.313615	-1.286356720457738	Alternating exposures requested	N	N
[deg] Pointing Roll	67.619573	67.8281733539734	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-225.840463	-225.8458576473255			
[mm] SIM translation stage offset	-7.752	-7.746595355604228			
[s] Observation start time (MET)	95244268.184000	95242778.309793			
Observation start date	2001-01-07T08:43:24	2001-01-07T08:19:38			
[s] Observation end time (MET)	95255225.184000	95255539.56028201			
Observation end date	2001-01-07T11:46:01	2001-01-07T11:52:19			
Read mode	TIMED	TIMED			

## 2.3 Aspect



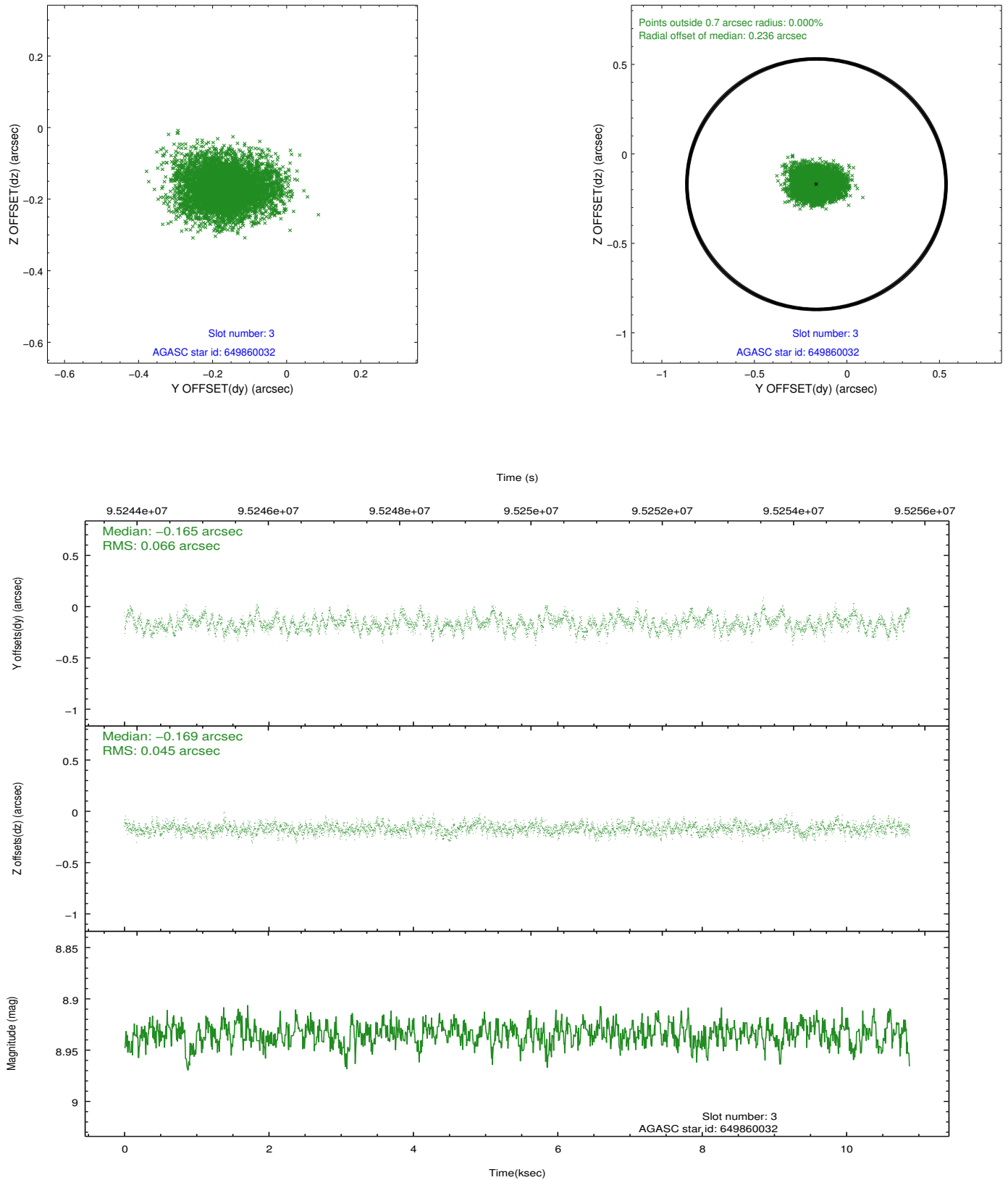


### Slot Statistics

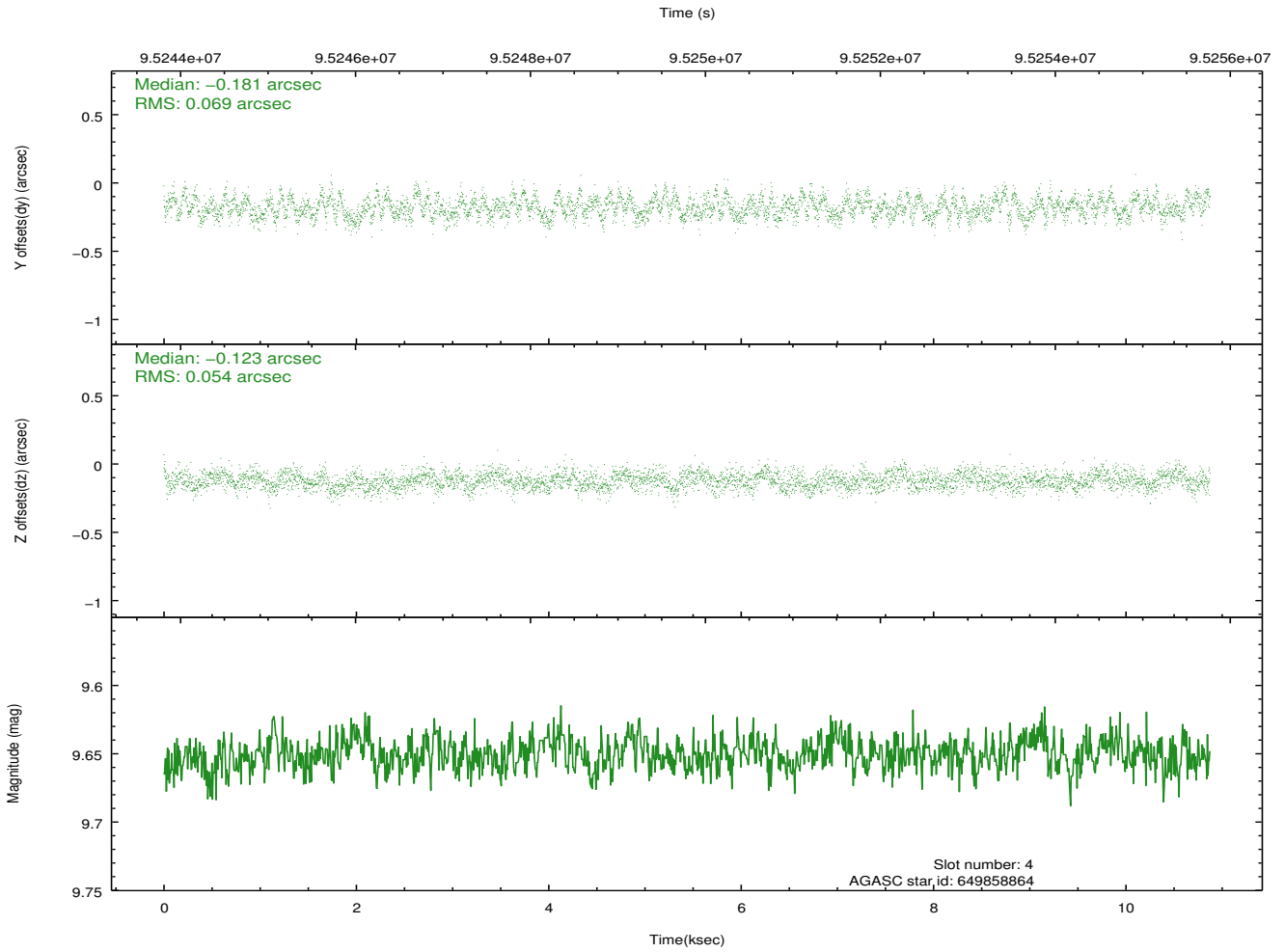
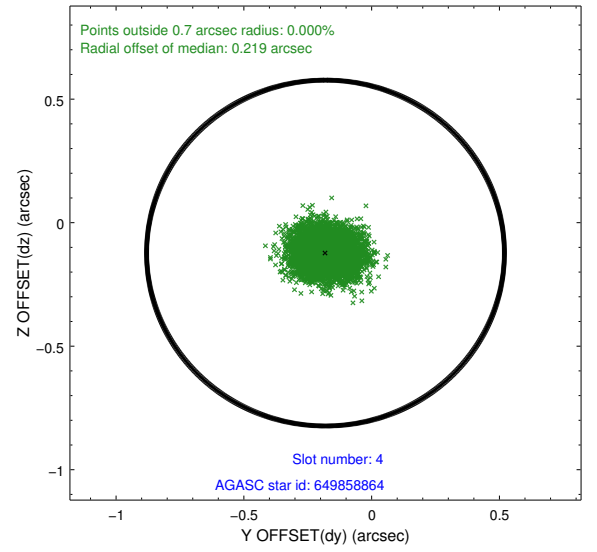
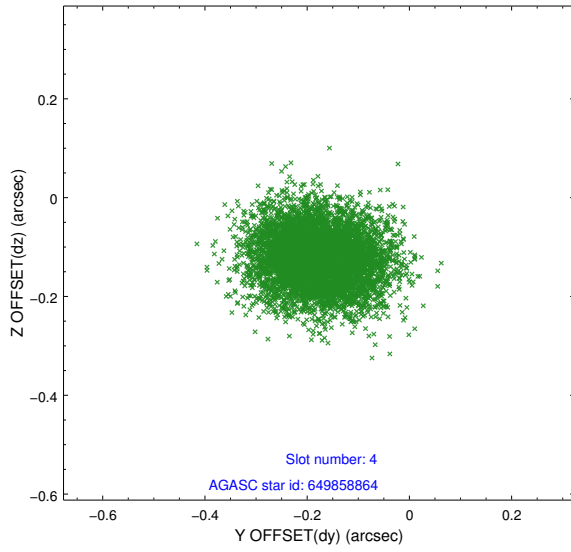
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.18	2653	-0.042	-0.047	0.009	0.015	0.000000	0.000000	-756.00	-993.94
1	FID	ACIS-I-4	7.15	2653	-0.049	0.045	0.007	0.012	0.000000	0.000000	2157.78	912.00
2	FID	ACIS-I-5	7.22	2653	-0.010	0.071	0.009	0.014	0.000000	0.000000	-1808.79	909.39
3	GUIDE	649860032	8.93	5305	-0.165	-0.169	0.085	0.140	197.517008	-0.616758	1794.71	2227.80
4	GUIDE	649858864	9.65	5304	-0.181	-0.123	0.094	0.150	197.684428	-0.695156	1763.63	1563.57
5	GUIDE	649729680	9.69	5302	0.171	-0.005	0.112	0.180	197.477731	-1.403690	-877.88	1279.60
6	GUIDE	649856976	9.83	5294	0.108	0.056	0.110	0.192	197.988518	-1.476151	-419.45	-519.43
7	GUIDE	649857296	10.06	5302	0.071	0.244	0.129	0.210	198.284356	-1.527390	-184.58	-1574.27

## 2.4 Star Slots

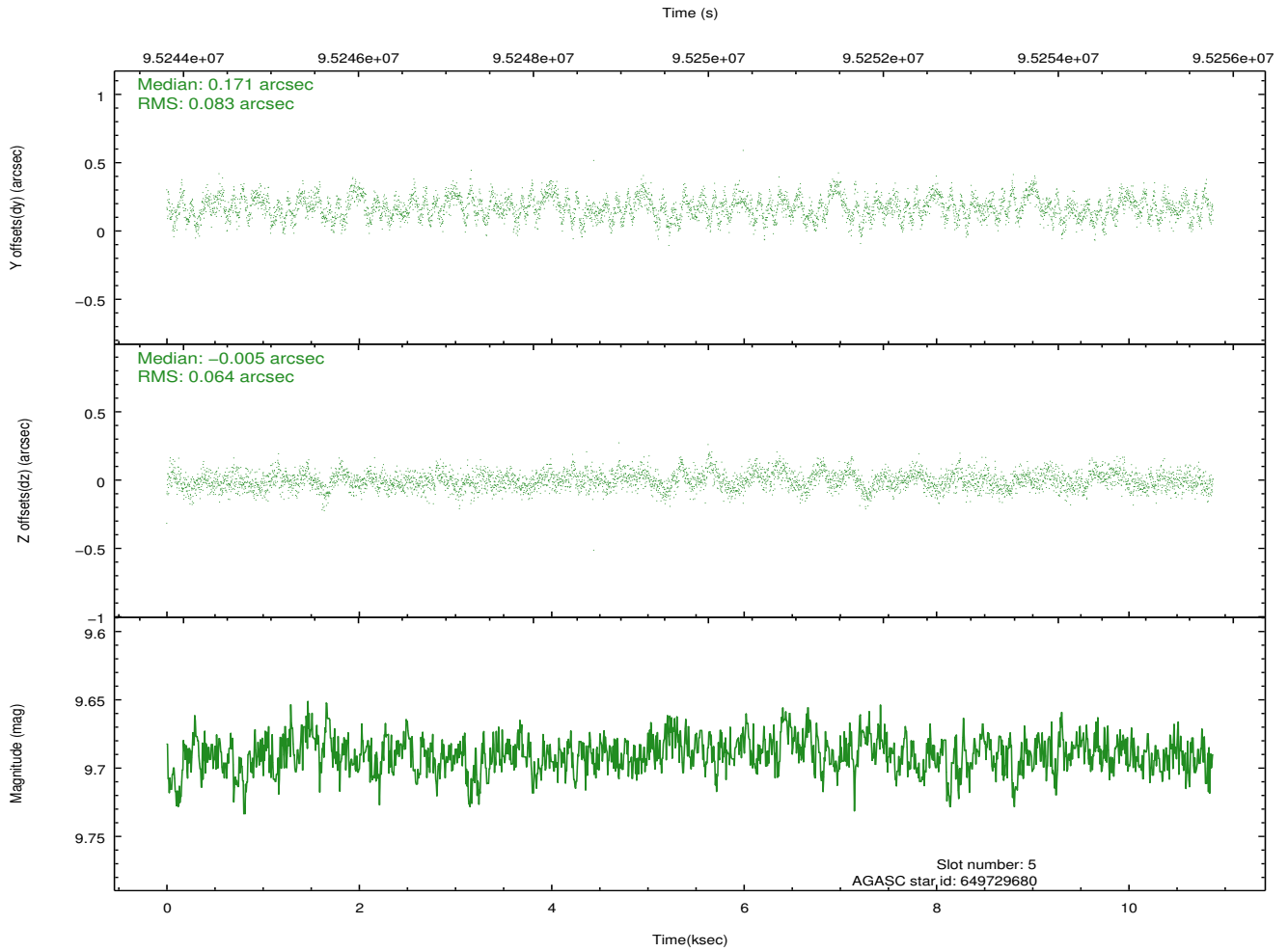
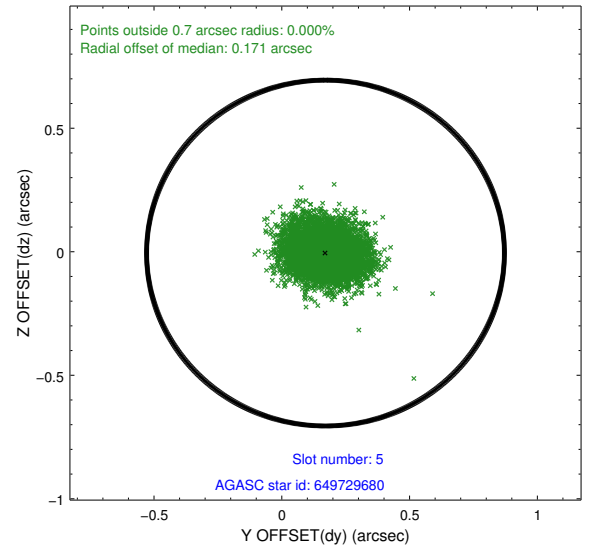
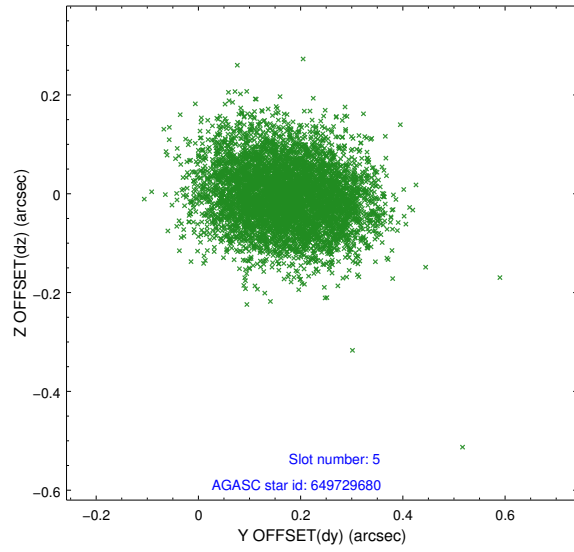
### 2.4.1 Slot 3



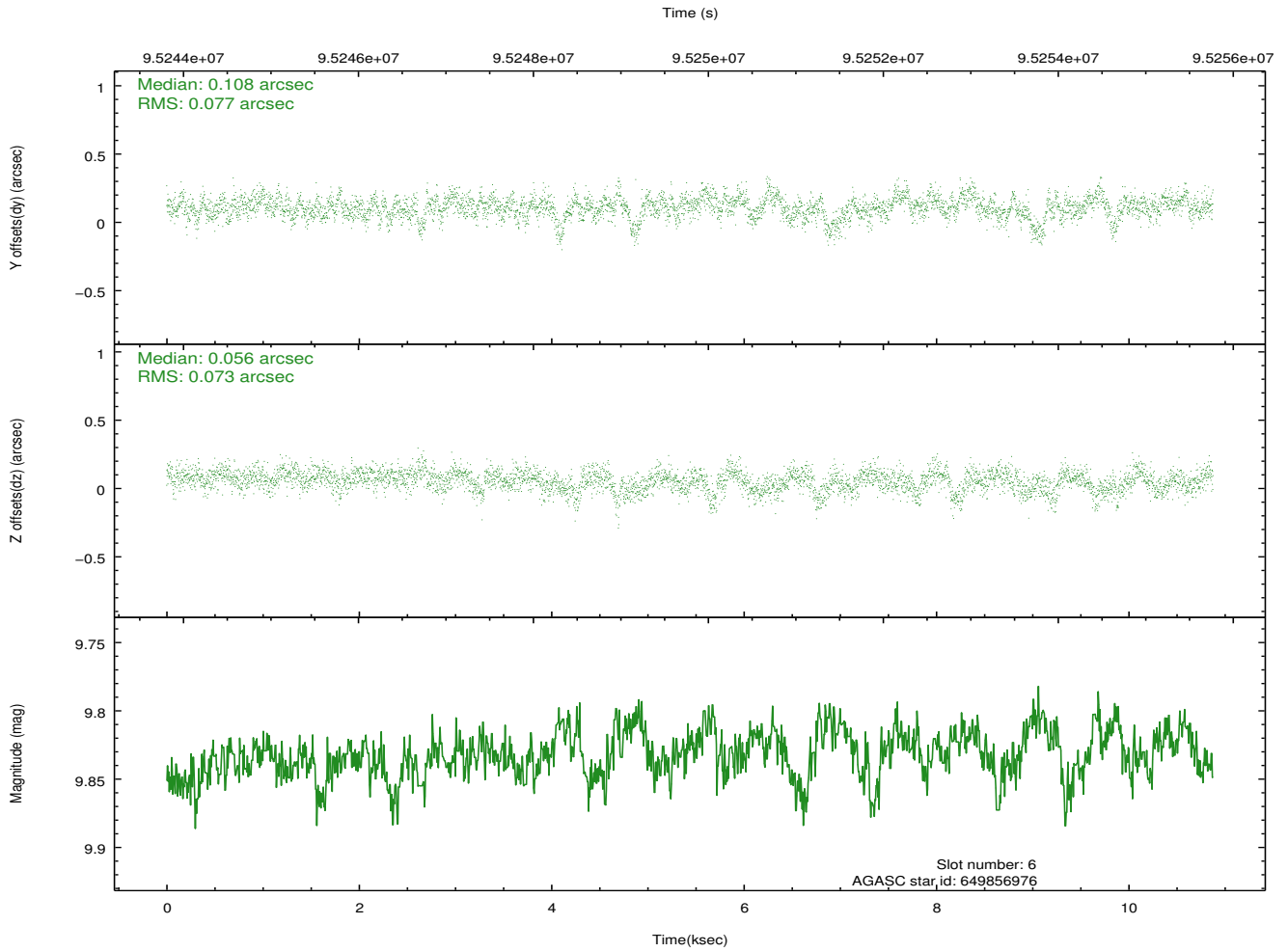
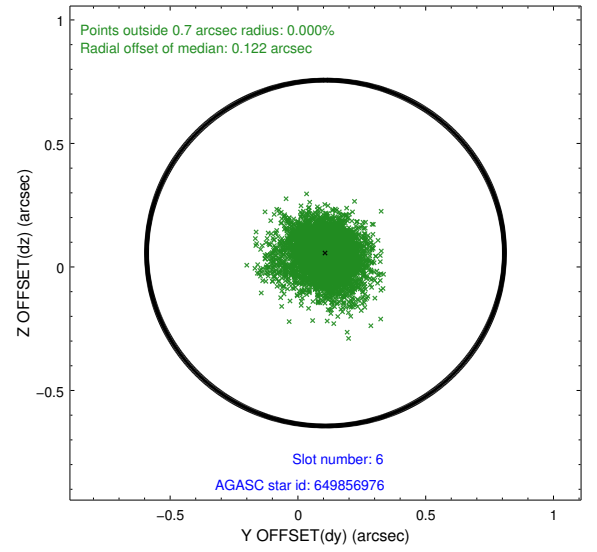
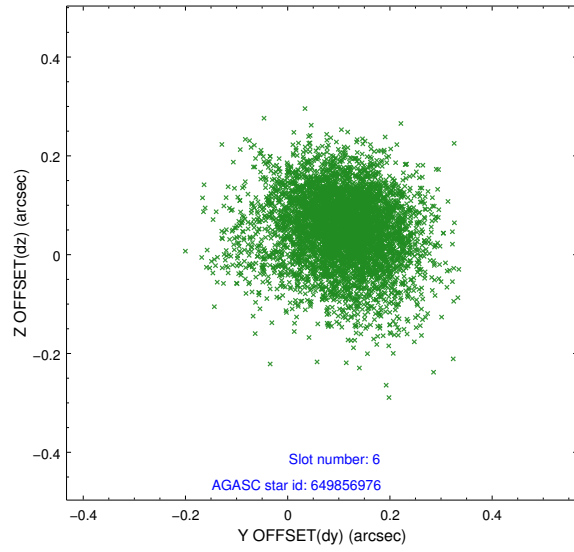
## 2.4.2 Slot 4



### 2.4.3 Slot 5

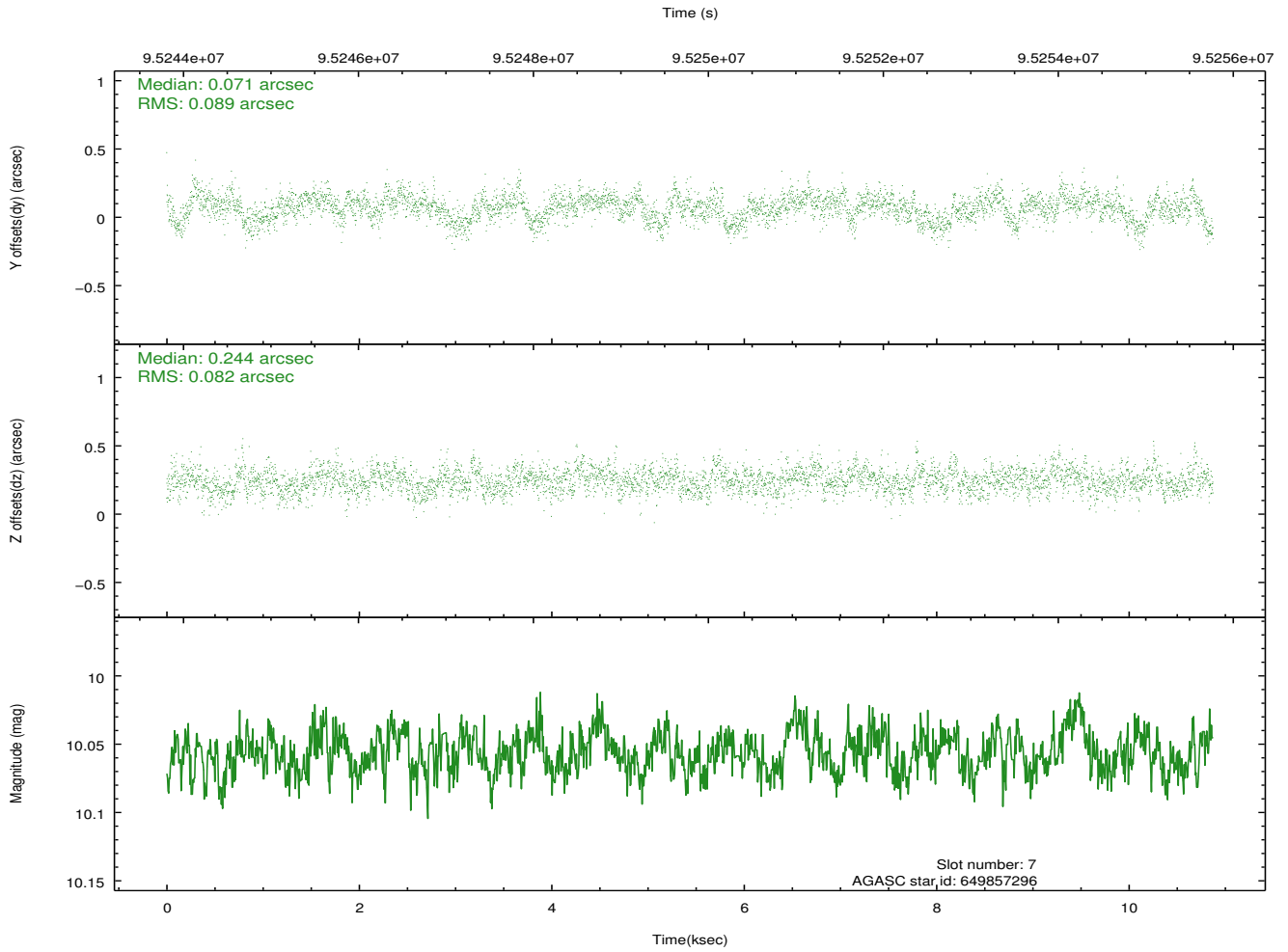
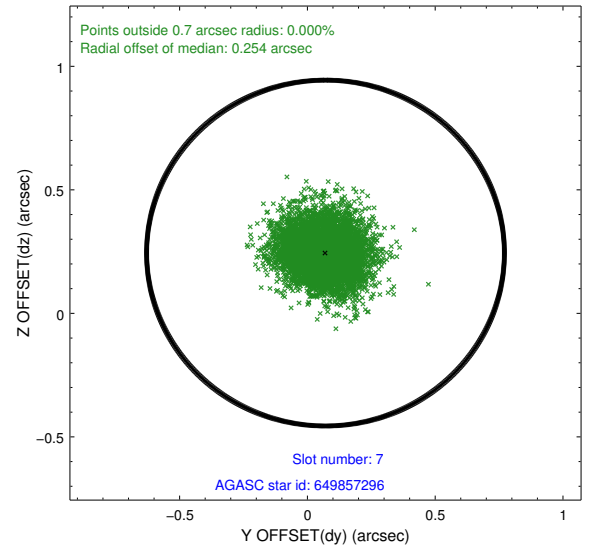
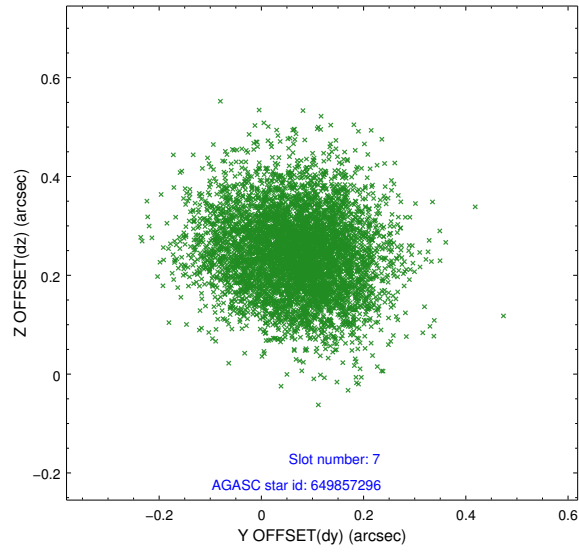


## 2.4.4 Slot 6



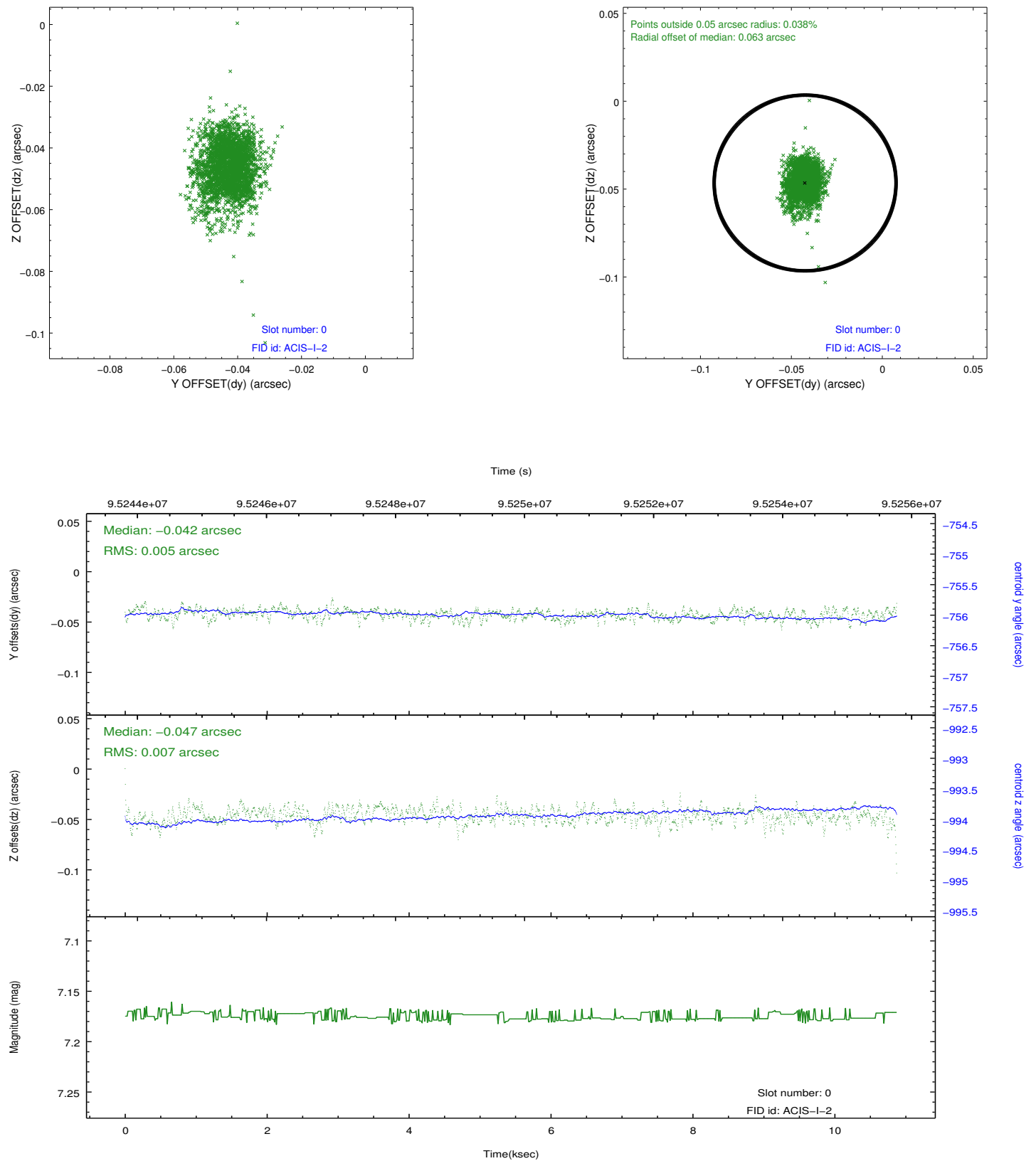


## 2.4.5 Slot 7

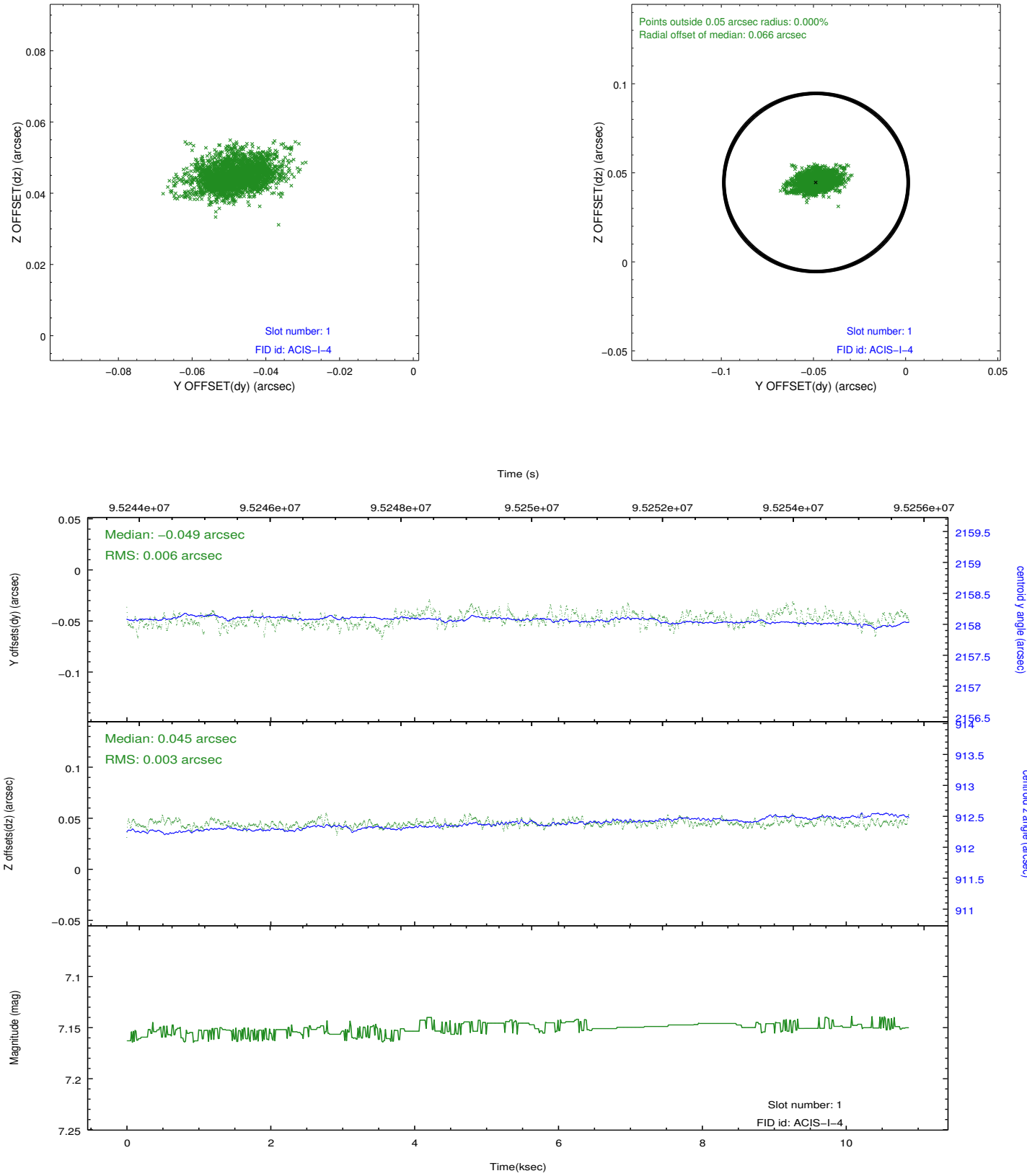


## 2.5 FID Slots

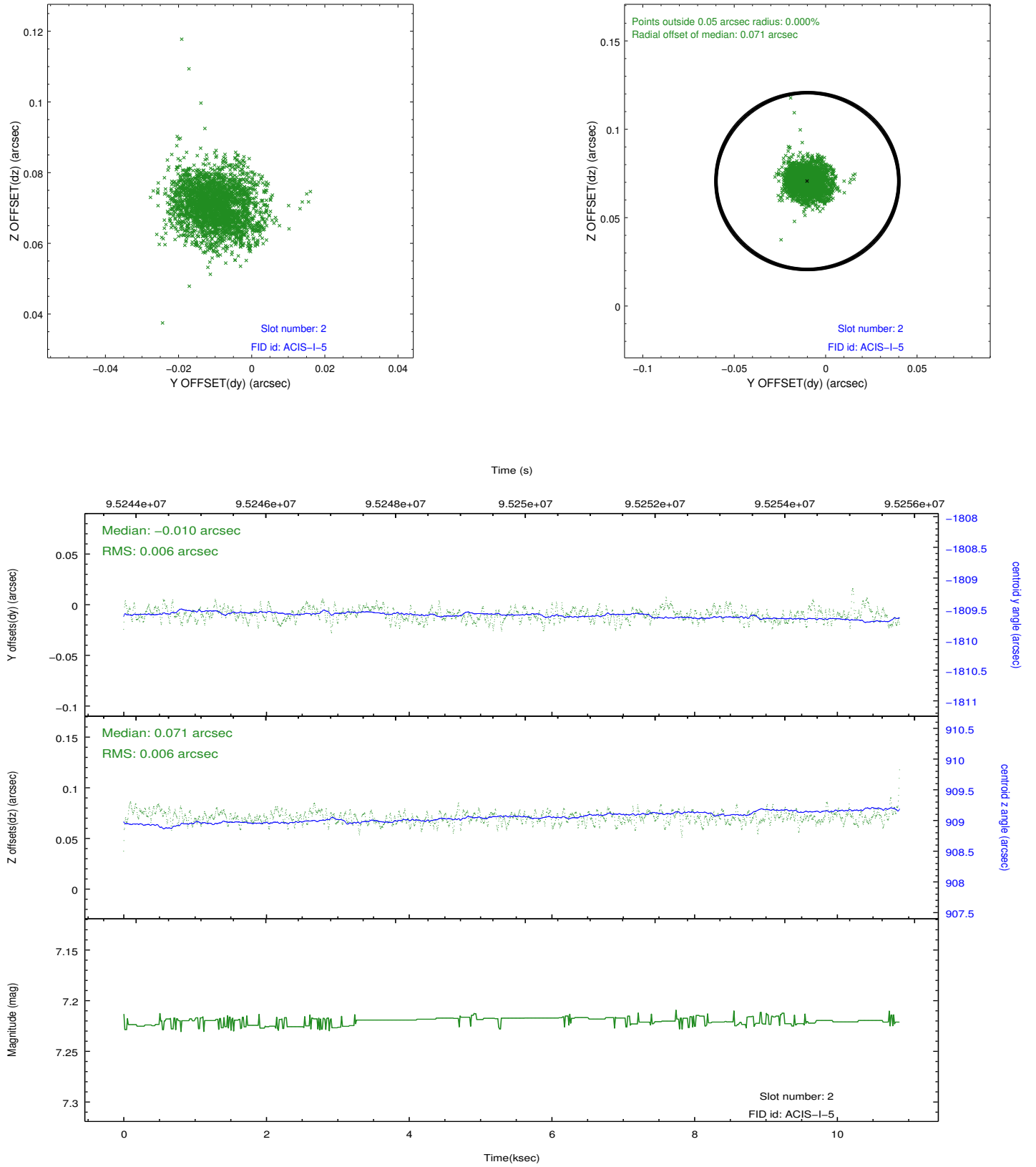
### 2.5.1 Slot 0



## 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)	2012.09.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.868

### A.2 Comments