

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2320 - L2 Version 3  
Chandra X-Ray Center

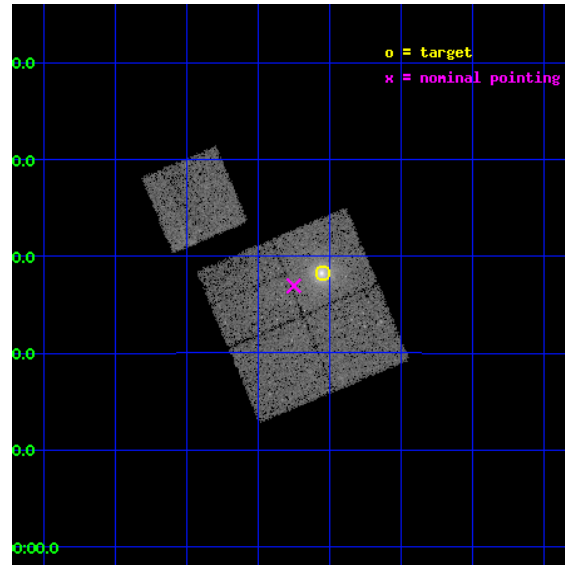
L2 Processing Date : Sep 3 2012

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# 1 Front

seq_num	800171	Sequence number
obs_id	2320	Observation id
title	DETERMINATION OF H0/Q0	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	A383	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	42.01325	Observer's specified target RA [deg]
dec_targ	-3.527847	Observer's specified target Dec [deg]
ra_nom	42.062761177799	Nominal RA [deg]
dec_nom	-3.5508677172803	Nominal Dec [deg]
roll_nom	337.20204123409	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19532.374356747	Sum of GTIs [s]
livetime	19285.043671658	Livetime [s]
ontime0	19548.743357882	Sum of GTIs [s]
ontime1	19538.979477003	Sum of GTIs [s]
ontime2	19545.420307621	Sum of GTIs [s]
ontime3	19532.374356747	Sum of GTIs [s]
ontime6	19545.379267633	Sum of GTIs [s]
l2events	75586	Number of level 2 events

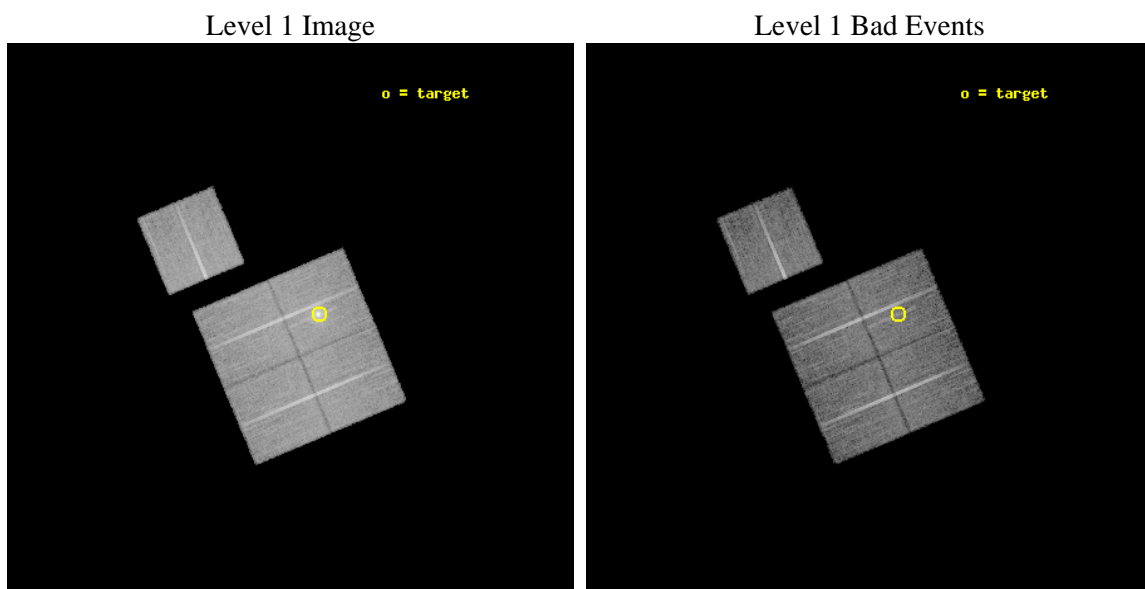




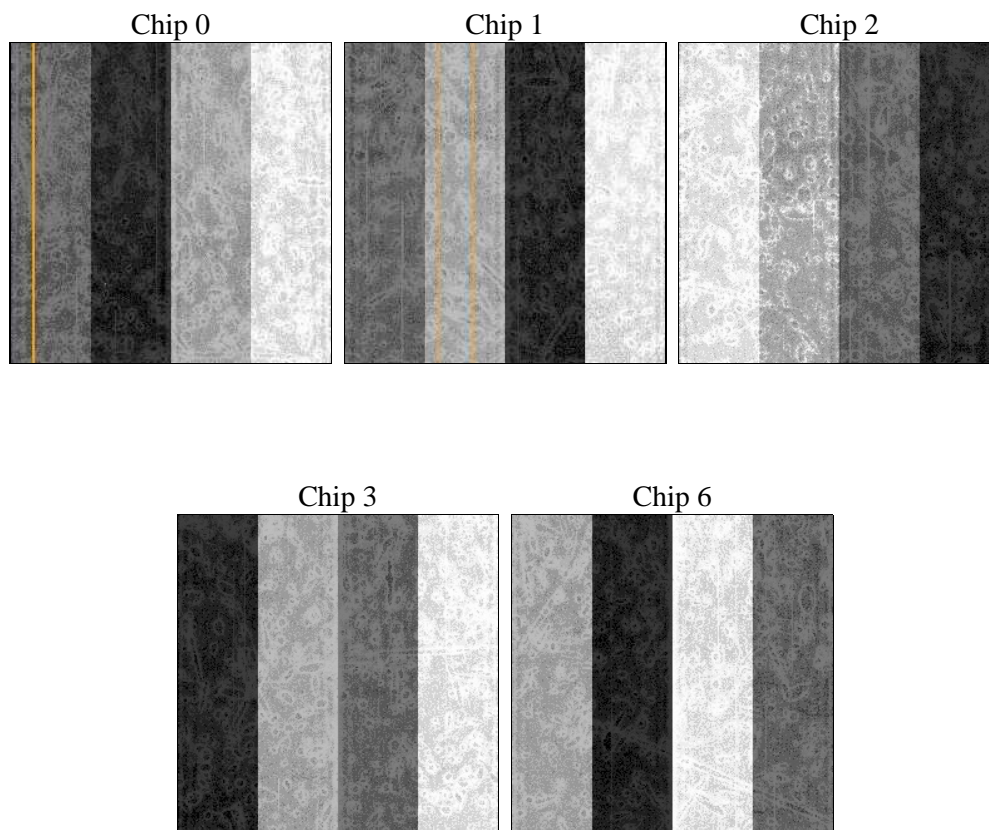
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19650.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19532.374356747	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	19548.743357882	Sum of GTIs [s]
date	2012-09-03T16:09:52	Date and time of file creation	ontime1	19538.979477003	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	19545.420307621	Sum of GTIs [s]
			ontime3	19532.374356747	Sum of GTIs [s]
			ontime6	19545.379267633	Sum of GTIs [s]
			l1events	577582	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	110756	108360	113624	128999	115843
rejected events	96292	93500	99987	99489	102169
rejected %	86%	86%	87%	77%	88%

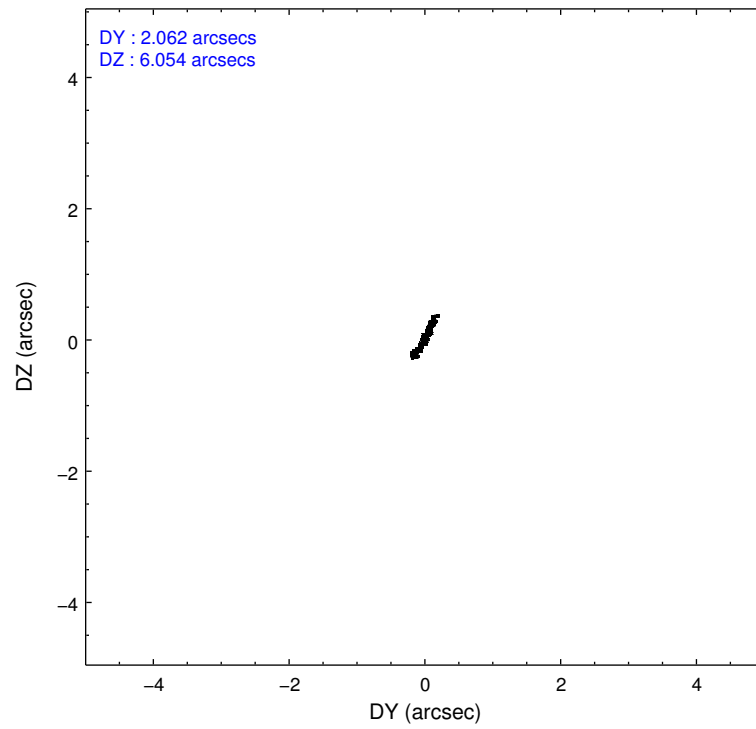
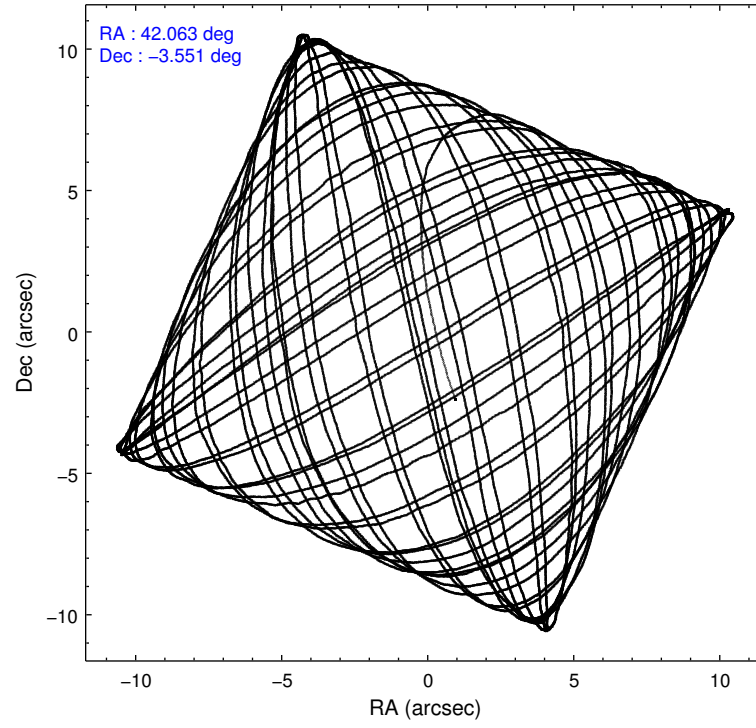
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6347	6339	5909	19302	5820
	5%	5%	5%	14%	5%
grade 1 events	52	54	50	121	56
	0%	0%	0%	0%	0%
grade 2 events	2970	2870	2865	4036	2659
	2%	2%	2%	3%	2%
grade 3 events	1404	1492	1304	1755	1295
	1%	1%	1%	1%	1%
grade 4 events	1272	1436	1266	1760	1278
	1%	1%	1%	1%	1%
grade 5 events	4110	4262	3788	4255	4618
	3%	3%	3%	3%	3%
grade 6 events	2471	2723	2295	2663	2624
	2%	2%	2%	2%	2%
grade 7 events	92130	89184	96147	95107	97493
	83%	82%	84%	73%	84%

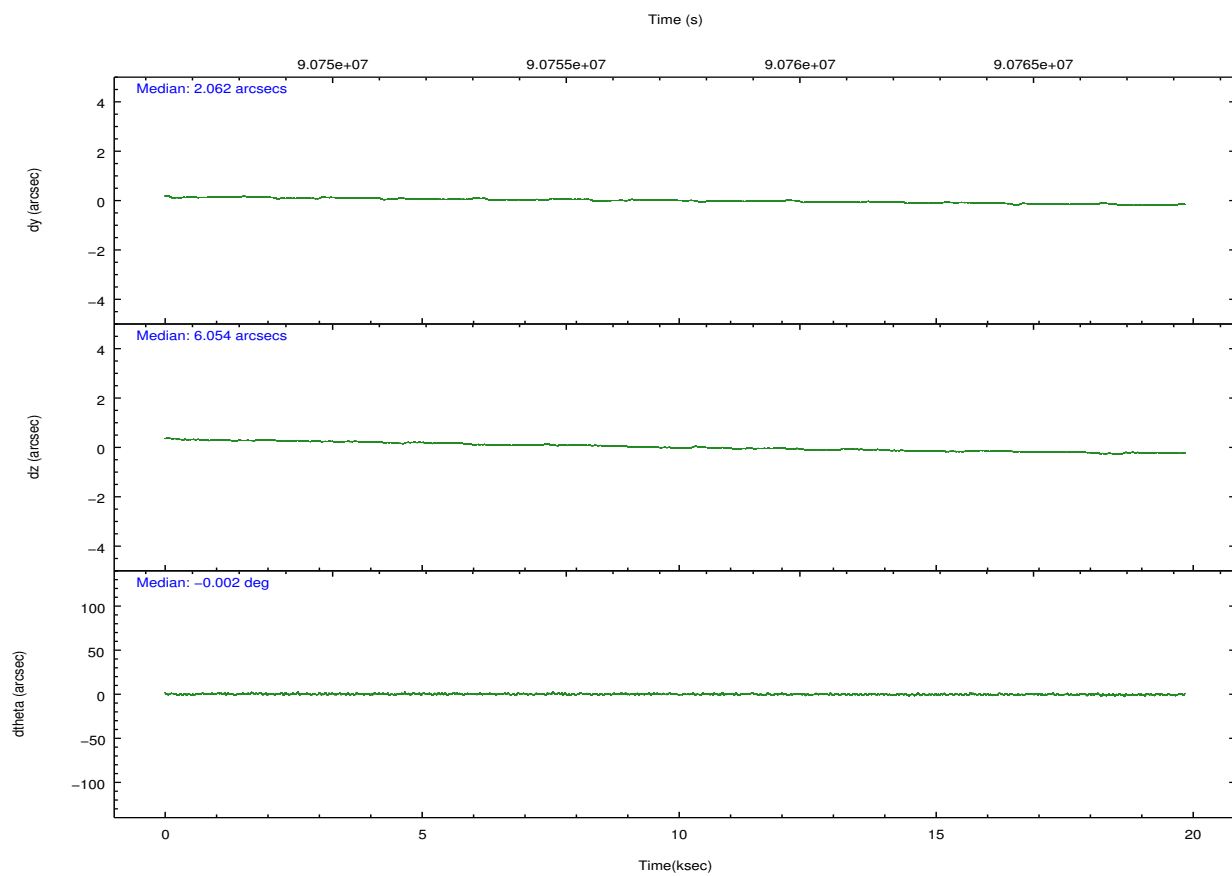
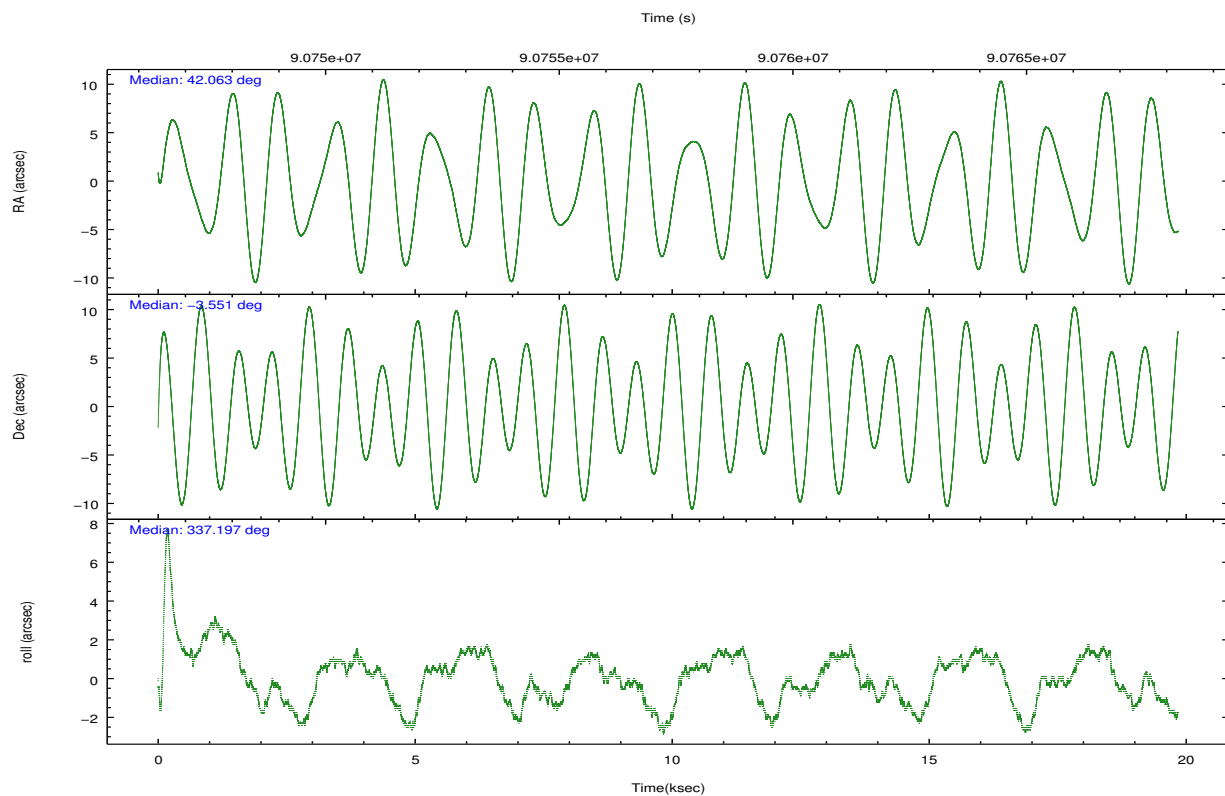
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	42.035397	42.06276117779905
[deg] Pointing Dec	-3.554254	-3.550867717280327
[deg] Pointing Roll	336.991655	337.2020412340922
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-225.840463	-225.8433433320239
[mm] SIM translation stage offset	-7.752	-7.749109670905796
[s] Observation start time (MET)	90747597.184000	90746618.200372
Observation start date	2000-11-16T07:38:53	2000-11-16T07:23:38
[s] Observation end time (MET)	90767247.184000	90768039.16369
Observation end date	2000-11-16T13:06:23	2000-11-16T13:20:39
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



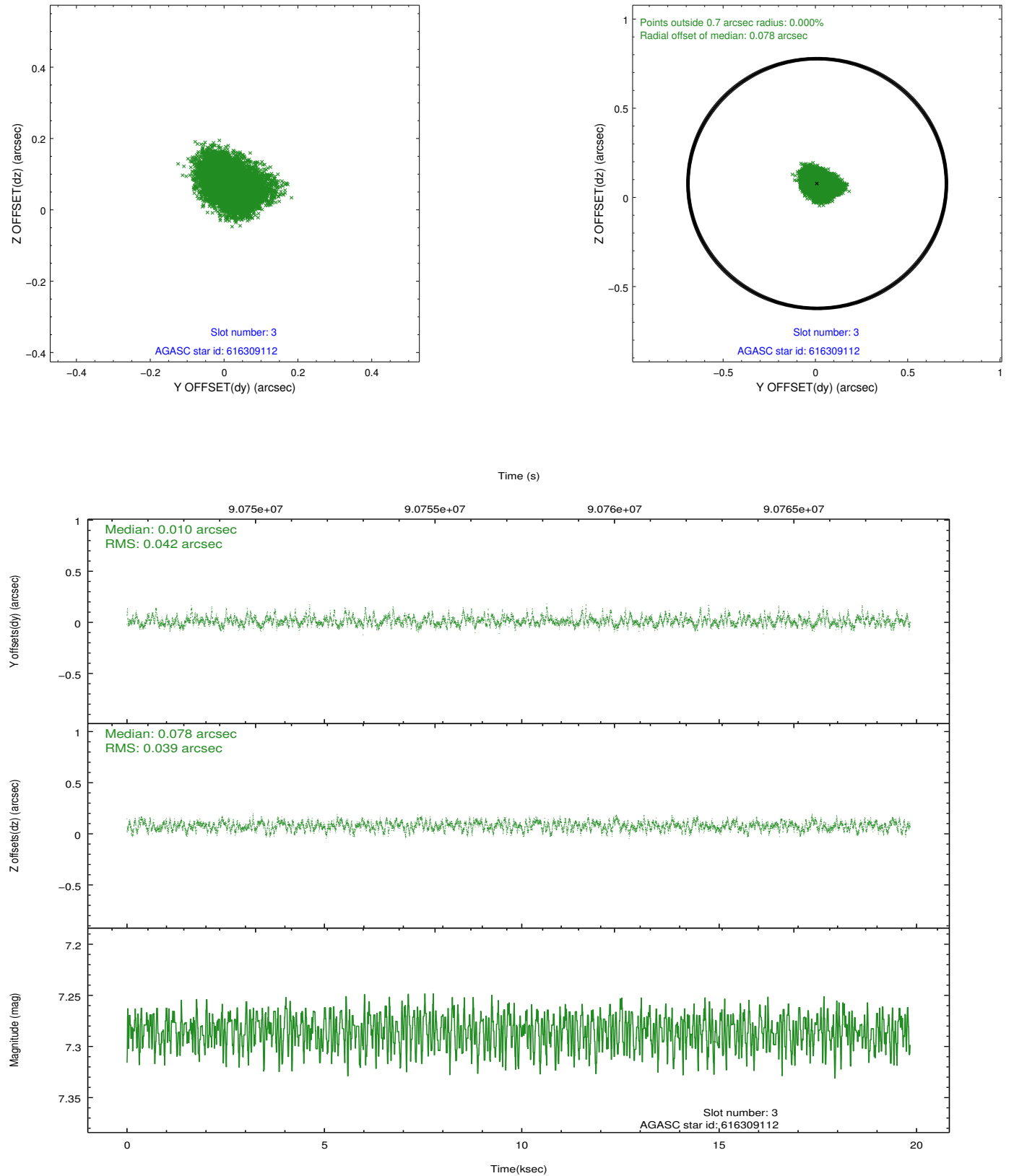


### Slot Statistics

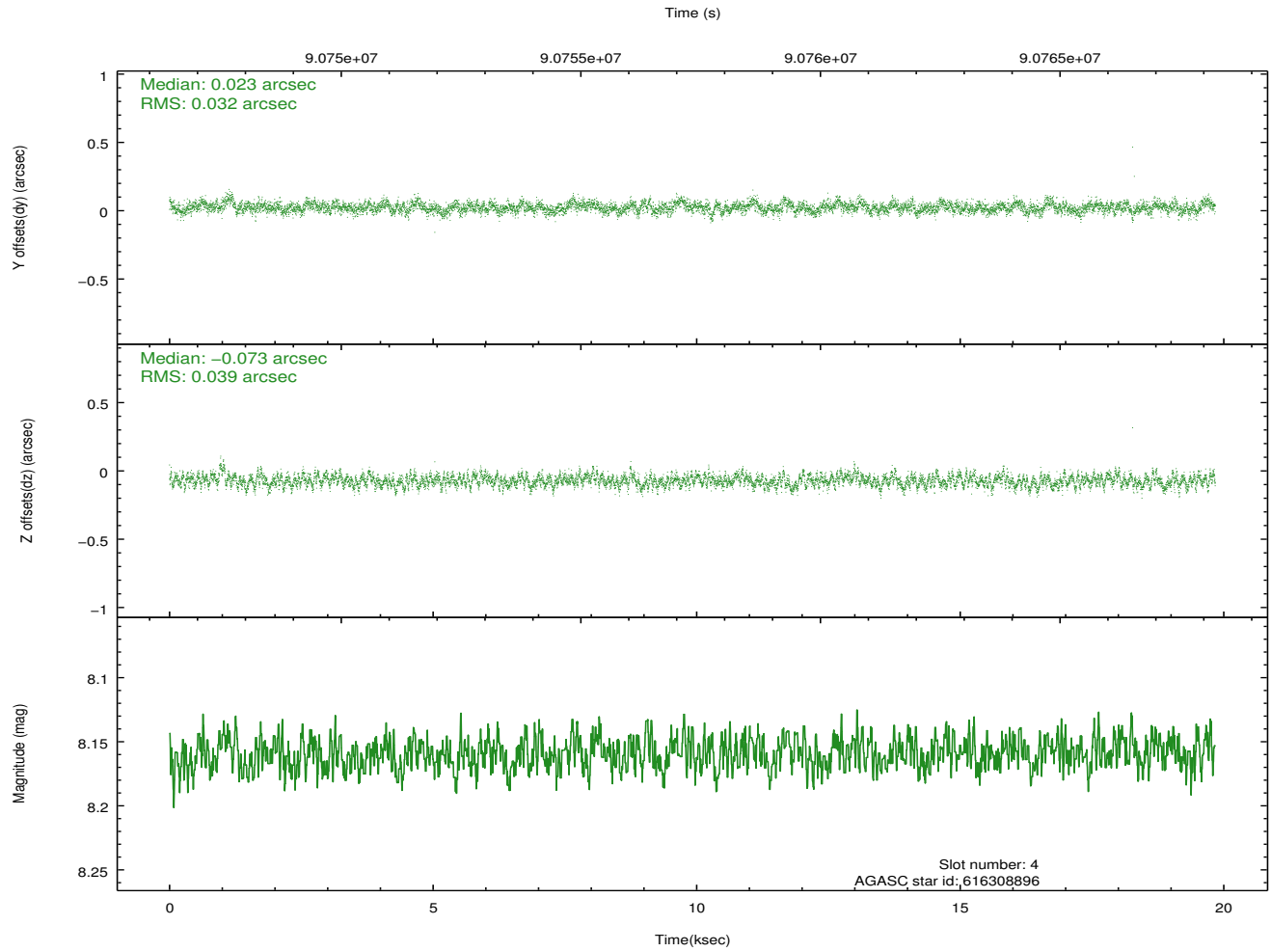
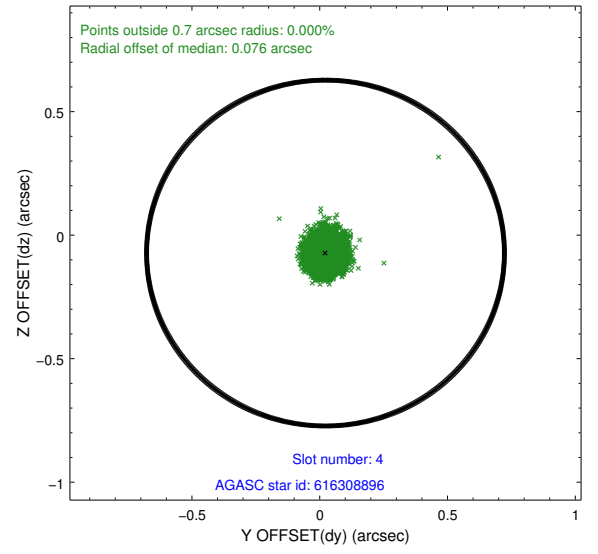
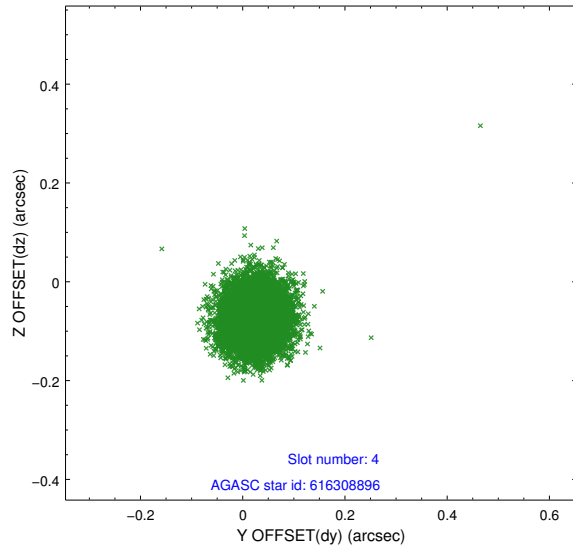
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.18	4838	-0.051	-0.033	0.012	0.019	0.000000	0.000000	-757.01	-993.89
1	FID	ACIS-I-4	7.15	4837	-0.043	0.045	0.010	0.015	0.000000	0.000000	2156.93	912.19
2	FID	ACIS-I-5	7.22	4838	-0.007	0.056	0.009	0.015	0.000000	0.000000	-1810.14	909.27
3	GUIDE	616309112	7.28	9678	0.010	0.078	0.061	0.099	42.055014	-3.619210	155.31	-187.38
4	GUIDE	616308896	8.16	9673	0.023	-0.073	0.053	0.086	42.427748	-3.548145	1288.10	571.24
5	GUIDE	616309048	8.82	9671	0.019	-0.009	0.062	0.100	41.784403	-3.226459	-1292.52	733.64
6	GUIDE	616302872	8.25	9676	-0.082	0.003	0.062	0.098	41.855710	-3.296822	-957.92	600.77
7	GUIDE	616306616	8.91	9675	0.029	0.003	0.064	0.103	42.263219	-4.097260	1516.19	-1479.34

## 2.4 Star Slots

### 2.4.1 Slot 3

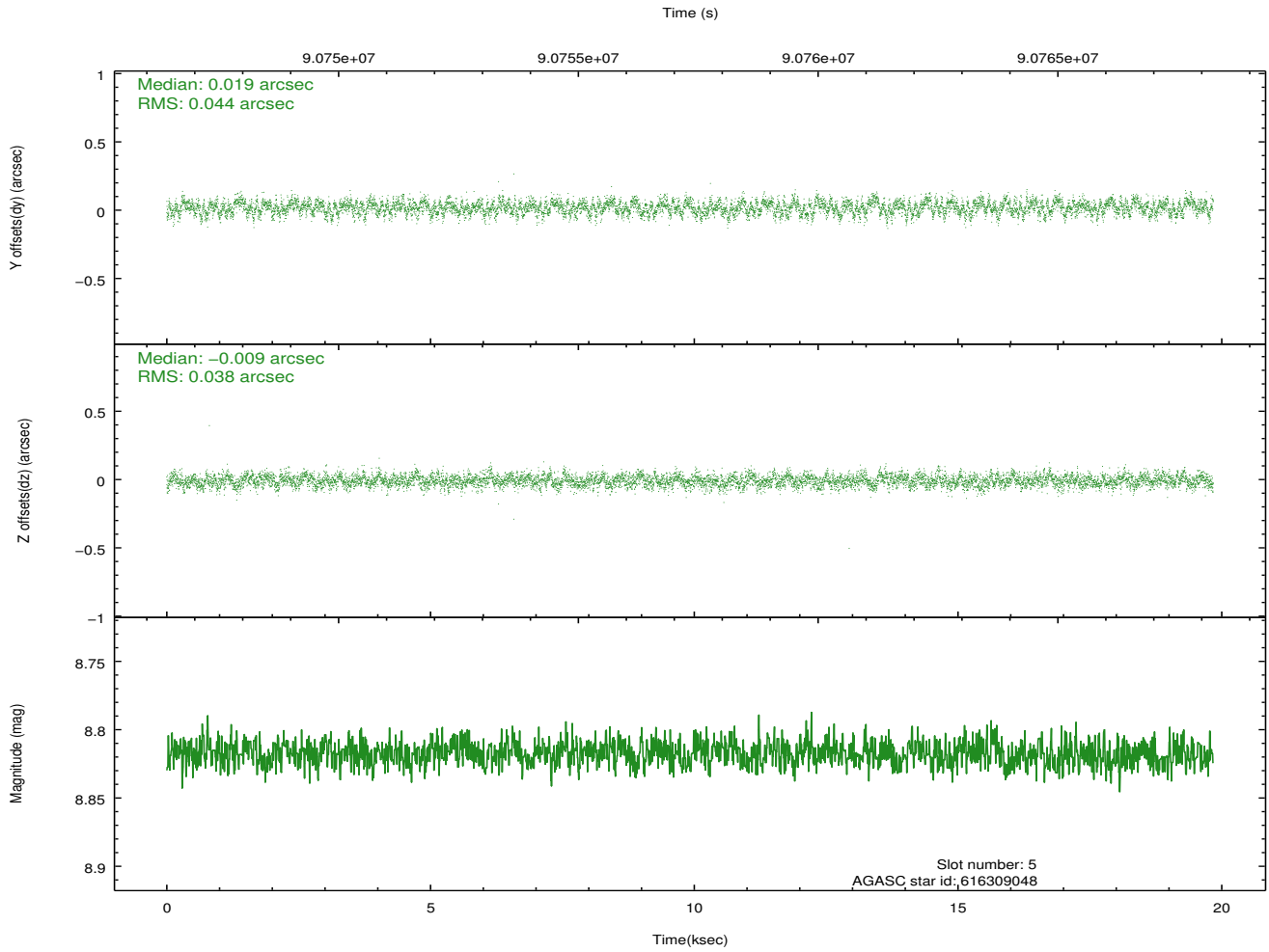
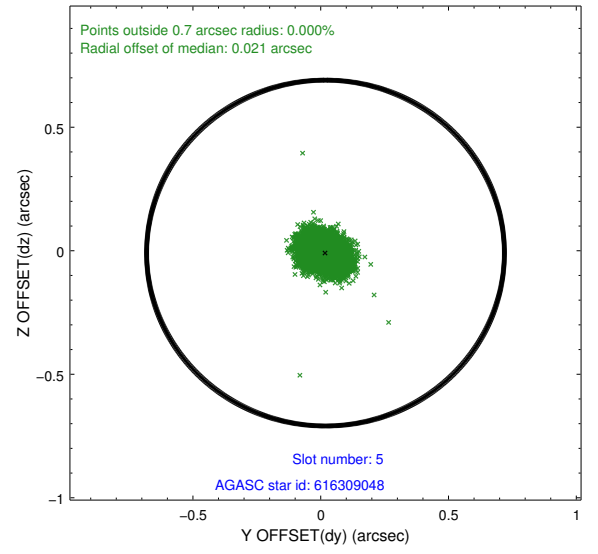
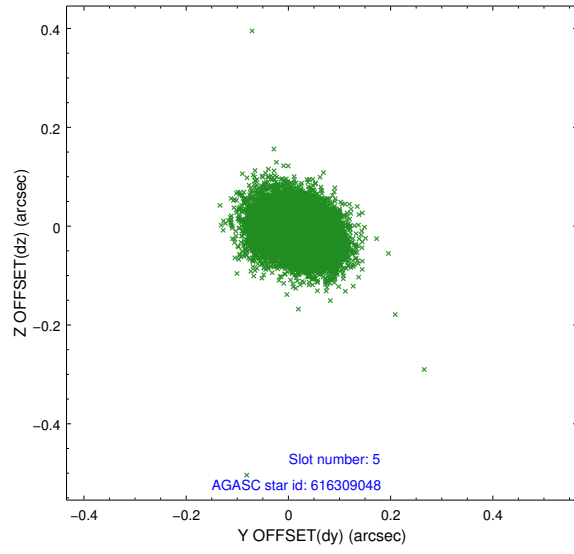


## 2.4.2 Slot 4

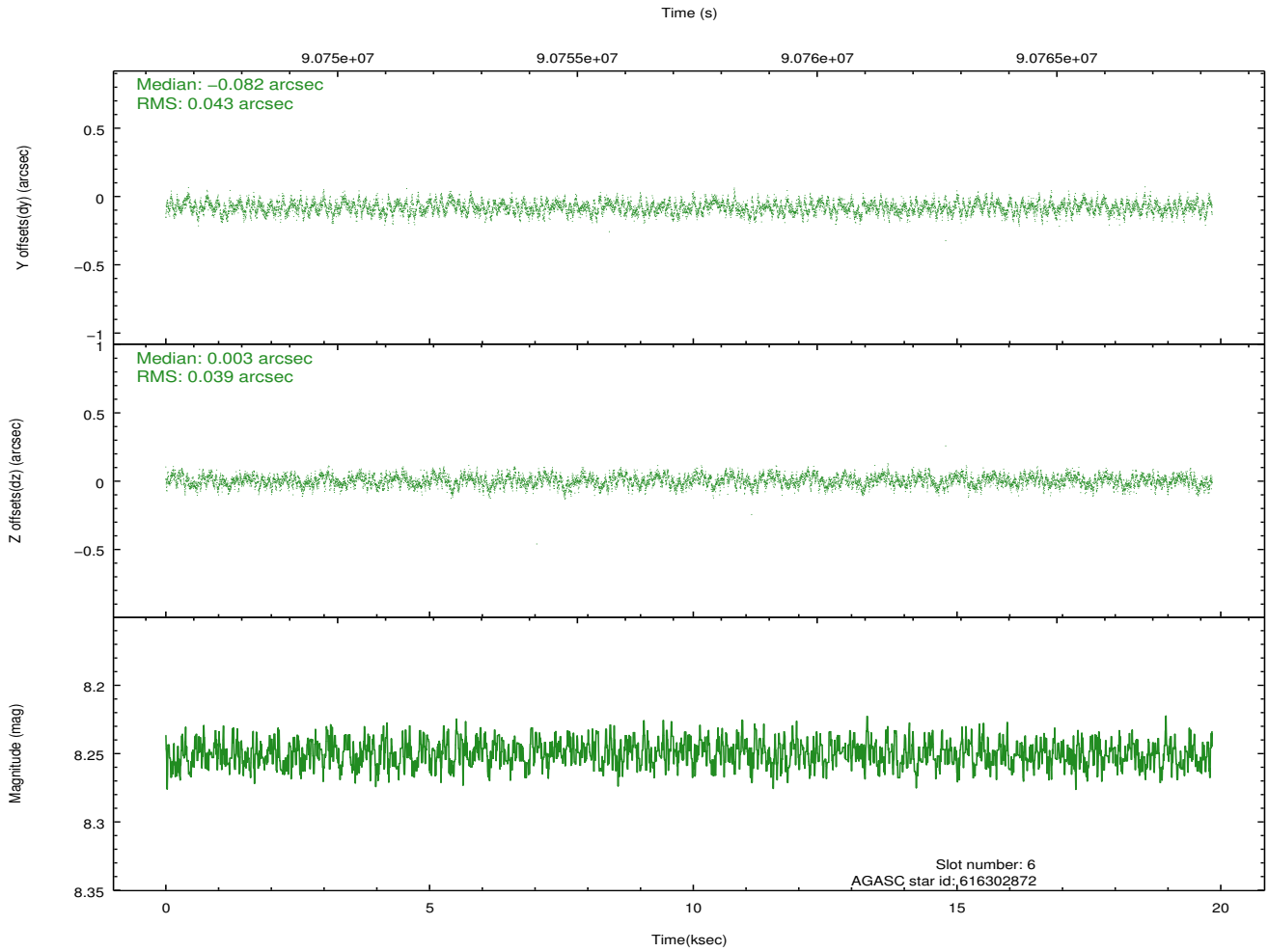
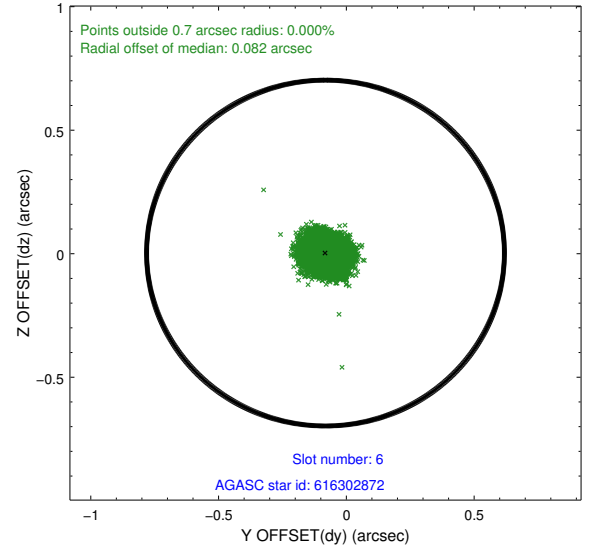
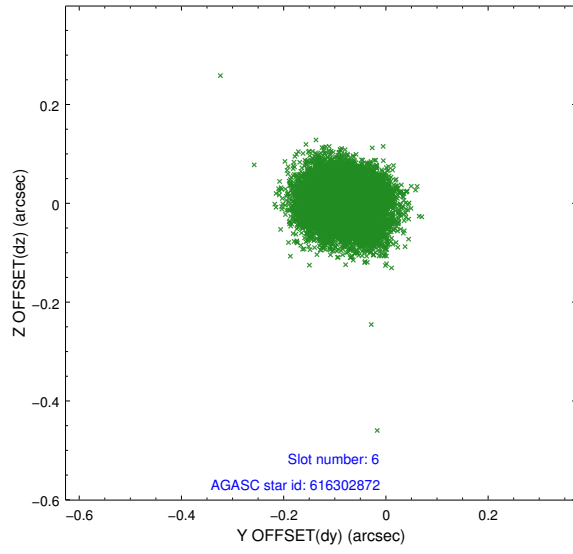




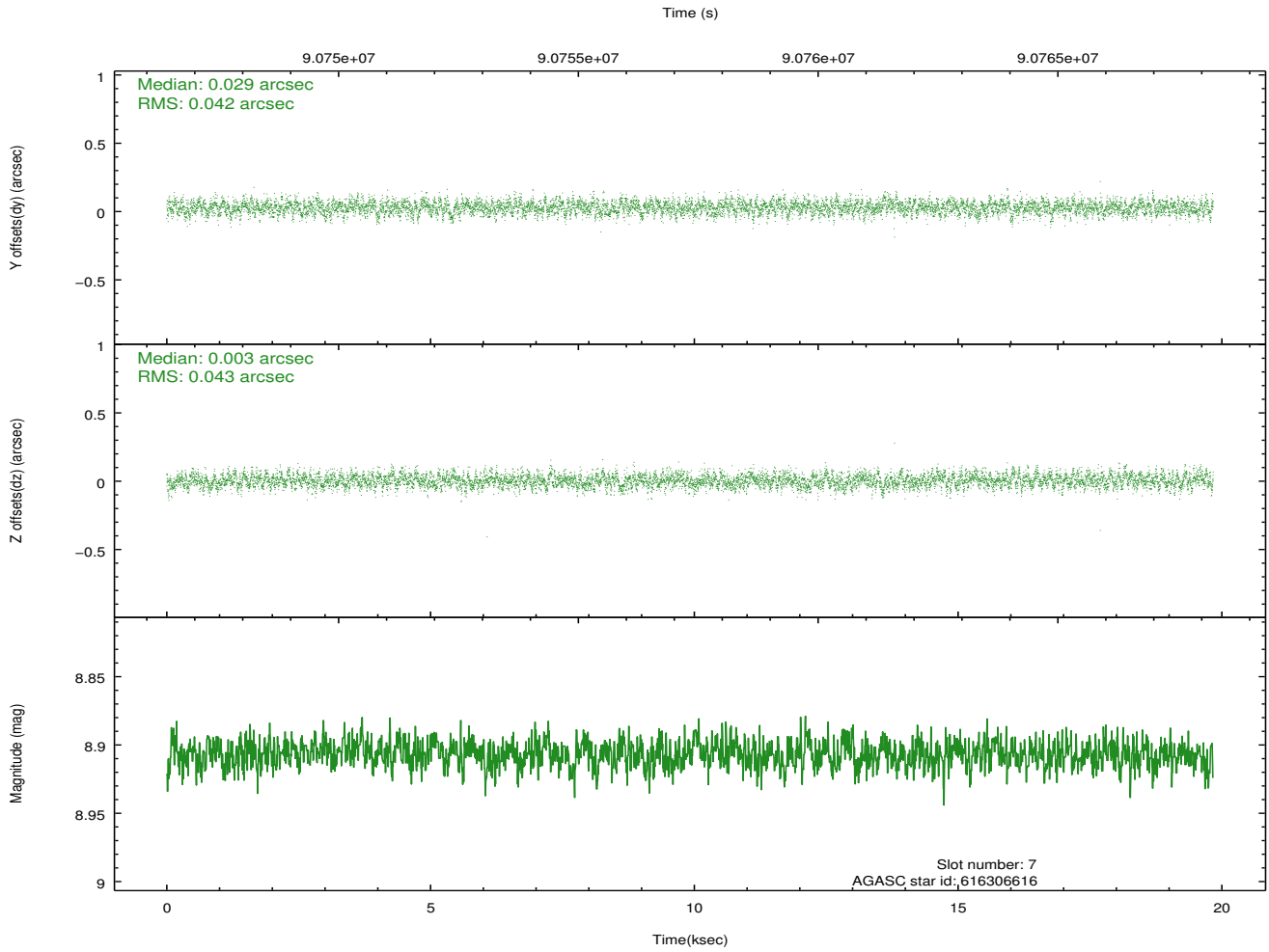
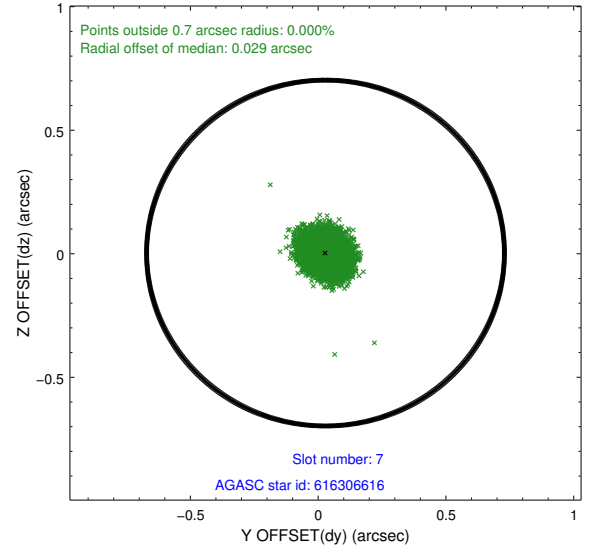
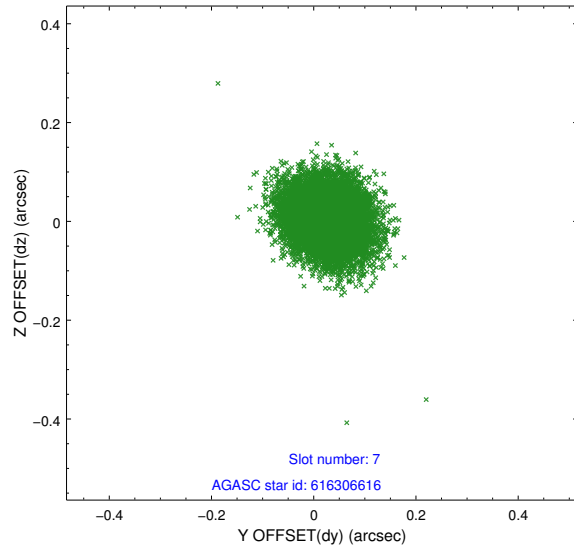
### 2.4.3 Slot 5



## 2.4.4 Slot 6

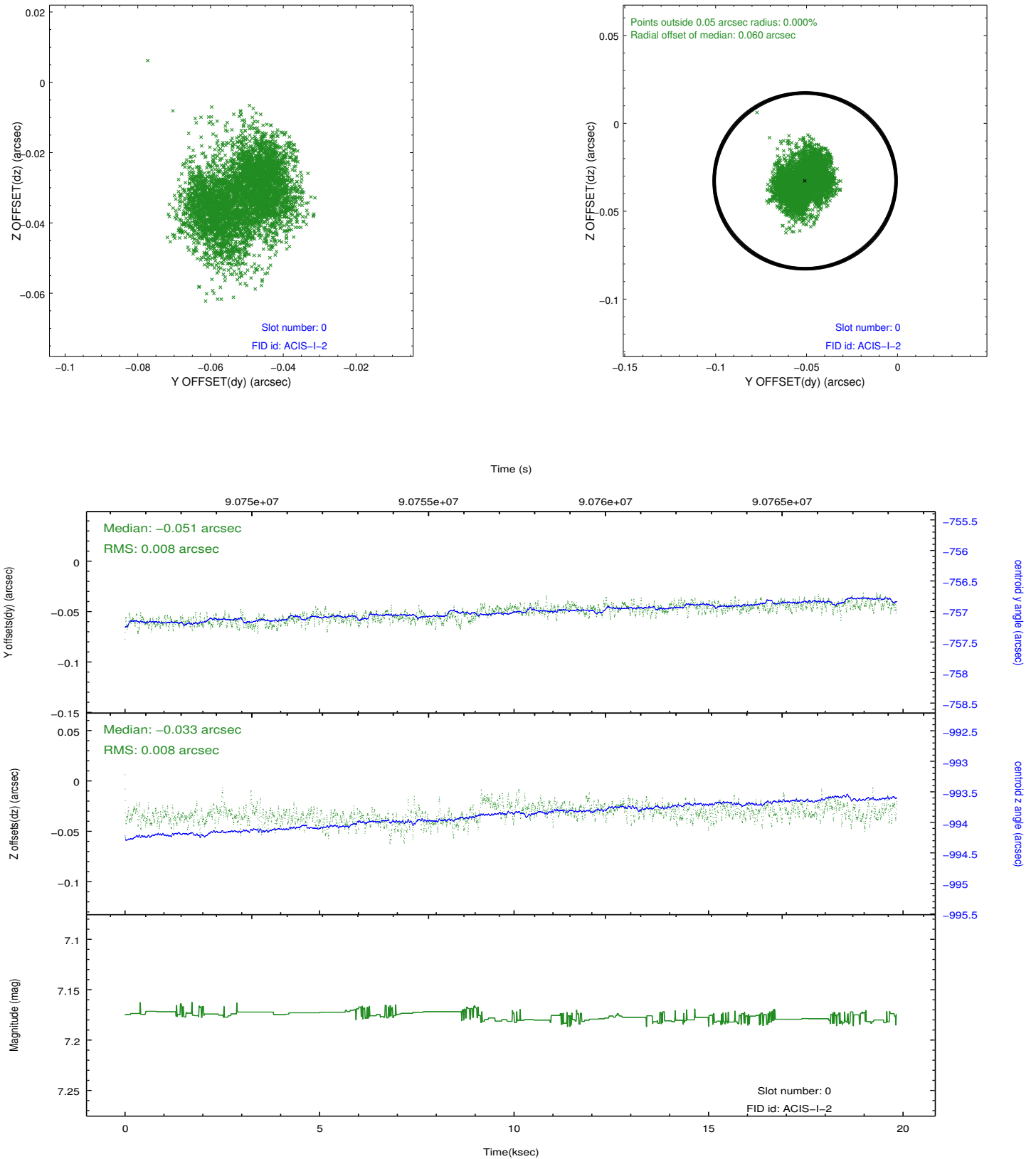


## 2.4.5 Slot 7

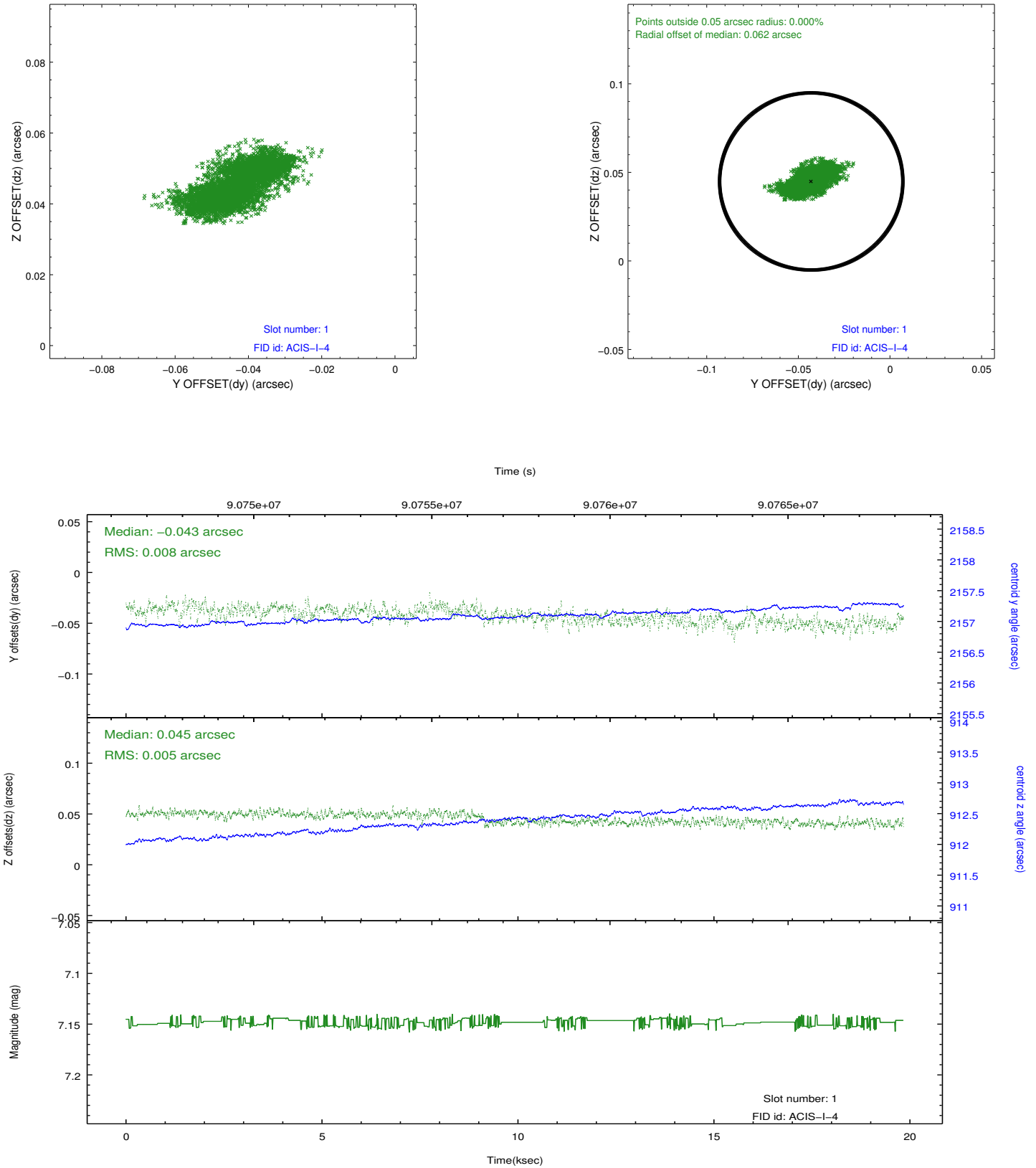


## 2.5 FID Slots

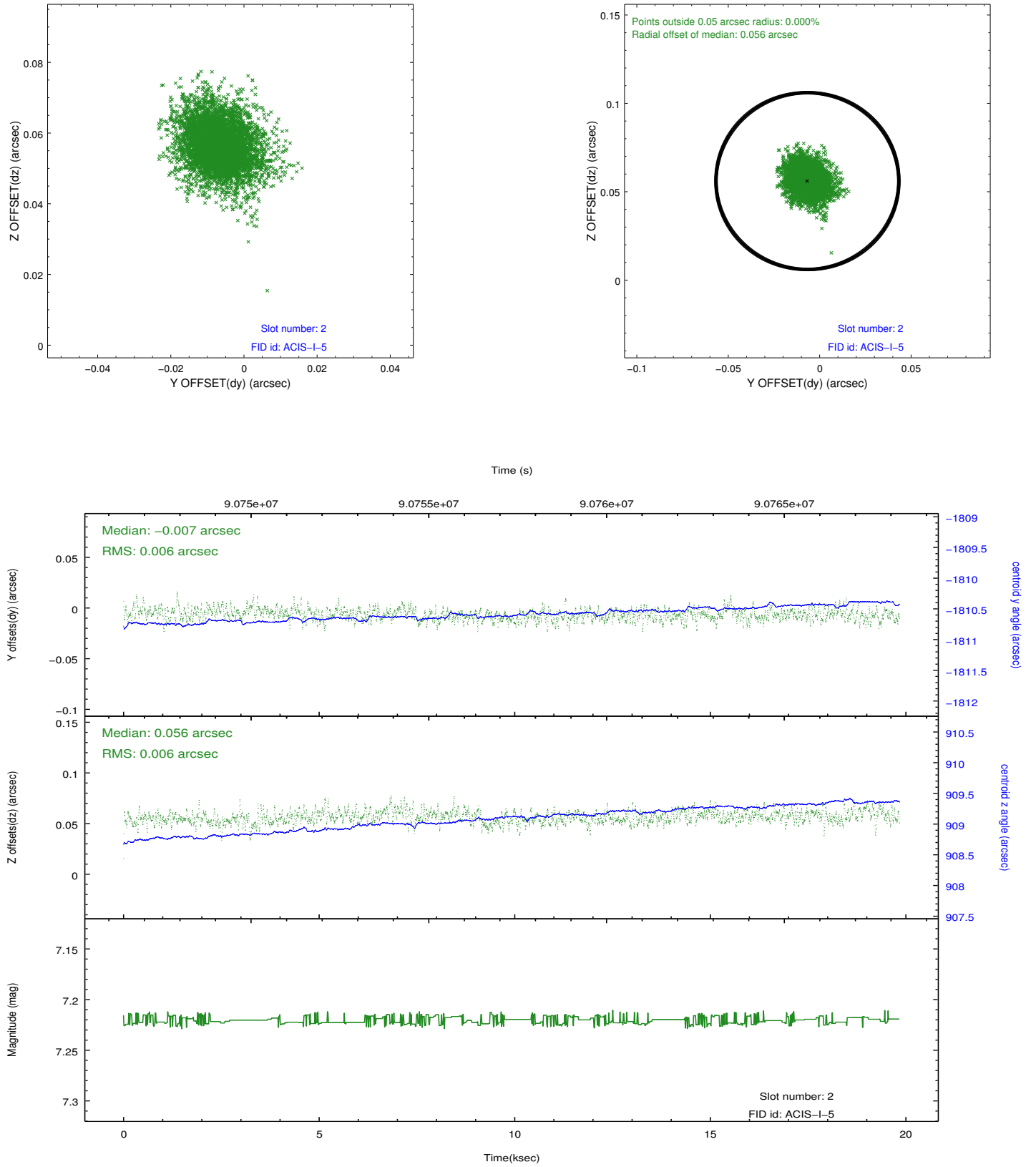
### 2.5.1 Slot 0



## 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)	2012.09.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.532

### A.2 Comments