

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12473 - L2 Version 1  
Chandra X-Ray Center

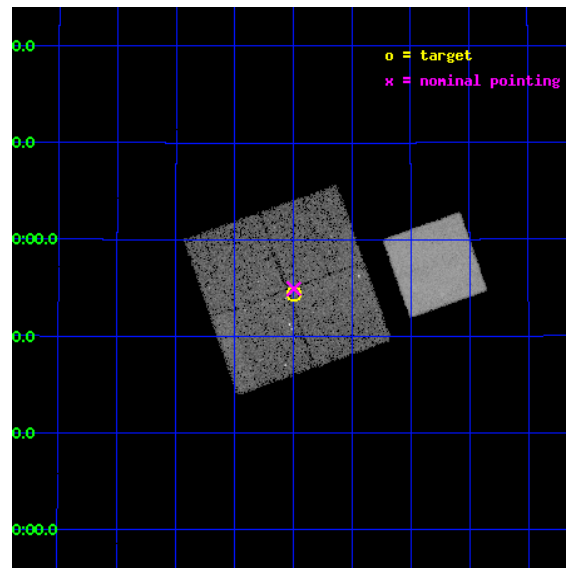
L2 Processing Date : Jan 4 2012

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# 1 Front

seq_num	401214	Sequence number
obs_id	12473	Observation id
title	Identifying the Optical Counterparts of ULXs in the Blue Compact Dwarf Galaxy NGC 4861 (Mrk 59)	Proposal title
observer	Ms Yi-Jung Yang	Principal investigator
object	NGC 4861	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.748333	Observer's specified target RA [deg]
dec_targ	34.907306	Observer's specified target Dec [deg]
ra_nom	194.74870646088	Nominal RA [deg]
dec_nom	34.915382301591	Nominal Dec [deg]
roll_nom	70.525880683103	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20044.600154161	Sum of GTIs [s]
livetime	19782.702696527	Livetime [s]
ontime0	20044.600154161	Sum of GTIs [s]
ontime1	20044.600154161	Sum of GTIs [s]
ontime2	20044.600154161	Sum of GTIs [s]
ontime3	20044.600154161	Sum of GTIs [s]
ontime7	20044.600154161	Sum of GTIs [s]
l2events	117506	Number of level 2 events

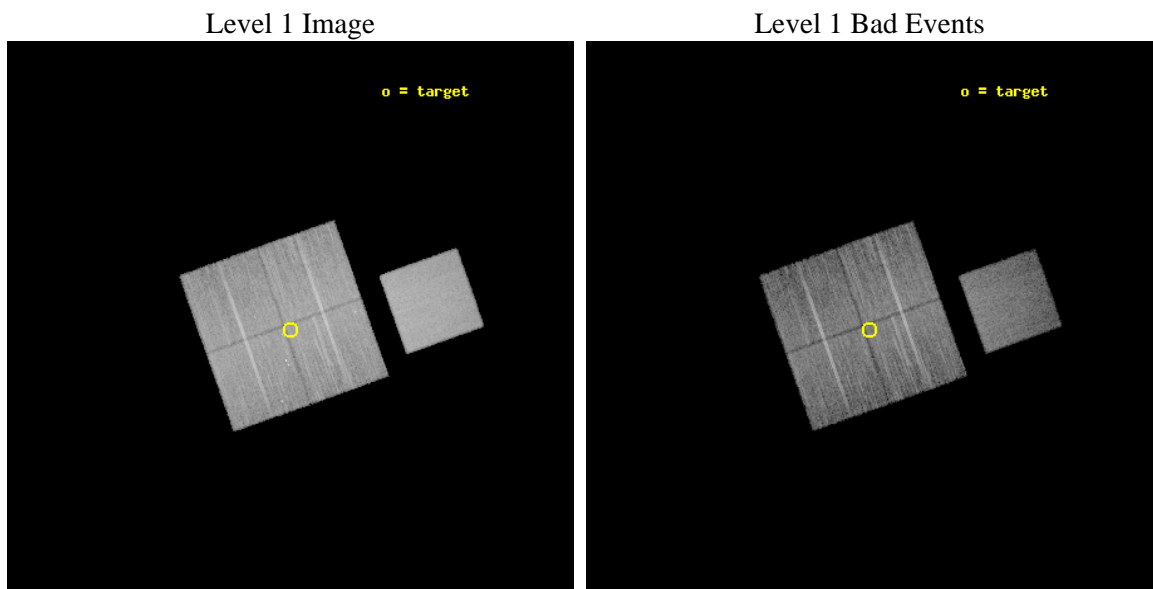




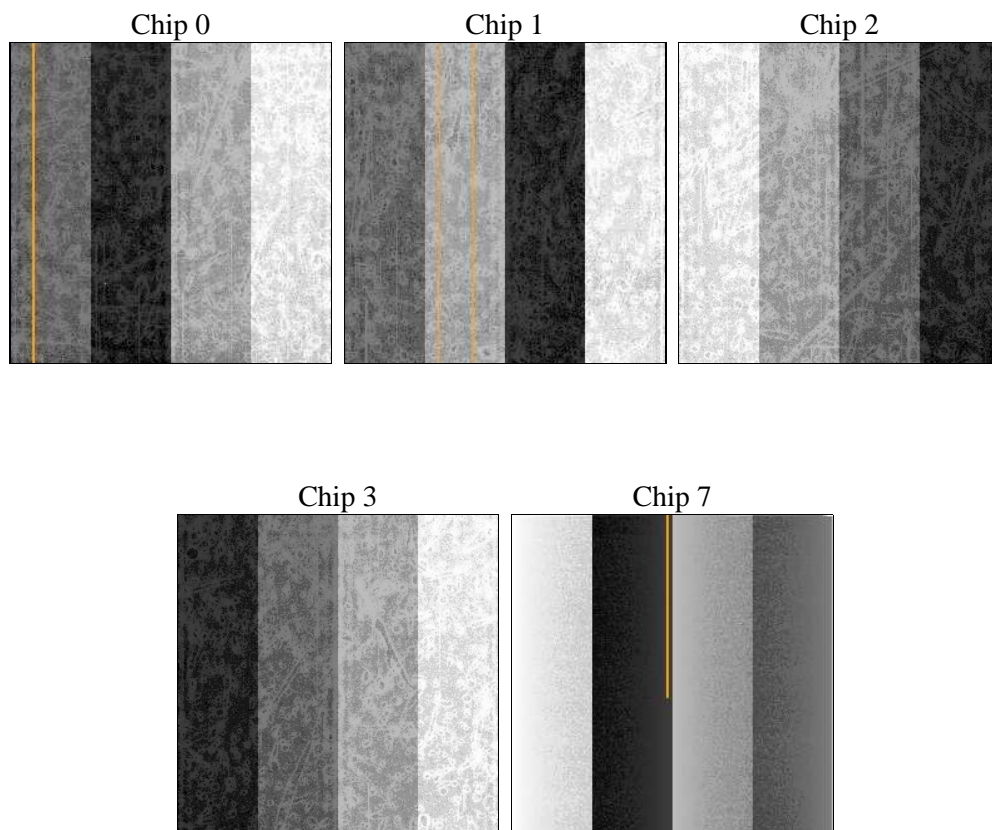
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	3	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	20044.600154161	Sum of GTIs [s]
caldsver	4.4.7	&#160	ontime0	20044.600154161	Sum of GTIs [s]
date	2012-01-04T13:42:18	Date and time of file creation	ontime1	20044.600154161	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	20044.600154161	Sum of GTIs [s]
			ontime3	20044.600154161	Sum of GTIs [s]
			ontime7	20044.600154161	Sum of GTIs [s]
			l1events	630599	Number of level 1 events

### 2.1.4 Events

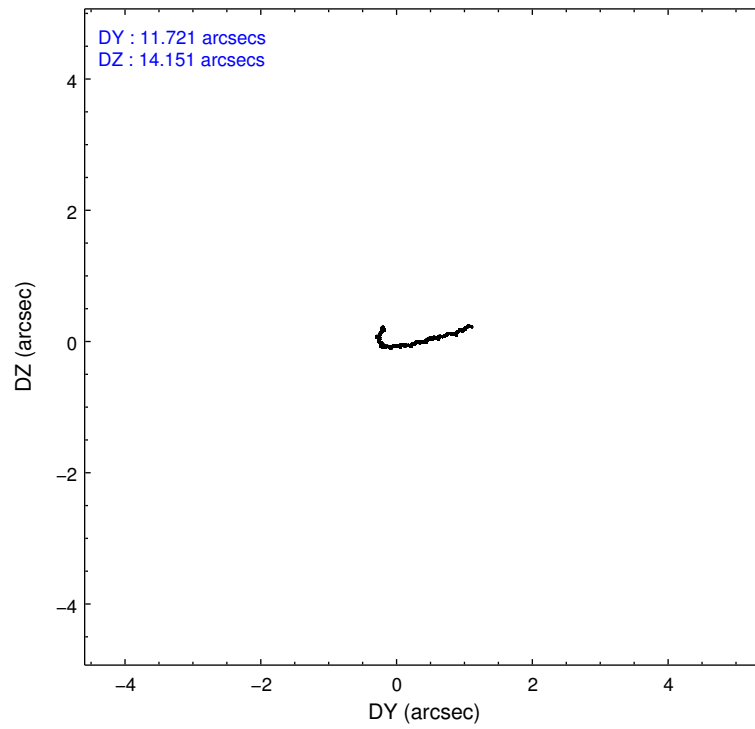
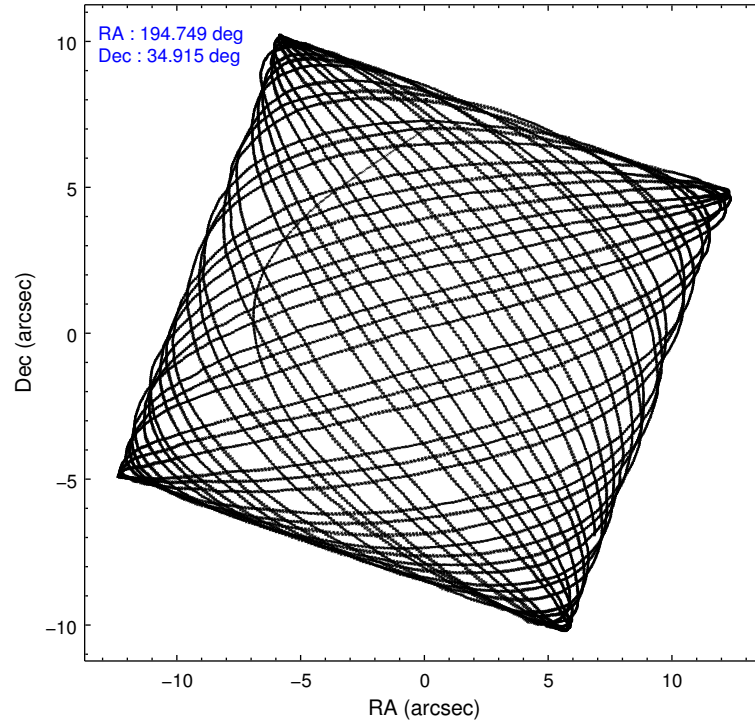
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	107852	115002	125544	122260	159941
rejected events	93726	97922	111735	108953	89160
rejected %	86%	85%	89%	89%	55%

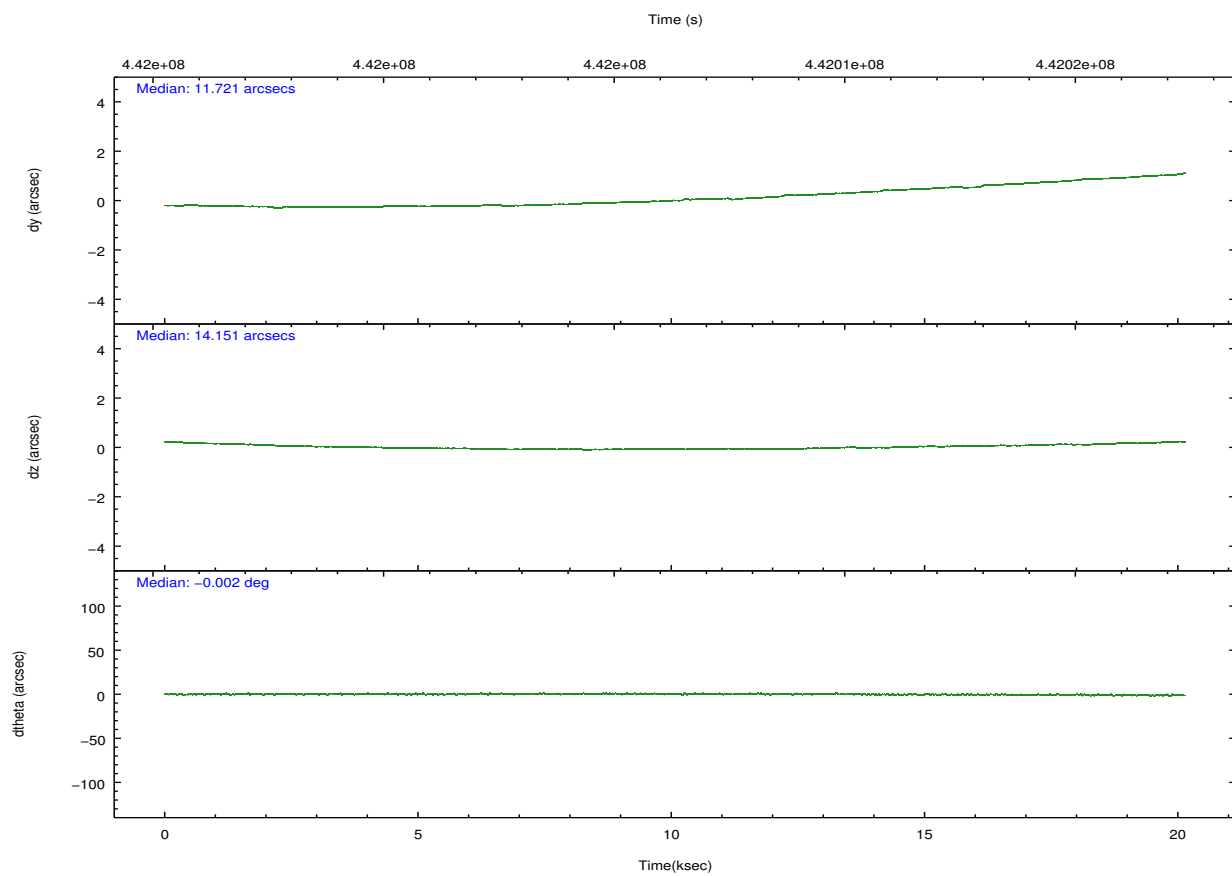
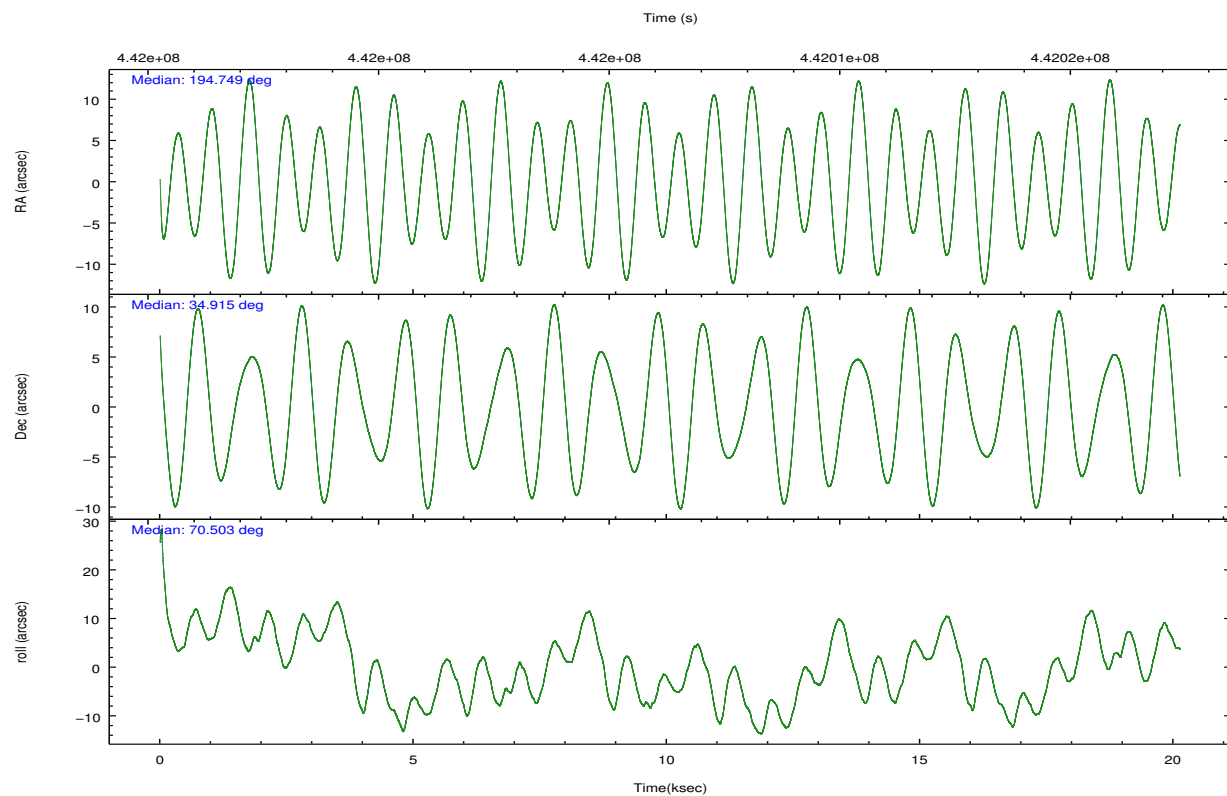
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	4870	6816	4889	4714	6390
	4%	5%	3%	3%	3%
grade 1 events	53	75	70	89	201
	0%	0%	0%	0%	0%
grade 2 events	3467	3820	3425	3011	14491
	3%	3%	2%	2%	9%
grade 3 events	1536	1618	1386	1428	6152
	1%	1%	1%	1%	3%
grade 4 events	1384	1607	1406	1419	6119
	1%	1%	1%	1%	3%
grade 5 events	5475	5657	5243	6065	16328
	5%	4%	4%	4%	10%
grade 6 events	2870	3222	2709	2736	37639
	2%	2%	2%	2%	23%
grade 7 events	88197	92187	106416	102798	72621
	81%	80%	84%	84%	45%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	194.754962	194.7487064608758	Subarray requested	NONE	NONE
[deg] Pointing Dec	34.888373	34.91538230159138	Alternating exposures requested	N	N
[deg] Pointing Roll	70.313611	70.52588068310335	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	441996395.184000	441995416.62059			
Observation start date	2012-01-03T16:45:29	2012-01-03T16:30:16			
[s] Observation end time (MET)	442016395.184000	442017371.60925			
Observation end date	2012-01-03T22:18:49	2012-01-03T22:36:11			
Read mode	TIMED	TIMED			

## 2.3 Aspect



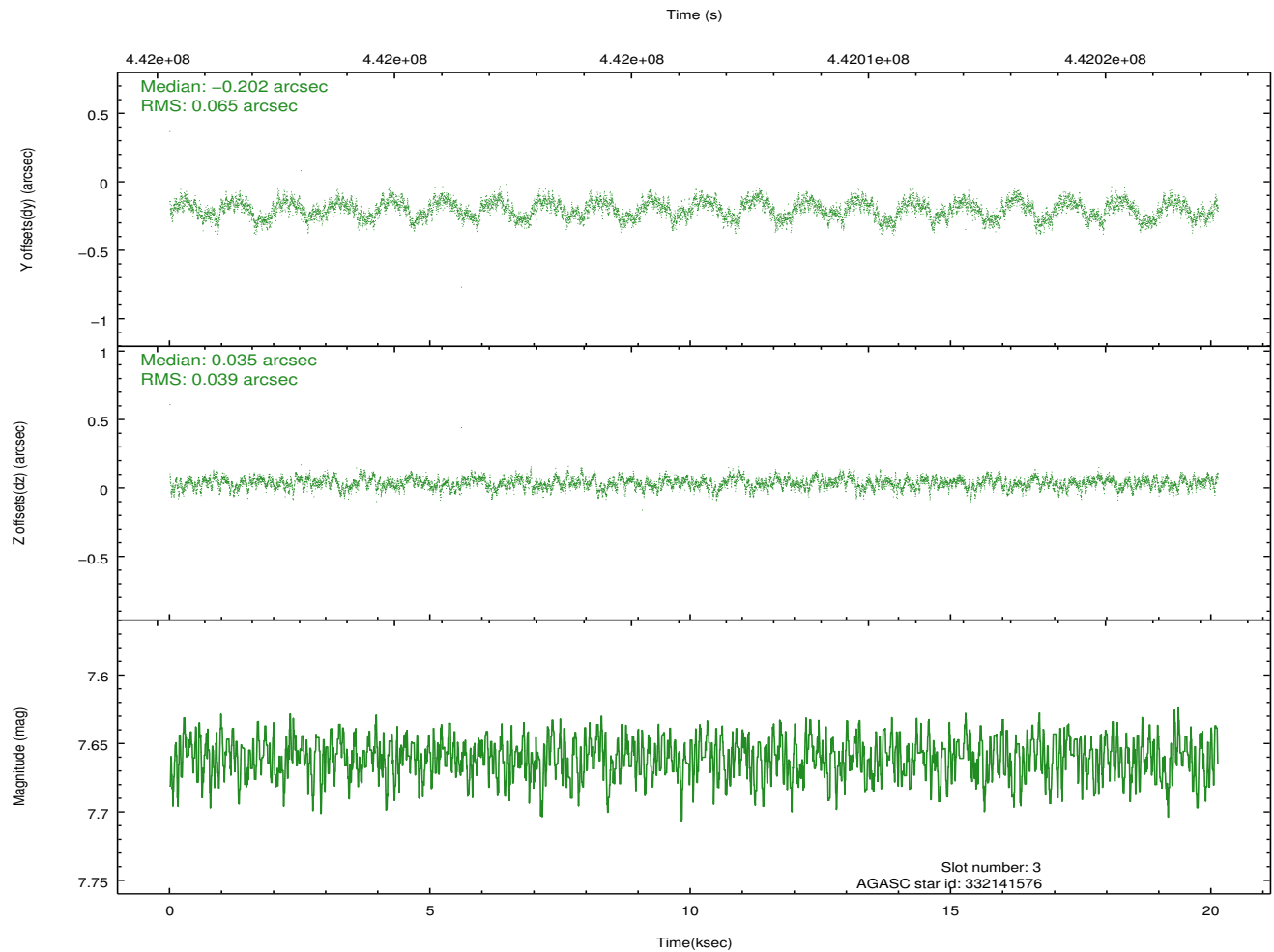
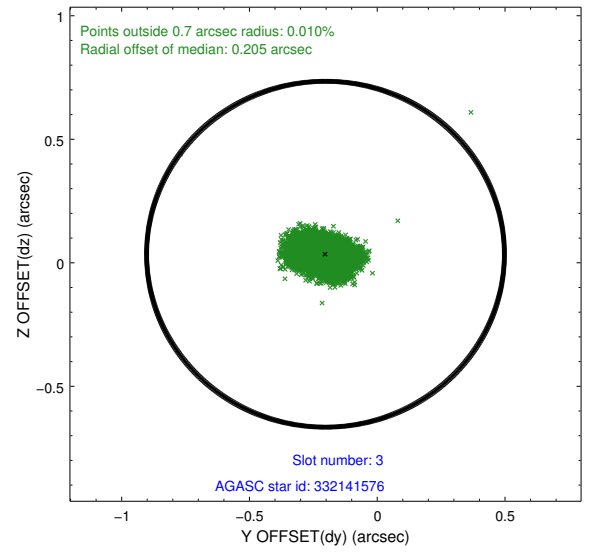
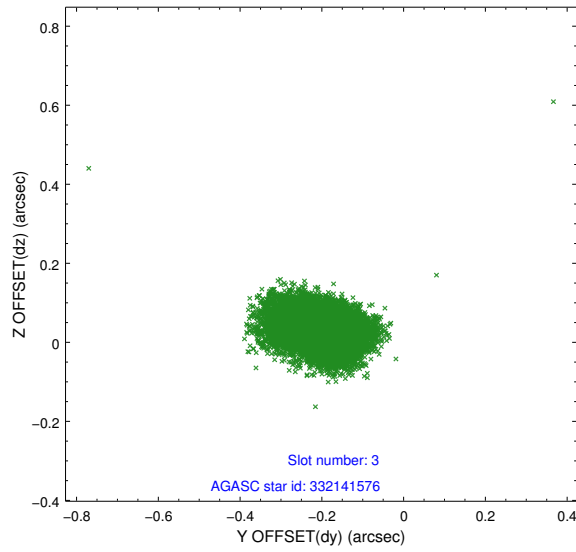


### Slot Statistics

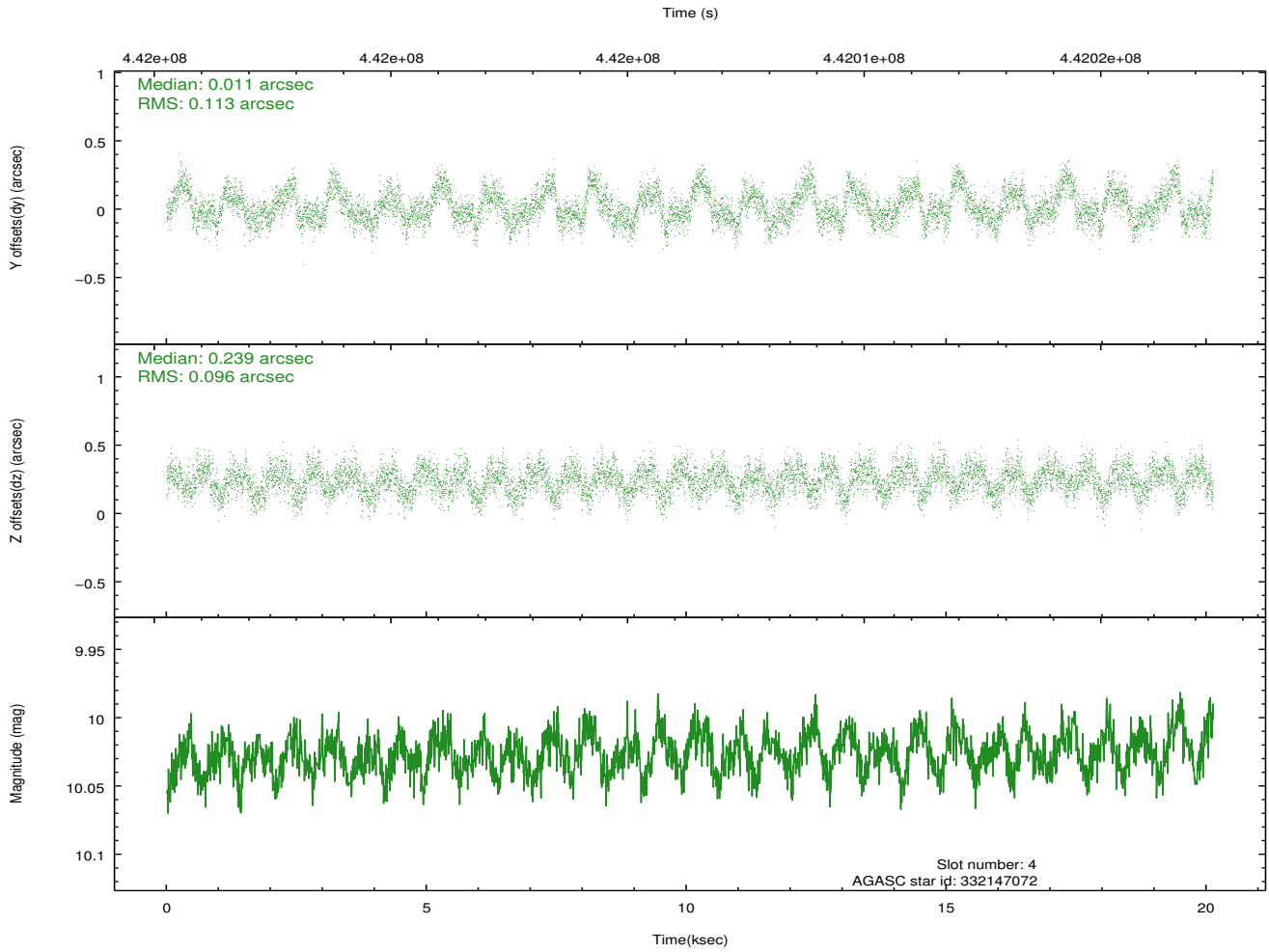
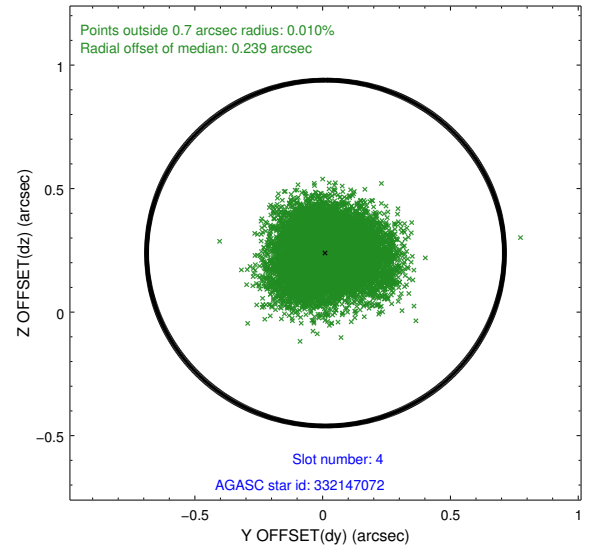
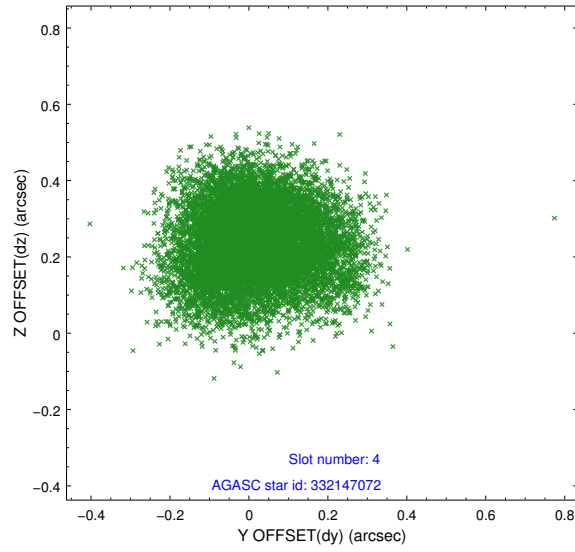
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.06	4908	0.026	0.024	0.008	0.015	0.000000	0.000000	927.70	-837.72
1	FID	ACIS-I-5	7.05	4910	-0.168	0.049	0.008	0.014	0.000000	0.000000	-1820.51	1059.67
2	FID	ACIS-I-6	7.06	4910	0.052	-0.003	0.008	0.013	0.000000	0.000000	393.05	1704.36
3	GUIDE	332141576	7.66	9818	-0.202	0.035	0.080	0.126	195.042870	34.998417	660.29	-664.55
4	GUIDE	332147072	10.03	9797	0.011	0.239	0.160	0.251	195.119150	34.263549	-1750.22	-1777.18
5	GUIDE	332147400	6.84	9820	0.157	-0.044	0.067	0.110	194.745902	34.545694	-1170.39	-390.26
6	GUIDE	332148272	9.69	9804	0.214	-0.331	0.250	0.365	194.890207	34.569306	-945.73	-764.38
7	GUIDE	332150720	7.55	9819	-0.195	0.101	0.083	0.135	195.031183	34.919346	380.77	-728.88

## 2.4 Star Slots

### 2.4.1 Slot 3

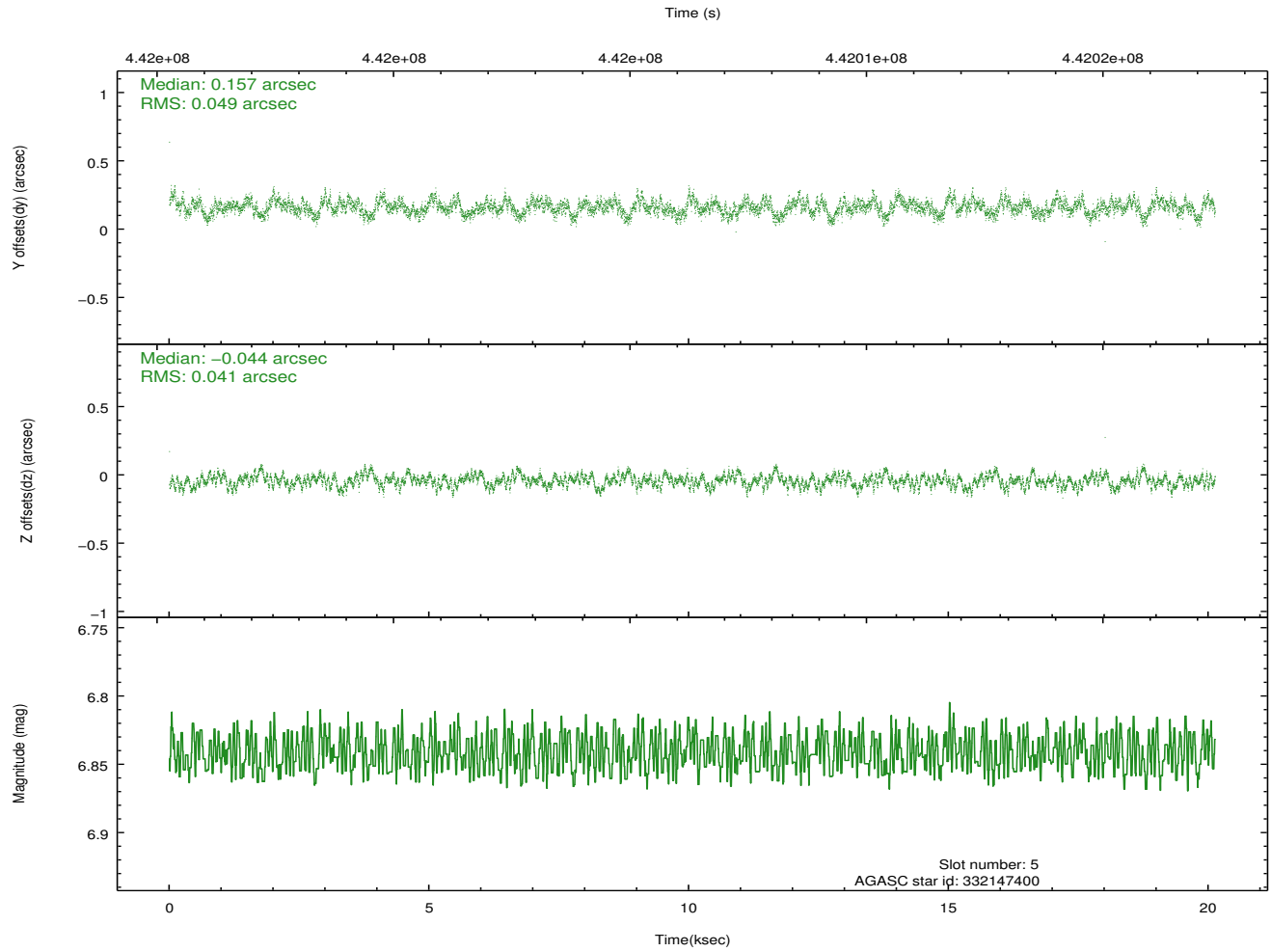
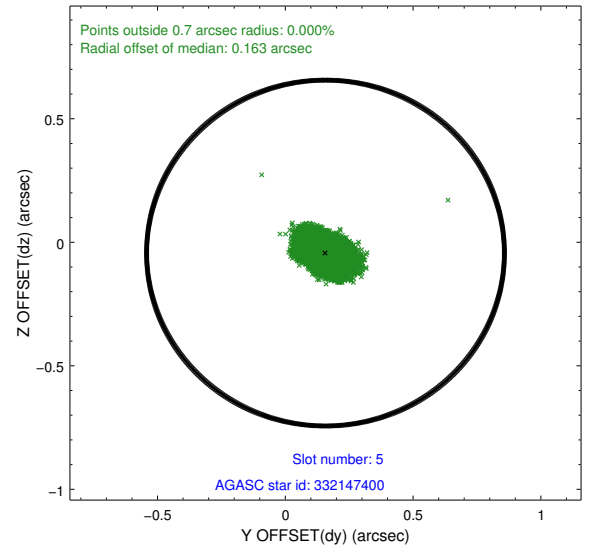
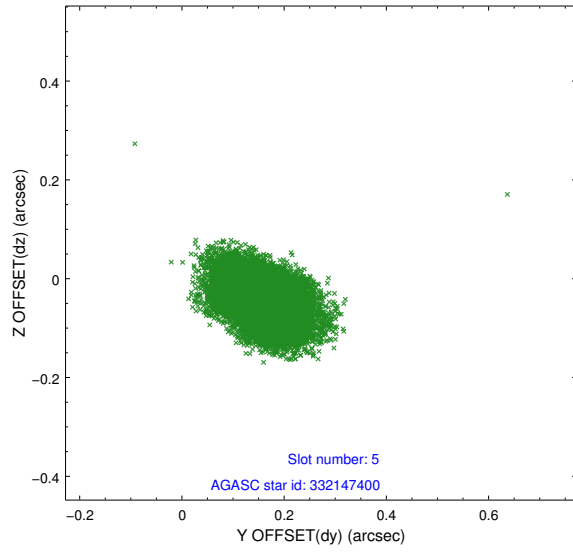


## 2.4.2 Slot 4

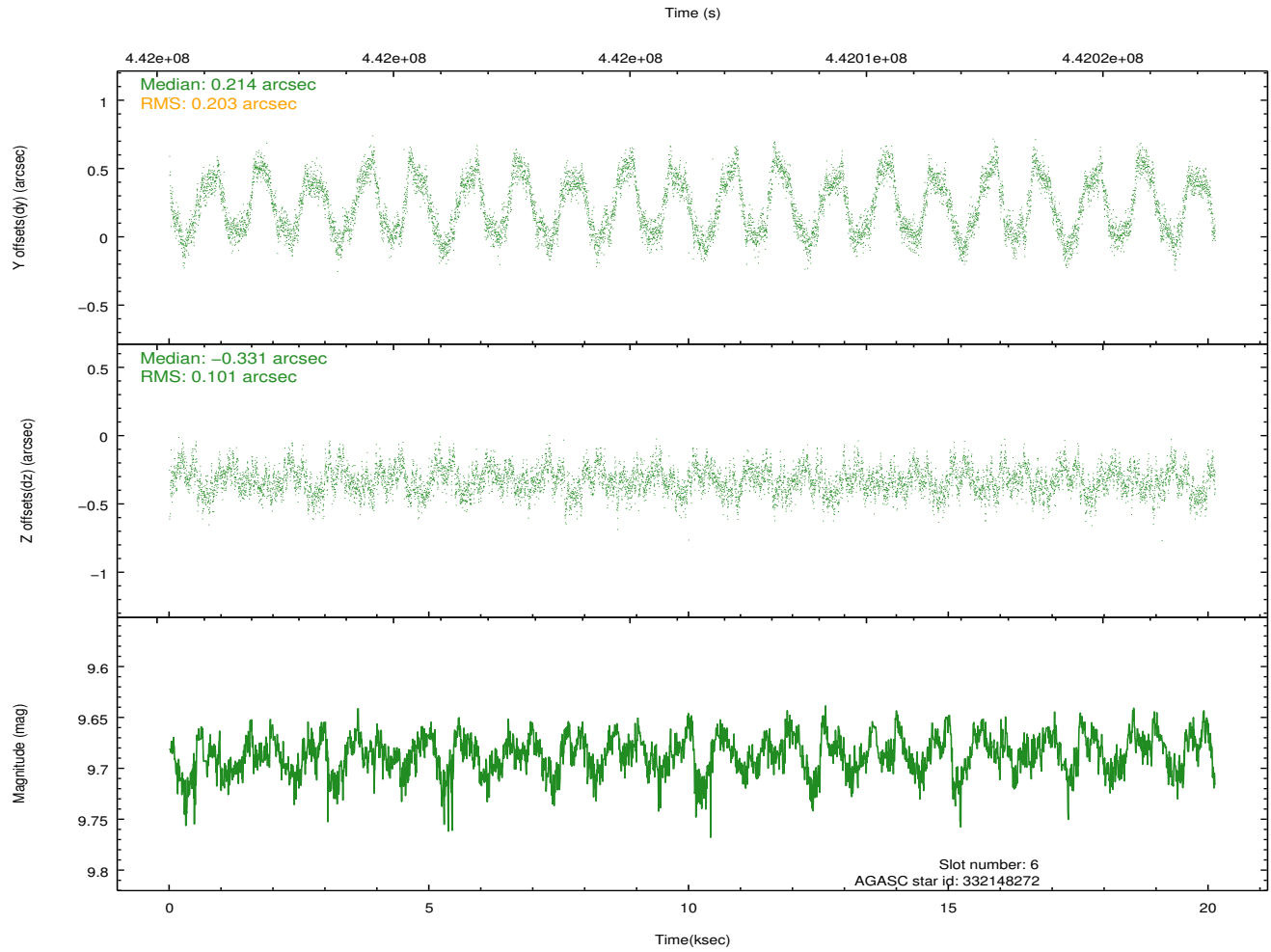
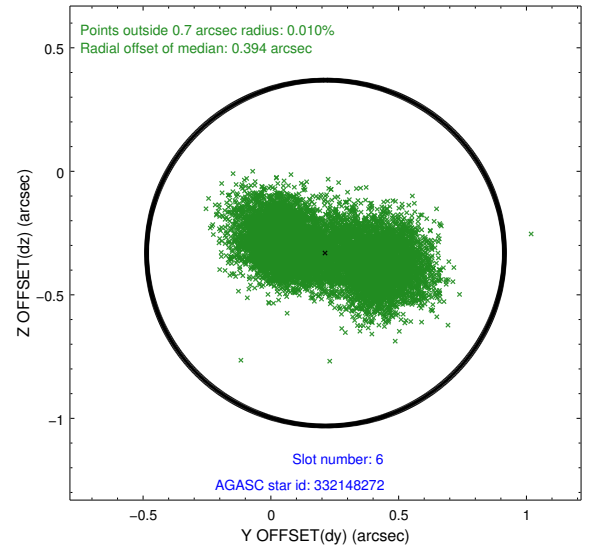
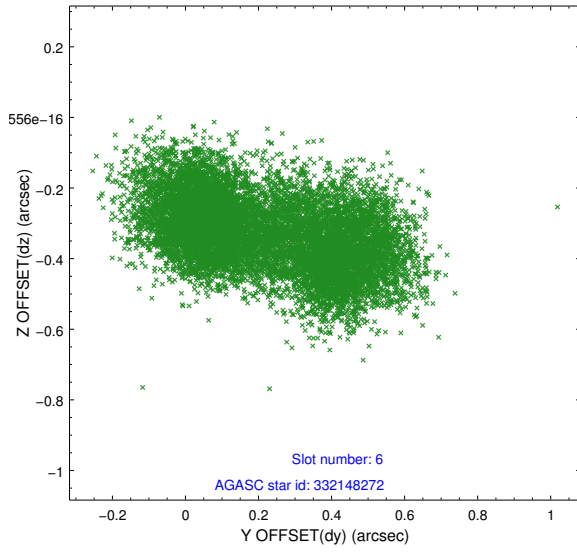




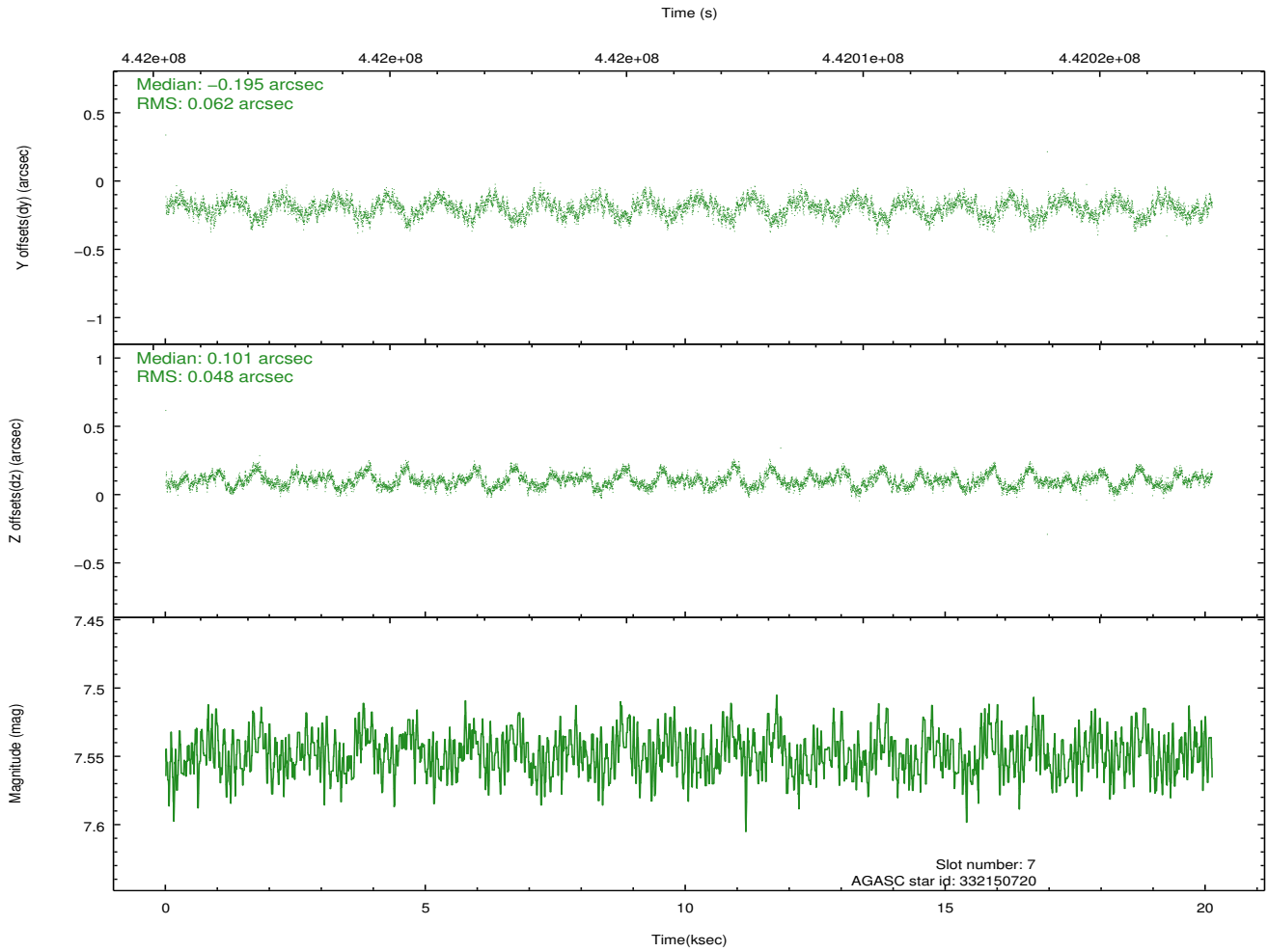
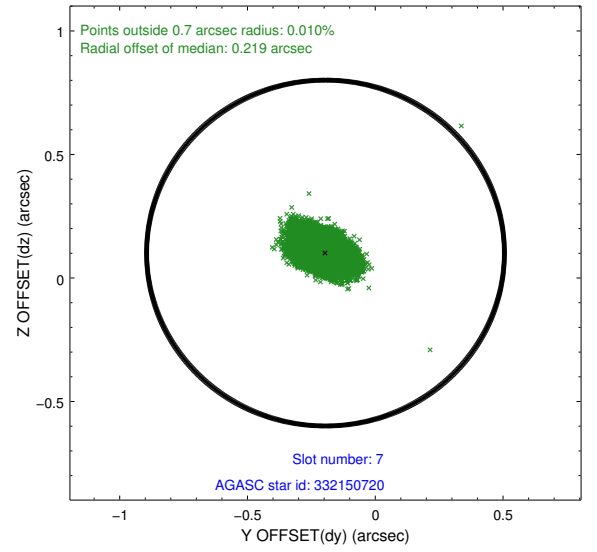
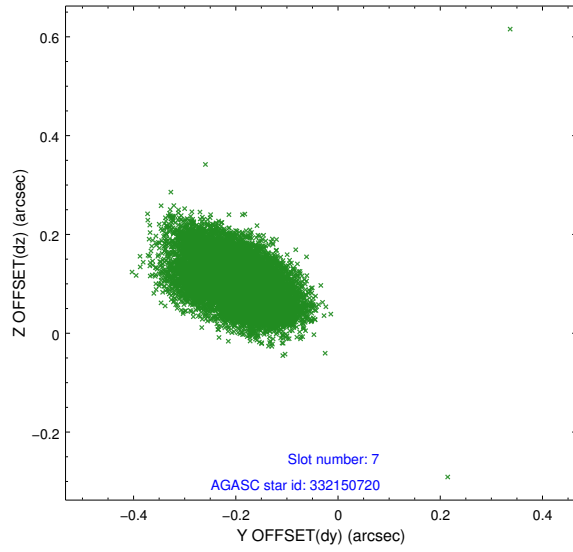
### 2.4.3 Slot 5



## 2.4.4 Slot 6

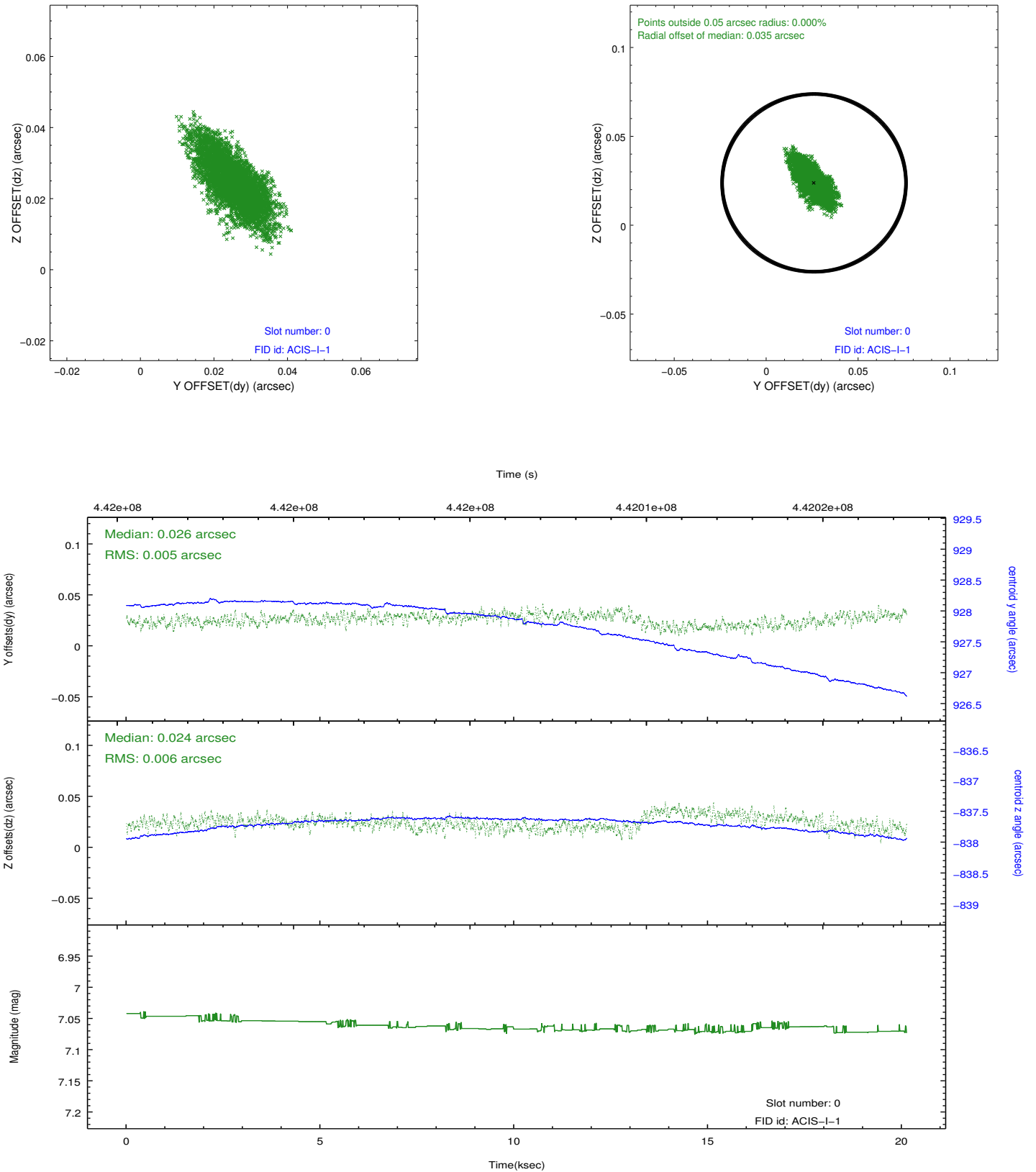


## 2.4.5 Slot 7

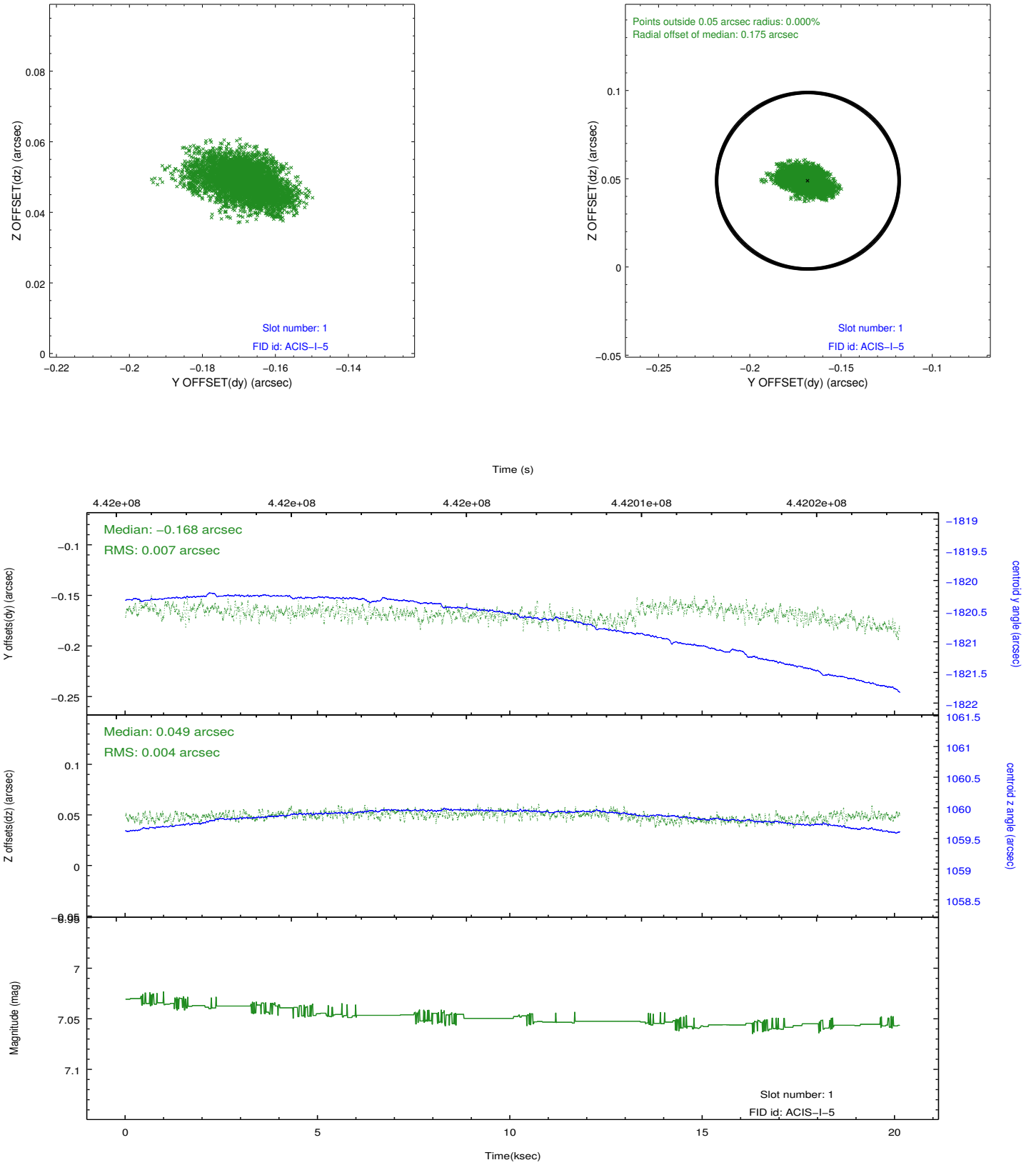


## 2.5 FID Slots

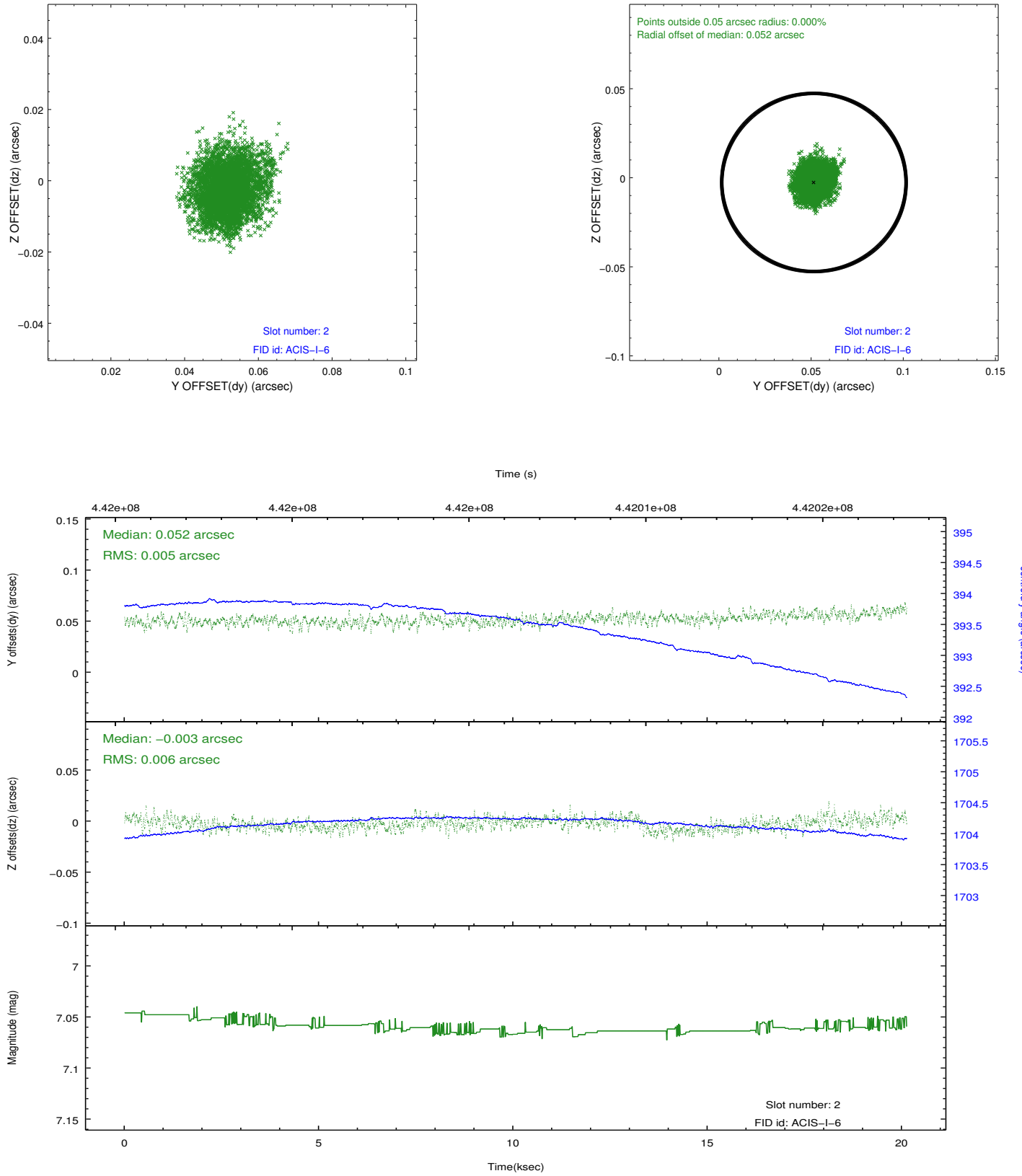
### 2.5.1 Slot 0



## 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)	2012.01.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.044600154161

### **A.2 Comments**