

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2287 - L2 Version 4  
Chandra X-Ray Center

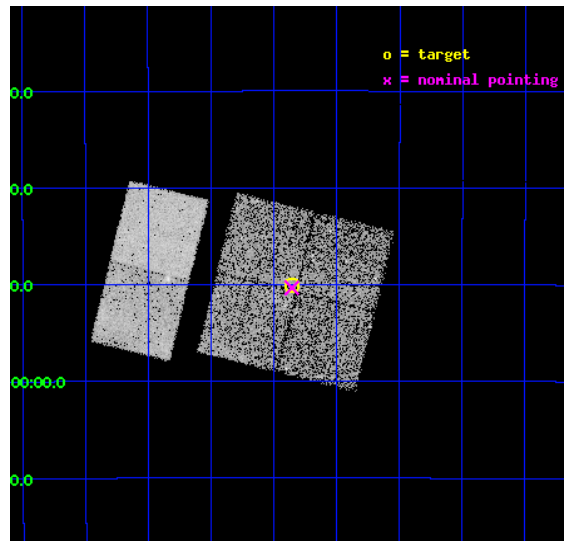
L2 Processing Date : Oct 19 2012

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# 1 Front

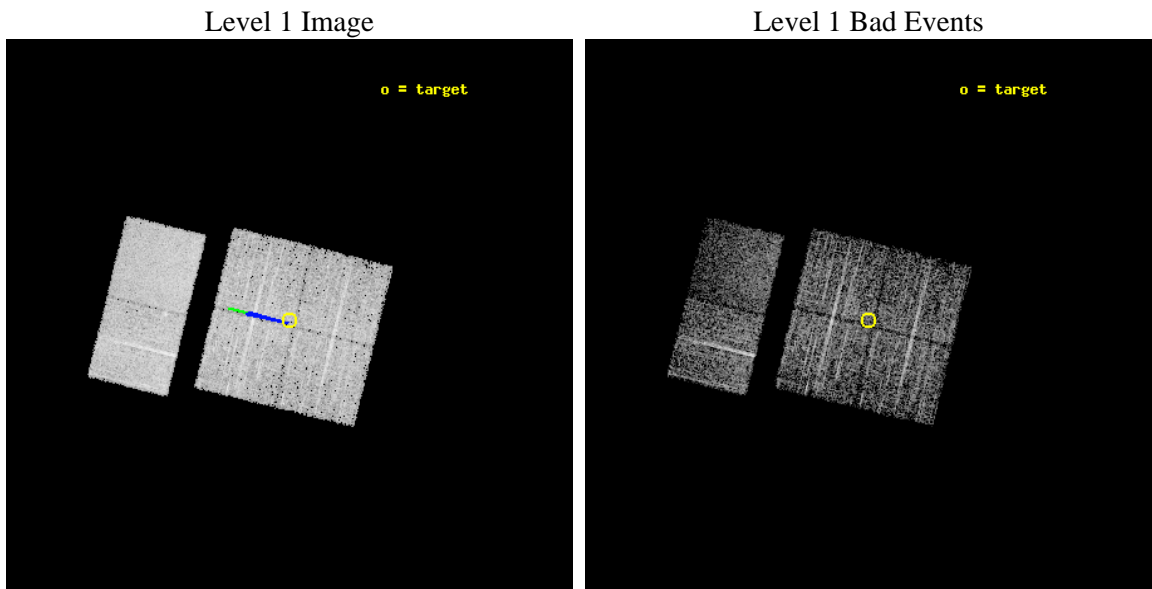
seq_num	900114	Sequence number
obs_id	2287	Observation id
title	CHANDRA SURVEY OF THE GALACTIC RIDGE AROUND THE MILKY WAY CENTER	P
observer	Prof. Q. Daniel Wang	Principal investigator
object	GCS 15	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.215	Observer's specified target RA [deg]
dec_targ	-28.8344	Observer's specified target Dec [deg]
ra_nom	266.21411487437	Nominal RA [deg]
dec_nom	-28.839053176124	Nominal Dec [deg]
roll_nom	283.80726613859	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10758.400010005	Sum of GTIs [s]
livetime	10622.170671147	Livetime [s]
ontime0	10758.400010005	Sum of GTIs [s]
ontime1	10755.159029767	Sum of GTIs [s]
ontime2	10758.400010005	Sum of GTIs [s]
ontime3	10758.400010005	Sum of GTIs [s]
ontime6	10758.400010005	Sum of GTIs [s]
ontime7	10758.400010005	Sum of GTIs [s]
l2events	60517	Number of level 2 events



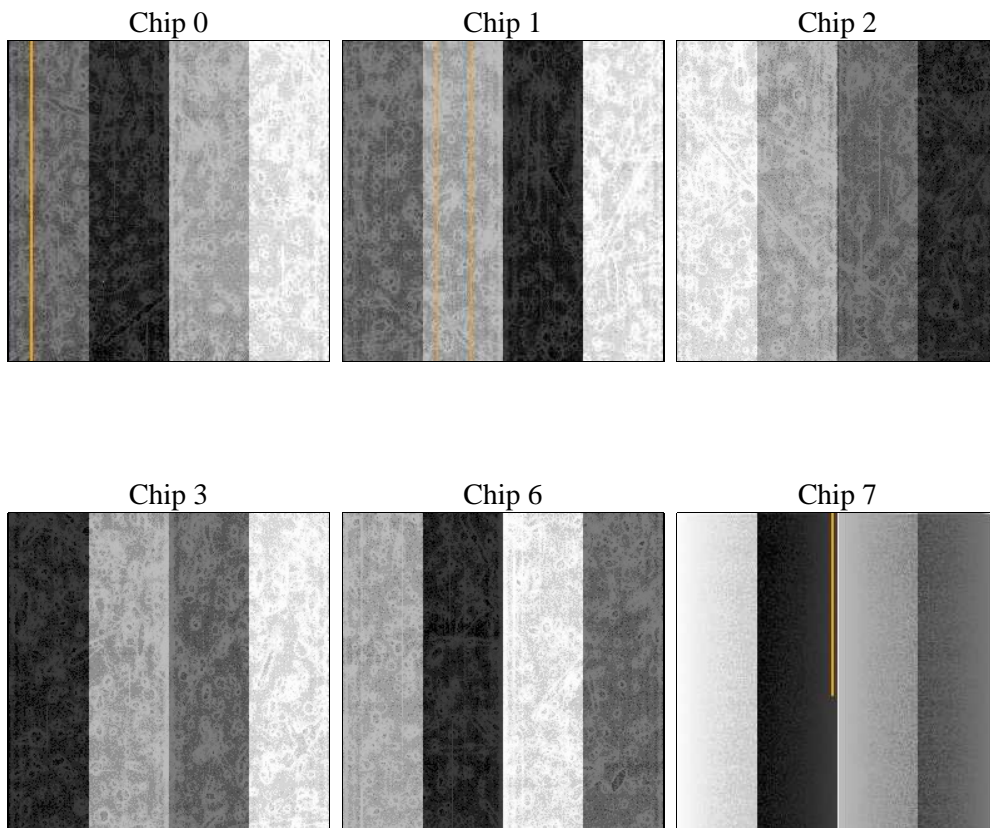
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10758.400010005	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	10758.400010005	Sum of GTIs [s]
date	2012-10-19T18:41:11	Date and time of file creation	ontime1	10755.159029767	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	10758.400010005	Sum of GTIs [s]
			ontime3	10758.400010005	Sum of GTIs [s]
			ontime6	10758.400010005	Sum of GTIs [s]
			ontime7	10758.400010005	Sum of GTIs [s]
			l1events	198794	Number of level 1 events

### 2.1.4 Events

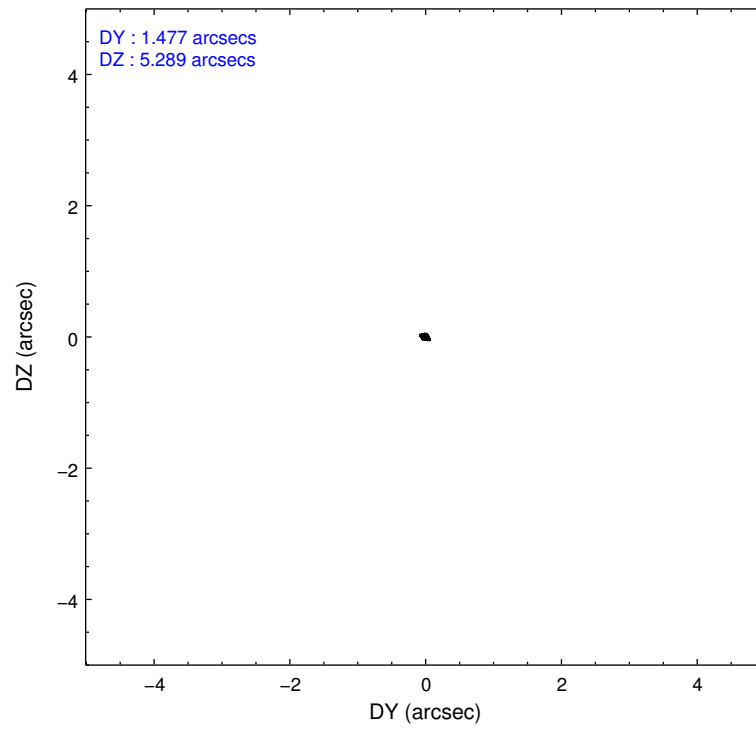
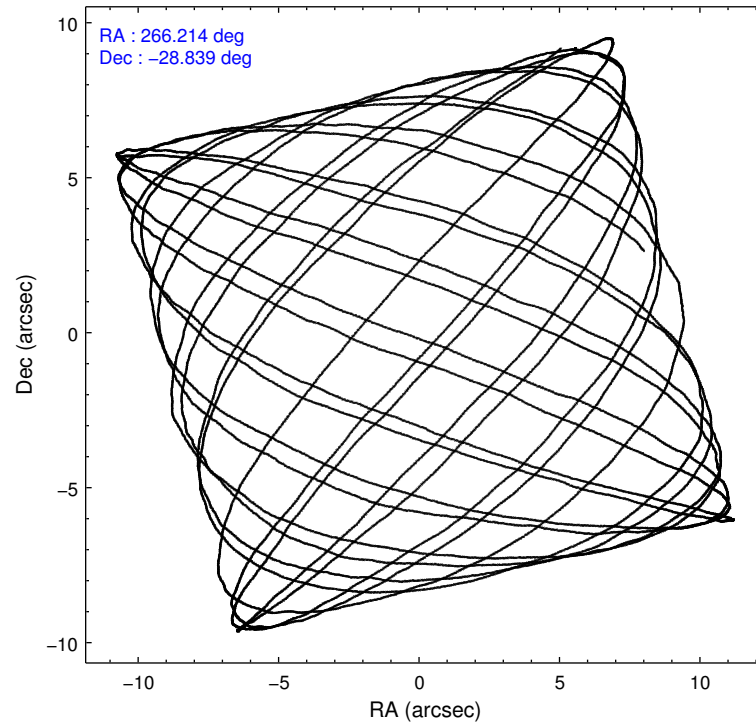
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	28186	27651	32976	30090	40646	39245	grade 0 events	3081	3079	4432	3347	9602	2583
rejected events	22154	21558	25059	23676	25482	16566		10%	11%	13%	11%	23%	6%
rejected %	78%	77%	75%	78%	62%	42%	grade 1 events	15	23	39	24	76	45
								0%	0%	0%	0%	0%	0%
							grade 2 events	1087	1157	1404	1169	2267	4746
								3%	4%	4%	3%	5%	12%
							grade 3 events	481	491	542	539	843	2181
								1%	1%	1%	1%	2%	5%
							grade 4 events	484	499	542	474	882	2198
								1%	1%	1%	1%	2%	5%
							grade 5 events	1151	1198	1019	1219	1435	4084
								4%	4%	3%	4%	3%	10%
							grade 6 events	903	869	998	886	1577	10980
								3%	3%	3%	2%	3%	27%
							grade 7 events	20984	20335	24000	22432	23964	12428
								74%	73%	72%	74%	58%	31%

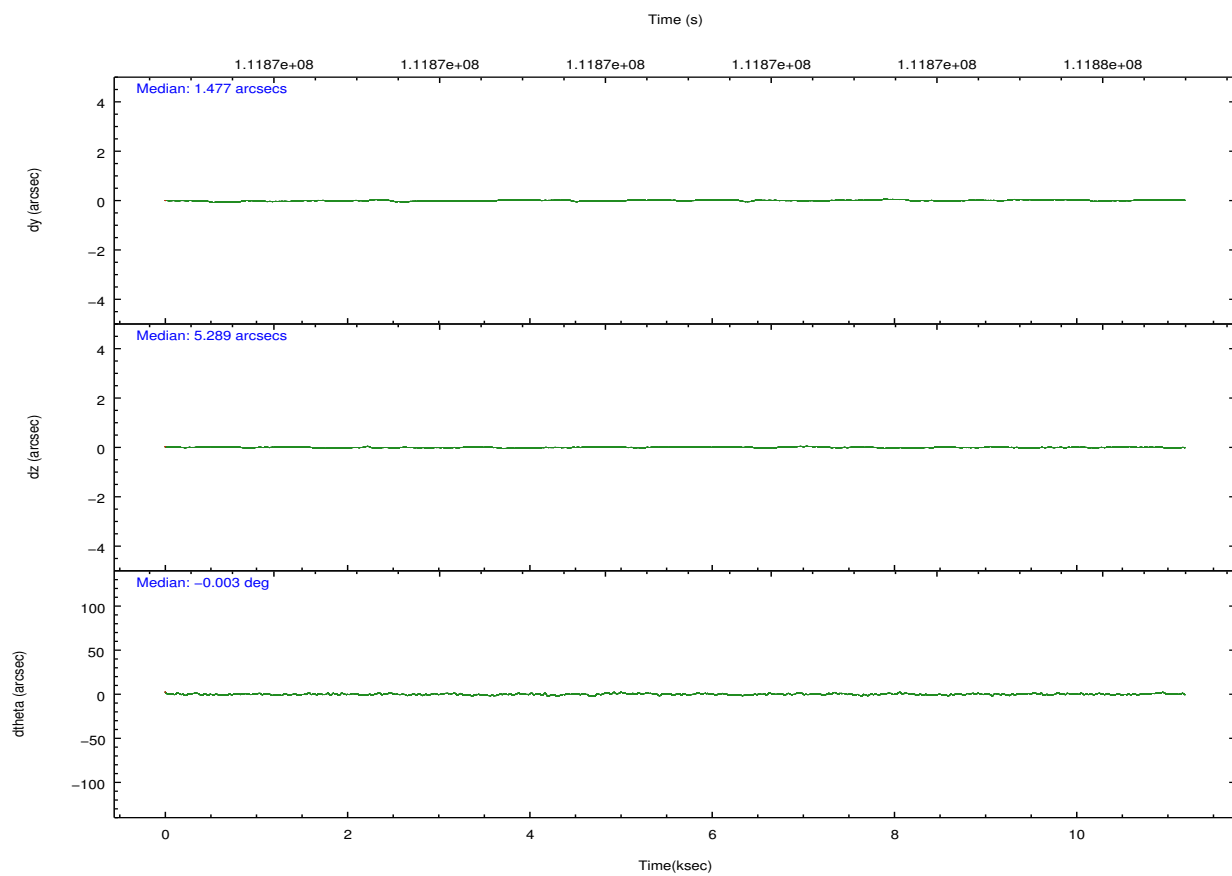
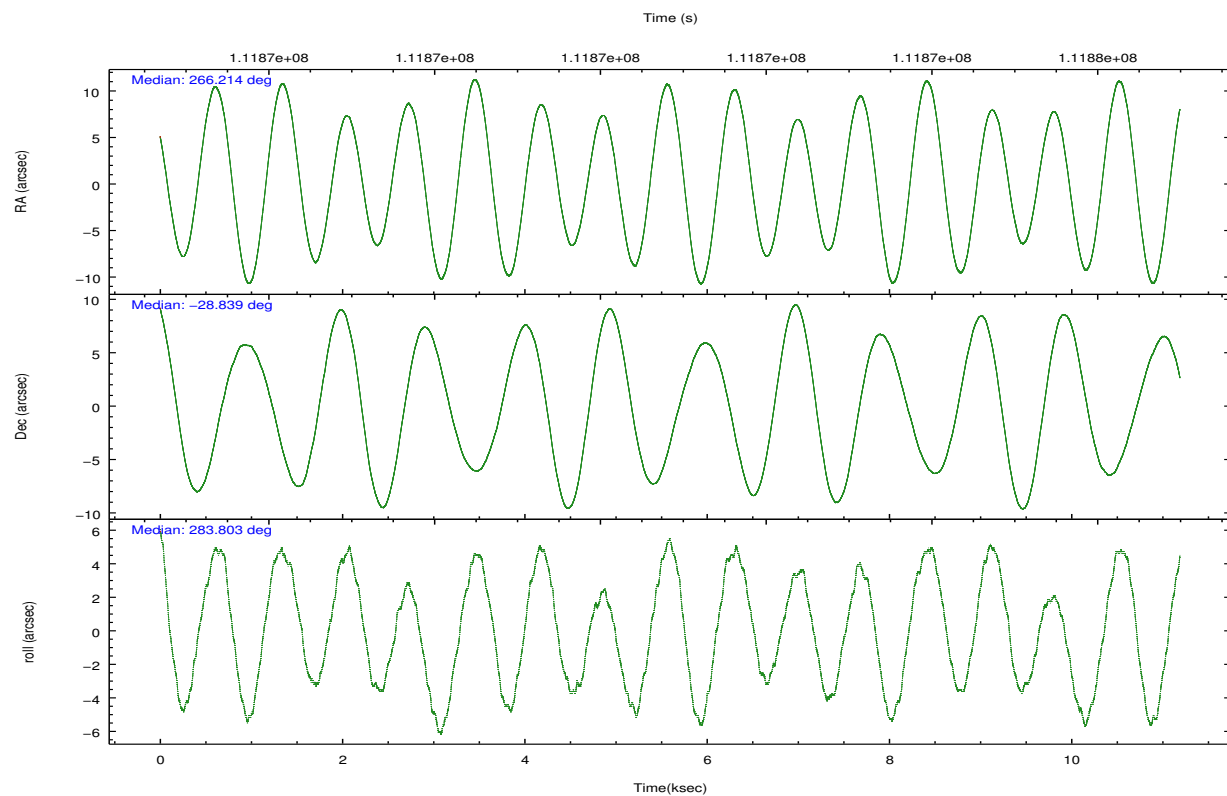


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	266.192438	266.2141148743671	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.819293	-28.83905317612422	Alternating exposures requested	N	N
[deg] Pointing Roll	283.588120	283.807266138592	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	283.600000	283.600000			
[deg] Roll tolerance	2.000000	2.000000			
Roll constraint allows 180D rotation	N	N			
[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)	111865434.184000	111865058.40408			
Observation start date	2001-07-18T17:42:50	2001-07-18T17:37:38			
[s] Observation end time (MET)	111876434.184000	111876568.64203			
Observation end date	2001-07-18T20:46:10	2001-07-18T20:49:28			
Read mode	TIMED	TIMED			

## 2.3 Aspect



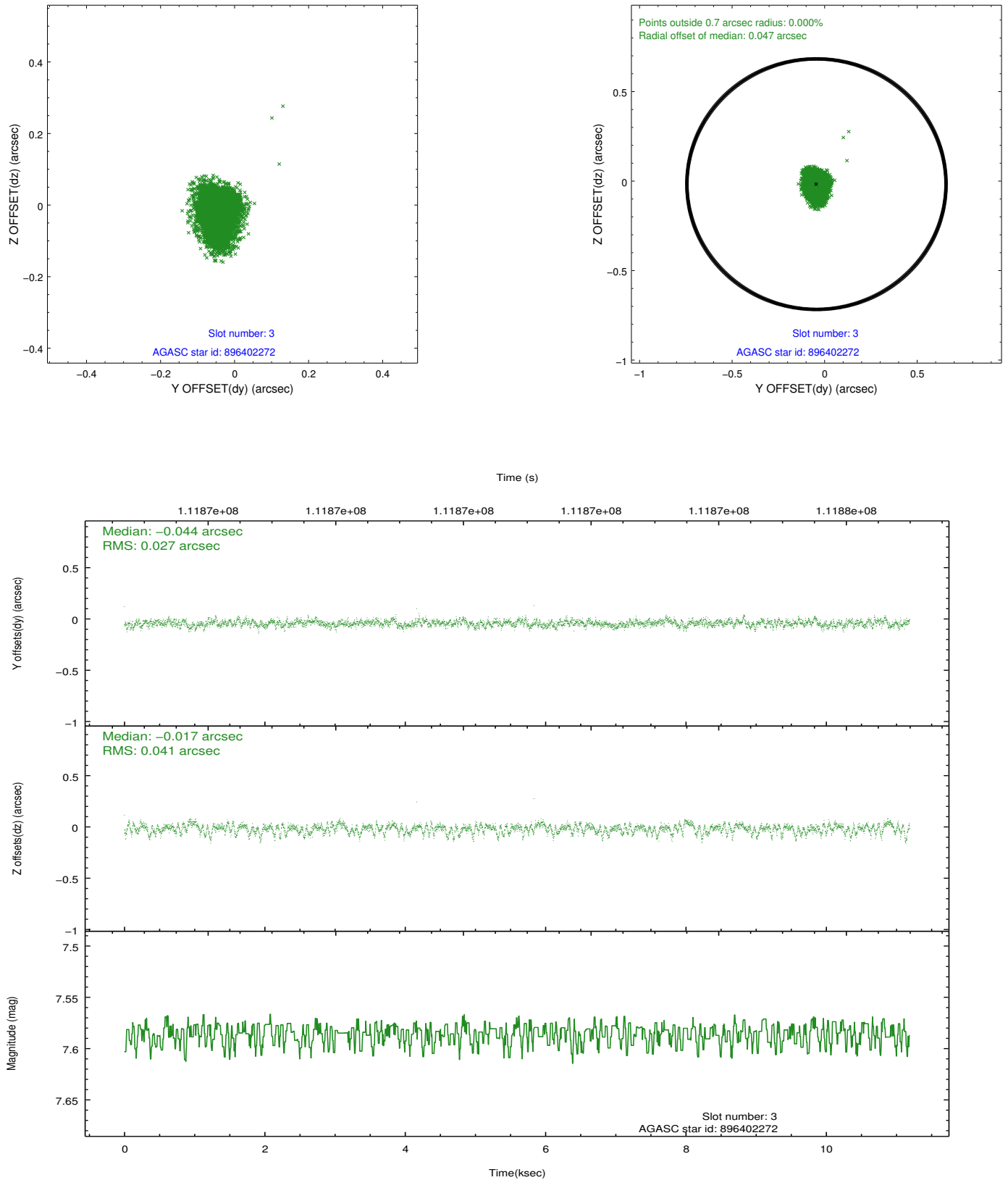


### Slot Statistics

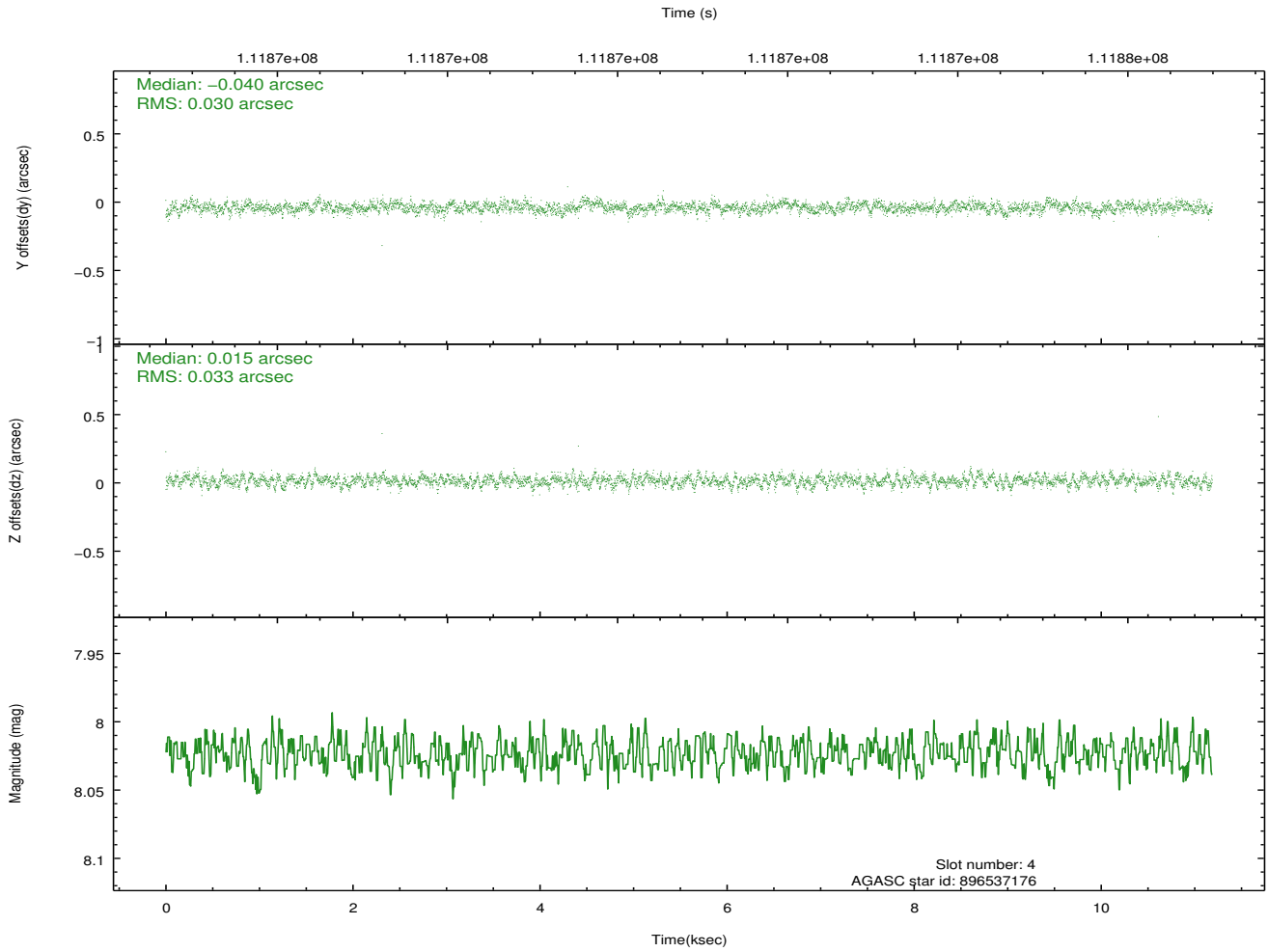
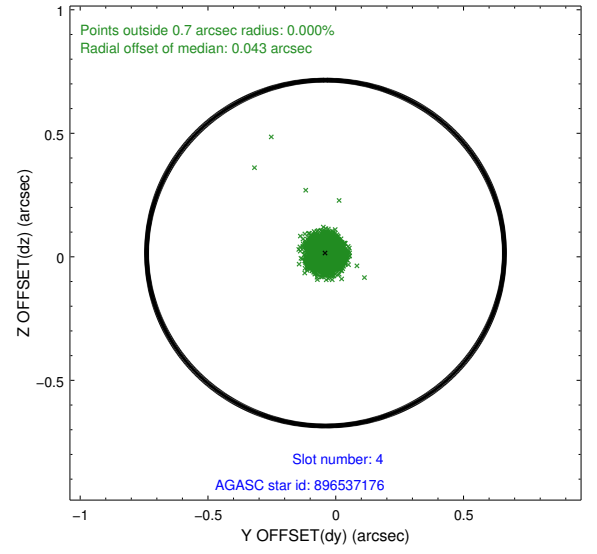
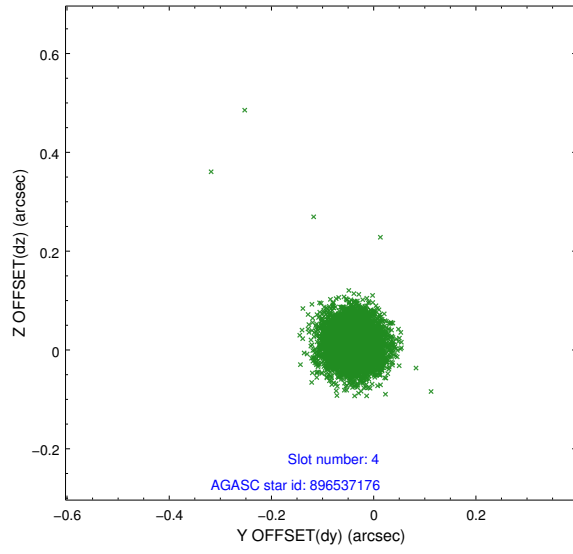
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	2730	-0.019	-0.055	0.018	0.034	0.000000	0.000000	-755.82	-835.07
1	FID	ACIS-I-4	7.19	2730	-0.034	0.035	0.008	0.013	0.000000	0.000000	2157.99	1071.01
2	FID	ACIS-I-5	7.23	2730	-0.049	0.090	0.015	0.025	0.000000	0.000000	-1809.11	1069.38
3	GUIDE	896402272	7.59	5459	-0.044	-0.017	0.051	0.087	265.637294	-28.313189	-2179.59	-1282.86
4	GUIDE	896537176	8.02	5459	-0.040	0.015	0.047	0.075	266.498272	-28.678259	-265.13	1058.14
5	GUIDE	896540808	7.51	5459	-0.022	0.084	0.052	0.085	265.985401	-29.308604	1560.85	-1044.88
6	GUIDE	896536320	8.98	5458	0.129	-0.088	0.067	0.109	266.369048	-29.307026	1838.51	126.64
7	GUIDE	896540672	9.00	5455	-0.020	0.009	0.095	0.153	266.662941	-28.185372	-1863.76	1987.11

## 2.4 Star Slots

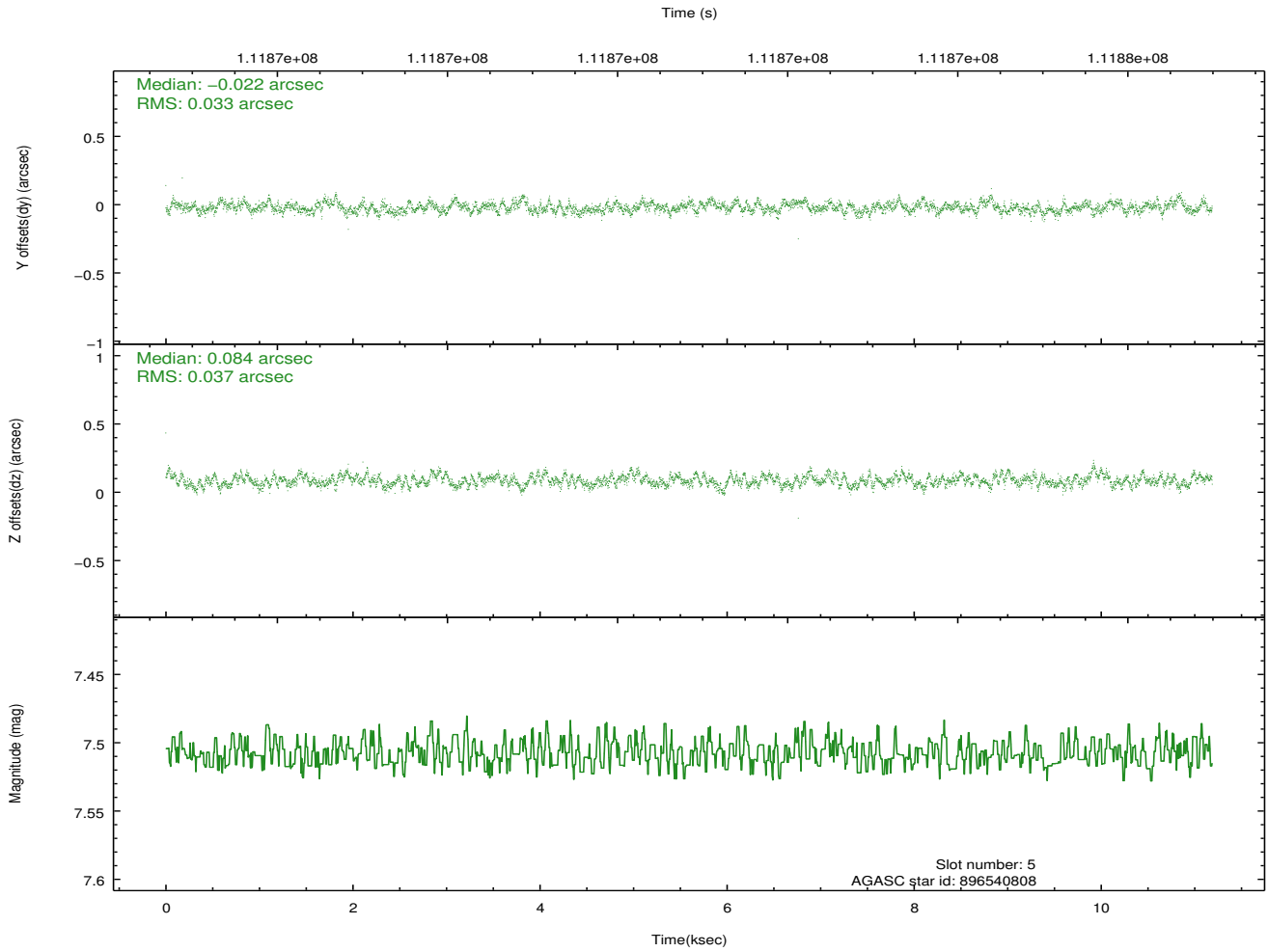
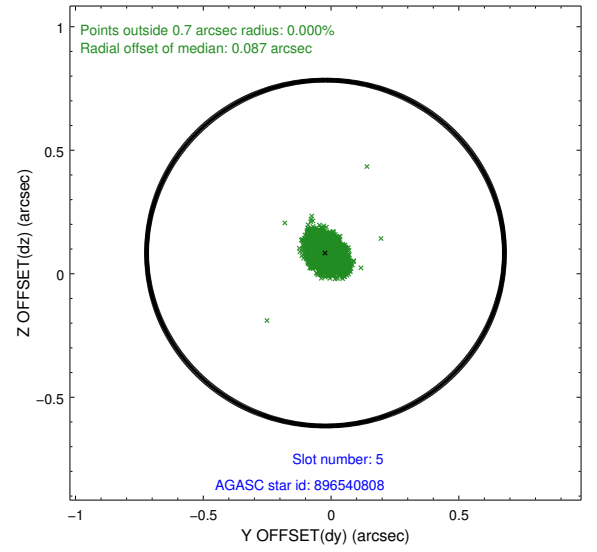
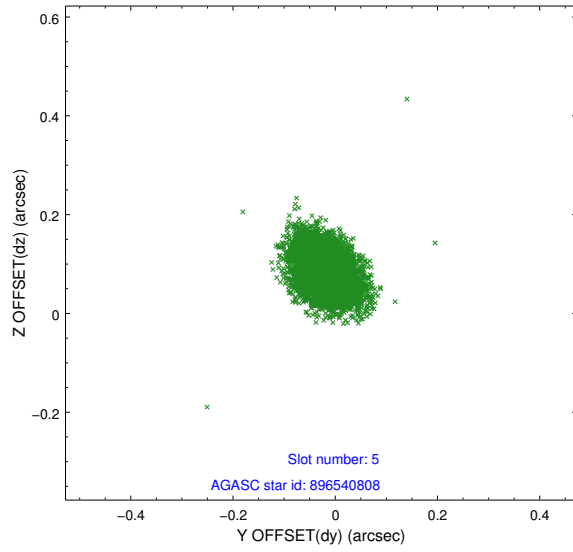
### 2.4.1 Slot 3



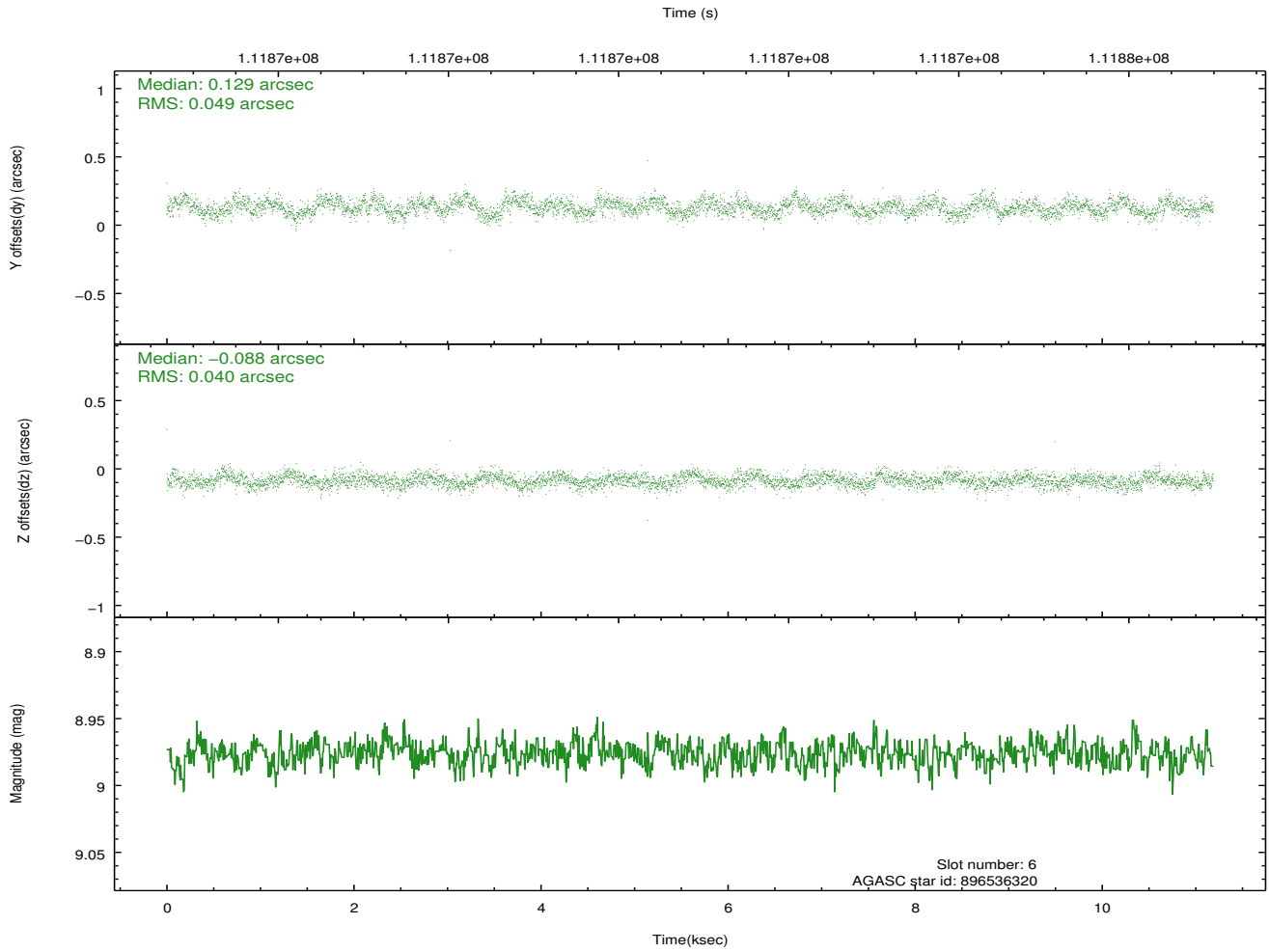
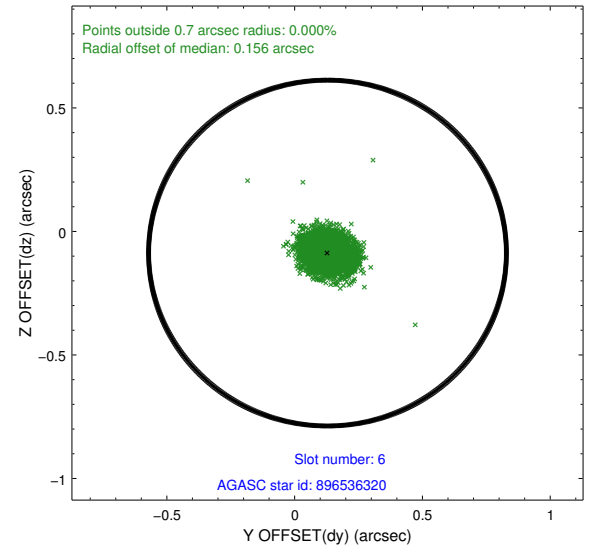
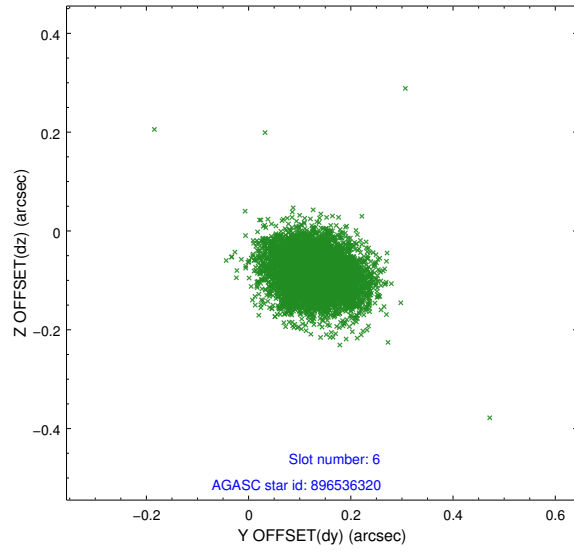
## 2.4.2 Slot 4



### 2.4.3 Slot 5

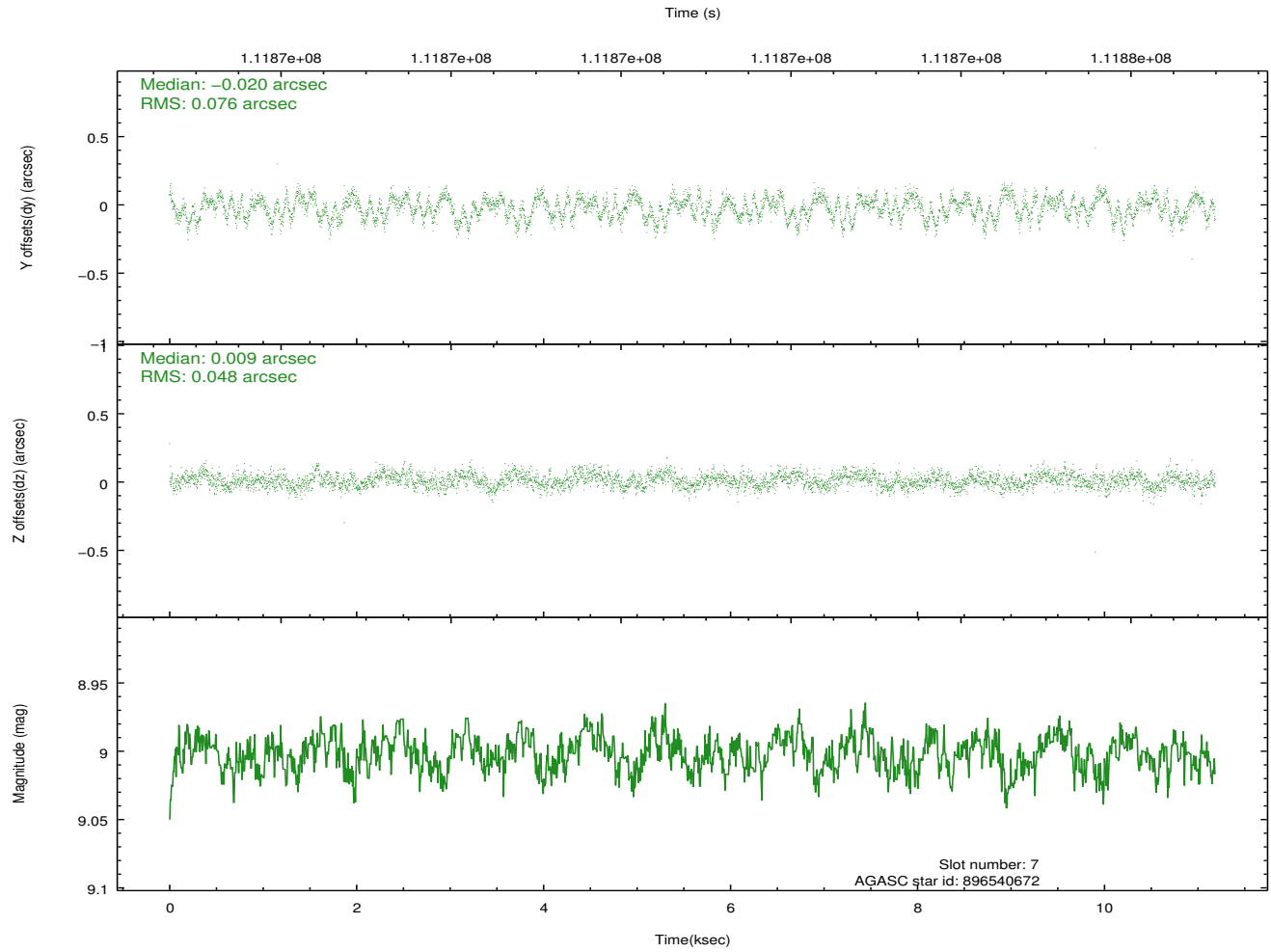
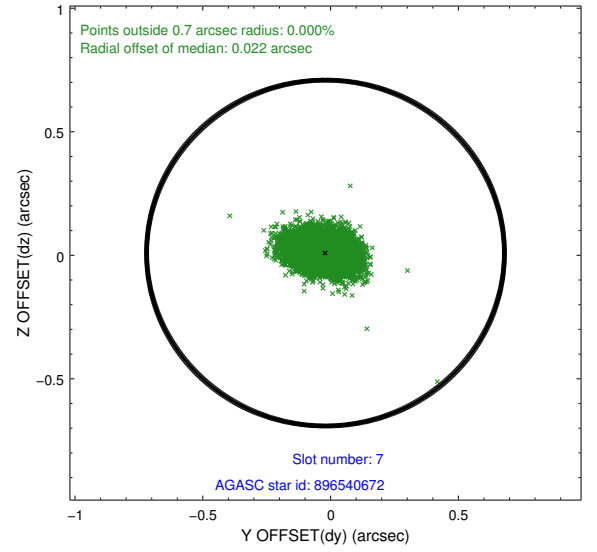
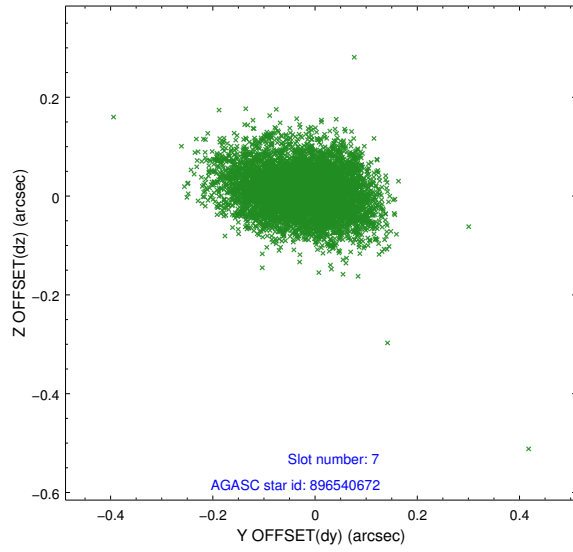


## 2.4.4 Slot 6



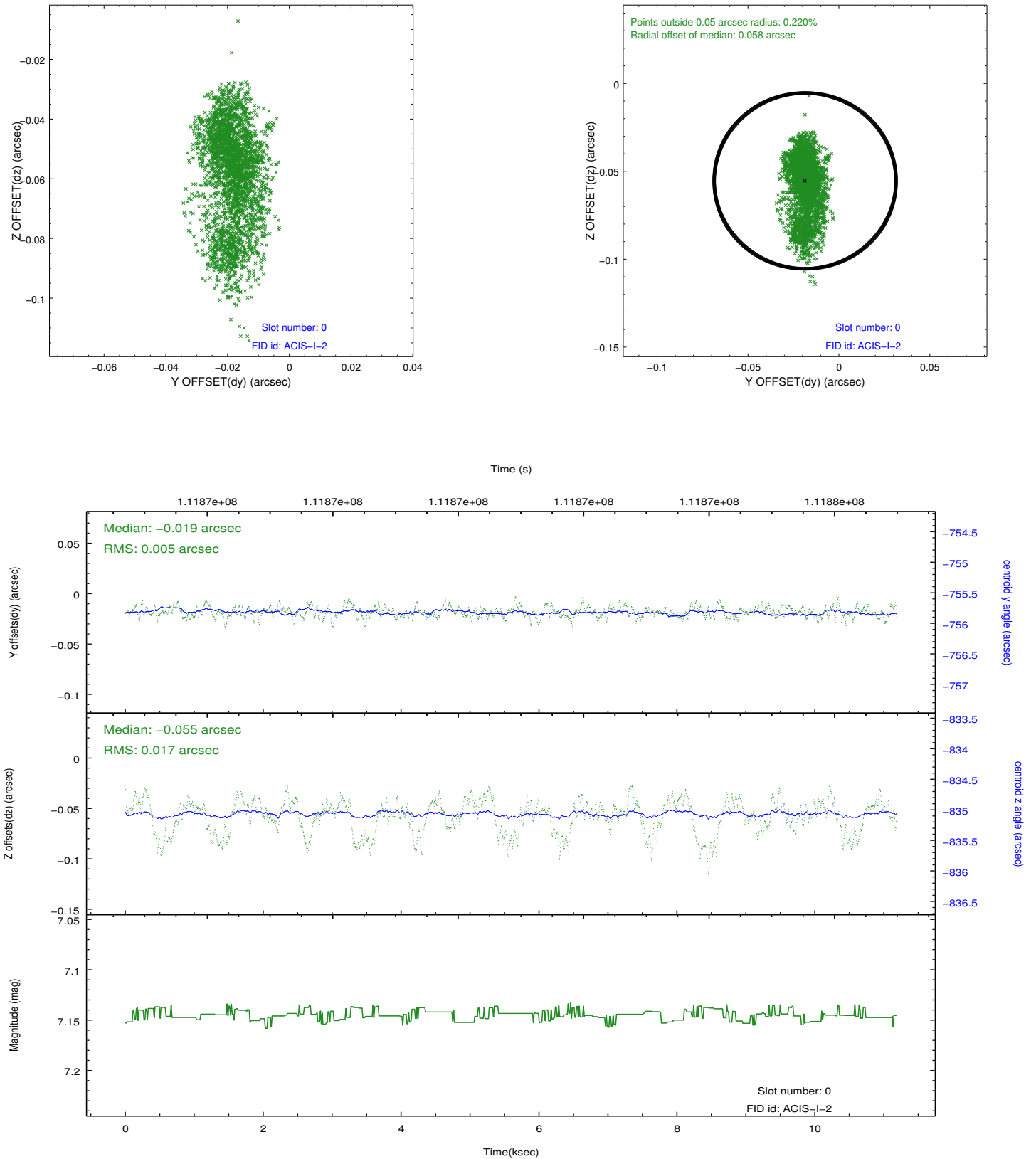


## 2.4.5 Slot 7

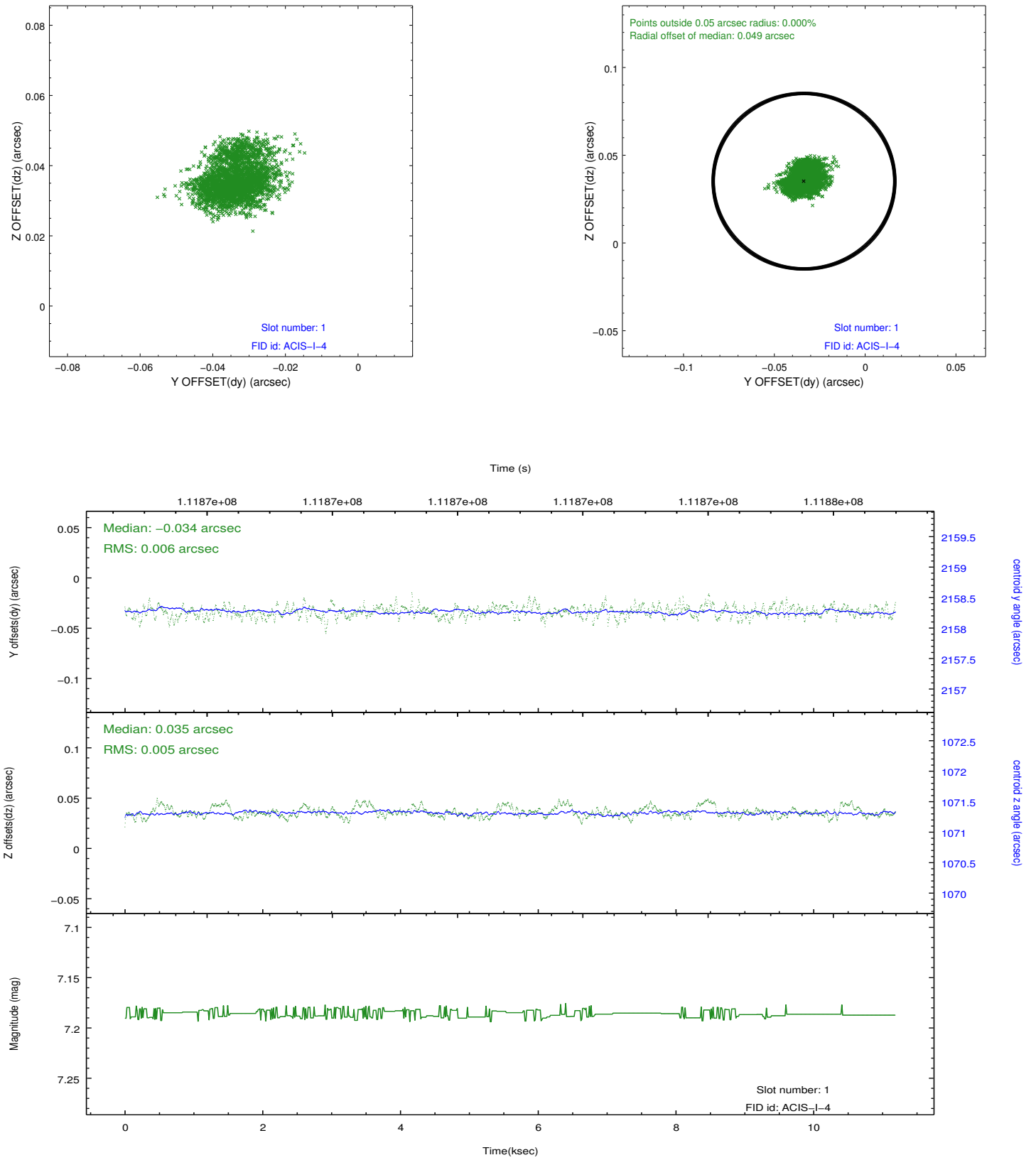


## 2.5 FID Slots

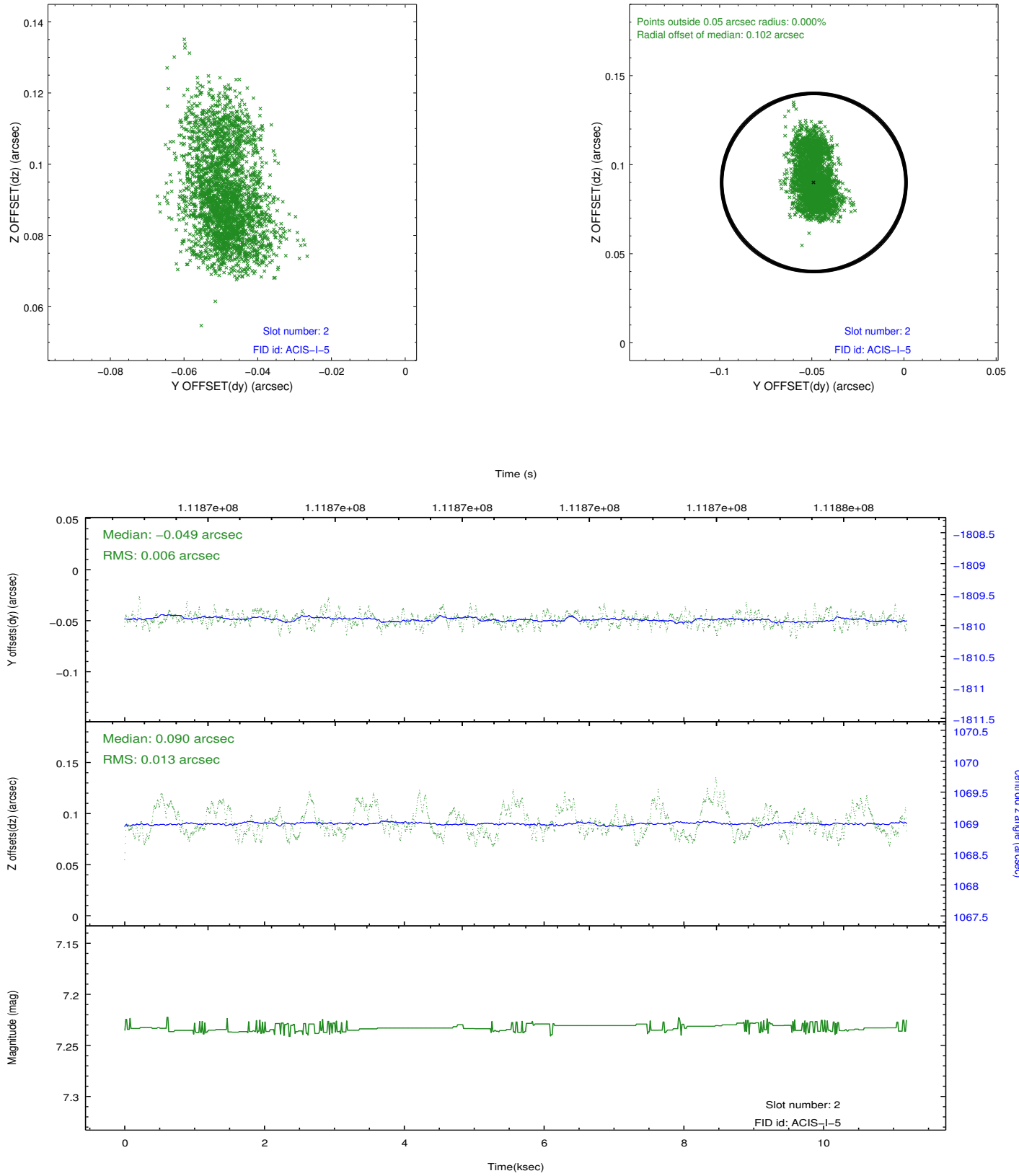
### 2.5.1 Slot 0



## 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)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.8

## A.2 Comments

Charge time for this ObsId remains at previous value of 10.8 ks although with the current processing the charge time would have been 10.76 ksec. Roll constraint met.

=====

A spatial region of the original bias map for CCD = 1 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 1 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:  
(266.10364,-28.72297),(266.09941,-28.72389),(266.10382,-28.73965),(266.10804,-28.73873)