

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 5007 - L2 Version 3  
Chandra X-Ray Center

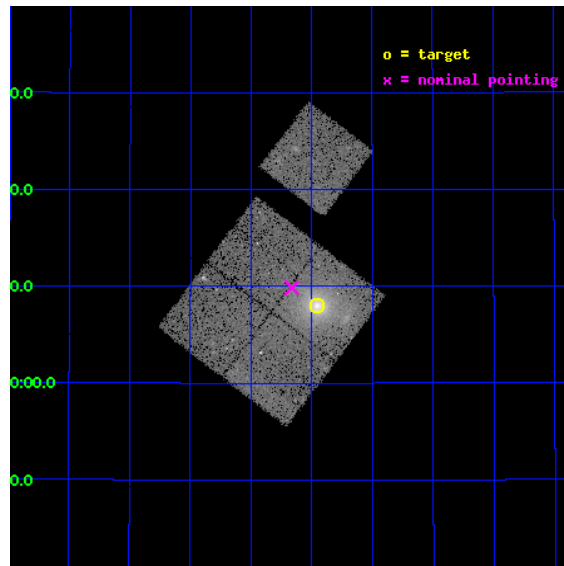
L2 Processing Date : Nov 10 2012

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# 1 Front

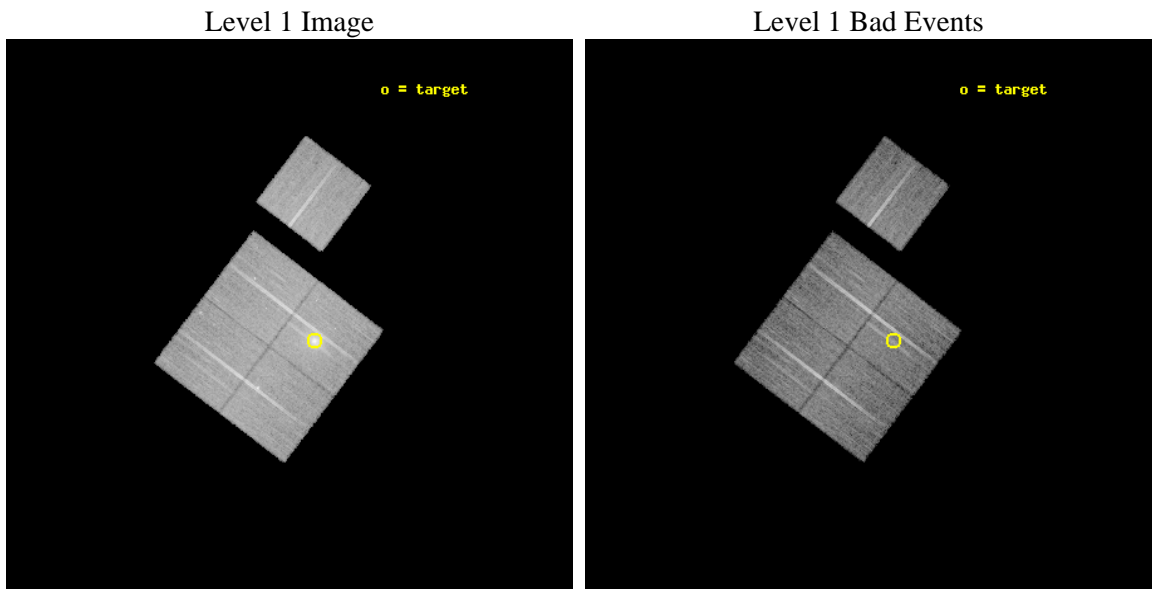
seq_num	800450	Sequence number
obs_id	5007	Observation id
title	Cluster studies: Determination of H0/q0	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	A2261	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	260.613333	Observer's specified target RA [deg]
dec_targ	32.132778	Observer's specified target Dec [deg]
ra_nom	260.6657939511	Nominal RA [deg]
dec_nom	32.164065338073	Nominal Dec [deg]
roll_nom	37.24843754813	Nominal Roll [deg]
revision	3	Processing version of data
ontime	24638.717992187	Sum of GTIs [s]
livetime	24316.795002858	Livetime [s]
ontime0	24641.858992338	Sum of GTIs [s]
ontime1	24638.717992127	Sum of GTIs [s]
ontime2	24644.999952585	Sum of GTIs [s]
ontime3	24638.717992187	Sum of GTIs [s]
ontime6	24644.999952585	Sum of GTIs [s]
l2events	84115	Number of level 2 events



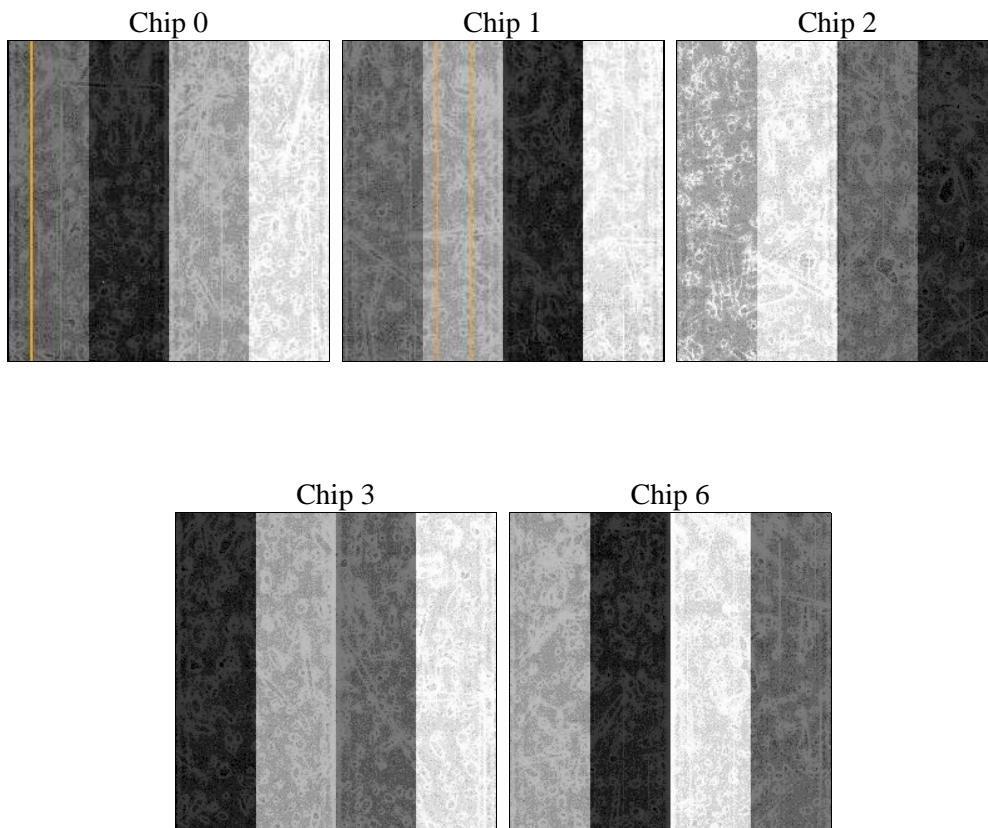
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	24526.771000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	24638.717992187	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	24641.858992338	Sum of GTIs [s]
date	2012-11-10T22:19:43	Date and time of file creation	ontime1	24638.717992127	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	24644.999952585	Sum of GTIs [s]
			ontime3	24638.717992187	Sum of GTIs [s]
			ontime6	24644.999952585	Sum of GTIs [s]
			l1events	635442	Number of level 1 events

### 2.1.4 Events

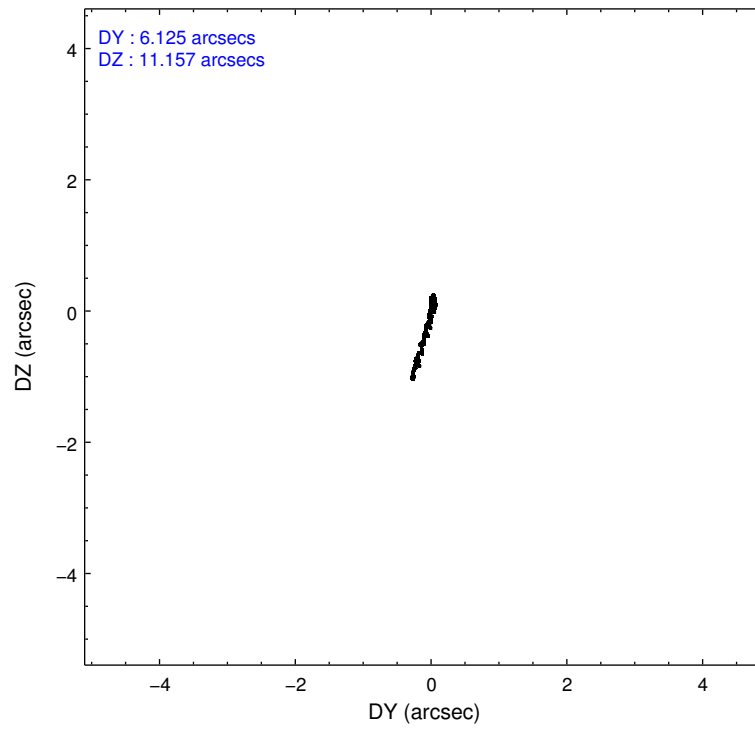
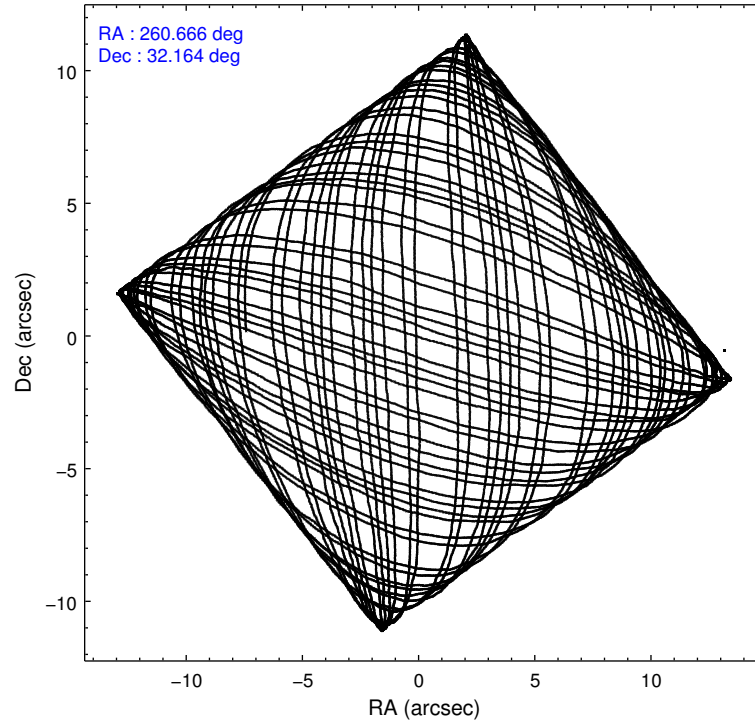
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	116788	115648	129992	150818	122196
rejected events	103622	100231	116286	109689	109381
rejected %	88%	86%	89%	72%	89%

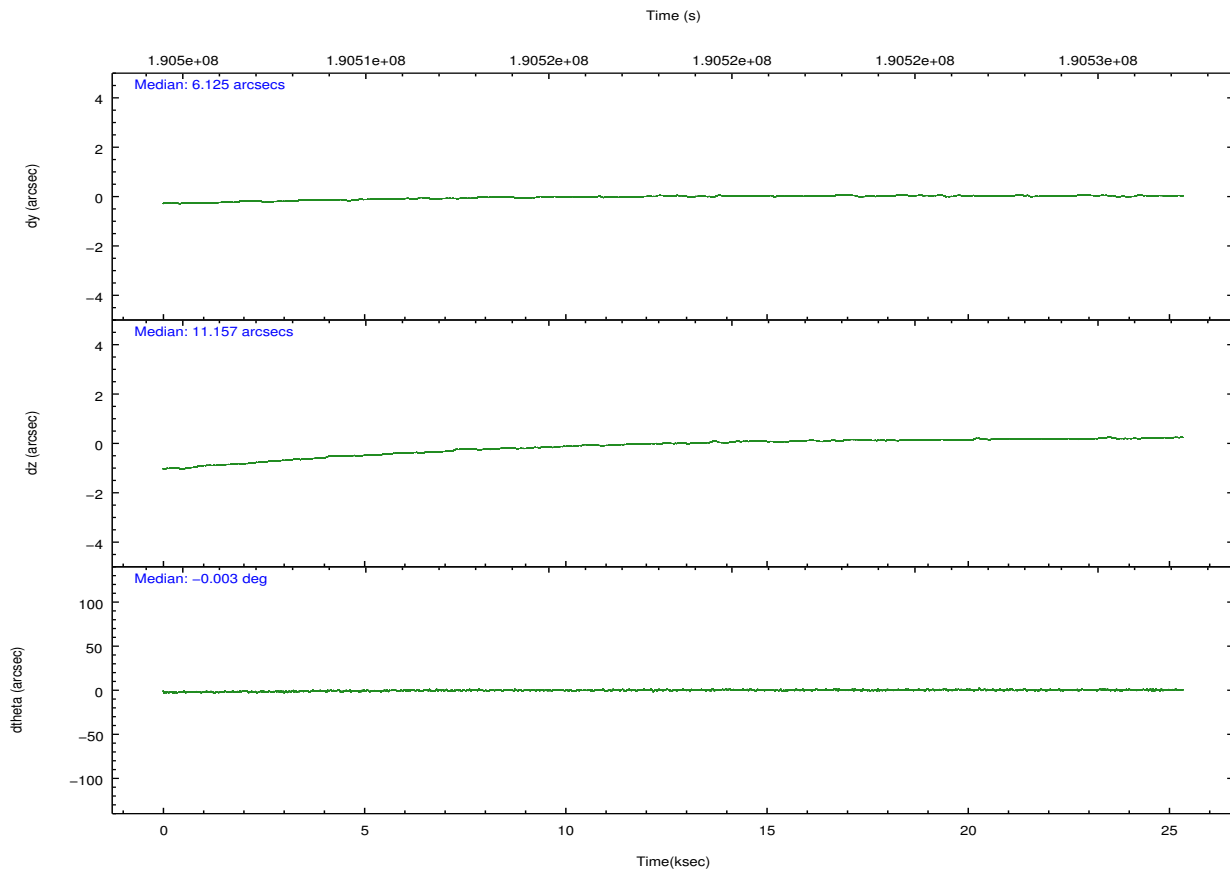
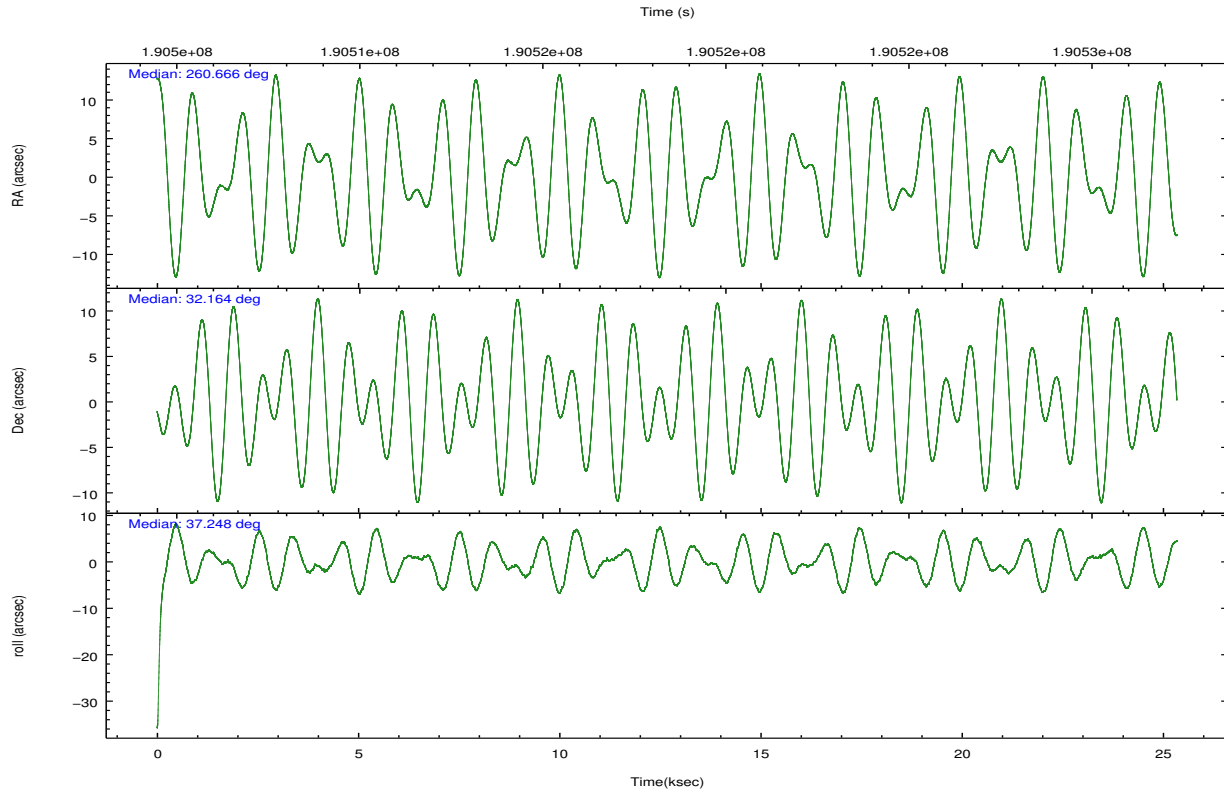
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4803	6259	5729	28362	4531
	4%	5%	4%	18%	3%
grade 1 events	66	61	74	178	40
	0%	0%	0%	0%	0%
grade 2 events	2978	3114	2885	5310	2693
	2%	2%	2%	3%	2%
grade 3 events	1523	1667	1428	2192	1401
	1%	1%	1%	1%	1%
grade 4 events	1392	1571	1405	2249	1398
	1%	1%	1%	1%	1%
grade 5 events	4506	4790	4172	5002	4911
	3%	4%	3%	3%	4%
grade 6 events	2475	2810	2262	3023	2792
	2%	2%	1%	2%	2%
grade 7 events	99045	95376	112037	104502	104430
	84%	82%	86%	69%	85%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	260.653385	260.6657939510973	Subarray requested	NONE	NONE
[deg] Pointing Dec	32.138752	32.16406533807348	Alternating exposures requested	N	N
[deg] Pointing Roll	37.046370	37.24843754813014	[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	-225.8433433320239			
[mm] SIM translation stage offset	-7.752	-7.749109670905796			
[s] Observation start time (MET)	190506536.184000	190505260.80032			
Observation start date	2004-01-14T22:27:52	2004-01-14T22:07:40			
[s] Observation end time (MET)	190531063.184000	190531377.28896			
Observation end date	2004-01-15T05:16:39	2004-01-15T05:22:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



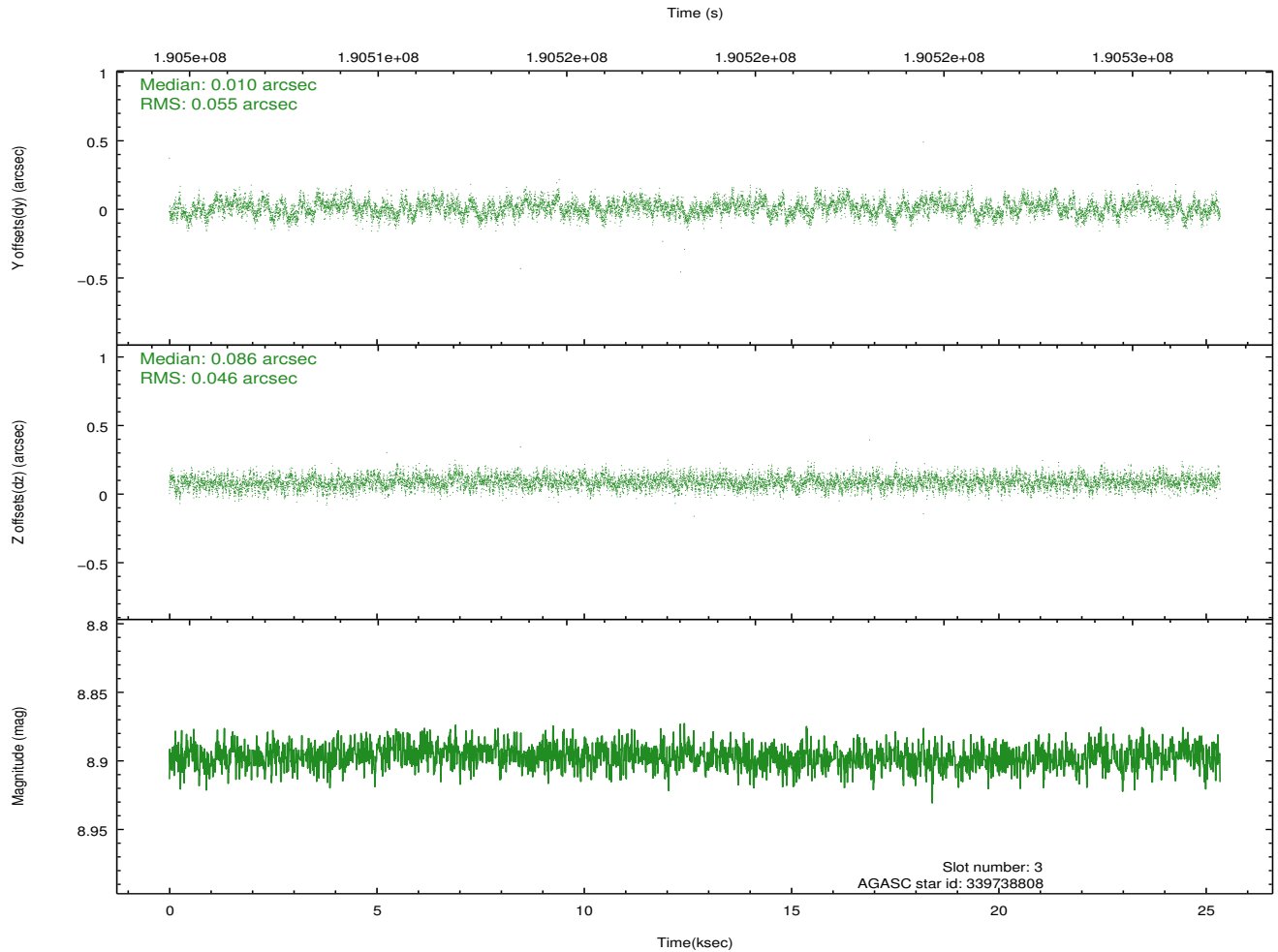
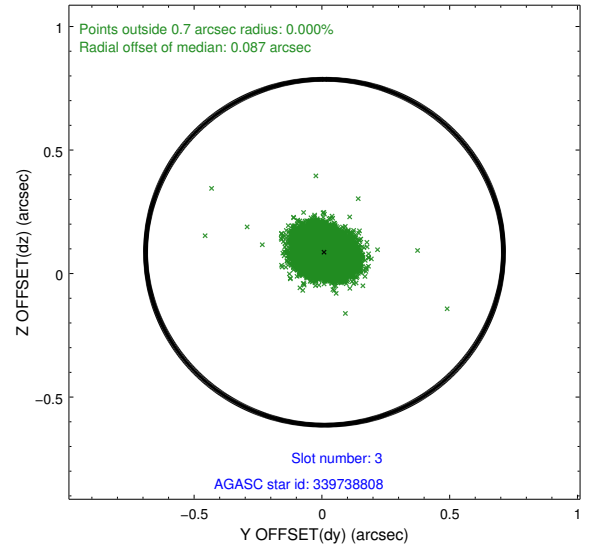
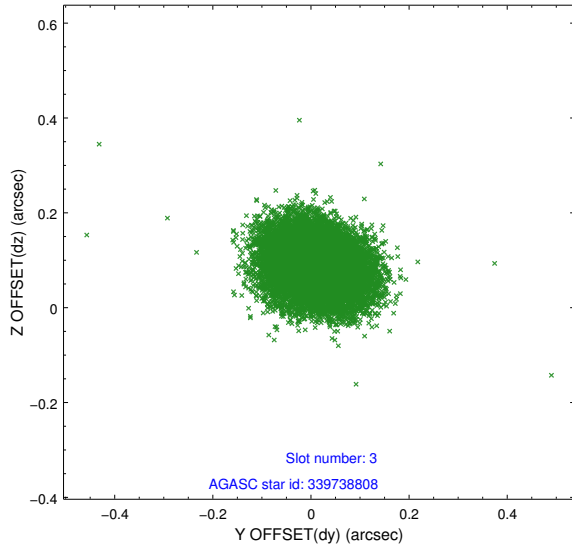


### Slot Statistics

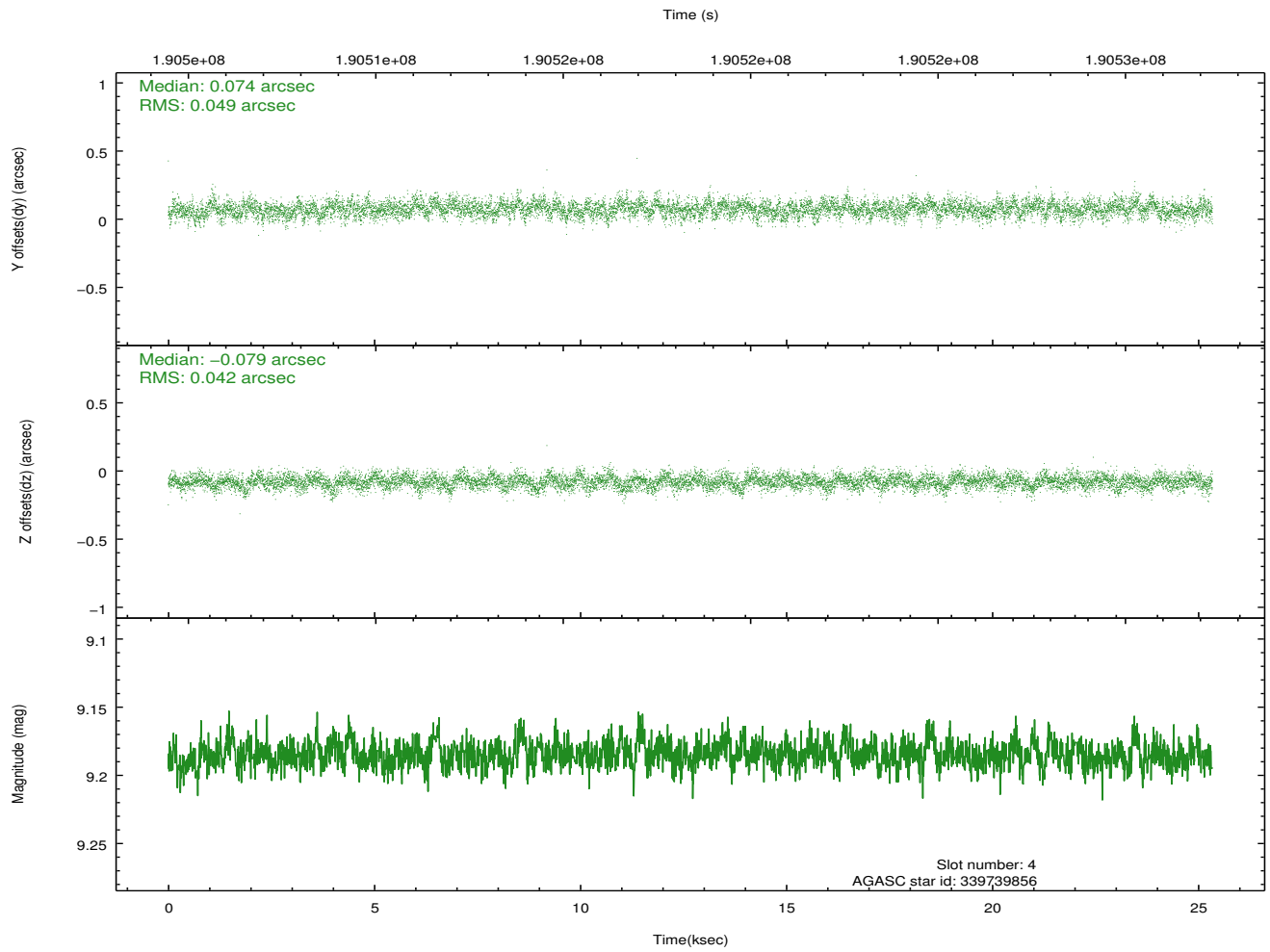
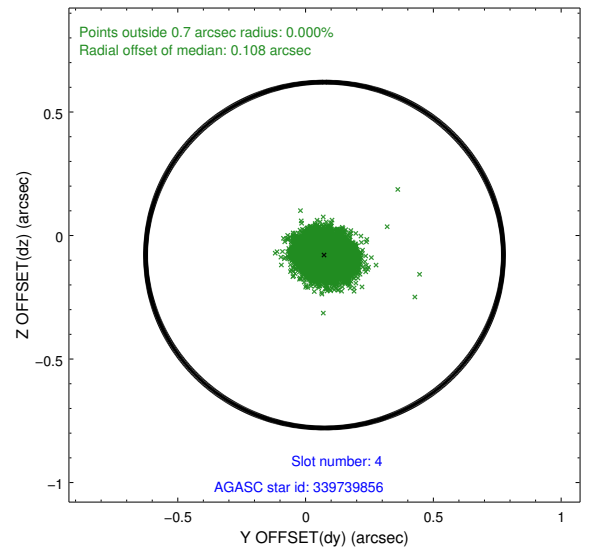
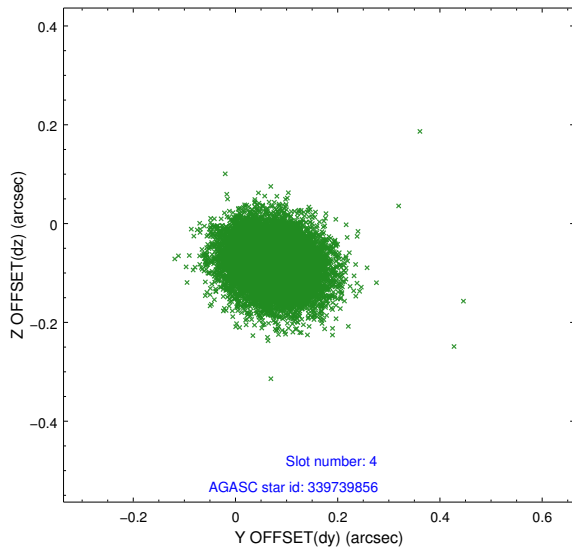
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	6180	0.093	-0.173	0.012	0.023	0.000000	0.000000	933.59	-993.75
1	FID	ACIS-I-4	7.14	6180	-0.043	0.099	0.011	0.028	0.000000	0.000000	2153.09	907.24
2	FID	ACIS-I-5	7.22	6180	-0.148	0.144	0.009	0.028	0.000000	0.000000	-1814.54	904.22
3	GUIDE	339738808	8.90	12351	0.010	0.086	0.076	0.122	260.388344	31.860977	-1248.64	-309.06
4	GUIDE	339739856	9.18	12356	0.074	-0.079	0.069	0.112	260.043055	31.783835	-2257.26	109.63
5	GUIDE	340264720	9.40	12354	0.069	0.048	0.089	0.149	260.154315	32.131036	-1229.03	897.51
6	GUIDE	340272152	9.24	12357	0.121	-0.041	0.081	0.131	259.948756	32.115258	-1761.48	1232.65
7	GUIDE	341979192	6.64	12361	-0.274	-0.016	0.045	0.076	261.163651	32.670375	2389.10	599.11

## 2.4 Star Slots

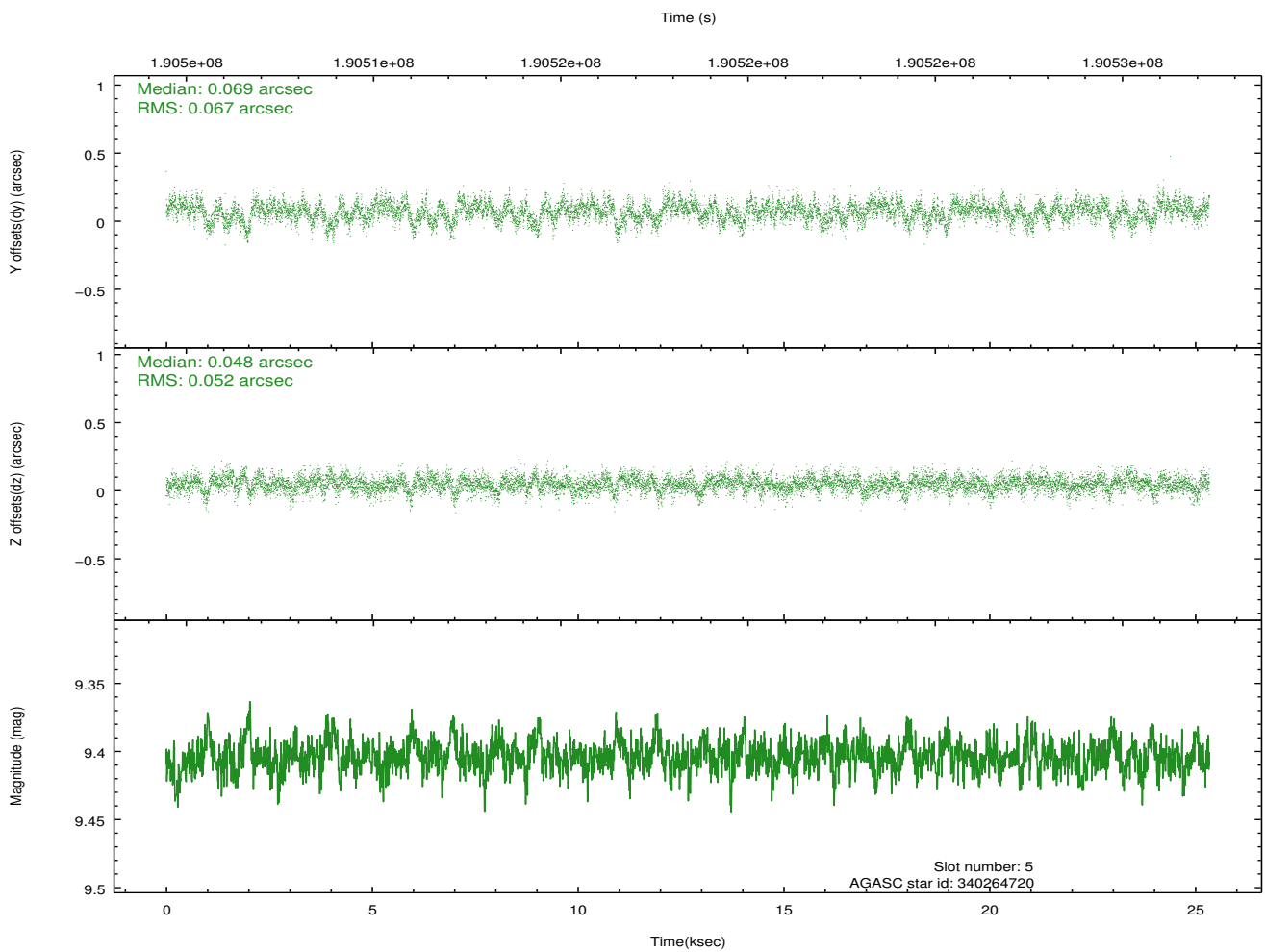
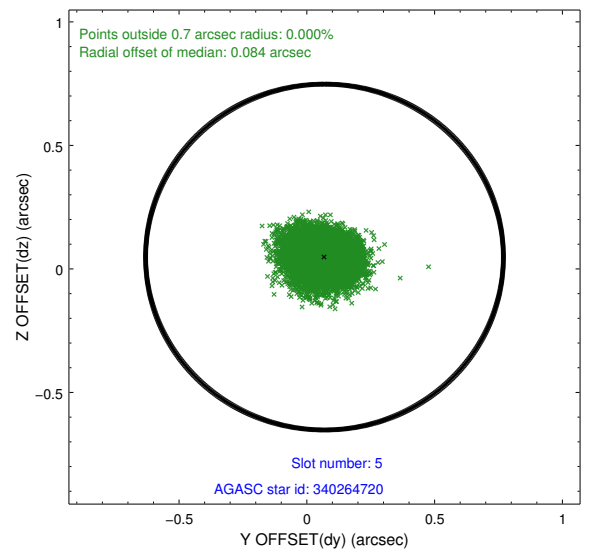
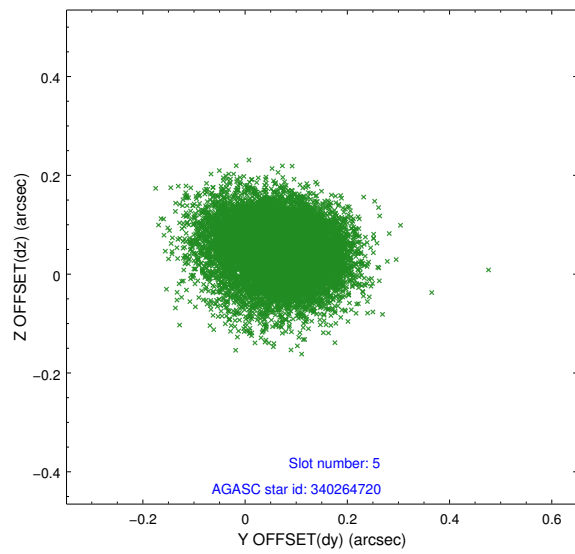
### 2.4.1 Slot 3



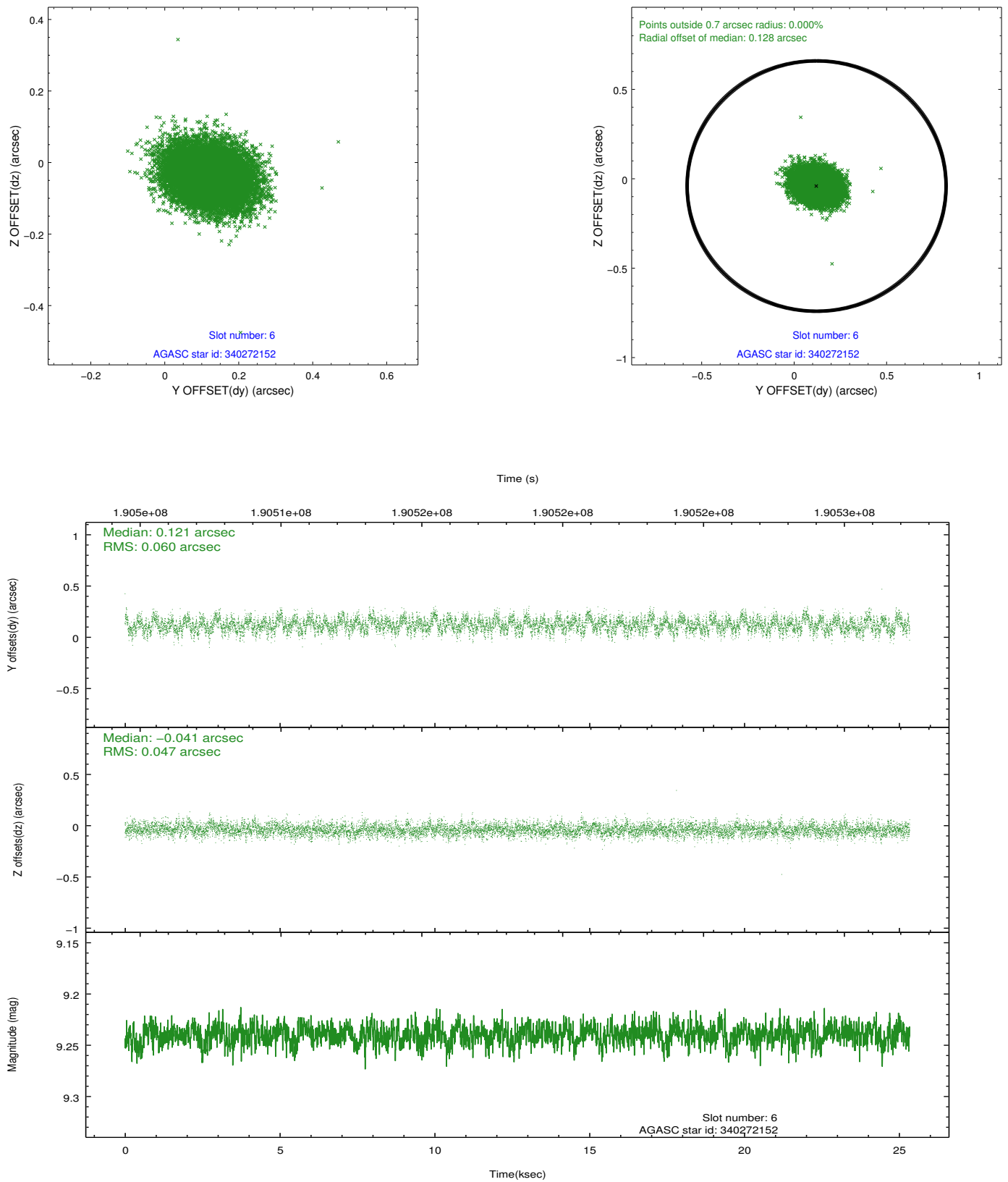
## 2.4.2 Slot 4



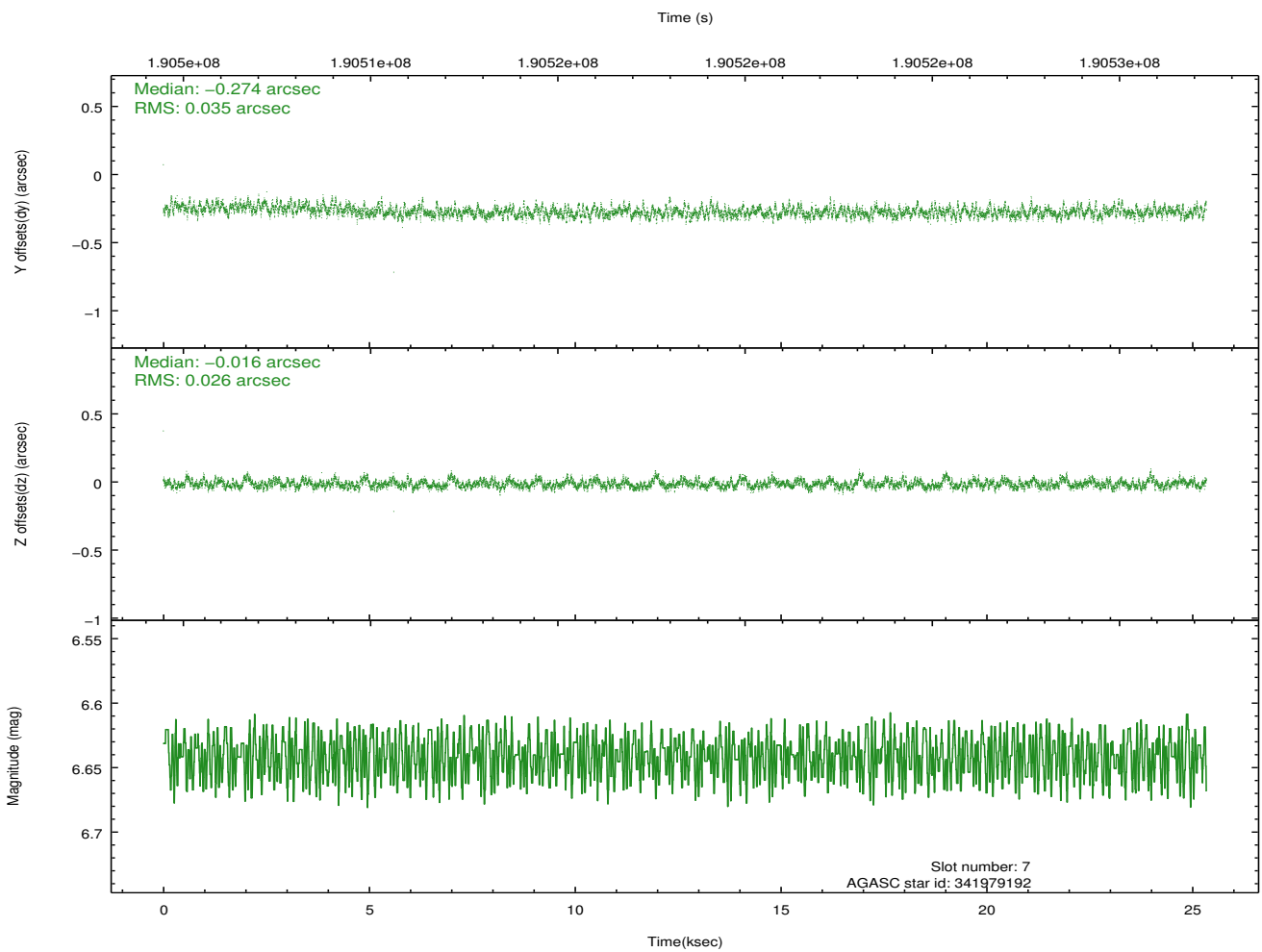
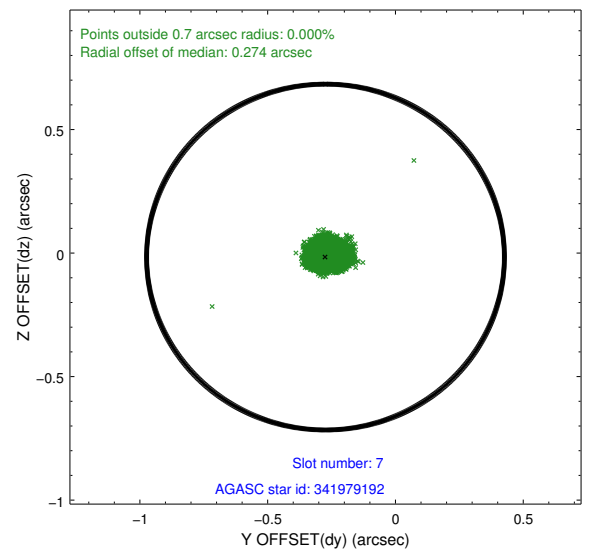
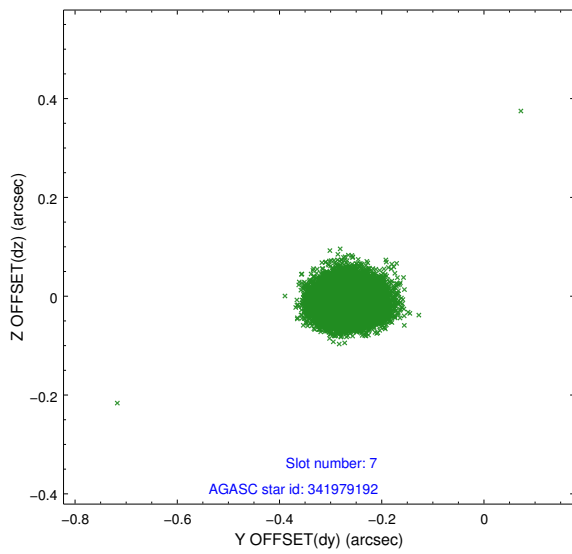
### 2.4.3 Slot 5



## 2.4.4 Slot 6

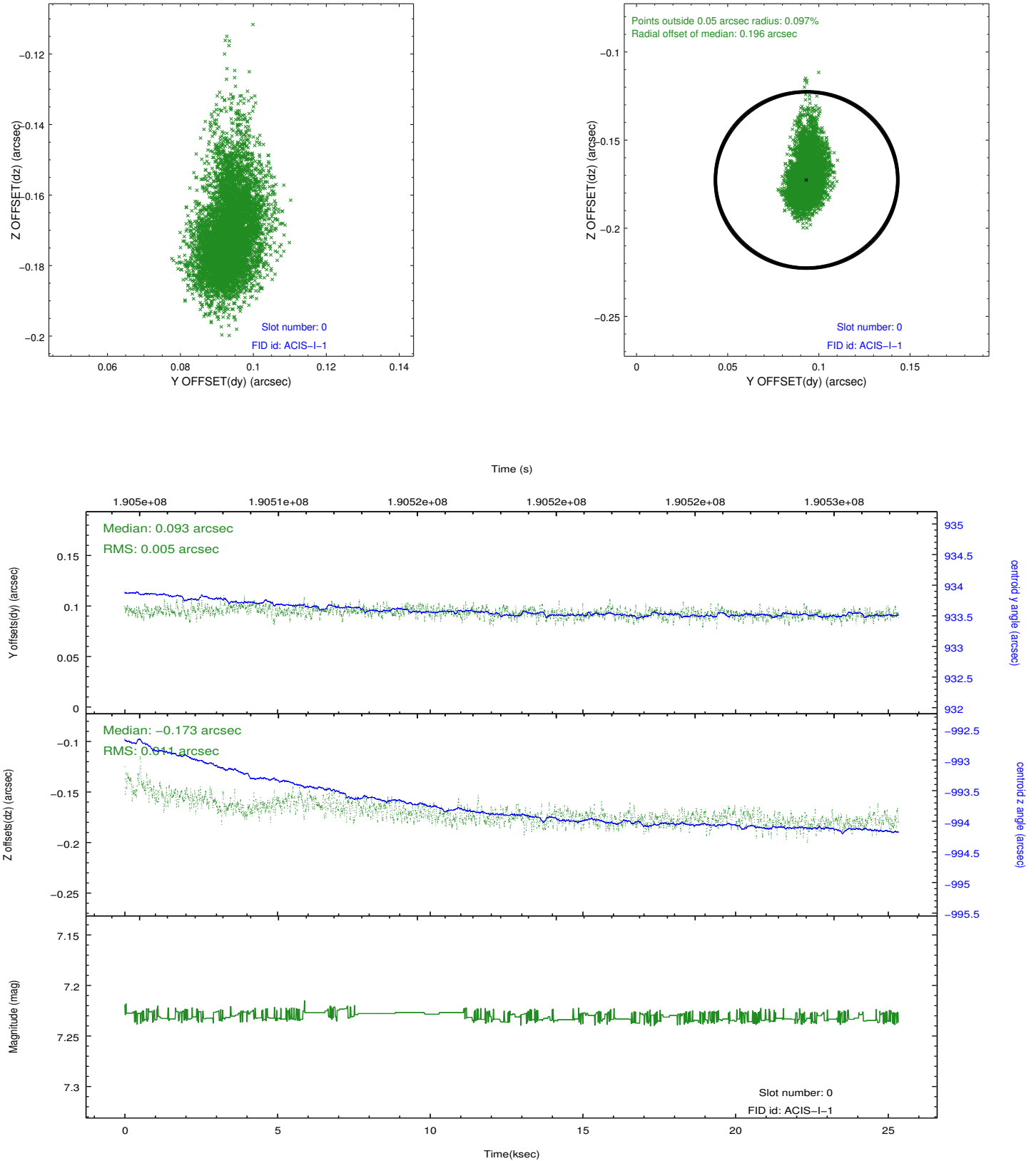


## 2.4.5 Slot 7

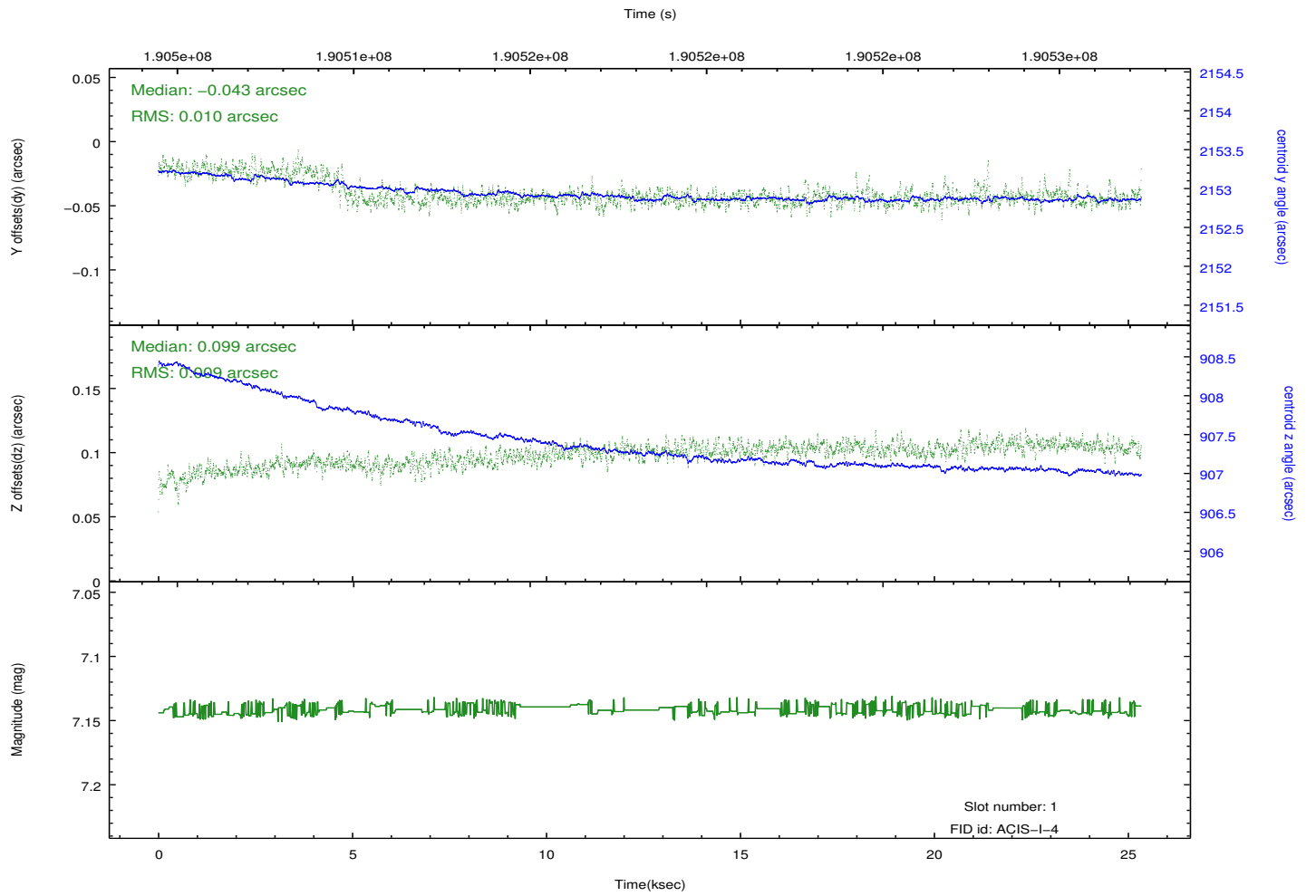
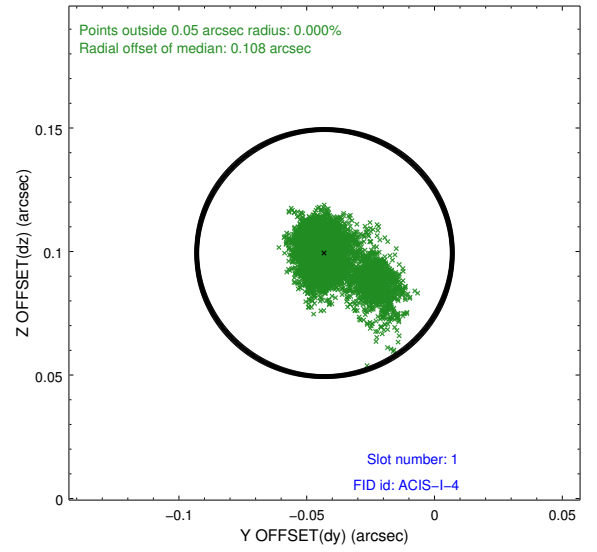
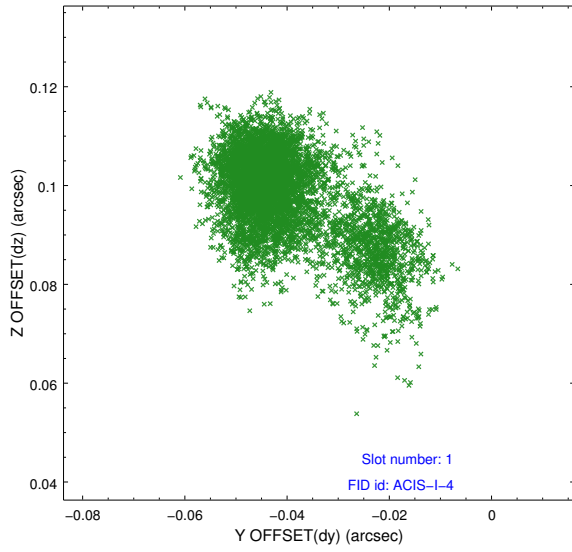


## 2.5 FID Slots

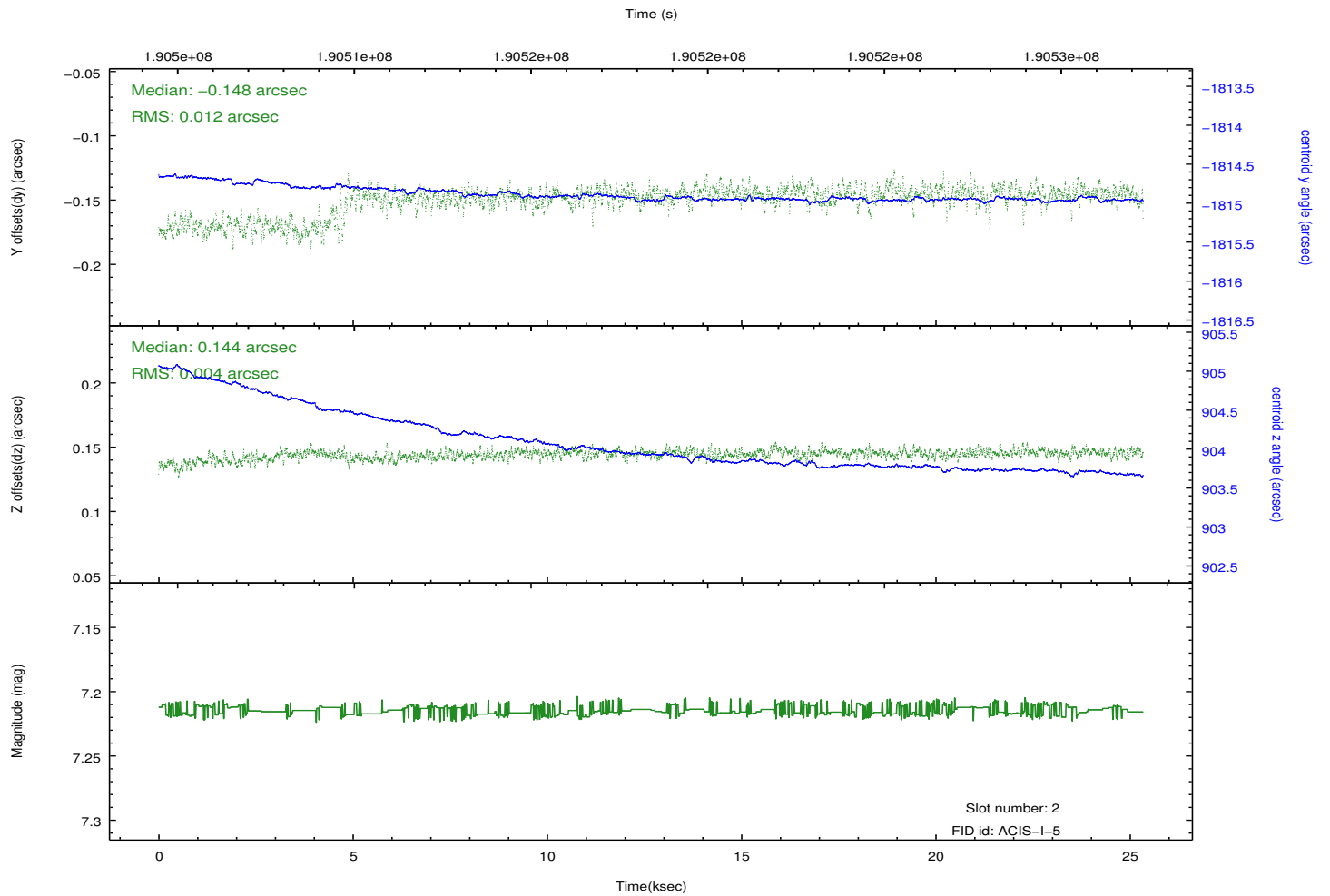
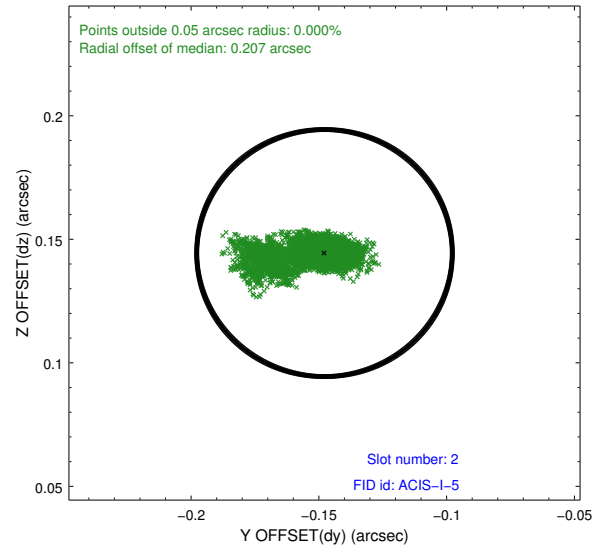
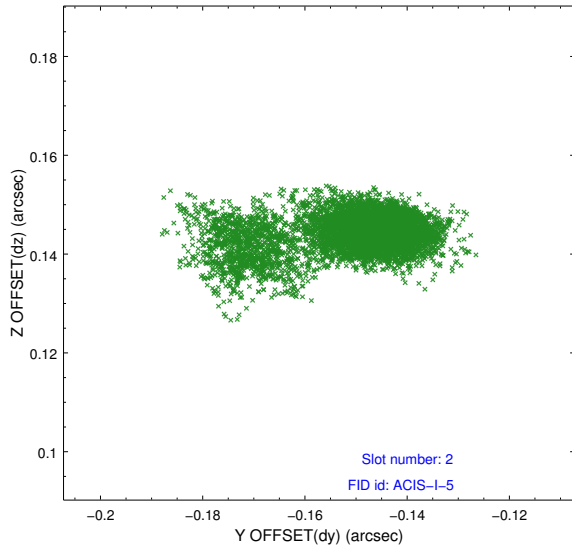
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## **A Summary**

### **A.1 Status**

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.11.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.641

### **A.2 Comments**