

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3264 - L2 Version 3  
Chandra X-Ray Center

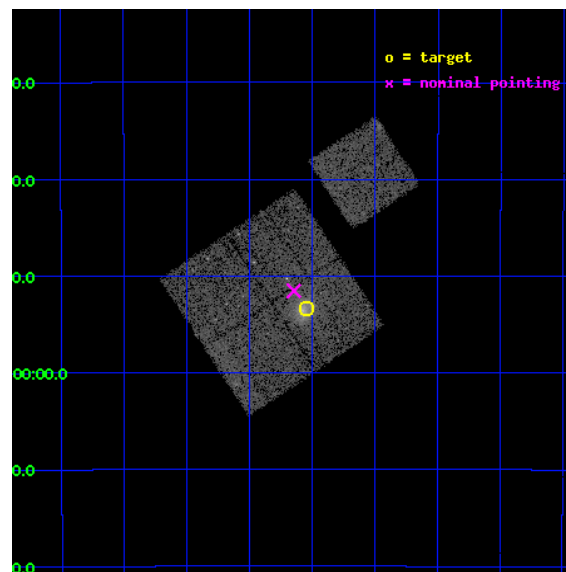
L2 Processing Date : Oct 14 2012

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# 1 Front

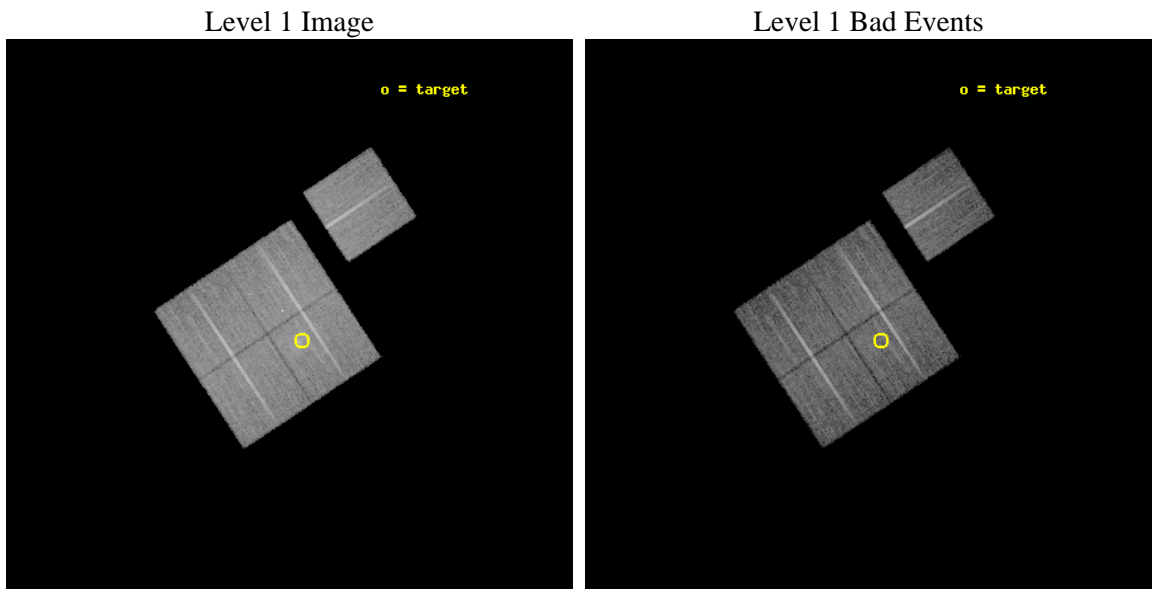
seq_num	800264	Sequence number
obs_id	3264	Observation id
title	MACS: THE X-RAY PROPERTIES OF THE MOST MASSIVE GALAXY CLUSTERS AT $Z>0.3$	Proposal title
observer	Dr. Harald Ebeling	Principal investigator
object	MACSJ0152.5-2852	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	28.135833	Observer's specified target RA [deg]
dec_targ	-28.889444	Observer's specified target Dec [deg]
ra_nom	28.16138310273	Nominal RA [deg]
dec_nom	-28.859113676517	Nominal Dec [deg]
roll_nom	56.525501027205	Nominal Roll [deg]
revision	3	Processing version of data
ontime	17775.358995527	Sum of GTIs [s]
livetime	17543.110844222	Livetime [s]
ontime0	17778.499965787	Sum of GTIs [s]
ontime1	17778.499965787	Sum of GTIs [s]
ontime2	17775.358995557	Sum of GTIs [s]
ontime3	17775.358995527	Sum of GTIs [s]
ontime6	17775.358985573	Sum of GTIs [s]
l2events	44576	Number of level 2 events



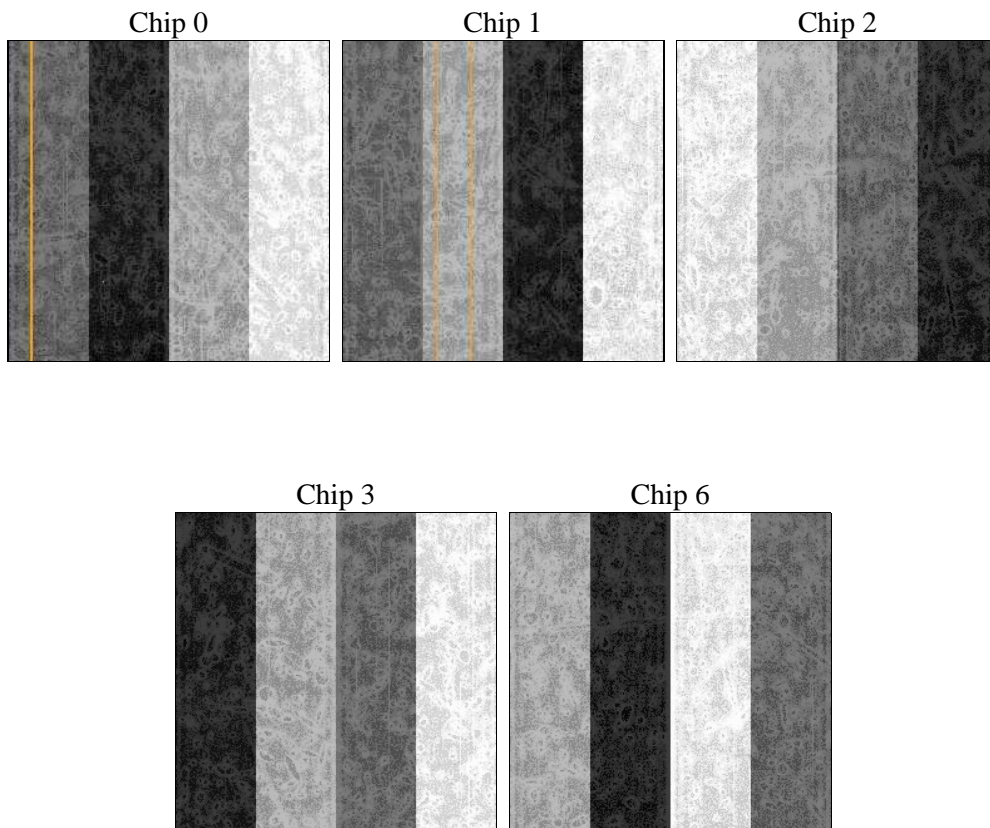
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	17664.344000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	17775.358995527	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	17778.499965787	Sum of GTIs [s]
date	2012-10-14T18:26:20	Date and time of file creation	ontime1	17778.499965787	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	17775.358995557	Sum of GTIs [s]
			ontime3	17775.358995527	Sum of GTIs [s]
			ontime6	17775.358985573	Sum of GTIs [s]
			l1events	528091	Number of level 1 events

### 2.1.4 Events

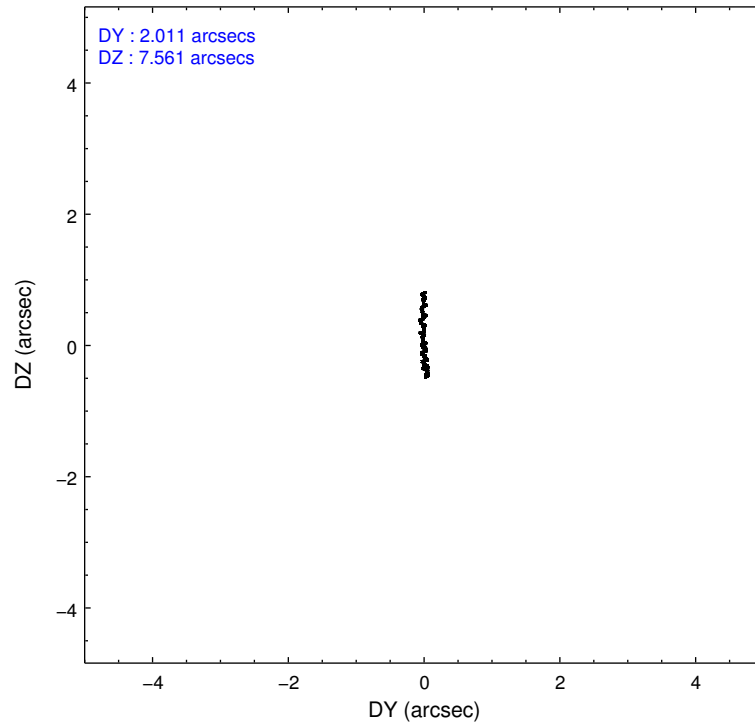
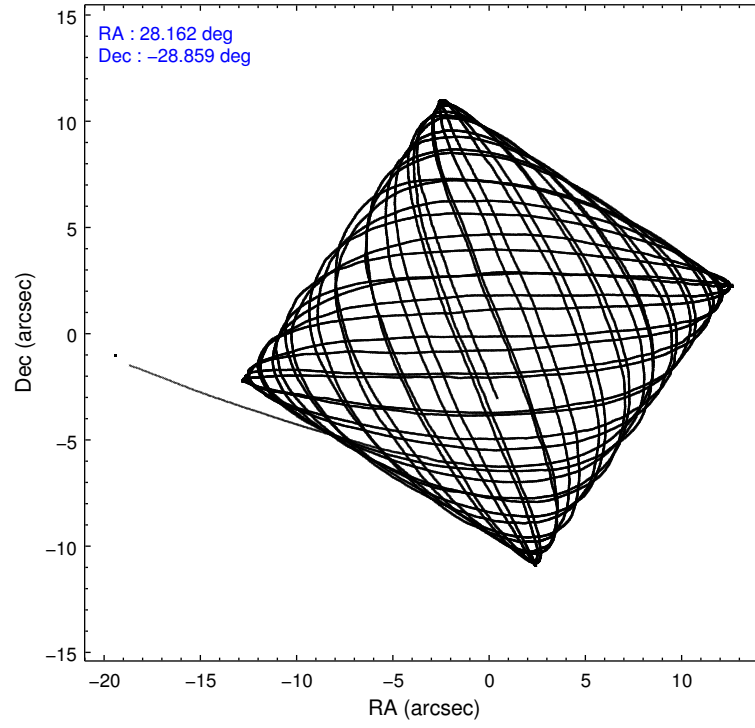
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	99636	101541	114854	109245	102815
rejected events	90175	91057	104200	96412	93284
rejected %	90%	89%	90%	88%	90%

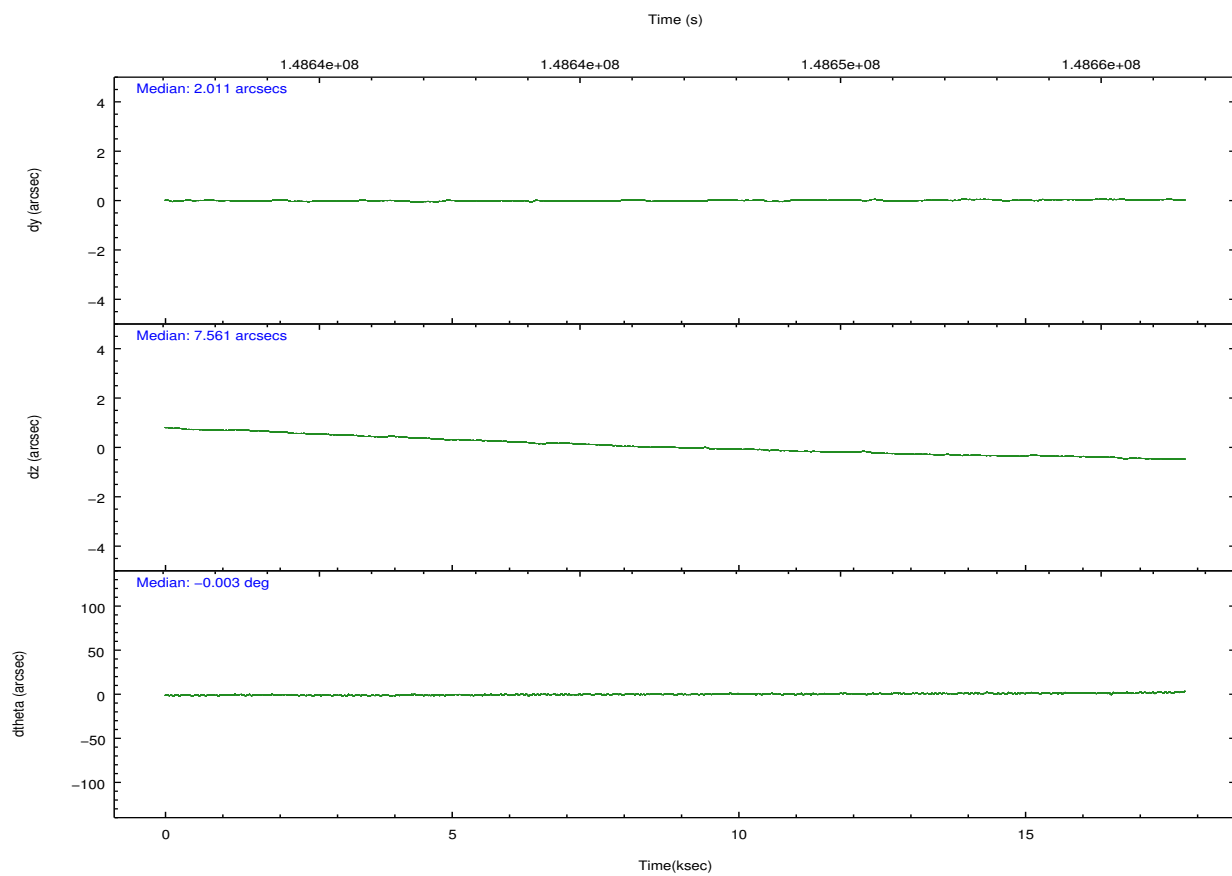
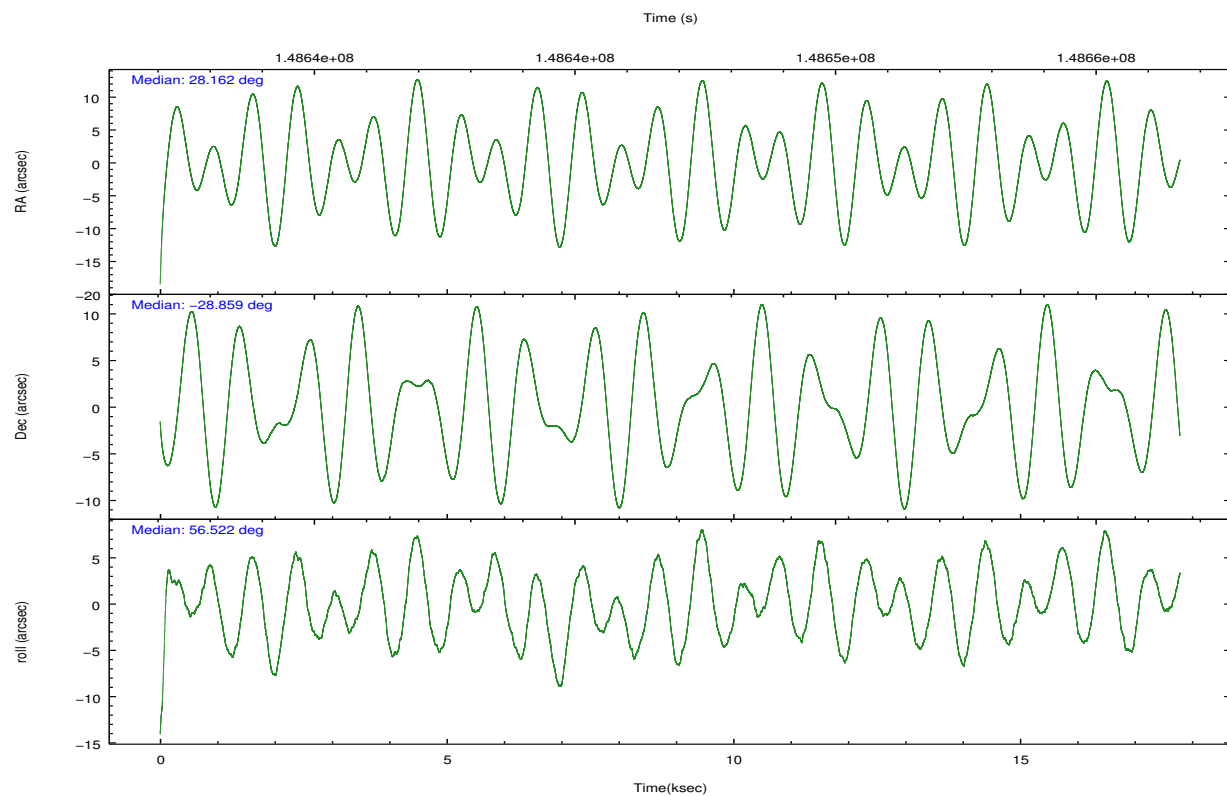
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3724	4195	4890	6843	3693
	3%	4%	4%	6%	3%
grade 1 events	61	40	81	67	44
	0%	0%	0%	0%	0%
grade 2 events	2362	2419	2519	2424	2157
	2%	2%	2%	2%	2%
grade 3 events	1223	1344	1147	1262	1252
	1%	1%	0%	1%	1%
grade 4 events	1154	1300	1181	1252	1174
	1%	1%	1%	1%	1%
grade 5 events	3536	3713	3414	3907	3948
	3%	3%	2%	3%	3%
grade 6 events	1906	2245	1818	1927	2209
	1%	2%	1%	1%	2%
grade 7 events	85670	86285	99804	91563	88338
	85%	84%	86%	83%	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	28.159590	28.16138310272959	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.886489	-28.85911367651698	Alternating exposures requested	N	N
[deg] Pointing Roll	56.315955	56.52550102720502	[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	-227.742463	-227.734108438797			
[mm] SIM translation stage offset	-5.85	-5.858344564132665			
[s] Observation start time (MET)	148638051.184000	148636228.15011			
Observation start date	2002-09-17T08:19:47	2002-09-17T07:50:28			
[s] Observation end time (MET)	148655716.184000	148656350.95094			
Observation end date	2002-09-17T13:14:12	2002-09-17T13:25:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect



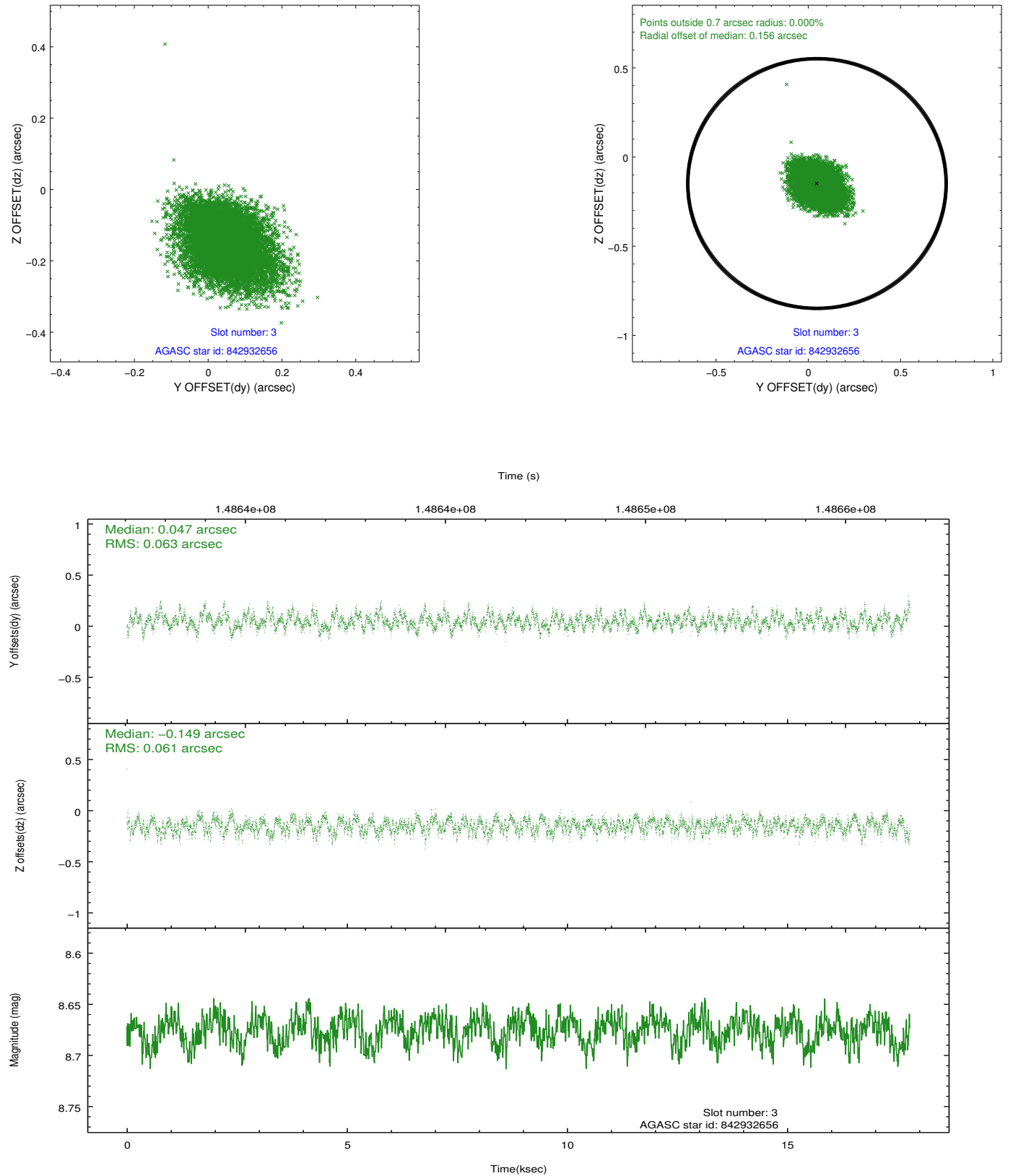


### Slot Statistics

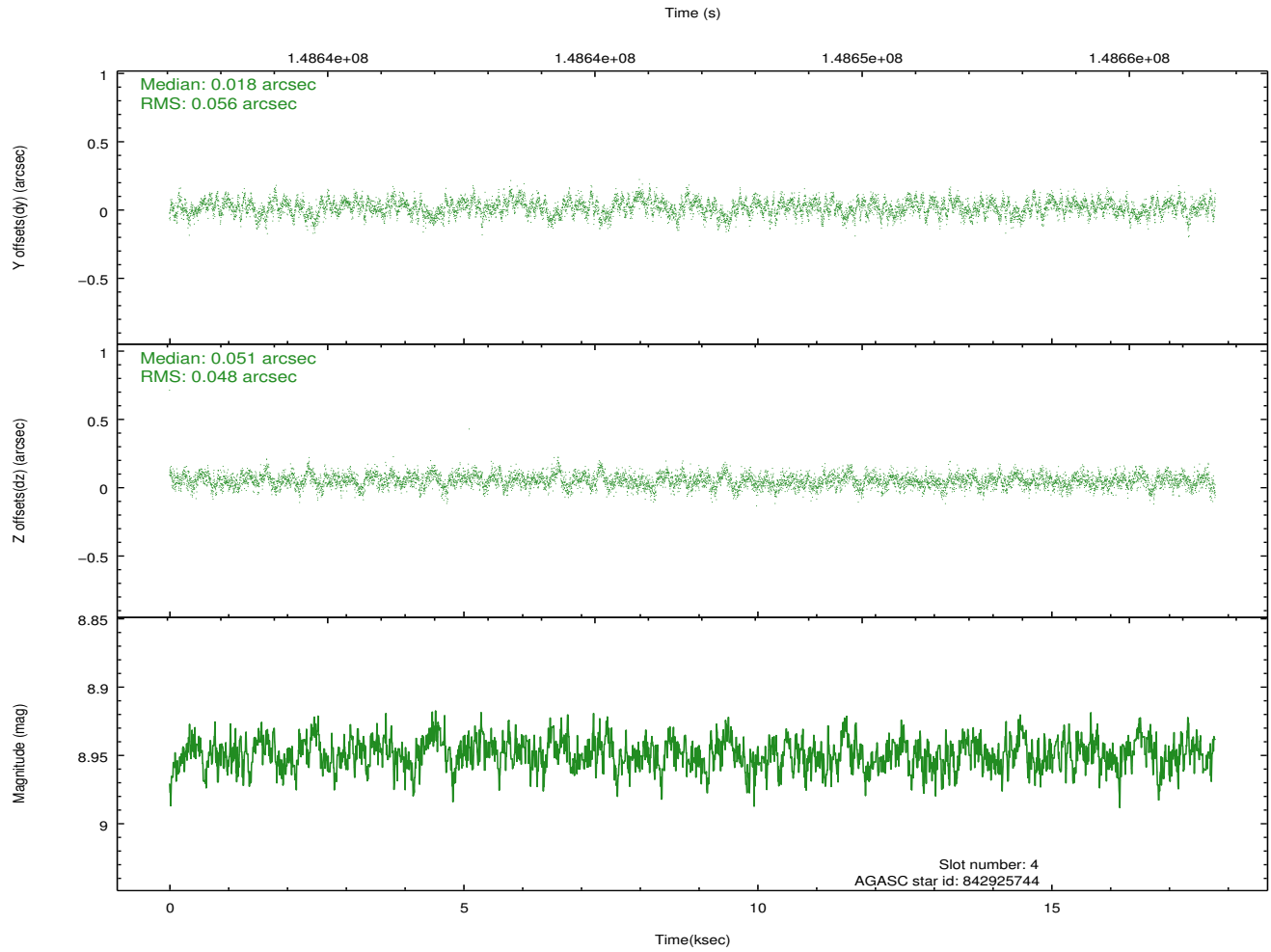
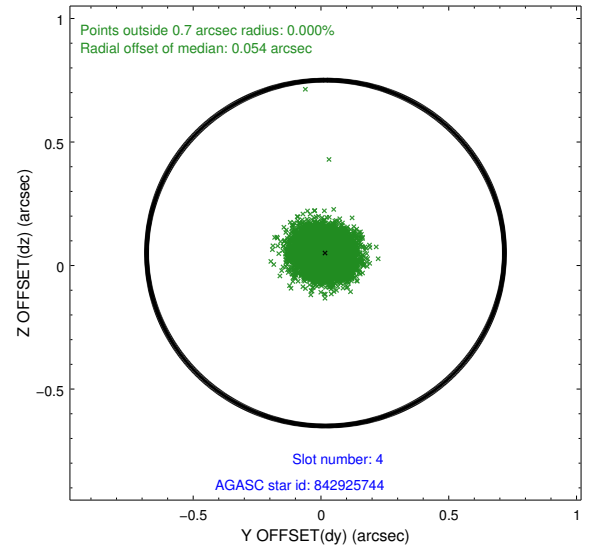
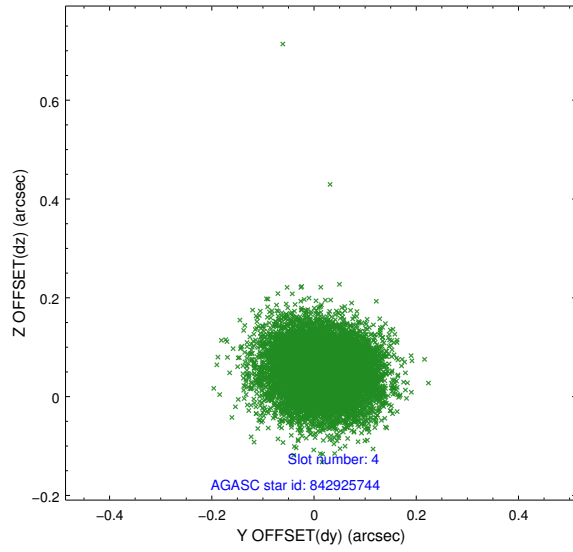
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	4338	0.016	-0.122	0.008	0.015	0.000000	0.000000	937.74	-951.37
1	FID	ACIS-I-3	7.44	4338	-0.024	0.186	0.008	0.013	0.000000	0.000000	55.33	-1084.53
2	FID	ACIS-I-5	7.23	4338	-0.082	0.008	0.011	0.018	0.000000	0.000000	-1810.59	946.01
3	GUIDE	842932656	8.68	8672	0.047	-0.149	0.092	0.152	27.637719	-28.652964	-218.18	1836.22
4	GUIDE	842925744	8.95	8675	0.018	0.051	0.079	0.127	27.919747	-28.019400	2173.71	2365.84
5	GUIDE	842932952	9.44	8672	-0.148	0.164	0.100	0.161	28.708817	-29.119653	256.08	-1904.33
6	GUIDE	842931664	10.17	8664	0.031	-0.144	0.149	0.233	27.747775	-29.229916	-1748.42	389.41
7	GUIDE	842931752	10.05	8601	0.040	0.084	0.233	0.357	28.383600	-29.423806	-1220.93	-1657.42

## 2.4 Star Slots

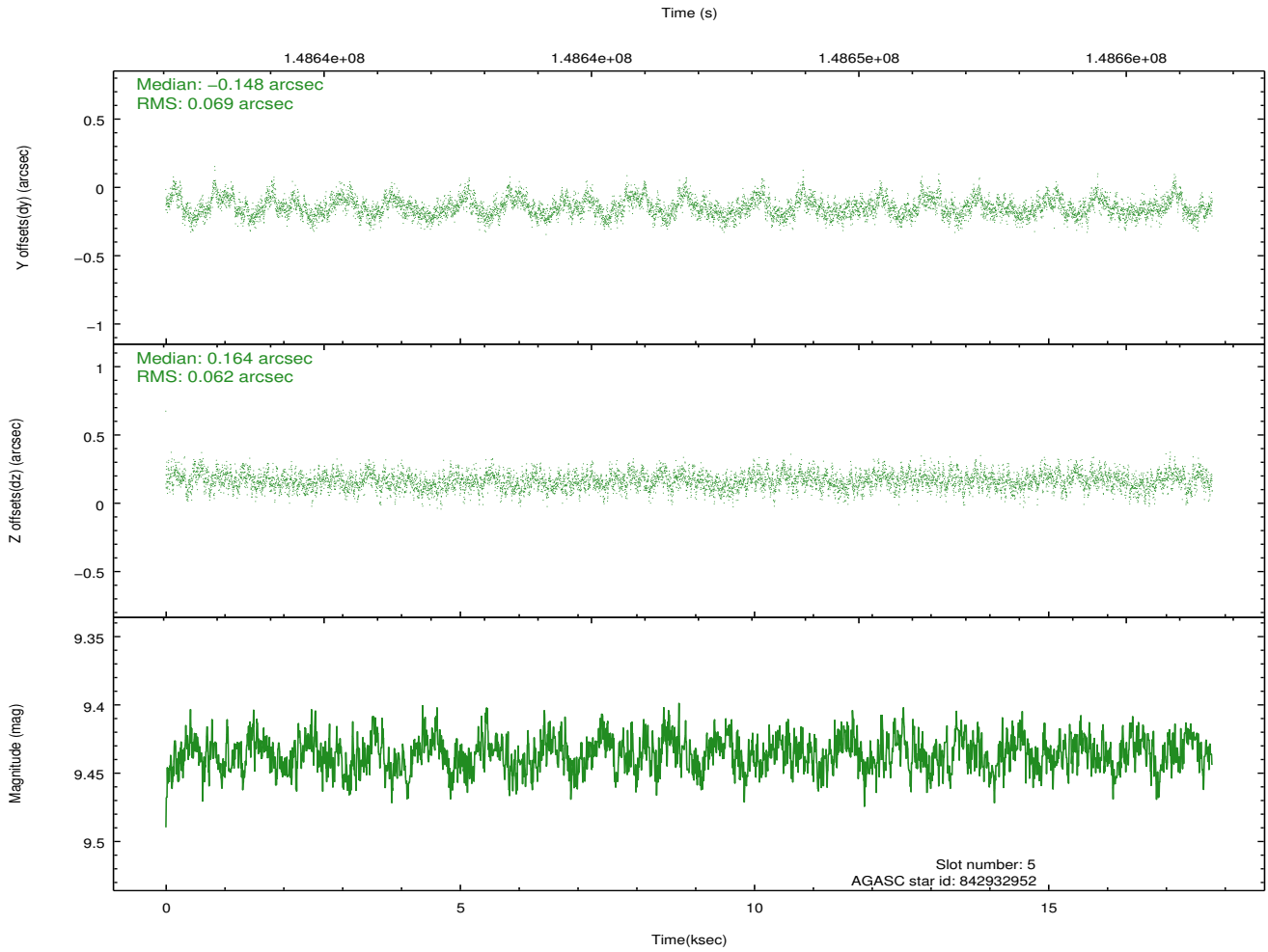
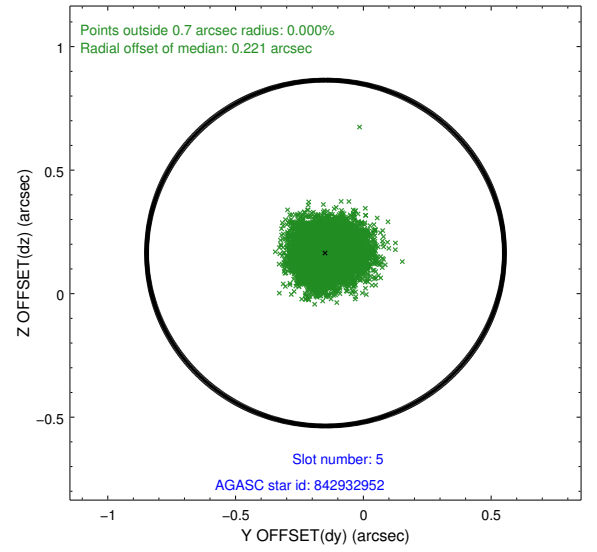
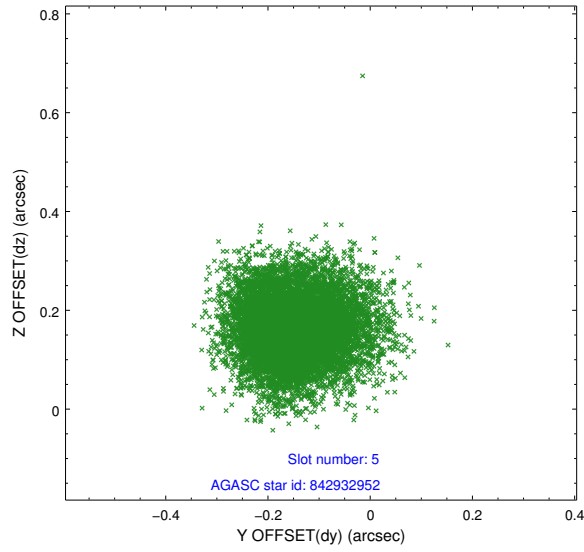
### 2.4.1 Slot 3



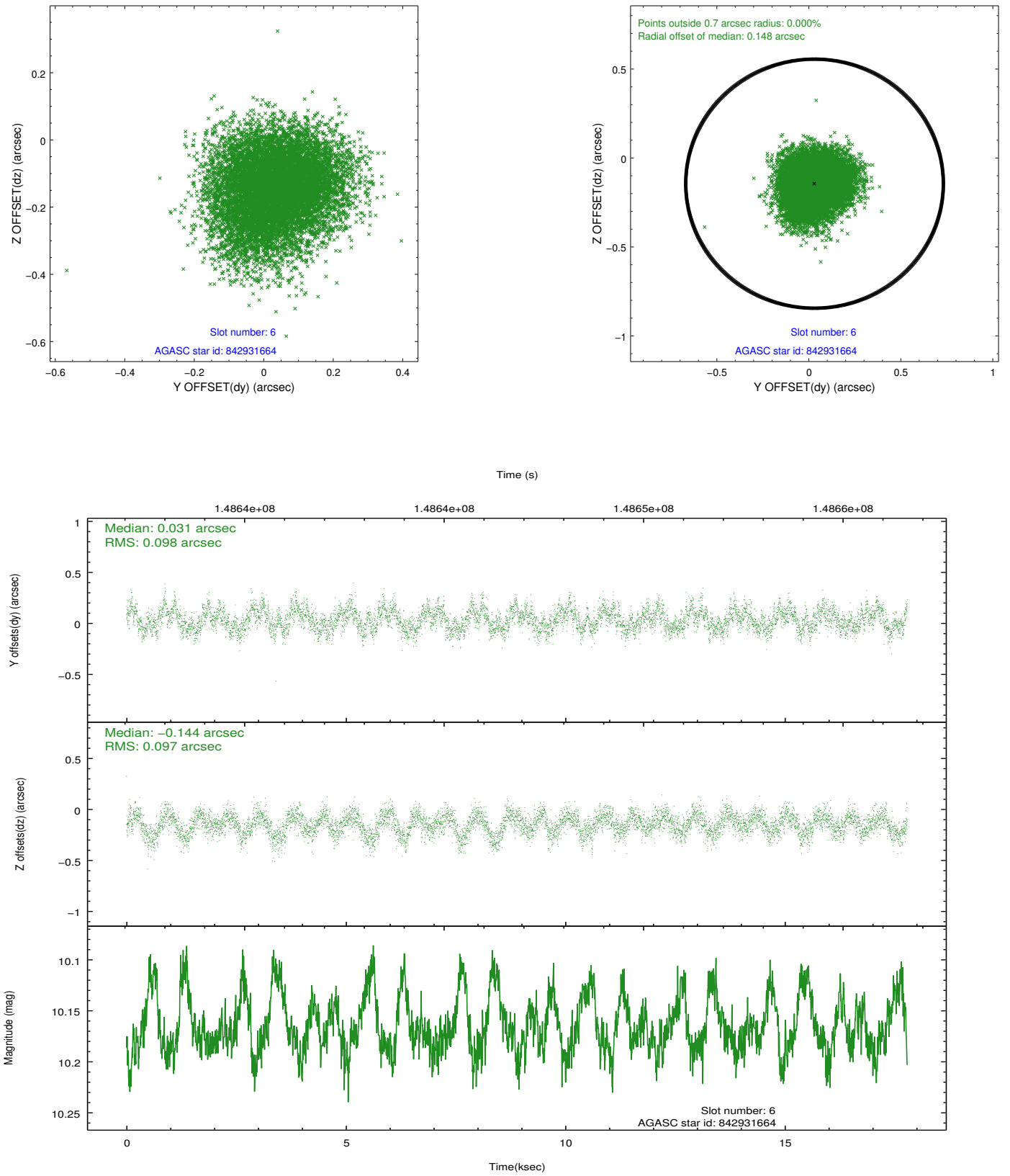
## 2.4.2 Slot 4



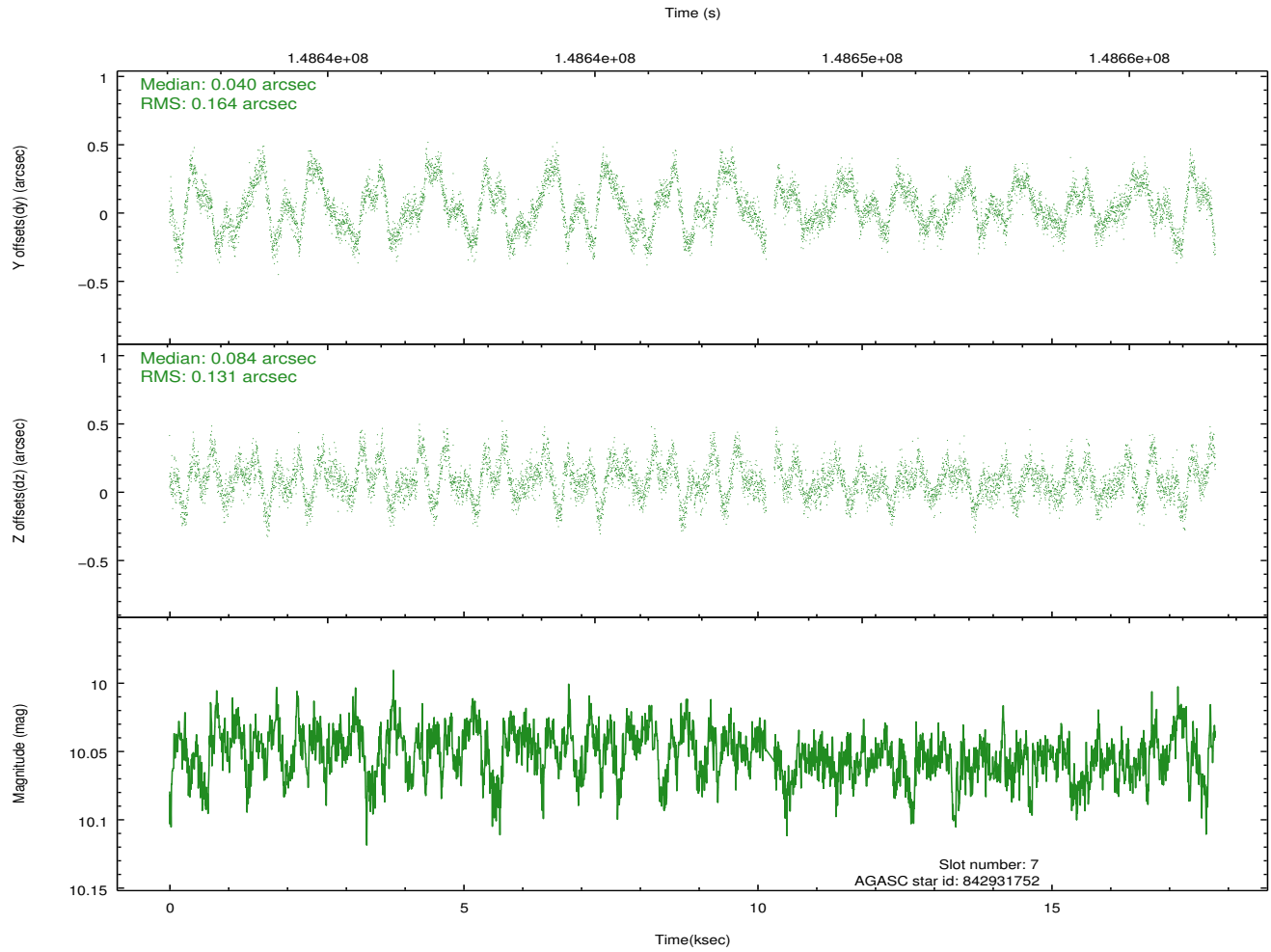
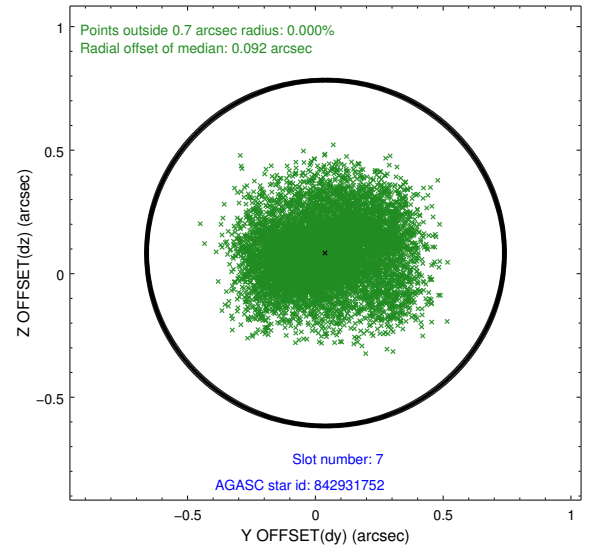
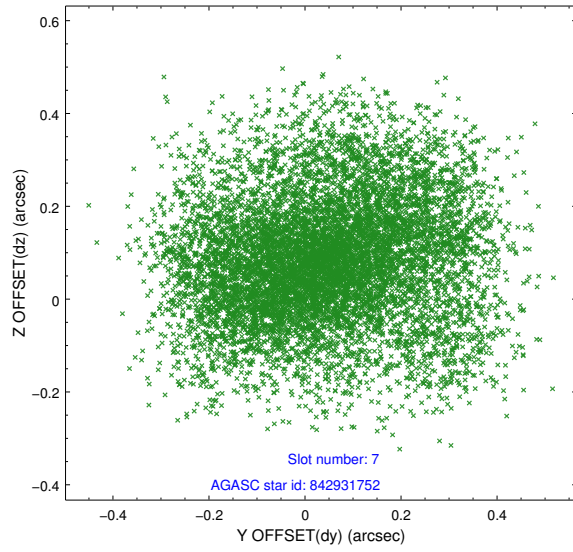
### 2.4.3 Slot 5



## 2.4.4 Slot 6

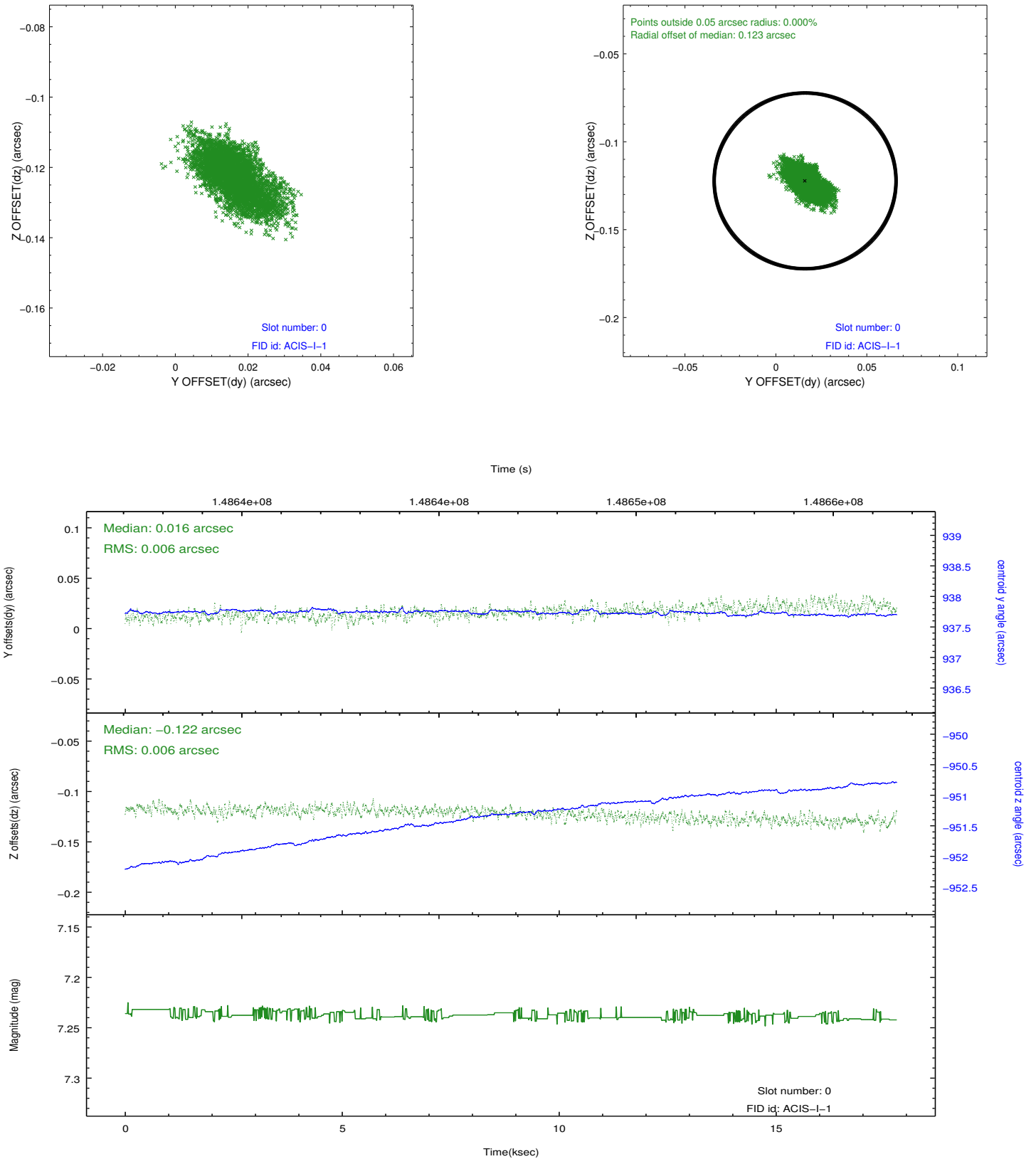


## 2.4.5 Slot 7

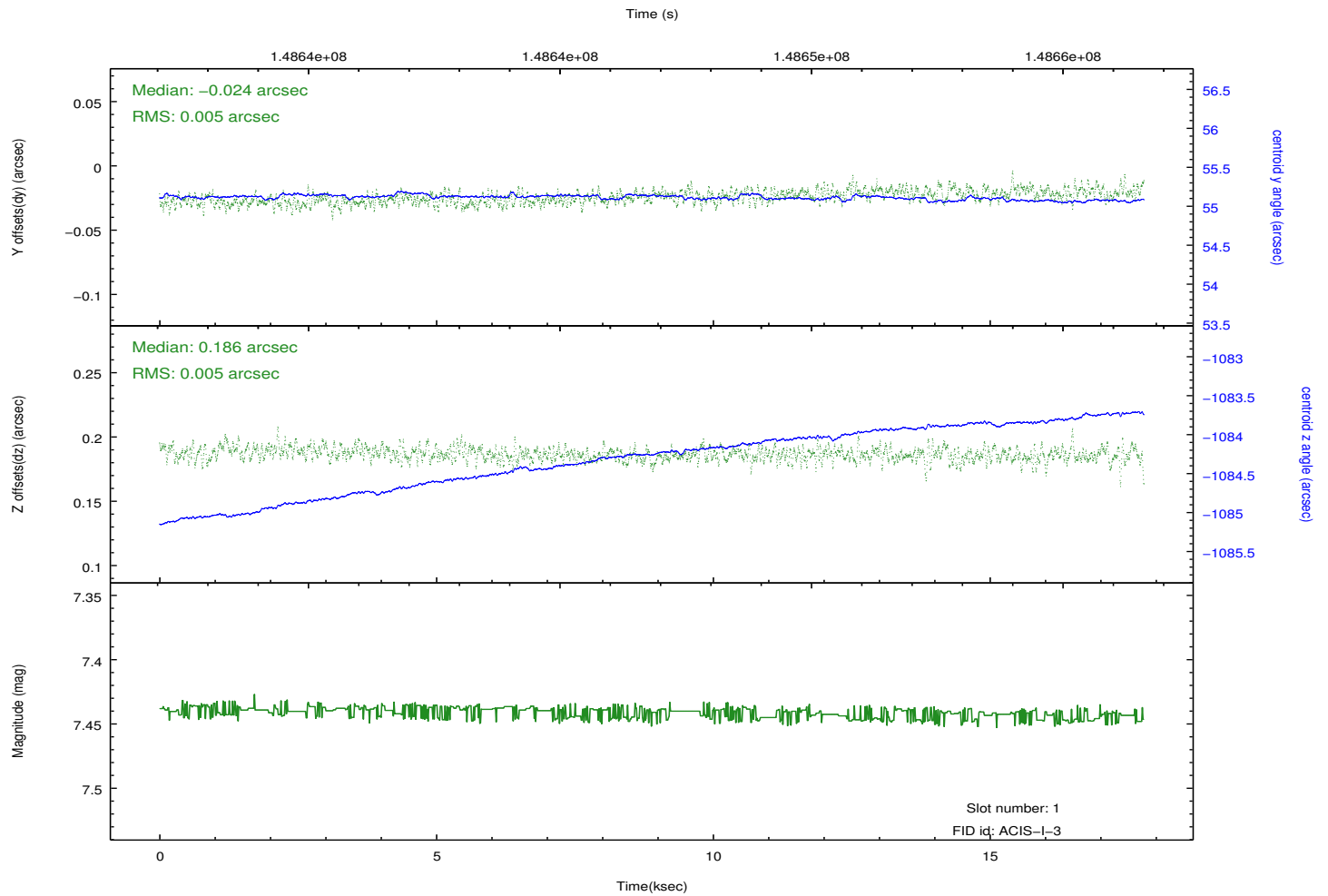
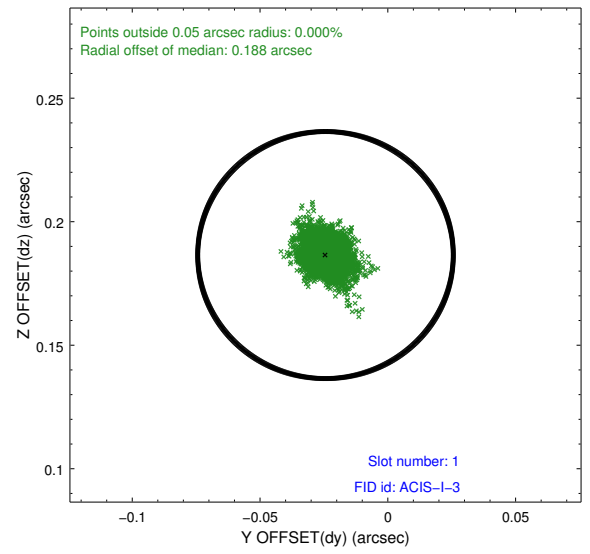
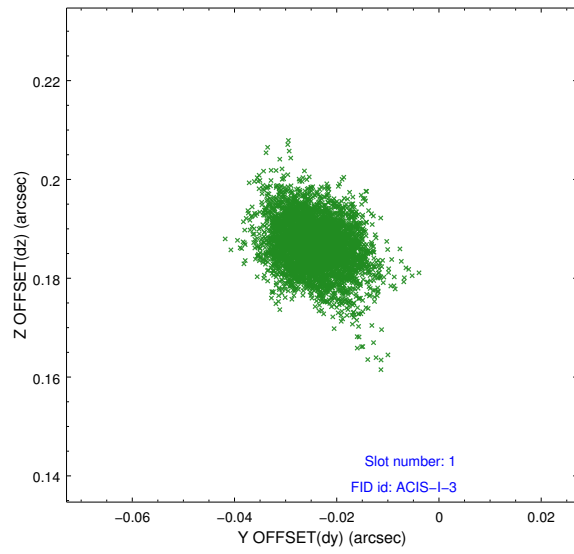


## 2.5 FID Slots

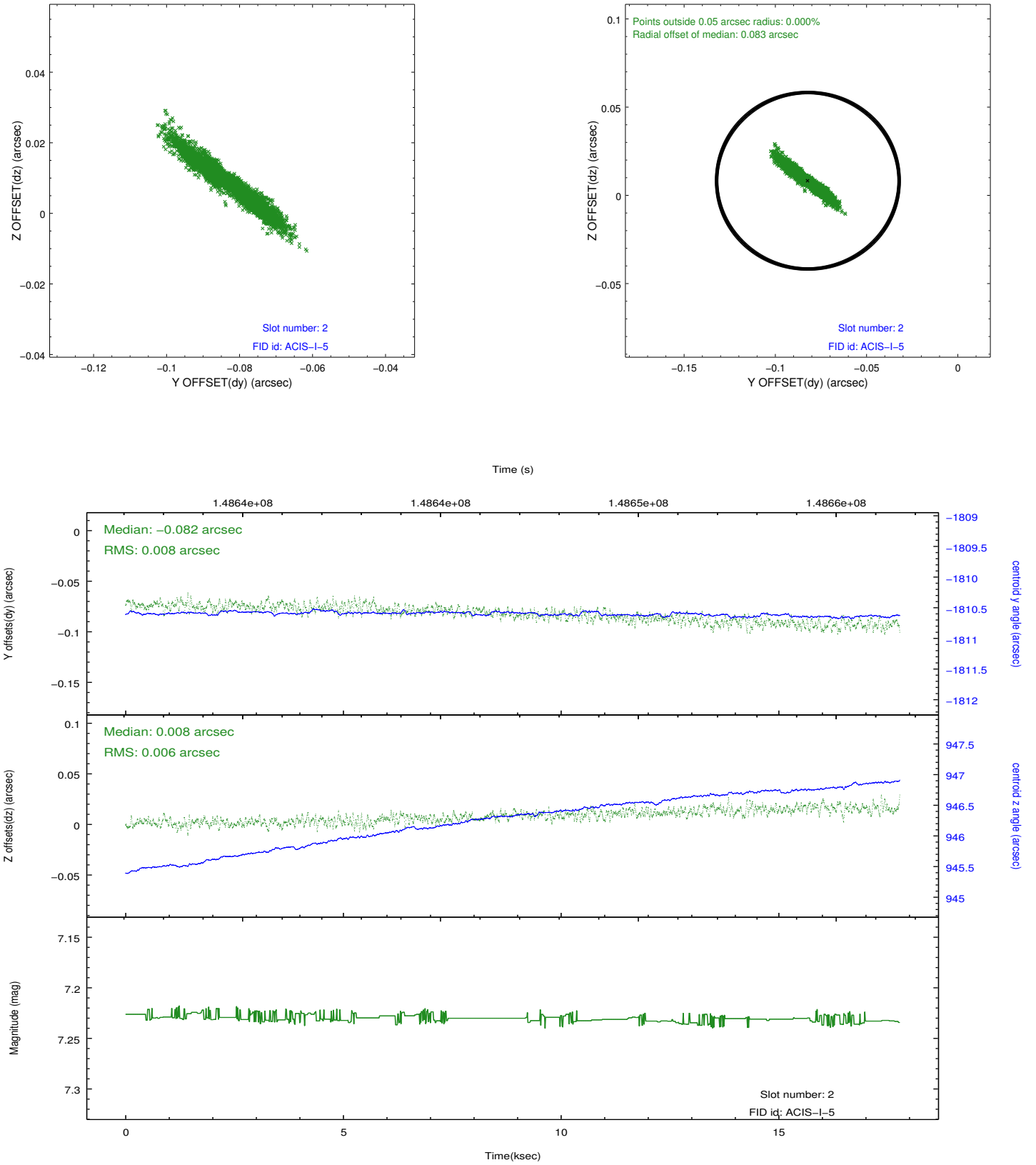
### 2.5.1 Slot 0



## 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)	2012.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.775

### **A.2 Comments**