

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2798 - L2 Version 3  
Chandra X-Ray Center

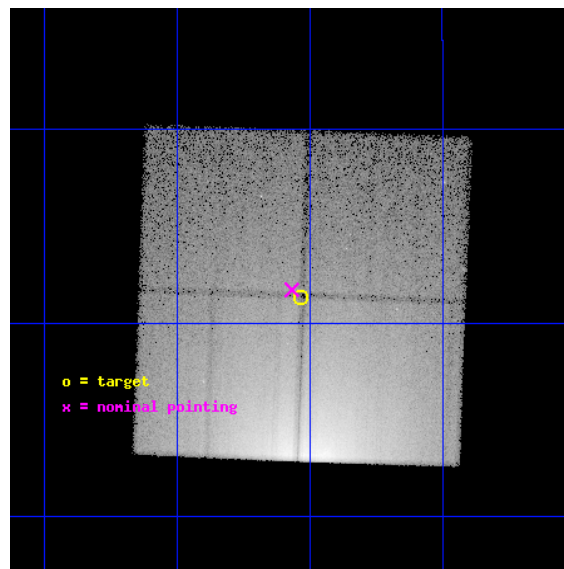
L2 Processing Date : Oct 5 2012

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# 1 Front

seq_num	500248	Sequence number
obs_id	2798	Observation id
title	SEARCH FOR THE OUTER SHELL OF THE CRAB NEBULA	Proposal title
observer	Frederick Seward	Principal investigator
object	CRAB NEBULA HALO	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.633333	Observer's specified target RA [deg]
dec_targ	22.189444	Observer's specified target Dec [deg]
ra_nom	83.641970618157	Nominal RA [deg]
dec_nom	22.195397703386	Nominal Dec [deg]
roll_nom	272.12814819927	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20244.807130635	Sum of GTIs [s]
liveltime	19980.293821463	Livetime [s]
ontime0	20244.684010625	Sum of GTIs [s]
ontime1	20244.725050628	Sum of GTIs [s]
ontime2	20244.766090631	Sum of GTIs [s]
ontime3	20244.807130635	Sum of GTIs [s]
l2events	836672	Number of level 2 events

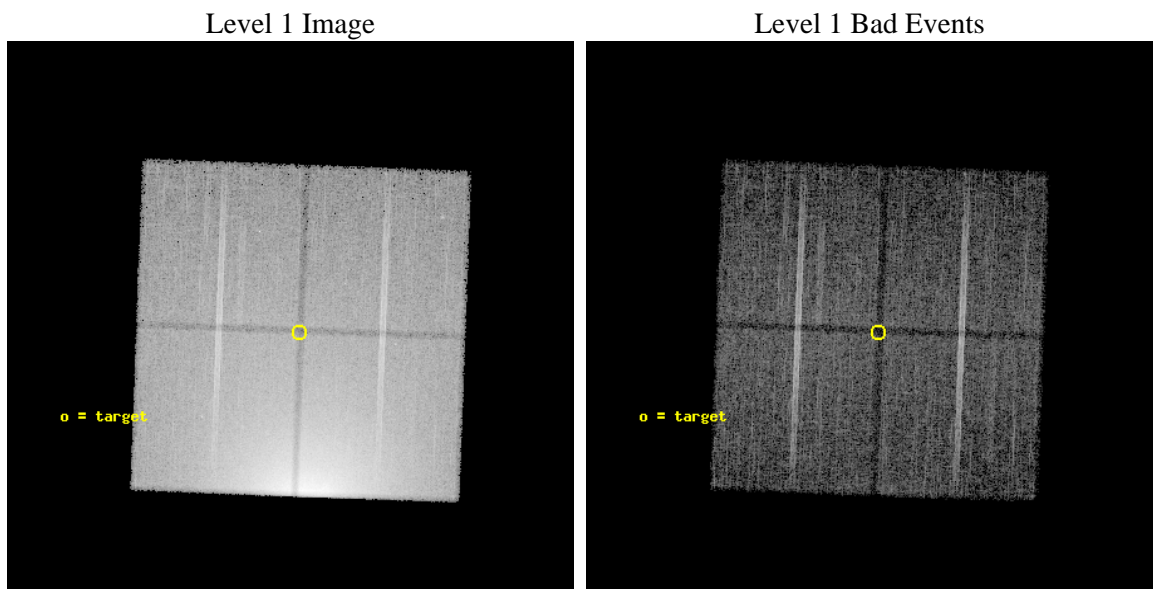




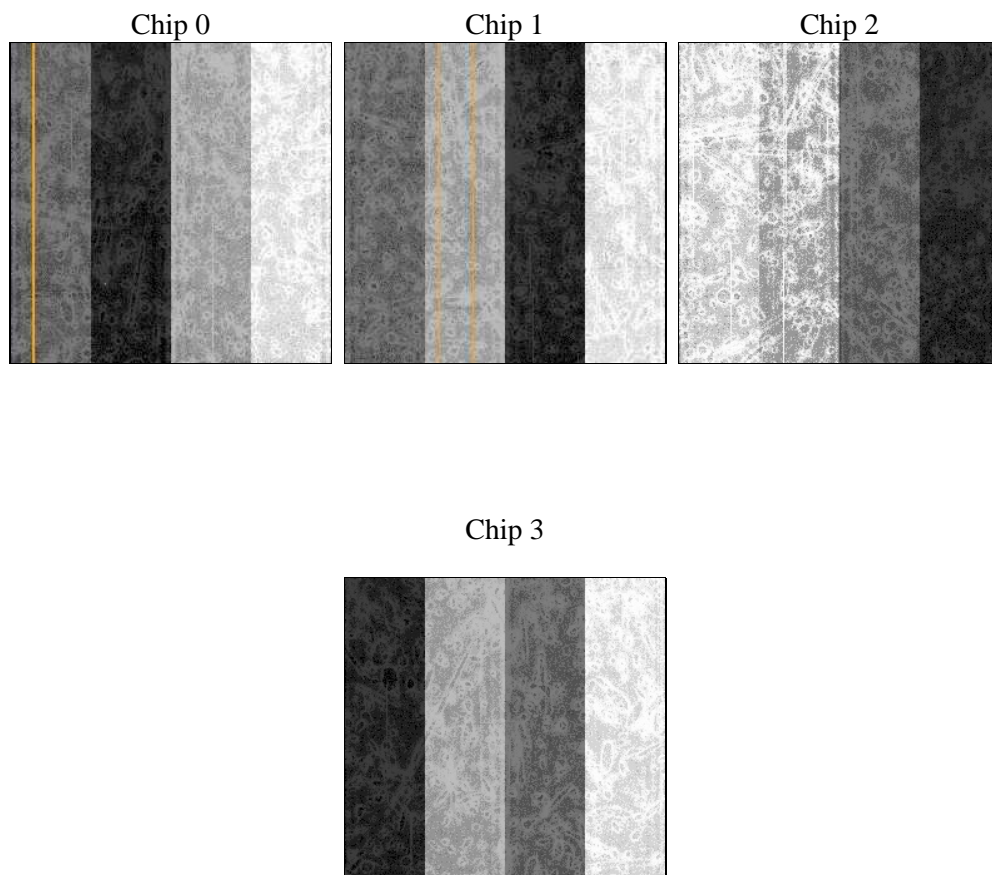
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20244.807130635	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	20244.684010625	Sum of GTIs [s]
date	2012-10-05T14:32:59	Date and time of file creation	ontime1	20244.725050628	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	20244.766090631	Sum of GTIs [s]
			ontime3	20244.807130635	Sum of GTIs [s]
			l1events	1360306	Number of level 1 events

### 2.1.4 Events

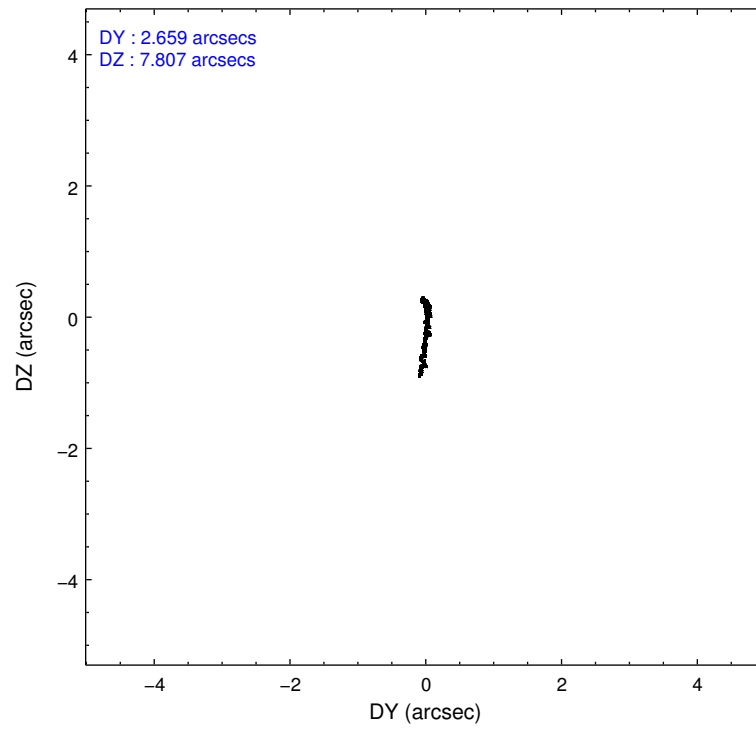
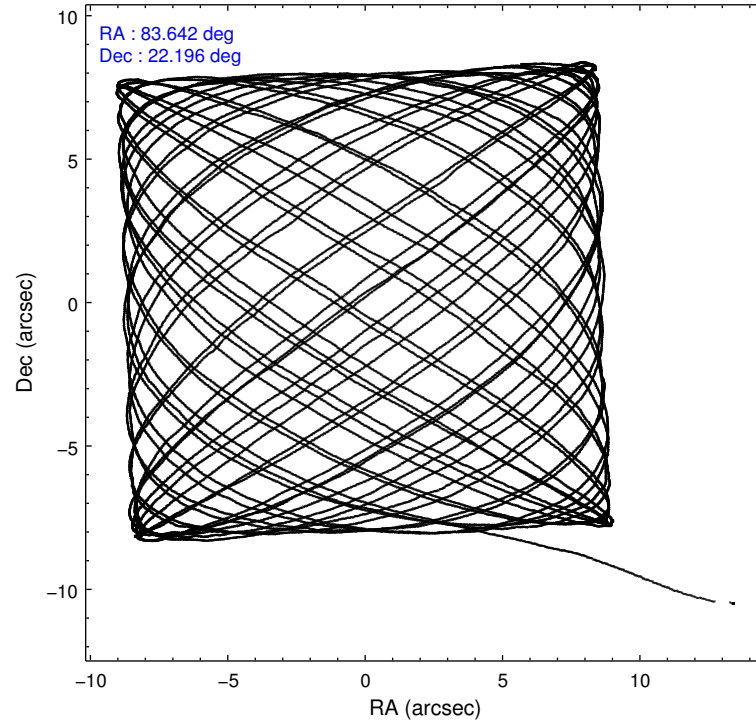
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	548969	172928	458639	179770
rejected events	112151	107223	120966	117844
rejected %	20%	62%	26%	65%

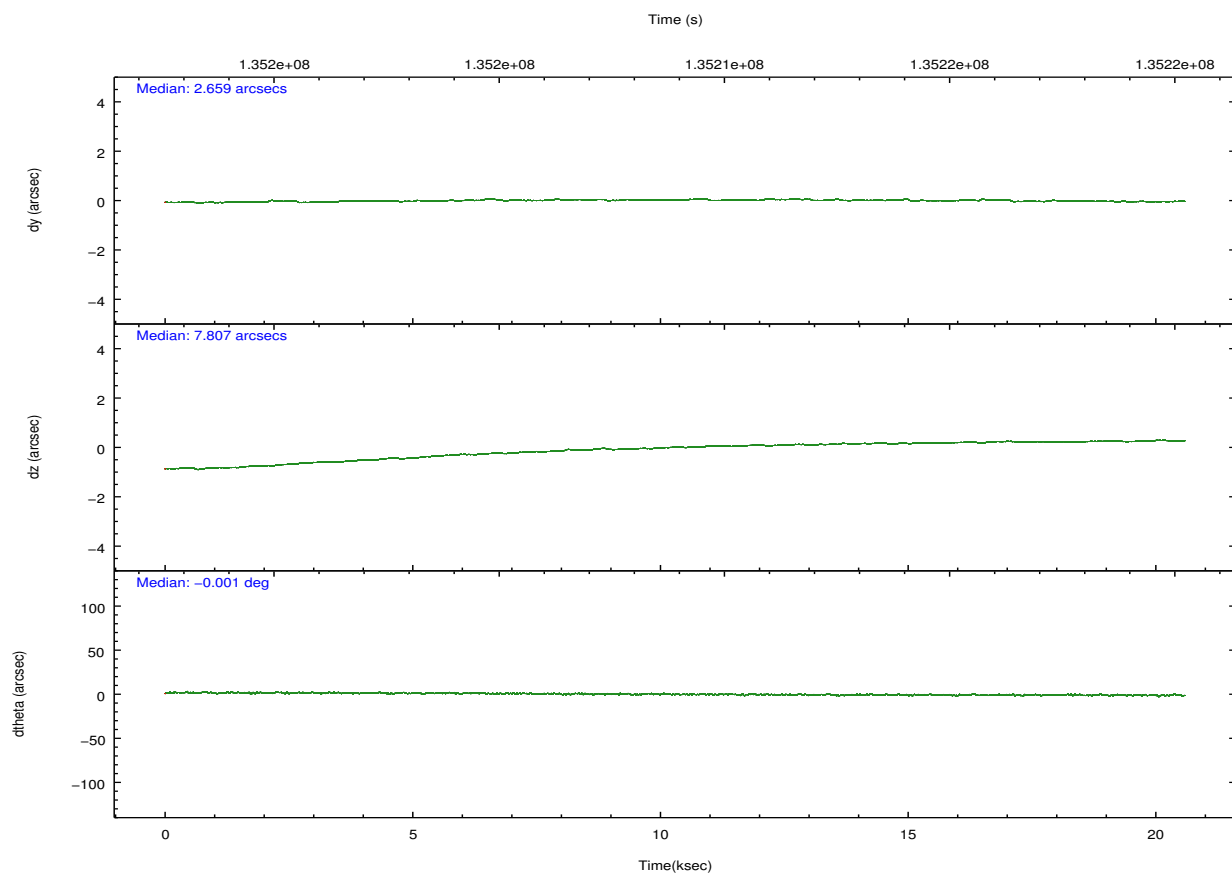
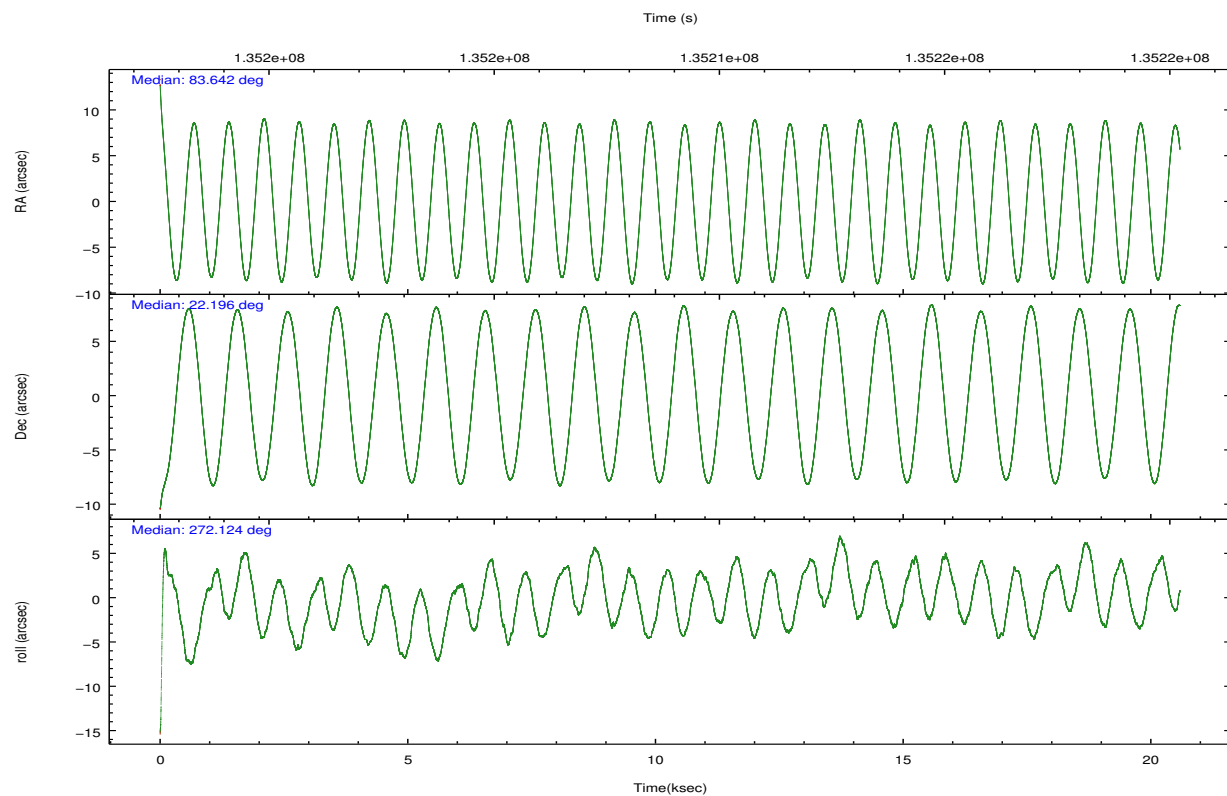
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	350777	47459	271177	45165
	63%	27%	59%	25%
grade 1 events	1402	208	1042	214
	0%	0%	0%	0%
grade 2 events	45203	8055	35181	7570
	8%	4%	7%	4%
grade 3 events	14227	2965	10858	2745
	2%	1%	2%	1%
grade 4 events	14102	3019	10659	2662
	2%	1%	2%	1%
grade 5 events	6116	5454	5611	5438
	1%	3%	1%	3%
grade 6 events	12638	4225	9896	3800
	2%	2%	2%	2%
grade 7 events	104504	101543	114215	112176
	19%	58%	24%	62%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	83.626157	83.64197061815653	Subarray requested	NONE	NONE
[deg] Pointing Dec	22.218573	22.19539770338602	Alternating exposures requested	N	N
[deg] Pointing Roll	271.925448	272.1281481992712	[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)	135199196.184000	135198038.89914			
Observation start date	2002-04-14T19:18:52	2002-04-14T19:00:38			
[s] Observation end time (MET)	135219196.184000	135220053.33754			
Observation end date	2002-04-15T00:52:12	2002-04-15T01:07:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



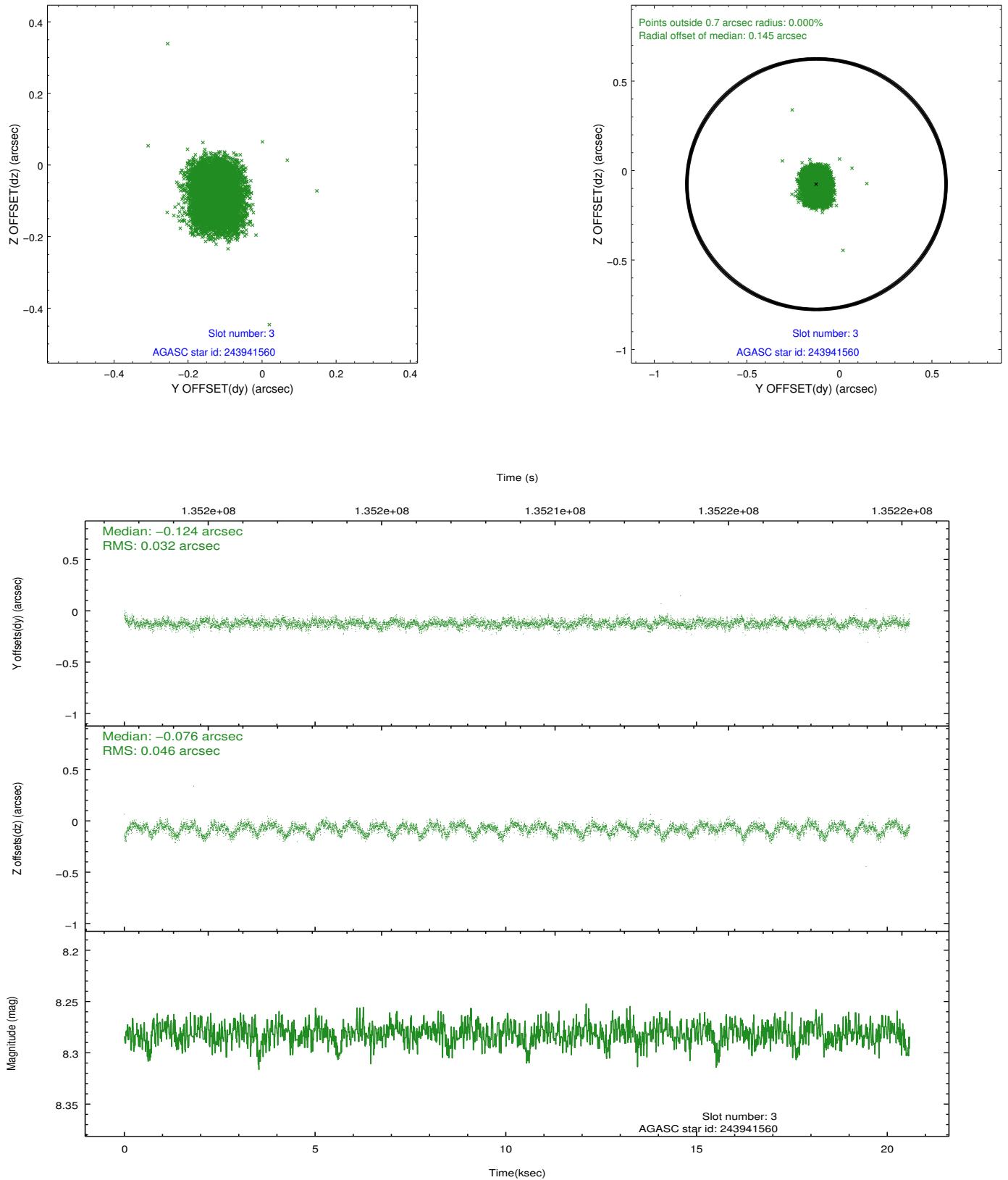


### Slot Statistics

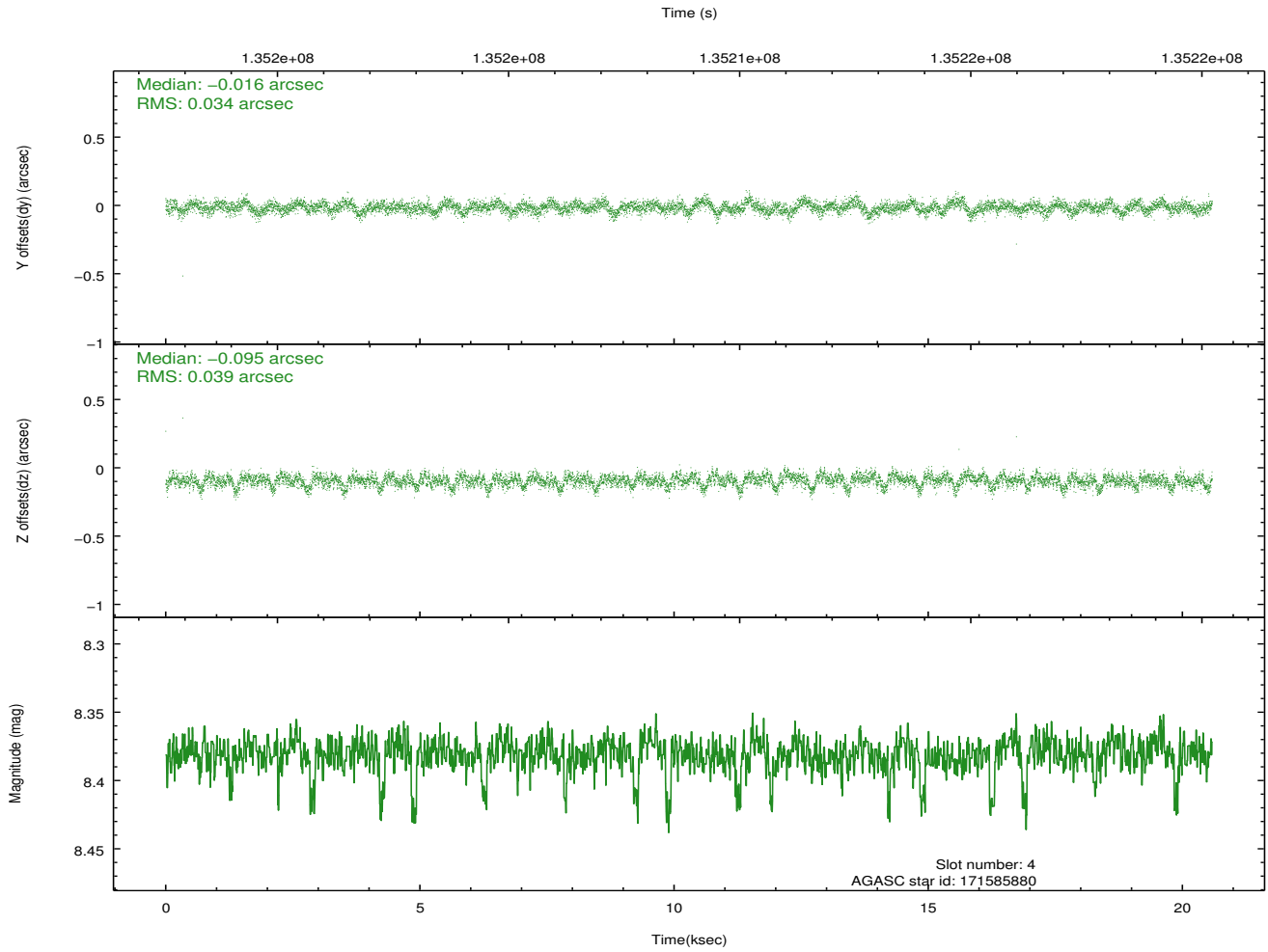
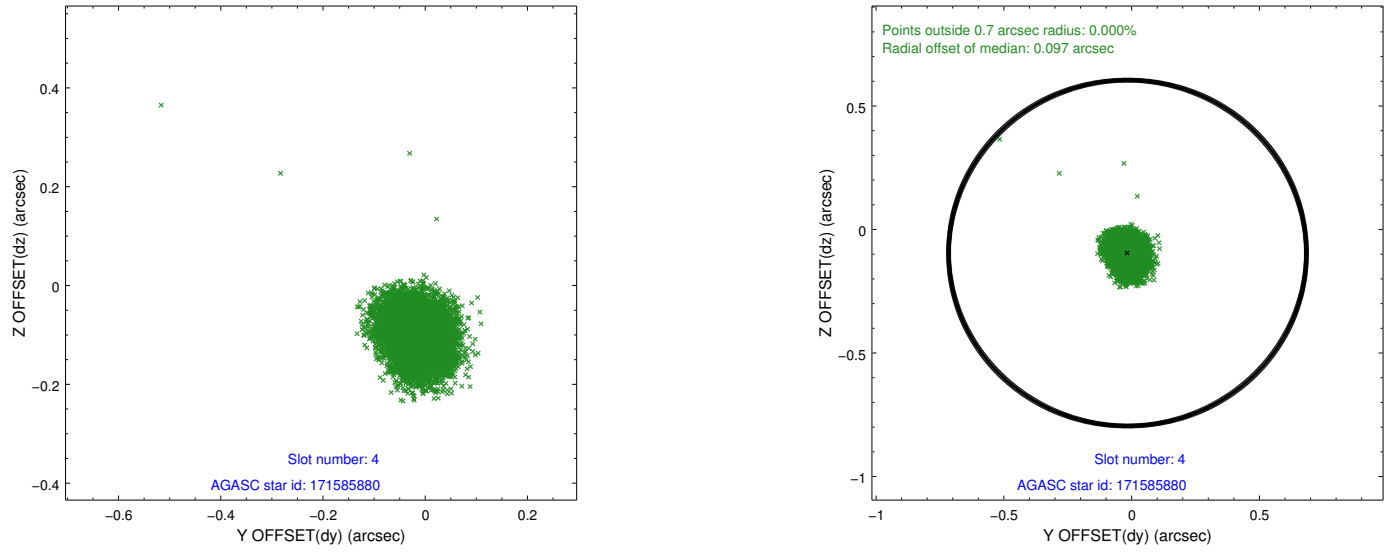
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	5022	-0.009	0.045	0.018	0.031	0.000000	0.000000	937.12	-831.07
1	FID	ACIS-I-5	7.23	5020	-0.045	0.050	0.009	0.016	0.000000	0.000000	-1810.89	1066.39
2	FID	ACIS-I-6	7.26	5022	-0.037	-0.023	0.012	0.025	0.000000	0.000000	402.49	1710.99
3	GUIDE	243941560	8.28	10043	-0.124	-0.076	0.059	0.099	83.733264	22.568598	-1246.69	397.77
4	GUIDE	171585880	8.38	10041	-0.016	-0.095	0.054	0.090	83.676260	22.176319	158.43	161.54
5	GUIDE	171586032	8.93	10041	0.057	-0.002	0.064	0.104	83.950197	22.083225	523.12	1063.84
6	GUIDE	171586792	9.05	10038	0.029	0.038	0.073	0.117	83.501733	22.424168	-752.71	-389.11
7	GUIDE	171721904	9.21	10034	0.051	0.143	0.110	0.172	84.272676	22.116922	434.41	2142.74

## 2.4 Star Slots

### 2.4.1 Slot 3

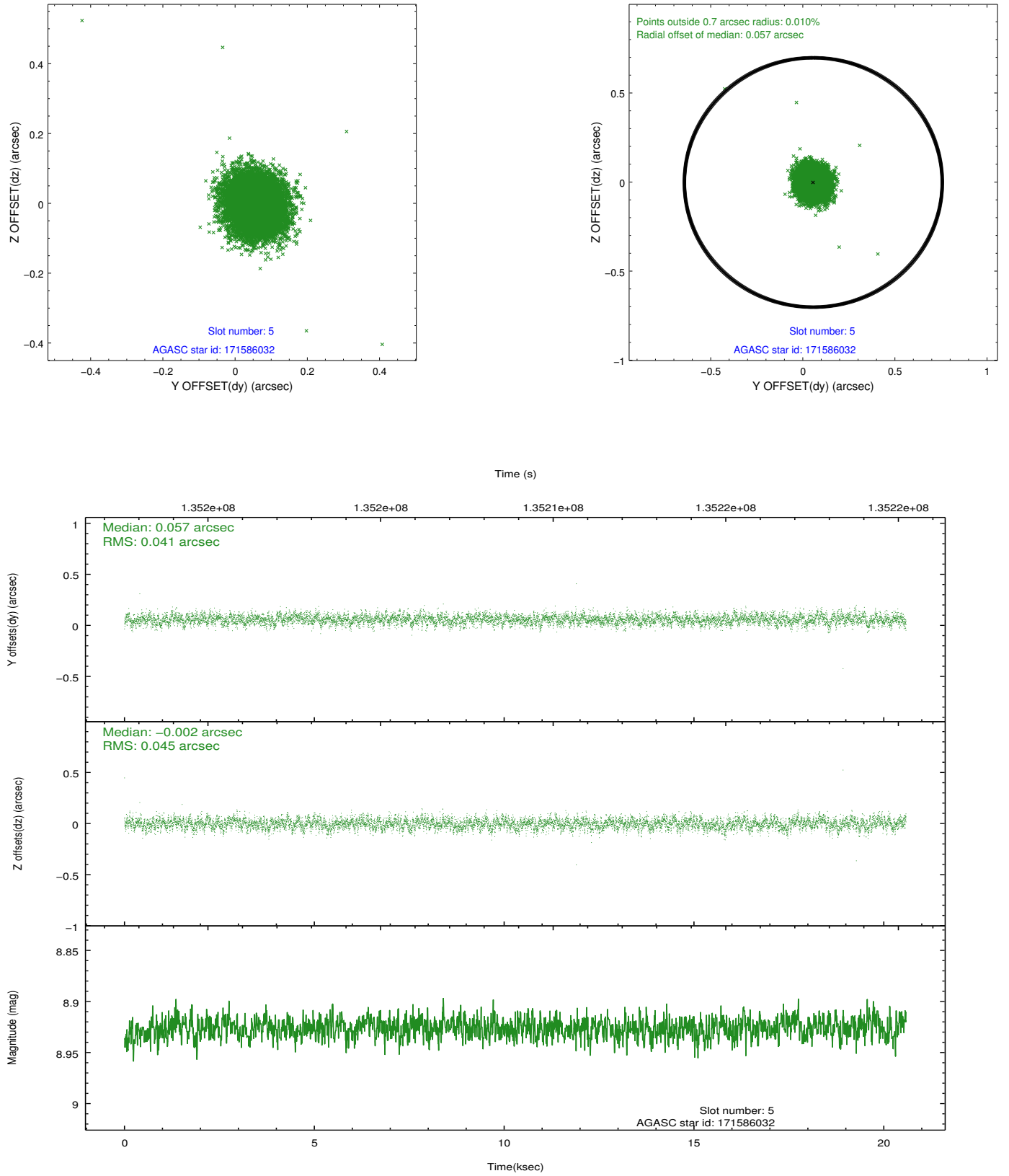


## 2.4.2 Slot 4

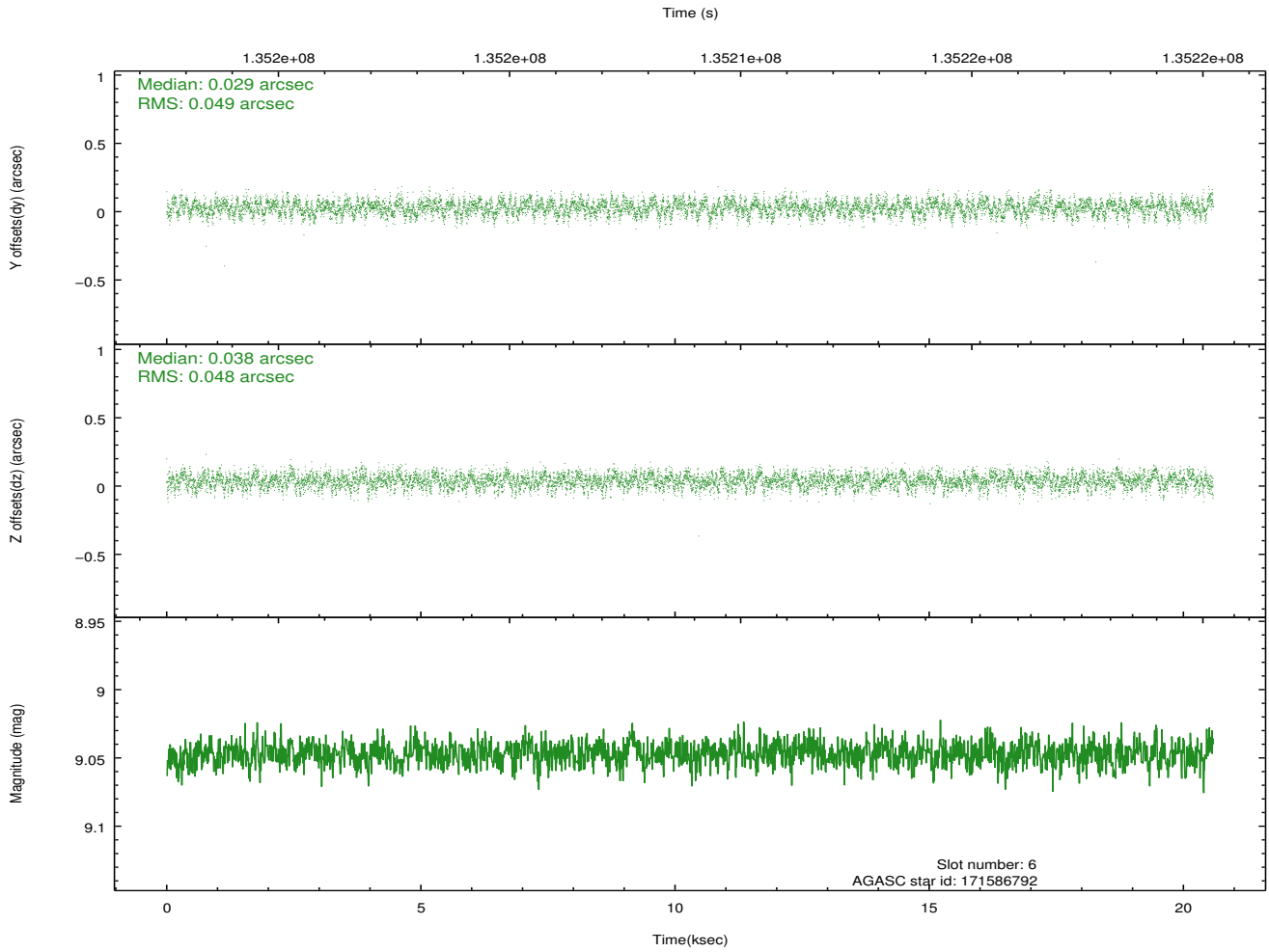
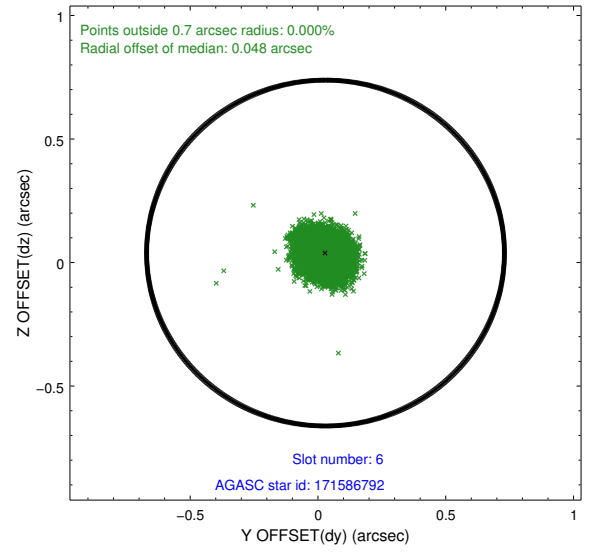
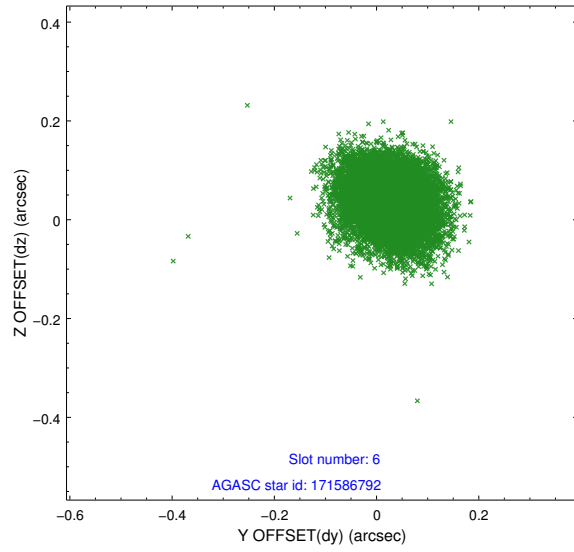




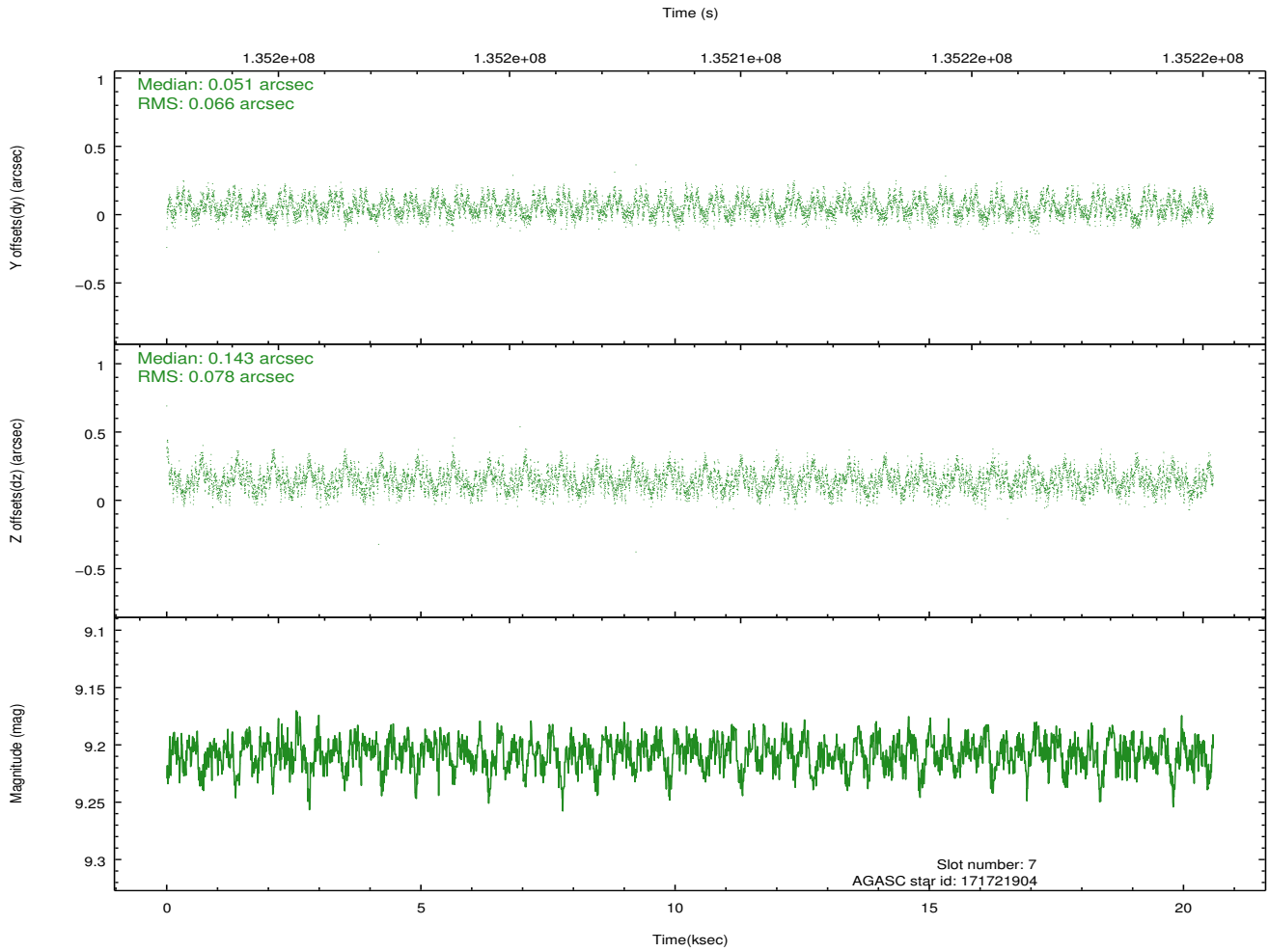
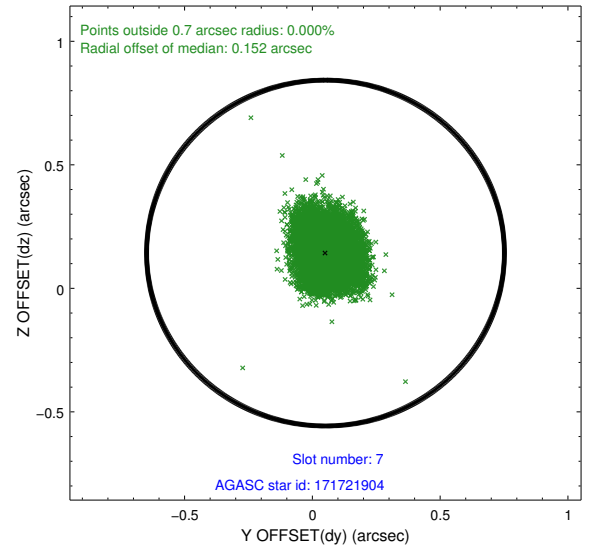
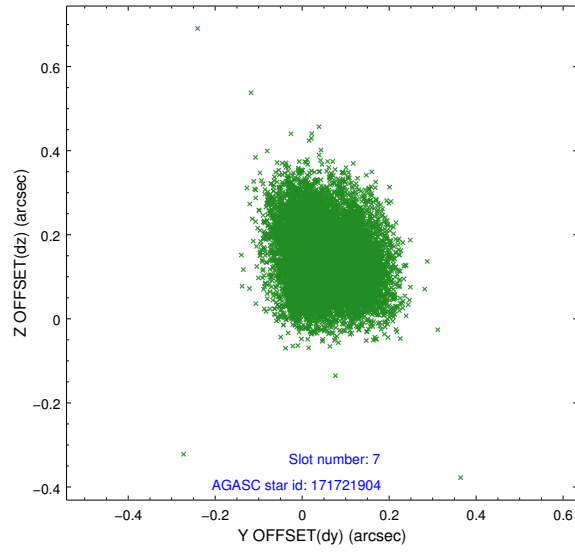
### 2.4.3 Slot 5



## 2.4.4 Slot 6

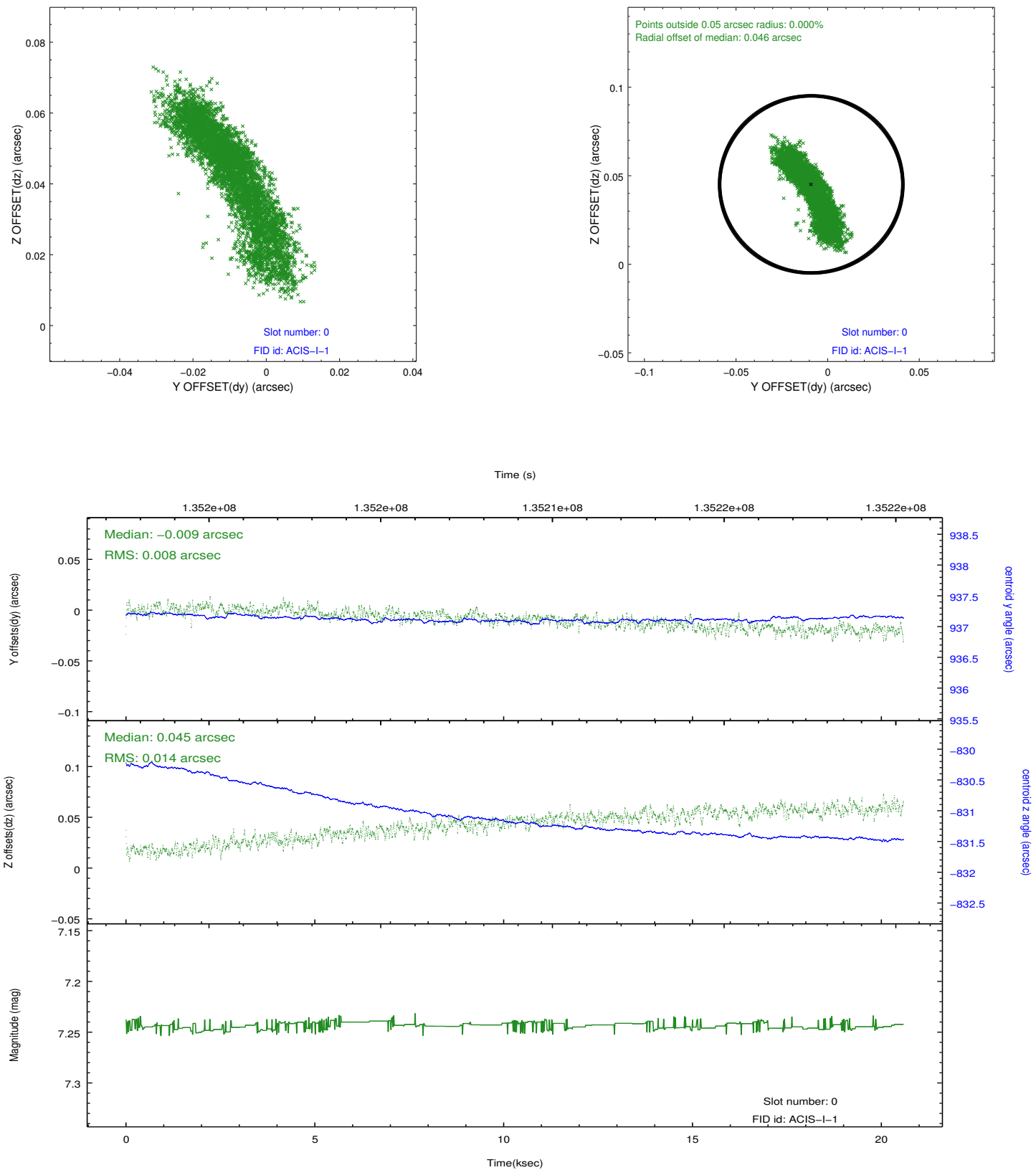


## 2.4.5 Slot 7

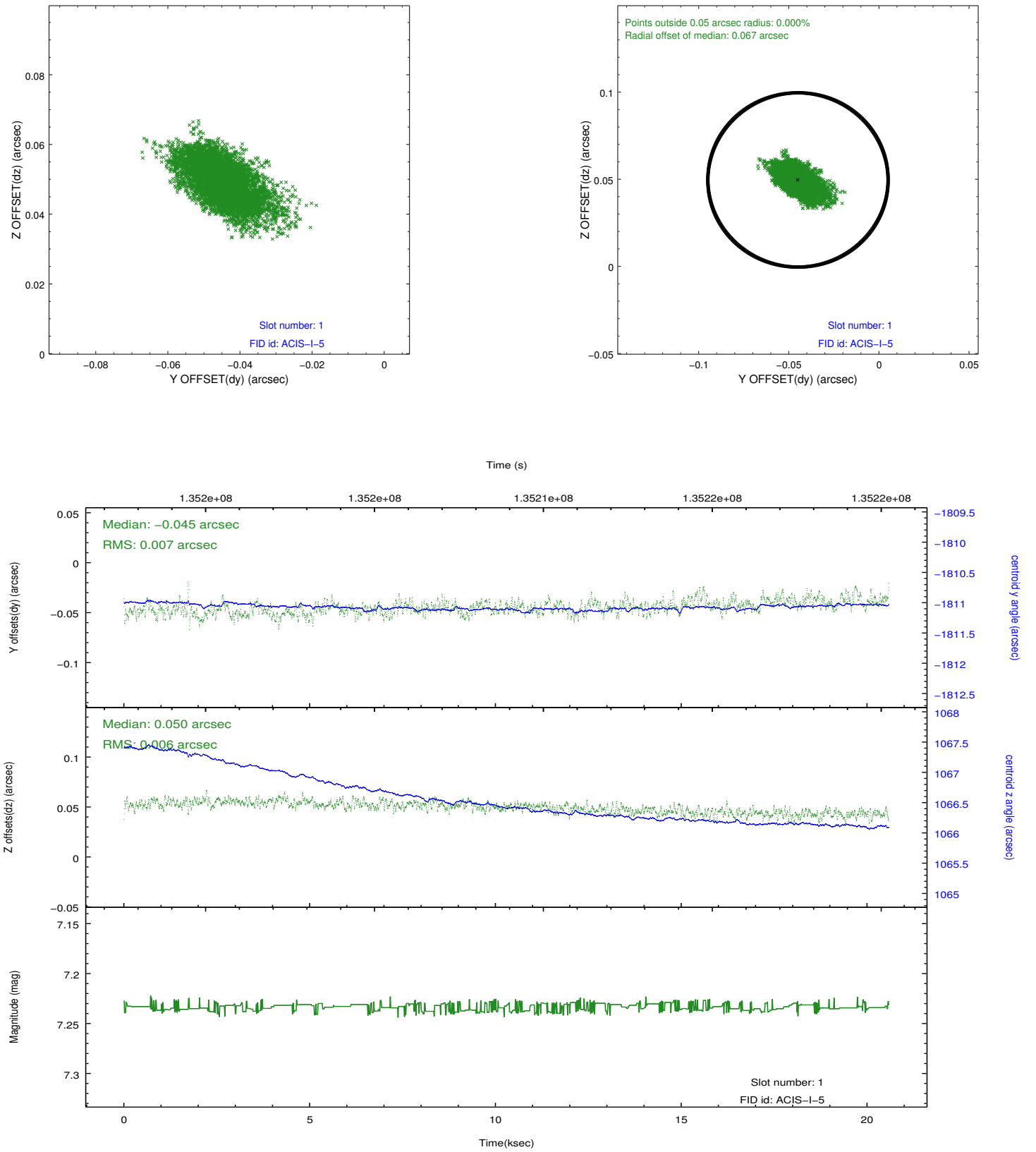


## 2.5 FID Slots

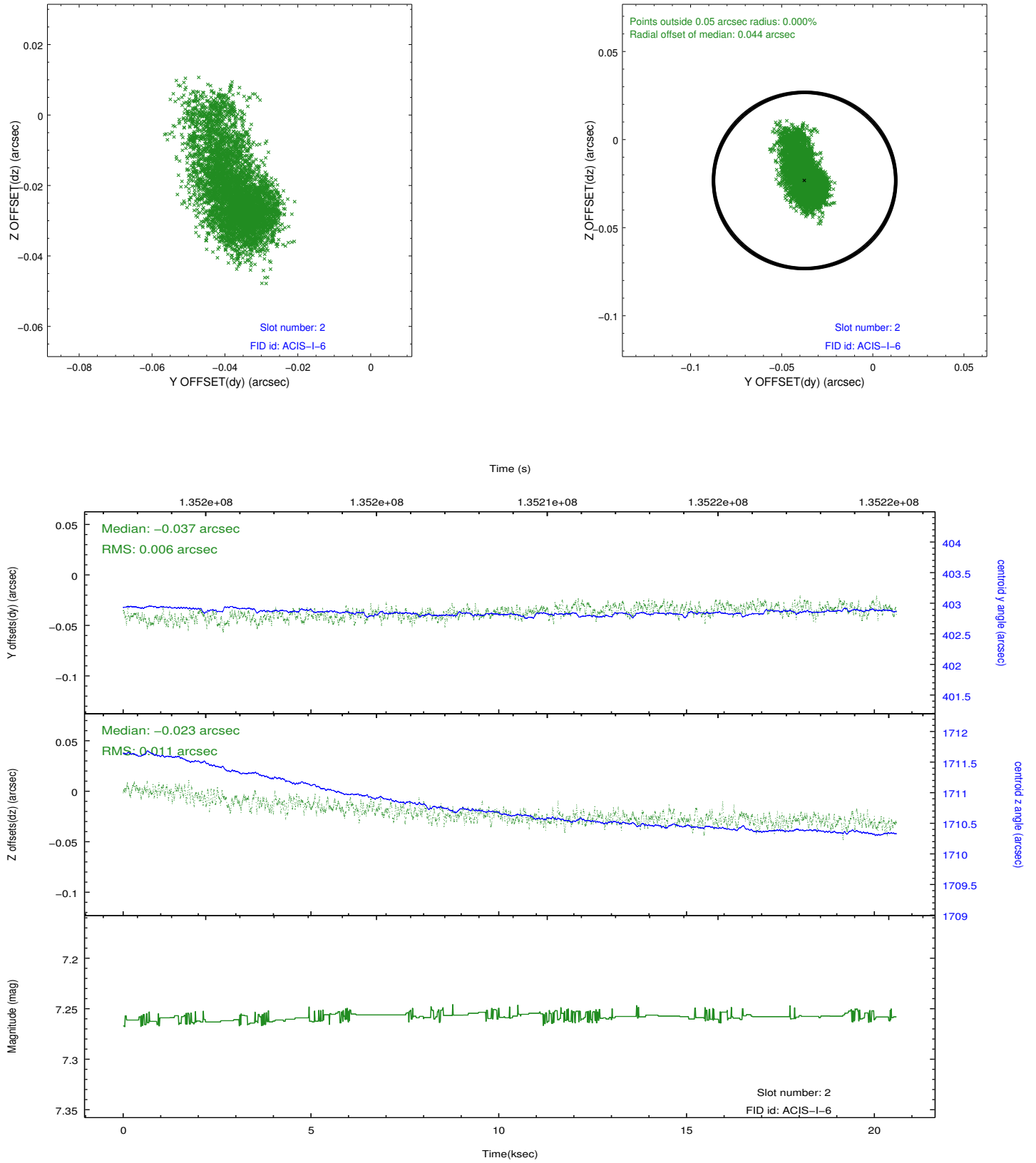
### 2.5.1 Slot 0



## 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)	2012.10.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.246

### A.2 Comments