

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2820 - L2 Version 3  
Chandra X-Ray Center

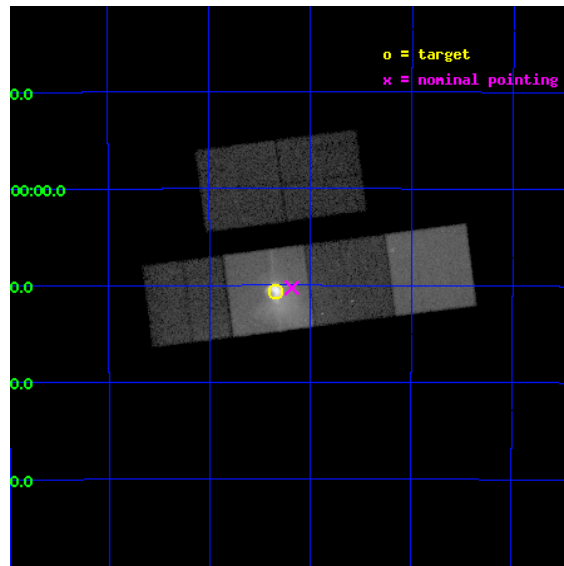
L2 Processing Date : Oct 11 2012

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# 1 Front

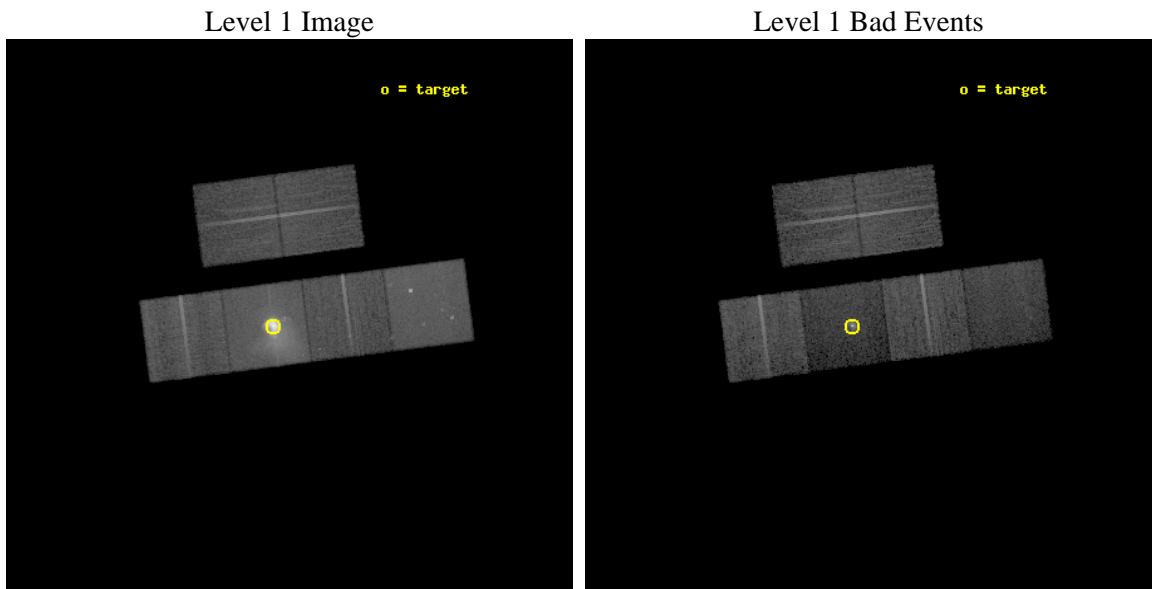
seq_num	500270	Sequence number
obs_id	2820	Observation id
title	THE DYNAMICAL PULSAR-WIND NEBULA IN THE VELA SNR	Proposal title
observer	Dr. George Pavlov	Principal investigator
object	VELA PWN	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	128.83625	Observer's specified target RA [deg]
dec_targ	-45.176667	Observer's specified target Dec [deg]
ra_nom	128.79573064104	Nominal RA [deg]
dec_nom	-45.171210373147	Nominal Dec [deg]
roll_nom	172.63917689605	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19753.599926412	Sum of GTIs [s]
liveltime	19503.467949954	Livetime [s]
ontime2	19750.359065831	Sum of GTIs [s]
ontime3	19750.35893622	Sum of GTIs [s]
ontime5	19753.599926412	Sum of GTIs [s]
ontime6	19753.599926412	Sum of GTIs [s]
ontime7	19753.599926412	Sum of GTIs [s]
ontime8	19750.359065801	Sum of GTIs [s]
l2events	533837	Number of level 2 events



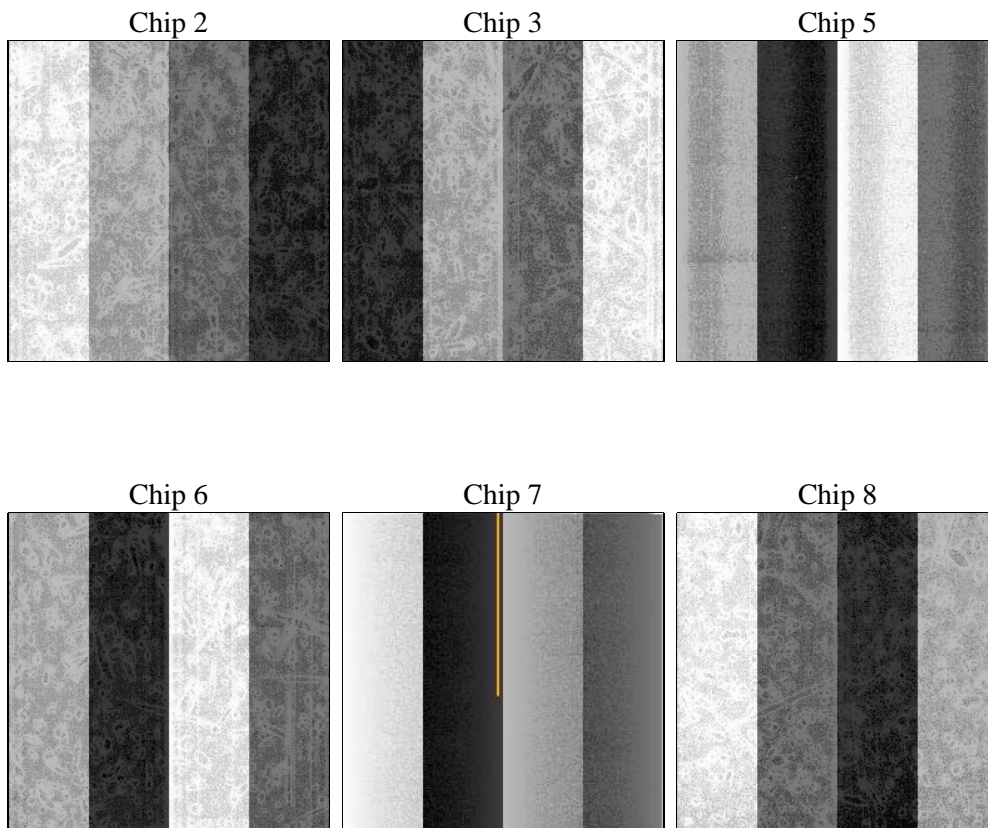
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19629.648000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19753.599926412	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	19750.359065831	Sum of GTIs [s]
date	2012-10-11T21:41:20	Date and time of file creation	ontime3	19750.35893622	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	19753.599926412	Sum of GTIs [s]
			ontime6	19753.599926412	Sum of GTIs [s]
			ontime7	19753.599926412	Sum of GTIs [s]
			ontime8	19750.359065801	Sum of GTIs [s]
			l1events	1025276	Number of level 1 events

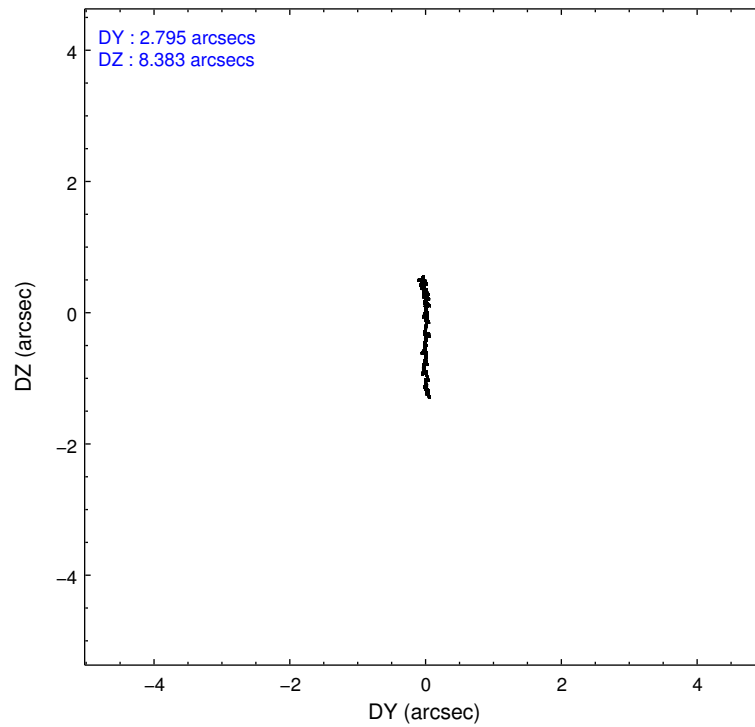
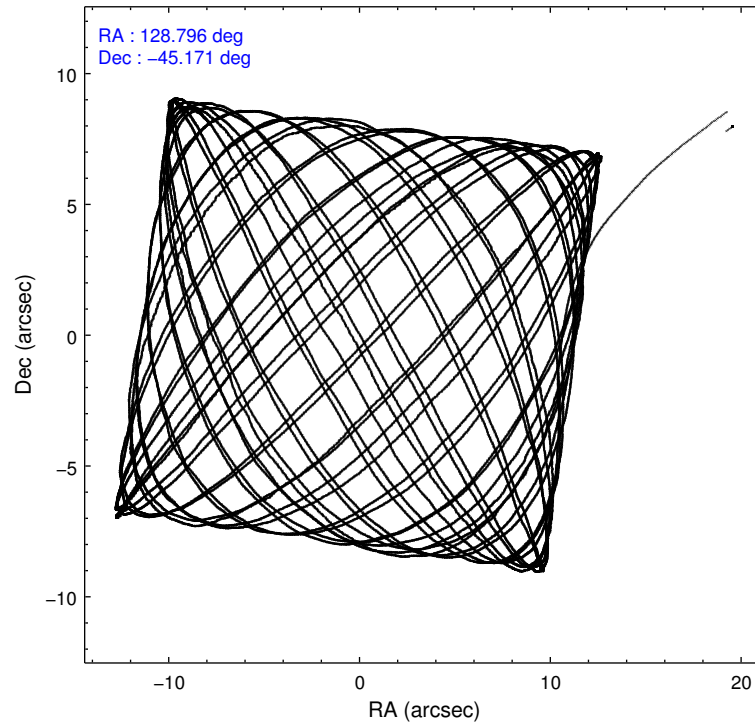
### 2.1.4 Events

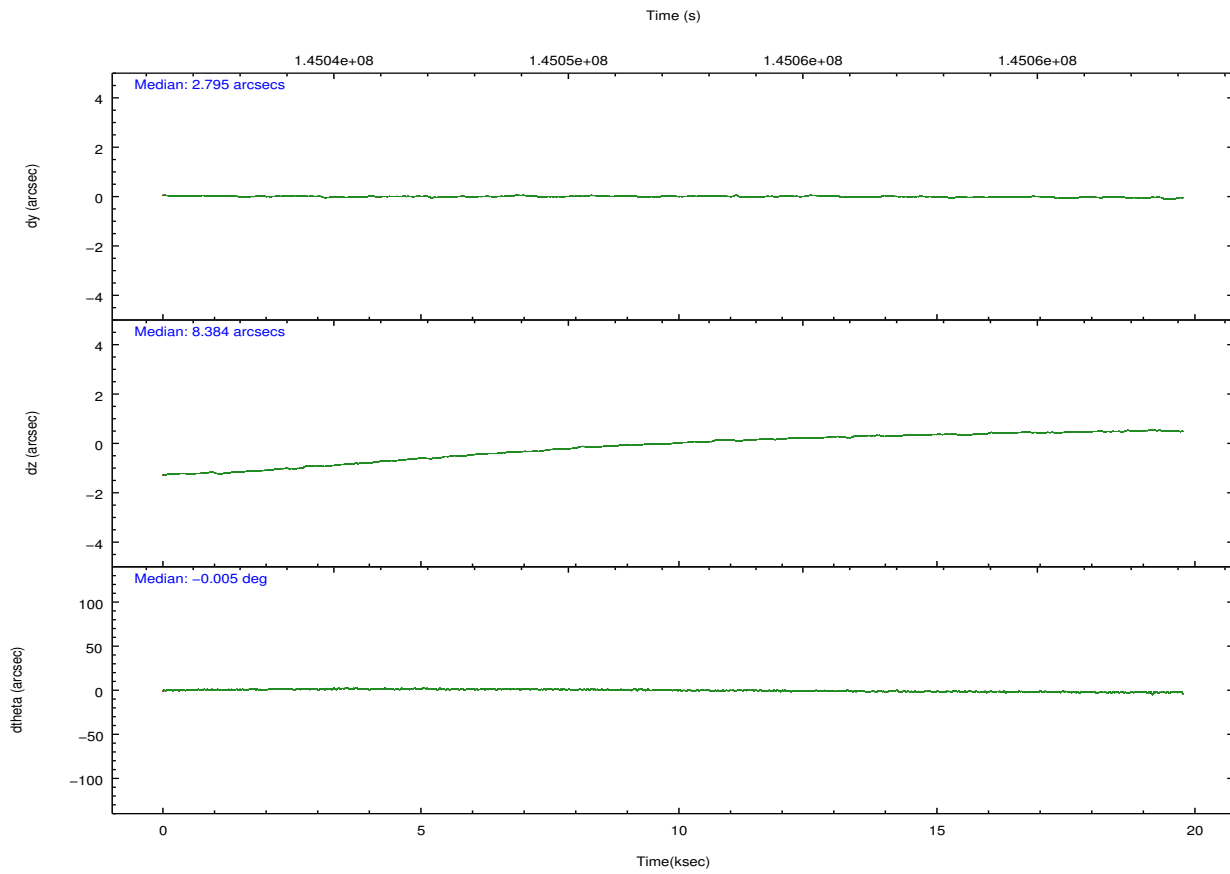
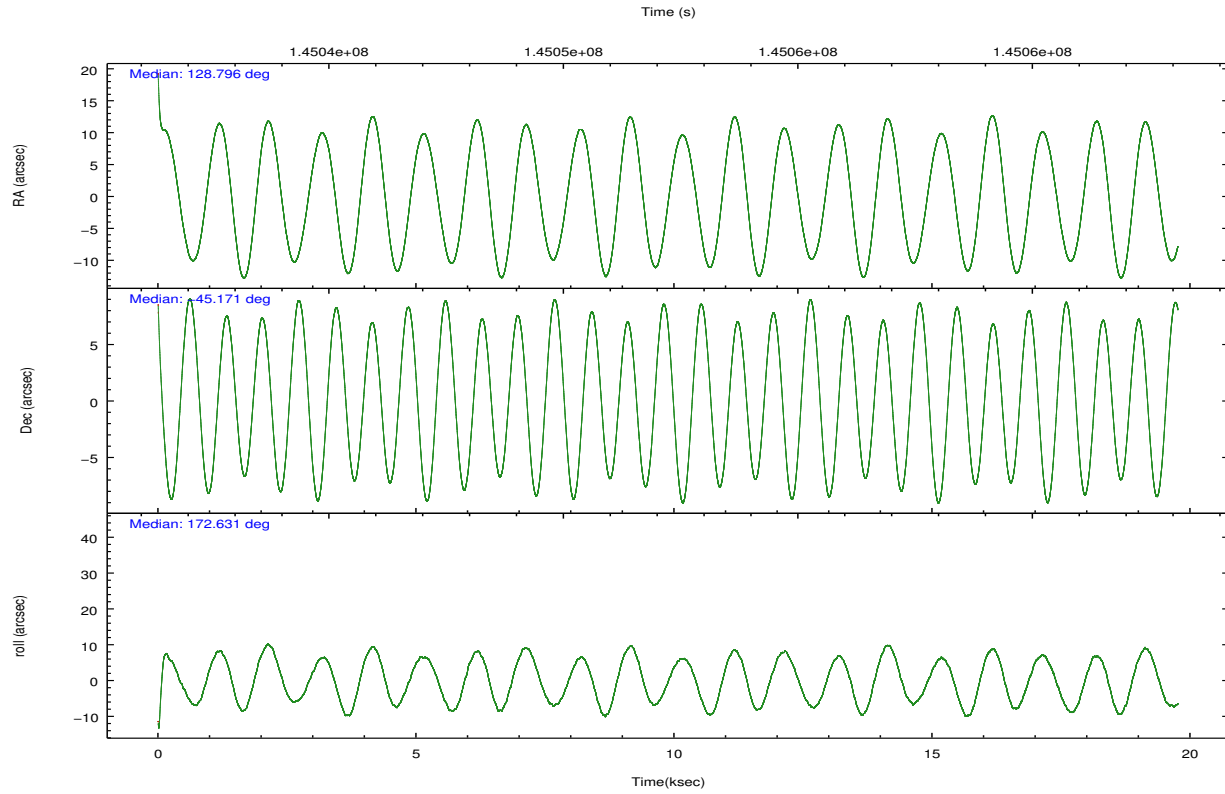
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	108688	103440	158245	119153	403377	132373	grade 0 events	13986	15527	34491	23690	108913	23192
rejected events	88026	81493	53597	87006	56869	89441		12%	15%	21%	19%	27%	17%
rejected %	80%	78%	33%	73%	14%	67%	grade 1 events	92	90	237	122	723	112
								0%	0%	0%	0%	0%	0%
							grade 2 events	2901	2595	26955	3682	87334	7457
								2%	2%	17%	3%	21%	5%
							grade 3 events	1291	1226	6395	1559	39105	3359
								1%	1%	4%	1%	9%	2%
							grade 4 events	1248	1187	6153	1525	38325	3138
								1%	1%	3%	1%	9%	2%
							grade 5 events	2677	2972	9760	3221	12432	4469
								2%	2%	6%	2%	3%	3%
							grade 6 events	1743	1765	32454	2253	76942	7206
								1%	1%	20%	1%	19%	5%
							grade 7 events	84750	78078	41800	83101	39603	83440
								77%	75%	26%	69%	9%	63%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	128.831183	128.7957306410433	Subarray requested	NONE	NONE
[deg] Pointing Dec	-45.160401	-45.17121037314718	Alternating exposures requested	N	N
[deg] Pointing Roll	172.507707	172.6391768960457	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	145042489.184000	145041271.12681			
Observation start date	2002-08-06T17:33:45	2002-08-06T17:14:31			
[s] Observation end time (MET)	145062118.184000	145062433.27768			
Observation end date	2002-08-06T23:00:54	2002-08-06T23:07:13			
Read mode	TIMED	TIMED			

## 2.3 Aspect



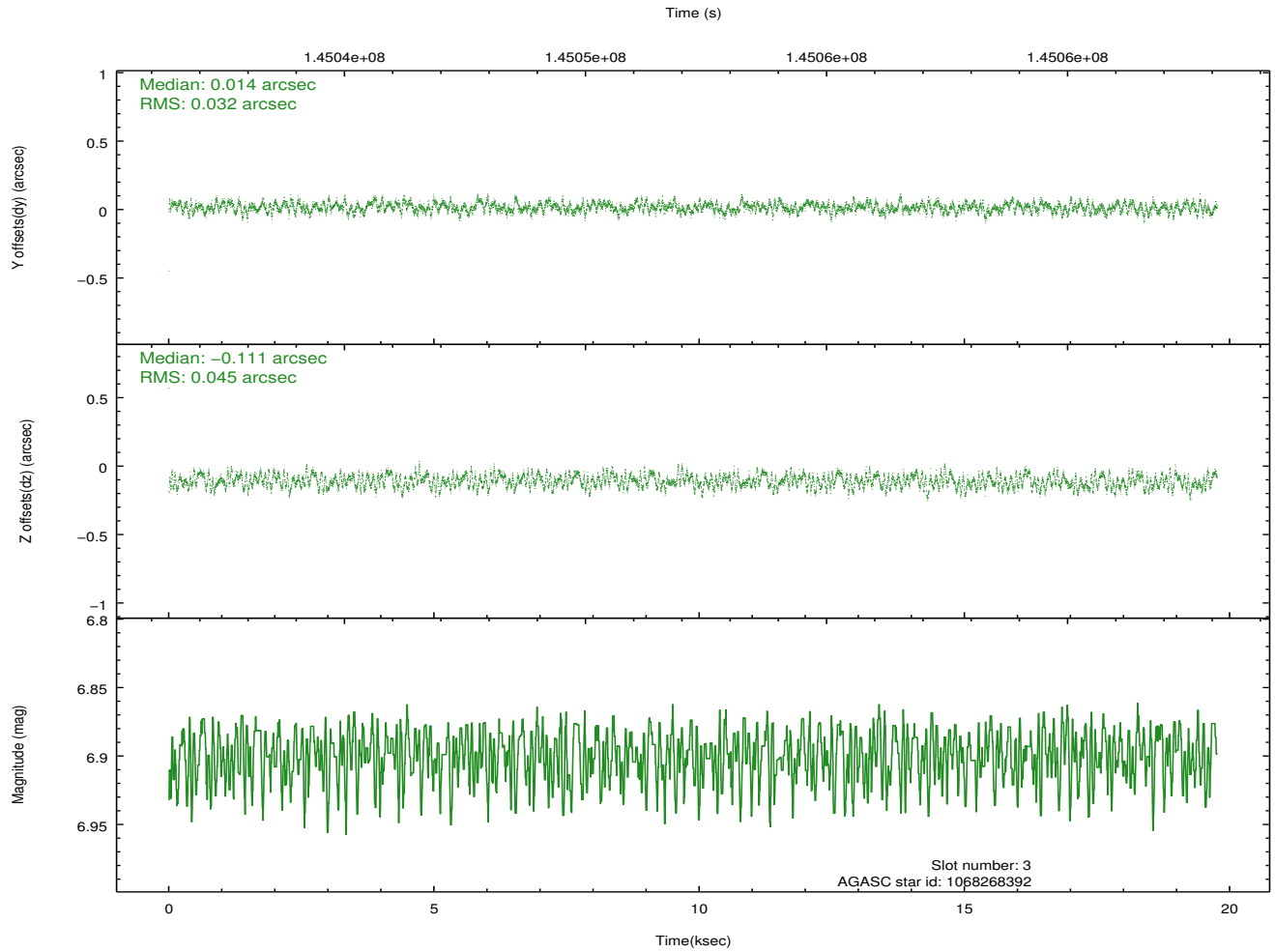
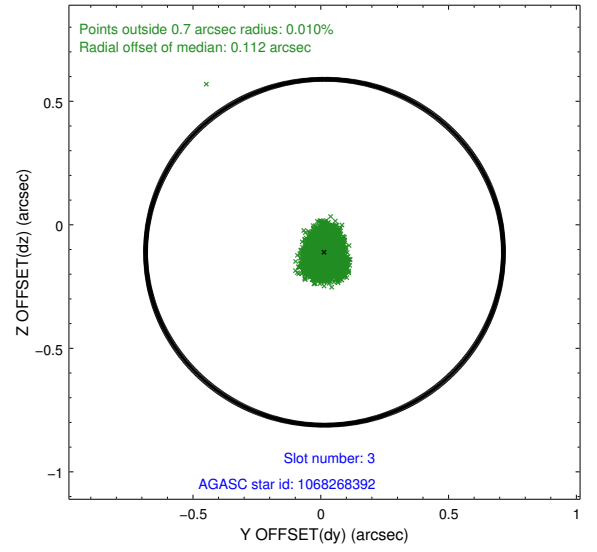
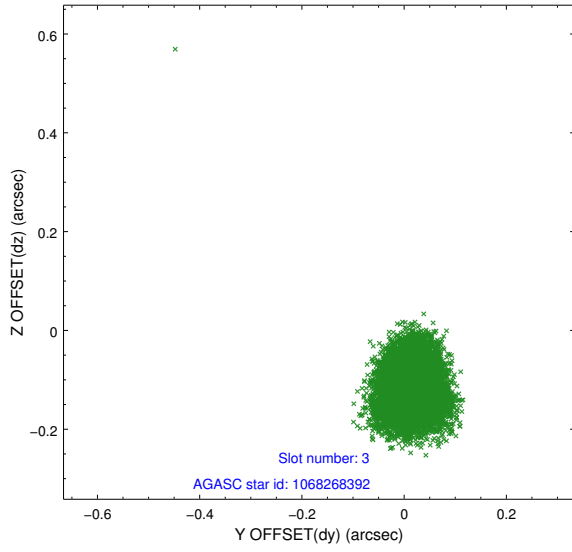


### Slot Statistics

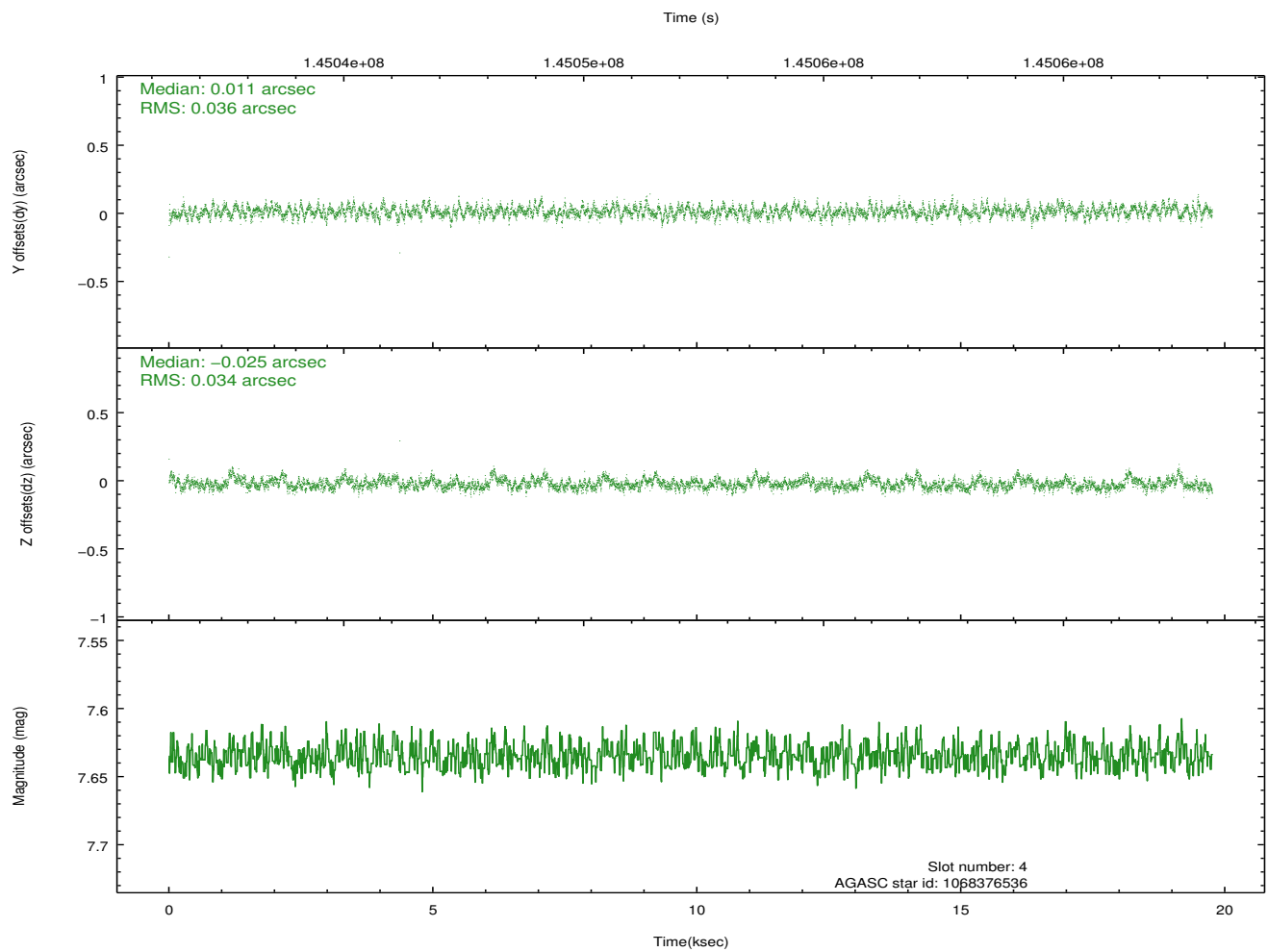
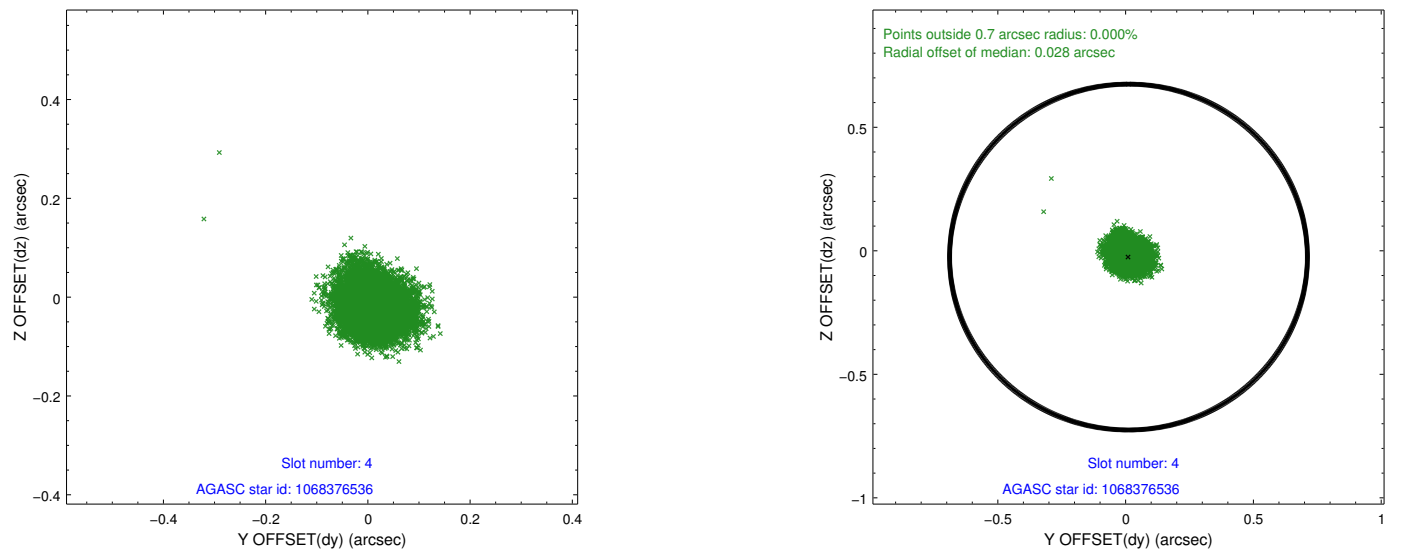
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	4821	0.026	0.005	0.028	0.058	0.000000	0.000000	940.62	-1725.07
1	FID	ACIS-S-5	7.24	4819	-0.010	0.039	0.009	0.015	0.000000	0.000000	-1808.29	172.36
2	FID	ACIS-S-6	7.36	4820	-0.037	-0.034	0.019	0.060	0.000000	0.000000	405.93	816.45
3	GUIDE	1068268392	6.90	9641	0.014	-0.111	0.059	0.092	128.257754	-45.752904	1149.78	2308.34
4	GUIDE	1068376536	7.64	9640	0.011	-0.025	0.052	0.085	129.556408	-45.593502	-2014.99	1316.28
5	GUIDE	1005869048	8.23	9641	-0.125	0.151	0.060	0.099	128.429058	-44.495949	1336.17	-2233.42
6	GUIDE	1005861048	8.41	9636	0.050	0.033	0.078	0.120	128.669106	-44.528323	710.33	-2200.94
7	GUIDE	1068399176	9.09	9635	0.044	-0.047	0.068	0.113	129.539137	-45.338406	-1859.96	409.57

## 2.4 Star Slots

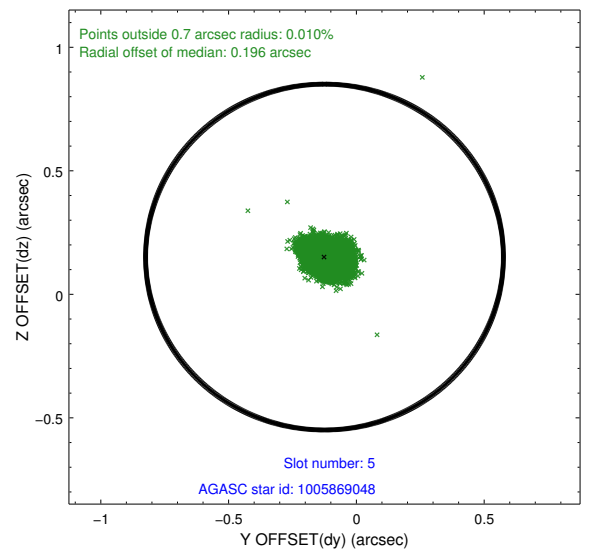
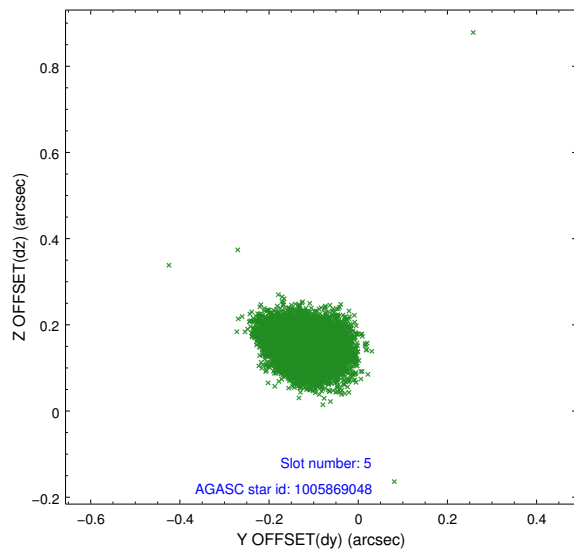
### 2.4.1 Slot 3



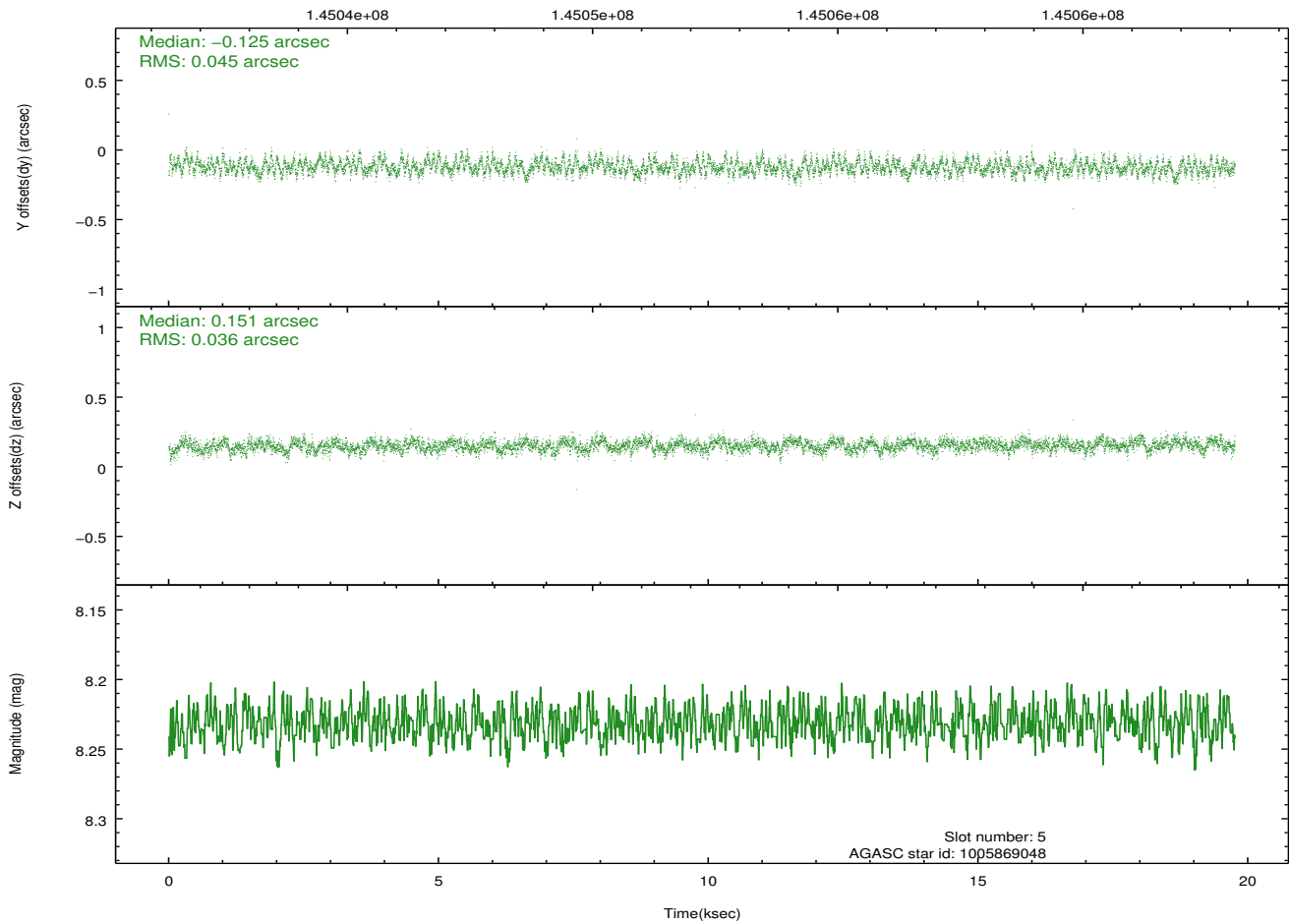
## 2.4.2 Slot 4



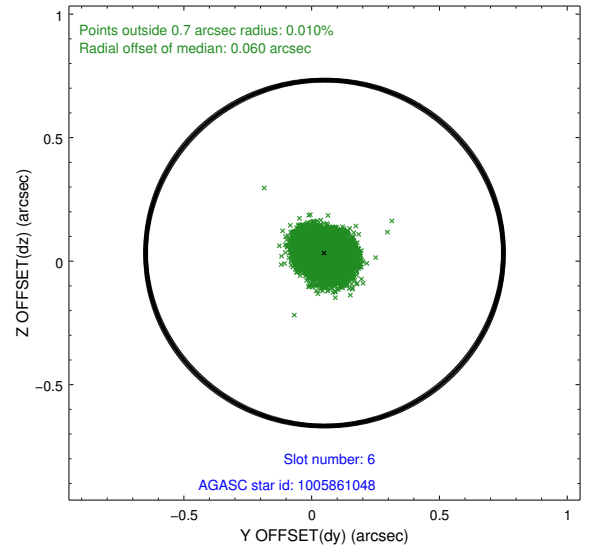
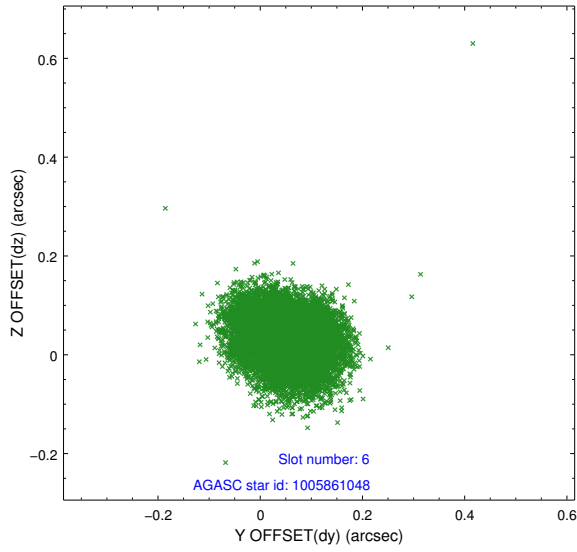
### 2.4.3 Slot 5



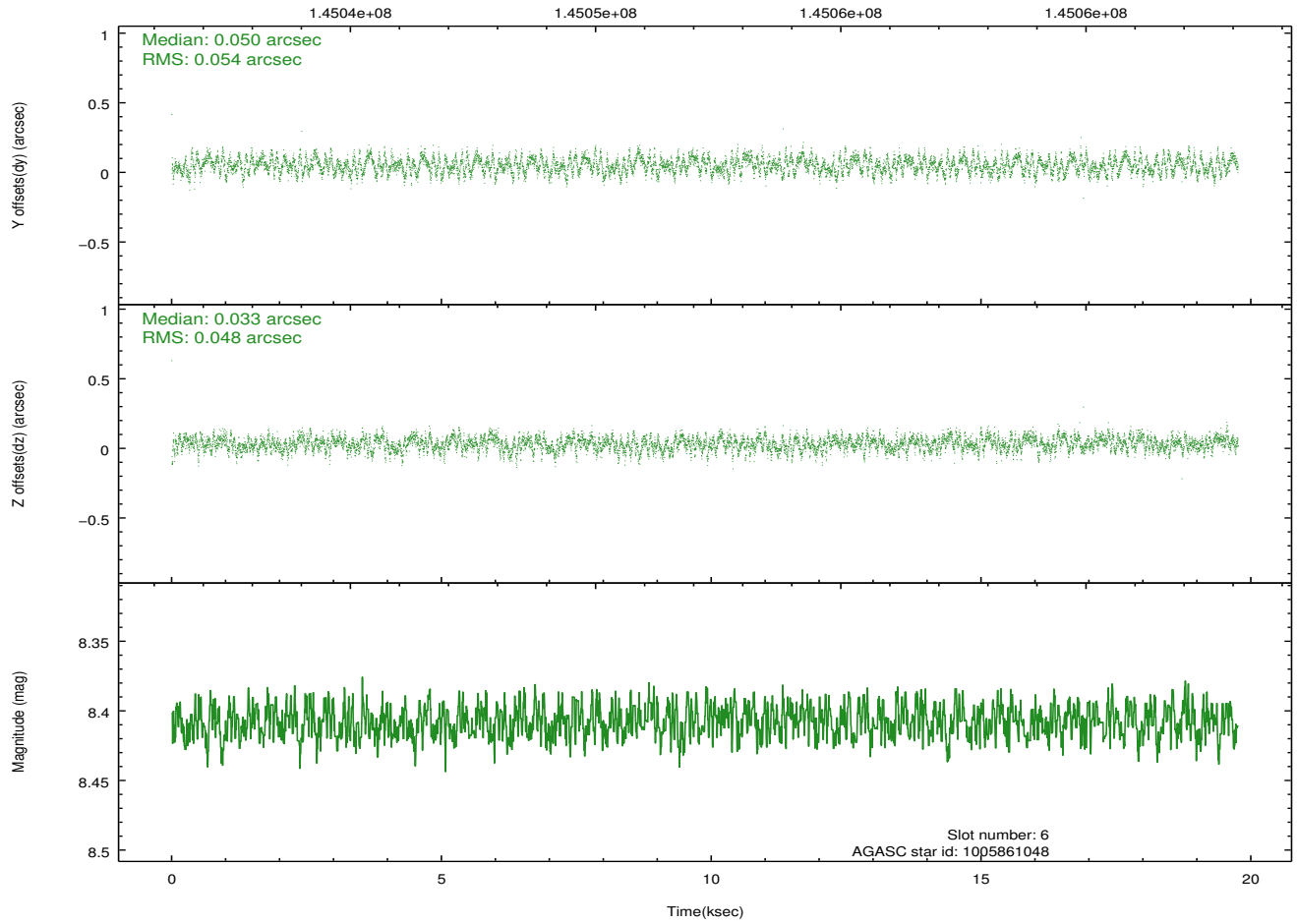
Time (s)



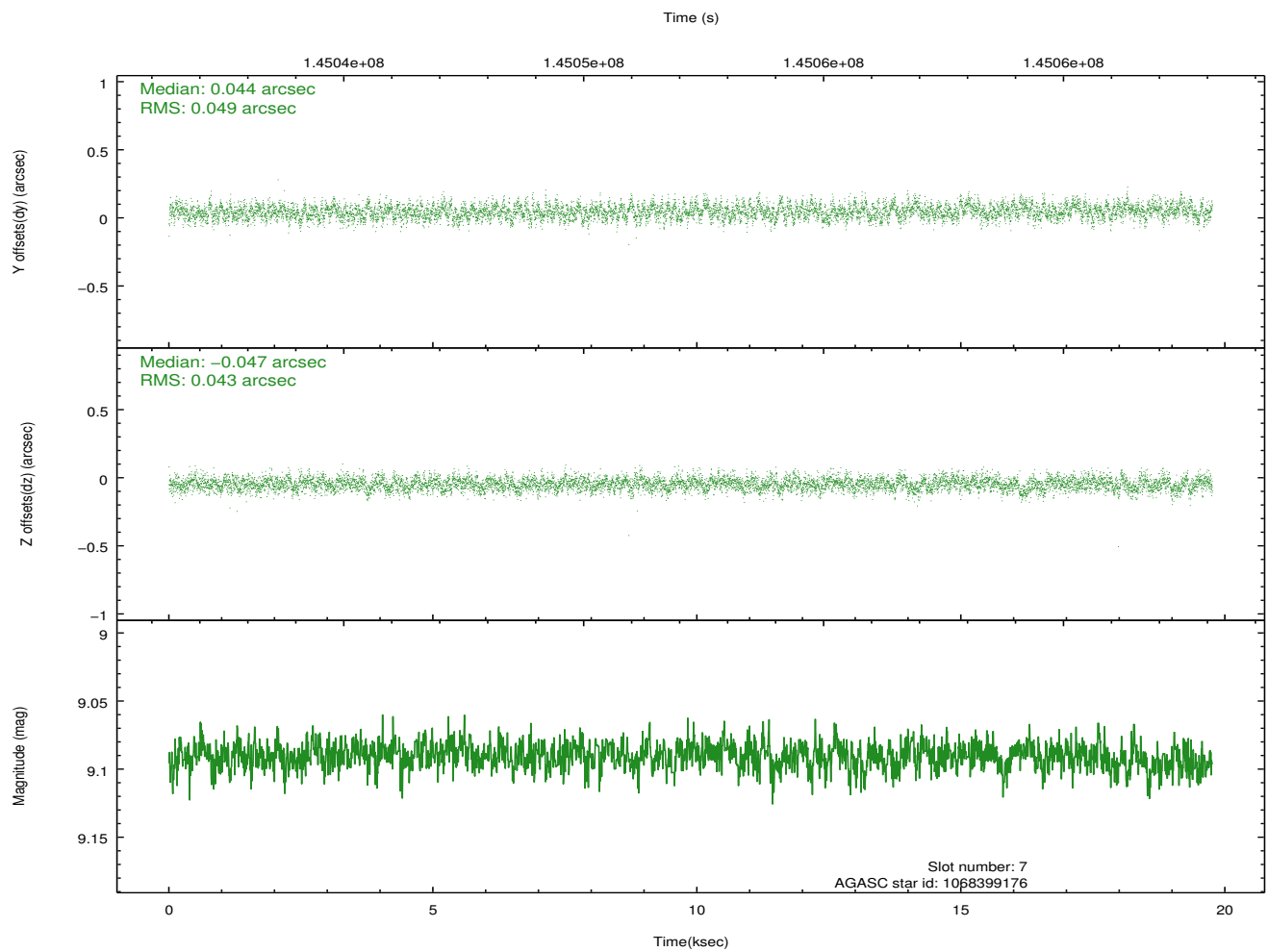
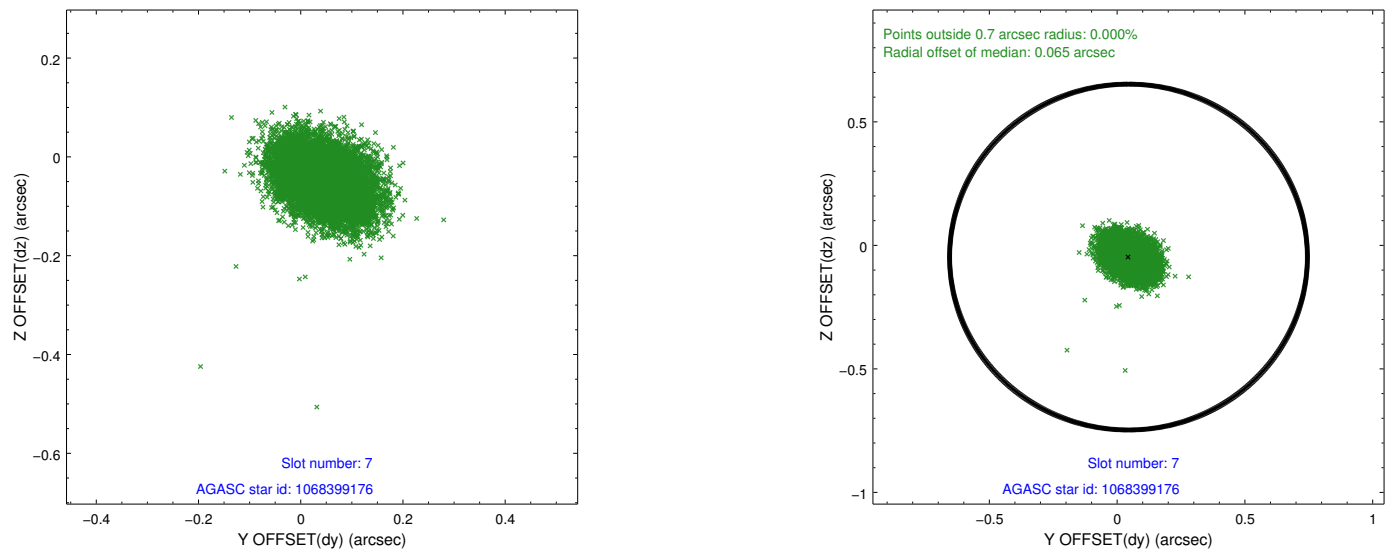
### 2.4.4 Slot 6



Time (s)

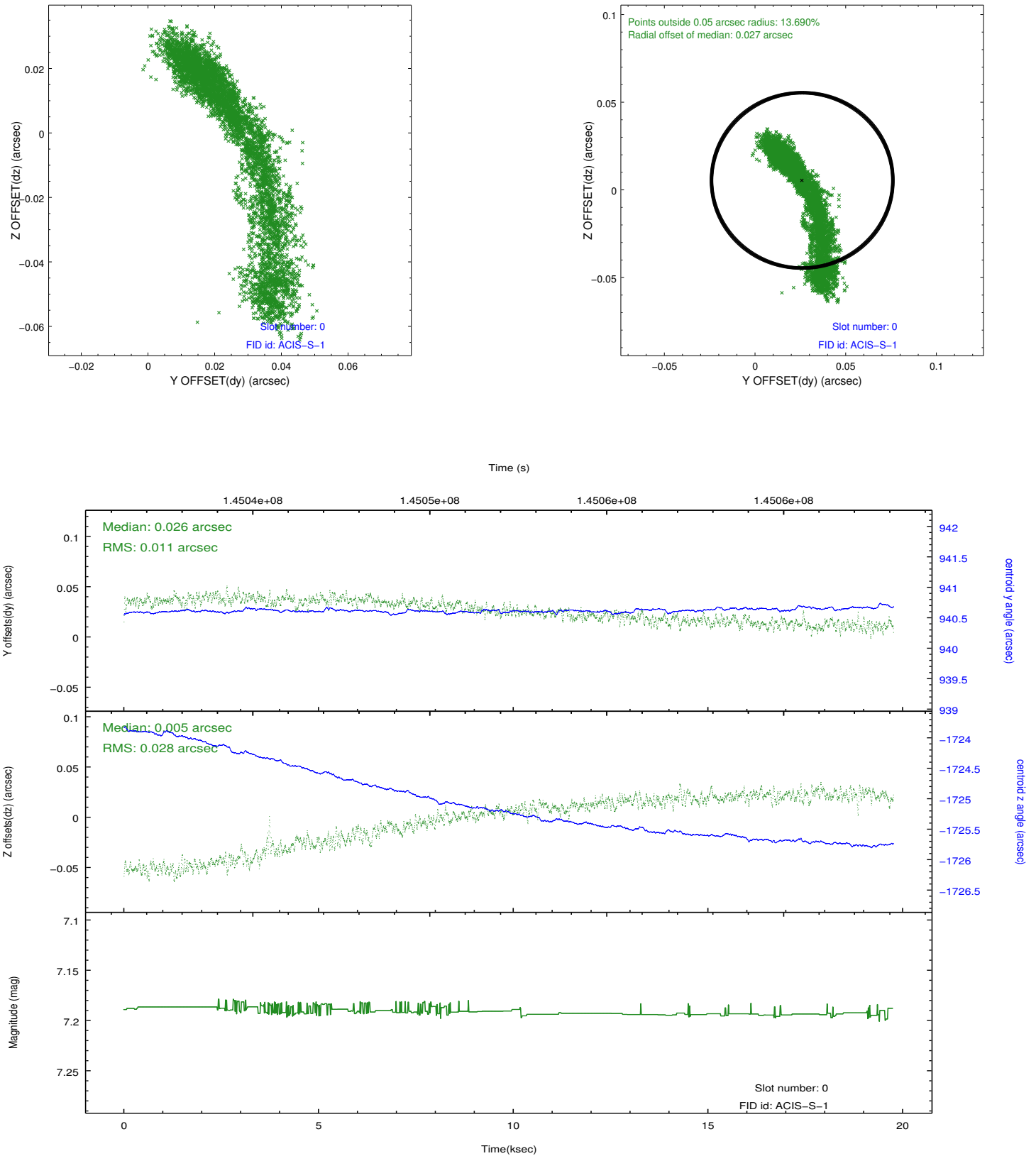


## 2.4.5 Slot 7

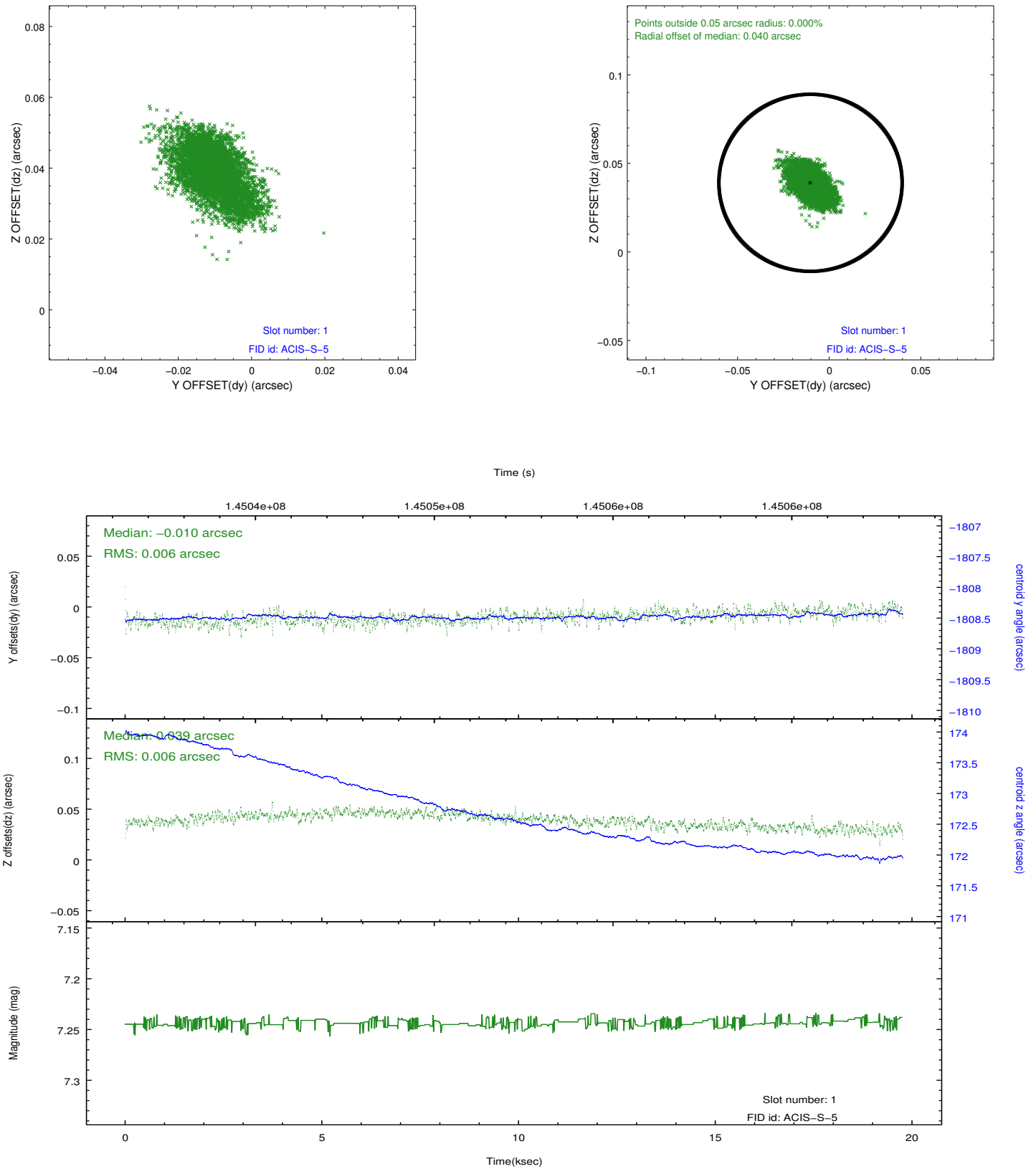


## 2.5 FID Slots

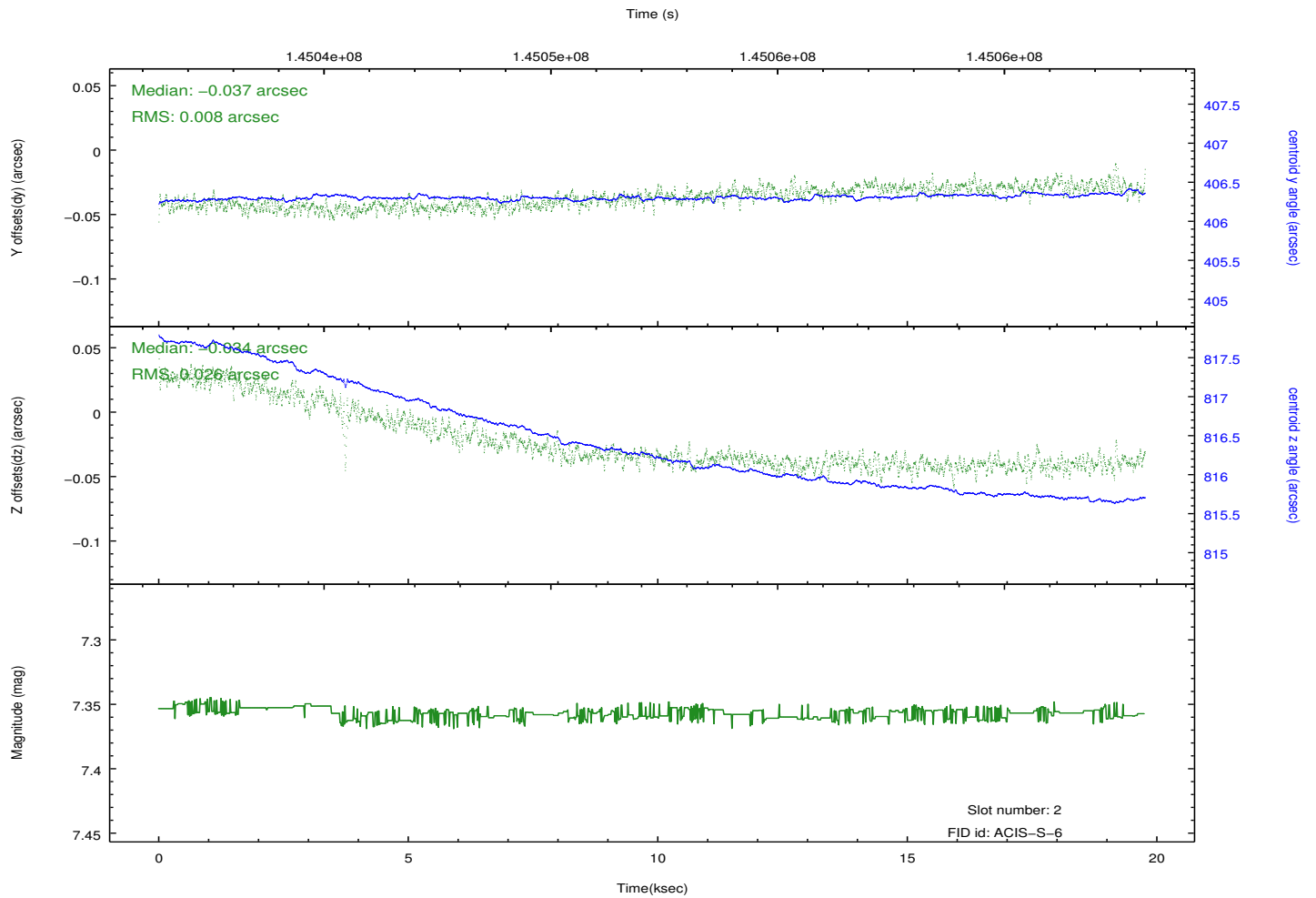
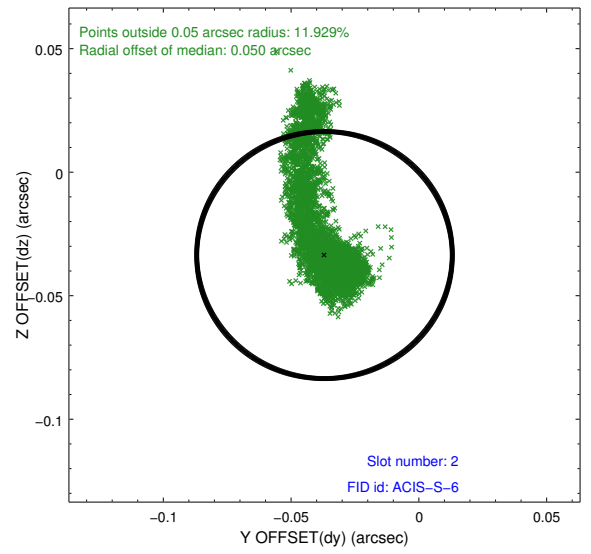
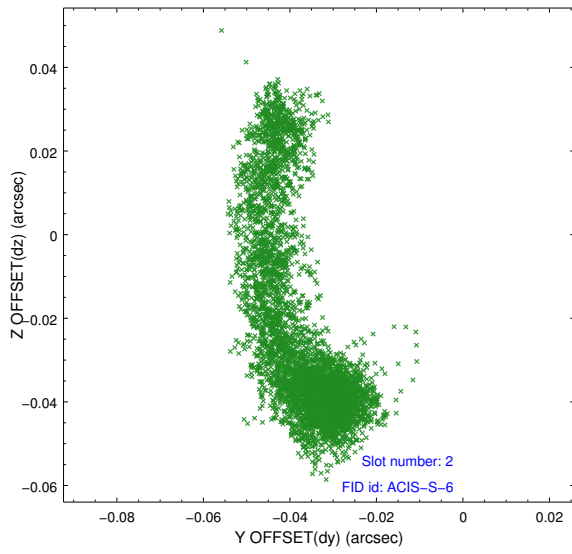
### 2.5.1 Slot 0



## 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)	2012.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.753

## A.2 Comments

Monitor constraint met.