

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3427 - L2 Version 5  
Chandra X-Ray Center

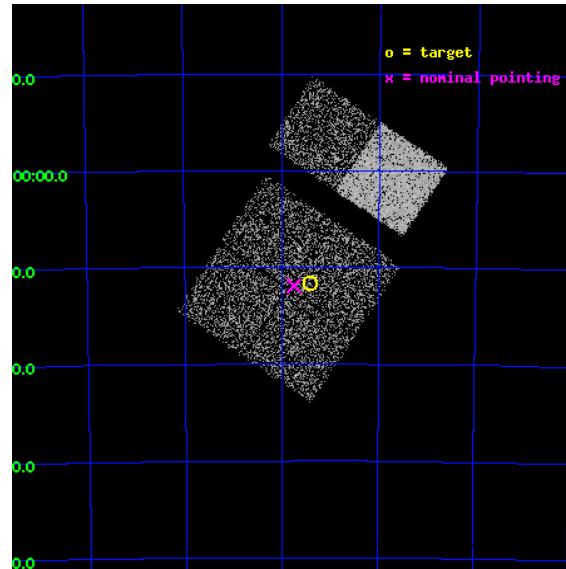
L2 Processing Date : Oct 15 2012

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# 1 Front

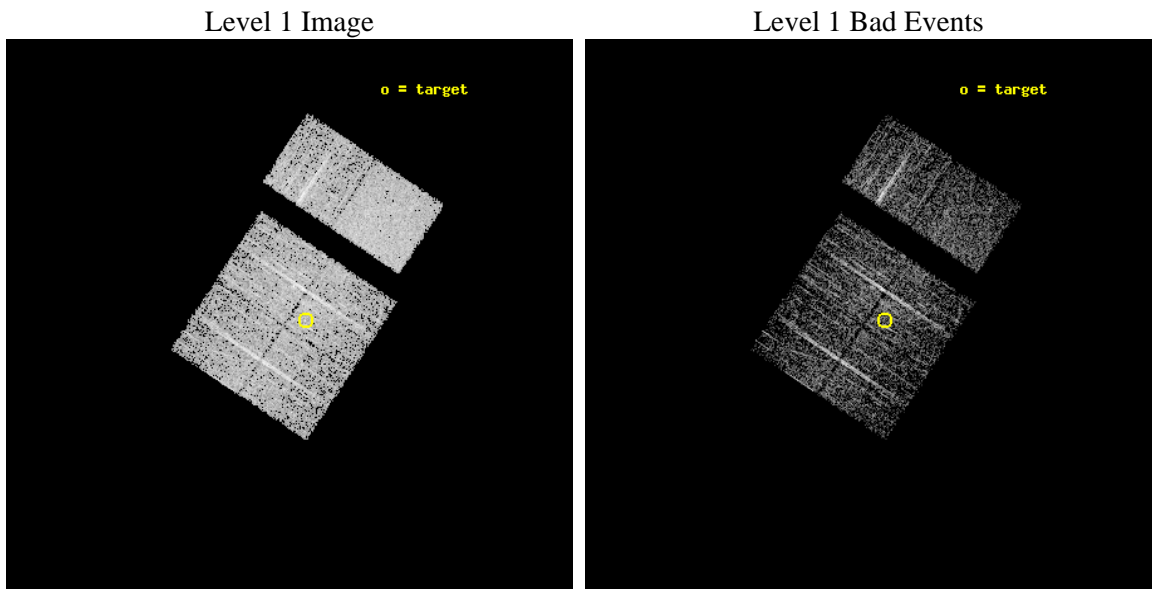
seq_num	200086	Sequence number
obs_id	3427	Observation id
title	OBSERVATION OF SCO-CEN OUTLYERS	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	HD100546	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	173.355833	Observer's specified target RA [deg]
dec_targ	-70.194722	Observer's specified target Dec [deg]
ra_nom	173.43741739572	Nominal RA [deg]
dec_nom	-70.198407823802	Nominal Dec [deg]
roll_nom	33.715871025104	Nominal Roll [deg]
revision	5	Processing version of data
ontime	2659.2000024617	Sum of GTIs [s]
livetime	2625.5276108525	Livetime [s]
ontime0	2659.2000024617	Sum of GTIs [s]
ontime1	2659.2000024617	Sum of GTIs [s]
ontime2	2659.2000024617	Sum of GTIs [s]
ontime3	2659.2000024617	Sum of GTIs [s]
ontime6	2659.2000024617	Sum of GTIs [s]
ontime7	2659.2000024617	Sum of GTIs [s]
l2events	18022	Number of level 2 events



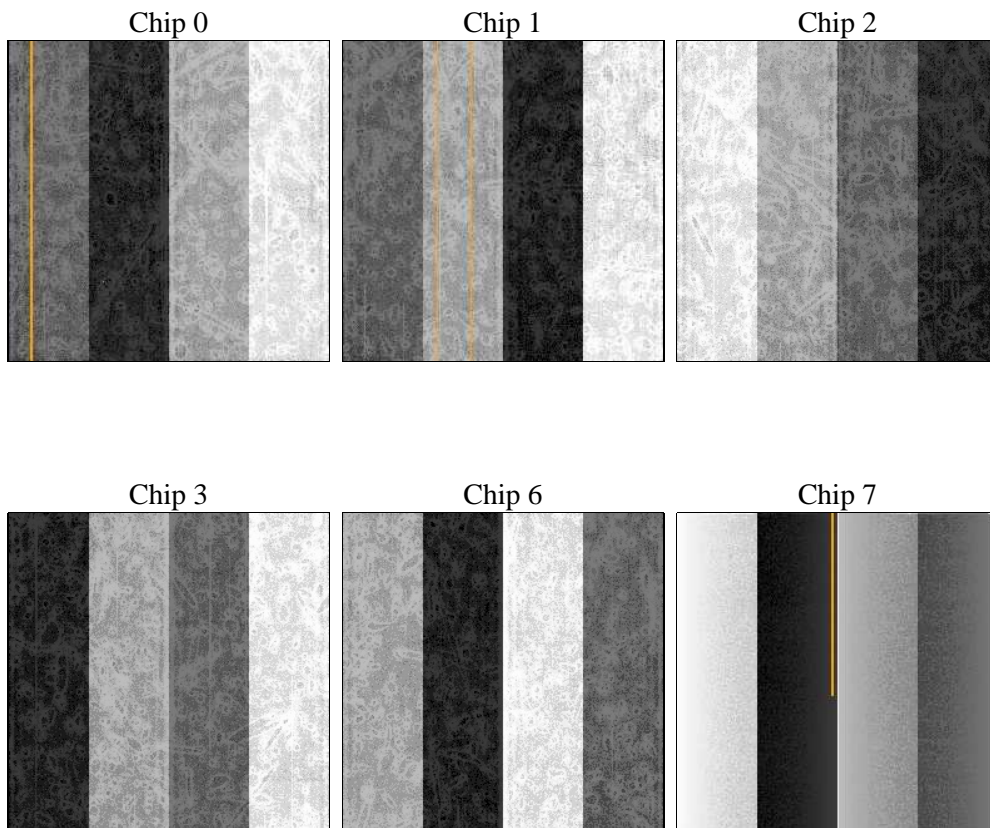
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2900.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2659.2000024617	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	2659.2000024617	Sum of GTIs [s]
date	2012-10-15T21:46:09	Date and time of file creation	ontime1	2659.2000024617	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	2659.2000024617	Sum of GTIs [s]
			ontime3	2659.2000024617	Sum of GTIs [s]
			ontime6	2659.2000024617	Sum of GTIs [s]
			ontime7	2659.2000024617	Sum of GTIs [s]
			l1events	104927	Number of level 1 events

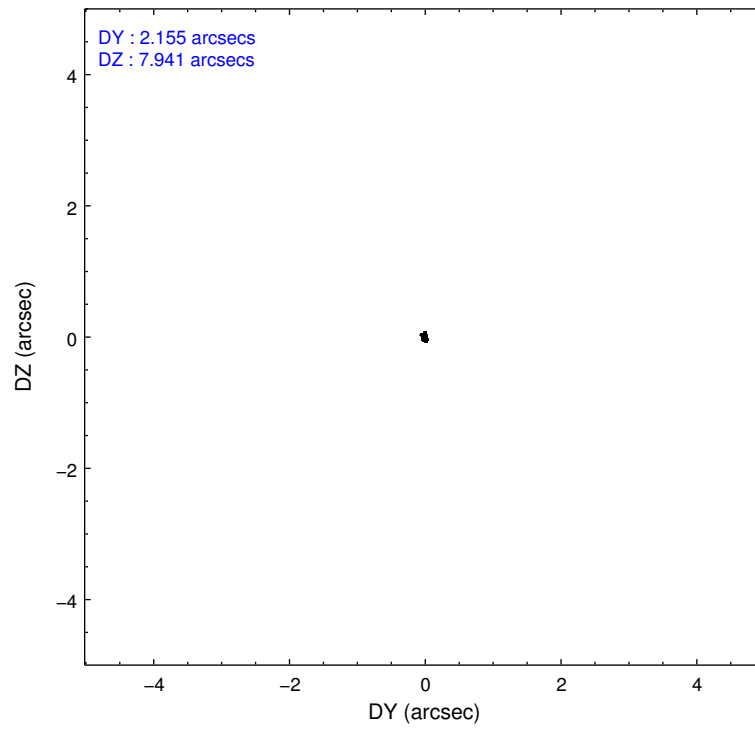
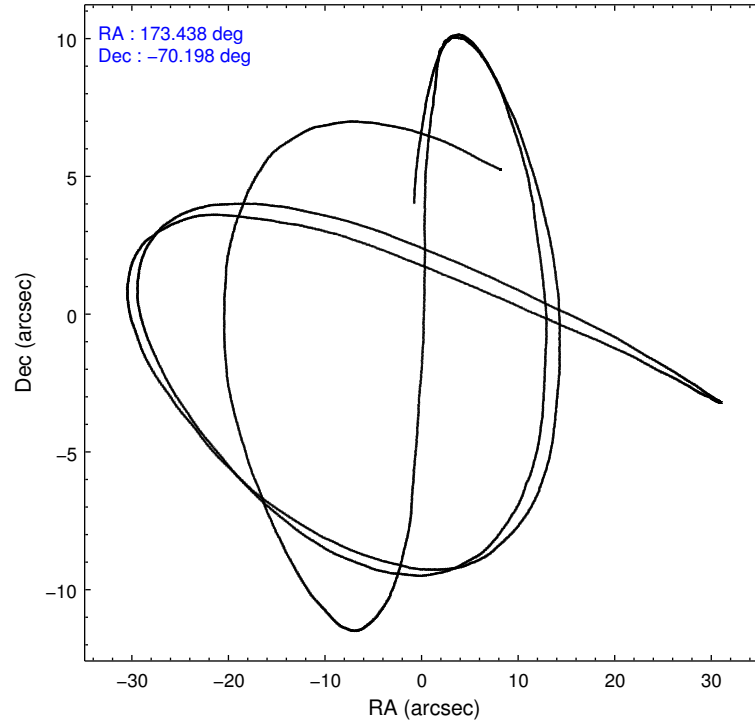
### 2.1.4 Events

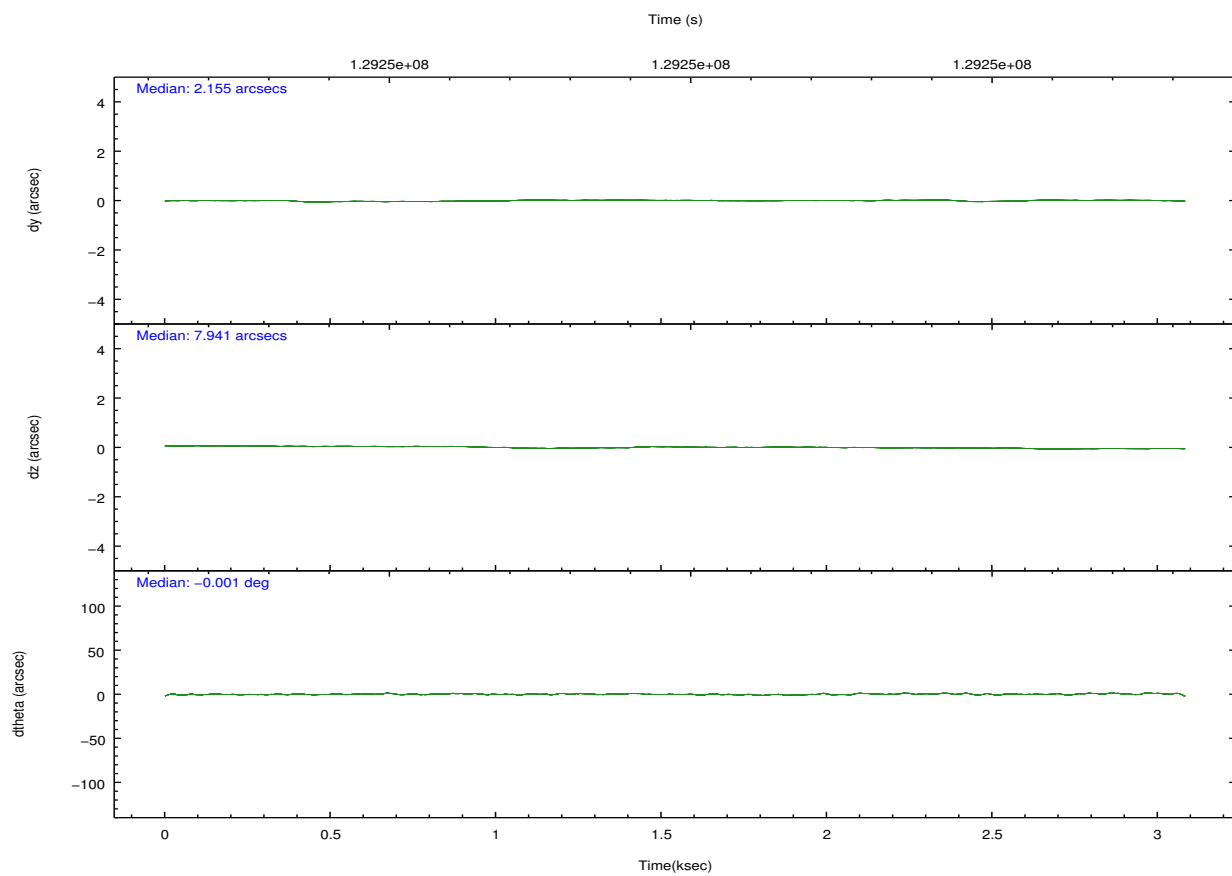
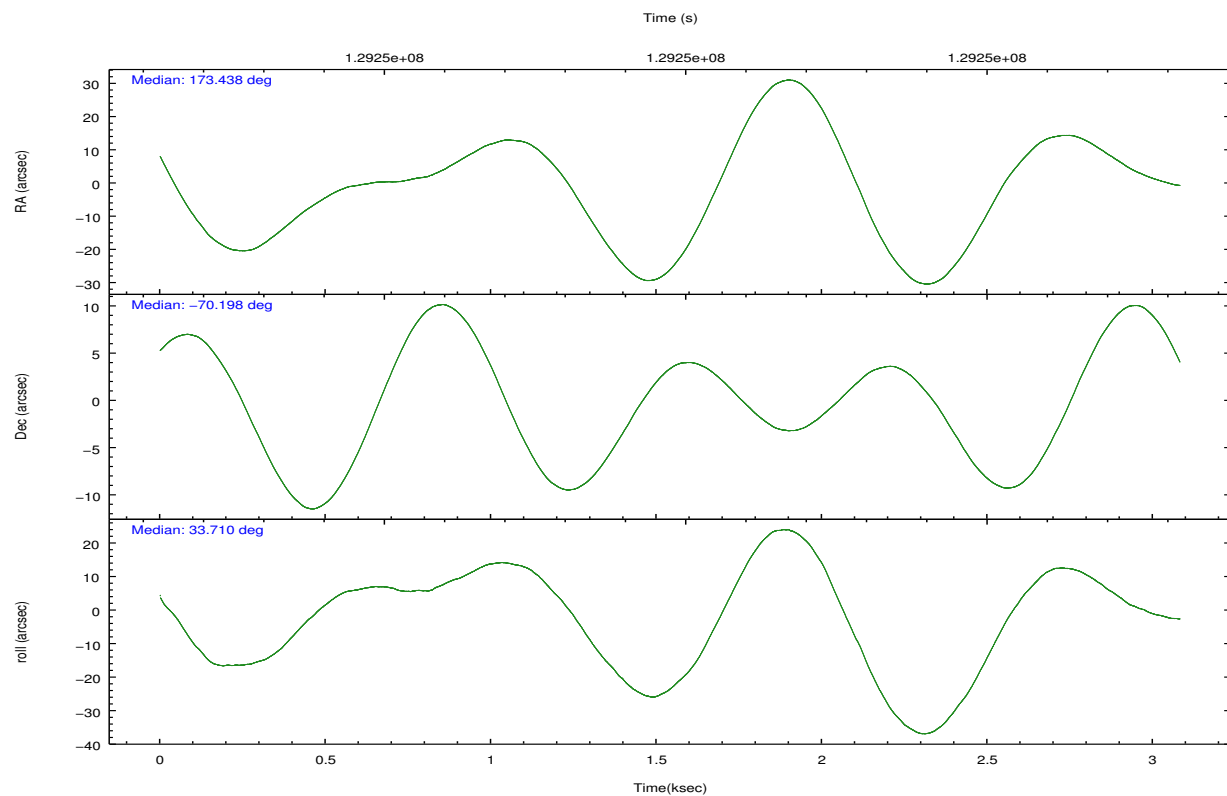
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	15096	14952	17730	16601	18124	22424	grade 0 events	890	880	947	865	859	876
rejected events	13029	12874	15665	14566	16026	13086		5%	5%	5%	5%	4%	3%
rejected %	86%	86%	88%	87%	88%	58%	grade 1 events	10	6	12	12	7	18
								0%	0%	0%	0%	0%	0%
							grade 2 events	425	416	448	407	395	1936
								2%	2%	2%	2%	2%	8%
							grade 3 events	196	206	168	211	205	849
								1%	1%	0%	1%	1%	3%
							grade 4 events	173	186	155	171	204	823
								1%	1%	0%	1%	1%	3%
							grade 5 events	571	674	588	689	752	2142
								3%	4%	3%	4%	4%	9%
							grade 6 events	384	391	349	382	437	4866
								2%	2%	1%	2%	2%	21%
							grade 7 events	12447	12193	15063	13864	15265	10914
								82%	81%	84%	83%	84%	48%

## 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	173.401911	173.4374173957164	Subarray requested	NONE	NONE
[deg] Pointing Dec	-70.223158	-70.19840782380201	Alternating exposures requested	N	N
[deg] Pointing Roll	33.473793	33.71587102510392	[s] Primary exposure time	0.000000	3.2
[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)	129246592.184000	129246216.25822			
Observation start date	2002-02-04T21:48:48	2002-02-04T21:43:36			
[s] Observation end time (MET)	129249492.184000	129250324.45838			
Observation end date	2002-02-04T22:37:08	2002-02-04T22:52:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect





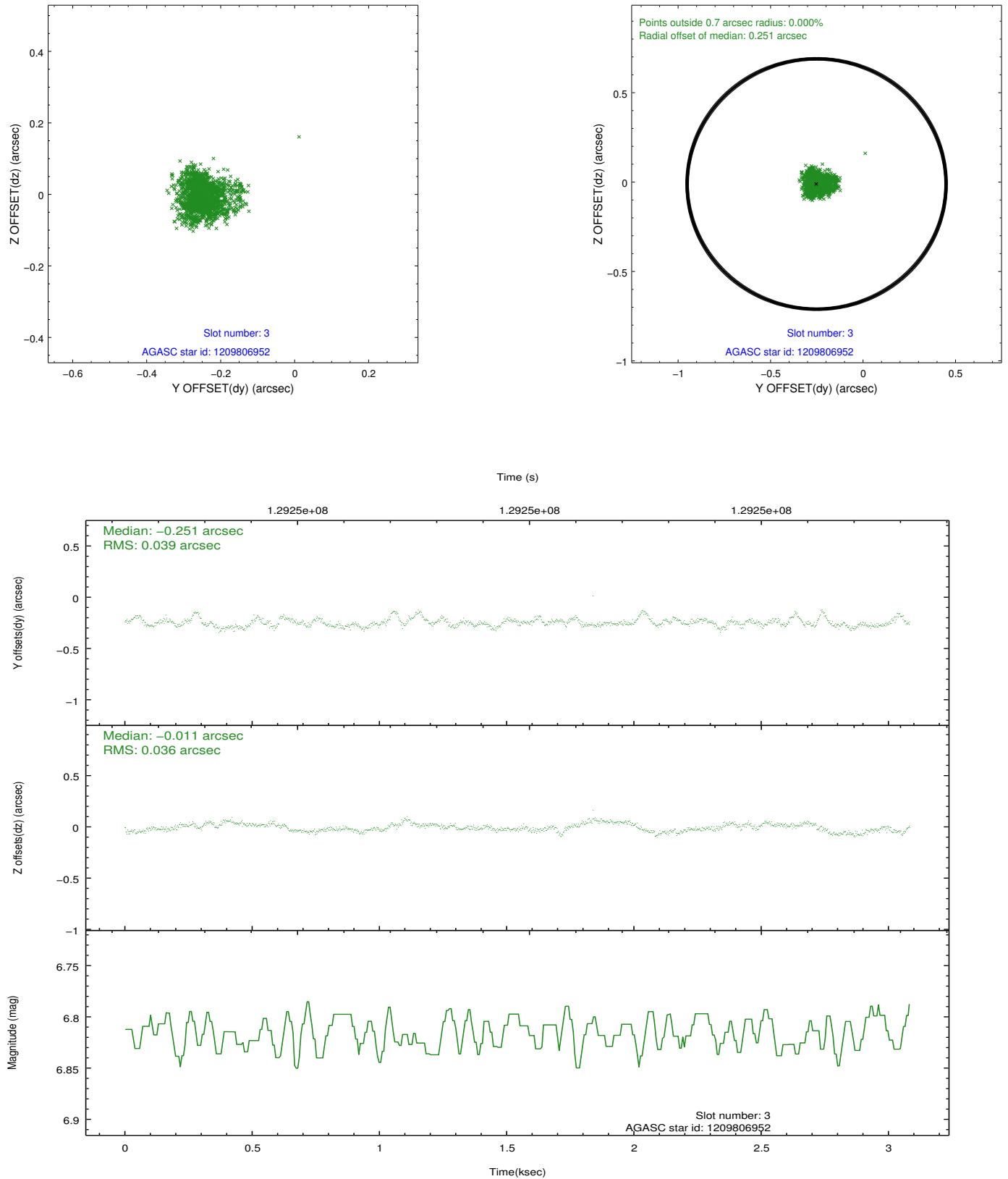
### Slot Statistics

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	752	-0.045	0.035	0.006	0.011	0.000000	0.000000	937.61	-831.33
1	FID	ACIS-I-5	7.23	752	-0.016	0.015	0.006	0.011	0.000000	0.000000	-1809.29	1065.13
2	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	1209806952	6.82	1505	-0.251	-0.011	0.056	0.094	174.311027	-69.674228	2032.83	1014.04
4	GUIDE	1209677760	9.11	1504	0.152	0.030	0.079	0.122	171.899645	-70.126361	-1352.73	1285.69
5	GUIDE	1209808912	9.59	1504	-0.042	0.179	0.086	0.142	174.926008	-70.456656	1053.49	-1731.96
6	GUIDE	1209675144	9.37	1504	-0.055	-0.162	0.120	0.184	173.252205	-70.915996	-1522.40	-1985.69
7	GUIDE	1209684208	9.95	1501	0.196	-0.040	0.193	0.310	170.984969	-70.133892	-2322.33	1847.43

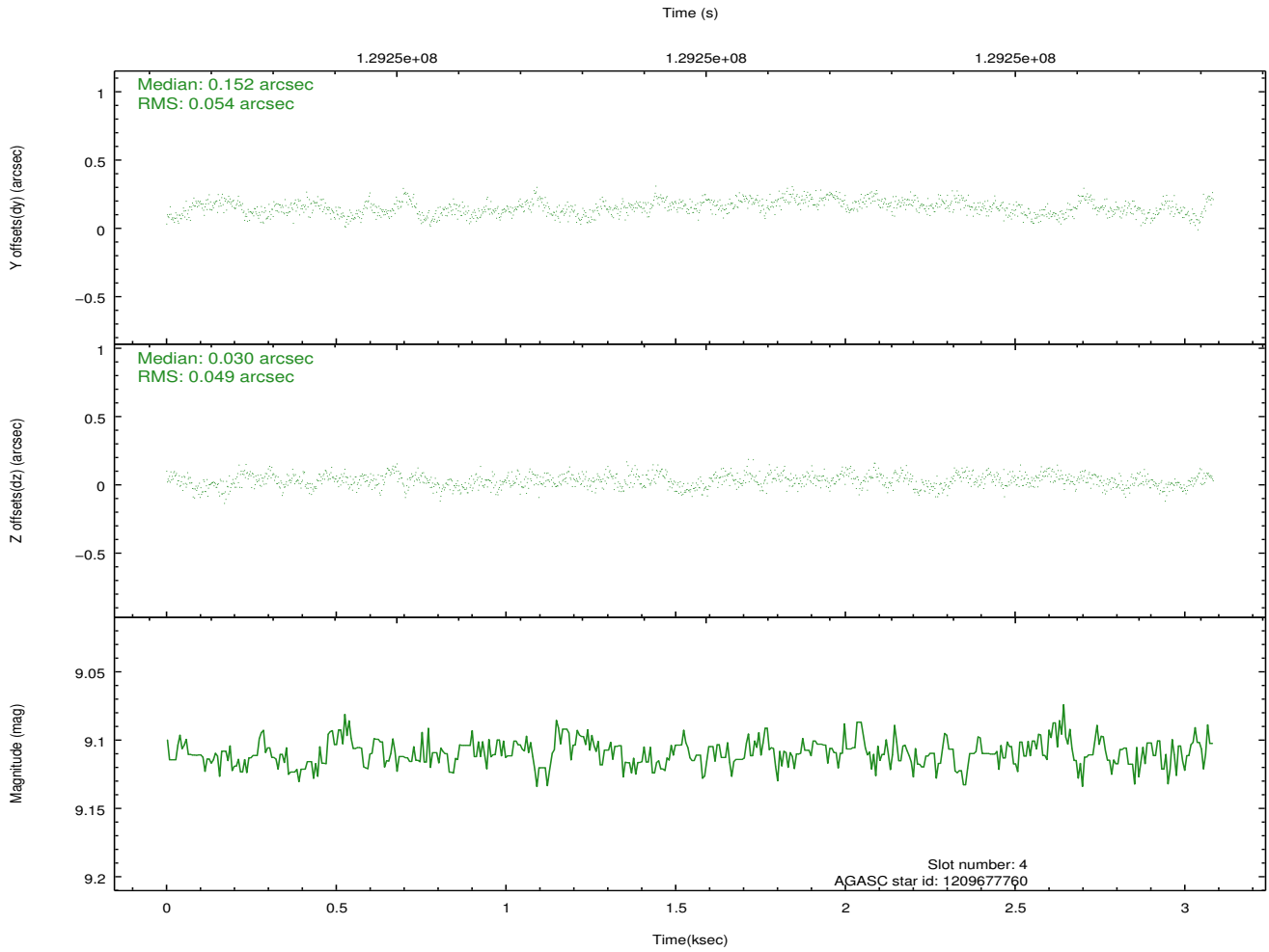
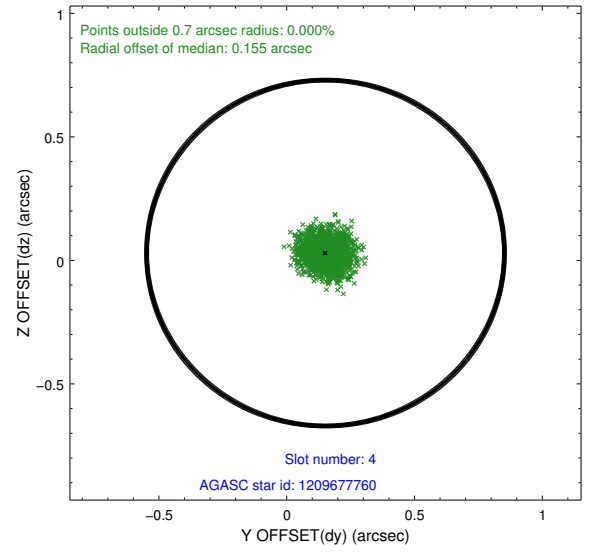
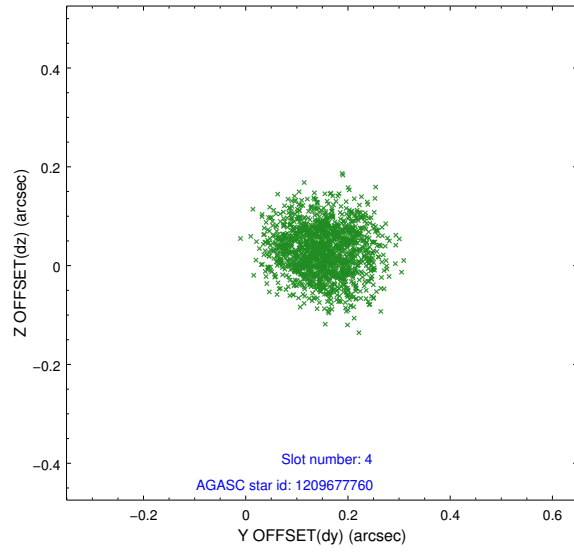


## 2.4 Star Slots

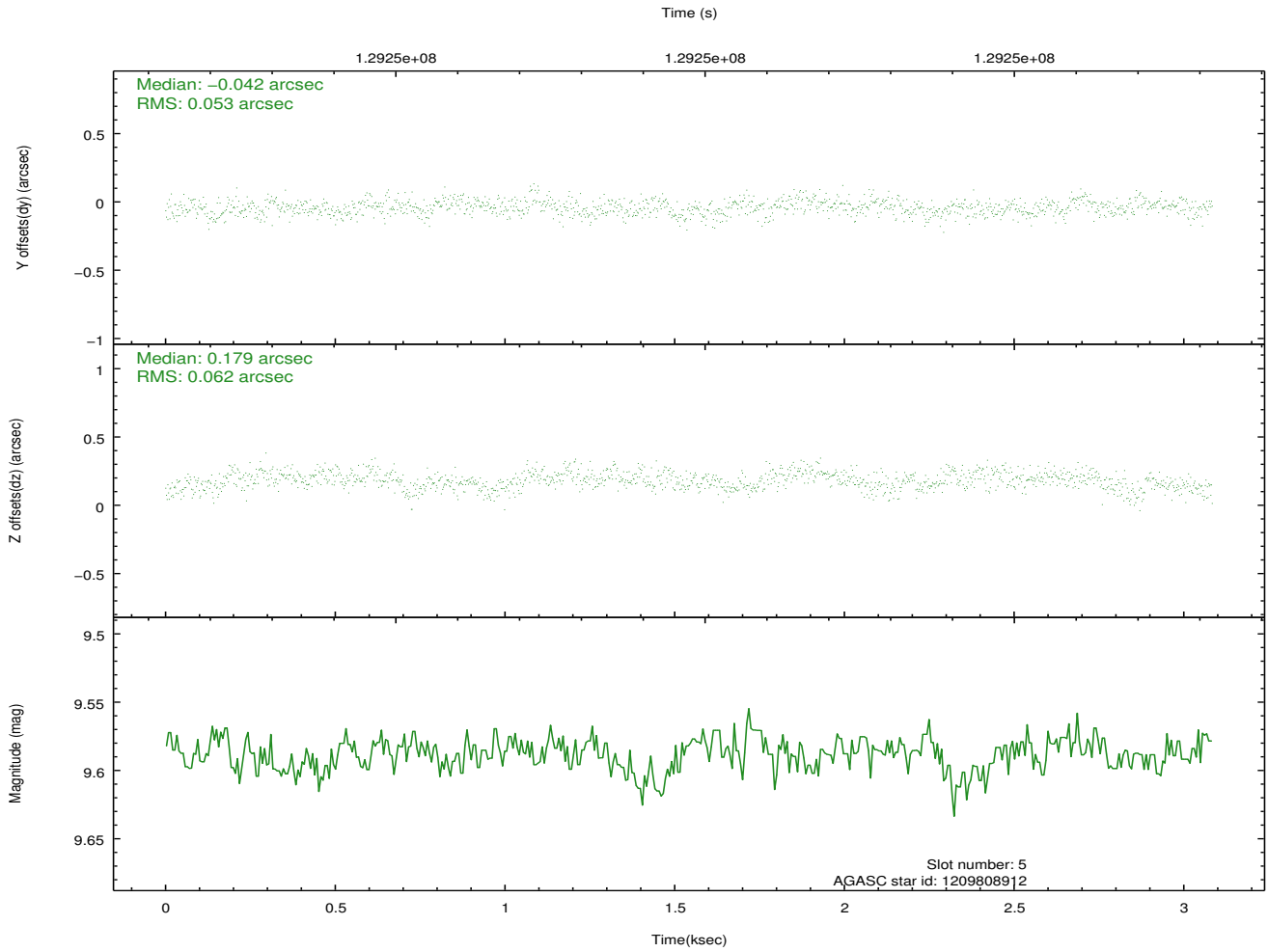
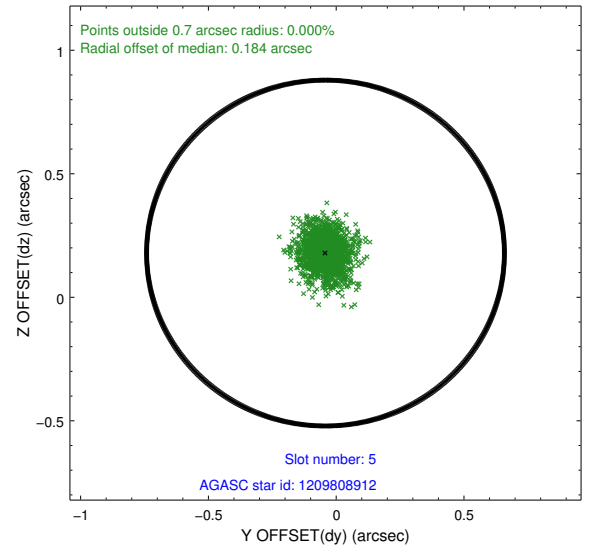
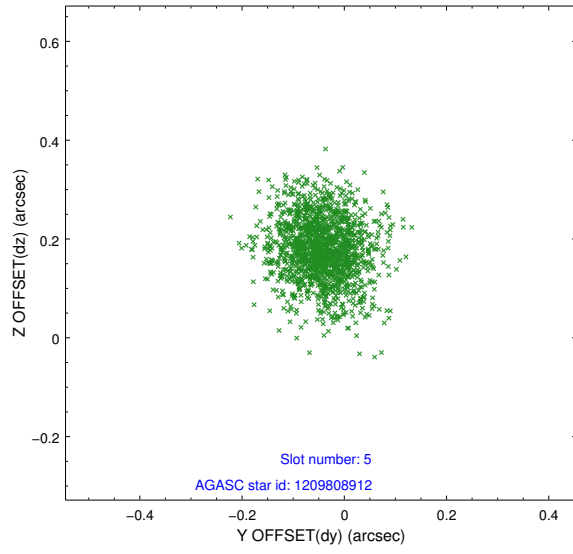
### 2.4.1 Slot 3



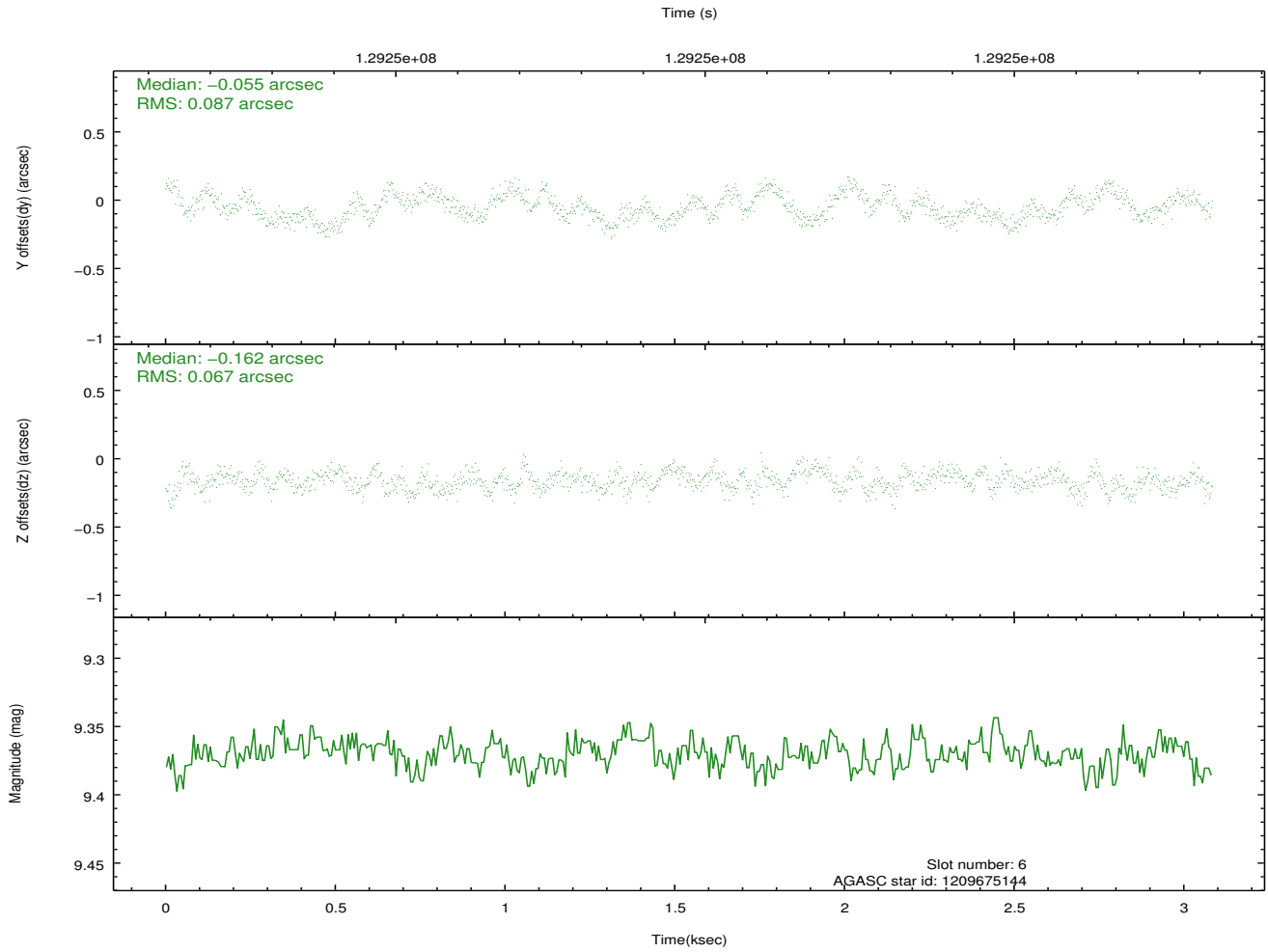
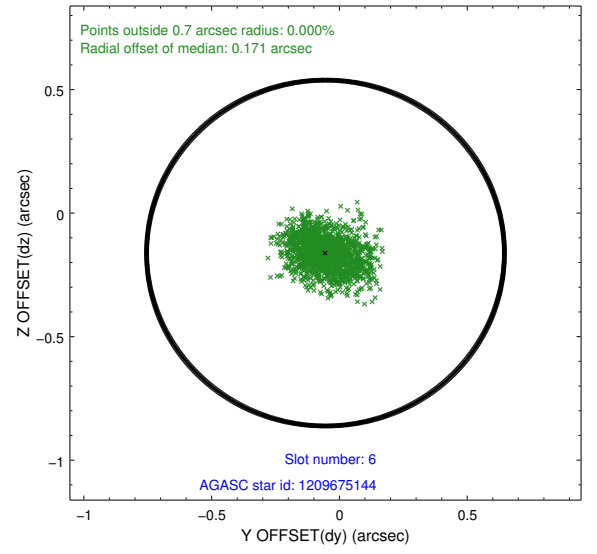
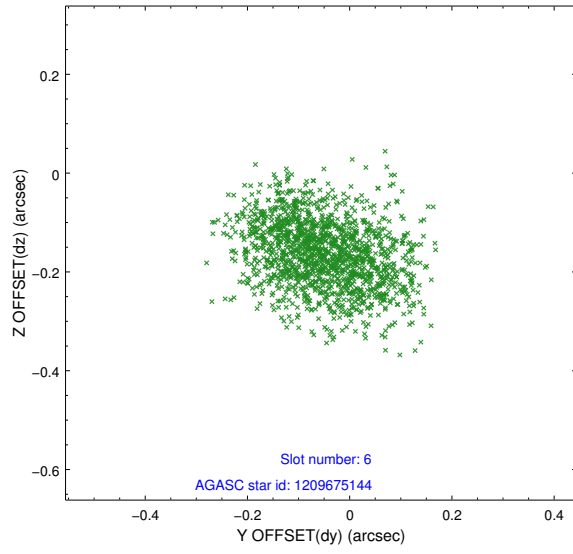
## 2.4.2 Slot 4



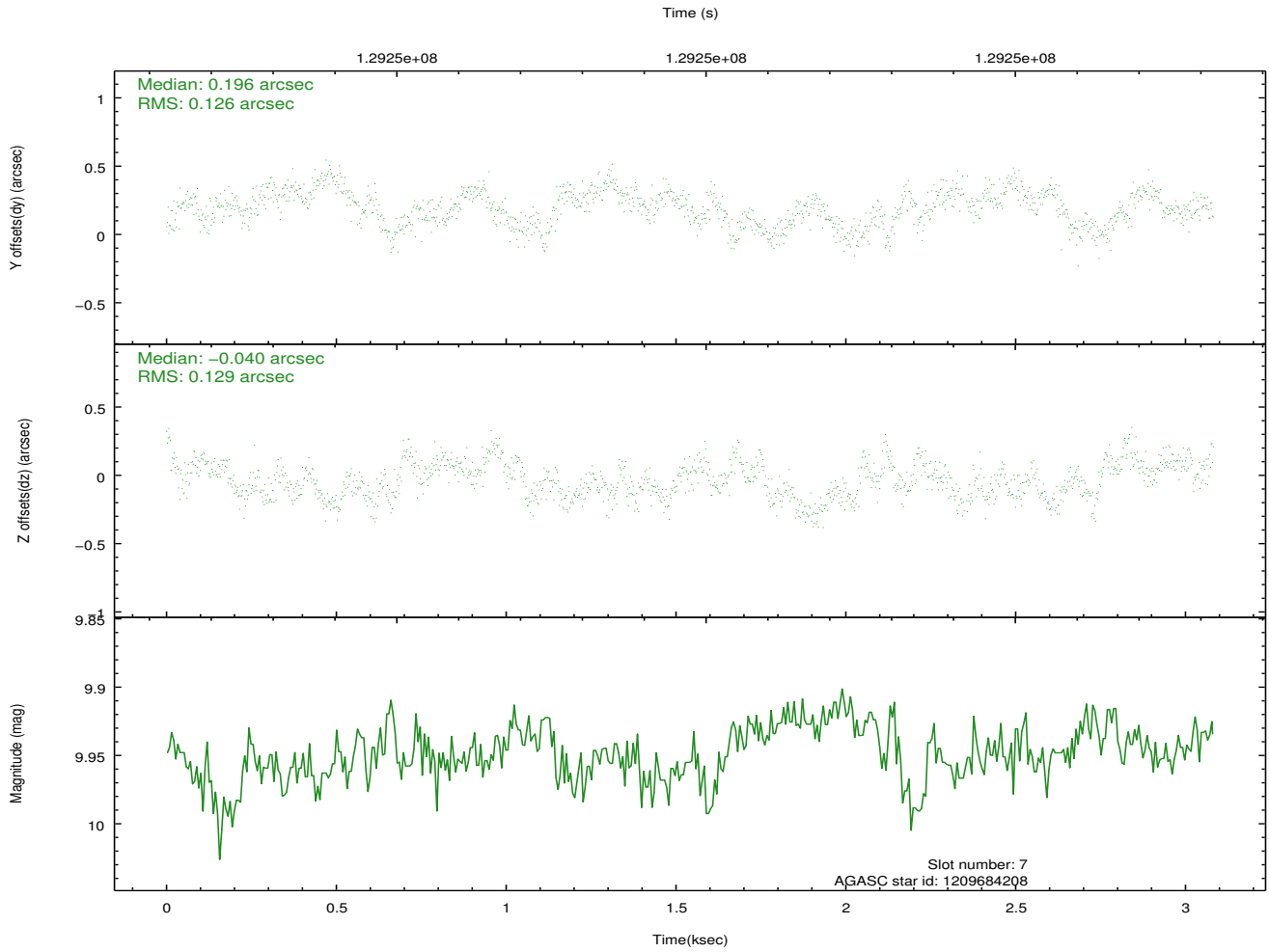
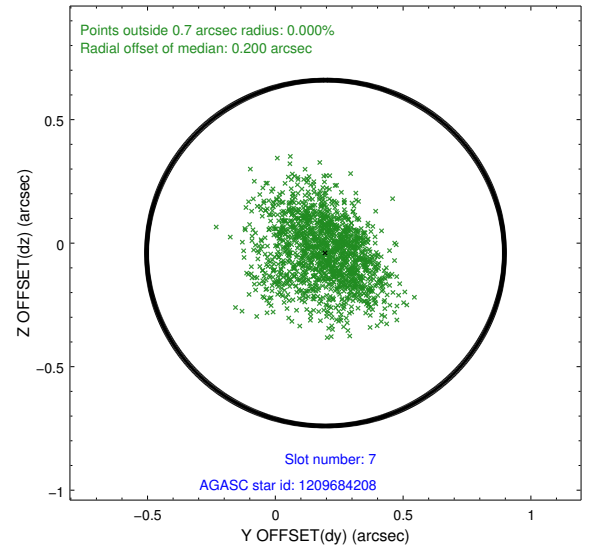
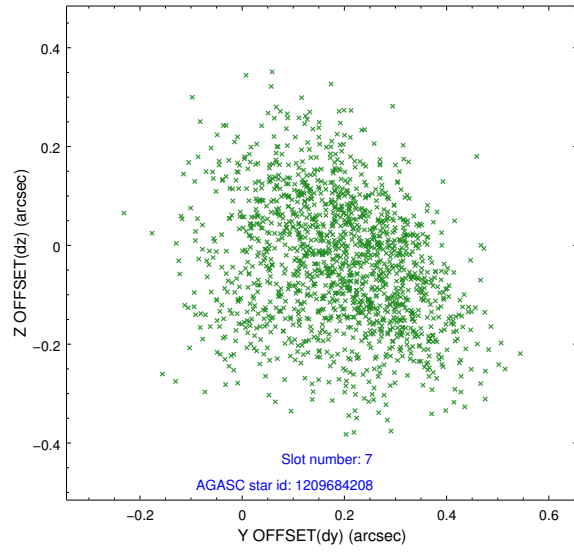
### 2.4.3 Slot 5



## 2.4.4 Slot 6

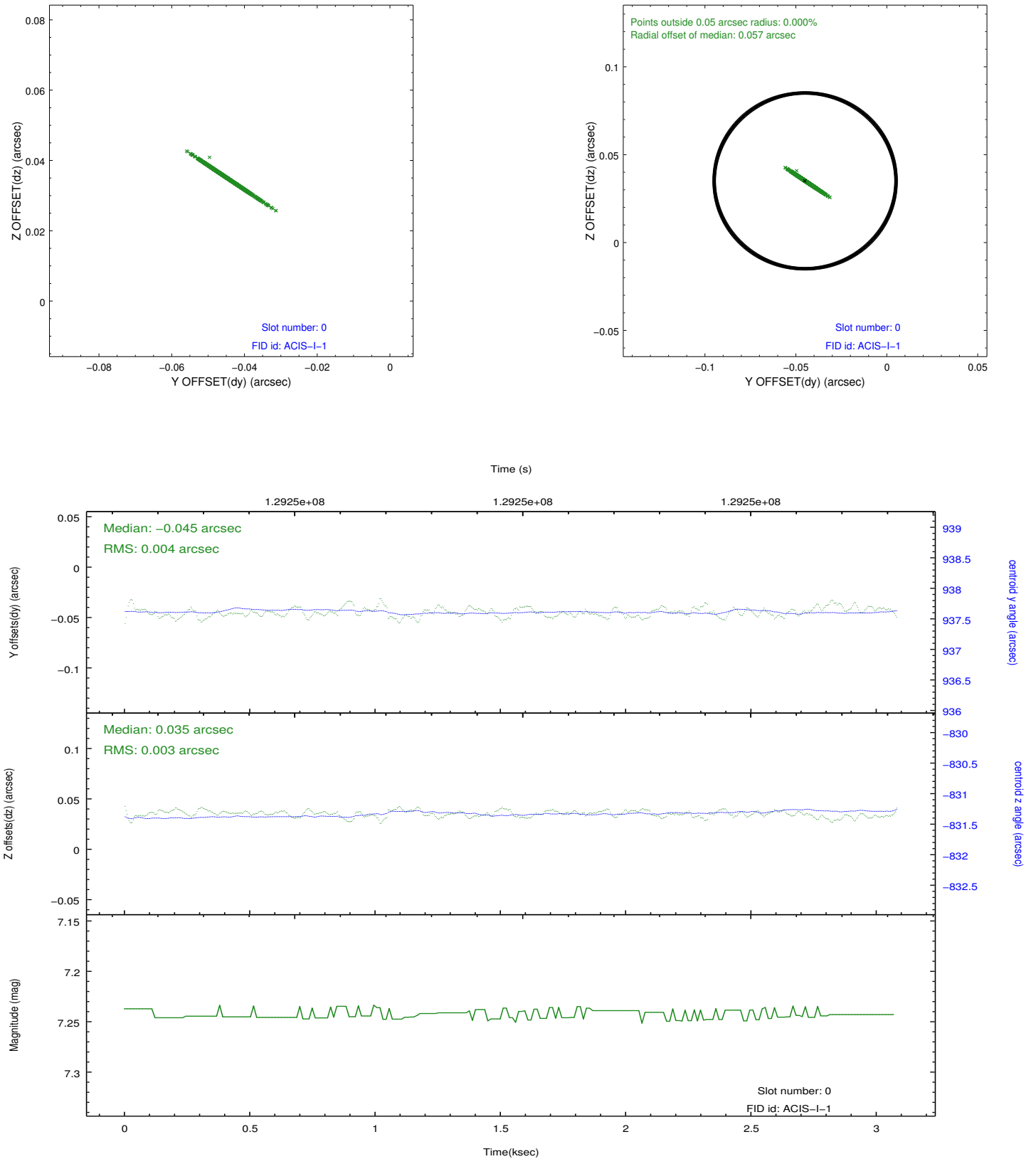


## 2.4.5 Slot 7

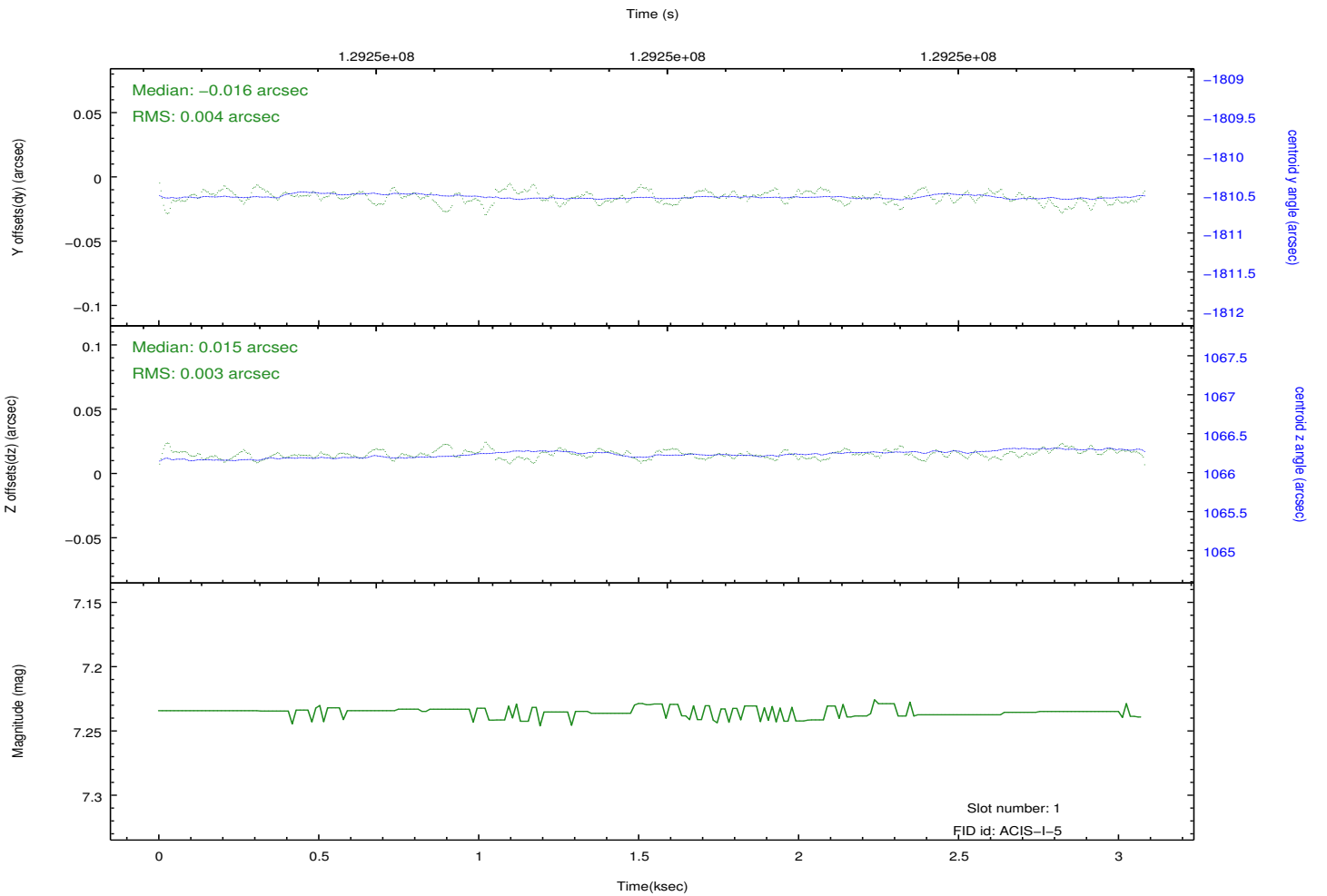
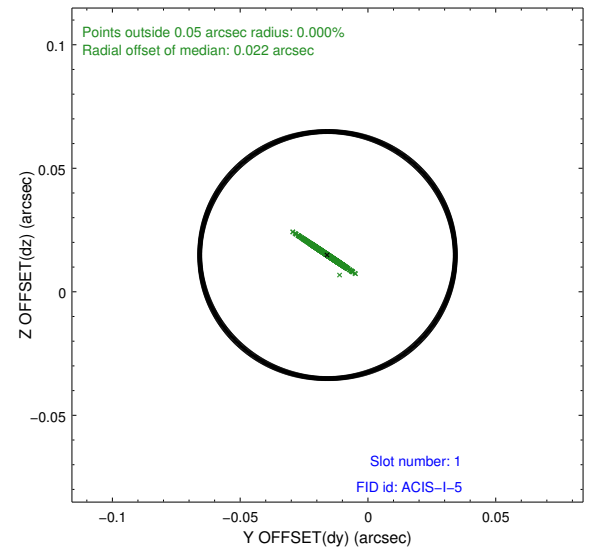
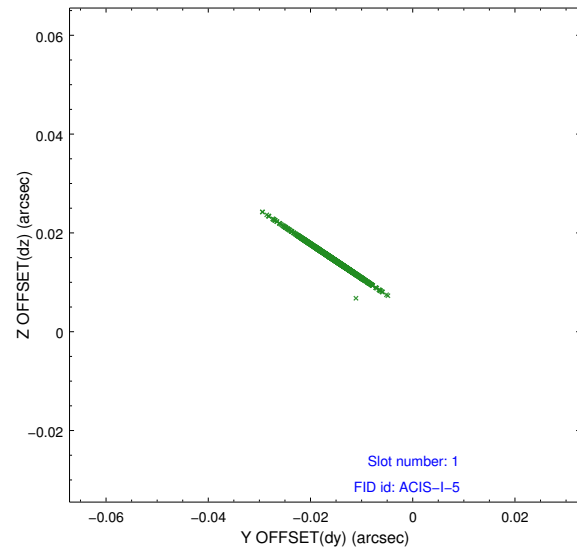


## 2.5 FID Slots

### 2.5.1 Slot 0



## 2.5.2 Slot 1



# 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	2.662

## A.2 Comments

The fid light in slot 2 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this fid light from the solution.