

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 6117 - L2 Version 3  
Chandra X-Ray Center

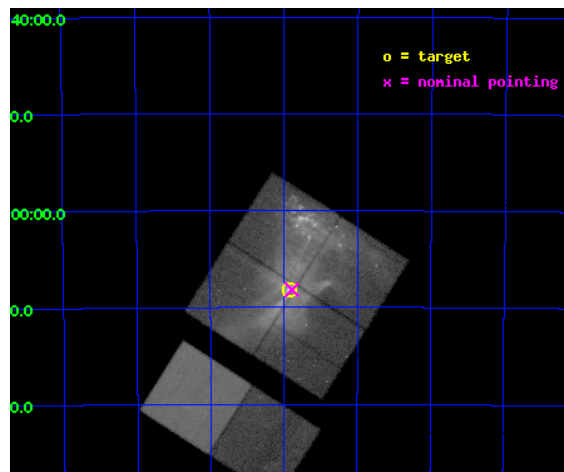
L2 Processing Date : Dec 30 2012

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# 1 Front

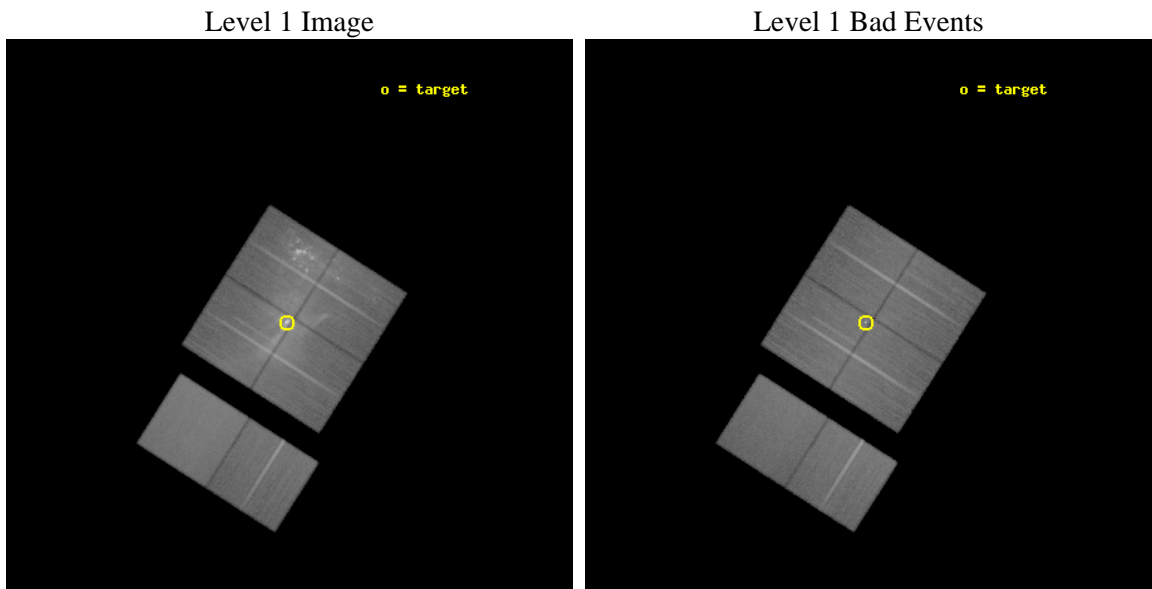
seq_num	500528	Sequence number
obs_id	6117	Observation id
title	The Structure and Composition of Pulsar Winds and their Nebulae	Pr
observer	Dr. Patrick Slane	Principal investigator
object	PSR B1509-58	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.481667	Observer's specified target RA [deg]
dec_targ	-59.135806	Observer's specified target Dec [deg]
ra_nom	228.47271598365	Nominal RA [deg]
dec_nom	-59.13657576297	Nominal Dec [deg]
roll_nom	212.46491375838	Nominal Roll [deg]
revision	3	Processing version of data
ontime	46137.476917237	Sum of GTIs [s]
livetime	45553.256403858	Livetime [s]
ontime0	46143.958867788	Sum of GTIs [s]
ontime1	46147.199828088	Sum of GTIs [s]
ontime2	46143.958837897	Sum of GTIs [s]
ontime3	46137.476917237	Sum of GTIs [s]
ontime6	46140.717817813	Sum of GTIs [s]
ontime7	46147.199828088	Sum of GTIs [s]
l2events	858303	Number of level 2 events



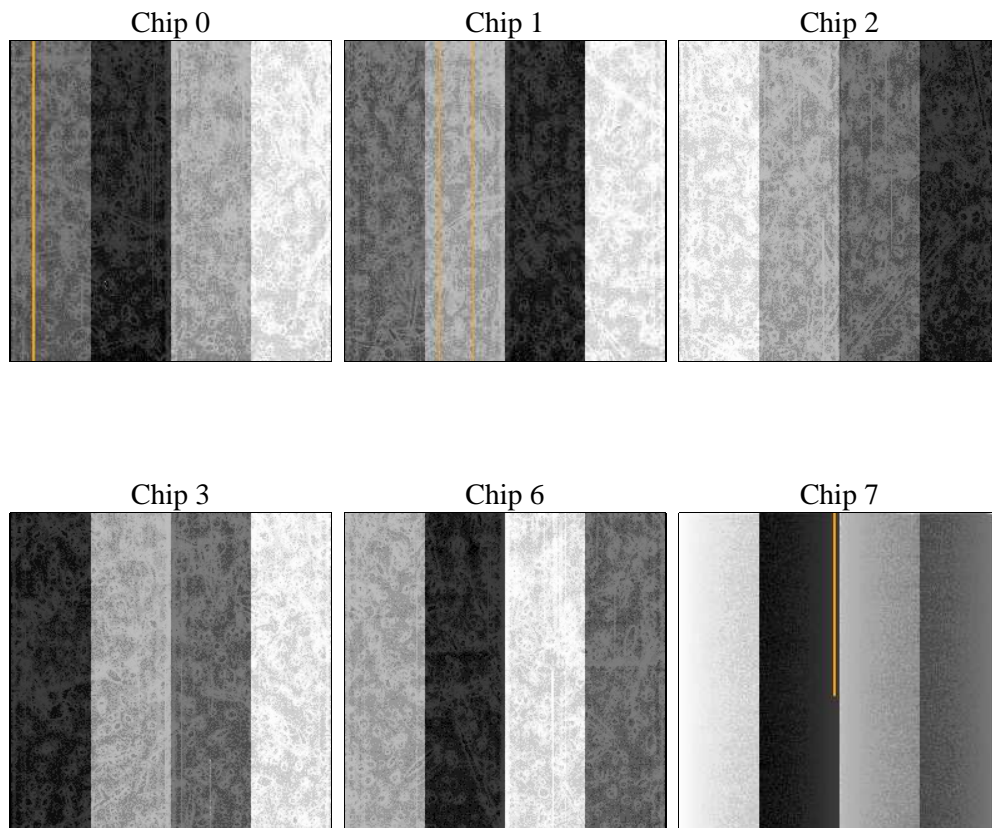
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	46000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	46137.476917237	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime0	46143.958867788	Sum of GTIs [s]
date	2012-12-30T21:09:06	Date and time of file creation	ontime1	46147.199828088	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	46143.958837897	Sum of GTIs [s]
			ontime3	46137.476917237	Sum of GTIs [s]
			ontime6	46140.717817813	Sum of GTIs [s]
			ontime7	46147.199828088	Sum of GTIs [s]
			l1events	2768721	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	412100	504607	436353	514270	383922	517469	grade 0 events	80498	158635	74583	125791	22959	23779
rejected events	290663	285993	322723	329002	332623	291015		19%	31%	17%	24%	5%	4%
rejected %	70%	56%	73%	63%	86%	56%	grade 1 events	555	853	524	2425	225	493
								0%	0%	0%	0%	0%	0%
							grade 2 events	17867	27722	16481	25018	10180	46669
								4%	5%	3%	4%	2%	9%
							grade 3 events	6894	9718	6515	9752	4505	20391
								1%	1%	1%	1%	1%	3%
							grade 4 events	6555	9553	6652	9817	4352	20212
								1%	1%	1%	1%	1%	3%
							grade 5 events	14892	16511	13876	19611	17186	47178
								3%	3%	3%	3%	4%	9%
							grade 6 events	9631	13001	9411	14899	9307	115422
								2%	2%	2%	2%	2%	22%
							grade 7 events	275208	268614	308311	306957	315208	243325
								66%	53%	70%	59%	82%	47%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	228.497224	228.4727159836546	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.112241	-59.13657576297027	Alternating exposures requested	N	N
[deg] Pointing Roll	212.277273	212.4649137583791	[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)	245982616.184000	245981561.22914			
Observation start date	2005-10-18T00:29:12	2005-10-18T00:12:41			
[s] Observation end time (MET)	246028616.184000	246029276.51884			
Observation end date	2005-10-18T13:15:52	2005-10-18T13:27:56			
Read mode	TIMED	TIMED			

## 2.3 Aspect

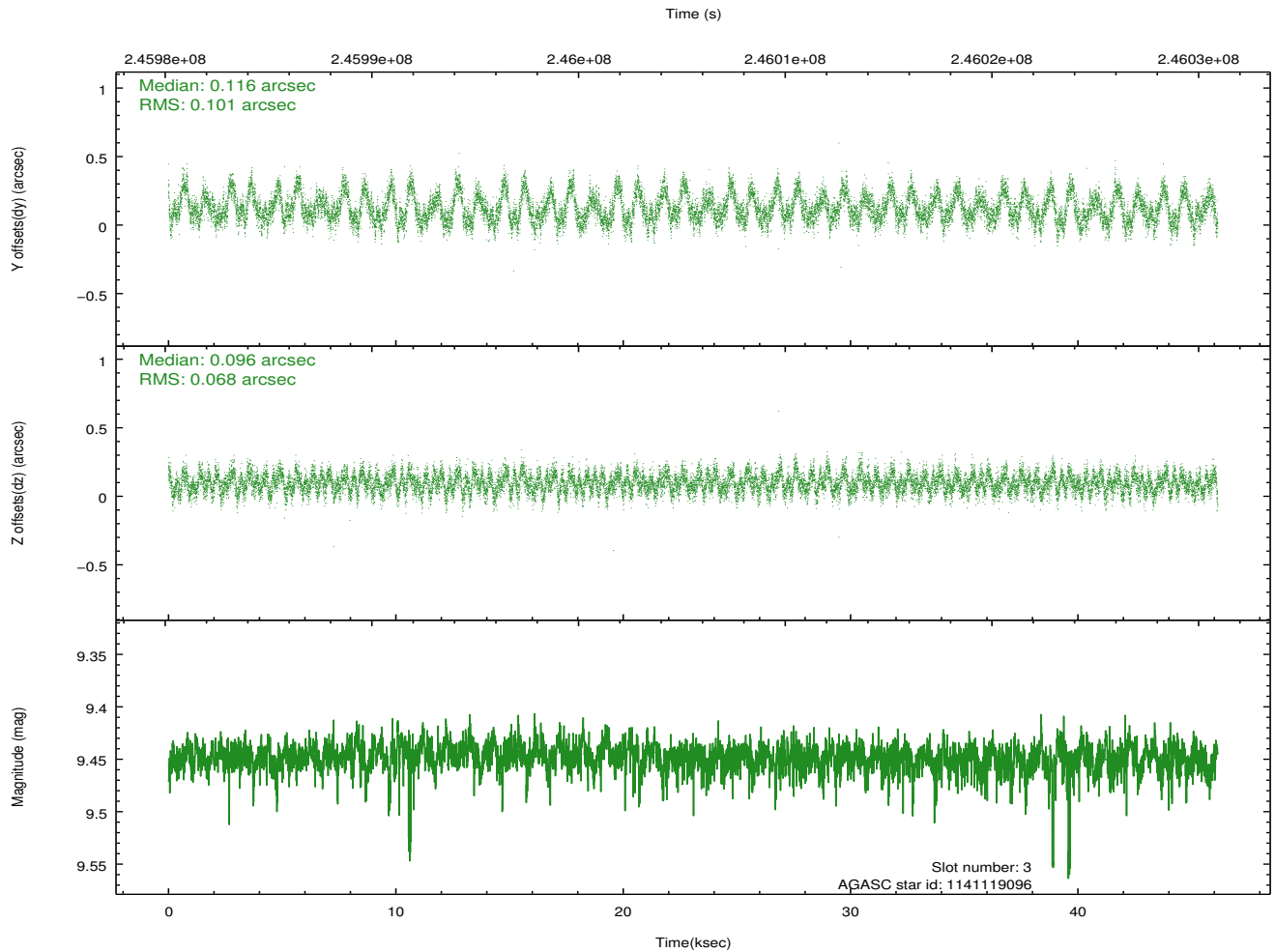
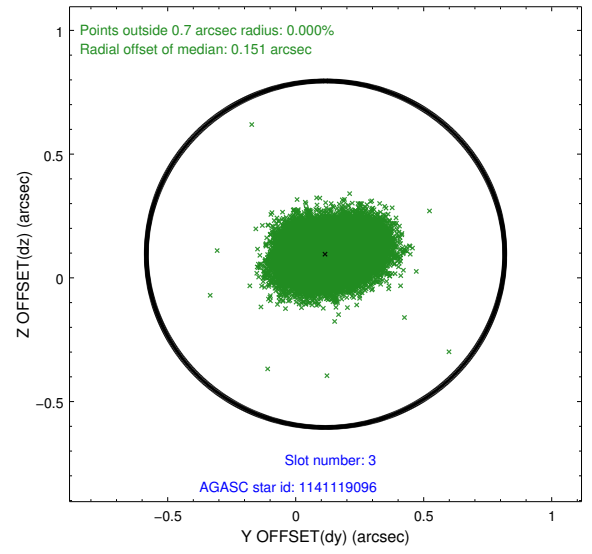
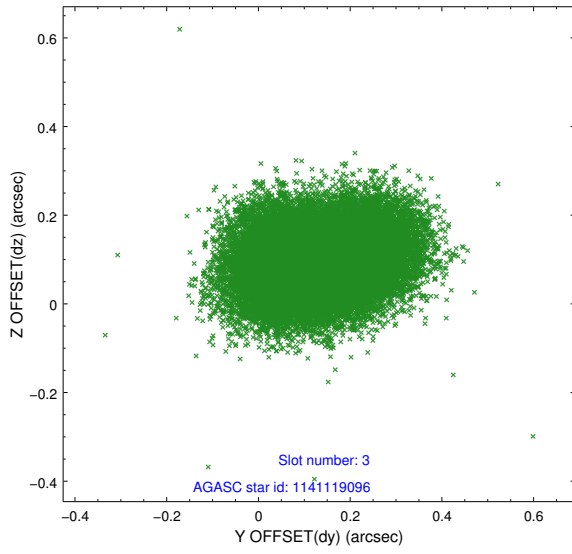


### Slot Statistics

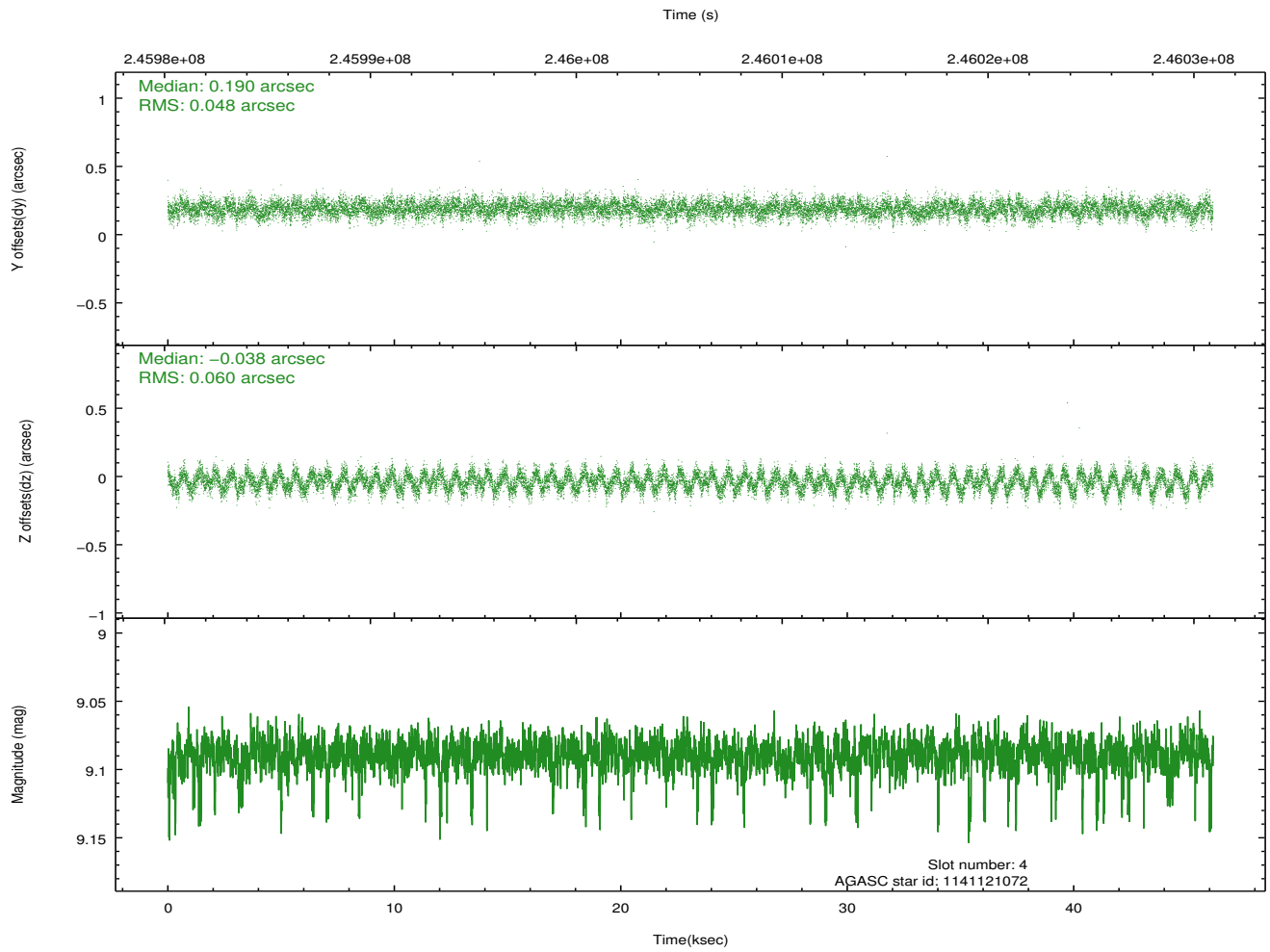
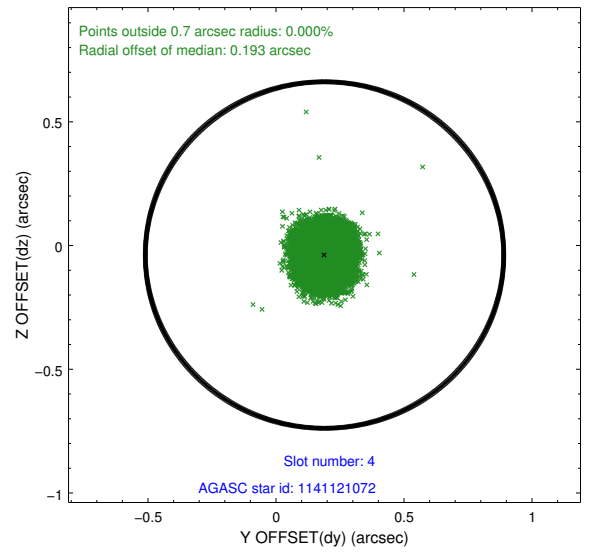
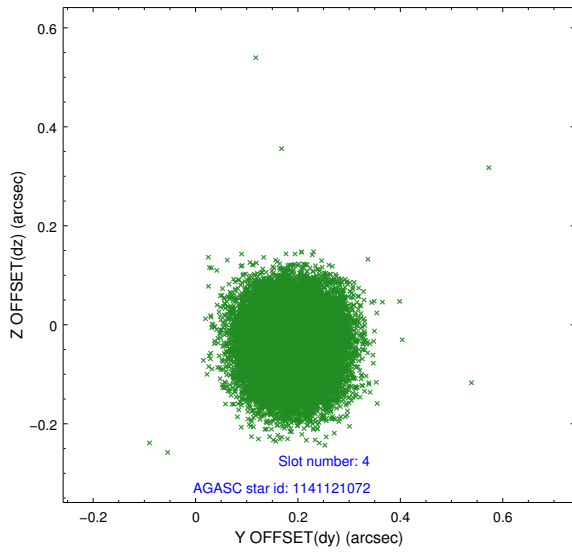
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	11256	0.050	-0.025	0.012	0.028	0.000000	0.000000	932.81	-835.16
1	FID	ACIS-I-5	7.23	11257	-0.165	0.065	0.010	0.027	0.000000	0.000000	-1815.47	1062.49
2	FID	ACIS-I-6	7.25	11257	0.025	0.032	0.015	0.026	0.000000	0.000000	398.40	1706.90
3	GUIDE	1141119096	9.45	22484	0.116	0.096	0.130	0.208	228.052751	-59.529718	1490.60	840.27
4	GUIDE	1141121072	9.09	22507	0.190	-0.038	0.083	0.130	227.898628	-59.420815	1523.52	358.33
5	GUIDE	1141116568	8.51	22510	-0.081	0.029	0.160	0.224	228.578452	-58.520066	-1267.16	-1720.66
6	GUIDE	1141113152	8.72	22507	-0.068	-0.056	0.071	0.114	228.952453	-58.305202	-2277.71	-1994.30
7	GUIDE	1141119896	8.39	22506	-0.141	-0.019	0.078	0.130	229.637327	-59.405643	-1192.74	2023.71

## 2.4 Star Slots

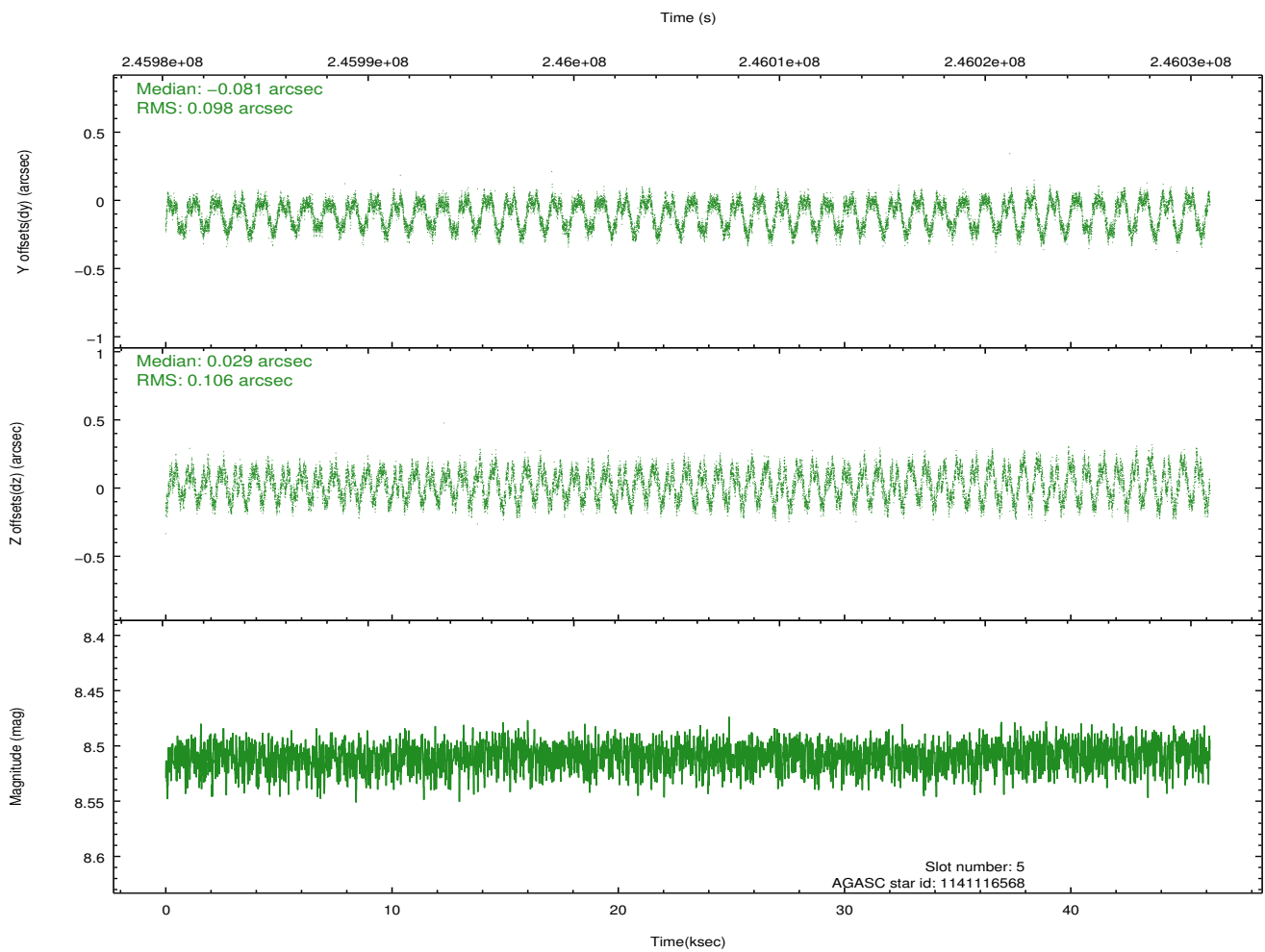
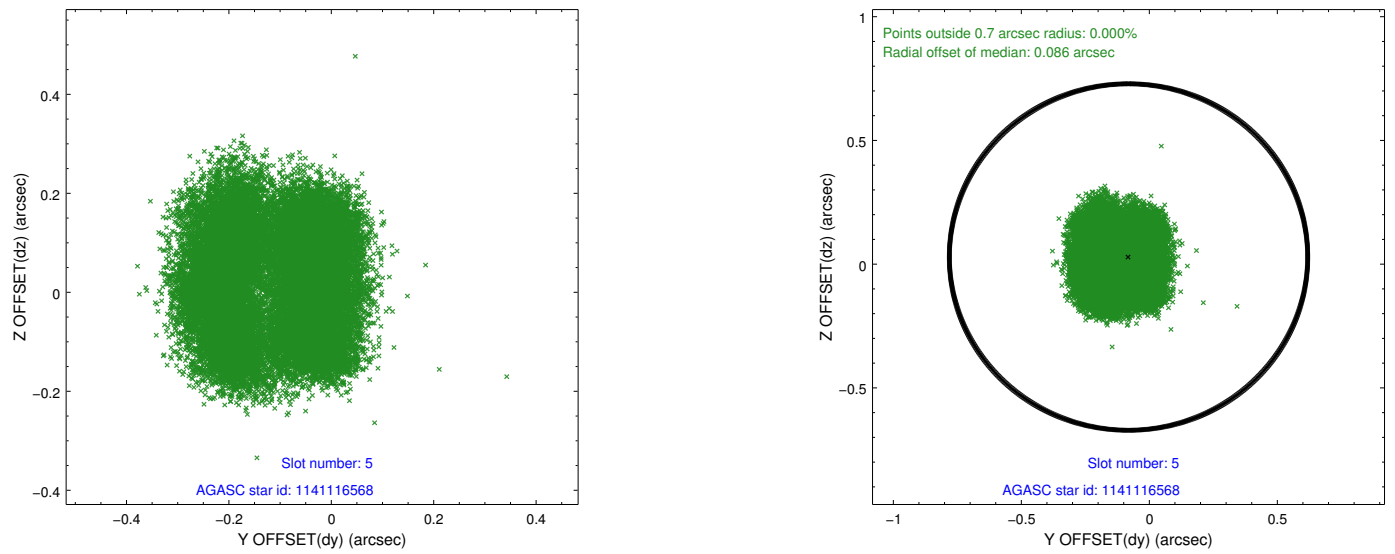
### 2.4.1 Slot 3



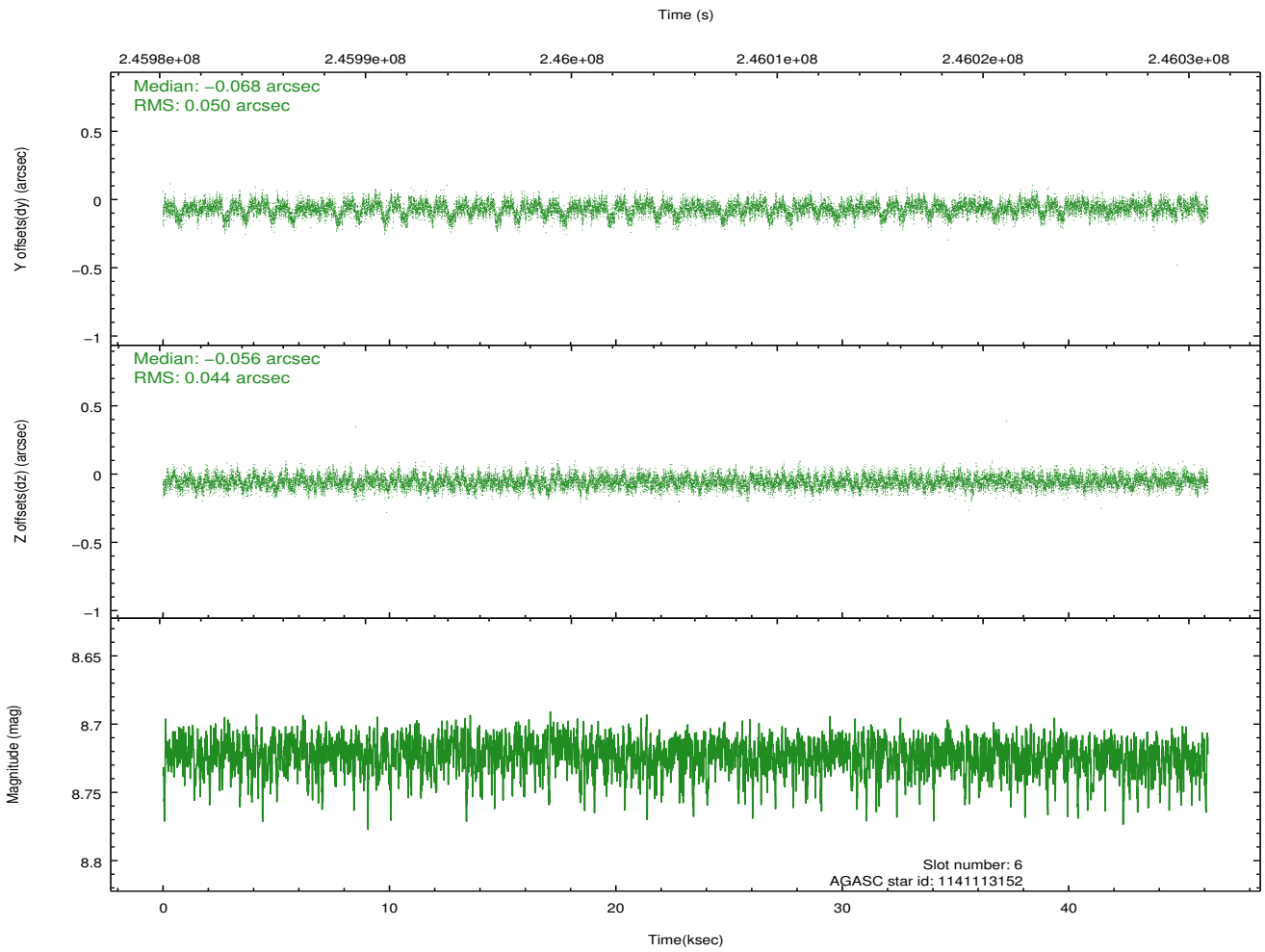
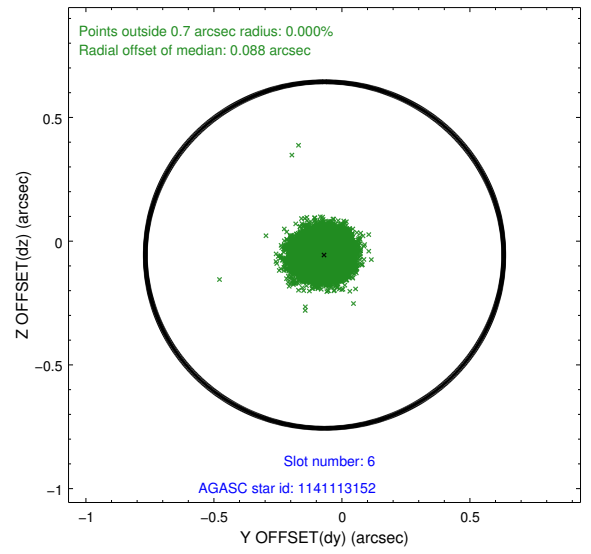
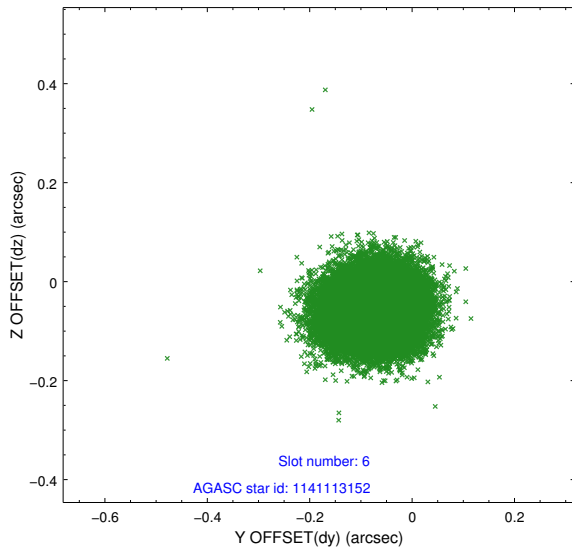
## 2.4.2 Slot 4



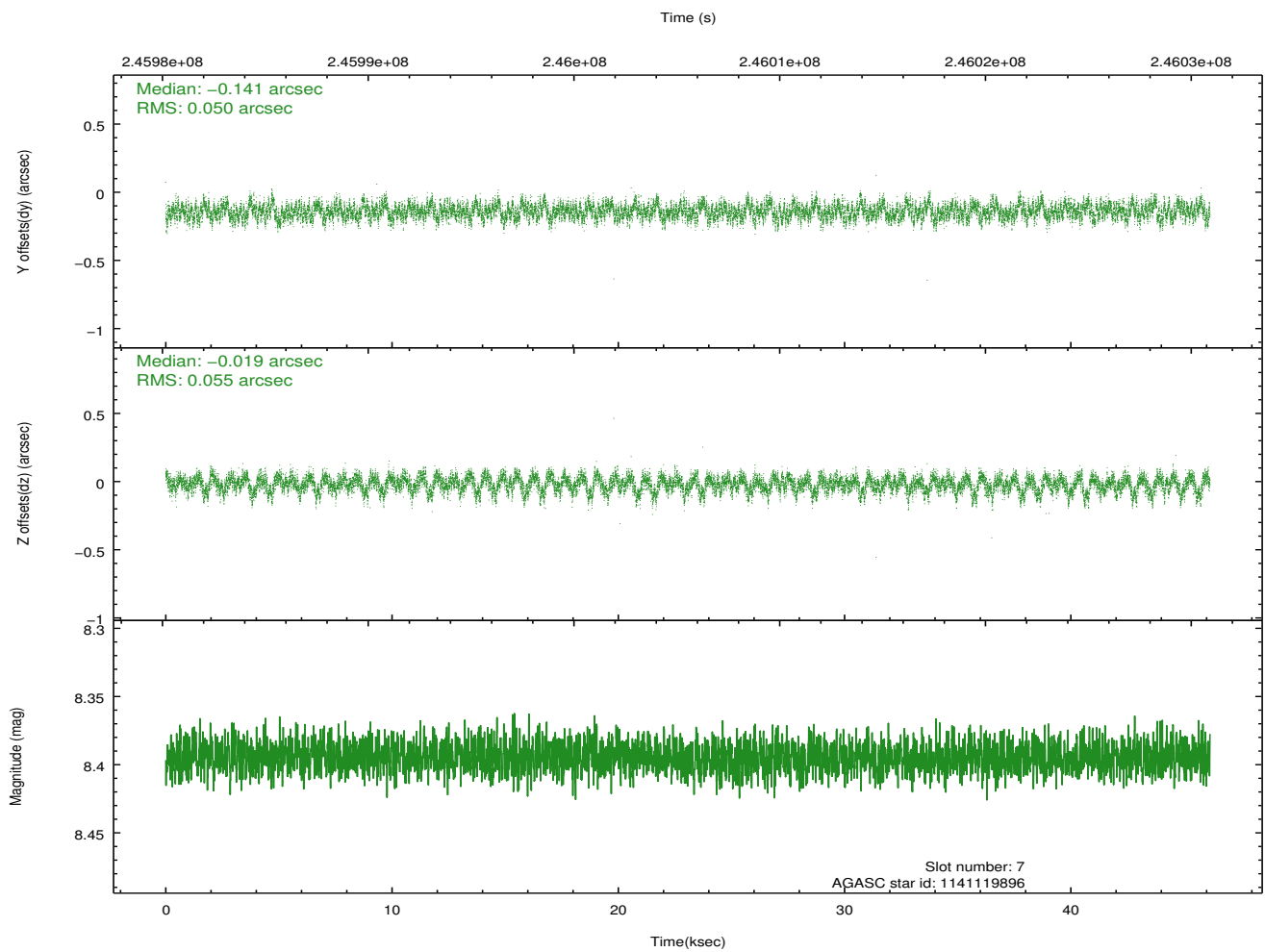
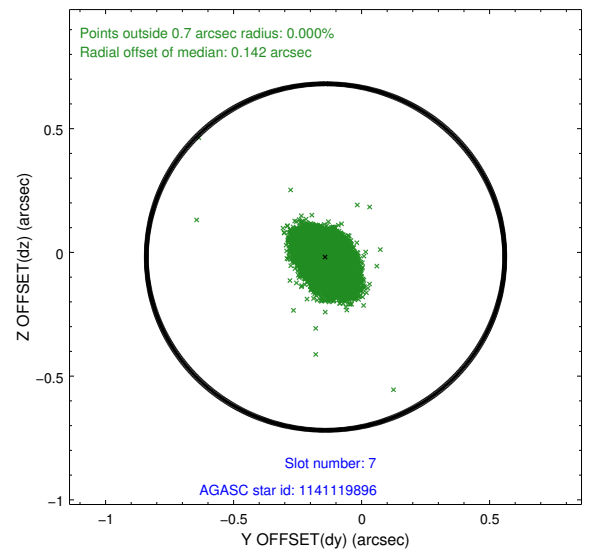
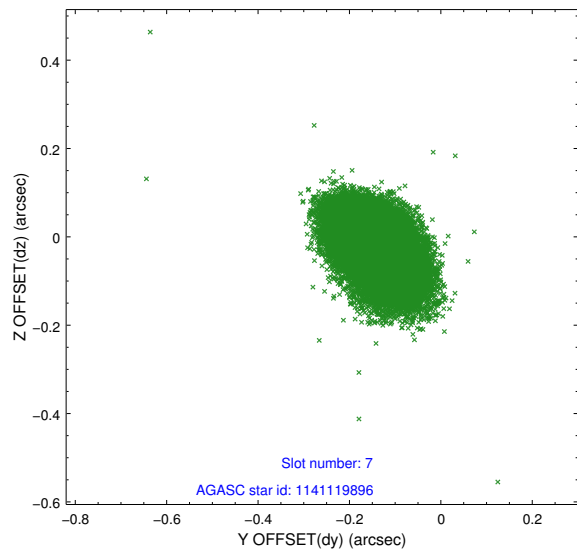
### 2.4.3 Slot 5



### 2.4.4 Slot 6

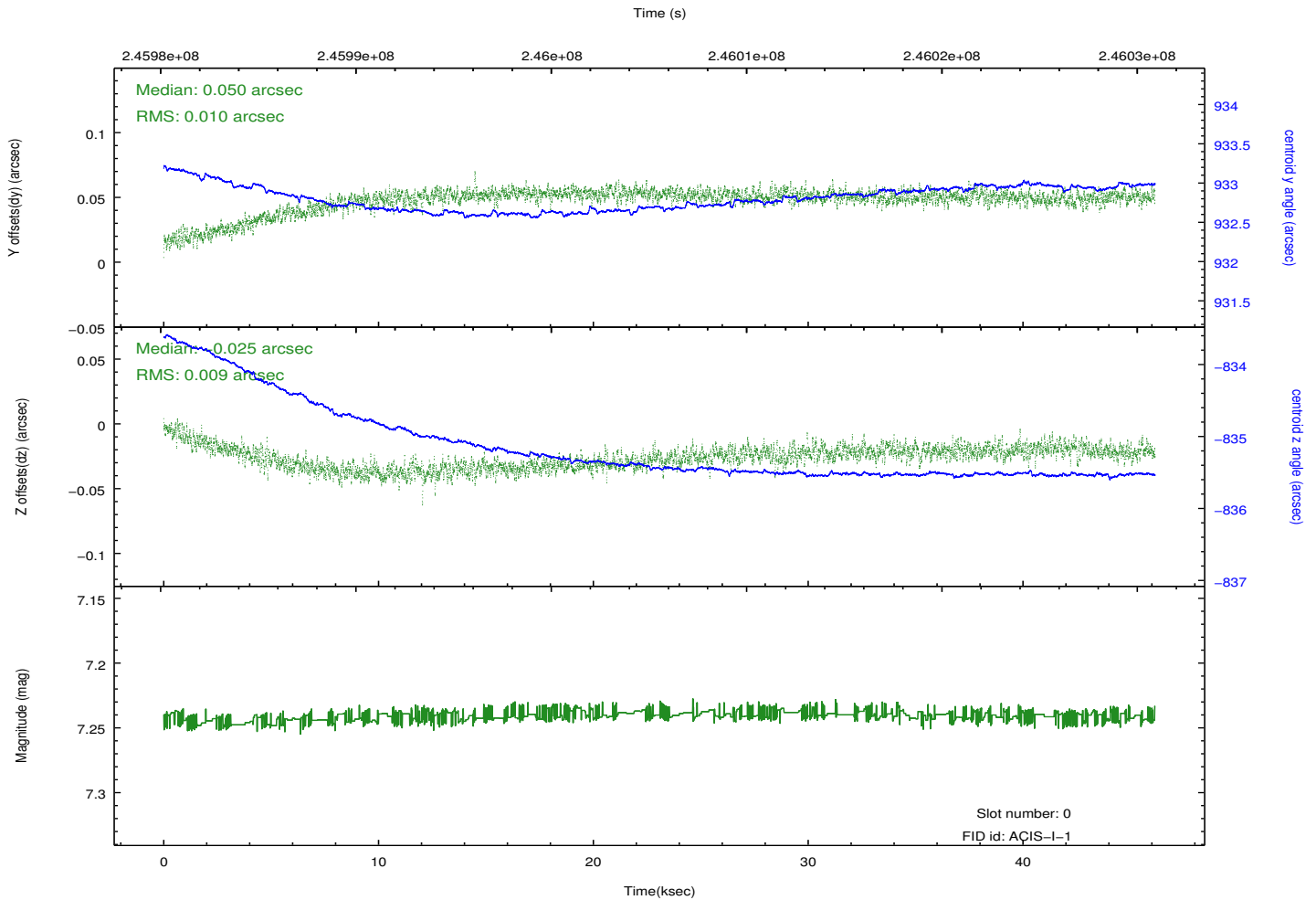
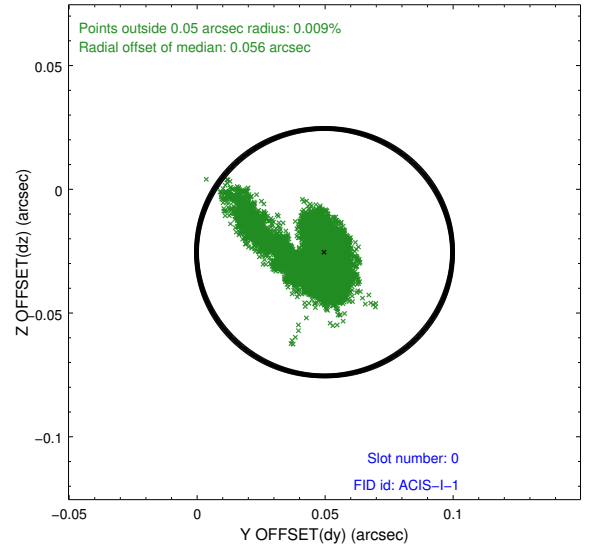
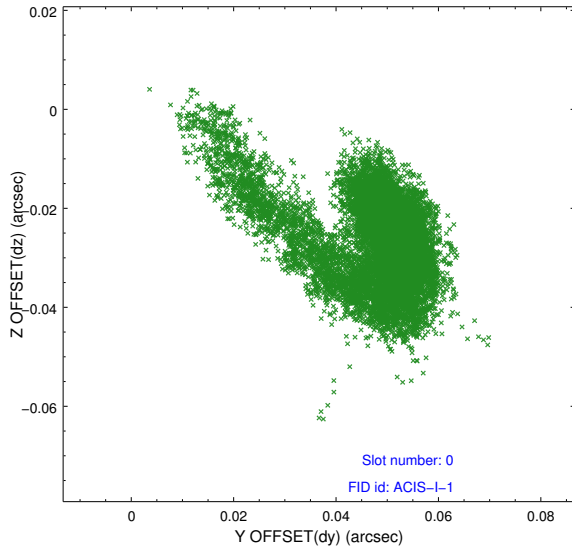


## 2.4.5 Slot 7

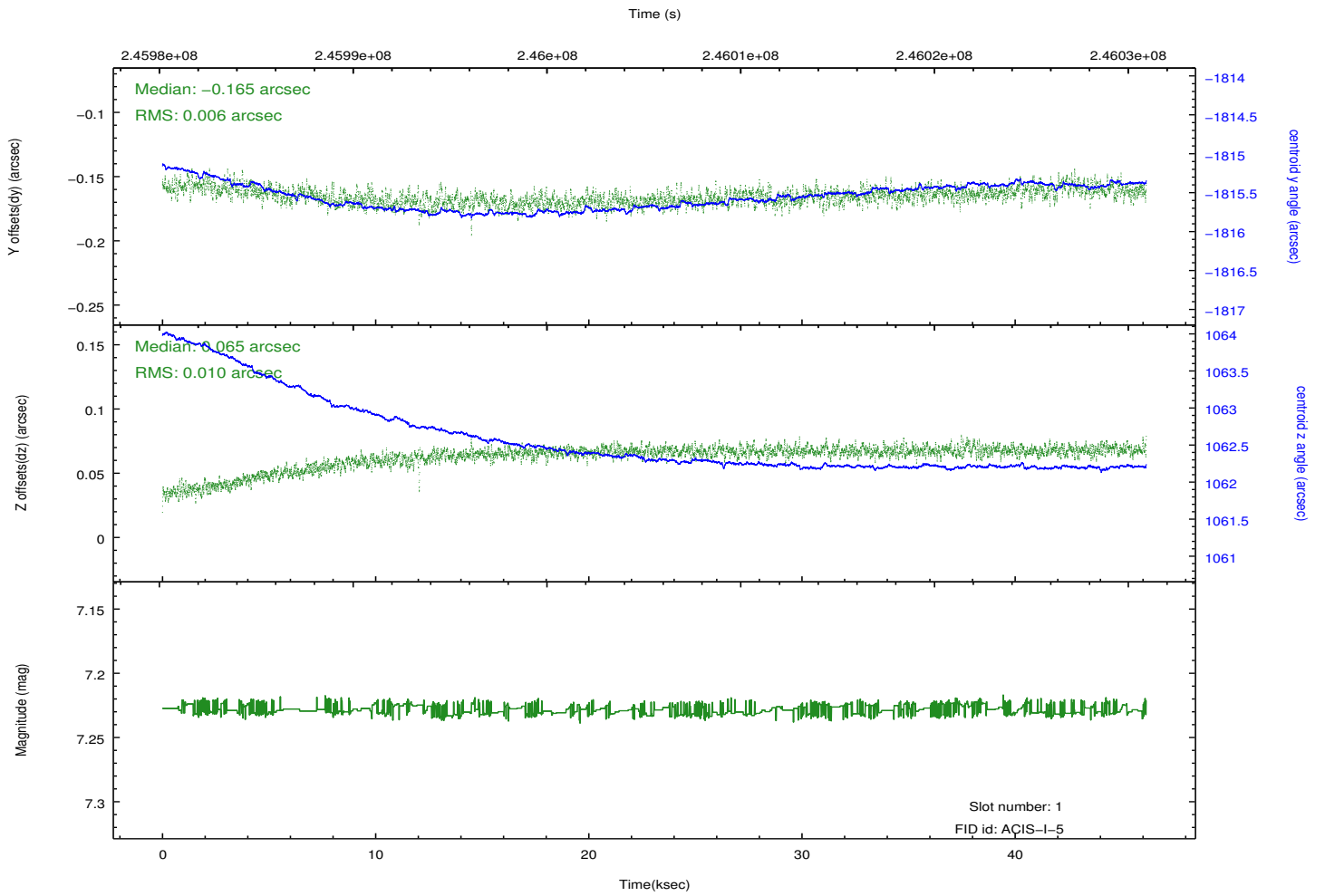
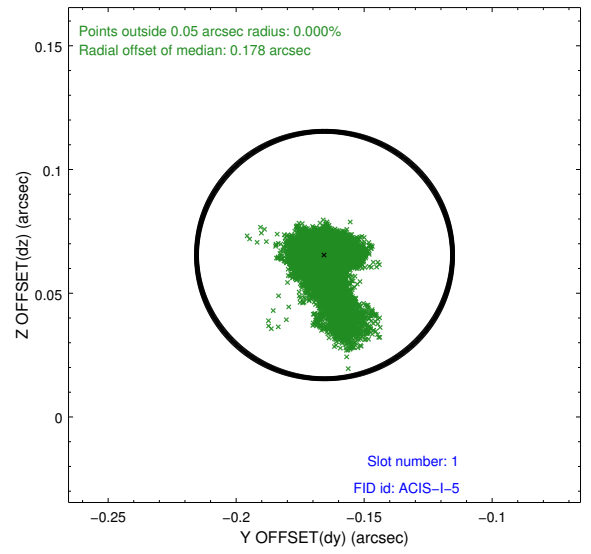
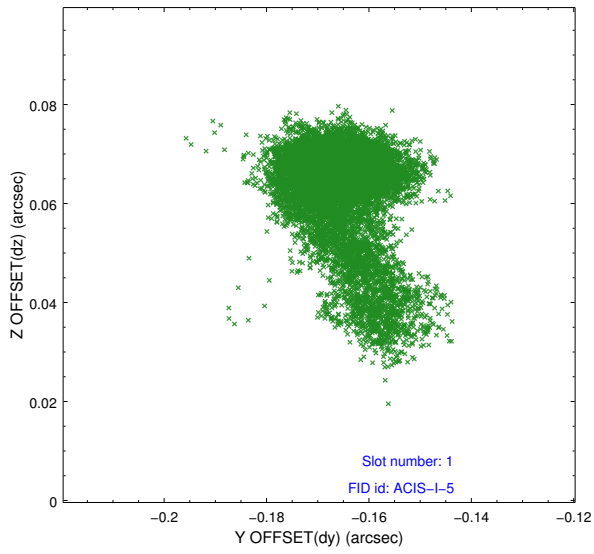


## 2.5 FID Slots

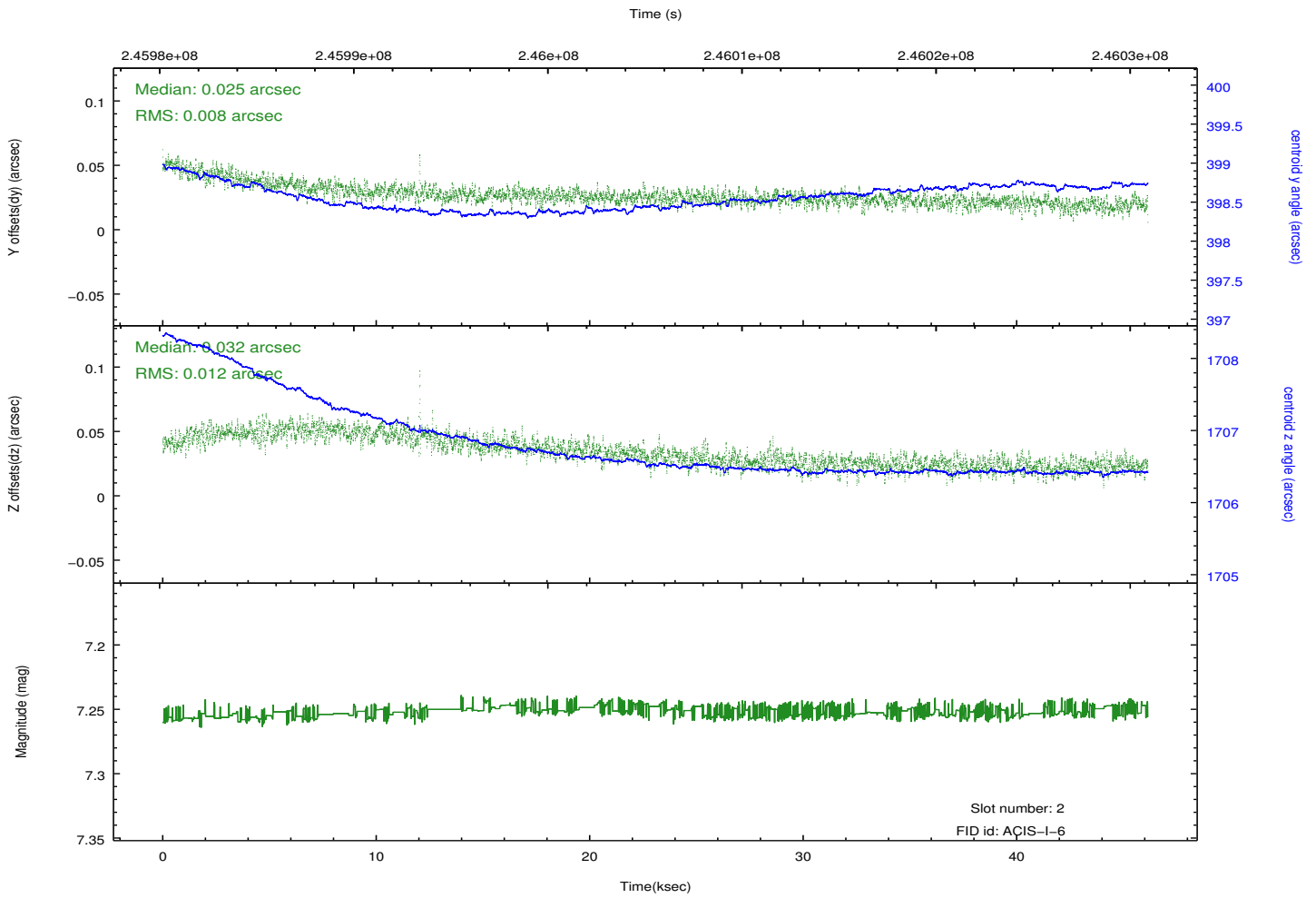
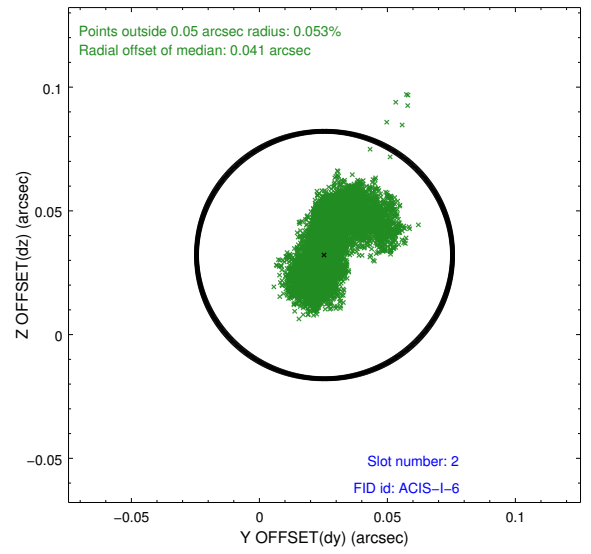
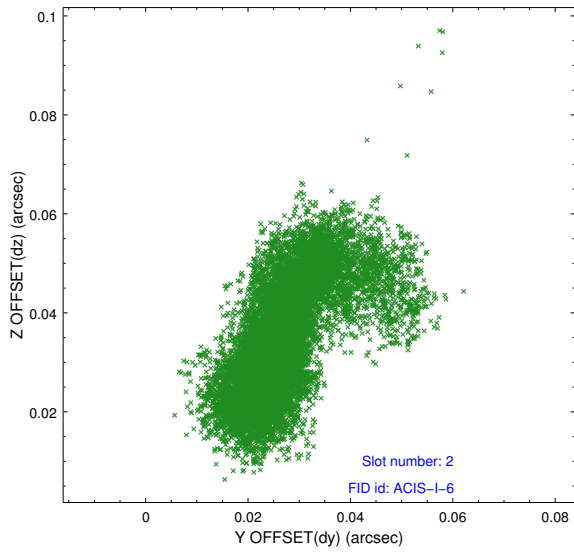
### 2.5.1 Slot 0



## 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)	2013.01.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.13747

## A.2 Comments

Monitor constraint met.