

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12429 - L2 Version 2  
Chandra X-Ray Center

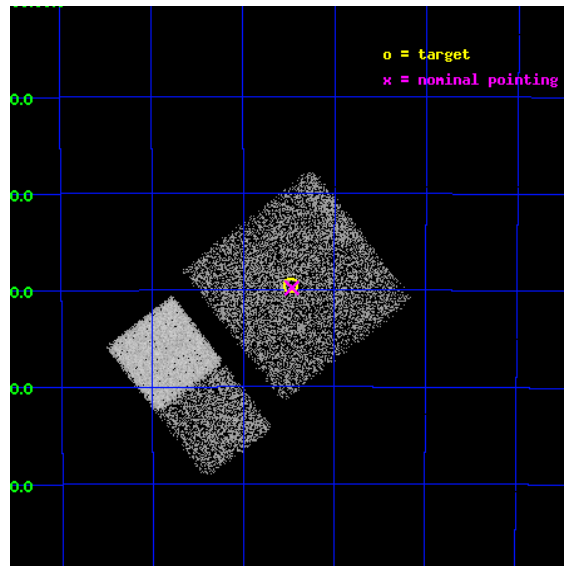
L2 Processing Date : Feb 24 2012

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# 1 Front

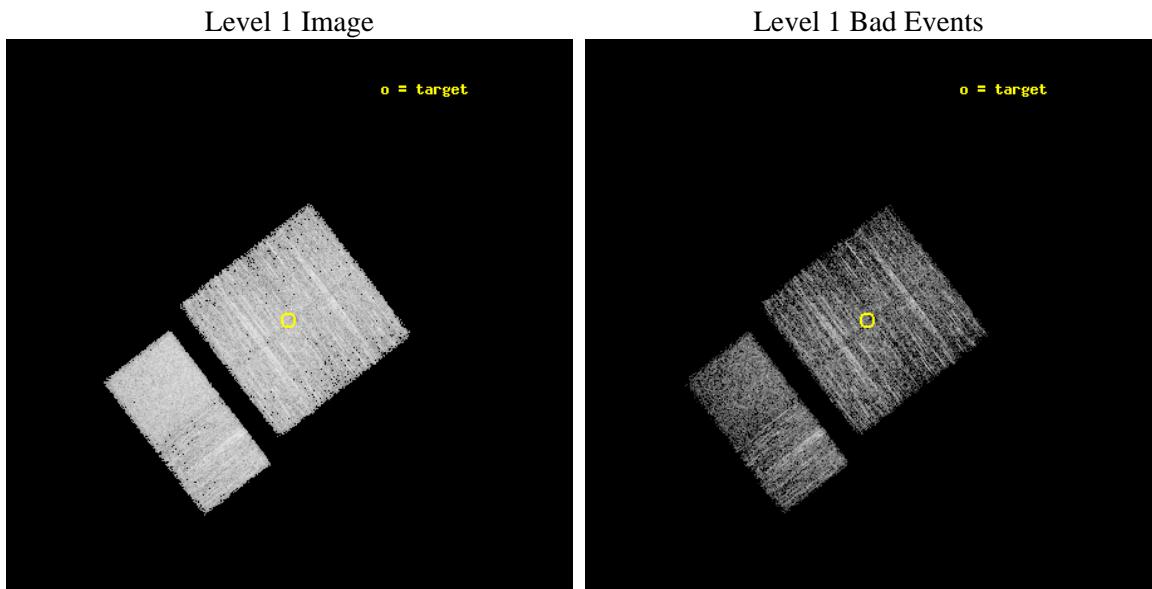
seq_num	401170	Sequence number
obs_id	12429	Observation id
title	The Nature of INTEGRAL Sources in the Galactic Plane	Proposal titl
observer	Dr. John Tomsick	Principal investigator
object	IGR J15415-5029	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	235.369167	Observer's specified target RA [deg]
dec_targ	-50.491	Observer's specified target Dec [deg]
ra_nom	235.36668129254	Nominal RA [deg]
dec_nom	-50.496451162963	Nominal Dec [deg]
roll_nom	232.43537650246	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5057.8712555766	Sum of GTIs [s]
livetime	4993.8254442541	Livetime [s]
ontime0	5057.7481355667	Sum of GTIs [s]
ontime1	5057.78917557	Sum of GTIs [s]
ontime2	5057.8302155733	Sum of GTIs [s]
ontime3	5057.8712555766	Sum of GTIs [s]
ontime6	5057.9533355832	Sum of GTIs [s]
ontime7	5057.9122955799	Sum of GTIs [s]
l2events	31746	Number of level 2 events



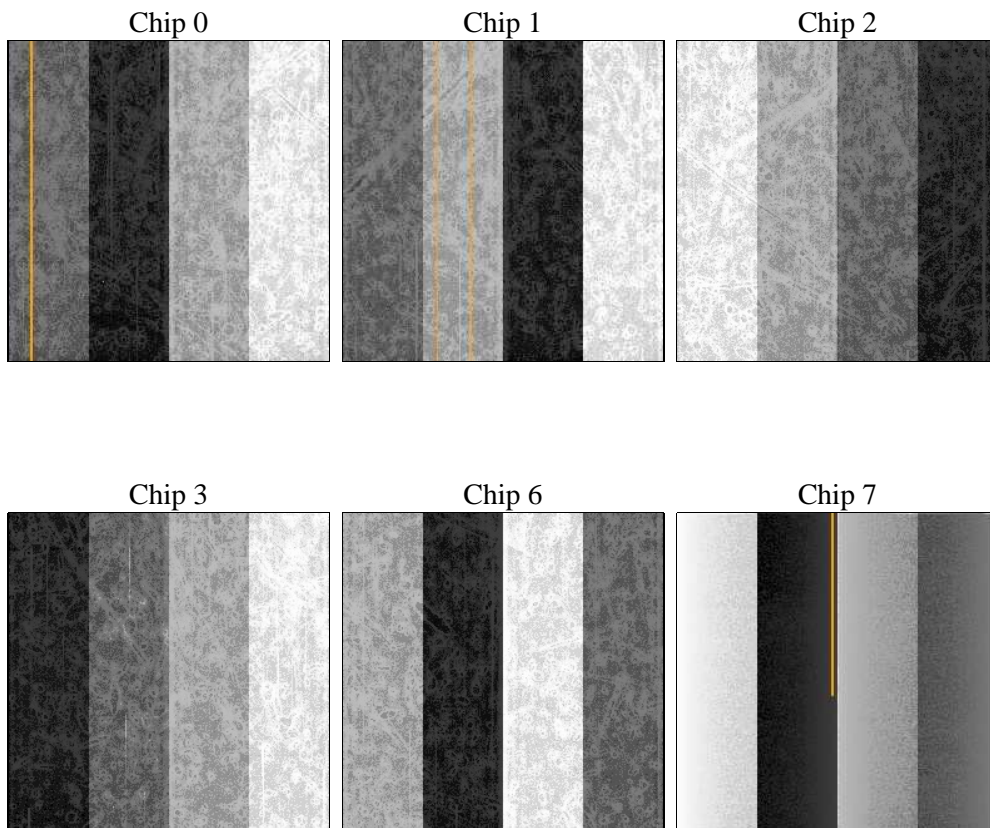
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	5057.8712555766	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime0	5057.7481355667	Sum of GTIs [s]
date	2012-02-24T04:30:34	Date and time of file creation	ontime1	5057.78917557	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5057.8302155733	Sum of GTIs [s]
			ontime3	5057.8712555766	Sum of GTIs [s]
			ontime6	5057.9533355832	Sum of GTIs [s]
			ontime7	5057.9122955799	Sum of GTIs [s]
			l1events	185970	Number of level 1 events

### 2.1.4 Events

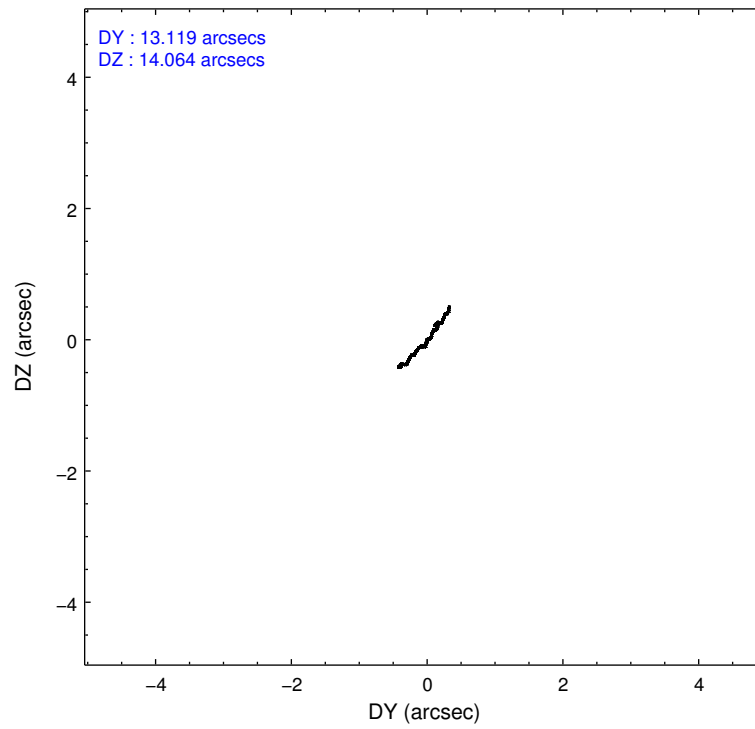
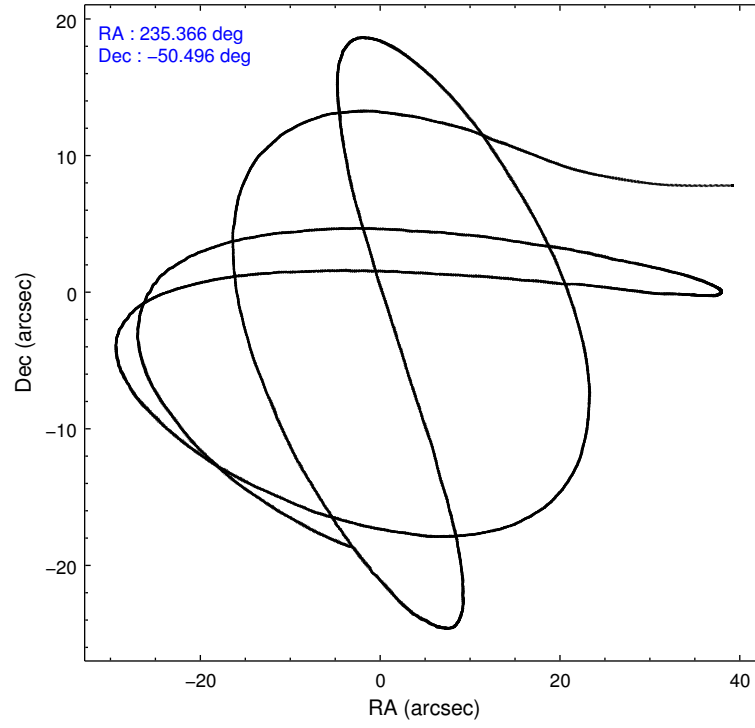
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	27415	26933	31780	29815	31083	38944	grade 0 events	1180	1457	1304	1227	1336	1545
rejected events	24100	23038	28308	26505	27323	21732		4%	5%	4%	4%	4%	3%
rejected %	87%	85%	89%	88%	87%	55%	grade 1 events	16	14	16	17	13	41
								0%	0%	0%	0%	0%	0%
							grade 2 events	819	897	878	731	815	3581
								2%	3%	2%	2%	2%	9%
							grade 3 events	340	347	313	355	402	1506
								1%	1%	0%	1%	1%	3%
							grade 4 events	321	404	332	336	386	1452
								1%	1%	1%	1%	1%	3%
							grade 5 events	1301	1372	1298	1446	1544	4097
								4%	5%	4%	4%	4%	10%
							grade 6 events	656	791	646	663	824	9134
								2%	2%	2%	2%	2%	23%
							grade 7 events	22782	21651	26993	25040	25763	17588
								83%	80%	84%	83%	82%	45%

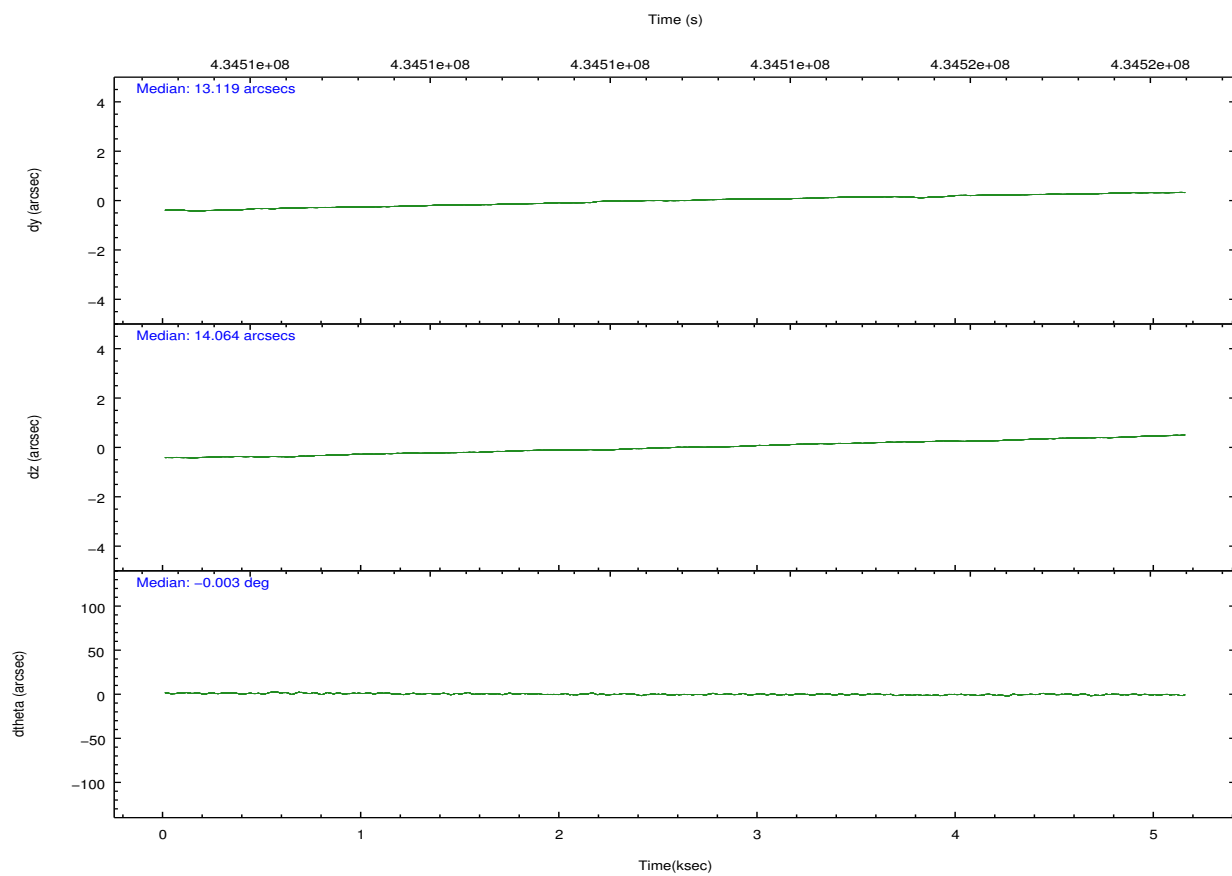
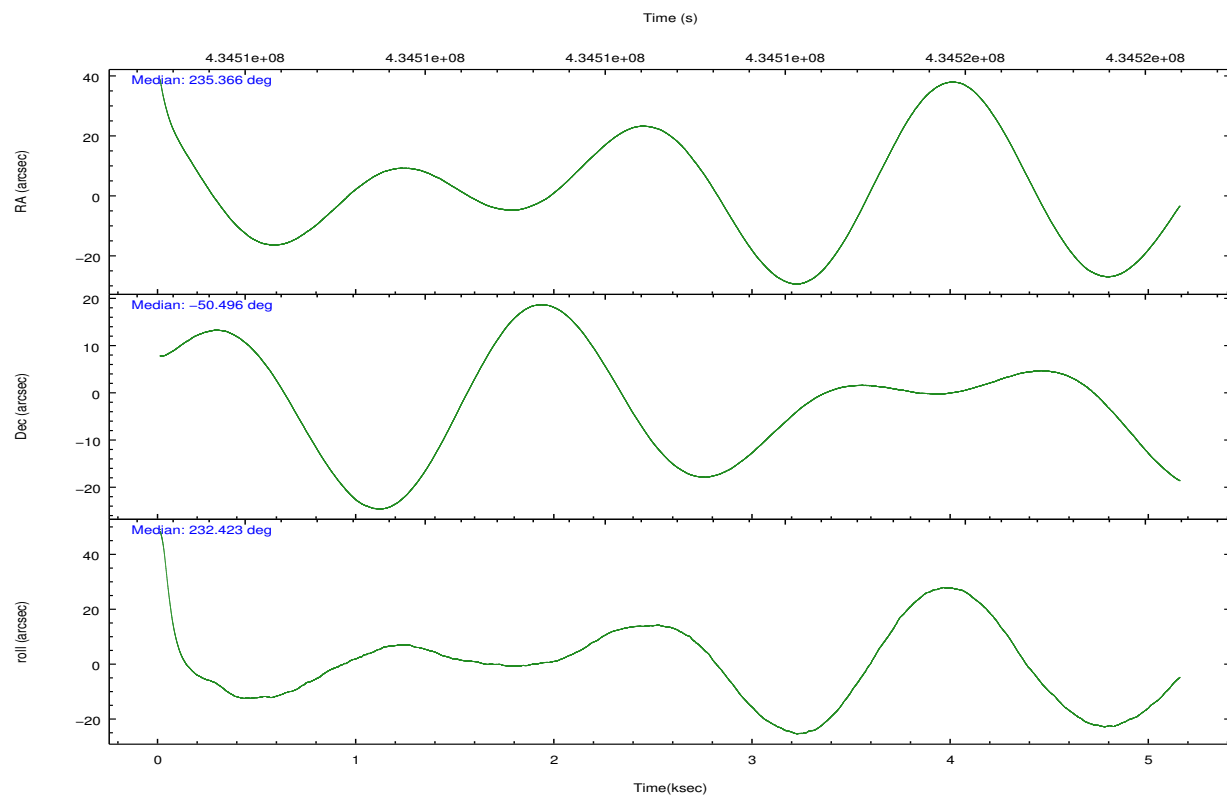


## 2.2 Compared Parameters

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	235.372682	235.3666812925417	CCD I2 on	Y	Y
[deg] Pointing Dec	-50.469337	-50.49645116296328	CCD I3 on	Y	Y
[deg] Pointing Roll	232.231261	232.4353765024638	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	434510943.184000	434509684.10144	CCD S5 on	N	N
Observation start date	2011-10-09T01:27:57	2011-10-09T01:08:04	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	434515943.184000	434516087.78927	On-chip summing requested	N	N
Observation end date	2011-10-09T02:51:17	2011-10-09T02:54:47	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



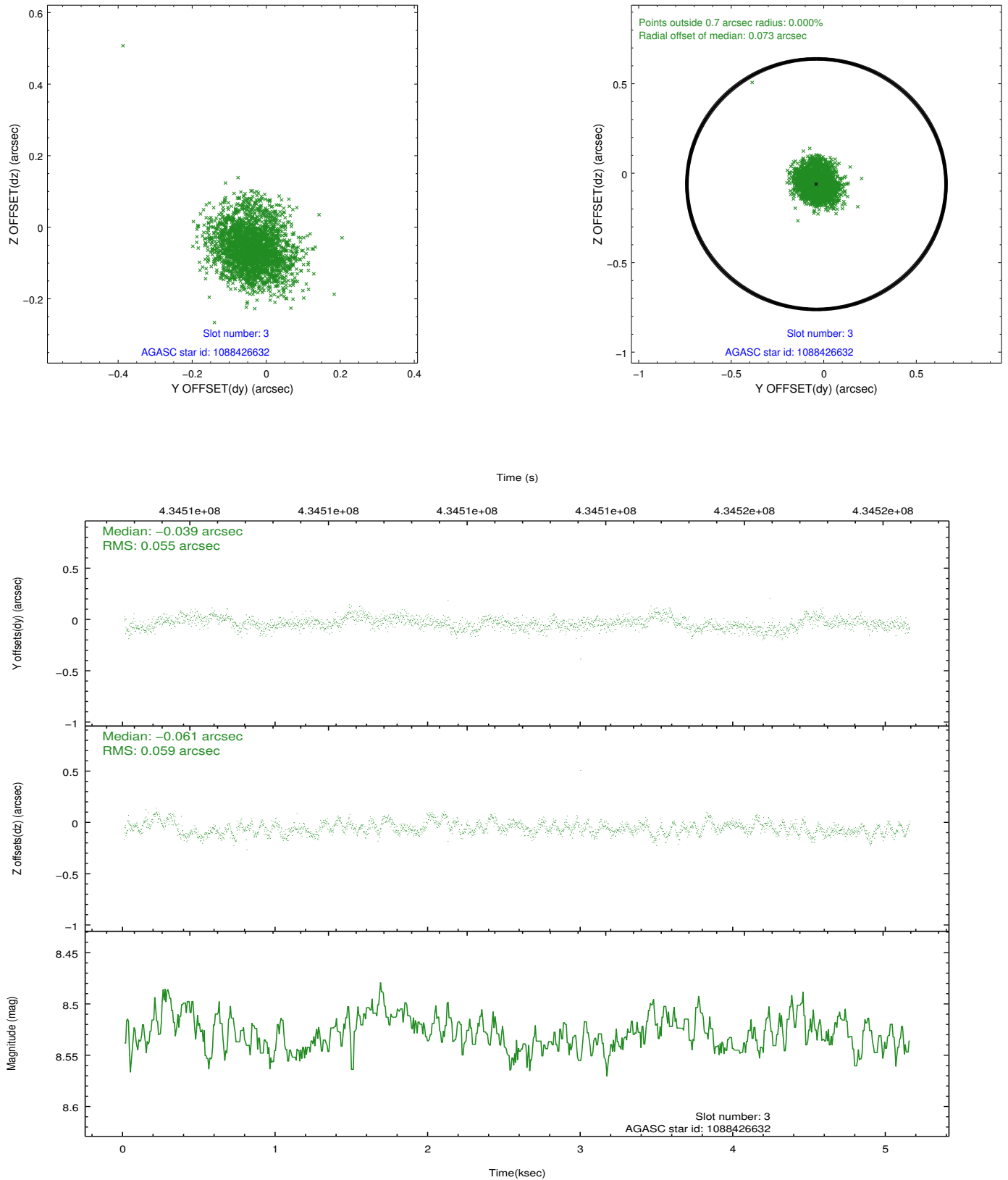


### Slot Statistics

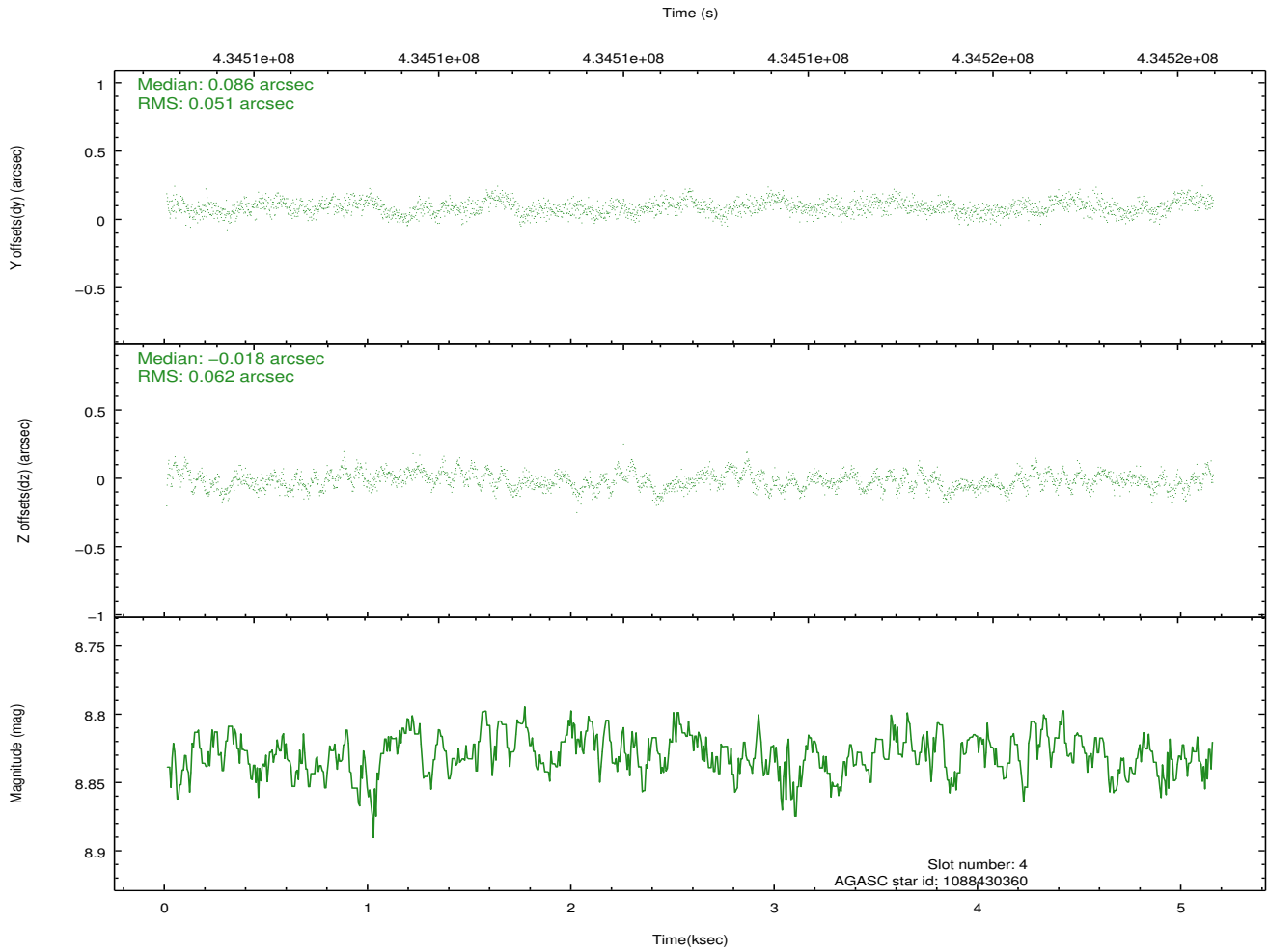
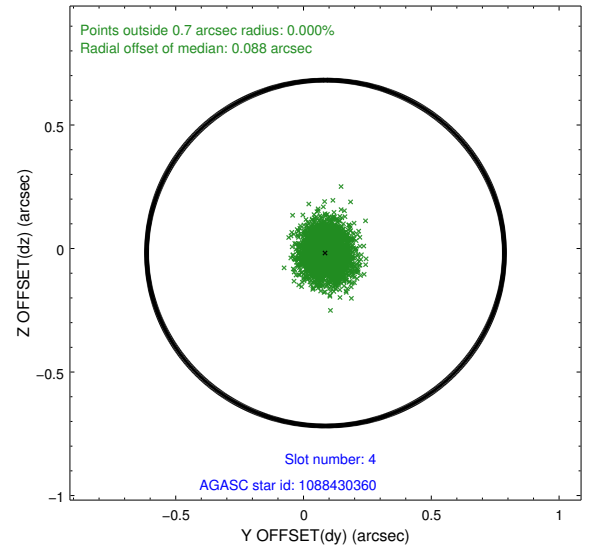
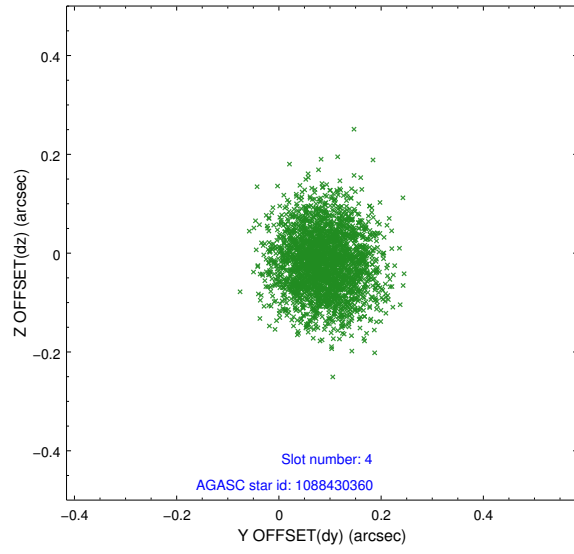
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.01	1256	-0.015	0.013	0.010	0.017	0.000000	0.000000	926.40	-837.62
1	FID	ACIS-I-4	6.93	1256	0.202	0.022	0.008	0.013	0.000000	0.000000	2147.30	1061.62
2	FID	ACIS-I-5	7.00	1256	-0.286	0.036	0.009	0.017	0.000000	0.000000	-1820.37	1060.79
3	GUIDE	1088426632	8.53	2503	-0.039	-0.061	0.085	0.140	234.720512	-50.346585	574.29	-1449.44
4	GUIDE	1088430360	8.83	2512	0.086	-0.018	0.085	0.138	235.187860	-49.858872	-1473.44	-1684.25
5	GUIDE	1088432992	7.63	2512	-0.156	0.015	0.067	0.108	235.920696	-50.607588	-370.76	1298.10
6	GUIDE	1090132976	8.94	2508	0.072	0.051	0.101	0.167	236.464309	-50.535454	-1327.69	2133.24
7	GUIDE	1088959536	9.09	2499	0.029	0.011	0.125	0.213	235.873470	-51.047662	955.05	2175.69

## 2.4 Star Slots

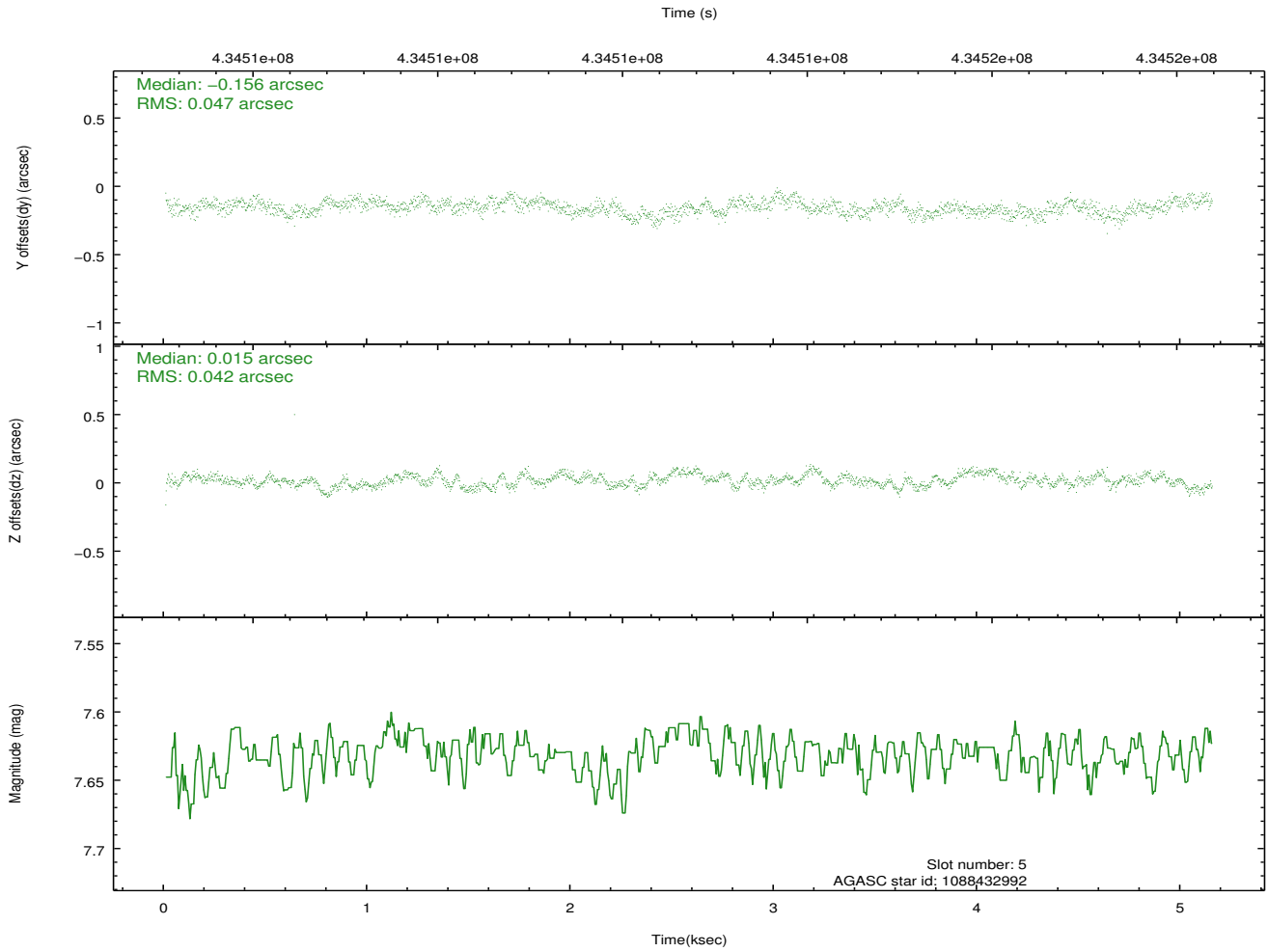
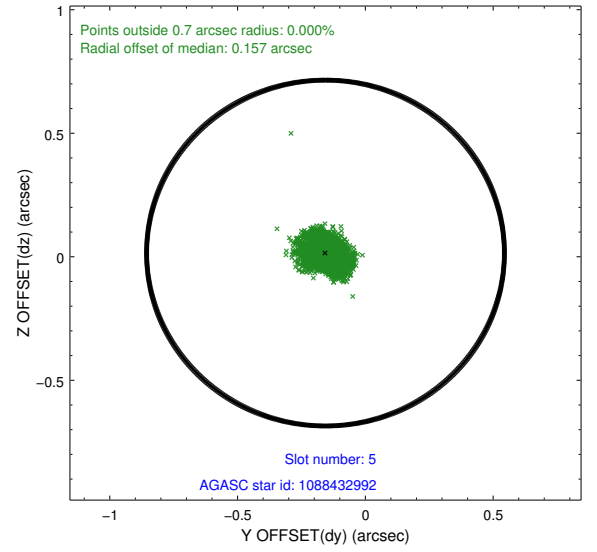
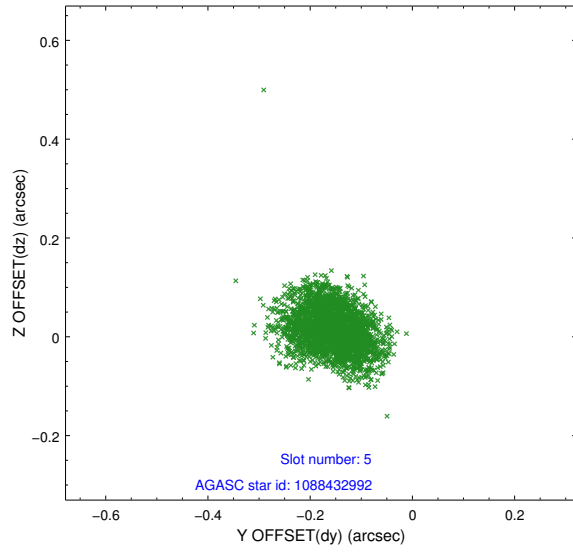
### 2.4.1 Slot 3



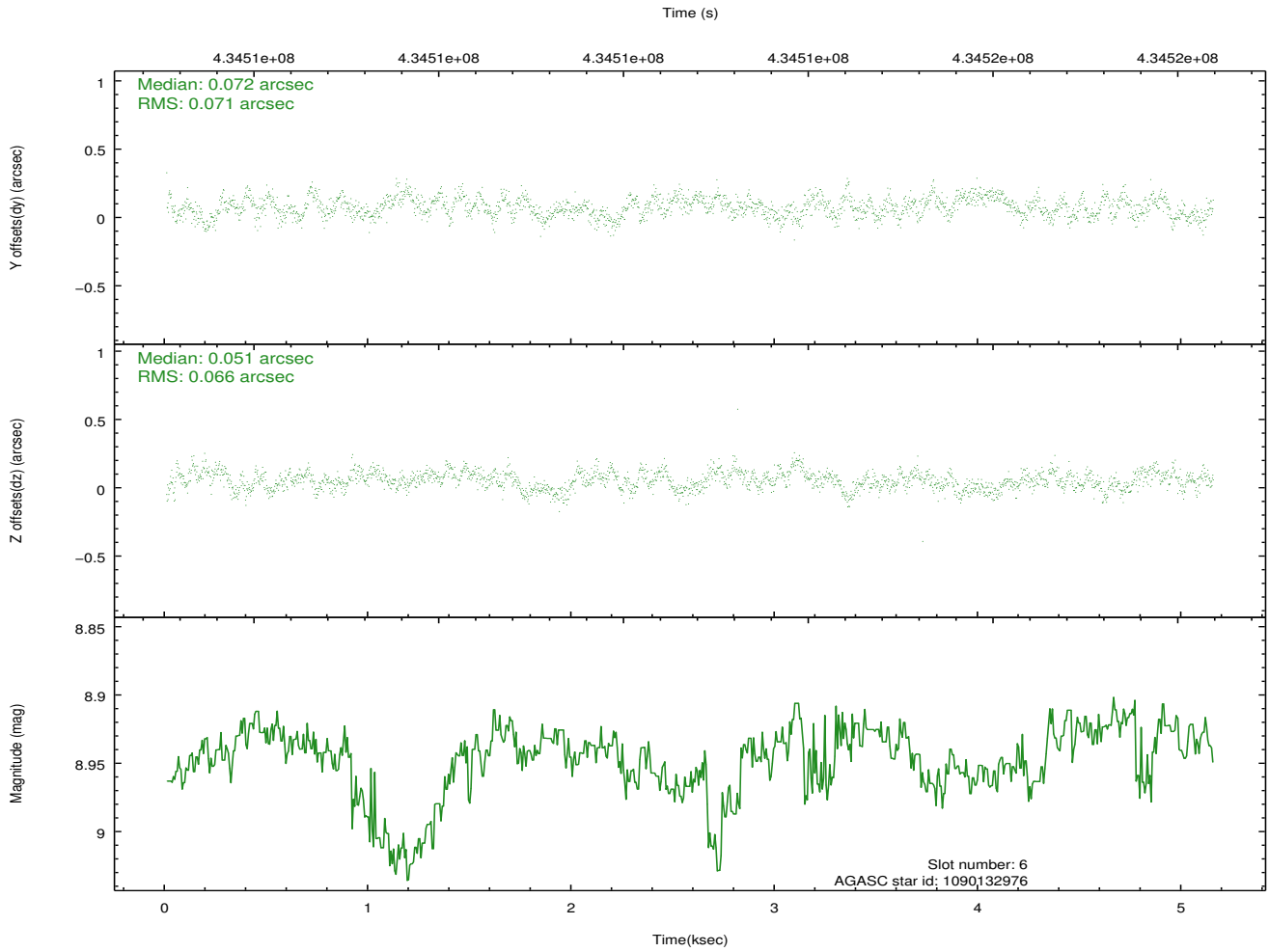
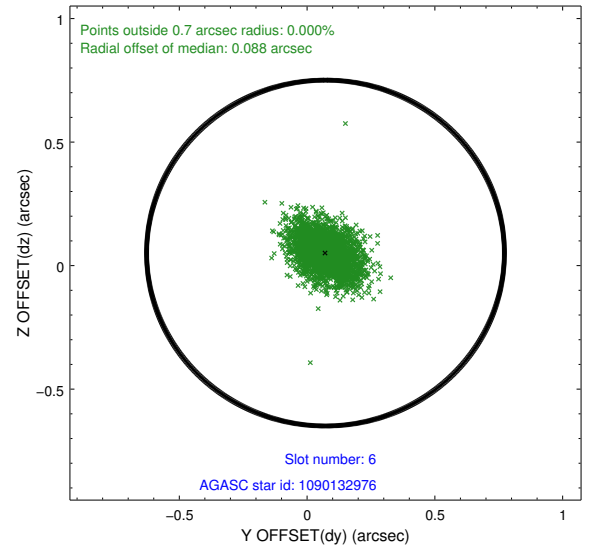
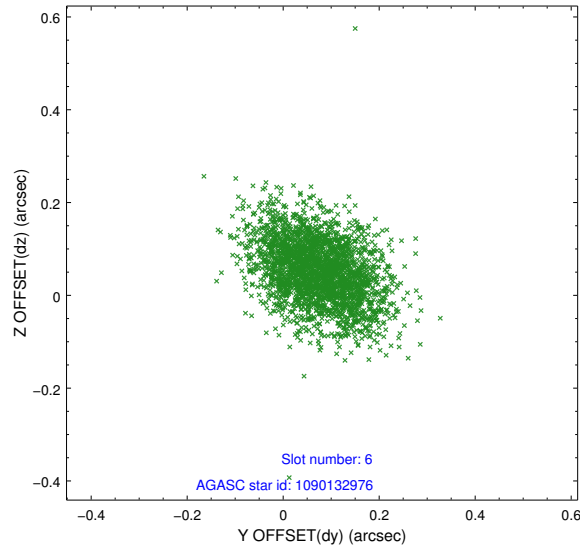
## 2.4.2 Slot 4



### 2.4.3 Slot 5

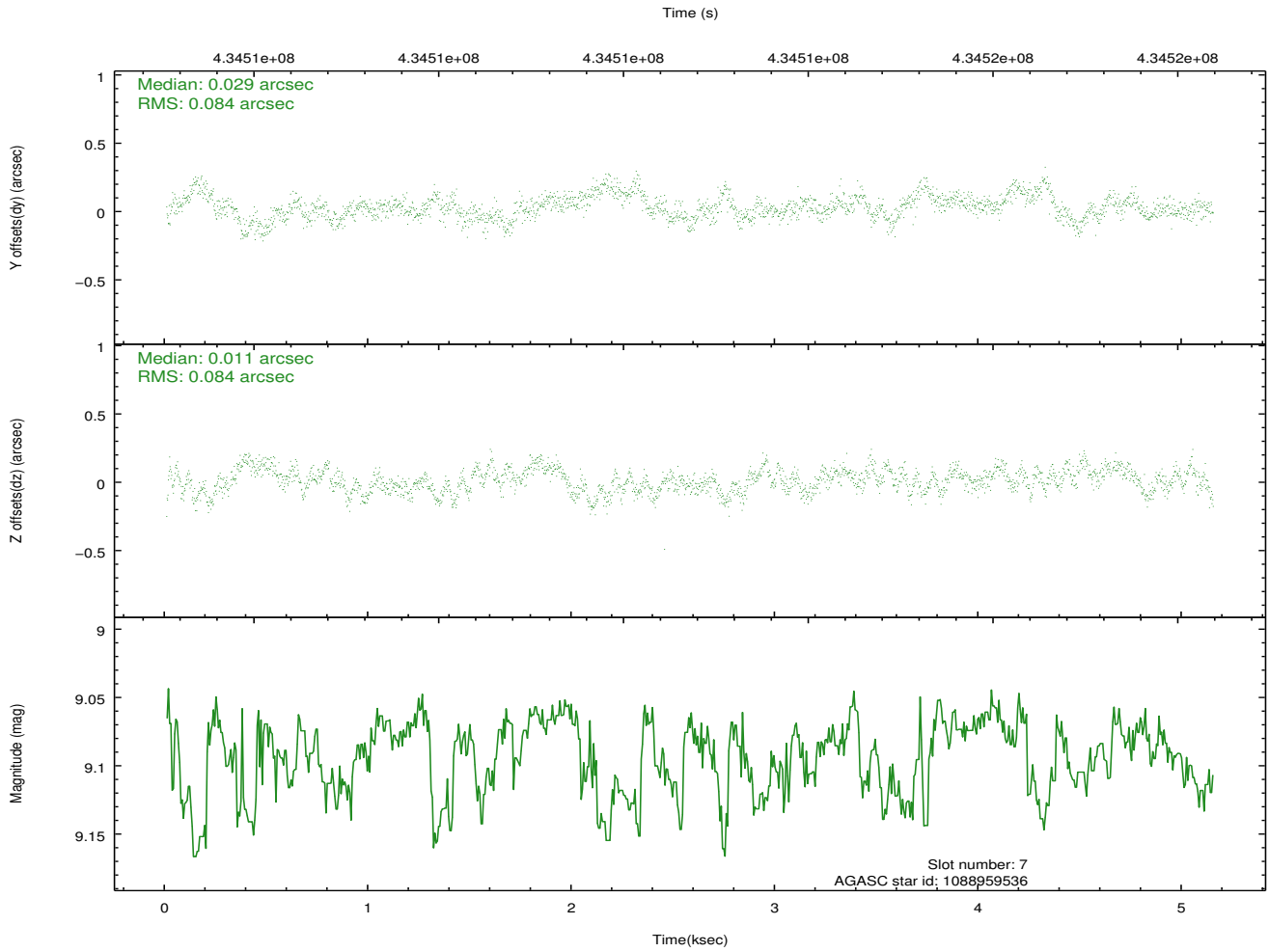
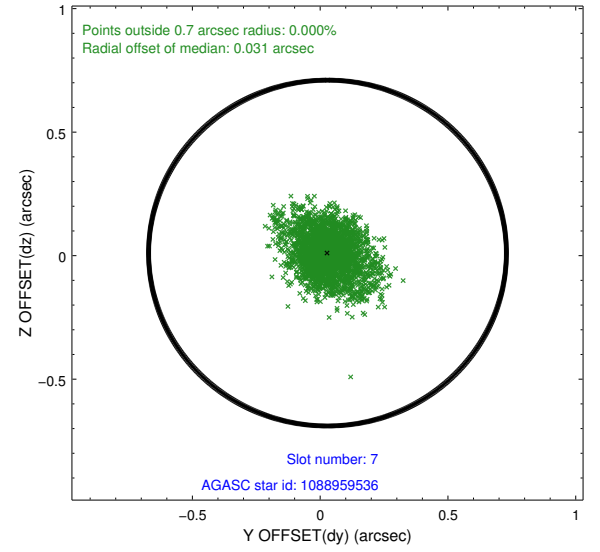
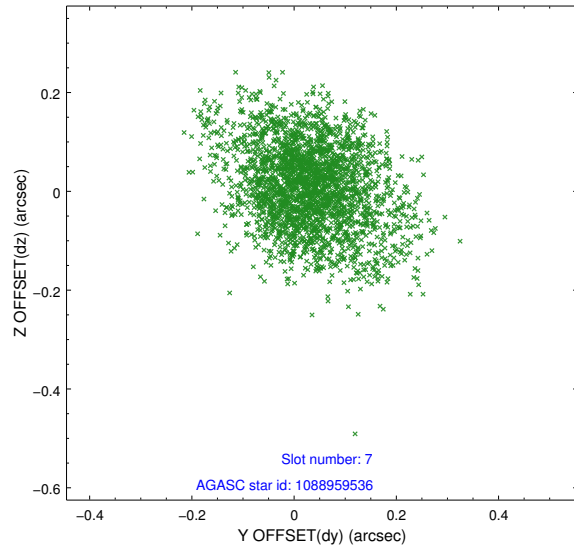


## 2.4.4 Slot 6



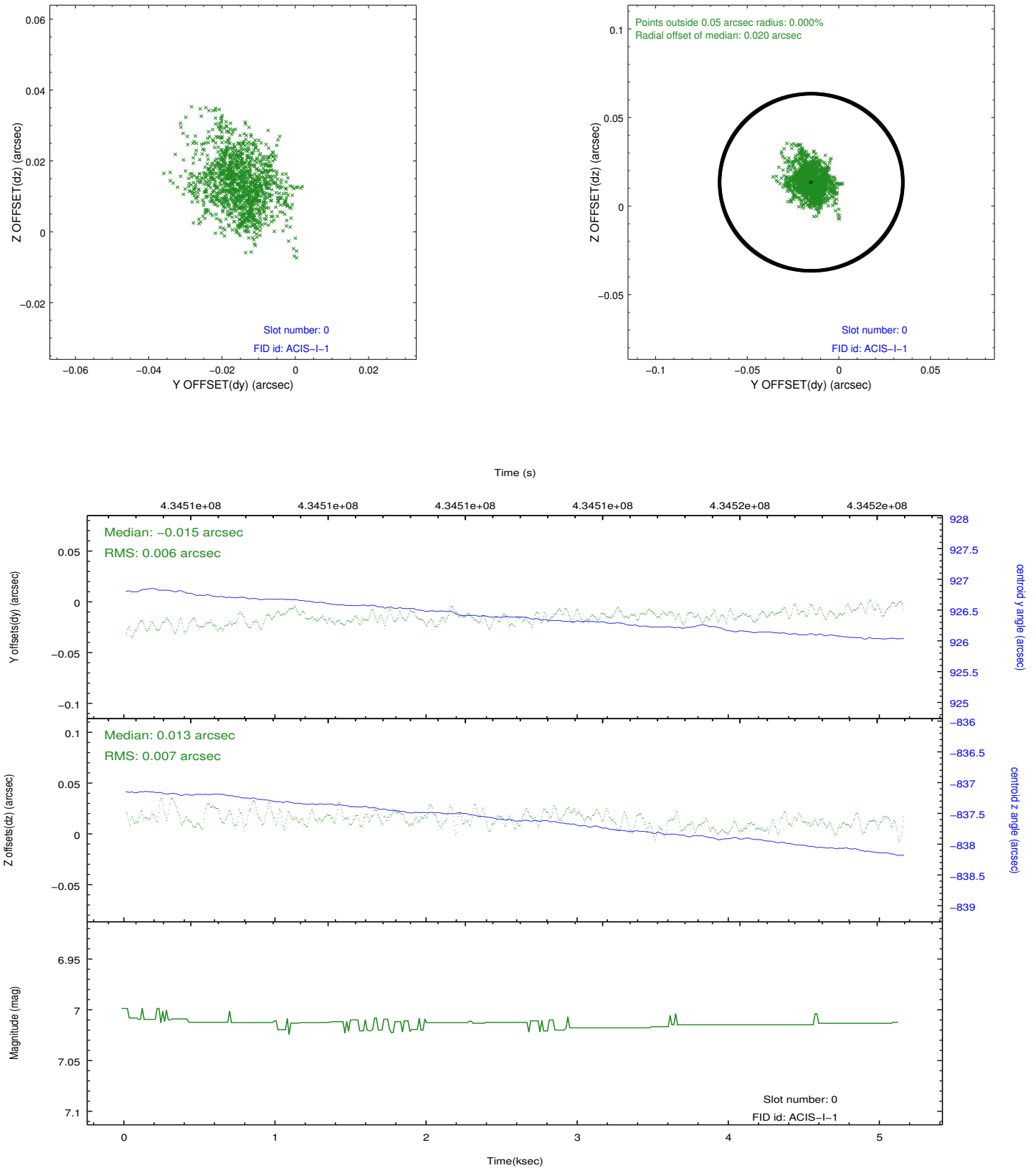


## 2.4.5 Slot 7

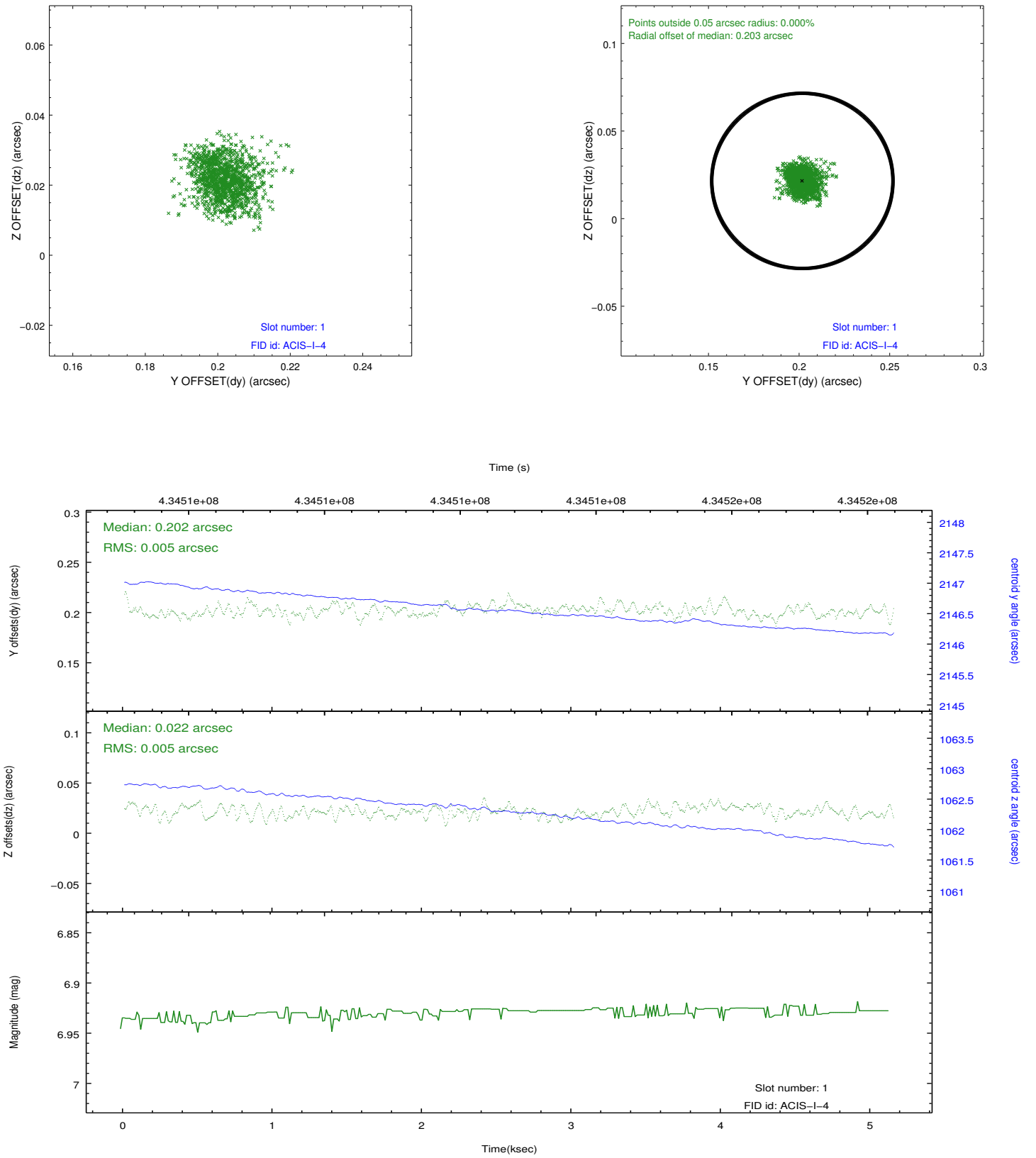


## 2.5 FID Slots

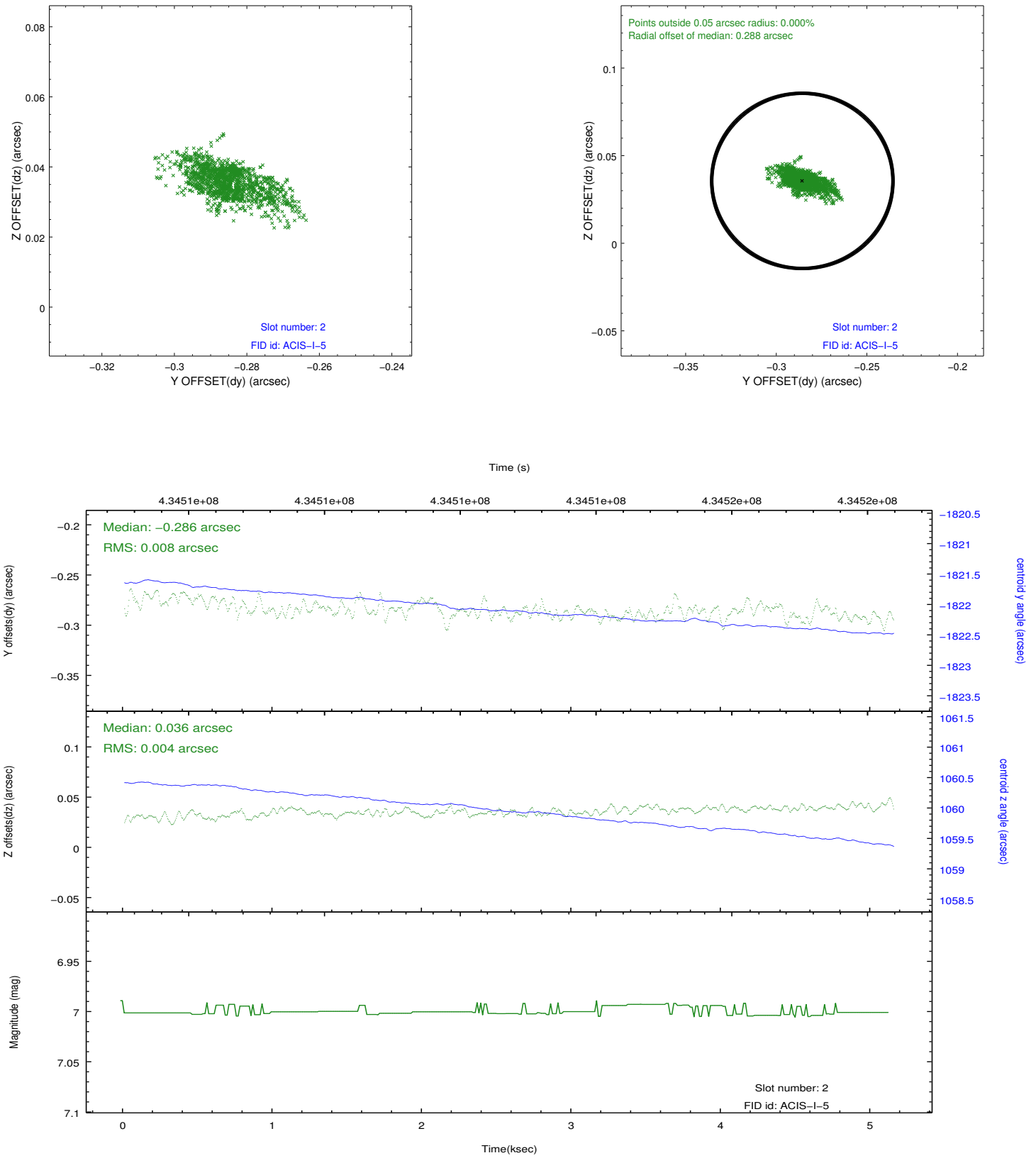
### 2.5.1 Slot 0



## 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)	2012.02.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0578712495565

### A.2 Comments