

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12424 - L2 Version 2  
Chandra X-Ray Center

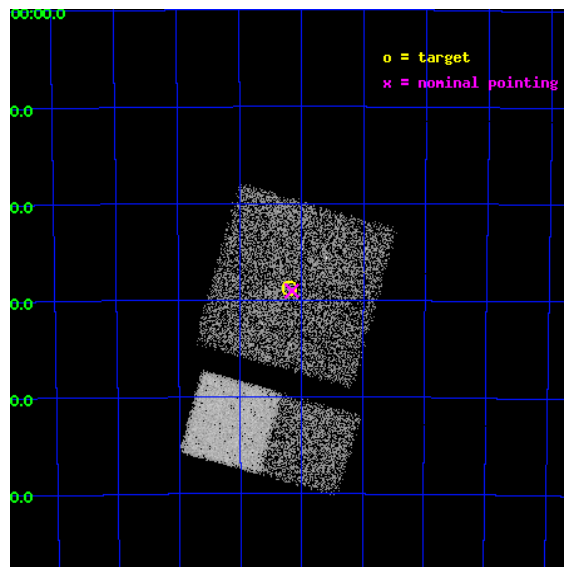
L2 Processing Date : Feb 24 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

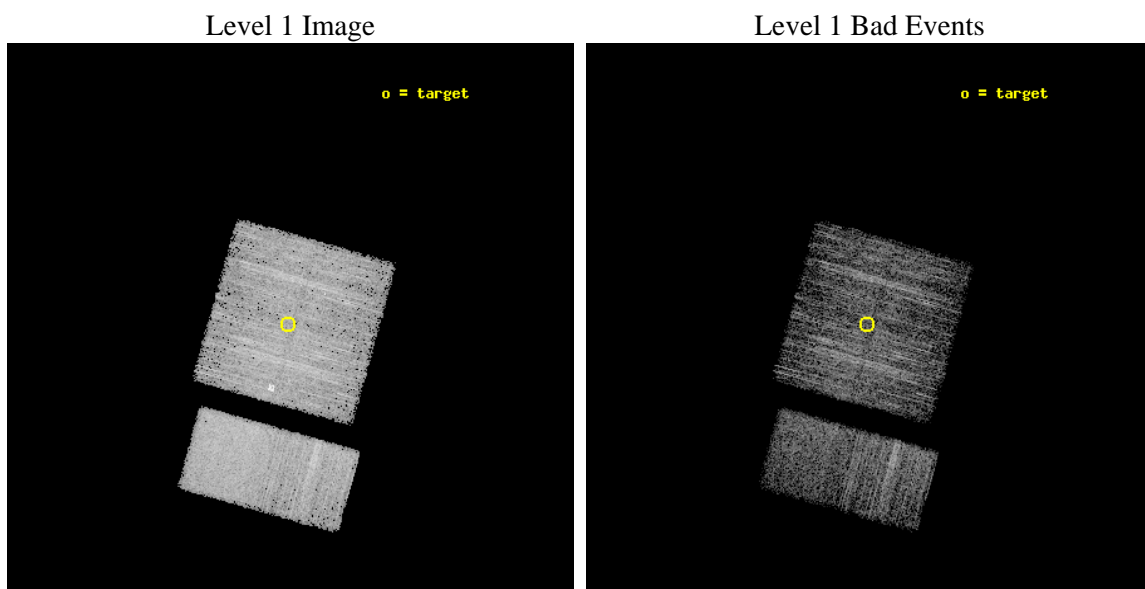
seq_num	401165	Sequence number
obs_id	12424	Observation id
title	The Nature of INTEGRAL Sources in the Galactic Plane	Proposal titl
observer	Dr. John Tomsick	Principal investigator
object	IGR J13402-6428	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	205.05	Observer's specified target RA [deg]
dec_targ	-64.48	Observer's specified target Dec [deg]
ra_nom	205.03982239778	Nominal RA [deg]
dec_nom	-64.484011526978	Nominal Dec [deg]
roll_nom	195.68083689222	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5058.6442777514	Sum of GTIs [s]
livetime	4994.5886779567	Livetime [s]
ontime0	5058.5211577415	Sum of GTIs [s]
ontime1	5058.5621977448	Sum of GTIs [s]
ontime2	5058.6032377481	Sum of GTIs [s]
ontime3	5058.6442777514	Sum of GTIs [s]
ontime6	5058.726357758	Sum of GTIs [s]
ontime7	5058.6853177547	Sum of GTIs [s]
l2events	32218	Number of level 2 events



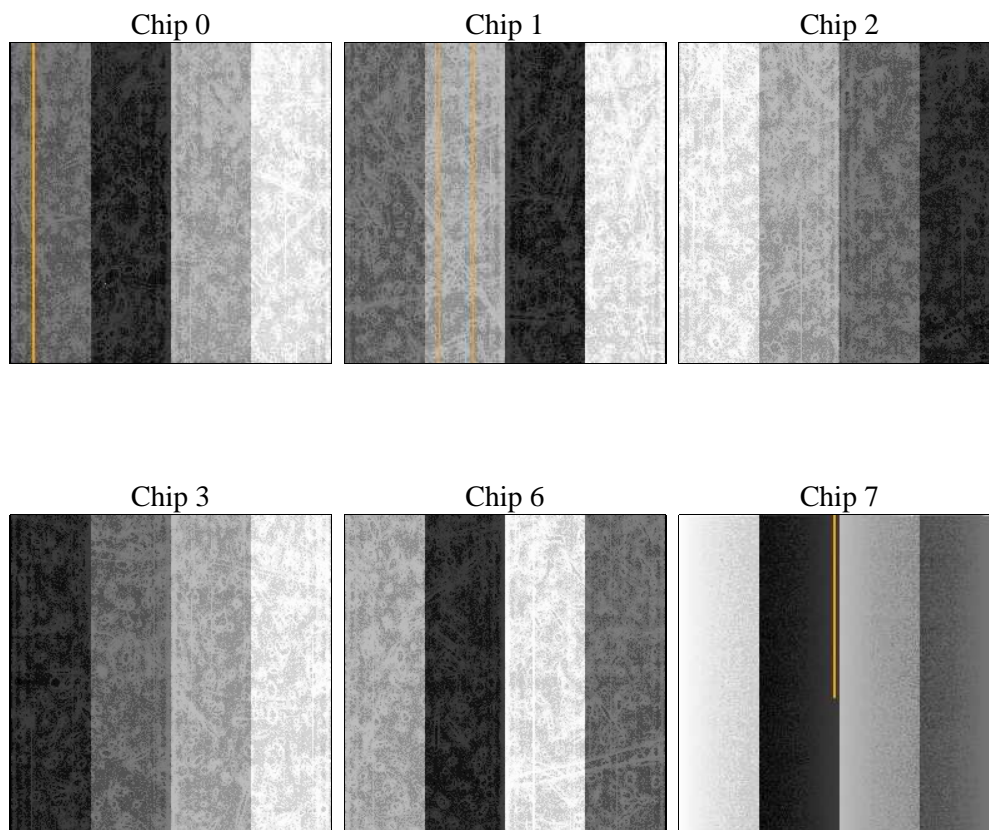
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	5058.6442777514	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime0	5058.5211577415	Sum of GTIs [s]
date	2012-02-24T04:06:05	Date and time of file creation	ontime1	5058.5621977448	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5058.6032377481	Sum of GTIs [s]
			ontime3	5058.6442777514	Sum of GTIs [s]
			ontime6	5058.726357758	Sum of GTIs [s]
			ontime7	5058.6853177547	Sum of GTIs [s]
			l1events	185875	Number of level 1 events

### 2.1.4 Events

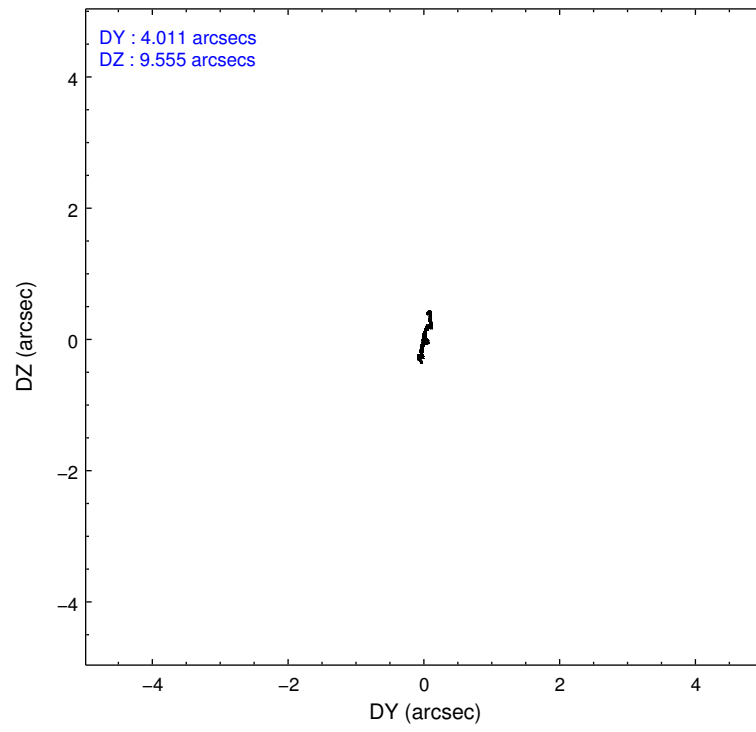
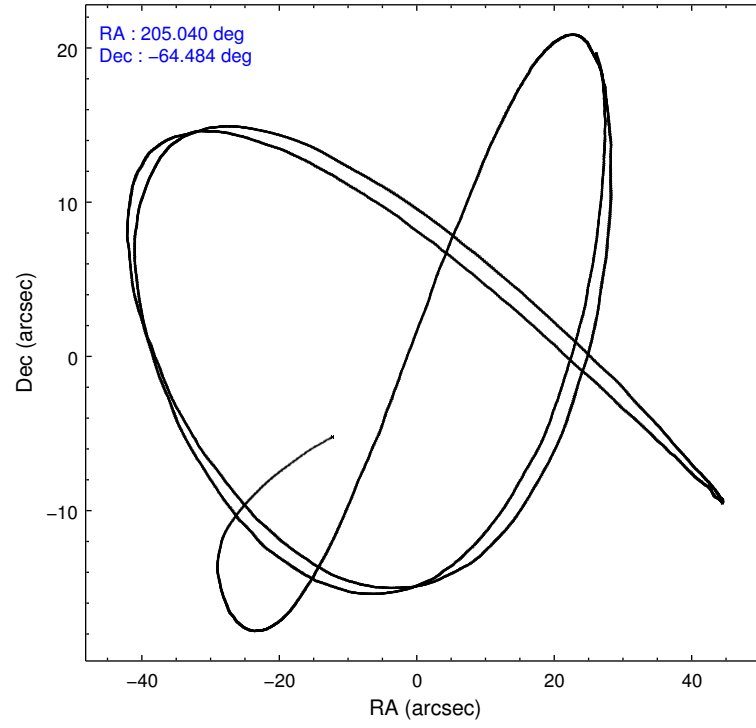
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	26017	27929	29839	31947	31375	38768	grade 0 events	1392	1462	1316	2557	1349	1550
rejected events	22339	24048	26433	27295	27754	21417		5%	5%	4%	8%	4%	3%
rejected %	85%	86%	88%	85%	88%	55%	grade 1 events	18	14	16	26	21	44
								0%	0%	0%	0%	0%	0%
							grade 2 events	852	899	789	681	786	3576
								3%	3%	2%	2%	2%	9%
							grade 3 events	373	373	333	369	347	1435
								1%	1%	1%	1%	1%	3%
							grade 4 events	366	356	333	353	349	1382
								1%	1%	1%	1%	1%	3%
							grade 5 events	1238	1315	1199	1491	1469	3862
								4%	4%	4%	4%	4%	9%
							grade 6 events	695	795	637	696	793	9419
								2%	2%	2%	2%	2%	24%
							grade 7 events	21083	22715	25216	25774	26261	17500
								81%	81%	84%	80%	83%	45%

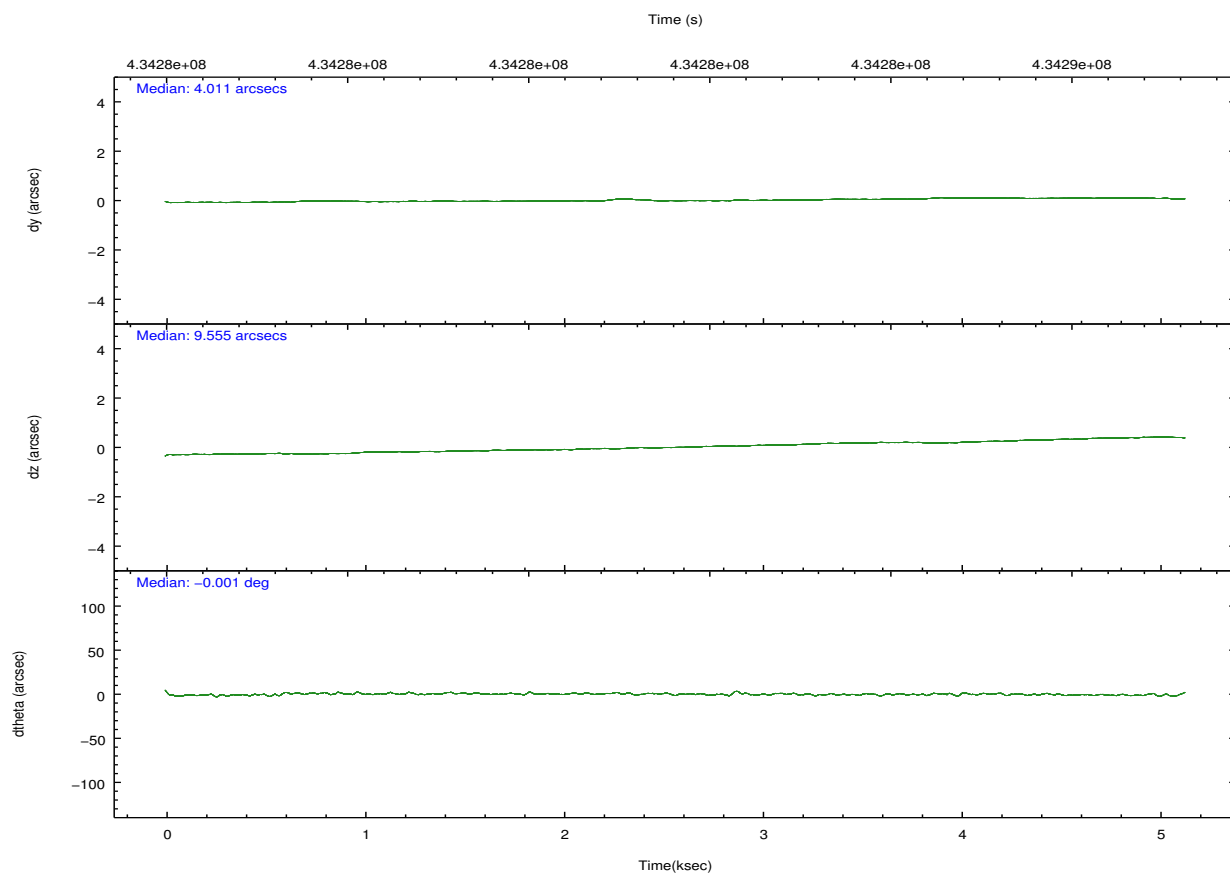
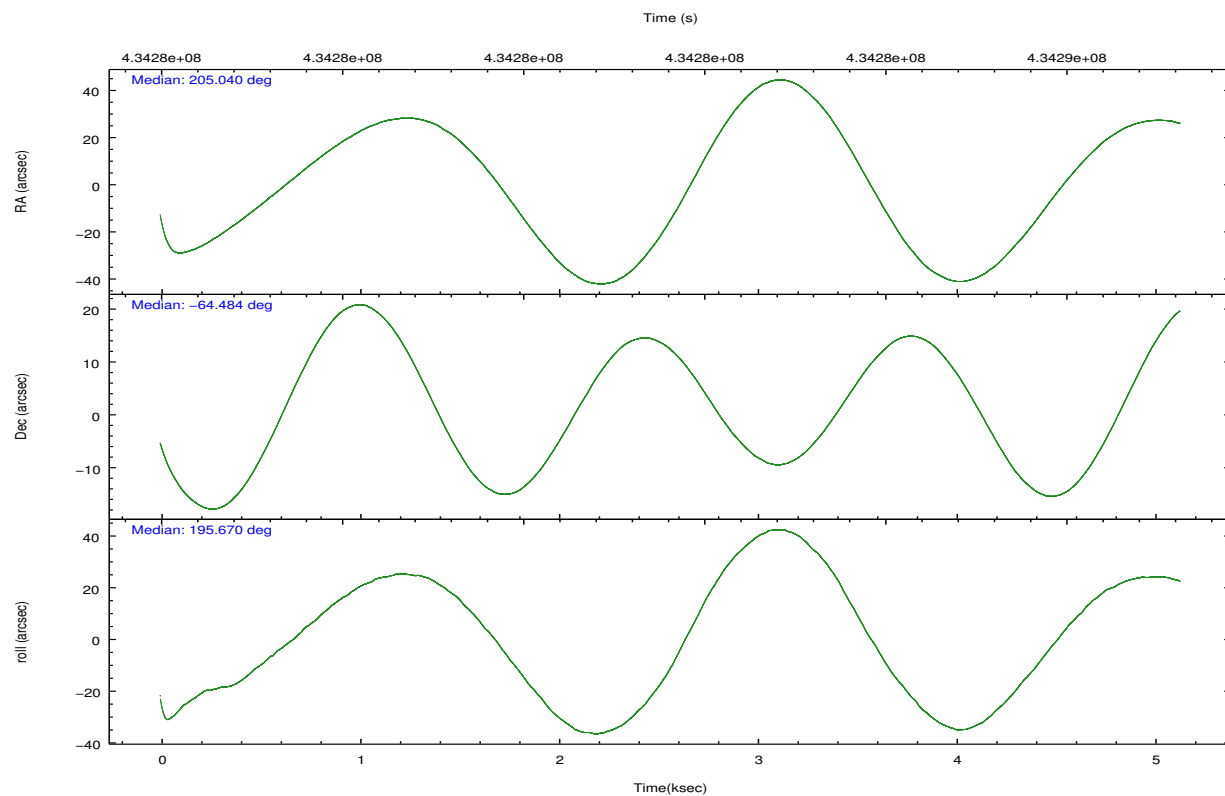


## 2.2 Compared Parameters

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	205.084238	205.0398223977782	CCD I2 on	Y	Y
[deg] Pointing Dec	-64.463990	-64.48401152697792	CCD I3 on	Y	Y
[deg] Pointing Roll	195.512258	195.6808368922153	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)	434281368.184000	434280160.96439	CCD S5 on	N	N
Observation start date	2011-10-06T09:41:42	2011-10-06T09:22:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	434286368.184000	434287022.31475	On-chip summing requested	N	N
Observation end date	2011-10-06T11:05:02	2011-10-06T11:17:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



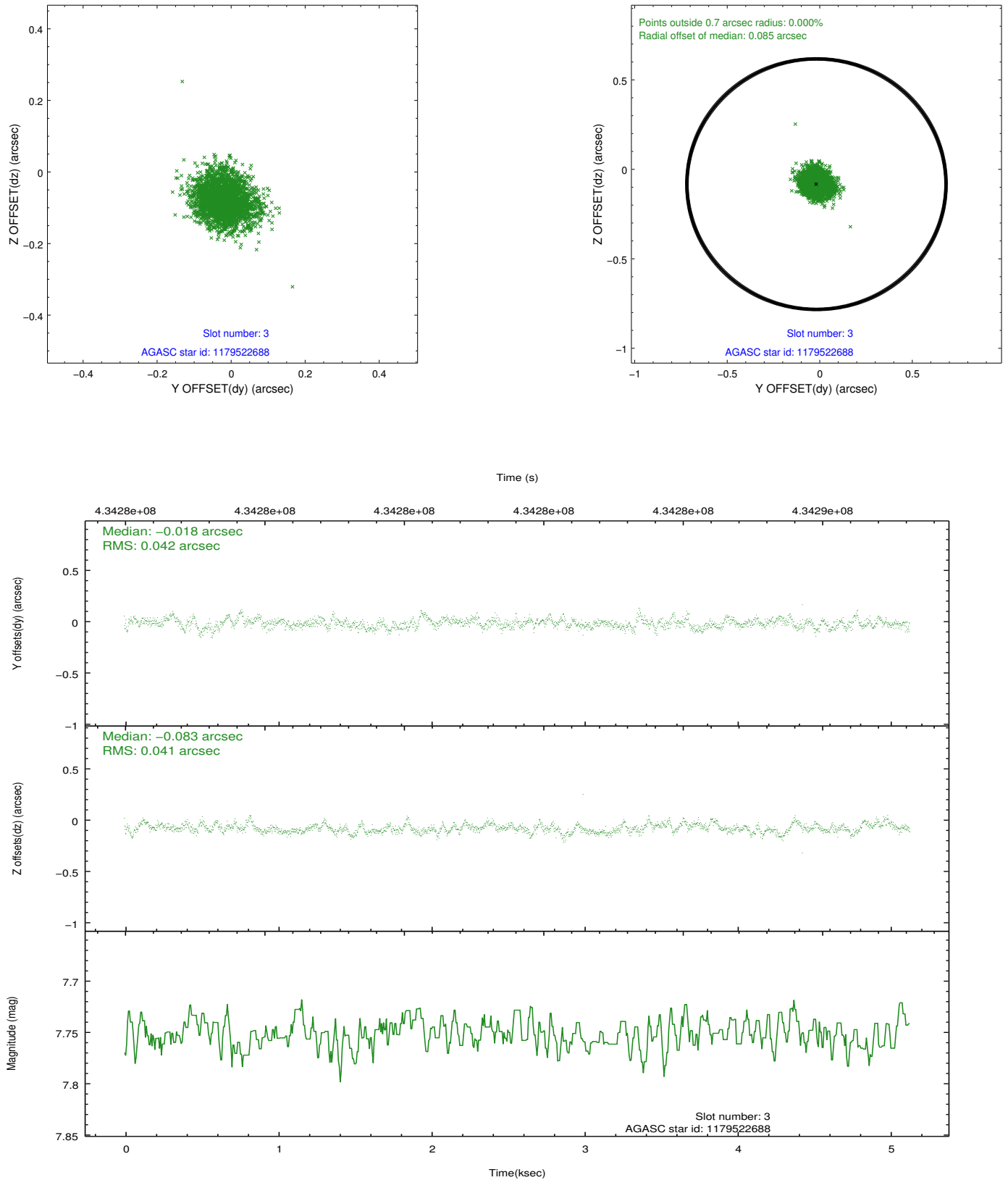


### Slot Statistics

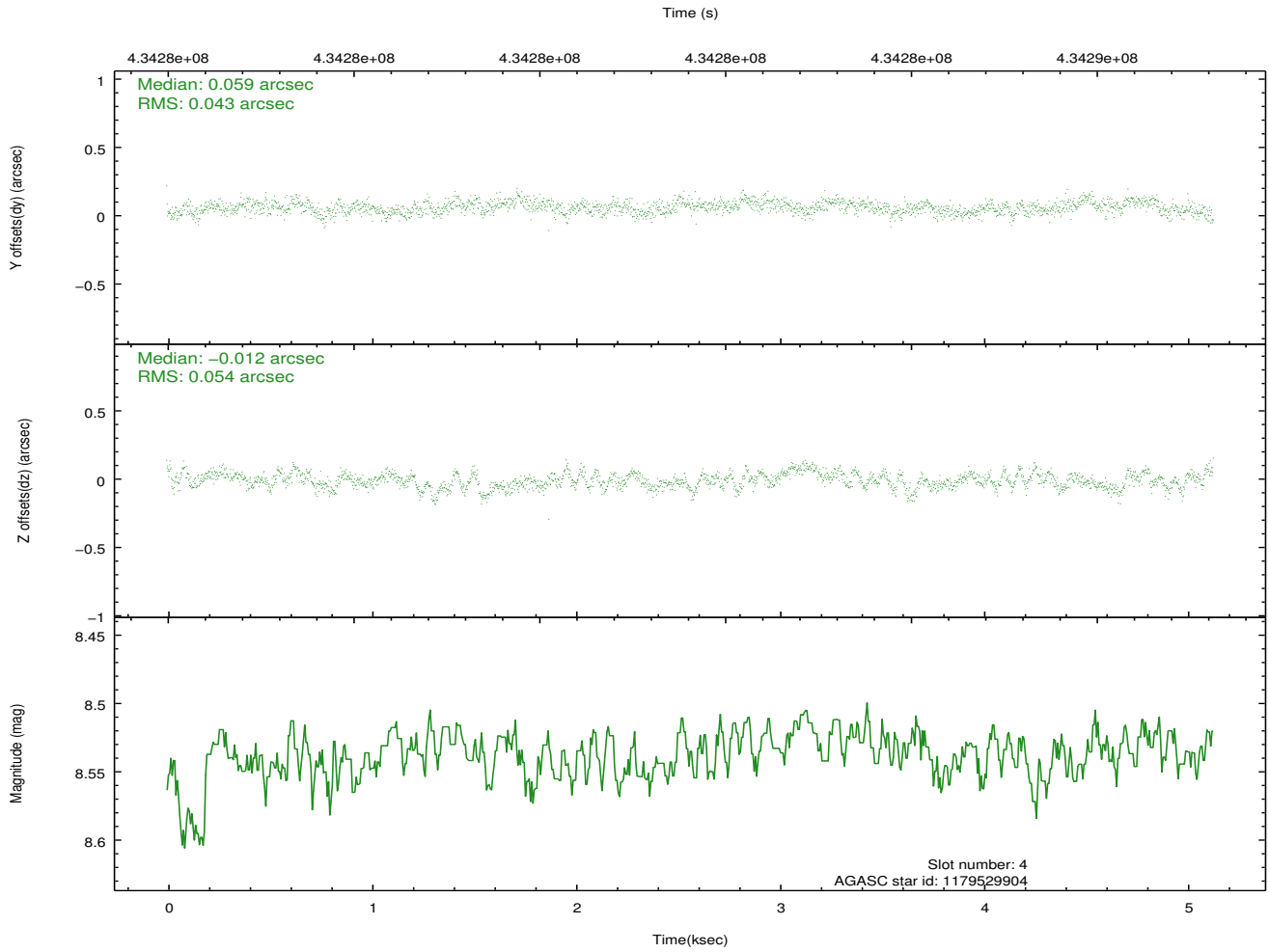
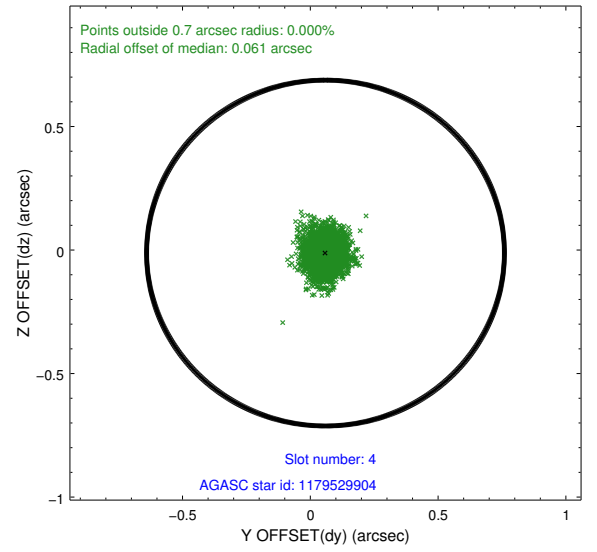
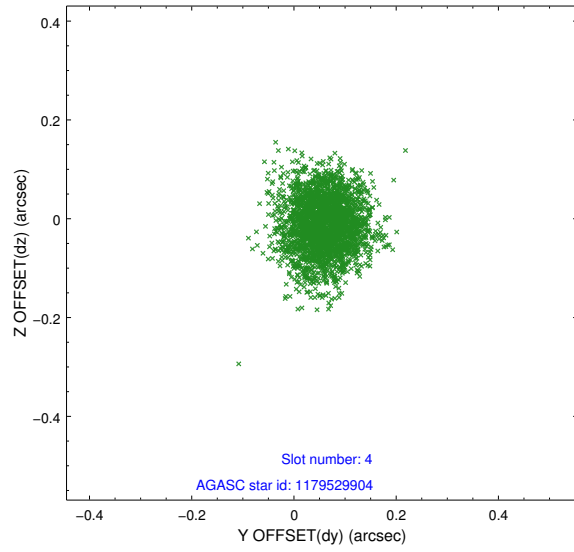
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.06	1251	-0.118	-0.059	0.010	0.019	0.000000	0.000000	-758.58	-839.44
1	FID	ACIS-I-4	7.09	1252	0.120	0.035	0.011	0.020	0.000000	0.000000	2155.23	1066.16
2	FID	ACIS-I-6	7.14	1252	-0.102	0.088	0.014	0.022	0.000000	0.000000	403.10	1709.78
3	GUIDE	1179522688	7.75	2504	-0.018	-0.083	0.063	0.100	204.618610	-64.055632	314.29	-1611.04
4	GUIDE	1179529904	8.54	2498	0.059	-0.012	0.074	0.119	205.156658	-64.069699	-488.48	-1338.47
5	GUIDE	1179532592	7.83	2502	0.078	0.035	0.057	0.097	203.909668	-65.151979	2379.32	1926.15
6	GUIDE	1179532784	7.85	2504	-0.047	0.044	0.052	0.083	204.004126	-64.909110	2021.62	1116.90
7	GUIDE	1179523696	7.67	2503	-0.072	0.018	0.056	0.088	204.287705	-64.120466	878.19	-1519.14

## 2.4 Star Slots

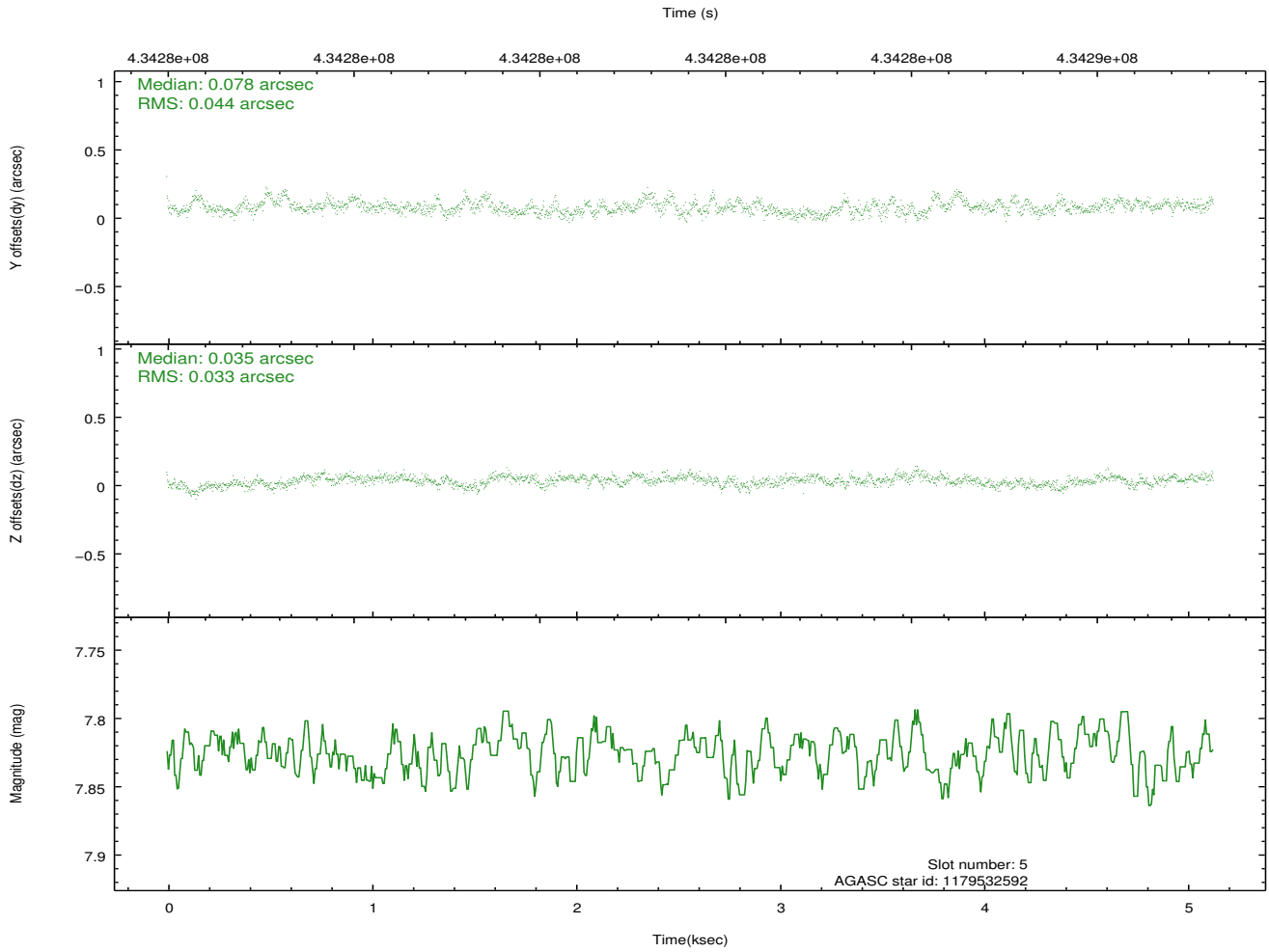
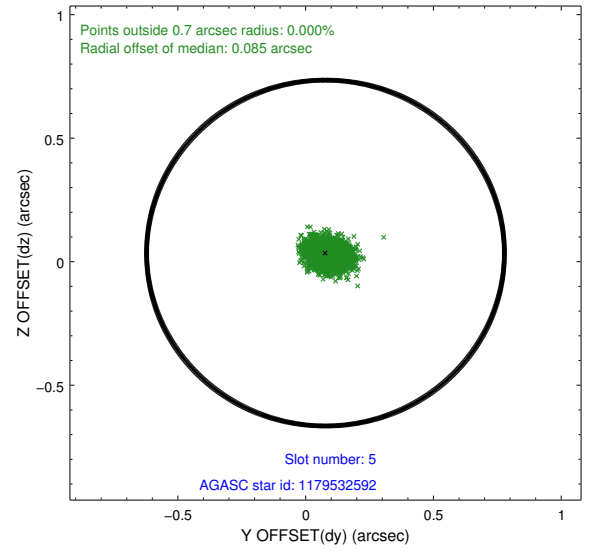
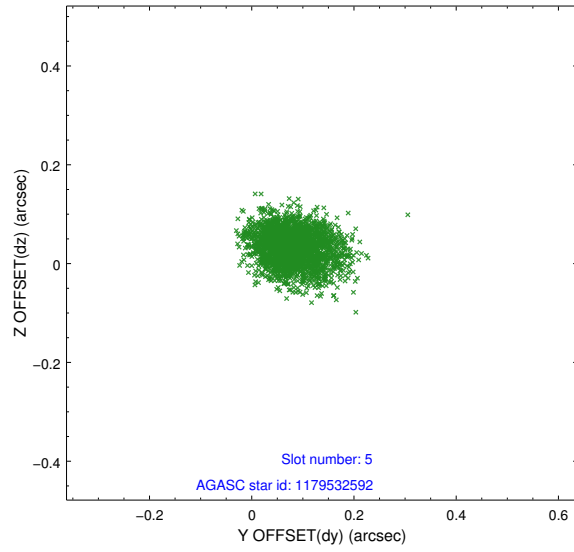
### 2.4.1 Slot 3



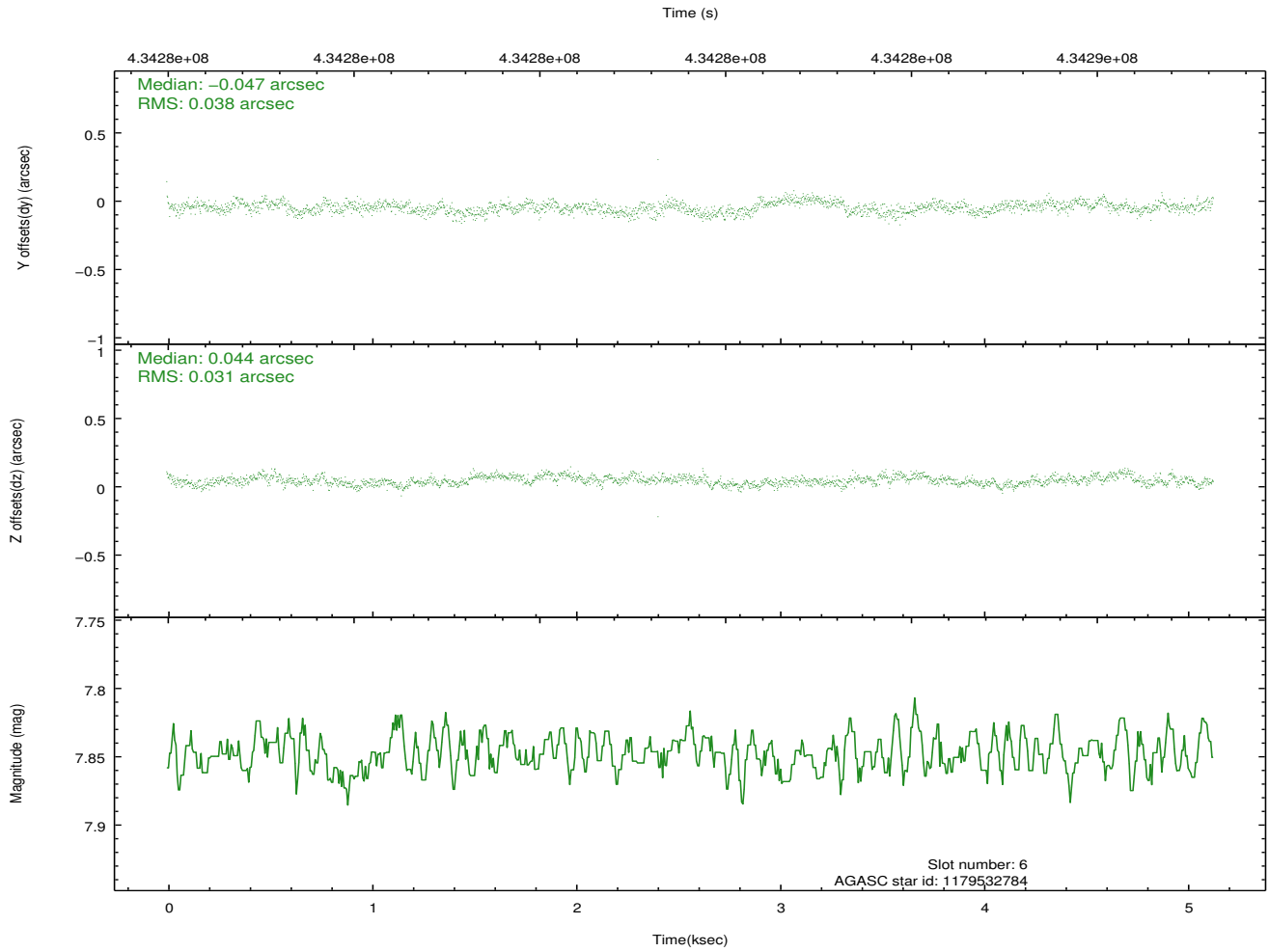
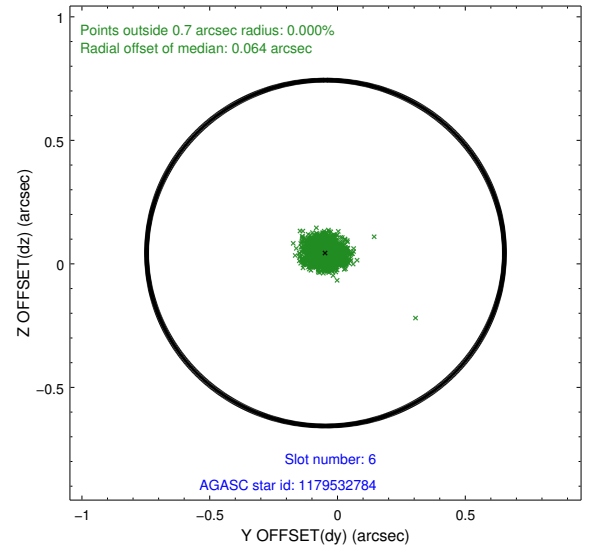
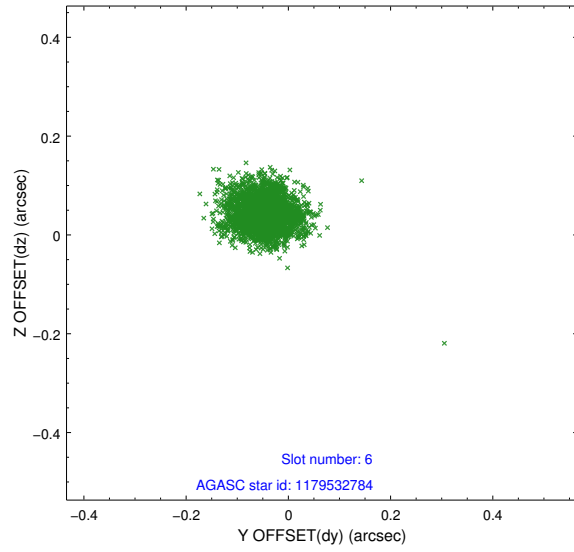
## 2.4.2 Slot 4



### 2.4.3 Slot 5

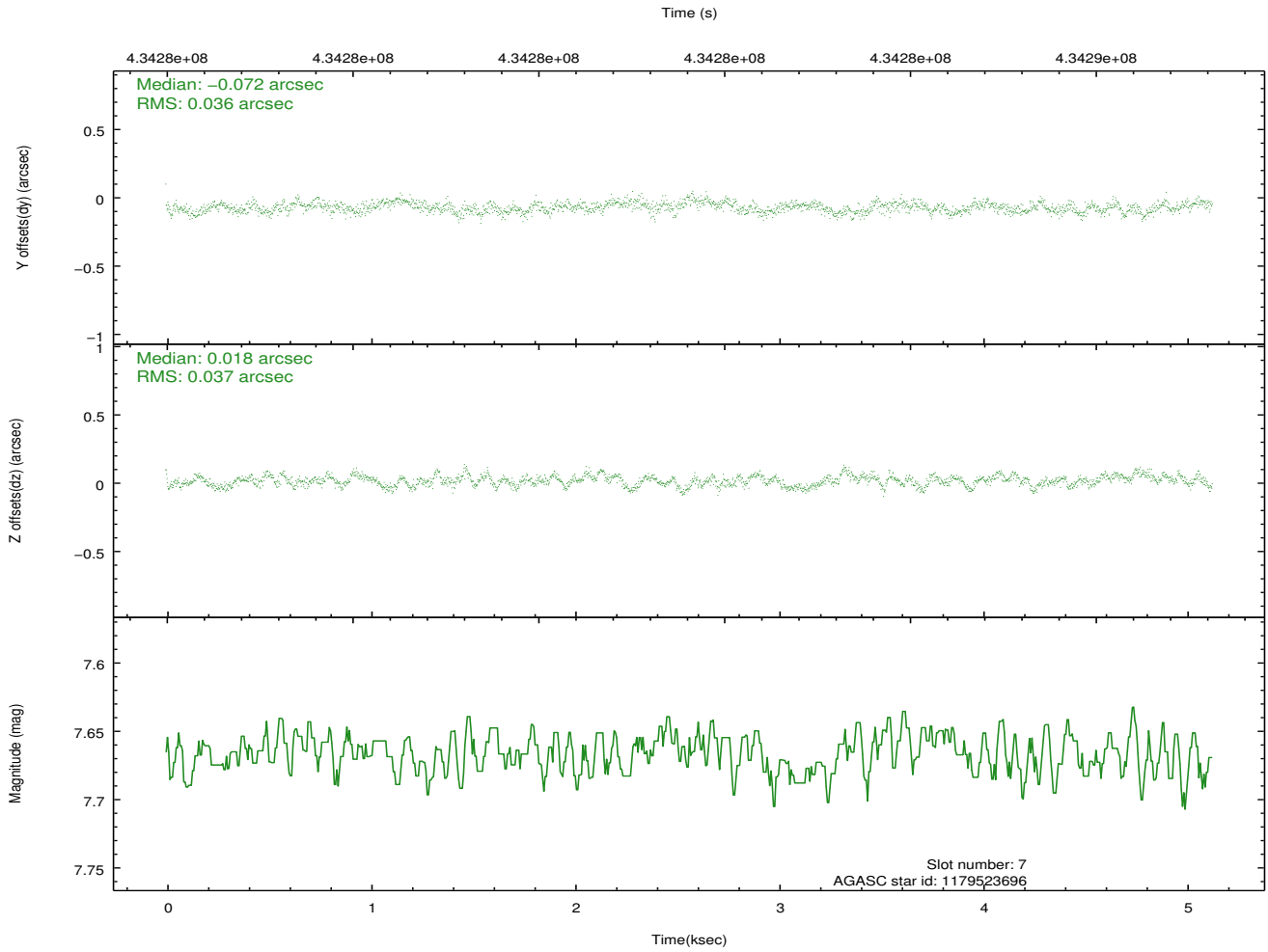
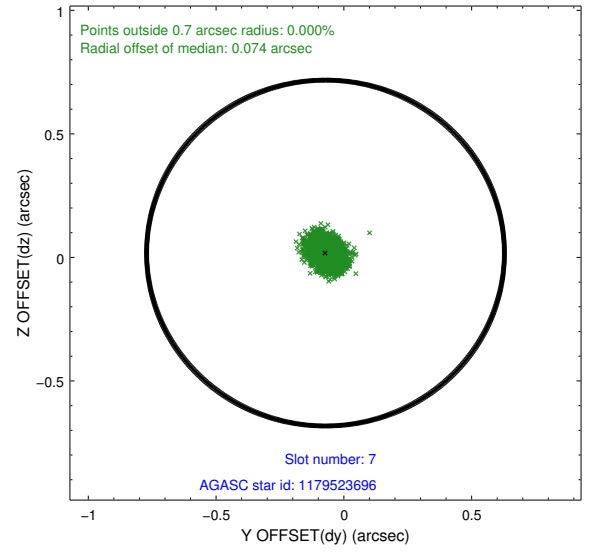
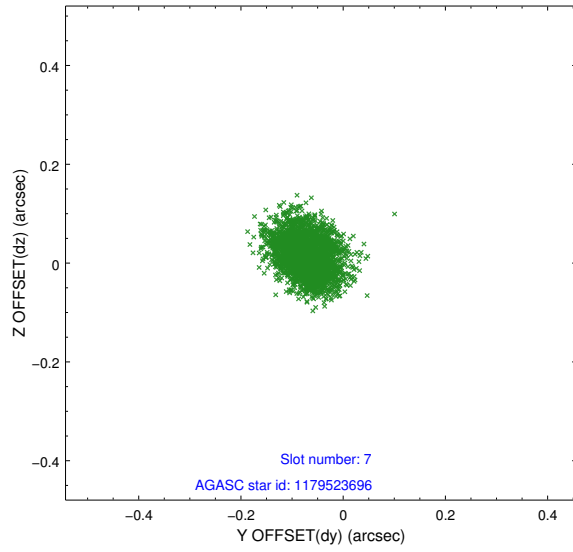


## 2.4.4 Slot 6



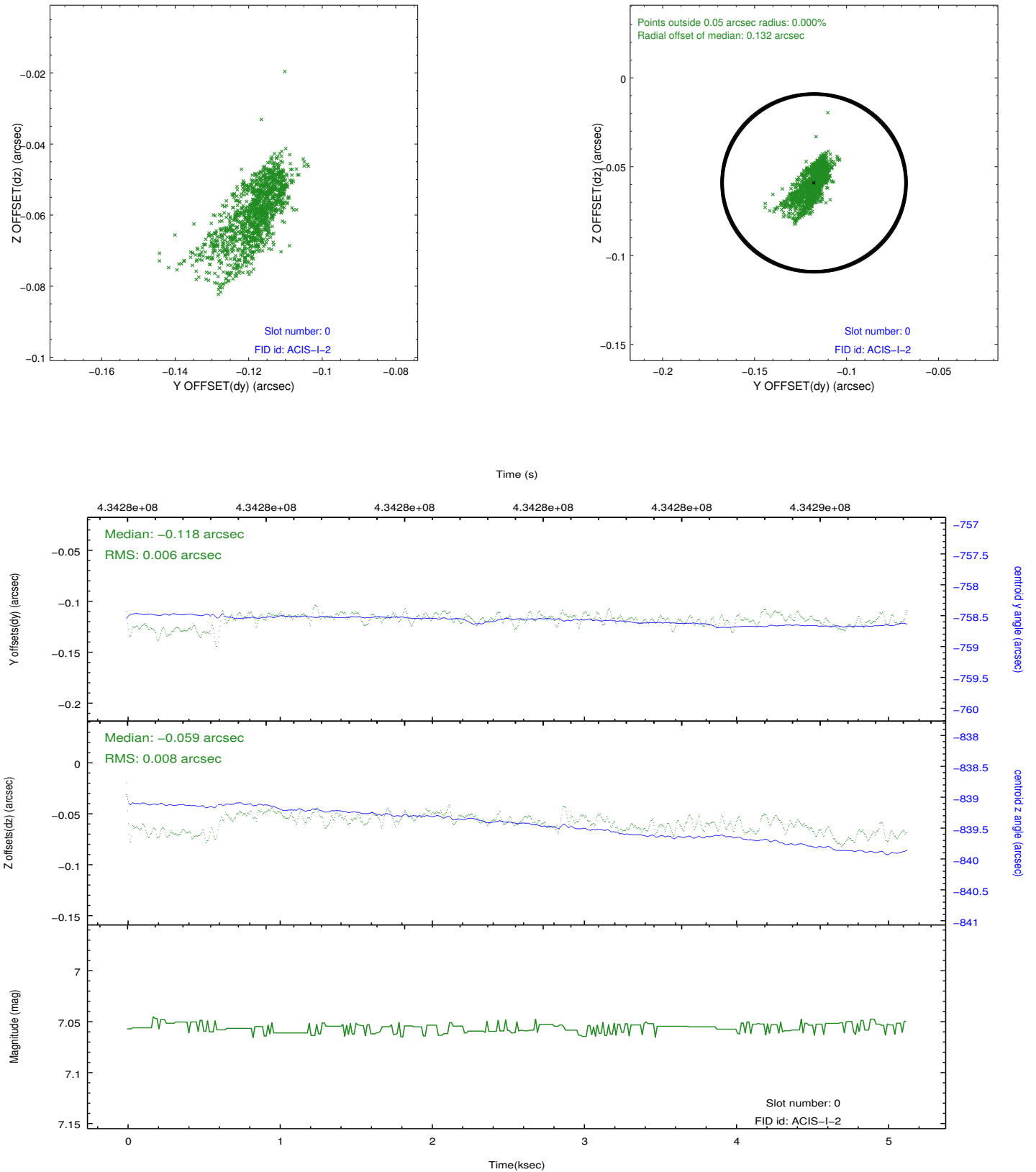


## 2.4.5 Slot 7

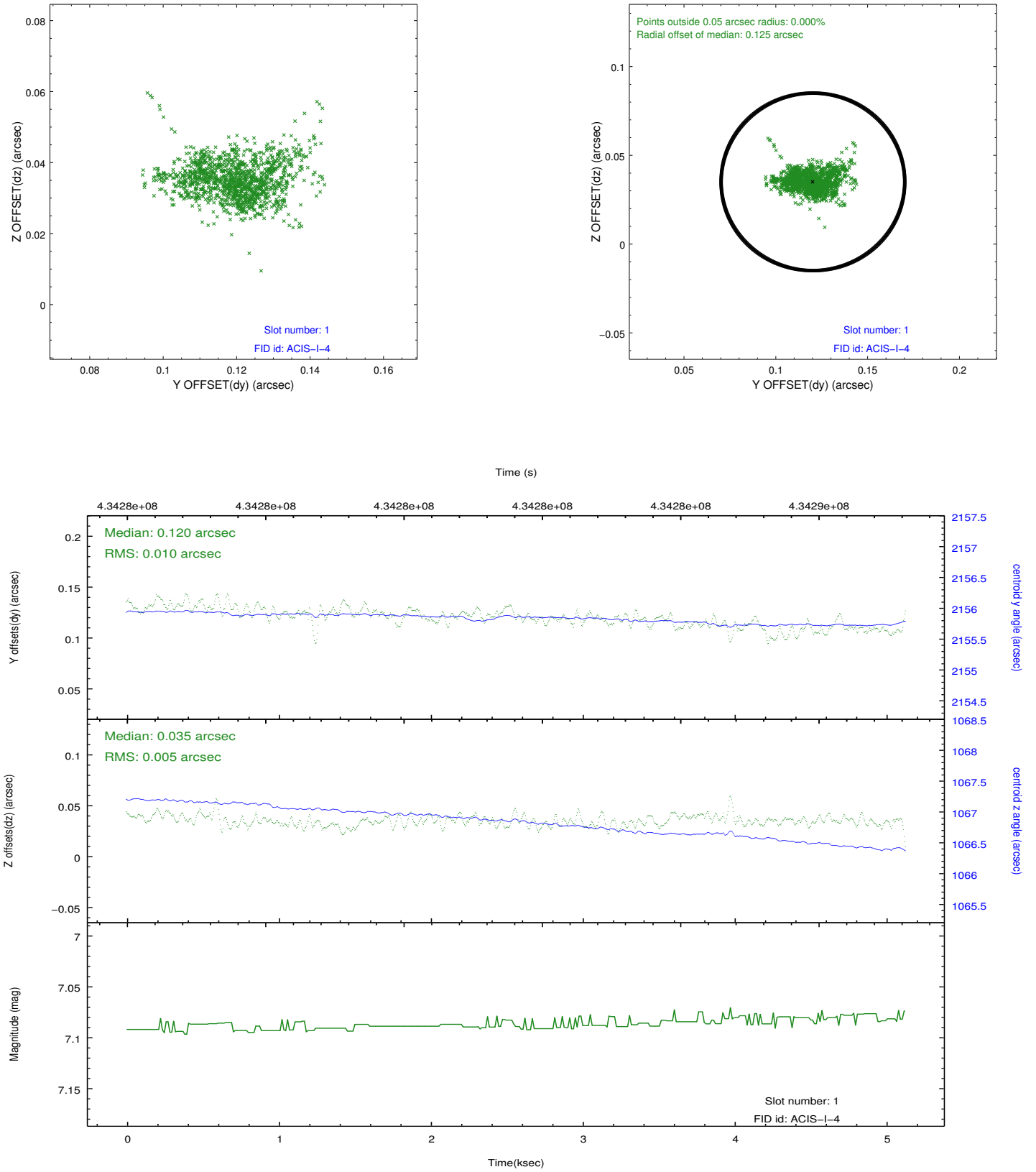


## 2.5 FID Slots

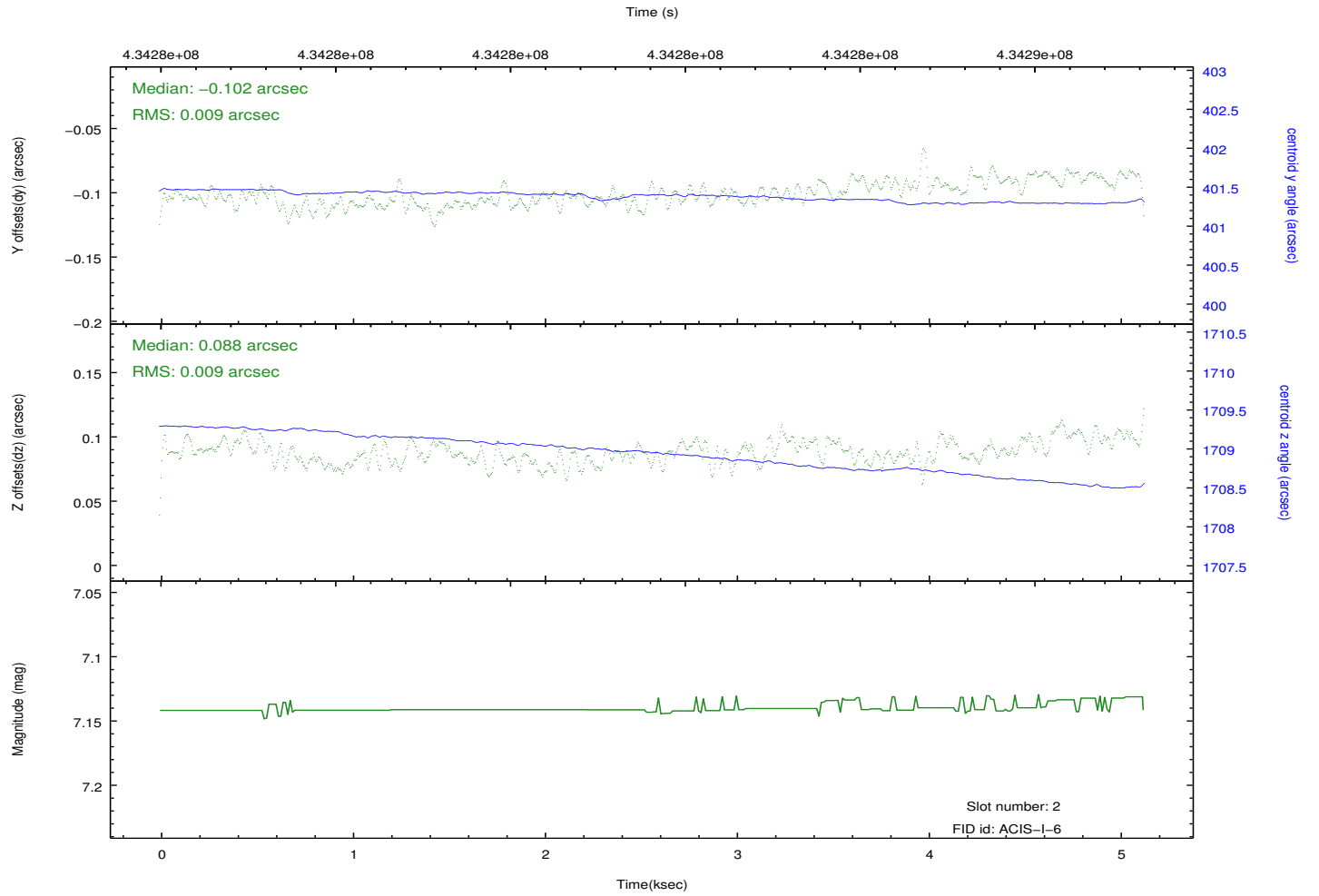
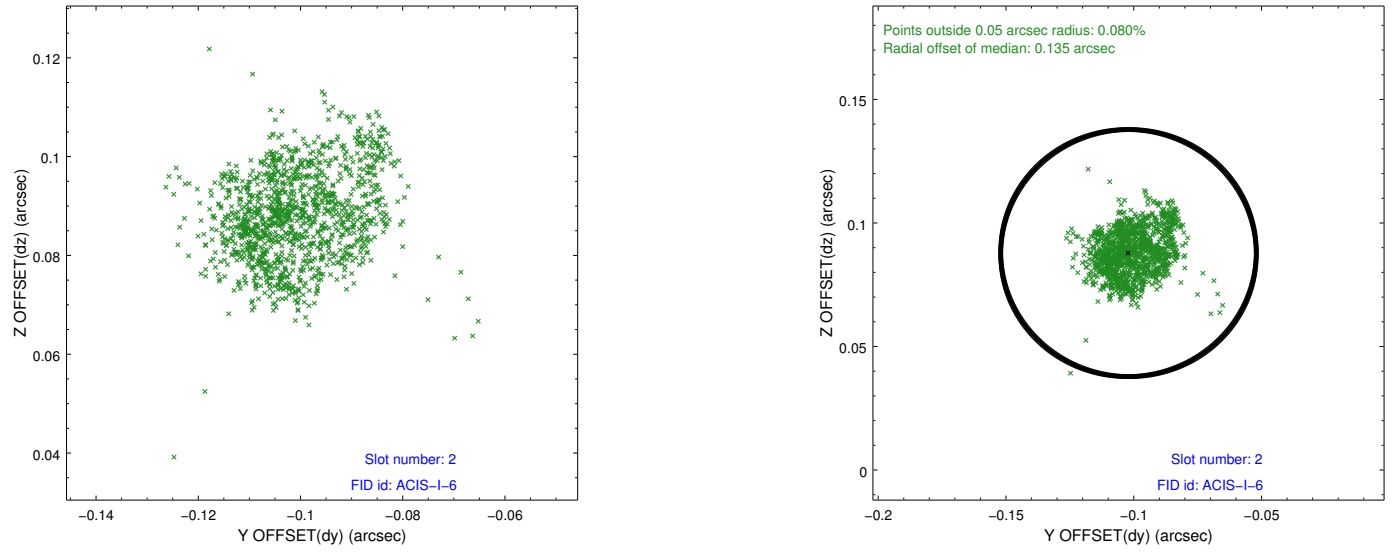
### 2.5.1 Slot 0



## 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	5.0586442744732

### A.2 Comments