

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12420 - L2 Version 2  
Chandra X-Ray Center

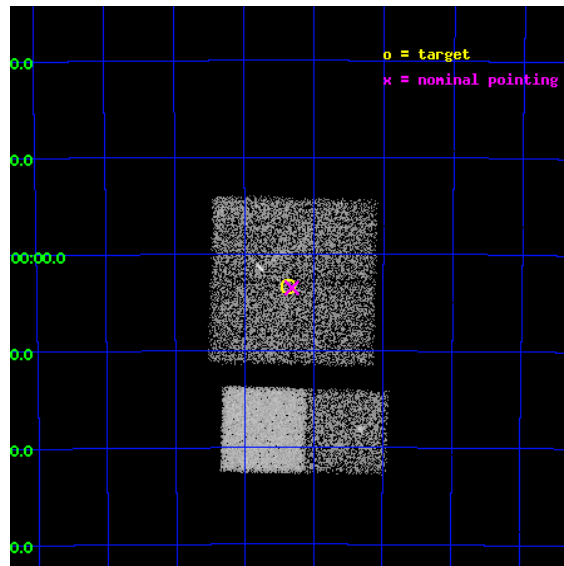
L2 Processing Date : Feb 22 2012

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# 1 Front

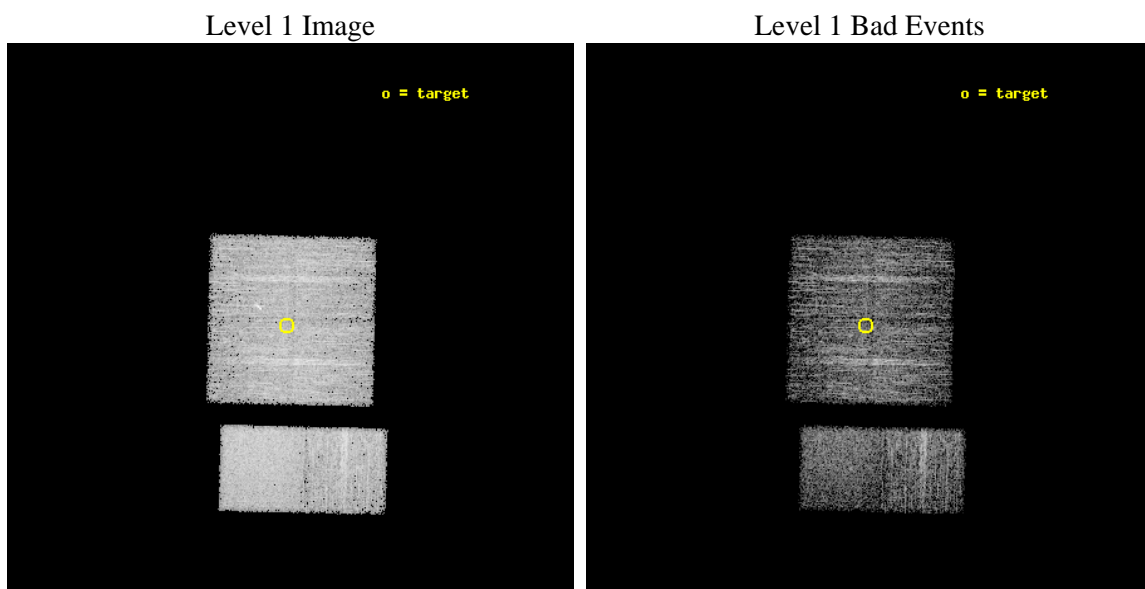
seq_num	401161	Sequence number
obs_id	12420	Observation id
title	The Nature of INTEGRAL Sources in the Galactic Plane	Proposal titl
observer	Dr. John Tomsick	Principal investigator
object	IGR J11014-6103	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	165.340833	Observer's specified target RA [deg]
dec_targ	-61.056	Observer's specified target Dec [deg]
ra_nom	165.32930203956	Nominal RA [deg]
dec_nom	-61.058518816474	Nominal Dec [deg]
roll_nom	181.31144665124	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5054.79872334	Sum of GTIs [s]
livetime	4990.7918182707	Livetime [s]
ontime0	5054.6756033301	Sum of GTIs [s]
ontime1	5054.7166433334	Sum of GTIs [s]
ontime2	5054.7576833367	Sum of GTIs [s]
ontime3	5054.79872334	Sum of GTIs [s]
ontime6	5054.8808033466	Sum of GTIs [s]
ontime7	5054.8397633433	Sum of GTIs [s]
l2events	38011	Number of level 2 events



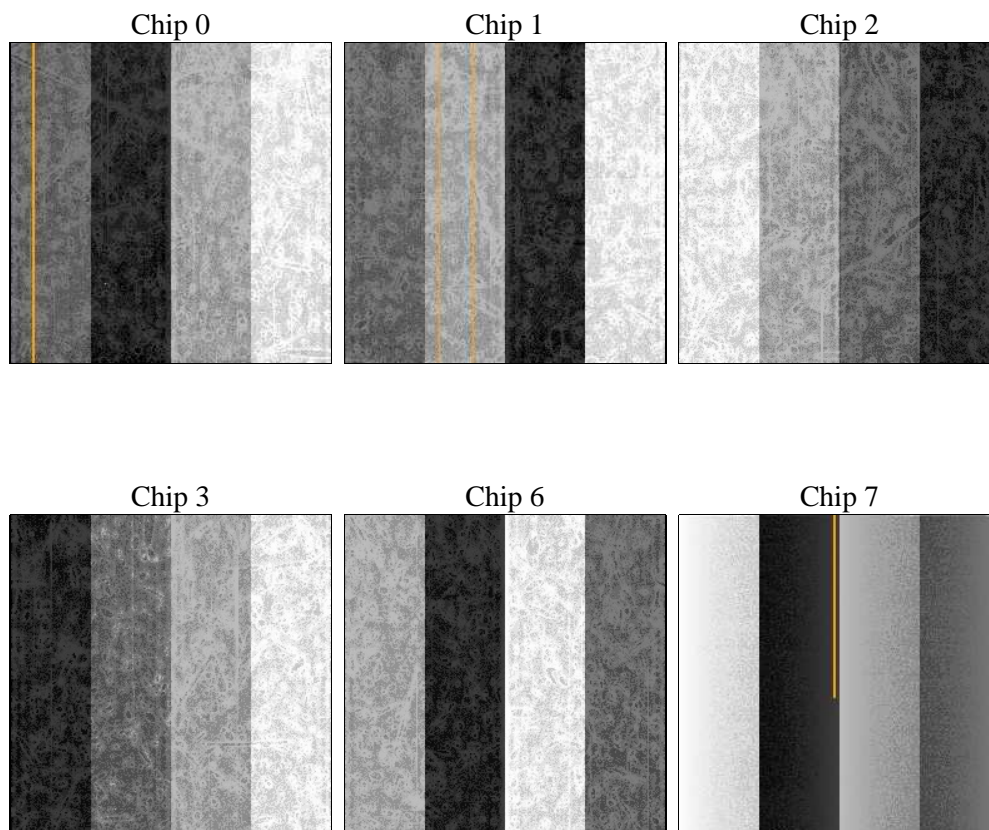
## 2 OBI

### 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	5054.79872334	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime0	5054.6756033301	Sum of GTIs [s]
date	2012-02-22T06:43:49	Date and time of file creation	ontime1	5054.7166433334	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5054.7576833367	Sum of GTIs [s]
			ontime3	5054.79872334	Sum of GTIs [s]
			ontime6	5054.8808033466	Sum of GTIs [s]
			ontime7	5054.8397633433	Sum of GTIs [s]
			l1events	199605	Number of level 1 events

### 2.1.4 Events

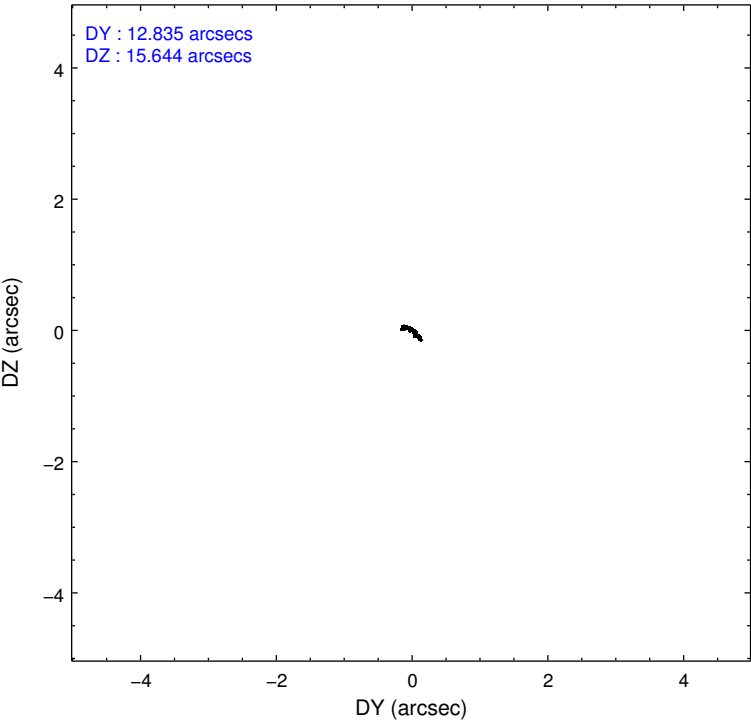
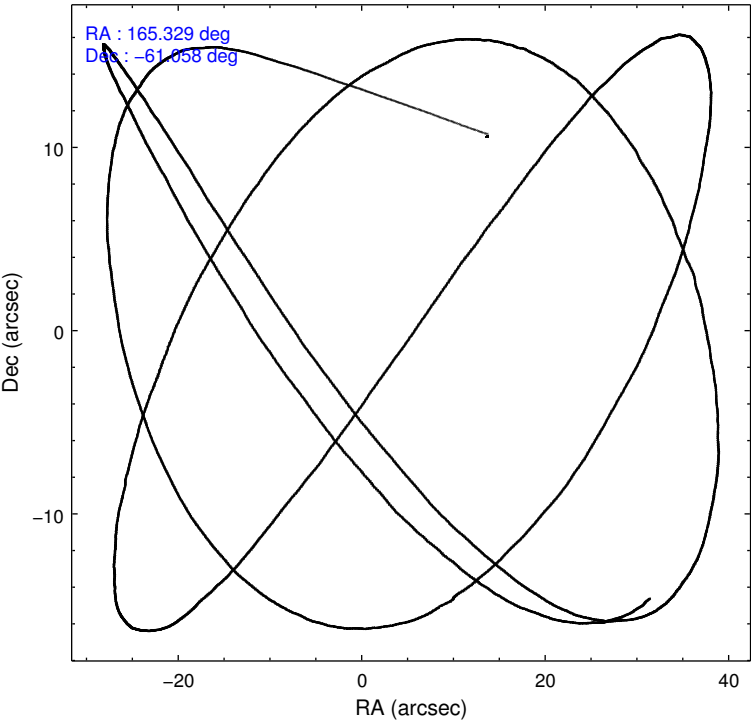
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	29507	31391	33063	30573	32787	42284	grade 0 events	1791	2480	1564	1606	1692	1794
rejected events	25170	25889	28997	26502	28275	23264		6%	7%	4%	5%	5%	4%
rejected %	85%	82%	87%	86%	86%	55%	grade 1 events	17	26	23	23	18	60
								0%	0%	0%	0%	0%	0%
							grade 2 events	989	1136	951	919	996	3857
								3%	3%	2%	3%	3%	9%
							grade 3 events	426	445	378	375	401	1656
								1%	1%	1%	1%	1%	3%
							grade 4 events	357	481	414	421	403	1736
								1%	1%	1%	1%	1%	4%
							grade 5 events	1398	1452	1328	1571	1563	4370
								4%	4%	4%	5%	4%	10%
							grade 6 events	776	962	761	751	1023	9996
								2%	3%	2%	2%	3%	23%
							grade 7 events	23753	24409	27644	24907	26691	18815
								80%	77%	83%	81%	81%	44%

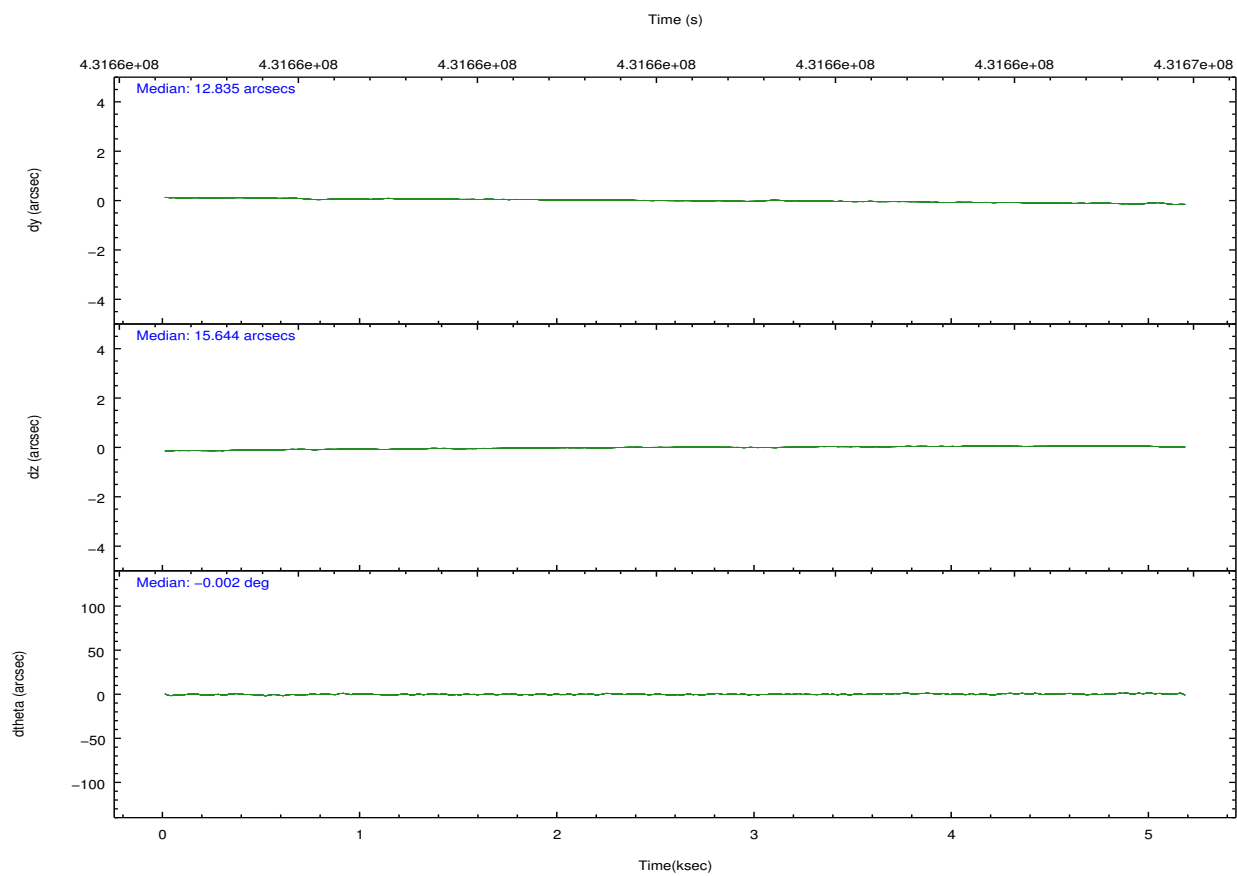
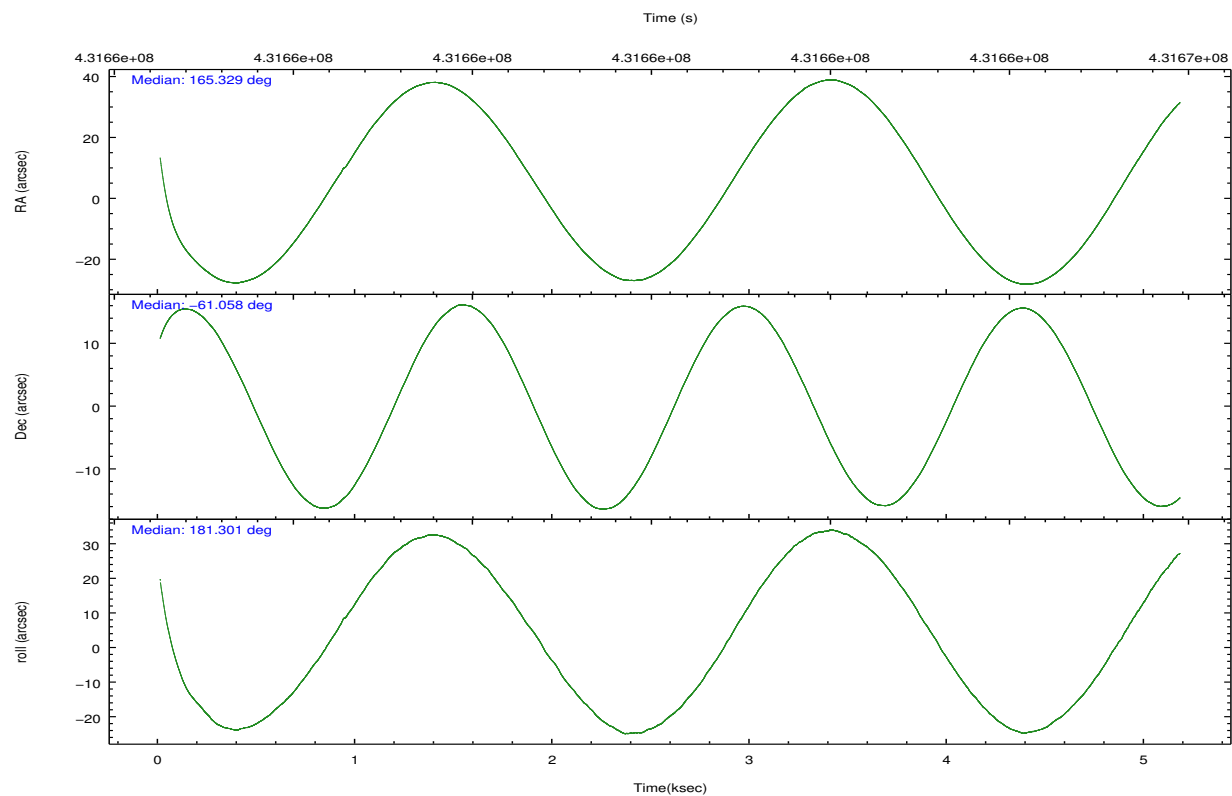


## 2.2 Compared Parameters

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	165.378573	165.3293020395608	CCD I2 on	Y	Y
[deg] Pointing Dec	-61.044132	-61.05851881647421	CCD I3 on	Y	Y
[deg] Pointing Roll	181.145882	181.3114466512368	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)	431660697.184000	431659545.88946	CCD S5 on	N	N
Observation start date	2011-09-06T01:43:51	2011-09-06T01:25:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	431665697.184000	431666683.47733	On-chip summing requested	N	N
Observation end date	2011-09-06T03:07:11	2011-09-06T03:24:43	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



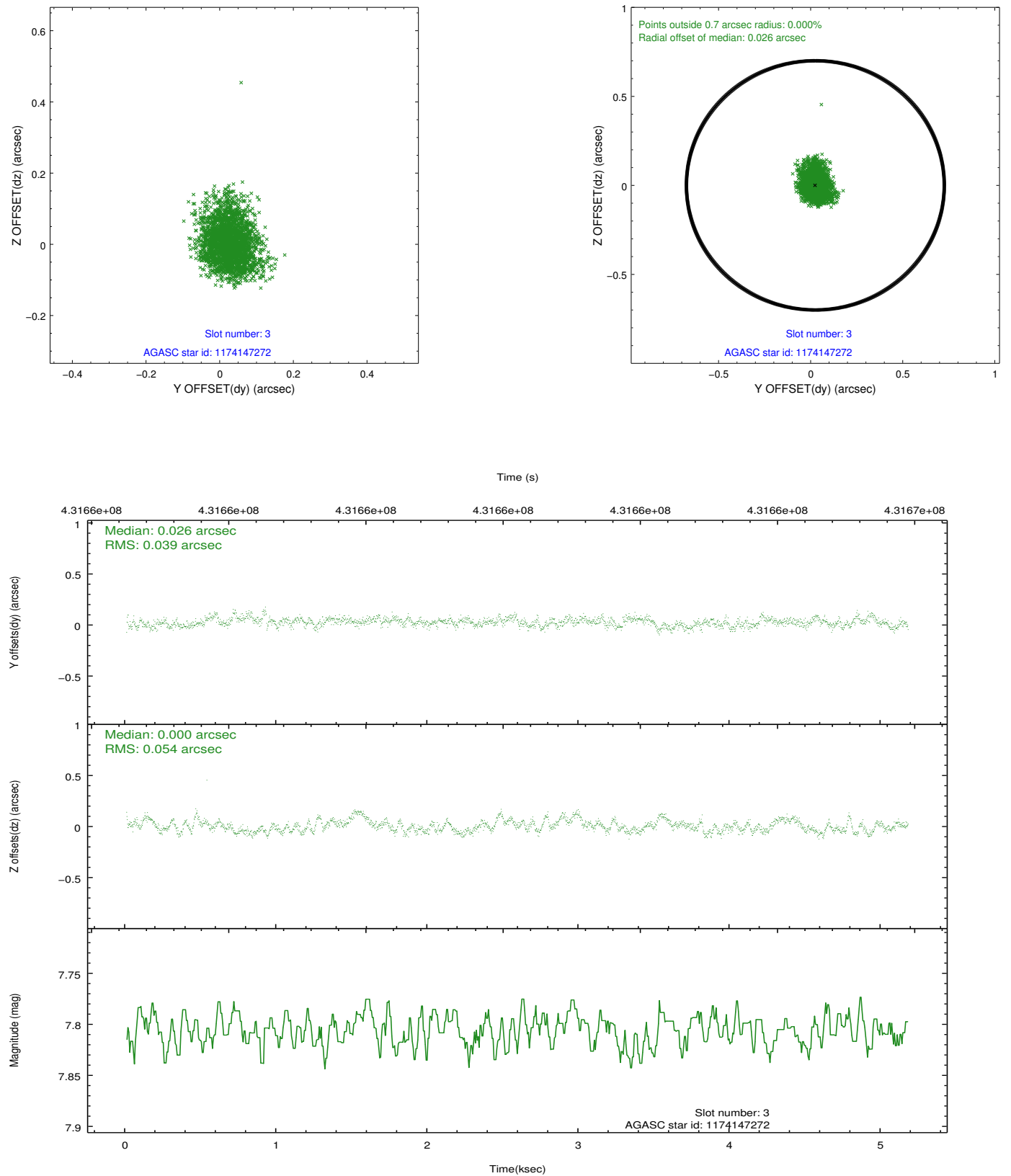


### Slot Statistics

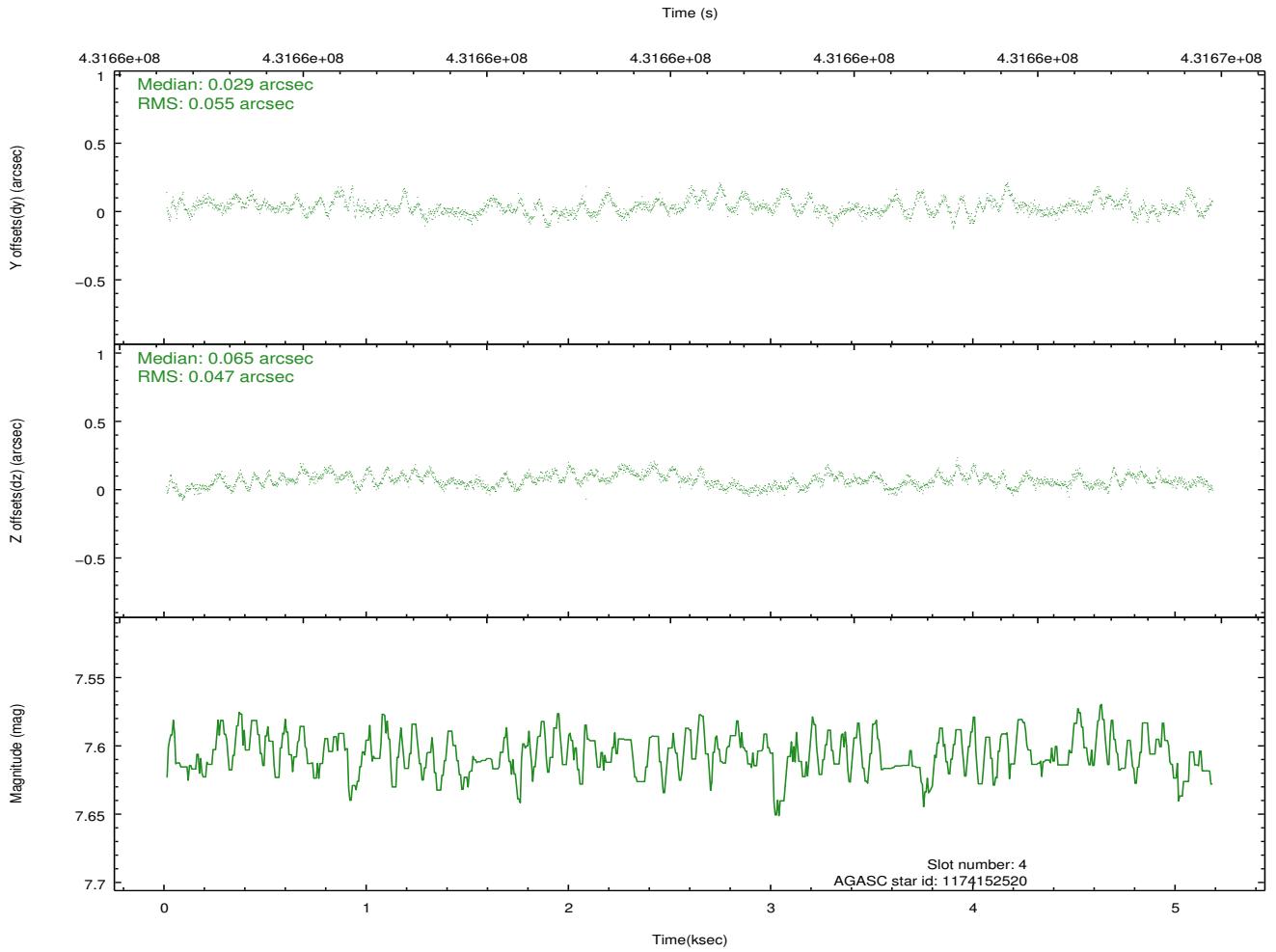
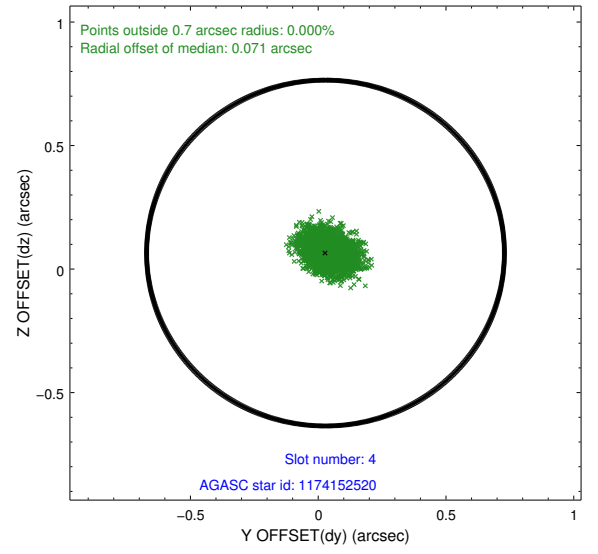
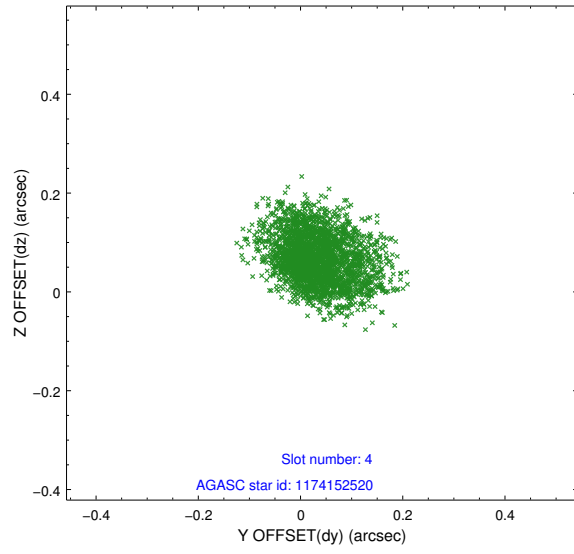
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	1262	0.051	-0.036	0.007	0.012	0.000000	0.000000	926.74	-839.28
1	FID	ACIS-I-5	7.00	1262	-0.212	0.050	0.007	0.012	0.000000	0.000000	-1820.99	1057.70
2	FID	ACIS-I-6	7.00	1262	0.071	0.056	0.009	0.015	0.000000	0.000000	391.02	1703.54
3	GUIDE	1174147272	7.81	2524	0.026	0.000	0.070	0.116	165.413771	-61.562087	-24.67	1865.57
4	GUIDE	1174152520	7.61	2523	0.029	0.065	0.077	0.127	165.769535	-60.824851	-702.89	-772.73
5	GUIDE	1174174824	7.33	2524	-0.014	0.041	0.061	0.098	164.692322	-60.862830	1188.21	-670.29
6	GUIDE	1174147776	8.00	2523	0.129	-0.196	0.091	0.176	164.022700	-60.390440	2364.33	-2376.21
7	GUIDE	1174156832	7.06	2523	-0.176	0.080	0.065	0.107	166.121036	-61.488309	-1244.09	1630.65

## 2.4 Star Slots

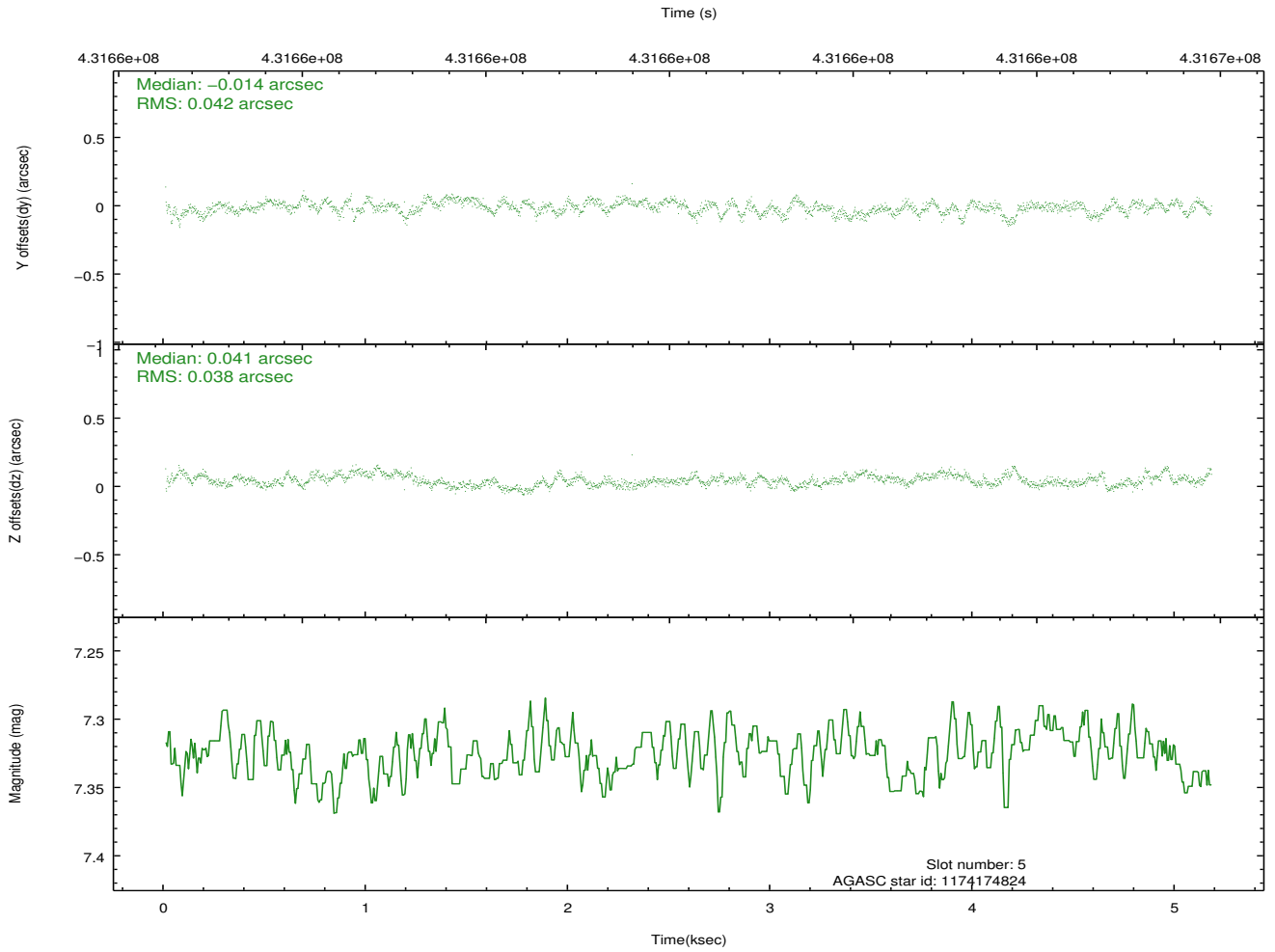
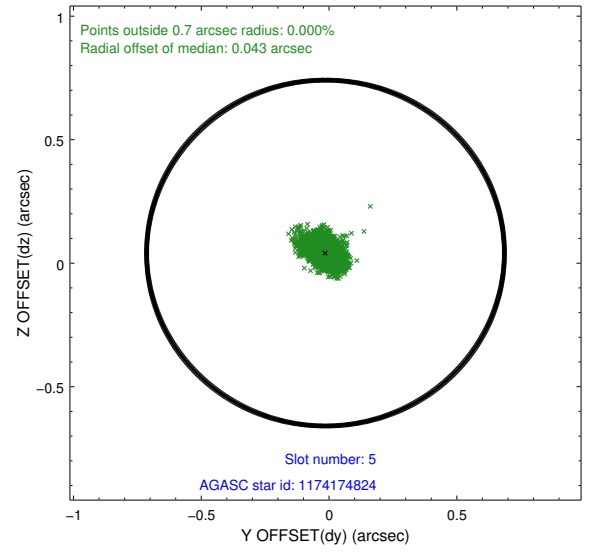
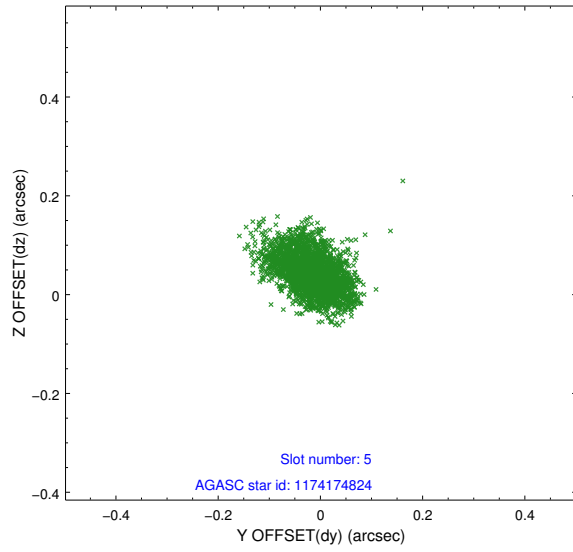
### 2.4.1 Slot 3



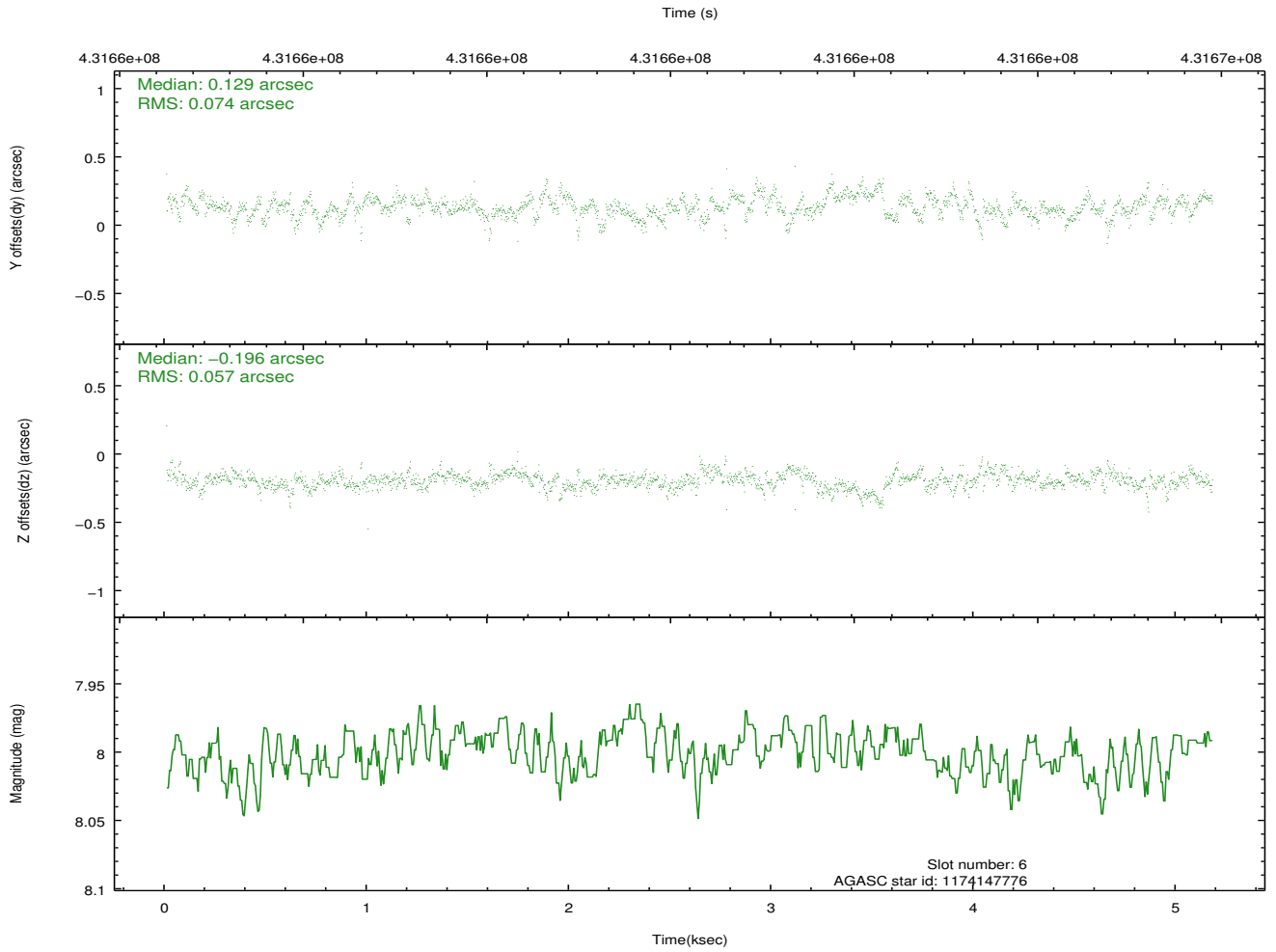
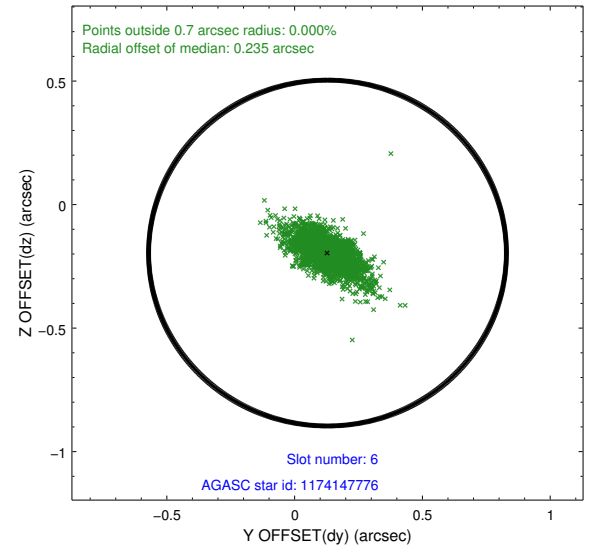
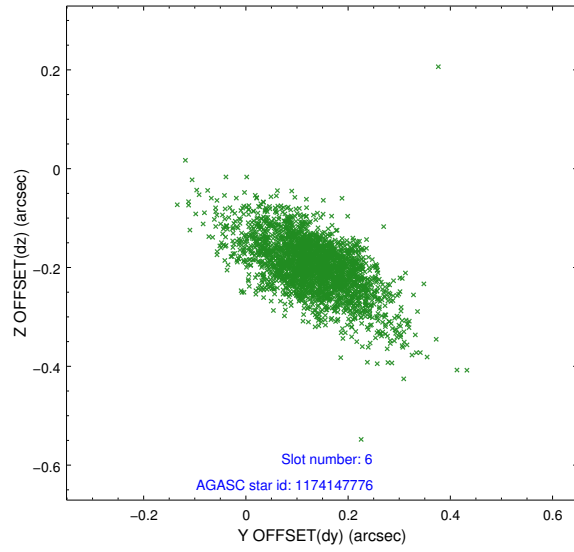
## 2.4.2 Slot 4



### 2.4.3 Slot 5

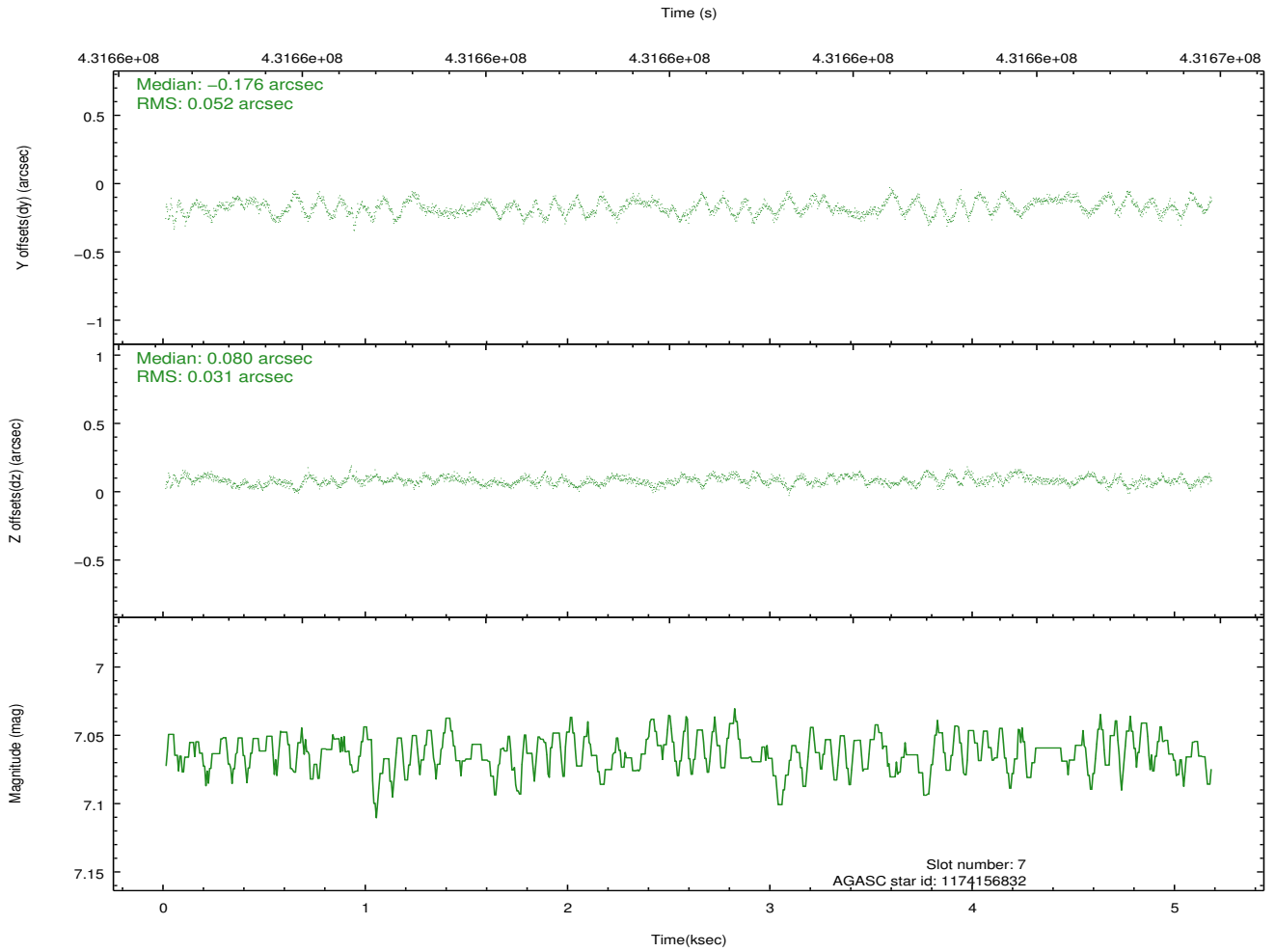
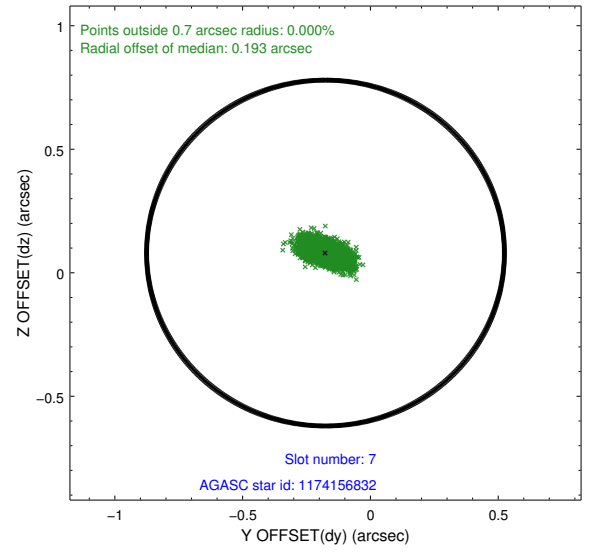
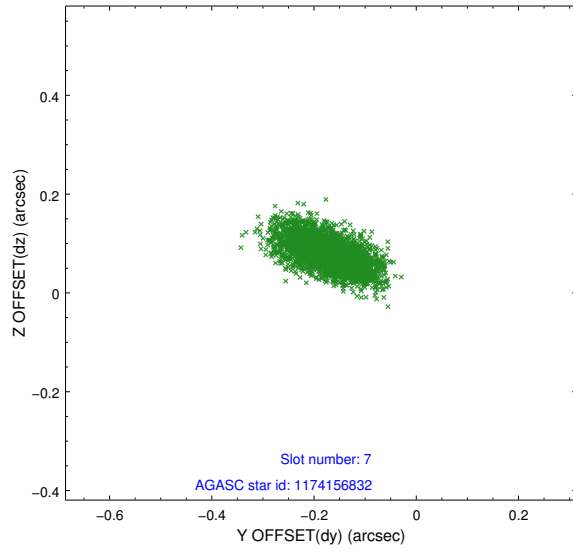


## 2.4.4 Slot 6



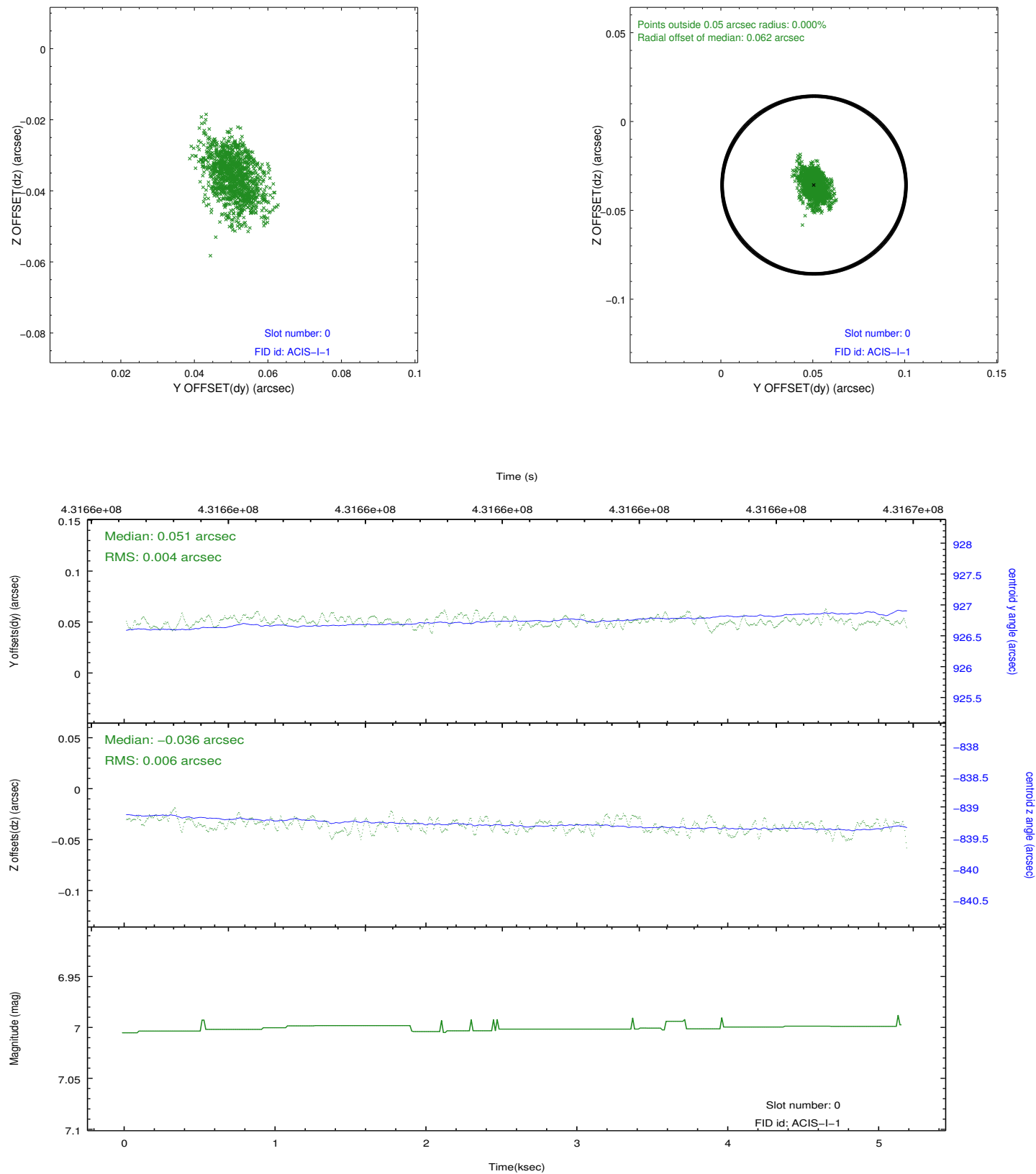


## 2.4.5 Slot 7

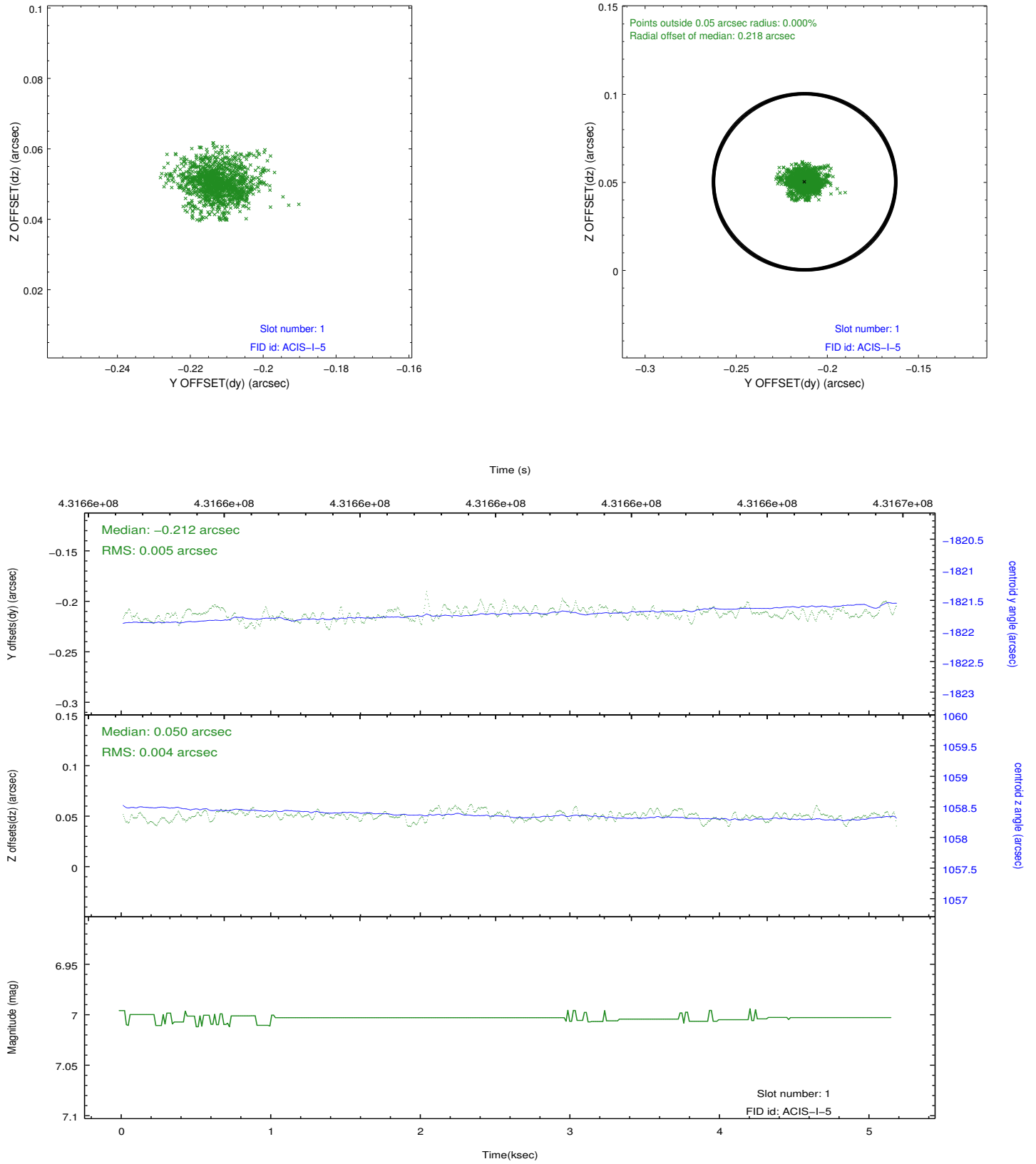


## 2.5 FID Slots

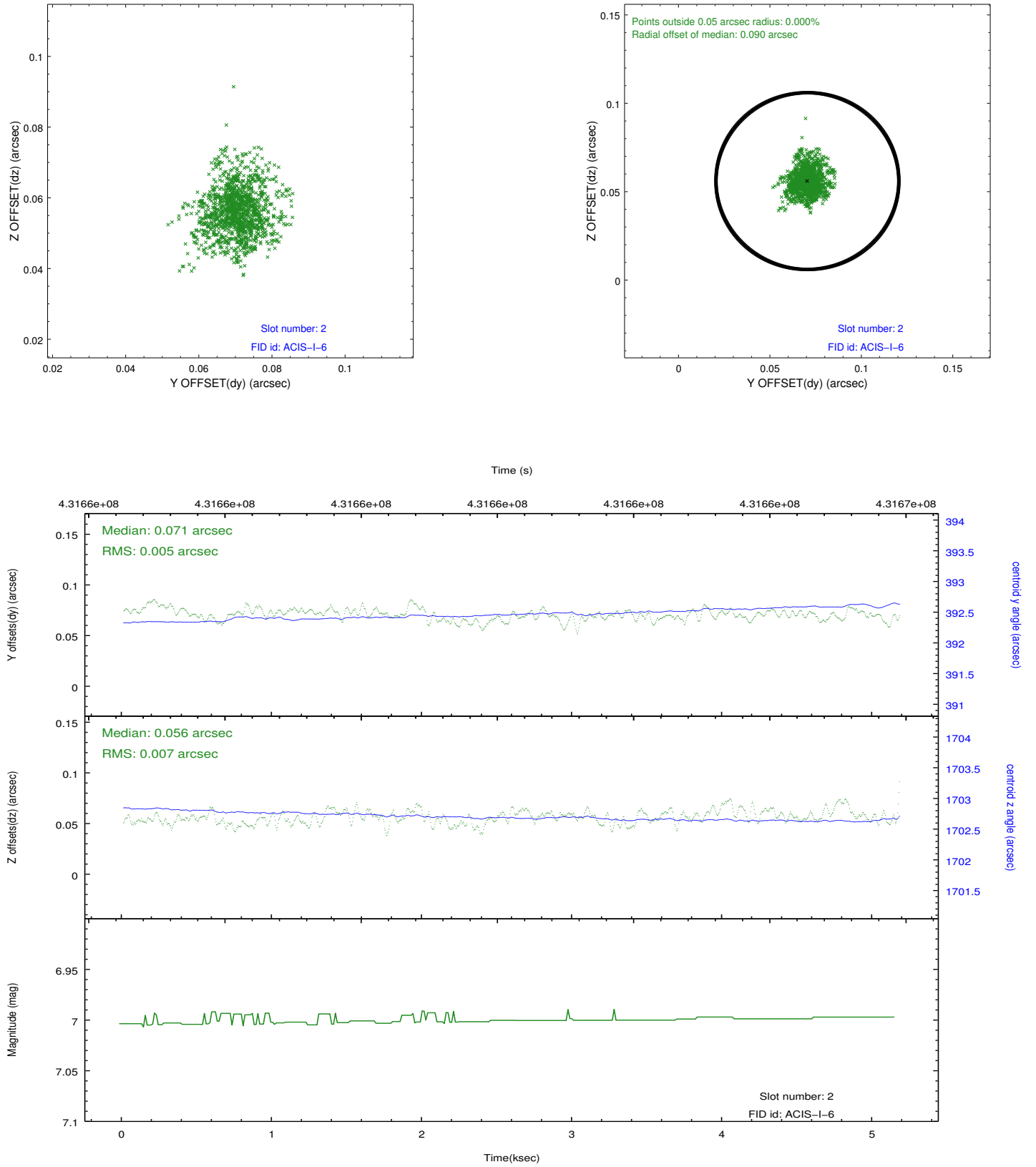
### 2.5.1 Slot 0



## 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)	2012.02.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0547987175584

### A.2 Comments