

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11334 - L2 Version 2  
Chandra X-Ray Center

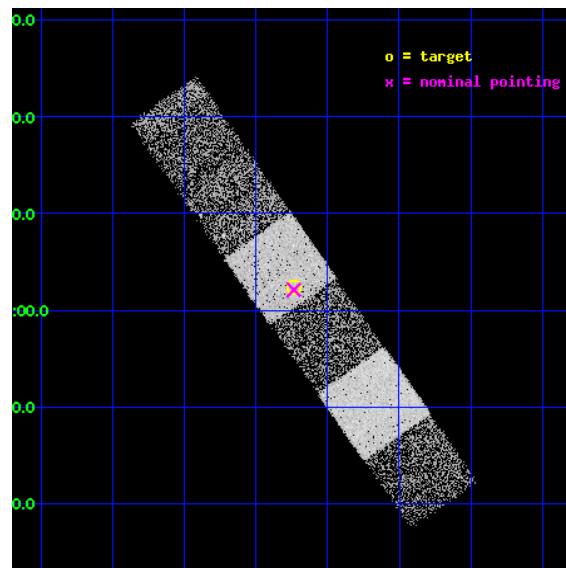
L2 Processing Date : Jun 25 2012

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# 1 Front

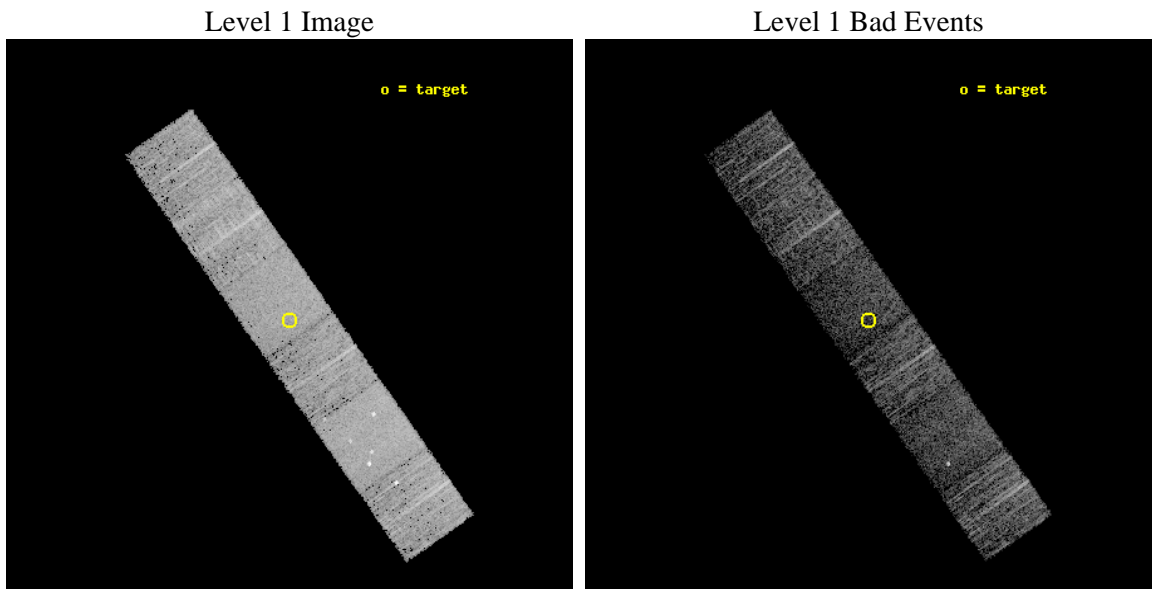
seq_num	600853	Sequence number
obs_id	11334	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	PGC135818	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	195.934	Observer's specified target RA [deg]
dec_targ	2.03996	Observer's specified target Dec [deg]
ra_nom	195.93383249564	Nominal RA [deg]
dec_nom	2.0350310059131	Nominal Dec [deg]
roll_nom	234.88478747586	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3548.7174786925	Sum of GTIs [s]
livetime	3503.7814811962	Livetime [s]
ontime4	3548.7585186958	Sum of GTIs [s]
ontime5	3548.6764386892	Sum of GTIs [s]
ontime6	3545.3944282532	Sum of GTIs [s]
ontime7	3548.7174786925	Sum of GTIs [s]
ontime8	3548.5943586826	Sum of GTIs [s]
ontime9	3548.5533186793	Sum of GTIs [s]
l2events	43086	Number of level 2 events



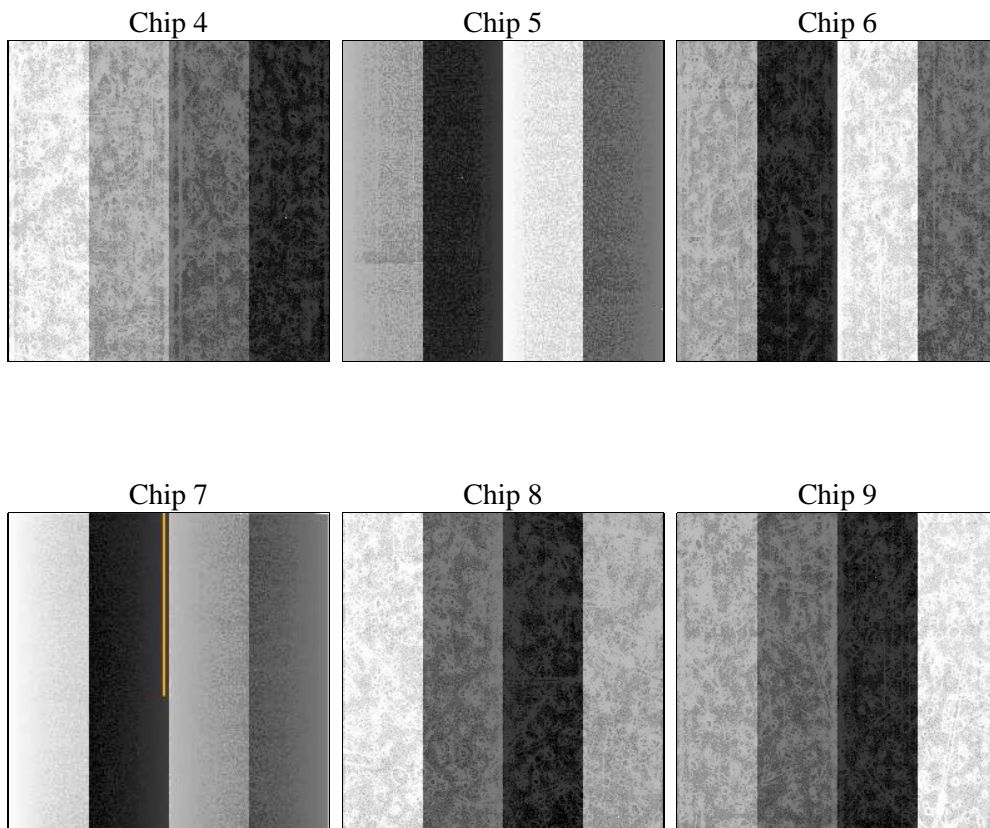
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3548.7174786925	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime4	3548.7585186958	Sum of GTIs [s]
date	2012-06-25T09:42:59	Date and time of file creation	ontime5	3548.6764386892	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3545.3944282532	Sum of GTIs [s]
			ontime7	3548.7174786925	Sum of GTIs [s]
			ontime8	3548.5943586826	Sum of GTIs [s]
			ontime9	3548.5533186793	Sum of GTIs [s]
			l1events	192921	Number of level 1 events

### 2.1.4 Events

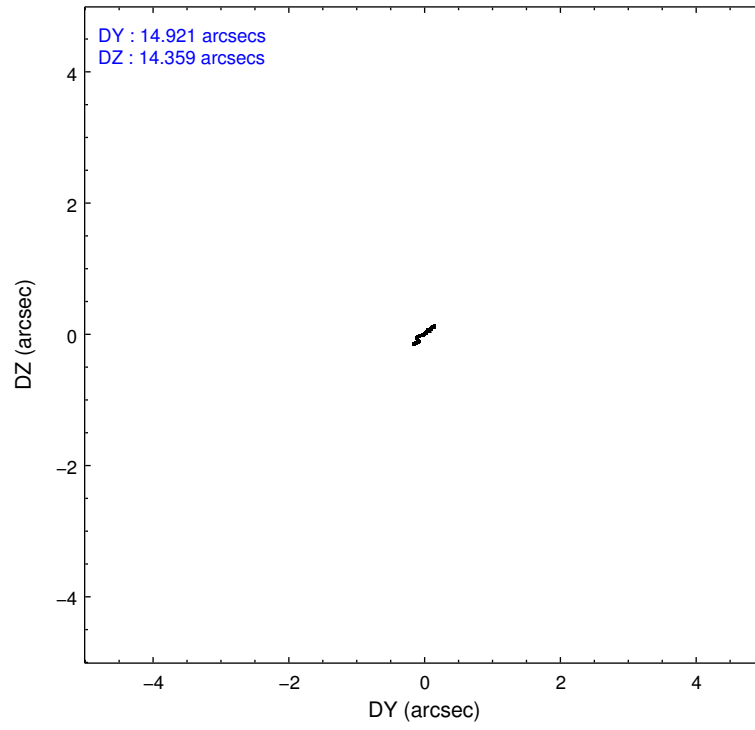
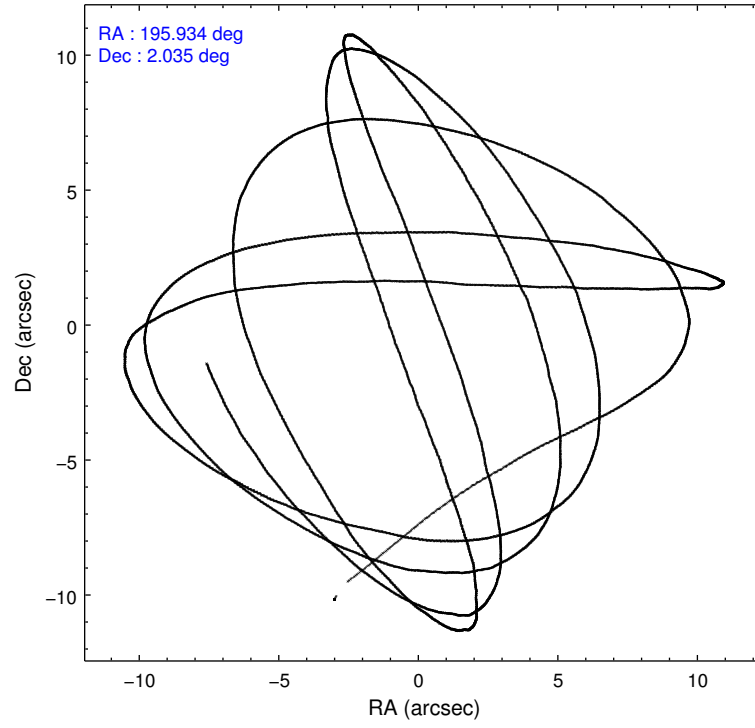
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	32336	40919	27367	31608	34485	26206	grade 0 events	2030	2582	1023	1298	2972	1161
rejected events	28348	20133	24463	17330	25093	23115		6%	6%	3%	4%	8%	4%
rejected %	87%	49%	89%	54%	72%	88%	grade 1 events	35	90	10	41	28	21
								0%	0%	0%	0%	0%	0%
							grade 2 events	777	6436	607	2957	2133	652
								2%	15%	2%	9%	6%	2%
							grade 3 events	339	763	314	1322	1060	328
								1%	1%	1%	4%	3%	1%
							grade 4 events	335	757	332	1233	941	317
								1%	1%	1%	3%	2%	1%
							grade 5 events	1171	3102	1142	3390	1736	1273
								3%	7%	4%	10%	5%	4%
							grade 6 events	510	10263	637	7480	2289	635
								1%	25%	2%	23%	6%	2%
							grade 7 events	27139	16926	23302	13887	23326	21819
								83%	41%	85%	43%	67%	83%

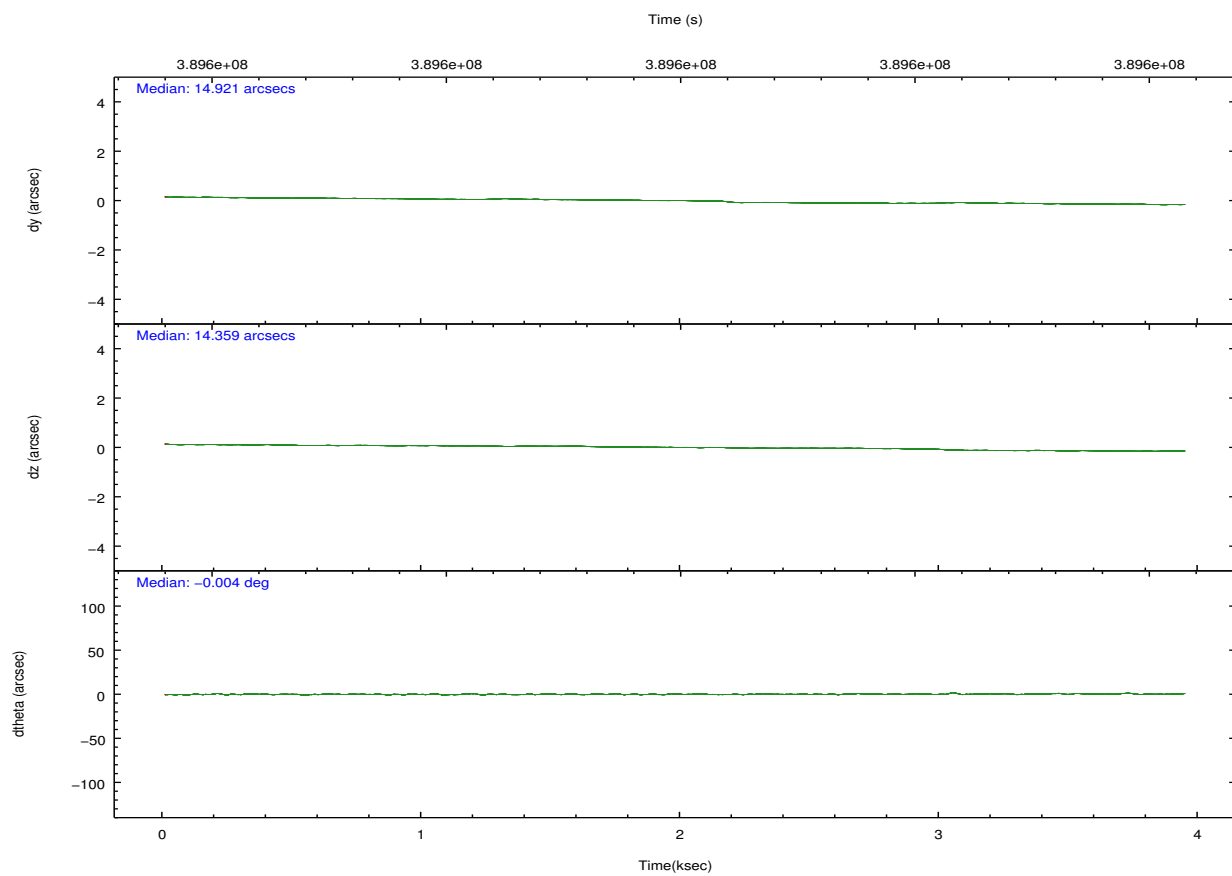
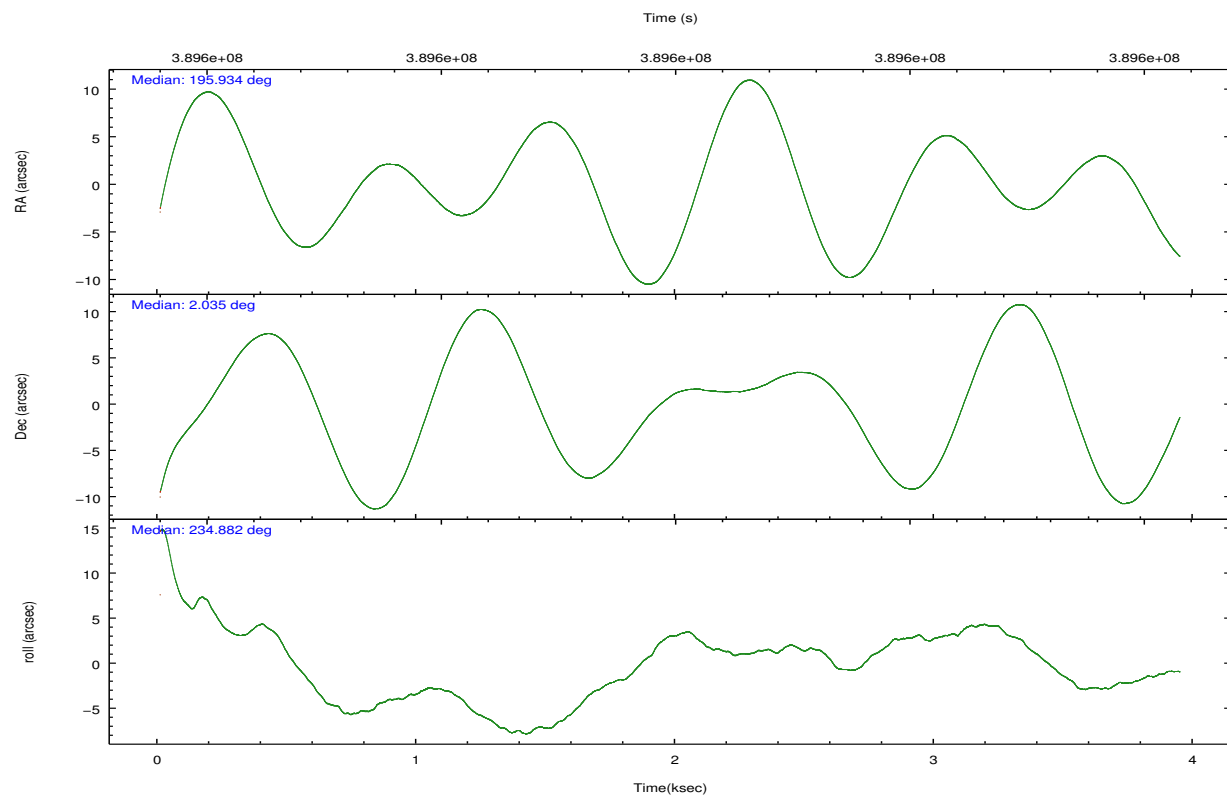


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	195.935770	195.9338324956403	CCD I2 on	N	N
[deg] Pointing Dec	2.062385	2.035031005913097	CCD I3 on	N	N
[deg] Pointing Roll	234.728048	234.8847874758644	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	389597446.184000	389596313.63986	CCD S5 on	O2	Y
Observation start date	2010-05-07T05:29:40	2010-05-07T05:11:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	389600946.184000	389602468.25267	On-chip summing requested	N	N
Observation end date	2010-05-07T06:28:00	2010-05-07T06:54:28	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



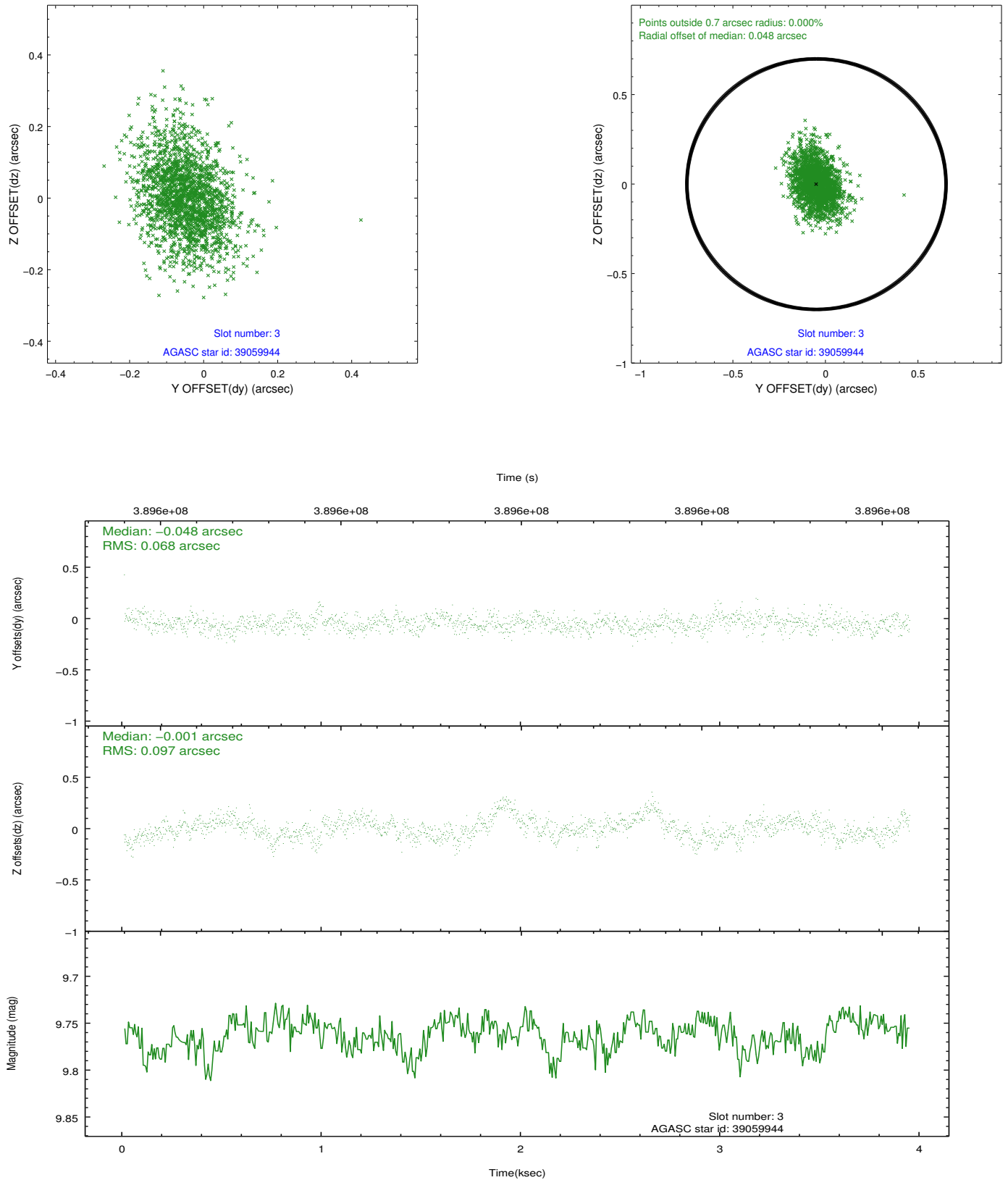


### Slot Statistics

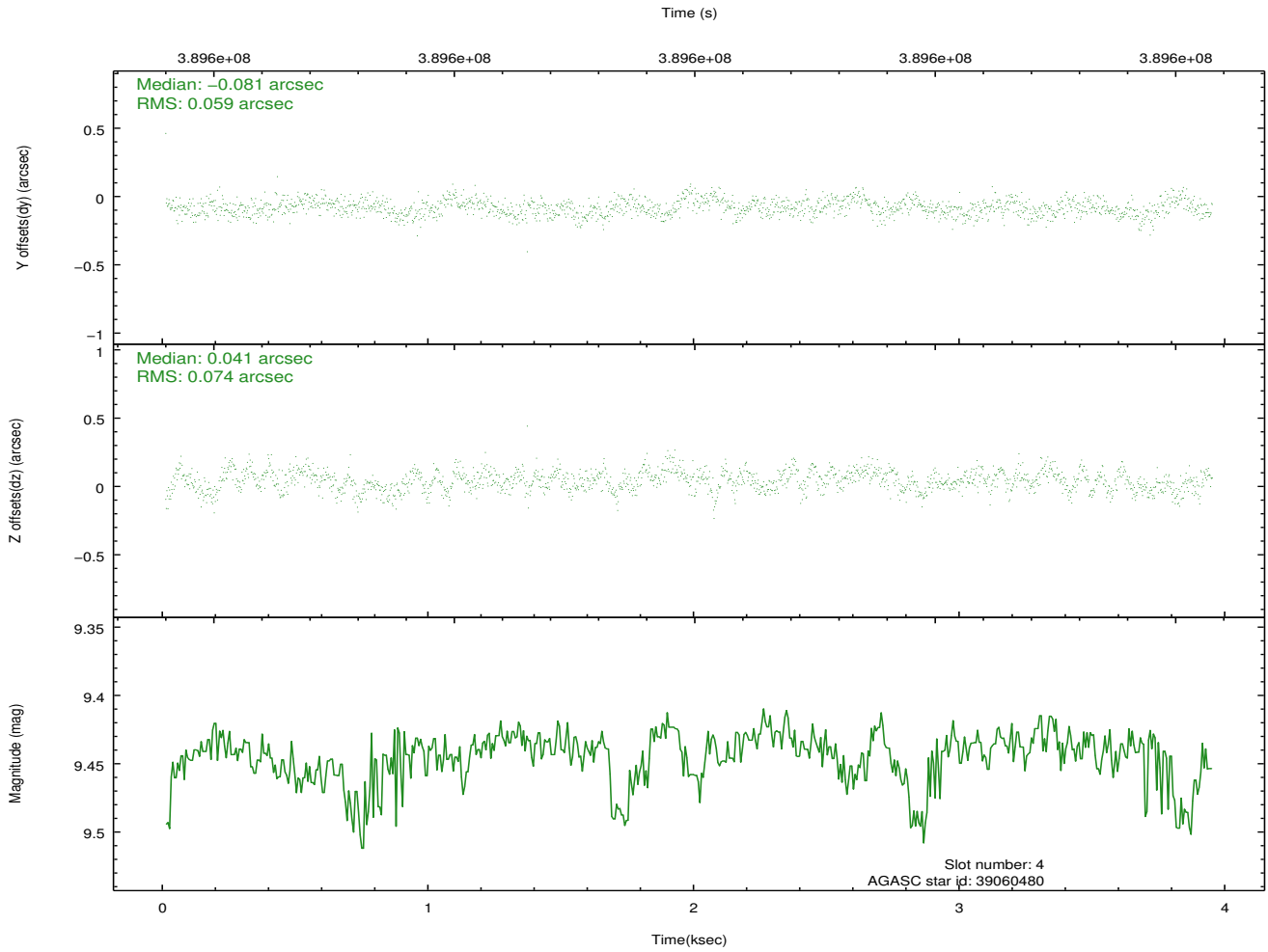
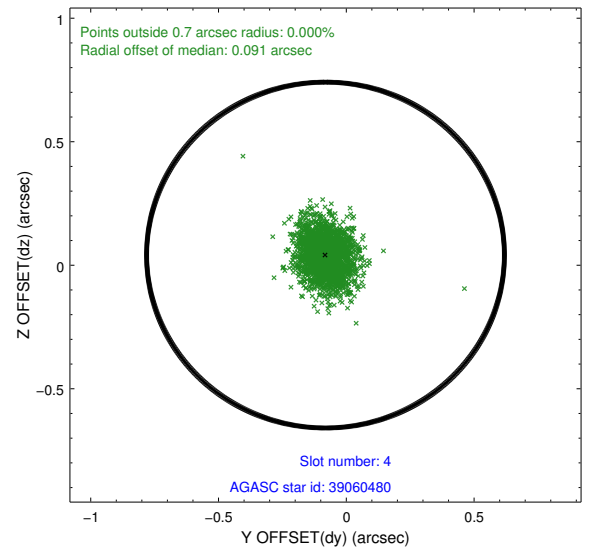
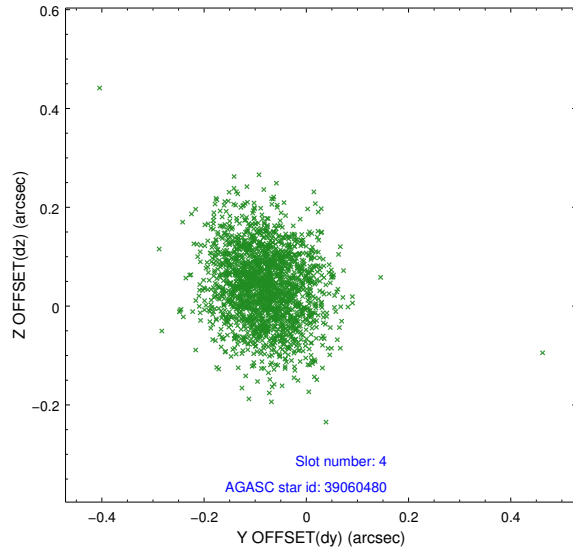
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	962	-0.090	-0.061	0.007	0.012	0.000000	0.000000	-767.96	-1735.72
1	FID	ACIS-S-4	6.97	962	0.222	0.060	0.006	0.012	0.000000	0.000000	2144.90	171.24
2	FID	ACIS-S-5	7.00	962	-0.163	0.010	0.007	0.013	0.000000	0.000000	-1818.85	166.67
3	GUIDE	39059944	9.76	1919	-0.048	-0.001	0.120	0.210	196.314719	2.400284	-1779.87	409.77
4	GUIDE	39060480	9.44	1919	-0.081	0.041	0.100	0.167	196.375689	2.085159	-981.77	1244.48
5	GUIDE	39060576	8.88	1921	0.281	-0.344	0.098	0.160	195.700571	2.094582	394.06	-757.86
6	GUIDE	39063624	9.89	1921	-0.156	0.077	0.174	0.295	196.308483	1.667485	386.34	1914.87
7	GUIDE	39458888	9.81	1919	0.009	0.244	0.132	0.210	196.079504	2.627028	-1957.45	-751.22

## 2.4 Star Slots

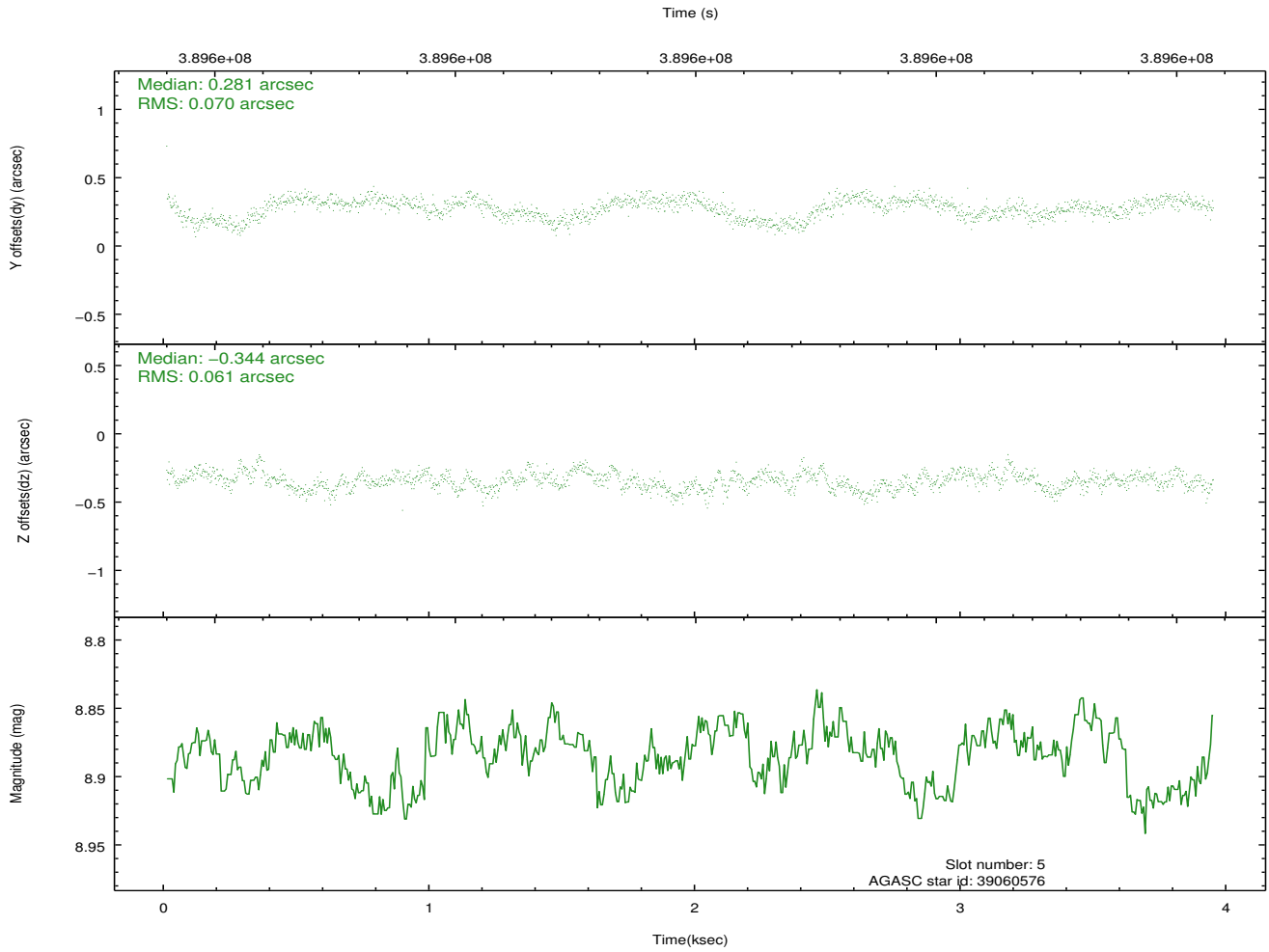
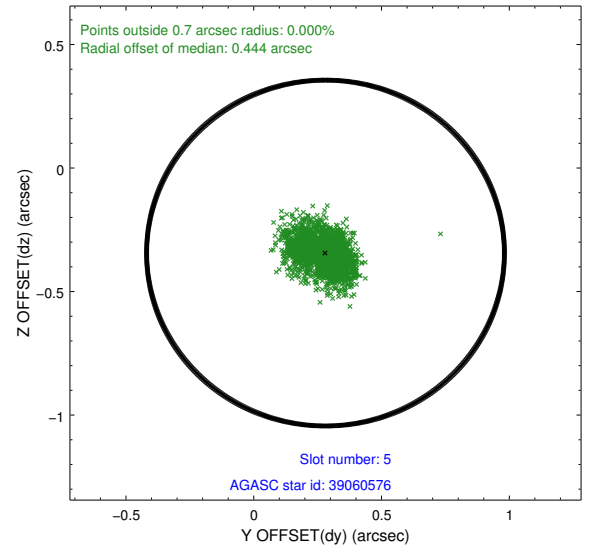
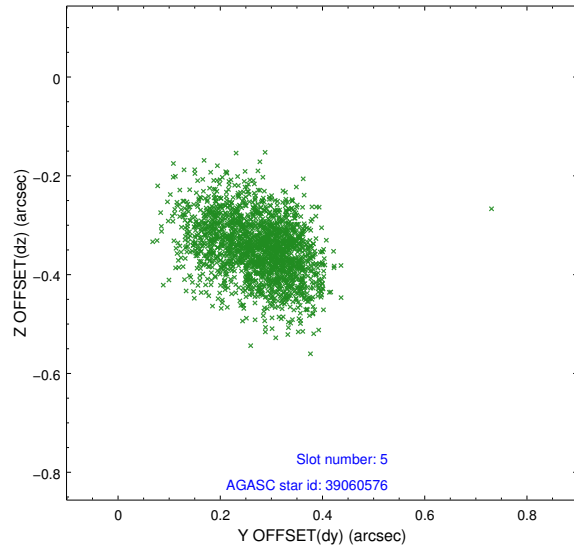
### 2.4.1 Slot 3



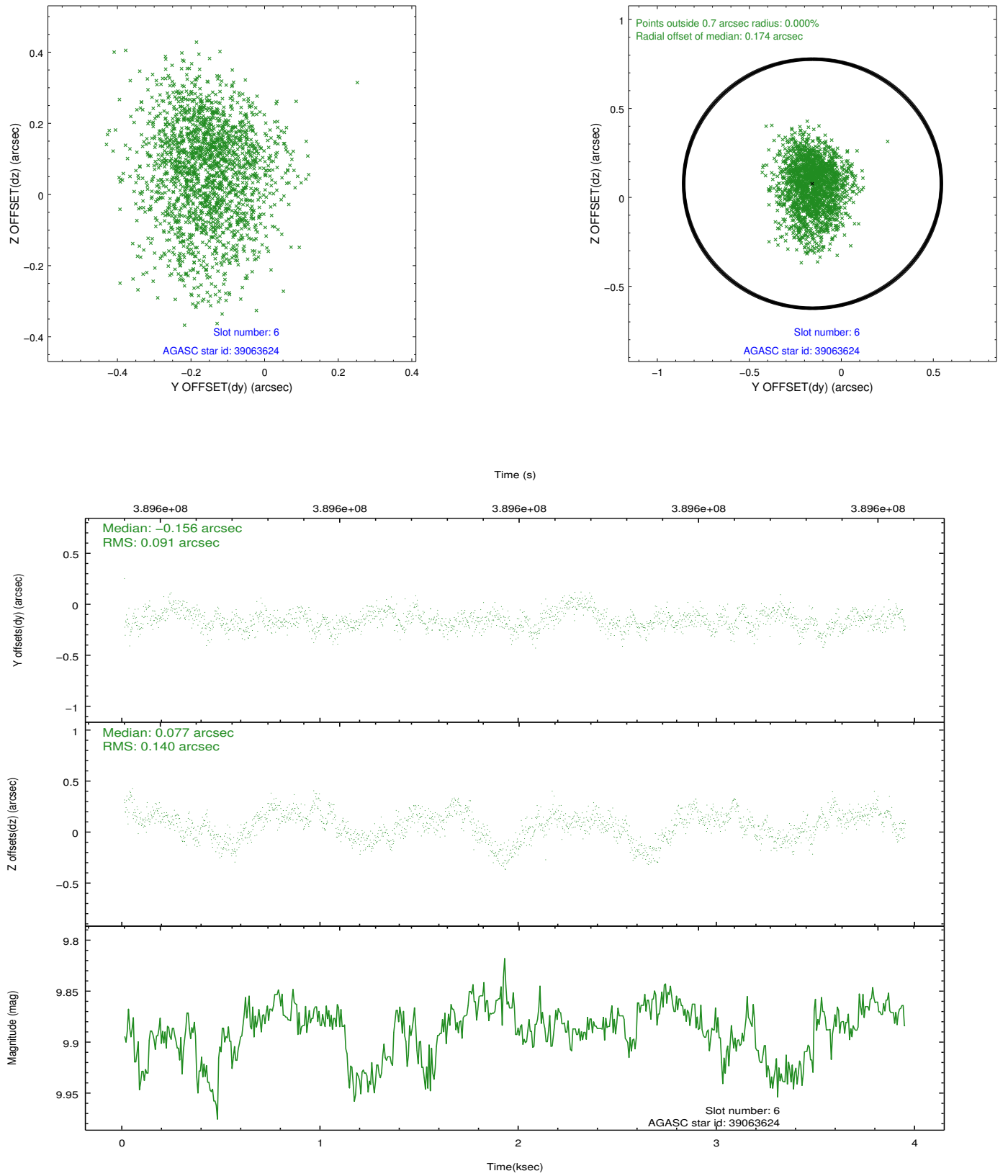
## 2.4.2 Slot 4



### 2.4.3 Slot 5

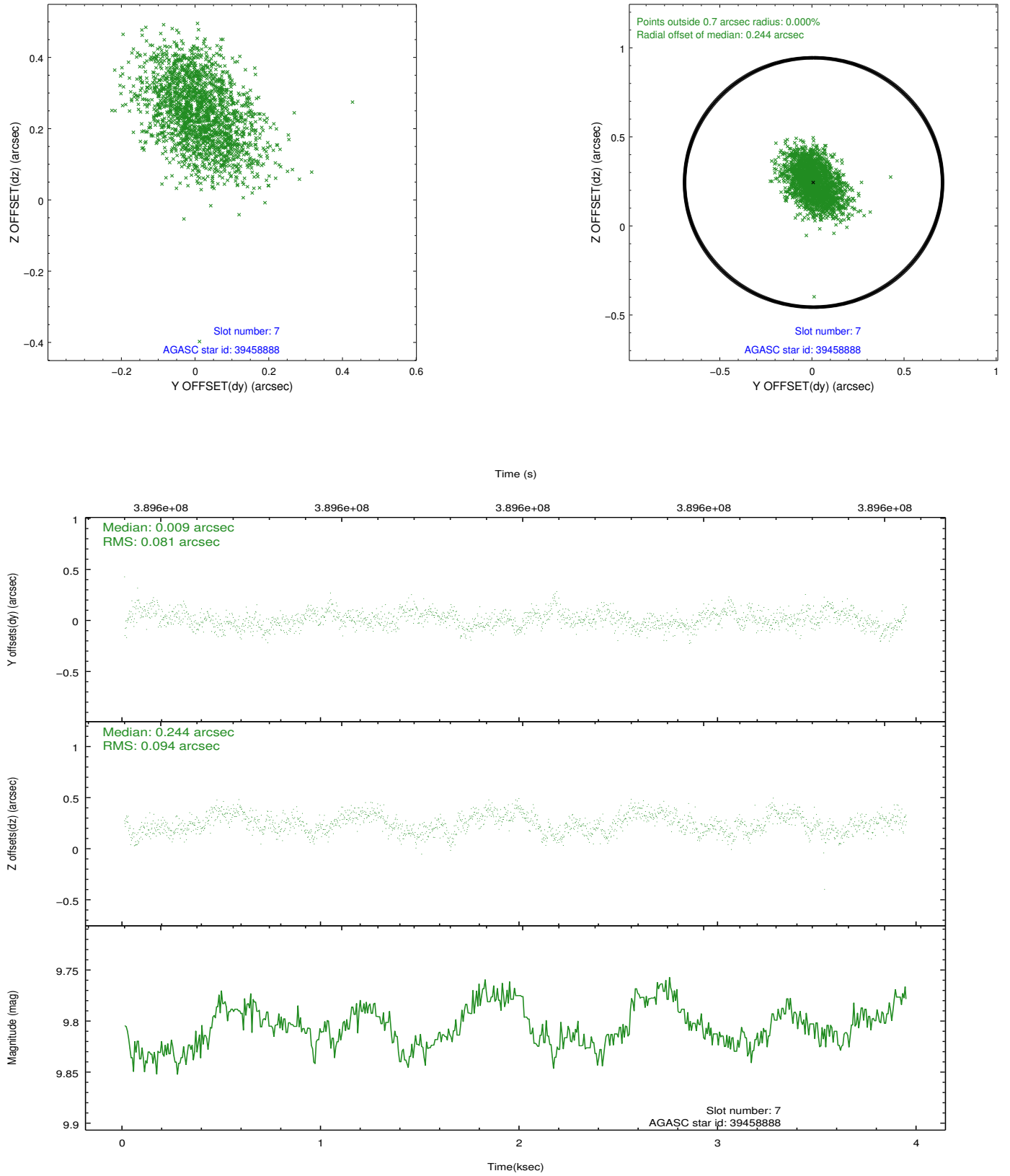


## 2.4.4 Slot 6



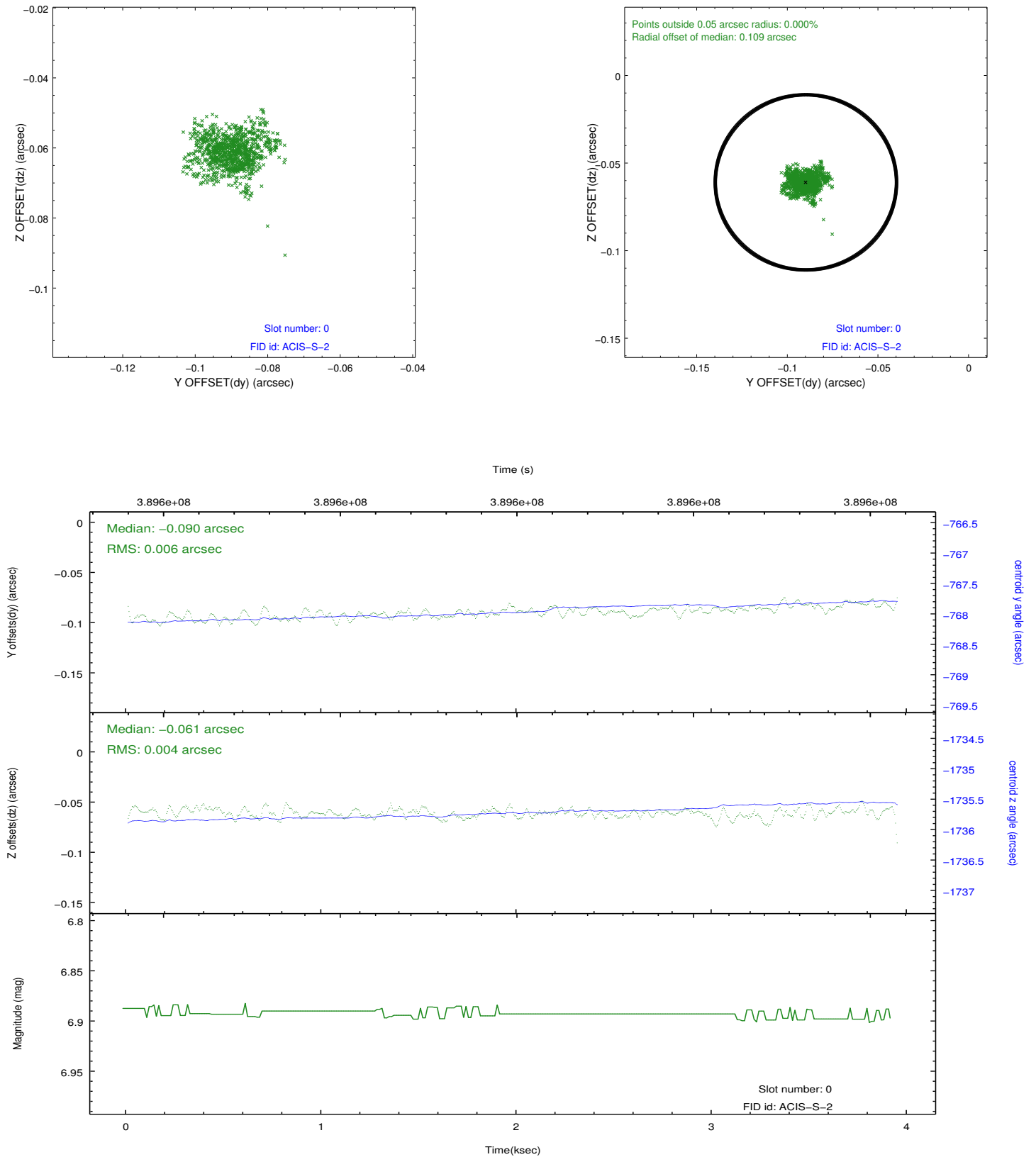


## 2.4.5 Slot 7

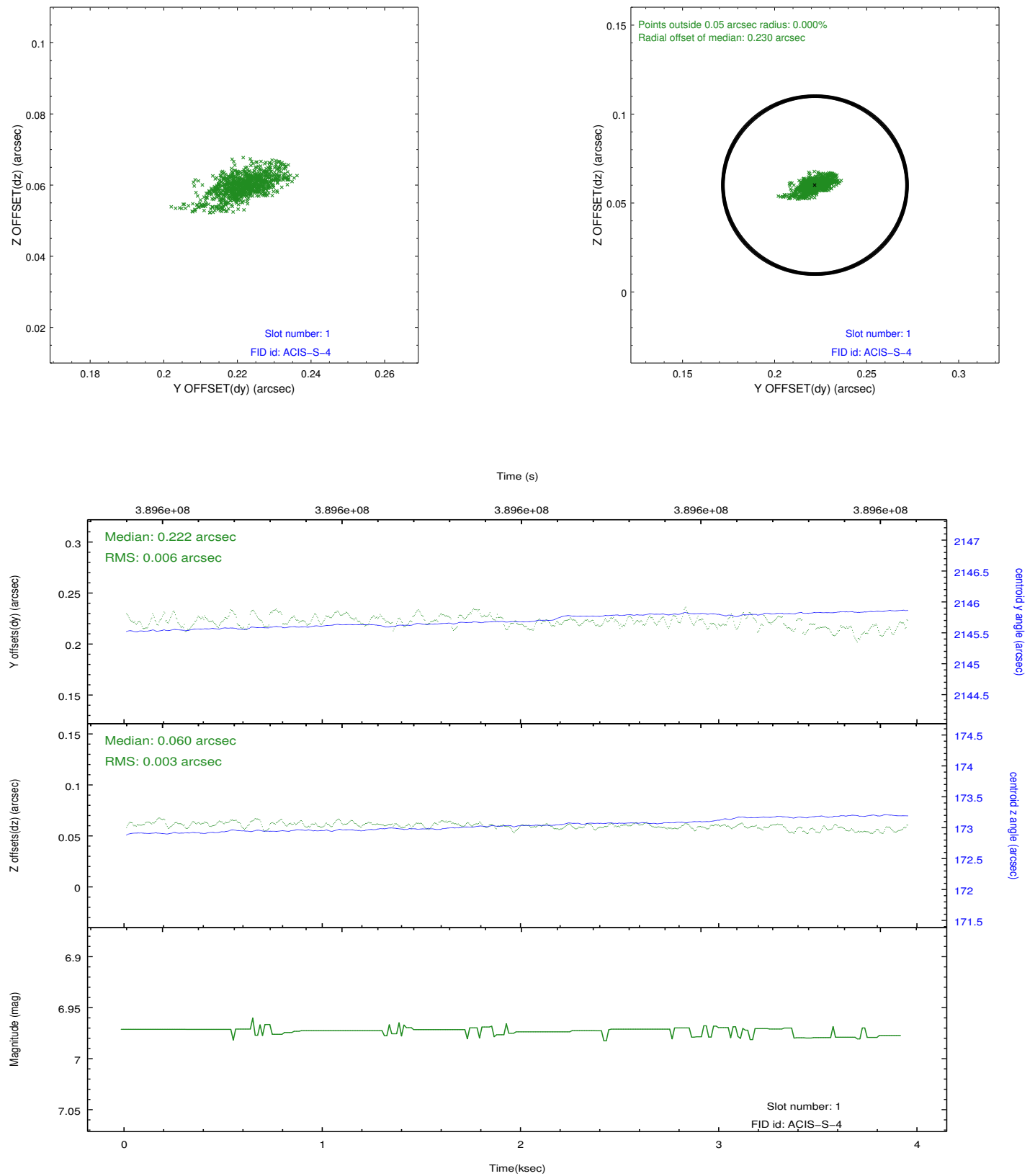


## 2.5 FID Slots

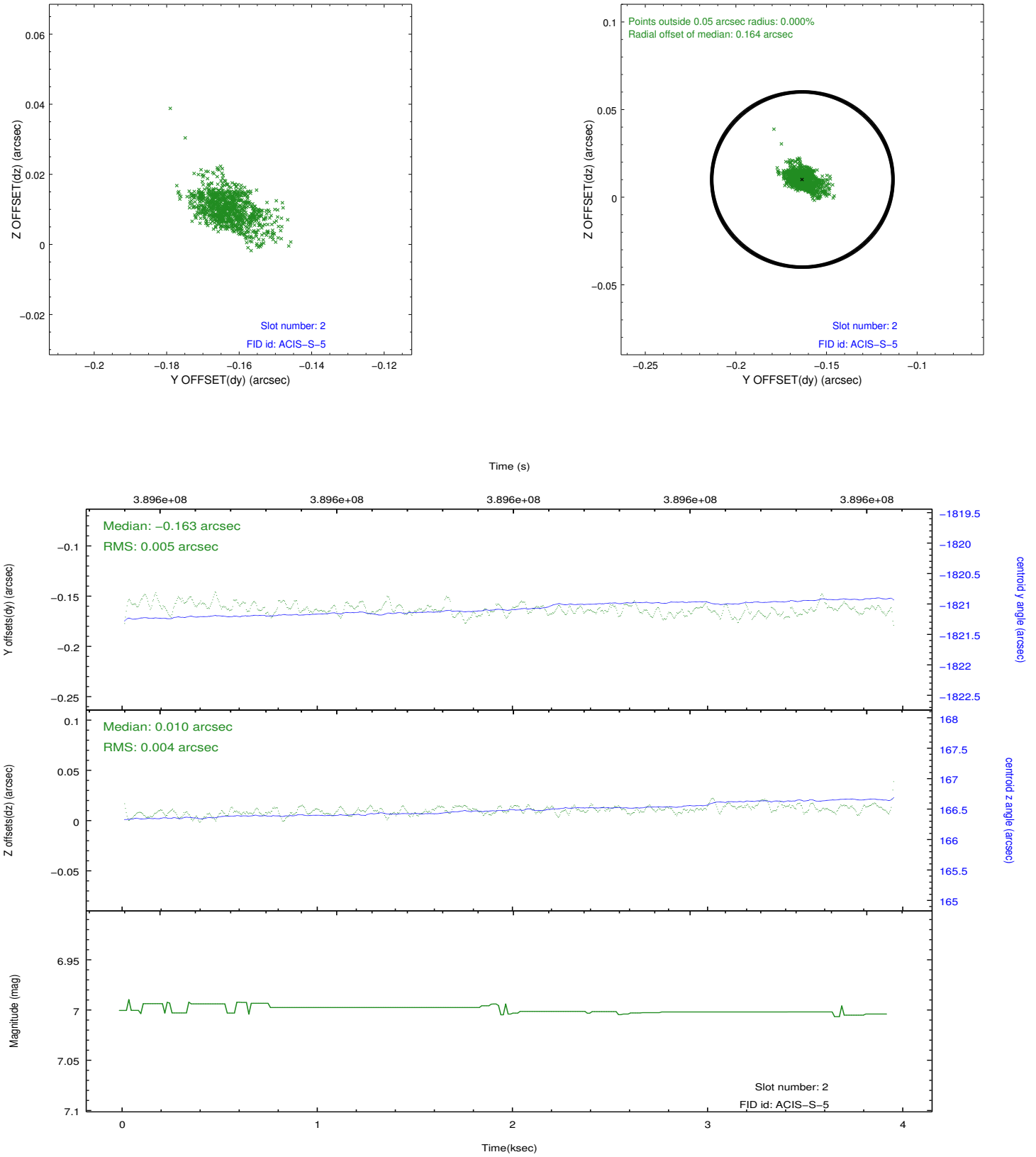
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.07.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.5487174783349

### A.2 Comments