

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8956 - L2 Version 2  
Chandra X-Ray Center

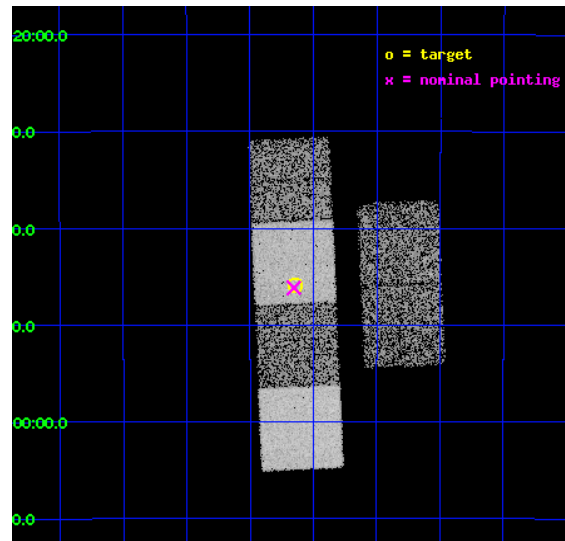
L2 Processing Date : May 23 2012

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# 1 Front

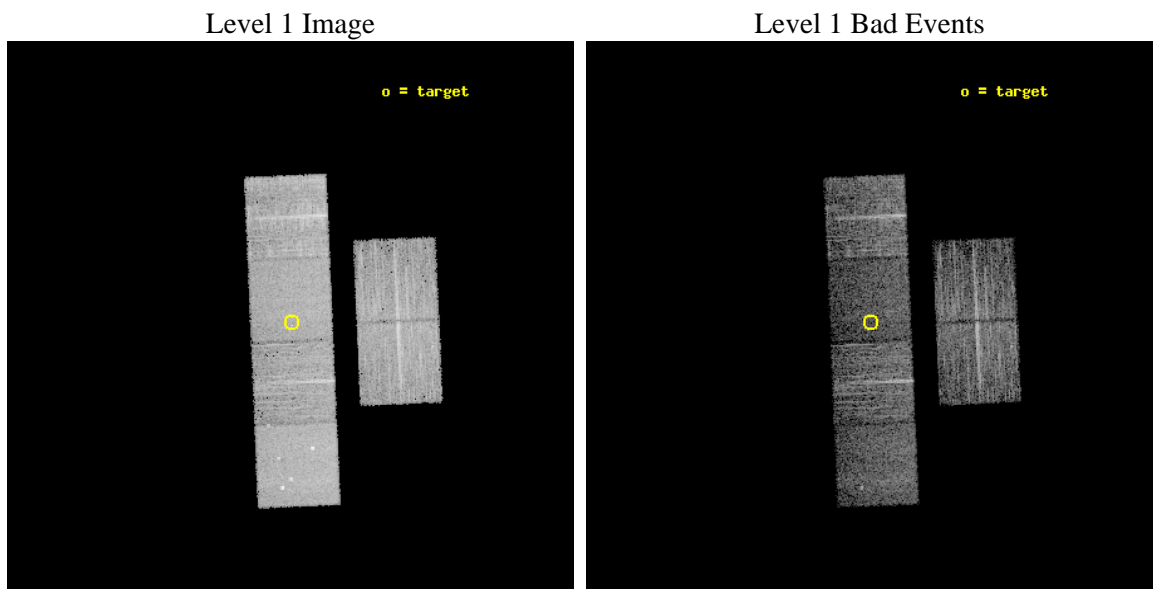
seq_num	300212	Sequence number
obs_id	8956	Observation id
title	A Chandra Legacy Survey of Dynamically Active Globular Clusters	Pr
observer	Prof. David Pooley	Principal investigator
object	NGC 6540	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	271.535833	Observer's specified target RA [deg]
dec_targ	-27.765278	Observer's specified target Dec [deg]
ra_nom	271.53844740067	Nominal RA [deg]
dec_nom	-27.769448125493	Nominal Dec [deg]
roll_nom	267.49236926051	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5177.5999807715	Sum of GTIs [s]
livetime	5112.0380922386	Livetime [s]
ontime2	5174.35899055	Sum of GTIs [s]
ontime3	5177.5999807715	Sum of GTIs [s]
ontime5	5177.5999807715	Sum of GTIs [s]
ontime6	5177.5999807715	Sum of GTIs [s]
ontime7	5177.5999807715	Sum of GTIs [s]
ontime8	5174.3589906096	Sum of GTIs [s]
l2events	68361	Number of level 2 events



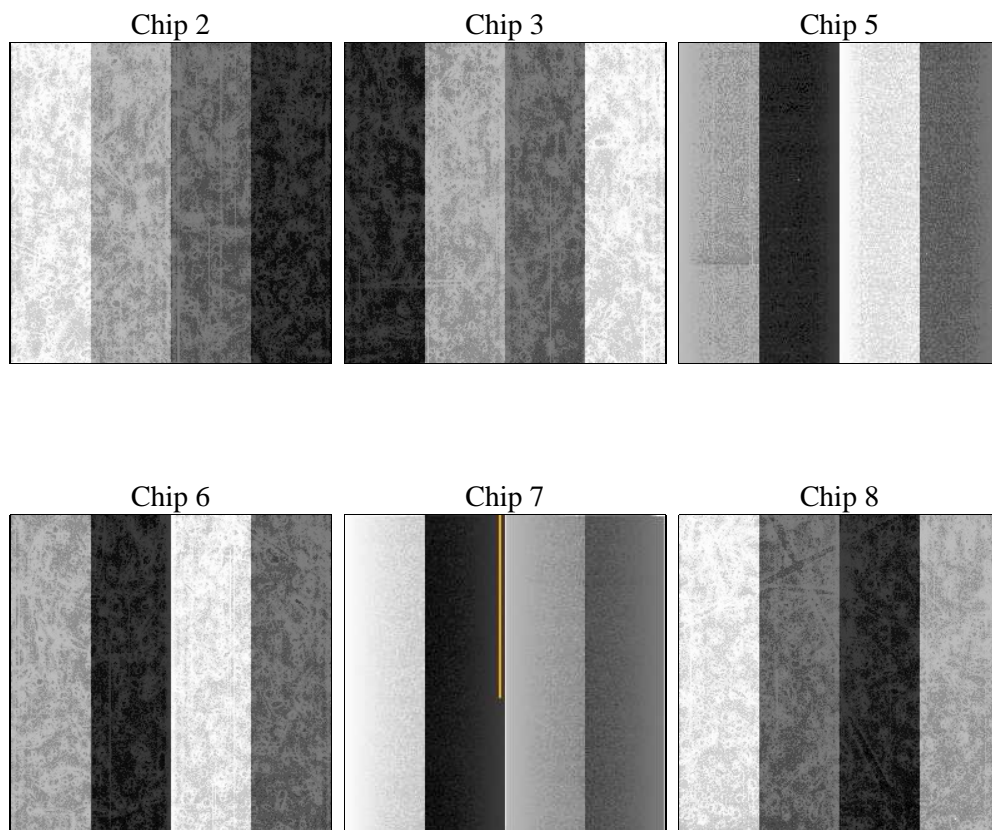
## 2 OBI

### 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	8.4.4	Processing system revision	ontime	5177.5999807715	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	5174.35899055	Sum of GTIs [s]
date	2012-05-23T11:49:39	Date and time of file creation	ontime3	5177.5999807715	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	5177.5999807715	Sum of GTIs [s]
			ontime6	5177.5999807715	Sum of GTIs [s]
			ontime7	5177.5999807715	Sum of GTIs [s]
			ontime8	5174.3589906096	Sum of GTIs [s]
			l1events	309785	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	48820	43495	63690	44780	51299	57701
rejected events	43994	38933	32920	39510	28164	43540
rejected %	90%	89%	51%	88%	54%	75%

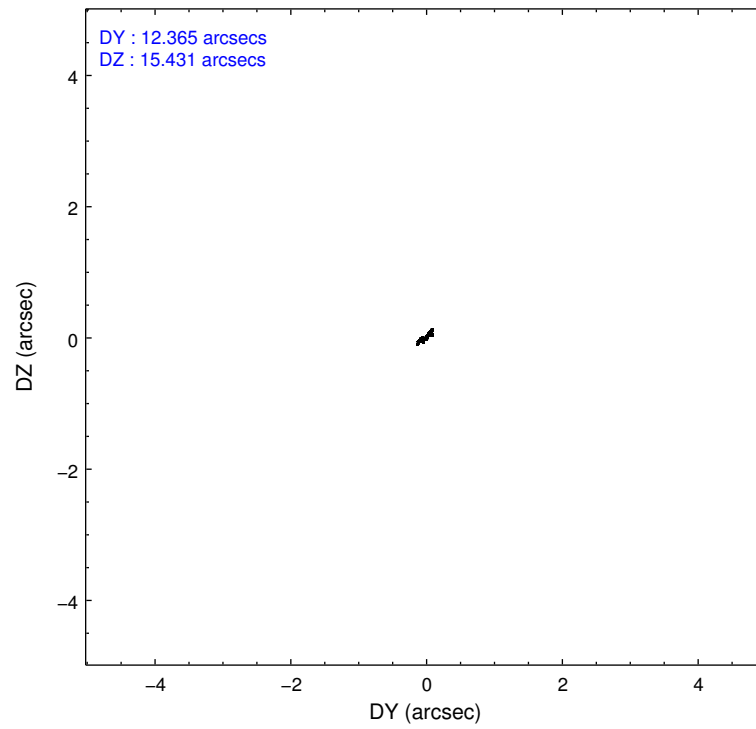
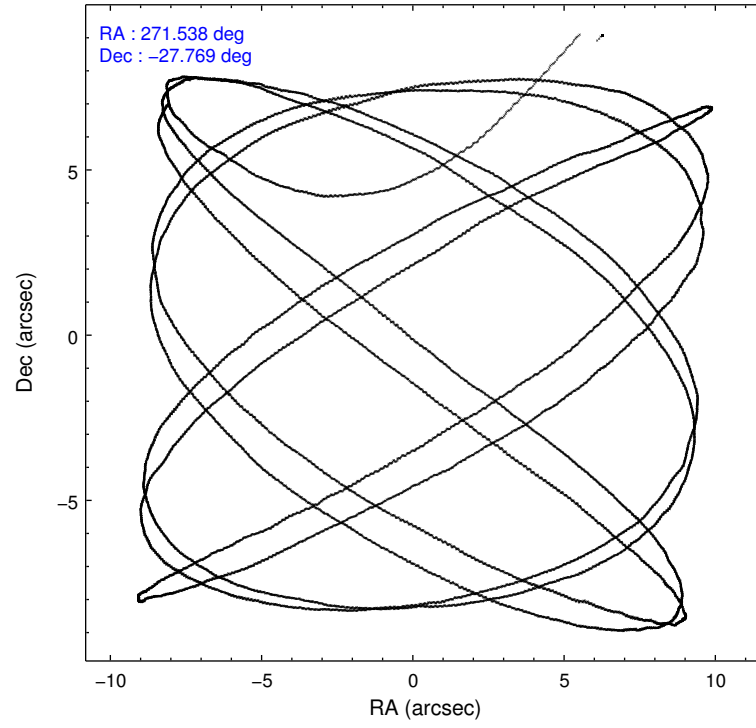
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2197	2068	4143	2421	2671	4931
	4%	4%	6%	5%	5%	8%
grade 1 events	41	27	135	17	73	65
	0%	0%	0%	0%	0%	0%
grade 2 events	1124	935	9778	1078	5170	3191
	2%	2%	15%	2%	10%	5%
grade 3 events	482	476	1376	538	2270	1591
	0%	1%	2%	1%	4%	2%
grade 4 events	503	487	1311	502	2265	1441
	1%	1%	2%	1%	4%	2%
grade 5 events	1418	1741	4906	1869	5318	2583
	2%	4%	7%	4%	10%	4%
grade 6 events	804	838	15900	1044	12073	3862
	1%	1%	24%	2%	23%	6%
grade 7 events	42251	36923	26141	37311	21459	40037
	86%	84%	41%	83%	41%	69%

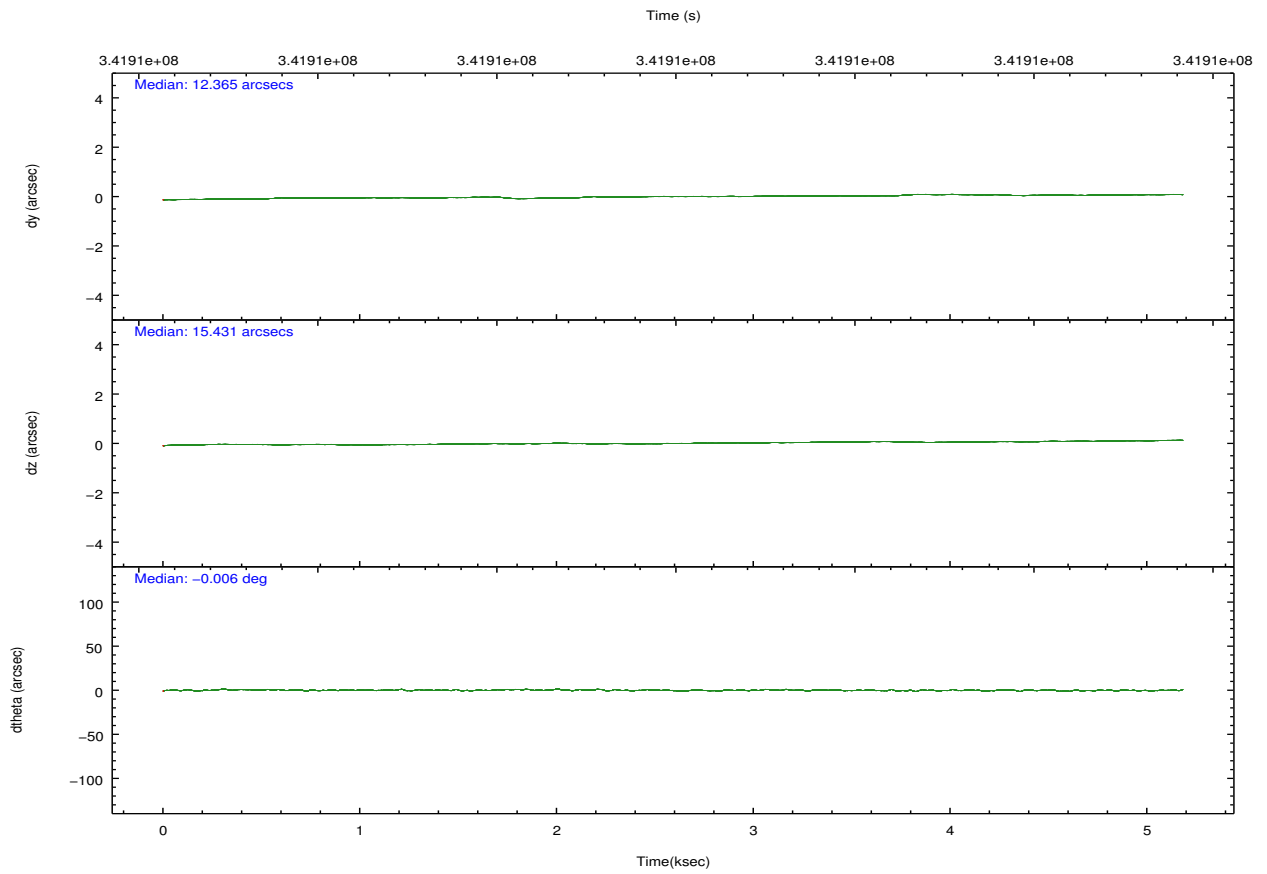
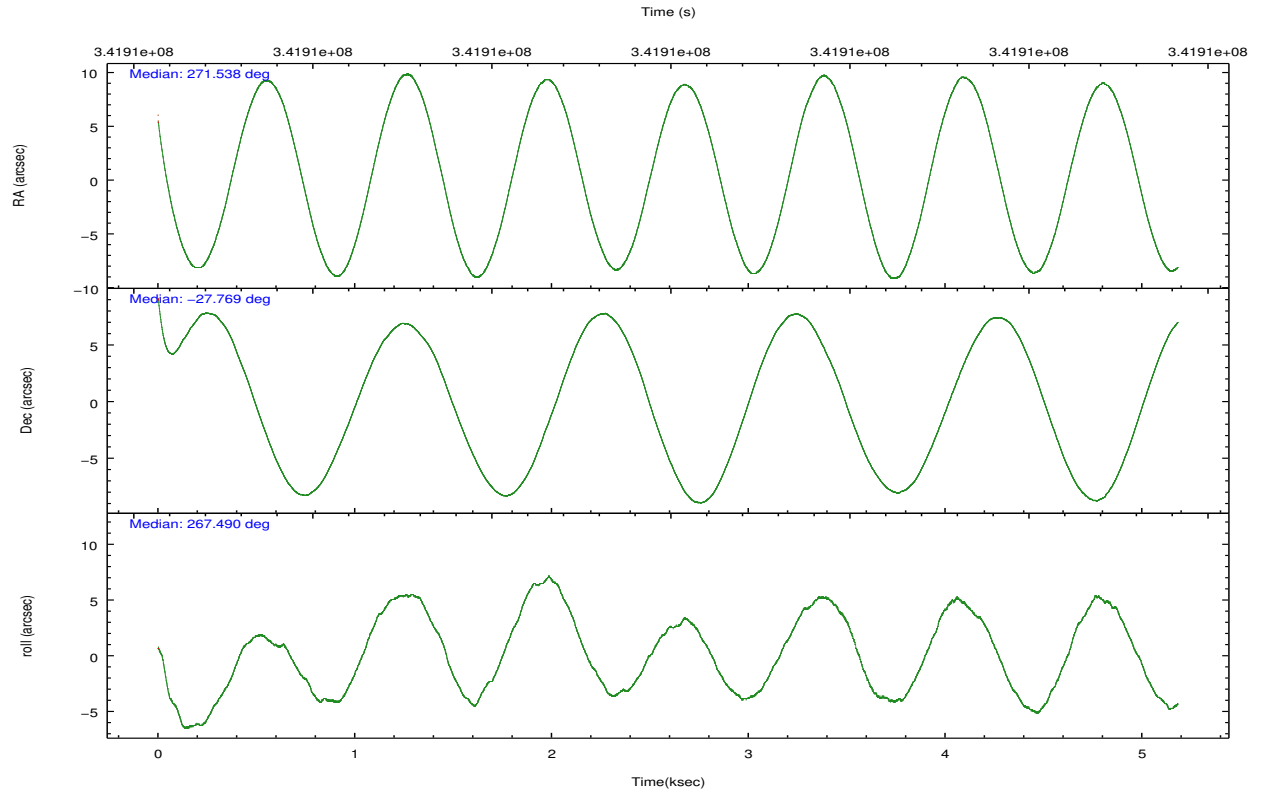


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	271.523864	271.5384474006678	CCD I2 on	O1	Y
[deg] Pointing Dec	-27.745426	-27.76944812549332	CCD I3 on	O2	Y
[deg] Pointing Roll	267.328955	267.4923692605076	CCD S0 on	N	N
[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)	341907576.184000	341906362.26344	CCD S5 on	N	N
Observation start date	2008-11-01T06:18:31	2008-11-01T05:59:22	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	341912576.184000	341913476.27629	On-chip summing requested	N	N
Observation end date	2008-11-01T07:41:51	2008-11-01T07:57:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



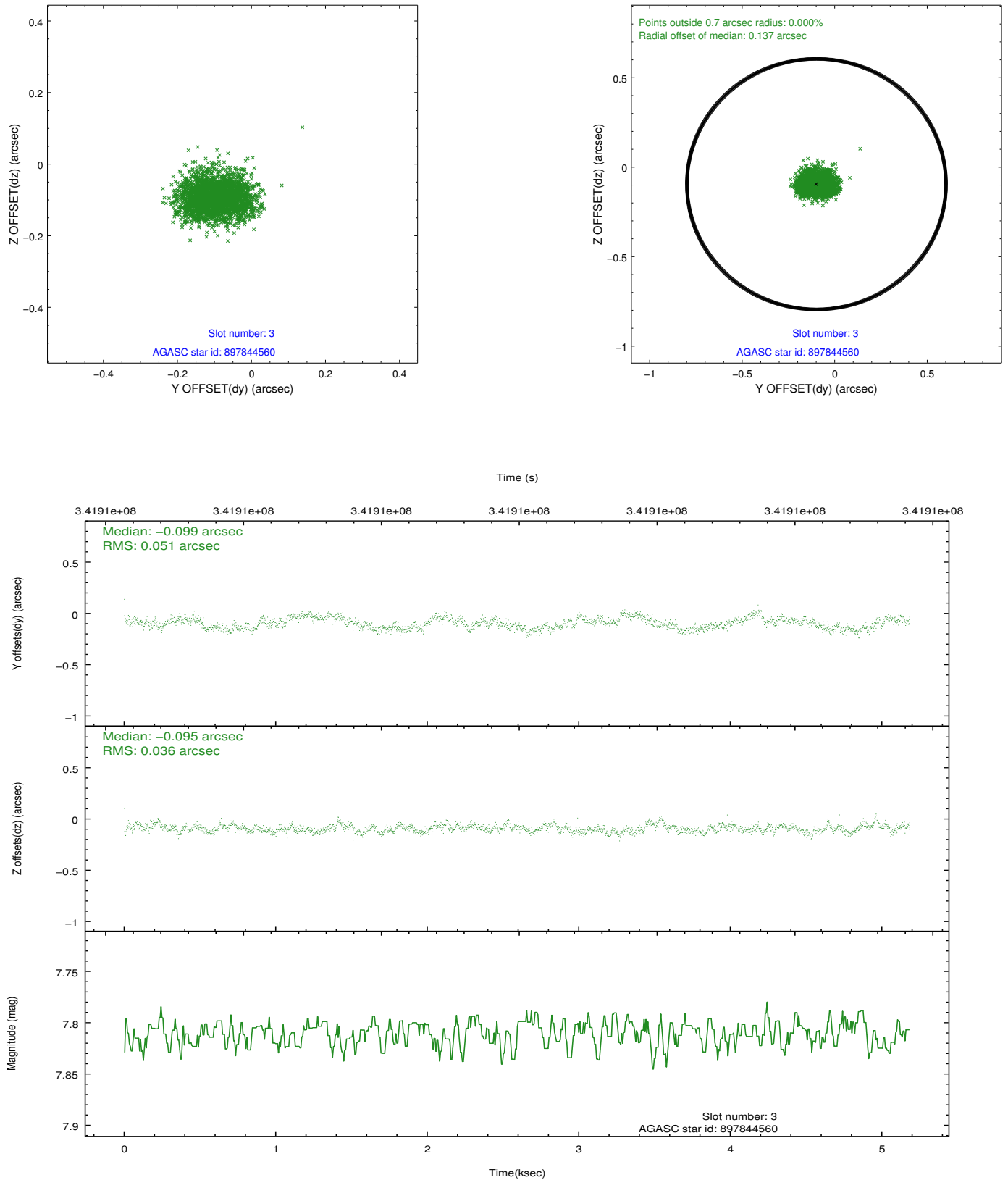


### Slot Statistics

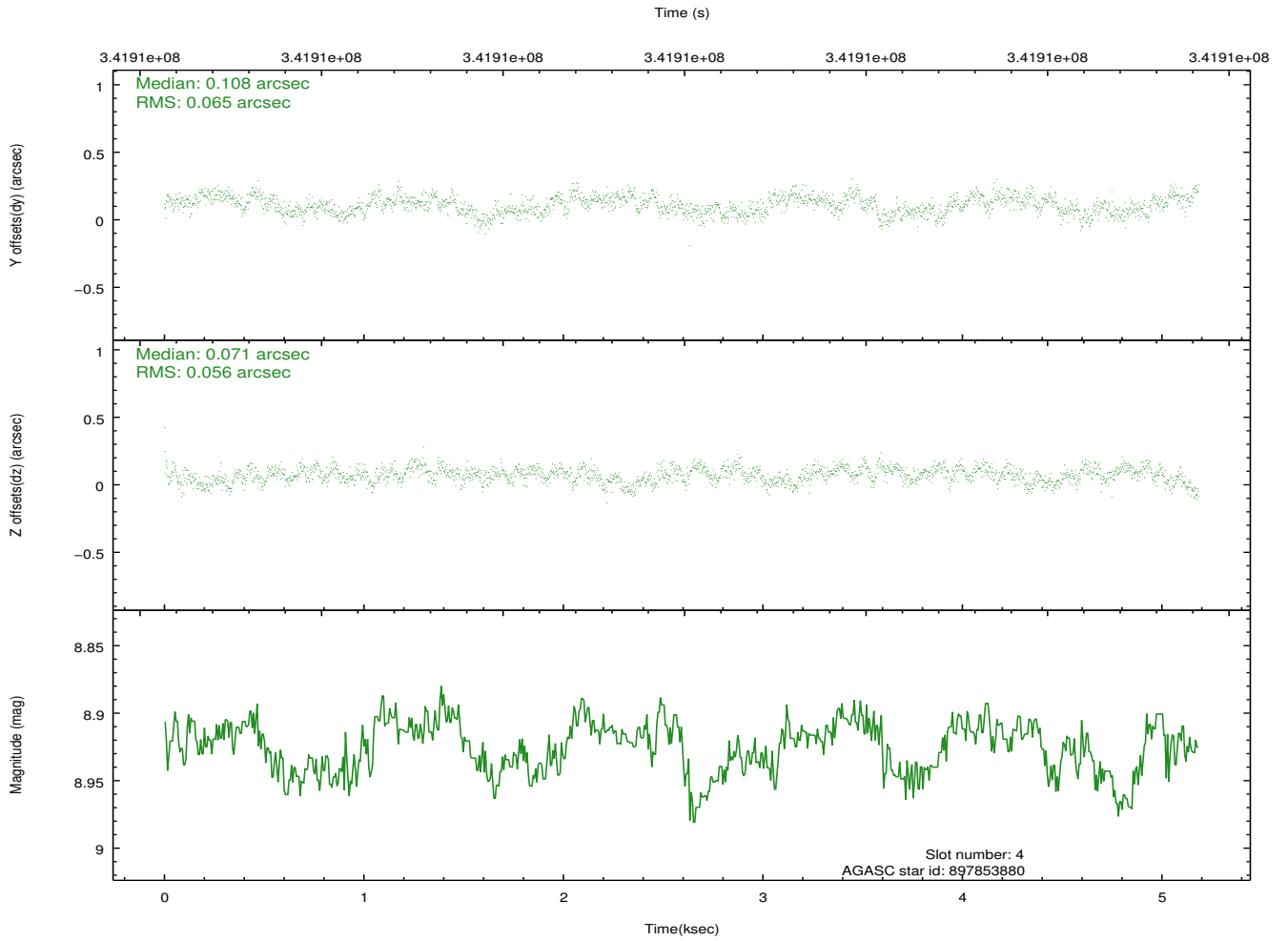
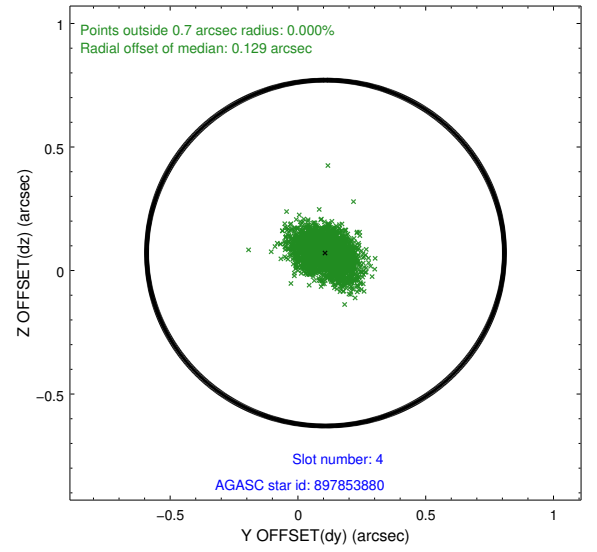
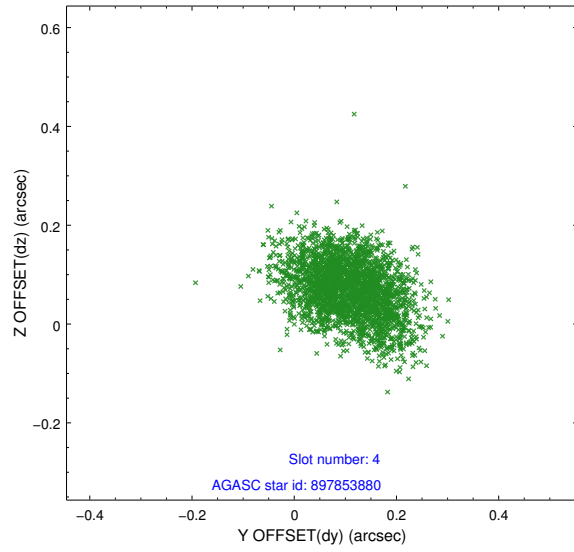
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.85	1265	-0.011	0.011	0.007	0.011	0.000000	0.000000	-765.21	-1736.80
1	FID	ACIS-S-5	6.97	1265	-0.039	-0.012	0.007	0.012	0.000000	0.000000	-1818.95	163.91
2	FID	ACIS-S-6	7.06	1265	0.025	0.010	0.006	0.011	0.000000	0.000000	395.09	809.23
3	GUIDE	897844560	7.81	2528	-0.099	-0.095	0.068	0.106	271.271436	-27.124371	-2194.36	-911.99
4	GUIDE	897853880	8.92	2526	0.108	0.071	0.091	0.150	272.024927	-27.314612	-1620.99	1528.84
5	GUIDE	897859312	9.38	2526	0.188	-0.082	0.107	0.170	271.302474	-27.552382	-660.49	-737.38
6	GUIDE	897864144	7.98	2529	-0.200	-0.128	0.070	0.107	270.922574	-27.098110	-2233.20	-2033.62
7	GUIDE	897870536	9.96	2522	0.002	0.223	0.184	0.277	271.938858	-27.887020	449.51	1342.67

## 2.4 Star Slots

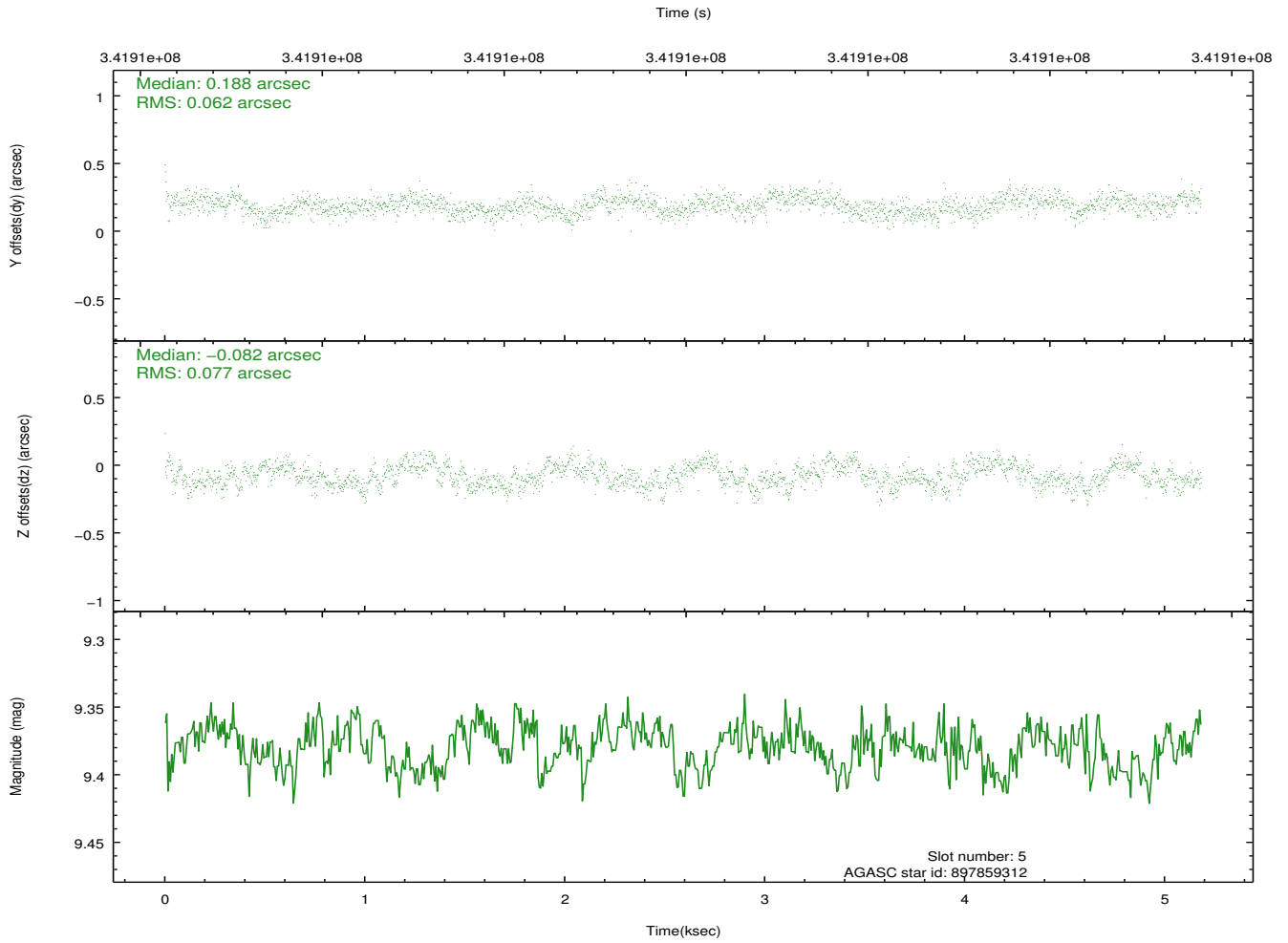
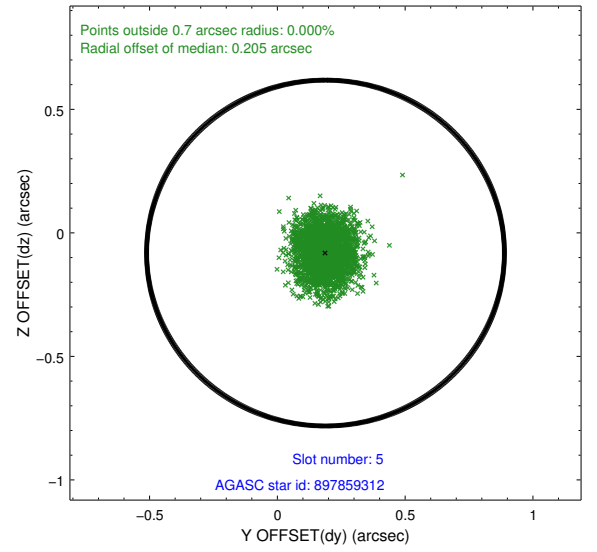
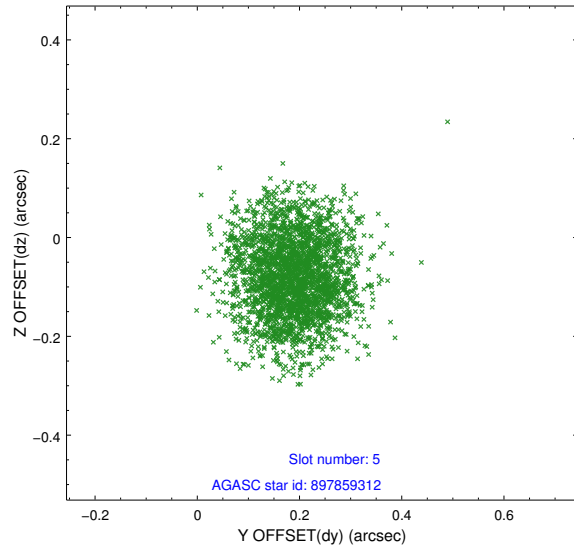
### 2.4.1 Slot 3



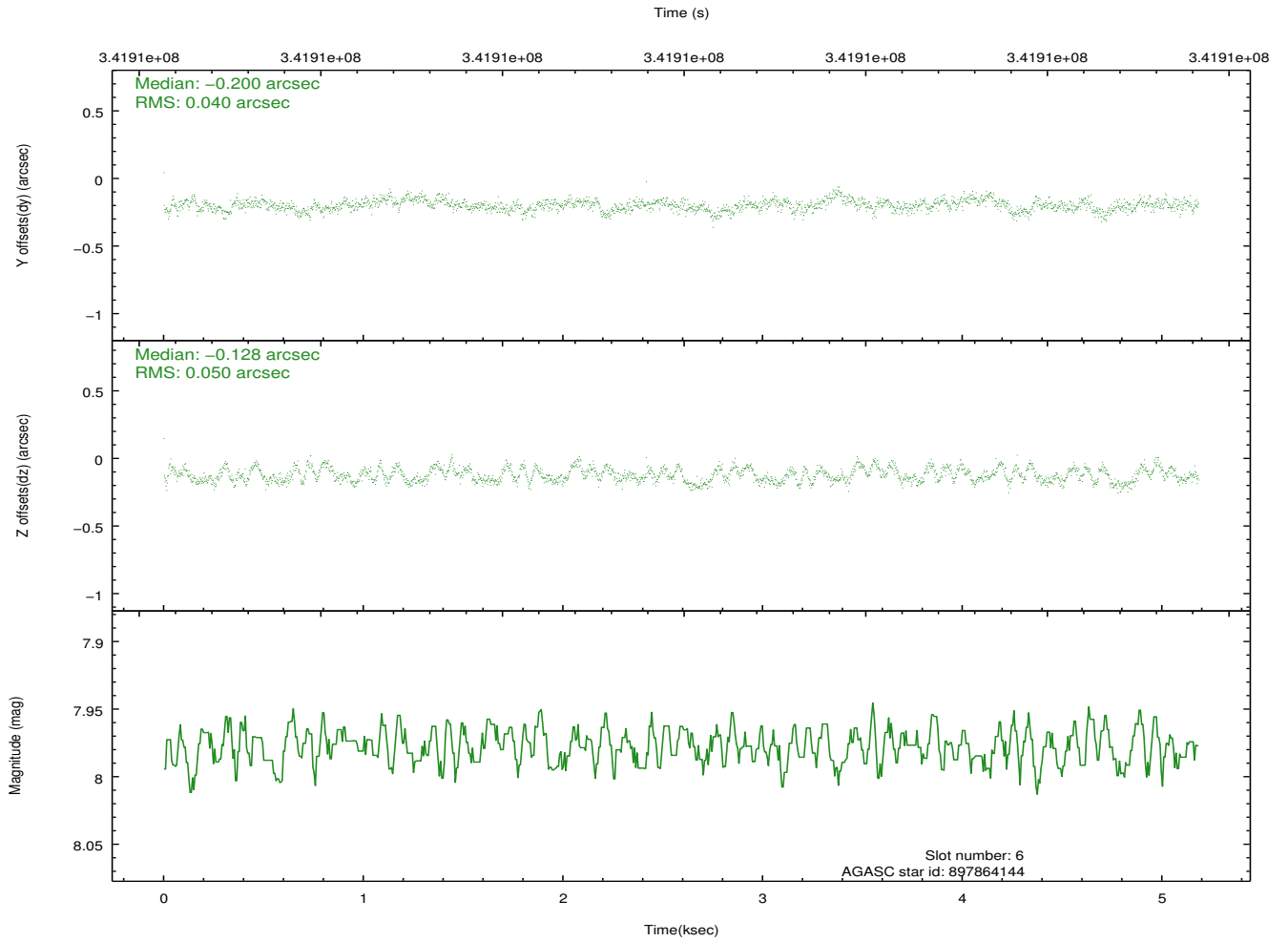
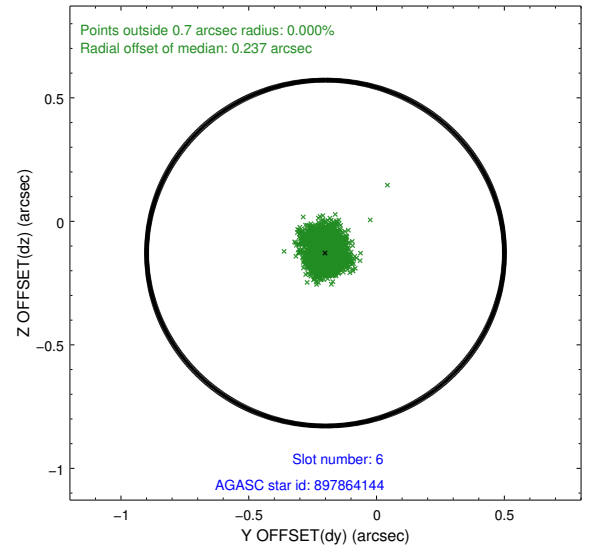
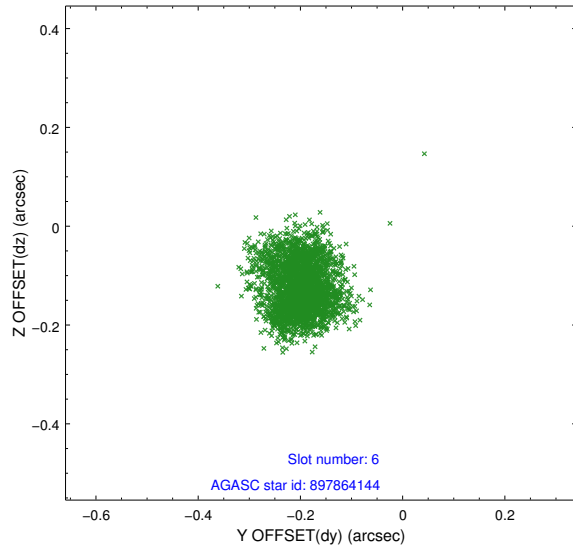
## 2.4.2 Slot 4



### 2.4.3 Slot 5

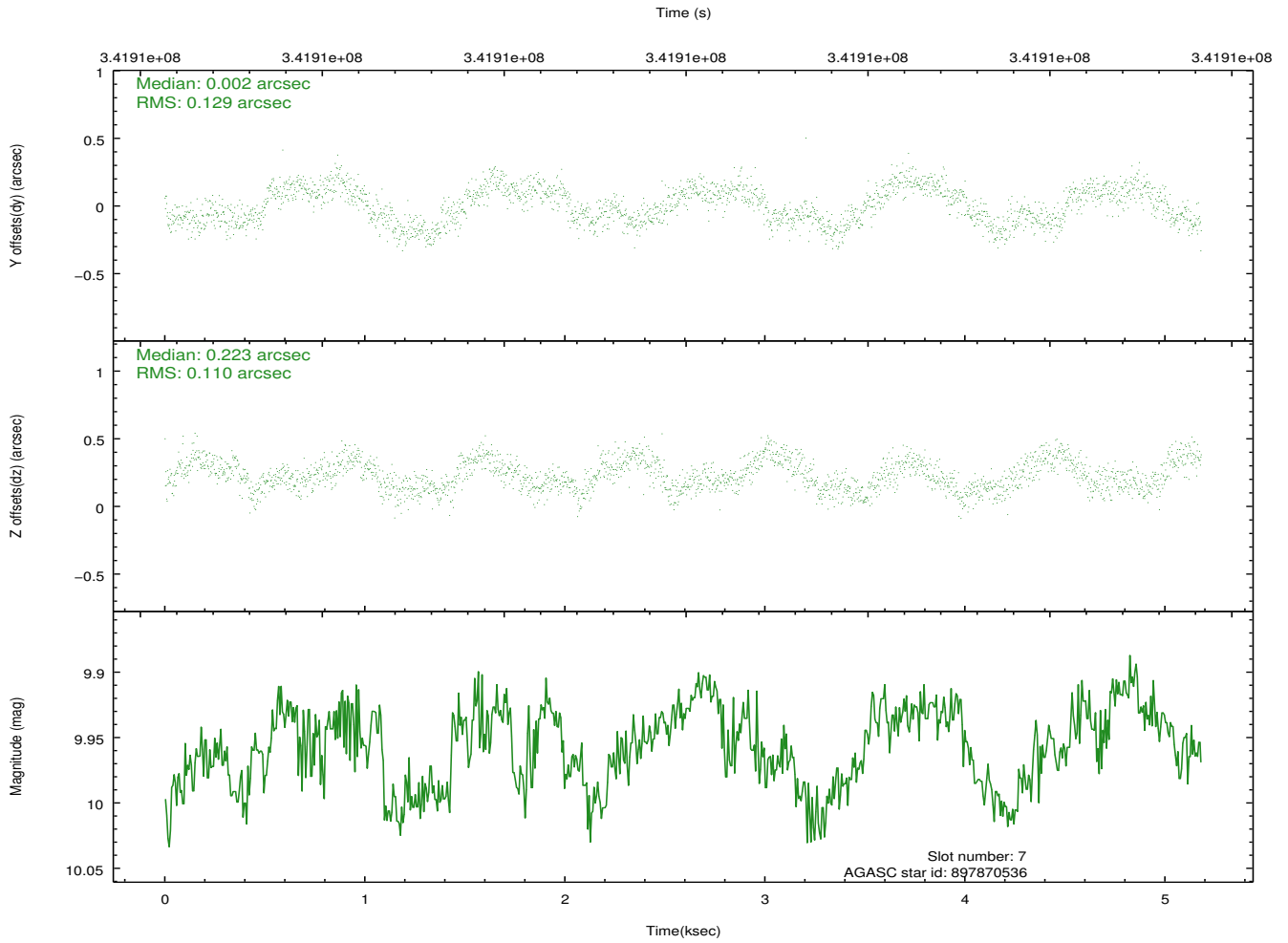
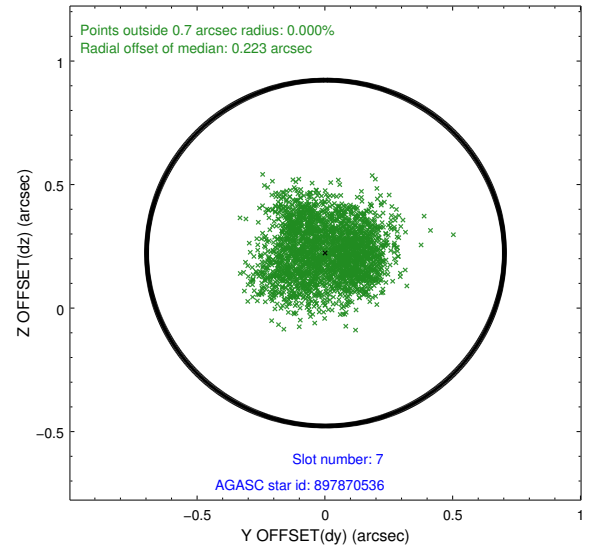
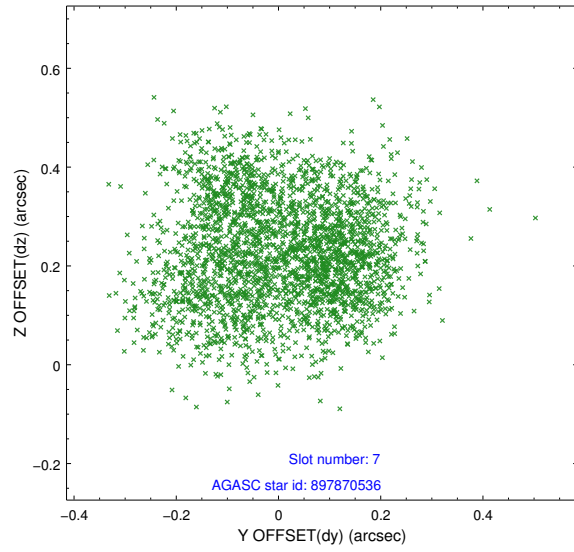


## 2.4.4 Slot 6



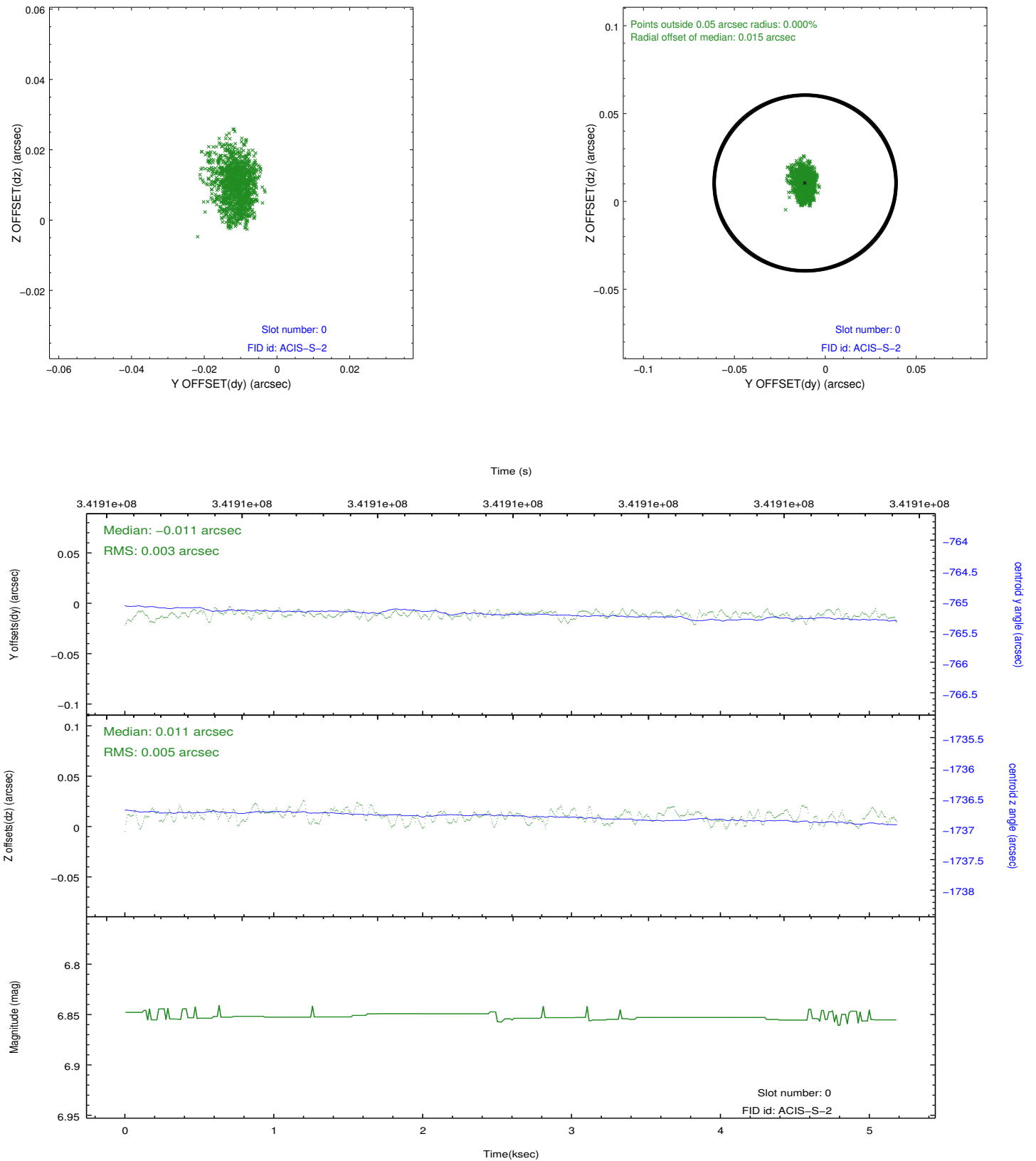


## 2.4.5 Slot 7

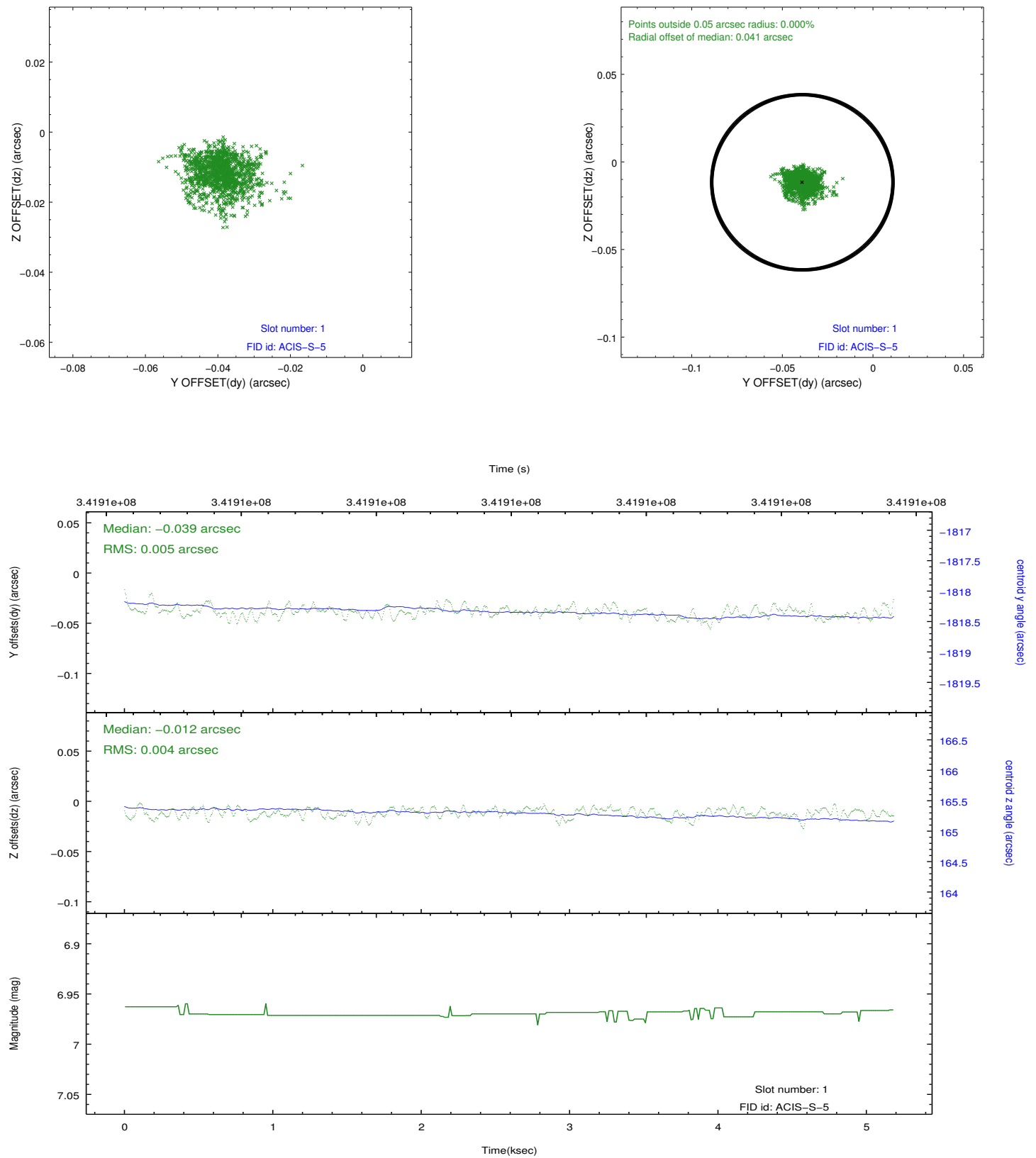


## 2.5 FID Slots

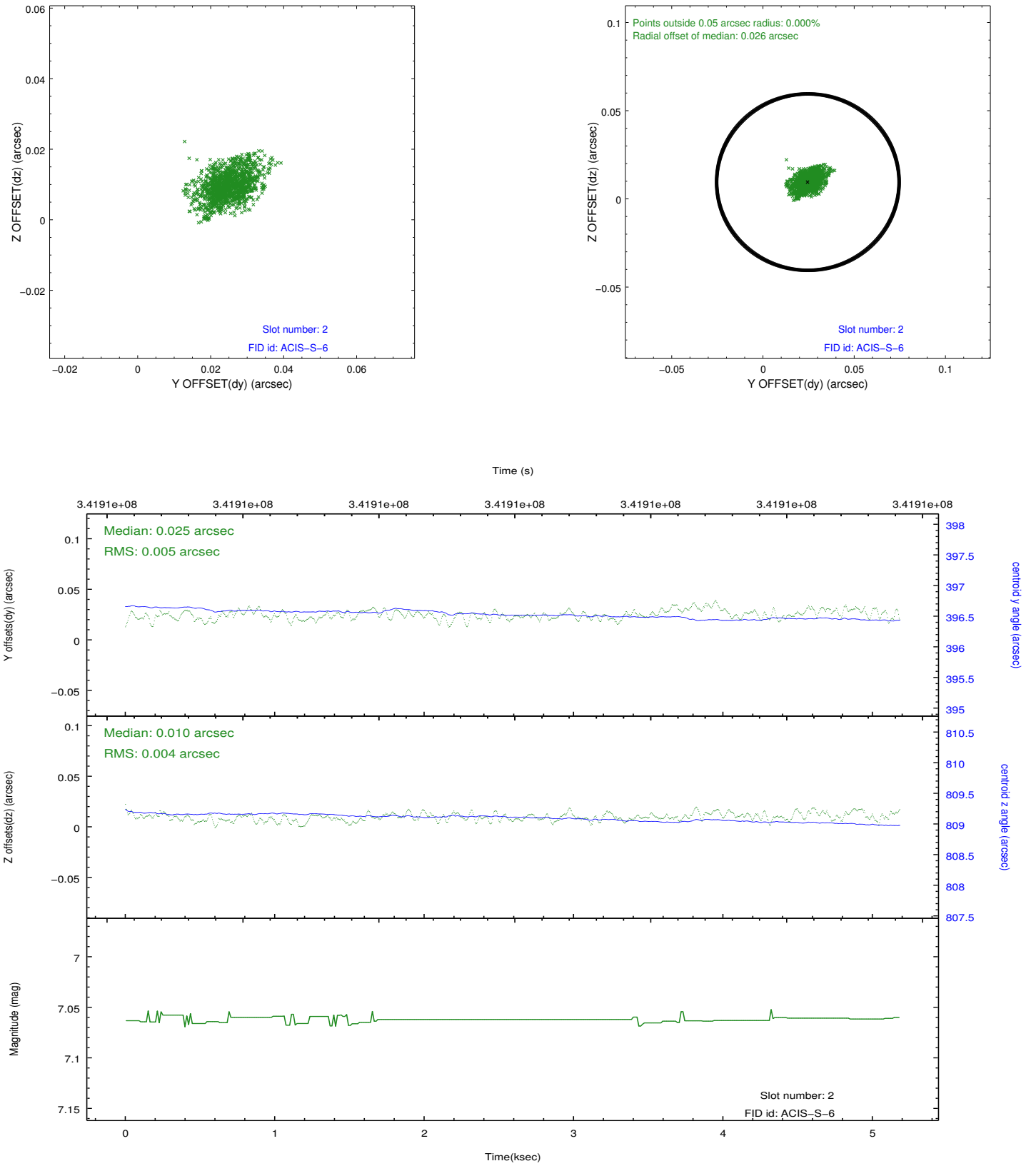
### 2.5.1 Slot 0



## 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)	2012.05.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.17759998

### A.2 Comments