

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11381 - L2 Version 2  
Chandra X-Ray Center

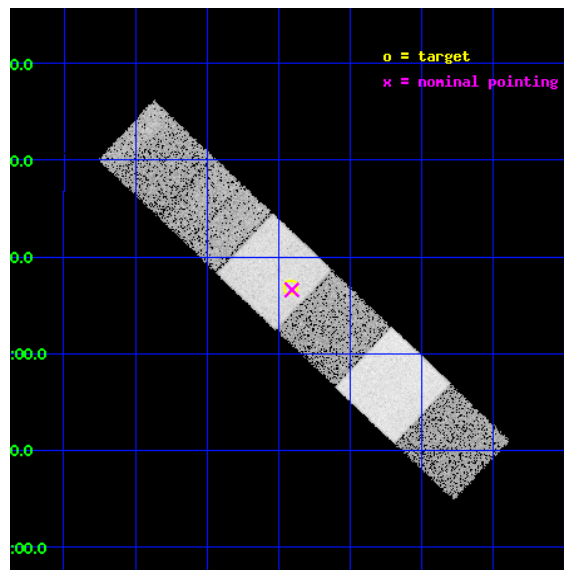
L2 Processing Date : Jun 26 2012

## 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

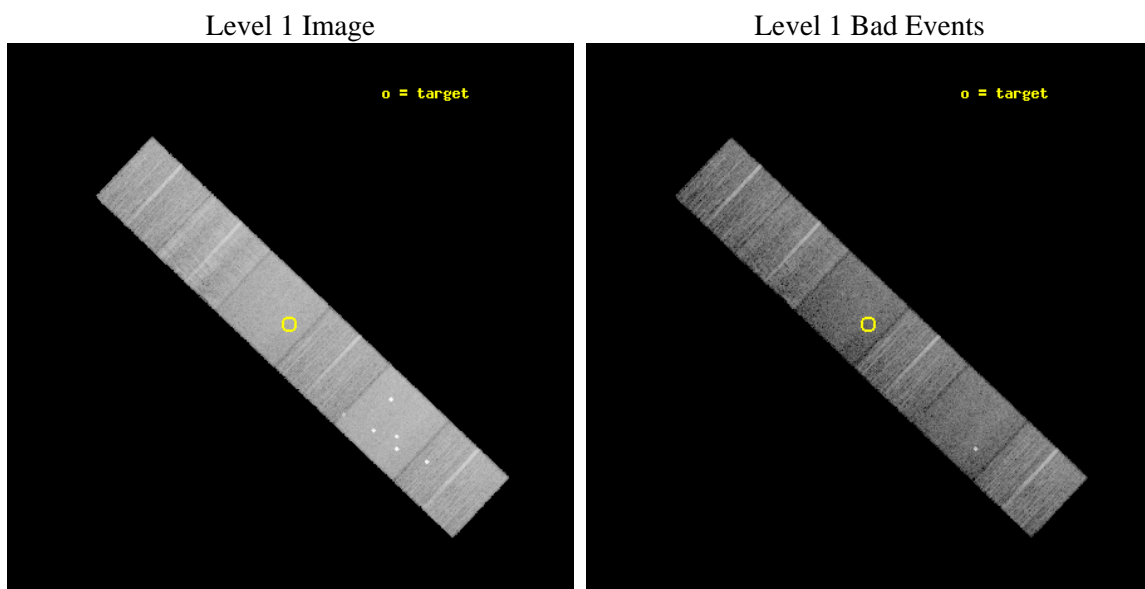
seq_num	600900	Sequence number
obs_id	11381	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	PGC1216386	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	226.103	Observer's specified target RA [deg]
dec_targ	2.11463	Observer's specified target Dec [deg]
ra_nom	226.10177823009	Nominal RA [deg]
dec_nom	2.1099012907337	Nominal Dec [deg]
roll_nom	223.34994852464	Nominal Roll [deg]
revision	2	Processing version of data
ontime	11544.908777475	Sum of GTIs [s]
livetime	11398.720191025	Livetime [s]
ontime4	11541.708827257	Sum of GTIs [s]
ontime5	11544.867737472	Sum of GTIs [s]
ontime6	11541.585697234	Sum of GTIs [s]
ontime7	11544.908777475	Sum of GTIs [s]
ontime8	11544.785657465	Sum of GTIs [s]
ontime9	11541.503647029	Sum of GTIs [s]
l2events	143348	Number of level 2 events



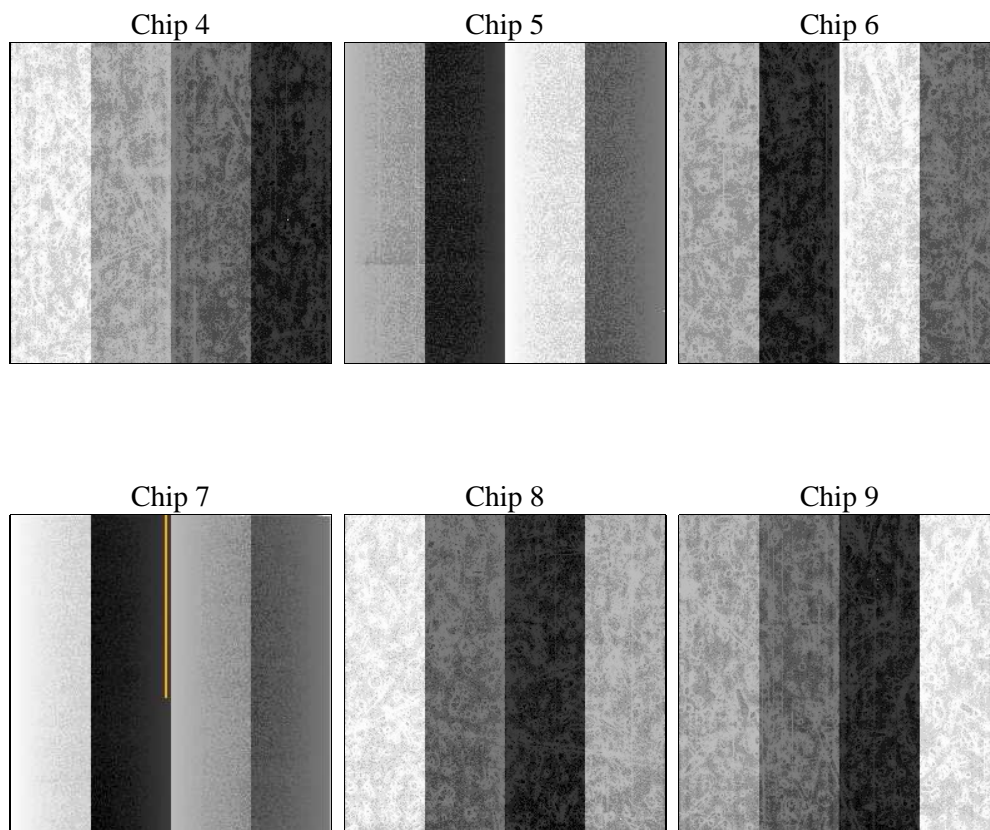
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	11500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	11544.908777475	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime4	11541.708827257	Sum of GTIs [s]
date	2012-06-26T14:58:04	Date and time of file creation	ontime5	11544.867737472	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	11541.585697234	Sum of GTIs [s]
			ontime7	11544.908777475	Sum of GTIs [s]
			ontime8	11544.785657465	Sum of GTIs [s]
			ontime9	11541.503647029	Sum of GTIs [s]
			l1events	639446	Number of level 1 events

### 2.1.4 Events

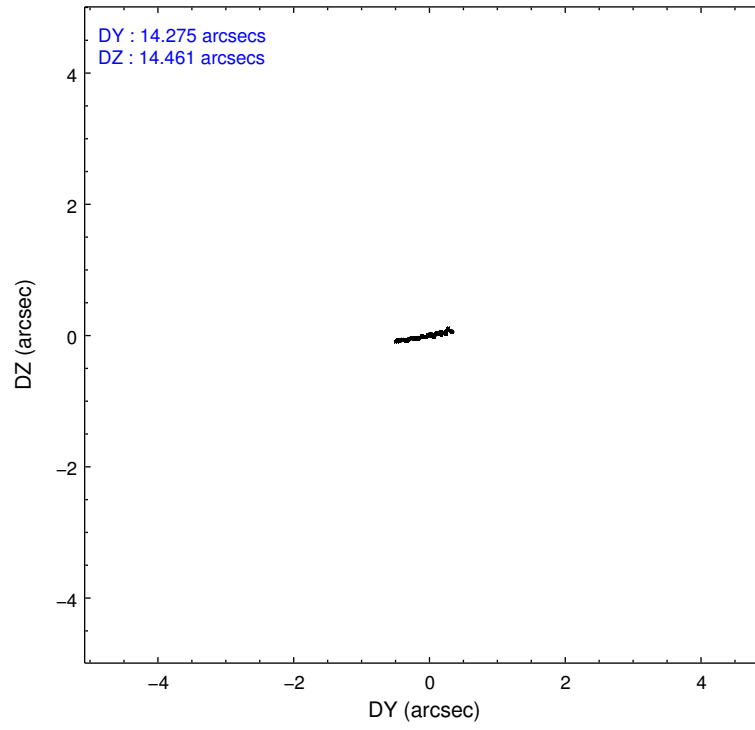
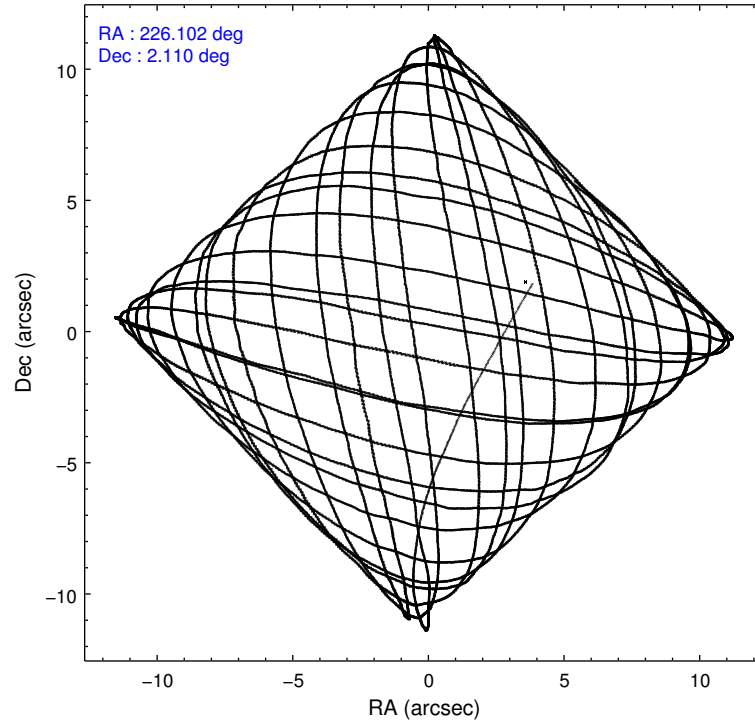
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	103032	139231	90239	105658	114136	87150	grade 0 events	6240	11617	3570	4451	8876	3967
rejected events	90470	67471	80446	57742	84458	76783		6%	8%	3%	4%	7%	4%
rejected %	87%	48%	89%	54%	73%	88%	grade 1 events	113	277	33	124	85	48
								0%	0%	0%	0%	0%	0%
							grade 2 events	2470	20791	2128	9833	7018	2216
								2%	14%	2%	9%	6%	2%
							grade 3 events	1070	2520	1051	4274	3072	1074
								1%	1%	1%	4%	2%	1%
							grade 4 events	1040	2369	1001	4277	2750	1066
								1%	1%	1%	4%	2%	1%
							grade 5 events	3916	10328	3871	11013	5703	4197
								3%	7%	4%	10%	4%	4%
							grade 6 events	1748	34495	2053	25096	7971	2052
								1%	24%	2%	23%	6%	2%
							grade 7 events	86435	56834	76532	46590	78661	72530
								83%	40%	84%	44%	68%	83%

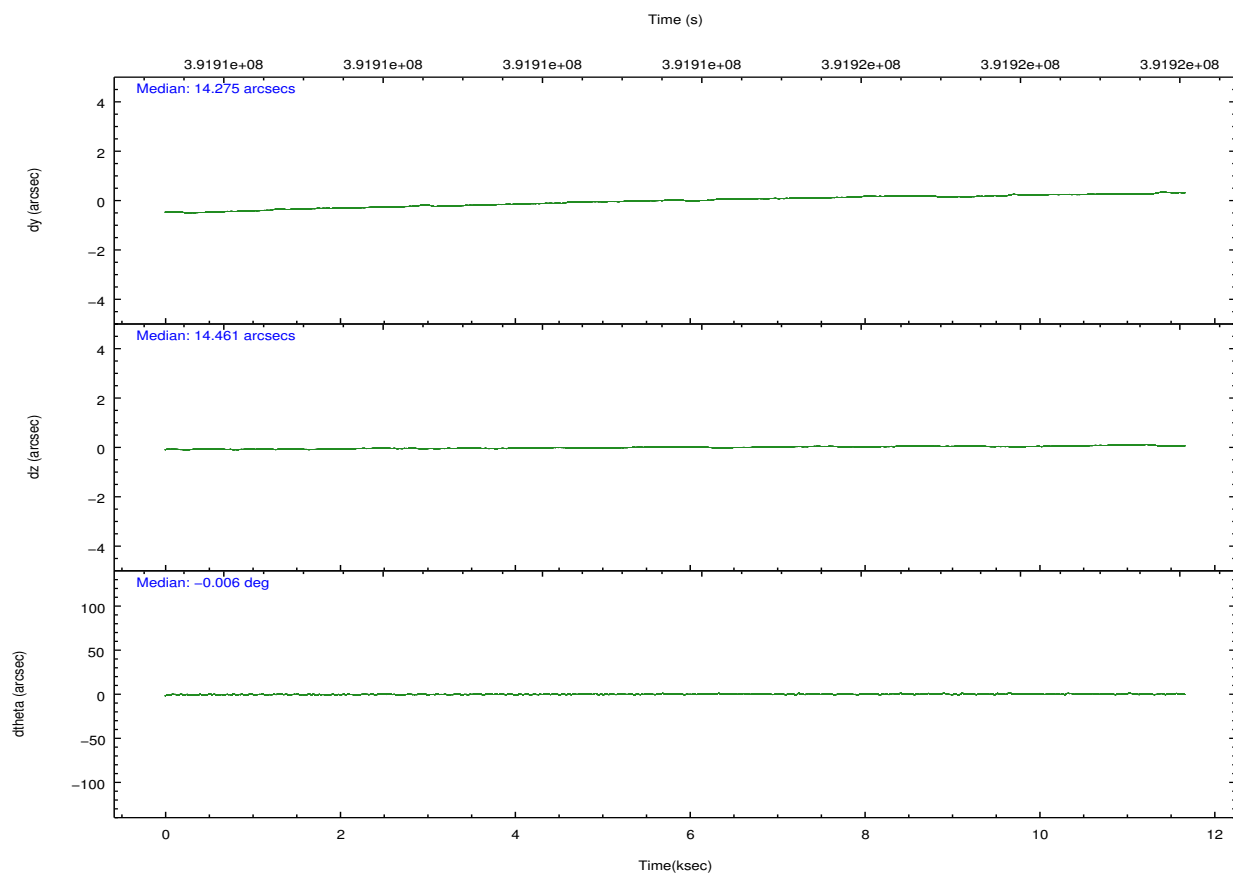
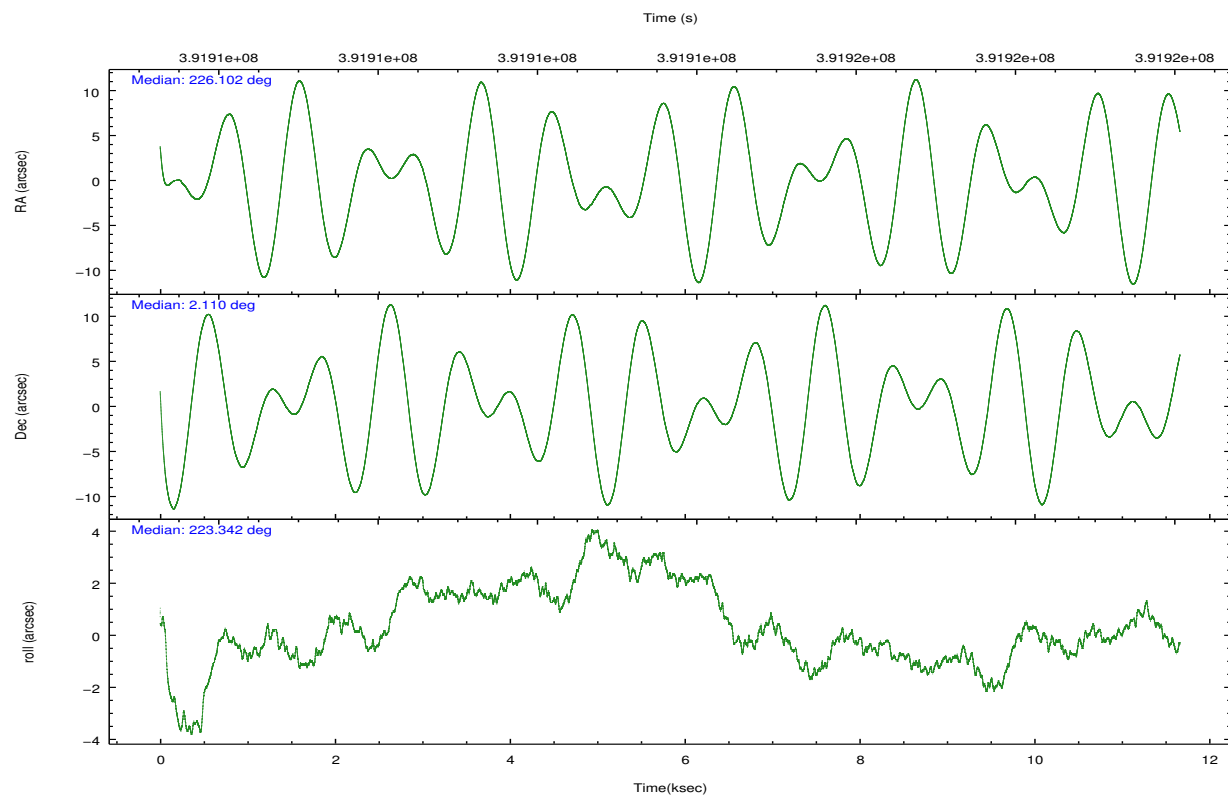


## 2.2 Compared Parameters

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	226.109231	226.1017782300853	CCD I2 on	N	N
[deg] Pointing Dec	2.136246	2.109901290733727	CCD I3 on	N	N
[deg] Pointing Roll	223.193047	223.3499485246405	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	391907999.184000	391906449.53248	CCD S5 on	O2	Y
Observation start date	2010-06-02T23:18:53	2010-06-02T22:54:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	391919499.184000	391920667.3082	On-chip summing requested	N	N
Observation end date	2010-06-03T02:30:33	2010-06-03T02:51:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



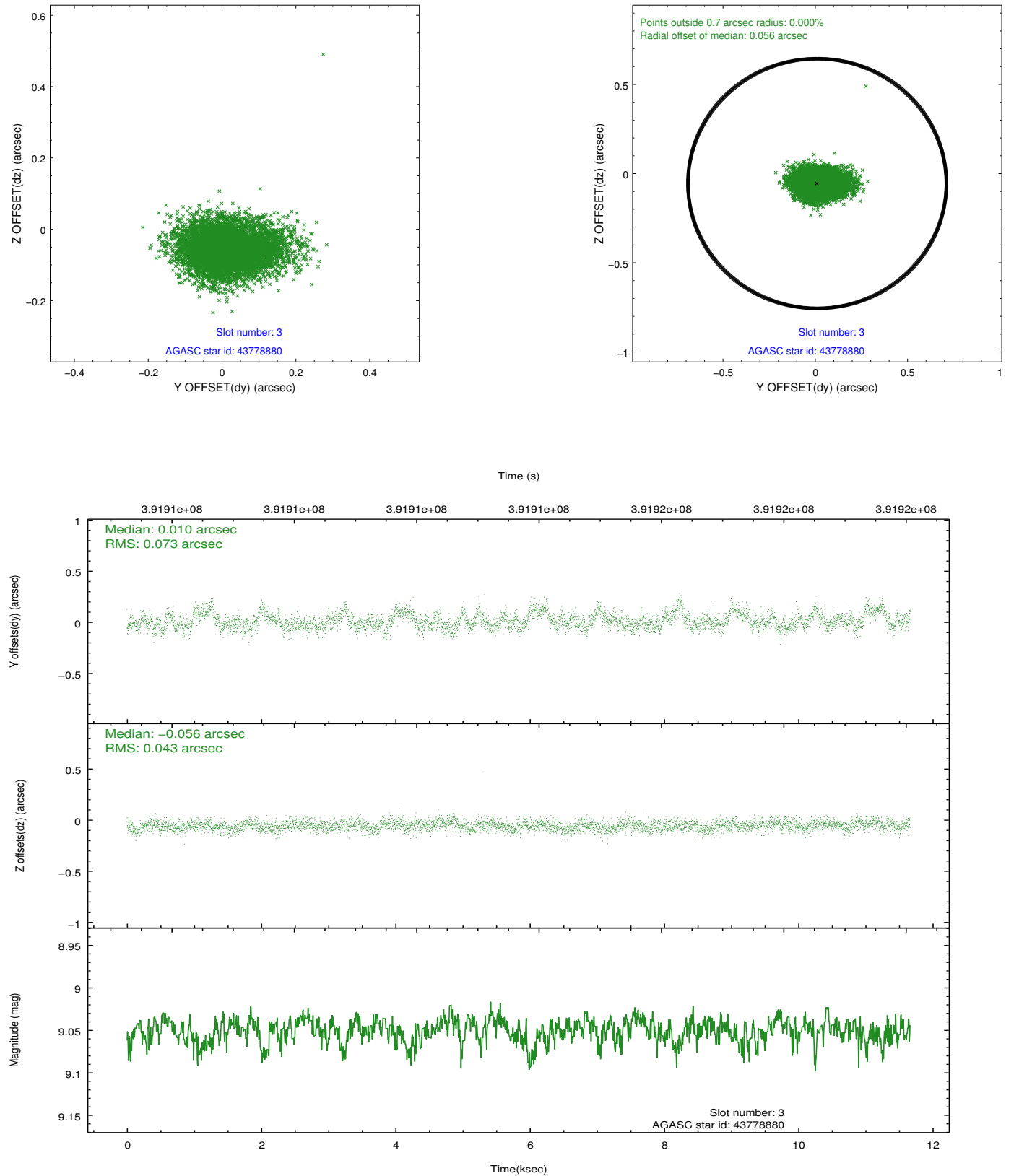


### Slot Statistics

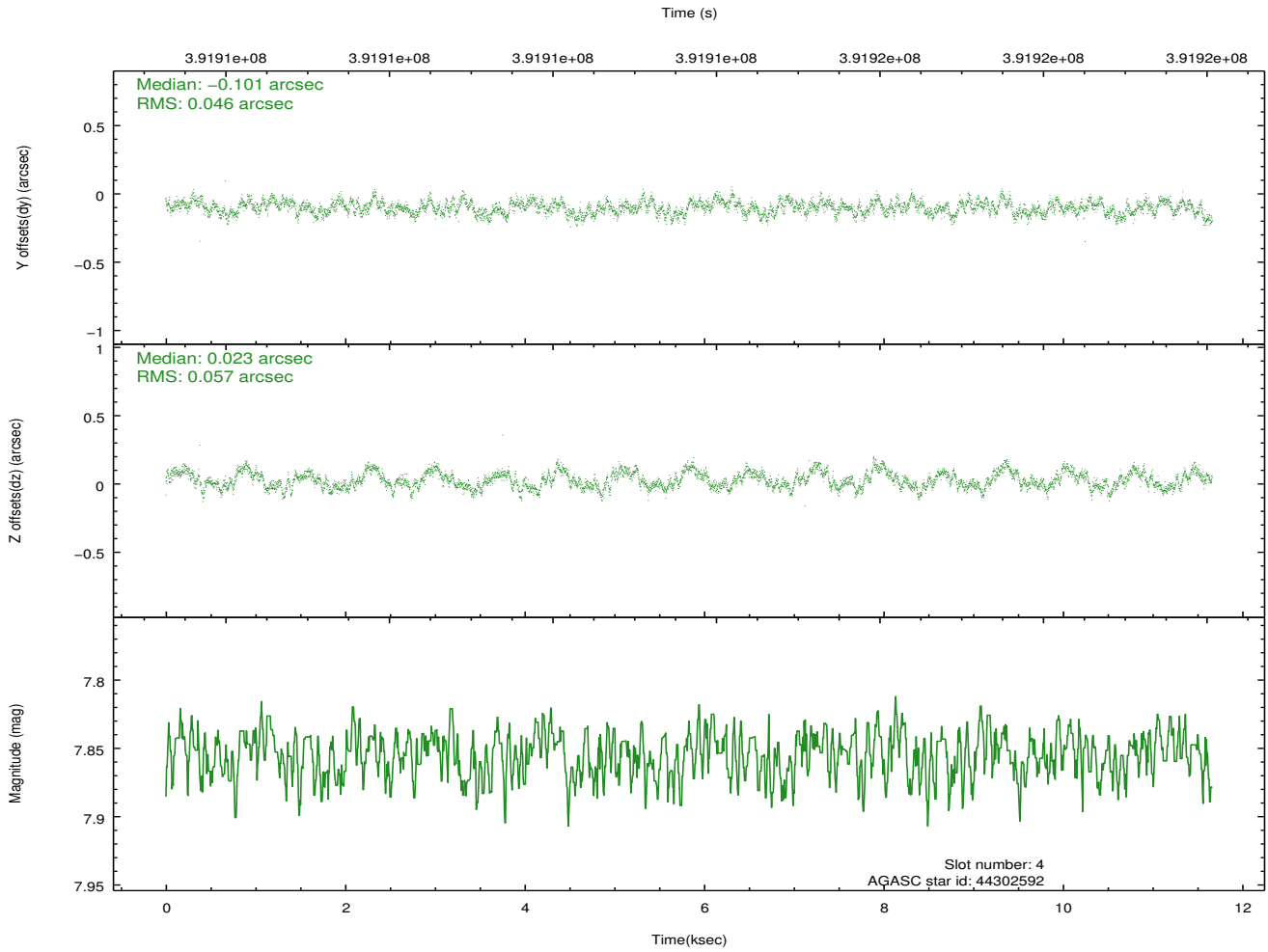
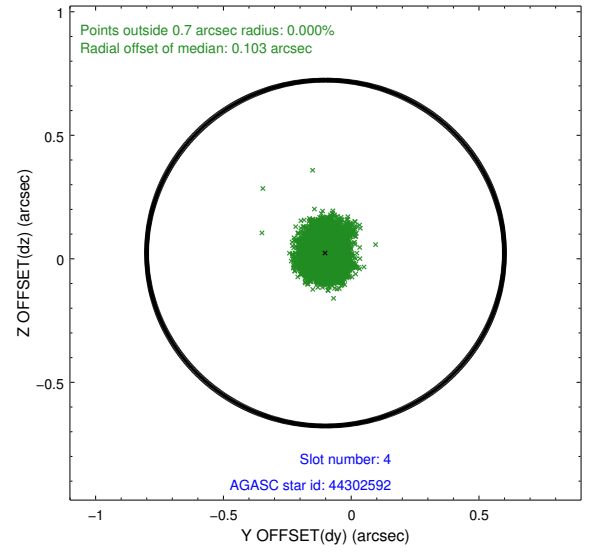
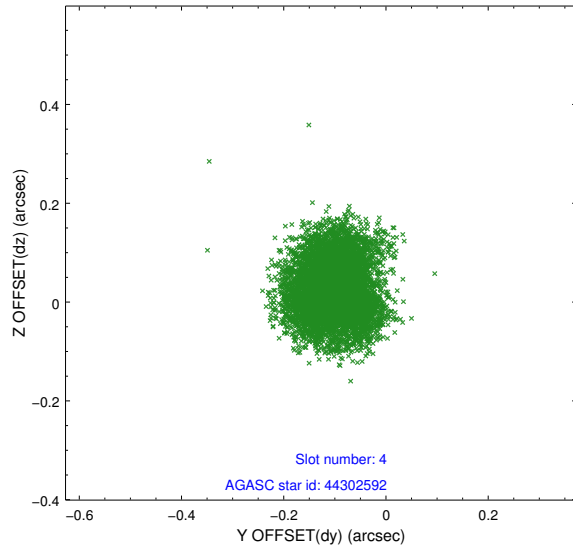
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.97	2845	0.070	-0.025	0.008	0.014	0.000000	0.000000	928.93	-1731.47
1	FID	ACIS-S-5	7.01	2845	-0.179	0.035	0.007	0.013	0.000000	0.000000	-1820.09	165.67
2	FID	ACIS-S-6	7.12	2845	0.087	0.001	0.011	0.018	0.000000	0.000000	394.01	810.11
3	GUIDE	43778880	9.05	5684	0.010	-0.056	0.089	0.150	225.720242	1.617889	2297.76	401.67
4	GUIDE	44302592	7.85	5689	-0.101	0.023	0.080	0.122	226.320439	2.016885	-258.75	833.06
5	GUIDE	44303984	8.65	5686	0.241	-0.104	0.077	0.129	225.918266	2.386308	-114.64	-1126.50
6	GUIDE	44304040	8.10	5686	-0.071	0.083	0.063	0.099	225.823407	2.372575	167.65	-1324.16
7	GUIDE	44305752	8.83	5684	-0.075	0.052	0.086	0.140	225.685277	2.473250	281.93	-1928.55

## 2.4 Star Slots

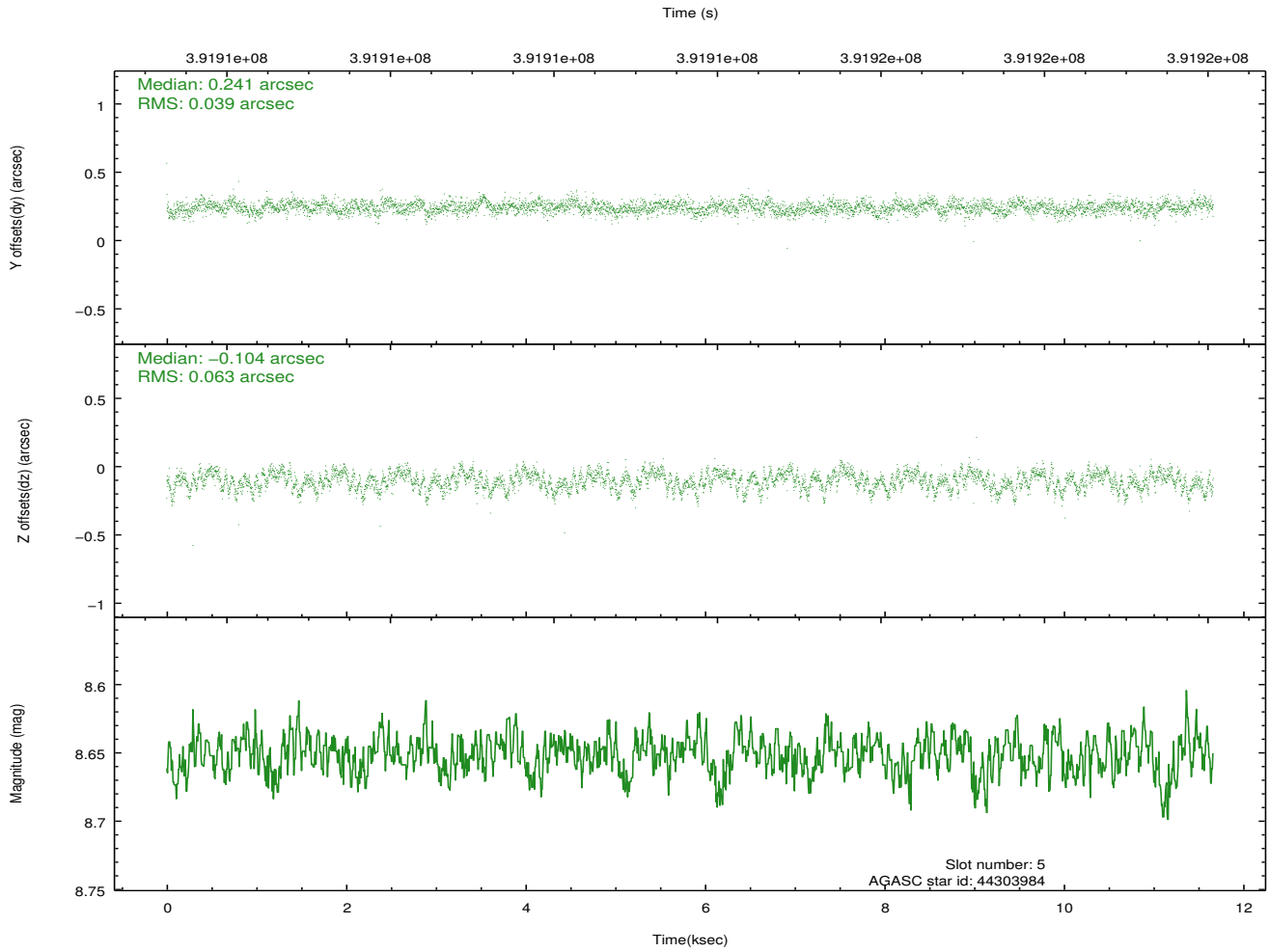
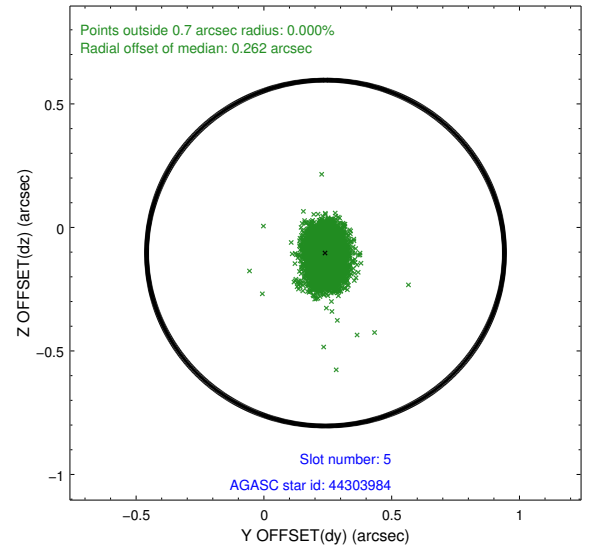
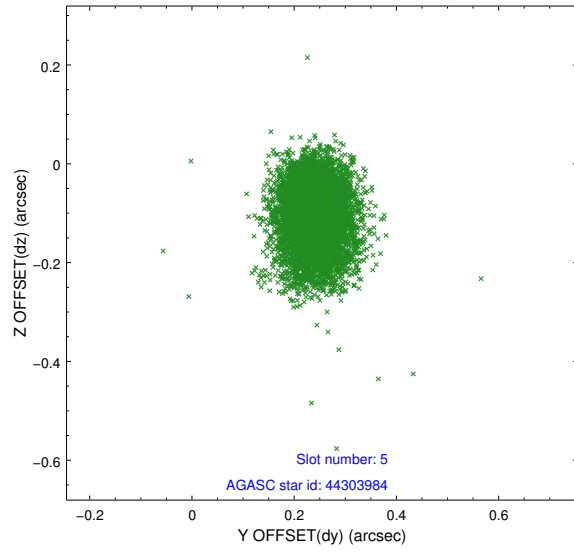
### 2.4.1 Slot 3



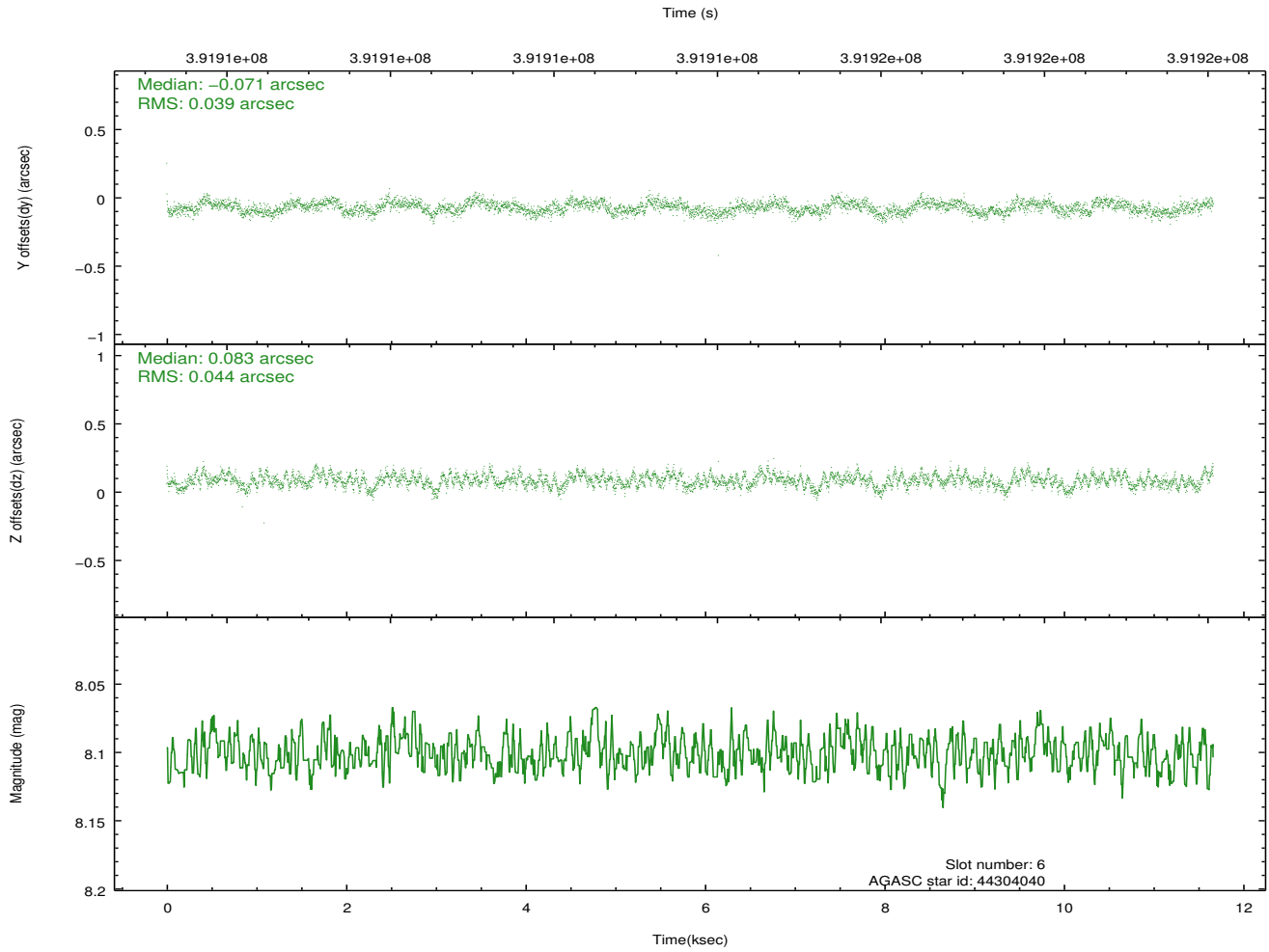
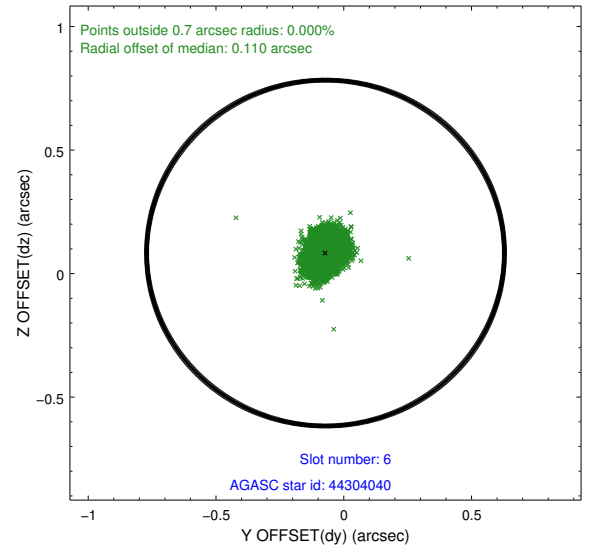
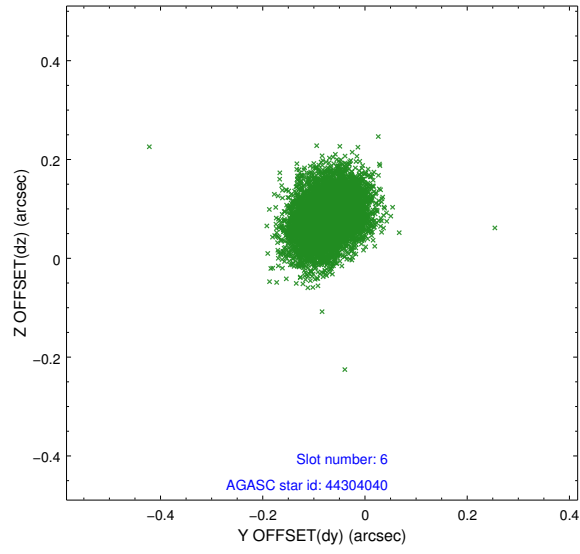
## 2.4.2 Slot 4



### 2.4.3 Slot 5

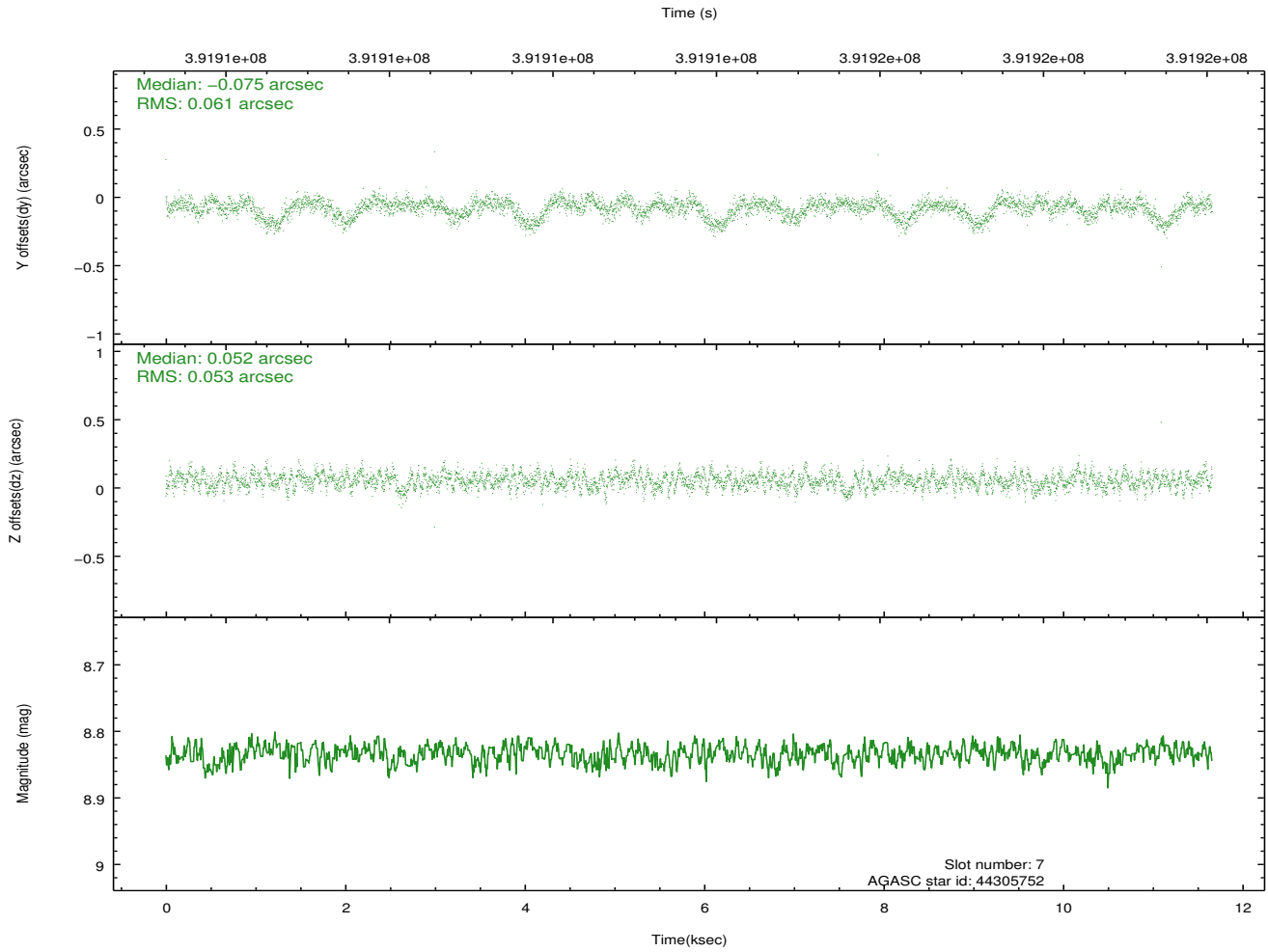
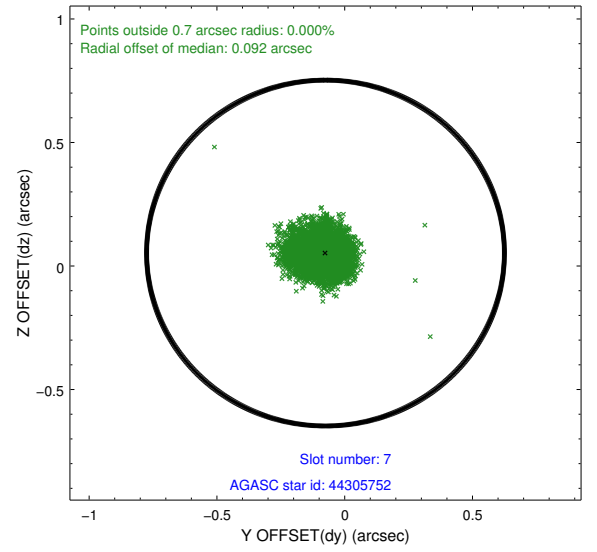
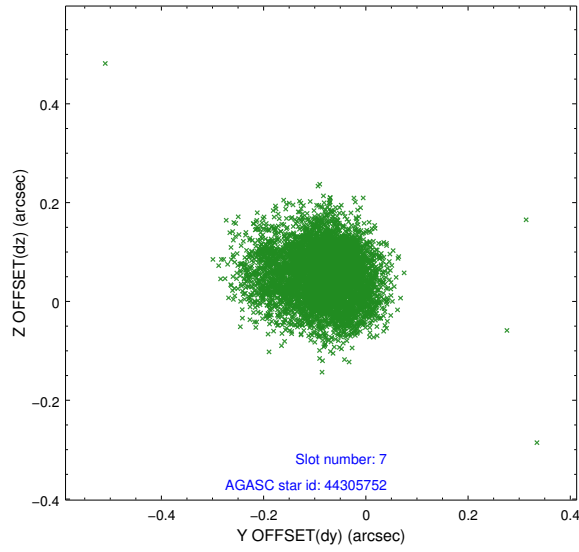


## 2.4.4 Slot 6



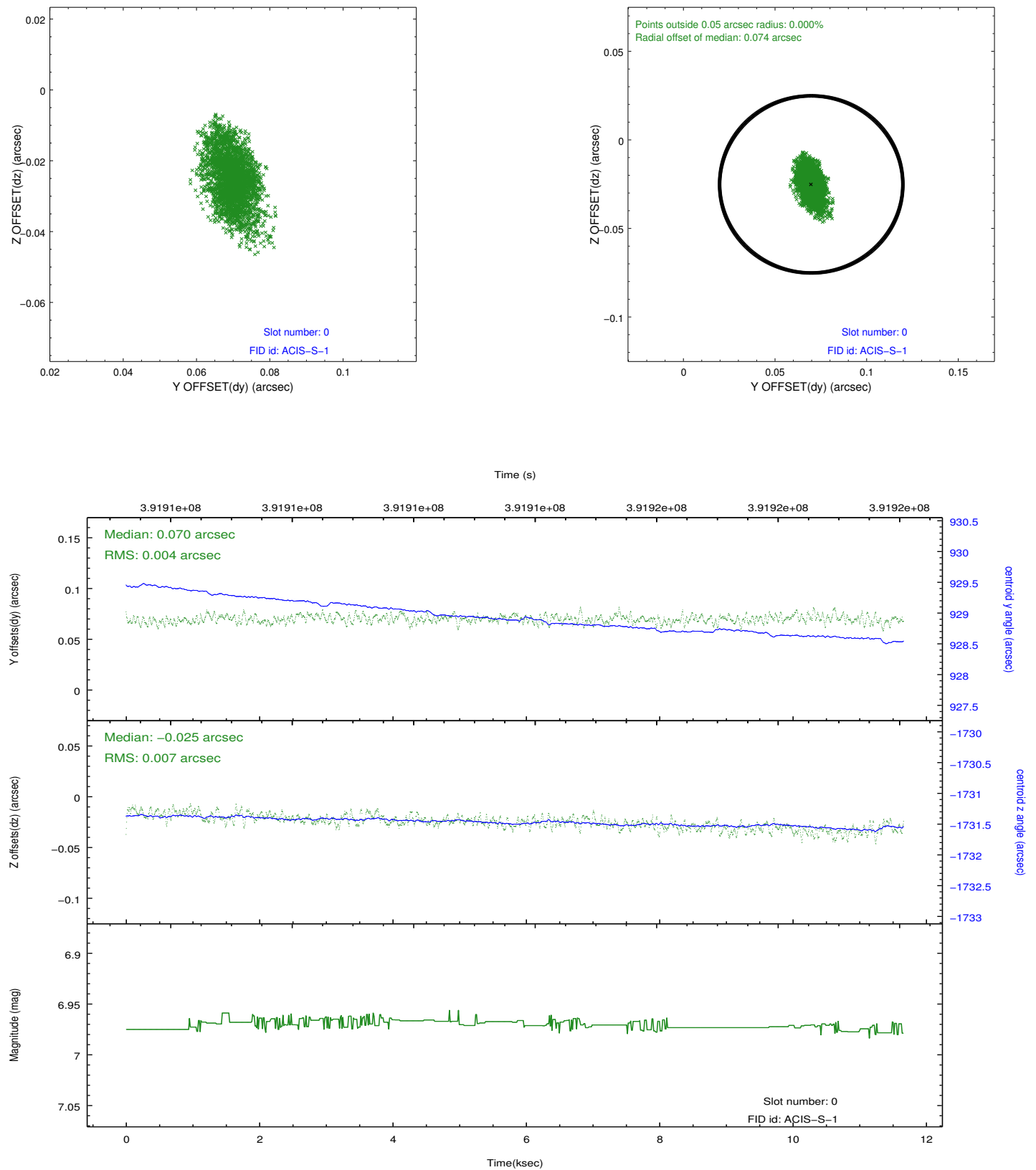


## 2.4.5 Slot 7

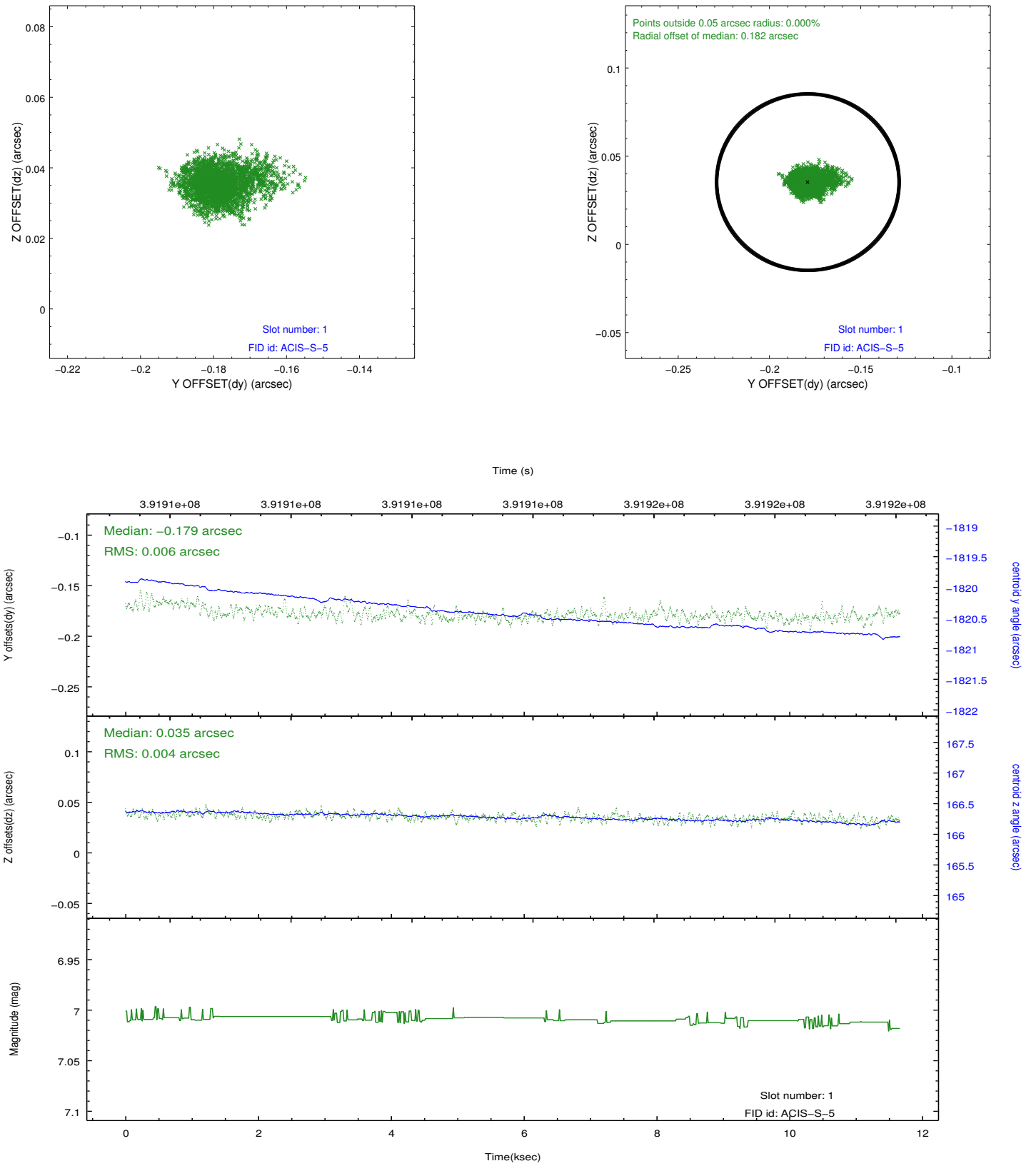


## 2.5 FID Slots

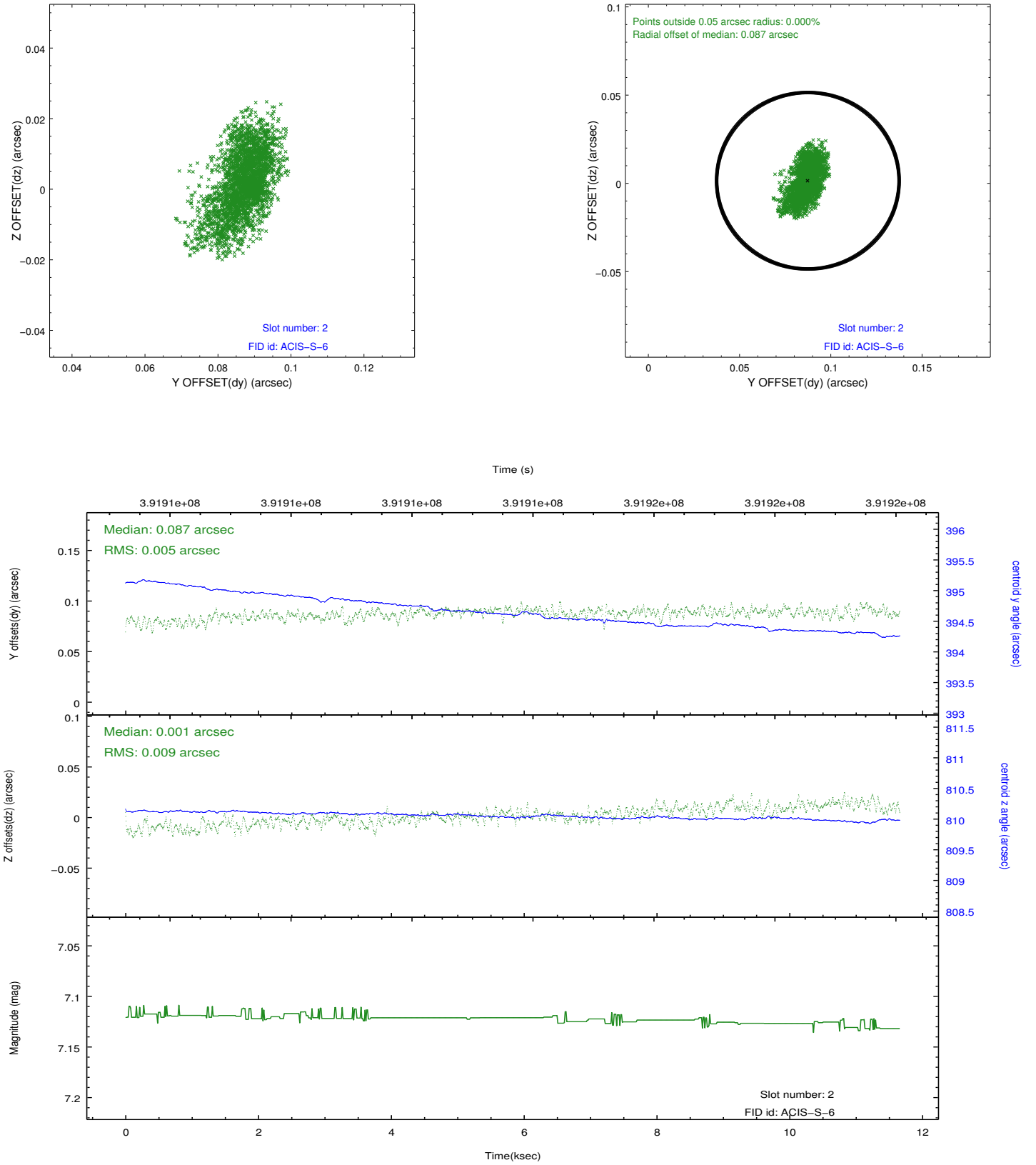
### 2.5.1 Slot 0



## 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)	2012.07.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.544908775866

### A.2 Comments