

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11349 - L2 Version 2  
Chandra X-Ray Center

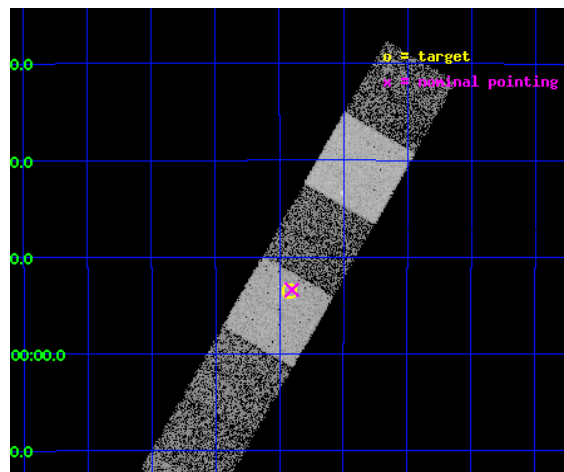
L2 Processing Date : Jun 29 2012

## 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

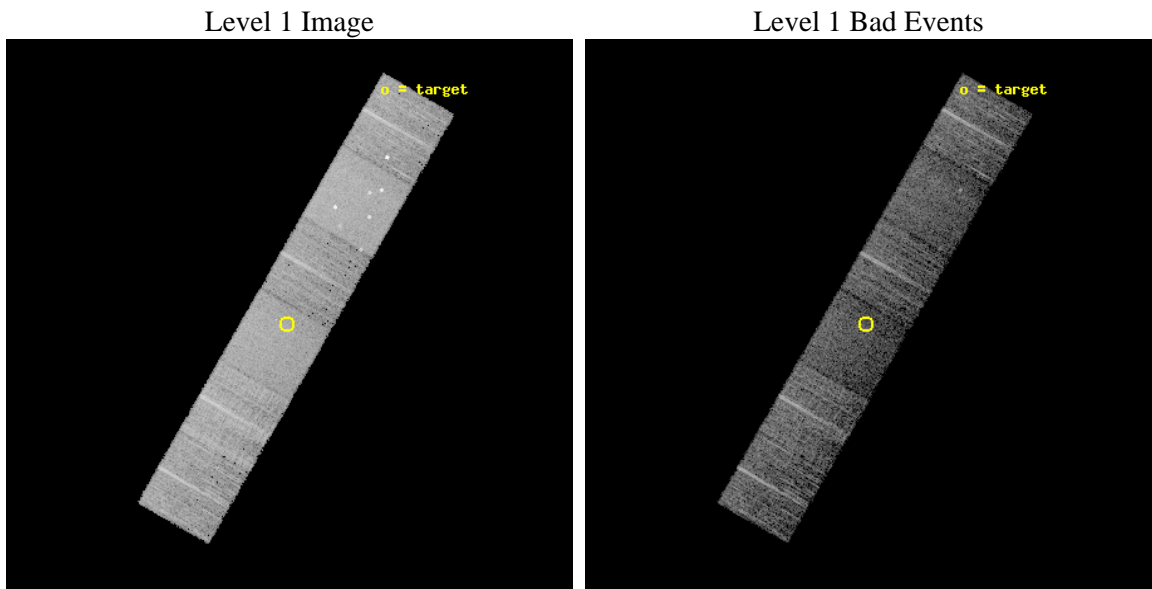
seq_num	600868	Sequence number
obs_id	11349	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	IC1729	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	26.9804	Observer's specified target RA [deg]
dec_targ	-26.89219	Observer's specified target Dec [deg]
ra_nom	26.975631821472	Nominal RA [deg]
dec_nom	-26.889846559024	Nominal Dec [deg]
roll_nom	120.01934978856	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5507.1999795437	Sum of GTIs [s]
livetime	5437.464497365	Livetime [s]
ontime4	5507.1999795437	Sum of GTIs [s]
ontime5	5507.1999795437	Sum of GTIs [s]
ontime6	5507.1999795437	Sum of GTIs [s]
ontime7	5507.1999795437	Sum of GTIs [s]
ontime8	5500.7181584239	Sum of GTIs [s]
ontime9	5507.1825689673	Sum of GTIs [s]
l2events	67550	Number of level 2 events



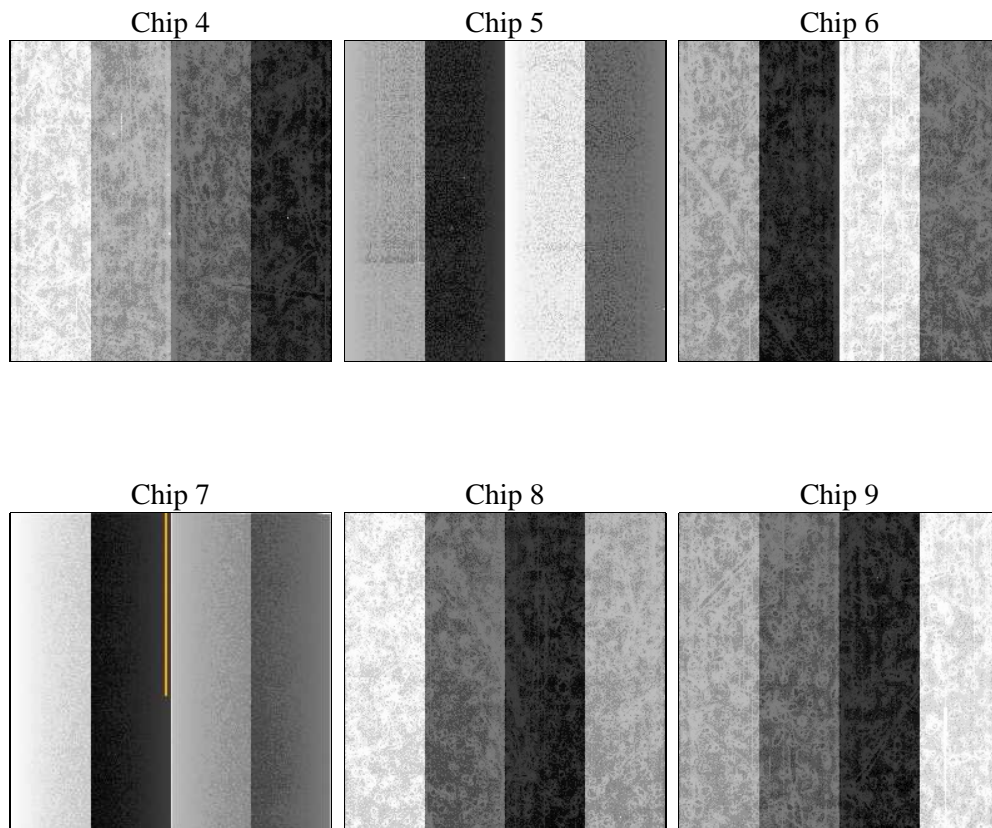
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5755.290000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5507.1999795437	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime4	5507.1999795437	Sum of GTIs [s]
date	2012-06-29T09:38:16	Date and time of file creation	ontime5	5507.1999795437	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	5507.1999795437	Sum of GTIs [s]
			ontime7	5507.1999795437	Sum of GTIs [s]
			ontime8	5500.7181584239	Sum of GTIs [s]
			ontime9	5507.1825689673	Sum of GTIs [s]
			l1events	299129	Number of level 1 events

### 2.1.4 Events

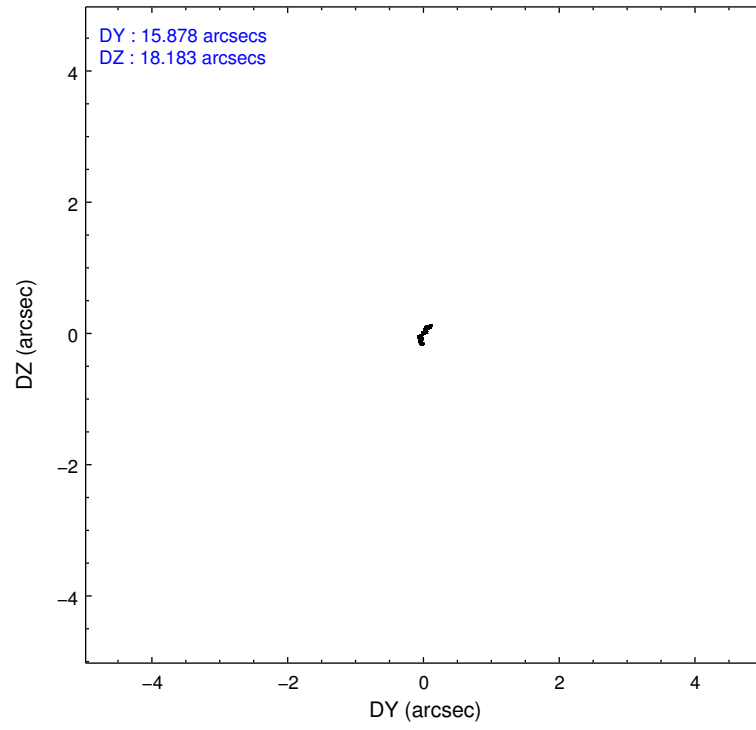
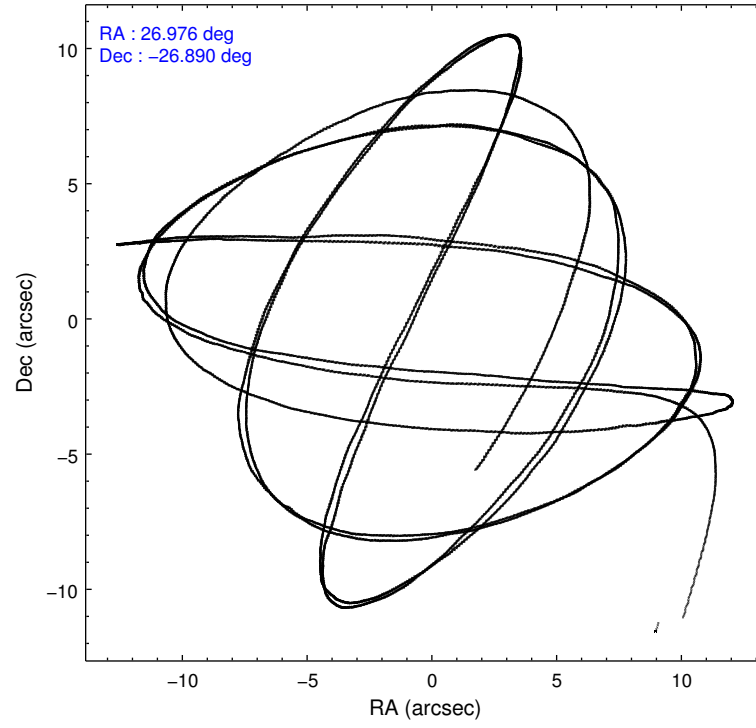
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	47788	64124	39478	49149	56614	41976	grade 0 events	3319	5028	1557	2121	4181	1889
rejected events	41488	31102	34964	26879	42763	36976		6%	7%	3%	4%	7%	4%
rejected %	86%	48%	88%	54%	75%	88%	grade 1 events	52	276	28	46	45	23
								0%	0%	0%	0%	0%	0%
							grade 2 events	1179	9146	1023	4594	3367	1063
								2%	14%	2%	9%	5%	2%
							grade 3 events	526	1292	462	1905	1393	521
								1%	2%	1%	3%	2%	1%
							grade 4 events	464	1217	475	2001	1269	489
								0%	1%	1%	4%	2%	1%
							grade 5 events	1789	4753	1729	5236	2676	2021
								3%	7%	4%	10%	4%	4%
							grade 6 events	823	16397	1006	11679	3663	1047
								1%	25%	2%	23%	6%	2%
							grade 7 events	39636	26015	33198	21567	40020	34923
								82%	40%	84%	43%	70%	83%

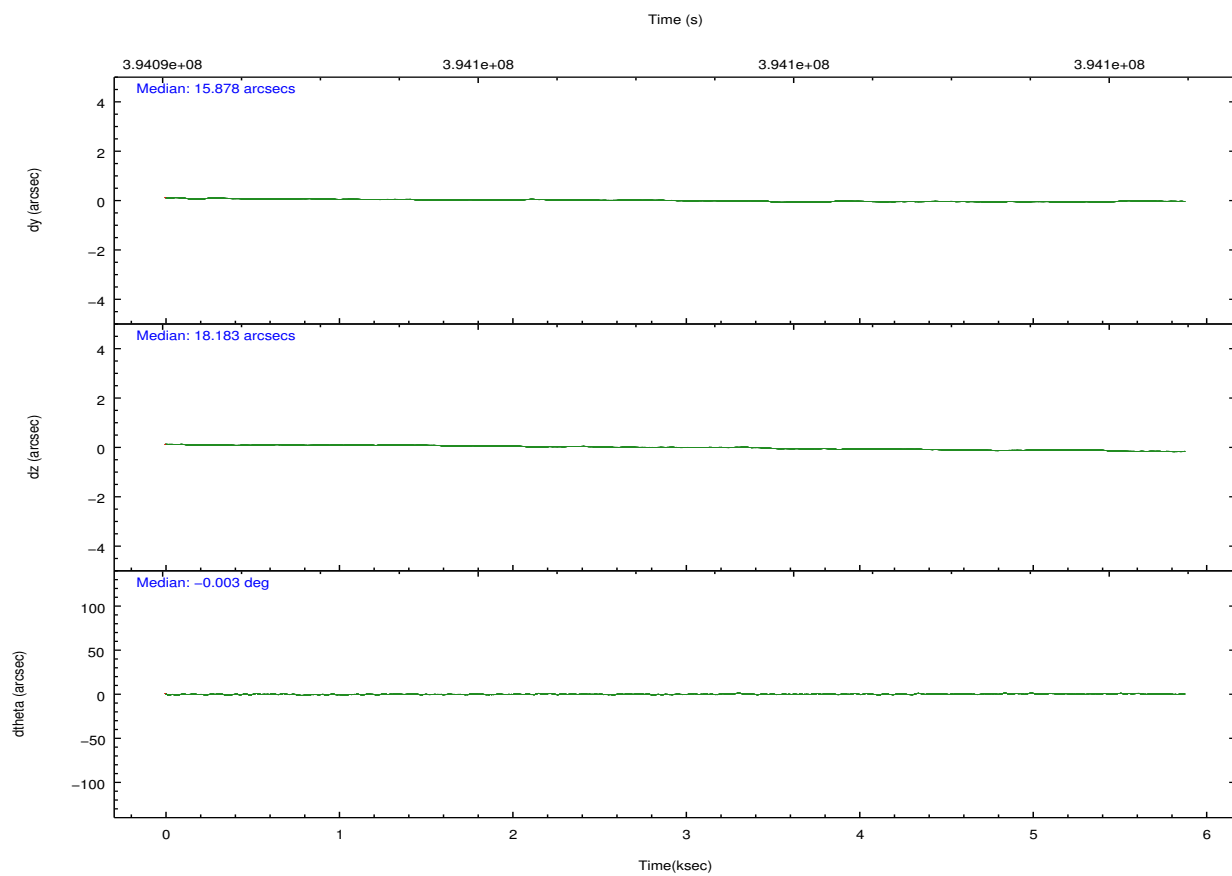
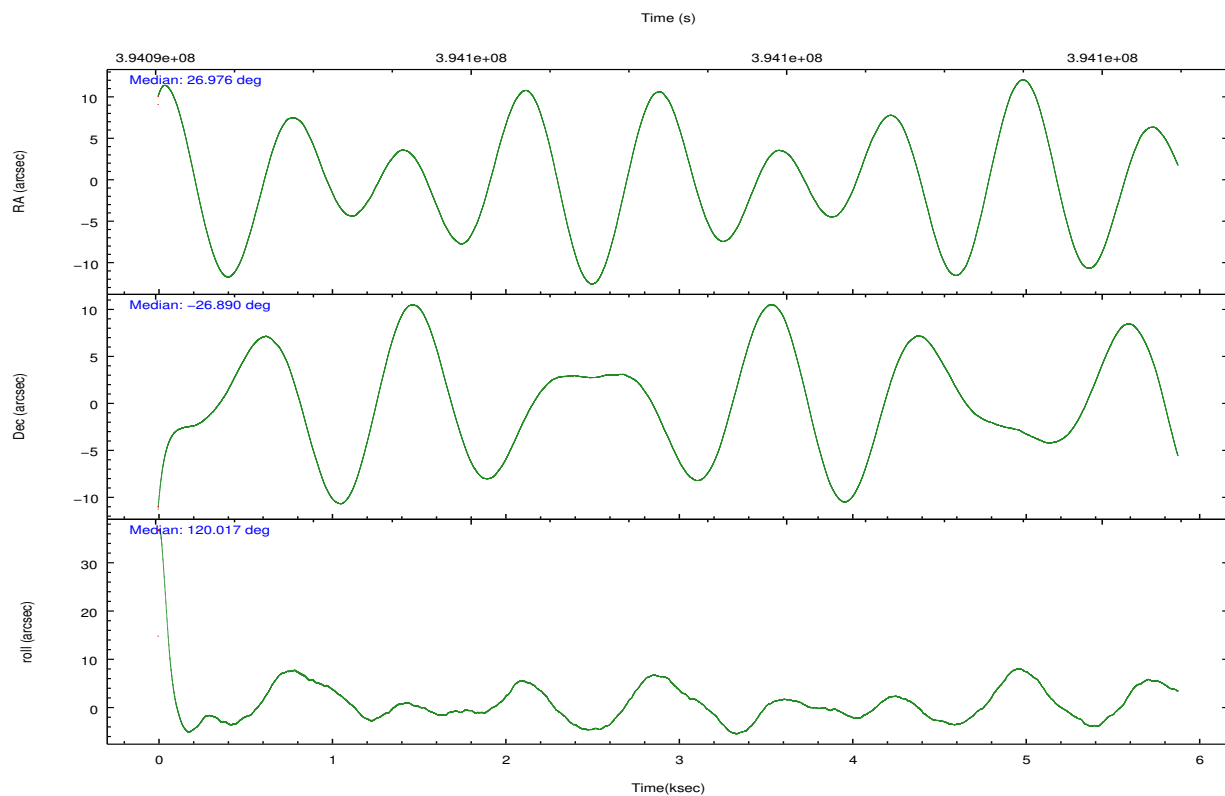


## 2.2 Compared Parameters

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	27.002380	26.97563182147202	CCD I2 on	N	N
[deg] Pointing Dec	-26.903233	-26.88984655902353	CCD I3 on	N	N
[deg] Pointing Roll	119.874742	120.0193497885562	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)	394094424.184000	394092886.369	CCD S5 on	O2	Y
Observation start date	2010-06-28T06:39:18	2010-06-28T06:14:46	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	394100179.184000	394100406.28189	On-chip summing requested	N	N
Observation end date	2010-06-28T08:15:13	2010-06-28T08:20:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



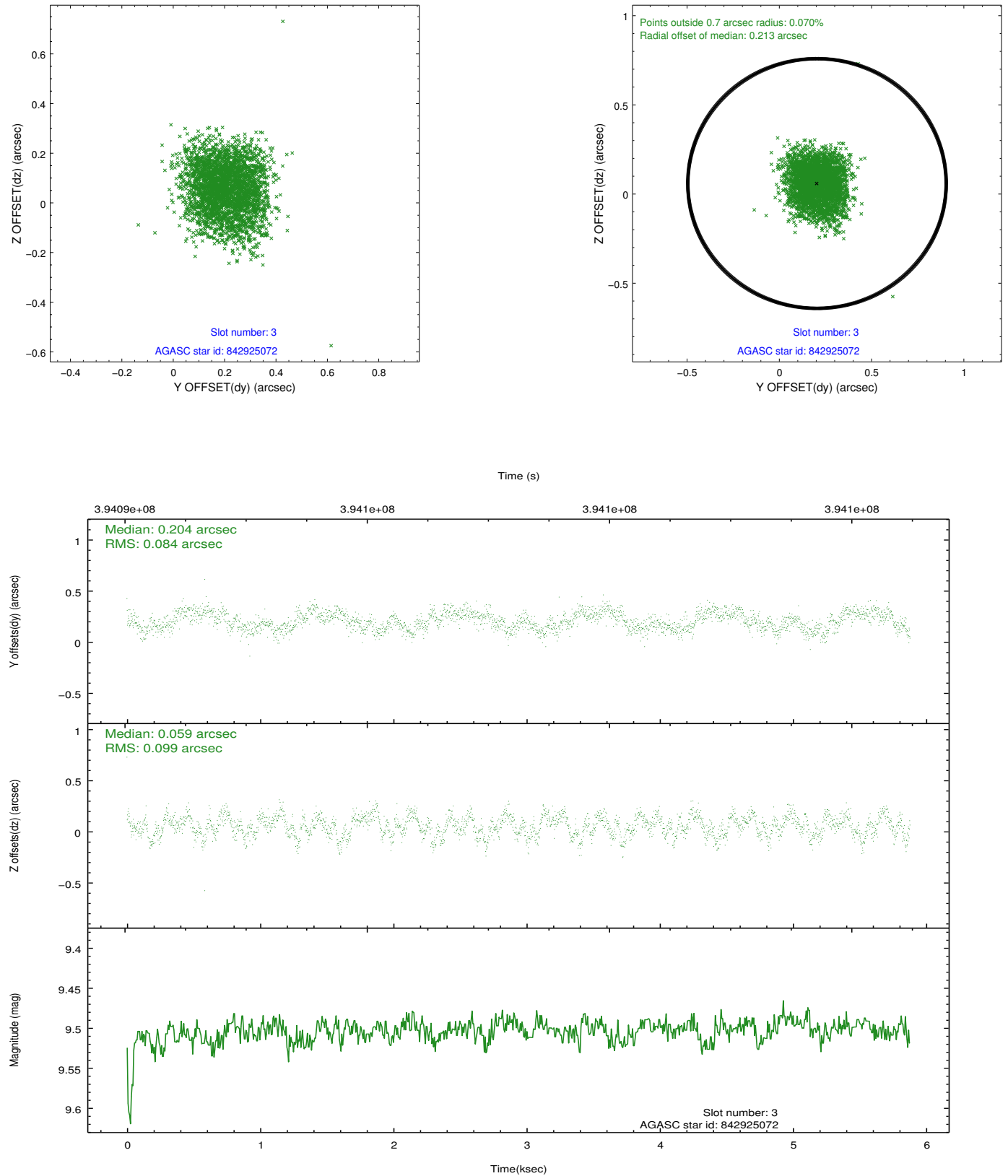


### Slot Statistics

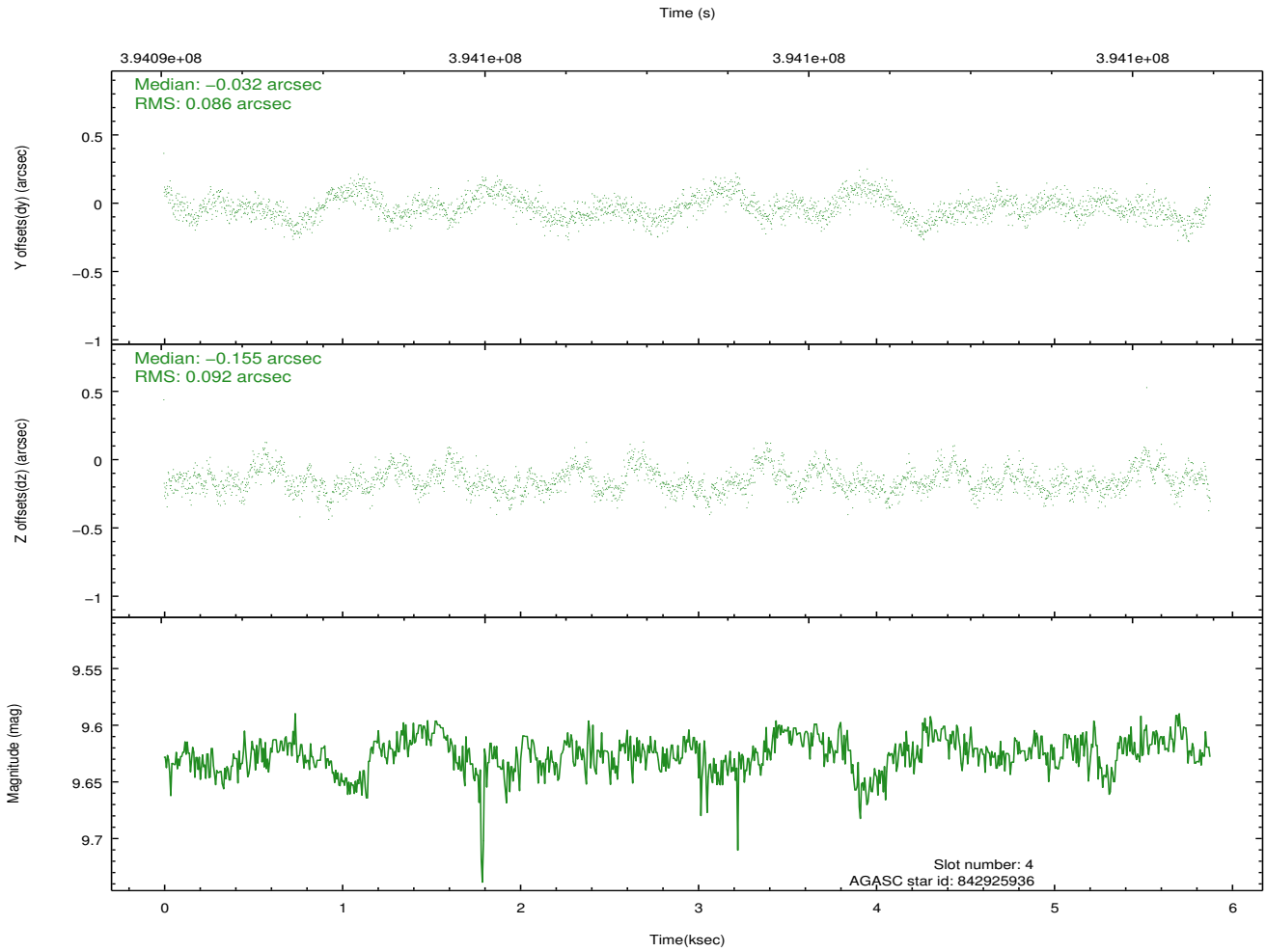
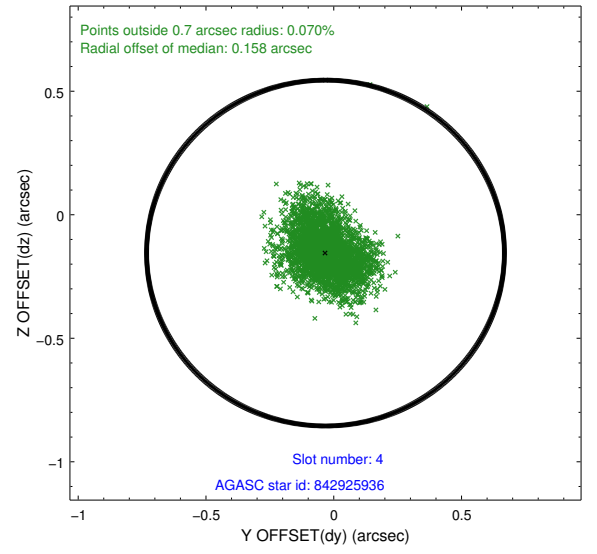
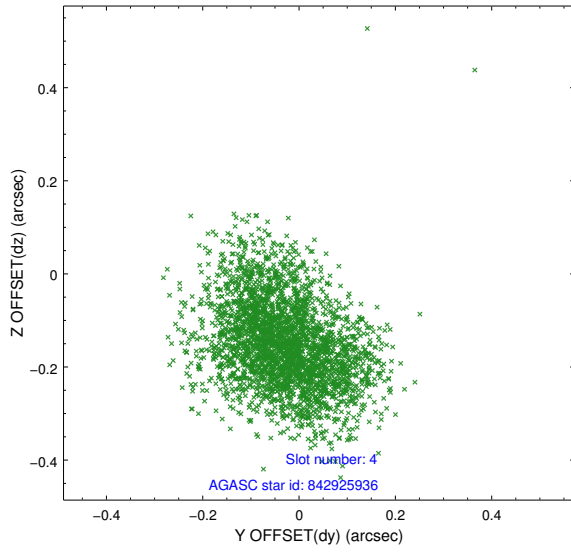
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.87	1435	-0.071	-0.036	0.006	0.011	0.000000	0.000000	-768.99	-1739.60
1	FID	ACIS-S-4	6.96	1435	0.160	0.044	0.005	0.010	0.000000	0.000000	2144.10	167.83
2	FID	ACIS-S-5	6.98	1435	-0.120	0.001	0.006	0.010	0.000000	0.000000	-1820.54	162.71
3	GUIDE	842925072	9.50	2866	0.204	0.059	0.138	0.216	27.468124	-27.008018	-1073.39	-1105.80
4	GUIDE	842925936	9.62	2862	-0.032	-0.155	0.134	0.214	26.975896	-27.155422	-745.48	525.98
5	GUIDE	842939328	9.69	2866	-0.272	-0.149	0.126	0.216	27.150481	-26.555124	848.66	-1037.20
6	GUIDE	842925632	9.16	2868	0.113	0.151	0.095	0.154	28.002354	-27.113196	-2262.12	-2395.92
7	GUIDE	842673376	9.64	2864	-0.021	0.096	0.143	0.233	27.080404	-26.100718	2378.84	-1658.62

## 2.4 Star Slots

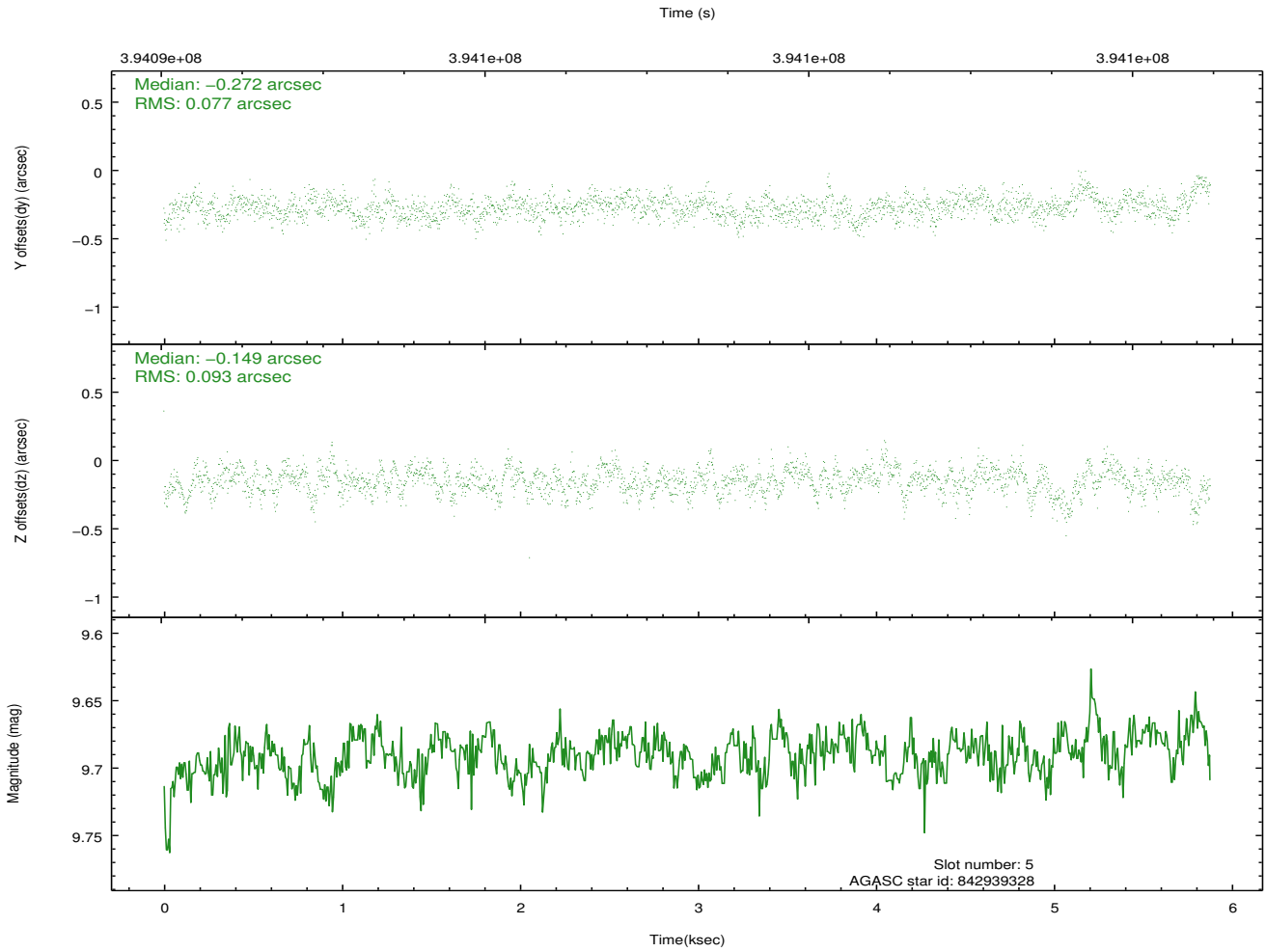
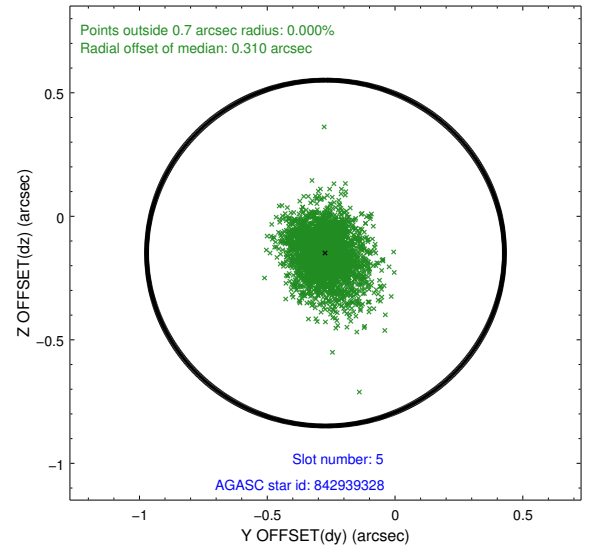
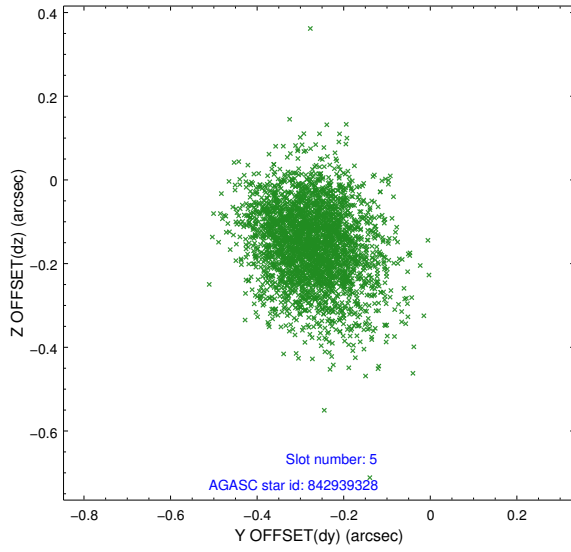
### 2.4.1 Slot 3



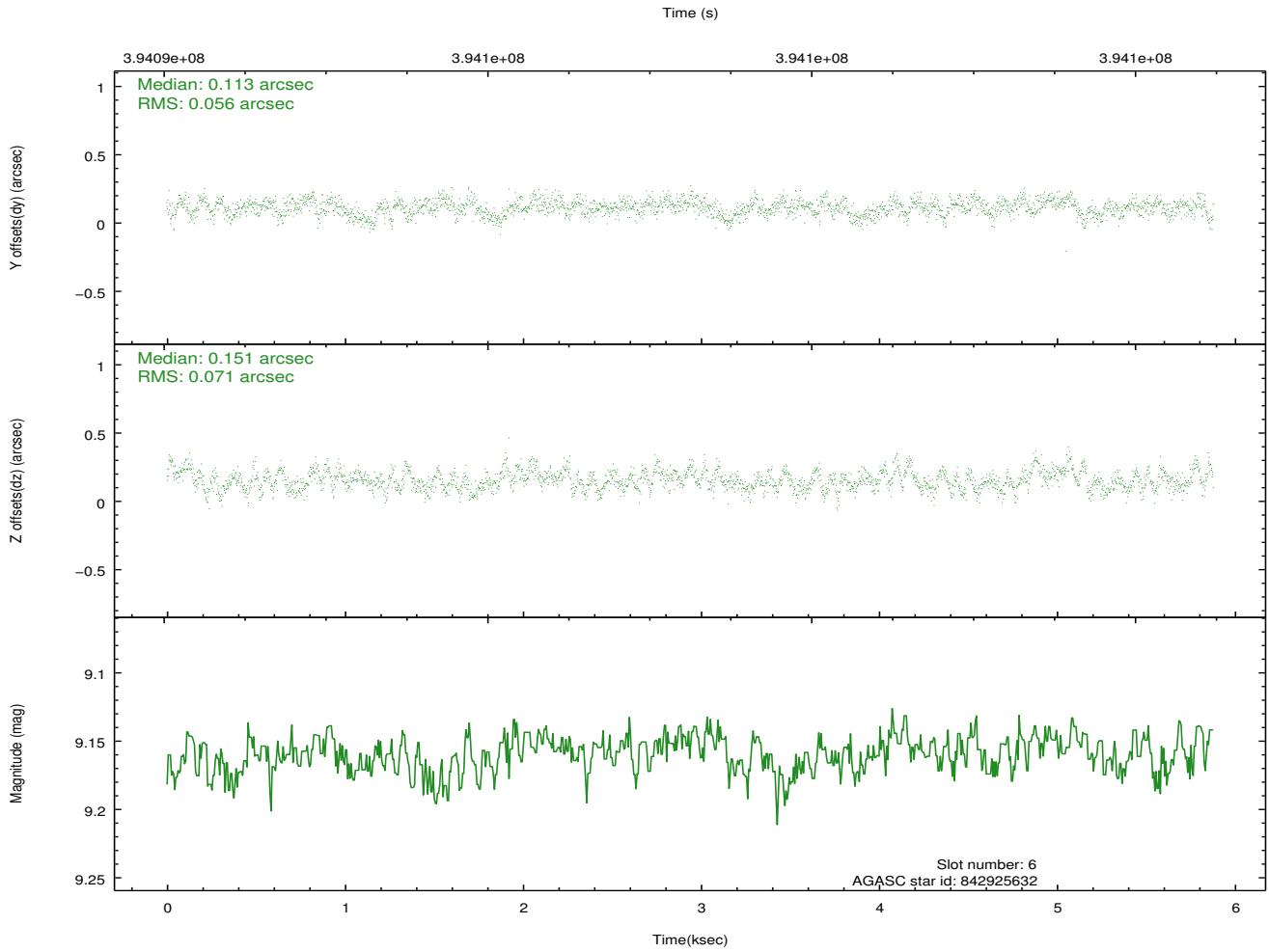
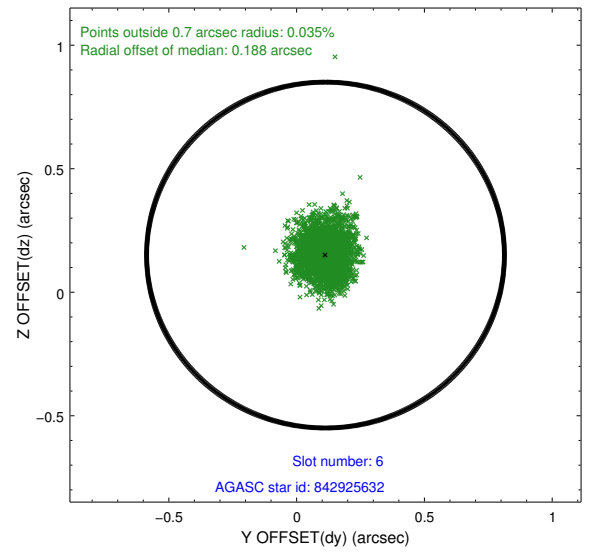
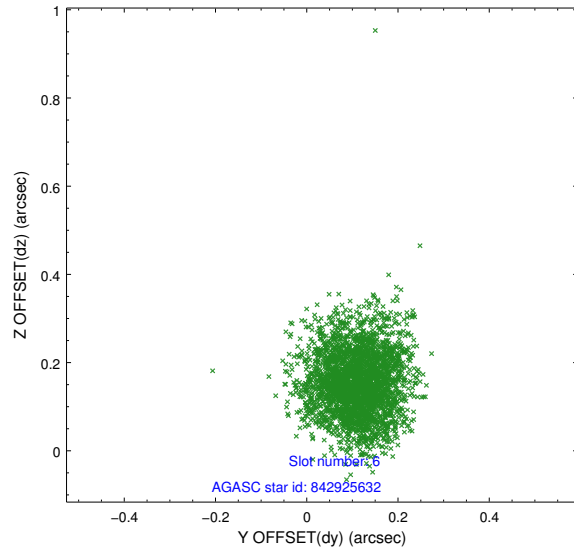
## 2.4.2 Slot 4



### 2.4.3 Slot 5

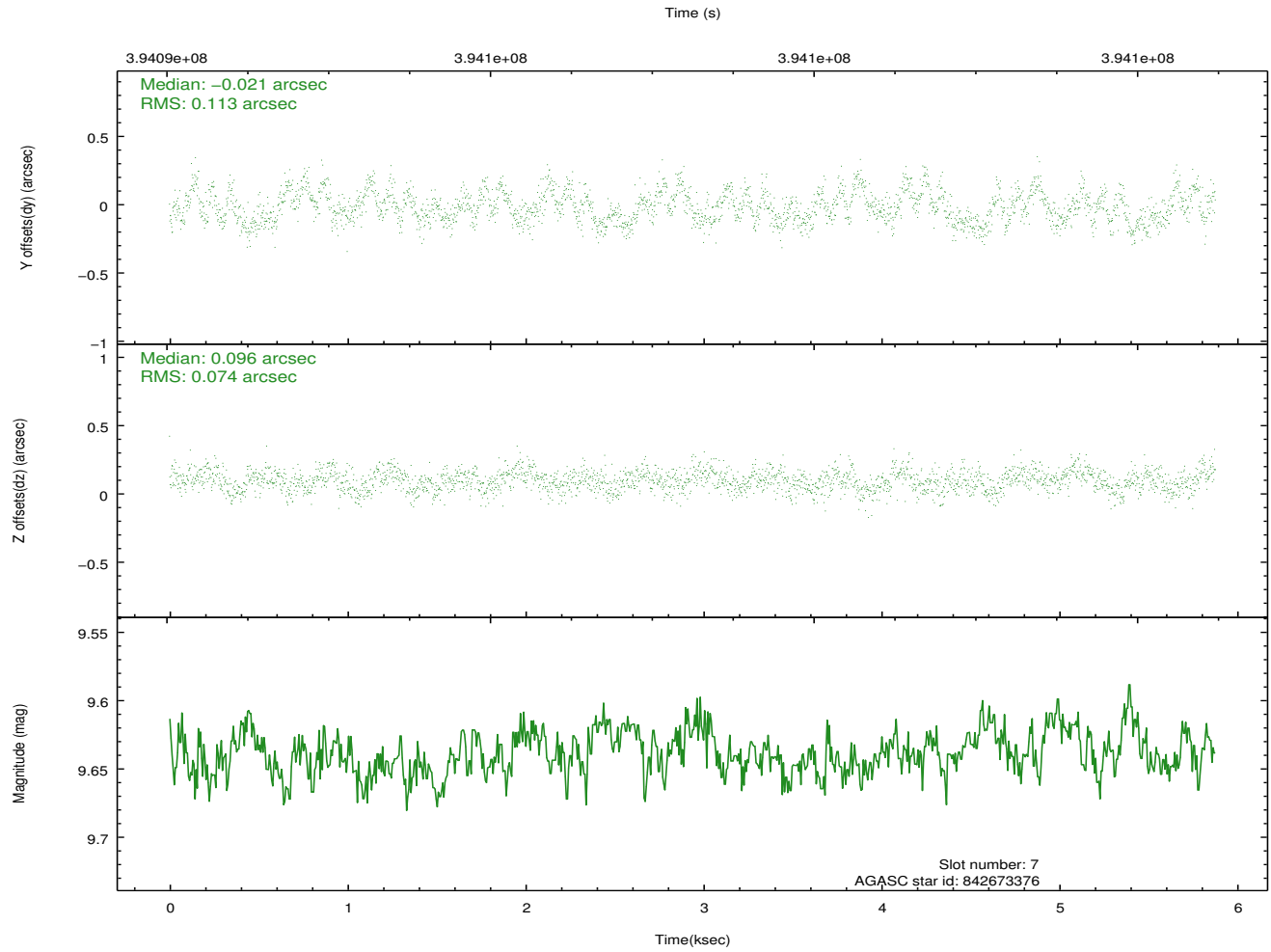
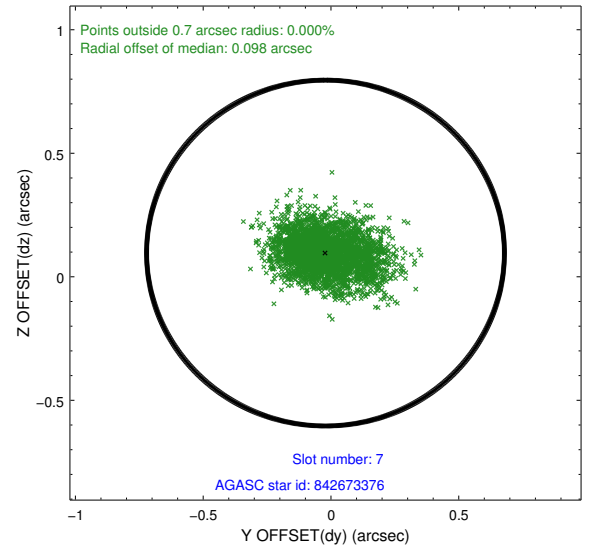
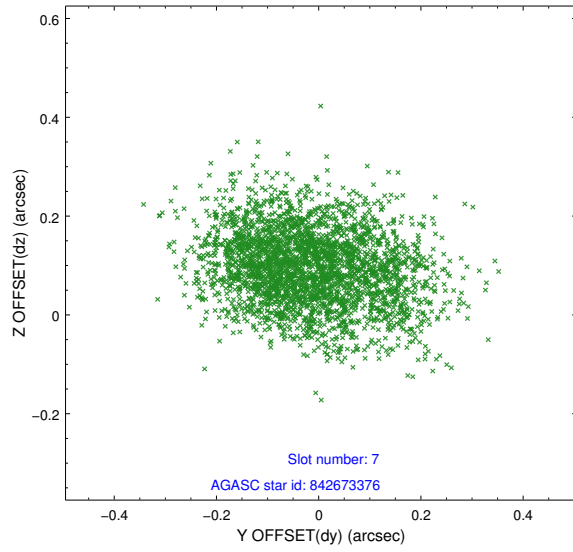


## 2.4.4 Slot 6



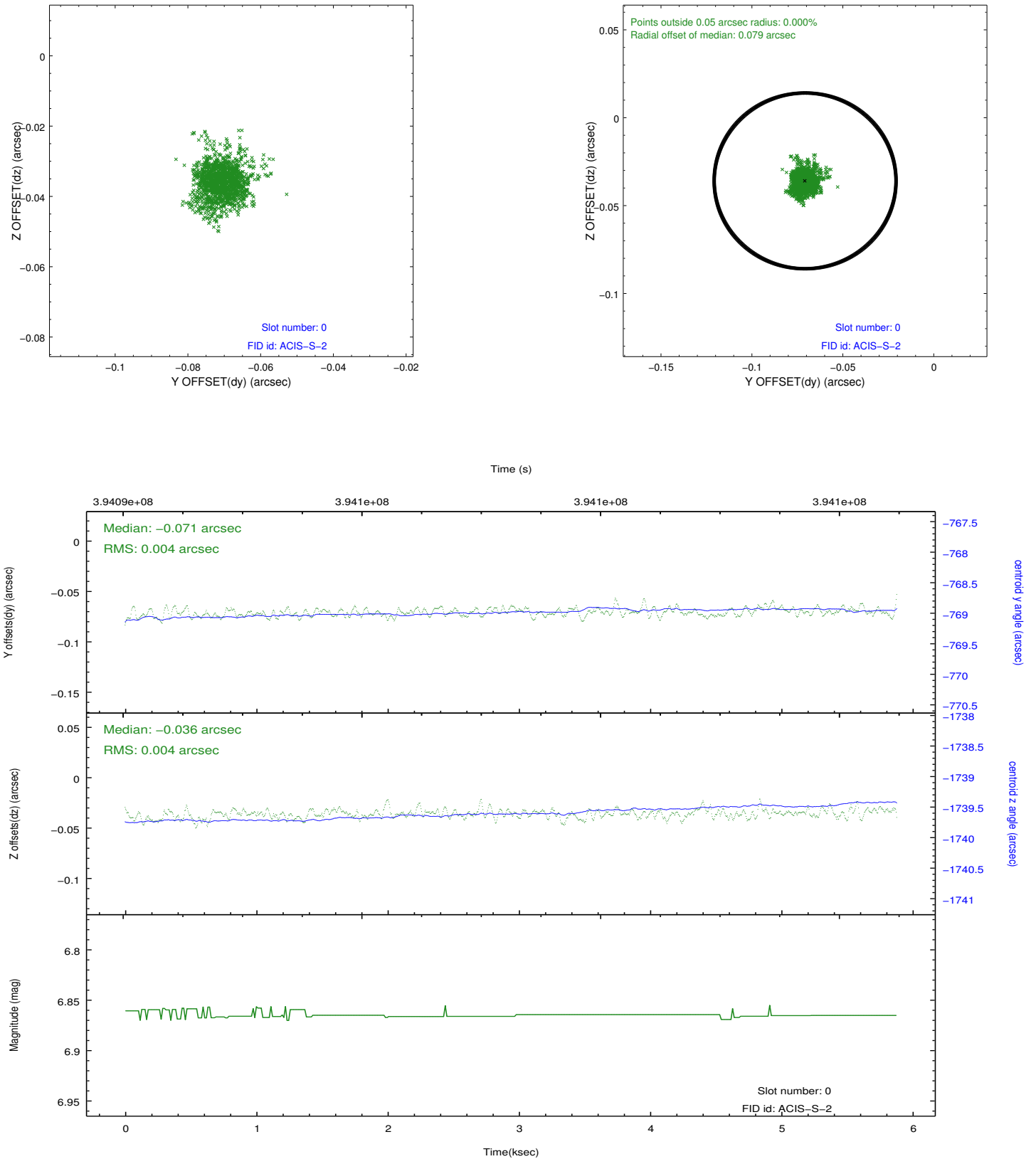


## 2.4.5 Slot 7

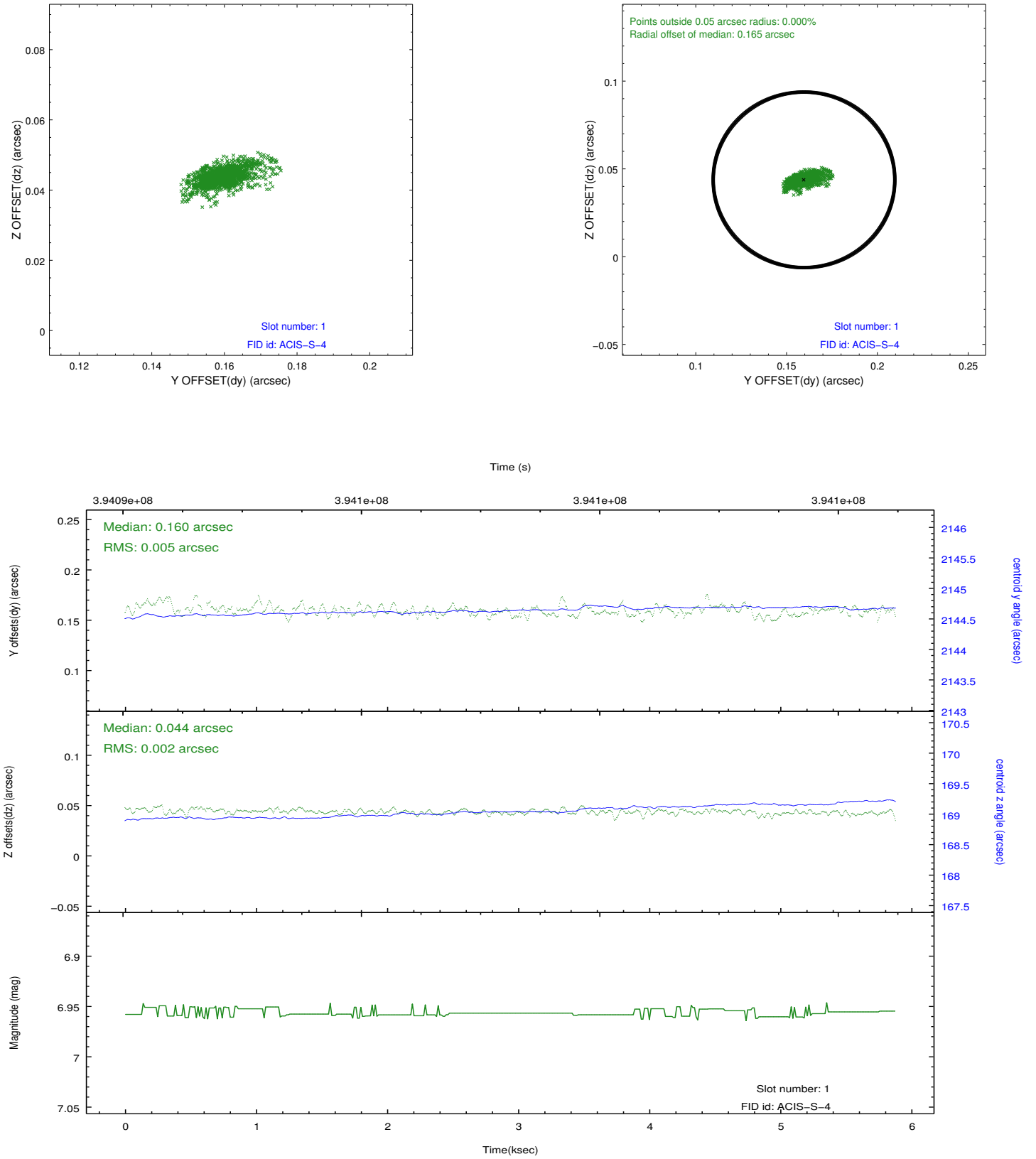


## 2.5 FID Slots

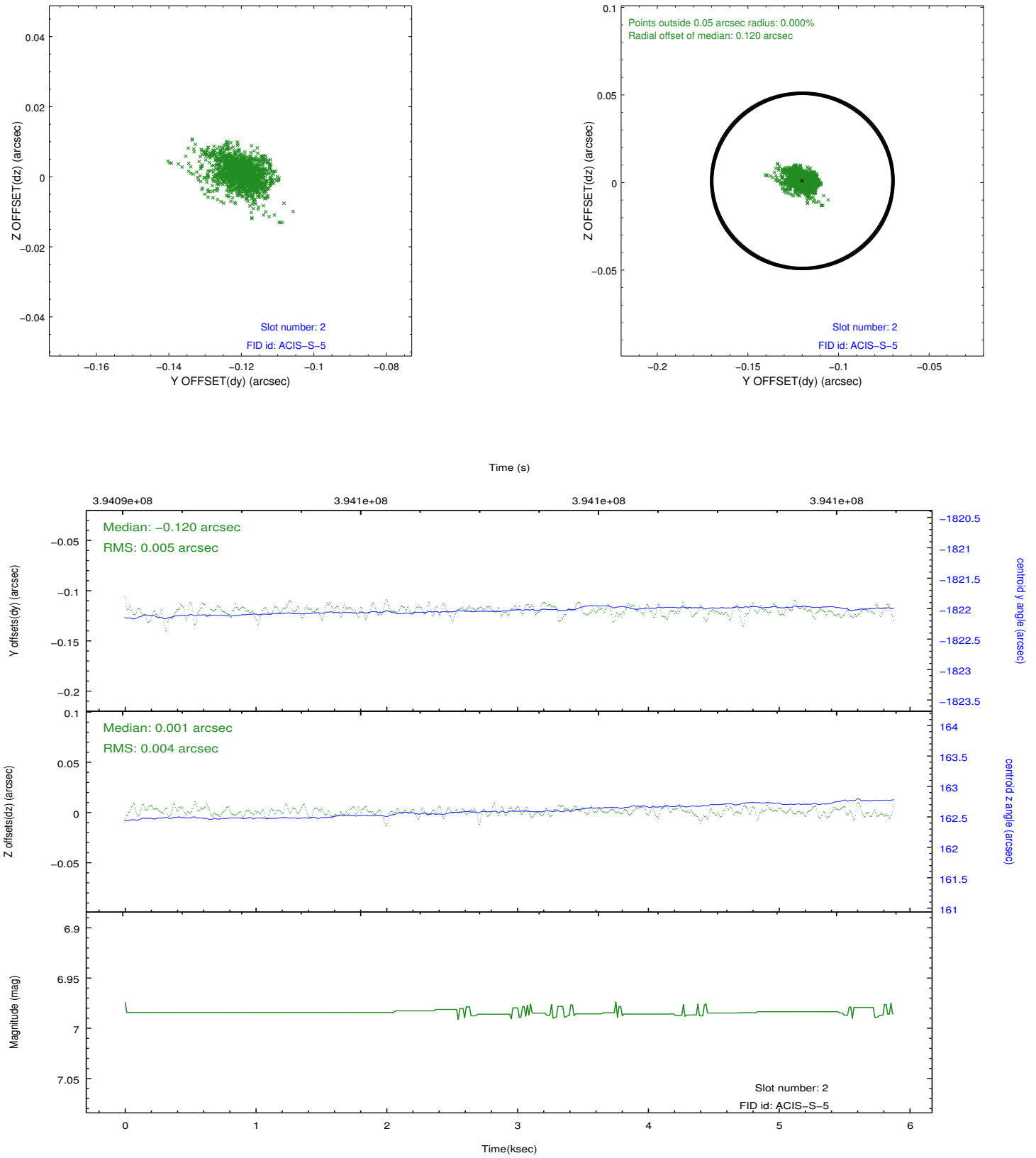
### 2.5.1 Slot 0



## 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)	2012.07.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.5071999795437

### **A.2 Comments**