

# V&V Reference Report

## L2 ASCDS Version : 8.4.3.1

Observation 6741 - L2 Version 2  
Chandra X-Ray Center

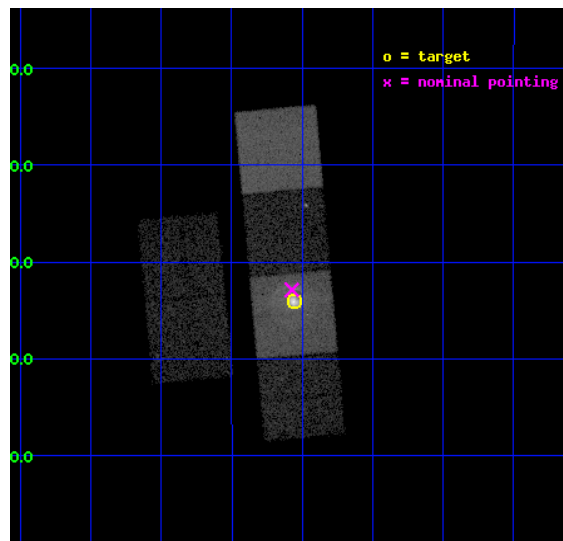
L2 Processing Date : Mar 26 2012

## 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

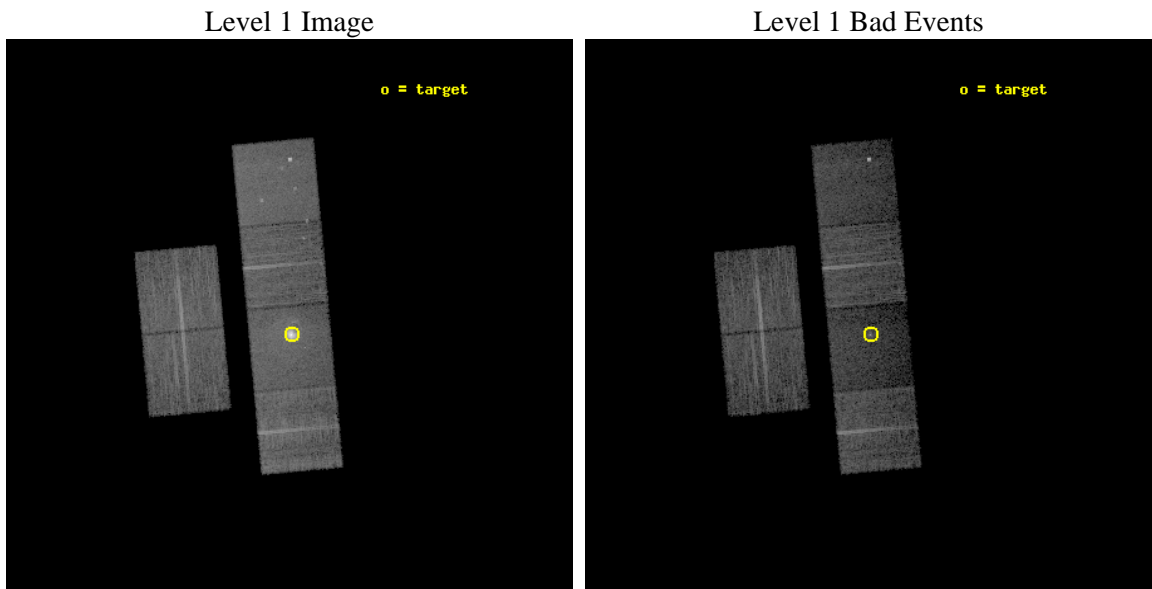
seq_num	590424	Sequence number
obs_id	6741	Observation id
title	AO7 Observations of the Standard Candles Cas A and G21.5-09	Propos
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-09[S3,-120,-1.0,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA [deg]
dec_targ	-10.568528	Observer's specified target Dec [deg]
ra_nom	278.39321486795	Nominal RA [deg]
dec_nom	-10.548089176452	Nominal Dec [deg]
roll_nom	84.765651746696	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9955.0595270693	Sum of GTIs [s]
livetime	9829.0025691204	Livetime [s]
ontime2	9955.1005670726	Sum of GTIs [s]
ontime3	9951.6955364048	Sum of GTIs [s]
ontime5	9955.018487066	Sum of GTIs [s]
ontime6	9951.7364867926	Sum of GTIs [s]
ontime7	9955.0595270693	Sum of GTIs [s]
ontime8	9954.8953670859	Sum of GTIs [s]
l2events	129223	Number of level 2 events



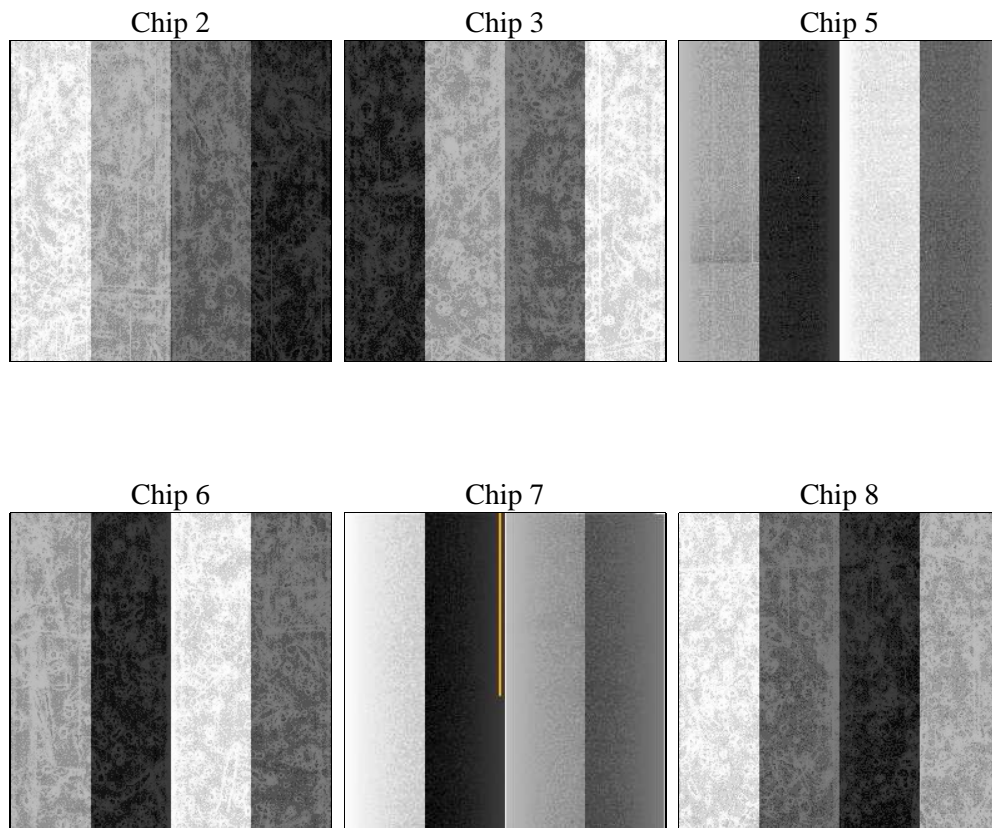
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	9955.0595270693	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime2	9955.1005670726	Sum of GTIs [s]
date	2012-03-26T06:16:14	Date and time of file creation	ontime3	9951.6955364048	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	9955.018487066	Sum of GTIs [s]
			ontime6	9951.7364867926	Sum of GTIs [s]
			ontime7	9955.0595270693	Sum of GTIs [s]
			ontime8	9954.8953670859	Sum of GTIs [s]
			l1events	461958	Number of level 1 events

### 2.1.4 Events

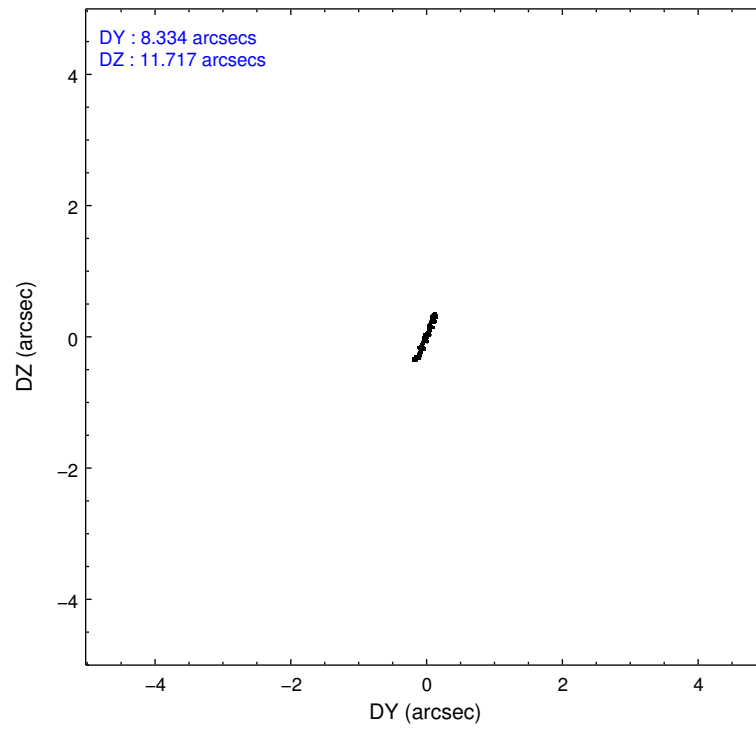
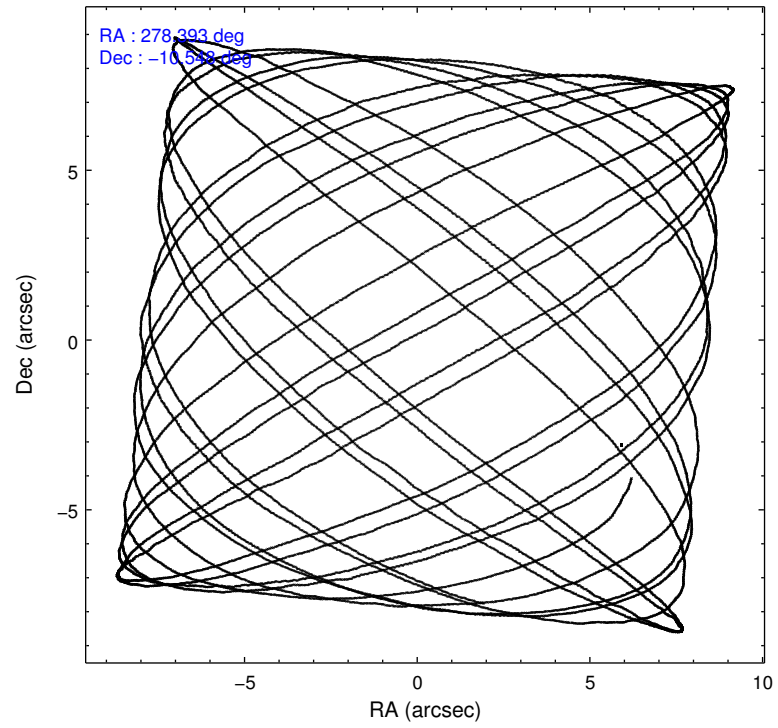
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	72573	63353	81802	67157	98657	78416	grade 0 events	2449	2272	3826	3375	11109	5769
rejected events	66115	57257	39686	59319	32021	58579		3%	3%	4%	5%	11%	7%
rejected %	91%	90%	48%	88%	32%	74%	grade 1 events	38	54	94	38	125	66
								0%	0%	0%	0%	0%	0%
							grade 2 events	1508	1283	13035	1613	15592	4582
								2%	2%	15%	2%	15%	5%
							grade 3 events	671	690	2020	758	7072	2175
								0%	1%	2%	1%	7%	2%
							grade 4 events	714	685	1887	784	6947	2062
								0%	1%	2%	1%	7%	2%
							grade 5 events	1763	2187	7745	2214	7162	3289
								2%	3%	9%	3%	7%	4%
							grade 6 events	1118	1166	21360	1313	25945	5251
								1%	1%	26%	1%	26%	6%
							grade 7 events	64312	55016	31835	57062	24705	55222
								88%	86%	38%	84%	25%	70%

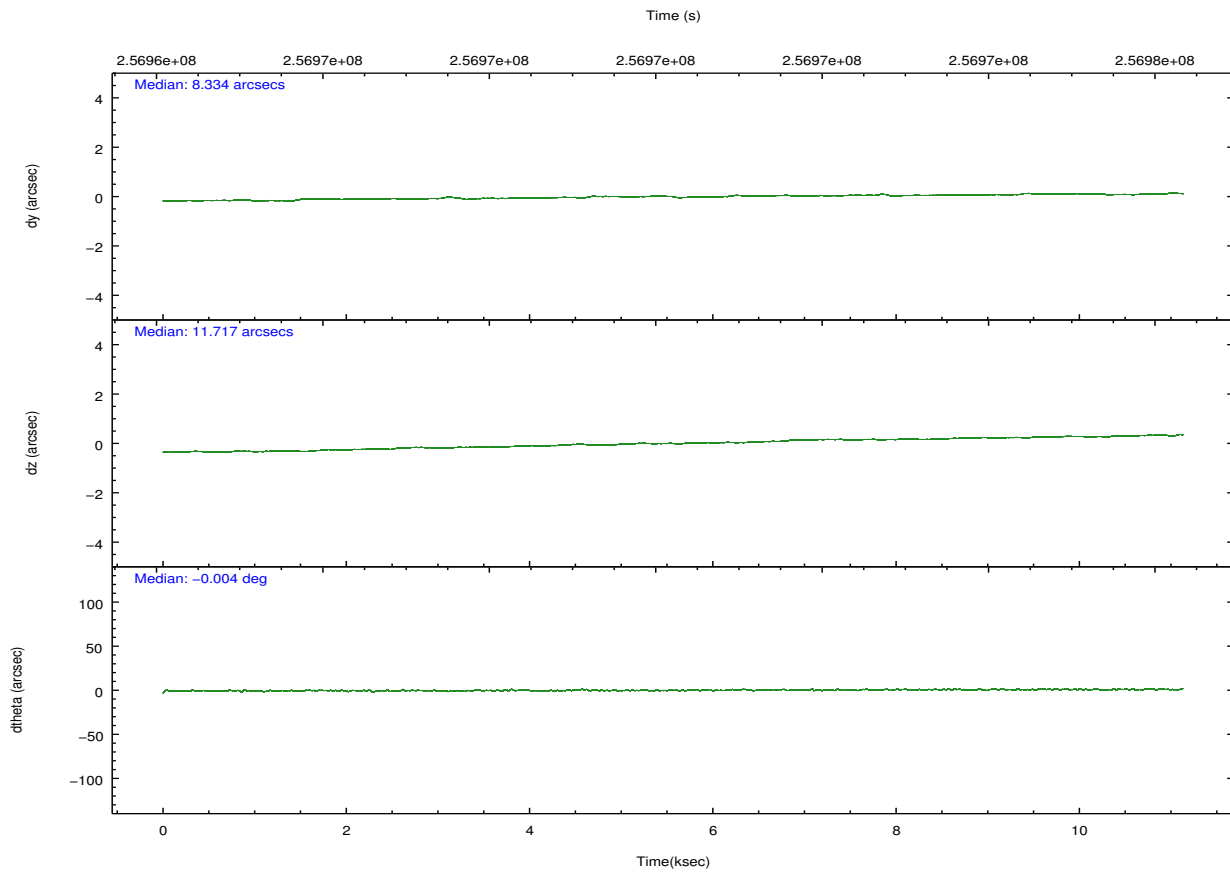
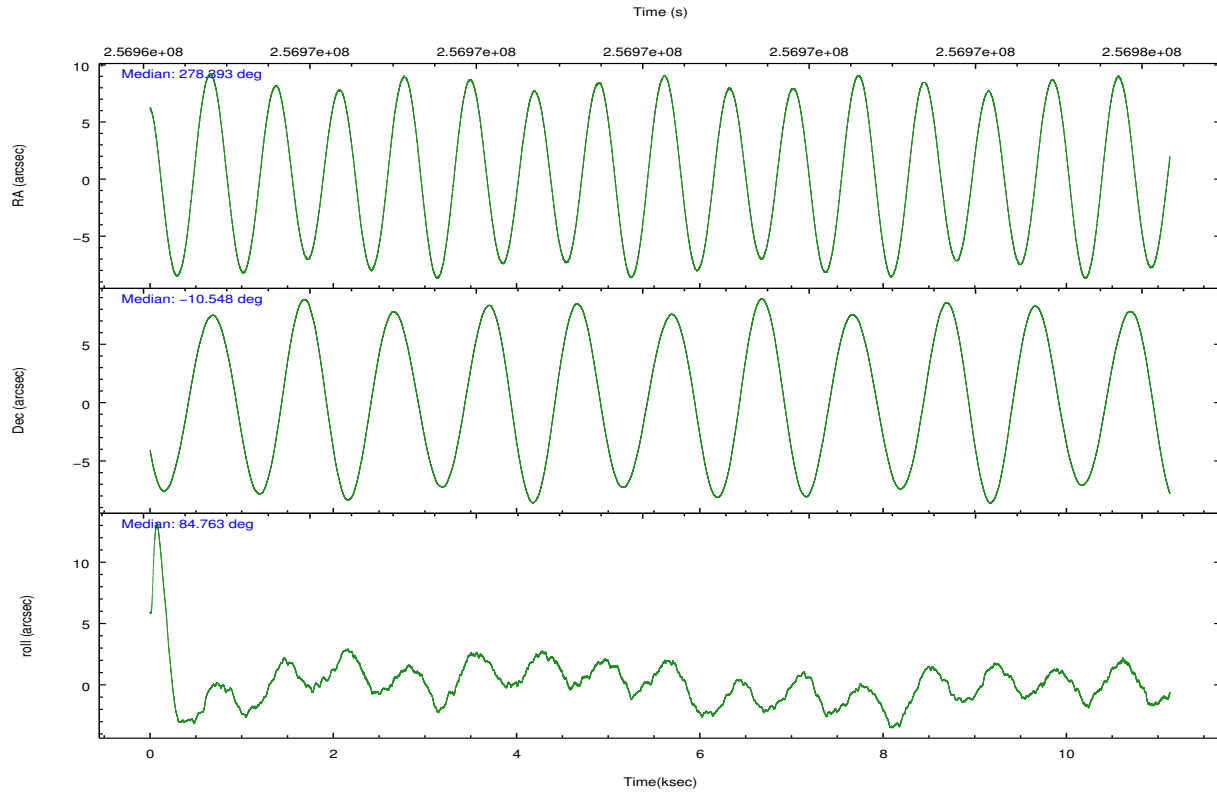


## 2.2 Compared Parameters

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	278.405195	278.3932148679452	Subarray requested	NONE	NONE
[deg] Pointing Dec	-10.572654	-10.54808917645161	Alternating exposures requested	N	N
[deg] Pointing Roll	84.611214	84.76565174669624	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	255139265.184000	255139265.184000			
[s] Window stop time (MET)	270604865.184000	270604865.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	256965771.184000	256964336.79984			
Observation start date	2006-02-22T03:21:46	2006-02-22T02:58:56			
[s] Observation end time (MET)	256975771.184000	256976763.38792			
Observation end date	2006-02-22T06:08:26	2006-02-22T06:26:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect



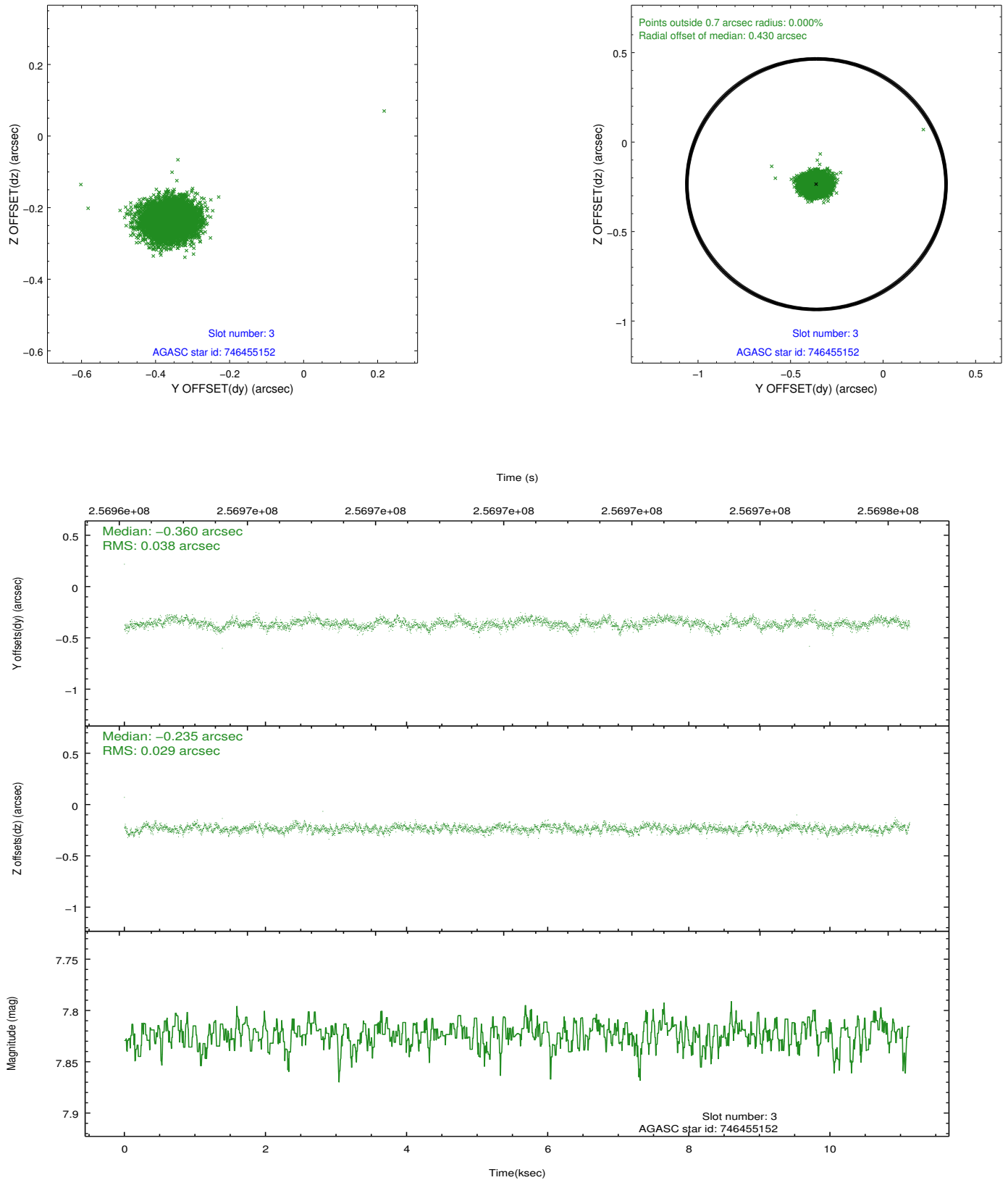


### Slot Statistics

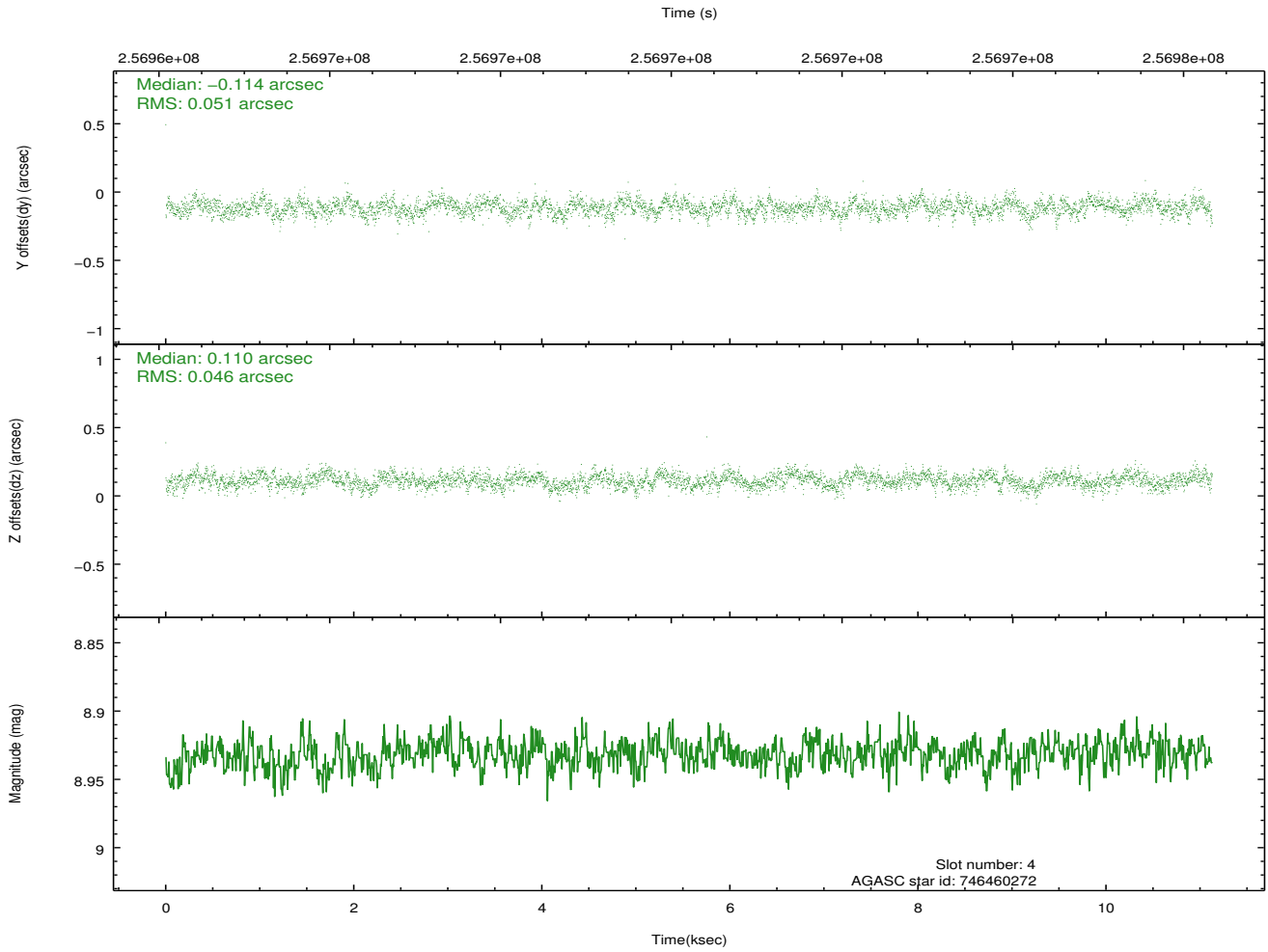
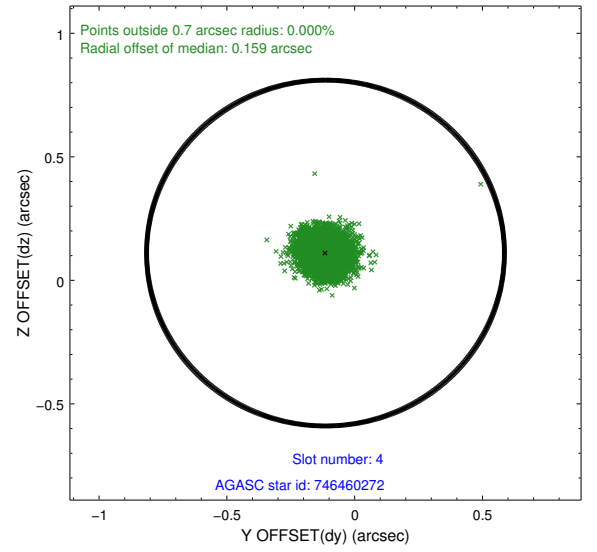
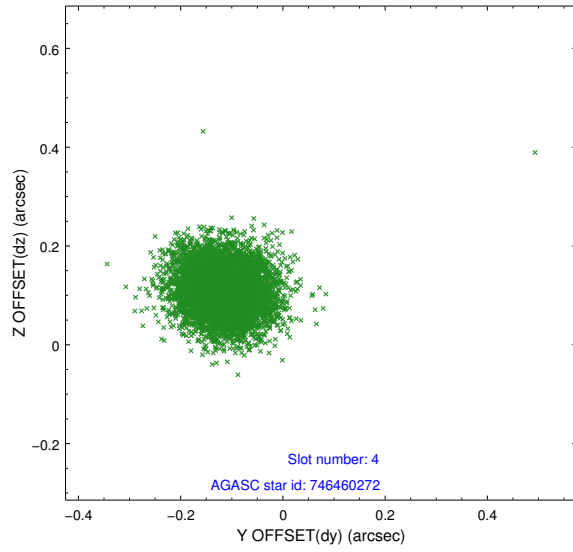
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	2715	0.077	-0.093	0.010	0.015	0.000000	0.000000	934.97	-1728.74
1	FID	ACIS-S-5	7.23	2715	-0.117	0.045	0.010	0.017	0.000000	0.000000	-1813.92	168.53
2	FID	ACIS-S-6	7.34	2713	0.018	0.060	0.011	0.018	0.000000	0.000000	400.02	812.98
3	GUIDE	746455152	7.82	5429	-0.360	-0.235	0.050	0.081	278.447893	-9.976732	2150.21	50.69
4	GUIDE	746460272	8.93	5428	-0.114	0.110	0.072	0.117	278.847488	-10.152127	1654.20	-1418.10
5	GUIDE	746462392	8.54	5429	0.149	0.146	0.080	0.126	279.038421	-10.890715	-932.08	-2337.41
6	GUIDE	746462456	8.39	5427	0.105	-0.071	0.063	0.102	278.652171	-10.530173	233.69	-856.61
7	GUIDE	746462680	9.02	5422	0.225	0.048	0.074	0.119	278.660755	-10.782756	-667.69	-970.92

## 2.4 Star Slots

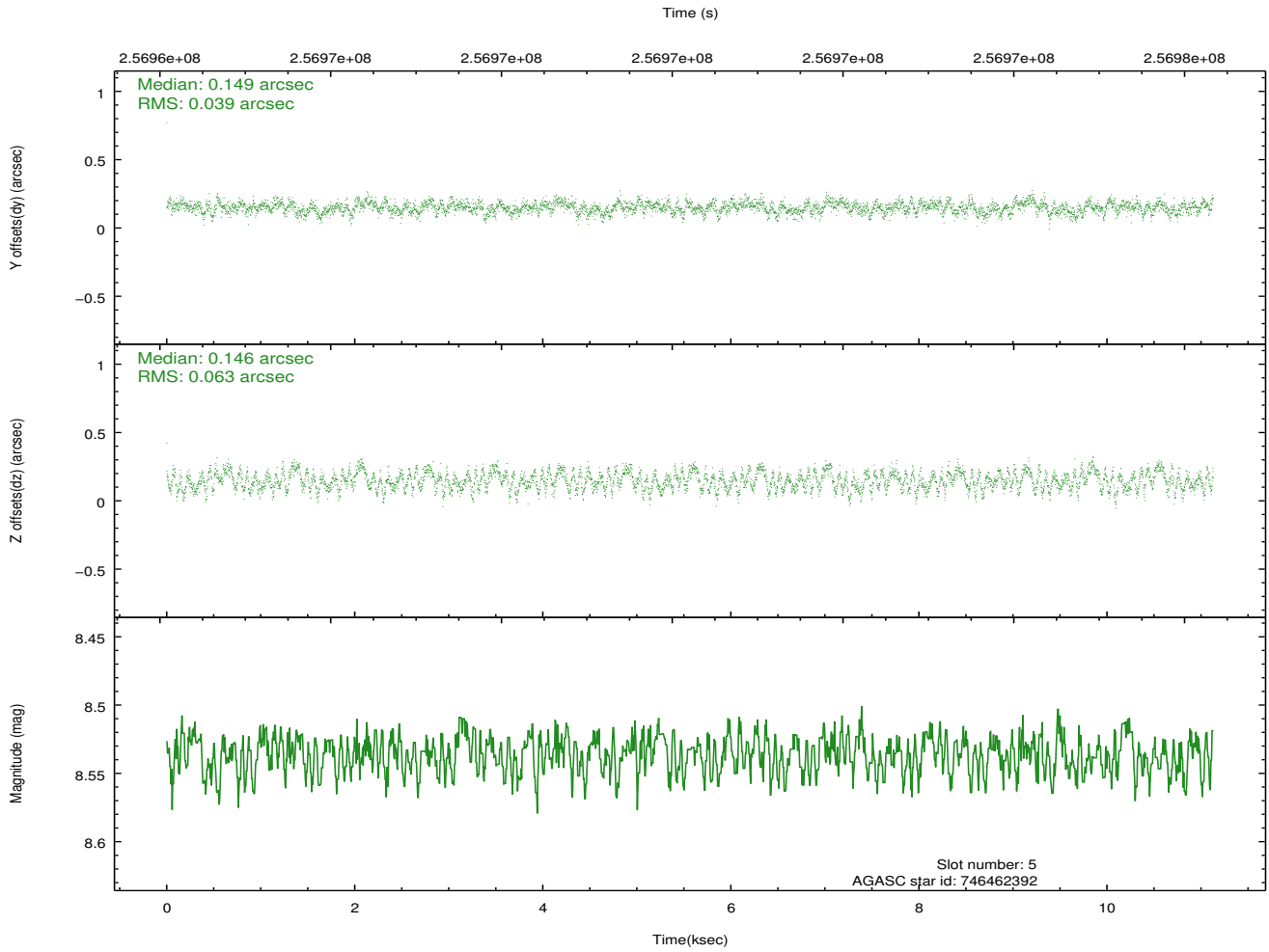
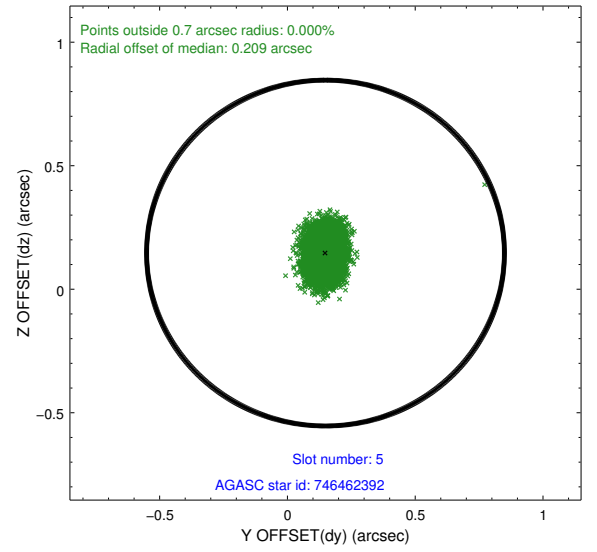
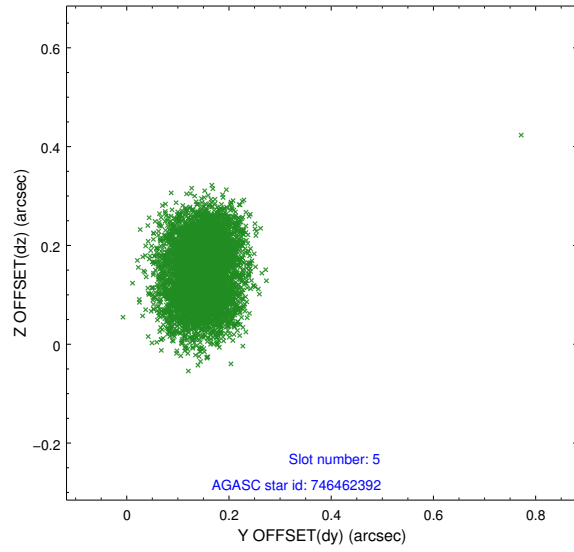
### 2.4.1 Slot 3



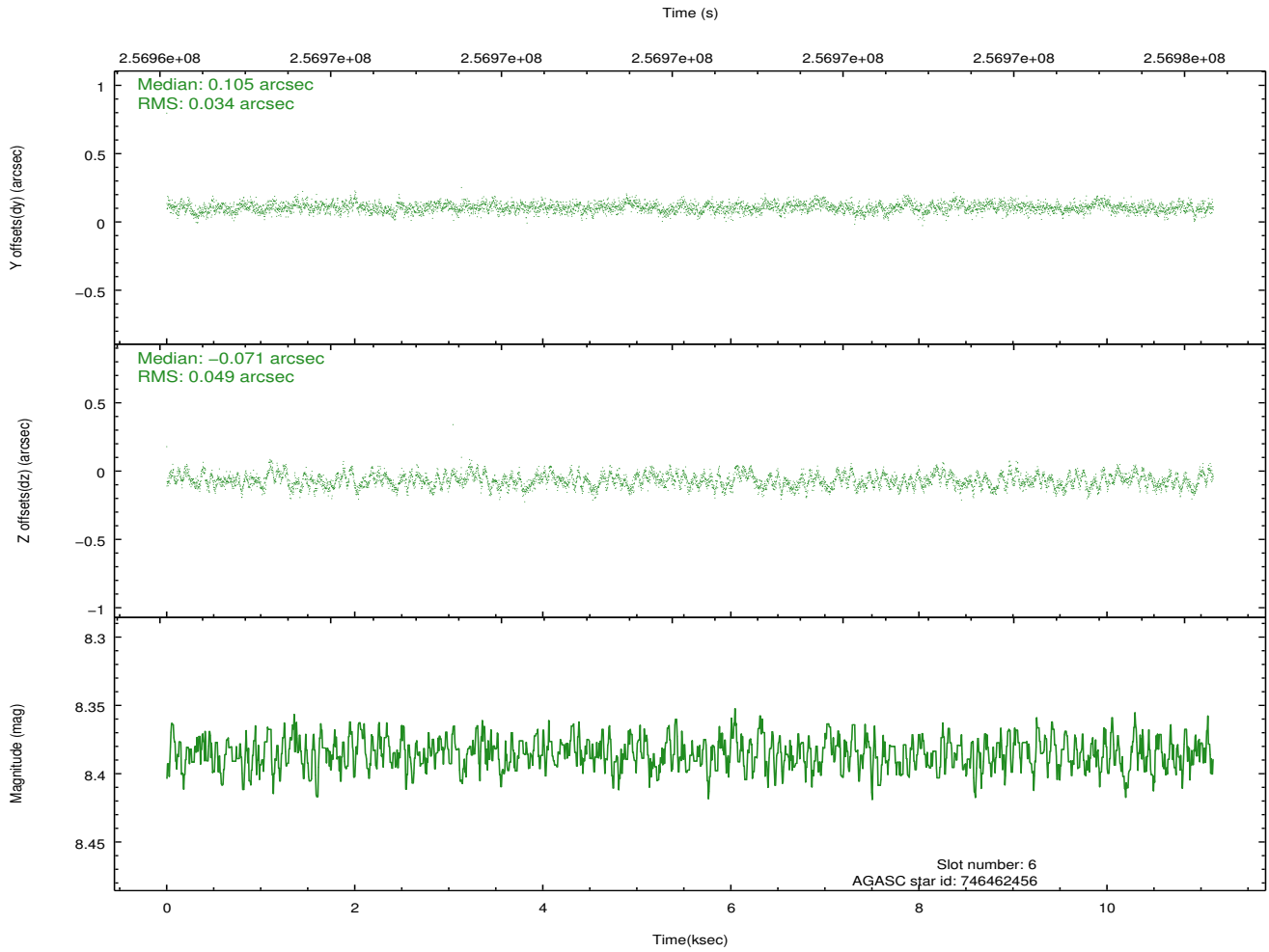
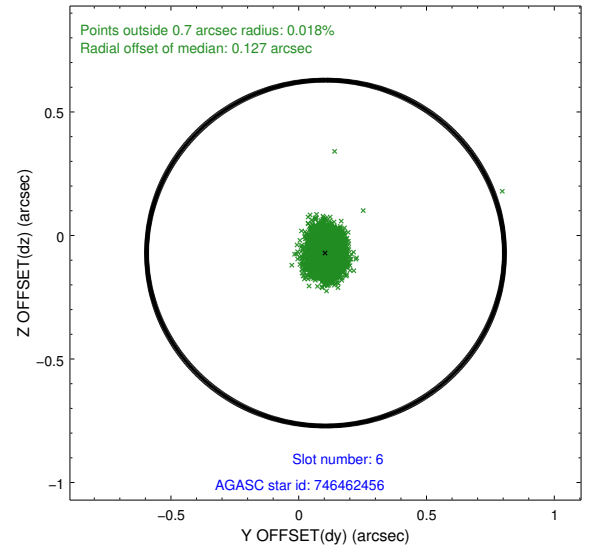
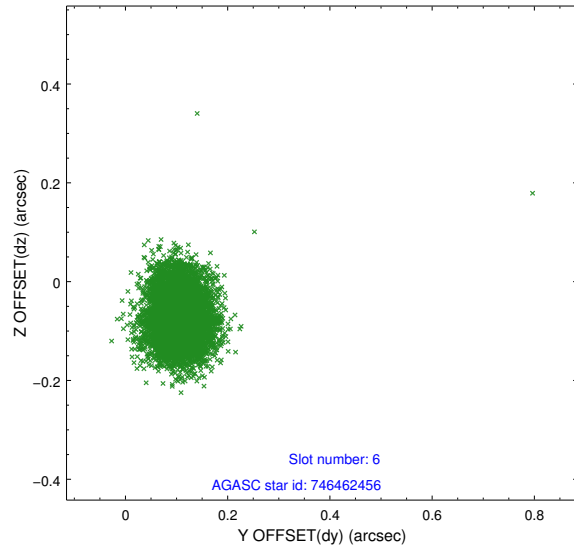
## 2.4.2 Slot 4



### 2.4.3 Slot 5

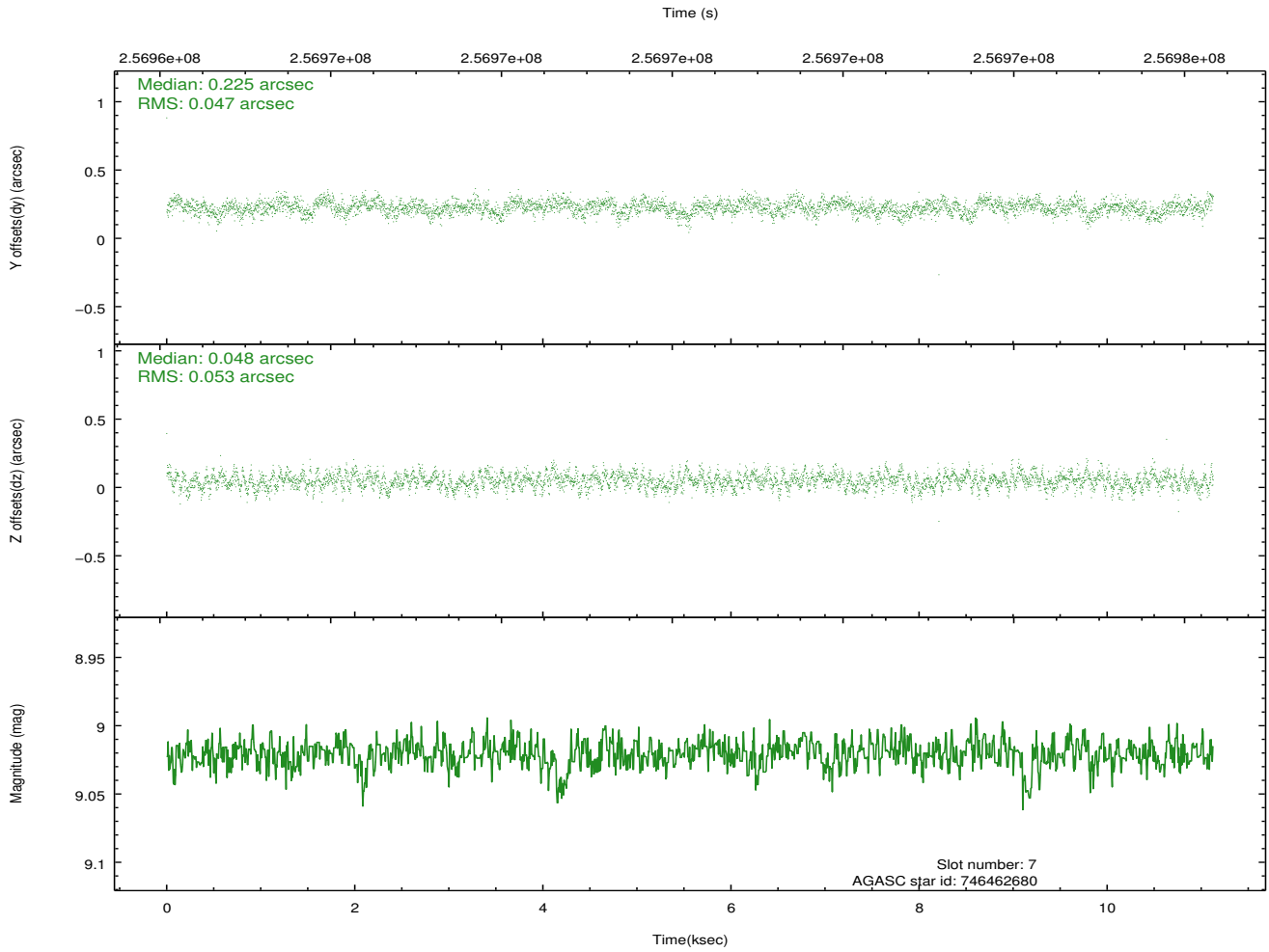
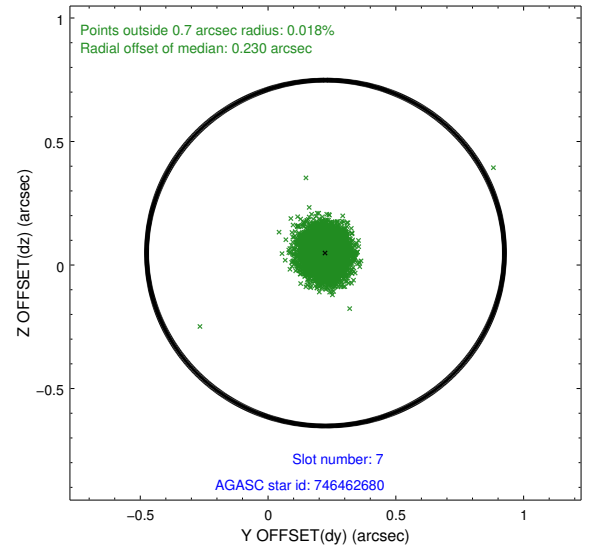
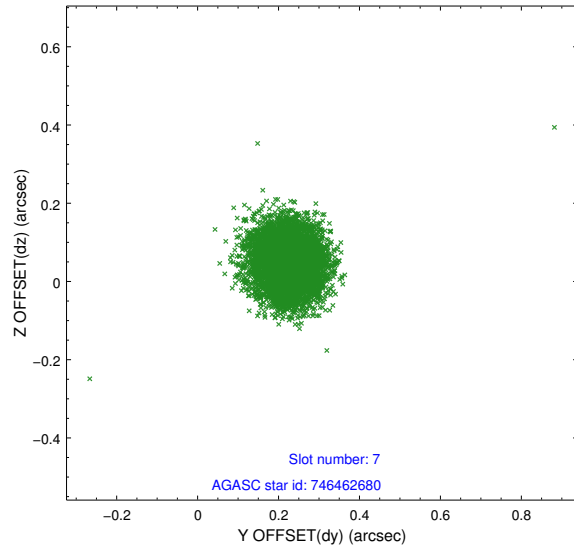


## 2.4.4 Slot 6



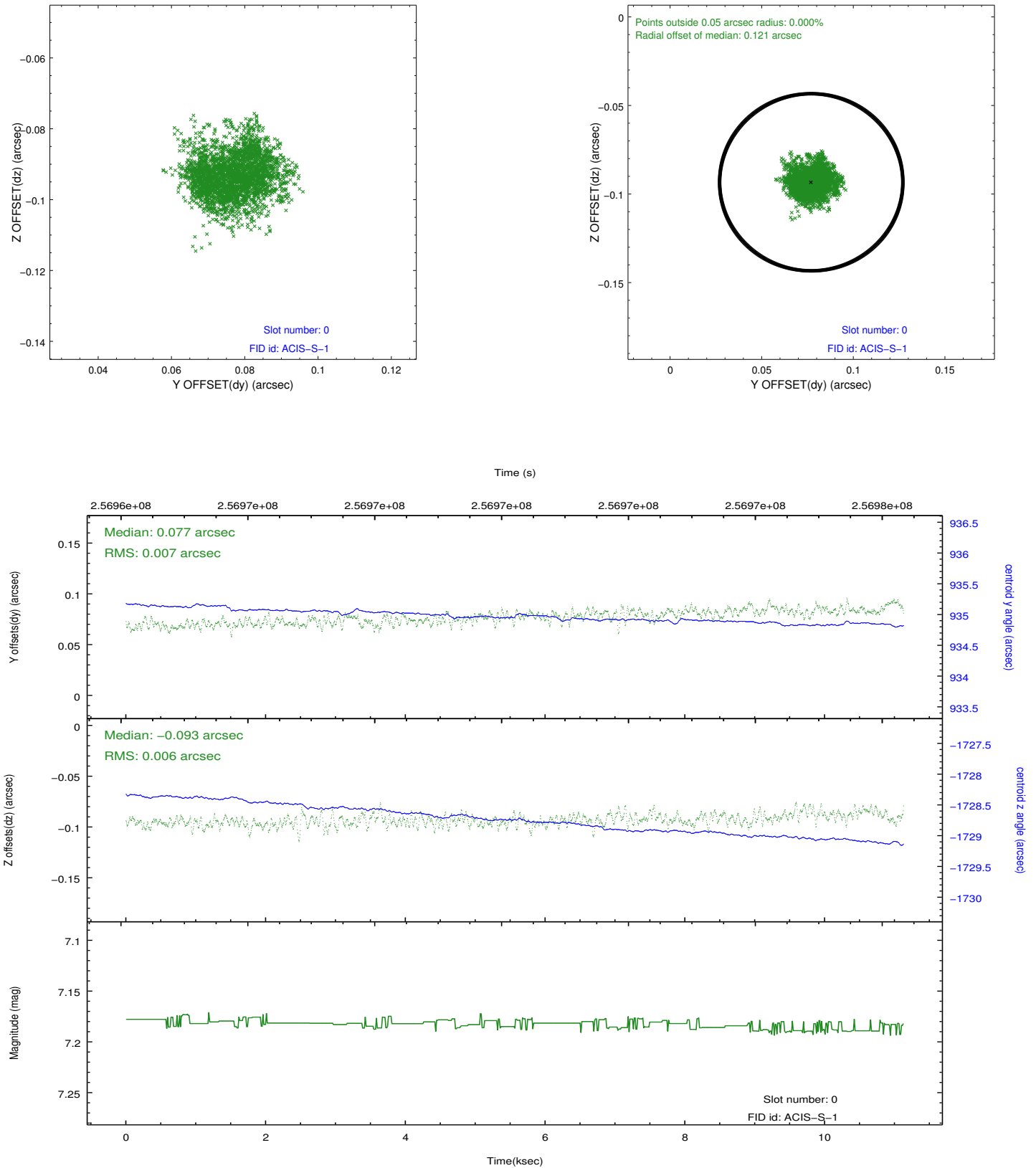


## 2.4.5 Slot 7

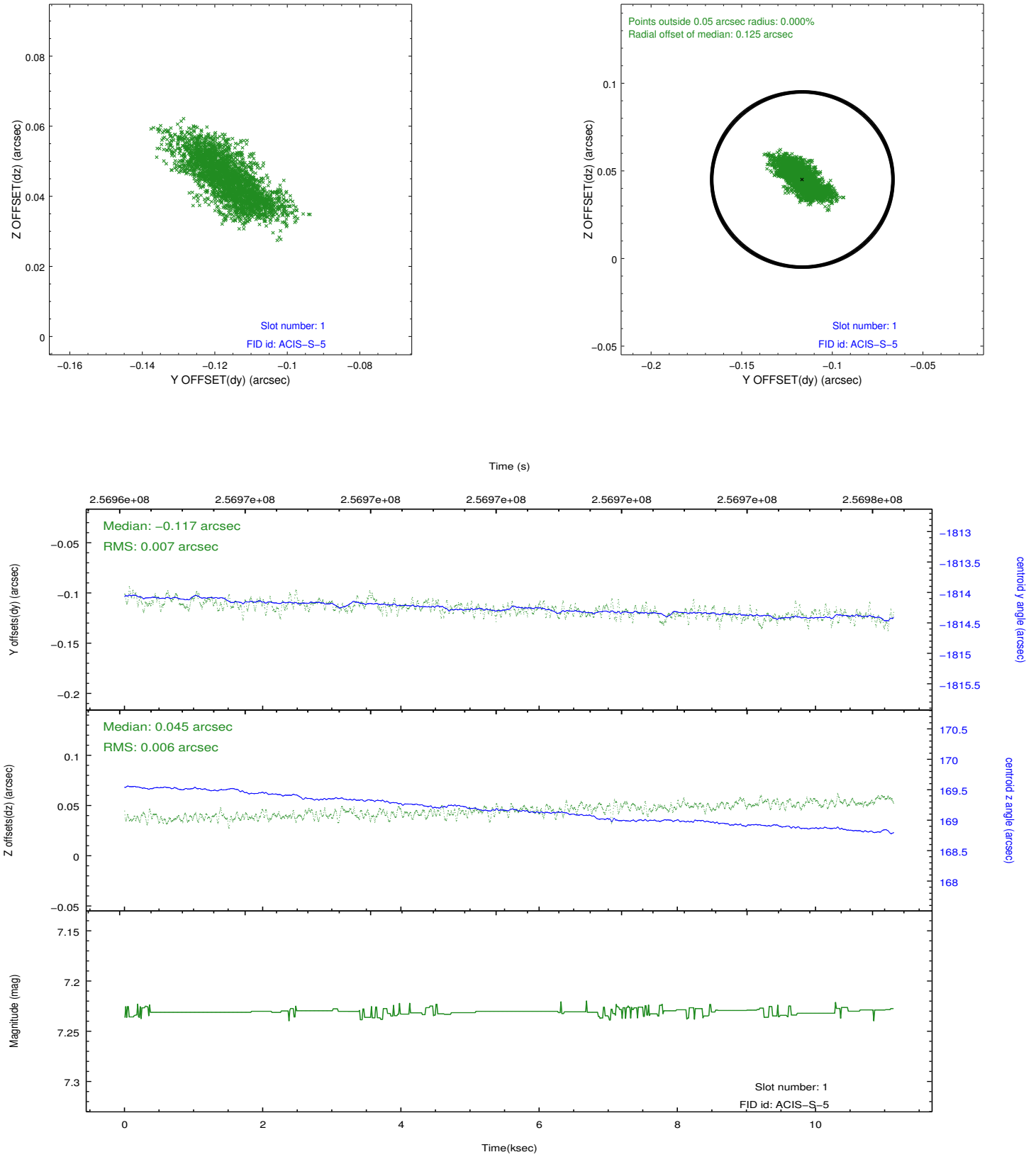


## 2.5 FID Slots

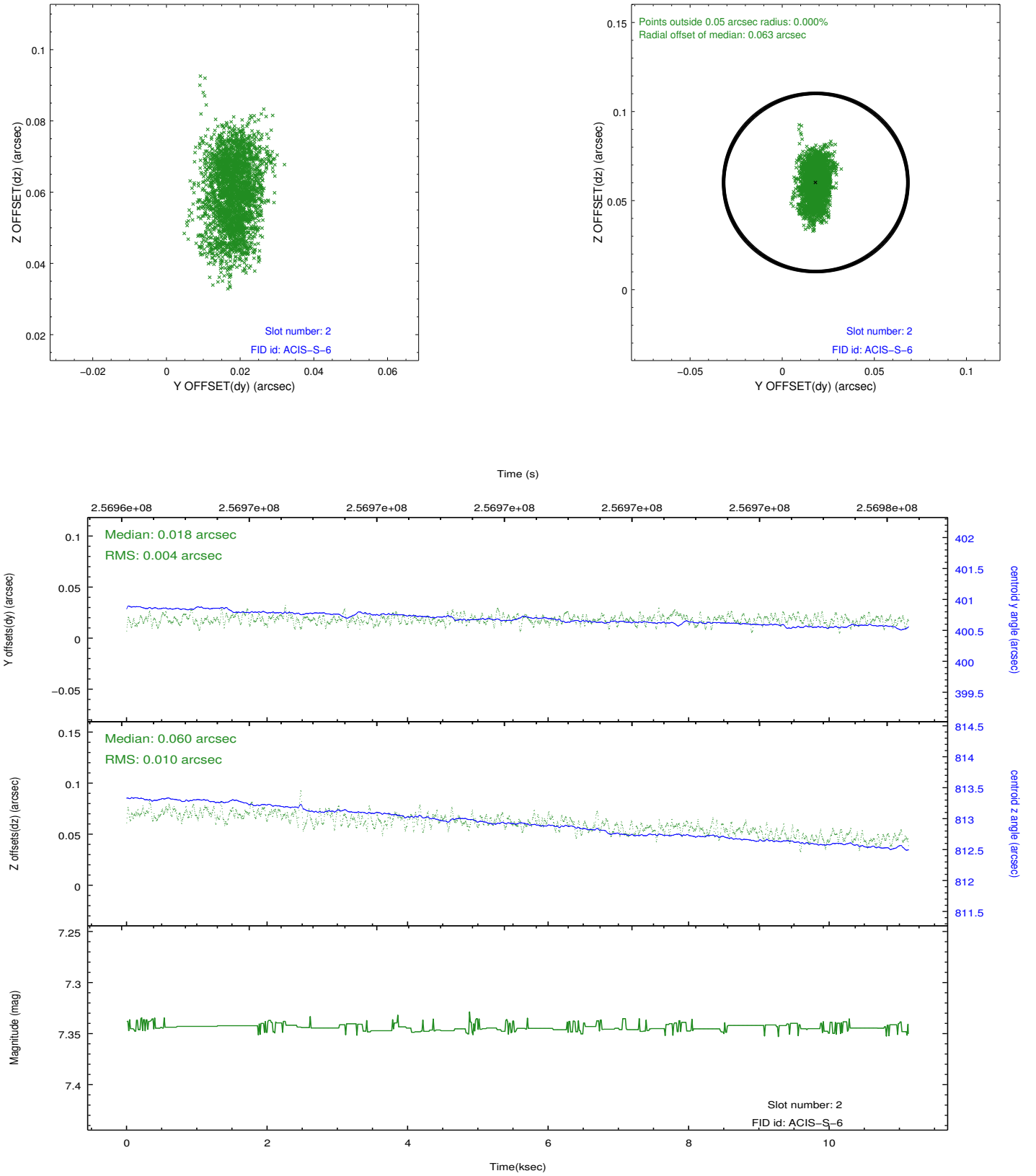
### 2.5.1 Slot 0



## 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)	2012.03.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.95519996

### A.2 Comments

Window constraint satisfied.