

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2837 - L2 Version 3  
Chandra X-Ray Center

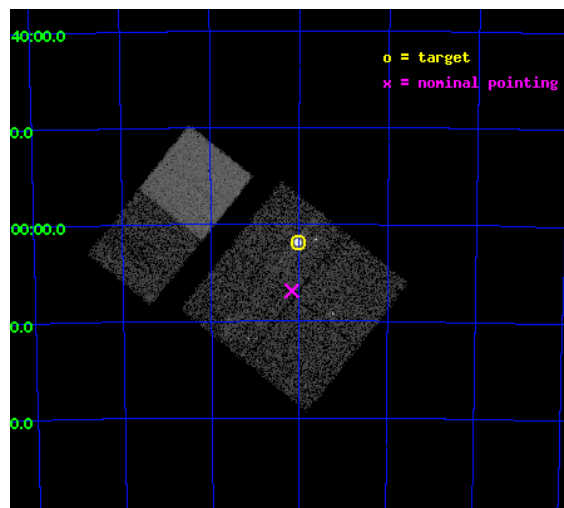
L2 Processing Date : Sep 28 2012

## 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

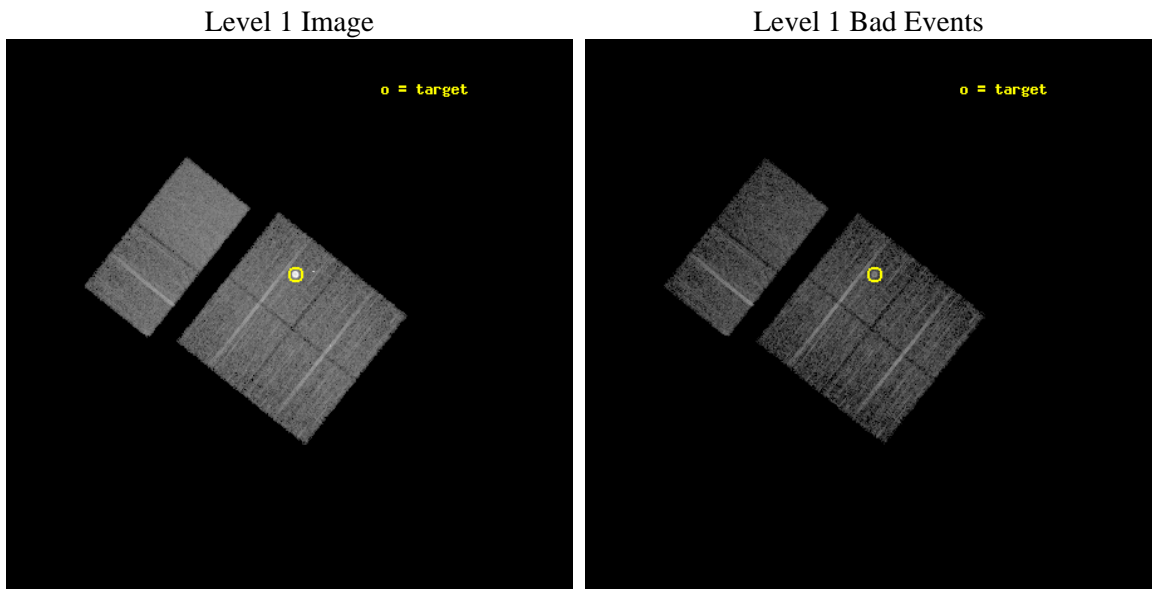
seq_num	590226	Sequence number
obs_id	2837	Observation id
title	AO3A ACIS-I CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip I3, T=120, Offsets=-4,2,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.042133475882	Nominal RA [deg]
dec_nom	-72.114718546828	Nominal Dec [deg]
roll_nom	308.55680015169	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7558.4000070244	Sum of GTIs [s]
livetime	7462.6909950134	Livetime [s]
ontime0	7558.4000070244	Sum of GTIs [s]
ontime1	7558.4000070244	Sum of GTIs [s]
ontime2	7558.4000070244	Sum of GTIs [s]
ontime3	7558.4000070244	Sum of GTIs [s]
ontime6	7558.4000070244	Sum of GTIs [s]
ontime7	7558.4000070244	Sum of GTIs [s]
l2events	76888	Number of level 2 events



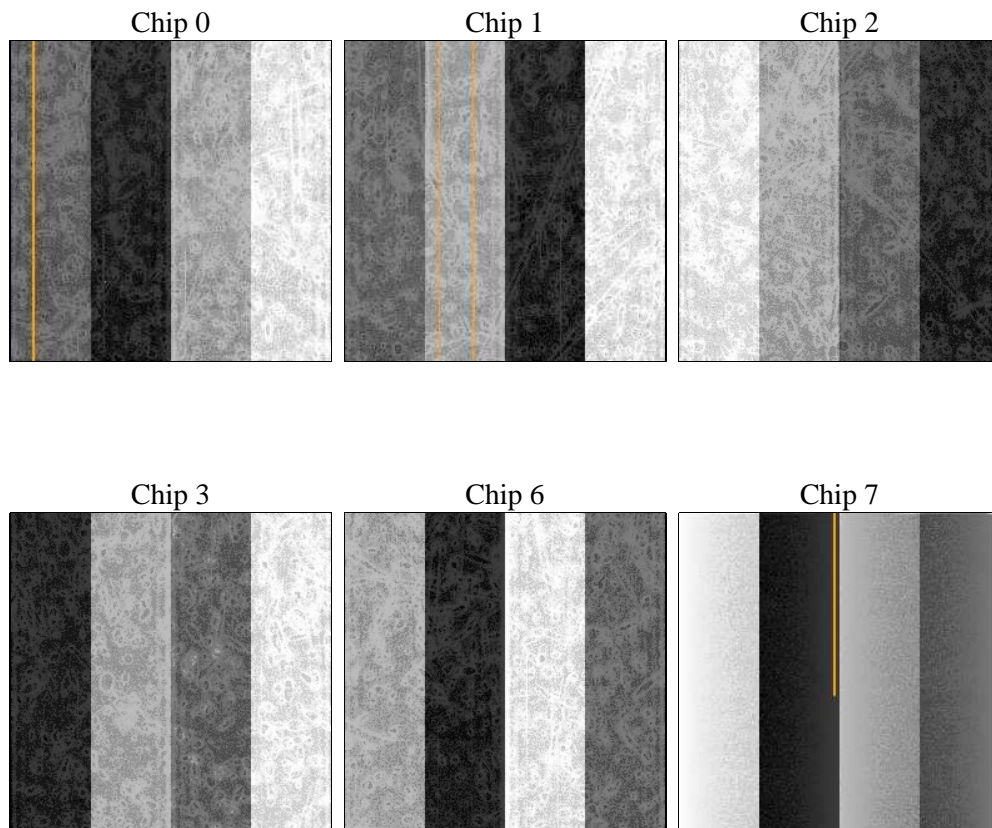
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7558.4000070244	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	7558.4000070244	Sum of GTIs [s]
date	2012-09-28T06:46:55	Date and time of file creation	ontime1	7558.4000070244	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	7558.4000070244	Sum of GTIs [s]
			ontime3	7558.4000070244	Sum of GTIs [s]
			ontime6	7558.4000070244	Sum of GTIs [s]
			ontime7	7558.4000070244	Sum of GTIs [s]
			l1events	326604	Number of level 1 events

### 2.1.4 Events

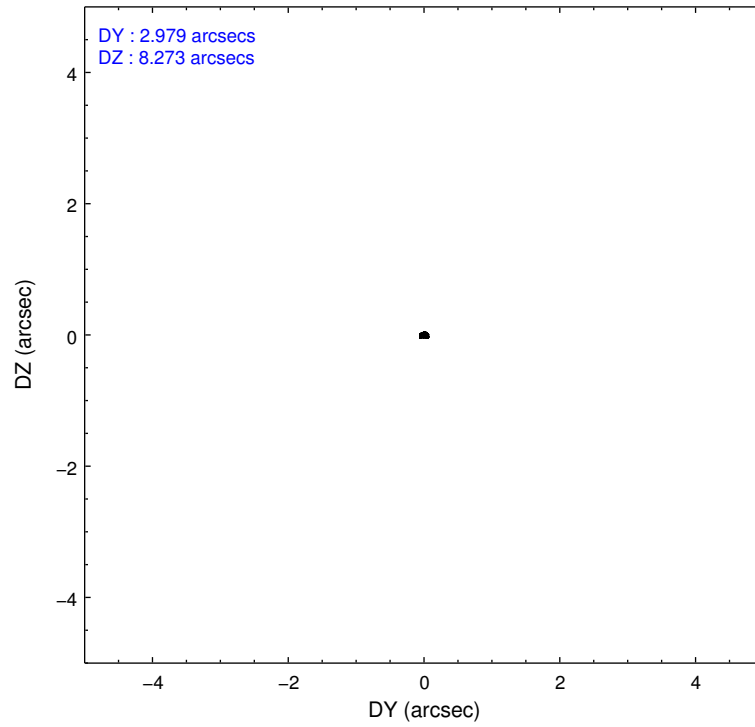
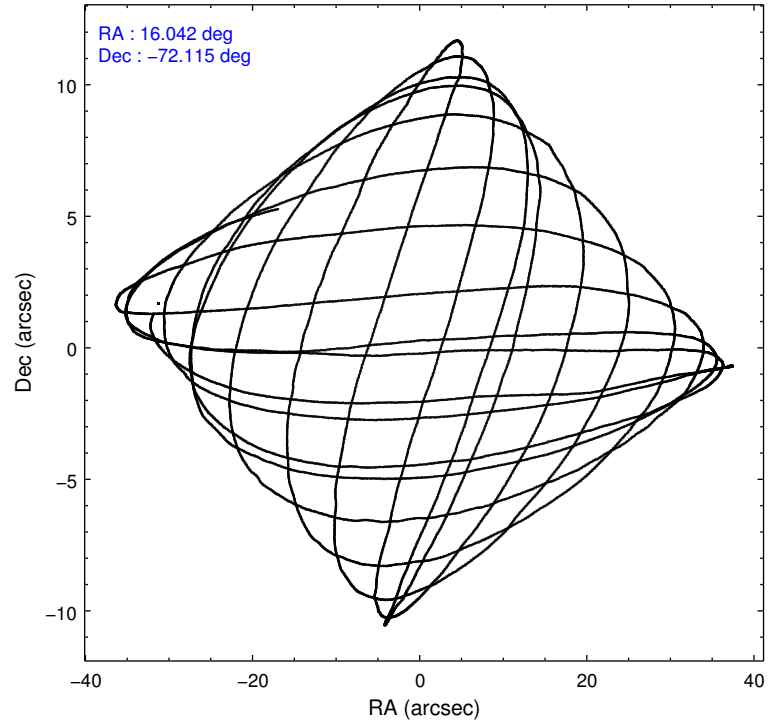
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	45633	46296	48084	74482	49570	62539	grade 0 events	2594	2994	3089	26113	2452	2535
rejected events	39699	39591	41823	42236	43682	36452		5%	6%	6%	35%	4%	4%
rejected %	86%	85%	86%	56%	88%	58%	grade 1 events	41	32	30	255	16	53
								0%	0%	0%	0%	0%	0%
							grade 2 events	1265	1298	1186	2969	1180	5136
								2%	2%	2%	3%	2%	8%
							grade 3 events	565	625	502	953	548	2430
								1%	1%	1%	1%	1%	3%
							grade 4 events	503	624	525	981	567	2331
								1%	1%	1%	1%	1%	3%
							grade 5 events	1785	1895	1588	1943	2162	5932
								3%	4%	3%	2%	4%	9%
							grade 6 events	1012	1170	964	1257	1148	13684
								2%	2%	2%	1%	2%	21%
							grade 7 events	37868	37658	40200	40011	41497	30438
								82%	81%	83%	53%	83%	48%

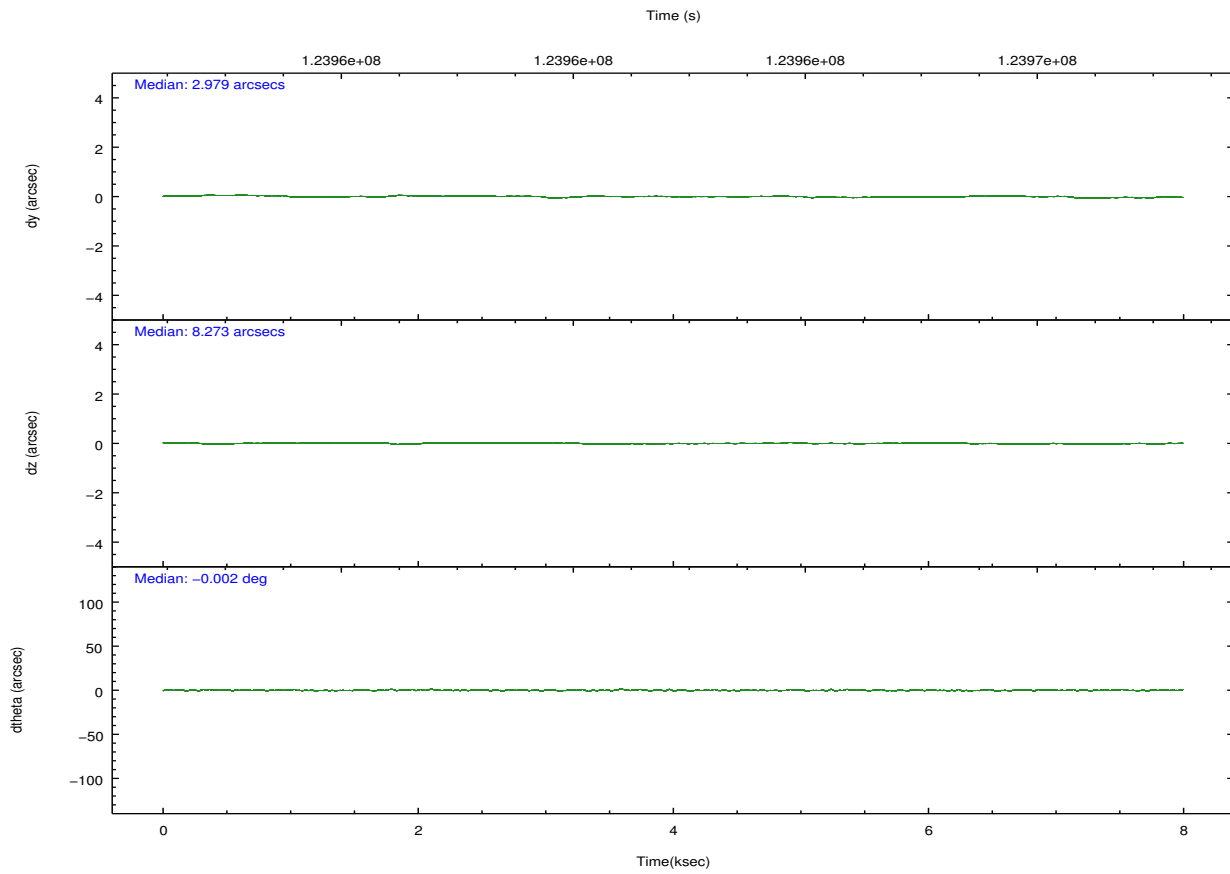
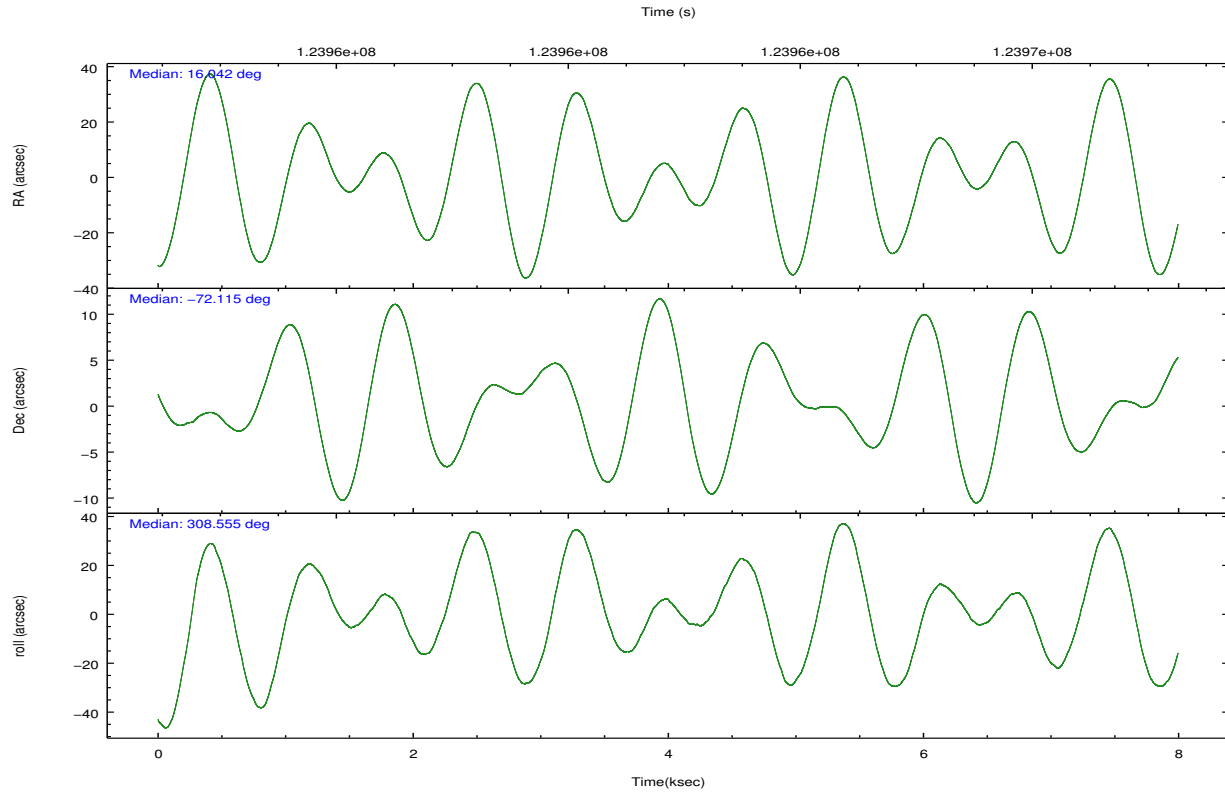


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	15.959105	16.04213347588239	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.104695	-72.11471854682796	Alternating exposures requested	N	N
[deg] Pointing Roll	308.269104	308.5568001516875	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	123552064.184000	123552064.184000			
[s] Window stop time (MET)	126144064.184000	126144064.184000			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	123959059.184000	123958682.8208			
Observation start date	2001-12-05T17:03:15	2001-12-05T16:58:02			
[s] Observation end time (MET)	123966859.184000	123966993.00864			
Observation end date	2001-12-05T19:13:15	2001-12-05T19:16:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



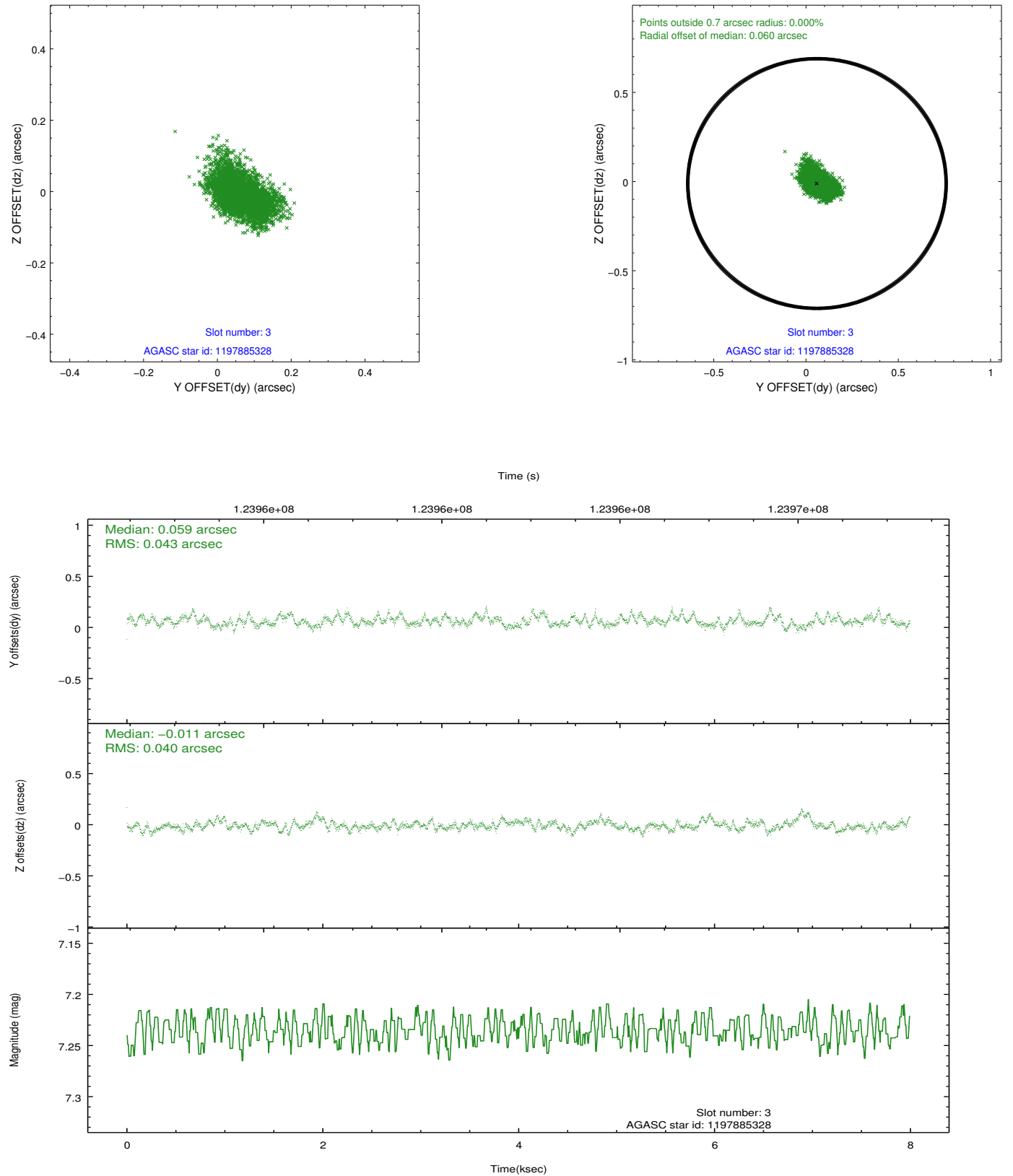


### Slot Statistics

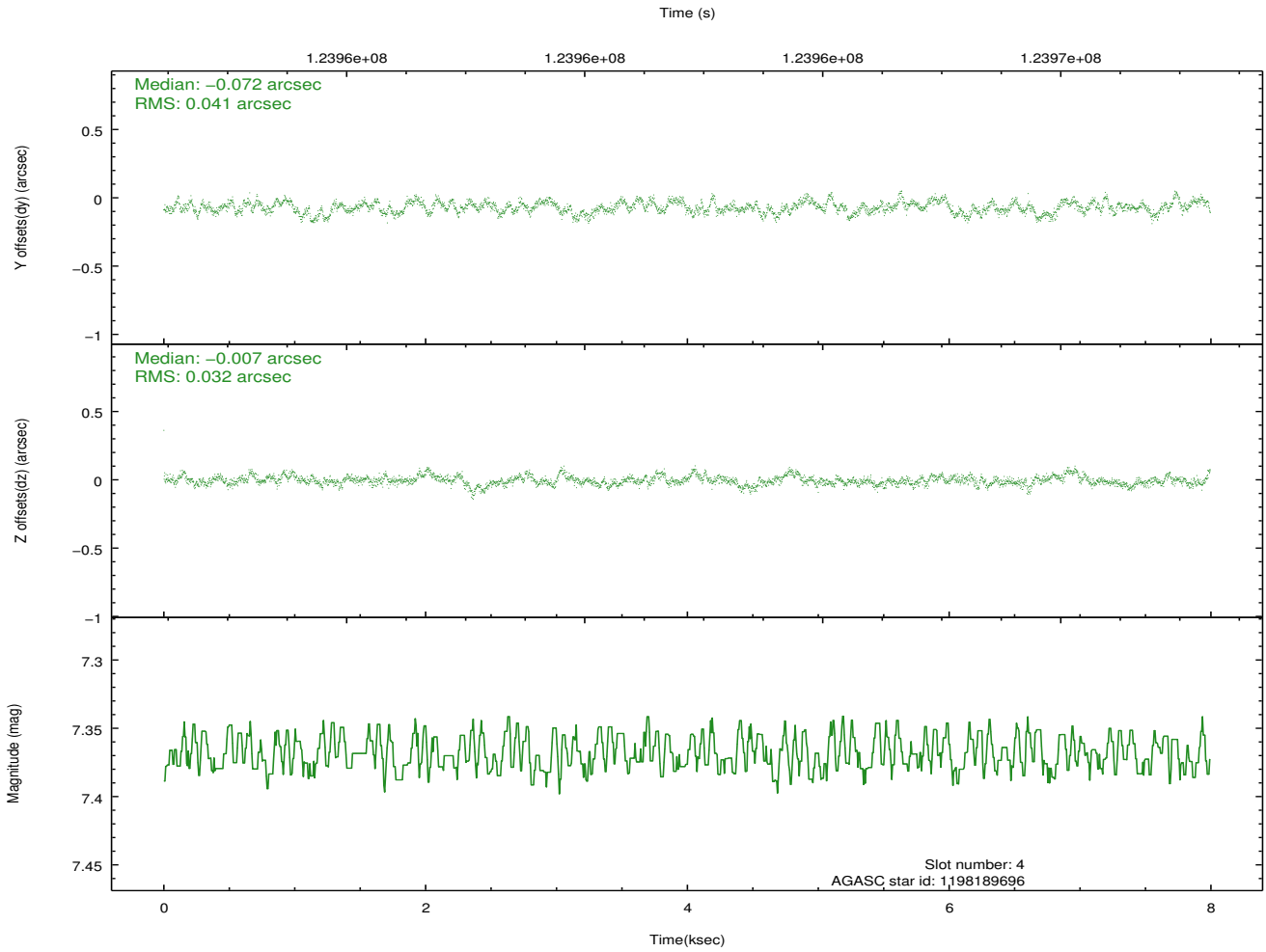
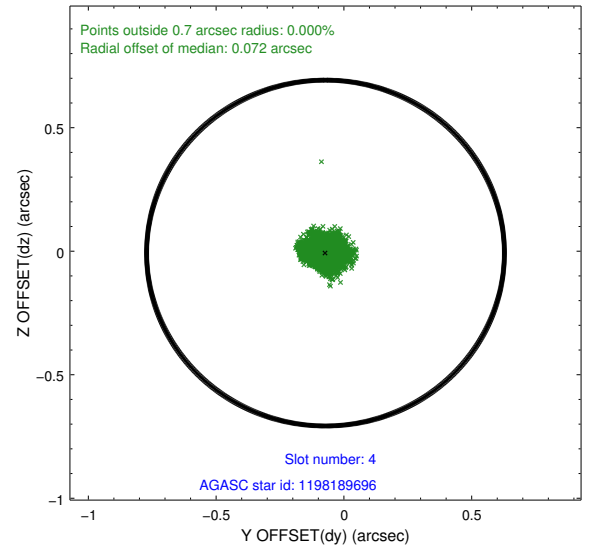
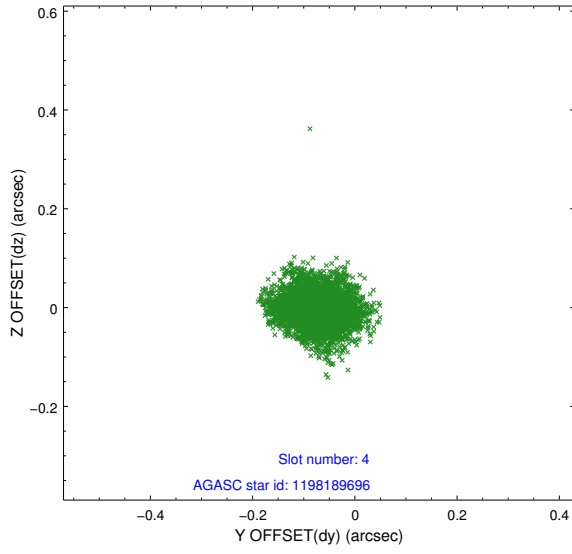
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1950	-0.027	0.063	0.006	0.010	0.000000	0.000000	936.78	-831.64
1	FID	ACIS-I-5	7.24	1950	-0.044	0.035	0.006	0.011	0.000000	0.000000	-1810.94	1065.49
2	FID	ACIS-I-6	7.26	1950	-0.021	-0.027	0.007	0.011	0.000000	0.000000	401.59	1710.71
3	GUIDE	1197885328	7.24	3901	0.059	-0.011	0.061	0.105	16.283090	-71.733943	-820.95	1113.57
4	GUIDE	1198189696	7.37	3901	-0.072	-0.007	0.056	0.090	15.223750	-72.697522	1191.26	-1942.29
5	GUIDE	1197750936	7.56	3895	0.063	-0.016	0.062	0.111	15.387940	-71.549550	-1969.59	724.70
6	GUIDE	1198283128	8.01	3900	-0.125	0.040	0.052	0.091	17.272580	-72.642428	2404.66	-100.40
7	GUIDE	1197749416	10.25	3799	0.071	-0.004	0.175	0.303	13.610513	-71.871242	-2248.07	-1575.95

## 2.4 Star Slots

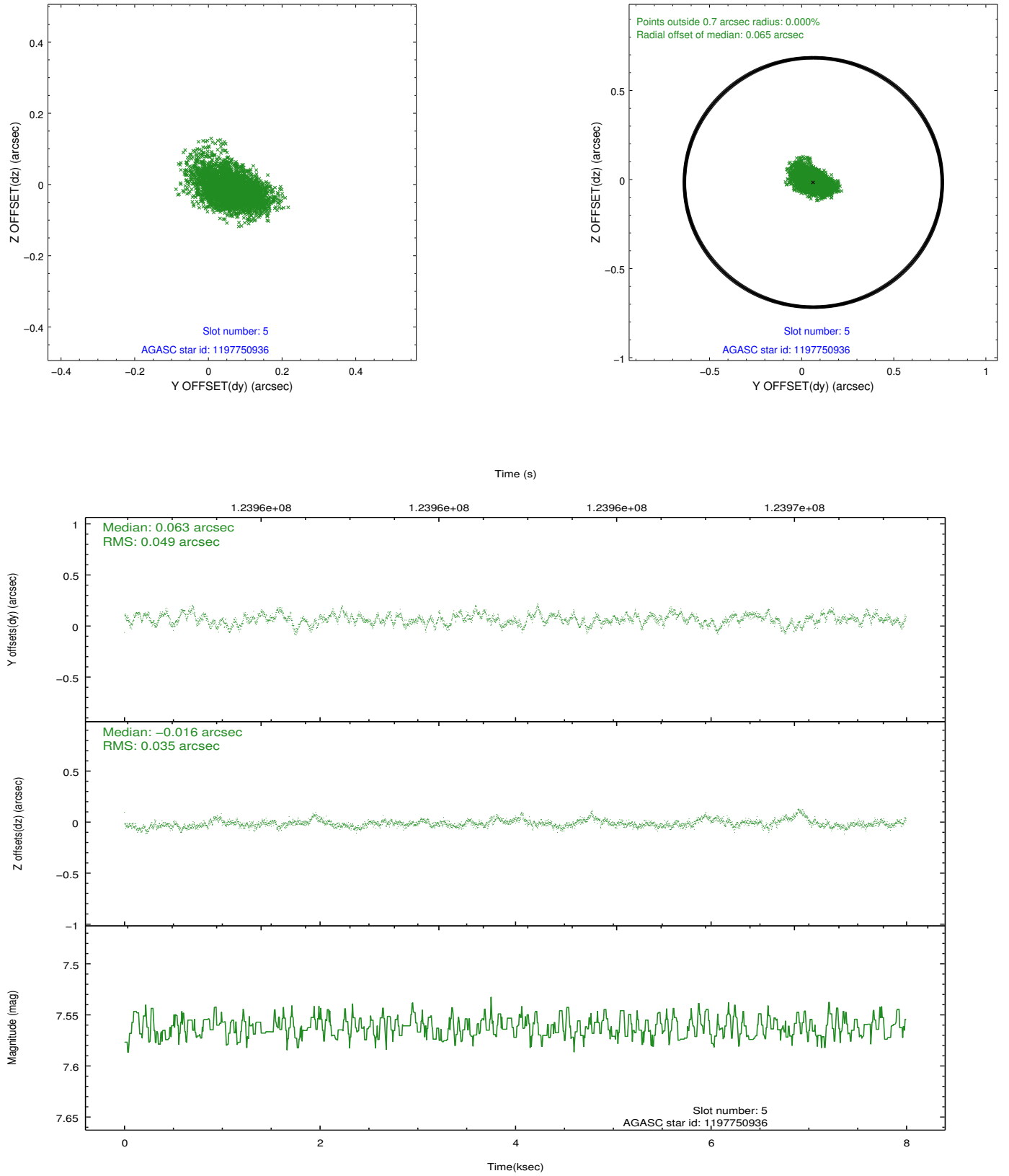
### 2.4.1 Slot 3



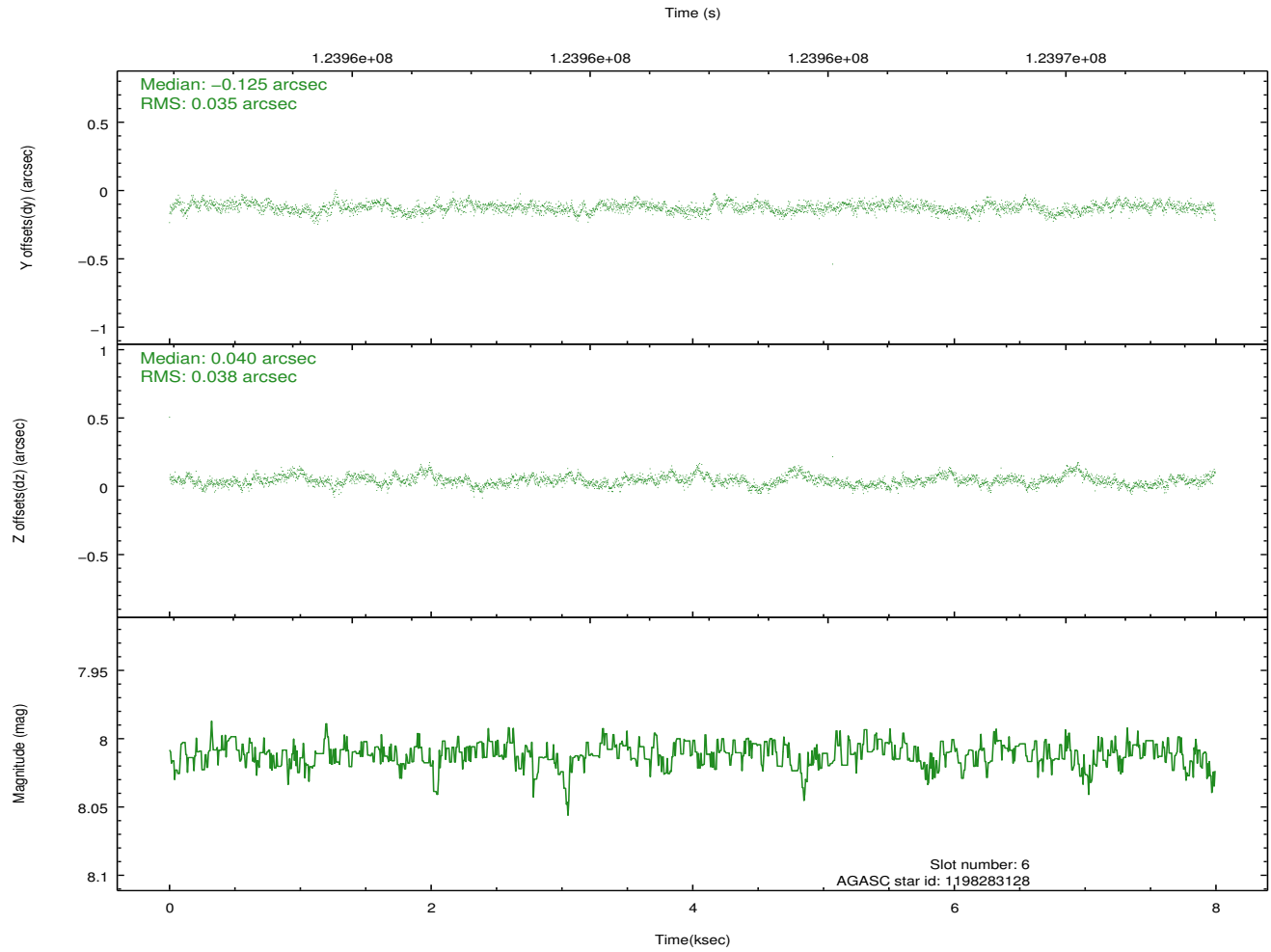
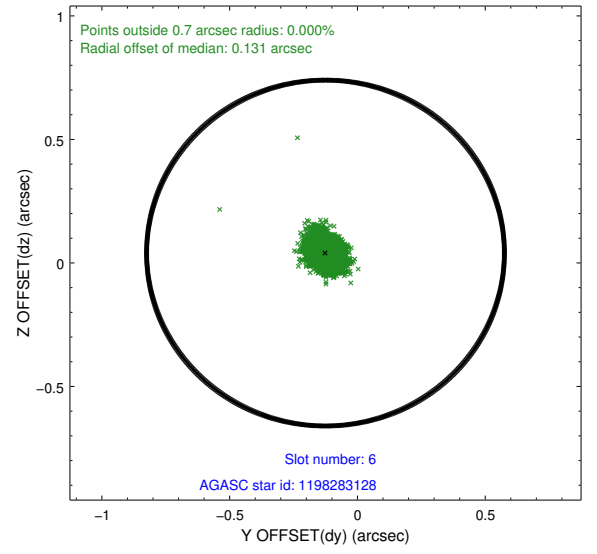
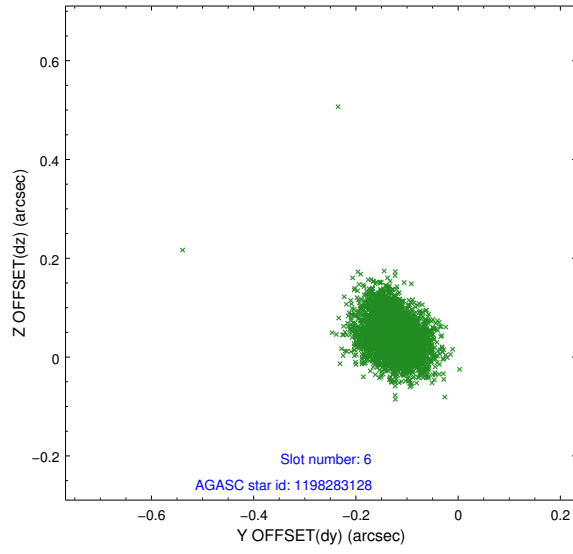
## 2.4.2 Slot 4



### 2.4.3 Slot 5

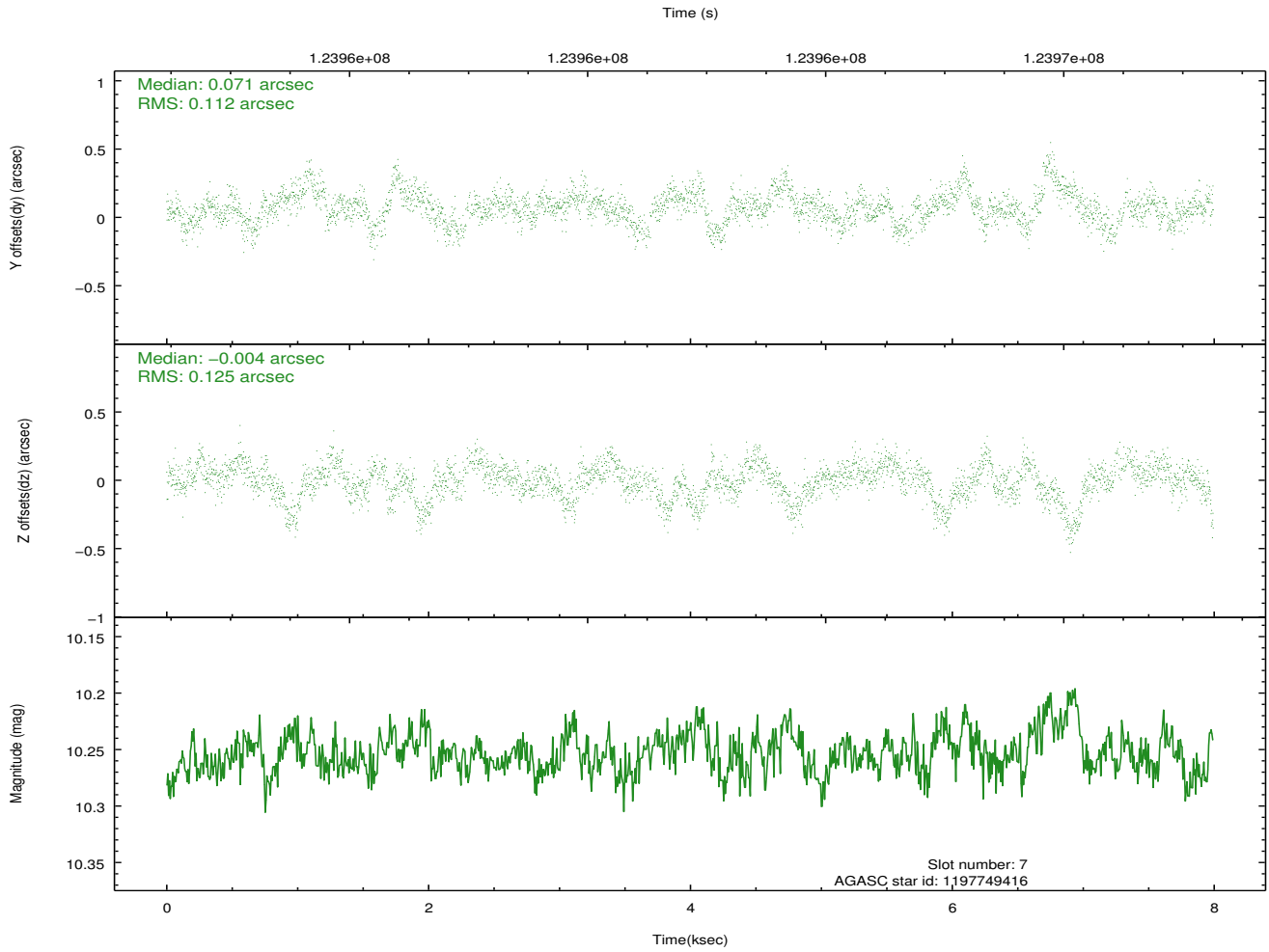
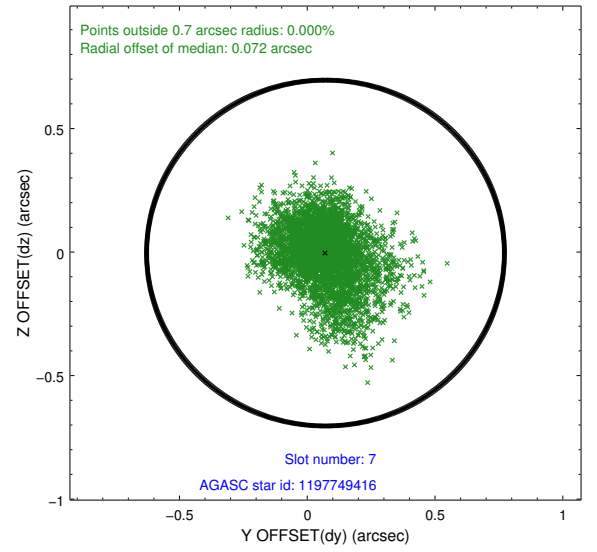
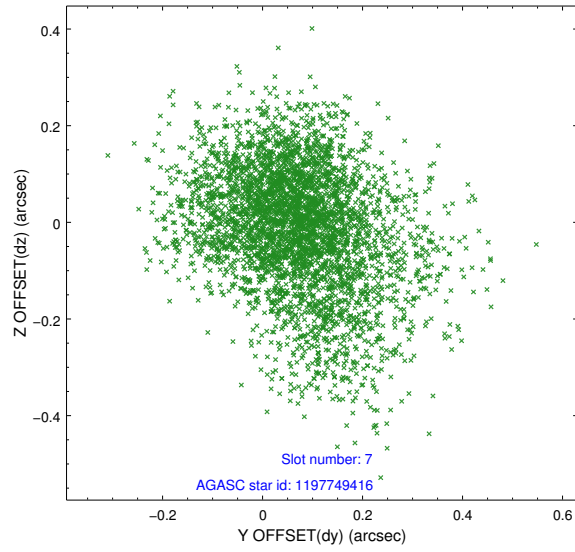


## 2.4.4 Slot 6



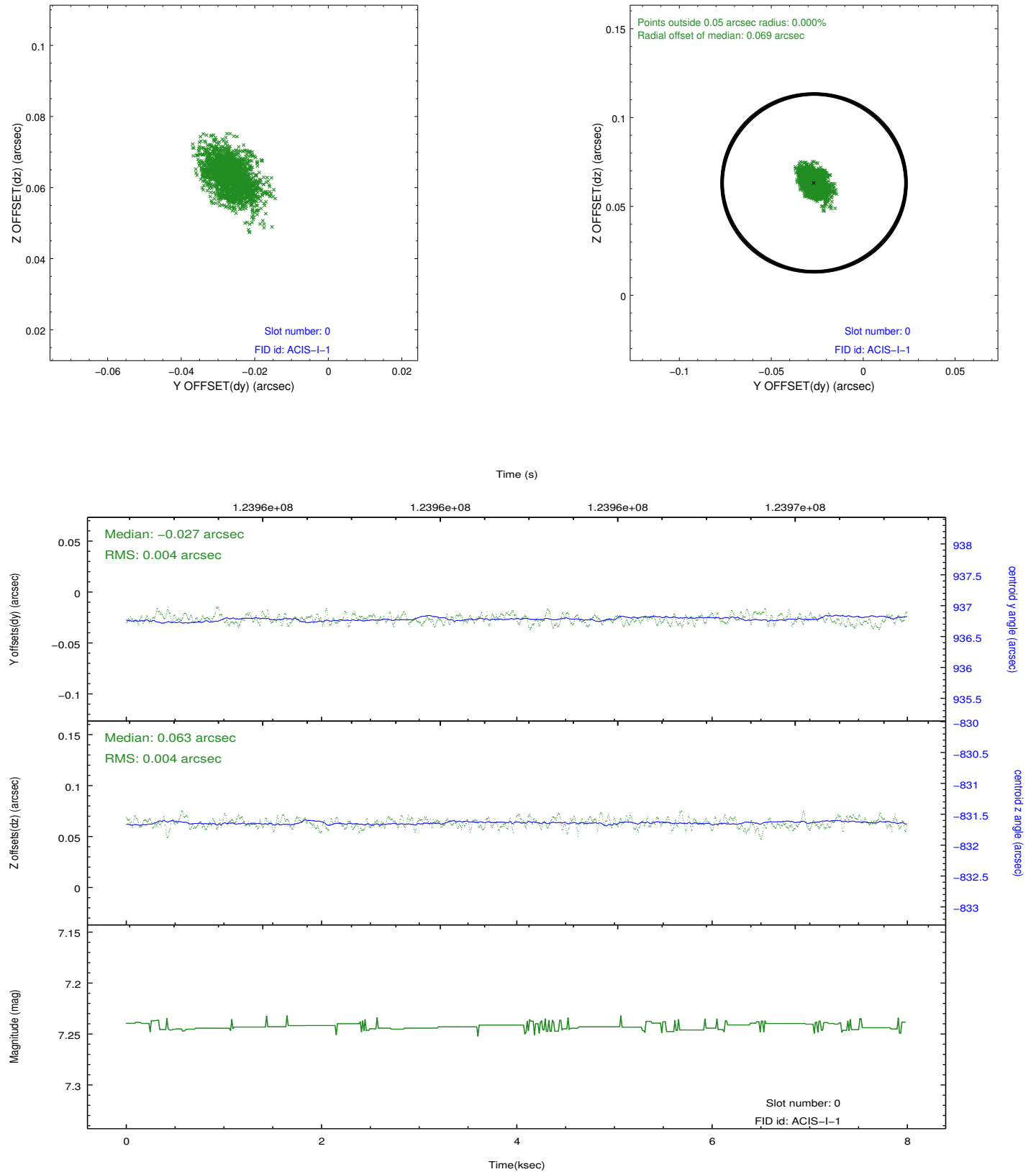


## 2.4.5 Slot 7

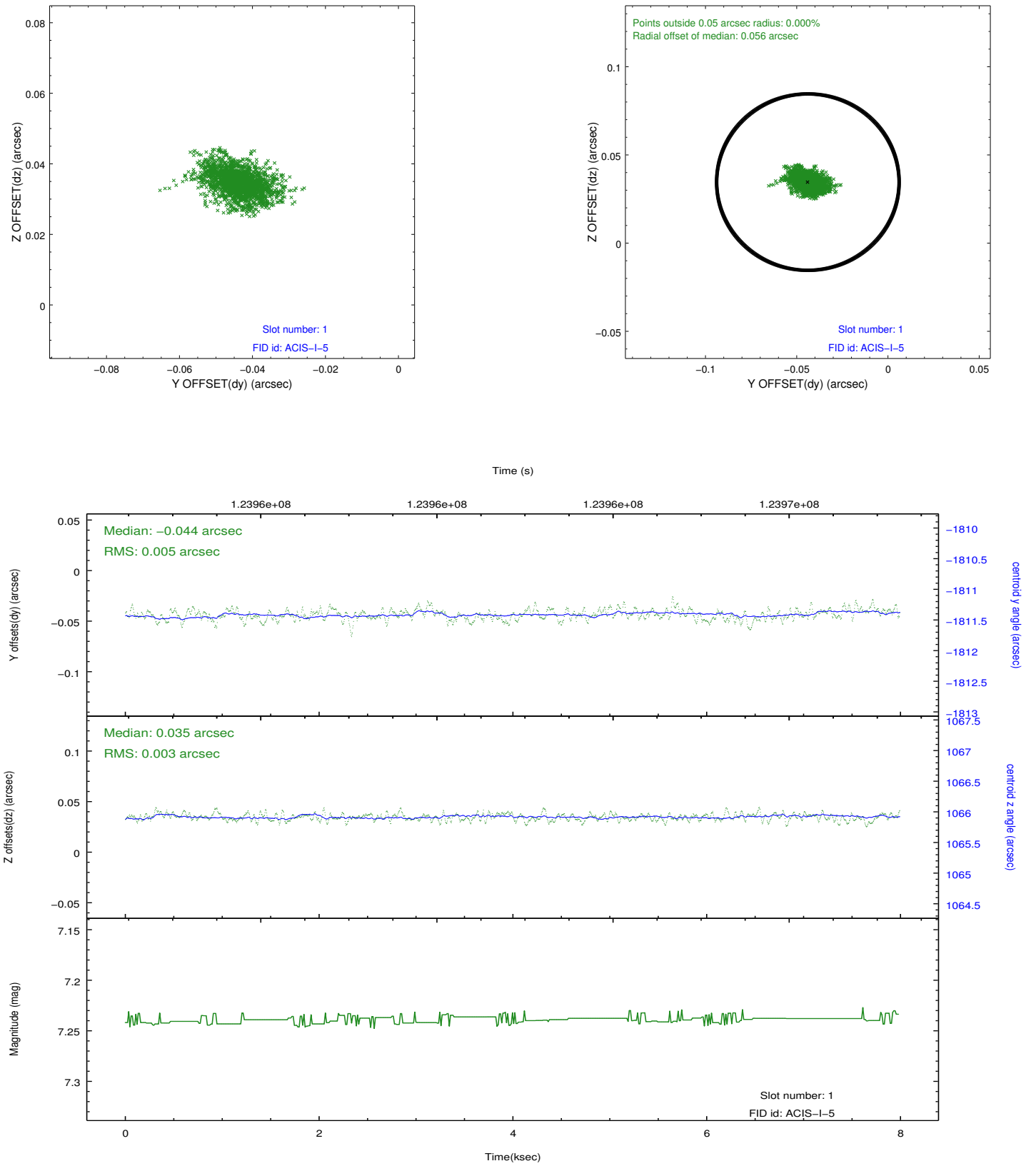


## 2.5 FID Slots

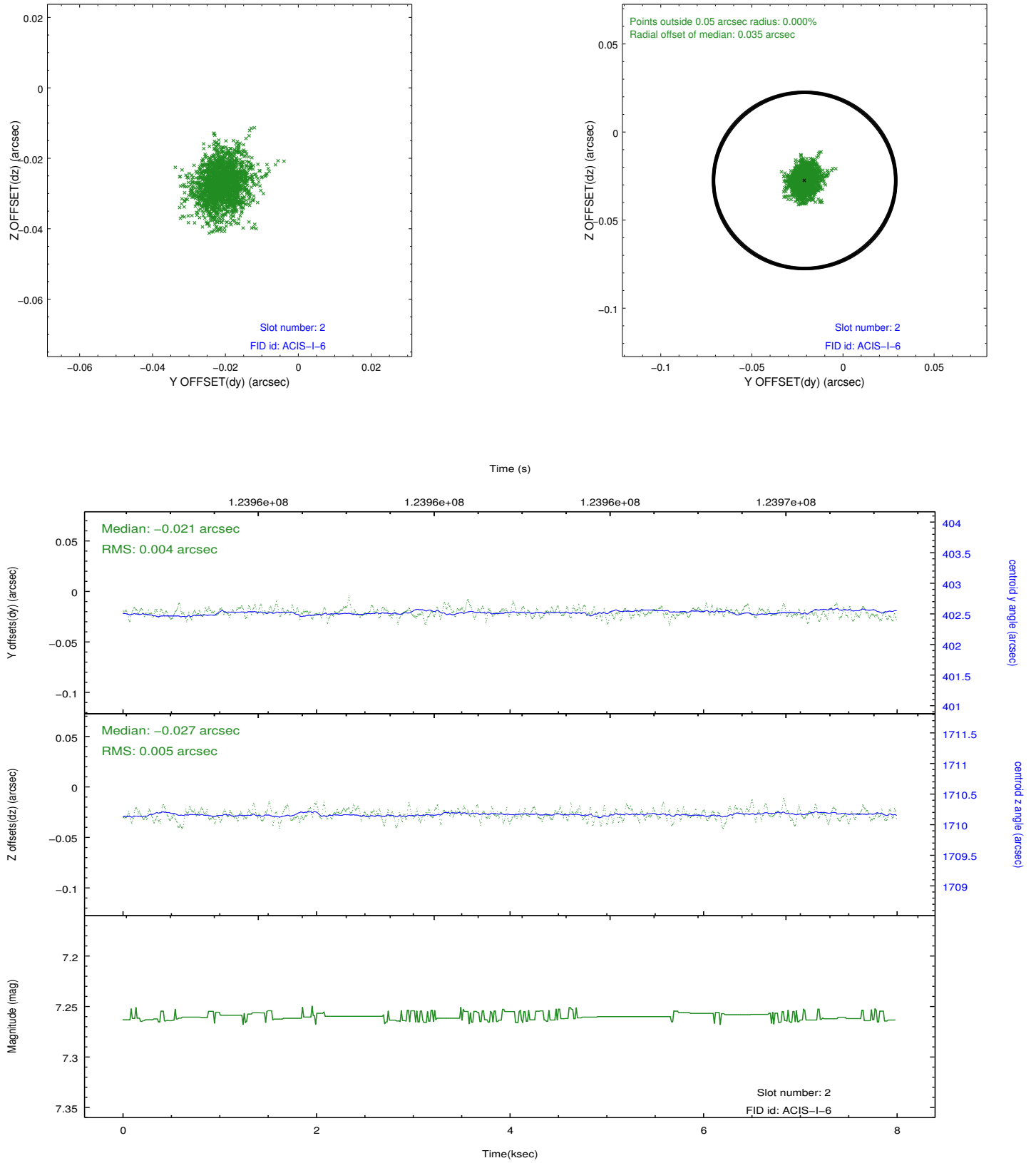
### 2.5.1 Slot 0



## 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)	2012.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.561

### A.2 Comments

Window constraint met.