

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2270 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Sep 20 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

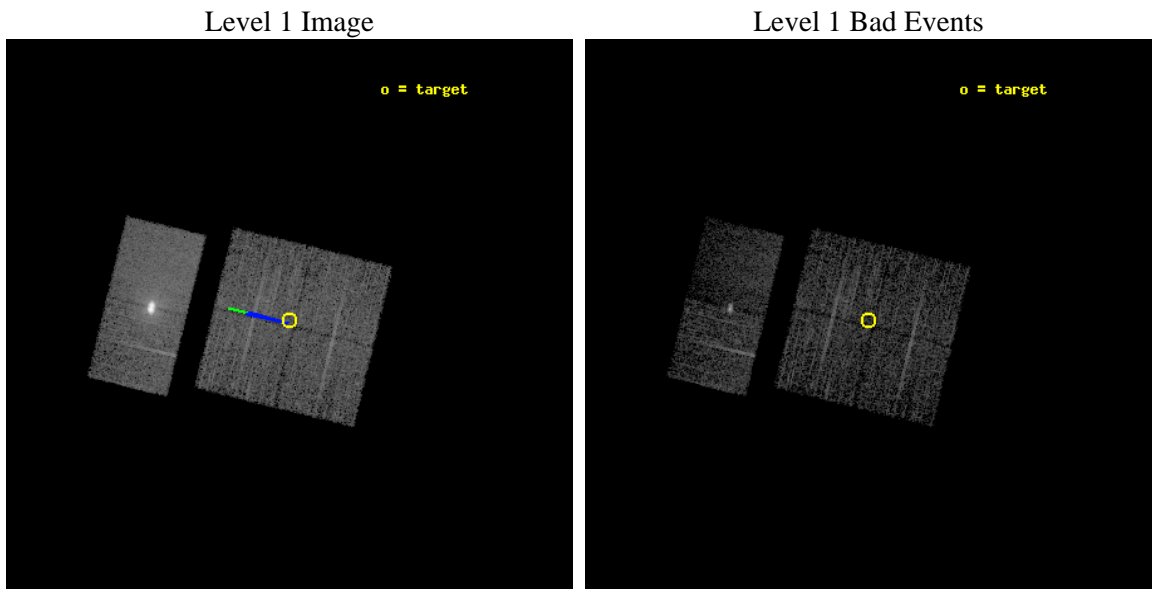
seq_num	900097	Sequence number
obs_id	2270	Observation id
title	CHANDRA SURVEY OF THE GALACTIC RIDGE AROUND THE MILKY WAY CENTER	P
observer	Prof. Q. Daniel Wang	Principal investigator
object	GCS 22	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.246	Observer's specified target RA [deg]
dec_targ	-29.537	Observer's specified target Dec [deg]
ra_nom	266.24515490601	Nominal RA [deg]
dec_nom	-29.541680538749	Nominal Dec [deg]
roll_nom	283.80727832019	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10755.194545507	Sum of GTIs [s]
livetime	10619.005796172	Livetime [s]
ontime0	10755.071425512	Sum of GTIs [s]
ontime1	10751.871495262	Sum of GTIs [s]
ontime2	10745.430554852	Sum of GTIs [s]
ontime3	10755.194545507	Sum of GTIs [s]
ontime6	10755.200010002	Sum of GTIs [s]
ontime7	10755.200010002	Sum of GTIs [s]
l2events	100212	Number of level 2 events



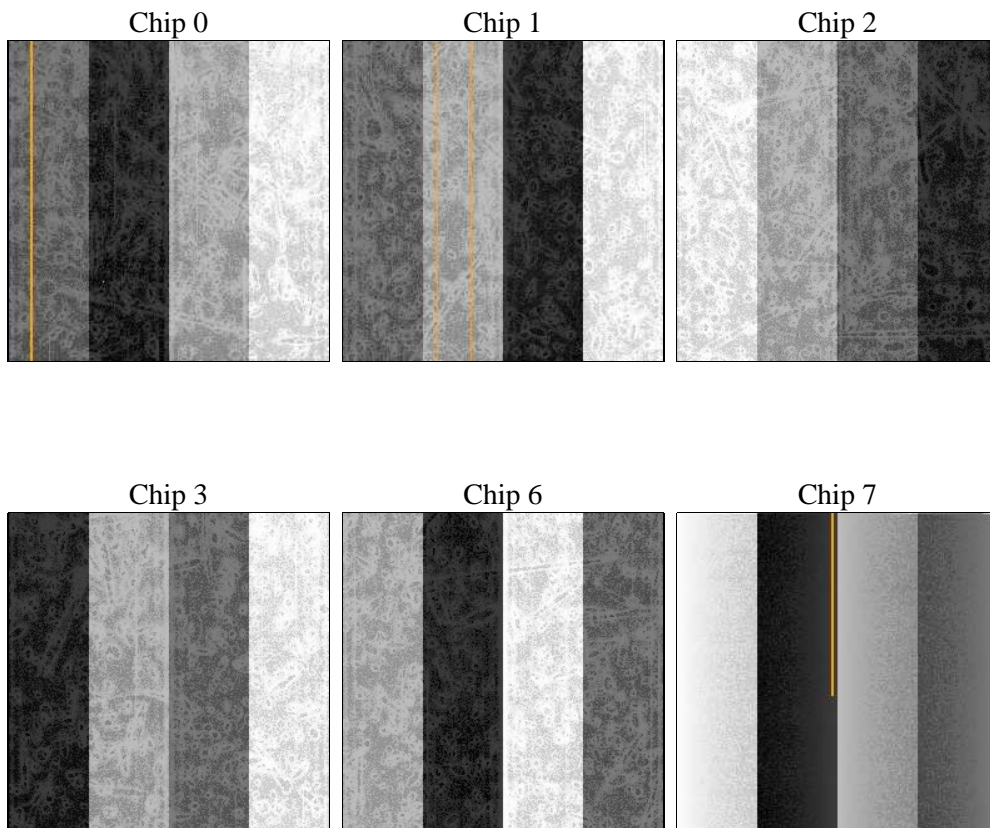
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10755.194545507	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	10755.071425512	Sum of GTIs [s]
date	2012-09-20T19:27:36	Date and time of file creation	ontime1	10751.871495262	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10745.430554852	Sum of GTIs [s]
			ontime3	10755.194545507	Sum of GTIs [s]
			ontime6	10755.200010002	Sum of GTIs [s]
			ontime7	10755.200010002	Sum of GTIs [s]
			l1events	238140	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	26230	29110	28989	30734	60548	62529	grade 0 events	2623	3733	2910	3281	22773	6285
rejected events	20730	21760	23488	24429	25583	17116		10%	12%	10%	10%	37%	10%
rejected %	79%	74%	81%	79%	42%	27%	grade 1 events	32	33	31	35	276	76
								0%	0%	0%	0%	0%	0%
							grade 2 events	1086	1392	981	1198	5257	9718
								4%	4%	3%	3%	8%	15%
							grade 3 events	457	555	423	502	1814	4618
								1%	1%	1%	1%	2%	7%
							grade 4 events	447	569	426	463	1789	4464
								1%	1%	1%	1%	2%	7%
							grade 5 events	1164	1204	1012	1268	1541	4133
								4%	4%	3%	4%	2%	6%
							grade 6 events	888	1110	764	864	3348	20363
								3%	3%	2%	2%	5%	32%
							grade 7 events	19533	20514	22442	23123	23750	12872
								74%	70%	77%	75%	39%	20%

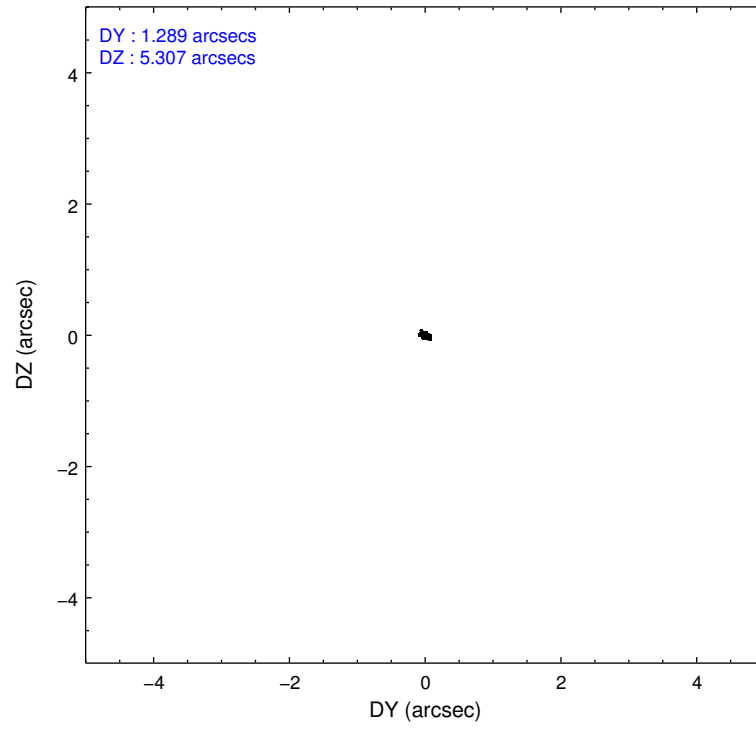
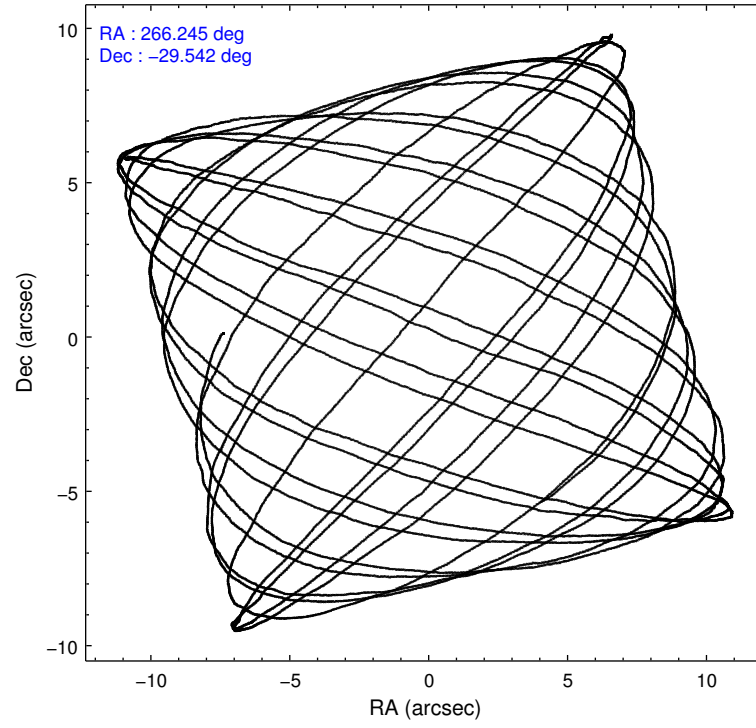


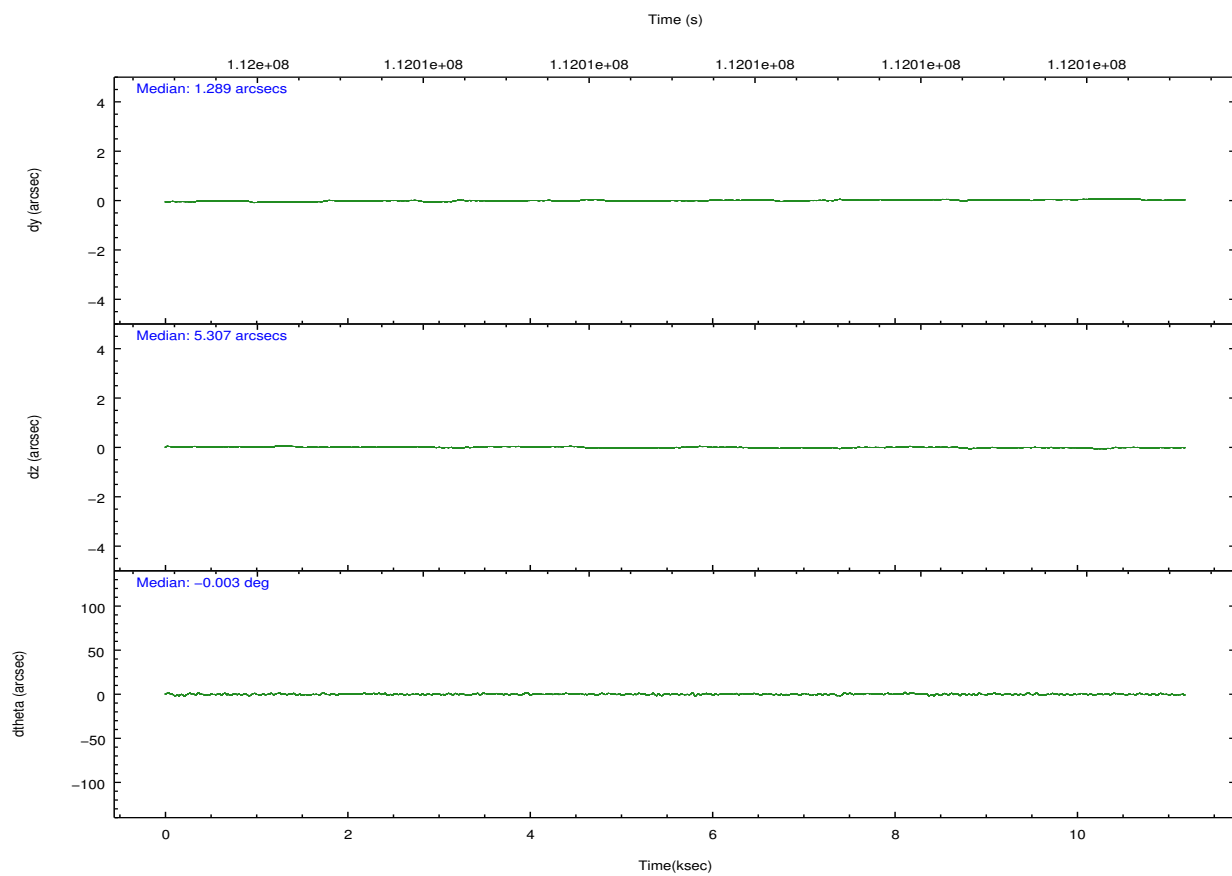
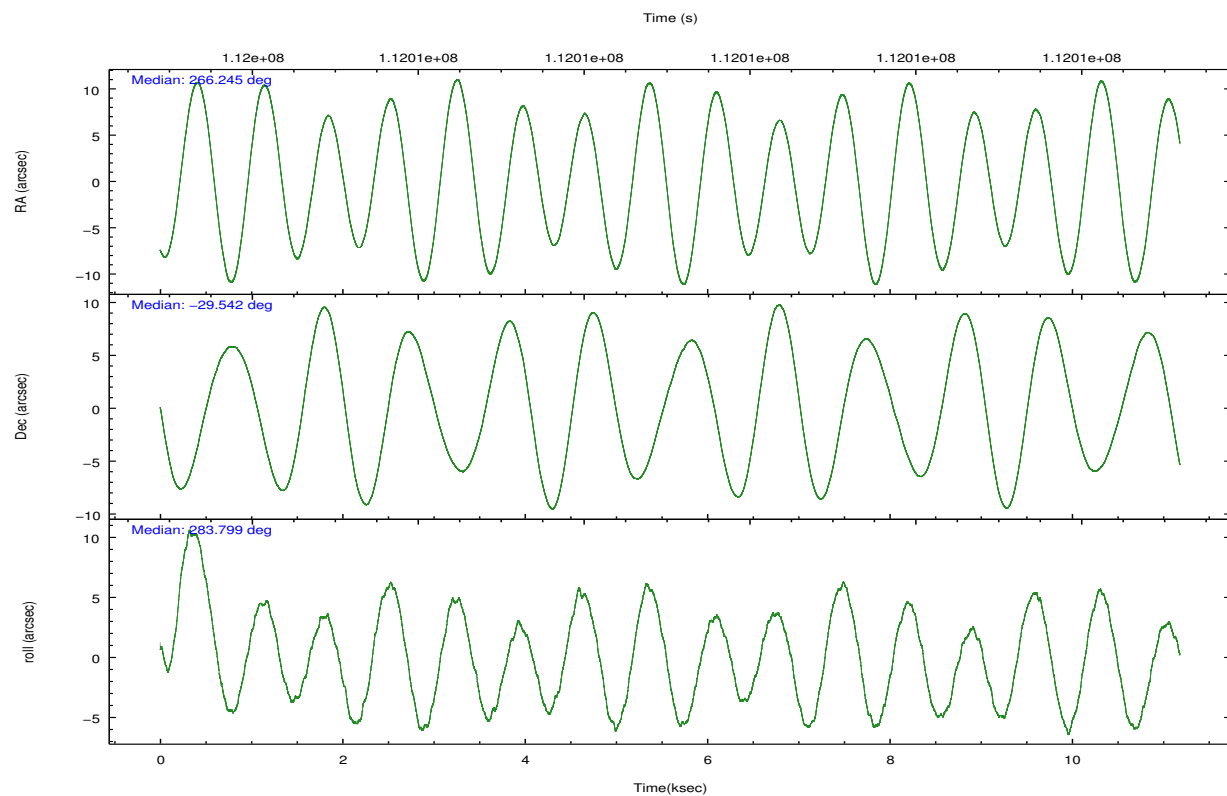
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	266.223279	266.2451549060093
[deg] Pointing Dec	-29.521888	-29.541680538749
[deg] Pointing Roll	283.587809	283.8072783201923
[deg] Roll angle	283.600000	283.600000
[deg] Roll tolerance	2.000000	2.000000
Roll constraint allows 180D rotation	N	N
[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)	112003626.184000	112003249.93449
Observation start date	2001-07-20T08:06:02	2001-07-20T08:00:49
[s] Observation end time (MET)	112014626.184000	112014760.17244
Observation end date	2001-07-20T11:09:22	2001-07-20T11:12:40
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



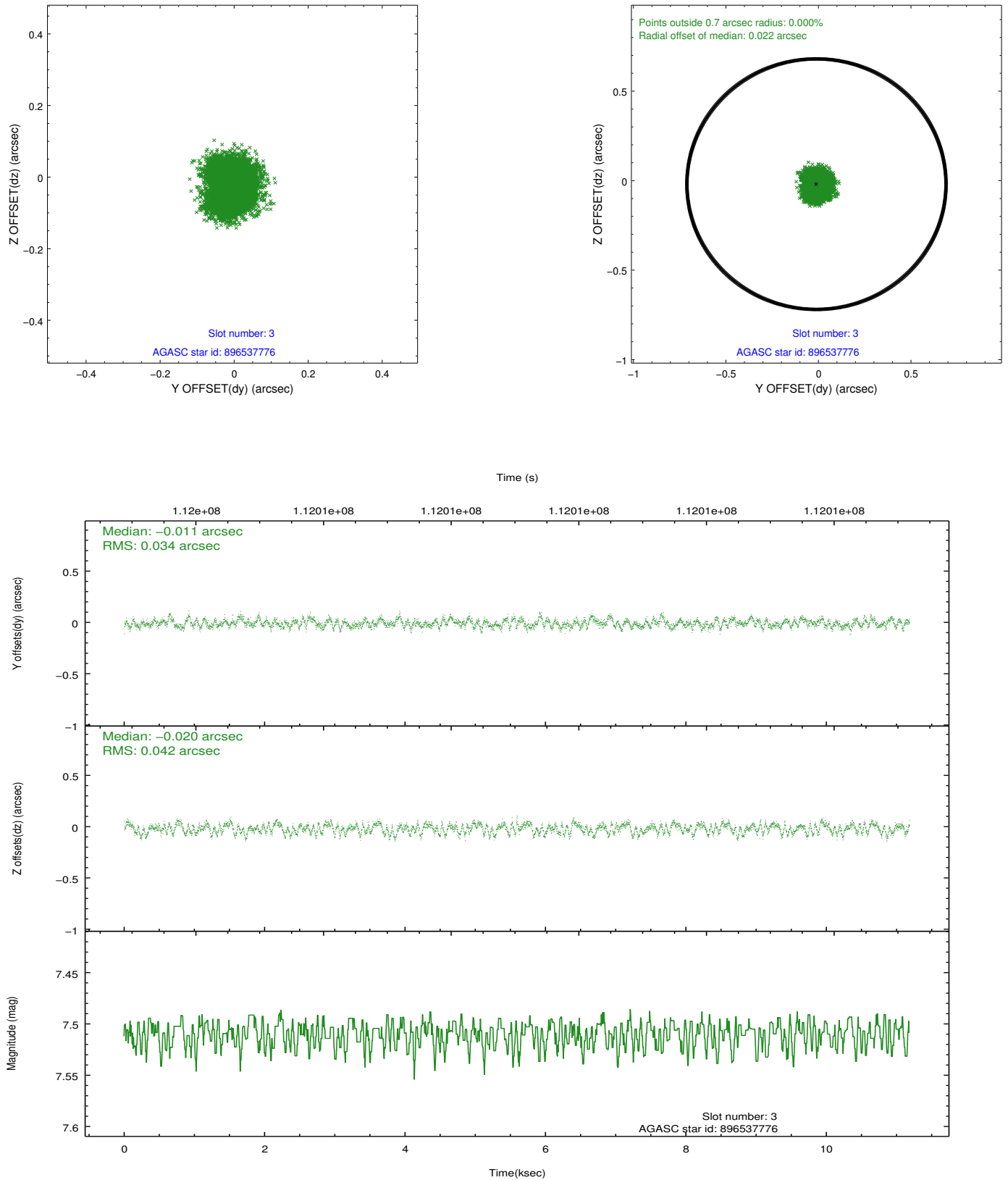


### Slot Statistics

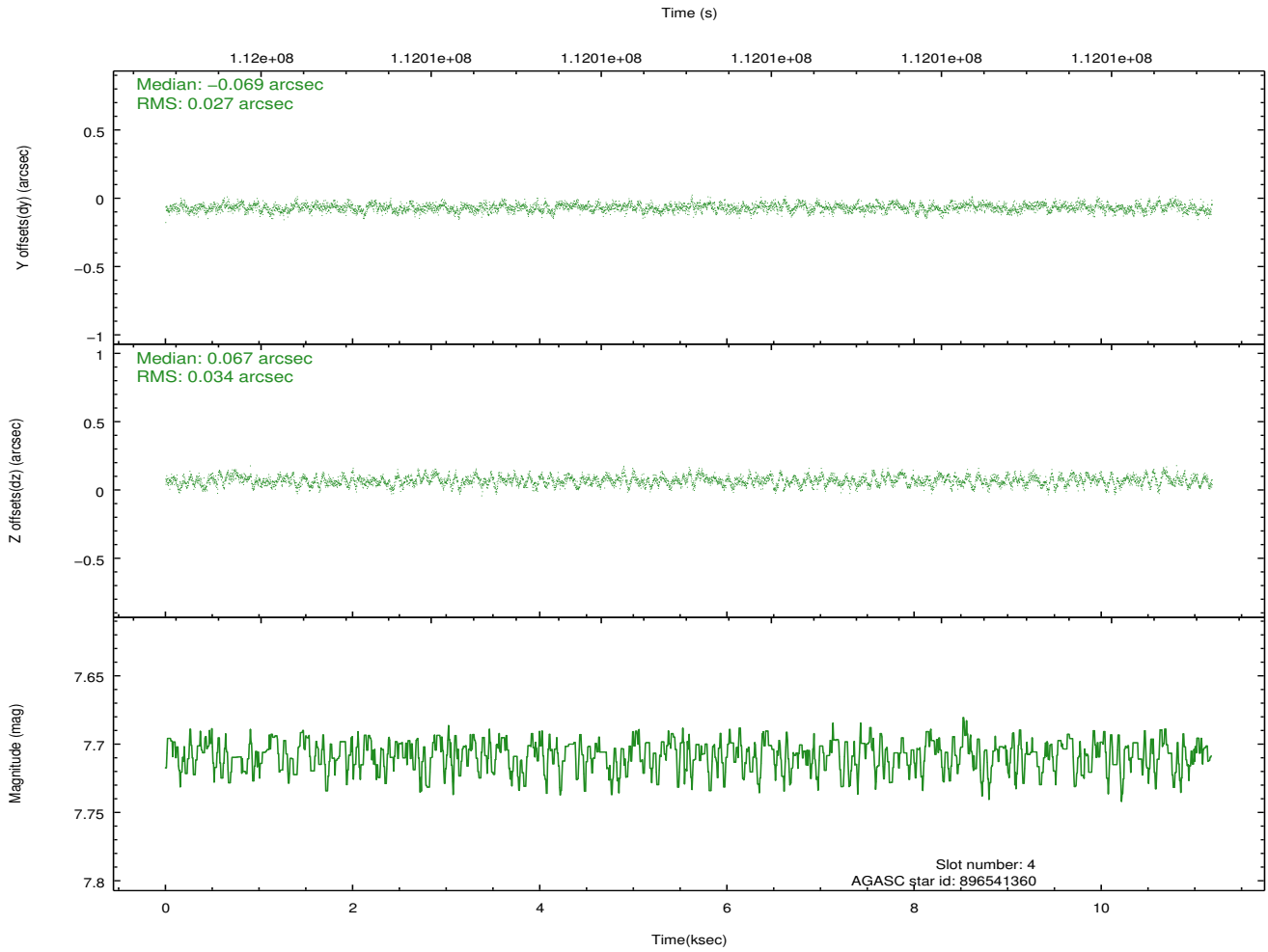
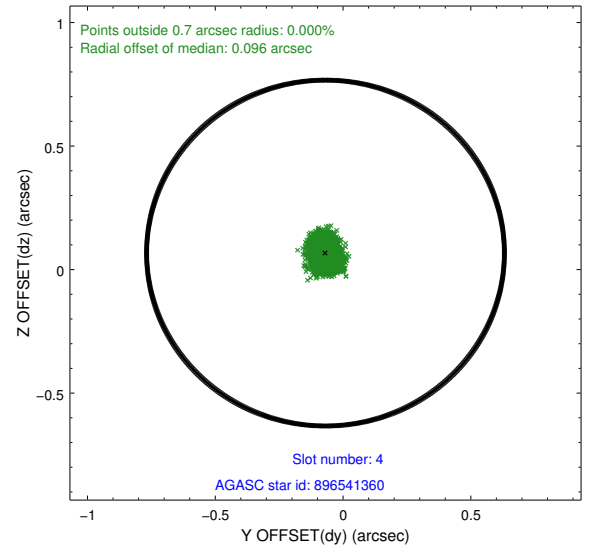
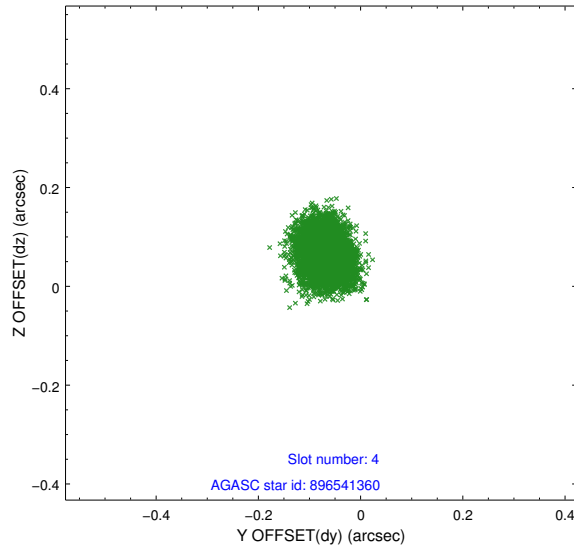
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	2728	-0.023	-0.050	0.008	0.015	0.000000	0.000000	-755.64	-835.08
1	FID	ACIS-I-4	7.19	2726	-0.036	0.036	0.006	0.010	0.000000	0.000000	2158.18	1070.98
2	FID	ACIS-I-5	7.23	2727	-0.042	0.083	0.008	0.014	0.000000	0.000000	-1808.91	1069.36
3	GUIDE	896537776	7.51	5453	-0.011	-0.020	0.059	0.090	266.655684	-29.665673	822.52	1193.16
4	GUIDE	896541360	7.71	5454	-0.069	0.067	0.046	0.074	266.684478	-29.453744	103.19	1463.01
5	GUIDE	896540808	7.50	5454	-0.066	0.056	0.072	0.107	265.985401	-29.308604	-921.66	-544.96
6	GUIDE	896536320	8.97	5455	0.041	-0.015	0.066	0.108	266.369048	-29.307026	-644.95	626.73
7	GUIDE	966924920	8.10	5455	0.117	-0.083	0.071	0.126	265.875401	-30.176961	2039.09	-1606.01

## 2.4 Star Slots

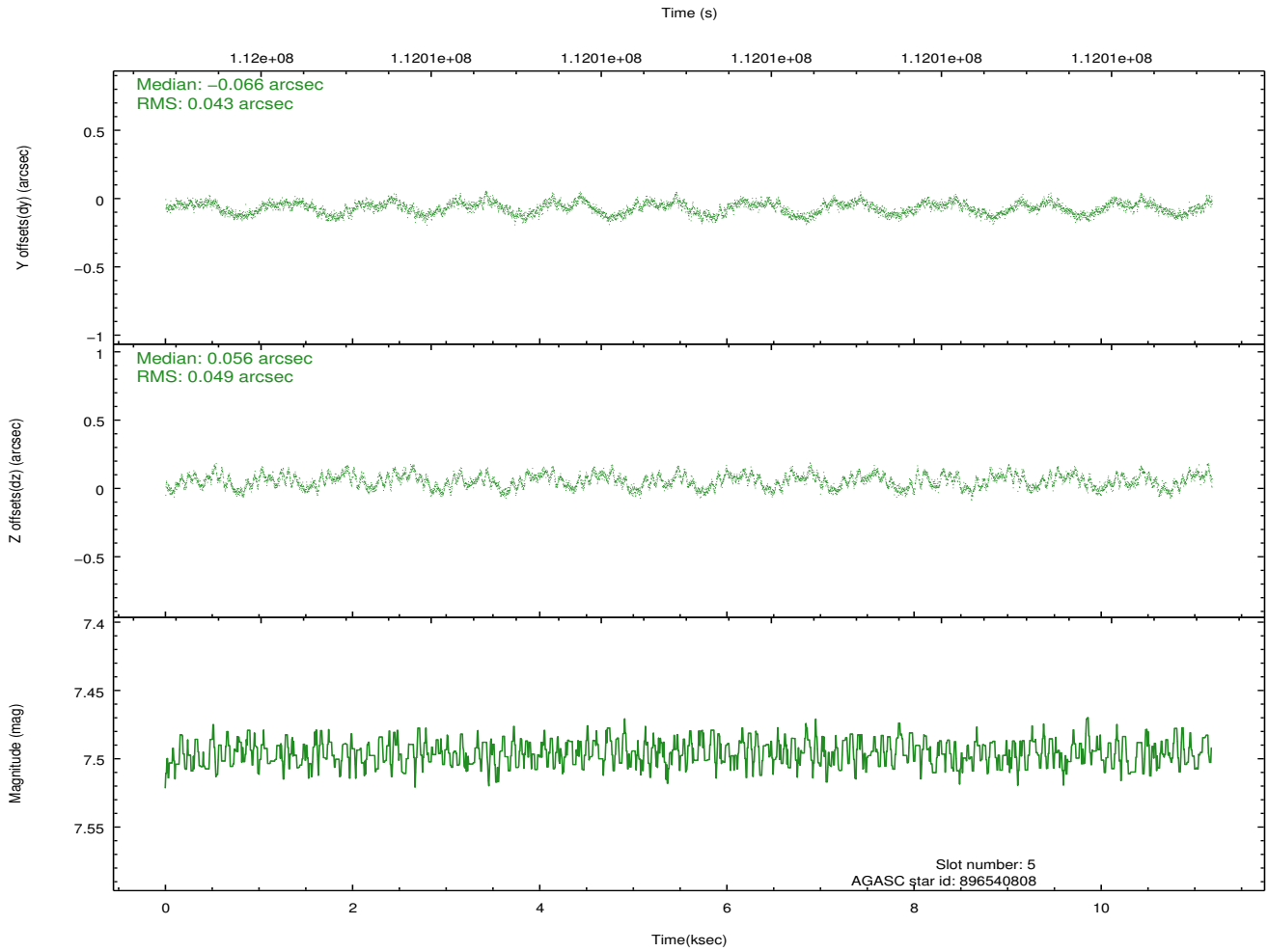
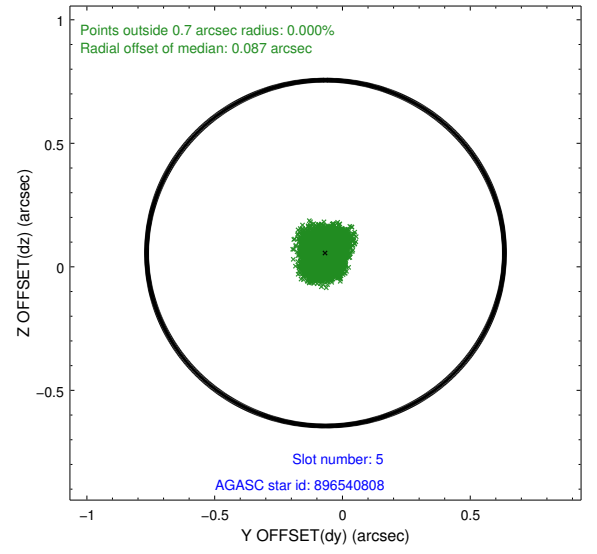
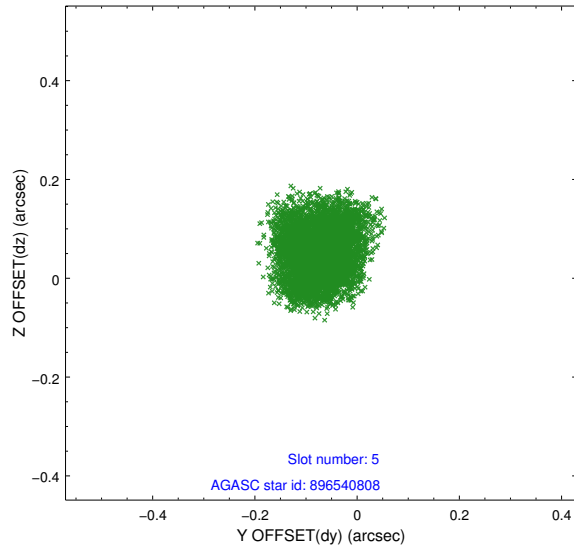
### 2.4.1 Slot 3



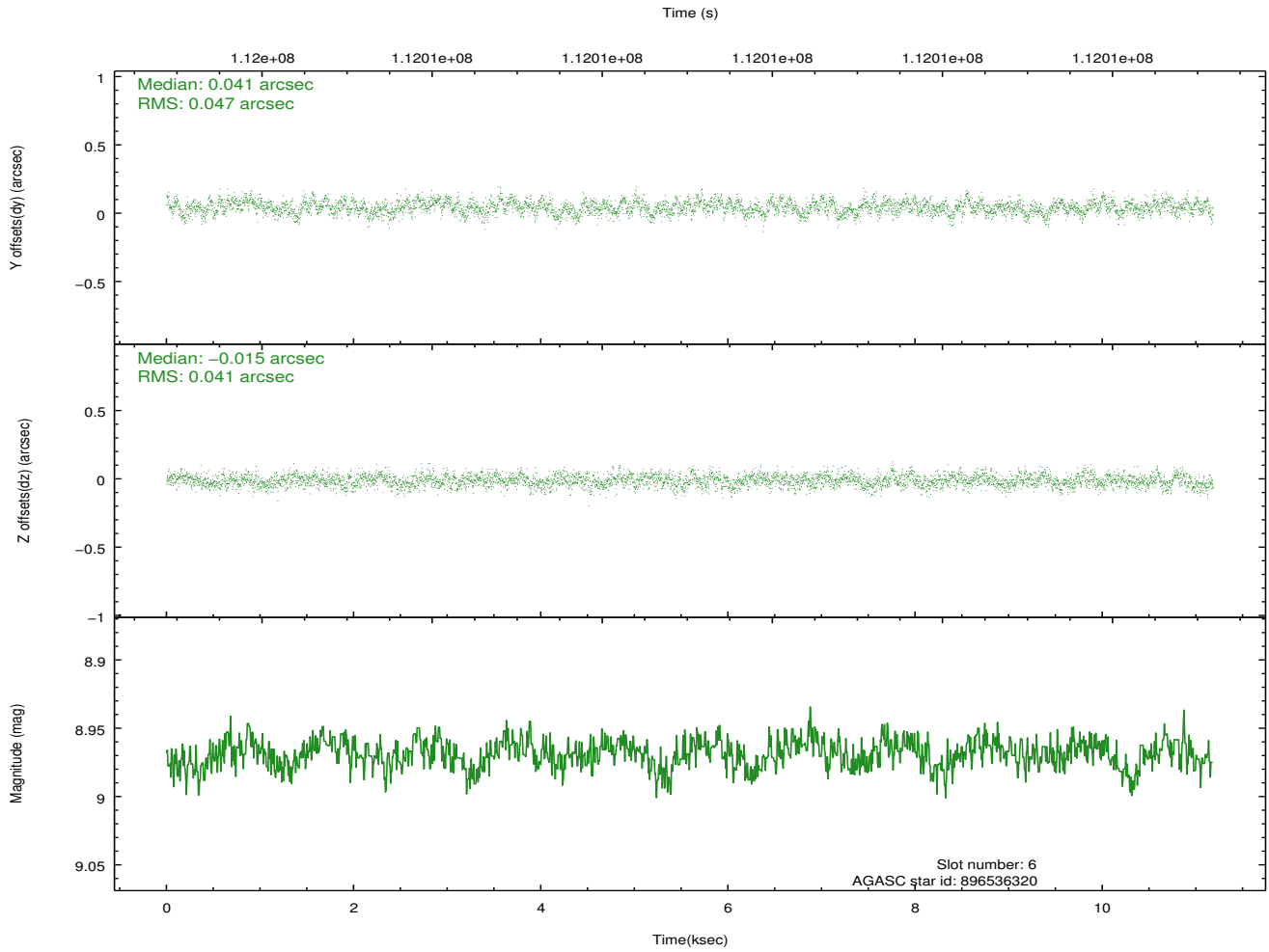
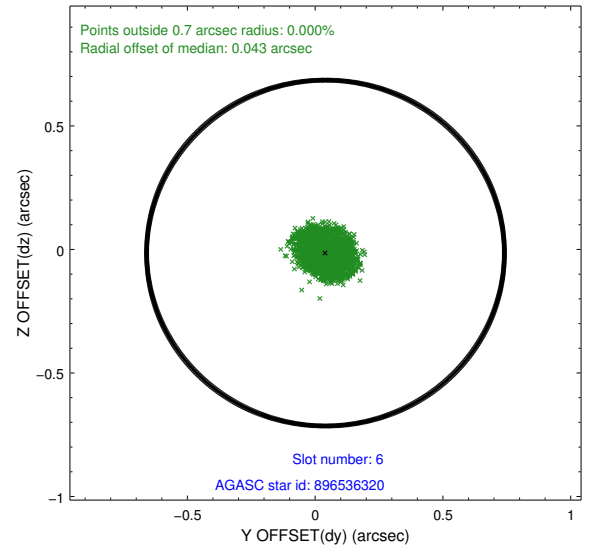
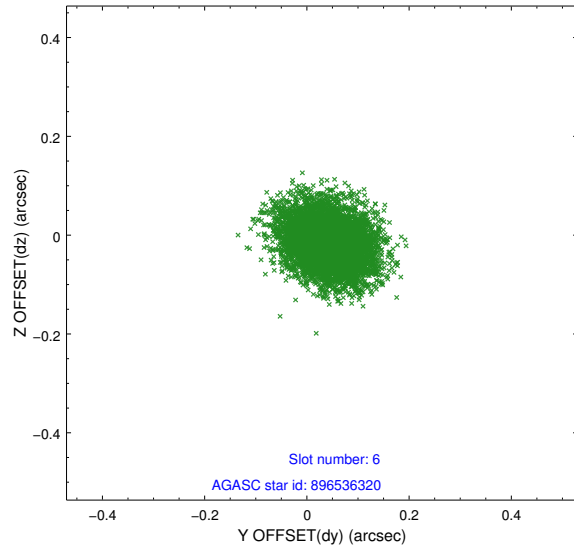
## 2.4.2 Slot 4



### 2.4.3 Slot 5

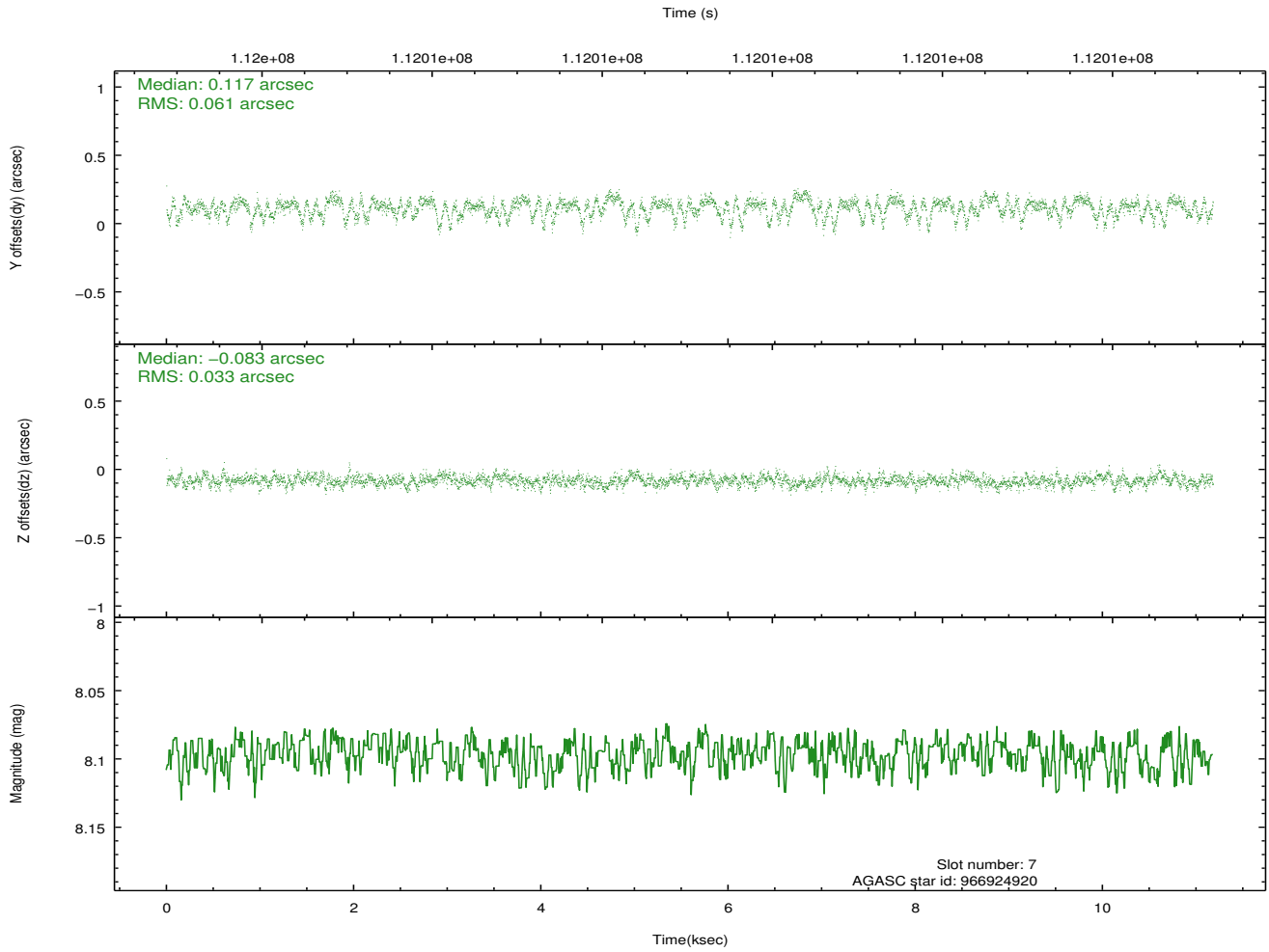
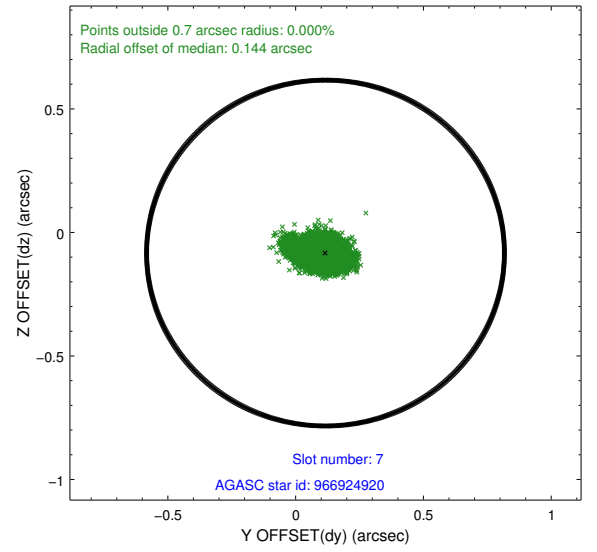
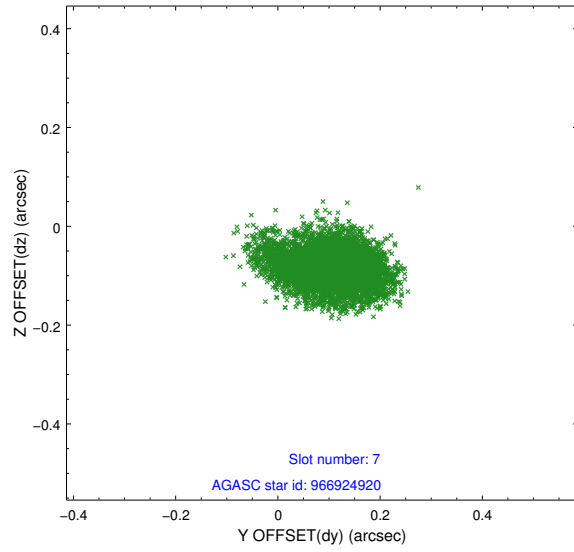


## 2.4.4 Slot 6



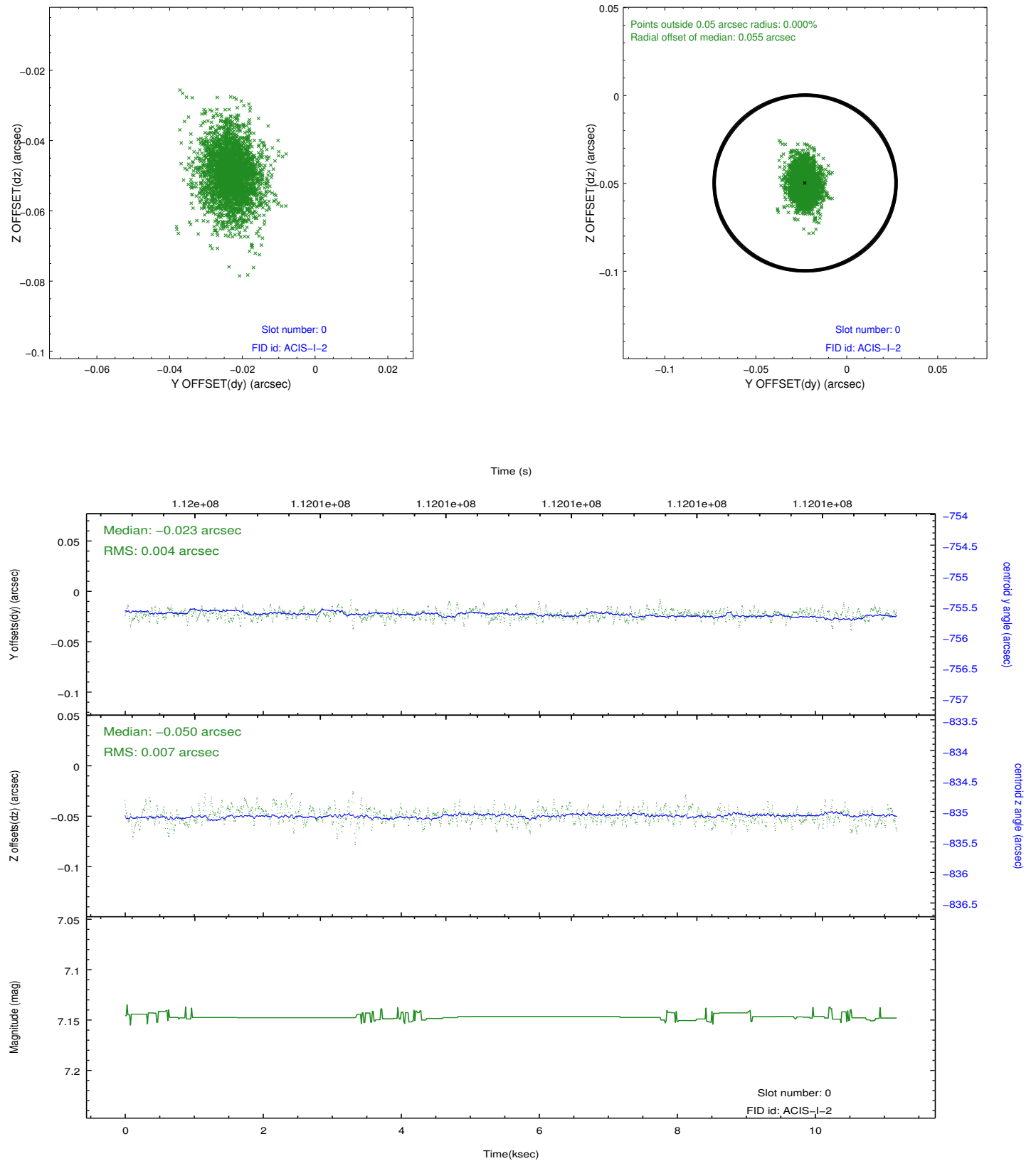


## 2.4.5 Slot 7

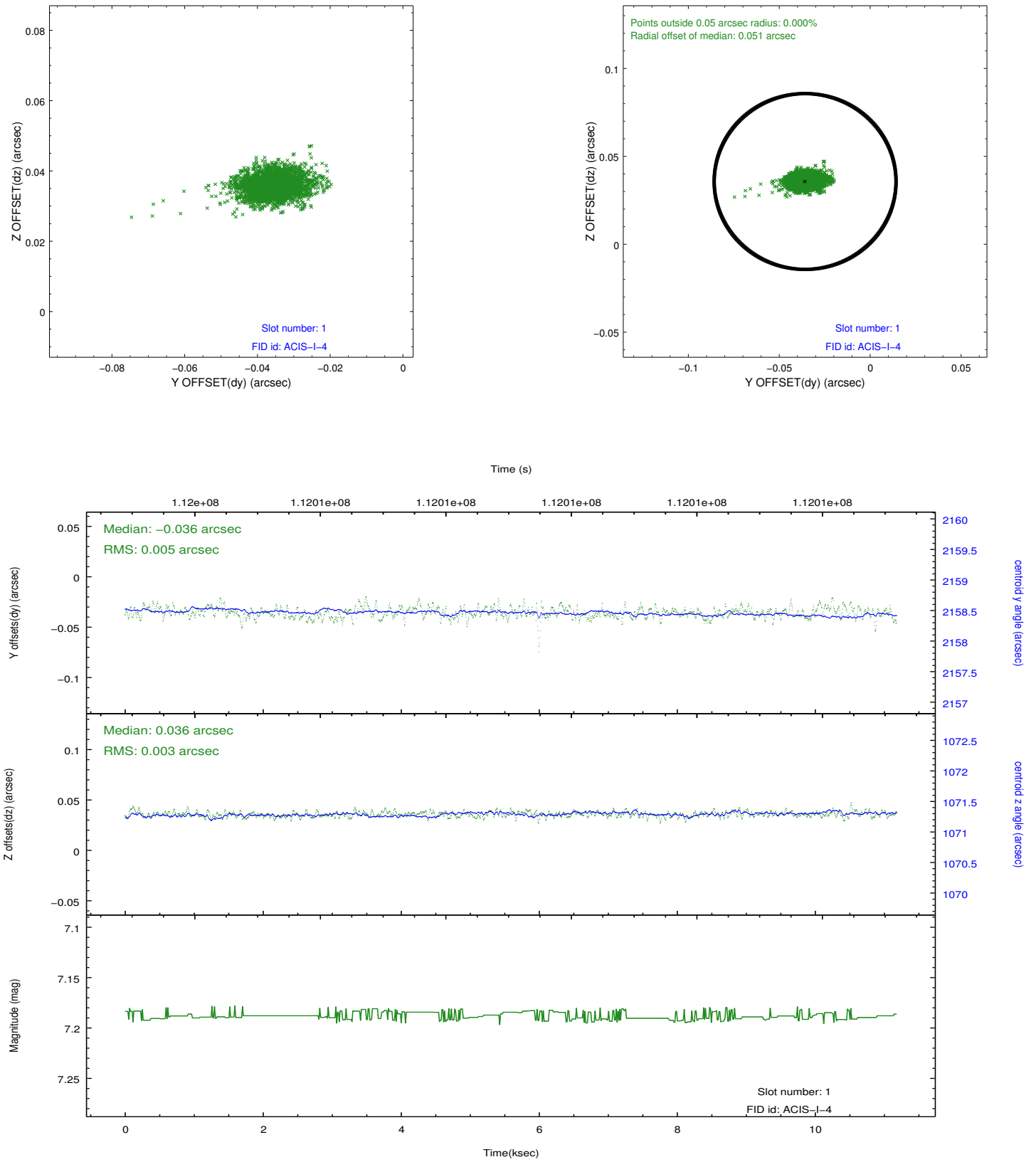


## 2.5 FID Slots

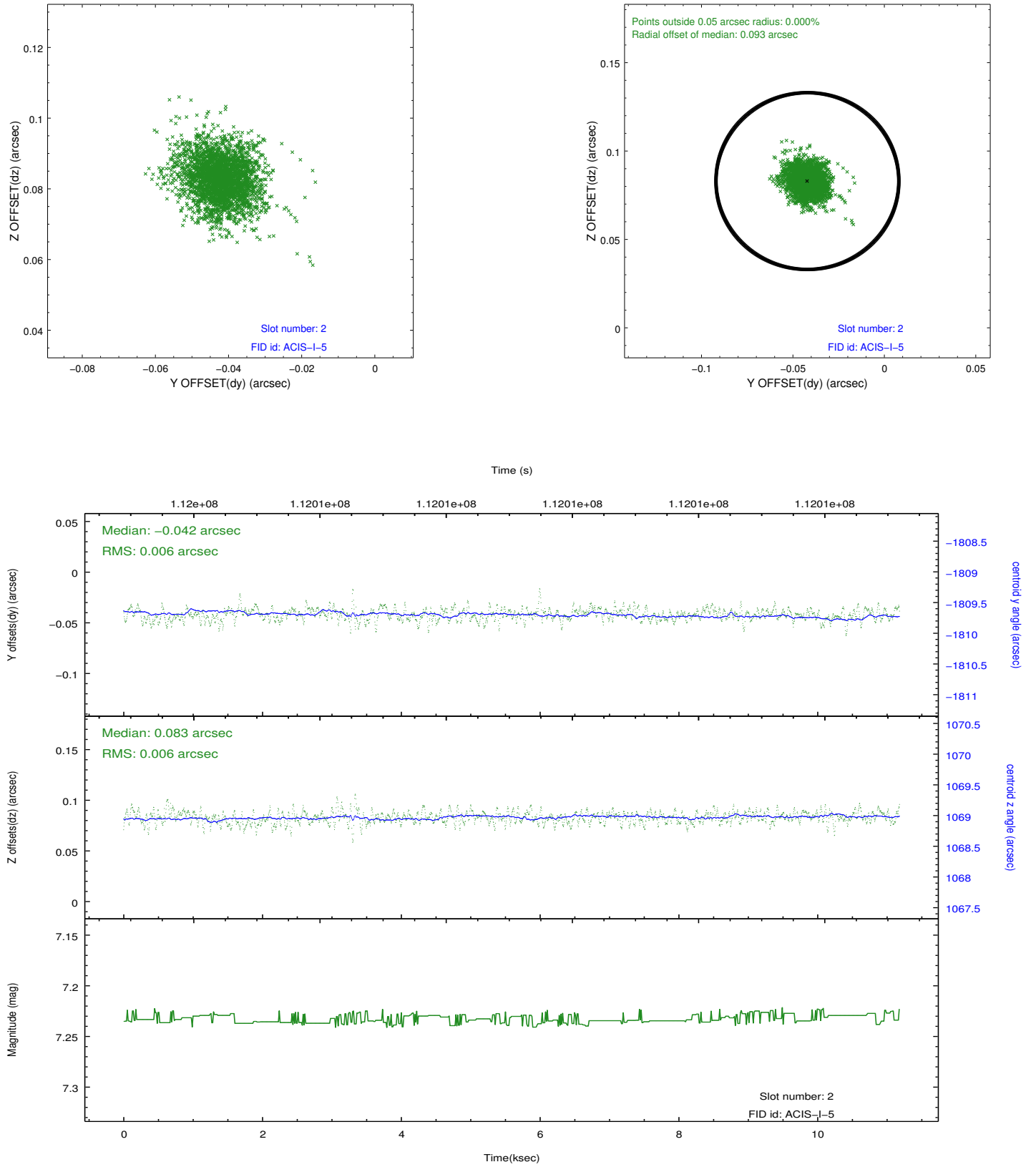
### 2.5.1 Slot 0



## 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)	2012.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.8

## A.2 Comments

Charge time for this ObsId remains at previous value of 10.8 ks although with the current processing the charge time would have been 10.76 ksec.  
Roll constraint met.