

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2864 - L2 Version 3  
Chandra X-Ray Center

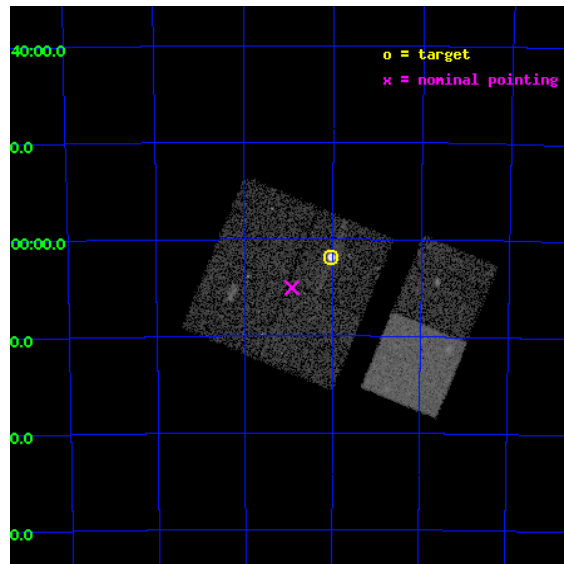
L2 Processing Date : Oct 9 2012

## 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

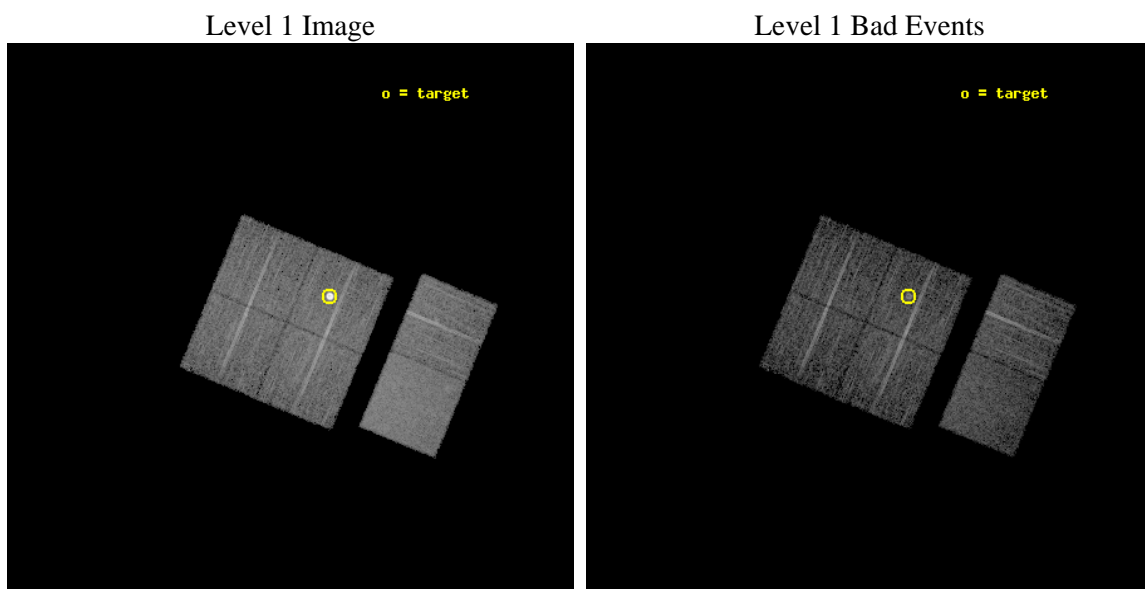
seq_num	590253	Sequence number
obs_id	2864	Observation id
title	AO3B ACIS-I CALIBRATION OBSERVATIONS OF E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip I2, T=120, Offsets=4,2,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.231855748409	Nominal RA [deg]
dec_nom	-72.084048774492	Nominal Dec [deg]
roll_nom	112.59825424494	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7657.5999714732	Sum of GTIs [s]
livetime	7560.6348297813	Livetime [s]
ontime0	7657.5999714732	Sum of GTIs [s]
ontime1	7657.5999714732	Sum of GTIs [s]
ontime2	7657.5999714732	Sum of GTIs [s]
ontime3	7657.5999714732	Sum of GTIs [s]
ontime6	7657.5999714732	Sum of GTIs [s]
ontime7	7657.5999714732	Sum of GTIs [s]
l2events	78883	Number of level 2 events



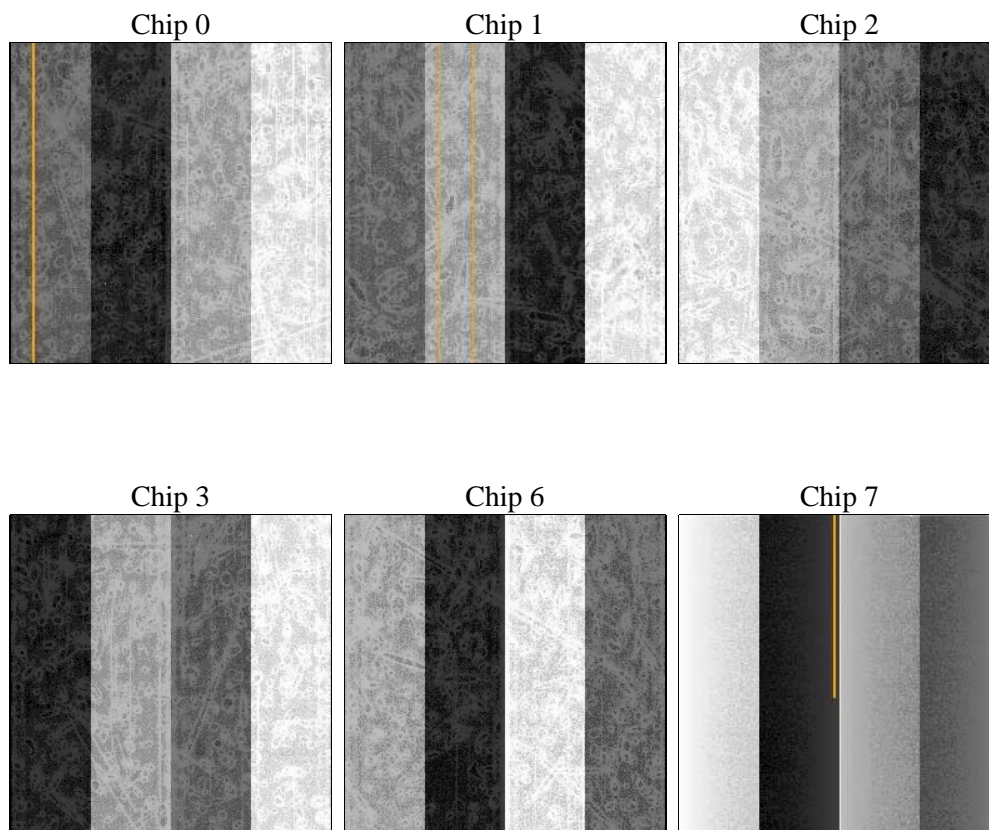
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7900.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7657.5999714732	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	7657.5999714732	Sum of GTIs [s]
date	2012-10-10T00:57:24	Date and time of file creation	ontime1	7657.5999714732	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	7657.5999714732	Sum of GTIs [s]
			ontime3	7657.5999714732	Sum of GTIs [s]
			ontime6	7657.5999714732	Sum of GTIs [s]
			ontime7	7657.5999714732	Sum of GTIs [s]
			l1events	338487	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	47078	45791	76791	49855	53068	65904	grade 0 events	2567	2976	25231	2930	2652	2625
rejected events	41045	39103	45537	43532	46804	38690		5%	6%	32%	5%	4%	3%
rejected %	87%	85%	59%	87%	88%	58%	grade 1 events	24	25	256	29	26	66
								0%	0%	0%	0%	0%	0%
							grade 2 events	1289	1282	3028	1185	1230	5376
								2%	2%	3%	2%	2%	8%
							grade 3 events	607	582	991	585	633	2384
								1%	1%	1%	1%	1%	3%
							grade 4 events	561	644	909	574	535	2444
								1%	1%	1%	1%	1%	3%
							grade 5 events	1802	2008	1805	1976	2198	6274
								3%	4%	2%	3%	4%	9%
							grade 6 events	1012	1204	1114	1050	1215	14395
								2%	2%	1%	2%	2%	21%
							grade 7 events	39216	37070	43457	41526	44579	32340
								83%	80%	56%	83%	84%	49%

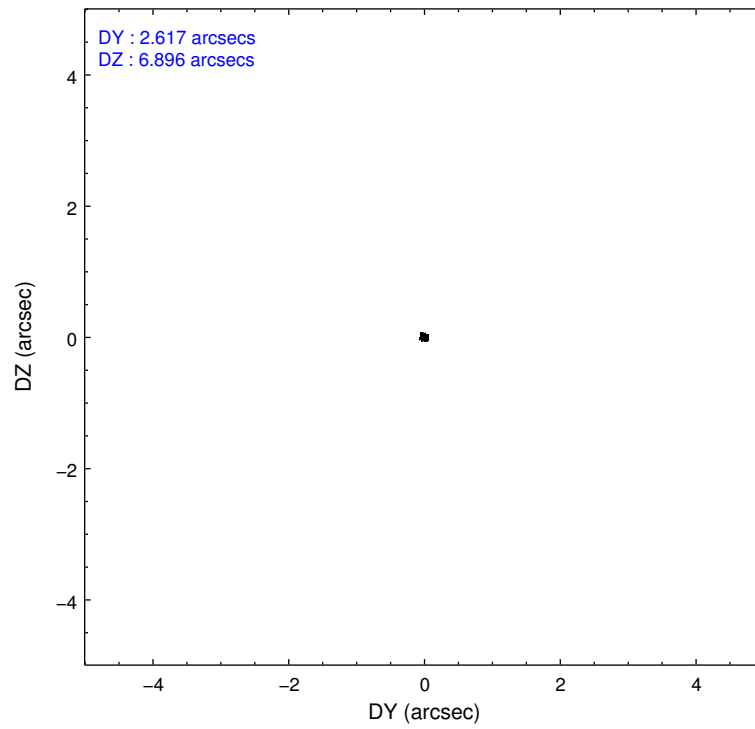
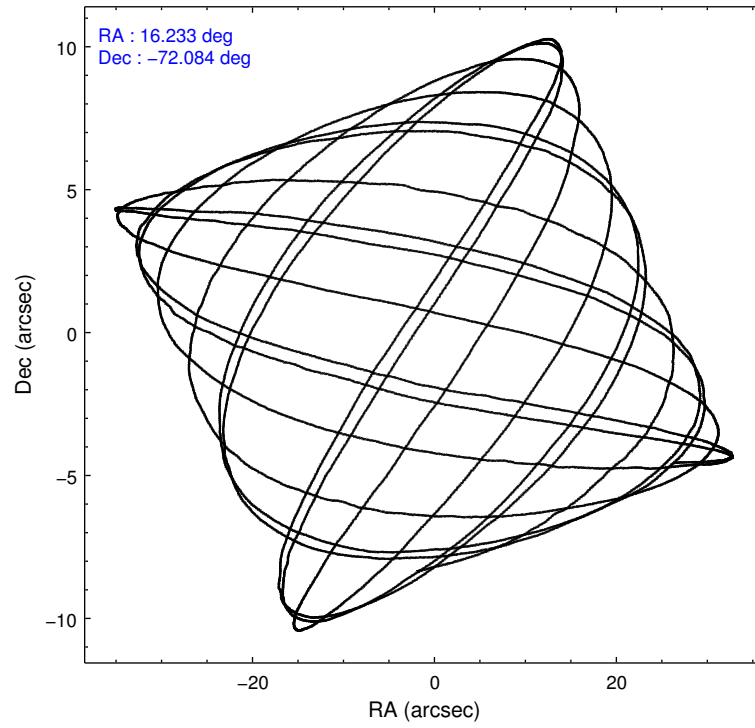


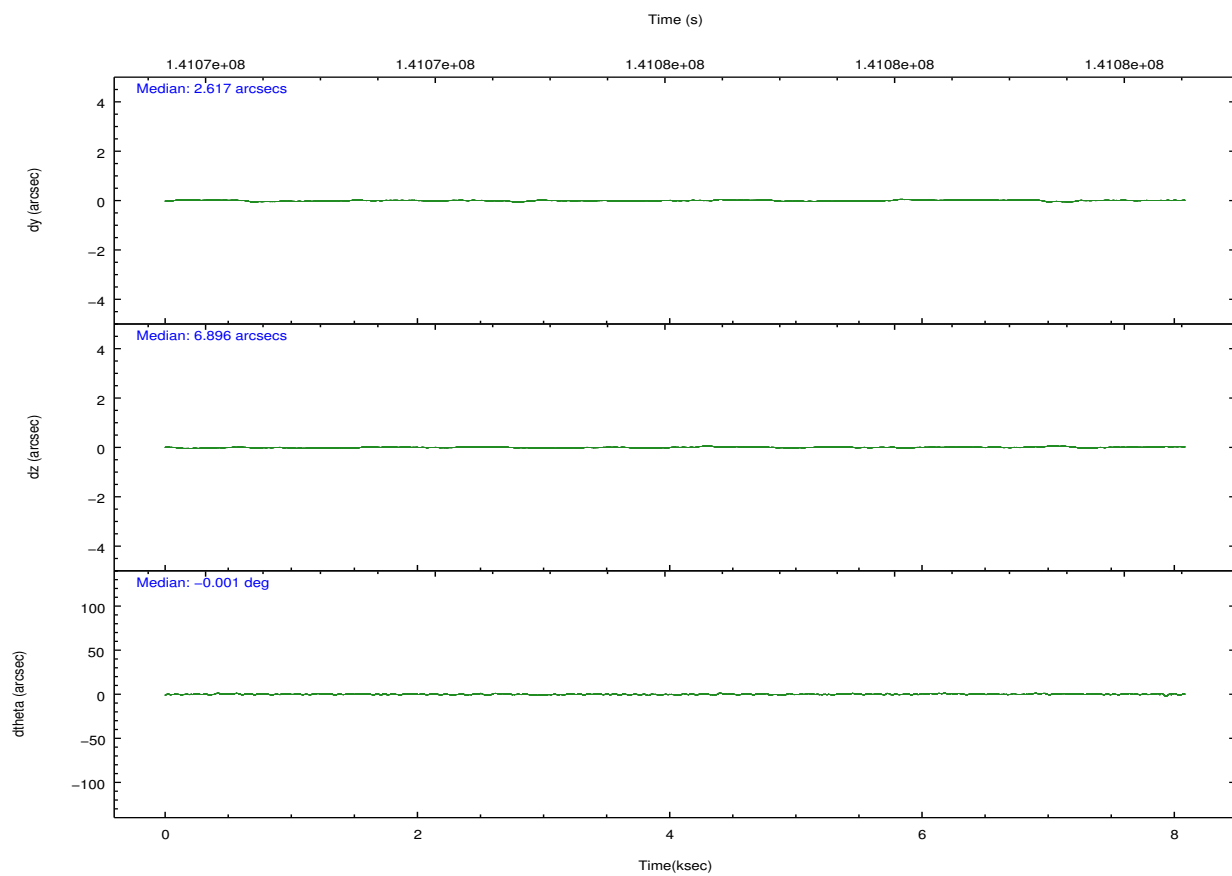
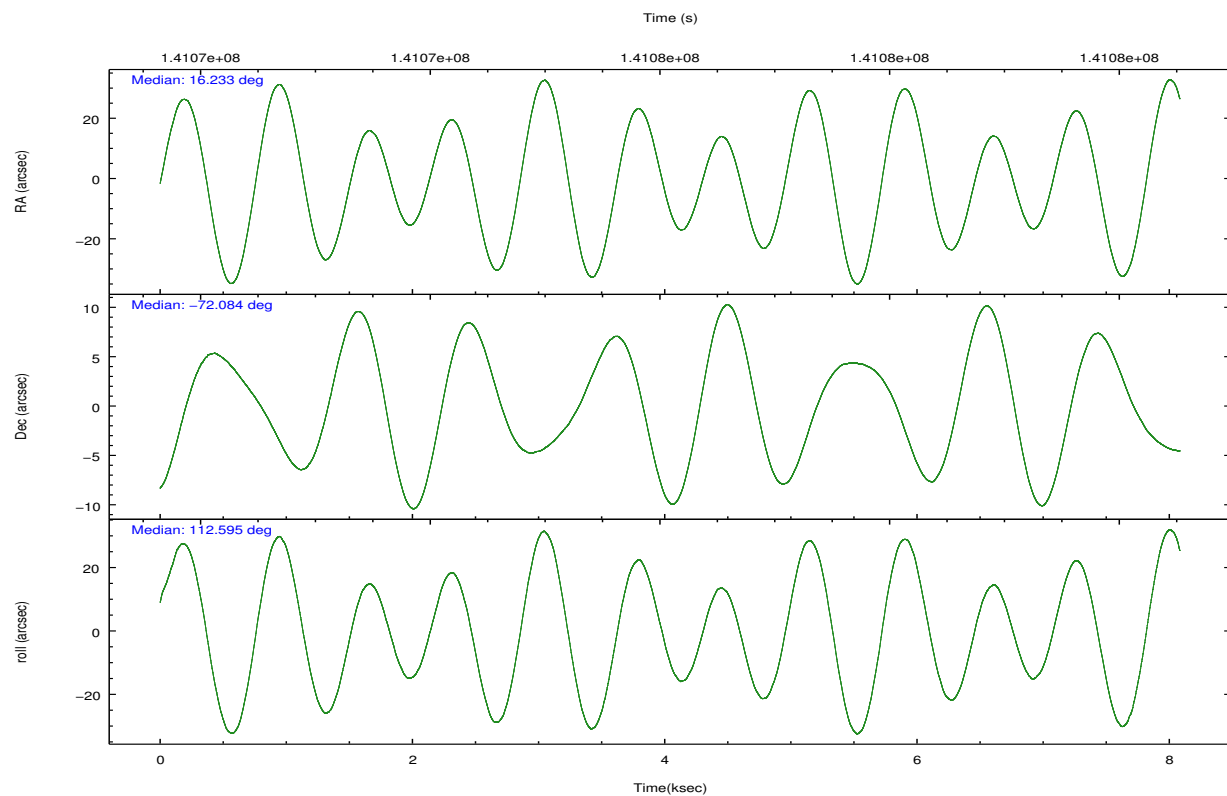
## 2.2 Compared Parameters

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	16.302695	16.23185574840901
[deg] Pointing Dec	-72.100615	-72.08404877449232
[deg] Pointing Roll	112.456972	112.5982542449354
[s] Window start time (MET)	139276864.184000	139276864.184000
[s] Window stop time (MET)	141782464.184000	141782464.184000
[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)	141072233.184000	141071856.98881
Observation start date	2002-06-21T18:42:49	2002-06-21T18:37:36
[s] Observation end time (MET)	141080133.184000	141080624.83916
Observation end date	2002-06-21T20:54:29	2002-06-21T21:03:44
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



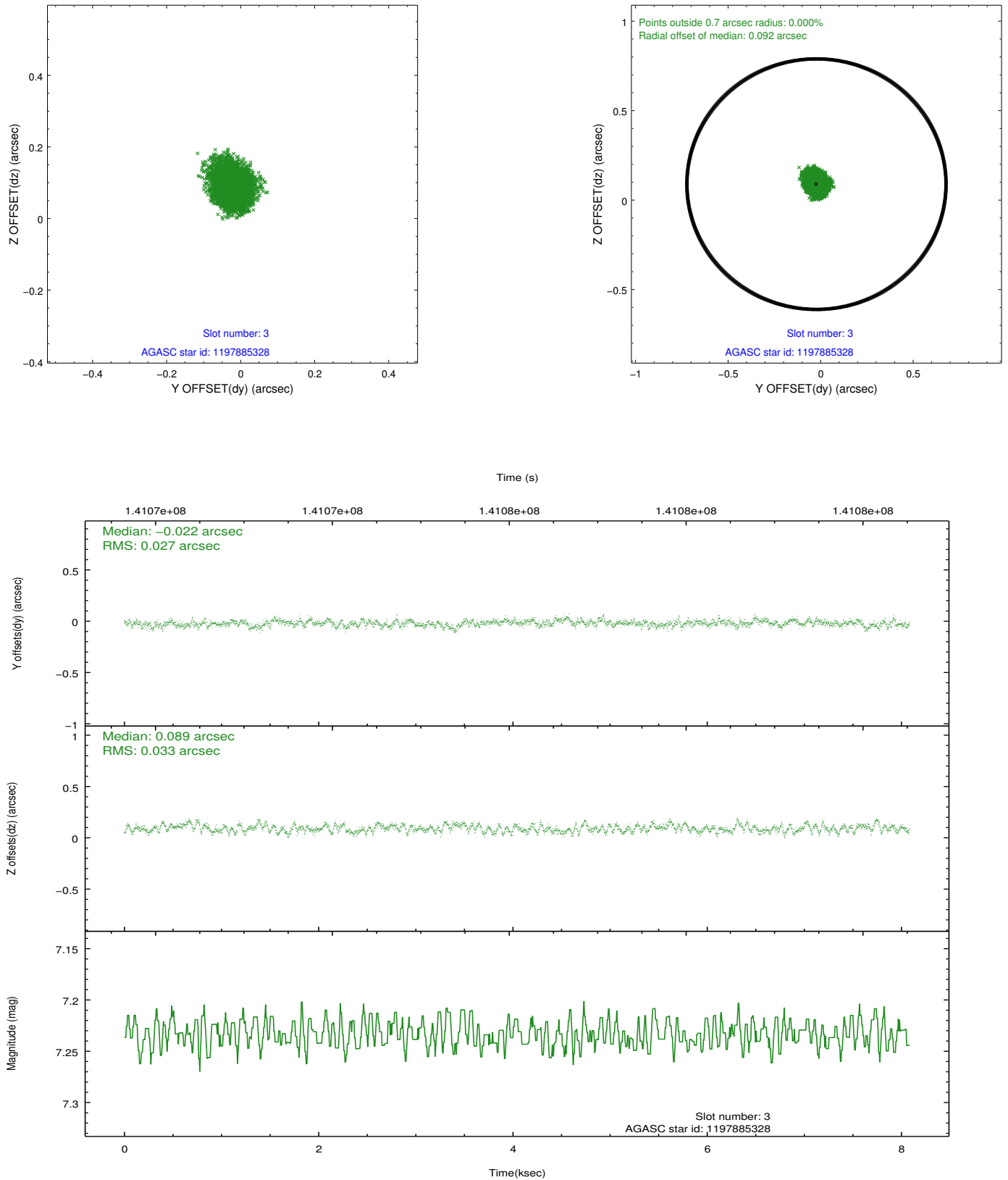


### Slot Statistics

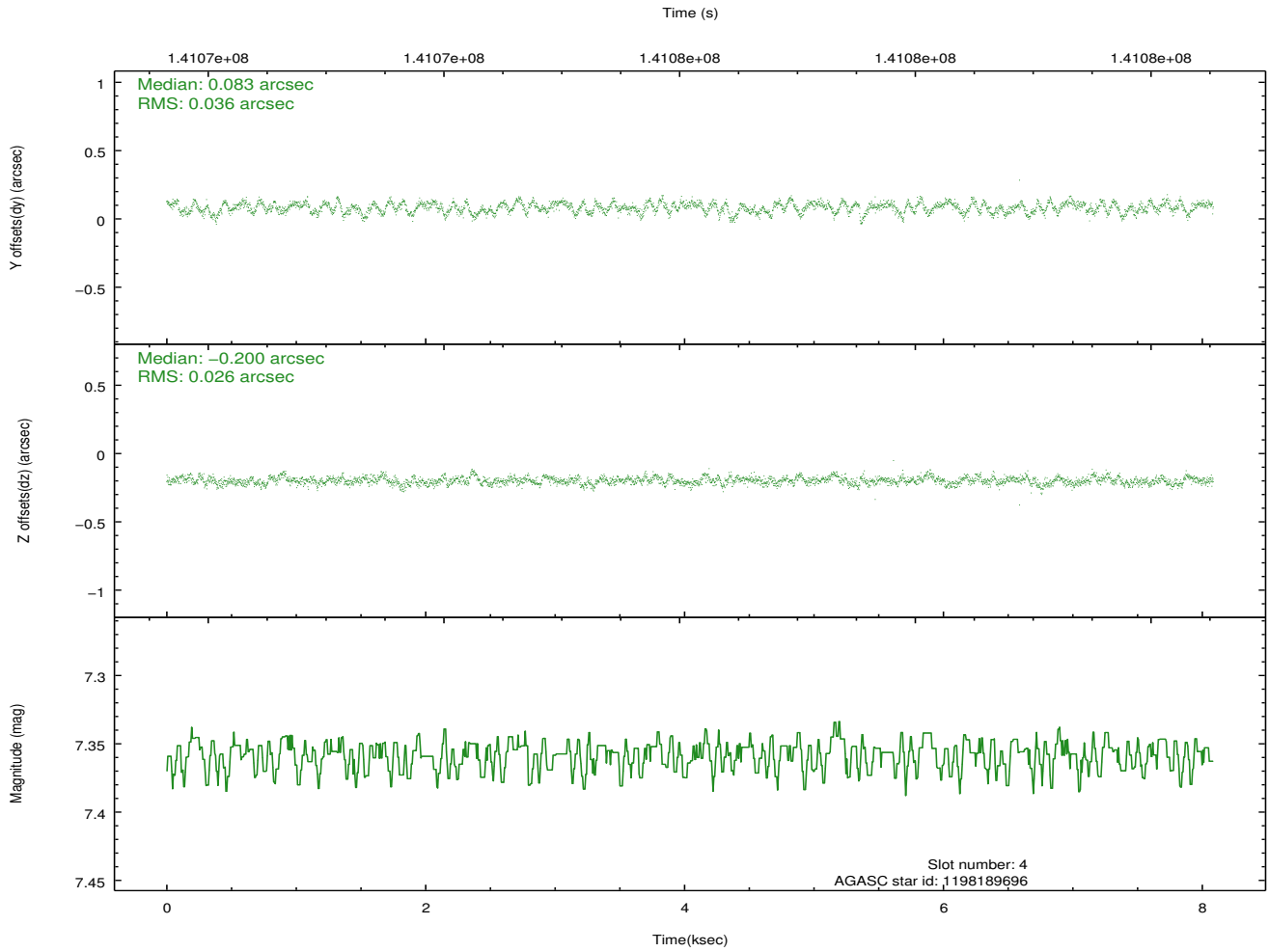
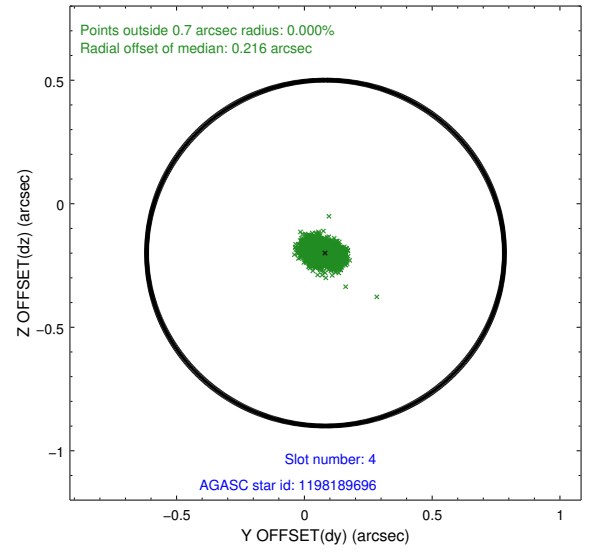
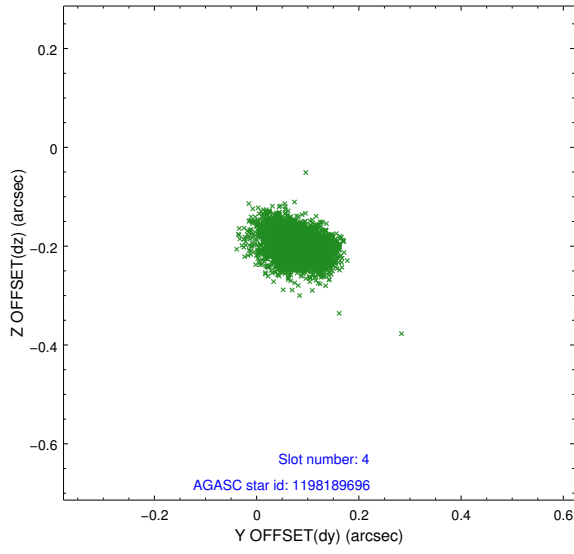
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1971	0.002	0.013	0.006	0.011	0.000000	0.000000	937.17	-830.29
1	FID	ACIS-I-5	7.24	1971	-0.057	0.052	0.006	0.011	0.000000	0.000000	-1810.57	1066.95
2	FID	ACIS-I-6	7.26	1971	-0.036	0.006	0.007	0.012	0.000000	0.000000	401.98	1712.15
3	GUIDE	1197885328	7.23	3944	-0.022	0.089	0.046	0.073	16.283090	-71.733943	1229.08	-483.15
4	GUIDE	1198189696	7.36	3944	0.083	-0.200	0.047	0.078	15.223750	-72.697522	-1553.36	1892.69
5	GUIDE	1197750936	7.58	3944	-0.202	-0.062	0.047	0.074	15.387940	-71.549550	2224.17	209.72
6	GUIDE	1197884536	8.50	3943	0.071	0.045	0.054	0.087	17.160729	-71.835289	510.00	-1251.29
7	GUIDE	1198283128	7.61	3943	0.073	0.128	0.049	0.075	17.272580	-72.642428	-2207.36	-213.97

## 2.4 Star Slots

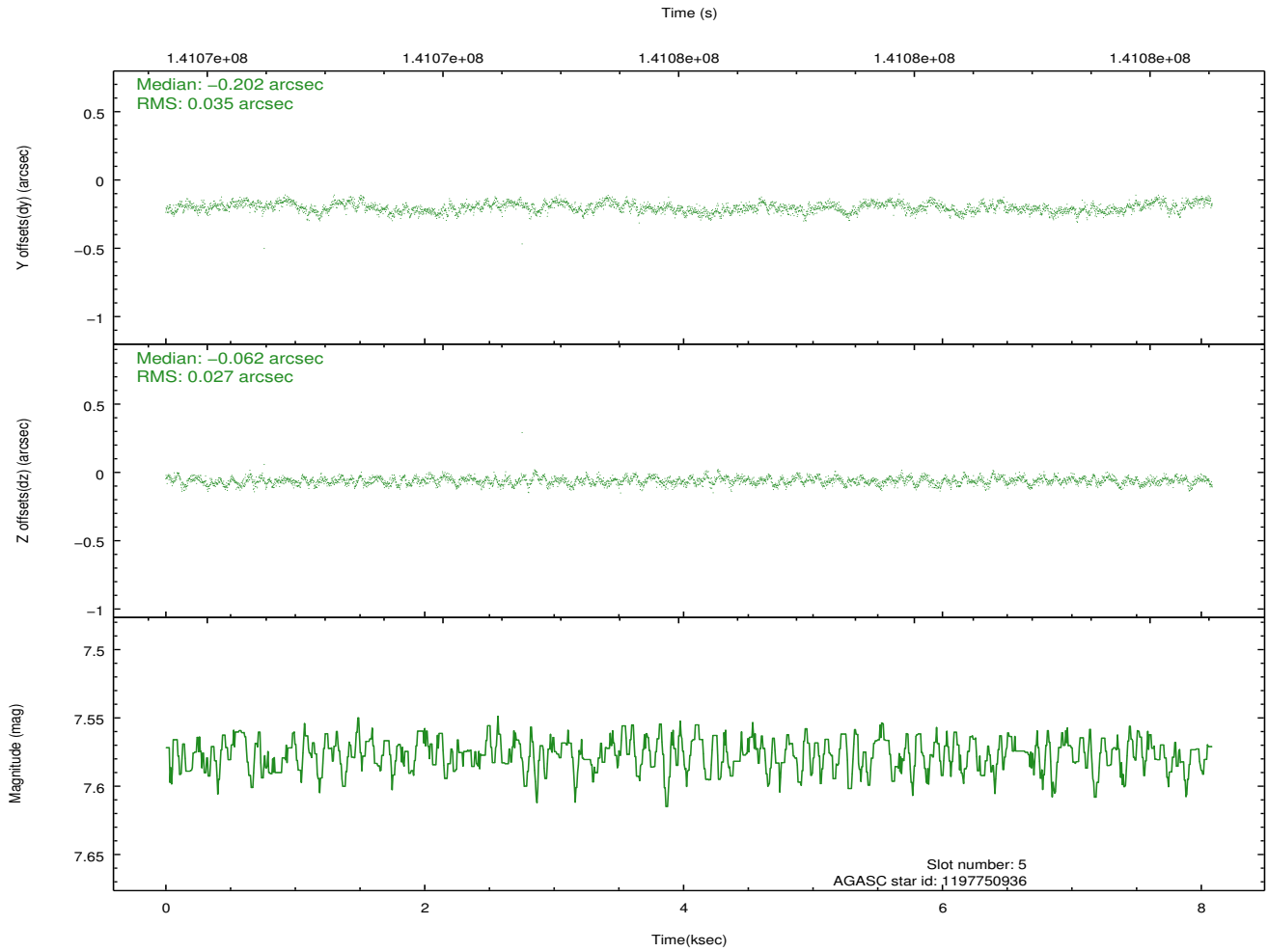
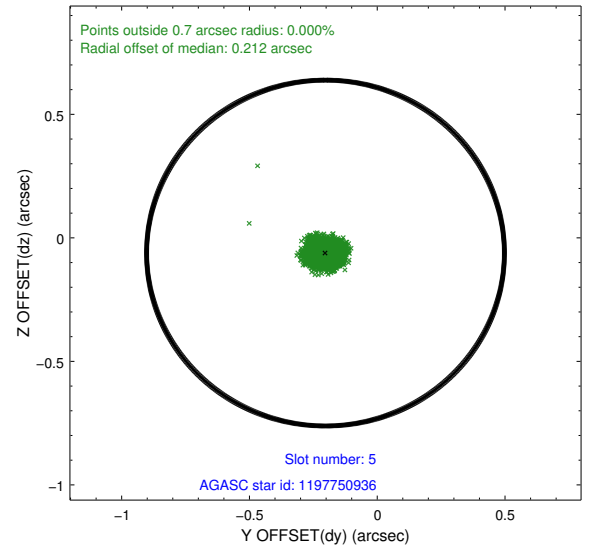
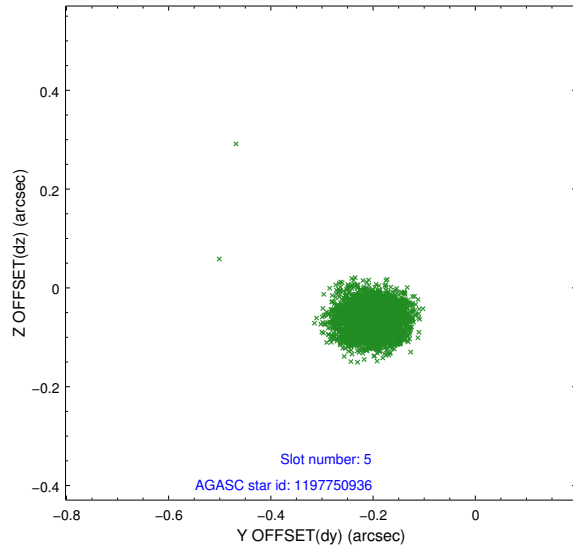
### 2.4.1 Slot 3



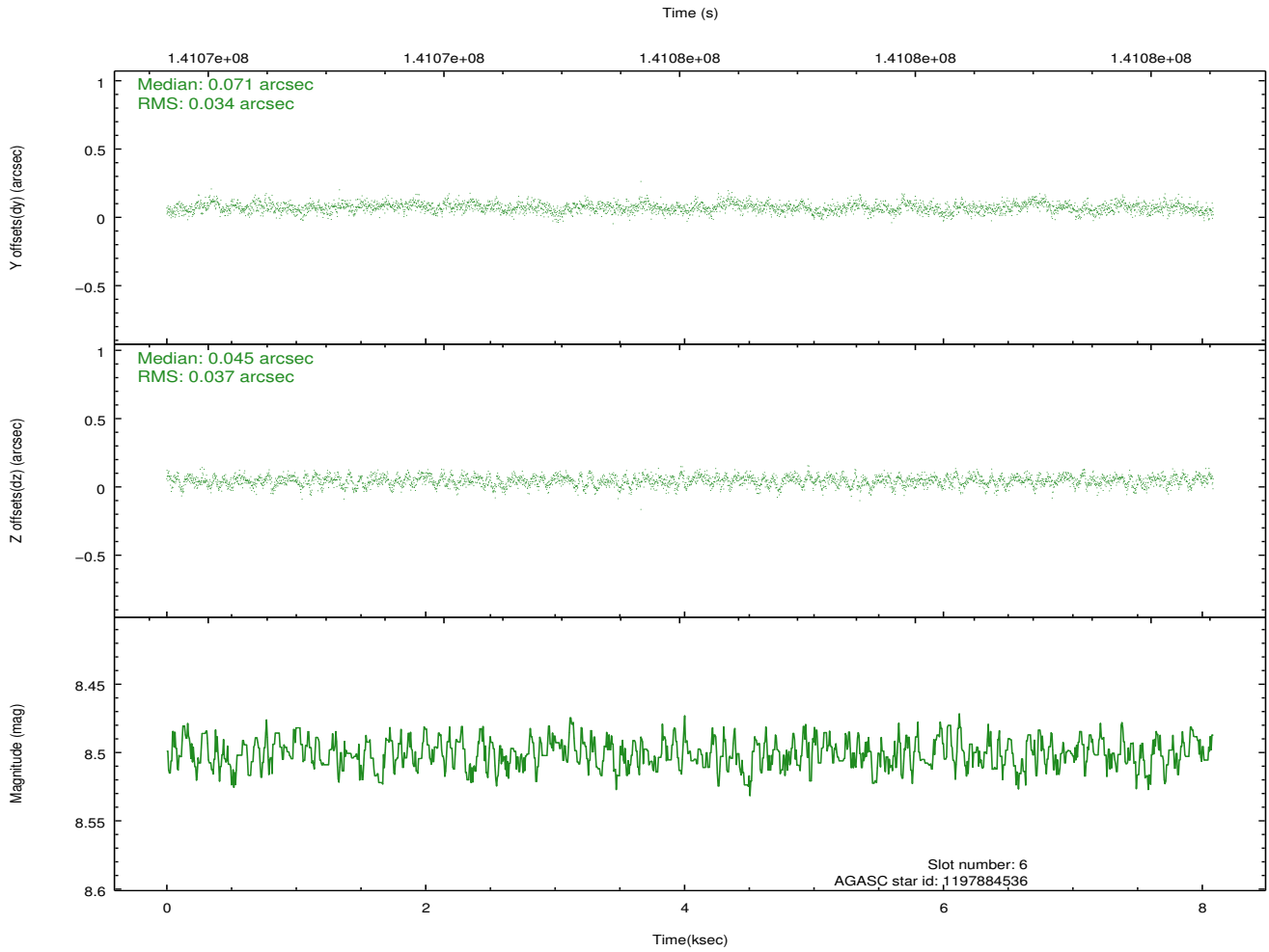
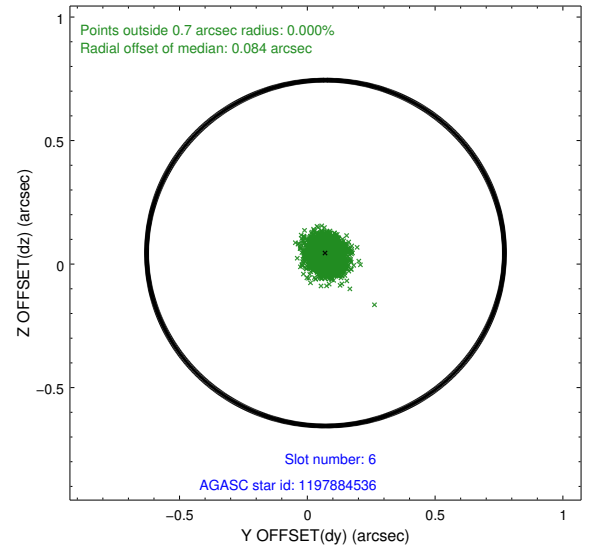
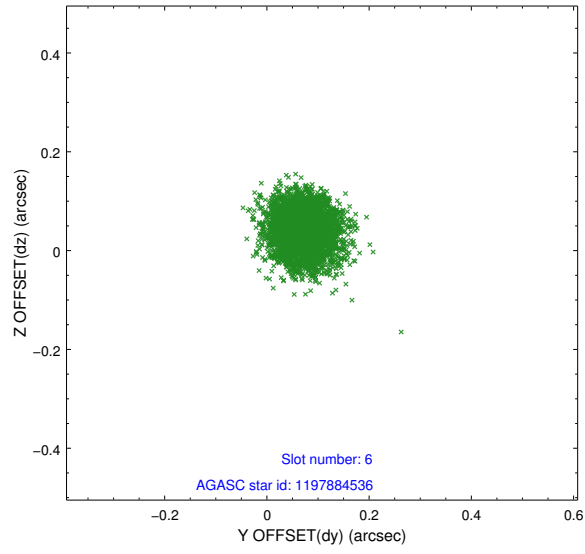
## 2.4.2 Slot 4



### 2.4.3 Slot 5

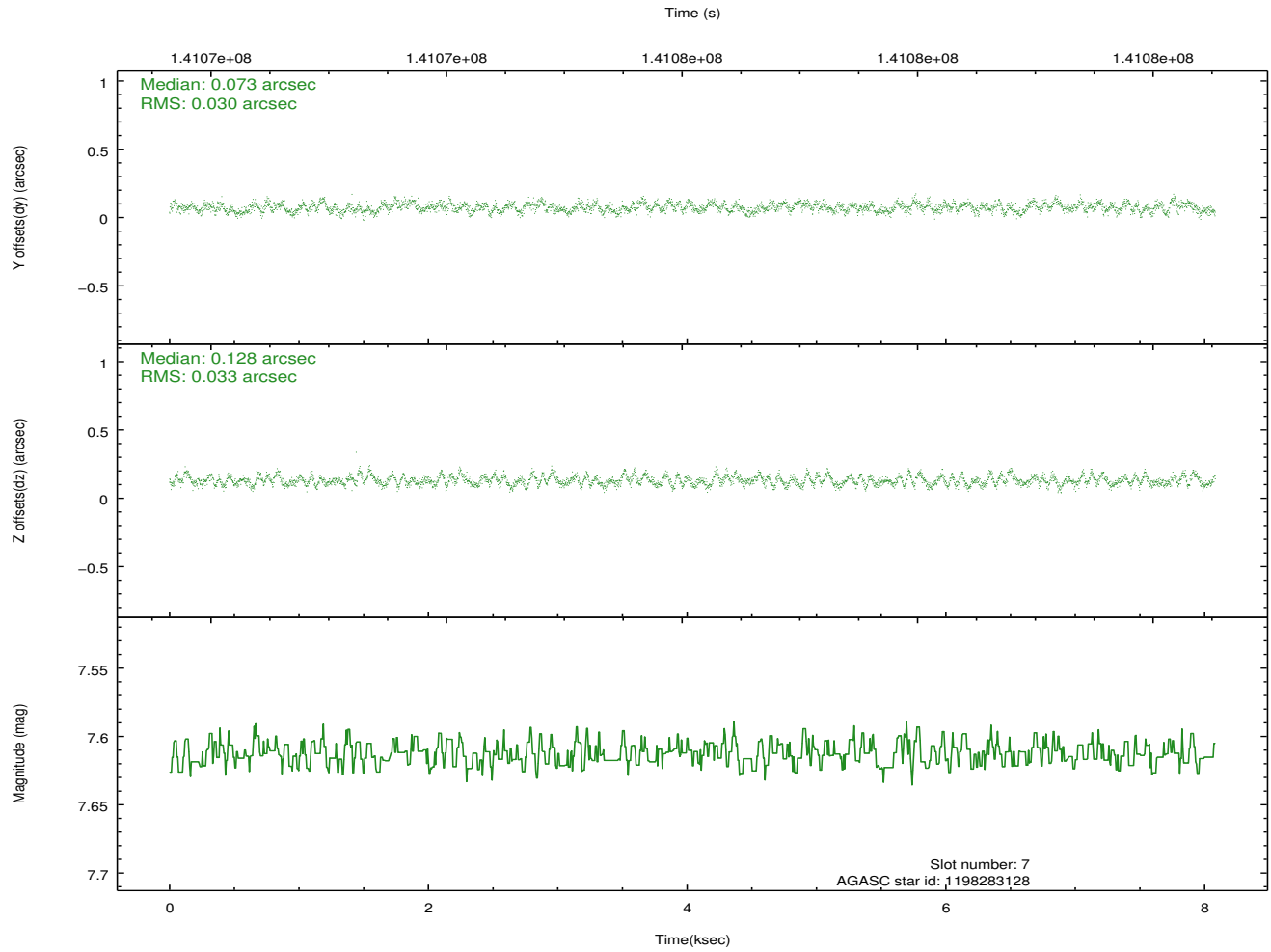
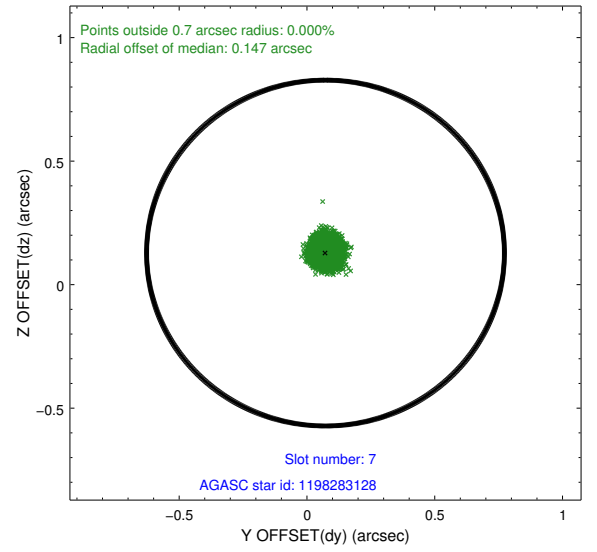
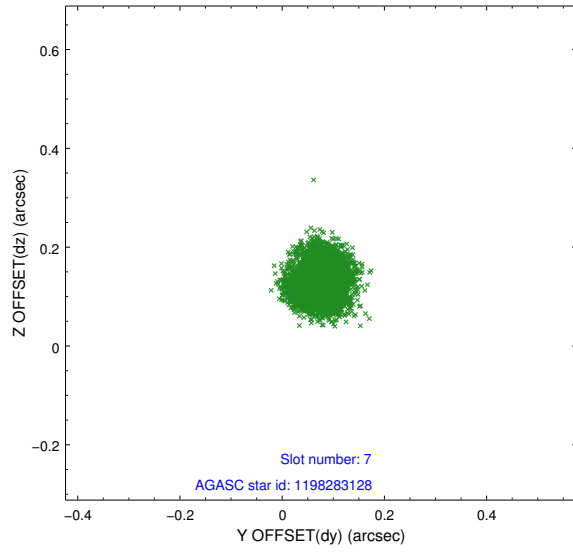


## 2.4.4 Slot 6



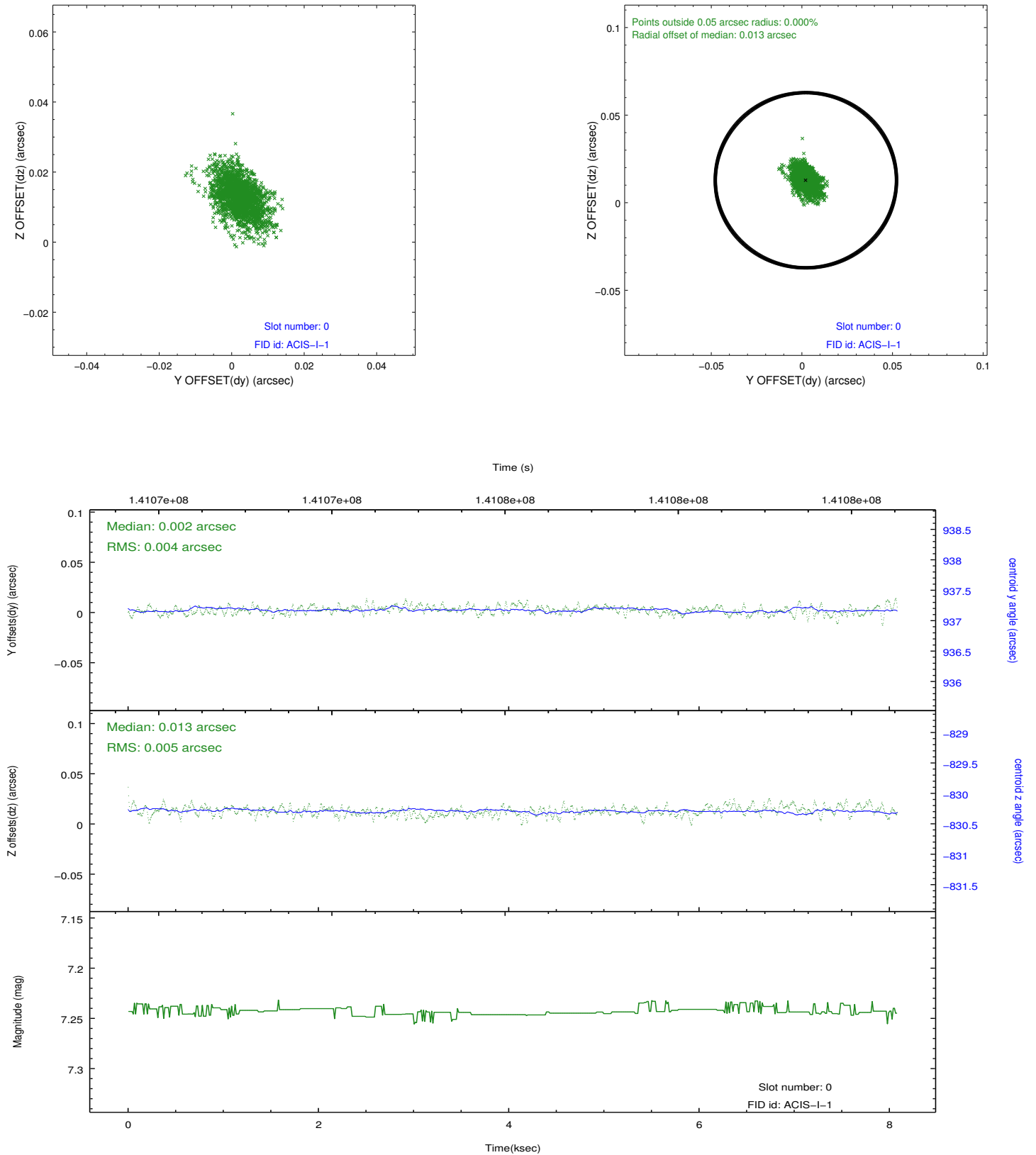


## 2.4.5 Slot 7

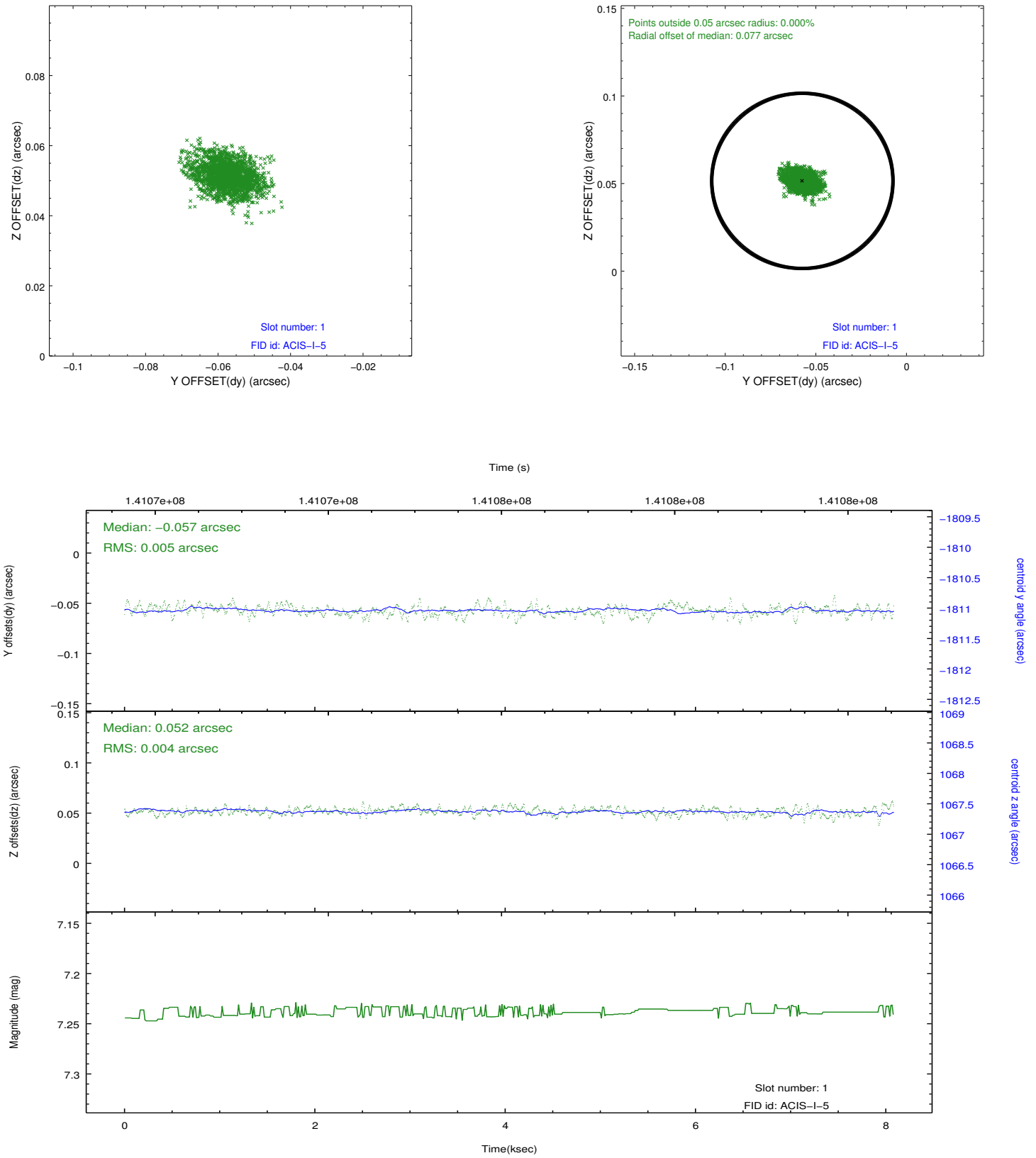


## 2.5 FID Slots

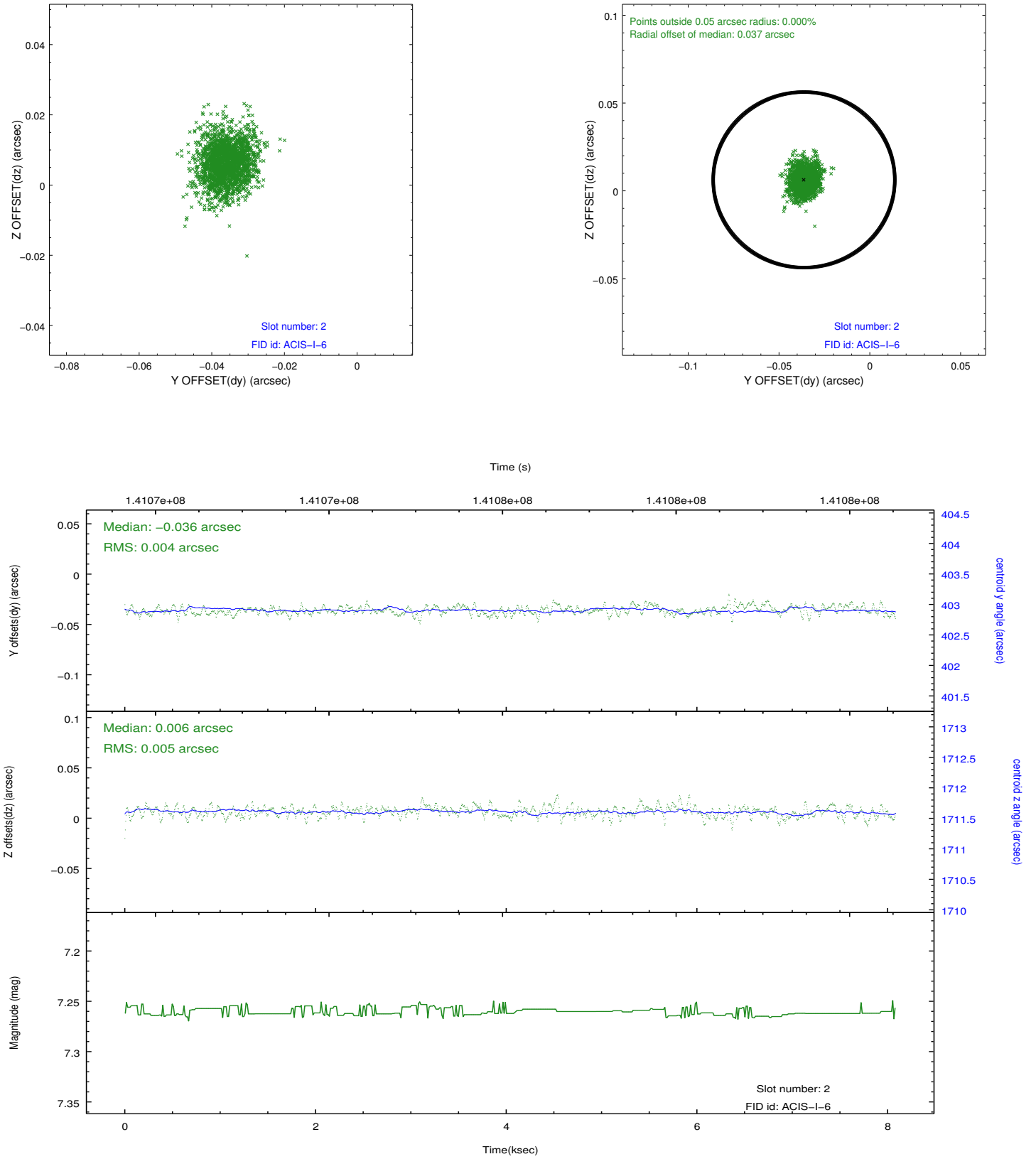
### 2.5.1 Slot 0



## 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)	2012.10.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.66

### A.2 Comments

Window constraint satisfied.