

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1677 - L2 Version 3  
Chandra X-Ray Center

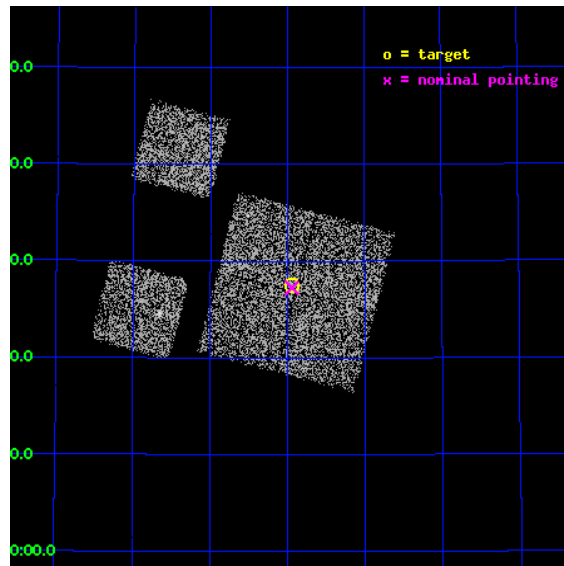
L2 Processing Date : Sep 20 2012

## 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

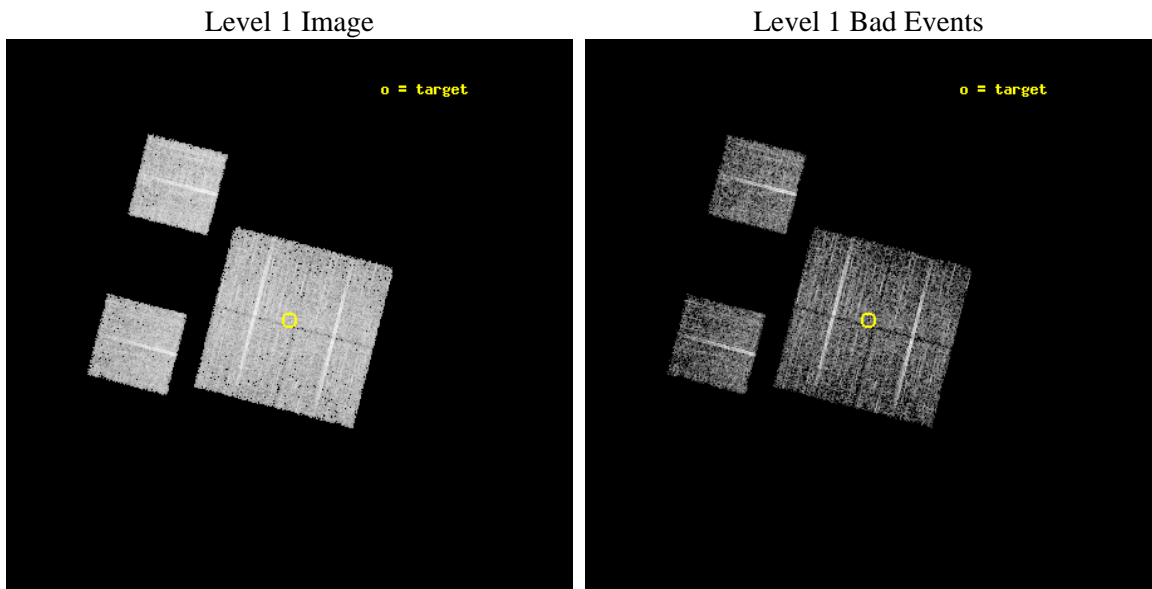
seq_num	900036	Sequence number
obs_id	1677	Observation id
title	LOCKMAN HOLE SHALLOW SURVEY	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	LOCKMAN HOLE #10	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	162.7375	Observer's specified target RA [deg]
dec_targ	57.458889	Observer's specified target Dec [deg]
ra_nom	162.73607127328	Nominal RA [deg]
dec_nom	57.454149343083	Nominal Dec [deg]
roll_nom	284.50054882817	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4758.4000044167	Sum of GTIs [s]
livetime	4698.1462783963	Livetime [s]
ontime0	4758.4000044167	Sum of GTIs [s]
ontime1	4758.4000044167	Sum of GTIs [s]
ontime2	4758.4000044167	Sum of GTIs [s]
ontime3	4758.4000044167	Sum of GTIs [s]
ontime6	4758.4000044167	Sum of GTIs [s]
ontime8	4758.4000044167	Sum of GTIs [s]
l2events	17909	Number of level 2 events



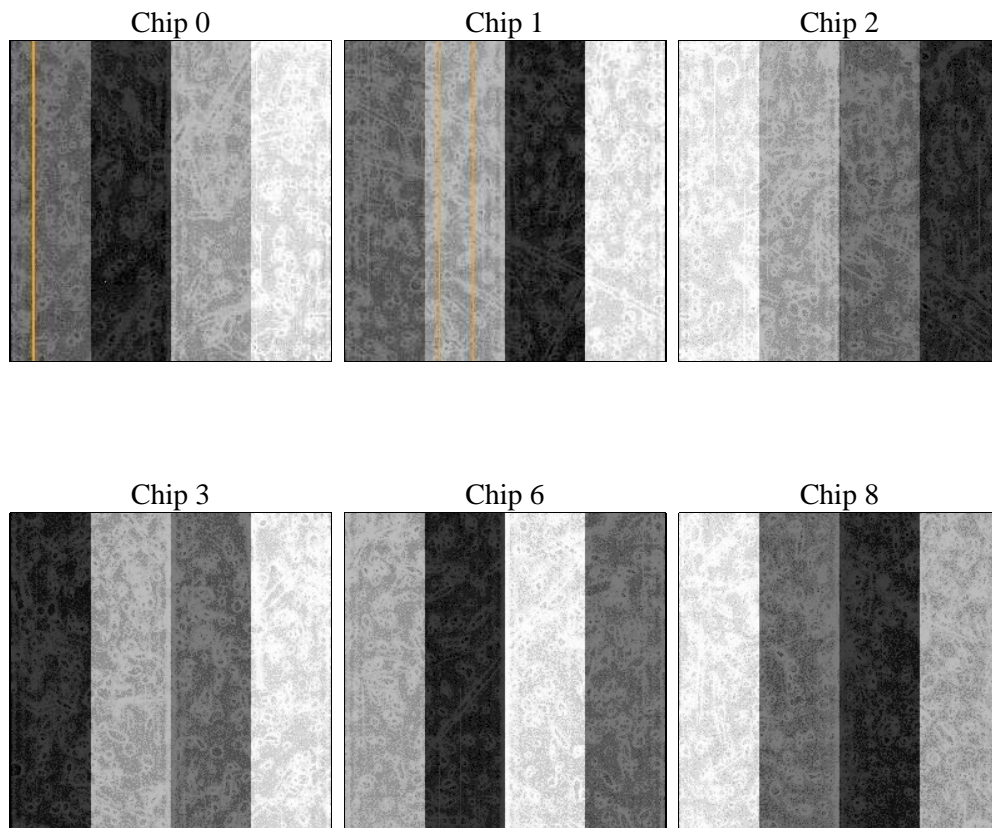
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4758.4000044167	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	4758.4000044167	Sum of GTIs [s]
date	2012-09-20T12:40:52	Date and time of file creation	ontime1	4758.4000044167	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4758.4000044167	Sum of GTIs [s]
			ontime3	4758.4000044167	Sum of GTIs [s]
			ontime6	4758.4000044167	Sum of GTIs [s]
			ontime8	4758.4000044167	Sum of GTIs [s]
			l1events	188562	Number of level 1 events

### 2.1.4 Events

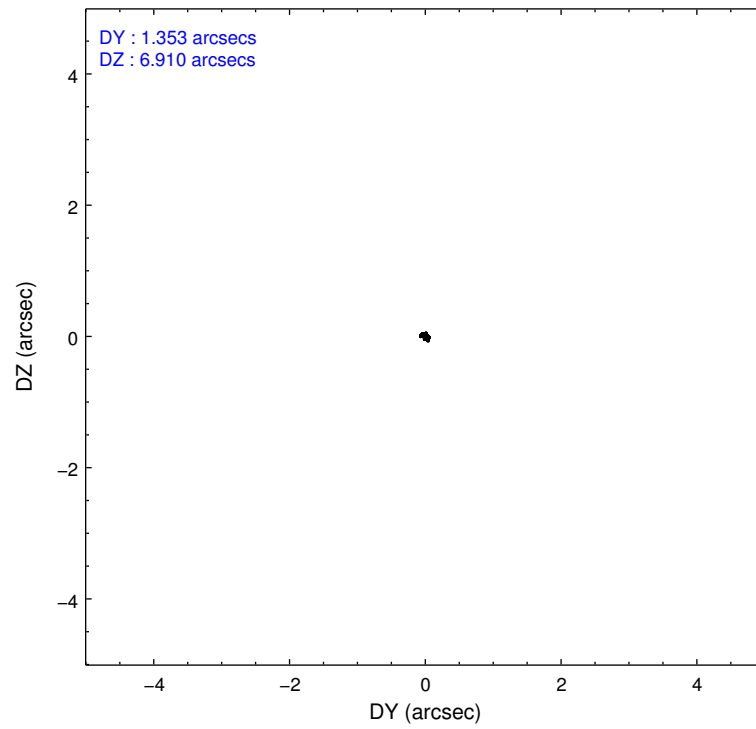
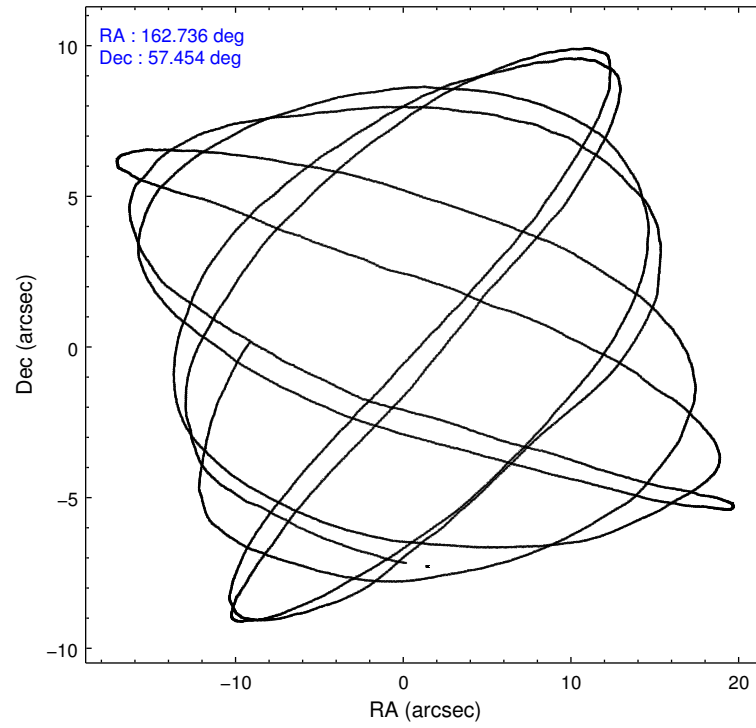
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8
level 1 events	28741	28536	29723	32186	29245	40131	grade 0 events	1411	1392	1441	1416	1413	2329
rejected events	25259	25007	26369	28850	25800	32467		4%	4%	4%	4%	4%	5%
rejected %	87%	87%	88%	89%	88%	80%	grade 1 events	13	16	12	14	15	27
								0%	0%	0%	0%	0%	0%
							grade 2 events	743	716	704	698	685	1795
								2%	2%	2%	2%	2%	4%
							grade 3 events	383	357	317	339	356	807
								1%	1%	1%	1%	1%	2%
							grade 4 events	312	379	340	321	322	706
								1%	1%	1%	0%	1%	1%
							grade 5 events	1051	1177	1006	1207	1202	1706
								3%	4%	3%	3%	4%	4%
							grade 6 events	636	688	554	563	670	2055
								2%	2%	1%	1%	2%	5%
							grade 7 events	24192	23811	25349	27628	24582	30706
								84%	83%	85%	85%	84%	76%

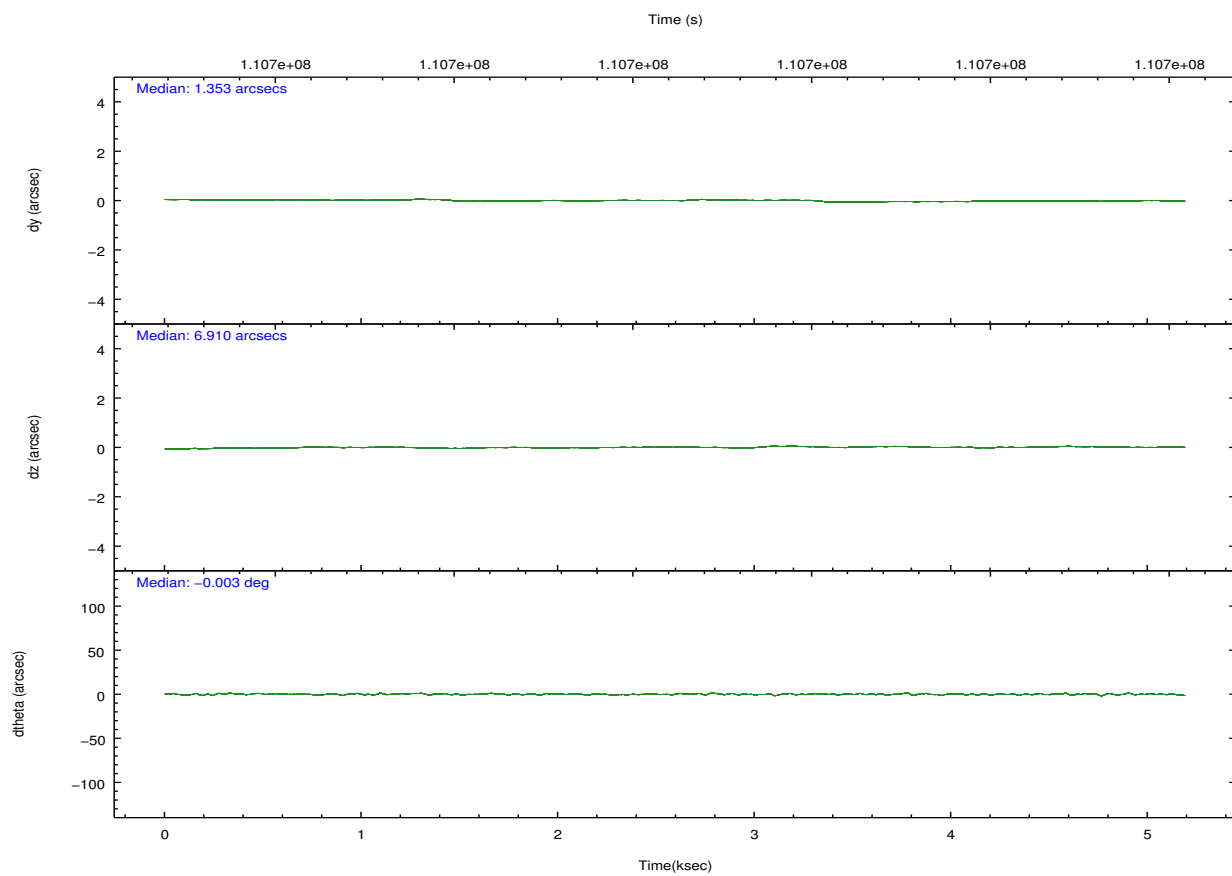
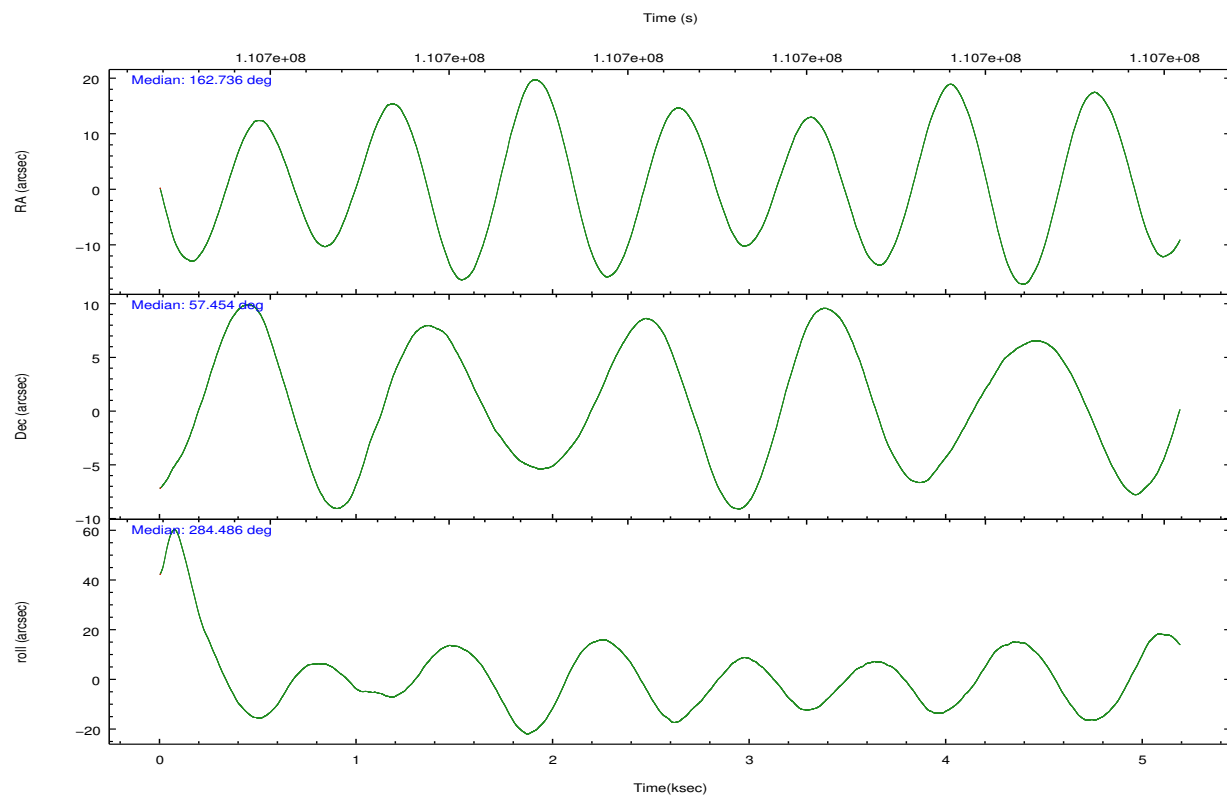


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012368	ACIS-012368	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	162.700393	162.7360712732768	Subarray requested	NONE	NONE
[deg] Pointing Dec	57.473750	57.45414934308339	Alternating exposures requested	N	N
[deg] Pointing Roll	284.321978	284.5005488281679	[s] Primary exposure time	0.000000	3.2
[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)	110696832.184000	110696456.37088			
Observation start date	2001-07-05T05:06:08	2001-07-05T05:00:56			
[s] Observation end time (MET)	110701832.184000	110702091.3086			
Observation end date	2001-07-05T06:29:28	2001-07-05T06:34:51			
Read mode	TIMED	TIMED			

## 2.3 Aspect



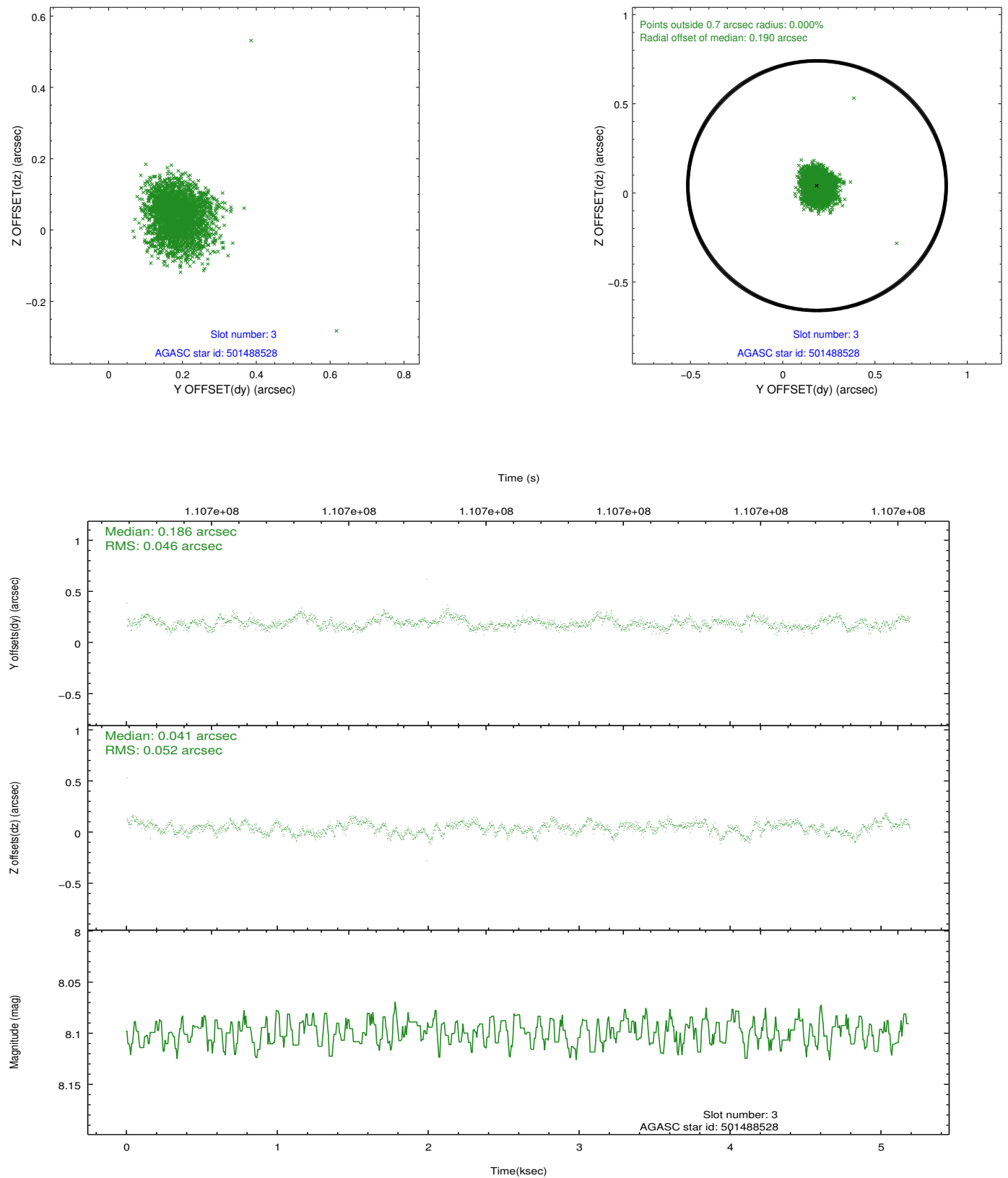


### Slot Statistics

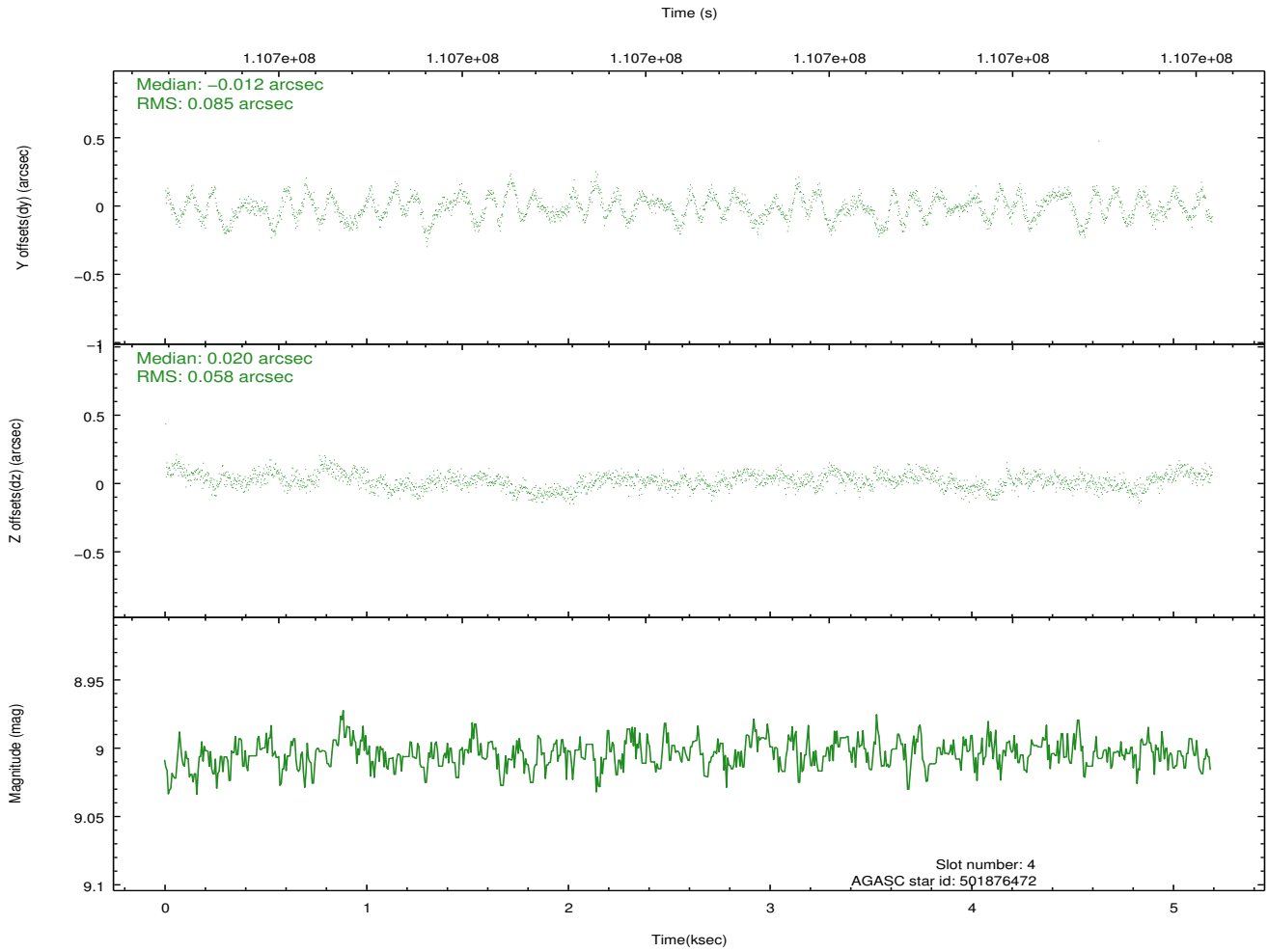
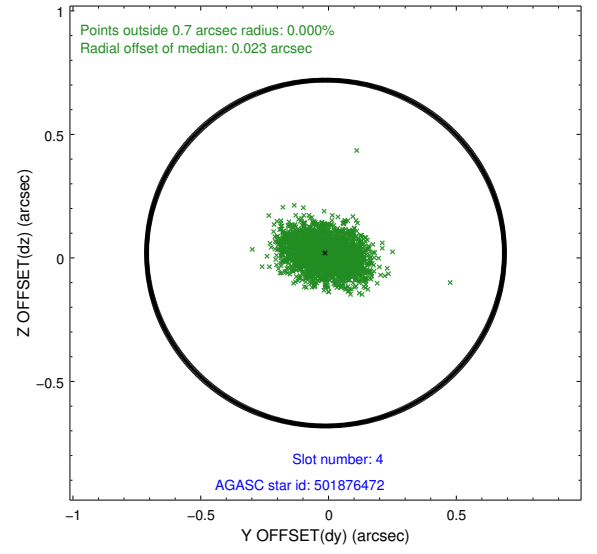
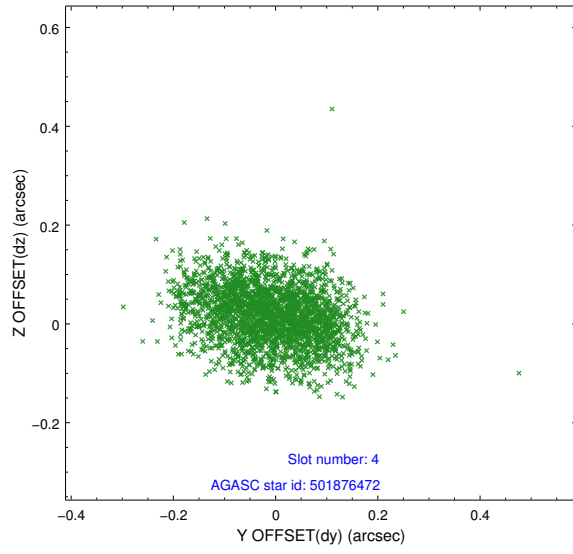
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	1266	-0.033	-0.069	0.008	0.014	0.000000	0.000000	-755.71	-836.74
1	FID	ACIS-I-4	7.18	1266	-0.046	0.046	0.006	0.012	0.000000	0.000000	2157.79	1068.99
2	FID	ACIS-I-5	7.23	1266	-0.022	0.092	0.008	0.013	0.000000	0.000000	-1808.04	1068.17
3	GUIDE	501488528	8.10	2532	0.186	0.041	0.073	0.115	162.150935	57.312270	295.27	-1177.06
4	GUIDE	501876472	9.00	2532	-0.012	0.020	0.110	0.175	163.621724	57.867447	-949.04	2062.65
5	GUIDE	501877264	9.31	2531	-0.033	0.279	0.088	0.145	163.254394	57.702218	-538.39	1238.71
6	GUIDE	501487600	10.34	2529	0.149	0.239	0.218	0.359	161.712206	56.979739	1230.45	-2313.10
7	BAD	501487624	10.42	2393	-0.303	-0.597	0.153	0.244	163.702908	57.008909	2094.01	1494.15

## 2.4 Star Slots

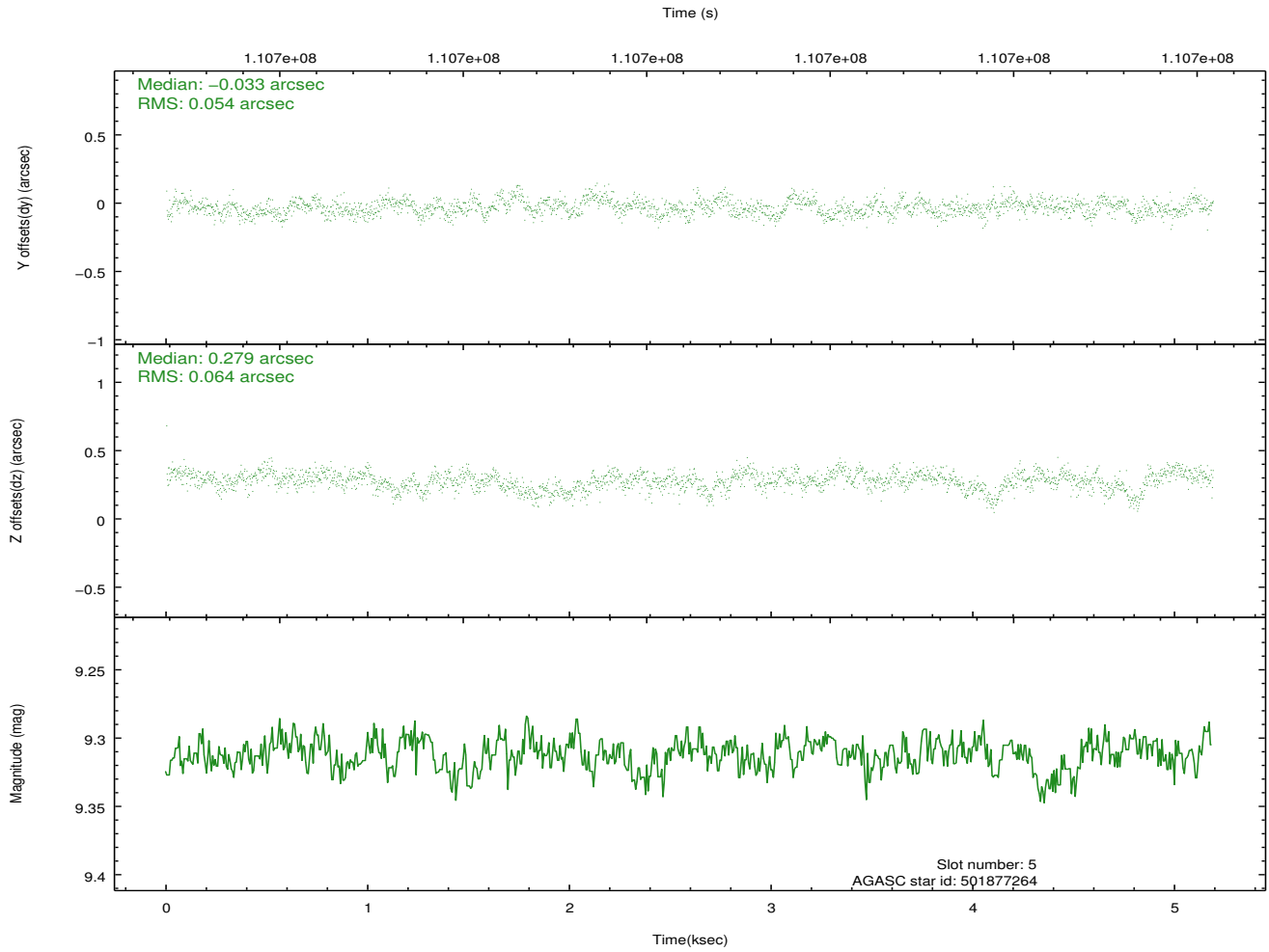
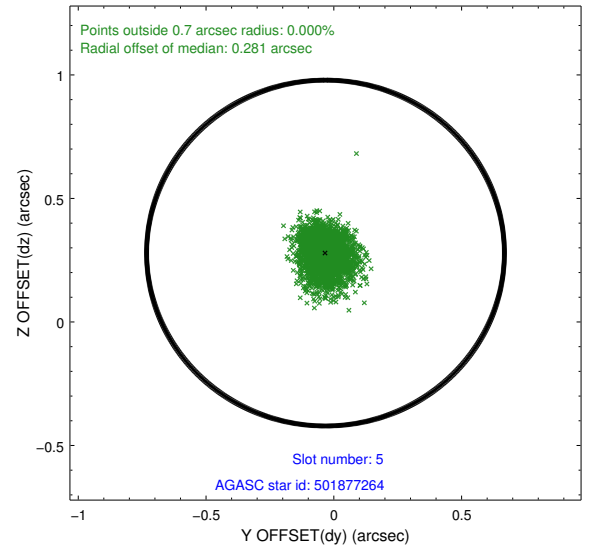
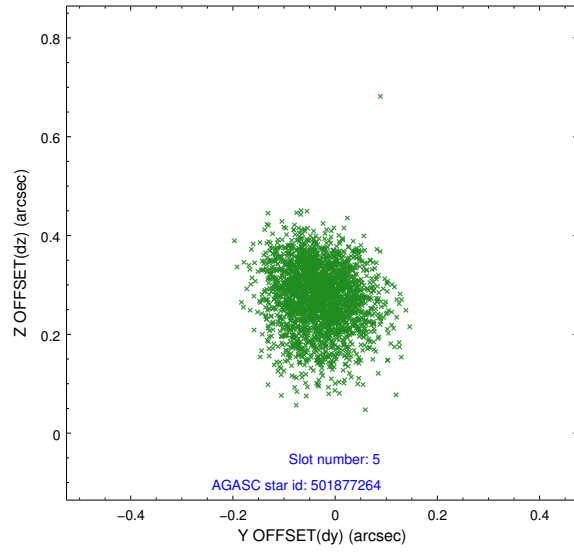
### 2.4.1 Slot 3



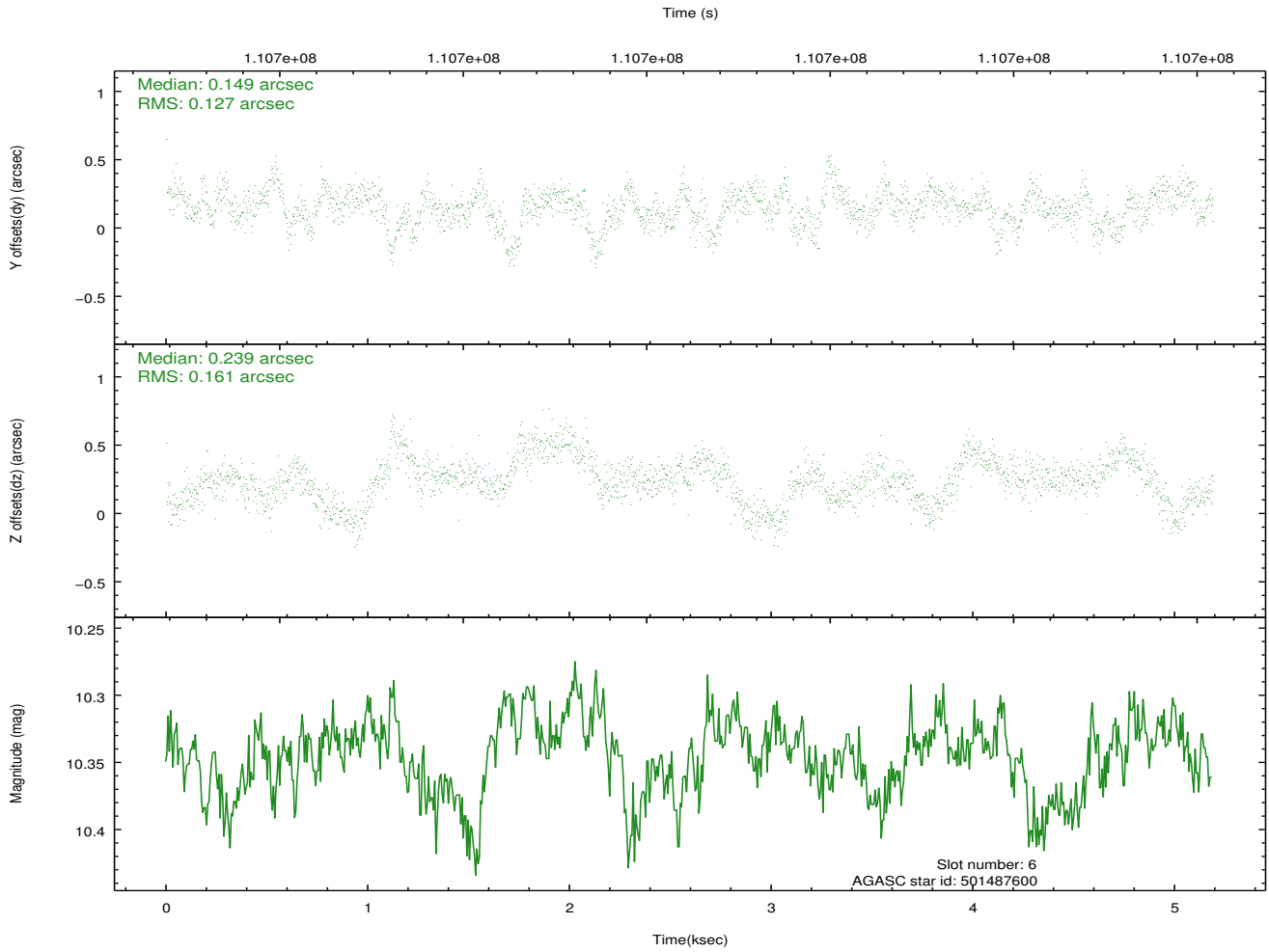
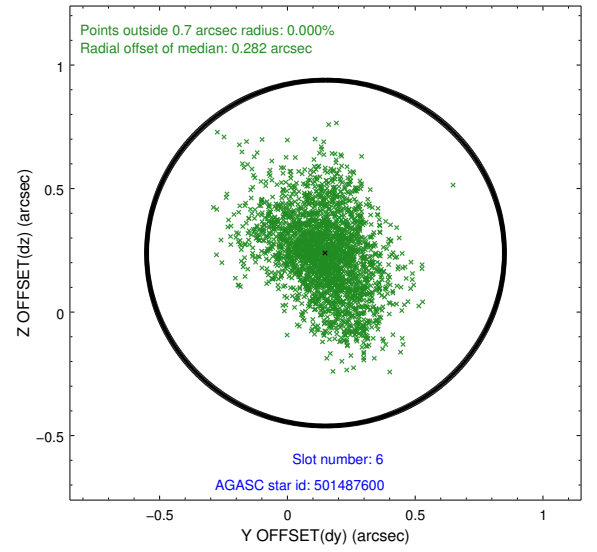
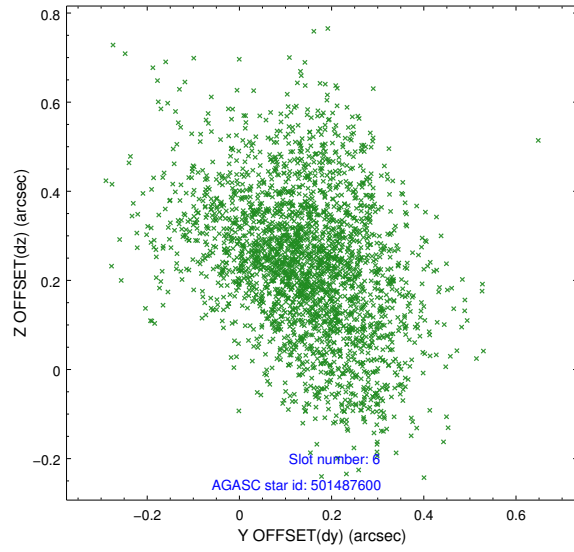
## 2.4.2 Slot 4



### 2.4.3 Slot 5

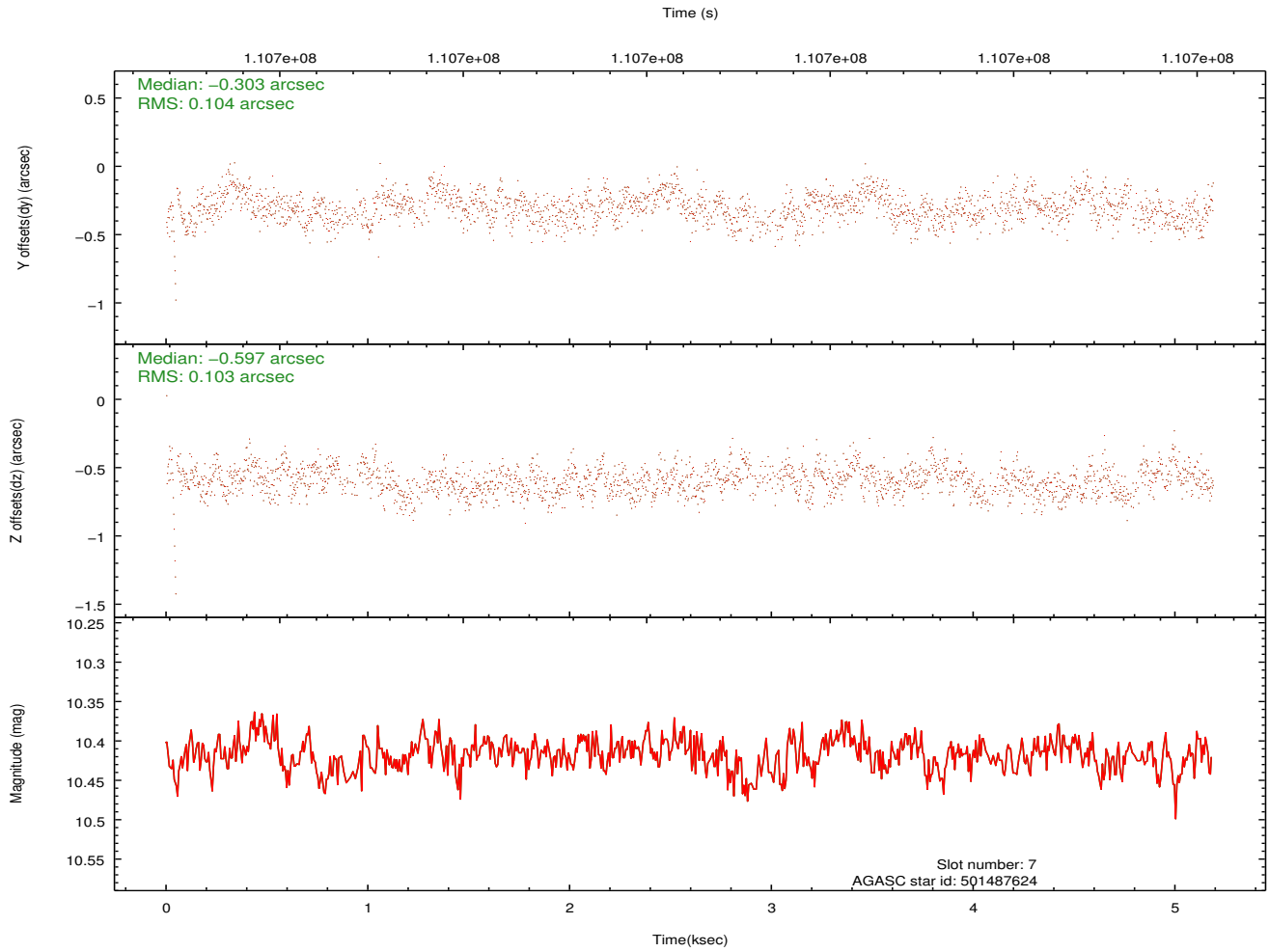
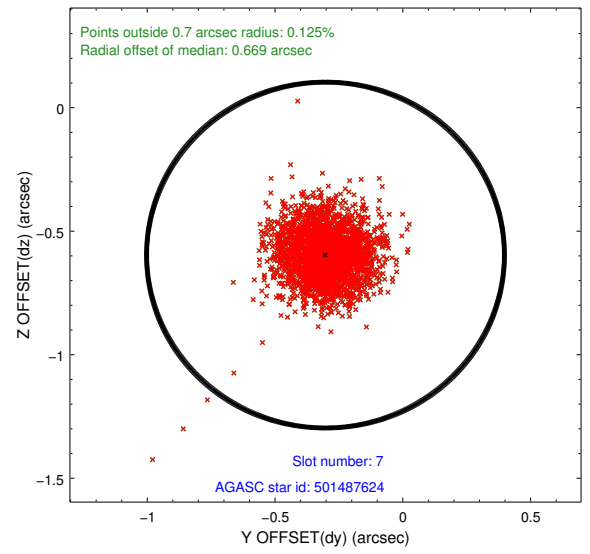
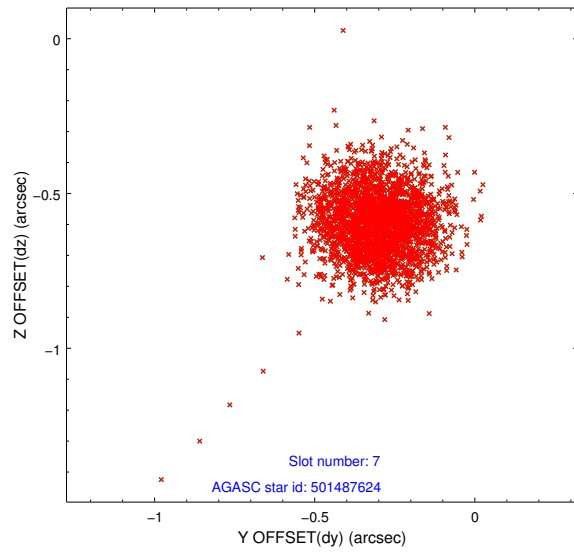


## 2.4.4 Slot 6



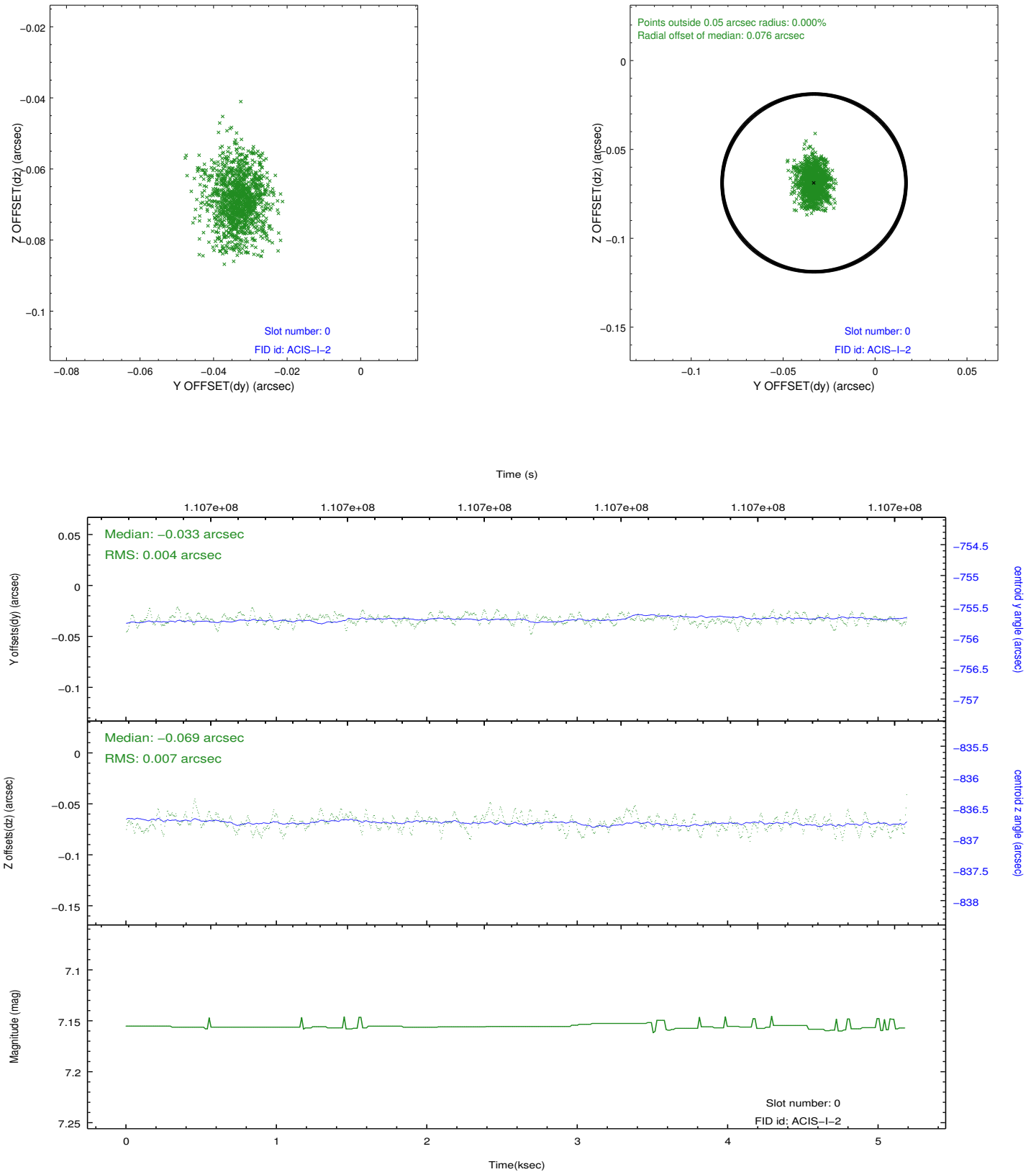


## 2.4.5 Slot 7

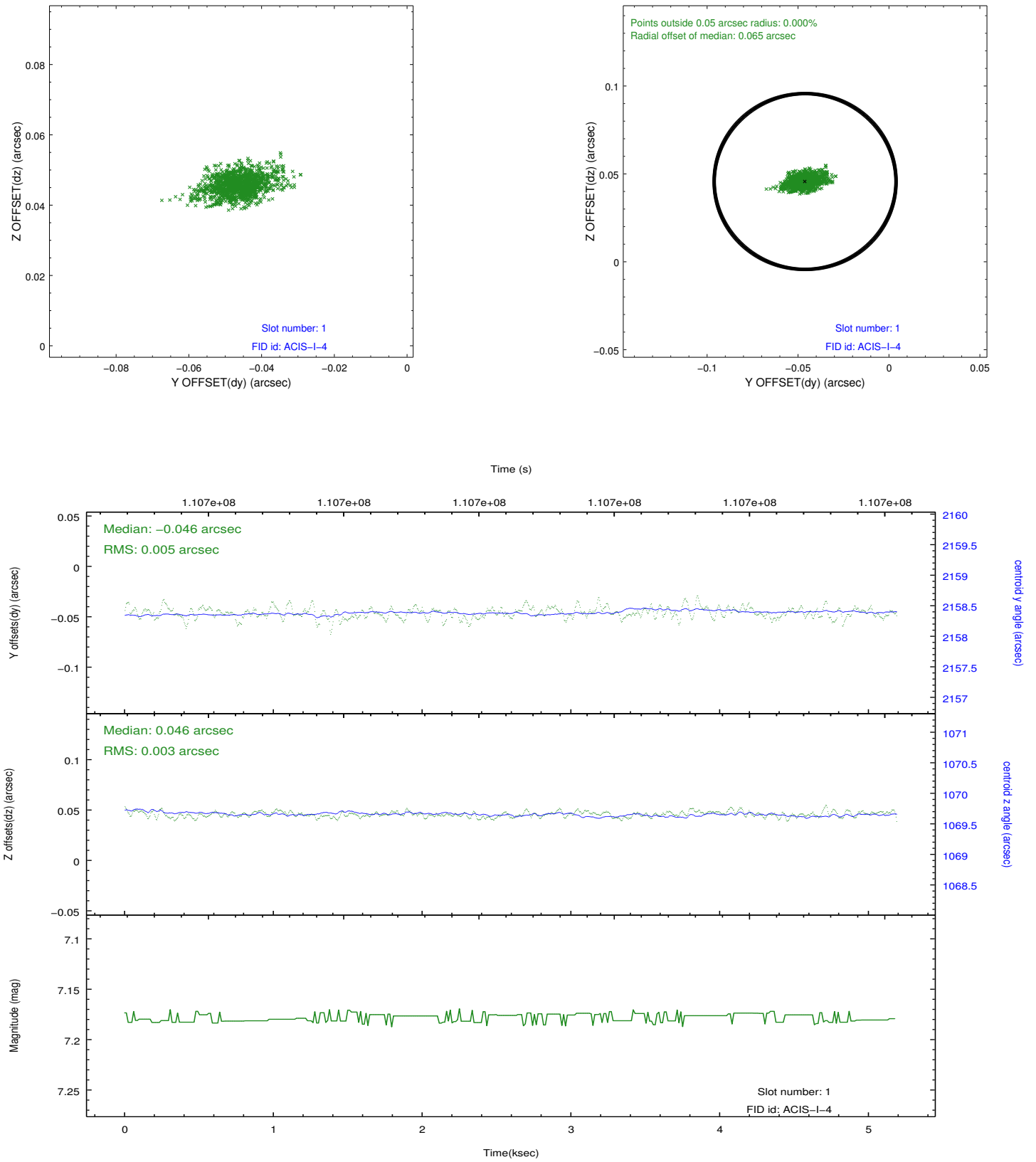


## 2.5 FID Slots

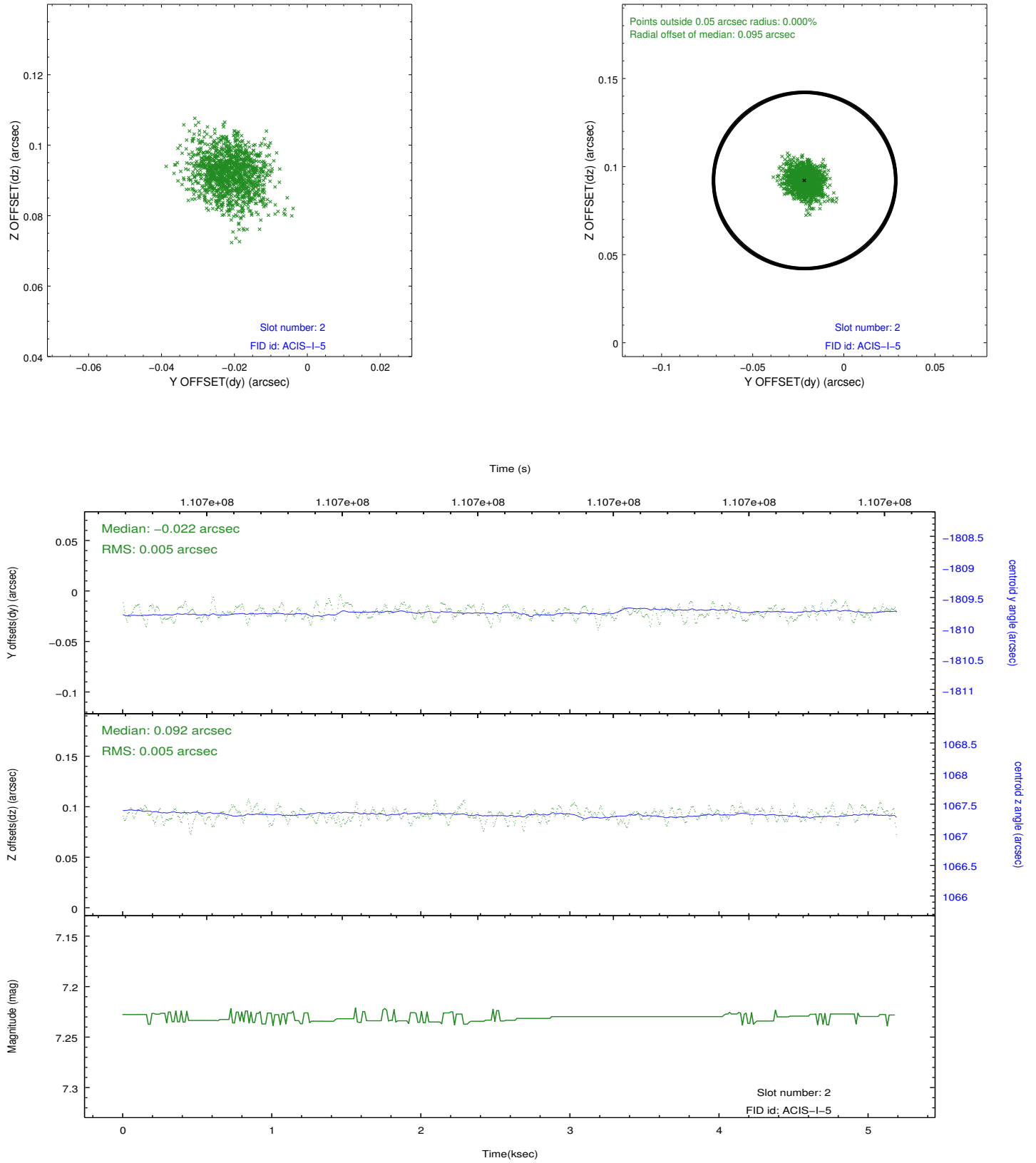
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.09.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.8

### A.2 Comments

Charge time for this observation remains at previous value of 4.8 ksec.