

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1690 - L2 Version 3  
Chandra X-Ray Center

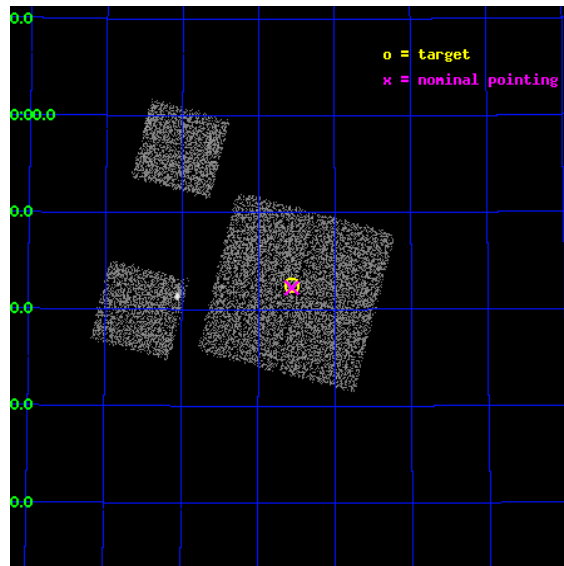
L2 Processing Date : Sep 20 2012

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# 1 Front

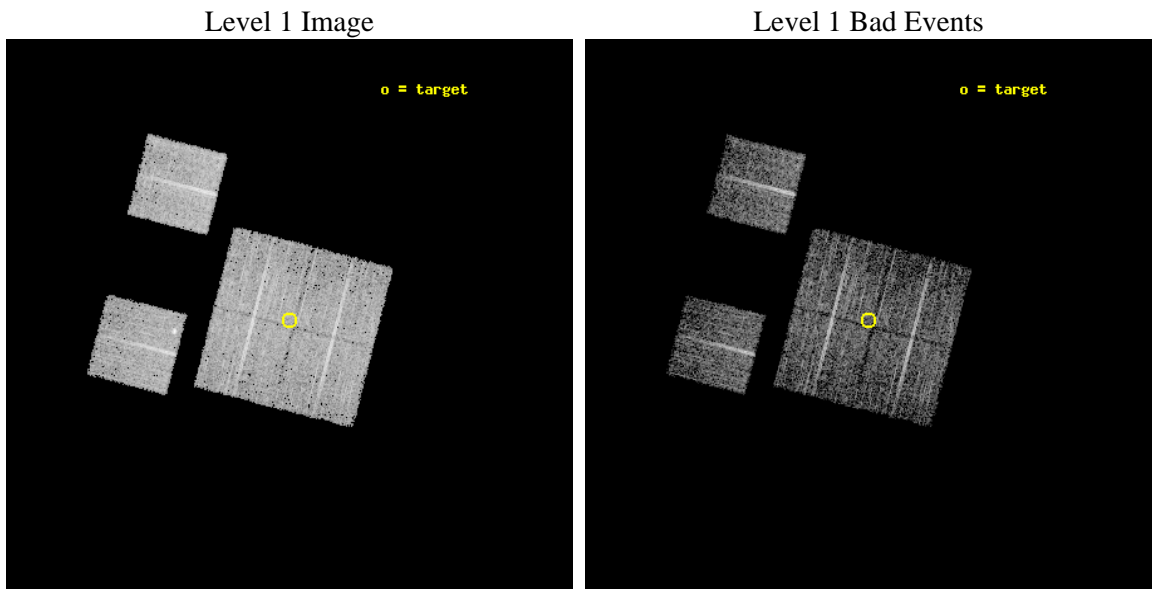
seq_num	900049	Sequence number
obs_id	1690	Observation id
title	LOCKMAN HOLE SHALLOW SURVEY	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	LOCKMAN HOLE #18	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	163.891667	Observer's specified target RA [deg]
dec_targ	57.708889	Observer's specified target Dec [deg]
ra_nom	163.89019946073	Nominal RA [deg]
dec_nom	57.704218762637	Nominal Dec [deg]
roll_nom	284.46279331893	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	18891	Number of level 2 events



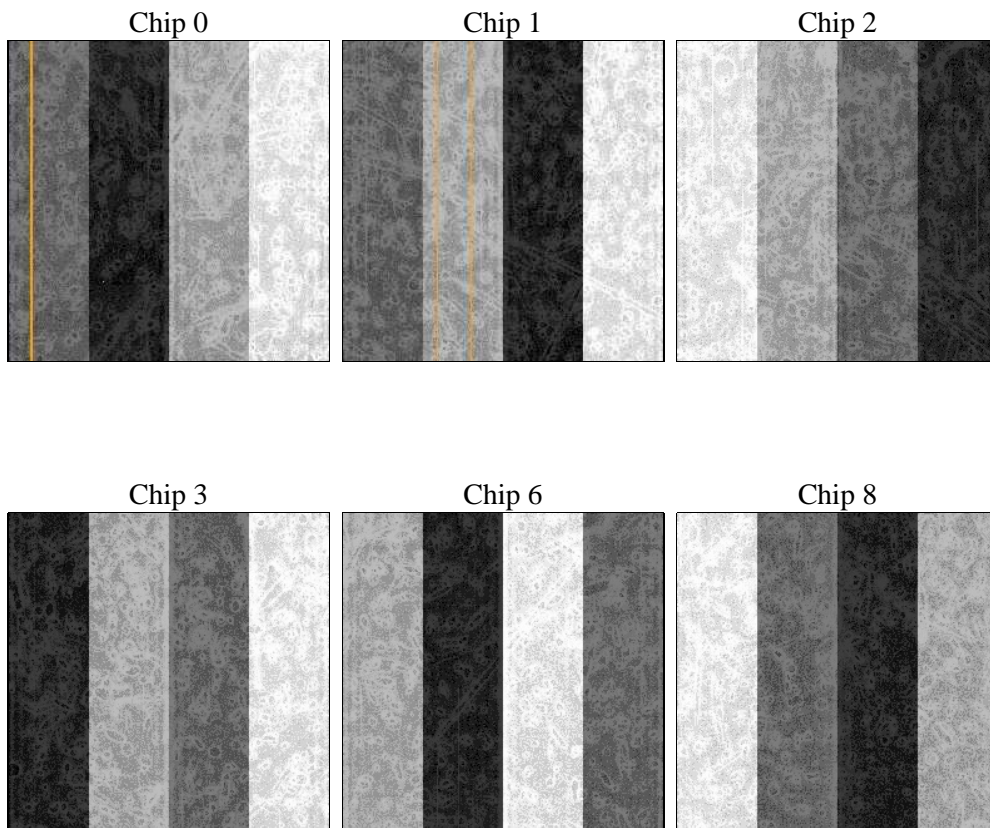
## 2 OBI

### 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	2012-09-20T12:45:15	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	194995	Number of level 1 events

### 2.1.4 Events

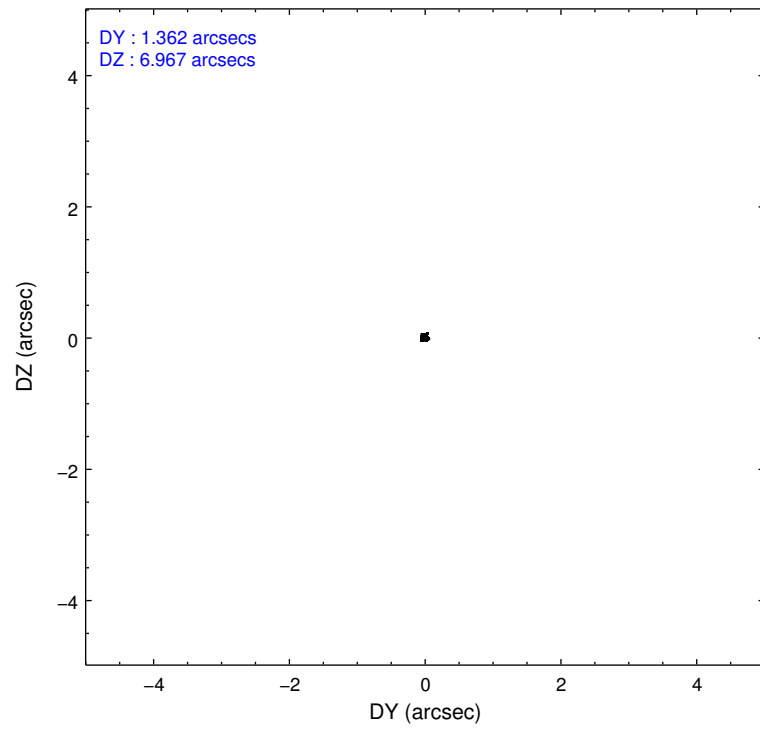
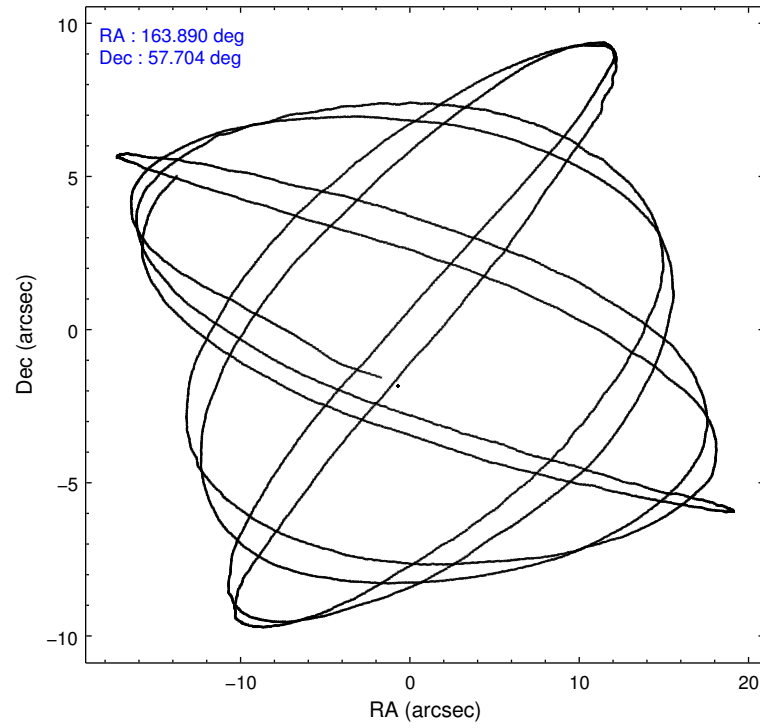
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8
level 1 events	29006	29327	31111	32691	32032	40828	grade 0 events	1496	1404	1455	1480	1898	2616
rejected events	25429	25724	27738	29204	28066	33373		5%	4%	4%	4%	5%	6%
rejected %	87%	87%	89%	89%	87%	81%	grade 1 events	15	11	19	16	17	24
								0%	0%	0%	0%	0%	0%
							grade 2 events	749	711	714	718	719	1427
								2%	2%	2%	2%	2%	3%
							grade 3 events	373	399	320	357	365	906
								1%	1%	1%	1%	1%	2%
							grade 4 events	319	388	315	315	330	802
								1%	1%	1%	0%	1%	1%
							grade 5 events	1155	1176	1070	1177	1269	1619
								3%	4%	3%	3%	3%	3%
							grade 6 events	647	710	572	623	666	1710
								2%	2%	1%	1%	2%	4%
							grade 7 events	24252	24528	26646	28005	26768	31724
								83%	83%	85%	85%	83%	77%

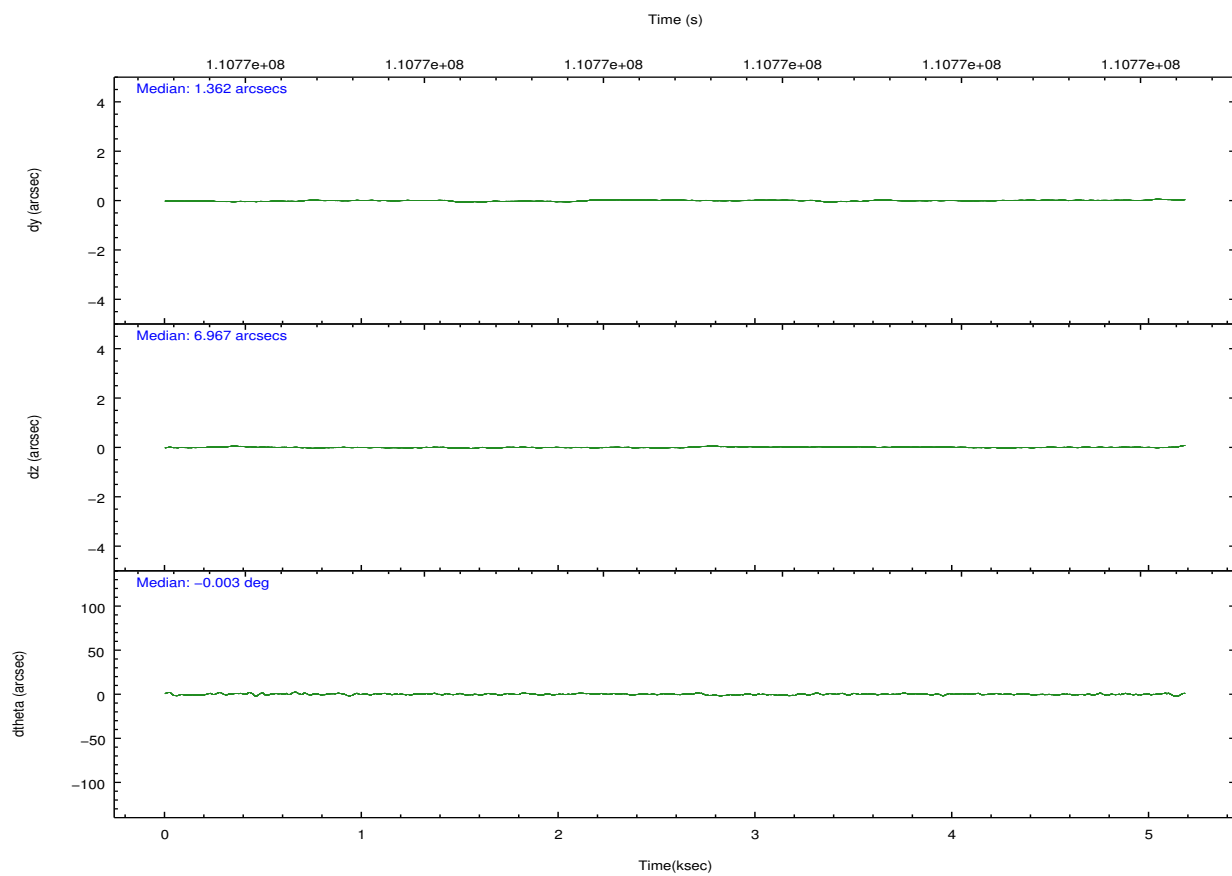
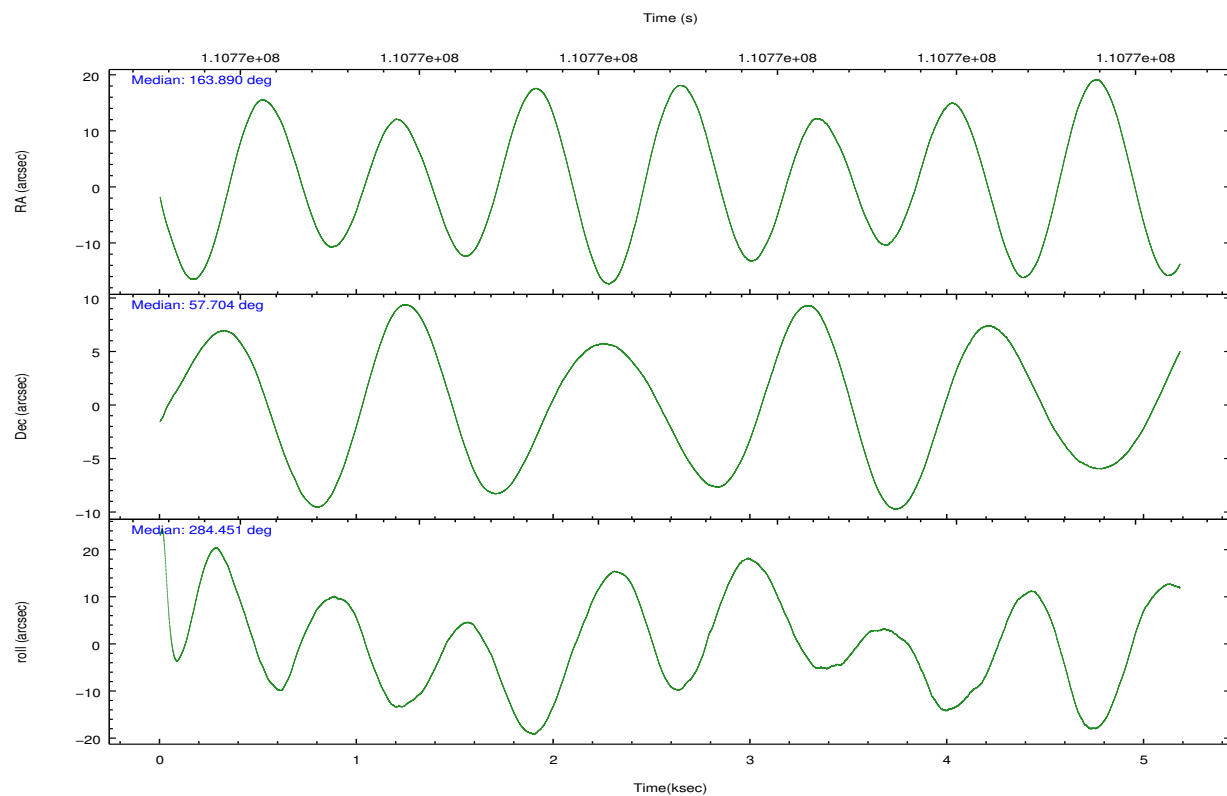


## 2.2 Compared Parameters

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	163.854317	163.8901994607266	Subarray requested	NONE	NONE
[deg] Pointing Dec	57.723777	57.70421876263654	Alternating exposures requested	N	N
[deg] Pointing Roll	284.284450	284.4627933189303	[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)	110768993.184000	110768616.8862			
Observation start date	2001-07-06T01:08:49	2001-07-06T01:03:36			
[s] Observation end time (MET)	110773993.184000	110774126.77391			
Observation end date	2001-07-06T02:32:09	2001-07-06T02:35:26			
Read mode	TIMED	TIMED			

## 2.3 Aspect



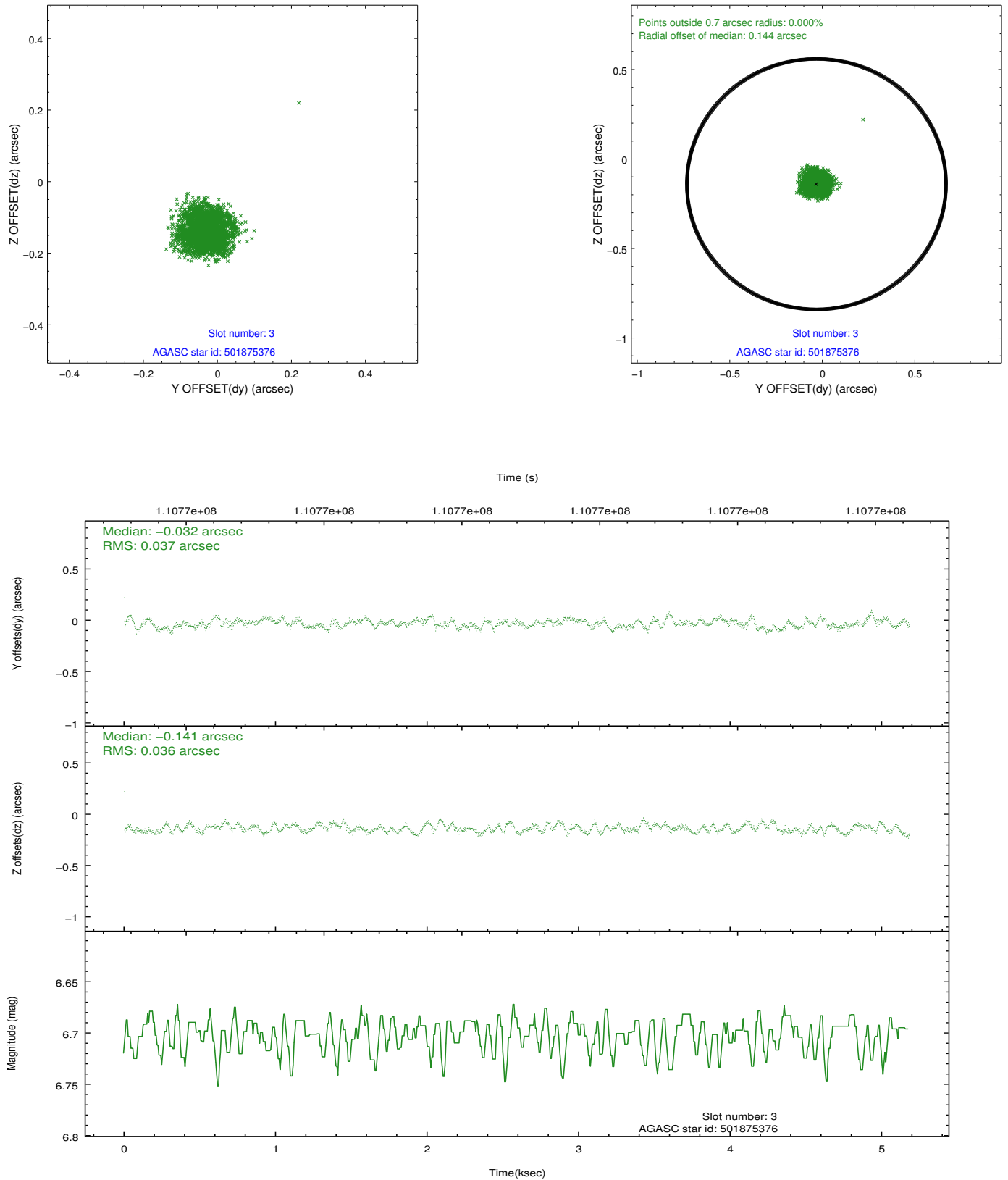


### Slot Statistics

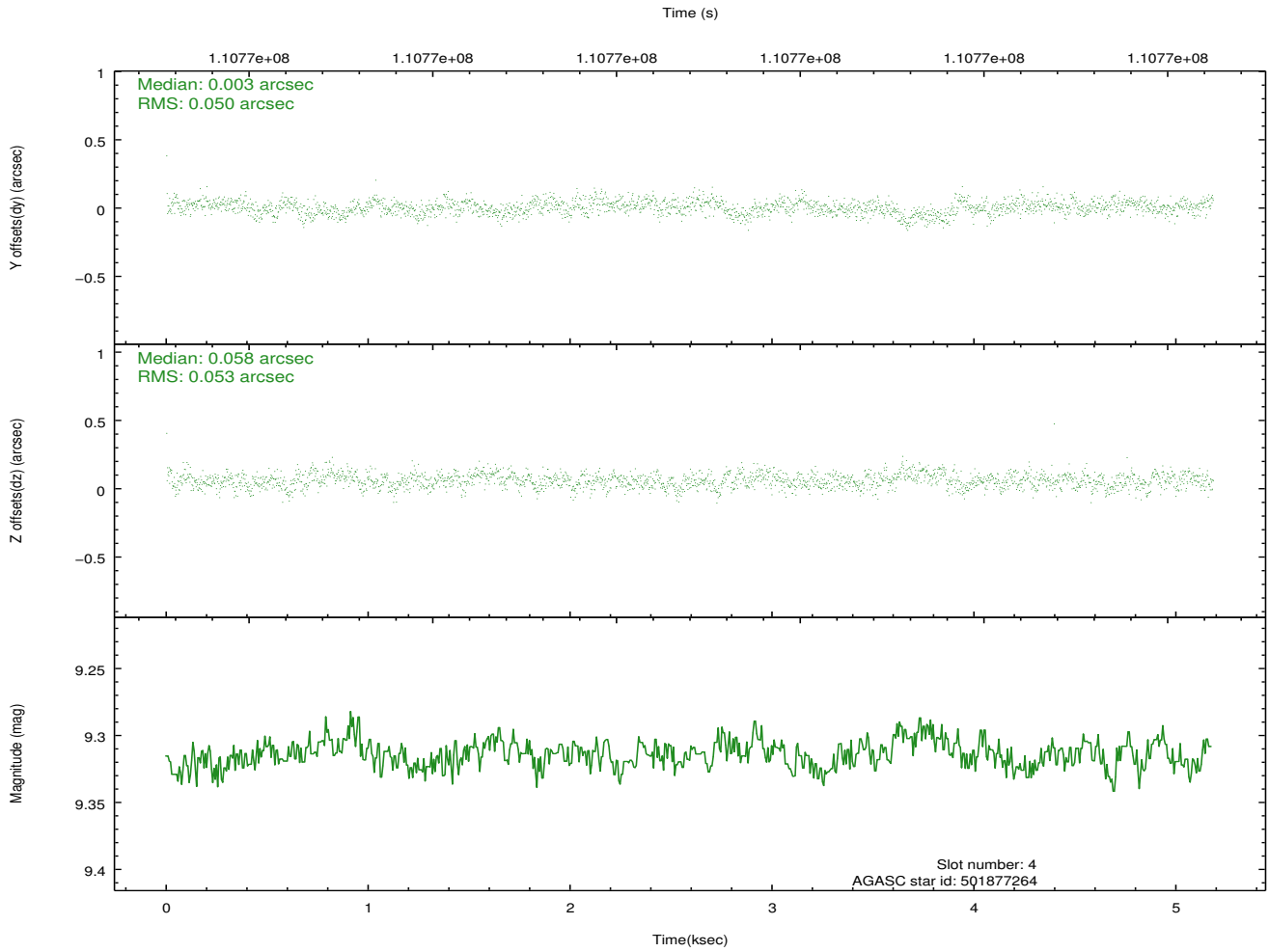
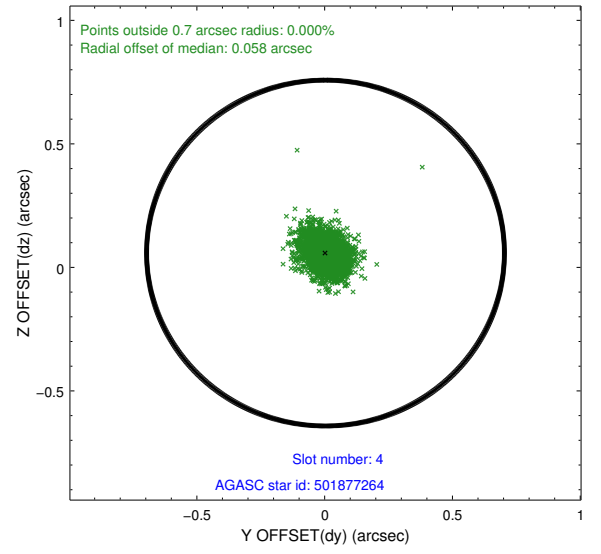
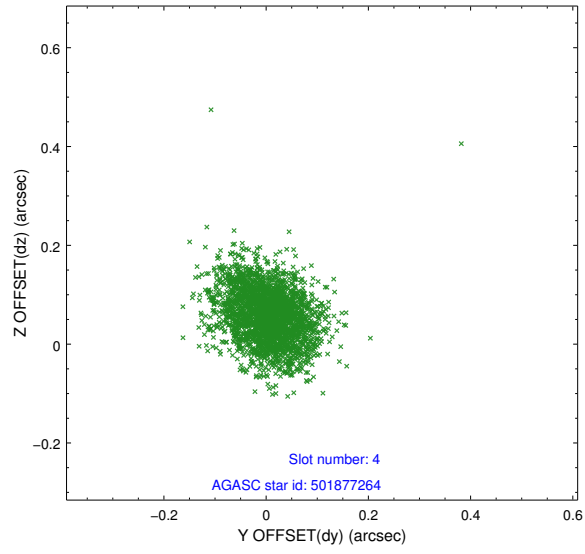
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	1264	-0.035	-0.069	0.009	0.015	0.000000	0.000000	-755.72	-836.80
1	FID	ACIS-I-4	7.18	1264	-0.048	0.046	0.006	0.010	0.000000	0.000000	2157.78	1068.93
2	FID	ACIS-I-5	7.23	1264	-0.018	0.091	0.009	0.014	0.000000	0.000000	-1808.04	1068.11
3	GUIDE	501875376	6.70	2529	-0.032	-0.141	0.055	0.083	164.111621	57.502963	892.64	285.81
4	GUIDE	501877264	9.31	2529	0.003	0.058	0.076	0.123	163.254394	57.702218	-213.43	-1136.56
5	GUIDE	501876472	9.00	2529	-0.004	0.026	0.063	0.104	163.621724	57.867447	-611.39	-305.04
6	GUIDE	501877056	9.69	2529	-0.077	-0.012	0.099	0.161	164.433826	58.166965	-1279.36	1460.22
7	GUIDE	501488296	9.74	2526	0.111	0.063	0.096	0.160	164.354320	57.421227	1291.12	671.67

## 2.4 Star Slots

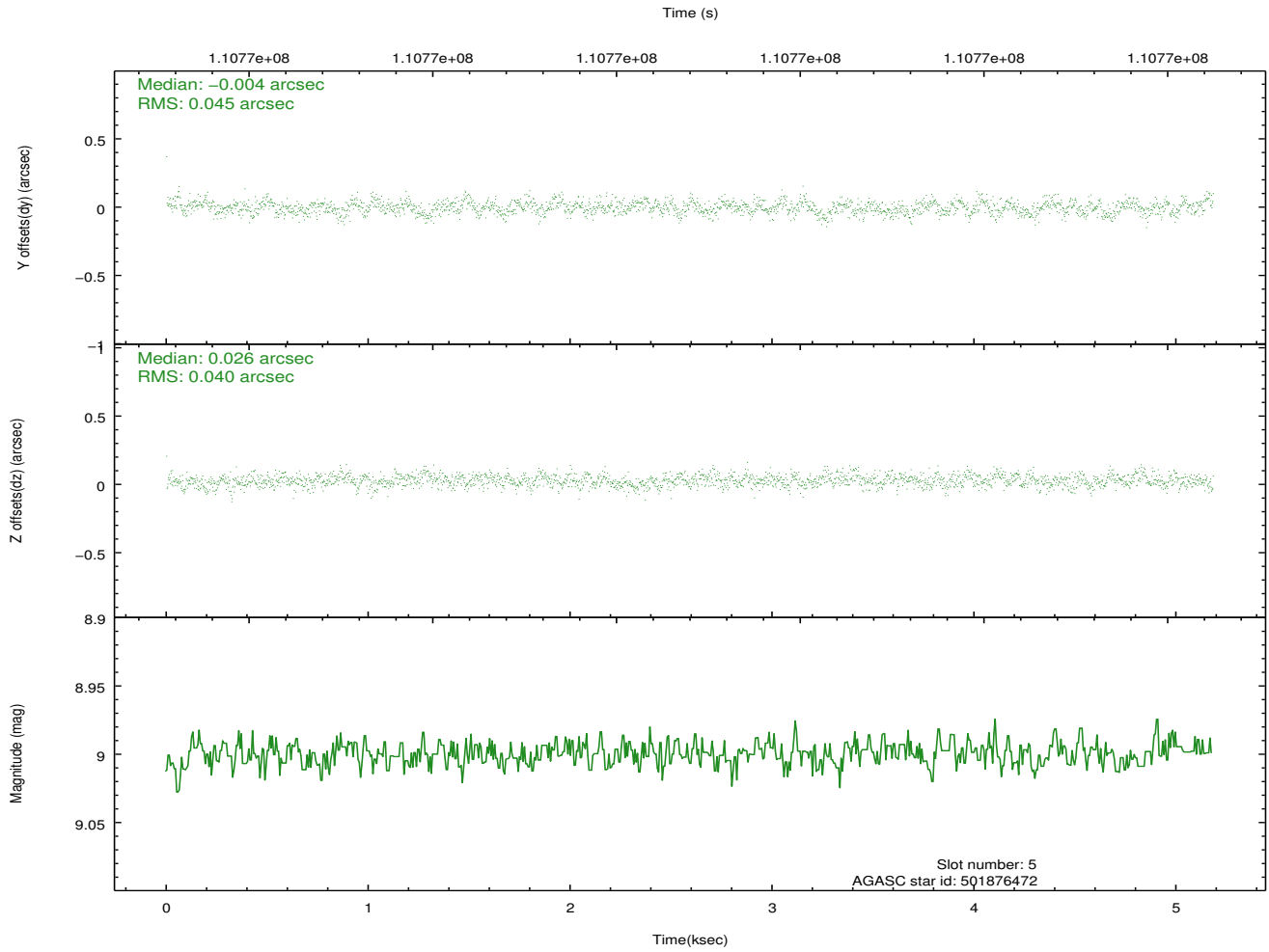
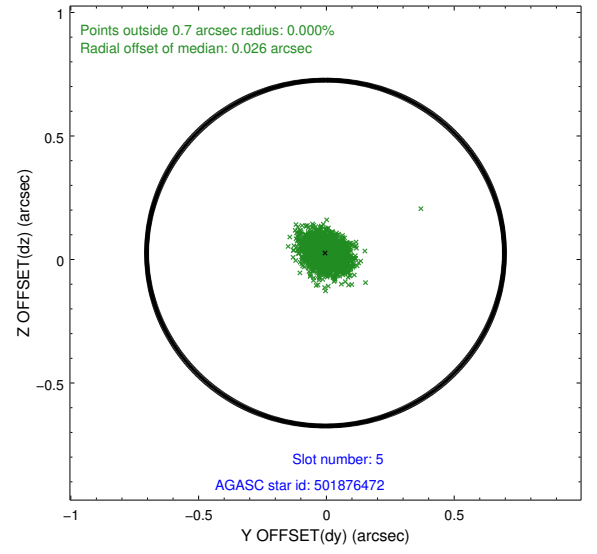
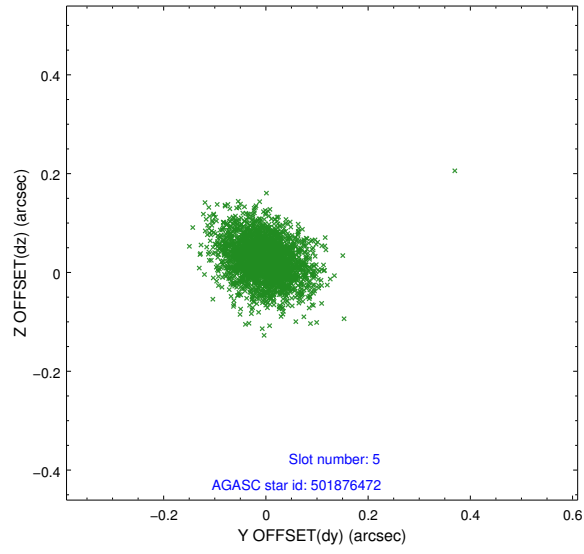
### 2.4.1 Slot 3



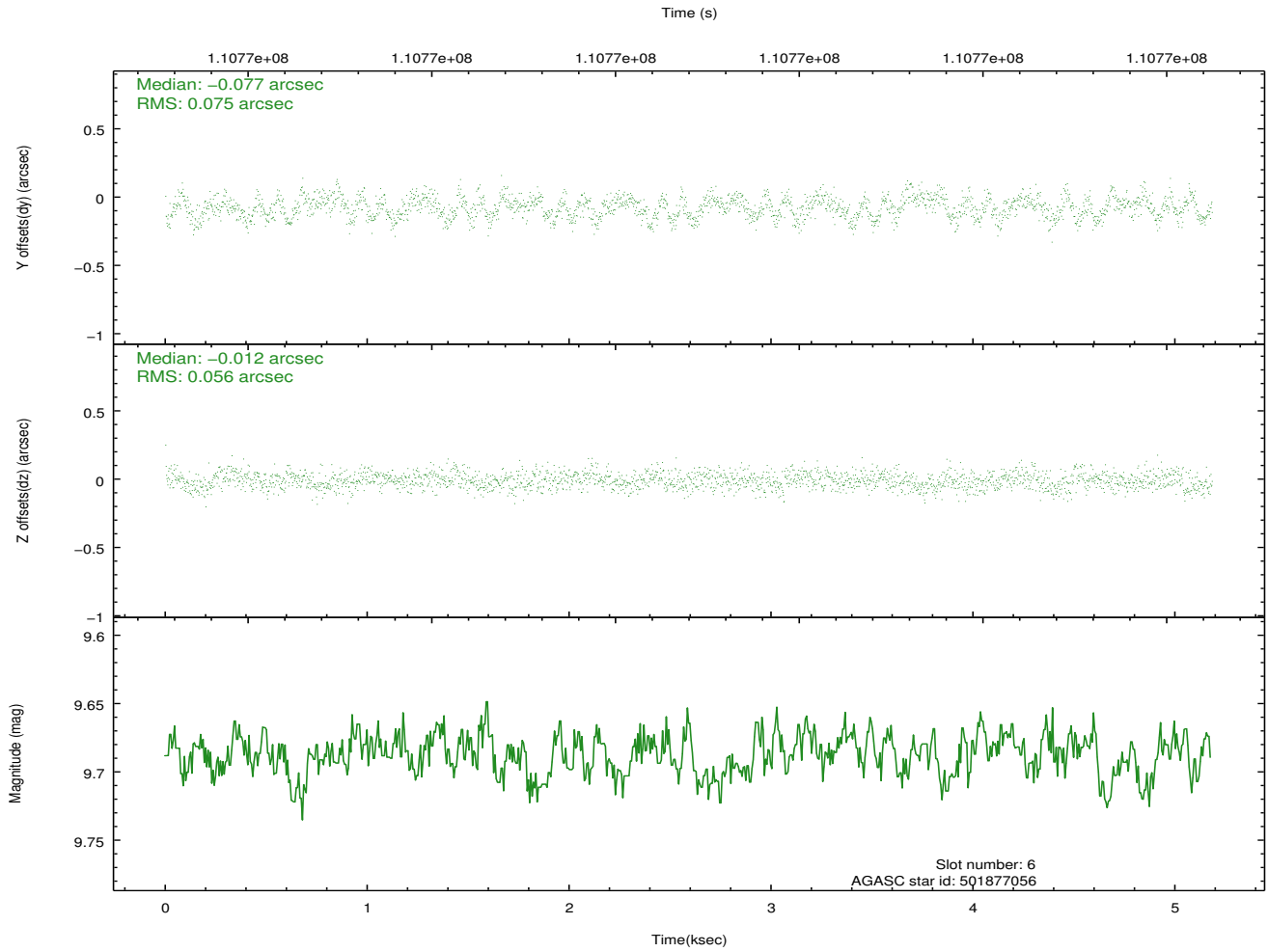
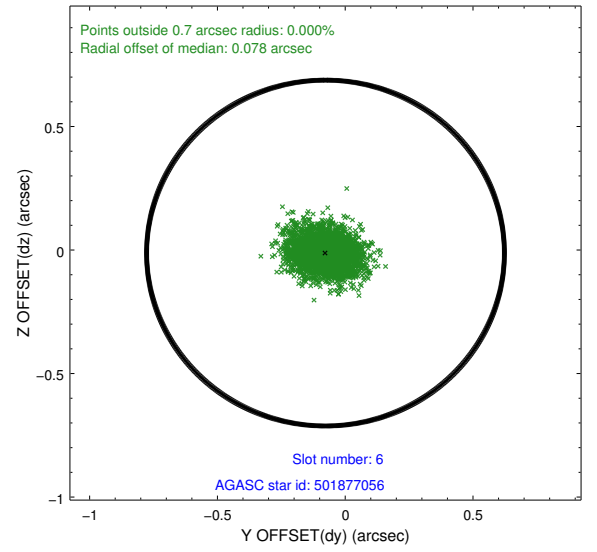
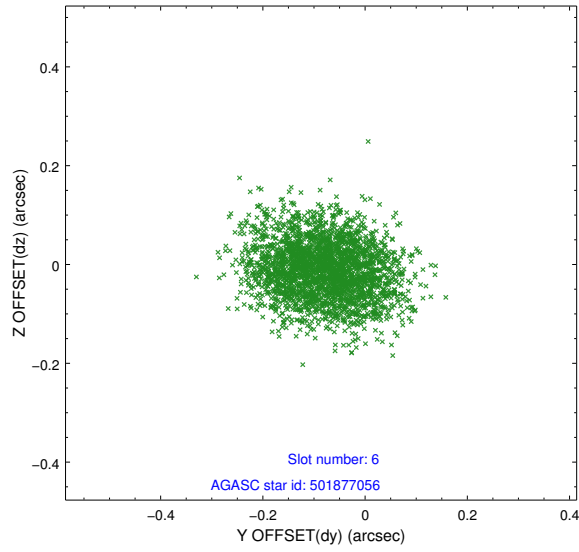
## 2.4.2 Slot 4



### 2.4.3 Slot 5

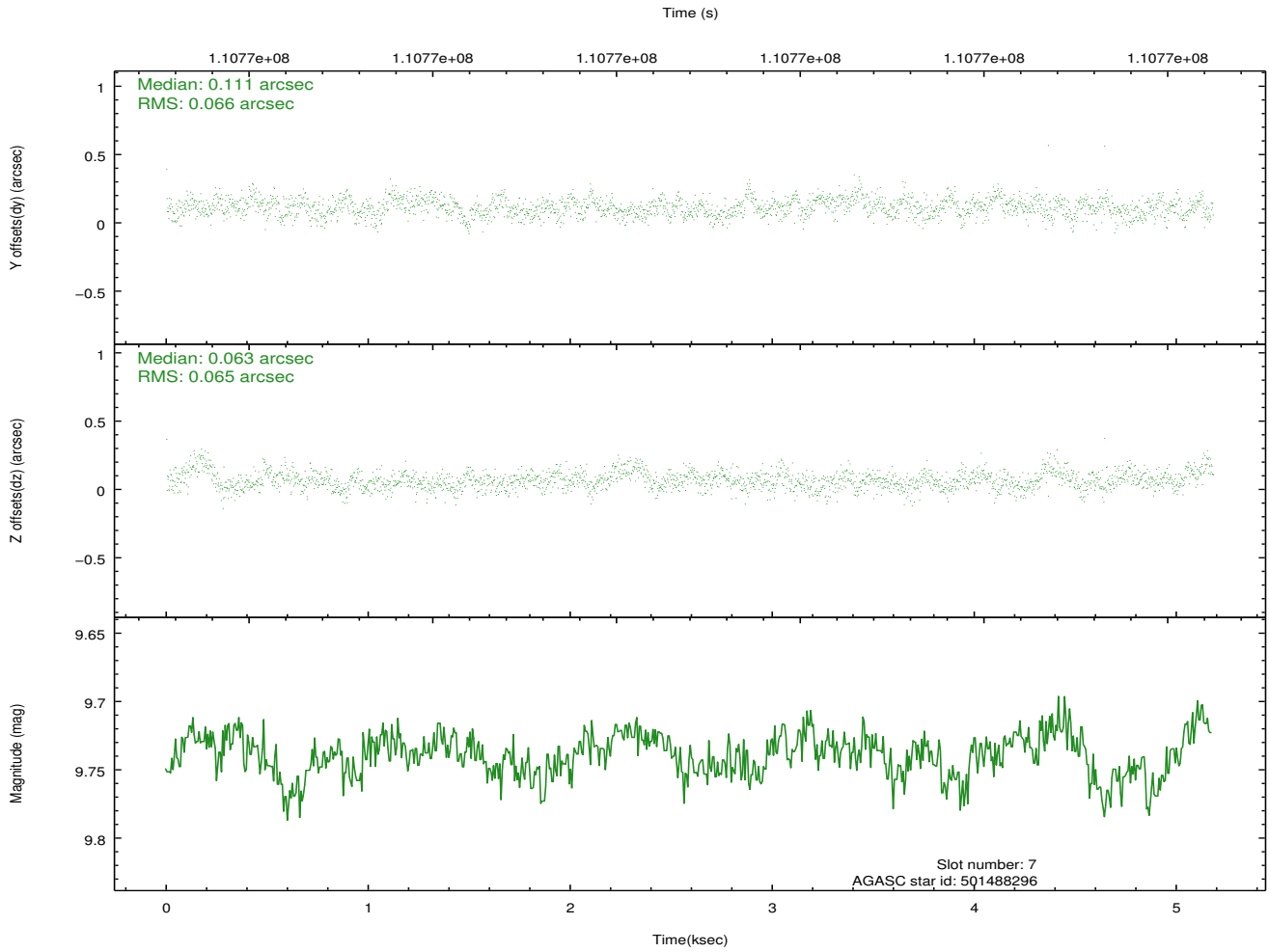
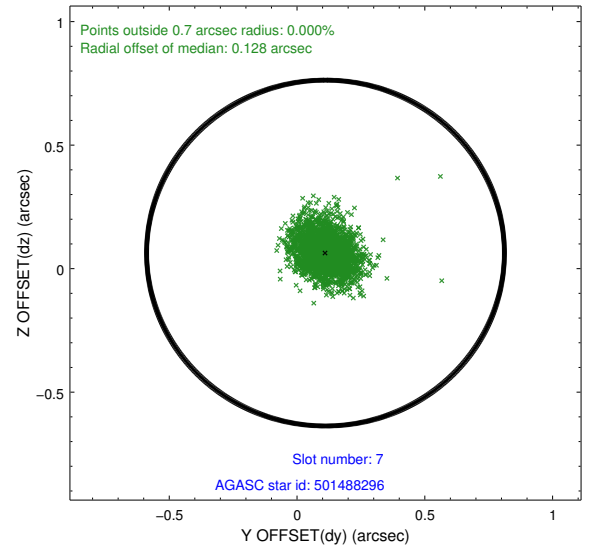
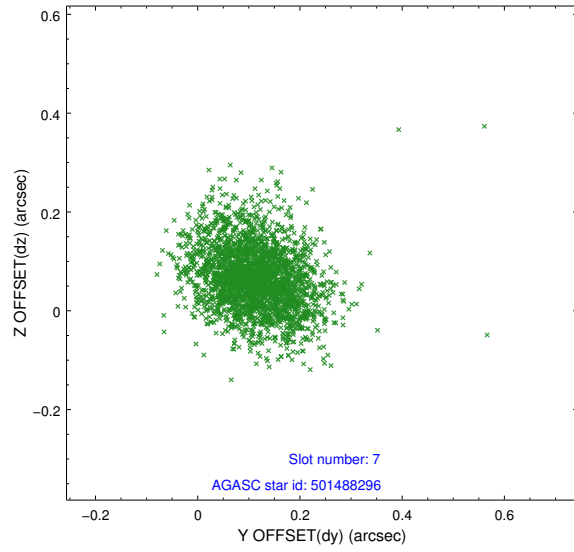


## 2.4.4 Slot 6



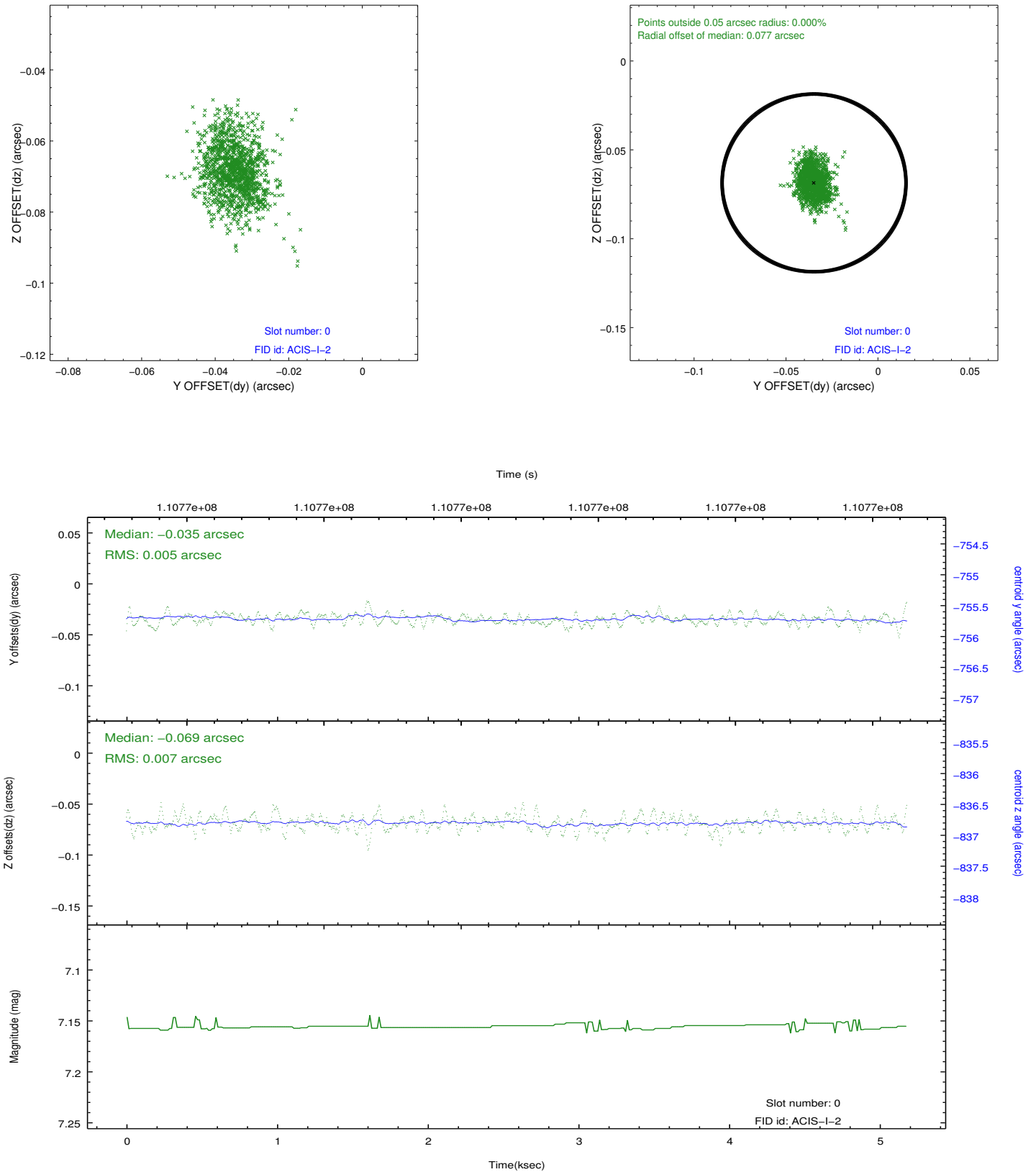


## 2.4.5 Slot 7

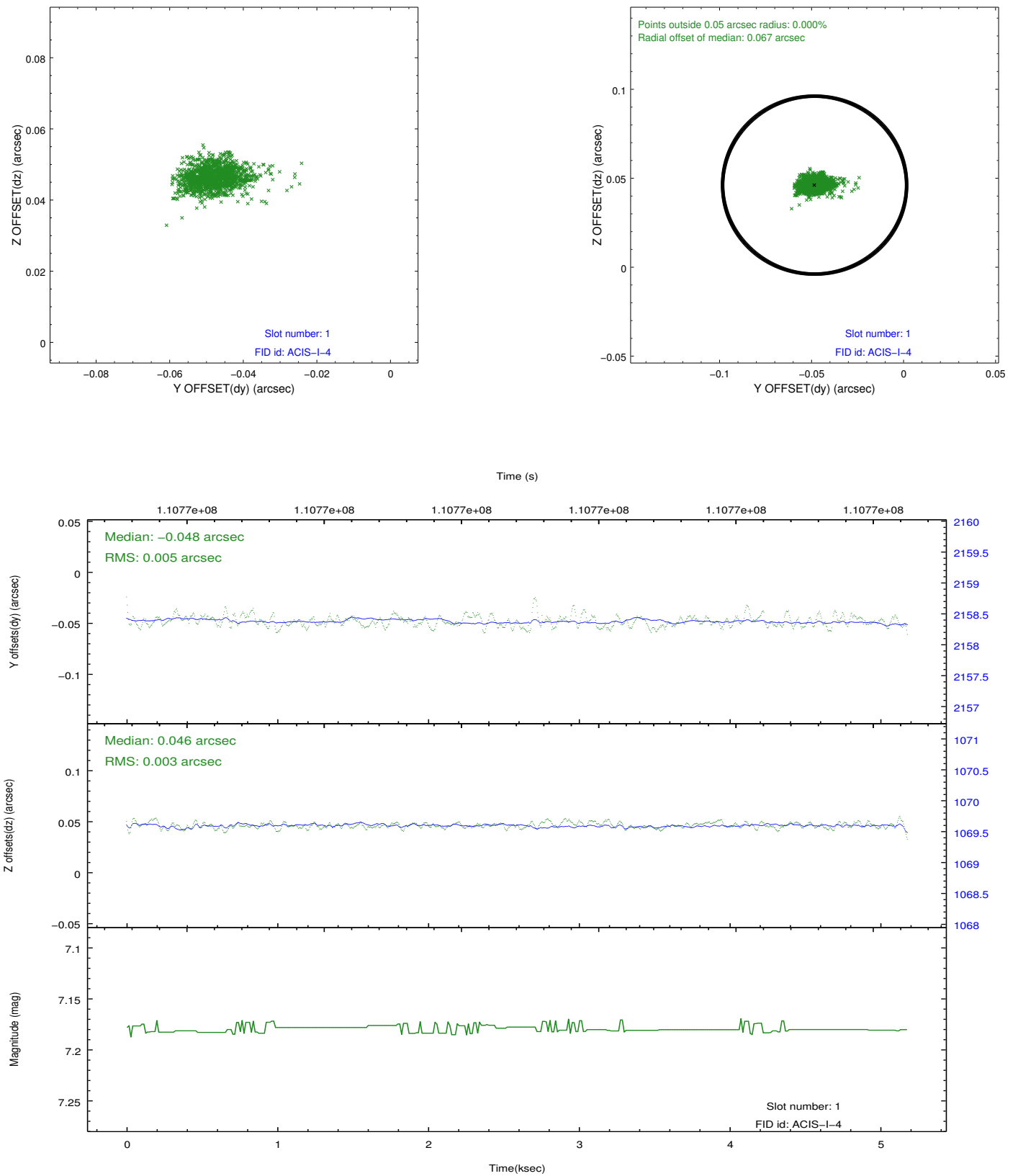


## 2.5 FID Slots

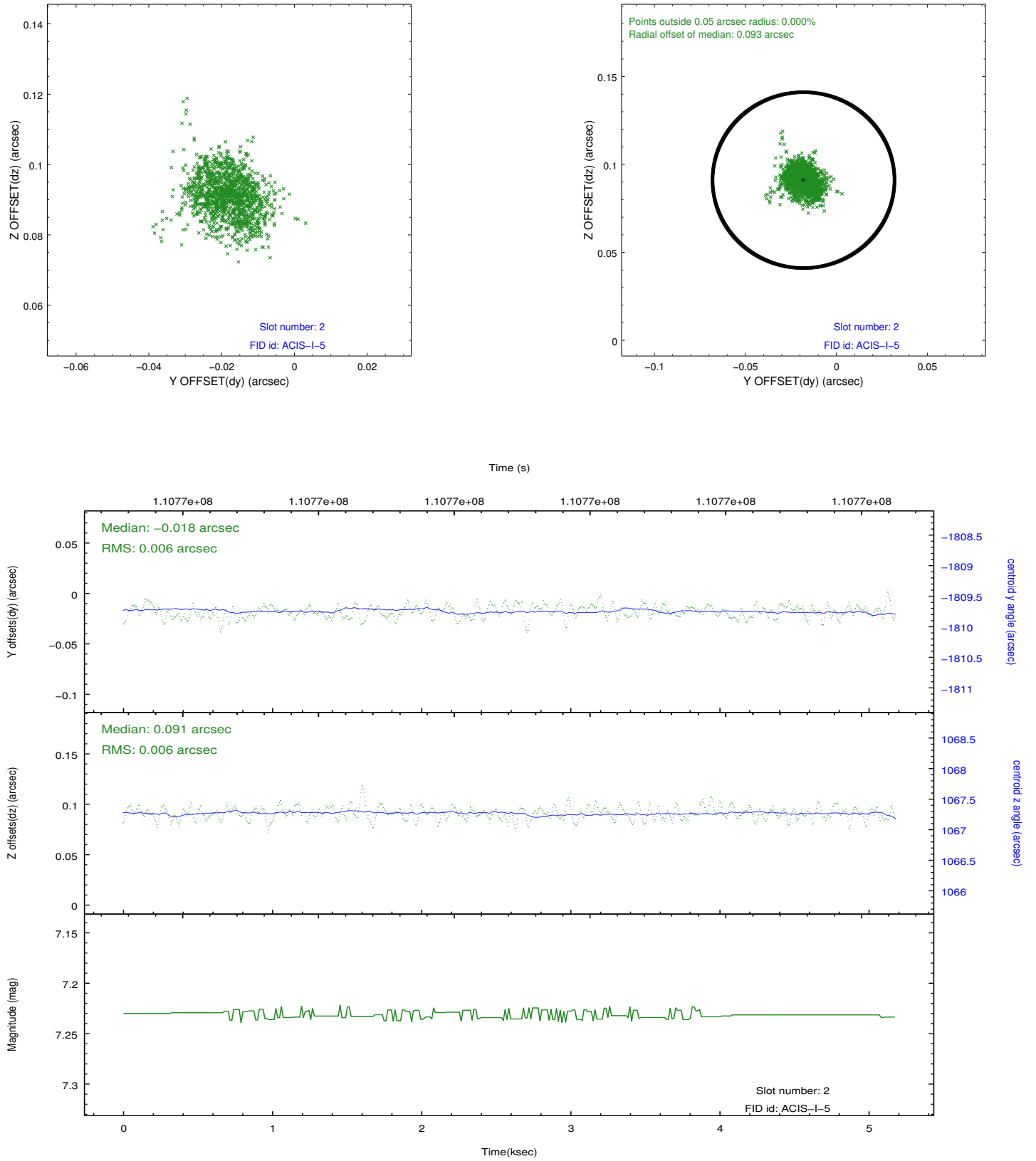
### 2.5.1 Slot 0



## 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)	2012.09.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.761

### A.2 Comments