

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1683 - L2 Version 3  
Chandra X-Ray Center

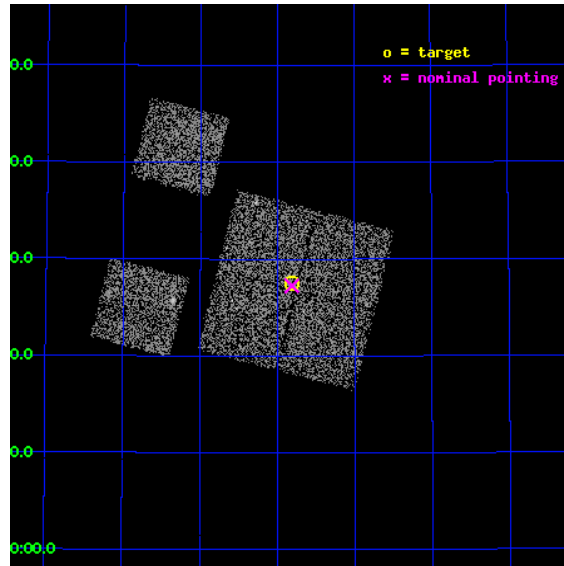
L2 Processing Date : Sep 20 2012

## 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

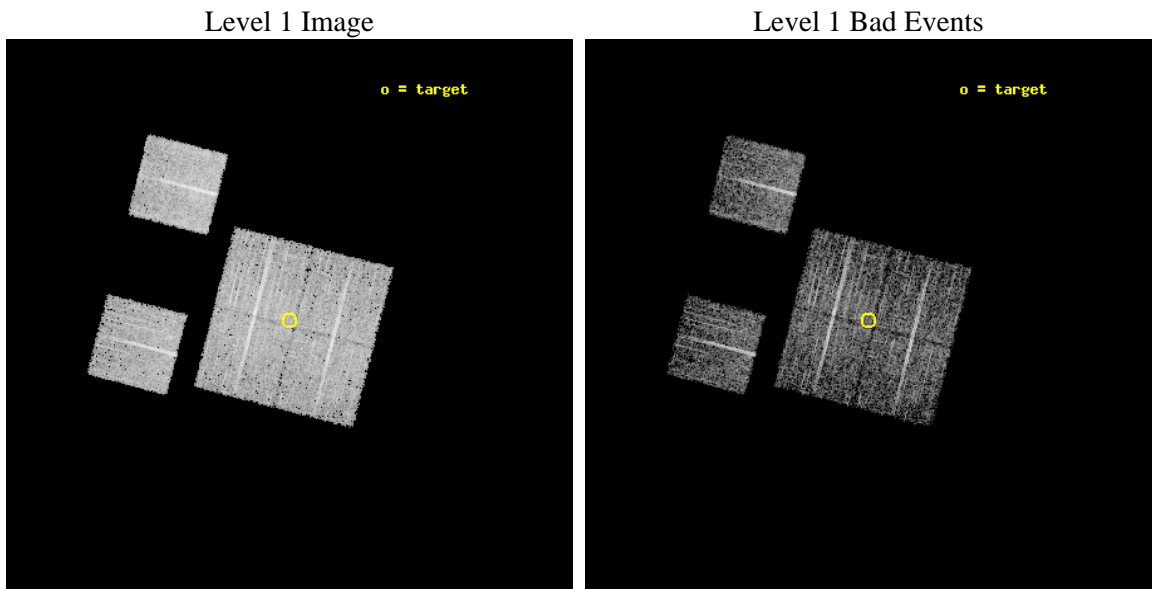
seq_num	900042	Sequence number
obs_id	1683	Observation id
title	LOCKMAN HOLE SHALLOW SURVEY	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	LOCKMAN HOLE #11	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	163.204167	Observer's specified target RA [deg]
dec_targ	57.458889	Observer's specified target Dec [deg]
ra_nom	163.20297470454	Nominal RA [deg]
dec_nom	57.454228341849	Nominal Dec [deg]
roll_nom	284.47027835203	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	18464	Number of level 2 events



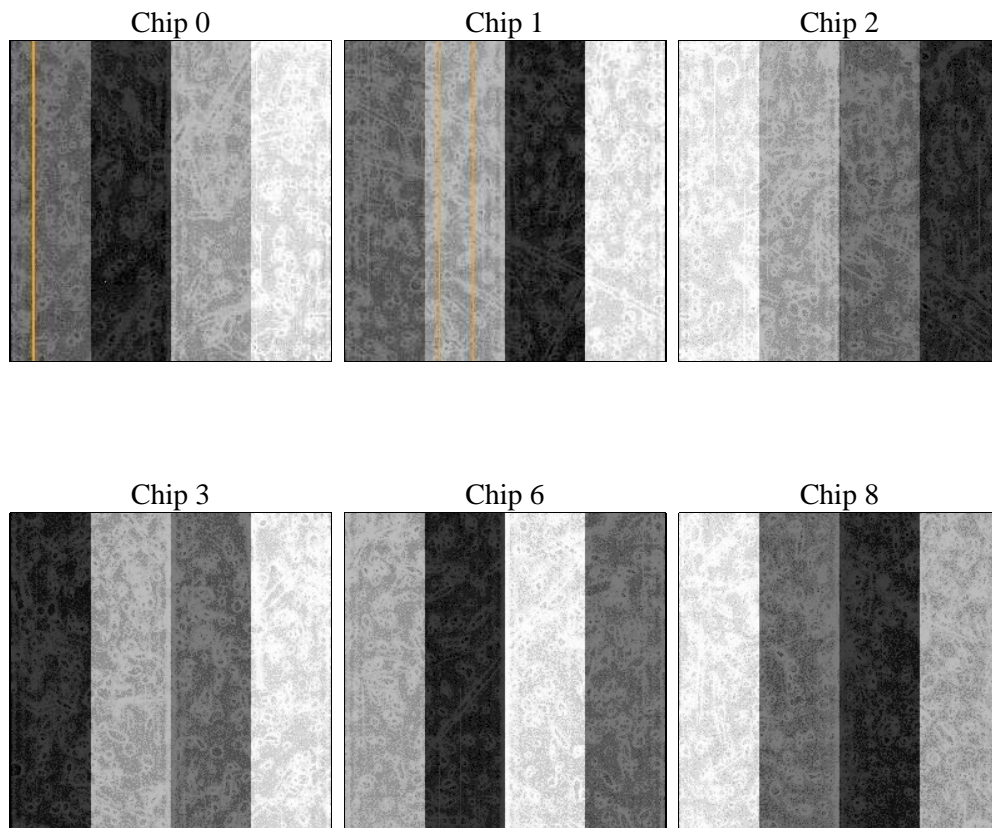
## 2 OBI

### 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	2012-09-20T12:43:29	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	189357	Number of level 1 events

### 2.1.4 Events

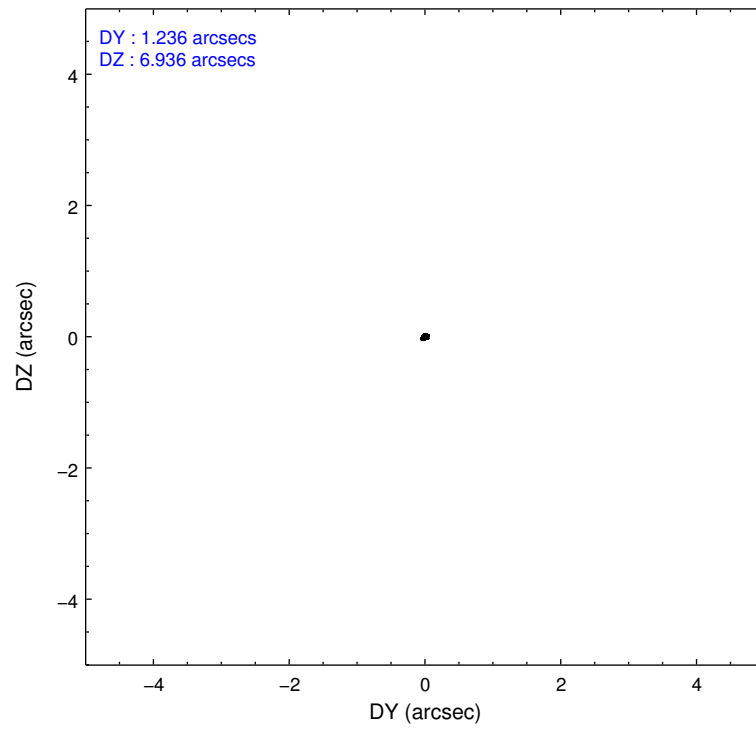
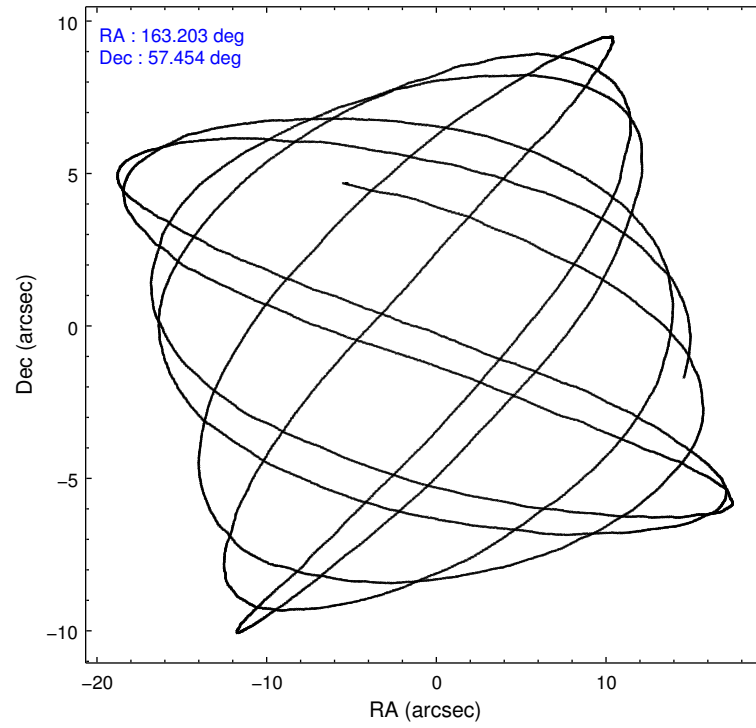
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8
level 1 events	28128	28426	29816	33424	29712	39851	grade 0 events	1502	1432	1560	1541	1438	2267
rejected events	24572	24884	26255	29885	26176	32243		5%	5%	5%	4%	4%	5%
rejected %	87%	87%	88%	89%	88%	80%	grade 1 events	10	14	20	12	11	30
								0%	0%	0%	0%	0%	0%
							grade 2 events	754	684	733	711	688	1719
								2%	2%	2%	2%	2%	4%
							grade 3 events	373	378	347	339	334	855
								1%	1%	1%	1%	1%	2%
							grade 4 events	304	366	339	338	358	785
								1%	1%	1%	1%	1%	1%
							grade 5 events	1074	1186	1024	1210	1223	1537
								3%	4%	3%	3%	4%	3%
							grade 6 events	628	689	584	610	720	1998
								2%	2%	1%	1%	2%	5%
							grade 7 events	23483	23677	25209	28663	24940	30660
								83%	83%	84%	85%	83%	76%

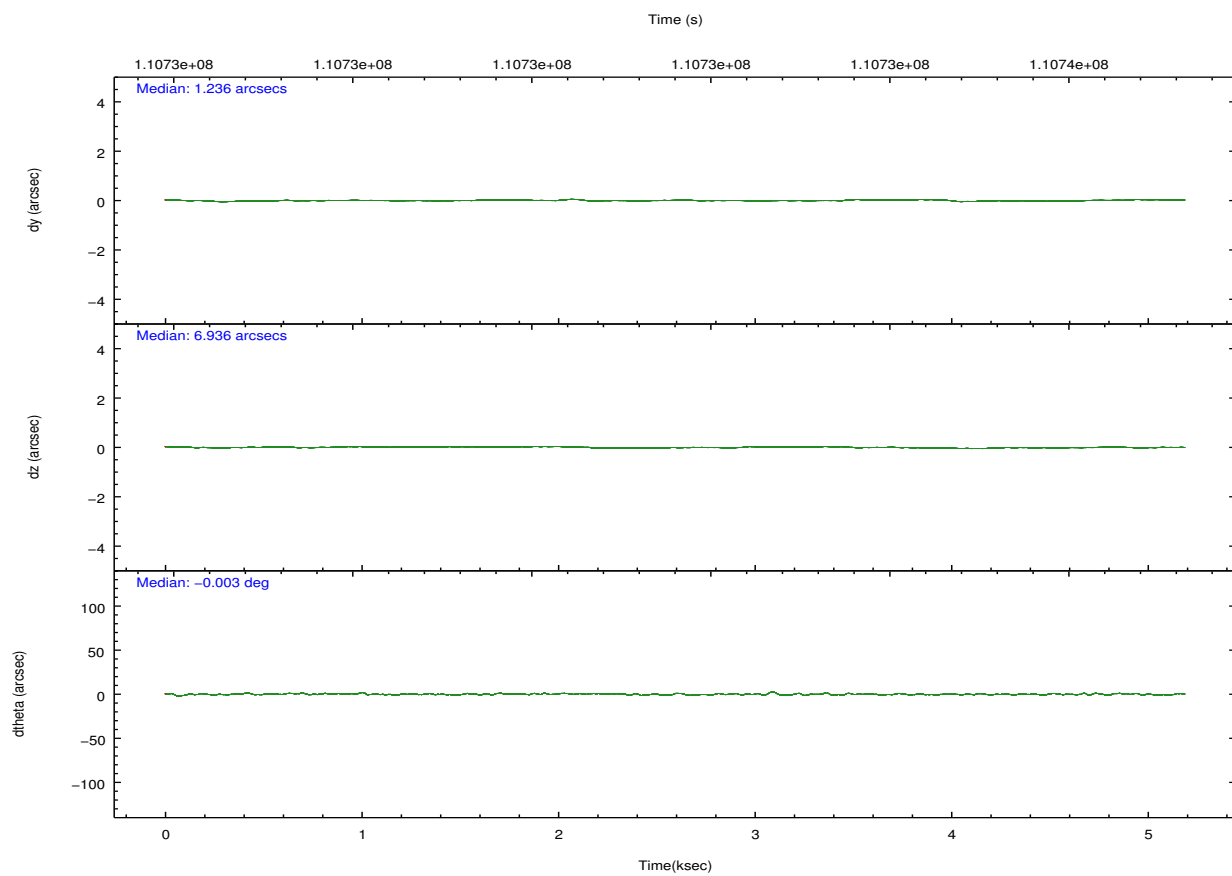
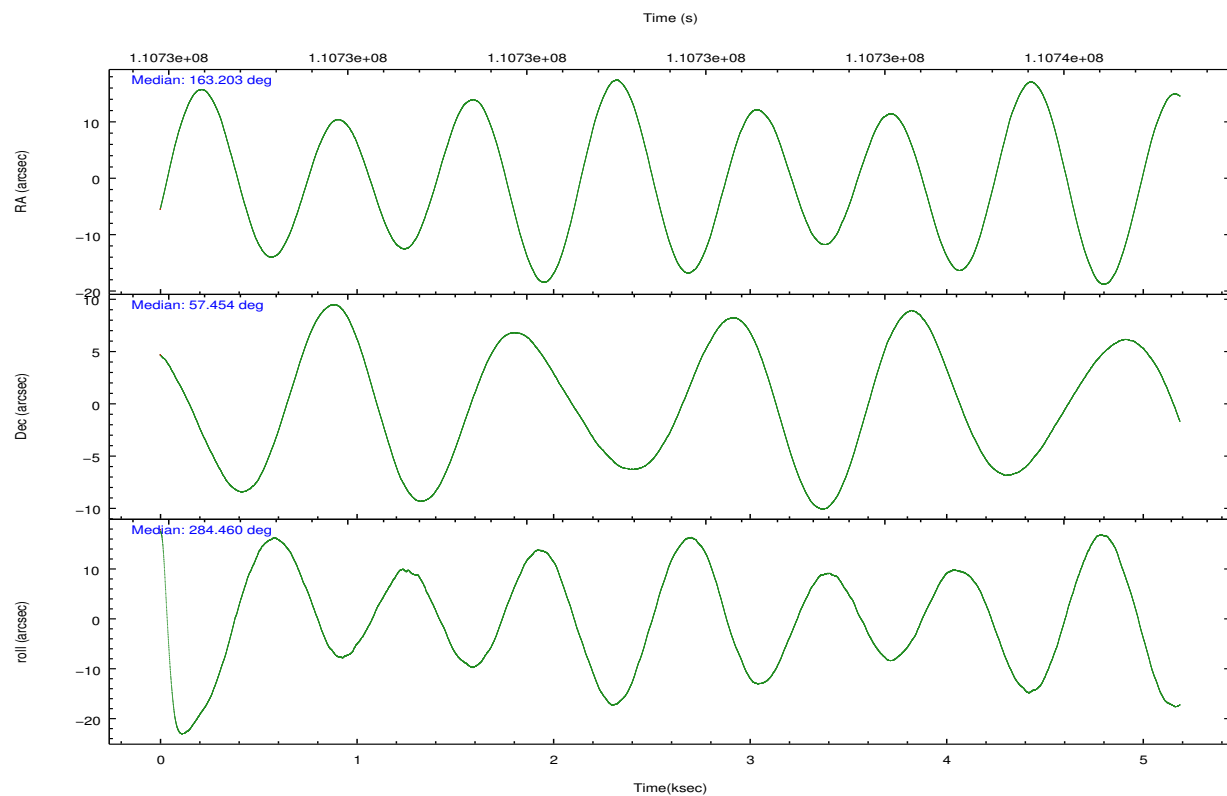


## 2.2 Compared Parameters

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	163.167072	163.2029747045425	Subarray requested	NONE	NONE
[deg] Pointing Dec	57.473768	57.45422834184862	Alternating exposures requested	N	N
[deg] Pointing Roll	284.291787	284.470278352027	[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)	110730395.184000	110730019.48469			
Observation start date	2001-07-05T14:25:31	2001-07-05T14:20:19			
[s] Observation end time (MET)	110735395.184000	110735529.37241			
Observation end date	2001-07-05T15:48:51	2001-07-05T15:52:09			
Read mode	TIMED	TIMED			

## 2.3 Aspect



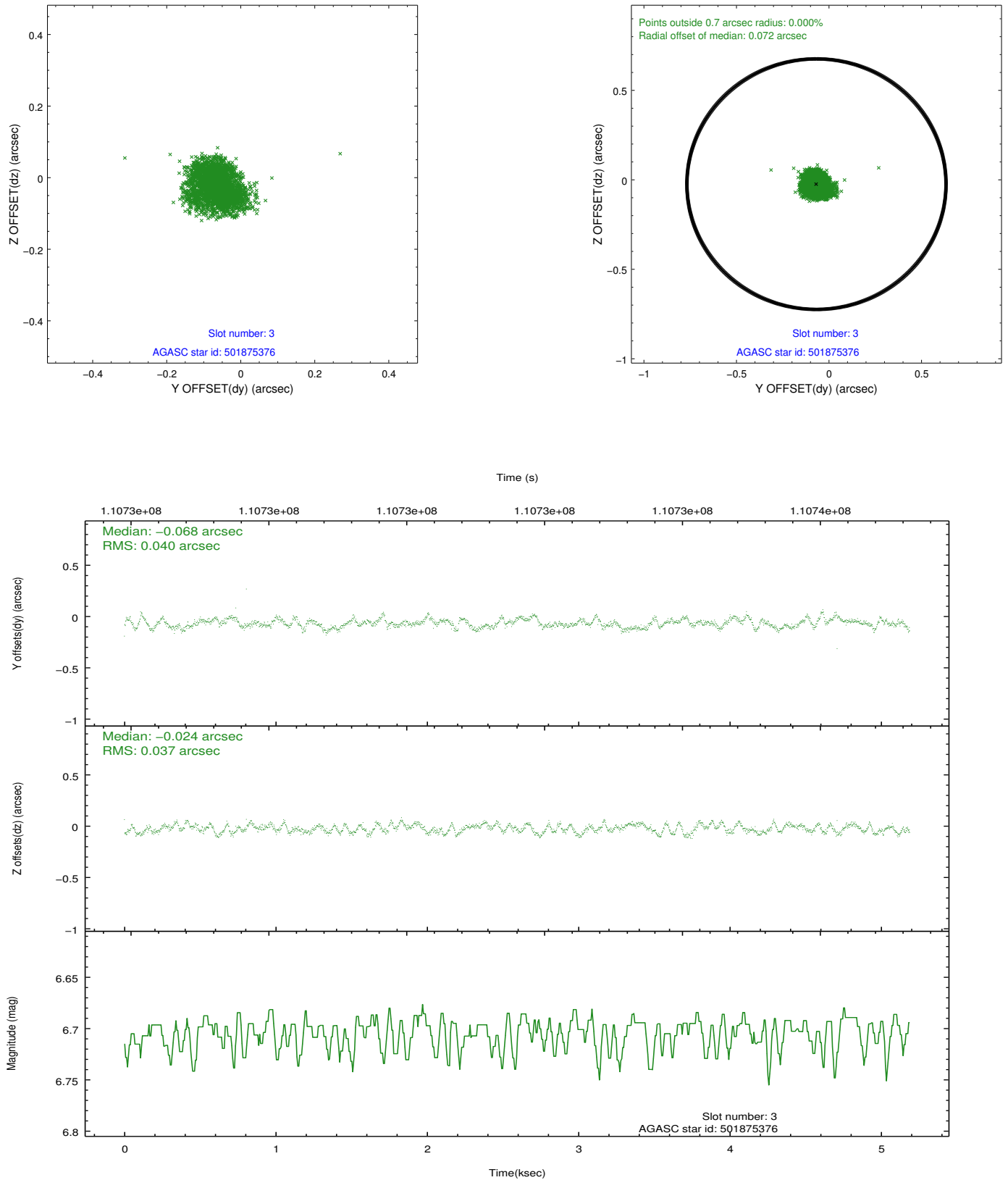


### Slot Statistics

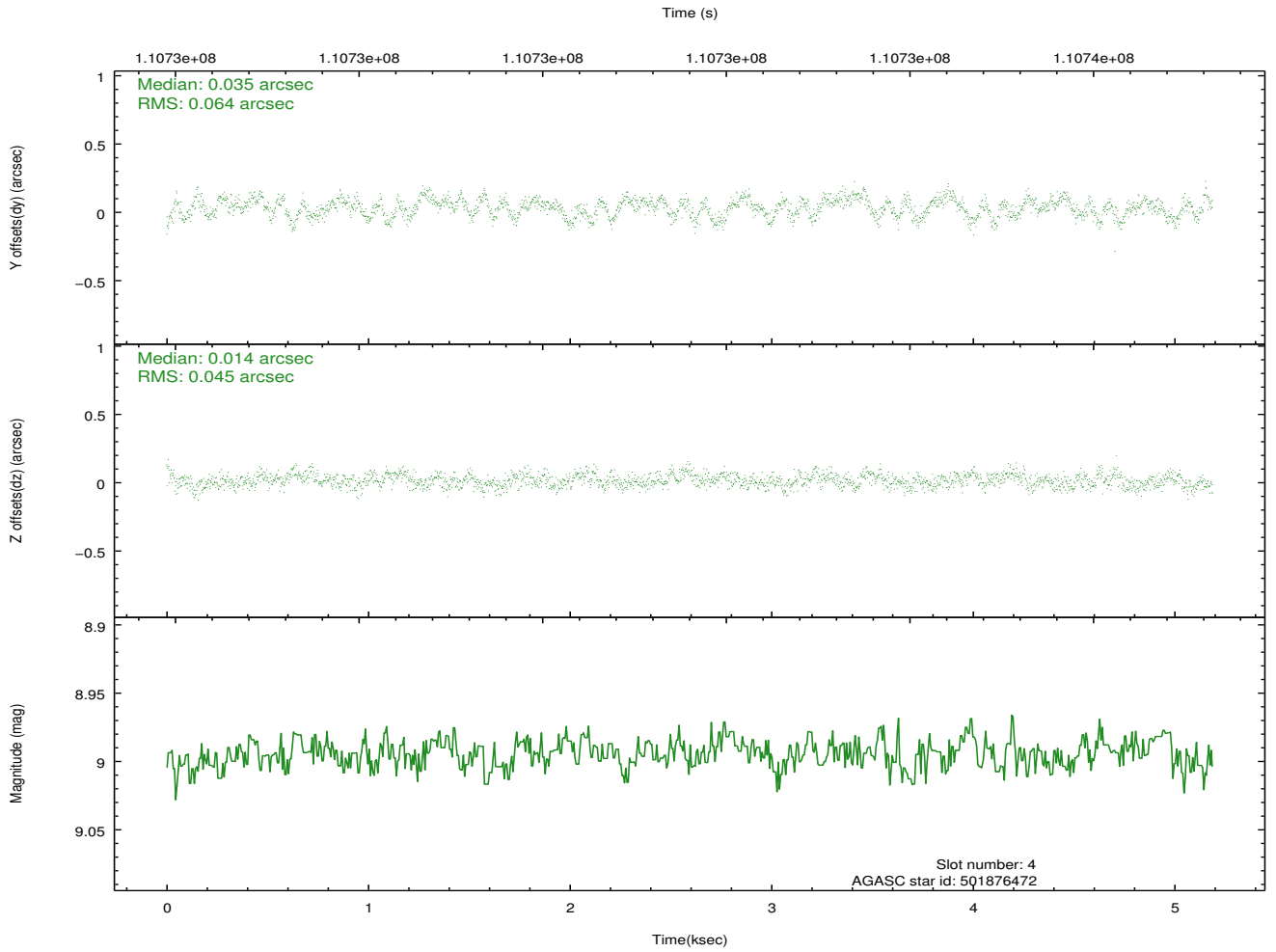
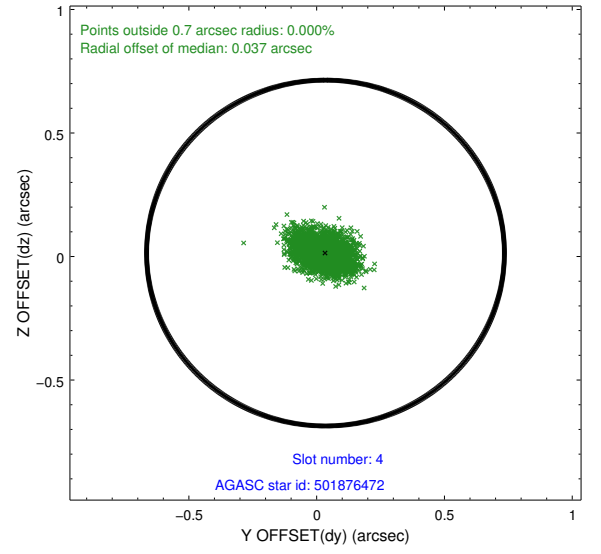
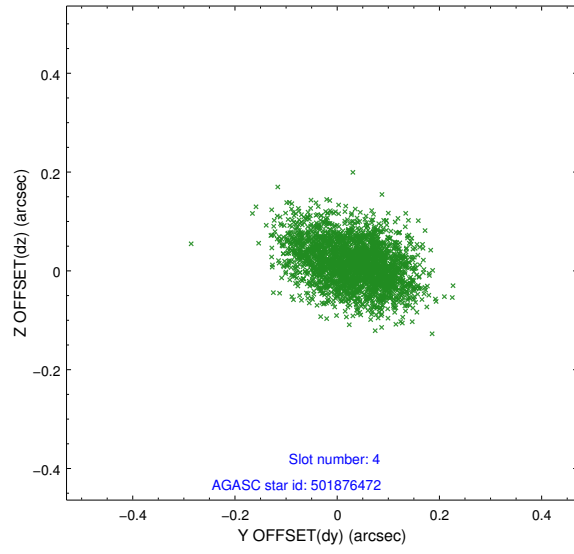
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	1266	-0.033	-0.068	0.009	0.015	0.000000	0.000000	-755.59	-836.77
1	FID	ACIS-I-4	7.18	1266	-0.049	0.045	0.006	0.010	0.000000	0.000000	2157.90	1068.97
2	FID	ACIS-I-5	7.23	1266	-0.019	0.091	0.009	0.013	0.000000	0.000000	-1807.92	1068.14
3	GUIDE	501875376	6.71	2528	-0.068	-0.024	0.060	0.088	164.111621	57.502963	336.43	1799.04
4	GUIDE	501876472	8.99	2531	0.035	0.014	0.083	0.135	163.621724	57.867447	-1161.39	1194.24
5	GUIDE	501877264	9.30	2532	-0.027	0.020	0.081	0.135	163.254394	57.702218	-756.22	365.90
6	GUIDE	501488528	8.11	2532	0.013	-0.054	0.064	0.103	162.150935	57.312270	61.54	-2054.52
7	GUIDE	501488296	9.75	2526	0.053	0.042	0.118	0.185	164.354320	57.421227	731.57	2187.33

## 2.4 Star Slots

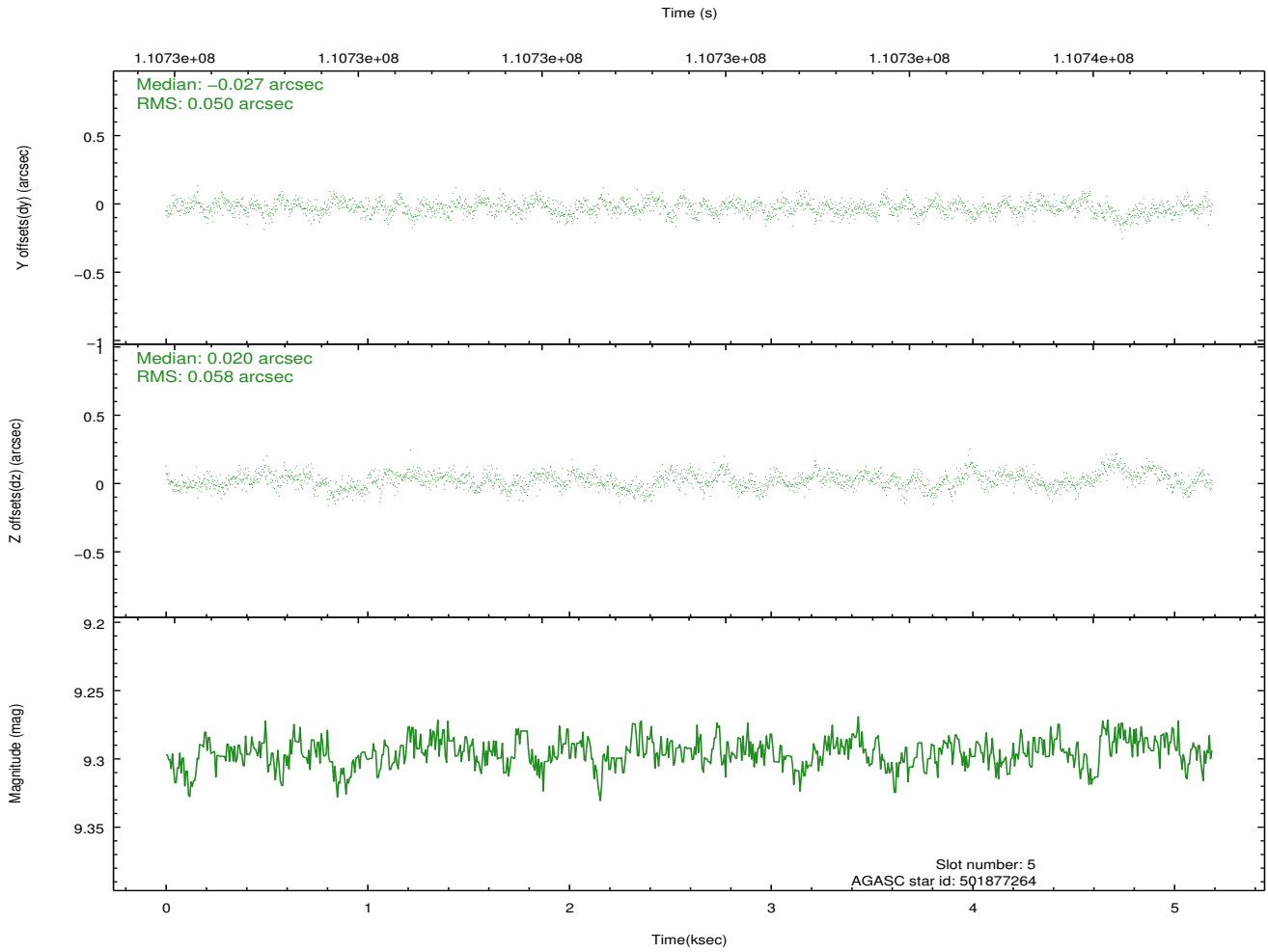
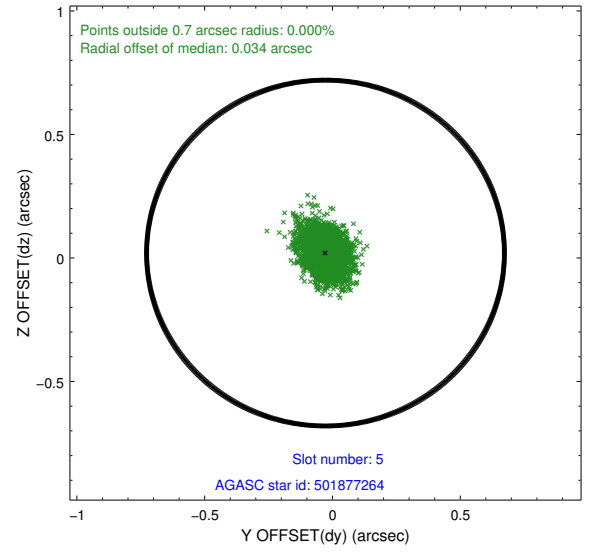
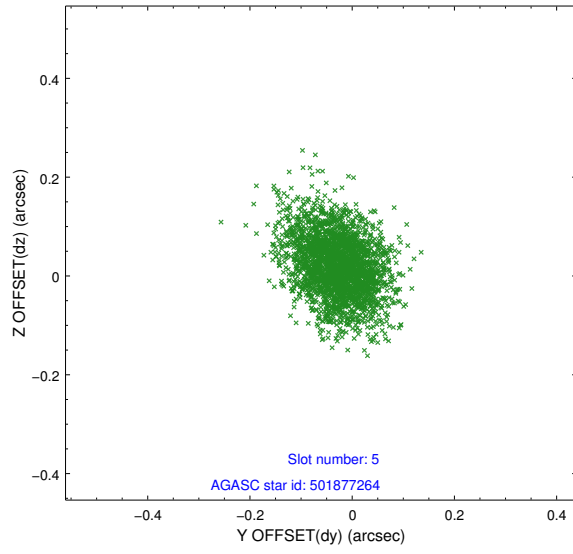
### 2.4.1 Slot 3



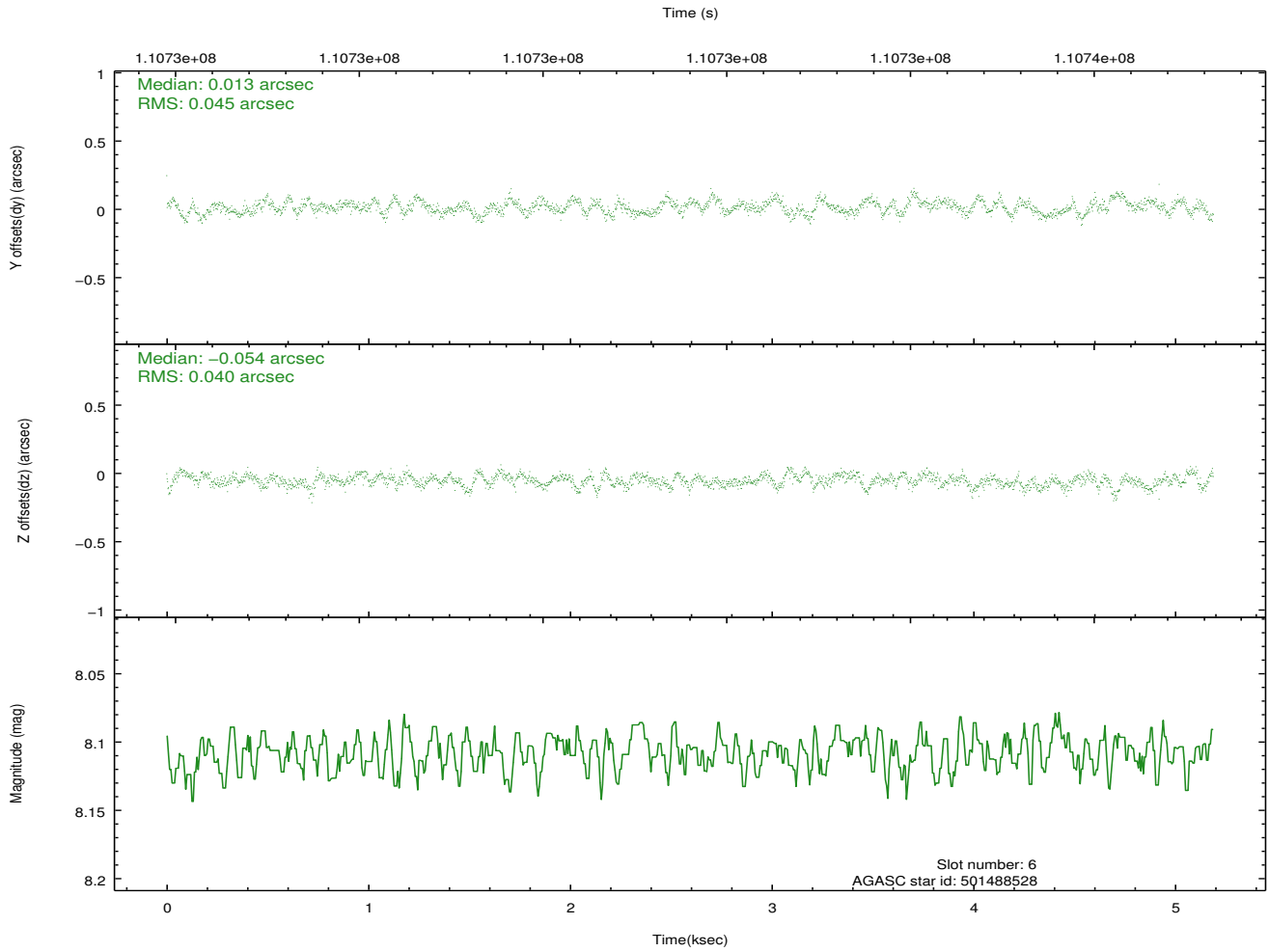
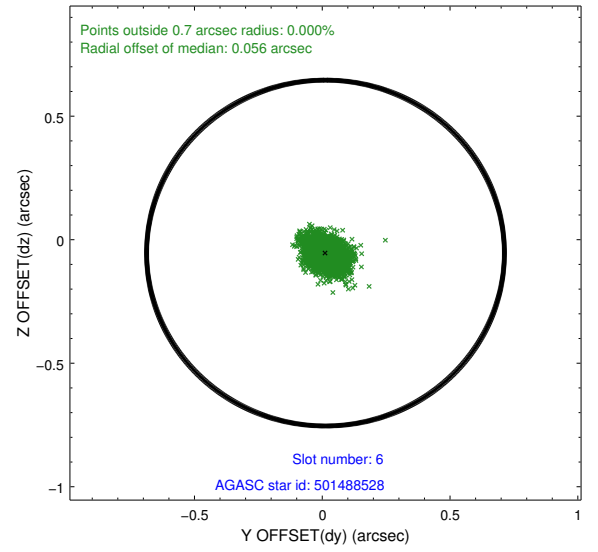
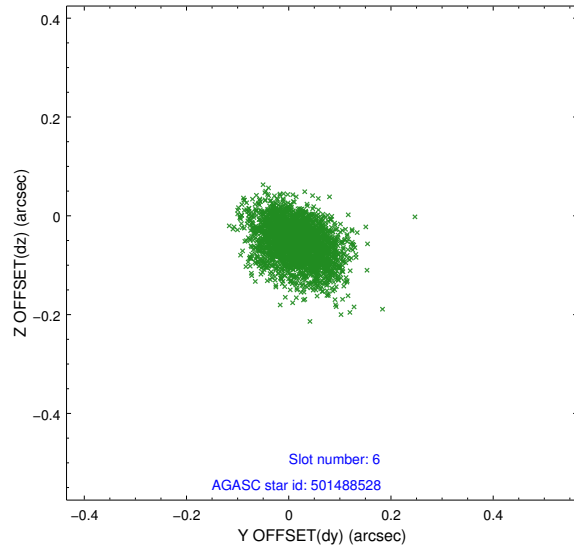
## 2.4.2 Slot 4



### 2.4.3 Slot 5

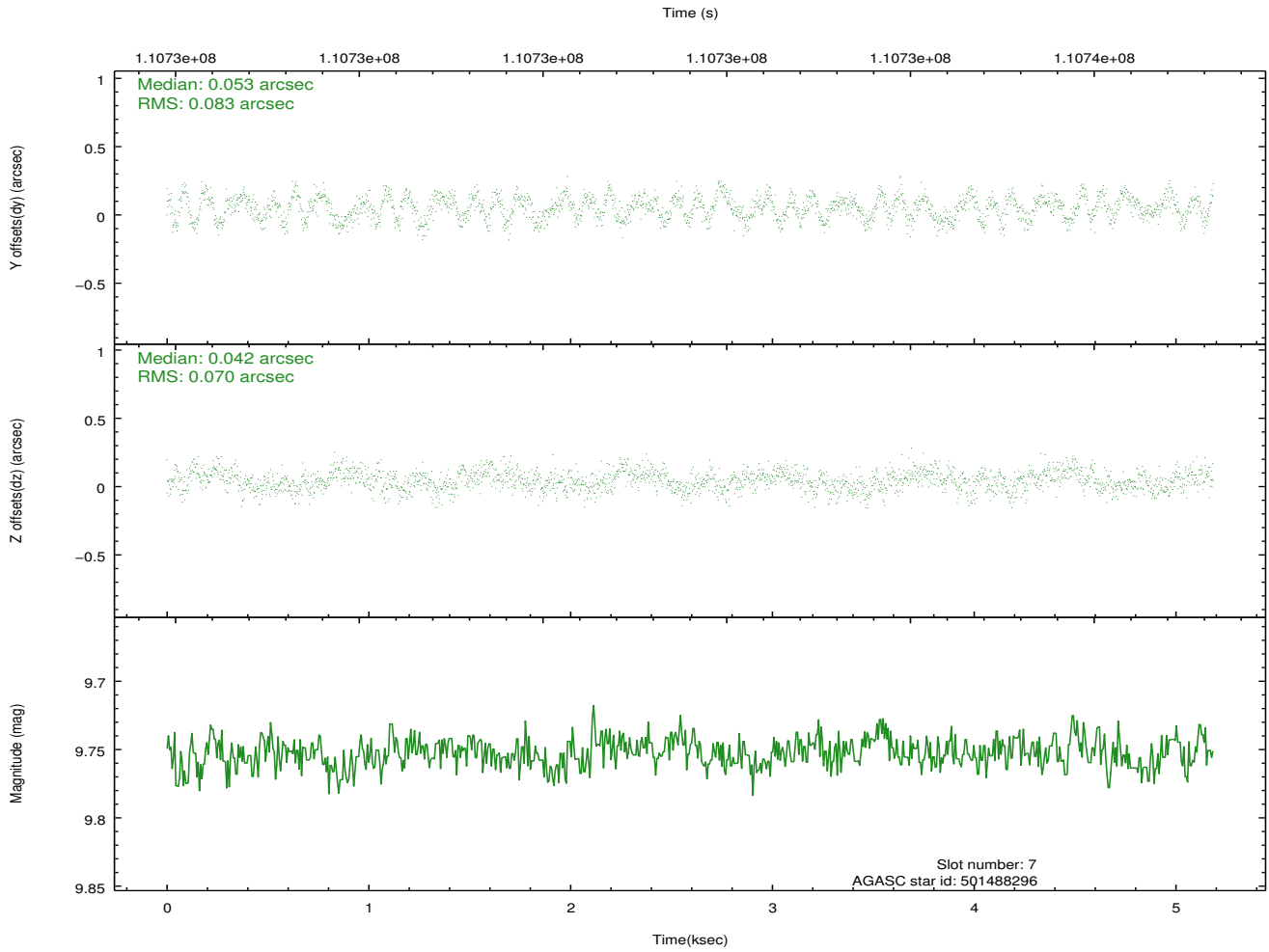
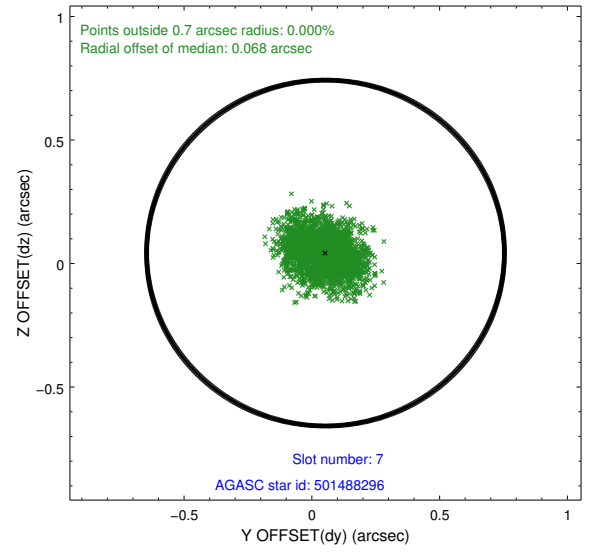
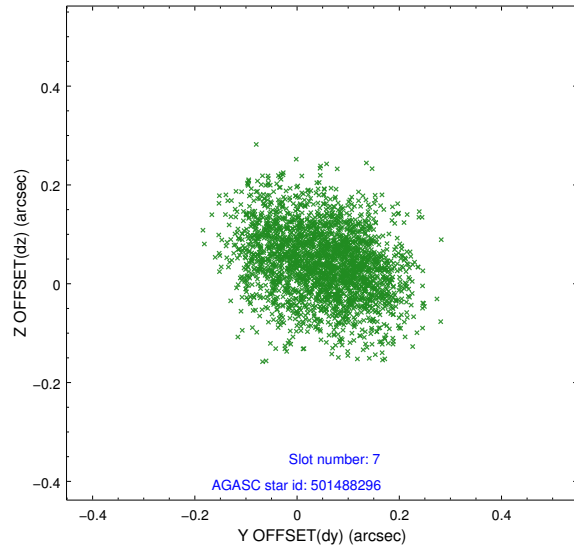


## 2.4.4 Slot 6



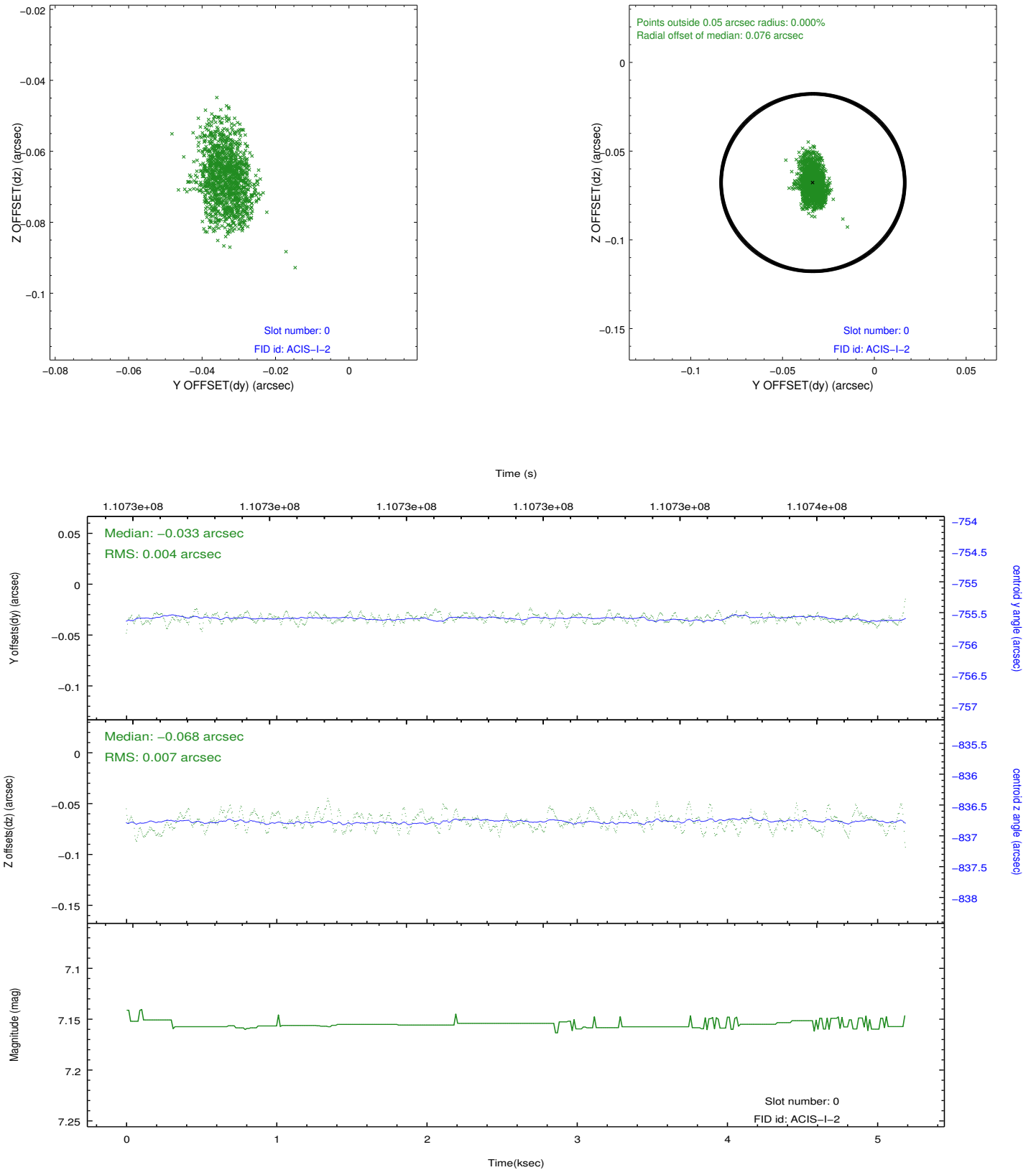


## 2.4.5 Slot 7

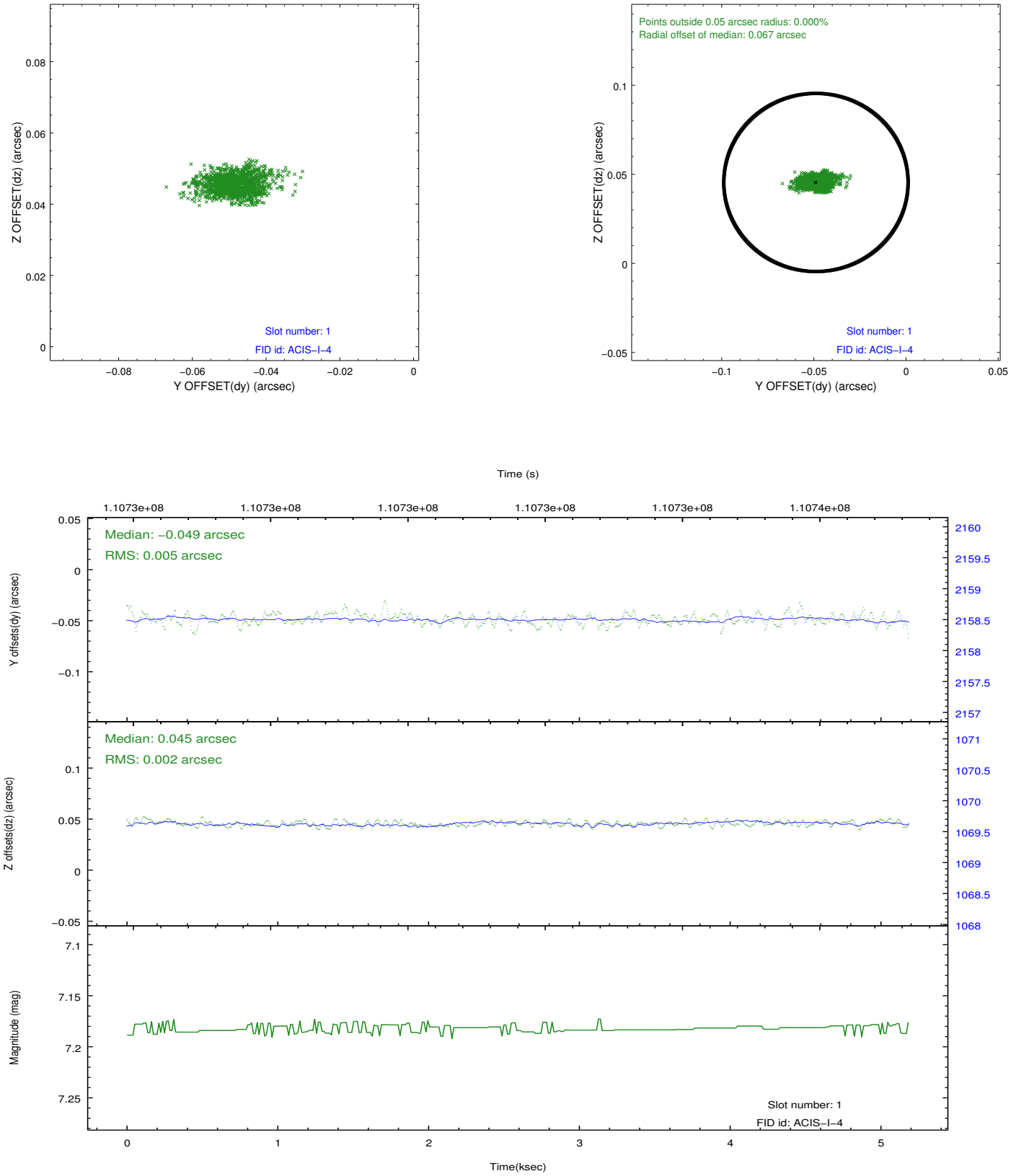


## 2.5 FID Slots

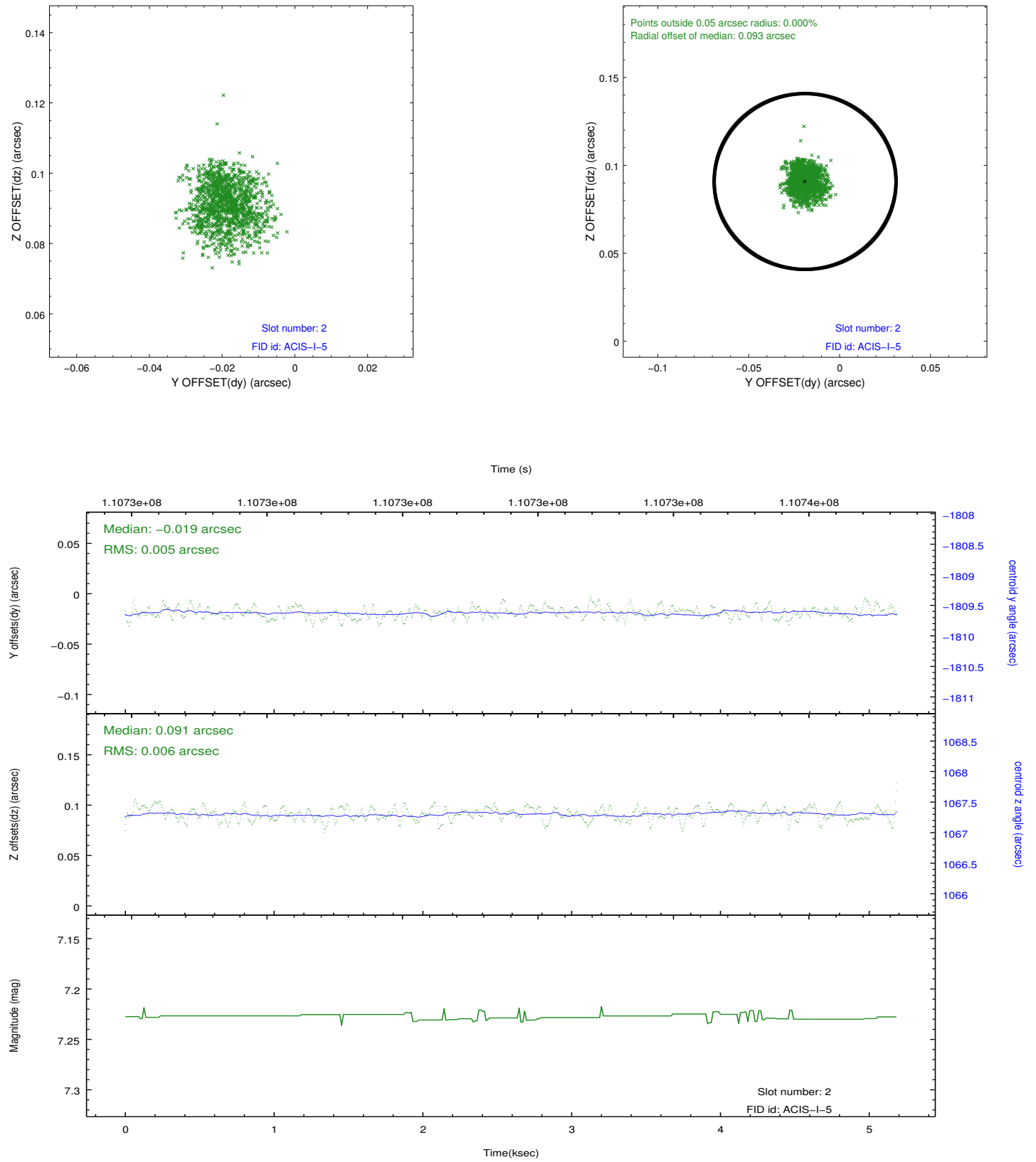
### 2.5.1 Slot 0



## 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