

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 234 - L2 Version 4  
Chandra X-Ray Center

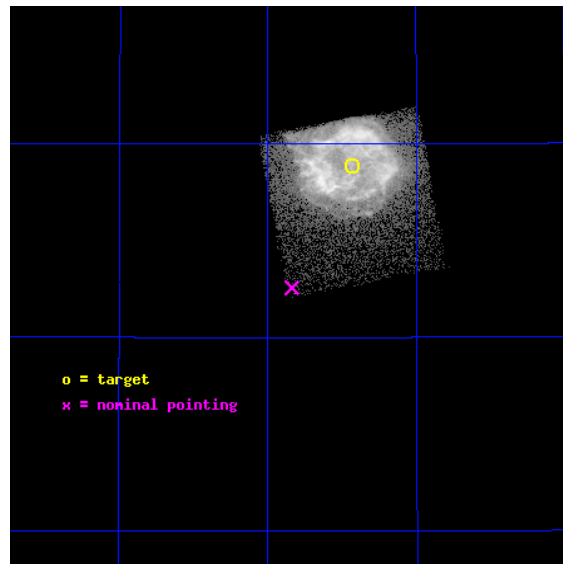
L2 Processing Date : Aug 23 2012

## 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

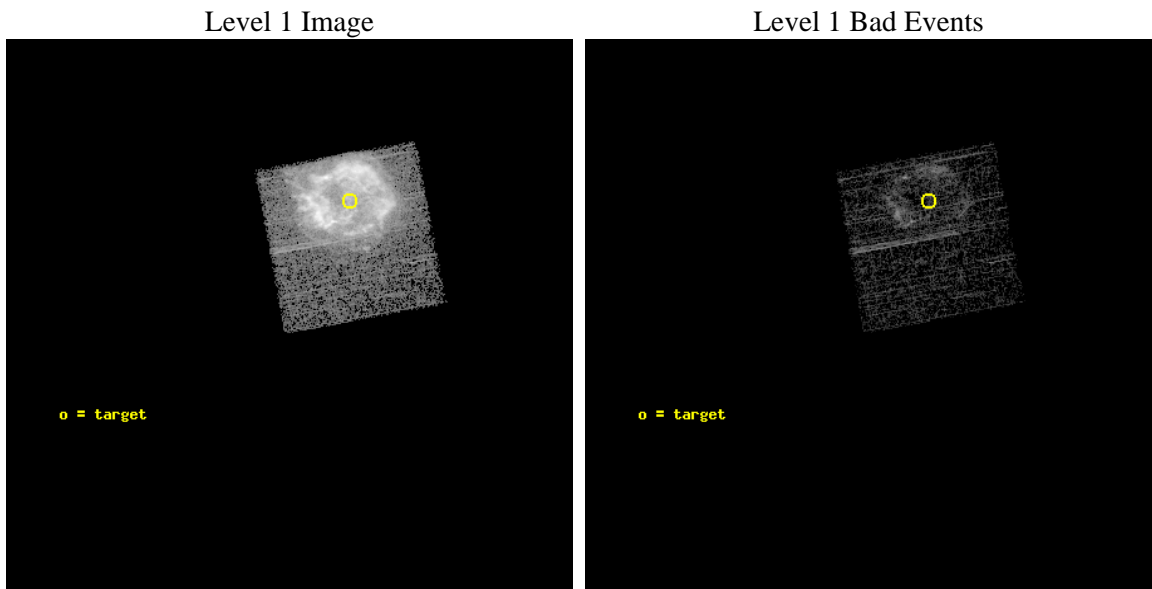
seq_num	590102	Sequence number
obs_id	234	Observation id
title	ACIS CHIP RESPONSE TO CAS A, APR. 99	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAS A [Chip I3, T=120, Offsets=-4,5,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA [deg]
dec_targ	58.814833	Observer's specified target Dec [deg]
ra_nom	350.95981476039	Nominal RA [deg]
dec_nom	58.709403629338	Nominal Dec [deg]
roll_nom	349.52432367171	Nominal Roll [deg]
revision	4	Processing version of data
ontime	1332.0546733588	Sum of GTIs [s]
livetime	1315.1873950177	Livetime [s]
ontime0	1755.4799596667	Sum of GTIs [s]
ontime1	1755.4389196634	Sum of GTIs [s]
ontime2	1755.397879675	Sum of GTIs [s]
ontime3	1332.0546733588	Sum of GTIs [s]
ontime6	1755.3157996684	Sum of GTIs [s]
ontime7	1755.52099967	Sum of GTIs [s]
l2events	283278	Number of level 2 events



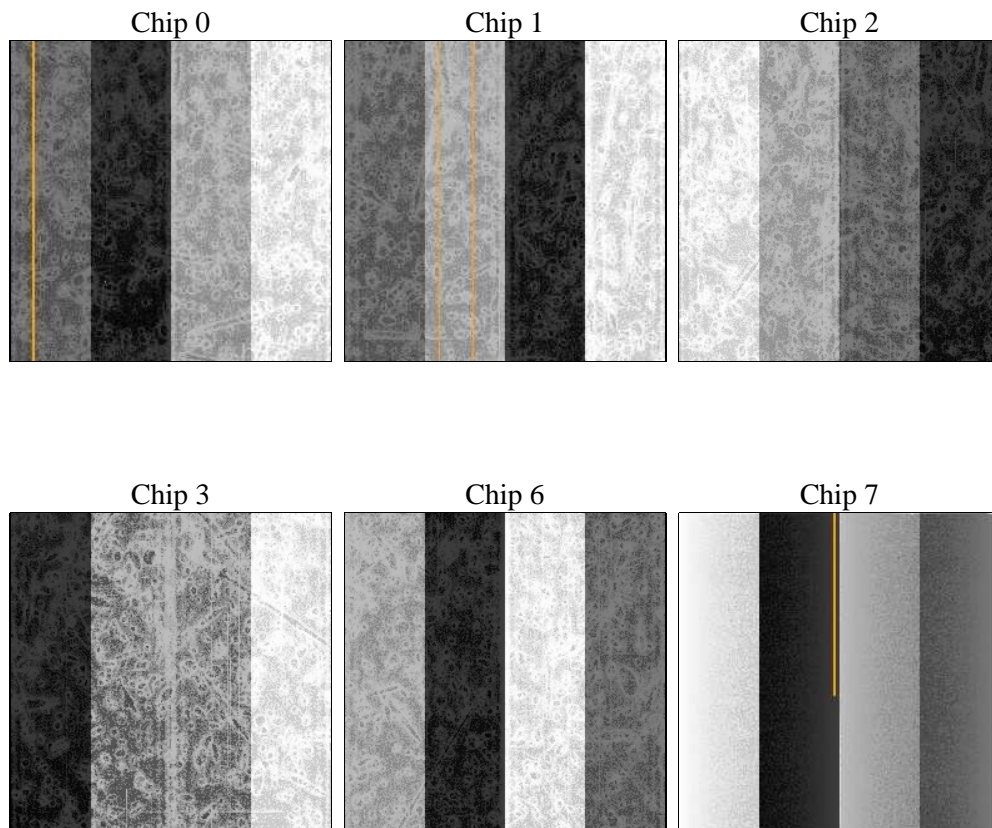
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1332.0546733588	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime0	1755.4799596667	Sum of GTIs [s]
date	2012-08-23T13:50:34	Date and time of file creation	ontime1	1755.4389196634	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	1755.397879675	Sum of GTIs [s]
			ontime3	1332.0546733588	Sum of GTIs [s]
			ontime6	1755.3157996684	Sum of GTIs [s]
			ontime7	1755.52099967	Sum of GTIs [s]
			l1events	338156	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	0	0	0	338156	0	0
rejected events	0	0	0	50049	0	0
rejected %	0%	0%	0%	14%	0%	0%

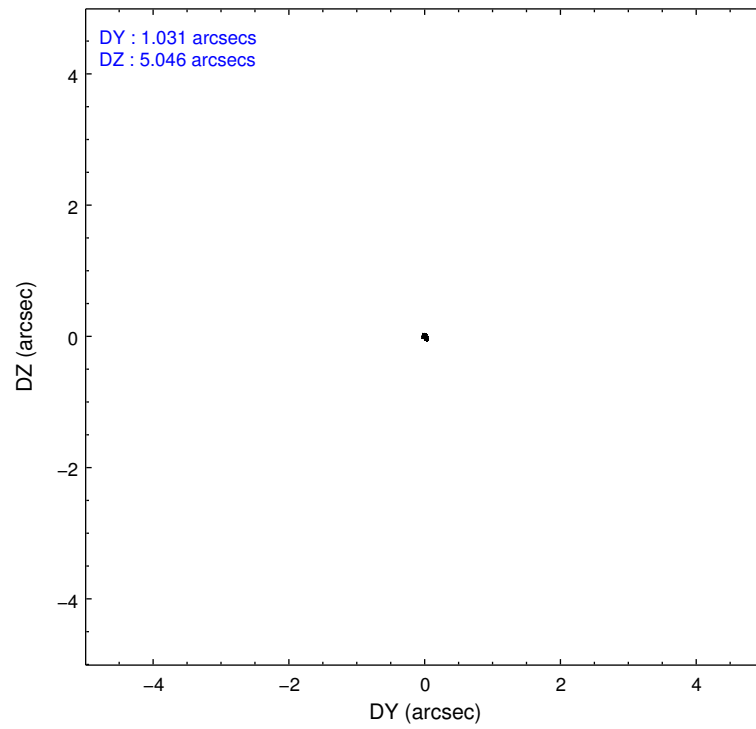
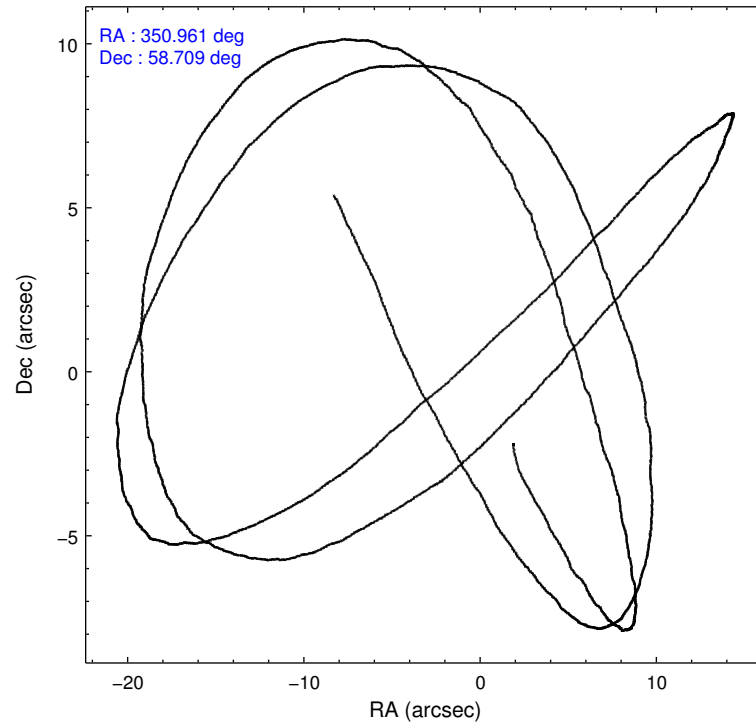
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	0	0	0	232765	0	0
	0%	0%	0%	68%	0%	0%
grade 1 events	0	0	0	3622	0	0
	0%	0%	0%	1%	0%	0%
grade 2 events	0	0	0	30076	0	0
	0%	0%	0%	8%	0%	0%
grade 3 events	0	0	0	9525	0	0
	0%	0%	0%	2%	0%	0%
grade 4 events	0	0	0	9628	0	0
	0%	0%	0%	2%	0%	0%
grade 5 events	0	0	0	2492	0	0
	0%	0%	0%	0%	0%	0%
grade 6 events	0	0	0	6793	0	0
	0%	0%	0%	2%	0%	0%
grade 7 events	0	0	0	43255	0	0
	0%	0%	0%	12%	0%	0%

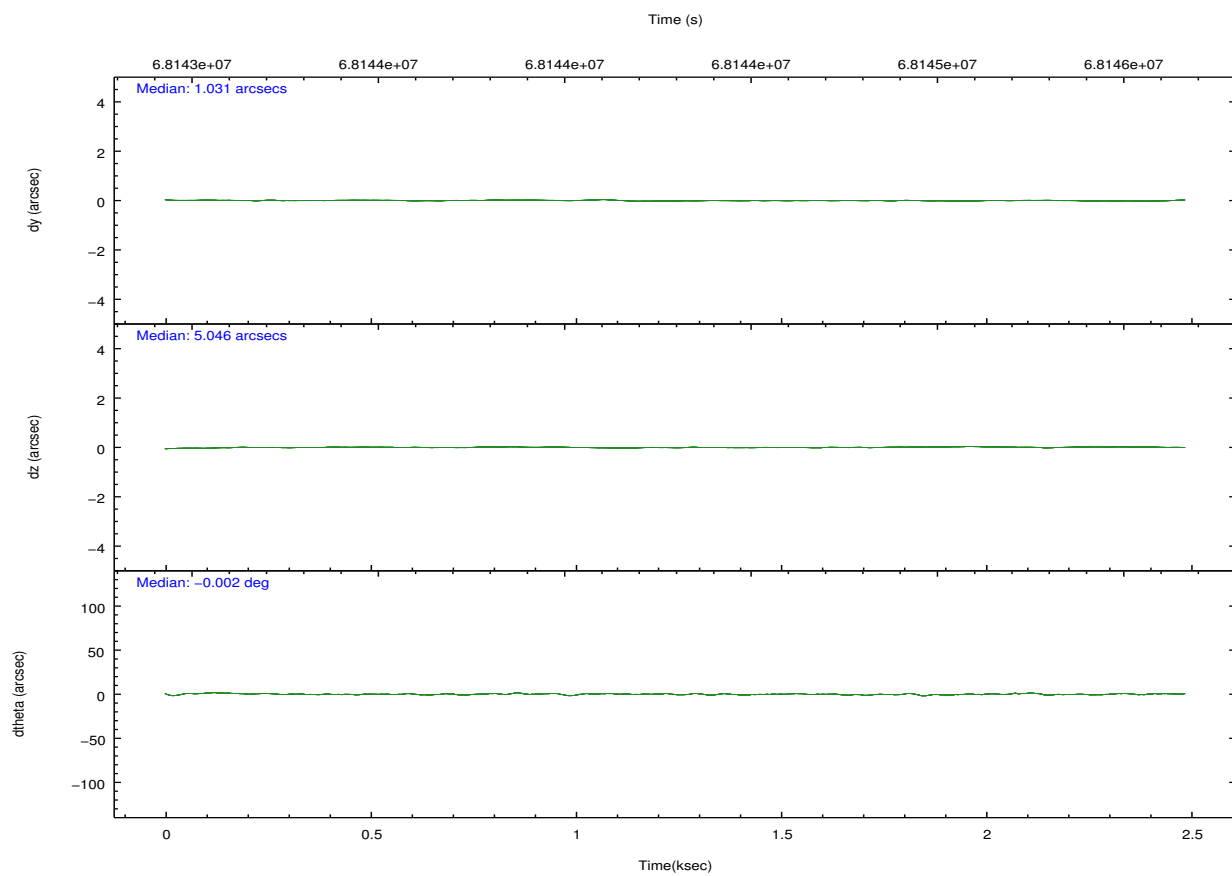
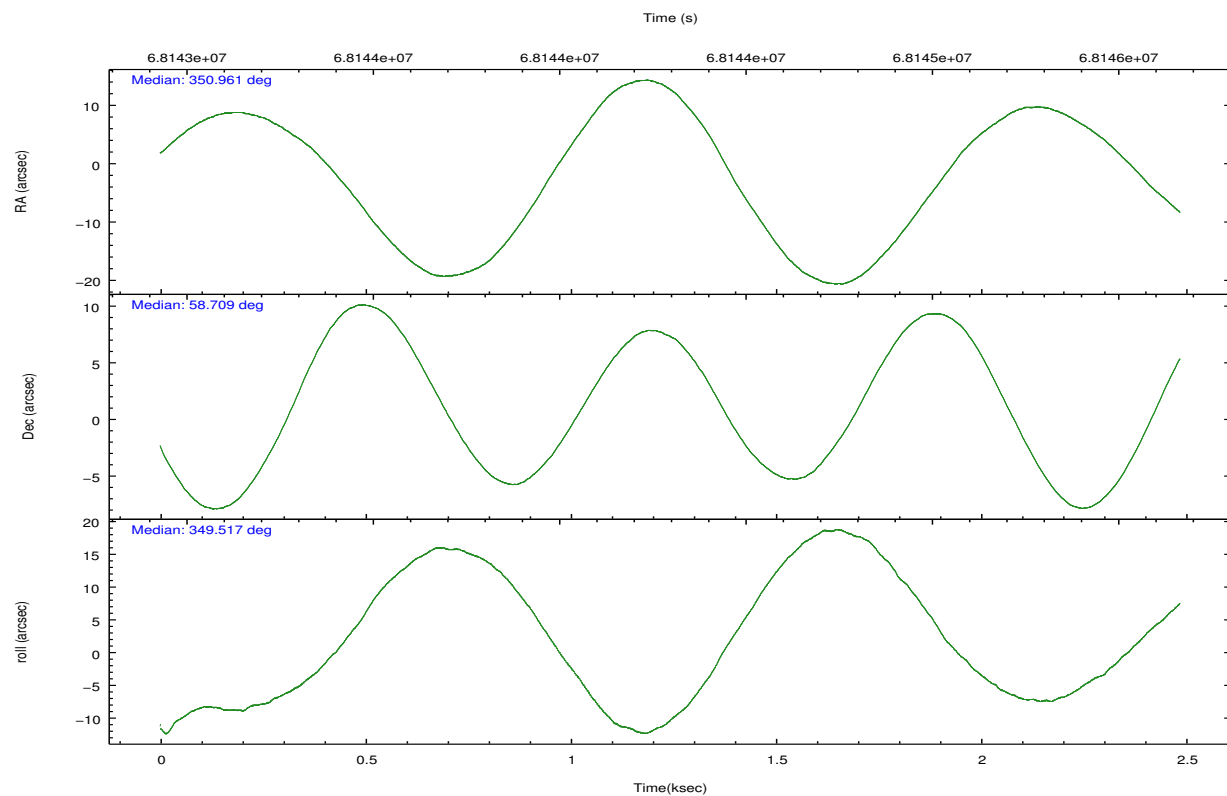
## 2.2 Compared Parameters

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	350.909069	350.9598147603854
[deg] Pointing Dec	58.700622	58.70940362933827
[deg] Pointing Roll	349.359012	349.524323671705
[s] Window start time (MET)	65750464.184000	65750464.184000
[s] Window stop time (MET)	68256064.184000	68256064.184000
[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)	68143539.184000	68142872.511297
Observation start date	2000-02-28T16:44:35	2000-02-28T16:34:32
[s] Observation end time (MET)	68145539.184000	68145672.811399
Observation end date	2000-02-28T17:17:55	2000-02-28T17:21:12
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





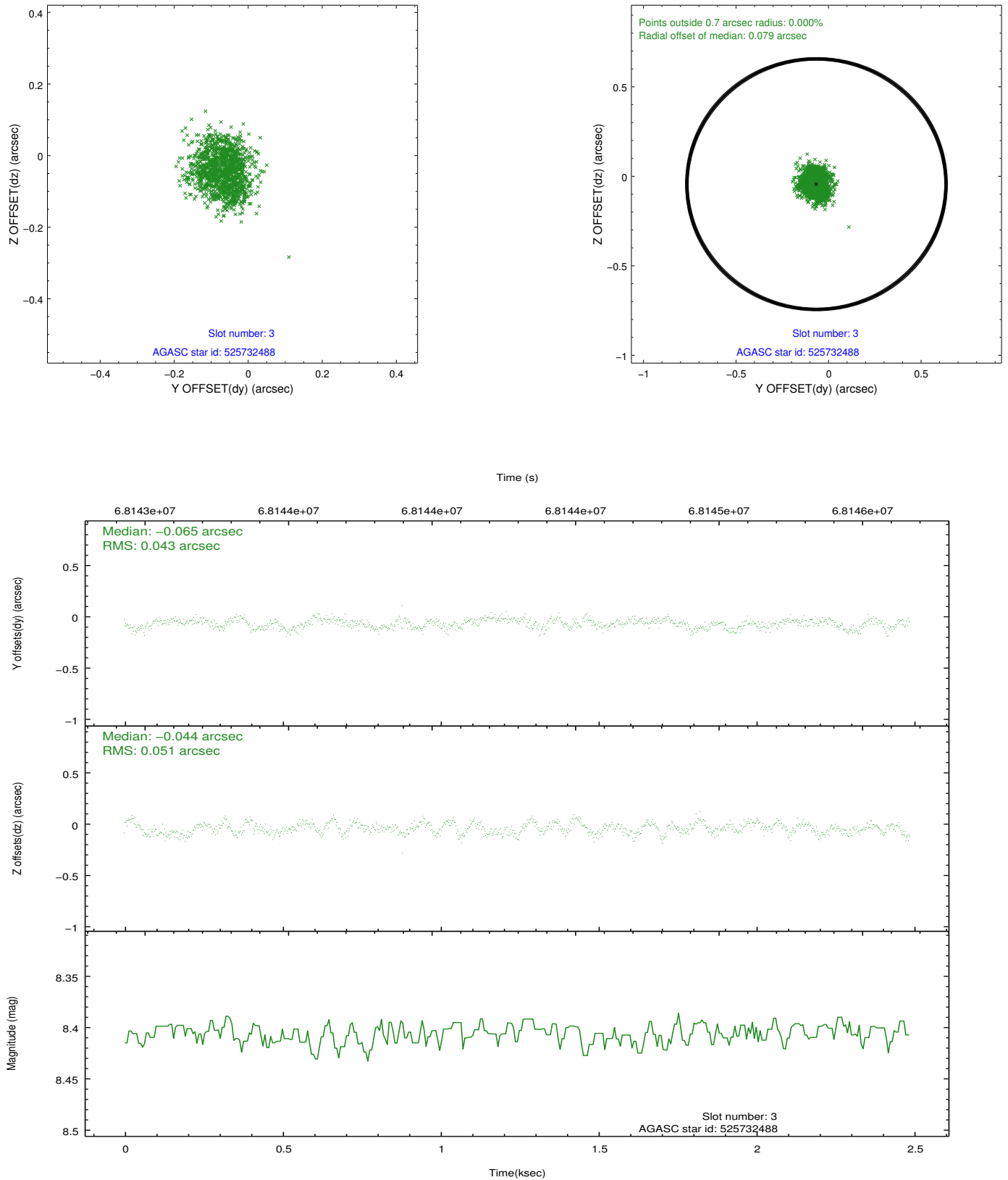
### Slot Statistics

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	607	-0.032	-0.038	0.008	0.014	0.000000	0.000000	-755.39	-834.79
1	FID	ACIS-I-4	7.19	606	-0.032	0.037	0.006	0.011	0.000000	0.000000	2157.49	1070.16
2	FID	ACIS-I-5	7.23	607	-0.037	0.071	0.008	0.013	0.000000	0.000000	-1805.87	1071.00
3	GUIDE	525732488	8.41	1214	-0.065	-0.044	0.072	0.110	350.087090	58.516915	-1399.82	-925.94
4	GUIDE	525736400	9.07	1214	0.003	0.078	0.079	0.131	350.974563	59.175145	-199.51	1700.87
5	GUIDE	525609504	9.06	1213	-0.038	-0.022	0.073	0.116	349.896632	58.356658	-1654.73	-1554.42
6	GUIDE	525732528	9.37	1213	-0.004	0.063	0.114	0.177	351.607241	59.298932	859.17	2359.61
7	GUIDE	525207384	9.74	1213	0.099	-0.069	0.122	0.198	351.880308	58.083642	2224.00	-1826.11

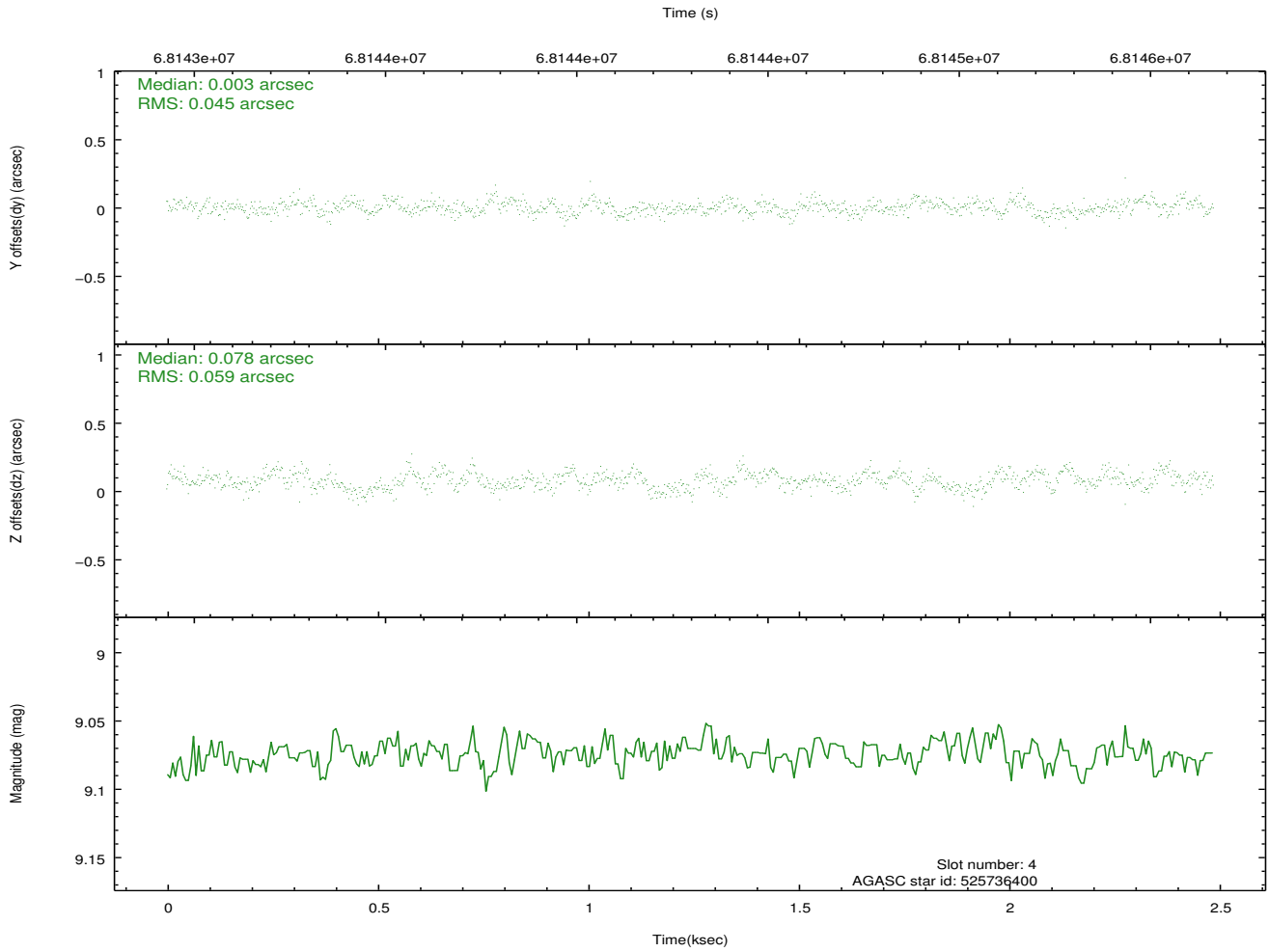
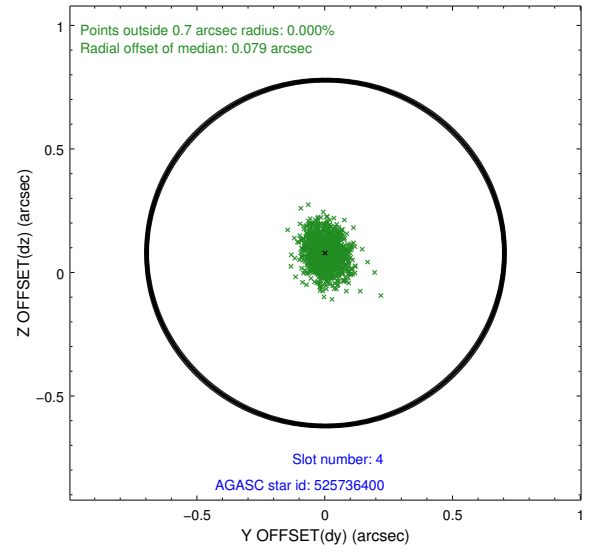
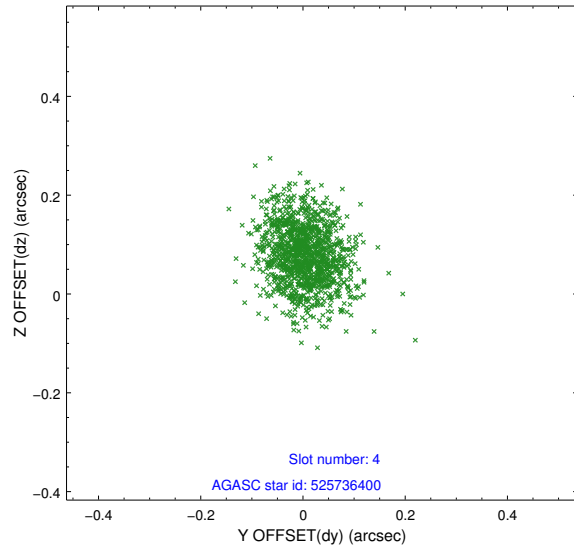


## 2.4 Star Slots

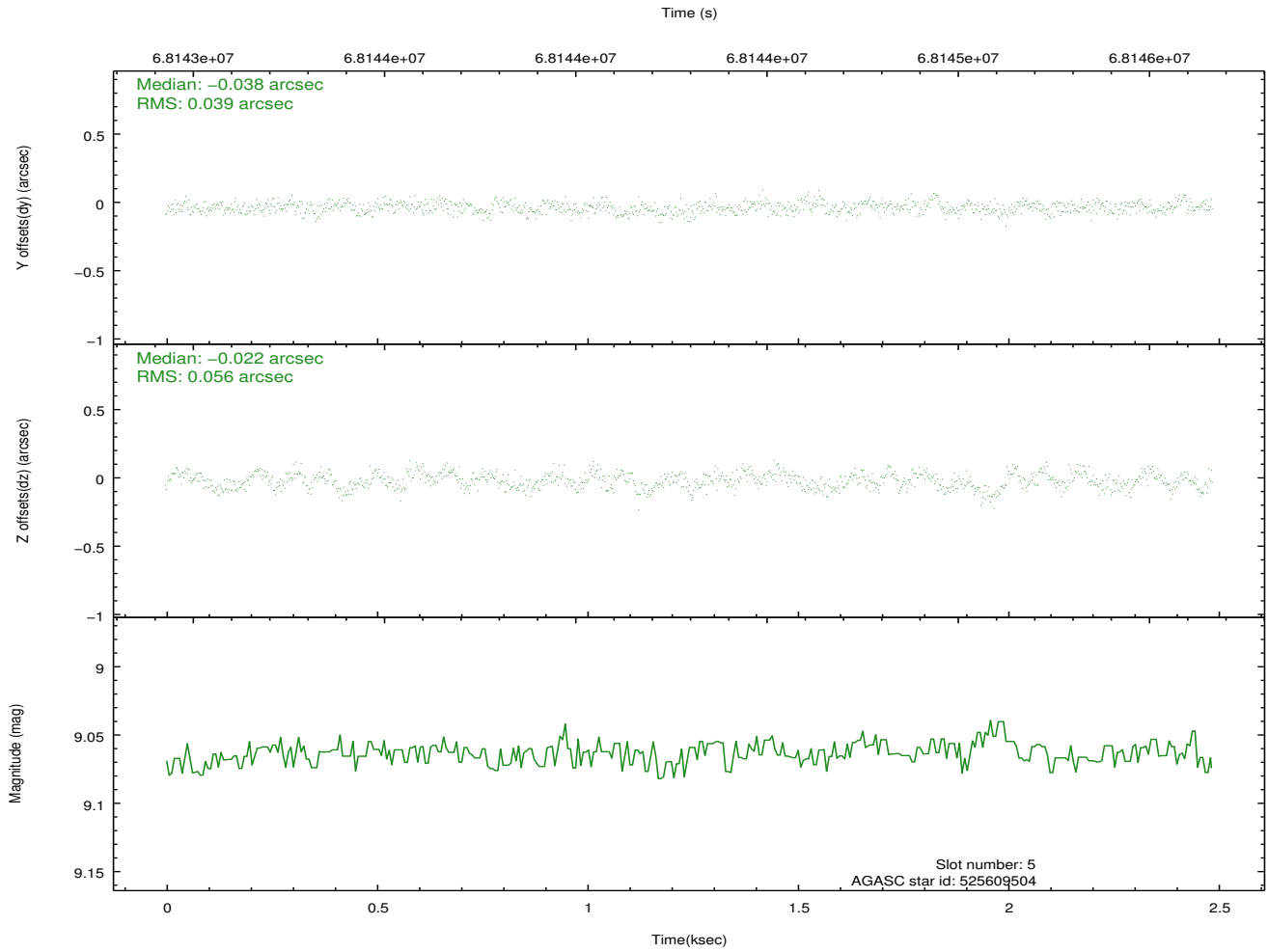
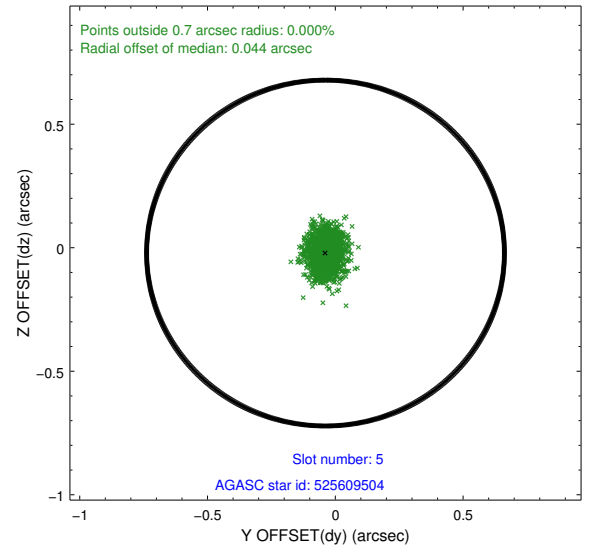
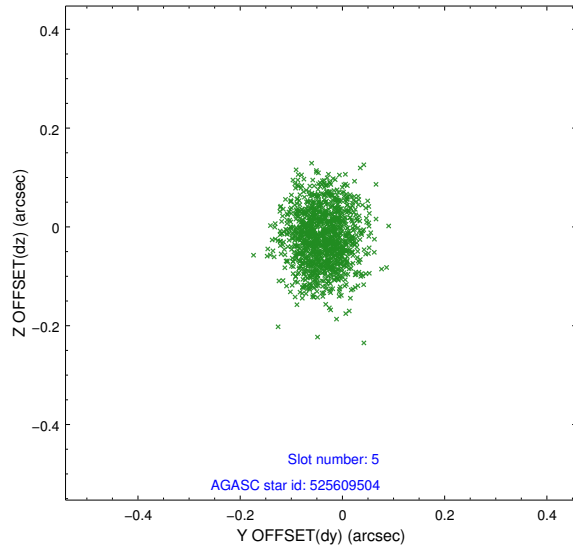
### 2.4.1 Slot 3



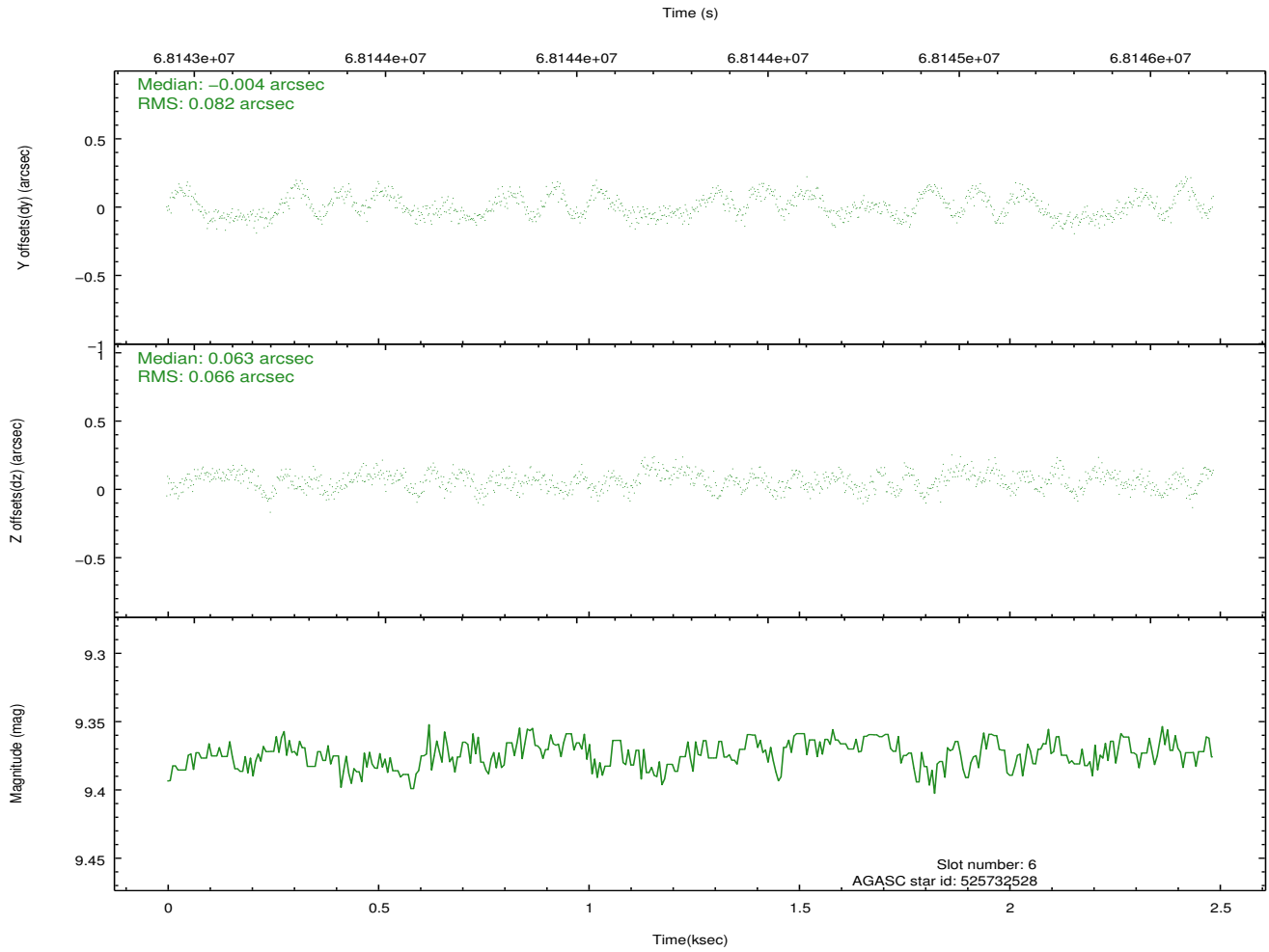
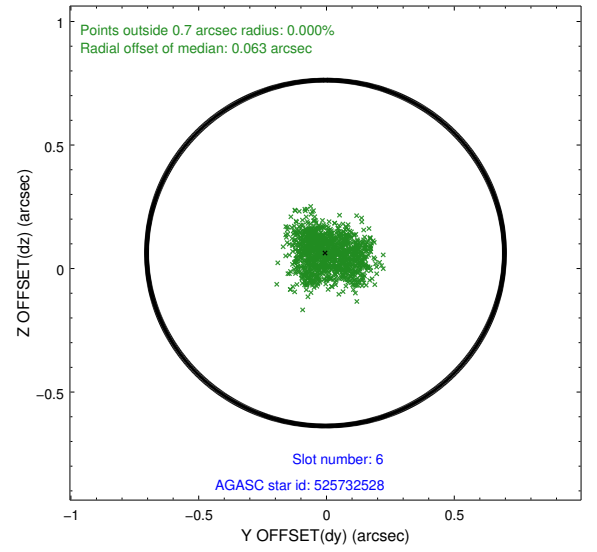
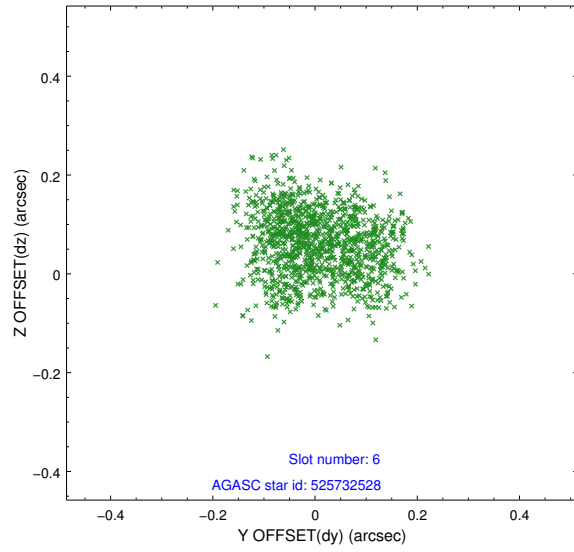
## 2.4.2 Slot 4



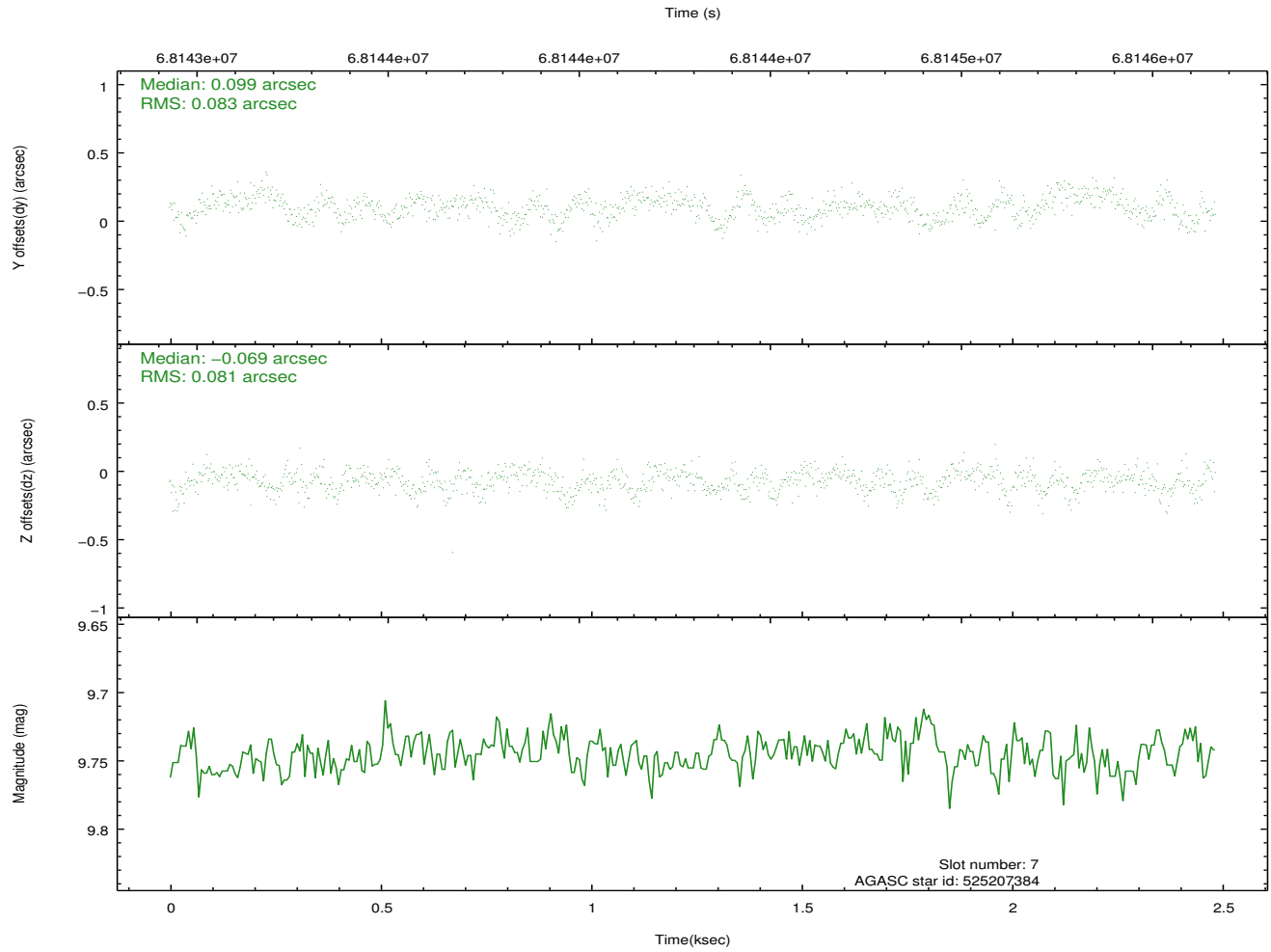
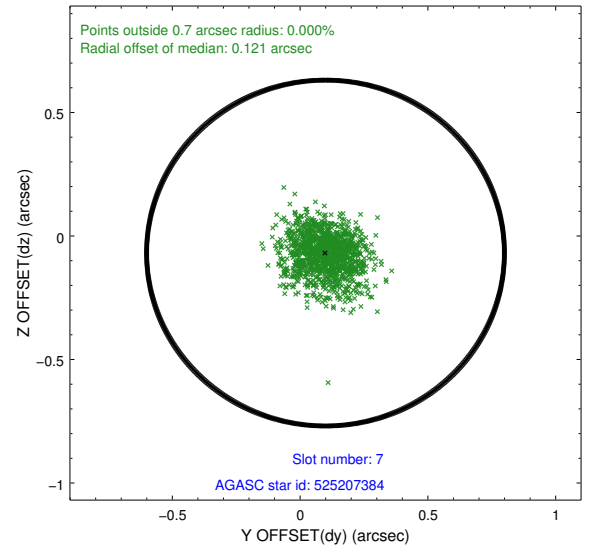
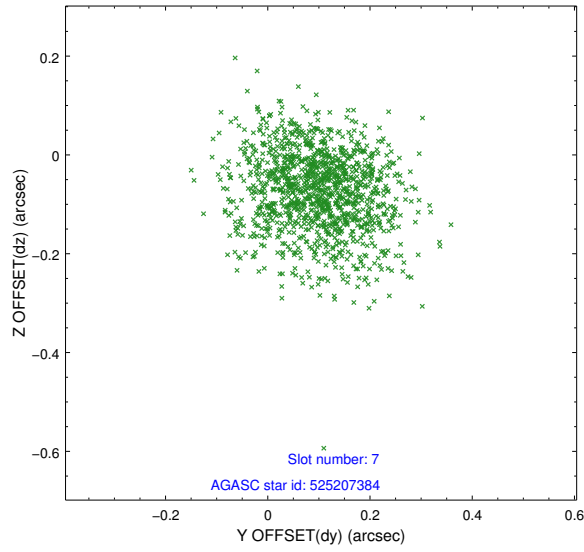
### 2.4.3 Slot 5



## 2.4.4 Slot 6

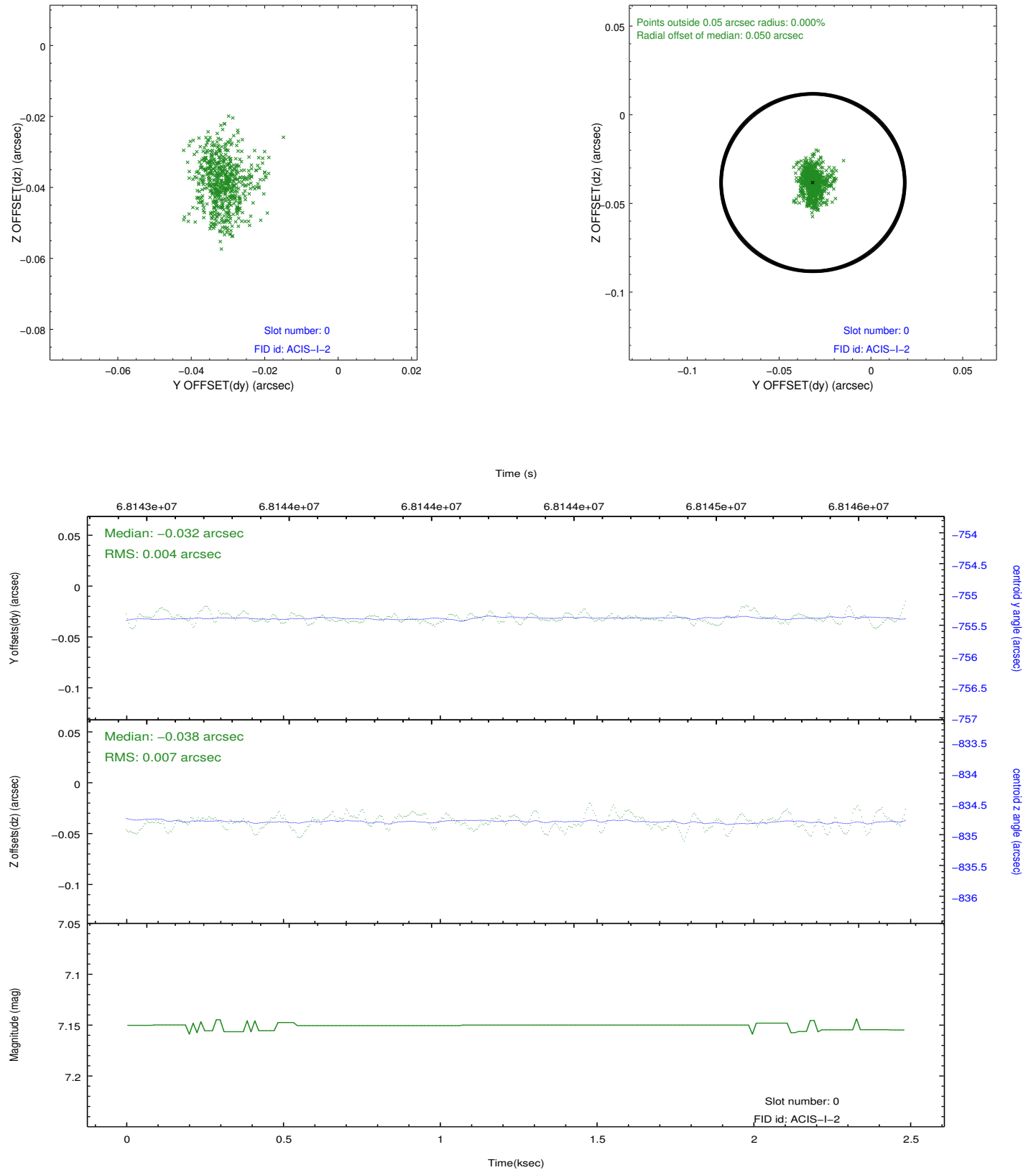


## 2.4.5 Slot 7

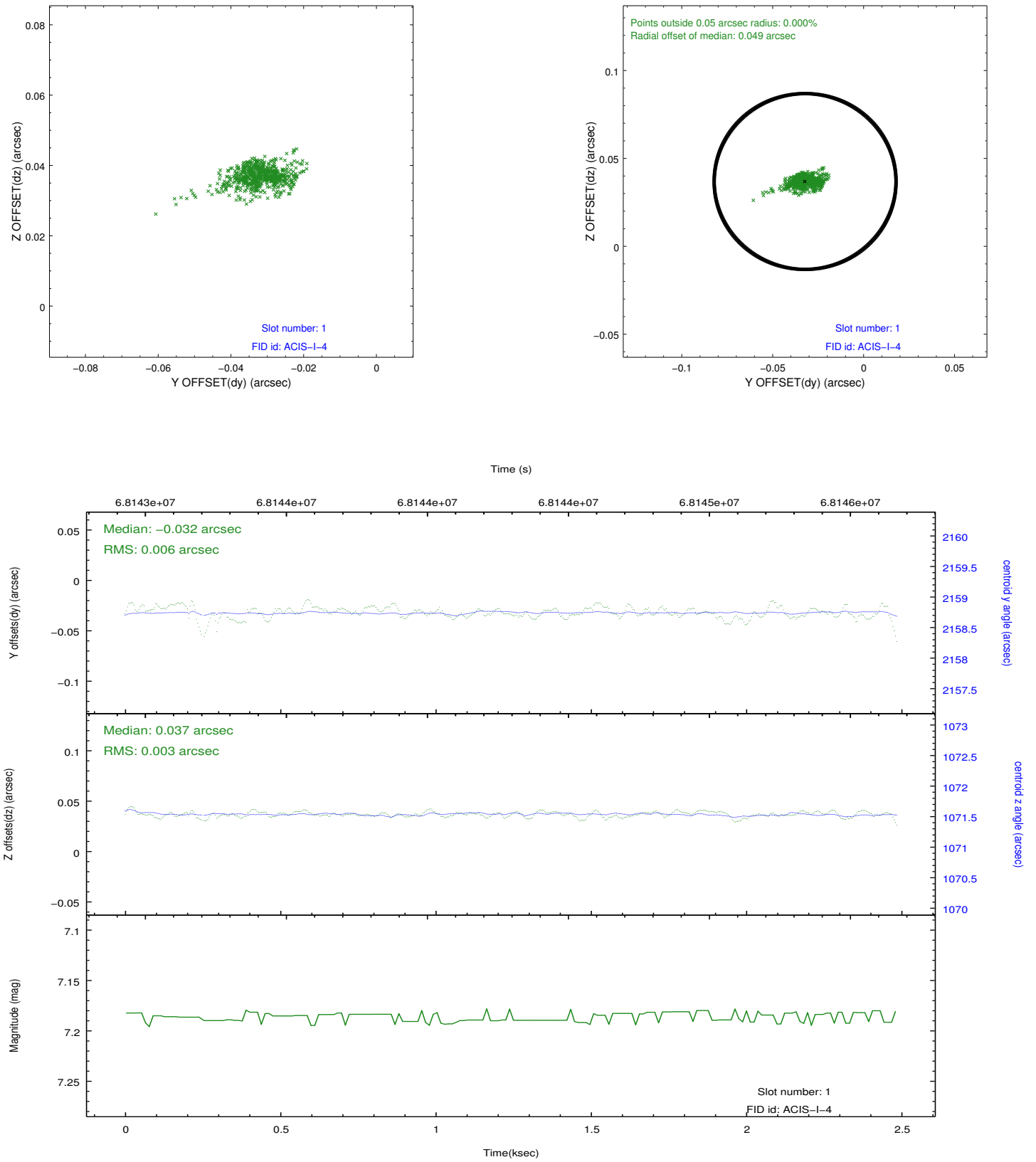


## 2.5 FID Slots

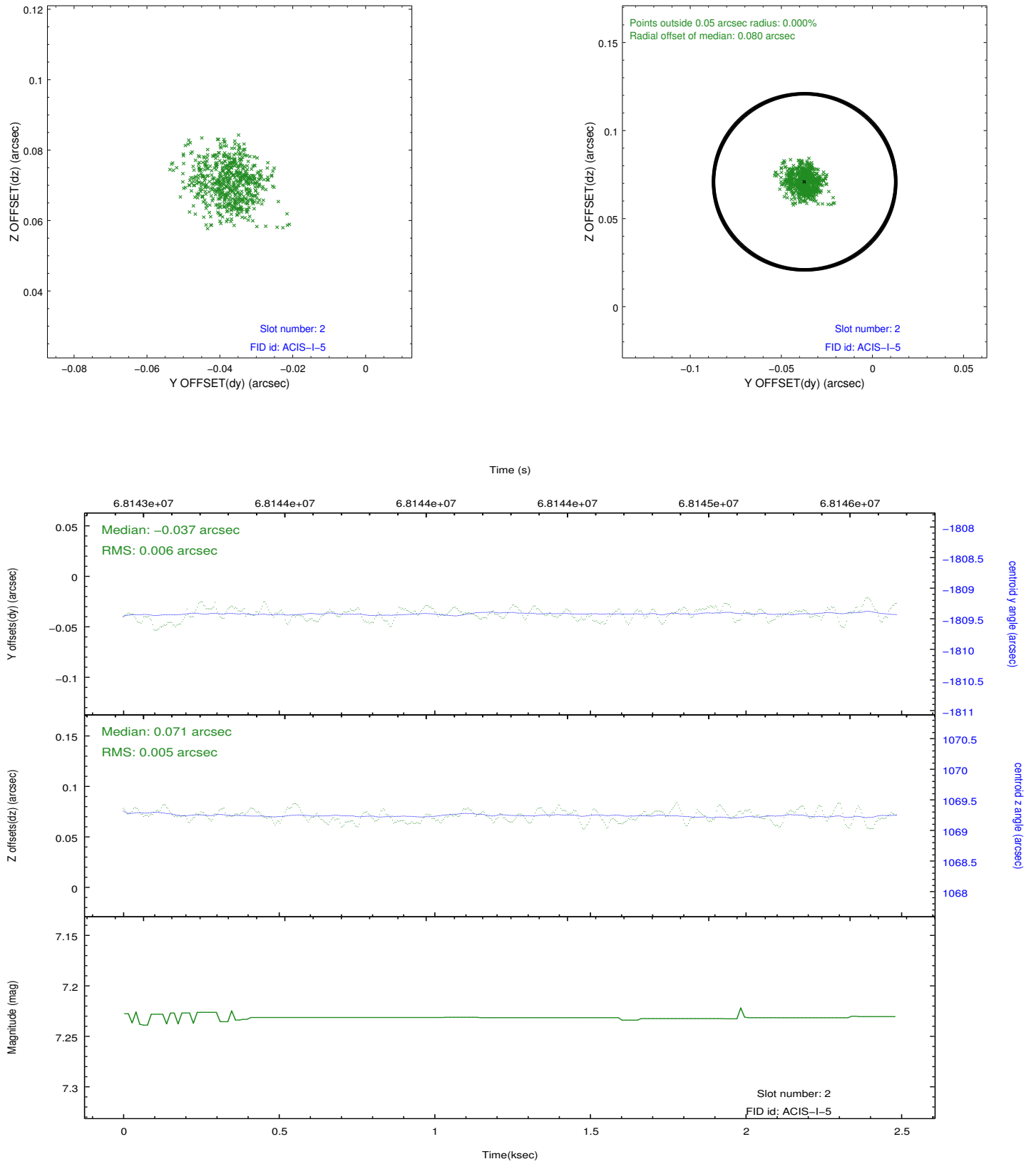
### 2.5.1 Slot 0



## 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)	2012.08.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.338

### A.2 Comments

Window constraint met.