

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 842 - L2 Version 3  
Chandra X-Ray Center

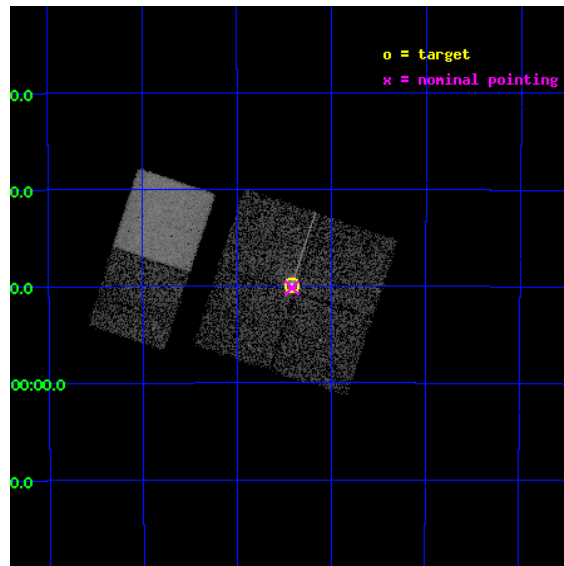
L2 Processing Date : Sep 5 2012

## 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

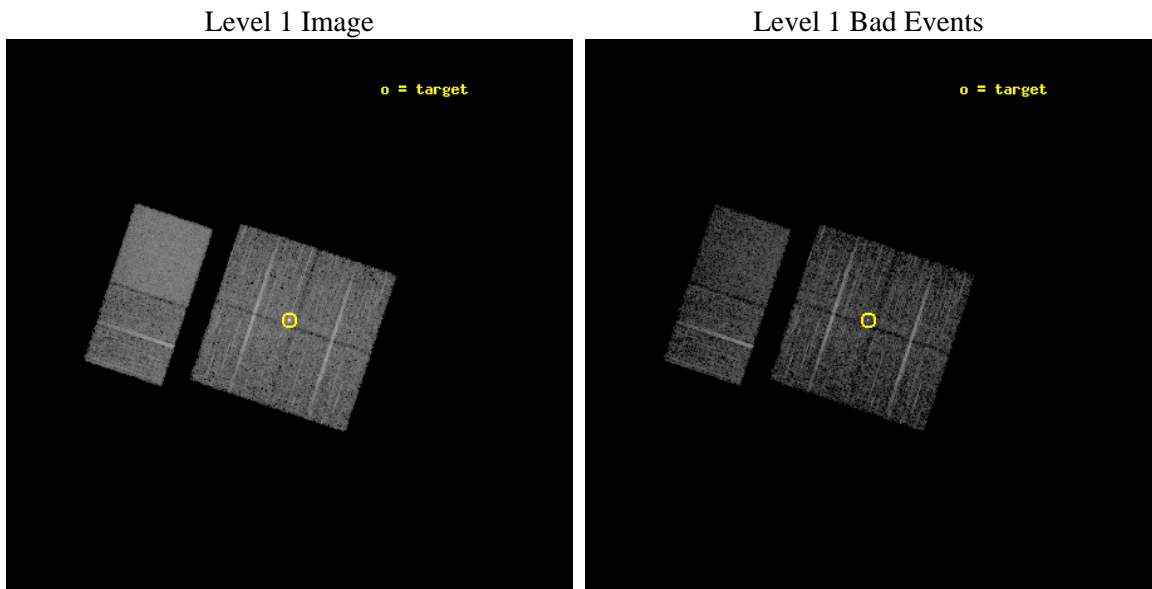
seq_num	700147	Sequence number
obs_id	842	Observation id
title	THE X-RAY CLUSTER ENVIRONMENT OF BLAZARS	Proposal title
observer	Dr. Joseph Pesce	Principal investigator
object	PKS 2005-489	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	302.355833	Observer's specified target RA [deg]
dec_targ	-48.831667	Observer's specified target Dec [deg]
ra_nom	302.35515566794	Nominal RA [deg]
dec_nom	-48.836458585792	Nominal Dec [deg]
roll_nom	288.37468297633	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5929.6000055075	Sum of GTIs [s]
livetime	5854.5158398613	Livetime [s]
ontime0	5929.6000055075	Sum of GTIs [s]
ontime1	5929.6000055075	Sum of GTIs [s]
ontime2	5929.6000055075	Sum of GTIs [s]
ontime3	5929.6000055075	Sum of GTIs [s]
ontime6	5929.6000055075	Sum of GTIs [s]
ontime7	5929.6000055075	Sum of GTIs [s]
l2events	53827	Number of level 2 events



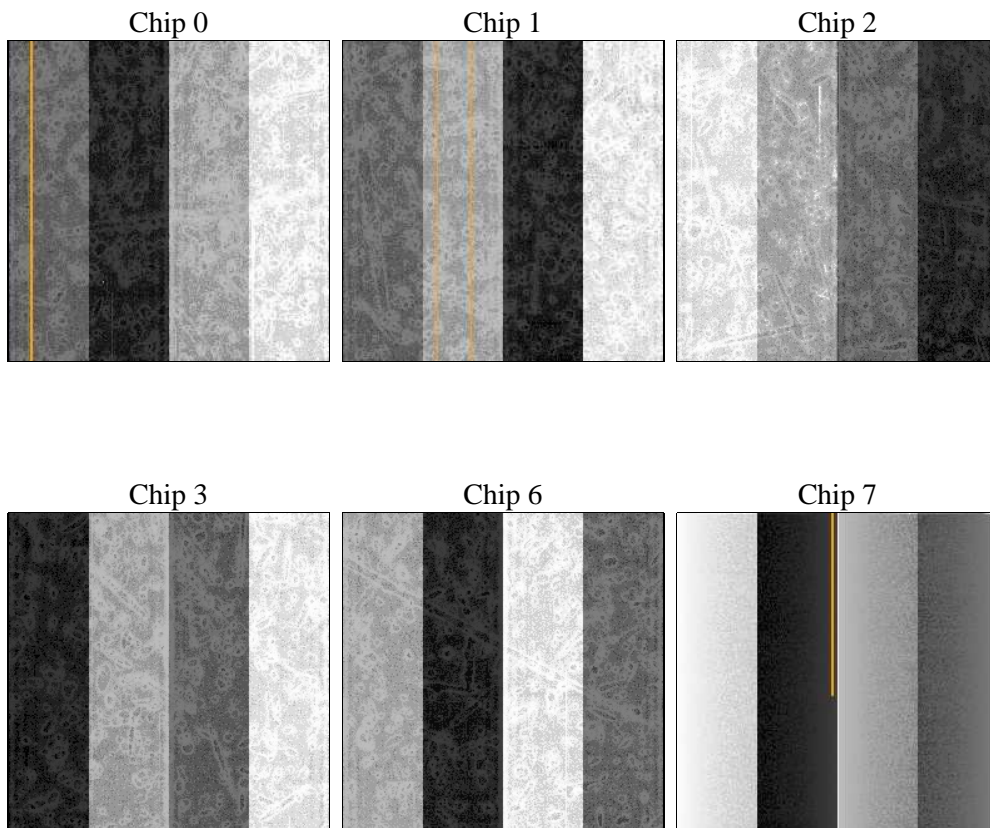
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5929.6000055075	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	5929.6000055075	Sum of GTIs [s]
date	2012-09-05T15:05:47	Date and time of file creation	ontime1	5929.6000055075	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	5929.6000055075	Sum of GTIs [s]
			ontime3	5929.6000055075	Sum of GTIs [s]
			ontime6	5929.6000055075	Sum of GTIs [s]
			ontime7	5929.6000055075	Sum of GTIs [s]
			l1events	234302	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	31968	33664	35478	39728	35941	57523	grade 0 events	2002	2055	2062	5466	1977	3882
rejected events	27573	29098	31225	31206	31575	26029		6%	6%	5%	13%	5%	6%
rejected %	86%	86%	88%	78%	87%	45%	grade 1 events	11	21	13	247	19	42
								0%	0%	0%	0%	0%	0%
							grade 2 events	870	843	844	1219	828	6046
								2%	2%	2%	3%	2%	10%
							grade 3 events	444	449	350	517	405	2800
								1%	1%	0%	1%	1%	4%
							grade 4 events	403	428	363	467	388	2782
								1%	1%	1%	1%	1%	4%
							grade 5 events	1192	1253	1175	1560	1448	4217
								3%	3%	3%	3%	4%	7%
							grade 6 events	681	793	635	859	773	15992
								2%	2%	1%	2%	2%	27%
							grade 7 events	26365	27822	30036	29393	30103	21762
								82%	82%	84%	73%	83%	37%

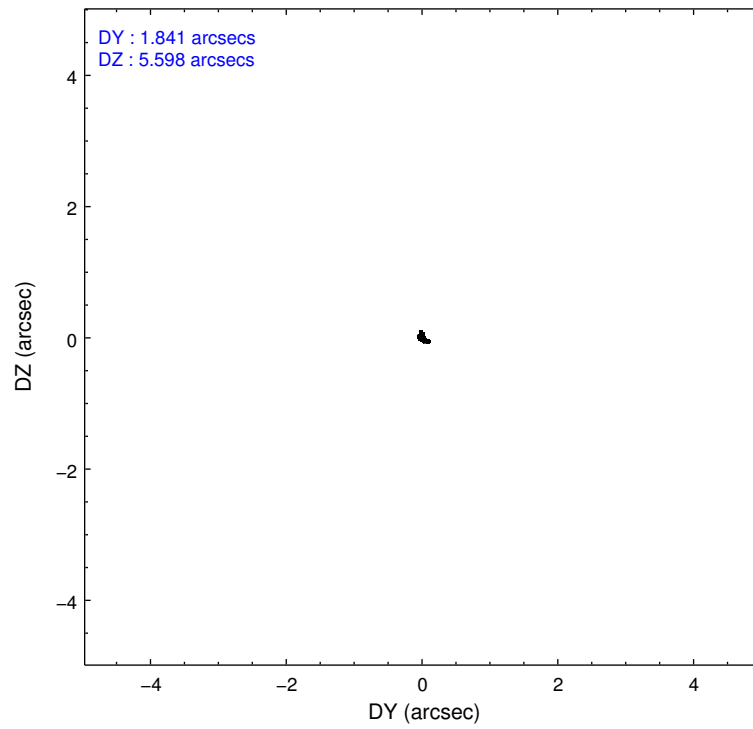
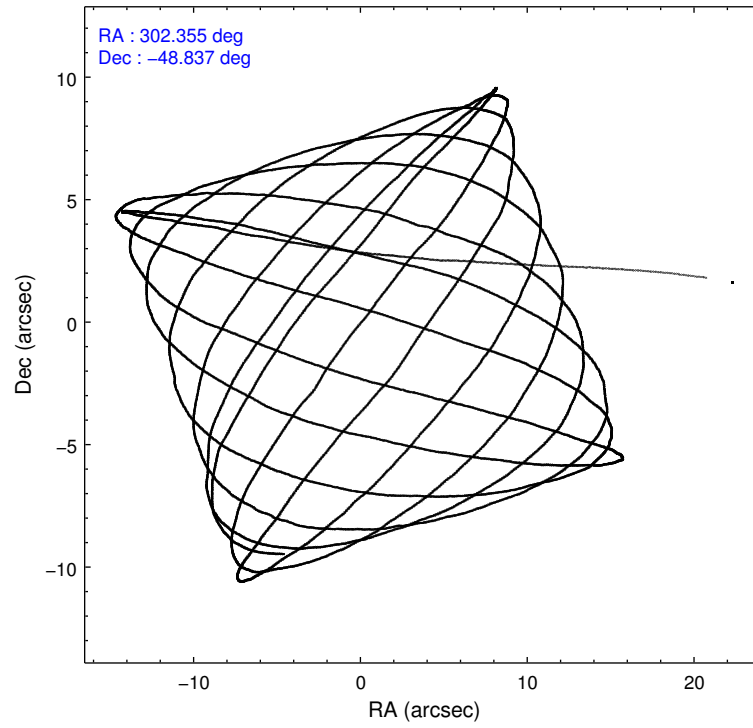


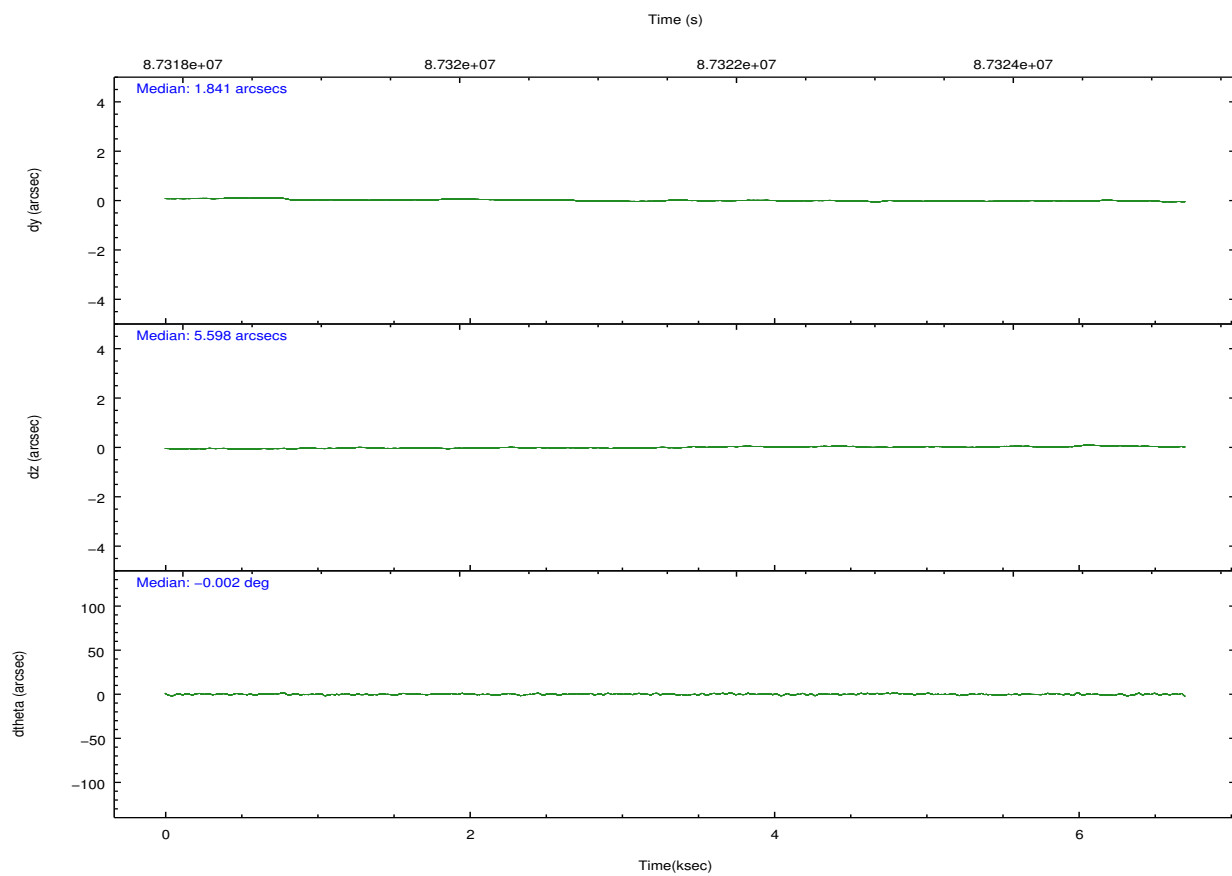
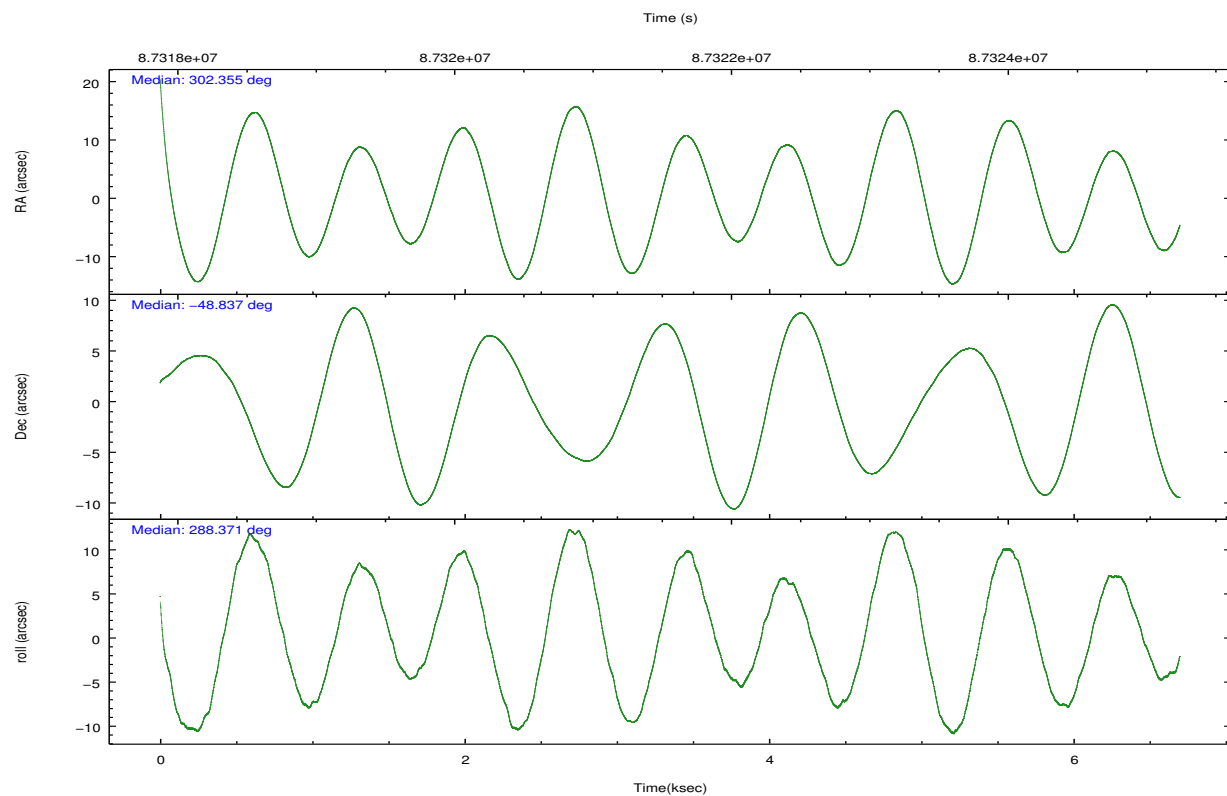
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	302.324078	302.3551556679411
[deg] Pointing Dec	-48.818182	-48.83645858579225
[deg] Pointing Roll	288.142615	288.3746829763253
[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)	87318904.184000	87317684.54566699
Observation start date	2000-10-07T15:14:00	2000-10-07T14:54:44
[s] Observation end time (MET)	87324904.184000	87325319.25845499
Observation end date	2000-10-07T16:54:00	2000-10-07T17:01:59
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



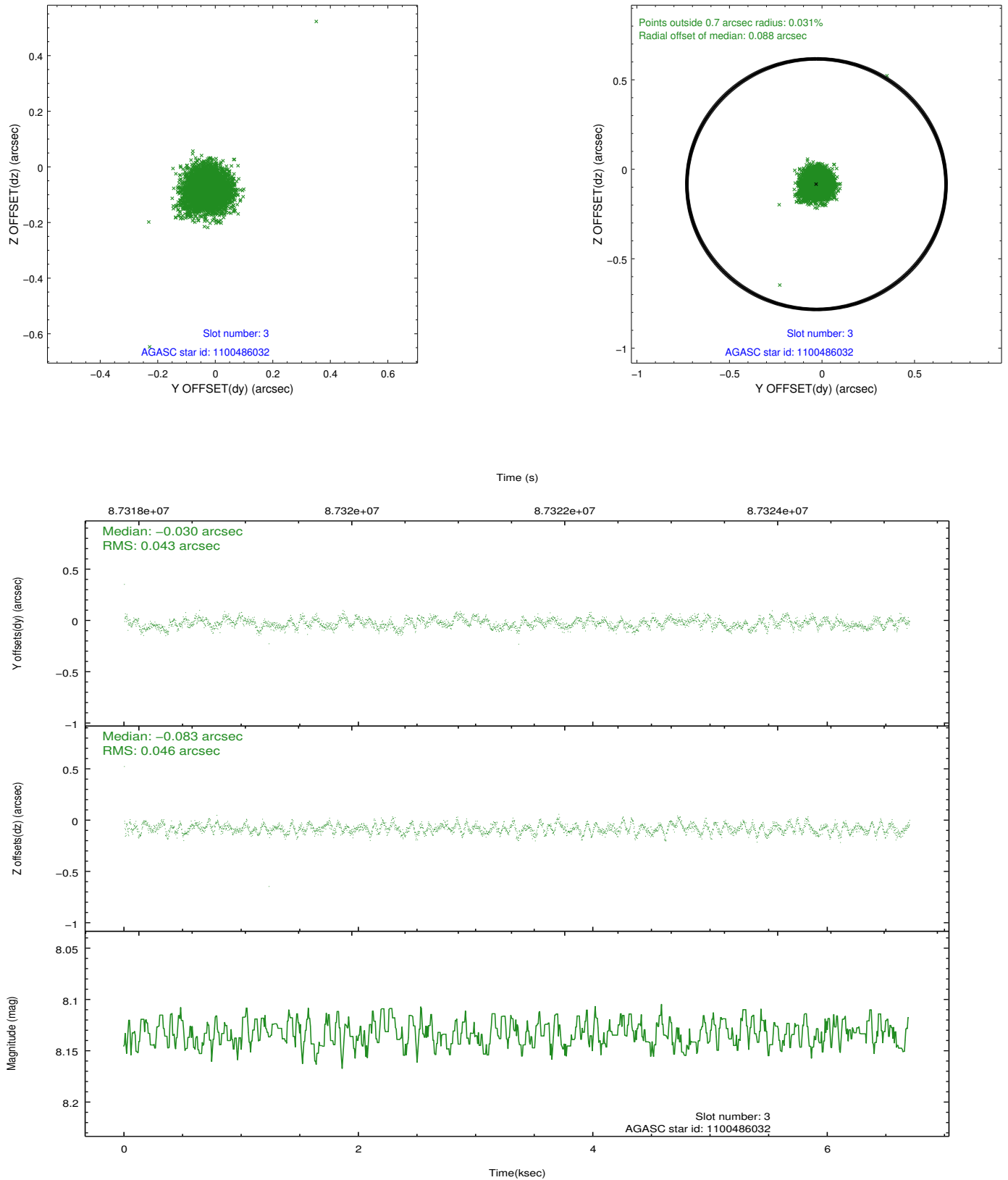


### Slot Statistics

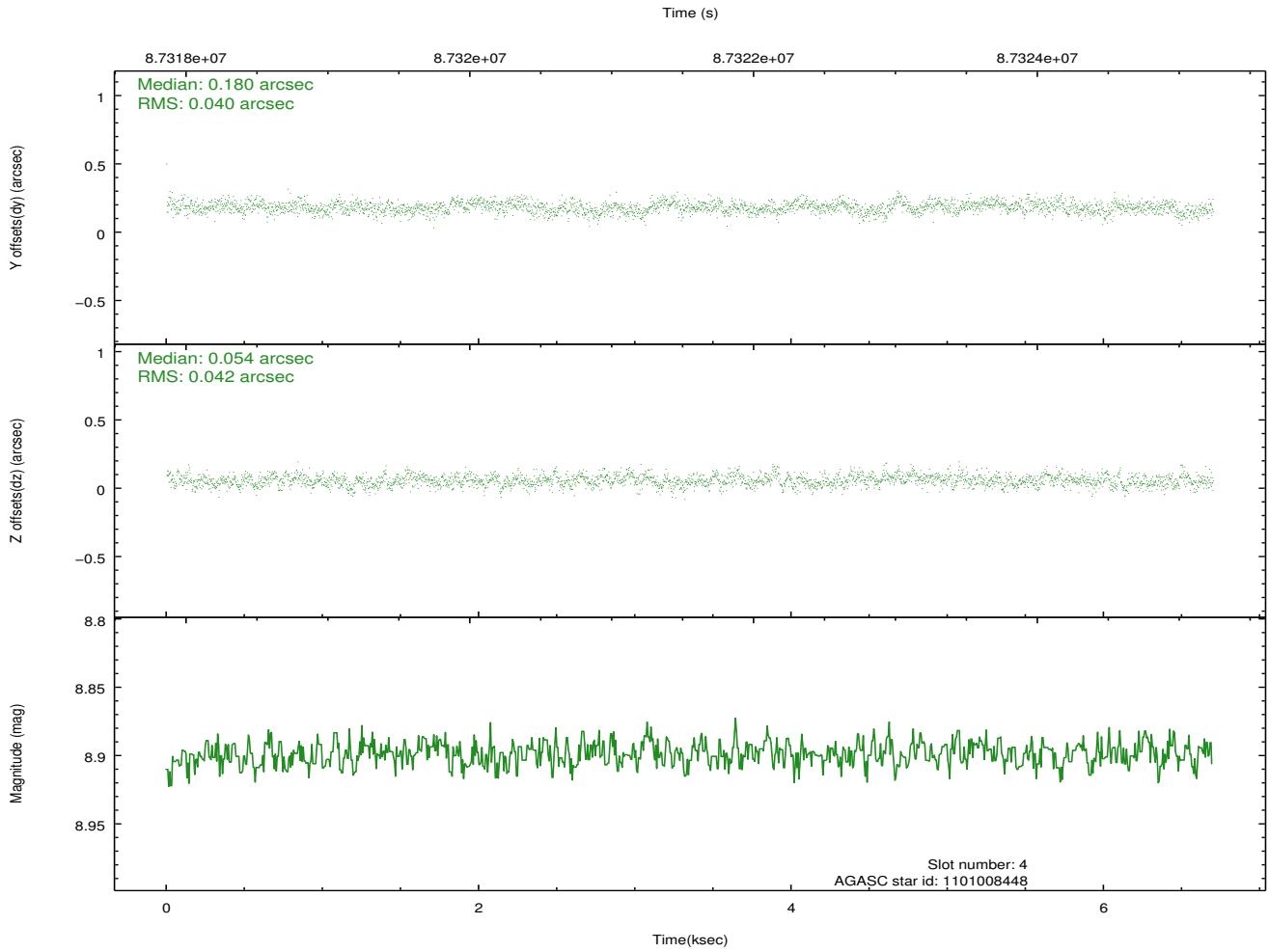
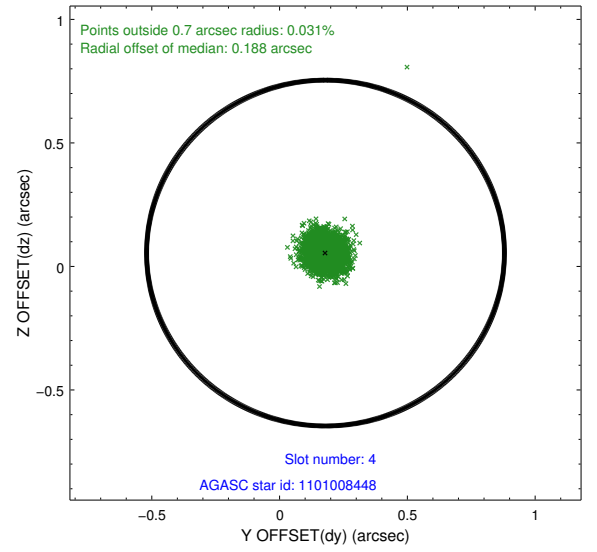
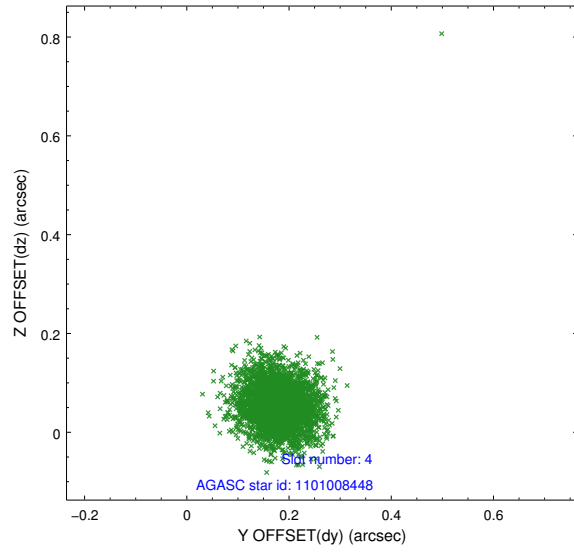
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-3	7.44	1634	-0.013	0.148	0.011	0.017	0.000000	0.000000	55.37	-962.03
1	FID	ACIS-I-4	7.18	1634	-0.035	-0.047	0.008	0.013	0.000000	0.000000	2157.93	1070.29
2	FID	ACIS-I-5	7.23	1634	-0.051	-0.032	0.009	0.014	0.000000	0.000000	-1808.96	1069.23
3	GUIDE	1100486032	8.13	3269	-0.030	-0.083	0.066	0.102	301.914450	-48.652458	-868.73	-740.91
4	GUIDE	1101008448	8.90	3266	0.180	0.054	0.059	0.097	302.775592	-49.104946	1314.26	688.76
5	GUIDE	1100497552	9.25	3268	-0.031	0.105	0.079	0.128	302.848311	-48.379409	-1107.40	1682.00
6	GUIDE	1100485088	9.31	3267	-0.216	-0.214	0.081	0.133	301.123370	-48.438414	-2172.18	-2306.22
7	GUIDE	1101013008	9.26	3201	0.099	0.142	0.069	0.113	303.172188	-49.140382	1733.32	1533.11

## 2.4 Star Slots

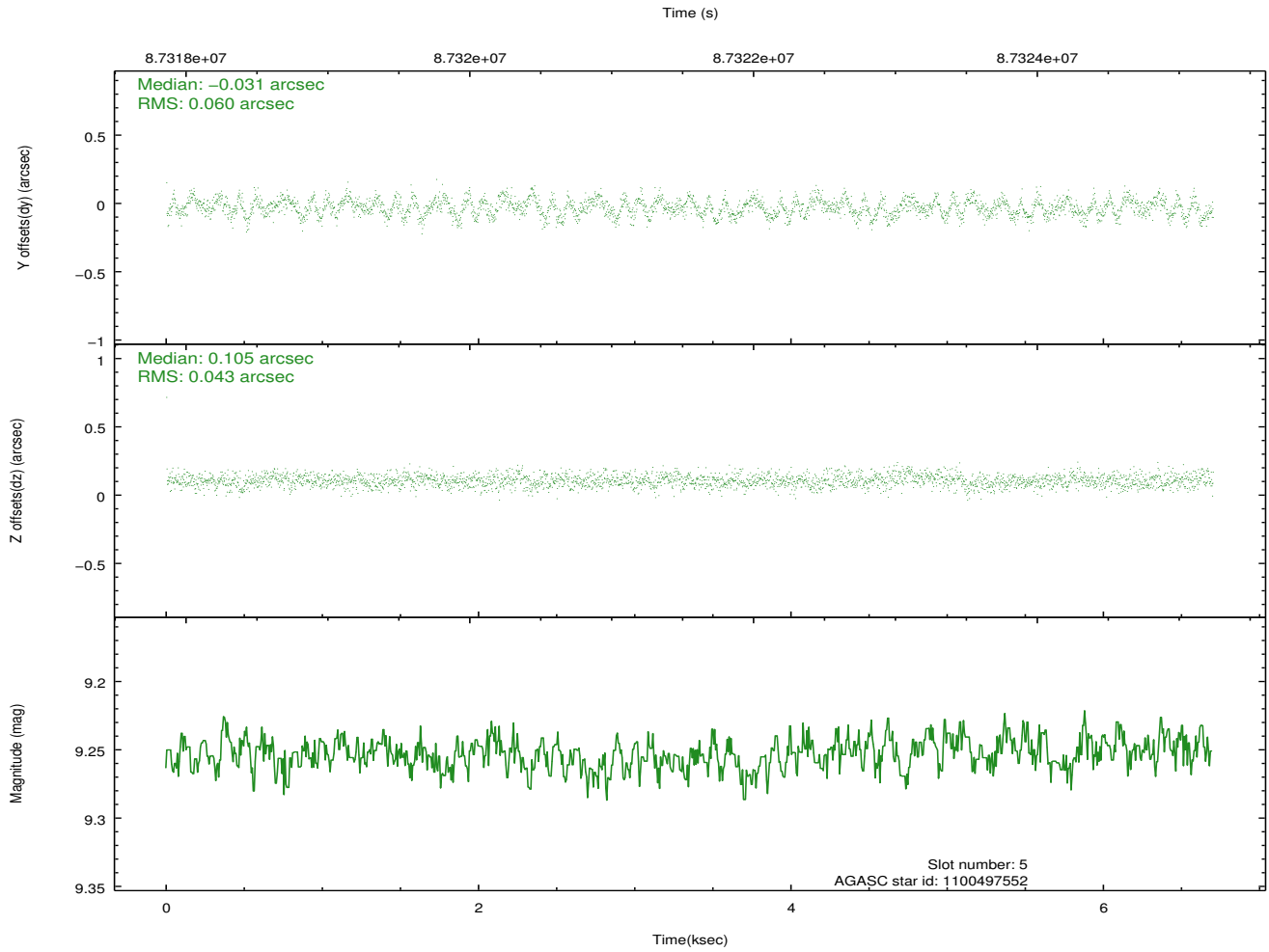
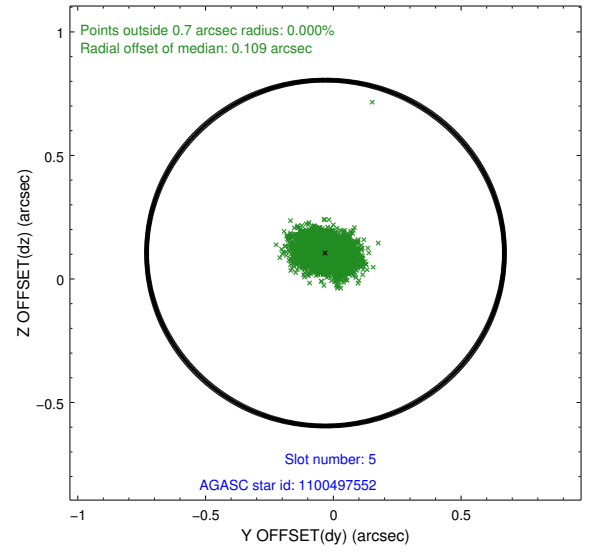
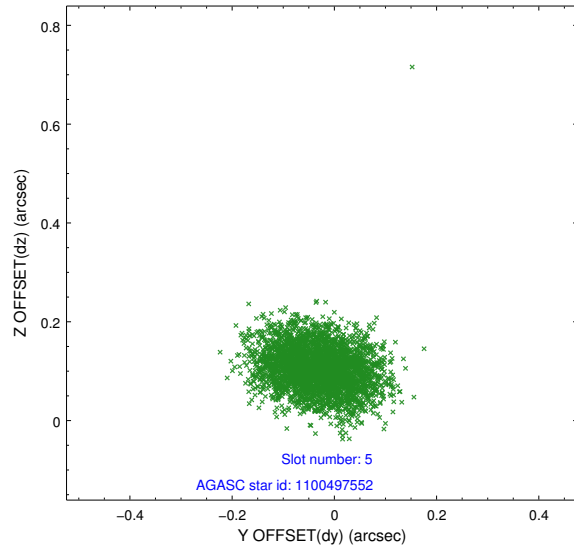
### 2.4.1 Slot 3



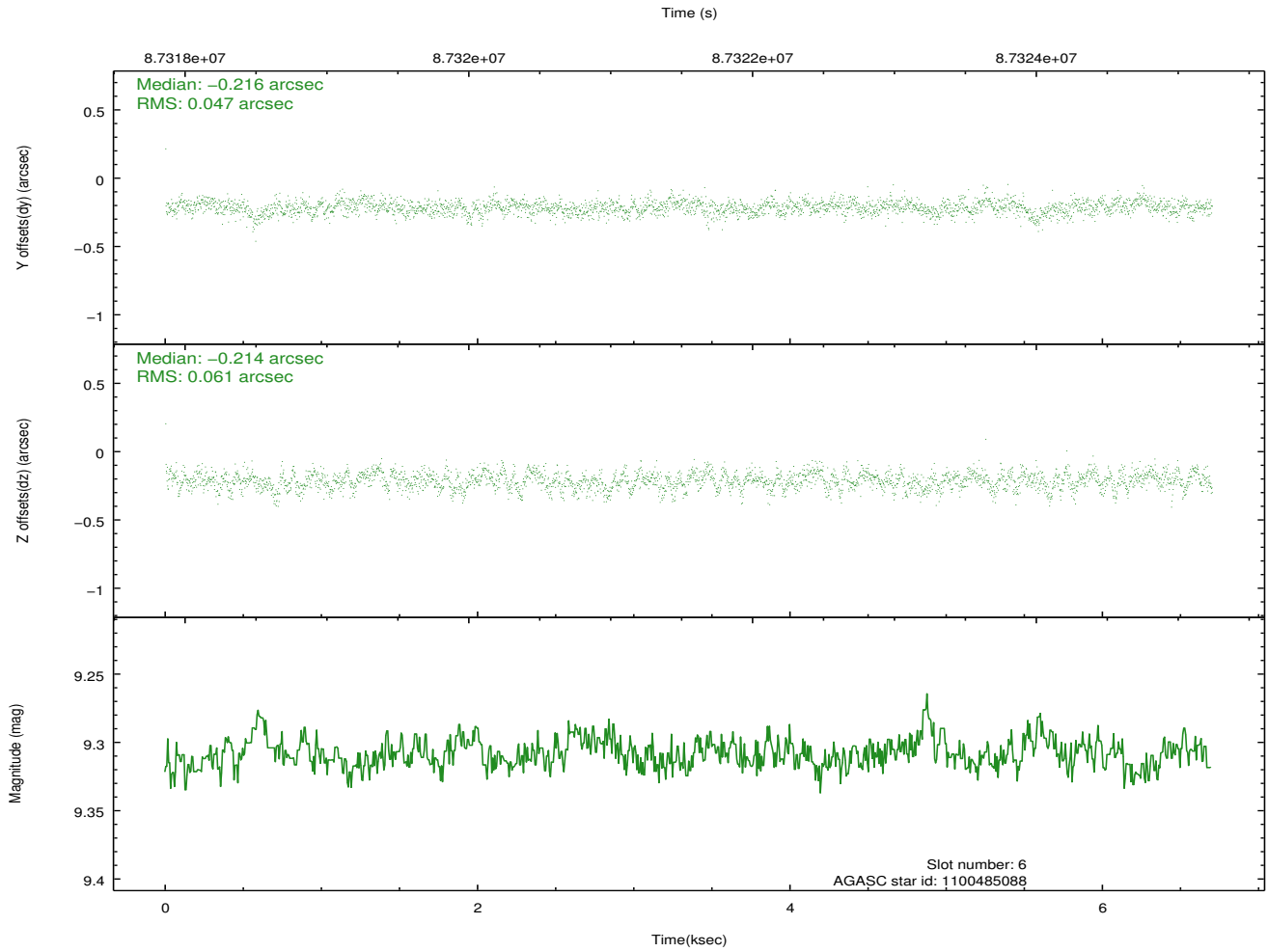
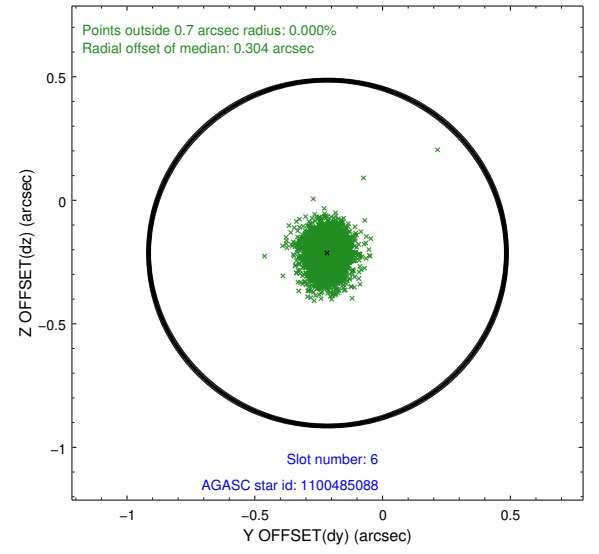
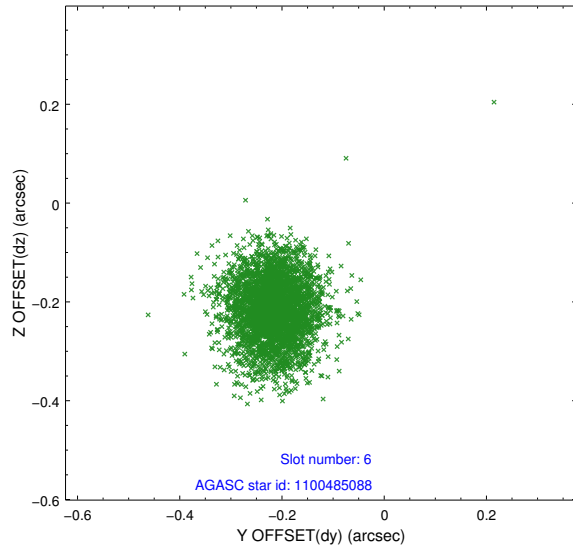
## 2.4.2 Slot 4



### 2.4.3 Slot 5

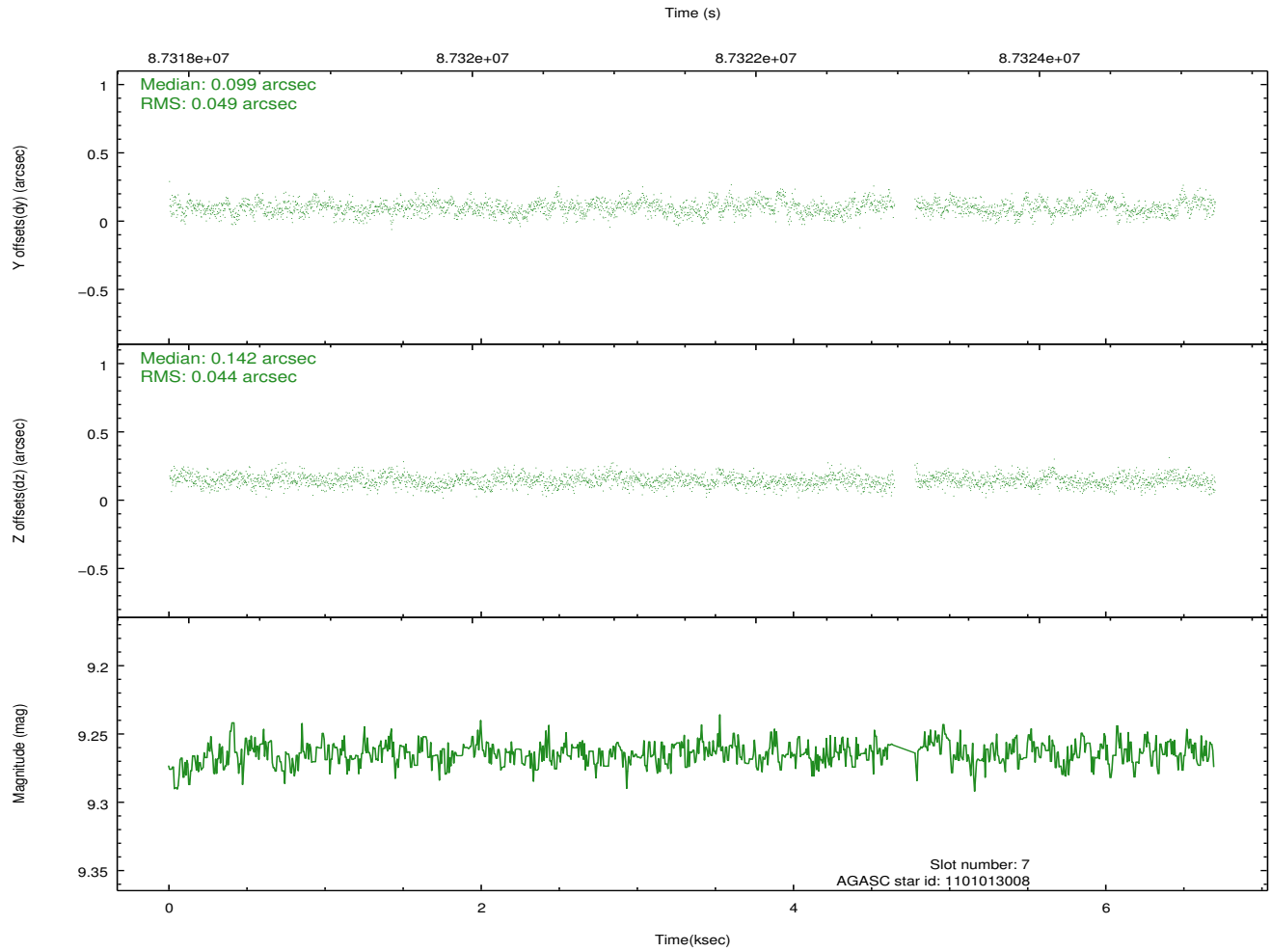
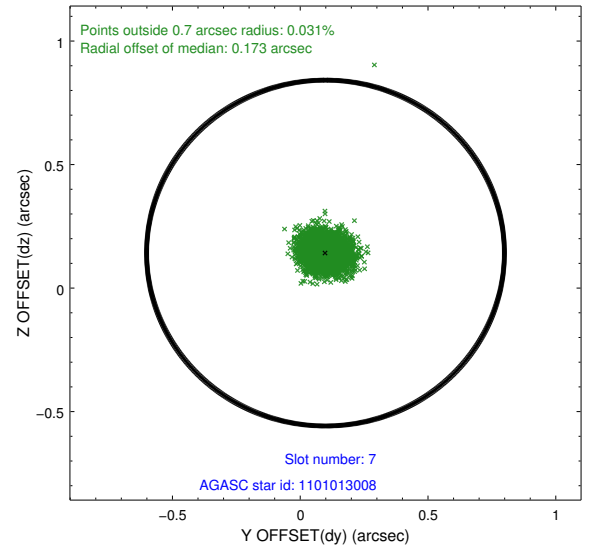
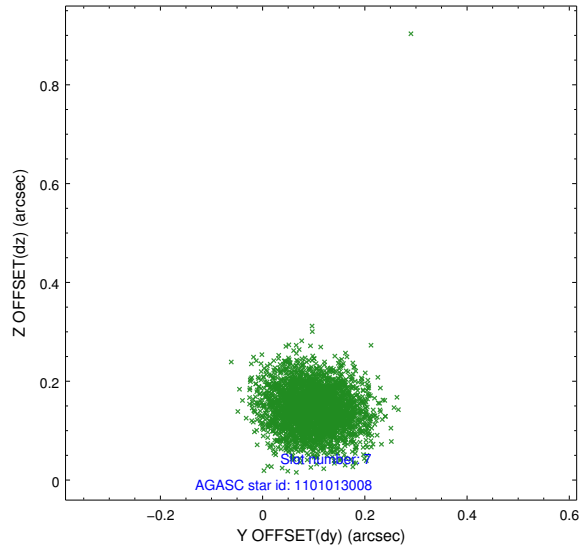


## 2.4.4 Slot 6



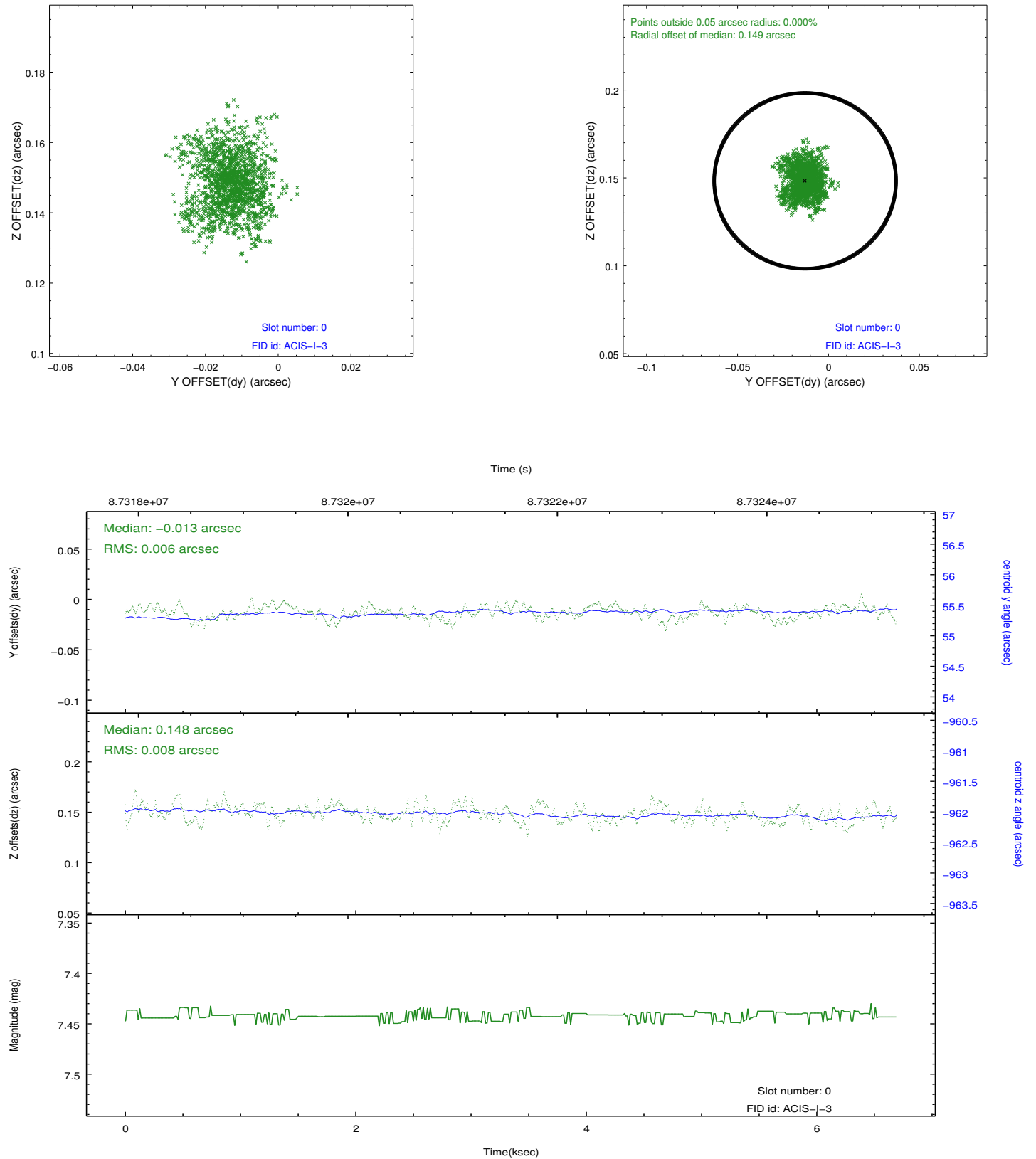


### 2.4.5 Slot 7

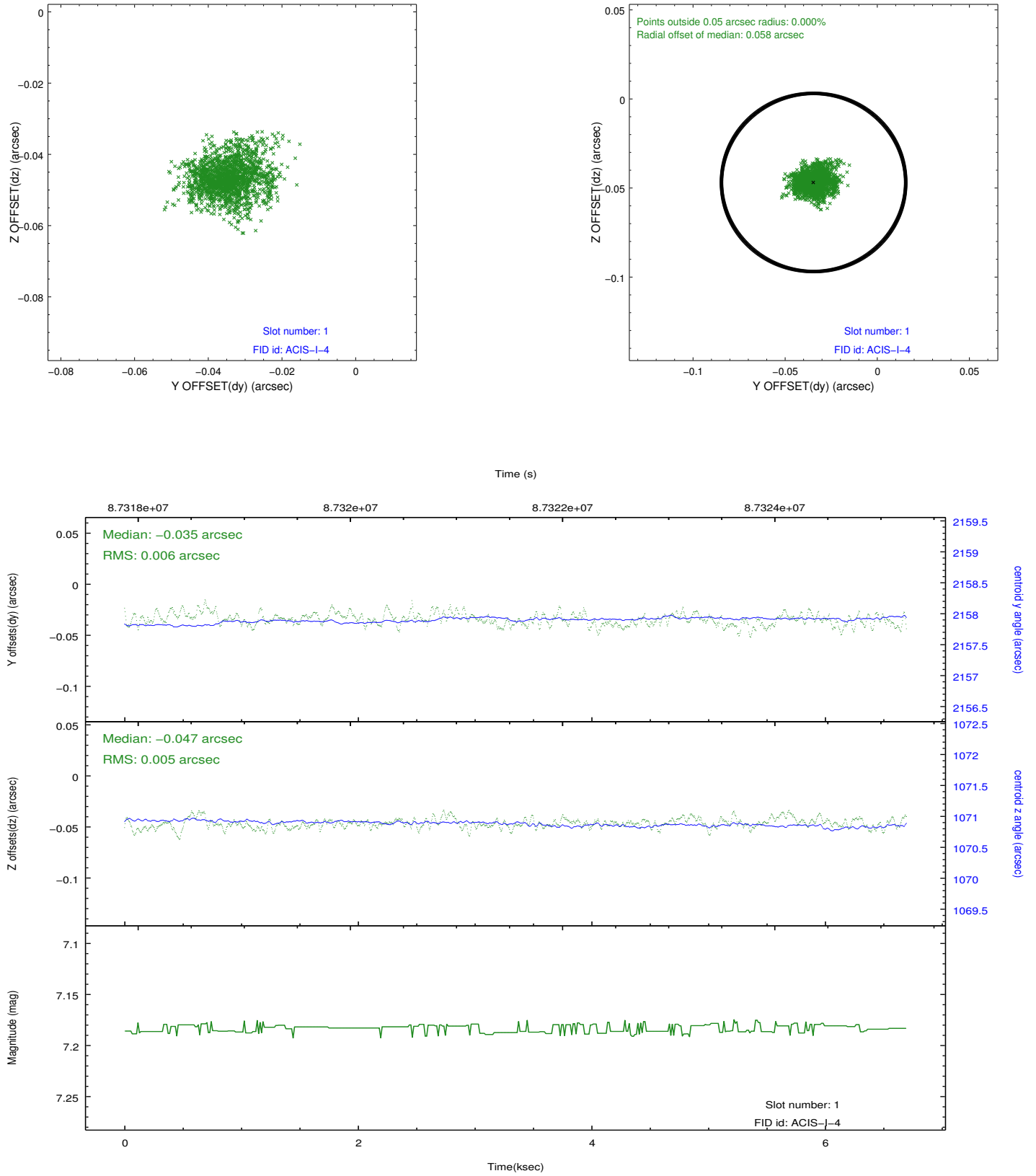


## 2.5 FID Slots

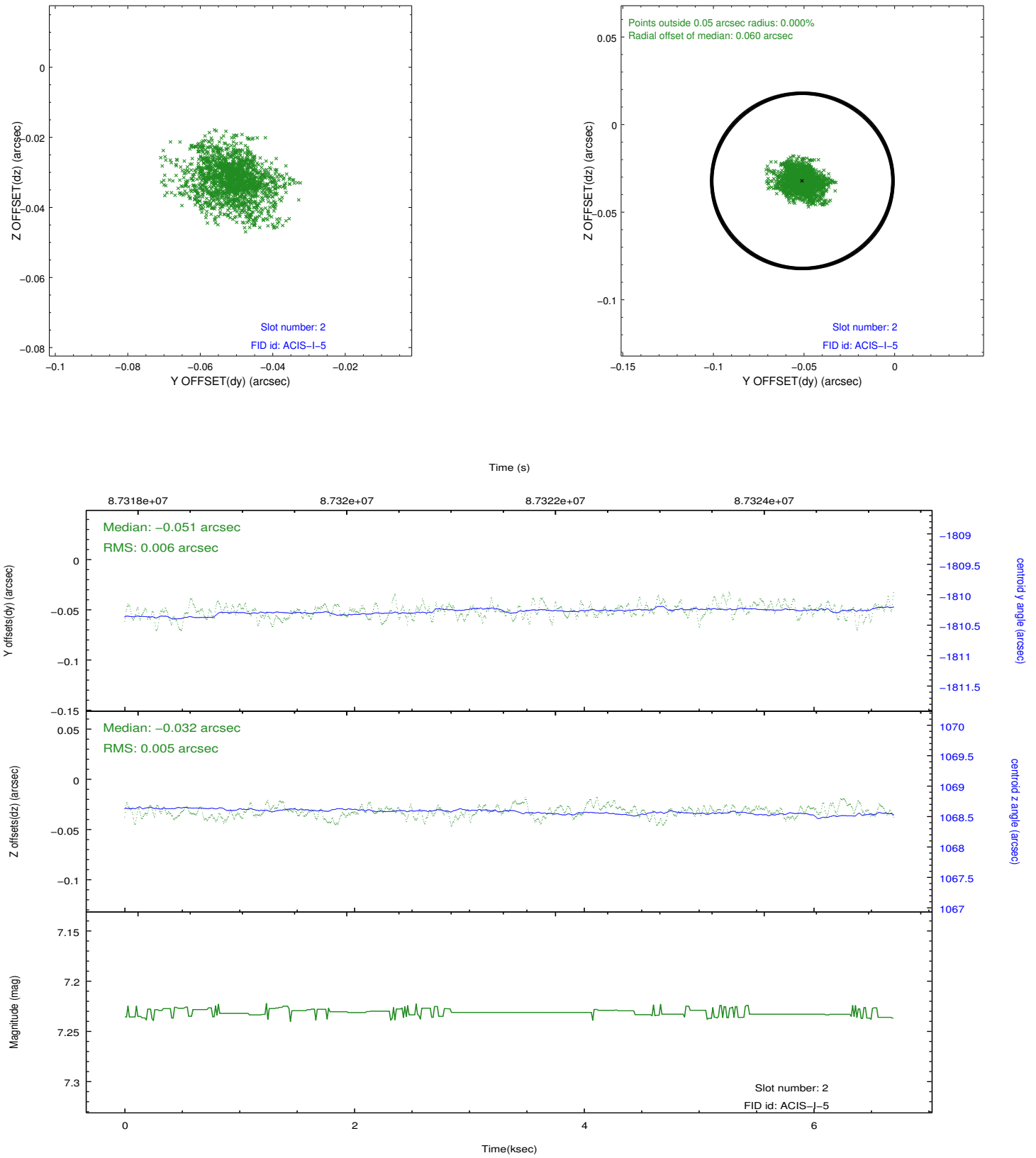
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.09.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.932

### A.2 Comments