

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9181 - L2 Version 2  
Chandra X-Ray Center

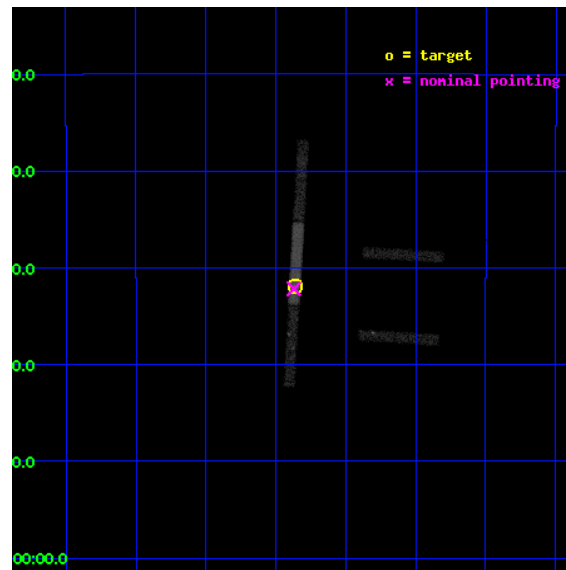
L2 Processing Date : May 12 2012

## 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	701623	Sequence number
obs_id	9181	Observation id
title	Studying the Optical and X-ray Emission Regions of Quasar RX J1131-1231 by Monitoring Microlensing Events	Proposal title
observer	Dr. George Chartas	Principal investigator
object	RX J1131-1231	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.96783763941	Nominal RA [deg]
dec_nom	-12.536480719536	Nominal Dec [deg]
roll_nom	273.36180878337	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15187.199741304	Sum of GTIs [s]
livetime	14346.107927929	Livetime [s]
ontime2	15185.717661321	Sum of GTIs [s]
ontime3	15187.199741304	Sum of GTIs [s]
ontime6	15187.199741304	Sum of GTIs [s]
ontime7	15187.199741304	Sum of GTIs [s]
ontime8	15187.199741304	Sum of GTIs [s]
l2events	28986	Number of level 2 events

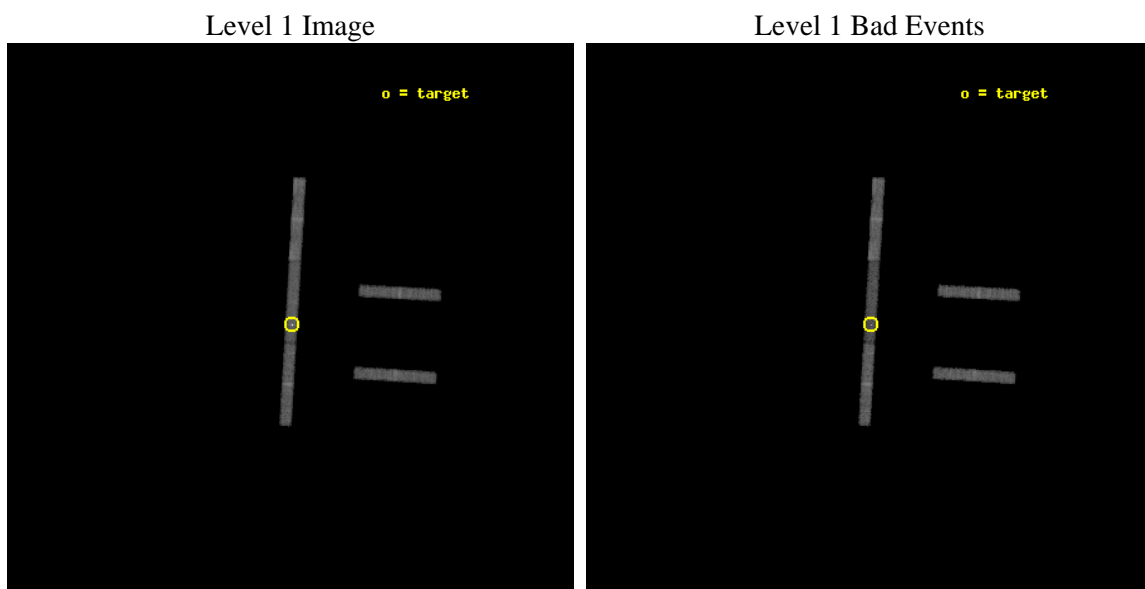




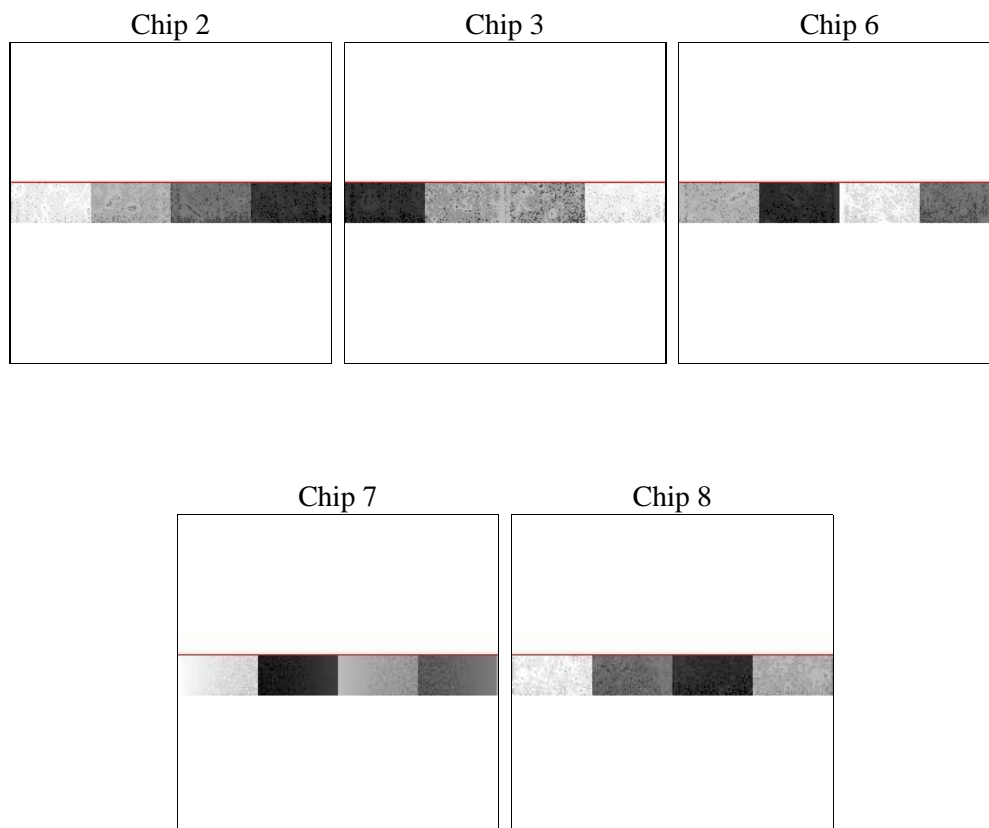
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	15187.199741304	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	15185.717661321	Sum of GTIs [s]
date	2012-05-13T00:16:28	Date and time of file creation	ontime3	15187.199741304	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15187.199741304	Sum of GTIs [s]
			ontime7	15187.199741304	Sum of GTIs [s]
			ontime8	15187.199741304	Sum of GTIs [s]
			l1events	128640	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	21067	20539	21883	35434	29717
rejected events	18972	18728	19658	12572	24129
rejected %	90%	91%	89%	35%	81%

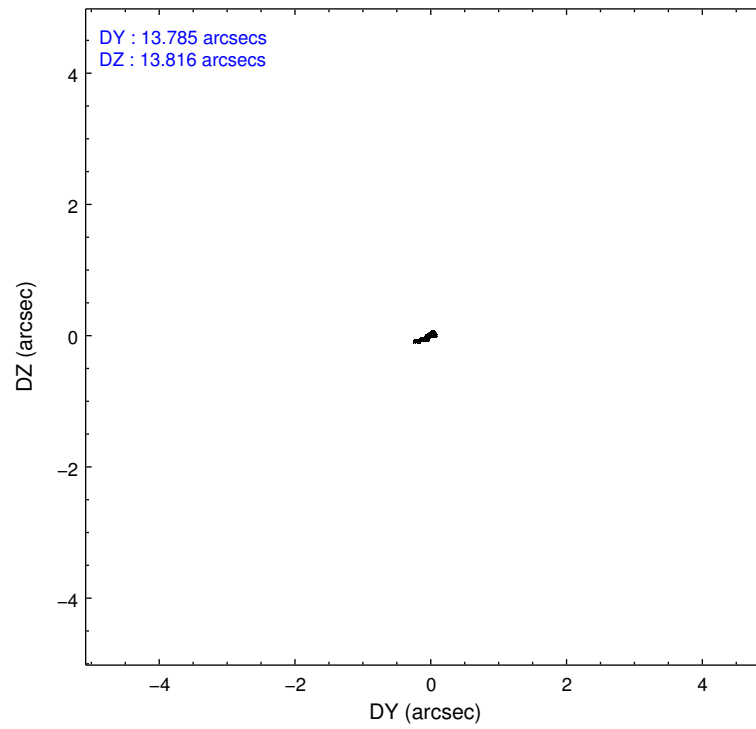
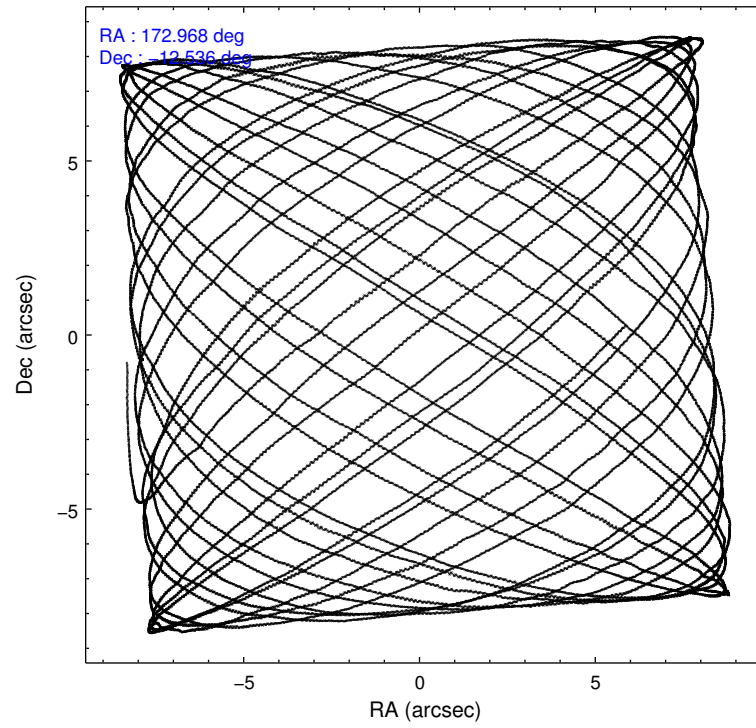
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	676	523	726	4994	1423
	3%	2%	3%	14%	4%
grade 1 events	6	5	2	196	12
	0%	0%	0%	0%	0%
grade 2 events	428	338	446	5604	1245
	2%	1%	2%	15%	4%
grade 3 events	376	387	394	2733	672
	1%	1%	1%	7%	2%
grade 4 events	394	343	379	2705	629
	1%	1%	1%	7%	2%
grade 5 events	518	674	712	2615	1025
	2%	3%	3%	7%	3%
grade 6 events	359	340	418	7484	1935
	1%	1%	1%	21%	6%
grade 7 events	18310	17929	18806	9103	22776
	86%	87%	85%	25%	76%

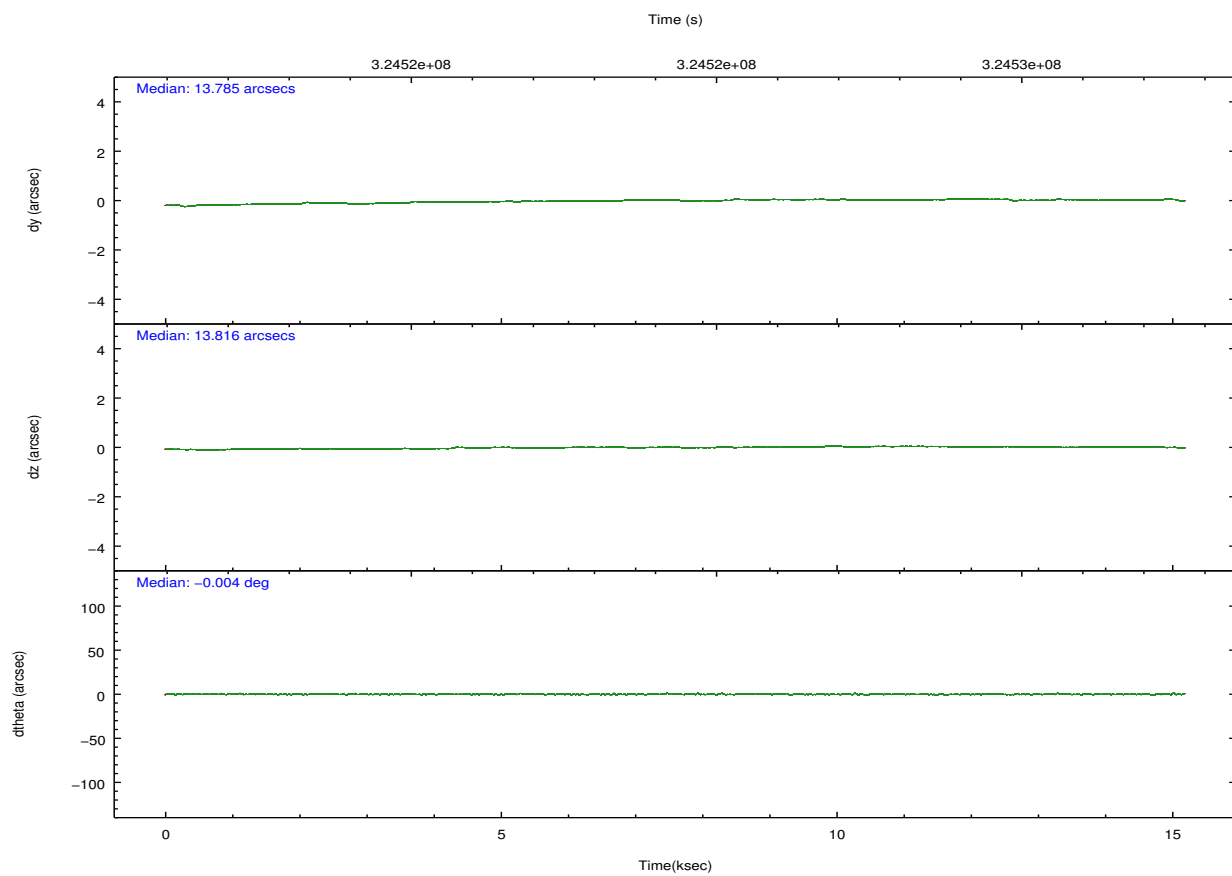
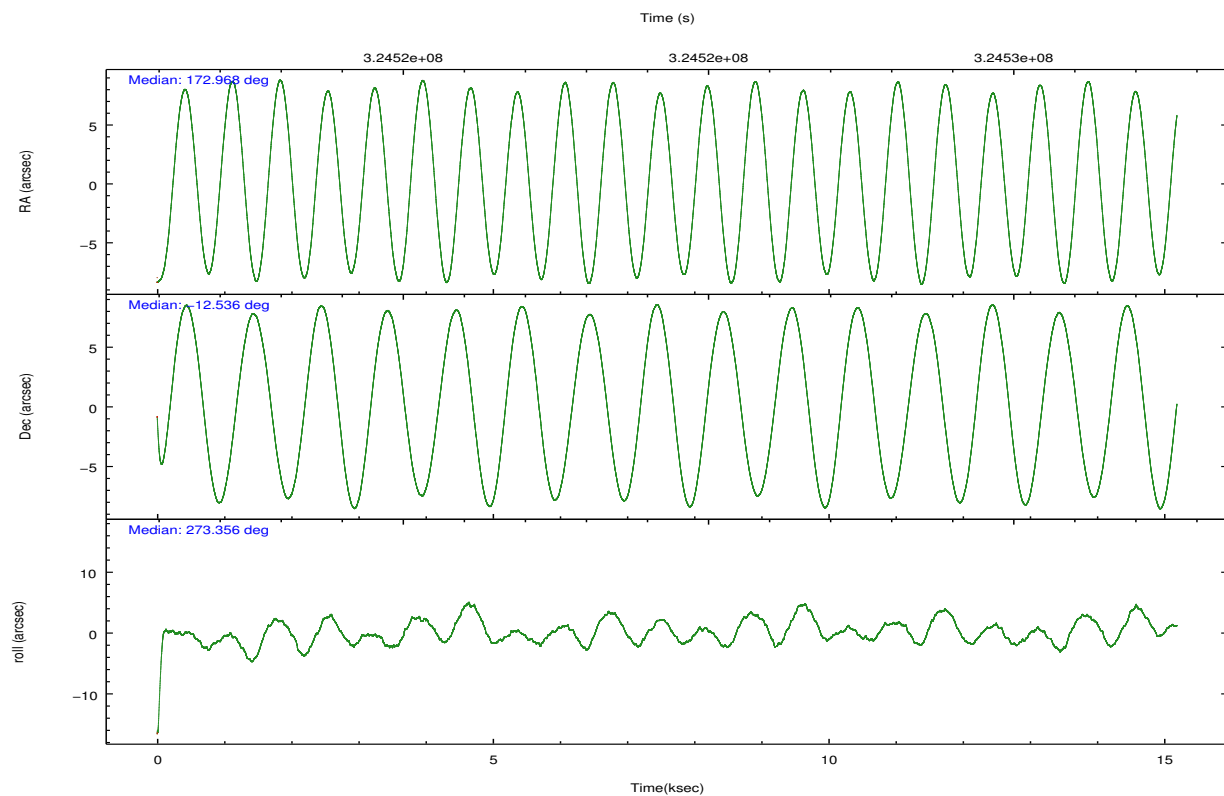
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	172.952127	172.9678376394074
[deg] Pointing Dec	-12.513837	-12.53648071953613
[deg] Pointing Roll	273.201785	273.3618087833673
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	324516918.184000	324515644.8141
Observation start date	2008-04-13T23:34:13	2008-04-13T23:14:04
[s] Observation end time (MET)	324531918.184000	324532685.43993
Observation end date	2008-04-14T03:44:13	2008-04-14T03:58:05
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	Y
CCD I3 on	O2	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O4	Y
CCD S3 on	Y	Y
CCD S4 on	O3	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/8
Subarray start row	449	449
Subarray row count	128	128
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.7

## 2.3 Aspect



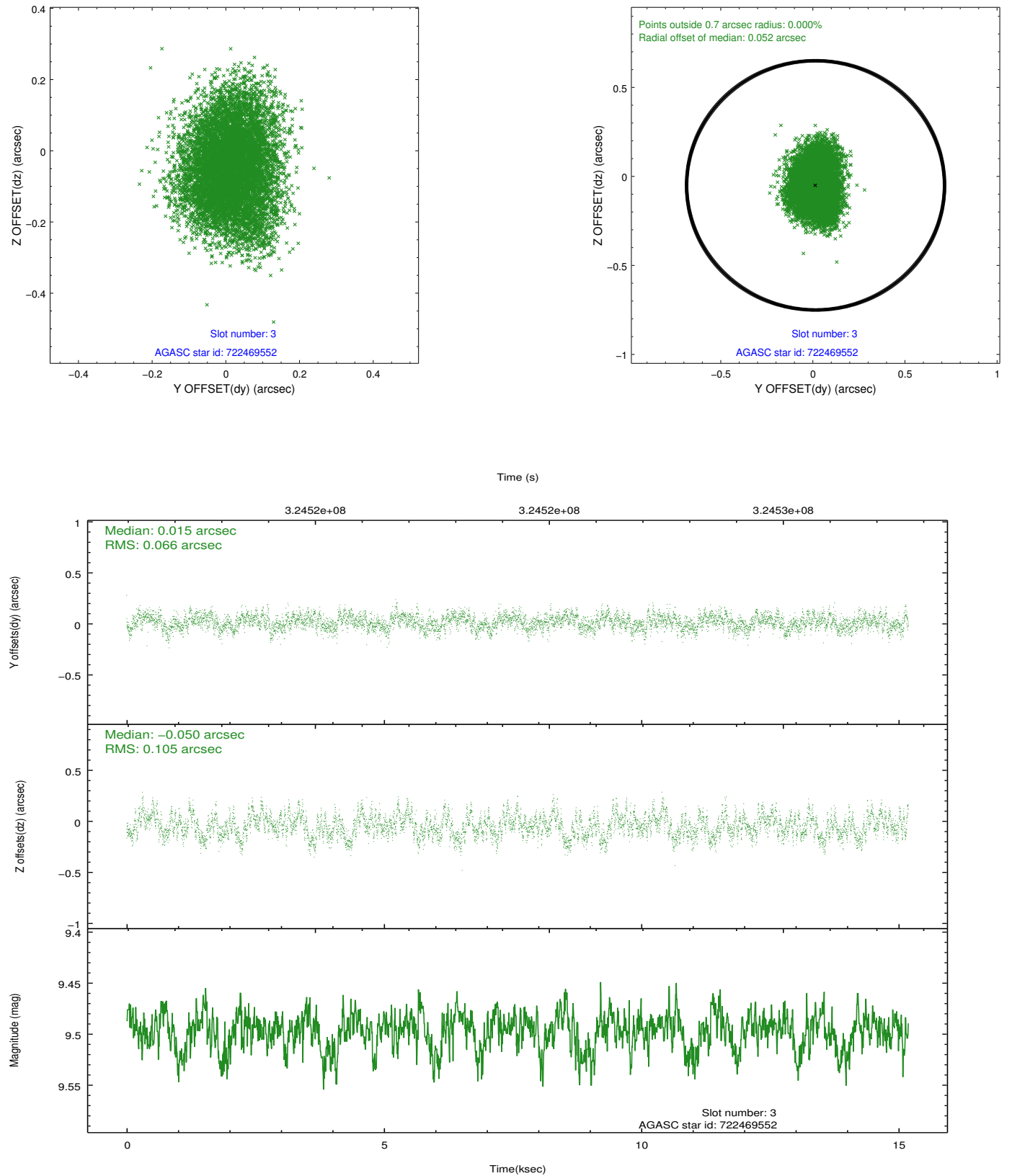


### Slot Statistics

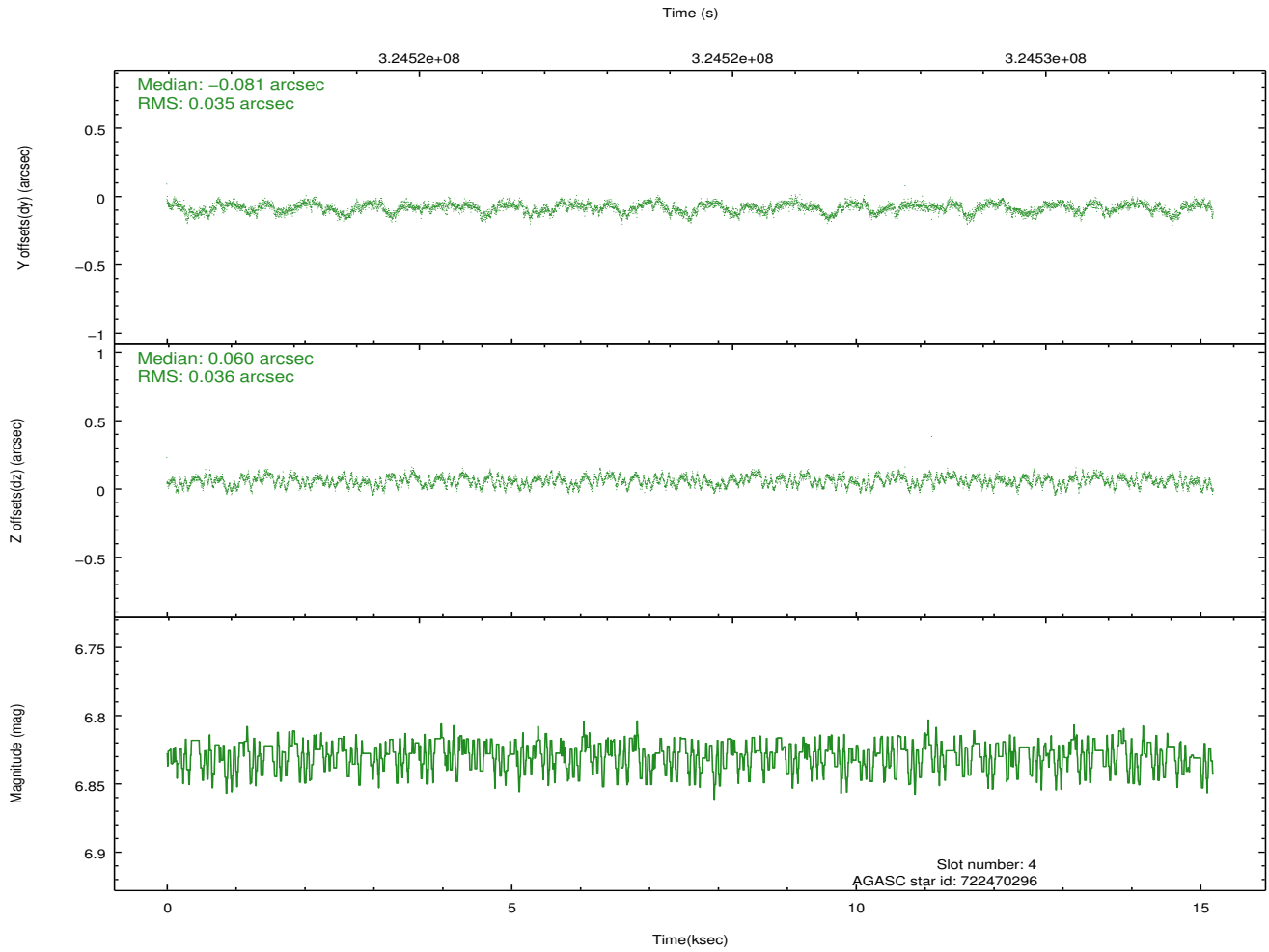
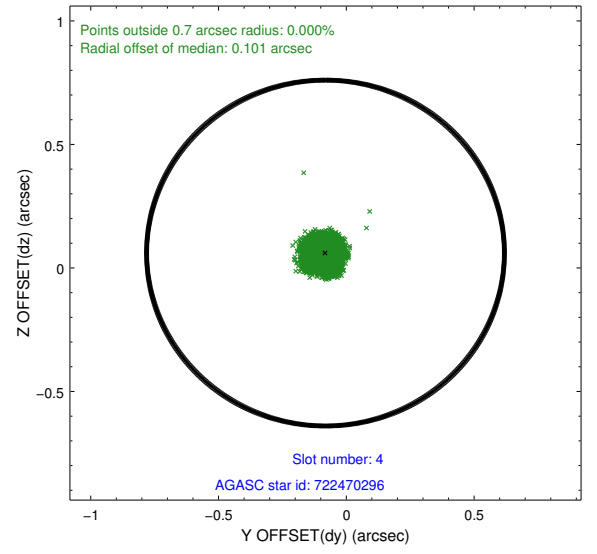
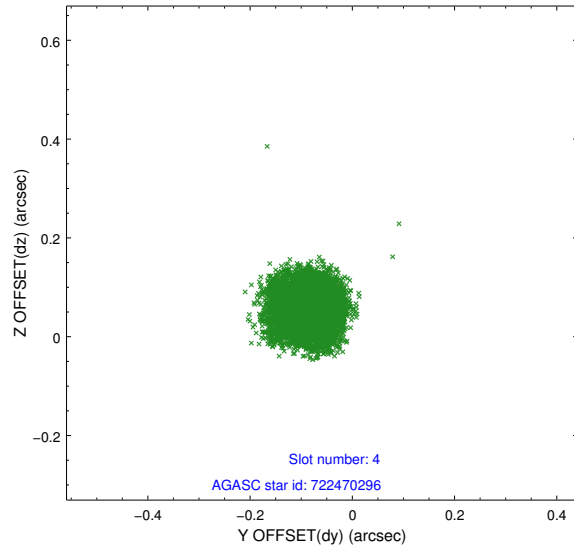
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	3705	-0.038	-0.016	0.007	0.012	0.000000	0.000000	-766.73	-1735.17
1	FID	ACIS-S-4	7.01	3705	0.127	0.023	0.006	0.012	0.000000	0.000000	2146.57	173.05
2	FID	ACIS-S-5	7.05	3705	-0.120	0.002	0.006	0.011	0.000000	0.000000	-1819.28	167.03
3	GUIDE	722469552	9.50	7401	0.015	-0.050	0.132	0.217	172.271393	-12.124699	-1529.05	-2314.22
4	GUIDE	722470296	6.83	7410	-0.081	0.060	0.054	0.084	172.921689	-12.381367	-482.24	-80.53
5	GUIDE	722473176	9.48	7401	0.000	0.048	0.103	0.169	172.599746	-12.066793	-1674.92	-1148.92
6	GUIDE	722871728	9.65	7393	0.025	-0.052	0.143	0.221	173.202235	-12.568355	245.42	866.34
7	GUIDE	722873464	7.33	7409	0.050	-0.002	0.073	0.118	172.661543	-13.050266	1872.69	-1124.72

## 2.4 Star Slots

### 2.4.1 Slot 3

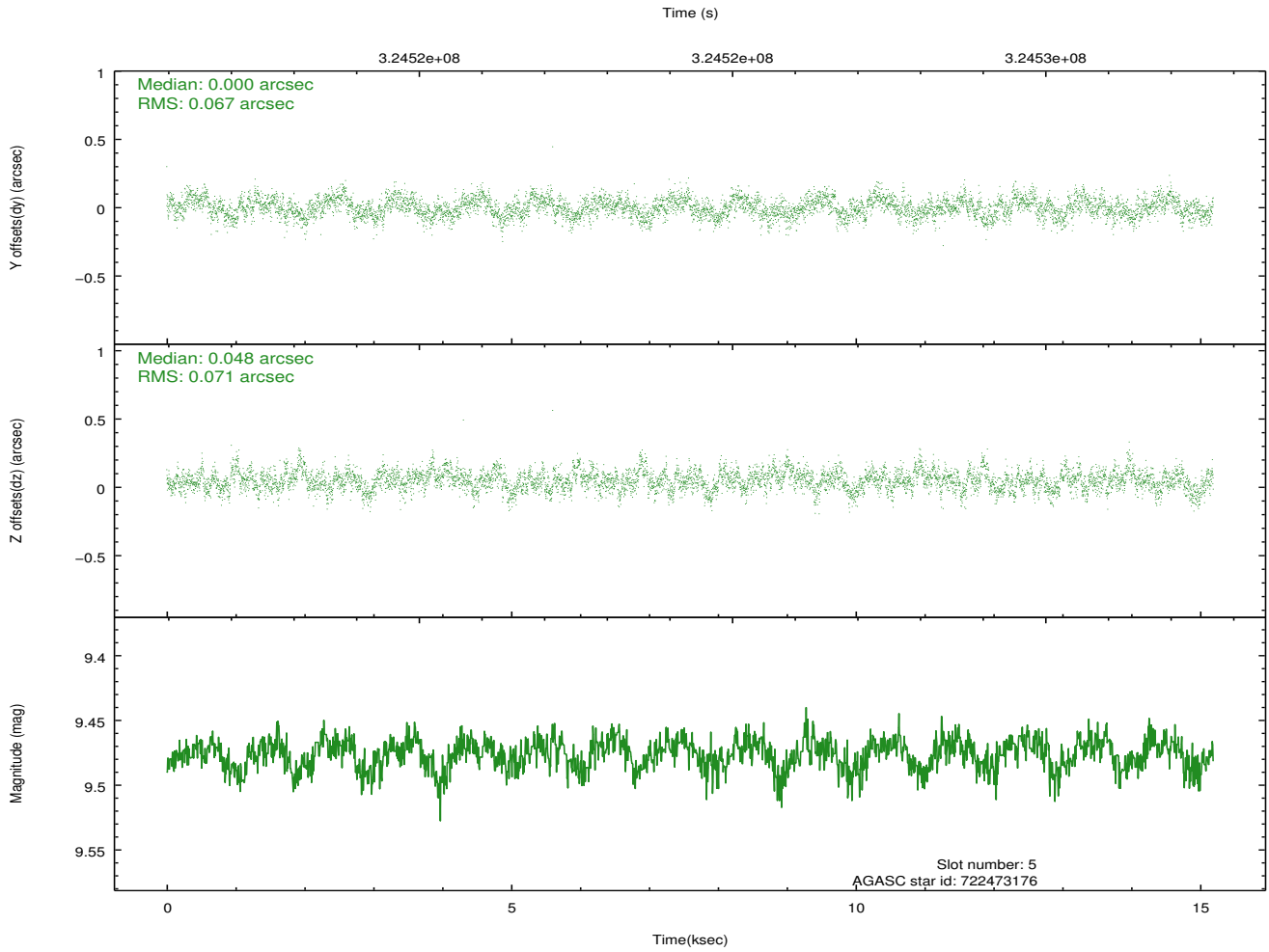
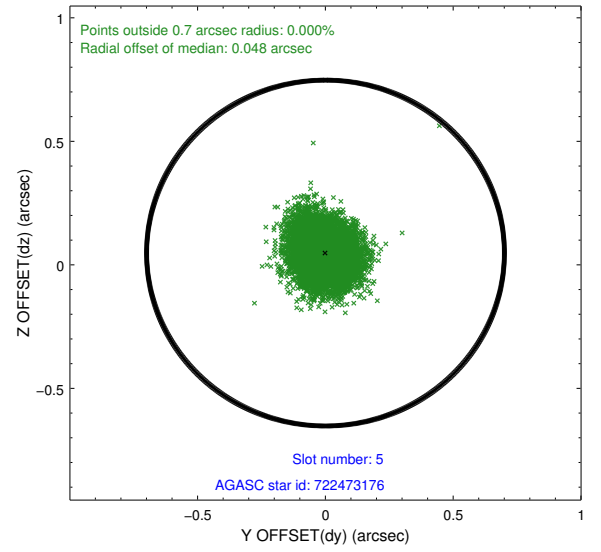
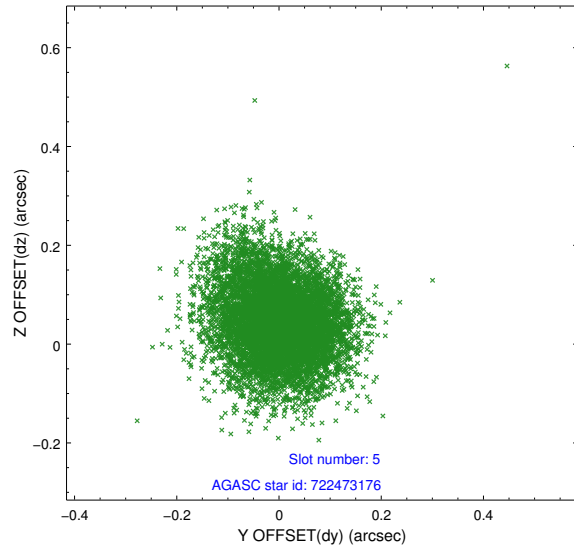


## 2.4.2 Slot 4

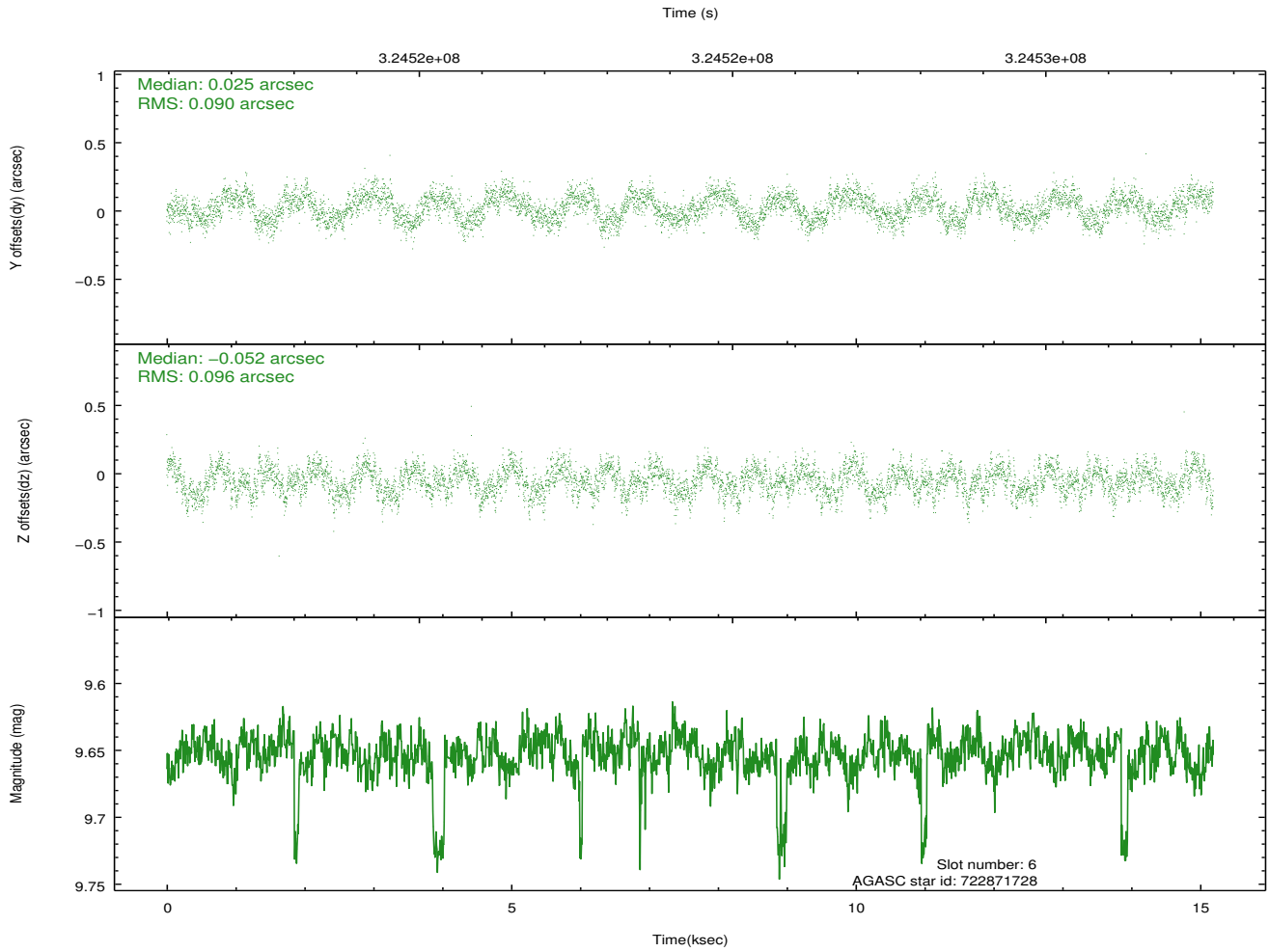
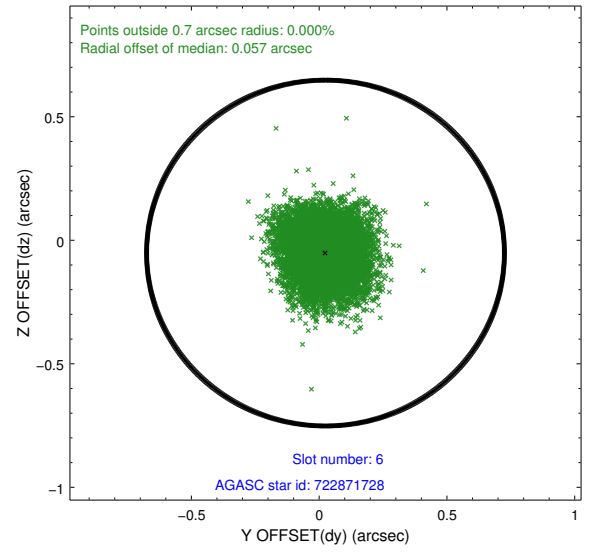
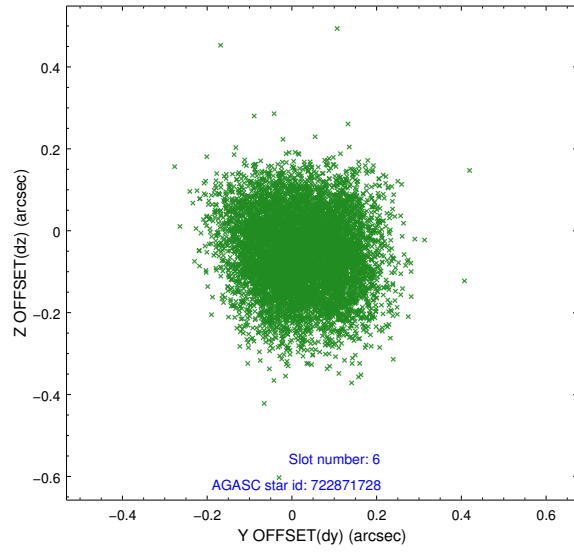




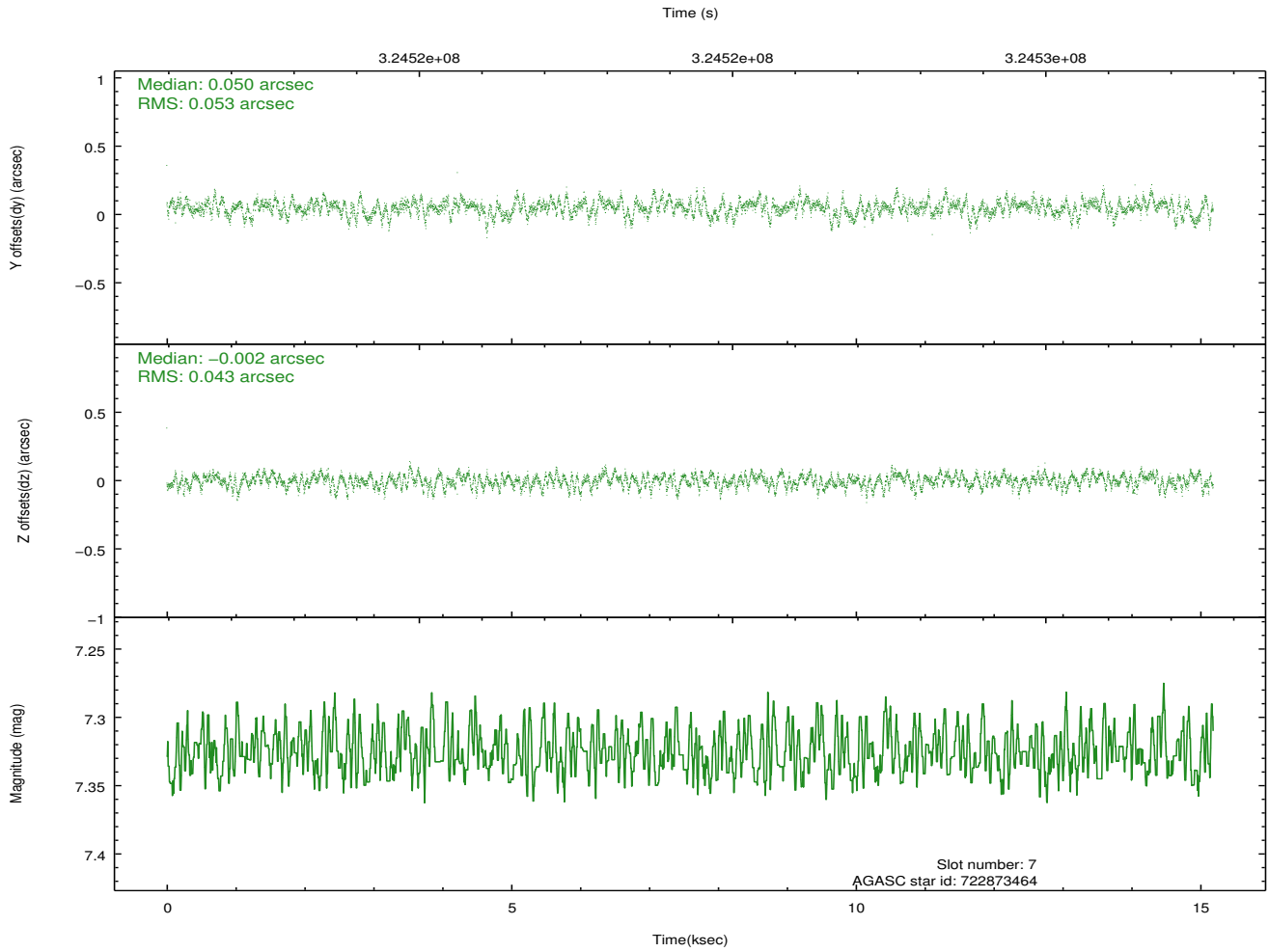
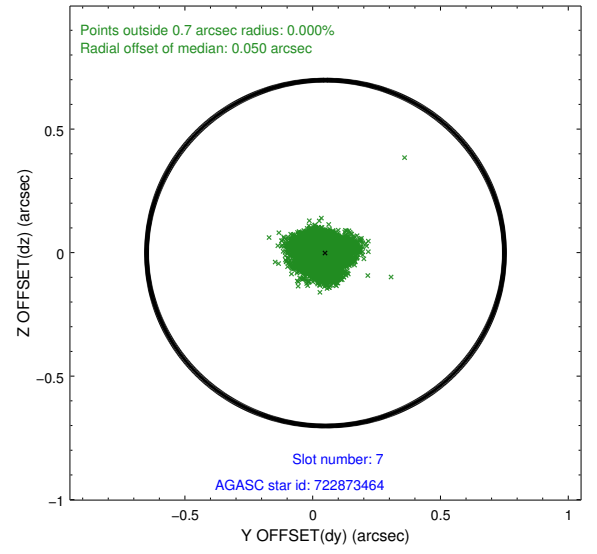
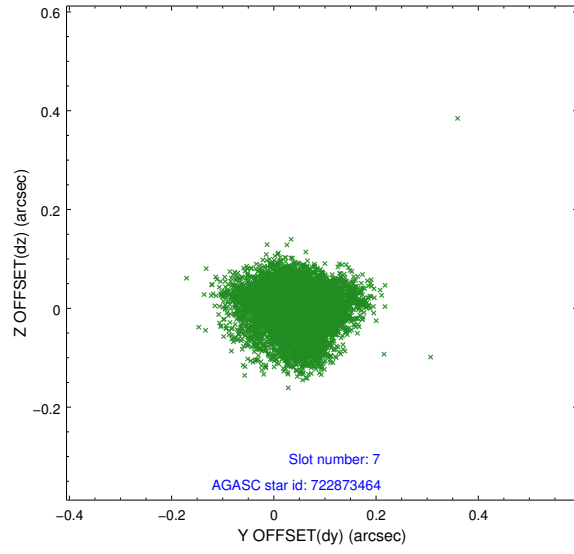
### 2.4.3 Slot 5



## 2.4.4 Slot 6

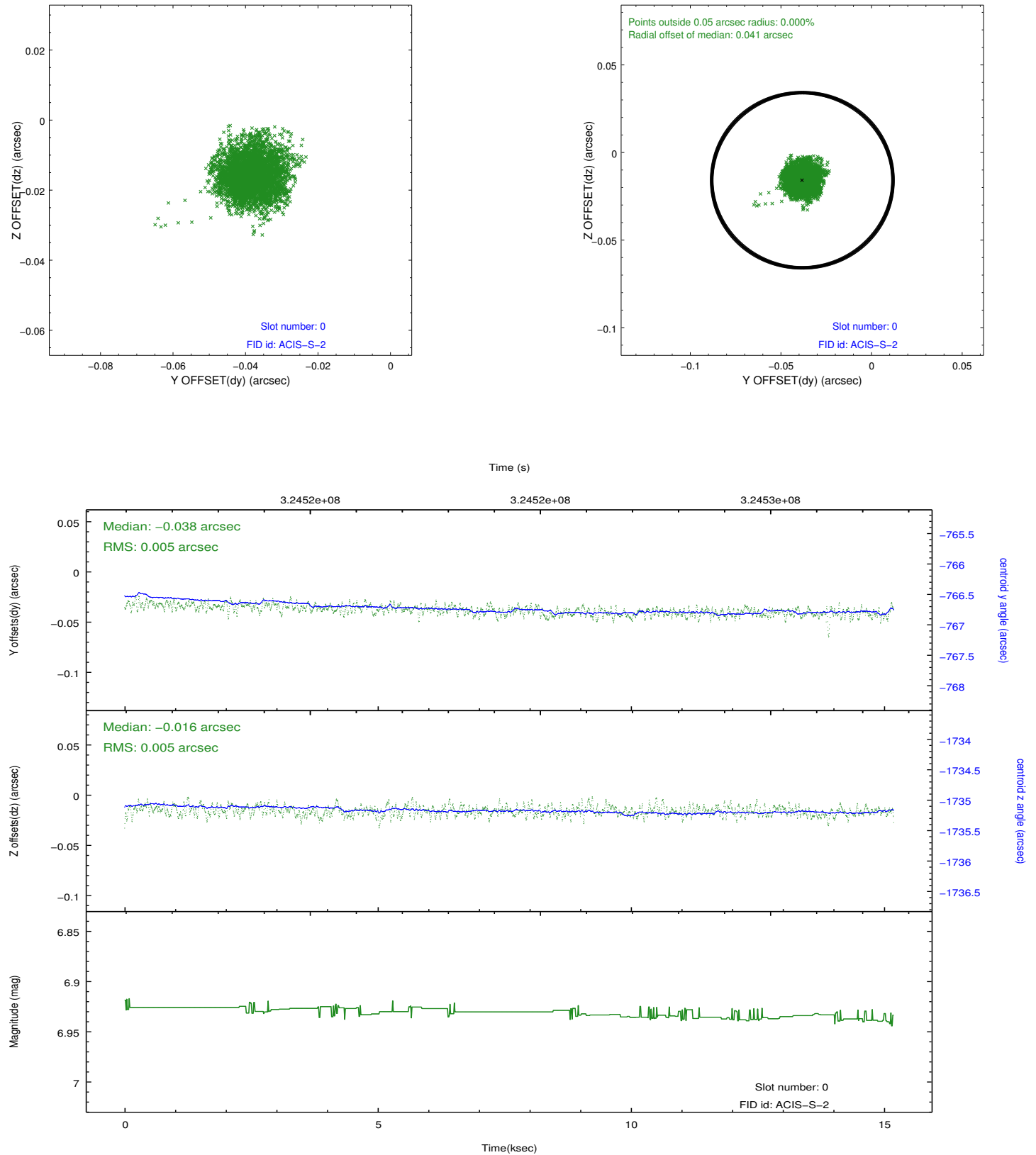


## 2.4.5 Slot 7

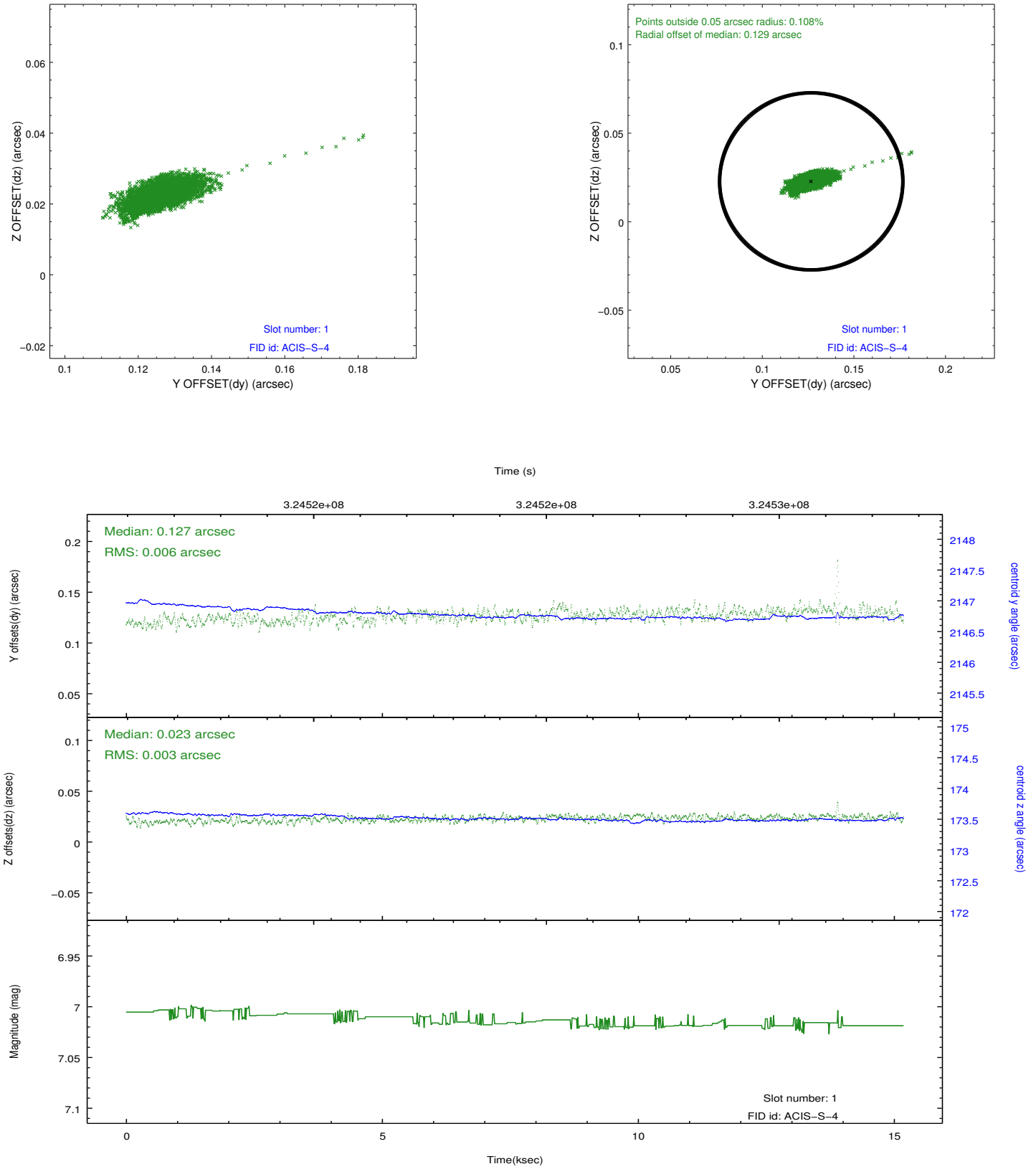


## 2.5 FID Slots

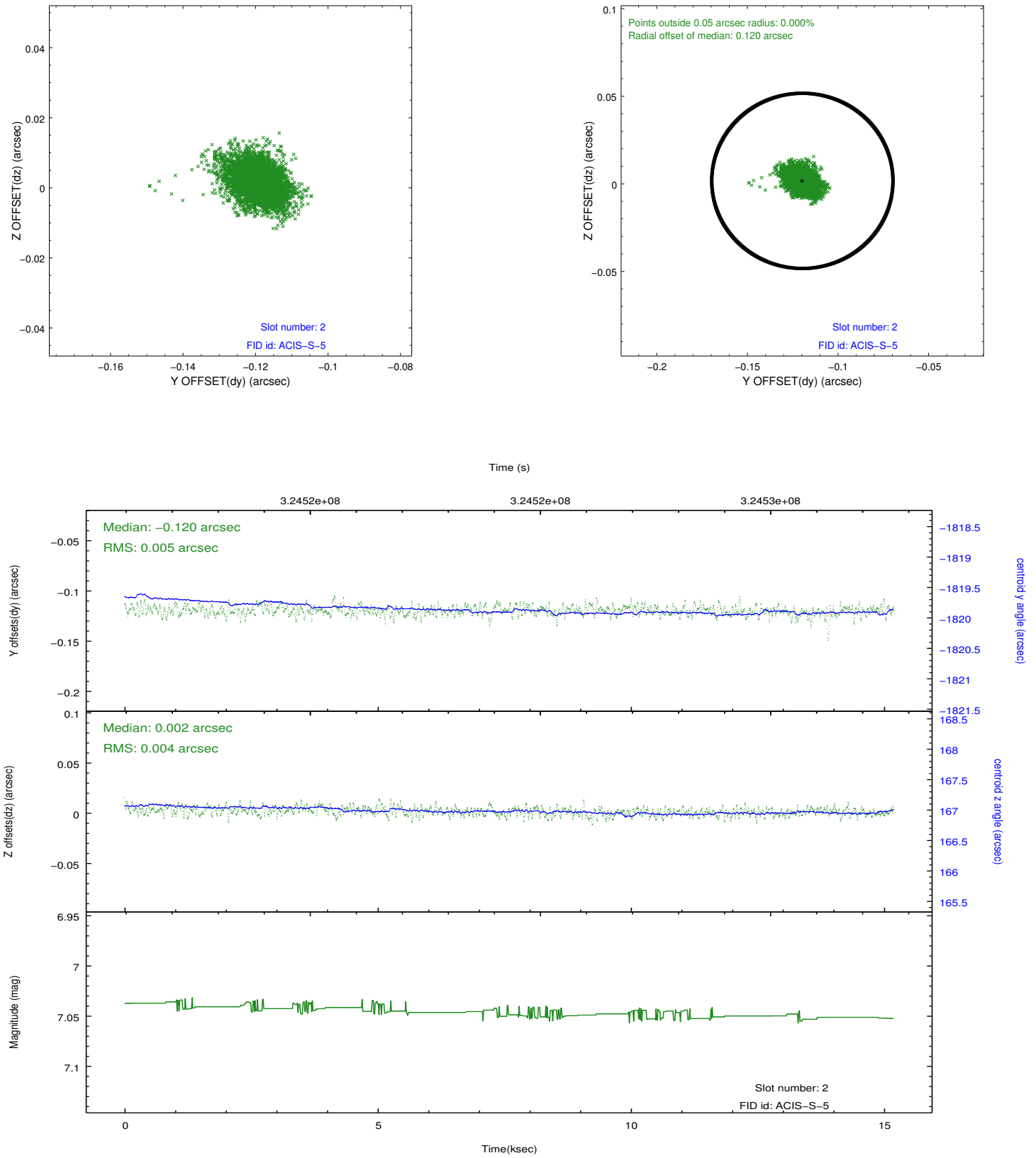
### 2.5.1 Slot 0



## 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)	2012.05.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.1871997

### A.2 Comments

Monitor constraint met.