

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 3011 - L2 Version 001  
Chandra X-Ray Center

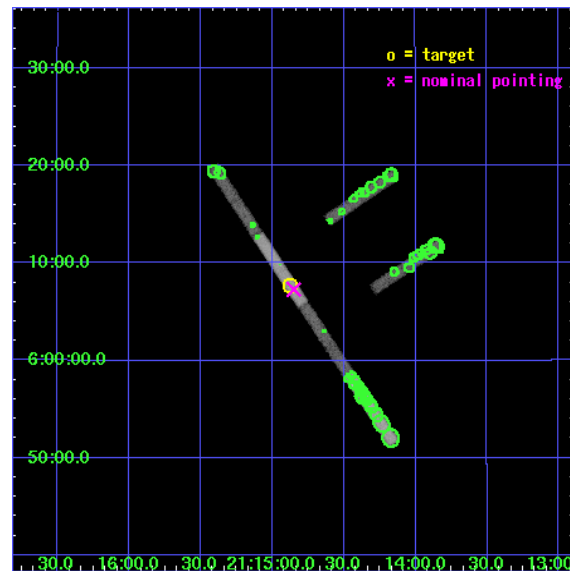
L2 Processing Date : Oct 2 2006

## 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>3</b>	<b>Point Sources</b>	<b>17</b>
<b>A</b>	<b>Summary</b>	<b>18</b>
A.1	Status . . . . .	18
A.2	Comments . . . . .	18

# 1 Front

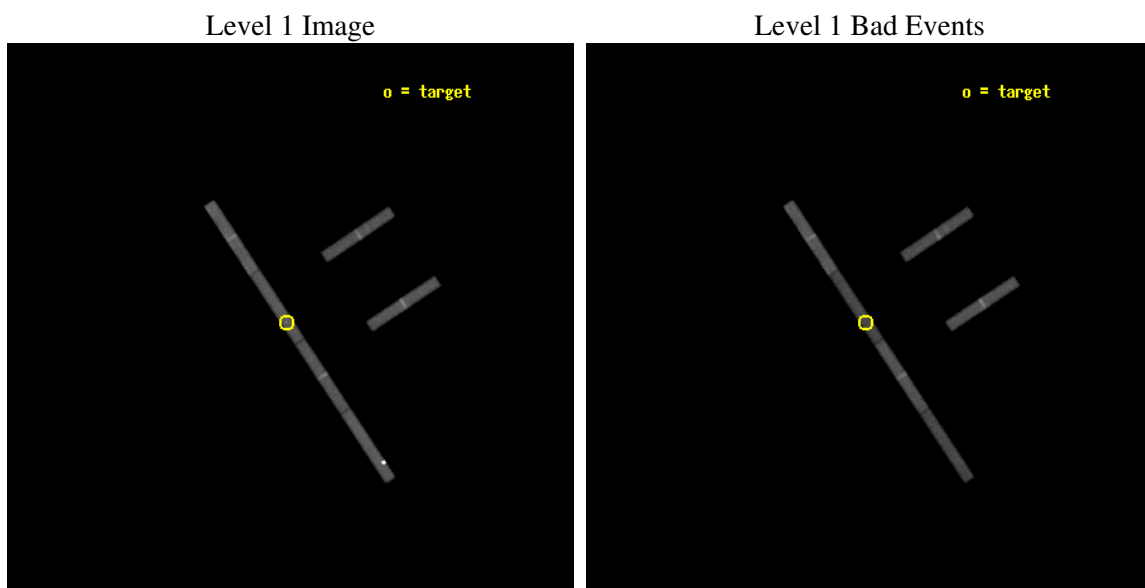
seq_num	700450
obs_id	3011
title	AN ABSORPTION STUDY OF PG 2112+059: THE X-RAY BRIGHTEST BAL QSO KNOWN
observer	Dr. Sarah Gallagher
object	PG 2112+059
dtcycle	0
cycle	P
ra_targ	318.719167
dec_targ	6.128472
ra_nom	318.71242840141
dec_nom	6.1214682168996
roll_nom	236.40500319587
revision	2
ontime	60202.098974764
livetime	56868.008855575
ontime2	60201.087132394
ontime3	60202.098974764
ontime5	60202.098974764
ontime6	60202.098974764
ontime7	60202.098974764
ontime8	60202.098974764
l2events	78967



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 2

Chip 3

Chip 5



Chip 6

Chip 7

Chip 8



### 2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldbver	3.2.3
date	2006-10-02T20:46:36
revision	2

sched_exp_time	60000.000000
ontime	60668.33589372
ontime2	60666.853833646
ontime3	60668.33589372
ontime5	60668.33589372
ontime6	60668.33589372
ontime7	60668.33589372
ontime8	60668.33589372
l1events	507491

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	70429	62260	151850	66896	68241	87815
rejected events	63443	55367	40581	59803	40698	73614
rejected %	90%	88%	26%	89%	59%	83%

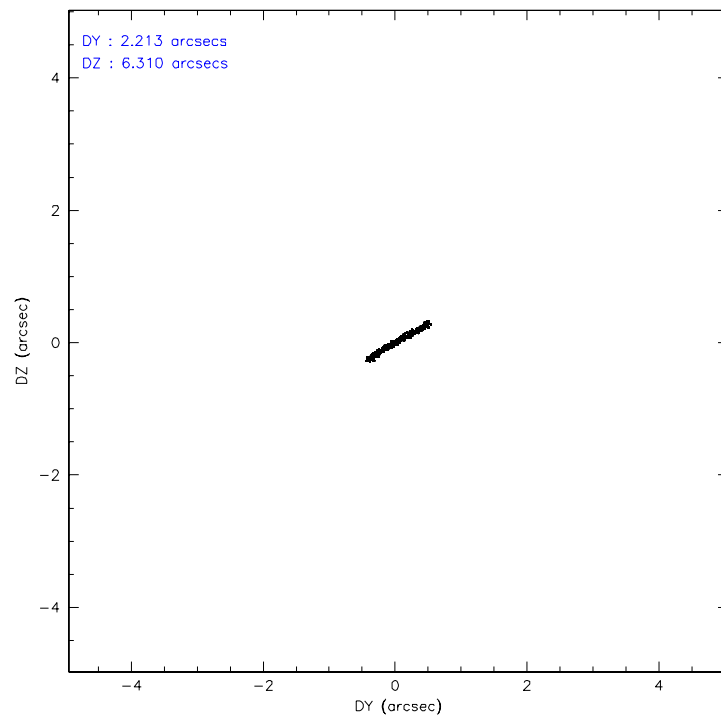
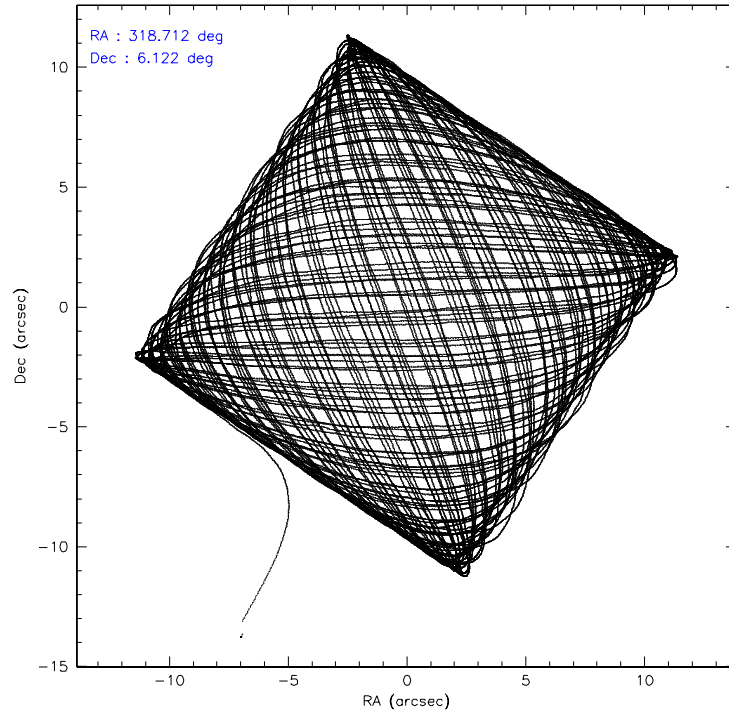
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2383	2533	53184	2358	2096	3538
	3%	4%	35%	3%	3%	4%
grade 1 events	18	13	197	15	35	34
	0%	0%	0%	0%	0%	0%
grade 2 events	1251	1067	36084	1263	6556	2753
	1%	1%	23%	1%	9%	3%
grade 3 events	1120	1193	1352	1136	2422	1784
	1%	1%	0%	1%	3%	2%
grade 4 events	1183	1101	3037	1158	2208	1754
	1%	1%	2%	1%	3%	1%
grade 5 events	1926	2029	3680	2128	4930	2655
	2%	3%	2%	3%	7%	3%
grade 6 events	1117	1055	18399	1231	14470	4479
	1%	1%	12%	1%	21%	5%
grade 7 events	61431	53269	35917	57607	35524	70818
	87%	85%	23%	86%	52%	80%

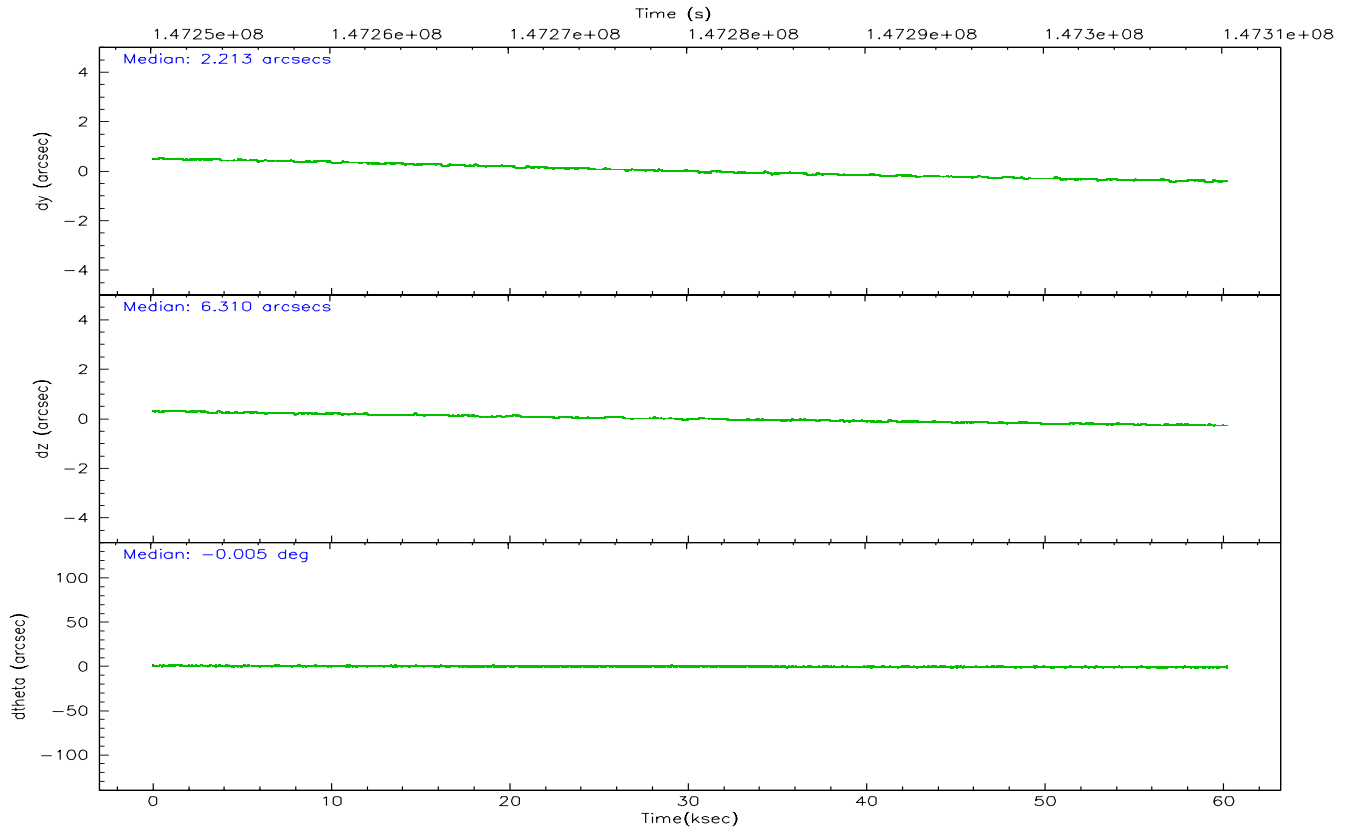
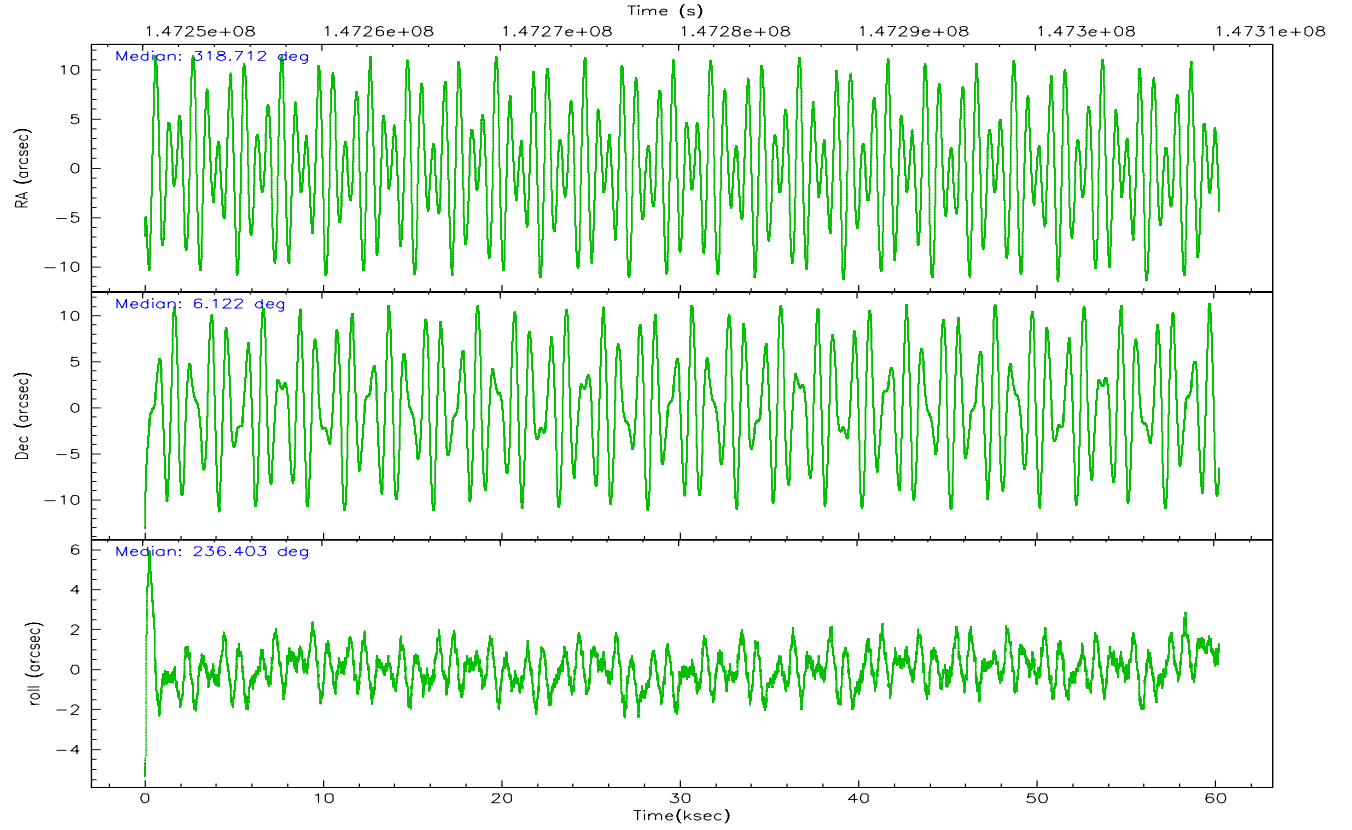


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-235678	ACIS-235678	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
Pointing RA	318.713797	318.7124284014116	Subarray requested	1/8	1/8
Pointing Dec	6.148678	6.121468216899586	Subarray start row	0	449
Pointing Roll	236.248233	236.4050031958671	Subarray row count	1024	128
Window start time	147225664.184000	147225664.184000	Alternating exposures requested	N	N
Window stop time	147312064.184000	147312064.184000	Primary exposure time	0.000000	0.7
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1425803651734			
SIM translation stage offset (mm)	0	0.01005778216563158			
Observation start time	147250320.184000	147249281.63033			
Observation start date	2002-09-01T06:50:56	2002-09-01T06:34:41			
Observation end time	147310320.184000	147311093.74538			
Observation end date	2002-09-01T23:30:56	2002-09-01T23:44:53			
Read mode	TIMED	TIMED			

## 2.3 Aspect



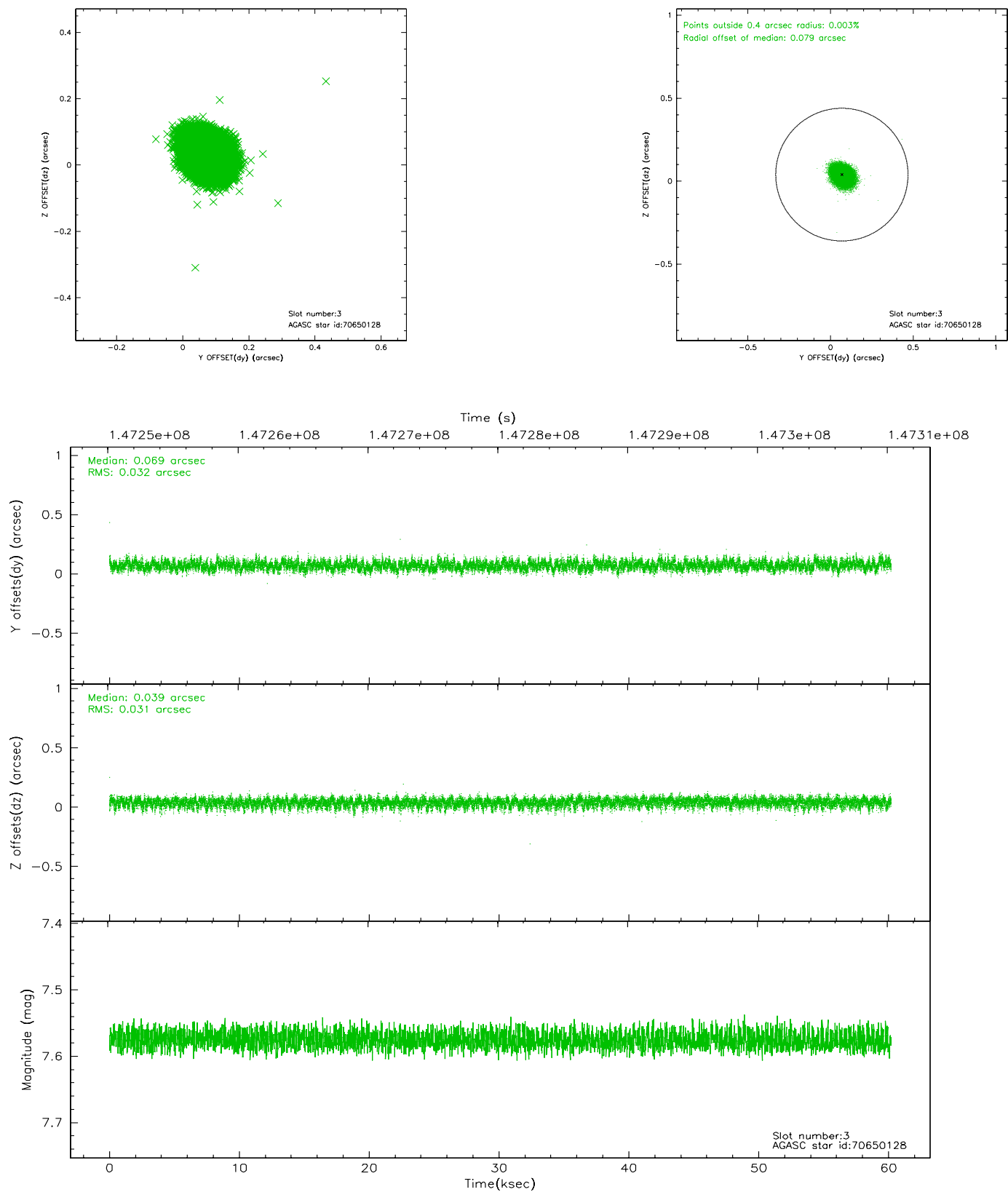


### Slot Statistics

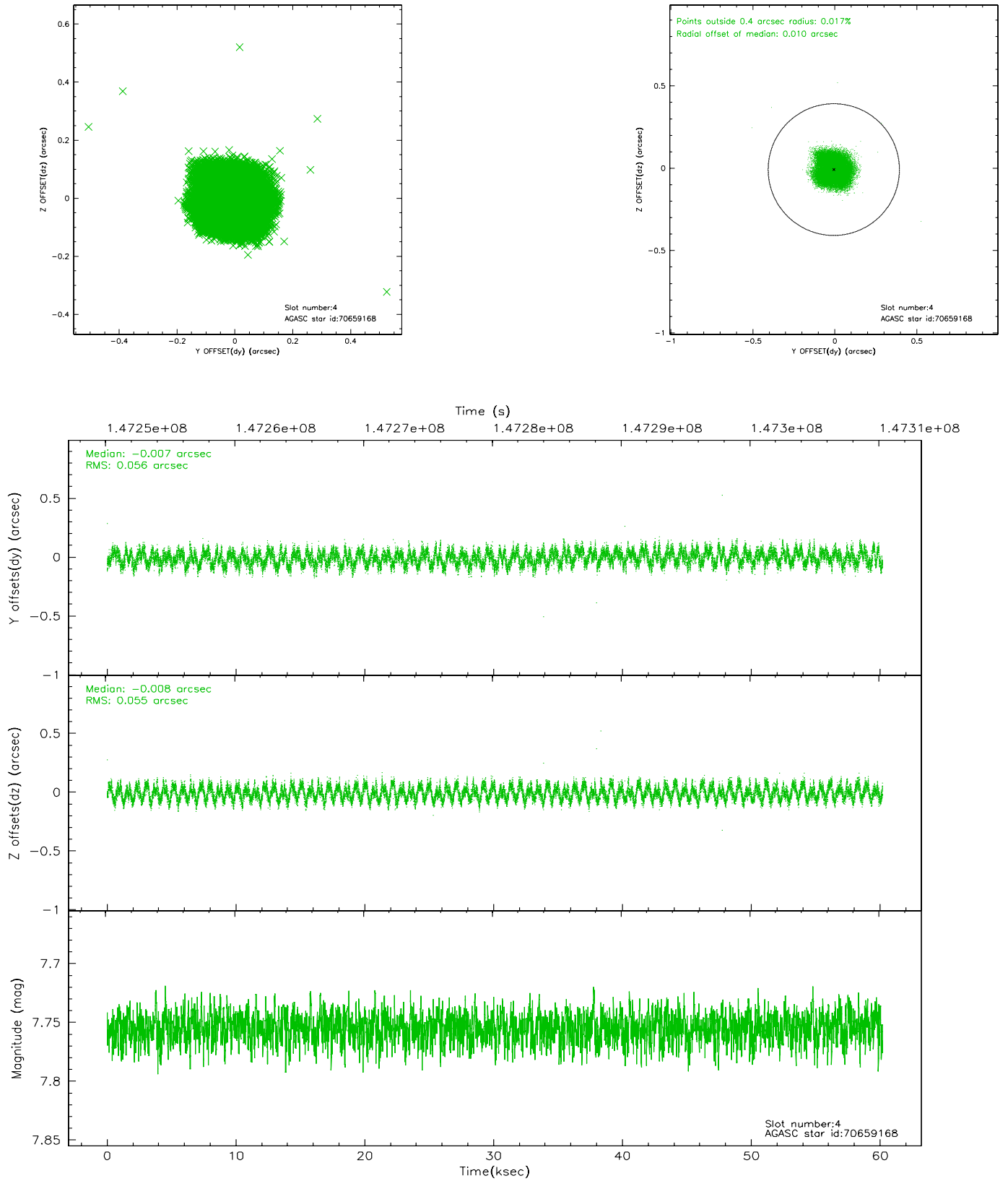
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	14684	-0.031	0.029	0.014	0.021	0.000000	0.000000	-754.86	-1727.40
1	FID	ACIS-S-4	7.21	14683	-0.053	0.006	0.020	0.028	0.000000	0.000000	2158.39	181.16
2	FID	ACIS-S-5	7.24	14684	0.048	-0.028	0.009	0.016	0.000000	0.000000	-1807.71	174.67
3	GUIDE	70650128	7.57	29364	0.069	0.039	0.047	0.077	318.413725	5.972155	1125.96	-539.67
4	GUIDE	70659168	7.76	29366	-0.007	-0.008	0.086	0.127	318.070667	5.803197	2313.65	-1224.30
5	GUIDE	70661360	8.04	29298	-0.136	0.023	0.061	0.099	318.143966	6.349745	530.87	-2097.34
6	GUIDE	70652936	8.47	29361	-0.049	-0.078	0.080	0.129	318.579143	6.965118	-2175.69	-2032.74
7	GUIDE	70664904	8.81	29293	0.124	0.030	0.071	0.116	318.249738	5.833453	1867.22	-751.11

## 2.4 Star Slots

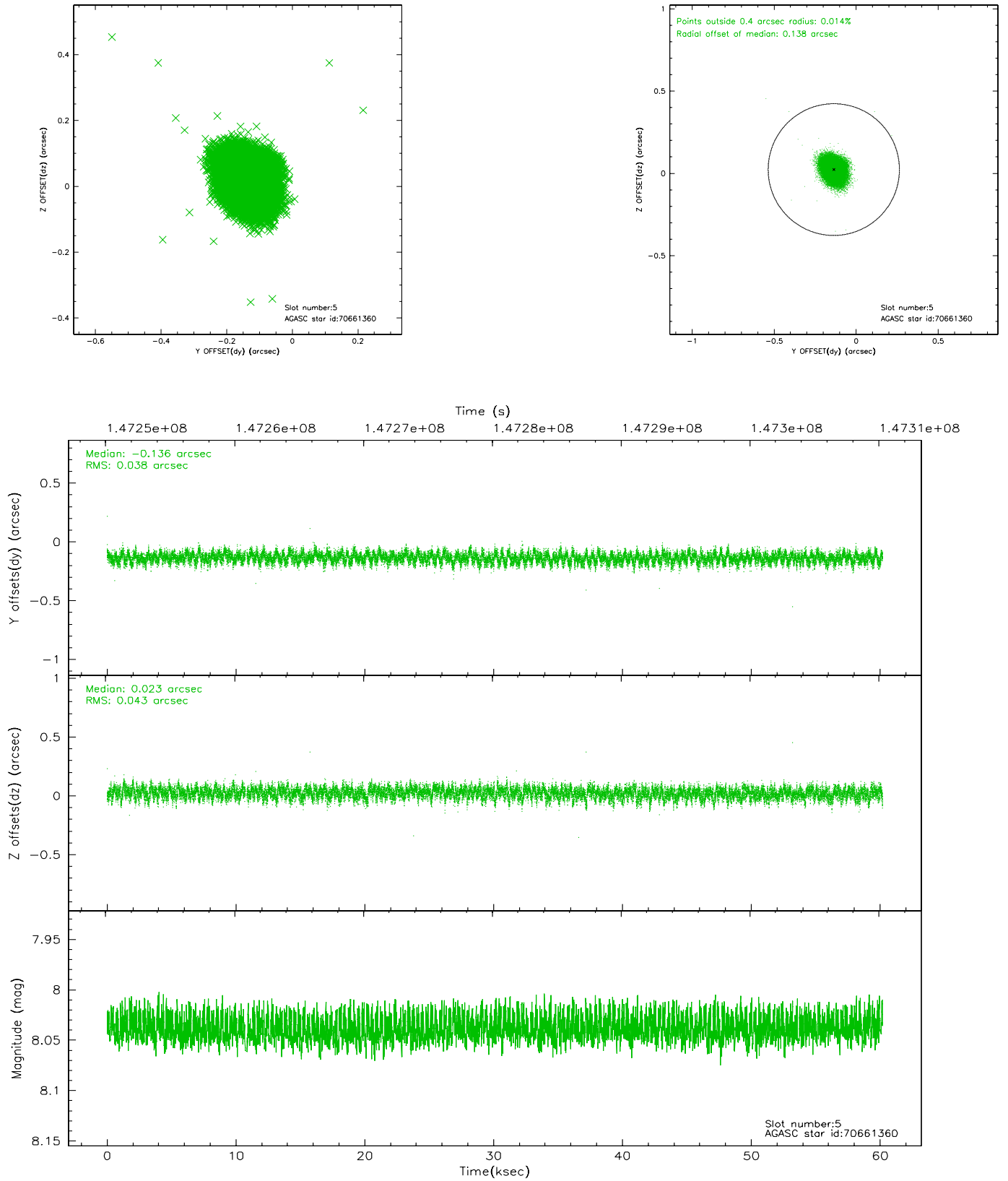
### 2.4.1 Slot 3



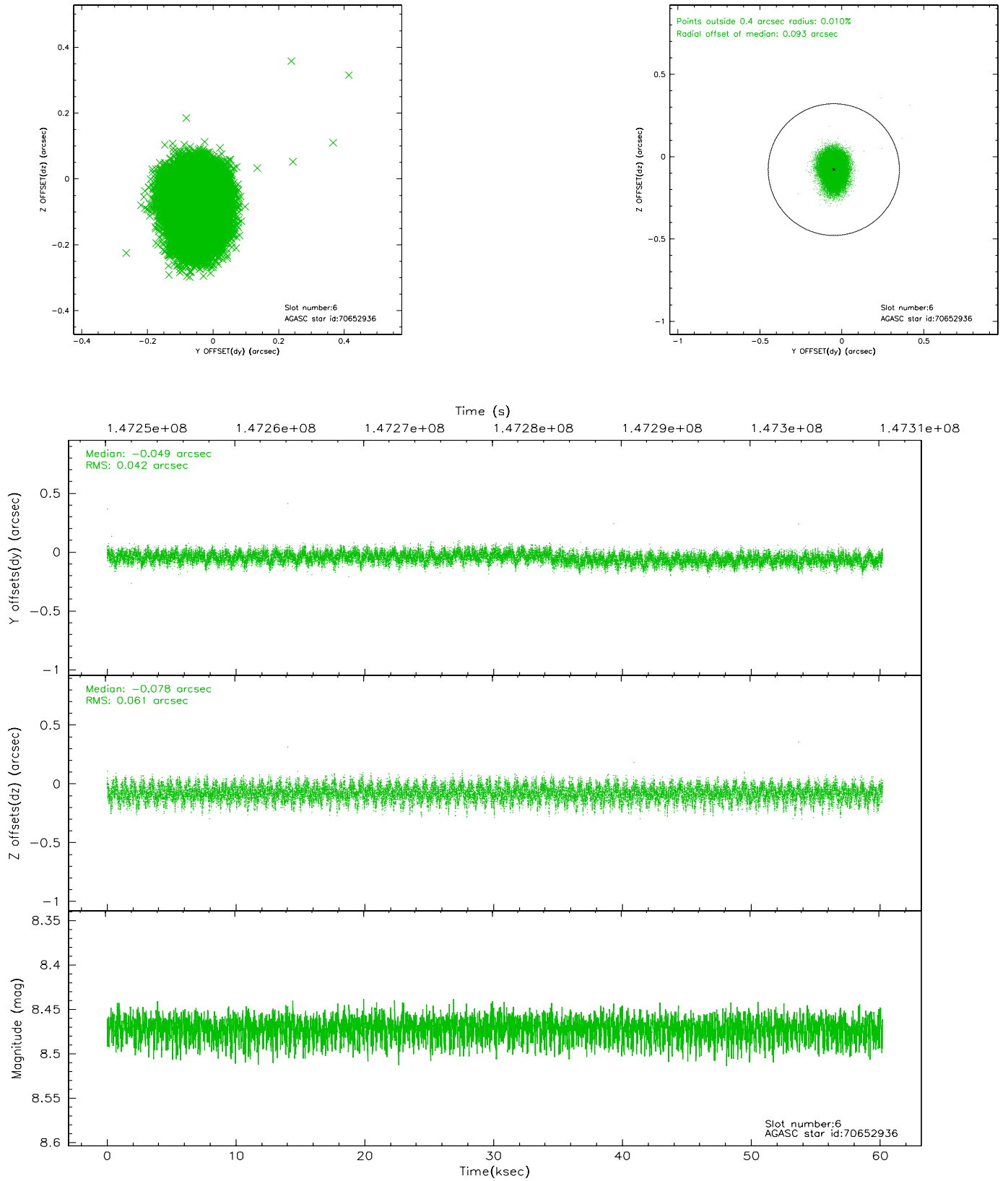
## 2.4.2 Slot 4



### 2.4.3 Slot 5

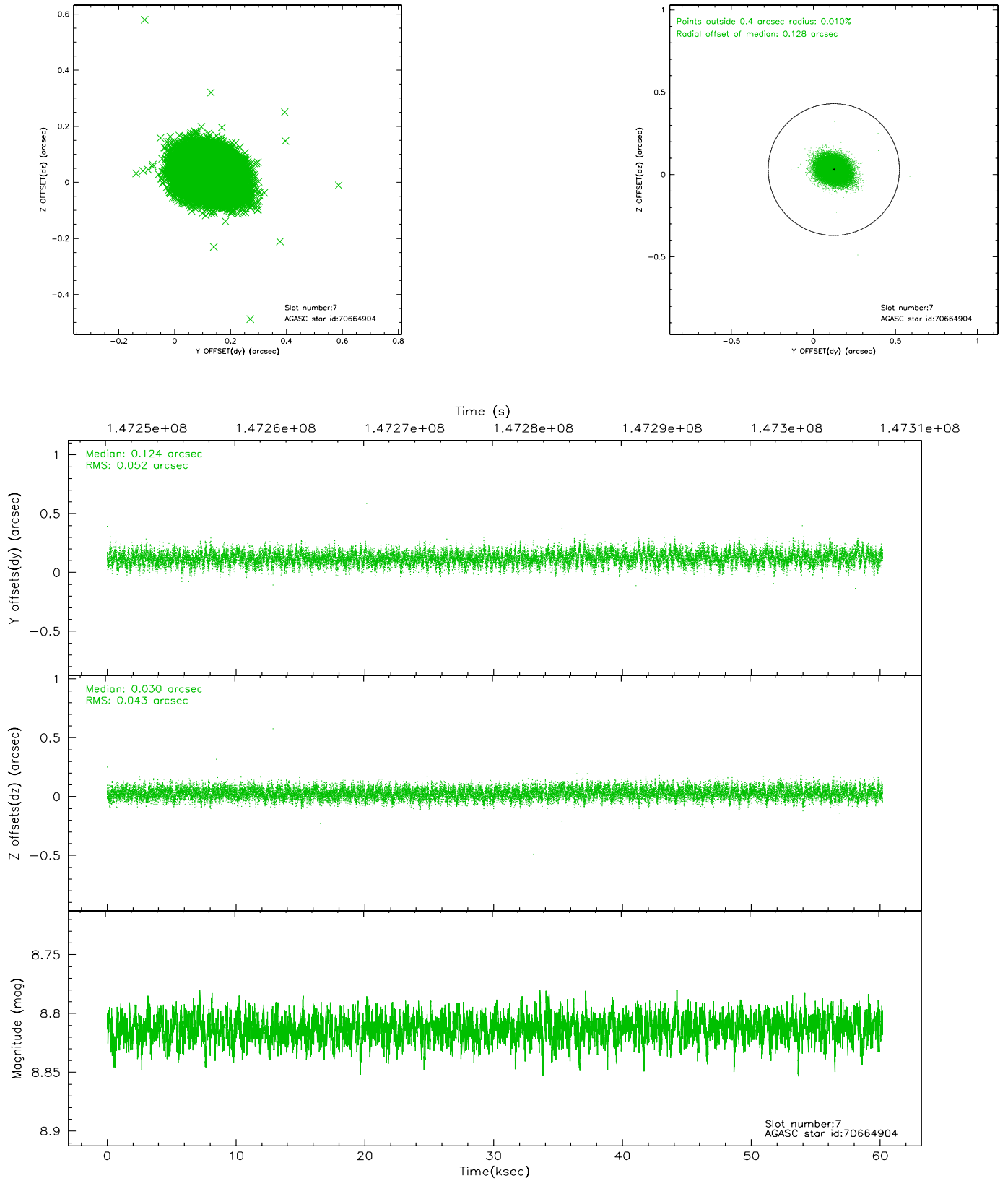


## 2.4.4 Slot 6



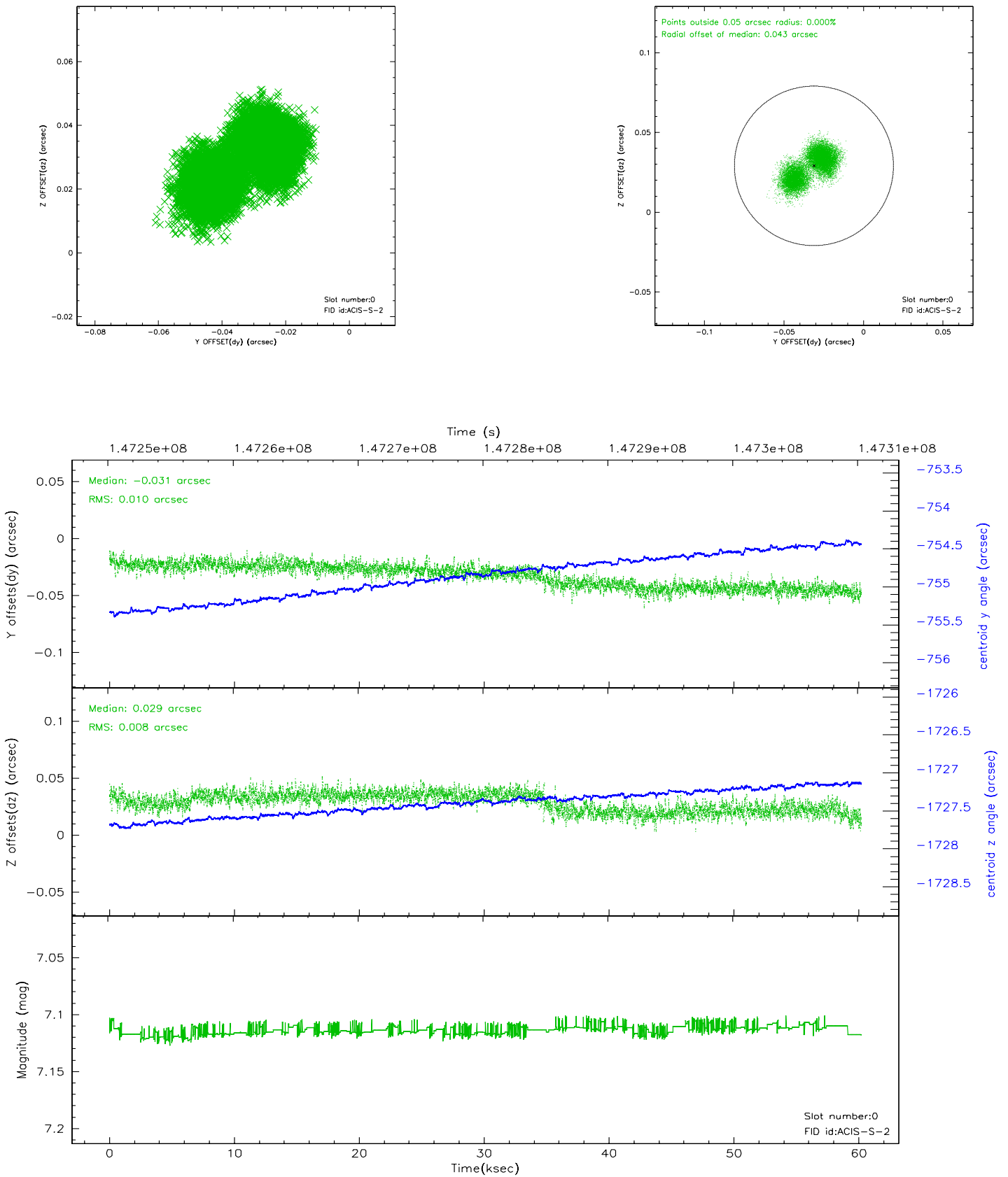


## 2.4.5 Slot 7

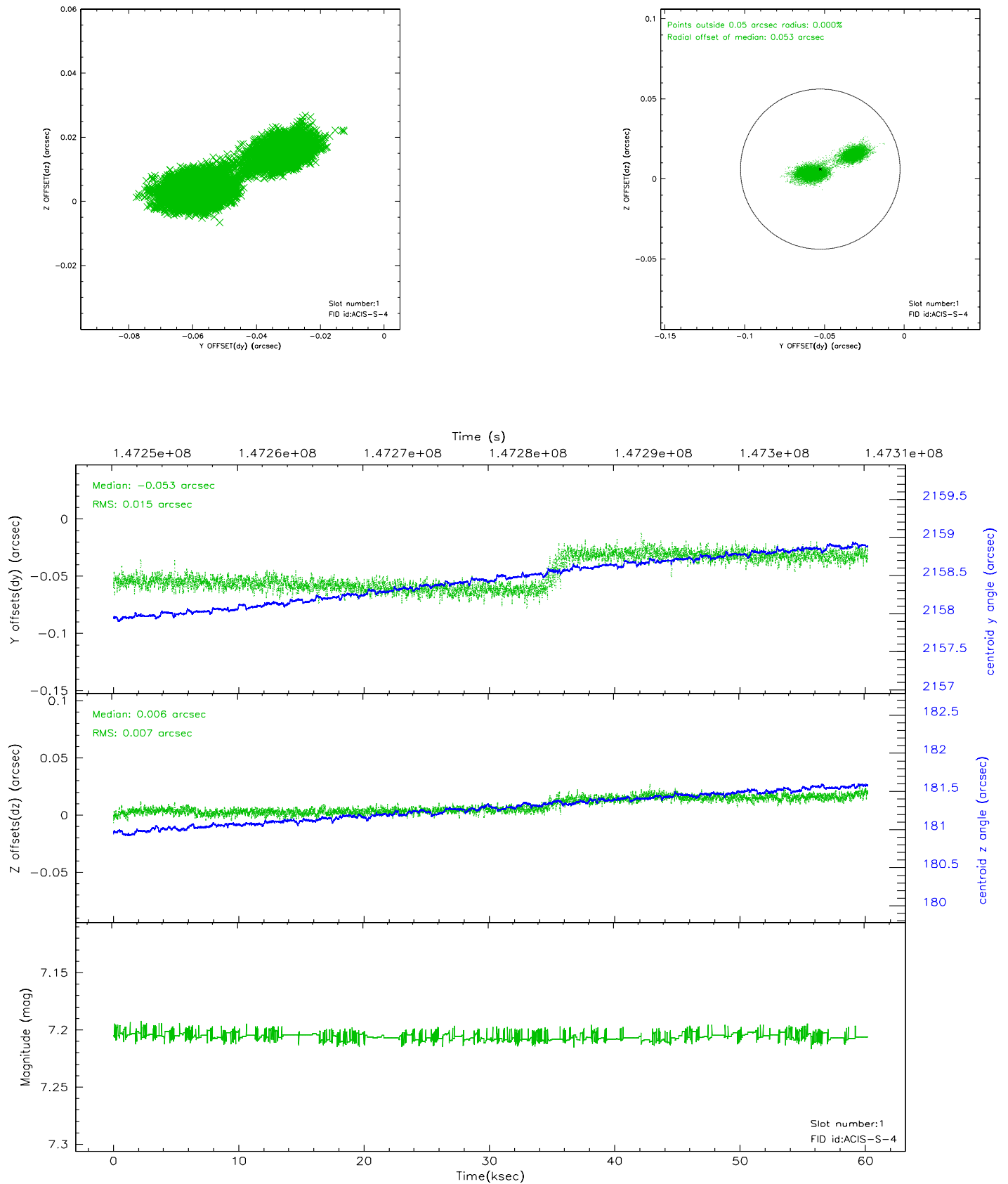


## 2.5 FID Slots

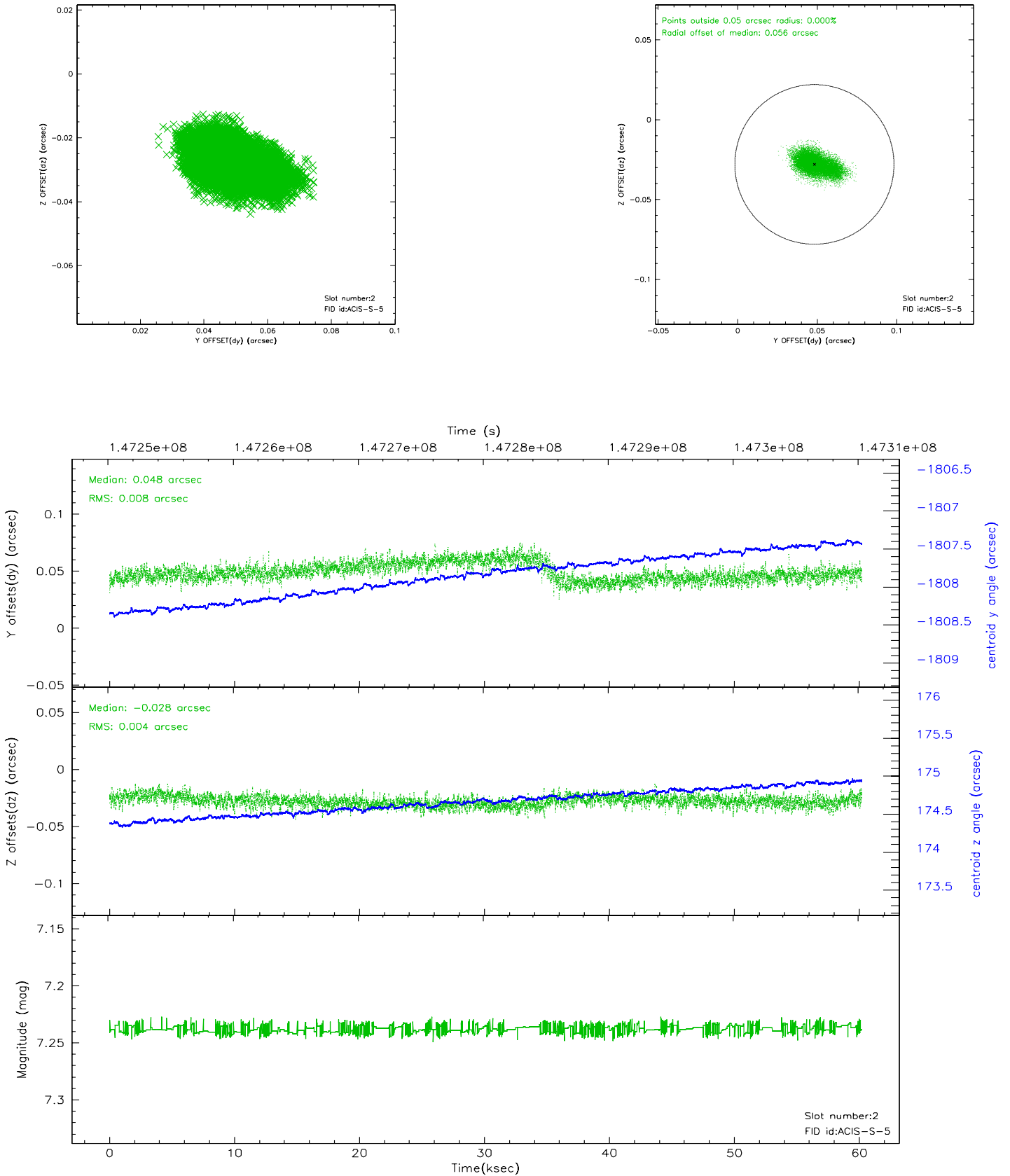
### 2.5.1 Slot 0



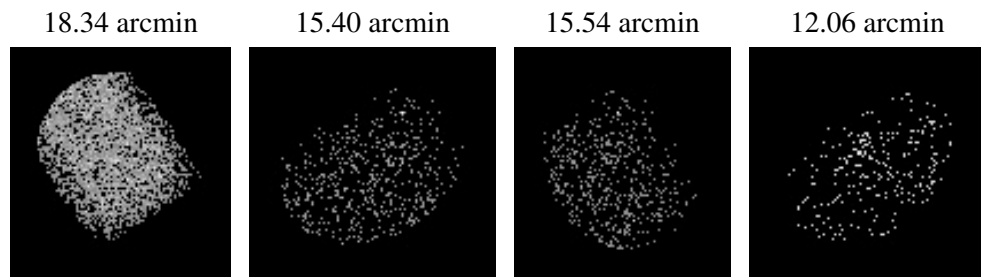
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.10.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	60.202

### A.2 Comments

Window constraint OK.