

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 3932 - L2 Version 001  
Chandra X-Ray Center

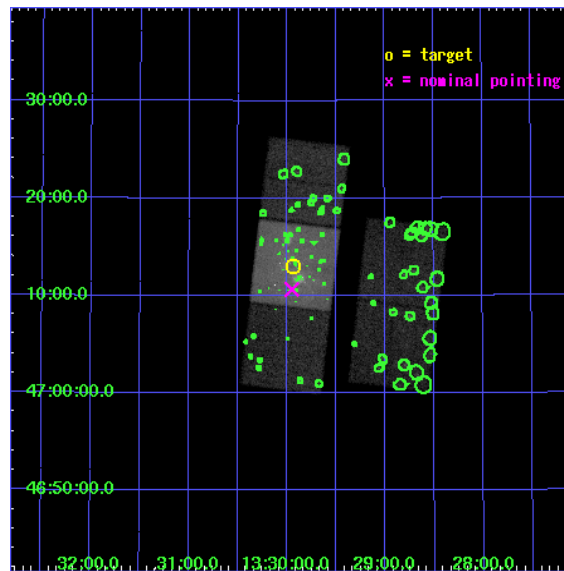
L2 Processing Date : Jul 11 2006

## 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

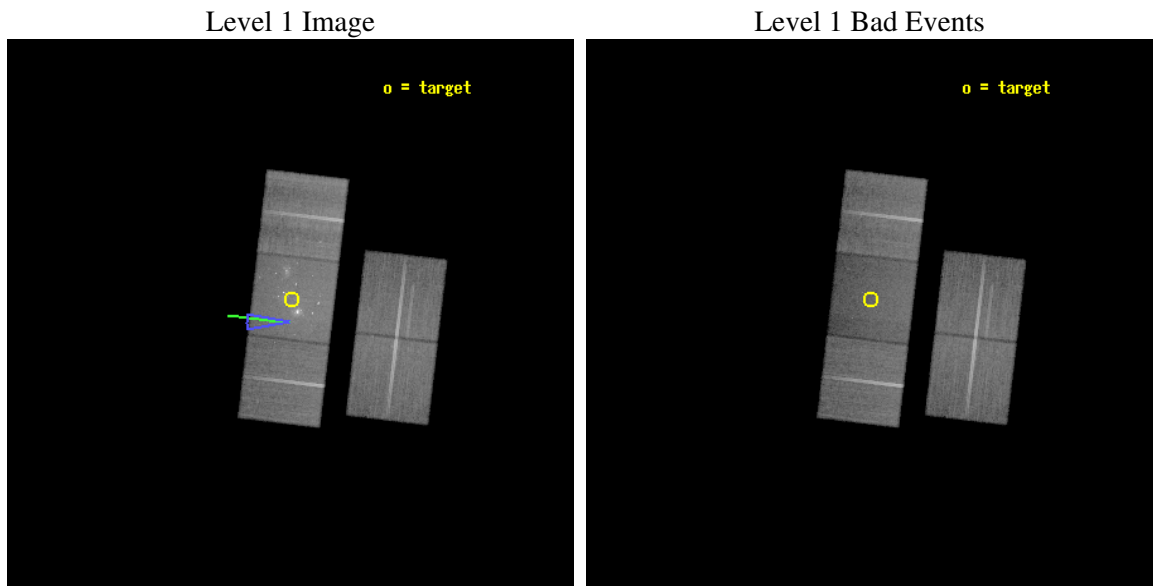
seq_num	600306
obs_id	3932
title	THE NATURE OF ULTRALUMINOUS X-RAY SOURCE POPULATION IN M51
observer	Dr. Yuichi Terashima
object	M51
dtcycle	0
cycle	P
ra_targ	202.483333
dec_targ	47.216667
ra_nom	202.48752003607
dec_nom	47.177527304065
roll_nom	276.75368819841
revision	2
ontime	48604.899906546
livetime	47969.84110686
ontime2	48598.617976099
ontime3	48595.476946056
ontime6	48604.899906546
ontime7	48604.899906546
ontime8	48604.899906546
l2events	257489



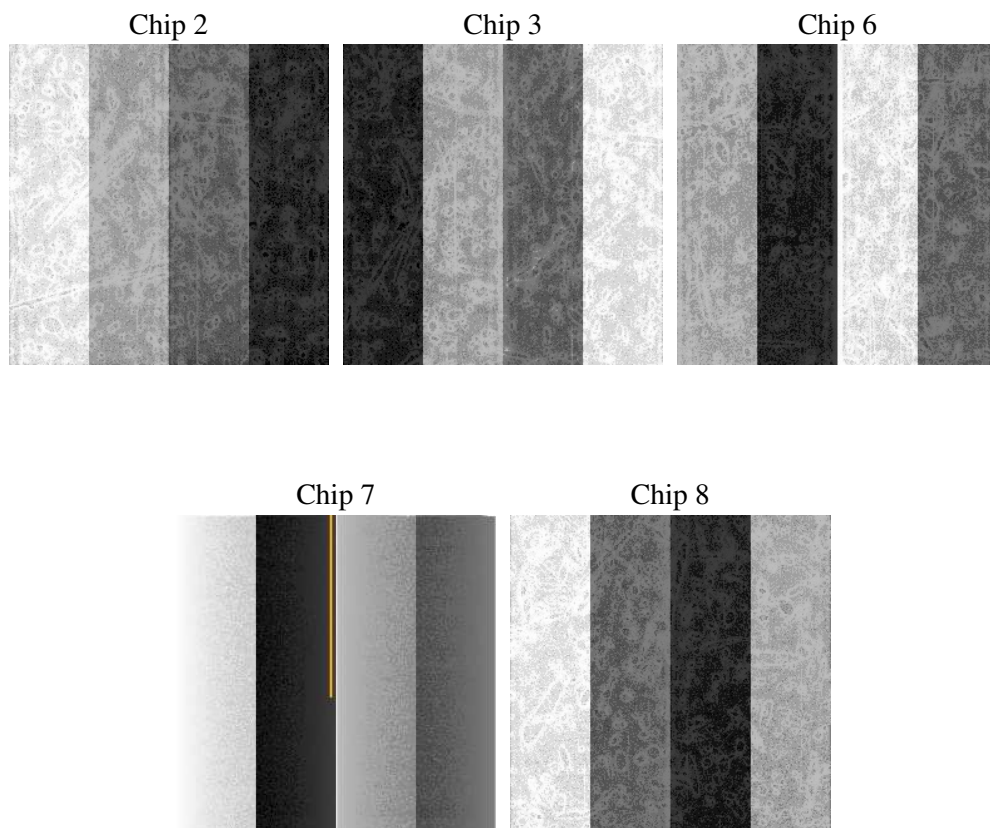
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.8
caldbver	3.2.2
date	2006-07-11T03:29:03
revision	2

sched_exp_time	48500.000000
ontime	48610.128386348
ontime2	48603.846455902
ontime3	48600.705425858
ontime6	48610.128386348
ontime7	48610.128386348
ontime8	48610.128386348
l1events	1420510

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	261874	249536	259688	327456	321956
rejected events	235817	225340	232012	163302	248730
rejected %	90%	90%	89%	49%	77%

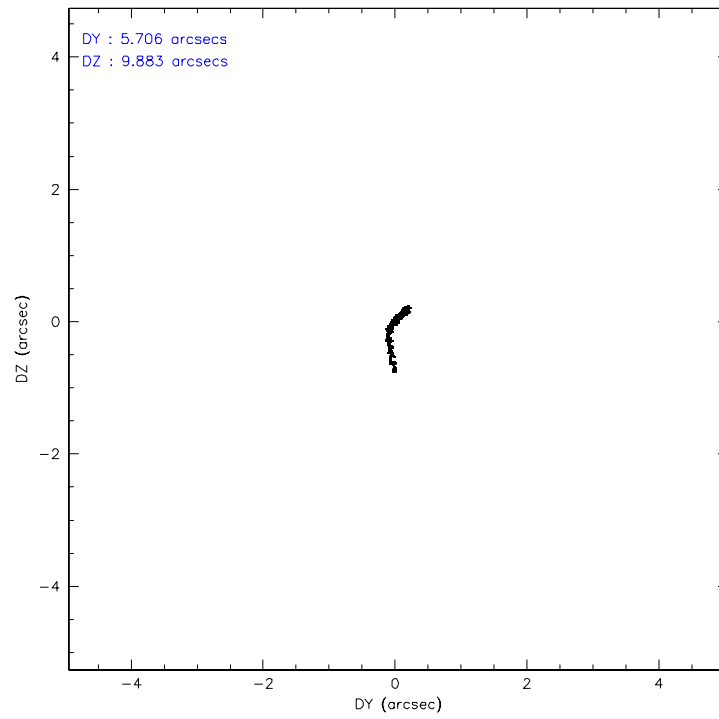
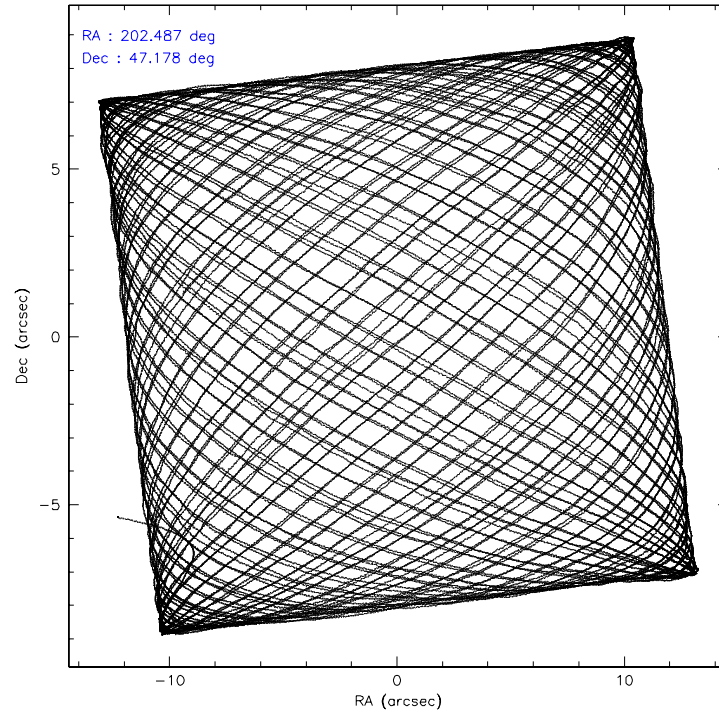
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	10131	8813	10099	22213	23695
	3%	3%	3%	6%	7%
grade 1 events	141	106	108	168	197
	0%	0%	0%	0%	0%
grade 2 events	5665	5124	5857	40695	15662
	2%	2%	2%	12%	4%
grade 3 events	2845	2867	3064	11912	7956
	1%	1%	1%	3%	2%
grade 4 events	2867	2795	2978	11556	7492
	1%	1%	1%	3%	2%
grade 5 events	8092	9833	10078	21997	14389
	3%	3%	3%	6%	4%
grade 6 events	4551	4600	5679	77791	18426
	1%	1%	2%	23%	5%
grade 7 events	227582	215398	221825	141124	234139
	86%	86%	85%	43%	72%

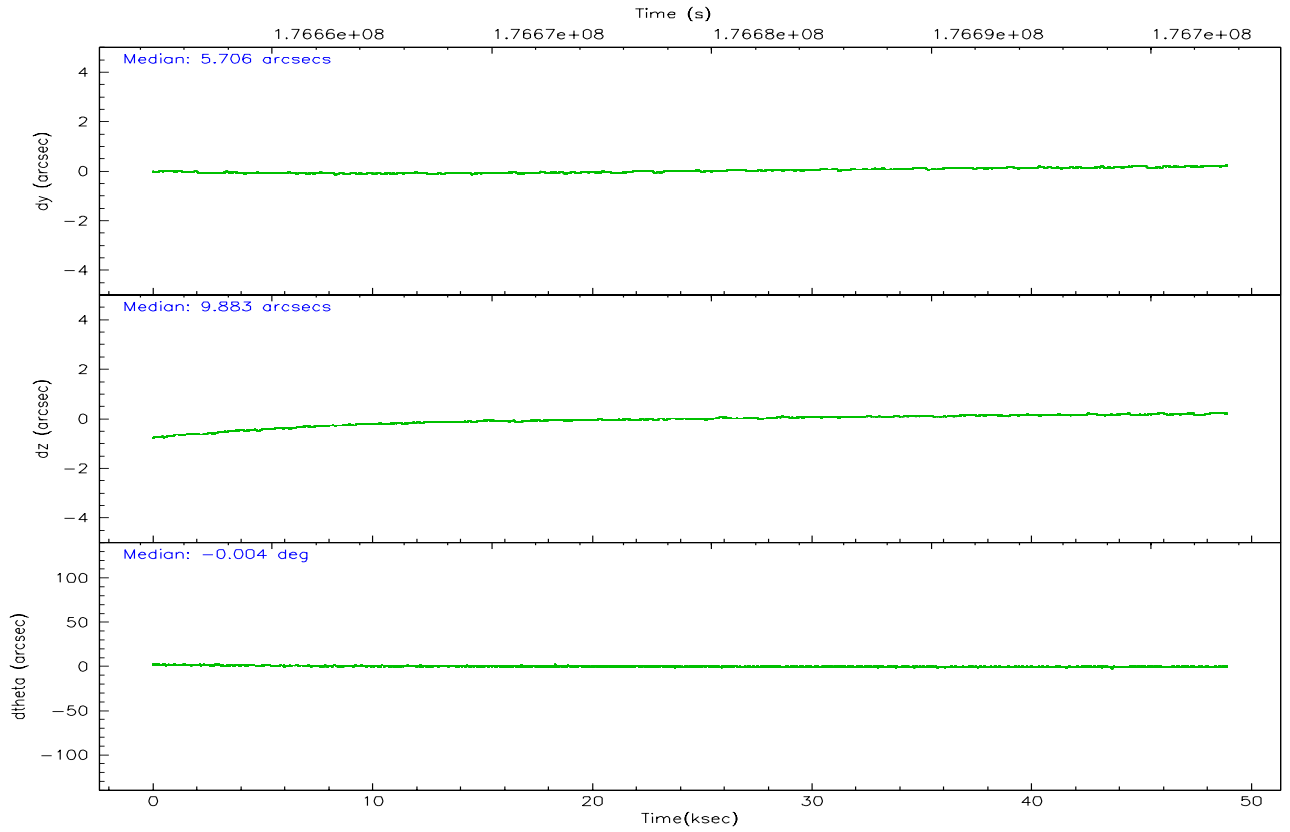
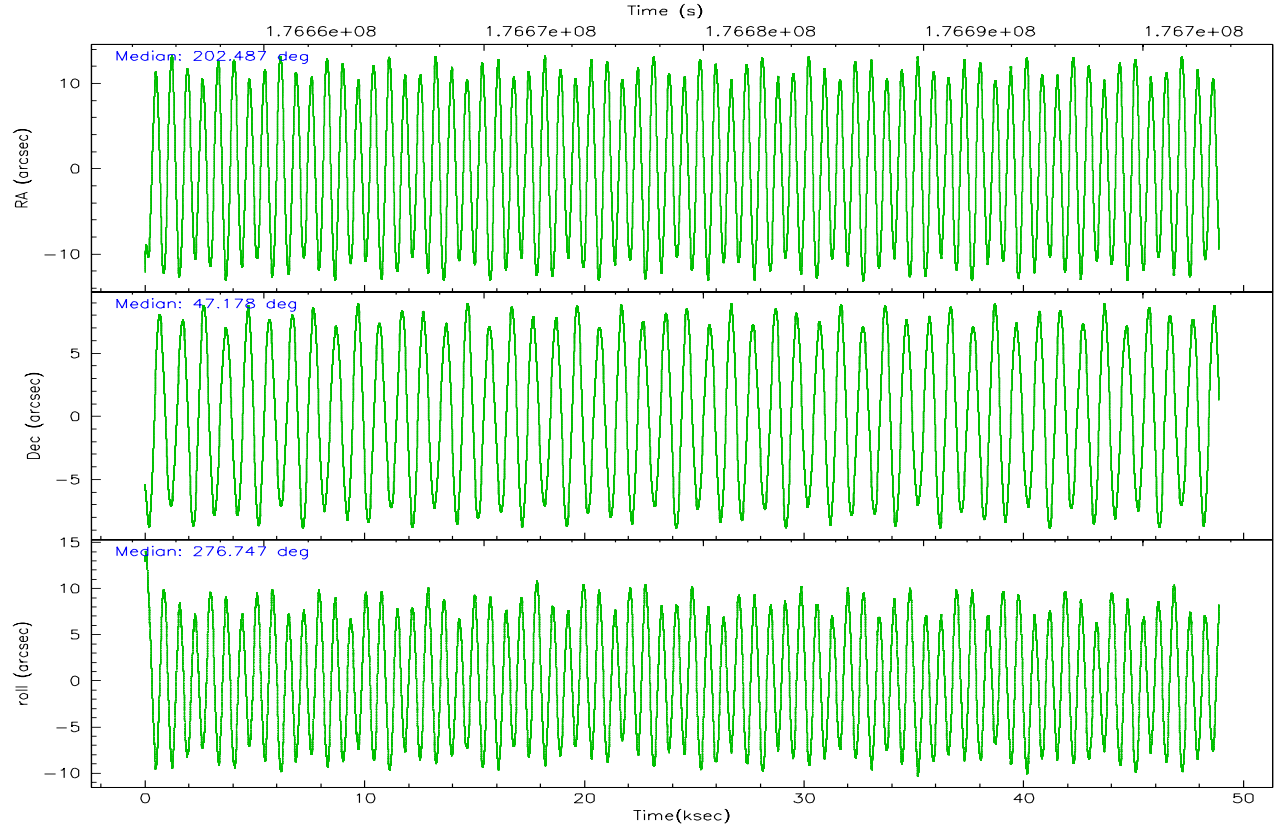


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	202.463113	202.4875200360693	Alternating exposures requested	N	N
Pointing Dec	47.199100	47.177527304065	Primary exposure time	0.000000	3.1
Pointing Roll	276.614976	276.753688198406			
Roll angle	270.000000	270.000000			
Roll tolerance	10.000000	10.000000			
Roll constraint allows 180D rotation	N	N			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	176654976.184000	176653904.76535			
Observation start date	2003-08-07T14:48:32	2003-08-07T14:31:44			
Observation end time	176703476.184000	176704117.97999			
Observation end date	2003-08-08T04:16:52	2003-08-08T04:28:37			
Read mode	TIMED	TIMED			

## 2.3 Aspect



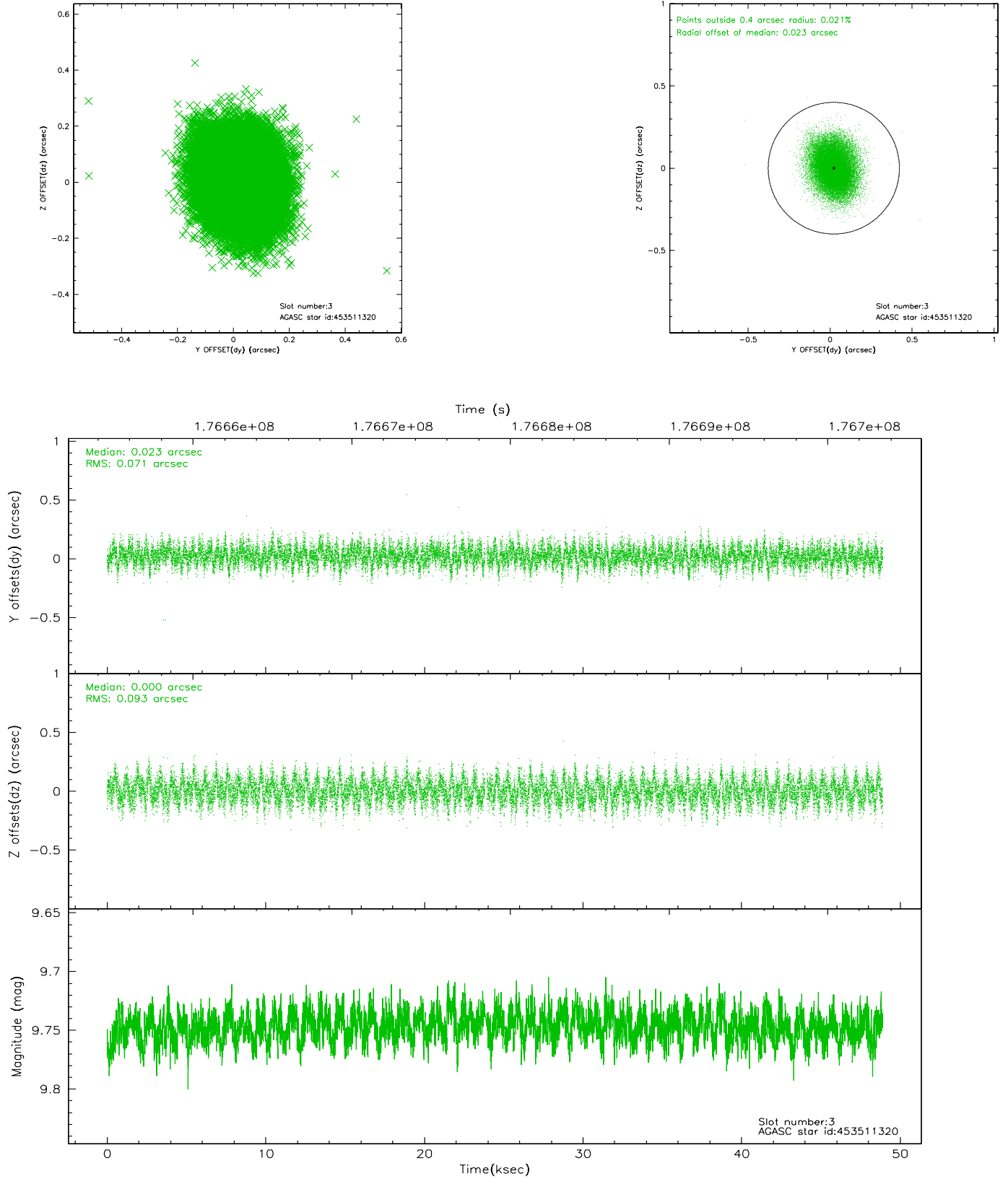


### Slot Statistics

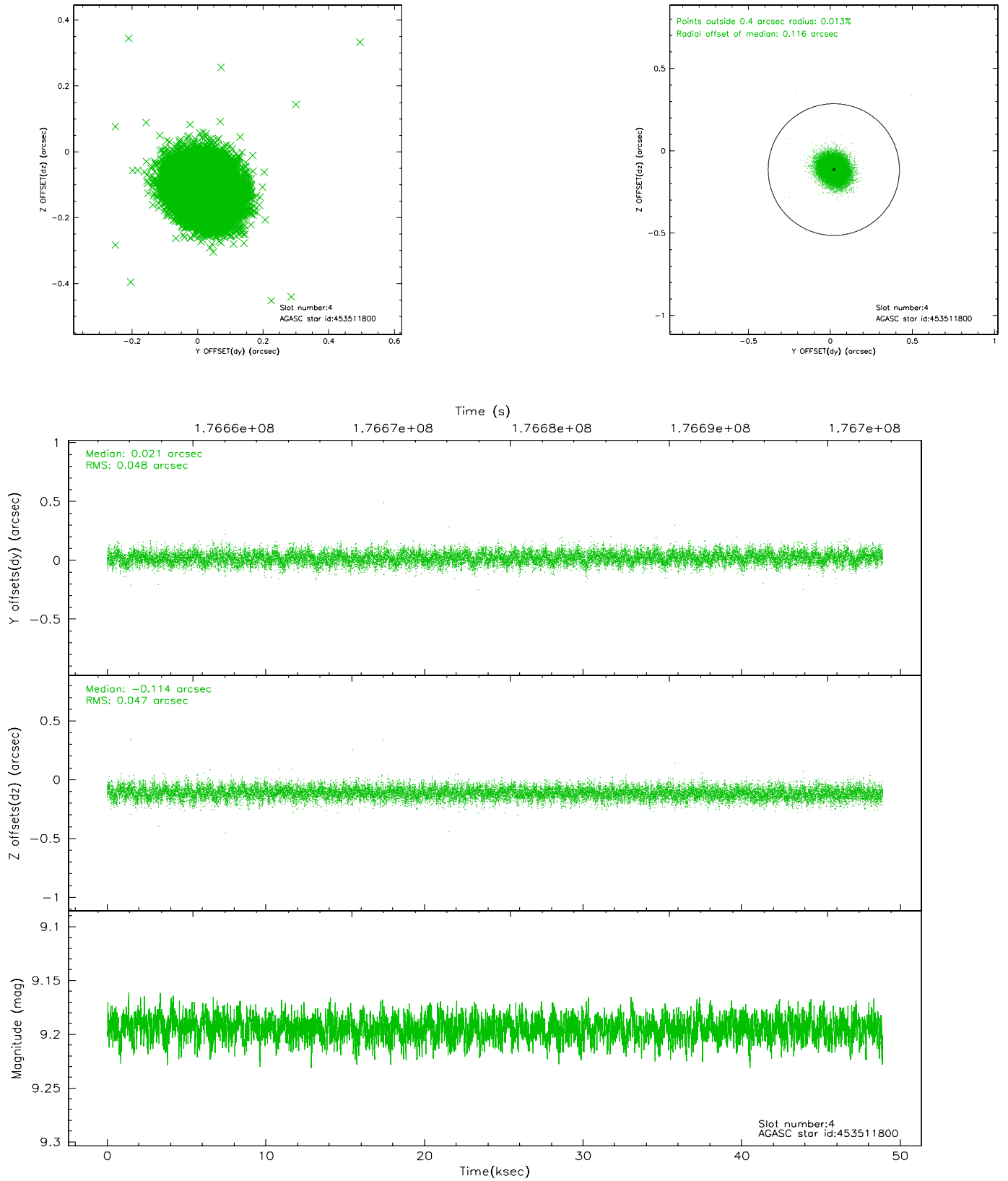
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	11928	-0.056	-0.031	0.006	0.011	0.000000	0.000000	-758.50	-1731.10
1	FID	ACIS-S-4	7.20	11928	0.026	0.040	0.006	0.010	0.000000	0.000000	2154.87	177.47
2	FID	ACIS-S-6	7.34	11928	0.002	-0.002	0.008	0.015	0.000000	0.000000	403.52	814.81
3	GUIDE	453511320	9.75	23769	0.023	0.000	0.125	0.202	201.652270	47.423457	-1039.36	-1867.31
4	GUIDE	453511800	9.19	23850	0.021	-0.114	0.071	0.114	201.825327	46.820165	1168.06	-1717.07
5	GUIDE	453904928	8.68	23845	-0.003	0.027	0.060	0.096	203.391671	46.796779	1688.92	2108.45
6	GUIDE	454303184	7.35	23854	-0.084	0.035	0.078	0.118	203.304787	47.758729	-1777.50	2257.06
7	GUIDE	454303504	9.71	23845	0.050	0.054	0.107	0.173	202.757470	47.708424	-1740.40	919.85

## 2.4 Star Slots

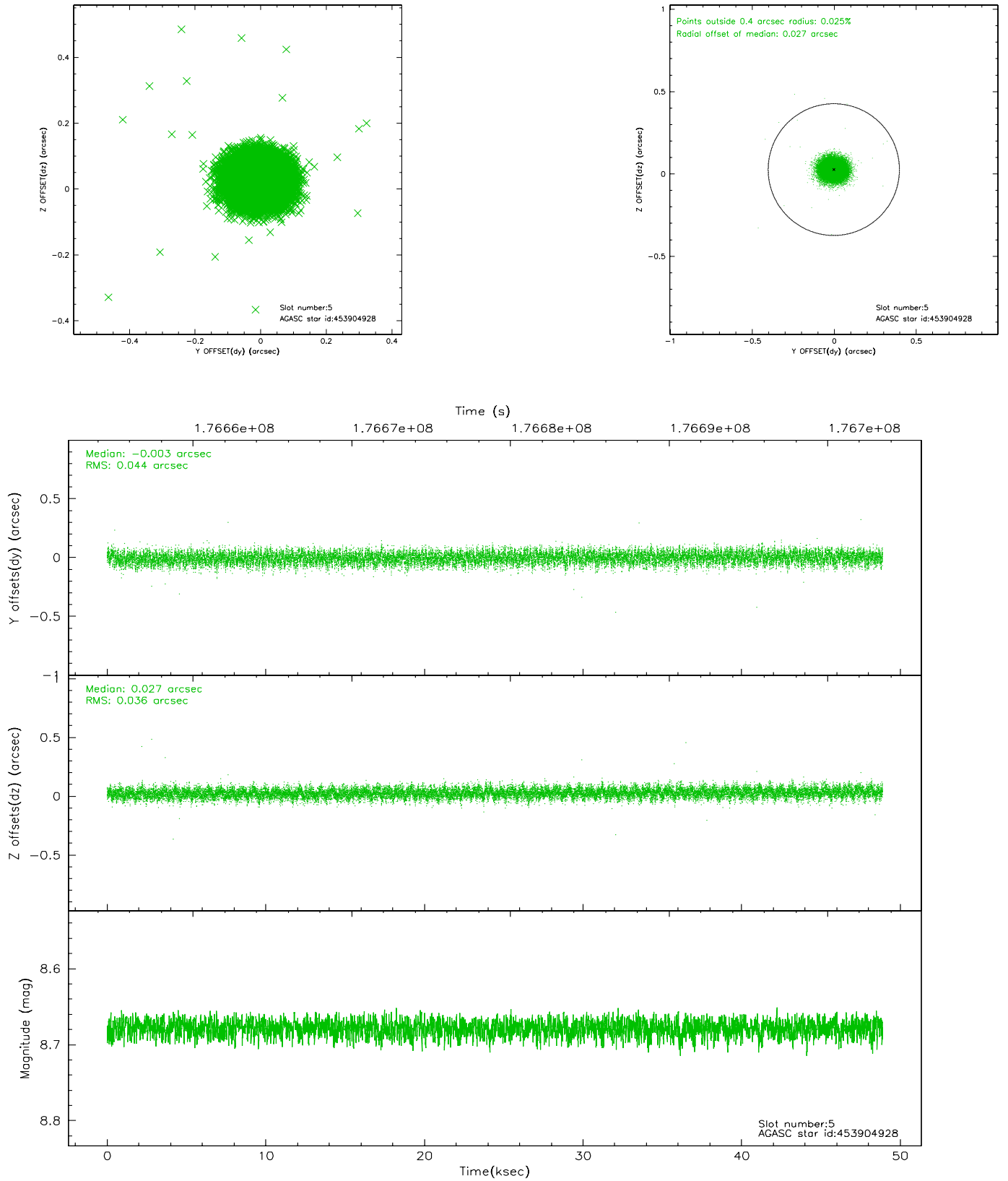
### 2.4.1 Slot 3



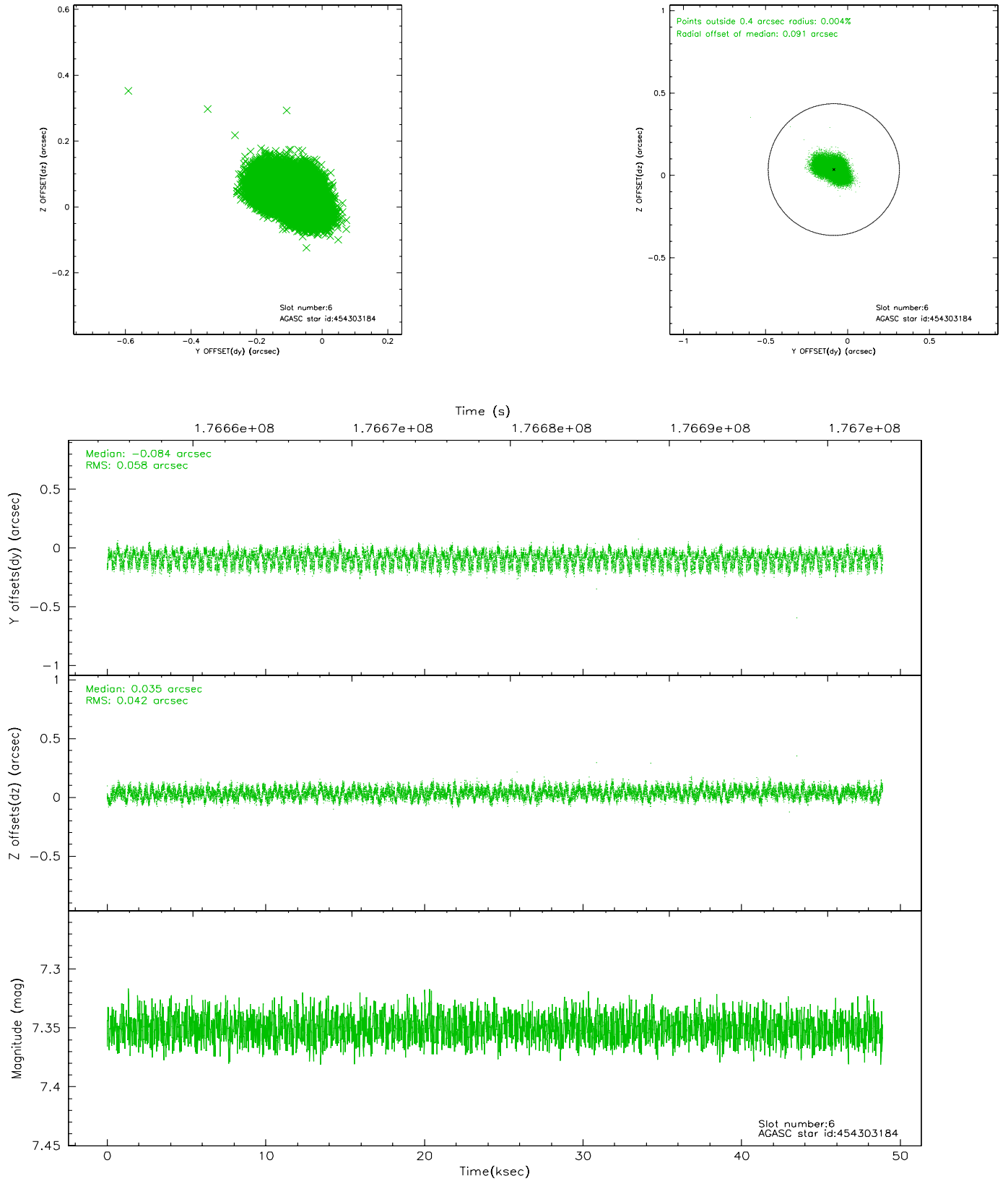
## 2.4.2 Slot 4



### 2.4.3 Slot 5

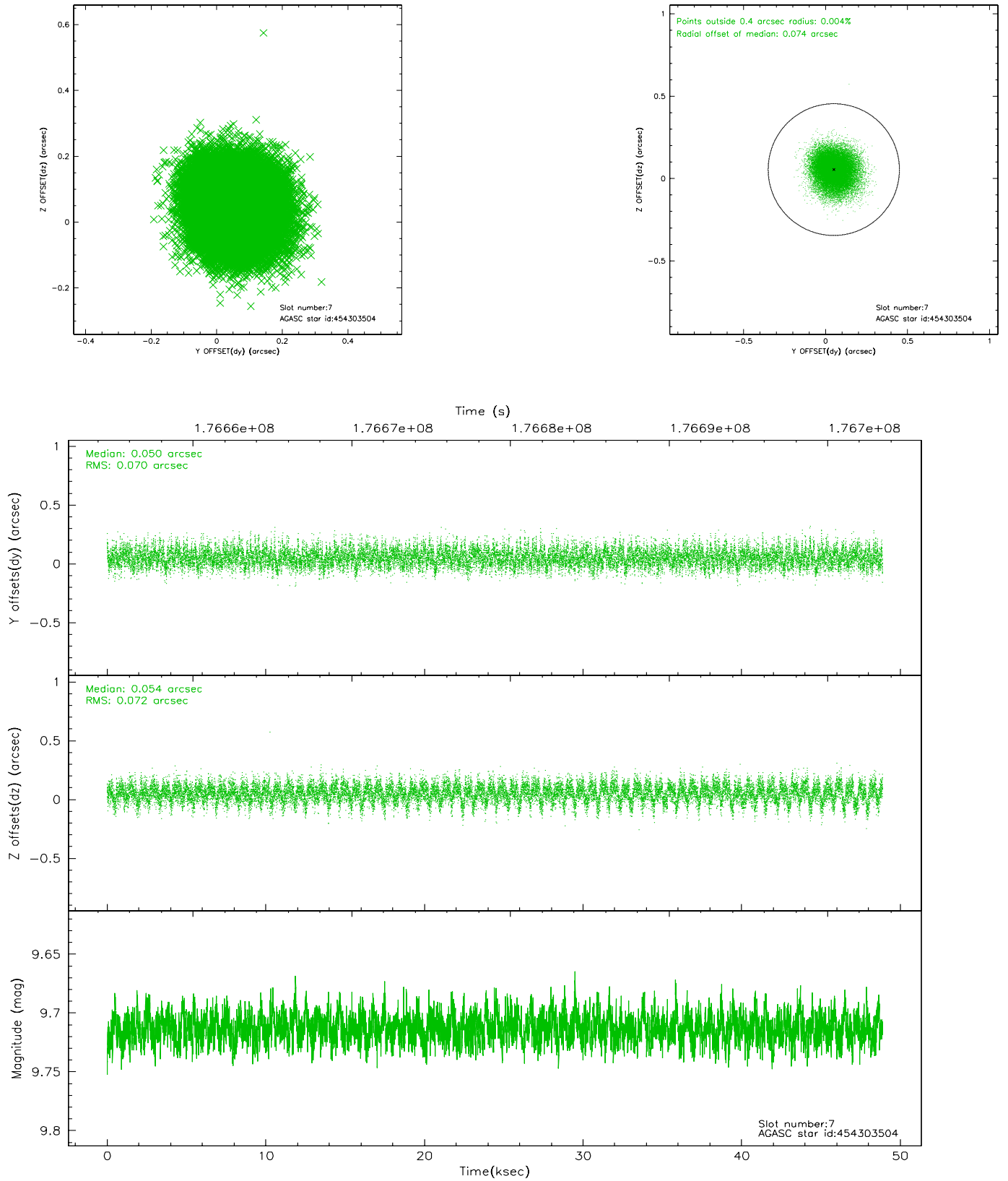


## 2.4.4 Slot 6



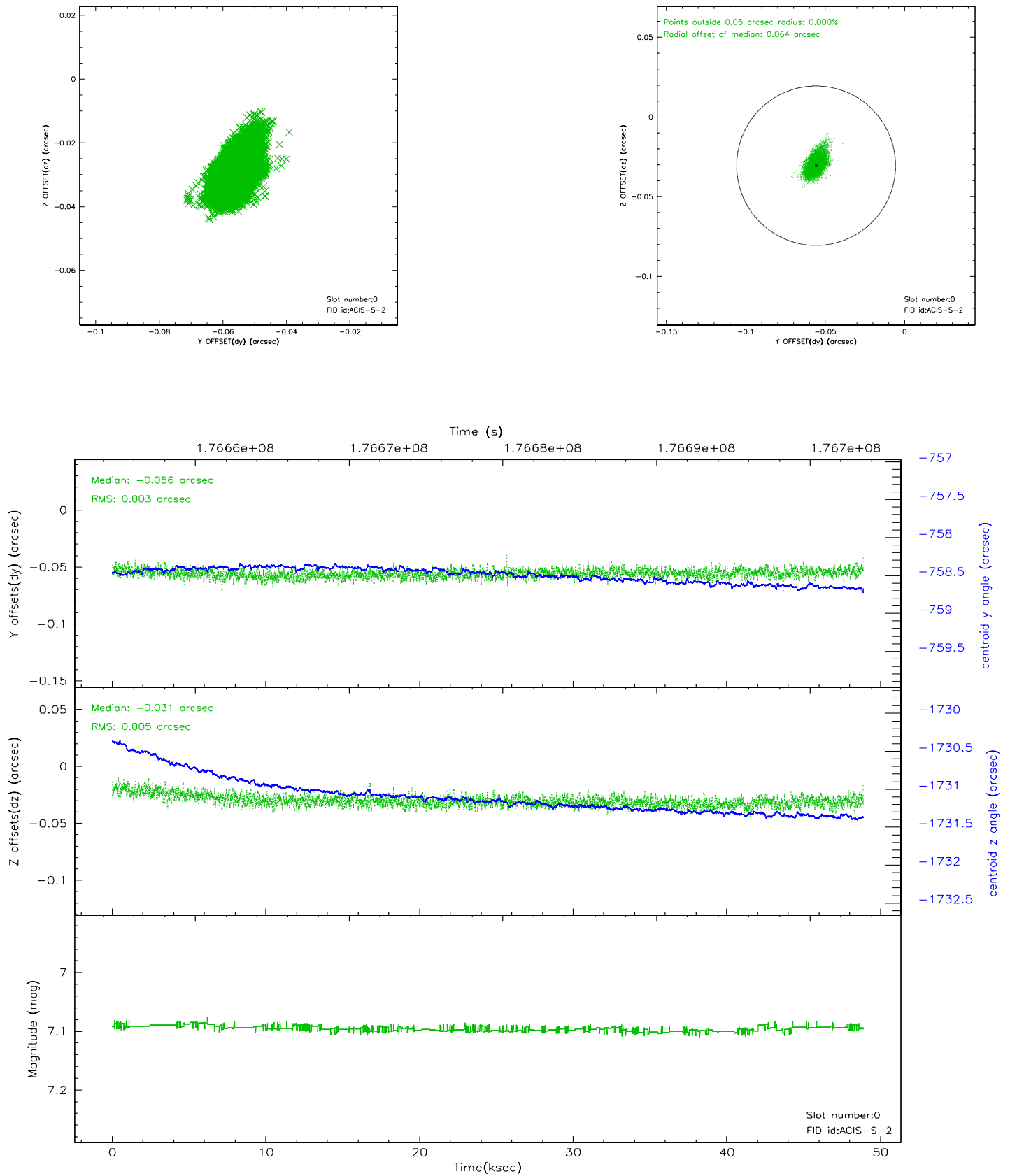


## 2.4.5 Slot 7

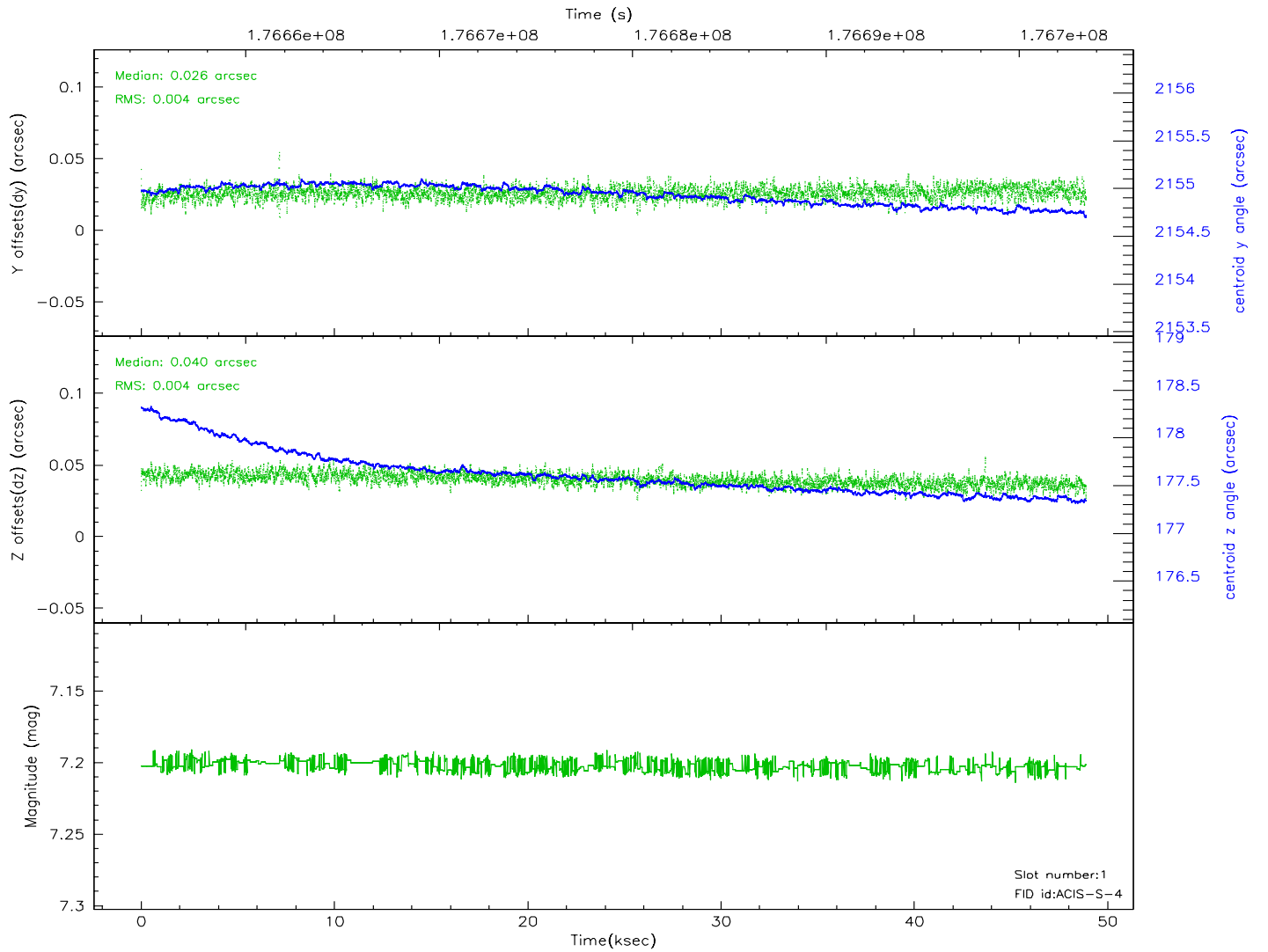
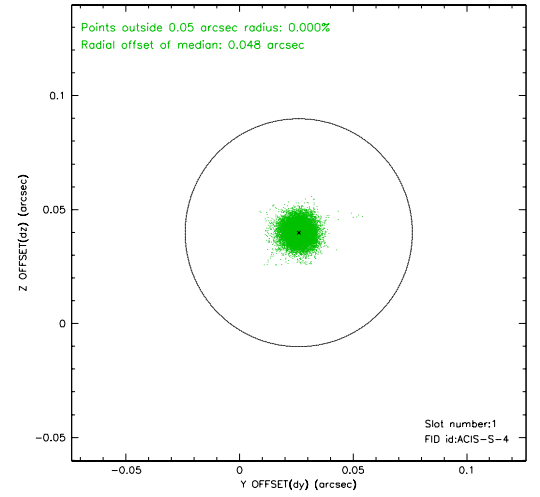
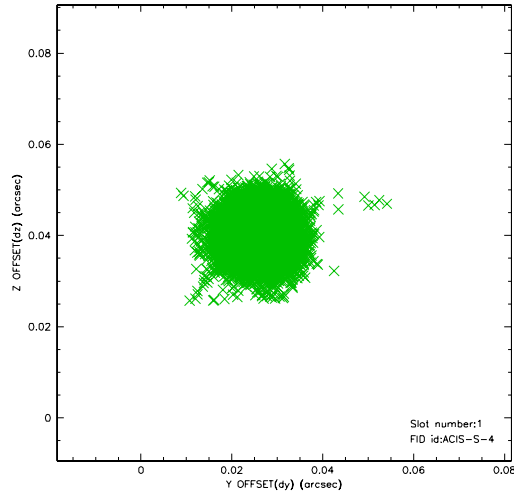


## 2.5 FID Slots

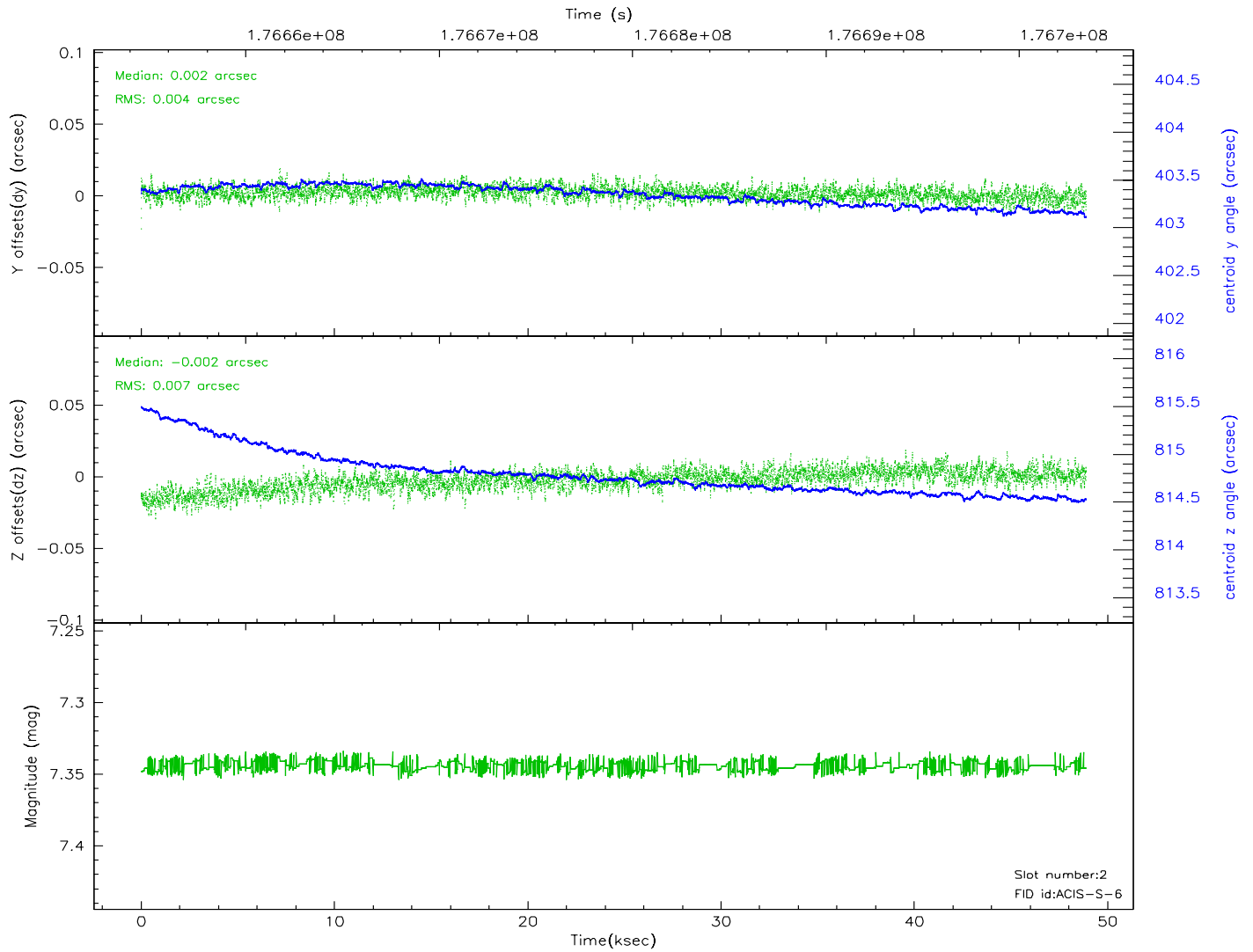
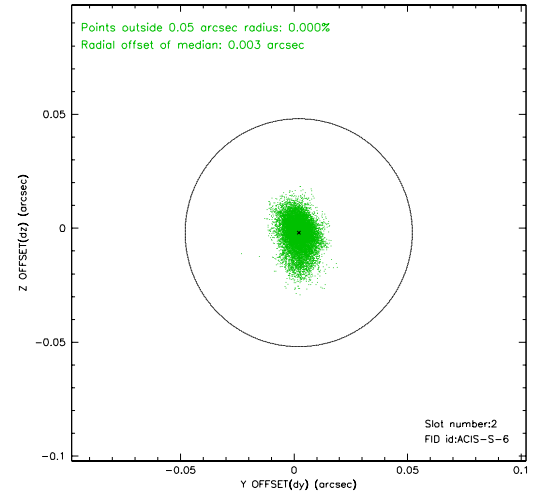
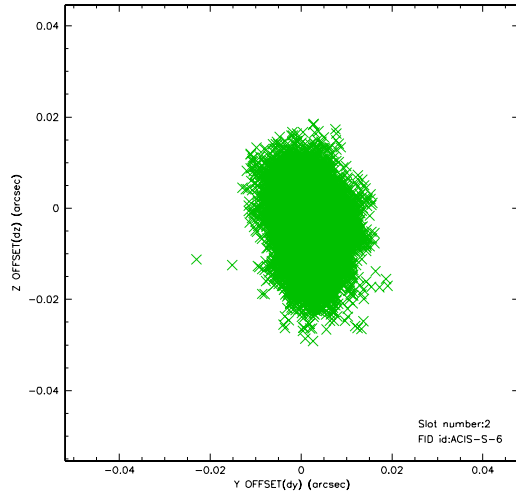
### 2.5.1 Slot 0



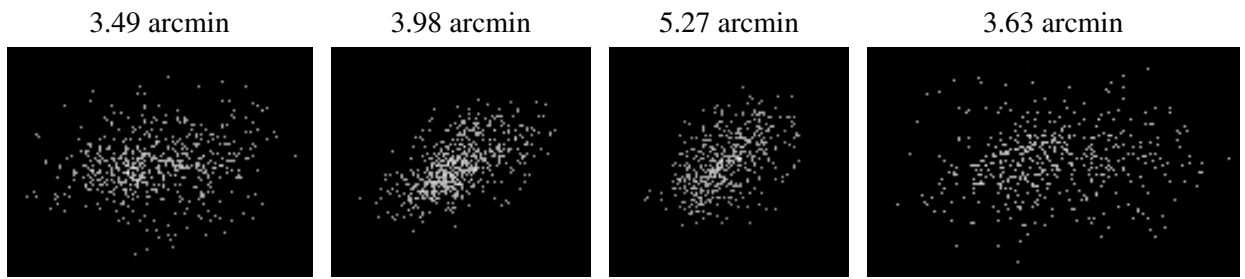
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.07.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.607

## A.2 Comments

Roll constraint met.

The ACIS focal plane temperature decreased by more than a degree during the observation.