

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.2

Observation 5168 - L2 Version 001  
Chandra X-Ray Center

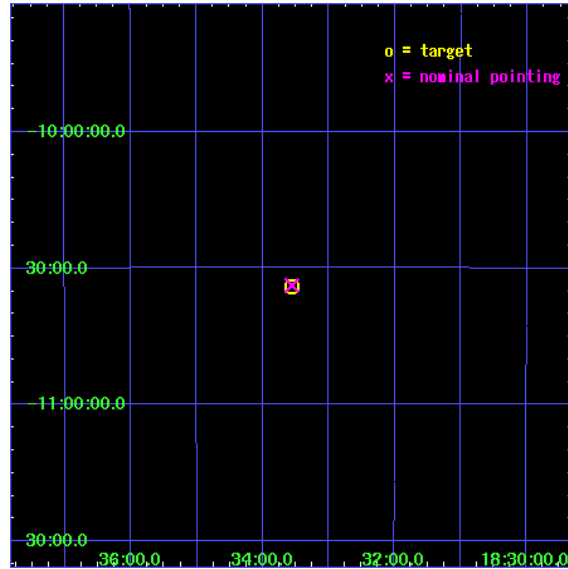
L2 Processing Date : May 31 2006

## 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	Parameters . . . . .	4
2.1.3	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
<b>3</b>	<b>Point Sources</b>	<b>15</b>
<b>A</b>	<b>Summary</b>	<b>16</b>
A.1	Status . . . . .	16
A.2	Comments . . . . .	16

# 1 Front

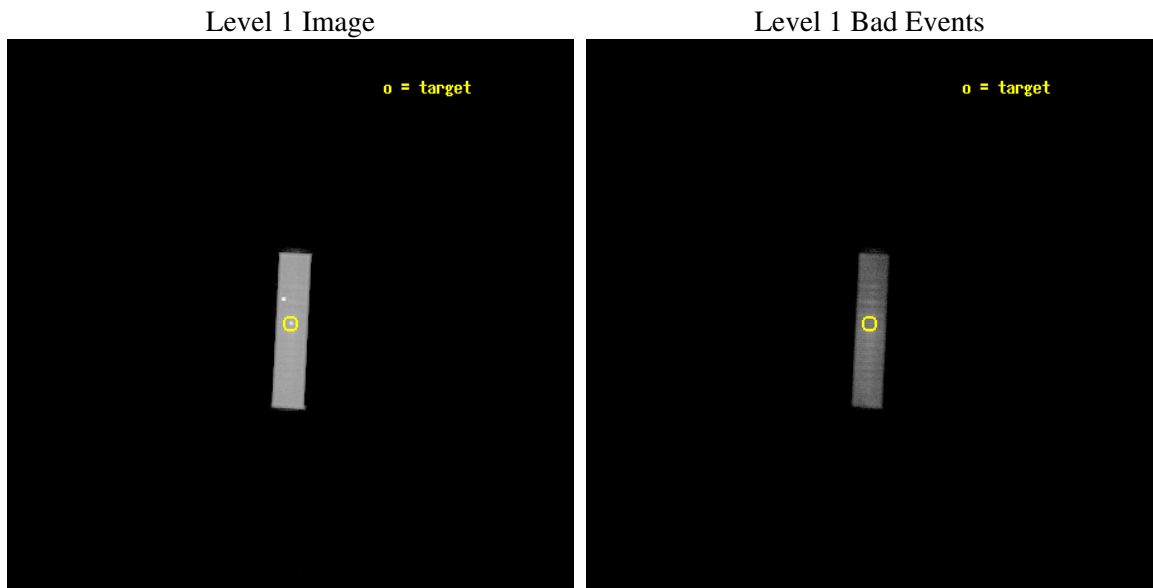
seq_num	590366
obs_id	5168
title	AO5A Observations of the Standard Candles Cas A and G21.5-09
observer	Dr. CXC Calibration
object	G21.5-09
ra_targ	278.389583
dec_targ	-10.568528
ra_nom	278.38944616049
dec_nom	-10.563918637104
roll_nom	92.767313333391
revision	2
ontime	0.0
livetime	0.0
l2events	0



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	1
ascdsver	7.6.7.2
caldbver	3.2.2
date	2006-05-31T15:03:47
revision	2

sched_exp_time	19200.000000
ontime	19377.625851274
l1events	887938

### 2.1.3 Events

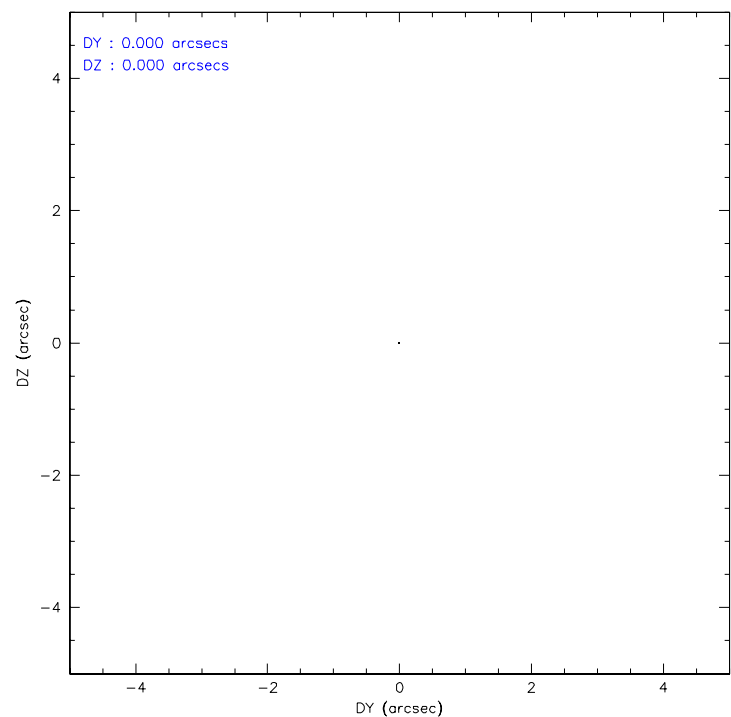
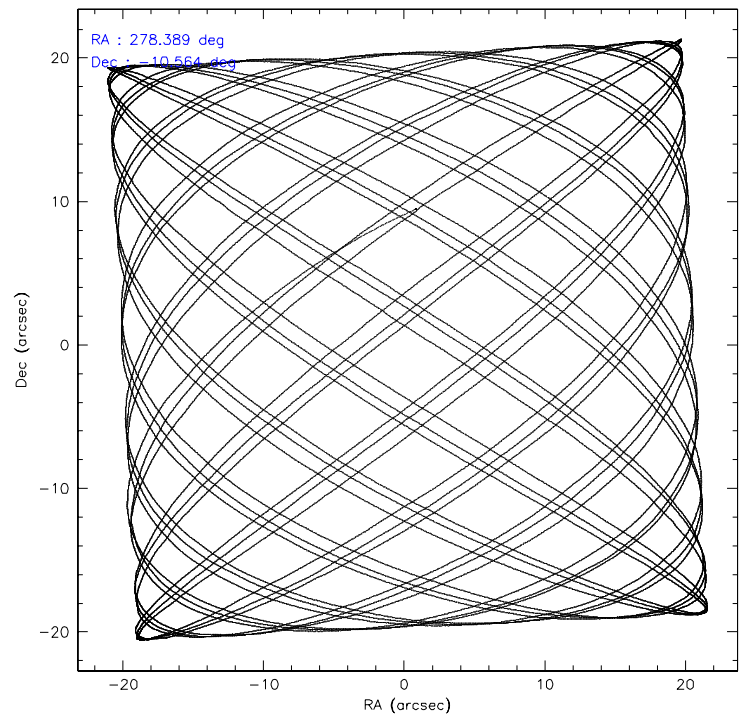
Level 1 Events

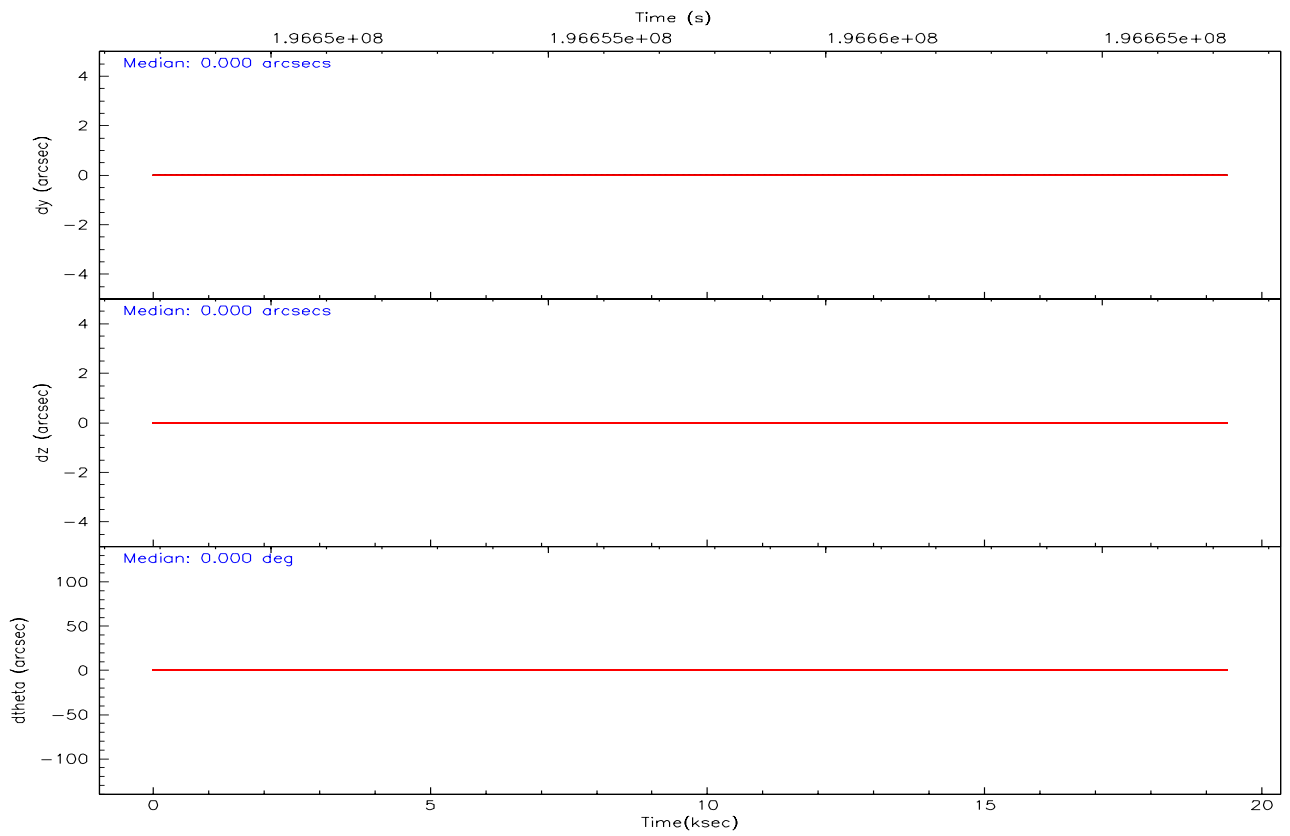
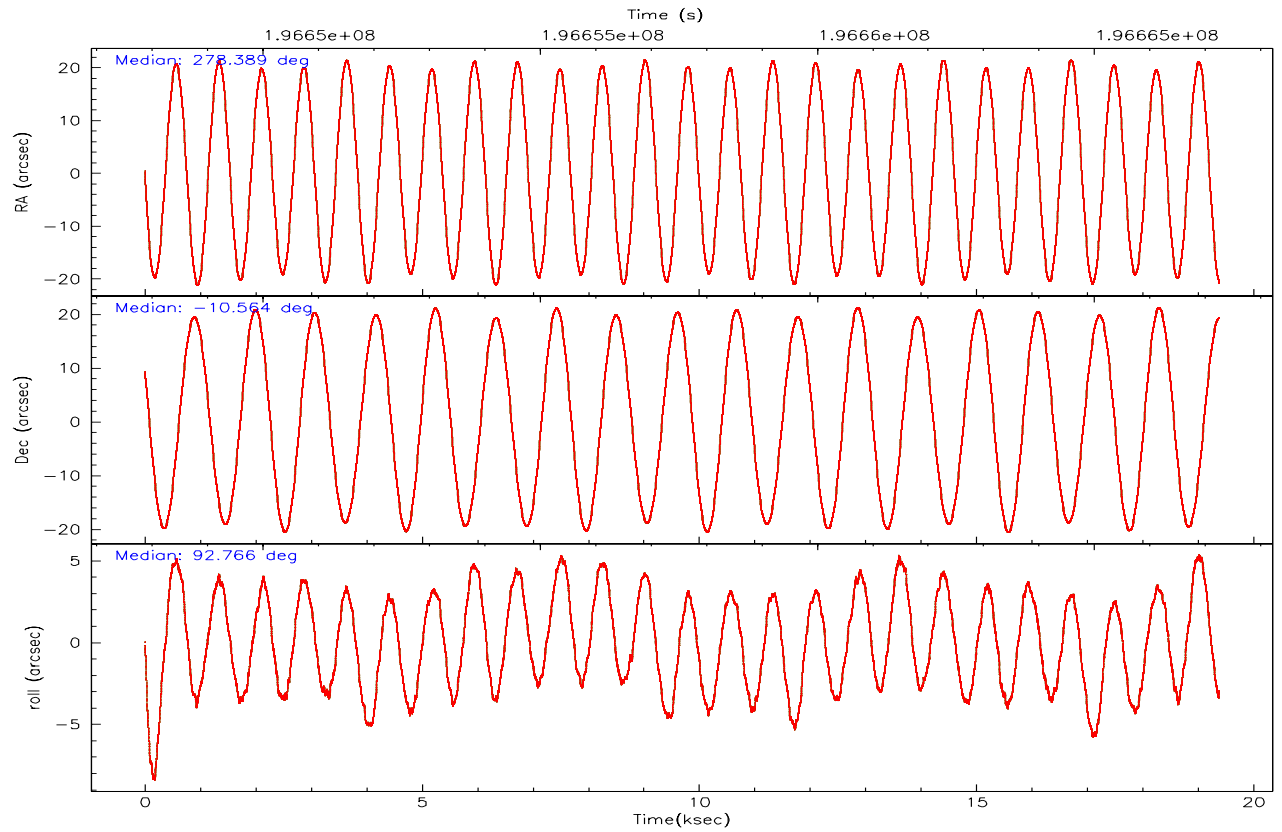
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	4	887925	9
rejected events	0	163681	0
rejected %	0%	18%	0%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	6	6
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
Pointing RA	278.406431	278.389446160491			
Pointing Dec	-10.587100	-10.56391863710433			
Pointing Roll	92.703092	92.76731333339083			
Window start time	194486464.184000	194486464.184000			
Window stop time	197078464.184000	197078464.184000			
SIM focus pos (mm)	-1.429586	-1.428180813131781			
SIM defocus (mm)	0.1037507710433287	0.1051558262725154			
SIM translation stage pos (mm)	250.455976	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	196648049.184000	196647678.11916			
Observation start date	2004-03-26T00:26:25	2004-03-26T00:21:18			
Observation end time	196667249.184000	196668038.72006			
Observation end date	2004-03-26T05:46:25	2004-03-26T06:00:38			

2.3 Aspect





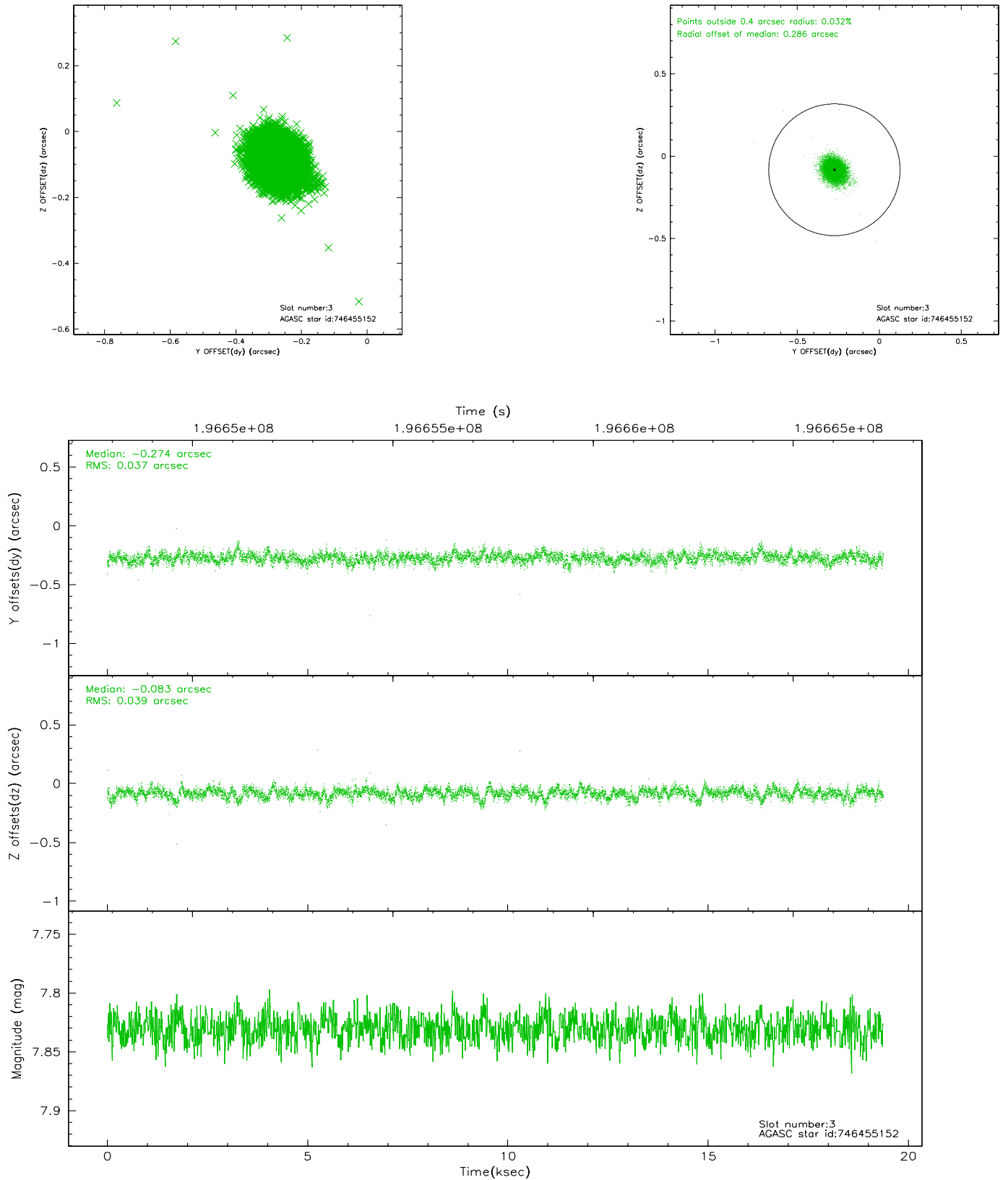
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
1	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
2	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	746455152	7.83	9453	-0.274	-0.083	0.056	0.094	278.447893	-9.976732	2188.34	-250.35
4	GUIDE	746460272	8.94	9451	-0.104	0.014	0.073	0.119	278.847488	-10.152127	1490.24	-1634.87
5	GUIDE	746461728	9.76	9443	0.047	0.076	0.125	0.205	278.986921	-10.530755	104.75	-2061.71
6	GUIDE	746462392	8.53	9452	0.153	0.144	0.084	0.137	279.038421	-10.890715	-1199.44	-2180.55
7	GUIDE	746462456	8.38	9451	0.179	-0.142	0.071	0.113	278.652171	-10.530173	163.52	-878.76

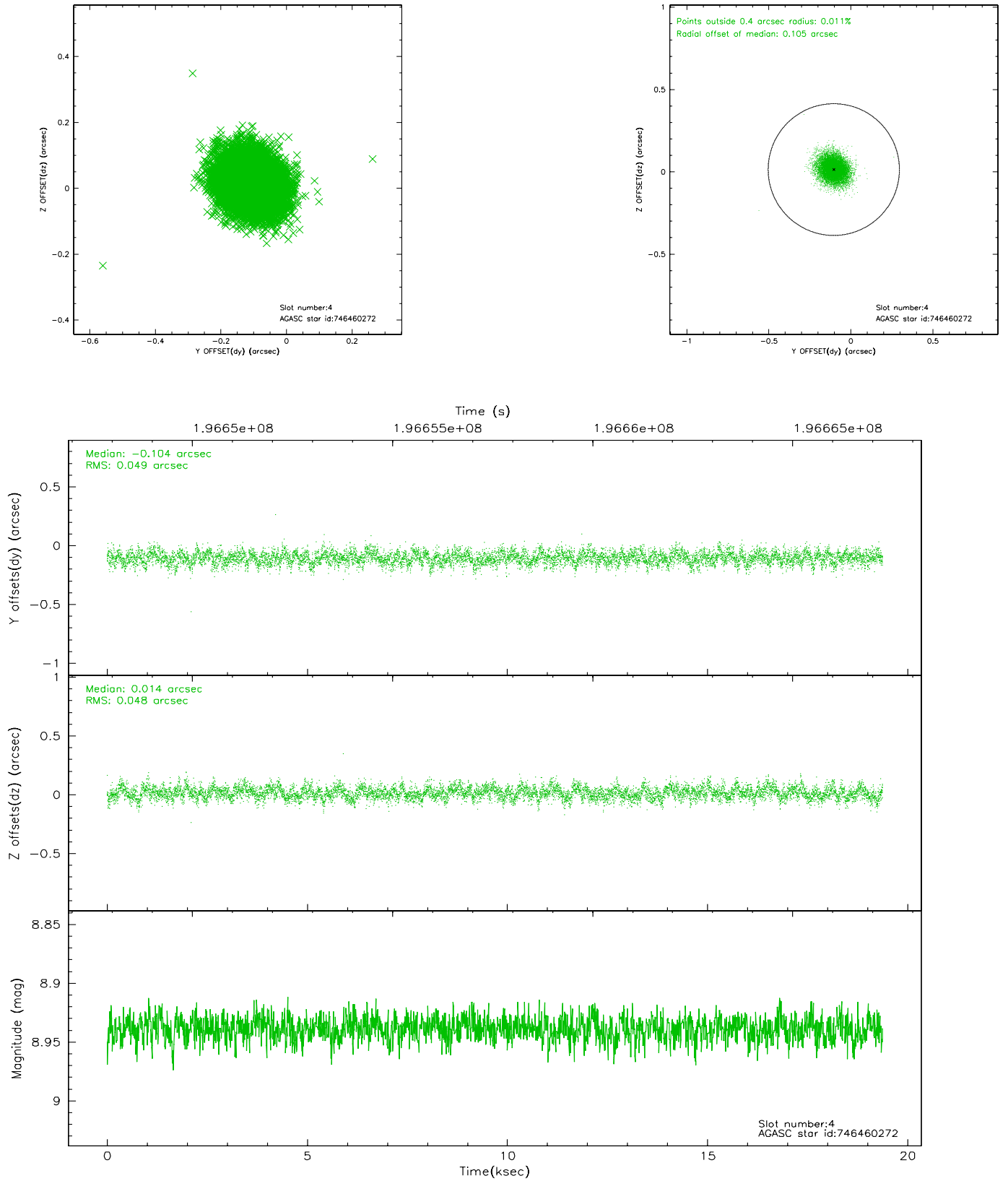


## 2.4 Star Slots

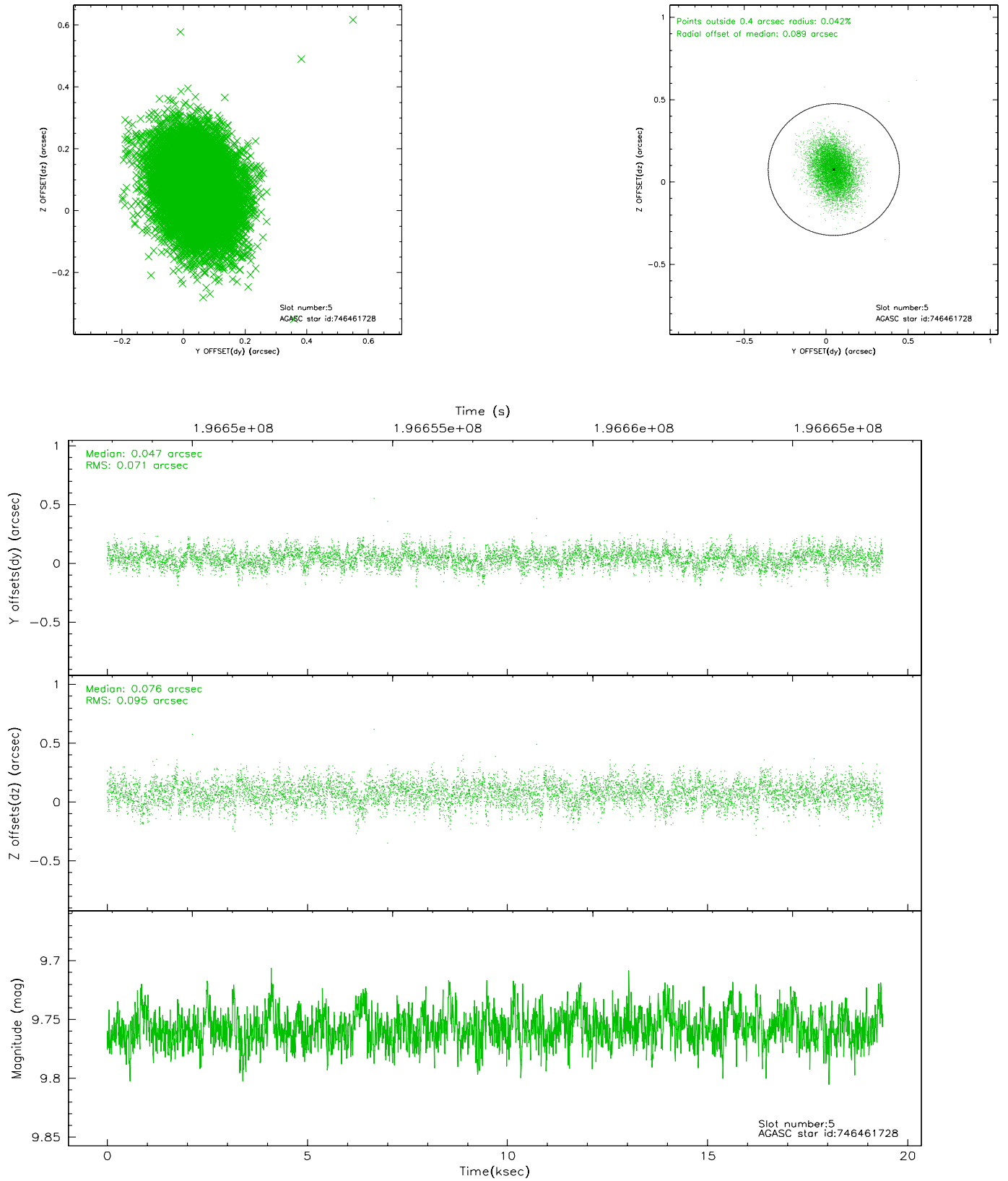
### 2.4.1 Slot 3



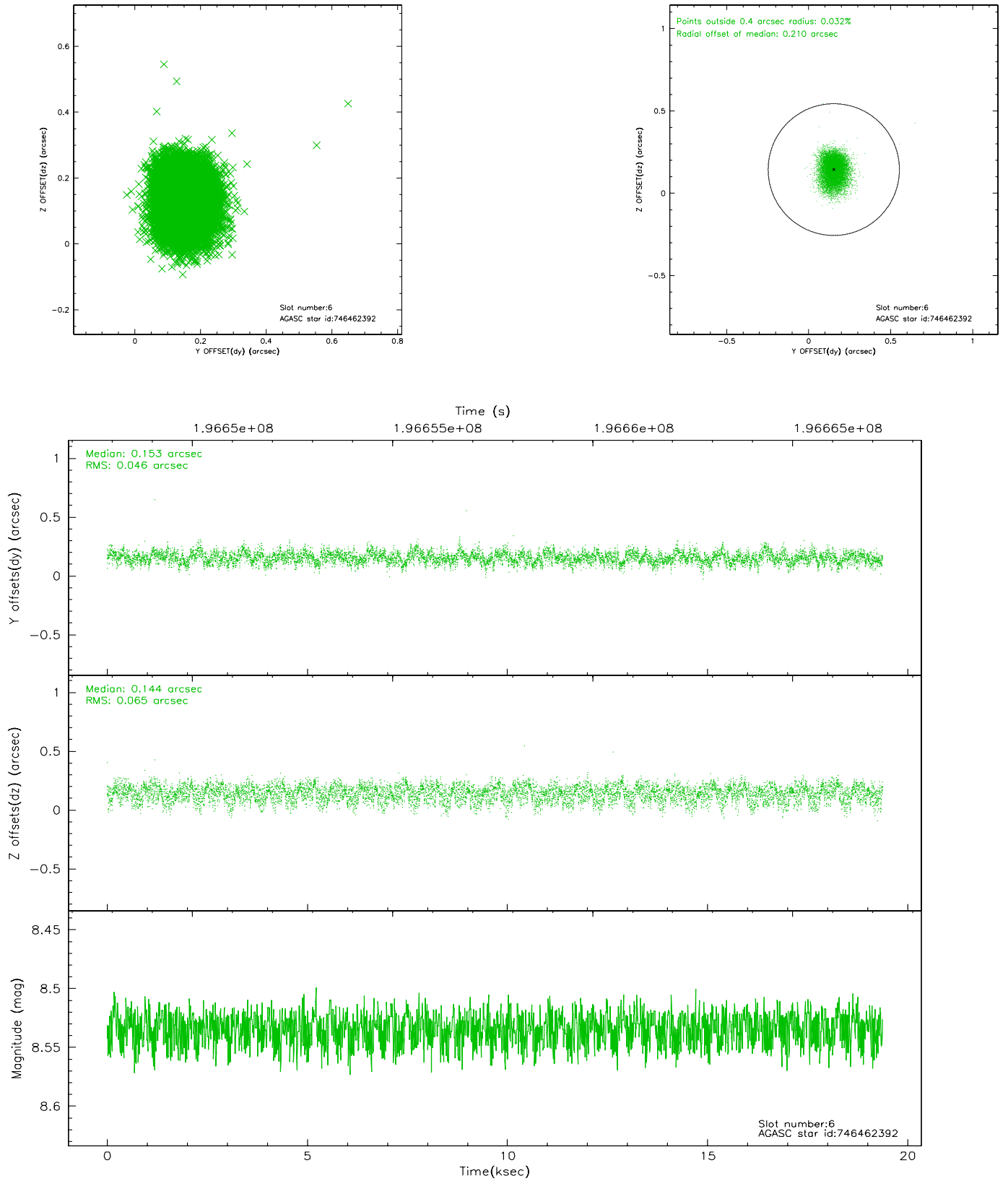
## 2.4.2 Slot 4



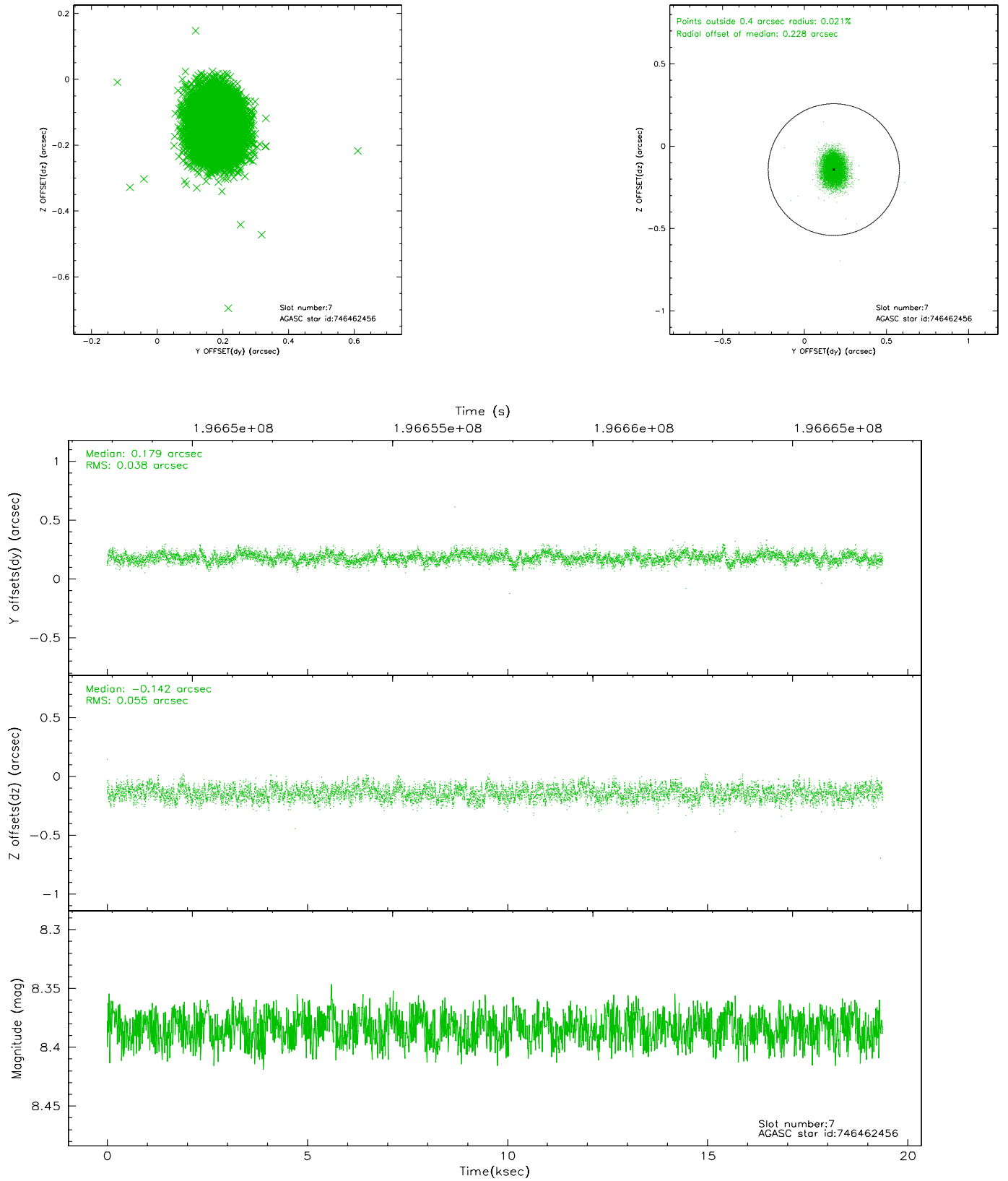
### 2.4.3 Slot 5



## 2.4.4 Slot 6



## 2.4.5 Slot 7



## 2.5 FID Slots

### 3 Point Sources

# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.06.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.3776258

## A.2 Comments

Window constraint met.

Due to a commanding error the wrong fid lights used here and thus fid lights have status of 'BAD'. This, in turn, leads to 0 good time for L2 purposes, and produces L2 evt files with 0 events and no GTIs. L1 data products are unaffected by this and are OK. This error is deemed to not adversely effect the goal and usability of this observation. The Charge Time is therefore taken from the L1 ontime rather than the normal L2 GTI.

The keywords DTCOR, EXPOSURE, and LIVETIME in the Level 2 event file and the keyword DTCOR in the Level 1 event file have been incorrectly determined due to a software bug. The correct value of DTCOR can be found in the file DTFSTATS file that can be obtained by downloading the Secondary Data Products. In most cases, the difference between the correct DTCOR value and the incorrect DTCOR value in the Level 2 event file is very small and does not affect the data analysis. However, there are cases of significant differences and the user is advised to use the DTCOR in the DTFSTATS file for analysis. Corrected data products will be made available in the archive as soon as feasible.