

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9667 - L2 Version 4  
Chandra X-Ray Center

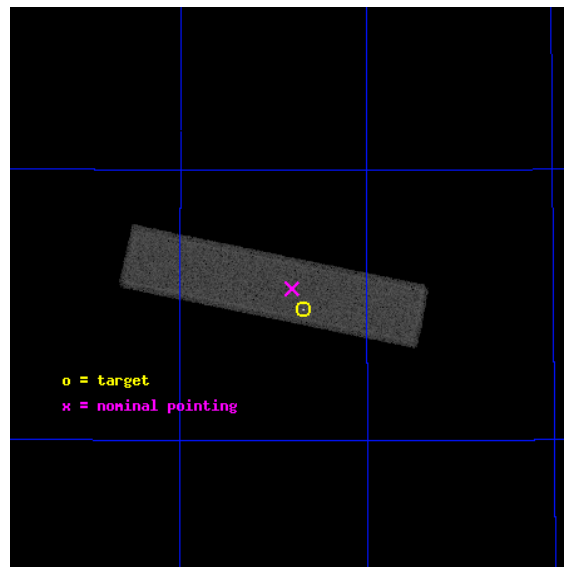
L2 Processing Date : Aug 12 2012

## 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	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 7 . . . . .	12
2.5	FID Slots . . . . .	13
2.5.1	Slot 0 . . . . .	13
2.5.2	Slot 1 . . . . .	14
2.5.3	Slot 2 . . . . .	15
<b>A</b>	<b>Summary</b>	<b>16</b>
A.1	Status . . . . .	16
A.2	Comments . . . . .	16

# 1 Front

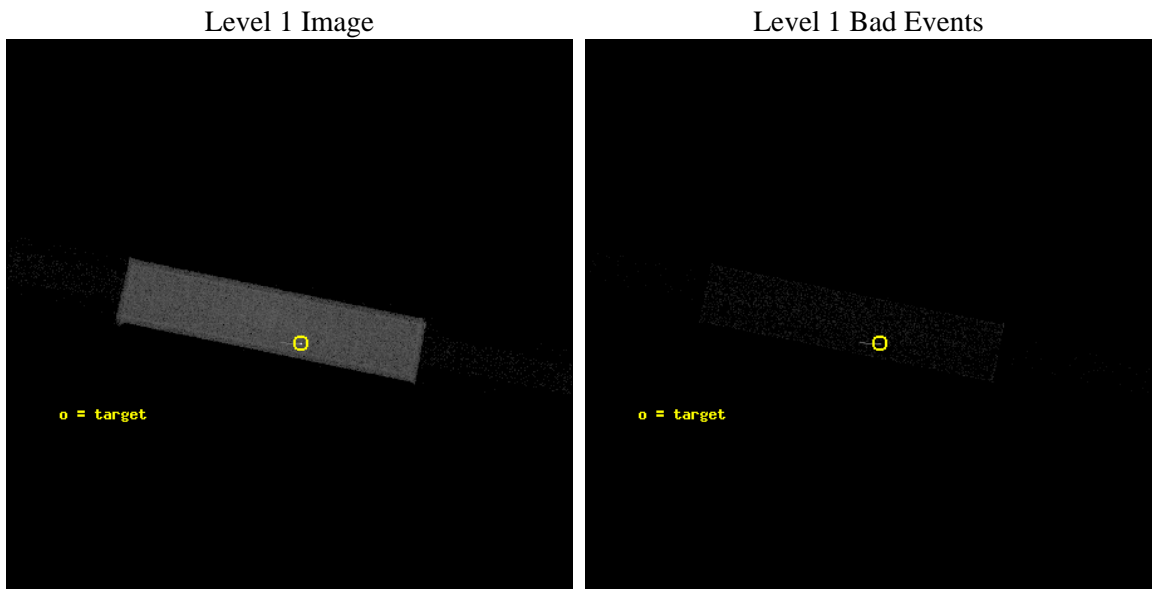
seq_num	290790	Sequence number
obs_id	9667	Observation id
title	AO9 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.20093994665	Nominal RA [deg]
dec_nom	45.780805090507	Nominal Dec [deg]
roll_nom	191.47217302711	Nominal Roll [deg]
revision	4	Processing version of data
ontime	1339.9313158393	[s]
livetime	1328.0146563668	Ontime multiplied by DTCOR
l2events	85482	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	1180.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1339.9313158393	[s]
caldsver	4.5.1.1	&#160	l1events	129735	Number of level 1 events
date	2012-08-12T16:54:15	Date and time of file creation			
revision	4	Processing version of data			

### 2.1.3 Events

Level 1 Events

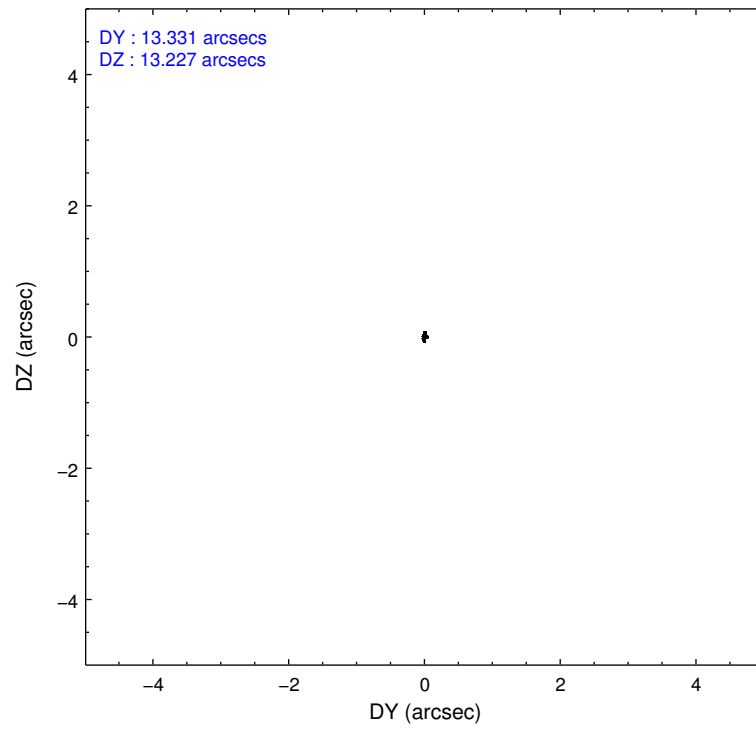
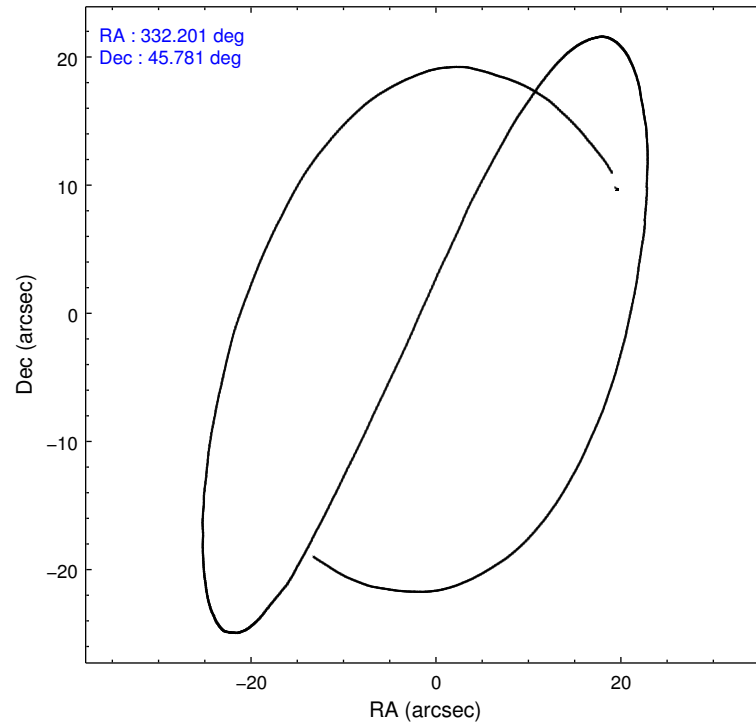
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	978	127836	921
rejected events	978	25394	921
rejected %	100%	19%	100%

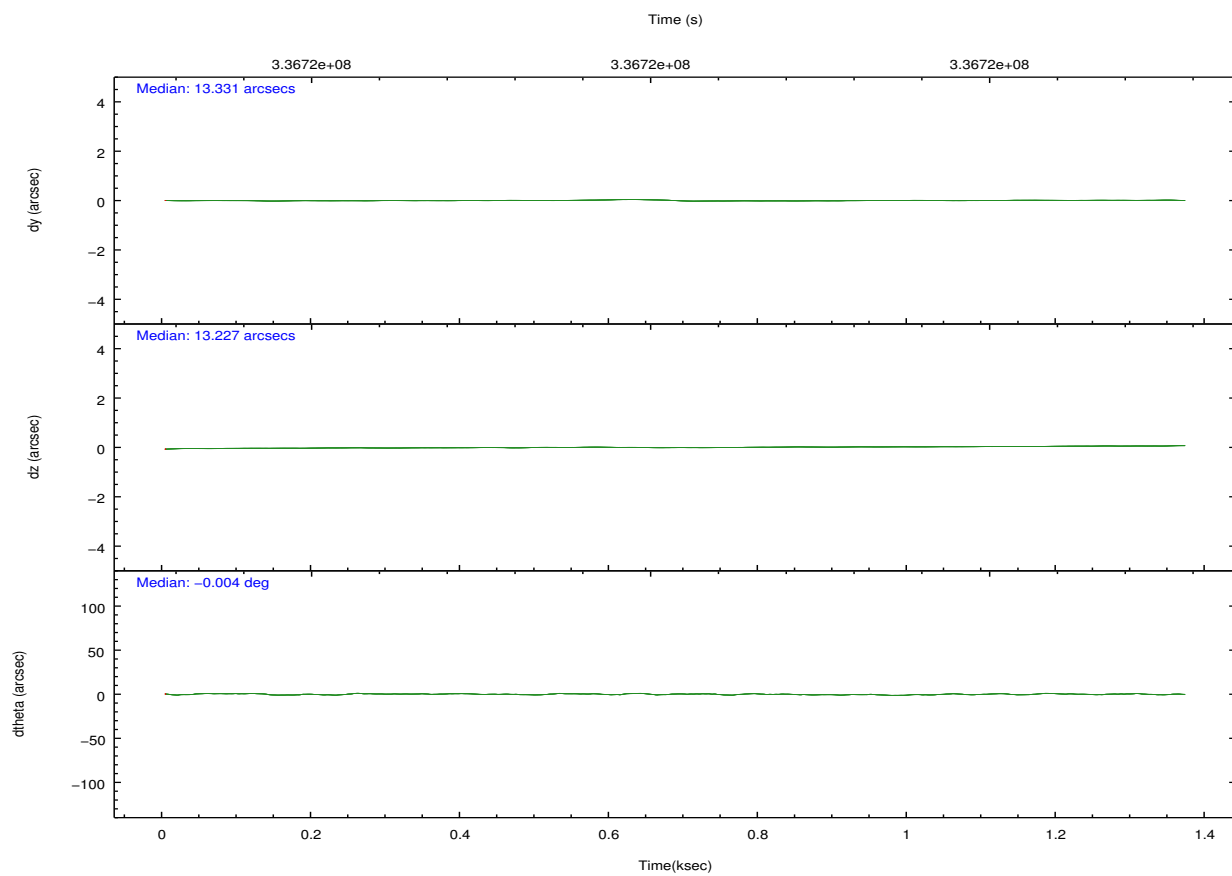
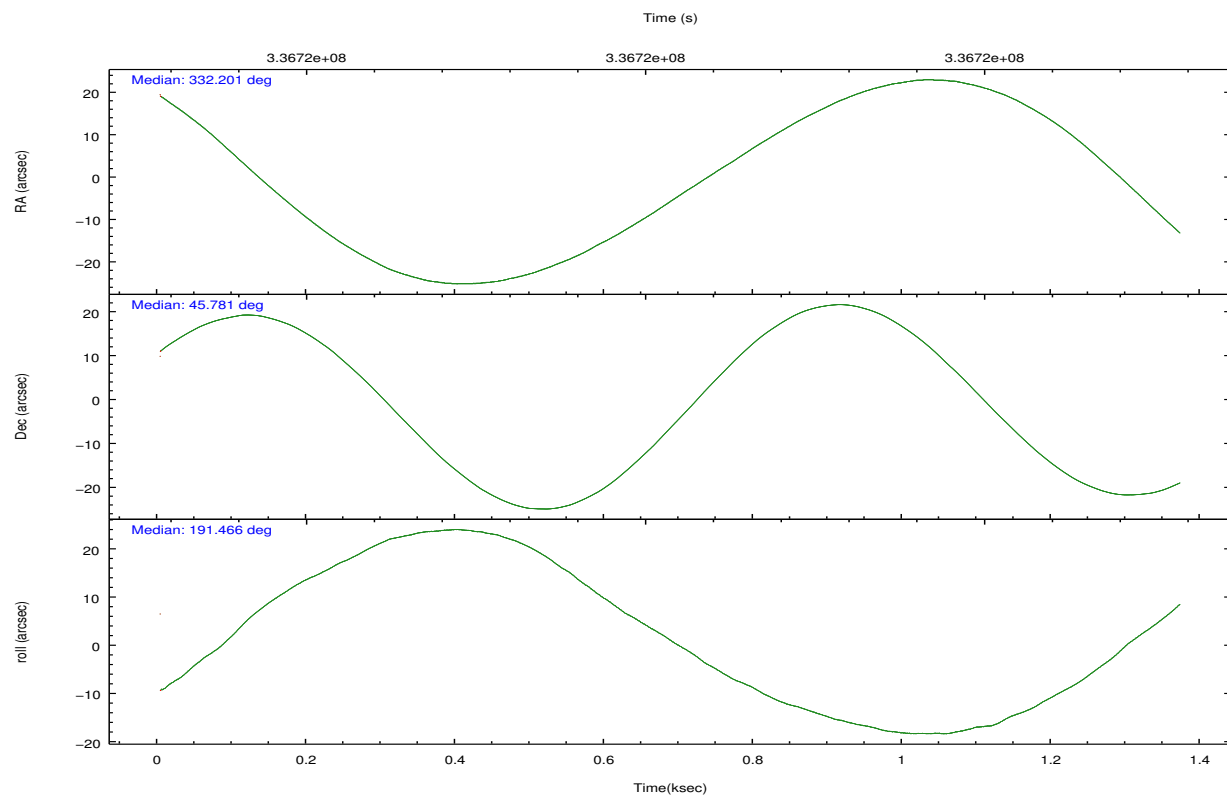
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	332.230117	332.200939946651
[deg] Pointing Dec	45.800759	45.78080509050672
[deg] Pointing Roll	191.383908	191.4721730271133
[mm] SIM focus pos	-1.533336	-1.526339935833849
[mm] SIM defocus	7.710433287538843e-07	0.006996703570447904
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	336723043.184000	336722666.92074
Observation start date	2008-09-02T06:09:38	2008-09-02T06:04:26
[s] Observation end time (MET)	336724223.184000	336724356.63332
Observation end date	2008-09-02T06:29:18	2008-09-02T06:32:36

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

## 2.3 Aspect





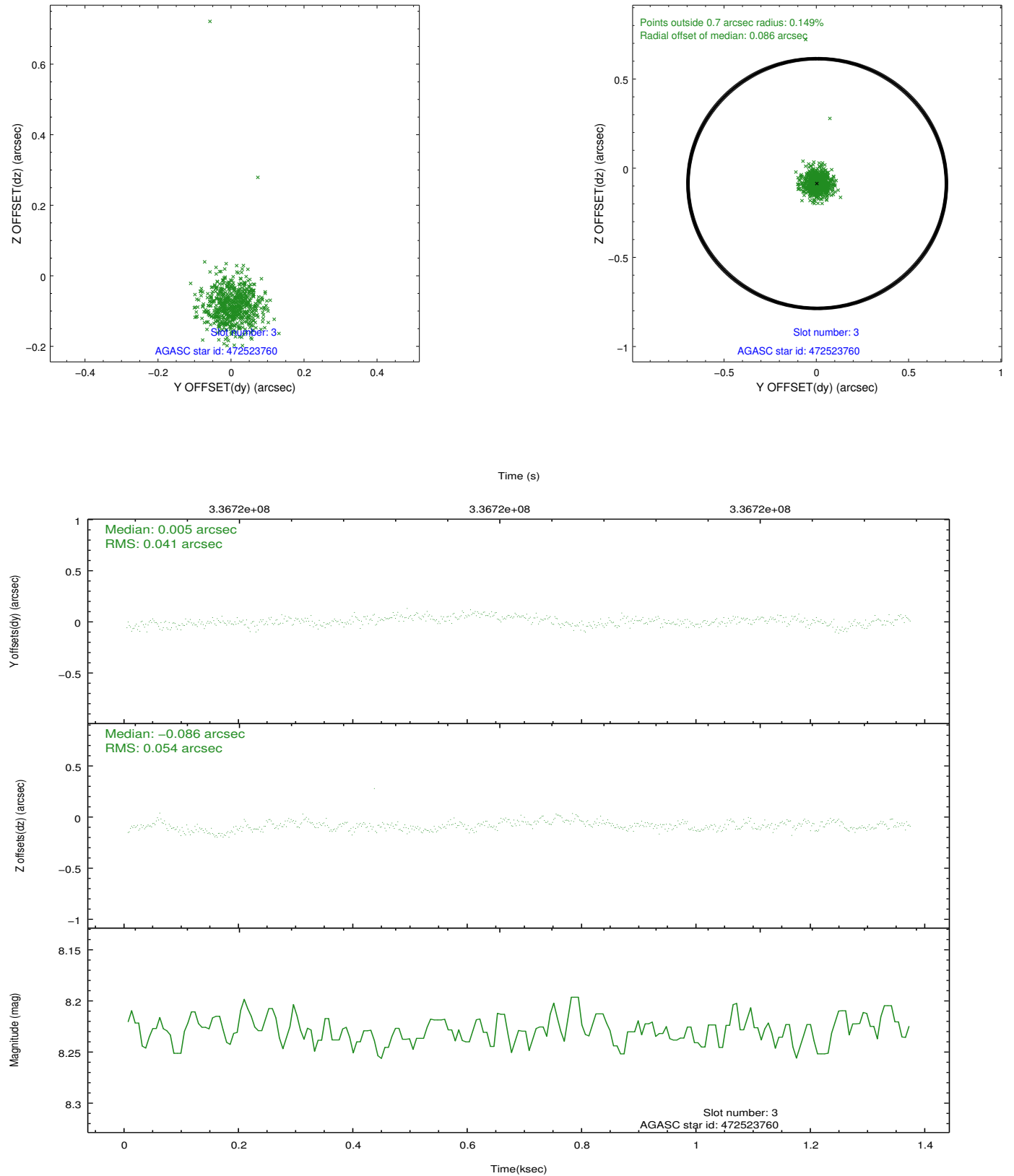
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.01	335	0.087	-0.150	0.007	0.011	0.000000	0.000000	-1167.67	-462.04
1	FID	HRC-S-2	7.00	335	0.211	-0.117	0.005	0.009	0.000000	0.000000	1228.63	-455.98
2	FID	HRC-S-3	7.02	335	0.092	-0.036	0.006	0.011	0.000000	0.000000	-1166.73	566.24
3	GUIDE	472523760	8.23	669	0.005	-0.086	0.063	0.102	331.645363	45.403260	1731.33	1106.24
4	GUIDE	472535576	7.87	669	-0.054	0.029	0.074	0.112	331.438373	46.291802	1583.66	-2129.24
5	GUIDE	472655152	9.45	669	0.176	0.060	0.098	0.159	332.504239	45.862991	-714.66	-87.95
6	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	472527720	6.98	668	-0.139	-0.009	0.073	0.128	331.460205	45.112509	2404.45	2034.15

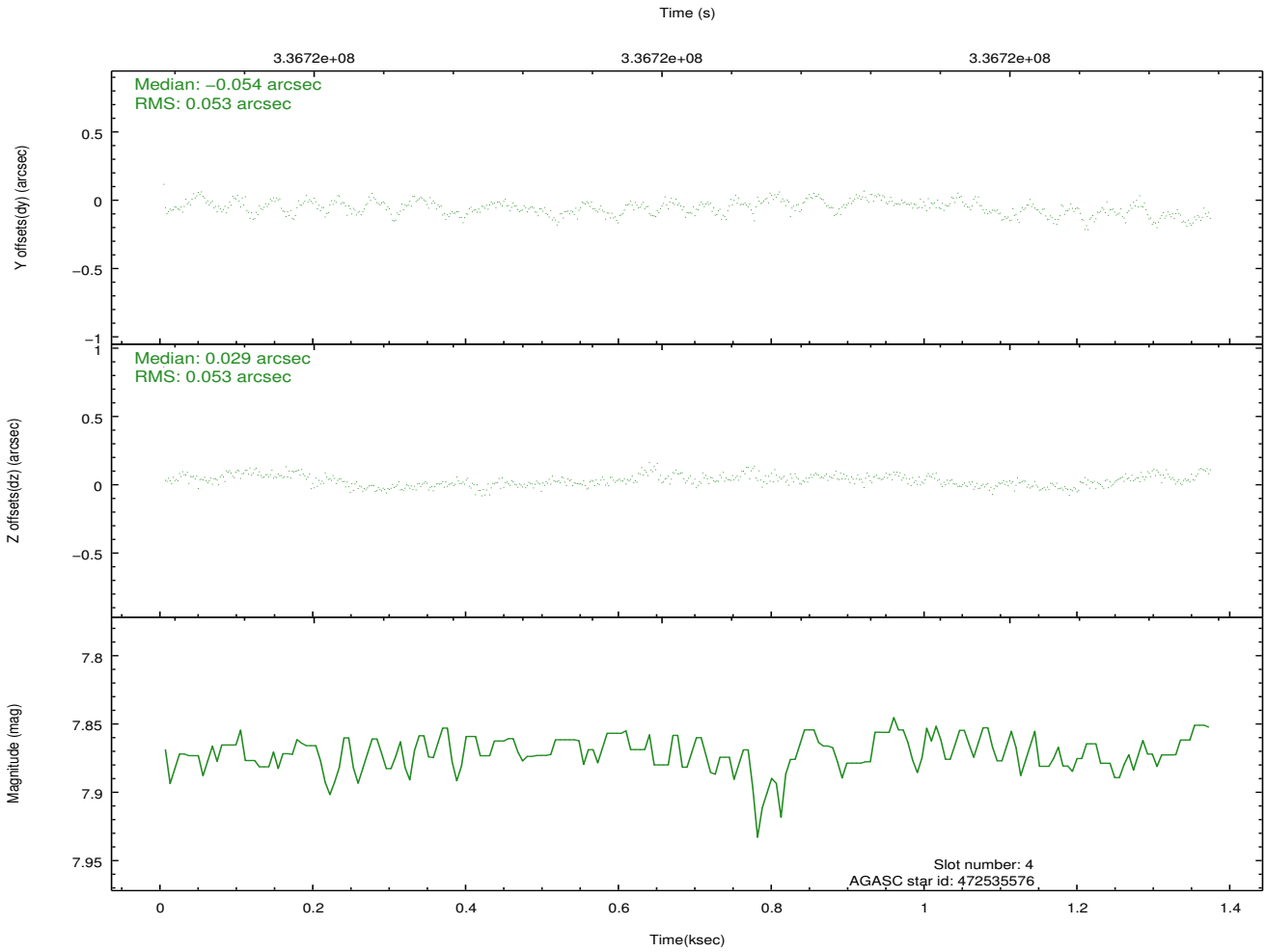
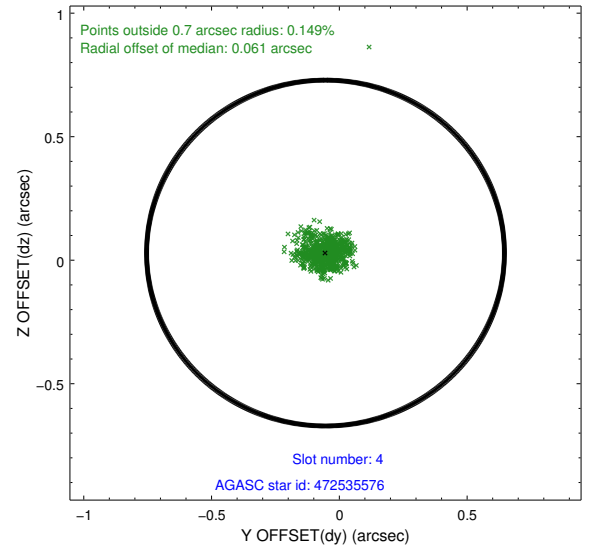
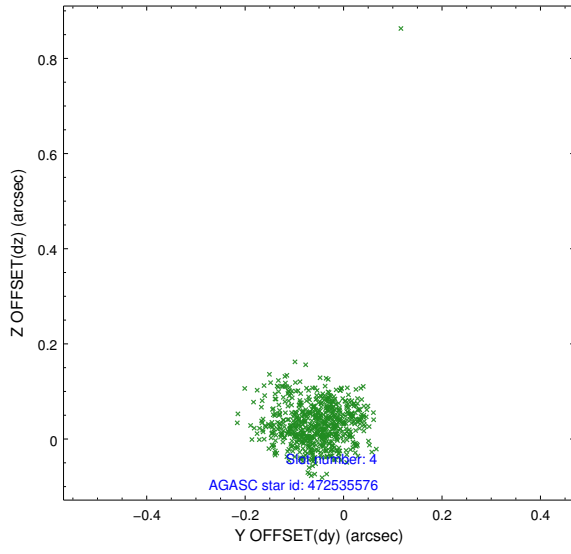


## 2.4 Star Slots

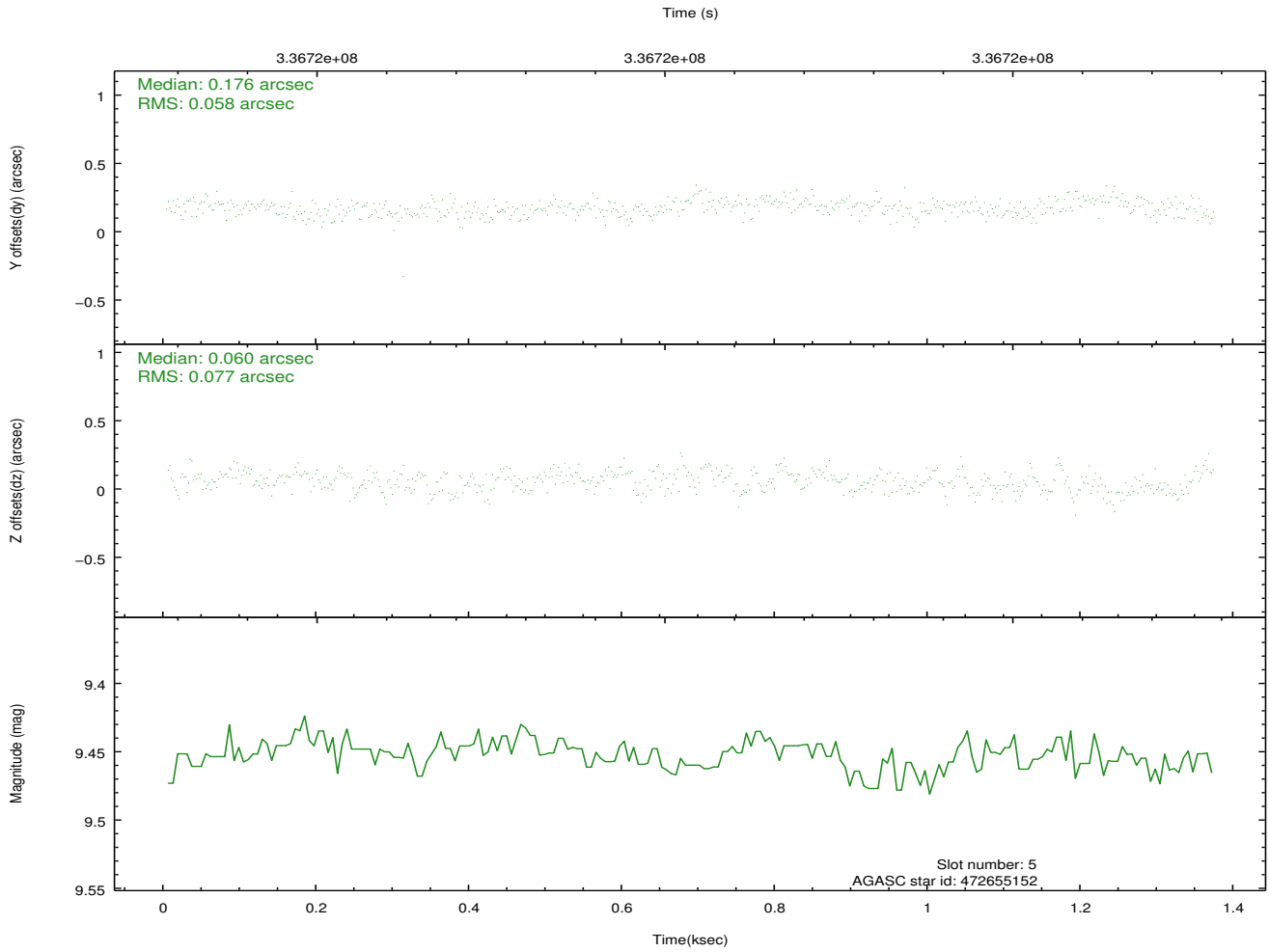
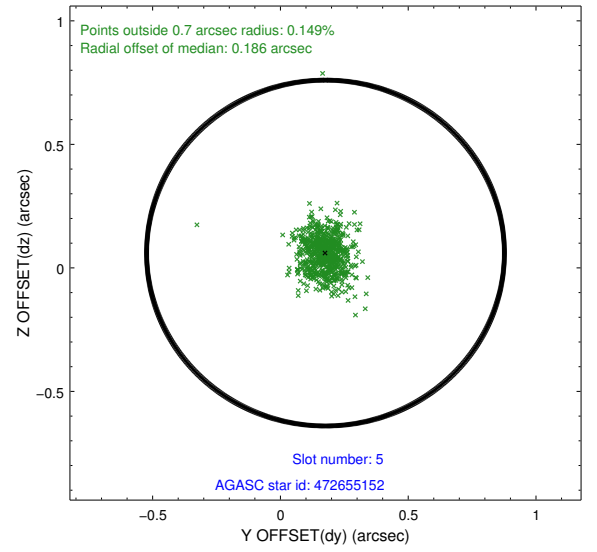
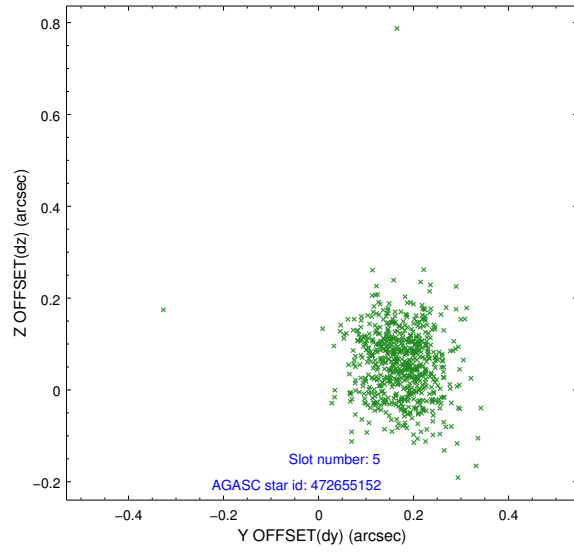
### 2.4.1 Slot 3



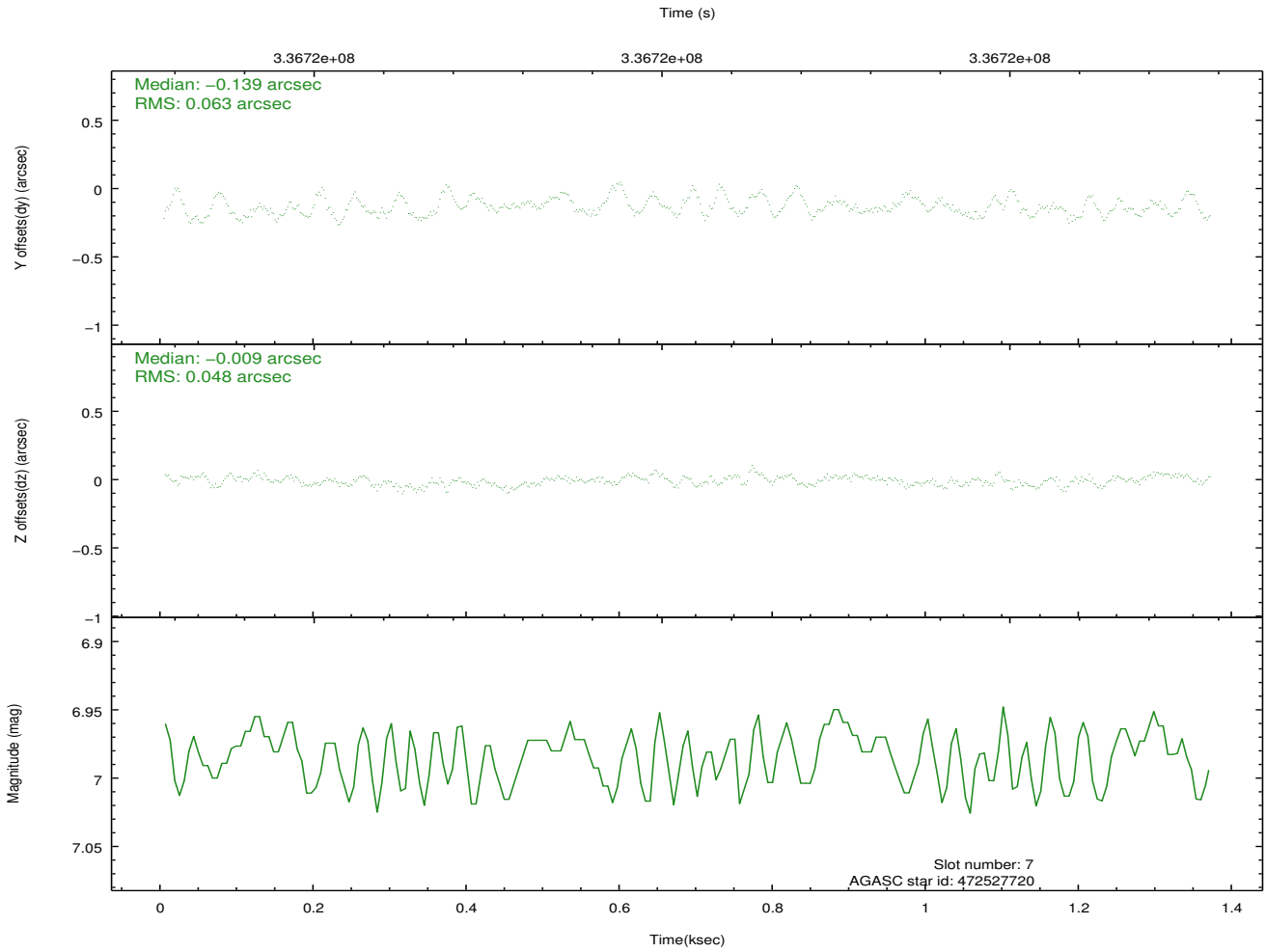
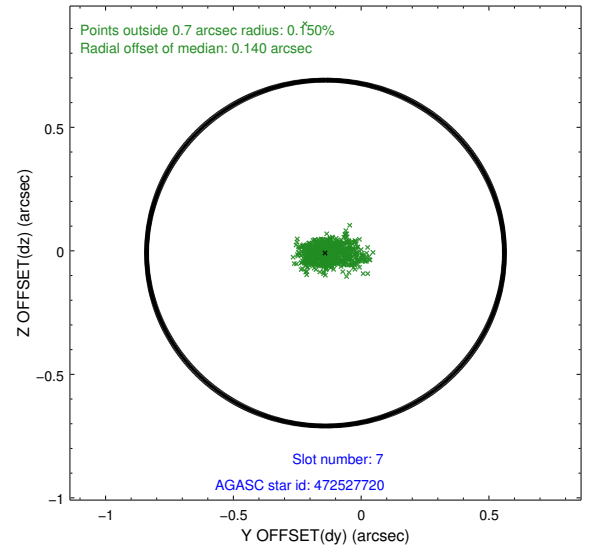
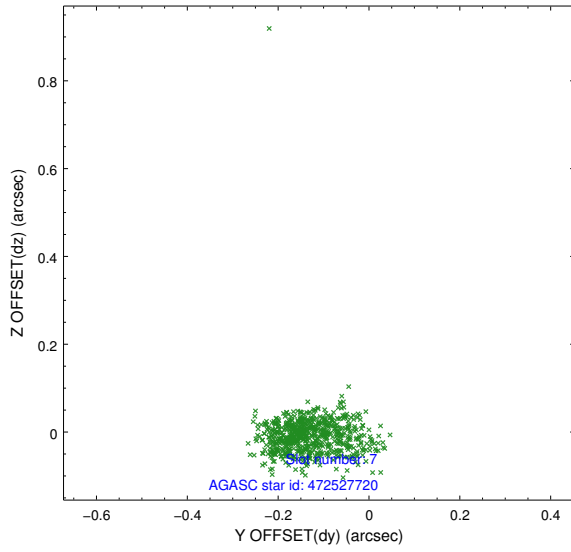
## 2.4.2 Slot 4



### 2.4.3 Slot 5

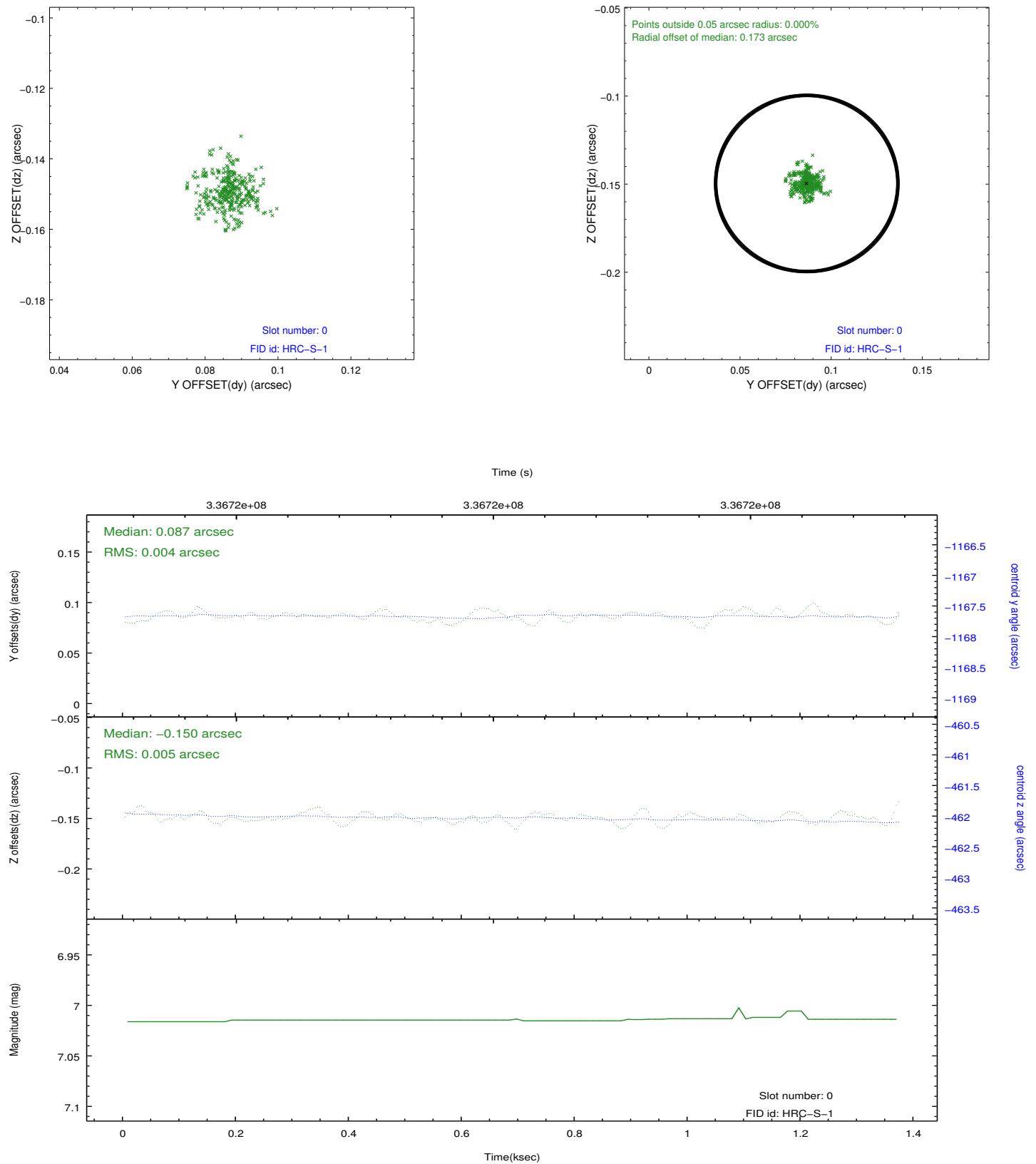


## 2.4.4 Slot 7

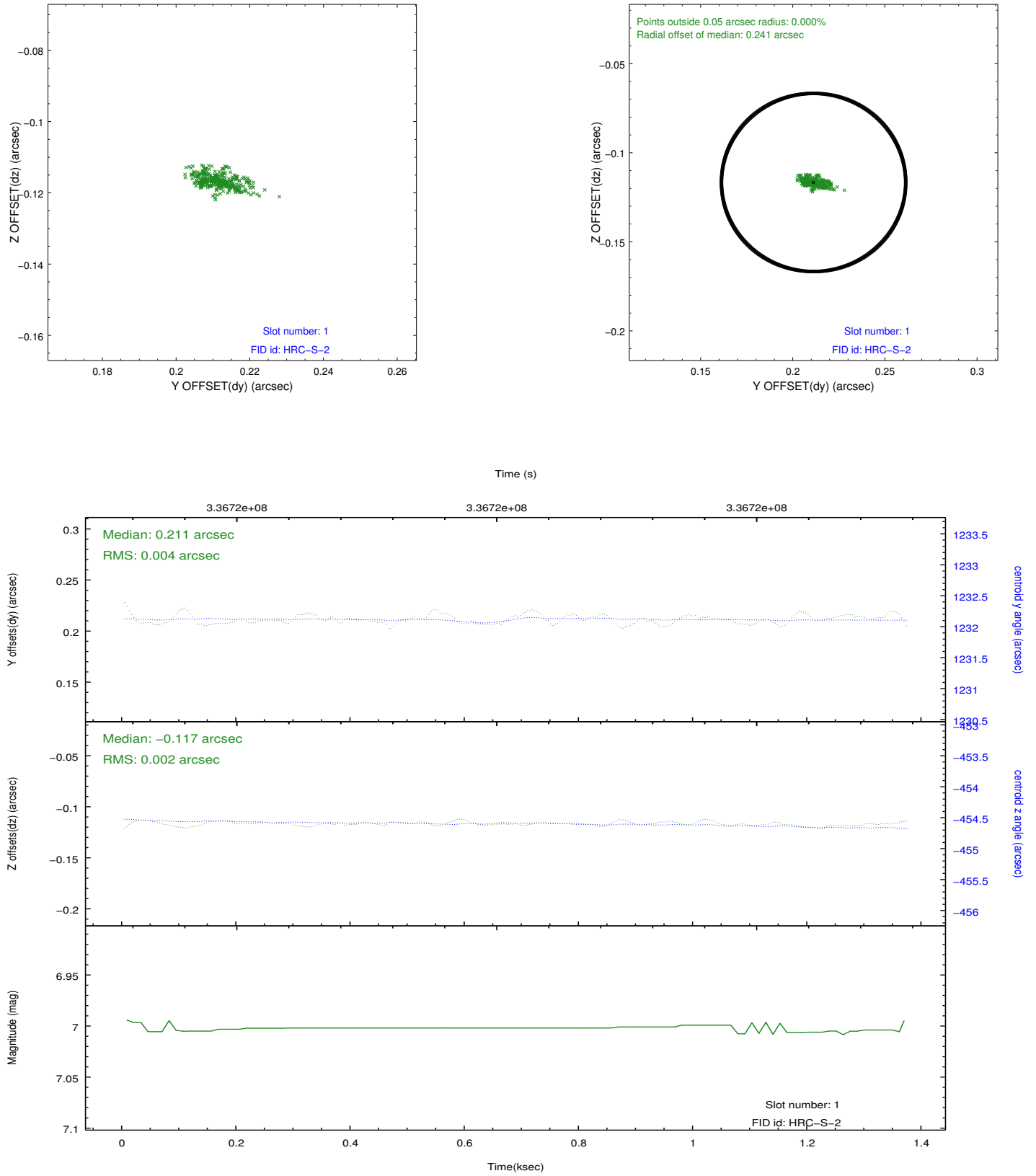


## 2.5 FID Slots

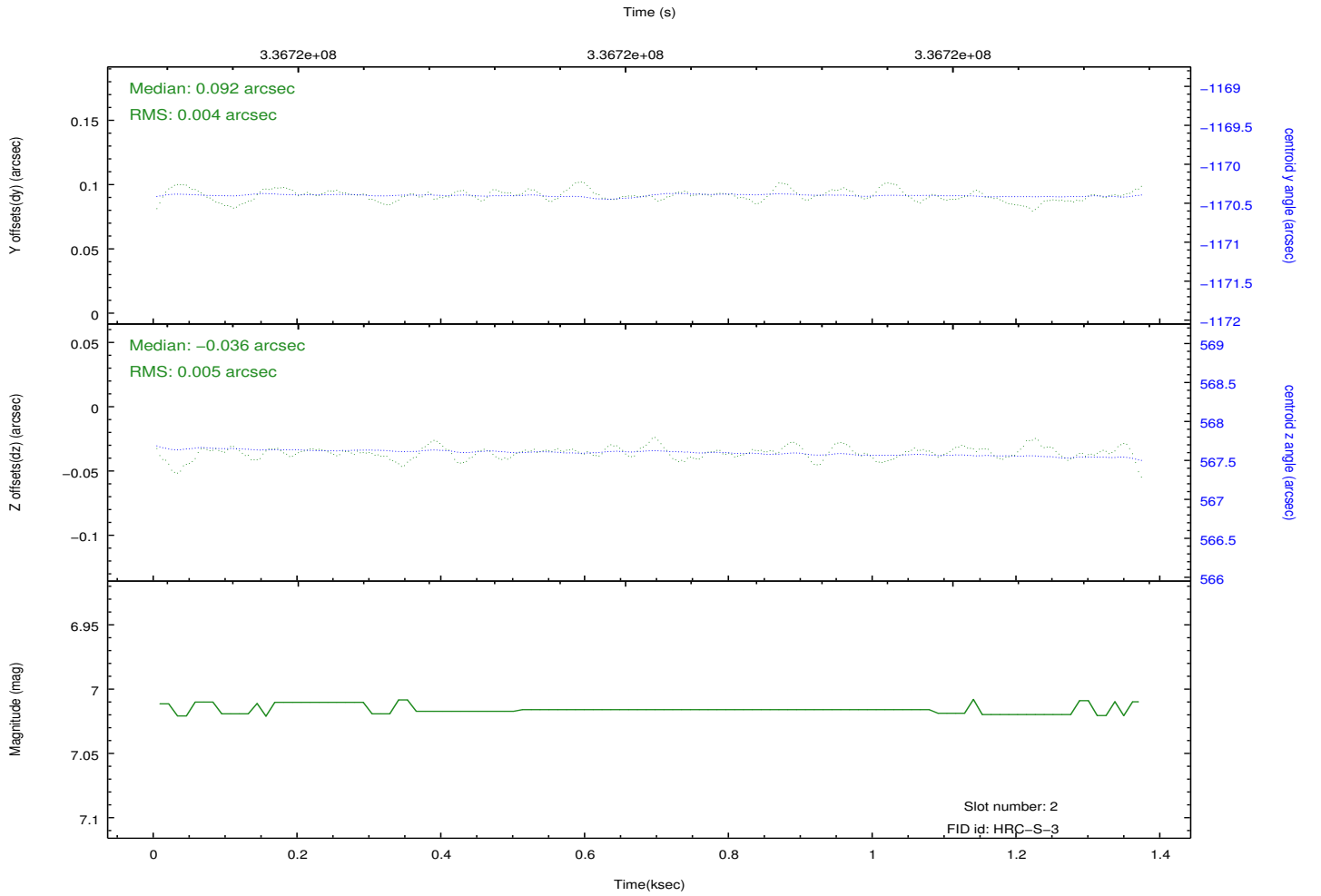
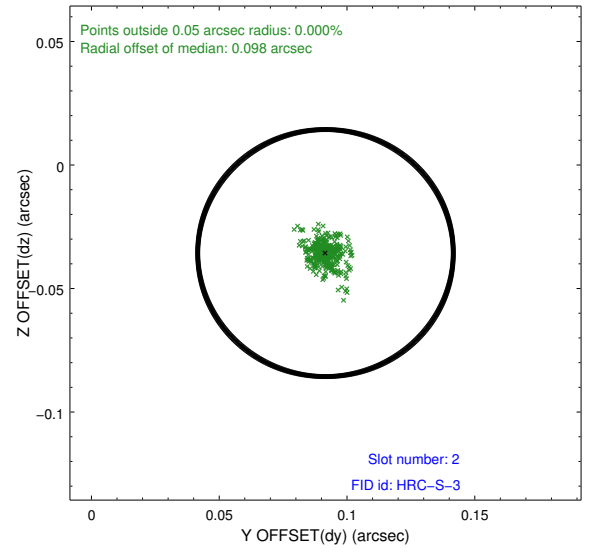
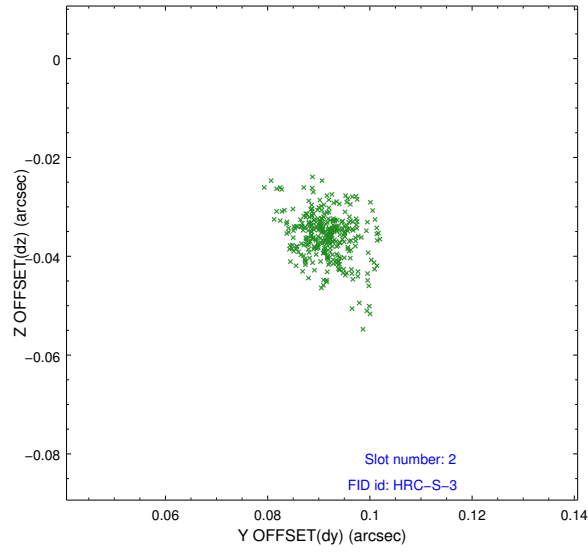
### 2.5.1 Slot 0



## 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)	2012.08.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.33993131

## A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.