

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4348 - L2 Version 5  
Chandra X-Ray Center

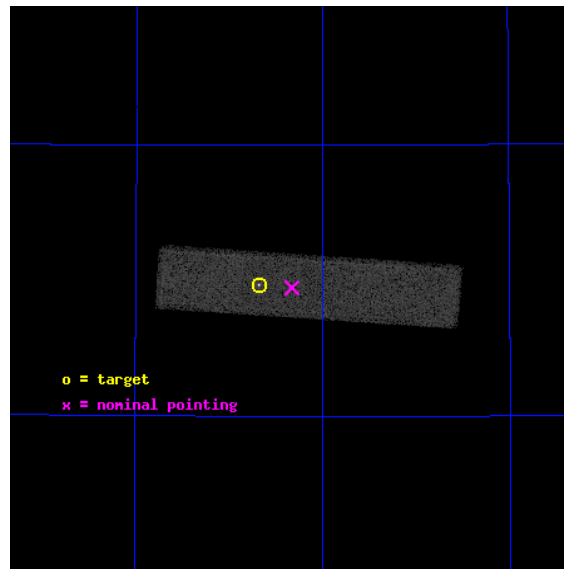
L2 Processing Date : Dec 17 2012

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# 1 Front

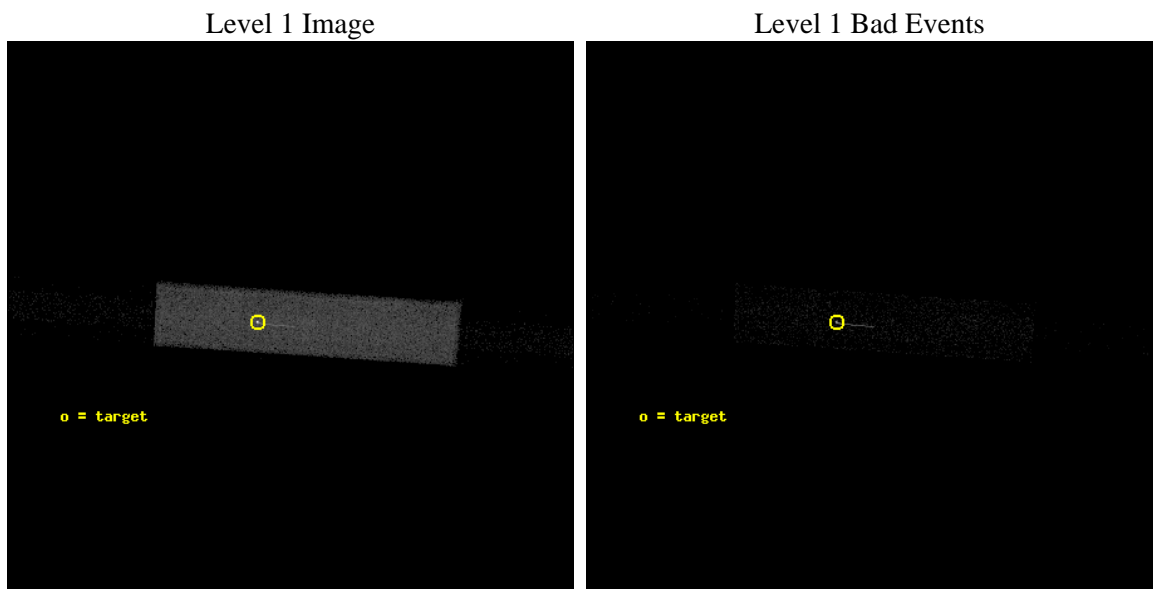
seq_num	290308	Sequence number
obs_id	4348	Observation id
title	AO4A CALIBRATION OBSERVATIONS TO MONITOR SPATIAL VARIATIONS IN THE HRC-S GAIN	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ARLAC	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.08183667986	Nominal RA [deg]
dec_nom	45.737161248069	Nominal Dec [deg]
roll_nom	3.7410599606997	Nominal Roll [deg]
revision	5	Processing version of data
ontime	1143.131298095	[s]
livetime	1136.5760496843	Ontime multiplied by DTCOR
l2events	46570	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	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	1143.131298095	[s]
caldsver	4.5.5	&#160	l1events	76638	Number of level 1 events
date	2012-12-17T19:08:25	Date and time of file creation			
revision	5	Processing version of data			

### 2.1.3 Events

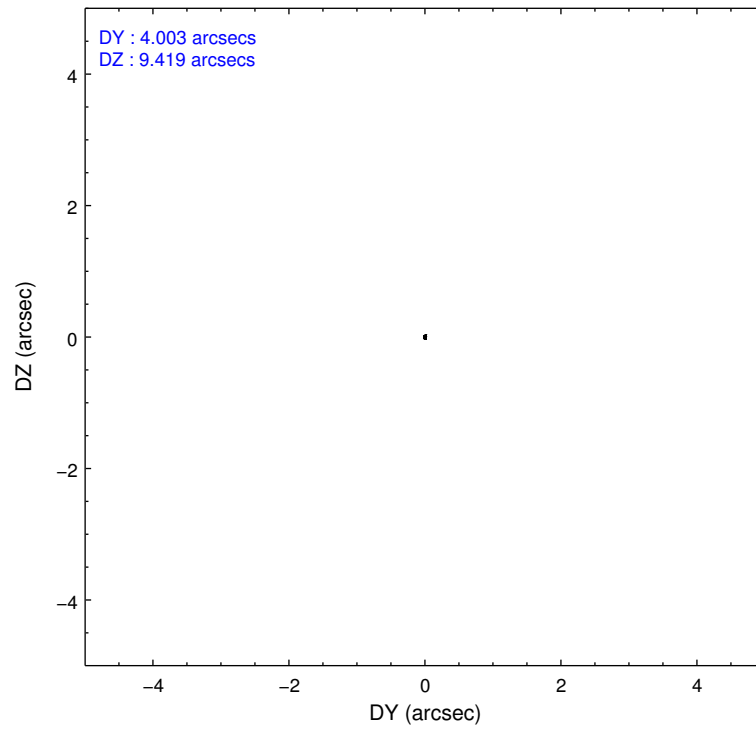
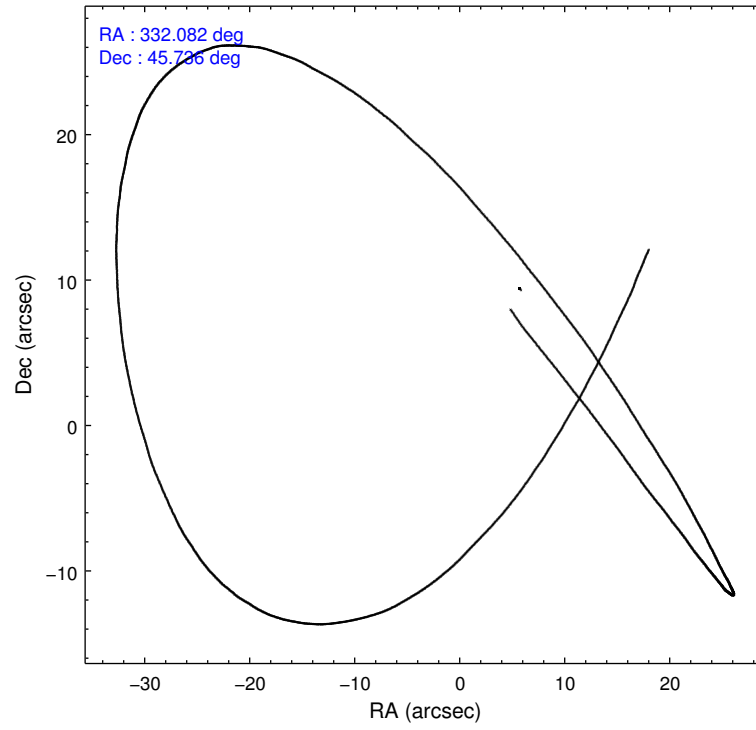
Level 1 Events

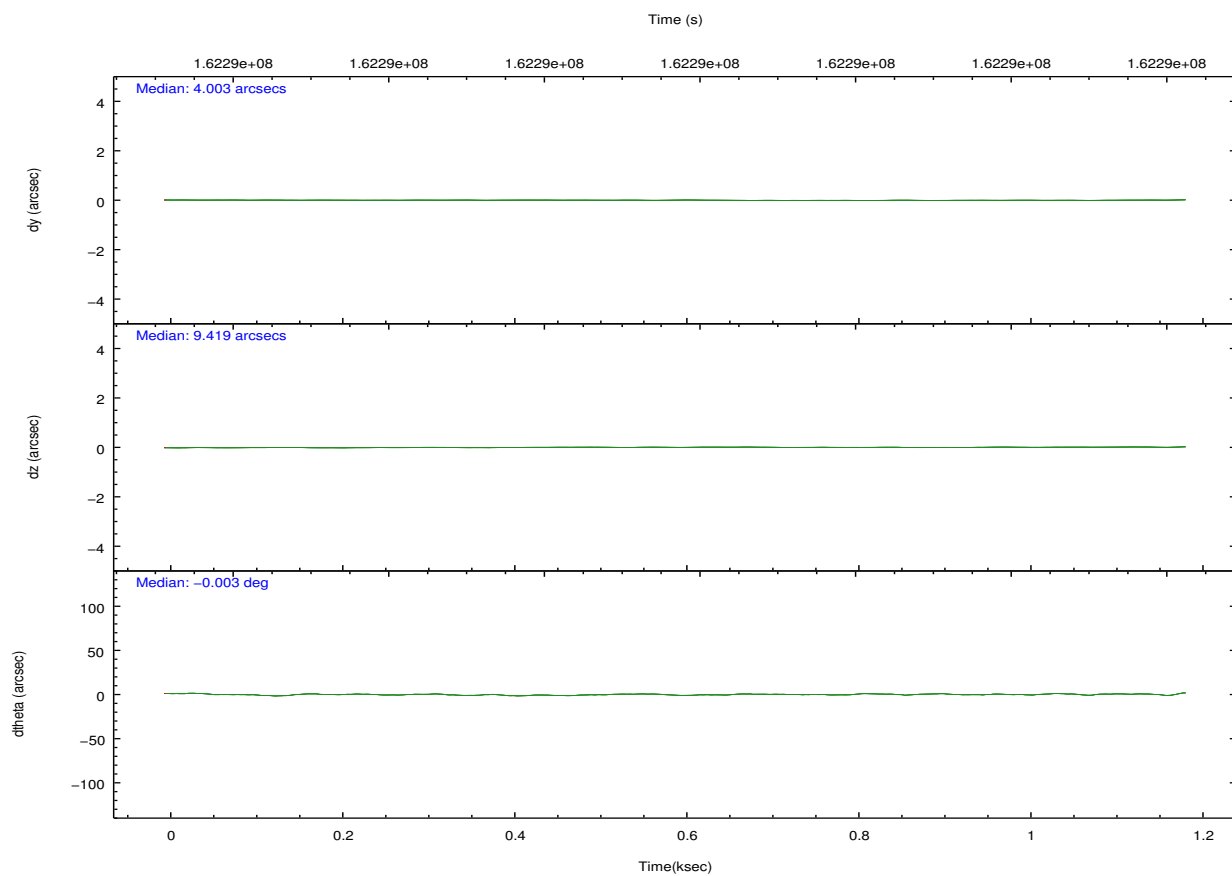
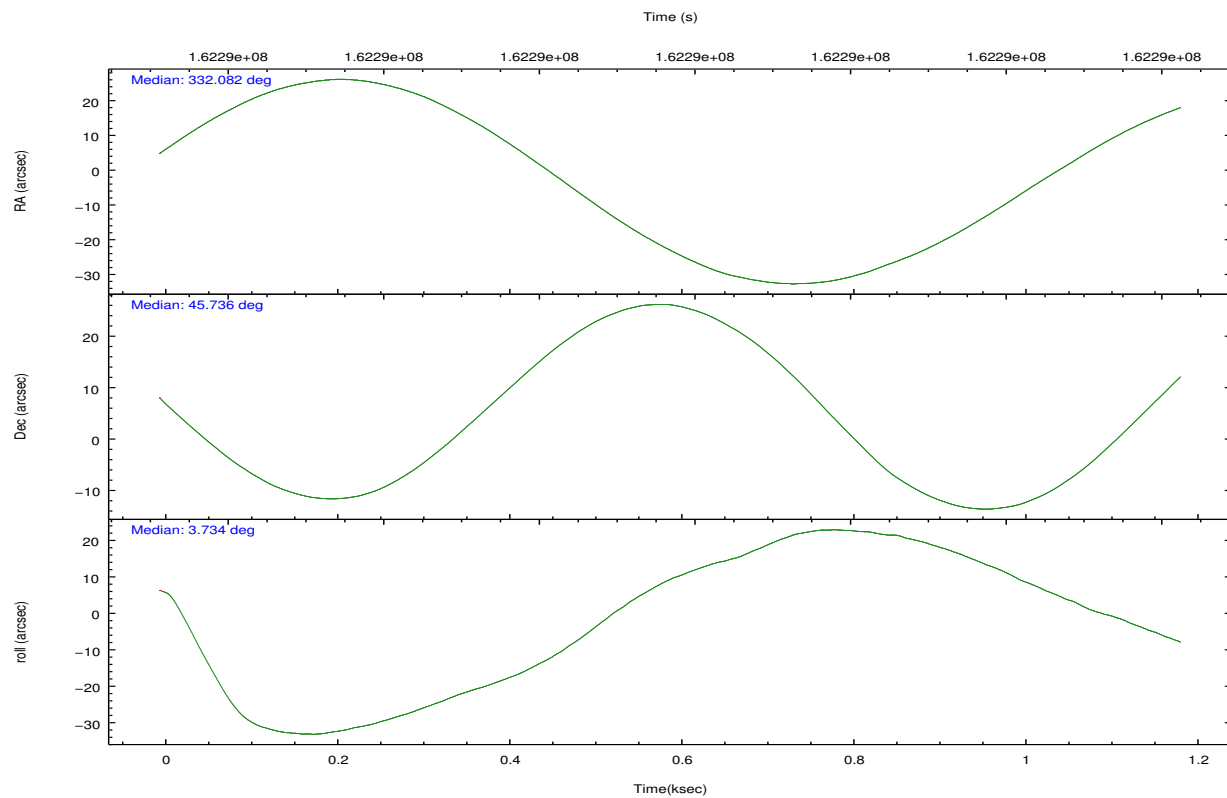
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	1143	74360	1135
rejected events	1143	18171	1135
rejected %	100%	24%	100%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
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			
[deg] Pointing RA	332.048468	332.0818366798557			
[deg] Pointing Dec	45.721191	45.73716124806869			
[deg] Pointing Roll	3.697420	3.741059960699668			
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	162285955.184000	162285579.71922			
Observation start date	2003-02-22T07:24:51	2003-02-22T07:19:39			
[s] Observation end time (MET)	162286955.184000	162287089.54428			
Observation end date	2003-02-22T07:41:31	2003-02-22T07:44:49			

## 2.3 Aspect





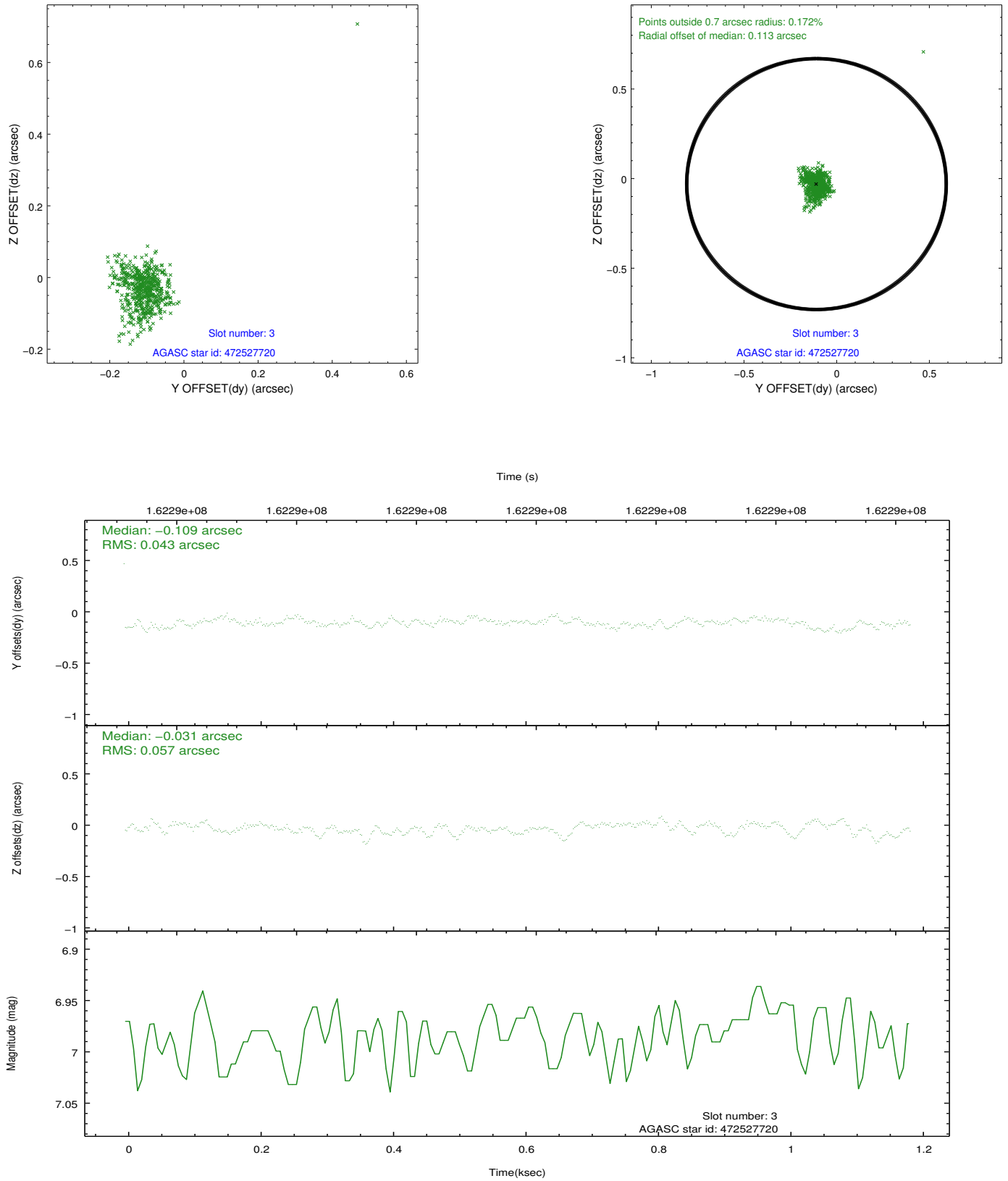
Slot Statistics

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	290	0.154	-0.182	0.007	0.013	0.000000	0.000000	-1158.05	-458.08
1	FID	HRC-S-2	7.00	290	0.082	-0.091	0.005	0.008	0.000000	0.000000	1237.57	-452.24
2	FID	HRC-S-3	7.02	290	0.153	-0.029	0.006	0.013	0.000000	0.000000	-1156.49	570.04
3	GUIDE	472527720	6.98	580	-0.109	-0.031	0.064	0.104	331.460205	45.112509	-1633.11	-2081.00
4	GUIDE	472655704	9.48	579	0.058	0.003	0.099	0.174	332.167195	45.285228	195.56	-1584.81
5	GUIDE	472659832	9.47	580	0.022	0.071	0.095	0.162	332.780399	46.098139	1910.76	1246.50
6	GUIDE	472533912	9.18	580	0.025	-0.037	0.119	0.194	331.791136	46.368695	-485.38	2374.62
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

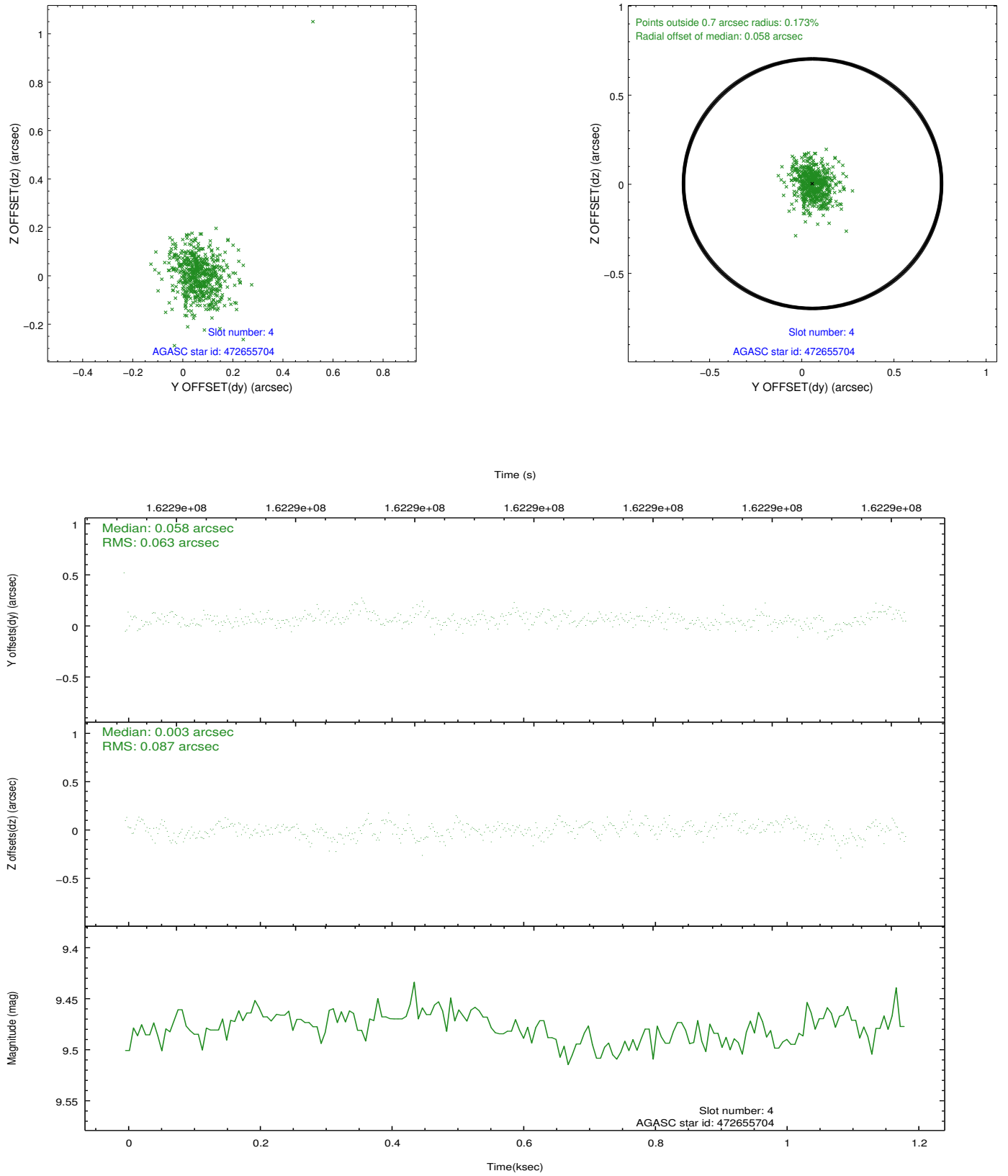


## 2.4 Star Slots

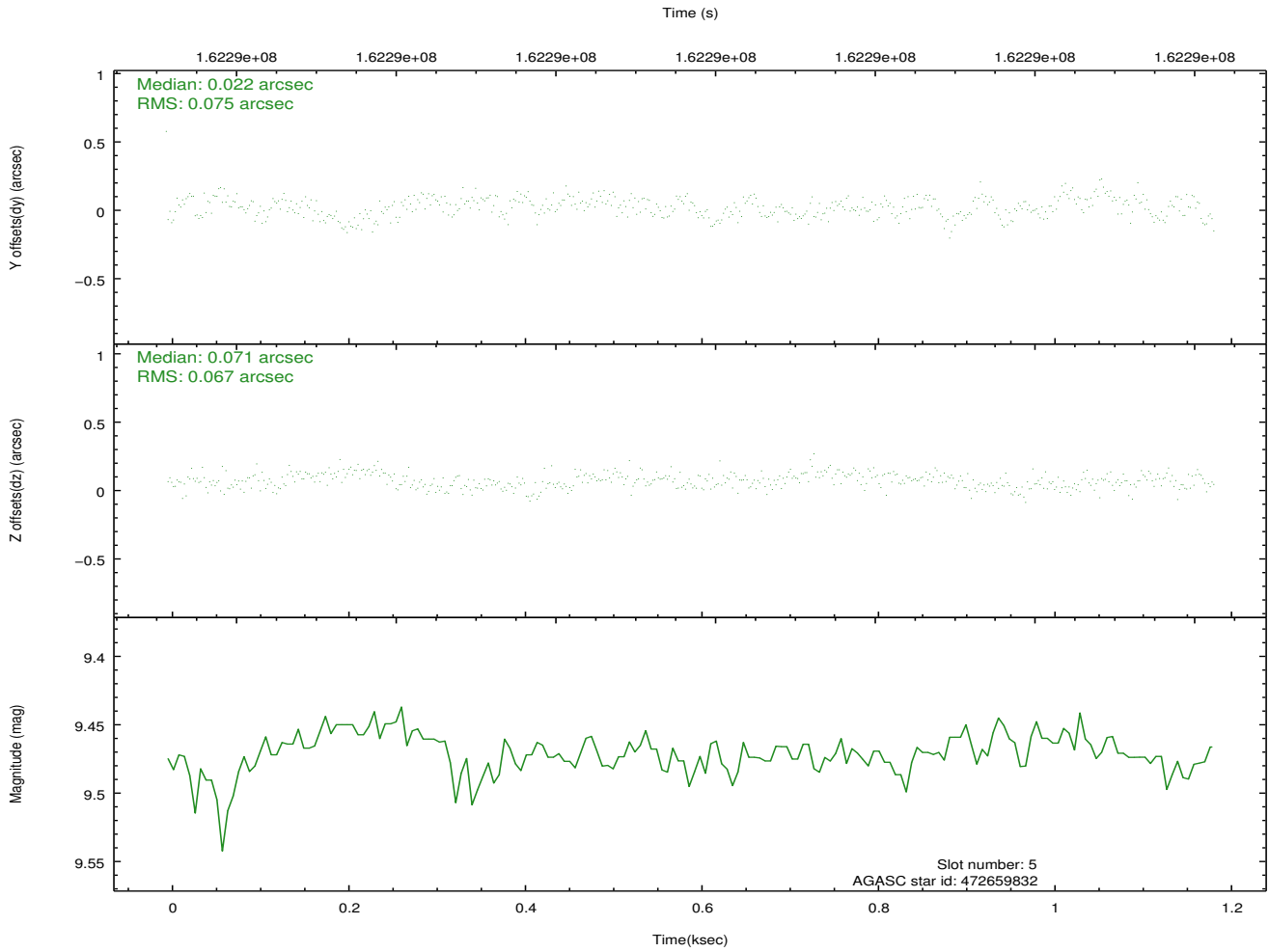
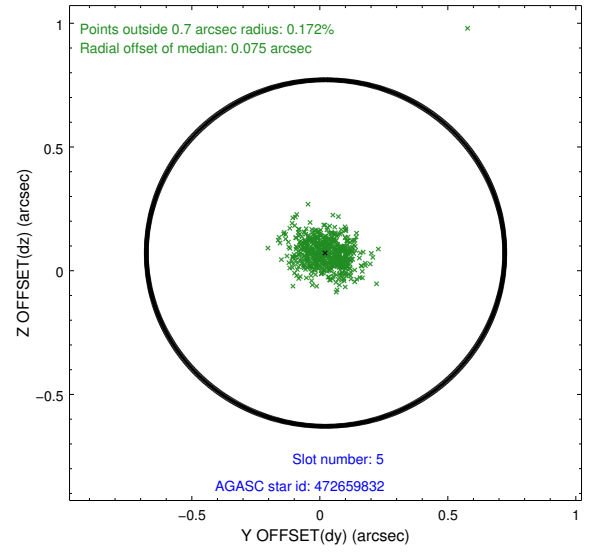
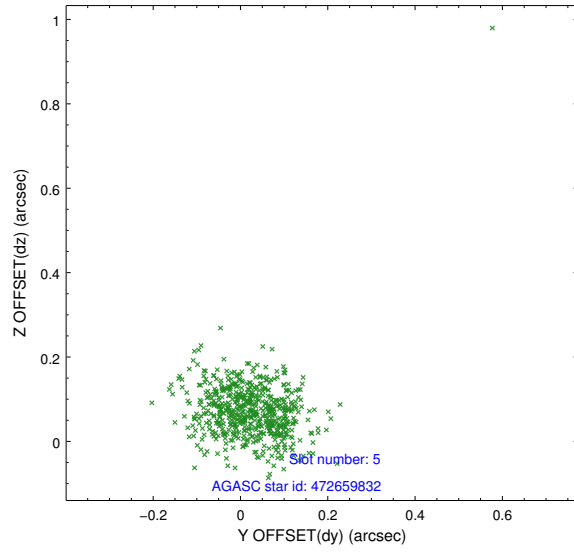
### 2.4.1 Slot 3



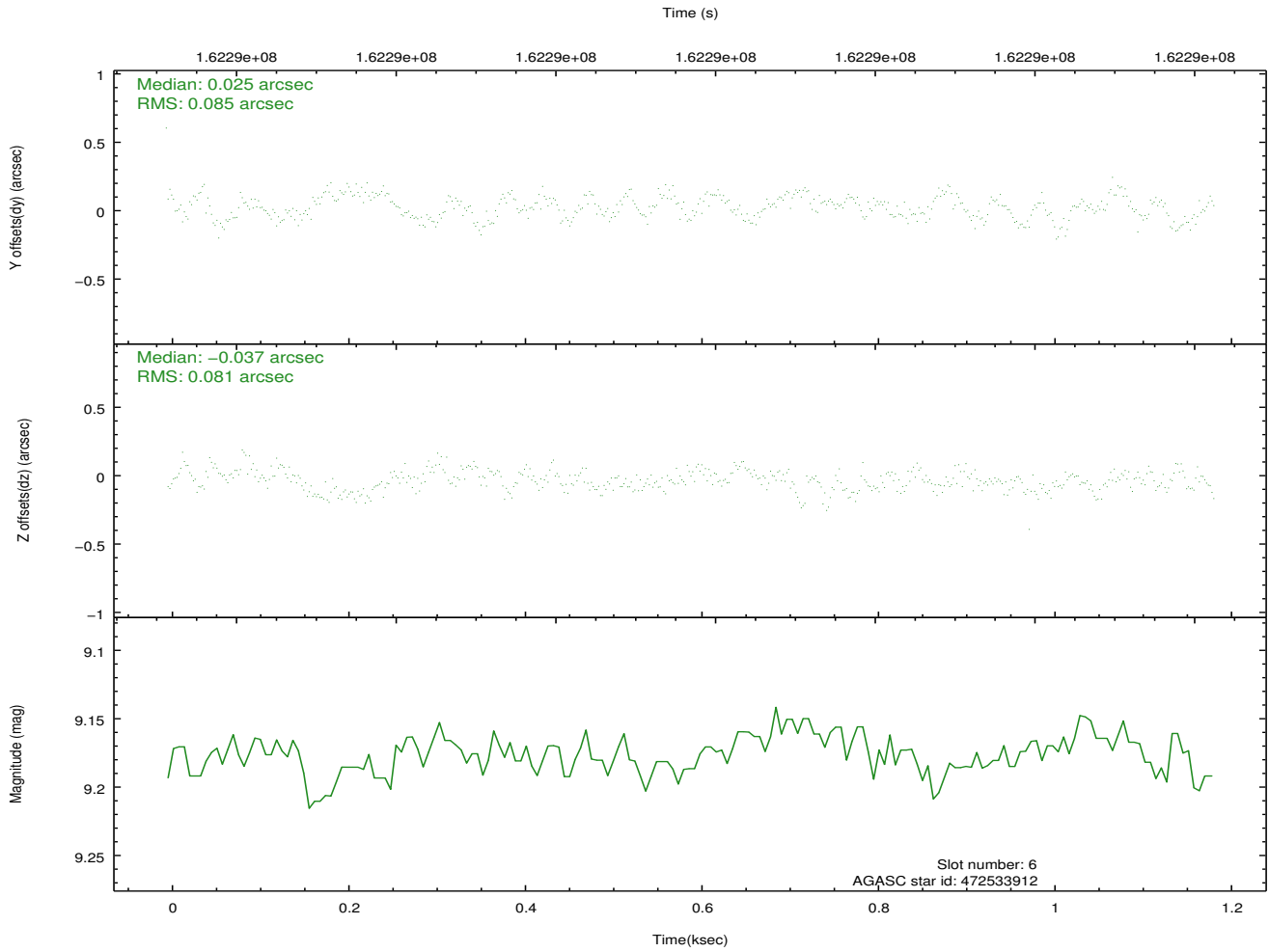
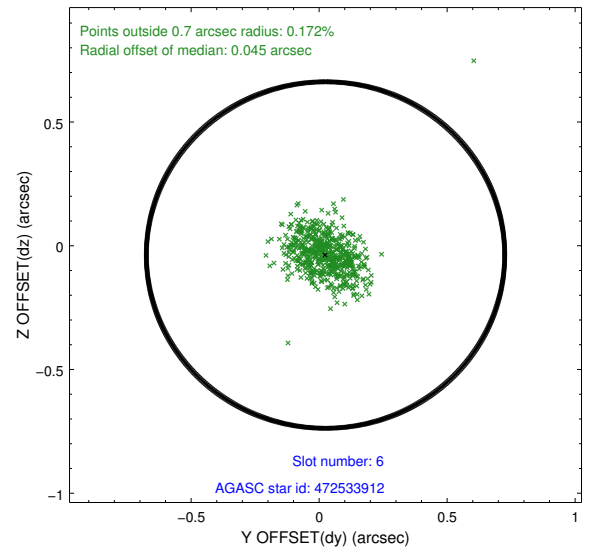
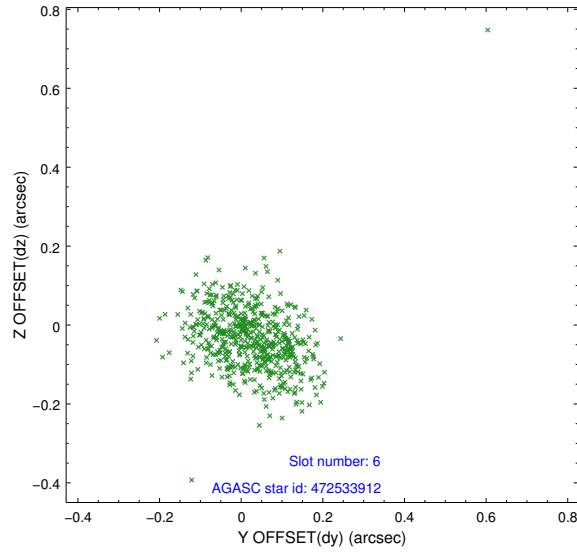
## 2.4.2 Slot 4



### 2.4.3 Slot 5

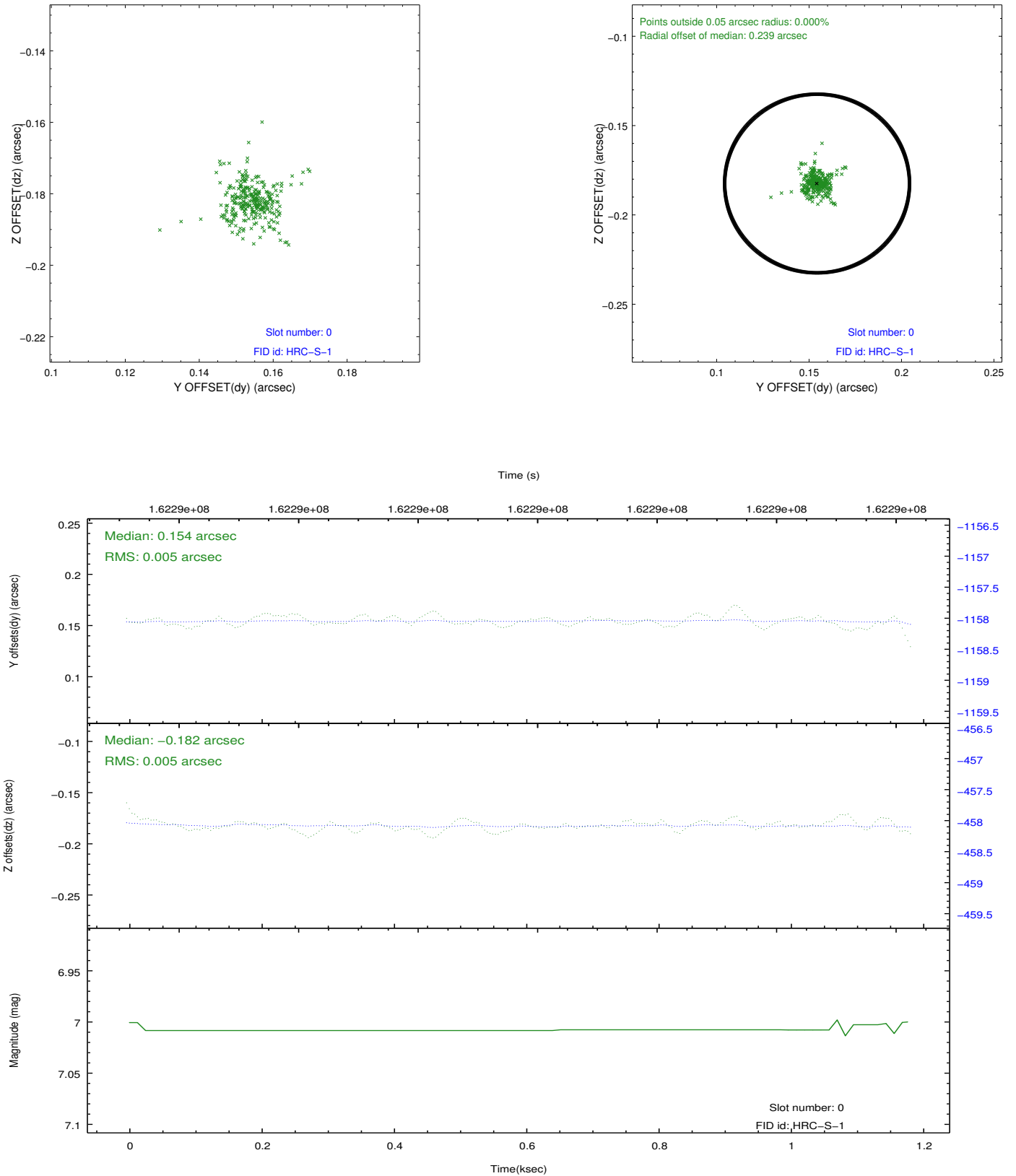


## 2.4.4 Slot 6

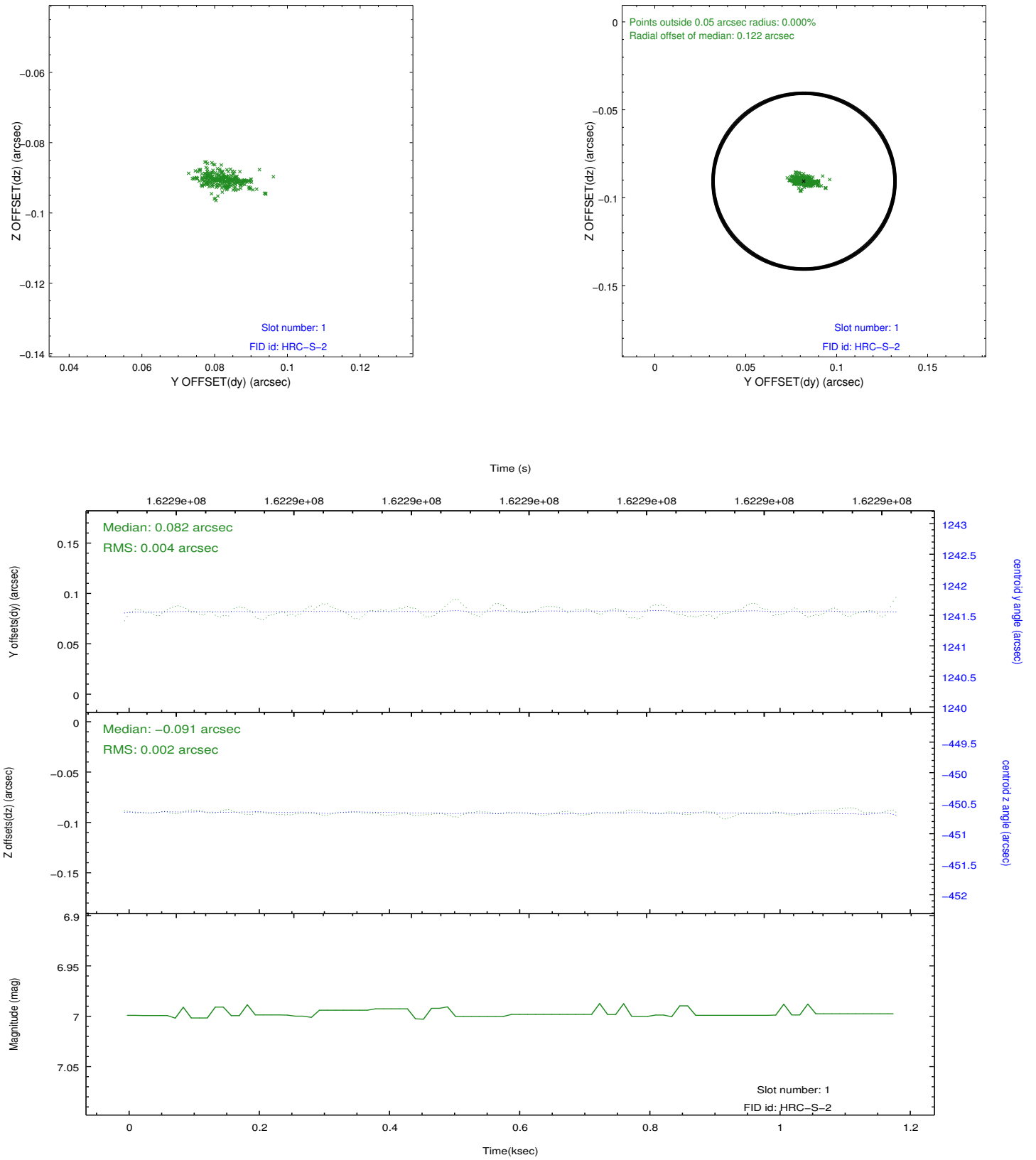


## 2.5 FID Slots

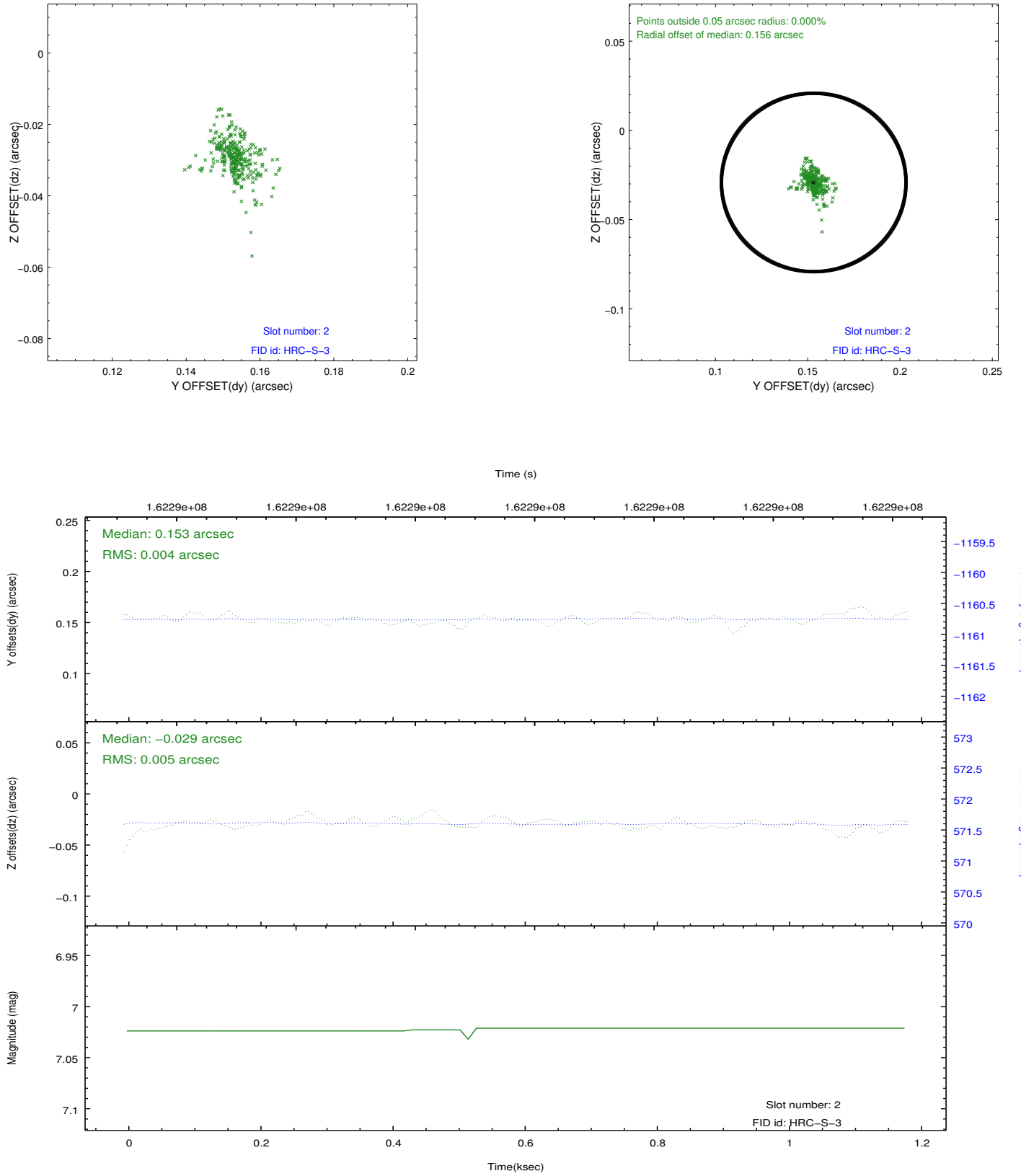
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.01.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.143

### A.2 Comments

The guide star in slot 7 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.