

# V&V Reference Report

## L2 ASCDS Version : 10.4.2.1

Observation 17333 - L2 Version 1  
Chandra X-Ray Center

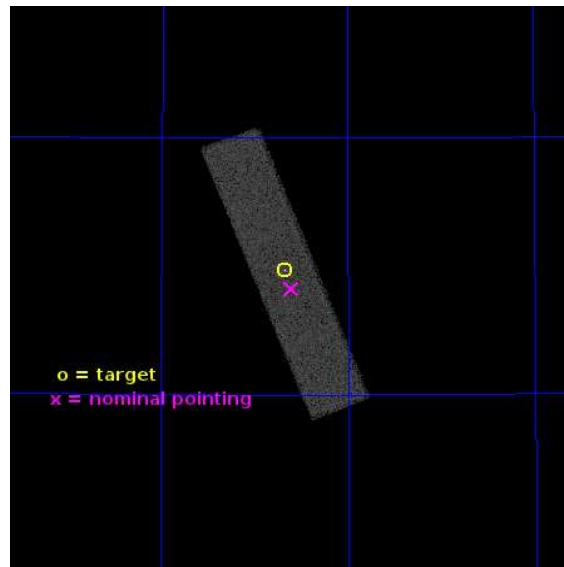
L2 Processing Date : Oct 20 2015

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# 1 Front

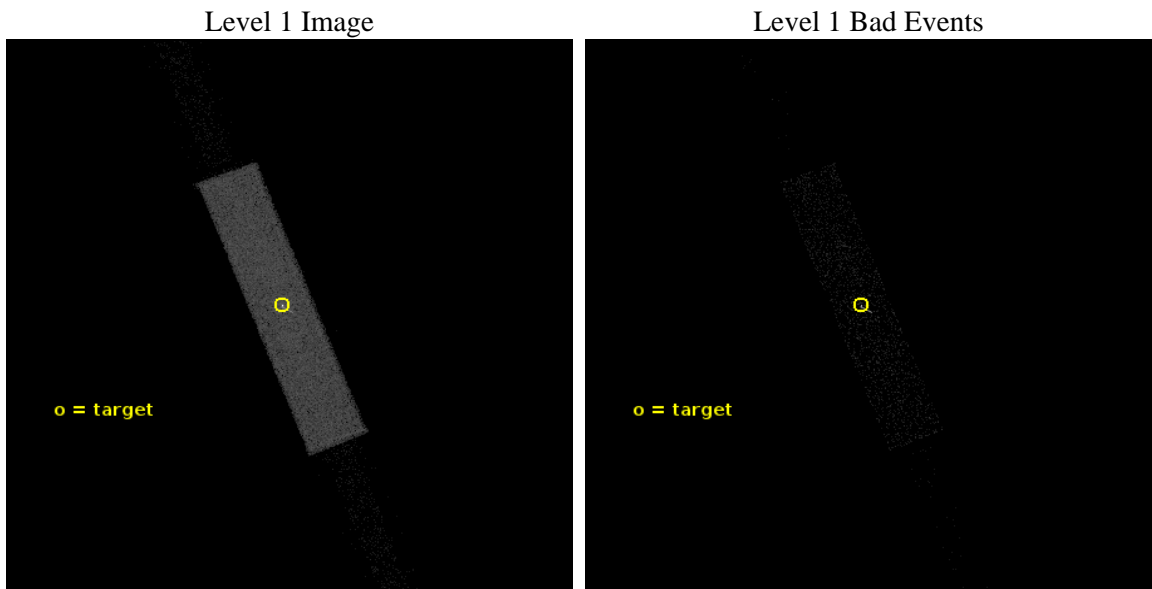
seq_num	291206	Sequence number
obs_id	17333	Observation id
title	AO-16 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.15138613087	Nominal RA [deg]
dec_nom	45.706428497022	Nominal Dec [deg]
roll_nom	248.38913259329	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1149.2813152075	[s]
livetime	1141.8803475433	Ontime multiplied by DTCOR
l2events	56087	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	1149.2813152075	[s]
caldbver	4.6.10a	&#160	l1events	86700	Number of level 1 events
date	2015-10-20T22:41:54	Date and time of file creation			
revision	1	Processing version of data			

### 2.1.3 Events

Level 1 Events

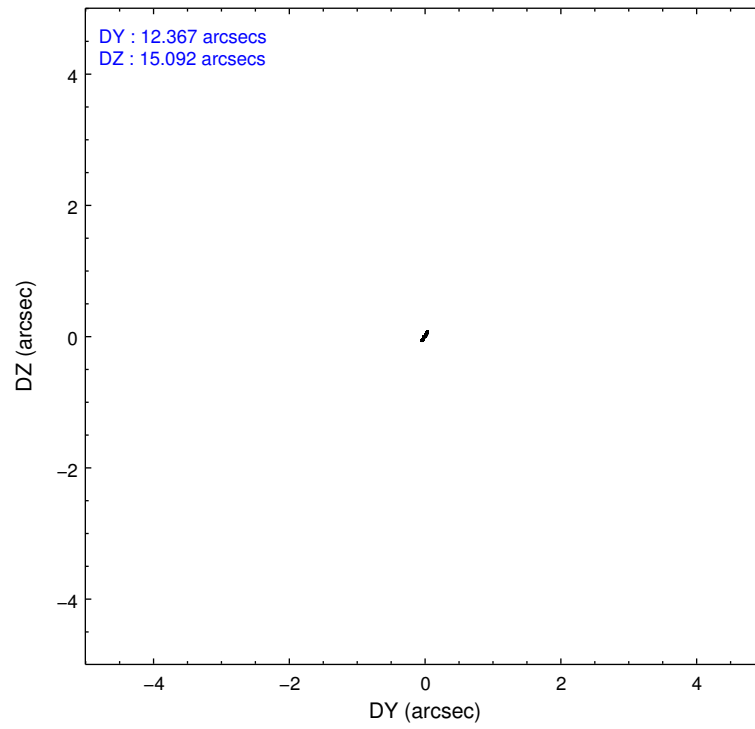
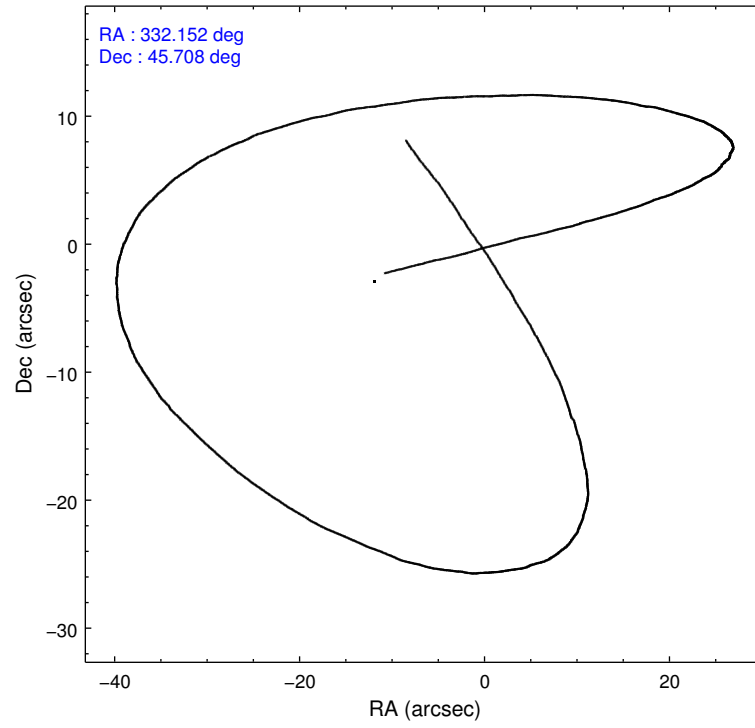
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	780	85105	815
rejected events	780	19761	815
rejected %	100%	23%	100%

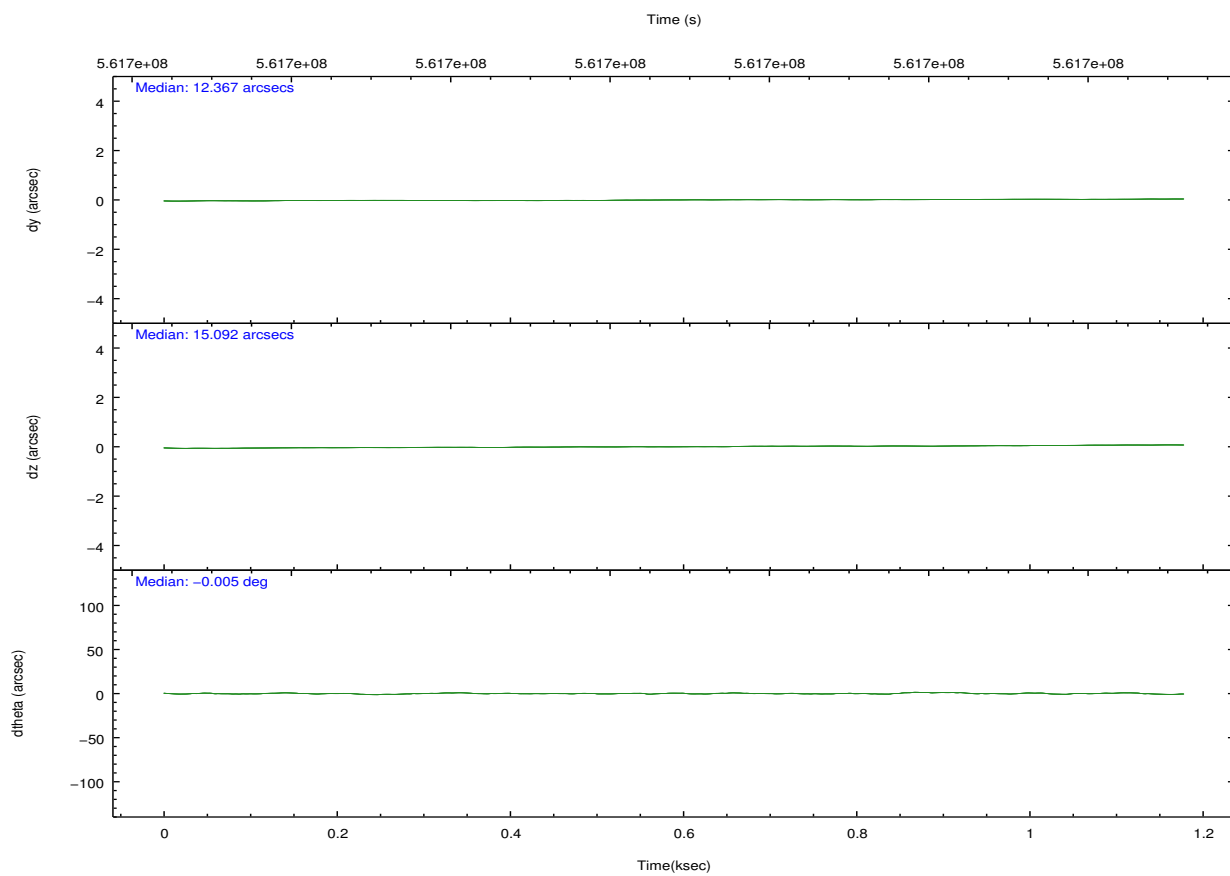
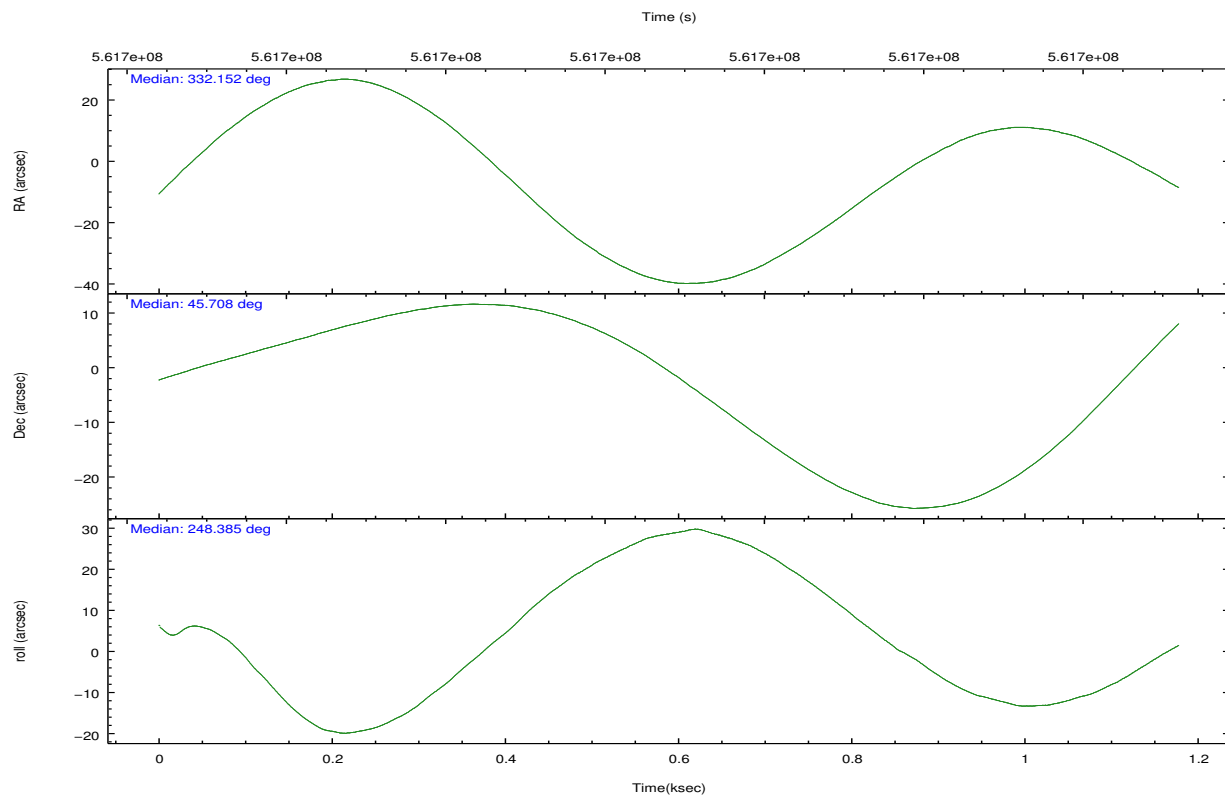
## 2.2 Compared Parameters

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	332.141721	332.1513861308715
[deg] Pointing Dec	45.735080	45.70642849702151
[deg] Pointing Roll	248.328687	248.3891325932859
[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)	561701683.184000	561701307.65841
Observation start date	2015-10-20T04:13:35	2015-10-20T04:08:27
[s] Observation end time (MET)	561702683.184000	561702816.9709899
Observation end date	2015-10-20T04:30:15	2015-10-20T04:33:36

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

## 2.3 Aspect



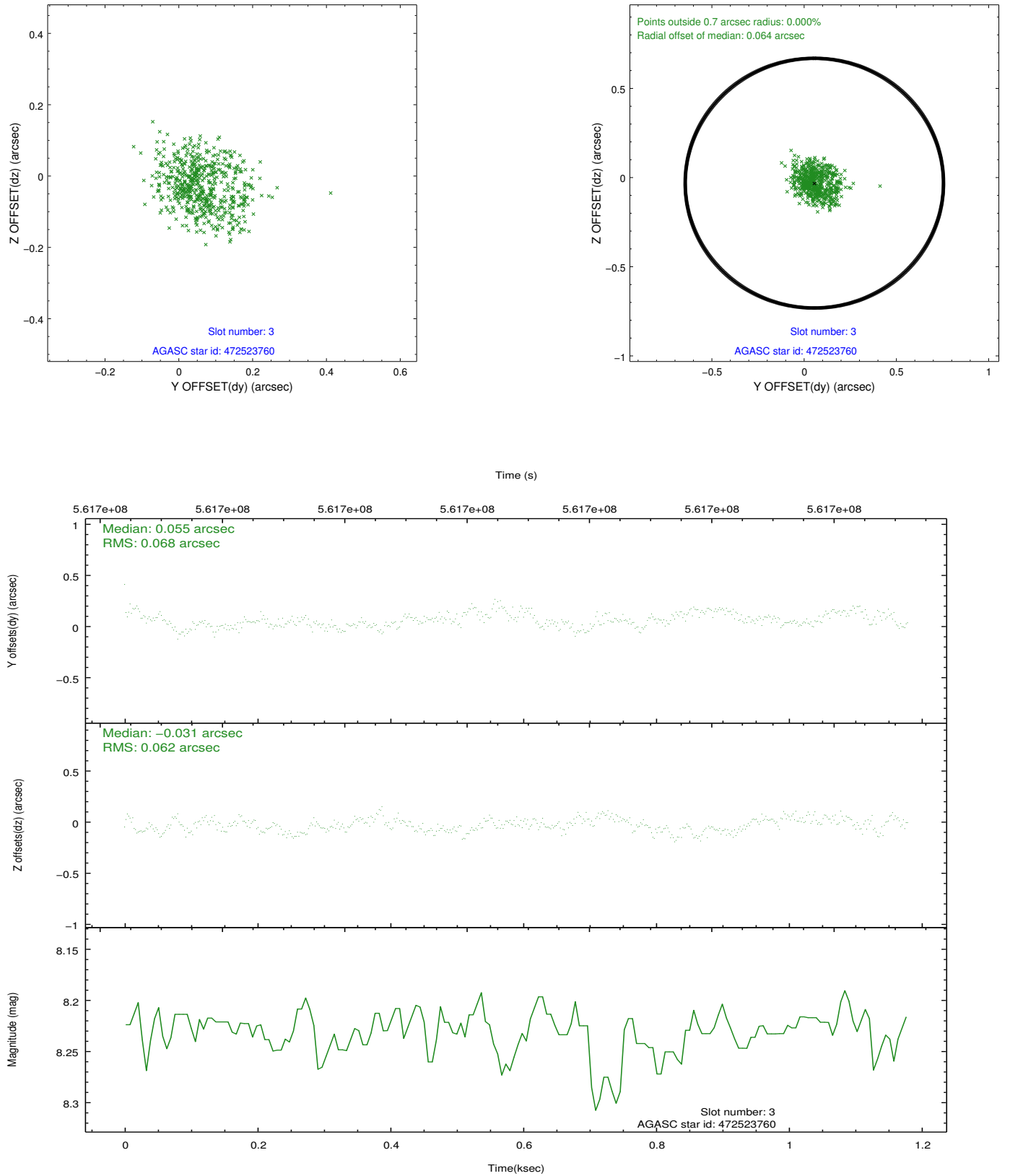


### Slot Statistics

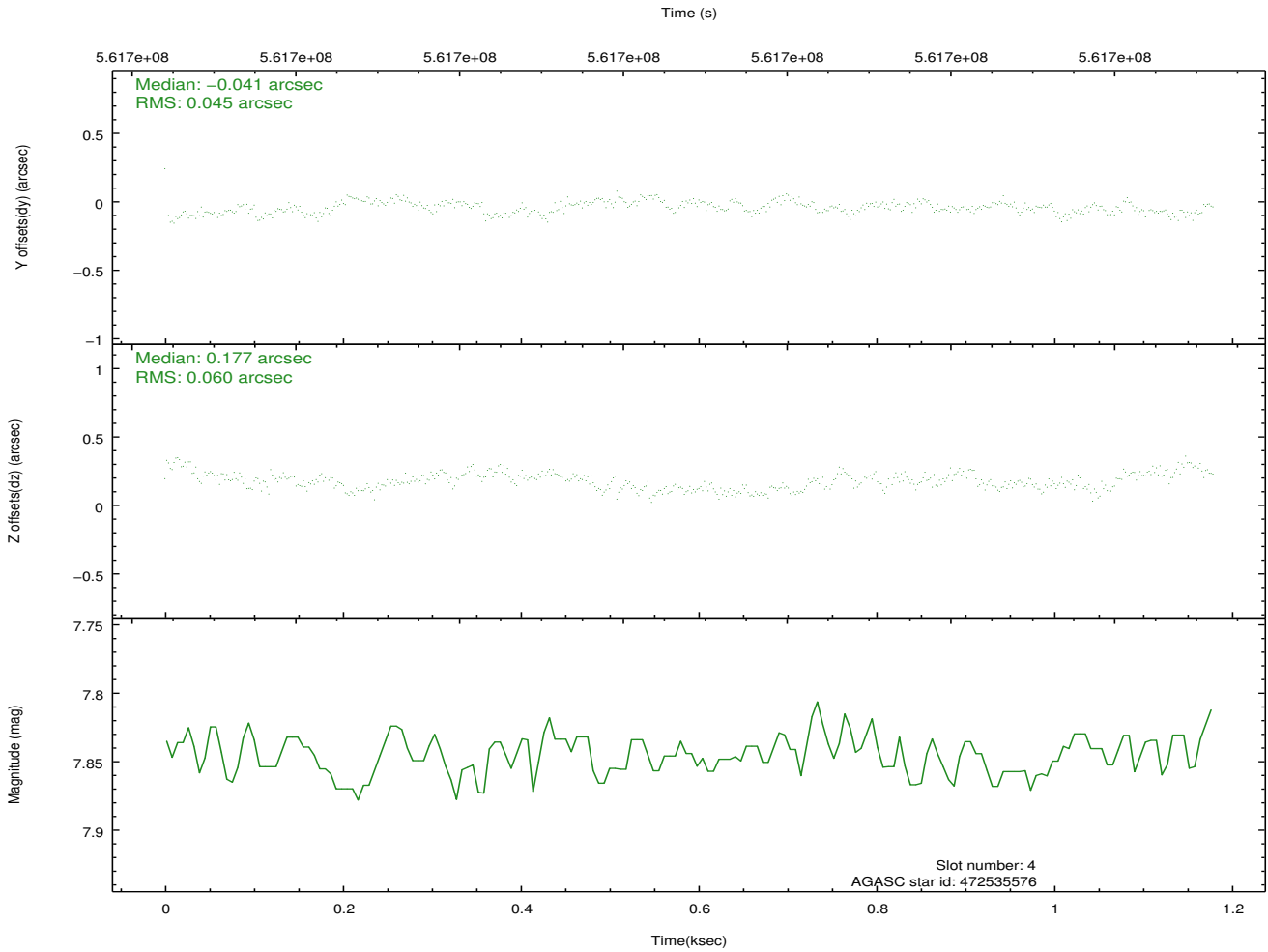
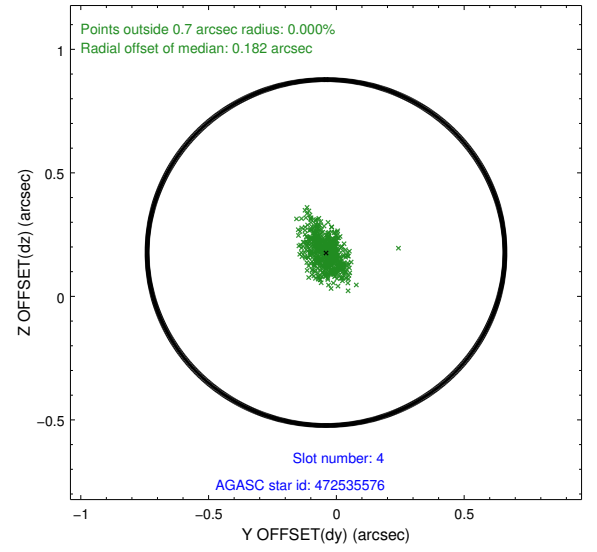
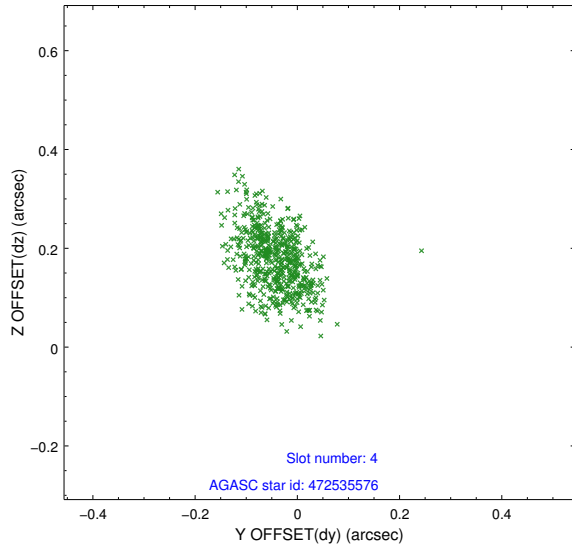
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-1	7.01	288	0.002	-0.211	0.007	0.011	0.000000	0.000000	-1166.75	-464.01
1	FID		HRC-S-2	7.00	288	0.366	-0.146	0.005	0.008	0.000000	0.000000	1229.22	-458.15
2	FID		HRC-S-3	7.01	288	0.022	0.055	0.007	0.011	0.000000	0.000000	-1165.20	564.18
3	GUIDE	used	472523760	8.23	576	0.055	-0.031	0.103	0.151	331.645363	45.403260	1570.90	-730.29
4	GUIDE	used	472535576	7.84	576	-0.041	0.177	0.081	0.132	331.438373	46.291802	-1219.99	-2374.12
5	GUIDE	used	472655152	9.40	576	-0.017	-0.100	0.167	0.320	332.504239	45.862991	-766.70	665.65
6	GUIDE	used	472665256	8.99	576	-0.016	-0.236	0.098	0.155	332.808125	46.195041	-2159.09	926.02
7	GUIDE	used	472536328	8.10	575	0.021	0.189	0.075	0.117	331.496671	46.454831	-1826.04	-2448.39

## 2.4 Star Slots

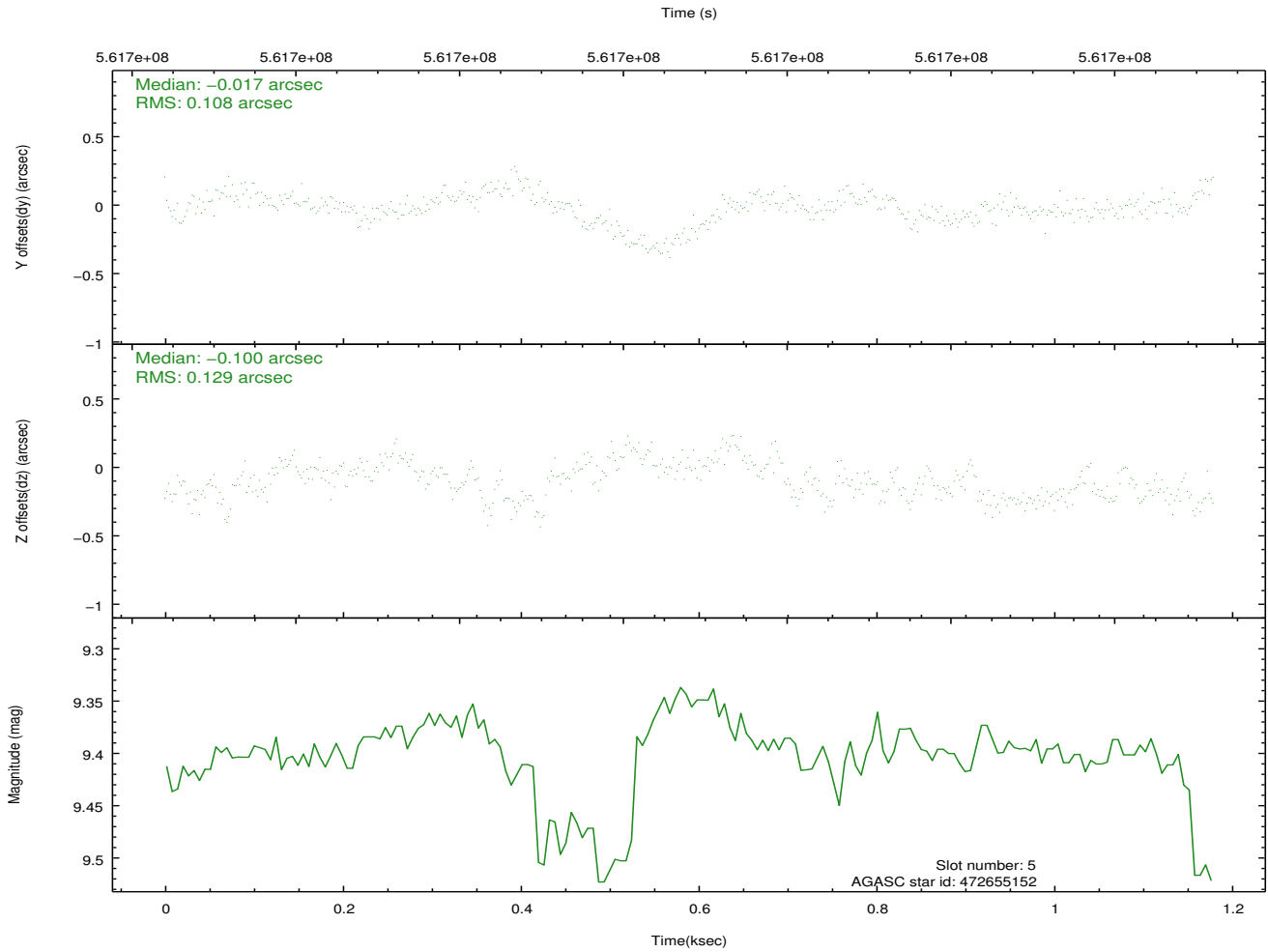
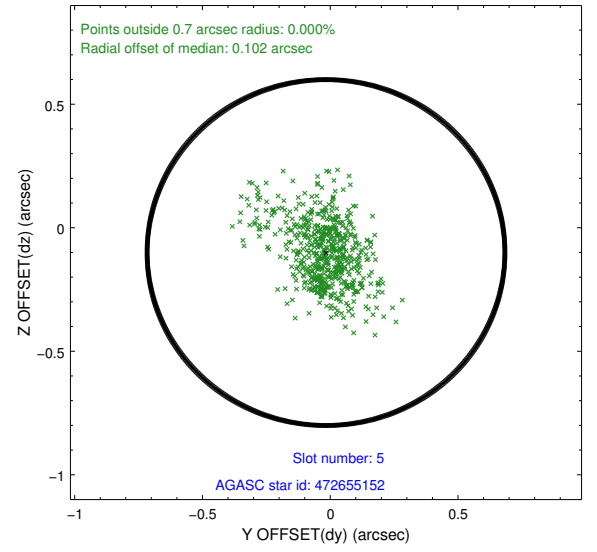
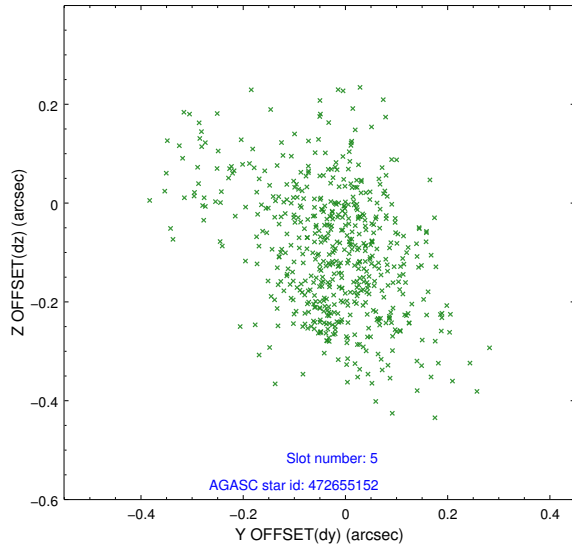
### 2.4.1 Slot 3



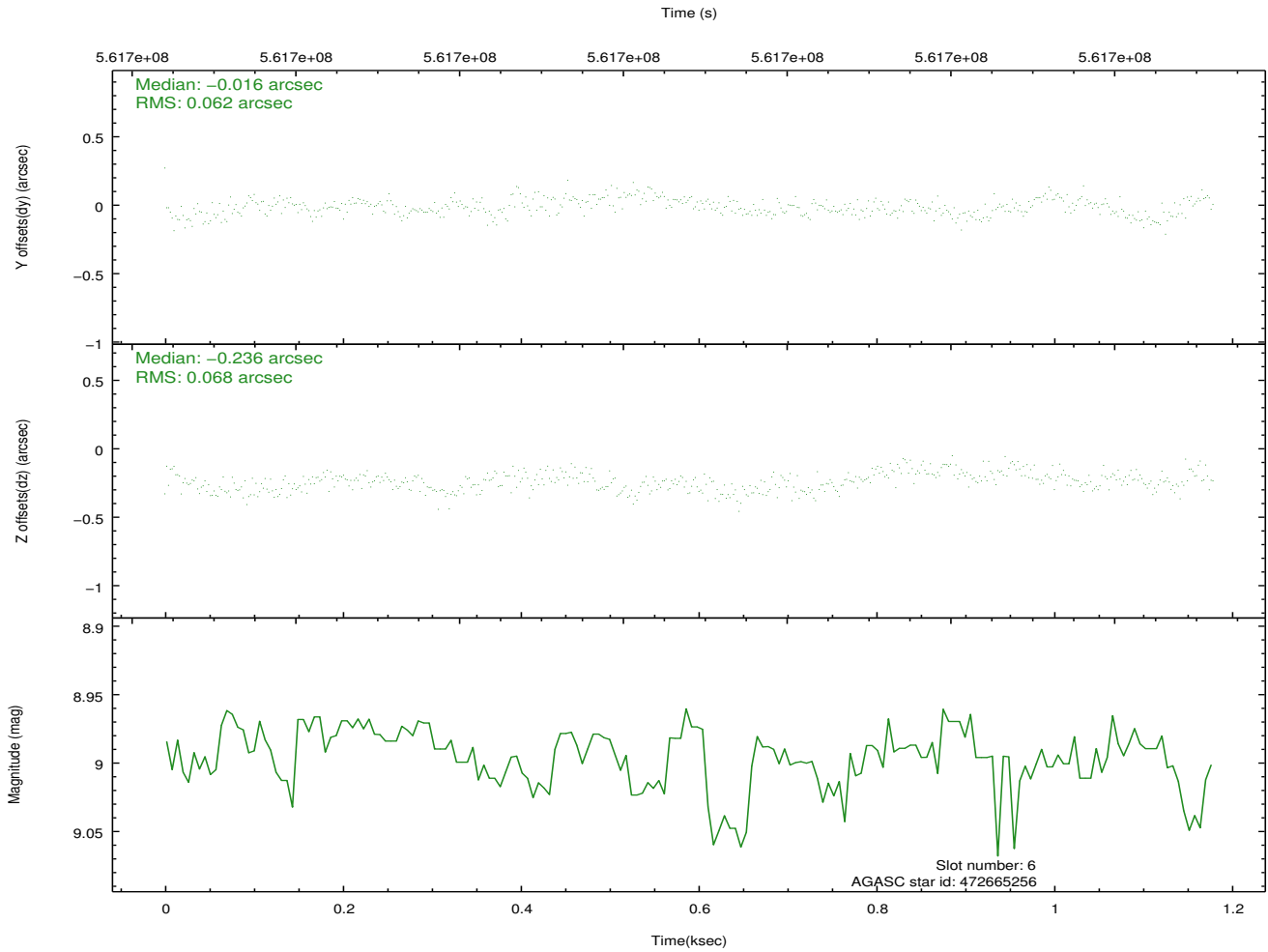
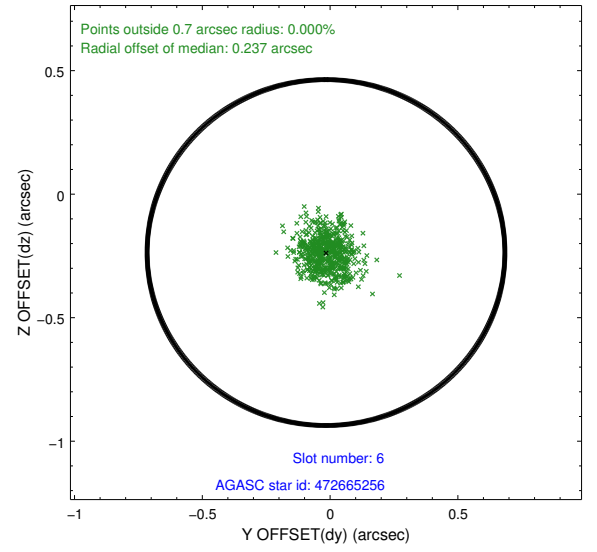
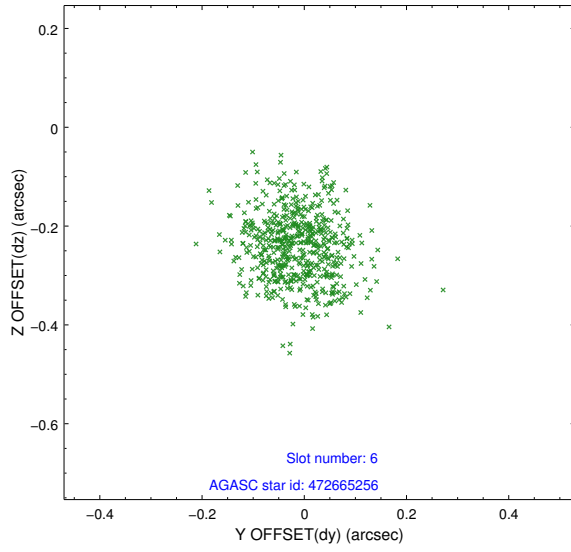
## 2.4.2 Slot 4



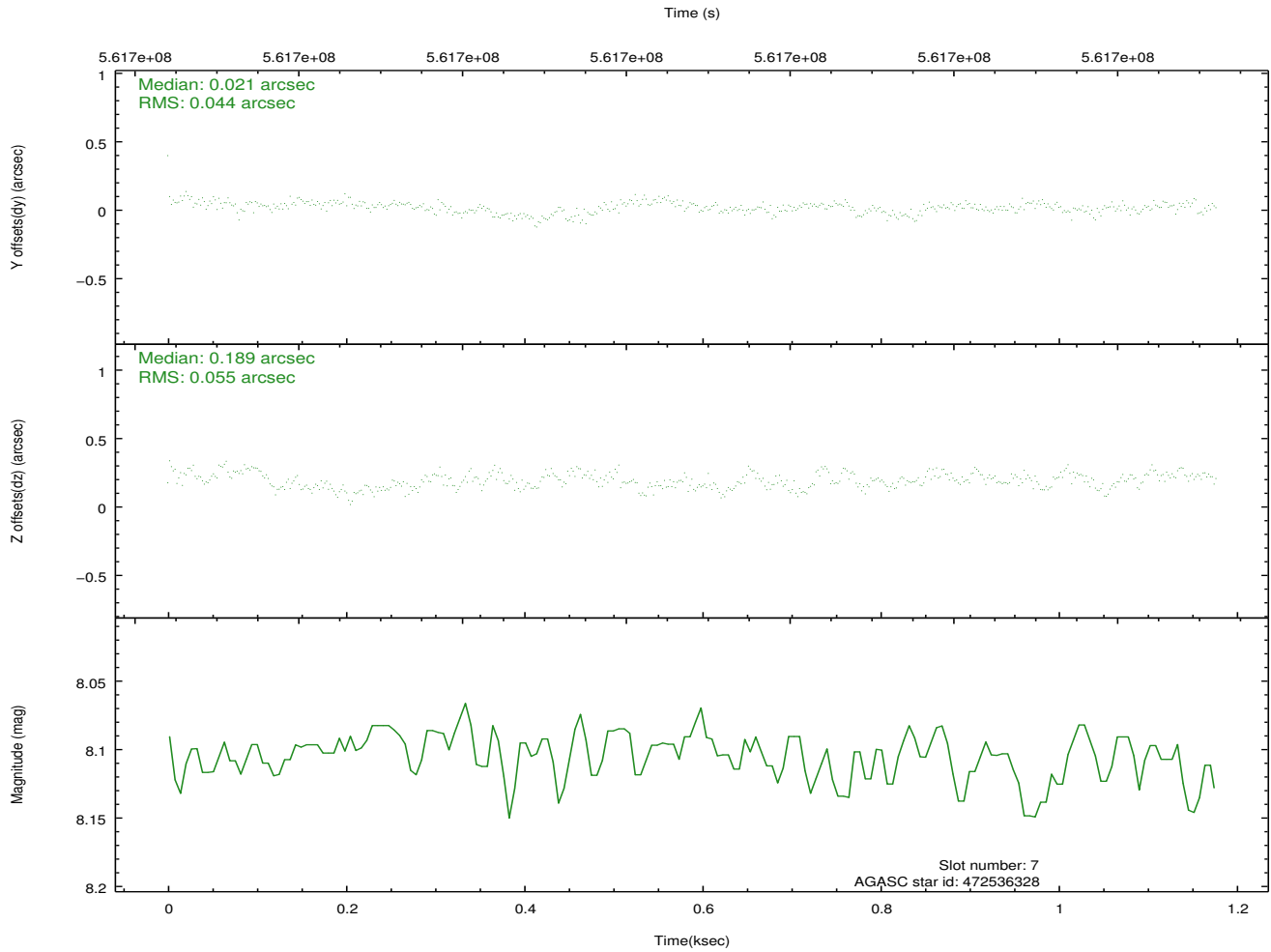
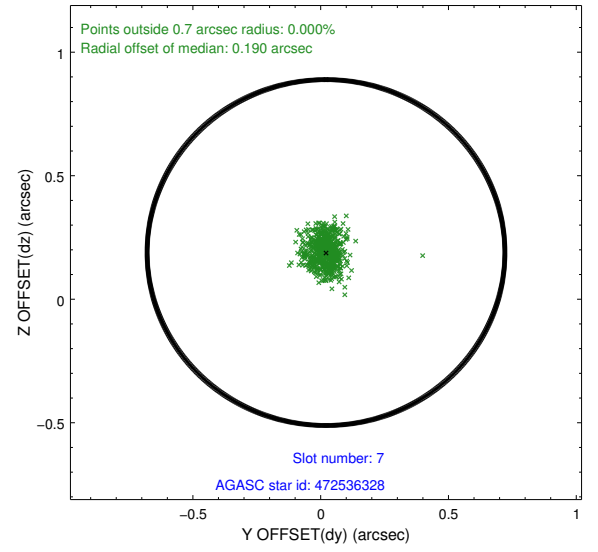
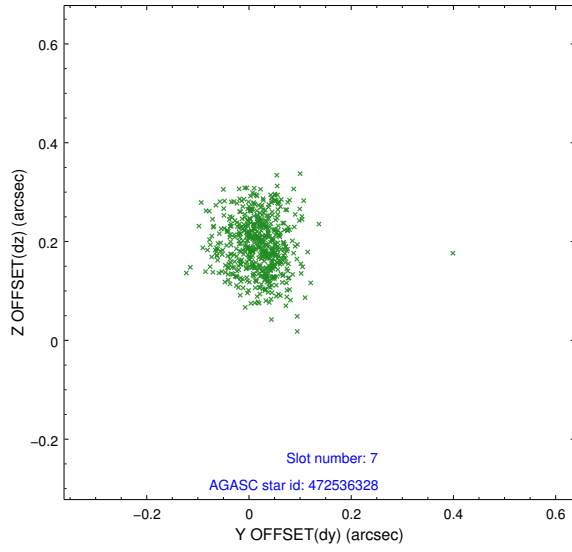
### 2.4.3 Slot 5



## 2.4.4 Slot 6

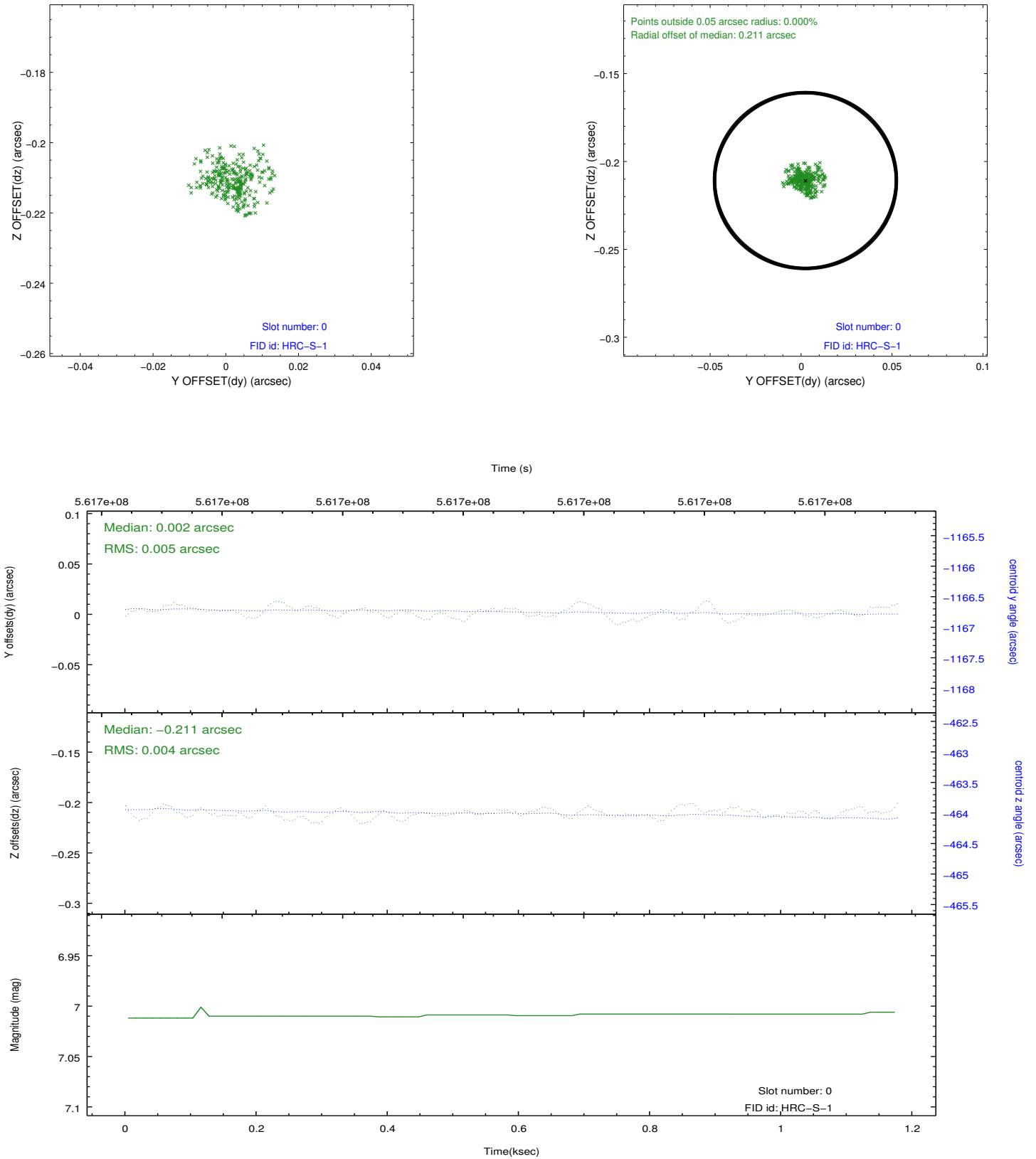


## 2.4.5 Slot 7

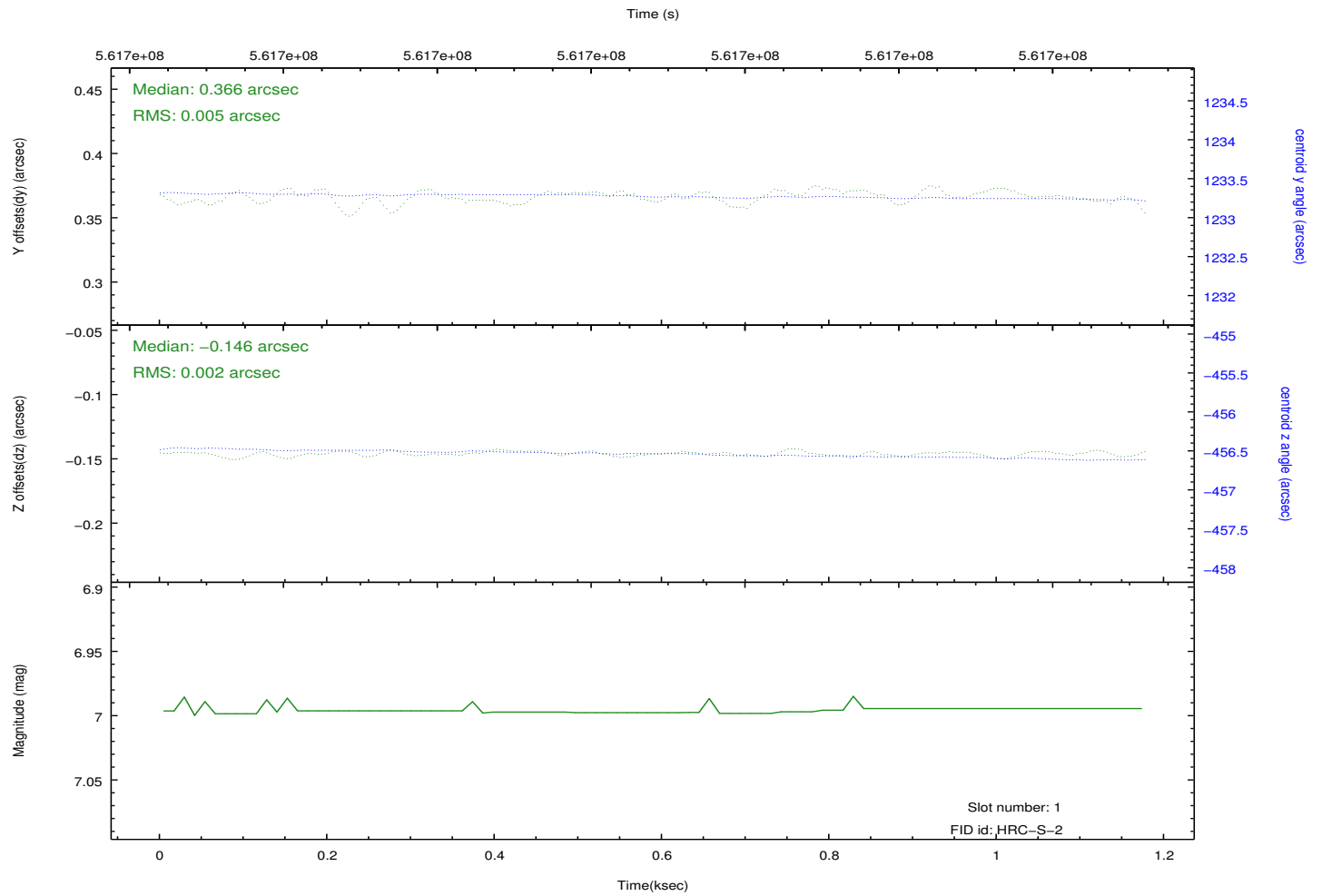
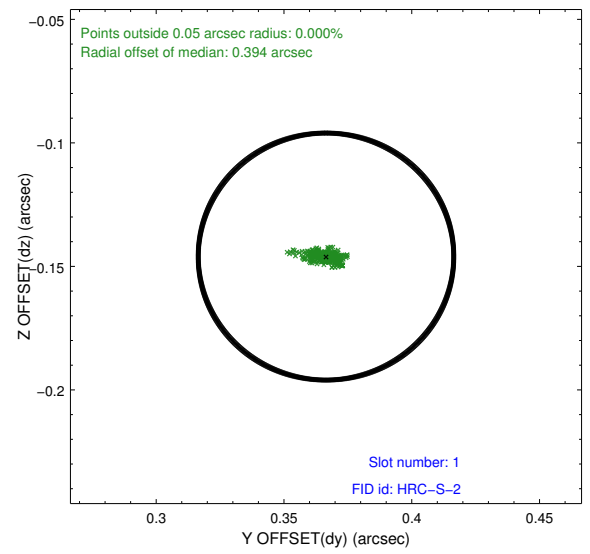
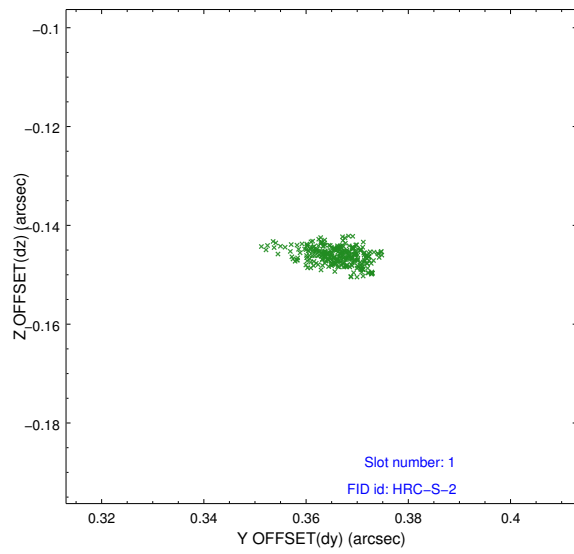


## 2.5 FID Slots

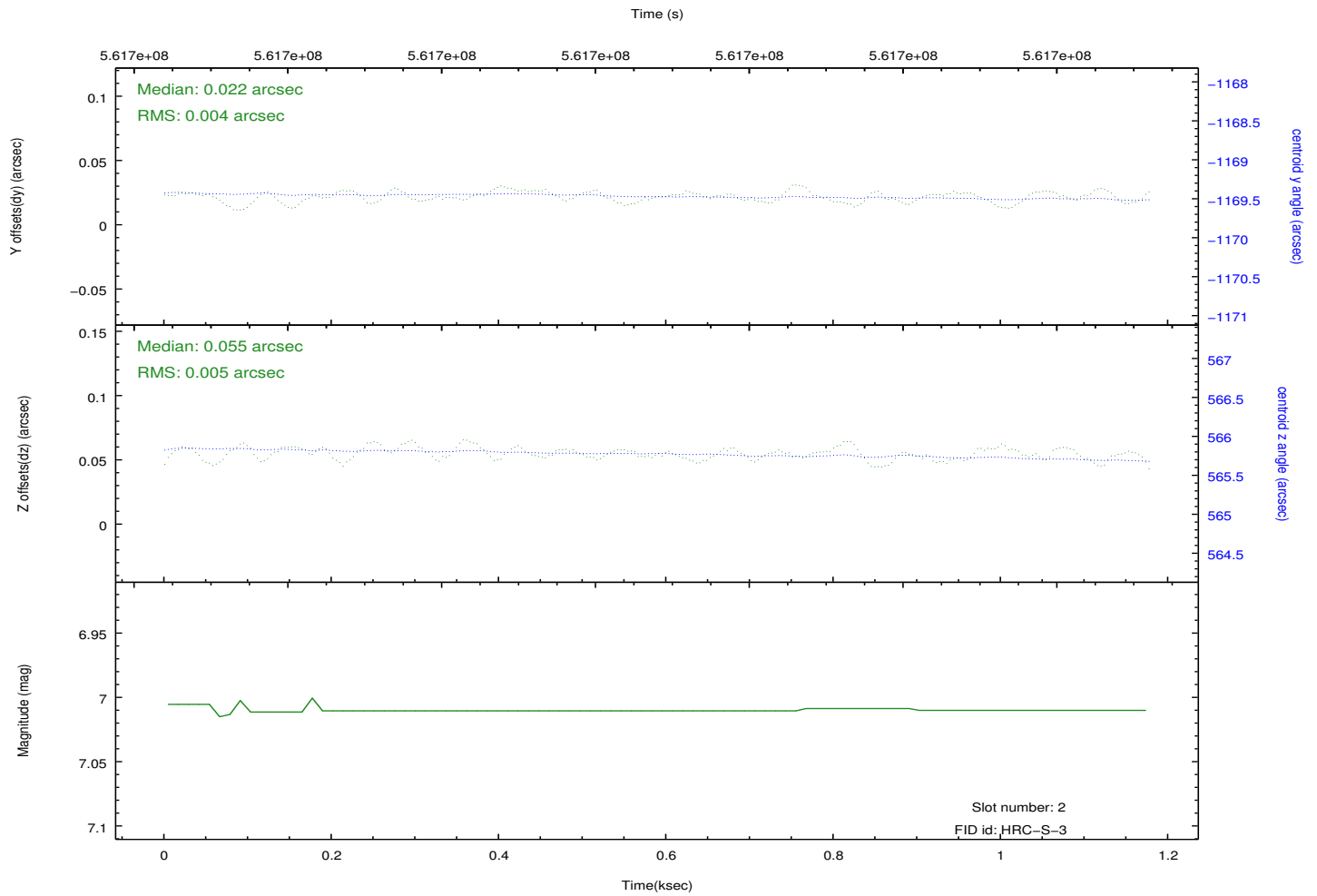
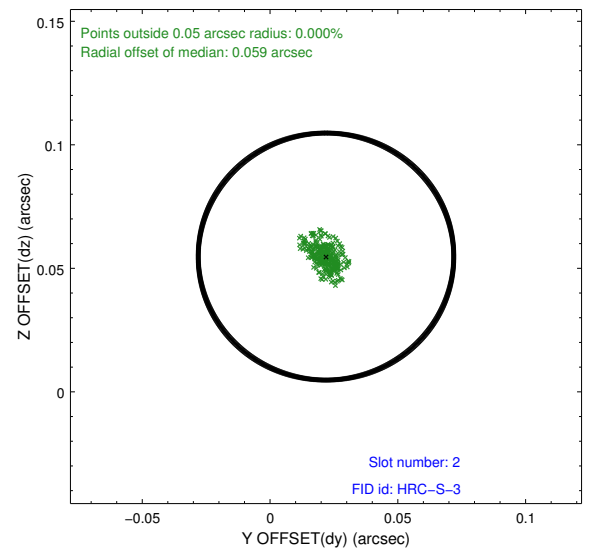
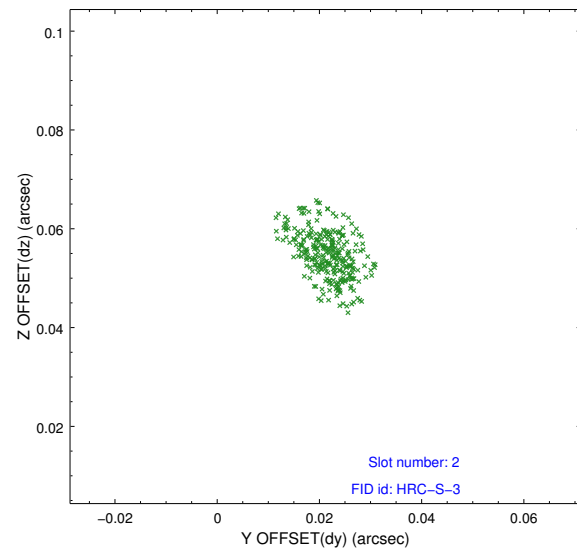
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2015.10.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1492813152075

### A.2 Comments