

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 16407 - L2 Version 2  
Chandra X-Ray Center

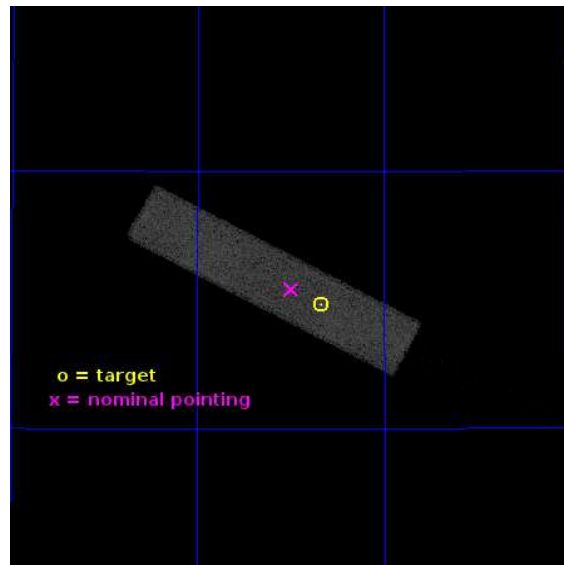
L2 Processing Date : Sep 17 2014

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# 1 Front

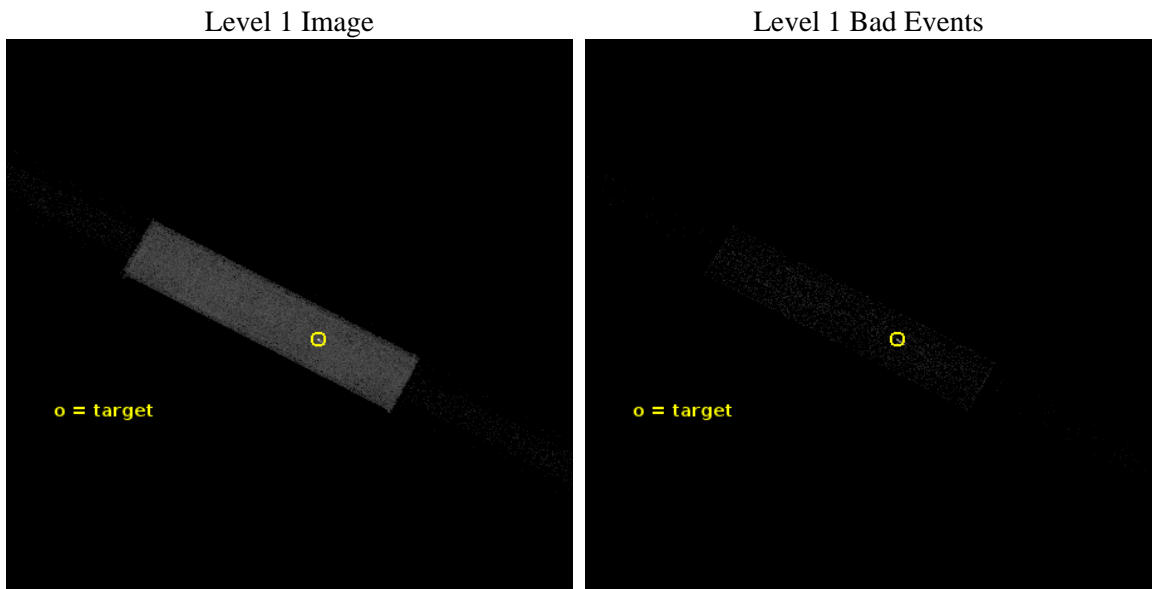
seq_num	291179	Sequence number
obs_id	16407	Observation id
title	AO-15 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.24782961596	Nominal RA [deg]
dec_nom	45.771438216449	Nominal Dec [deg]
roll_nom	208.15327023497	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1151.0750639439	[s]
livetime	1142.3823392485	Ontime multiplied by DTCOR
l2events	68306	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	10.2.4	Processing system revision	ontime	1151.0750639439	[s]
caldsver	4.6.3	&#160	l1events	103092	Number of level 1 events
date	2014-09-17T19:30:04	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

Level 1 Events

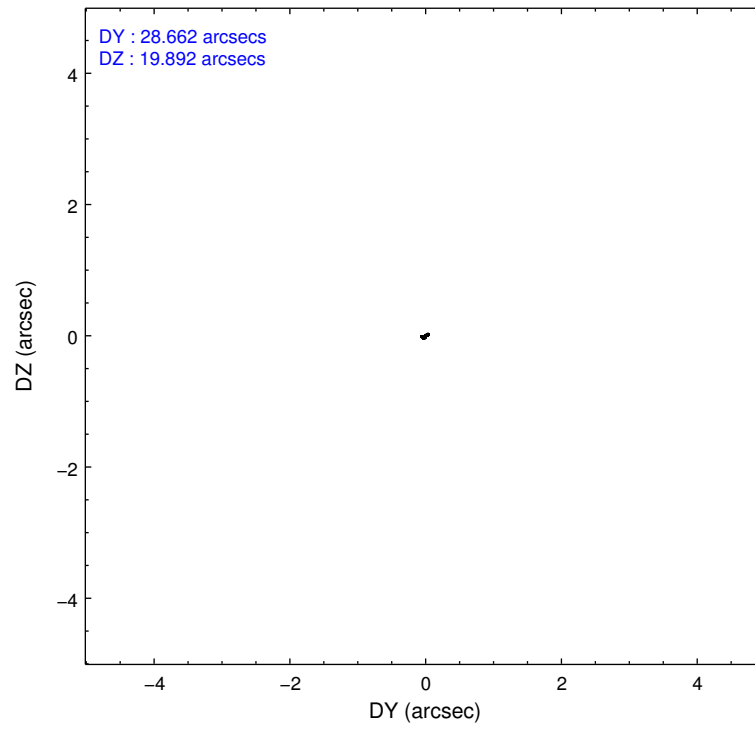
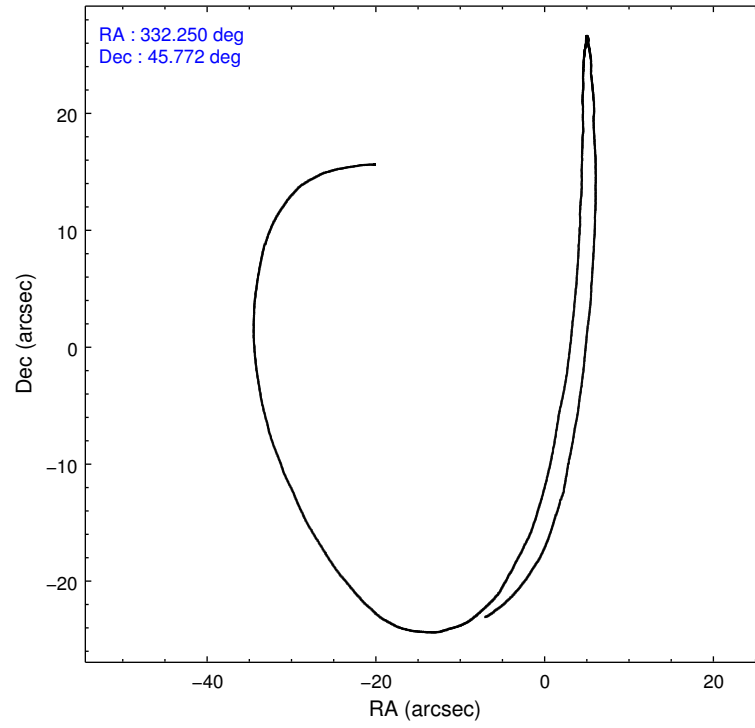
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	959	101281	852
rejected events	959	23607	819
rejected %	100%	23%	96%

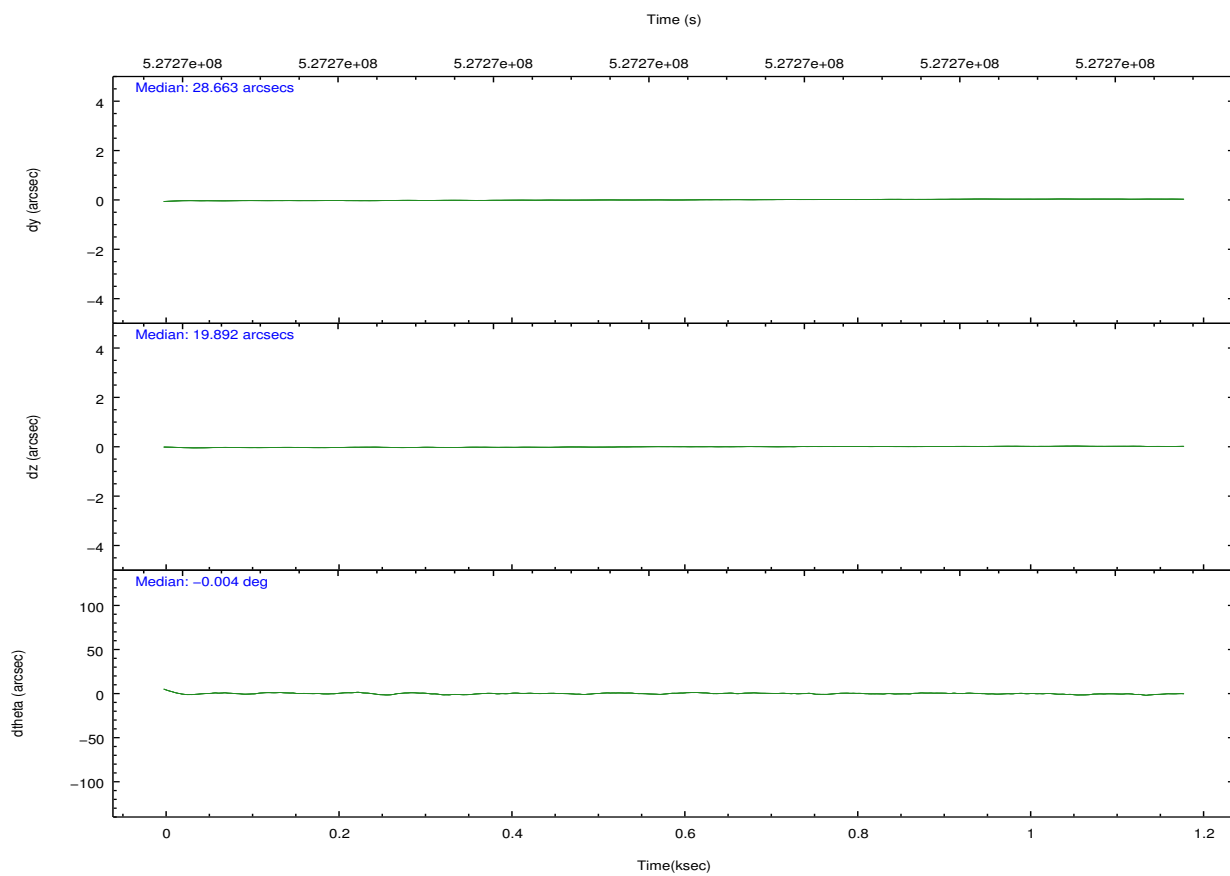
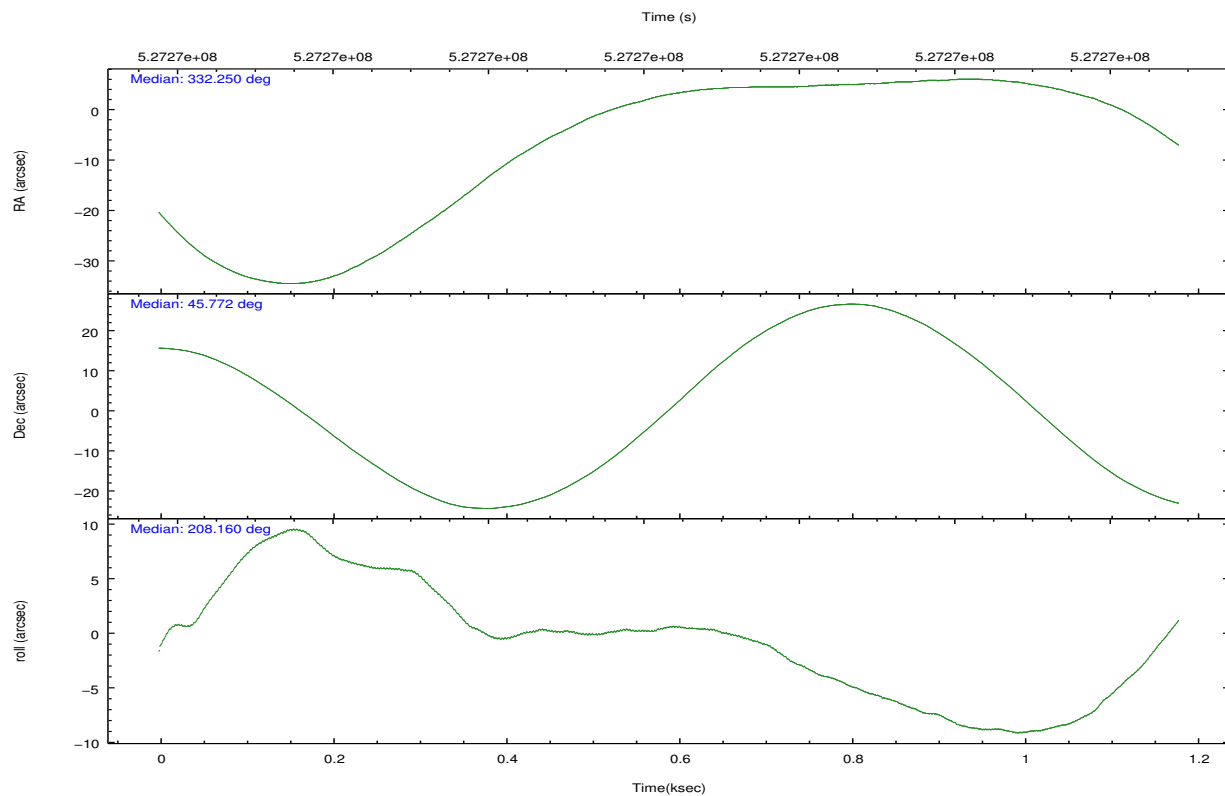
## 2.2 Compared Parameters

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	332.268168	332.2478296159577
[deg] Pointing Dec	45.796639	45.77143821644852
[deg] Pointing Roll	208.071385	208.1532702349698
[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)	527272018.184000	527271642.06585
Observation start date	2014-09-16T16:25:51	2014-09-16T16:20:42
[s] Observation end time (MET)	527273018.184000	527273151.89094
Observation end date	2014-09-16T16:42:31	2014-09-16T16:45:51

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

## 2.3 Aspect





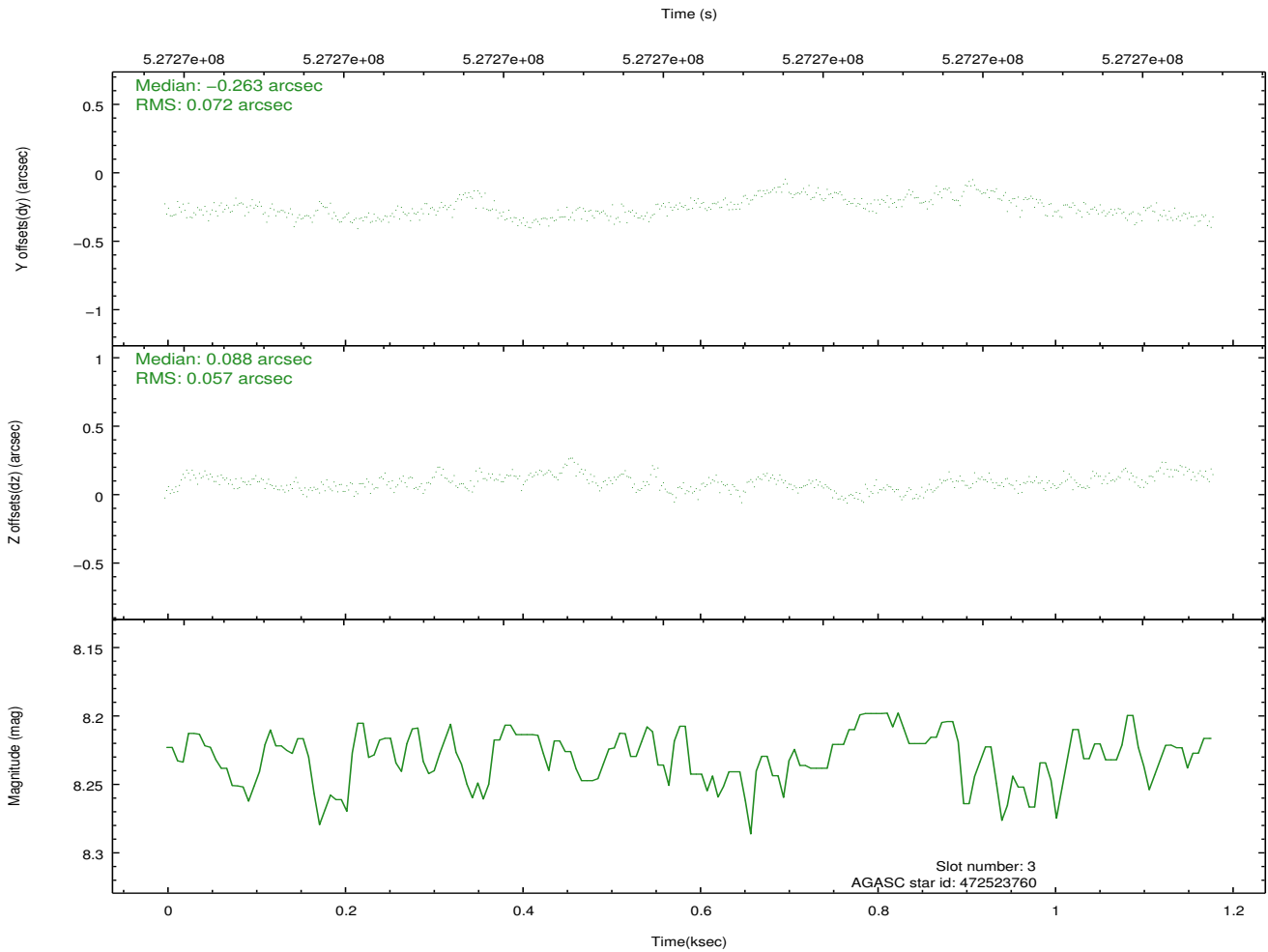
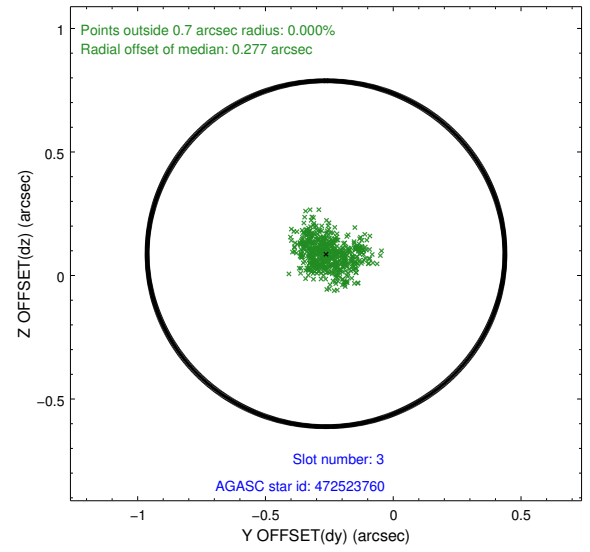
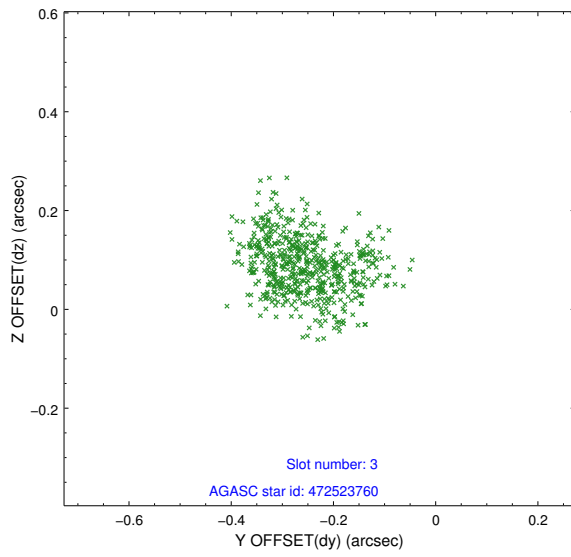
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-2	7.03	288	0.199	-0.175	0.008	0.015	0.000000	0.000000	1216.36	-461.56
1	FID	HRC-S-3	7.07	289	-0.134	-0.071	0.006	0.011	0.000000	0.000000	-1182.16	559.07
2	FID	HRC-S-4	6.99	288	0.340	-0.050	0.008	0.016	0.000000	0.000000	1210.96	565.23
3	GUIDE	472523760	8.23	577	-0.263	0.088	0.099	0.154	331.645363	45.403260	2052.53	503.91
4	GUIDE	472651904	6.10	577	-0.223	-0.374	0.117	0.165	332.170077	45.742257	313.18	56.74
5	GUIDE	472665256	8.97	577	0.432	0.084	0.123	0.205	332.808125	46.195041	-1863.41	-635.35
6	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	472659832	9.43	576	0.052	0.199	0.163	0.258	332.780399	46.098139	-1644.16	-359.65

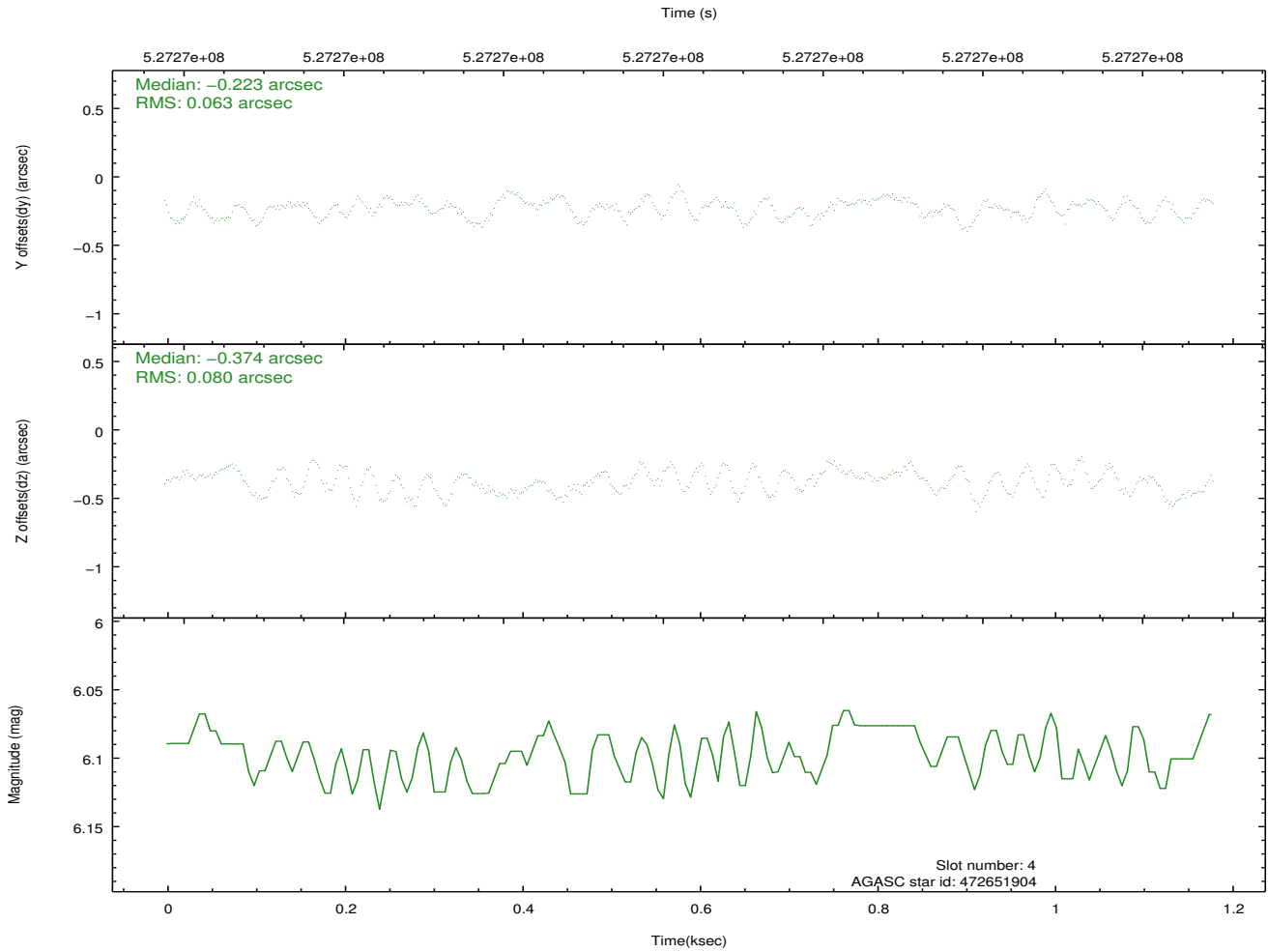
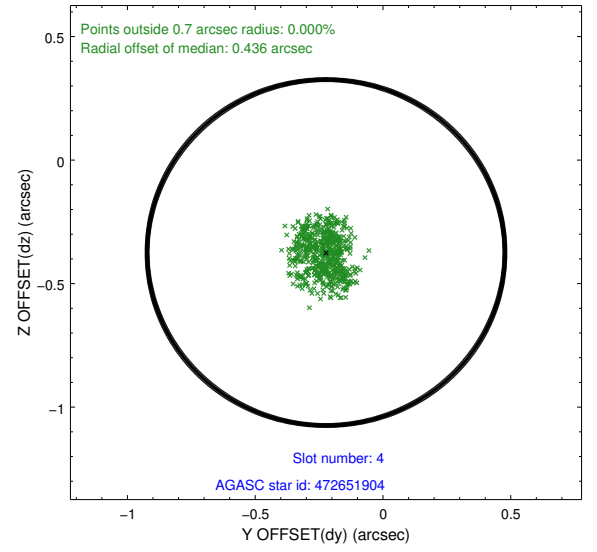
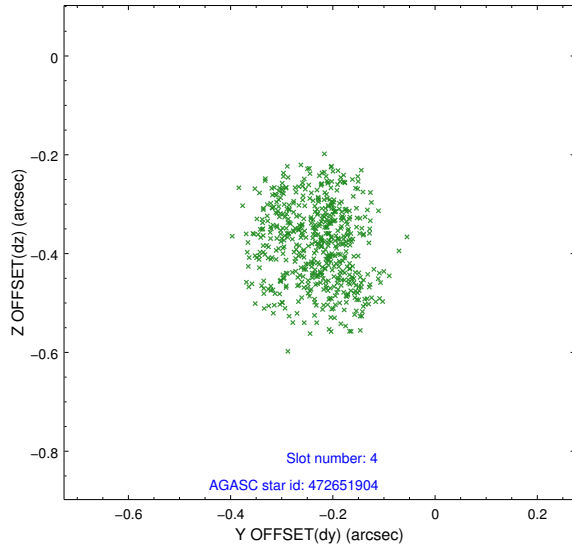


## 2.4 Star Slots

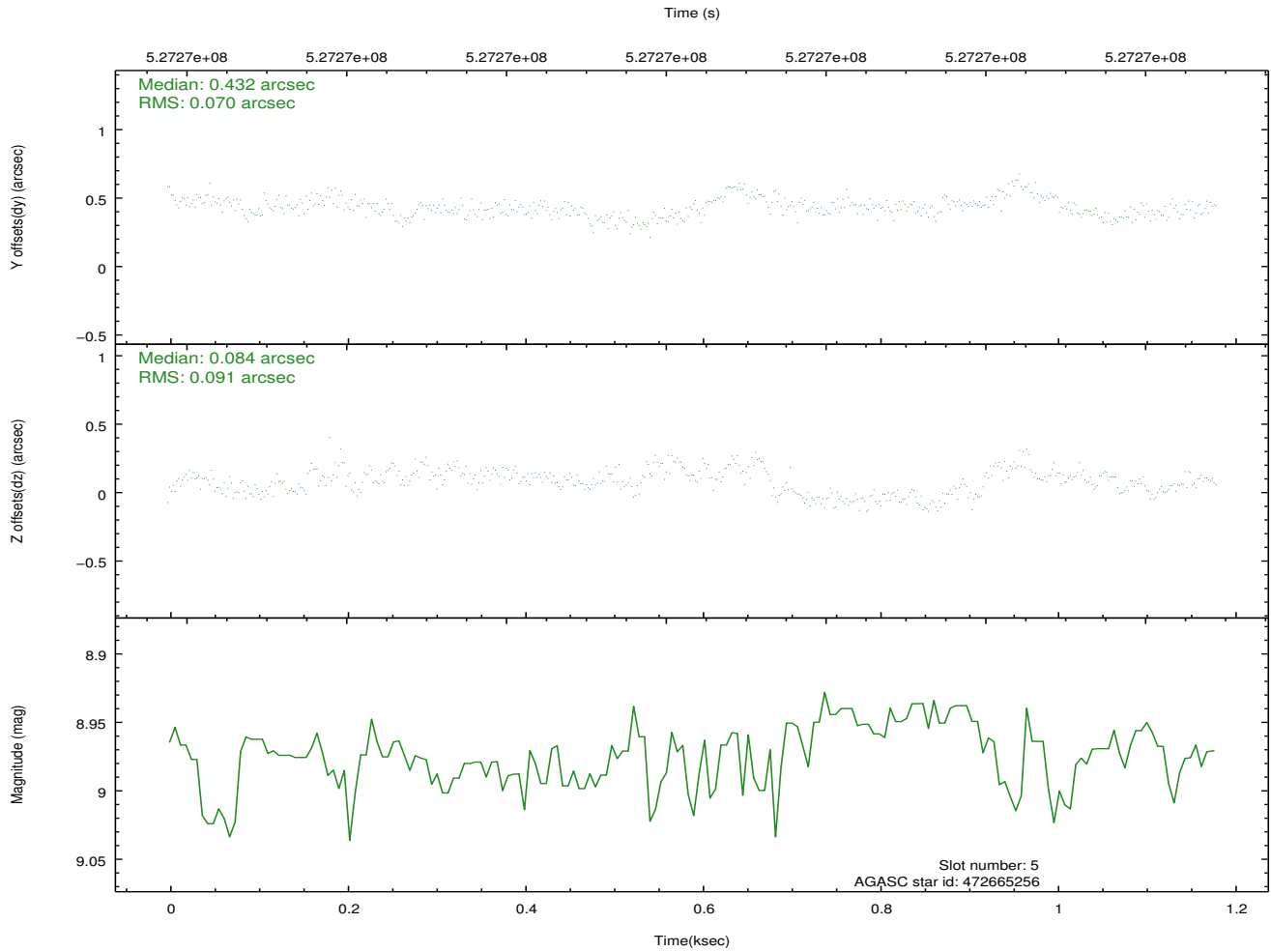
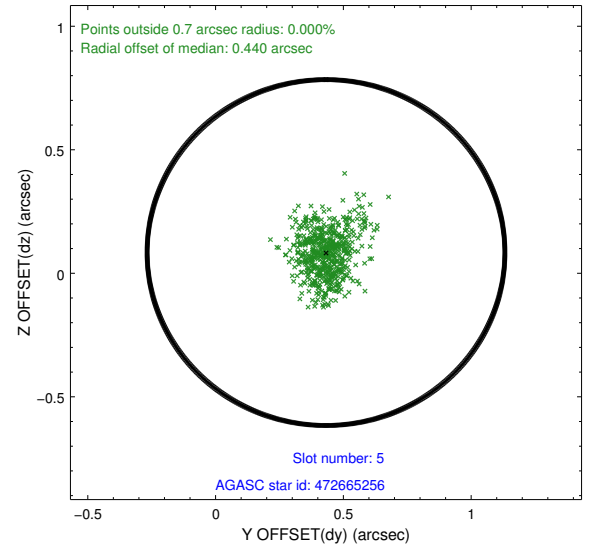
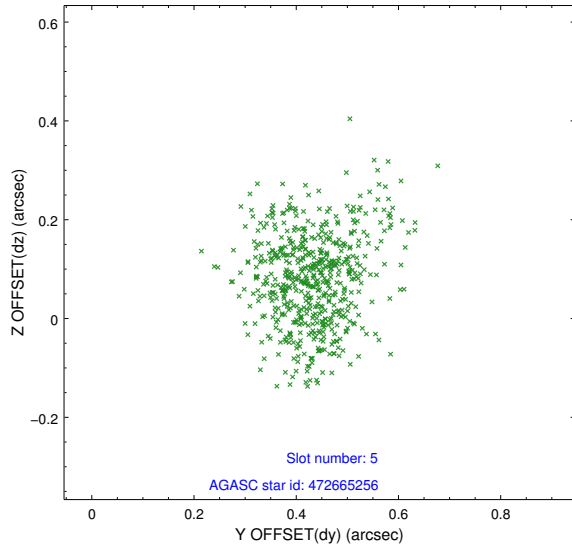
### 2.4.1 Slot 3



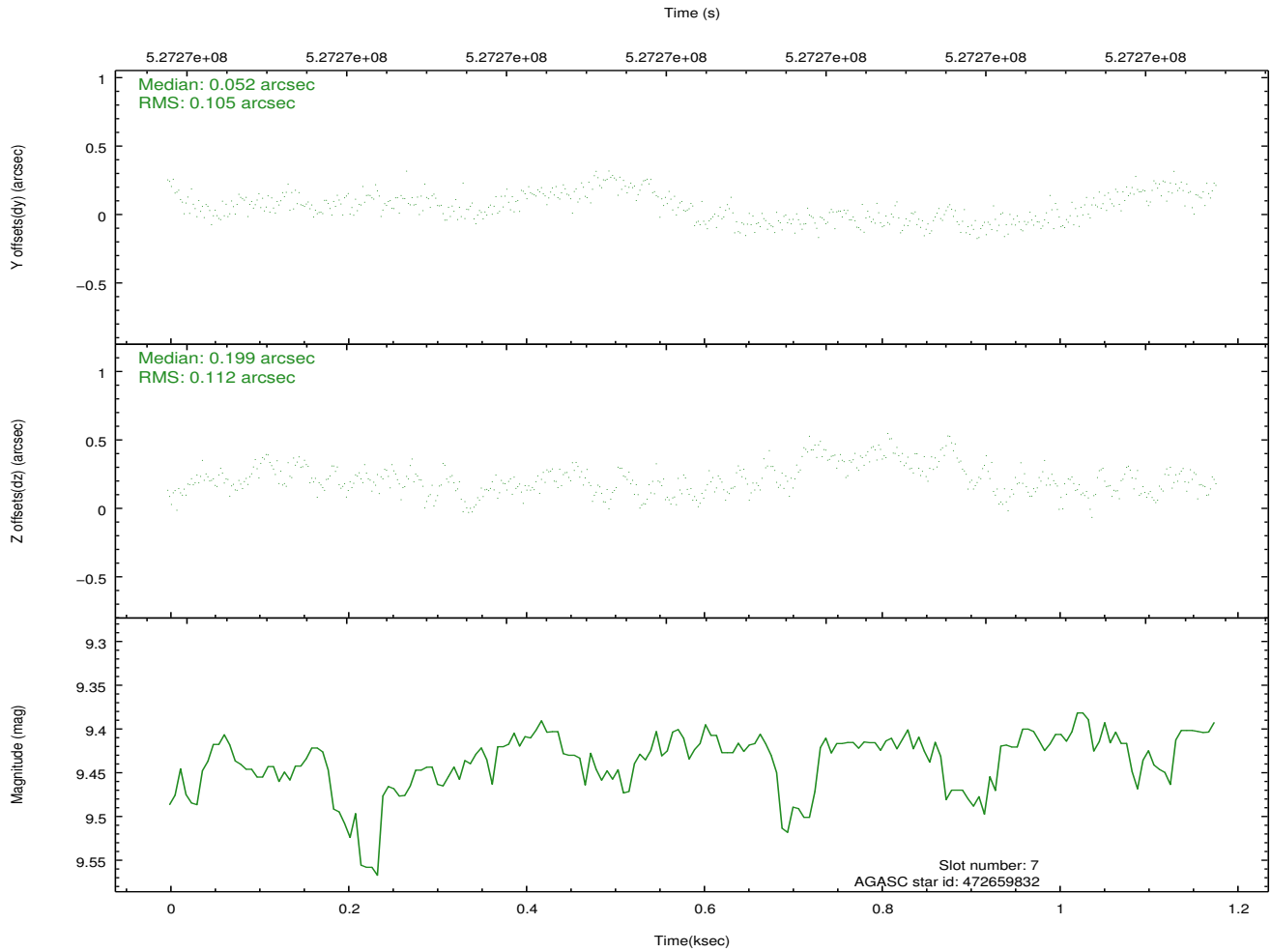
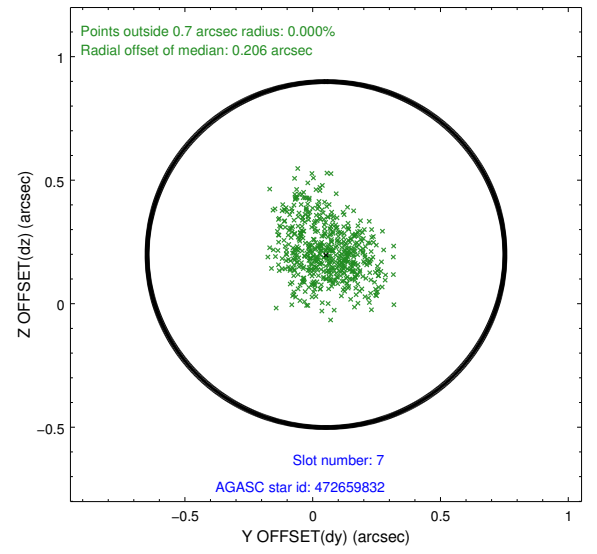
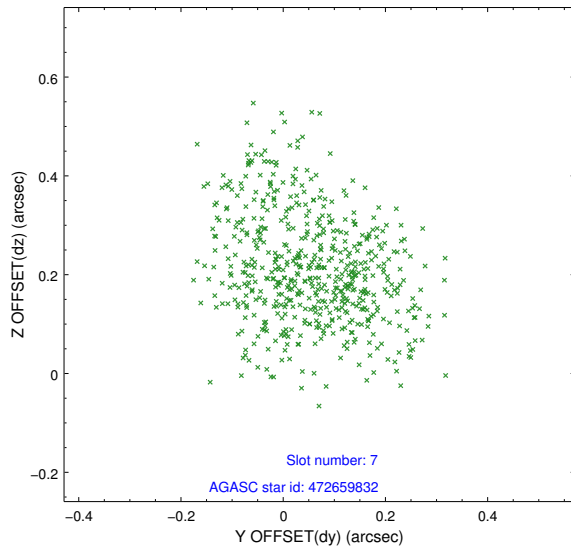
## 2.4.2 Slot 4



### 2.4.3 Slot 5

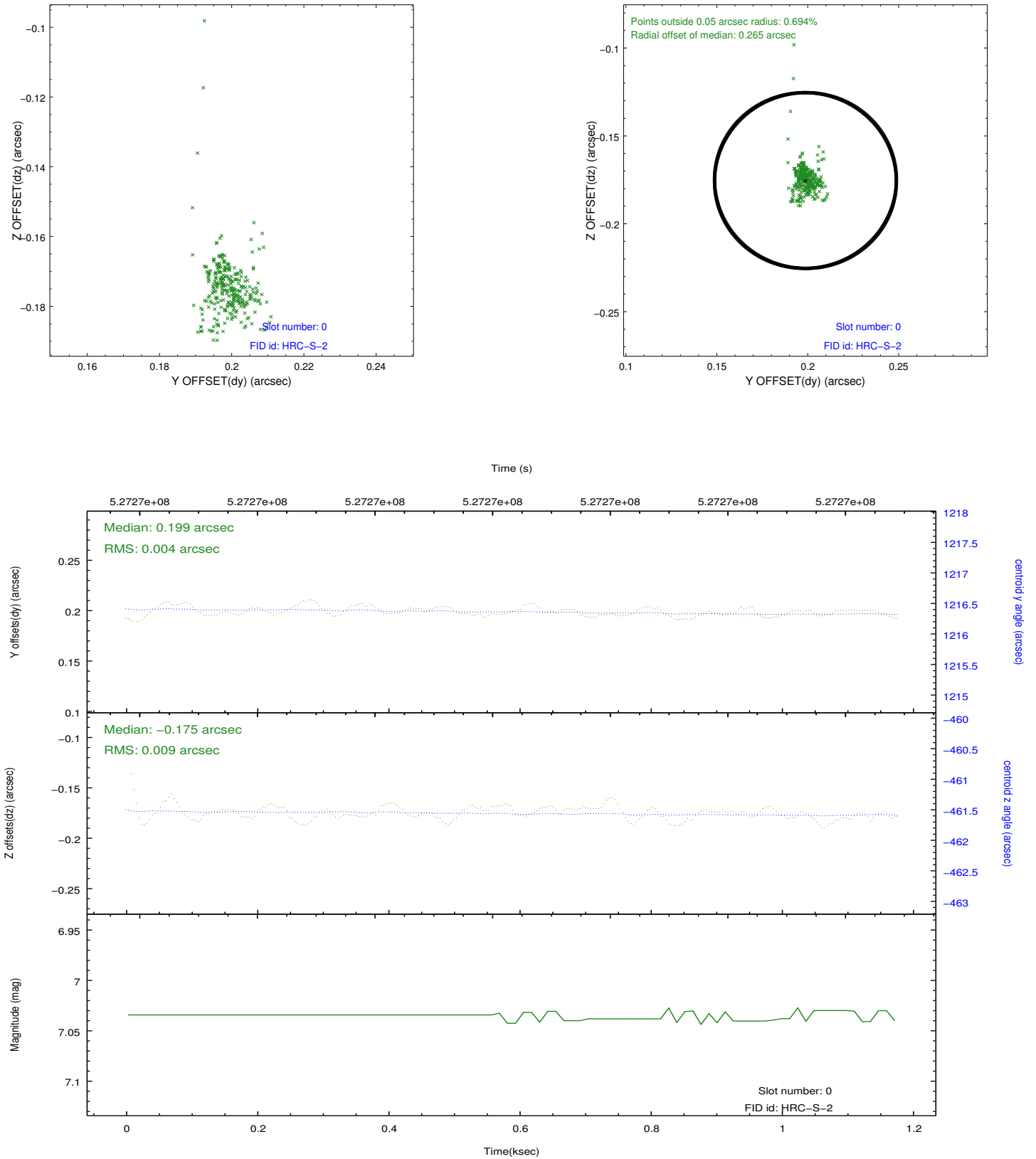


## 2.4.4 Slot 7

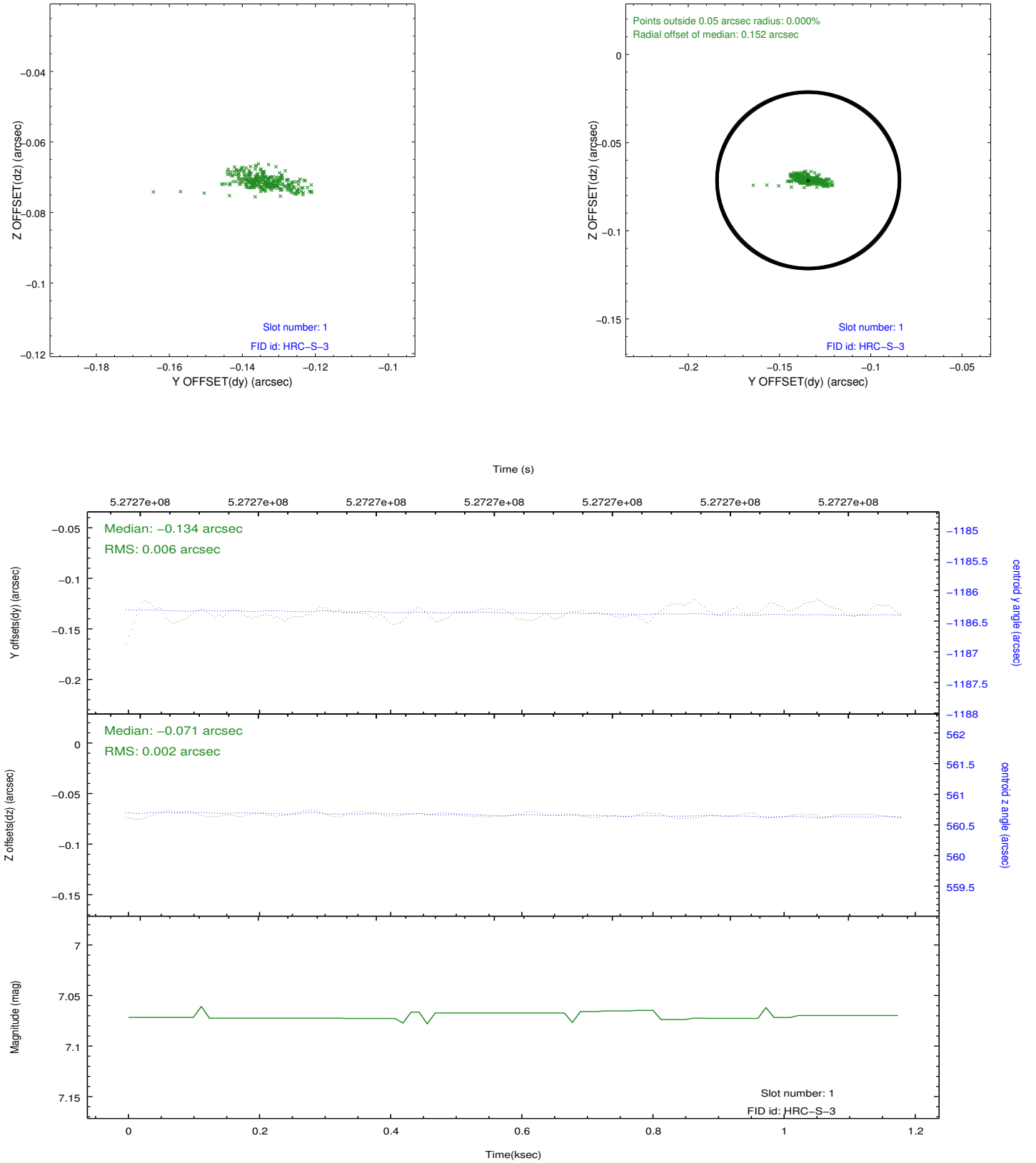


## 2.5 FID Slots

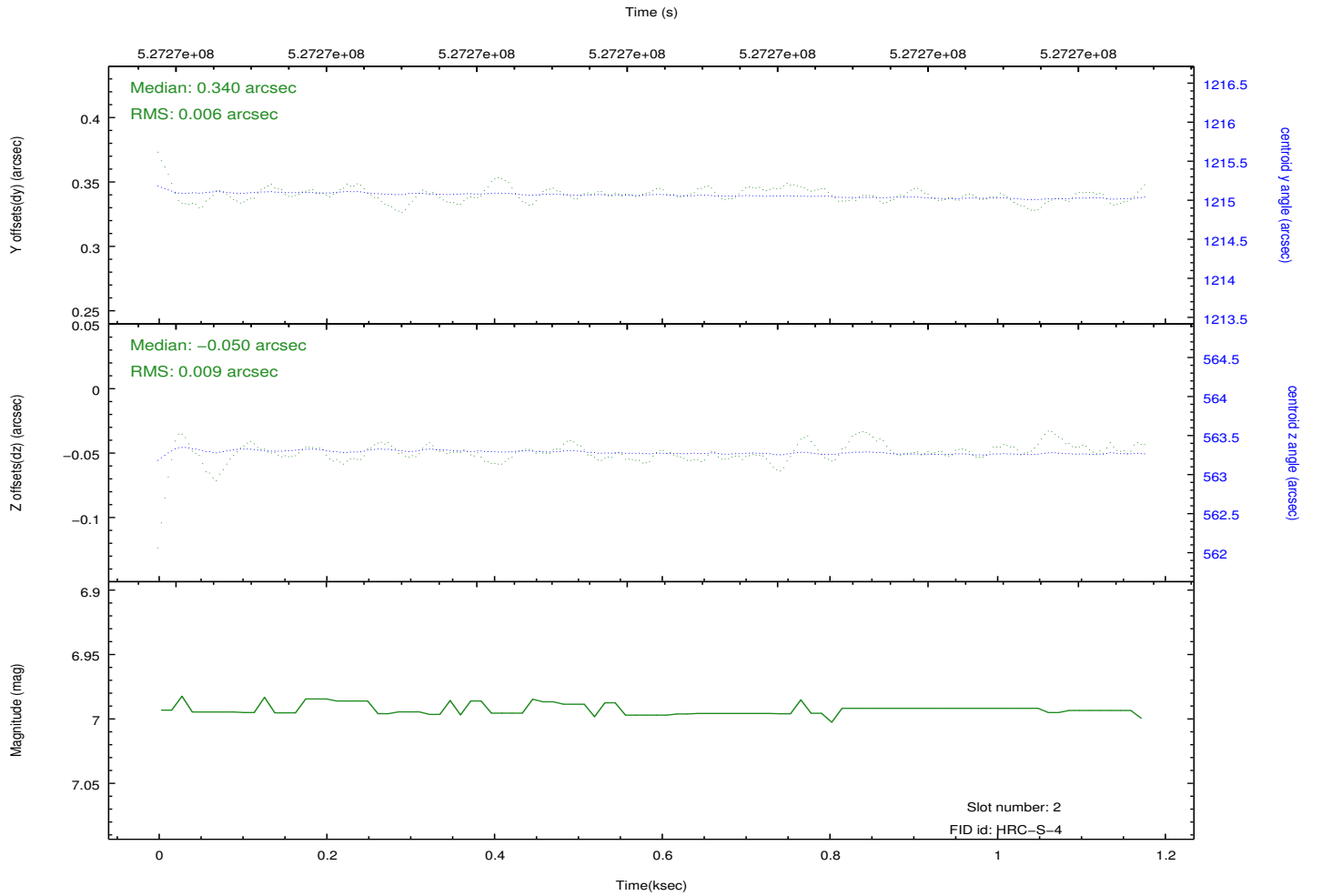
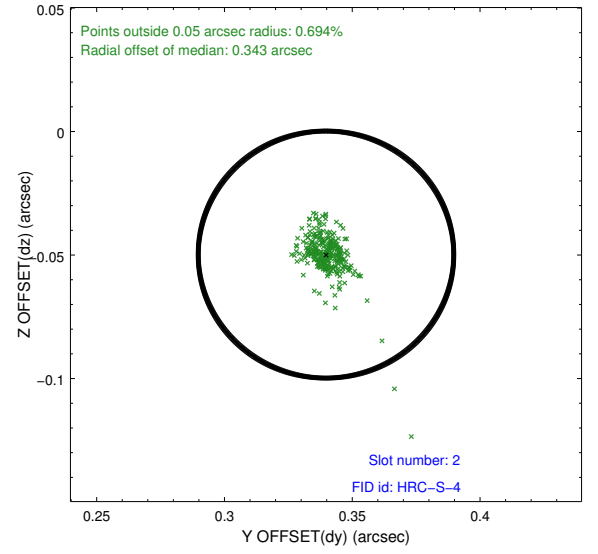
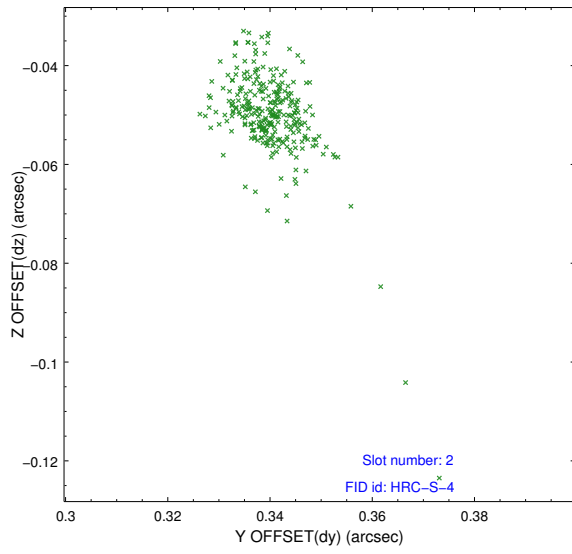
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.09.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1510750639439

### 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.