

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 14304 - L2 Version 2  
Chandra X-Ray Center

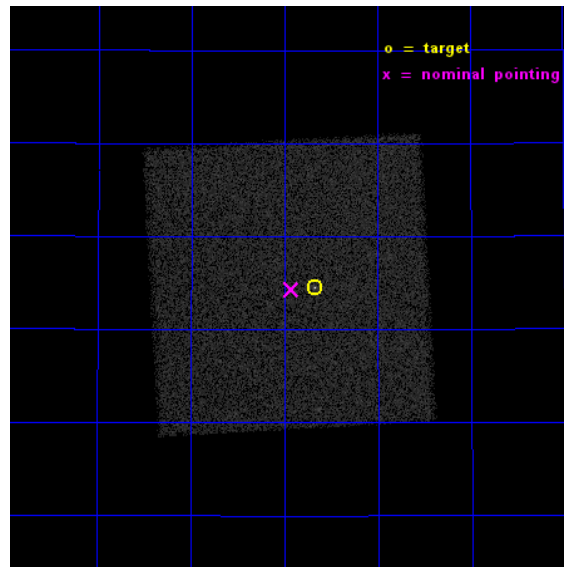
L2 Processing Date : Nov 27 2014

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# 1 Front

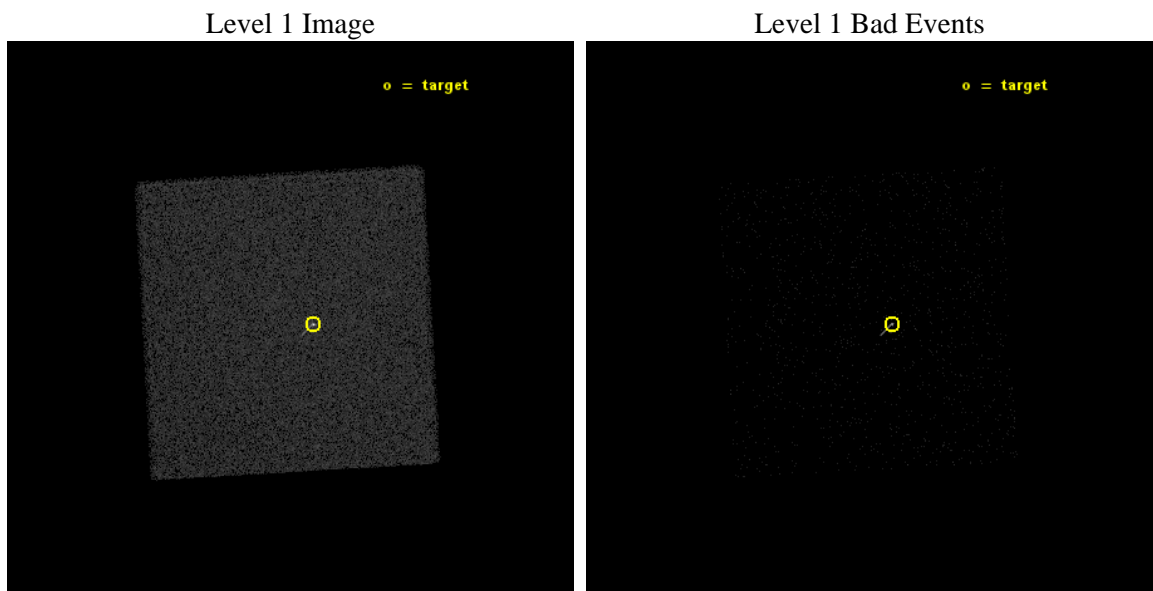
seq_num	291055	Sequence number
obs_id	14304	Observation id
title	AO-13 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.23110499628	Nominal RA [deg]
dec_nom	45.738802568041	Nominal Dec [deg]
roll_nom	221.75364159242	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1182.0813133717	[s]
livetime	1171.9089124829	Ontime multiplied by DTCOR
l2events	78043	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	10.3	Processing system revision	ontime	1182.0813133717	[s]
caldbver	4.6.4	&#160	l1events	133855	Number of level 1 events
date	2014-11-27T07:23:52	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

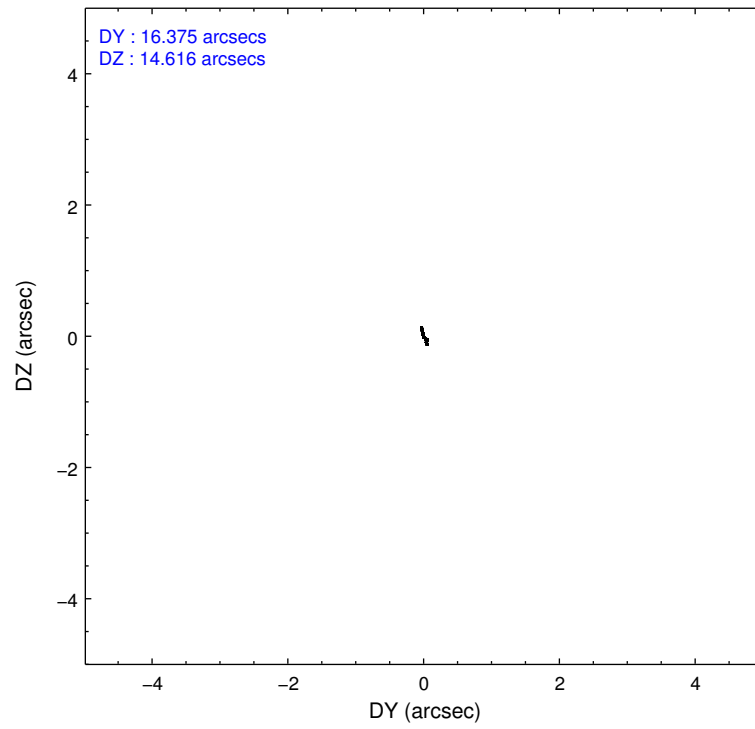
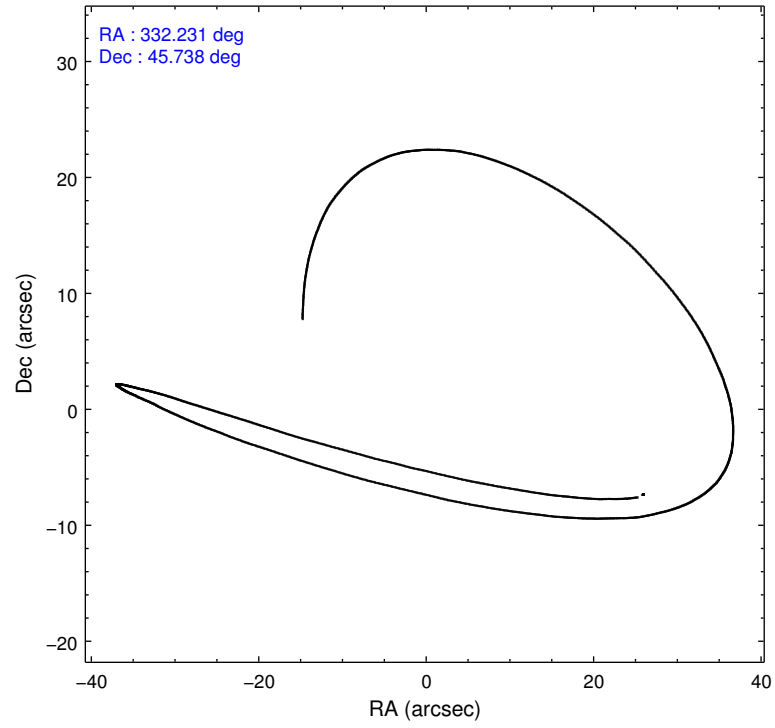
#### Level 1 Events

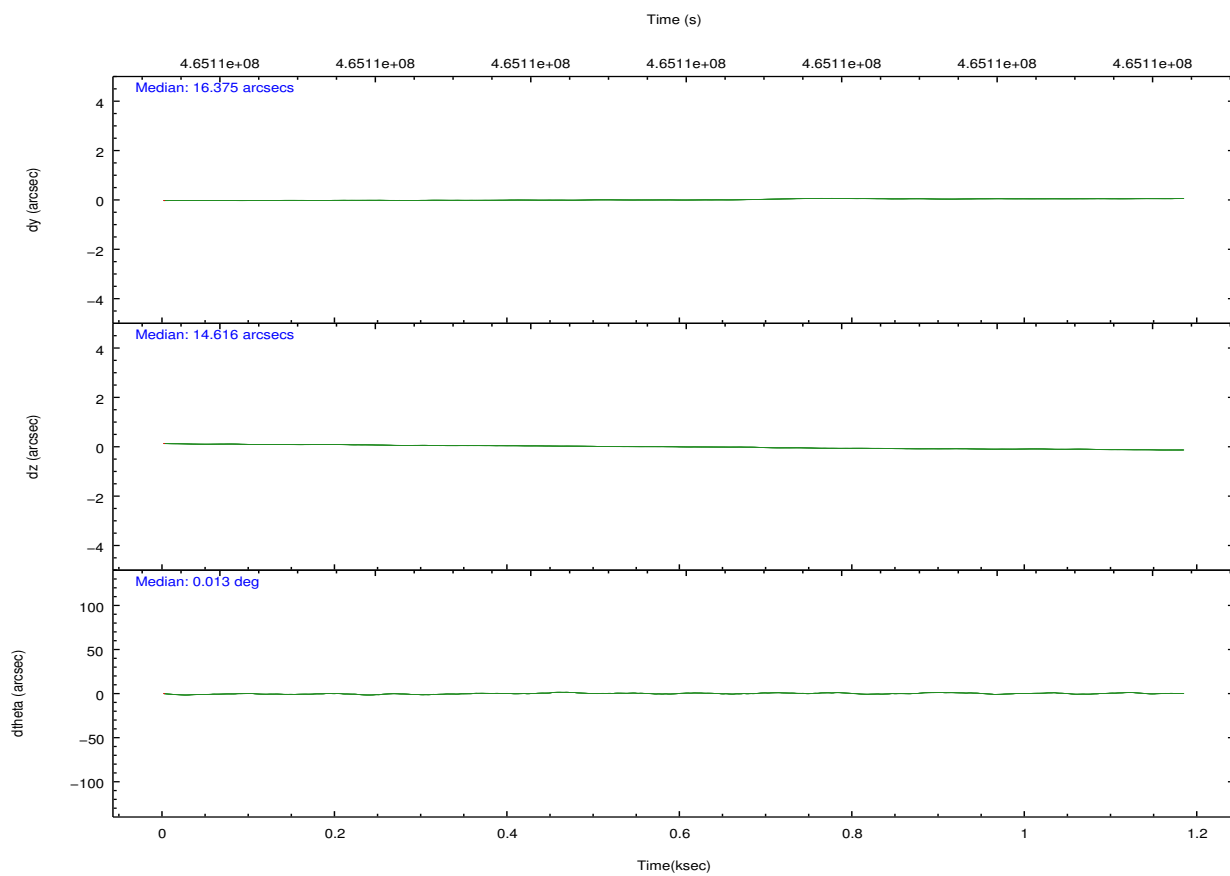
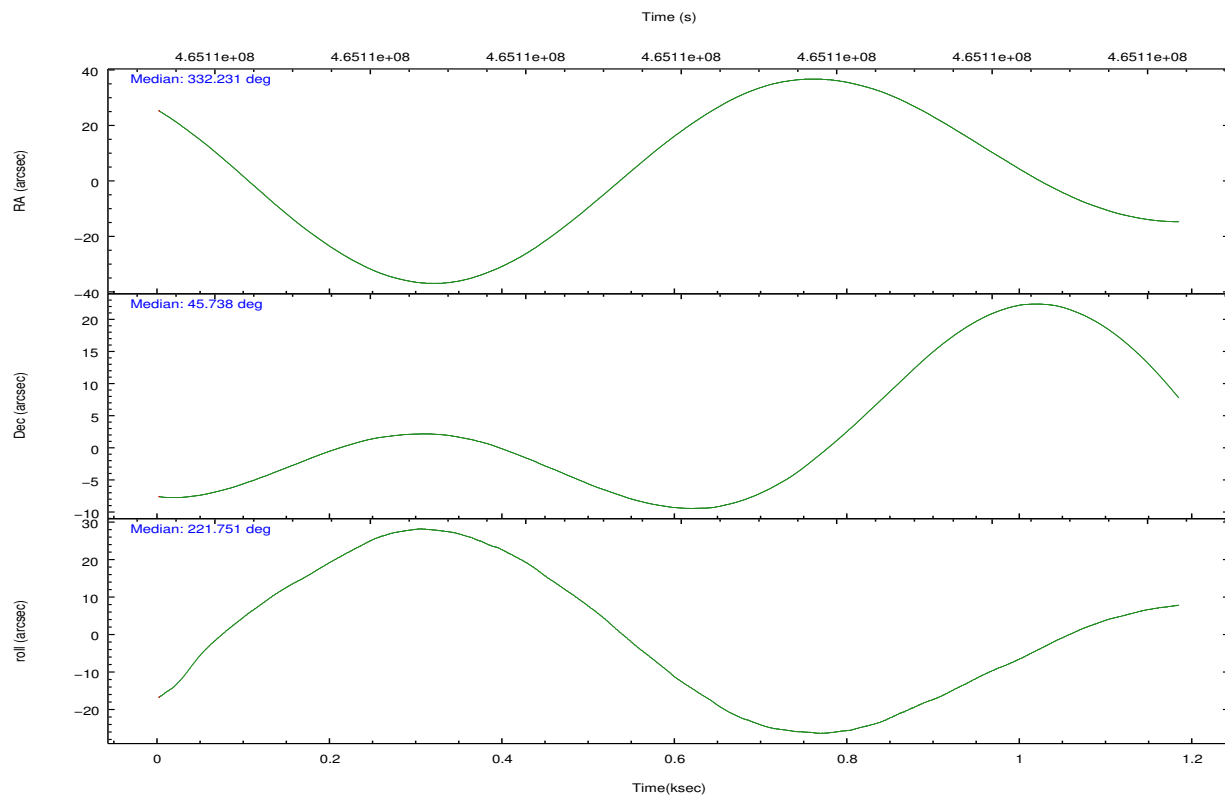
	<b>segment 0</b>
level 1 events	133855
rejected events	28760
rejected %	21%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-I	HRC-I	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	332.243111	332.2311049962785			
[deg] Pointing Dec	45.764305	45.73880256804073			
[deg] Pointing Roll	221.840491	221.7536415924245			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	126.985494	126.9829799899862			
[mm] SIM translation stage offset	0	0.002508901615314585			
[s] Observation start time (MET)	465110778.184000	465110401.94636			
Observation start date	2012-09-27T05:25:11	2012-09-27T05:20:01			
[s] Observation end time (MET)	465111778.184000	465111911.77144			
Observation end date	2012-09-27T05:41:51	2012-09-27T05:45:11			

## 2.3 Aspect





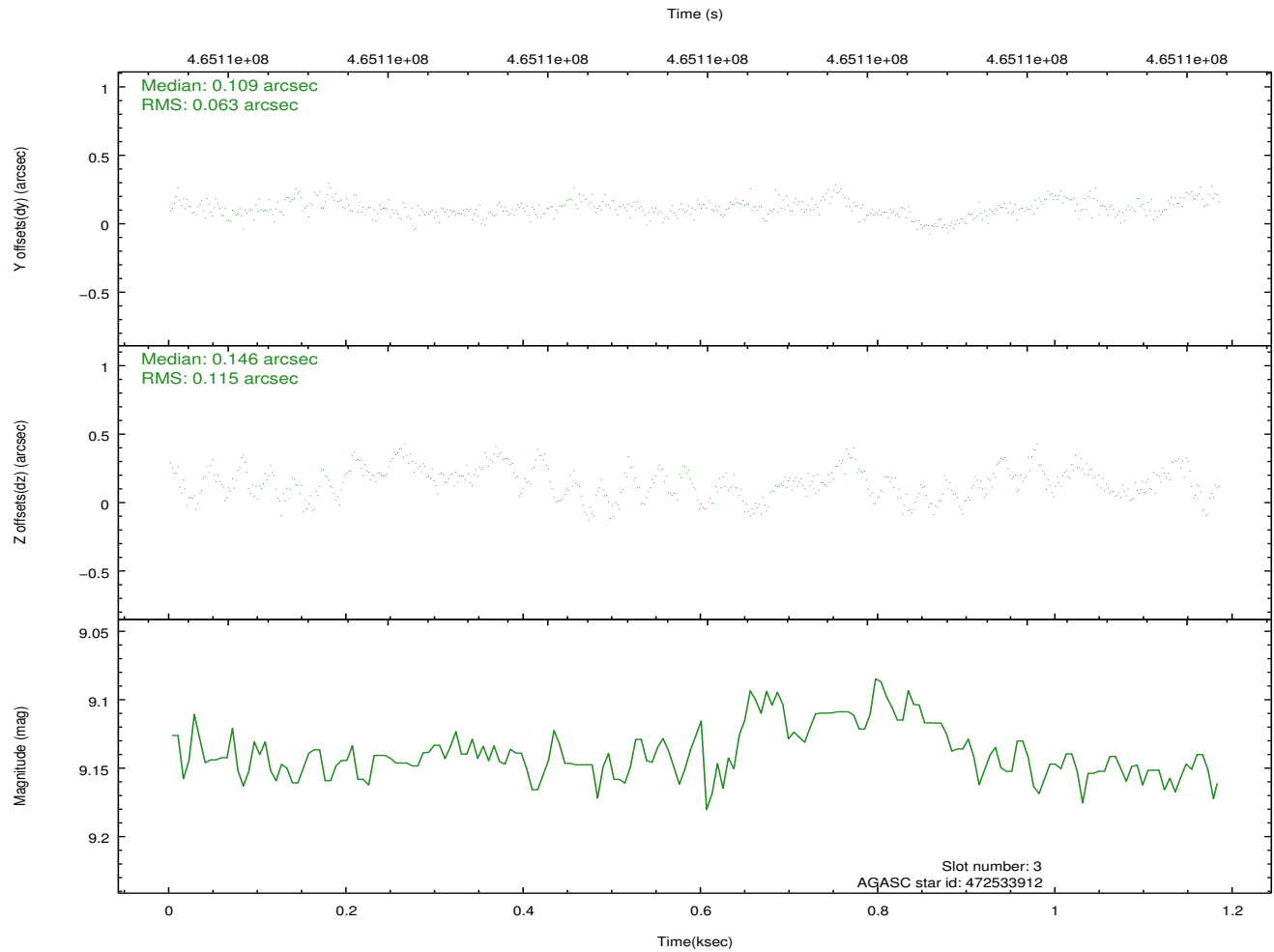
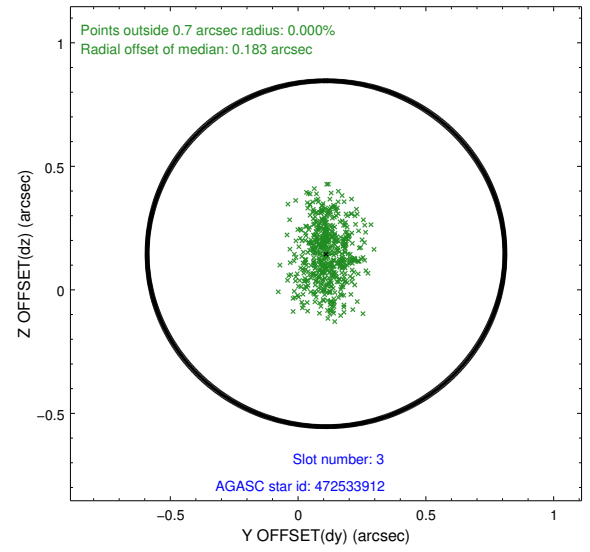
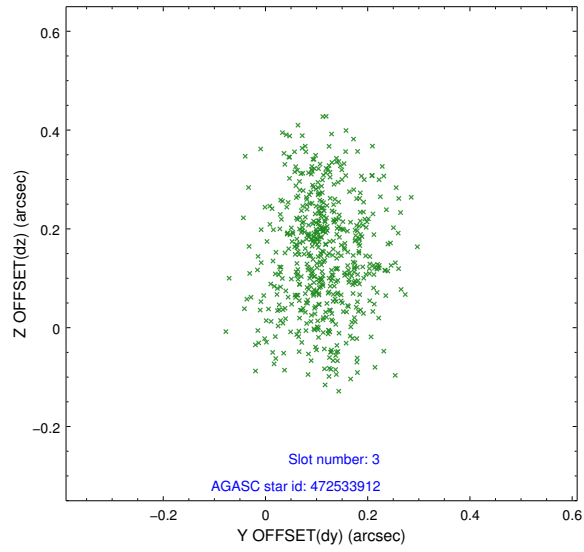
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	7.04	289	-0.185	-0.100	0.007	0.012	0.000000	0.000000	-772.53	-1302.71
1	FID		HRC-I-2	7.07	289	0.203	-0.048	0.007	0.011	0.000000	0.000000	837.82	-1308.87
2	FID		HRC-I-4	7.06	289	0.100	0.054	0.006	0.011	0.000000	0.000000	1273.64	994.91
3	GUIDE	used	472533912	9.14	578	0.109	0.146	0.141	0.230	331.791136	46.368695	-616.42	-2369.41
4	GUIDE	used	472654568	9.40	578	-0.053	0.107	0.106	0.183	332.194449	45.063576	1774.17	1795.71
5	GUIDE	used	472655152	9.41	575	0.027	-0.180	0.164	0.291	332.504239	45.862991	-721.76	176.97
6	GUIDE	used	472665256	9.01	578	0.071	0.174	0.109	0.165	332.808125	46.195041	-2087.39	-216.61
7	GUIDE	used	472649352	9.76	576	-0.154	-0.247	0.144	0.234	332.034169	45.325407	1444.18	826.04

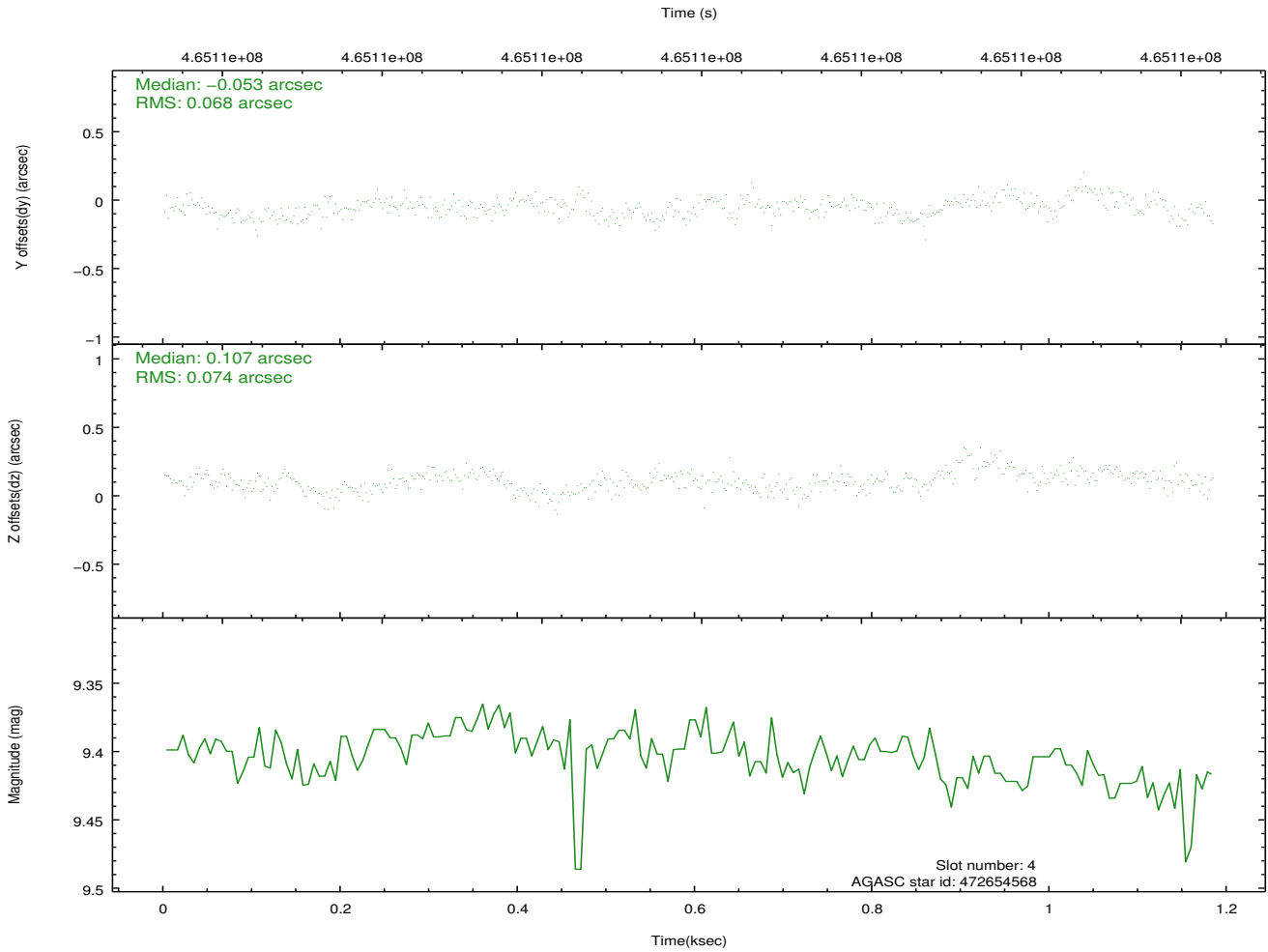
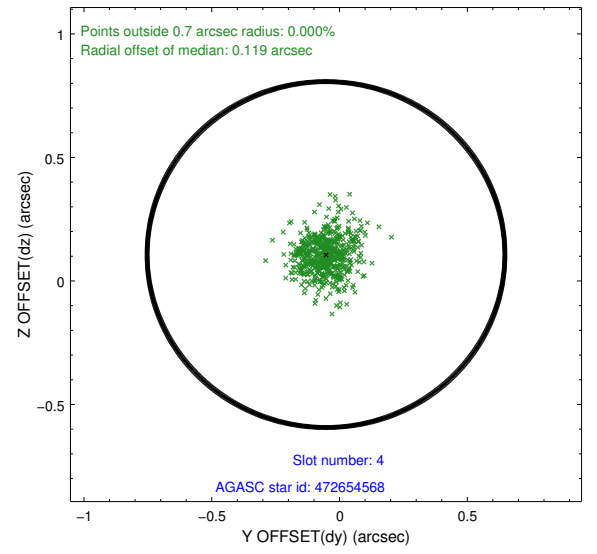
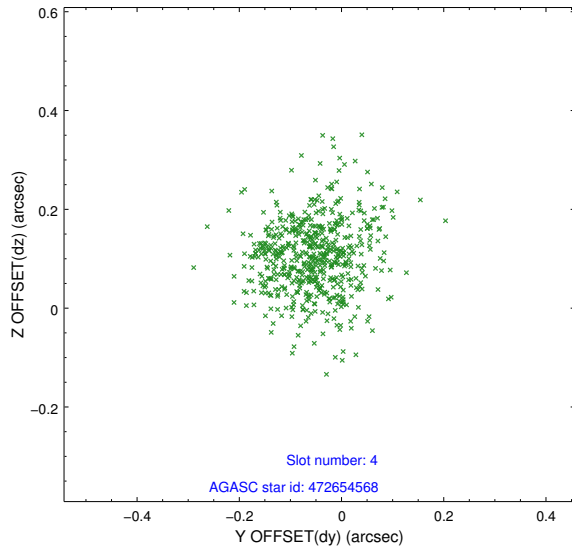


## 2.4 Star Slots

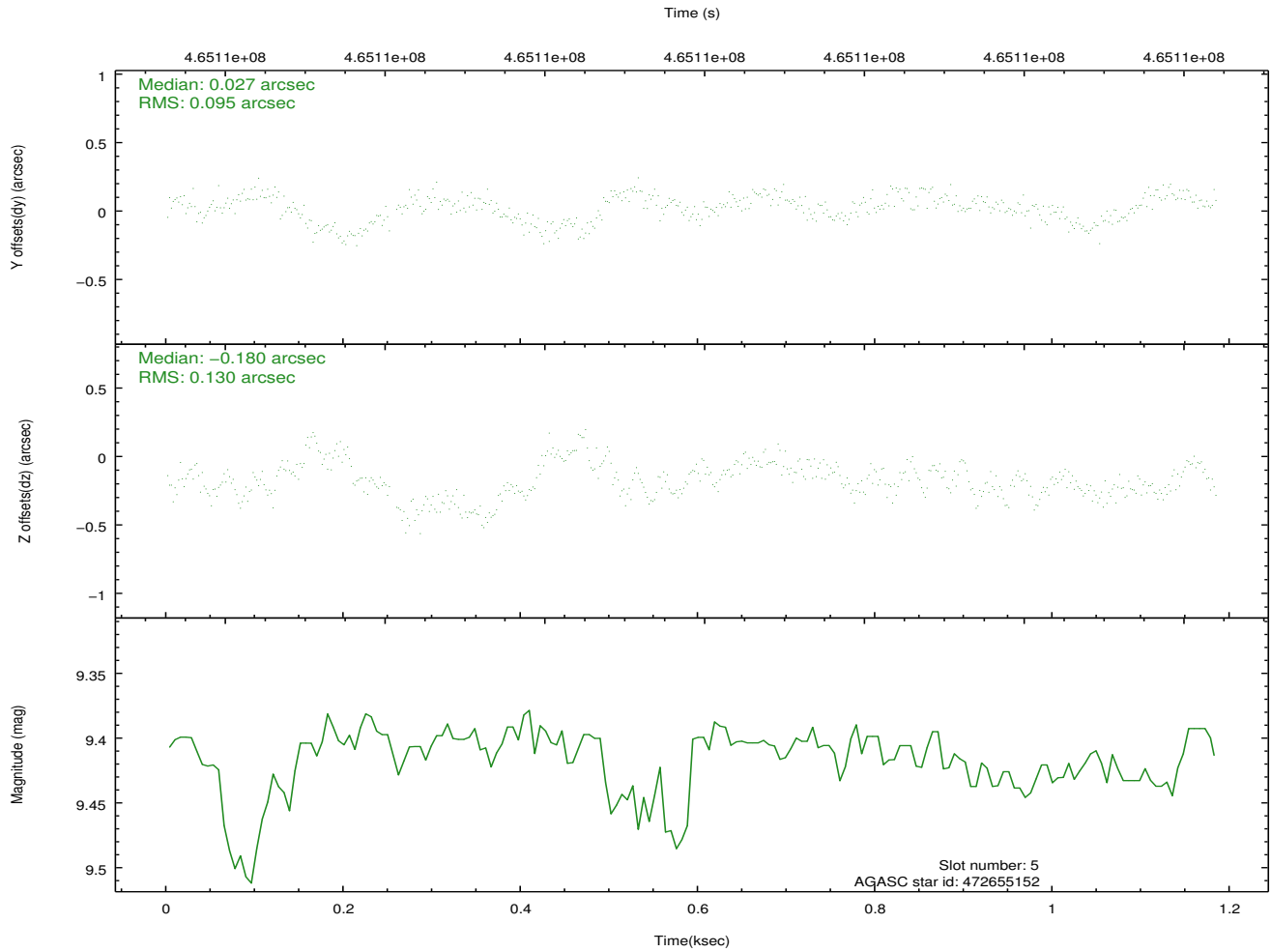
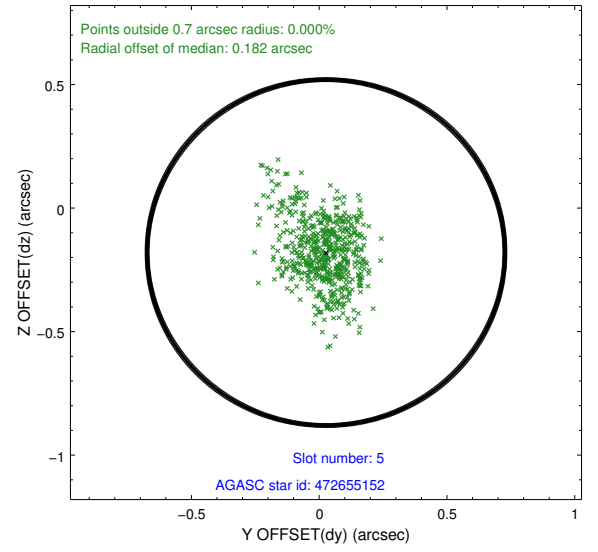
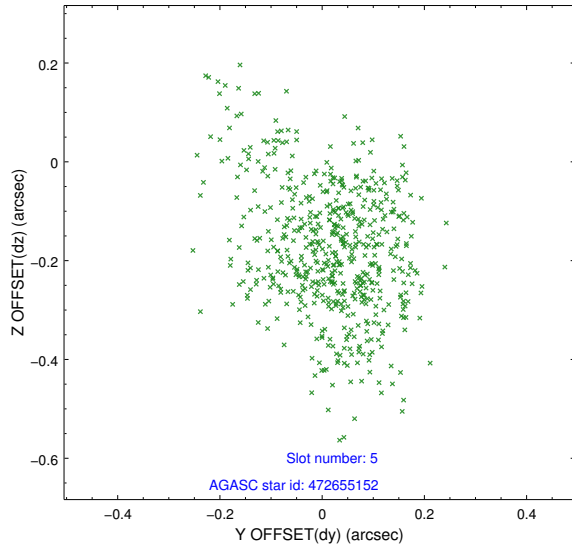
### 2.4.1 Slot 3



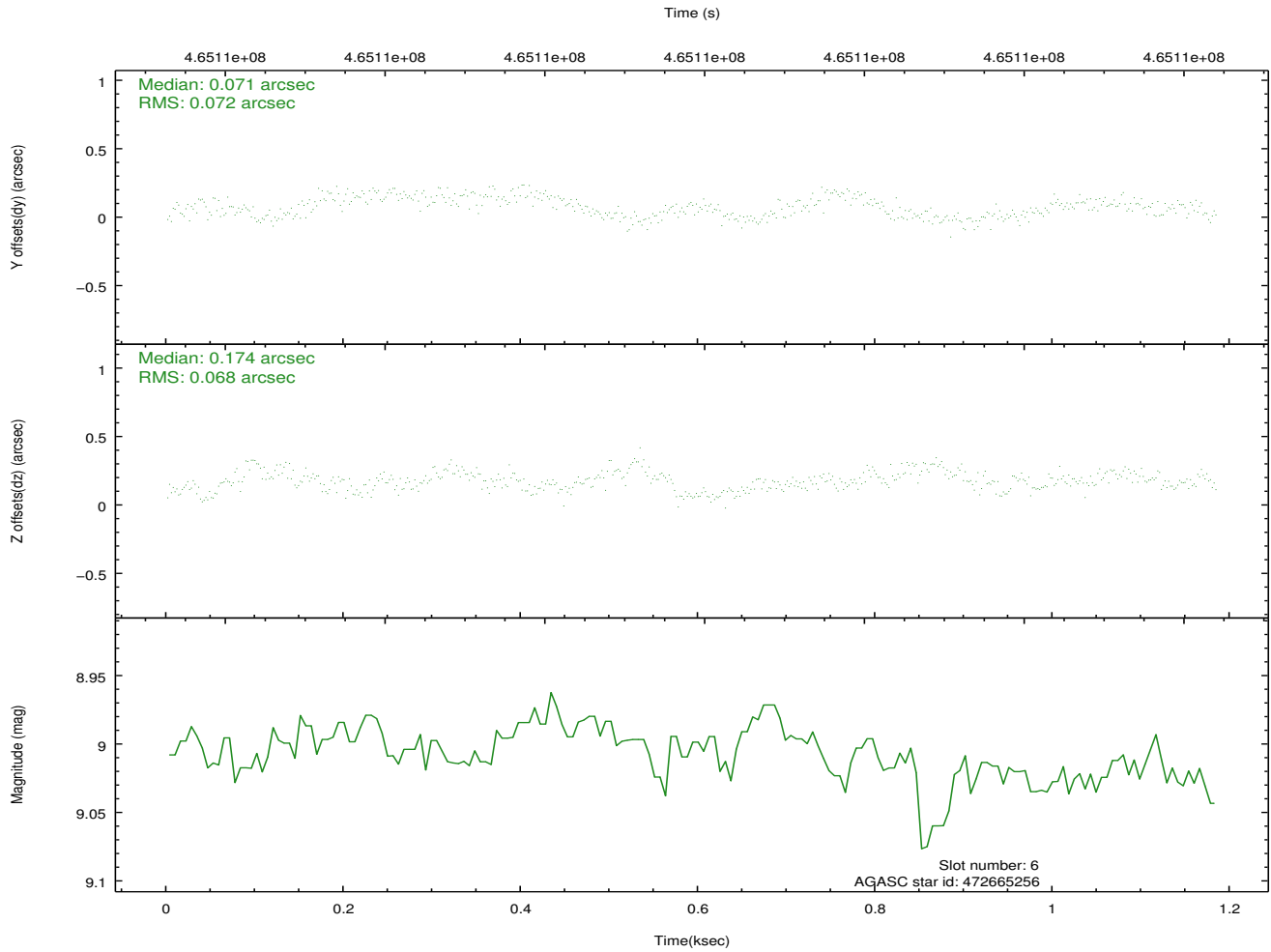
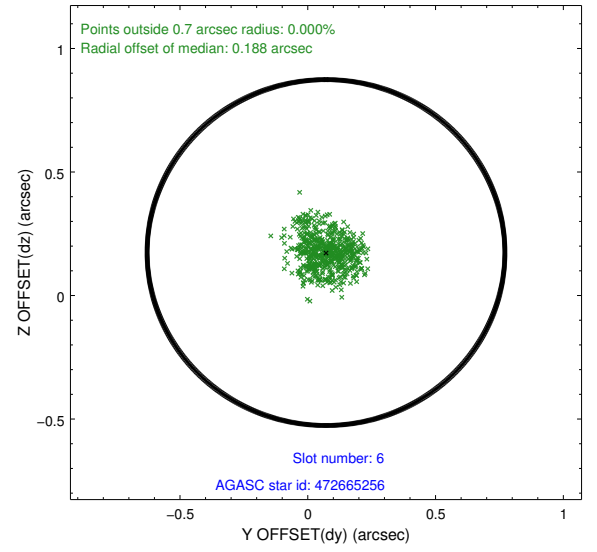
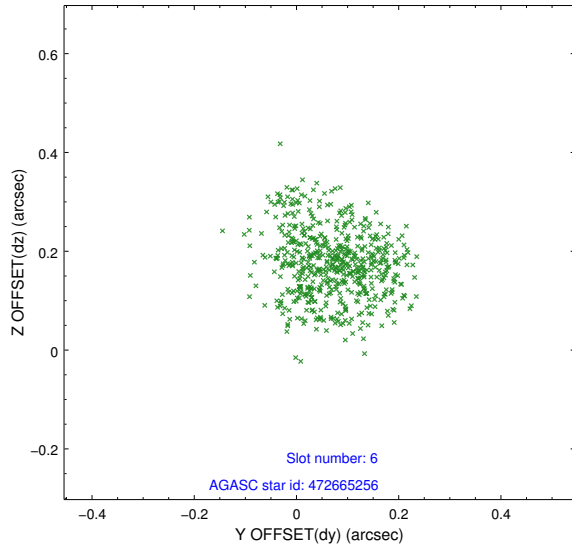
## 2.4.2 Slot 4



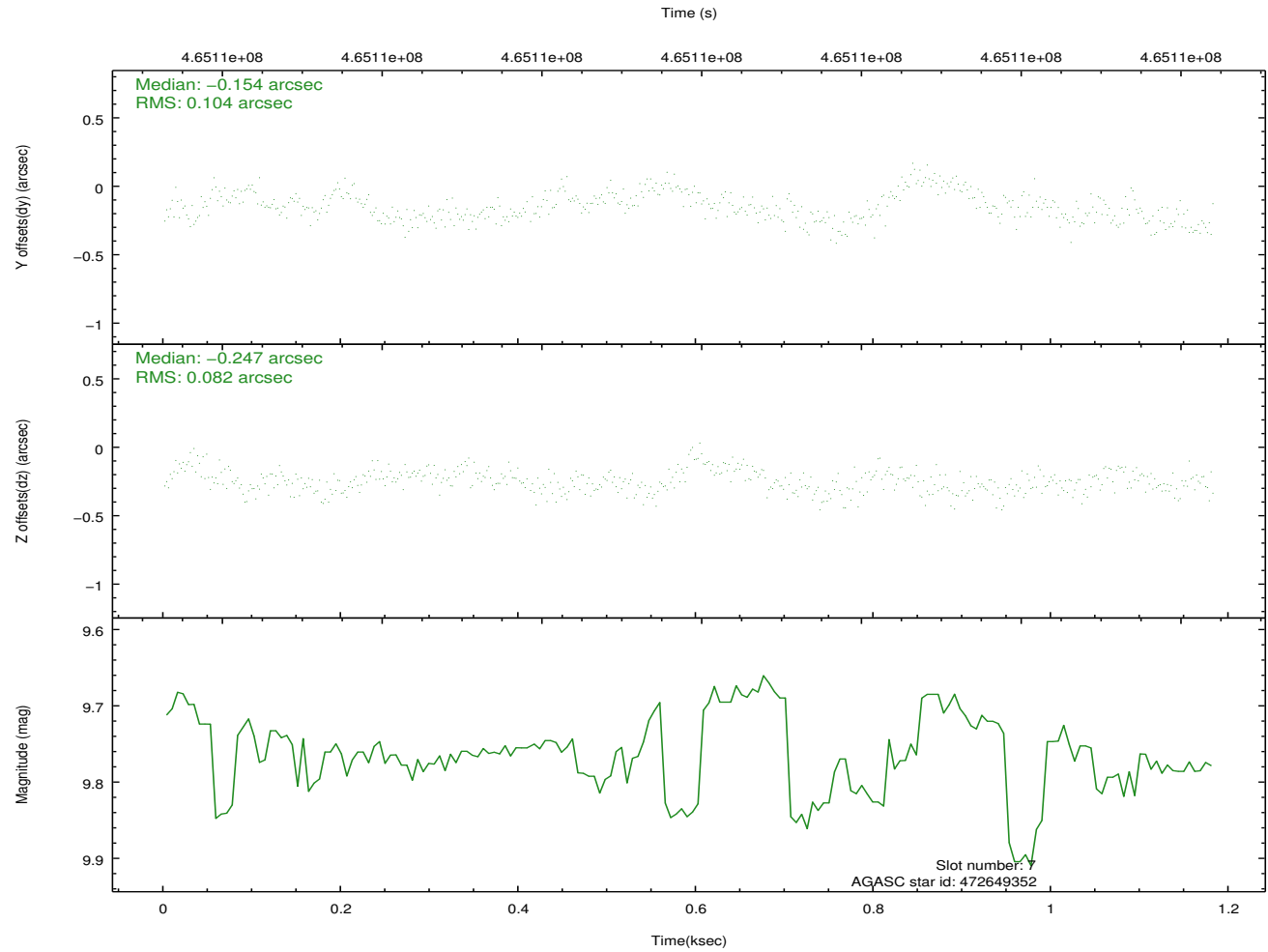
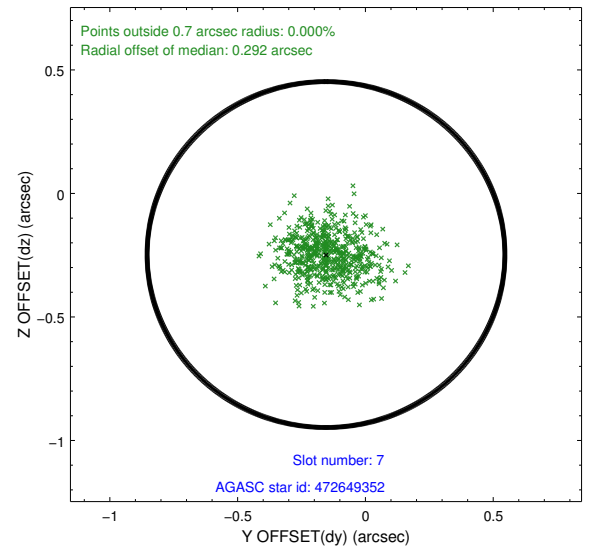
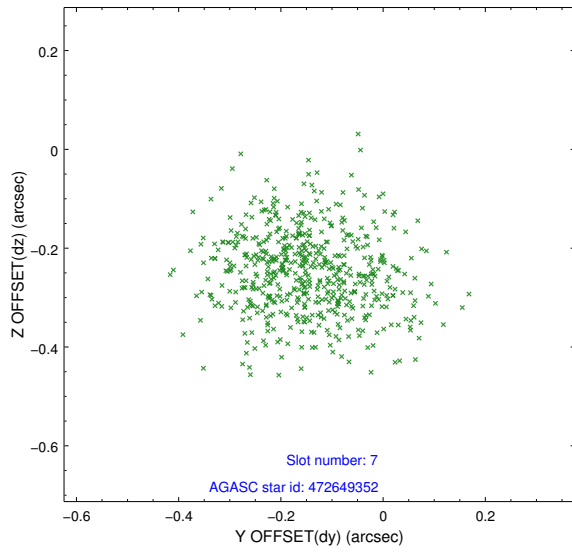
### 2.4.3 Slot 5



## 2.4.4 Slot 6

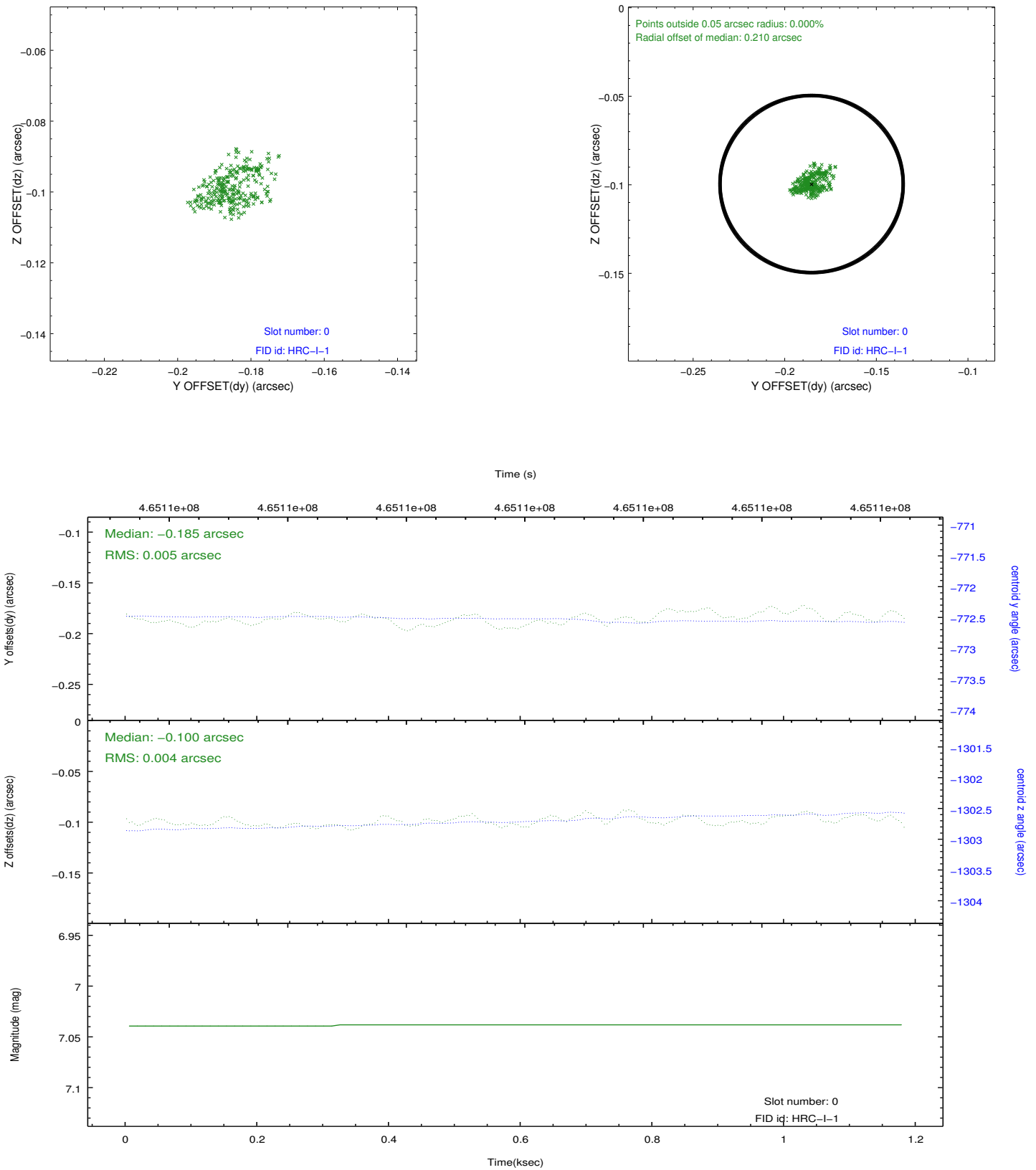


## 2.4.5 Slot 7

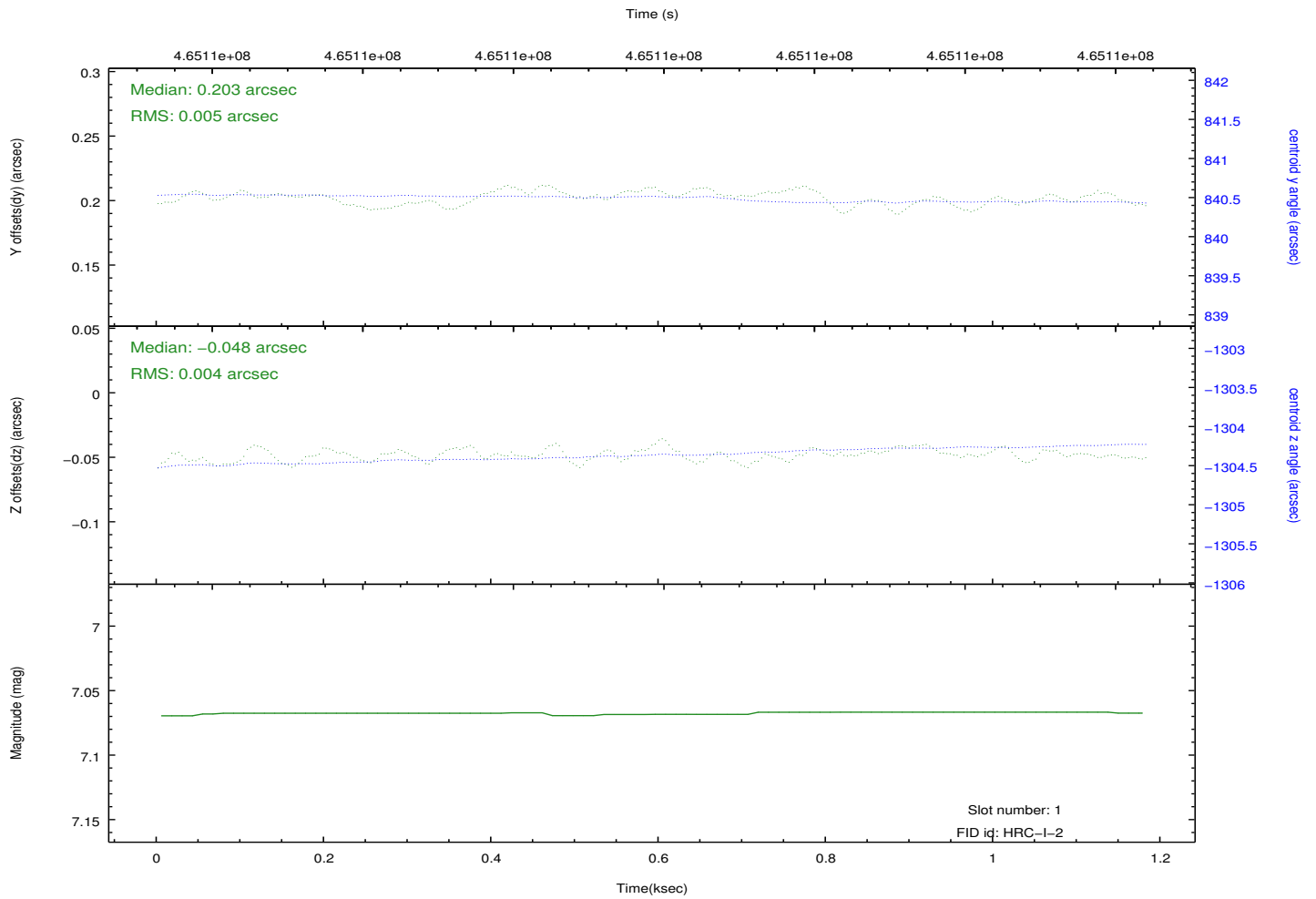
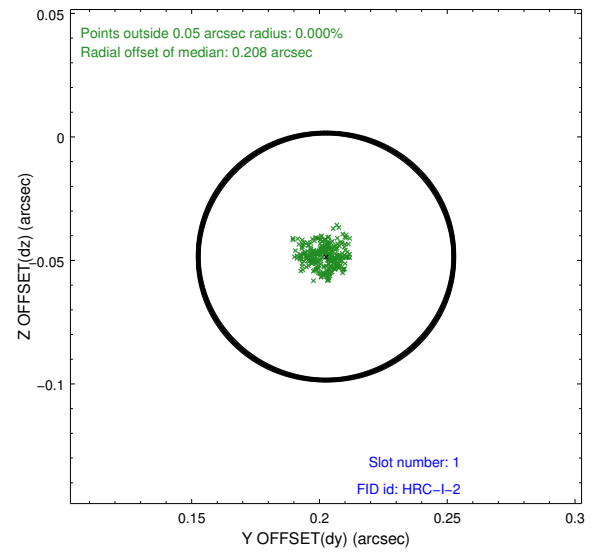
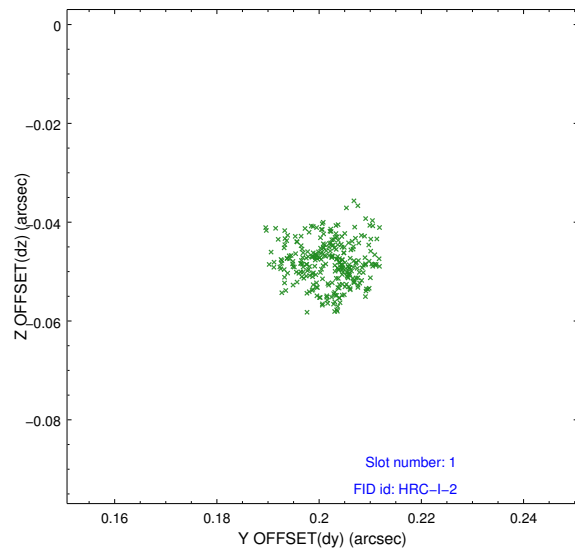


## 2.5 FID Slots

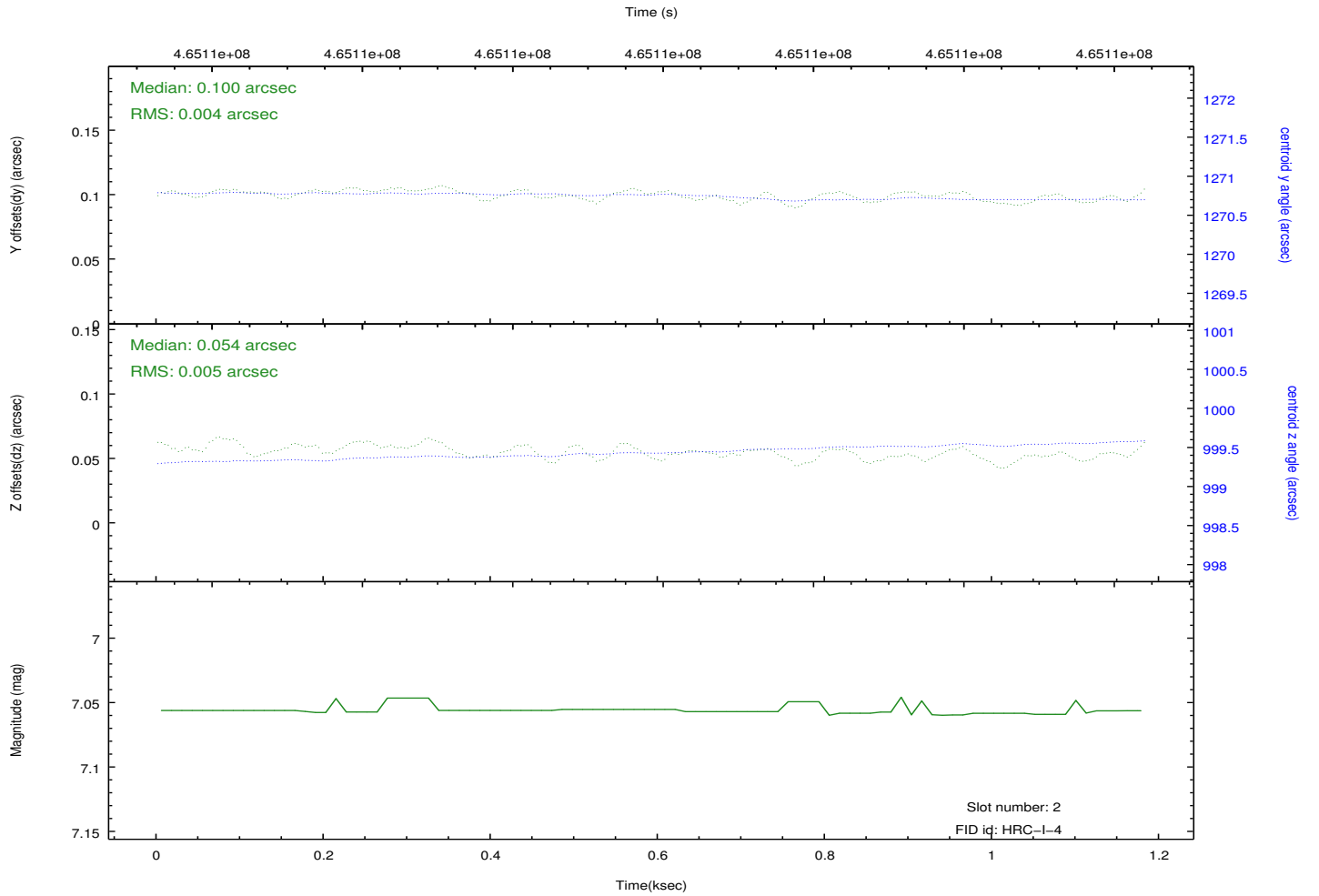
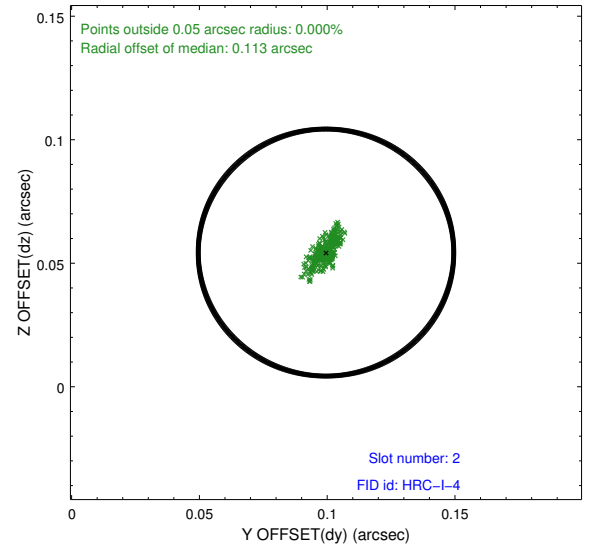
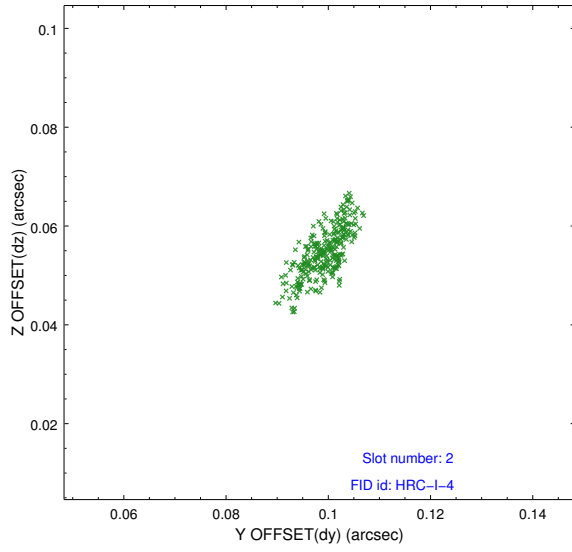
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1820813133717

## A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.