

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 14309 - L2 Version 2  
Chandra X-Ray Center

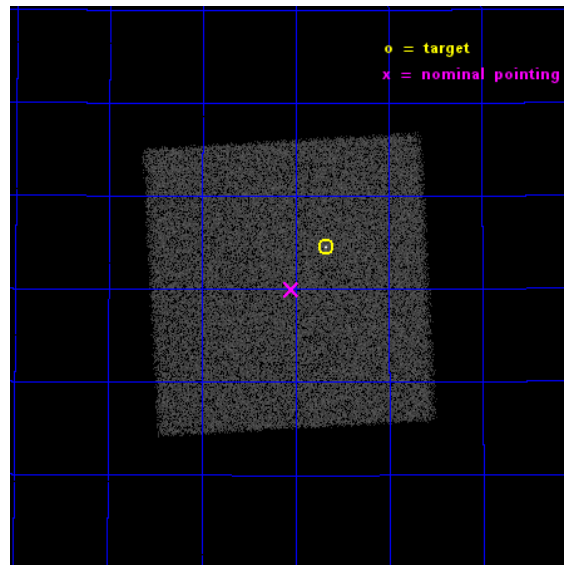
L2 Processing Date : Nov 27 2014

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# 1 Front

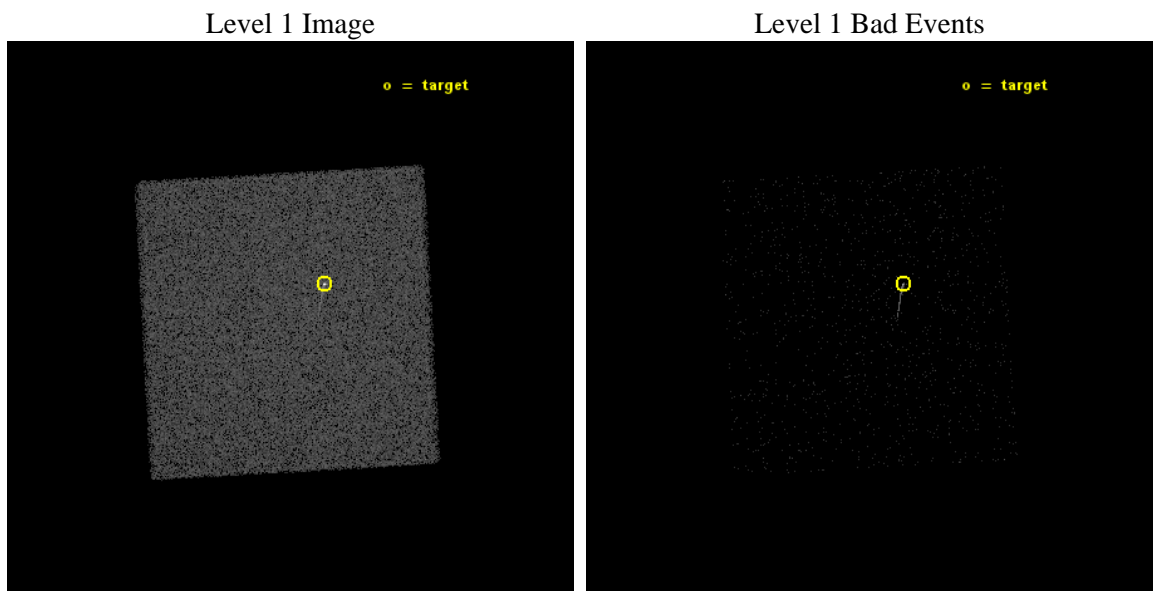
seq_num	291060	Sequence number
obs_id	14309	Observation id
title	AO-13 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.26081161832	Nominal RA [deg]
dec_nom	45.66624148543	Nominal Dec [deg]
roll_nom	221.86463825854	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1181.8250632286	[s]
livetime	1154.099636147	Ontime multiplied by DTCOR
l2events	87589	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	1181.8250632286	[s]
caldbver	4.6.4	&#160	l1events	144957	Number of level 1 events
date	2014-11-27T07:46:58	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

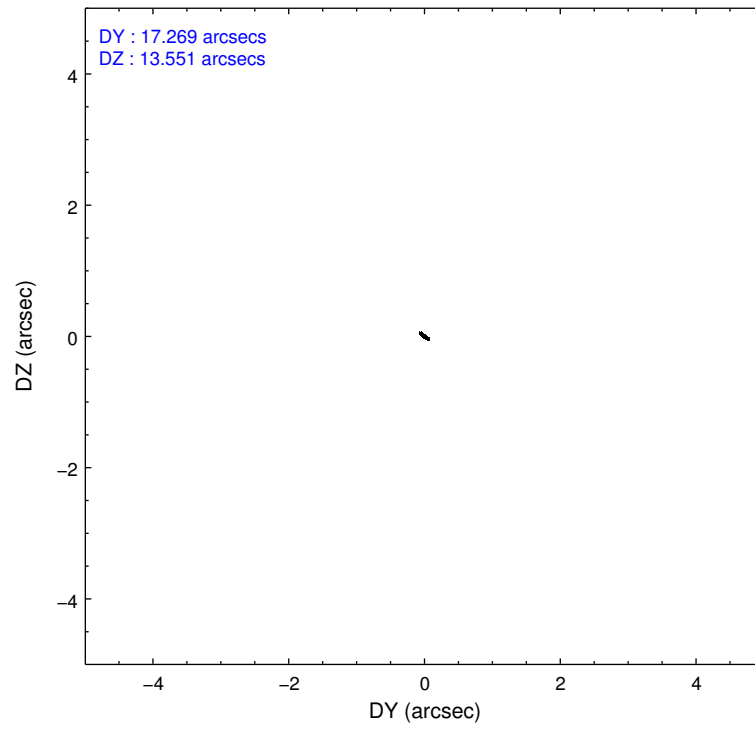
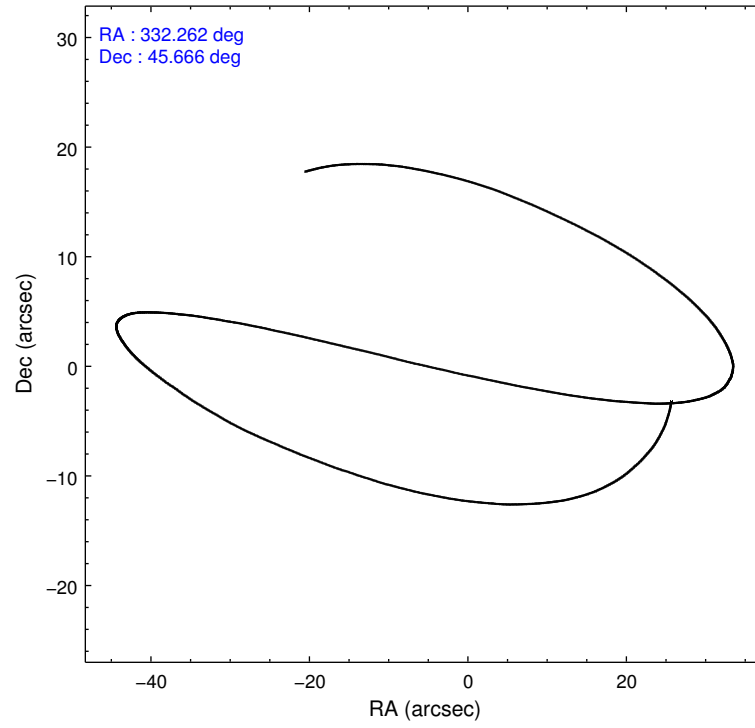
	<b>segment 0</b>
level 1 events	144957
rejected events	28429
rejected %	19%

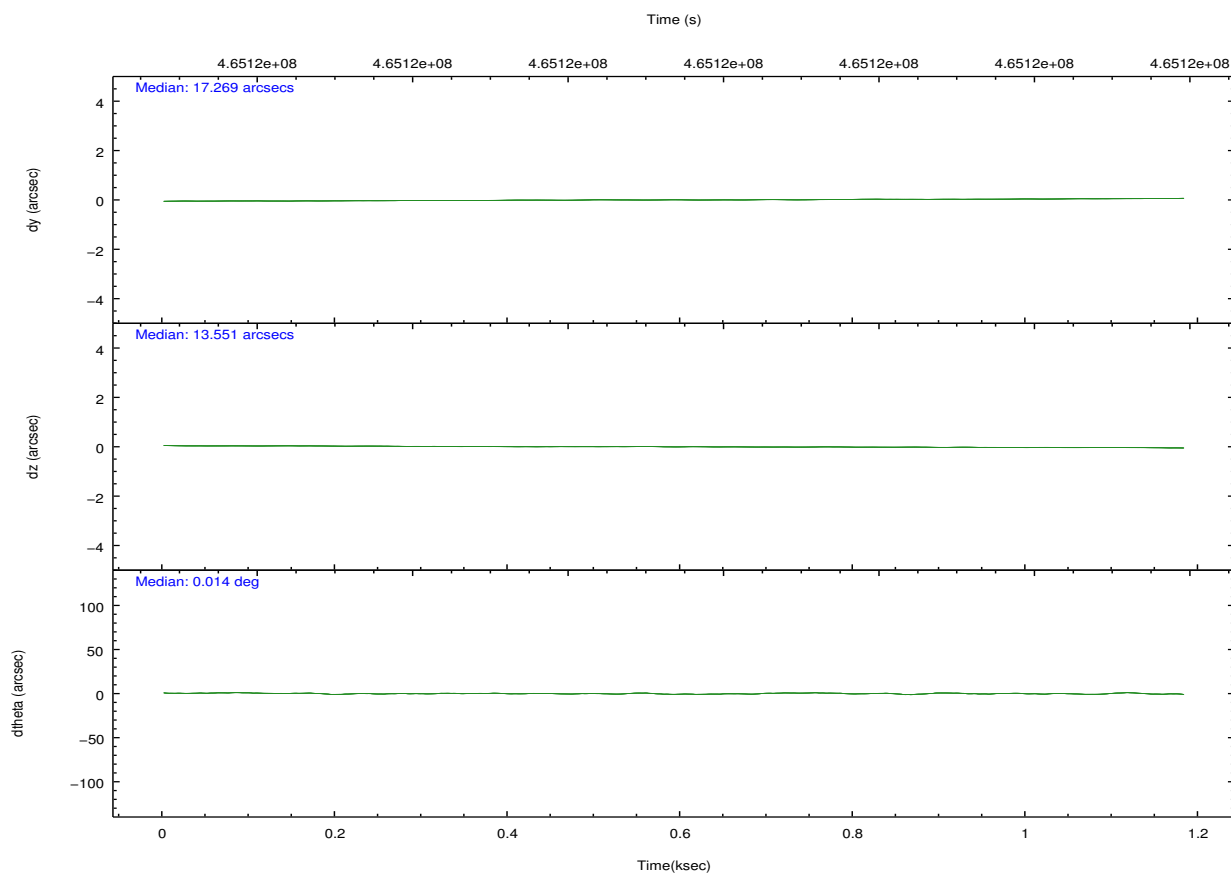
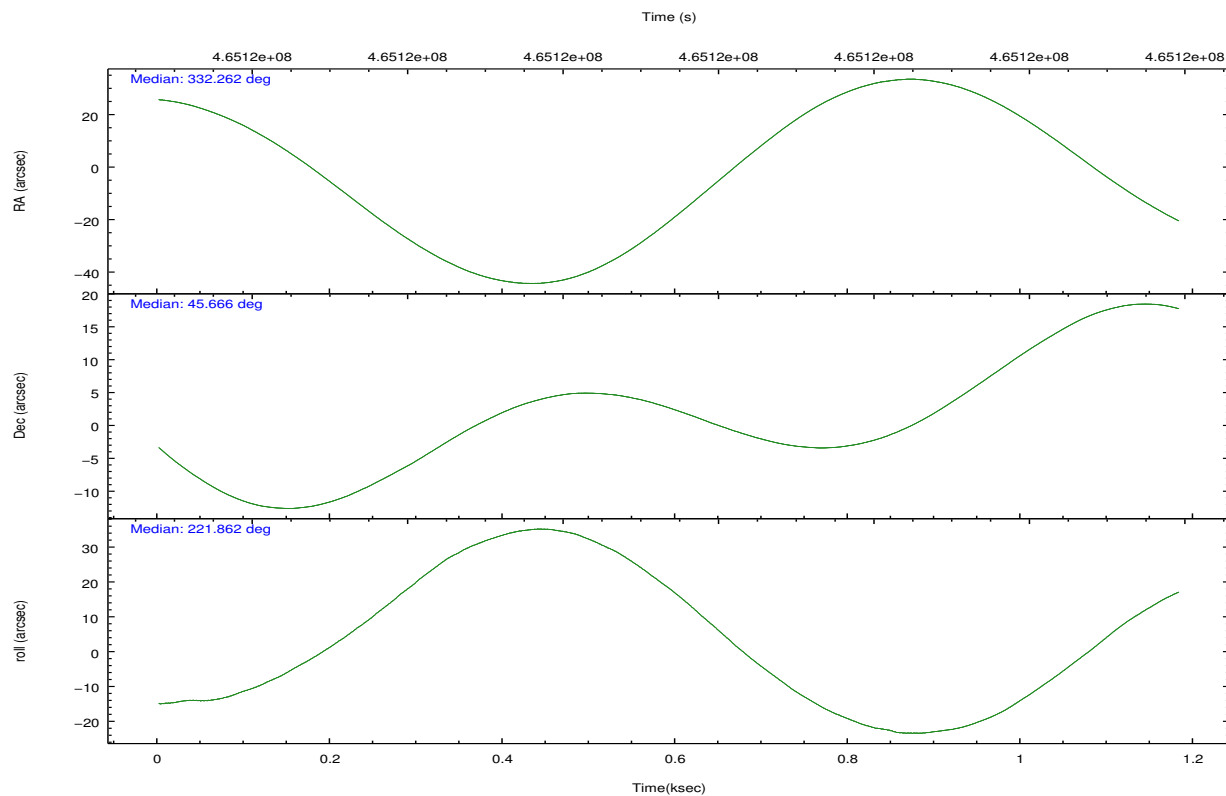
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	332.271383	332.2608116183224
[deg] Pointing Dec	45.692556	45.66624148542989
[deg] Pointing Roll	221.952594	221.8646382585411
[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)	465118328.184000	465117952.09677
Observation start date	2012-09-27T07:31:01	2012-09-27T07:25:52
[s] Observation end time (MET)	465119328.184000	465119461.92185
Observation end date	2012-09-27T07:47:41	2012-09-27T07:51:01

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

## 2.3 Aspect





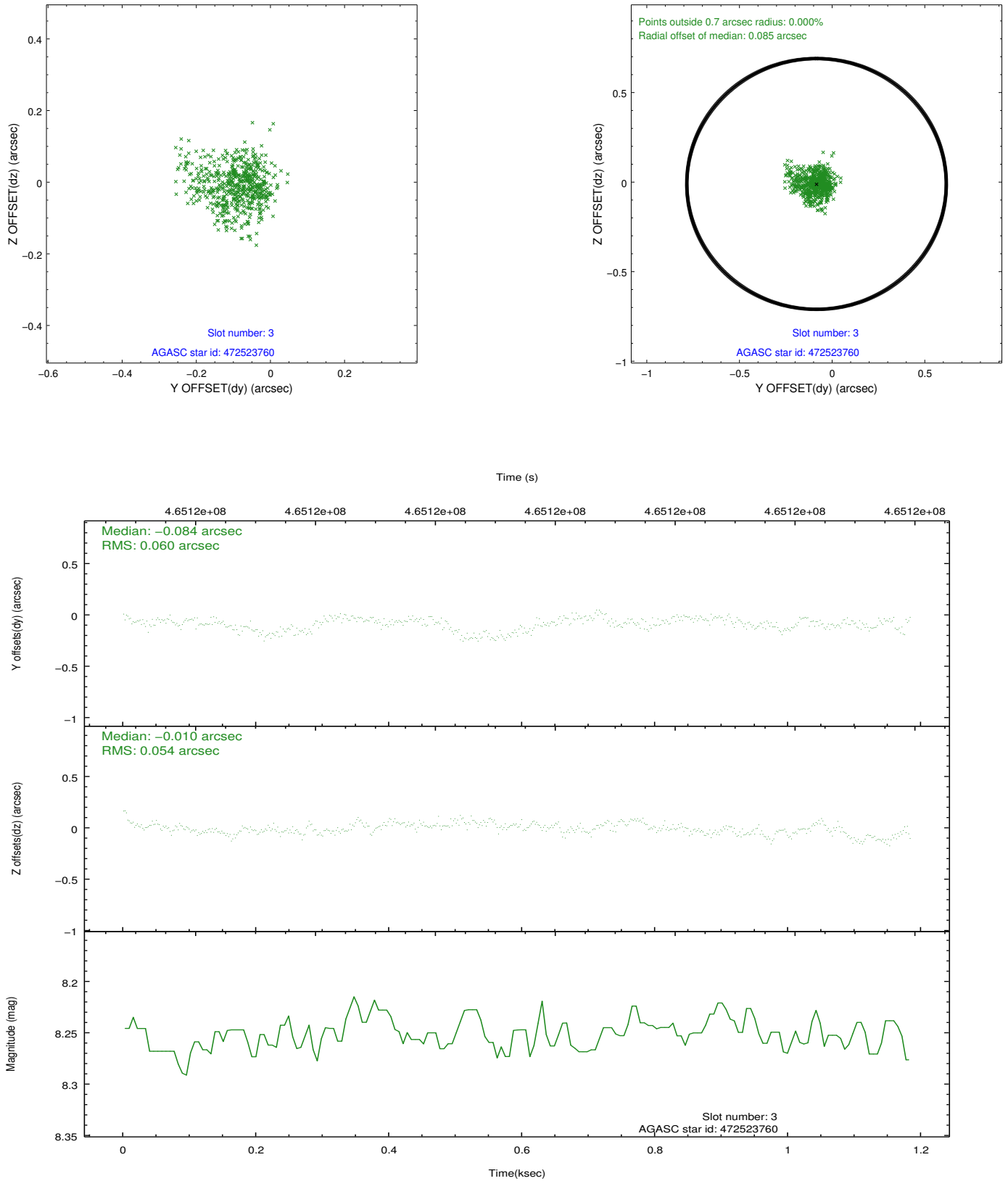
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	7.04	289	-0.017	-0.047	0.011	0.017	0.000000	0.000000	-773.28	-1301.57
1	FID		HRC-I-3	7.12	289	-0.139	-0.065	0.008	0.016	0.000000	0.000000	-1204.35	998.52
2	FID		HRC-I-4	7.05	289	0.270	0.022	0.007	0.012	0.000000	0.000000	1265.85	1003.94
3	GUIDE	used	472523760	8.25	578	-0.084	-0.010	0.085	0.147	331.645363	45.403260	1870.03	-289.45
4	GUIDE	used	472659832	9.44	573	-0.198	0.206	0.150	0.221	332.780399	46.098139	-1919.58	-241.46
5	GUIDE	used	472661712	9.99	571	0.308	-0.179	0.238	0.419	331.914954	46.059715	-224.78	-1581.75
6	GUIDE	used	472665256	9.01	578	0.061	0.043	0.126	0.195	332.808125	46.195041	-2206.26	-458.88
7	GUIDE	used	472654568	9.41	574	-0.085	-0.069	0.125	0.229	332.194449	45.063576	1656.41	1550.61

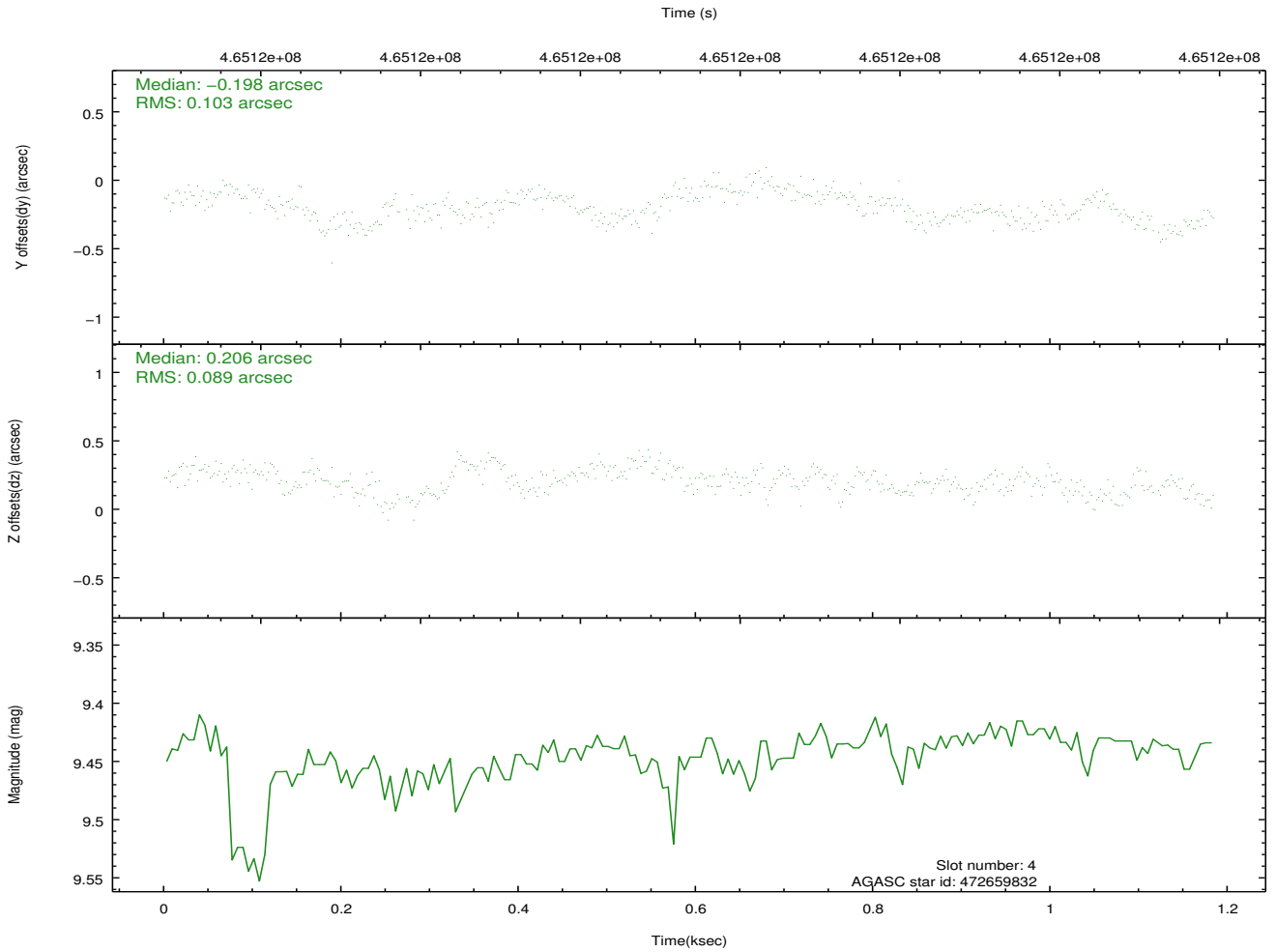
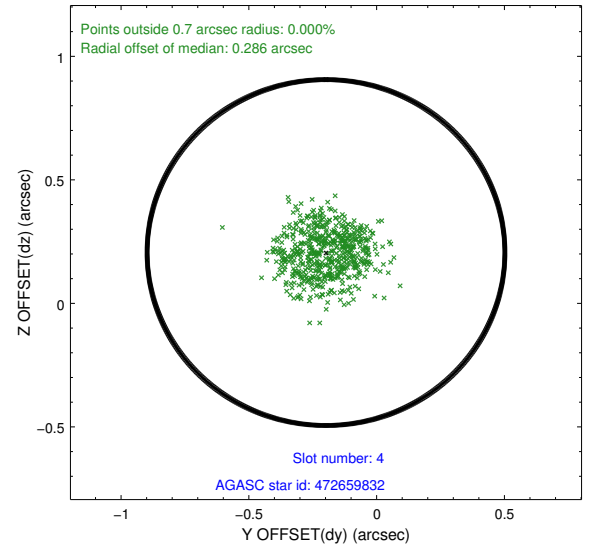
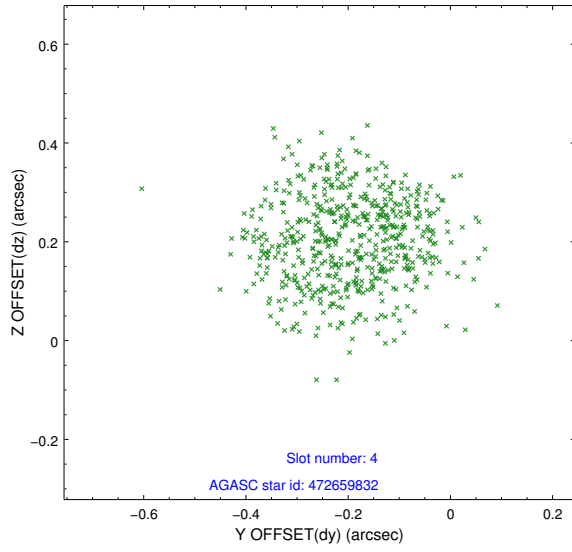


## 2.4 Star Slots

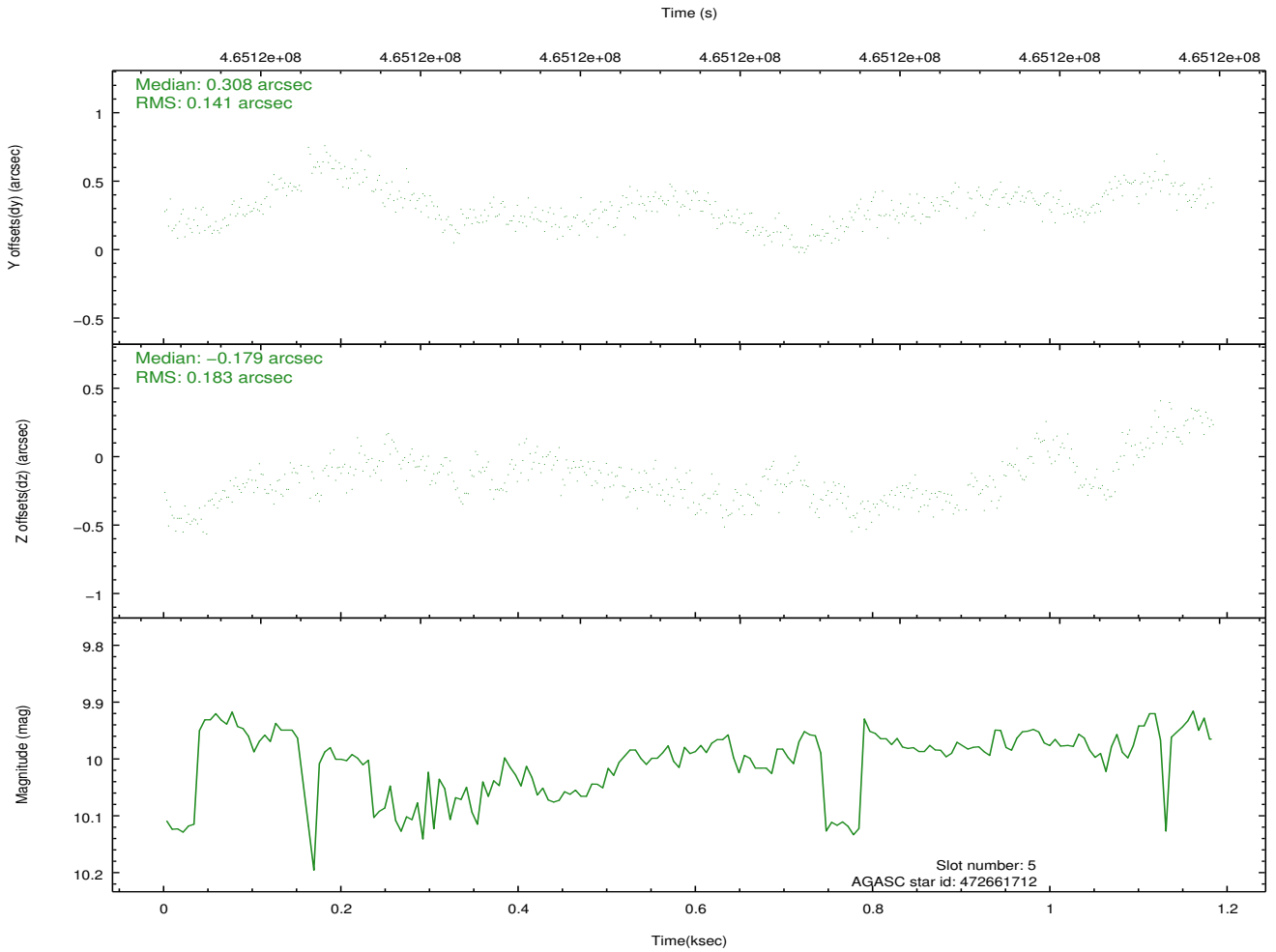
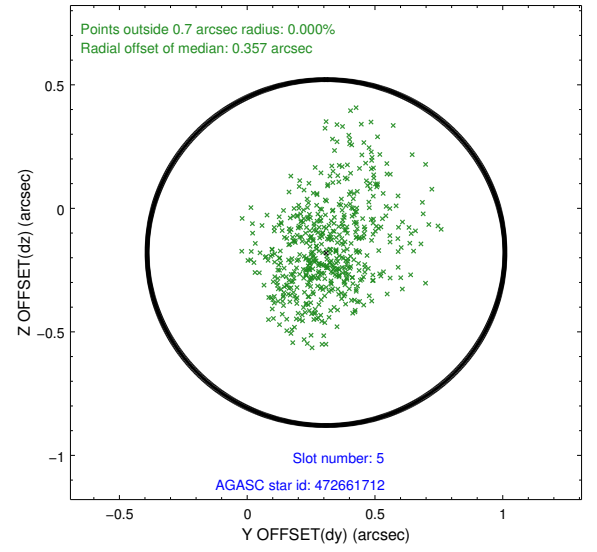
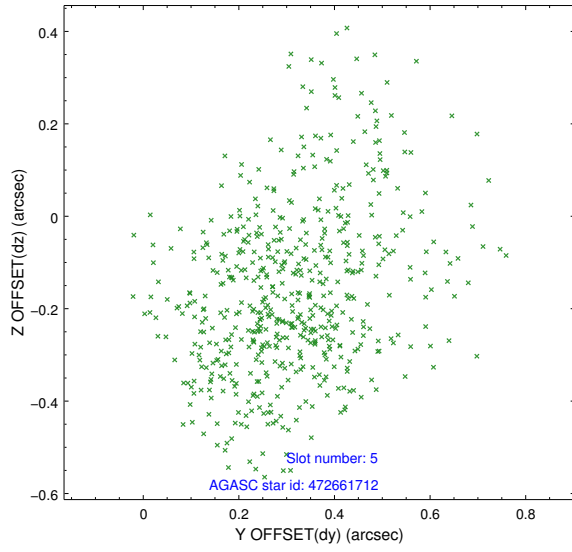
### 2.4.1 Slot 3



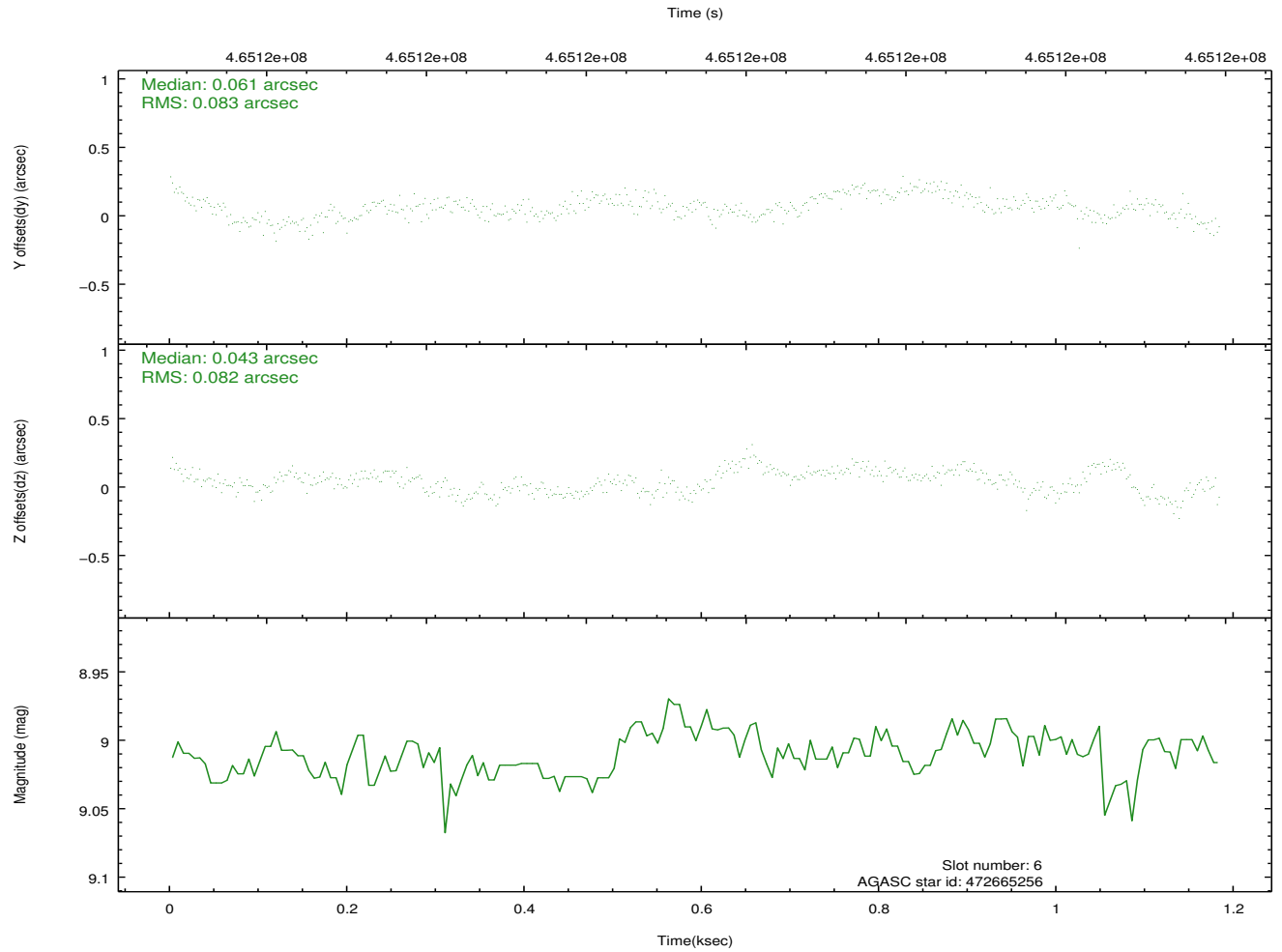
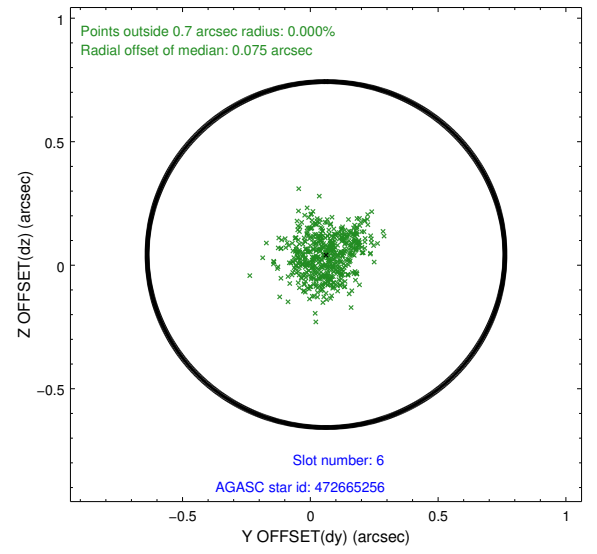
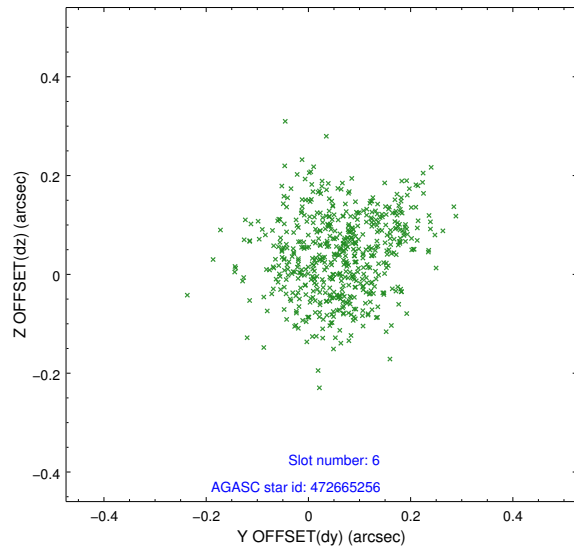
## 2.4.2 Slot 4



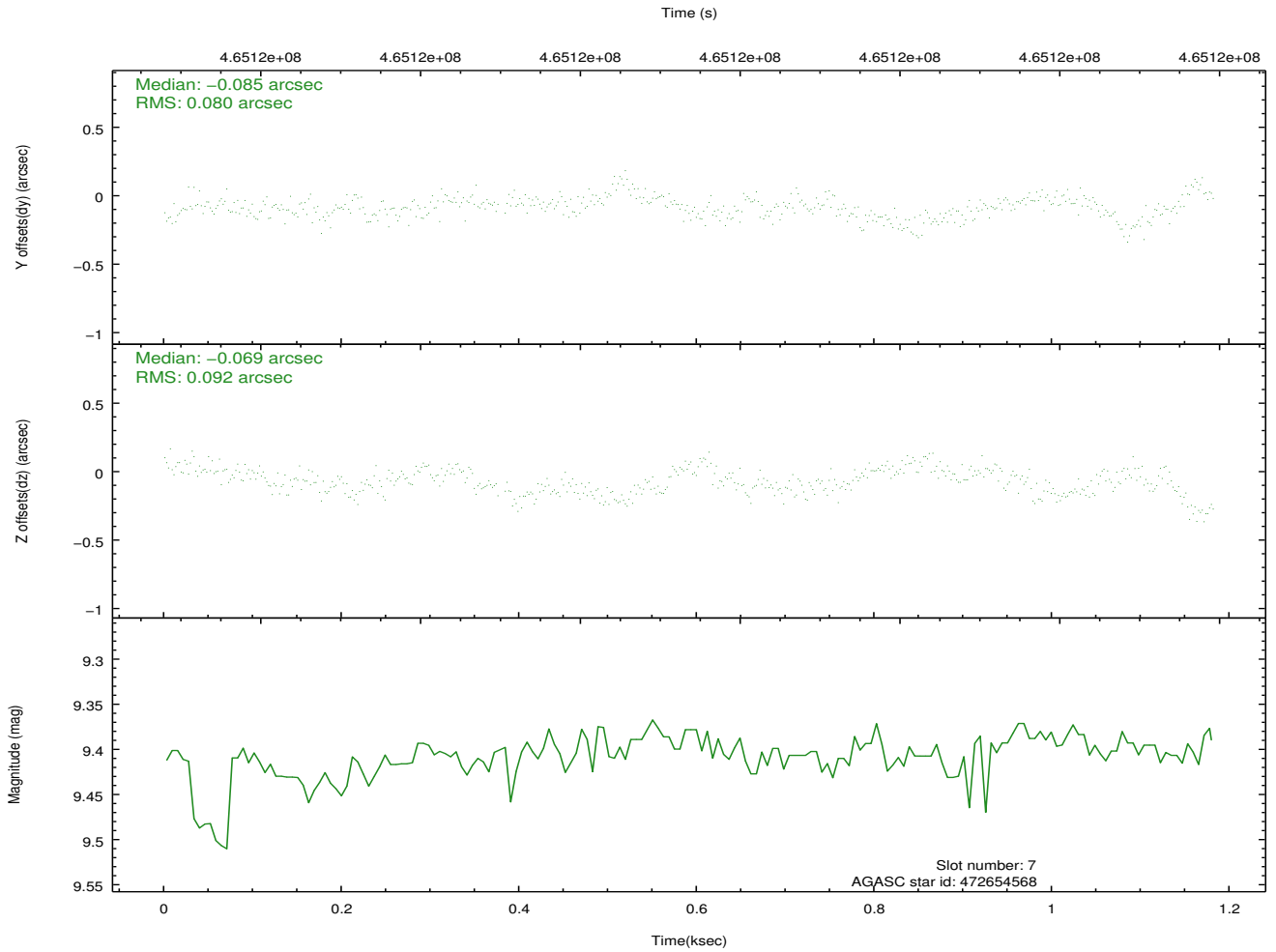
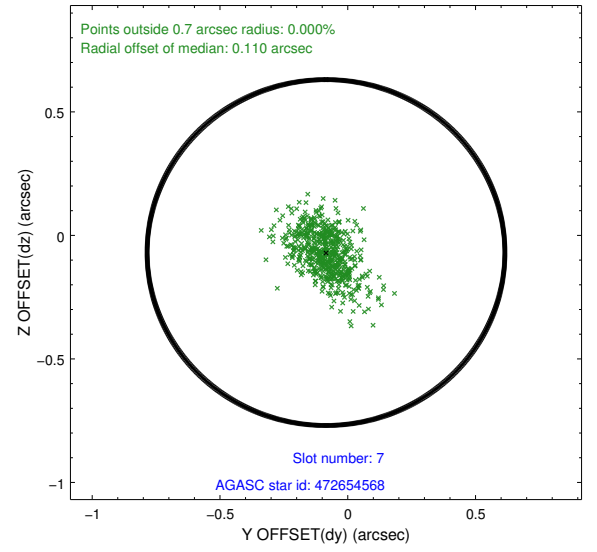
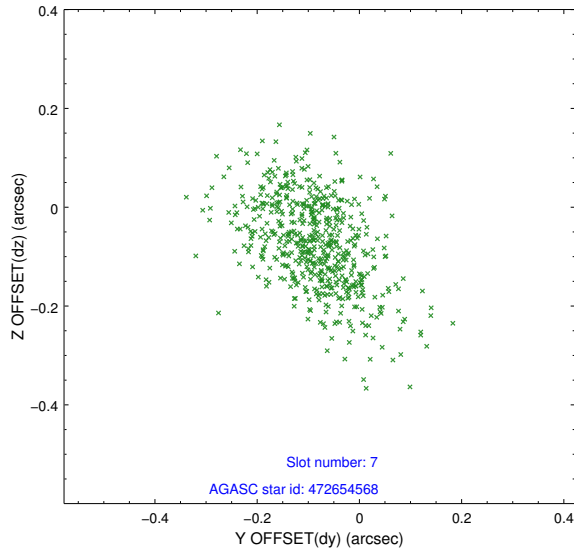
### 2.4.3 Slot 5



## 2.4.4 Slot 6

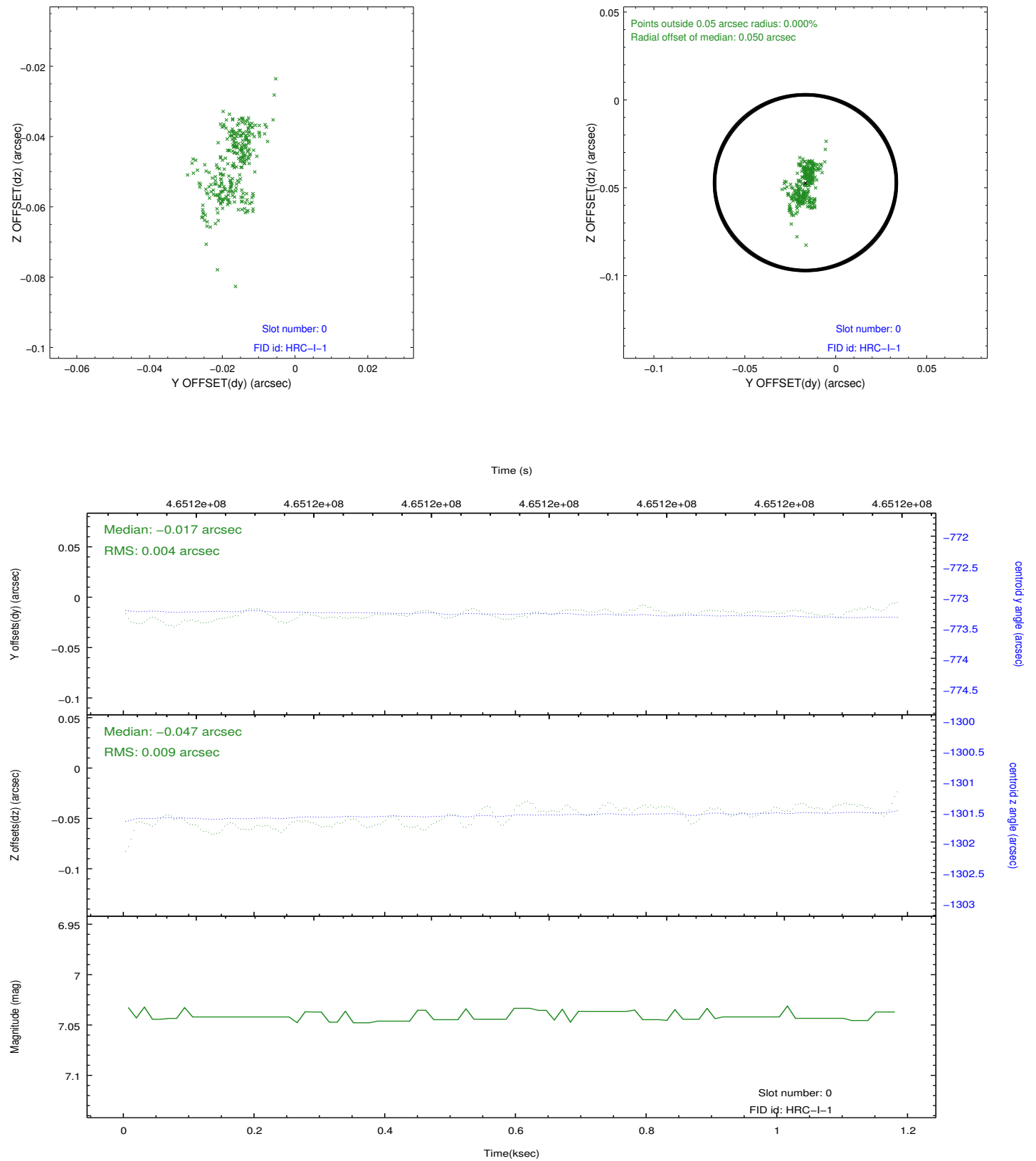


## 2.4.5 Slot 7

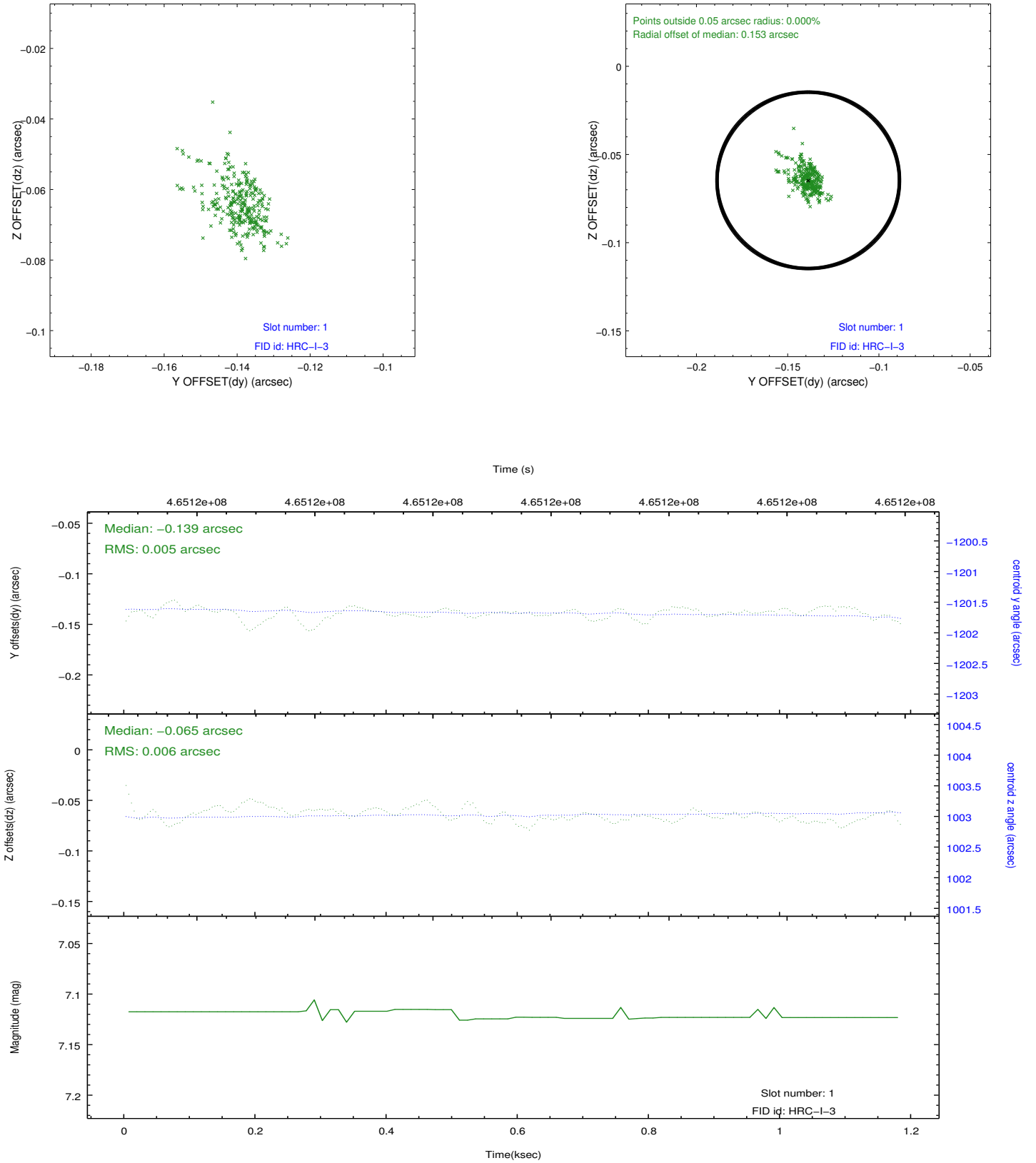


## 2.5 FID Slots

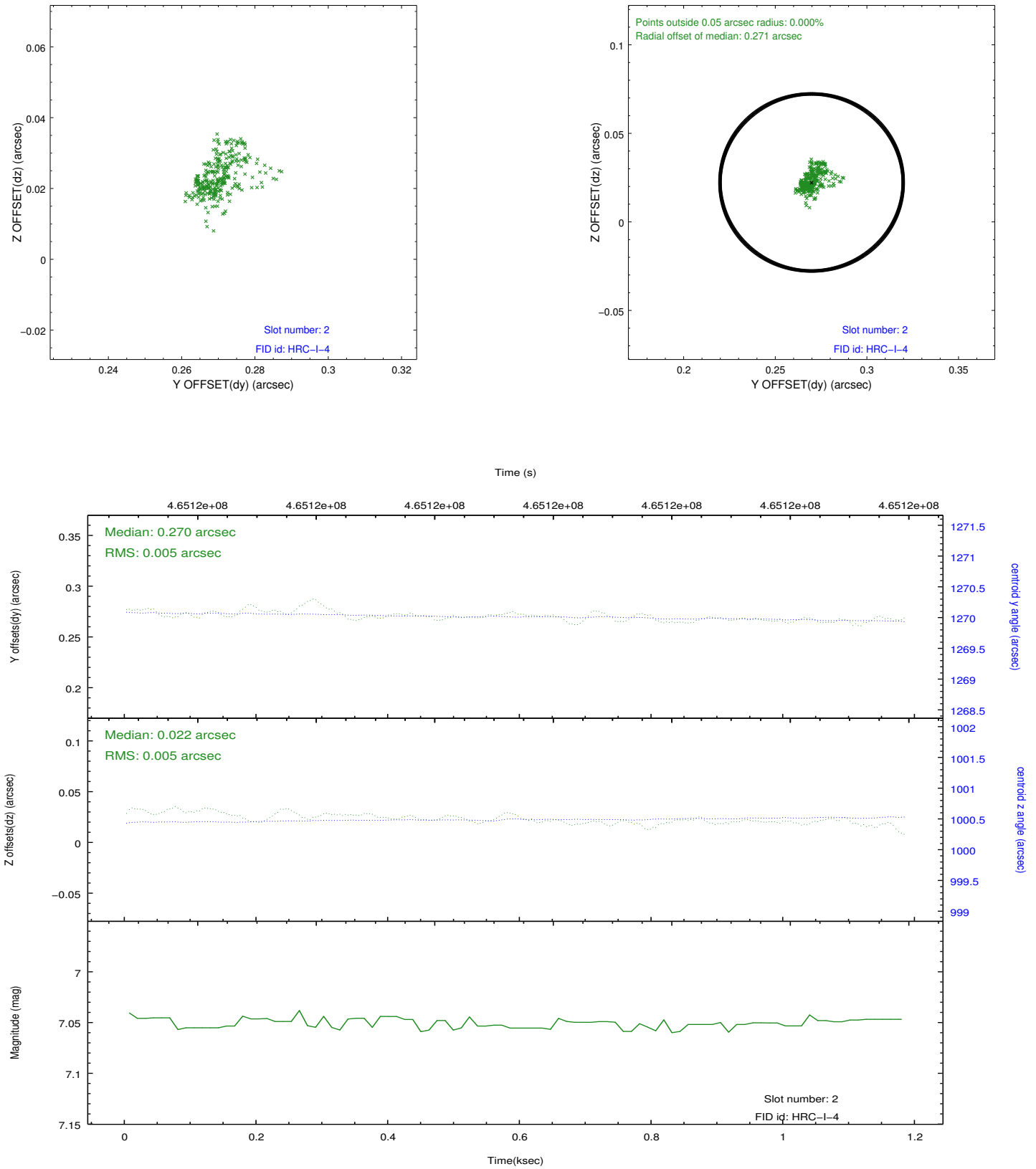
### 2.5.1 Slot 0



## 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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1818250632286

## 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.