

# V&V Reference Report

## L2 ASCDS Version : 10

Observation 15426 - L2 Version 2  
Chandra X-Ray Center

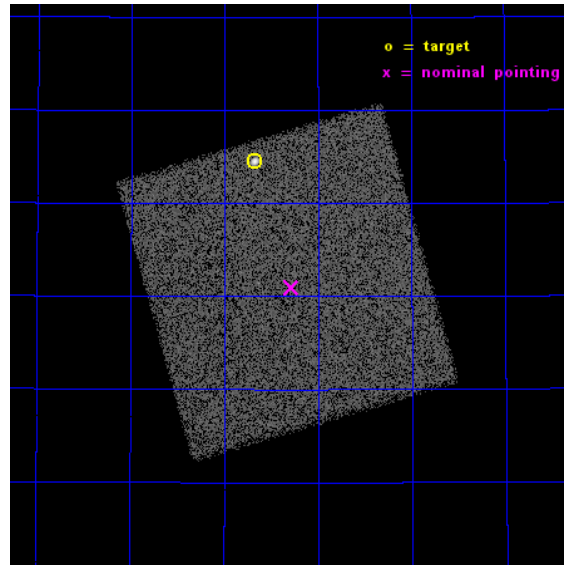
L2 Processing Date : Dec 6 2014

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# 1 Front

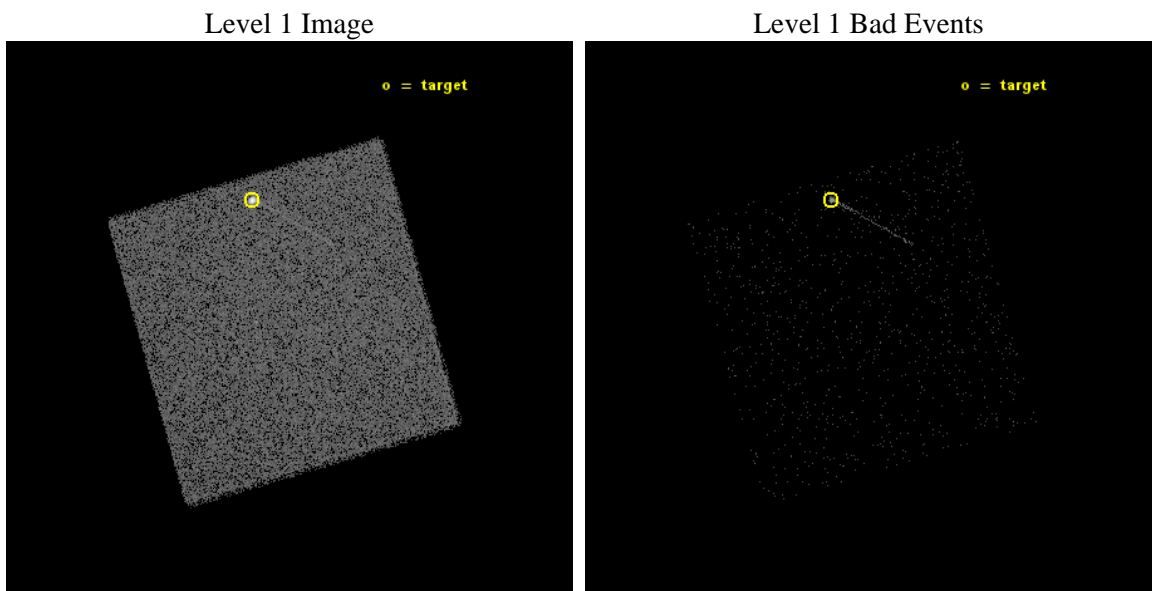
seq_num	291105	Sequence number
obs_id	15426	Observation id
title	AO-14 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.07074733938	Nominal RA [deg]
dec_nom	45.516227285793	Nominal Dec [deg]
roll_nom	208.9642455669	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1180.0313144922	[s]
livetime	1170.9170055493	Ontime multiplied by DTCOR
l2events	71530	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	10.3.1	Processing system revision	ontime	1180.0313144922	[s]
caldbver	4.6.4	&#160	l1events	114467	Number of level 1 events
date	2014-12-06T11:25:47	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

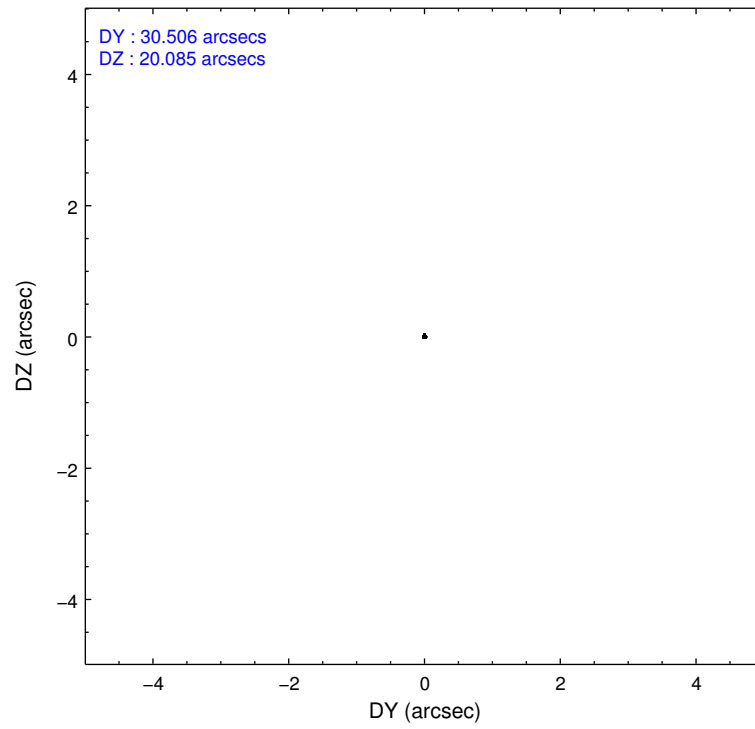
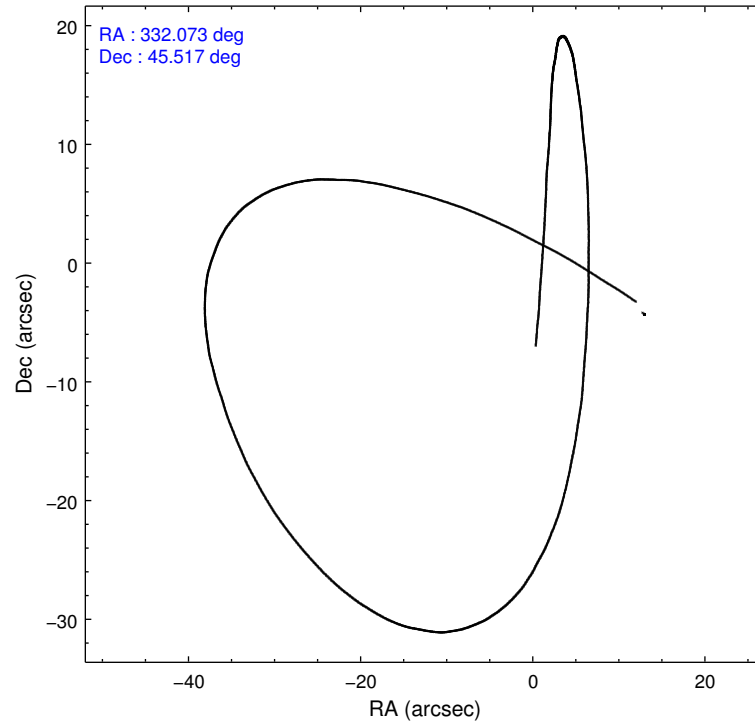
	<b>segment 0</b>
level 1 events	114467
rejected events	18638
rejected %	16%

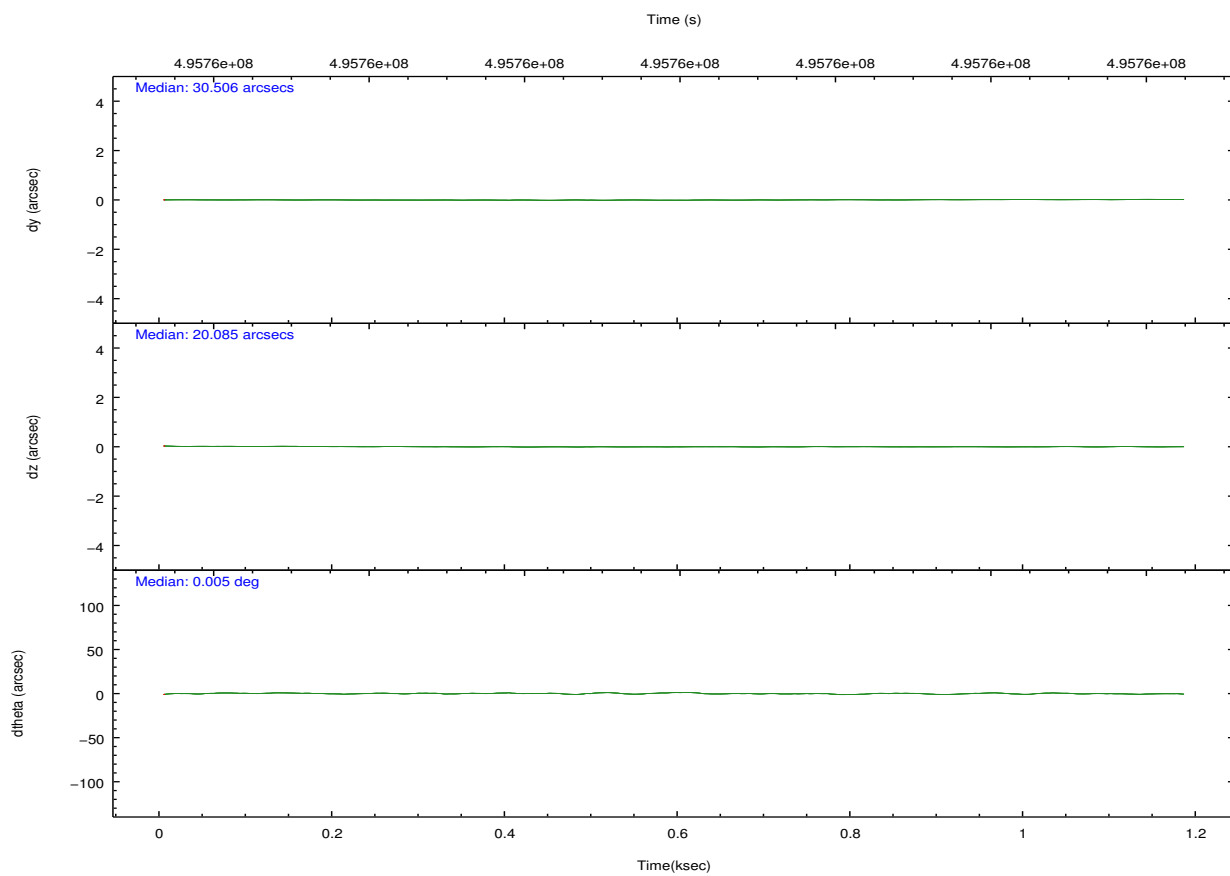
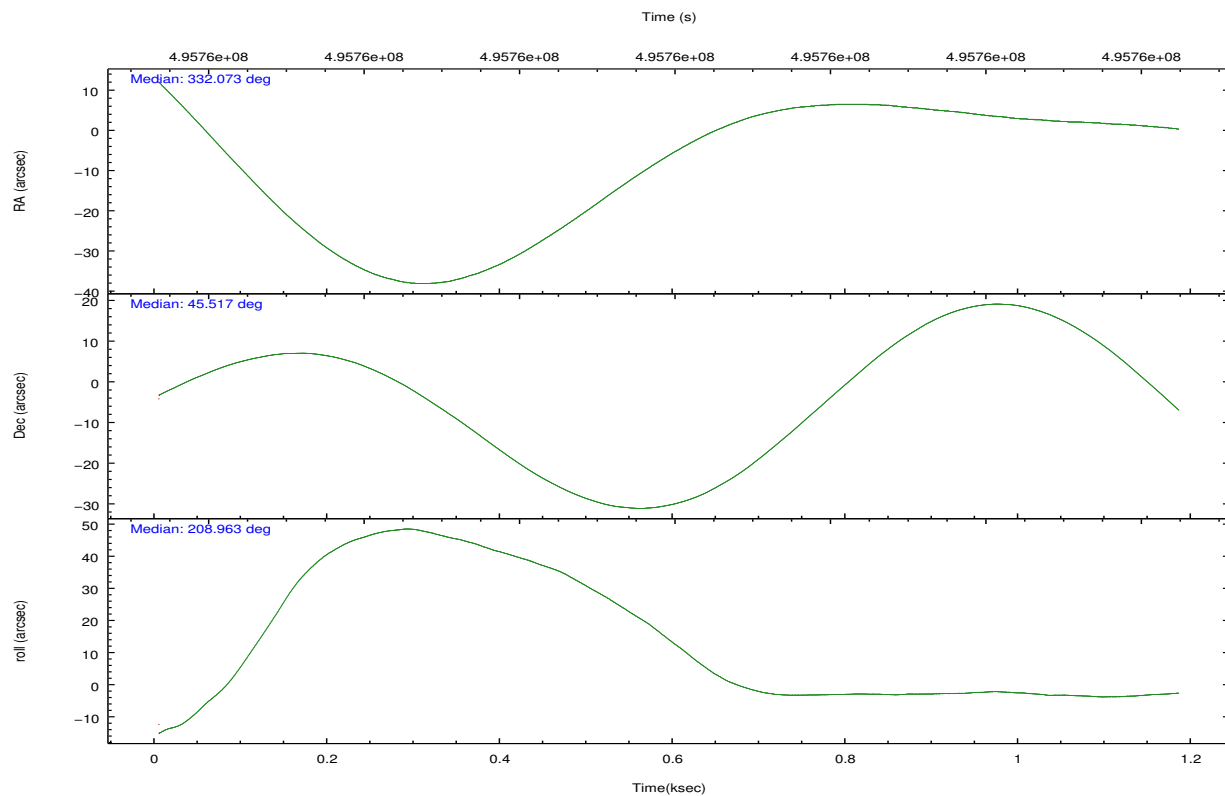
## 2.2 Compared Parameters

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	332.090482	332.0707473393758
[deg] Pointing Dec	45.538793	45.51622728579257
[deg] Pointing Roll	209.045645	208.9642455668956
[mm] SIM focus pos	-1.040293	-1.038866356238299
[mm] SIM defocus	0	0.001426264420575141
[mm] SIM translation stage pos	126.985494	126.9854943052878
[mm] SIM translation stage offset	0	-5.413686238853188e-06
[s] Observation start time (MET)	495760986.184000	495760568.09222
Observation start date	2013-09-16T23:21:59	2013-09-16T23:16:08
[s] Observation end time (MET)	495761986.184000	495762120.4548
Observation end date	2013-09-16T23:38:39	2013-09-16T23:42:00

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

## 2.3 Aspect





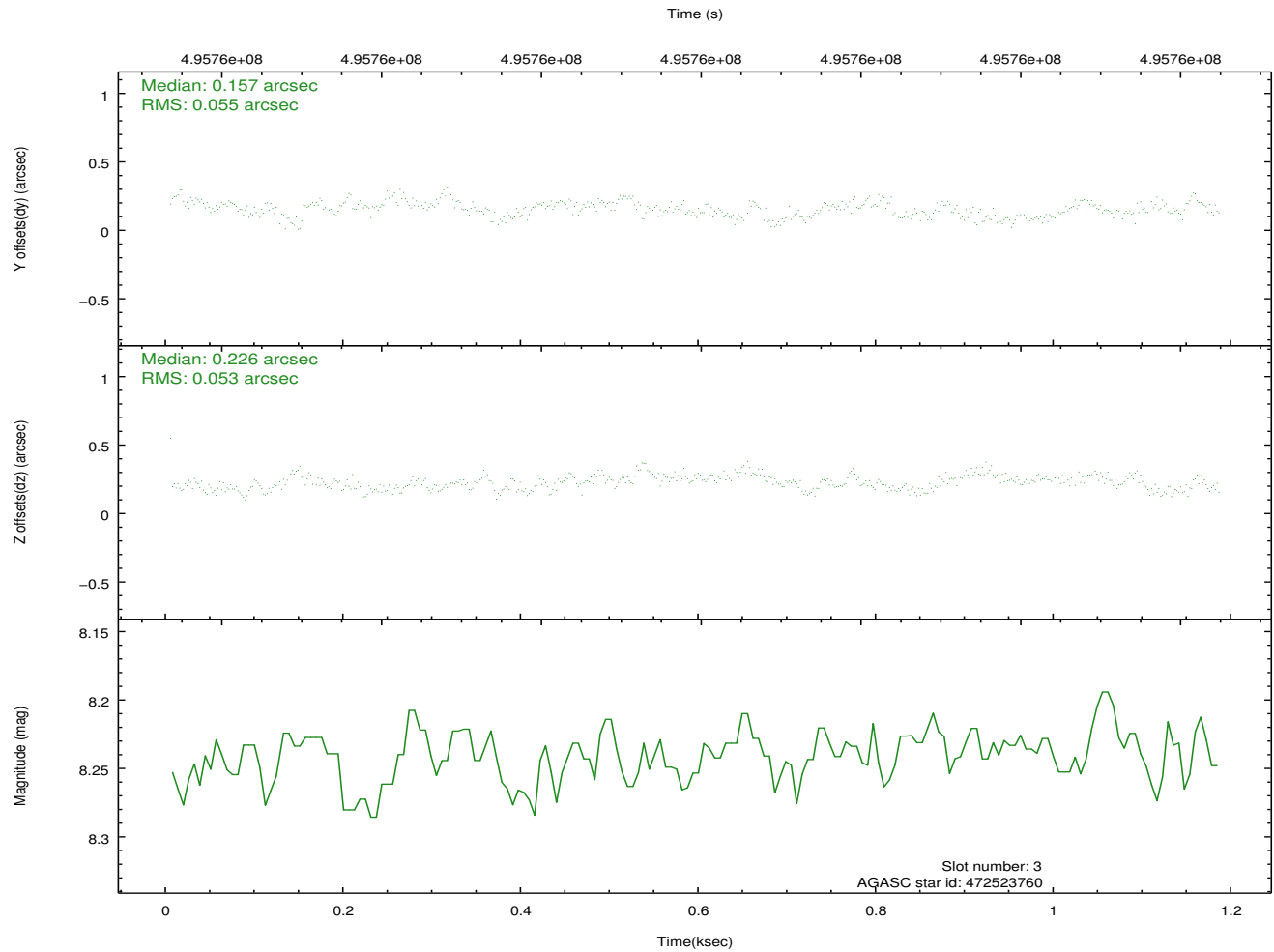
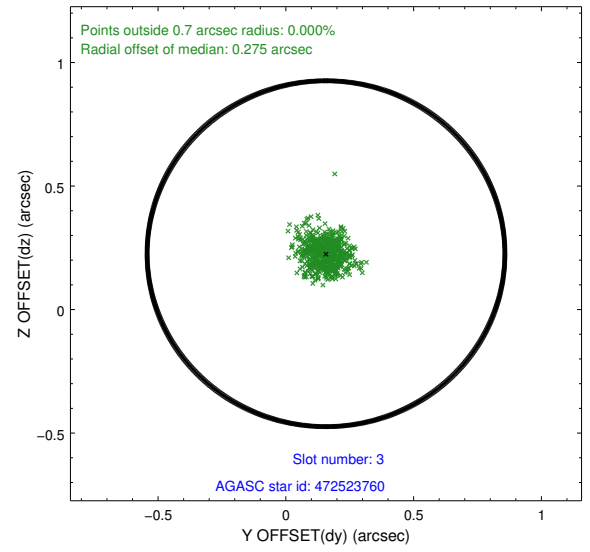
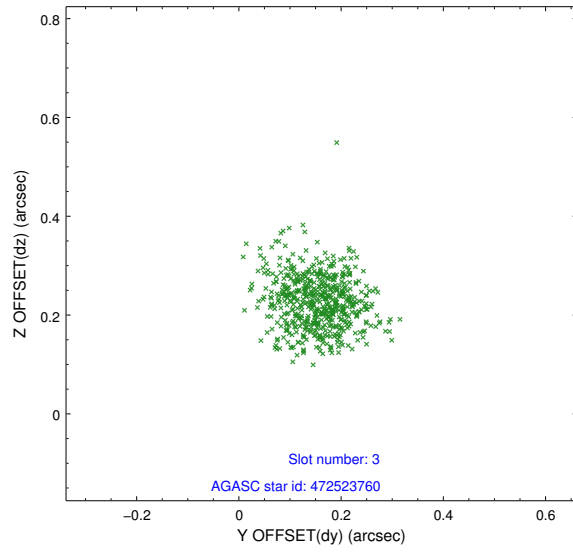
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	7.02	289	-0.144	-0.018	0.006	0.009	0.000000	0.000000	-786.80	-1308.44
1	FID		HRC-I-2	7.05	289	0.226	-0.037	0.006	0.011	0.000000	0.000000	823.48	-1314.46
2	FID		HRC-I-3	7.11	288	0.037	-0.034	0.005	0.010	0.000000	0.000000	-1212.38	991.52
3	GUIDE	used	472523760	8.24	576	0.157	0.226	0.079	0.130	331.645363	45.403260	1220.38	-118.10
4	GUIDE	used	472527720	7.02	577	-0.324	-0.127	0.092	0.148	331.460205	45.112509	2144.85	562.44
5	GUIDE	used	472651904	6.13	577	0.135	0.080	0.116	0.162	332.170077	45.742257	-525.26	-539.04
6	GUIDE	used	472655152	9.43	573	0.333	0.218	0.148	0.245	332.504239	45.862991	-1474.19	-515.36
7	GUIDE	used	420754040	9.04	573	-0.290	-0.390	0.120	0.211	331.917939	44.882543	1528.39	1854.34

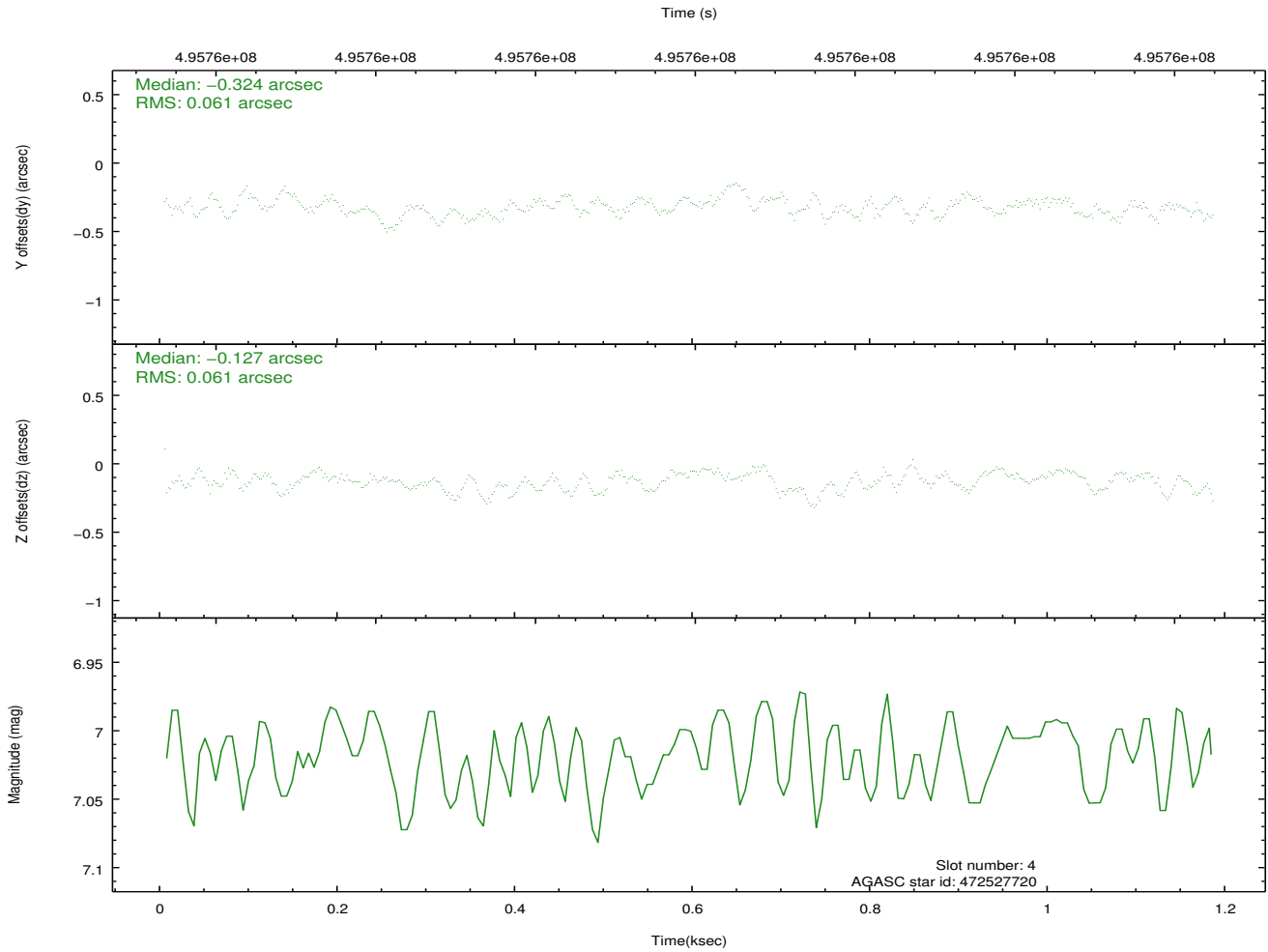
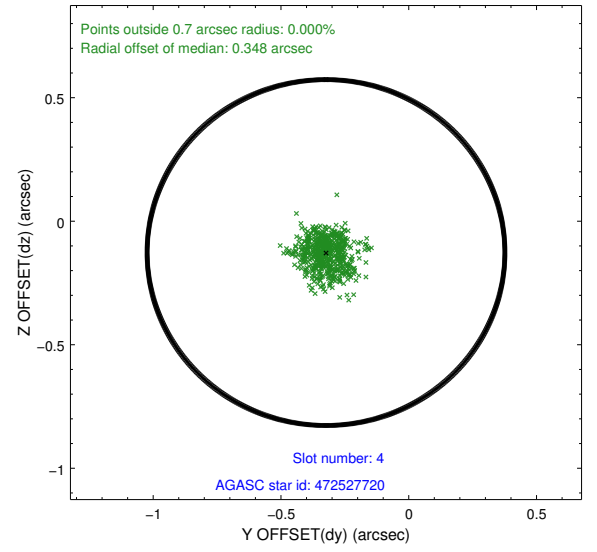
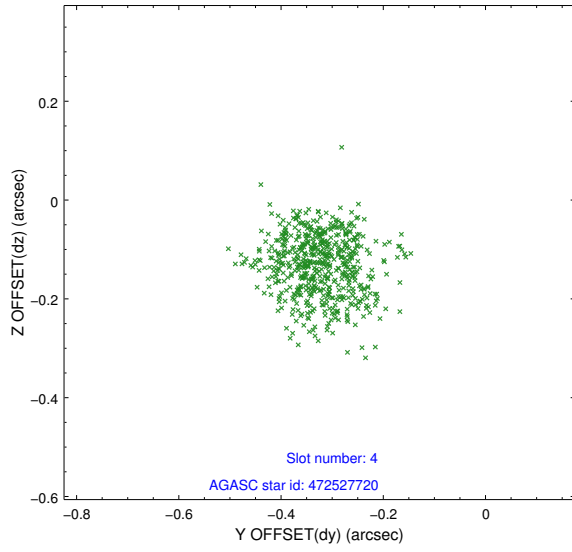


## 2.4 Star Slots

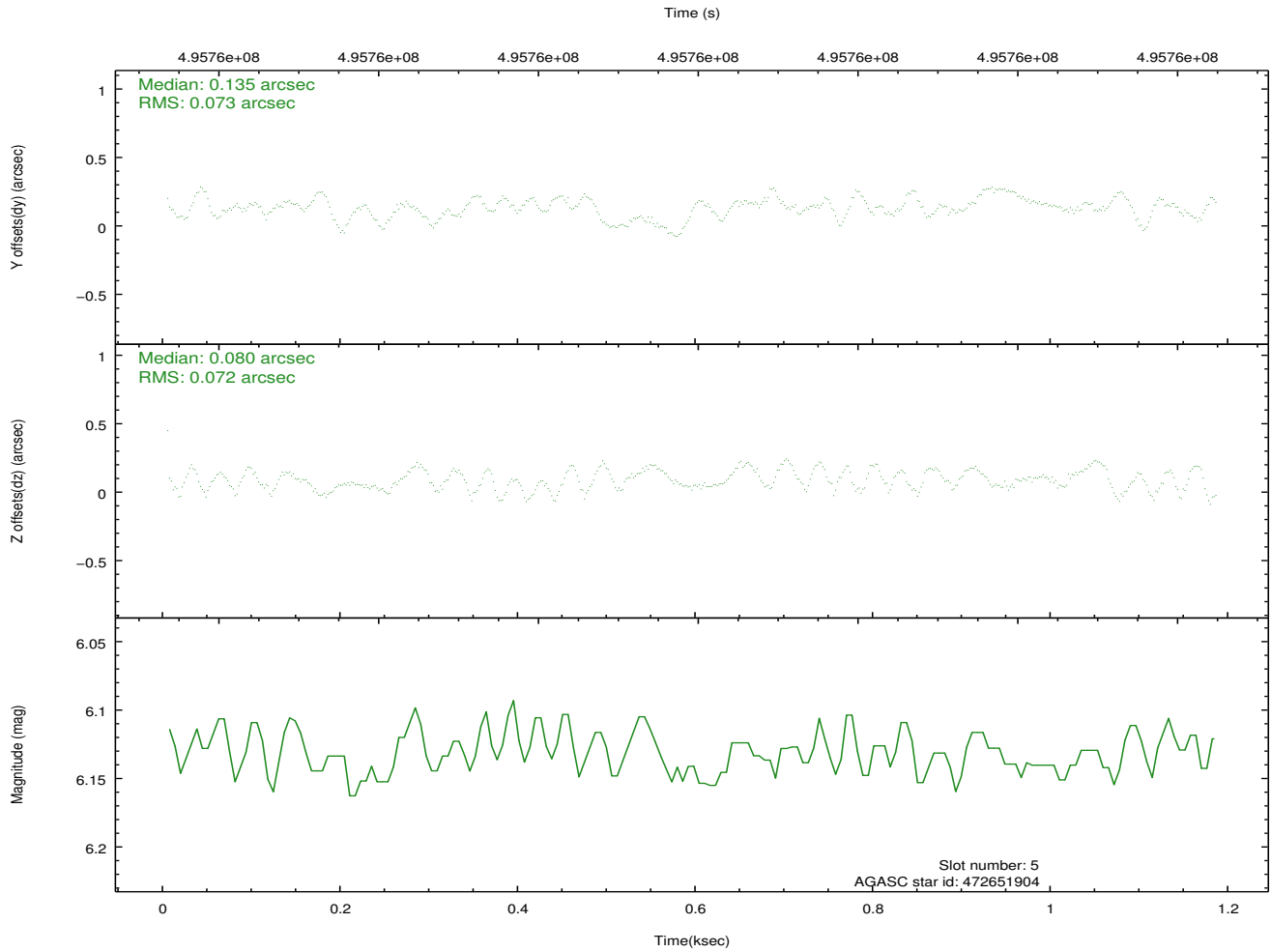
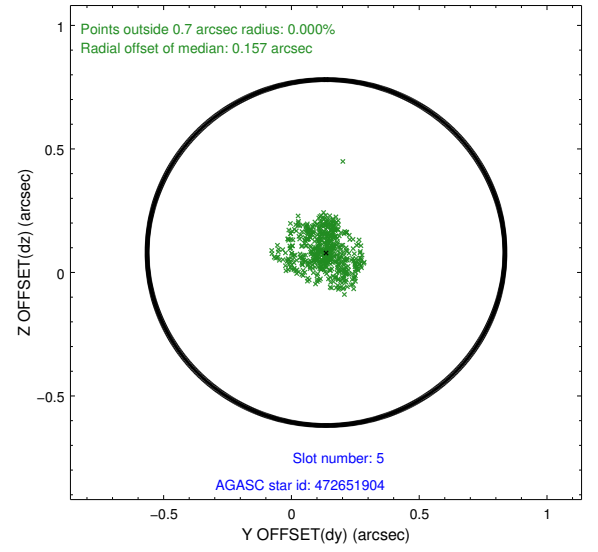
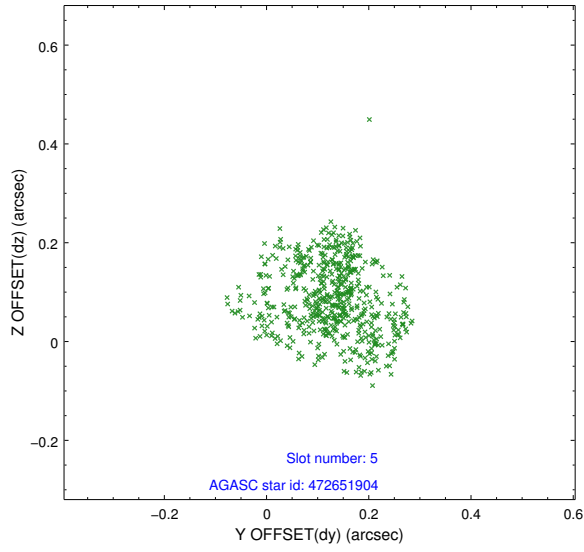
### 2.4.1 Slot 3



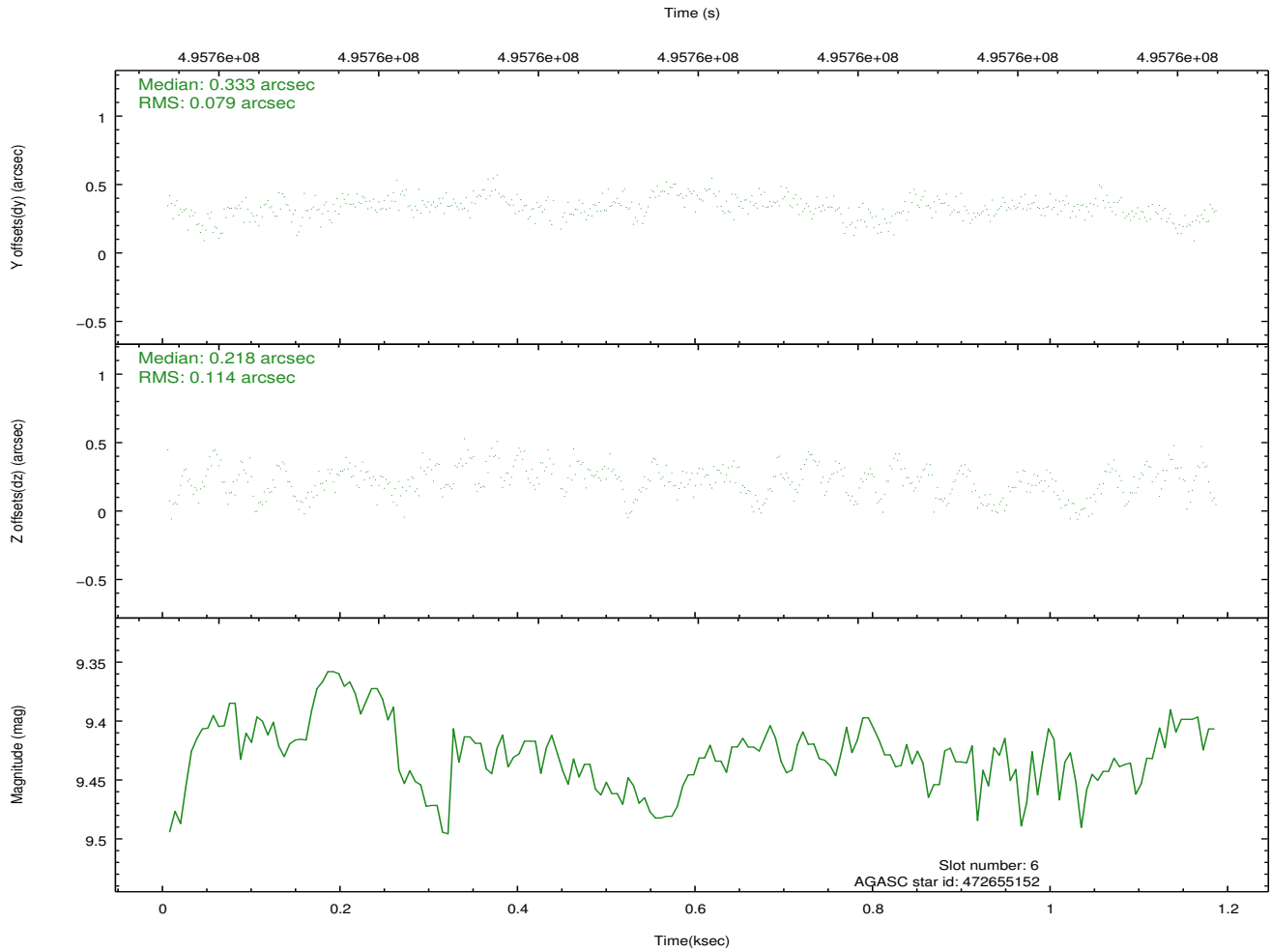
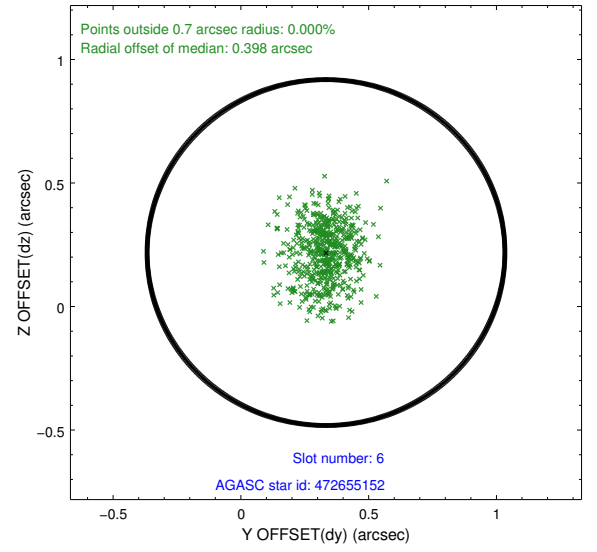
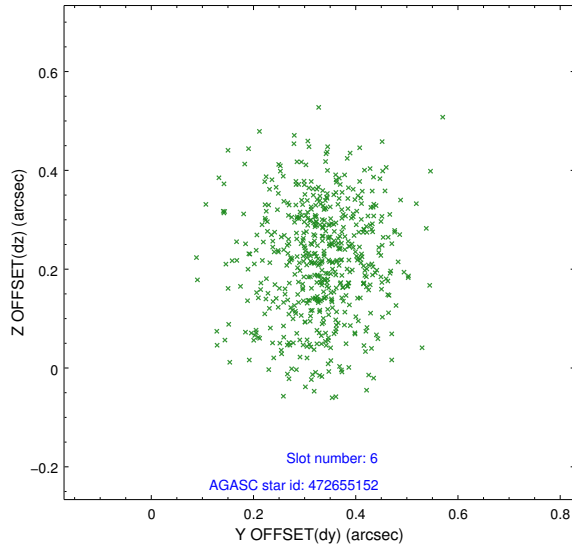
## 2.4.2 Slot 4



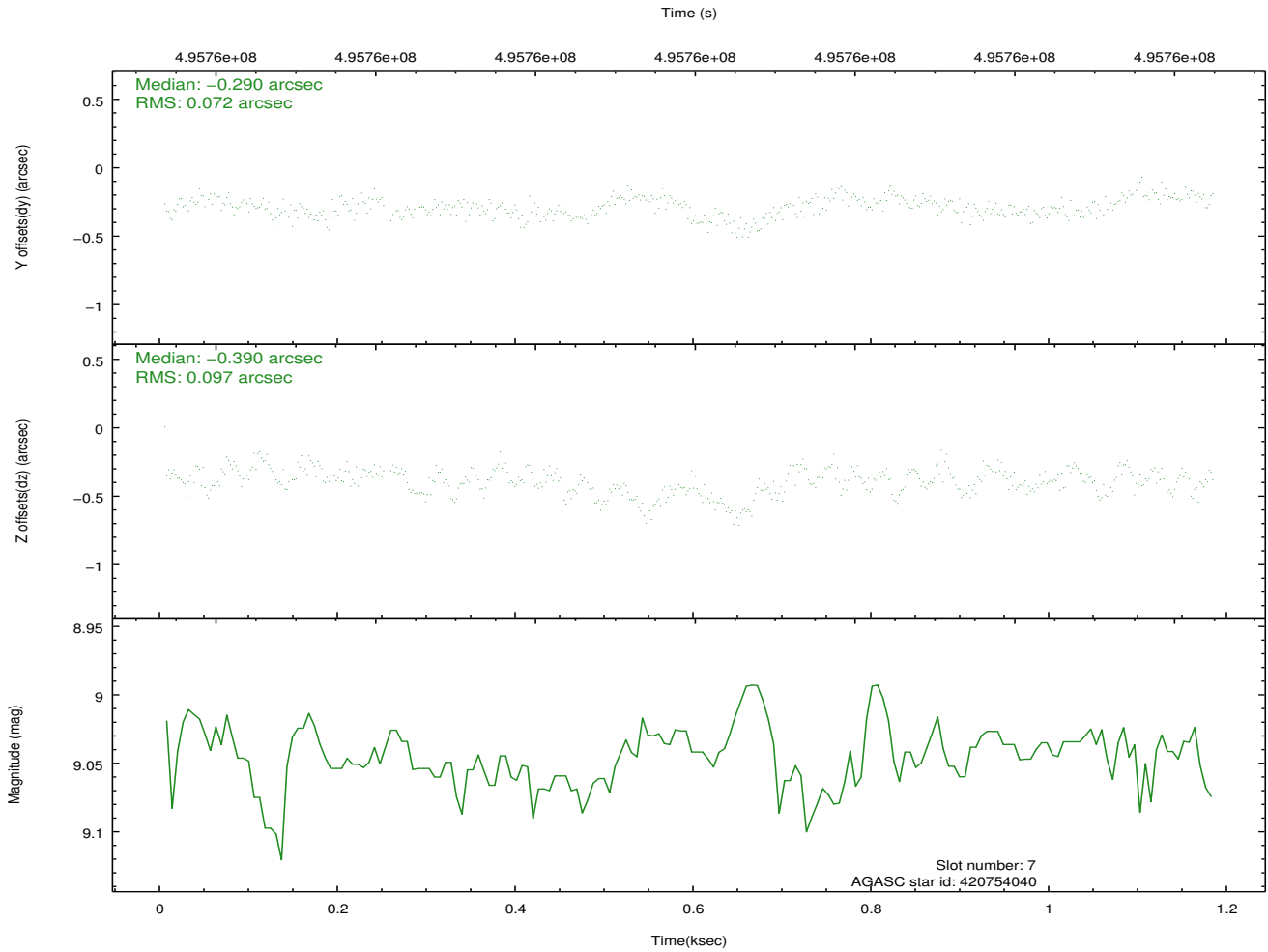
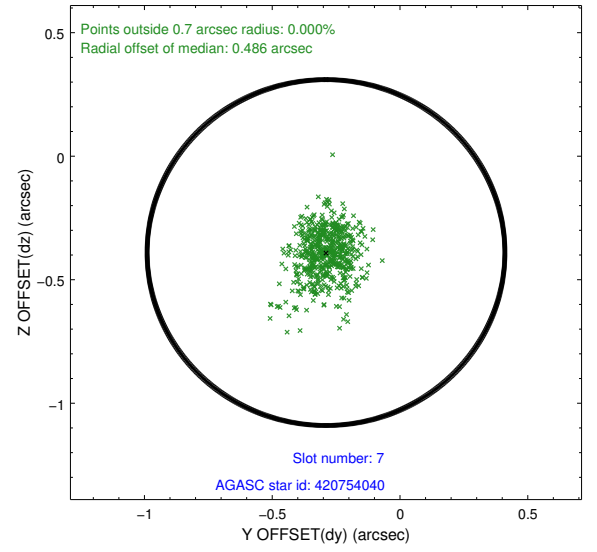
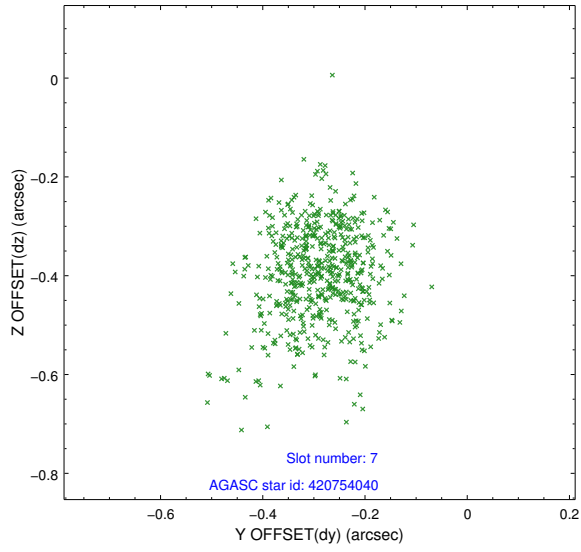
### 2.4.3 Slot 5



## 2.4.4 Slot 6

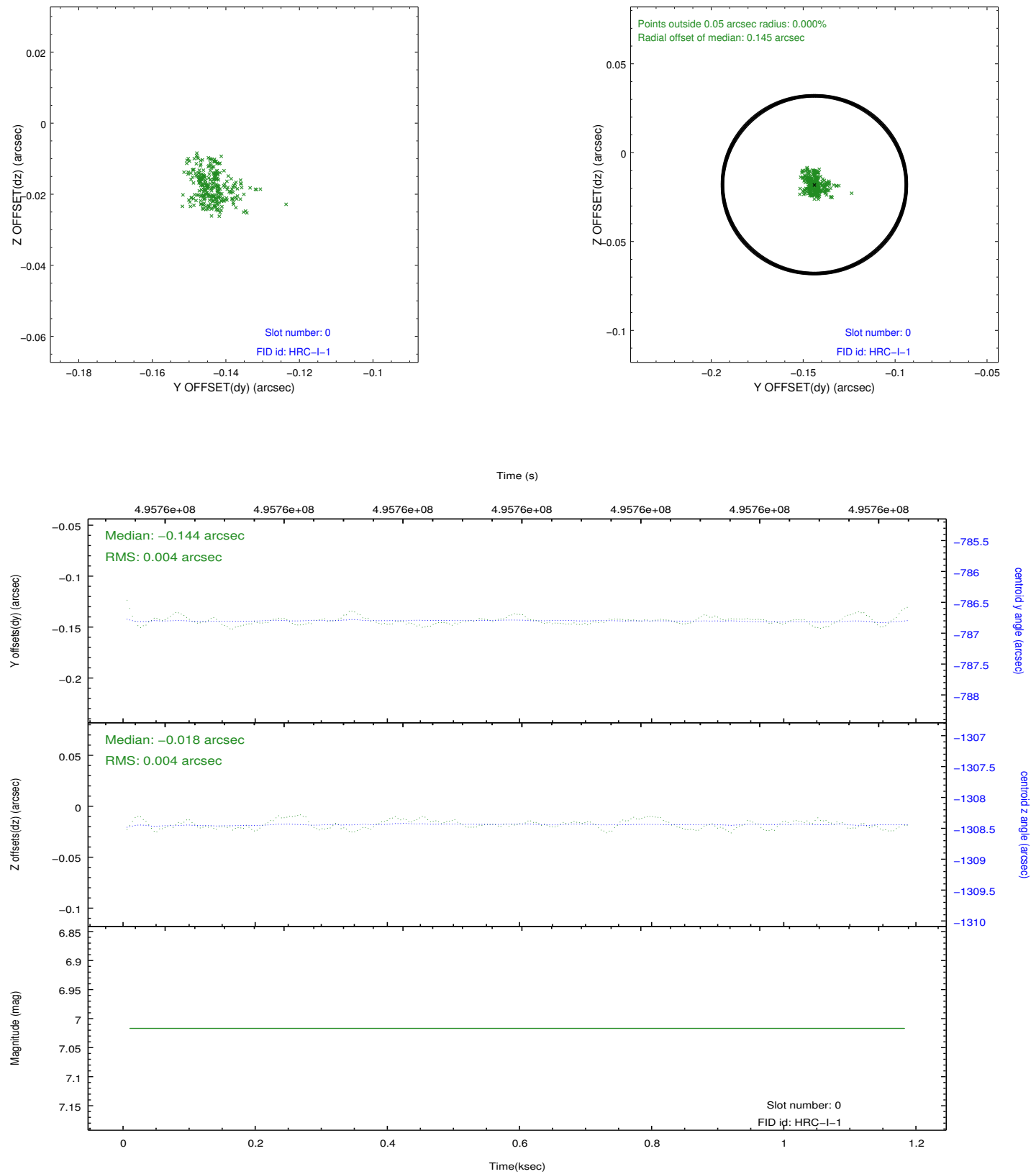


## 2.4.5 Slot 7

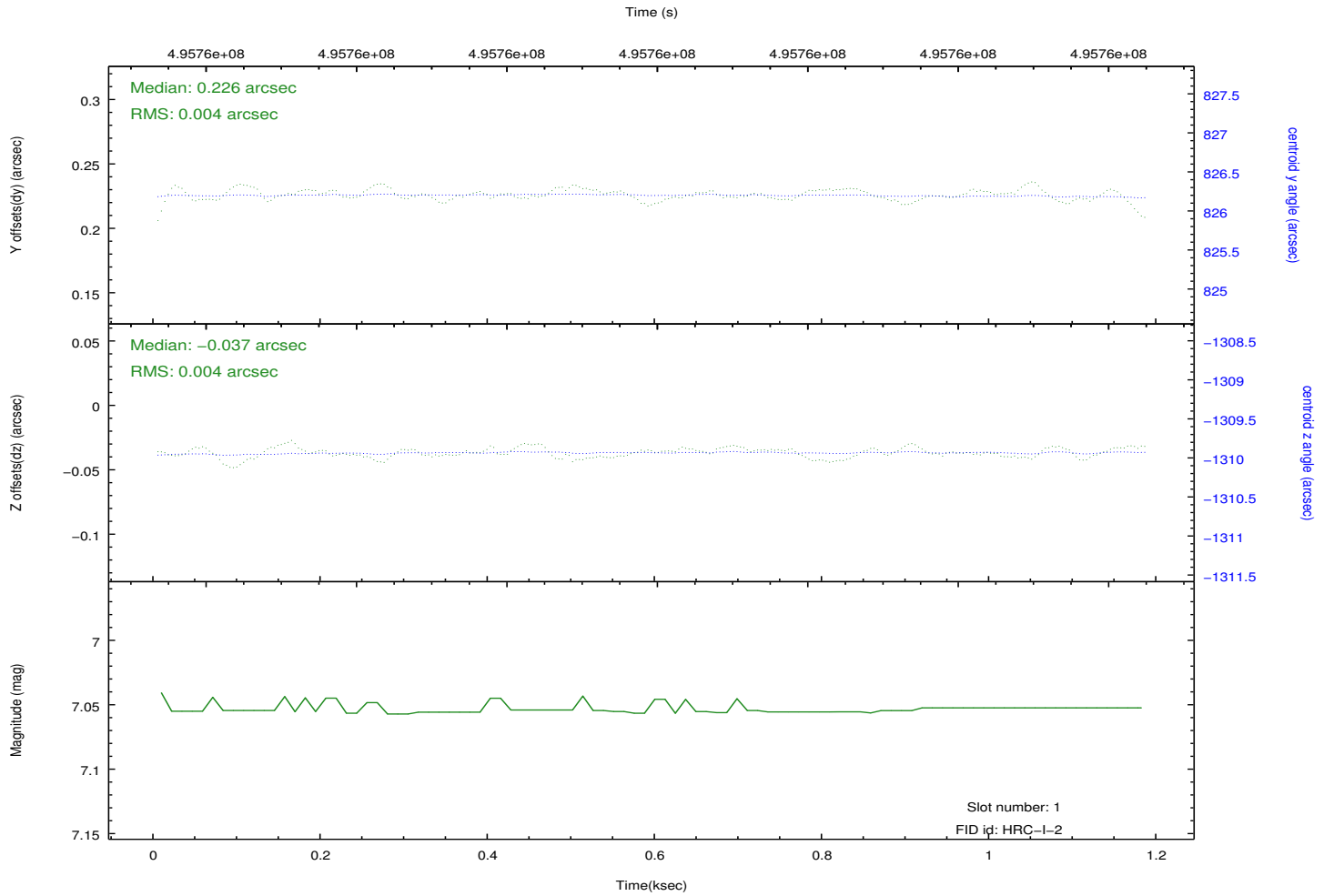
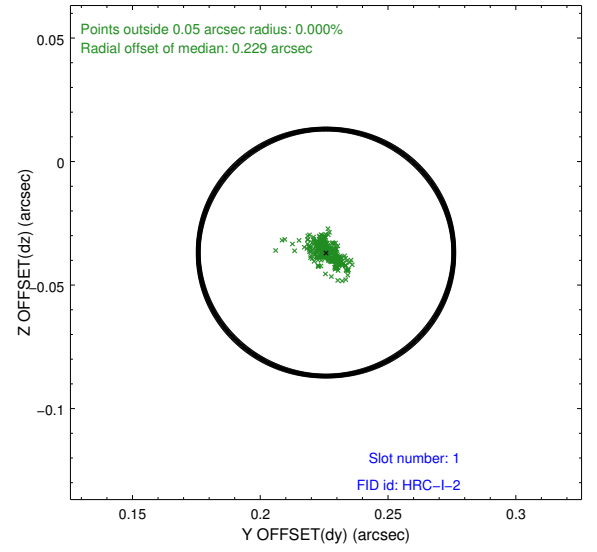
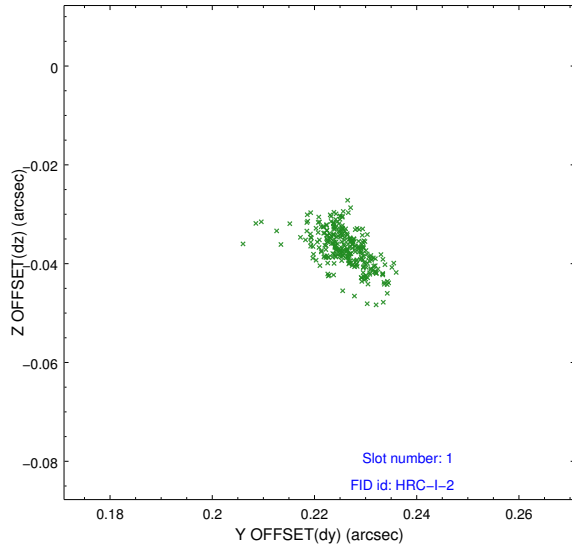


## 2.5 FID Slots

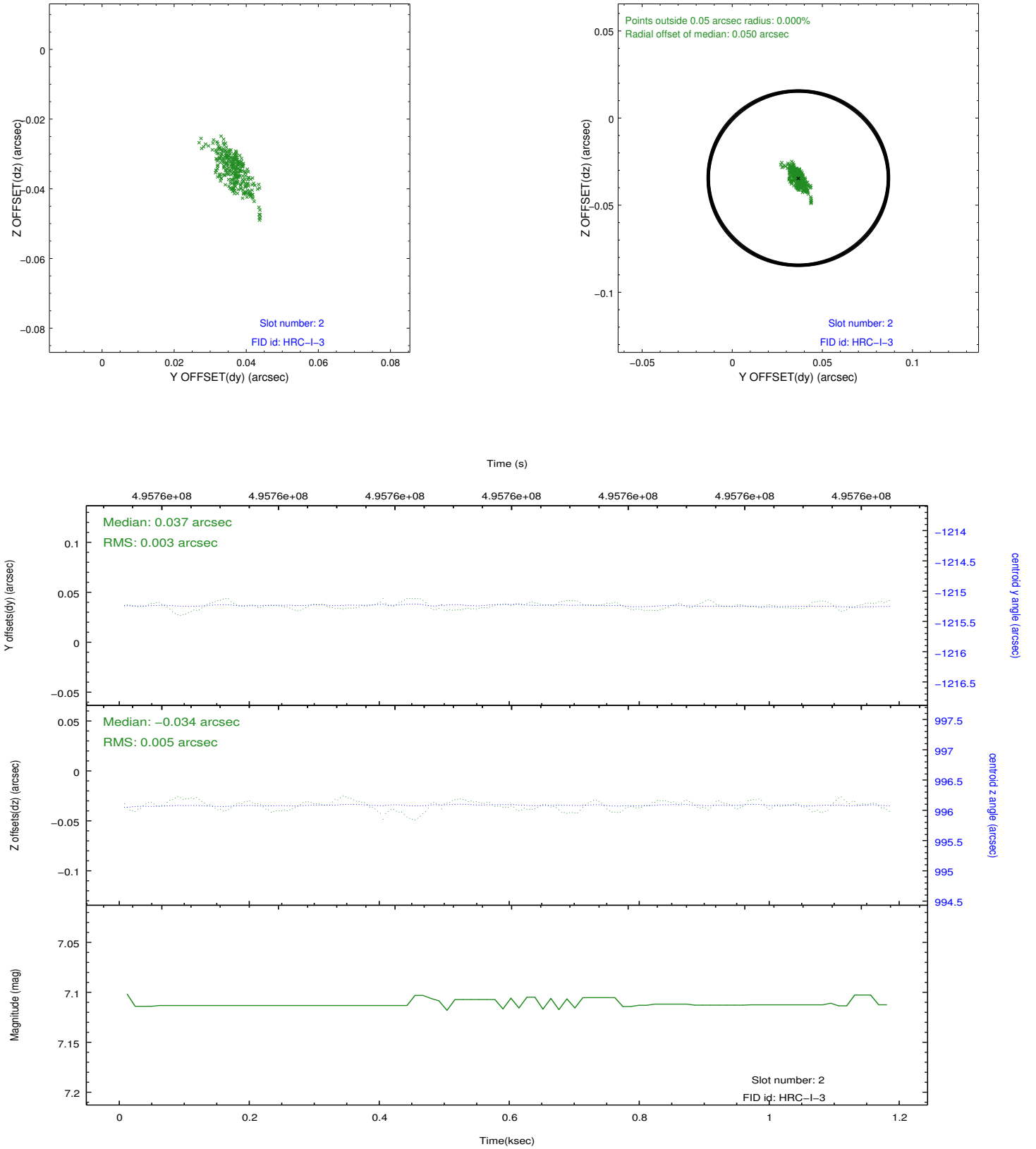
### 2.5.1 Slot 0



## 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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1800313144922

## 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.