

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 1360 - L2 Version 4  
Chandra X-Ray Center

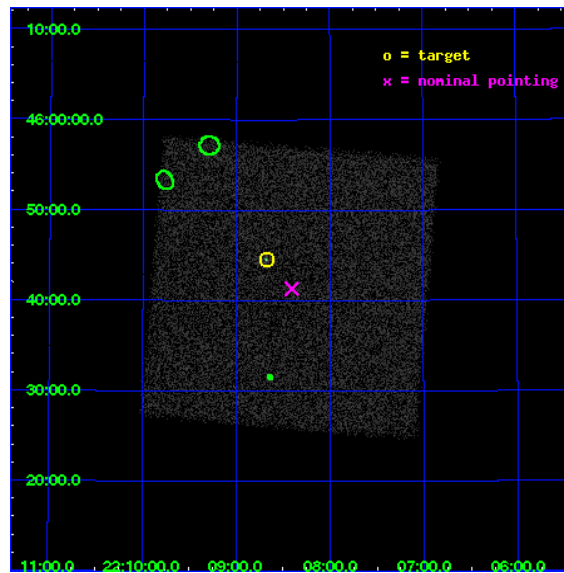
L2 Processing Date : Nov 19 2009

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# 1 Front

seq_num	280310	Sequence number
obs_id	1360	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.1701	Observer's specified target RA
dec_targ	45.7423	Observer's specified target Dec
ra_nom	332.10143050587	Nominal RA
dec_nom	45.688385911203	Nominal Dec
roll_nom	229.86296806846	Nominal Roll
revision	4	Processing version of data
ontime	1277.4062960148	[s]
livetime	1268.5894975222	Ontime multiplied by DTCOR
l2events	42542	Number of level 2 events

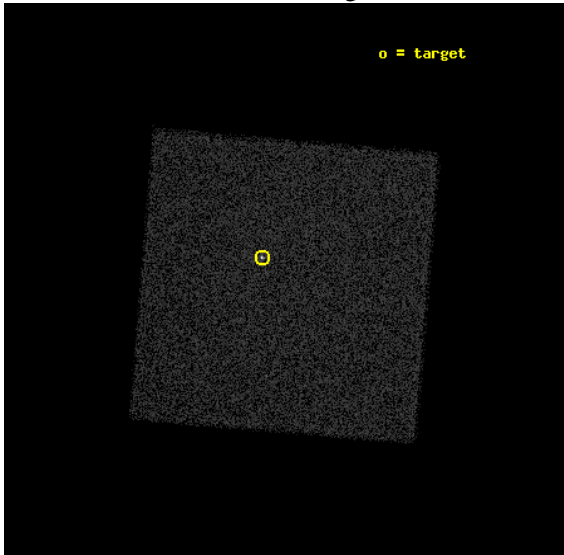


## 2 OBI

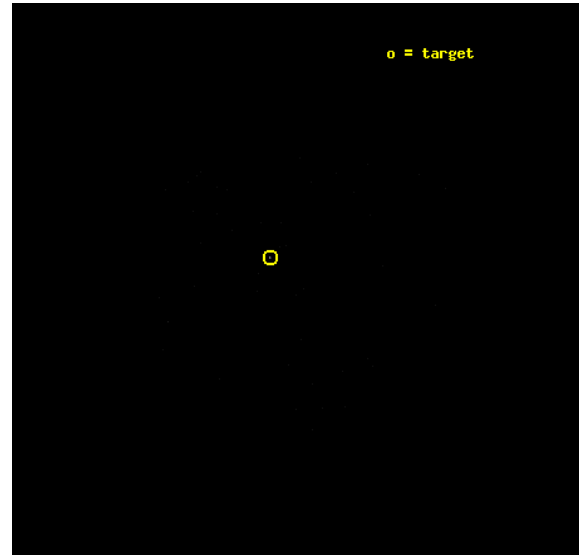
### 2.1 OBI

#### 2.1.1 Images

Level 1 Image



Level 1 Bad Events



## 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	Scheduled observation exposure time
ascdsver	8.1.1	Processing system revision	ontime	1277.4062960148	[s]
caldbver	4.1.4	&#160	l1events	67789	Number of level 1 events
date	2009-11-19T06:55:20	Date and time of file creation			
revision	4	Processing version of data			

## 2.1.3 Events

### Level 1 Events

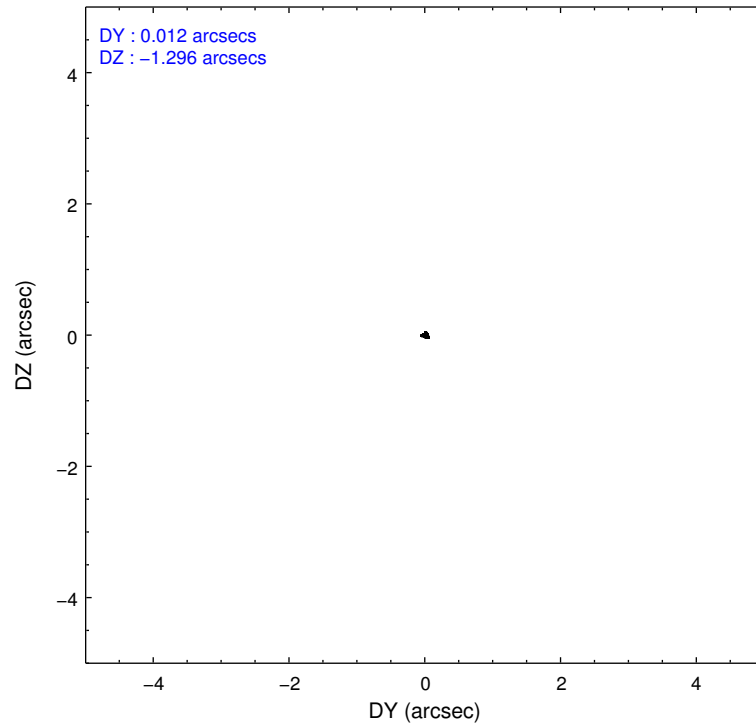
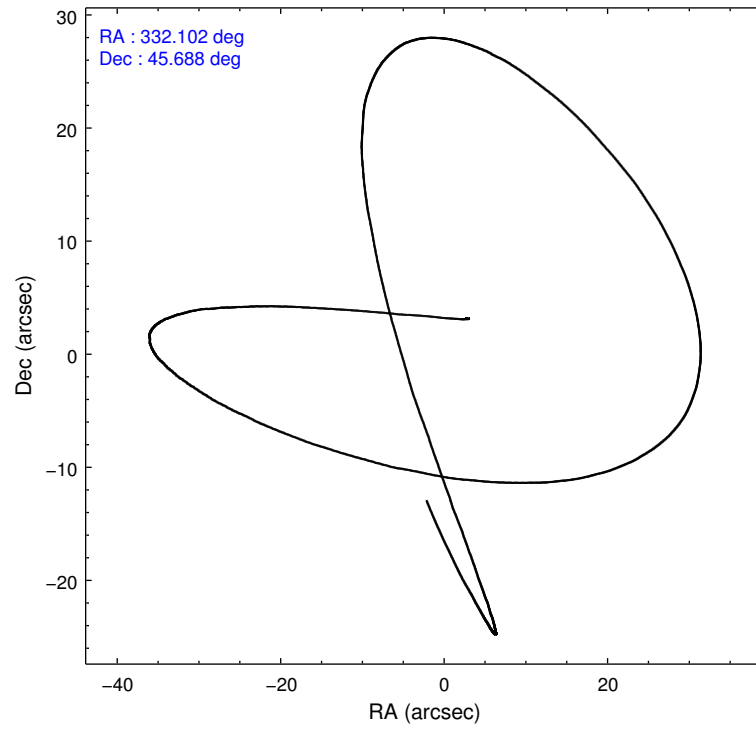
	<b>segment 0</b>
level 1 events	67789
rejected events	2464
rejected %	<b>3%</b>

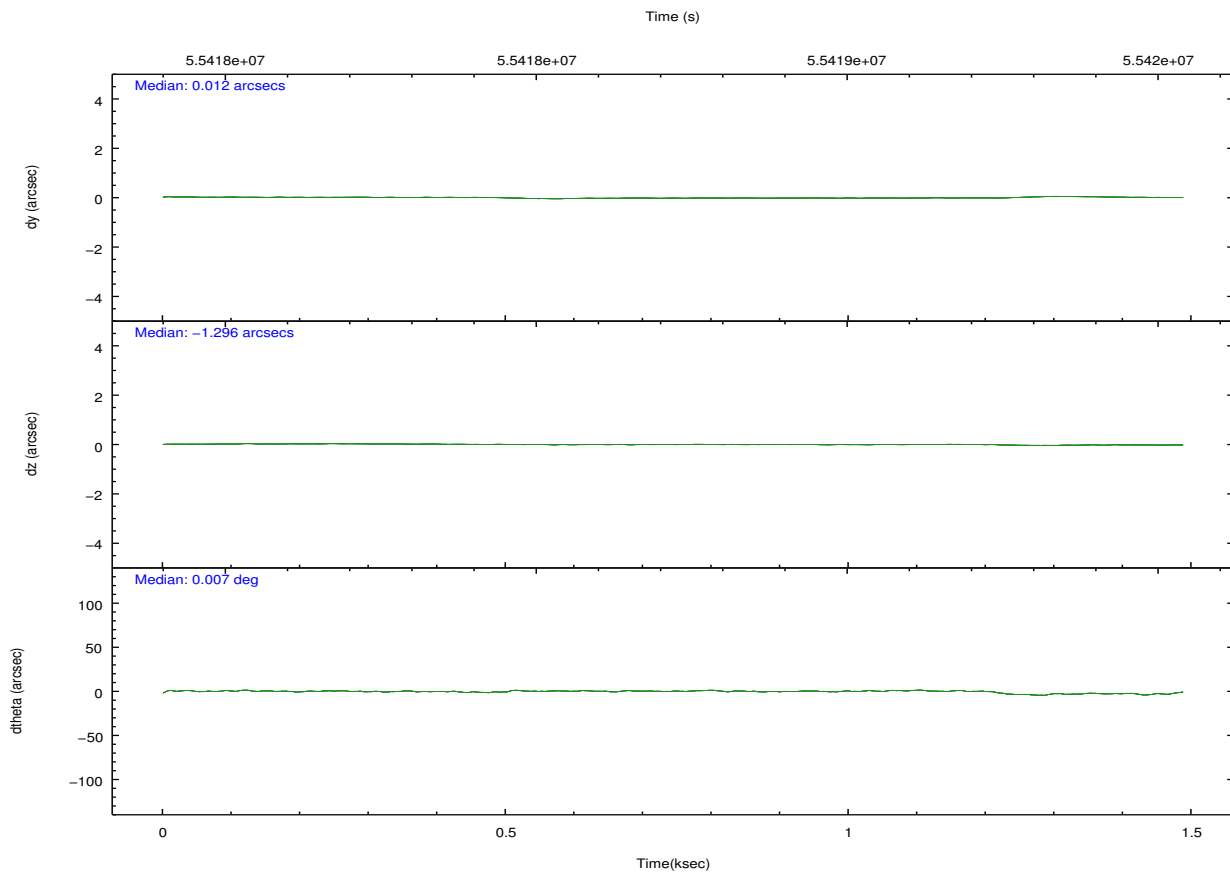
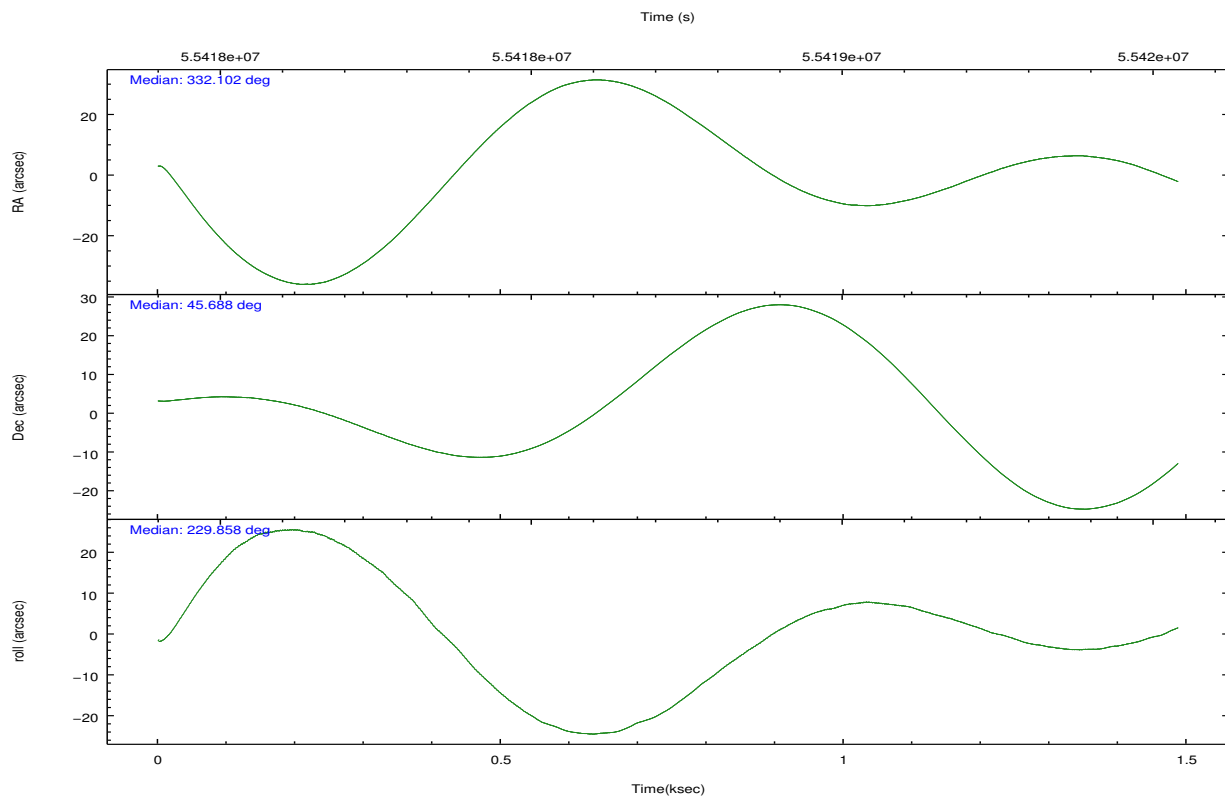
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	332.109275	332.1014305058721
Pointing Dec	45.716153	45.68838591120316
Pointing Roll	229.952829	229.8629680684558
SIM focus pos (mm)	-0.040293	-0.2342646132009995
SIM defocus (mm)	1	0.806028007457875
SIM translation stage pos (mm)	126.985494	126.9854943052878
SIM translation stage offset (mm)	0	-5.413686238853188e-06
Observation start time	55418464.184000	55417797.321373
Observation start date	1999-10-04T10:00:00	1999-10-04T09:49:57
Observation end time	55419464.184000	55419598.246438
Observation end date	1999-10-04T10:16:40	1999-10-04T10:19:58

Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

## 2.3 Aspect



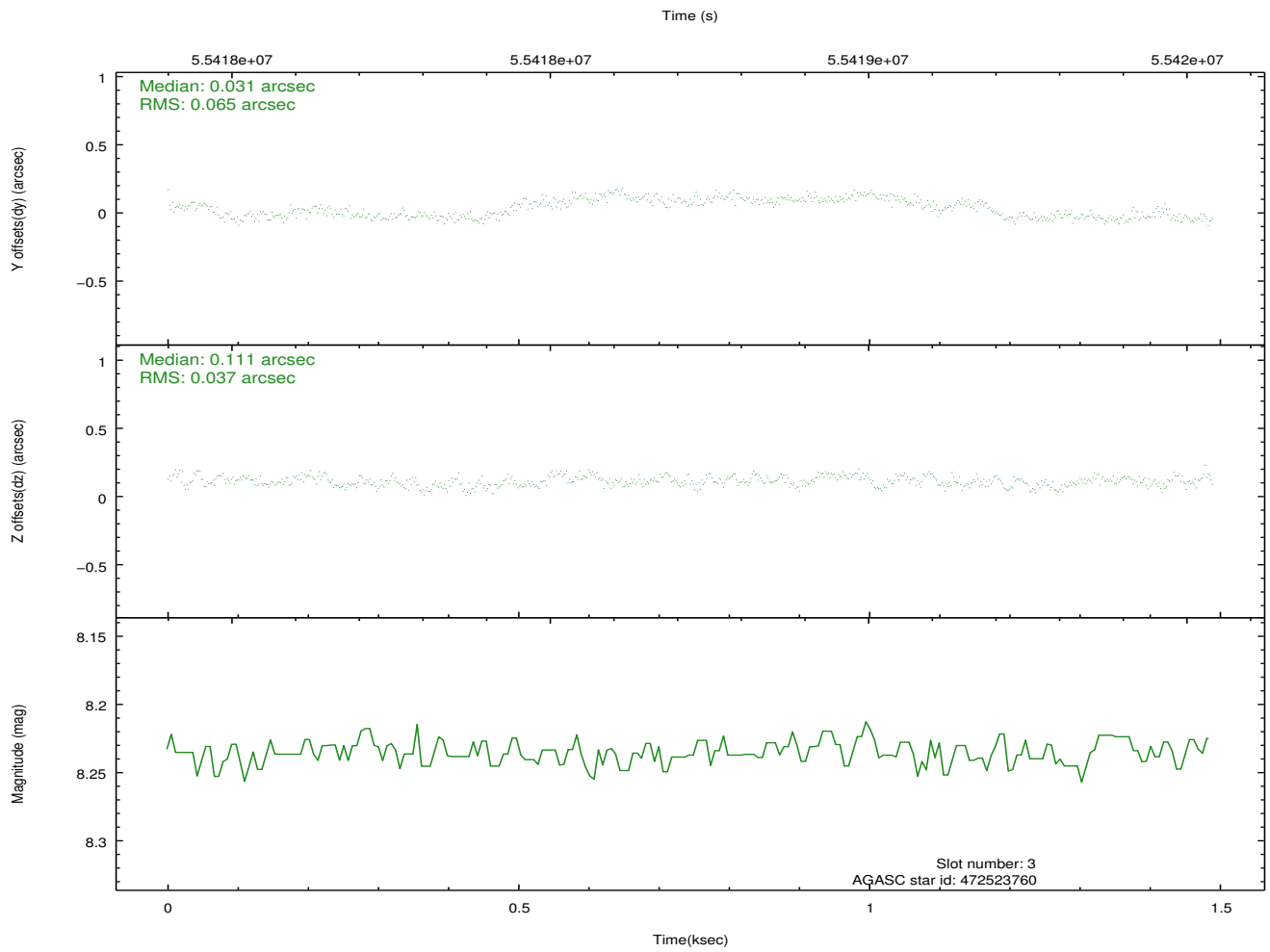
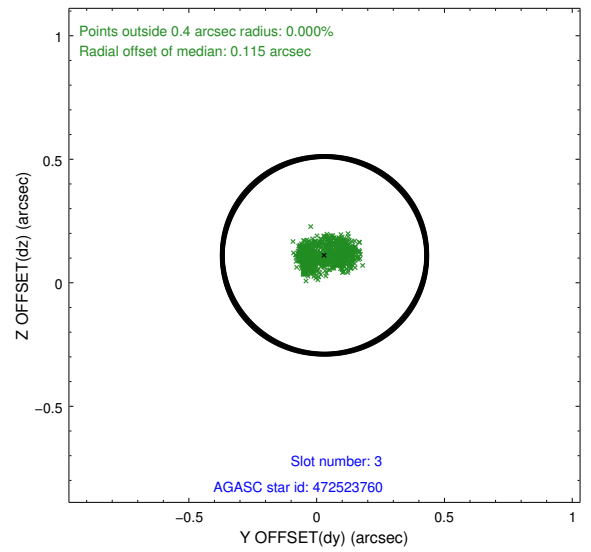
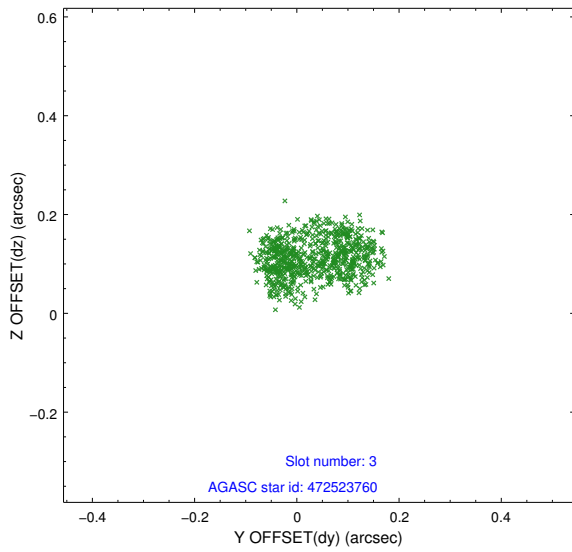


### Slot Statistics

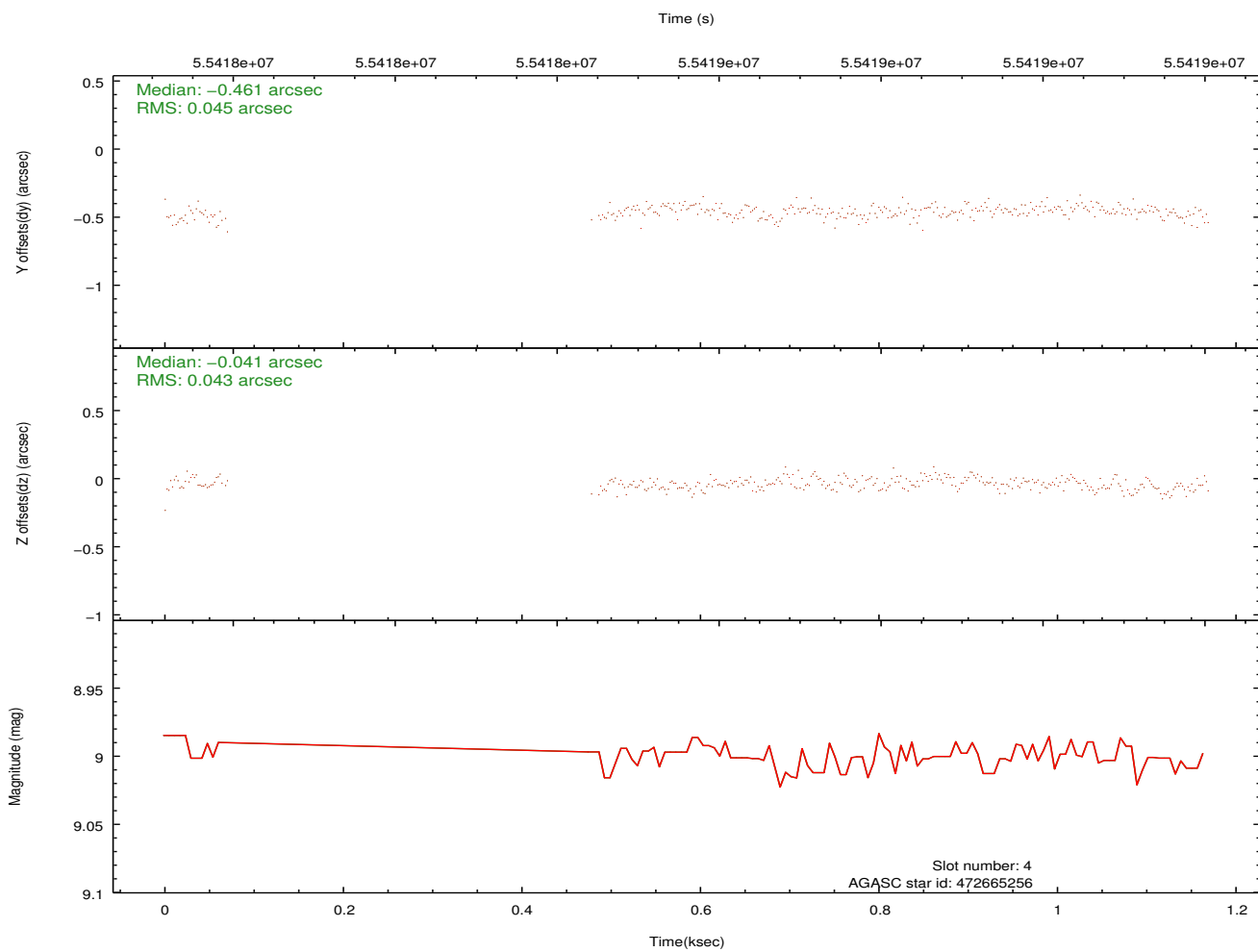
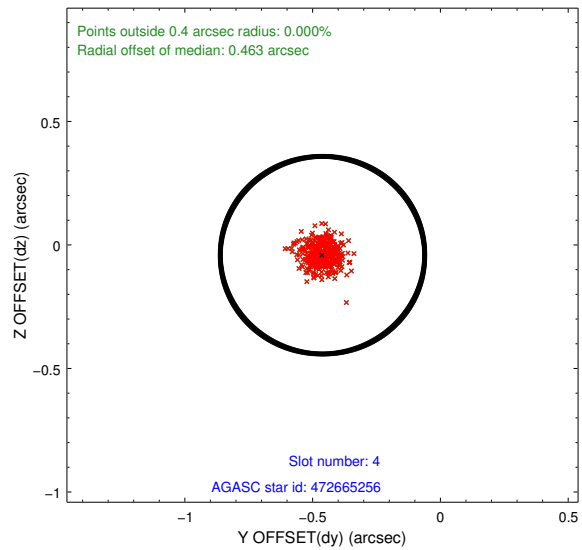
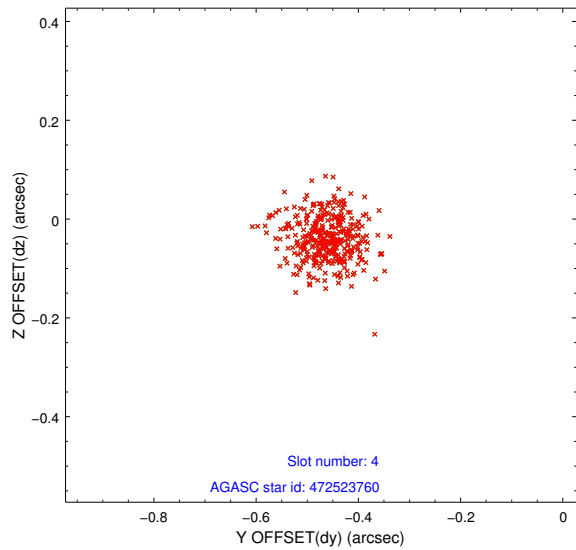
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.97	727	0.056	-0.010	0.009	0.021	0.000000	0.000000	-755.39	-1286.51
1	FID	HRC-I-3	7.05	727	0.055	-0.029	0.009	0.031	0.000000	0.000000	-1185.00	1016.44
2	FID	HRC-I-4	6.99	727	0.002	-0.052	0.009	0.029	0.000000	0.000000	1285.83	1017.26
3	GUIDE	472523760	8.24	727	0.031	0.111	0.083	0.116	331.645363	45.403260	1610.69	-174.51
4	BAD	472665256	9.00	369	-0.461	-0.041	0.066	0.113	332.808125	46.195041	-2433.34	219.99
5	GUIDE	472659832	9.46	727	0.037	0.102	0.102	0.151	332.780399	46.098139	-2142.88	393.73
6	GUIDE	472654568	9.44	727	-0.010	0.015	0.115	0.202	332.194449	45.063576	1652.40	1678.33
7	GUIDE	472524416	9.49	725	0.172	-0.215	0.137	0.228	330.789917	45.626718	2361.84	-2350.53

## 2.4 Star Slots

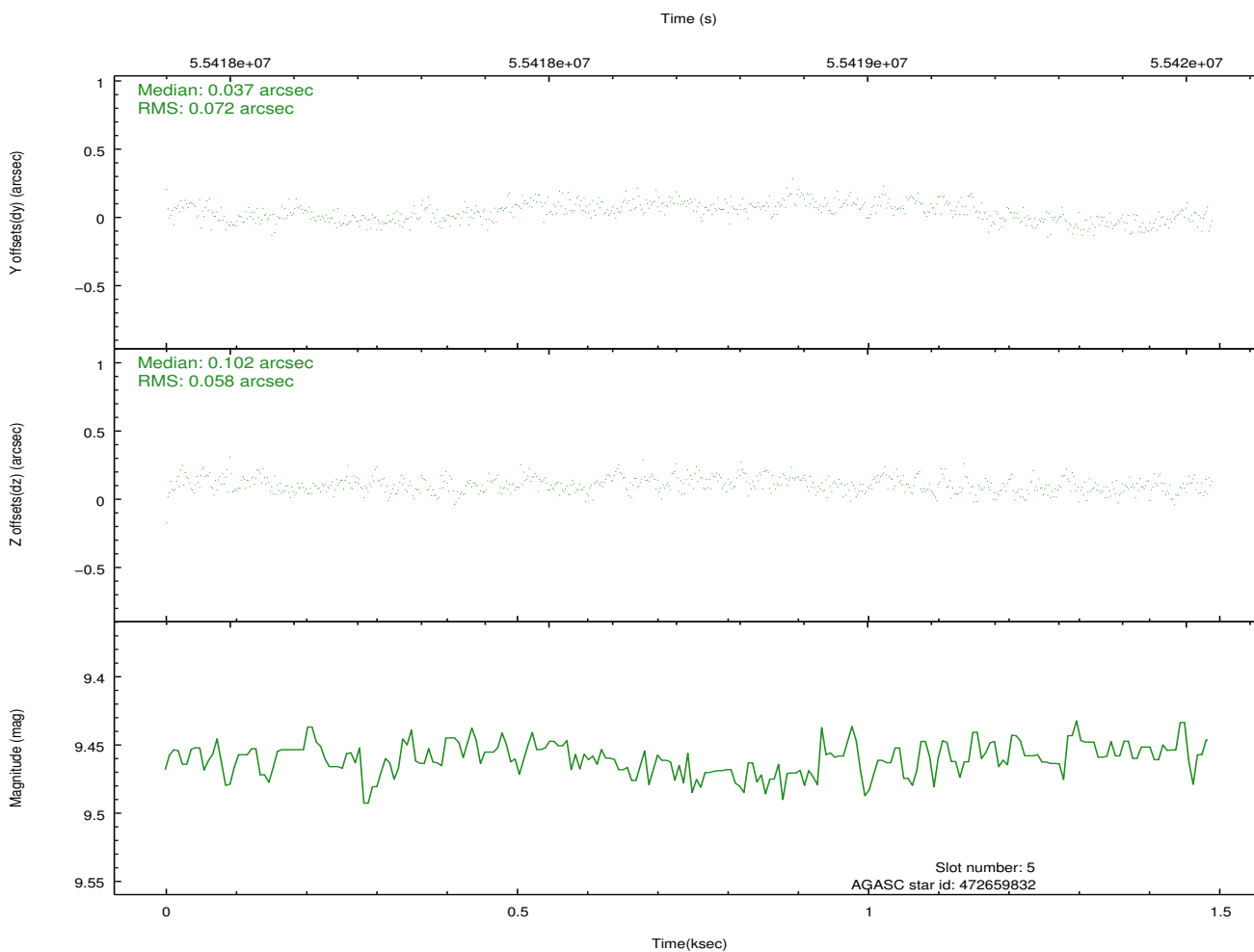
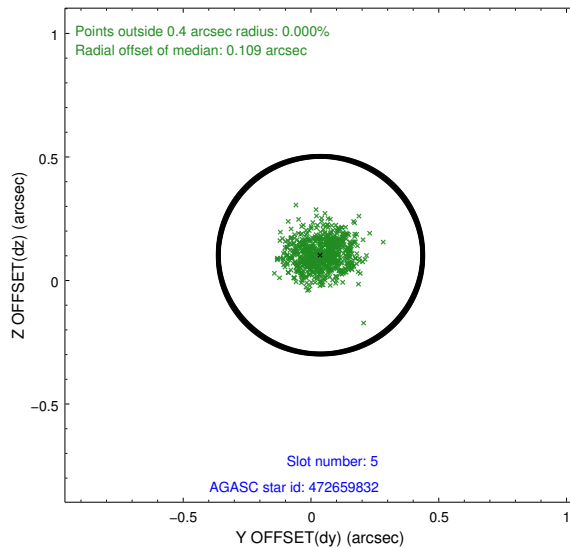
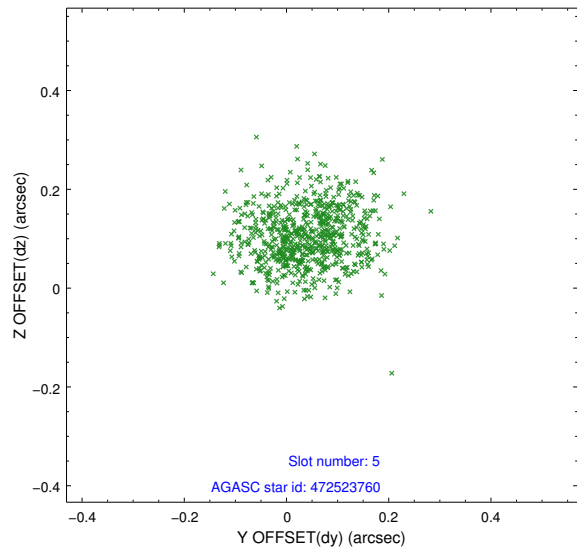
### 2.4.1 Slot 3



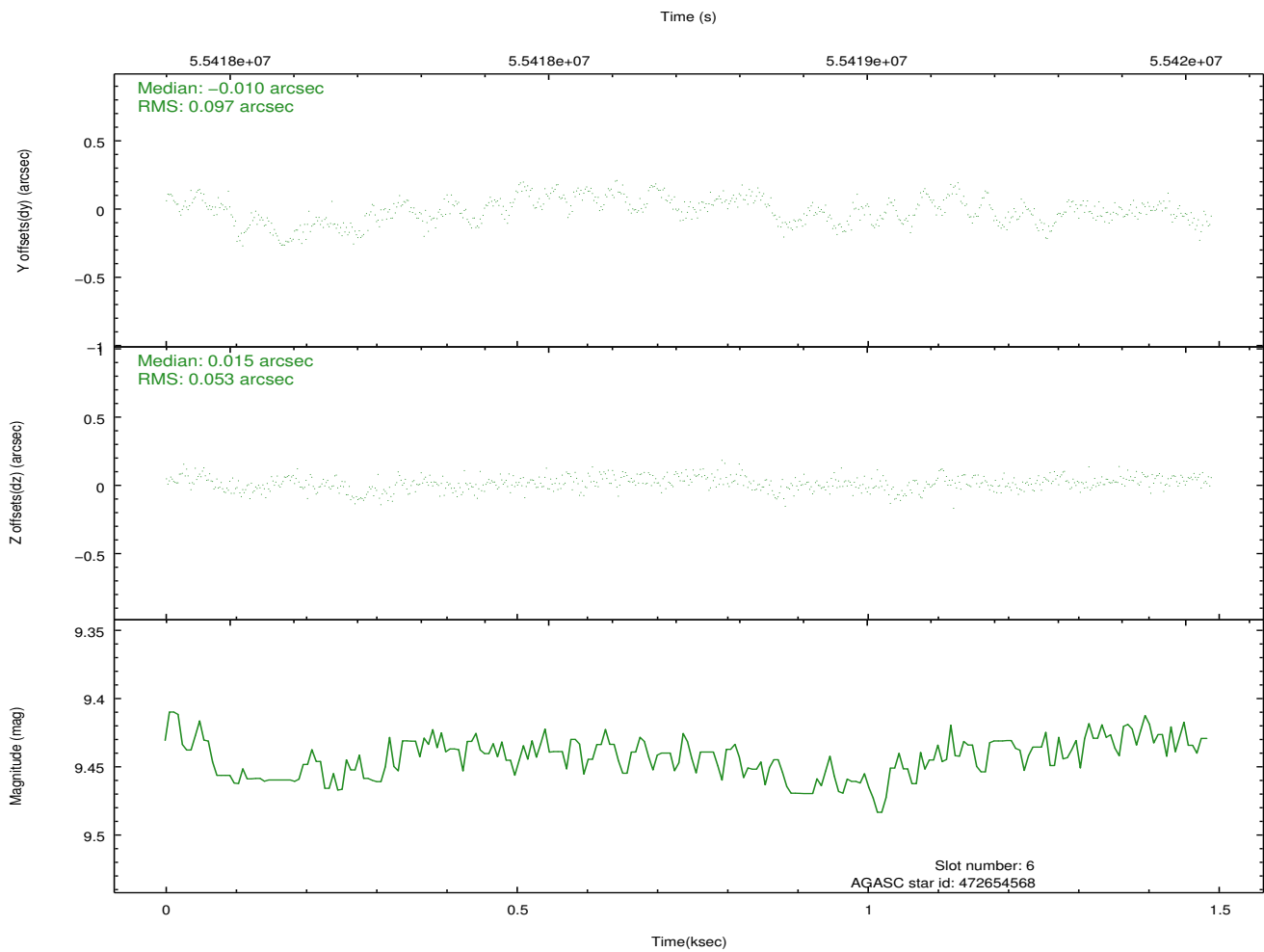
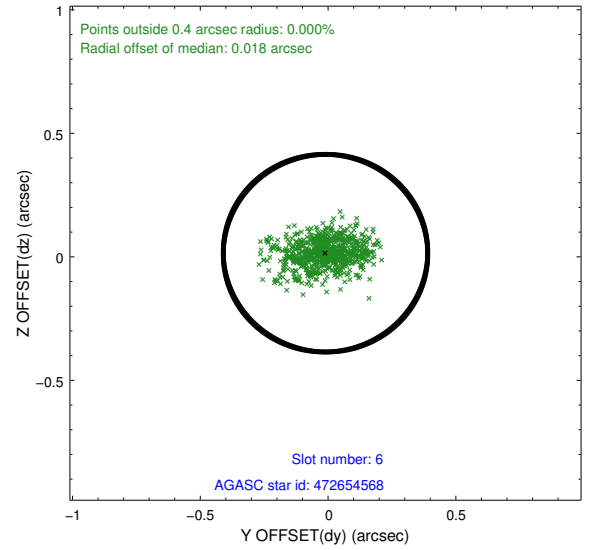
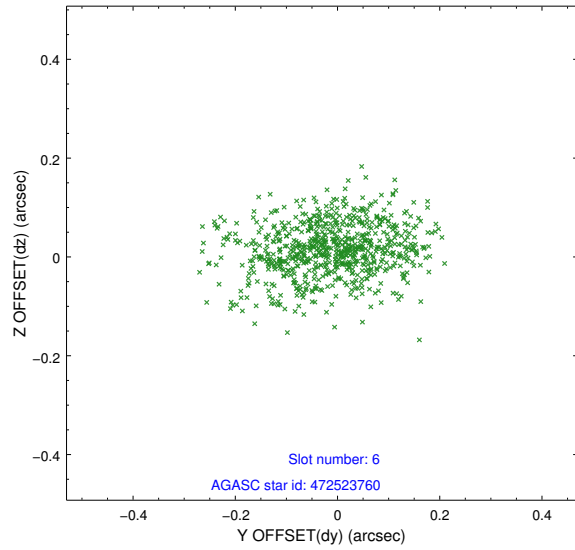
## 2.4.2 Slot 4



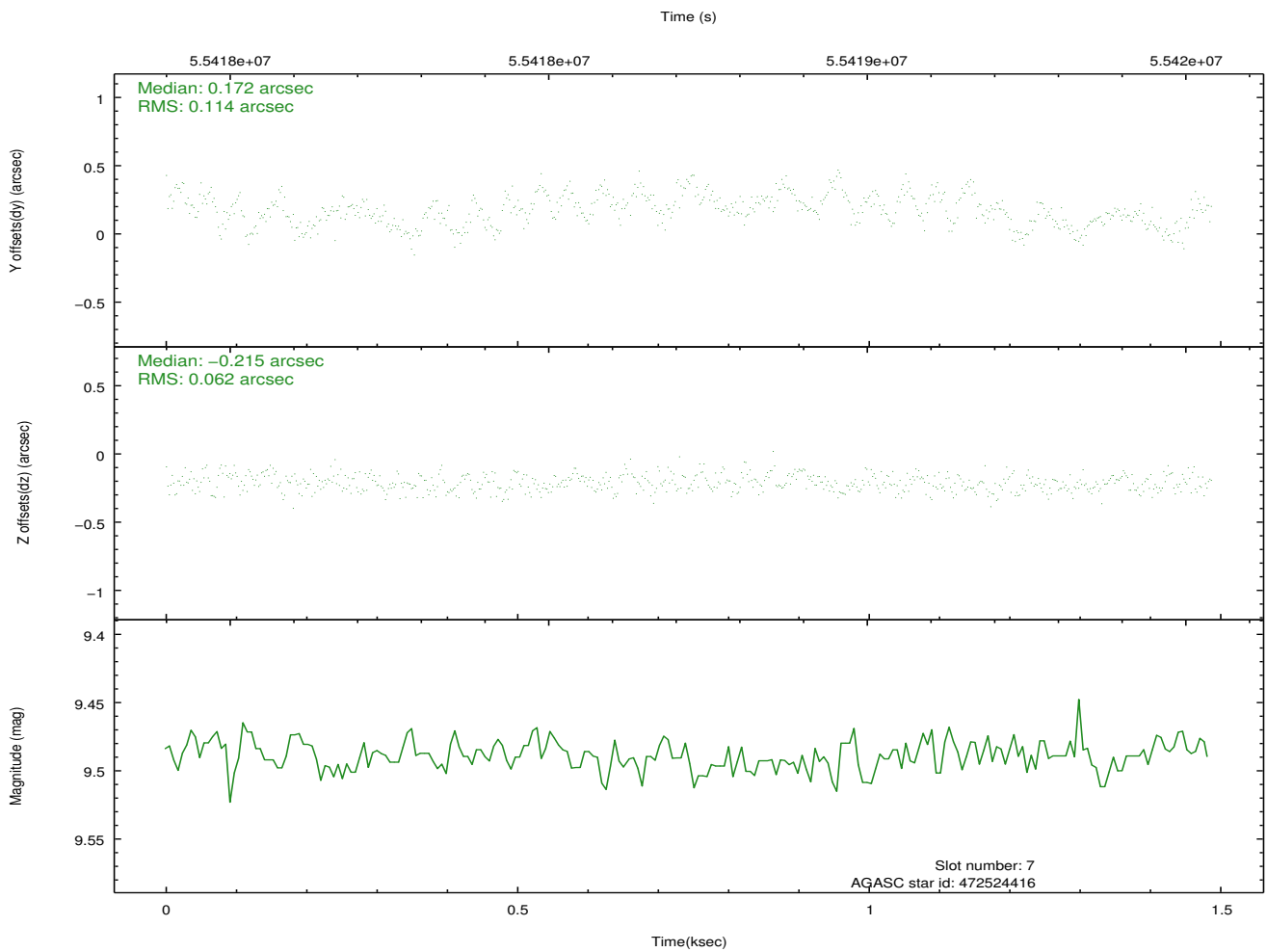
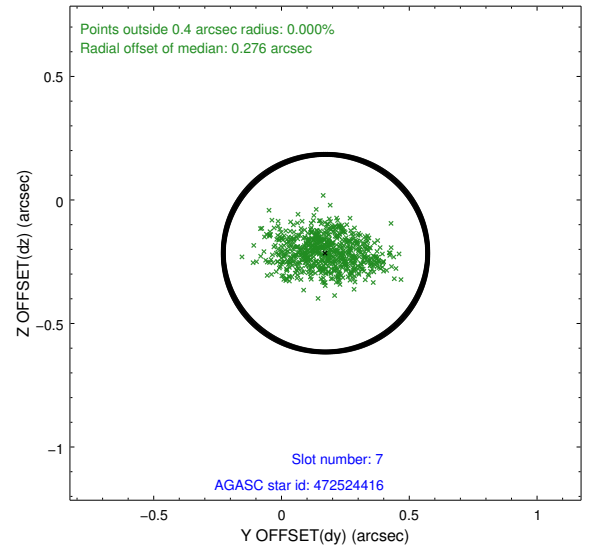
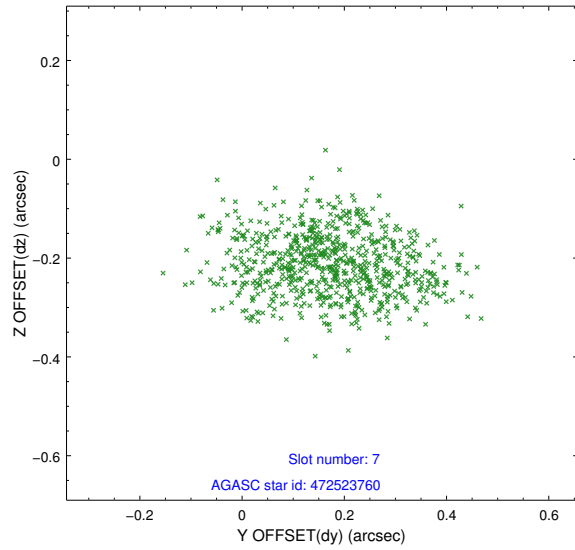
### 2.4.3 Slot 5



## 2.4.4 Slot 6

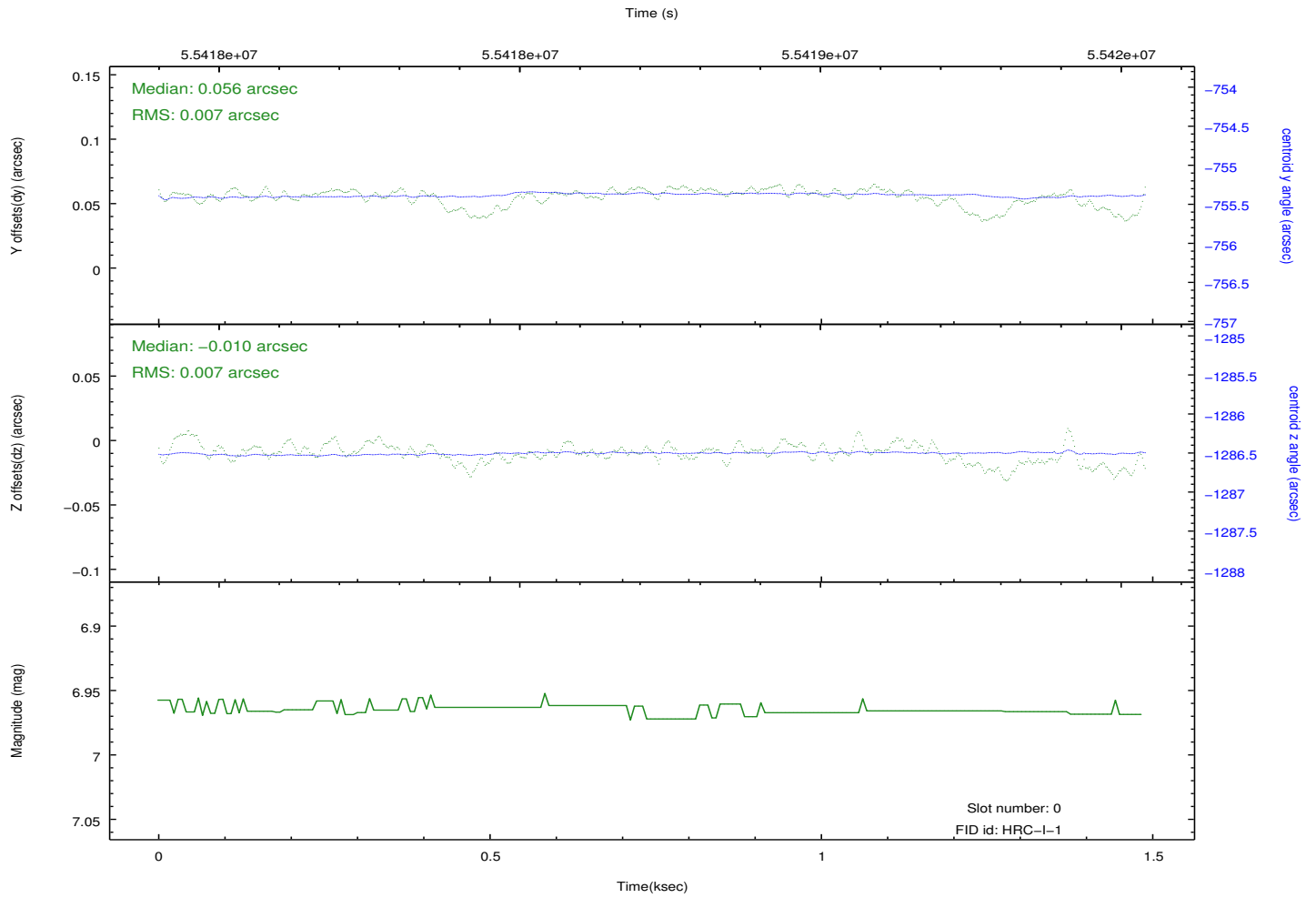
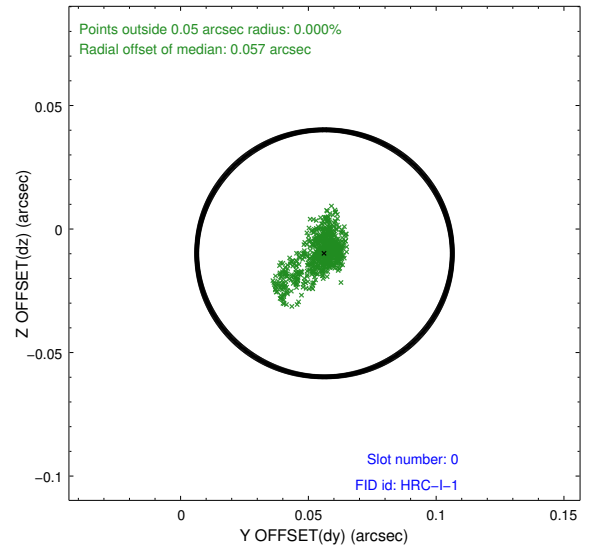
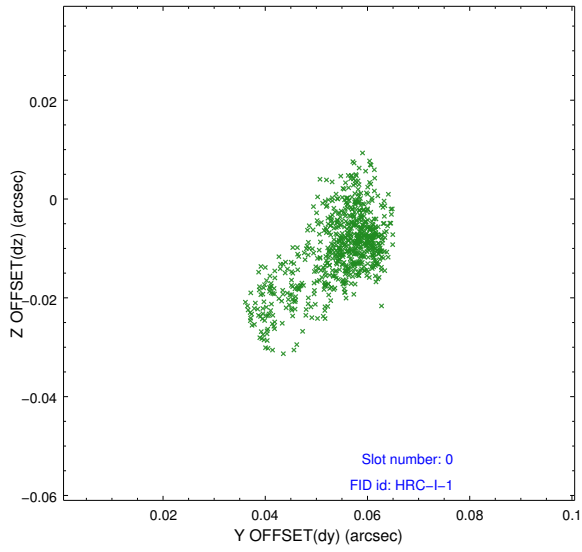


## 2.4.5 Slot 7

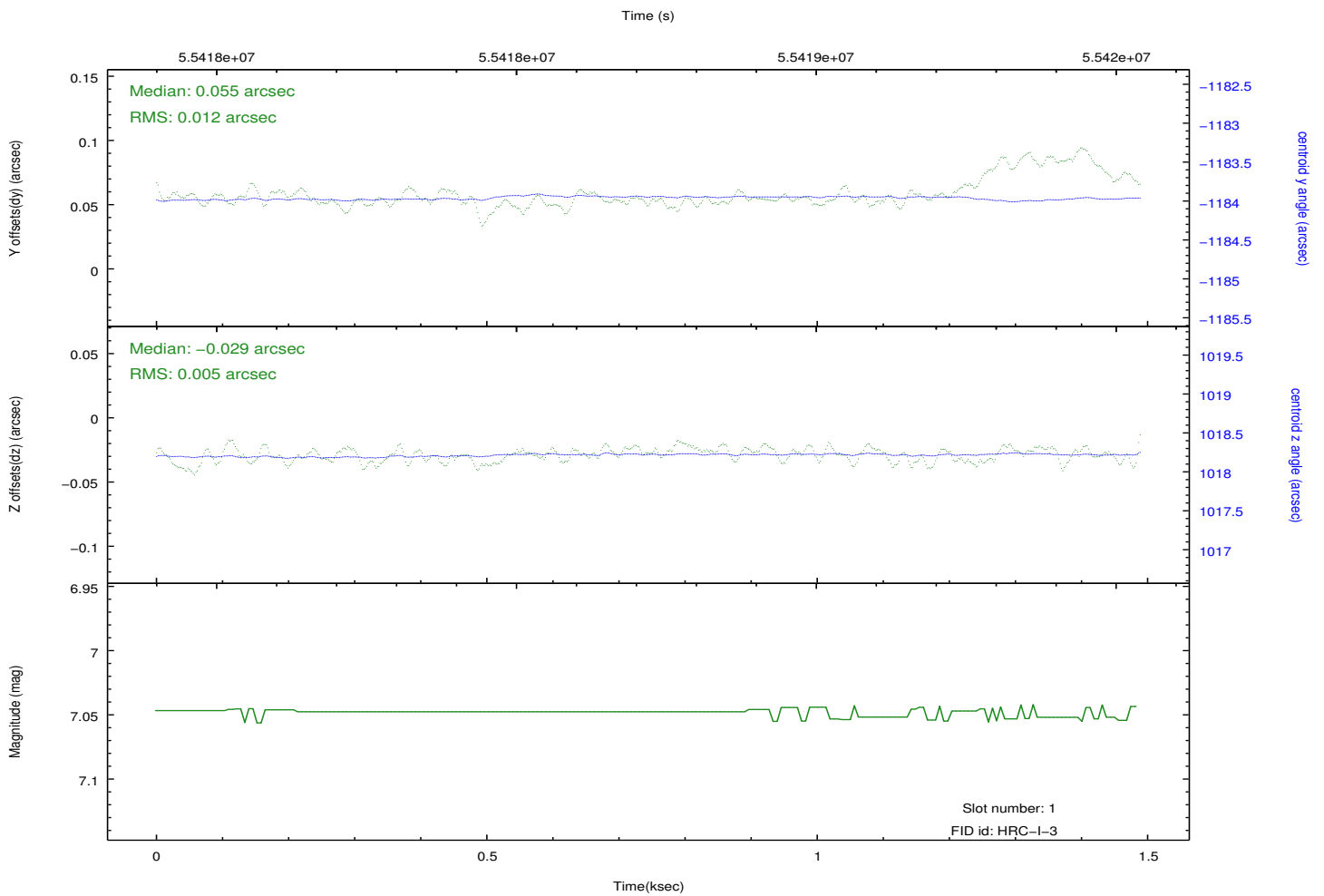
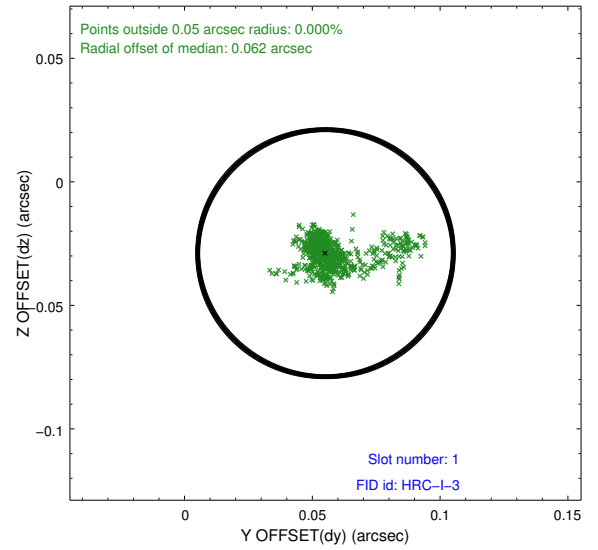
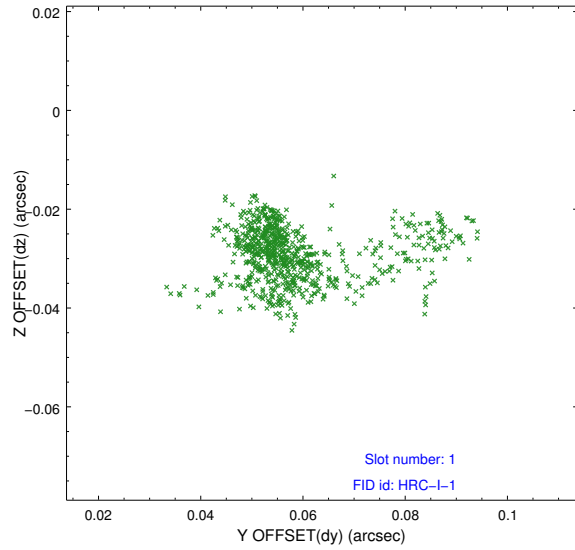


## 2.5 FID Slots

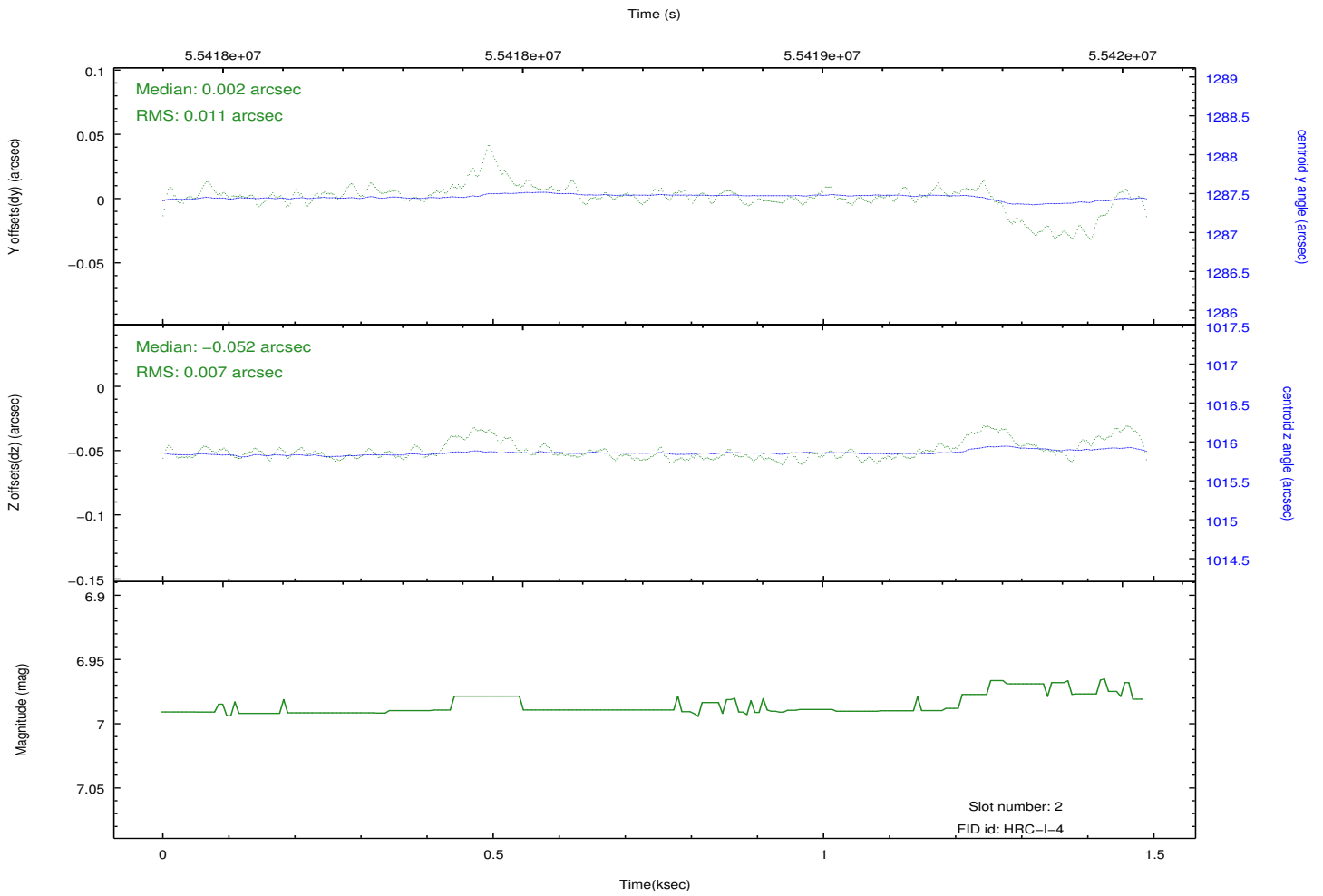
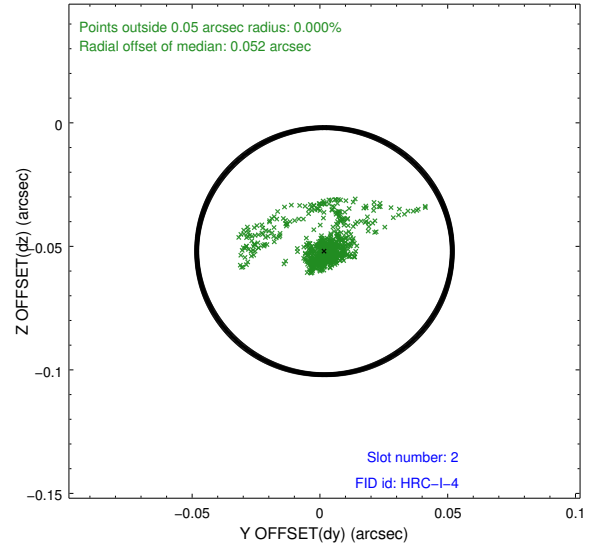
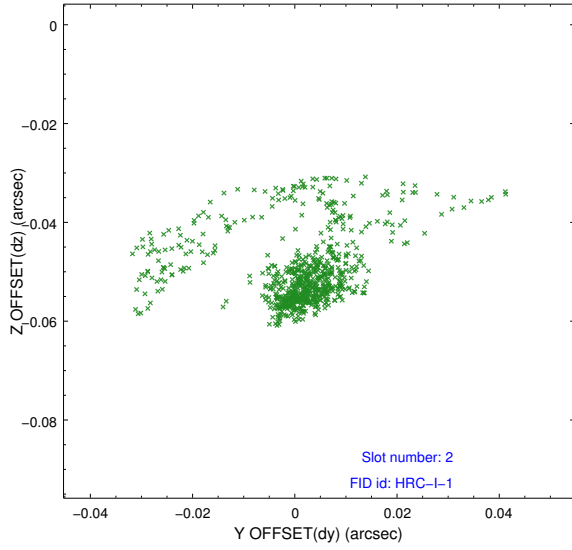
### 2.5.1 Slot 0



## 2.5.2 Slot 1

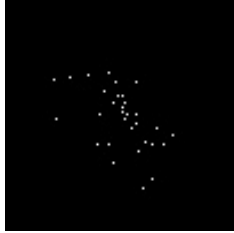


### 2.5.3 Slot 2



### 3 Point Sources

10.12 arcmin



18.59 arcmin



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2009.11.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.277

## A.2 Comments

The ObsID series 1319-1382 were intended to access the HRC-I gain variation across the detector as a function of MCP HV. They were performed as triples (3 different HV settings at each Y-/Z-offset). The best HRC-I focus was not determined at the time the observations were performed (the data to determine that were being analyzed during this series).

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The guide star in slot 4 was automatically removed from the aspect solution due to poor data tracking. The aspect solution is not expected to be degraded by removing one fid light or guide star from the solution.