

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1001 - L2 Version 4  
Chandra X-Ray Center

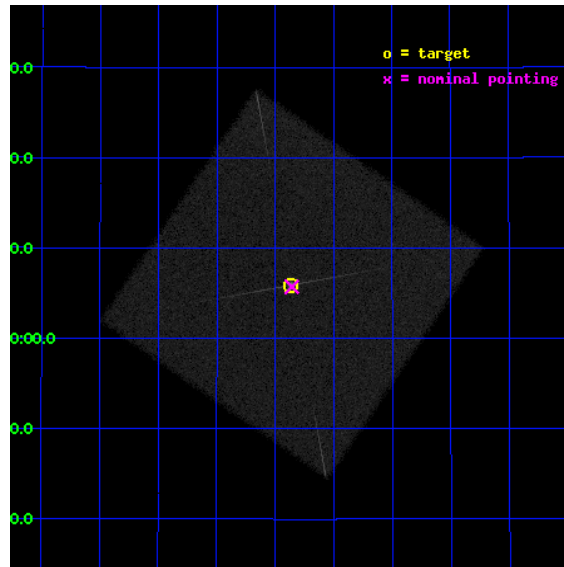
L2 Processing Date : Sep 21 2012

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# 1 Front

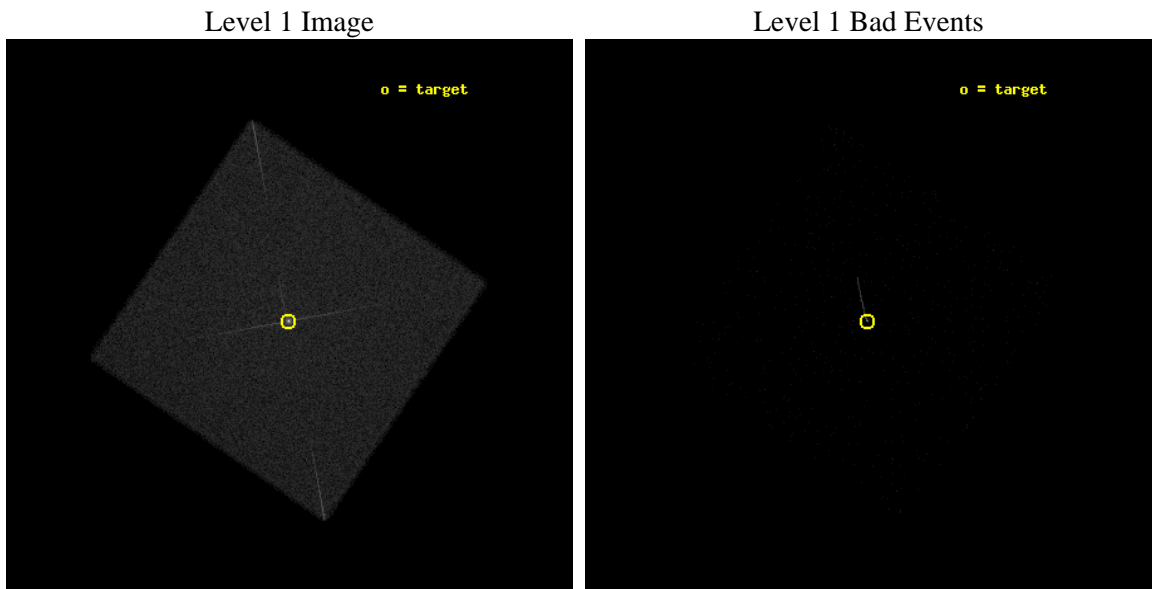
seq_num	290082	Sequence number
obs_id	1001	Observation id
title	LETG/HRC-I CALIBRATION OBSERVATIONS OF HZ43	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.092083	Observer's specified target RA [deg]
dec_targ	29.099	Observer's specified target Dec [deg]
ra_nom	199.08944257212	Nominal RA [deg]
dec_nom	29.095459734427	Nominal Dec [deg]
roll_nom	259.42510832454	Nominal Roll [deg]
revision	4	Processing version of data
ontime	4972.5314452499	[s]
livetime	4940.1218989456	Ontime multiplied by DTCOR
l2events	204773	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	5100.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4972.5314452499	[s]
caldbver	4.5.1.1	&#160	l1events	298782	Number of level 1 events
date	2012-09-21T08:57:58	Date and time of file creation			
revision	4	Processing version of data			

### 2.1.3 Events

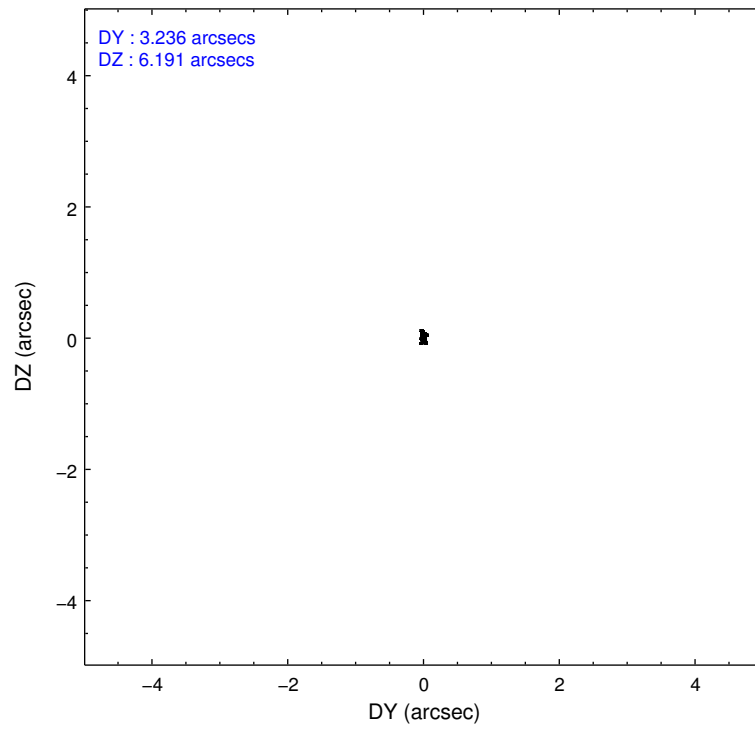
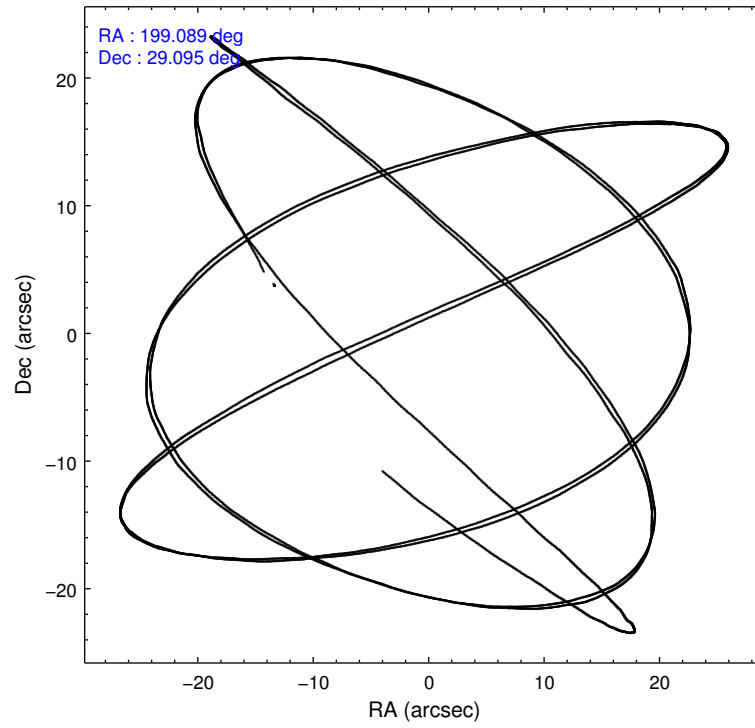
#### Level 1 Events

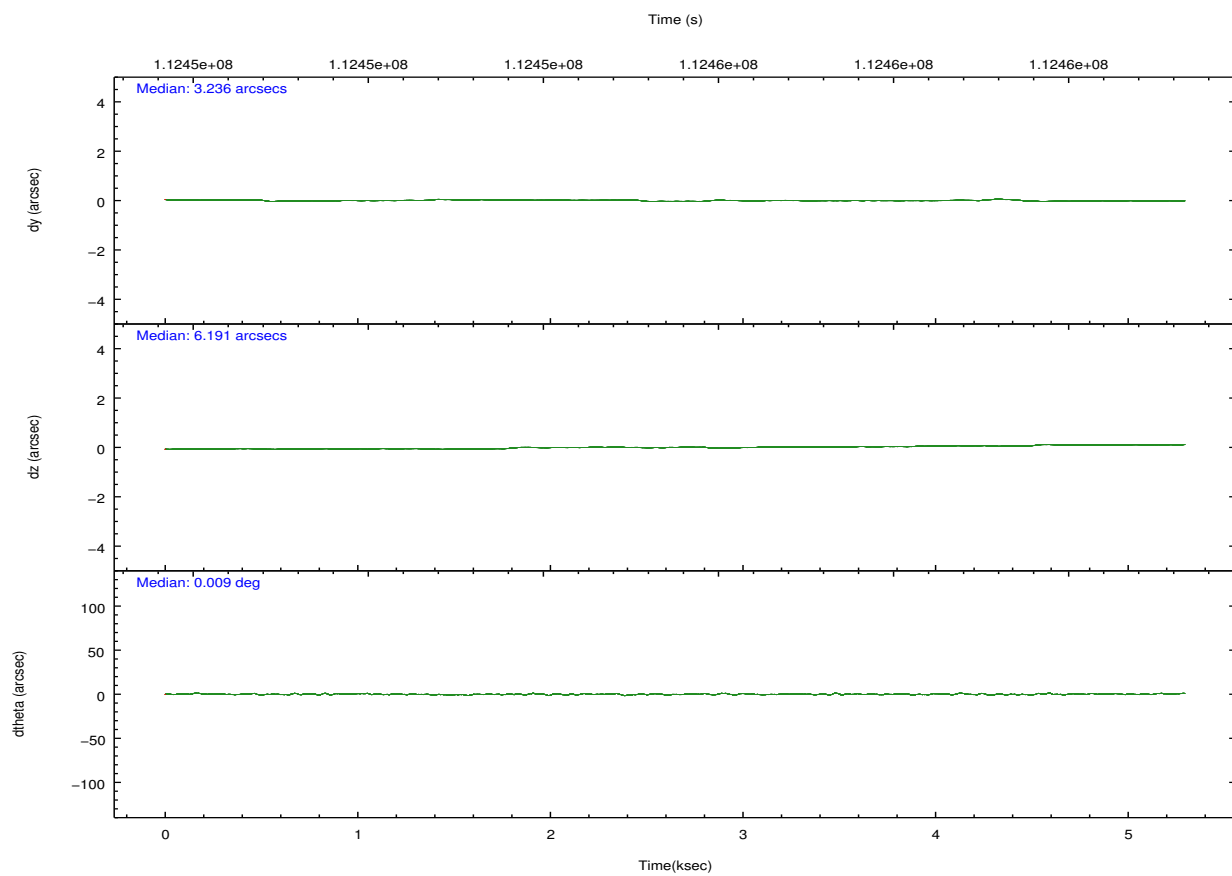
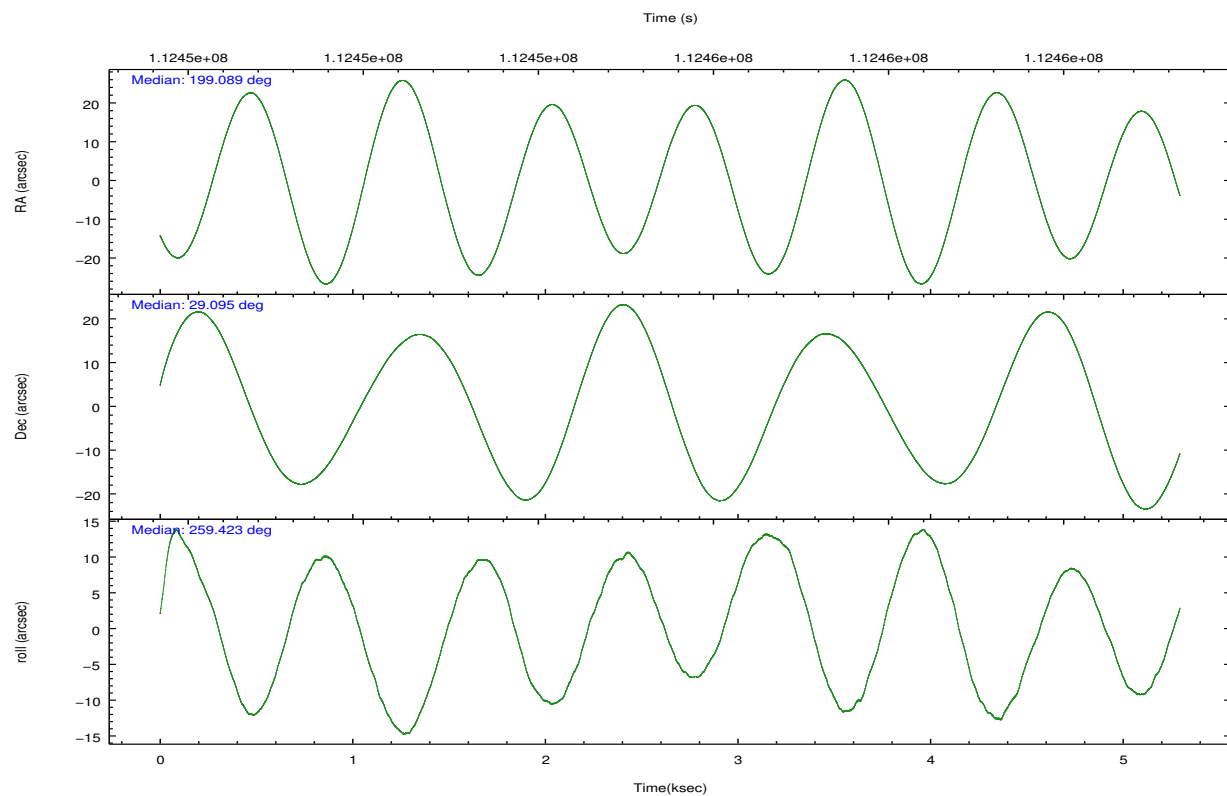
	<b>segment 0</b>
level 1 events	298782
rejected events	8468
rejected %	2%

## 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	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	199.078473	199.0894425721188			
[deg] Pointing Dec	29.120855	29.09545973442721			
[deg] Pointing Roll	259.525944	259.4251083245406			
[s] Window start time (MET)	110332864.184000	110332864.184000			
[s] Window stop time (MET)	112838464.184000	112838464.184000			
[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)	112452298.184000	112451730.50207			
Observation start date	2001-07-25T12:43:54	2001-07-25T12:35:30			
[s] Observation end time (MET)	112457398.184000	112457532.5148			
Observation end date	2001-07-25T14:08:54	2001-07-25T14:12:12			

## 2.3 Aspect



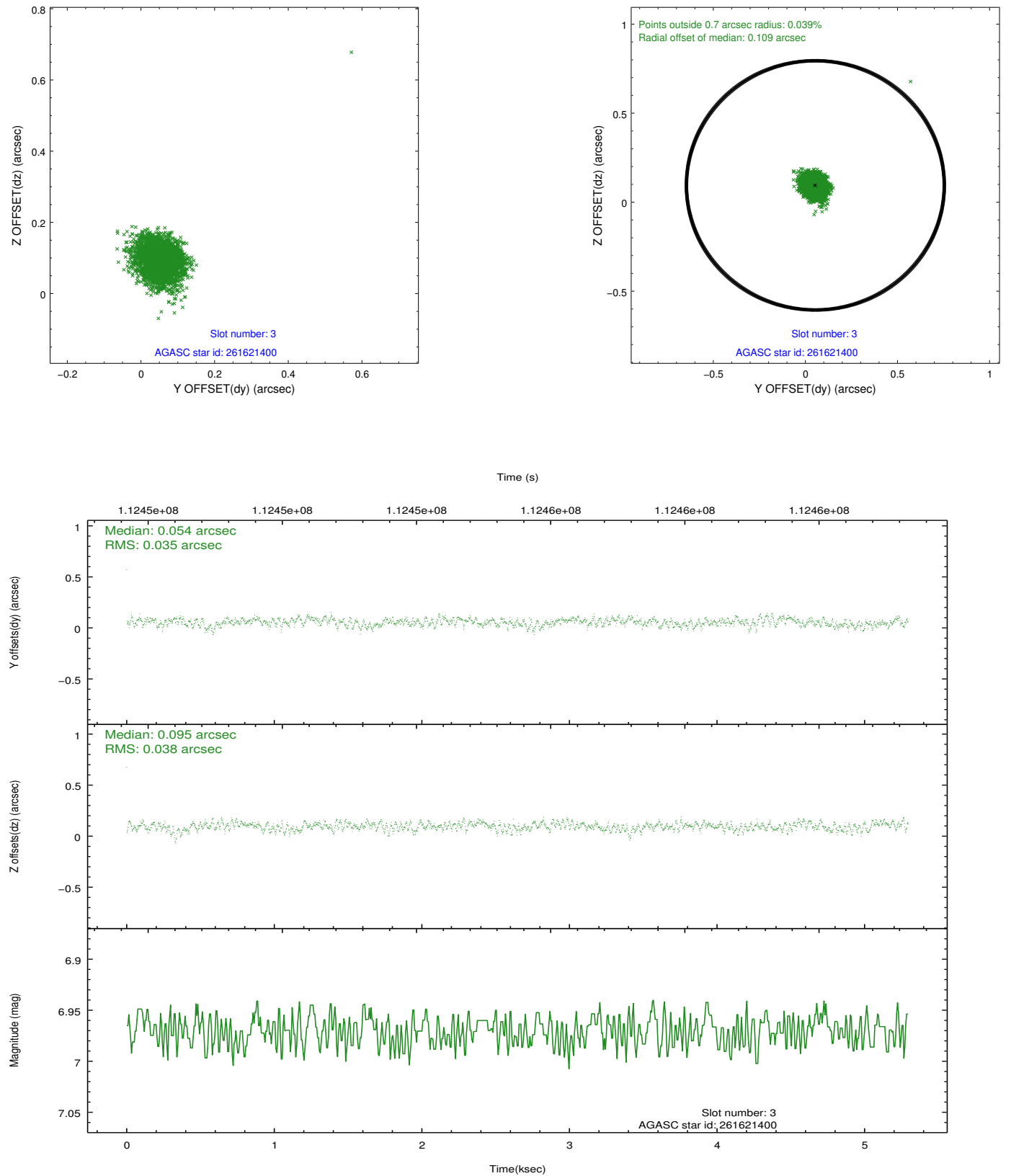


### Slot Statistics

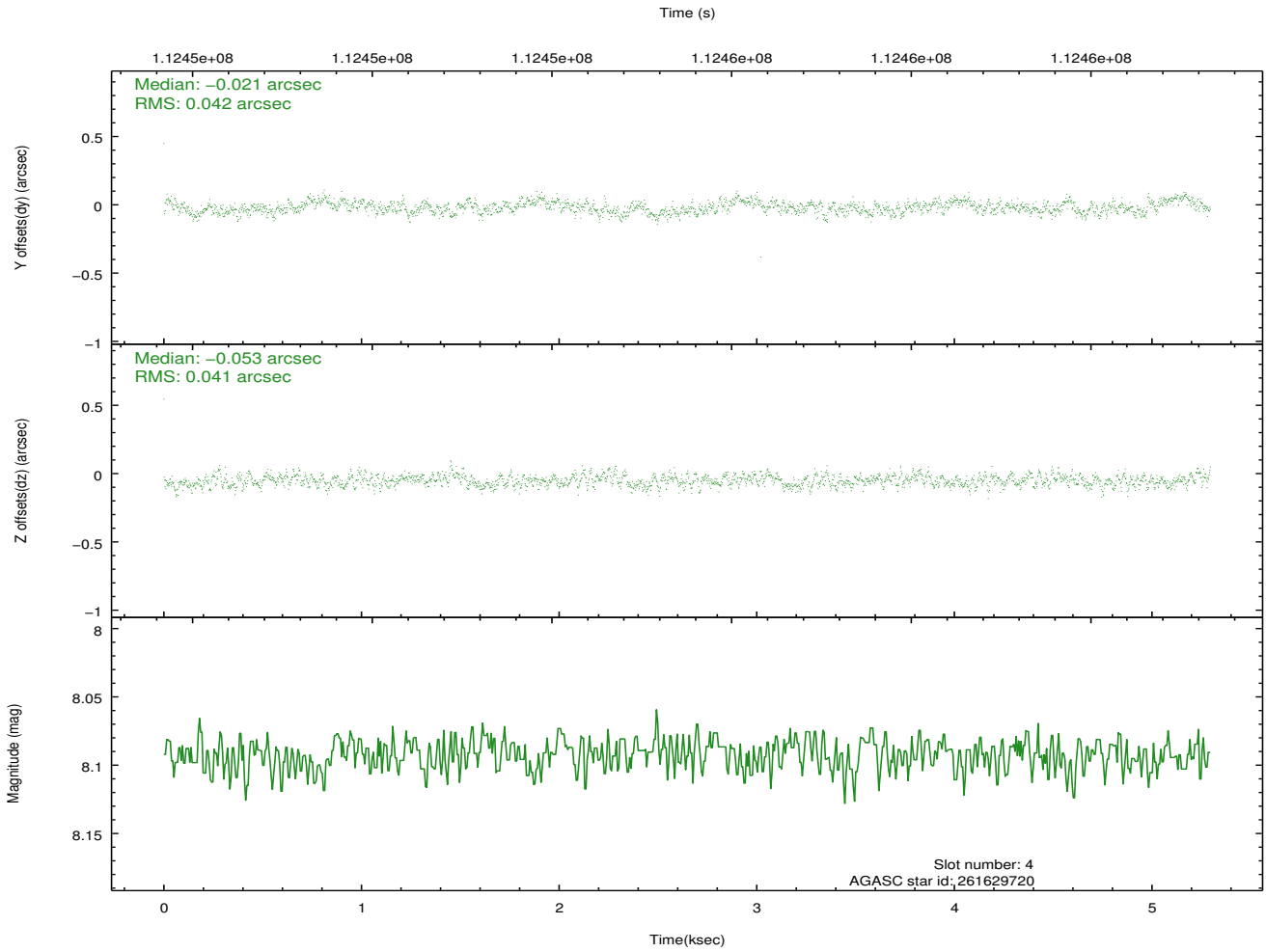
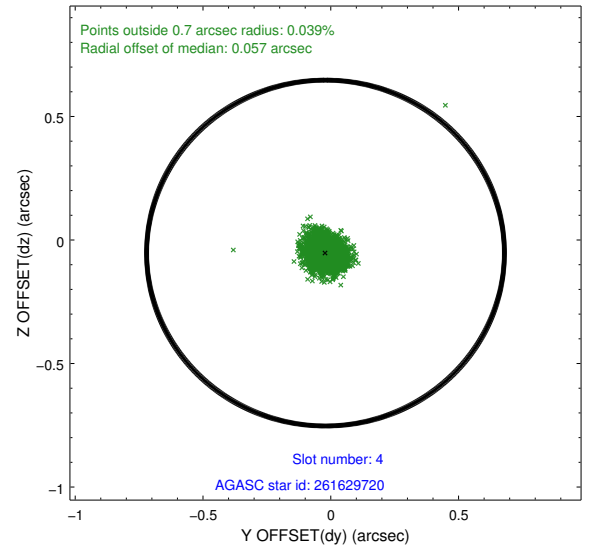
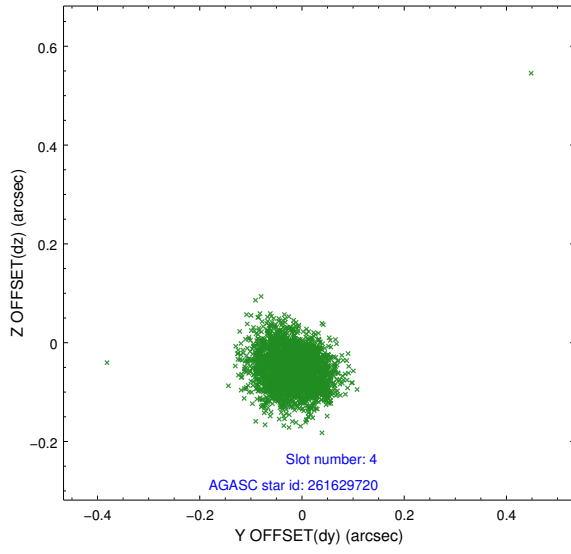
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.97	1292	0.053	0.036	0.006	0.011	0.000000	0.000000	-758.68	-1294.02
1	FID	HRC-I-3	7.06	1292	0.012	-0.069	0.007	0.011	0.000000	0.000000	-1187.77	1009.44
2	FID	HRC-I-4	7.00	1292	0.049	-0.057	0.006	0.010	0.000000	0.000000	1283.21	1008.81
3	GUIDE	261621400	6.97	2584	0.054	0.095	0.053	0.083	198.901600	28.741982	1441.95	-299.83
4	GUIDE	261629720	8.09	2584	-0.021	-0.053	0.060	0.095	199.236176	29.044452	180.01	539.03
5	GUIDE	261619776	8.80	2584	-0.058	-0.094	0.075	0.117	198.654383	29.401174	-753.19	-1490.48
6	GUIDE	261623040	9.12	2583	-0.098	-0.035	0.082	0.131	198.792686	29.757643	-2093.71	-1294.81
7	GUIDE	261623624	9.13	2575	0.123	0.088	0.082	0.139	199.611555	28.454113	2048.68	2095.77

## 2.4 Star Slots

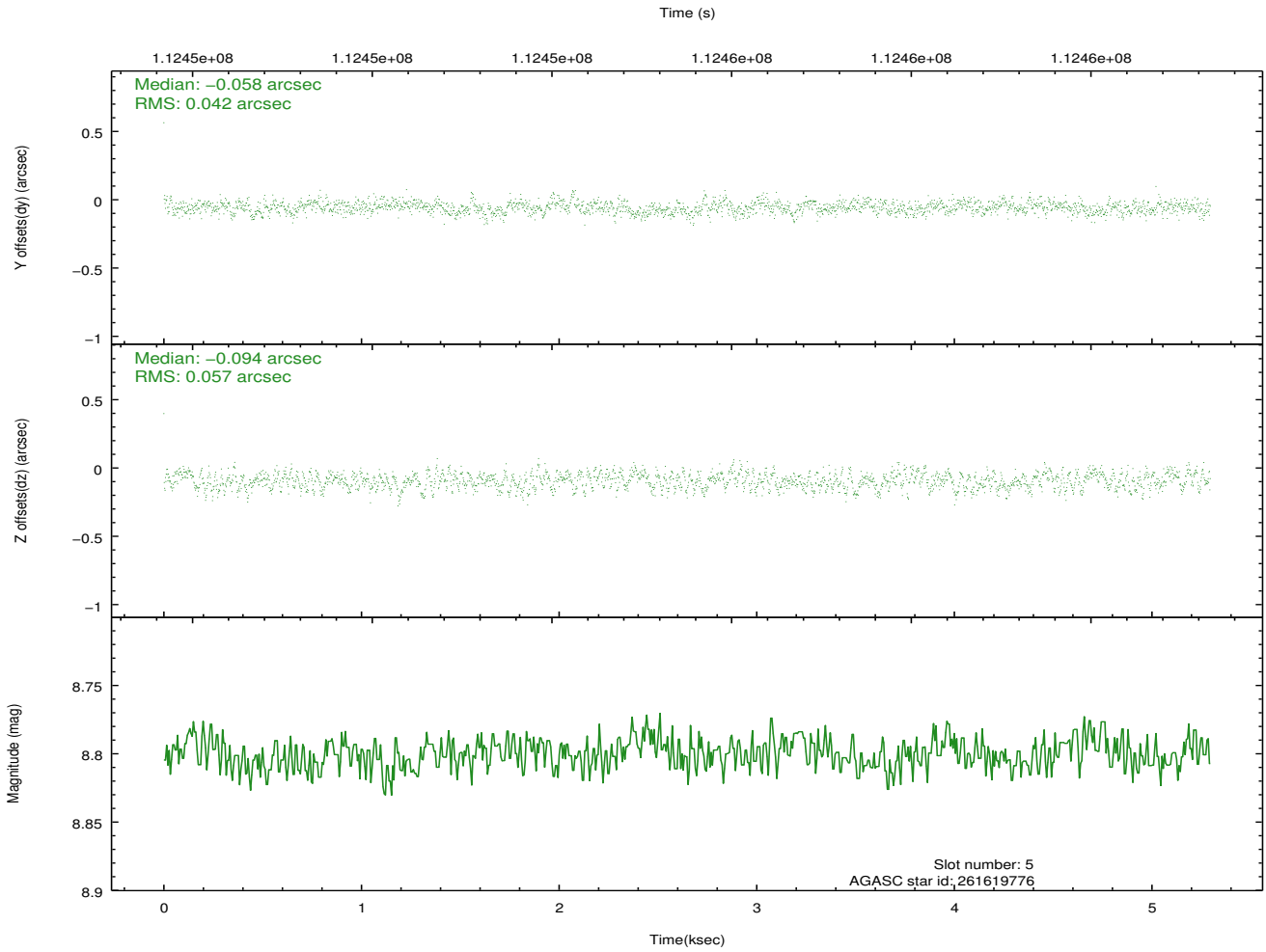
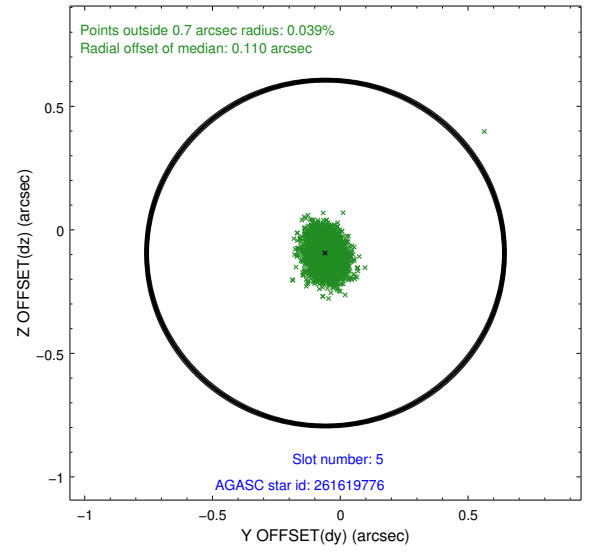
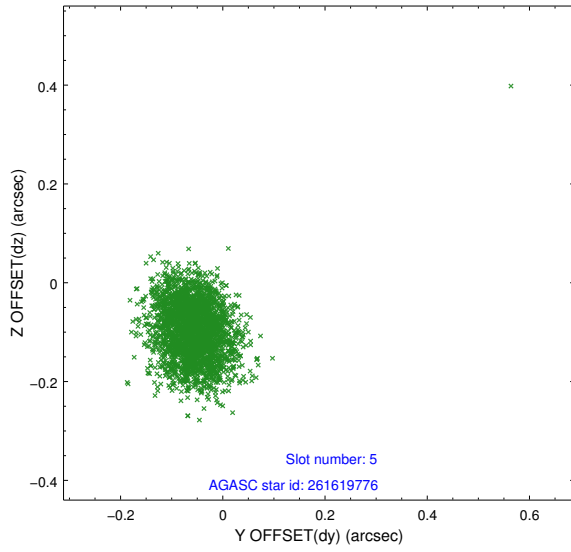
### 2.4.1 Slot 3



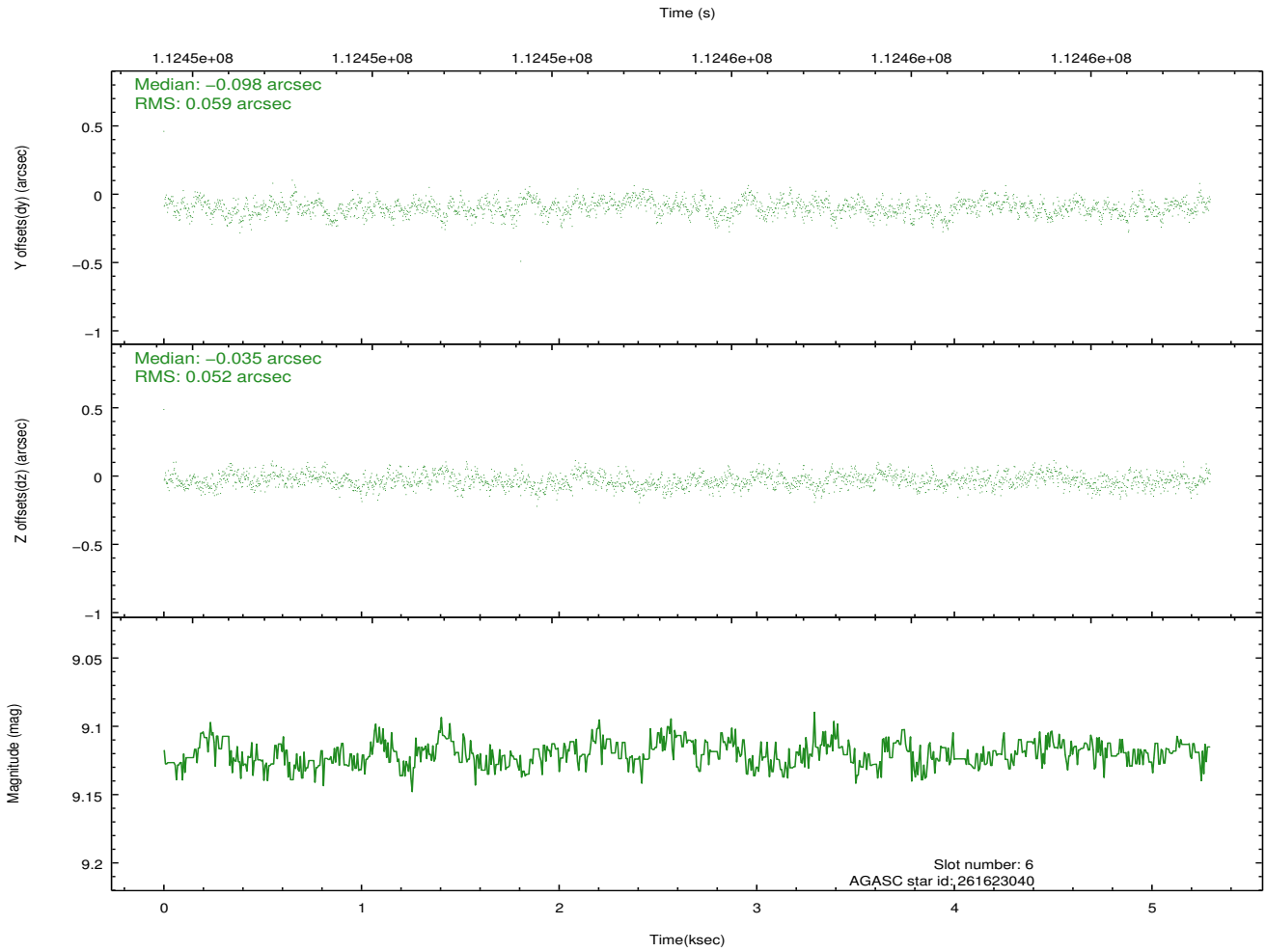
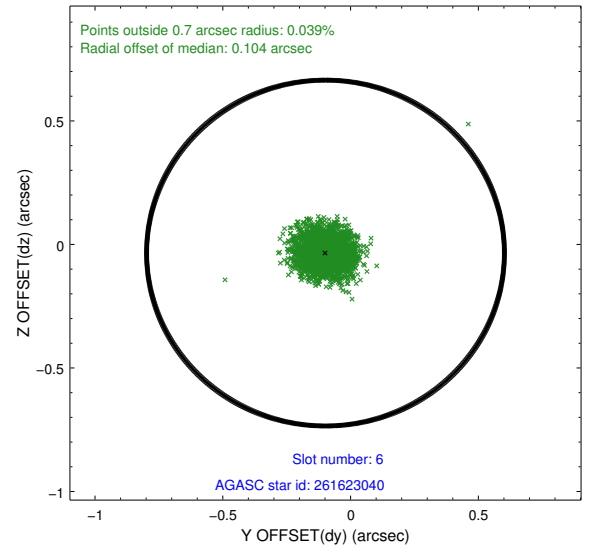
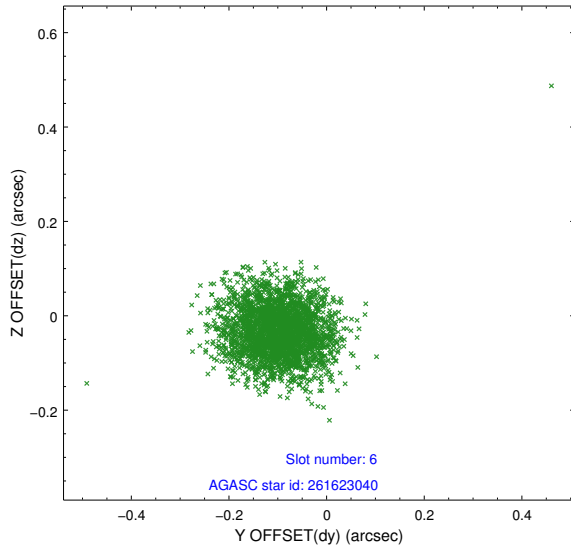
## 2.4.2 Slot 4



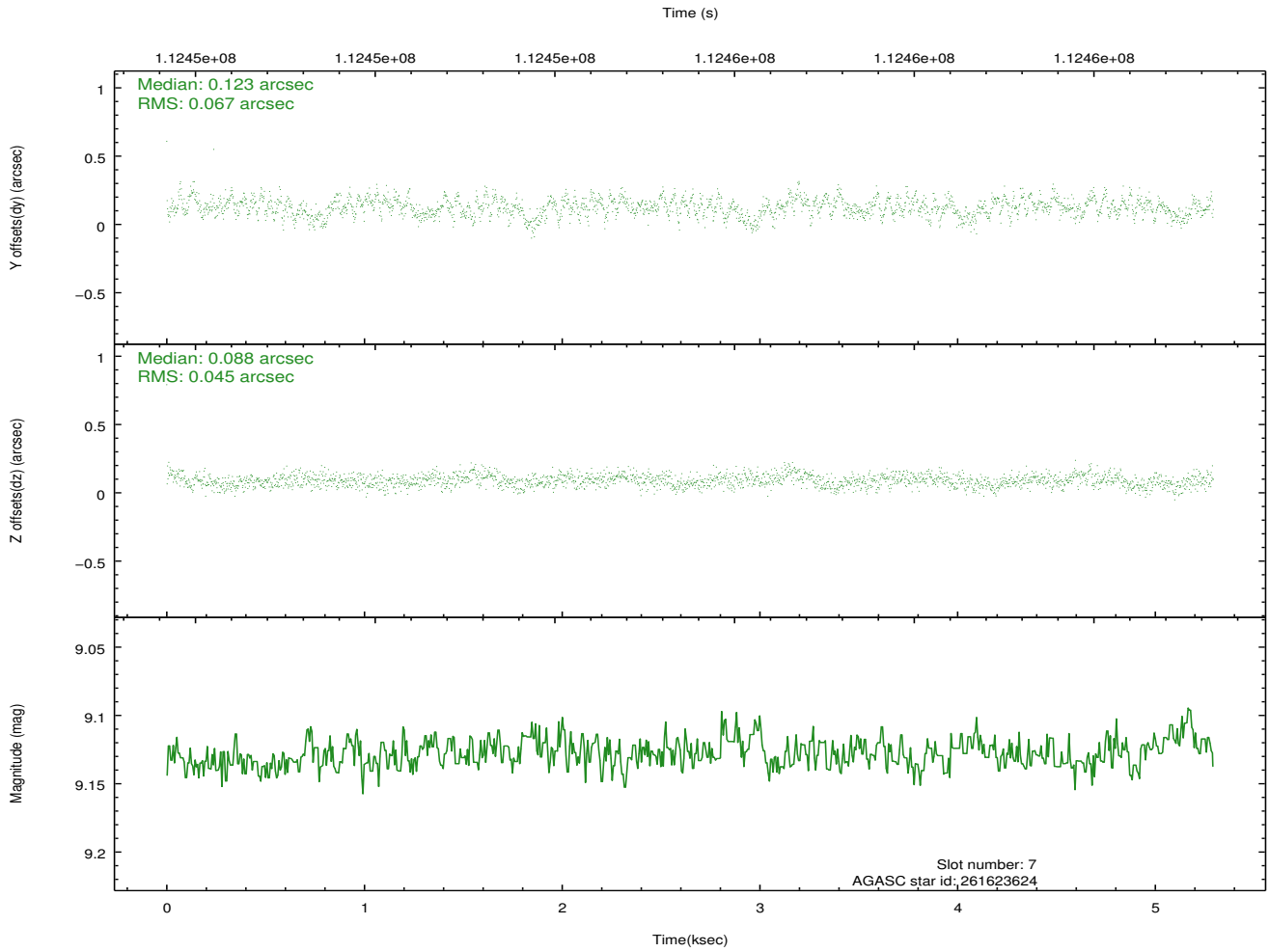
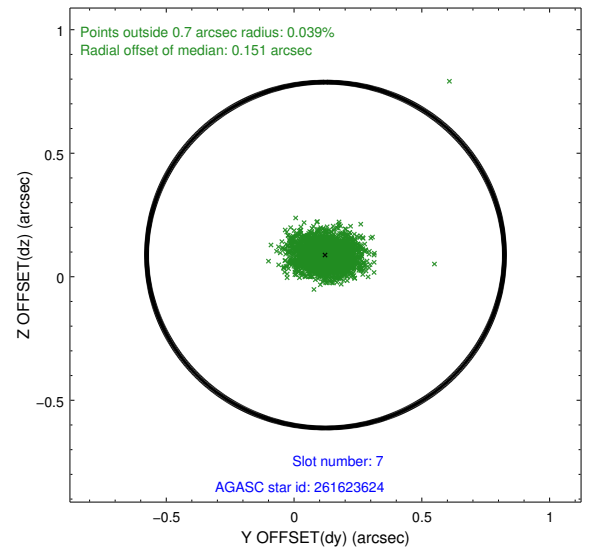
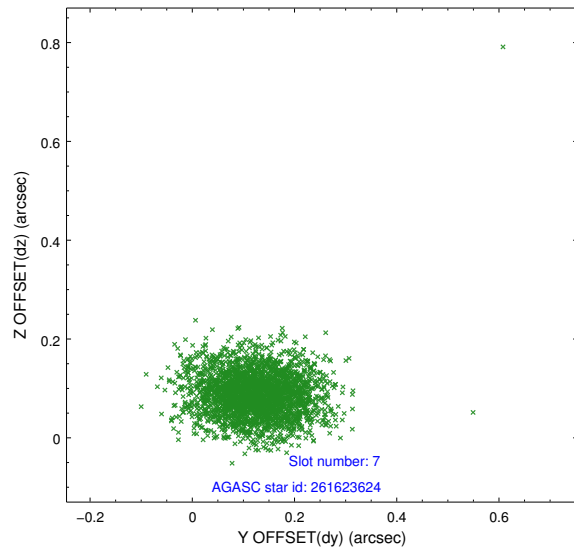
### 2.4.3 Slot 5



## 2.4.4 Slot 6

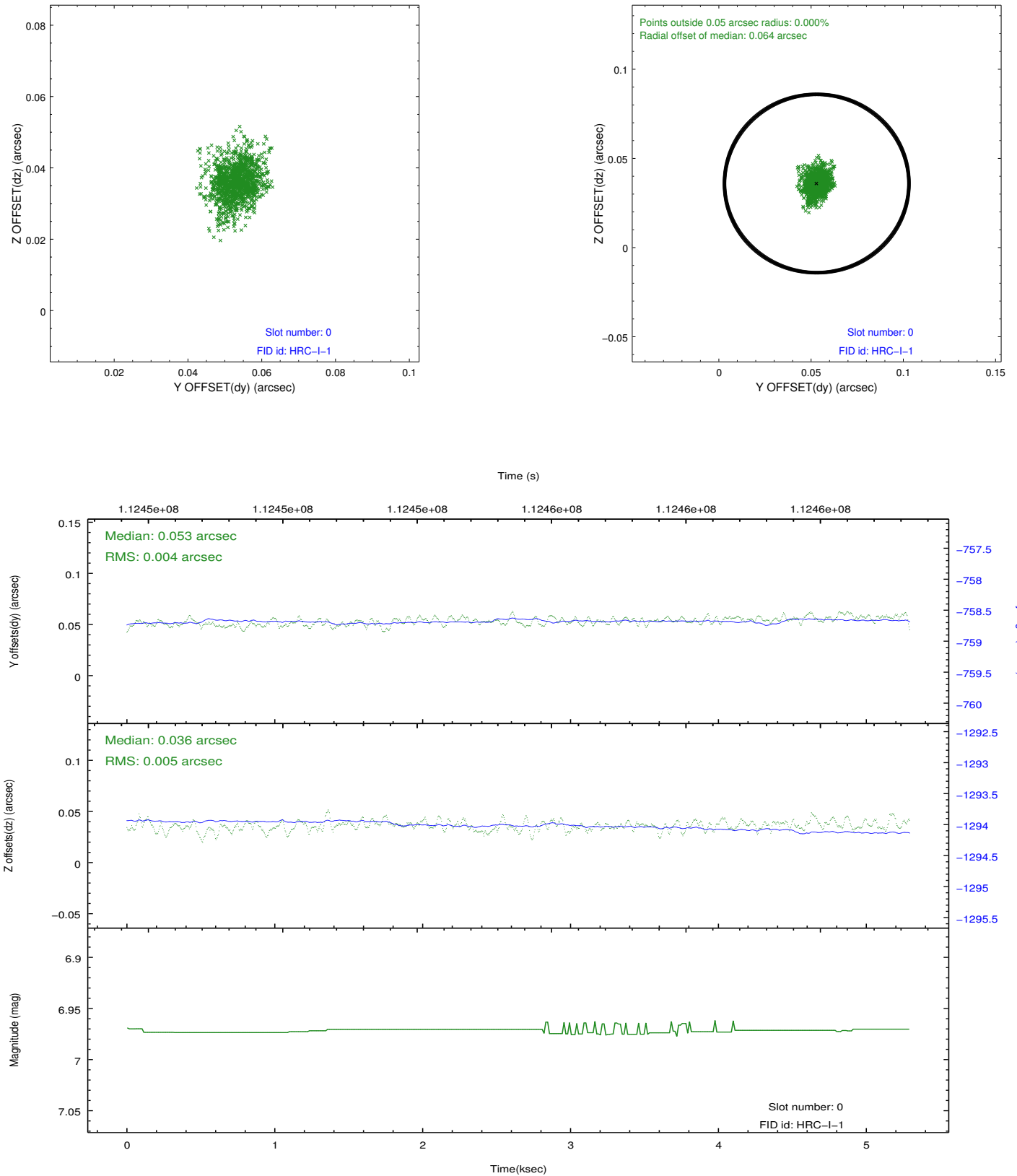


## 2.4.5 Slot 7

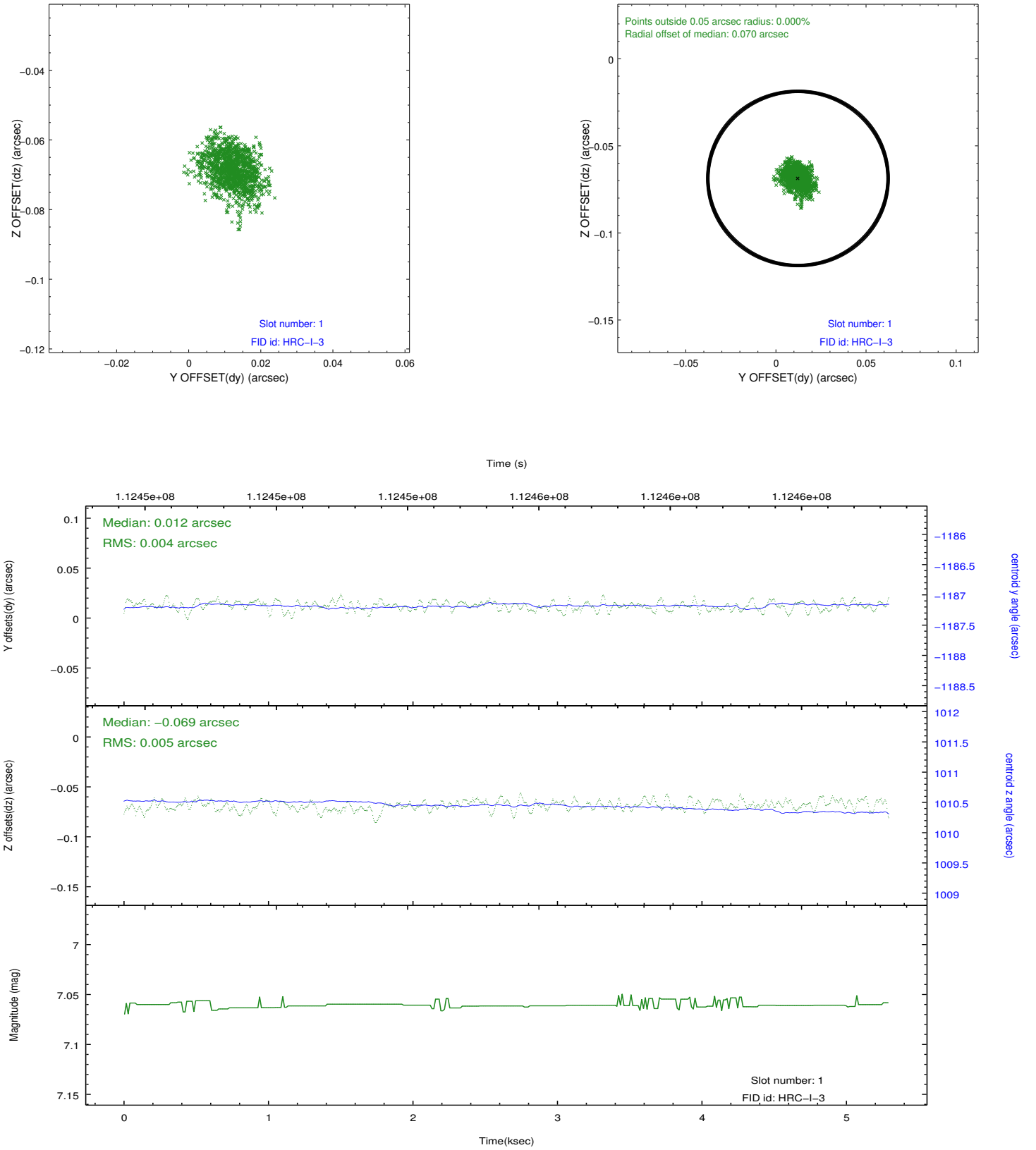


## 2.5 FID Slots

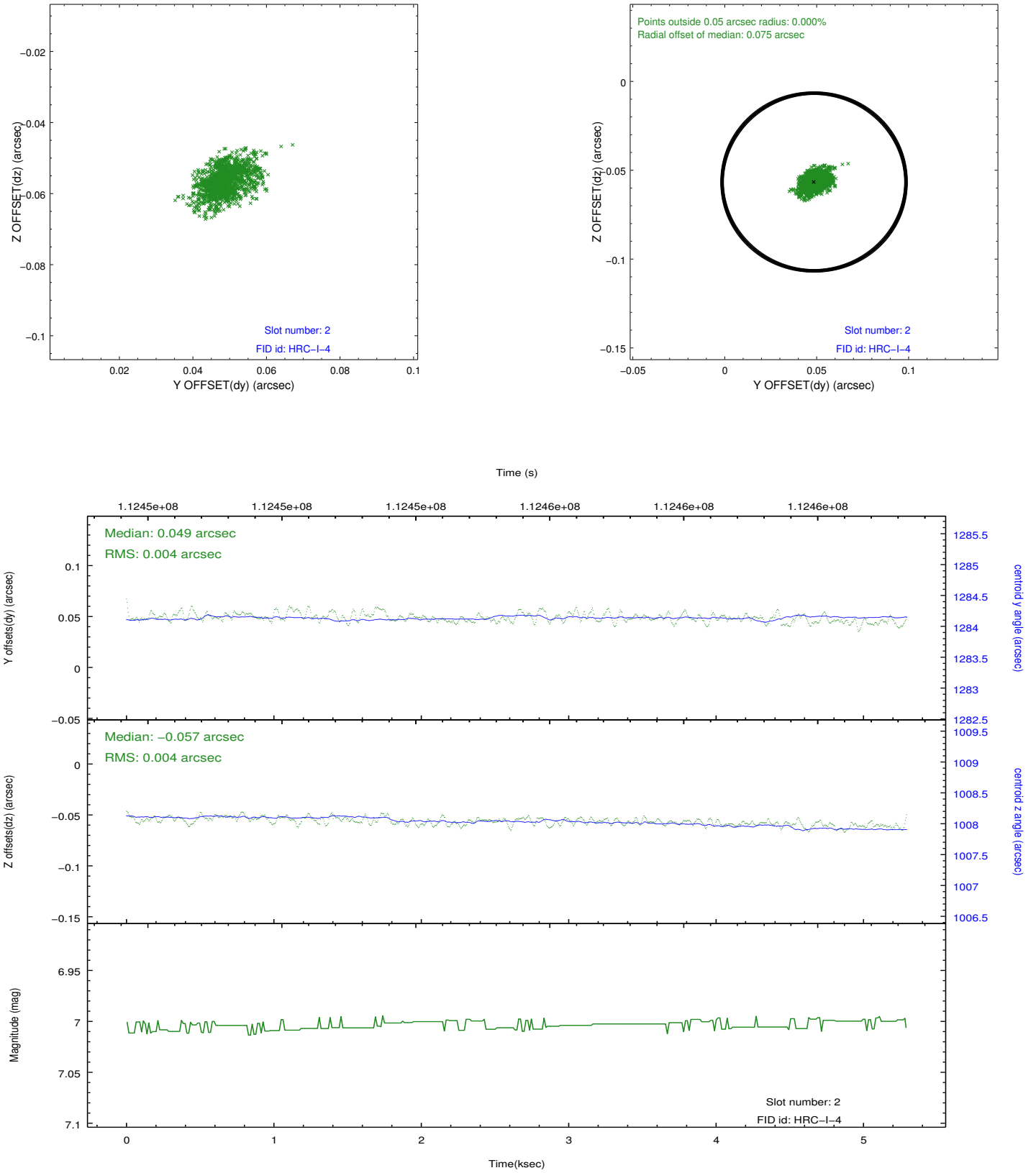
### 2.5.1 Slot 0



## 2.5.2 Slot 1

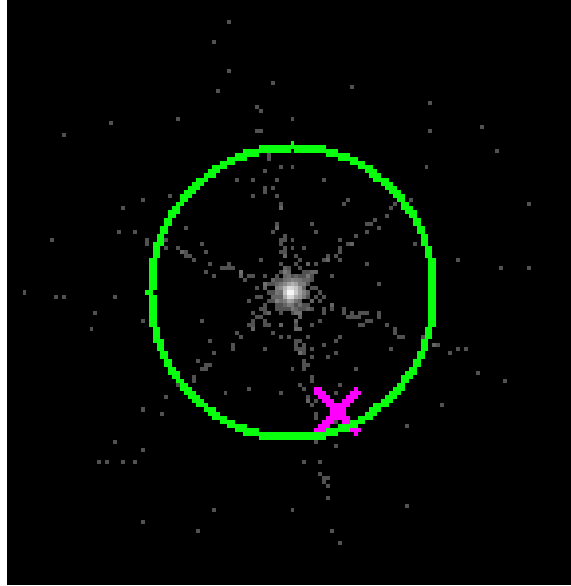


### 2.5.3 Slot 2

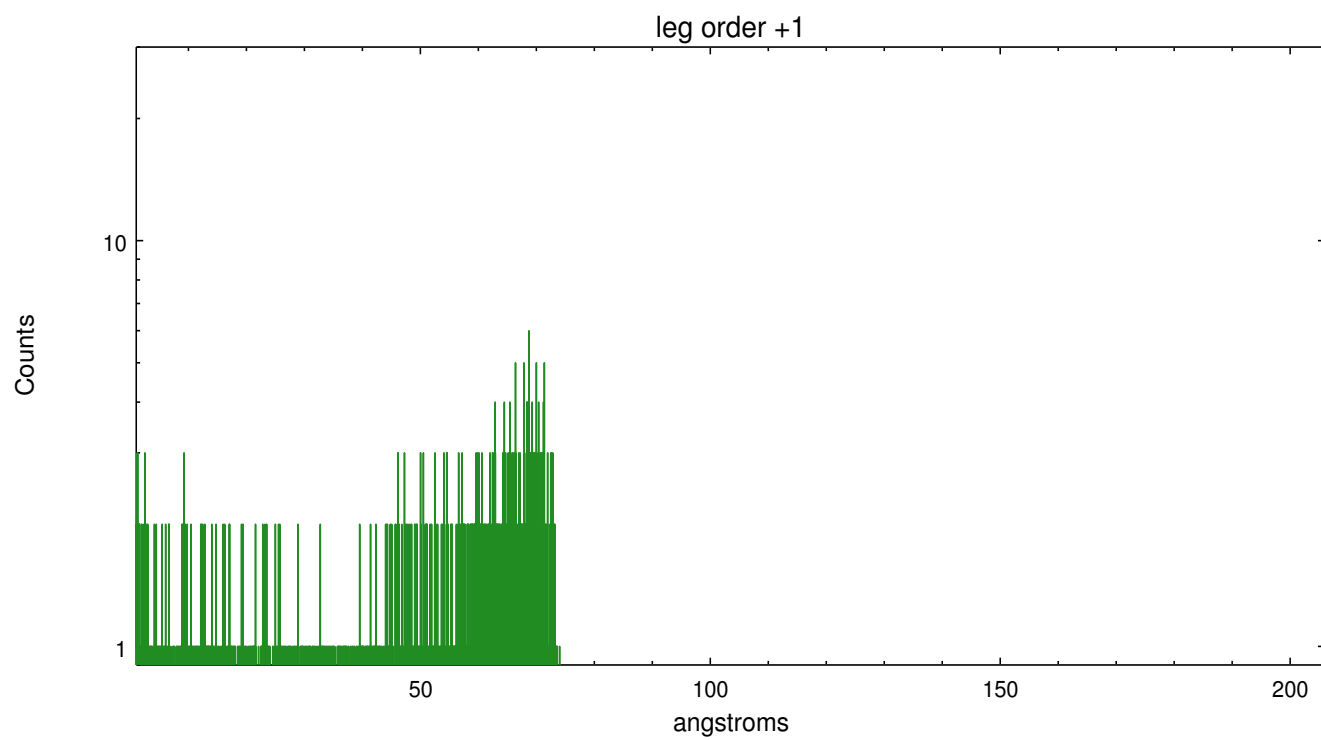
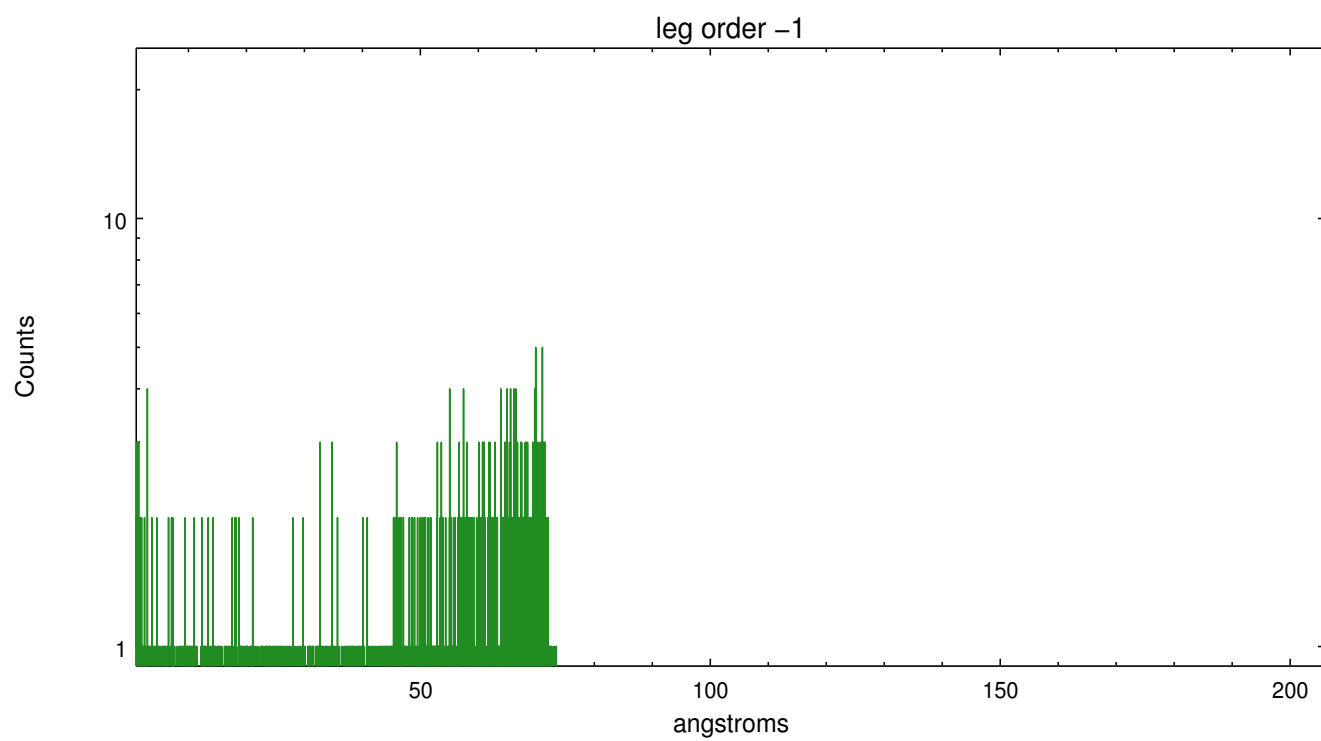


## 3 Gratings

### 3.1 LETG Arm



LETG Zero Order



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.972

### A.2 Comments