

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 5042 - L2 Version 3  
Chandra X-Ray Center

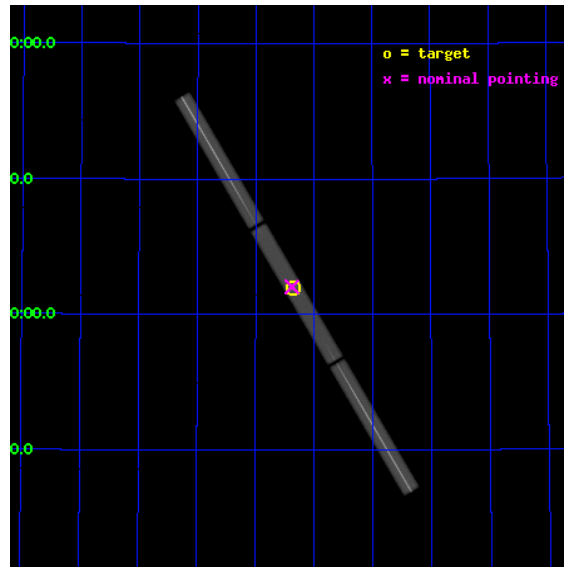
L2 Processing Date : Nov 9 2012

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# 1 Front

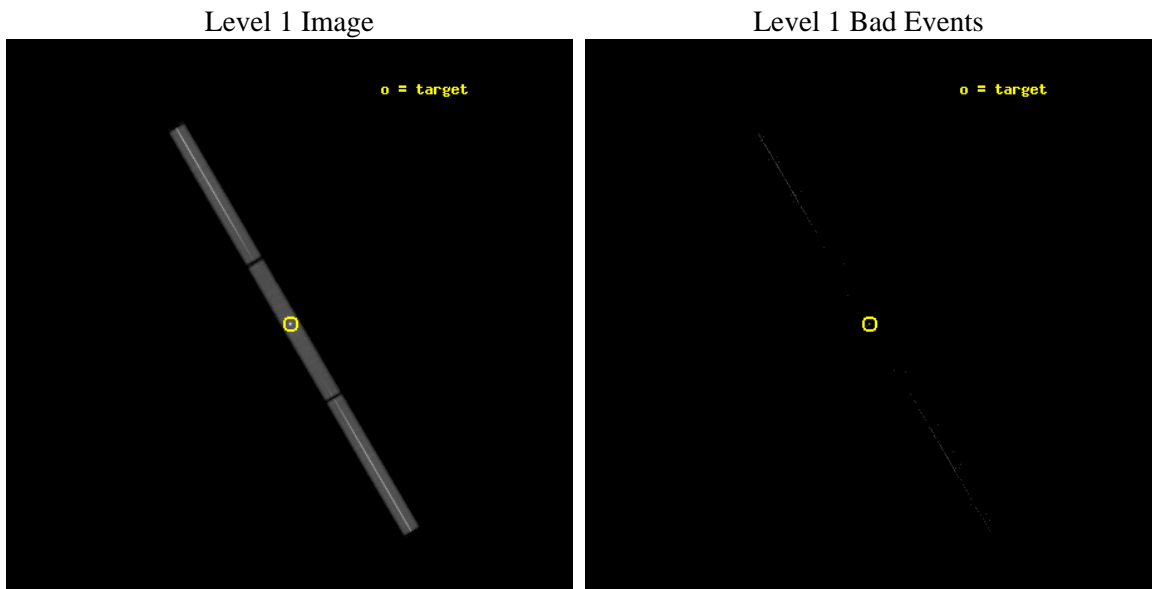
seq_num	290315	Sequence number
obs_id	5042	Observation id
title	AO5 Calibration Observations of HZ43	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.092083	Observer's specified target RA [deg]
dec_targ	29.099	Observer's specified target Dec [deg]
ra_nom	199.09489709491	Nominal RA [deg]
dec_nom	29.10298252674	Nominal Dec [deg]
roll_nom	59.4200137284	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19853.482113183	[s]
livetime	19686.049842162	Ontime multiplied by DTCOR
l2events	1666350	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	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19853.482113183	[s]
caldsver	4.5.2	&#160	l1events	2038410	Number of level 1 events
date	2012-11-09T07:44:52	Date and time of file creation			
revision	3	Processing version of data			

## 2.1.3 Events

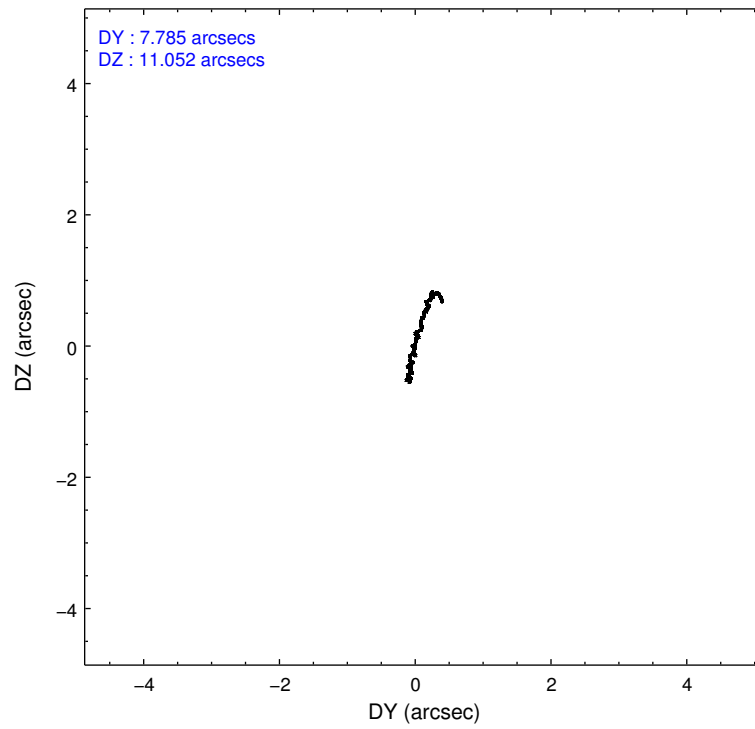
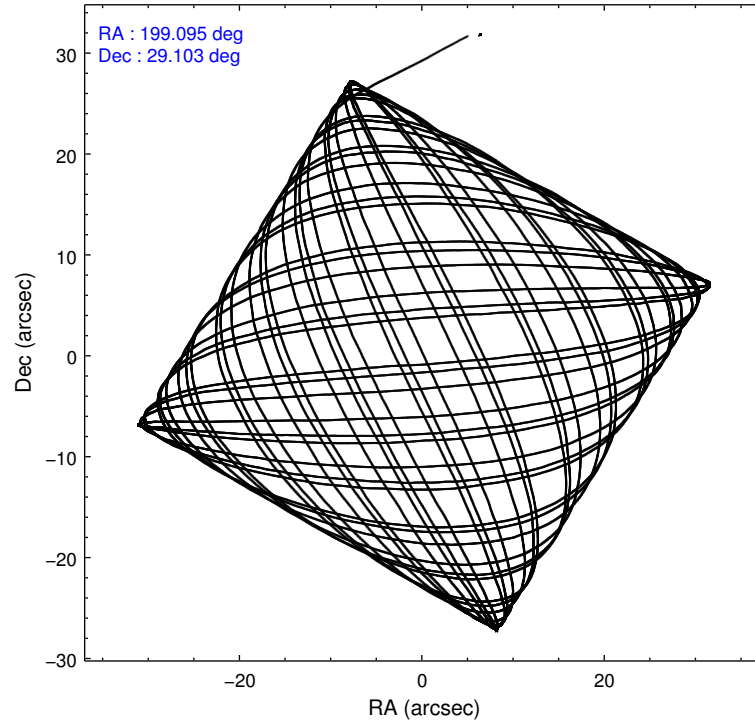
### Level 1 Events

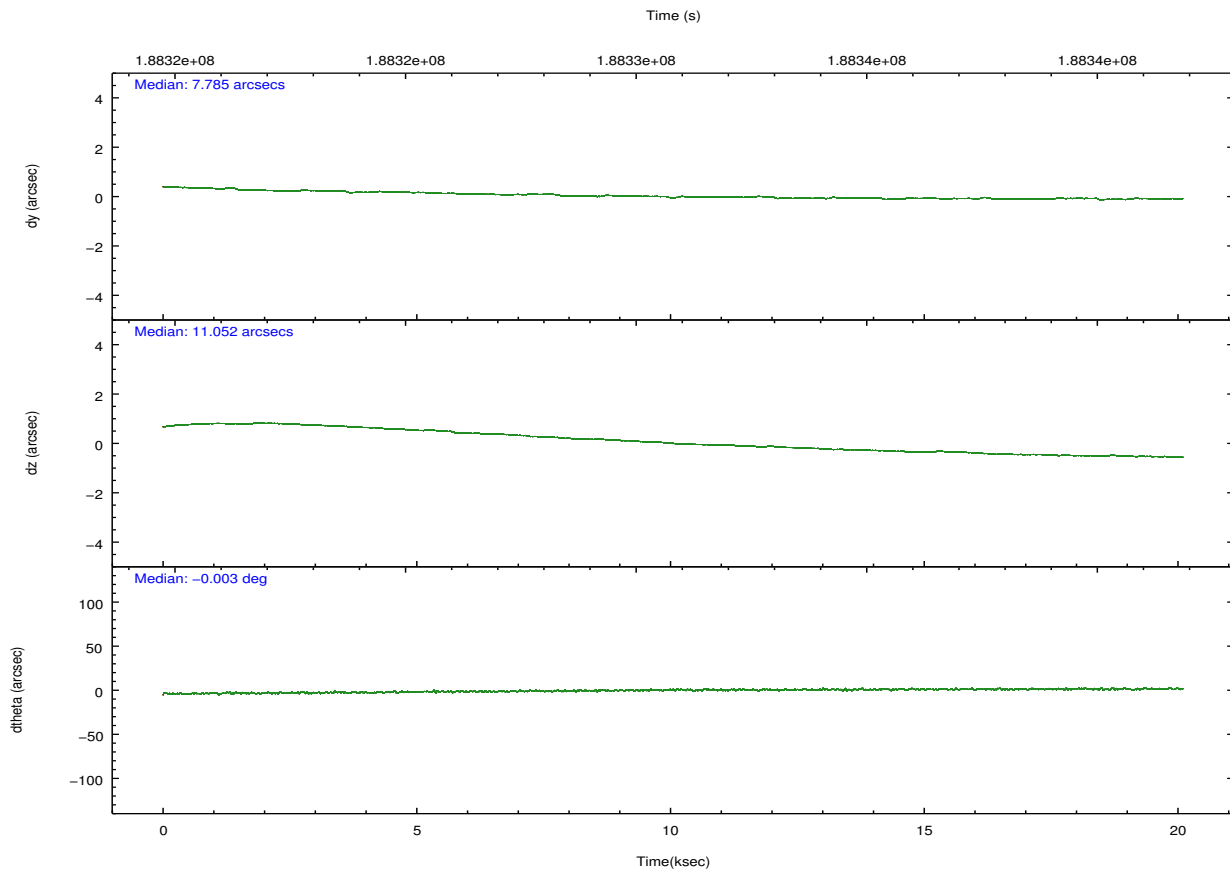
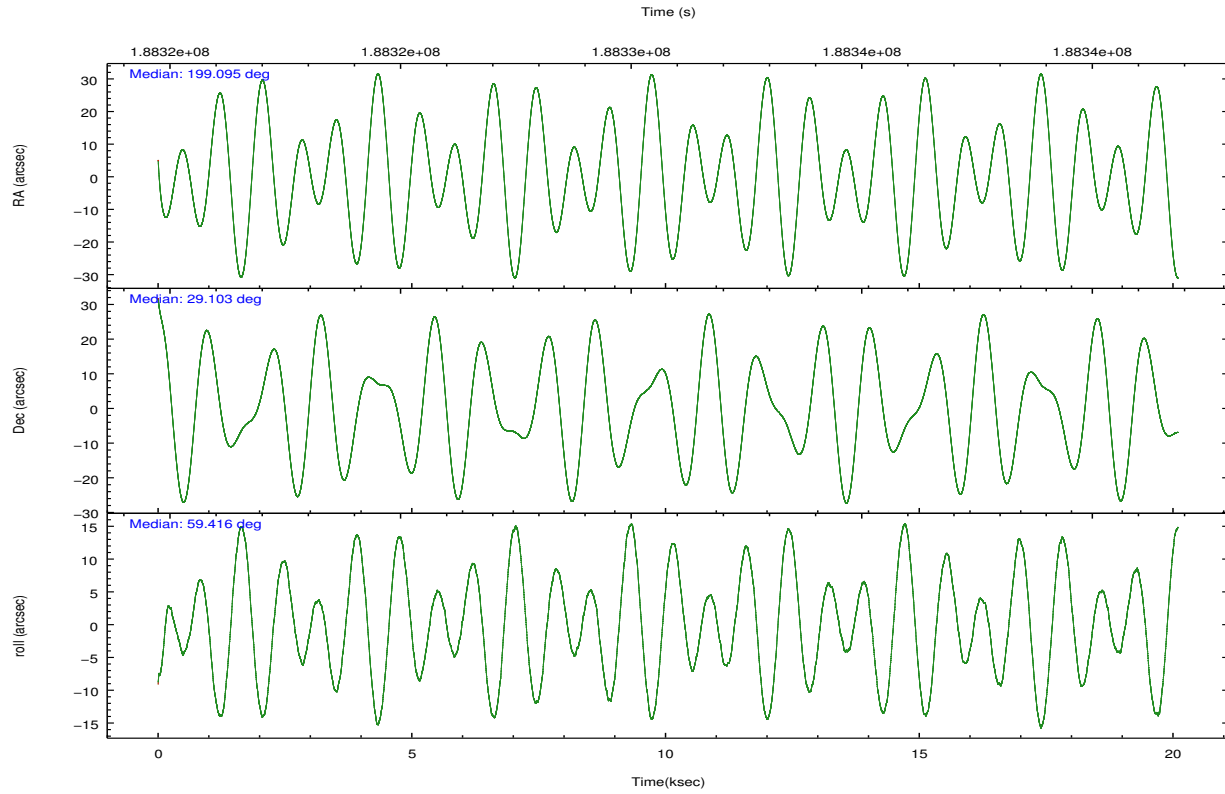
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	713014	601367	724029
rejected events	2676	8886	2898
rejected %	0%	1%	0%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	199.096223	199.0948970949125			
[deg] Pointing Dec	29.074383	29.10298252674042			
[deg] Pointing Roll	59.352032	59.42001372839968			
[s] Window start time (MET)	186624064.184000	186624064.184000			
[s] Window stop time (MET)	191894464.184000	191894464.184000			
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.4635187648994			
[mm] SIM translation stage offset	0	-0.007540371344731511			
[s] Observation start time (MET)	188320851.184000	188319778.25523			
Observation start date	2003-12-20T15:19:47	2003-12-20T15:02:58			
[s] Observation end time (MET)	188340851.184000	188341768.60619			
Observation end date	2003-12-20T20:53:07	2003-12-20T21:09:28			

## 2.3 Aspect



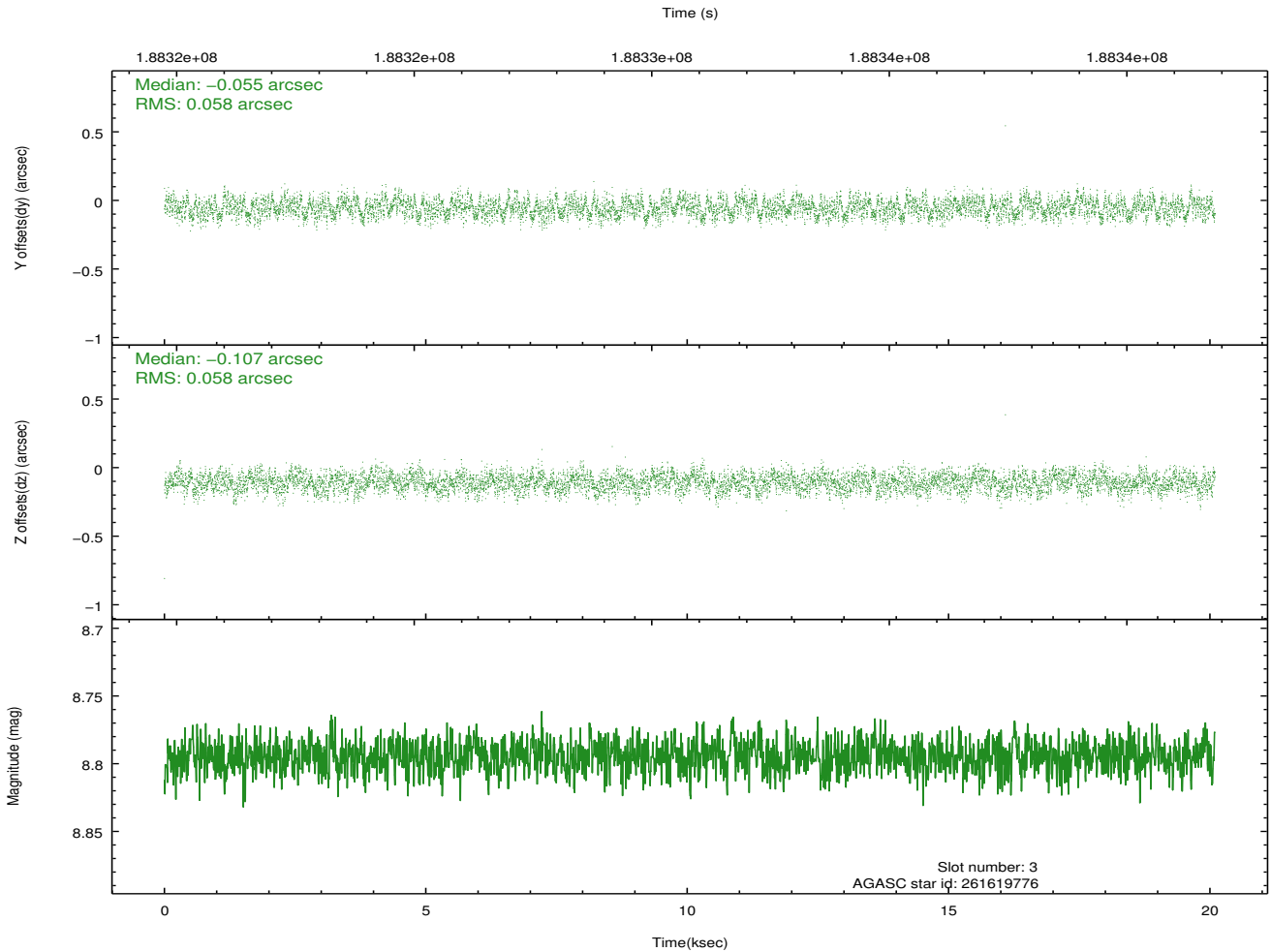
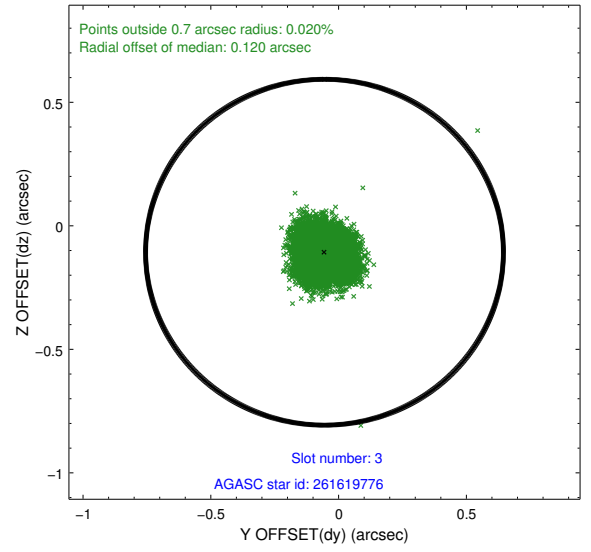
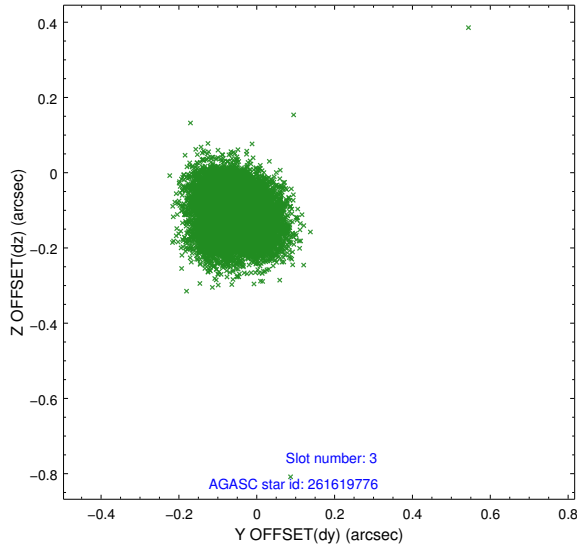


### Slot Statistics

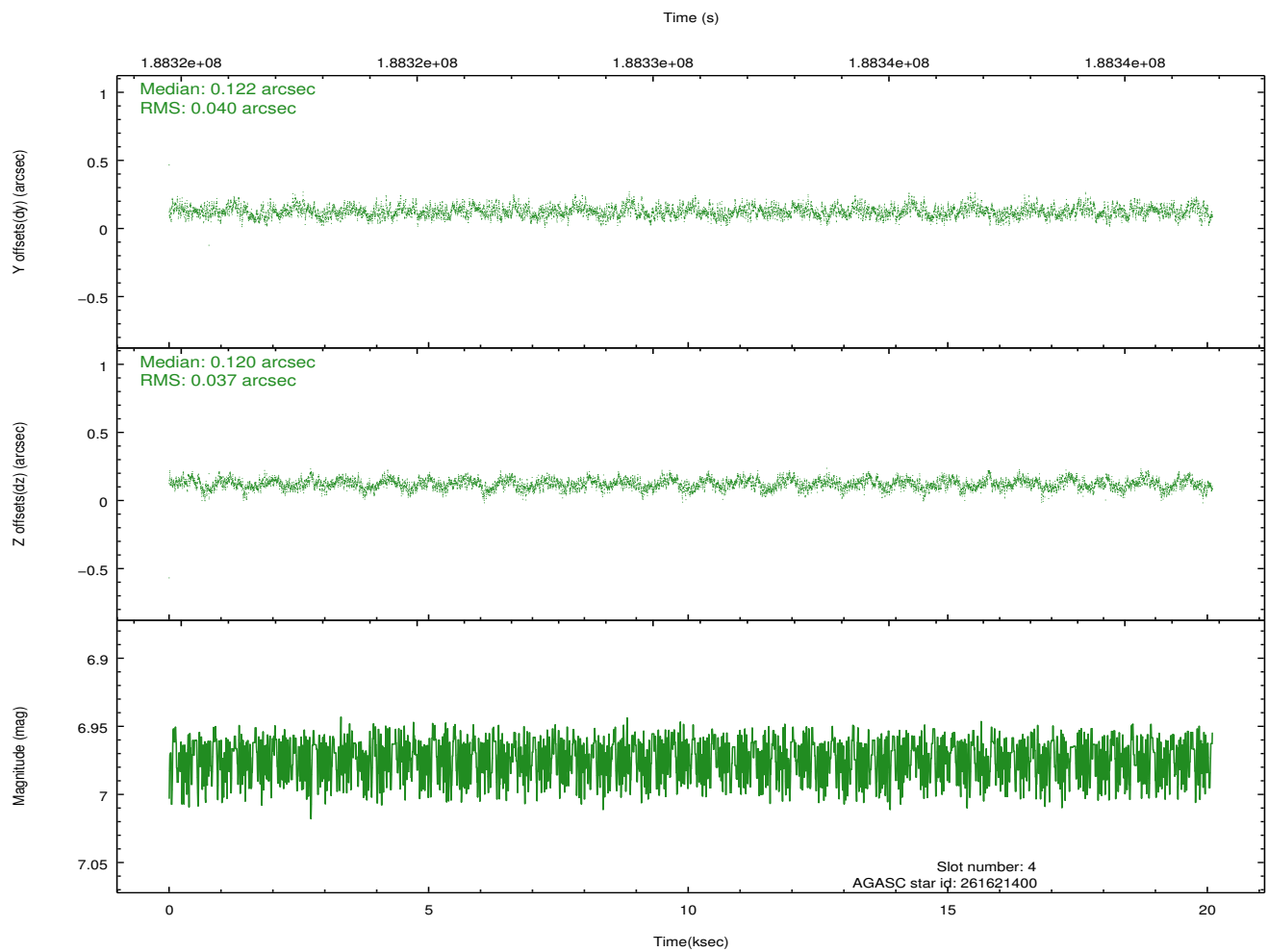
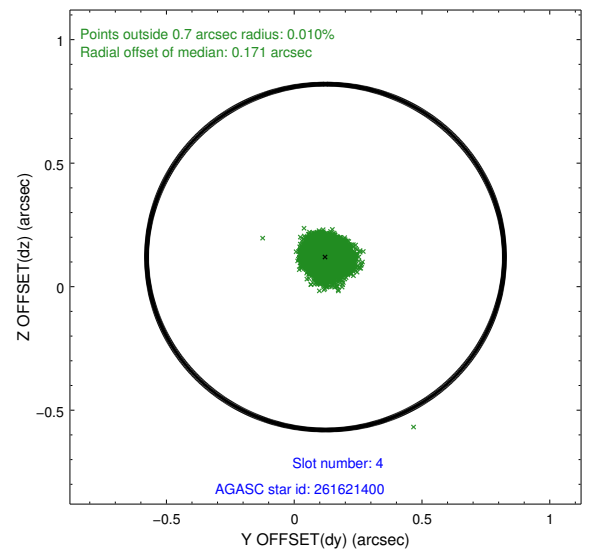
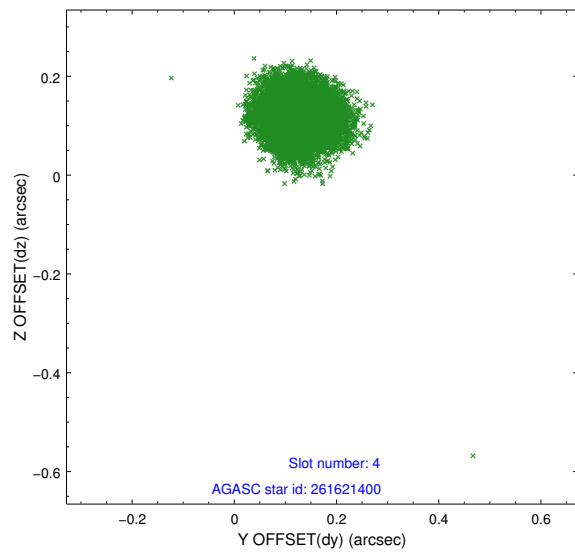
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.02	4901	0.147	-0.160	0.023	0.037	0.000000	0.000000	-1161.98	-459.80
1	FID	HRC-S-2	7.02	4901	0.132	-0.109	0.009	0.018	0.000000	0.000000	1237.44	-452.50
2	FID	HRC-S-3	7.03	4901	0.111	-0.033	0.026	0.046	0.000000	0.000000	-1164.48	569.76
3	GUIDE	261619776	8.79	9802	-0.055	-0.107	0.088	0.136	198.654383	29.401174	307.87	1792.82
4	GUIDE	261621400	6.97	9803	0.122	0.120	0.058	0.093	198.901600	28.741982	-1341.98	-80.95
5	GUIDE	261623040	9.13	9796	-0.176	-0.151	0.087	0.140	198.792686	29.757643	1633.34	2070.59
6	GUIDE	261626376	9.71	9796	0.060	-0.048	0.114	0.190	198.947288	29.347445	607.97	903.63
7	GUIDE	261629720	8.10	9801	0.049	0.187	0.064	0.107	199.236176	29.044452	132.32	-433.51

## 2.4 Star Slots

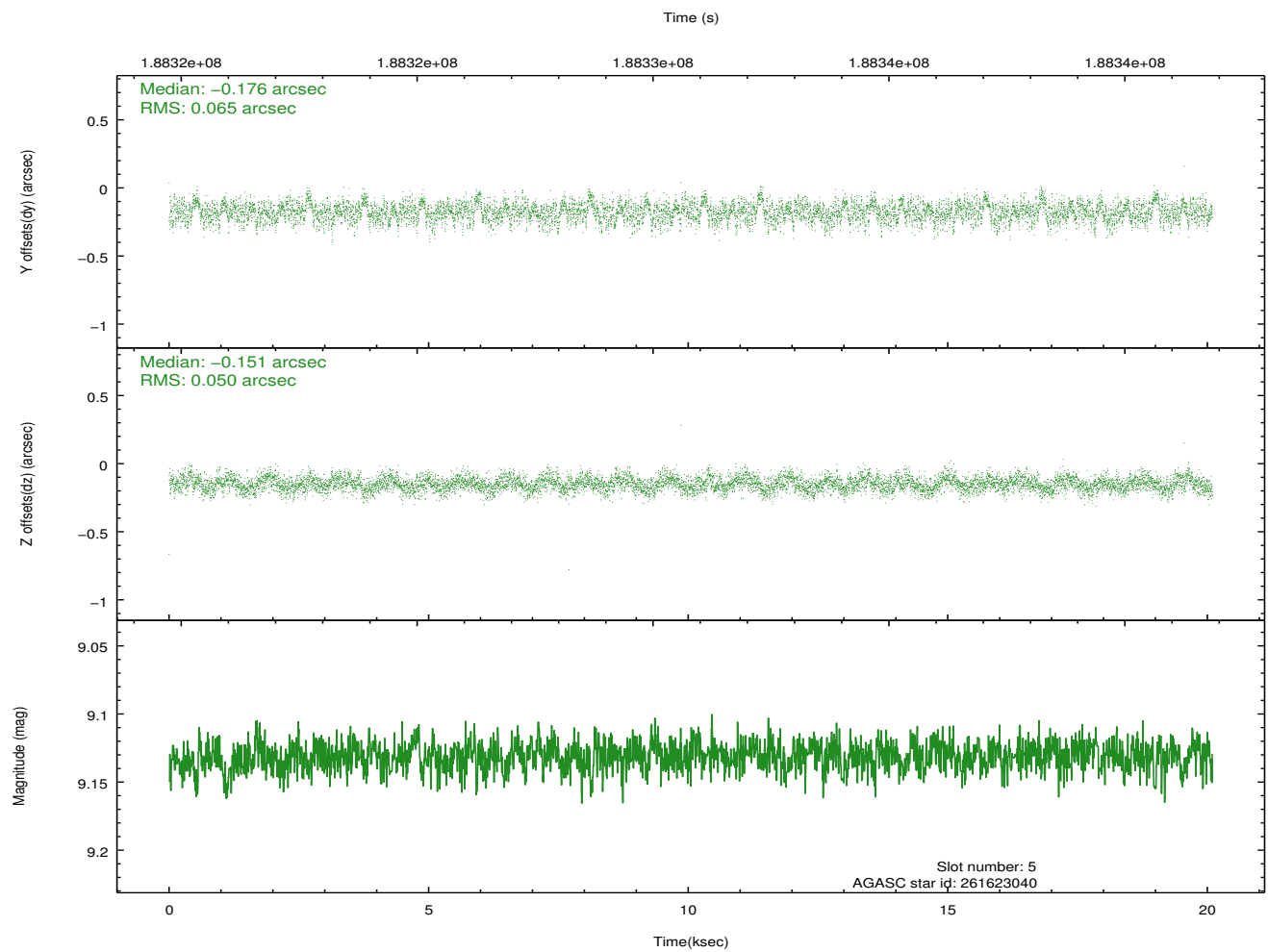
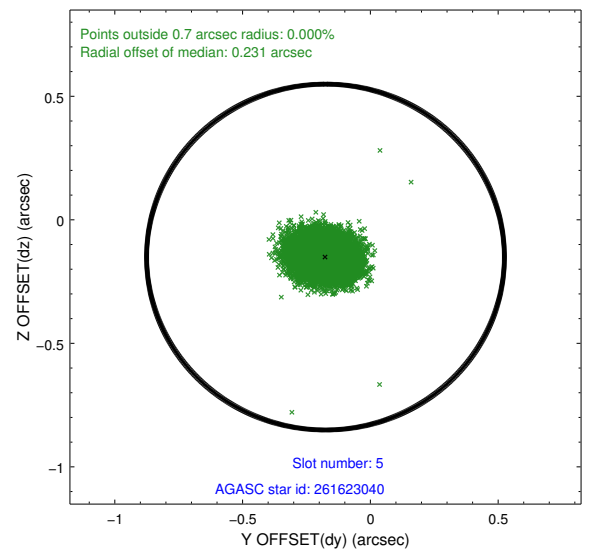
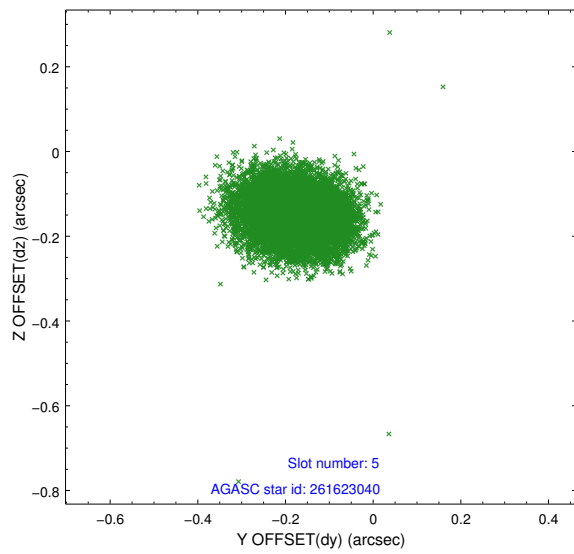
### 2.4.1 Slot 3



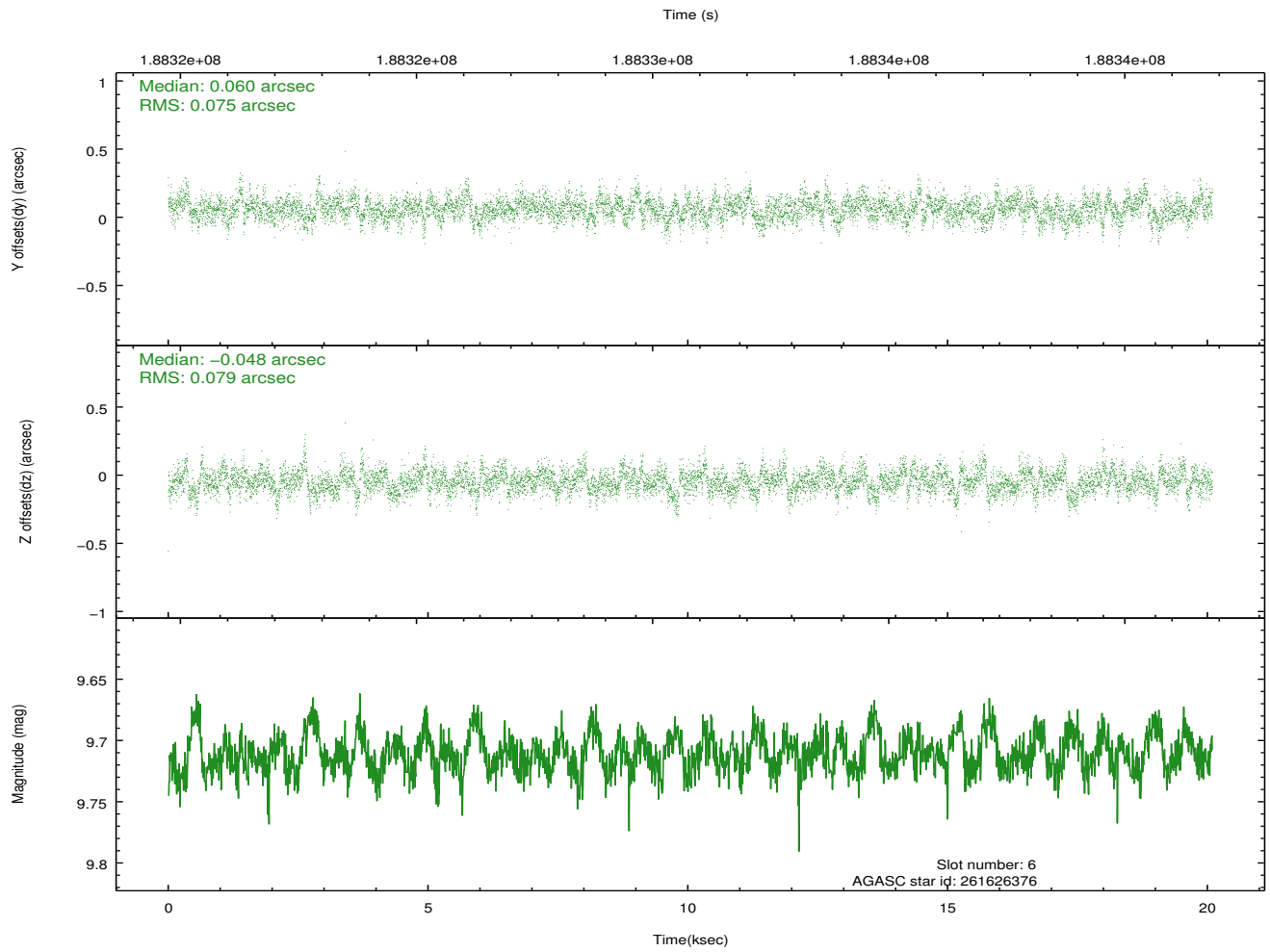
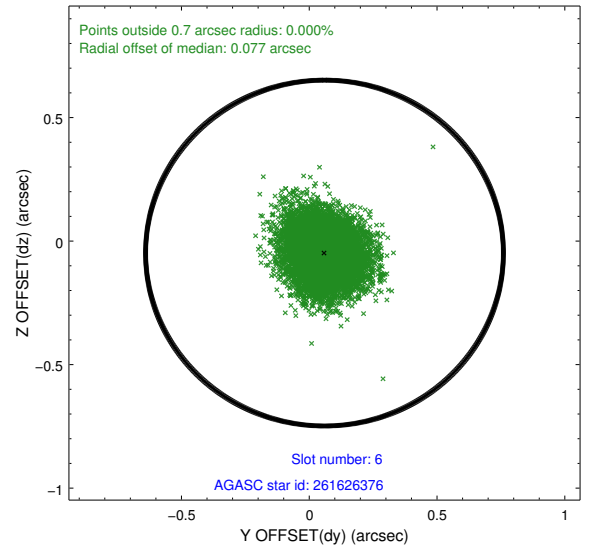
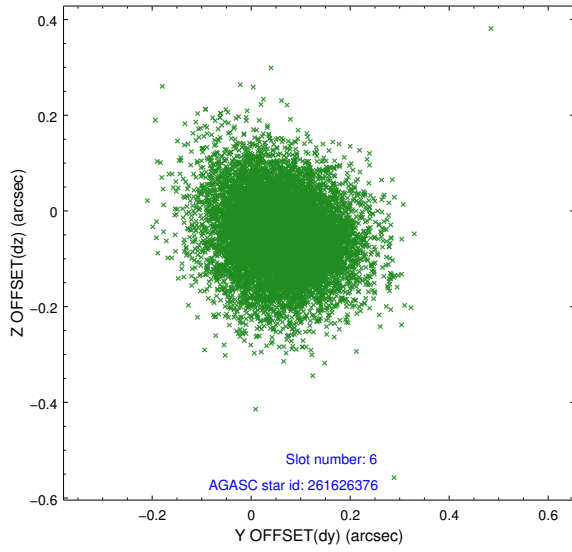
## 2.4.2 Slot 4



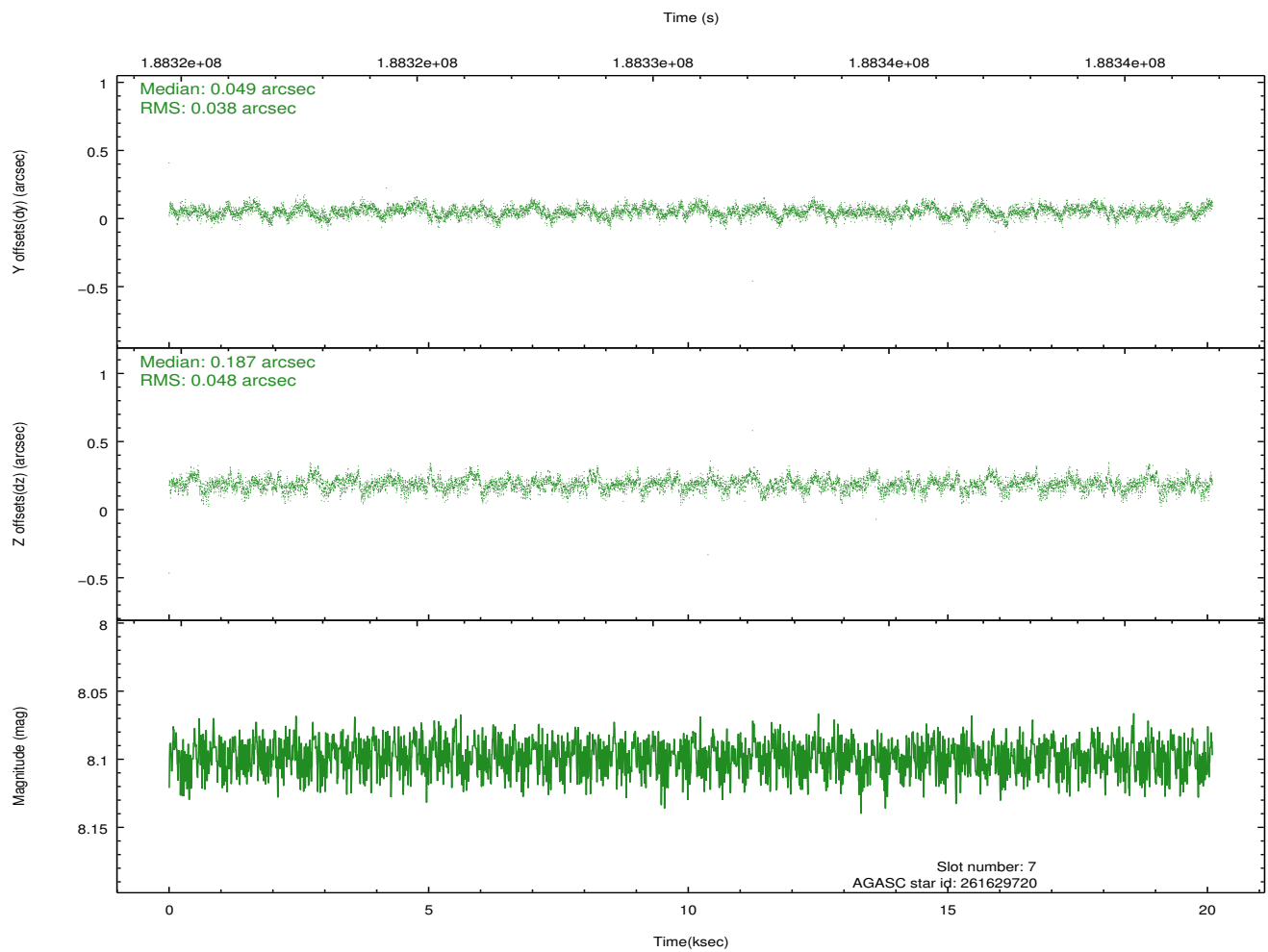
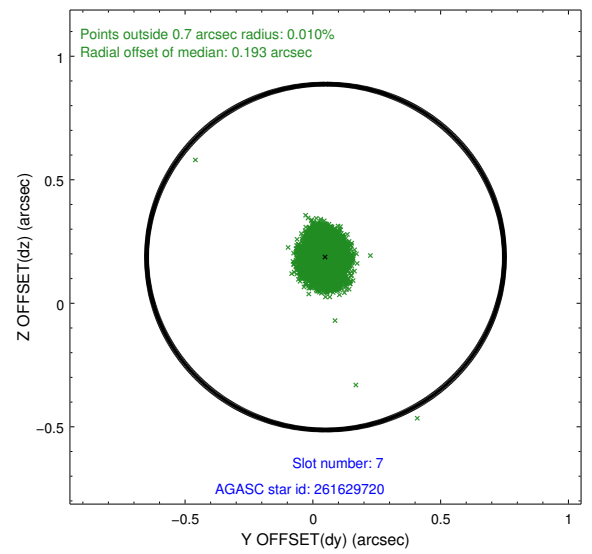
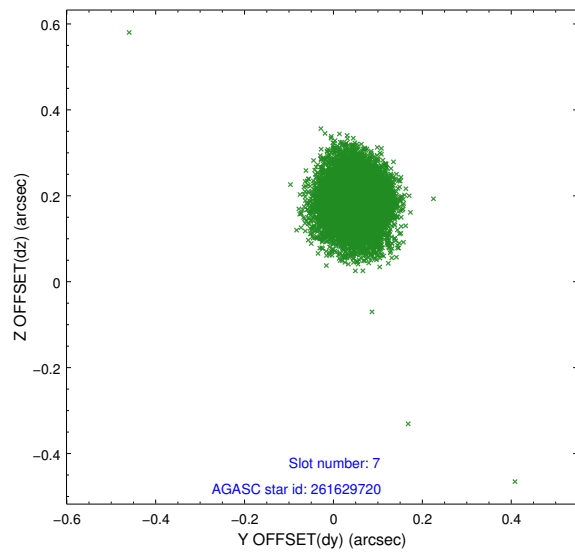
### 2.4.3 Slot 5



### 2.4.4 Slot 6

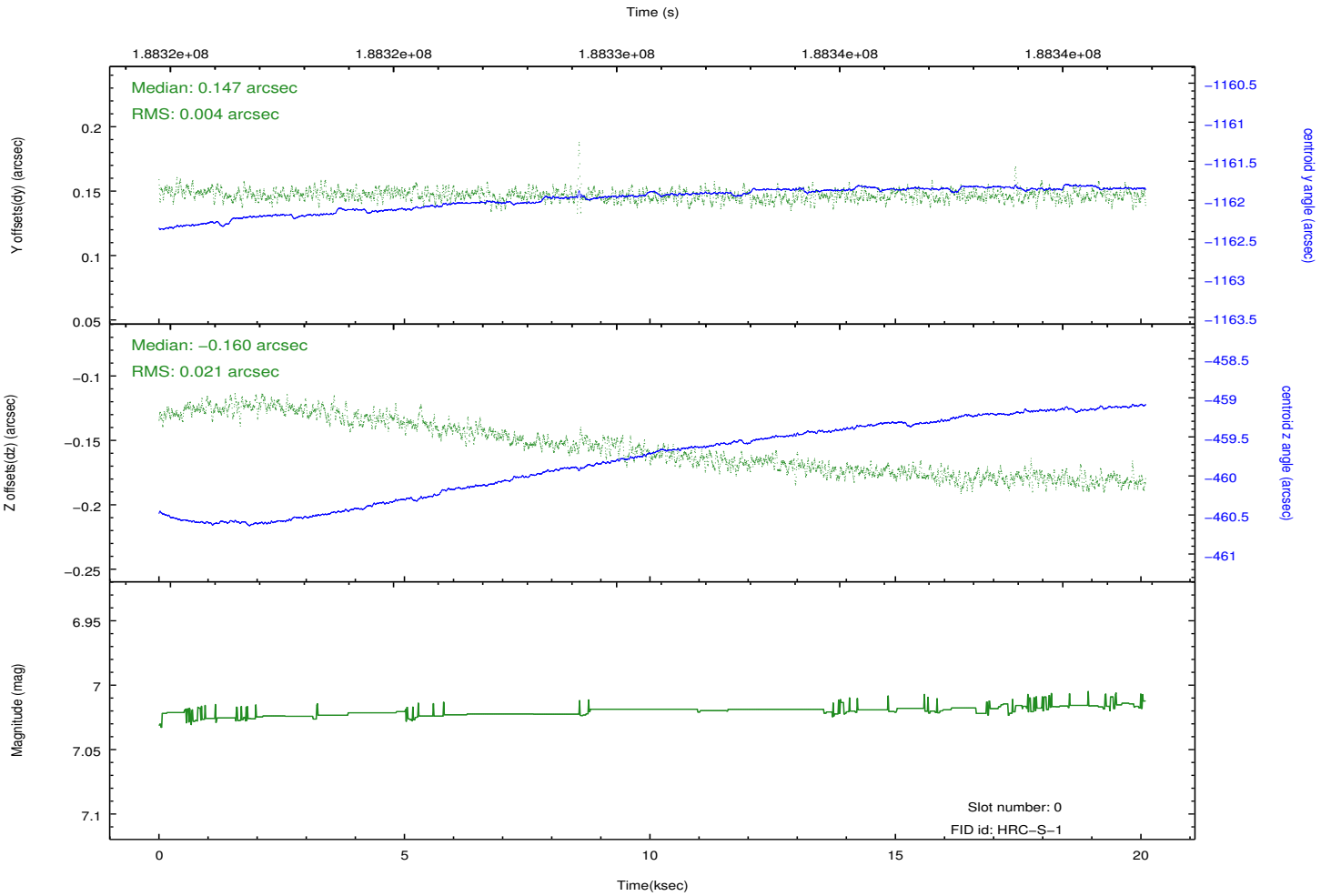
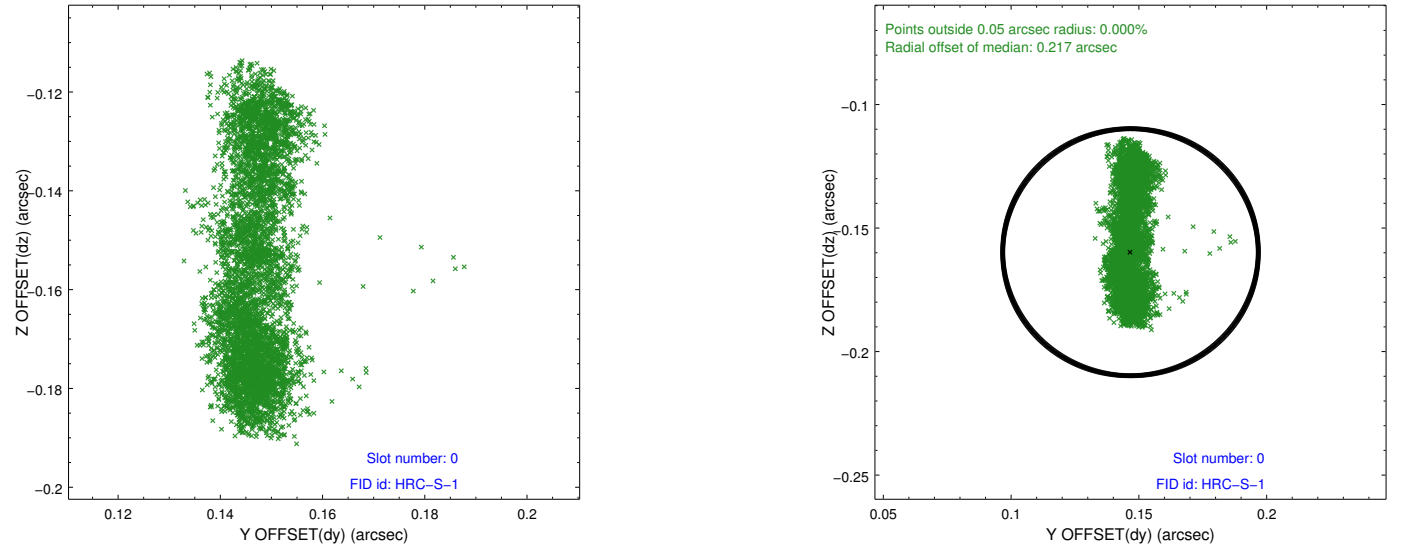


## 2.4.5 Slot 7

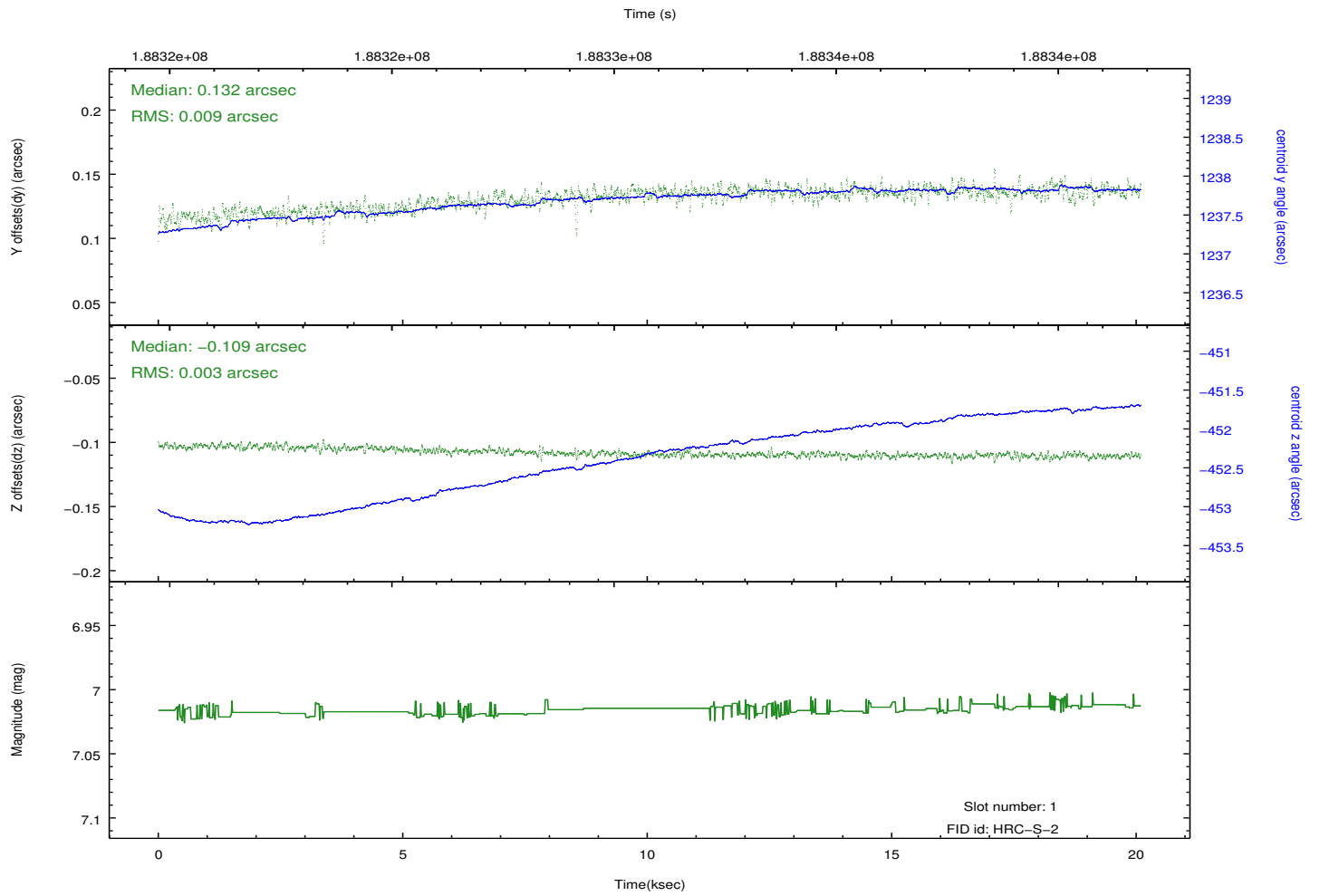
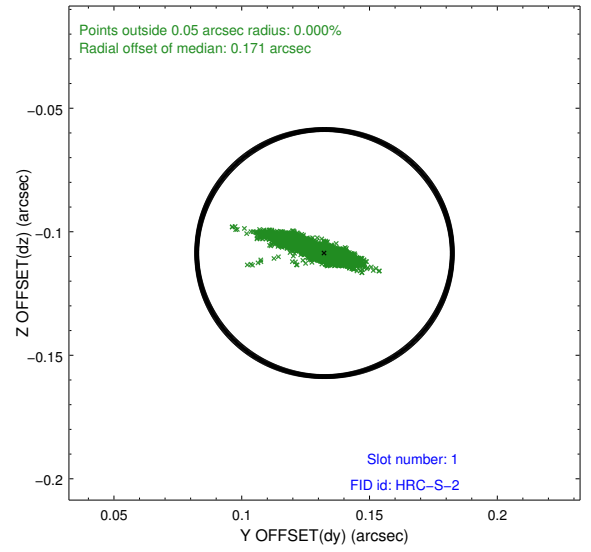
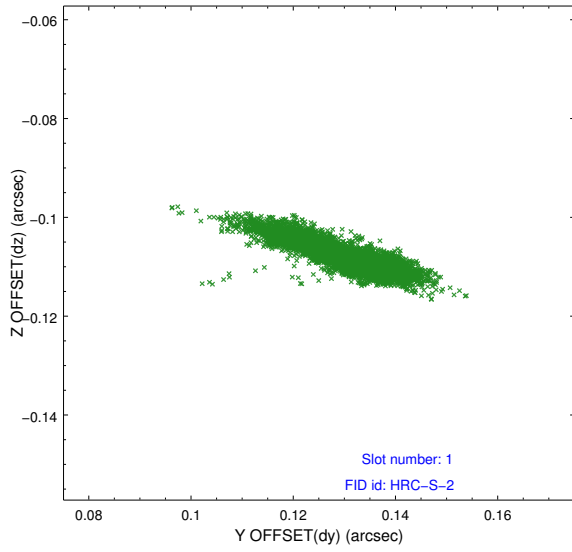


## 2.5 FID Slots

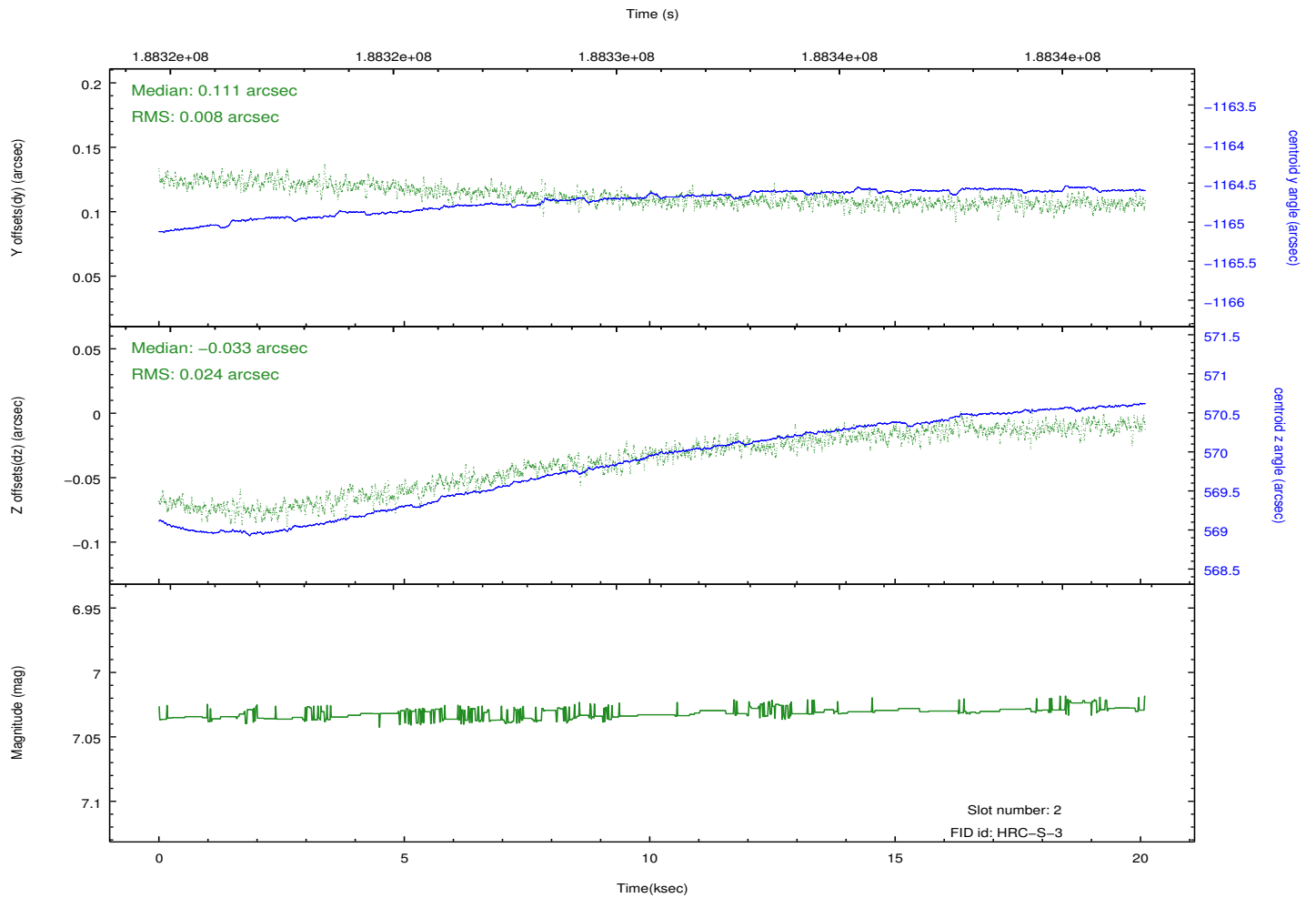
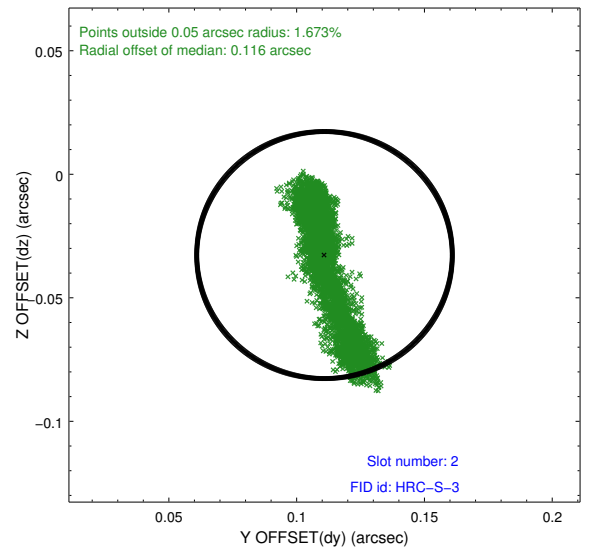
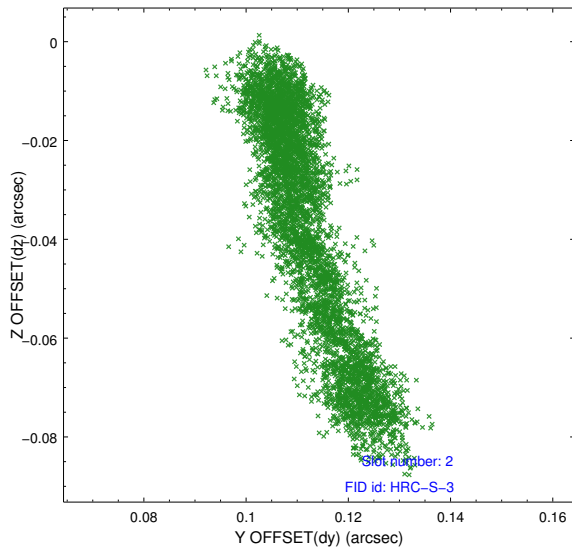
### 2.5.1 Slot 0



## 2.5.2 Slot 1

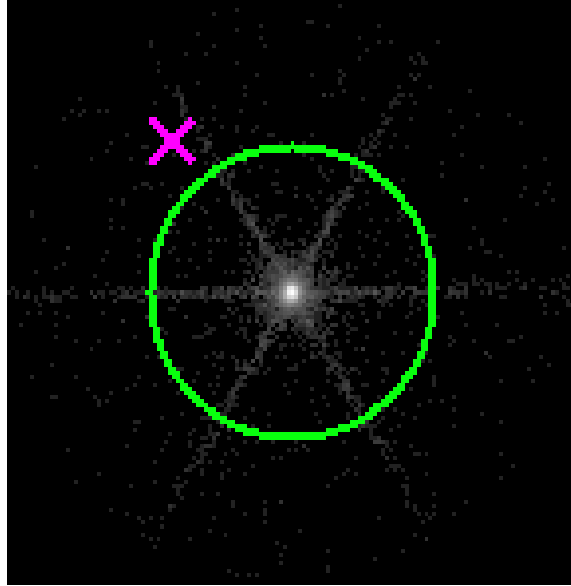


### 2.5.3 Slot 2

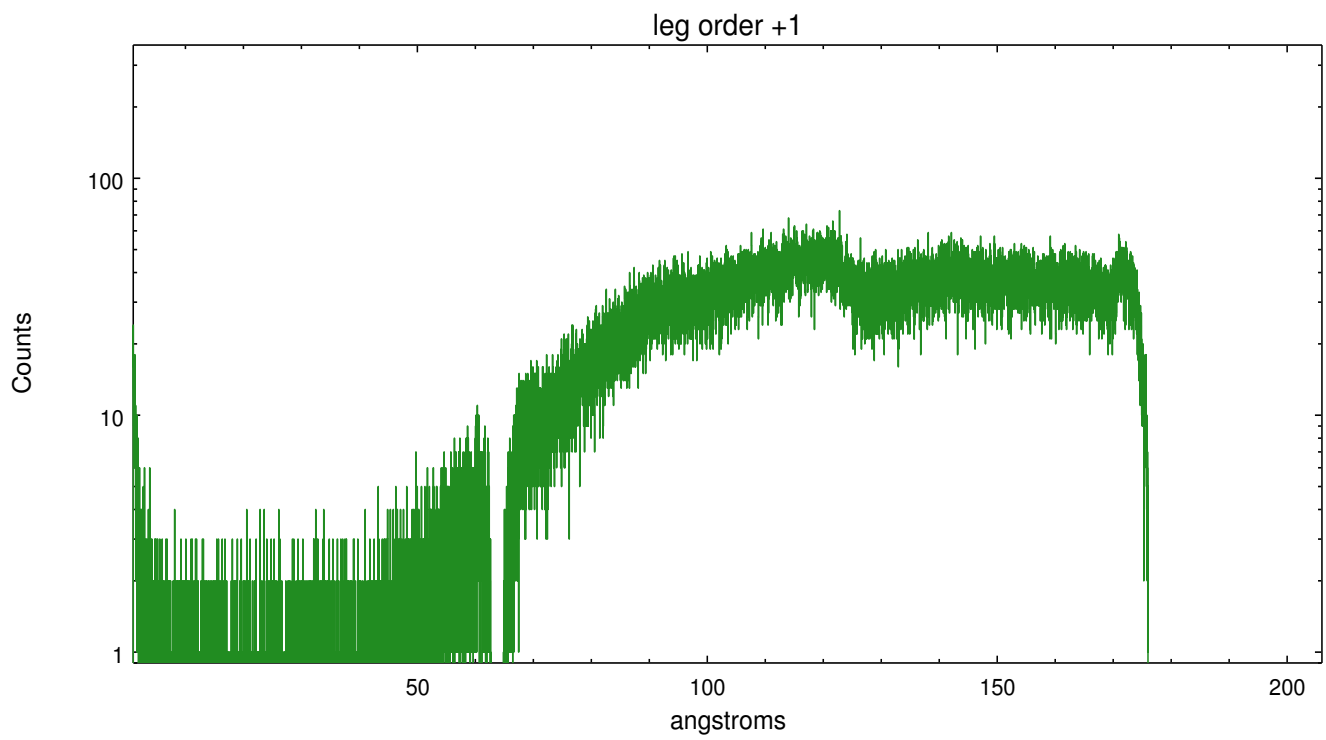
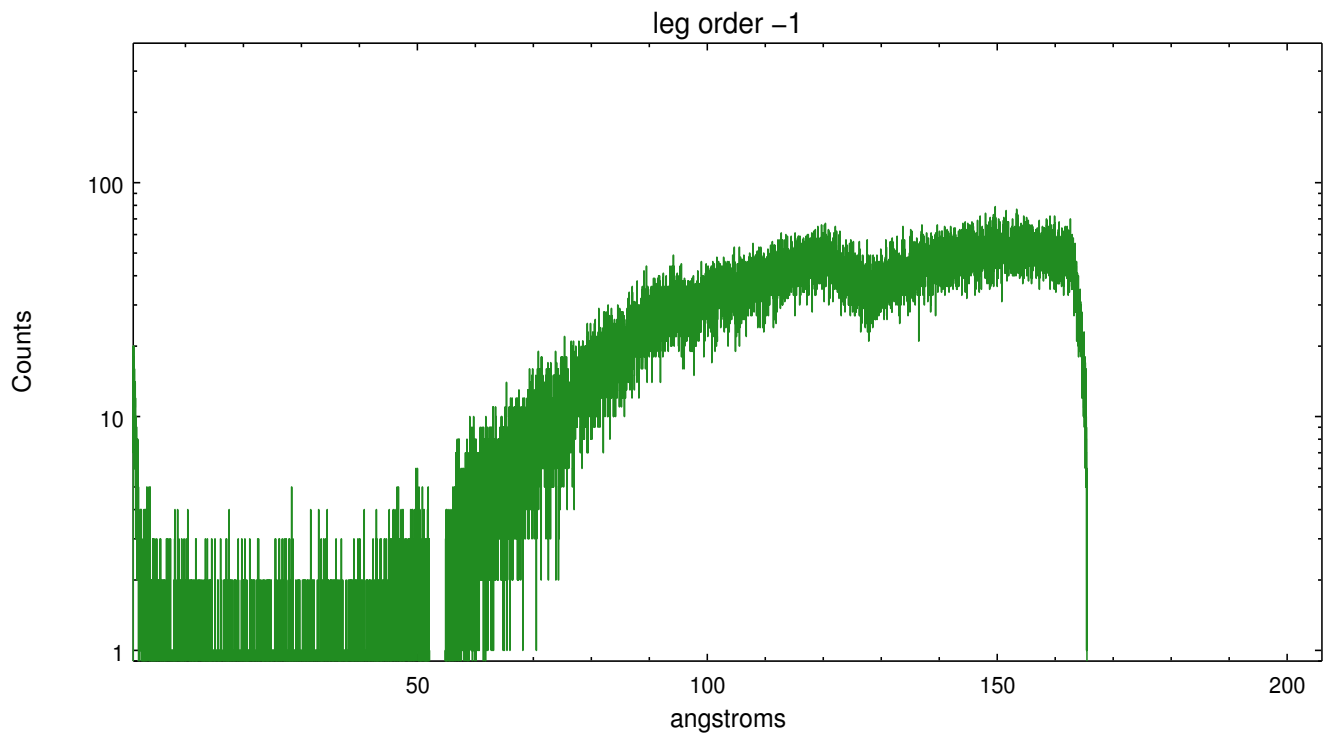


## 3 Gratings

### 3.1 LETG Arm



LETG Zero Order



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.853

## A.2 Comments