

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5960 - L2 Version 5  
Chandra X-Ray Center

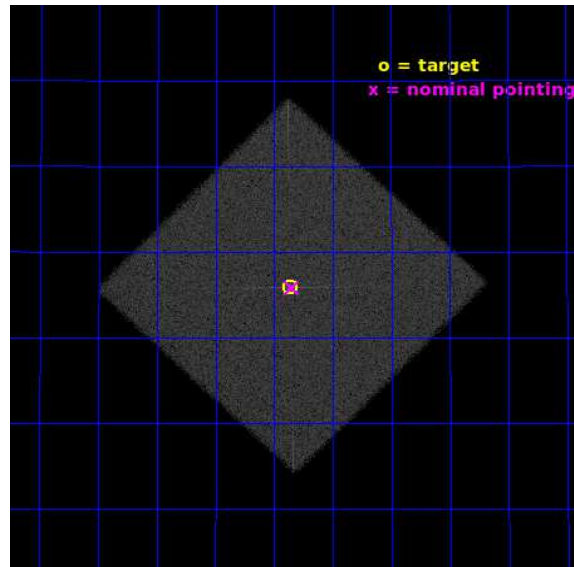
L2 Processing Date : Oct 9 2020

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# 1 Front

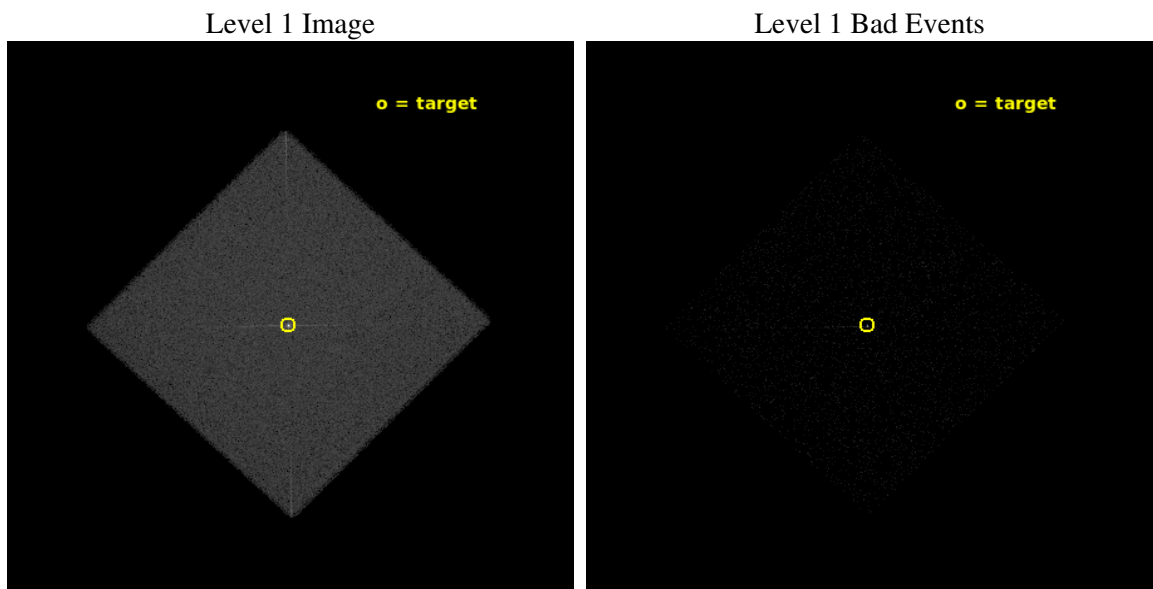
seq_num	290452	Sequence number
obs_id	5960	Observation id
title	AO6 Calibration Observations of HZ43	Proposal title
observer	CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.092083	Observer's specified target RA [deg]
dec_targ	29.099	Observer's specified target Dec [deg]
ra_nom	199.08713927128	Nominal RA [deg]
dec_nom	29.097615167844	Nominal Dec [deg]
roll_nom	268.90959469119	Nominal Roll [deg]
revision	5	Processing version of data
ontime	2172.2313495576	[s]
livetime	2132.6774070229	Ontime multiplied by DTCOR
l2events	261372	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	1998.709000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	2172.2313495576	[s]
caldbver	4.9.2	&#160	l1events	464187	Number of level 1 events
date	2020-10-09T18:02:02	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	5	Processing version of data	zo_pos	(16298.04, 16409.19)	src1a sky pixel position

### 2.1.3 Events

#### Level 1 Events

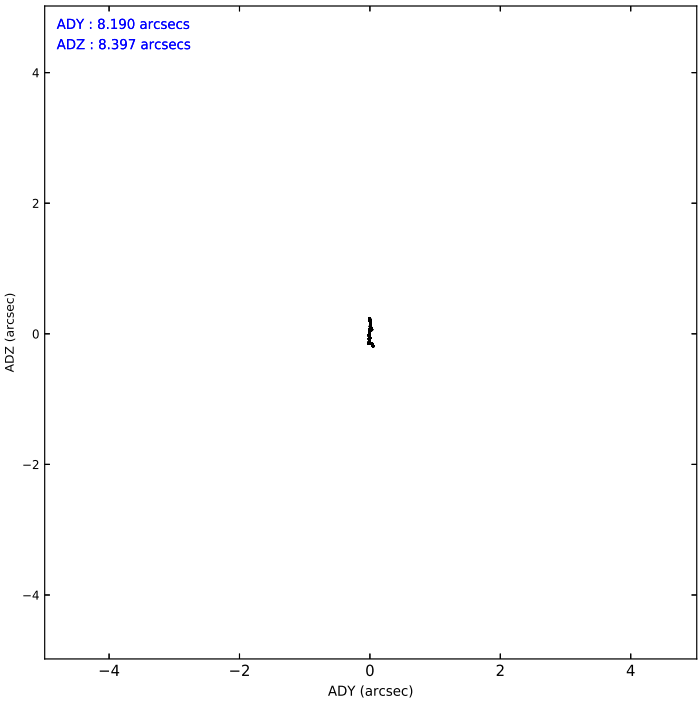
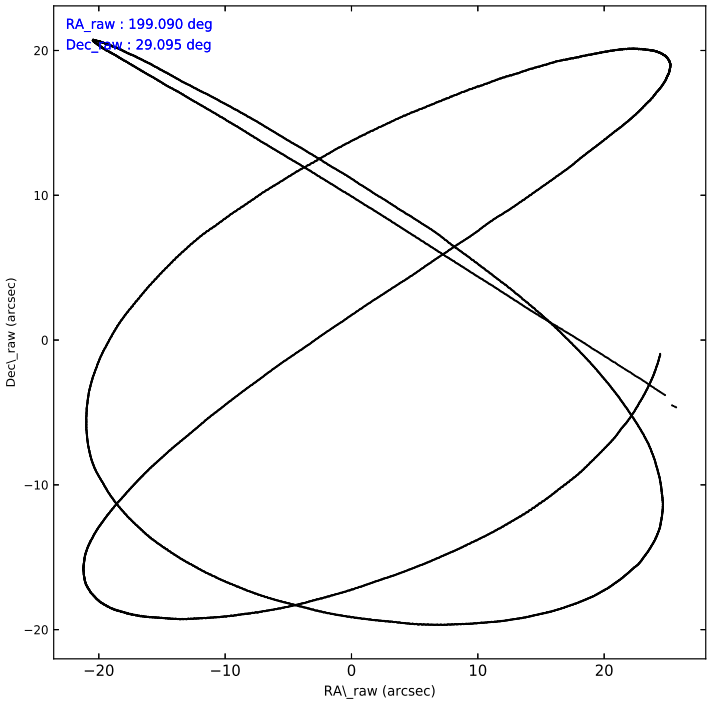
	<b>segment 0</b>
level 1 events	464187
rejected events	142814
rejected %	30%

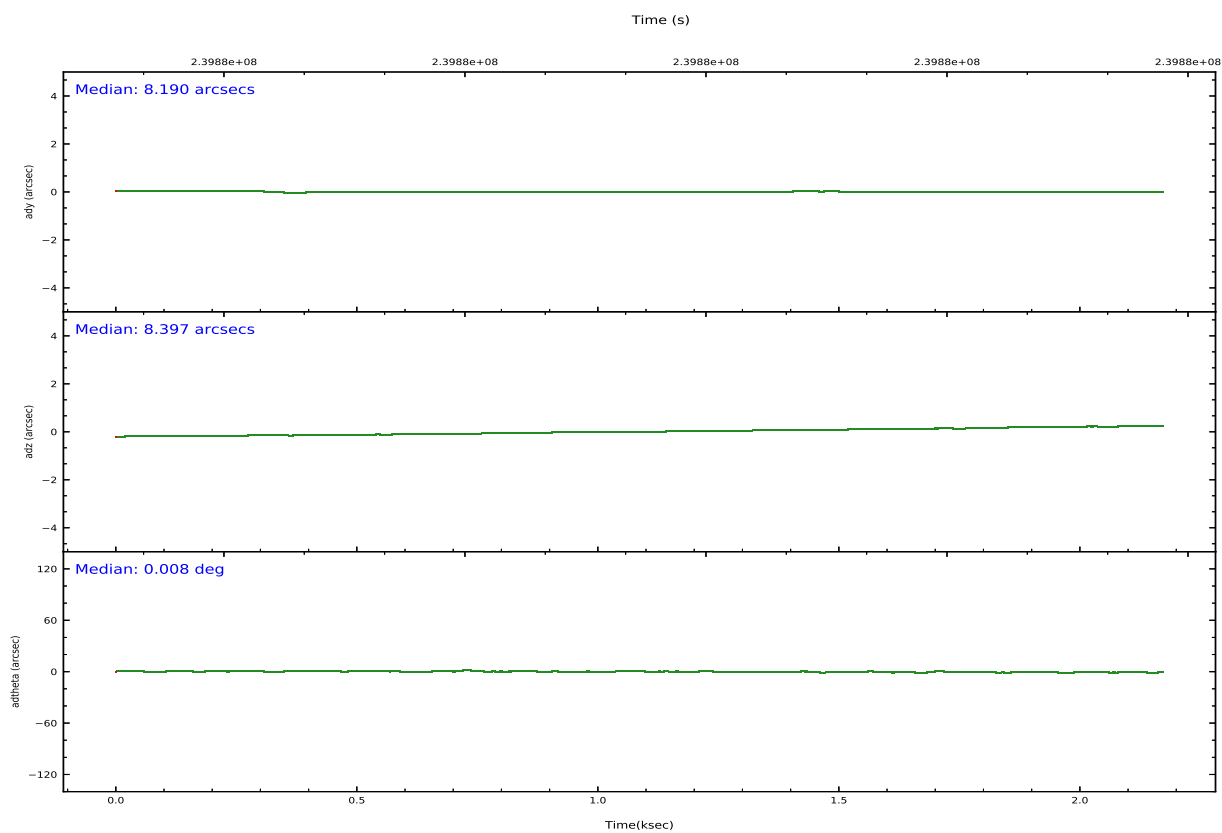
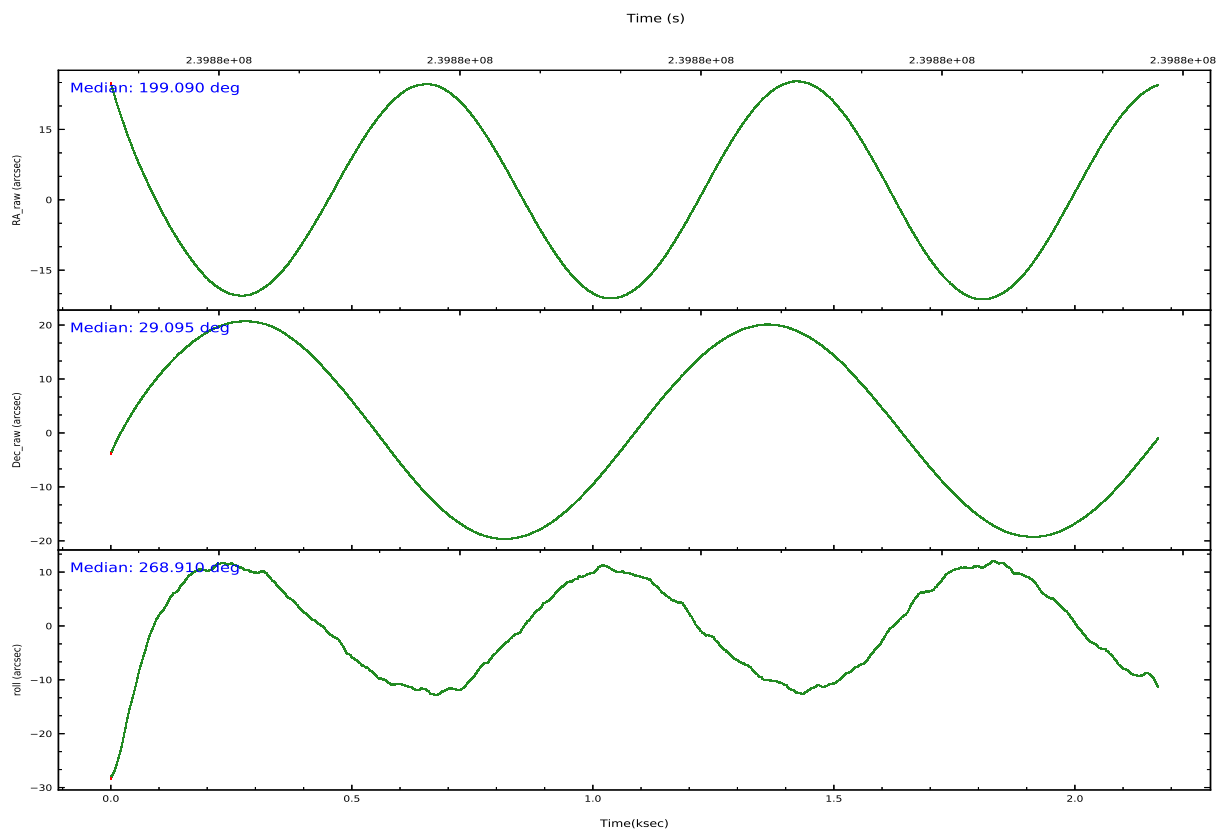
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	LETG	LETG
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	199.074532	199.08713927128
[deg] Pointing Dec	29.118598	29.097615167844
[deg] Pointing Roll	269.024592	268.90959469119
[s] Window start time (MET)	233971264.184000	233971264.184000
[s] Window stop time (MET)	241833664.184000	241833664.184000
[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)	239876450.184000	239875460.67357
Observation start date	2005-08-08T08:19:46	2005-08-08T08:04:20
[s] Observation end time (MET)	239878449.184000	239878643.29872
Observation end date	2005-08-08T08:53:05	2005-08-08T08:57:23

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect





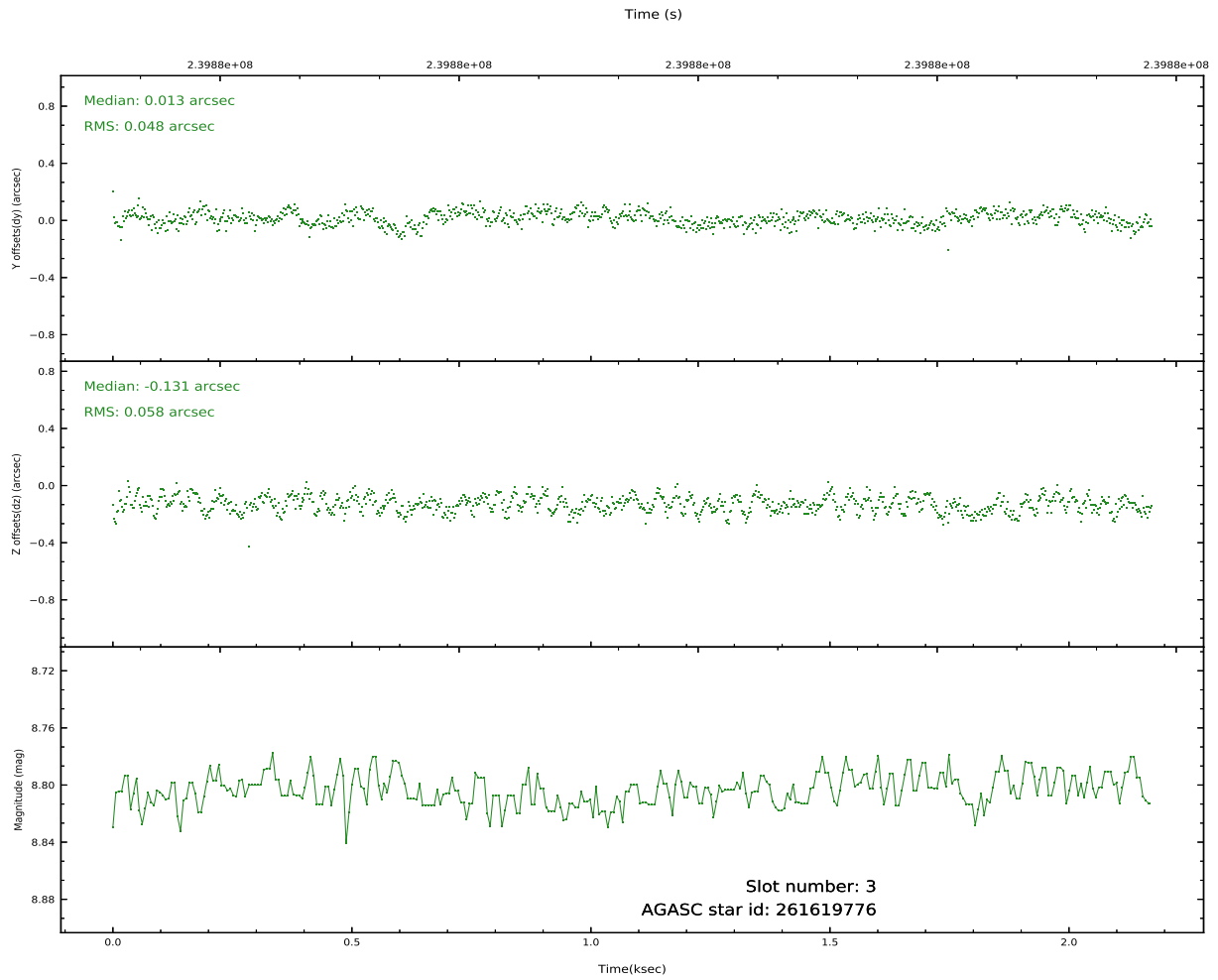
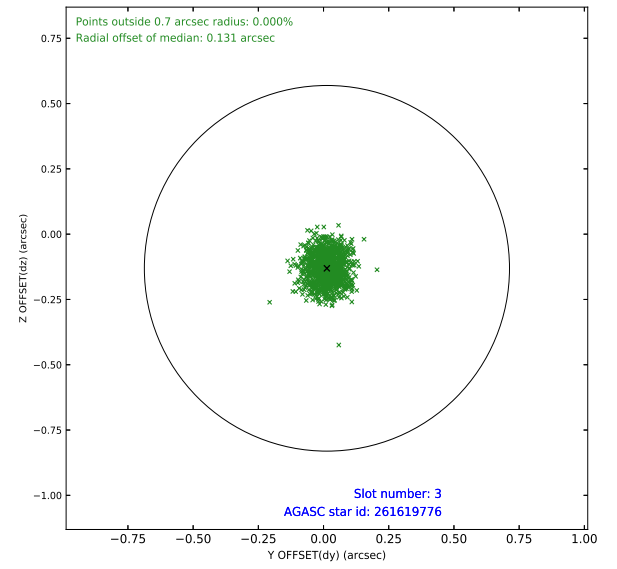
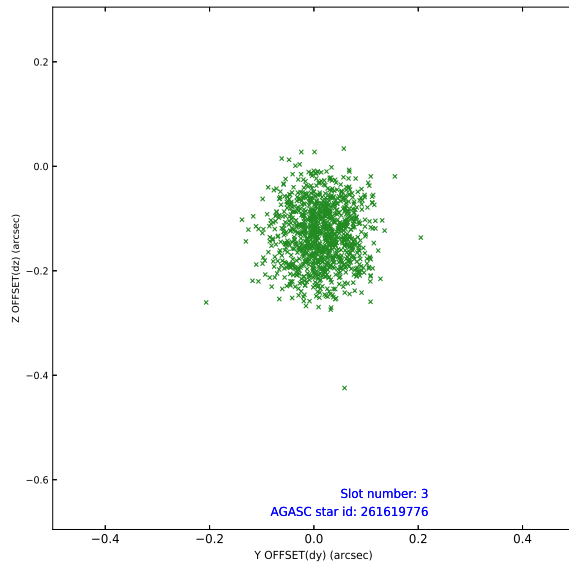
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-I-2	7.01	531	1.000	0.089	-0.101	0.008	0.011	0.000000	0.000000	848.91	-1297
1	FID		HRC-I-3	7.05	531	1.000	-0.095	0.029	0.007	0.012	0.000000	0.000000	-1190.79	1005
2	FID		HRC-I-4	6.99	531	1.000	0.124	-0.015	0.006	0.009	0.000000	0.000000	1276.86	1007
3	GUIDE	used	261619776	8.80	1060	1.000	0.013	-0.131	0.081	0.125	198.654383	29.401174	-996.55	-1333
4	GUIDE	used	261621400	6.98	1061	1.000	0.107	0.056	0.059	0.089	198.901600	28.741982	1363.90	-523
5	GUIDE	used	261624456	7.31	1060	1.000	0.184	0.193	0.059	0.091	199.758056	28.567828	1940.46	2194
6	GUIDE	used	261626352	8.60	1061	1.000	-0.220	-0.133	0.074	0.122	198.417097	29.781420	-2355.17	-2092
7	GUIDE	used	261623040	9.12	1060	1.000	-0.087	0.017	0.085	0.138	198.792686	29.757643	-2288.24	-921

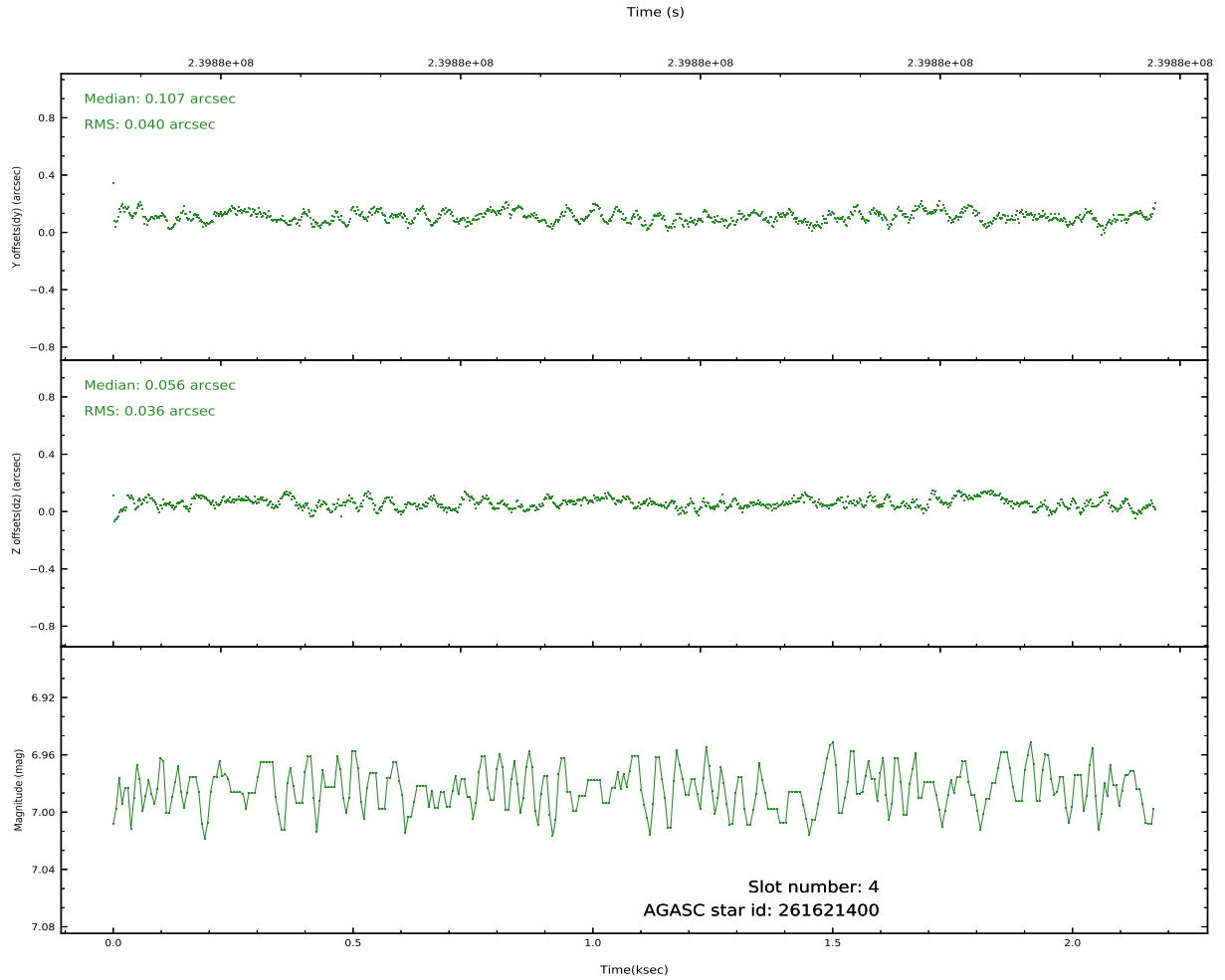
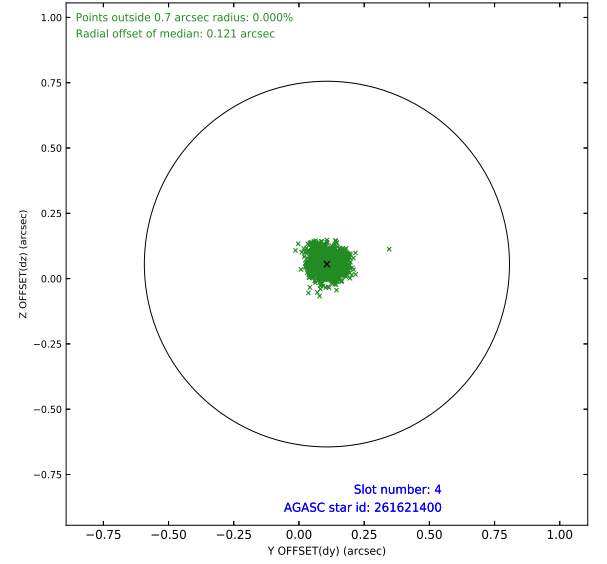
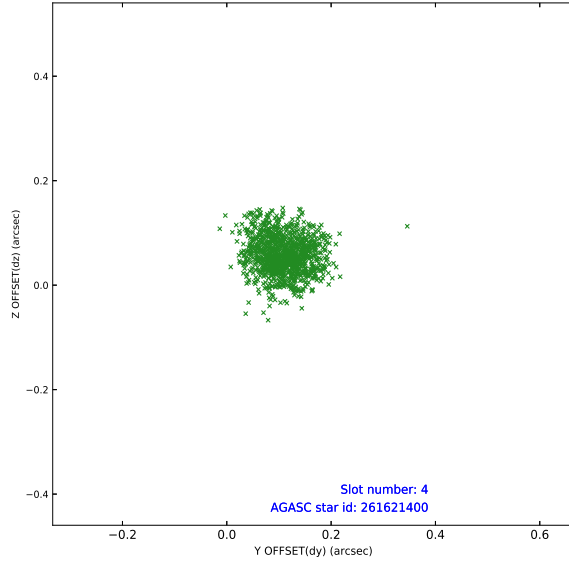


## 2.4 Star Slots

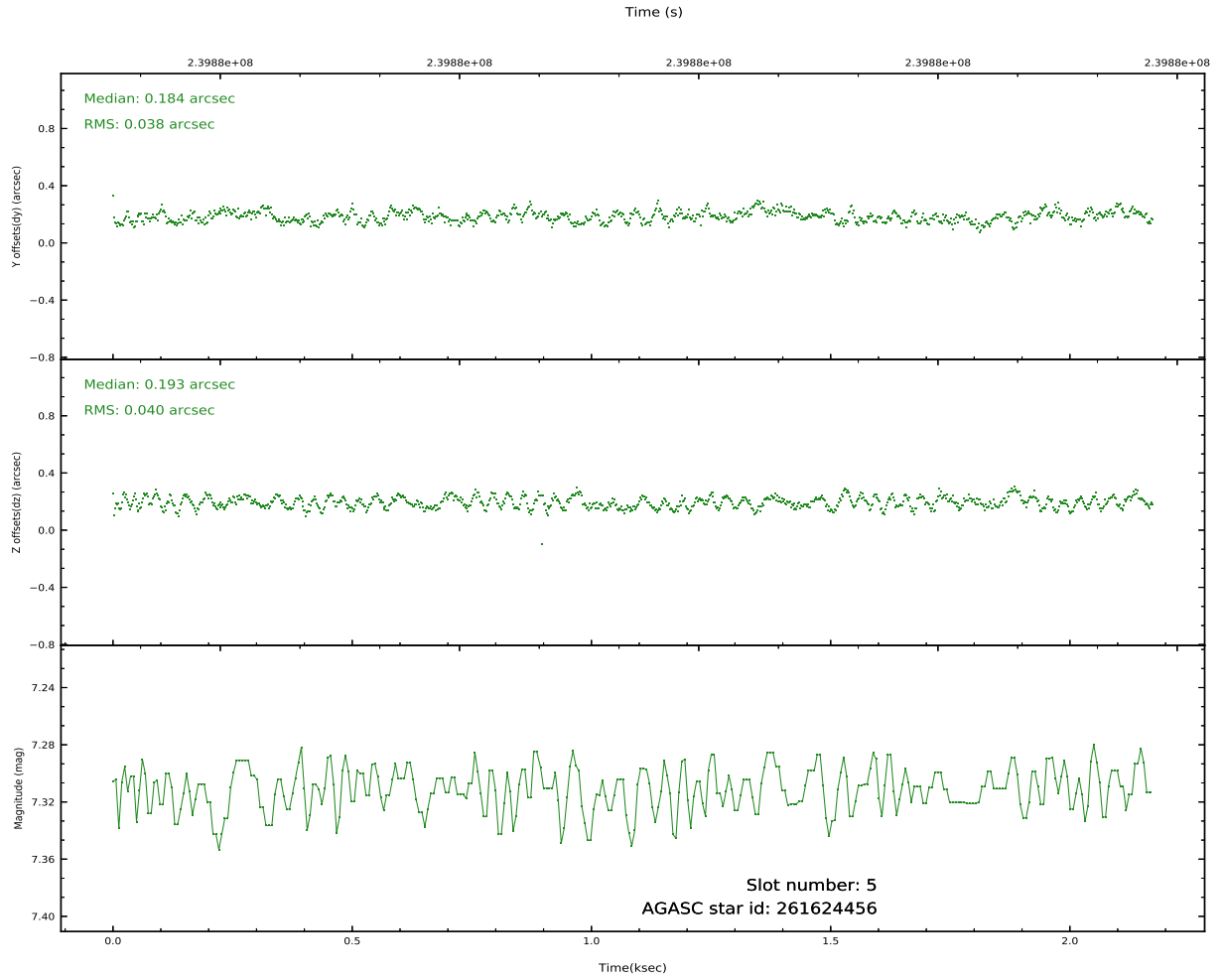
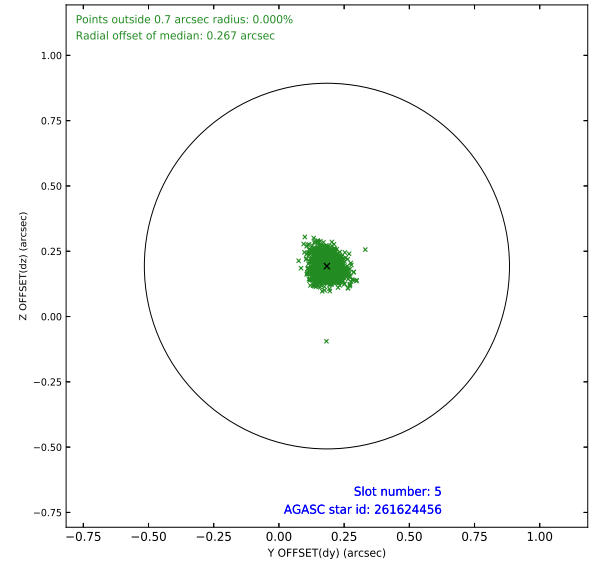
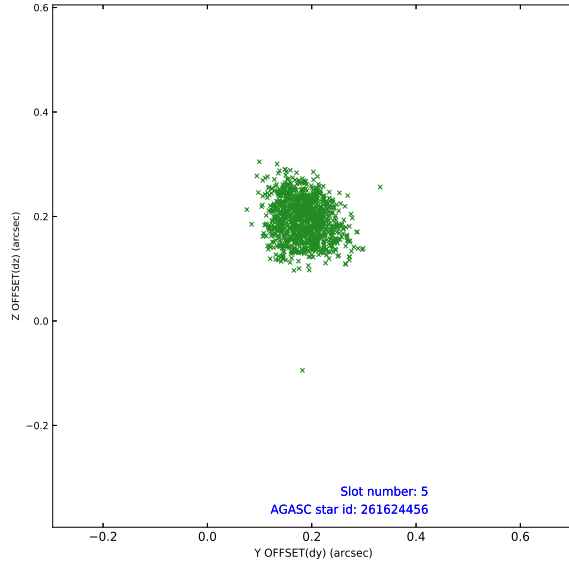
### 2.4.1 Slot 3



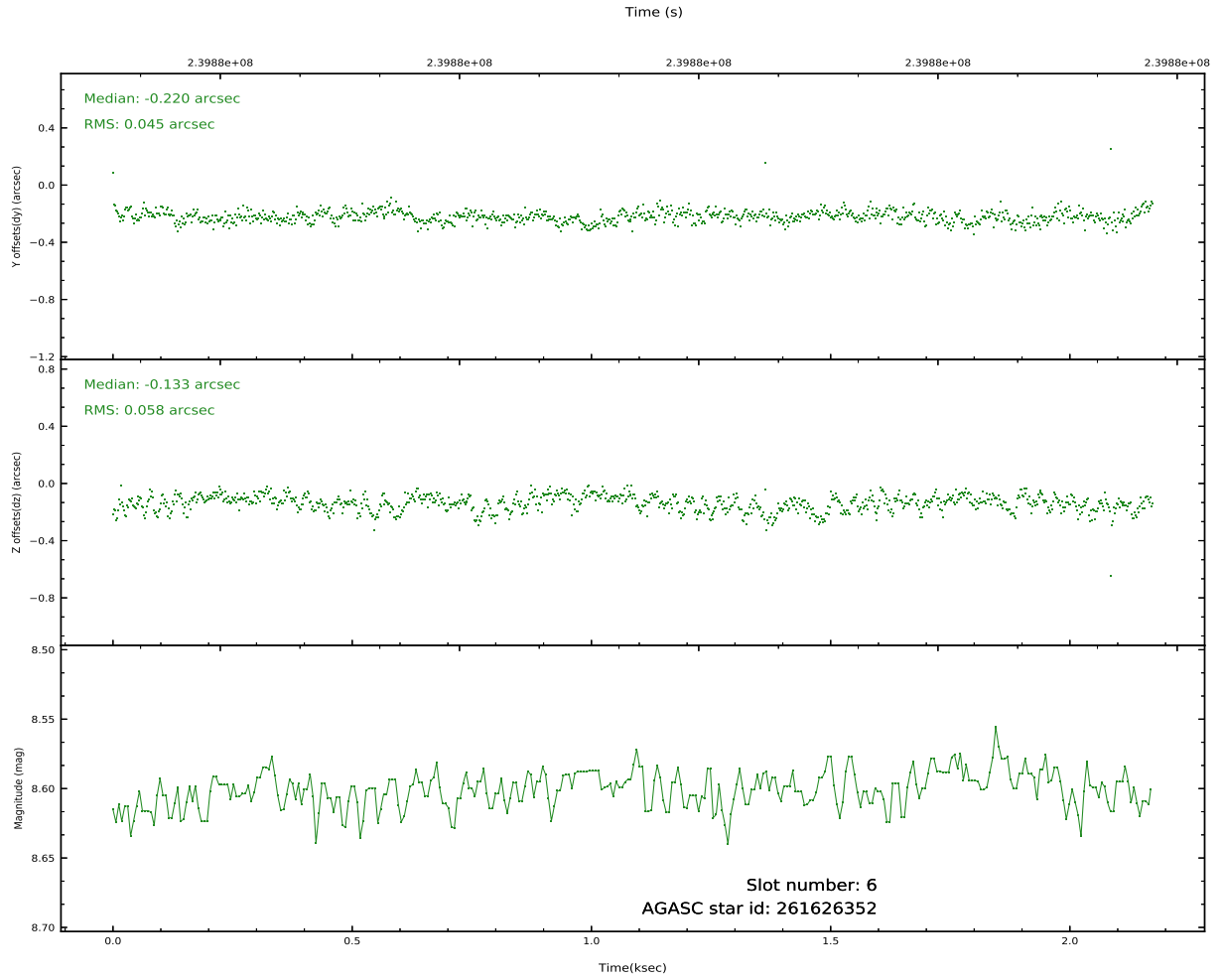
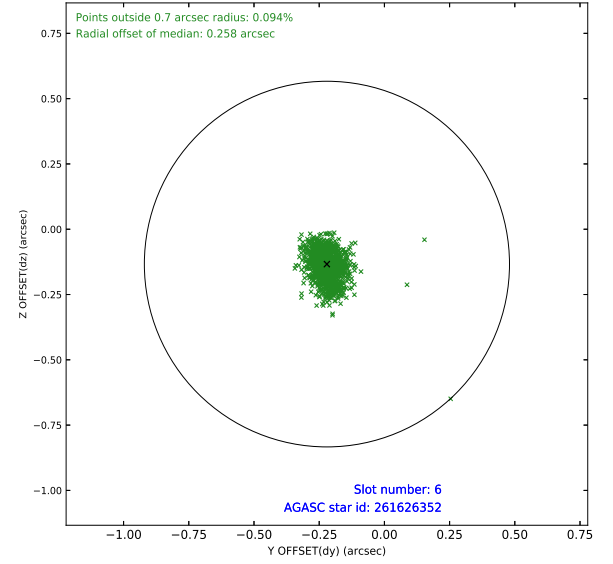
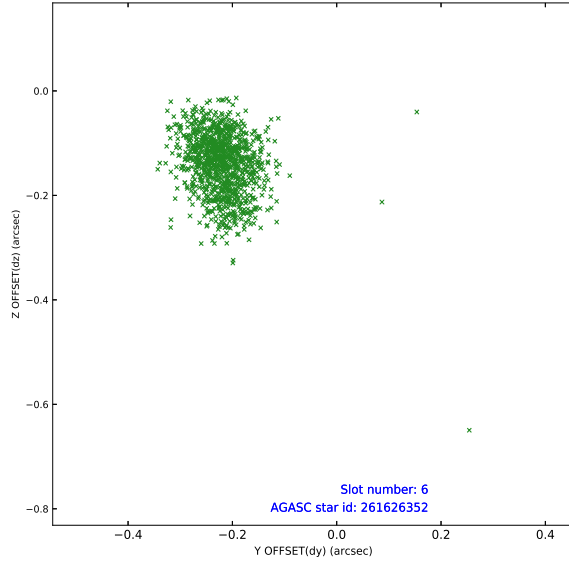
## 2.4.2 Slot 4



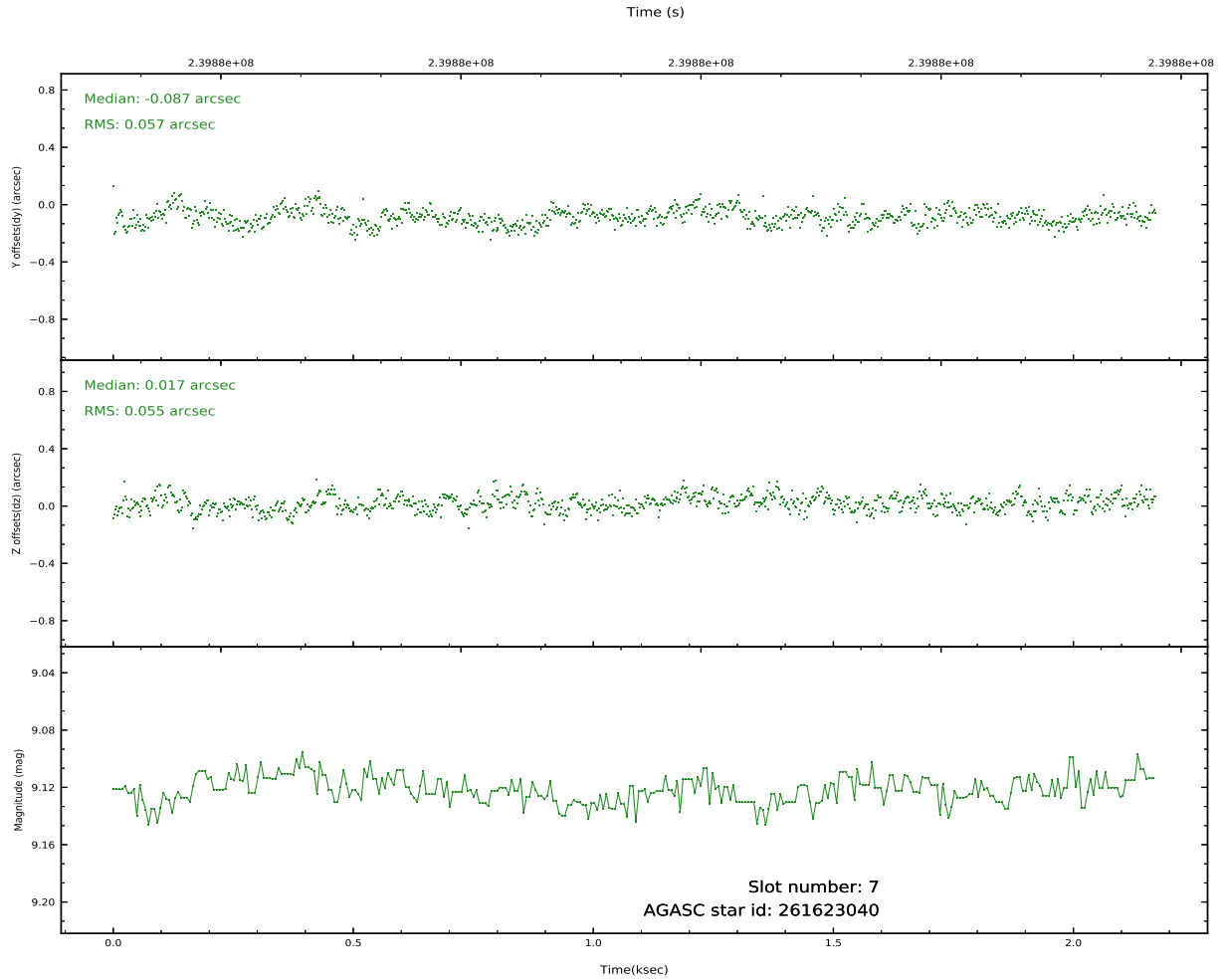
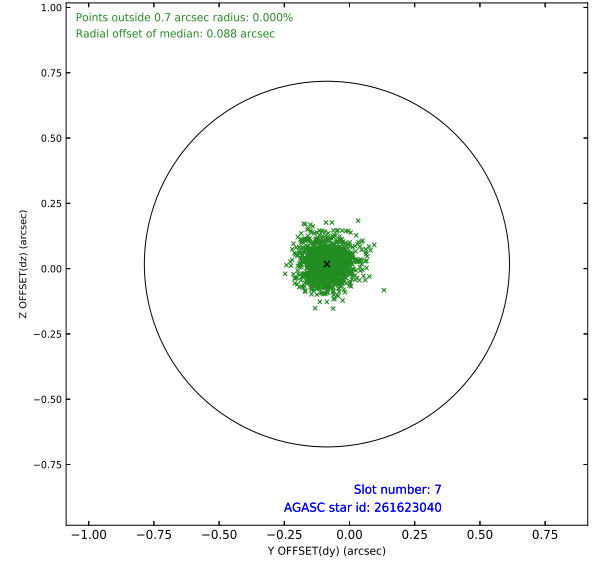
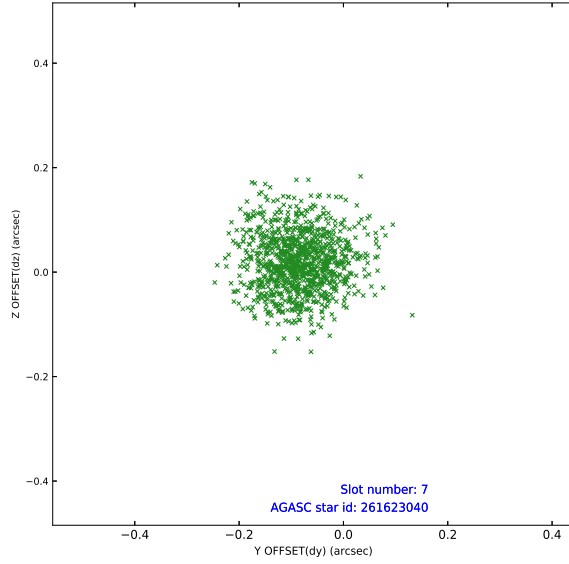
### 2.4.3 Slot 5



## 2.4.4 Slot 6

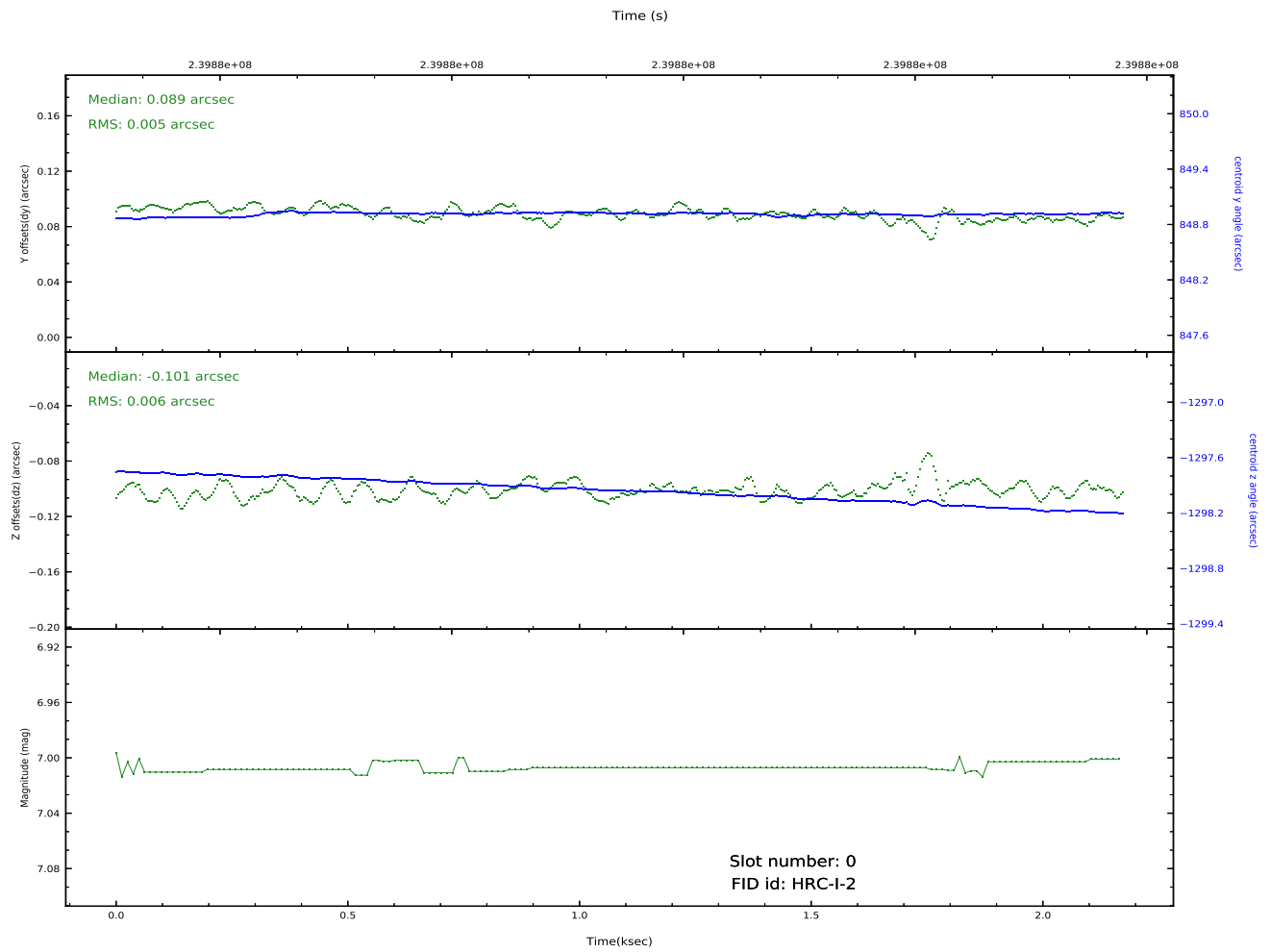
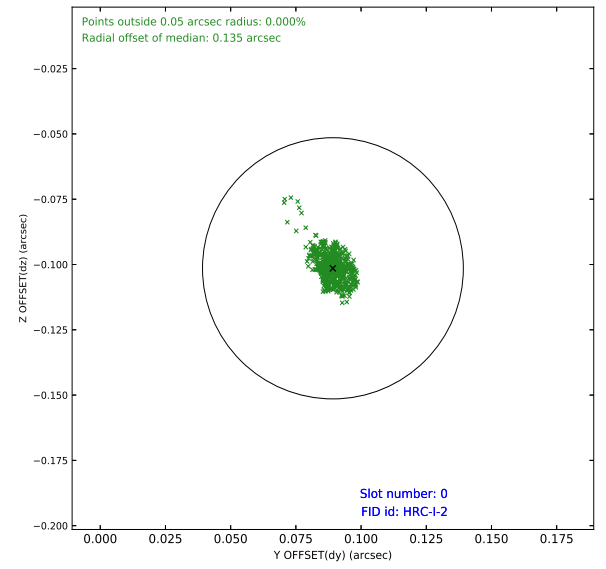
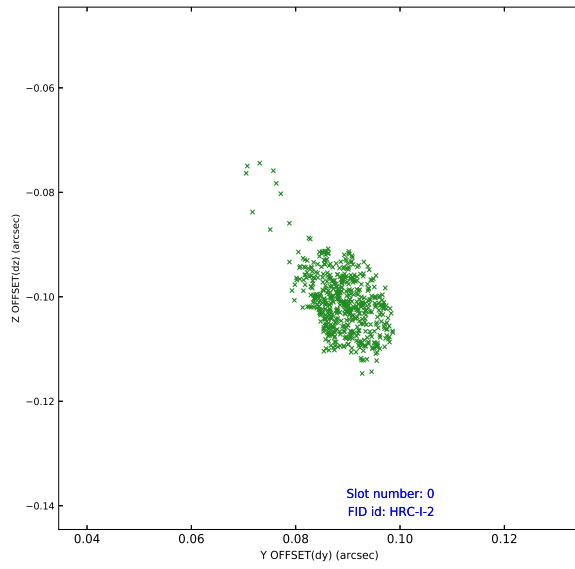


## 2.4.5 Slot 7

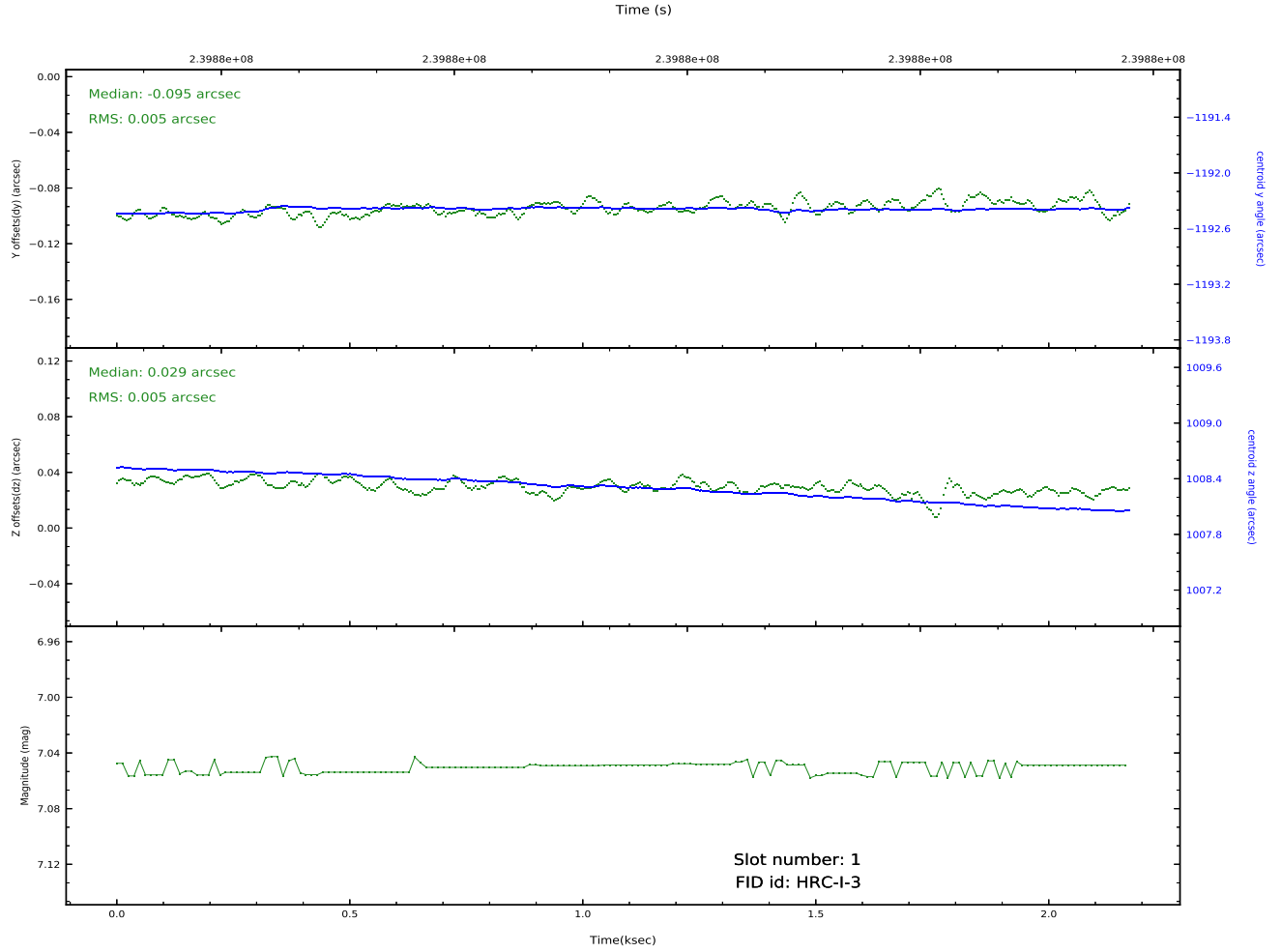
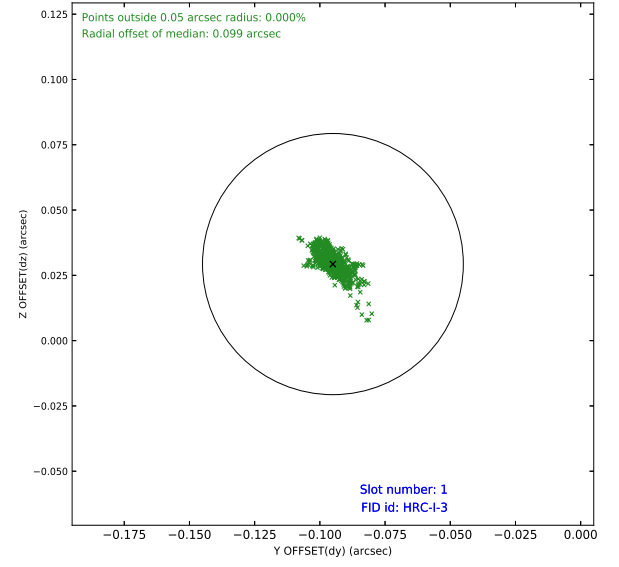
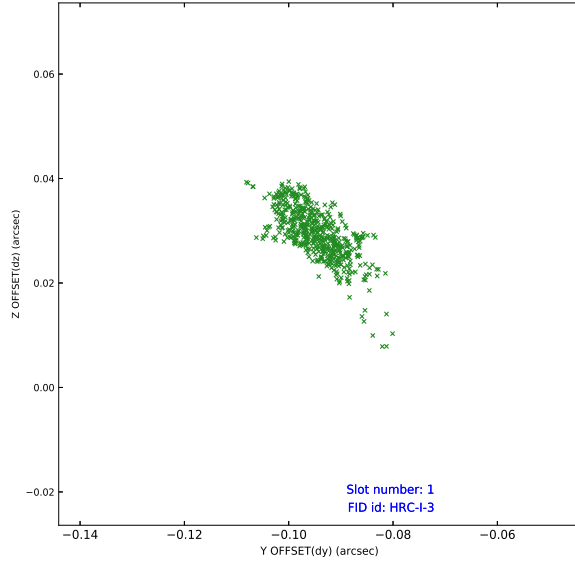


## 2.5 FID Slots

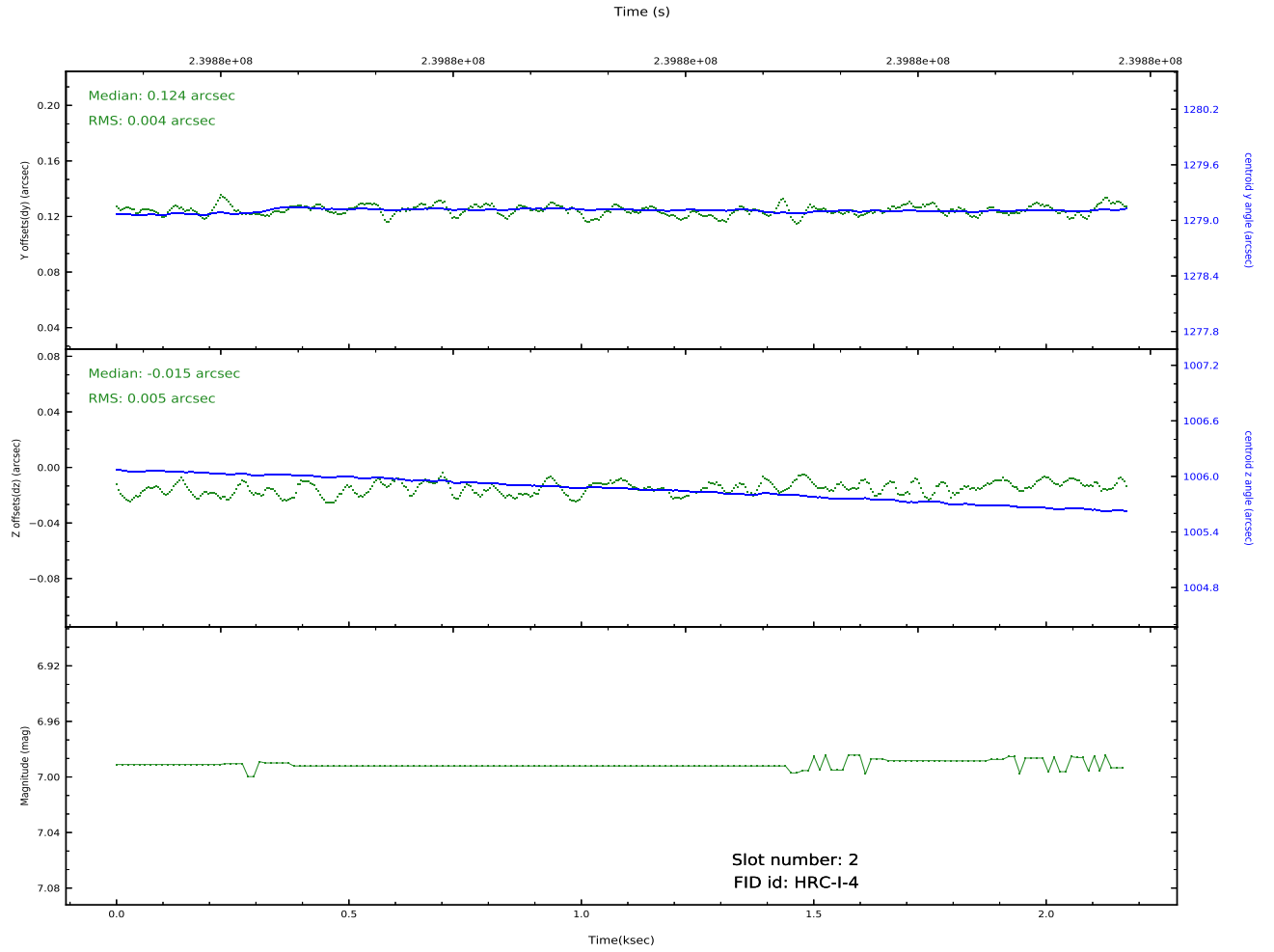
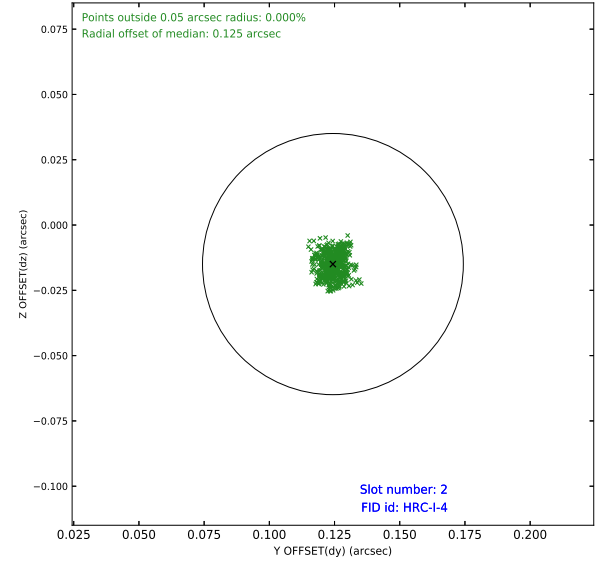
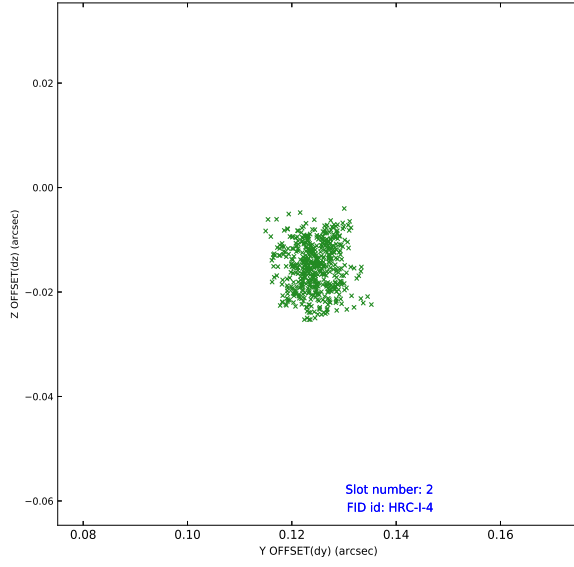
### 2.5.1 Slot 0



## 2.5.2 Slot 1



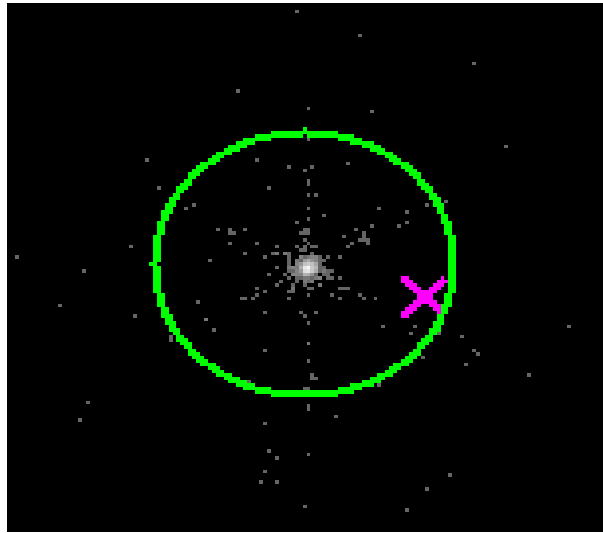
### 2.5.3 Slot 2



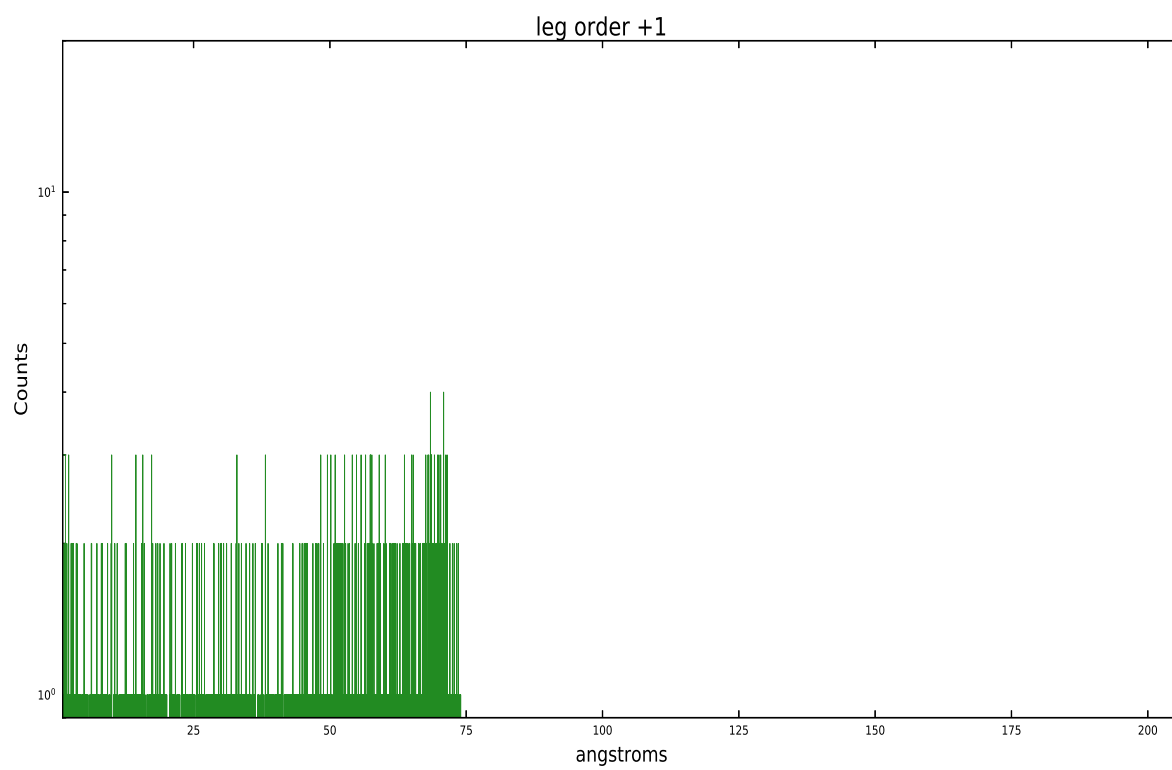
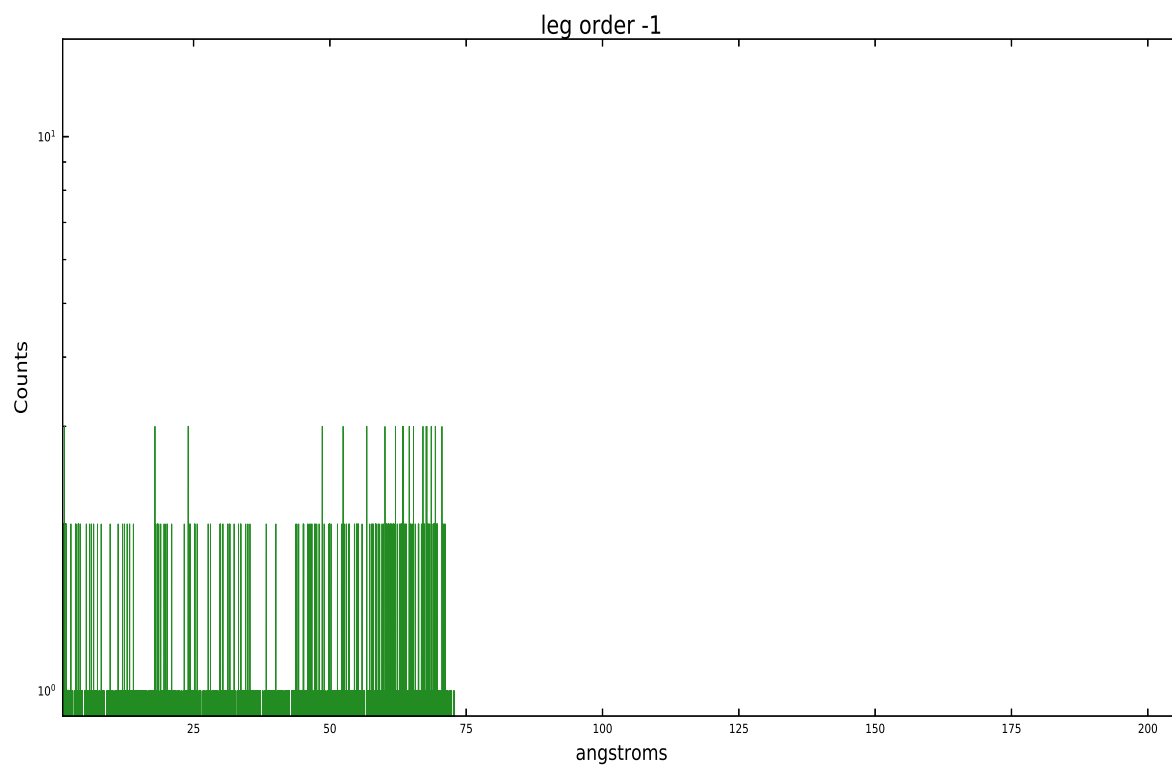


## 3 Gratings

### 3.1 LETG Arm



LETG Zero Order



## A Summary

### A.1 Status

V&V Scientist	David Principe
V&V Date (YYYY-MM-DD)	2020.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.17223

### A.2 Comments