

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 21735 - L2 Version 1  
Chandra X-Ray Center

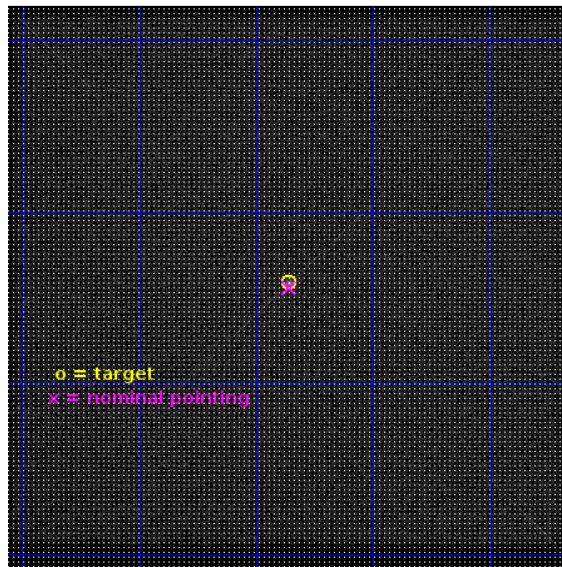
L2 Processing Date : May 27 2019

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# 1 Front

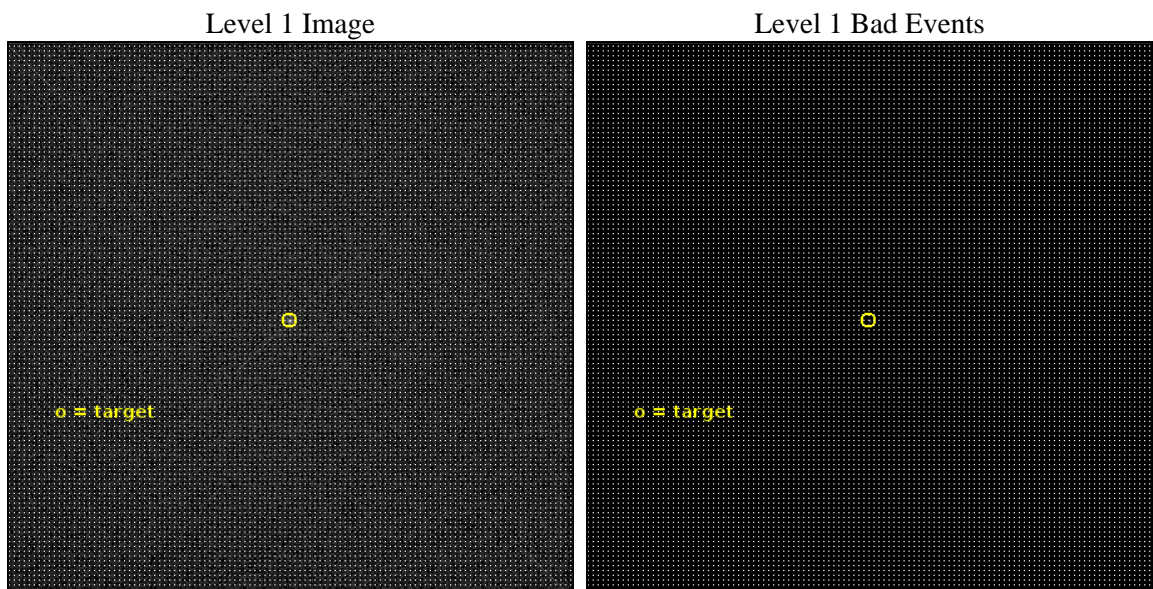
seq_num	291421	Sequence number
obs_id	21735	Observation id
title	AO-20 Calibration Observations of HZ43	Proposal title
observer	CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.090417	Observer's specified target RA [deg]
dec_targ	29.098306	Observer's specified target Dec [deg]
ra_nom	199.08960271534	Nominal RA [deg]
dec_nom	29.093181290459	Nominal Dec [deg]
roll_nom	225.34925255179	Nominal Roll [deg]
revision	1	Processing version of data
ontime	2188.1188812256	[s]
livetime	2156.8761695466	Ontime multiplied by DTCOR
l2events	272370	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	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	2188.1188812256	[s]
caldbver	4.8.3	&#160	l1events	435201	Number of level 1 events
date	2019-05-27T05:15:04	Date and time of file creation	tgmethod	TGDETECT	Method used to create src1a file
revision	1	Processing version of data	zo_pos	(16372.25, 16516.33)	src1a sky pixel position

### 2.1.3 Events

#### Level 1 Events

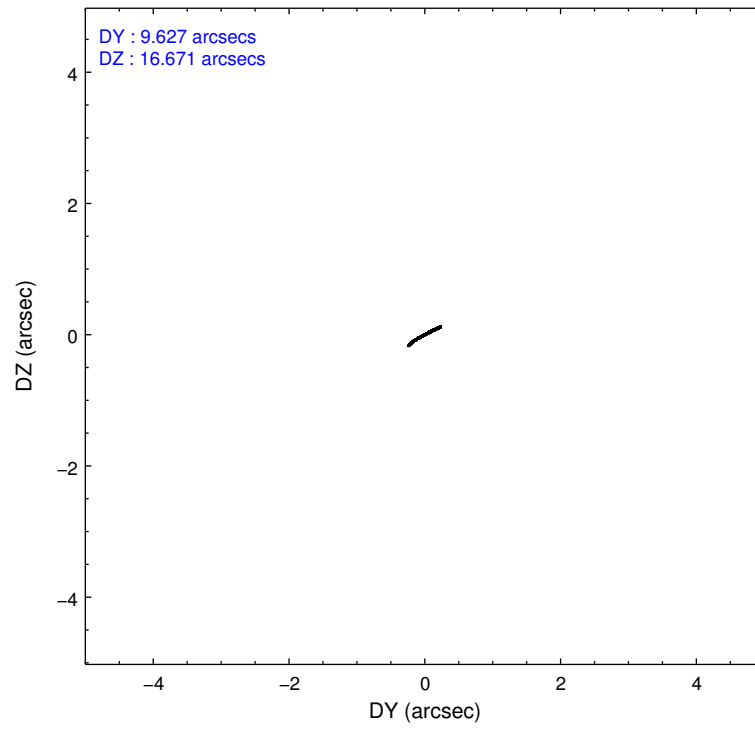
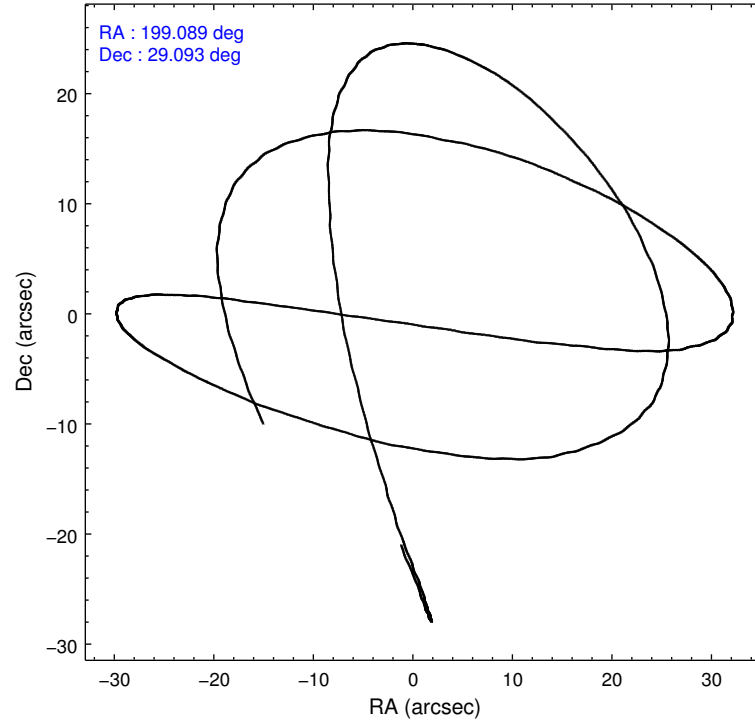
	<b>segment 0</b>
level 1 events	435201
rejected events	78404
rejected %	18%

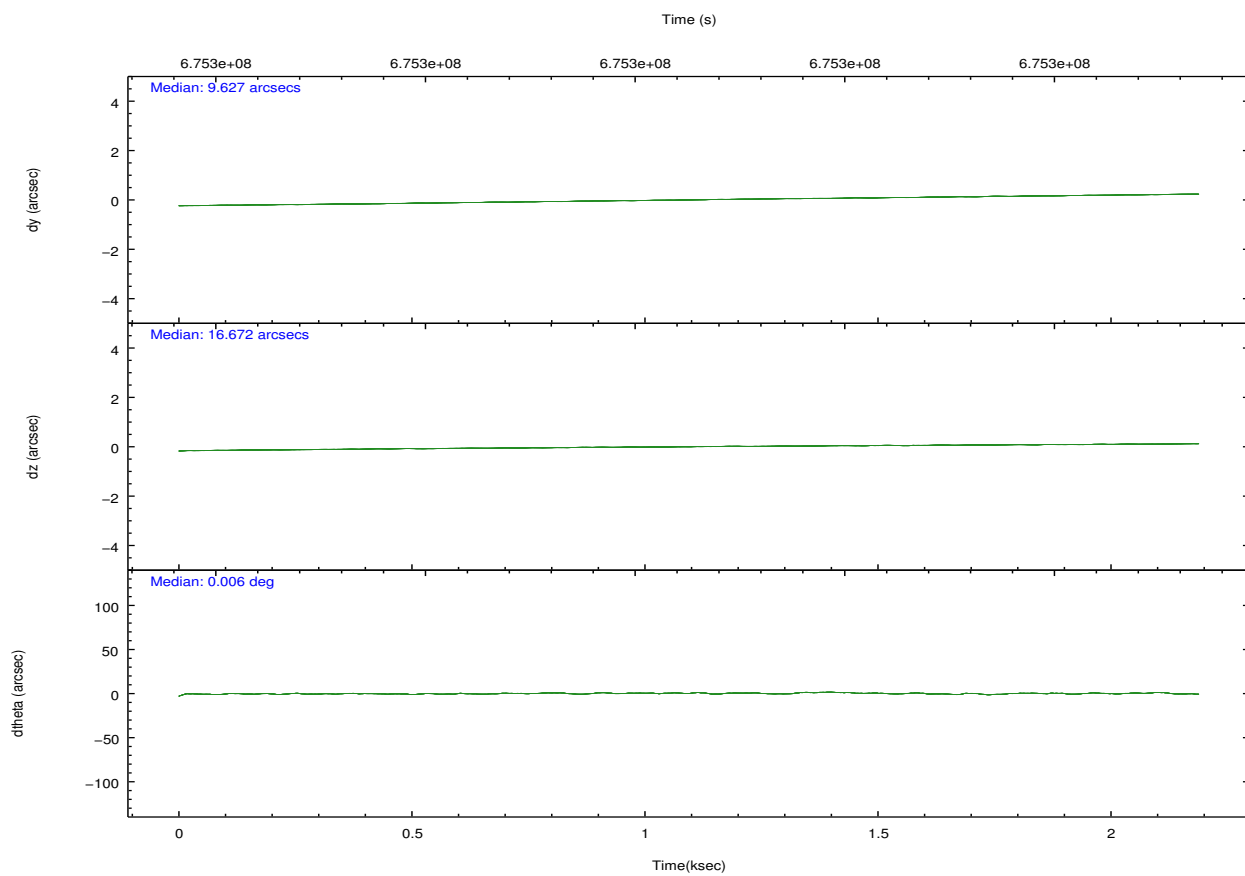
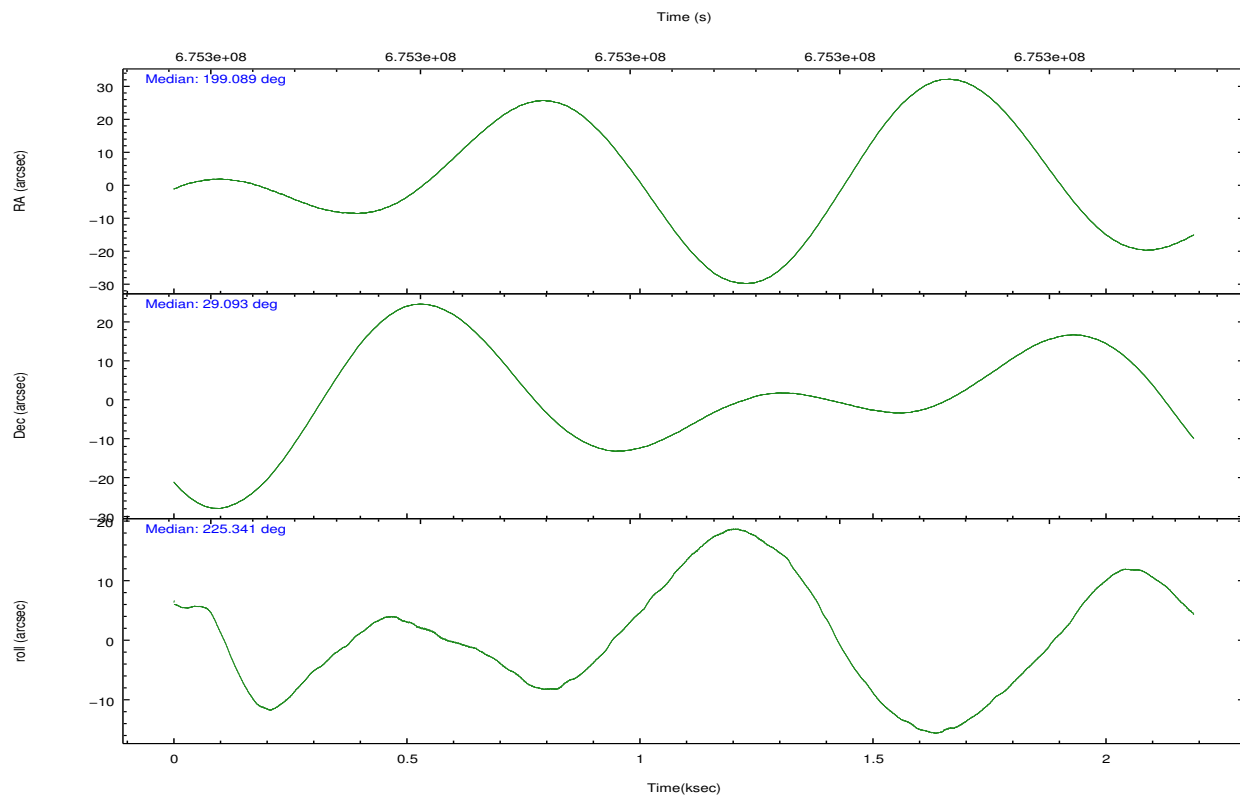
## 2.2 Compared Parameters

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	199.096905	199.0896027153401
[deg] Pointing Dec	29.119745	29.09318129045925
[deg] Pointing Roll	225.441167	225.3492525517905
[s] Window start time (MET)	674265669.184000	674265669.184000
[s] Window stop time (MET)	676944069.184000	676944069.184000
[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)	675303219.184000	675302590.6416301
Observation start date	2019-05-27T00:12:30	2019-05-27T00:03:10
[s] Observation end time (MET)	675305219.184000	675305860.39183
Observation end date	2019-05-27T00:45:50	2019-05-27T00:57:40

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

## 2.3 Aspect





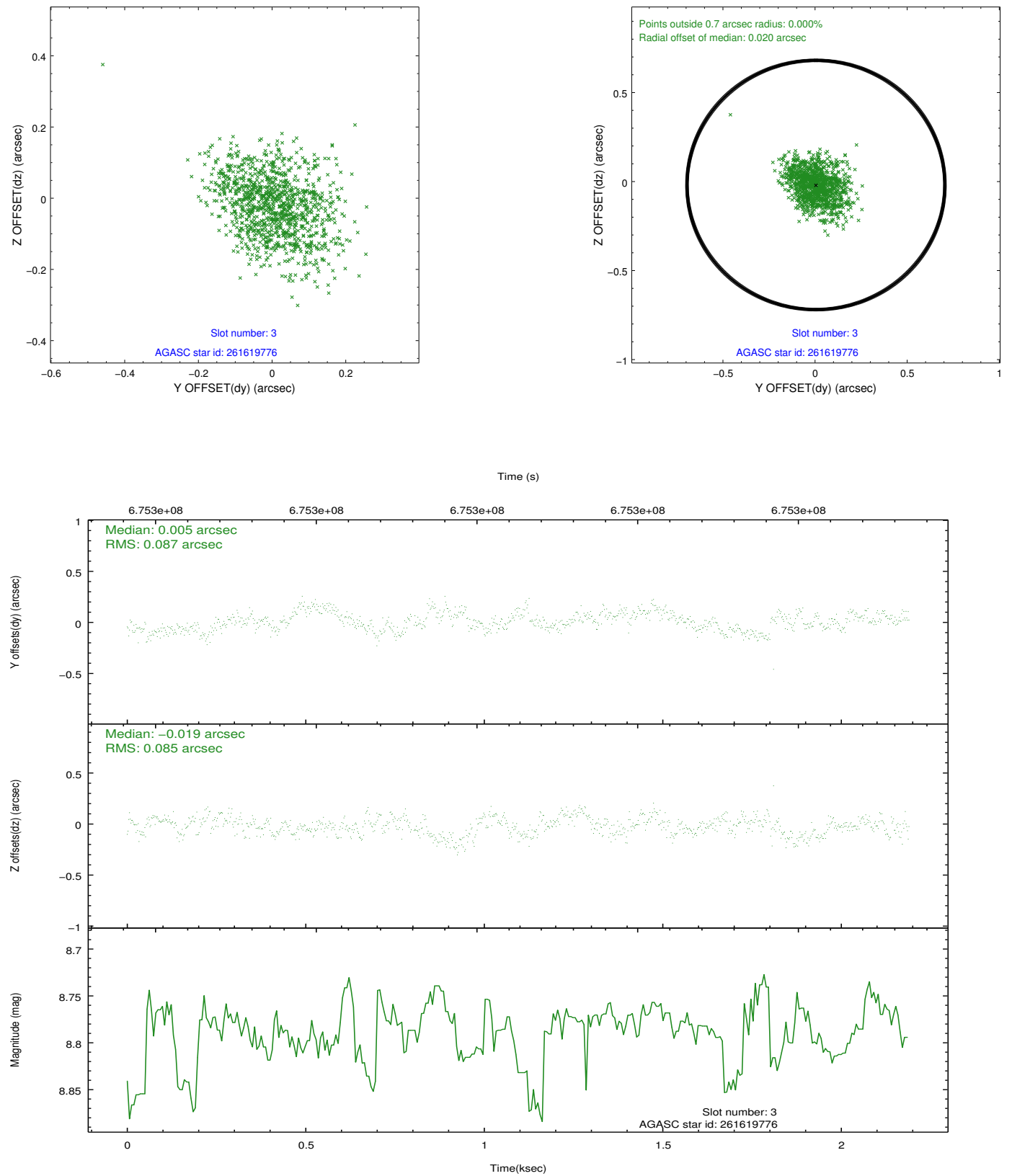
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-I-1	7.04	534	1.000	-0.185	-0.011	0.008	0.013	0.000000	0.000000	-765.40	-1304
1	FID		HRC-I-2	7.04	534	1.000	0.382	-0.166	0.008	0.012	0.000000	0.000000	846.36	-1308
2	FID		HRC-I-3	7.11	534	1.000	-0.077	0.089	0.008	0.014	0.000000	0.000000	-1192.29	997
3	GUIDE	used	261619776	8.79	1066	1.000	0.005	-0.019	0.131	0.205	198.654383	29.401174	250.34	-1699
4	GUIDE	used	261621400	6.97	1069	1.000	-0.304	-0.336	0.090	0.145	198.901600	28.741982	1401.66	512
5	GUIDE	used	261623040	9.07	1064	1.000	0.129	0.294	0.146	0.233	198.792686	29.757643	-967.88	-2288
6	GUIDE	used	261626376	9.68	1064	1.000	0.297	0.140	0.239	0.376	198.947288	29.347445	-254.81	-912
7	GUIDE	used	261629720	8.08	1066	1.000	-0.122	-0.071	0.108	0.176	199.236176	29.044452	-114.57	501

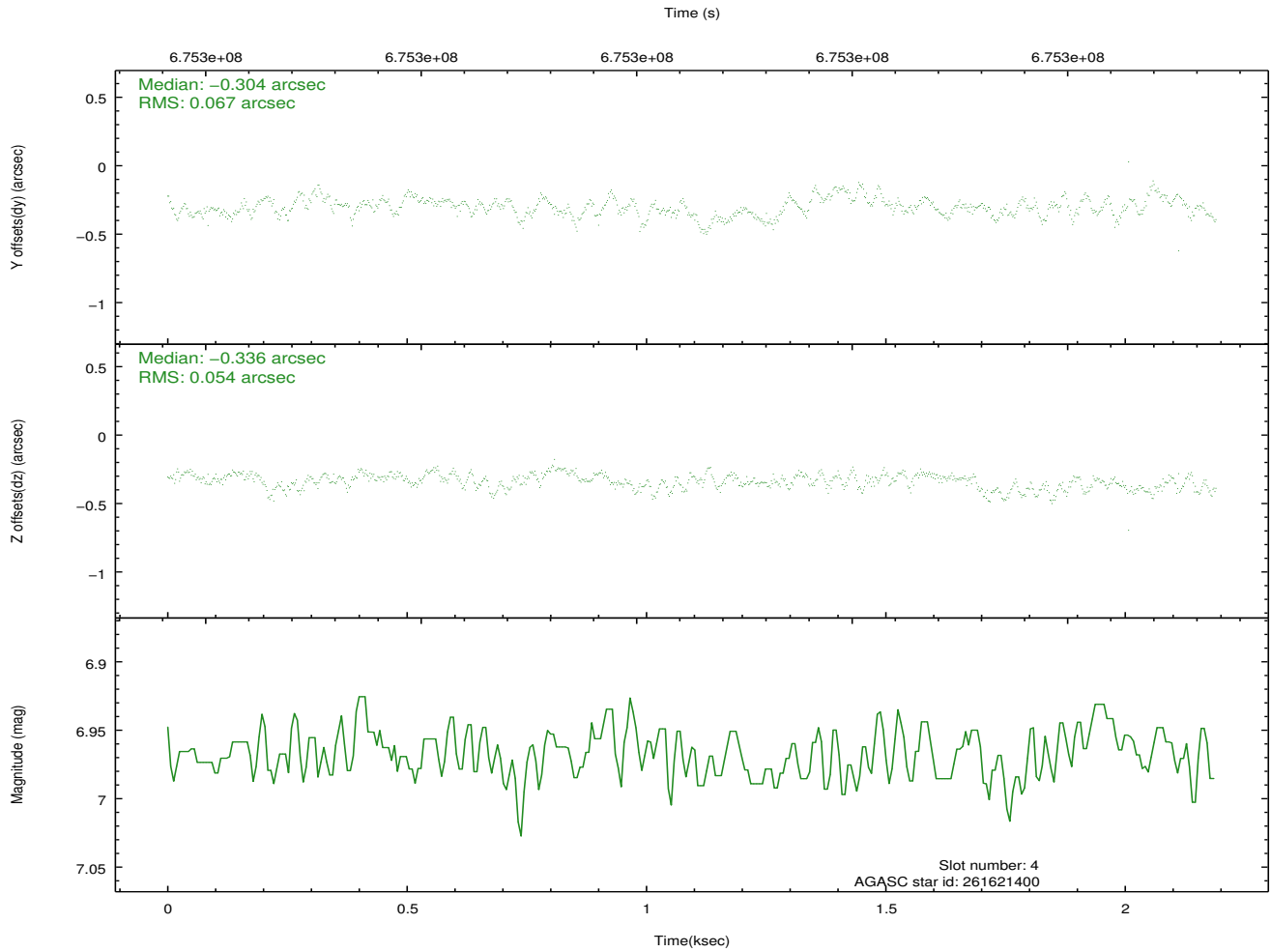
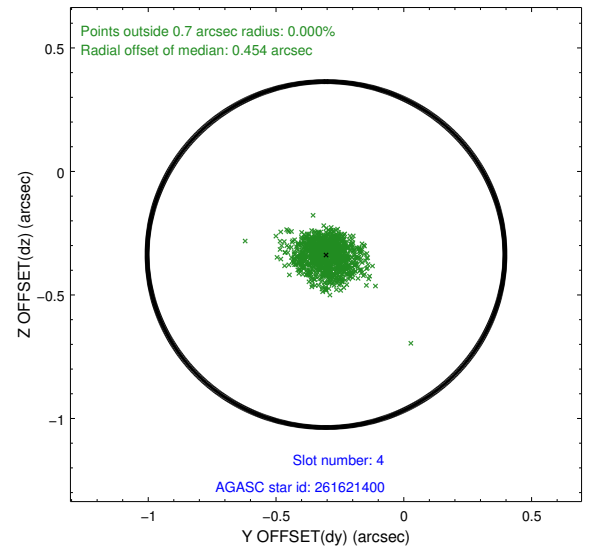
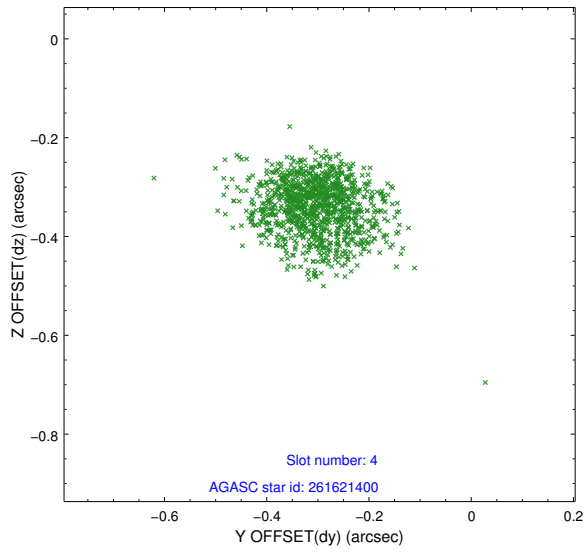


## 2.4 Star Slots

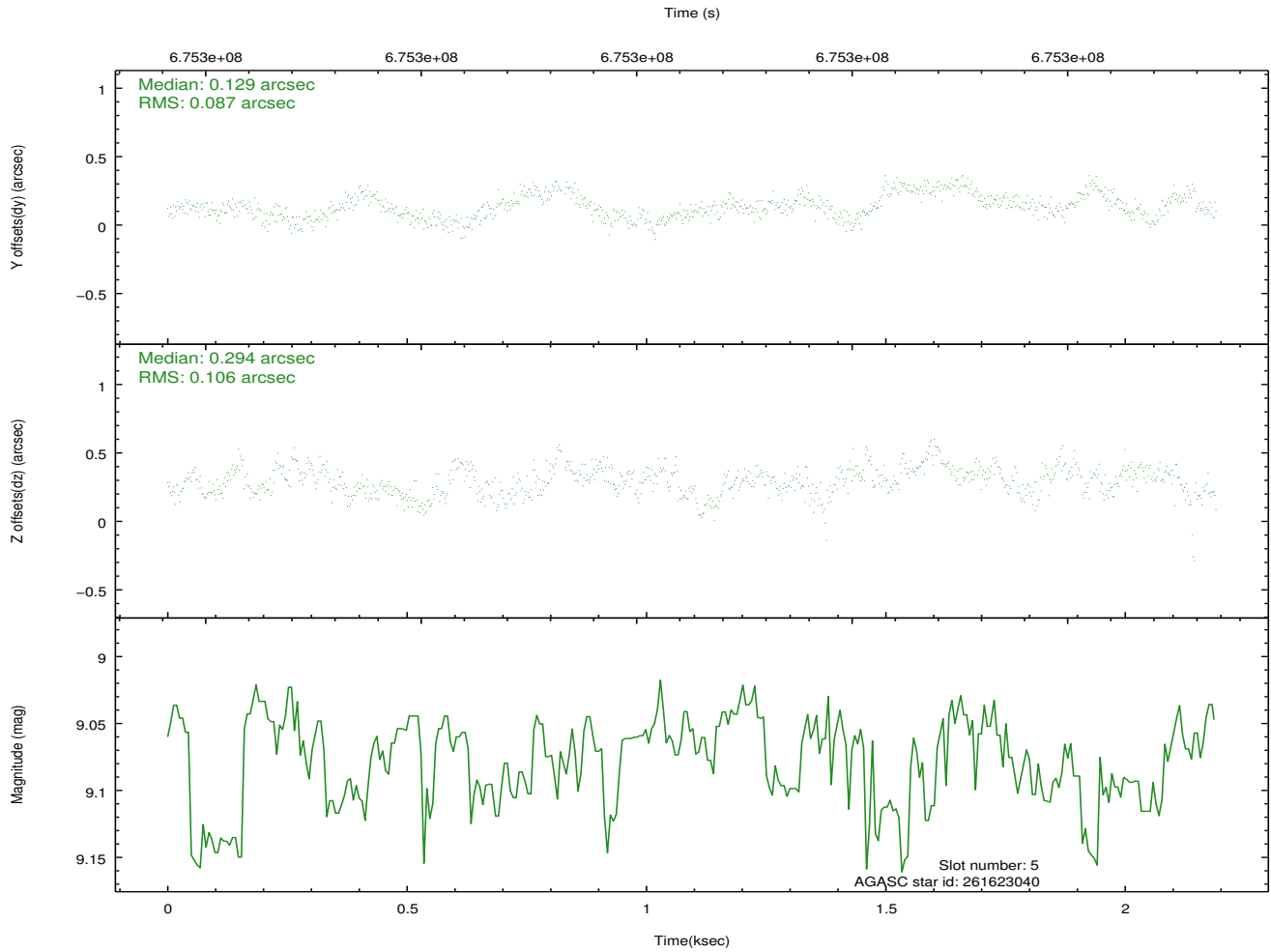
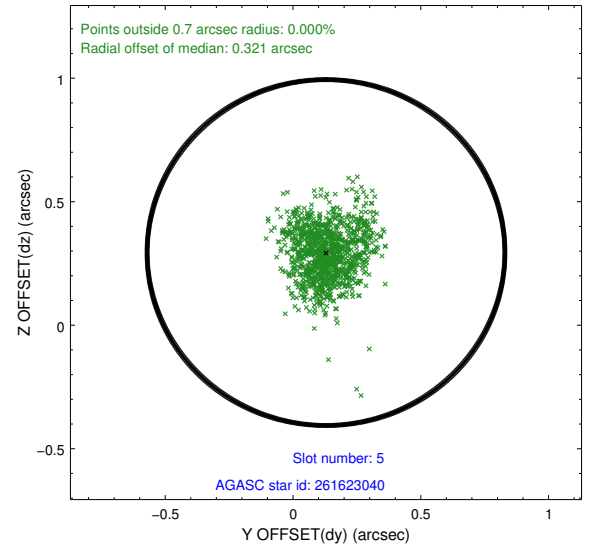
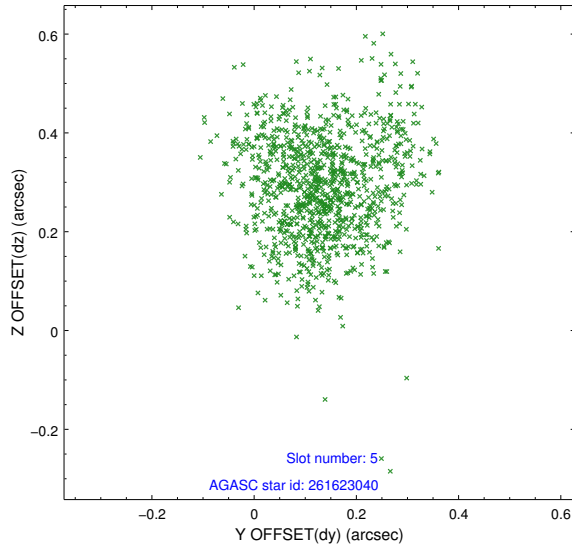
### 2.4.1 Slot 3



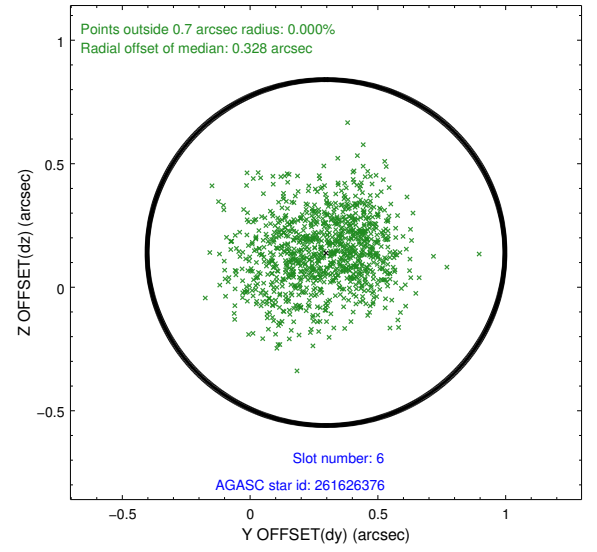
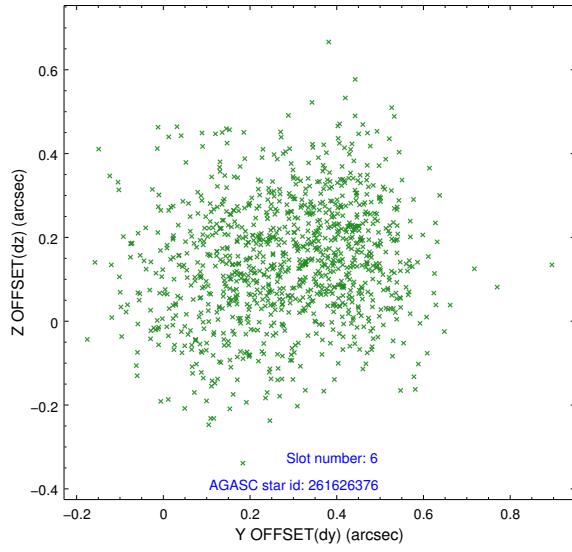
## 2.4.2 Slot 4



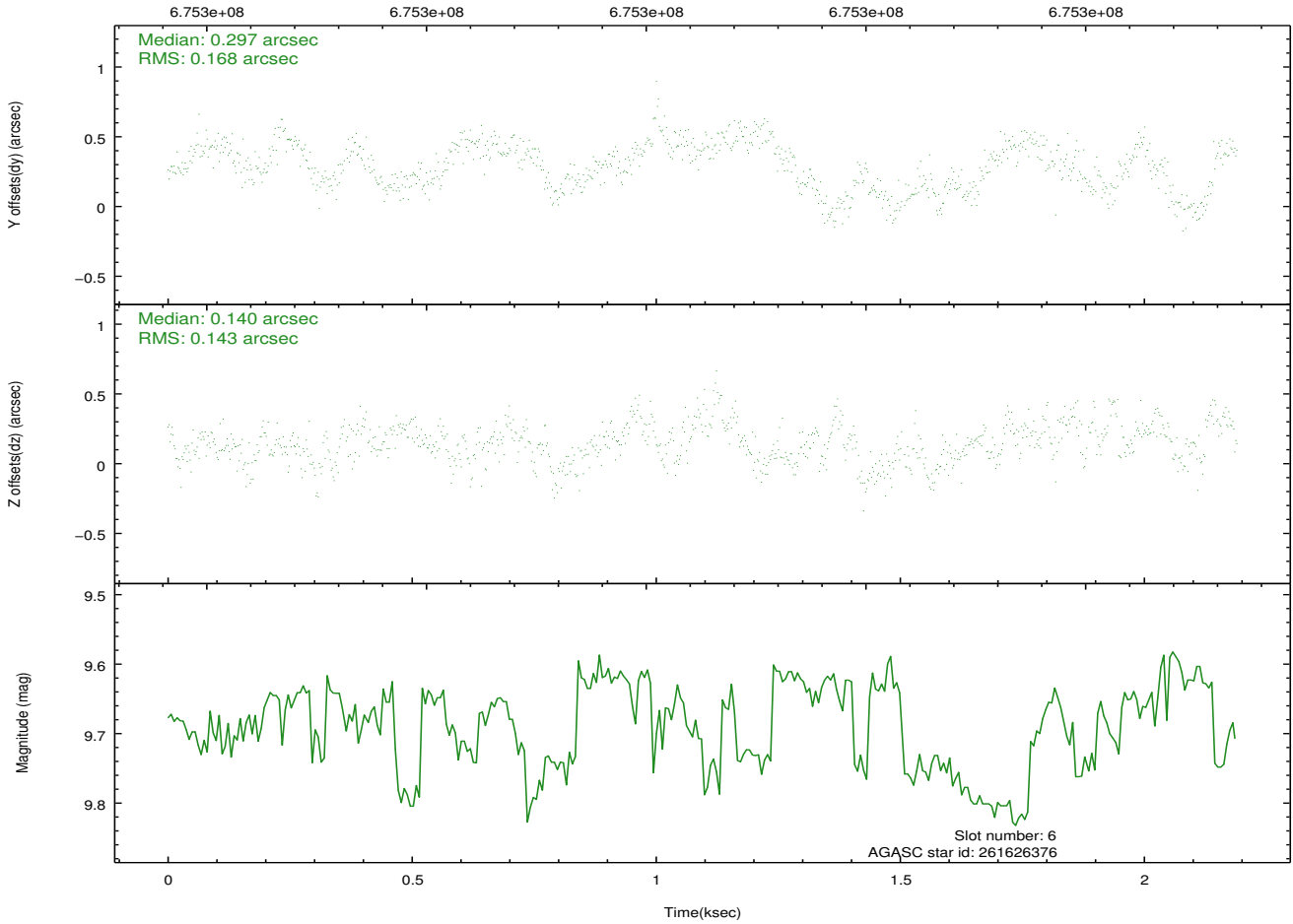
### 2.4.3 Slot 5



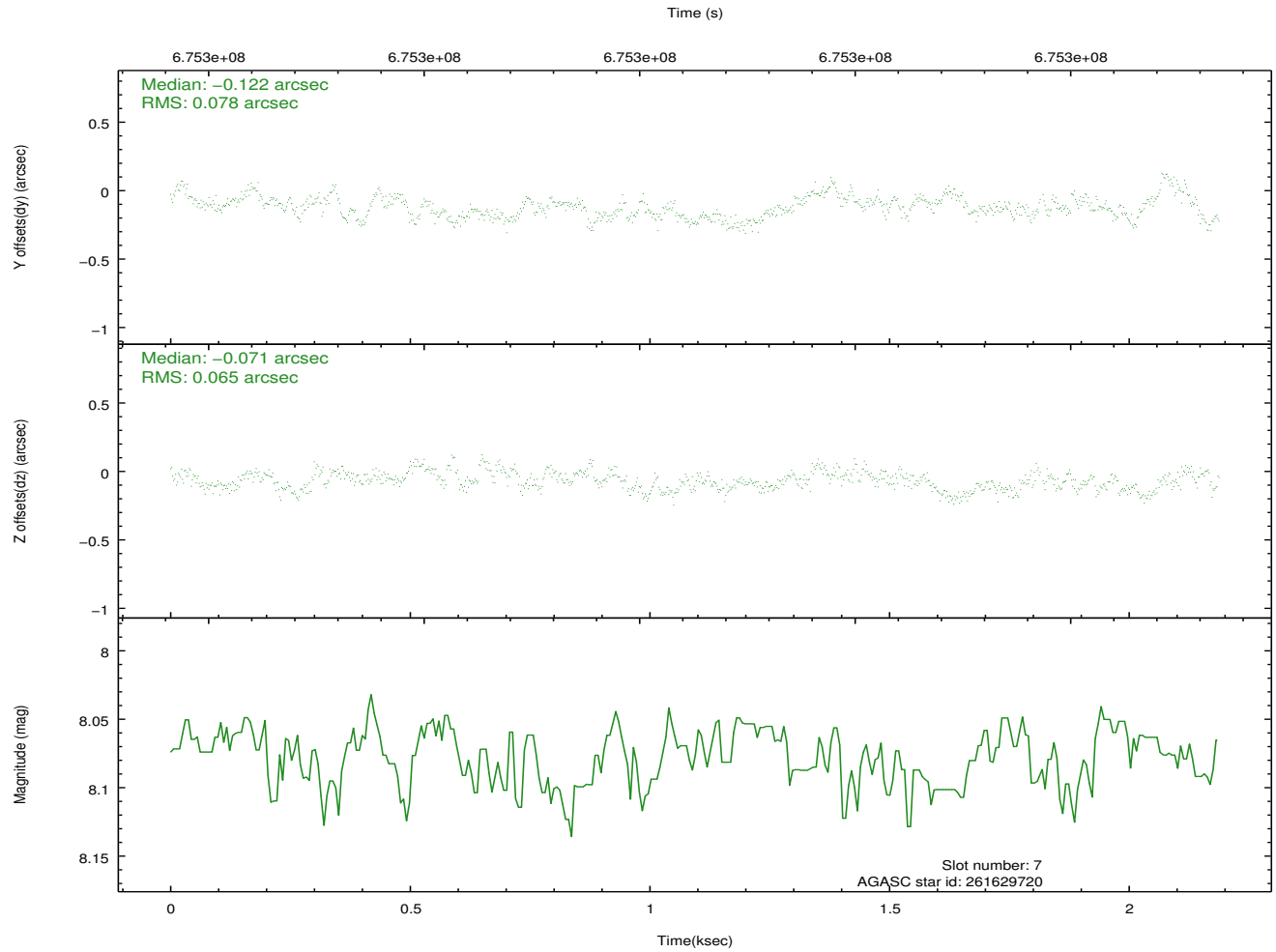
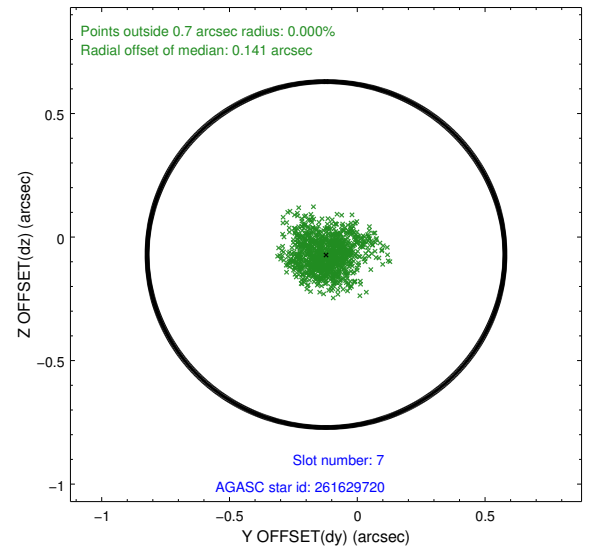
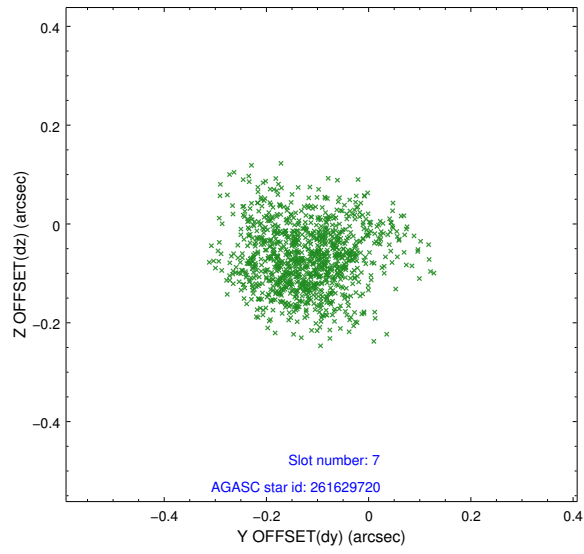
## 2.4.4 Slot 6



Time (s)

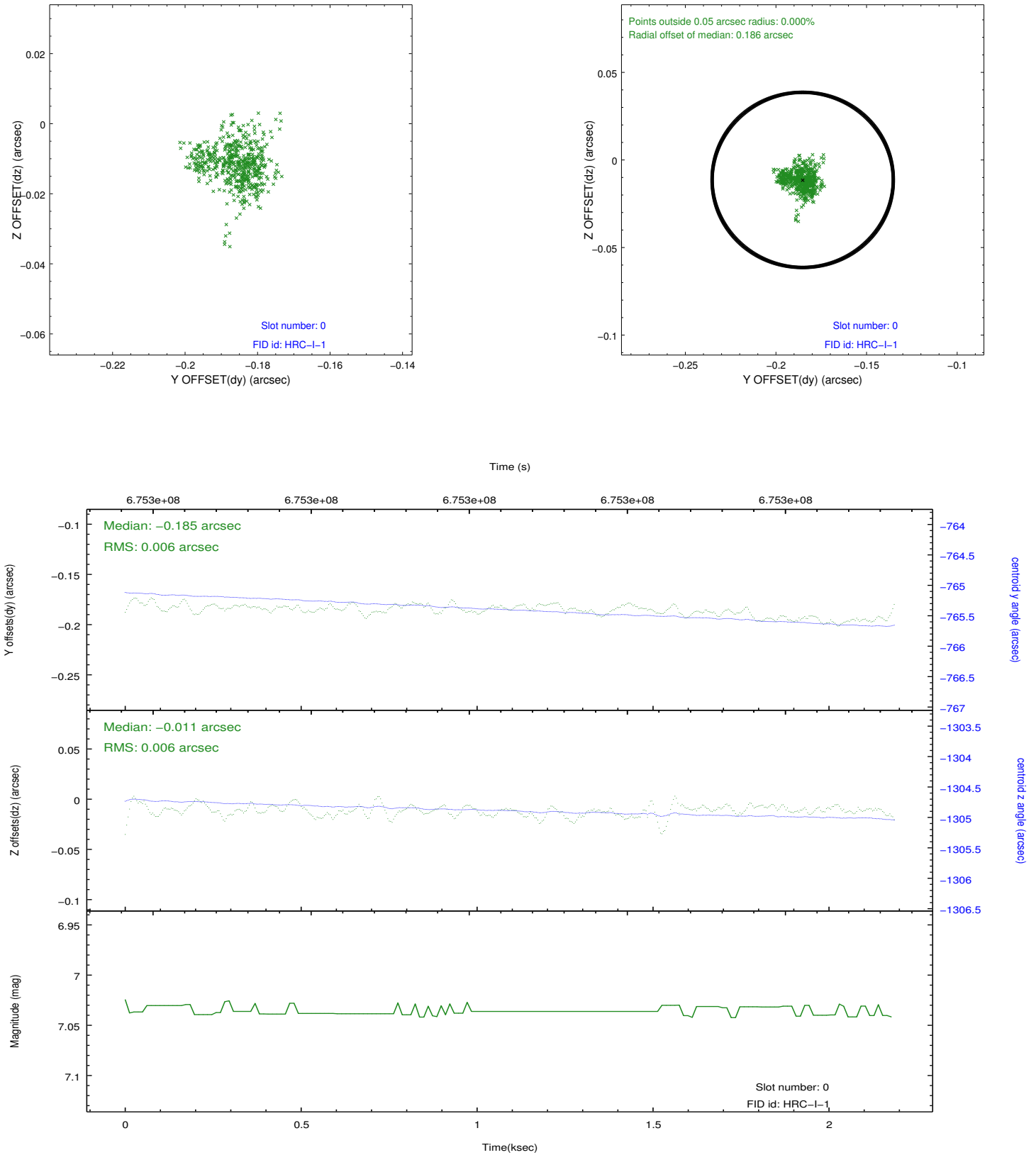


## 2.4.5 Slot 7

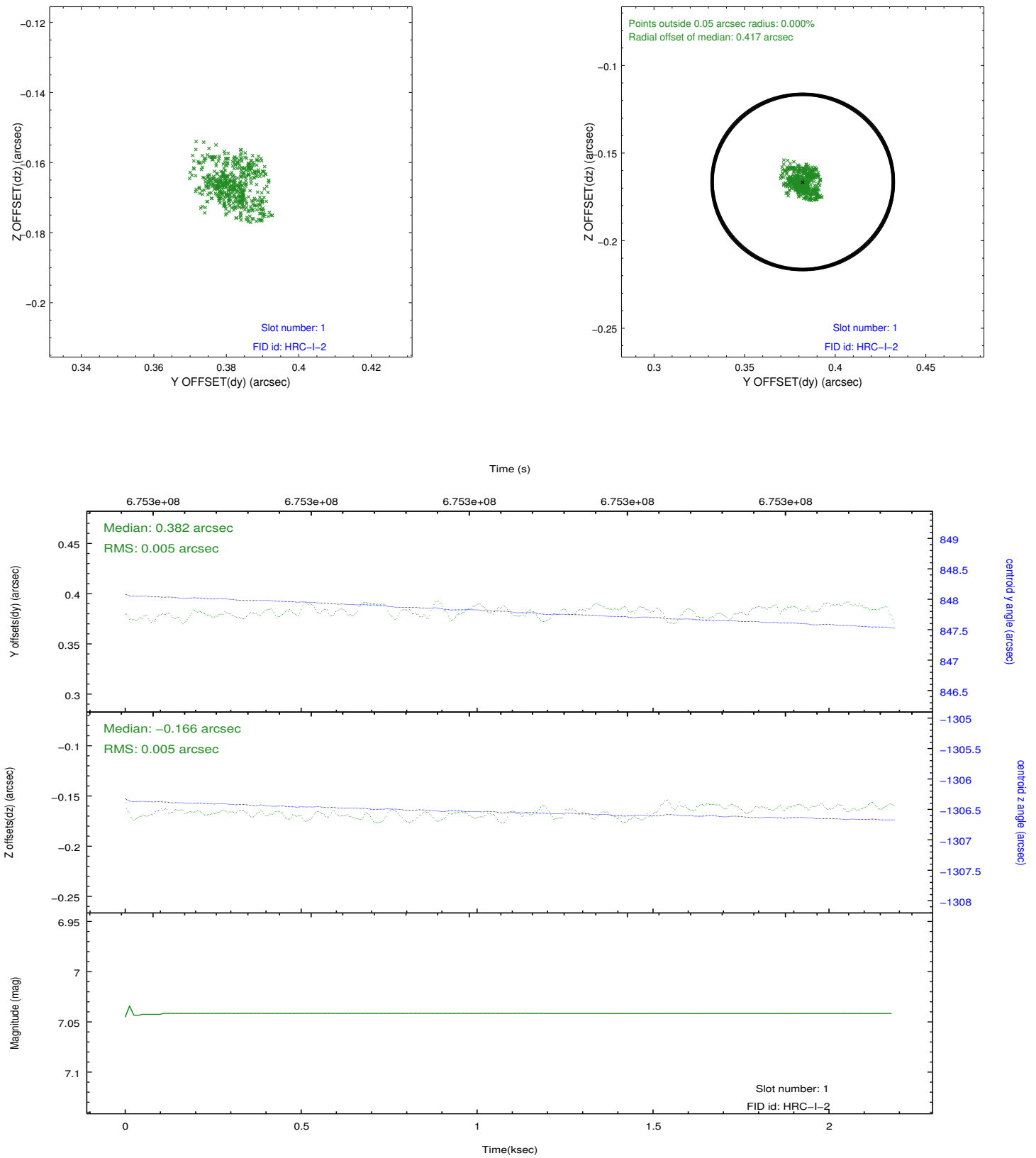


## 2.5 FID Slots

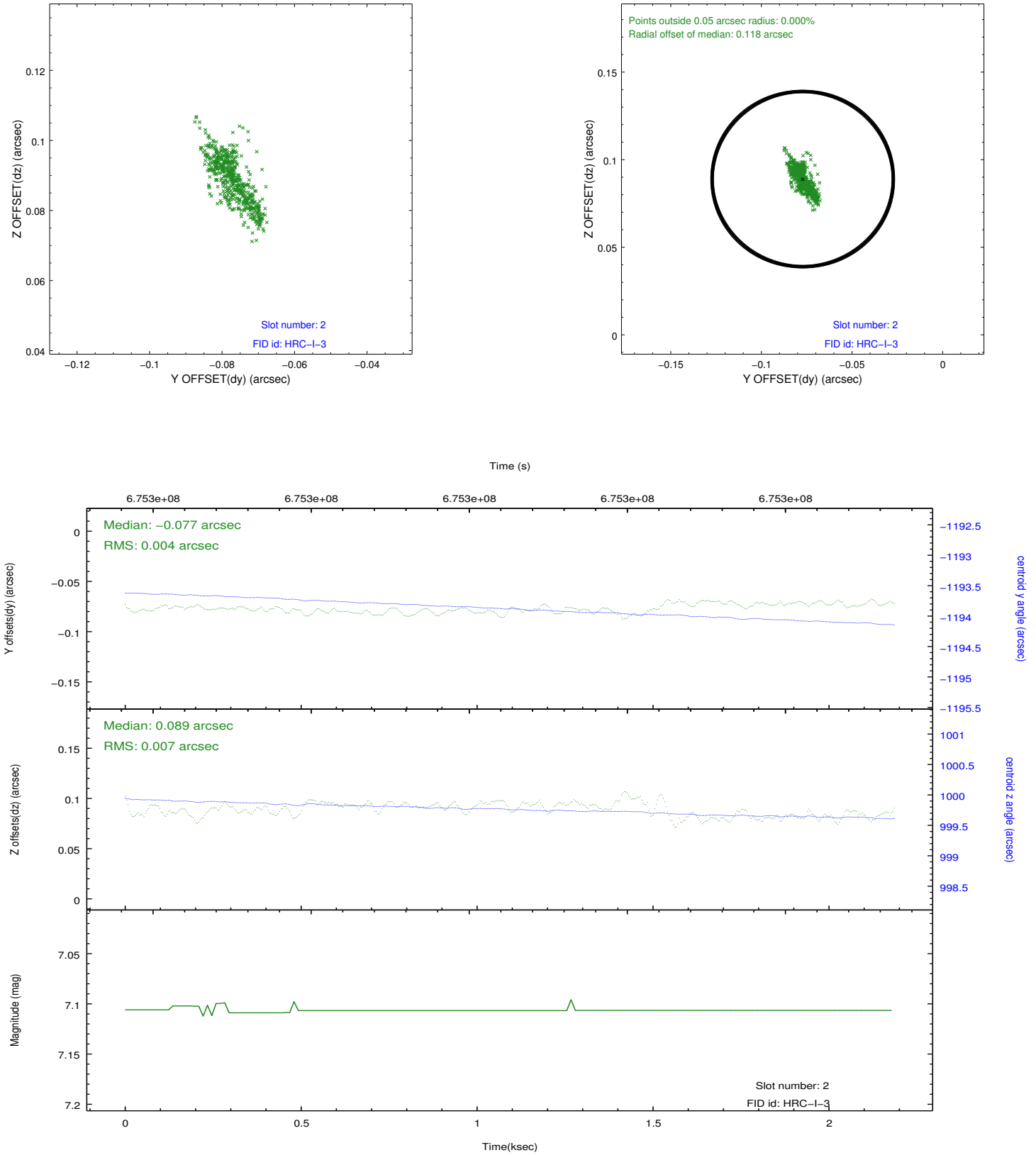
### 2.5.1 Slot 0



## 2.5.2 Slot 1



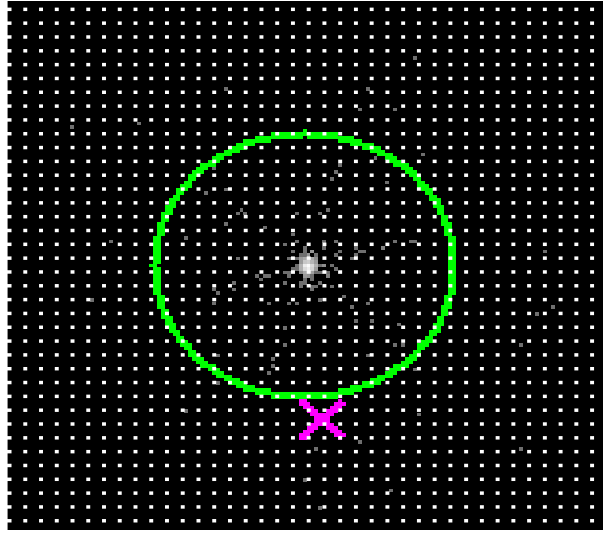
### 2.5.3 Slot 2



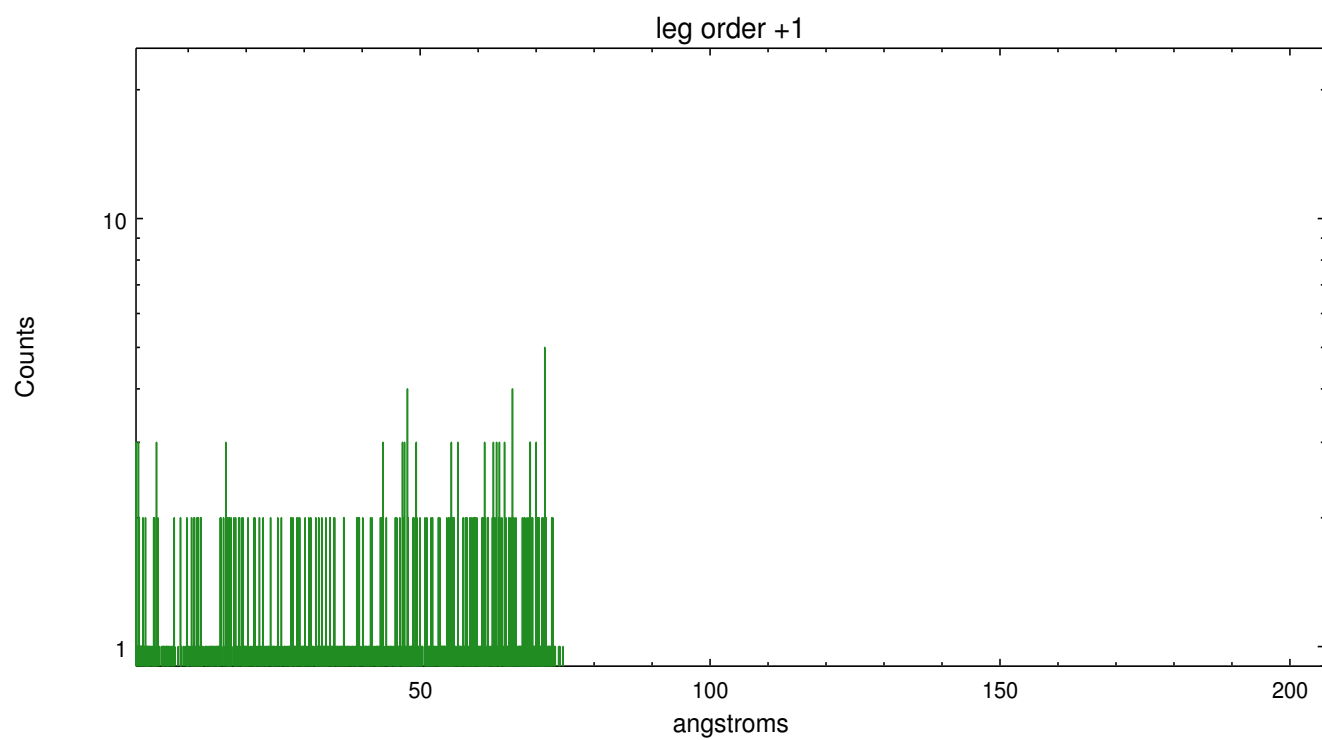
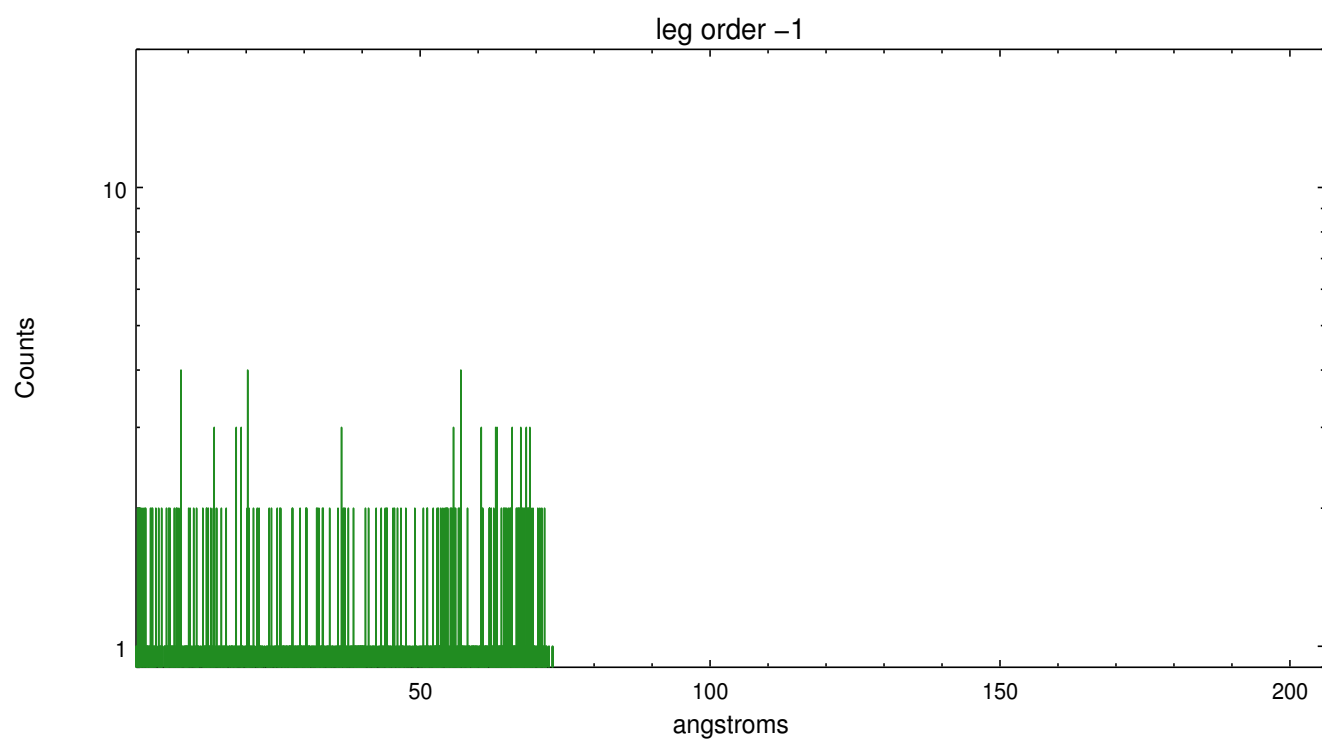


## 3 Gratings

### 3.1 LETG Arm



LETG Zero Order



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2019.05.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.1881188812256

### A.2 Comments