

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 5042 - L2 Version 001  
Chandra X-Ray Center

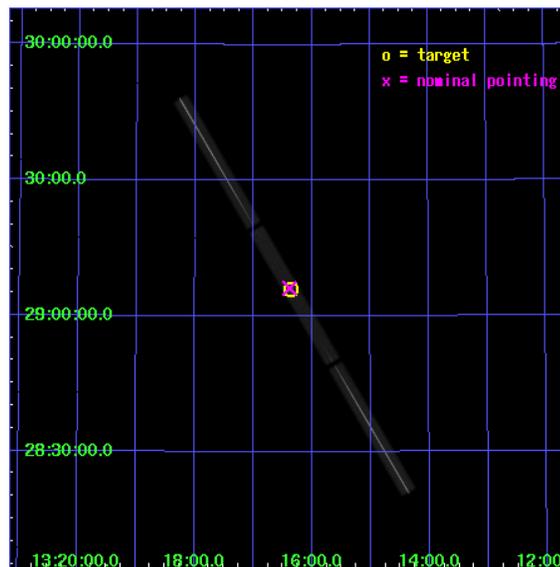
L2 Processing Date : Jun 22 2006

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# 1 Front

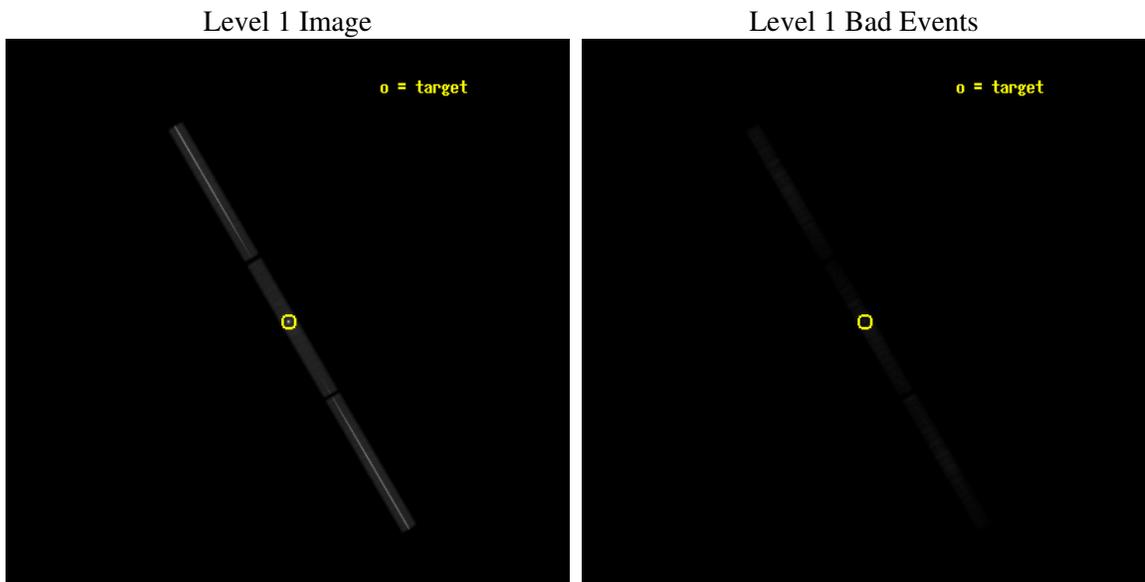
seq_num	290315
obs_id	5042
title	AO5 Calibration Observations of HZ43
observer	Dr. CXC Calibration
object	HZ43
ra_targ	199.092083
dec_targ	29.099
ra_nom	199.0948808891
dec_nom	29.102958628924
roll_nom	59.420021603054
revision	2
ontime	19853.482113183
livetime	19686.653140068
l2events	1604539



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0
ascdsver	7.6.8
caldbver	3.2.2
date	2006-06-22T05:16:49
revision	2

sched_exp_time	20000.000000
ontime	20096.150873721
l1events	2038410

### 2.1.3 Events

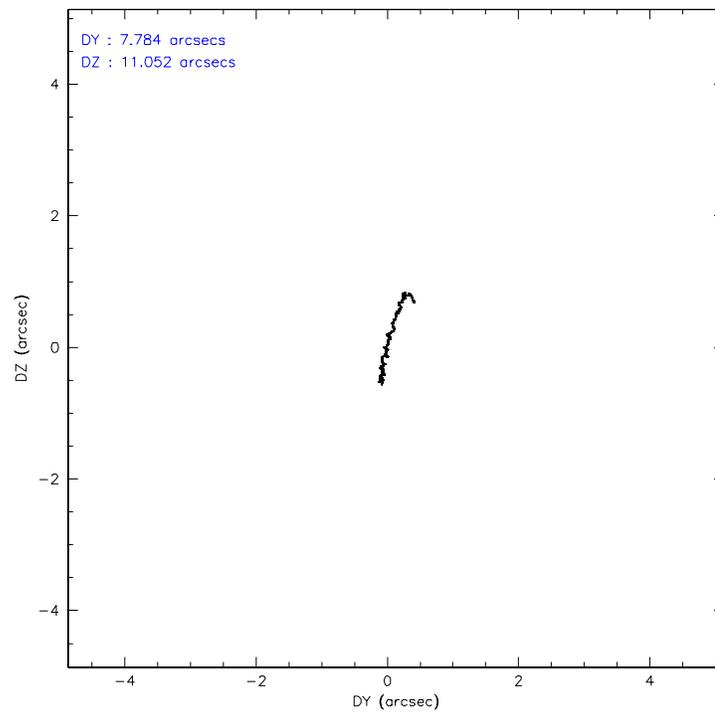
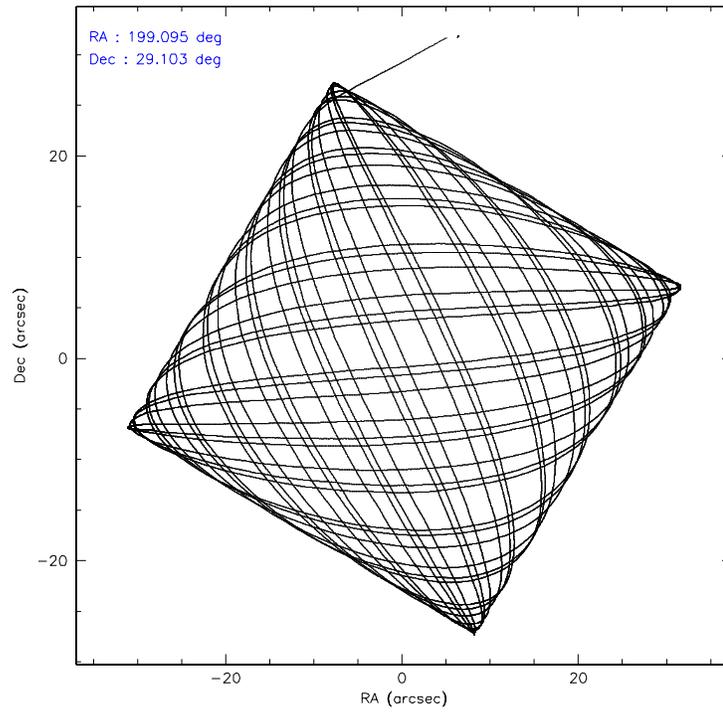
#### Level 1 Events

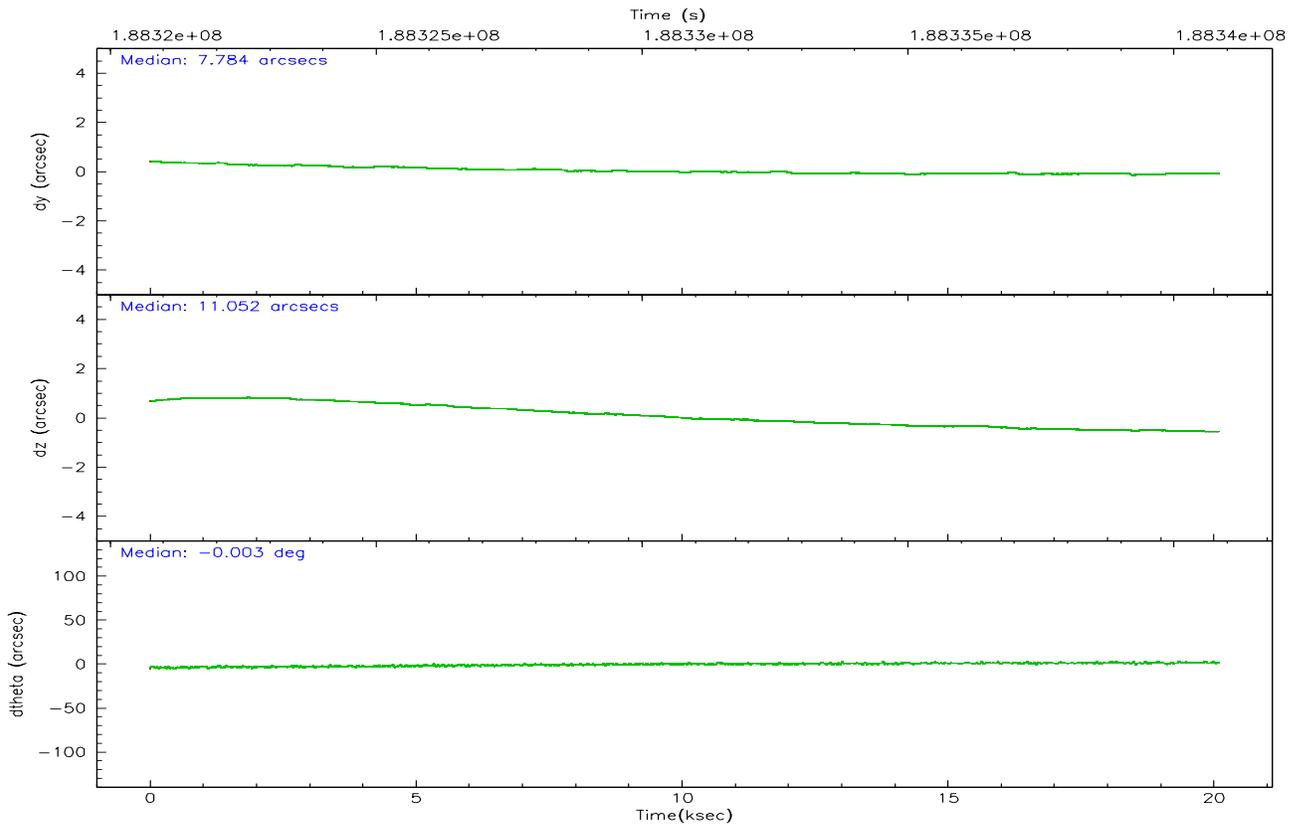
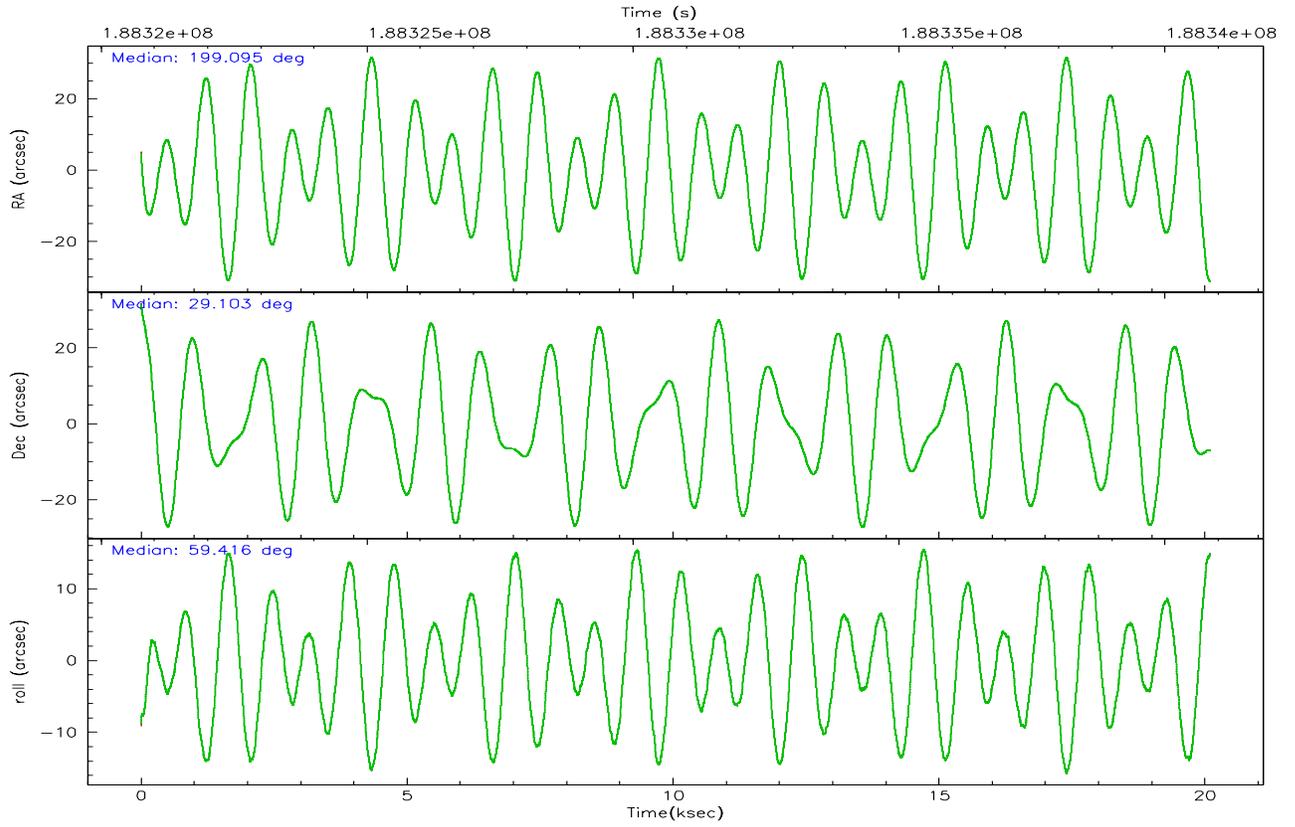
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	713014	601367	724029
rejected events	87246	101900	106644
rejected %	12%	16%	14%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	6	6
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			
Pointing RA	199.096223	199.0948808891016			
Pointing Dec	29.074383	29.10295862892442			
Pointing Roll	59.352032	59.42002160305369			
Window start time	186624064.184000	186624064.184000			
Window stop time	191894464.184000	191894464.184000			
SIM focus pos (mm)	-1.429586	-1.428180813131781			
SIM defocus (mm)	0.1037507710433287	0.1051558262725154			
SIM translation stage pos (mm)	250.455976	250.4635187648994			
SIM translation stage offset (mm)	0	-0.007540371344731511			
Observation start time	188320851.184000	188319778.25523			
Observation start date	2003-12-20T15:19:47	2003-12-20T15:02:58			
Observation end time	188340851.184000	188341768.60619			
Observation end date	2003-12-20T20:53:07	2003-12-20T21:09:28			

## 2.3 Aspect



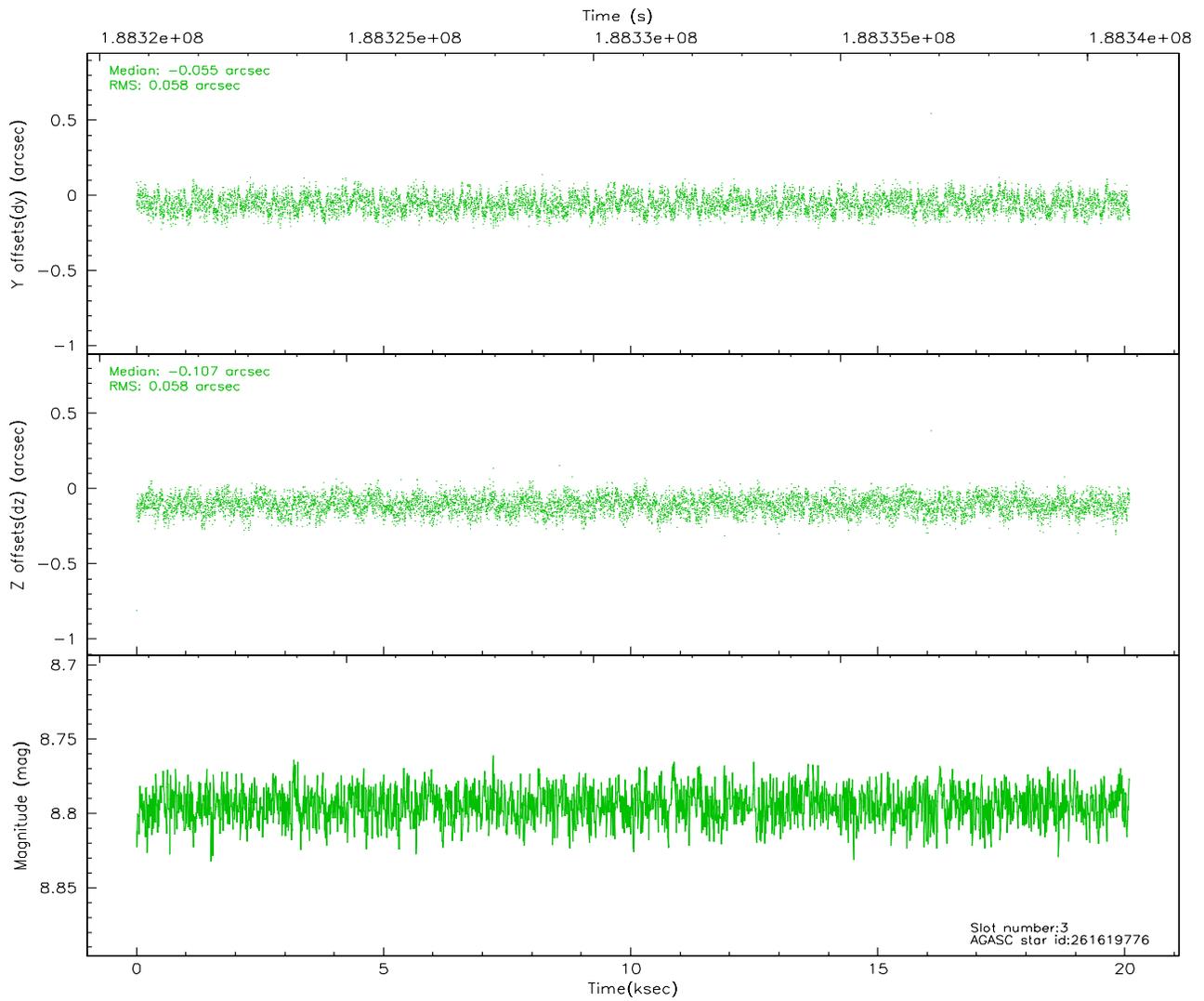
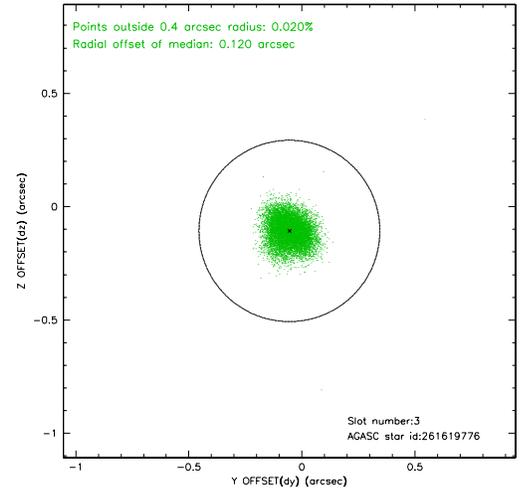
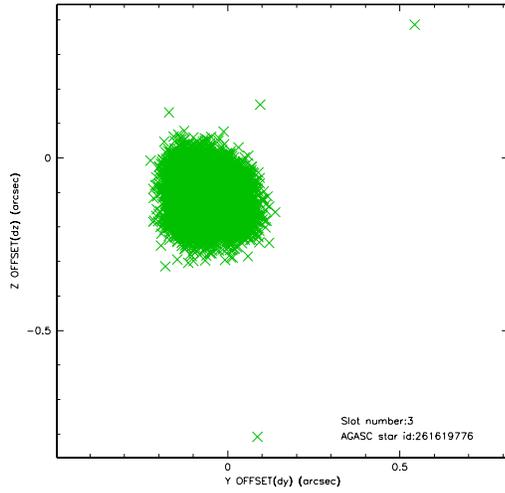


### Slot Statistics

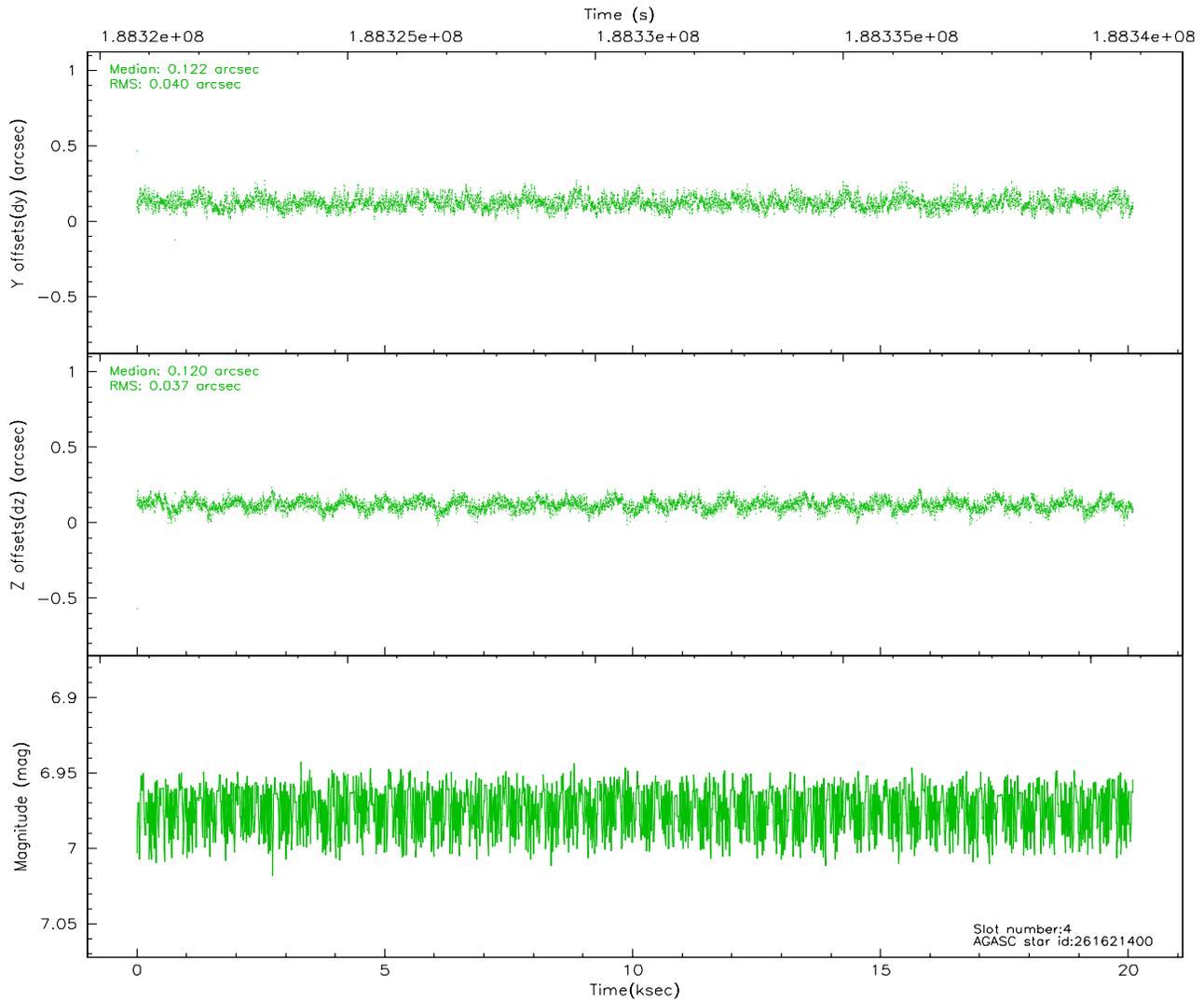
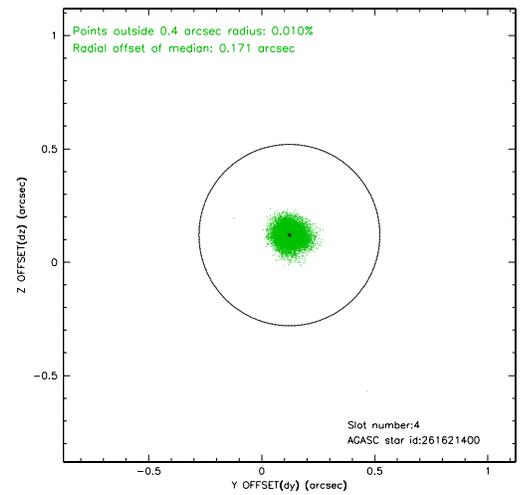
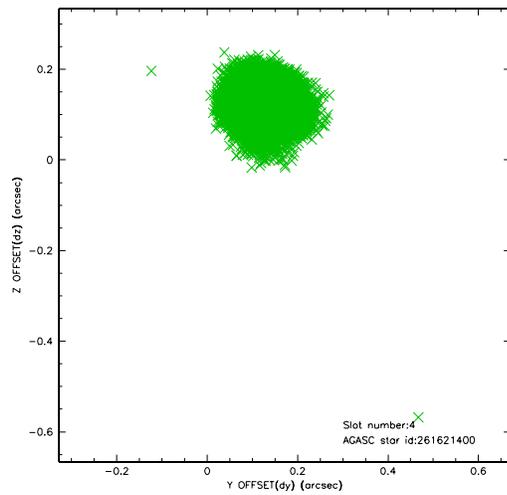
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.02	4901	0.147	-0.160	0.023	0.037	0.000000	0.000000	-1161.98	-459.80
1	FID	HRC-S-2	7.02	4901	0.132	-0.109	0.009	0.018	0.000000	0.000000	1237.44	-452.50
2	FID	HRC-S-3	7.03	4901	0.111	-0.033	0.026	0.046	0.000000	0.000000	-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

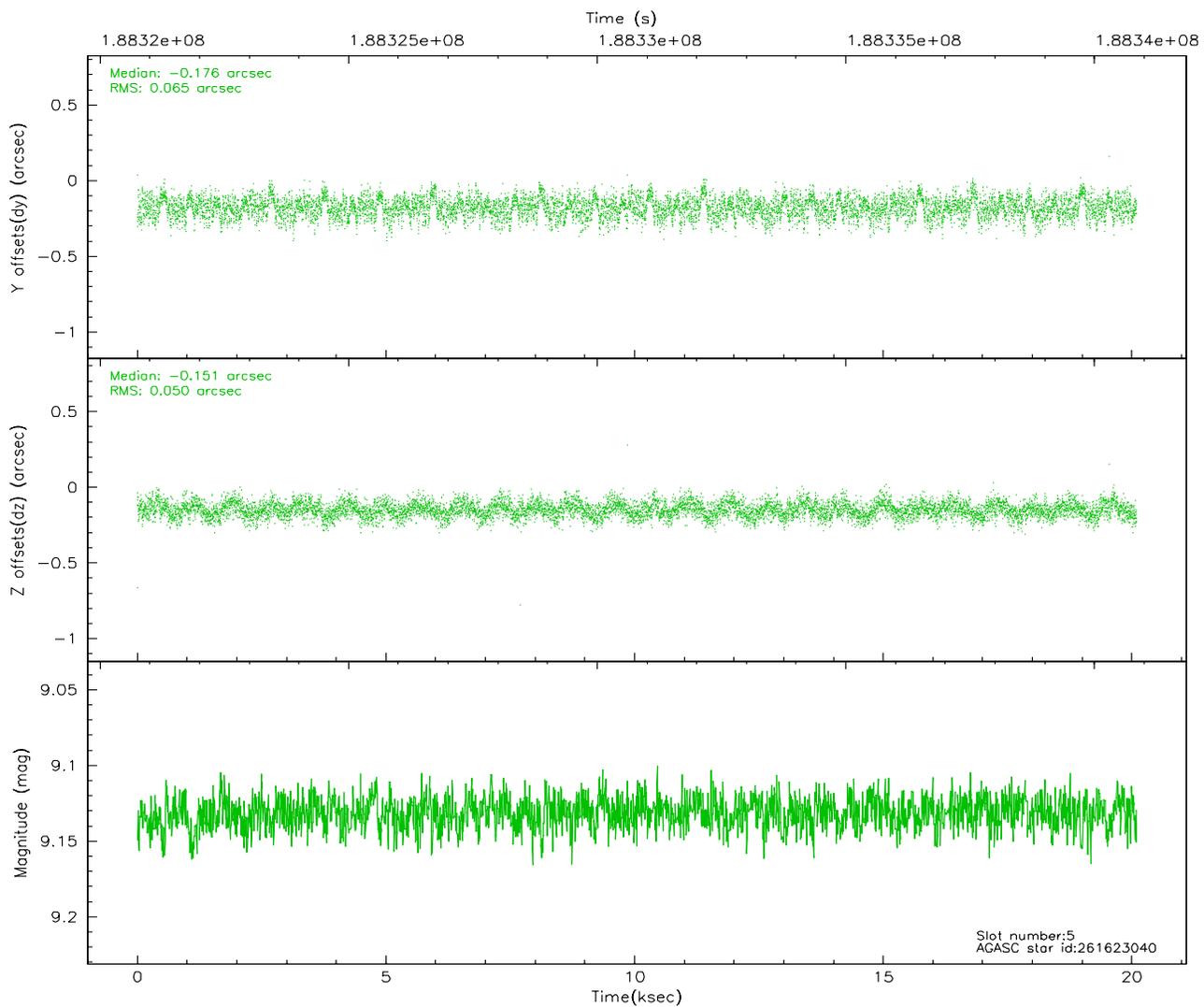
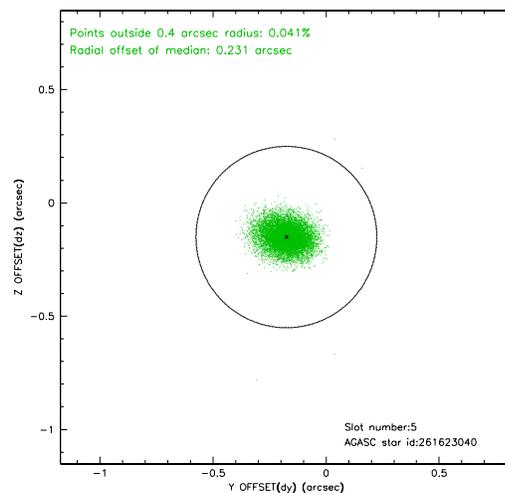
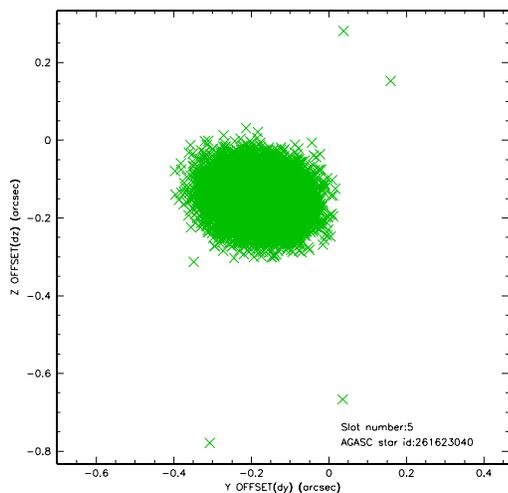
### 2.4.1 Slot 3



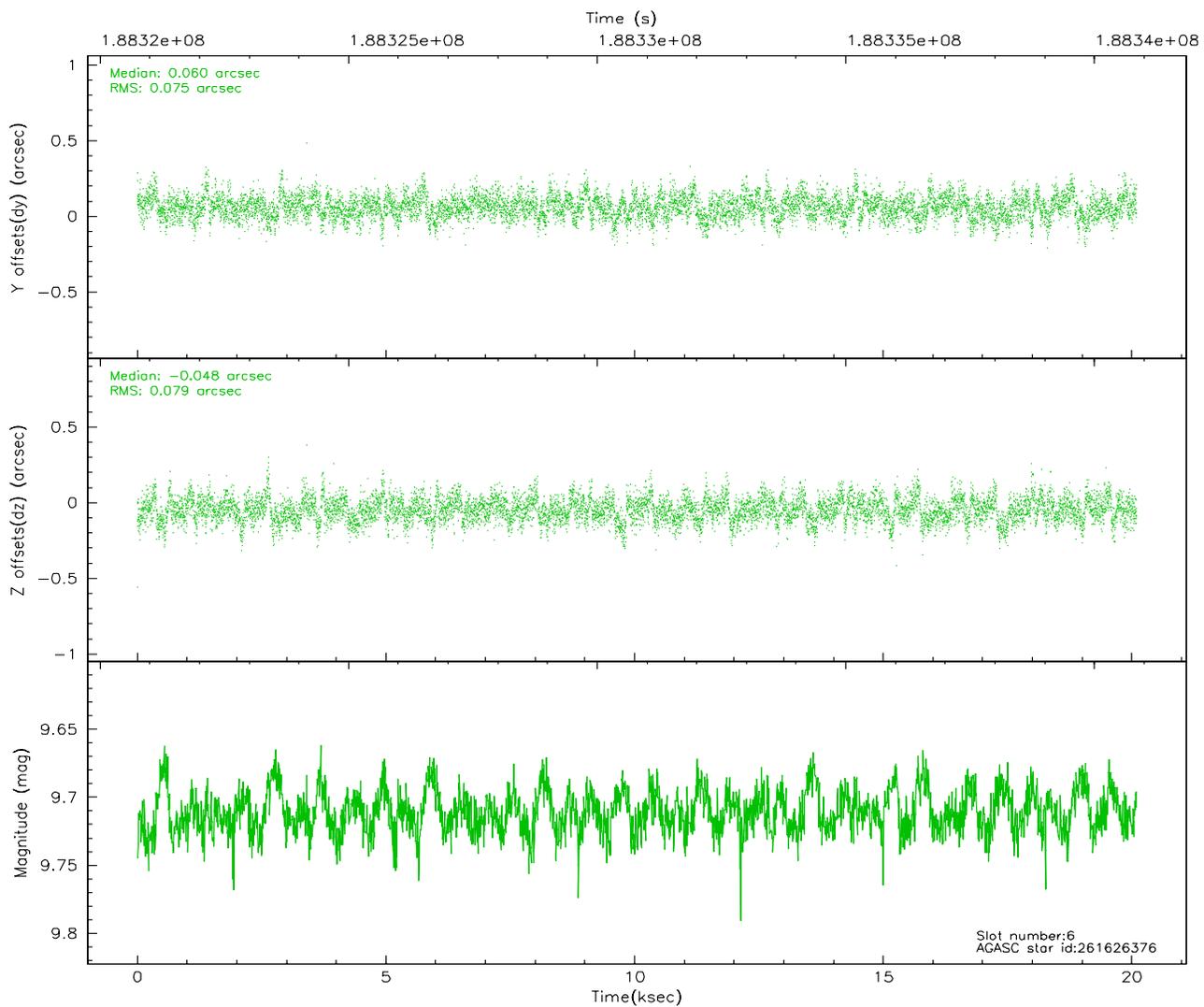
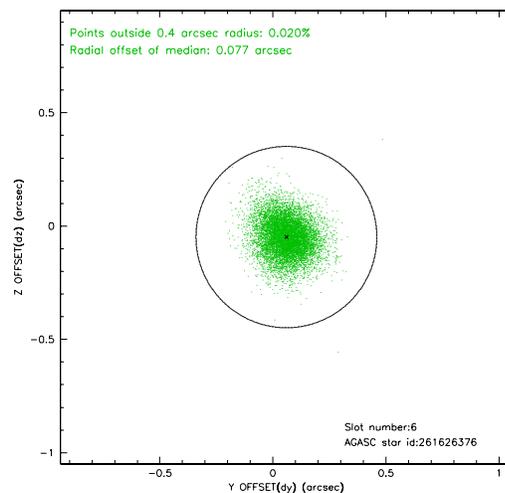
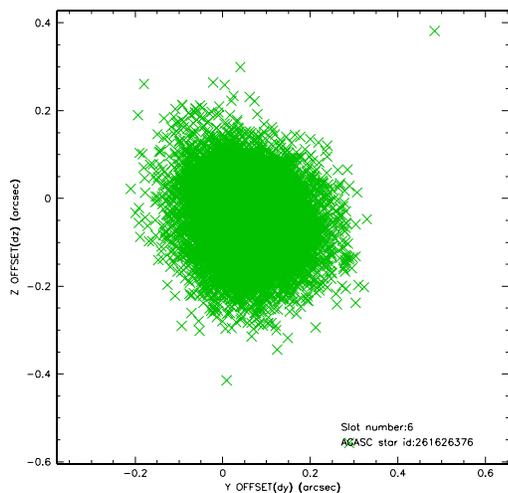
## 2.4.2 Slot 4



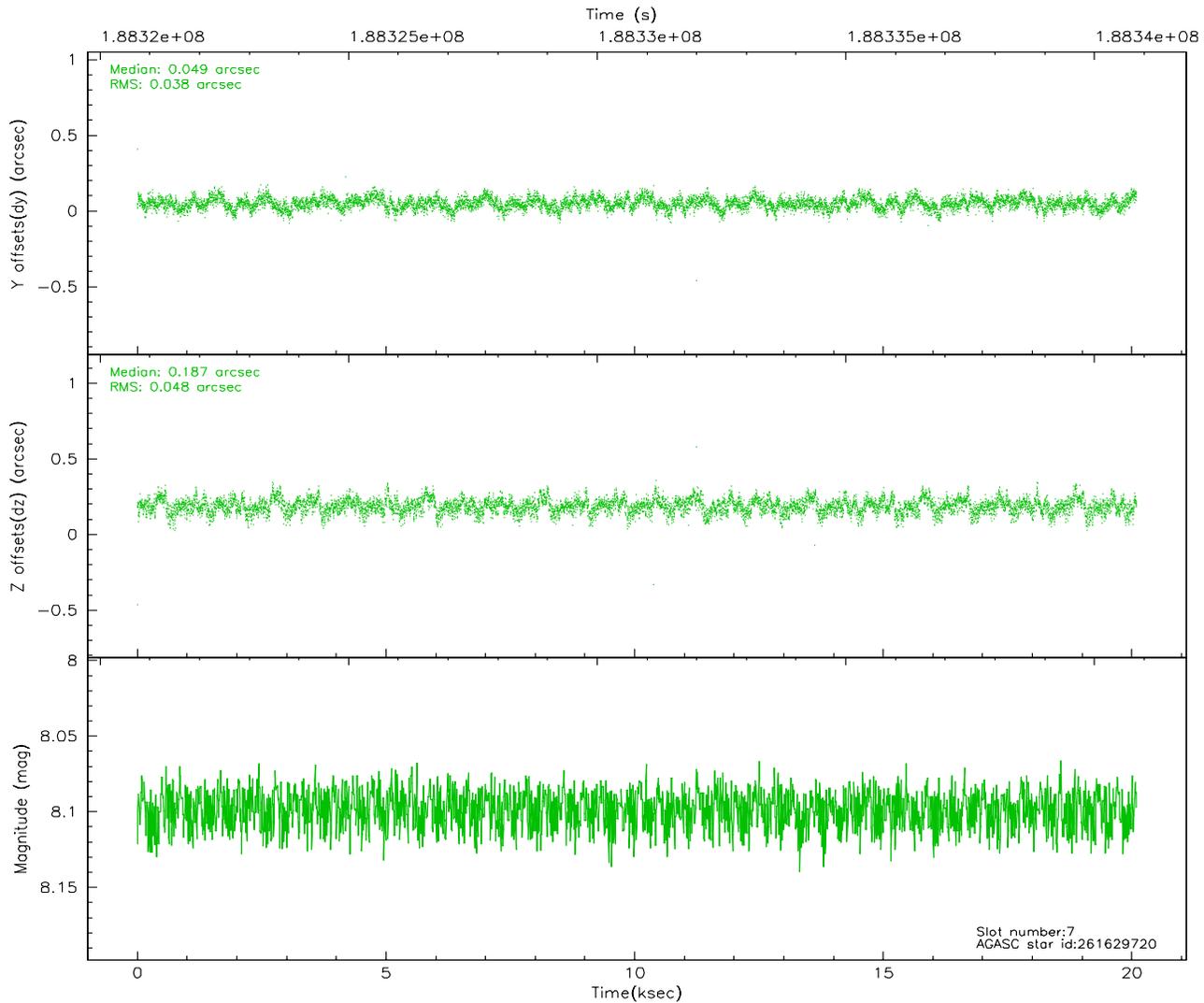
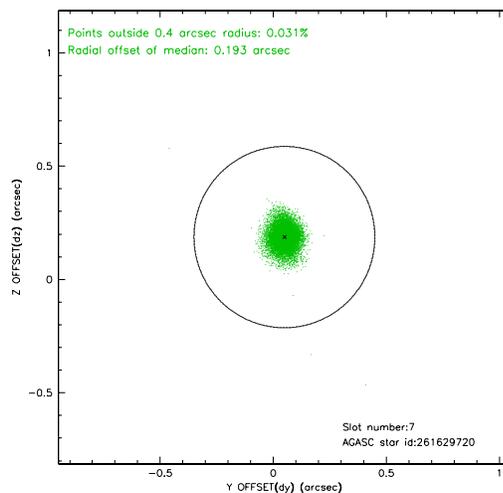
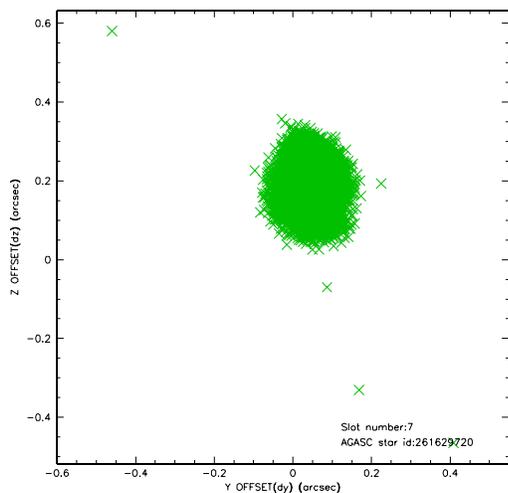
### 2.4.3 Slot 5



### 2.4.4 Slot 6

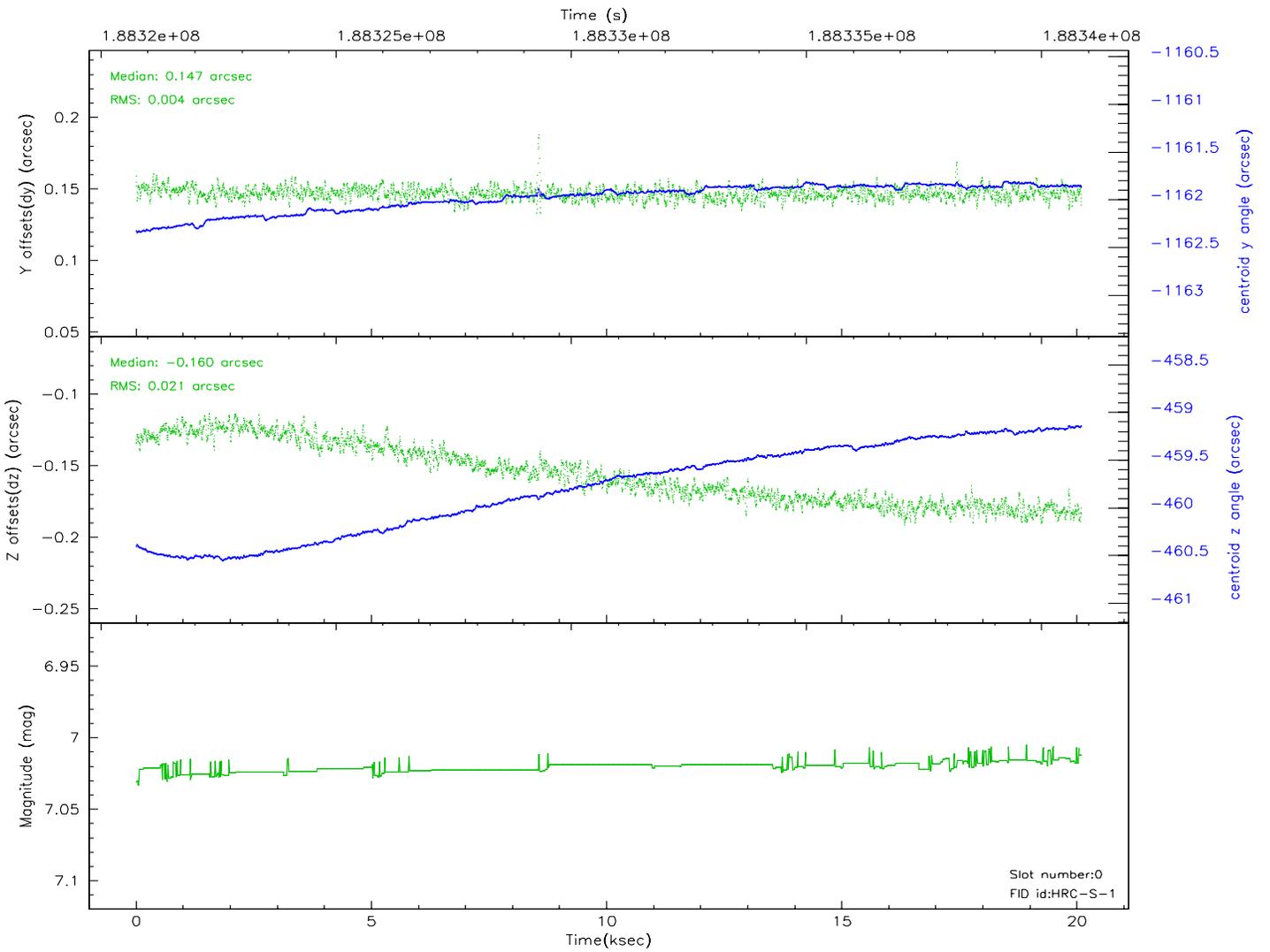
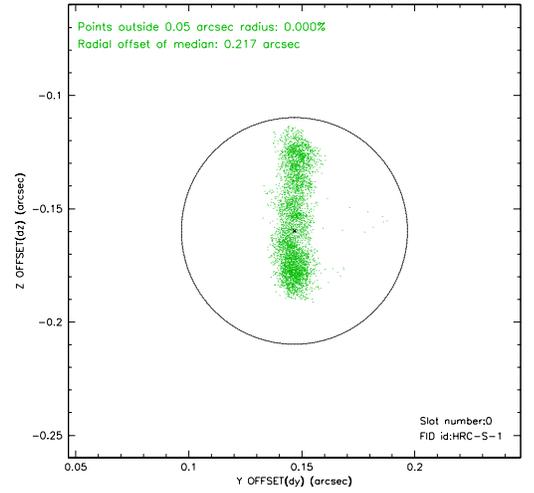
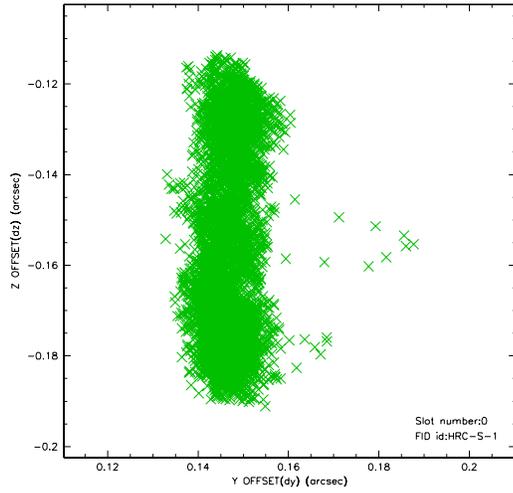


## 2.4.5 Slot 7

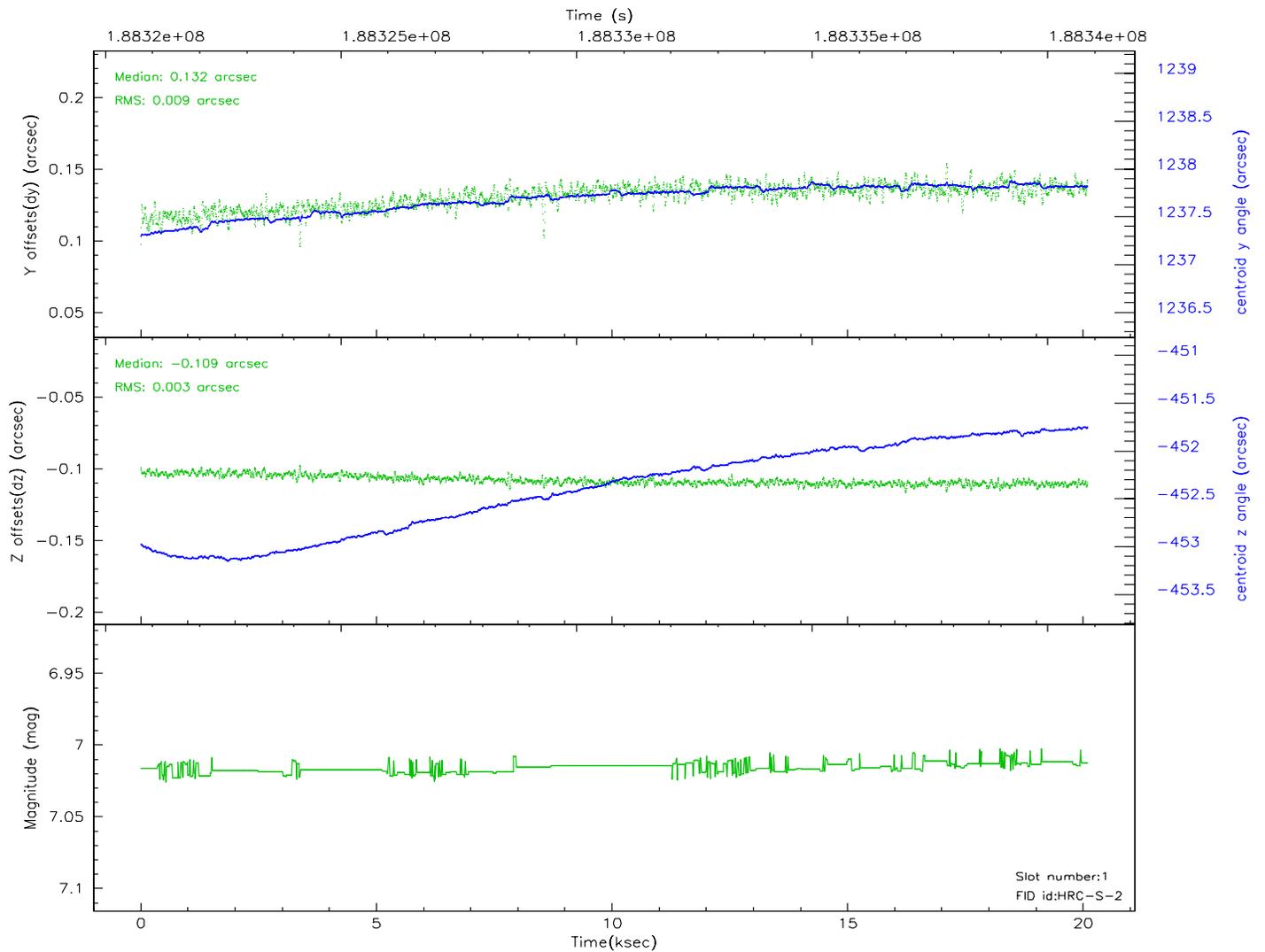
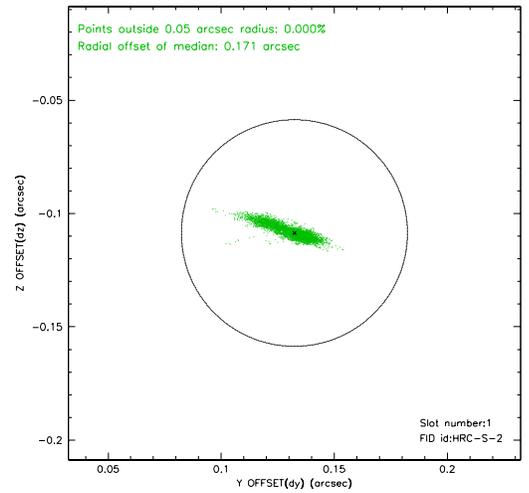
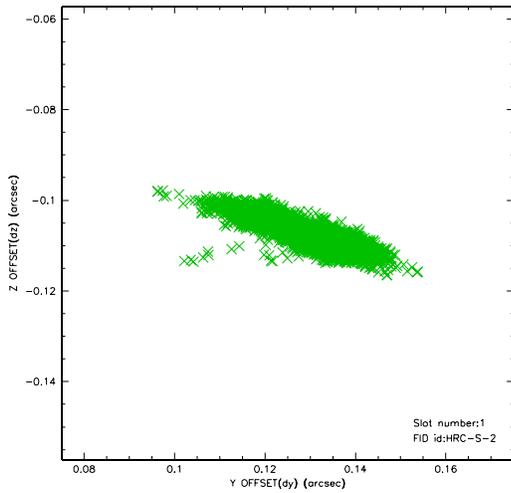


## 2.5 FID Slots

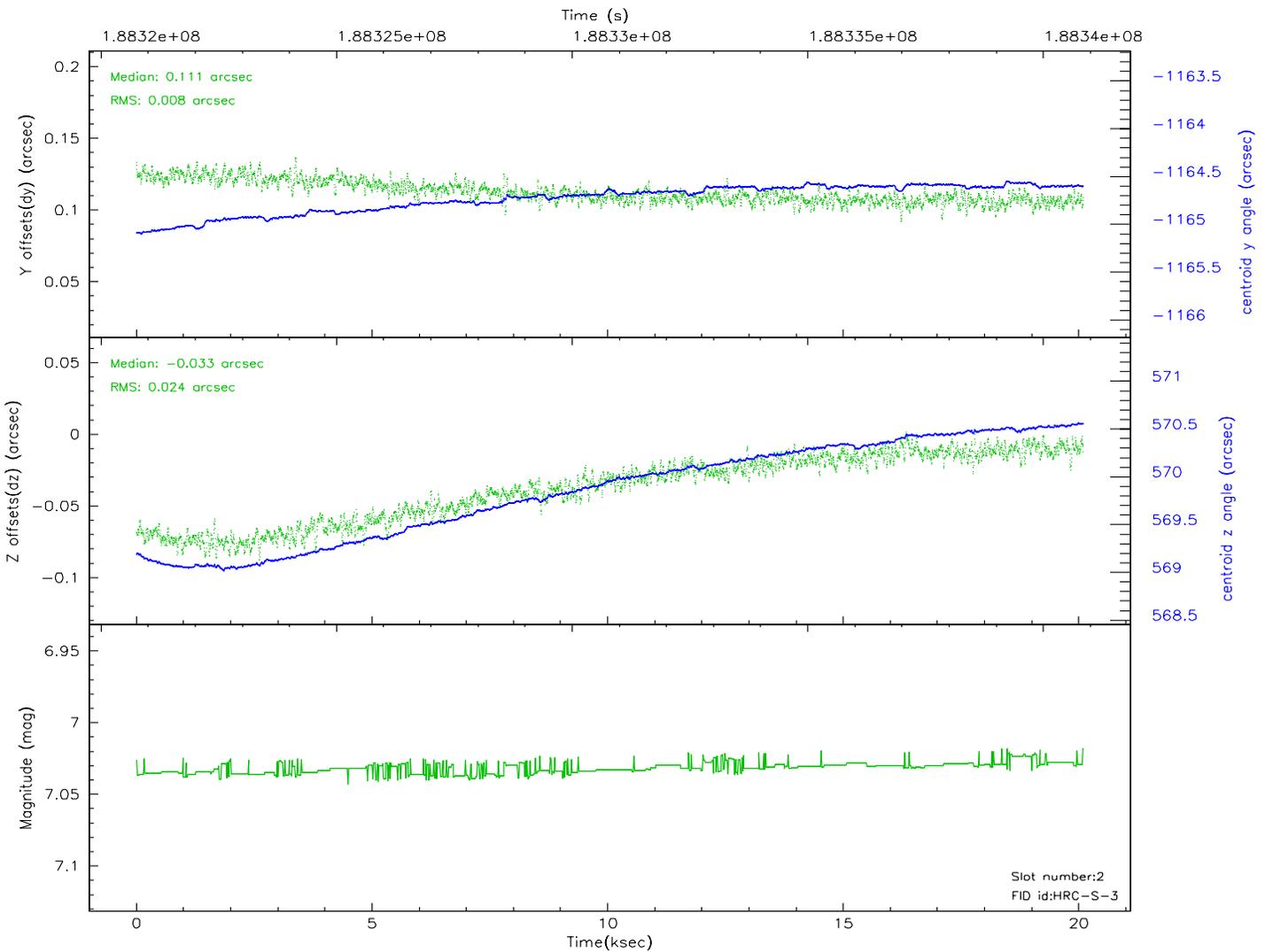
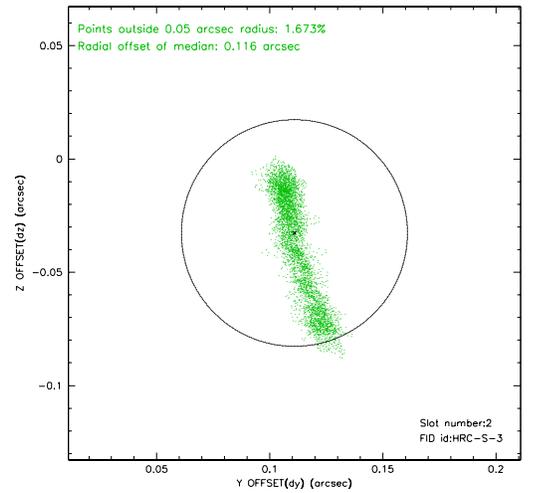
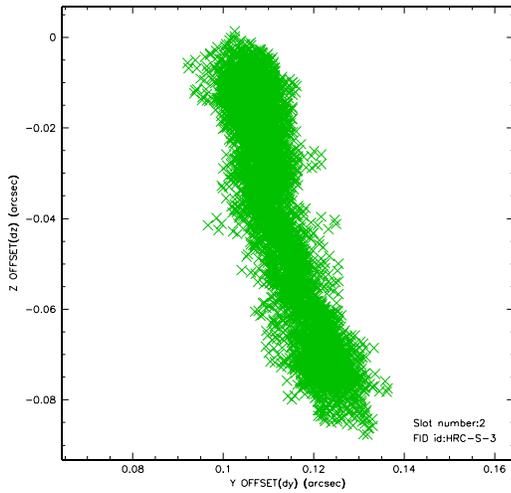
### 2.5.1 Slot 0



## 2.5.2 Slot 1

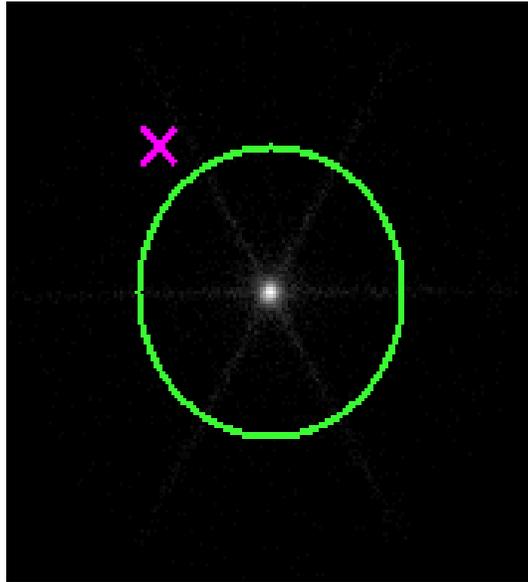


### 2.5.3 Slot 2



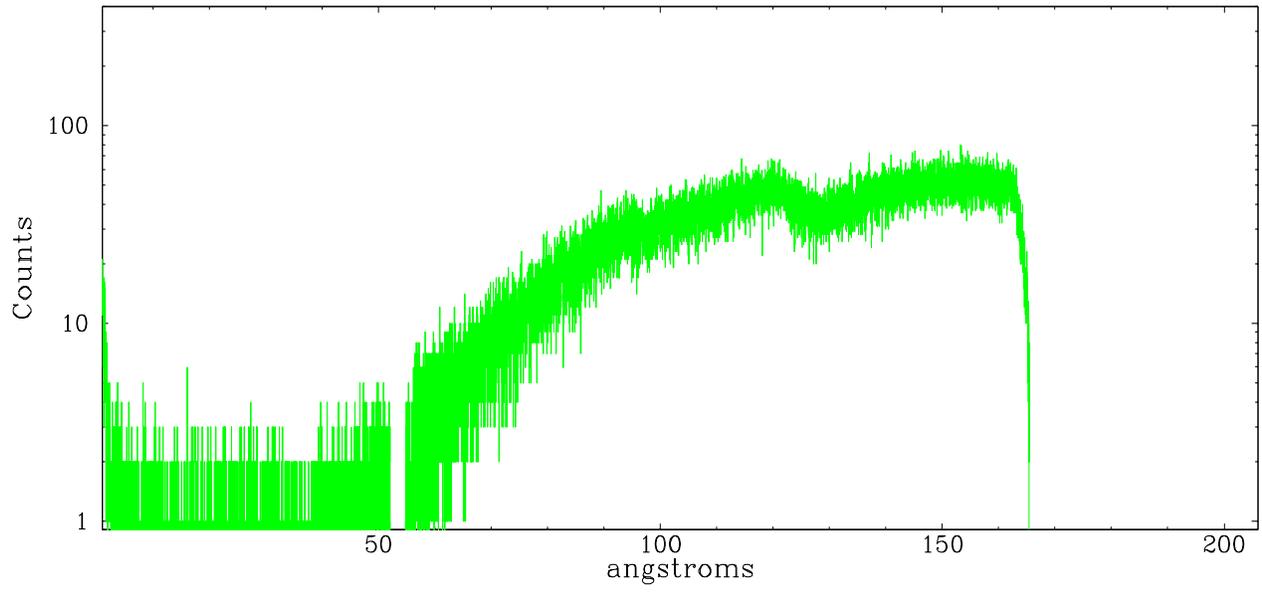
## 3 Gratings

### 3.1 LETG Arm

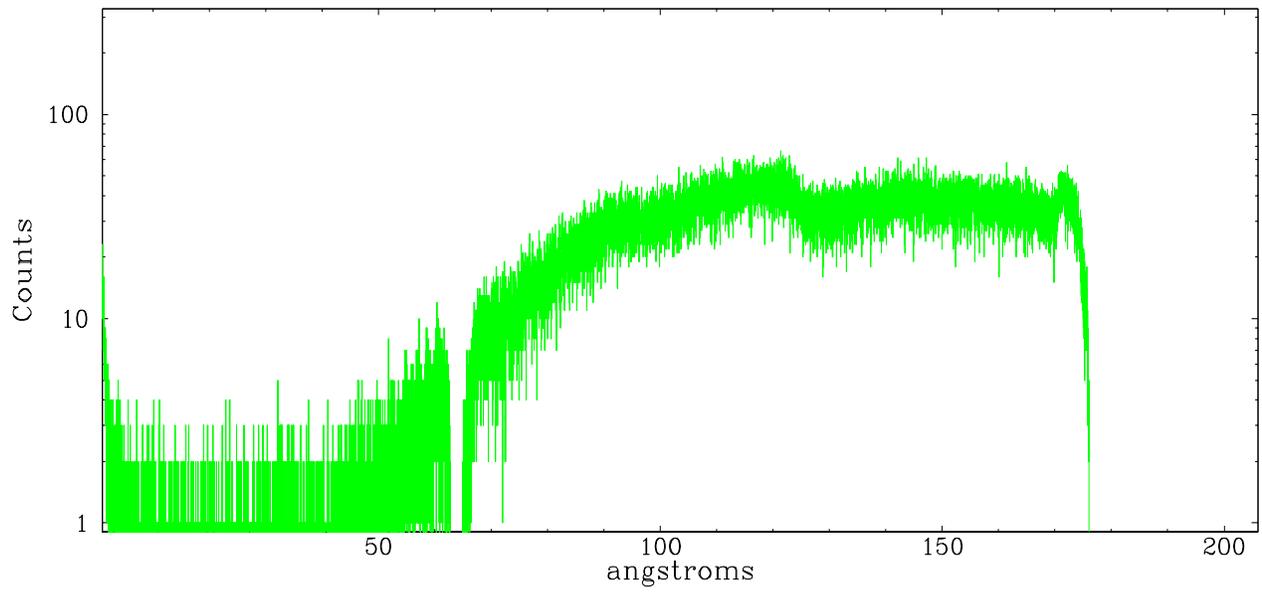


LETG Zero Order

leg order -1



leg order +1



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.06.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.853

## A.2 Comments

Window constraint met.