

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 2600 - L2 Version 3  
Chandra X-Ray Center

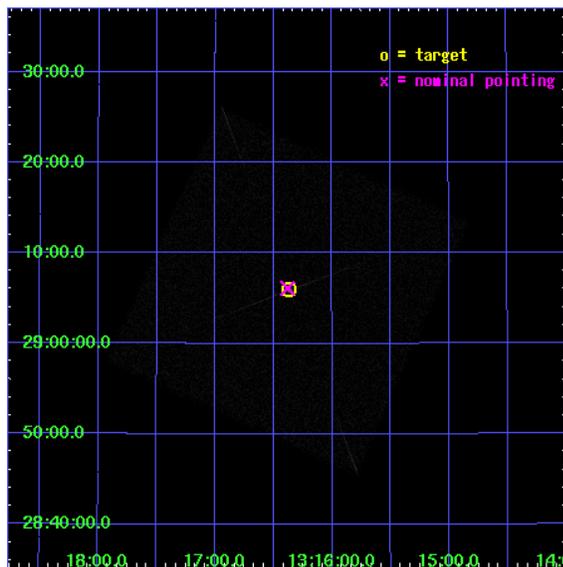
L2 Processing Date : Nov 20 2007

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# 1 Front

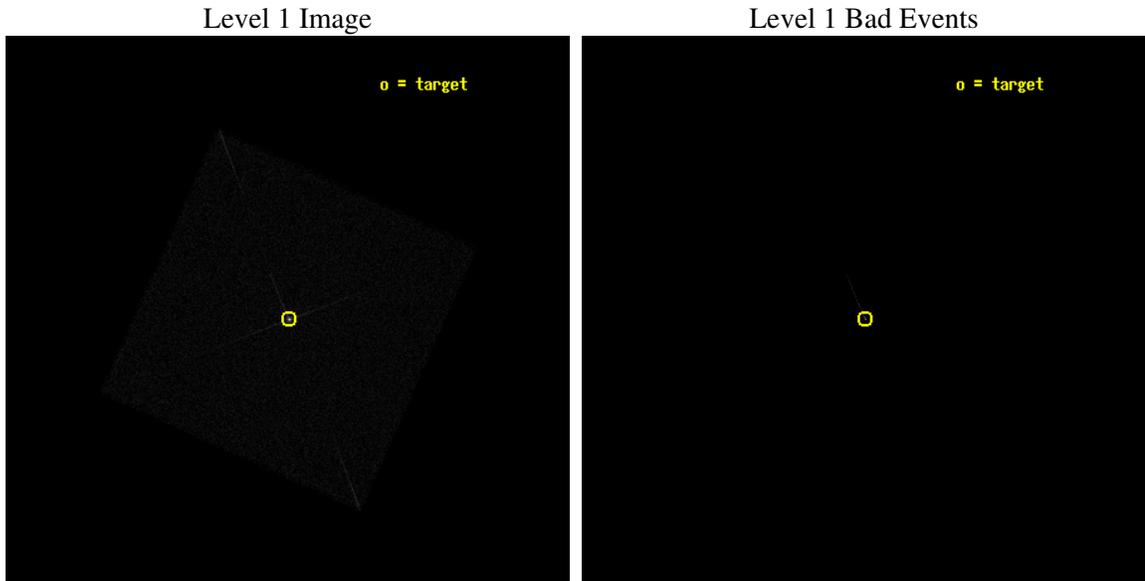
seq_num	290156
obs_id	2600
title	AO3 LETG/HRC-I CALIBRATION OBSERVATIONS OF HZ43
observer	Dr. CXC Calibration
object	HZ43
ra_targ	199.092083
dec_targ	29.099
ra_nom	199.09518292166
dec_nom	29.10214636485
roll_nom	69.215356170961
revision	3
ontime	1895.4813261479
livetime	1882.9361218254
l2events	81805



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	1
ascdsver	7.6.11.2
caldbver	3.4.1
date	2007-11-20T21:00:30
revision	3

sched_exp_time	2000.000000
ontime	1895.4813261479
l1events	136984

### 2.1.3 Events

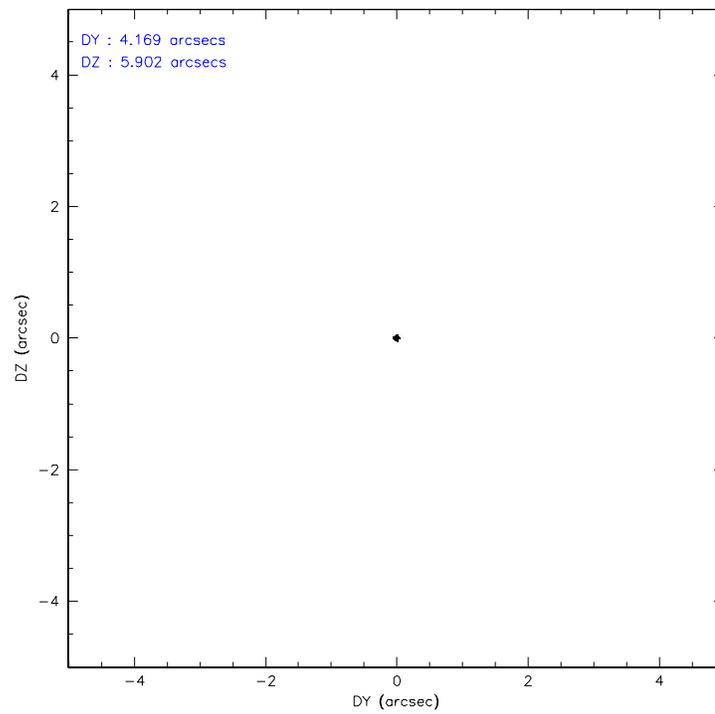
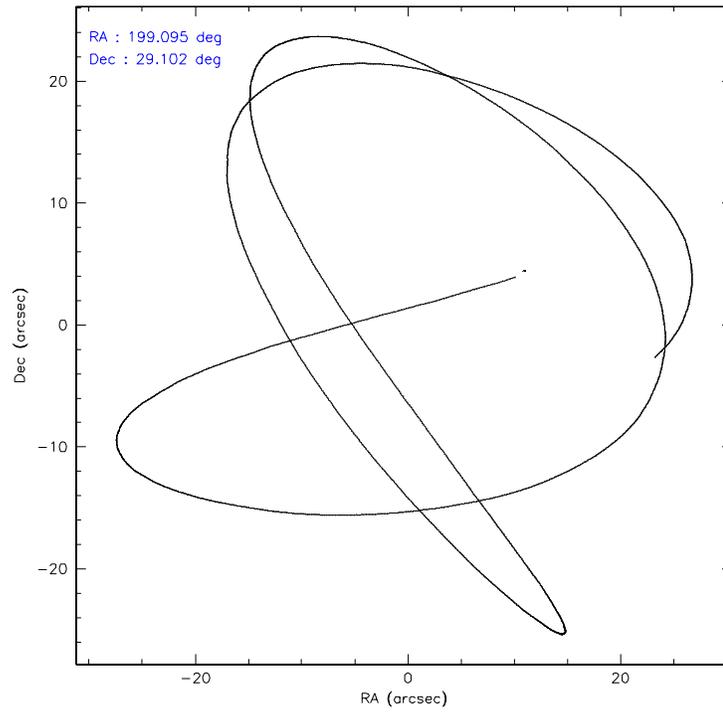
#### Level 1 Events

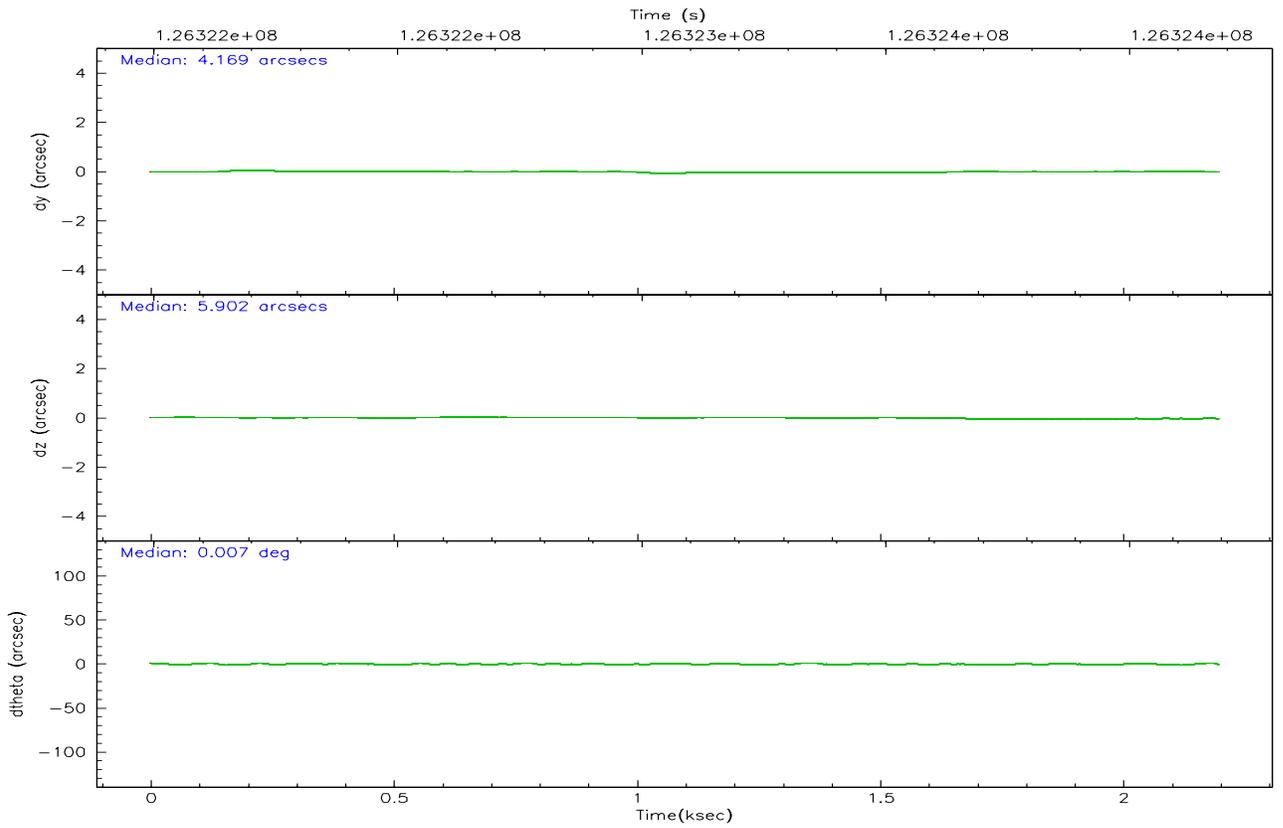
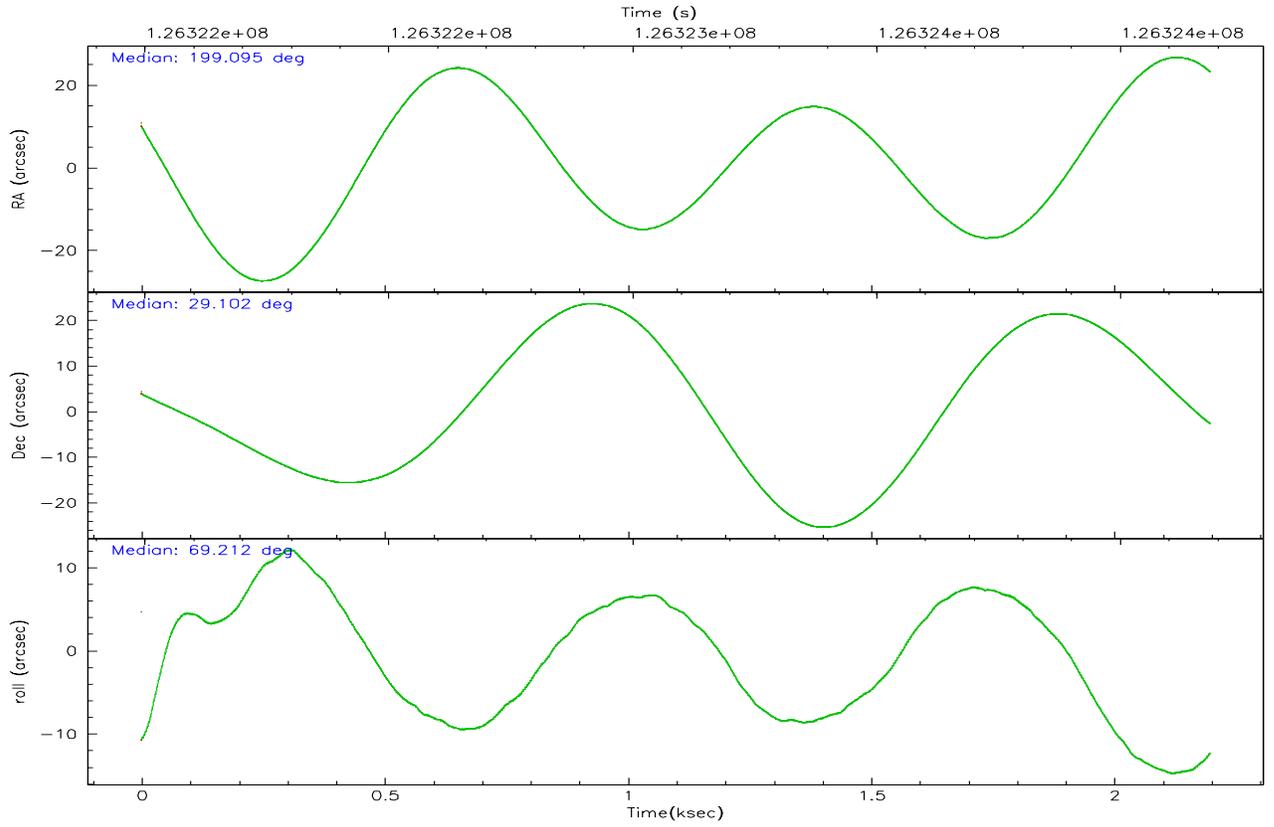
	<b>segment 0</b>
level 1 events	136984
rejected events	20052
rejected %	14%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	6	6
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			
Pointing RA	199.101033	199.0951829216631			
Pointing Dec	29.075377	29.10214636485009			
Pointing Roll	69.307998	69.21535617096131			
Window start time	126230464.184000	126230464.184000			
Window stop time	128822464.184000	128822464.184000			
SIM focus pos (mm)	-1.040293	-1.038866356238299			
SIM defocus (mm)	0	0.001426264420575141			
SIM translation stage pos (mm)	126.985494	126.9854943052878			
SIM translation stage offset (mm)	0	-5.413686238853188e-06			
Observation start time	126322188.184000	126321775.82801			
Observation start date	2002-01-02T01:28:44	2002-01-02T01:22:55			
Observation end time	126324188.184000	126324321.41561			
Observation end date	2002-01-02T02:02:04	2002-01-02T02:05:21			

## 2.3 Aspect



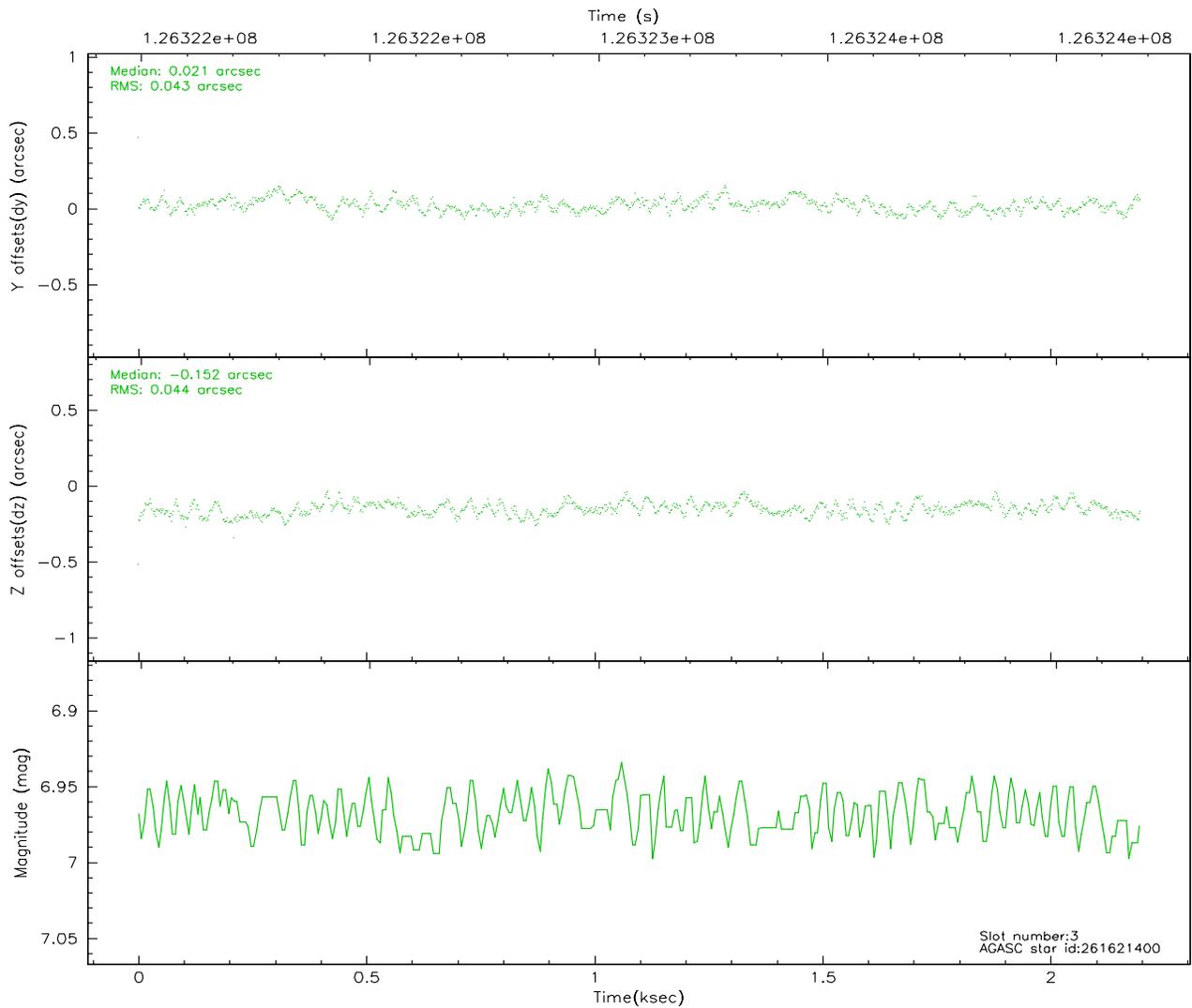
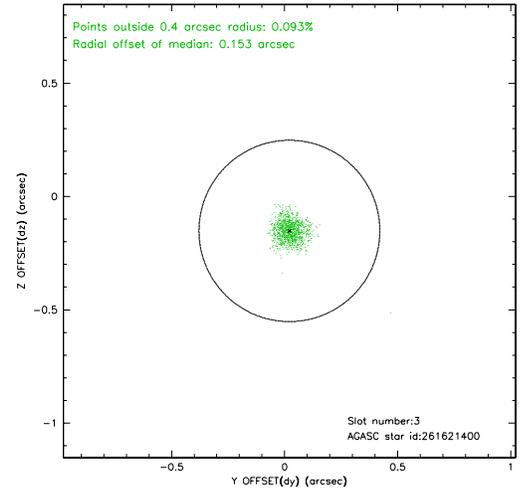
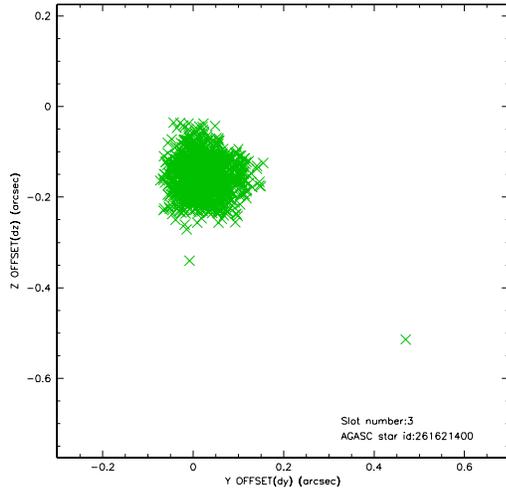


### Slot Statistics

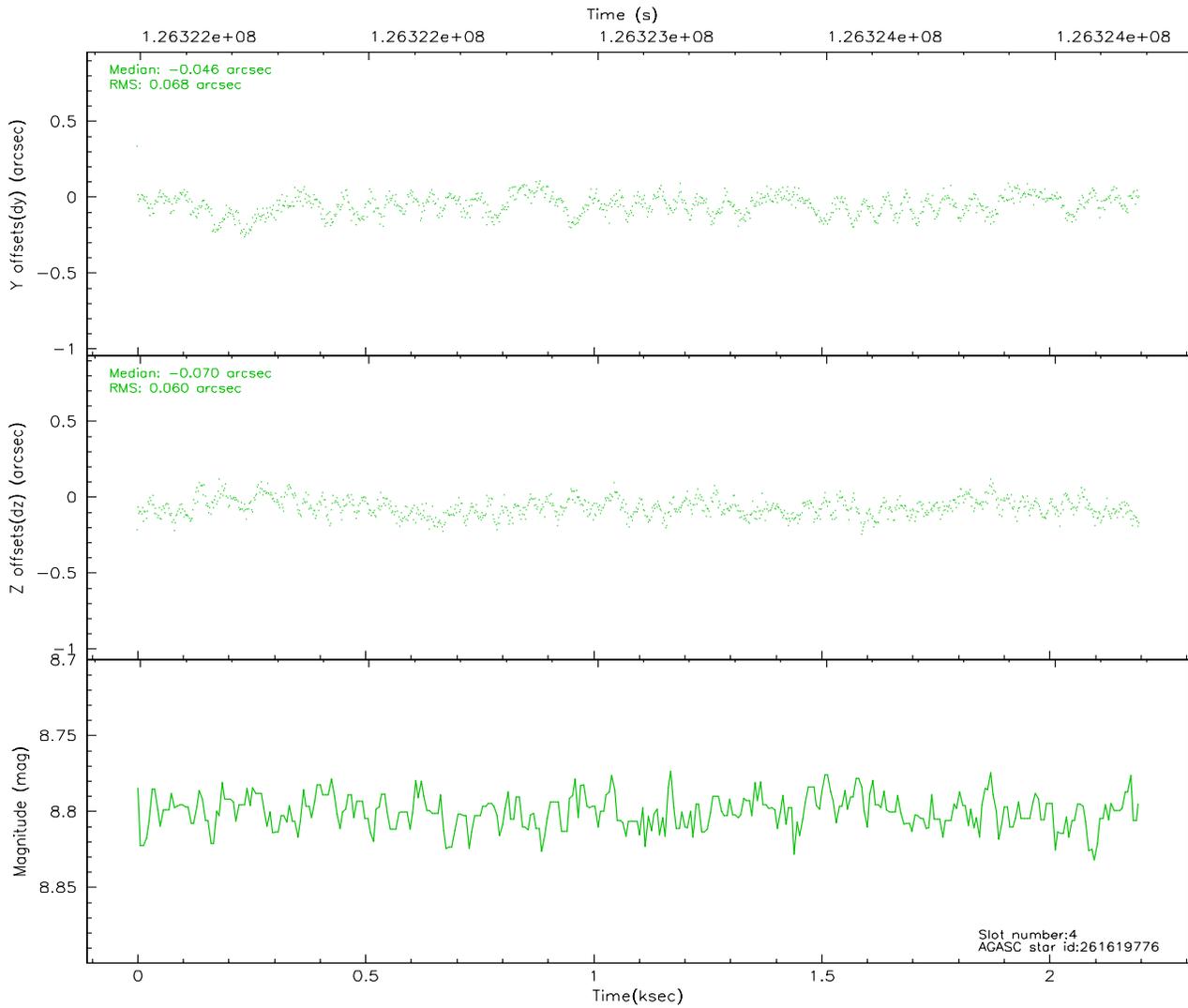
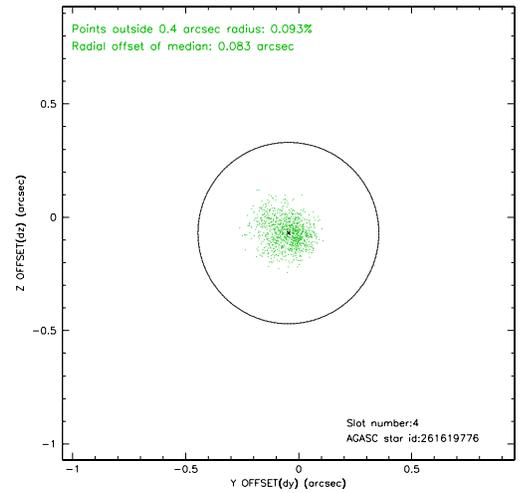
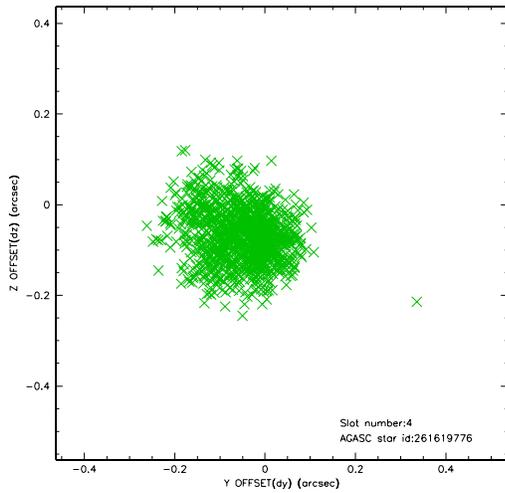
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.97	537	0.010	0.024	0.006	0.010	0.000000	0.000000	-759.62	-1293.76
1	FID	HRC-I-2	7.01	537	0.081	-0.055	0.005	0.010	0.000000	0.000000	851.67	-1297.78
2	FID	HRC-I-3	7.06	537	0.028	-0.059	0.006	0.010	0.000000	0.000000	-1186.57	1008.29
3	GUIDE	261621400	6.97	1073	0.021	-0.152	0.064	0.099	198.901600	28.741982	-1345.41	164.94
4	GUIDE	261619776	8.80	1073	-0.046	-0.070	0.097	0.157	198.654383	29.401174	602.62	1725.95
5	GUIDE	261619992	9.32	1071	0.187	-0.113	0.102	0.172	198.395553	28.647634	-2221.90	1544.81
6	GUIDE	261623040	9.13	1072	-0.224	-0.071	0.079	0.124	198.792686	29.757643	1955.39	1771.49
7	GUIDE	261623624	9.12	1072	0.067	0.405	0.105	0.156	199.611555	28.454113	-1516.79	-2298.68

## 2.4 Star Slots

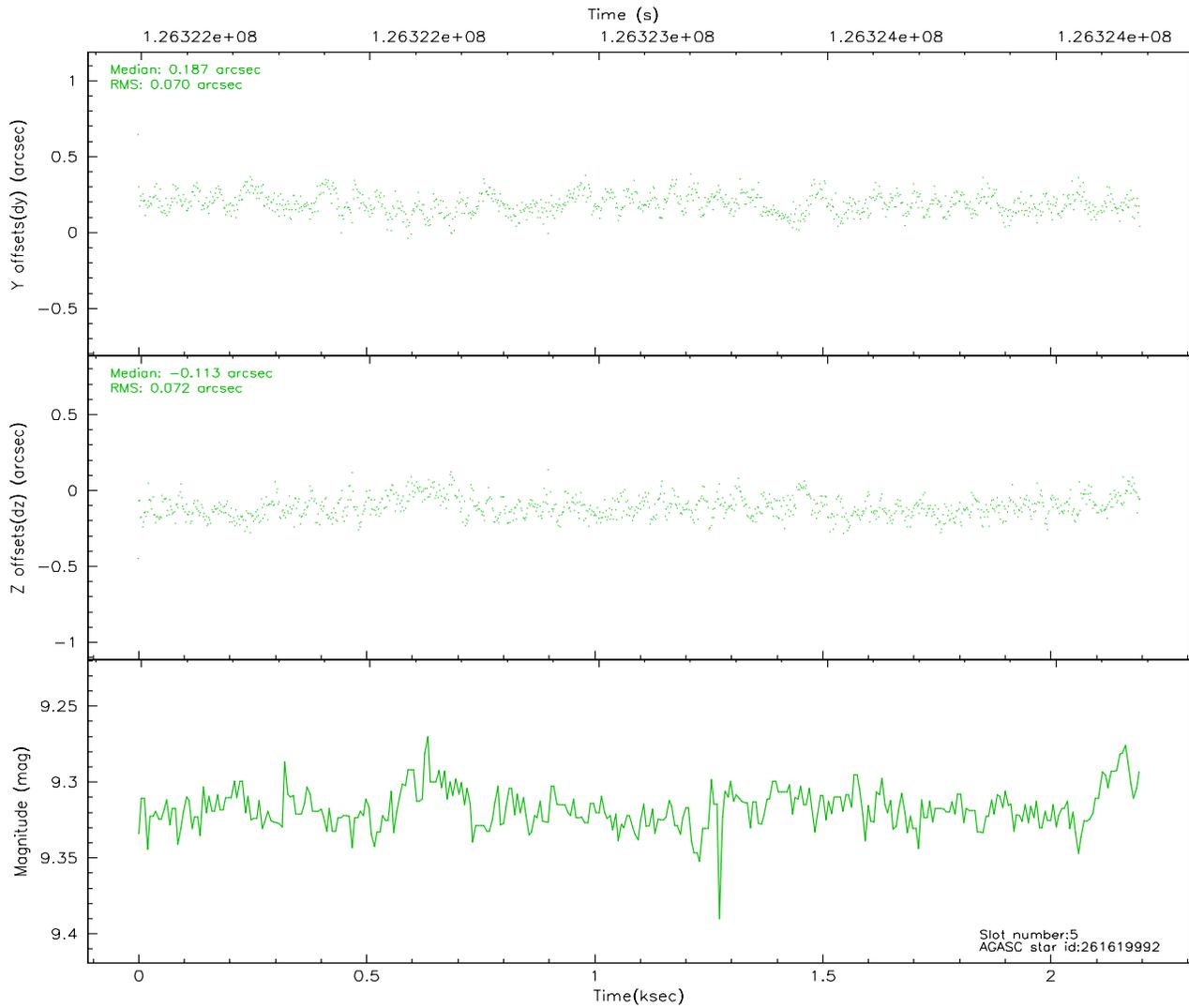
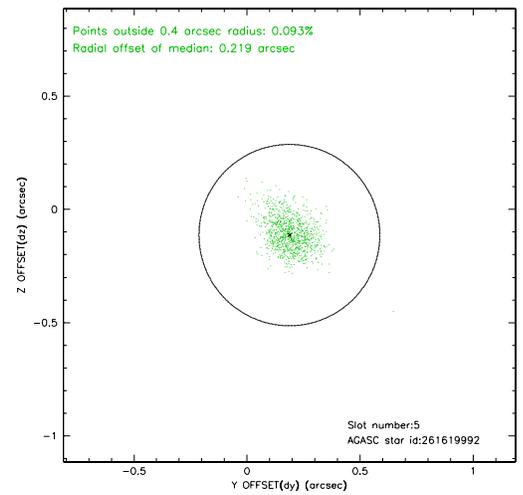
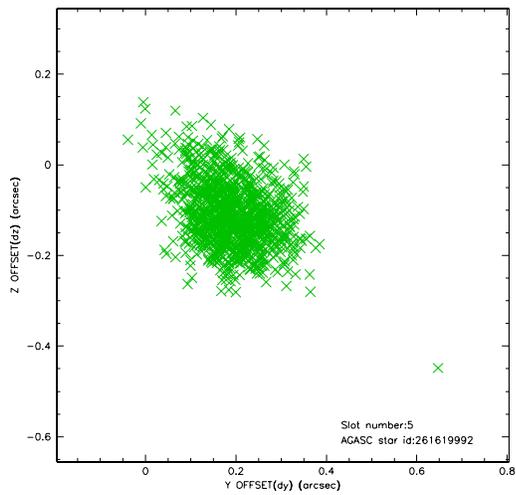
### 2.4.1 Slot 3



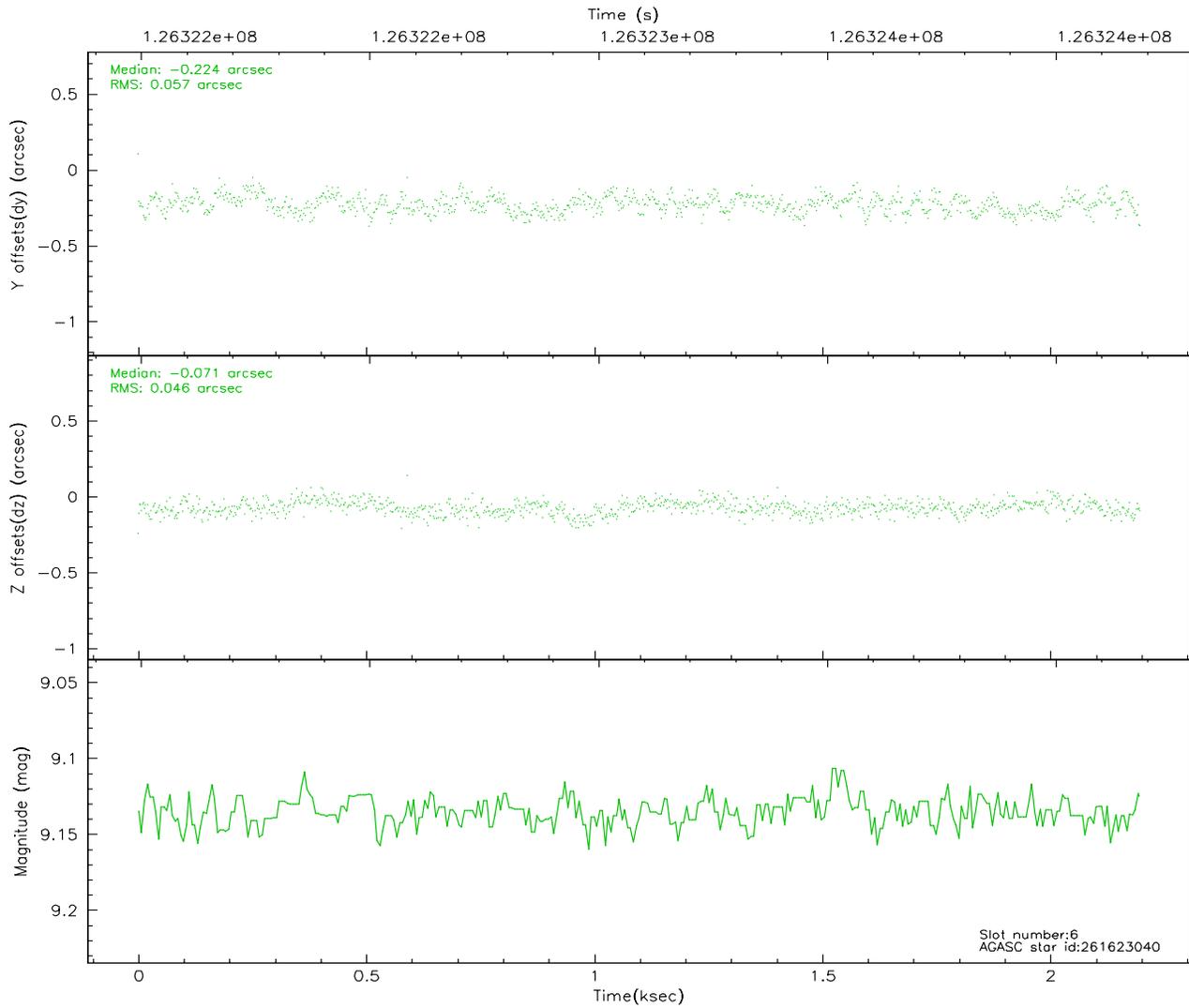
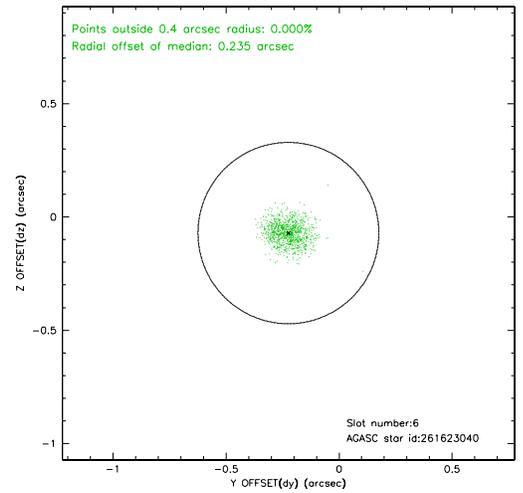
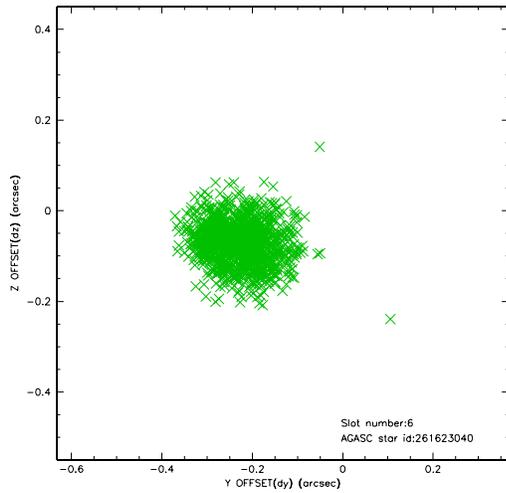
### 2.4.2 Slot 4



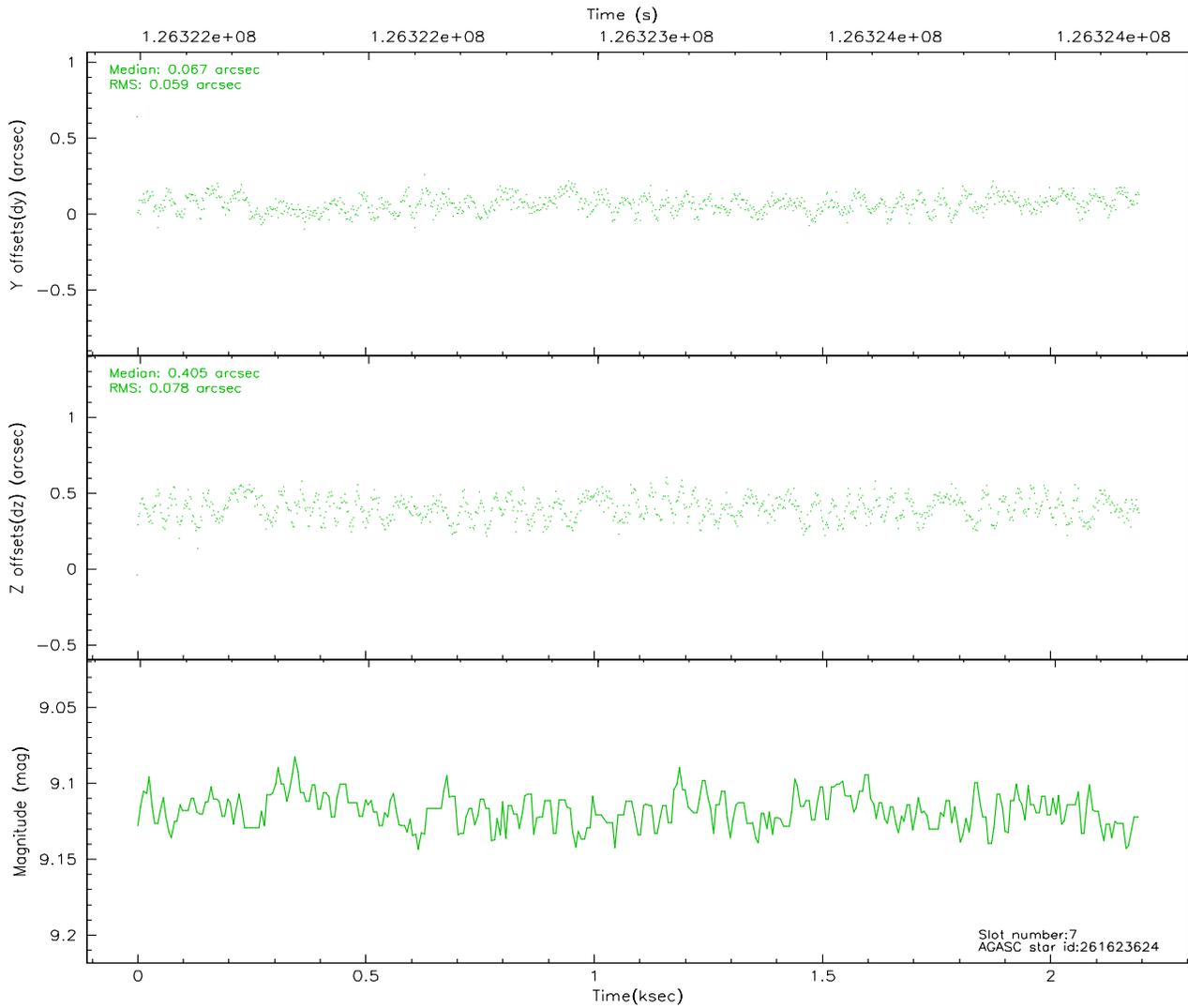
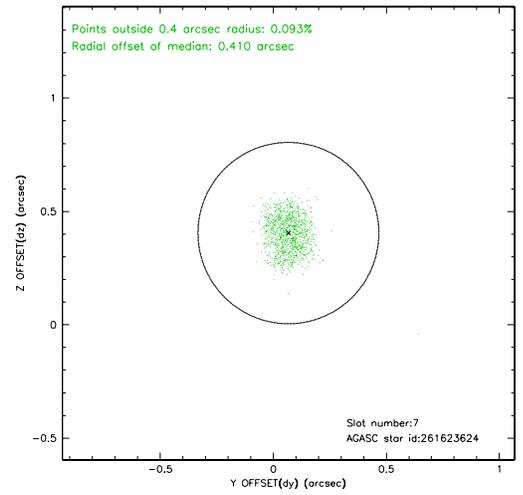
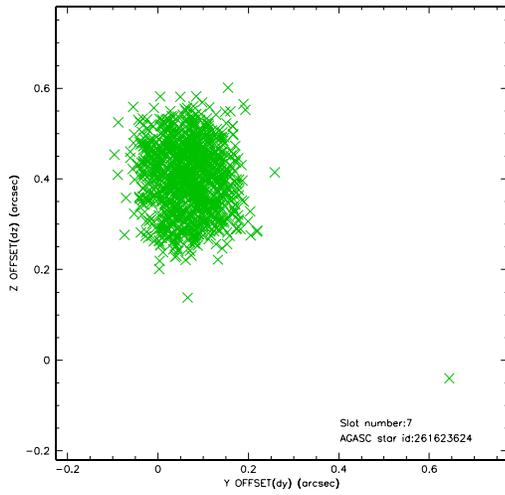
### 2.4.3 Slot 5



### 2.4.4 Slot 6

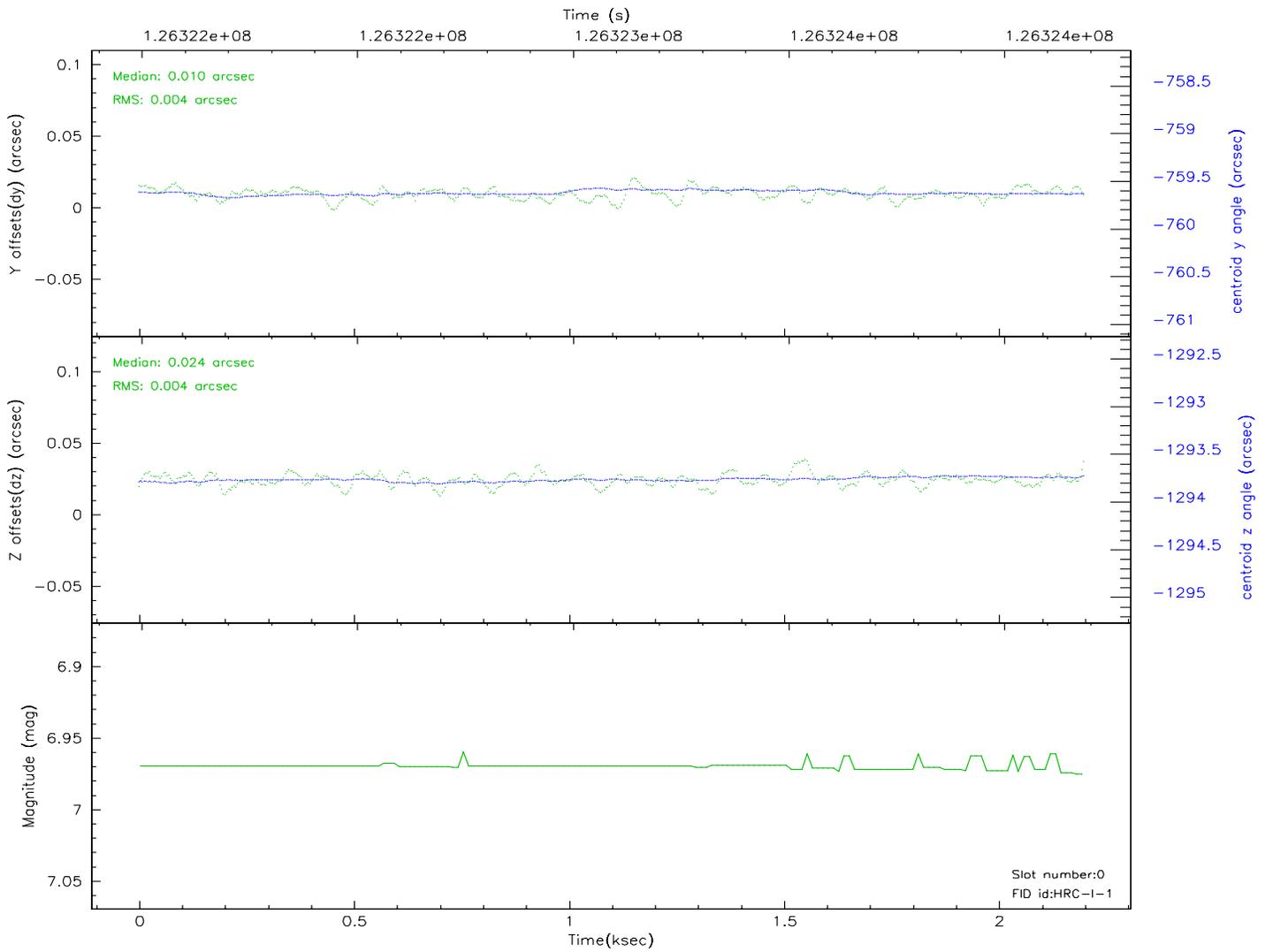
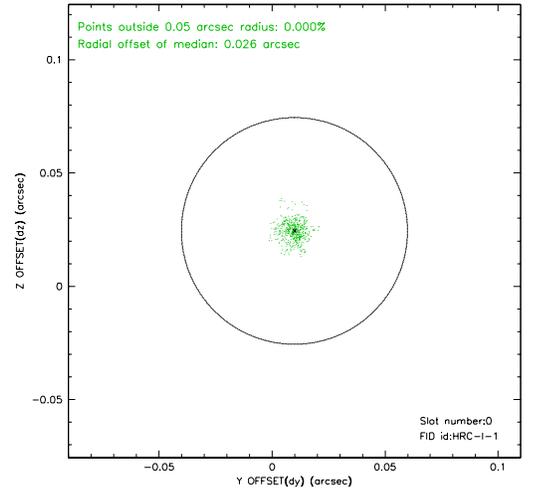
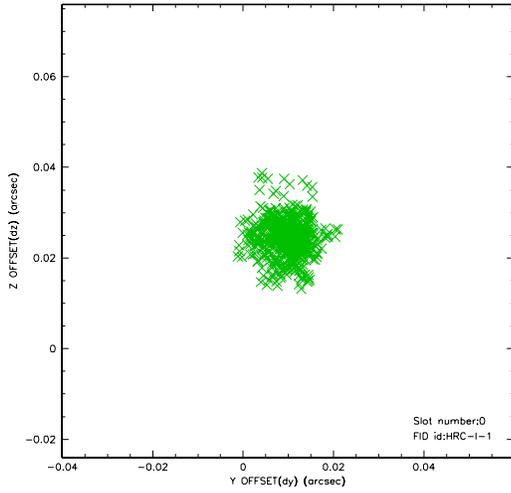


### 2.4.5 Slot 7

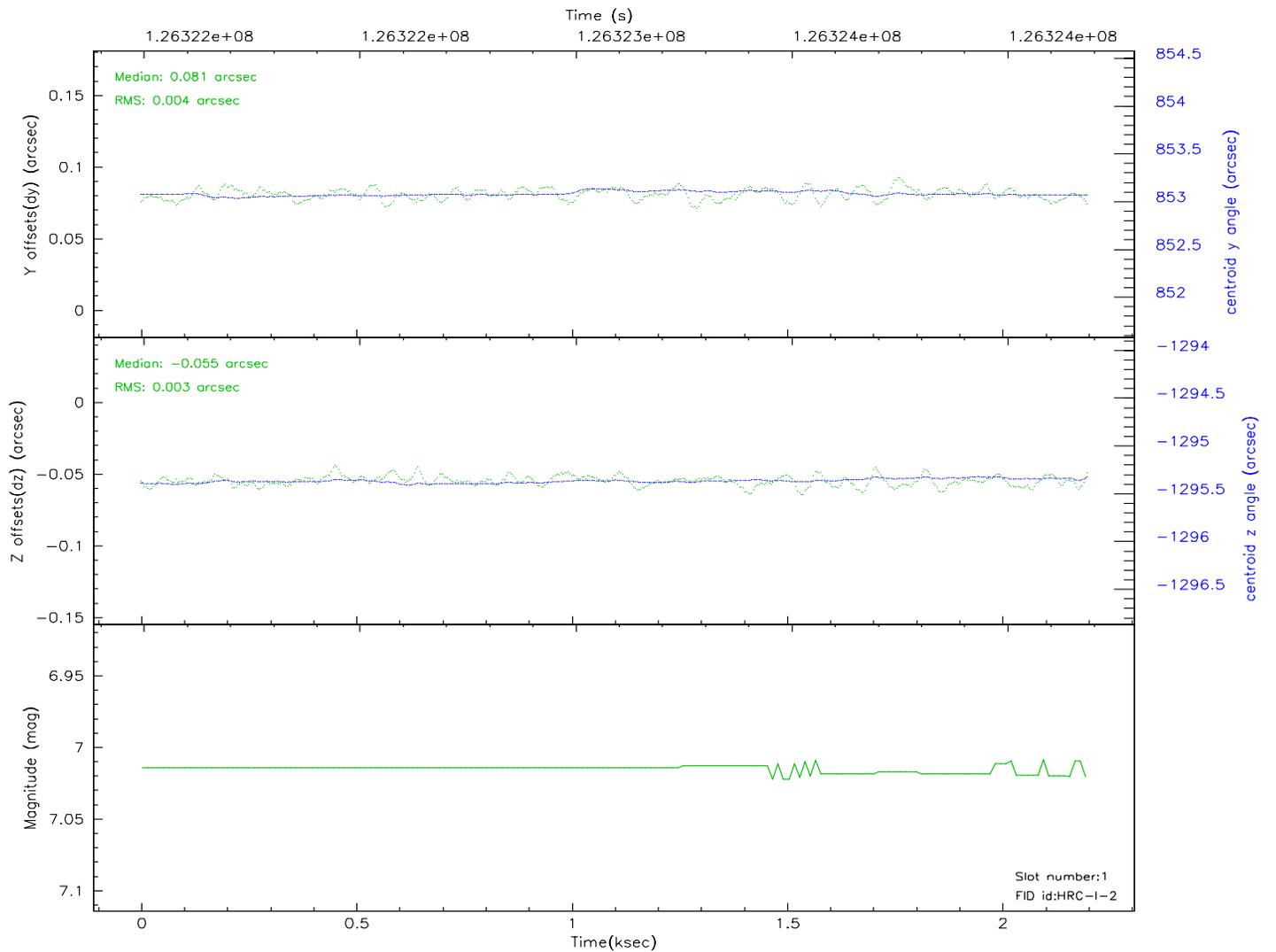
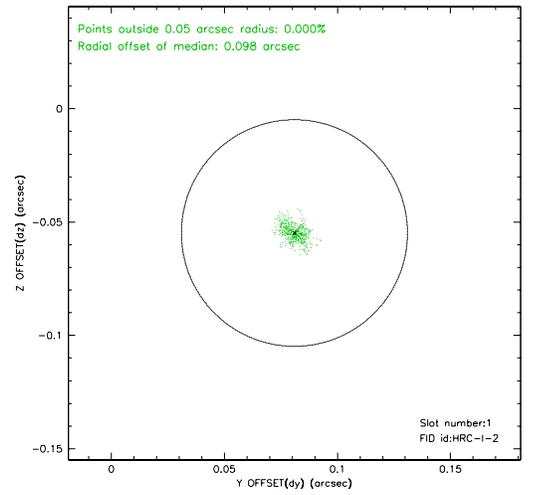
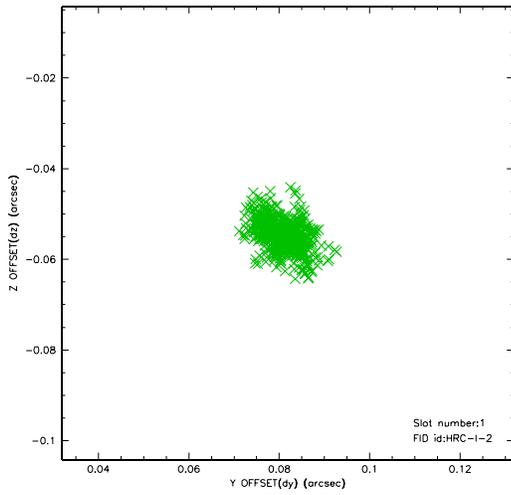


## 2.5 FID Slots

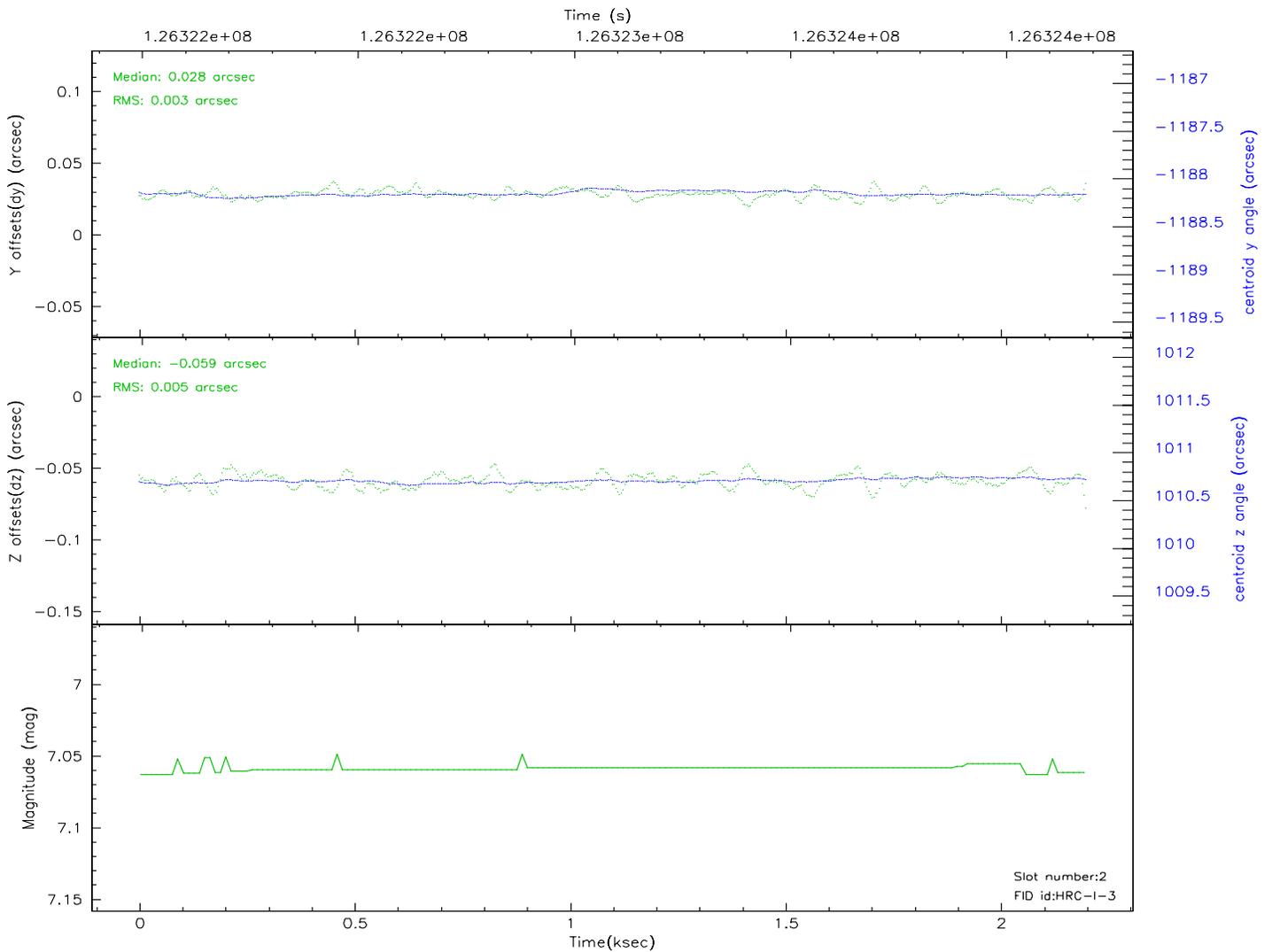
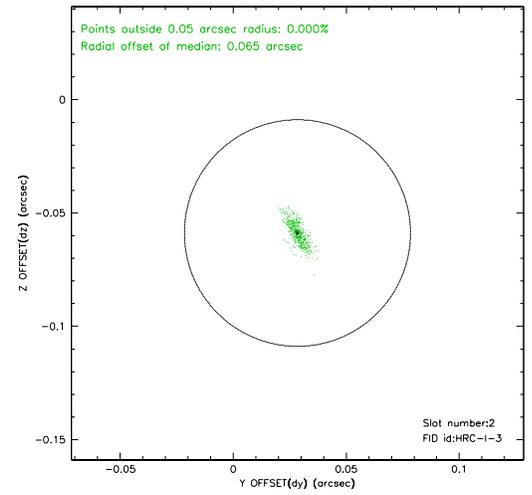
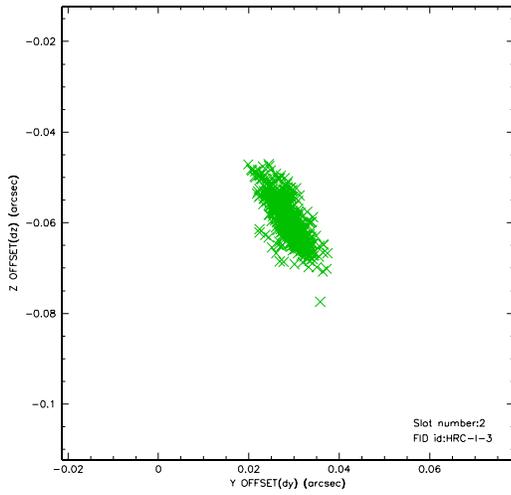
### 2.5.1 Slot 0



## 2.5.2 Slot 1

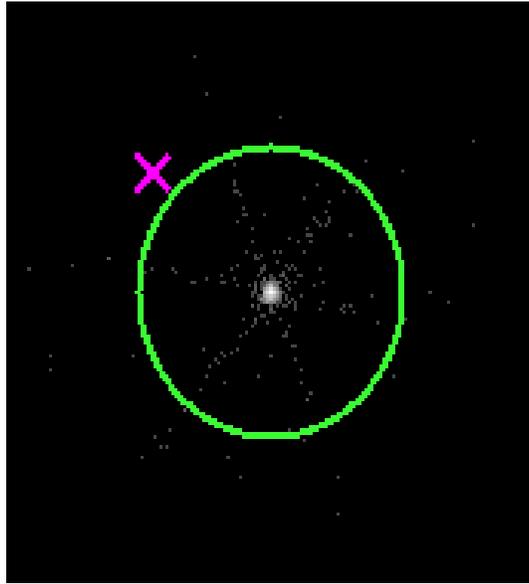


### 2.5.3 Slot 2



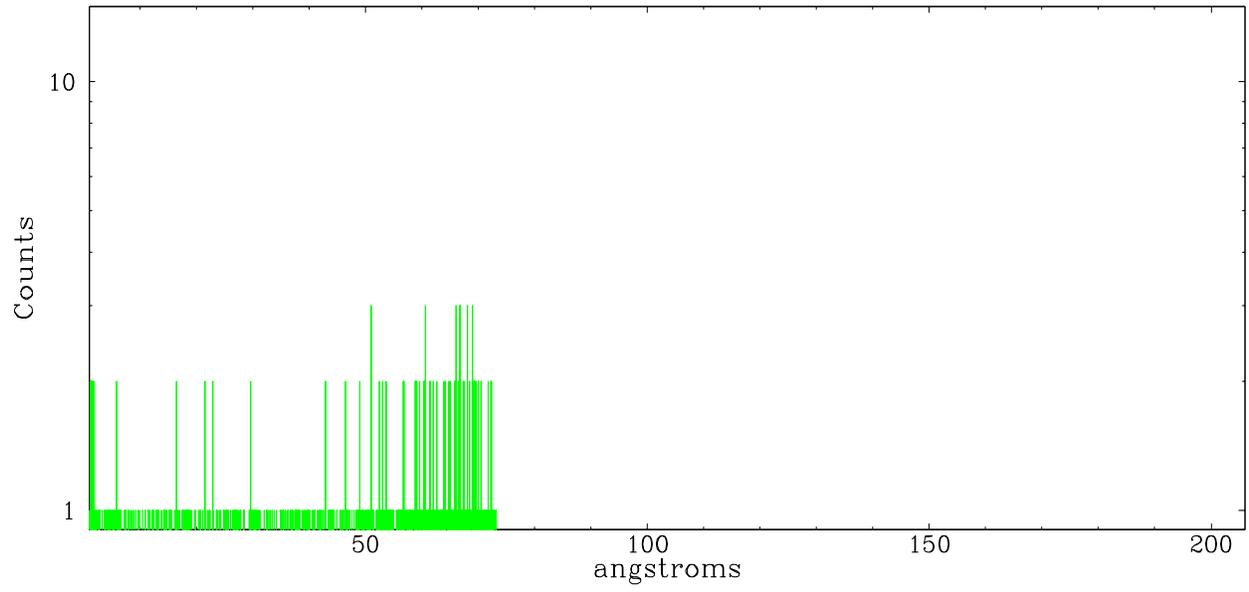
## 3 Gratings

### 3.1 LETG Arm

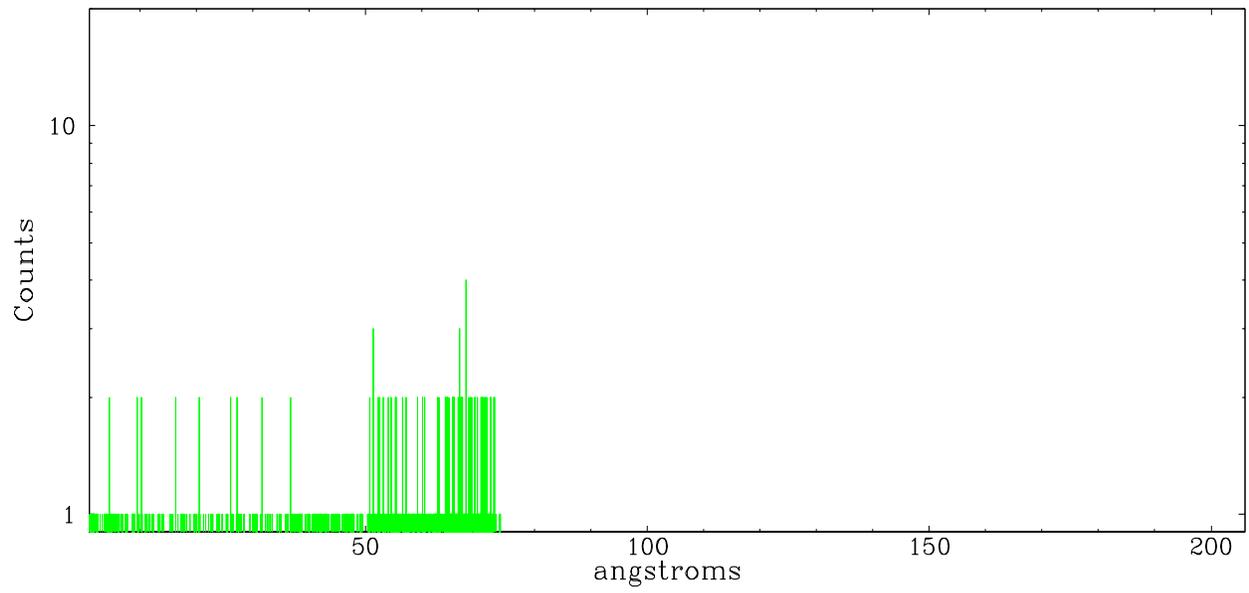


LETG Zero Order

leg order -1



leg order +1



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.893

## A.2 Comments

First 200 seconds not usable because high voltage for the instrument was not fully configured.

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The current observation has been reprocessed as part of ReprO III ('C' supplement) the purpose of which is to update all HRC-I ObsIDs since Jan 2000 to the latest calibrations available for that configuration. Specifically, we are updating the DEGAP solution and the Gain Maps applied. For more information see the ReprO IIIC web page at

<http://asc.harvard.edu/cda/repro3.html#IIIC>

and the associated links.