

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 5172 - L2 Version 001  
Chandra X-Ray Center

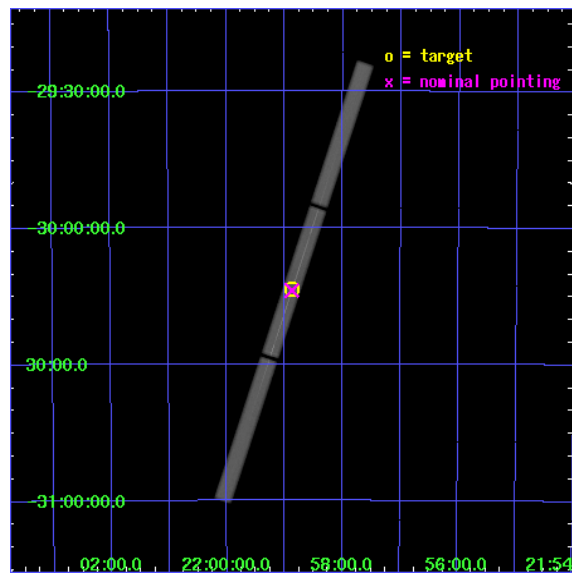
L2 Processing Date : Apr 10 2006

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# 1 Front

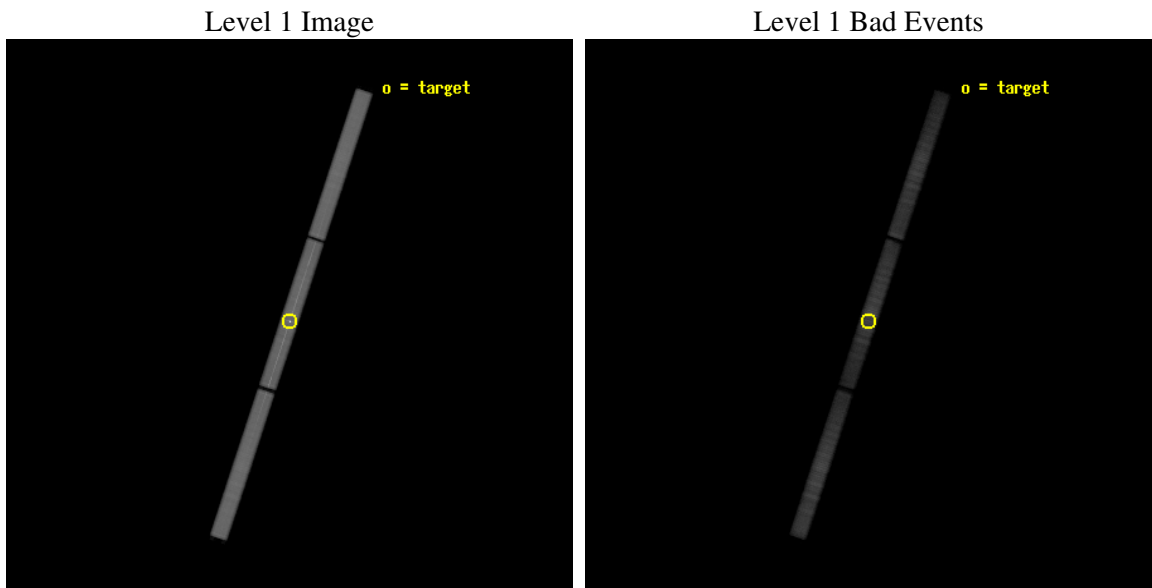
seq_num	790092
obs_id	5172
title	AO5 Calibration Observations of PKS2155-304
observer	Dr. CXC Calibration
object	PKS2155-304
ra_targ	329.716667
dec_targ	-30.225556
ra_nom	329.7182655011
dec_nom	-30.23000270543
roll_nom	288.26715173986
revision	2
ontime	27165.576219827
livetime	26930.430379205
l2events	1982266



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



## 2.1.2 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-04-10T11:05:02
revision	2

sched_exp_time	27000.000000
ontime	27165.576219827
l1events	2830519

## 2.1.3 Events

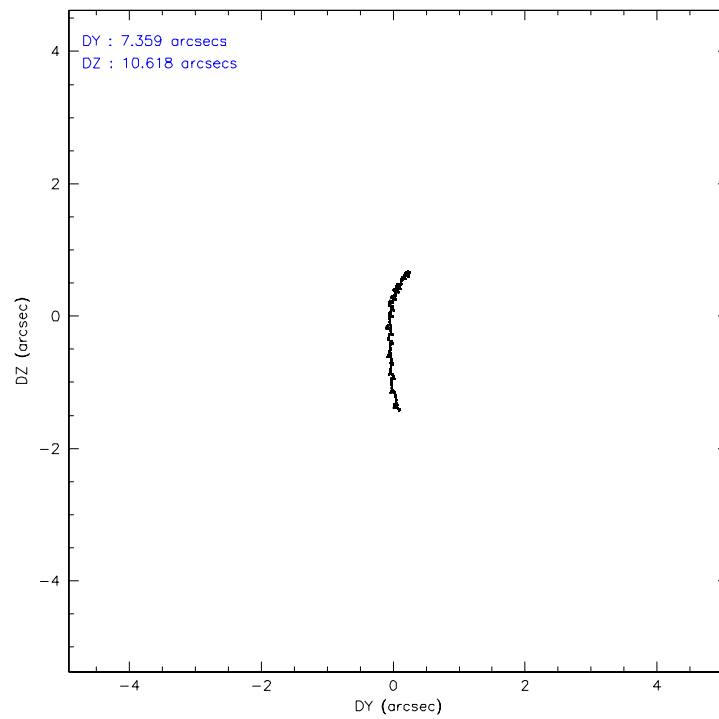
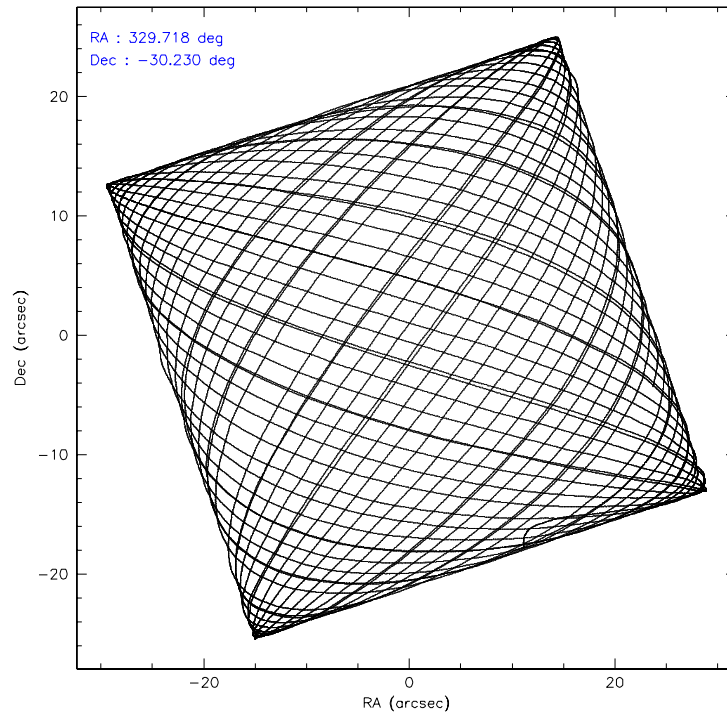
### Level 1 Events

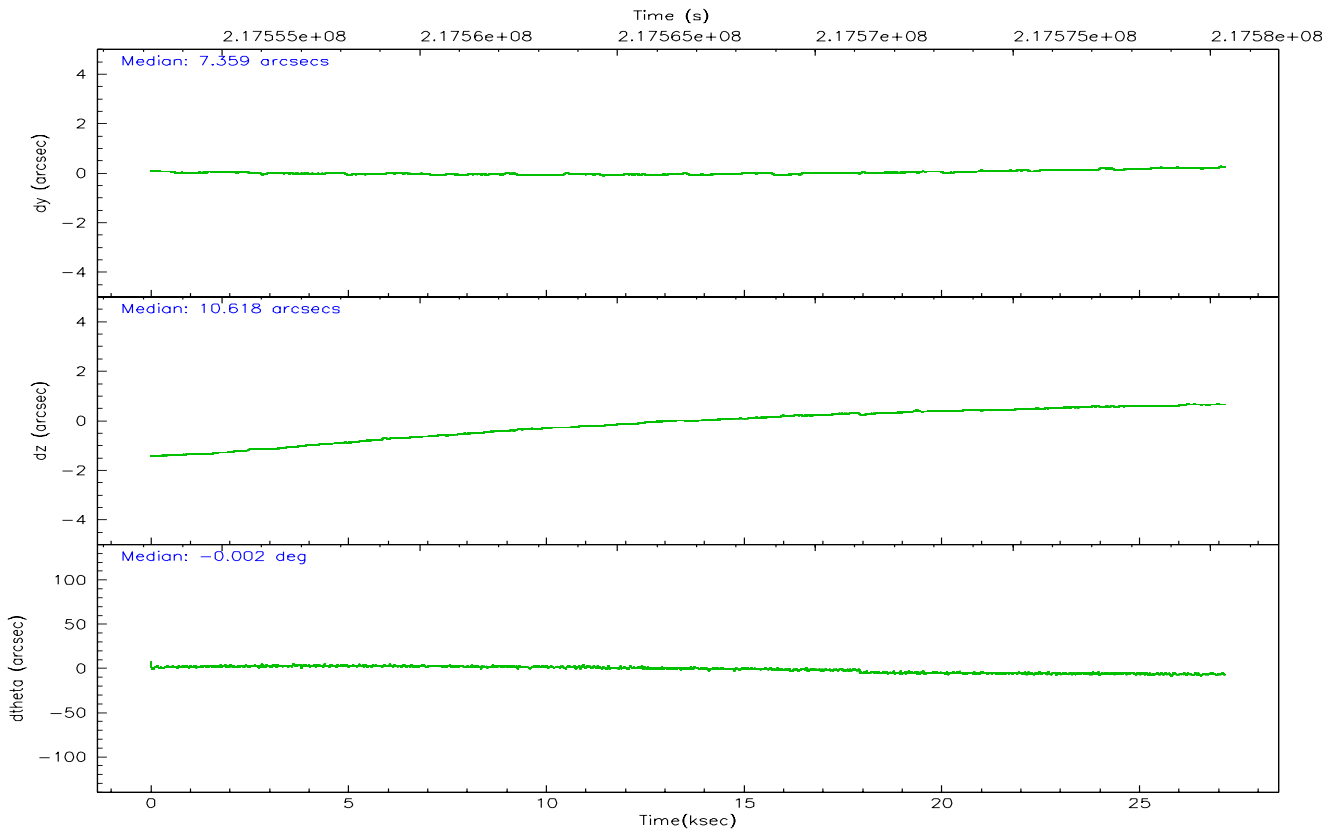
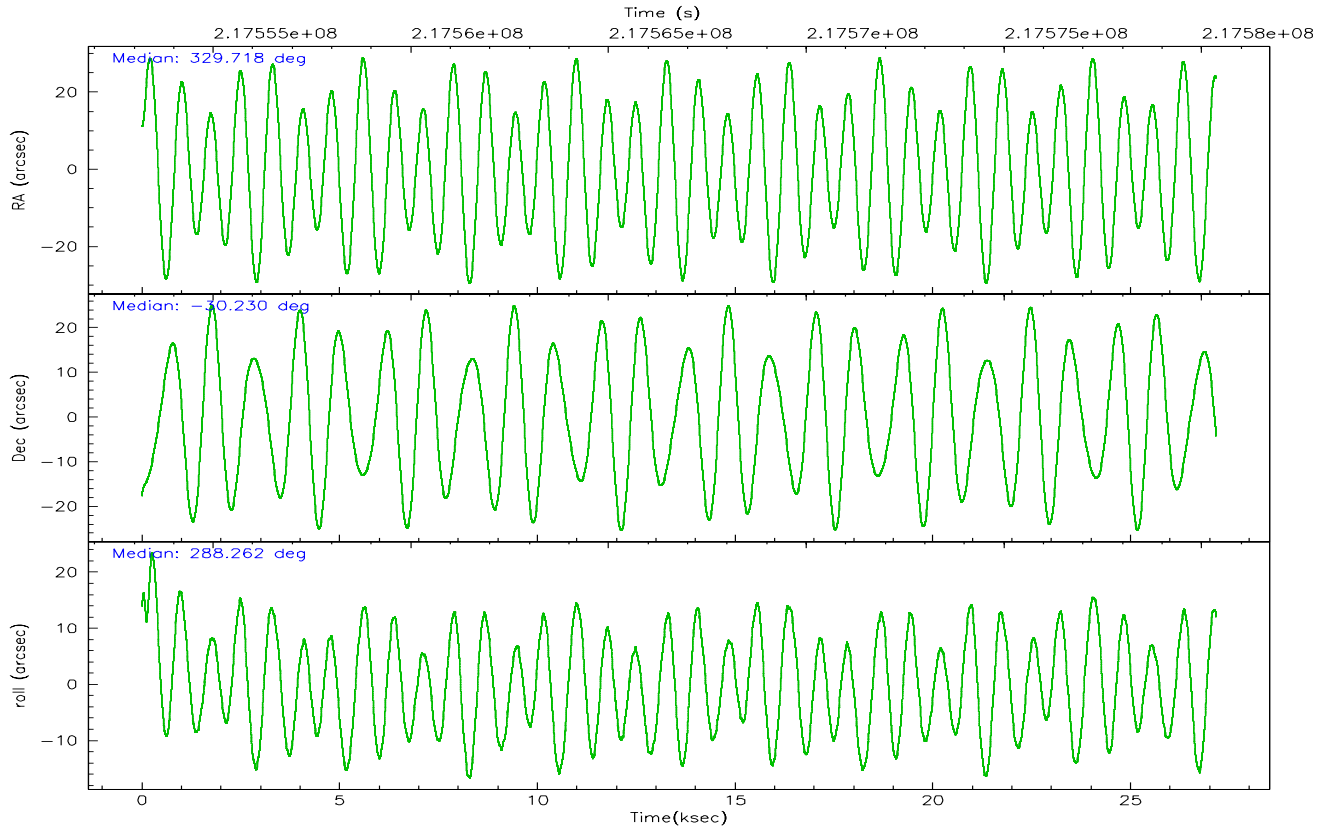
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	948909	957068	924542
rejected events	192802	205856	228290
rejected %	20%	21%	24%

## 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	329.692456	329.7182655501133			
Pointing Dec	-30.212083	-30.23000270543032			
Pointing Roll	288.186822	288.2671517398609			
Window start time	215654464.184000	215654464.184000			
Window stop time	220838464.184000	220838464.184000			
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	217553368.184000	217552274.22274			
Observation start date	2004-11-22T23:28:24	2004-11-22T23:11:14			
Observation end time	217580368.184000	217581176.14903			
Observation end date	2004-11-23T06:58:24	2004-11-23T07:12:56			

## 2.3 Aspect



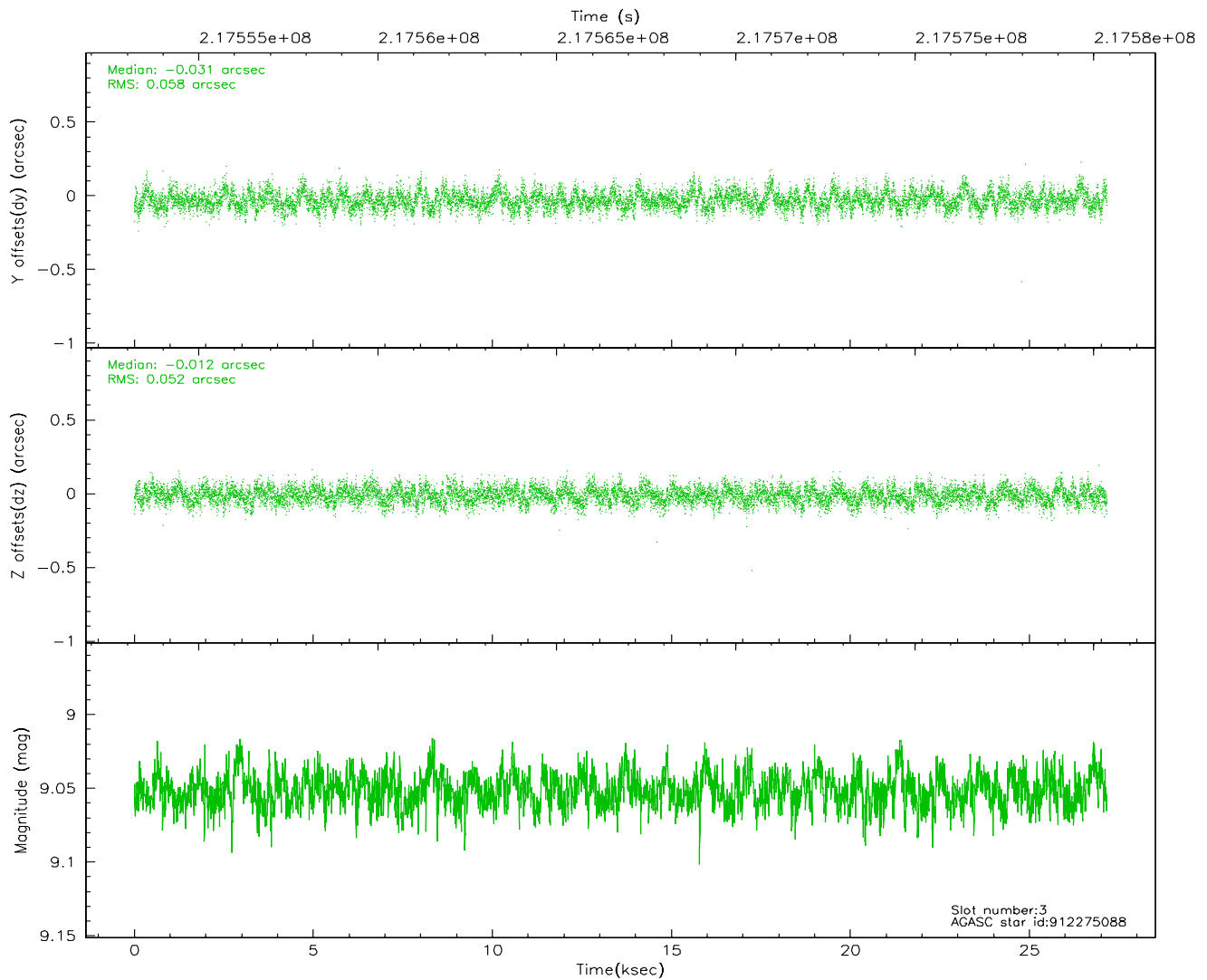
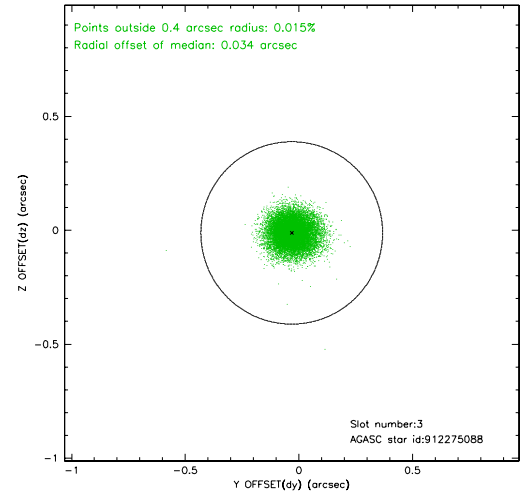
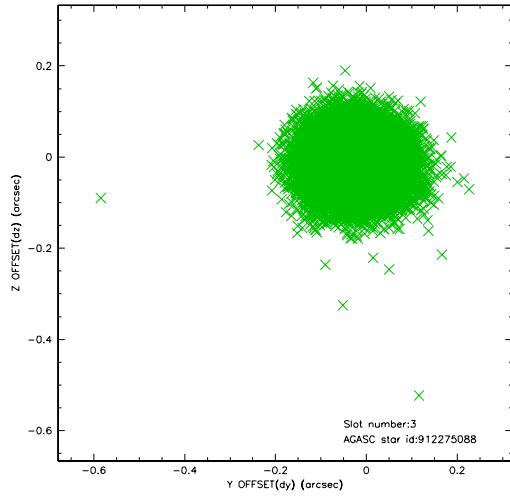


### Slot Statistics

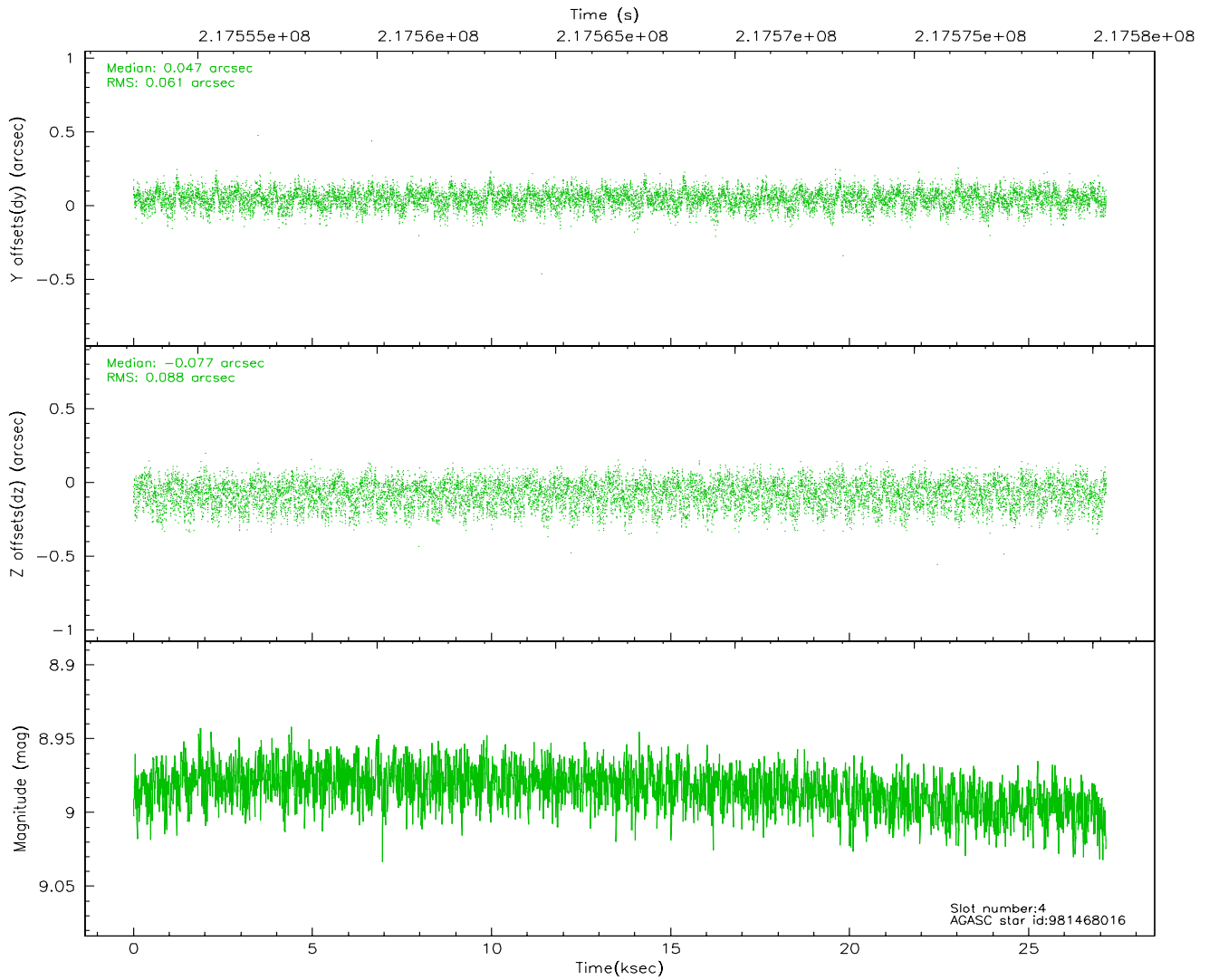
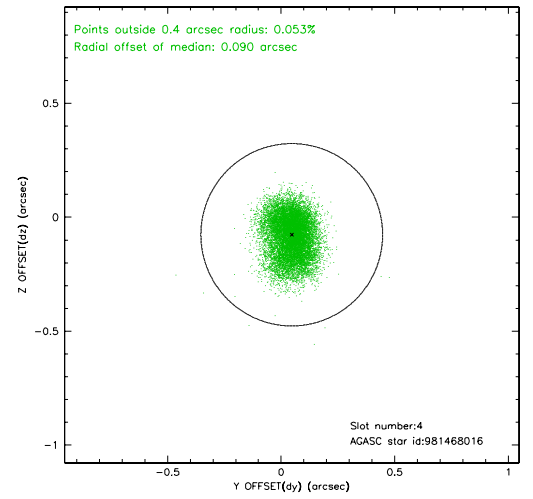
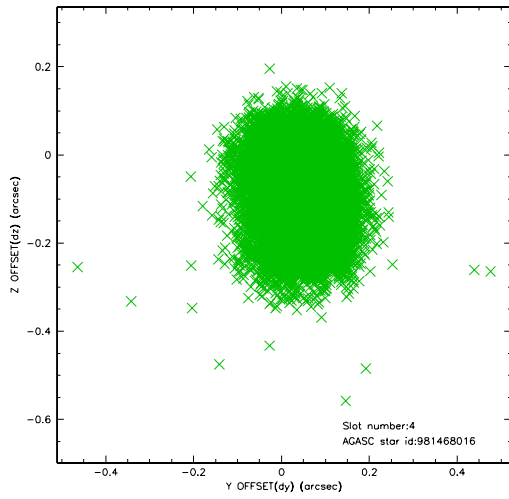
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-2	7.00	6626	0.151	-0.141	0.039	0.051	0.000000	0.000000	1238.15	-451.77
1	FID	HRC-S-3	7.01	6626	0.063	-0.092	0.011	0.018	0.000000	0.000000	-1164.13	570.44
2	FID	HRC-S-4	6.96	6626	0.194	-0.064	0.043	0.053	0.000000	0.000000	1236.62	573.13
3	GUIDE	912275088	9.05	13244	-0.031	-0.012	0.083	0.132	329.619228	-29.738698	-1690.11	314.44
4	GUIDE	981468016	8.98	13249	0.047	-0.077	0.115	0.183	328.842457	-30.034984	-1422.66	-2320.84
5	GUIDE	981468128	9.37	13241	0.074	0.025	0.101	0.165	329.756350	-30.158334	-121.28	249.42
6	GUIDE	981478152	9.42	13240	0.026	0.166	0.096	0.156	329.415589	-30.057192	-797.56	-645.60
7	GUIDE	912131856	9.76	13232	-0.115	-0.090	0.134	0.217	328.758728	-29.933690	-1849.47	-2458.41

## 2.4 Star Slots

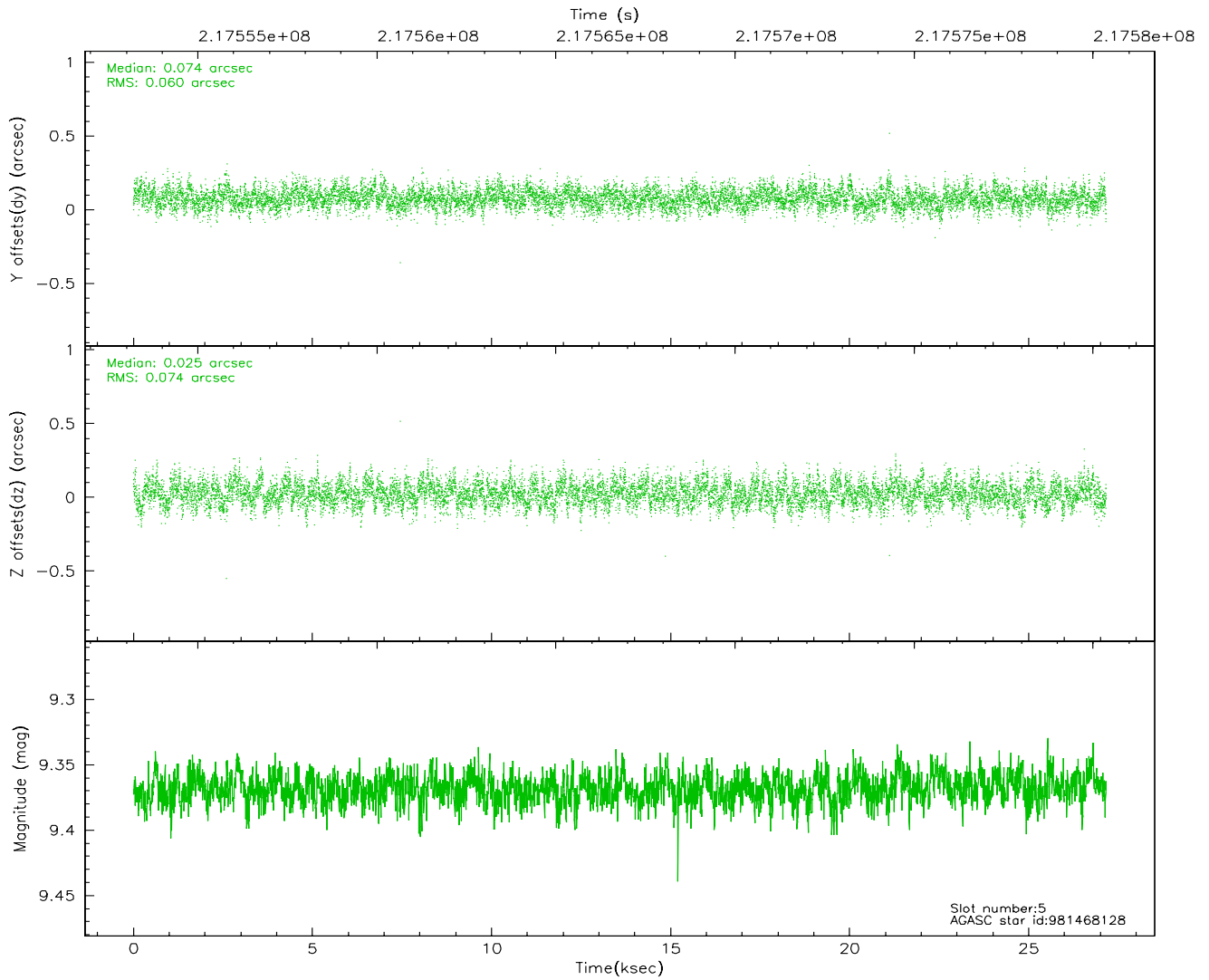
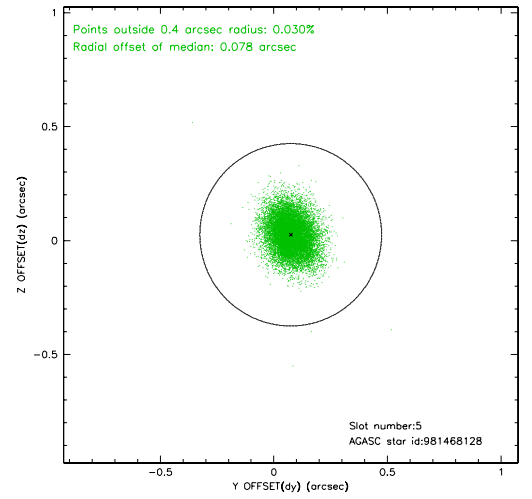
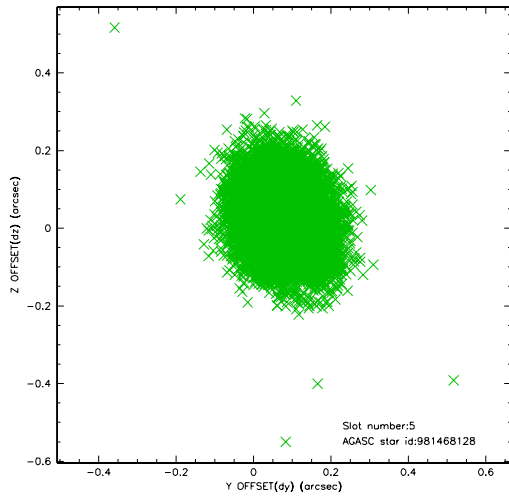
### 2.4.1 Slot 3



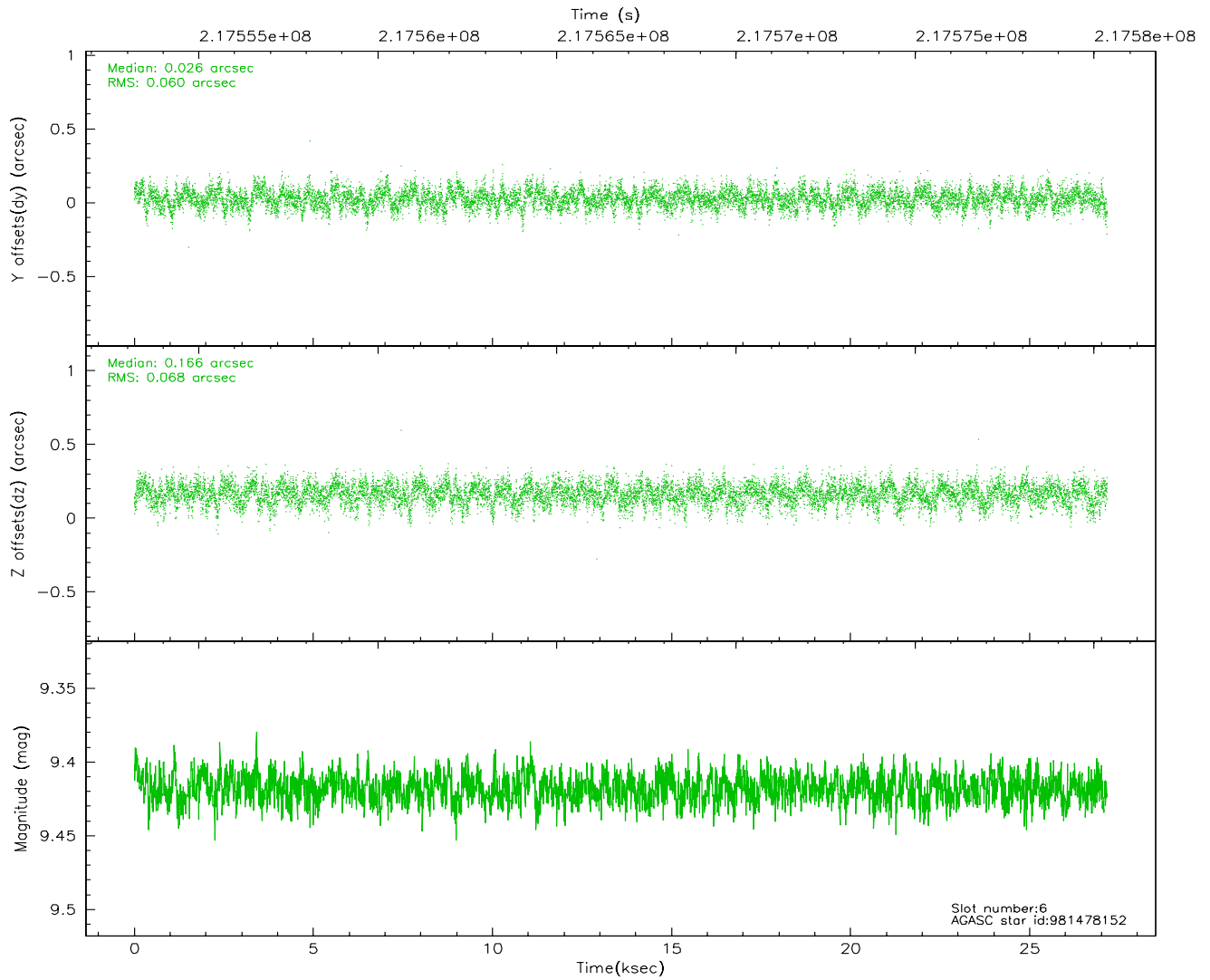
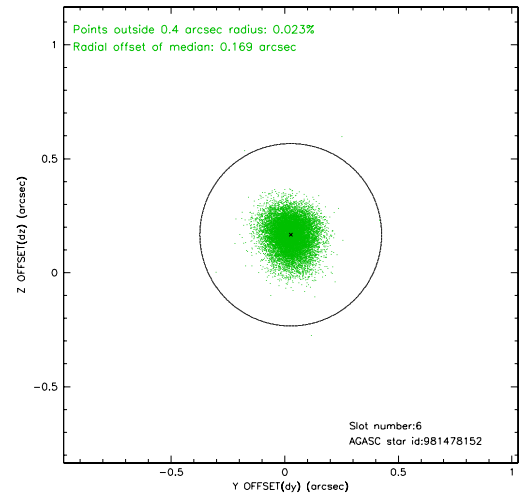
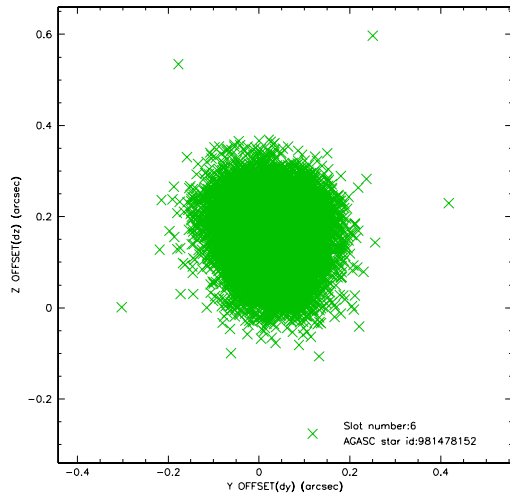
### 2.4.2 Slot 4



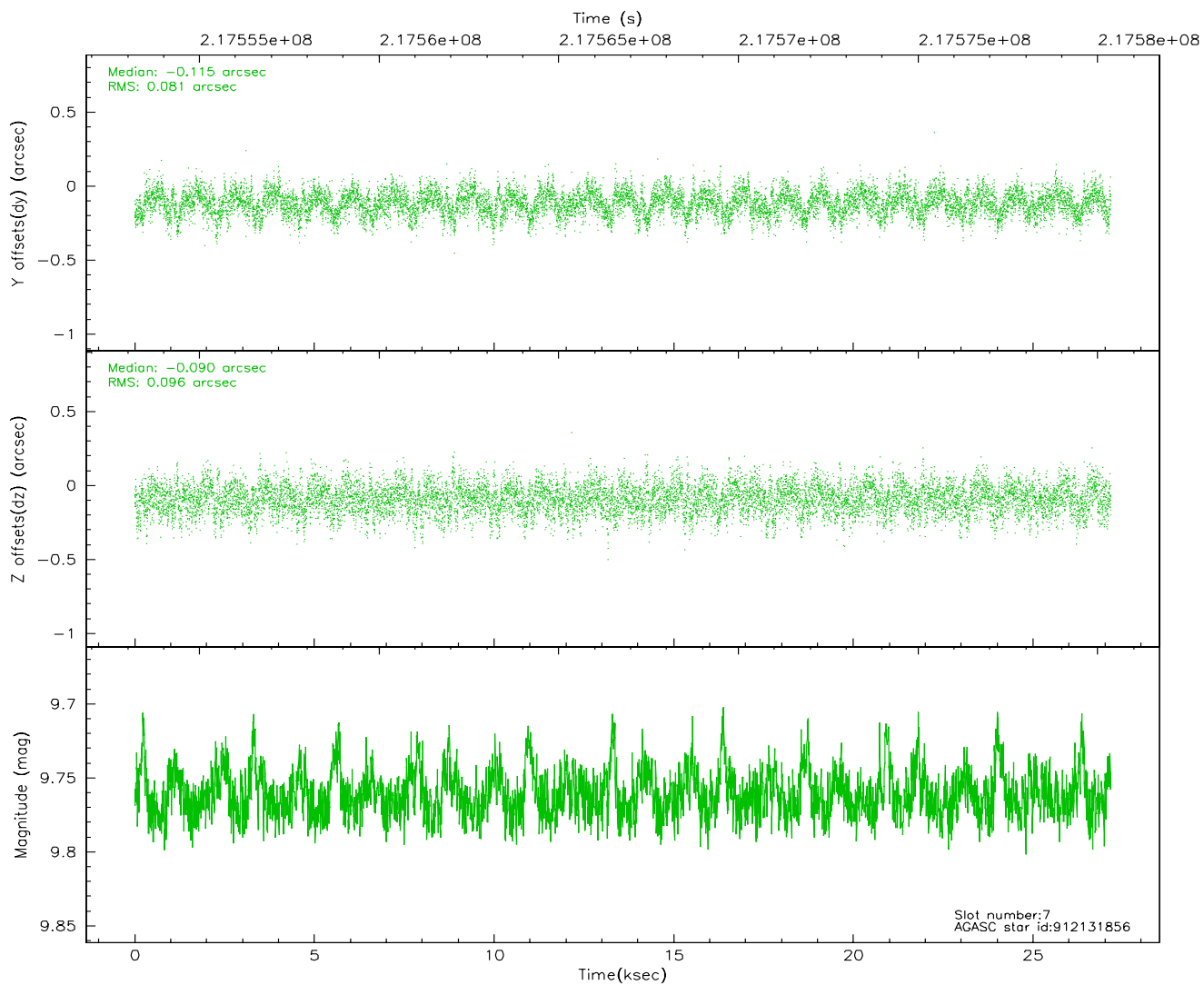
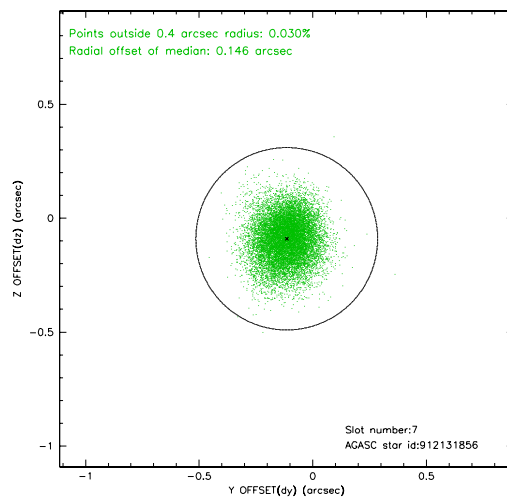
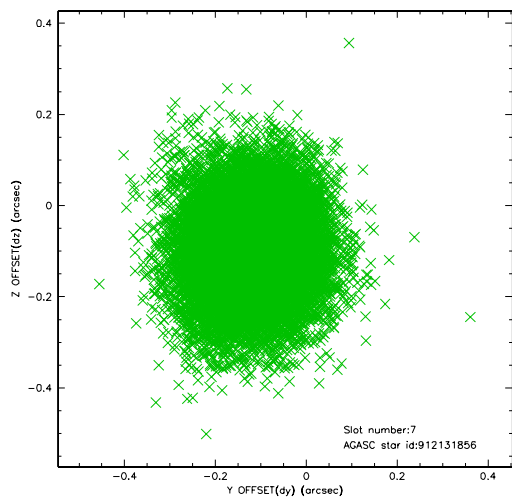
### 2.4.3 Slot 5



### 2.4.4 Slot 6

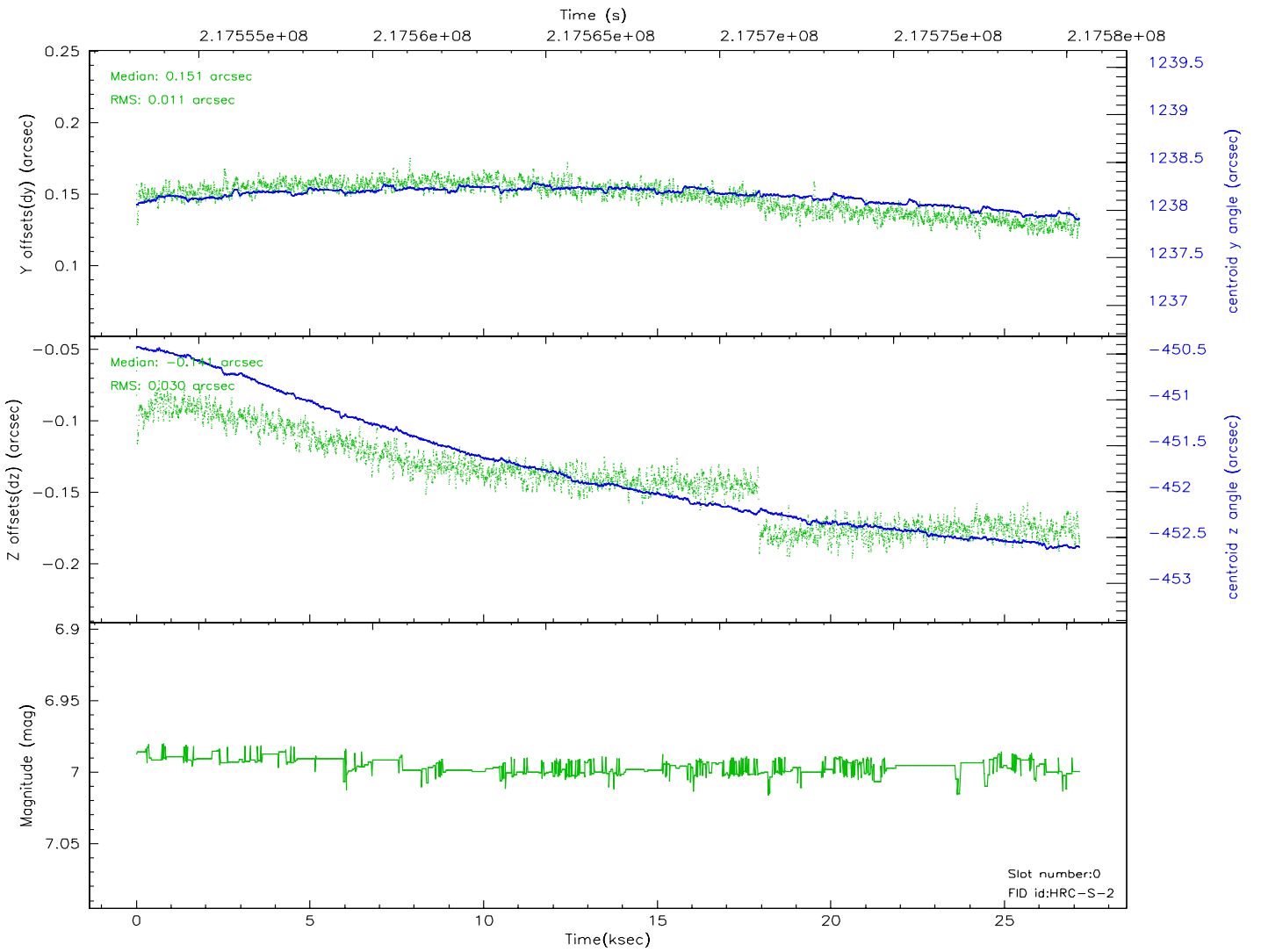
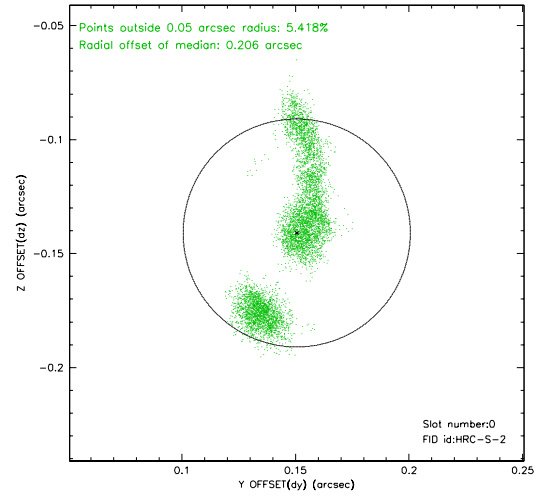
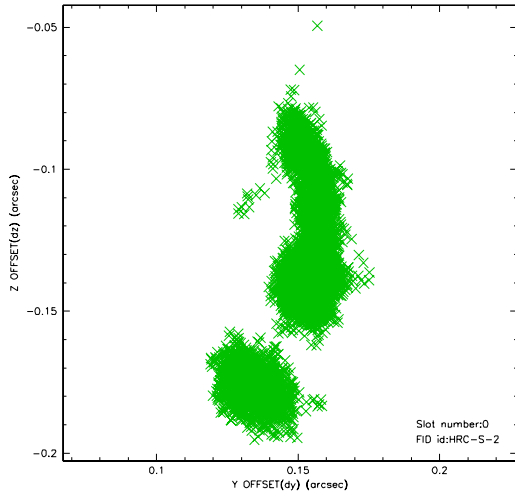


## 2.4.5 Slot 7

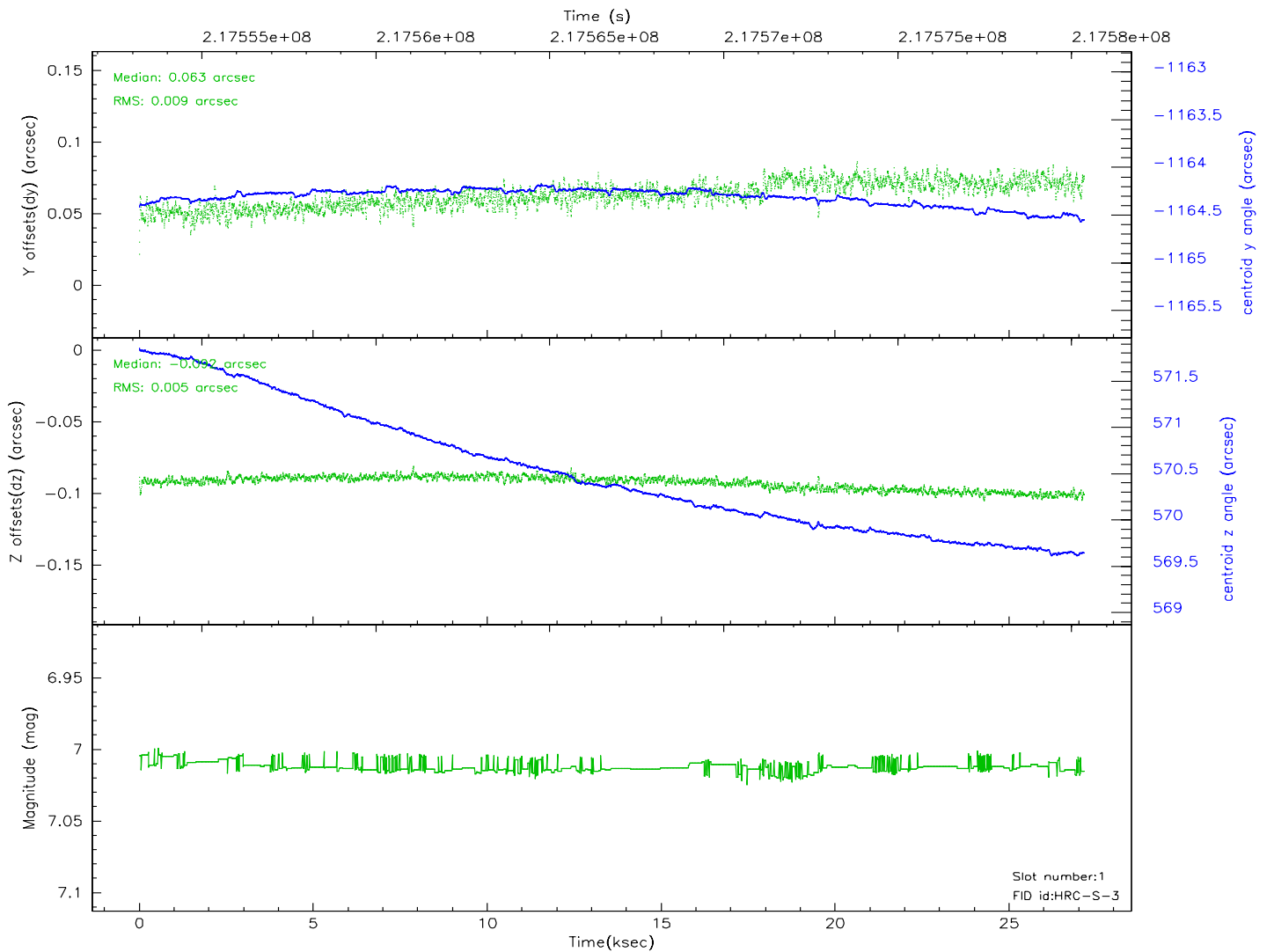
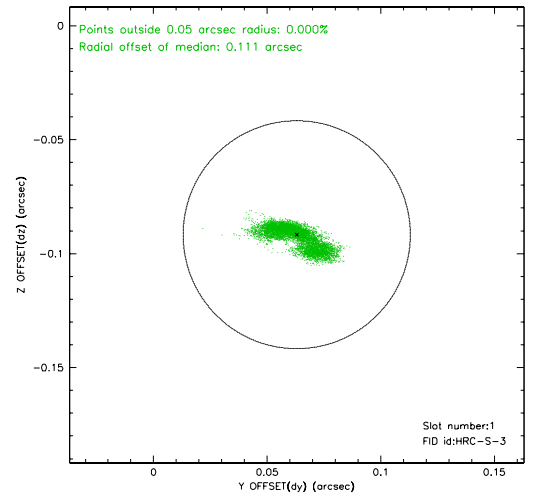
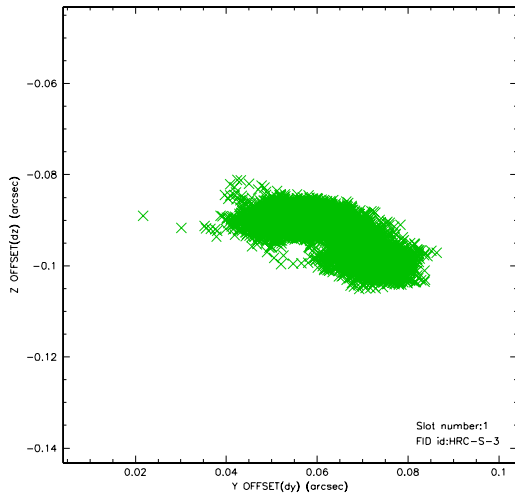


## 2.5 FID Slots

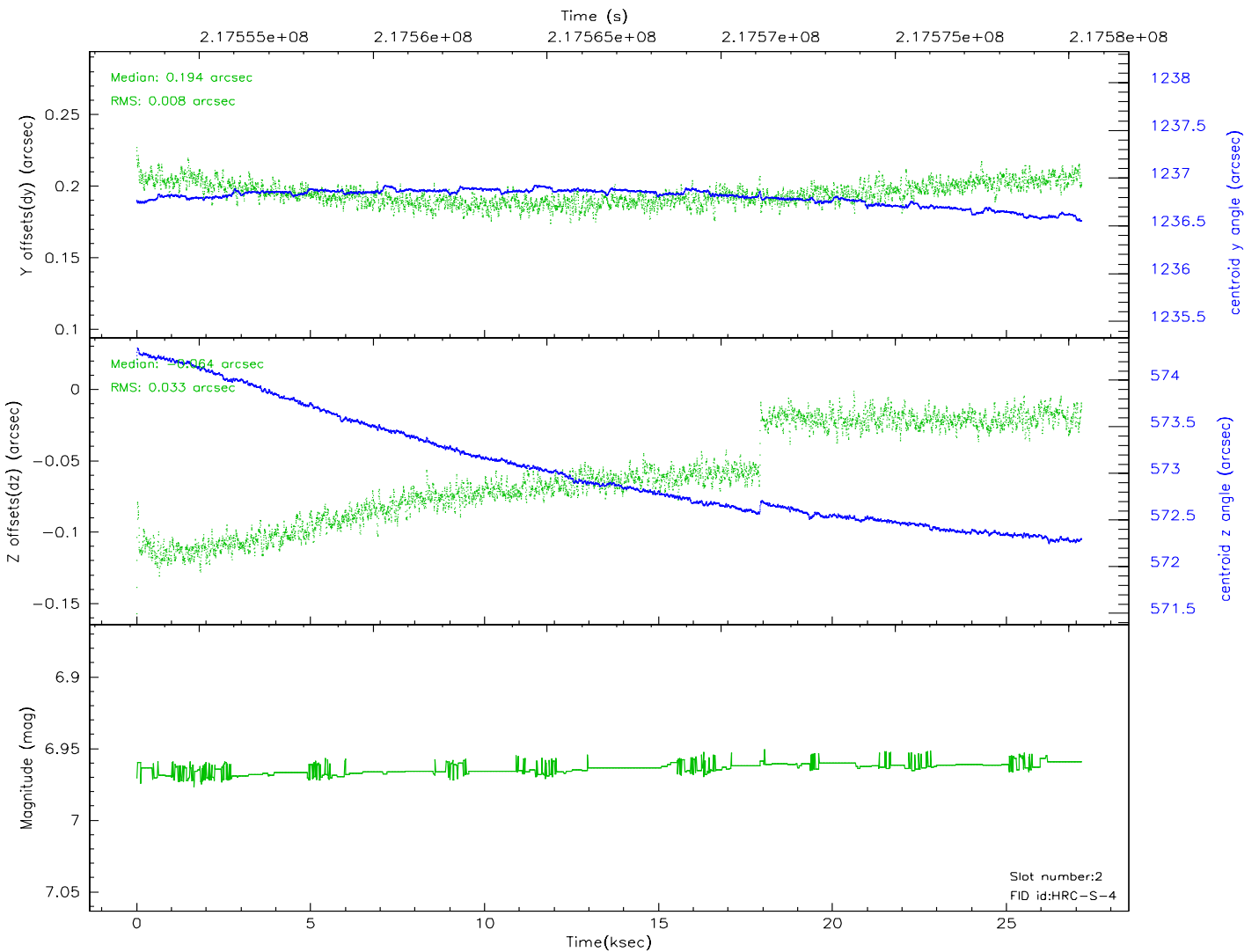
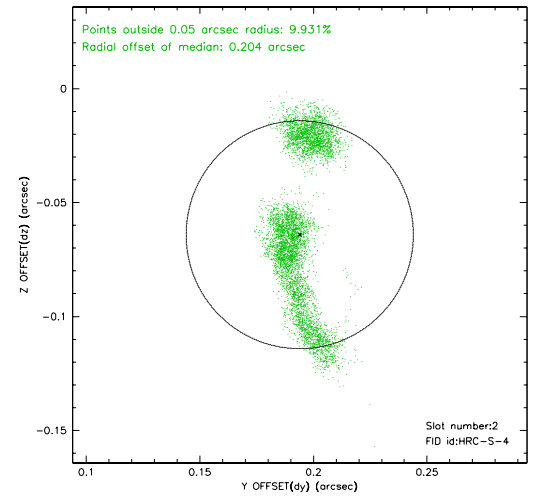
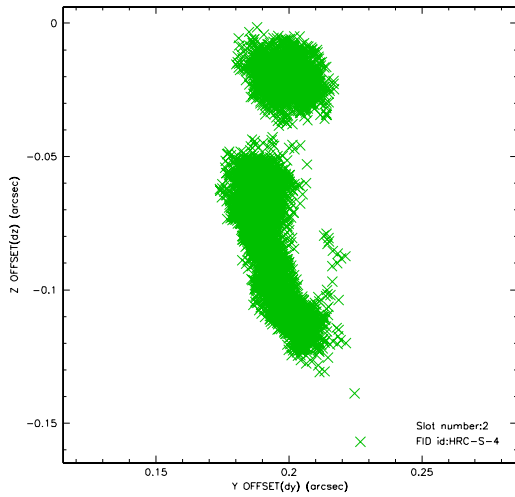
### 2.5.1 Slot 0



## 2.5.2 Slot 1

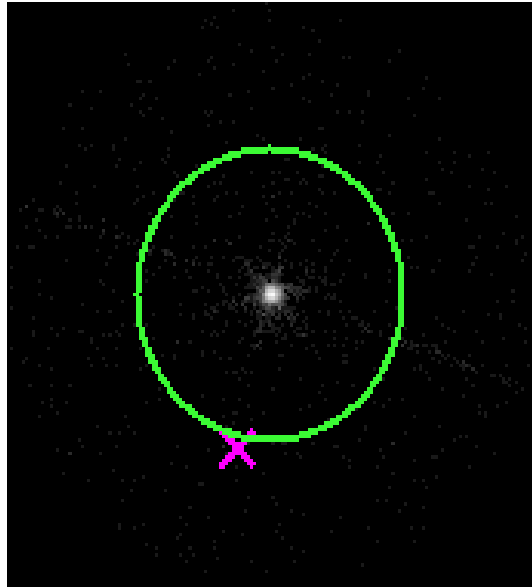


### 2.5.3 Slot 2



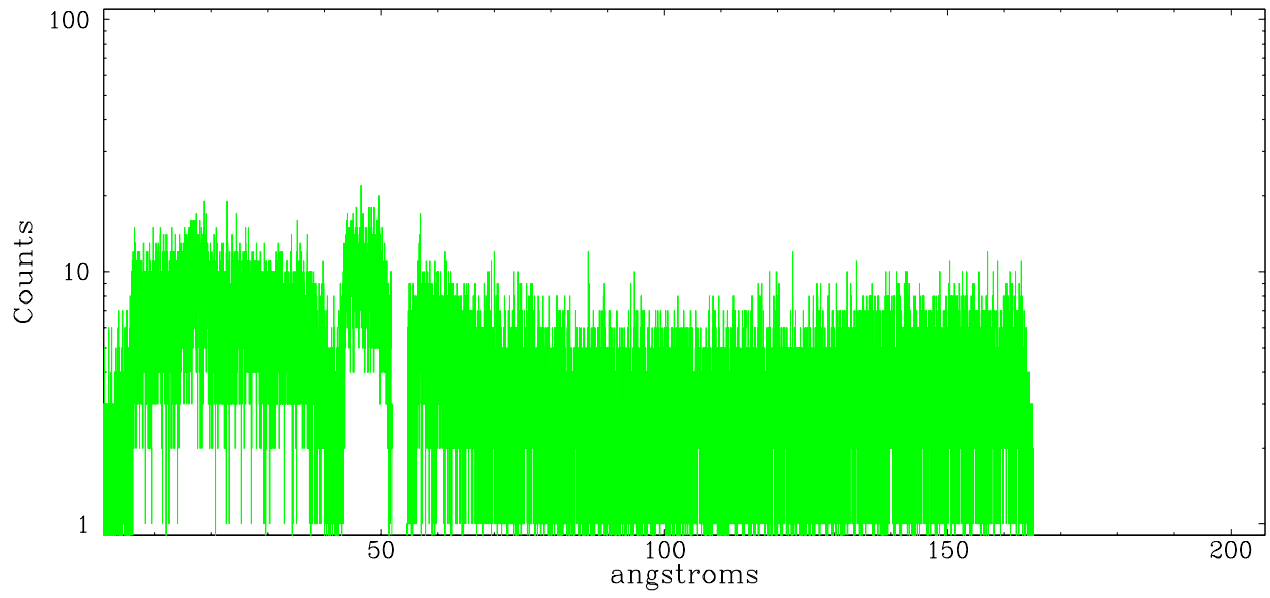
### 3 Gratings

#### 3.1 LETG Arm

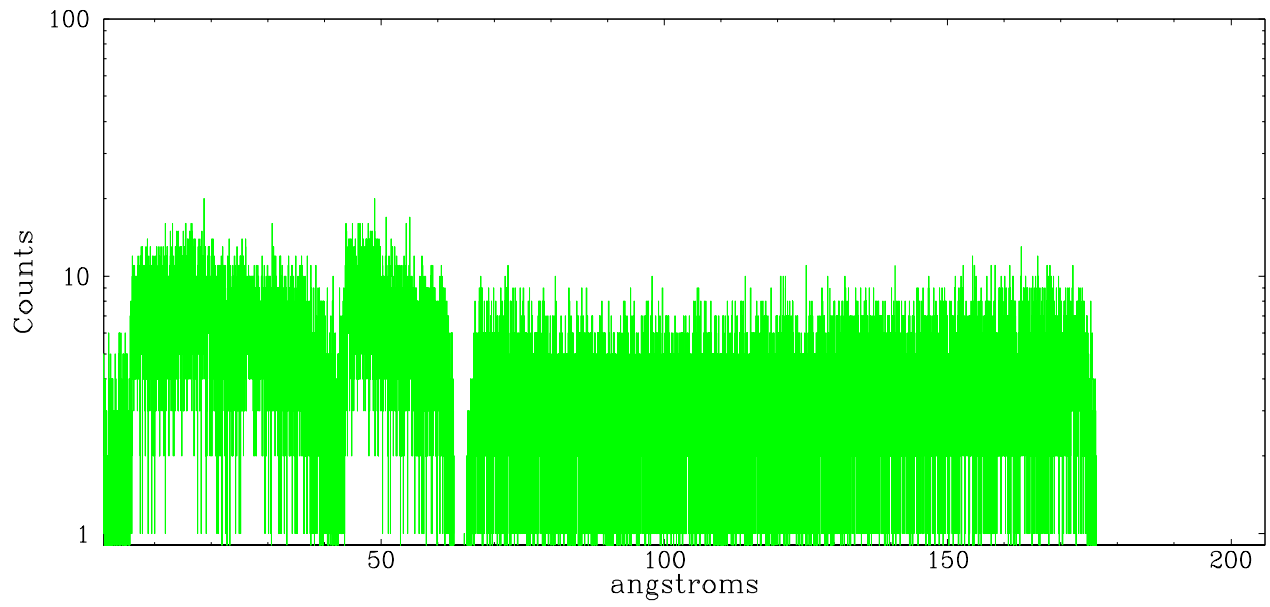


LETG Zero Order

leg order -1



leg order +1



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.165

## A.2 Comments

Window constraint met.

The keywords DTCOR, EXPOSURE, and LIVETIME in the Level 2 event file and the keyword DTCOR in the Level 1 event file have been incorrectly determined due to a software bug. The correct value of DTCOR can be found in the file DTFSTATS file that can be obtained by downloading the Secondary Data Products. In most cases, the difference between the correct DTCOR value and the incorrect DTCOR value in the Level 2 event file is very small and does not affect the data analysis. However, there are cases of significant differences and the user is advised to use the DTCOR in the DTFSTATS file for analysis. Corrected data products will be made available in the archive as soon as feasible.