

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 5035 - L2 Version 002  
Chandra X-Ray Center

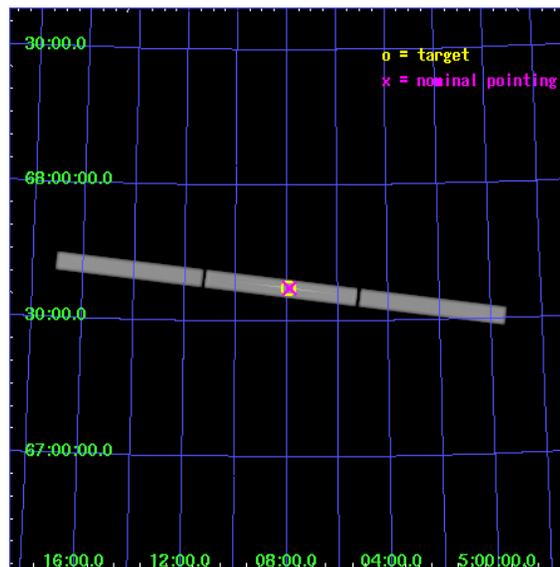
L2 Processing Date : Apr 9 2006

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Parameters . . . . .	4
2.1.3	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>3</b>	<b>Gratings</b>	<b>17</b>
3.1	LETG Arm . . . . .	17
<b>A</b>	<b>Summary</b>	<b>19</b>
A.1	Status . . . . .	19
A.2	Comments . . . . .	19

# 1 Front

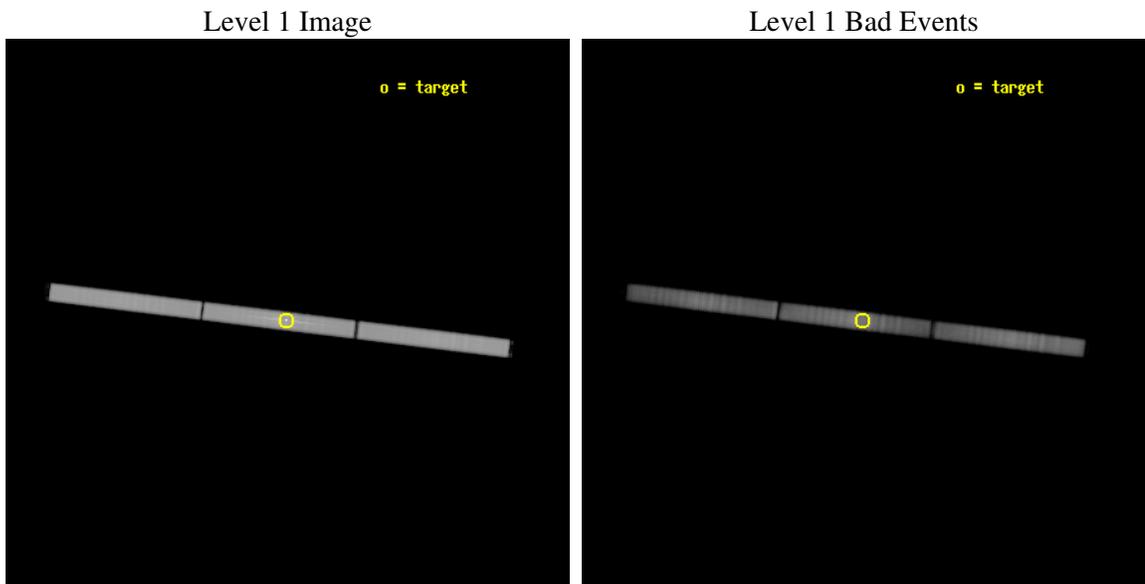
seq_num	900342
obs_id	5035
title	X-Raying the Intergalactic Medium with Blazars in Outburst
observer	Dr. Fabrizio Nicastro
object	BL 0502+675
ra_targ	76.984167
dec_targ	67.623333
ra_nom	76.971985387823
dec_nom	67.622899415796
roll_nom	186.86875516882
revision	2
ontime	129509.01207939
livetime	128661.42501608
l2events	6845076



## 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	2006-04-08T22:13:59
revision	2

sched_exp_time	128937.907000
ontime	129517.98082992
l1events	10134987

## 2.1.3 Events

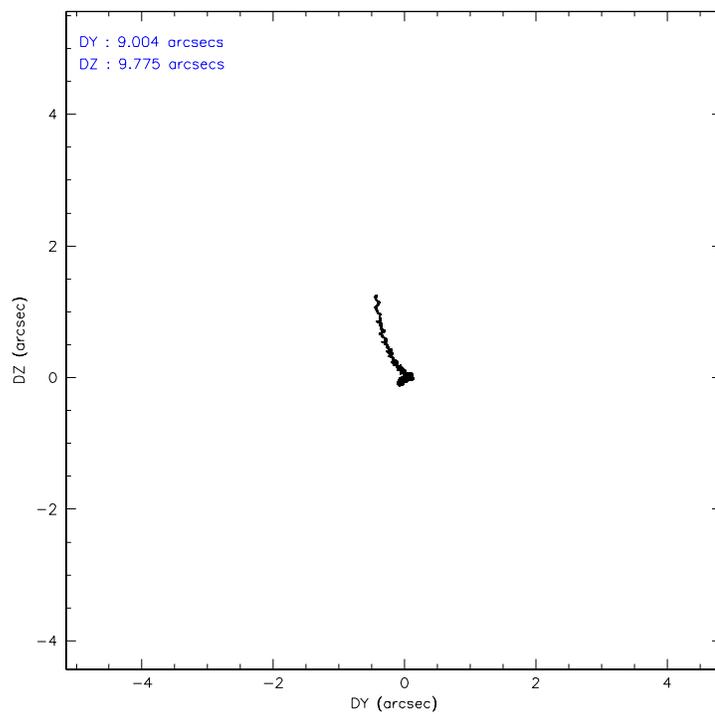
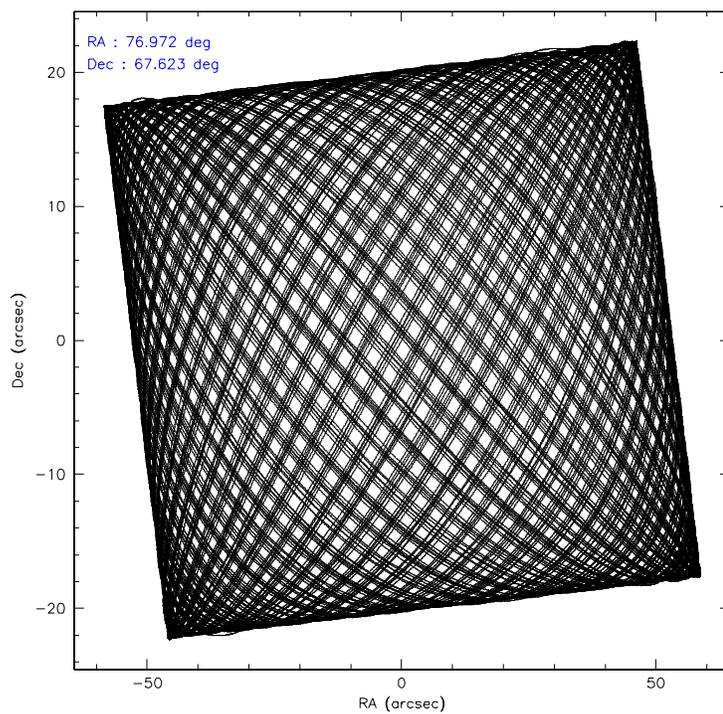
### Level 1 Events

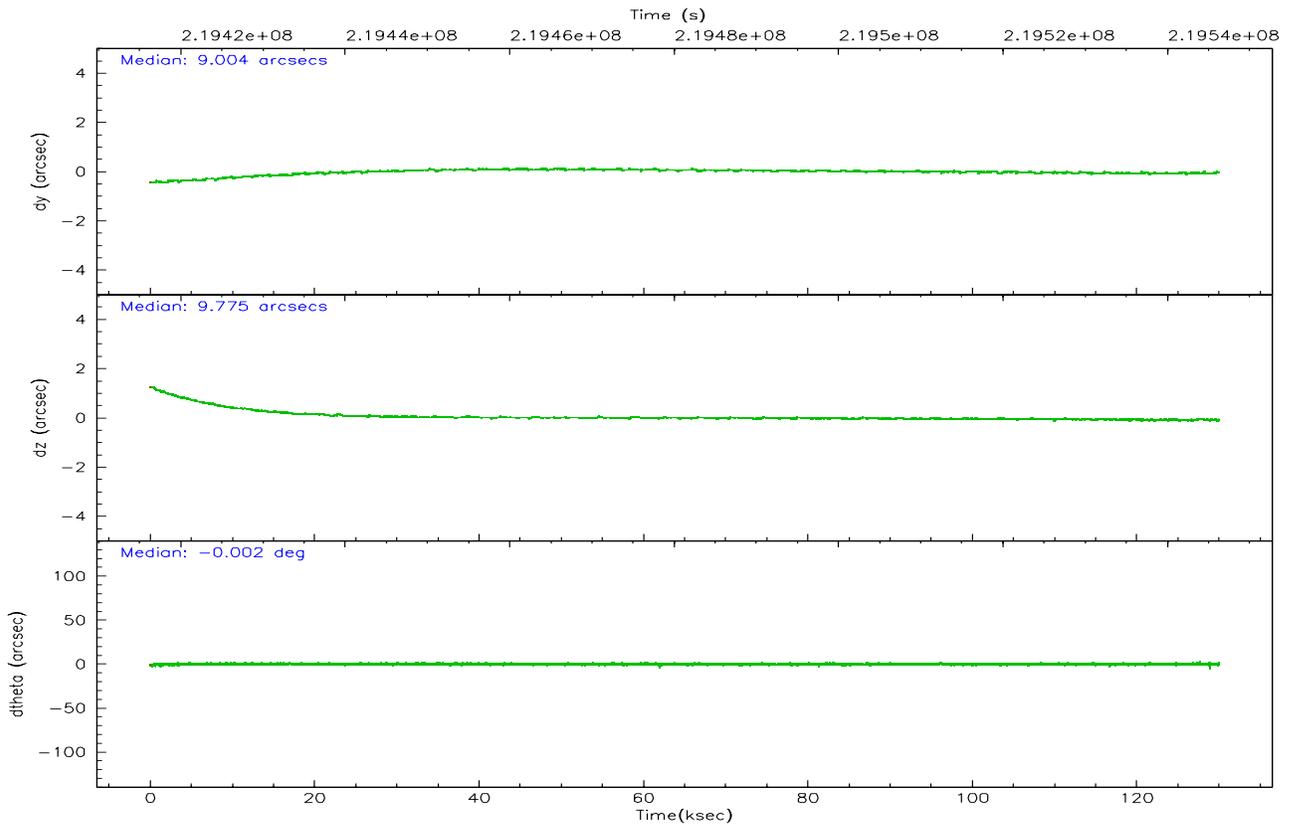
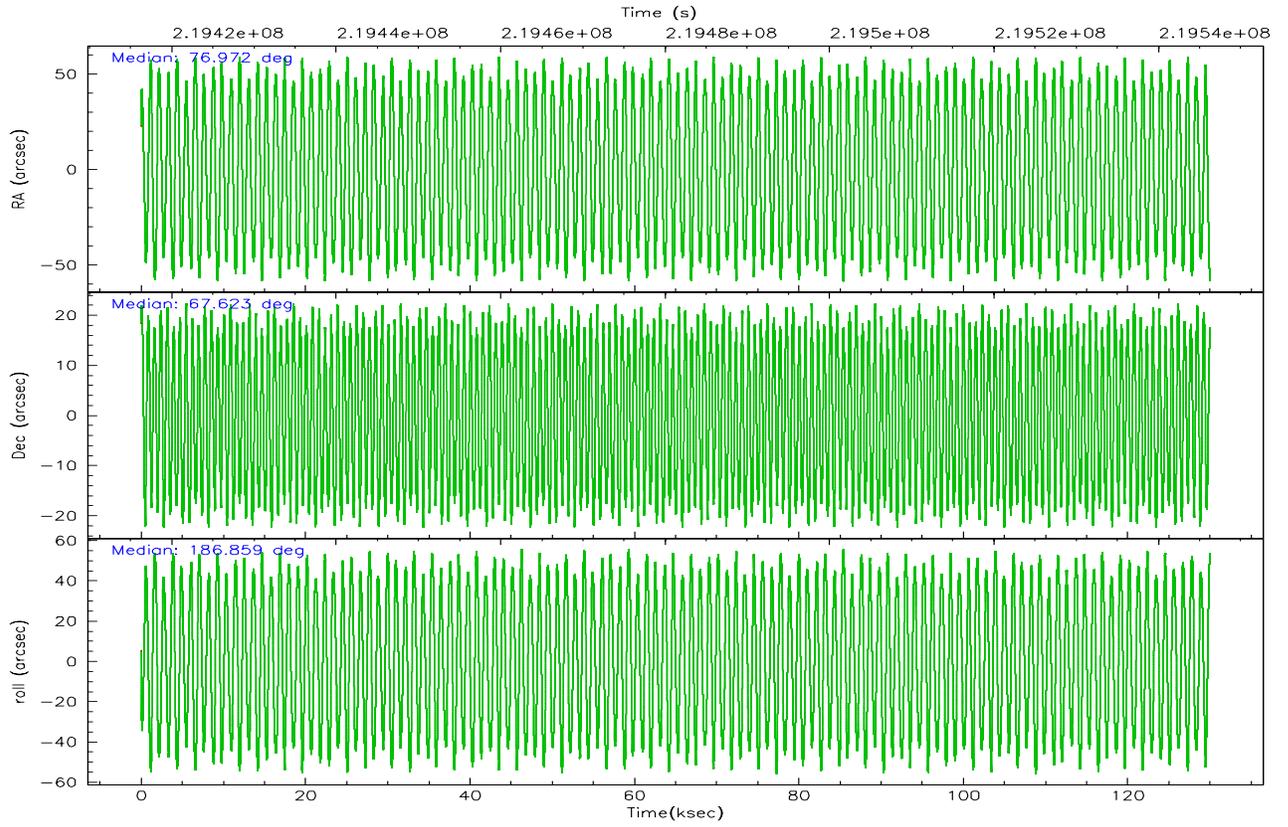
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	3347959	3422336	3364692
rejected events	709025	775334	858672
rejected %	21%	22%	25%

## 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	77.029761	76.97198538782347			
Pointing Dec	67.641184	67.62289941579637			
Pointing Roll	186.747991	186.8687551688245			
SIM focus pos (mm)	-1.429586	-1.428180813131781			
SIM defocus (mm)	0.1037507710433287	0.1051558262725154			
SIM translation stage pos (mm)	250.455976	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	219416454.184000	219414802.83149			
Observation start date	2004-12-14T12:59:50	2004-12-14T12:33:22			
Observation end time	219545392.184000	219546962.74994			
Observation end date	2004-12-16T00:48:48	2004-12-16T01:16:02			

## 2.3 Aspect



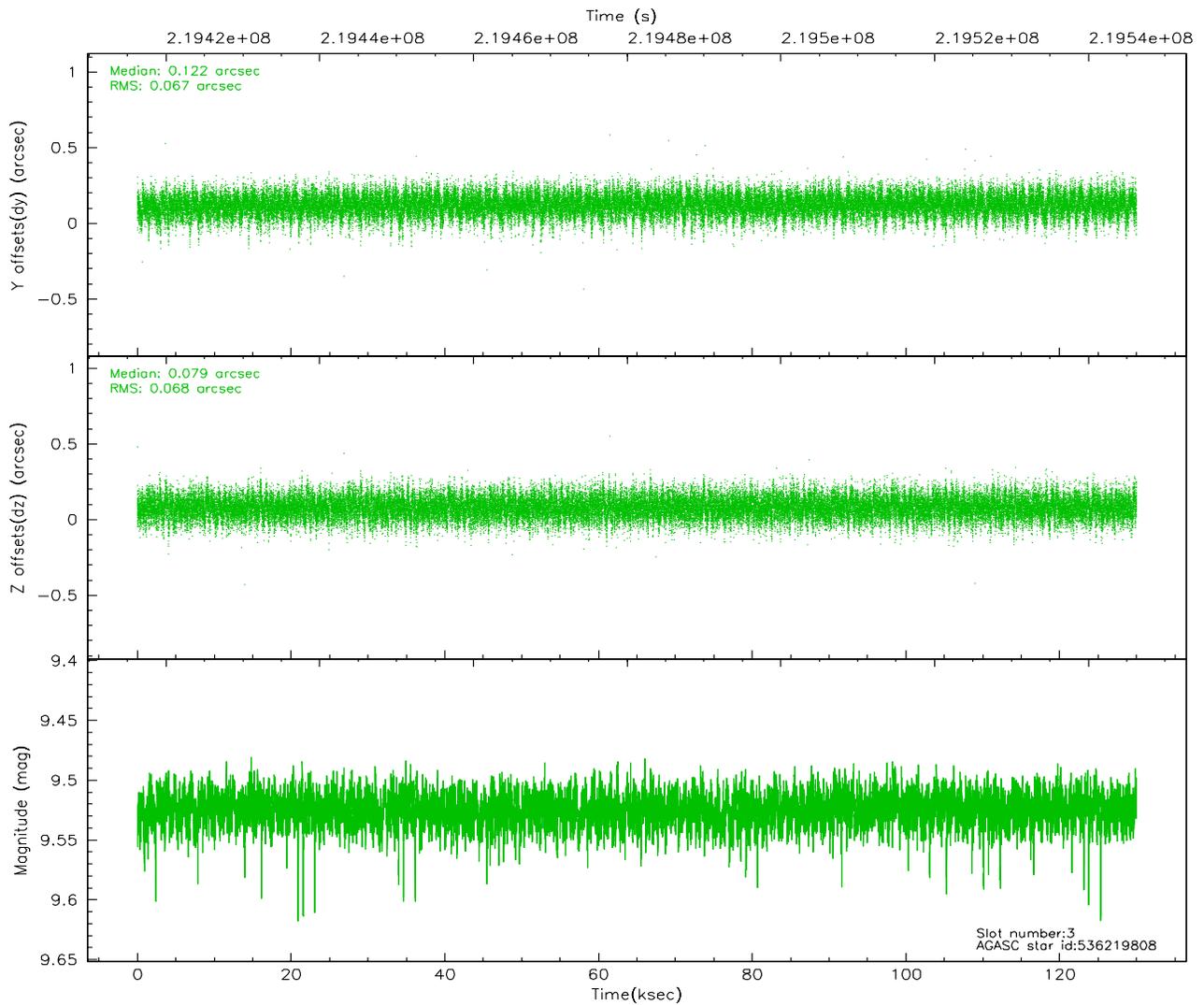
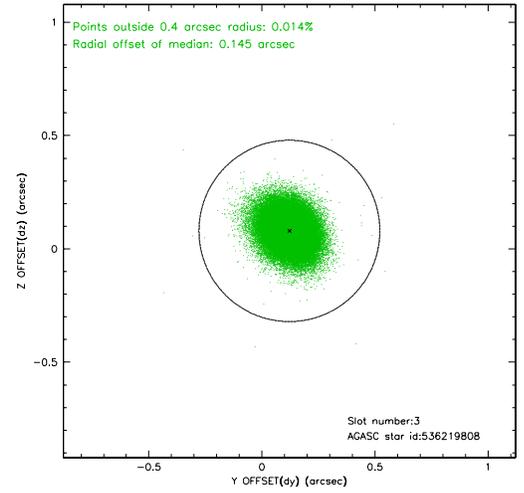
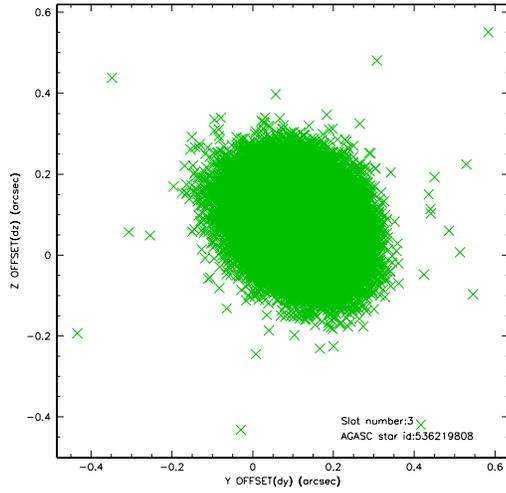


### Slot Statistics

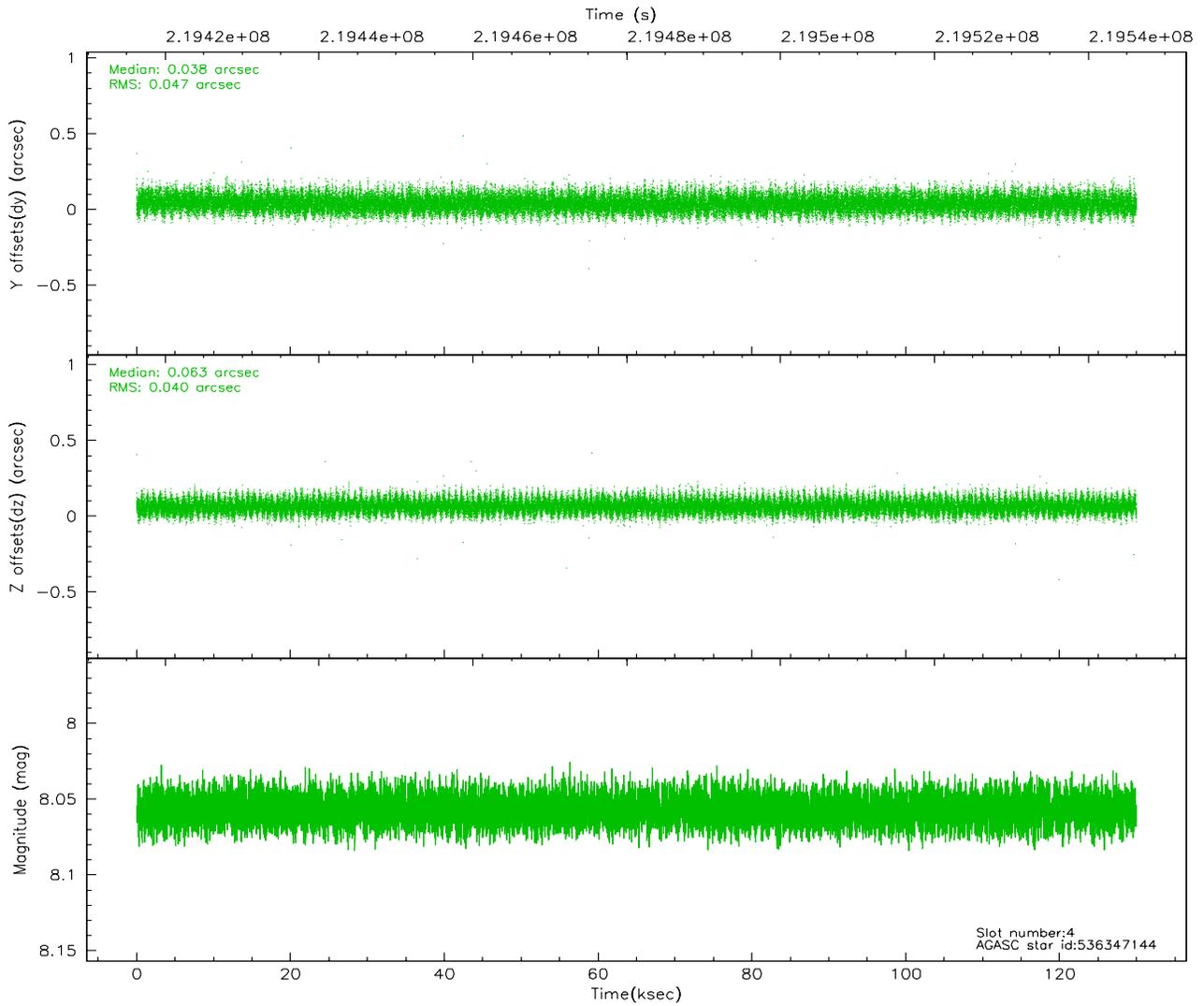
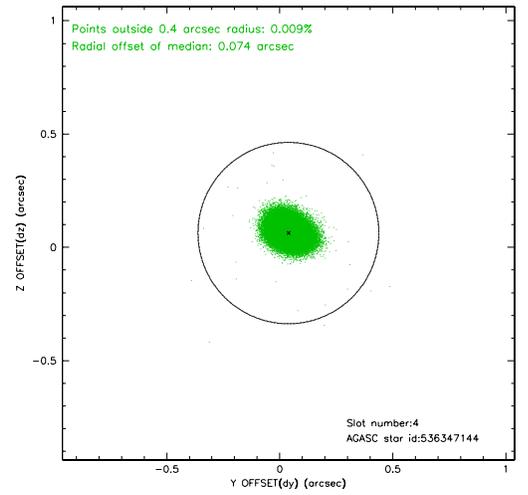
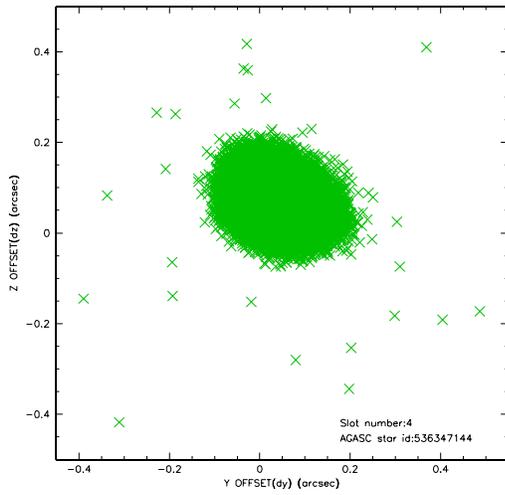
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.03	31710	0.157	-0.199	0.007	0.014	0.000000	0.000000	-1163.17	-458.55
1	FID	HRC-S-2	7.02	31709	0.124	-0.109	0.005	0.009	0.000000	0.000000	1236.45	-451.16
2	FID	HRC-S-3	7.04	31707	0.109	0.006	0.007	0.014	0.000000	0.000000	-1165.88	571.17
3	GUIDE	536219808	9.53	63371	0.122	0.079	0.100	0.167	76.524068	67.407554	793.20	750.81
4	GUIDE	536347144	8.06	63413	0.038	0.063	0.065	0.108	78.692300	67.360764	-2172.70	1242.66
5	GUIDE	536352128	7.54	63412	0.001	0.026	0.073	0.117	78.532528	67.481756	-1992.92	788.85
6	GUIDE	536354544	6.90	63414	-0.081	-0.280	0.053	0.082	77.840781	67.039585	-877.80	2277.14
7	GUIDE	569120904	9.02	63381	-0.082	0.116	0.102	0.165	76.592712	68.268526	313.37	-2312.58

## 2.4 Star Slots

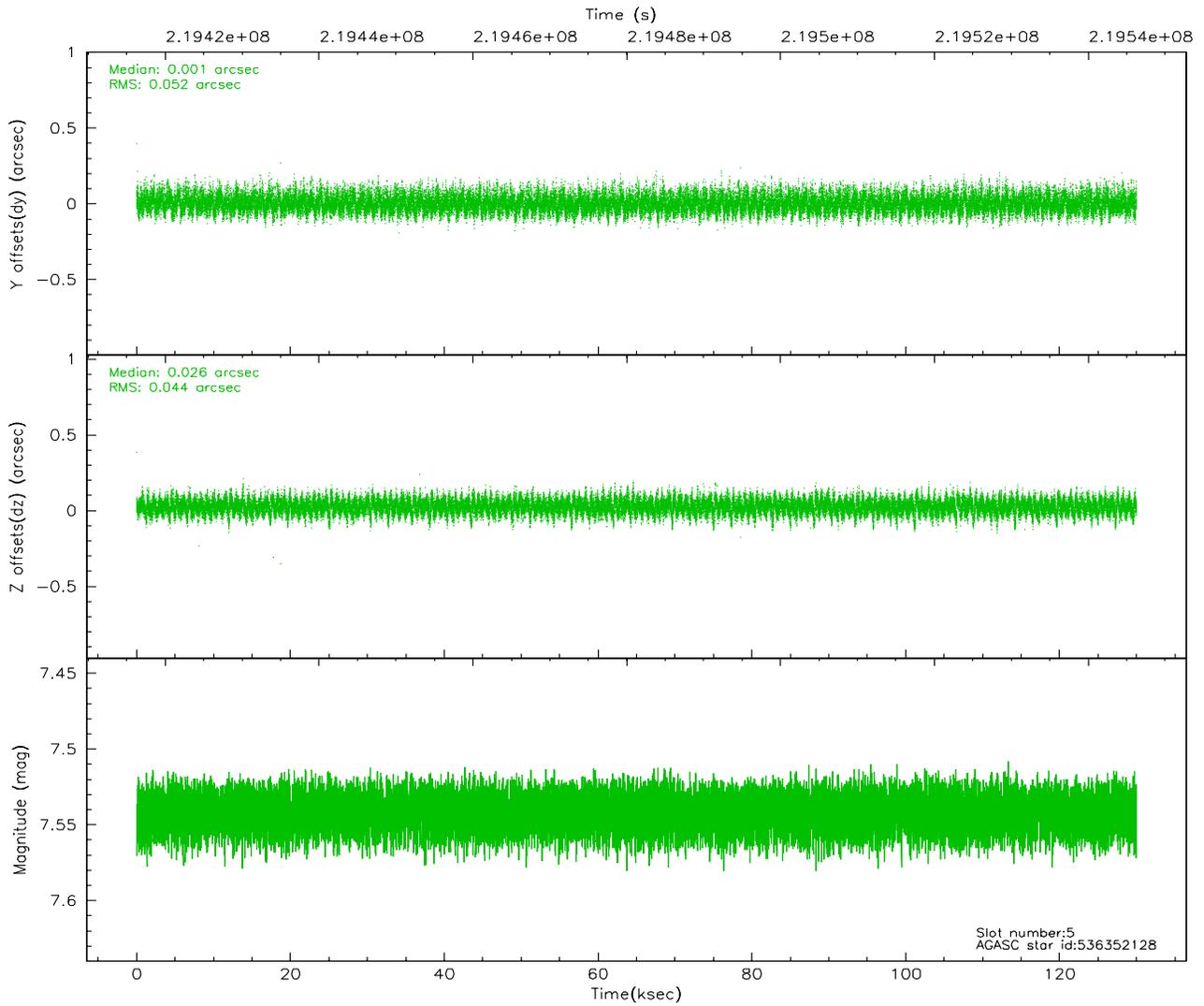
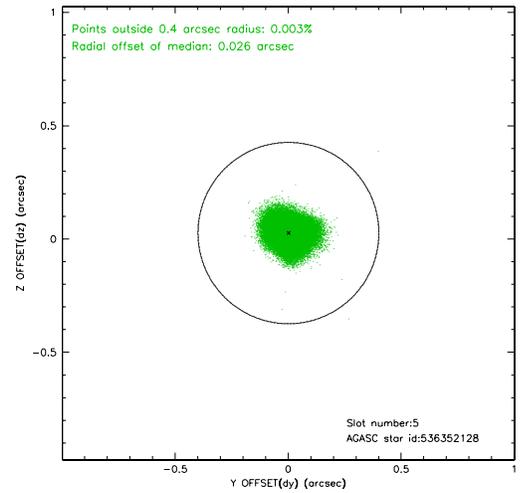
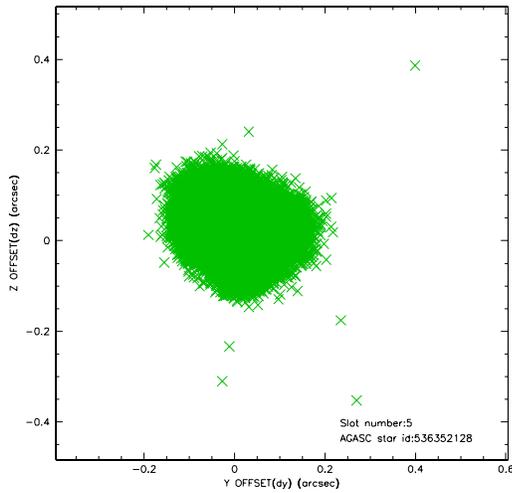
### 2.4.1 Slot 3



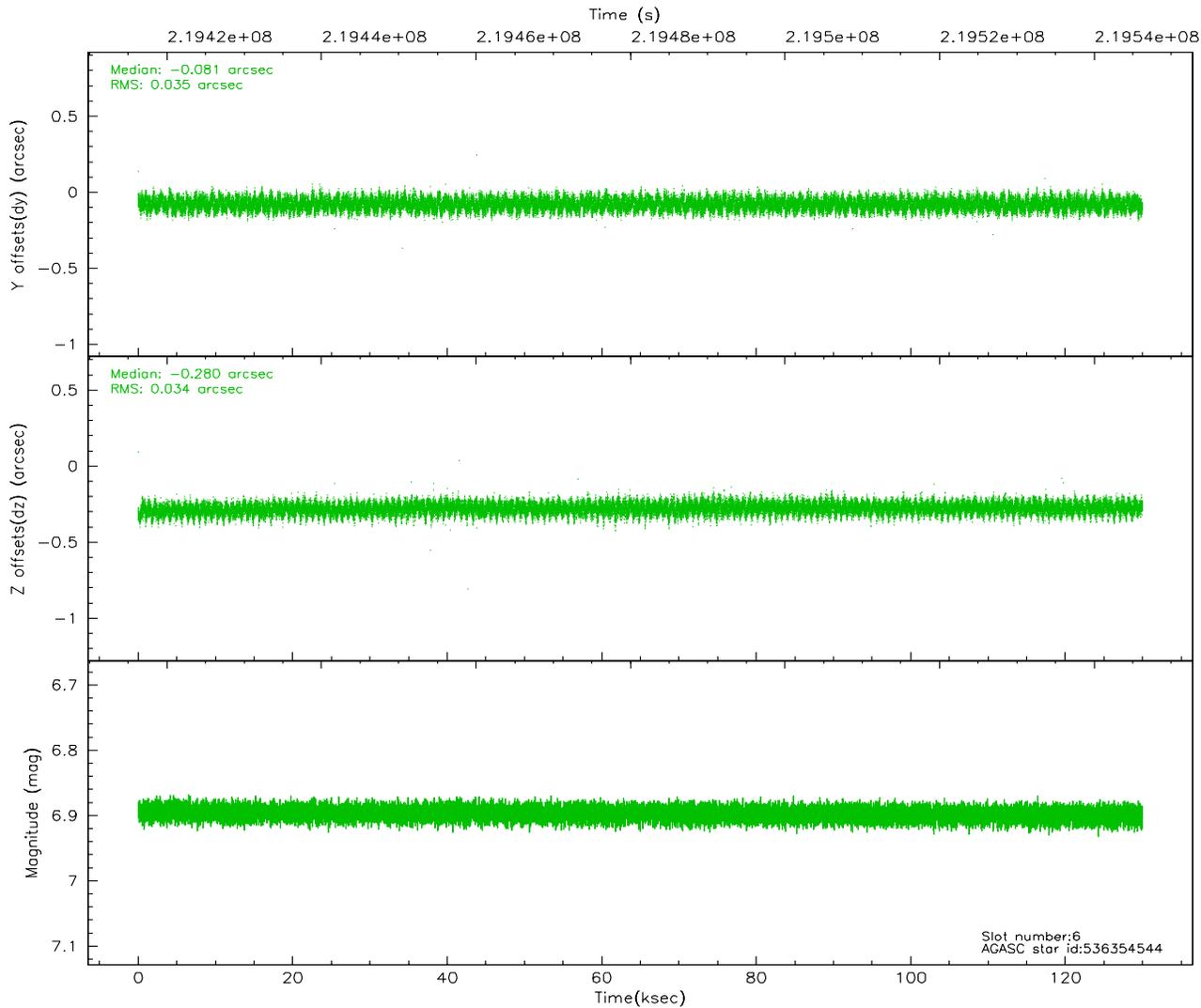
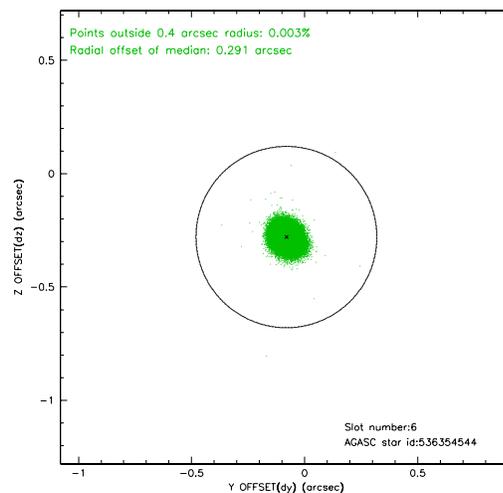
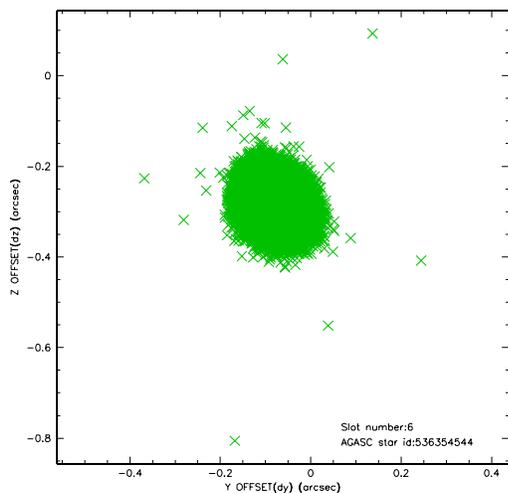
### 2.4.2 Slot 4



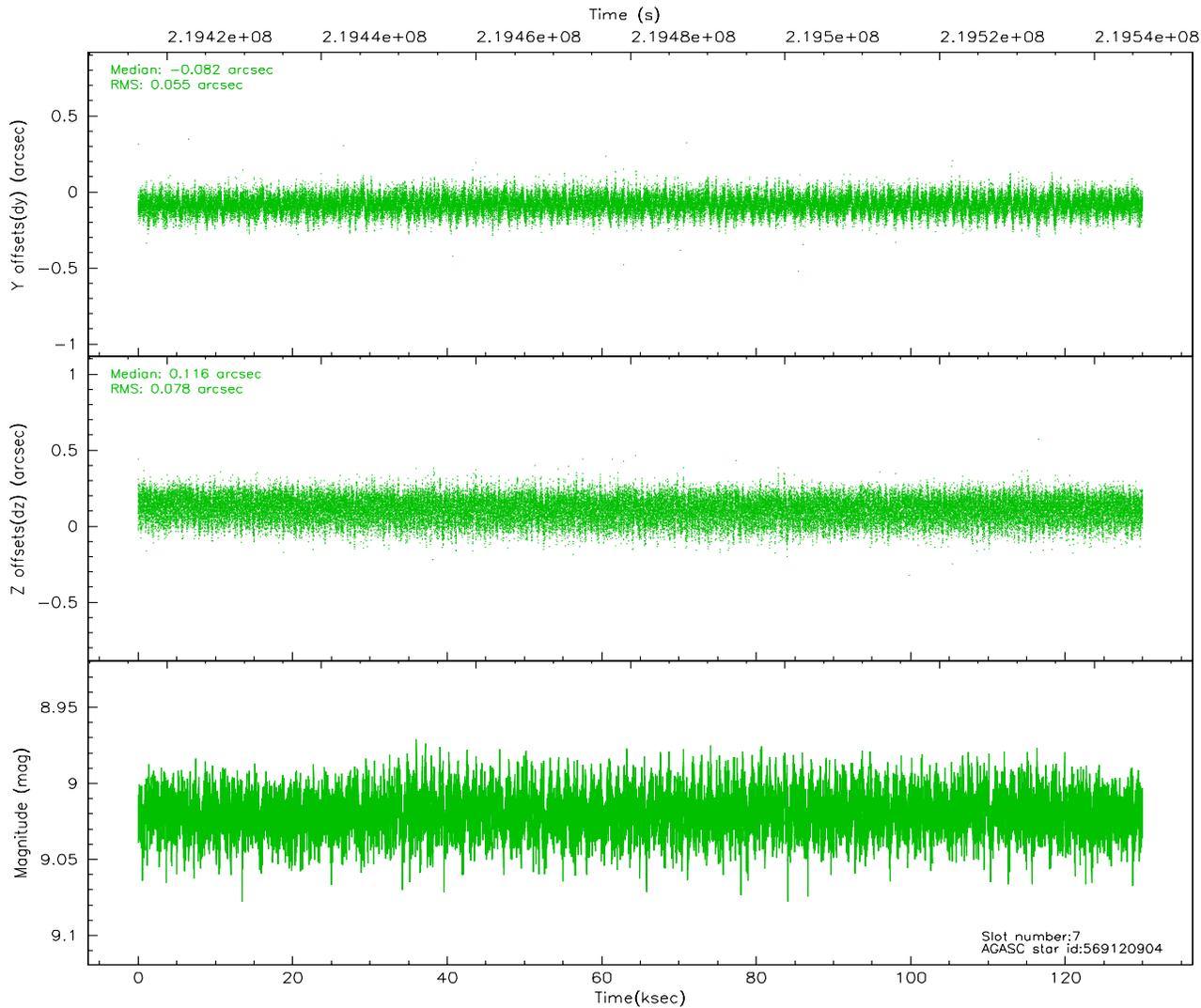
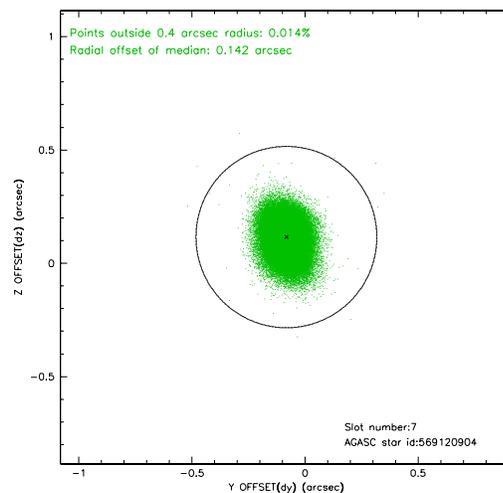
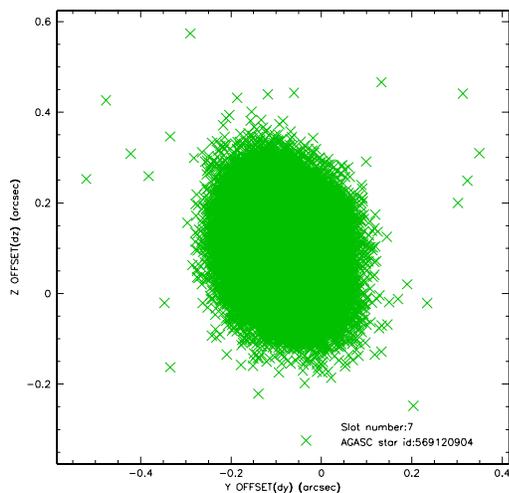
### 2.4.3 Slot 5



## 2.4.4 Slot 6

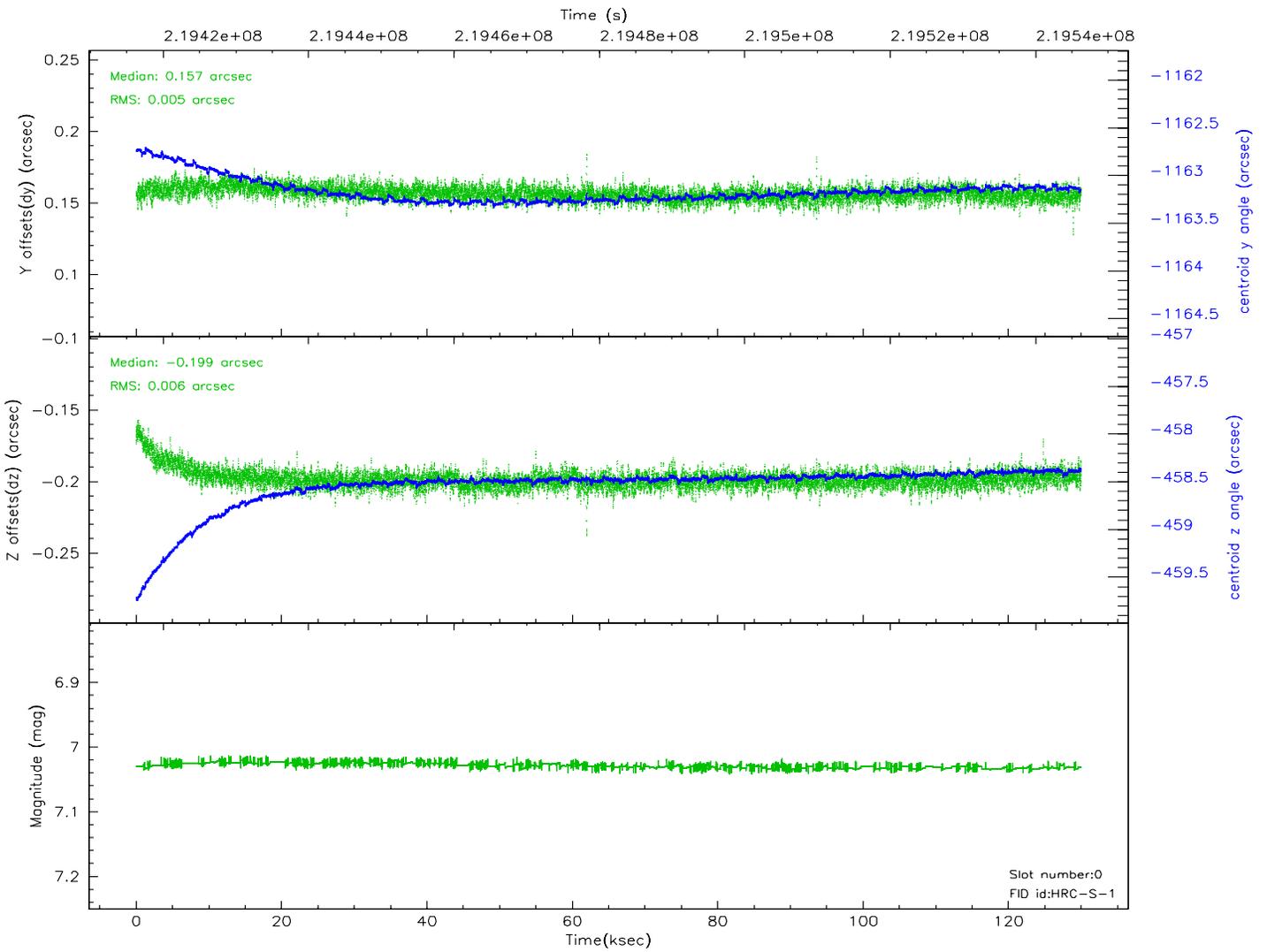
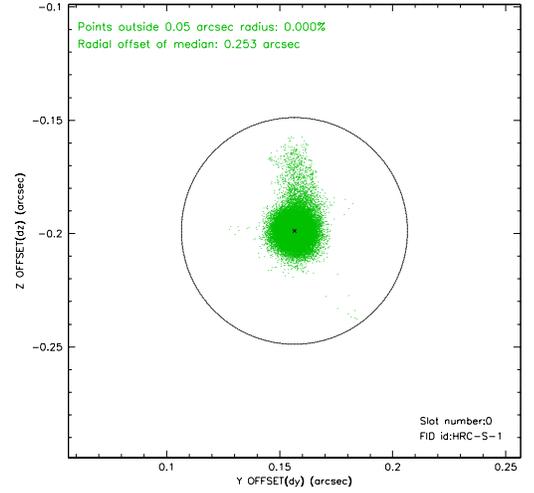
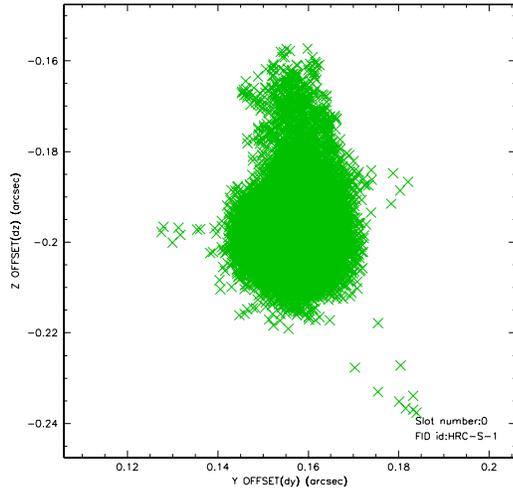


## 2.4.5 Slot 7

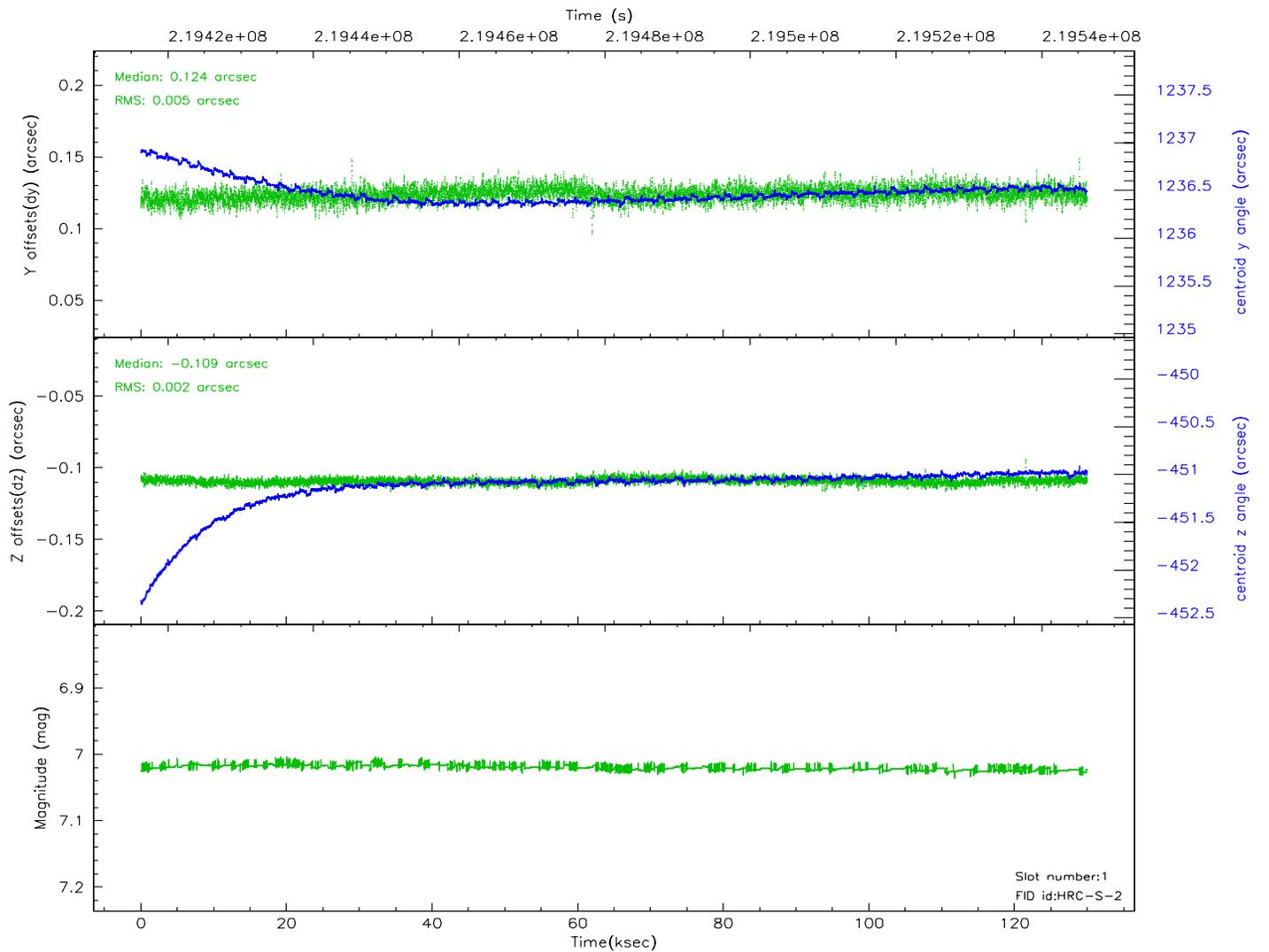
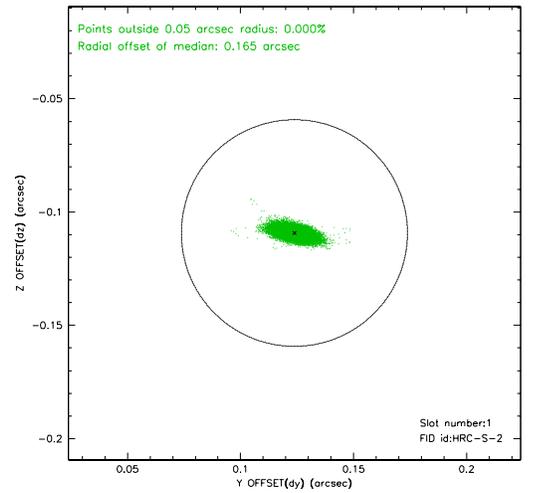
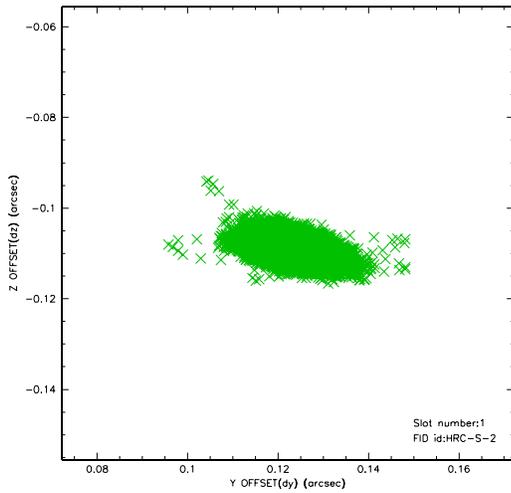


## 2.5 FID Slots

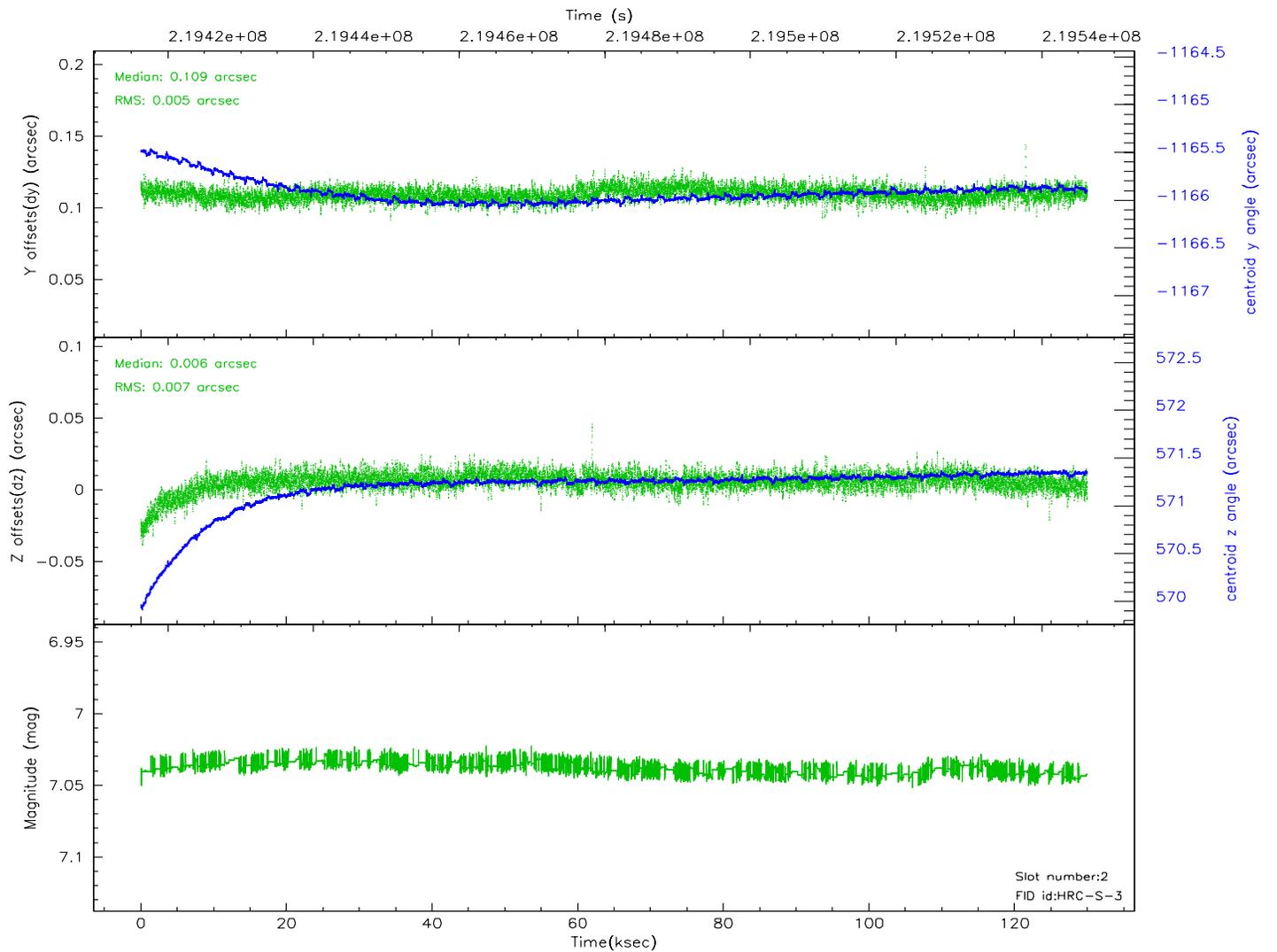
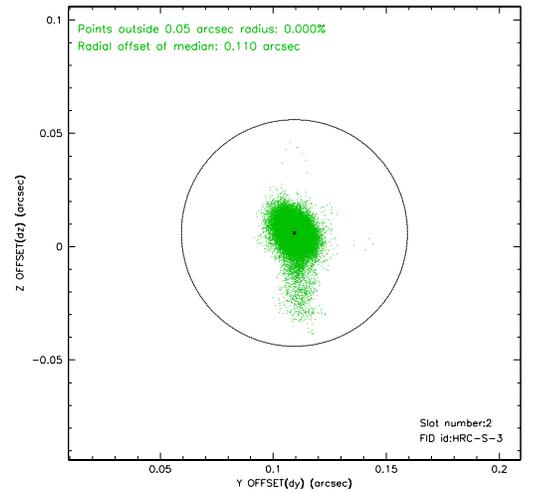
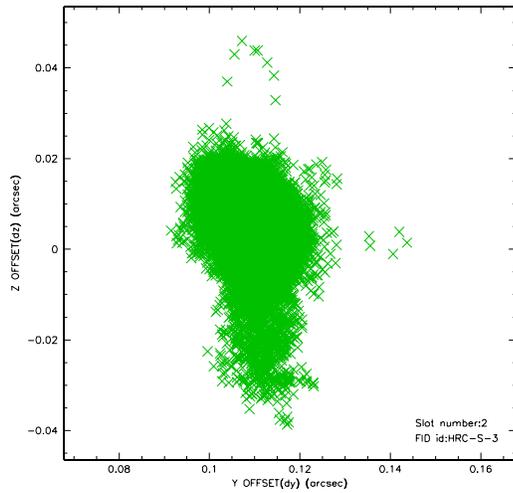
### 2.5.1 Slot 0



## 2.5.2 Slot 1

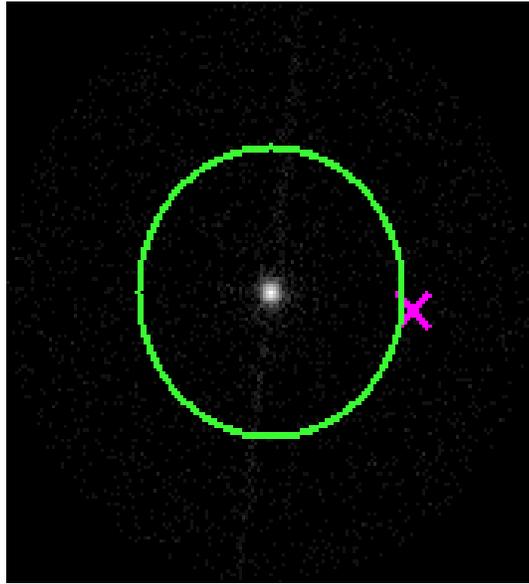


### 2.5.3 Slot 2



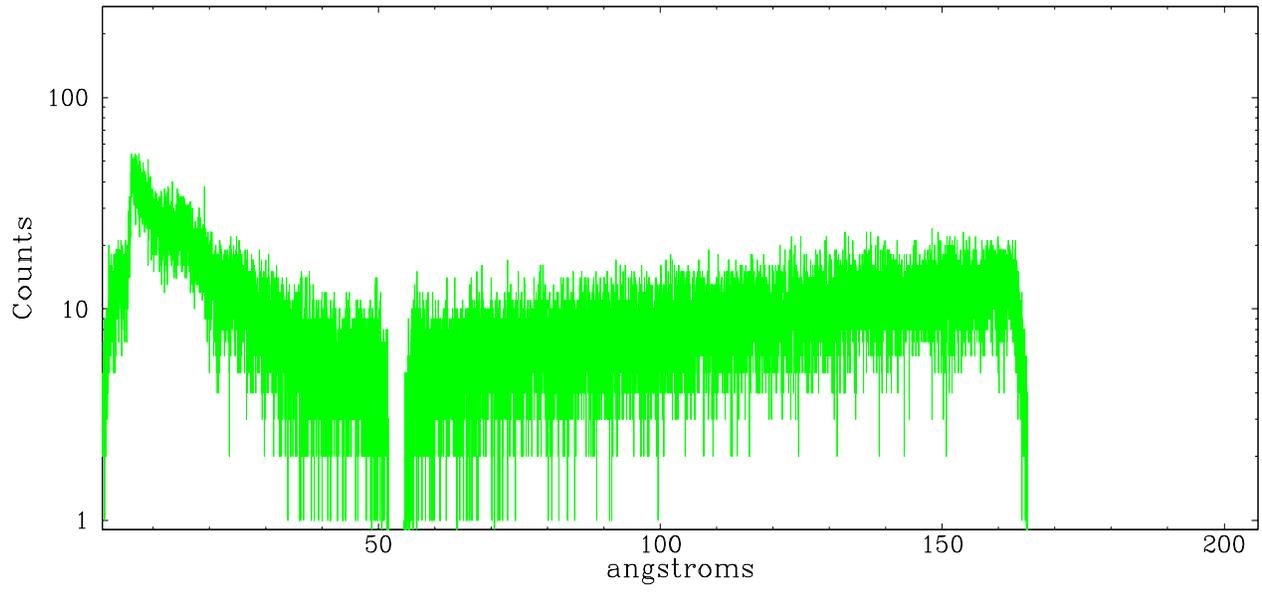
## 3 Gratings

### 3.1 LETG Arm

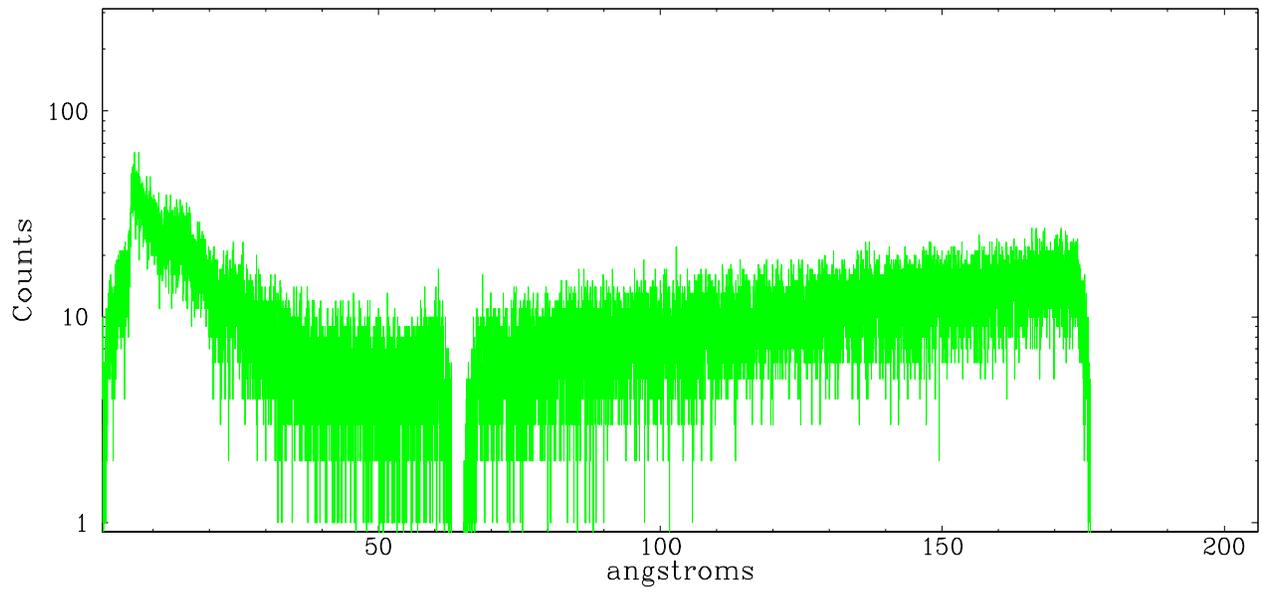


LETG Zero Order

leg order -1



leg order +1



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	129.509

## A.2 Comments

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.