

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 3677 - L2 Version 001  
Chandra X-Ray Center

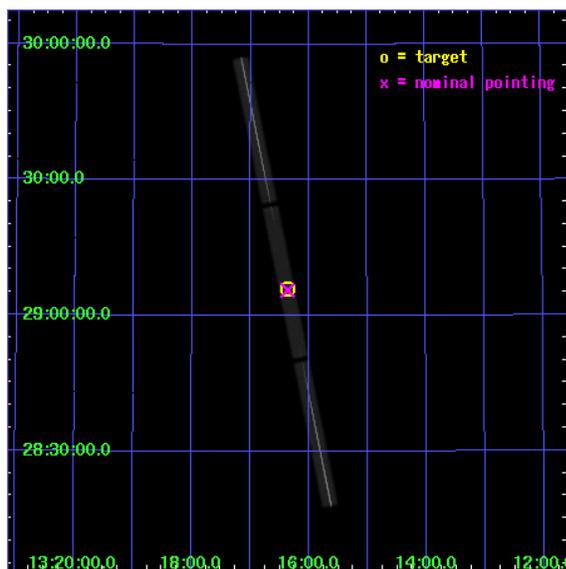
L2 Processing Date : Jul 12 2006

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# 1 Front

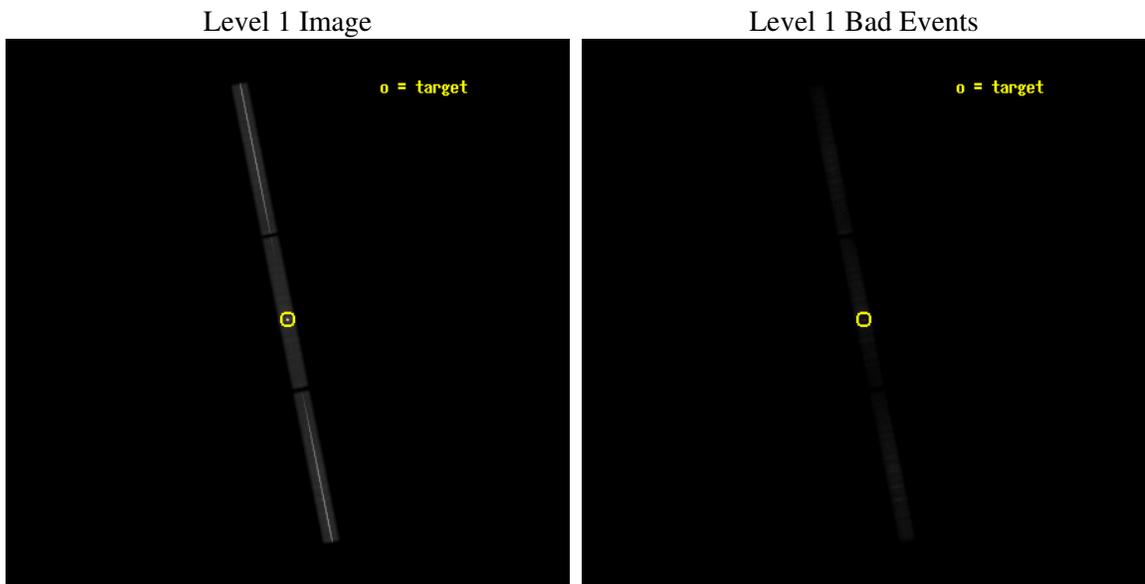
seq_num	290231
obs_id	3677
title	AO4 CALIBRATION OBSERVATIONS OF HZ43
observer	Dr. CXC Calibration
object	HZ43
ra_targ	199.092083
dec_targ	29.099
ra_nom	199.09086013404
dec_nom	29.094405255392
roll_nom	258.4180877204
revision	2
ontime	20179.432110399
livetime	20009.822796234
l2events	1616402



## 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	2006-07-12T11:34:33
revision	2

sched_exp_time	20000.000000
ontime	20179.432110399
l1events	2100512

## 2.1.3 Events

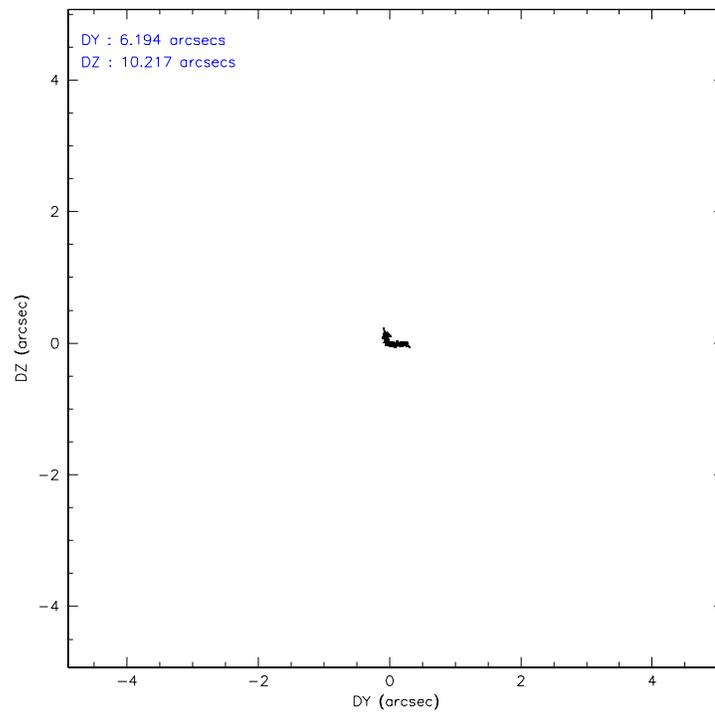
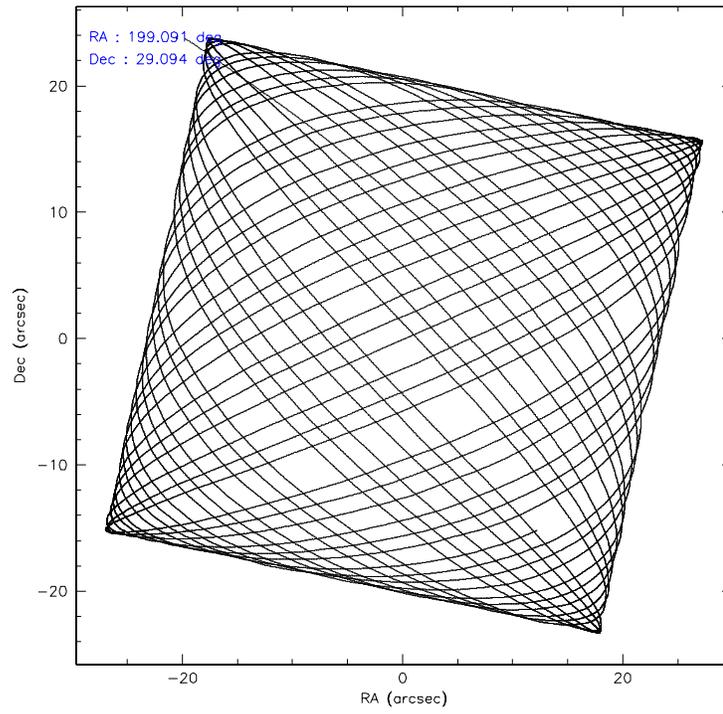
### Level 1 Events

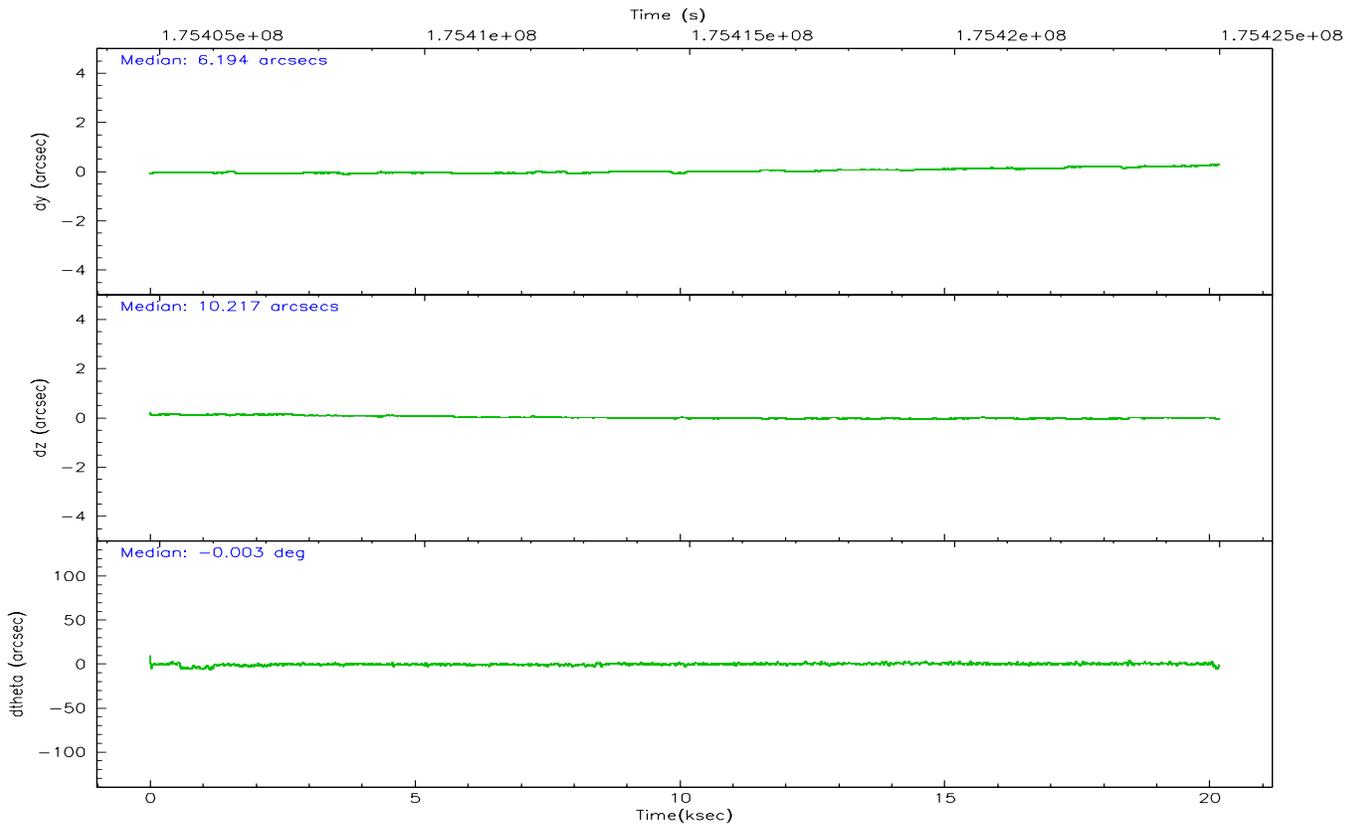
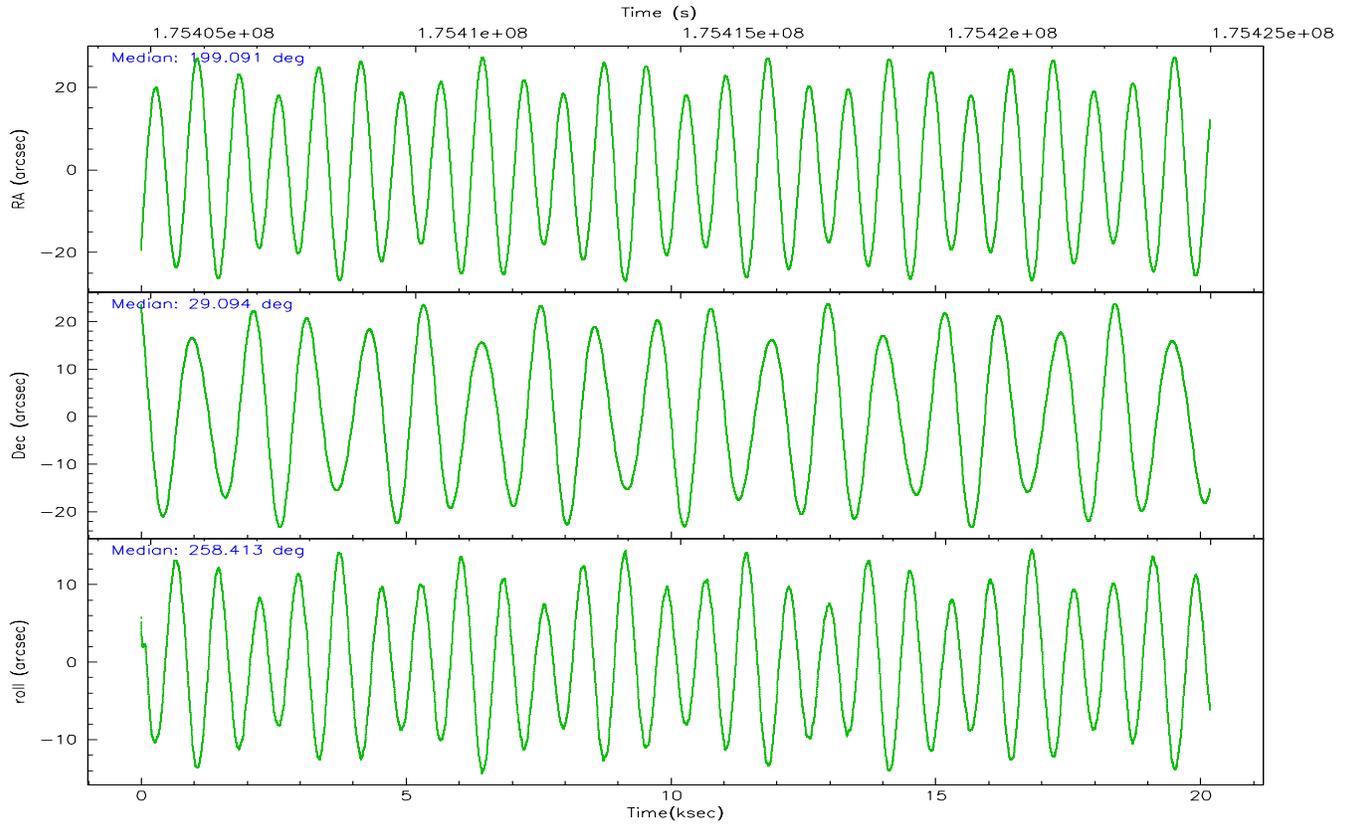
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	734796	617778	747938
rejected events	105286	112710	126222
rejected %	14%	18%	16%

## 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	199.078991	199.0908601340448			
Pointing Dec	29.121102	29.09440525539192			
Pointing Roll	258.356531	258.4180877203976			
Window start time	170812864.184000	170812864.184000			
Window stop time	175996864.184000	175996864.184000			
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	175404993.184000	175404283.64954			
Observation start date	2003-07-24T03:35:29	2003-07-24T03:24:43			
Observation end time	175424993.184000	175425163.41293			
Observation end date	2003-07-24T09:08:49	2003-07-24T09:12:43			

## 2.3 Aspect



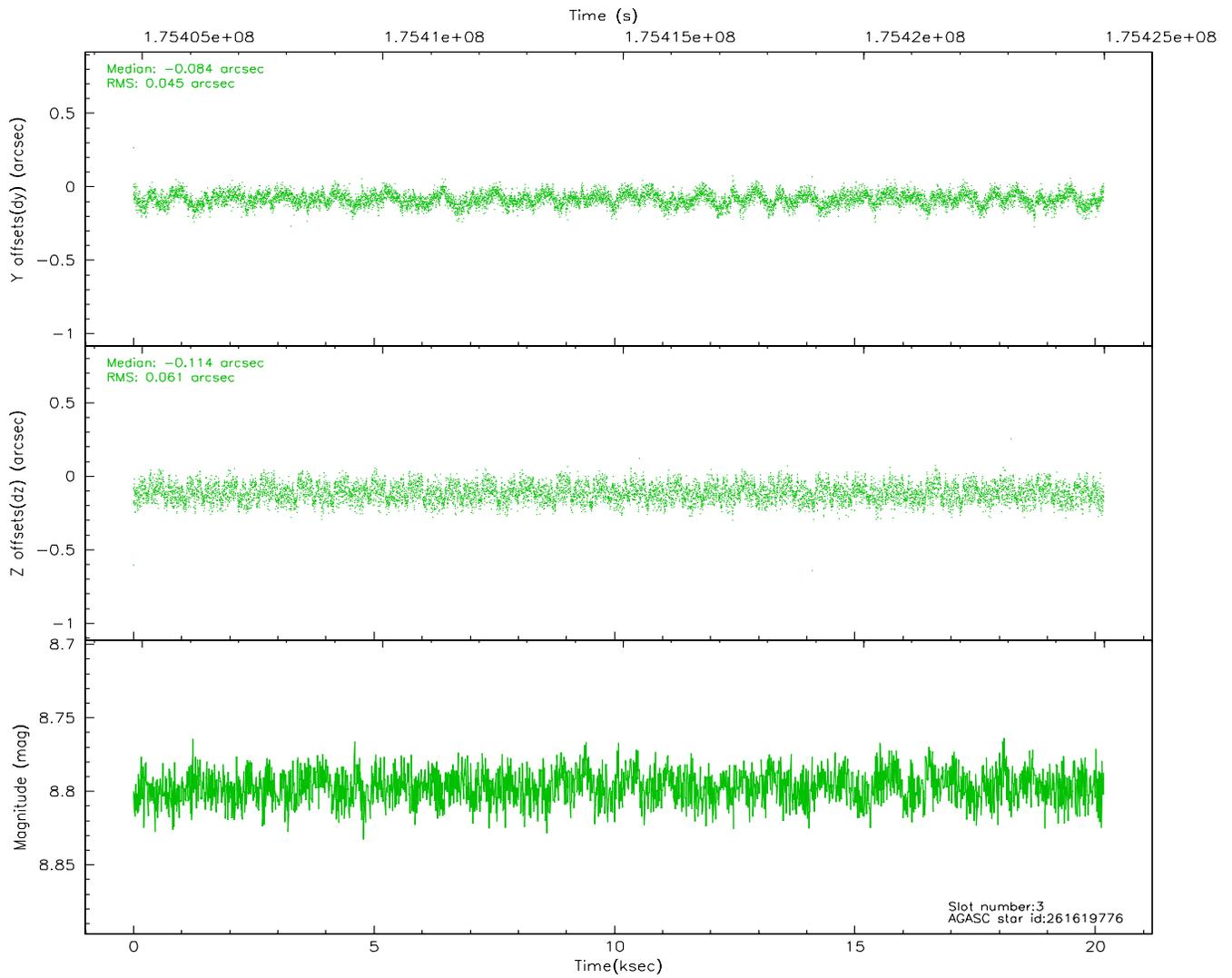
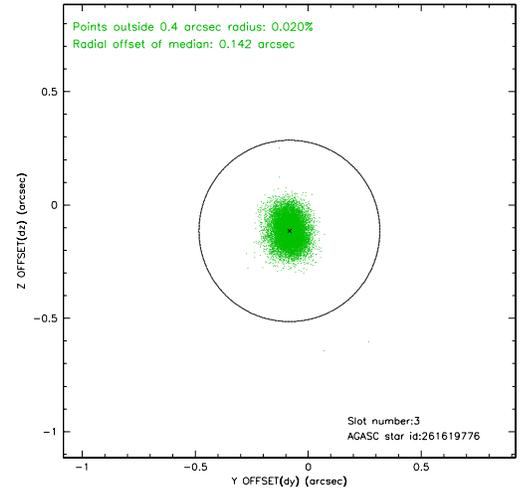
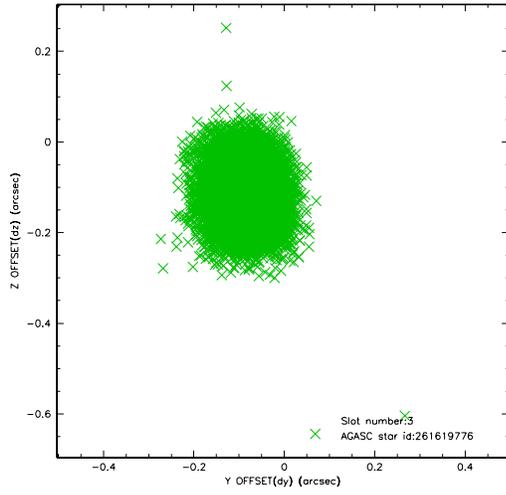


### Slot Statistics

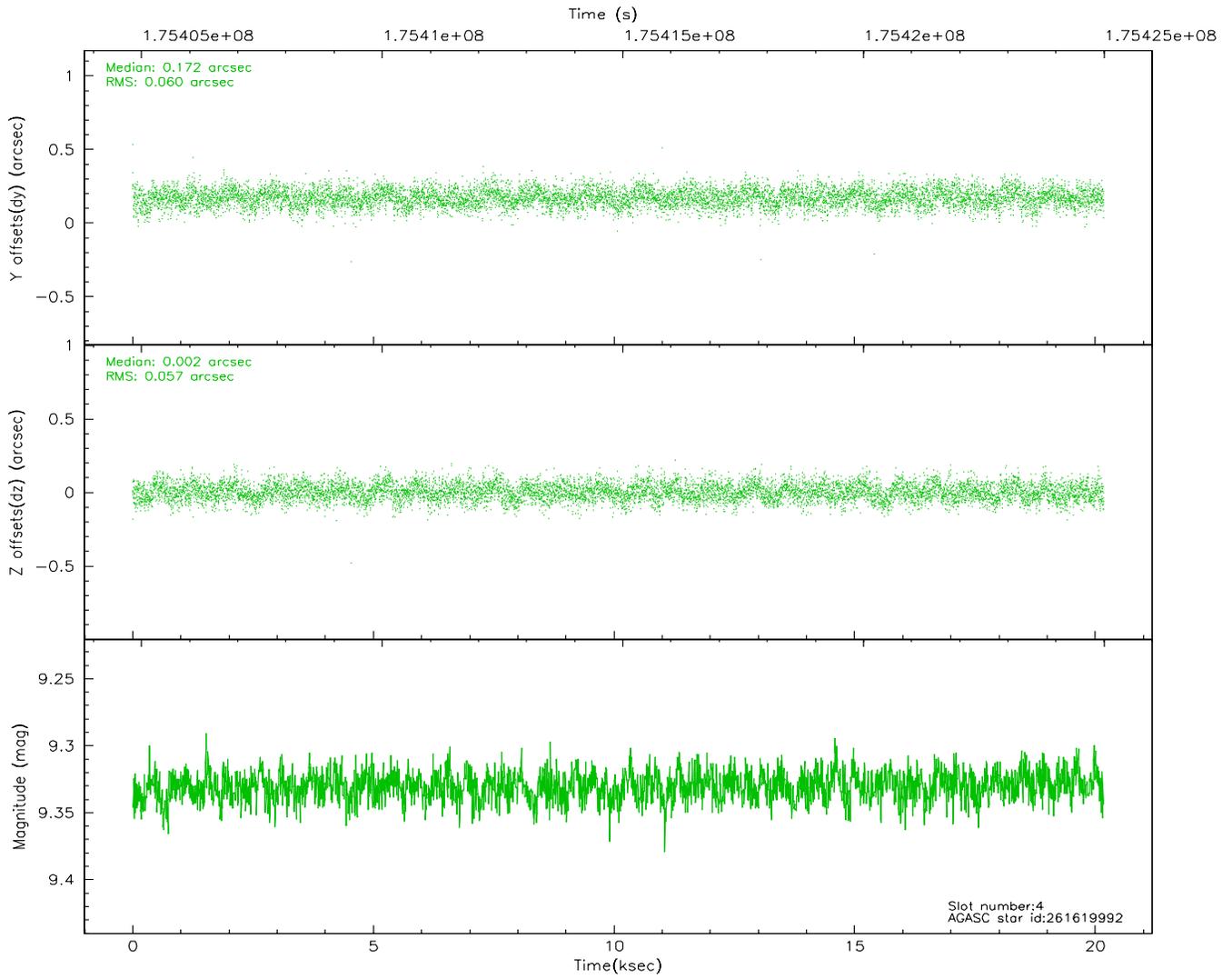
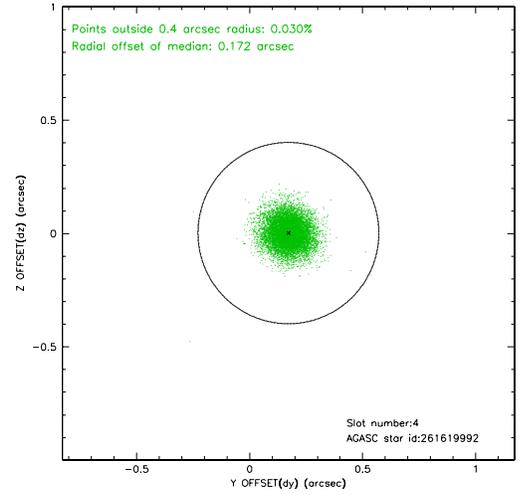
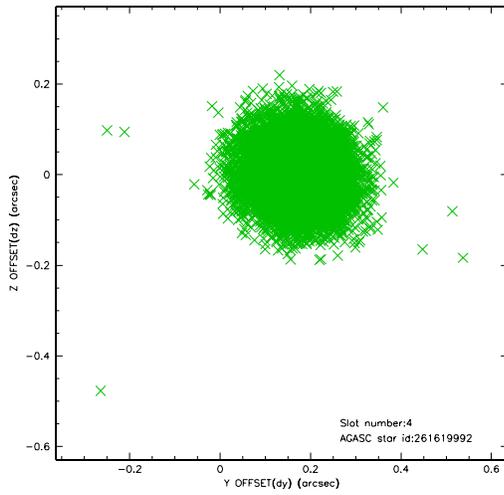
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	6.99	4922	0.105	-0.191	0.007	0.011	0.000000	0.000000	-1160.38	-458.96
1	FID	HRC-S-3	7.00	4921	0.138	-0.017	0.010	0.017	0.000000	0.000000	-1163.30	570.65
2	FID	HRC-S-4	6.95	4921	0.144	-0.089	0.008	0.014	0.000000	0.000000	1237.69	573.34
3	GUIDE	261619776	8.80	9842	-0.084	-0.114	0.082	0.128	198.654383	29.401174	-720.88	-1508.13
4	GUIDE	261619992	9.33	9841	0.172	0.002	0.088	0.142	198.395553	28.647634	2099.46	-1771.93
5	GUIDE	261623040	9.12	9840	-0.171	0.001	0.078	0.127	198.792686	29.757643	-2064.65	-1339.36
6	GUIDE	261623624	9.13	9763	0.150	0.126	0.076	0.123	199.611555	28.454113	2007.91	2135.05
7	GUIDE	261629720	8.10	9844	-0.066	-0.017	0.062	0.100	199.236176	29.044452	170.28	540.48

## 2.4 Star Slots

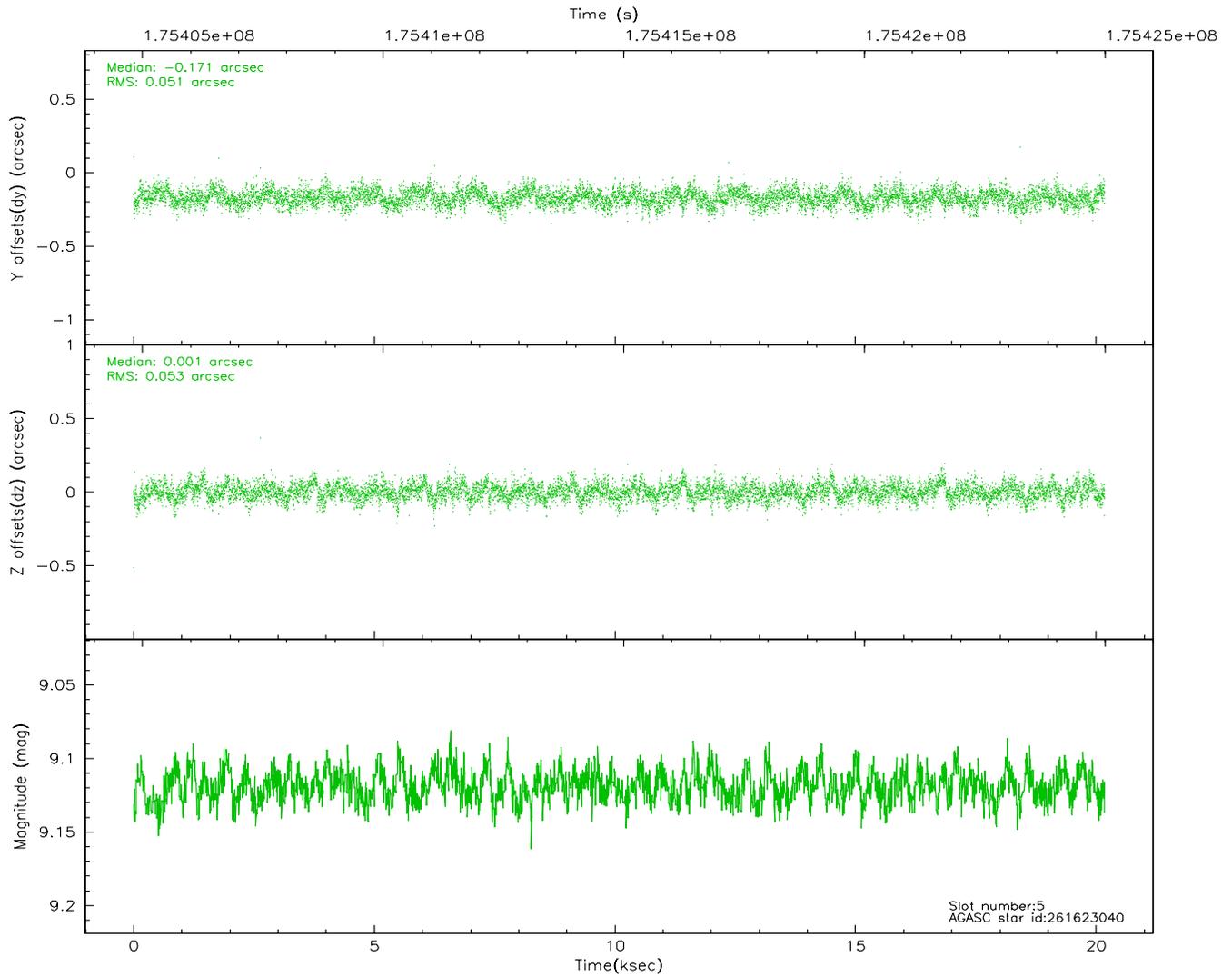
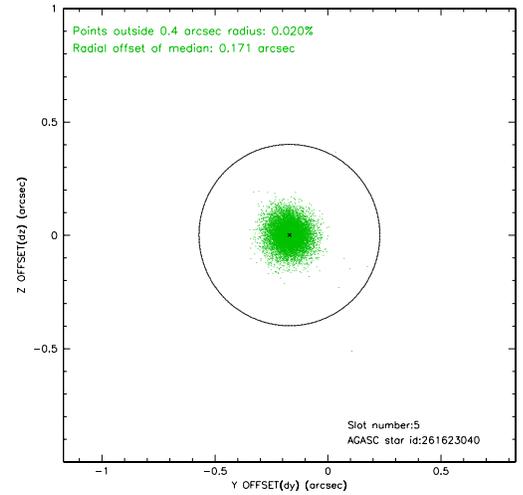
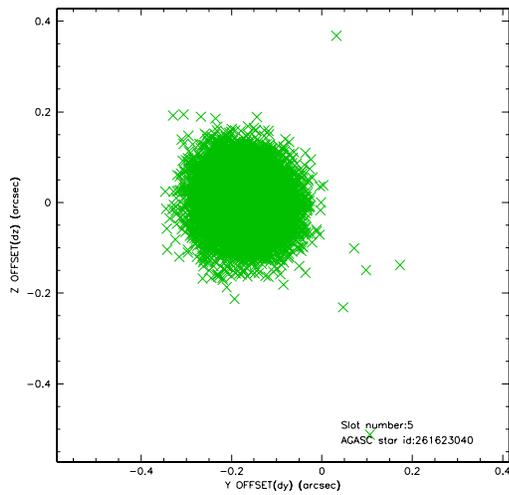
### 2.4.1 Slot 3



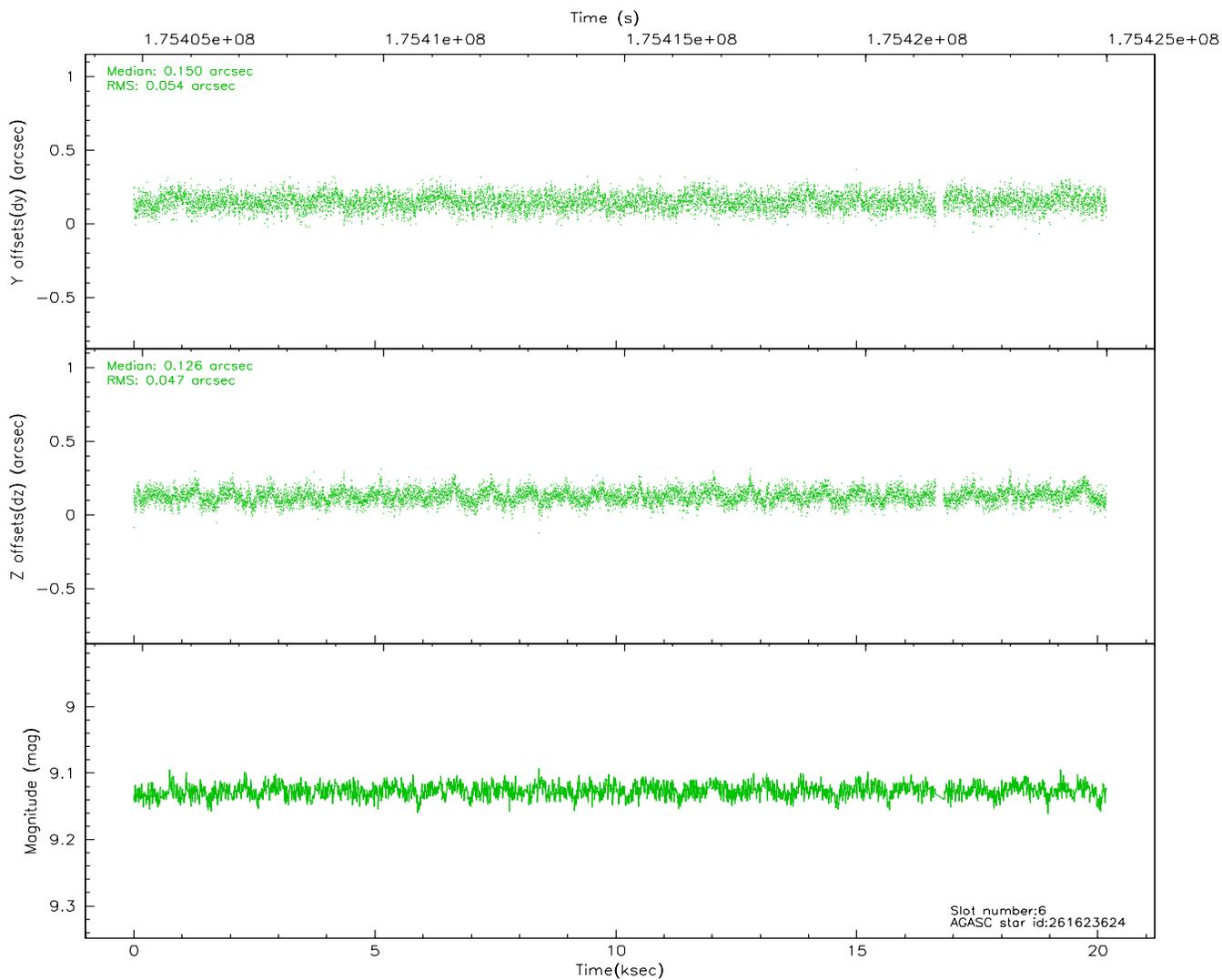
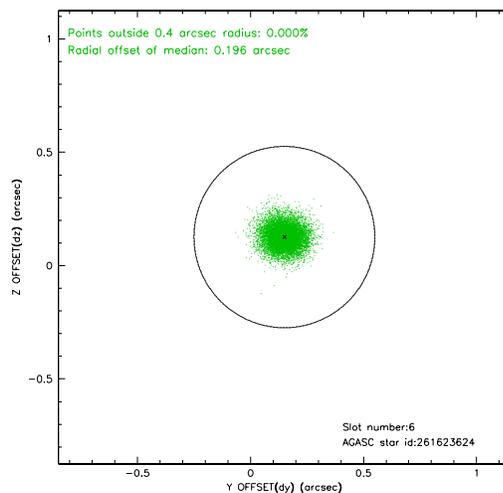
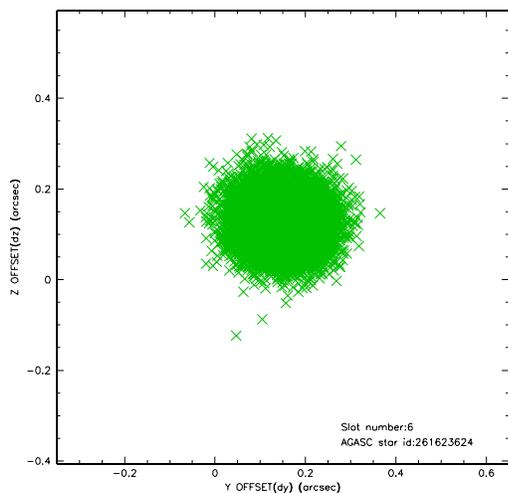
### 2.4.2 Slot 4



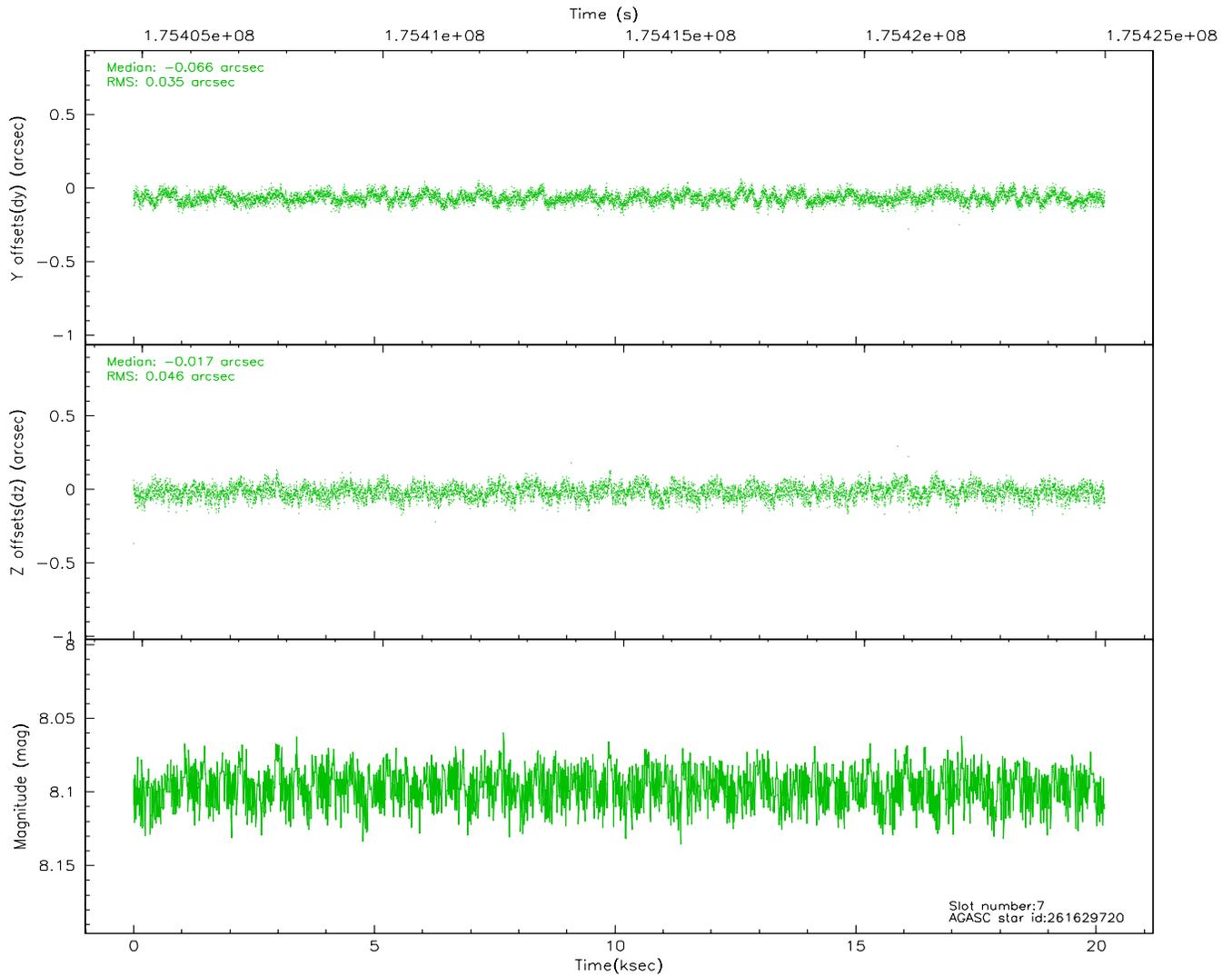
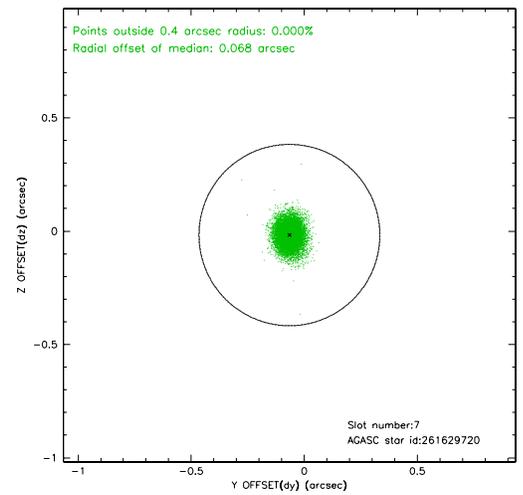
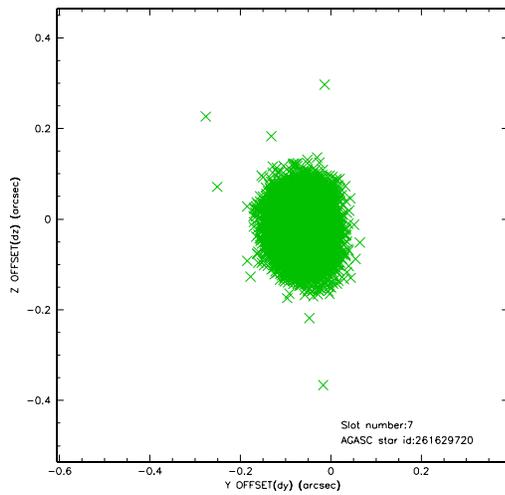
### 2.4.3 Slot 5



### 2.4.4 Slot 6

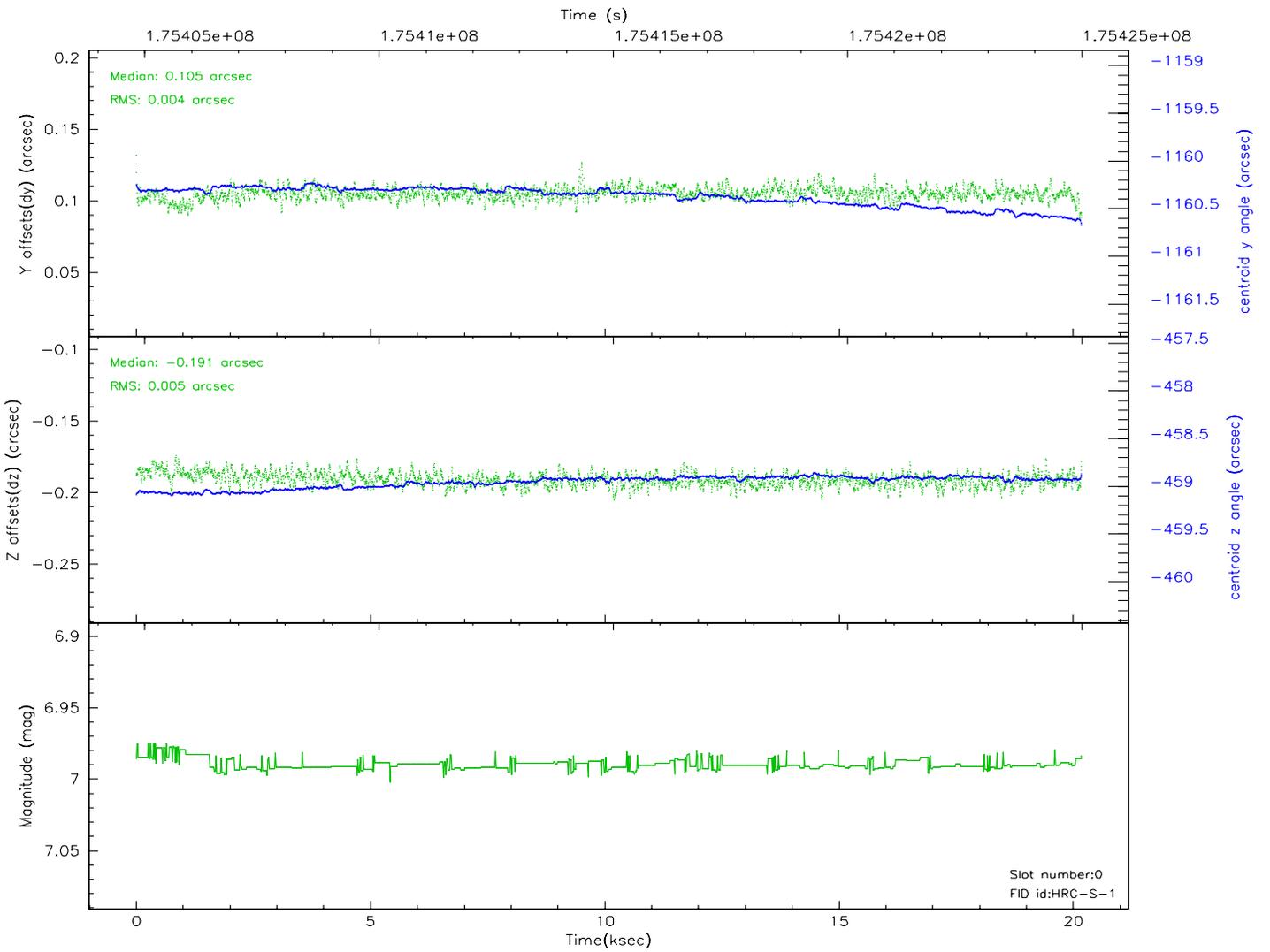
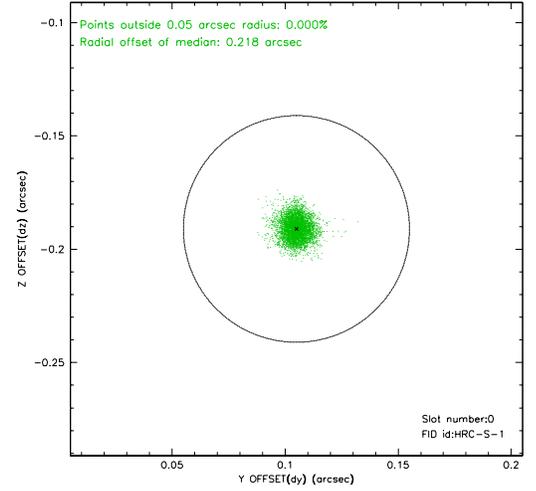
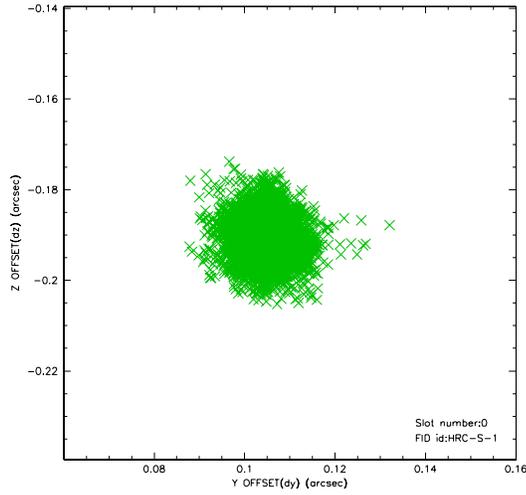


### 2.4.5 Slot 7

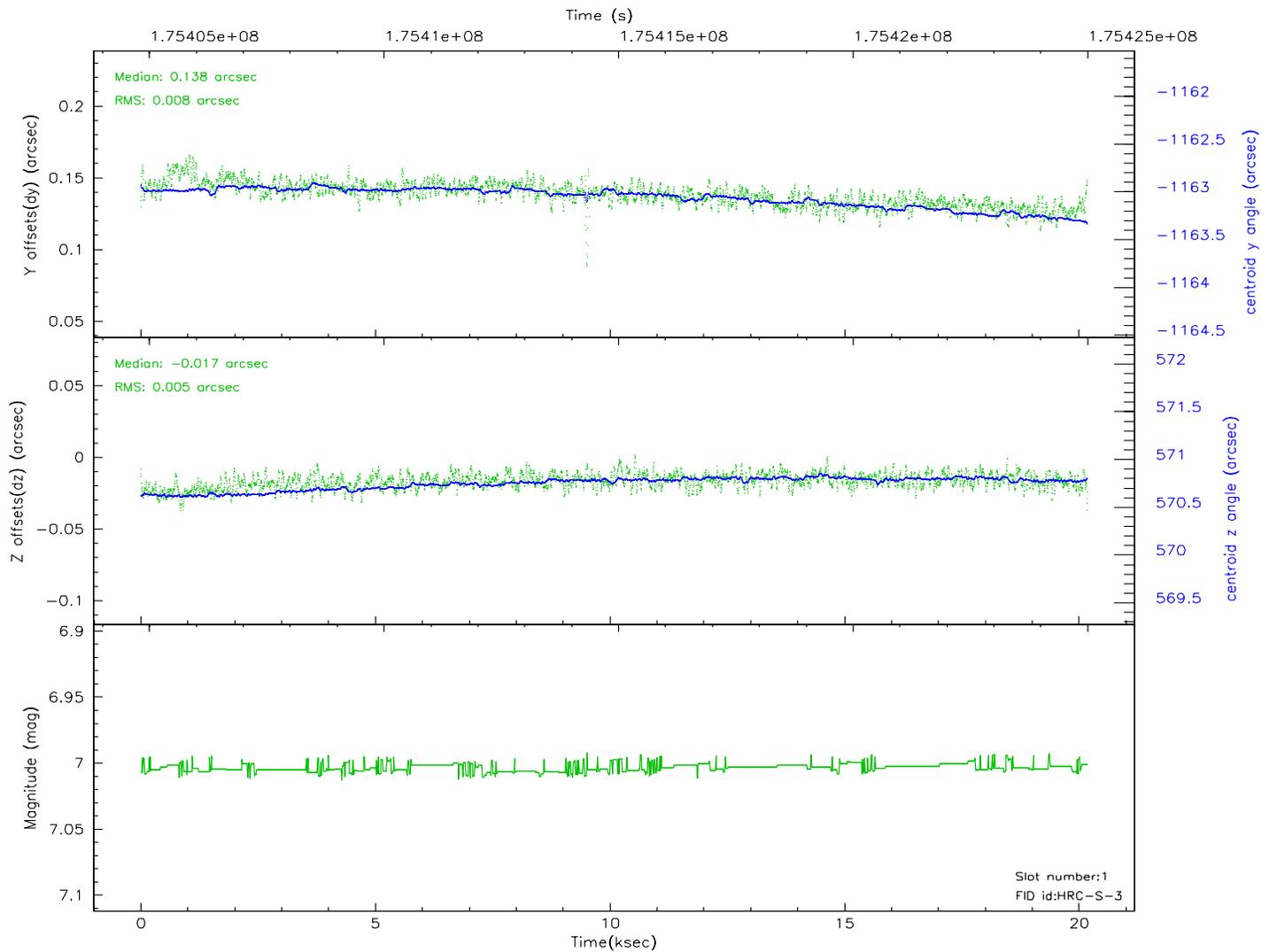
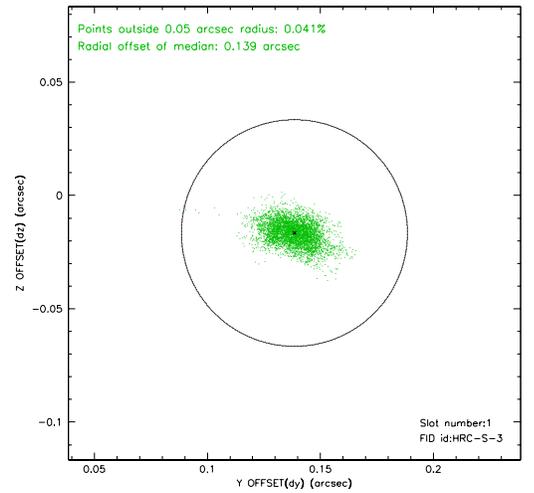
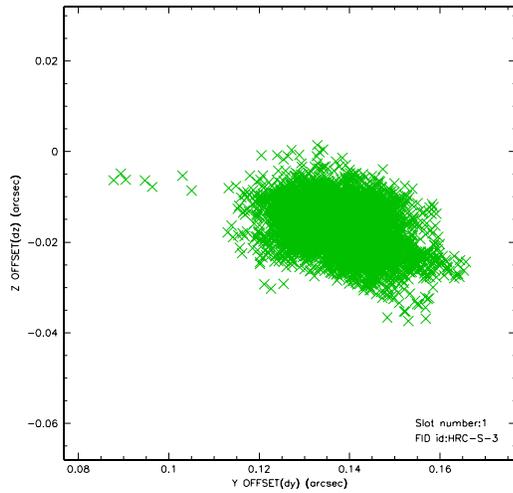


## 2.5 FID Slots

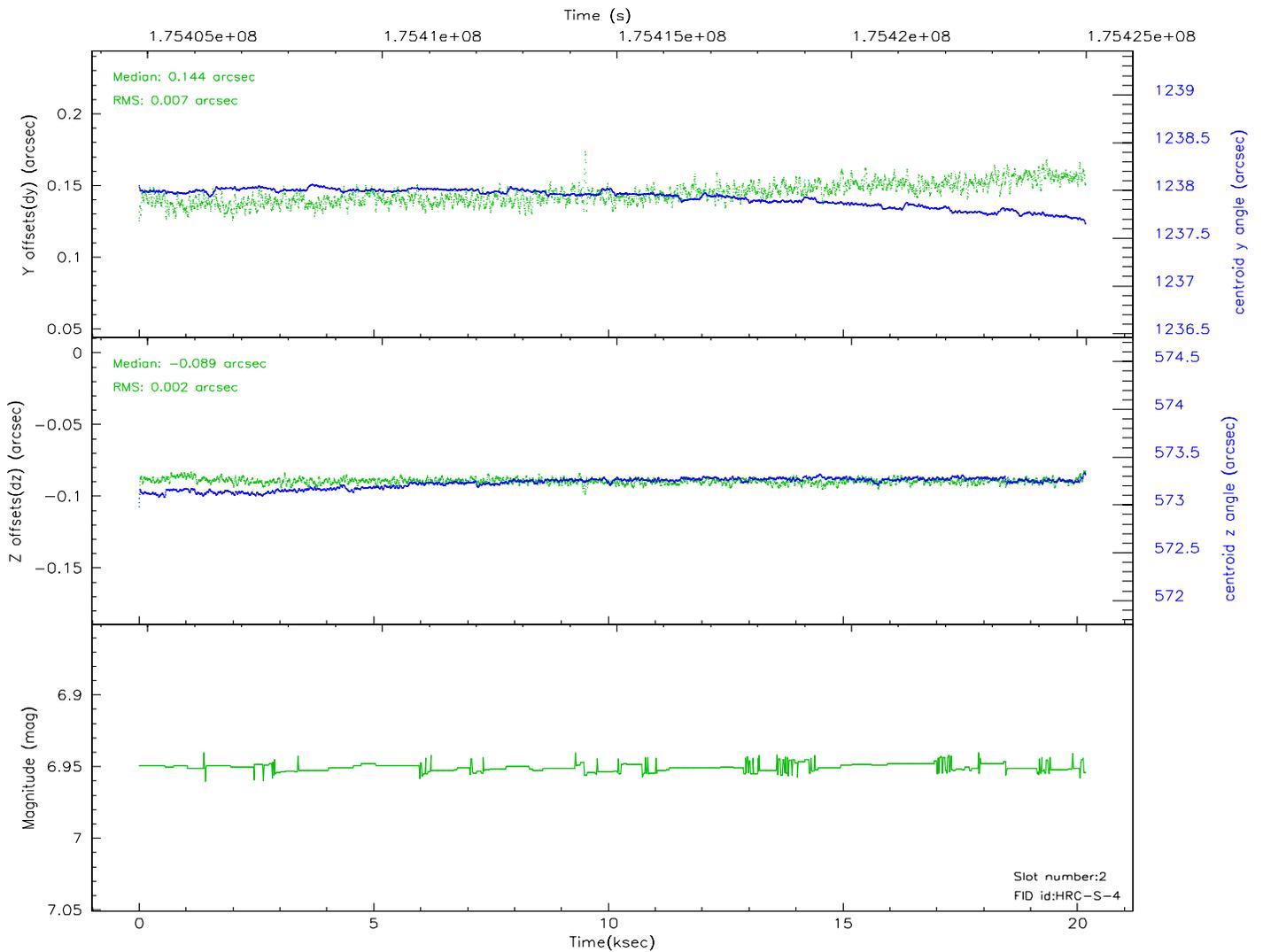
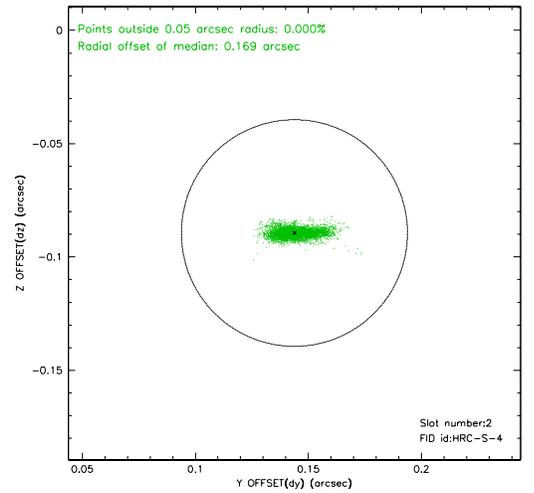
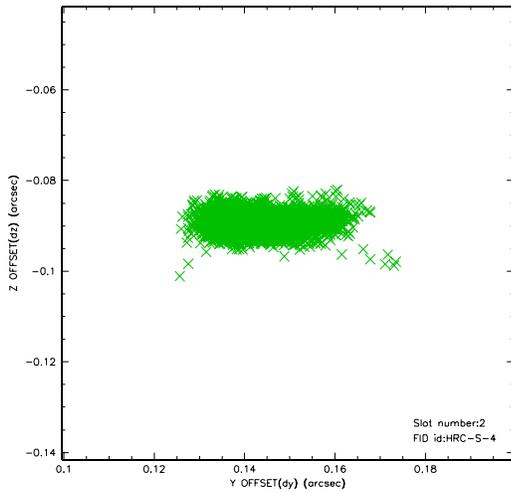
### 2.5.1 Slot 0



## 2.5.2 Slot 1

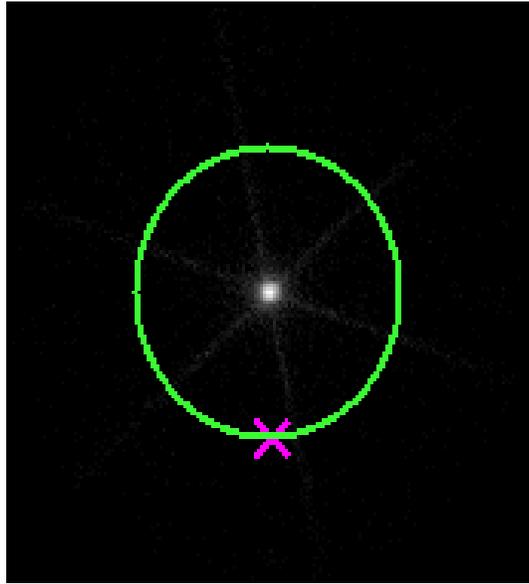


### 2.5.3 Slot 2



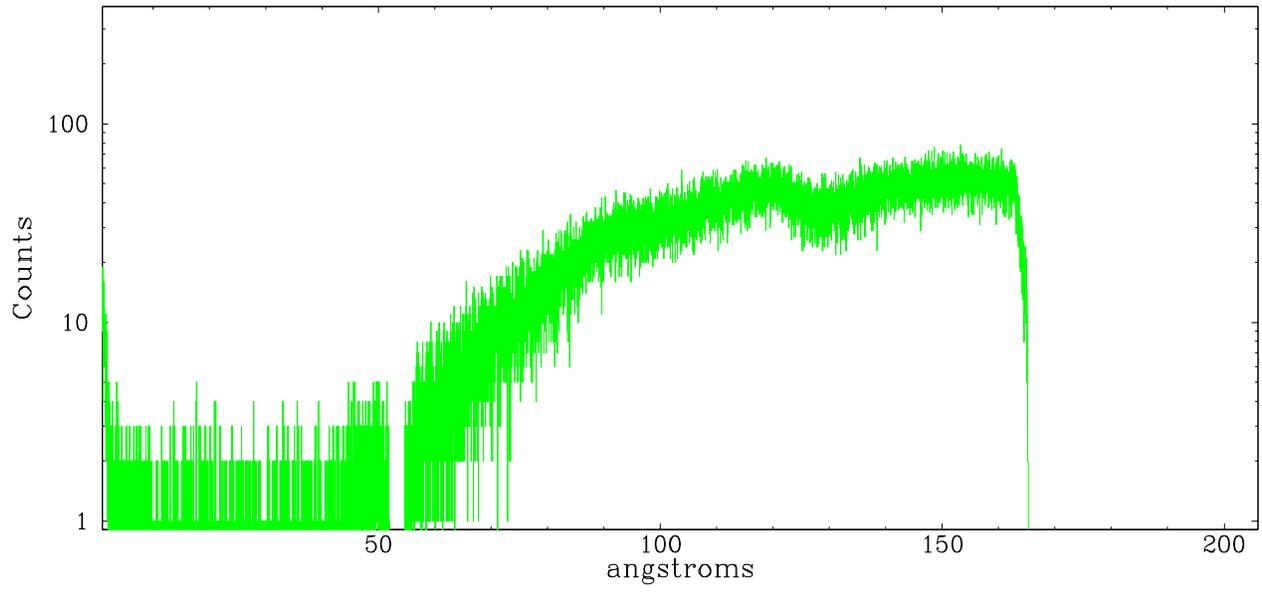
### 3 Gratings

#### 3.1 LETG Arm

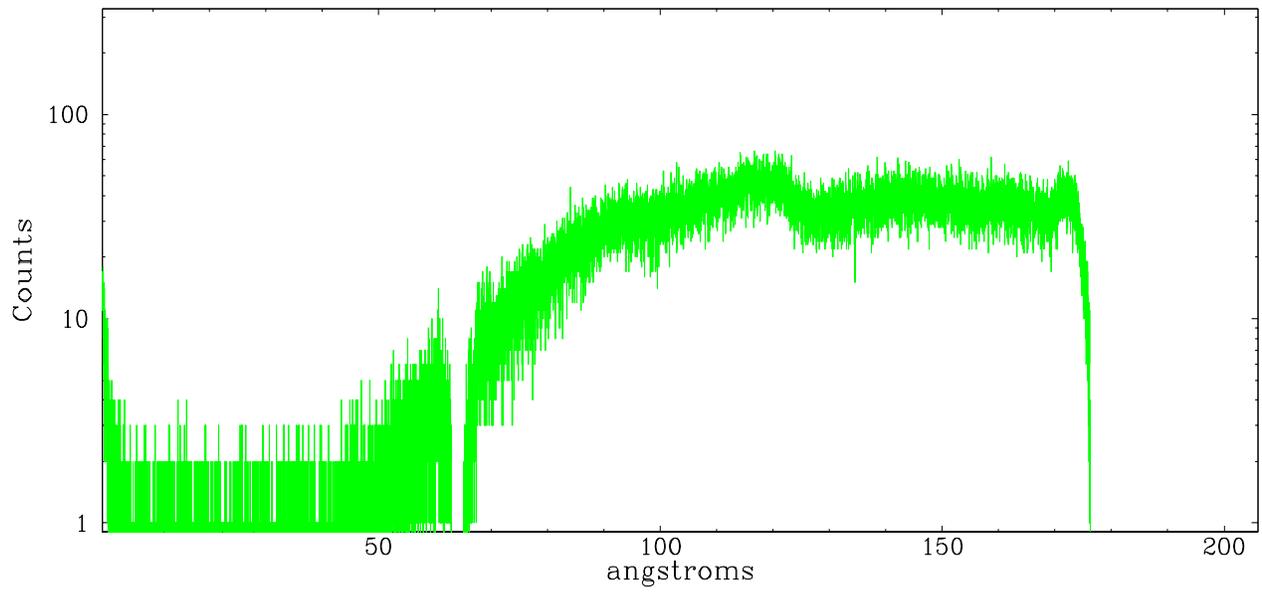


LETG Zero Order

leg order -1



leg order +1



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.07.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.179

## A.2 Comments

Window constraint met.