

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 4000 - L2 Version 001  
Chandra X-Ray Center

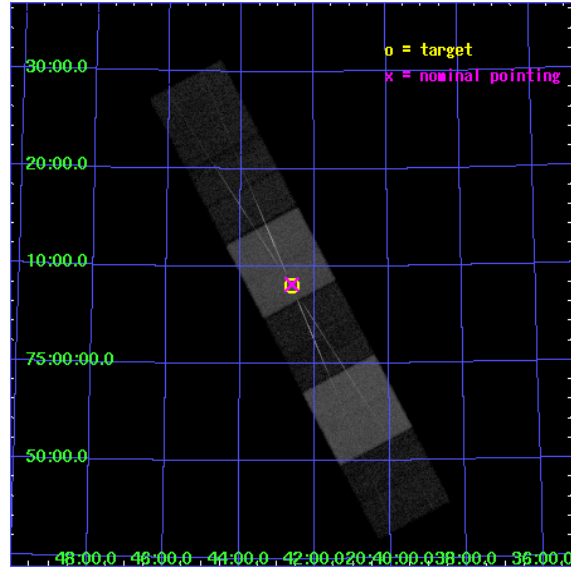
L2 Processing Date : Jul 1 2006

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# 1 Front

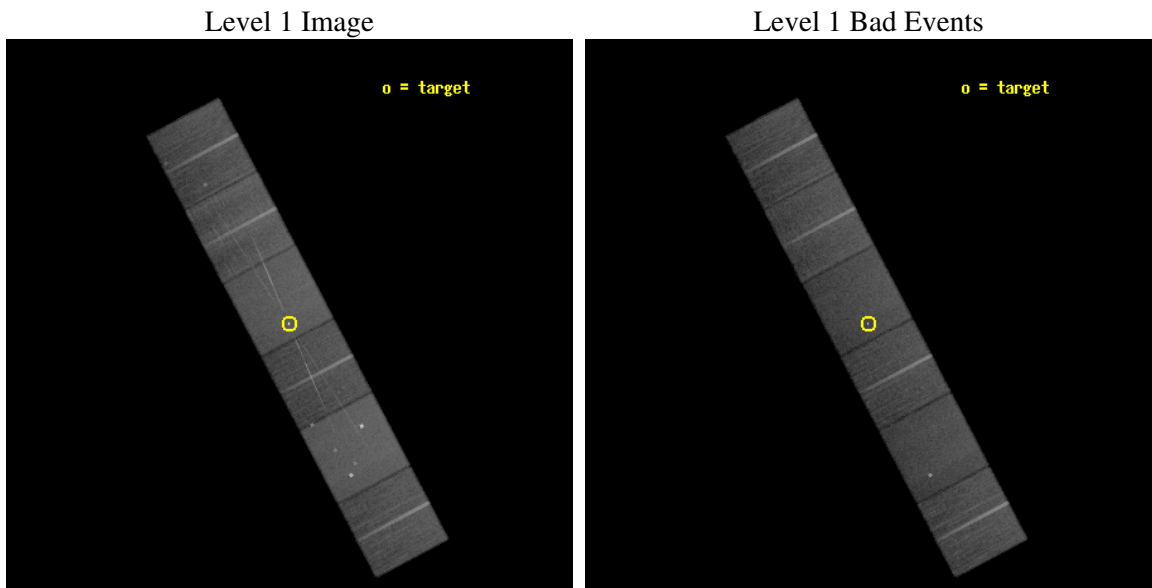
seq_num	700679
obs_id	4000
title	SEARCHING FOR HIGHLY IONIZED WARM ABSORBERS IN HIGH LUMINOSITY AGN: 4C 74.26
observer	Dr. Shai Kaspi
object	4C 74.26
dtcycle	0
cycle	P
ra_targ	310.655
dec_targ	75.134028
ra_nom	310.65199270554
dec_nom	75.136120417701
roll_nom	242.15954477907
revision	2
ontime	37657.599859715
livetime	37180.756655606
ontime4	37657.599859715
ontime5	37657.599859715
ontime6	37657.599859715
ontime7	37657.599859715
ontime8	37651.117899239
ontime9	37657.599859715
l2events	392888



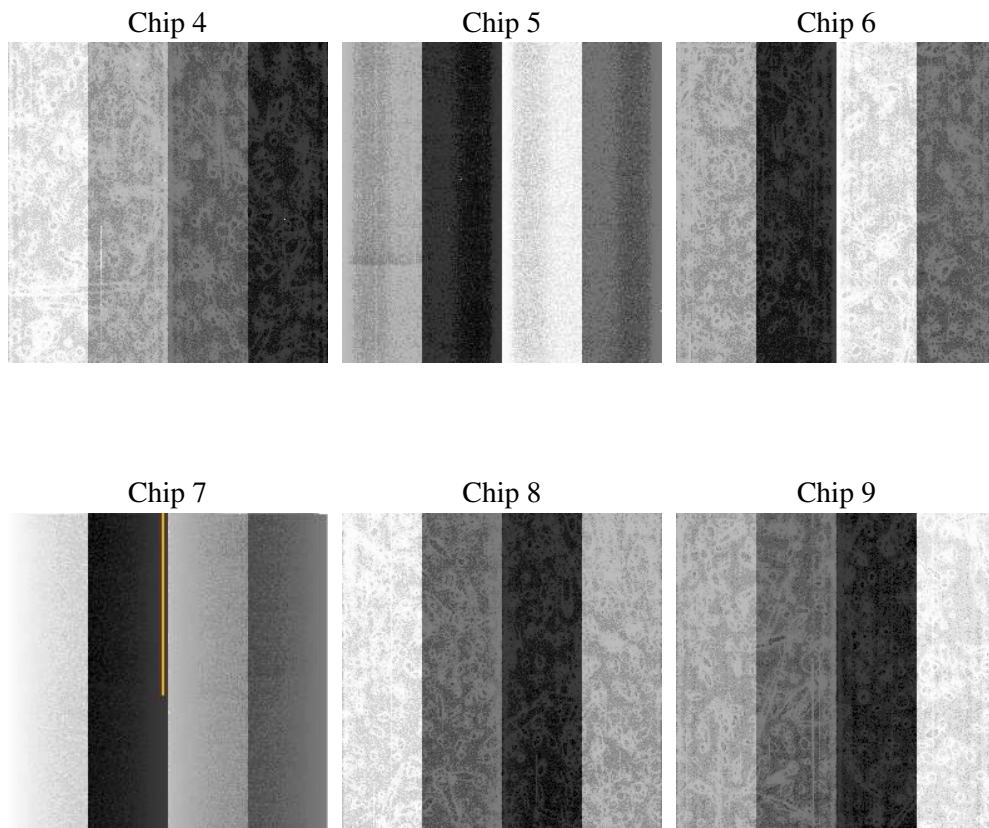
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2
ascdsver	7.6.8
caldsver	3.2.2
date	2006-07-01T17:32:15
revision	2

sched_exp_time	37849.000000
ontime	37663.677028596
ontime4	37663.677028596
ontime5	37663.677028596
ontime6	37663.677028596
ontime7	37663.677028596
ontime8	37657.195068121
ontime9	37663.677028596
l1events	1780079

### 2.1.4 Events

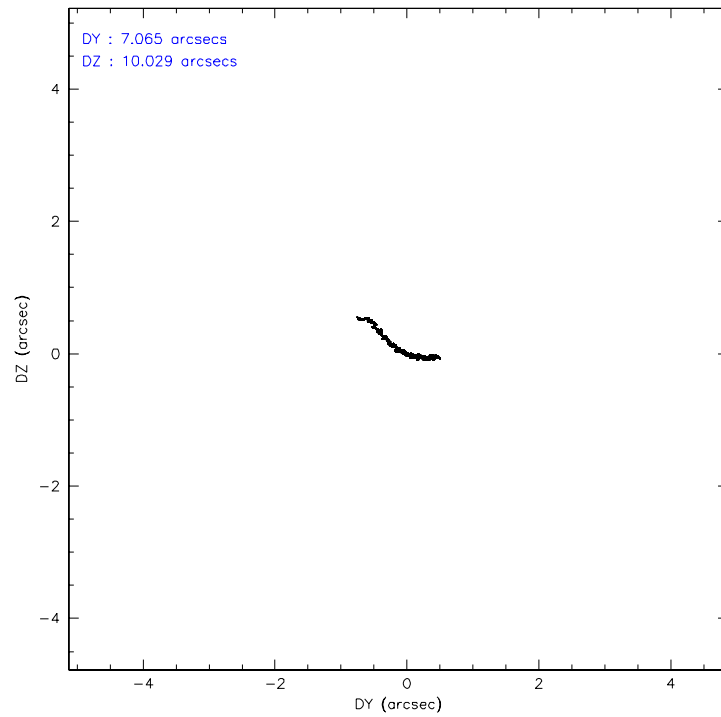
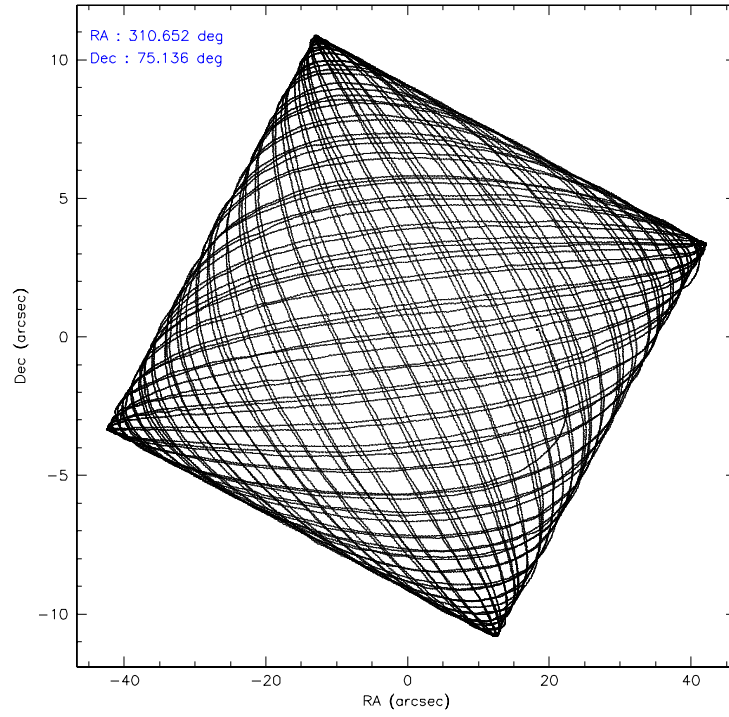
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	268140	364035	253704	340235	310545	243420
rejected events	238880	200406	217624	202883	244272	213162
rejected %	89%	55%	85%	59%	78%	87%

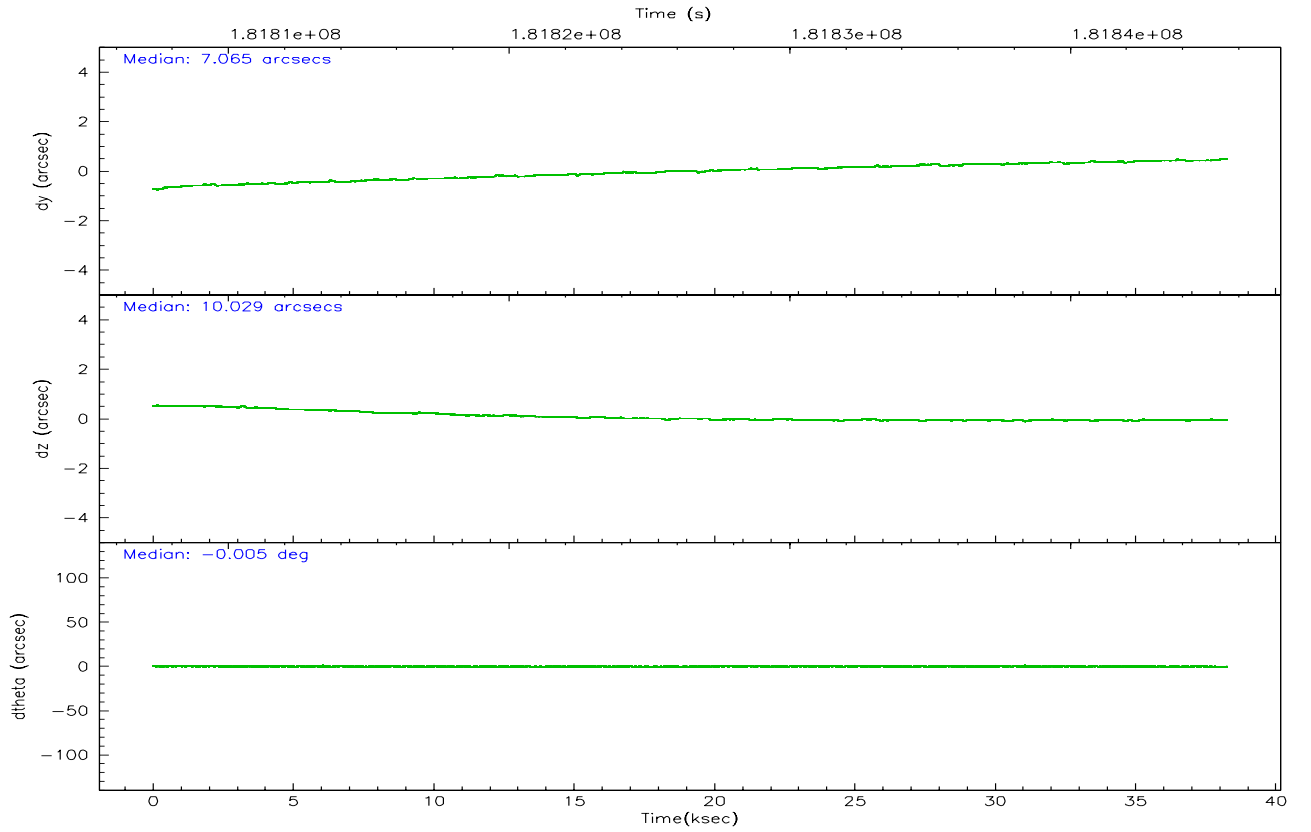
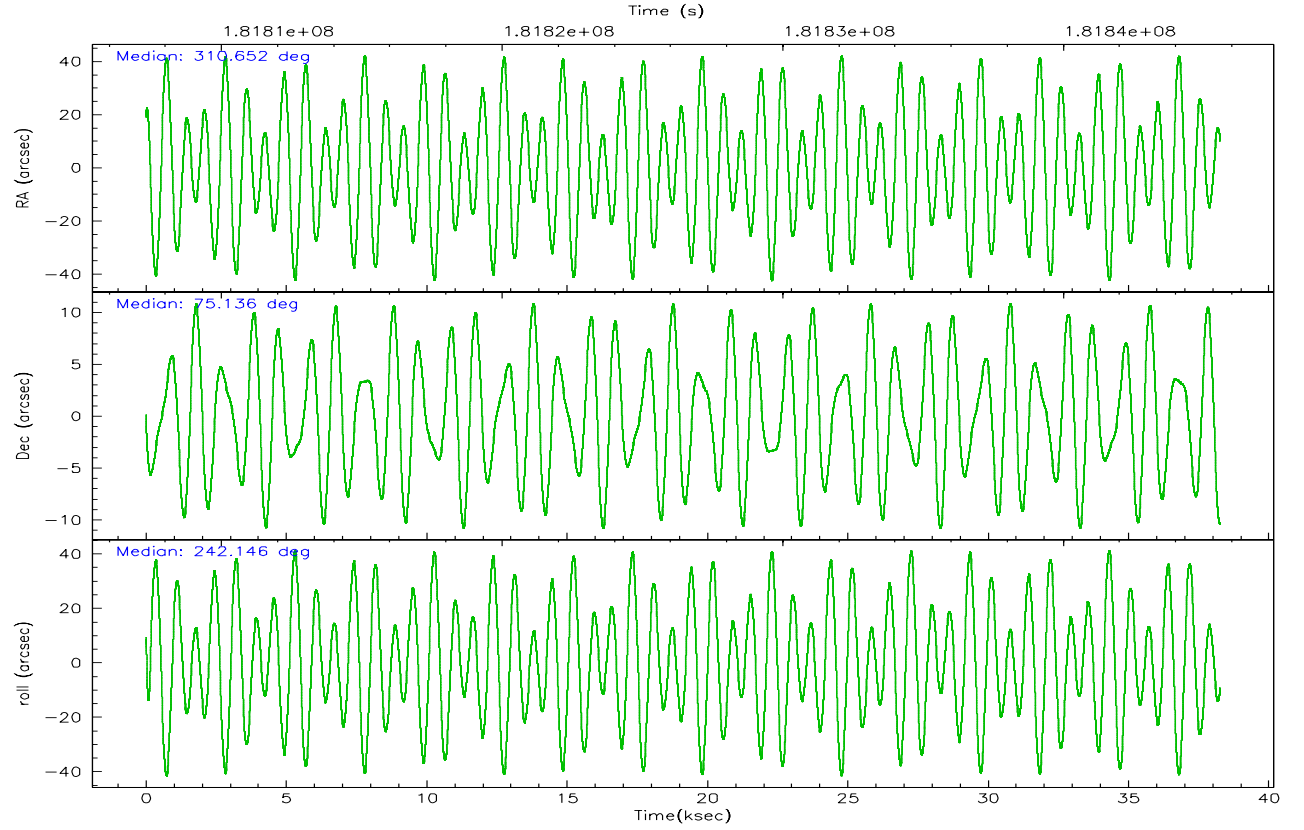
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	12752	19491	17265	9143	21930	13011
	4%	5%	6%	2%	7%	5%
grade 1 events	225	2391	130	307	205	178
	0%	0%	0%	0%	0%	0%
grade 2 events	6003	47925	6819	34173	14576	5589
	2%	13%	2%	10%	4%	2%
grade 3 events	2865	3468	3161	7600	6515	3004
	1%	0%	1%	2%	2%	1%
grade 4 events	3072	3303	2956	7439	6256	2850
	1%	0%	1%	2%	2%	1%
grade 5 events	10441	17201	11331	22418	14553	11759
	3%	4%	4%	6%	4%	4%
grade 6 events	4574	89470	5885	79026	17014	5812
	1%	24%	2%	23%	5%	2%
grade 7 events	228208	180786	206157	180129	229496	201217
	85%	49%	81%	52%	73%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	310.646505	310.6519927055384	Alternating exposures requested	N	N
Pointing Dec	75.163322	75.13612041770057	Primary exposure time	0.000000	3.2
Pointing Roll	242.008214	242.1595447790663			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1425803651734			
SIM translation stage offset (mm)	0	0.01005778216563158			
Observation start time	181807727.184000	181806650.71109			
Observation start date	2003-10-06T06:07:43	2003-10-06T05:50:50			
Observation end time	181845576.184000	181845891.30027			
Observation end date	2003-10-06T16:38:32	2003-10-06T16:44:51			
Read mode	TIMED	TIMED			

## 2.3 Aspect





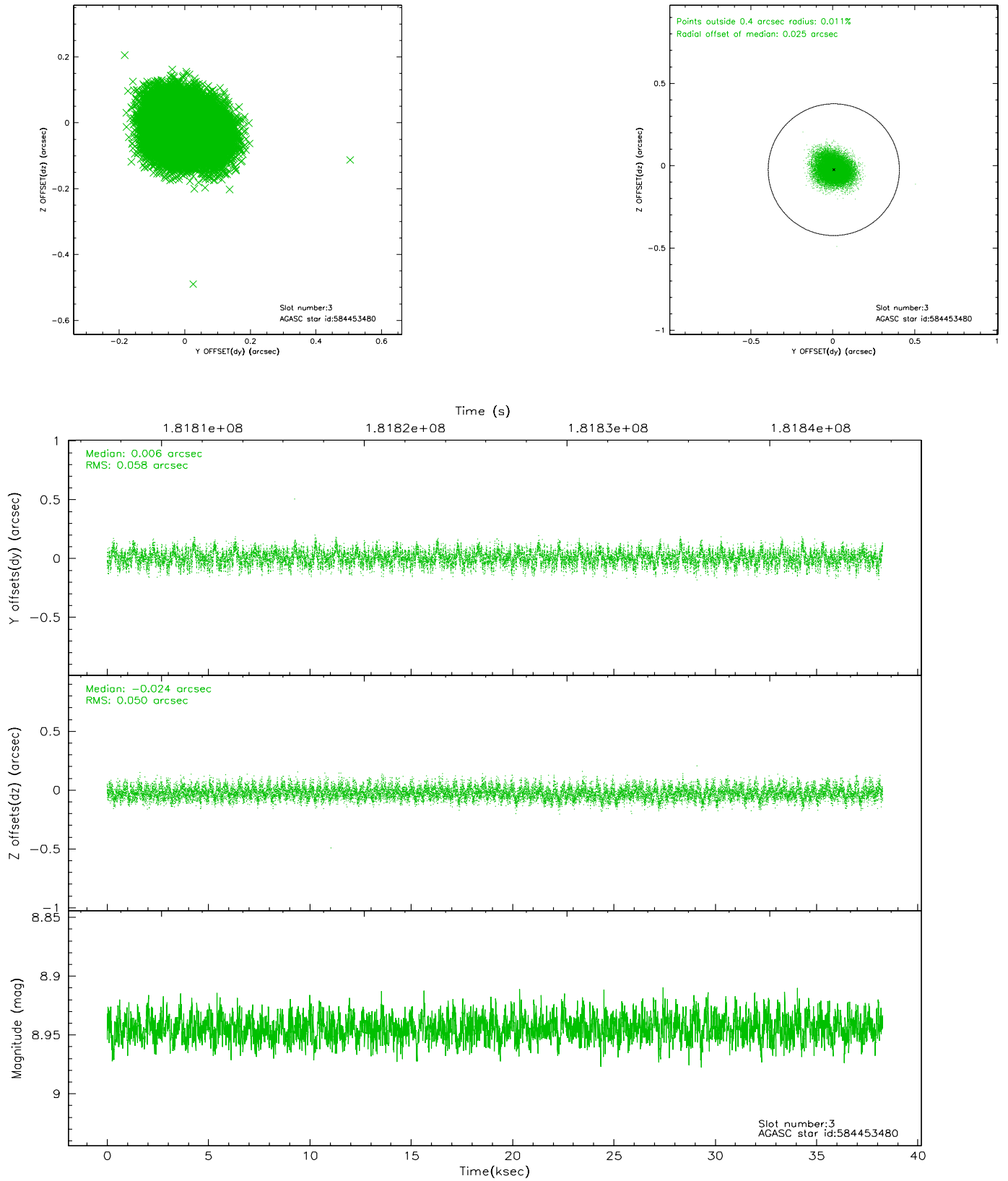
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	9334	-0.037	0.008	0.012	0.017	0.000000	0.000000	-759.79	-1731.33
1	FID	ACIS-S-4	7.20	9334	0.025	0.016	0.010	0.017	0.000000	0.000000	2153.51	177.19
2	FID	ACIS-S-5	7.23	9334	-0.019	-0.014	0.011	0.018	0.000000	0.000000	-1812.62	170.79
3	GUIDE	584453480	8.94	18660	0.006	-0.024	0.082	0.132	311.245727	74.720187	1139.24	1249.47
4	GUIDE	584456408	9.42	18642	0.014	0.018	0.108	0.171	307.720285	74.988328	1777.59	-2143.94
5	GUIDE	600992280	9.20	18654	-0.057	0.073	0.102	0.164	307.494541	75.010644	1794.17	-2368.75
6	GUIDE	601098528	9.11	18650	0.084	0.130	0.071	0.114	310.058226	75.008164	748.40	-222.85
7	GUIDE	586155048	7.94	18668	-0.051	-0.195	0.062	0.099	312.135794	74.489876	1451.57	2395.31

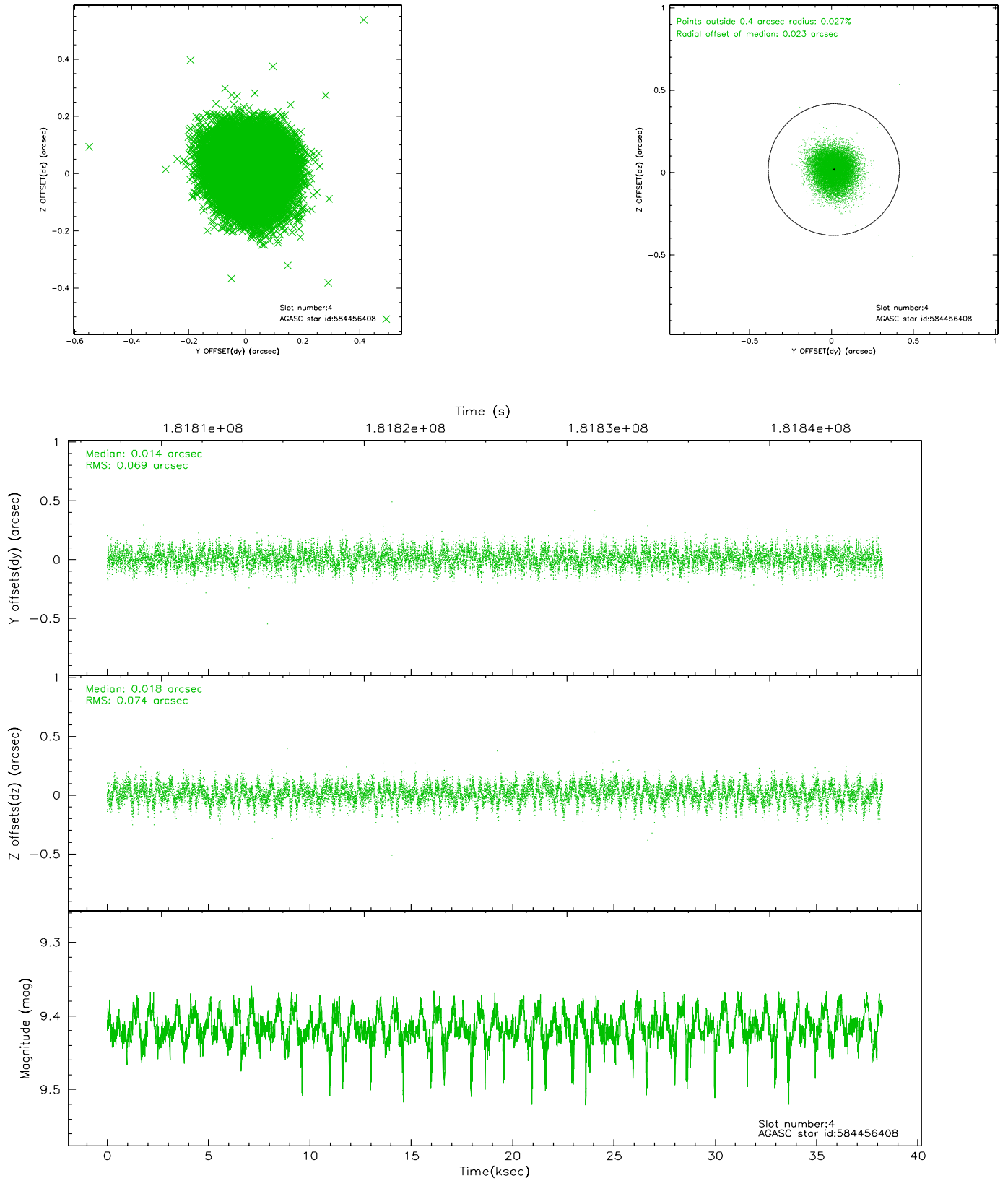


## 2.4 Star Slots

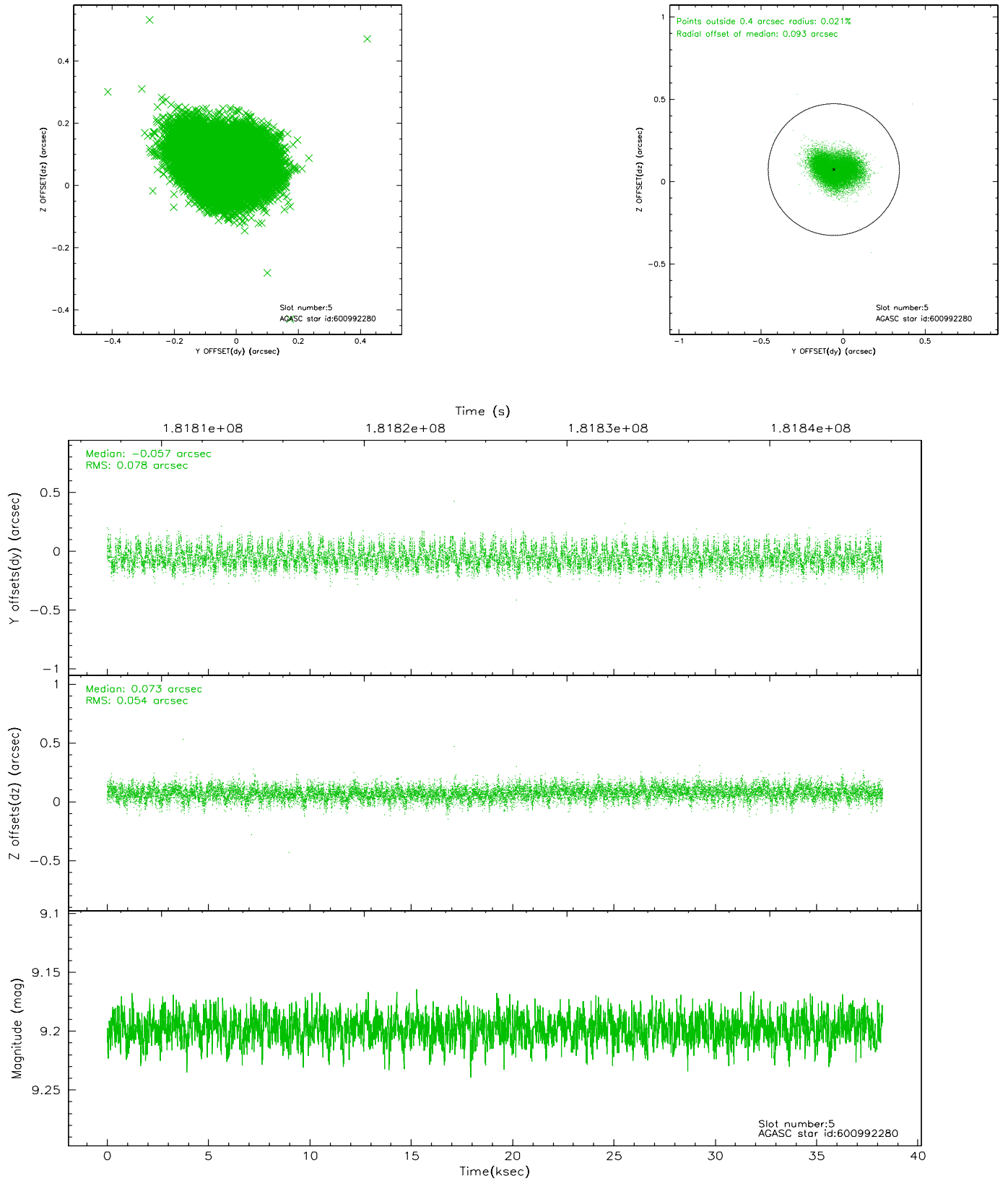
### 2.4.1 Slot 3



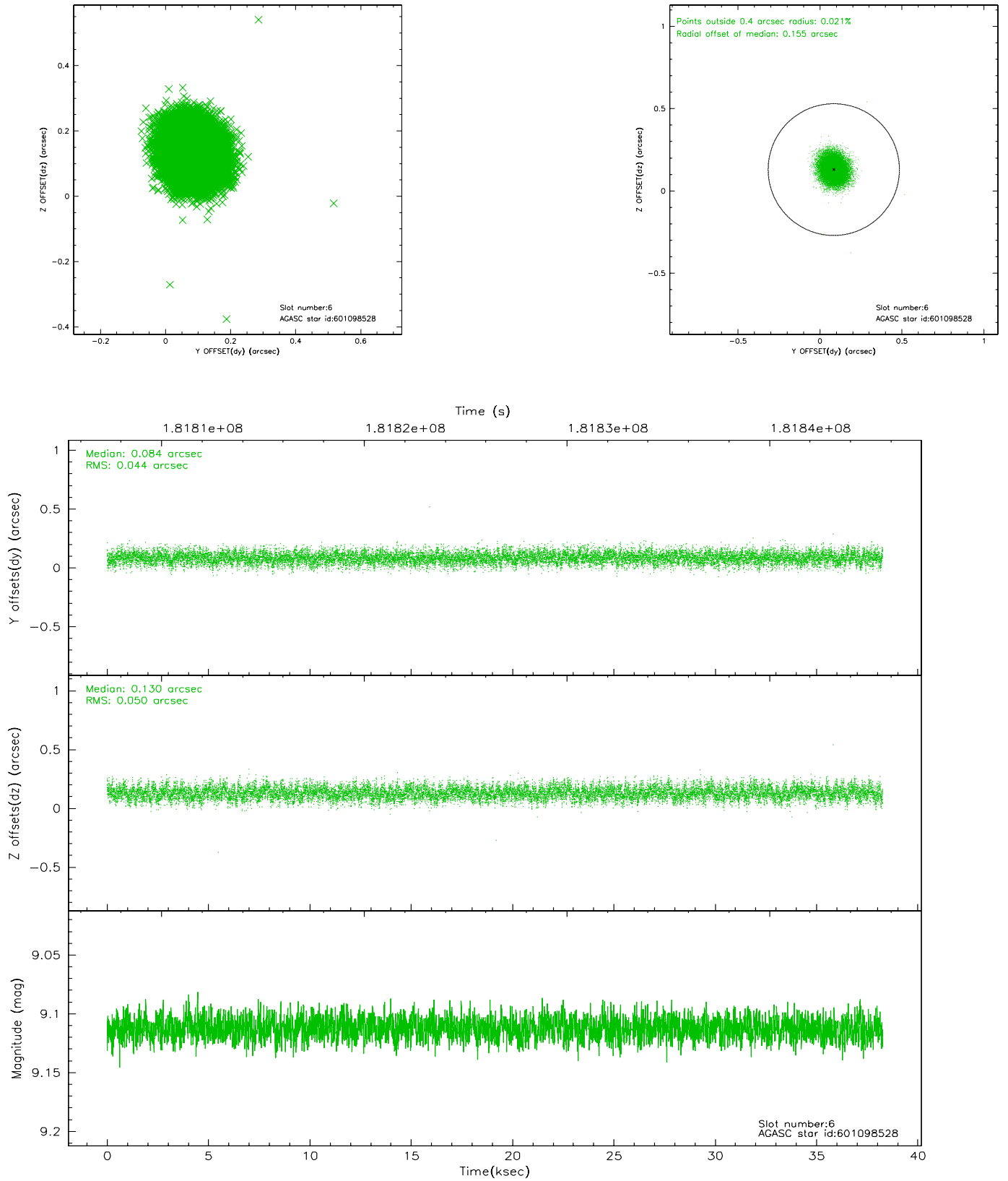
## 2.4.2 Slot 4



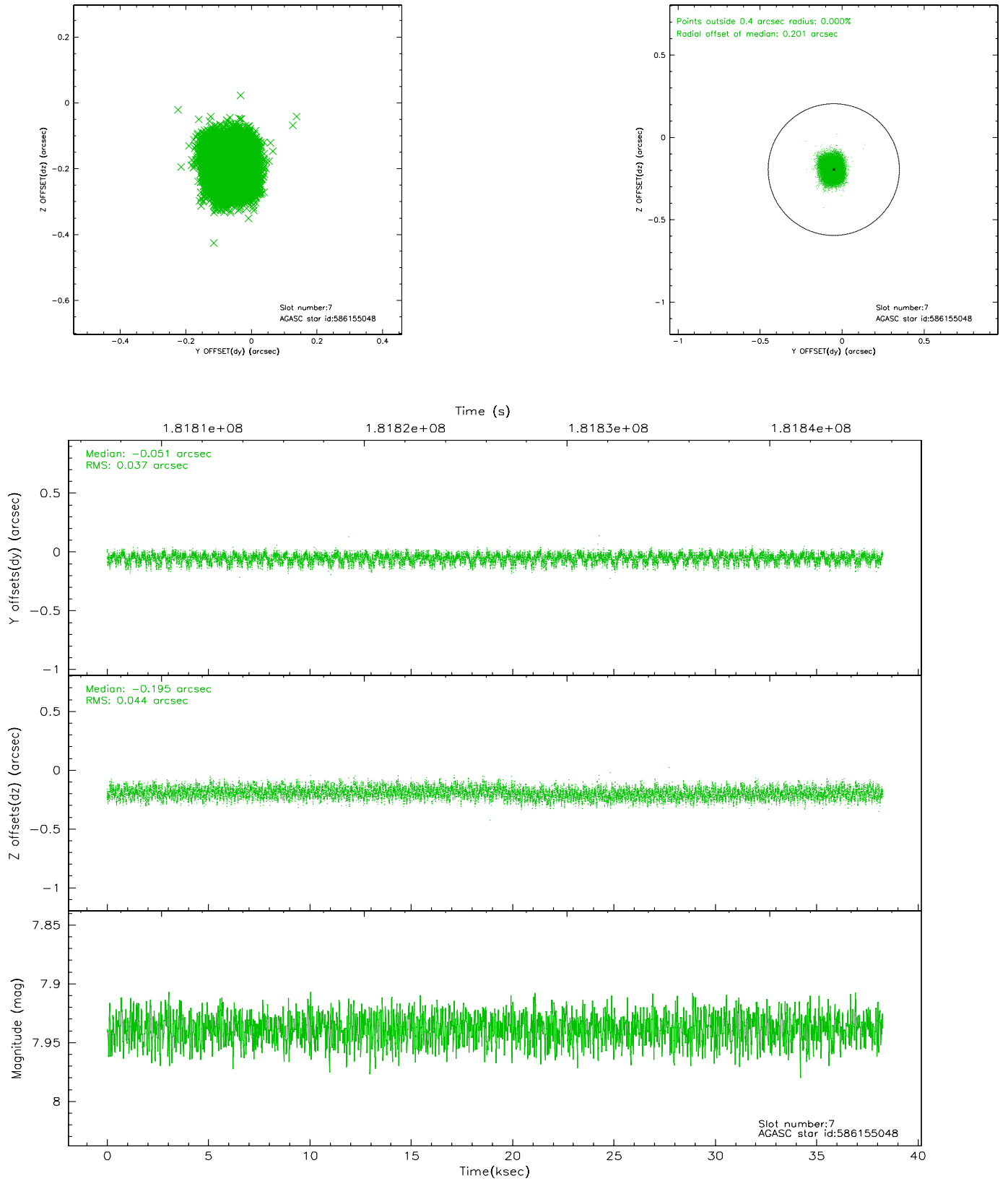
### 2.4.3 Slot 5



## 2.4.4 Slot 6

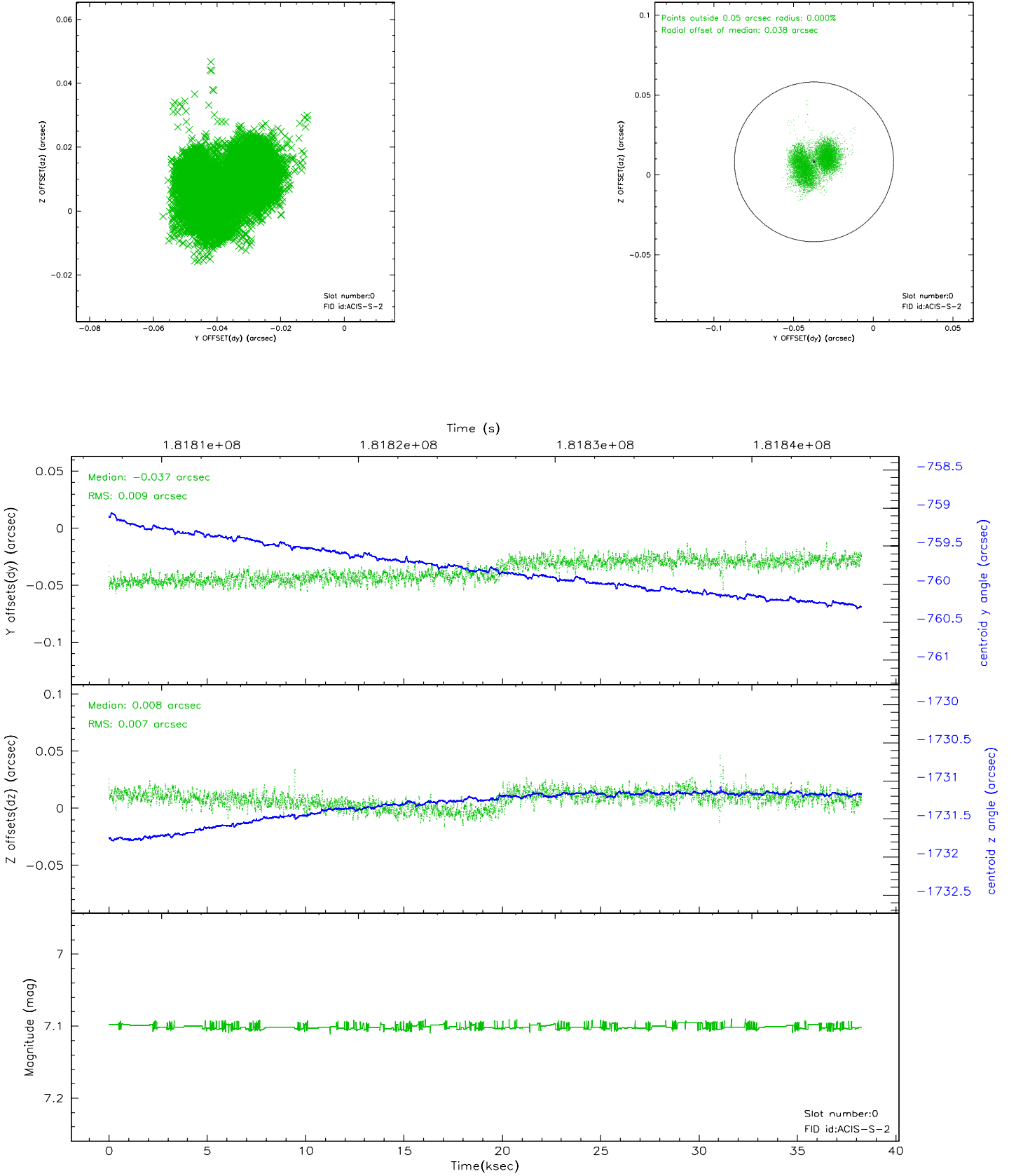


## 2.4.5 Slot 7

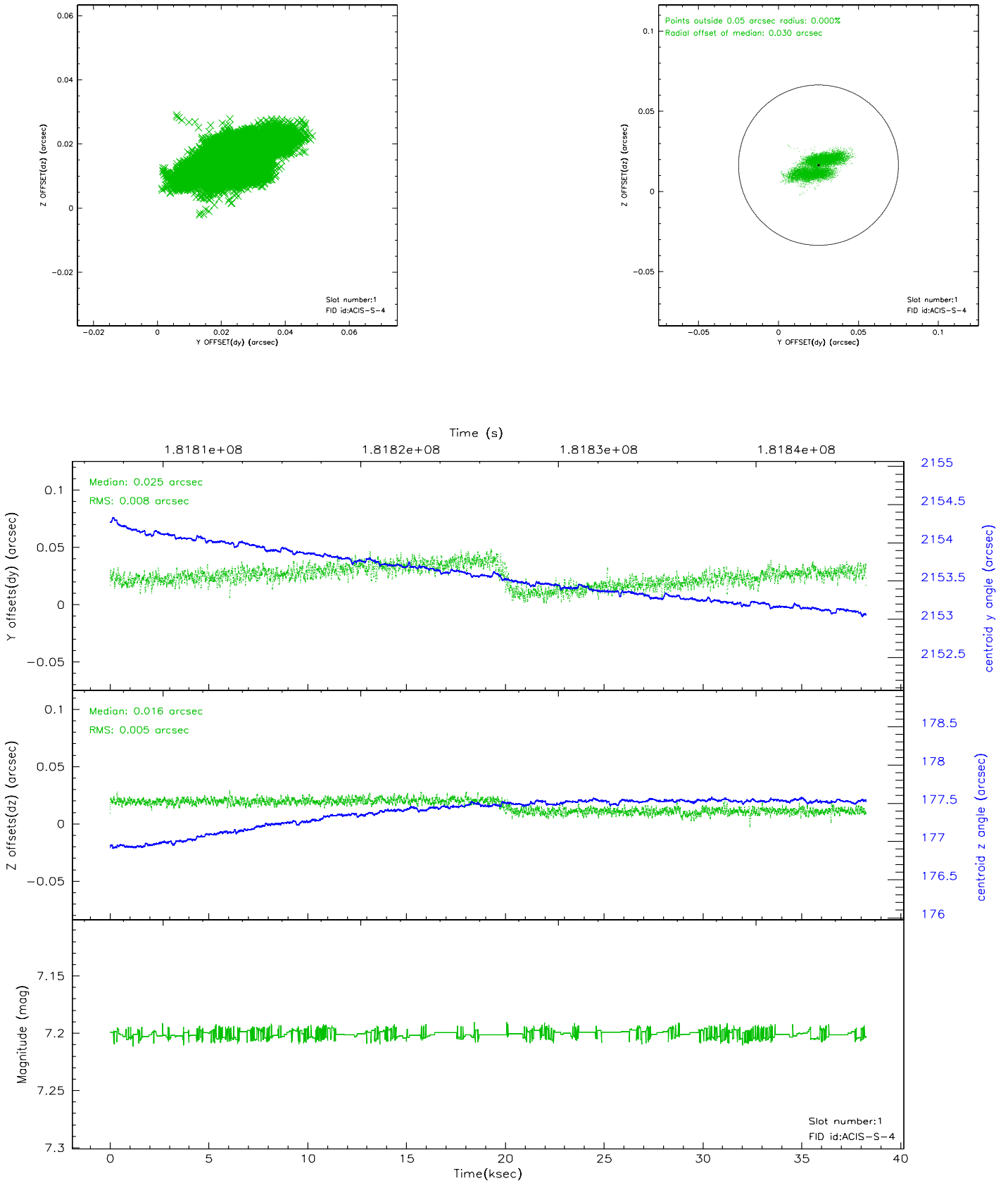


## 2.5 FID Slots

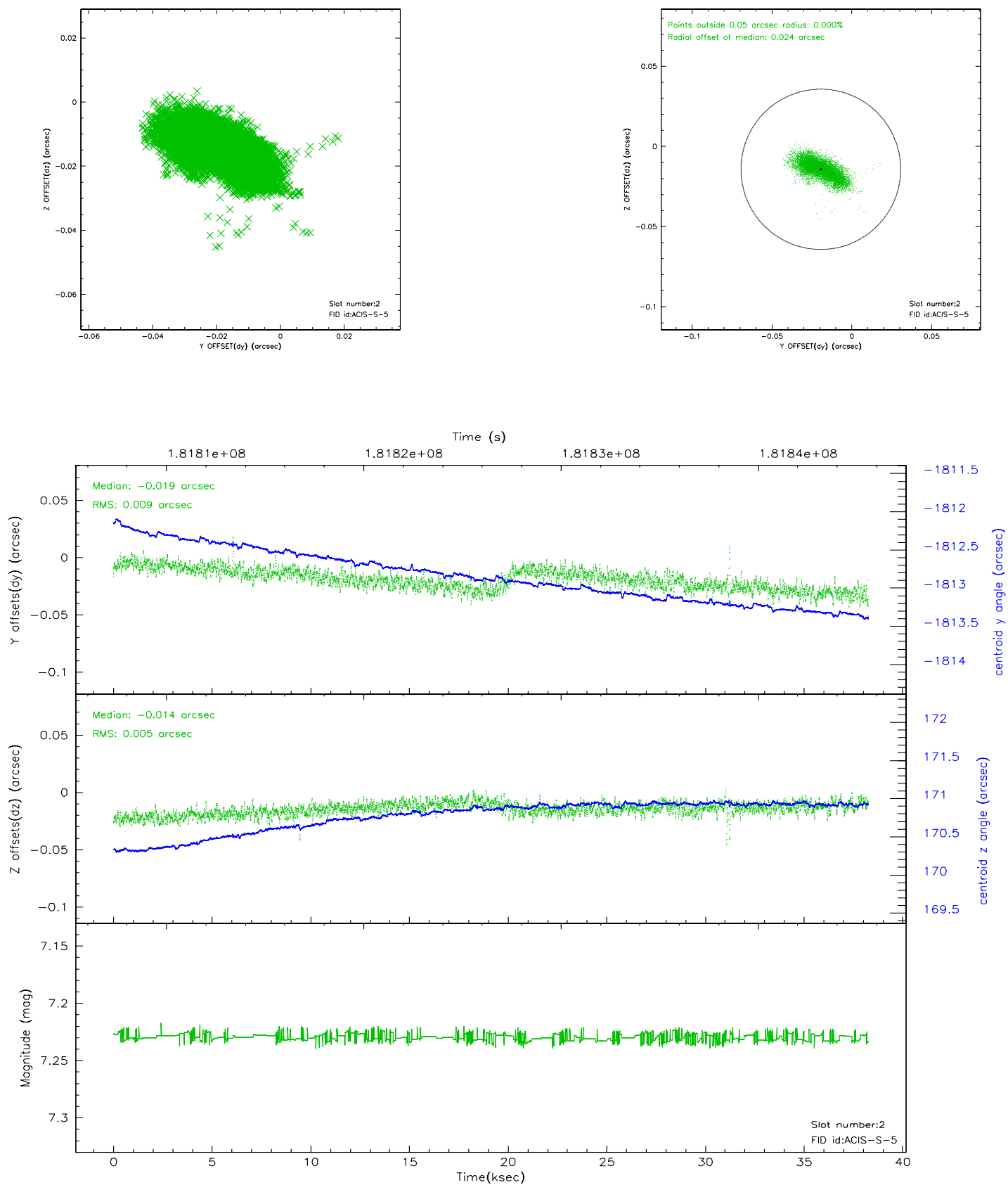
### 2.5.1 Slot 0



## 2.5.2 Slot 1



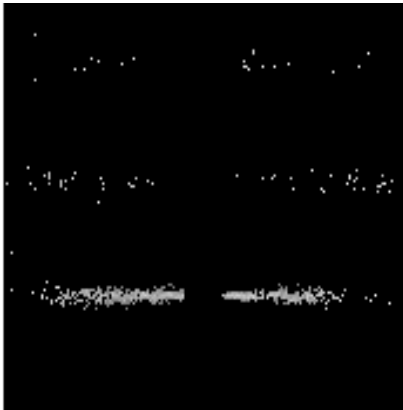
### 2.5.3 Slot 2



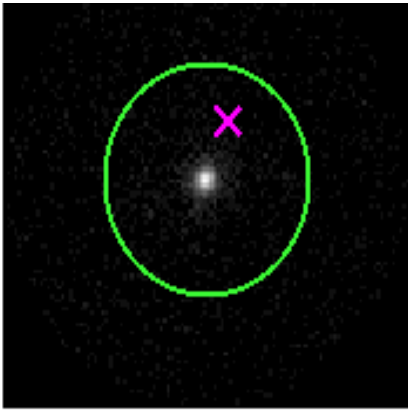


# 3 Gratings

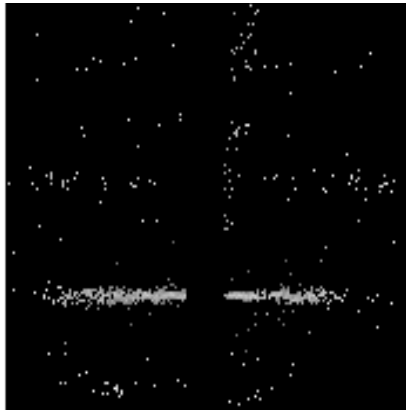
## 3.1 HEG Arm



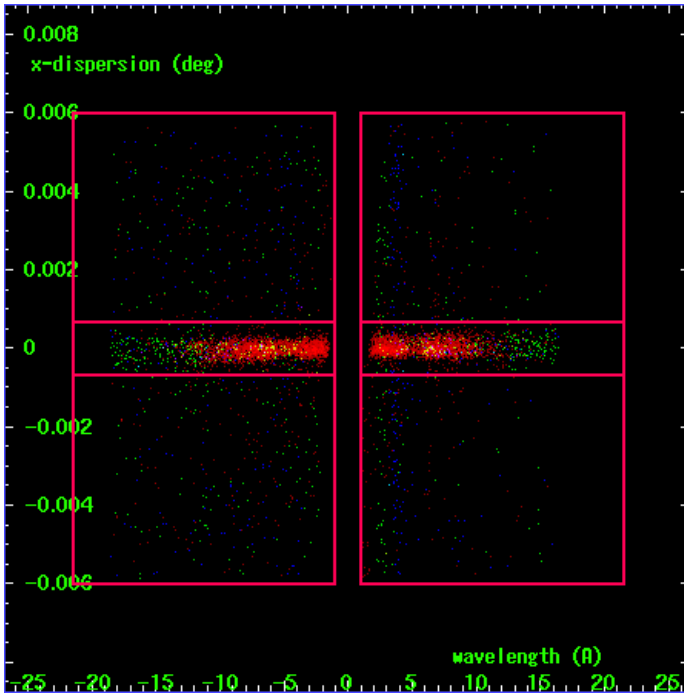
HEG Order Sort 123



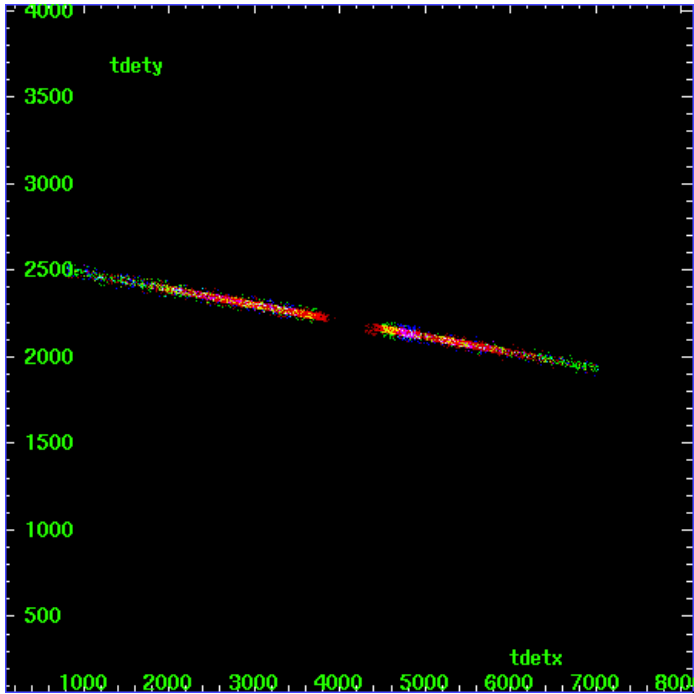
HEG Zero Order



HEG Order Sort ALL

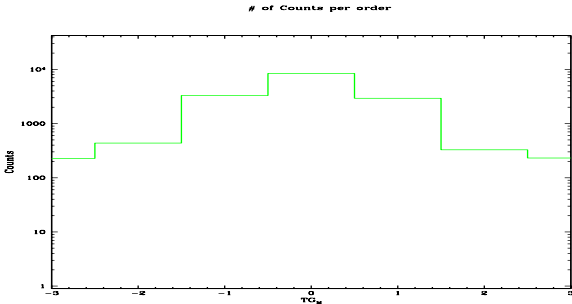


Spot Image HEG

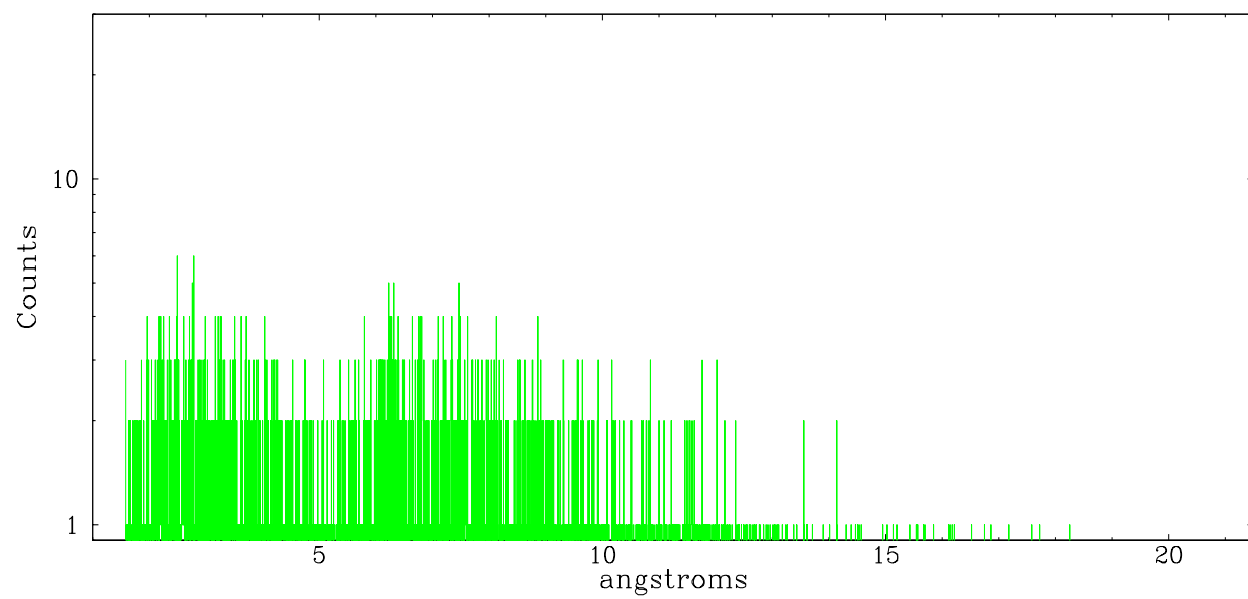


Full Detector HEG

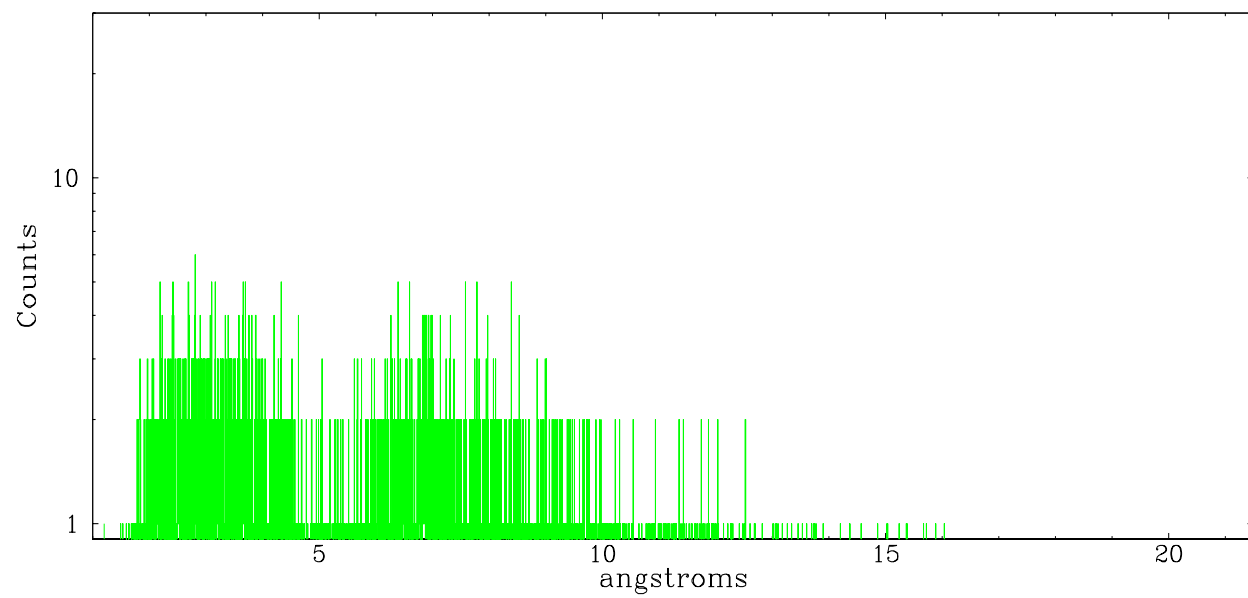
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	227	437	3301	8391	2927	327	232



heg order -1



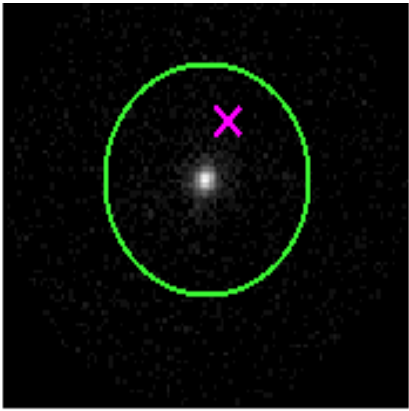
heg order +1



3.2 MEG Arm



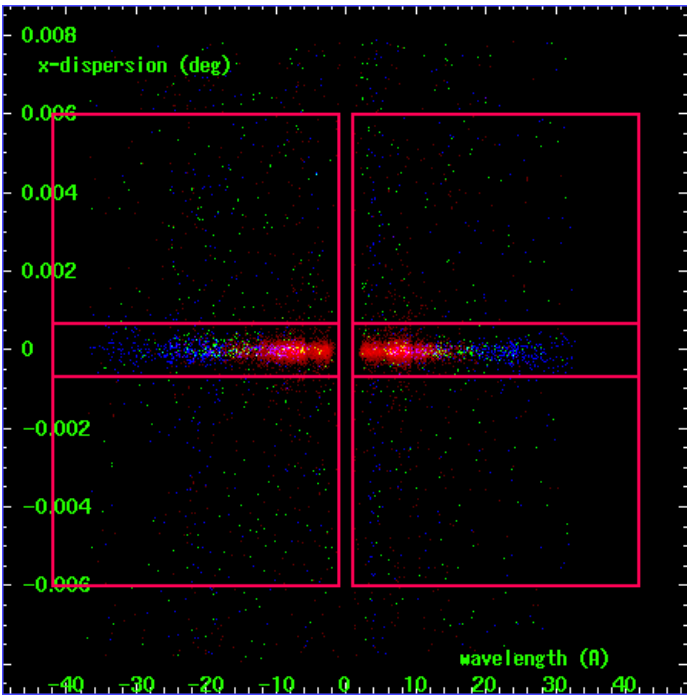
MEG Order Sort 123



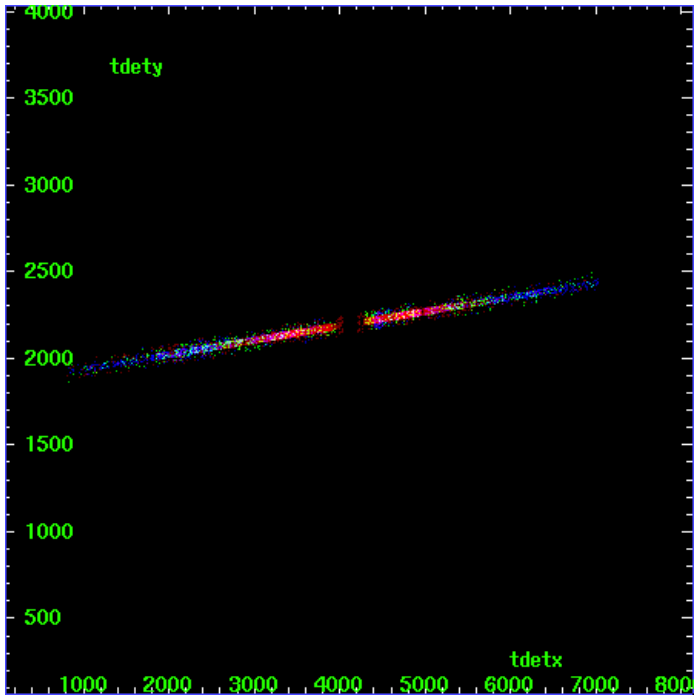
MEG Zero Order



MEG Order Sort ALL

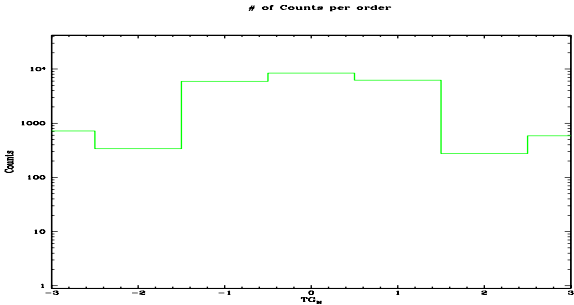


Spot Image MEG

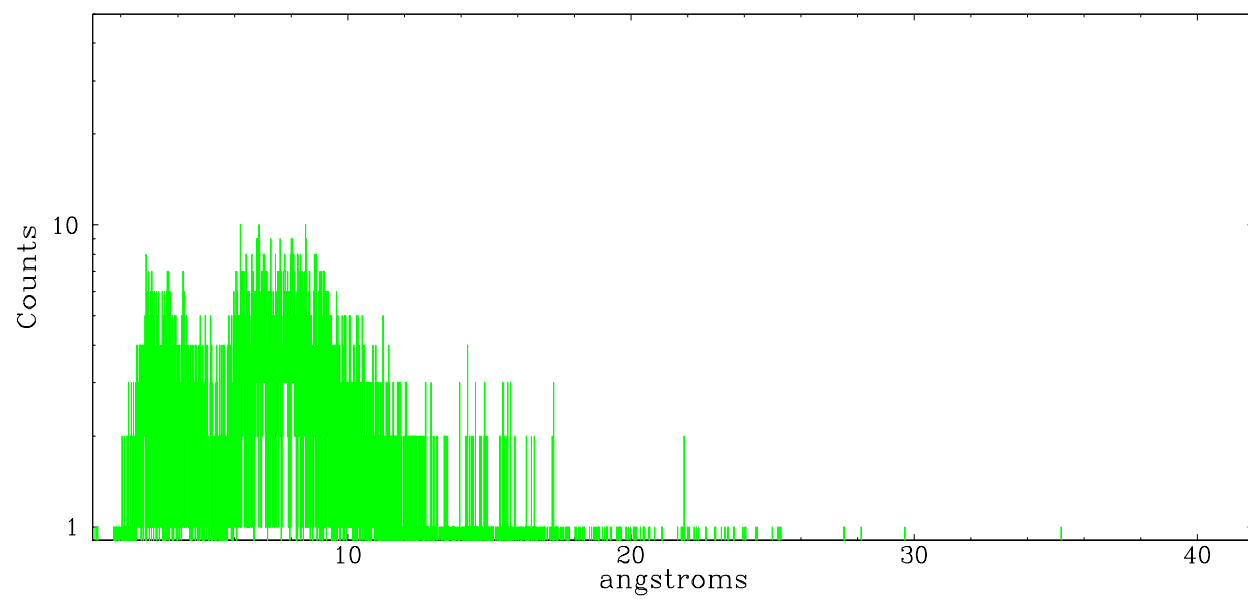


Full Detector MEG

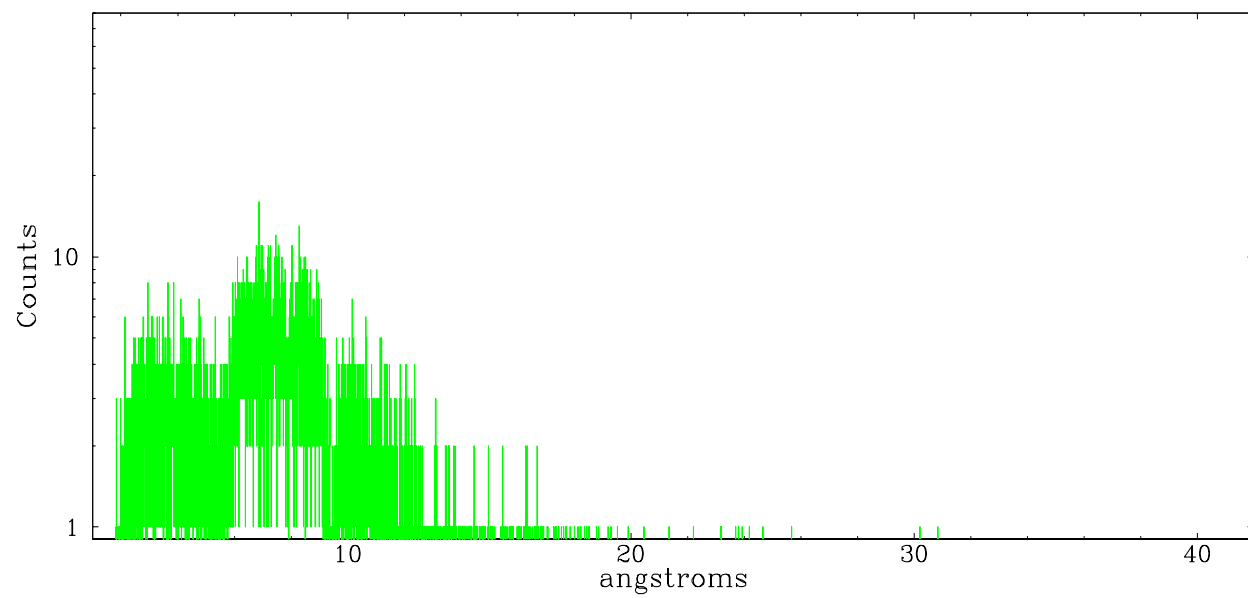
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	718	338	5914	8391	6241	275	587



meg order -1



meg order +1



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.07.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.66

### A.2 Comments