

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 5431 - L2 Version 002  
Chandra X-Ray Center

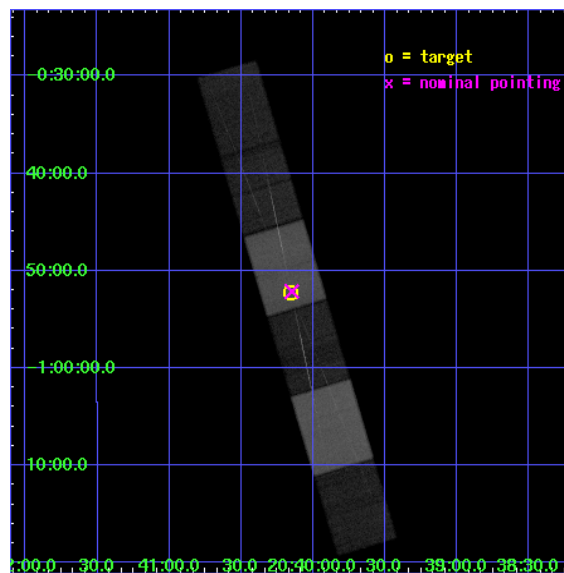
L2 Processing Date : Mar 23 2006

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# 1 Front

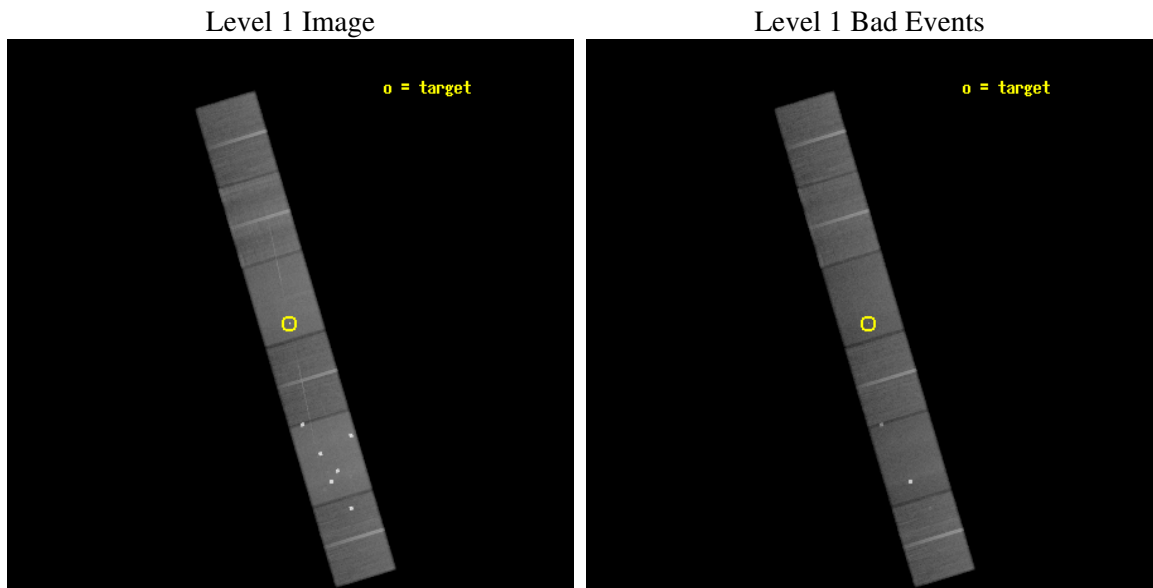
seq_num	300147
obs_id	5431
title	Coordinated Multiwavelength Observations of AE Aqr
observer	Dr. Christopher Mauche
object	AE Aqr
dtcycle	0
cycle	P
ra_targ	310.038333
dec_targ	-0.870861
ra_nom	310.03716904505
dec_nom	-0.8689449612308
roll_nom	253.33673480967
revision	2
ontime	78177.5
livetime	76914.865566854
ontime4	78174.958989799
ontime5	78177.5
ontime6	78177.5
ontime7	78177.5
ontime8	78177.5
ontime9	78177.5
l2events	726477



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images

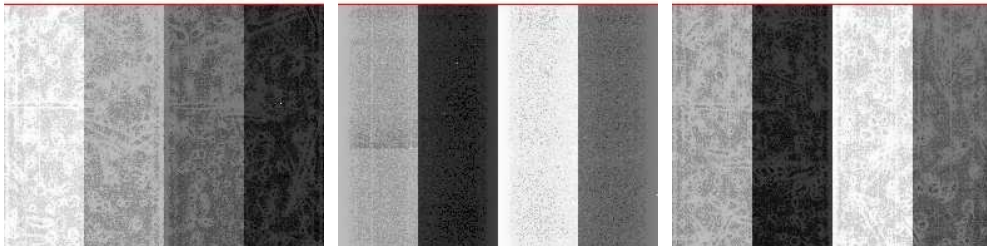


#### 2.1.2 Bias

Chip 4

Chip 5

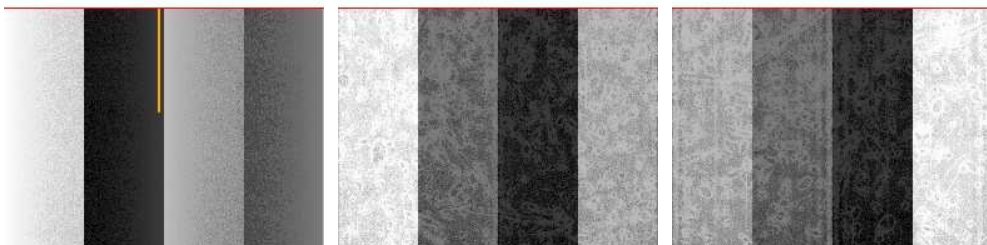
Chip 6



Chip 7

Chip 8

Chip 9



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-03-23T15:40:15
revision	2

sched_exp_time	78000.000000
ontime	79096.879701495
ontime4	79094.338671386
ontime5	79096.879701495
ontime6	79096.879681587
ontime7	79096.879701495
ontime8	79096.879681587
ontime9	79096.879681587
l1events	3502422

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	535825	809335	471276	628098	594225	463663
rejected events	449526	411964	411593	381316	460591	407297
rejected %	83%	50%	87%	60%	77%	87%

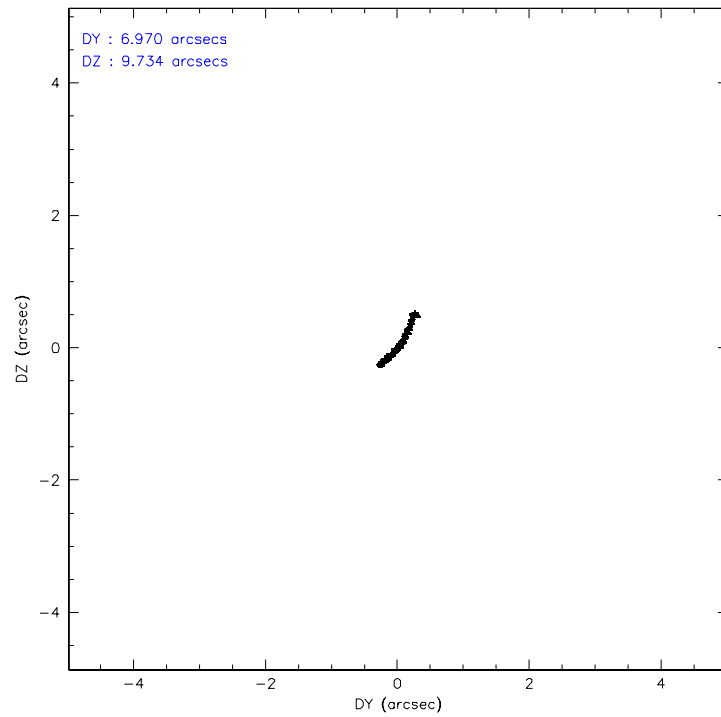
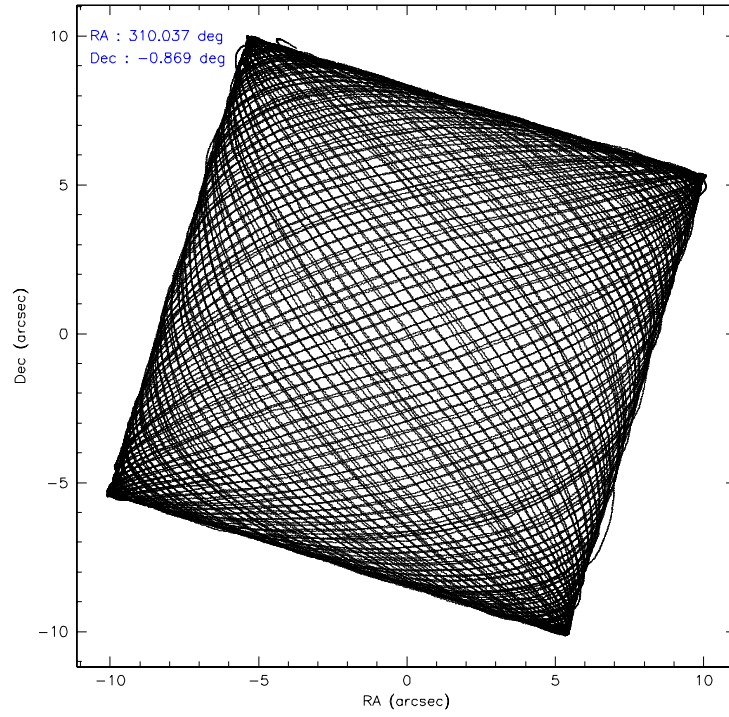
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	53535	102494	25256	15861	42953	23128
	9%	12%	5%	2%	7%	4%
grade 1 events	514	6239	216	471	395	220
	0%	0%	0%	0%	0%	0%
grade 2 events	12460	98550	12273	61075	29556	11183
	2%	12%	2%	9%	4%	2%
grade 3 events	6012	14379	5842	14384	14285	5838
	1%	1%	1%	2%	2%	1%
grade 4 events	5811	10157	5612	13979	13189	5809
	1%	1%	1%	2%	2%	1%
grade 5 events	19752	39181	20659	42366	27447	22376
	3%	4%	4%	6%	4%	4%
grade 6 events	9317	175500	11389	144338	35027	11055
	1%	21%	2%	22%	5%	2%
grade 7 events	428424	362835	390029	335624	431373	384054
	79%	44%	82%	53%	72%	82%

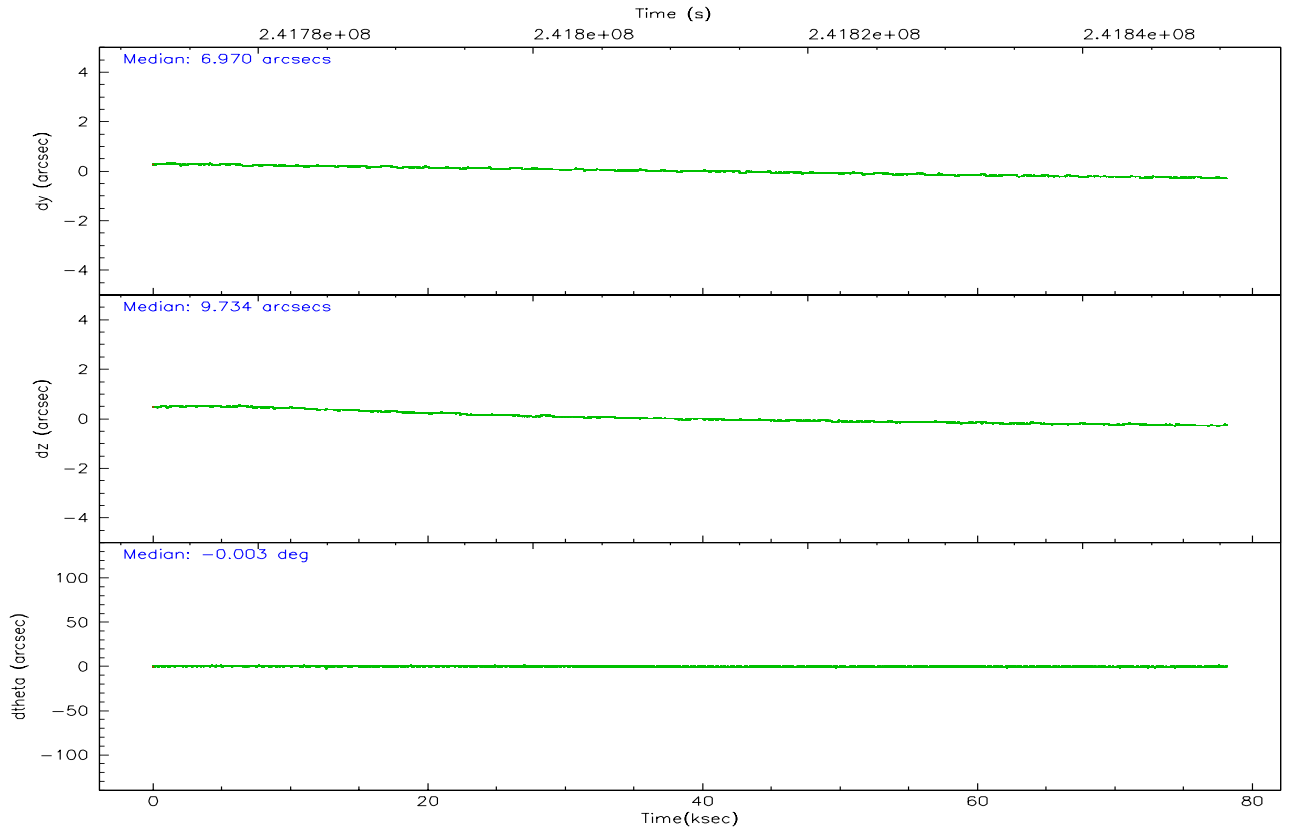
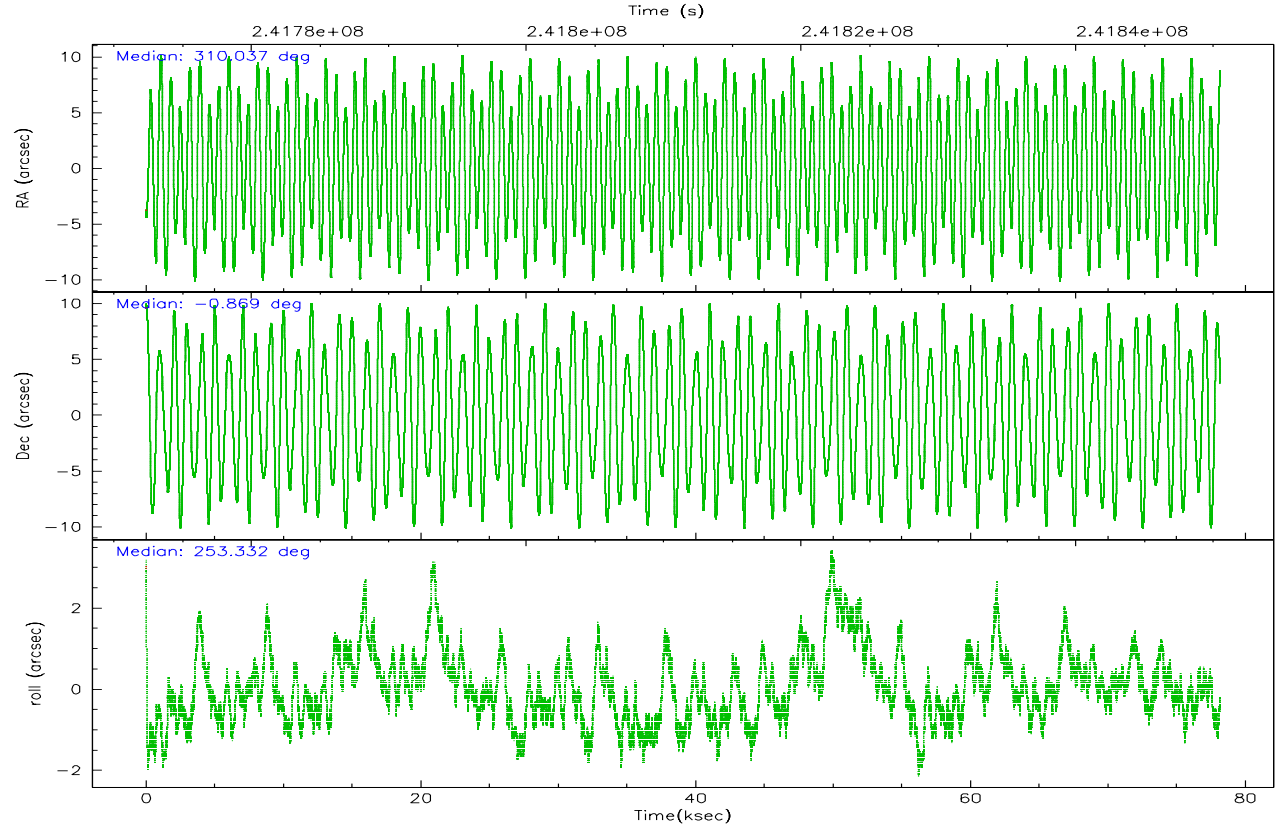


## 2.2 Compared Parameters

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	CUSTOM	CUSTOM
Pointing RA	310.030524	310.0371690450492	Subarray start row	1	1
Pointing Dec	-0.842553	-0.8689449612308028	Subarray row count	774	774
Pointing Roll	253.180008	253.3367348096659	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	2.5
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	241772514.184000	241771031.69802			
Observation start date	2005-08-30T07:00:50	2005-08-30T06:37:11			
Observation end time	241850514.184000	241852007.72674			
Observation end date	2005-08-31T04:40:50	2005-08-31T05:06:47			
Read mode	TIMED	TIMED			

## 2.3 Aspect



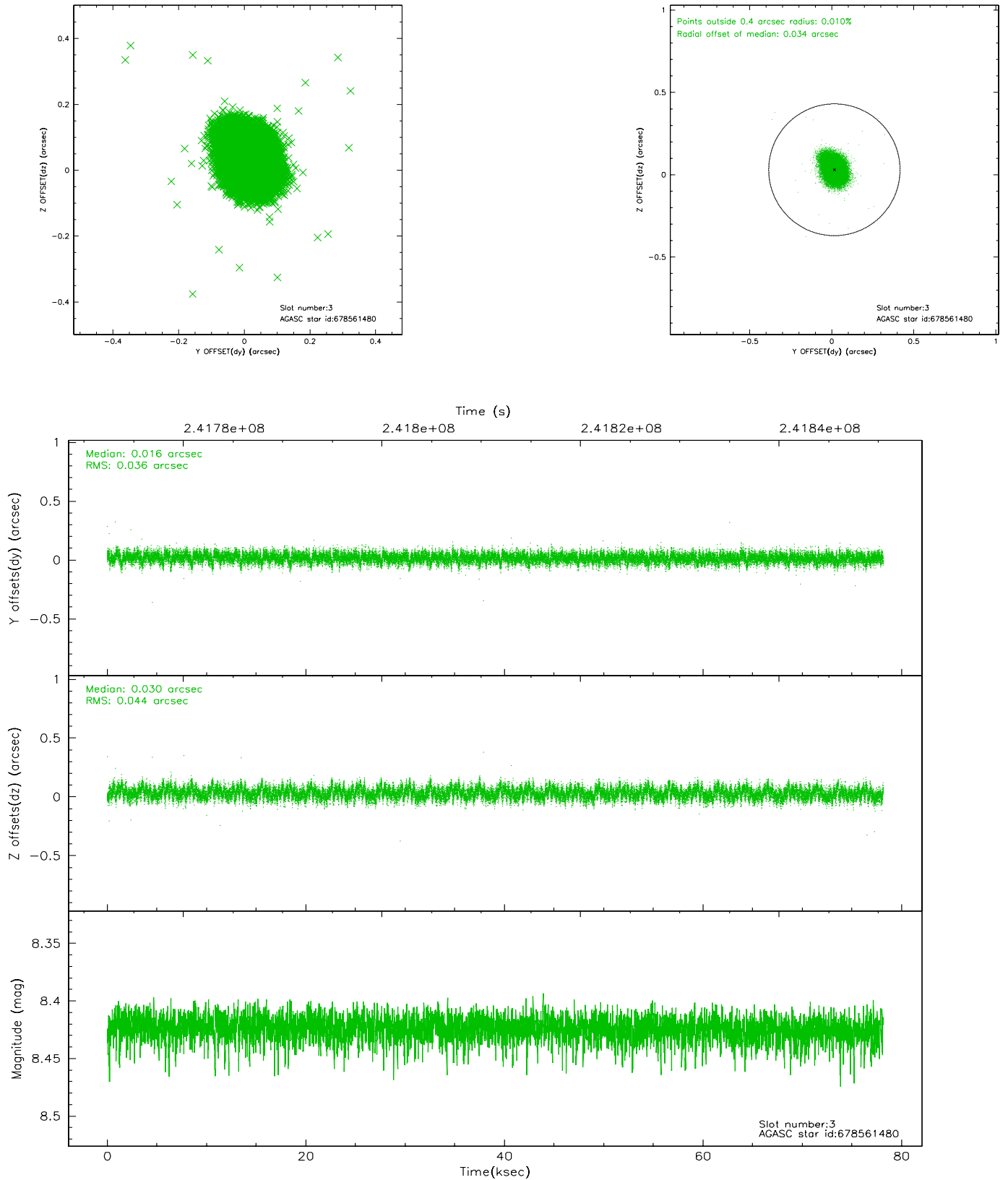


### Slot Statistics

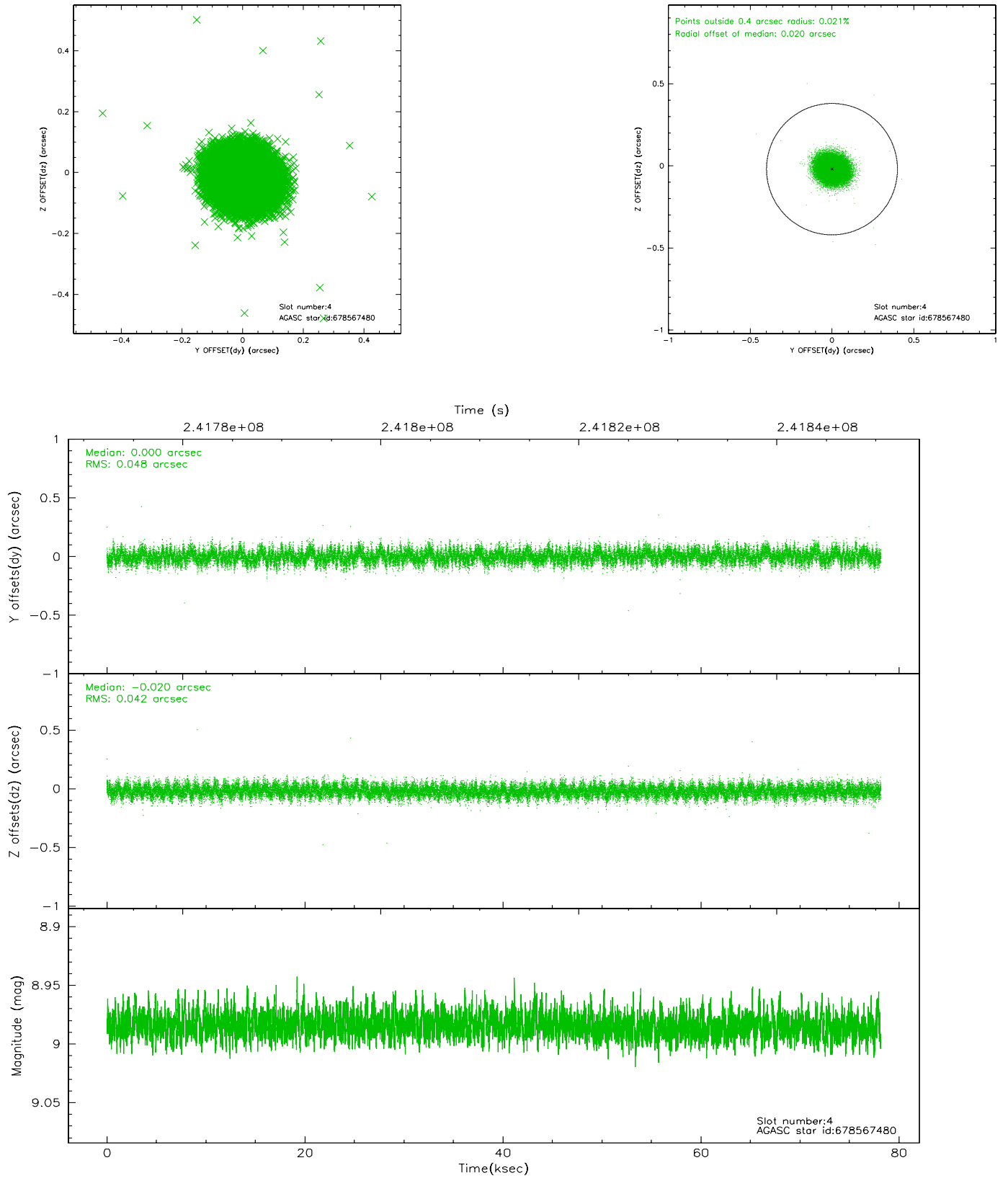
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	19065	-0.052	-0.061	0.012	0.018	0.000000	0.000000	-759.59	-1793.22
1	FID	ACIS-S-4	7.19	19065	0.075	0.041	0.005	0.009	0.000000	0.000000	2153.87	115.40
2	FID	ACIS-S-5	7.23	19066	-0.054	0.027	0.011	0.018	0.000000	0.000000	-1812.50	109.02
3	GUIDE	678561480	8.42	38124	0.016	0.030	0.059	0.099	310.388546	-1.531359	2000.95	1951.30
4	GUIDE	678567480	8.98	38112	0.000	-0.020	0.067	0.110	310.342585	-0.463802	-1630.03	680.83
5	GUIDE	678568944	9.26	38116	-0.188	-0.068	0.096	0.158	309.652969	-0.081267	-2229.95	-2094.31
6	GUIDE	678440656	9.07	38113	0.103	0.034	0.083	0.135	309.267349	-1.042435	1484.52	-2421.01
7	GUIDE	678567064	9.28	38039	0.069	0.023	0.103	0.159	310.550349	-1.419928	1448.58	2392.58

## 2.4 Star Slots

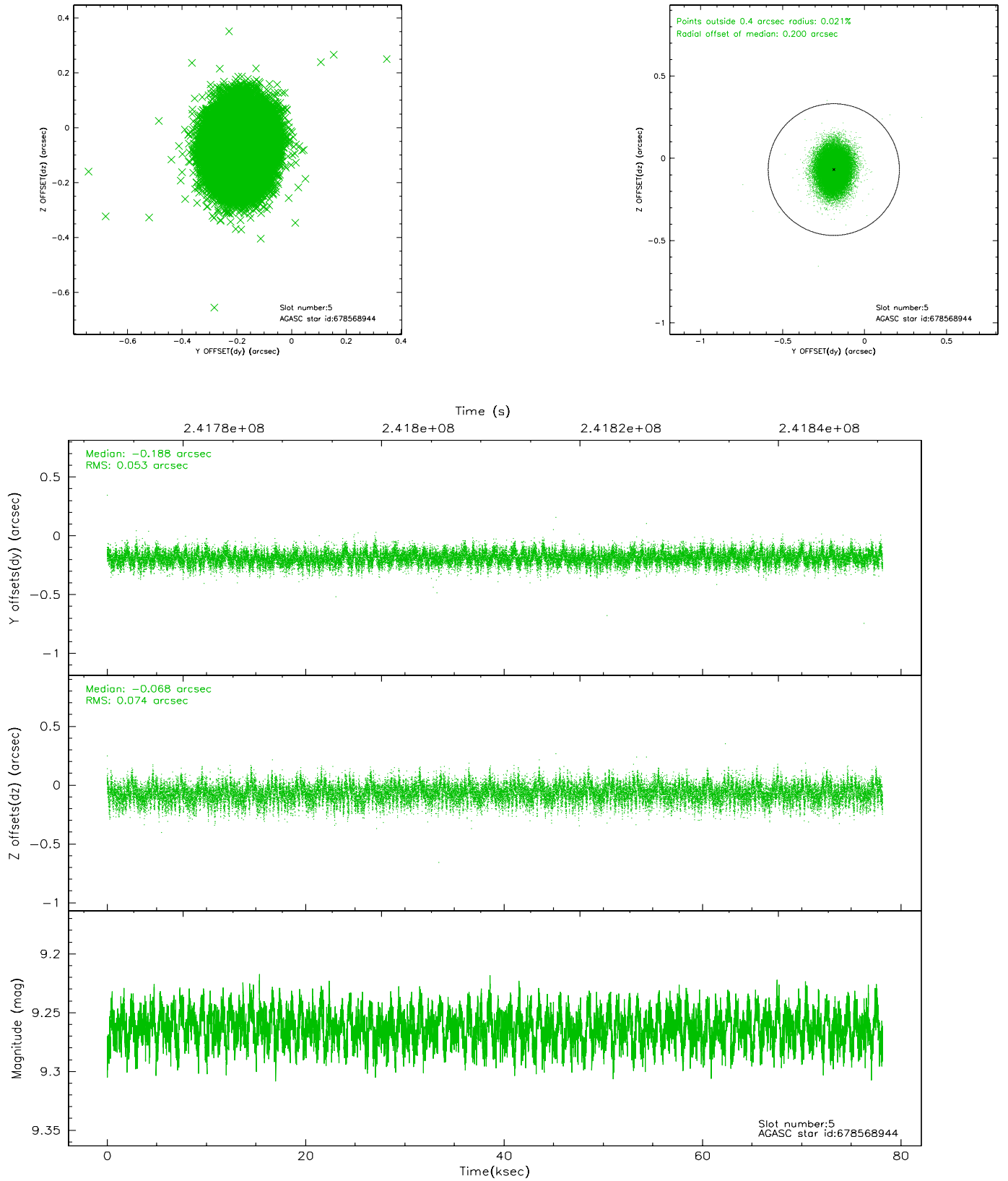
### 2.4.1 Slot 3



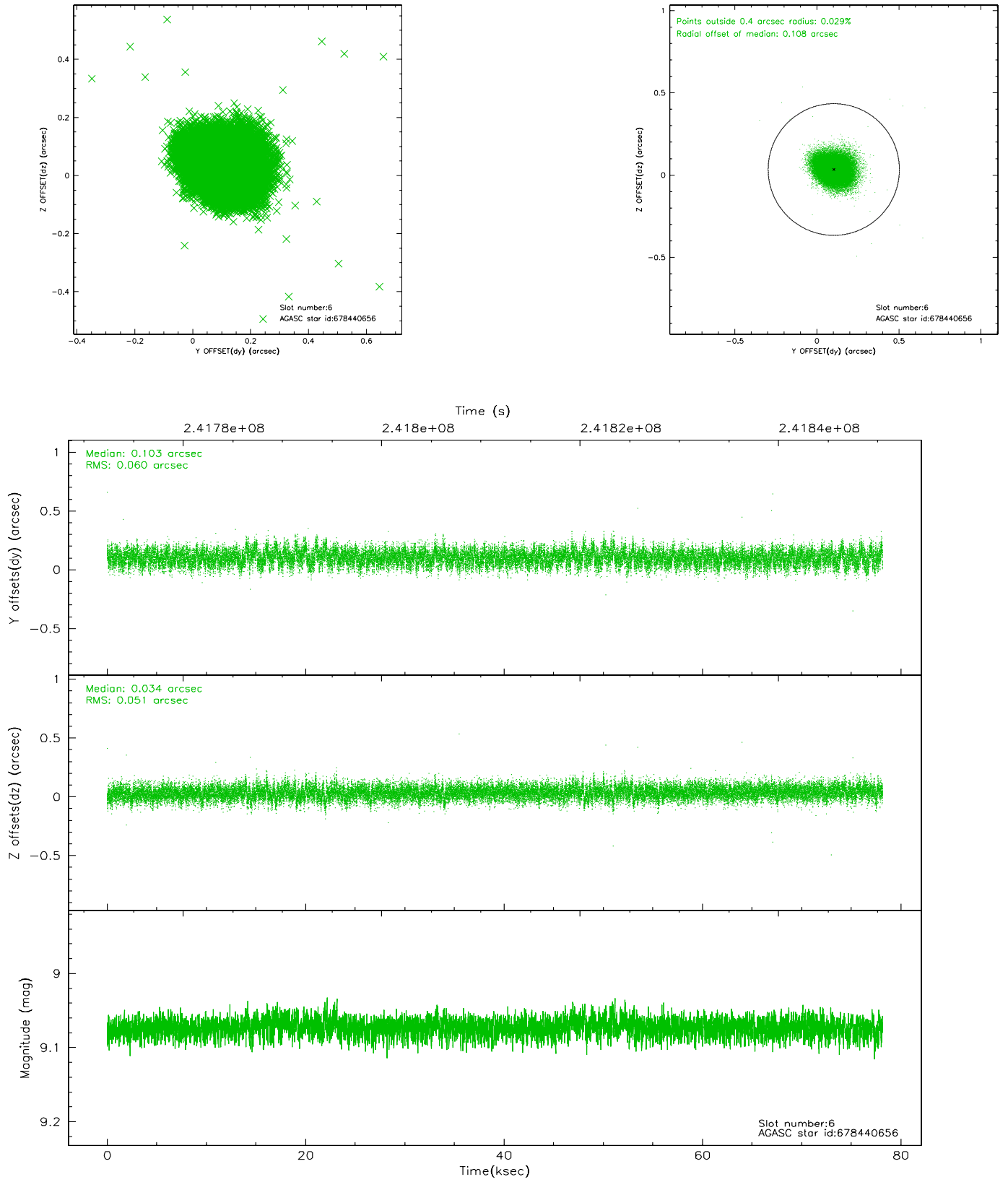
## 2.4.2 Slot 4



### 2.4.3 Slot 5

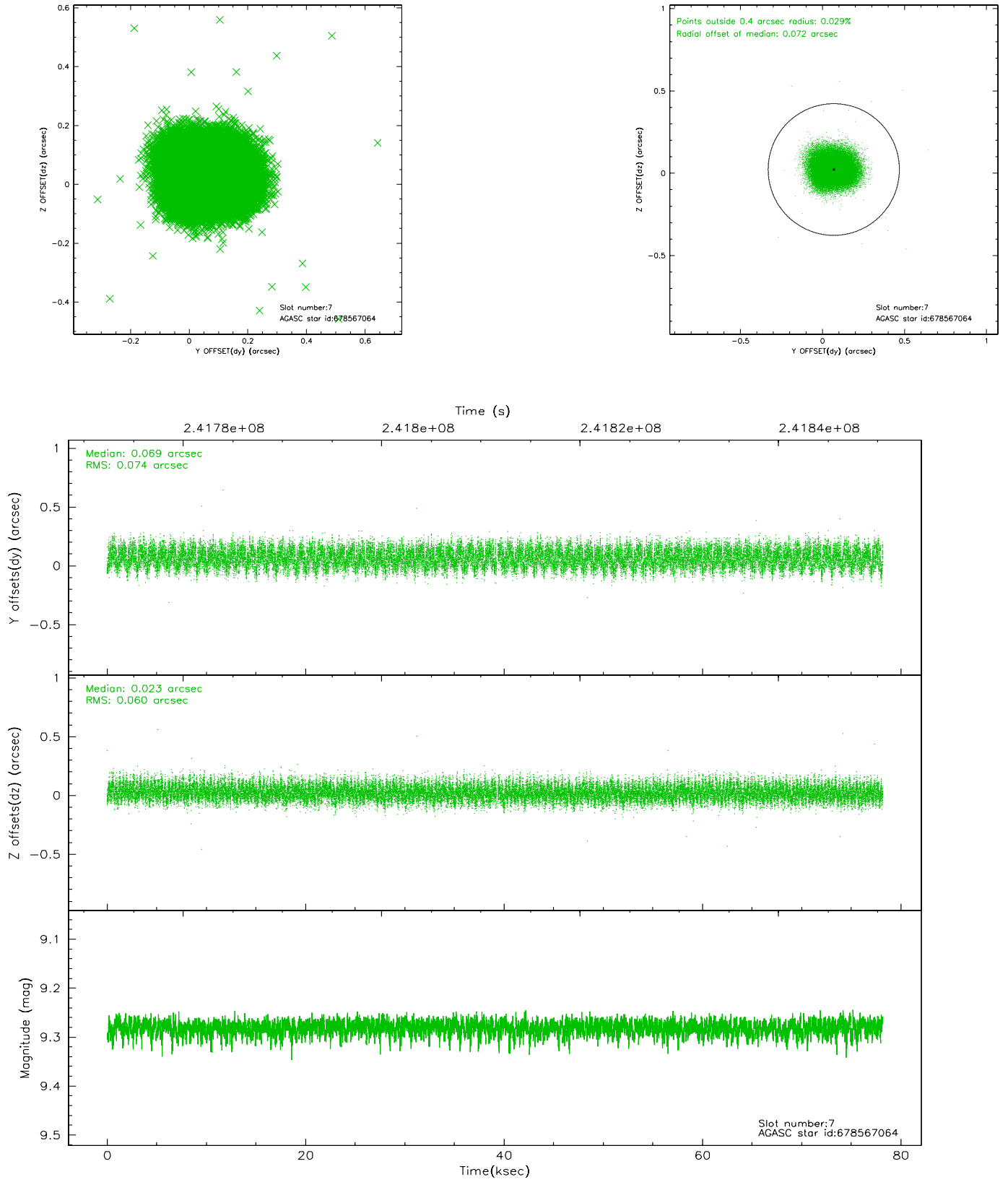


## 2.4.4 Slot 6



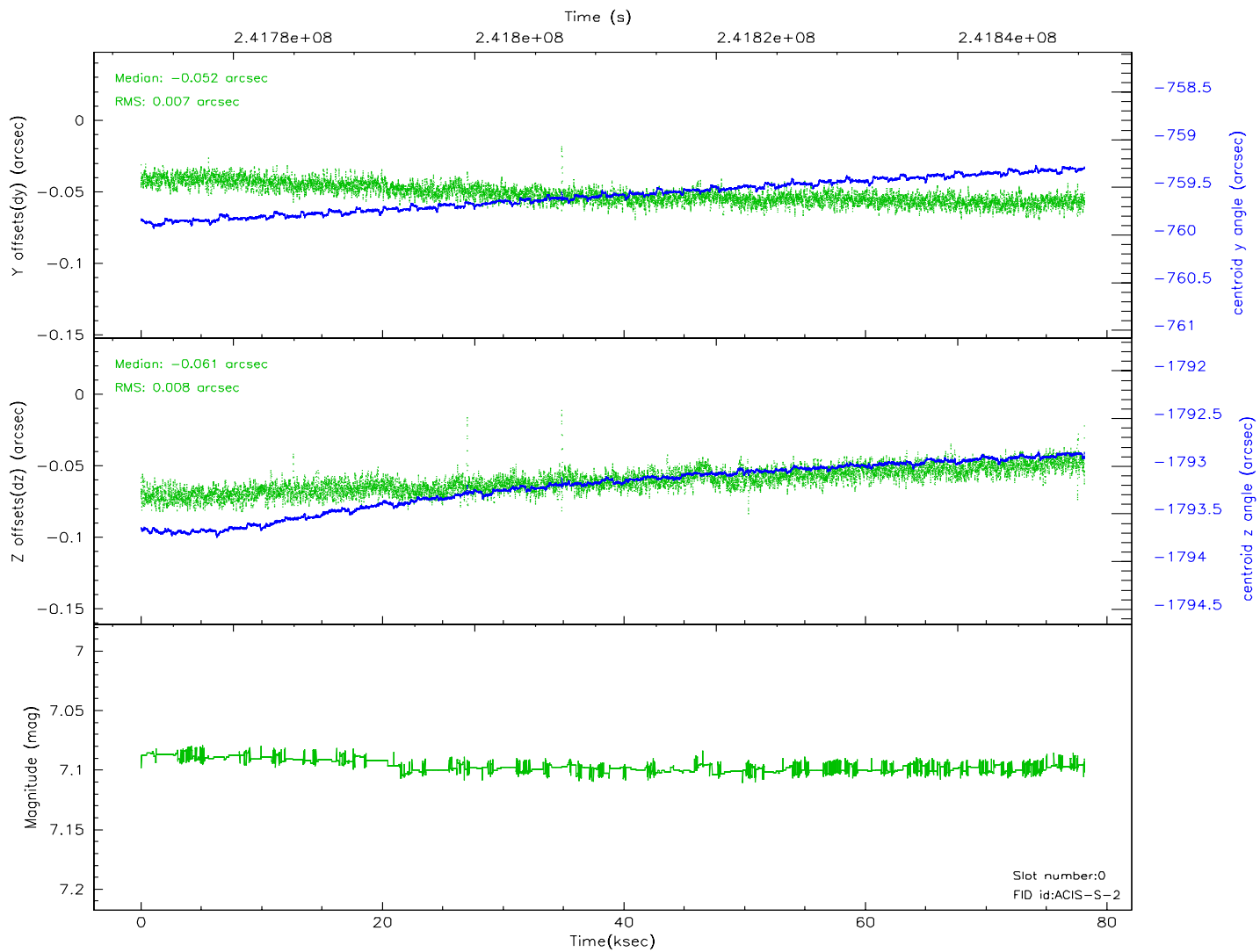
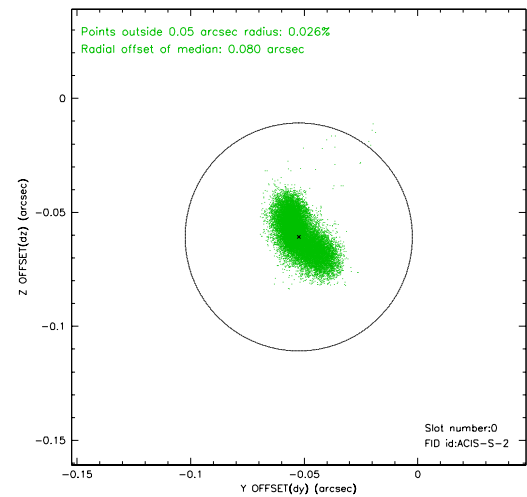
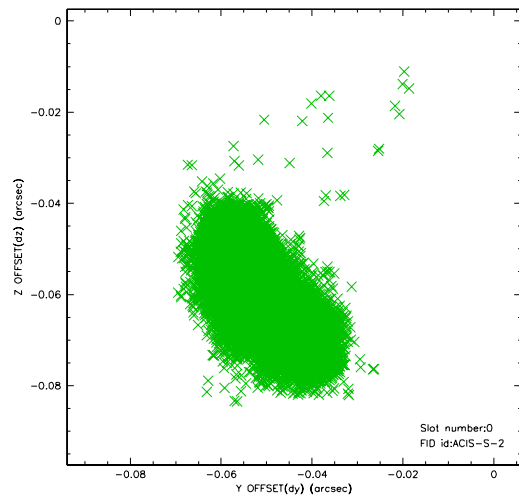


## 2.4.5 Slot 7

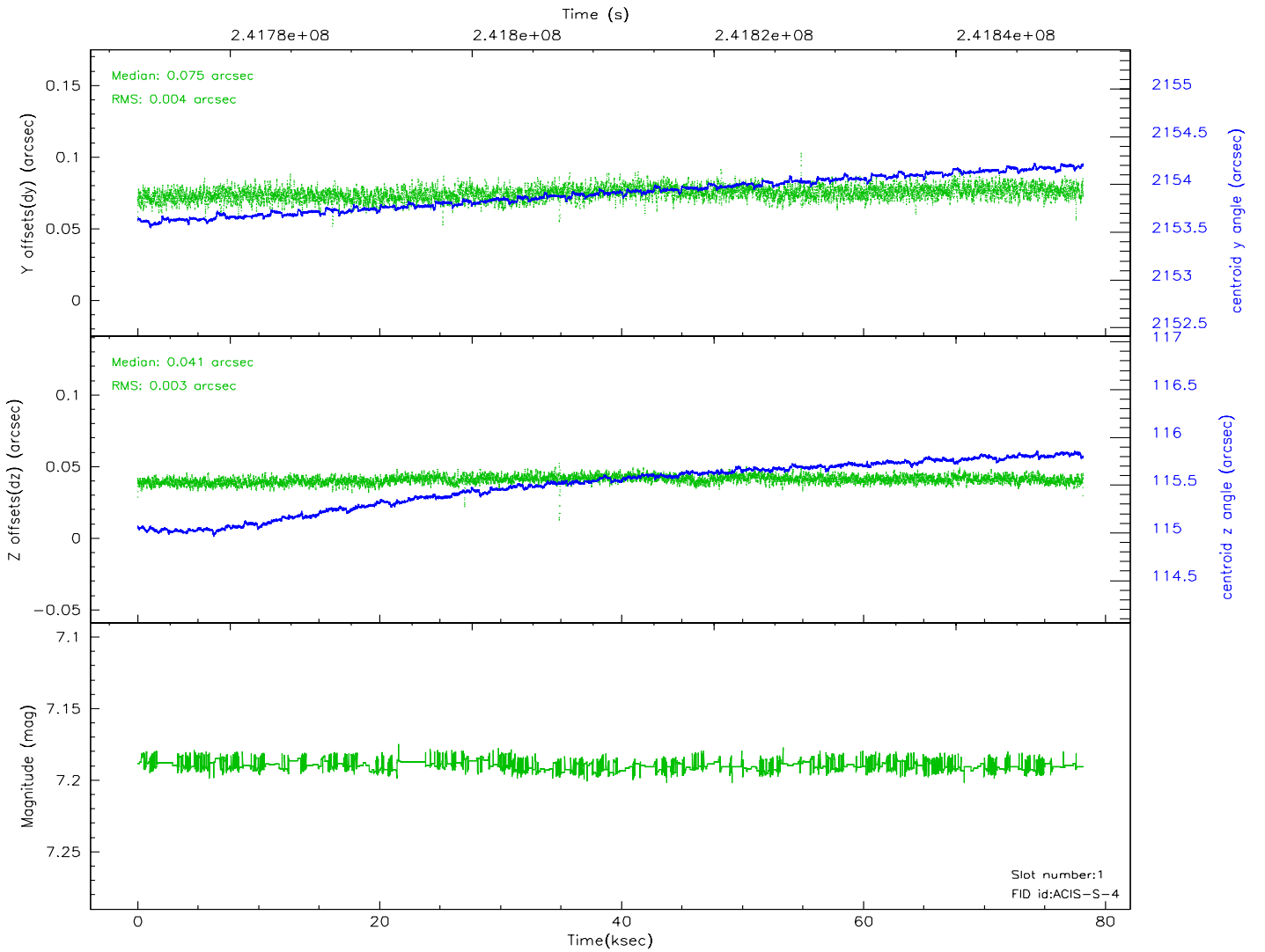
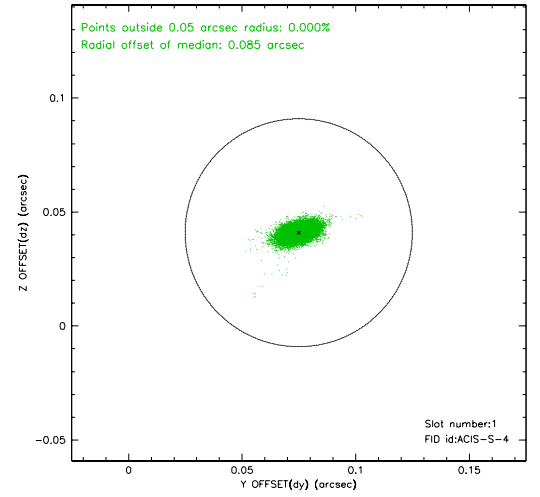
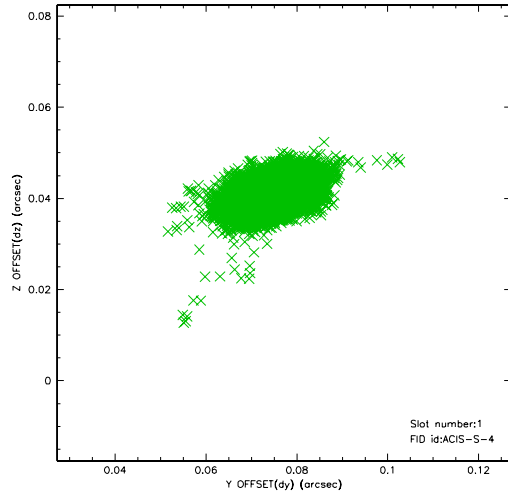


## 2.5 FID Slots

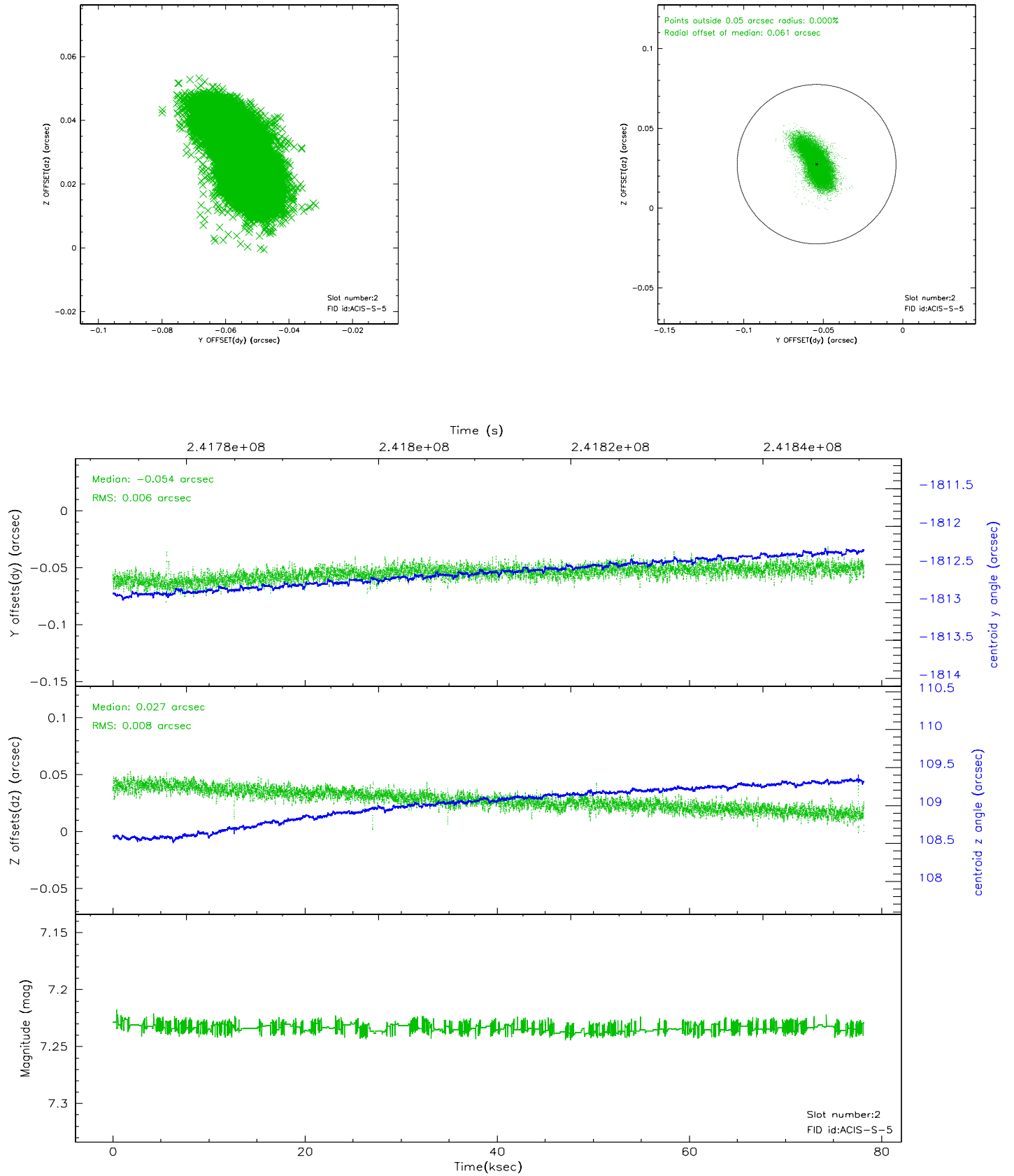
### 2.5.1 Slot 0



## 2.5.2 Slot 1

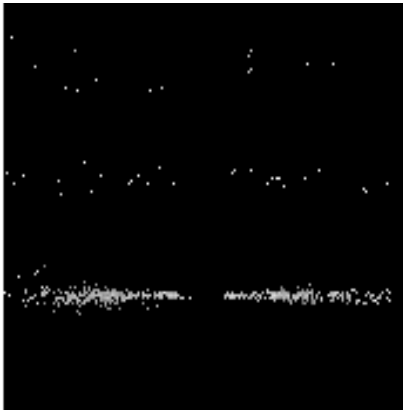


### 2.5.3 Slot 2

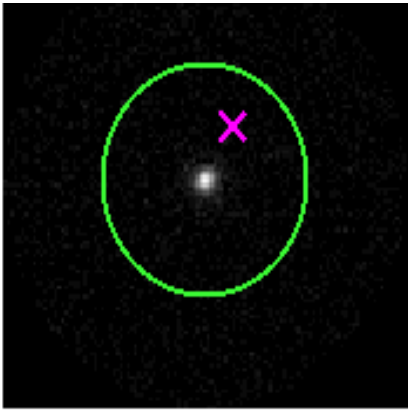


# 3 Gratings

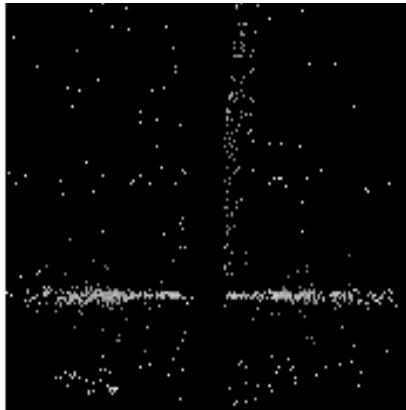
## 3.1 HEG Arm



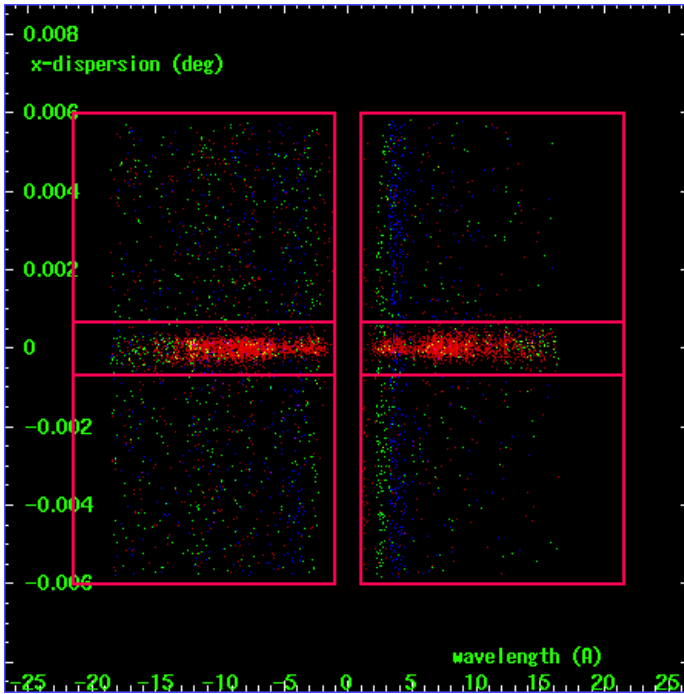
HEG Order Sort 123



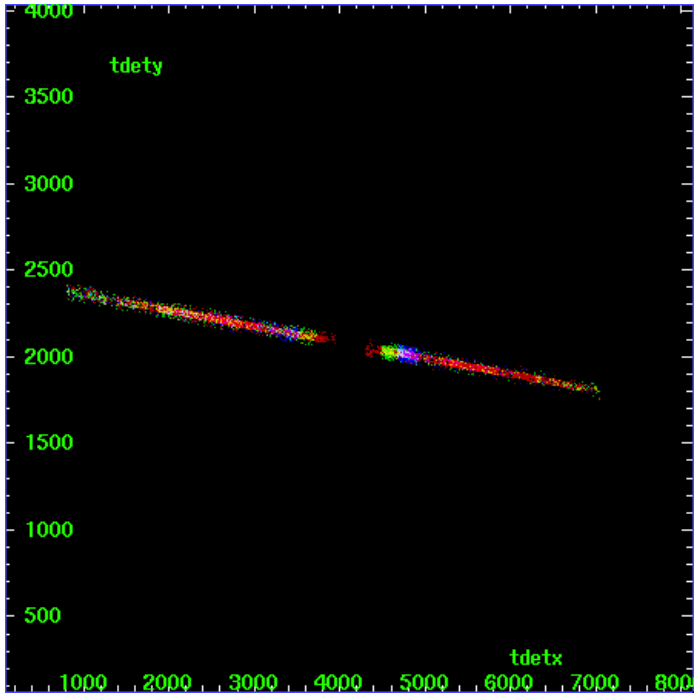
HEG Zero Order



HEG Order Sort ALL

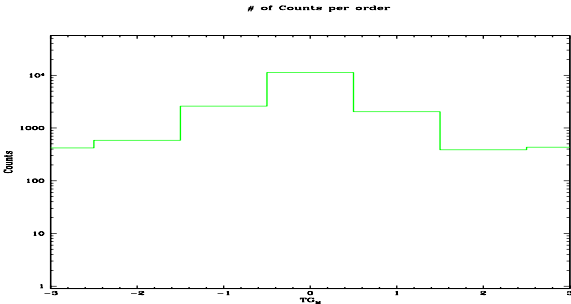


Spot Image HEG

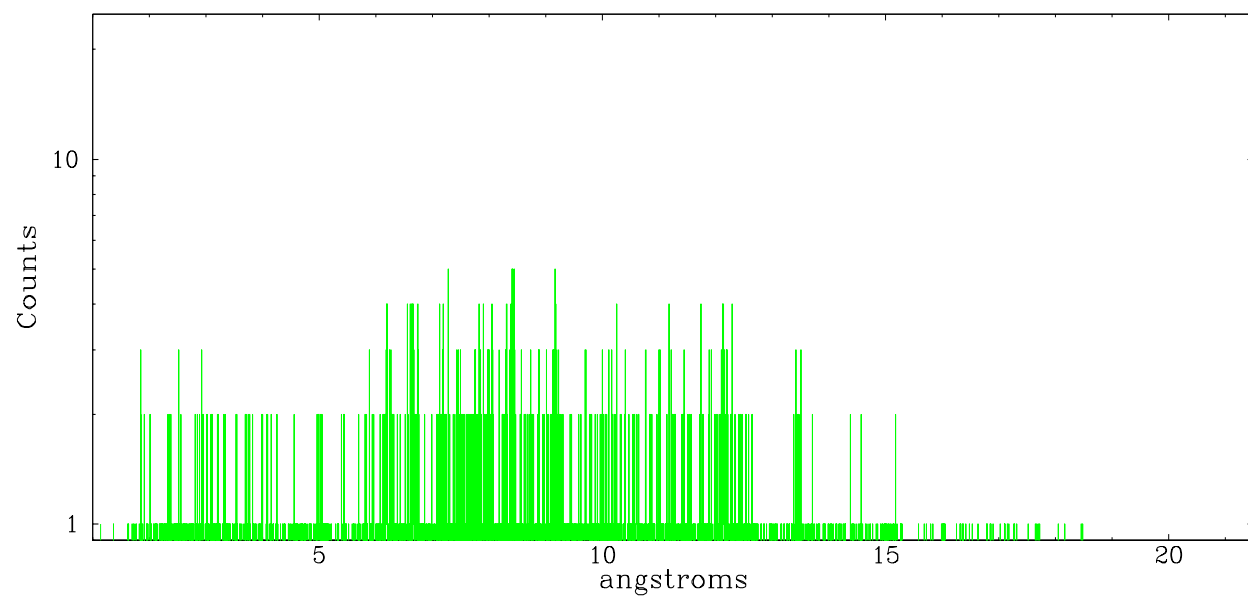


Full Detector HEG

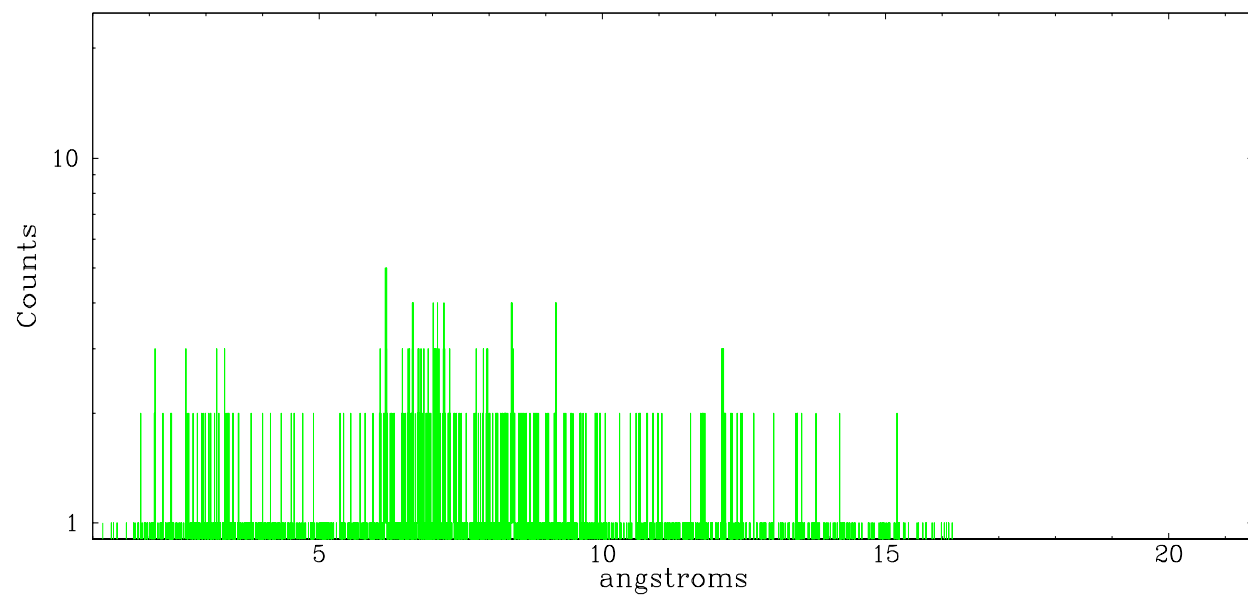
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	420	586	2609	11313	2038	387	432



heg order -1



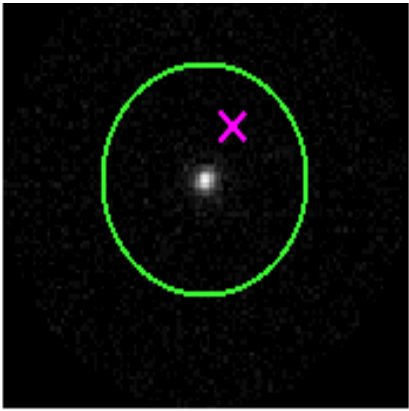
heg order +1



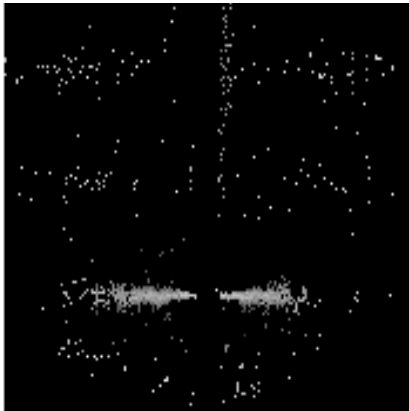
3.2 MEG Arm



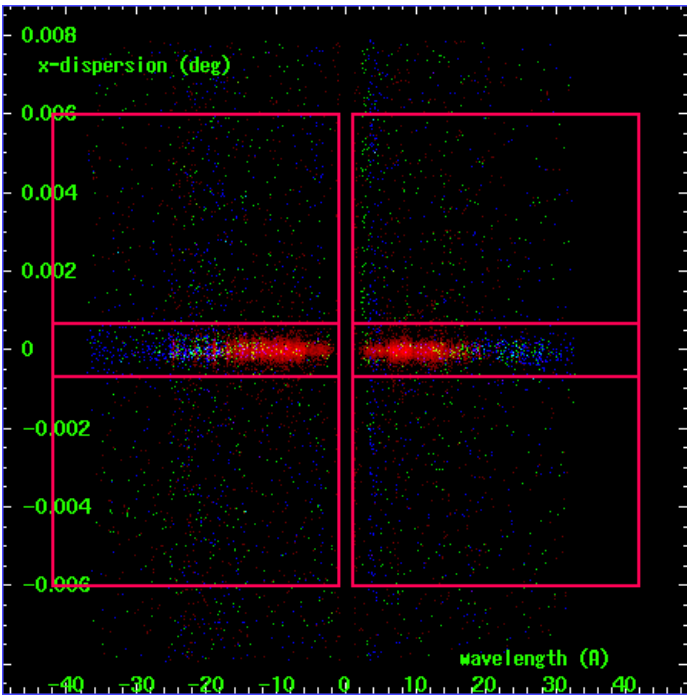
MEG Order Sort 123



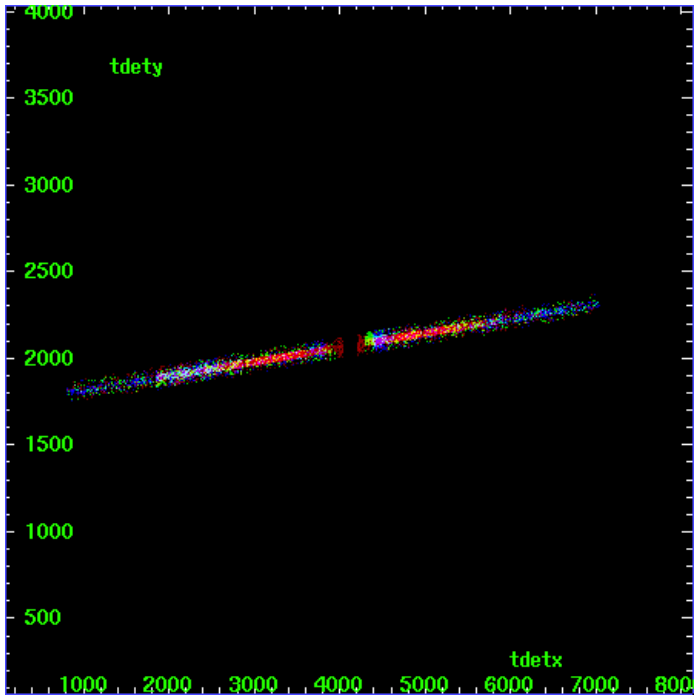
MEG Zero Order



MEG Order Sort ALL

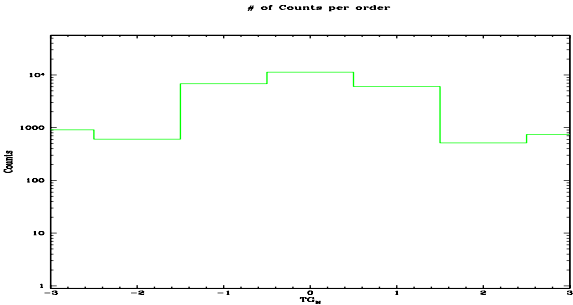


Spot Image MEG

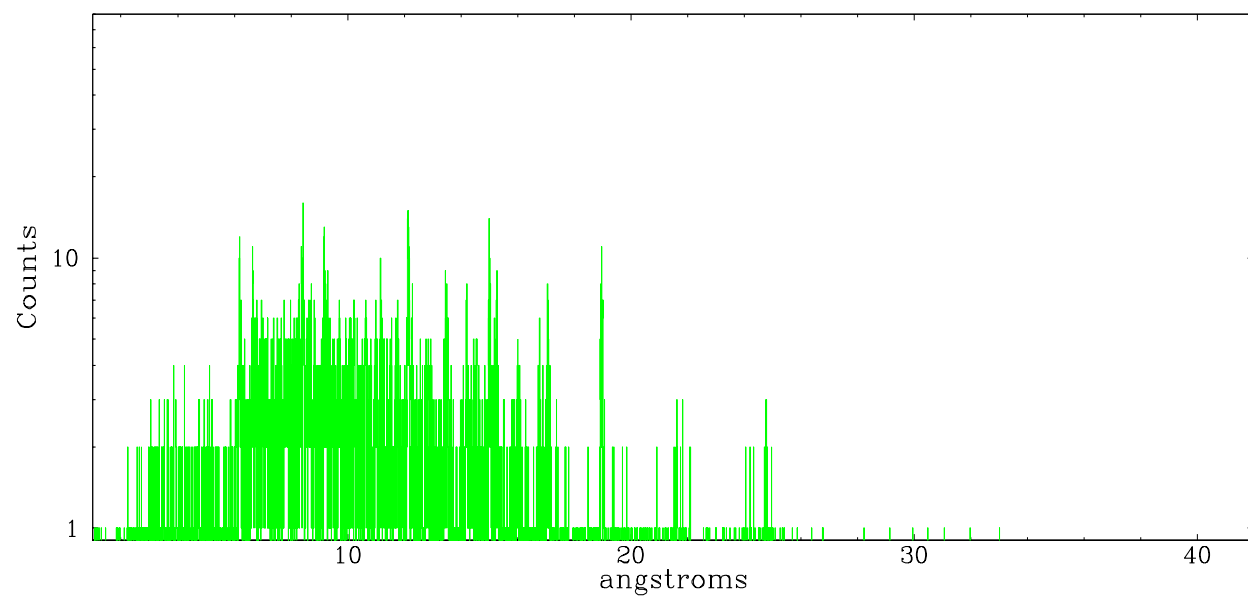


Full Detector MEG

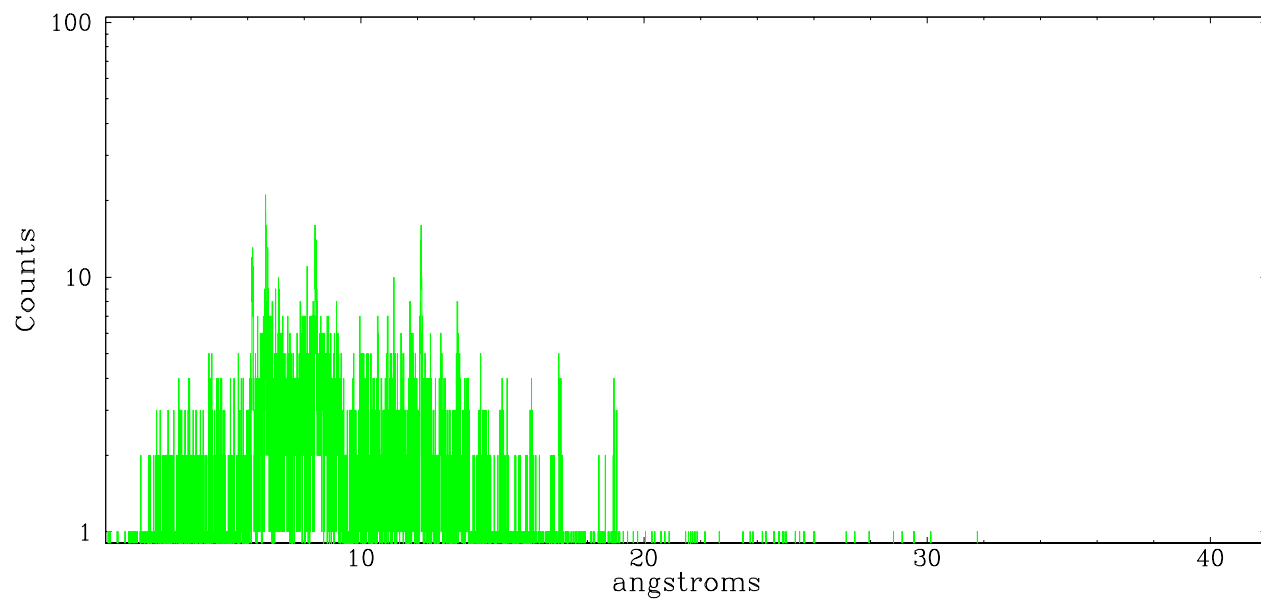
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	911	604	6801	11313	6032	513	744



meg order -1



meg order +1





## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.03.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	78.1775

### A.2 Comments

Roll preference not met.