

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 6336 - L2 Version 002  
Chandra X-Ray Center

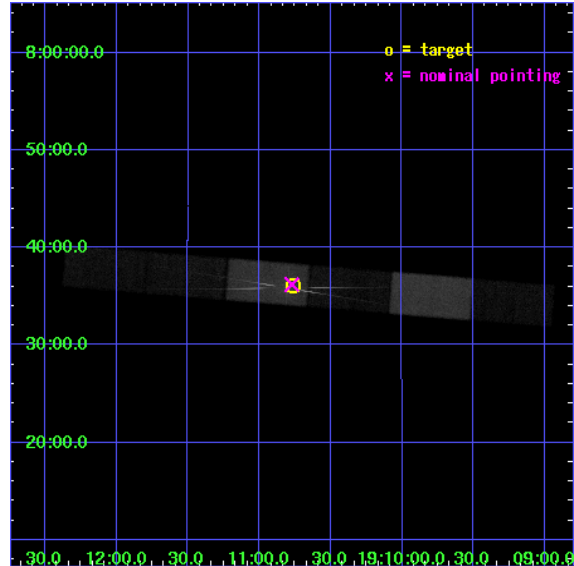
L2 Processing Date : Mar 14 2006

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# 1 Front

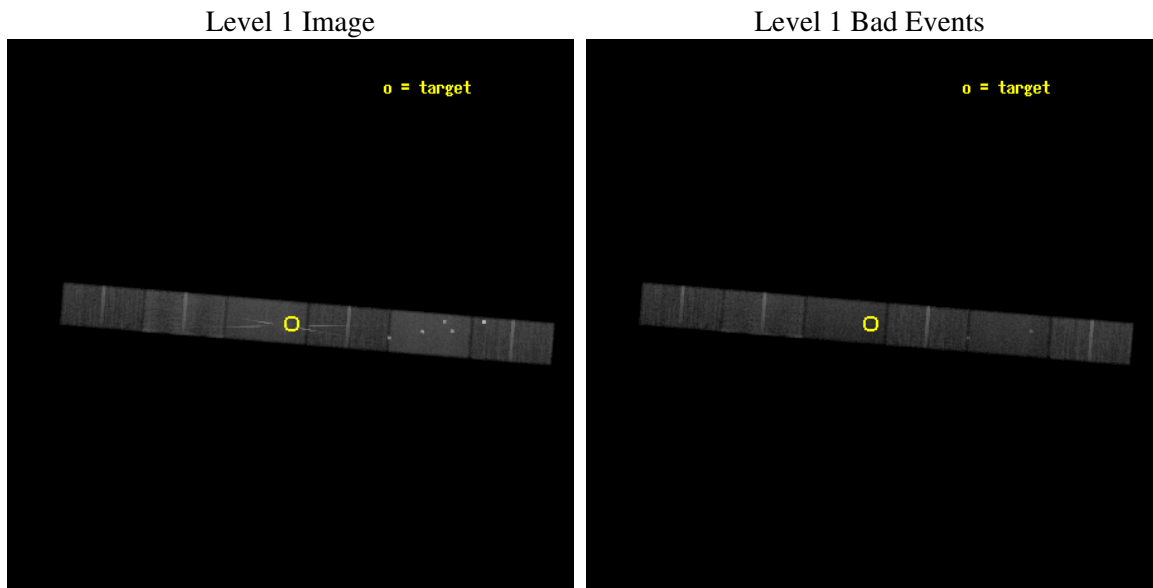
seq_num	400406
obs_id	6336
title	X-RAY DIAGNOSTICS OF THE WIND OF HMXB X1908+075: POSSIBLE PROGENITOR BH-NS SYSTEM
observer	Prof. Saul Rappaport
object	X1908+375: Low N_H
dtcycle	0
cycle	P
ra_targ	287.691667
dec_targ	7.601944
ra_nom	287.69304306566
dec_nom	7.6037150700688
roll_nom	184.65644236734
revision	2
ontime	32179.299774349
livetime	31420.765528875
ontime4	32179.299774349
ontime5	32179.299774349
ontime6	32179.299774349
ontime7	32179.299774349
ontime8	32179.299774349
ontime9	32179.299774349
l2events	231657



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images

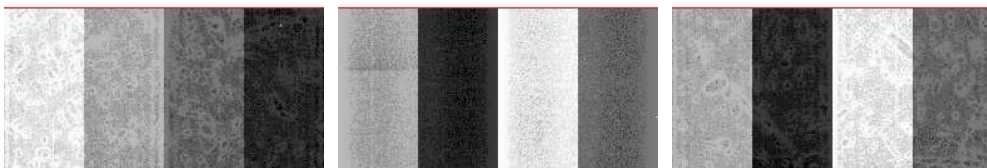


#### 2.1.2 Bias

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	2006-03-14T14:53:25
revision	2

sched_exp_time	32000.000000
ontime	32800.913820803
ontime4	32800.913820803
ontime5	32800.913820803
ontime6	32800.913820803
ontime7	32800.913820803
ontime8	32800.913820803
ontime9	32800.913820803
l1events	989316

### 2.1.4 Events

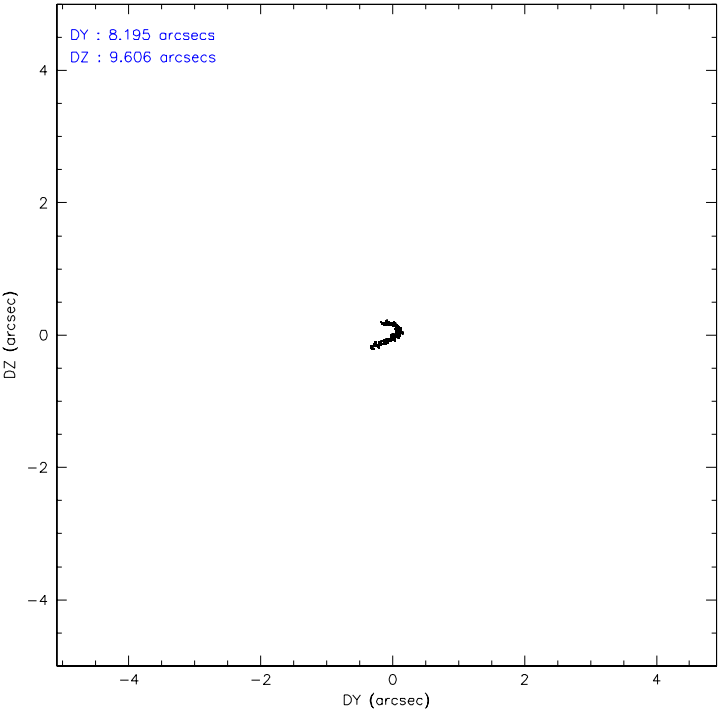
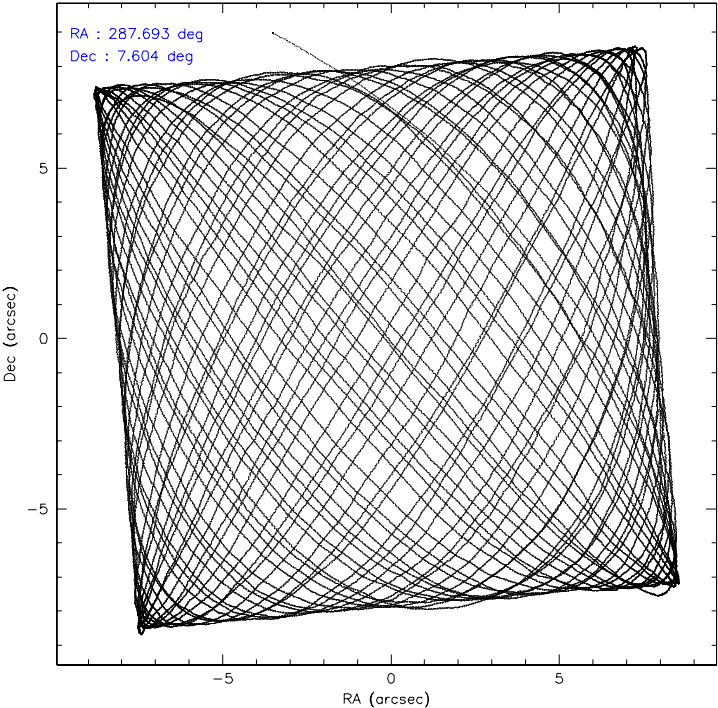
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	162009	198184	136284	198334	169514	124991
rejected events	127764	105987	112927	105566	130322	109206
rejected %	78%	53%	82%	53%	76%	87%

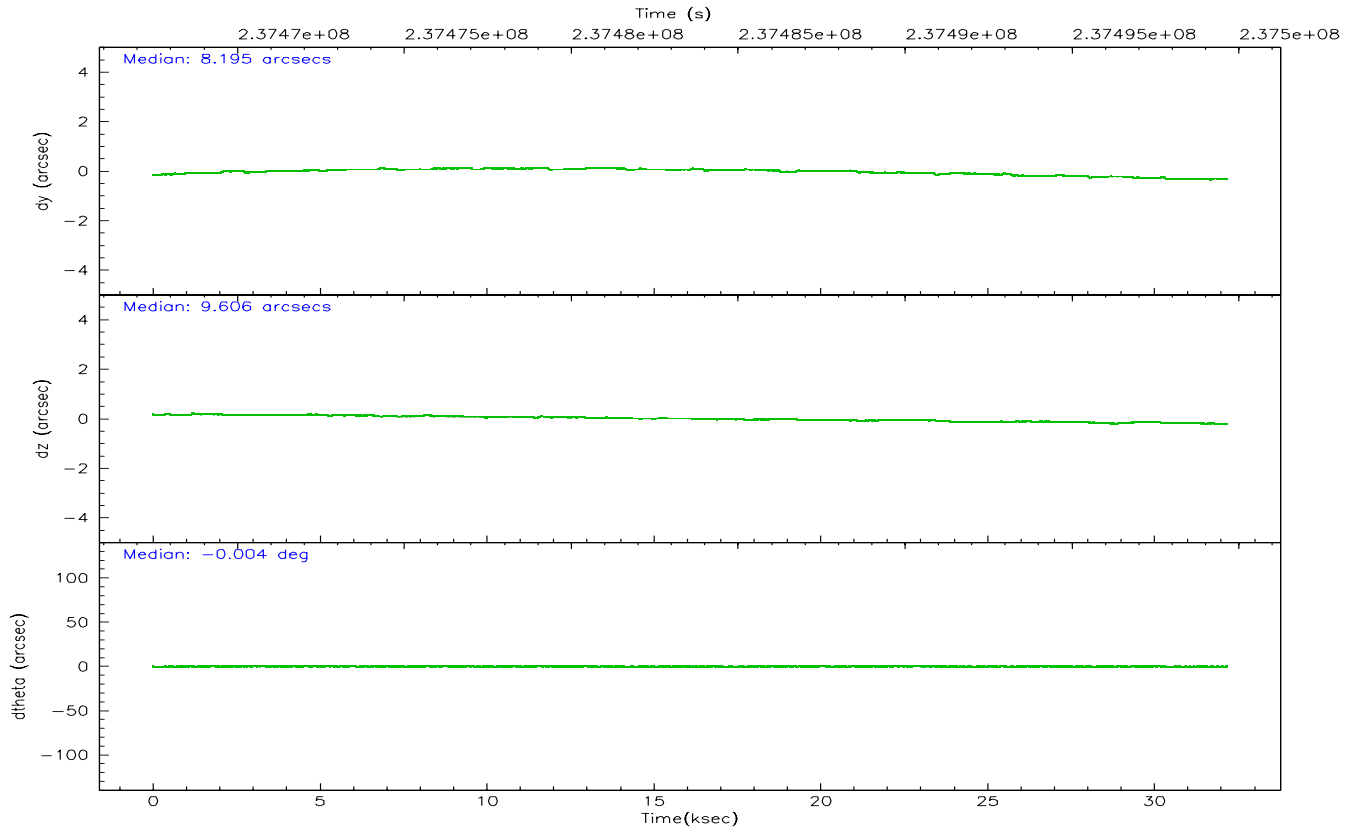
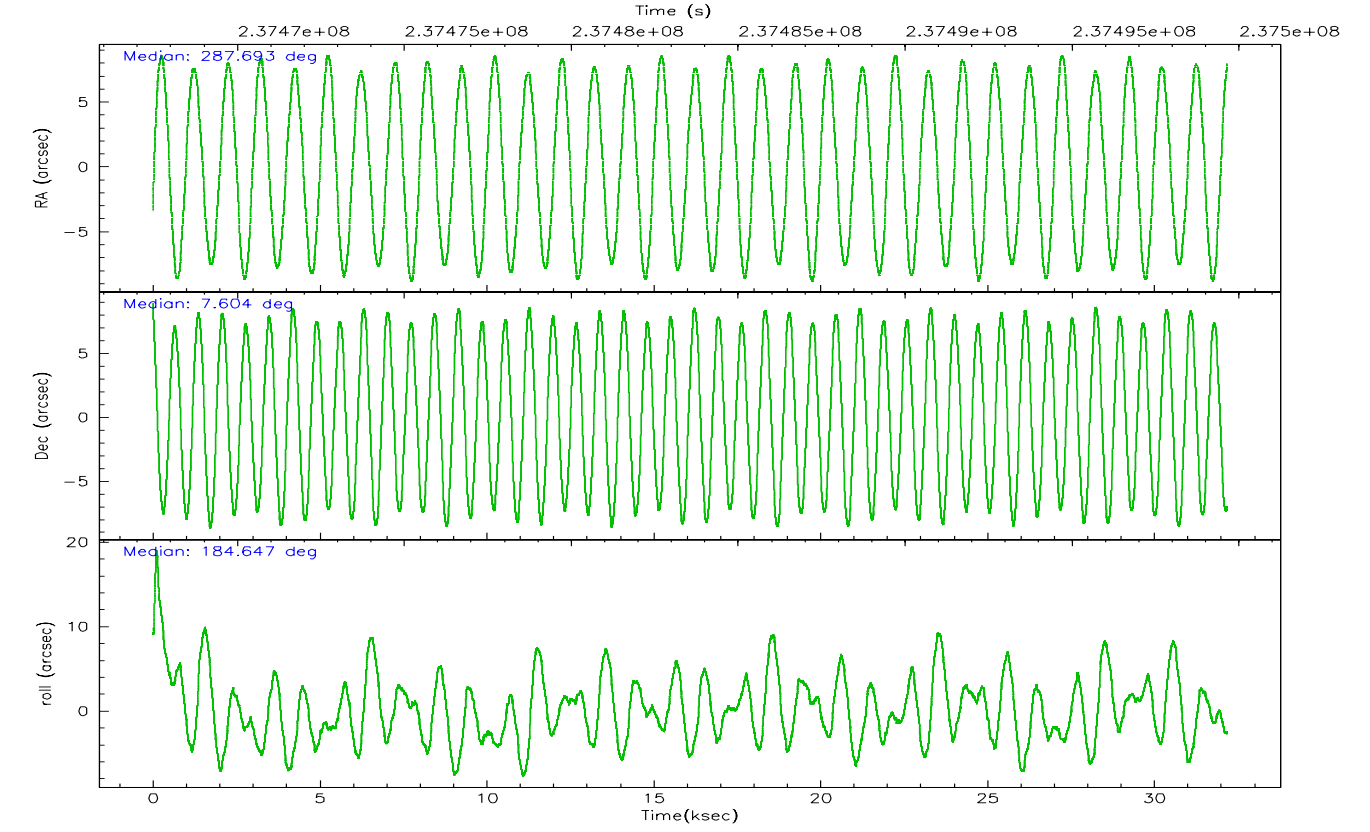
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	24949	15710	11007	8701	12832	6293
	15%	7%	8%	4%	7%	5%
grade 1 events	142	727	74	352	105	51
	0%	0%	0%	0%	0%	0%
grade 2 events	3655	26146	4506	21993	8116	3033
	2%	13%	3%	11%	4%	2%
grade 3 events	1851	3009	2196	6995	4943	1889
	1%	1%	1%	3%	2%	1%
grade 4 events	1799	2700	2149	6689	4438	1762
	1%	1%	1%	3%	2%	1%
grade 5 events	5334	10596	5627	13812	7312	5645
	3%	5%	4%	6%	4%	4%
grade 6 events	2677	46326	3869	49921	10000	3163
	1%	23%	2%	25%	5%	2%
grade 7 events	121602	92970	106856	89871	121768	103155
	75%	46%	78%	45%	71%	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	1/2
Pointing RA	287.715401	287.693043065661	Subarray start row	1	1
Pointing Dec	7.619508	7.603715070068795	Subarray row count	512	512
Pointing Roll	184.496853	184.6564423673357	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	1.7
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-183.992523	-183.9875365069546			
SIM translation stage offset (mm)	-6.14	-6.144986076053243			
Phase constraints	Y	Y			
Phase period	4.400700	4.400700			
Phase epoch	52631.383000	52631.383000			
Phase start	0.434200	0.434200			
Phase end	0.565800	0.565800			
Phase start error	0.134200	0.134200			
Phase end error	0.134200	0.134200			
Observation start time	237467649.184000	237466437.40077			
Observation start date	2005-07-11T11:13:05	2005-07-11T10:53:57			
Observation end time	237499649.184000	237501177.72736			
Observation end date	2005-07-11T20:06:25	2005-07-11T20:32:57			
Read mode	TIMED	TIMED			

2.3 Aspect





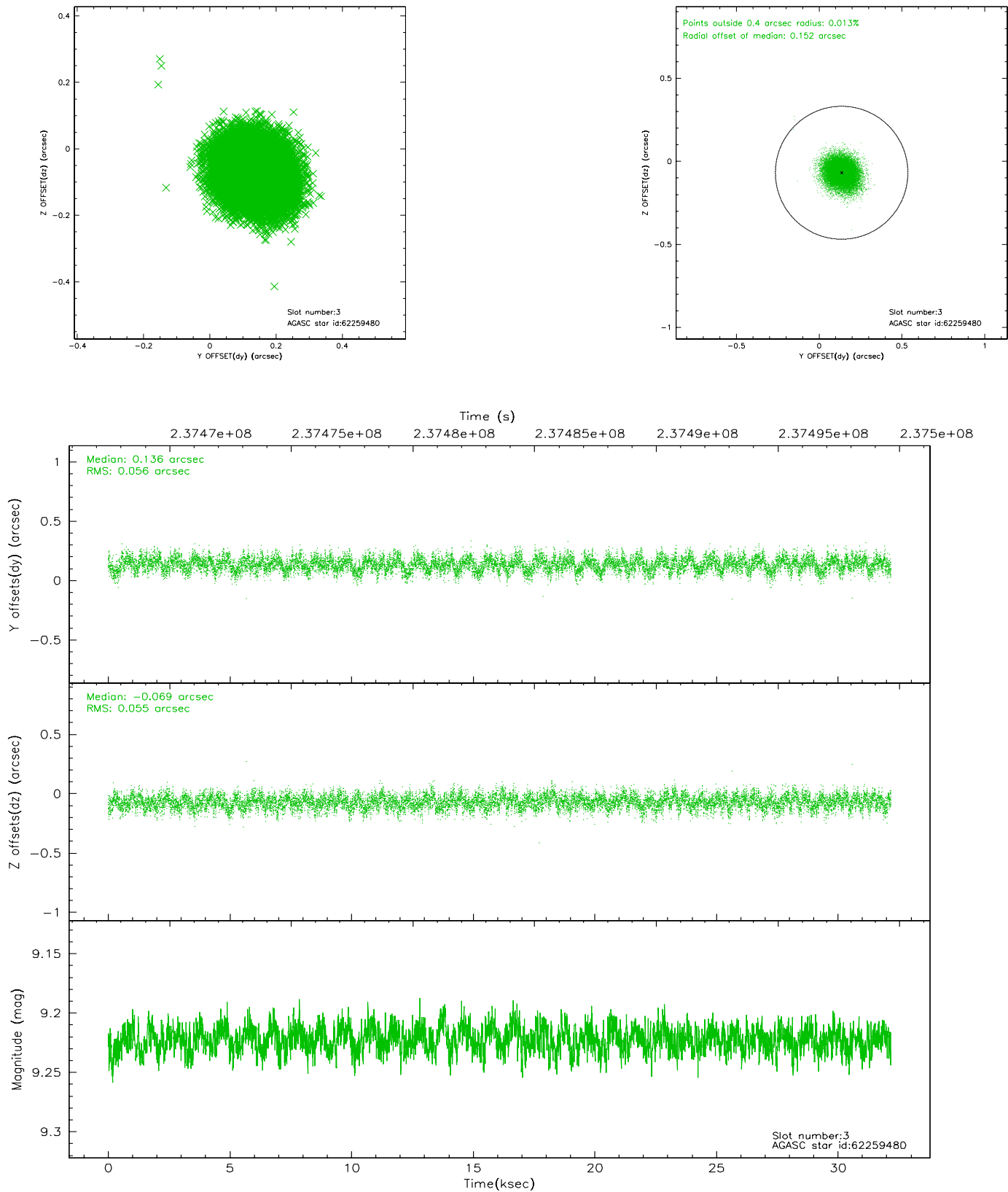
# Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.08	7850	-0.038	-0.084	0.010	0.015	0.000000	0.000000	-760.54	-1857.59
1	FID	ACIS-S-4	7.18	7850	0.069	0.041	0.008	0.017	0.000000	0.000000	2152.81	50.94
2	FID	ACIS-S-5	7.23	7850	-0.060	0.051	0.010	0.016	0.000000	0.000000	-1813.34	44.68
3	GUIDE	62259480	9.22	15689	0.136	-0.069	0.084	0.134	288.069646	7.483083	-1221.65	588.06
4	GUIDE	62264256	9.26	15691	-0.034	-0.044	0.099	0.154	287.525458	7.120381	817.32	1738.19
5	GUIDE	136318600	9.18	15689	-0.098	0.017	0.092	0.147	287.193672	7.971966	1755.36	-1411.47
6	GUIDE	136451568	9.67	15684	0.028	0.058	0.130	0.209	287.608270	8.059160	257.37	-1607.79
7	GUIDE	136446056	9.38	15686	-0.028	0.044	0.075	0.123	287.496360	7.664883	766.62	-224.22

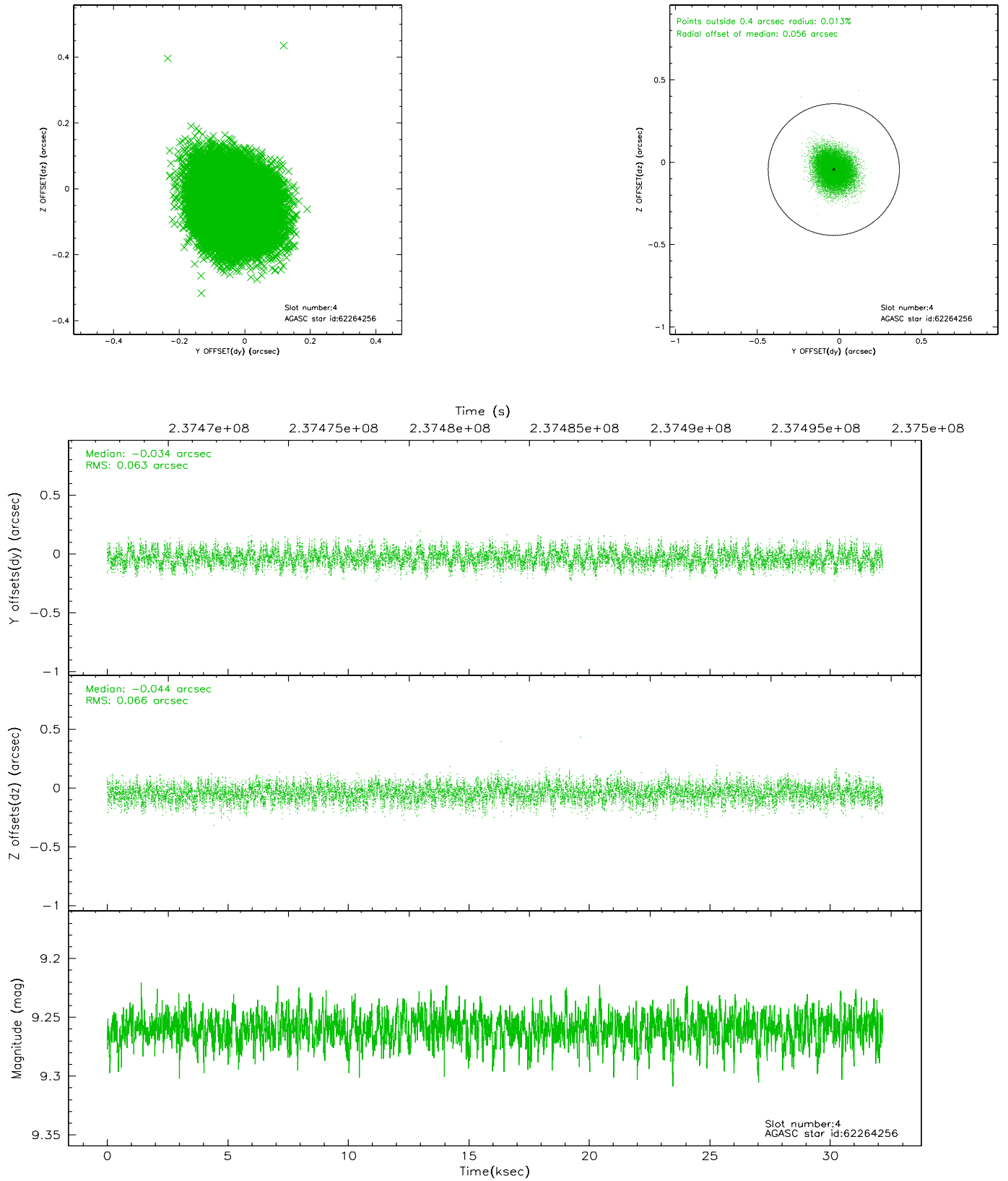


## 2.4 Star Slots

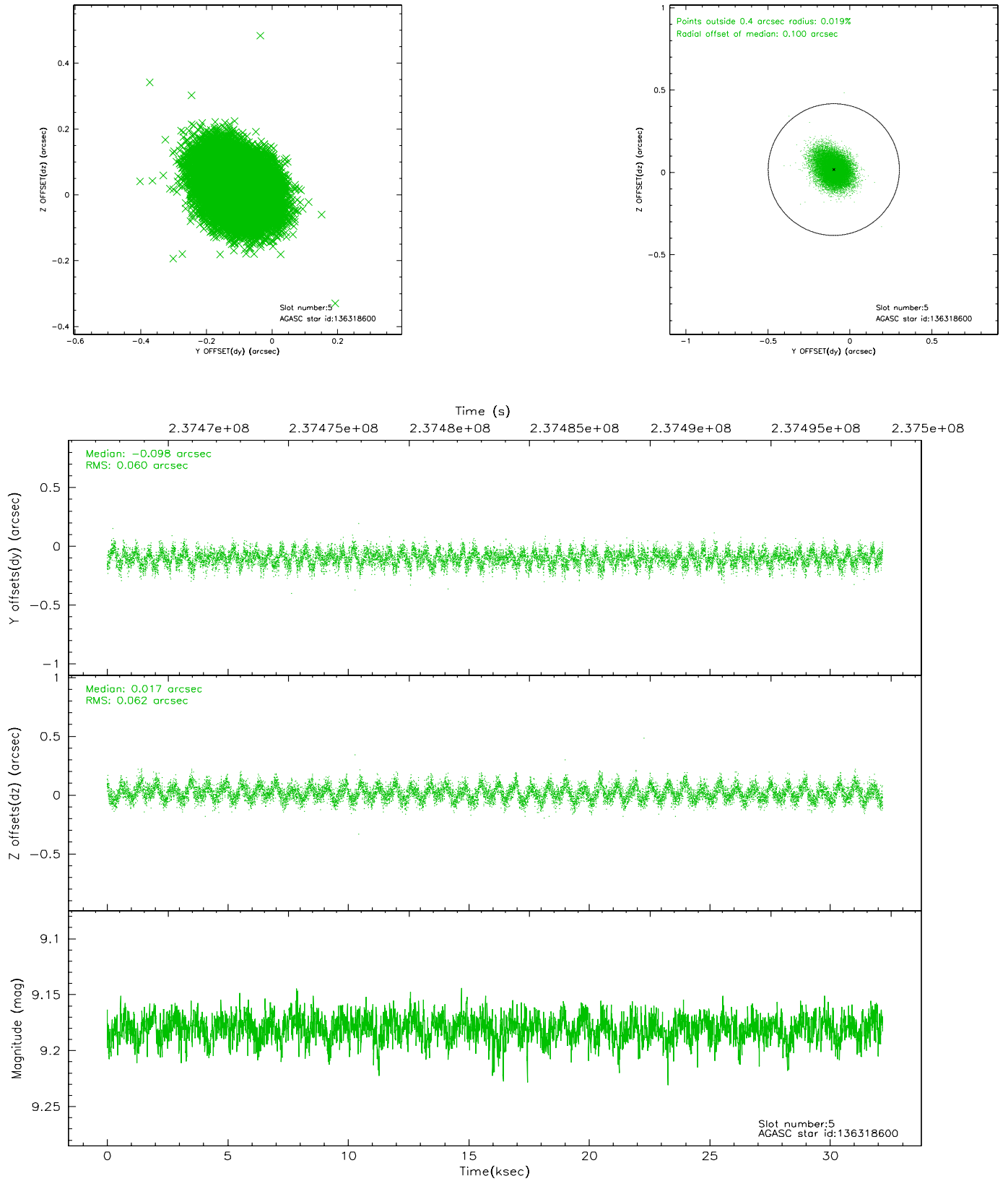
### 2.4.1 Slot 3



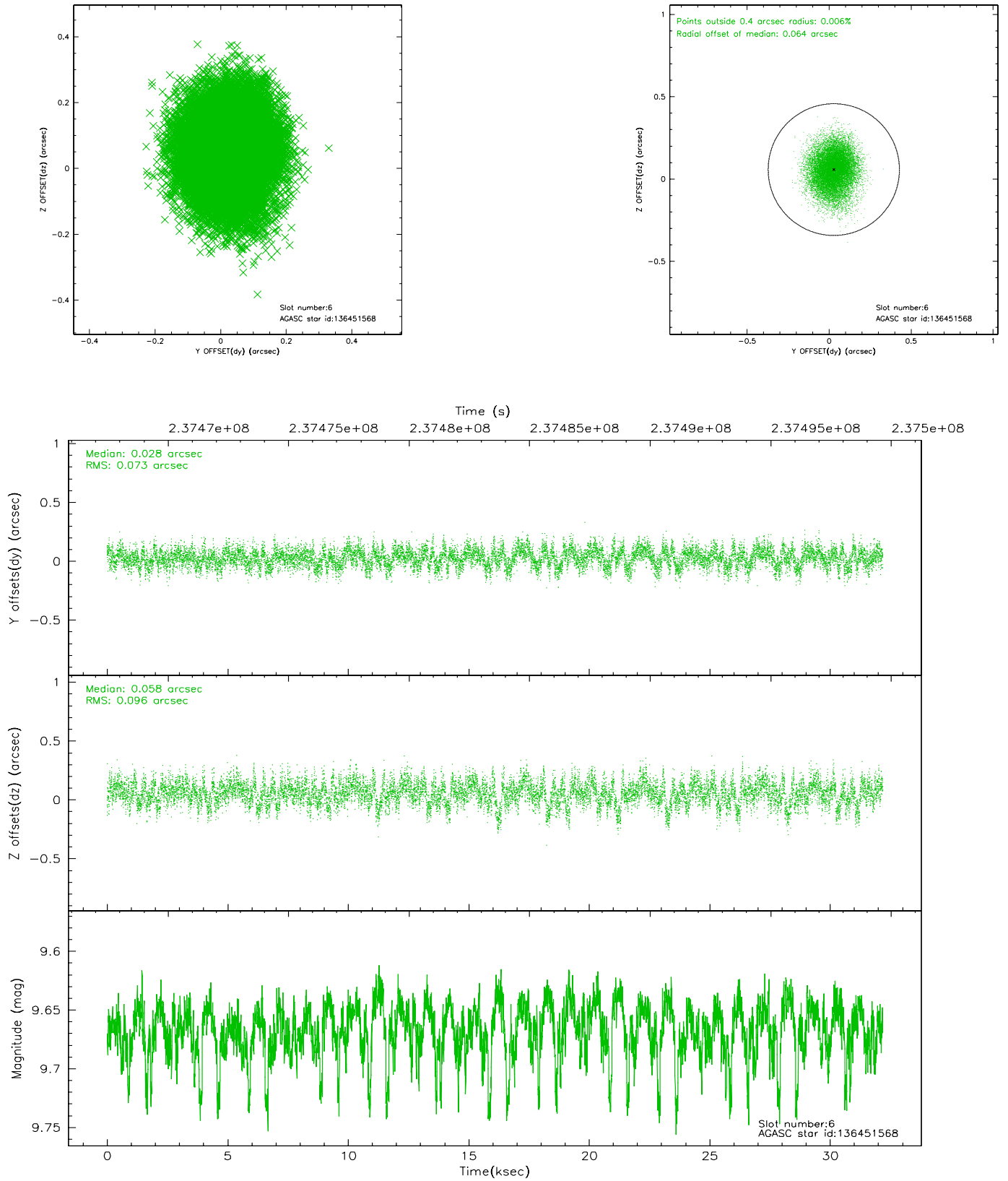
## 2.4.2 Slot 4



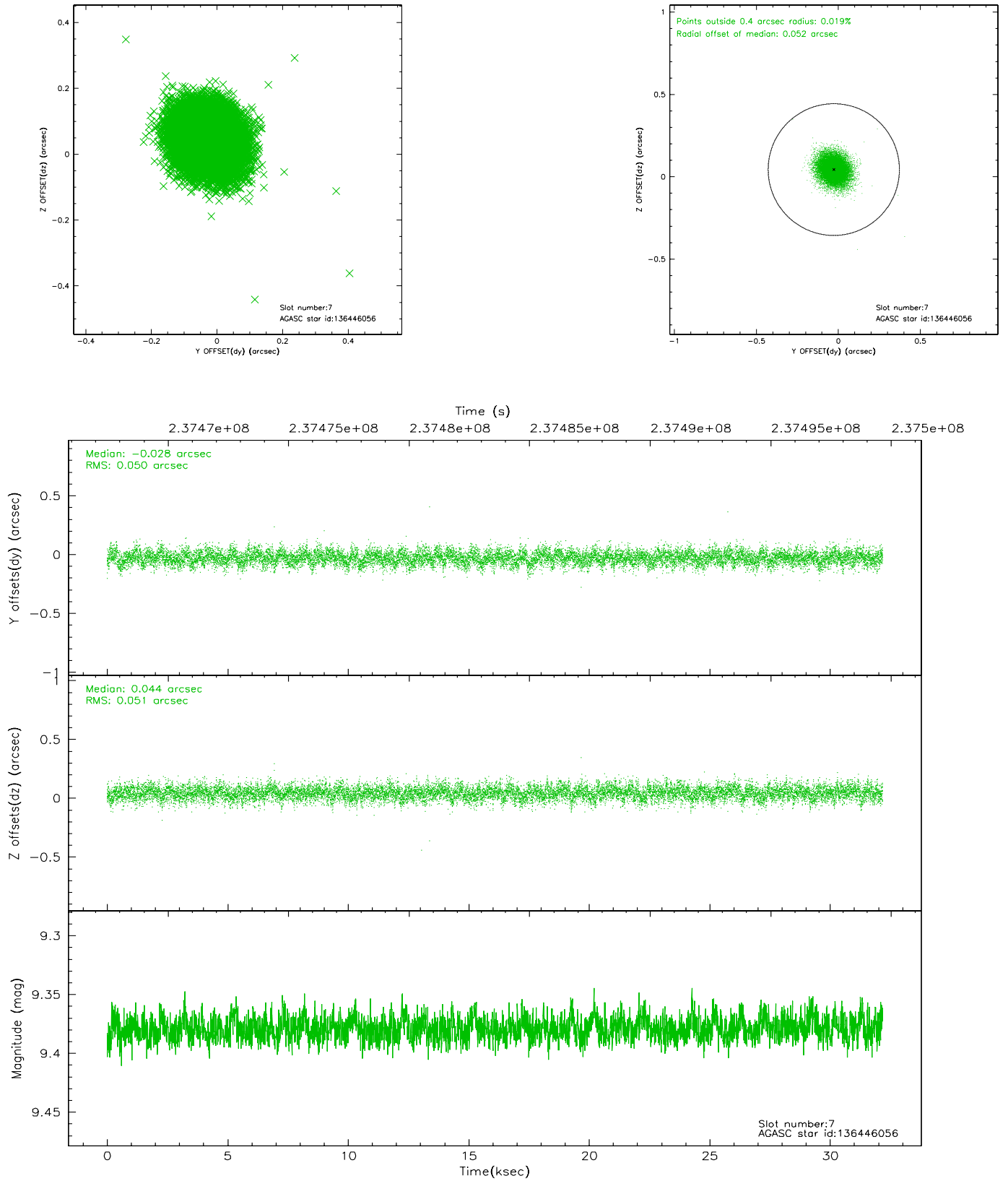
### 2.4.3 Slot 5



## 2.4.4 Slot 6

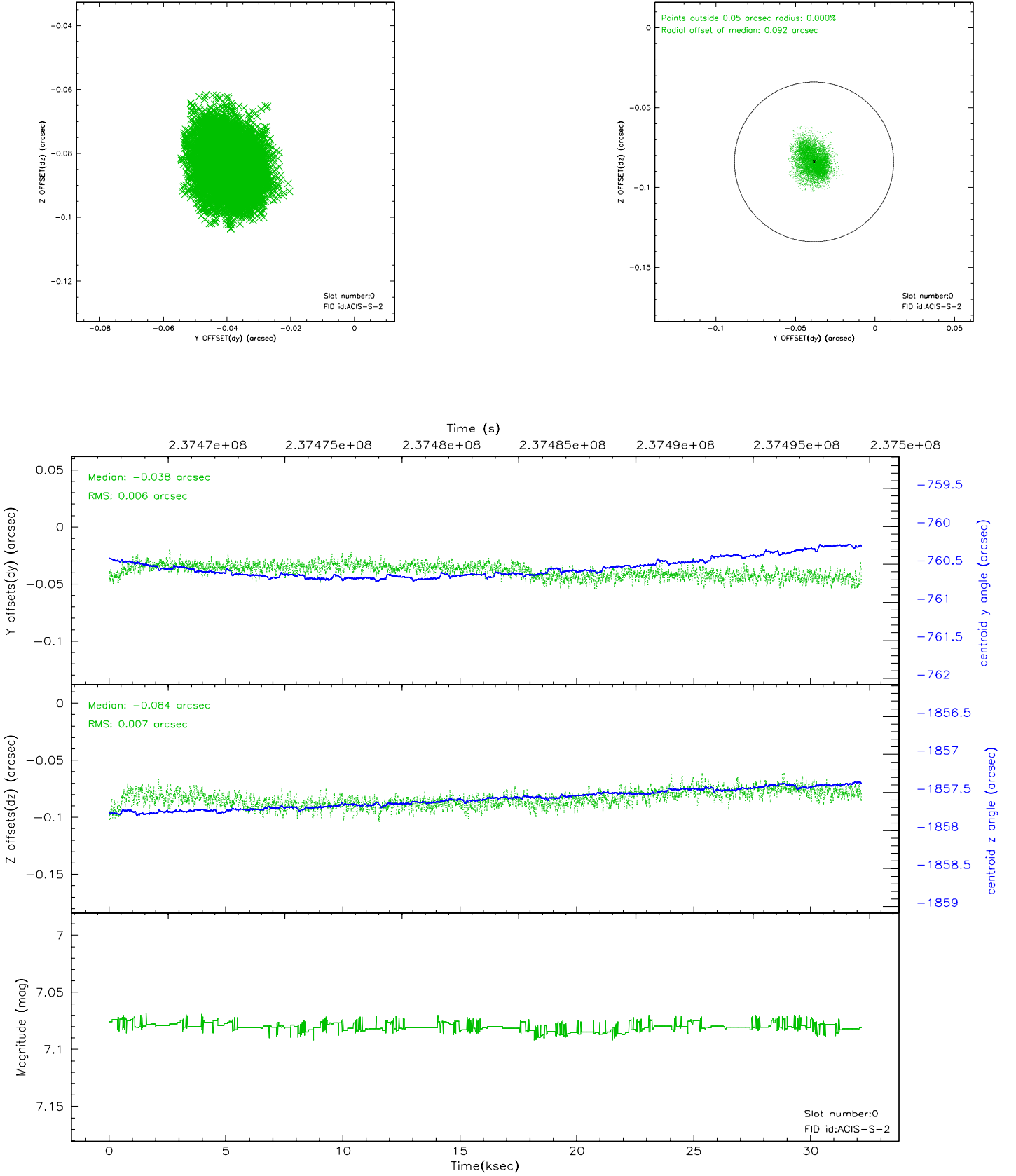


## 2.4.5 Slot 7

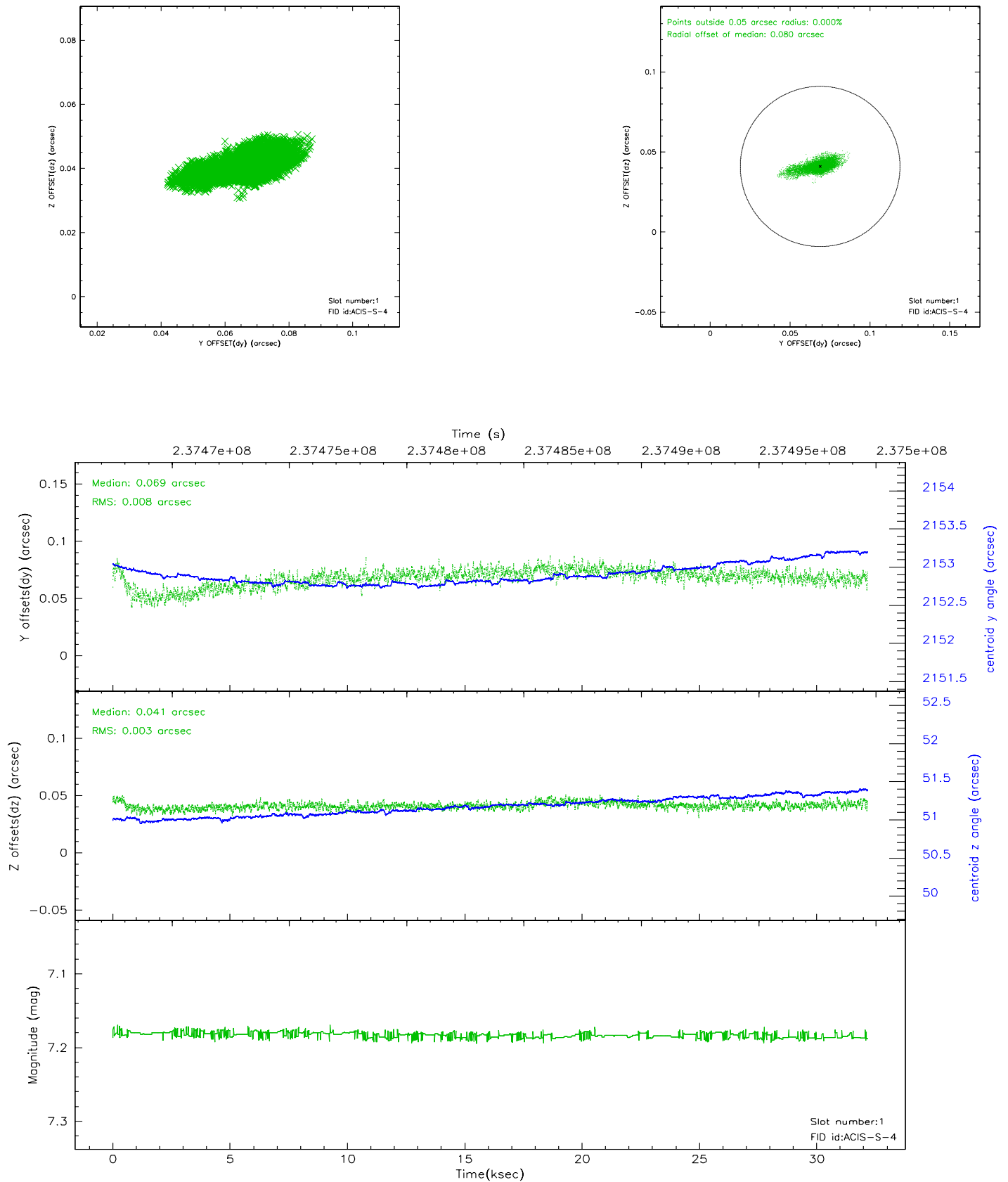


## 2.5 FID Slots

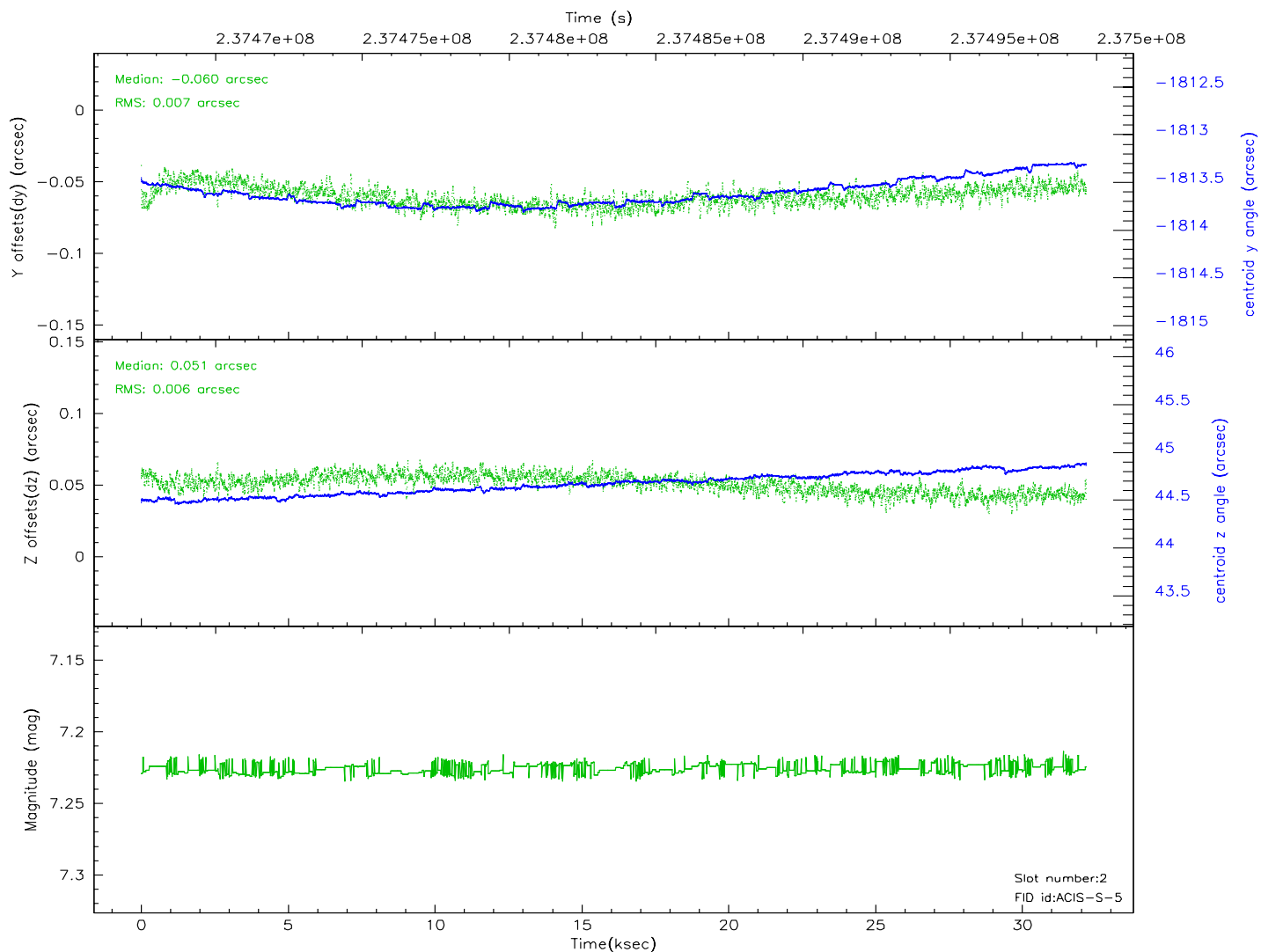
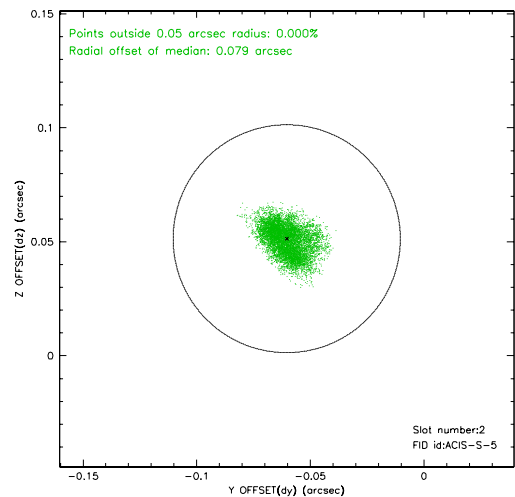
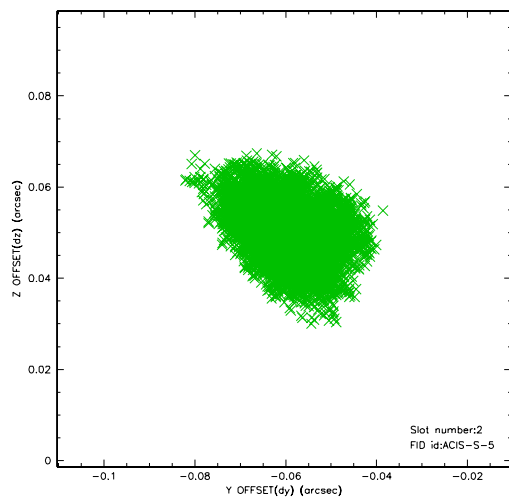
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





# 3 Gratings

## 3.1 HEG Arm



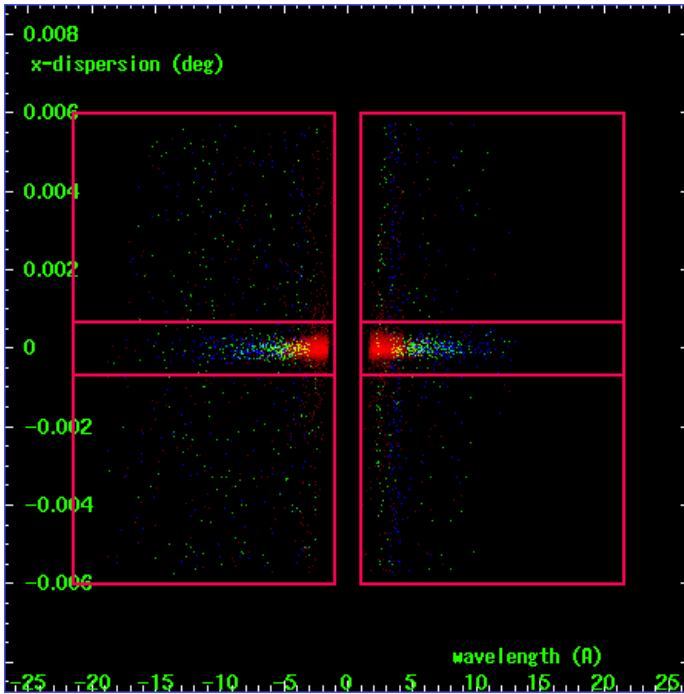
HEG Order Sort 123



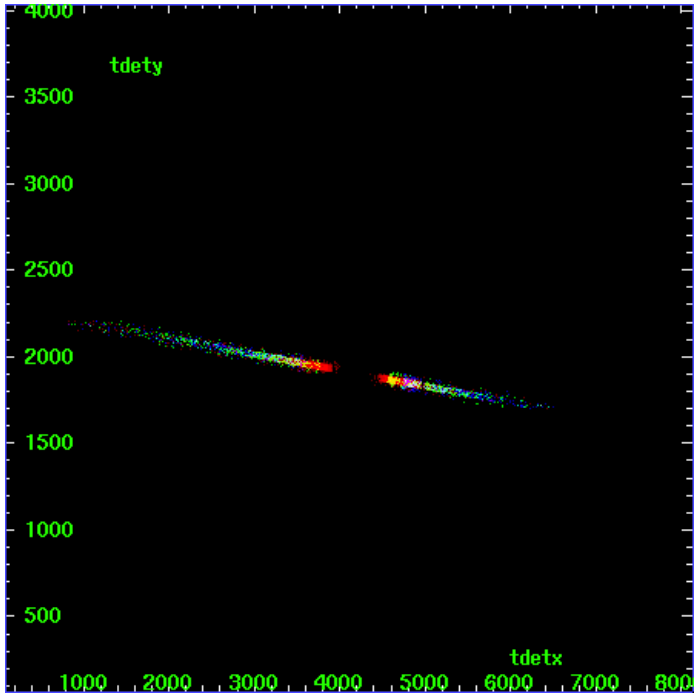
HEG Zero Order



HEG Order Sort ALL

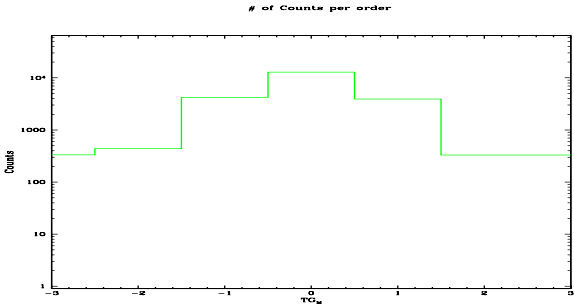


Spot Image HEG

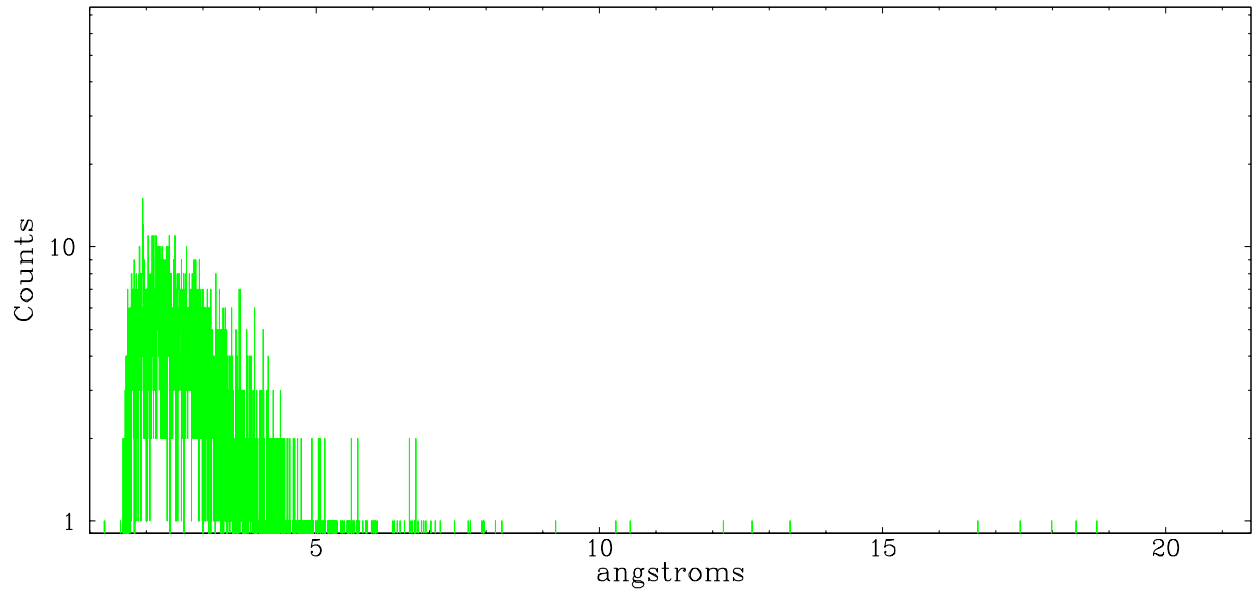


Full Detector HEG

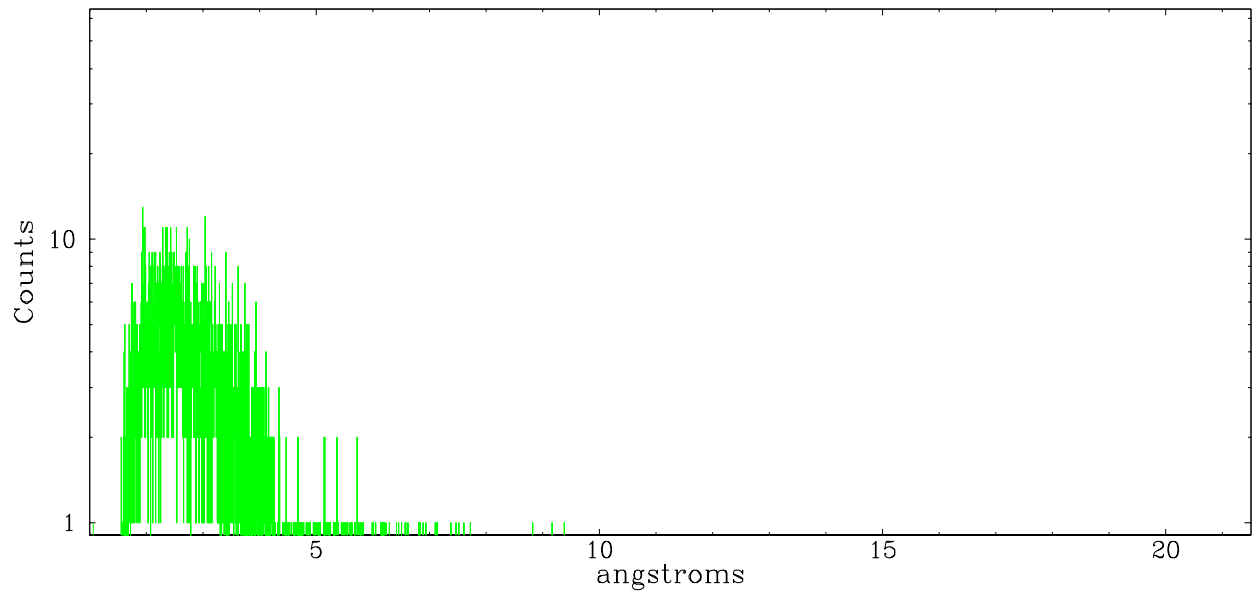
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	333	436	4238	12905	3928	331	330



heg order -1



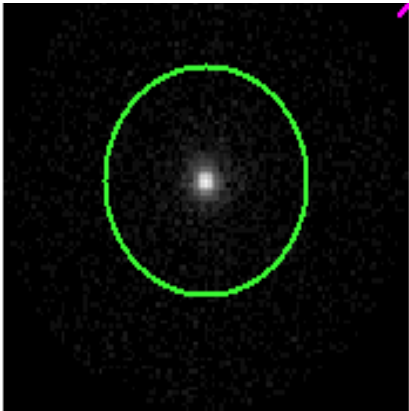
heg order +1



3.2 MEG Arm



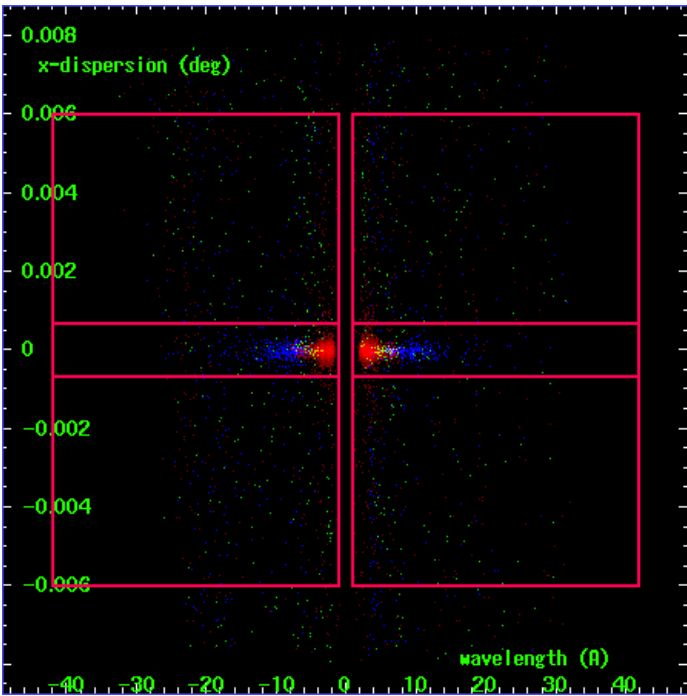
MEG Order Sort 123



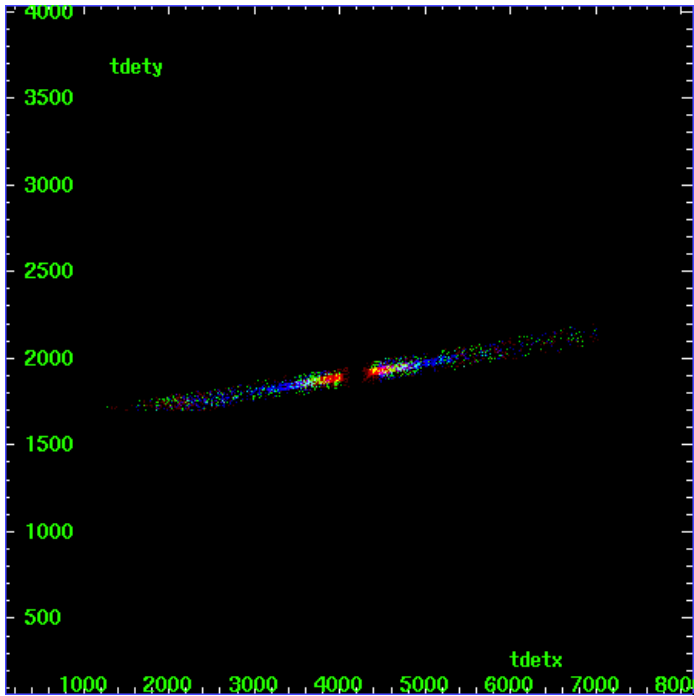
MEG Zero Order



MEG Order Sort ALL

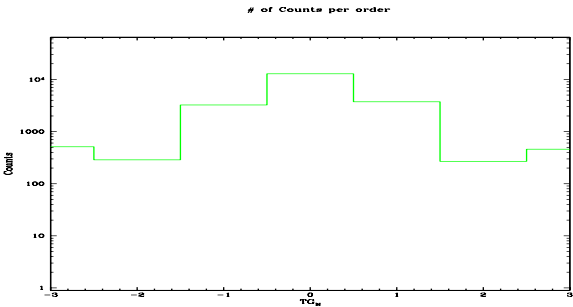


Spot Image MEG

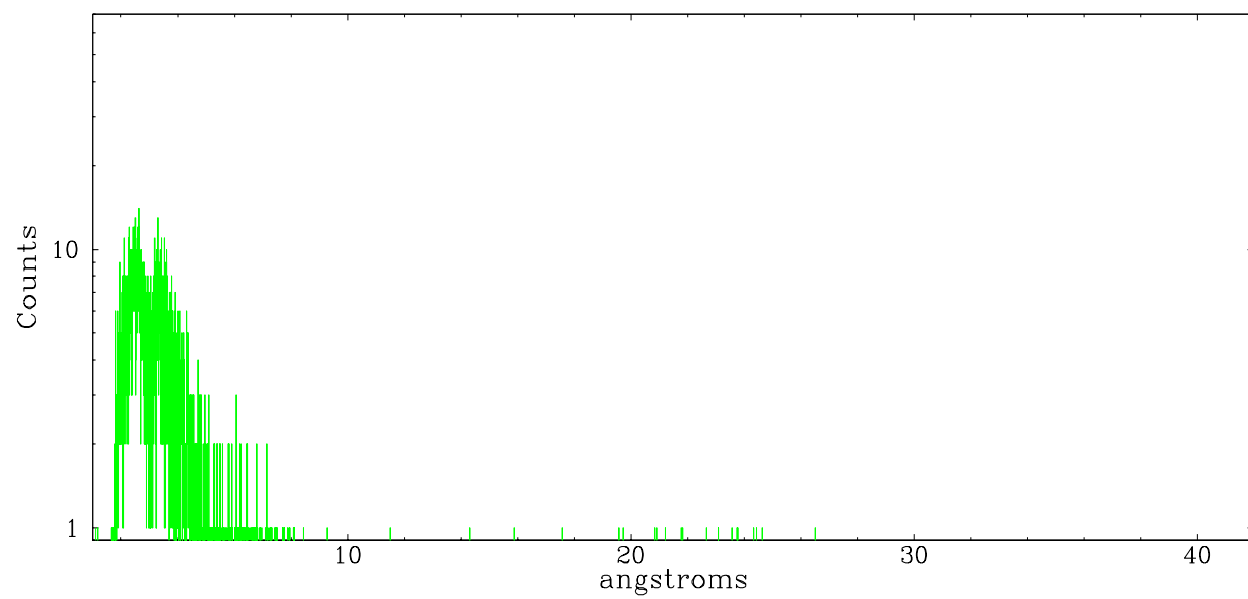


Full Detector MEG

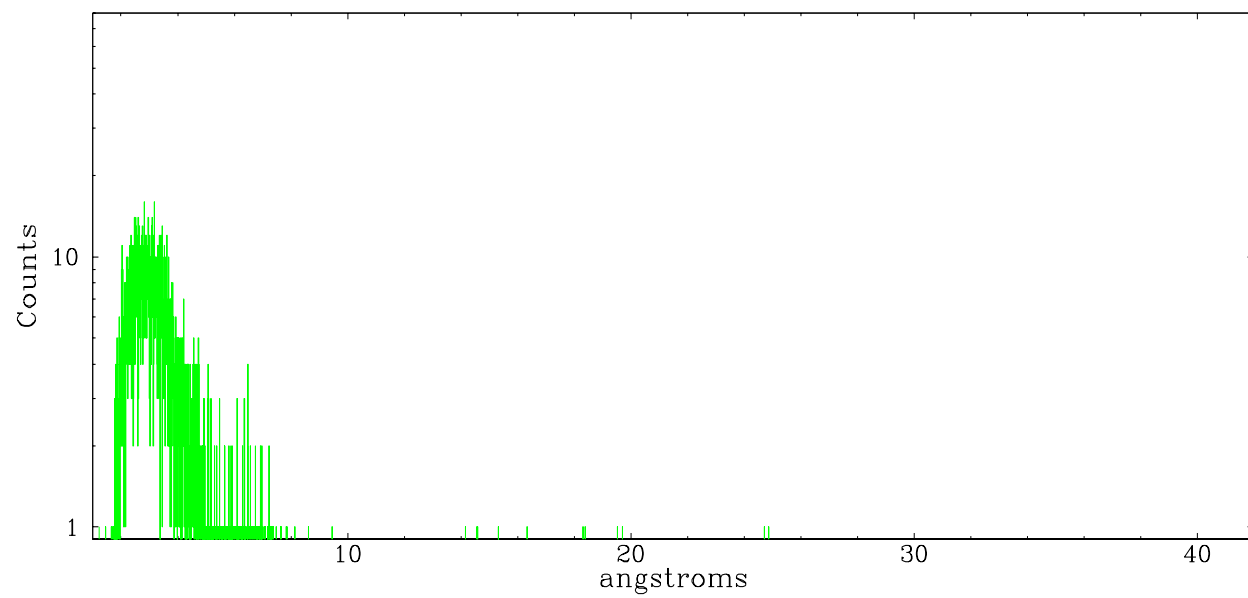
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	509	287	3235	12905	3734	268	458



meg order -1



meg order +1



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.03.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.17929

### A.2 Comments