

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 4622 - L2 Version 001  
Chandra X-Ray Center

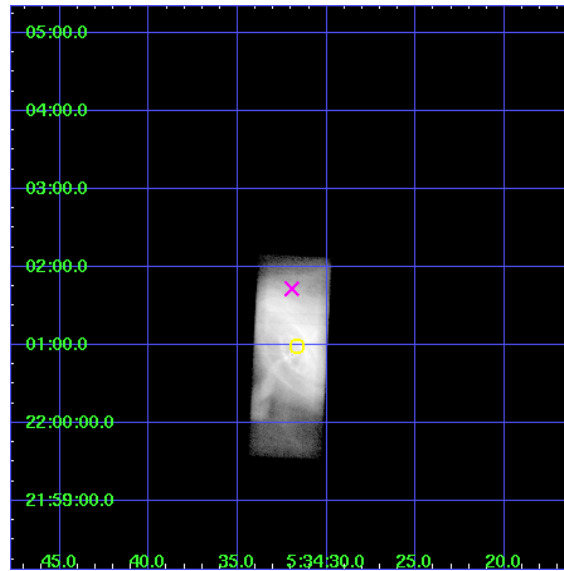
L2 Processing Date : Apr 19 2006

## 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	HEG Arm . . . . .	17
3.2	MEG Arm . . . . .	19
<b>A</b>	<b>Summary</b>	<b>21</b>
A.1	Status . . . . .	21
A.2	Comments . . . . .	21

# 1 Front

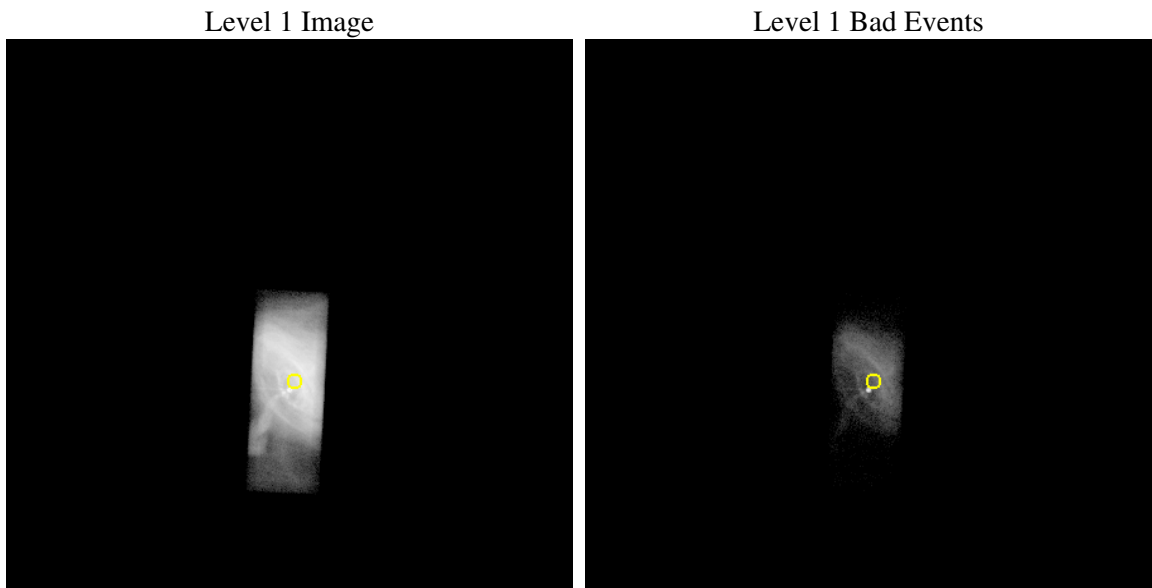
seq_num	500447
obs_id	4622
title	Spectroscopic Study of the Dynamic Shock in the Pulsar Wind of the Crab Nebula
observer	Dr Koji Mori
object	The Crab Nebula
dtcycle	0
cycle	P
ra_targ	83.632083
dec_targ	22.016472
ra_nom	83.633218523586
dec_nom	22.028877466843
roll_nom	92.921497429521
revision	2
ontime	10152.90040344
livetime	8931.1228038705
ontime7	10152.90040344
l2events	2487103



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



## 2.1.2 Parameters

obi_num	1
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-04-19T11:10:34
revision	2

sched_exp_time	10000.000000
ontime	10885.197884709
ontime7	10885.197884709
l1events	2648046

## 2.1.3 Events

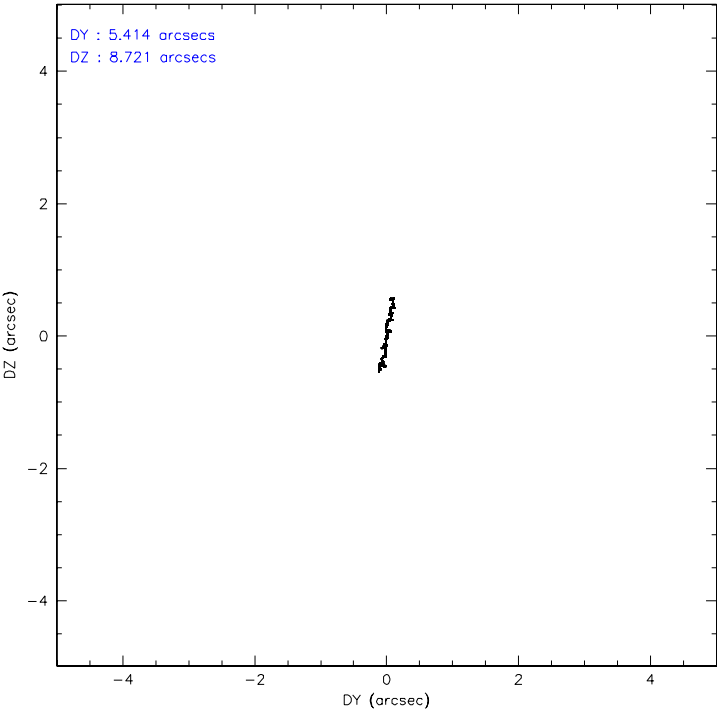
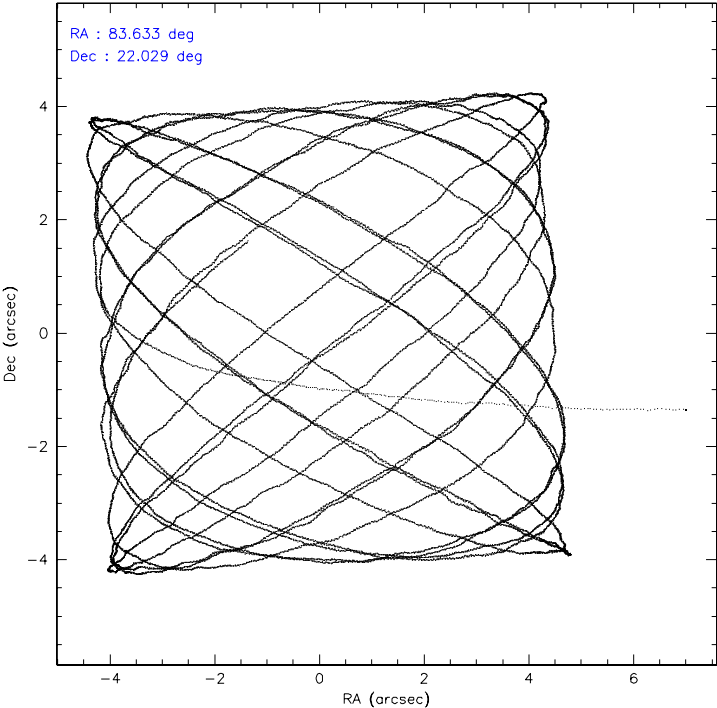
	<b>ccd 7</b>
level 1 events	2648046
rejected events	123417
rejected %	4%

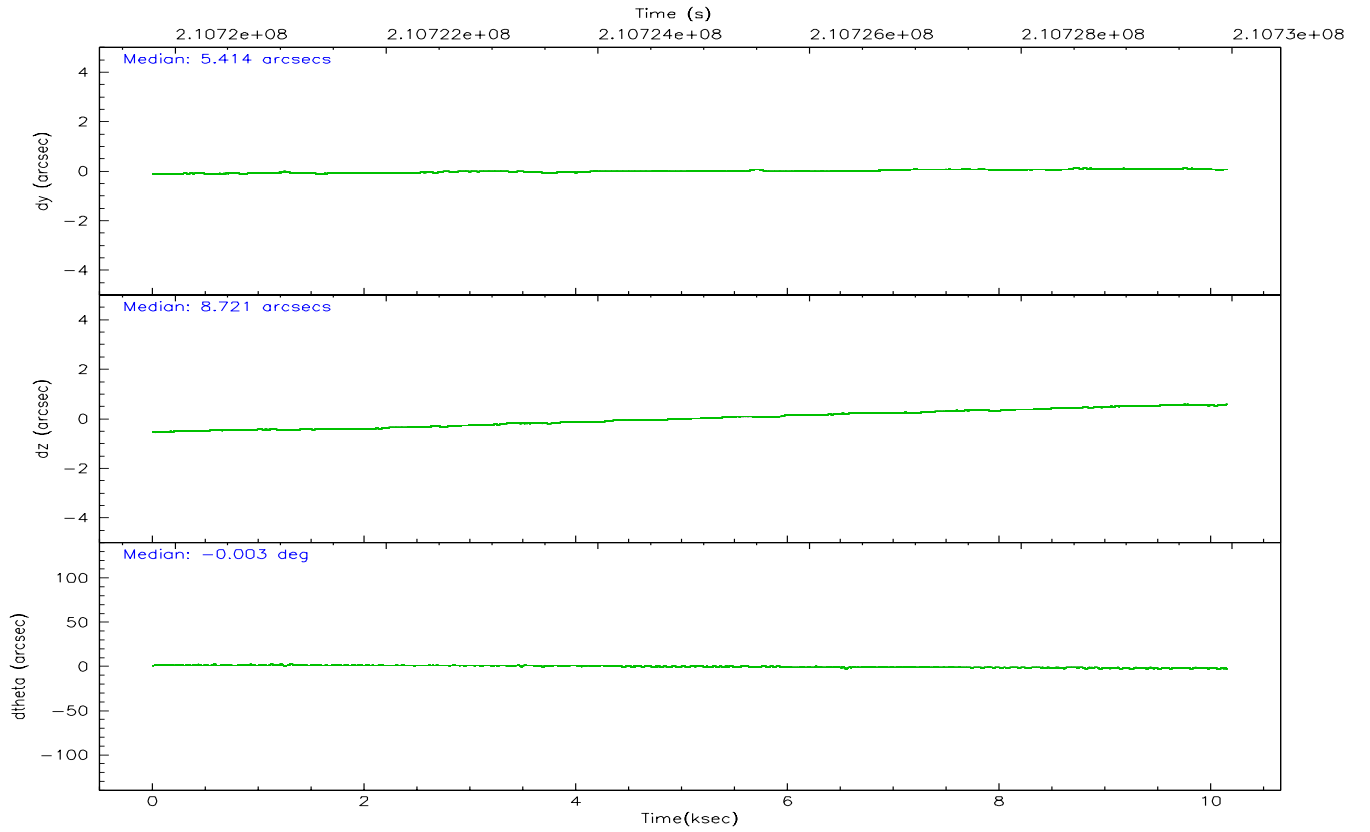
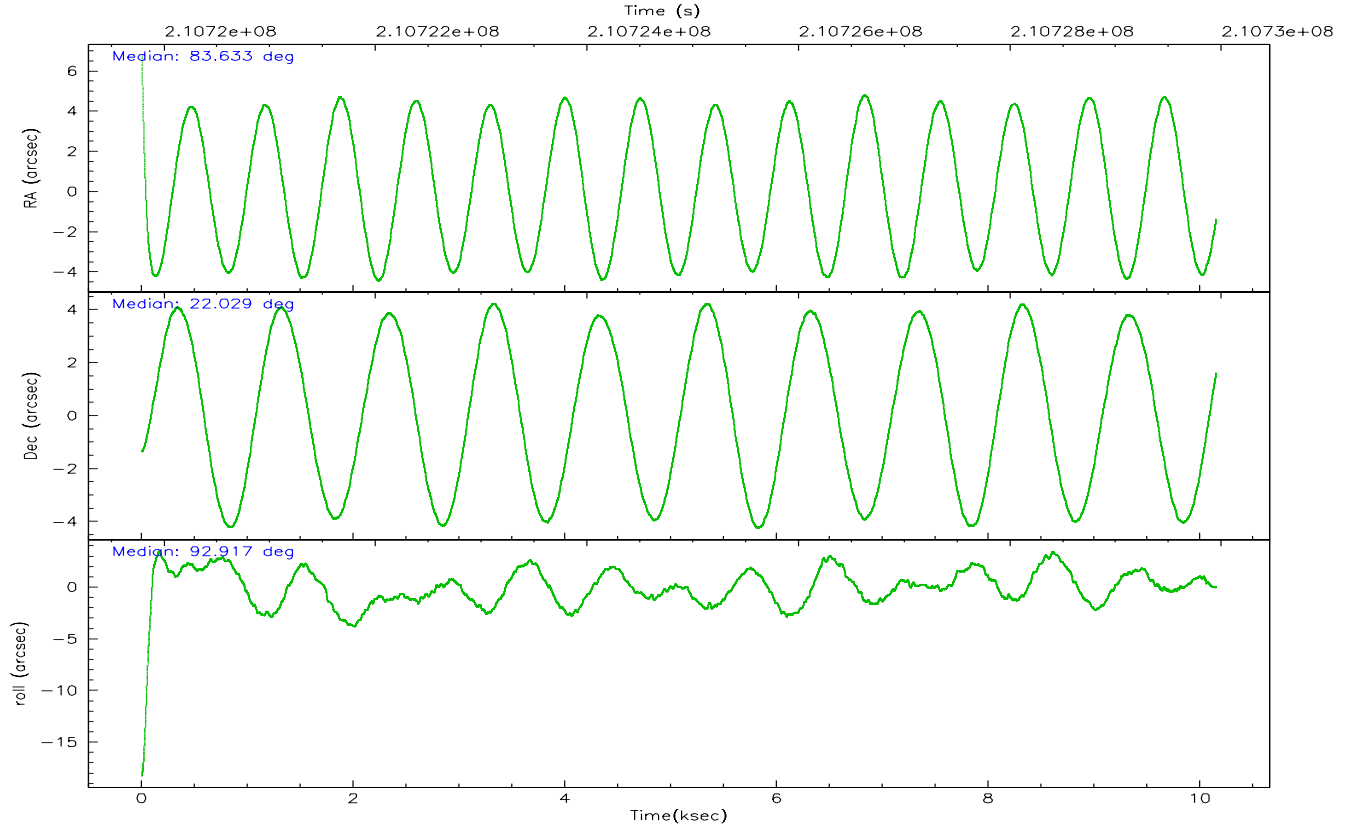
	<b>ccd 7</b>
grade 0 events	513436
	19%
grade 1 events	9706
	0%
grade 2 events	651230
	24%
grade 3 events	288936
	10%
grade 4 events	278967
	10%
grade 5 events	39853
	1%
grade 6 events	818613
	30%
grade 7 events	47305
	1%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	GRADED	GRADED	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	CUSTOM
Pointing RA	83.649532	83.63321852358573	Subarray start row	127	127
Pointing Dec	22.006236	22.02887746684294	Subarray row count	101	101
Pointing Roll	92.758766	92.92149742952118	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	0.3
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-182.132523	-182.1370004450064			
SIM translation stage offset (mm)	-8	-7.995522138001405			
Observation start time	210719950.184000	210718832.61697			
Observation start date	2004-09-04T21:18:06	2004-09-04T21:00:32			
Observation end time	210729950.184000	210730907.11751			
Observation end date	2004-09-05T00:04:46	2004-09-05T00:21:47			
Read mode	TIMED	TIMED			

### 2.3 Aspect





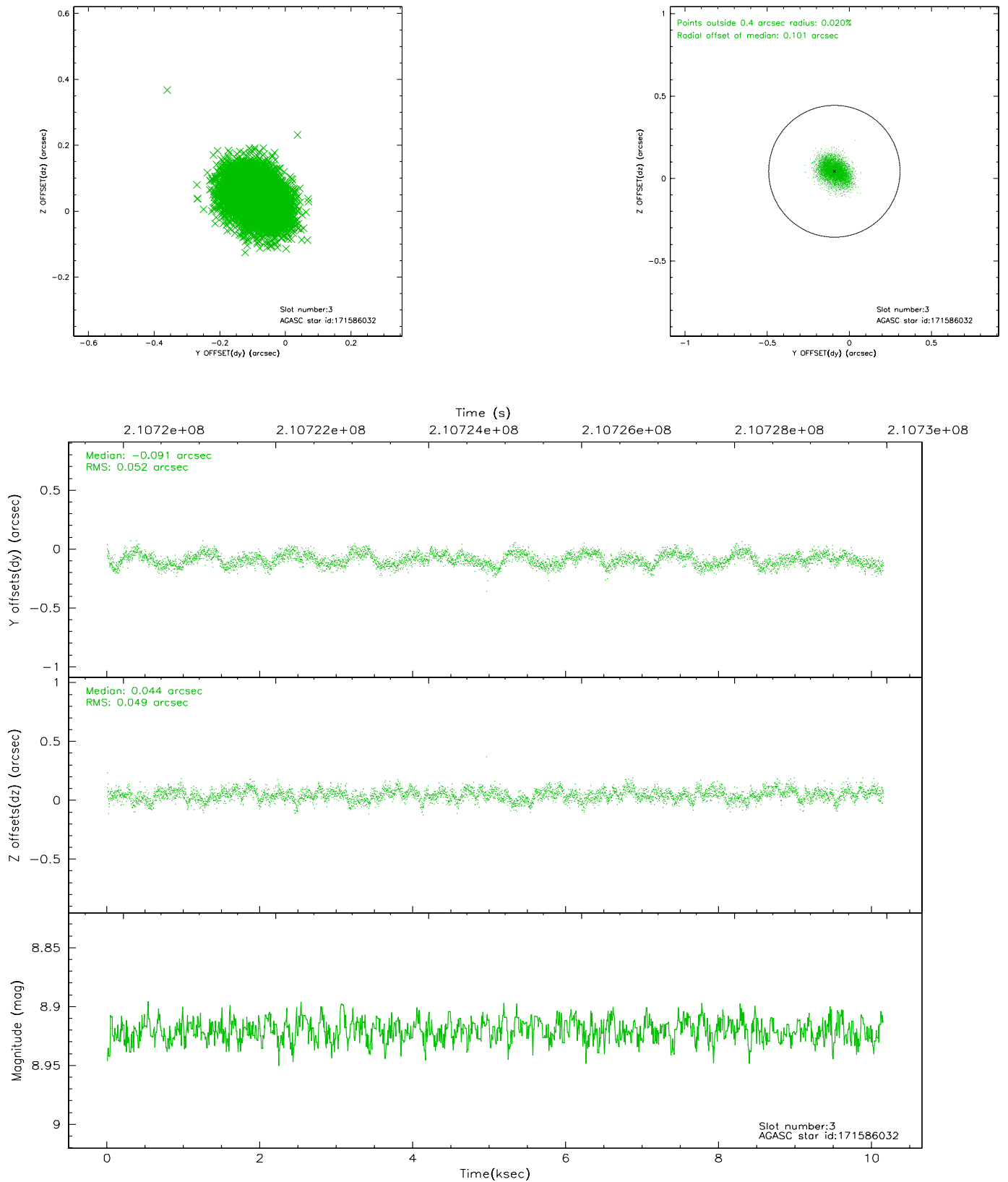
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	2477	-0.065	-0.111	0.030	0.040	0.000000	0.000000	-757.64	-1894.75
1	FID	ACIS-S-4	7.17	2477	0.134	0.062	0.015	0.020	0.000000	0.000000	2155.63	13.24
2	FID	ACIS-S-5	7.23	2477	-0.101	0.058	0.028	0.037	0.000000	0.000000	-1809.82	7.56
3	GUIDE	171586032	8.92	4953	-0.091	0.044	0.076	0.121	83.950197	22.083225	229.87	-1015.06
4	GUIDE	171586976	8.48	4952	-0.041	0.026	0.091	0.142	83.857953	22.438065	1520.16	-767.67
5	GUIDE	171597832	9.15	4950	0.288	-0.235	0.088	0.141	83.183230	21.366702	-2221.29	1671.83
6	GUIDE	171721904	9.19	4949	-0.030	0.099	0.094	0.151	84.272676	22.116922	302.24	-2094.67
7	GUIDE	243941560	8.31	4952	-0.127	0.062	0.069	0.106	83.733264	22.568598	2009.06	-375.55

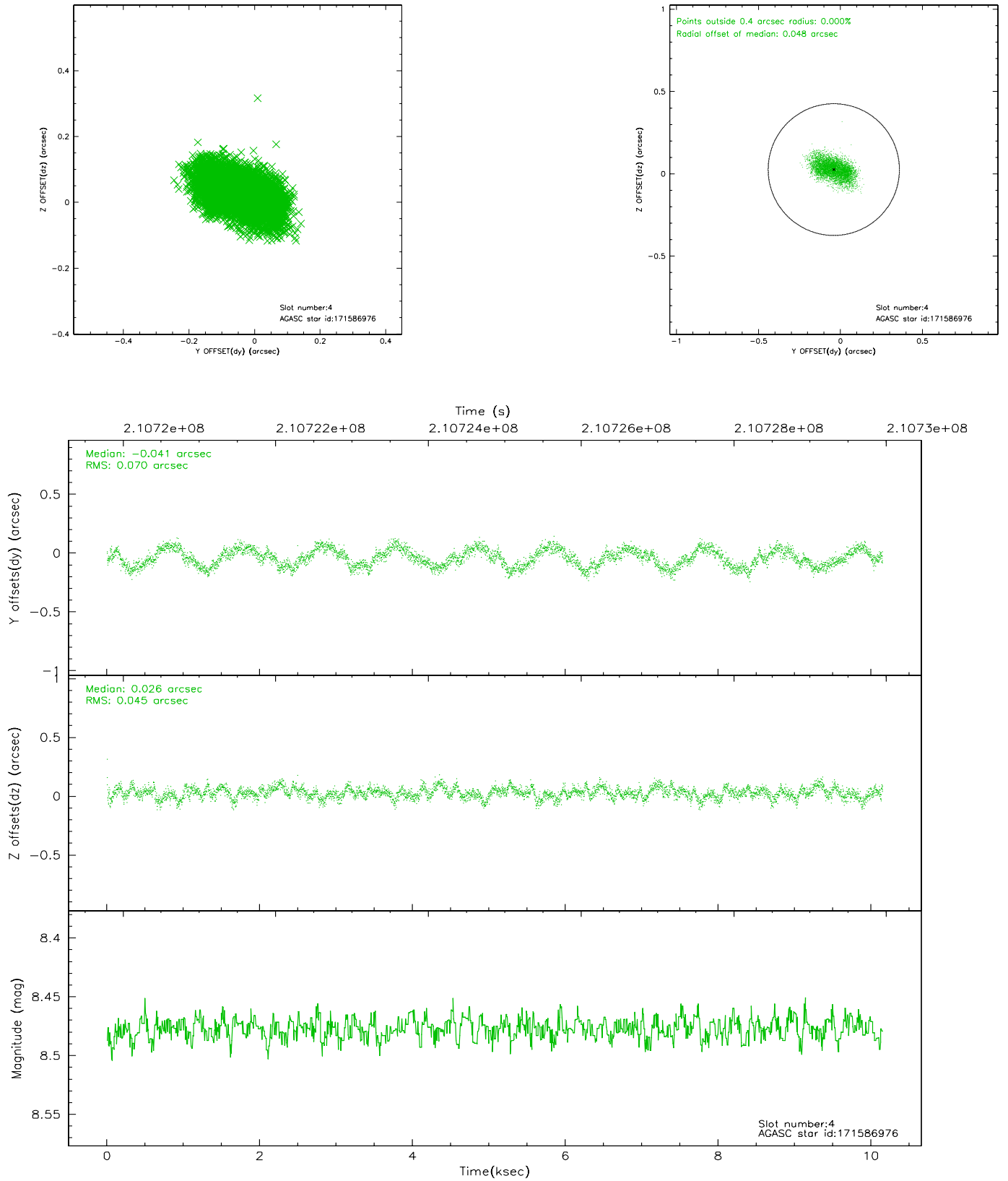


## 2.4 Star Slots

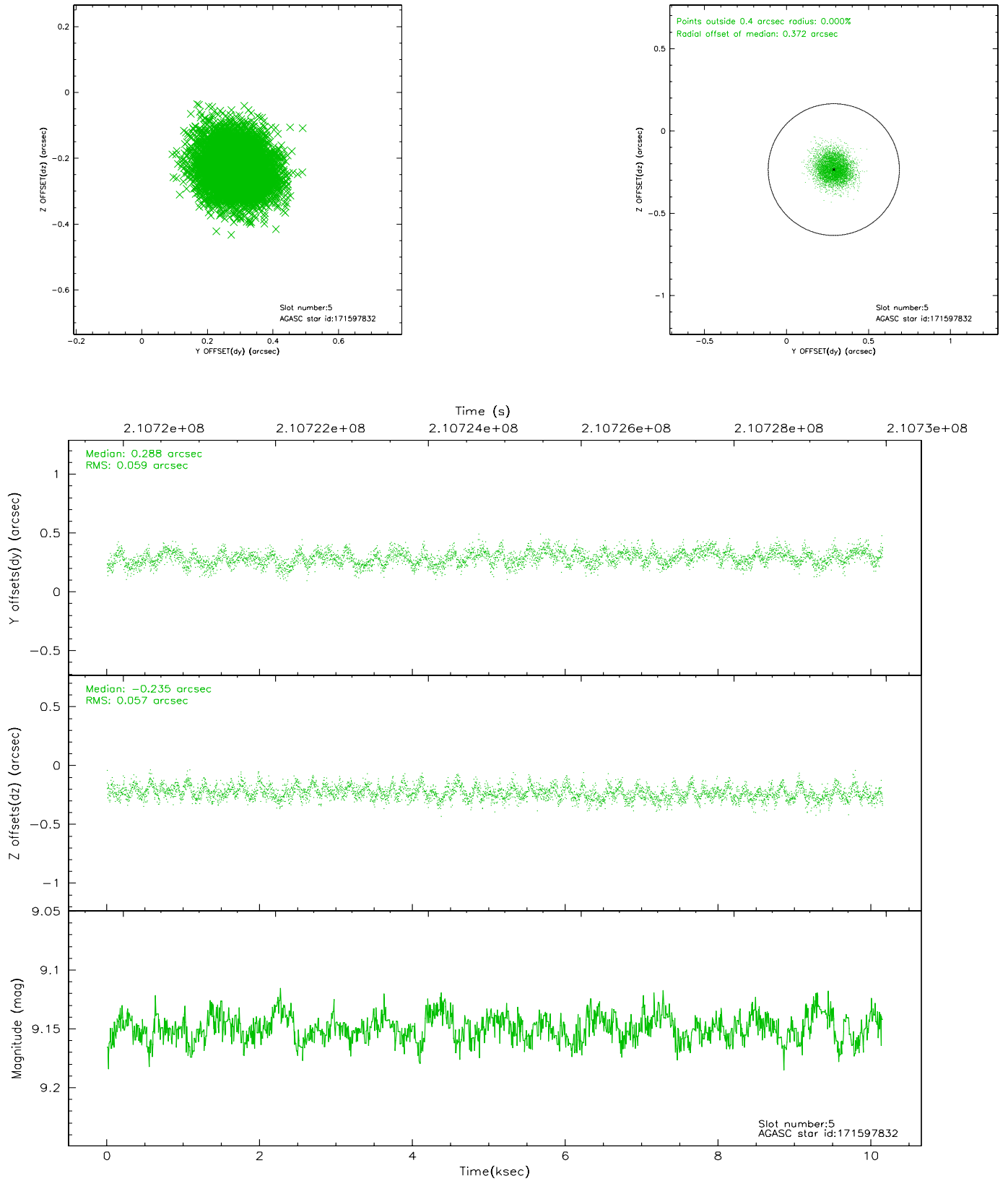
### 2.4.1 Slot 3



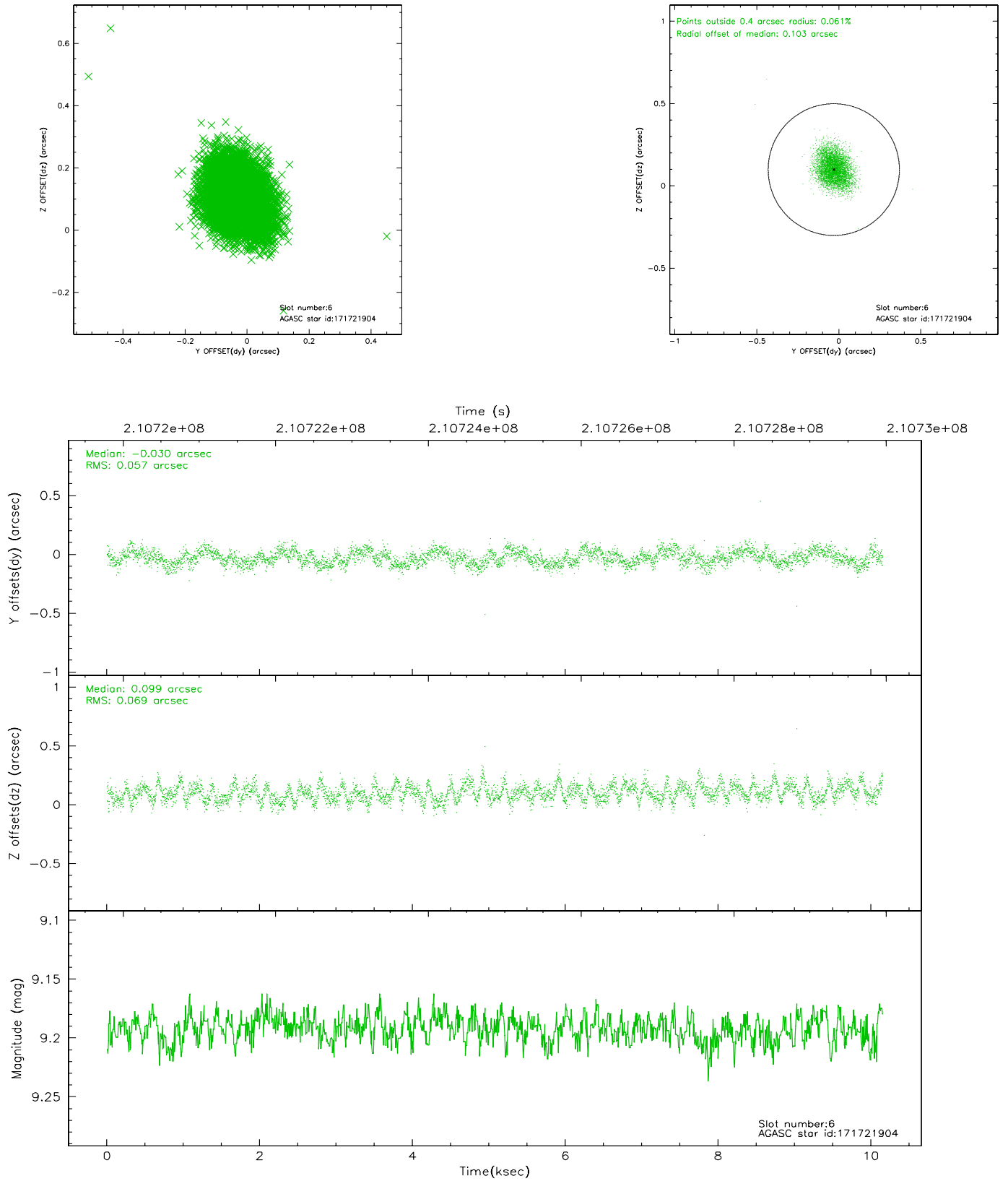
## 2.4.2 Slot 4



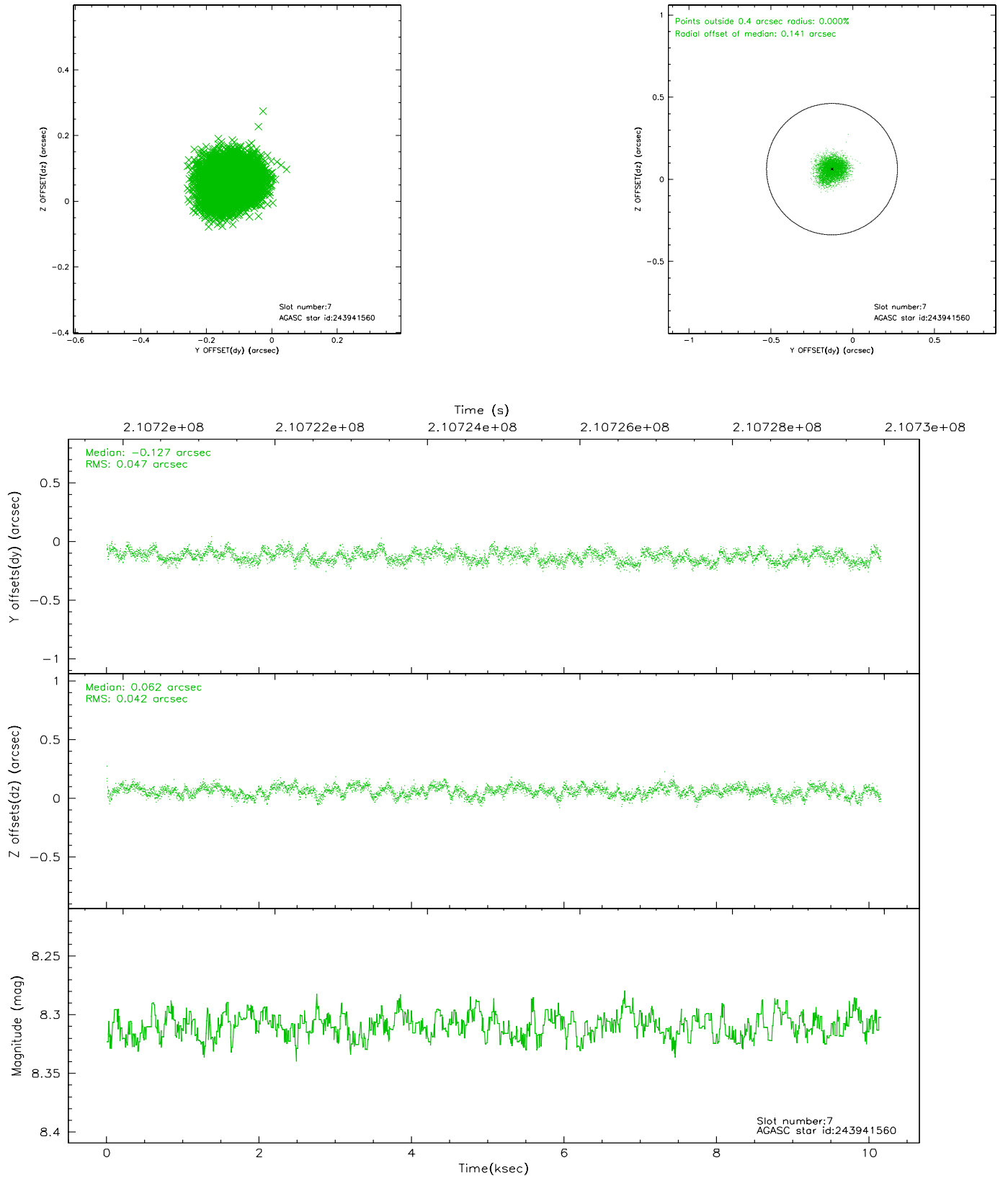
### 2.4.3 Slot 5



## 2.4.4 Slot 6

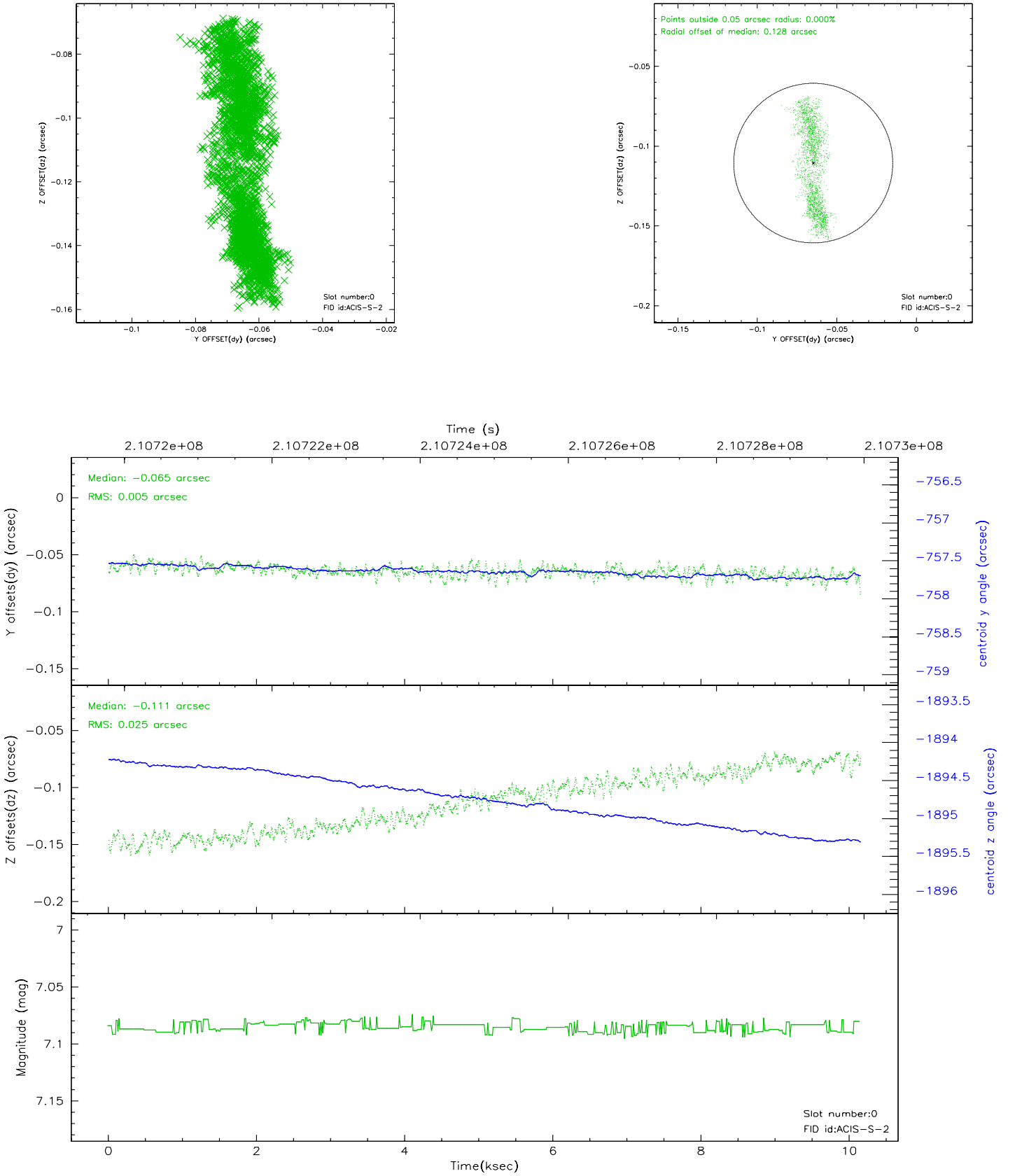


## 2.4.5 Slot 7

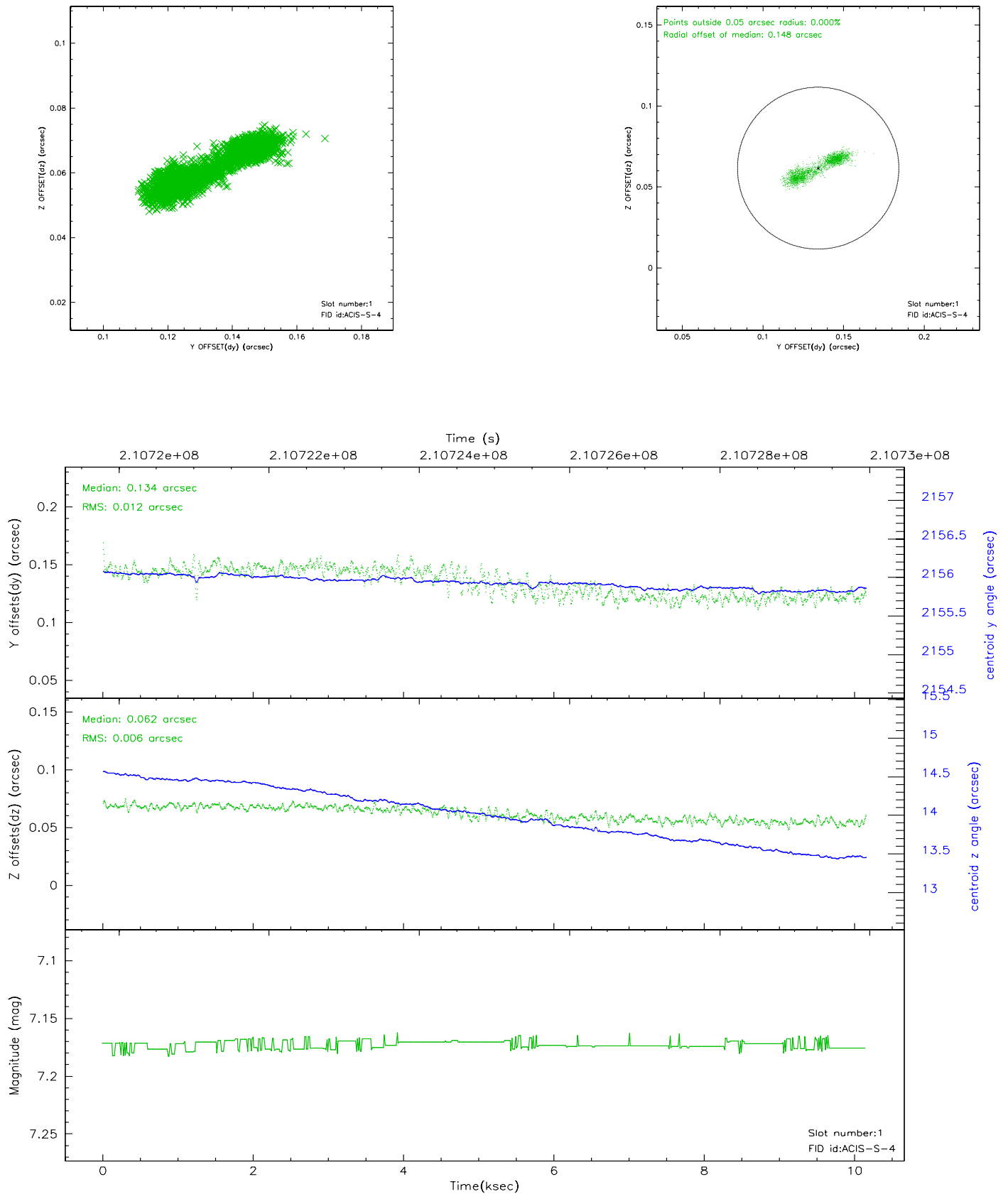


## 2.5 FID Slots

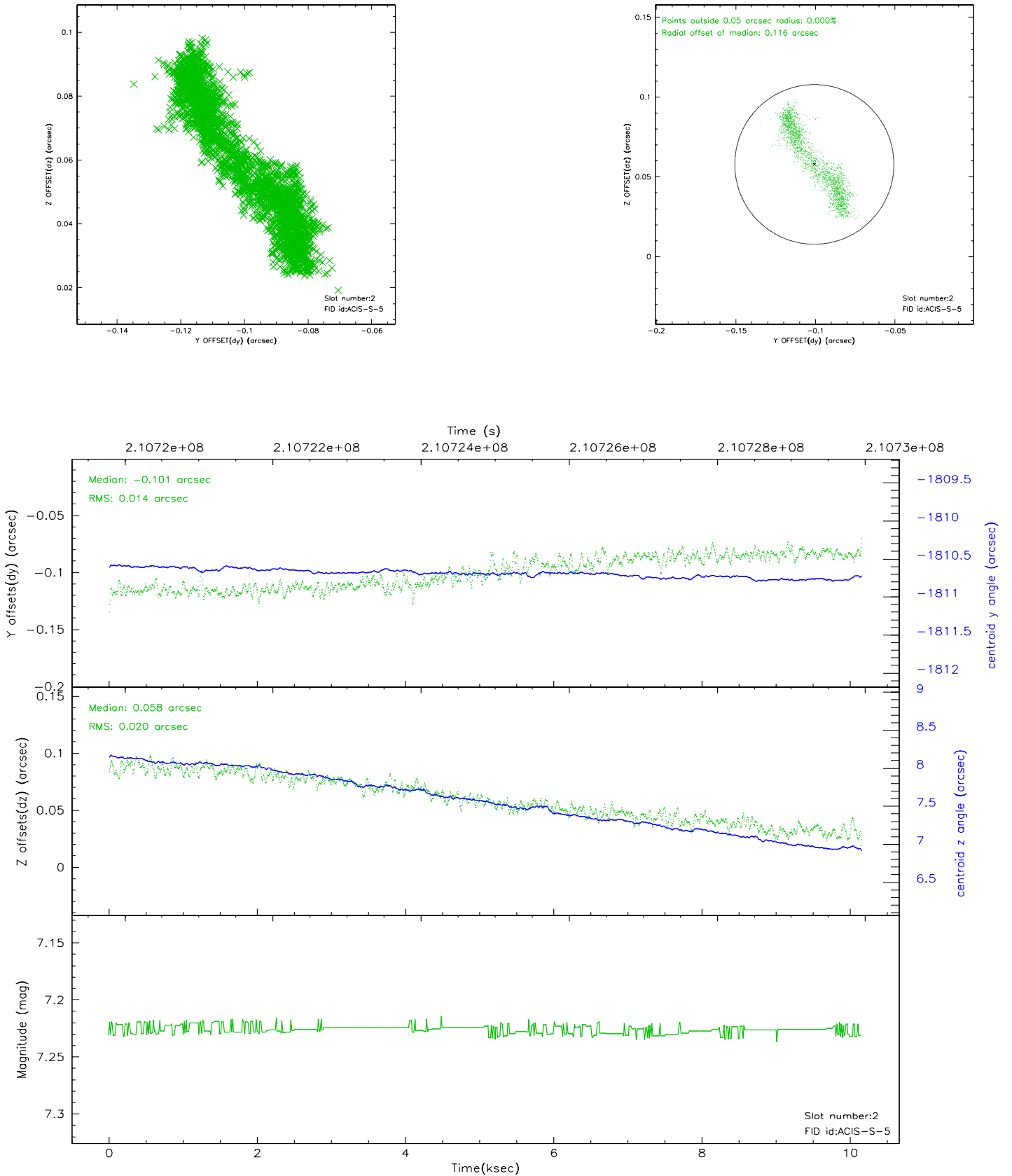
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



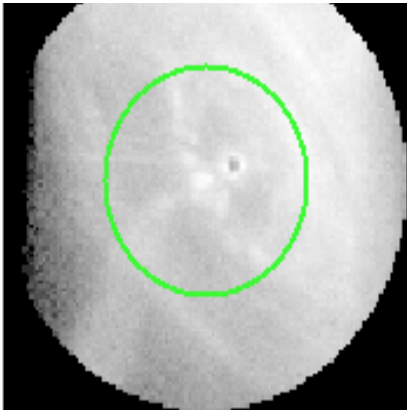


# 3 Gratings

## 3.1 HEG Arm



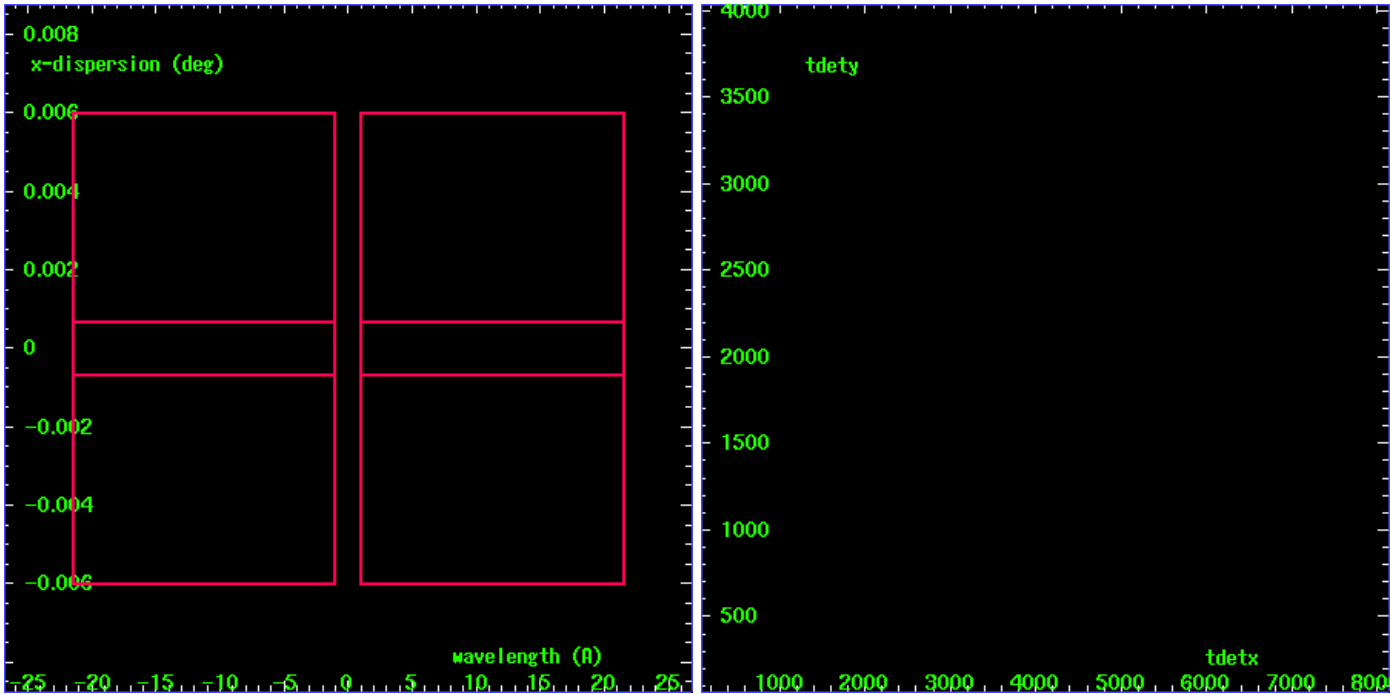
HEG Order Sort 123



HEG Zero Order



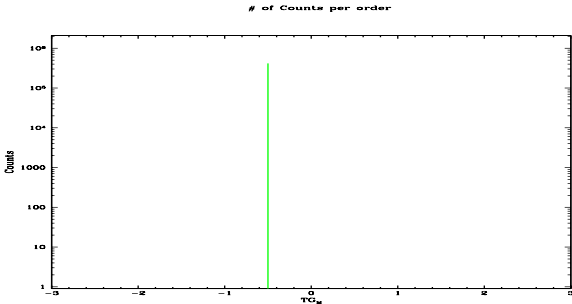
HEG Order Sort ALL

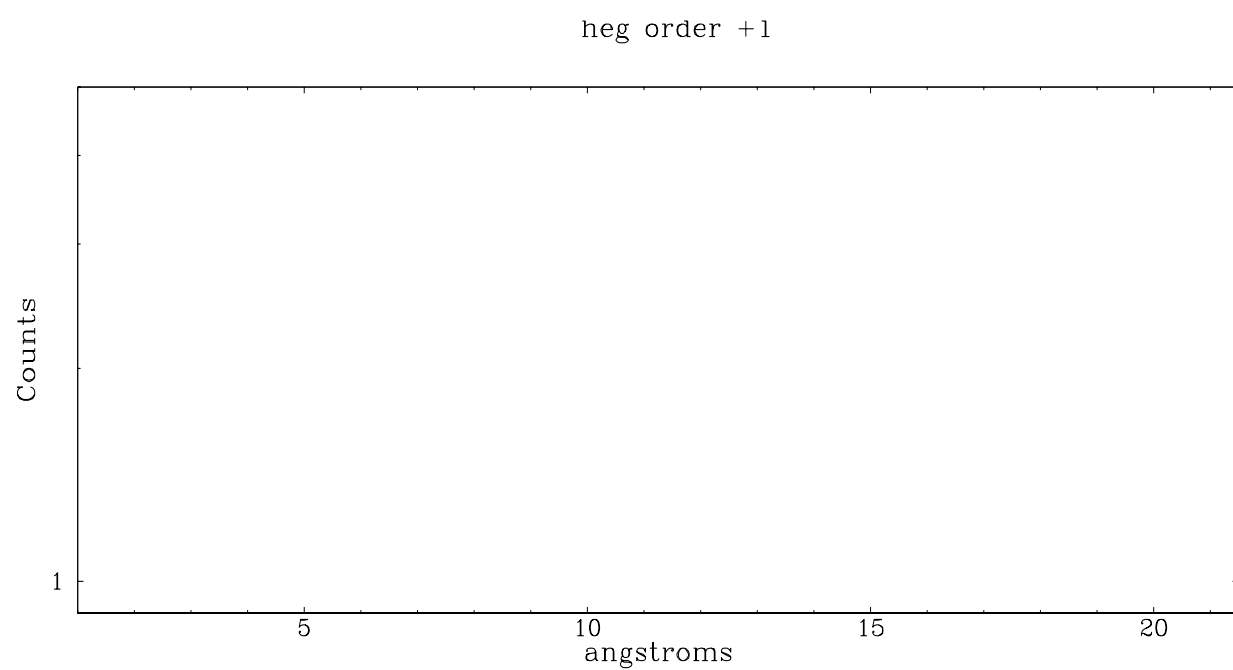
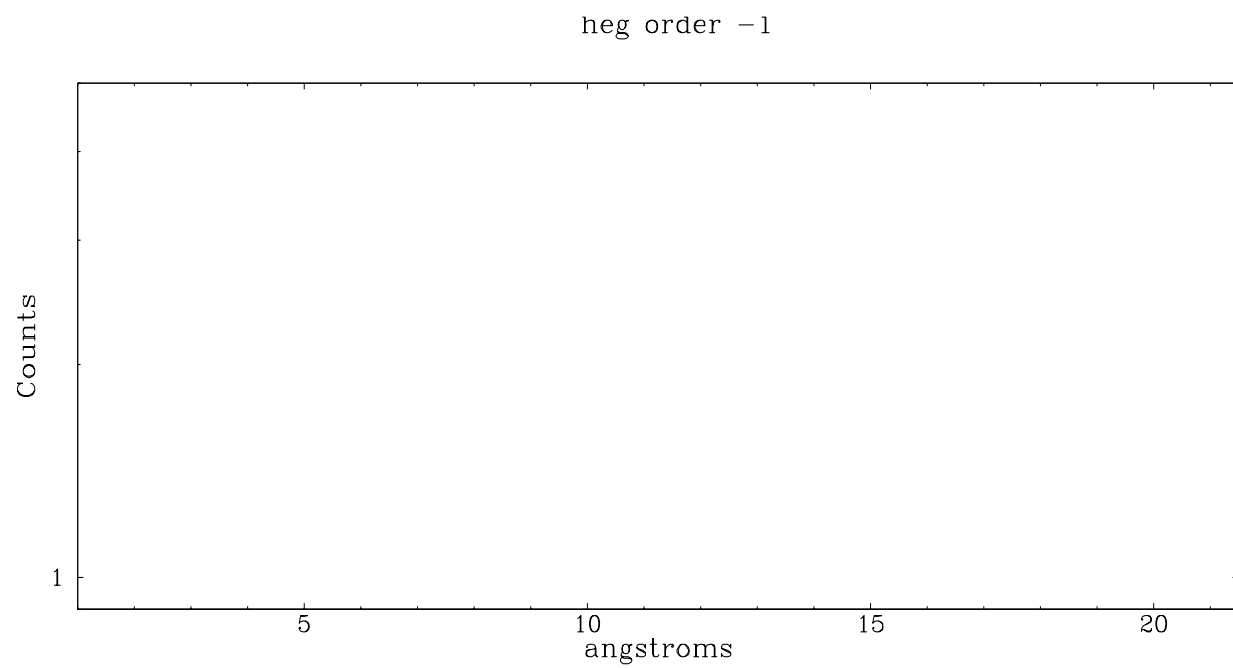


Spot Image HEG

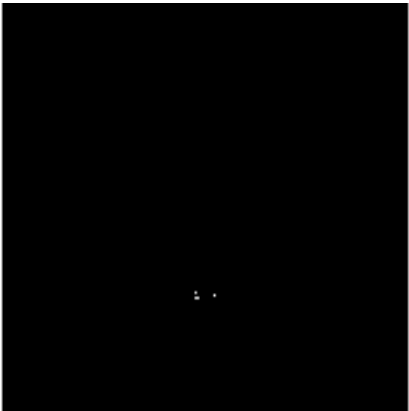
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	0	414777	0	0	0

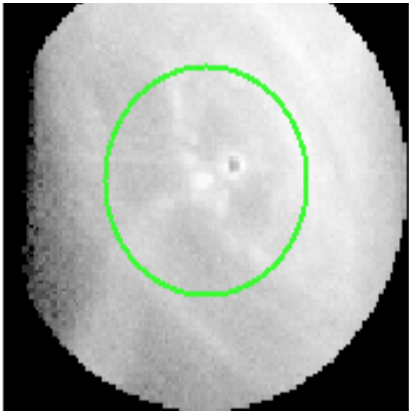




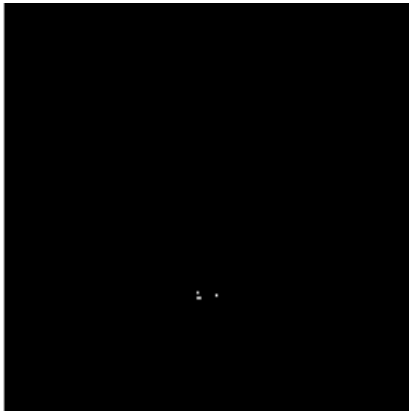
3.2 MEG Arm



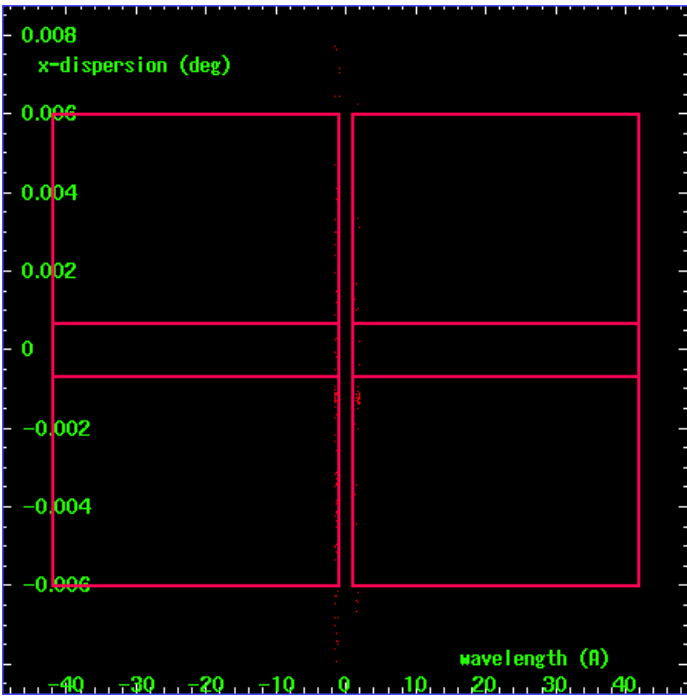
MEG Order Sort 123



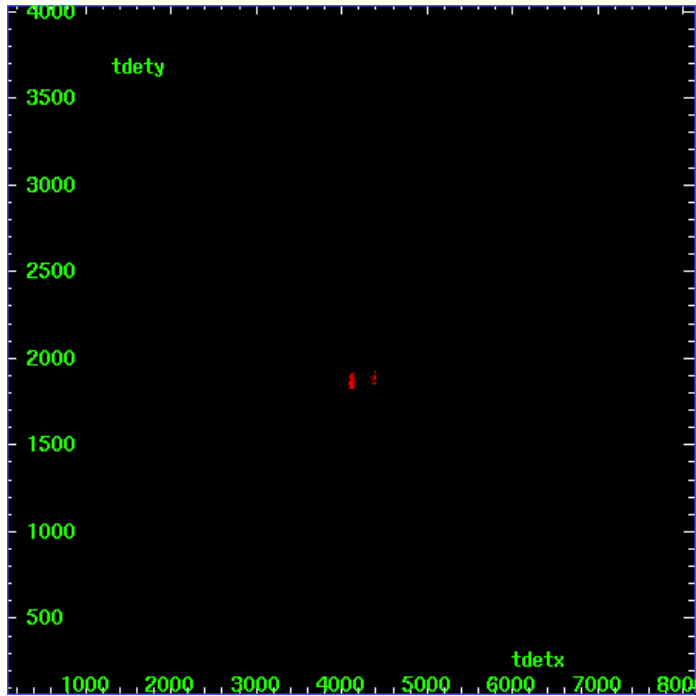
MEG Zero Order



MEG Order Sort ALL

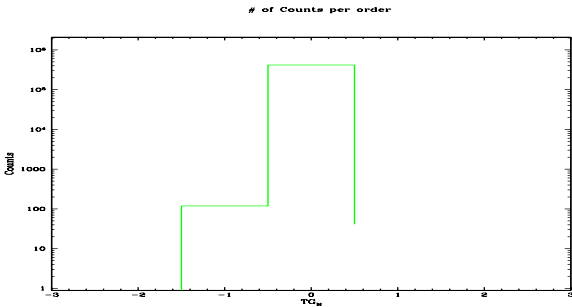


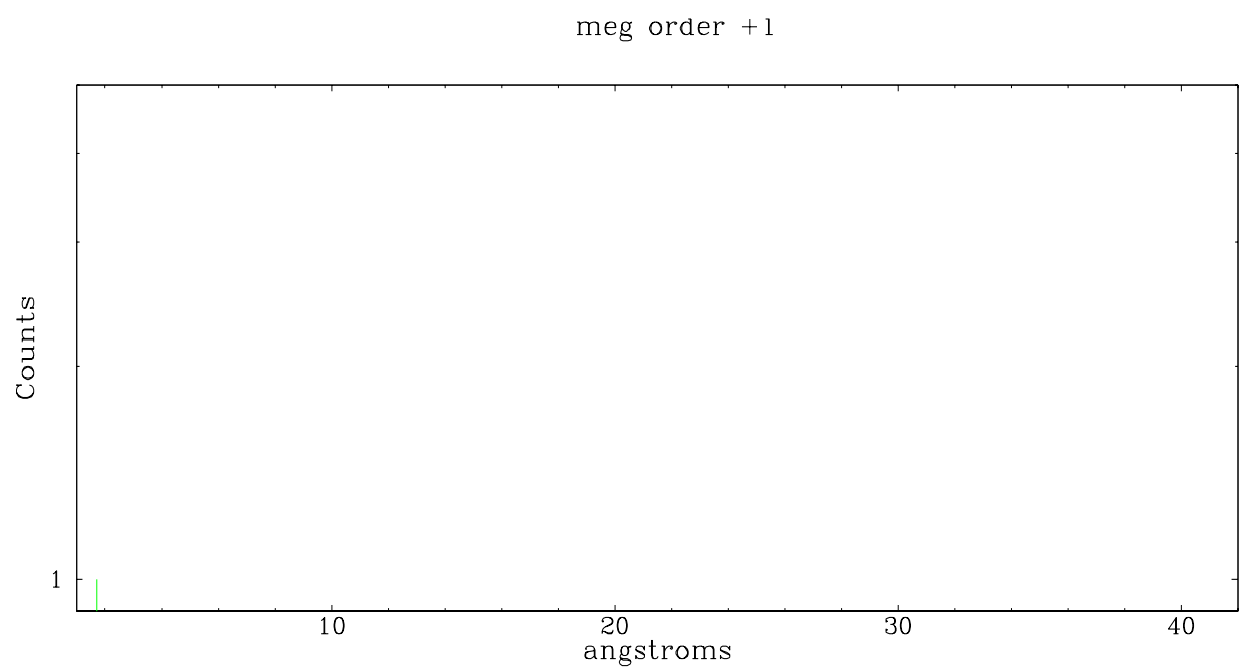
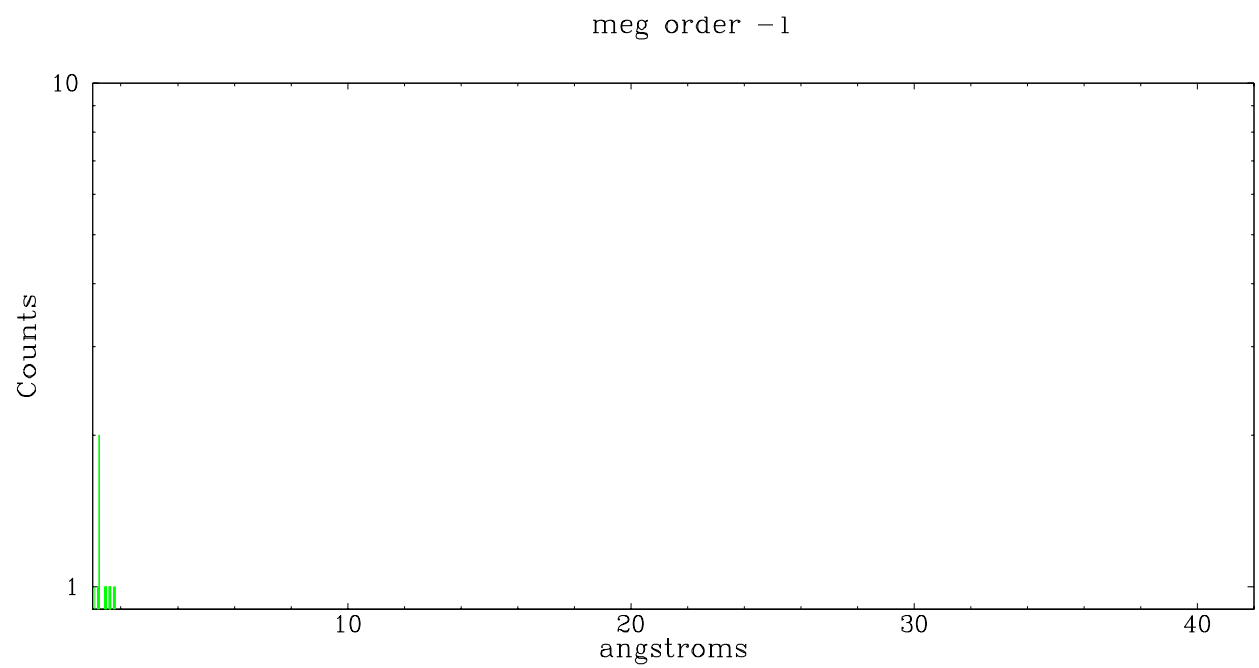
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	119	414777	41	0	0





## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.152

### A.2 Comments