

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 4624 - L2 Version 001  
Chandra X-Ray Center

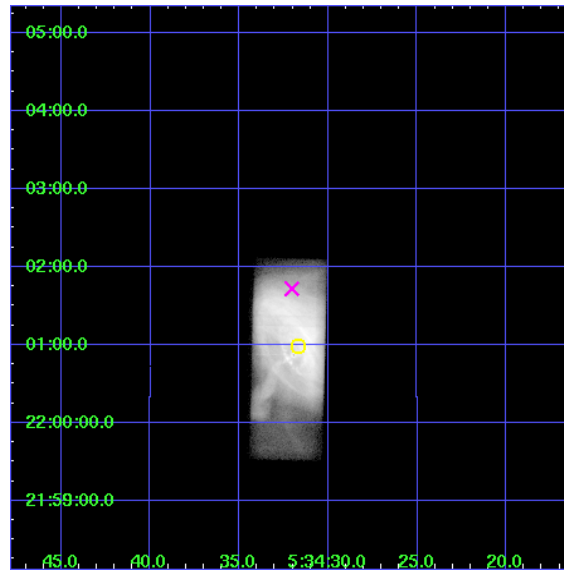
L2 Processing Date : Apr 13 2006

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# 1 Front

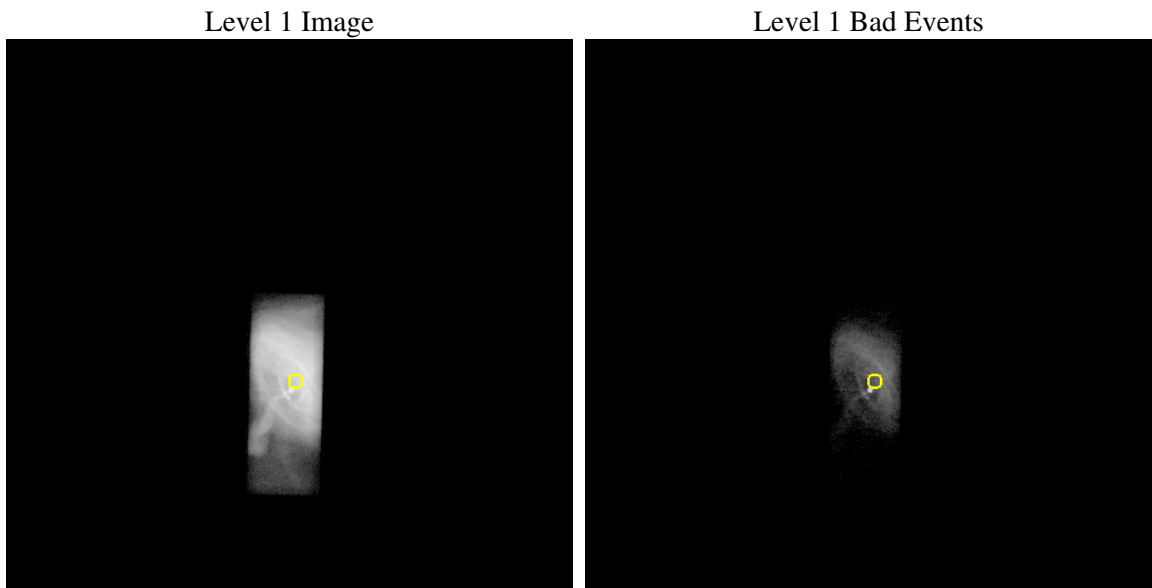
seq_num	500449
obs_id	4624
title	Spectroscopic Study of the Dynamic Shock in the Pulsar Wind of the Crab Nebula
observer	Dr Koji Mori
object	The Crab Nebula
dtcycle	0
cycle	P
ra_targ	83.632083
dec_targ	22.016472
ra_nom	83.633565529674
dec_nom	22.028861965316
roll_nom	91.479961464753
revision	2
ontime	10681.800424457
livetime	9396.3761650744
ontime7	10681.800424457
l2events	2555416



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-04-13T17:00:44
revision	2

sched_exp_time	10500.000000
ontime	12052.905250341
ontime7	12052.905250341
l1events	2720963

### 2.1.3 Events

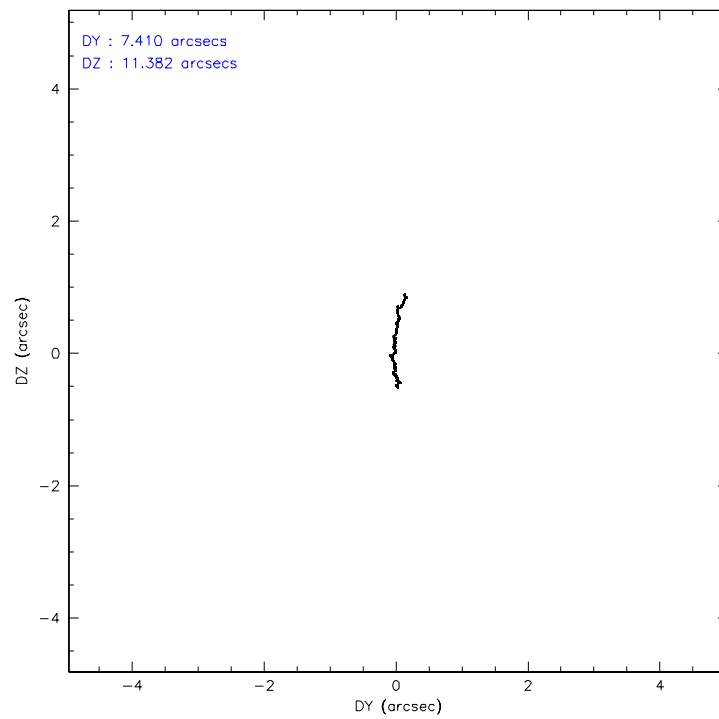
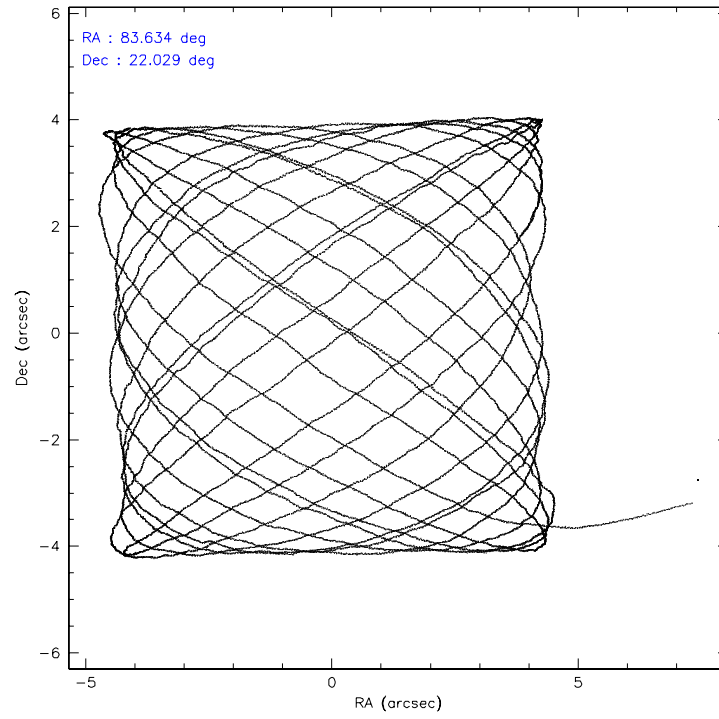
	<b>ccd 7</b>
level 1 events	2720963
rejected events	125808
rejected %	4%

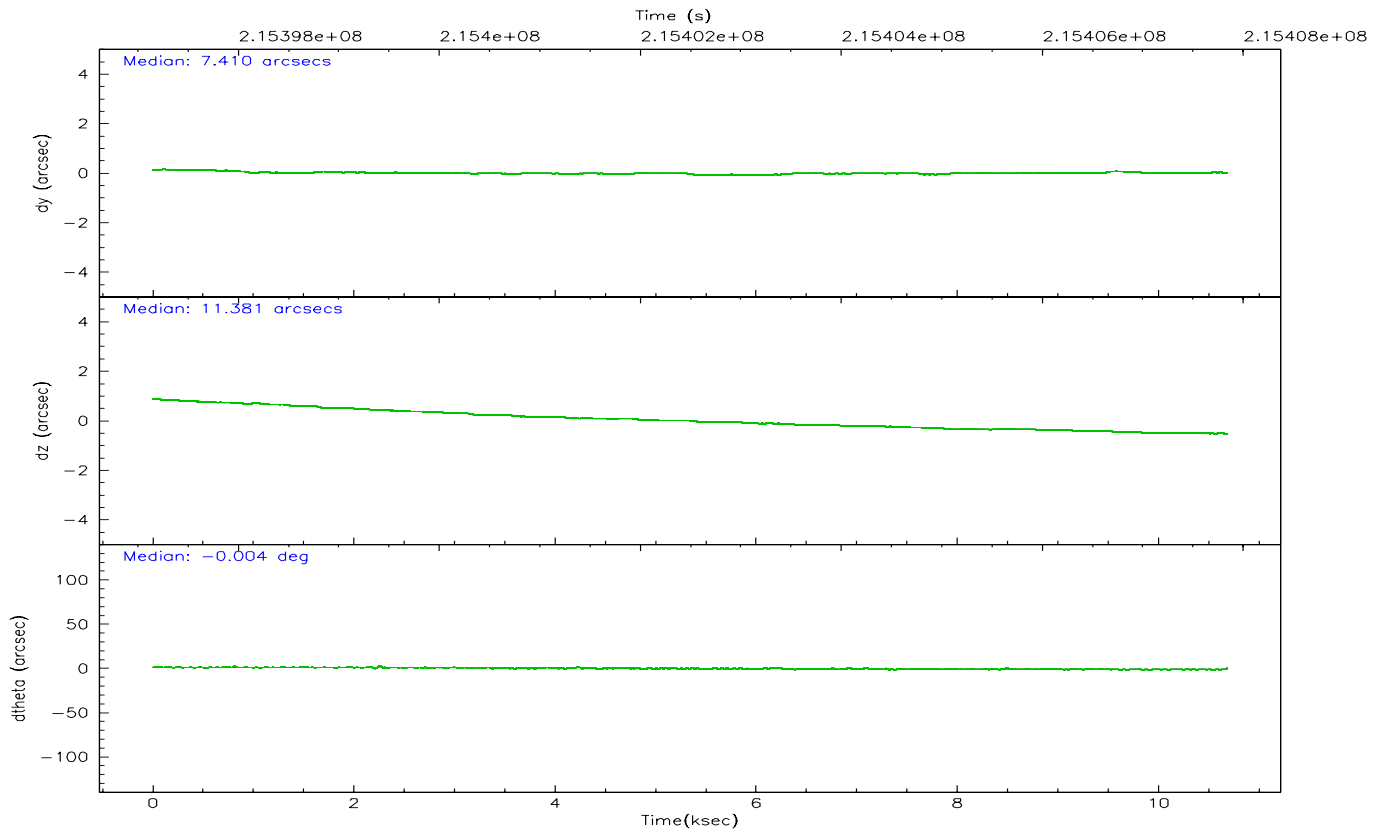
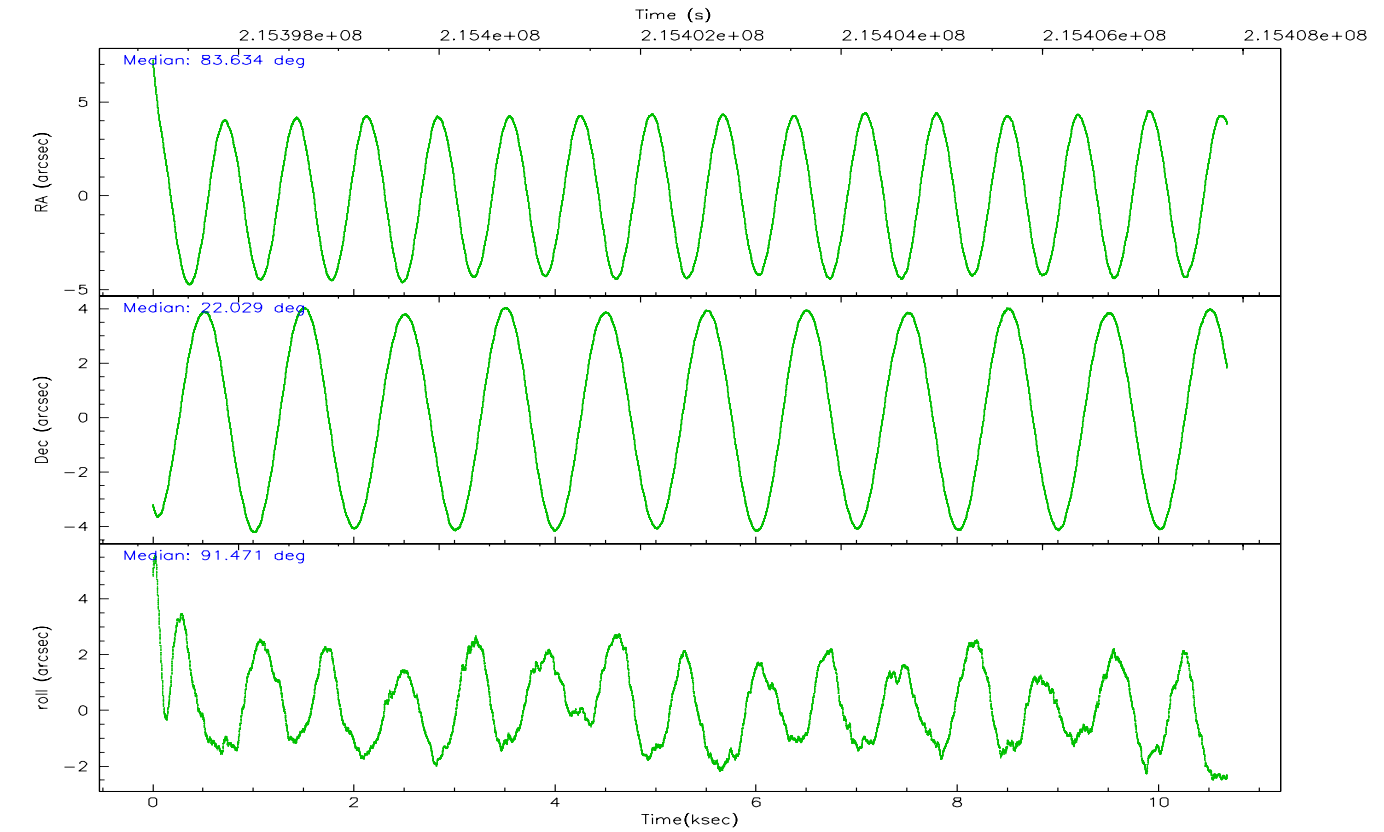
	<b>ccd 7</b>
grade 0 events	522321
	19%
grade 1 events	9688
	0%
grade 2 events	668348
	24%
grade 3 events	296963
	10%
grade 4 events	286483
	10%
grade 5 events	40528
	1%
grade 6 events	847546
	31%
grade 7 events	49086
	1%

## 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	83.649252	83.63356552967397	Subarray start row	127	127
Pointing Dec	22.005833	22.02886196531637	Subarray row count	101	101
Pointing Roll	91.317447	91.47996146475326	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	215397337.184000	215395785.33853			
Observation start date	2004-10-29T00:34:33	2004-10-29T00:09:45			
Observation end time	215407837.184000	215408834.61411			
Observation end date	2004-10-29T03:29:33	2004-10-29T03:47:14			
Read mode	TIMED	TIMED			

## 2.3 Aspect





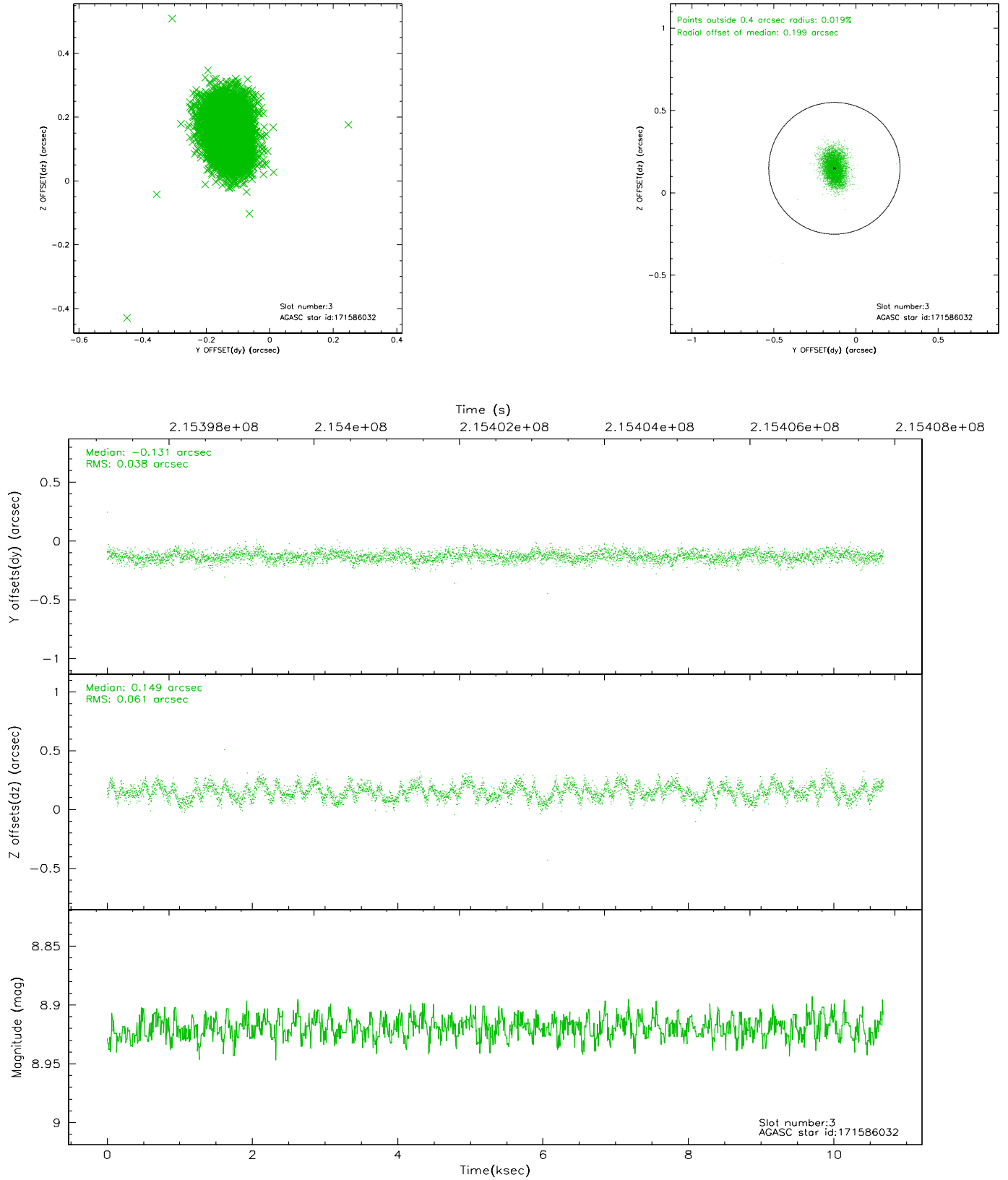
### Slot Statistics

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	2606	-0.045	-0.116	0.020	0.030	0.000000	0.000000	-759.66	-1897.54
1	FID	ACIS-S-4	7.18	2606	0.047	0.053	0.008	0.014	0.000000	0.000000	2153.50	10.52
2	FID	ACIS-S-5	7.22	2605	-0.034	0.071	0.018	0.026	0.000000	0.000000	-1811.85	4.78
3	GUIDE	171586032	8.92	5206	-0.131	0.149	0.076	0.123	83.950197	22.083225	256.64	-1009.75
4	GUIDE	171597832	9.17	5211	0.164	-0.054	0.091	0.145	83.183230	21.366702	-2261.88	1614.45
5	GUIDE	171721904	9.18	5208	-0.040	0.126	0.106	0.157	84.272676	22.116922	356.29	-2087.29
6	GUIDE	243941560	8.32	5208	-0.139	0.119	0.058	0.091	83.733264	22.568598	2019.15	-325.57
7	GUIDE	171600224	9.67	5201	0.143	-0.340	0.102	0.164	82.941815	21.636094	-1270.54	2396.78

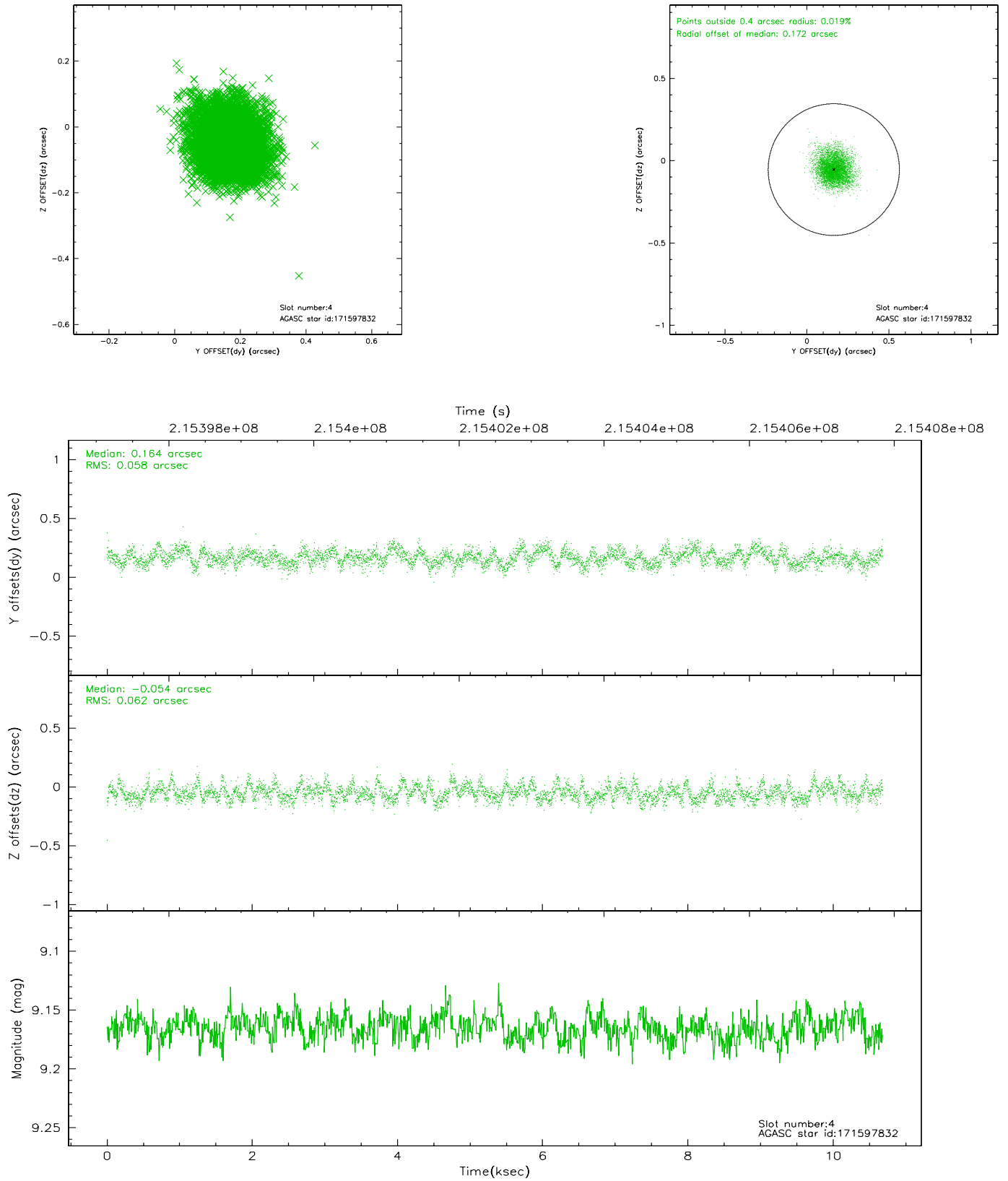


## 2.4 Star Slots

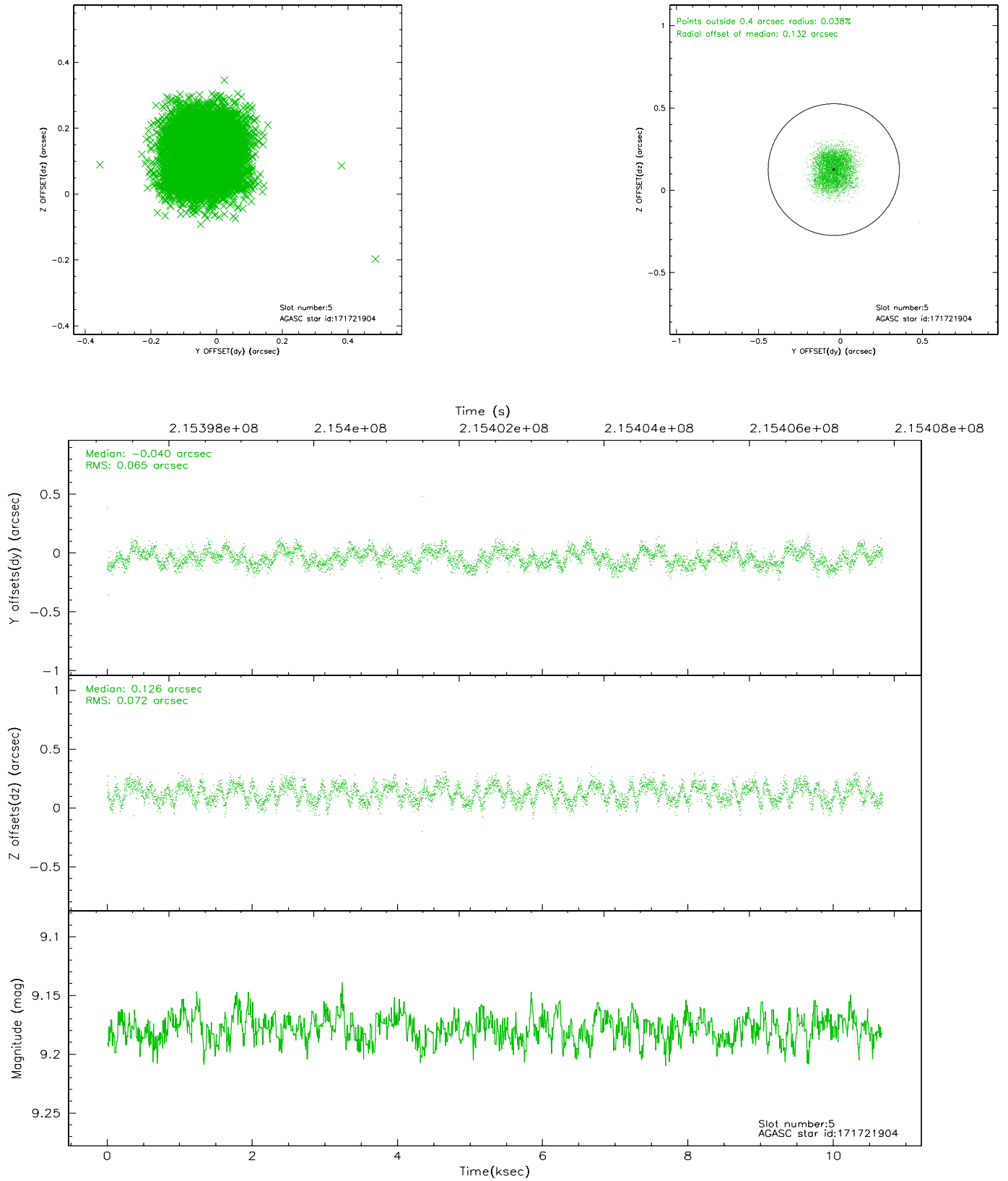
### 2.4.1 Slot 3



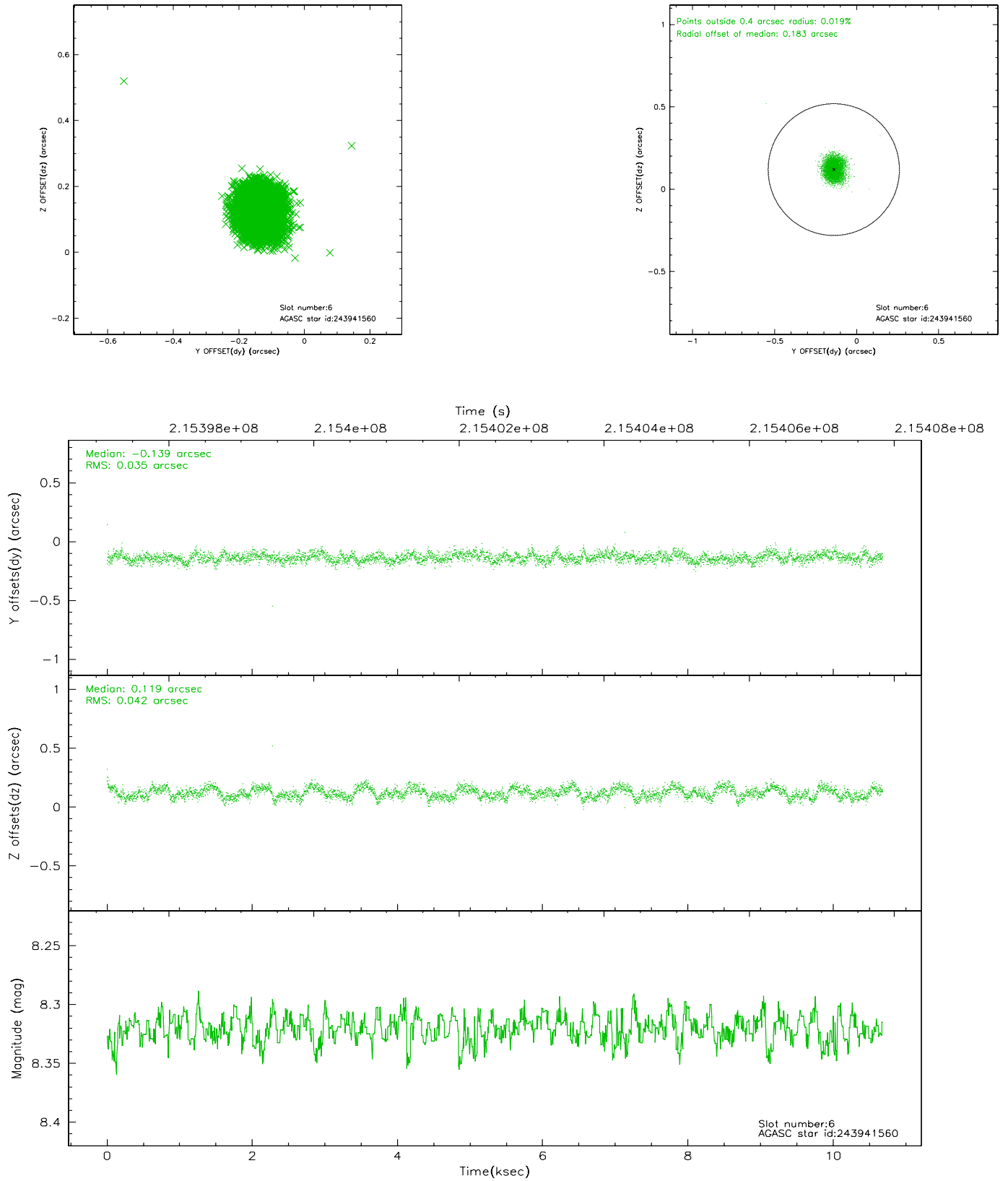
## 2.4.2 Slot 4



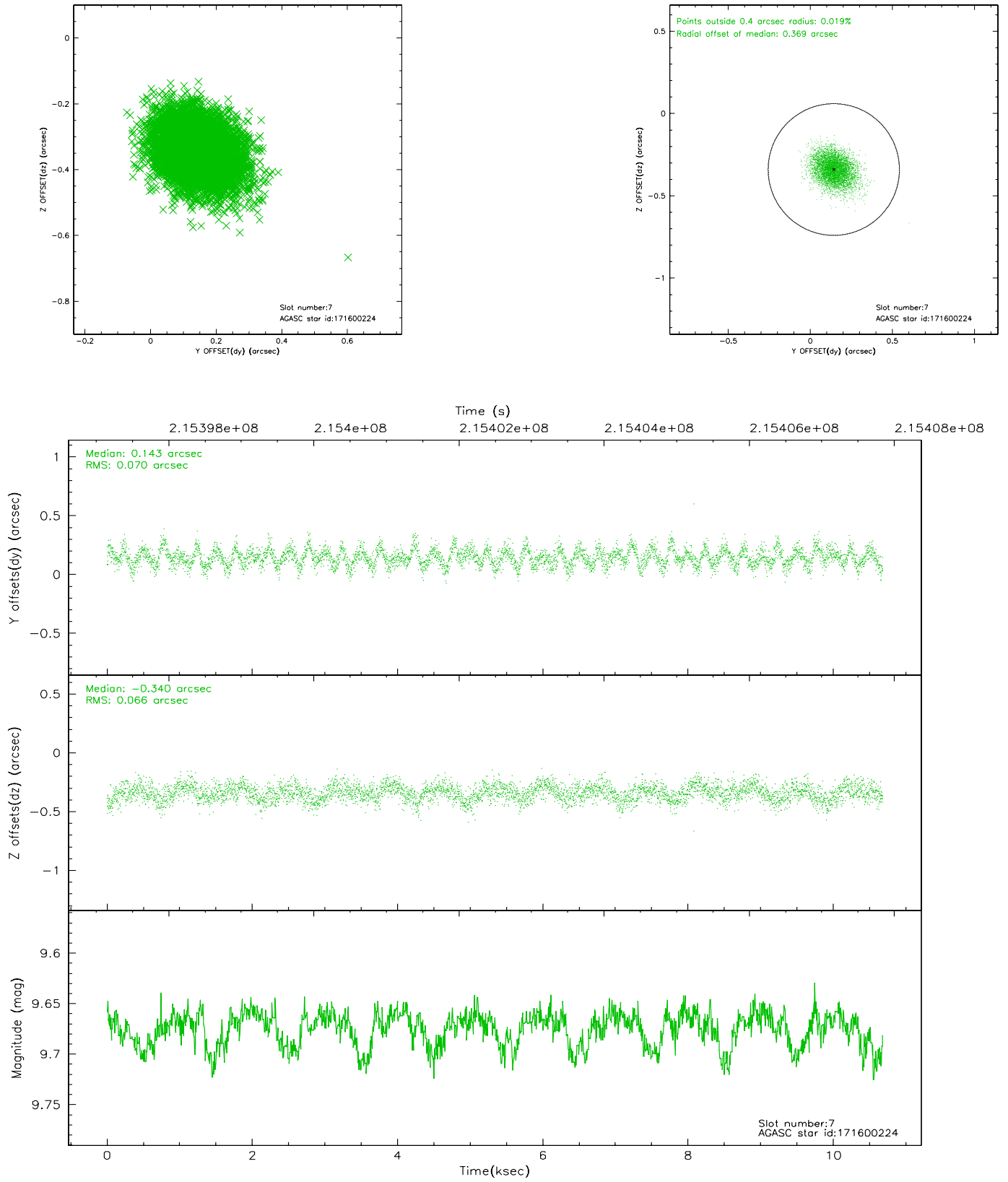
### 2.4.3 Slot 5



## 2.4.4 Slot 6

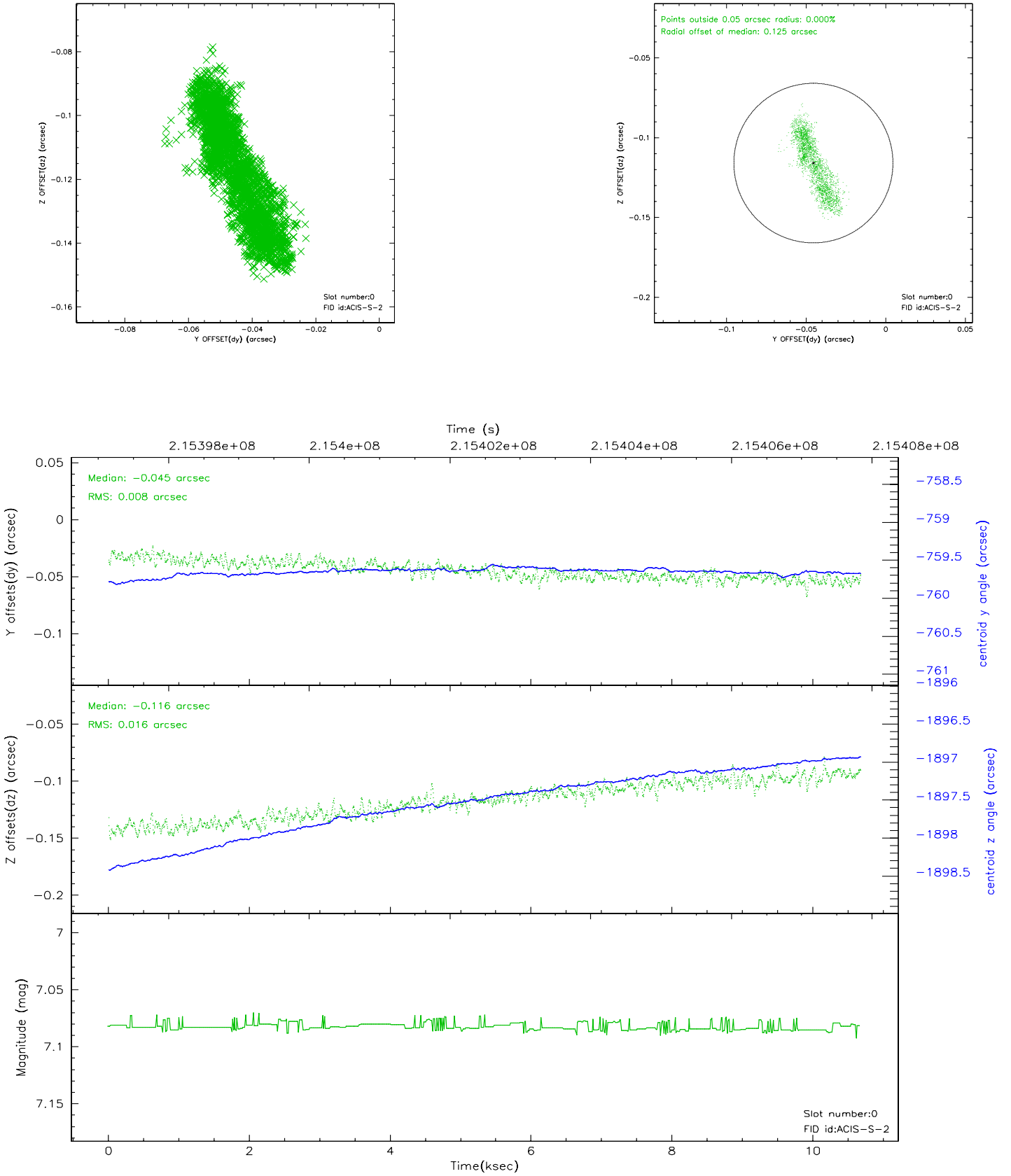


## 2.4.5 Slot 7

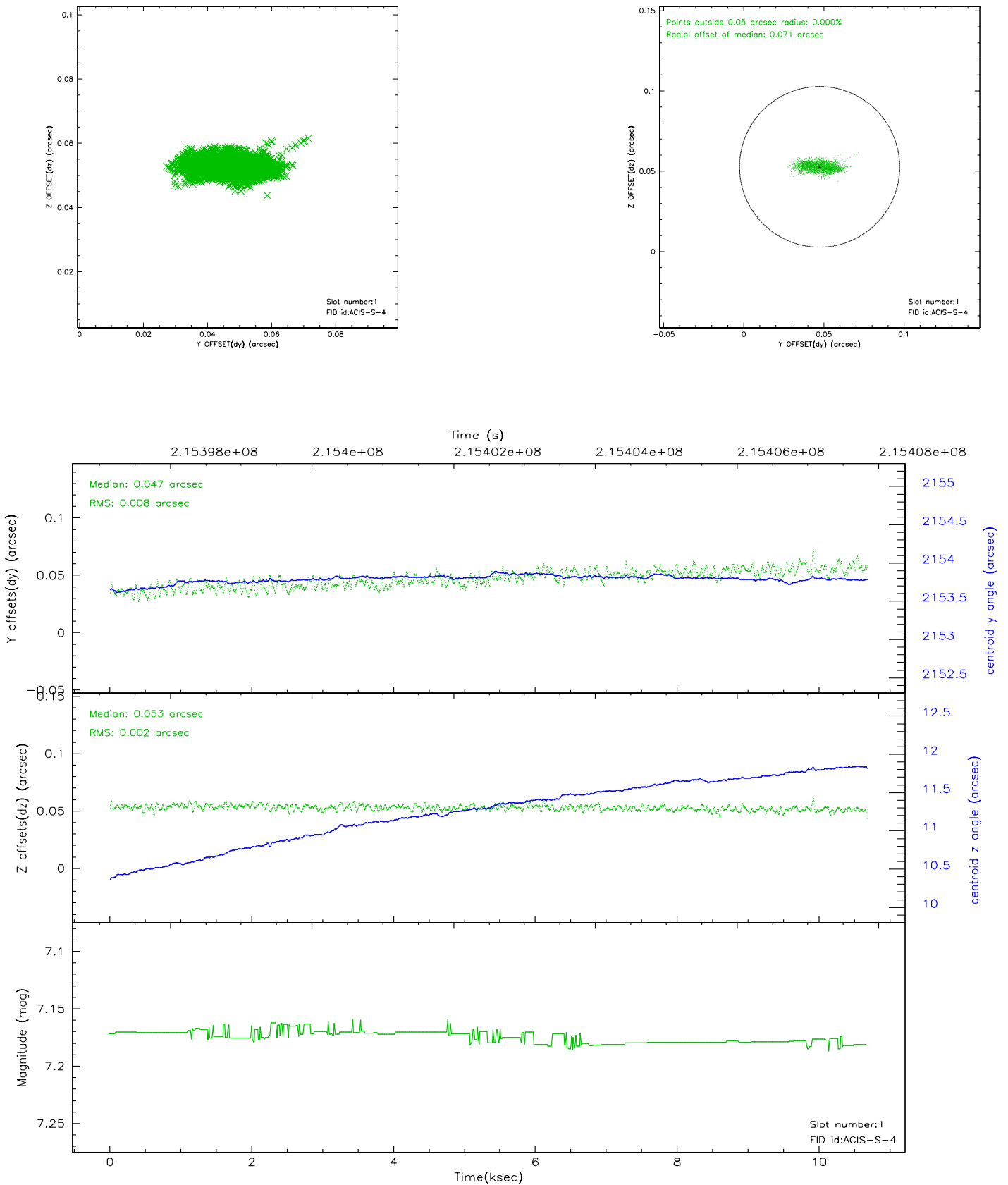


## 2.5 FID Slots

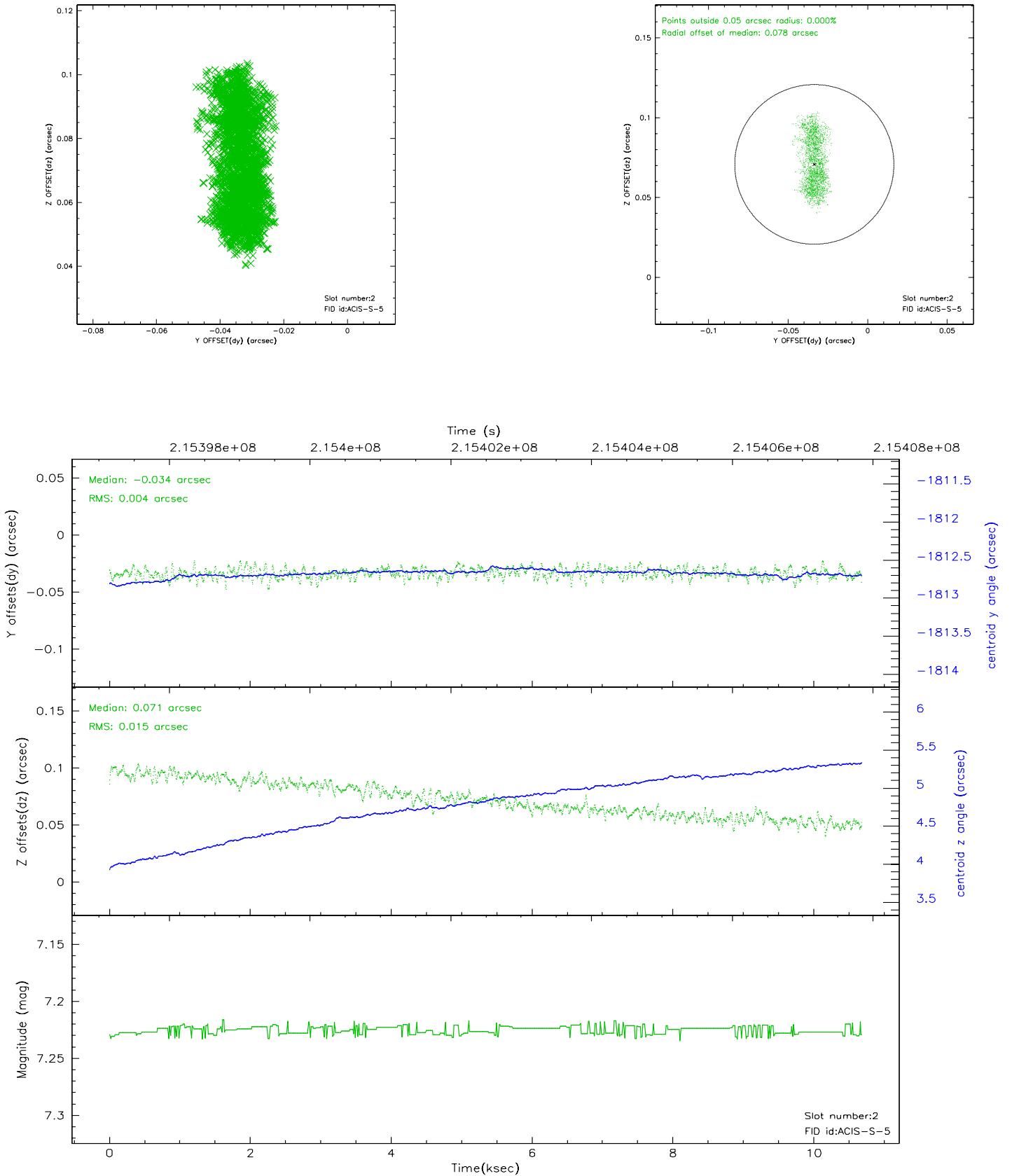
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



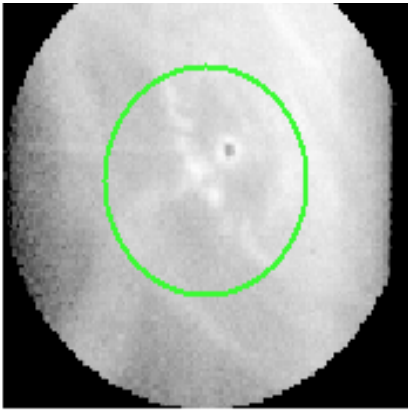


# 3 Gratings

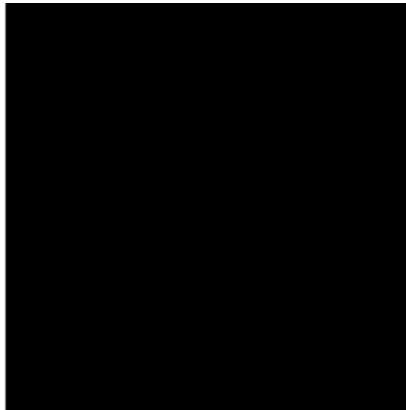
## 3.1 HEG Arm



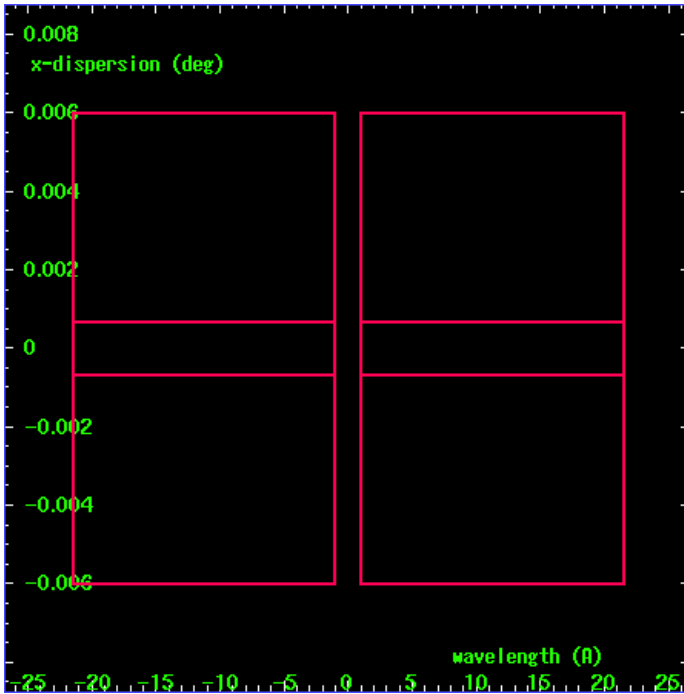
HEG Order Sort 123



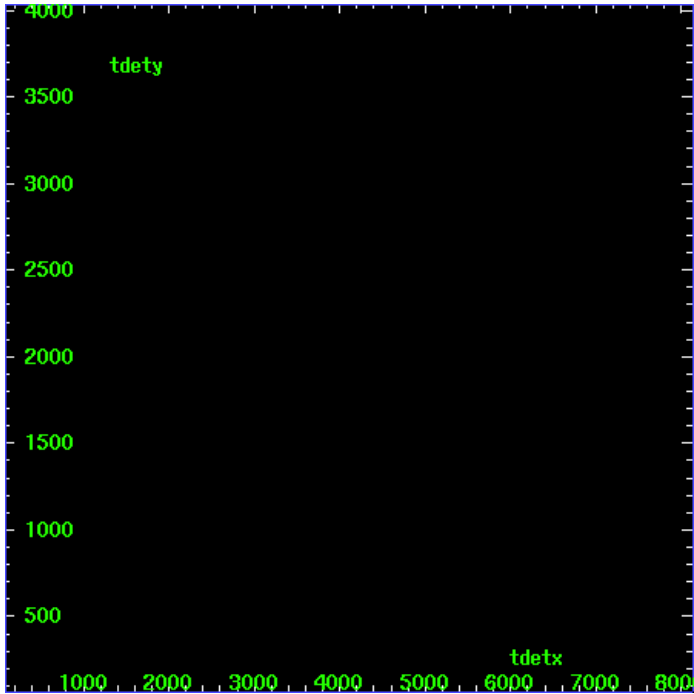
HEG Zero Order



HEG Order Sort ALL

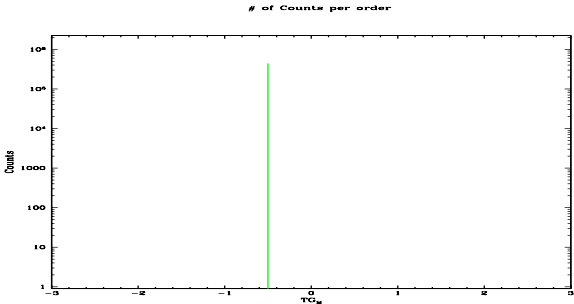


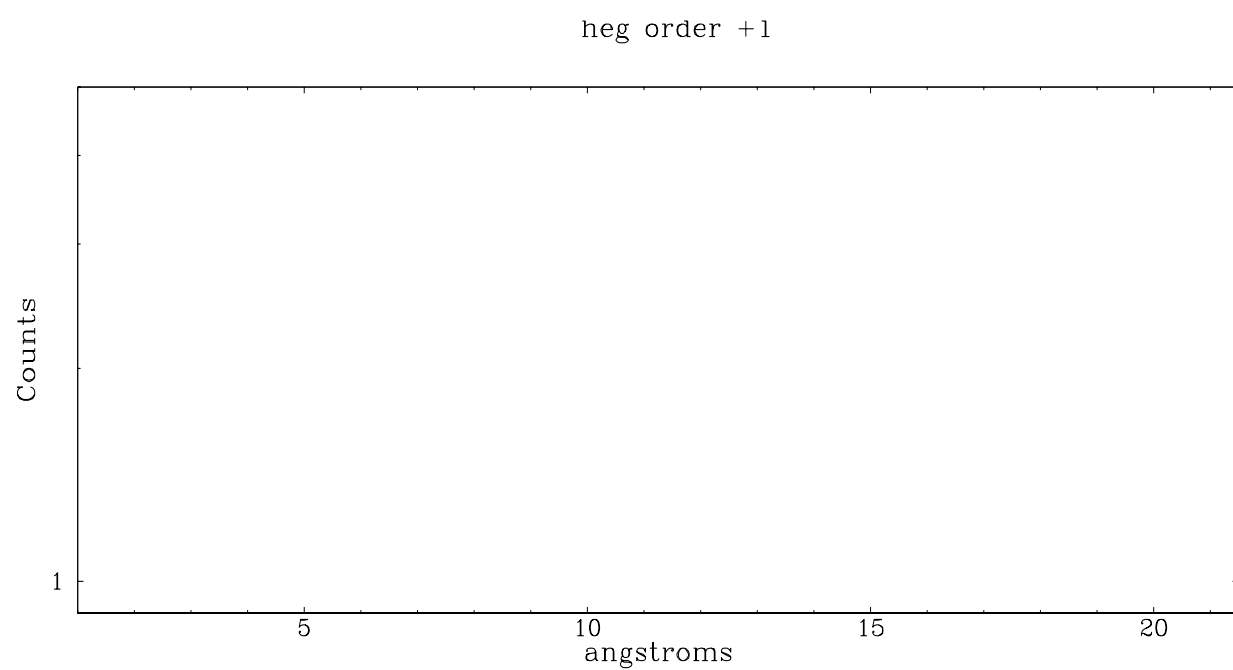
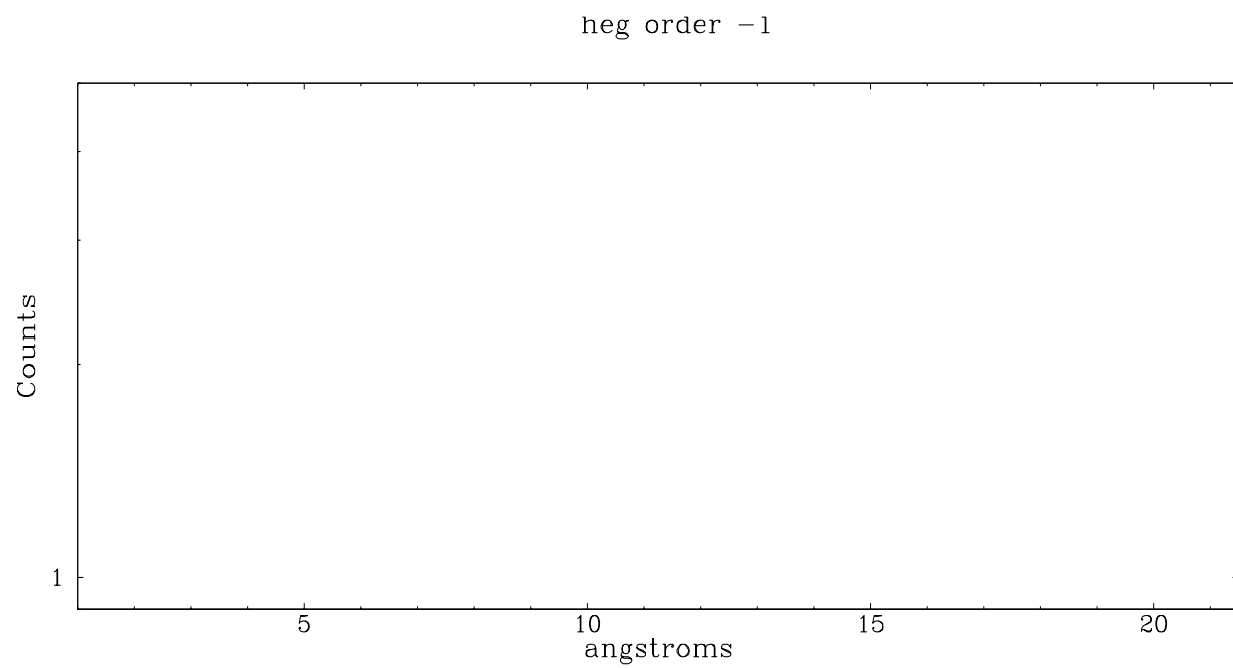
Spot Image HEG



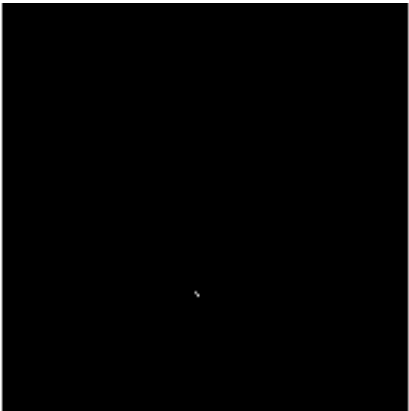
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	0	443404	0	0	0

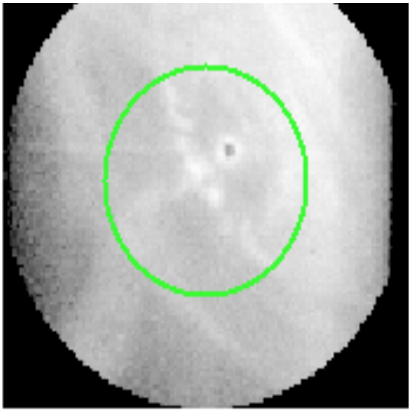




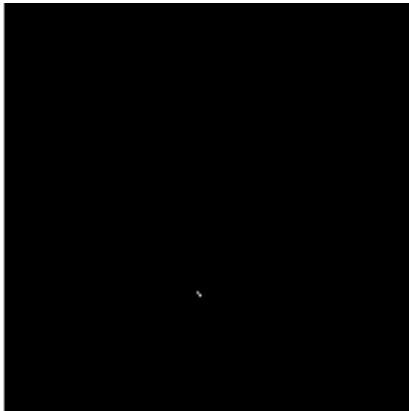
3.2 MEG Arm



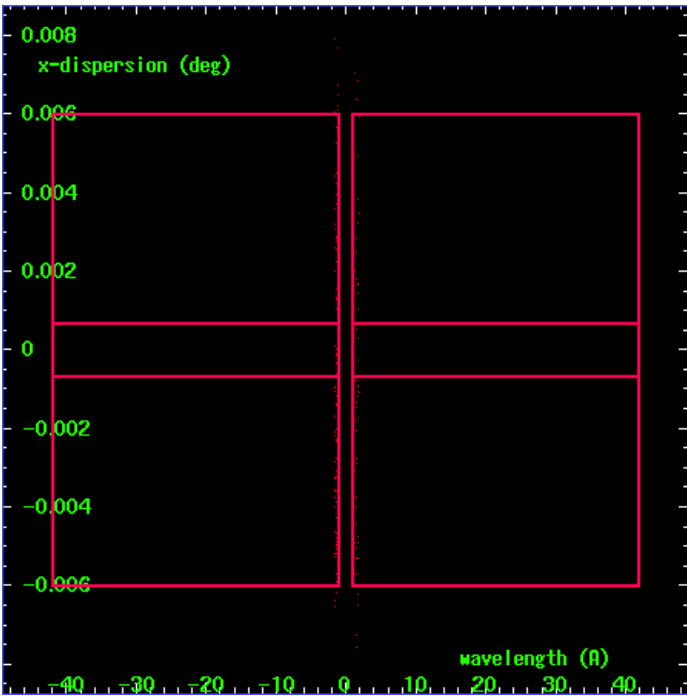
MEG Order Sort 123



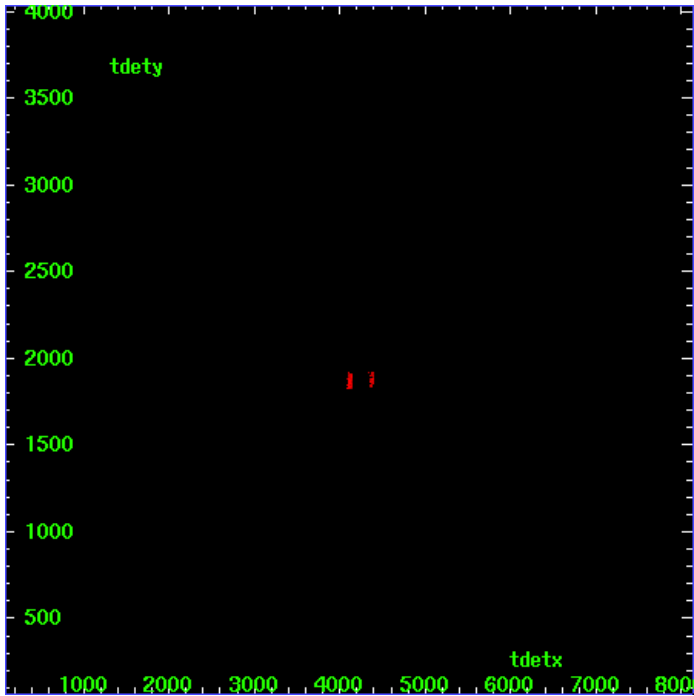
MEG Zero Order



MEG Order Sort ALL

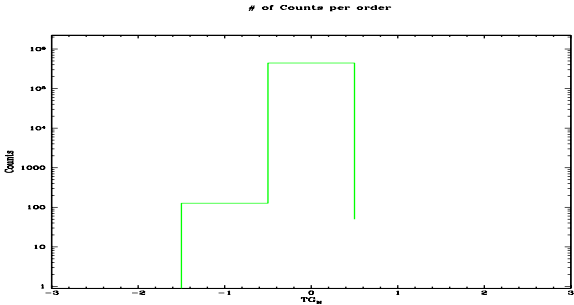


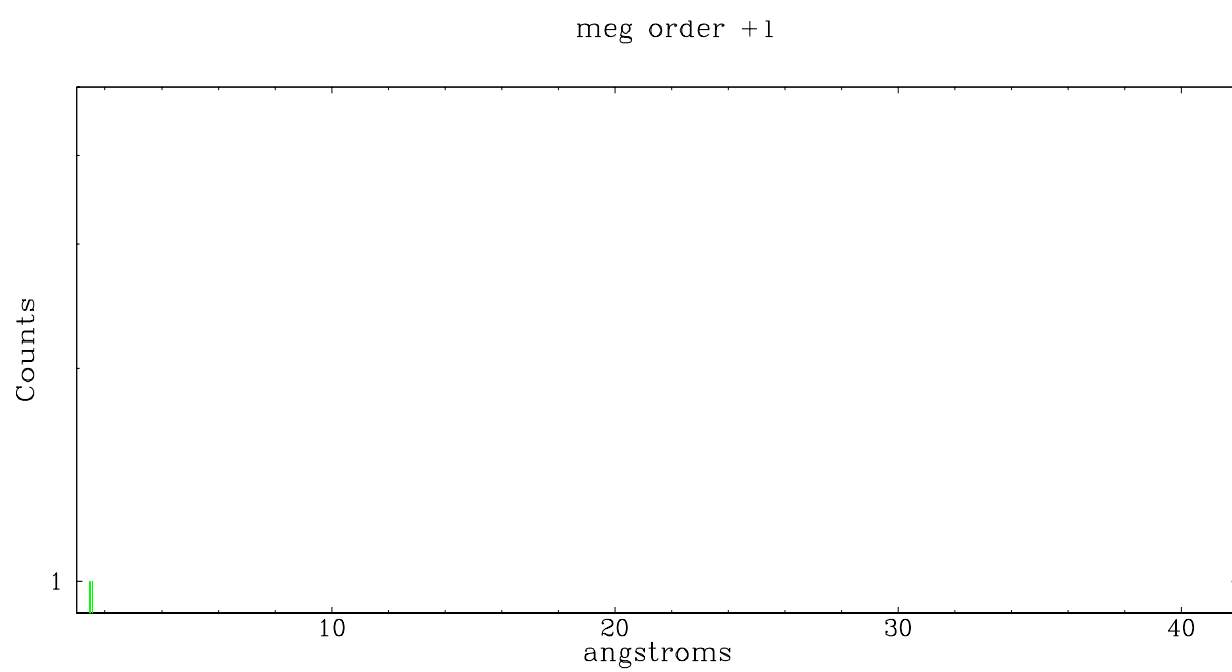
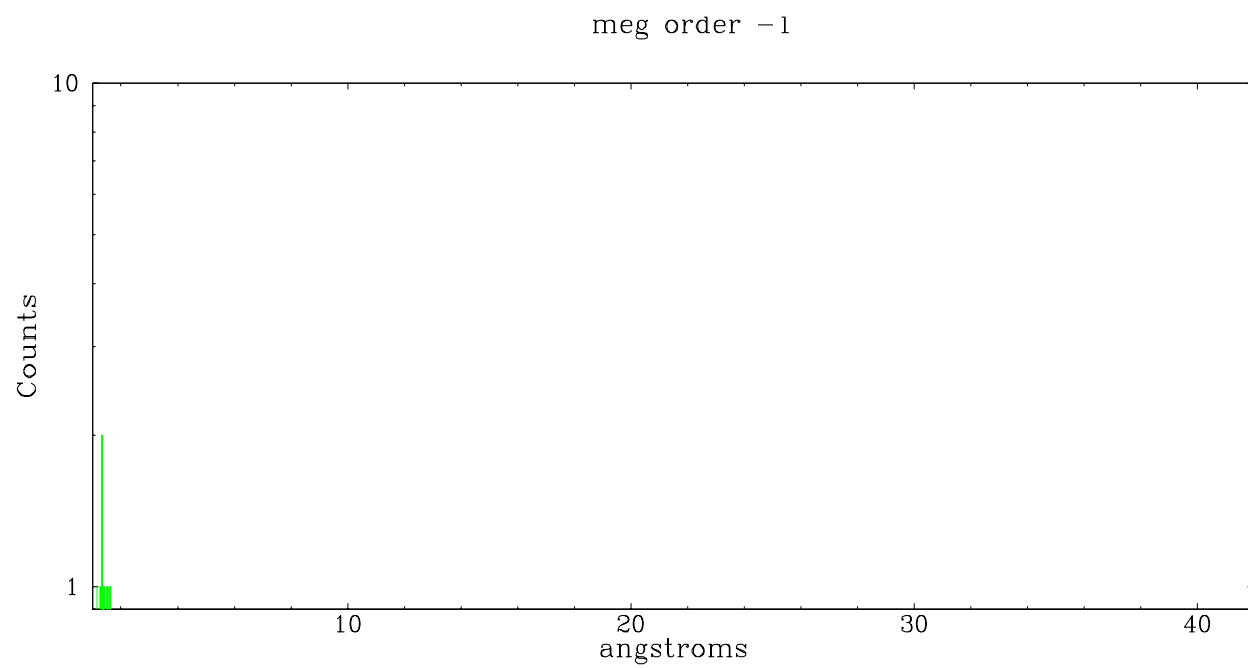
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	127	443404	50	0	0





# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.681

## A.2 Comments

Monitor constraint met. HETG is inserted for filter purposes, there is not much useful gratings information.