

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 6143 - L2 Version 003  
Chandra X-Ray Center

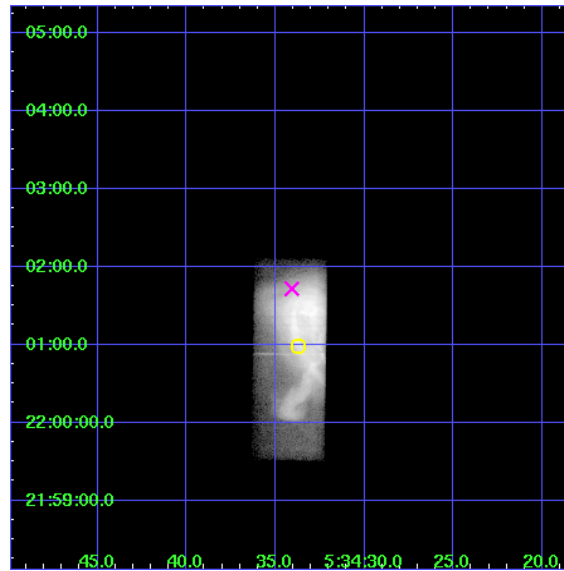
L2 Processing Date : Apr 4 2006

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# 1 Front

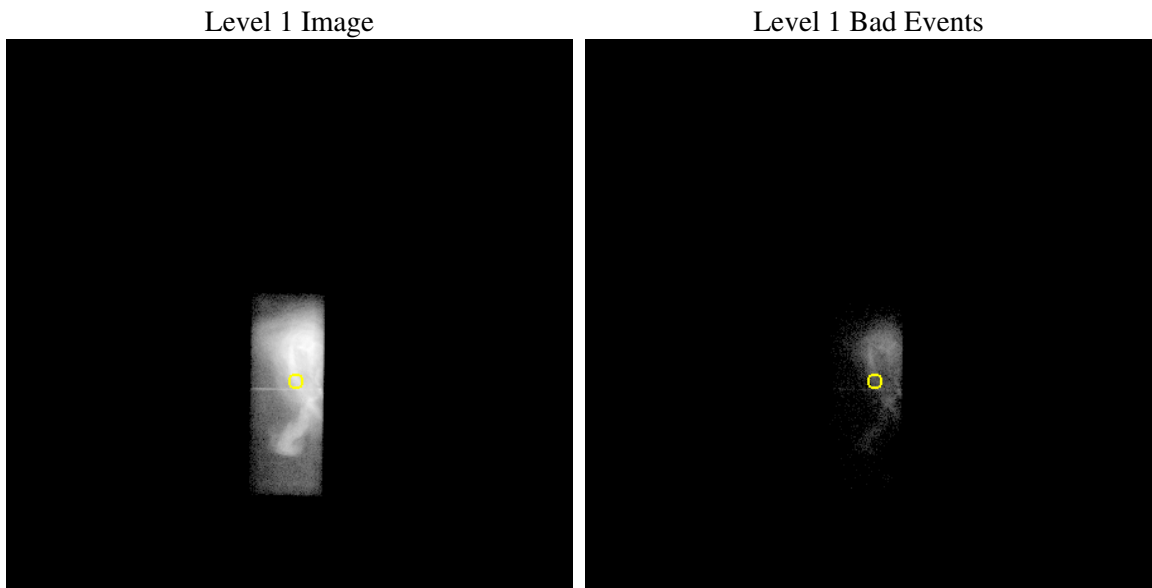
seq_num	500596
obs_id	6143
title	Monitoring of the Relativistic Magnetohydrodynamic Shock in the Crab Nebula
observer	Dr Koji Mori
object	The Crab Nebula
dtcycle	0
cycle	P
ra_targ	83.640417
dec_targ	22.016472
ra_nom	83.642051018969
dec_nom	22.028836233114
roll_nom	90.804026869159
revision	3
ontime	10181.700404584
livetime	8956.4570765169
ontime7	10181.700404584
l2events	1167199



## 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	2006-04-04T21:48:53
revision	3

sched_exp_time	10000.000000
ontime	10900.210292727
ontime7	10900.210292727
l1events	1239025

### 2.1.3 Events

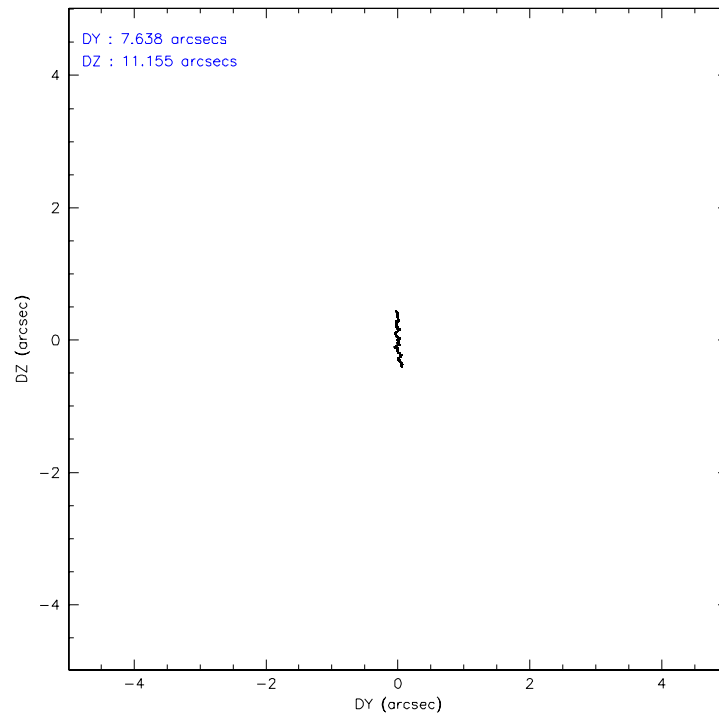
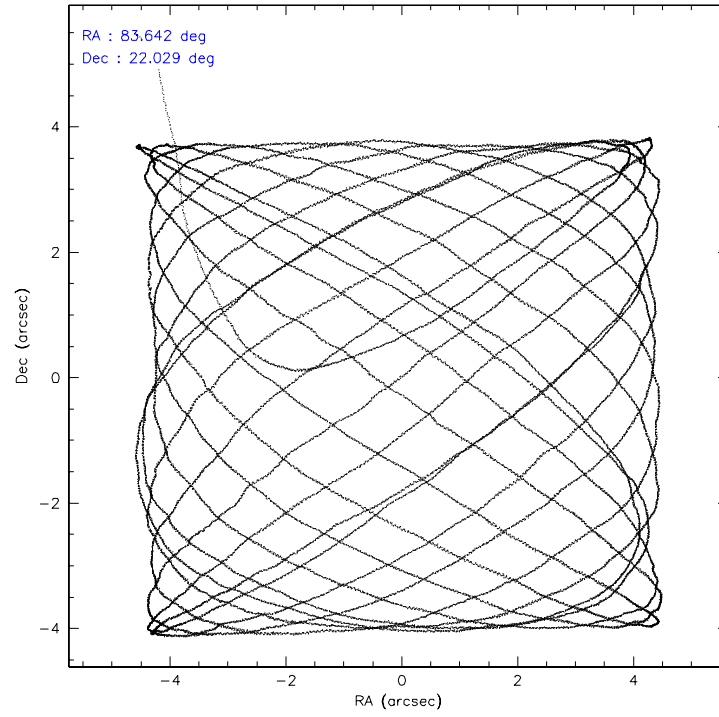
	<b>ccd 7</b>
level 1 events	1239025
rejected events	51113
rejected %	4%

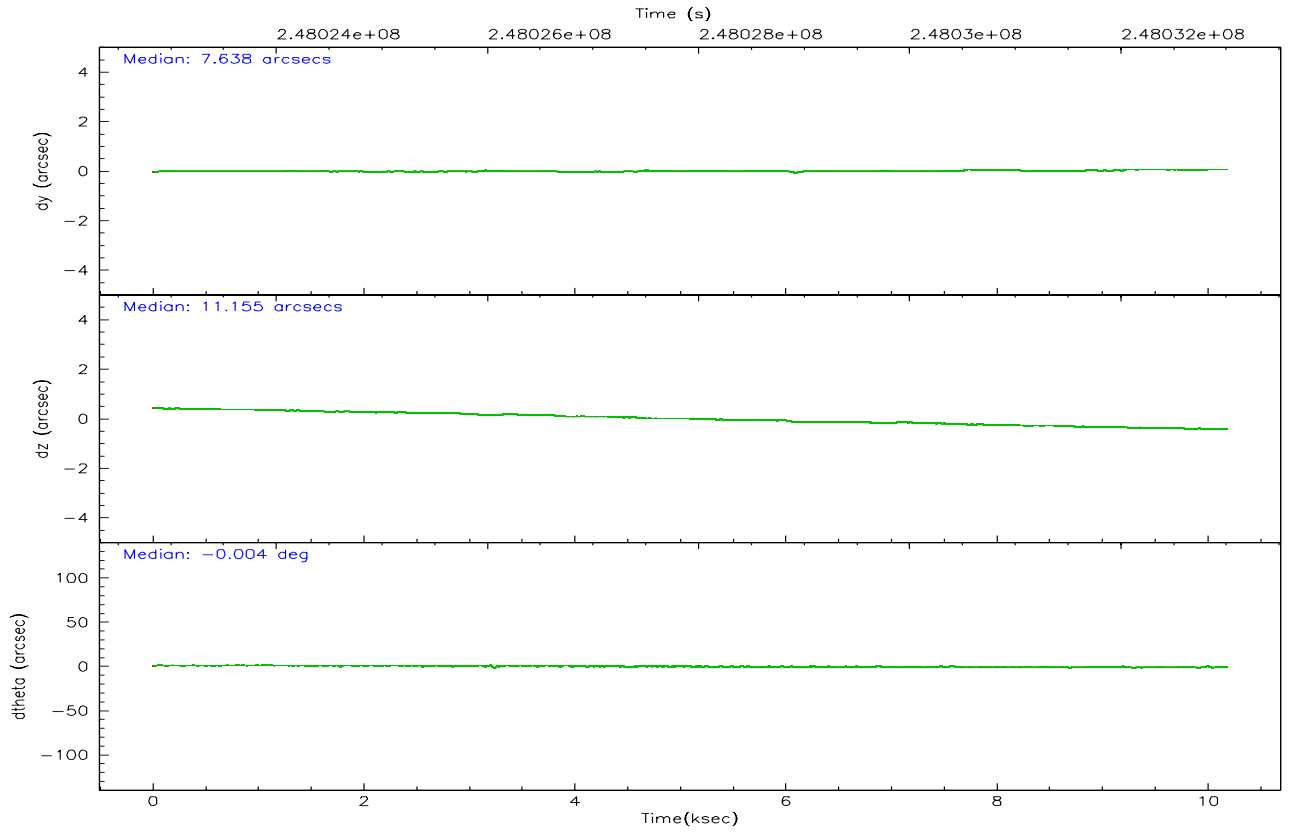
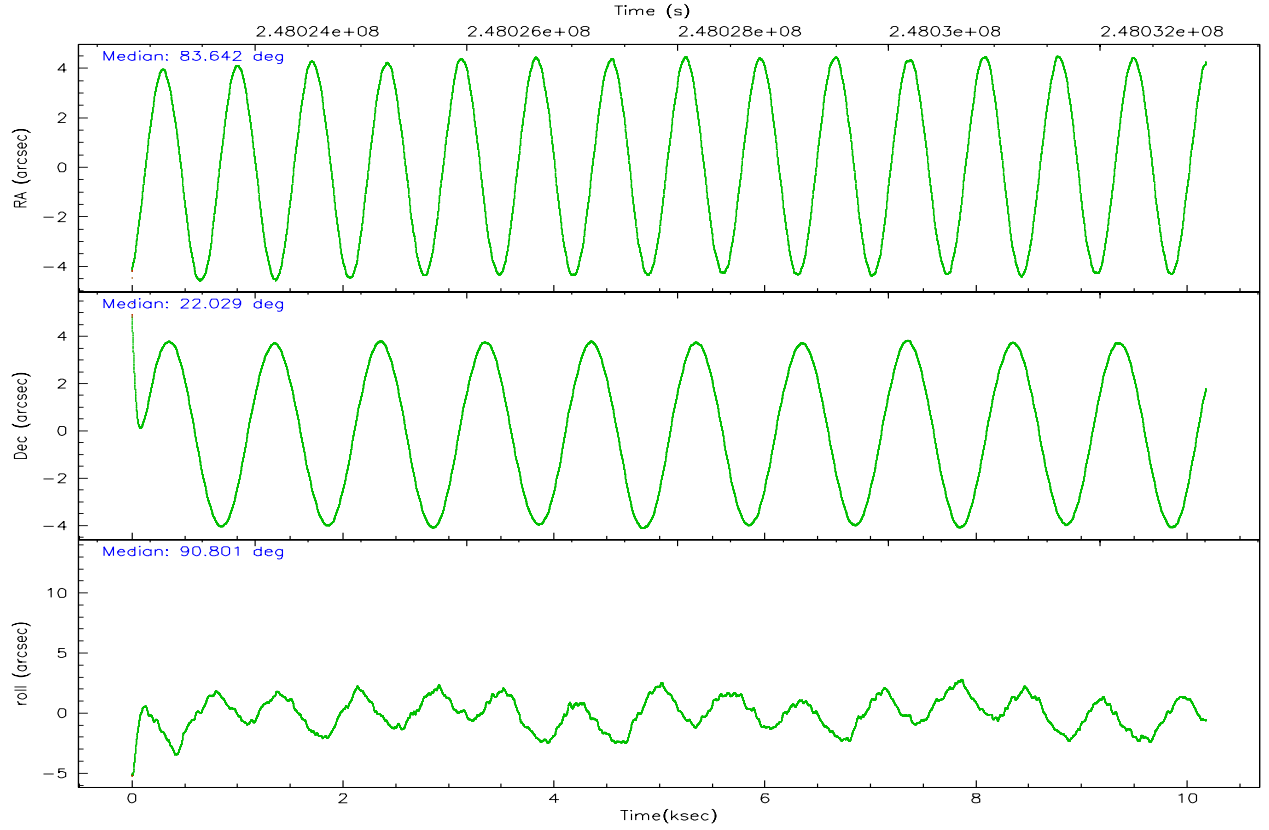
	<b>ccd 7</b>
grade 0 events	238732
	19%
grade 1 events	2828
	0%
grade 2 events	305381
	24%
grade 3 events	135595
	10%
grade 4 events	131998
	10%
grade 5 events	14154
	1%
grade 6 events	394621
	31%
grade 7 events	15716
	1%

## 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	83.657442	83.6420510189694	Subarray start row	127	127
Pointing Dec	22.005650	22.028836233114	Subarray row count	101	101
Pointing Roll	90.641636	90.80402686915889	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	248023016.184000	248022038.56072			
Observation start date	2005-11-10T15:15:52	2005-11-10T15:00:38			
Observation end time	248033016.184000	248034031.06128			
Observation end date	2005-11-10T18:02:32	2005-11-10T18:20:31			
Read mode	TIMED	TIMED			

## 2.3 Aspect





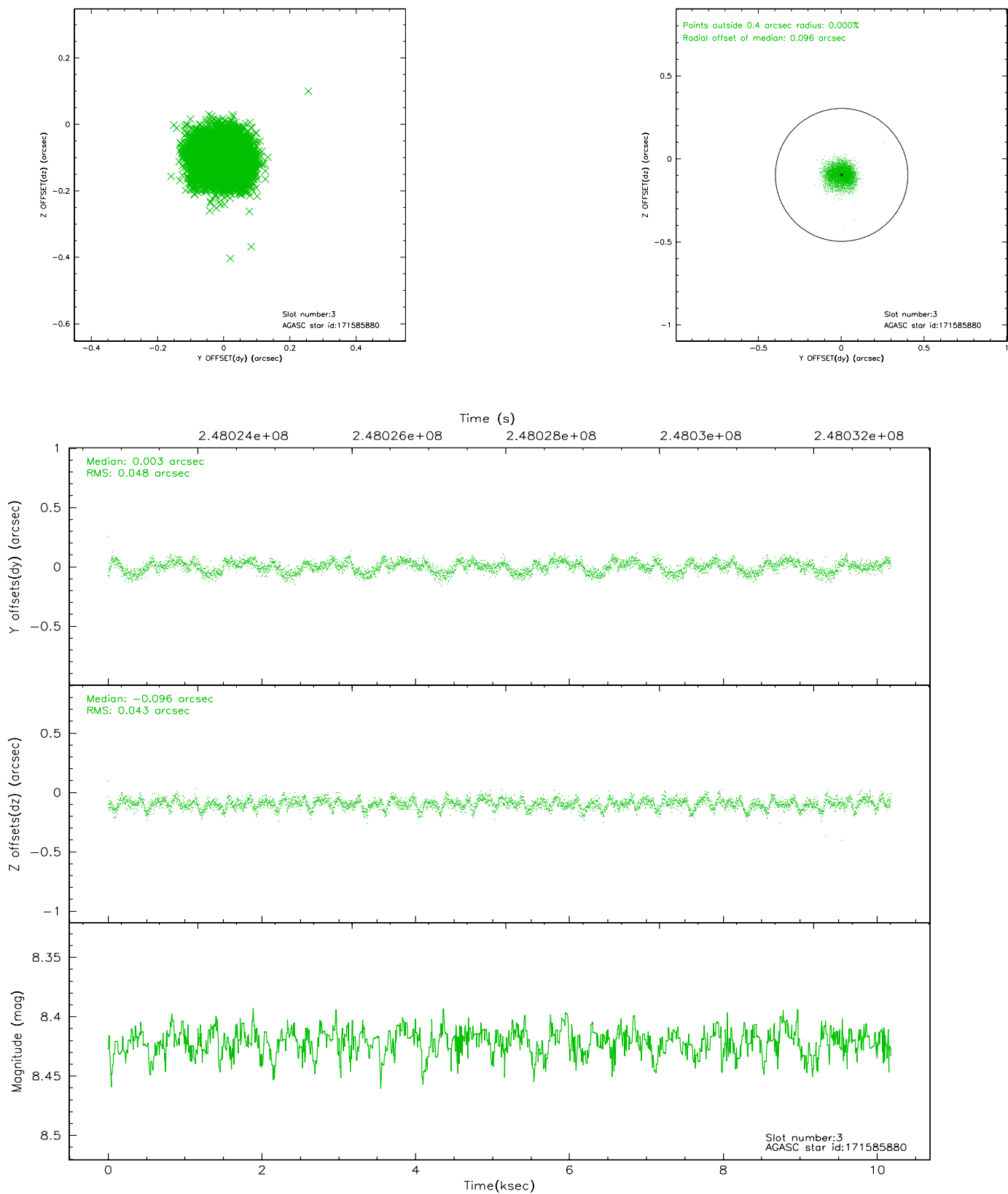
### Slot Statistics

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	2484	-0.048	-0.105	0.015	0.022	0.000000	0.000000	-759.89	-1897.26
1	FID	ACIS-S-4	7.18	2484	0.058	0.051	0.007	0.011	0.000000	0.000000	2153.26	10.76
2	FID	ACIS-S-5	7.23	2484	-0.042	0.061	0.013	0.019	0.000000	0.000000	-1812.05	5.04
3	GUIDE	171585880	8.42	4967	0.003	-0.096	0.069	0.107	83.676260	22.176319	613.85	-69.54
4	GUIDE	171586032	8.93	4966	-0.084	0.079	0.065	0.104	83.950197	22.083225	269.52	-979.46
5	GUIDE	171721904	9.20	4964	-0.045	0.061	0.073	0.121	84.272676	22.116922	382.03	-2056.25
6	GUIDE	243941560	8.31	4968	-0.091	0.109	0.067	0.105	83.733264	22.568598	2023.80	-274.72
7	GUIDE	171597832	9.15	4959	0.221	-0.153	0.072	0.120	83.183230	21.366702	-2279.17	1615.34

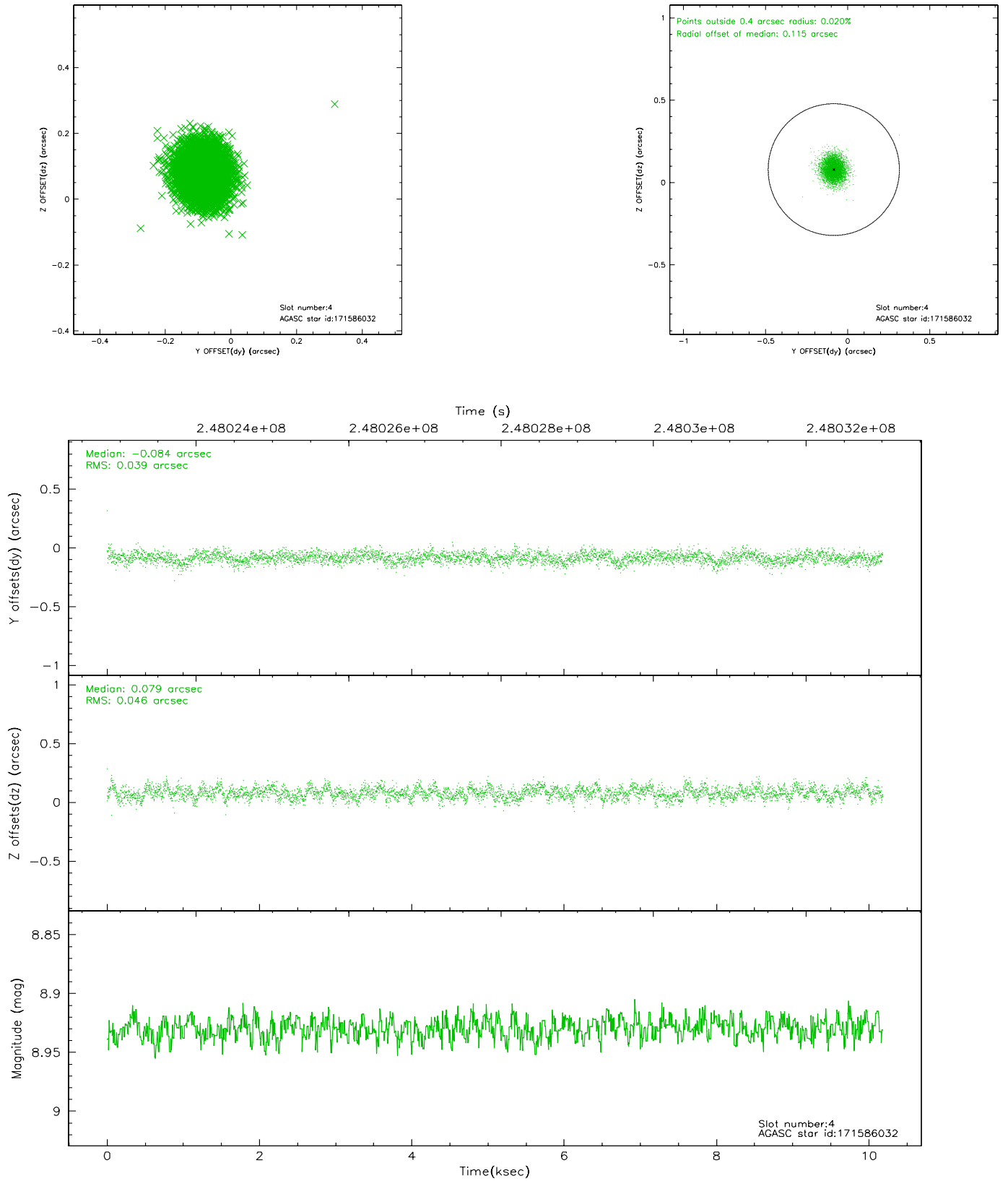


## 2.4 Star Slots

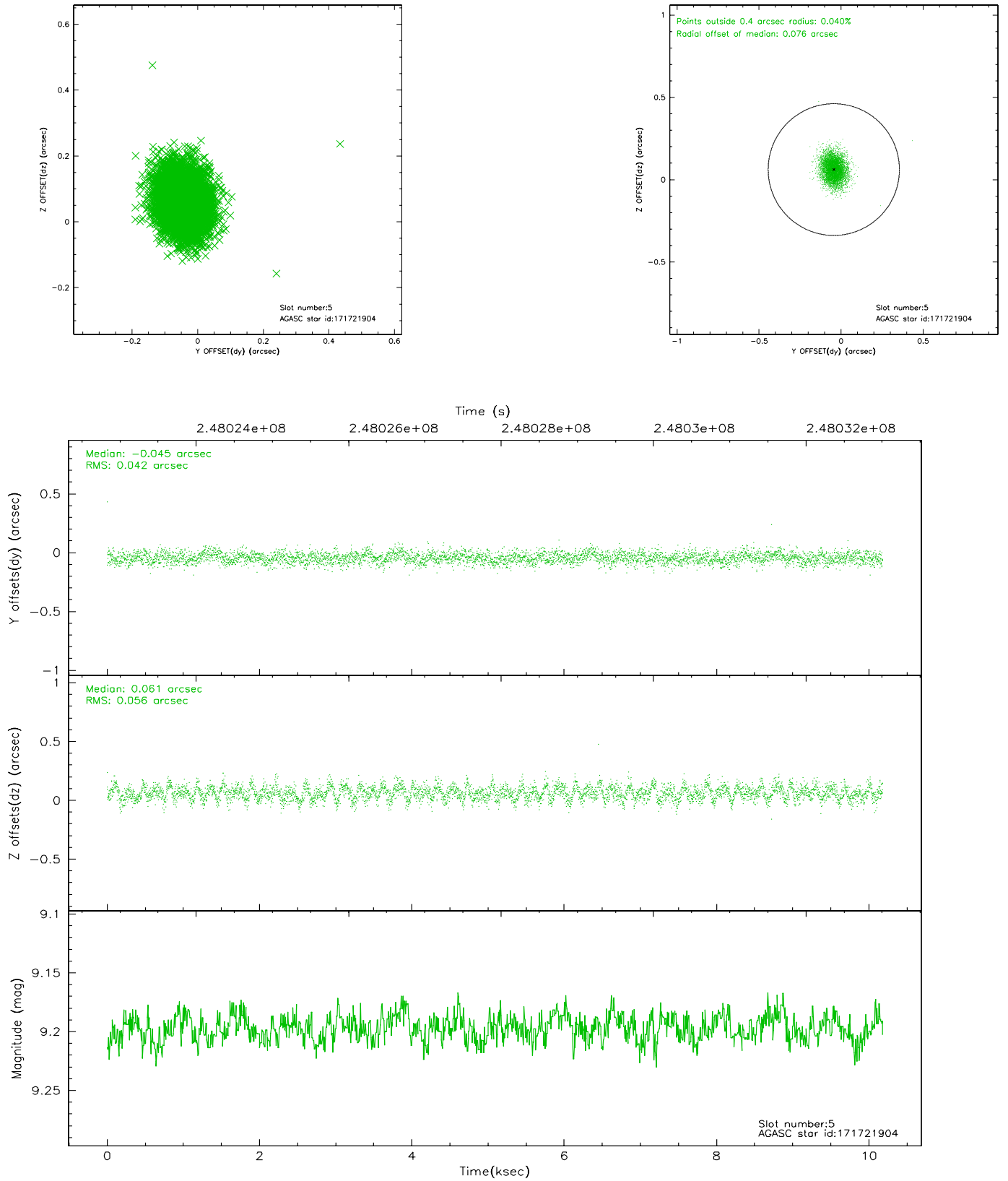
### 2.4.1 Slot 3



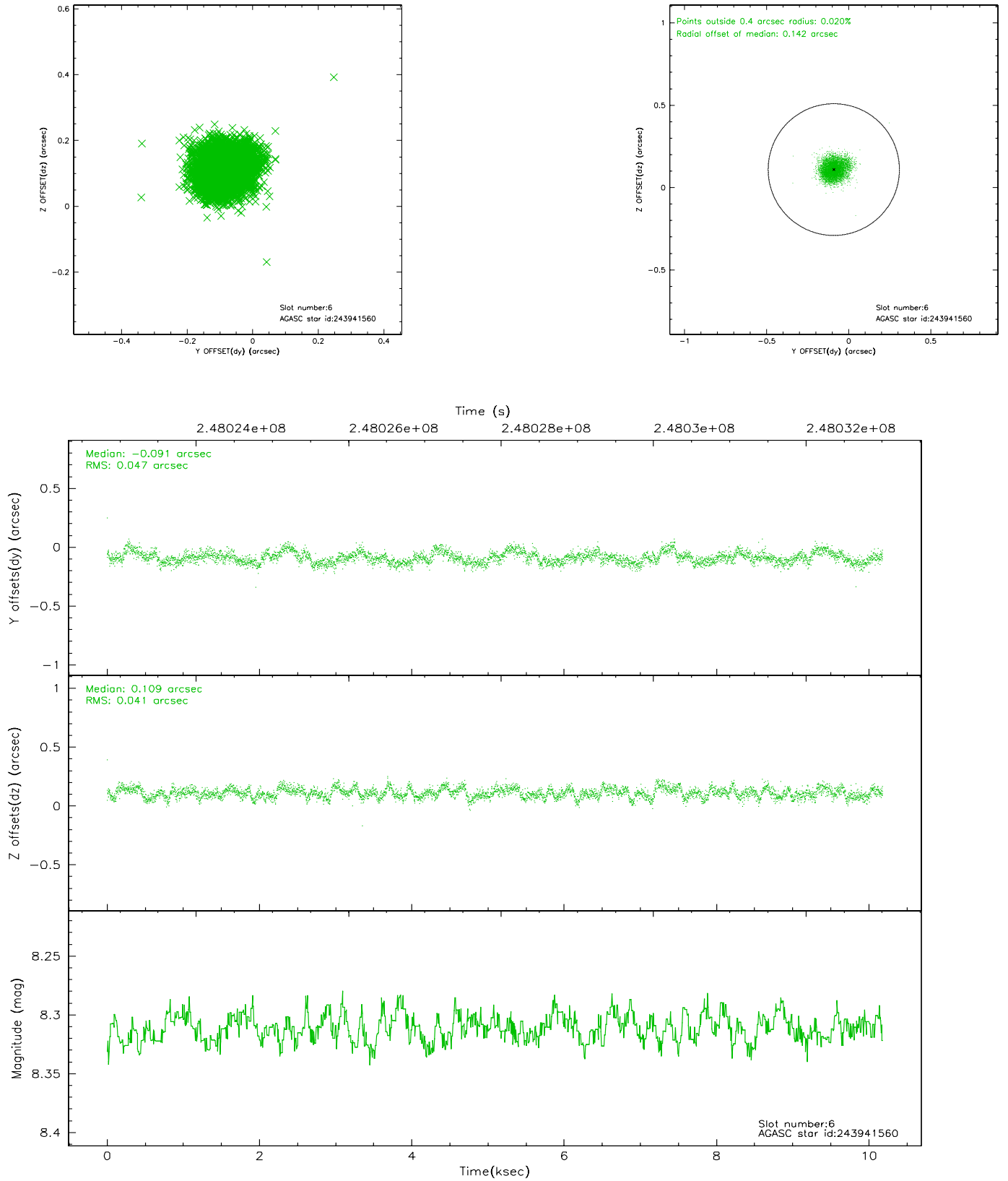
## 2.4.2 Slot 4



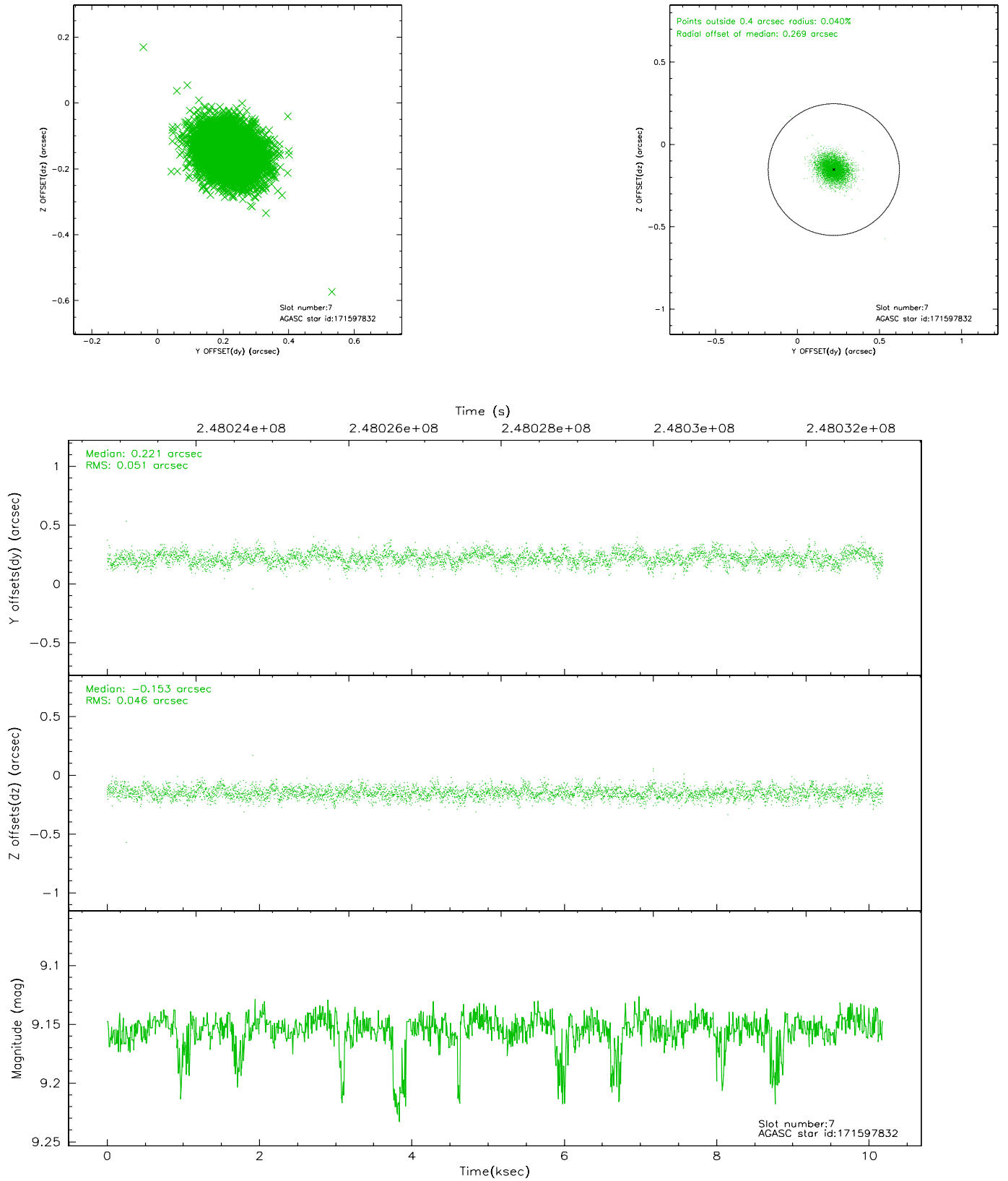
### 2.4.3 Slot 5



## 2.4.4 Slot 6

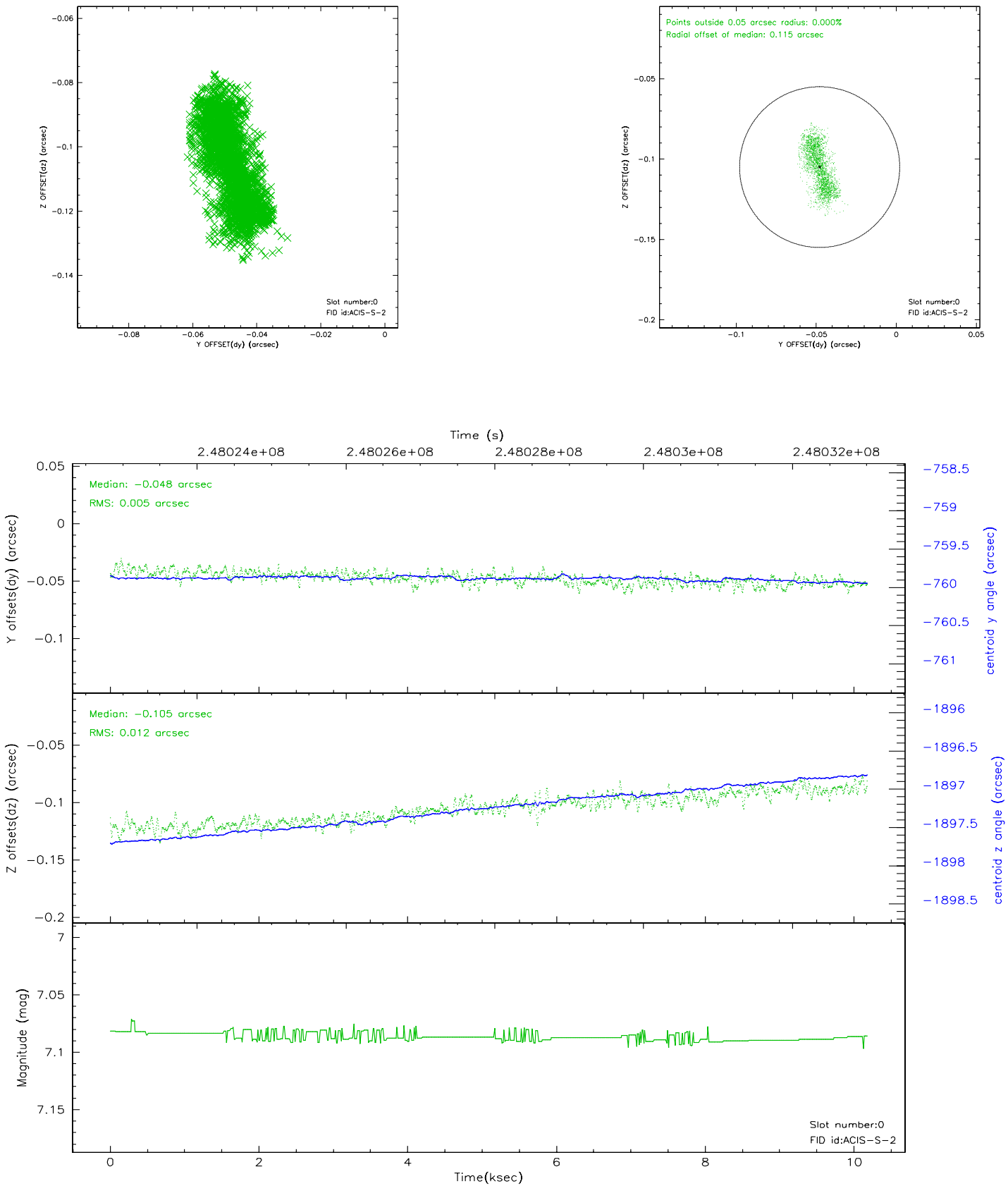


## 2.4.5 Slot 7

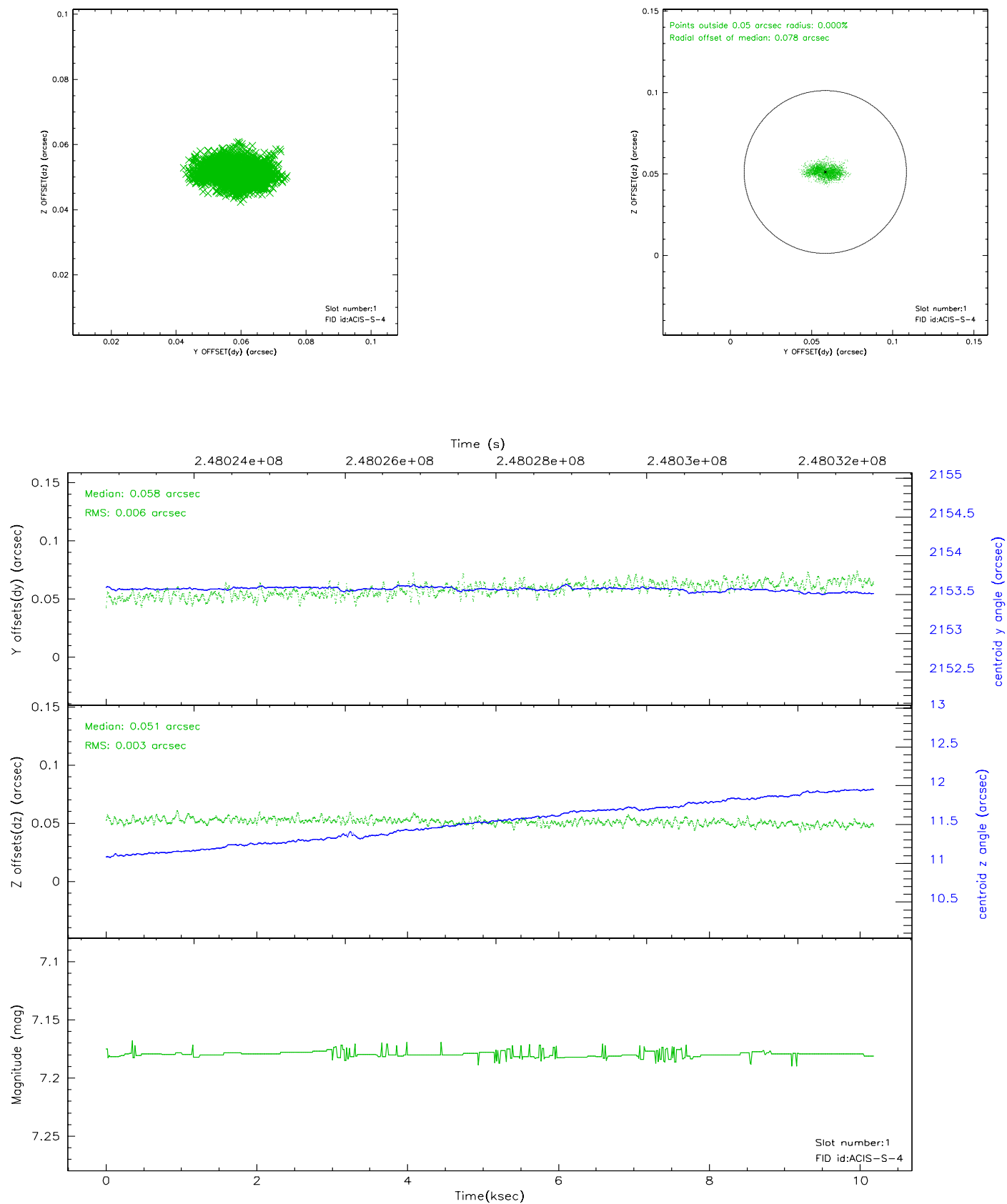


## 2.5 FID Slots

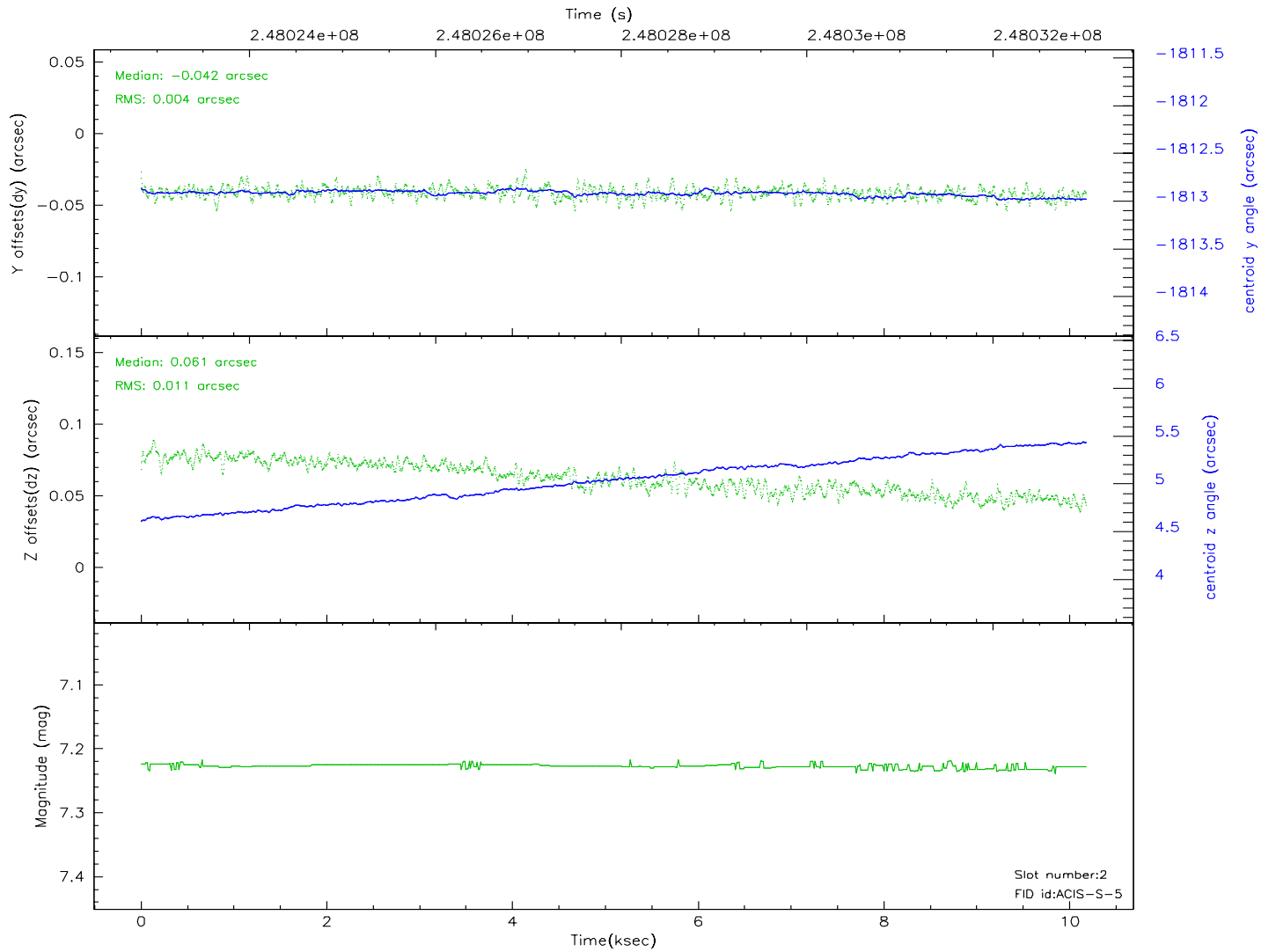
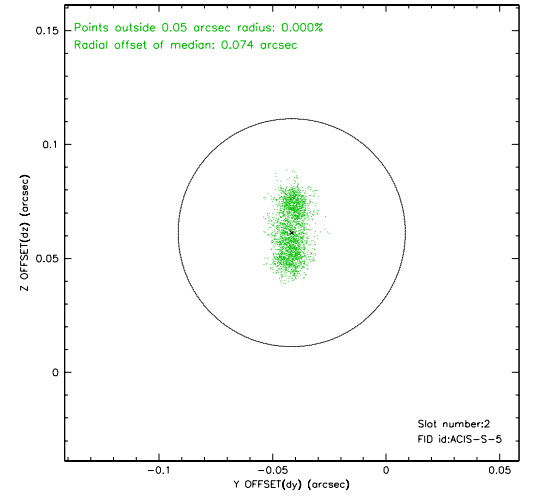
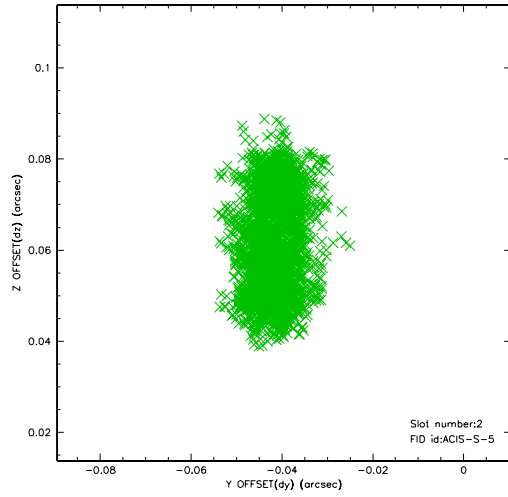
### 2.5.1 Slot 0



2.5.2 Slot 1



### 2.5.3 Slot 2



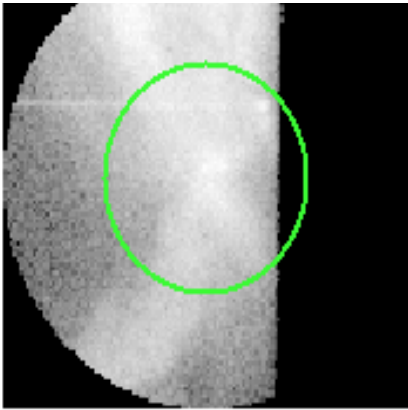


# 3 Gratings

## 3.1 HEG Arm



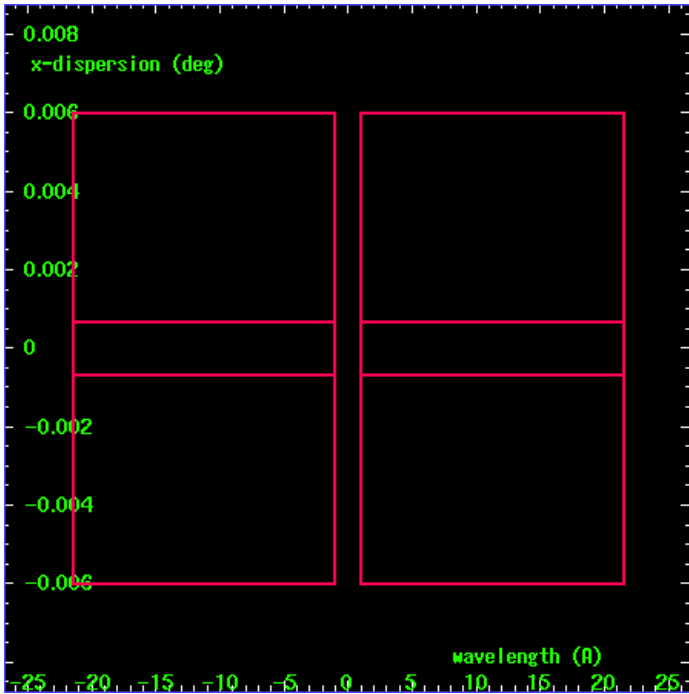
HEG Order Sort 123



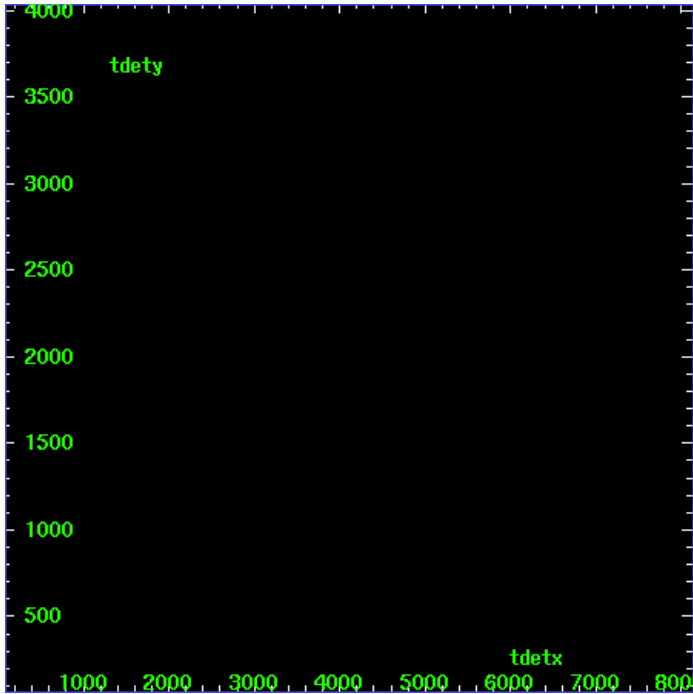
HEG Zero Order



HEG Order Sort ALL

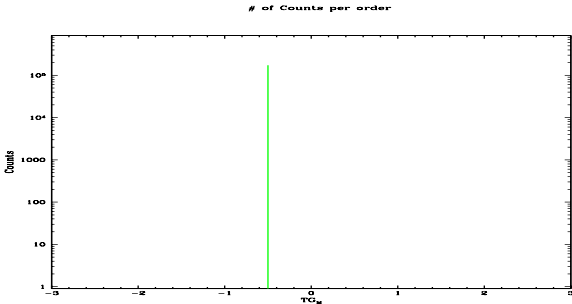


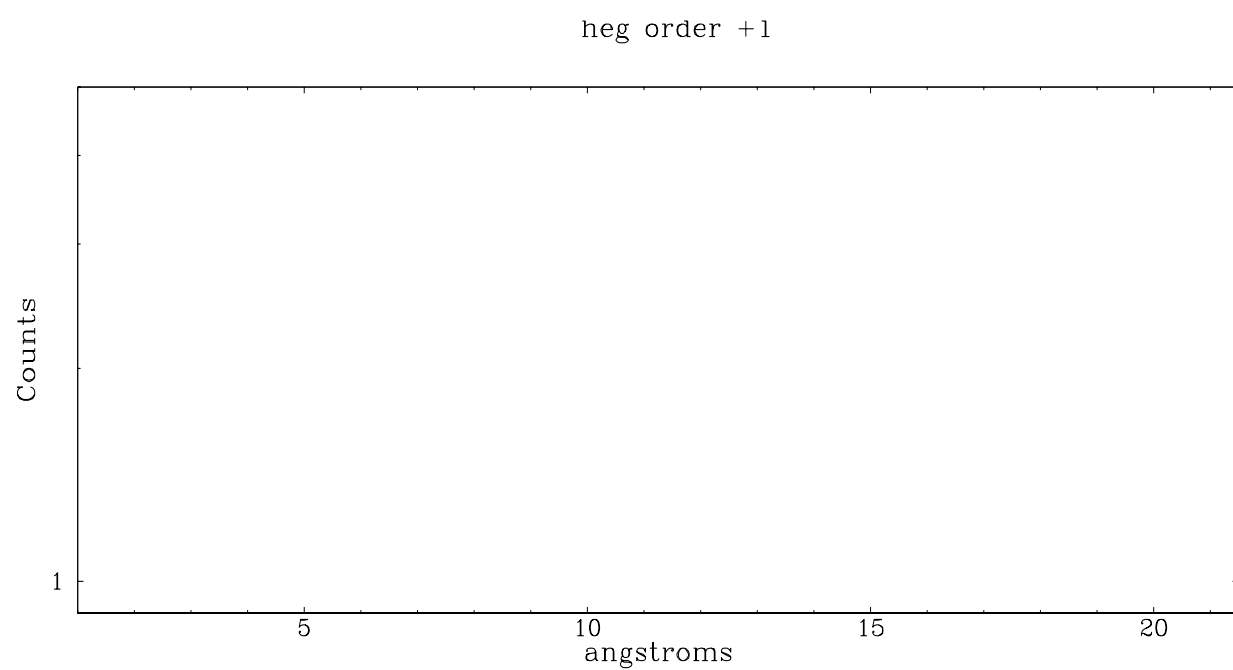
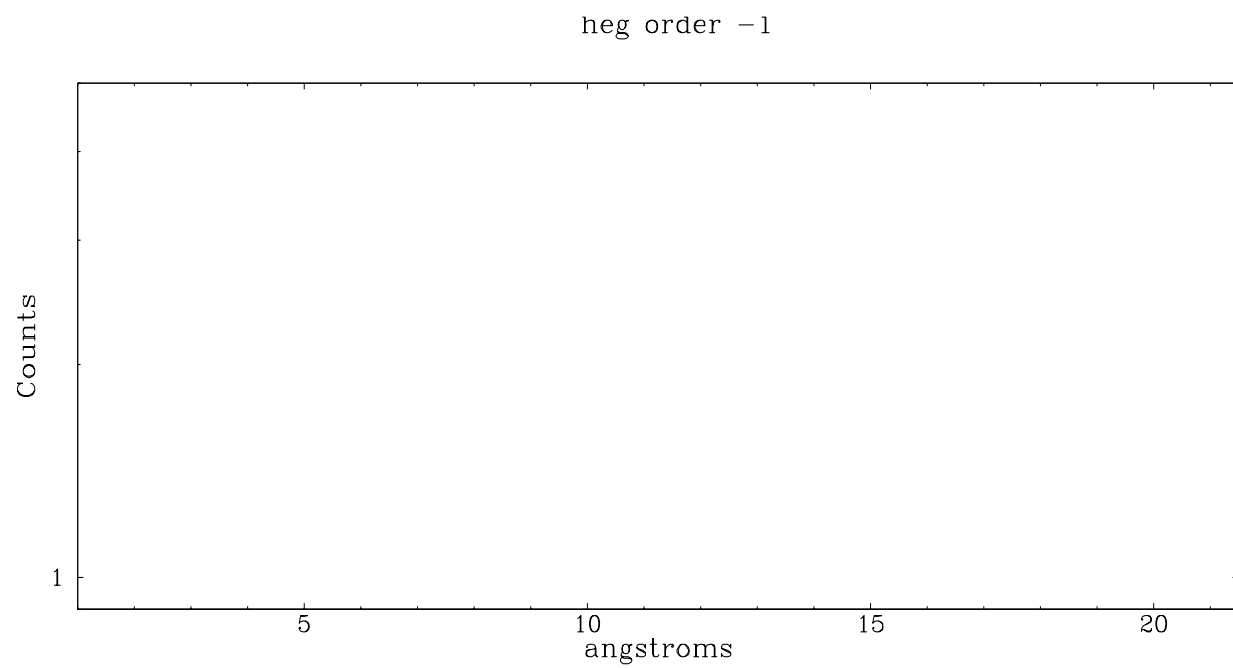
Spot Image HEG



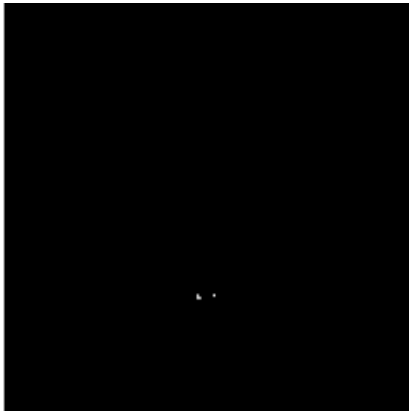
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	0	173594	0	0	0

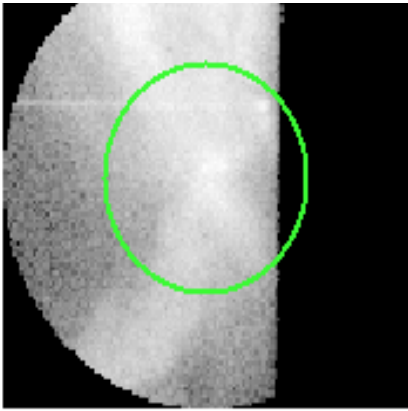




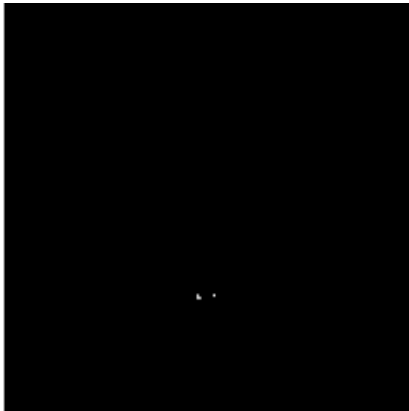
3.2 MEG Arm



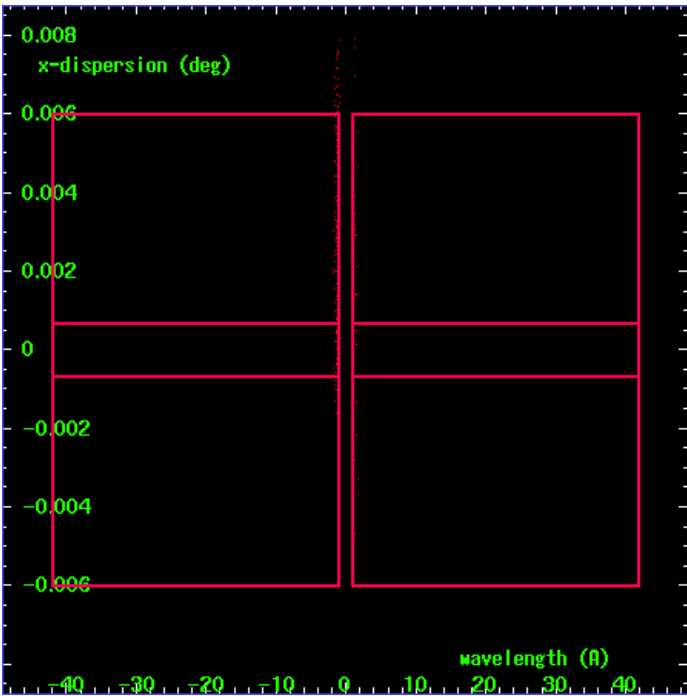
MEG Order Sort 123



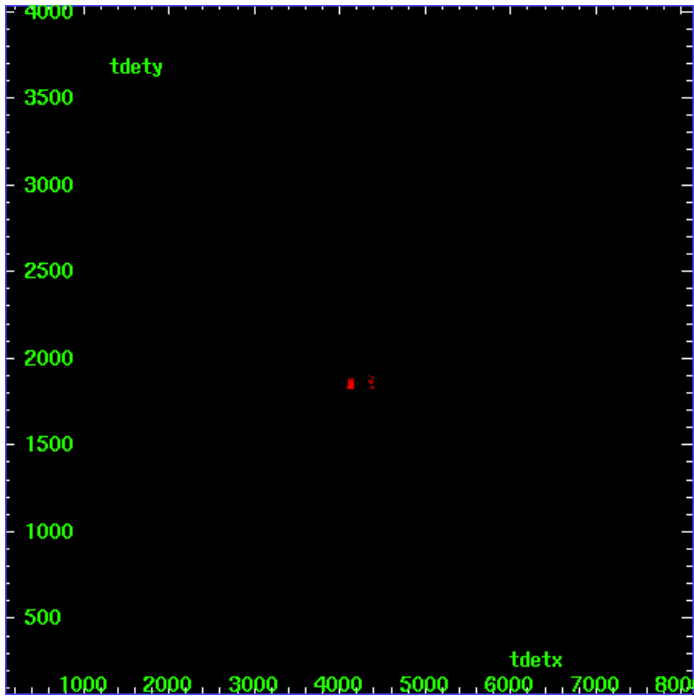
MEG Zero Order



MEG Order Sort ALL

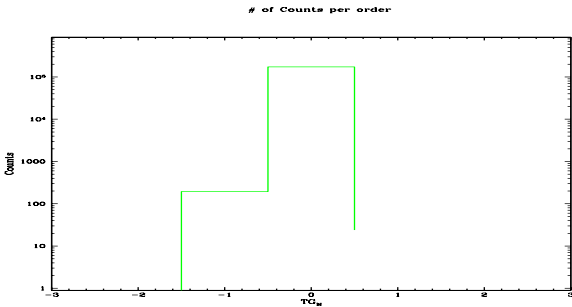


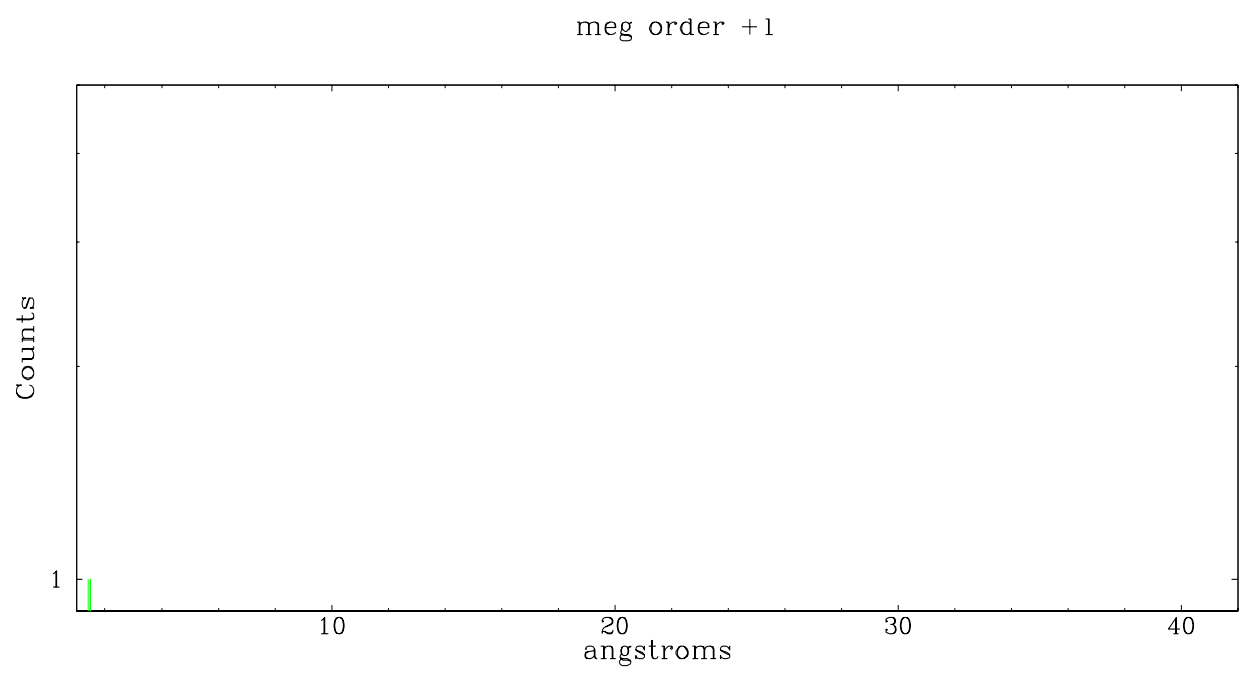
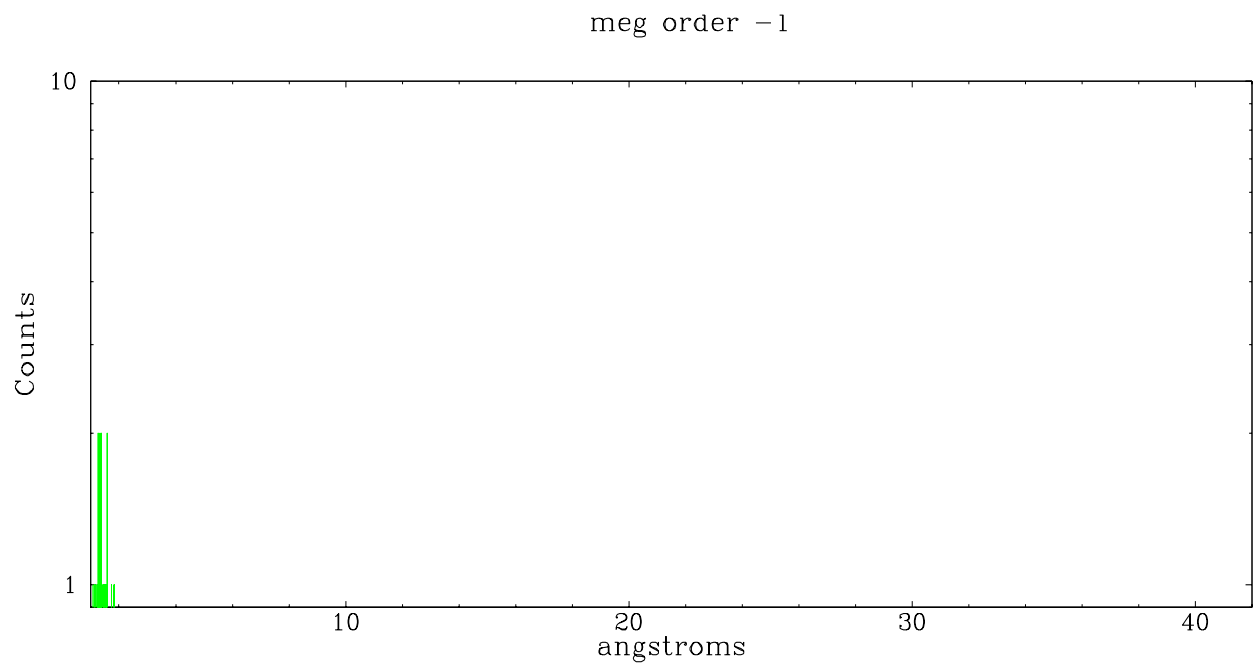
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	0	0	195	173594	24	0	0





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.1817

## A.2 Comments

Aim point is about 30 arcsec east of the aim points used for the other observations in this set, as requested by the proposer. Grating is used primarily to avoid pileup.