

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 4474 - L2 Version 001  
Chandra X-Ray Center

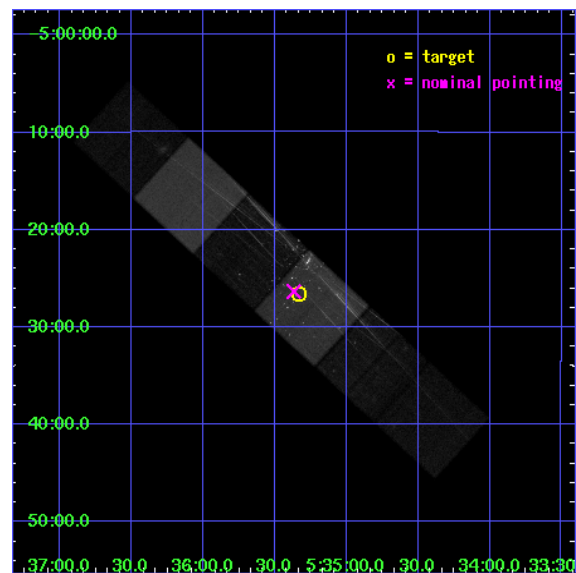
L2 Processing Date : Apr 10 2006

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# 1 Front

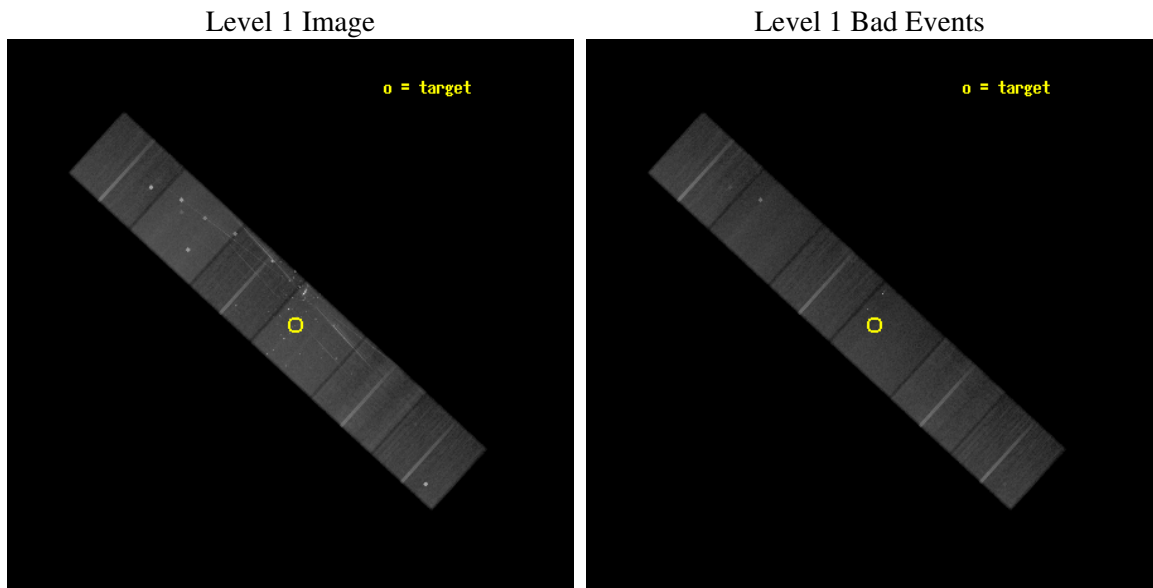
seq_num	200243
obs_id	4474
title	Study of Pre-Main Sequence Stars Near the Beginning of their Accretion Phase
observer	Prof. Claude Canizares
object	Orion Nebula Cluster
dtcycle	0
cycle	P
ra_targ	83.83375
dec_targ	-5.444194
ra_nom	83.841936894667
dec_nom	-5.4390109475828
roll_nom	42.488580650987
revision	2
ontime	51251.199809074
livetime	50602.226257324
ontime4	51251.199809074
ontime5	51251.199809074
ontime6	51251.199809074
ontime7	51251.199809074
ontime8	51251.199809074
ontime9	51251.199809074
l2events	789677



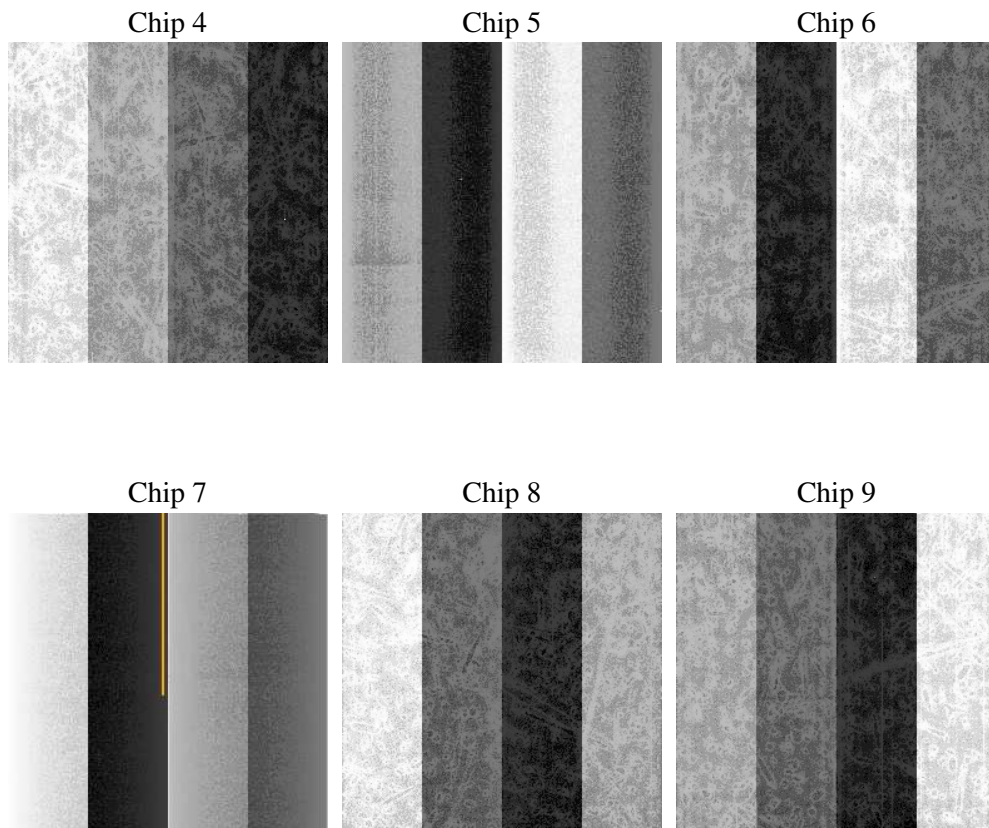
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-04-10T12:18:42
revision	2

sched_exp_time	51100.000000
ontime	51431.630749851
ontime4	51431.630729944
ontime5	51431.630749851
ontime6	51431.630729944
ontime7	51431.630749851
ontime8	51431.630729944
ontime9	51431.630729944
l1events	3126744

### 2.1.4 Events

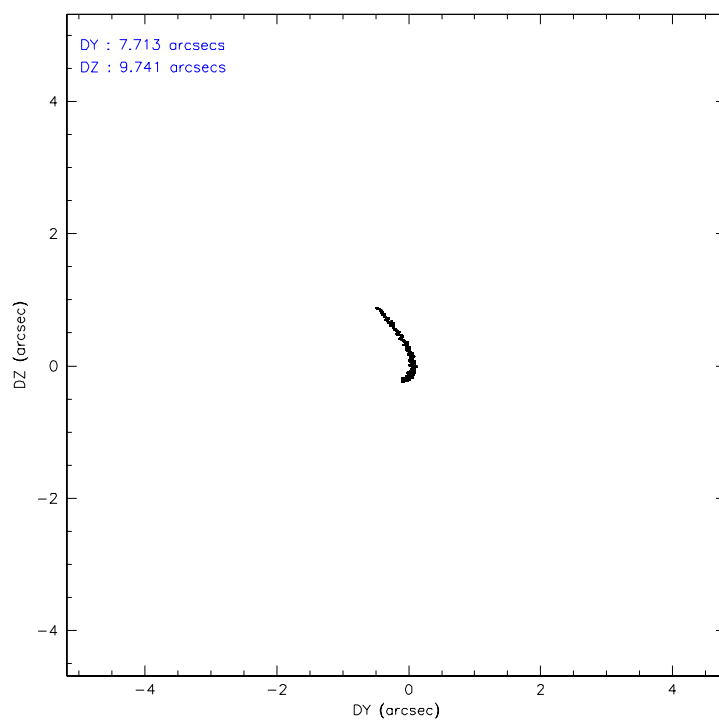
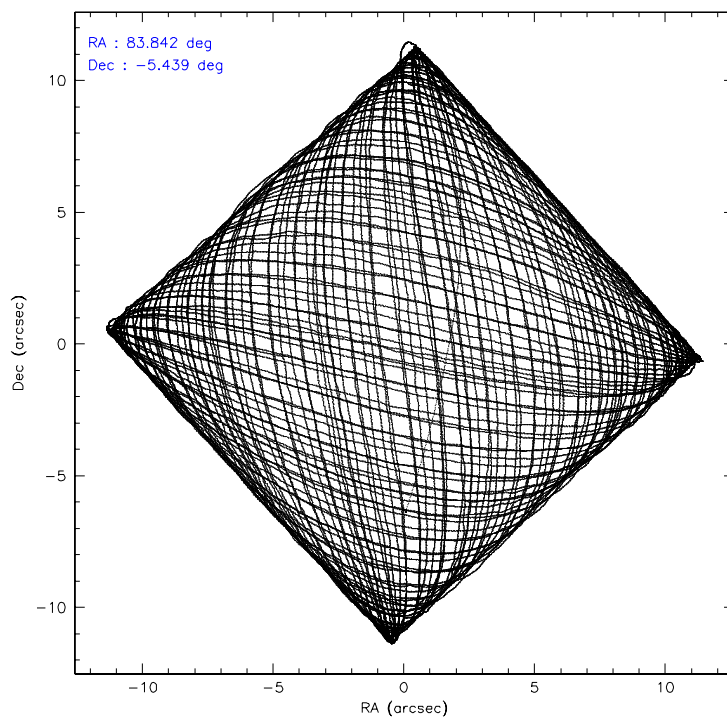
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	462928	621194	453906	638190	525383	425143
rejected events	396372	335577	357294	338954	401179	357772
rejected %	85%	54%	78%	53%	76%	84%

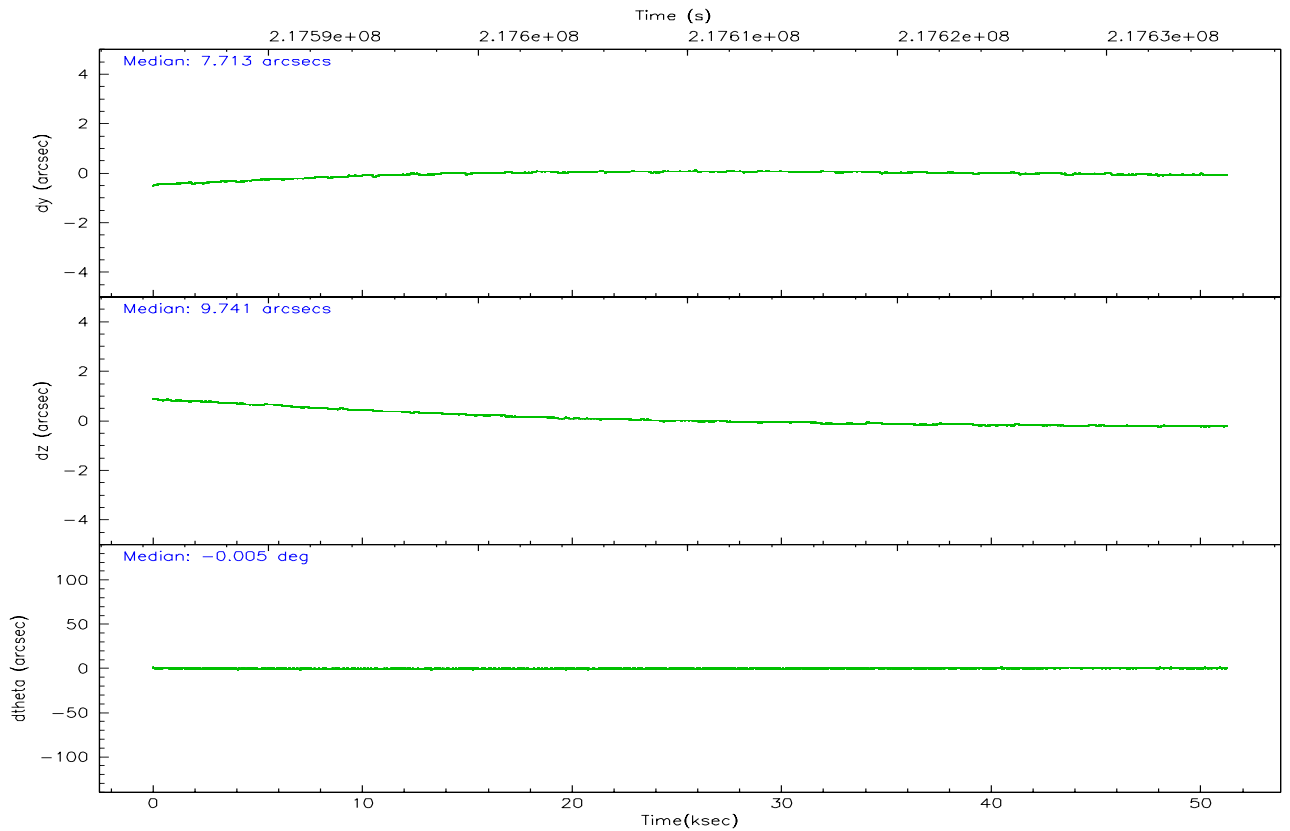
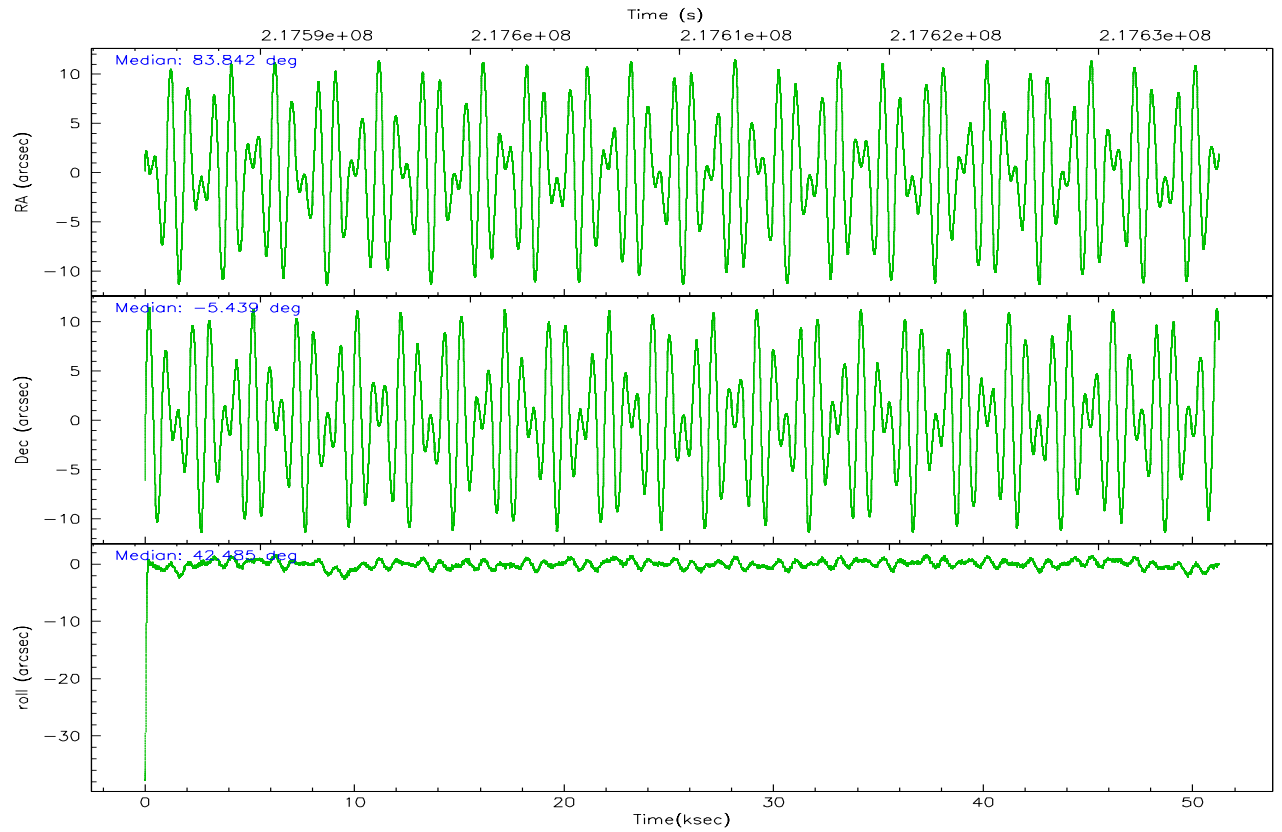
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	37997	31391	56226	28413	47655	38165
	8%	5%	12%	4%	9%	8%
grade 1 events	570	602	410	622	418	335
	0%	0%	0%	0%	0%	0%
grade 2 events	10884	90316	15805	76821	25461	9930
	2%	14%	3%	12%	4%	2%
grade 3 events	5113	6924	6673	19912	12095	4983
	1%	1%	1%	3%	2%	1%
grade 4 events	4943	6392	6337	19718	11264	4998
	1%	1%	1%	3%	2%	1%
grade 5 events	17508	29011	18580	37439	24092	19503
	3%	4%	4%	5%	4%	4%
grade 6 events	7900	151637	11953	155363	28134	9513
	1%	24%	2%	24%	5%	2%
grade 7 events	378013	304921	337922	299902	376264	337716
	81%	49%	74%	46%	71%	79%

## 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	NONE	NONE
Pointing RA	83.834079	83.84193689466689	Alternating exposures requested	N	N
Pointing Dec	-5.465090	-5.439010947582849	Primary exposure time	0.000000	3.2
Pointing Roll	42.331210	42.48858065098697			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	217584642.184000	217583318.91163			
Observation start date	2004-11-23T08:09:38	2004-11-23T07:48:38			
Observation end time	217635742.184000	217636825.96403			
Observation end date	2004-11-23T22:21:18	2004-11-23T22:40:25			
Read mode	TIMED	TIMED			

## 2.3 Aspect



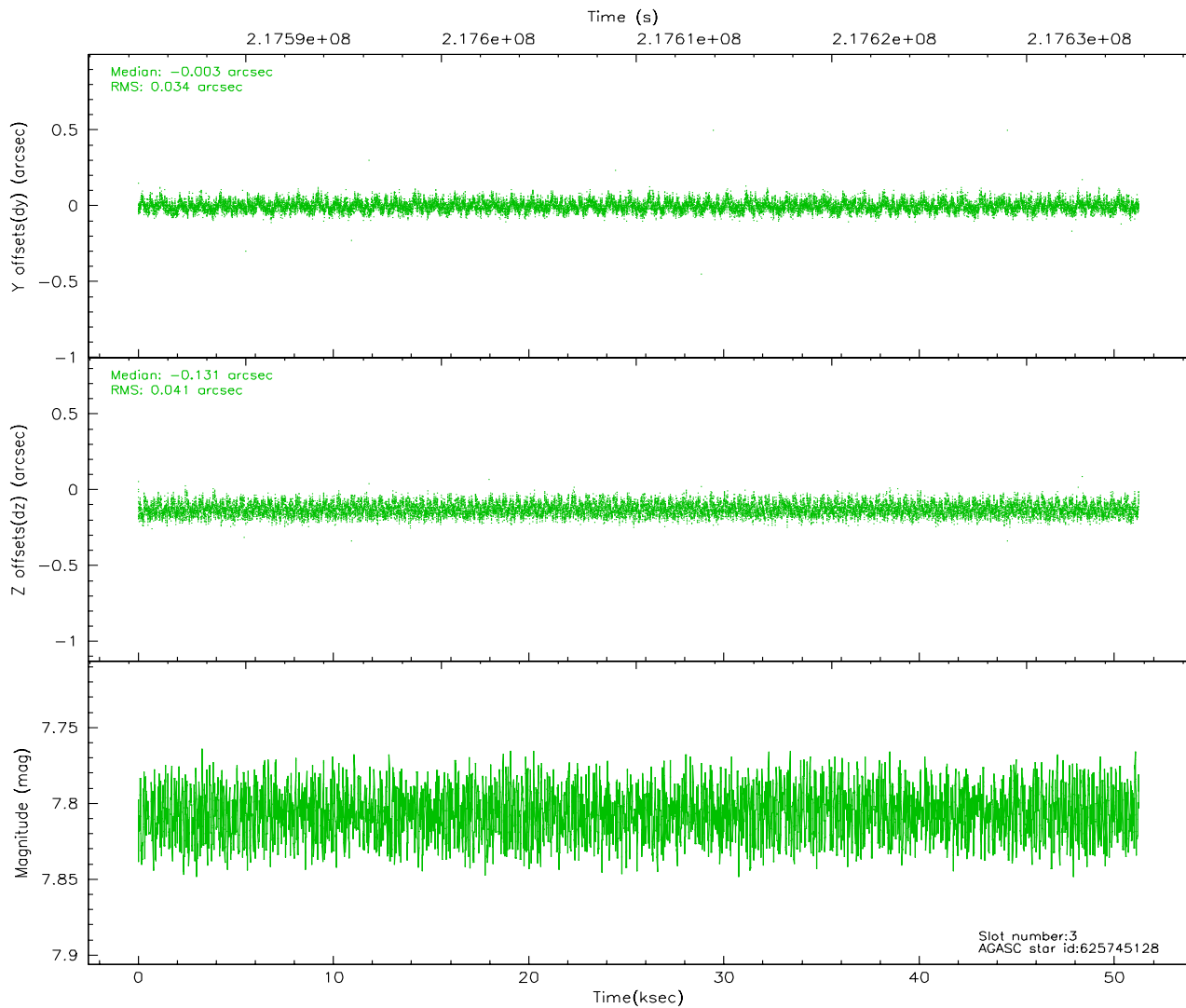
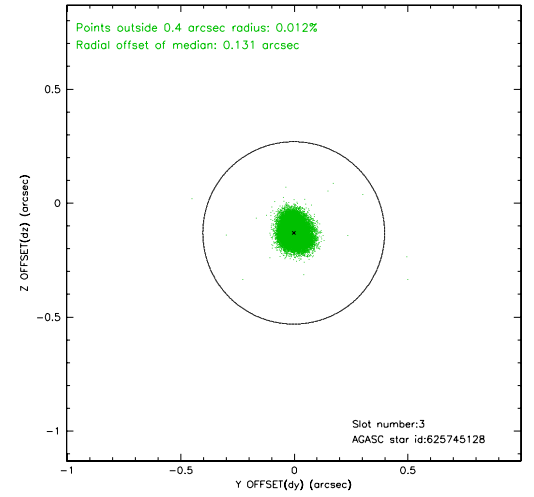
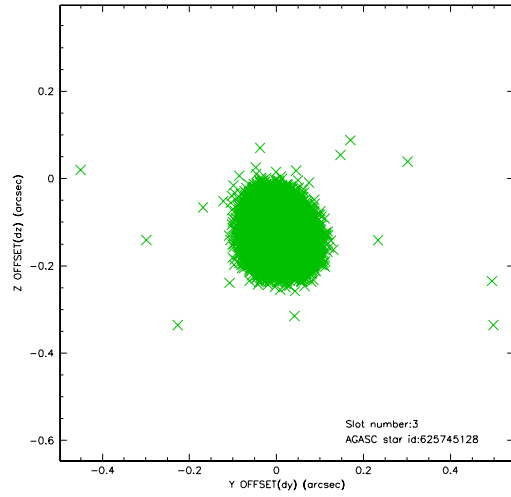


### Slot Statistics

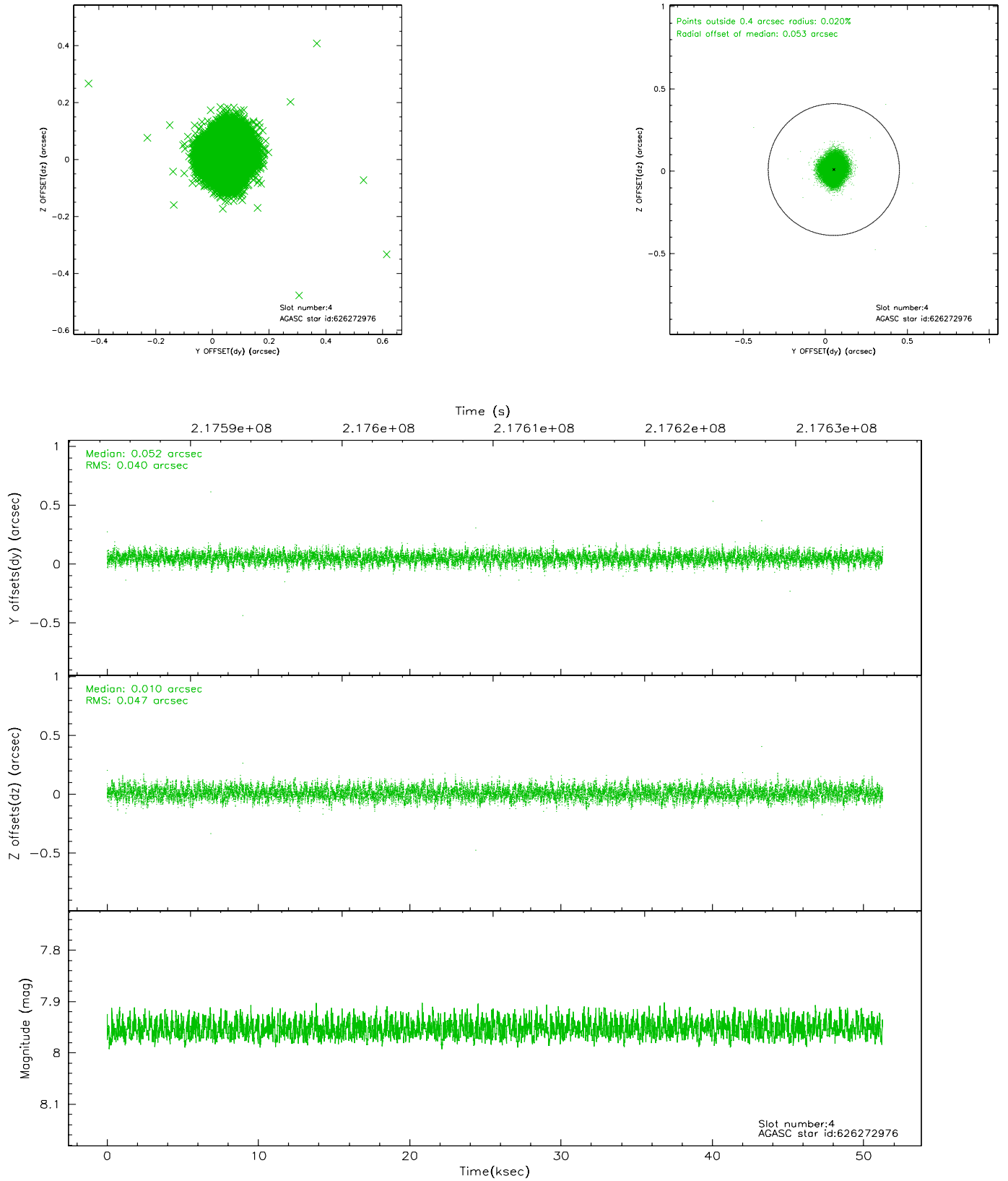
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	12502	-0.032	-0.013	0.010	0.021	0.000000	0.000000	-760.42	-1731.13
1	FID	ACIS-S-4	7.21	12501	0.068	0.018	0.007	0.021	0.000000	0.000000	2152.92	177.48
2	FID	ACIS-S-5	7.23	12503	-0.069	0.003	0.012	0.033	0.000000	0.000000	-1813.37	171.01
3	GUIDE	625745128	7.81	25000	-0.003	-0.131	0.057	0.090	83.769930	-4.731835	1607.64	2106.46
4	GUIDE	626272976	7.95	25000	0.052	0.010	0.066	0.102	83.795875	-5.926912	-1220.28	-1136.96
5	GUIDE	626273040	7.11	25003	0.061	0.004	0.067	0.106	84.062610	-5.647920	162.26	-1038.06
6	GUIDE	625745144	7.85	25000	-0.107	0.038	0.059	0.095	83.888985	-4.837539	1667.06	1537.63
7	GUIDE	626272880	7.65	25001	-0.015	0.079	0.065	0.106	83.815609	-6.032748	-1424.66	-1466.20

## 2.4 Star Slots

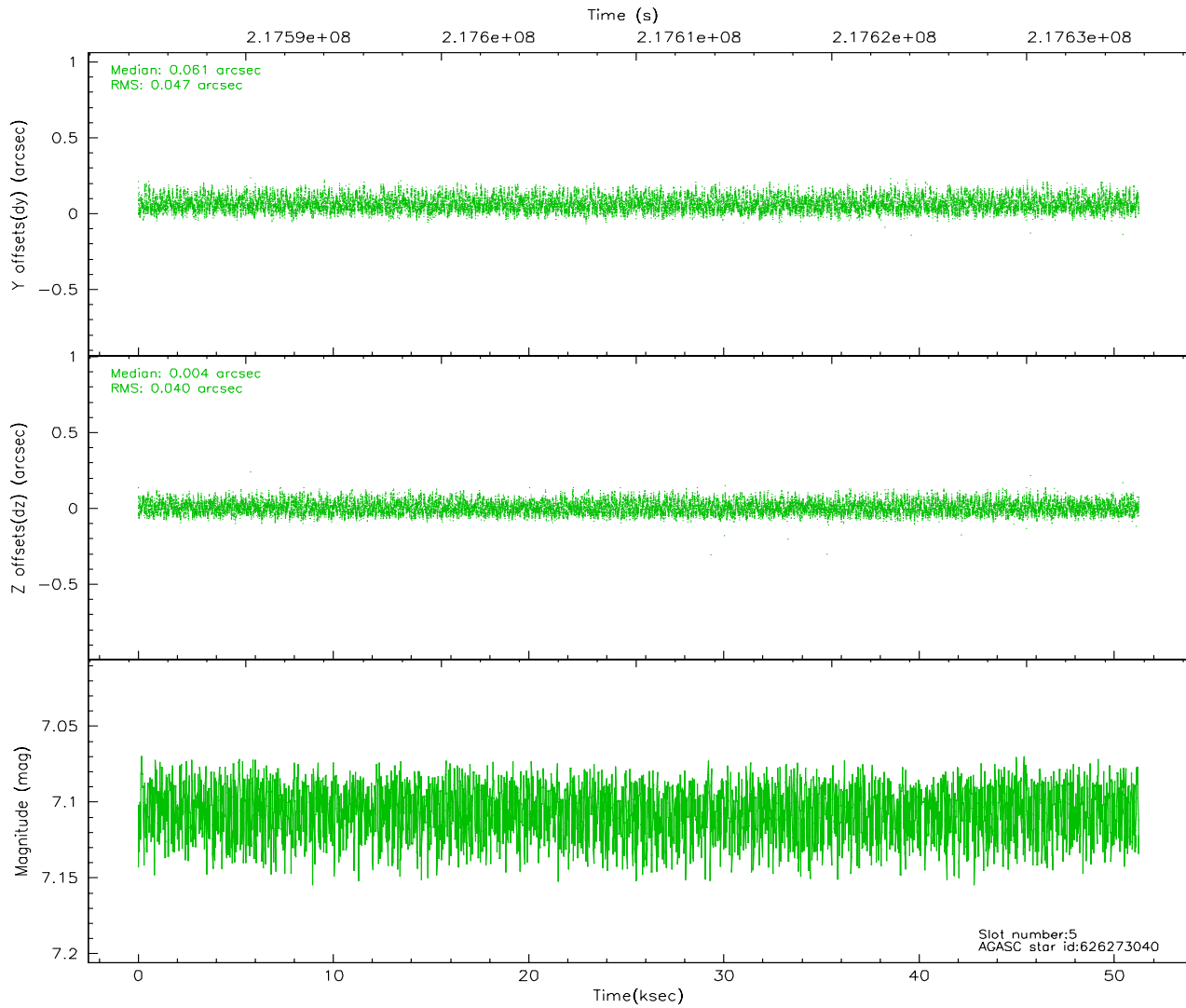
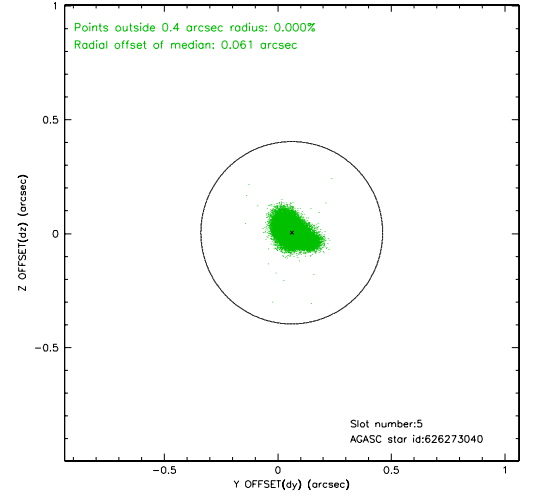
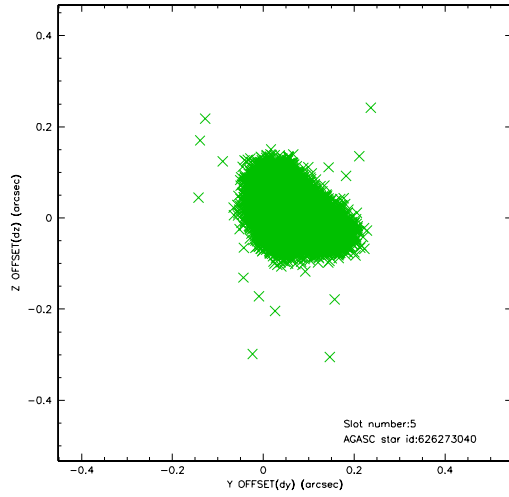
### 2.4.1 Slot 3



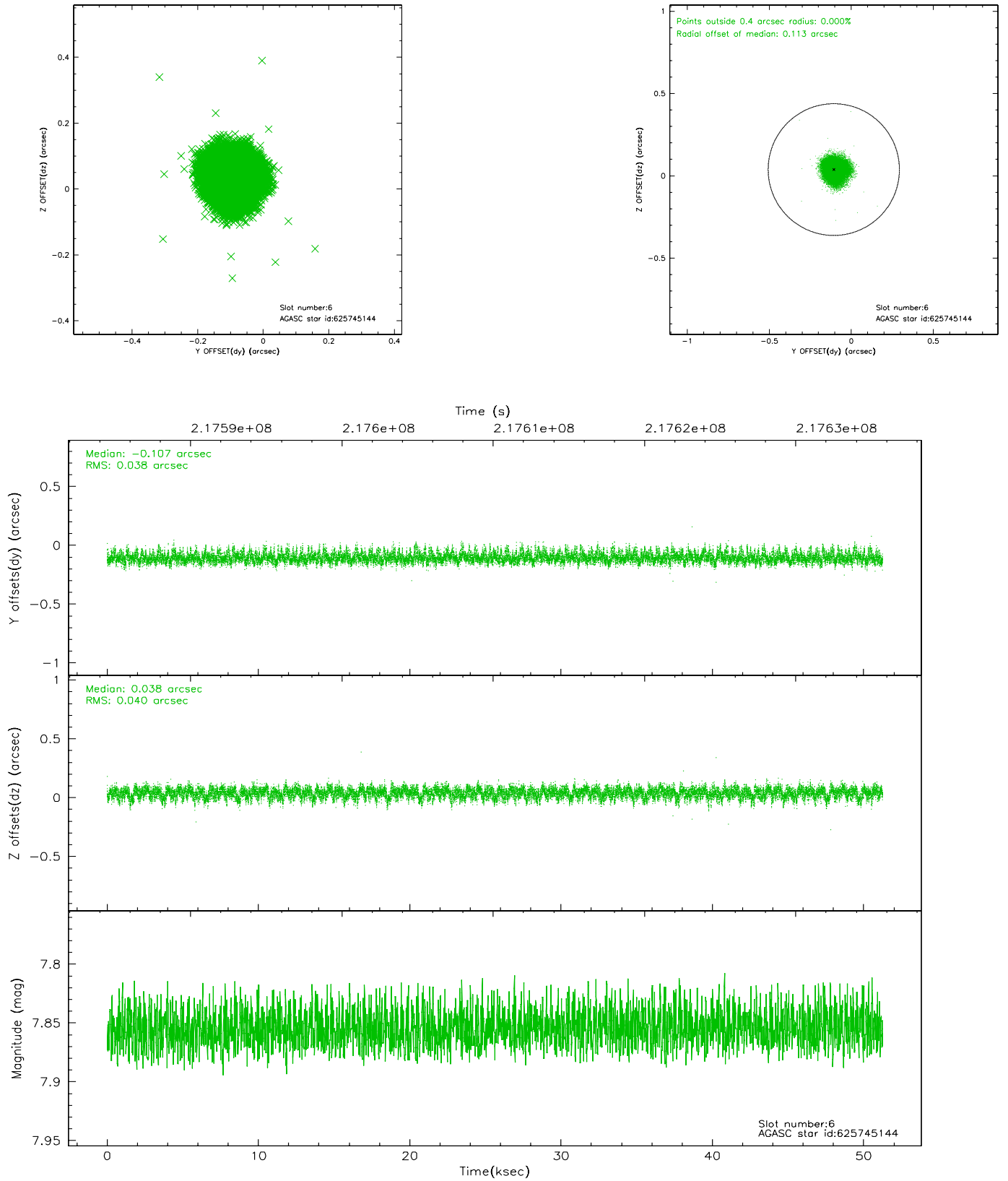
## 2.4.2 Slot 4



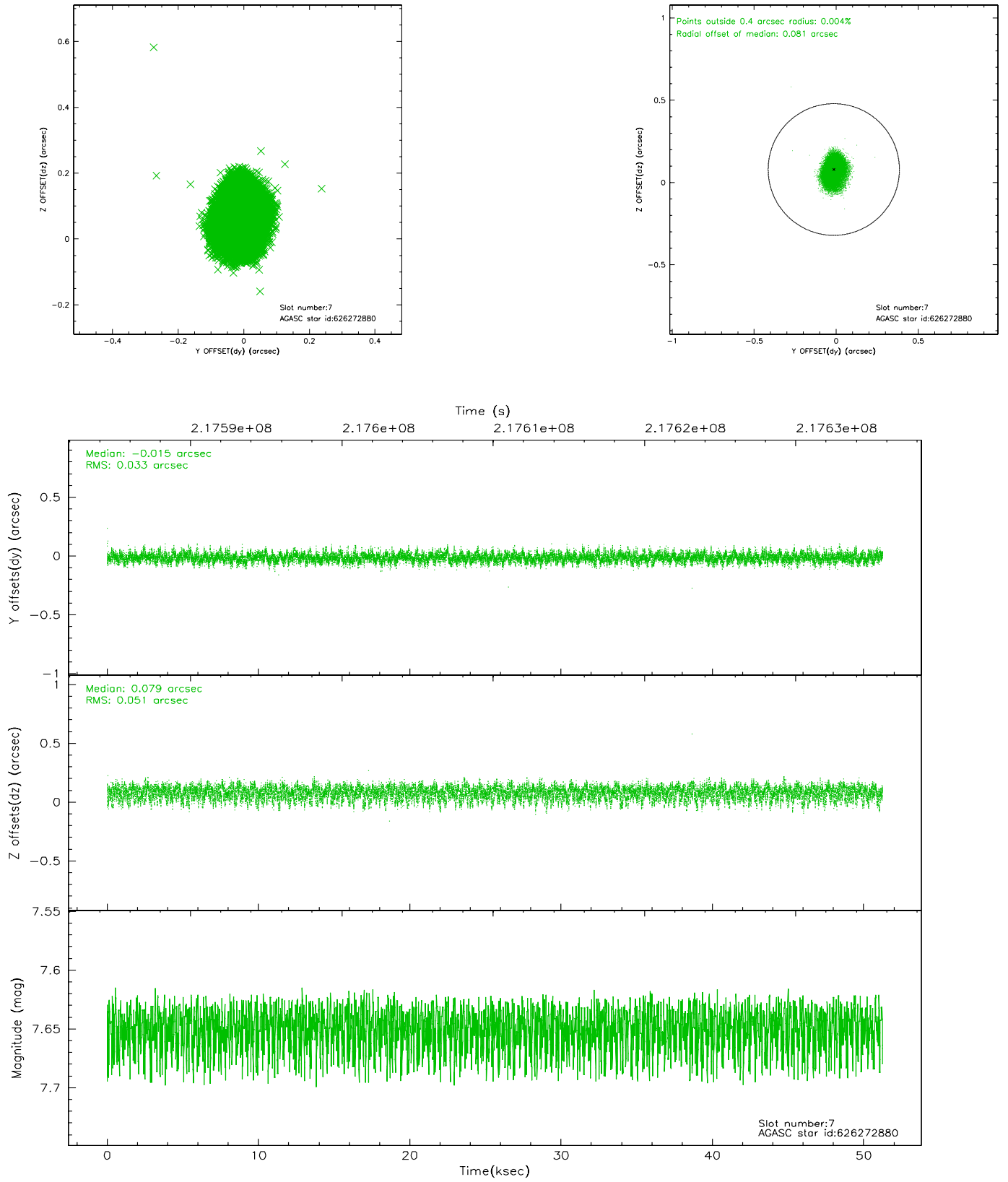
### 2.4.3 Slot 5



## 2.4.4 Slot 6

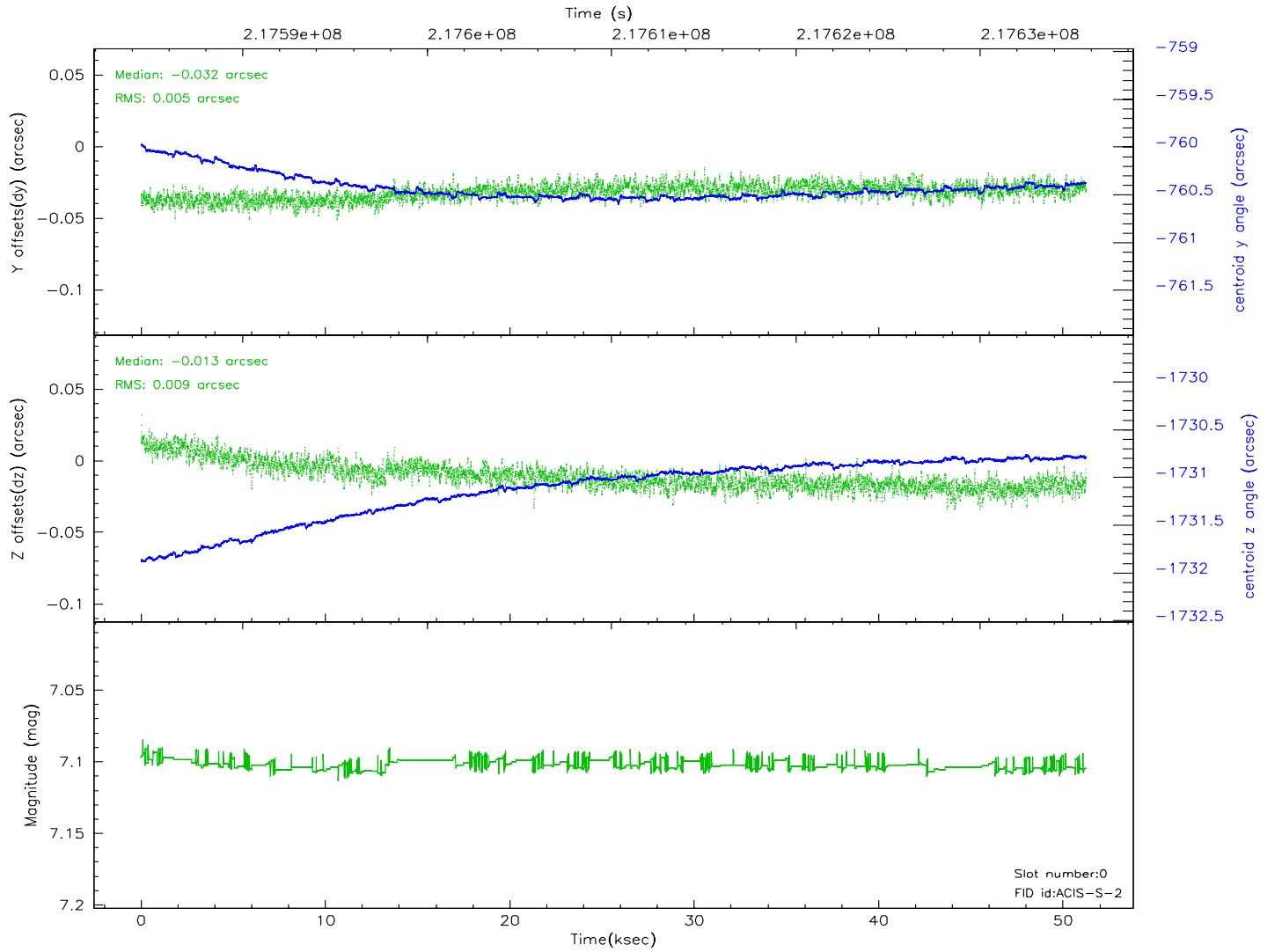
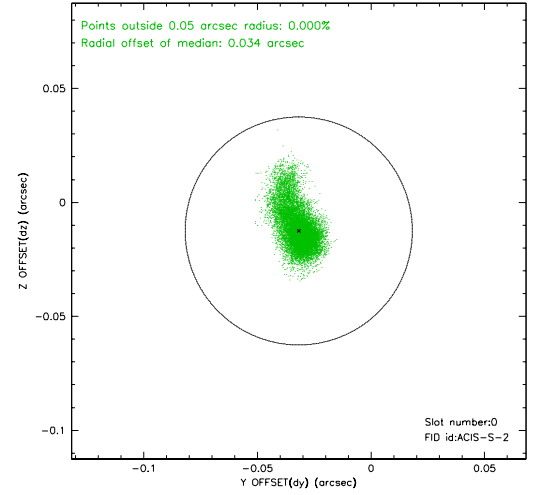
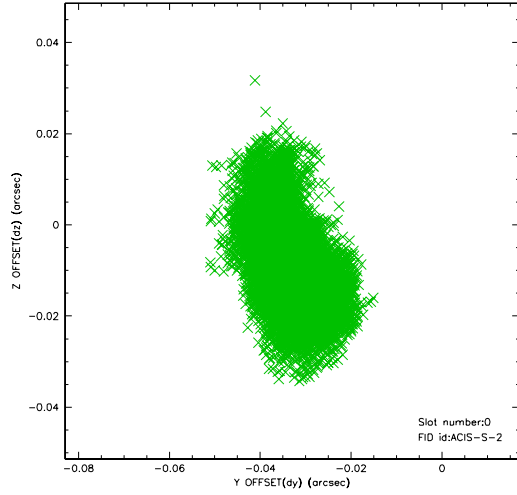


## 2.4.5 Slot 7

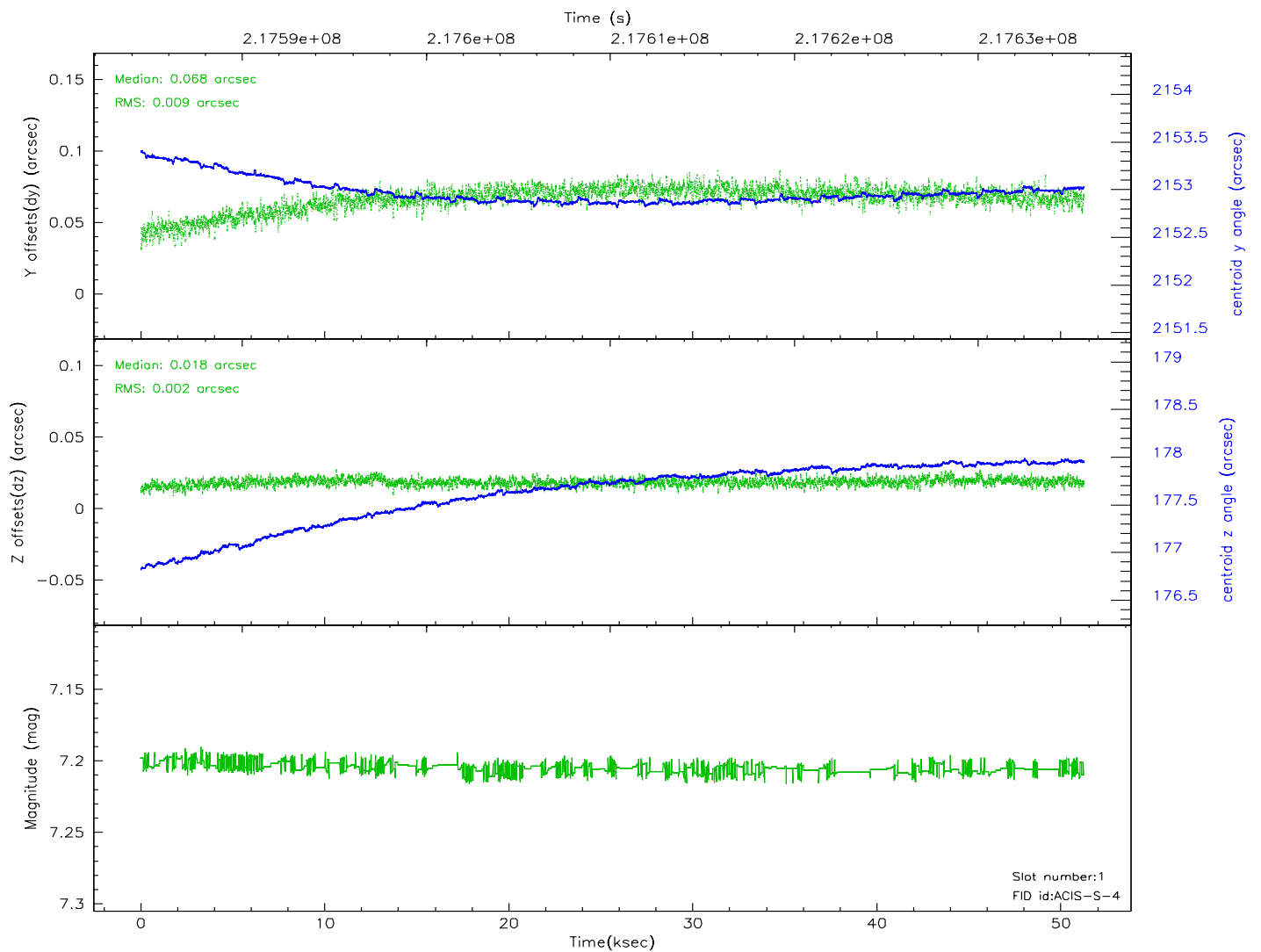
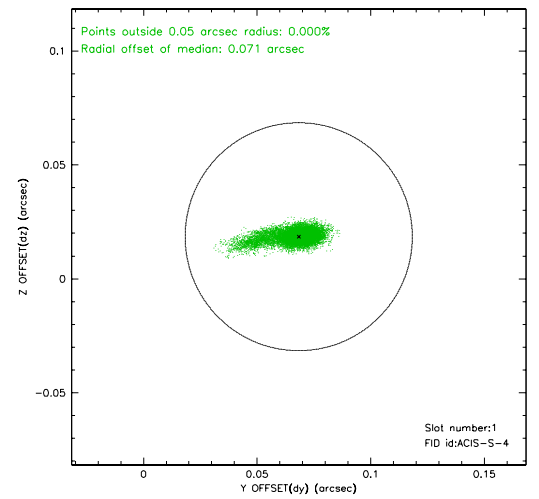
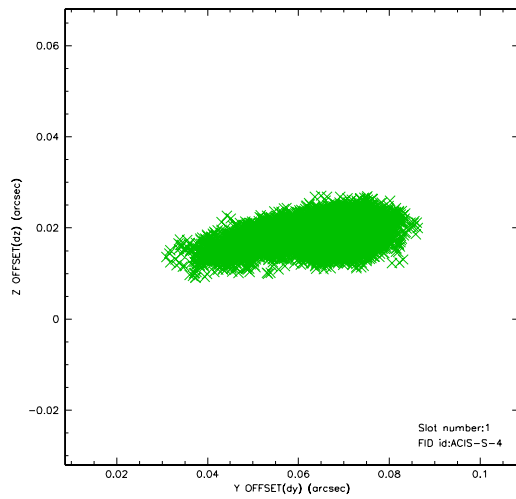


## 2.5 FID Slots

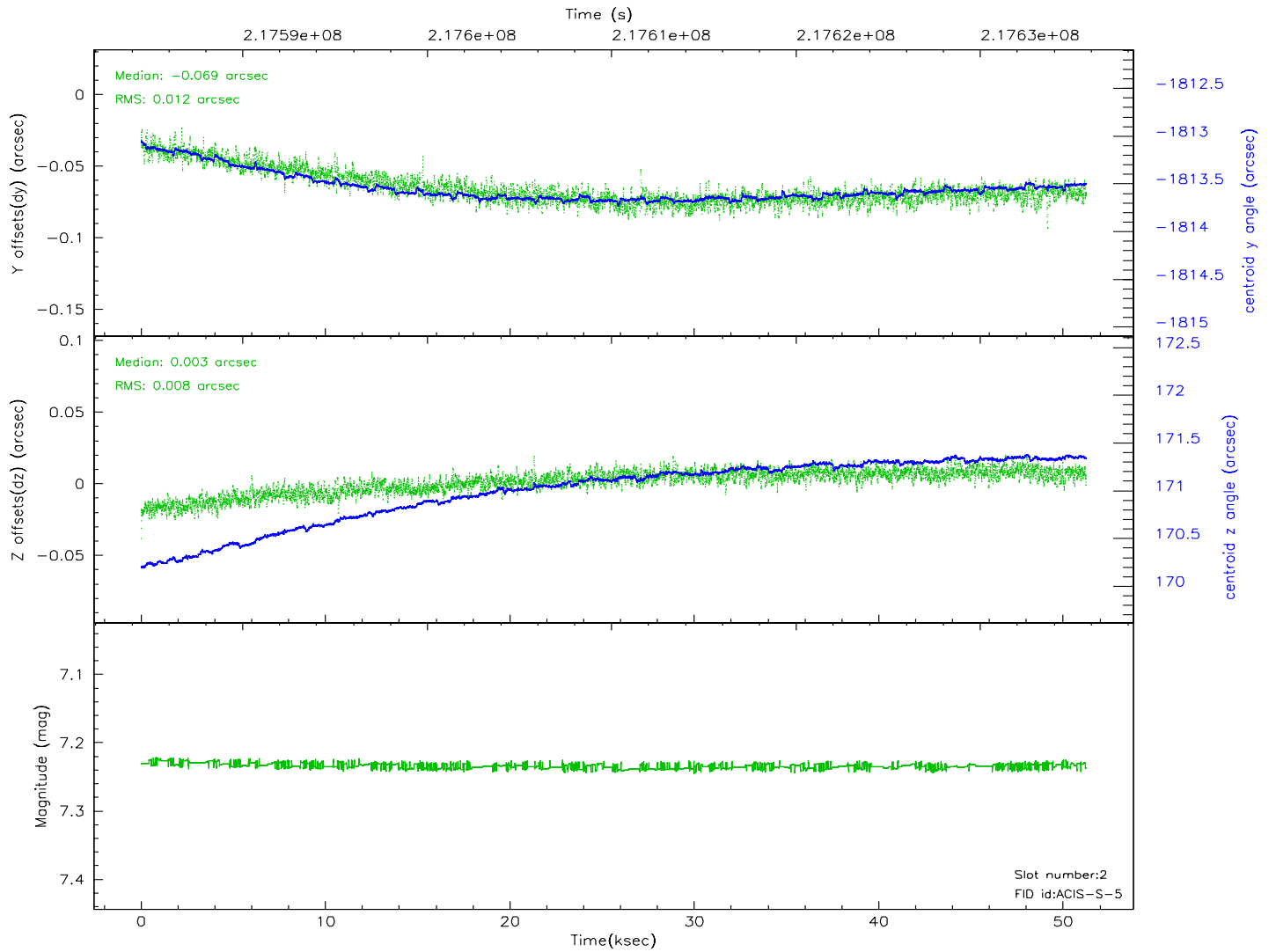
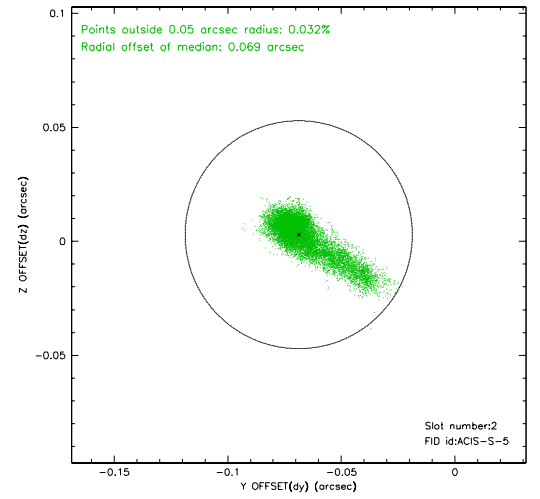
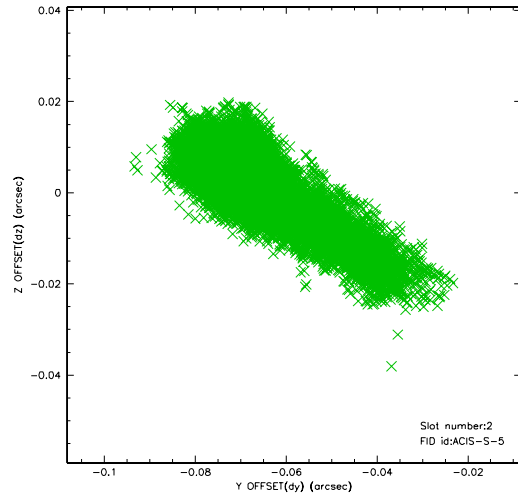
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2

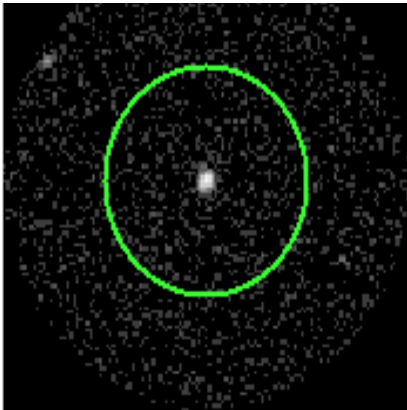


# 3 Gratings

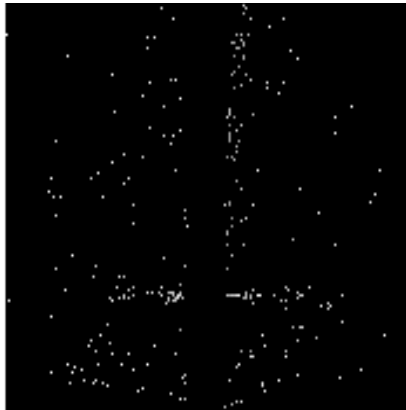
## 3.1 HEG Arm



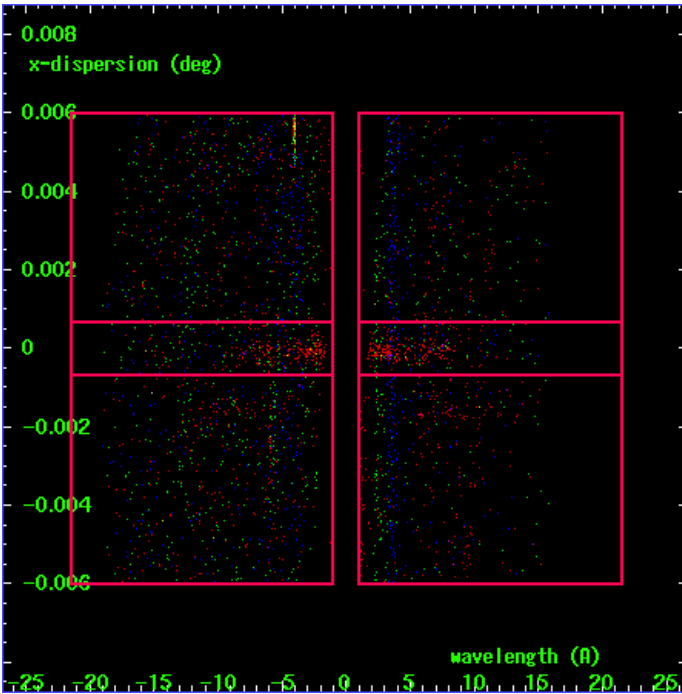
HEG Order Sort 123



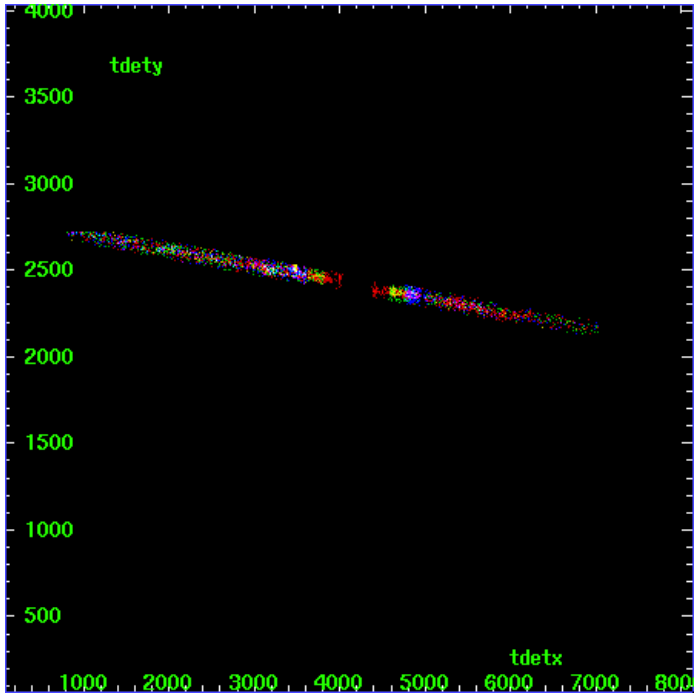
HEG Zero Order



HEG Order Sort ALL

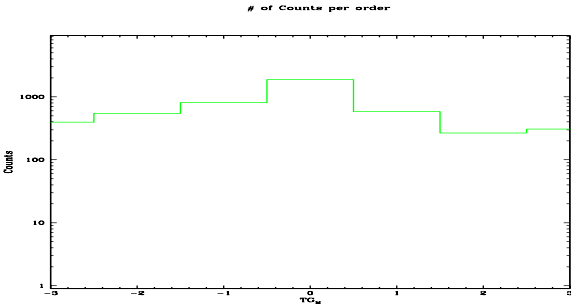


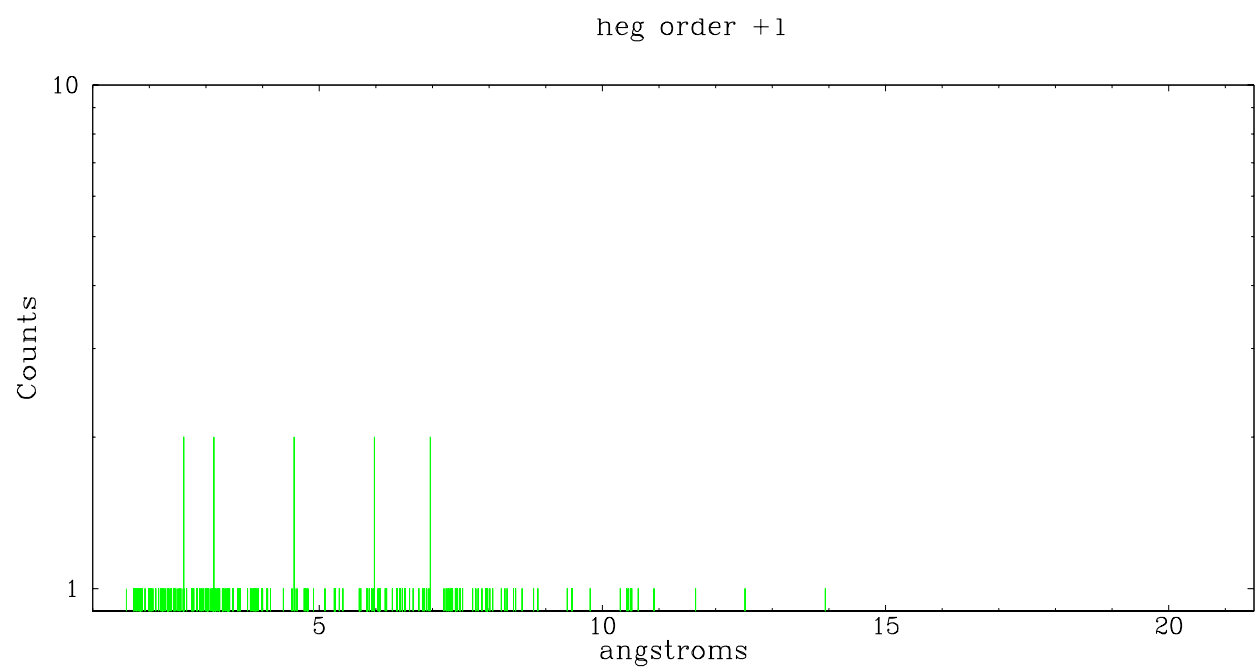
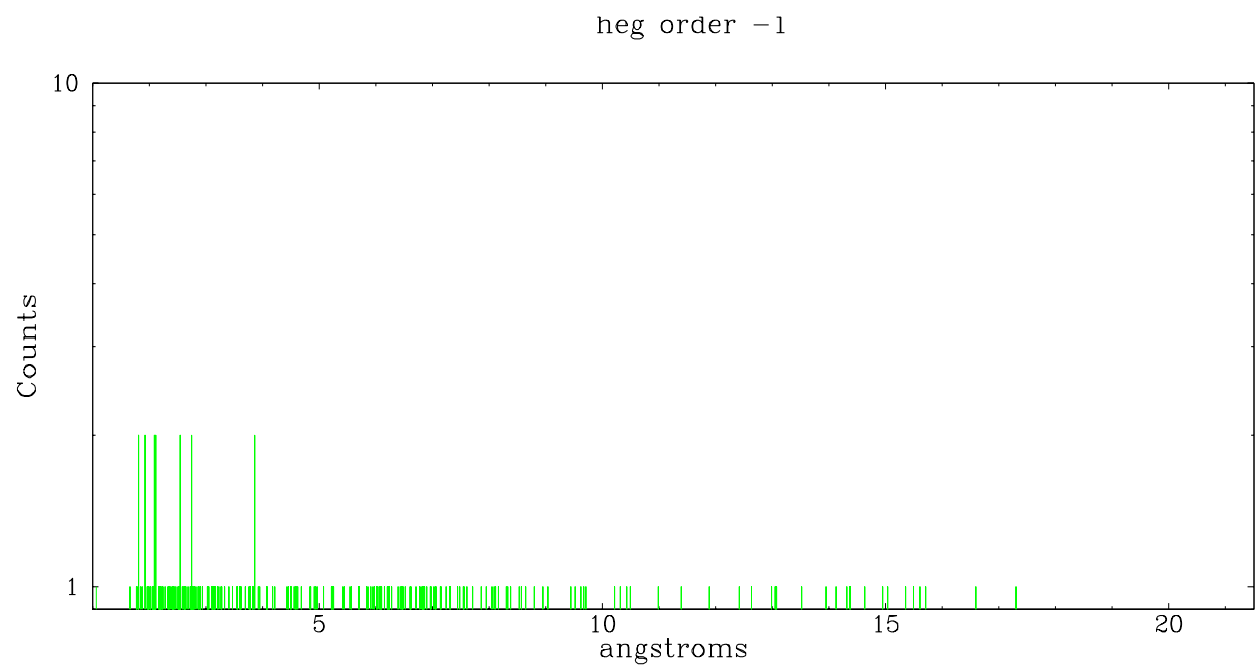
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	396	544	808	1872	584	266	307

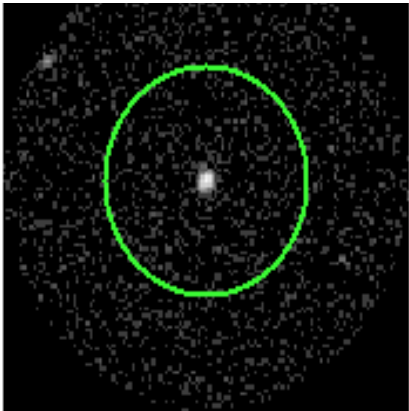




3.2 MEG Arm



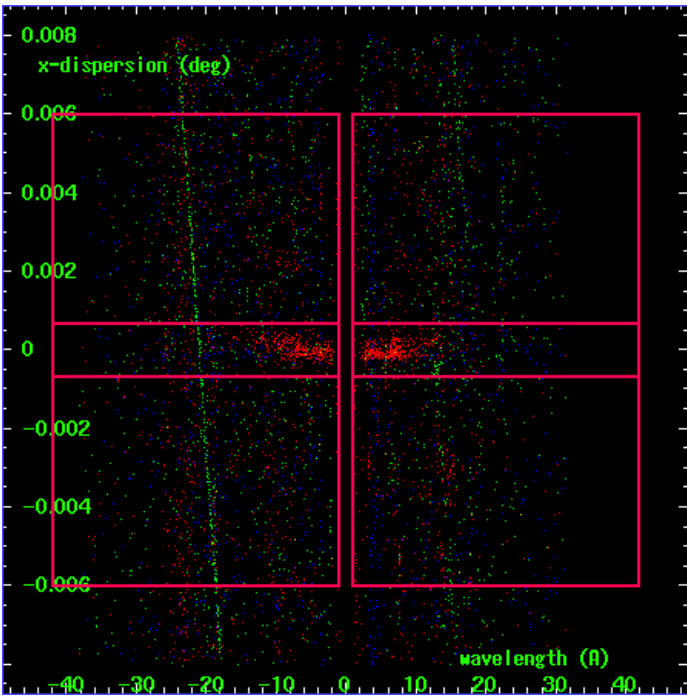
MEG Order Sort 123



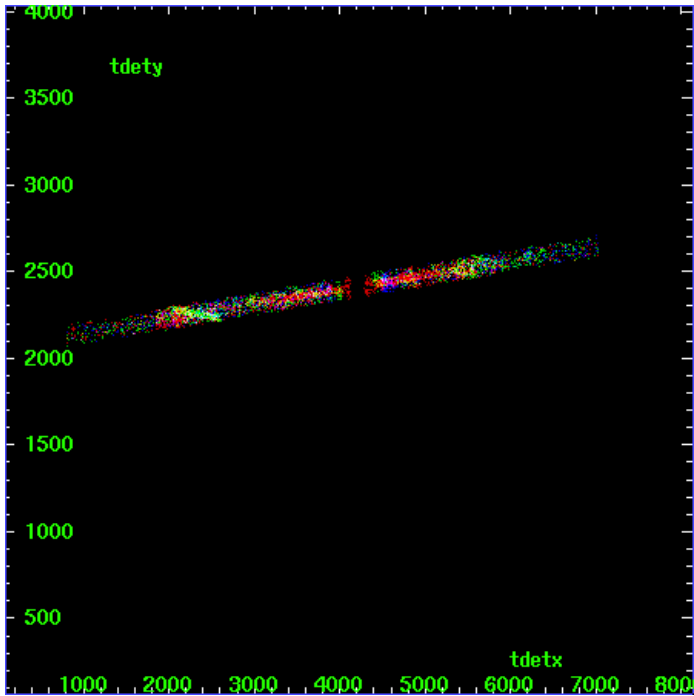
MEG Zero Order



MEG Order Sort ALL

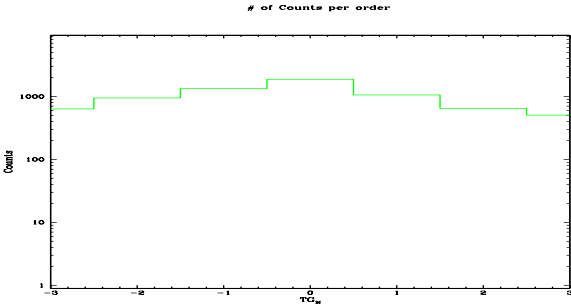


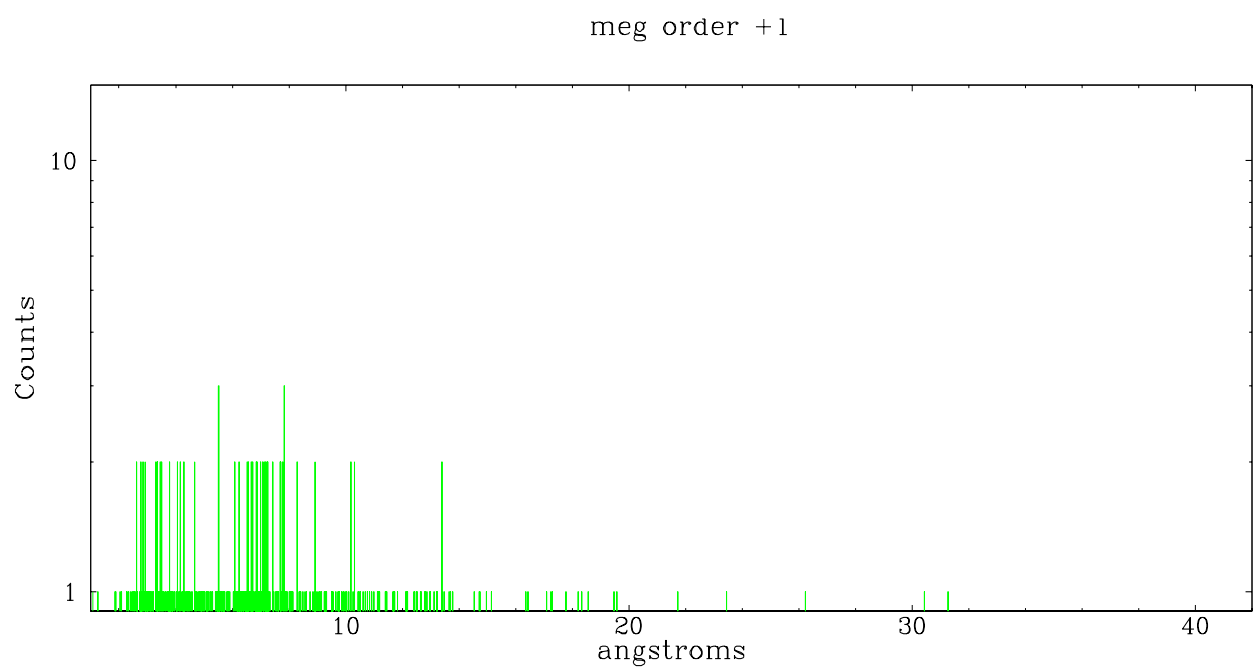
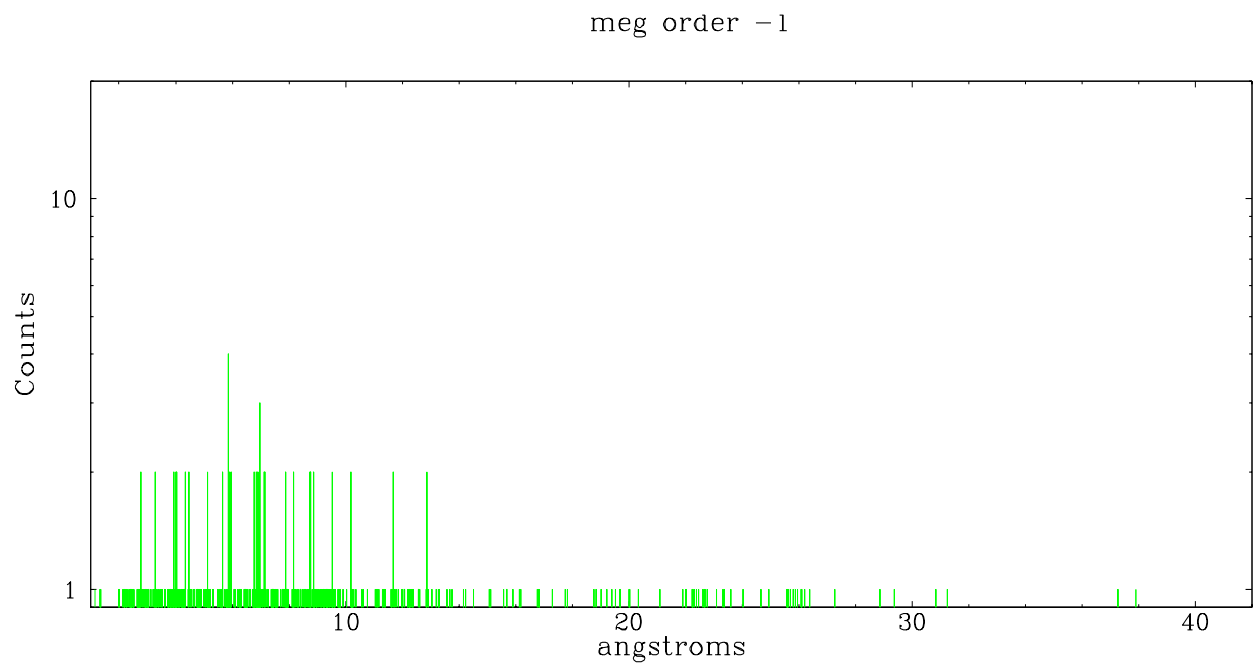
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	633	946	1330	1872	1060	648	507





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	51.251

## A.2 Comments

Multiple sources and dispersed spectra present. Only one spectrum is extracted in standard data processing - the source at 05:35:24.7, -05:28:00. Spectra of other sources can be extracted using CIAO threads.