

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2812 - L2 Version 001  
Chandra X-Ray Center

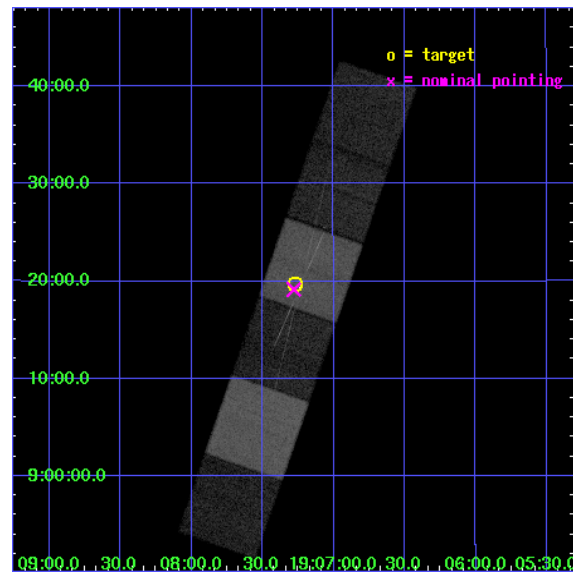
L2 Processing Date : Oct 13 2006

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# 1 Front

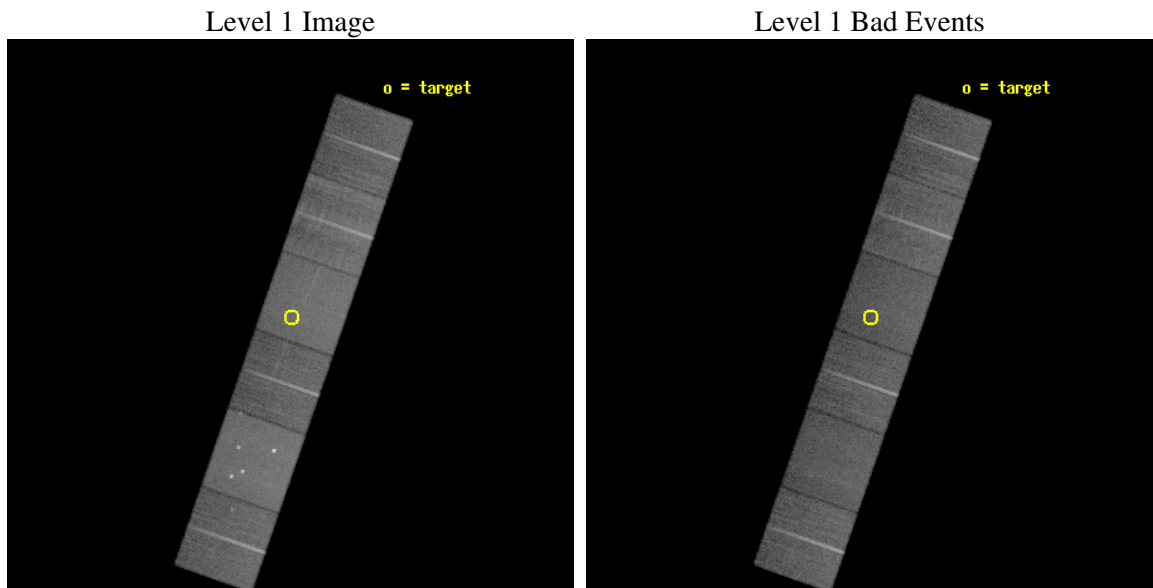
seq_num	500262
obs_id	2812
title	SEARCHING FOR PROTON CYCLOTRON FEATURES IN TWO MAGNETAR CANDIDATES
observer	PROFESSOR LUIGI STELLA
object	SGR 1900+14
dtcycle	0
cycle	P
ra_targ	286.818333
dec_targ	9.328917
ra_nom	286.81988745221
dec_nom	9.3193491413084
roll_nom	289.15657766017
revision	2
ontime	29695.999889374
livetime	29319.97125799
ontime4	29695.999889374
ontime5	29695.999889374
ontime6	29695.999889374
ontime7	29695.999889374
ontime8	29695.999889374
ontime9	29695.999889374
l2events	283703



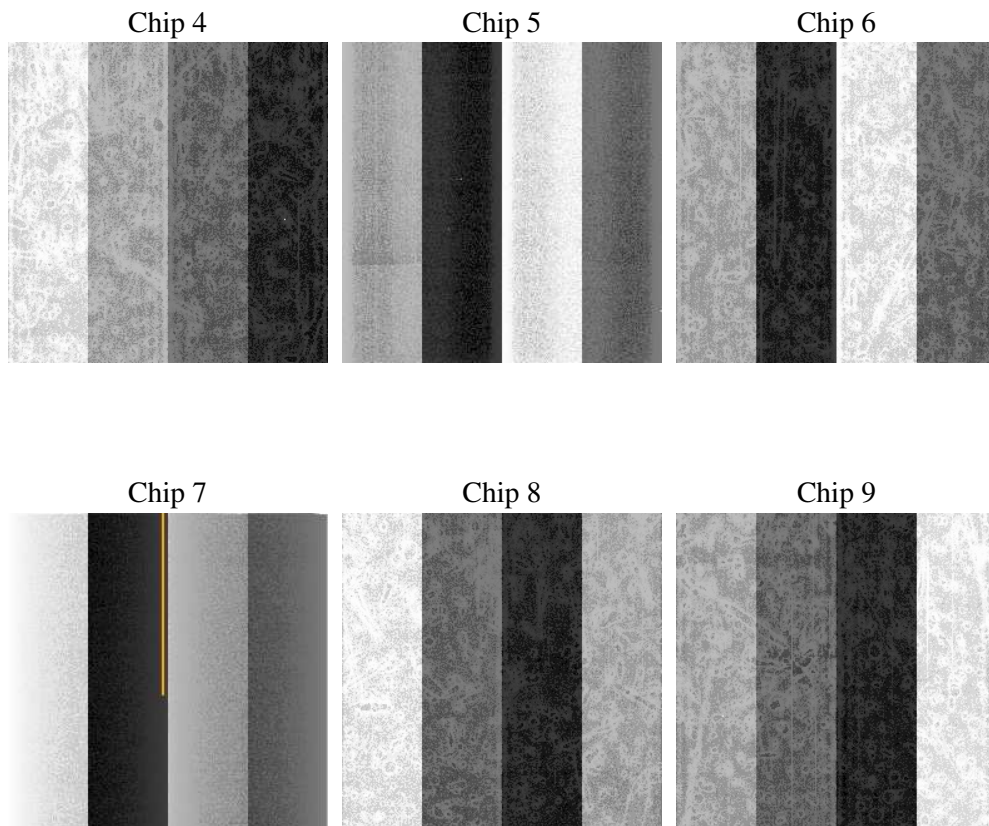
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldsver	3.2.3
date	2006-10-11T23:56:45
revision	2

sched_exp_time	30000.000000
ontime	29700.52693516
ontime4	29700.526905239
ontime5	29700.52693516
ontime6	29700.526905239
ontime7	29700.52693516
ontime8	29700.52693516
ontime9	29700.526905239
l1events	1319465

### 2.1.4 Events

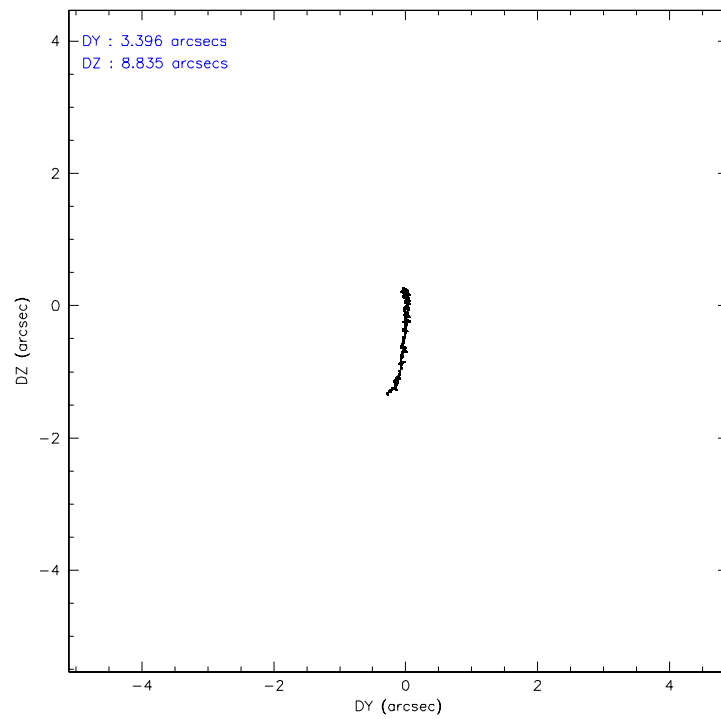
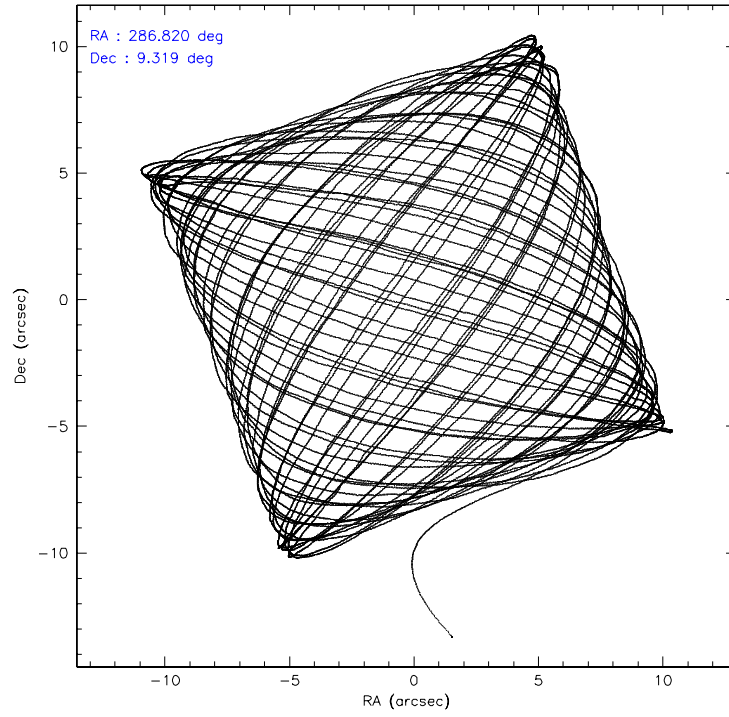
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	199102	270387	185782	244148	237604	182442
rejected events	175753	146415	161843	147566	183309	159667
rejected %	88%	54%	87%	60%	77%	87%

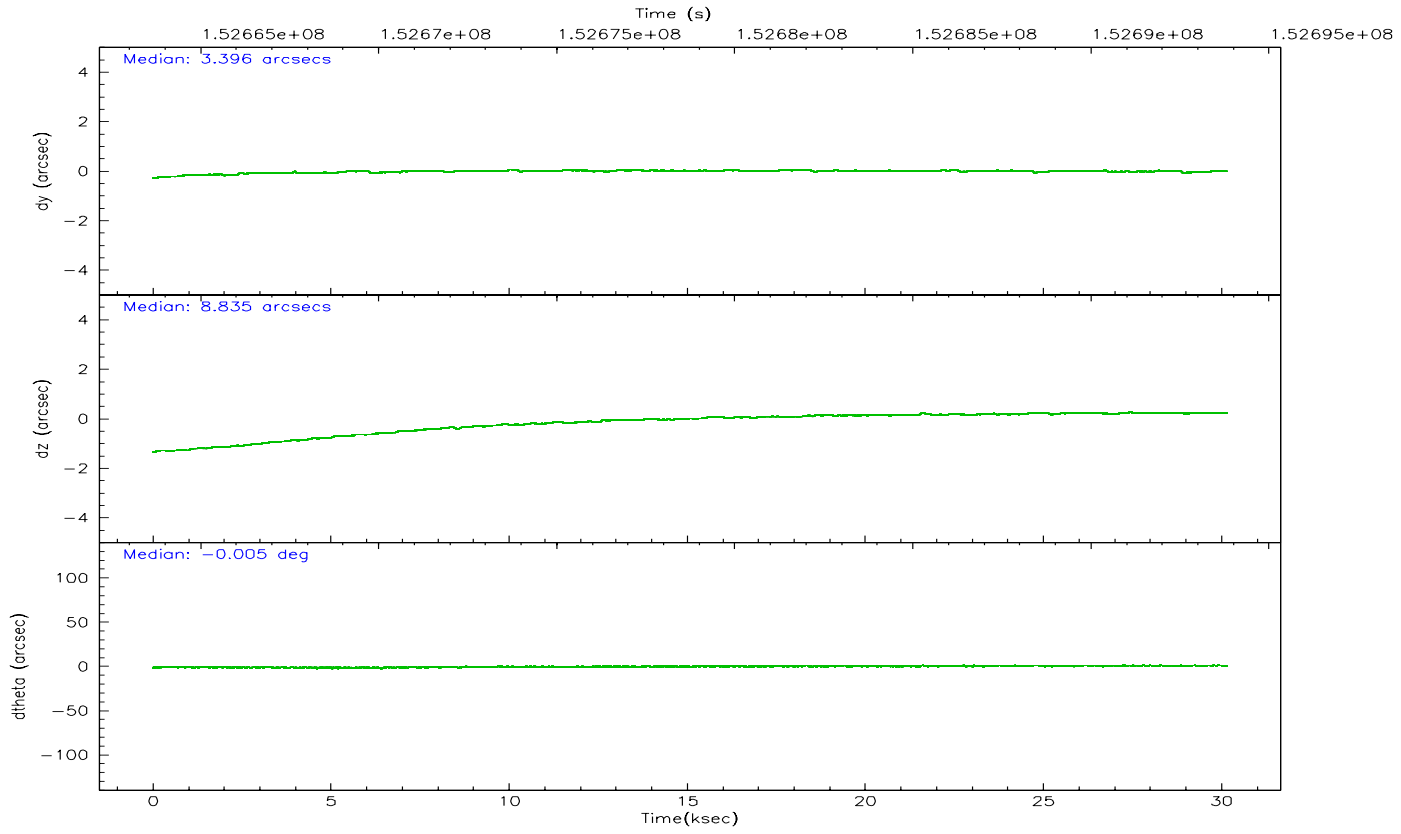
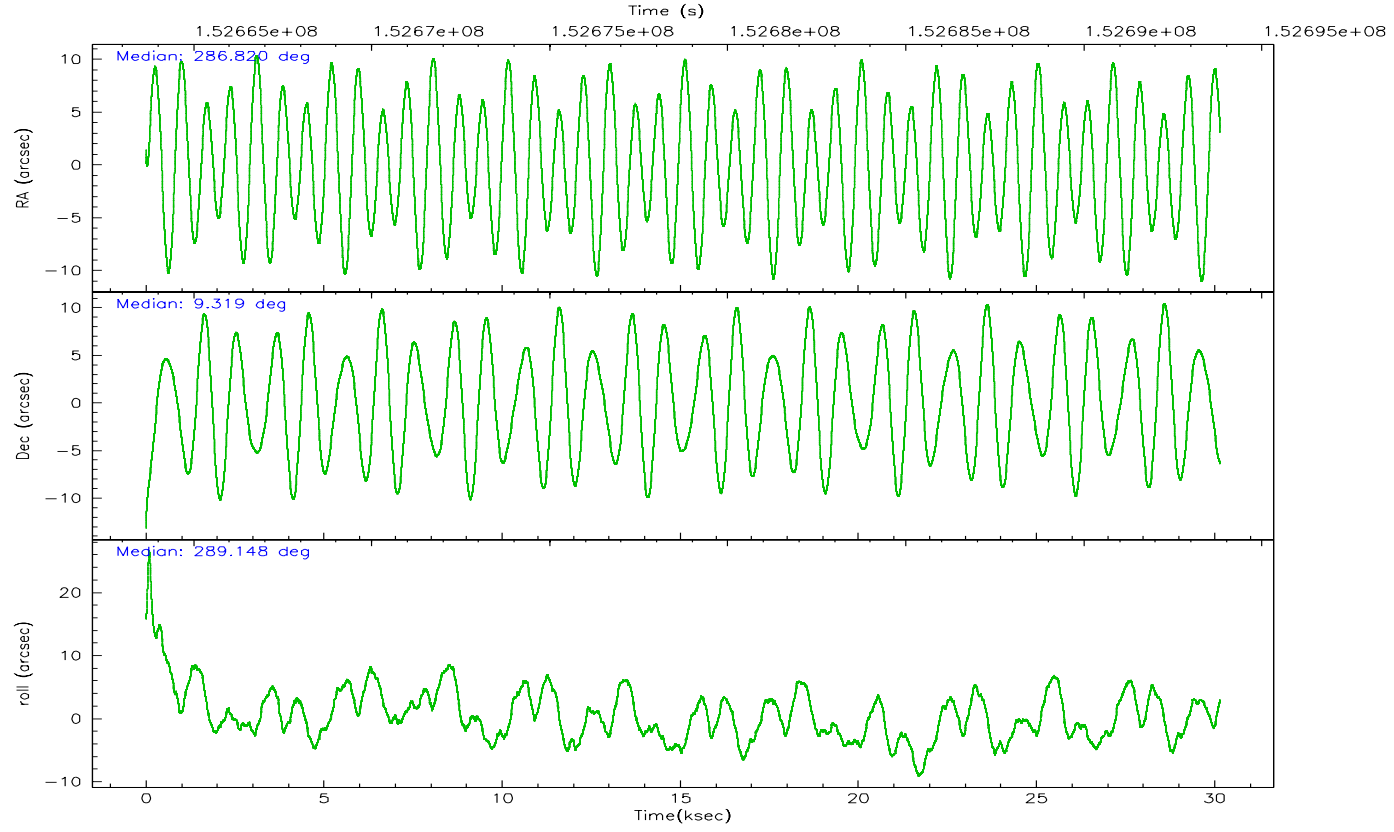
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	10462	17650	10120	5883	17343	9463
	5%	6%	5%	2%	7%	5%
grade 1 events	186	332	87	145	172	102
	0%	0%	0%	0%	0%	0%
grade 2 events	4847	35523	4803	24058	11316	4394
	2%	13%	2%	9%	4%	2%
grade 3 events	2223	2539	2235	5162	6149	2308
	1%	0%	1%	2%	2%	1%
grade 4 events	2309	2494	2198	5063	5569	2216
	1%	0%	1%	2%	2%	1%
grade 5 events	7647	12686	7985	15881	10773	8616
	3%	4%	4%	6%	4%	4%
grade 6 events	3511	65776	4586	56428	13920	4397
	1%	24%	2%	23%	5%	2%
grade 7 events	167917	133387	153768	131528	172362	150946
	84%	49%	82%	53%	72%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	286.798751	286.8198874522121	Subarray requested	NONE	NONE
Pointing Dec	9.336895	9.319349141308352	Alternating exposures requested	N	N
Pointing Roll	289.003387	289.1565776601658	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	152663824.184000	152662862.40456			
Observation start date	2002-11-02T22:36:00	2002-11-02T22:21:02			
Observation end time	152693824.184000	152694454.44337			
Observation end date	2002-11-03T06:56:00	2002-11-03T07:07:34			
Read mode	TIMED	TIMED			

## 2.3 Aspect





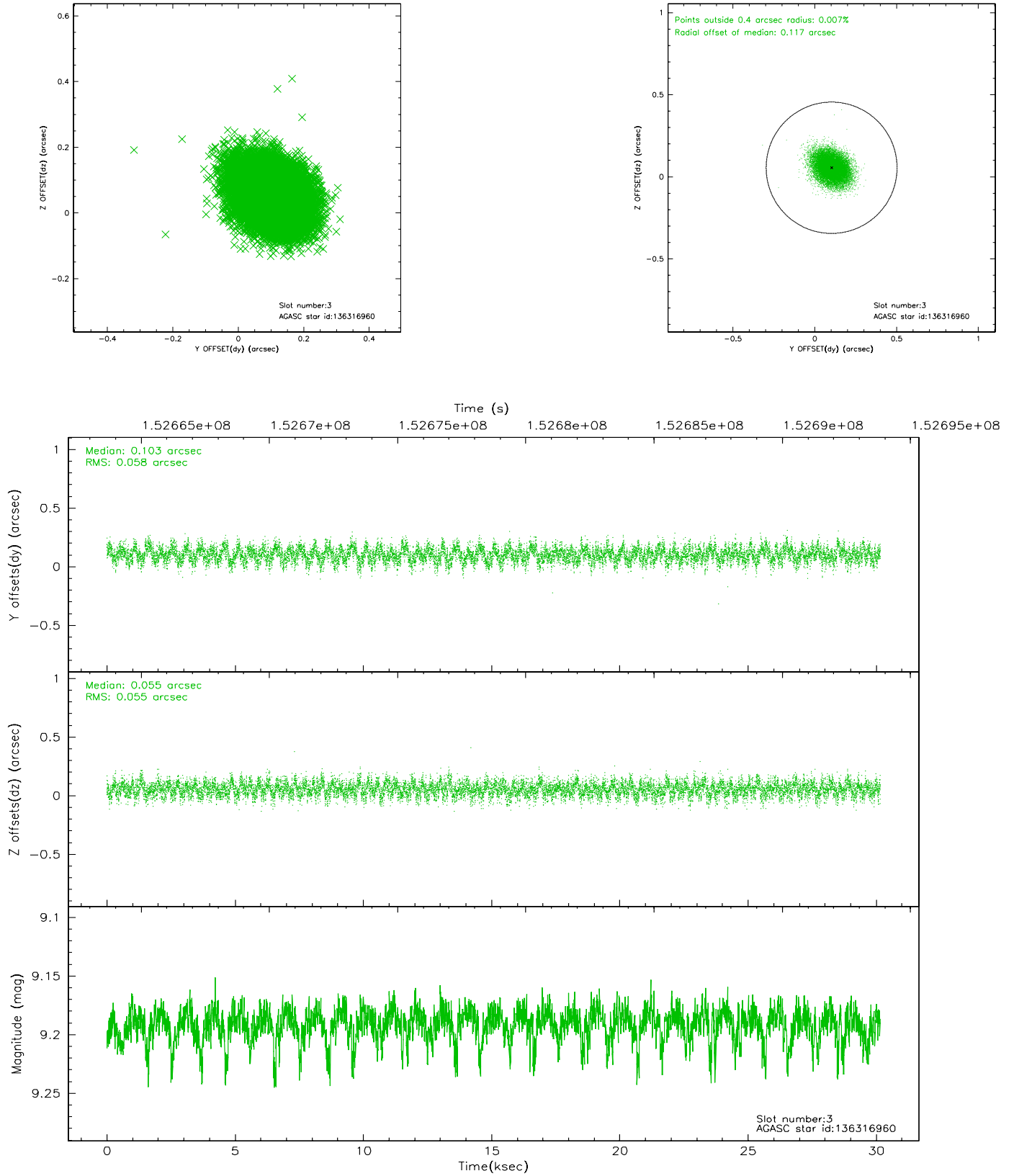
### Slot Statistics

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	7354	-0.042	-0.011	0.009	0.014	0.000000	0.000000	-755.83	-1792.02
1	FID	ACIS-S-4	7.20	7355	-0.006	0.023	0.008	0.013	0.000000	0.000000	2157.41	116.46
2	FID	ACIS-S-5	7.23	7356	0.017	-0.004	0.008	0.013	0.000000	0.000000	-1808.56	110.11
3	GUIDE	136316960	9.19	14708	0.103	0.055	0.086	0.137	287.104881	9.133555	1045.68	790.82
4	GUIDE	136317768	9.48	14661	0.092	-0.016	0.099	0.160	286.604147	8.690245	1975.45	-1412.47
5	GUIDE	136323720	8.86	14708	0.005	-0.053	0.092	0.151	286.331708	8.774626	1372.03	-2229.96
6	GUIDE	136849008	9.63	14700	-0.094	0.129	0.129	0.207	287.041390	10.029261	-2077.49	1624.81
7	GUIDE	136841600	9.69	14701	-0.103	-0.118	0.114	0.191	286.277350	9.785919	-2132.43	-1222.46

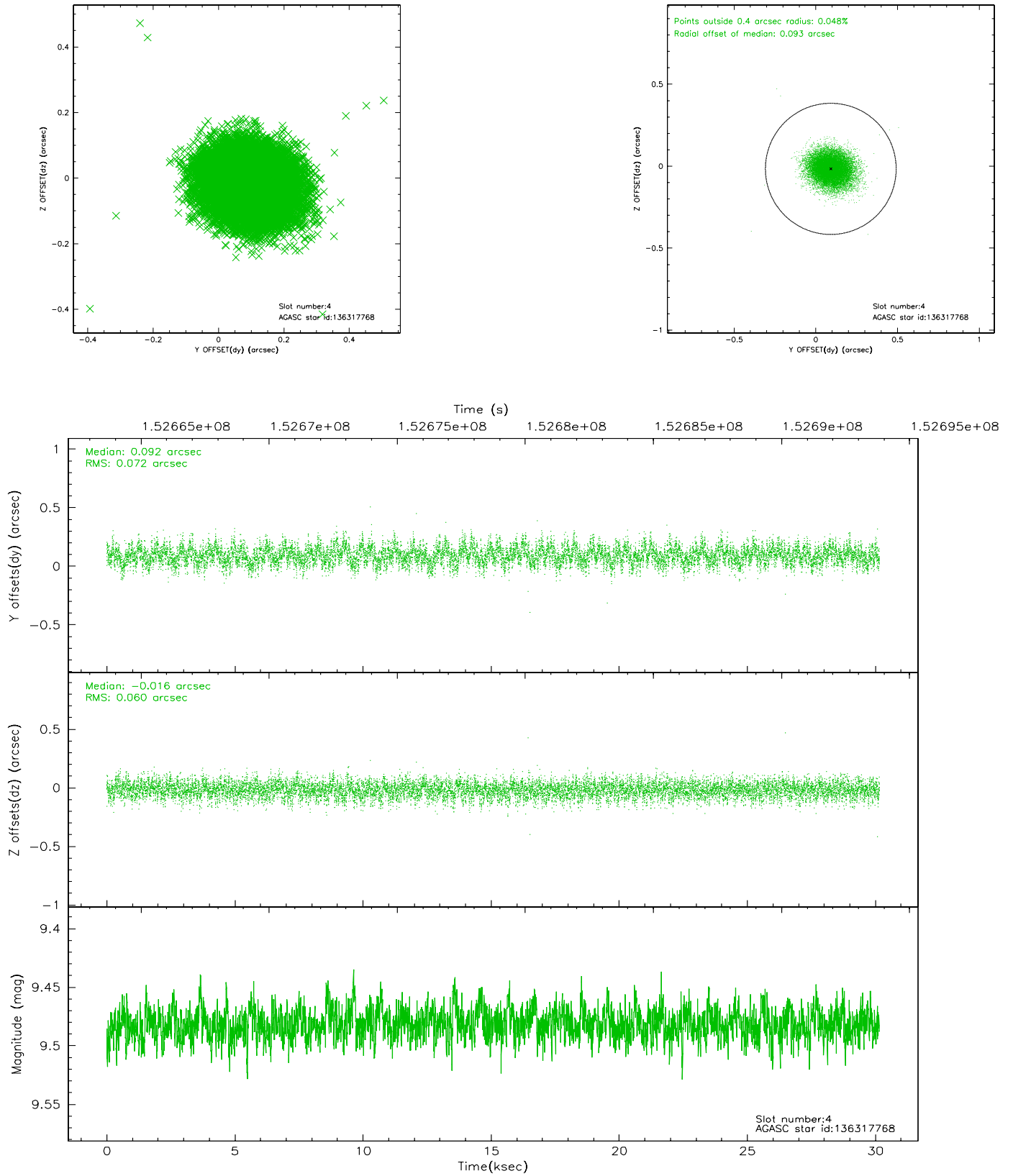


## 2.4 Star Slots

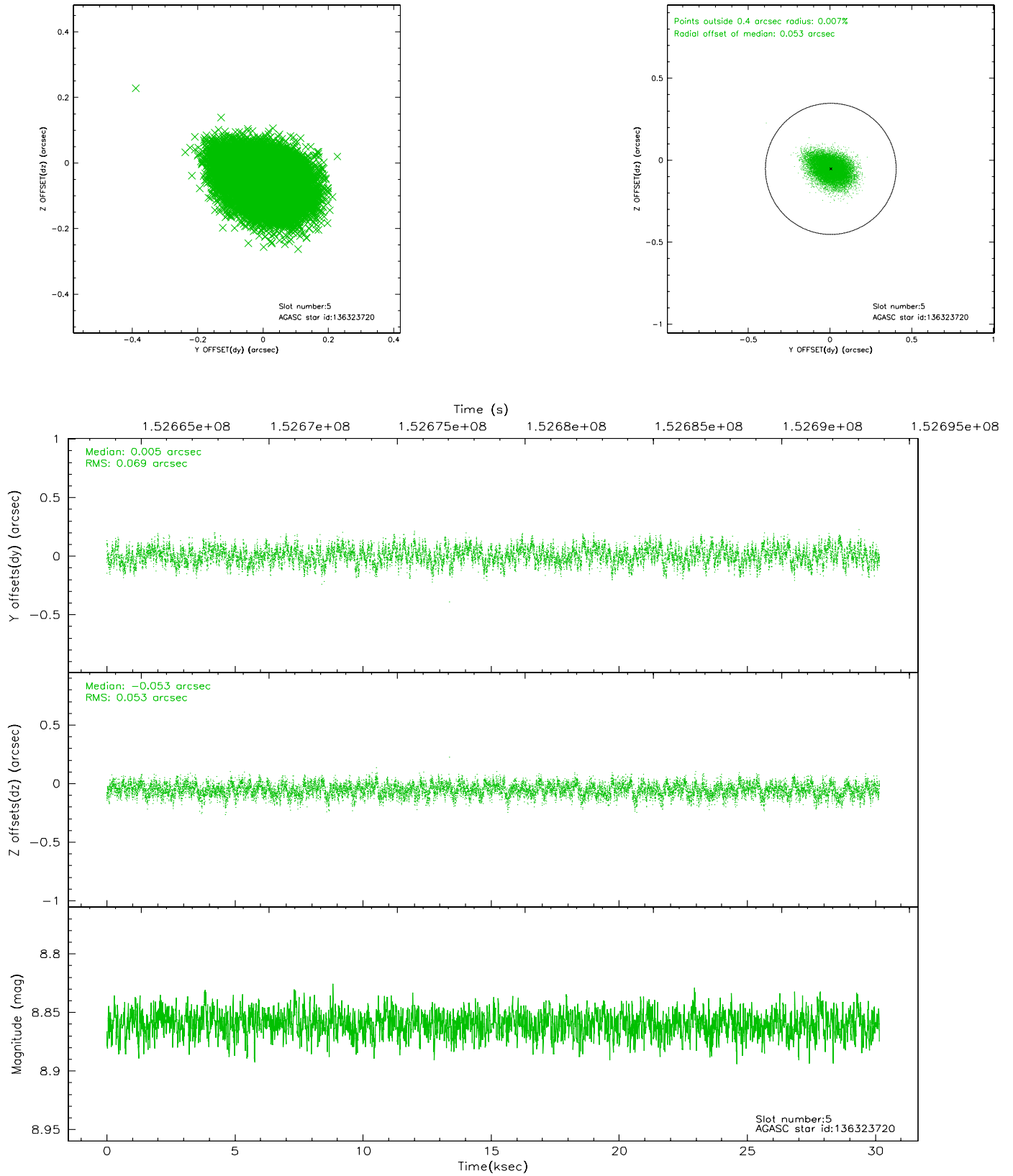
### 2.4.1 Slot 3



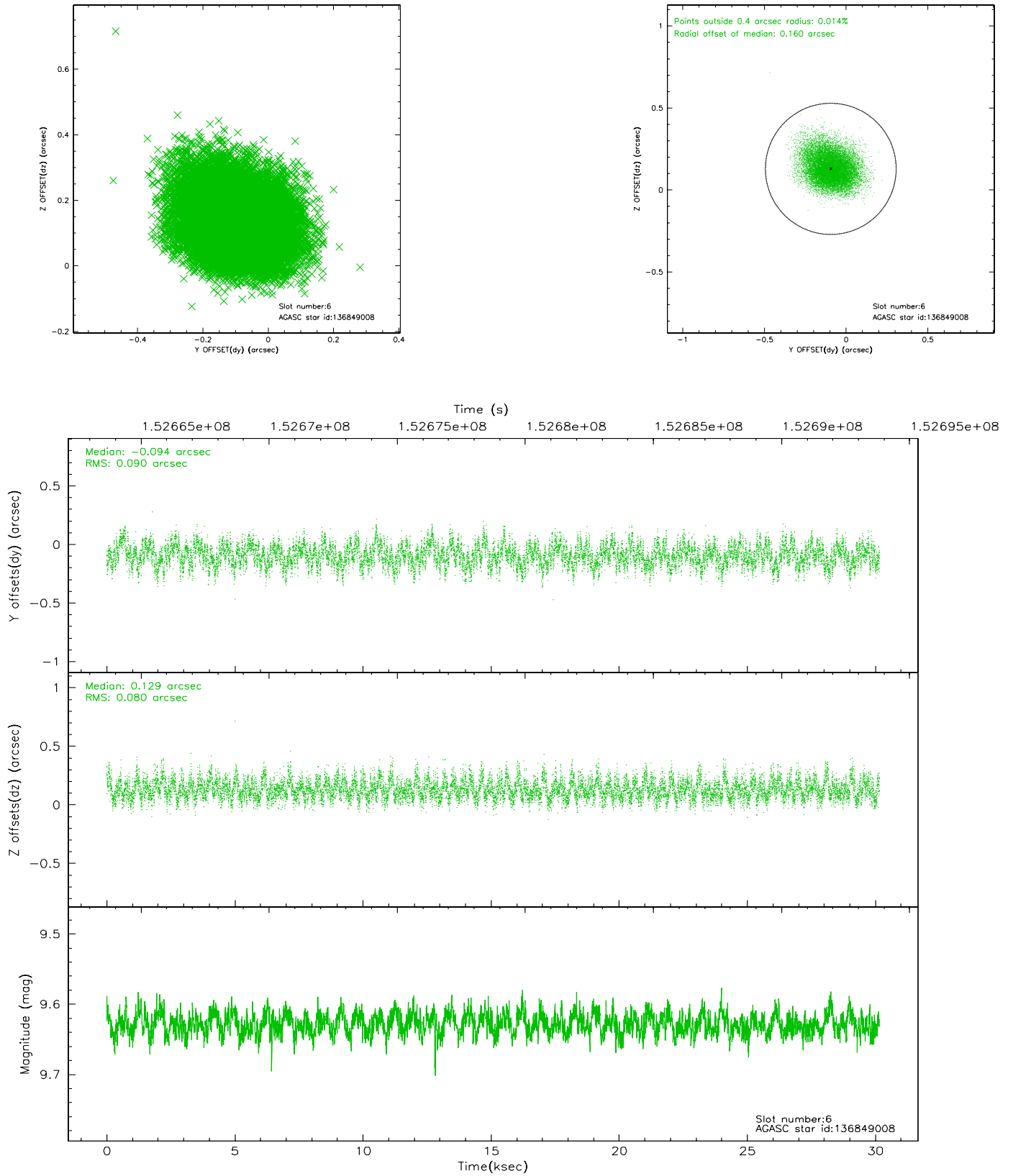
## 2.4.2 Slot 4



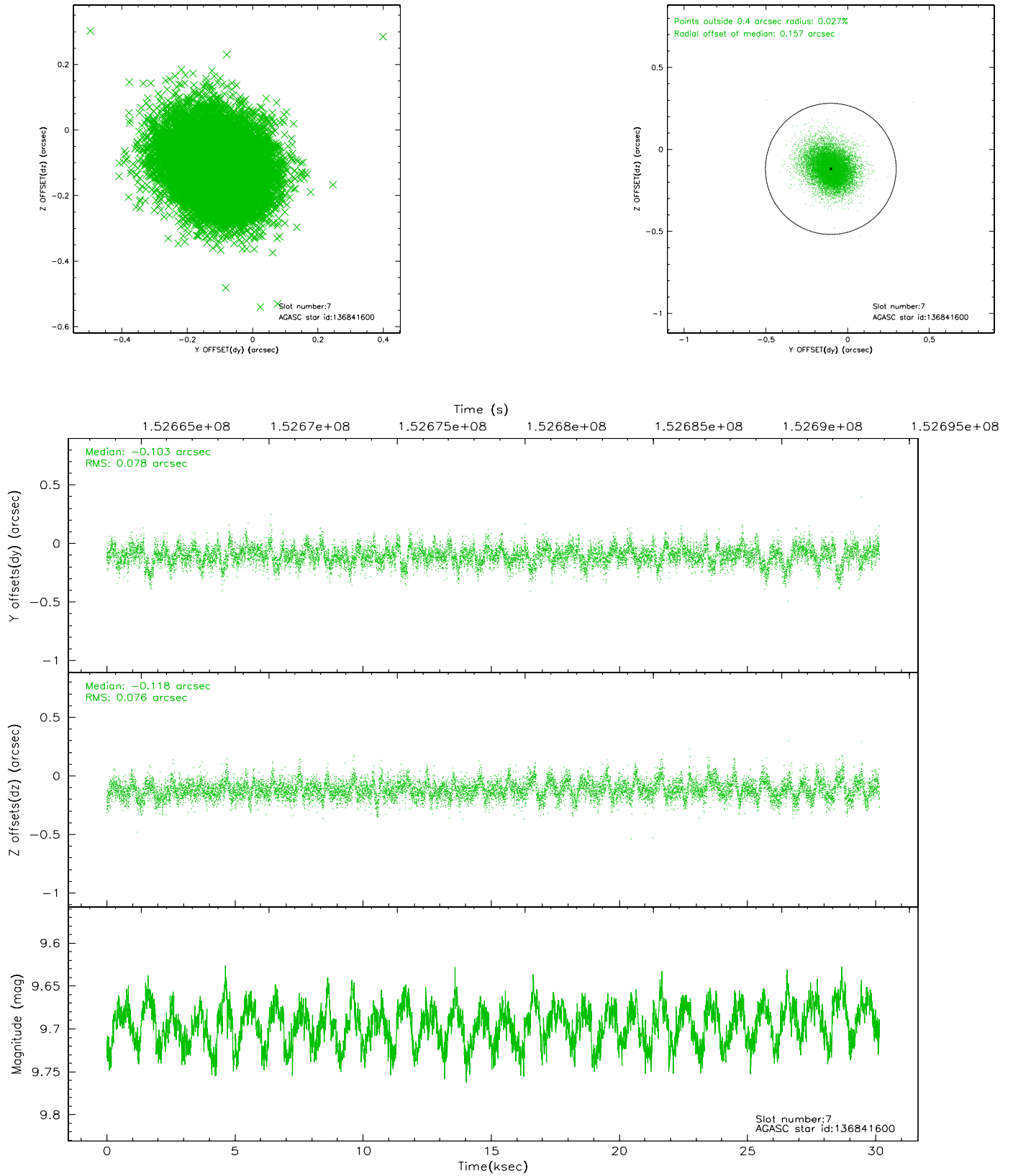
### 2.4.3 Slot 5



## 2.4.4 Slot 6

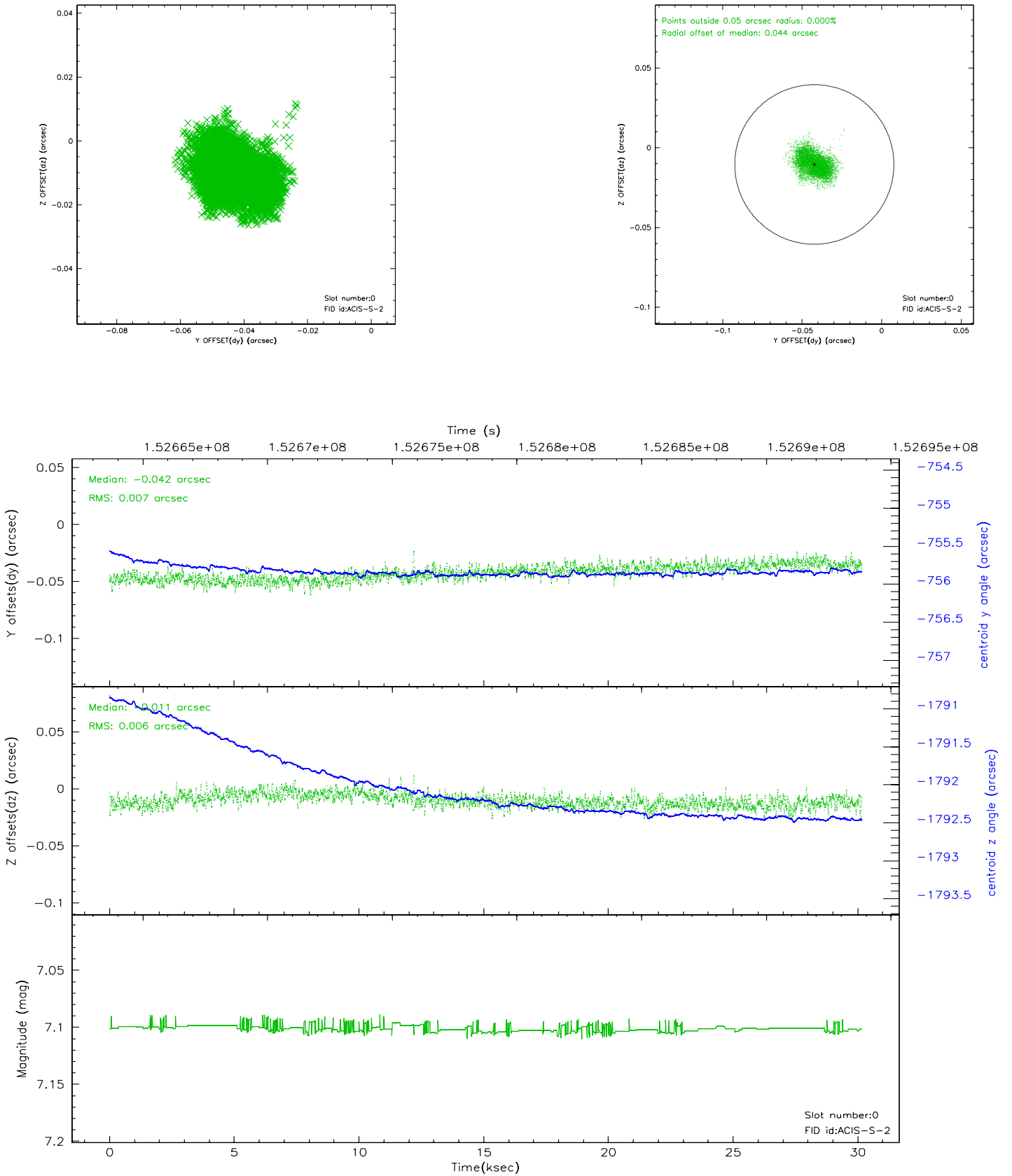


## 2.4.5 Slot 7

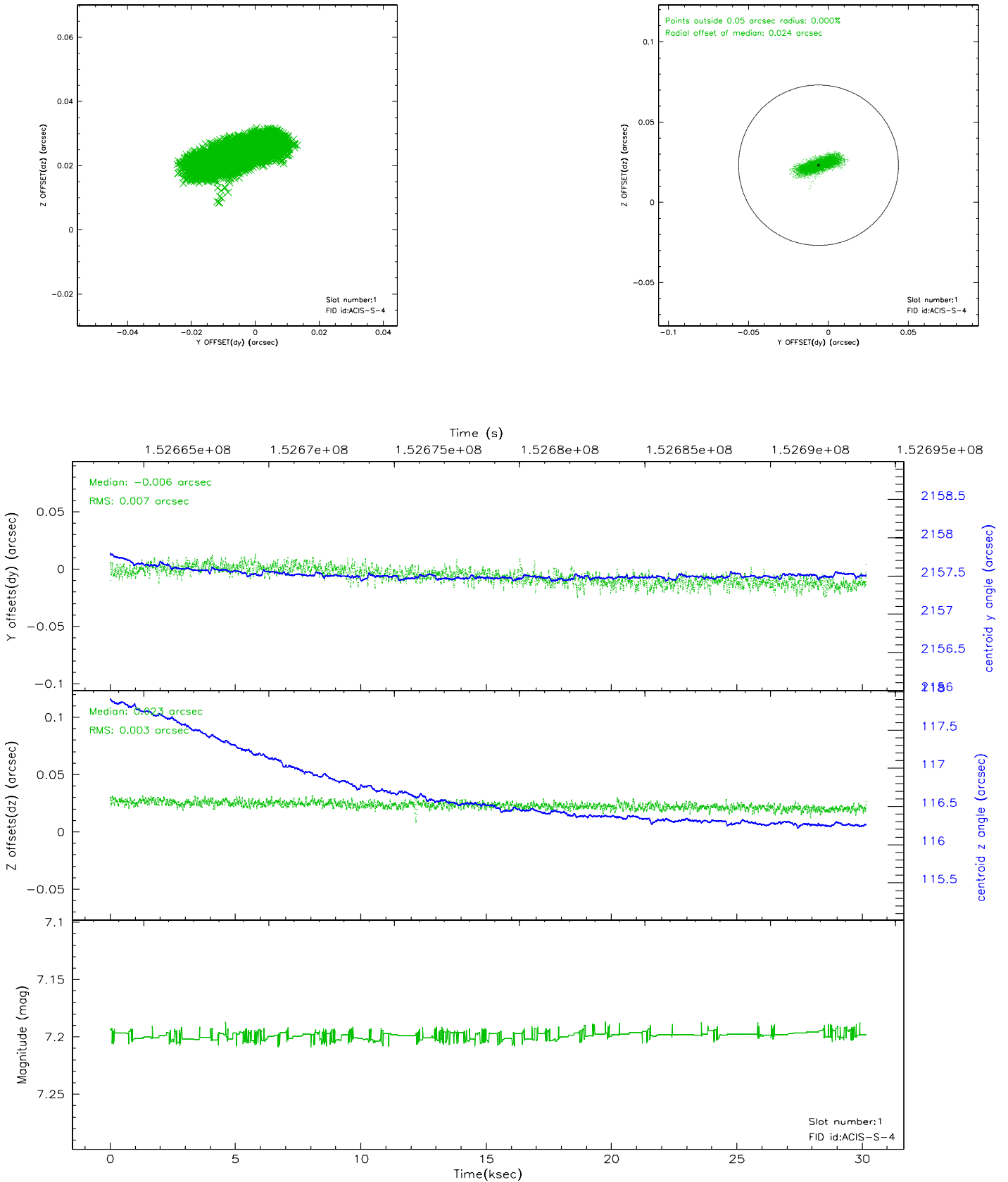


## 2.5 FID Slots

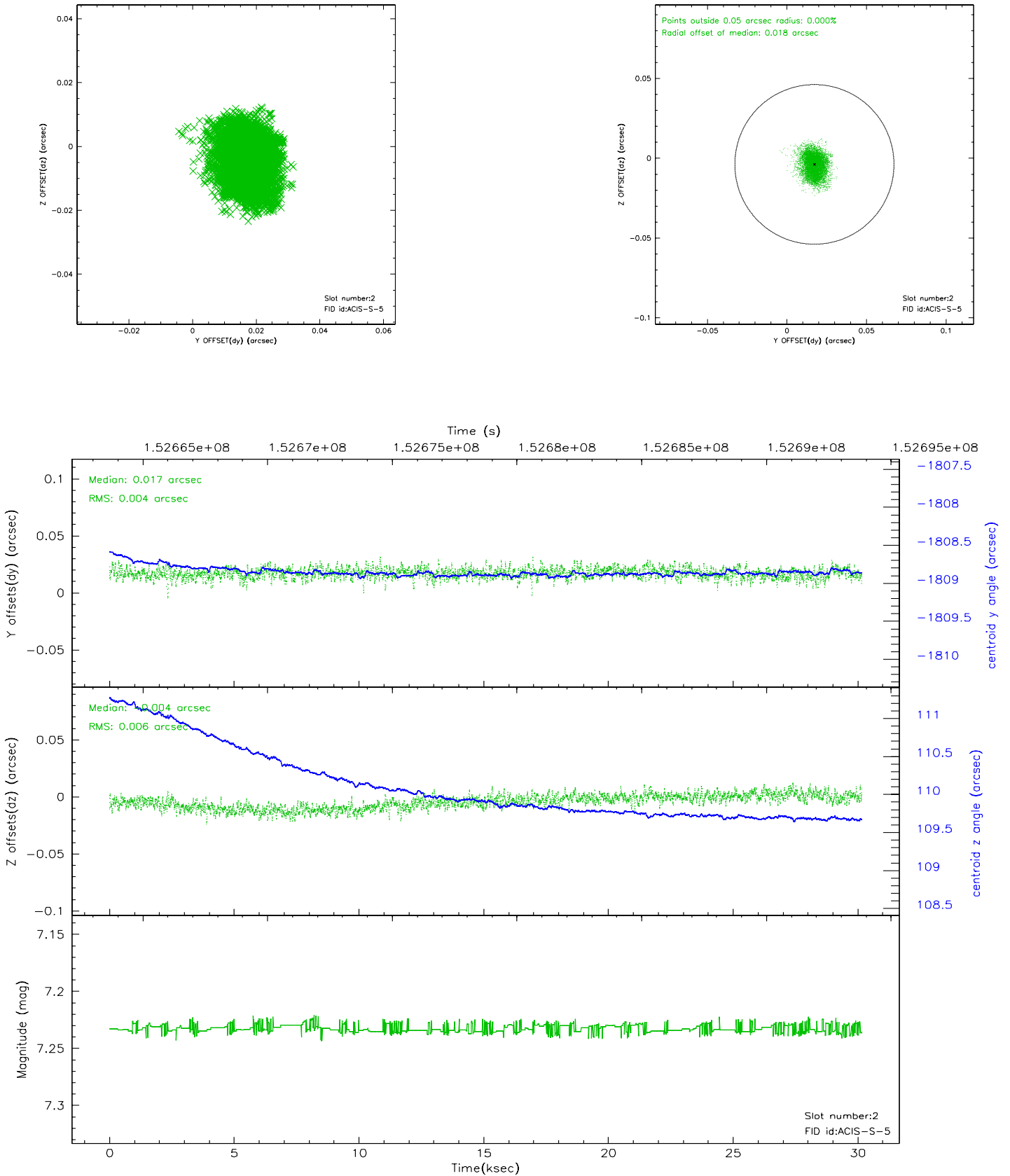
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



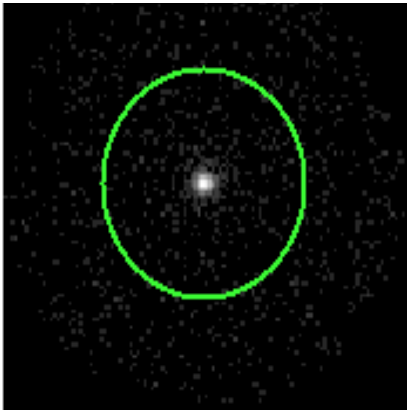


# 3 Gratings

## 3.1 HEG Arm



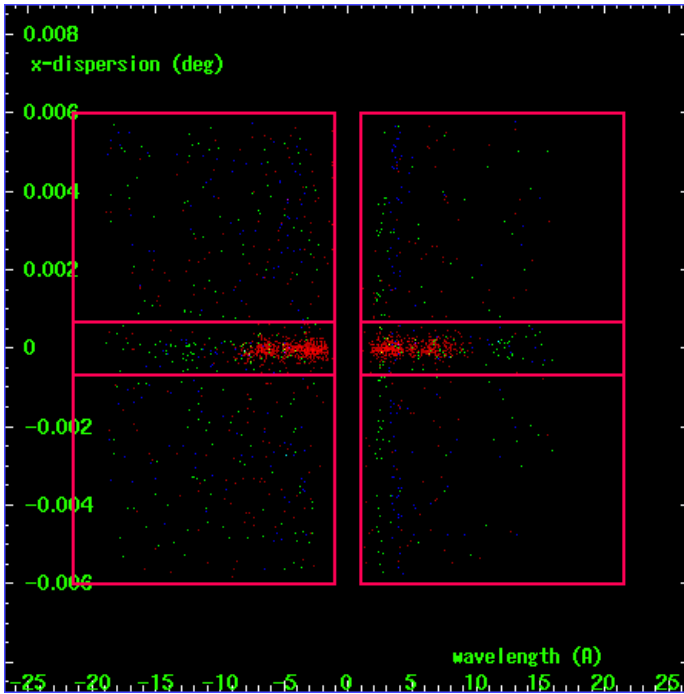
HEG Order Sort 123



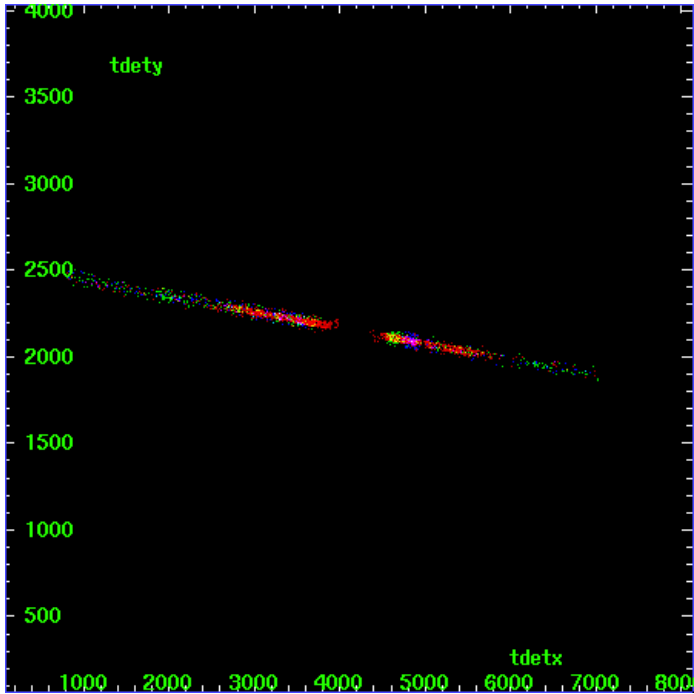
HEG Zero Order



HEG Order Sort ALL

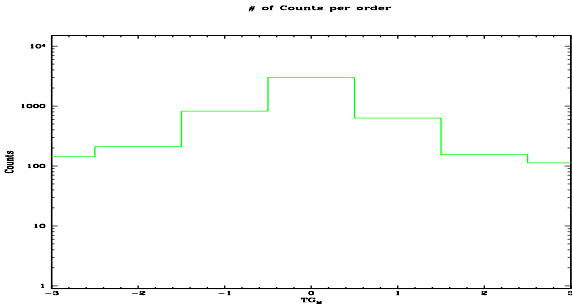


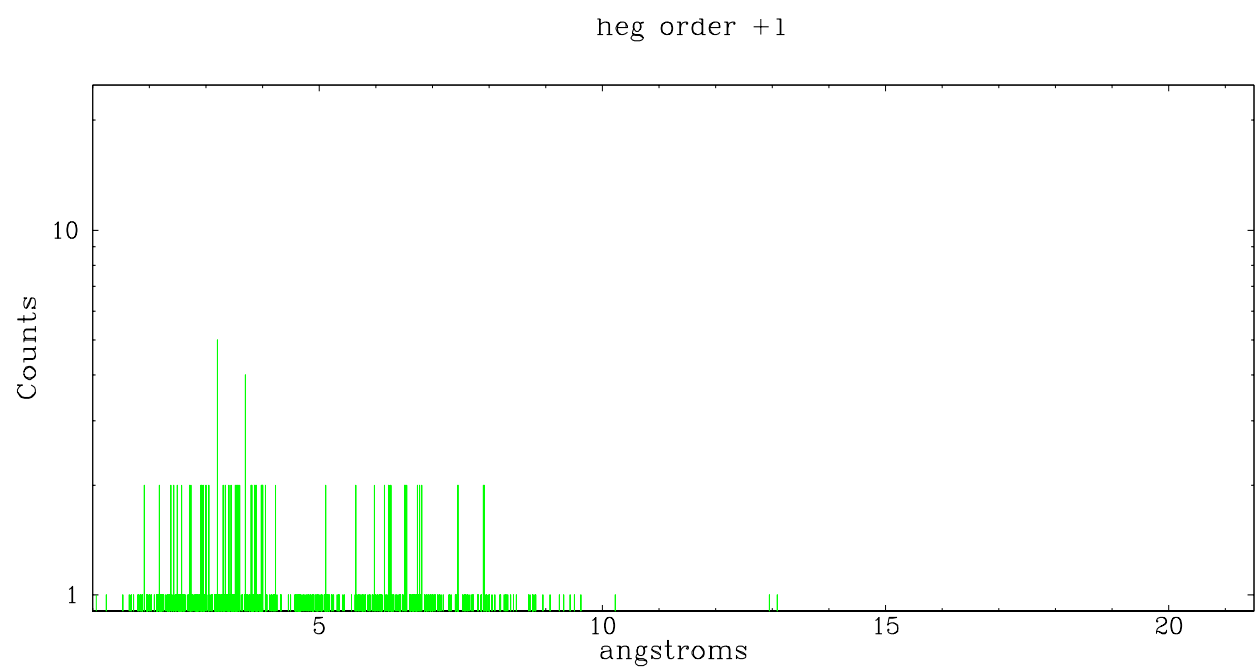
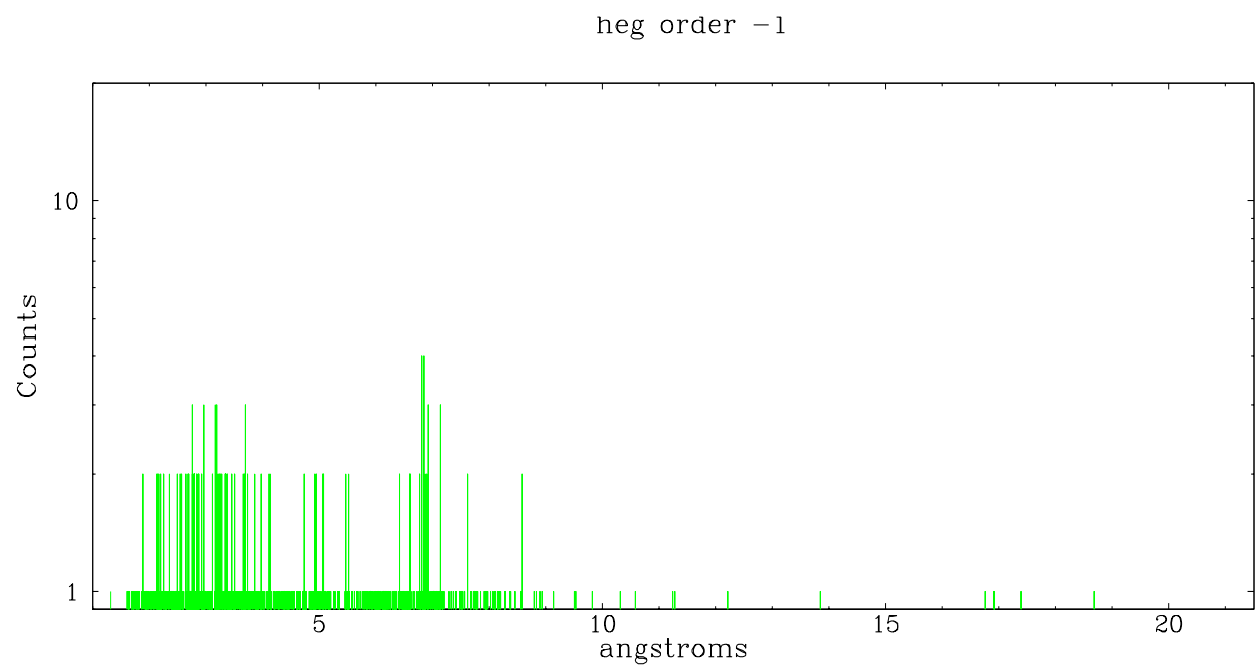
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	143	211	824	2989	631	155	113

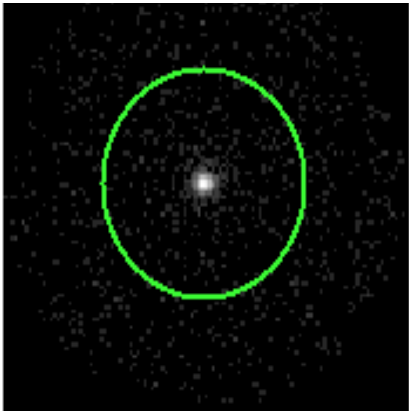




3.2 MEG Arm



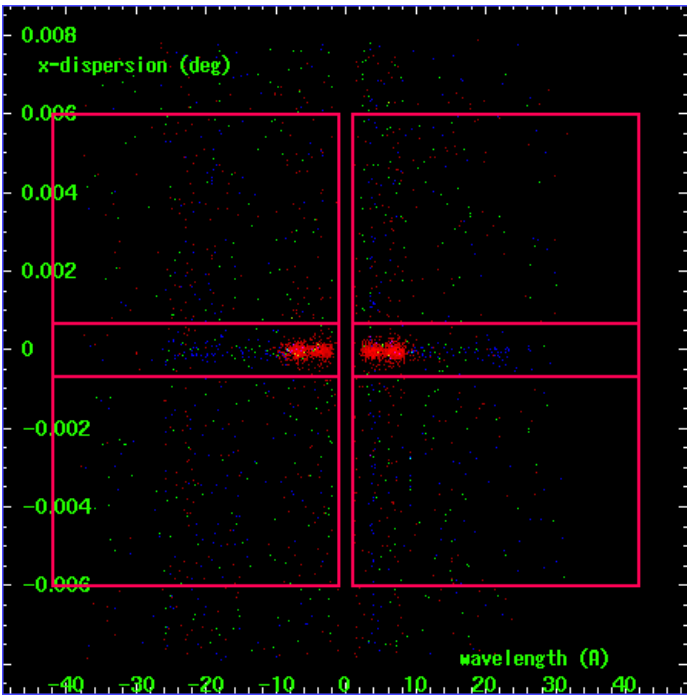
MEG Order Sort 123



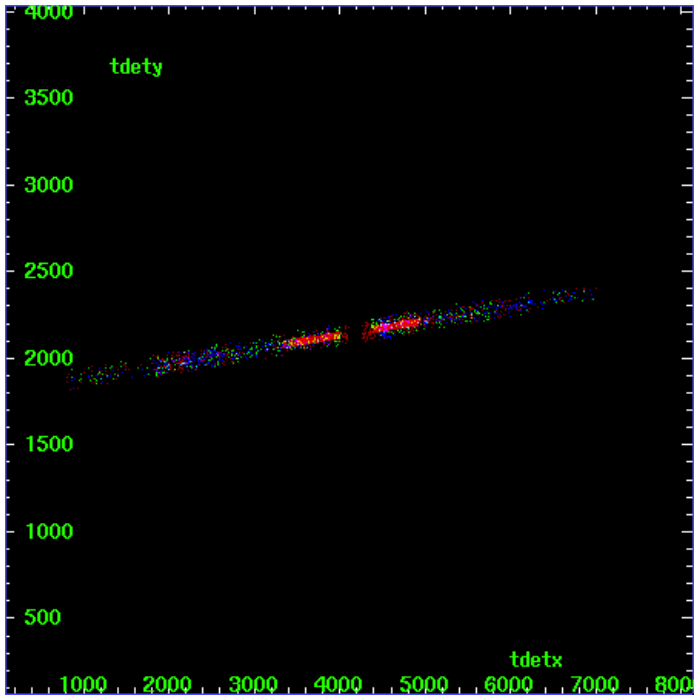
MEG Zero Order



MEG Order Sort ALL

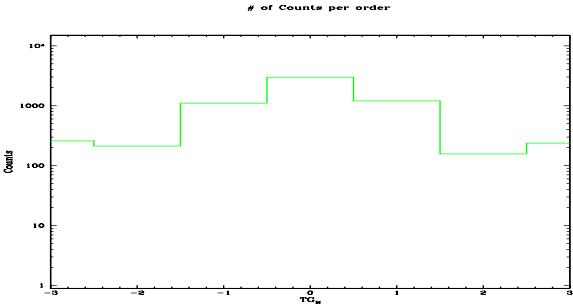


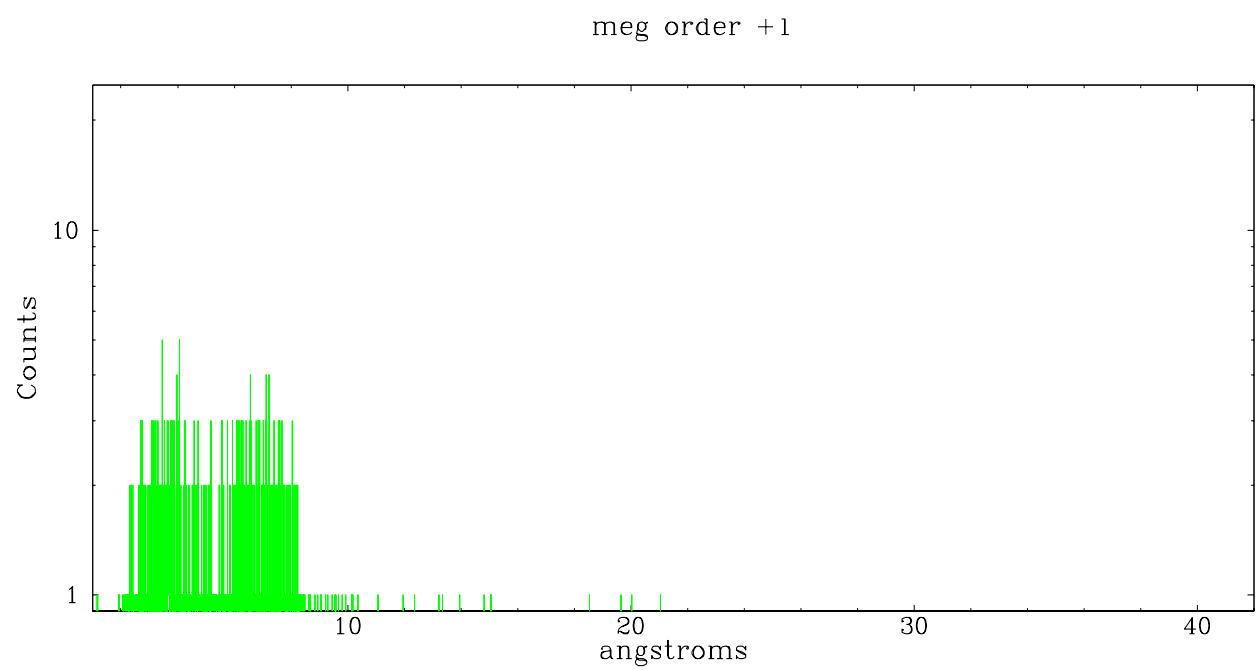
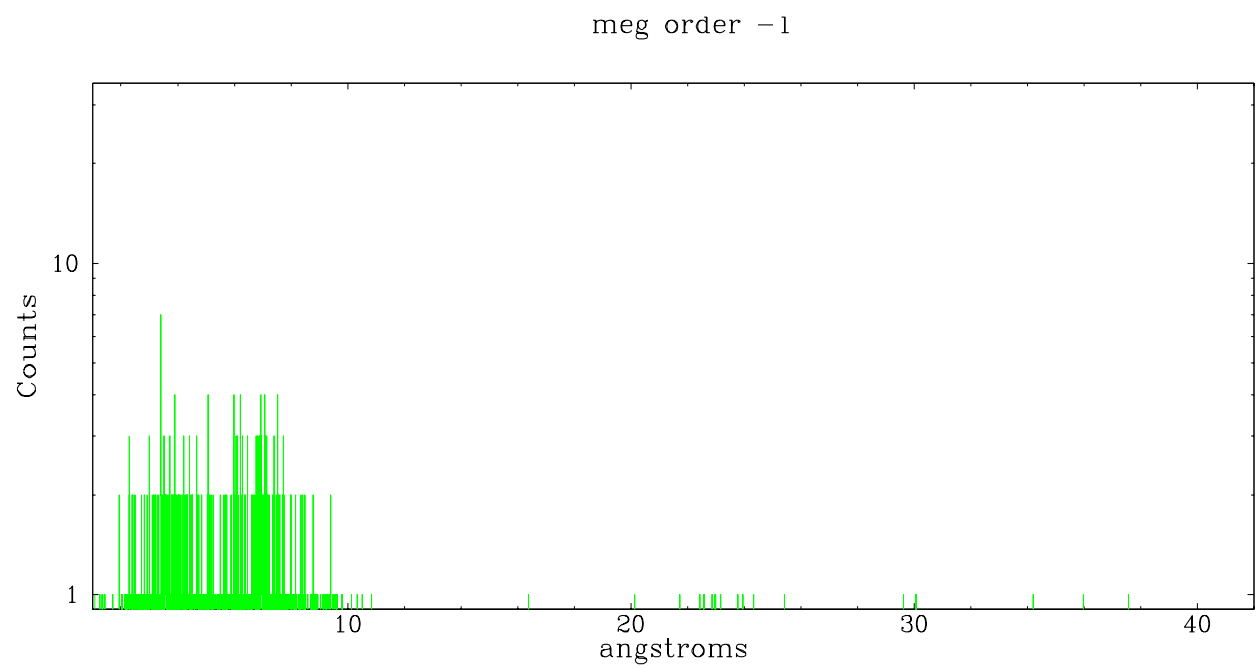
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	259	212	1101	2989	1206	157	238





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.696

### A.2 Comments