

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 6372 - L2 Version 002  
Chandra X-Ray Center

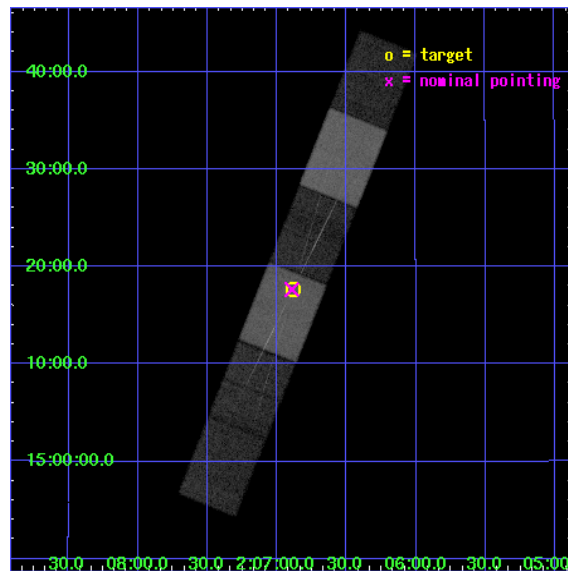
L2 Processing Date : Mar 23 2006

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# 1 Front

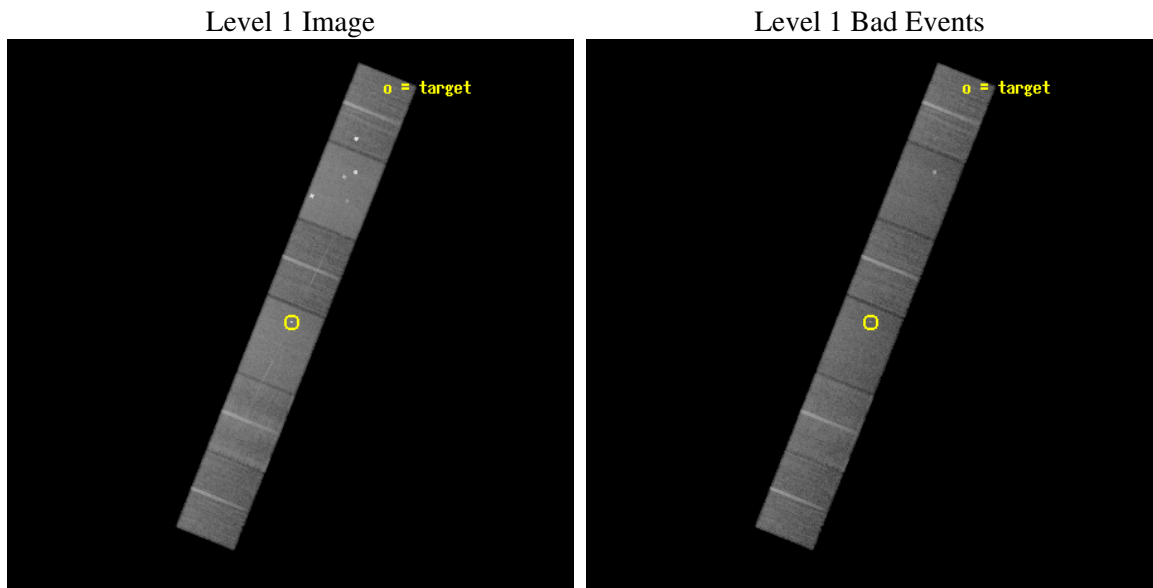
seq_num	300148
obs_id	6372
title	Chandra HETG Spectroscopy of the VY Sculptoris Star TT Ari
observer	Dr. Christopher Mauche
object	TT Ari
dtcycle	0
cycle	P
ra_targ	31.72125
dec_targ	15.295278
ra_nom	31.723420946514
dec_nom	15.294498933304
roll_nom	111.73220104858
revision	2
ontime	33167.5
livetime	32631.816106791
ontime4	33167.5
ontime5	33167.5
ontime6	33167.5
ontime7	33167.5
ontime8	33167.5
ontime9	33167.5
l2events	315124



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images

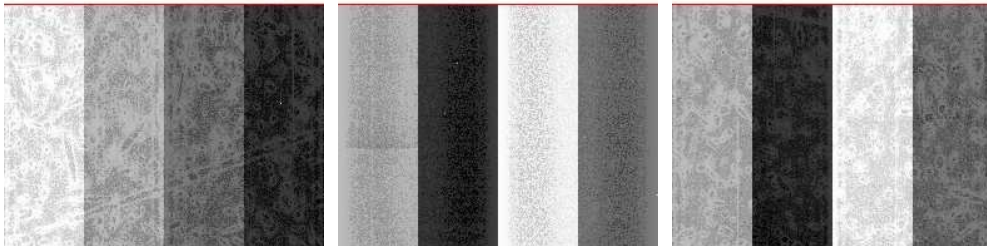


#### 2.1.2 Bias

Chip 4

Chip 5

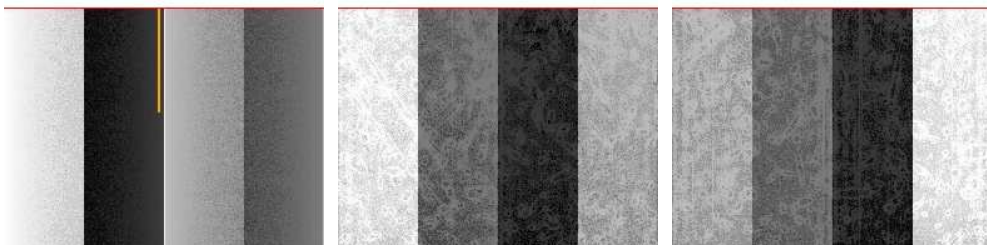
Chip 6



Chip 7

Chip 8

Chip 9



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-03-23T21:20:44
revision	2

sched_exp_time	32988.526000
ontime	33838.71913439
ontime4	33838.71913439
ontime5	33838.719154269
ontime6	33838.71913439
ontime7	33838.71913439
ontime8	33838.71913439
ontime9	33838.71913439
l1events	1420570

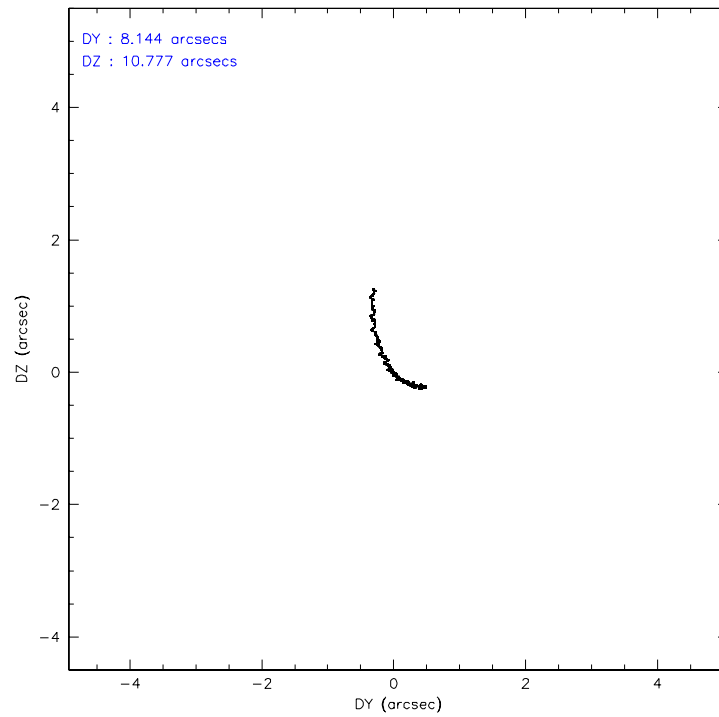
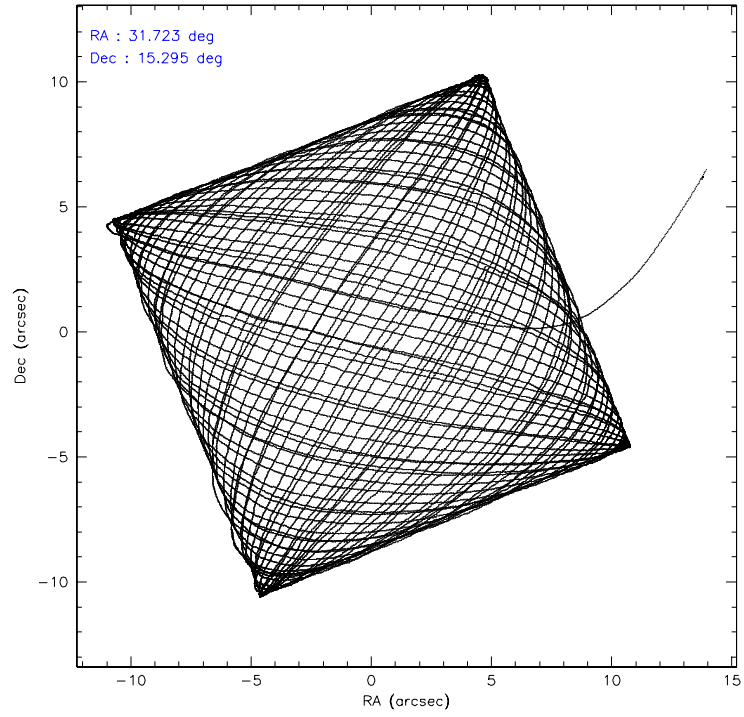
### 2.1.4 Events

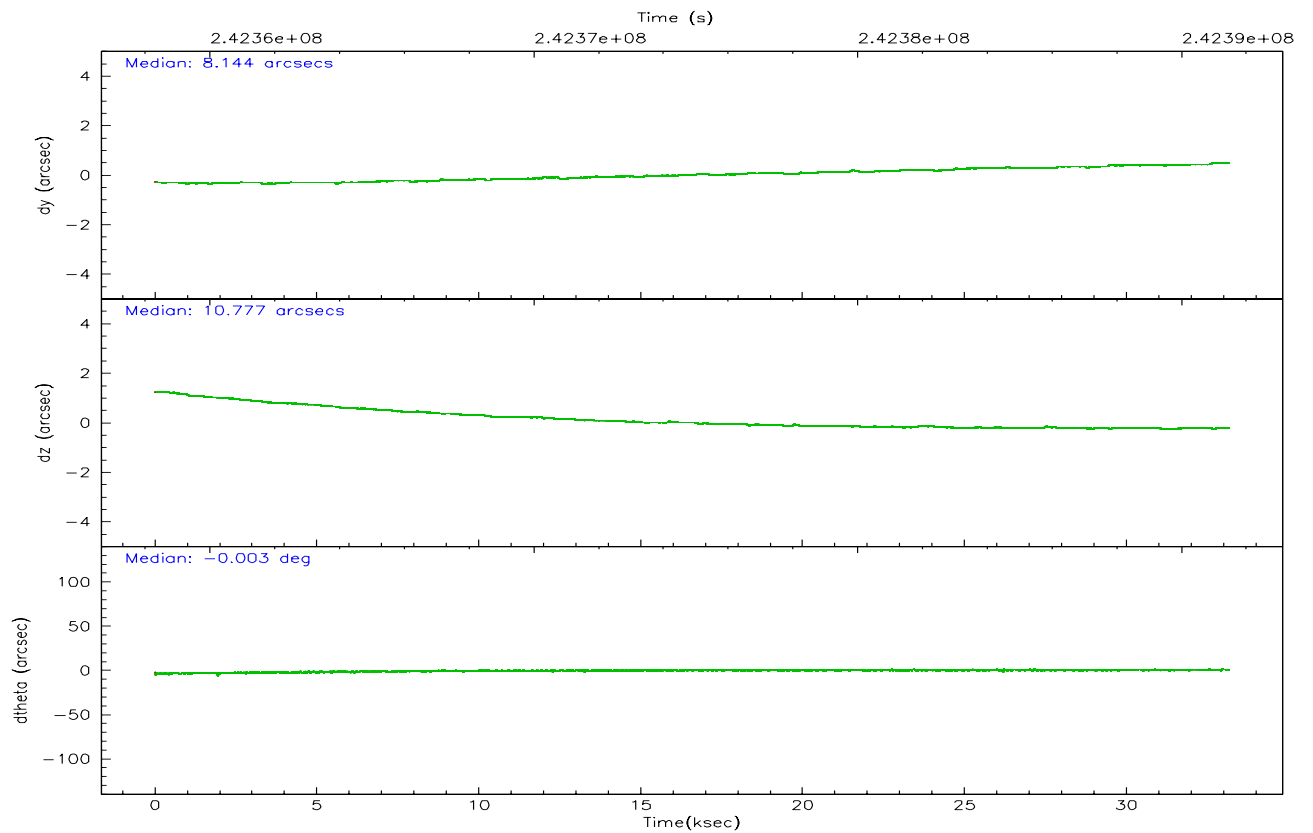
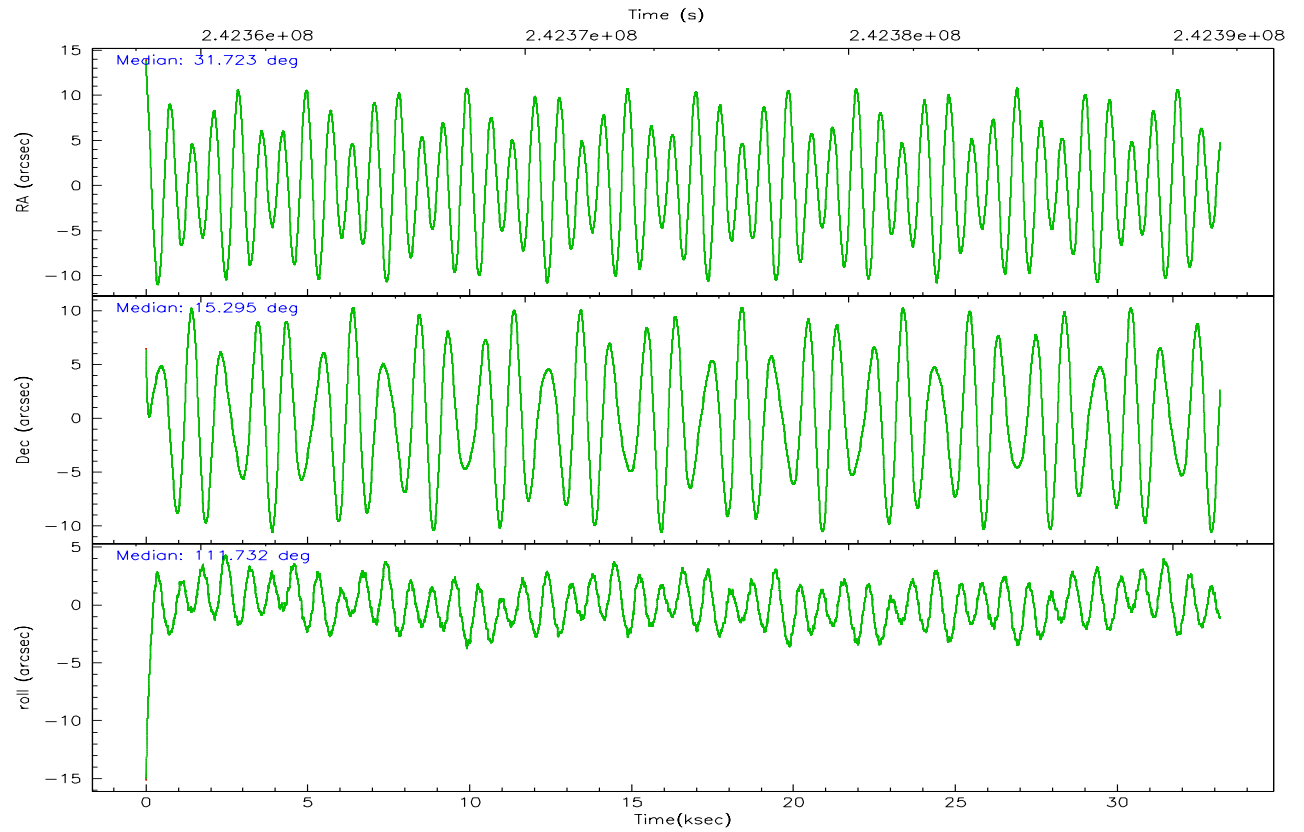
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	223981	303555	192734	265527	248484	186289	grade 0 events	22534	17804	11729	6979	18108	10599
rejected events	187372	163054	166187	159180	192911	161352		10%	5%	6%	2%	7%	5%
rejected %	83%	53%	86%	59%	77%	86%	grade 1 events	215	319	85	194	150	106
								0%	0%	0%	0%	0%	0%
							grade 2 events	5446	45988	5216	26520	12208	4930
								2%	15%	2%	9%	4%	2%
							grade 3 events	2633	3331	2593	6506	5934	2603
								1%	1%	1%	2%	2%	1%
							grade 4 events	2562	3259	2468	6427	5358	2423
								1%	1%	1%	2%	2%	1%
							grade 5 events	8546	15154	8578	18297	11413	9293
								3%	4%	4%	6%	4%	4%
							grade 6 events	4116	72995	4966	61891	14947	4884
								1%	24%	2%	23%	6%	2%
							grade 7 events	177929	144705	157099	138713	180366	151451
								79%	47%	81%	52%	72%	81%

## 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	CUSTOM	CUSTOM
Pointing RA	31.745817	31.7234209465138	Subarray start row	1	1
Pointing Dec	15.277945	15.2944989333036	Subarray row count	774	774
Pointing Roll	111.569666	111.7322010485791	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	2.5
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1254020033014			
SIM translation stage offset (mm)	-3	-3.007120579706367			
Observation start time	242358492.184000	242357187.71244			
Observation start date	2005-09-06T01:47:08	2005-09-06T01:26:27			
Observation end time	242391481.184000	242391697.41403			
Observation end date	2005-09-06T10:56:57	2005-09-06T11:01:37			
Read mode	TIMED	TIMED			

## 2.3 Aspect





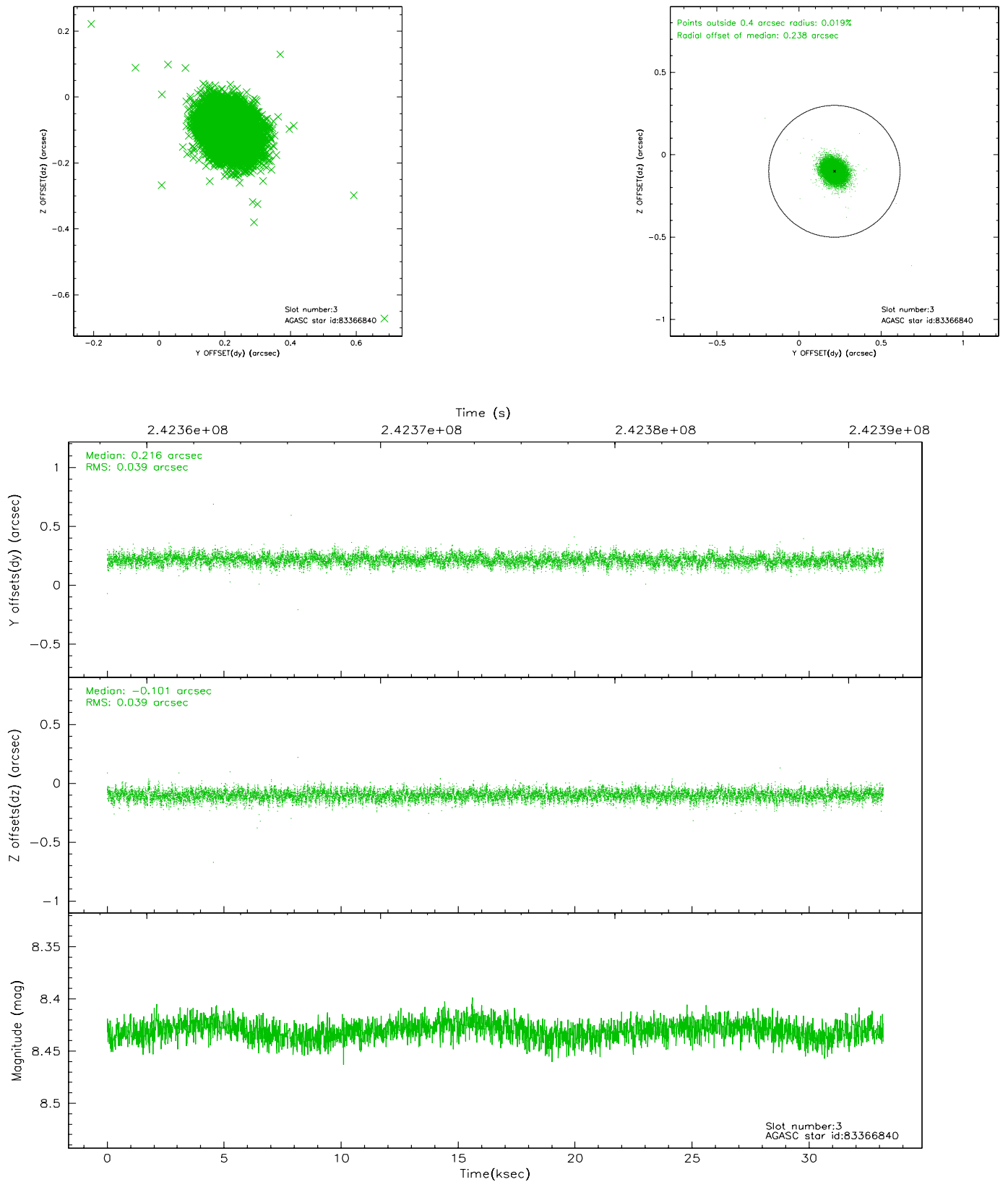
### Slot Statistics

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	8091	-0.033	-0.074	0.009	0.023	0.000000	0.000000	-760.79	-1794.36
1	FID	ACIS-S-4	7.19	8091	0.075	0.036	0.014	0.027	0.000000	0.000000	2152.59	114.14
2	FID	ACIS-S-5	7.24	8091	-0.075	0.047	0.020	0.032	0.000000	0.000000	-1813.59	107.91
3	GUIDE	83366840	8.43	16174	0.216	-0.101	0.058	0.095	31.673303	14.583774	-2230.86	1153.75
4	GUIDE	158211640	9.28	16168	0.017	-0.013	0.075	0.123	31.349537	15.537415	1375.04	934.44
5	GUIDE	159131712	7.91	16178	0.113	0.292	0.058	0.098	32.565244	15.023039	-1895.64	-2313.93
6	GUIDE	158210600	8.26	16182	-0.257	-0.046	0.067	0.105	31.131603	15.630068	1964.24	1513.14
7	GUIDE	158215416	9.23	16169	-0.088	-0.132	0.094	0.153	31.249092	15.295299	694.15	1580.47

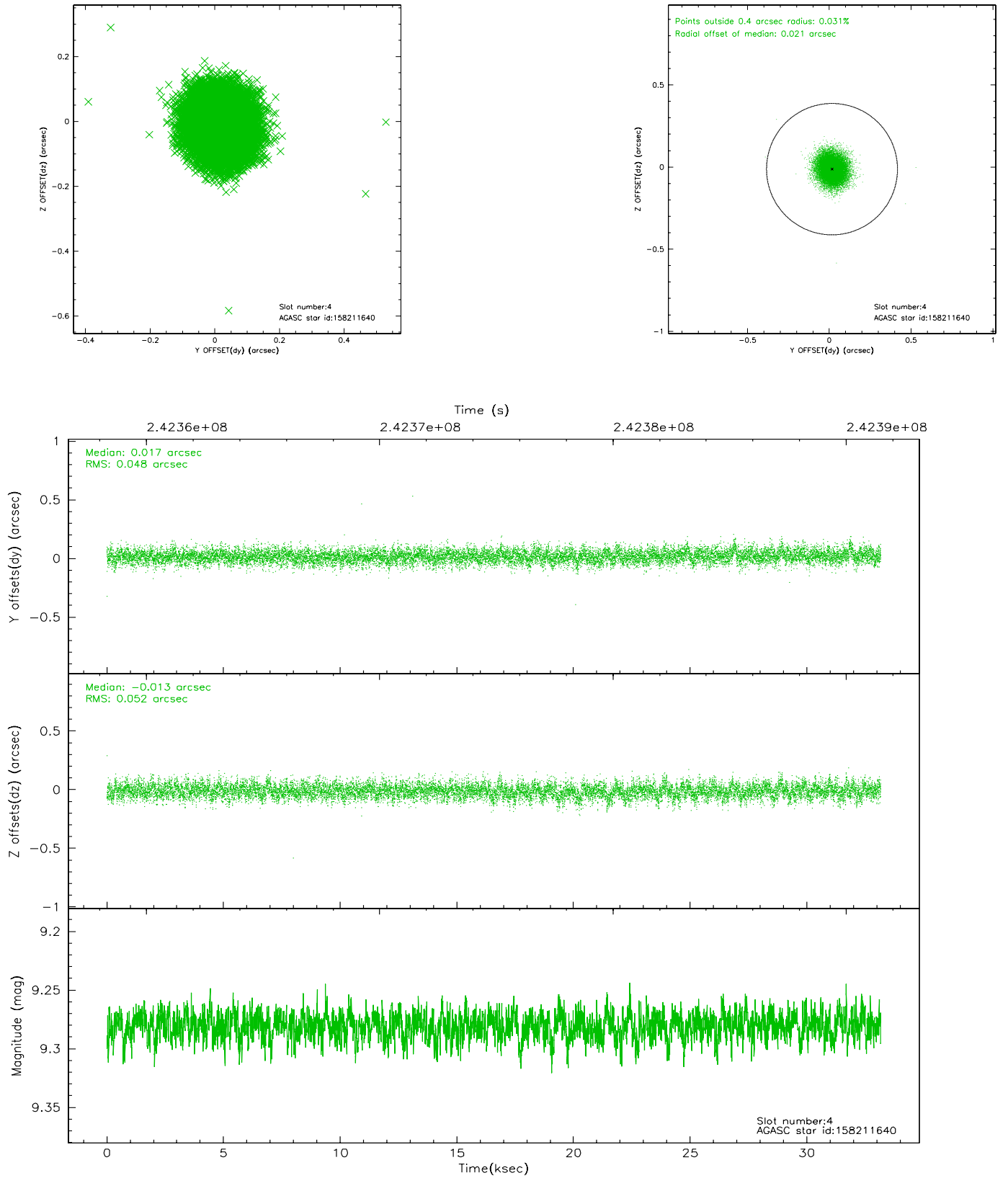


## 2.4 Star Slots

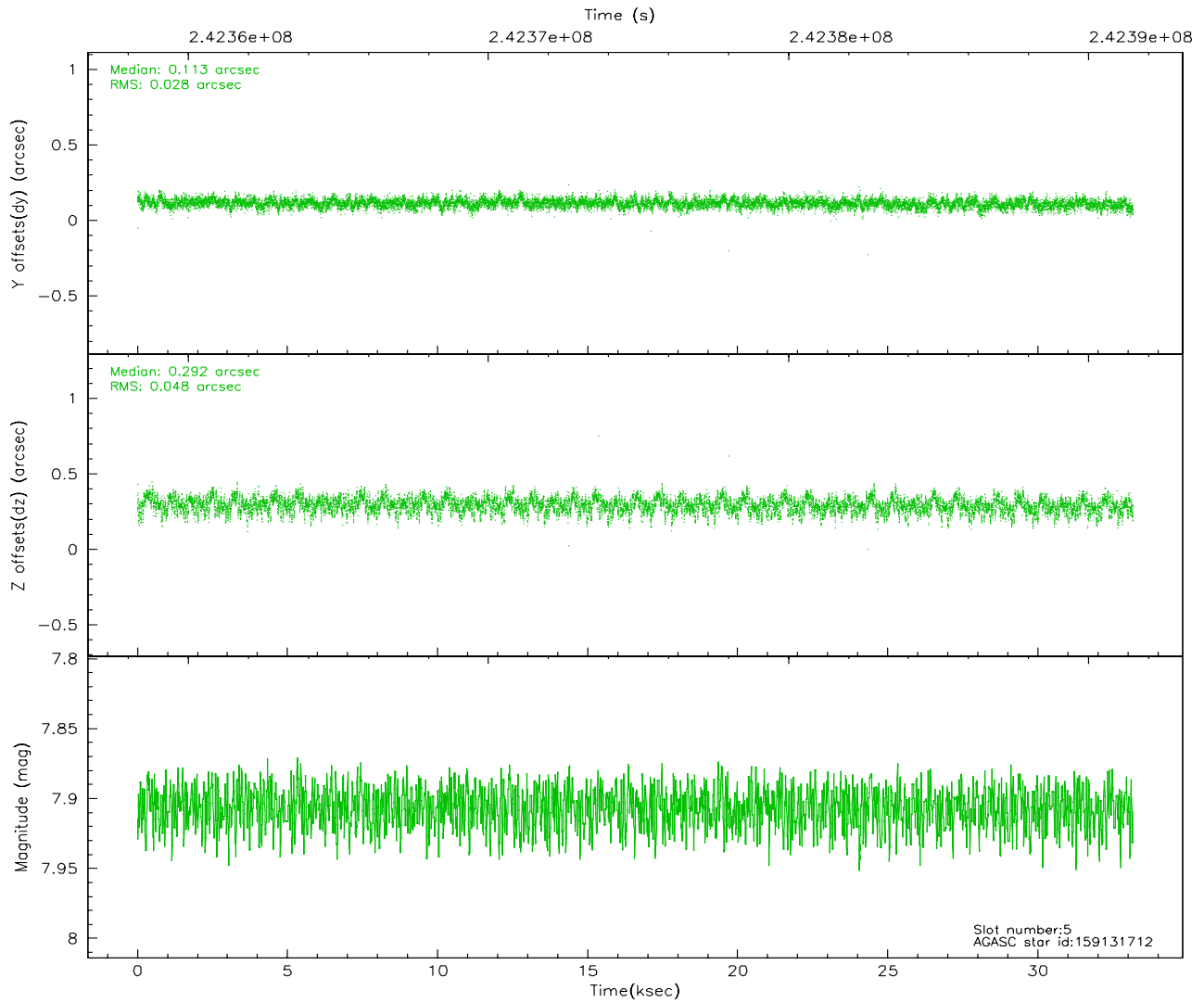
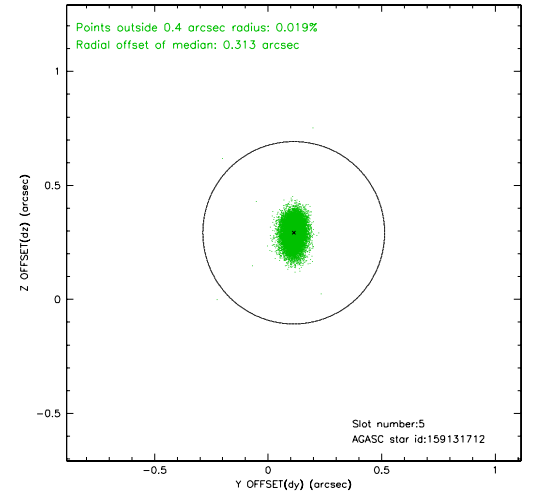
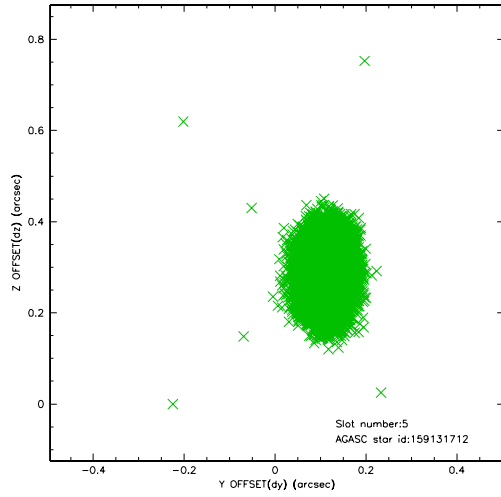
### 2.4.1 Slot 3



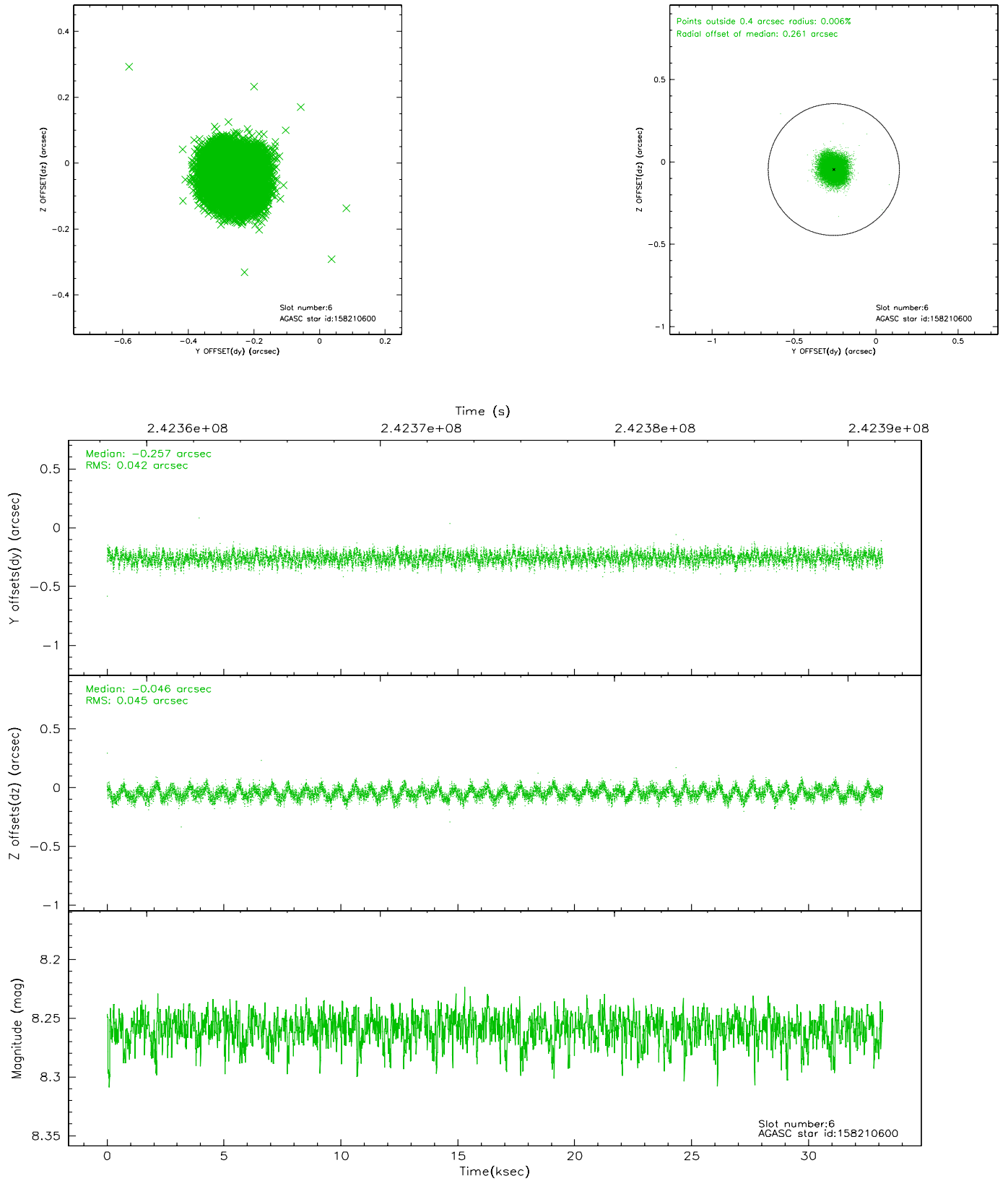
## 2.4.2 Slot 4



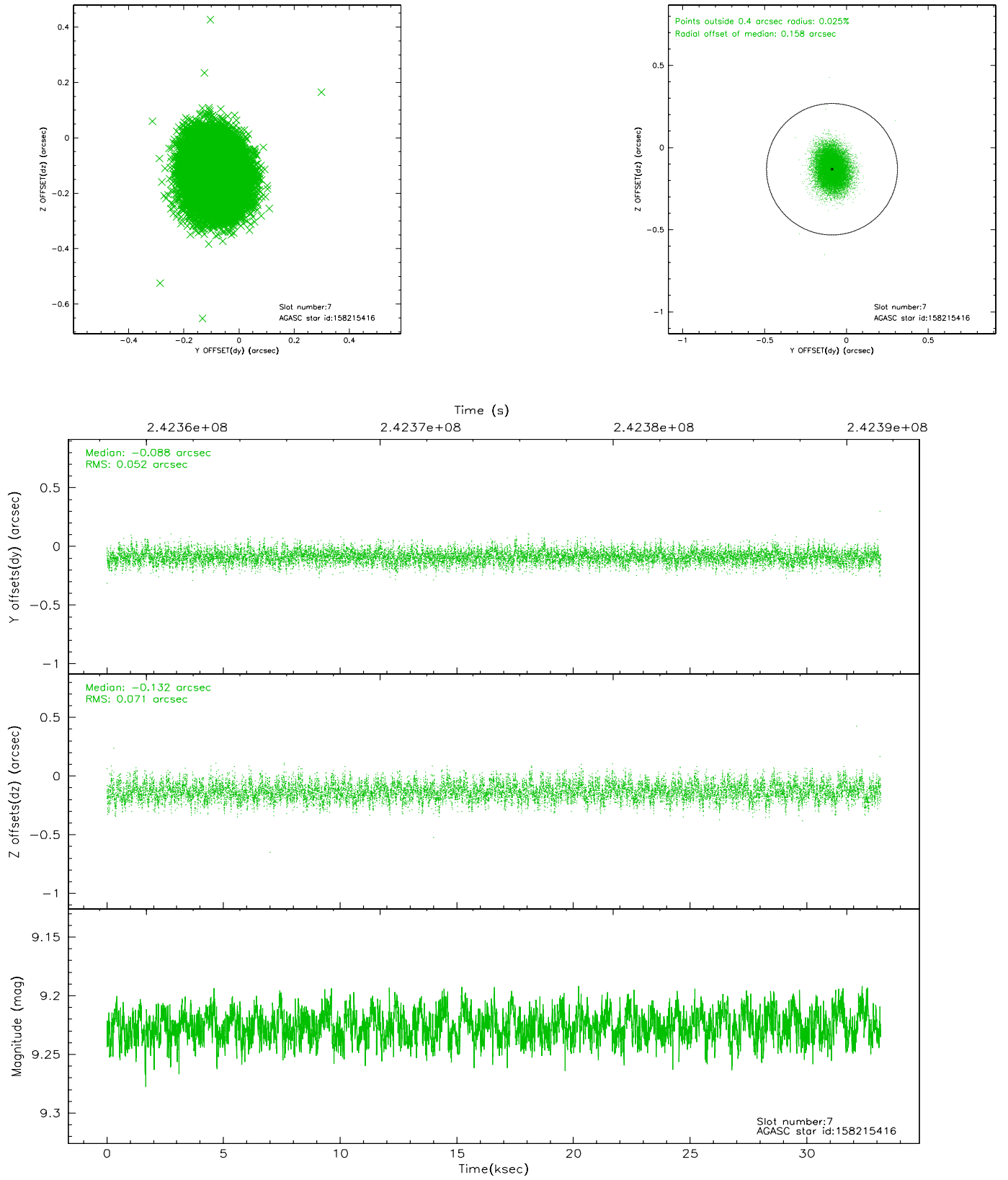
### 2.4.3 Slot 5



## 2.4.4 Slot 6

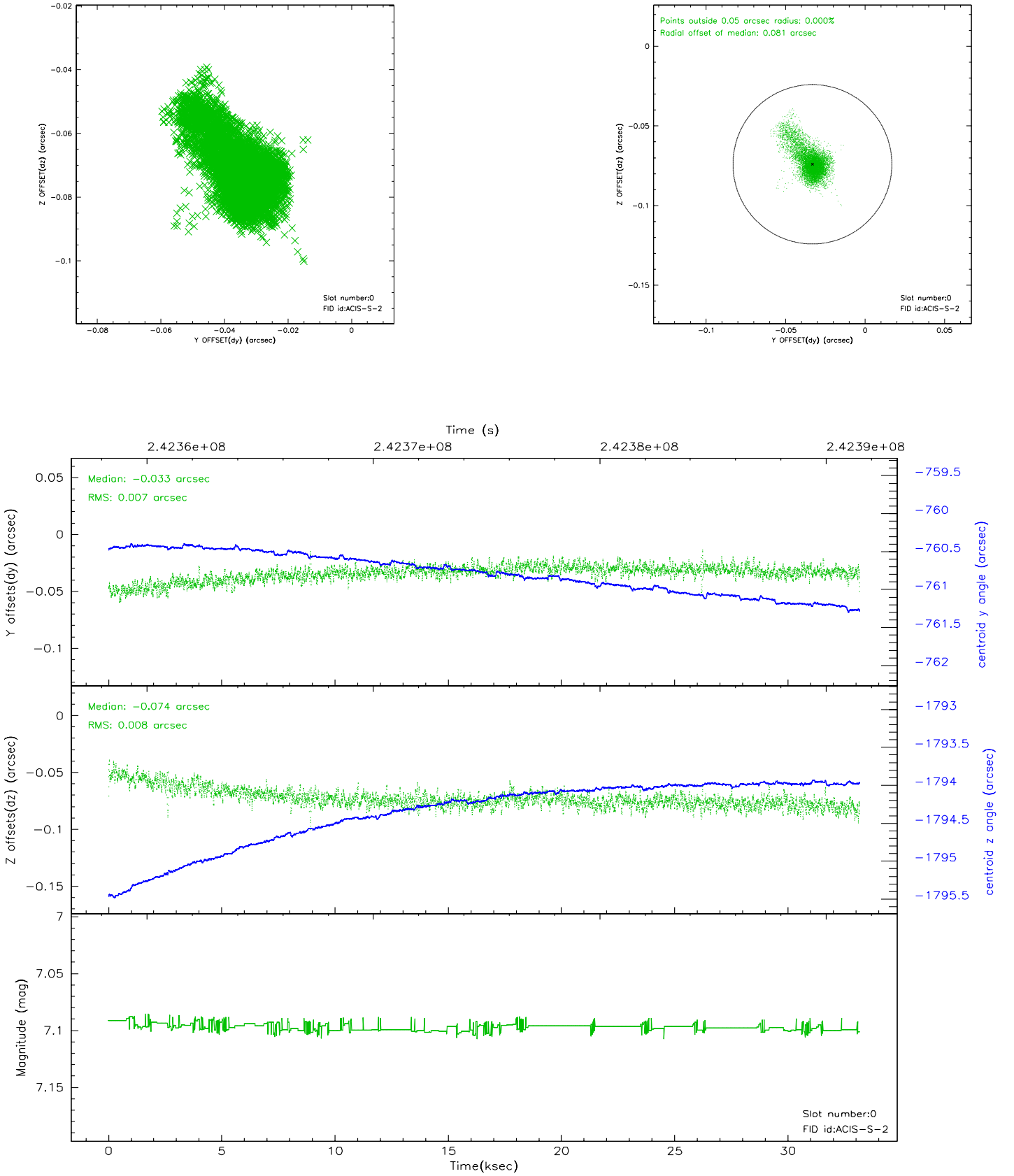


## 2.4.5 Slot 7

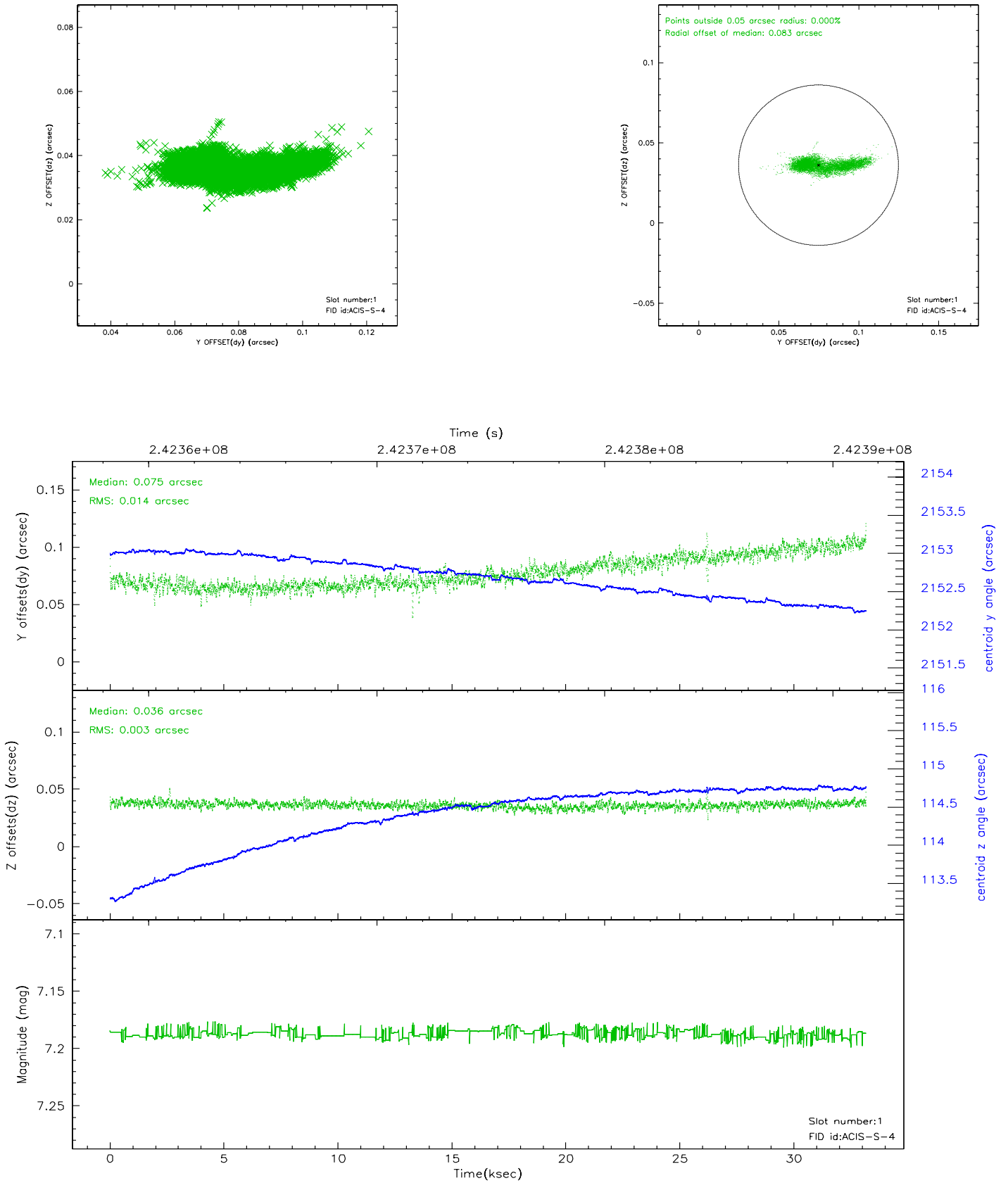


## 2.5 FID Slots

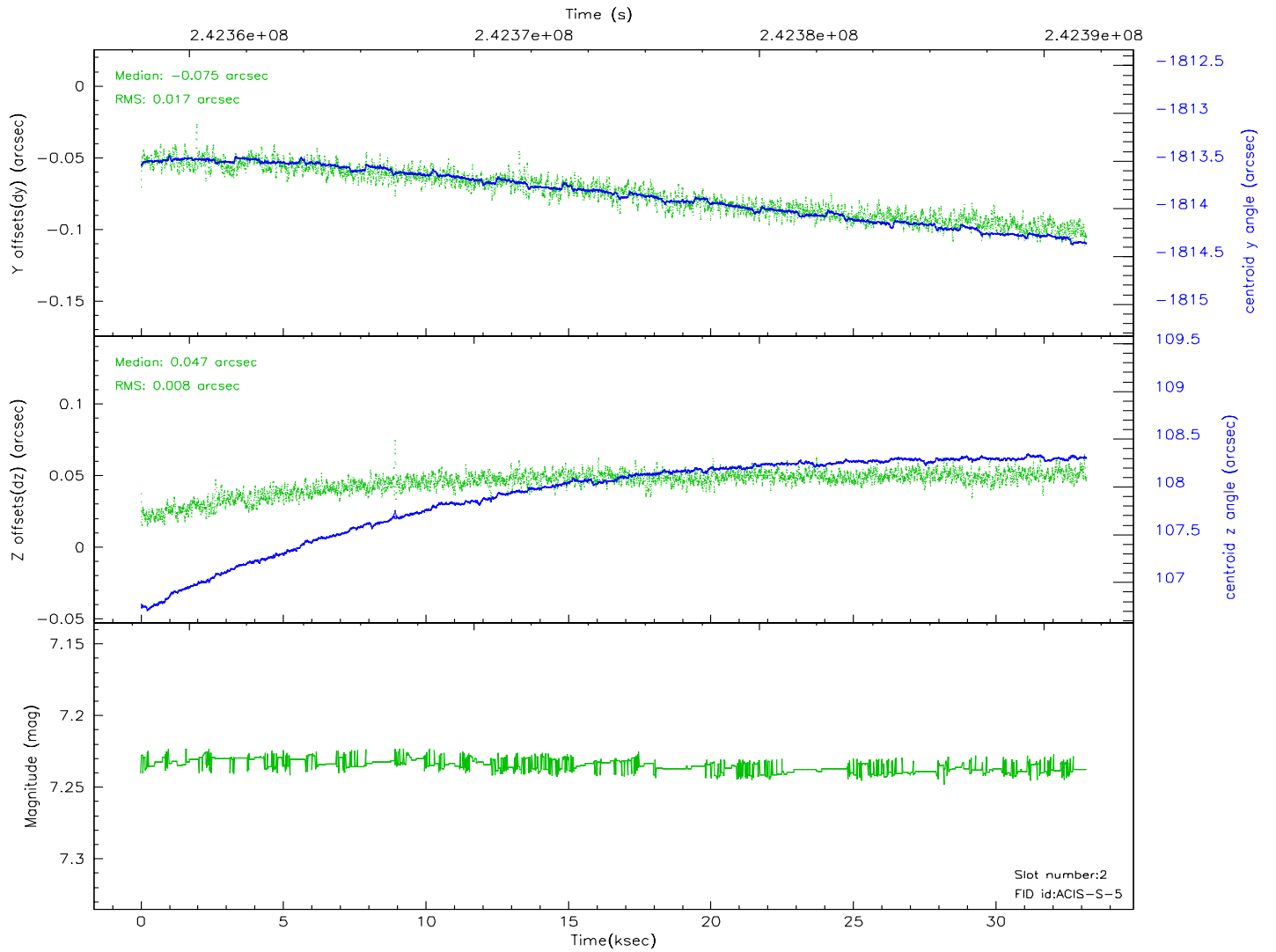
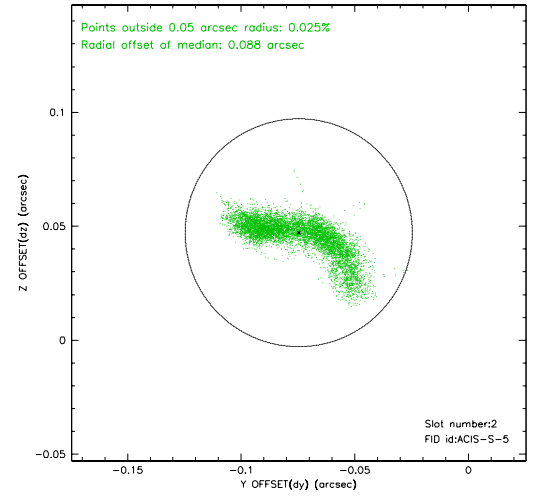
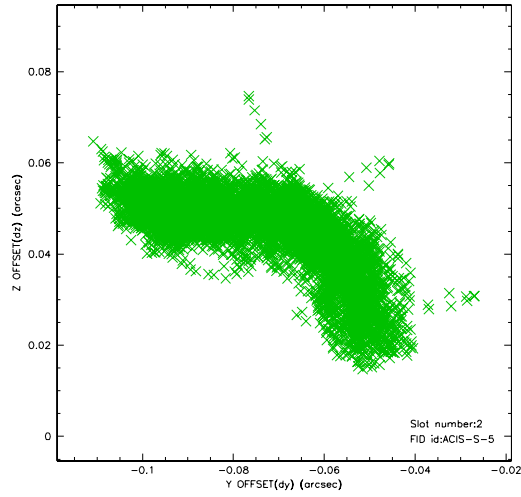
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



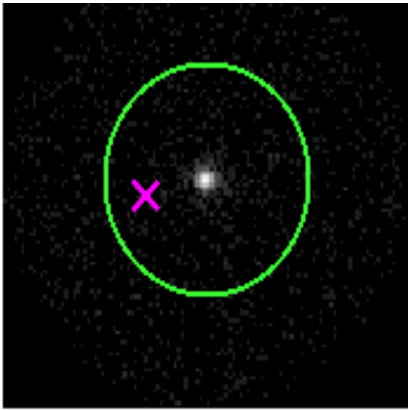


# 3 Gratings

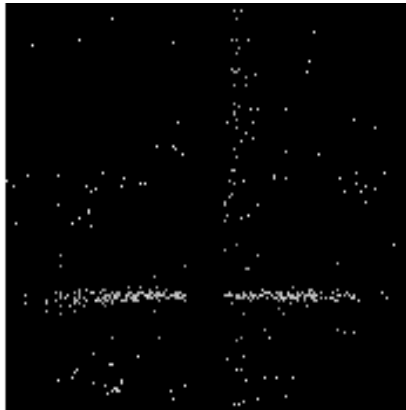
## 3.1 HEG Arm



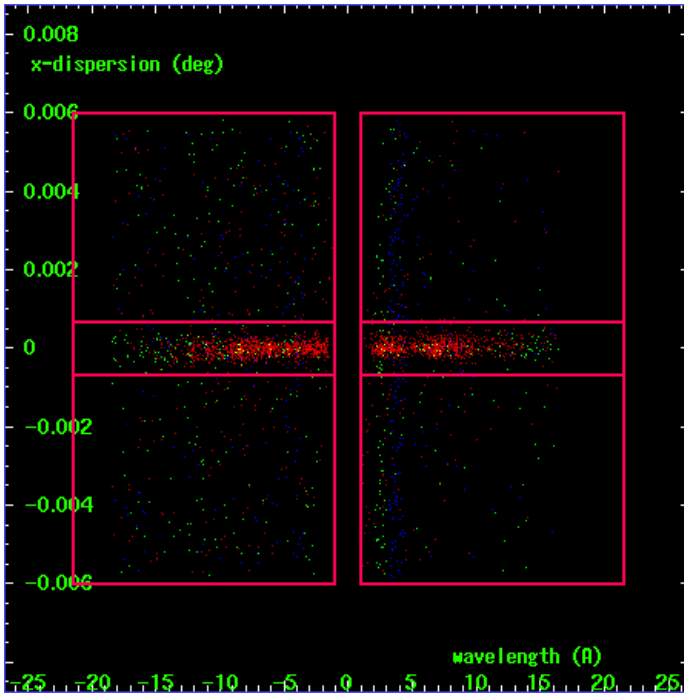
HEG Order Sort 123



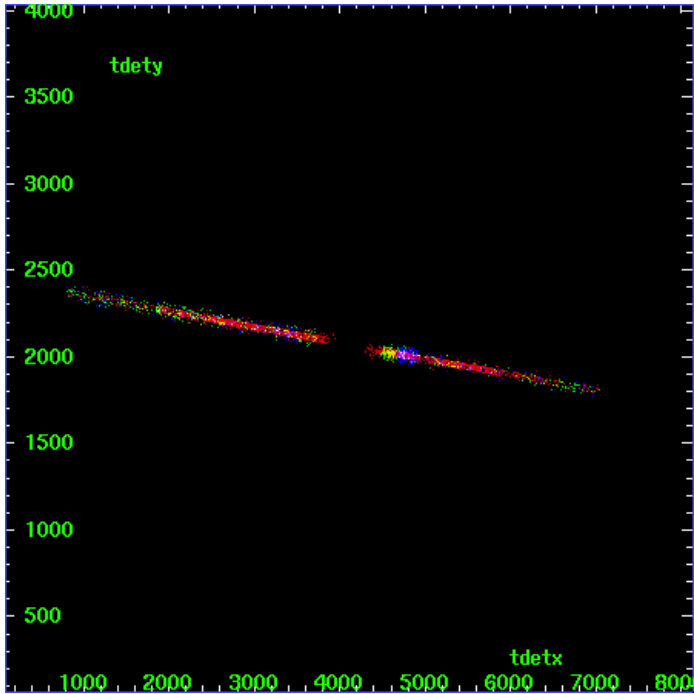
HEG Zero Order



HEG Order Sort ALL

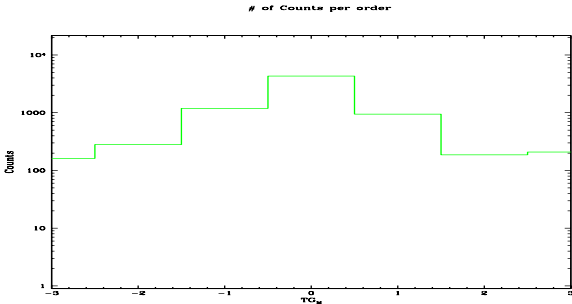


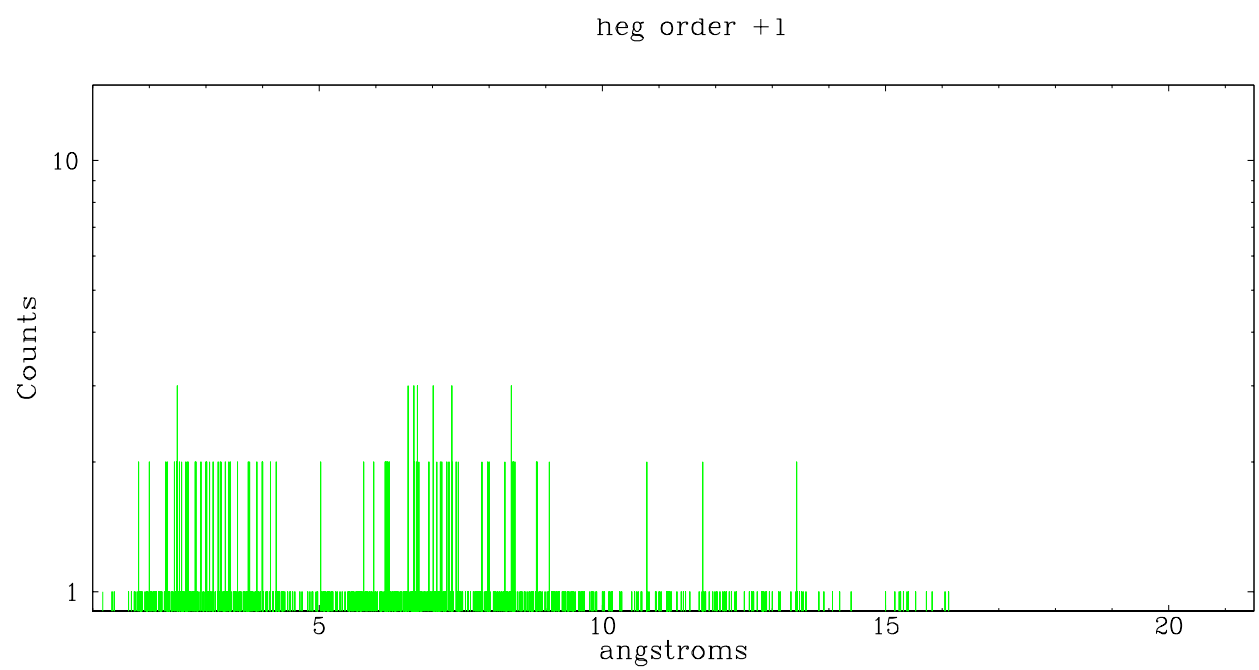
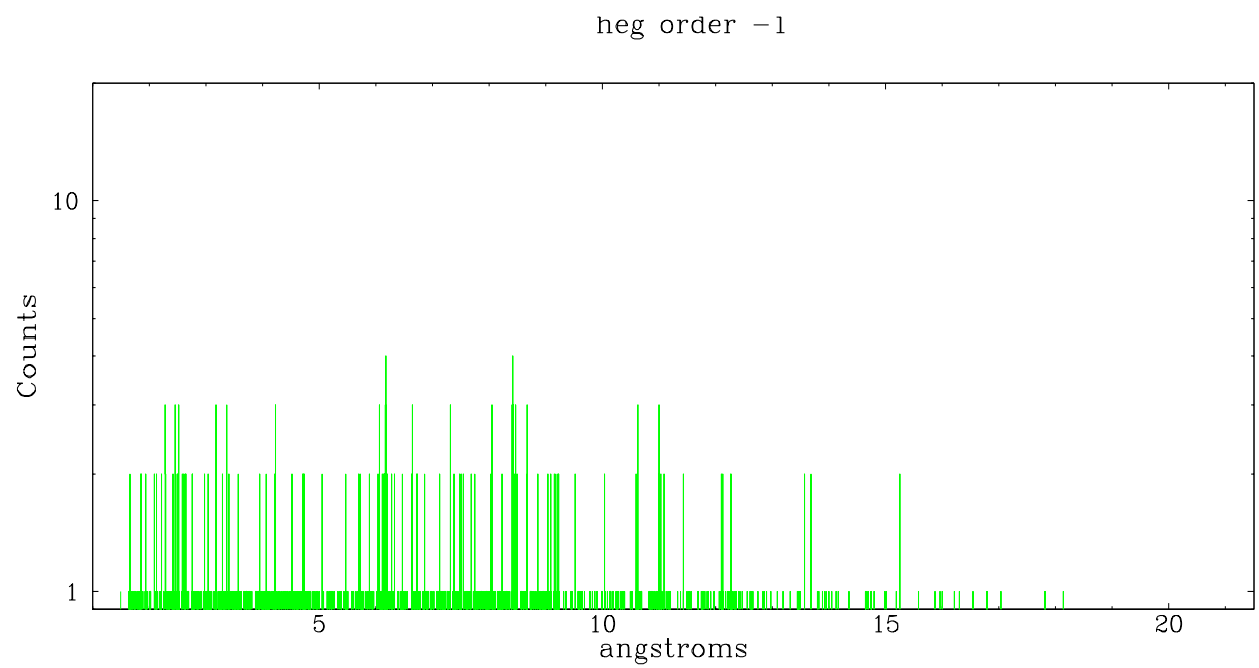
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	162	281	1193	4327	943	187	209

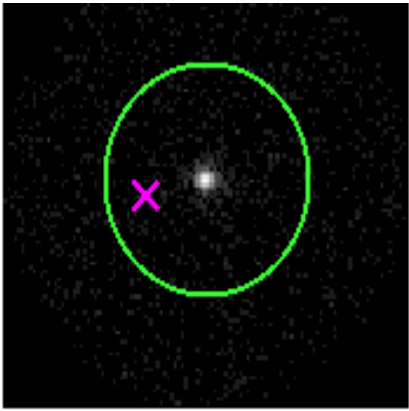




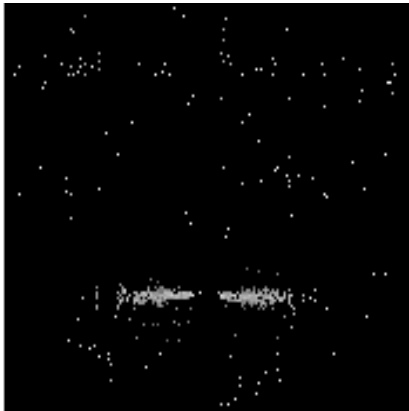
3.2 MEG Arm



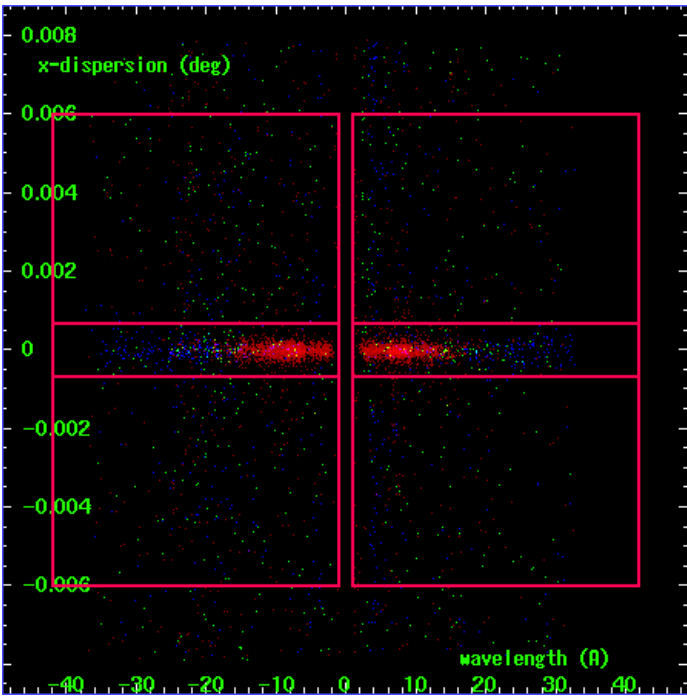
MEG Order Sort 123



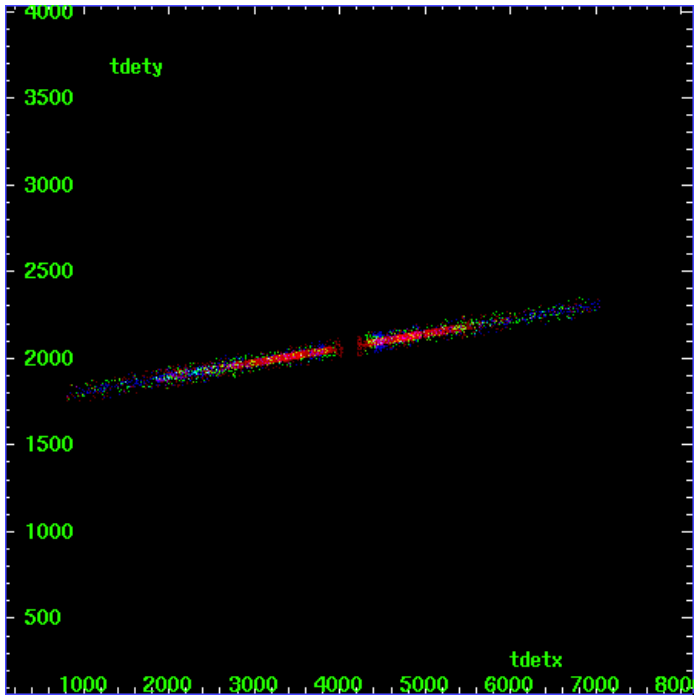
MEG Zero Order



MEG Order Sort ALL

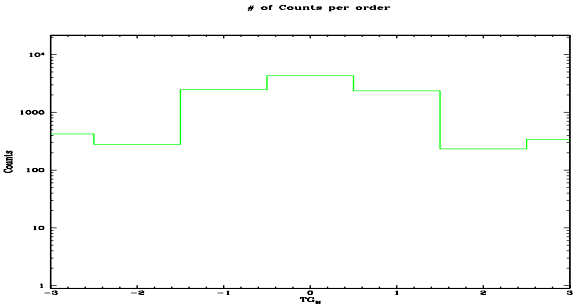


Spot Image MEG

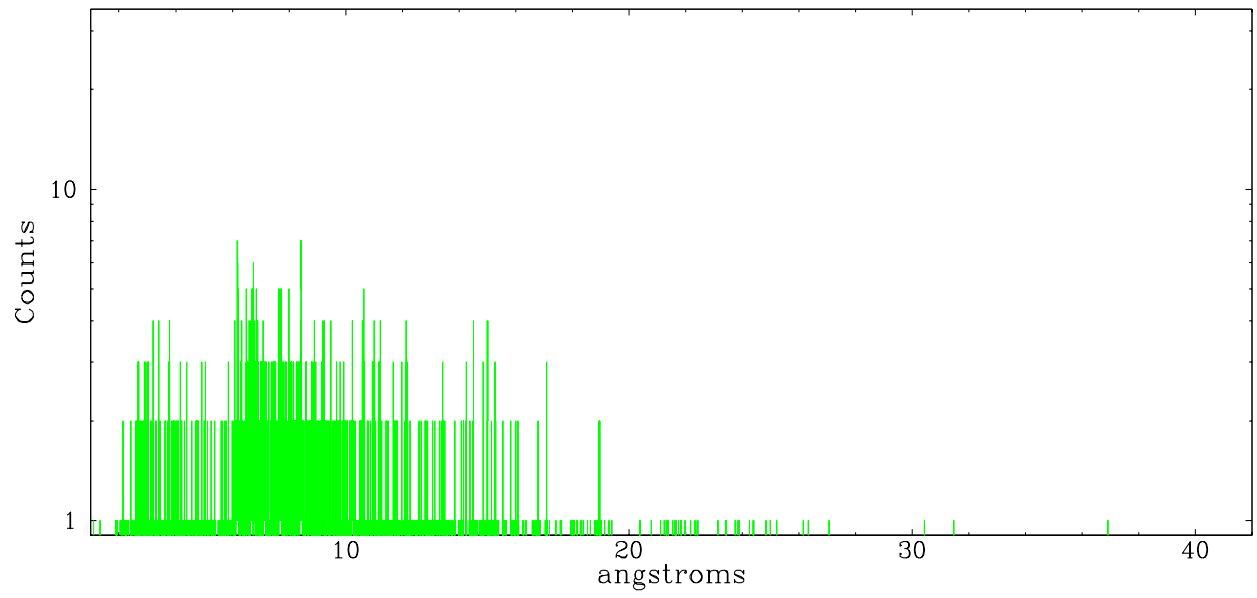


Full Detector MEG

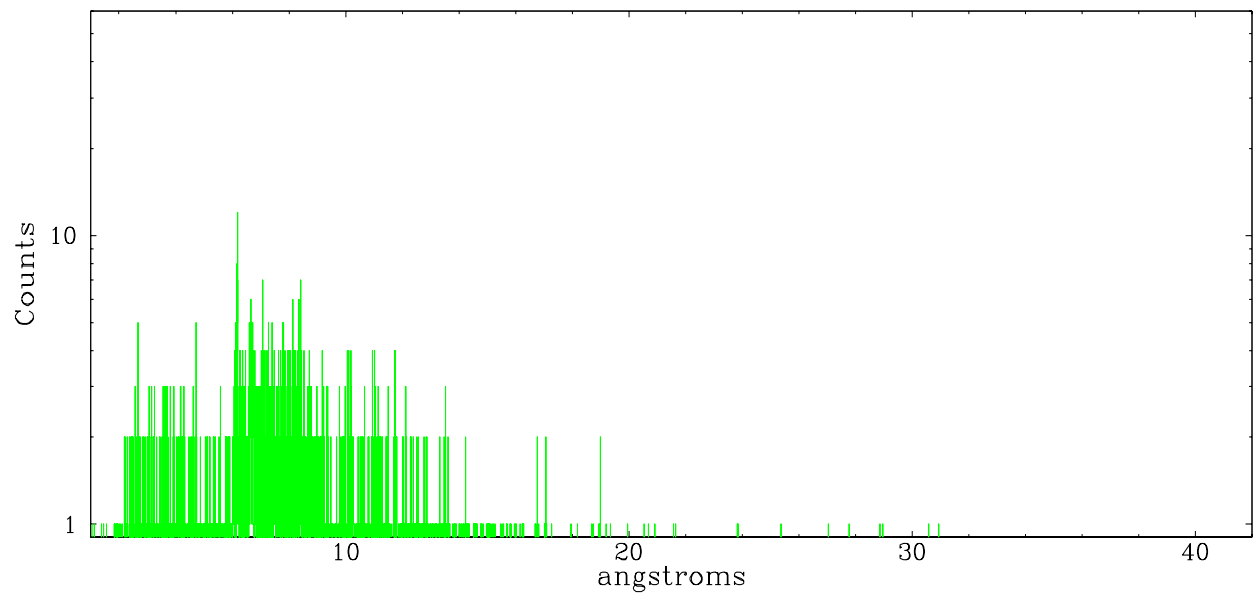
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	422	279	2470	4327	2356	233	341



meg order -1



meg order +1



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.03.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.1675

### A.2 Comments