

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 1940 - L2 Version 001  
Chandra X-Ray Center

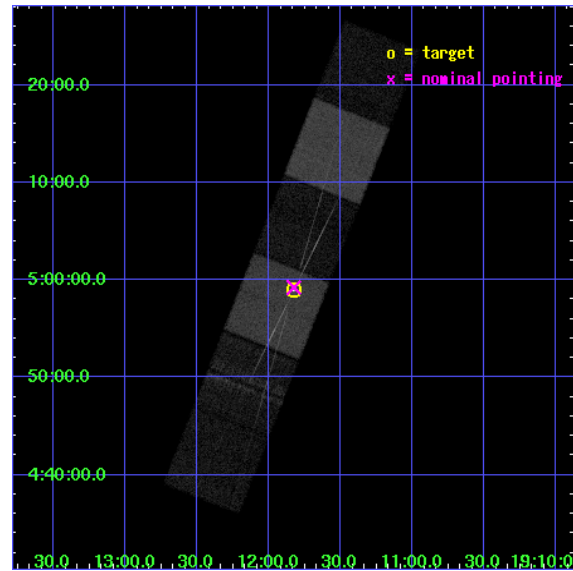
L2 Processing Date : Dec 28 2006

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# 1 Front

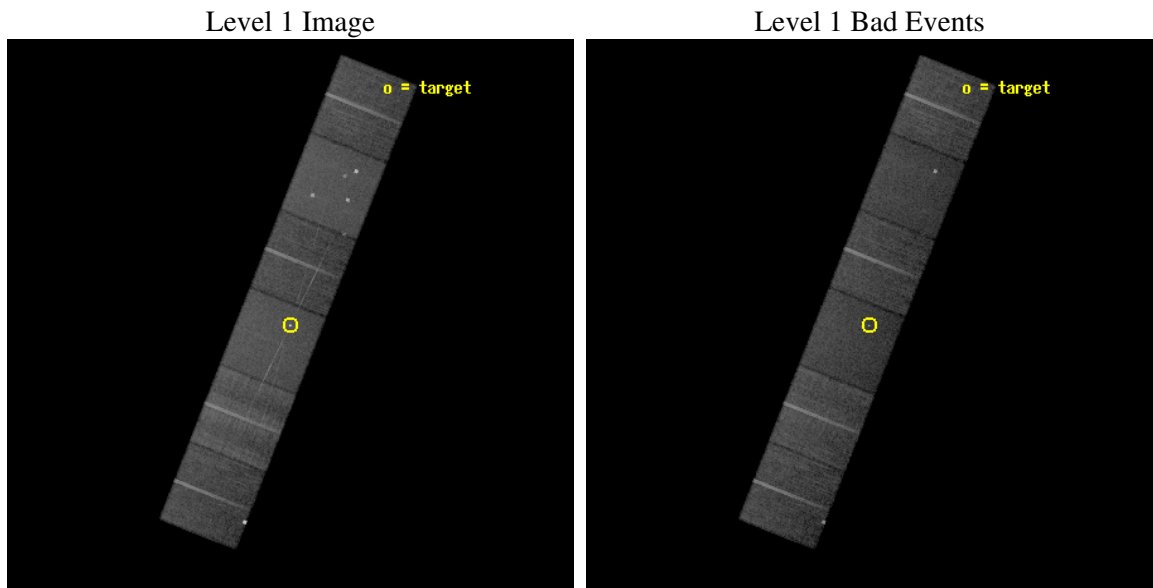
seq_num	400153
obs_id	1940
title	MAPPING THE JETS OF SS 433
observer	Dr. masaaki namiki
object	SS 433
dtcycle	0
cycle	P
ra_targ	287.95625
dec_targ	4.982806
ra_nom	287.95635896905
dec_nom	4.9872692388838
roll_nom	111.59895937865
revision	2
ontime	19859.200018495
livetime	19607.730870087
ontime4	19859.200018495
ontime5	19859.200018495
ontime6	19859.200018495
ontime7	19859.200018495
ontime8	19859.200018495
ontime9	19859.200018495
l2events	203068



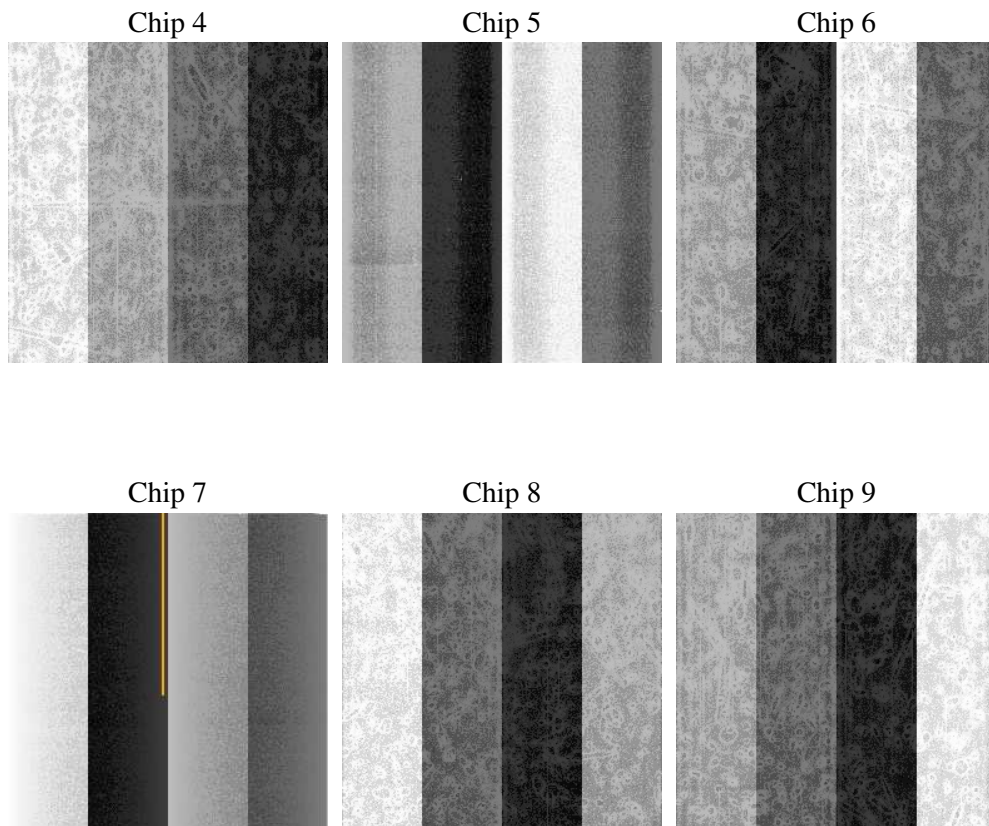
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.4
date	2006-11-29T21:20:57
revision	2

sched_exp_time	20100.000000
ontime	19864.080360979
ontime4	19864.080360979
ontime5	19864.080390885
ontime6	19864.080360979
ontime7	19864.080360979
ontime8	19864.080251306
ontime9	19864.080360979
l1events	964056

### 2.1.4 Events

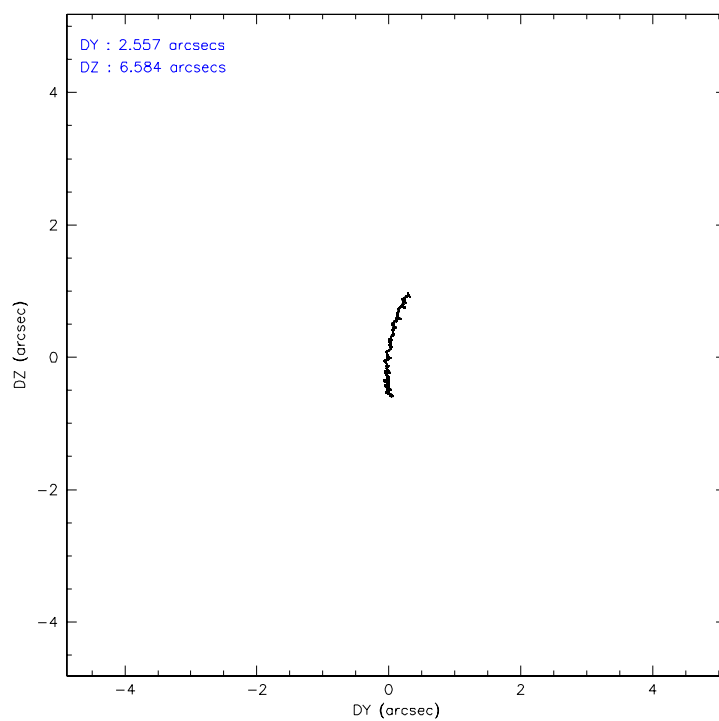
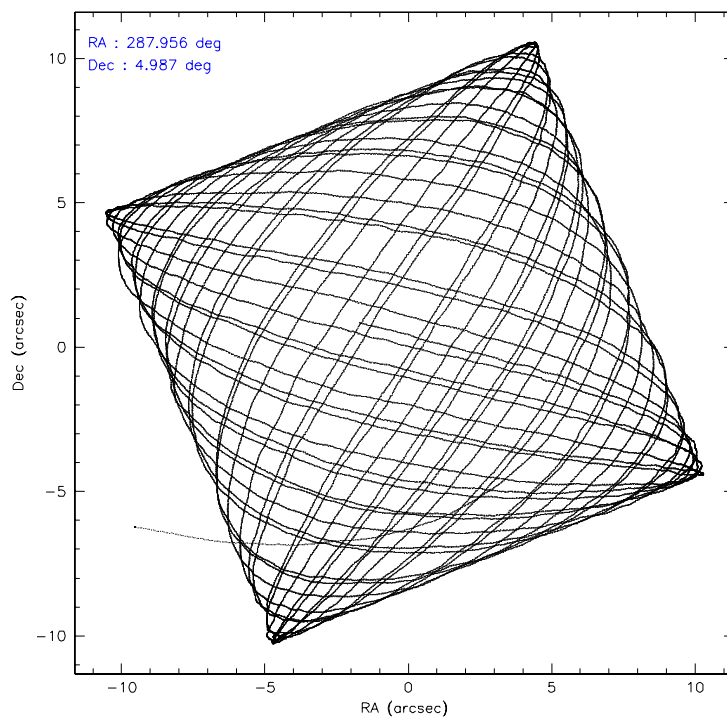
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	147885	184778	137991	171328	187392	134682
rejected events	131551	100872	119541	100382	138732	114731
rejected %	88%	54%	86%	58%	74%	85%

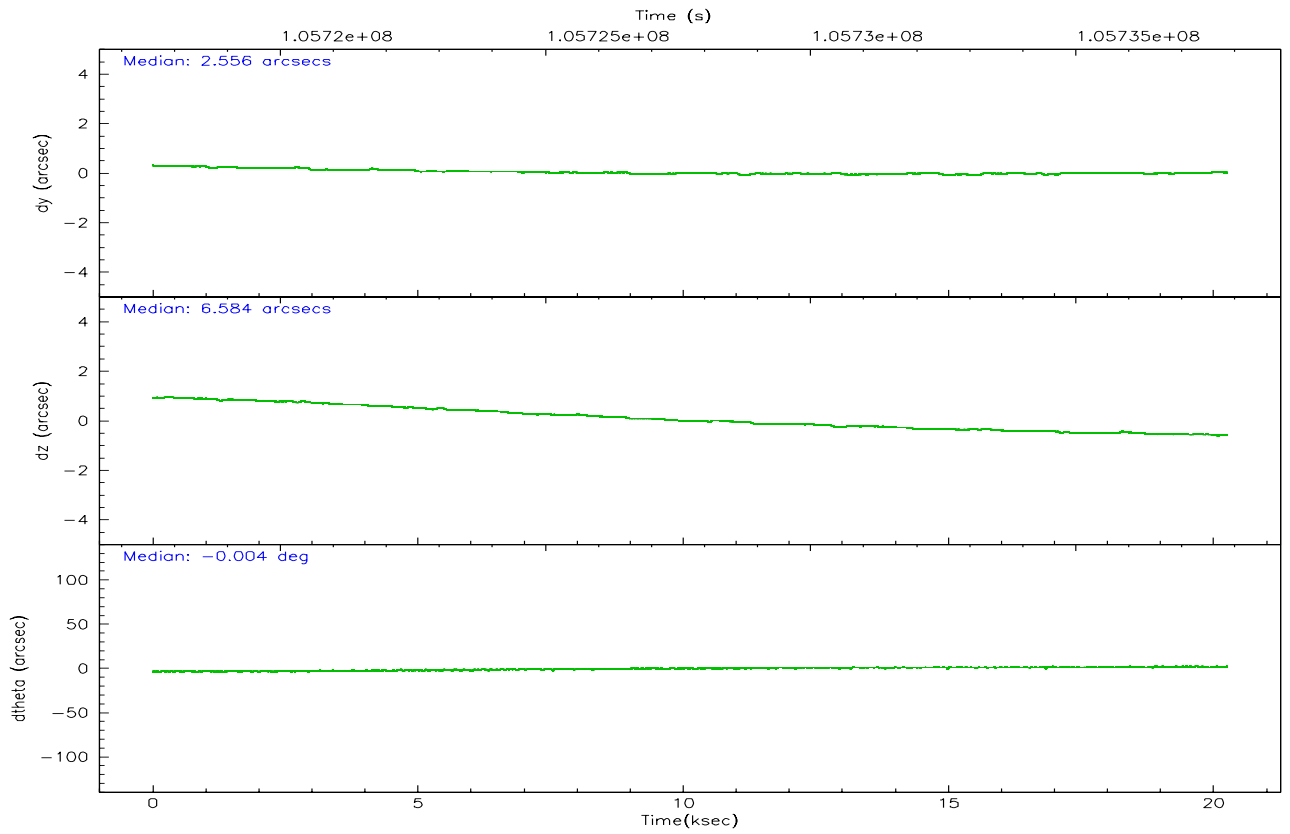
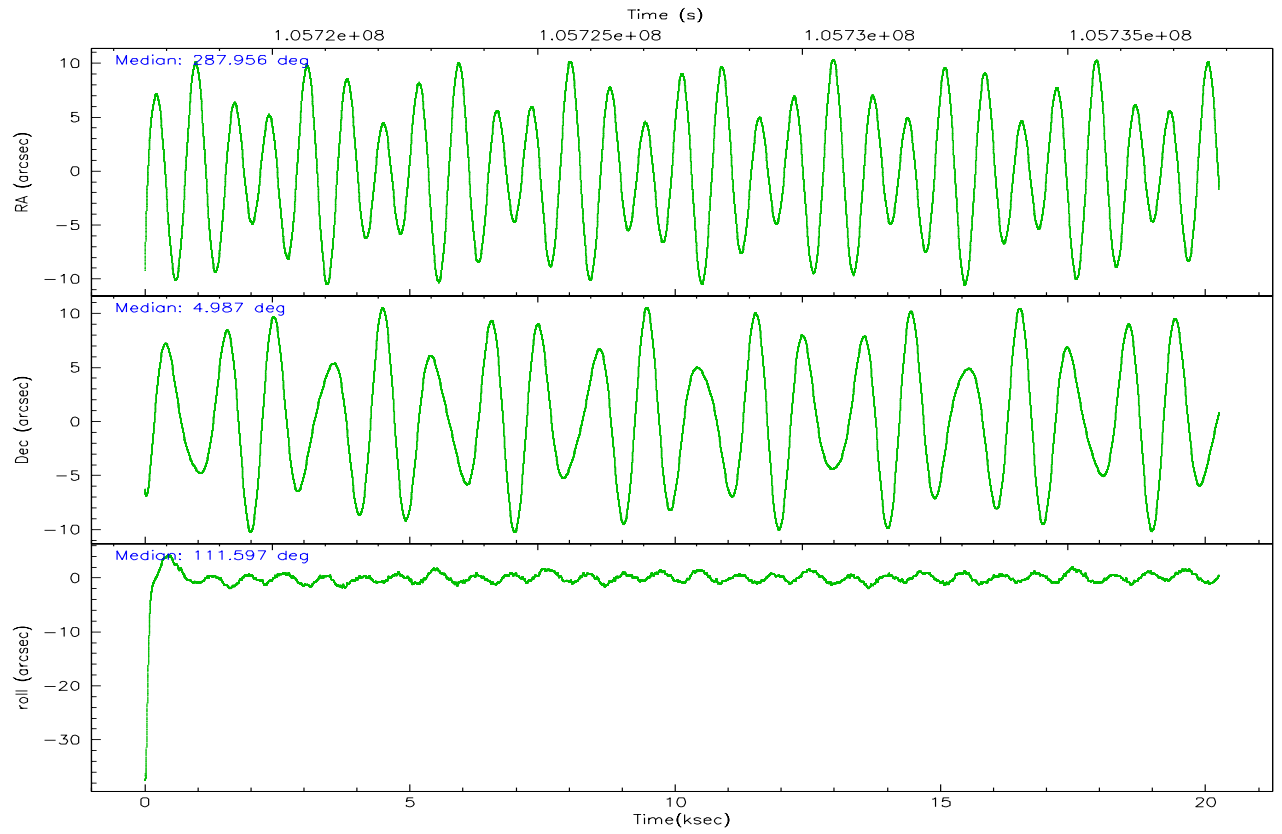
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	6563	10875	8693	5200	13986	10972
	4%	5%	6%	3%	7%	8%
grade 1 events	73	1918	63	154	108	1093
	0%	1%	0%	0%	0%	0%
grade 2 events	4266	24558	3697	17441	9933	3224
	2%	13%	2%	10%	5%	2%
grade 3 events	1448	2065	1538	4335	5864	1470
	0%	1%	1%	2%	3%	1%
grade 4 events	1308	2106	1524	4204	5357	1421
	0%	1%	1%	2%	2%	1%
grade 5 events	4533	8836	5456	11305	7246	5421
	3%	4%	3%	6%	3%	4%
grade 6 events	2750	44322	3004	39789	13536	2867
	1%	23%	2%	23%	7%	2%
grade 7 events	126944	90098	114016	88900	131362	108214
	85%	48%	82%	51%	70%	80%

## 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	287.977984	287.9563589690468	Subarray requested	NONE	NONE
Pointing Dec	4.970539	4.987269238883785	Alternating exposures requested	N	N
Pointing Roll	111.440478	111.5989593786464	Primary exposure time	0.000000	3.2
Window start time	105667264.184000	105667264.184000			
Window stop time	105753664.184000	105753664.184000			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1254020033014			
SIM translation stage offset (mm)	-3	-3.007120579706367			
Phase constraints	Y	Y			
Phase period	13.082000	13.082000			
Phase epoch	46595.700000	46595.700000			
Phase start	0.000000	0.000000			
Phase end	0.050000	0.050000			
Phase start error	0.070000	0.070000			
Phase end error	0.030000	0.030000			
Observation start time	105717757.184000	105716765.8144			
Observation start date	2001-05-08T14:01:33	2001-05-08T13:46:05			
Observation end time	105737857.184000	105738481.97774			
Observation end date	2001-05-08T19:36:33	2001-05-08T19:48:01			

## 2.3 Aspect





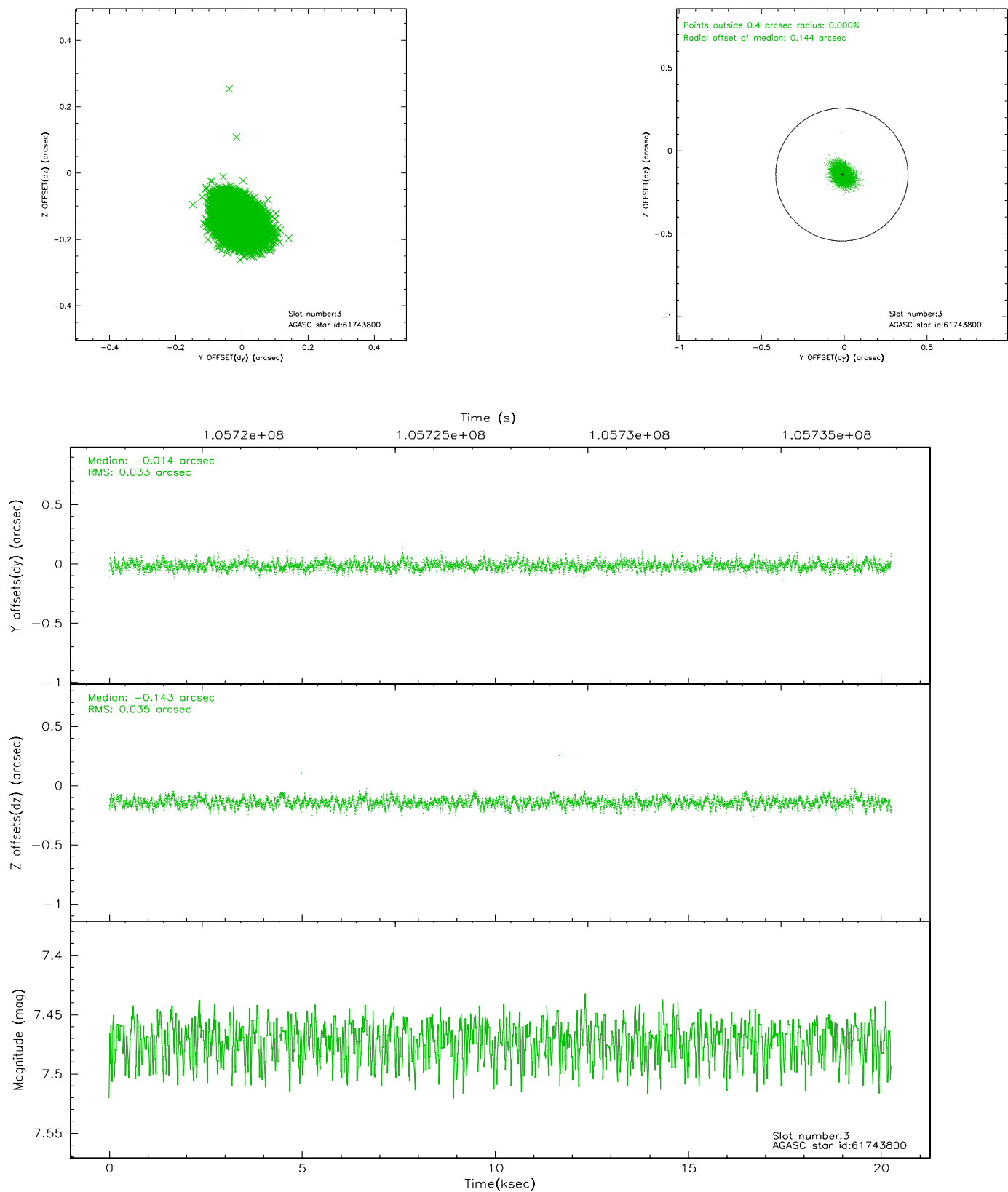
### Slot Statistics

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	4940	-0.024	-0.032	0.014	0.025	0.000000	0.000000	-755.05	-1789.95
1	FID	ACIS-S-4	7.19	4940	-0.050	0.021	0.009	0.018	0.000000	0.000000	2158.12	118.38
2	FID	ACIS-S-5	7.23	4939	0.043	0.021	0.013	0.023	0.000000	0.000000	-1807.59	112.25
3	GUIDE	61743800	7.47	9879	-0.014	-0.143	0.051	0.084	287.776811	5.274666	1282.49	270.90
4	GUIDE	61738240	7.41	9880	0.135	-0.074	0.046	0.078	287.996556	4.354861	-2087.48	748.04
5	GUIDE	61745024	7.60	9880	-0.023	0.074	0.048	0.077	288.156168	5.297362	861.27	-1024.46
6	GUIDE	61741304	7.64	9881	-0.139	0.097	0.042	0.069	287.957418	5.377327	1389.72	-466.69
7	GUIDE	61735664	7.80	9880	0.042	0.047	0.065	0.101	288.278990	4.935643	-511.44	-959.09

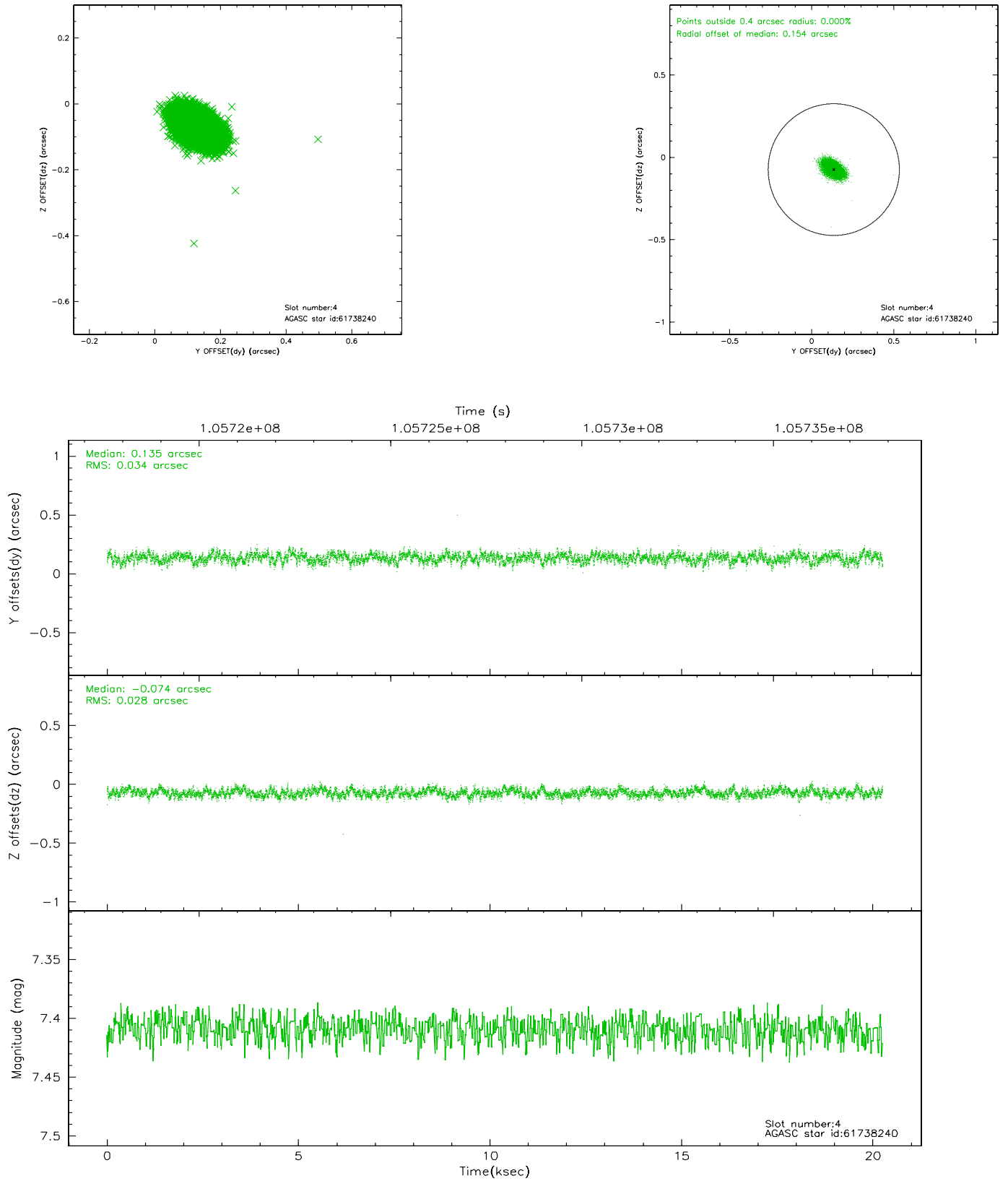


## 2.4 Star Slots

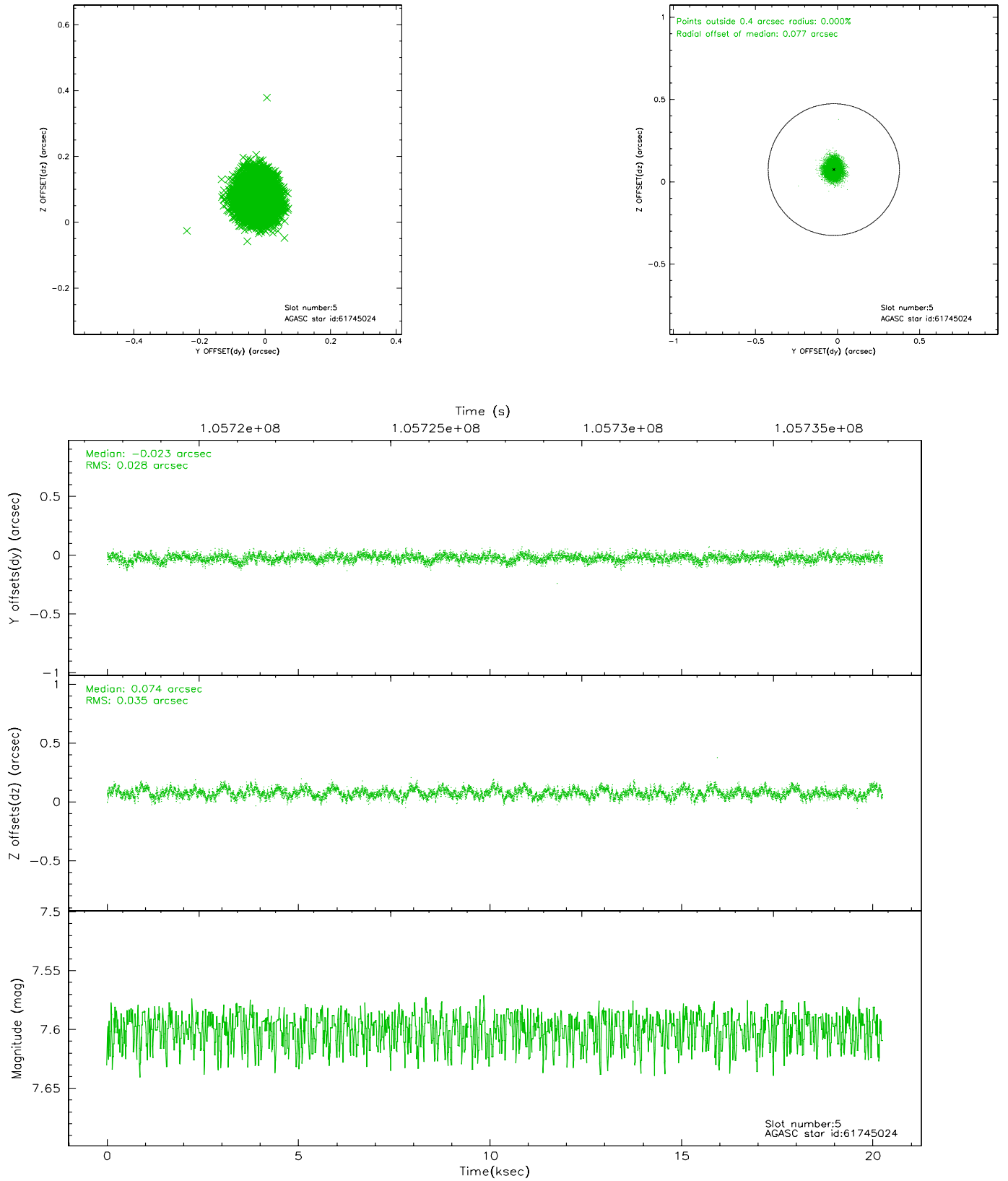
### 2.4.1 Slot 3



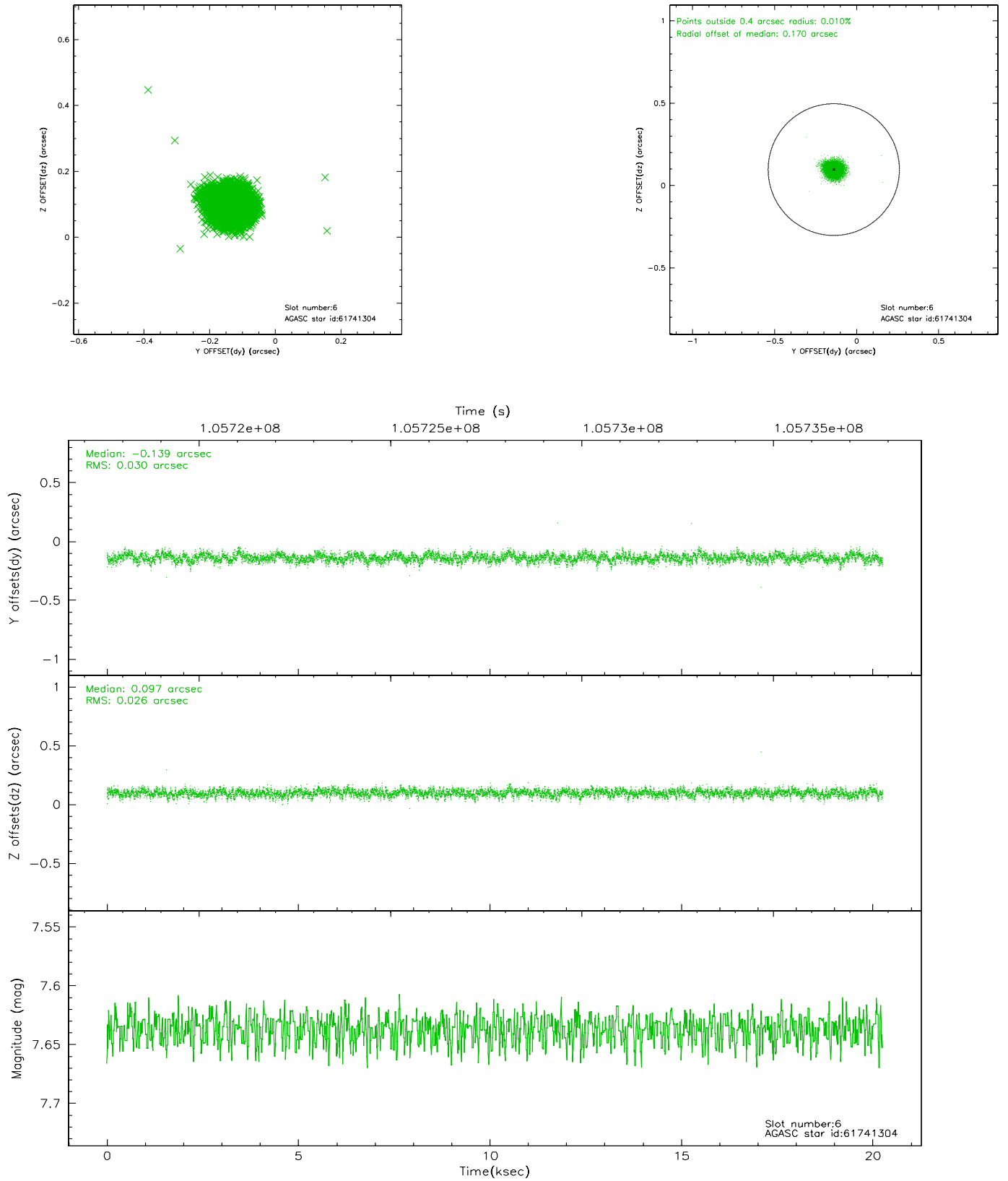
## 2.4.2 Slot 4



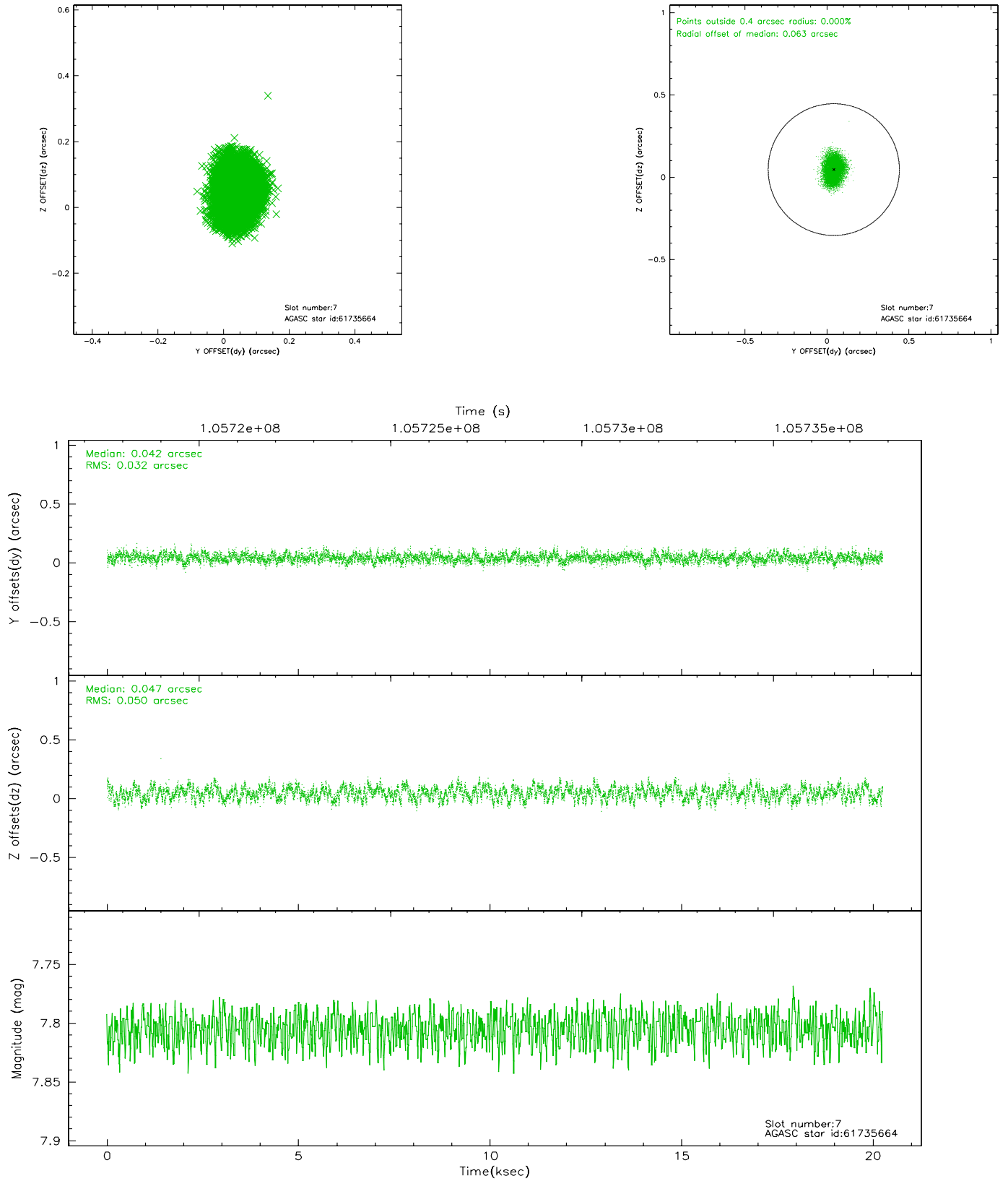
### 2.4.3 Slot 5



## 2.4.4 Slot 6

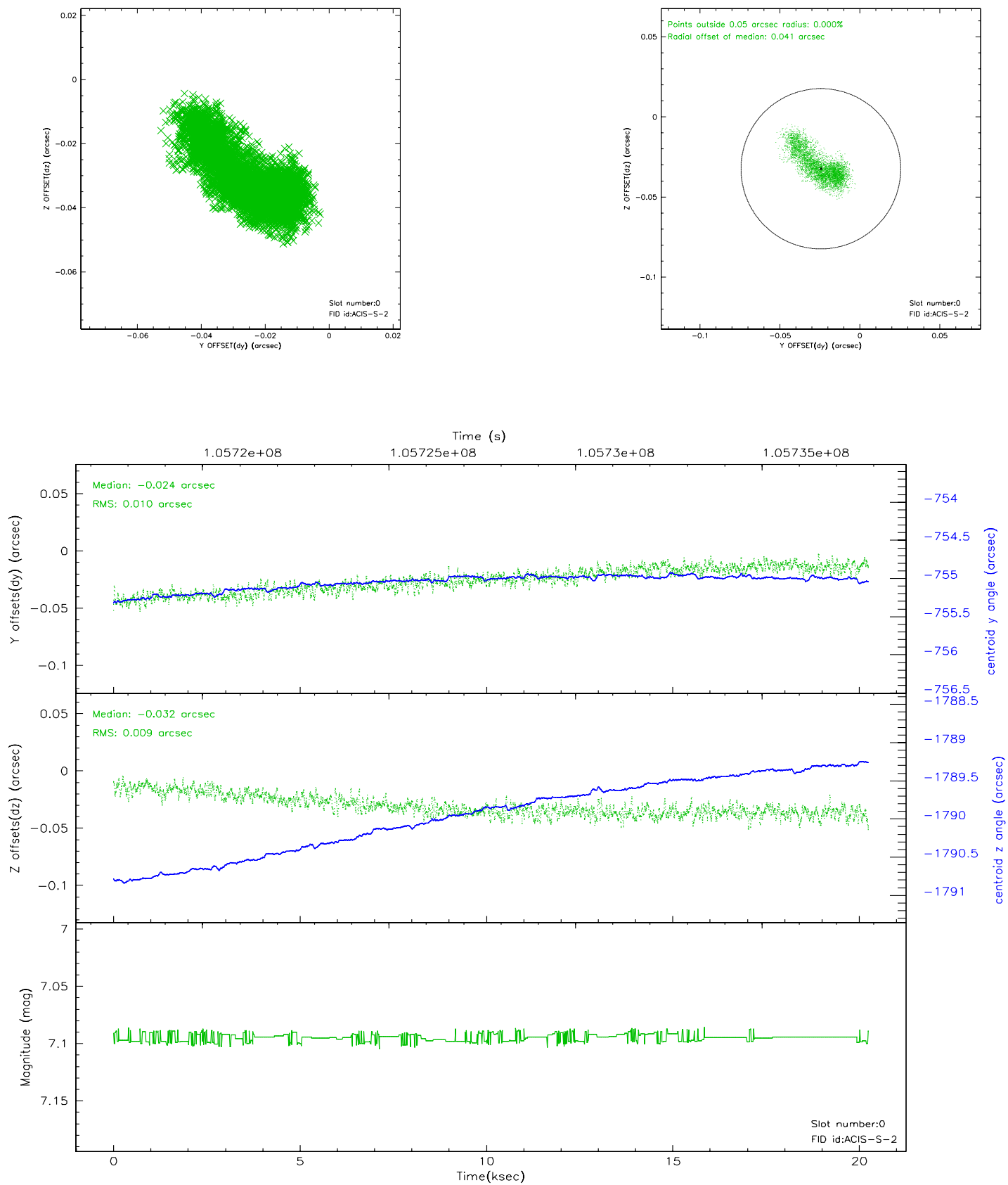


## 2.4.5 Slot 7

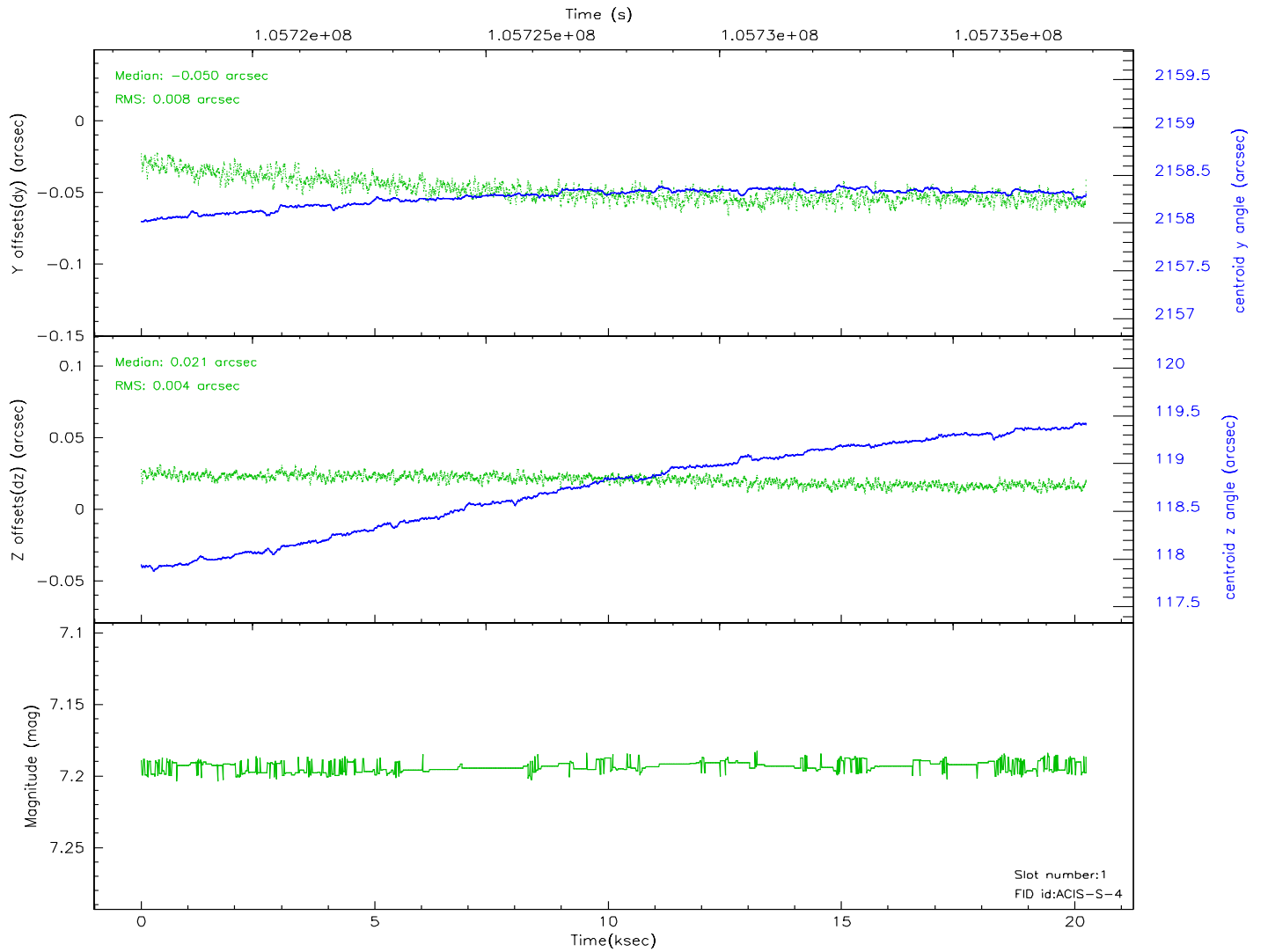
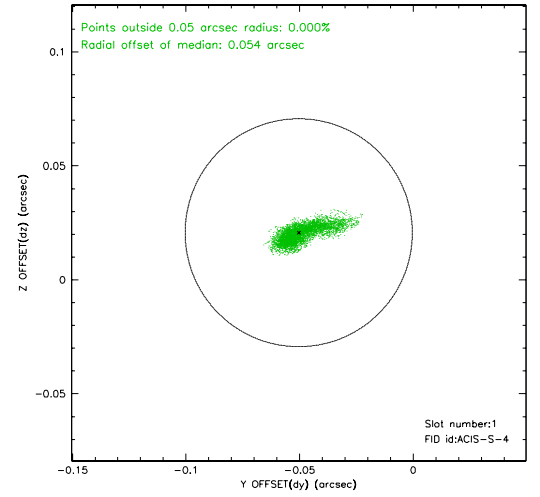
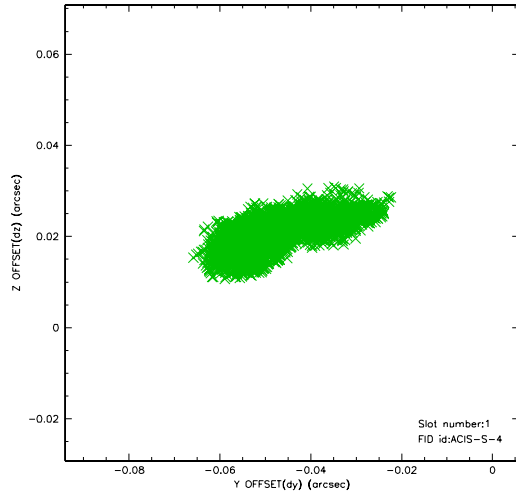


## 2.5 FID Slots

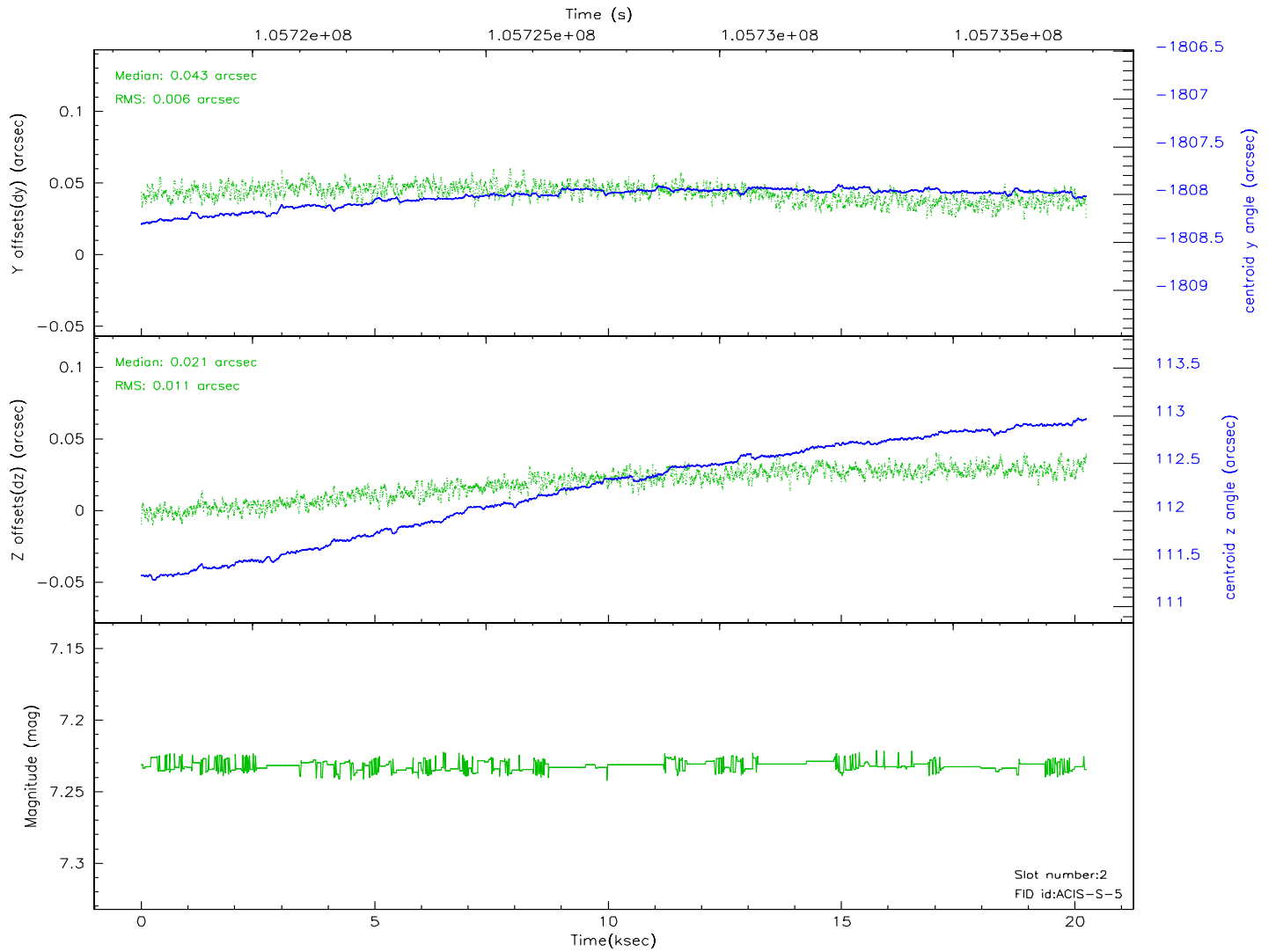
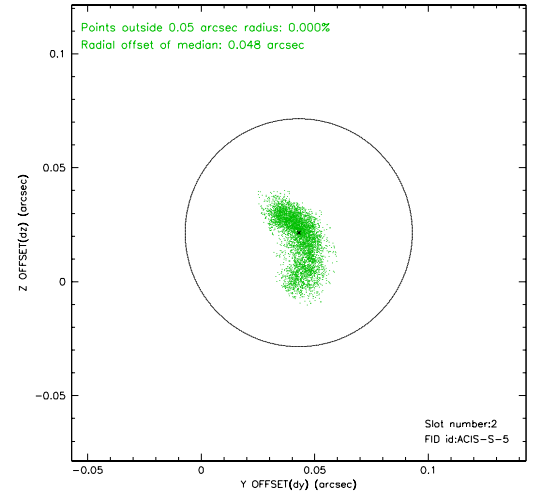
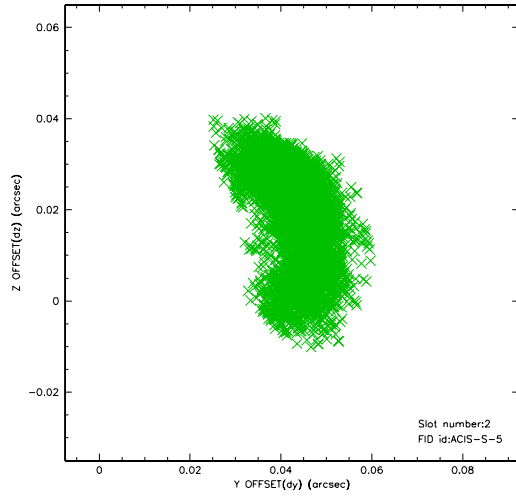
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



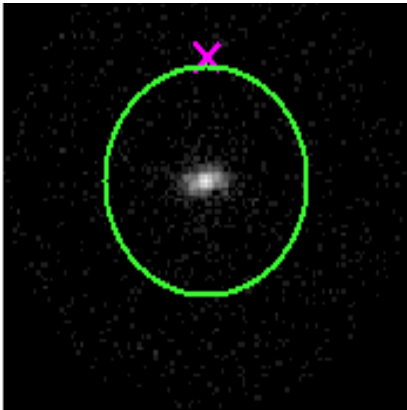


# 3 Gratings

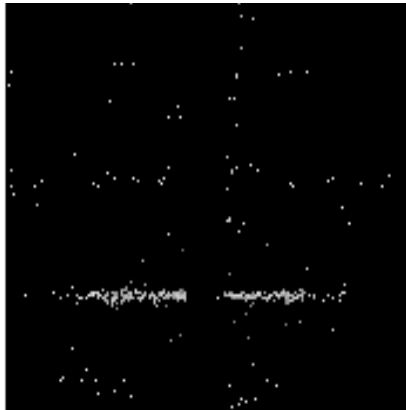
## 3.1 HEG Arm



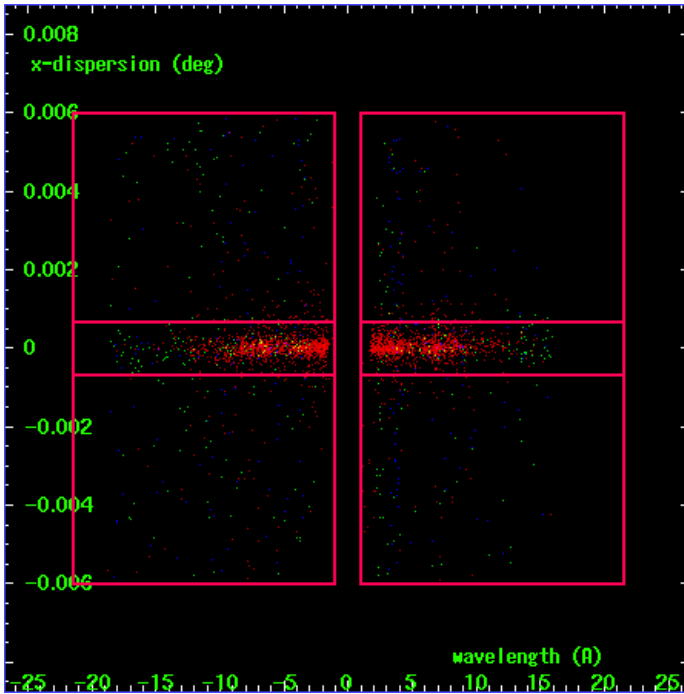
HEG Order Sort 123



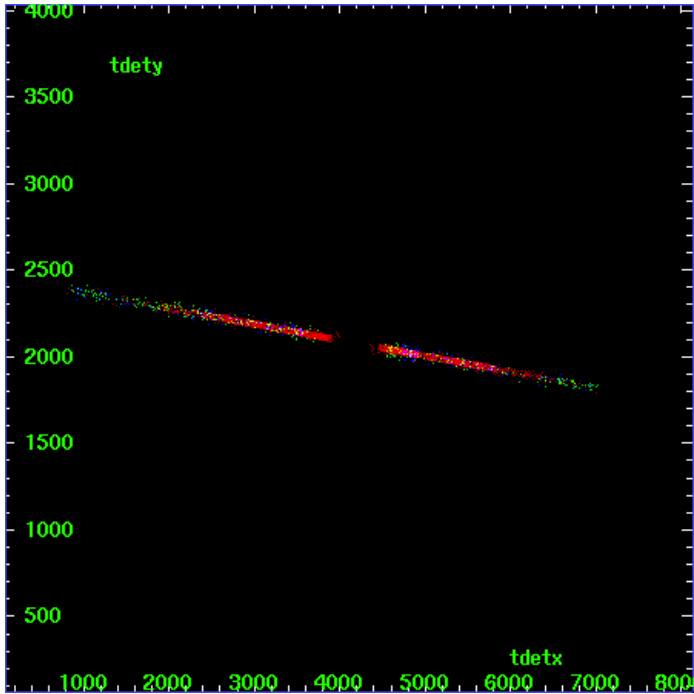
HEG Zero Order



HEG Order Sort ALL

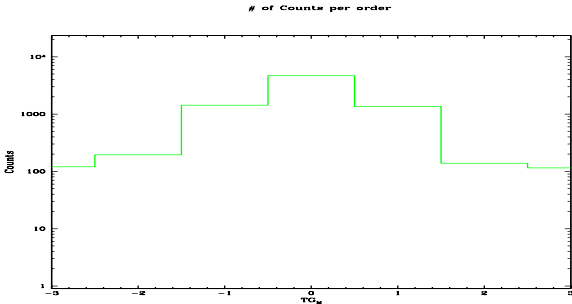


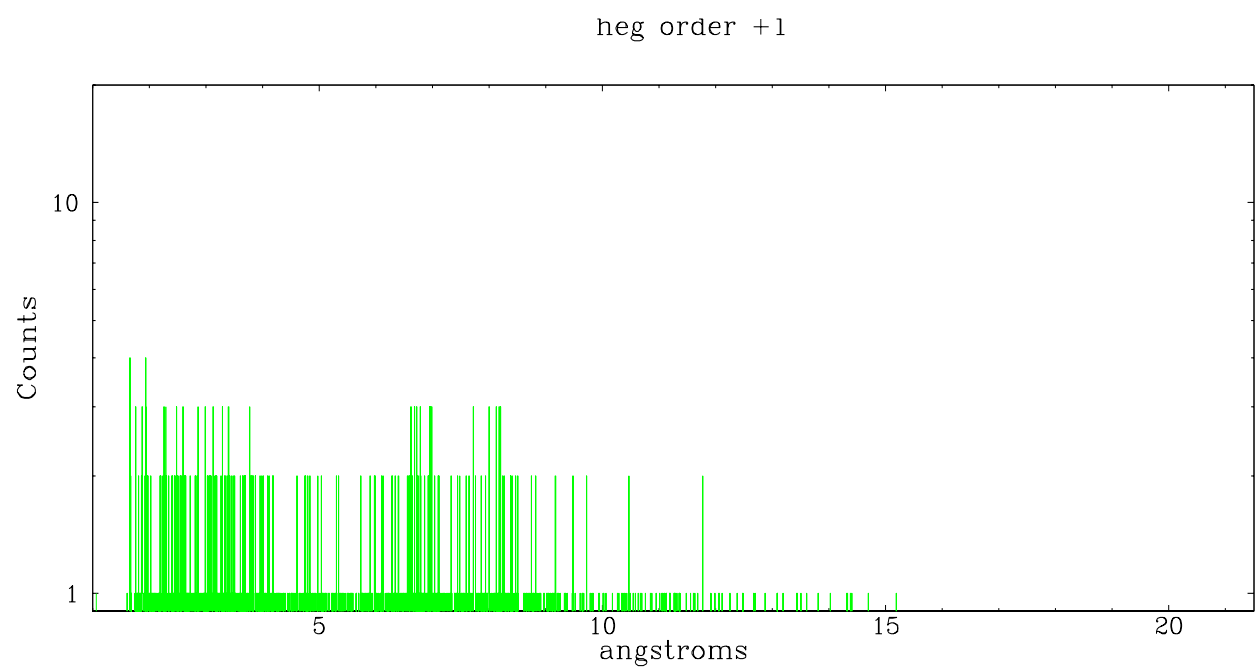
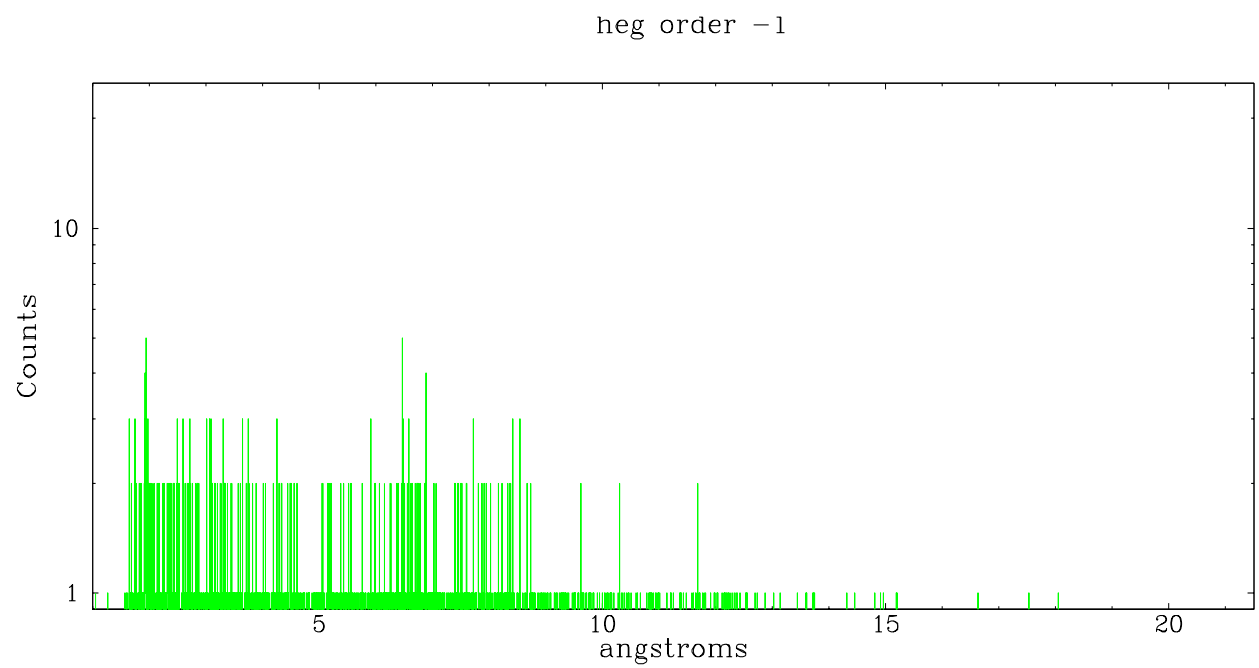
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	120	194	1429	4677	1355	139	115

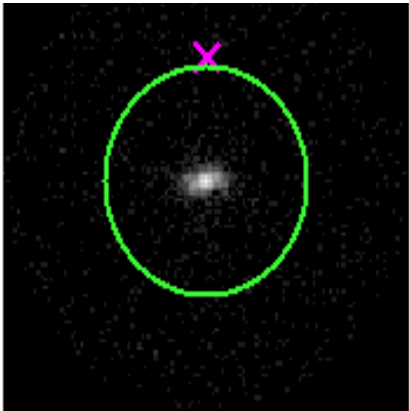




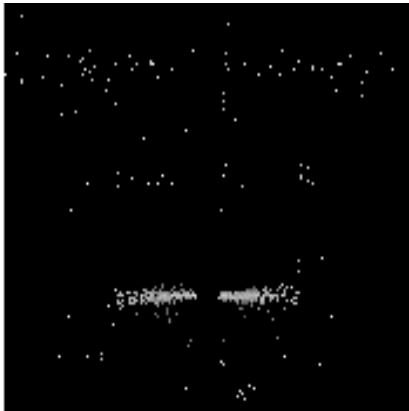
### 3.2 MEG Arm



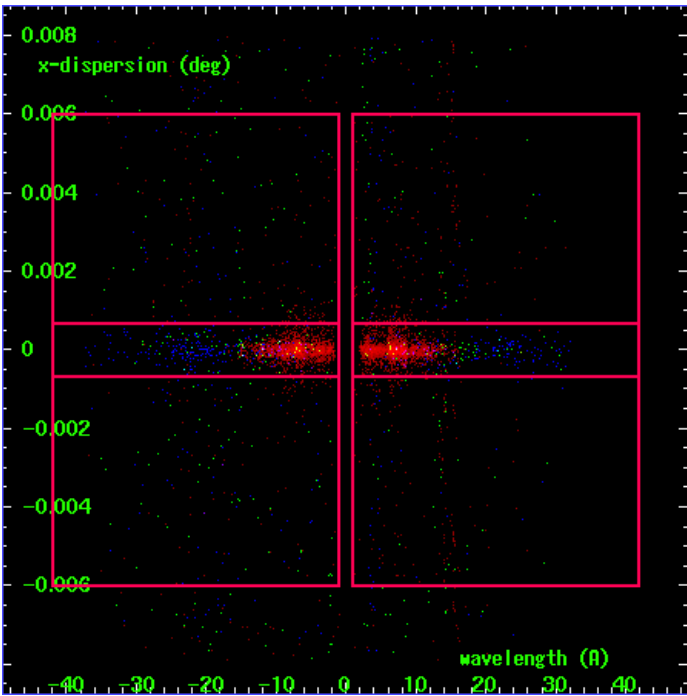
MEG Order Sort 123



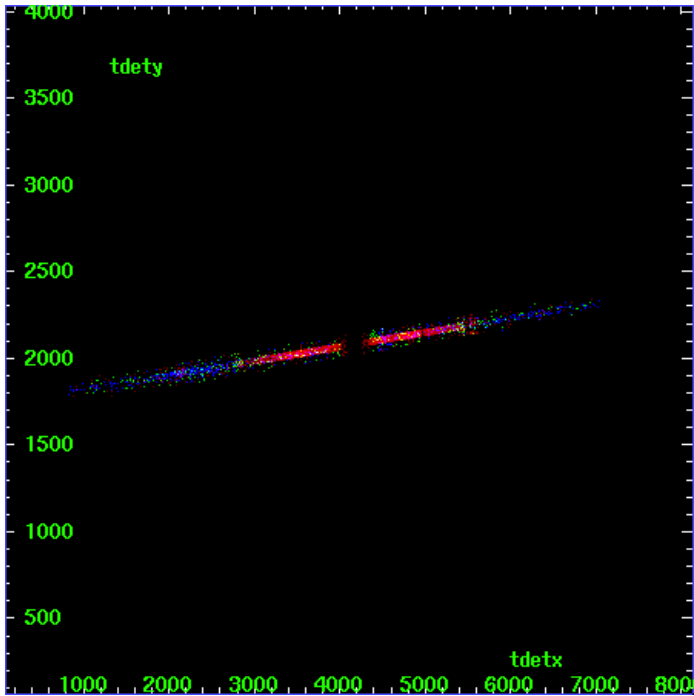
MEG Zero Order



MEG Order Sort ALL

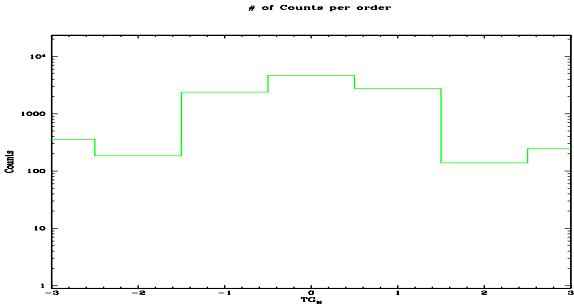


Spot Image MEG

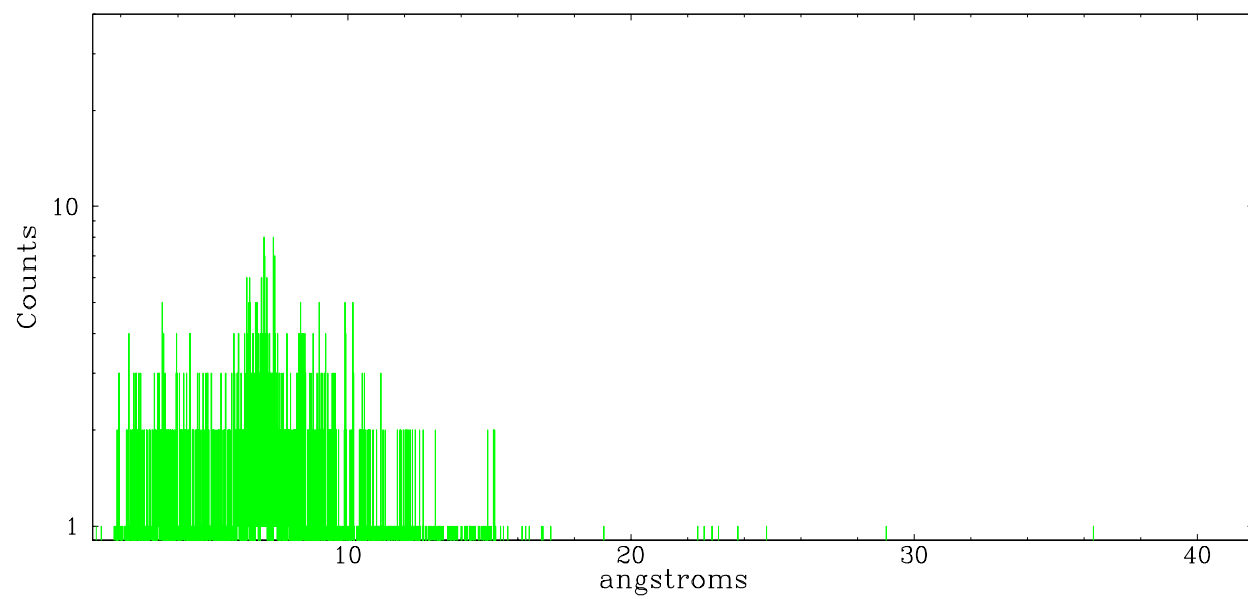


Full Detector MEG

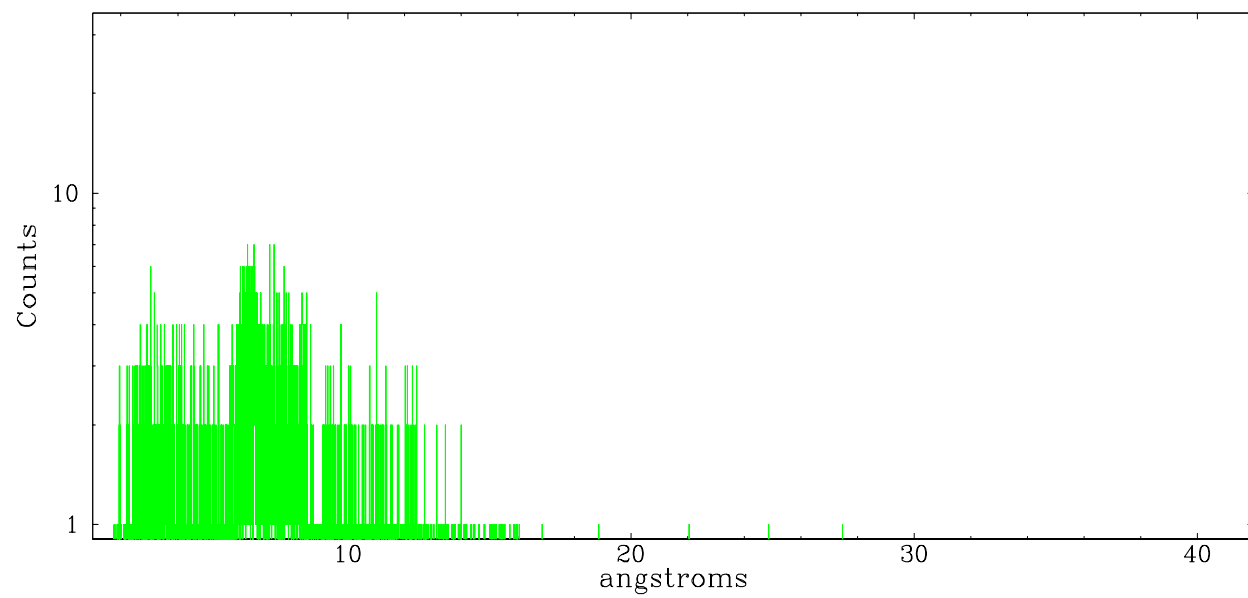
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	357	185	2381	4677	2741	139	245



meg order -1



meg order +1



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.01.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.9

## A.2 Comments

Source is extended. Zeroth order position used in these data products was calculated from the position of the brightest X-ray emission.