

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 4910 - L2 Version 001  
Chandra X-Ray Center

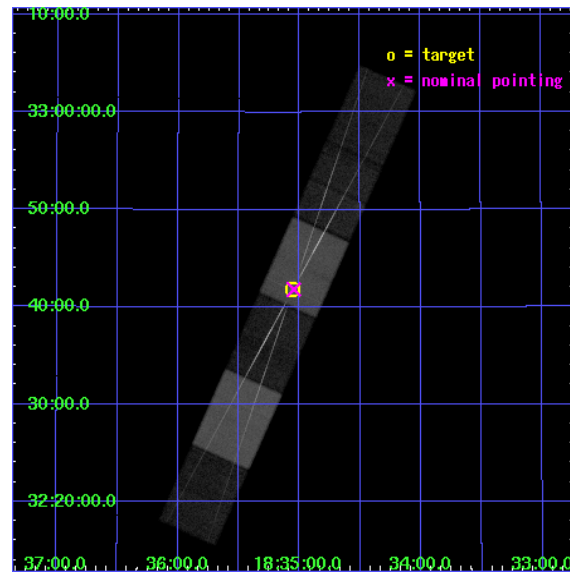
L2 Processing Date : Apr 13 2006

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# 1 Front

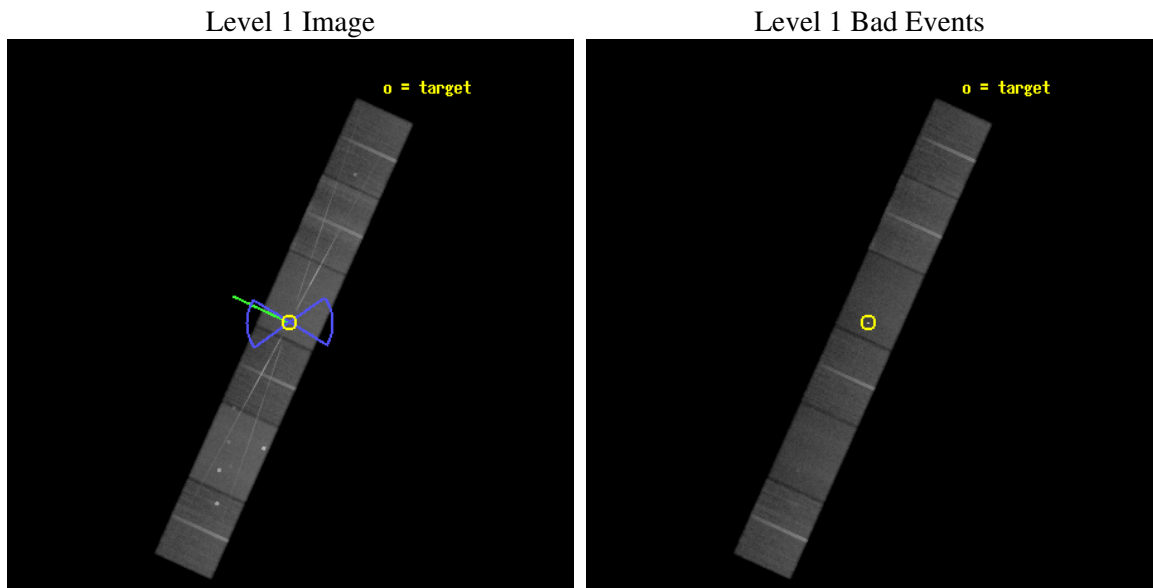
seq_num	700991
obs_id	4910
title	The profile of the Fe Kalpha line in the Broad Line Radio Galaxy 3C382
observer	Dr. Rita Sambruna
object	3C382
dtcycle	0
cycle	P
ra_targ	278.764167
dec_targ	32.696389
ra_nom	278.76163016744
dec_nom	32.697084061808
roll_nom	294.15800048031
revision	2
ontime	55042.5
livetime	54153.51588326
ontime4	55039.958999813
ontime5	55042.5
ontime6	55042.5
ontime7	55042.5
ontime8	55042.5
ontime9	55042.5
l2events	621611



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images

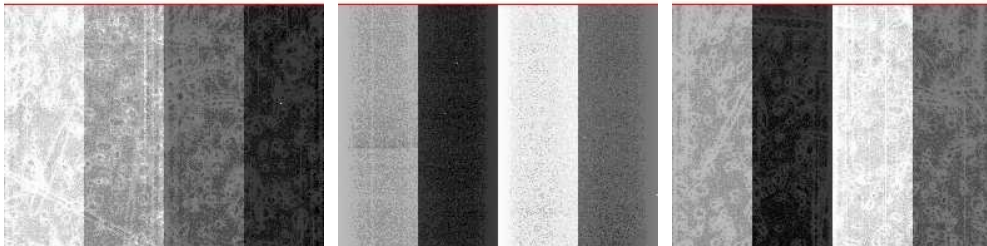


#### 2.1.2 Bias

Chip 4

Chip 5

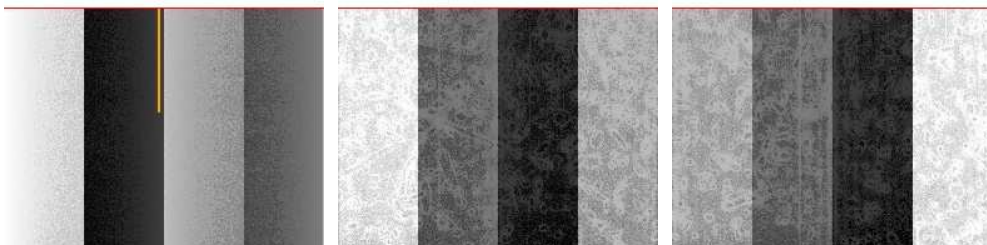
Chip 6



Chip 7

Chip 8

Chip 9



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-04-13T10:05:12
revision	2

sched_exp_time	55000.000000
ontime	55045.895157307
ontime4	55043.35415712
ontime5	55045.895157307
ontime6	55045.895157307
ontime7	55045.895157307
ontime8	55045.895157307
ontime9	55045.895157307
l1events	2529003

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	376698	514904	368088	497216	439217	332880
rejected events	324268	271323	295798	279158	333357	287716
rejected %	86%	52%	80%	56%	75%	86%

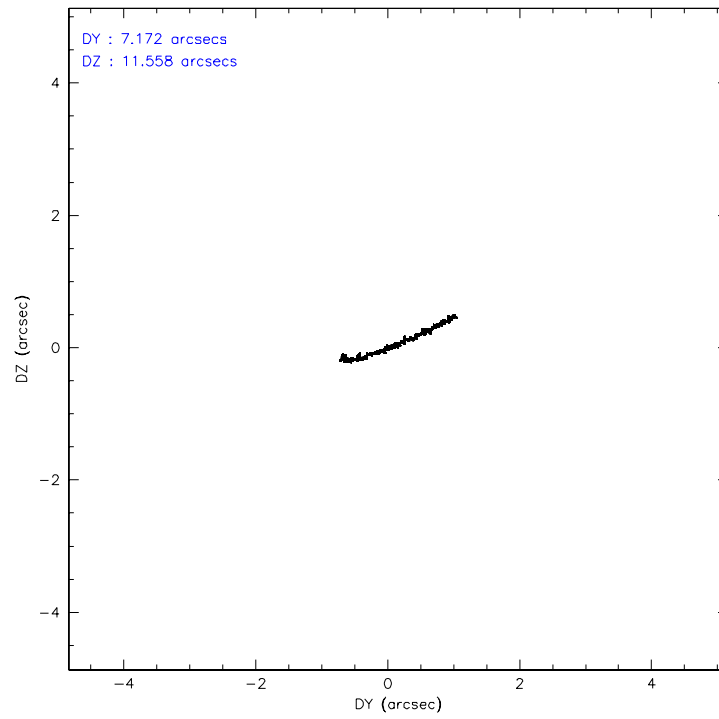
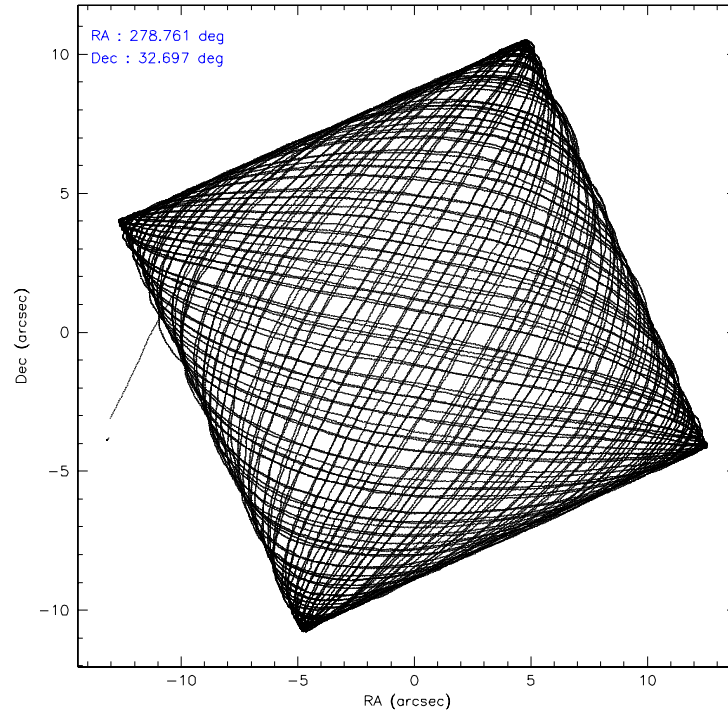
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	28076	35139	41053	18406	40810	20513
	7%	6%	11%	3%	9%	6%
grade 1 events	358	637	248	593	297	212
	0%	0%	0%	0%	0%	0%
grade 2 events	8930	71377	11965	53709	21144	8193
	2%	13%	3%	10%	4%	2%
grade 3 events	4497	6558	5358	14384	10304	4382
	1%	1%	1%	2%	2%	1%
grade 4 events	4368	6371	5136	14116	9583	4186
	1%	1%	1%	2%	2%	1%
grade 5 events	14021	24944	15016	34360	19837	15623
	3%	4%	4%	6%	4%	4%
grade 6 events	6560	124146	8782	117452	24030	7894
	1%	24%	2%	23%	5%	2%
grade 7 events	309888	245732	280530	244196	313212	271877
	82%	47%	76%	49%	71%	81%

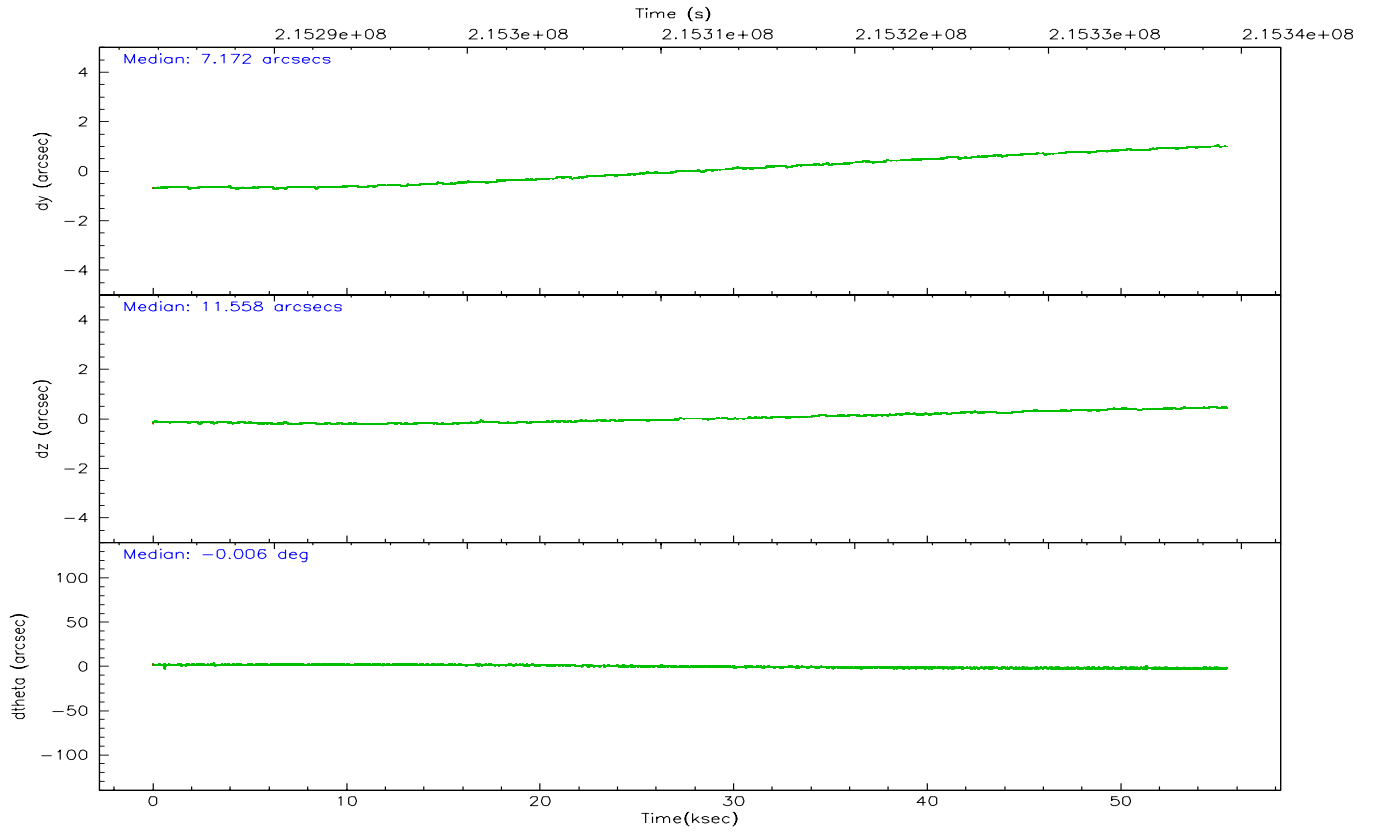
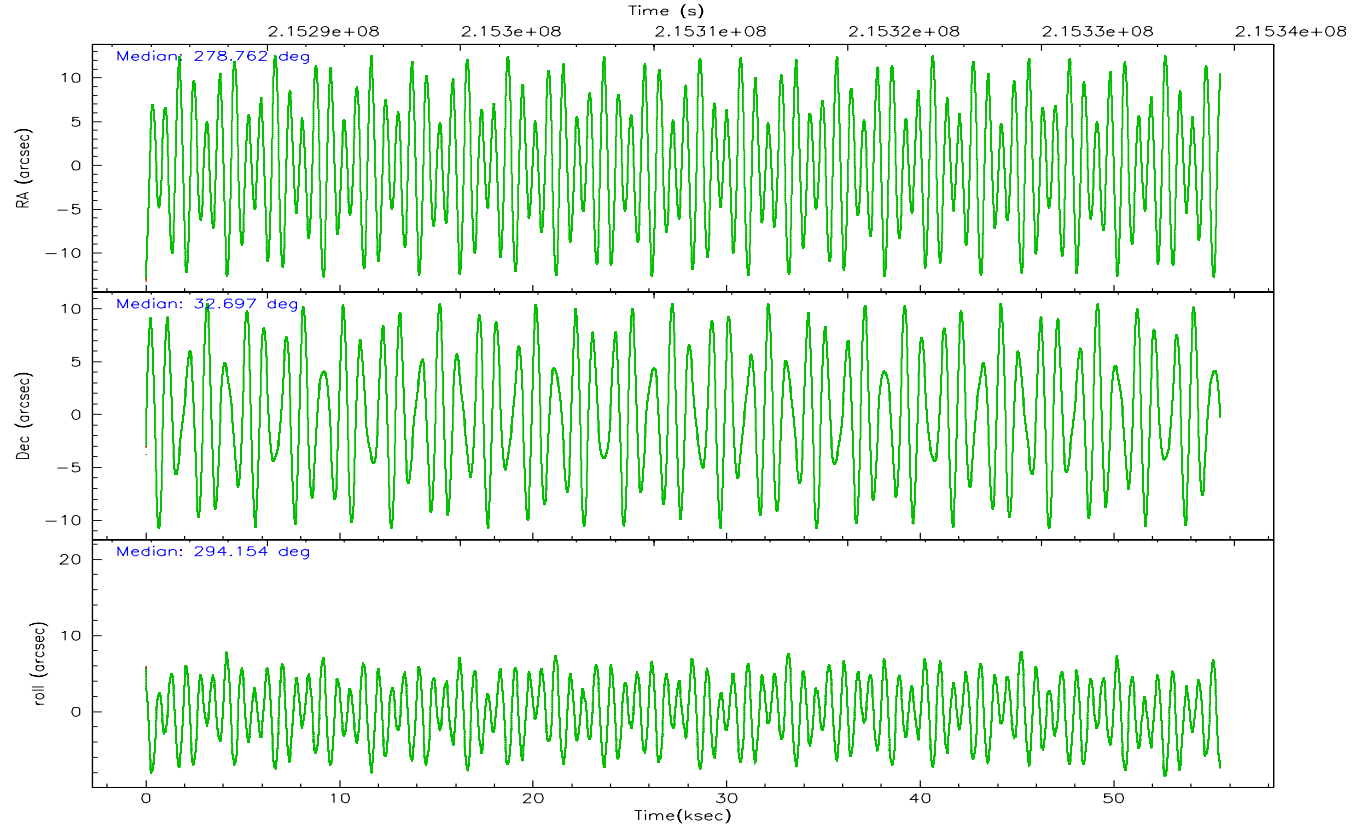


## 2.2 Compared Parameters

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	278.735154	278.7616301674374	Subarray start row	1	1
Pointing Dec	32.712702	32.69708406180783	Subarray row count	774	774
Pointing Roll	294.015678	294.1580004803074	Alternating exposures requested	N	N
Roll angle	268.000000	268.000000	Primary exposure time	0.000000	2.5
Roll tolerance	33.000000	33.000000			
Roll constraint allows 180D rotation	Y	Y			
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			
Observation start time	215284246.184000	215283039.43347			
Observation start date	2004-10-27T17:09:42	2004-10-27T16:50:39			
Observation end time	215339246.184000	215340225.72353			
Observation end date	2004-10-28T08:26:22	2004-10-28T08:43:45			
Read mode	TIMED	TIMED			

## 2.3 Aspect



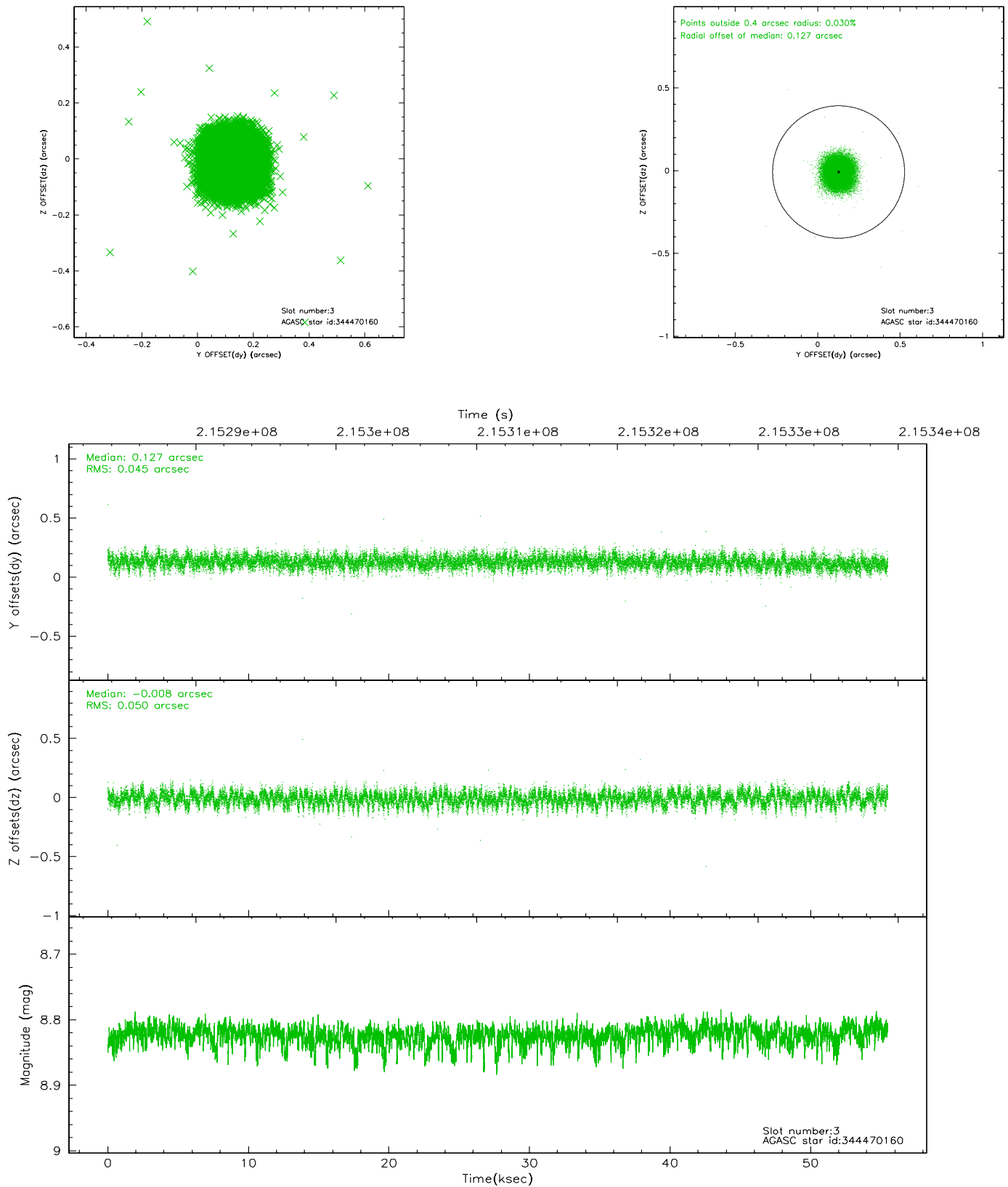


### Slot Statistics

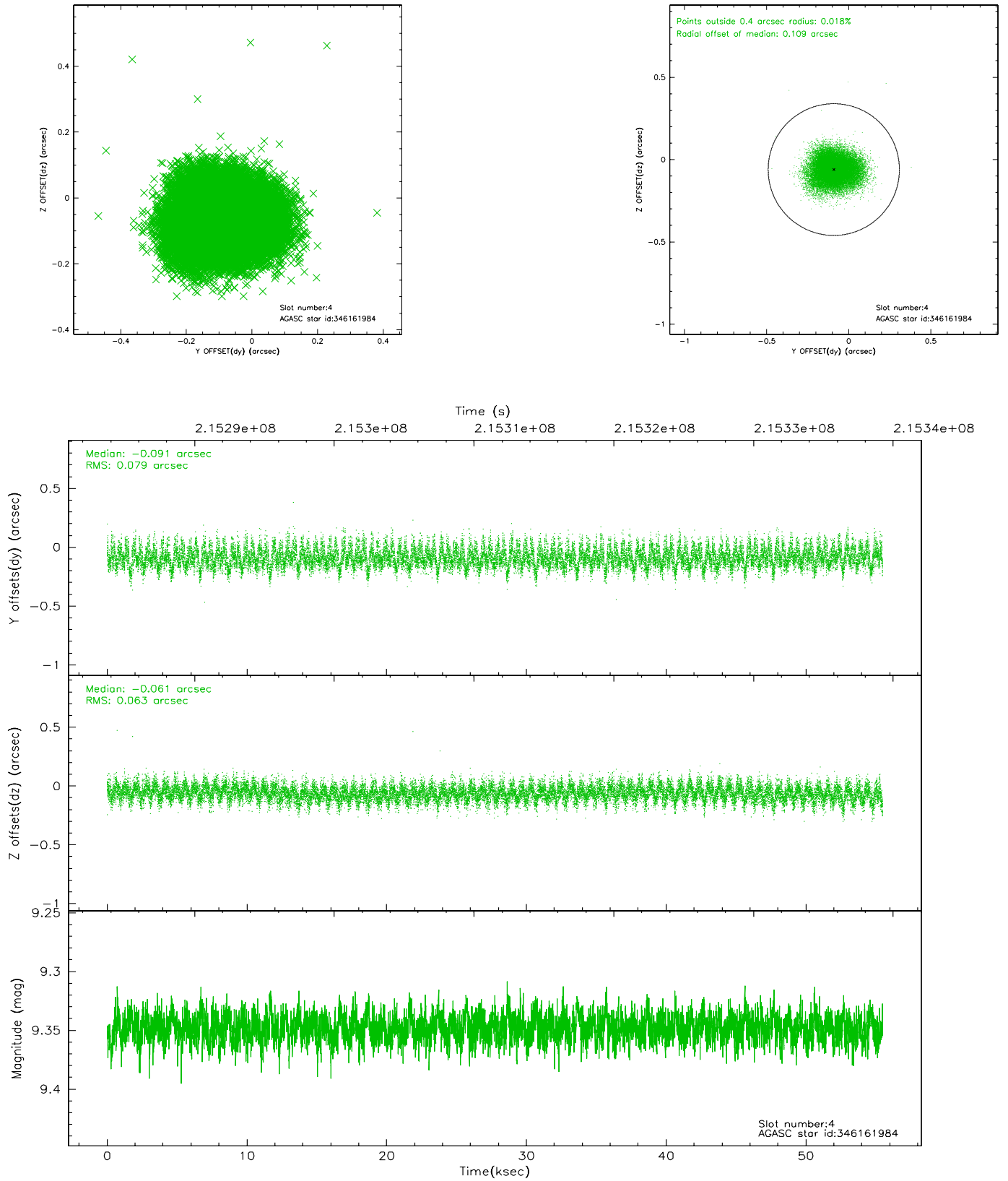
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	13537	0.010	0.071	0.011	0.020	0.000000	0.000000	936.29	-1790.54
1	FID	ACIS-S-5	7.23	13535	-0.056	0.025	0.012	0.018	0.000000	0.000000	-1812.79	107.00
2	FID	ACIS-S-6	7.37	13535	0.025	-0.084	0.012	0.017	0.000000	0.000000	401.89	750.81
3	GUIDE	344470160	8.82	27058	0.127	-0.008	0.072	0.116	278.797364	32.225309	1680.32	-540.63
4	GUIDE	346161984	9.35	27057	-0.091	-0.061	0.108	0.174	279.085504	33.499118	-2159.43	2113.82
5	GUIDE	346176856	9.20	27053	0.088	-0.022	0.072	0.118	279.094962	32.258255	1938.87	335.99
6	GUIDE	344457512	9.85	27045	-0.014	0.021	0.162	0.250	277.881000	32.714944	-1069.51	-2355.21
7	GUIDE	344464904	8.42	27004	-0.108	0.071	0.071	0.115	278.255510	33.238188	-2318.51	-547.84

## 2.4 Star Slots

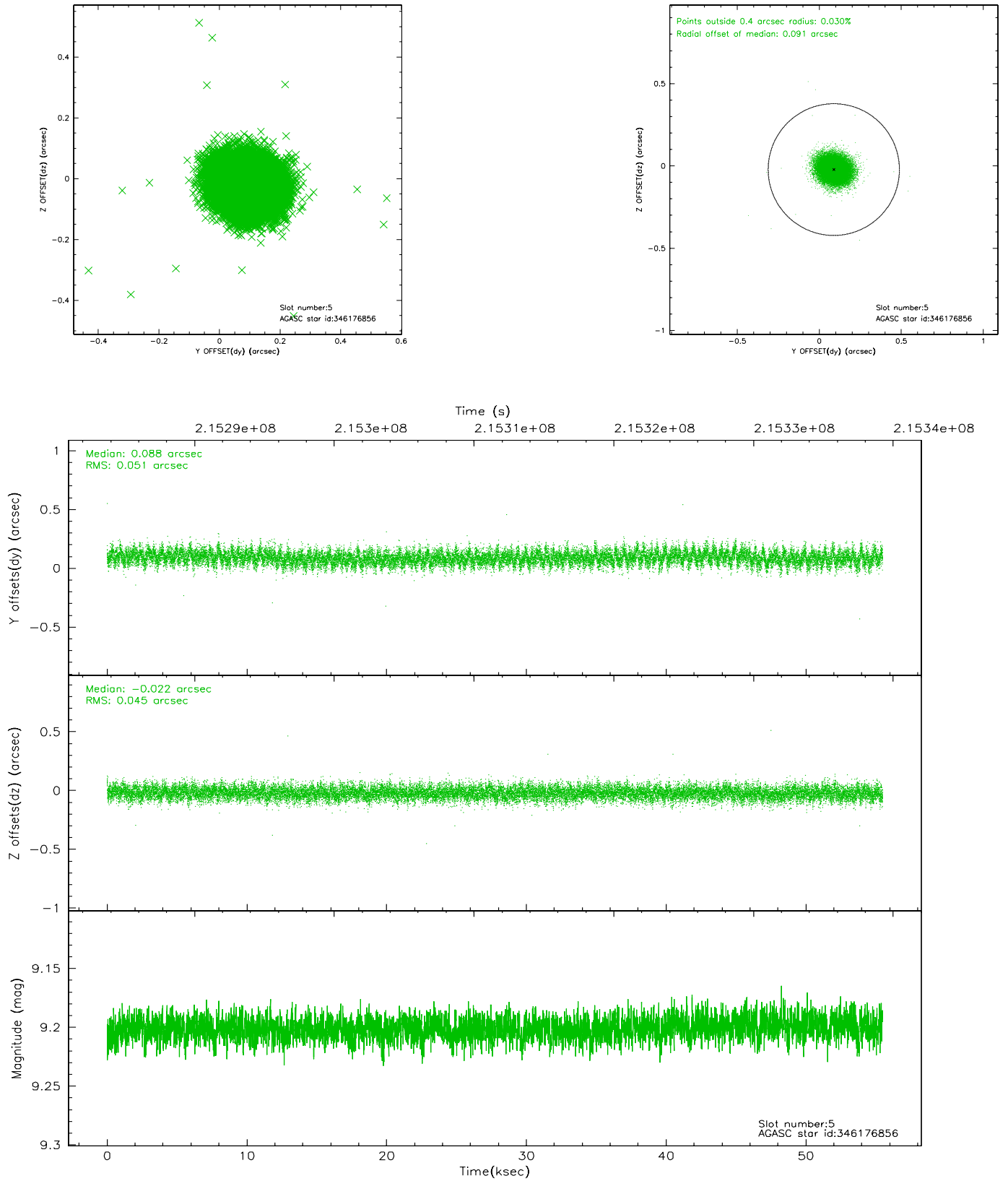
### 2.4.1 Slot 3



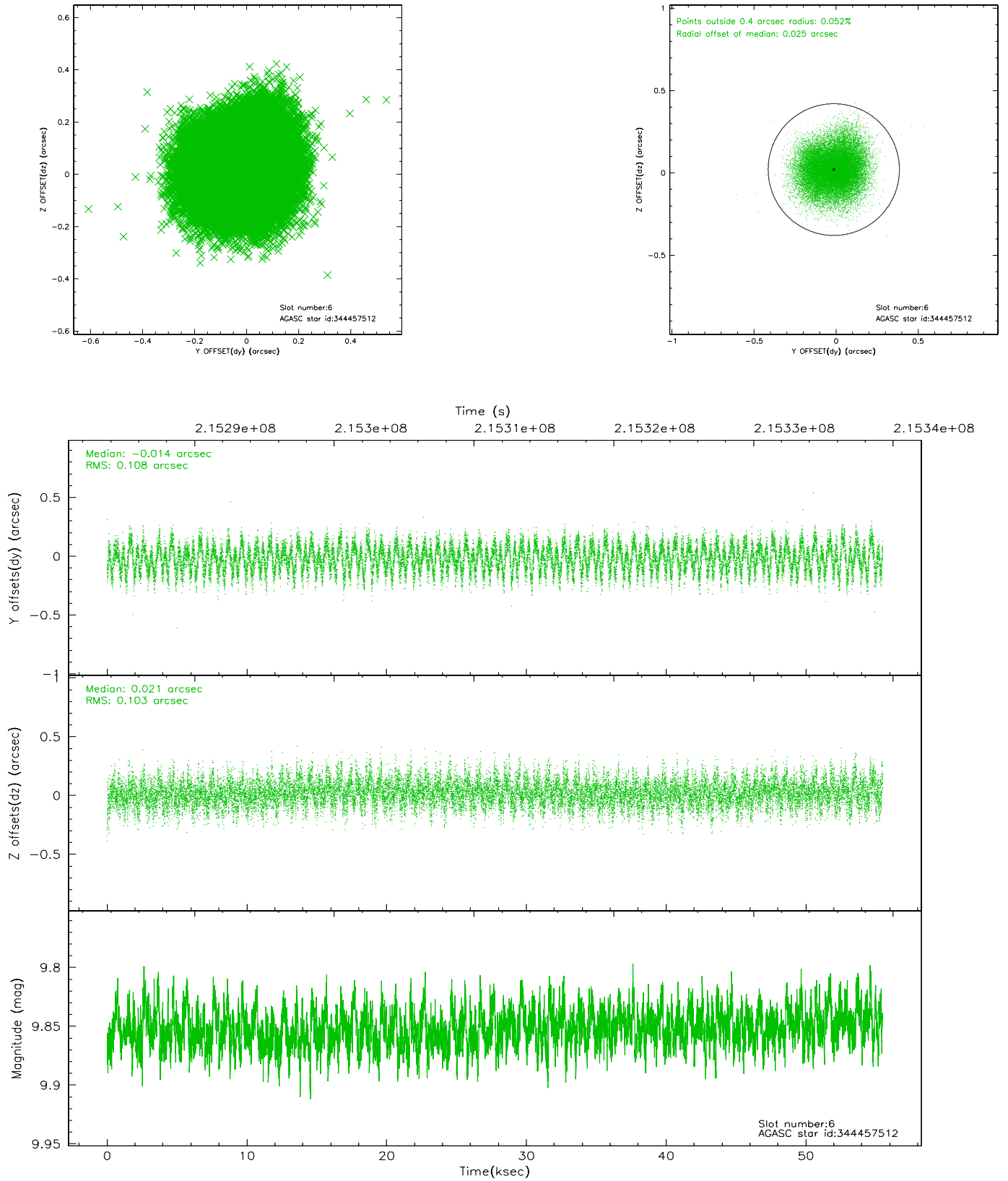
## 2.4.2 Slot 4



### 2.4.3 Slot 5

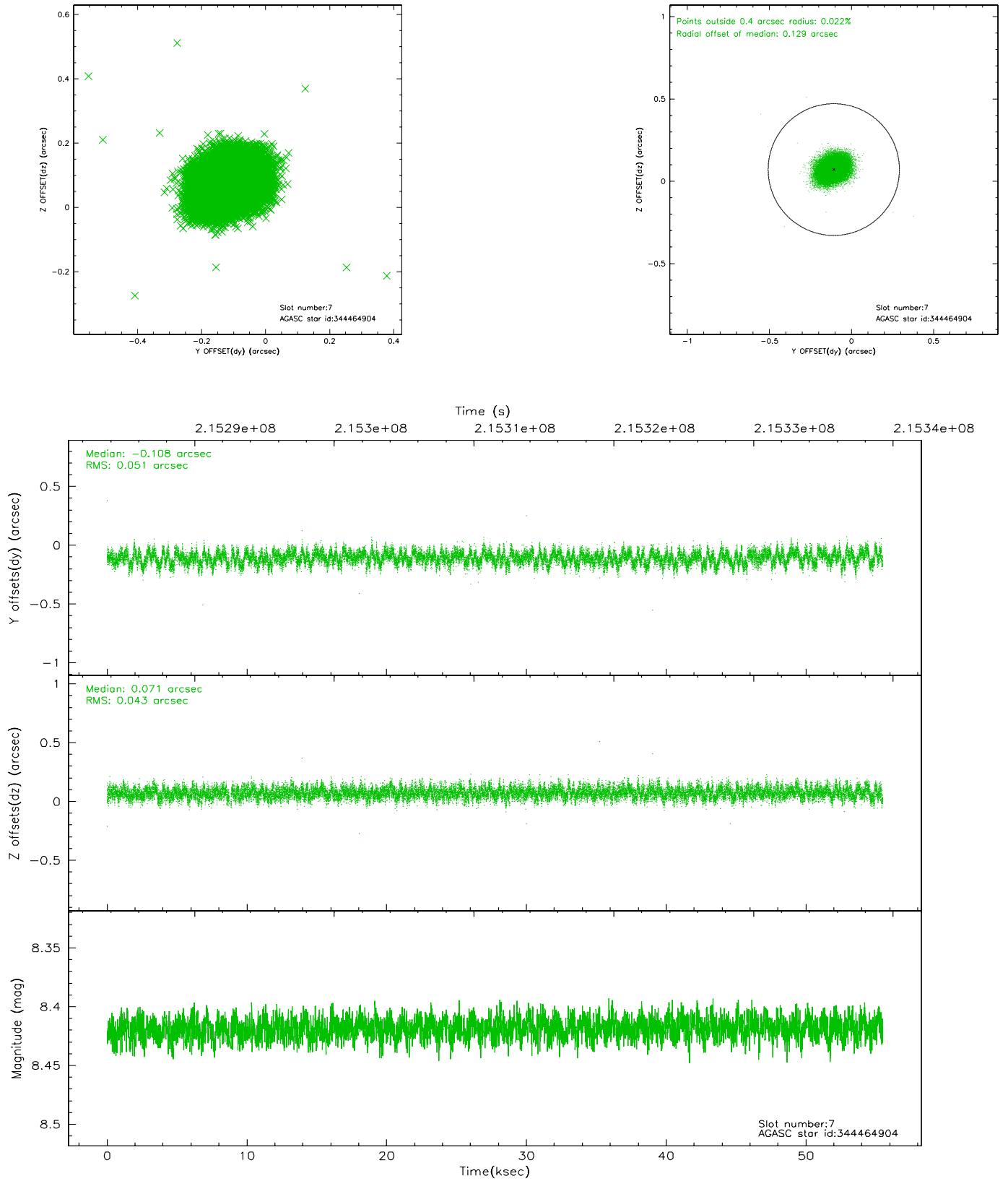


## 2.4.4 Slot 6



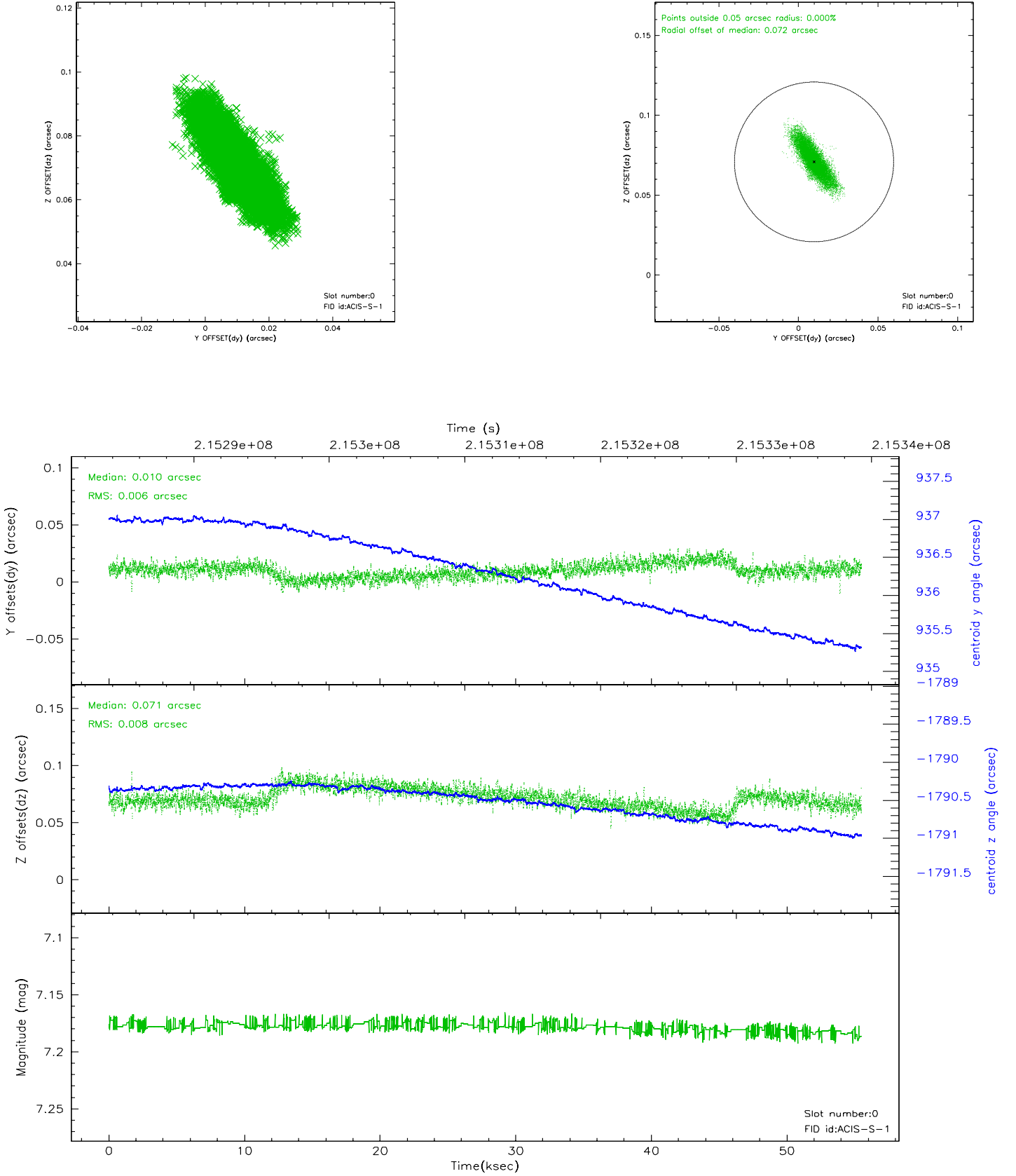


## 2.4.5 Slot 7

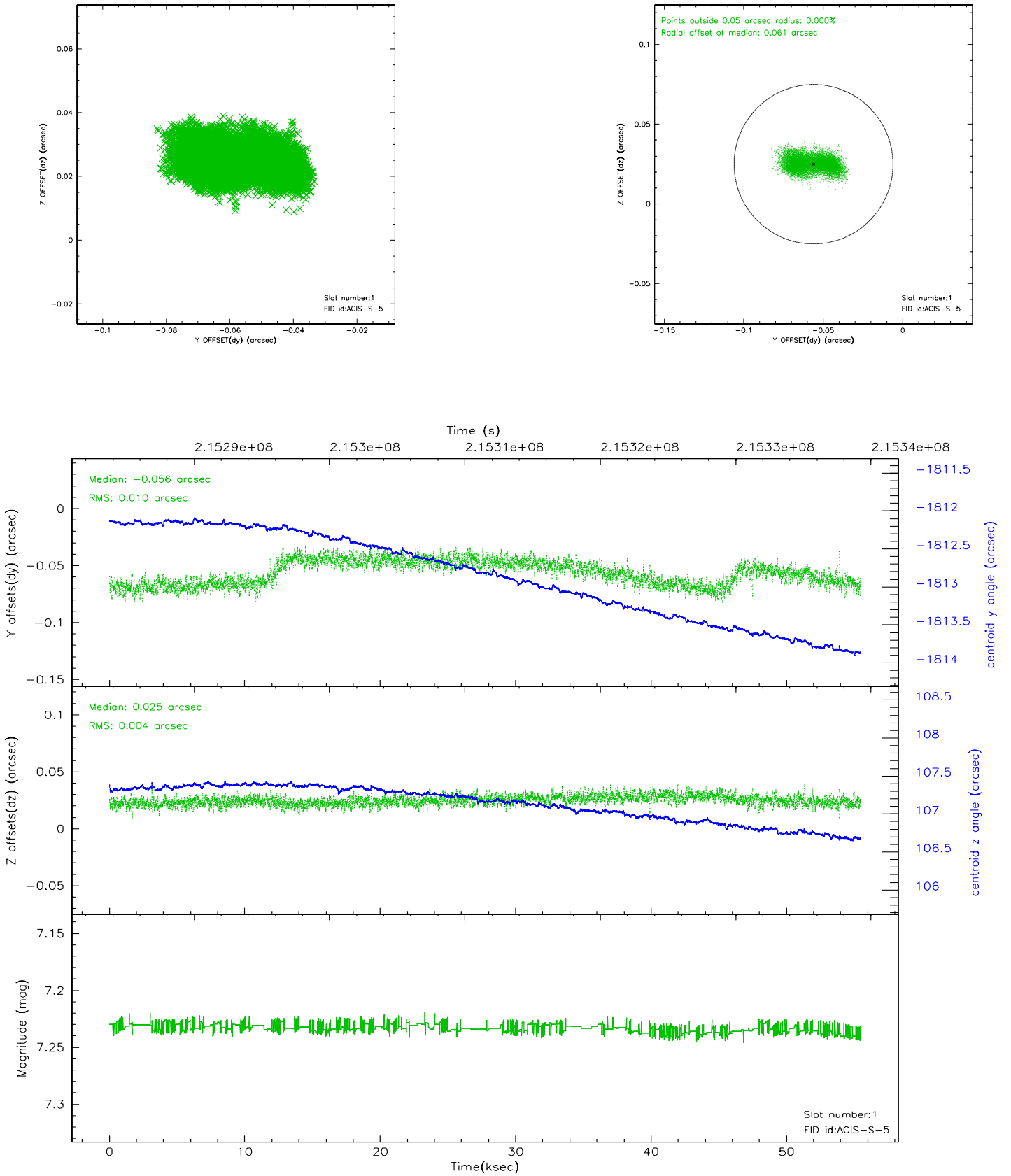


## 2.5 FID Slots

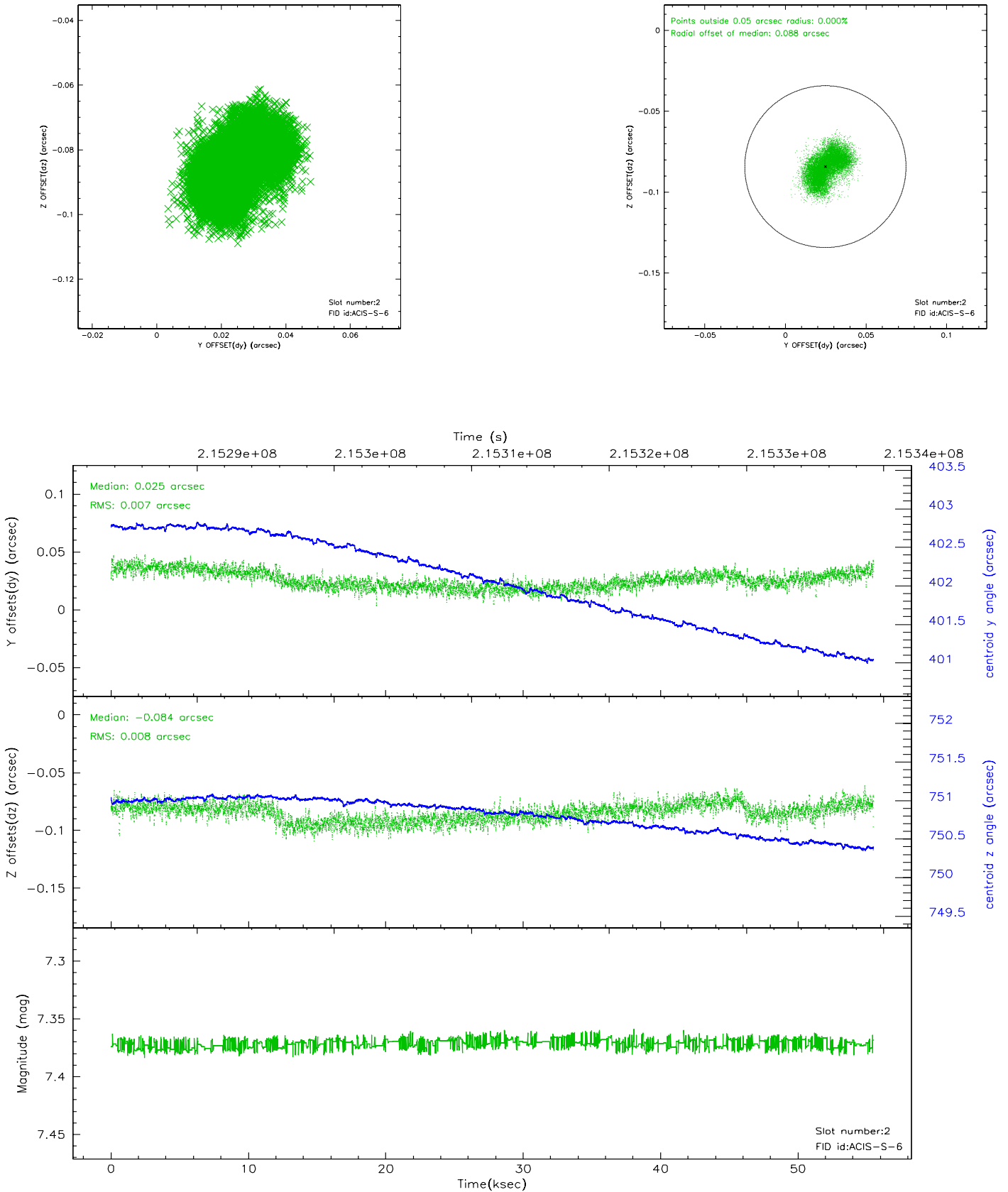
### 2.5.1 Slot 0



## 2.5.2 Slot 1

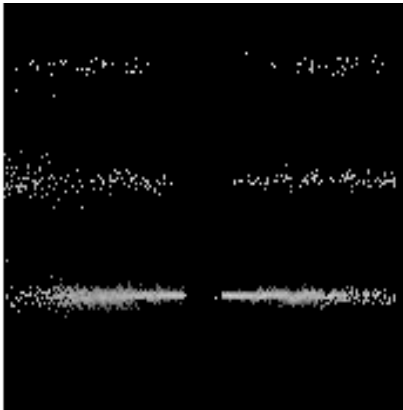


### 2.5.3 Slot 2

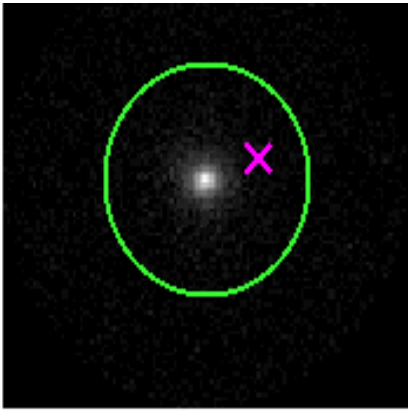


# 3 Gratings

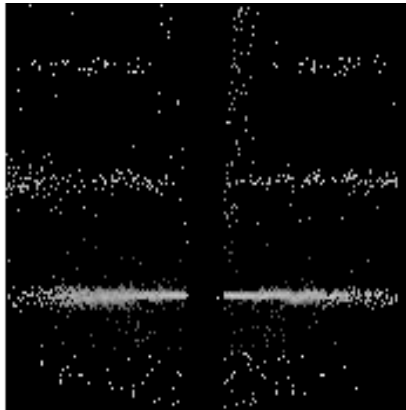
## 3.1 HEG Arm



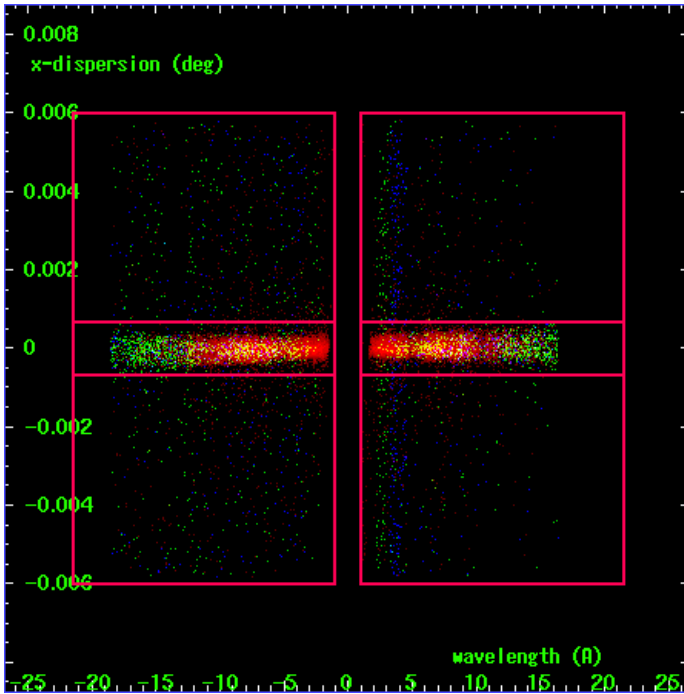
HEG Order Sort 123



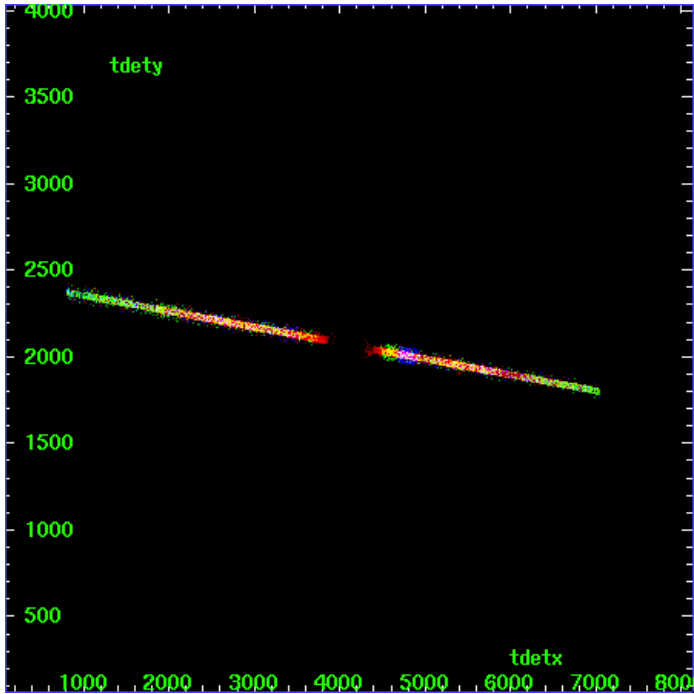
HEG Zero Order



HEG Order Sort ALL

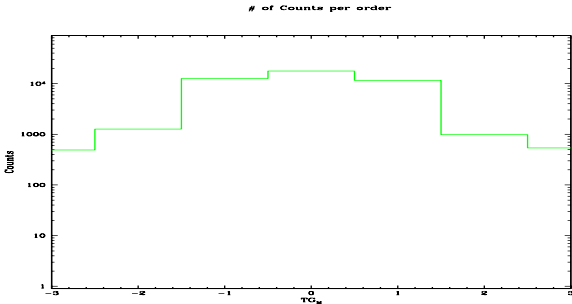


Spot Image HEG

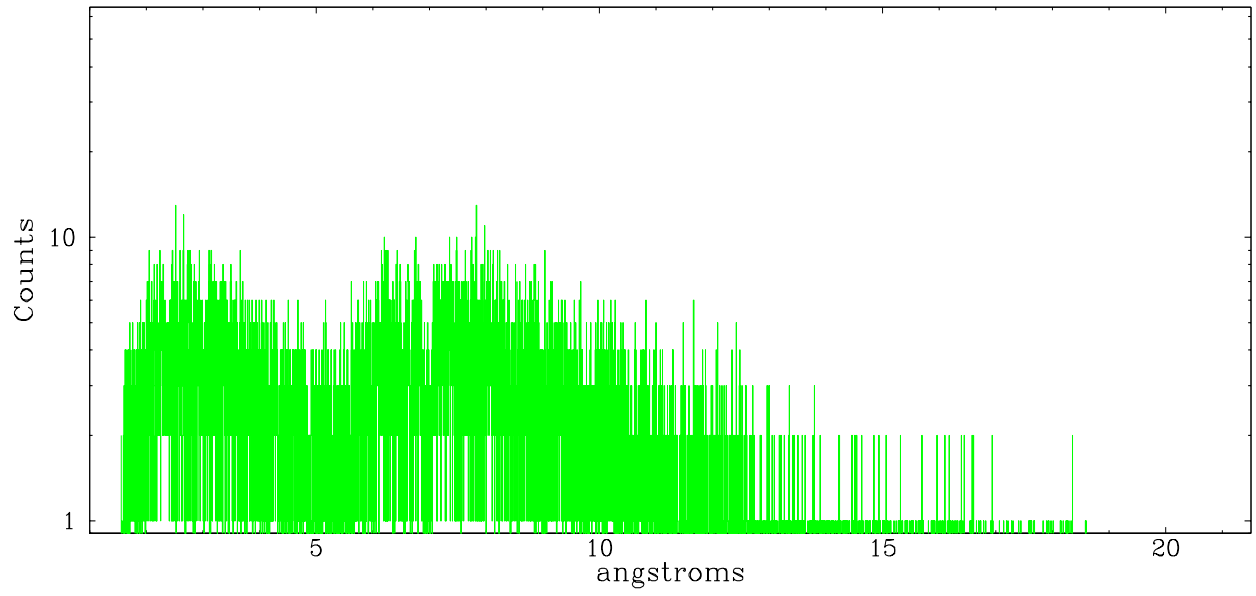


Full Detector HEG

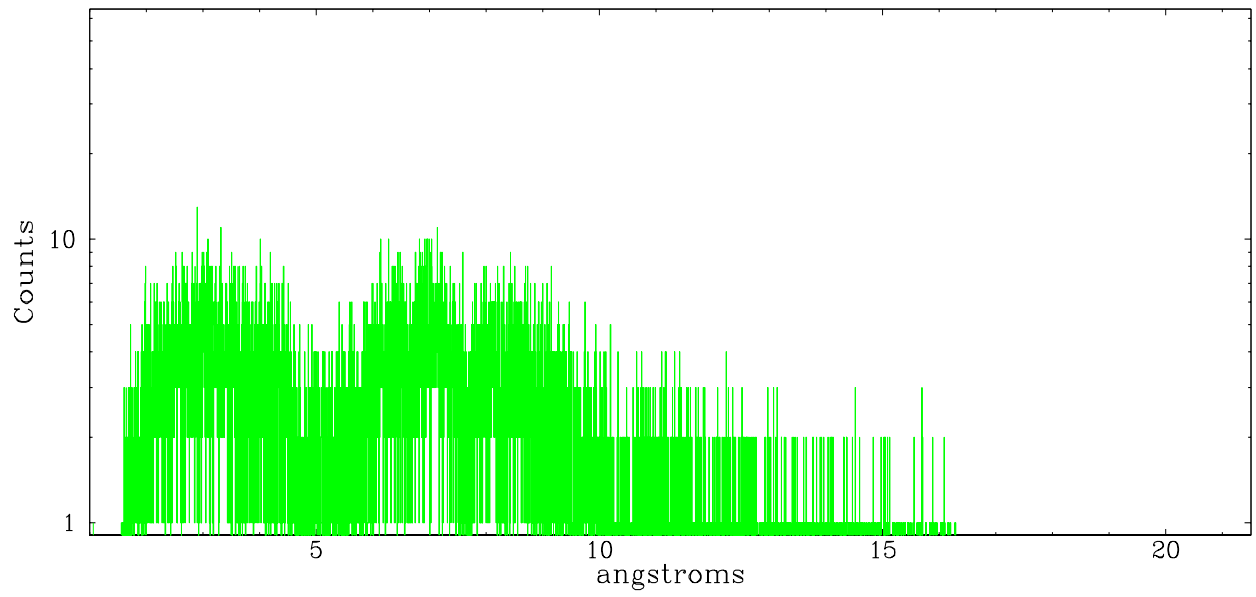
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	492	1268	12668	17695	11553	982	540



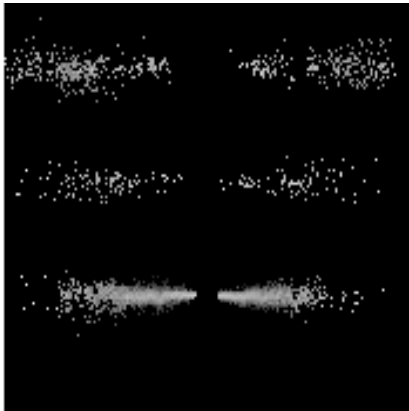
neg order -1



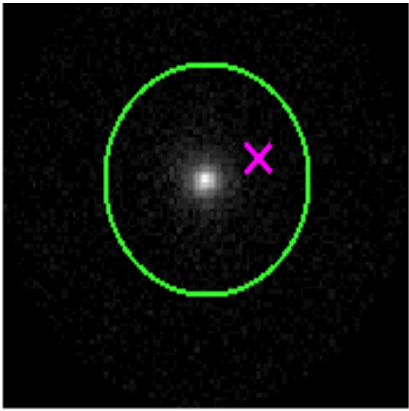
neg order +1



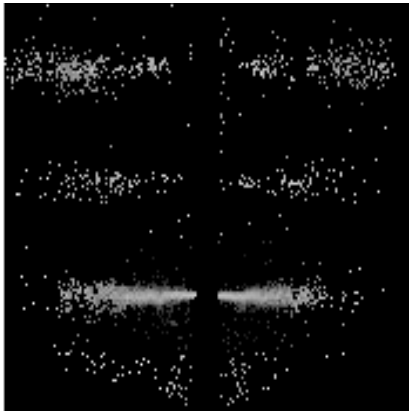
### 3.2 MEG Arm



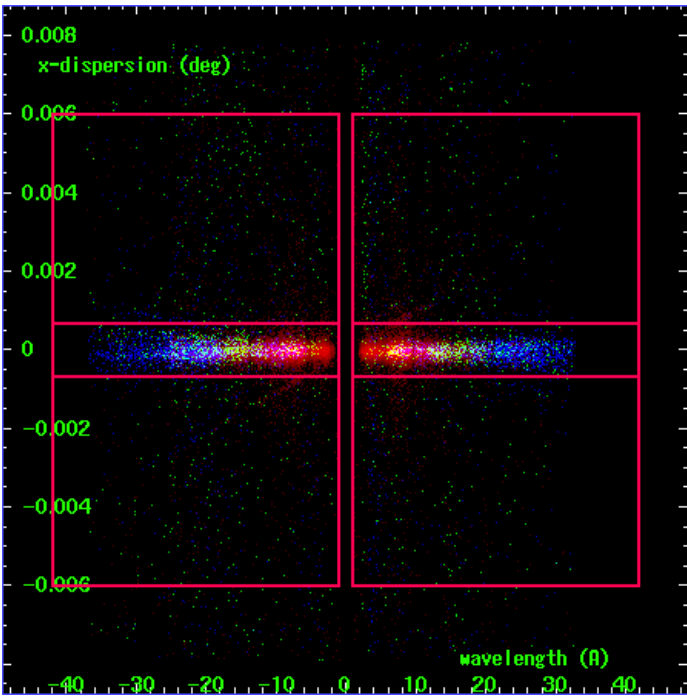
MEG Order Sort 123



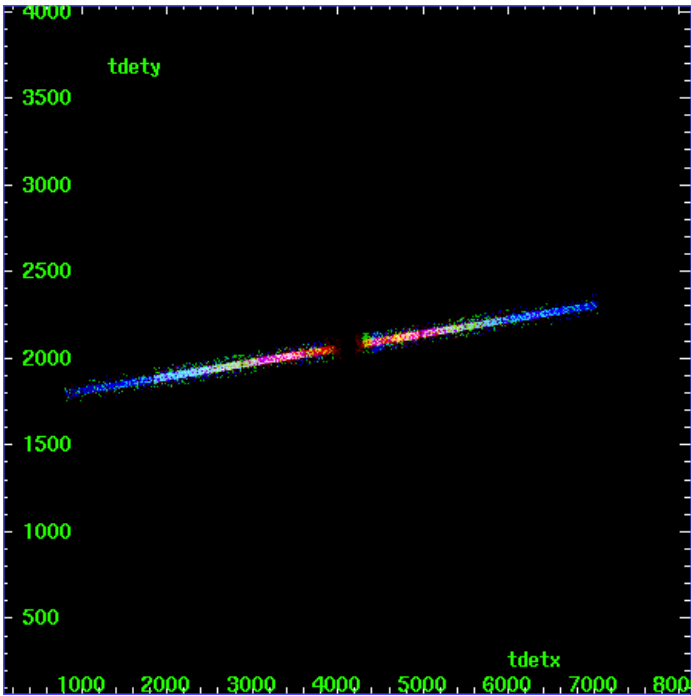
MEG Zero Order



MEG Order Sort ALL

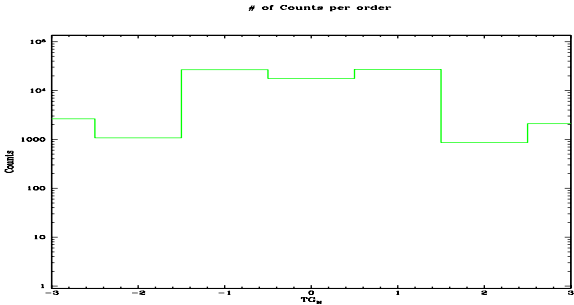


Spot Image MEG

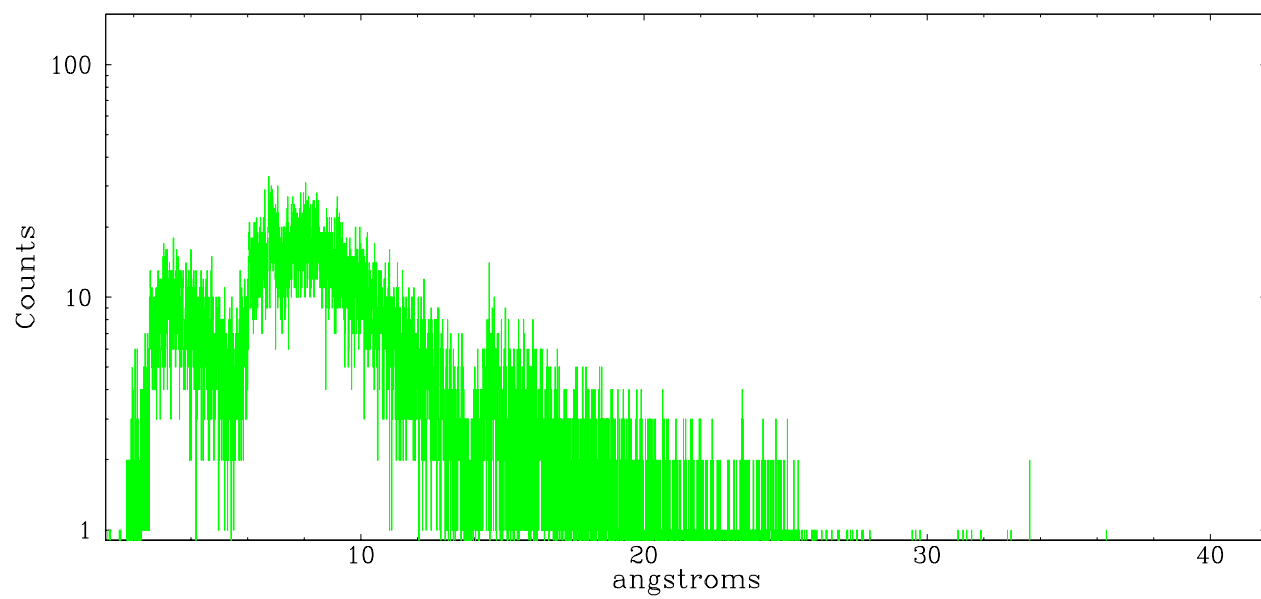


Full Detector MEG

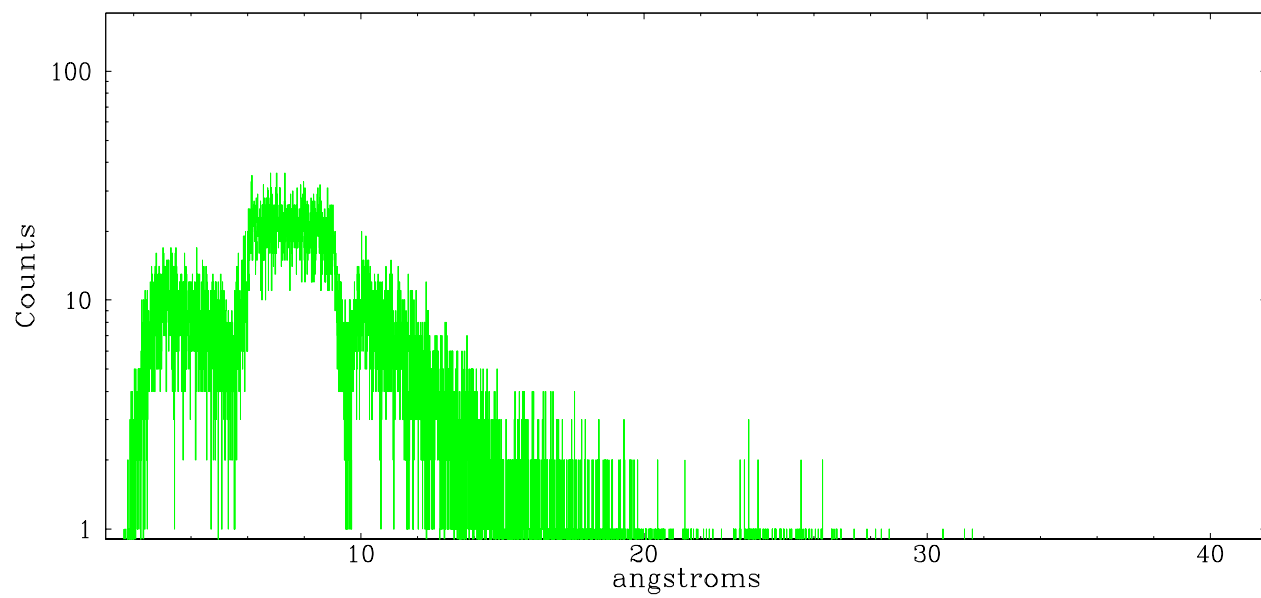
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2626	1077	26620	17695	26996	860	2094



meg order -1



meg order +1





## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	55.042

### A.2 Comments

Roll constraint met.