

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 6245 - L2 Version 2  
Chandra X-Ray Center

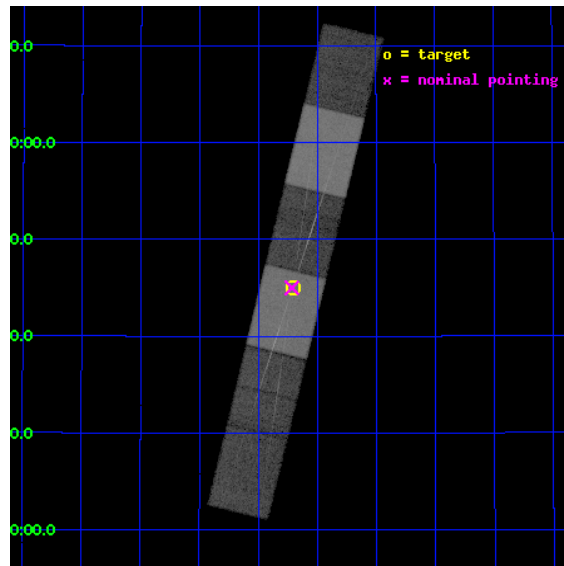
L2 Processing Date : Mar 21 2012

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# 1 Front

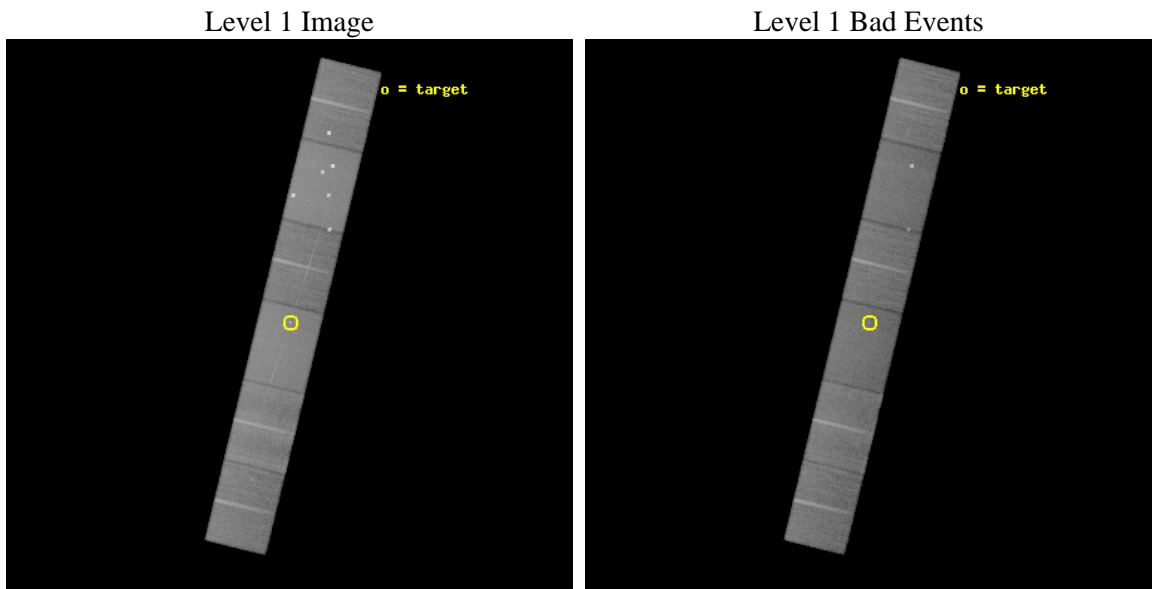
seq_num	701023	Sequence number
obs_id	6245	Observation id
title	The High Velocity Ionized Outflow of PG 0844+349	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	PG 0844+349	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	131.926667	Observer's specified target RA [deg]
dec_targ	34.751111	Observer's specified target Dec [deg]
ra_nom	131.92906238983	Nominal RA [deg]
dec_nom	34.750066997574	Nominal Dec [deg]
roll_nom	103.65527594446	Nominal Roll [deg]
revision	2	Processing version of data
ontime	36180.0	Sum of GTIs [s]
livetime	35595.661618865	Livetime [s]
ontime4	36180.0	Sum of GTIs [s]
ontime5	36180.0	Sum of GTIs [s]
ontime6	36180.0	Sum of GTIs [s]
ontime7	36180.0	Sum of GTIs [s]
ontime8	36180.0	Sum of GTIs [s]
ontime9	36180.0	Sum of GTIs [s]
l2events	374224	Number of level 2 events



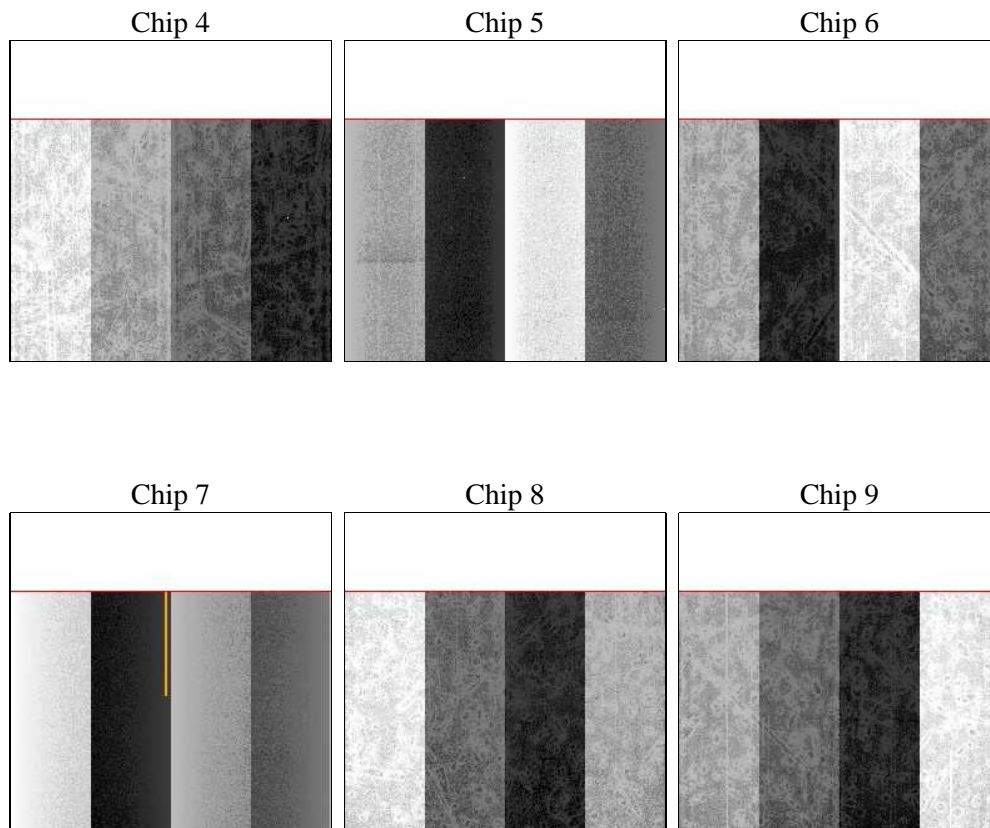
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	36180.0	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime4	36180.0	Sum of GTIs [s]
date	2012-03-21T06:10:46	Date and time of file creation	ontime5	36180.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	36180.0	Sum of GTIs [s]
			ontime7	36180.0	Sum of GTIs [s]
			ontime8	36180.0	Sum of GTIs [s]
			ontime9	36180.0	Sum of GTIs [s]
			l1events	1706431	Number of level 1 events

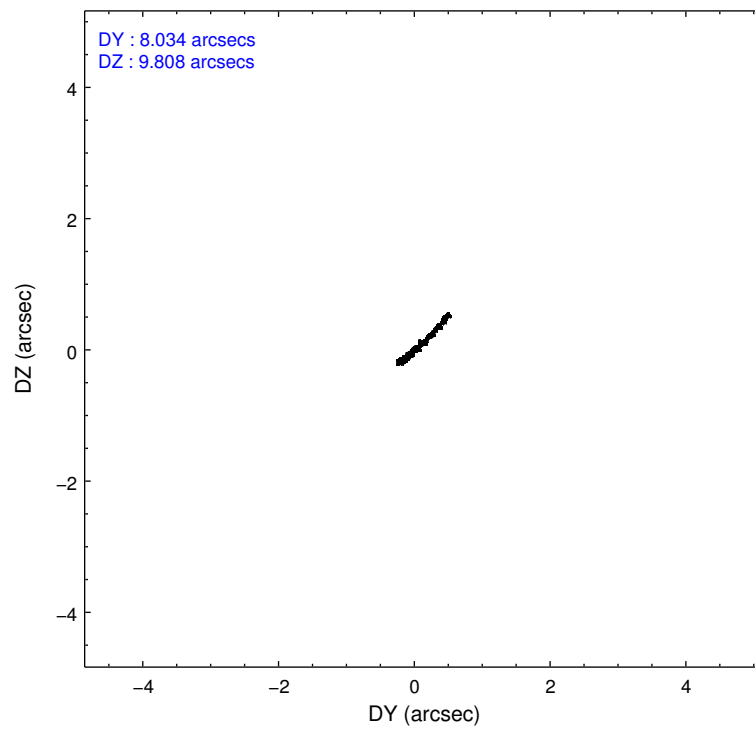
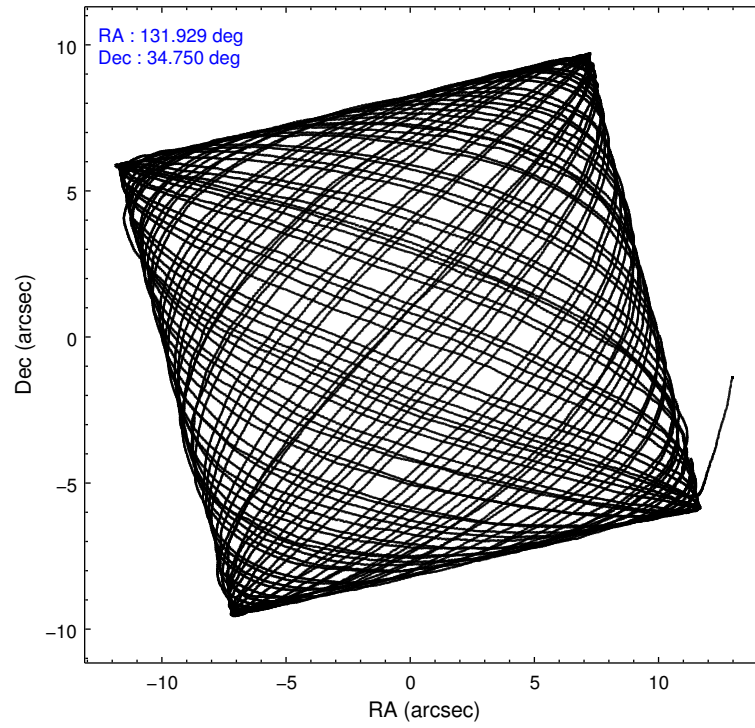
### 2.1.4 Events

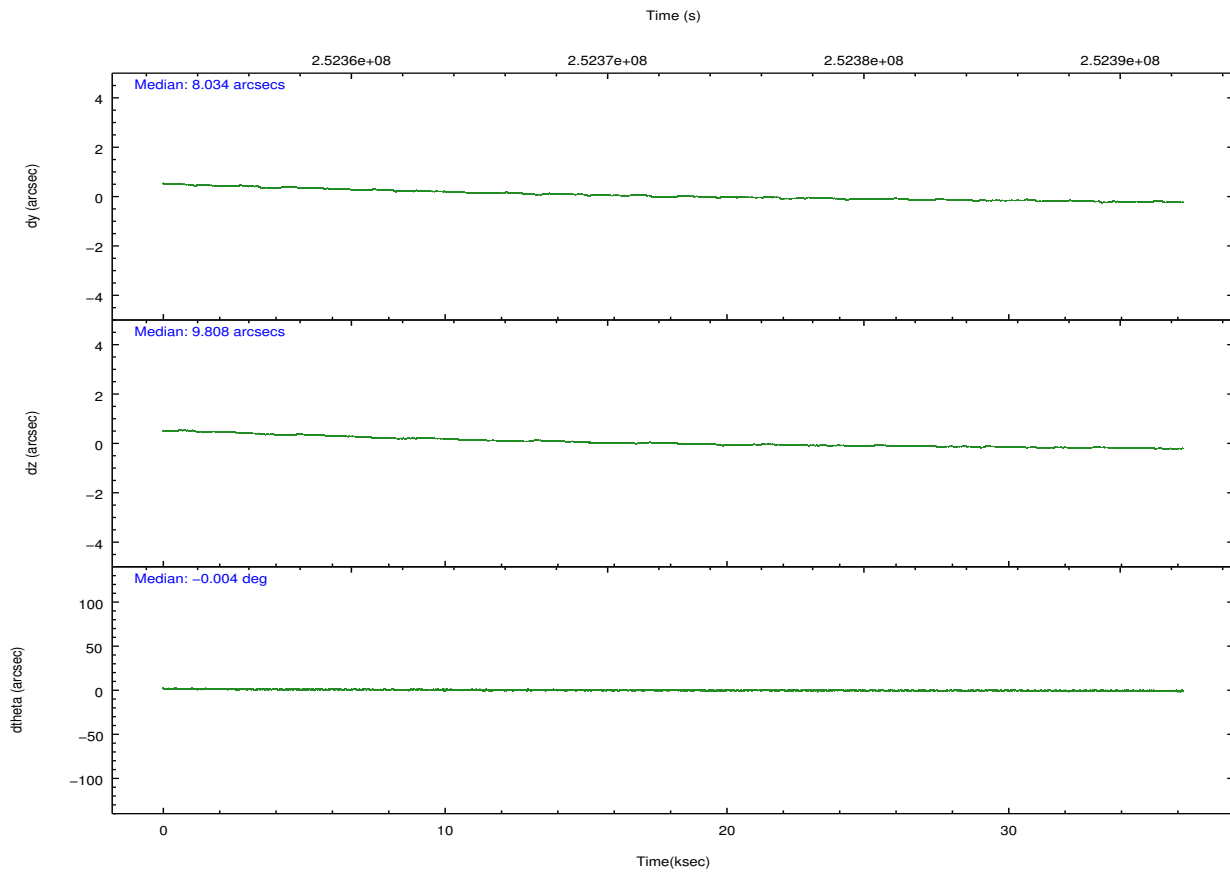
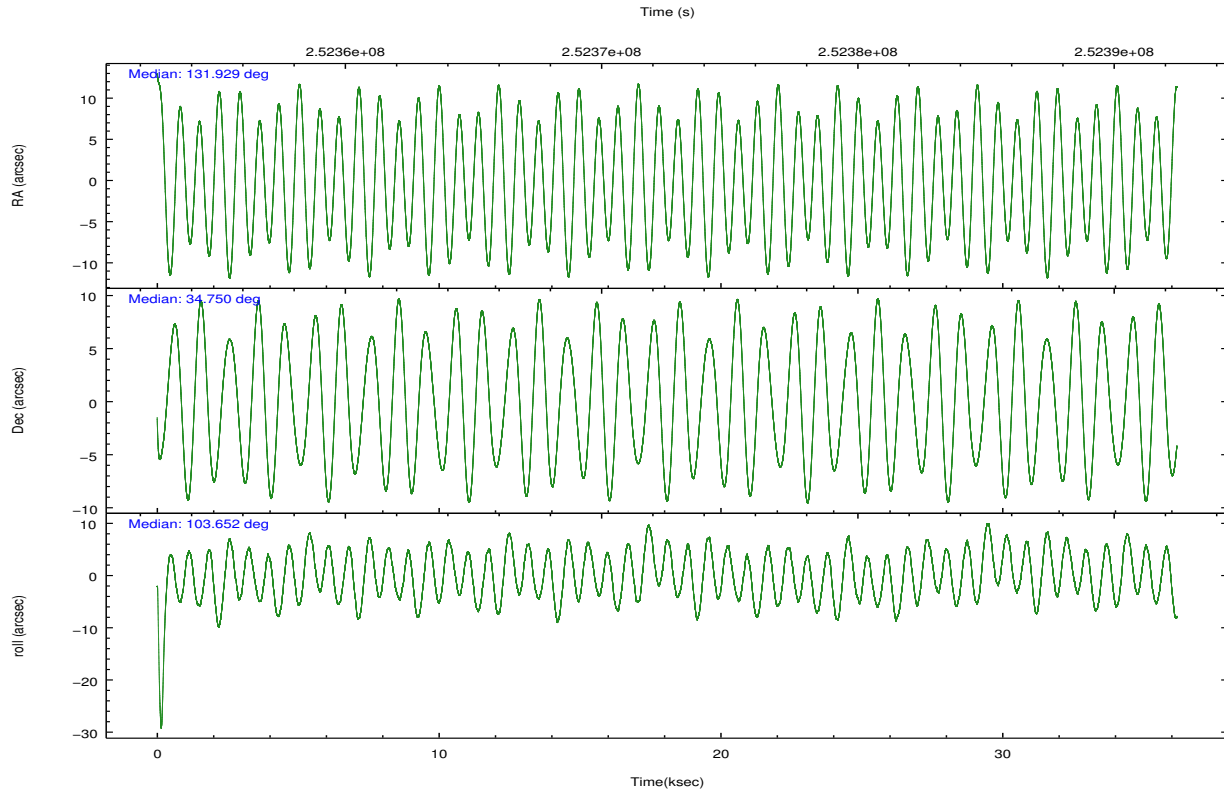
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	263035	382441	232377	312555	288883	227140	grade 0 events	26074	44579	13024	13187	20908	11968
rejected events	221291	193003	202882	180344	226142	198822		9%	11%	5%	4%	7%	5%
rejected %	84%	50%	87%	57%	78%	87%	grade 1 events	219	1736	112	359	183	124
								0%	0%	0%	0%	0%	0%
							grade 2 events	6206	49946	5958	27369	13762	5550
								2%	13%	2%	8%	4%	2%
							grade 3 events	2969	8611	2942	12378	6672	3000
								1%	2%	1%	3%	2%	1%
							grade 4 events	2861	7605	2814	12269	6228	2898
								1%	1%	1%	3%	2%	1%
							grade 5 events	9891	27073	10287	29083	13889	11051
								3%	7%	4%	9%	4%	4%
							grade 6 events	4528	82662	5435	69990	16709	5539
								1%	21%	2%	22%	5%	2%
							grade 7 events	210287	160229	191805	147920	210532	187010
								79%	41%	82%	47%	72%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
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
[deg] Pointing RA	131.952257	131.9290623898307	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	34.730614	34.75006699757425	Subarray start row	1	1
[deg] Pointing Roll	103.485417	103.6552759444619	Subarray row count	774	774
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	2.5
[mm] SIM translation stage pos	-187.132523	-187.1228876879999			
[mm] SIM translation stage offset	-3	-3.009634895007935			
[s] Observation start time (MET)	252354643.184000	252353247.49847			
Observation start date	2005-12-30T18:29:39	2005-12-30T18:07:27			
[s] Observation end time (MET)	252390643.184000	252391352.38773			
Observation end date	2005-12-31T04:29:39	2005-12-31T04:42:32			
Read mode	TIMED	TIMED			

## 2.3 Aspect



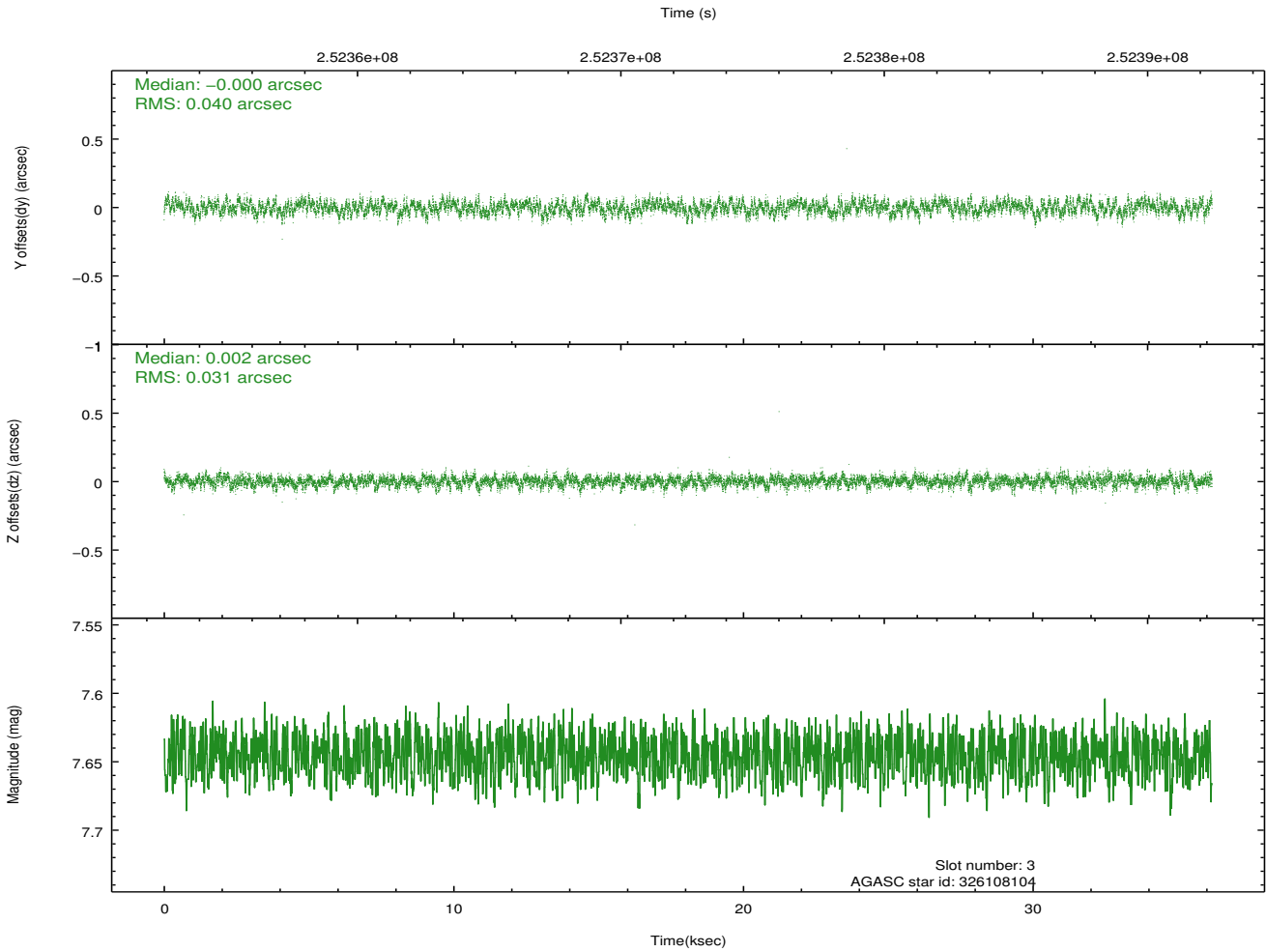
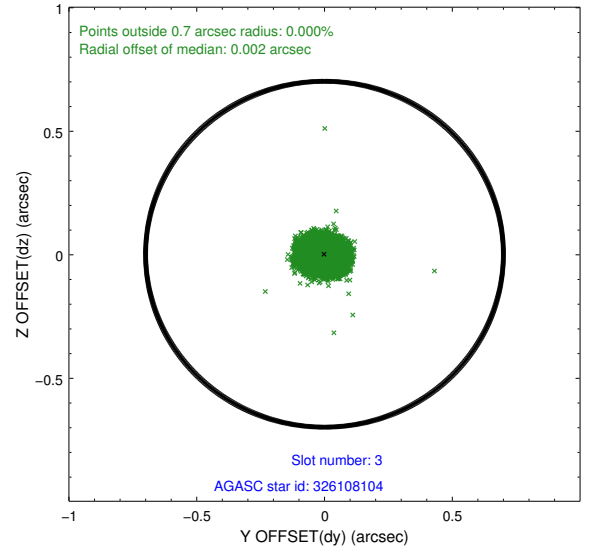
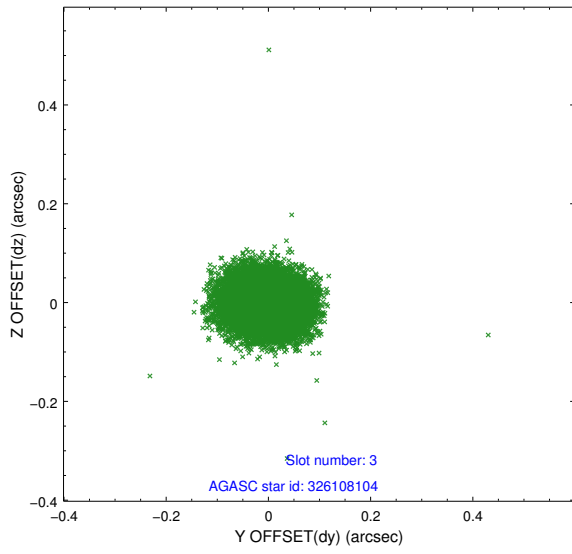


### Slot Statistics

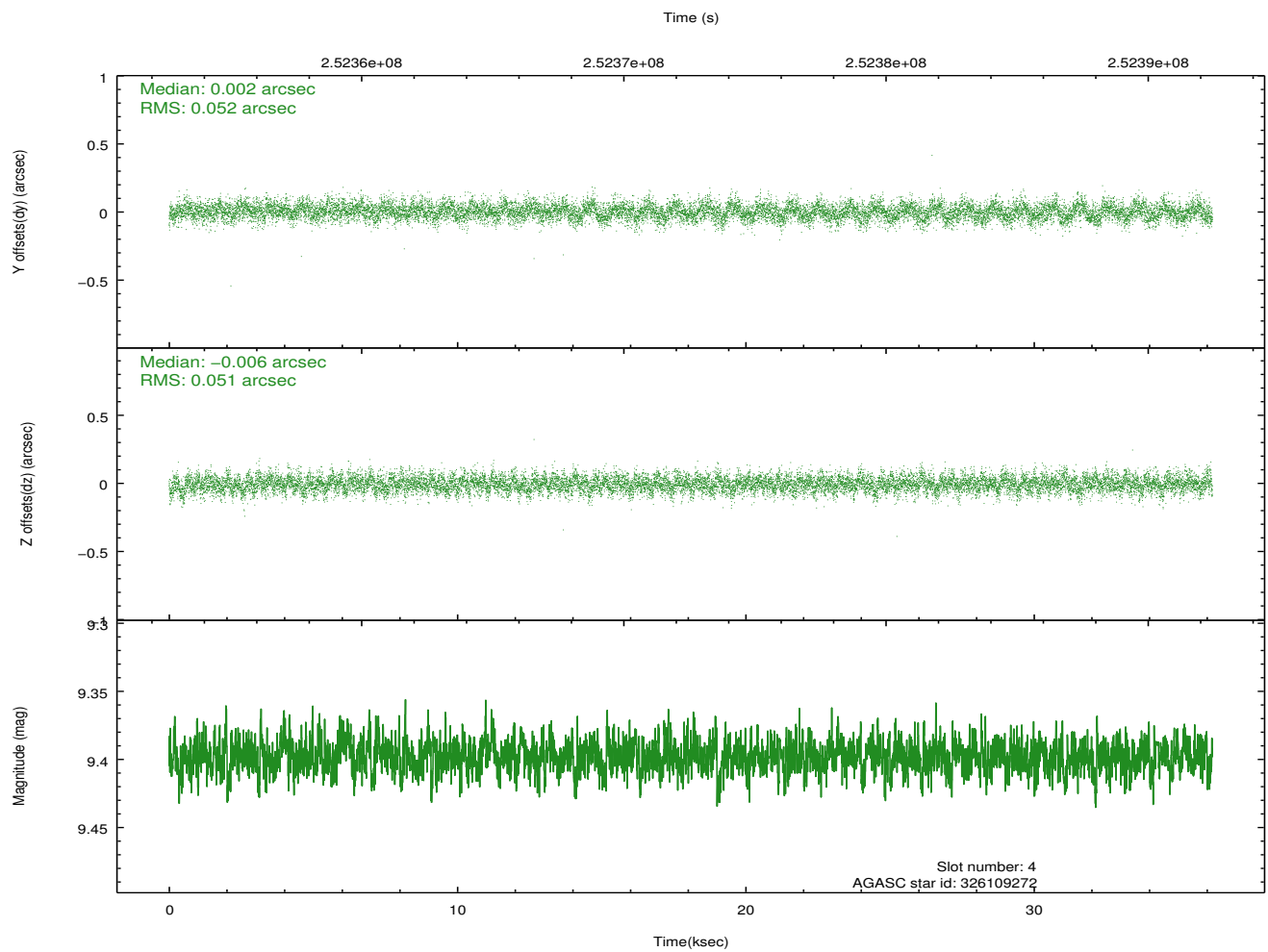
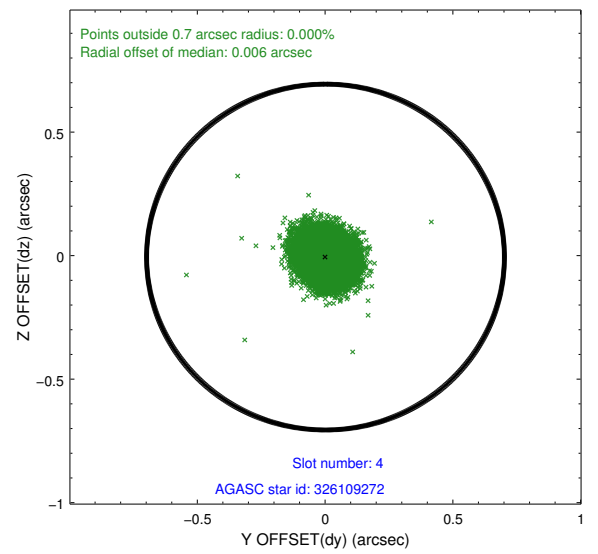
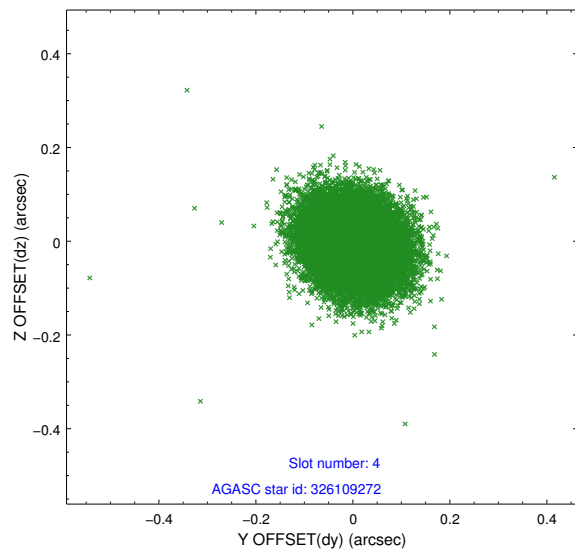
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	8826	-0.054	-0.084	0.011	0.018	0.000000	0.000000	-760.73	-1793.32
1	FID	ACIS-S-4	7.19	8826	0.133	0.049	0.009	0.017	0.000000	0.000000	2152.73	115.23
2	FID	ACIS-S-5	7.24	8827	-0.111	0.045	0.014	0.022	0.000000	0.000000	-1813.58	108.96
3	GUIDE	326108104	7.65	17645	-0.000	0.002	0.054	0.087	132.748644	34.823318	-214.83	-2368.05
4	GUIDE	326109272	9.40	17642	0.002	-0.006	0.077	0.125	132.082215	34.934229	623.99	-543.84
5	GUIDE	326110664	9.31	17642	0.070	-0.008	0.095	0.154	132.443800	34.238836	-2058.76	-1010.49
6	GUIDE	326511744	8.32	17646	-0.021	-0.034	0.072	0.114	132.569856	35.037369	654.99	-2028.73
7	GUIDE	326506920	8.37	17648	-0.054	0.045	0.079	0.129	132.504020	35.379662	1898.88	-2120.10

## 2.4 Star Slots

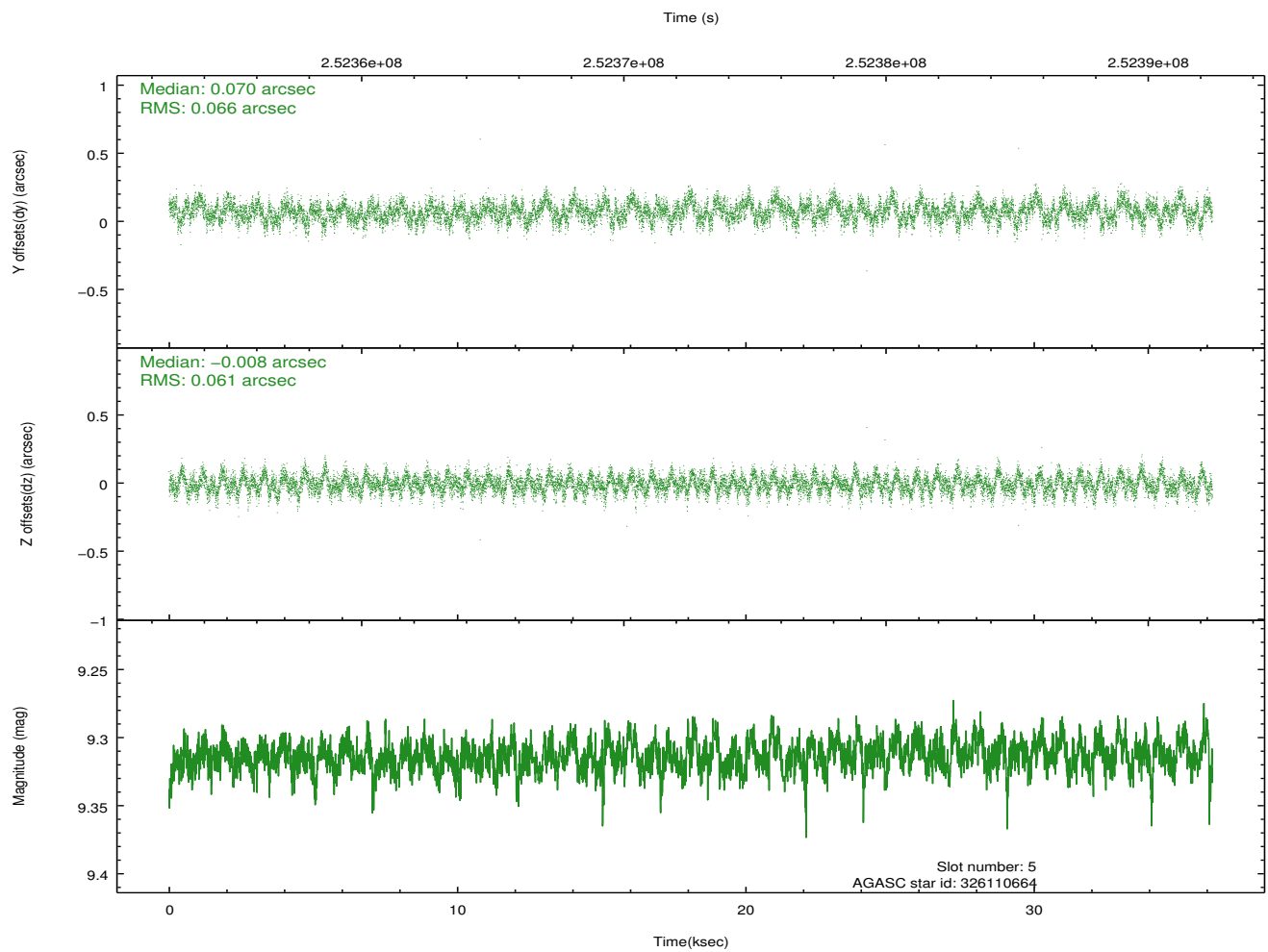
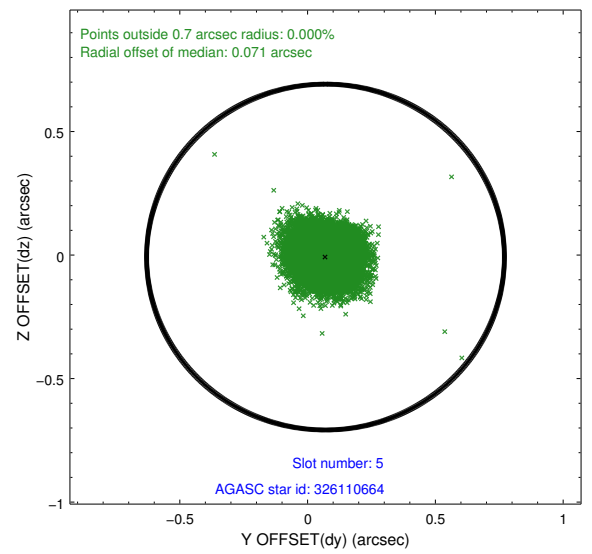
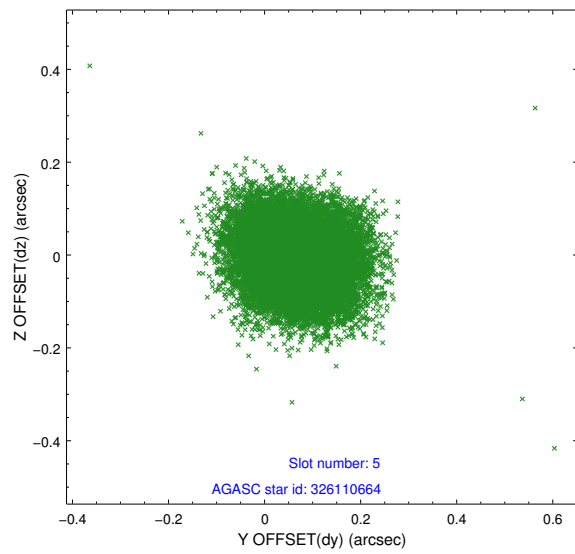
### 2.4.1 Slot 3



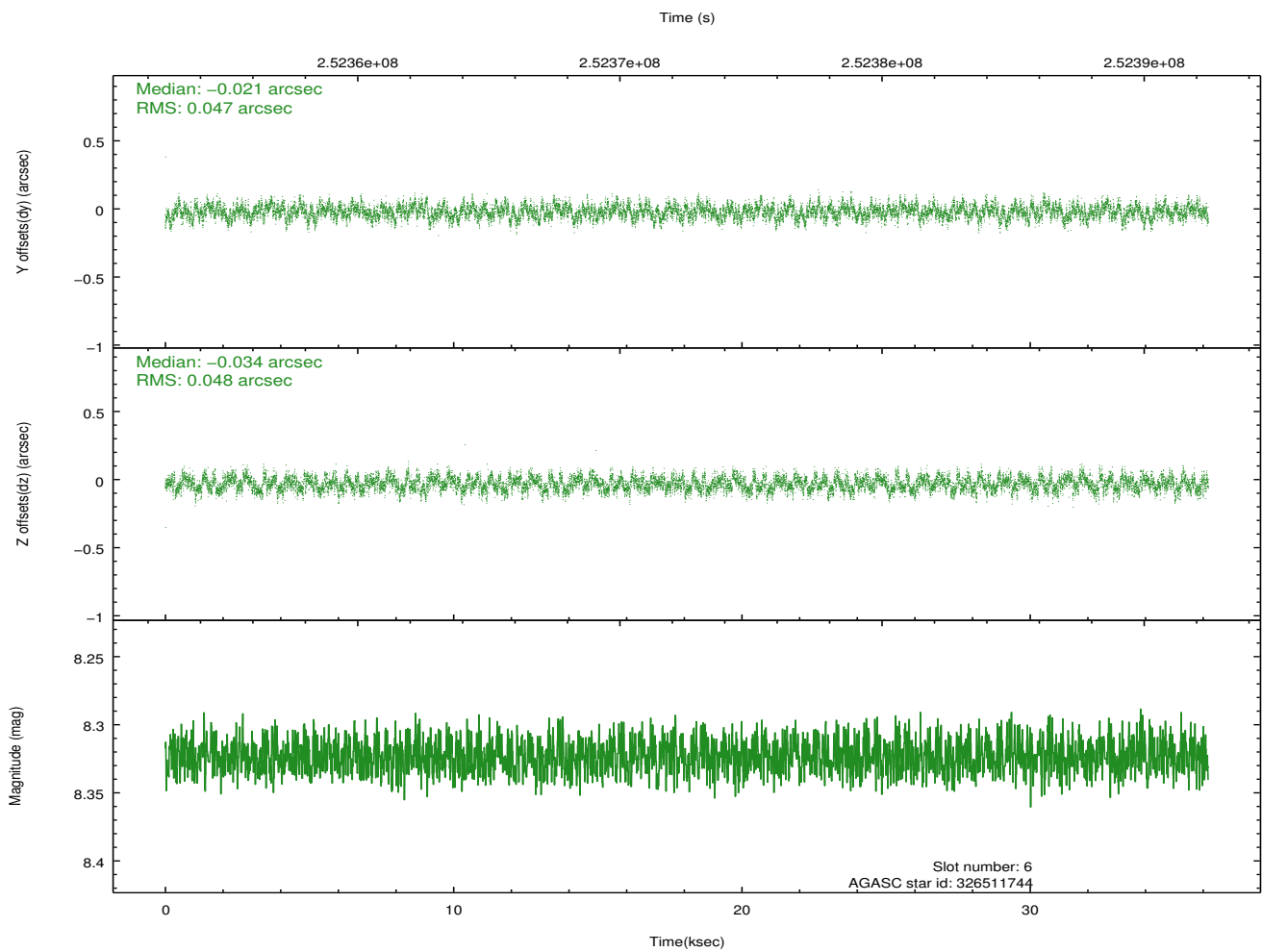
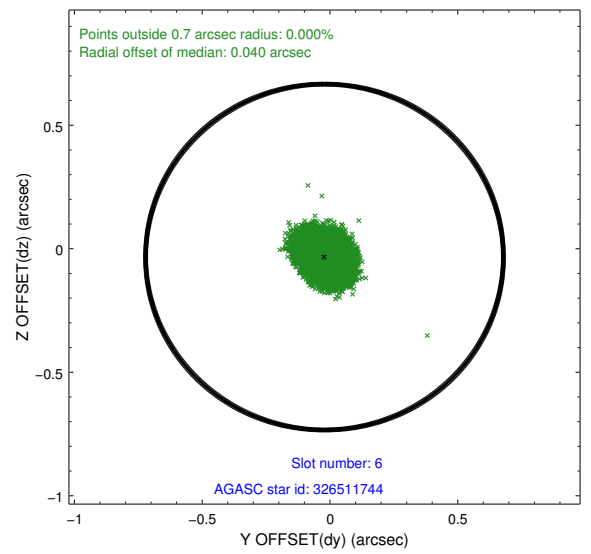
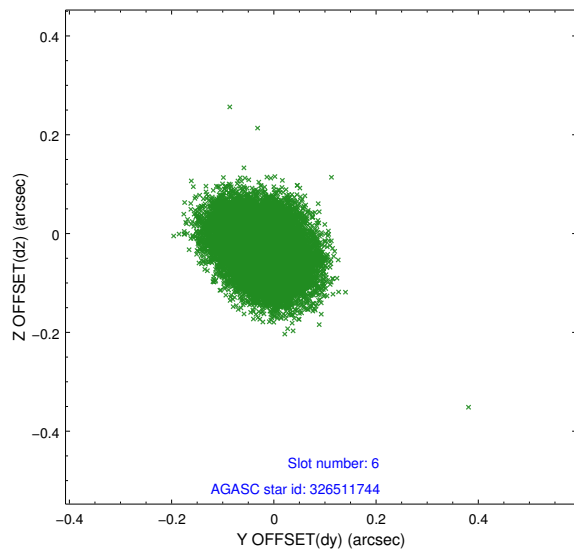
## 2.4.2 Slot 4



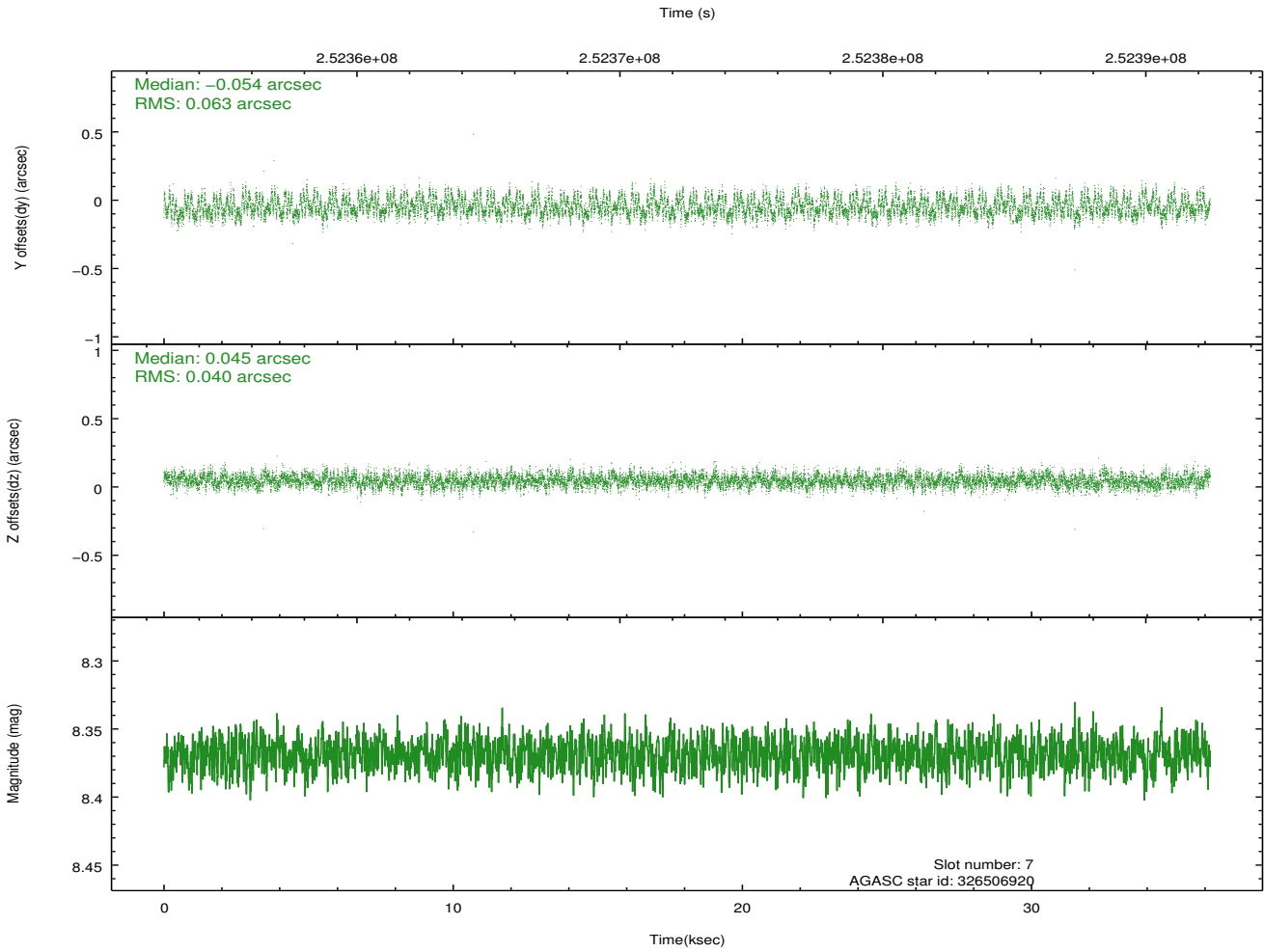
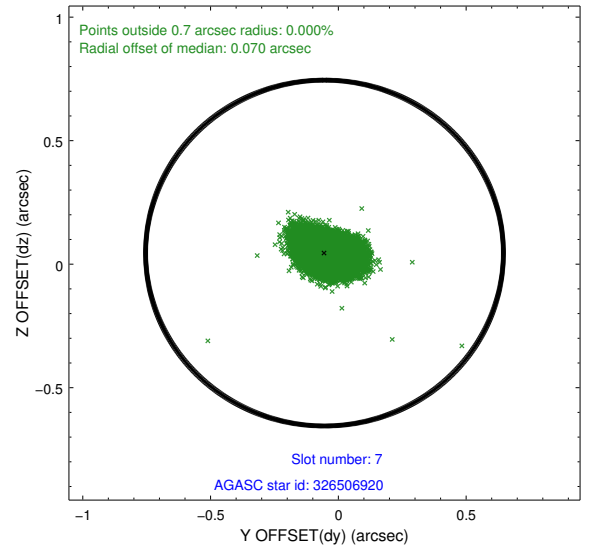
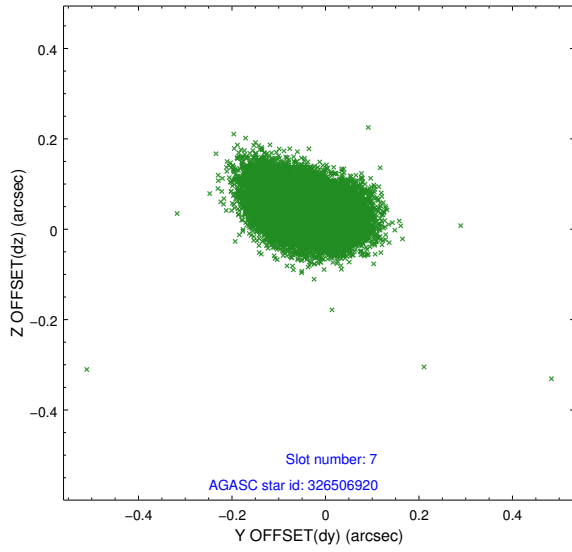
### 2.4.3 Slot 5



### 2.4.4 Slot 6

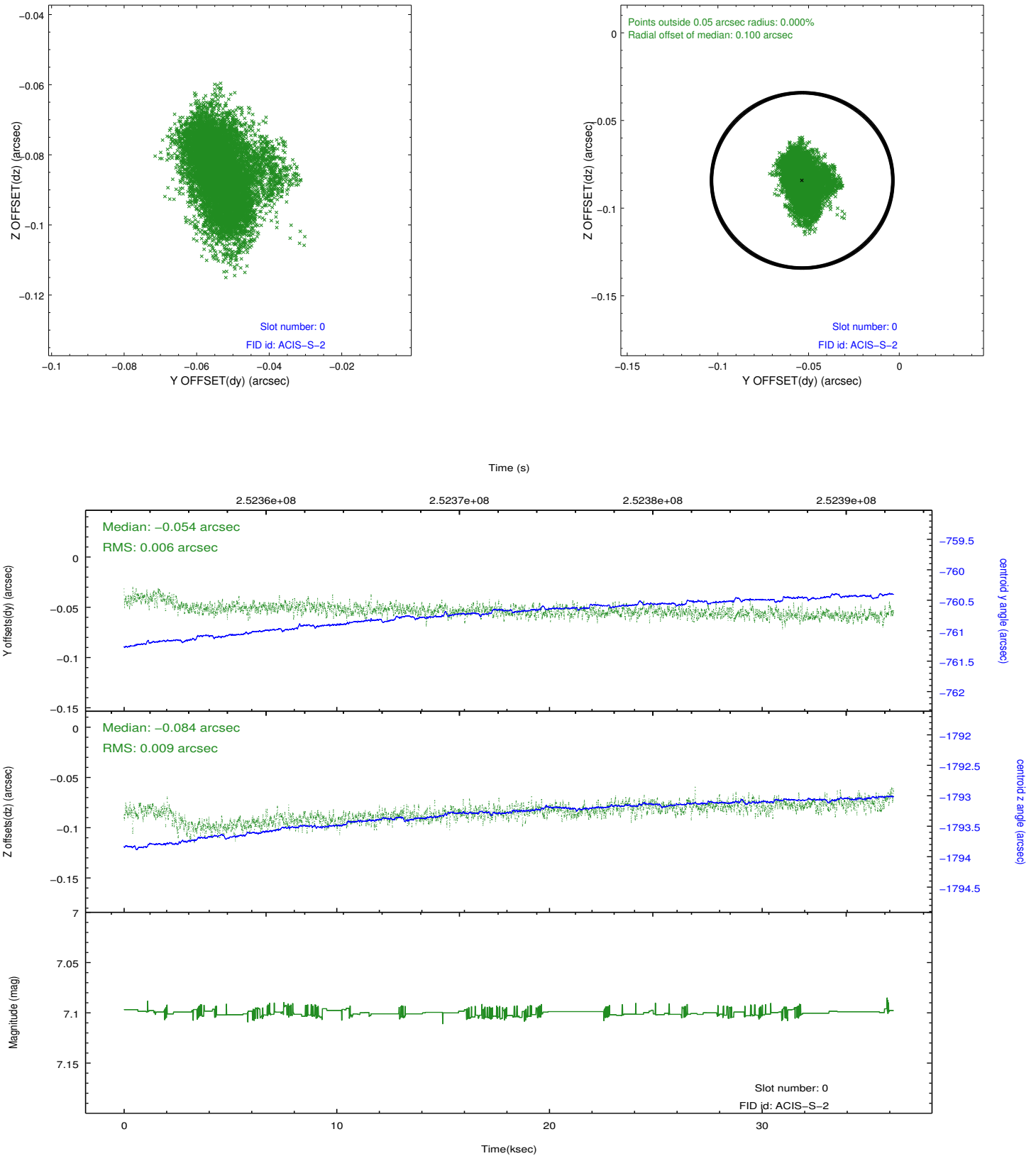


### 2.4.5 Slot 7

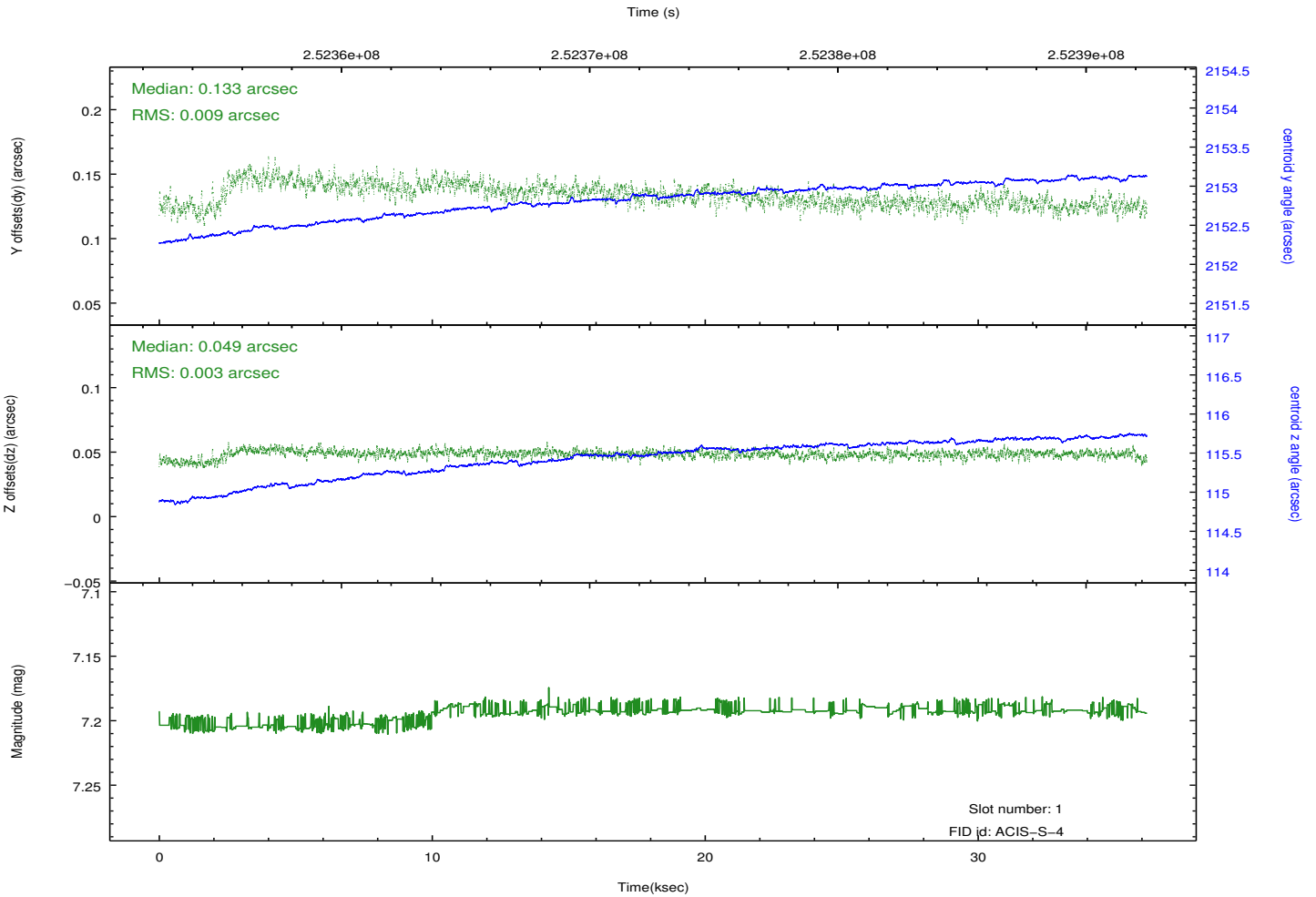
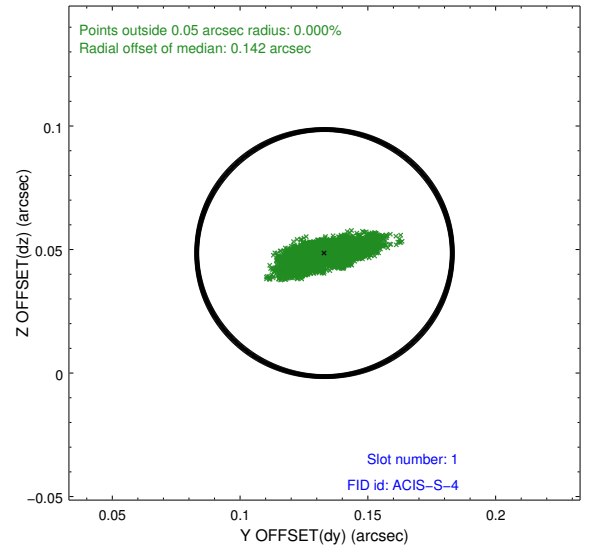
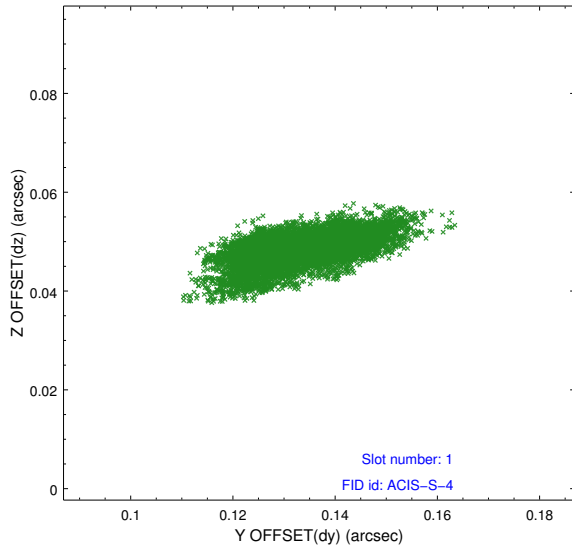


## 2.5 FID Slots

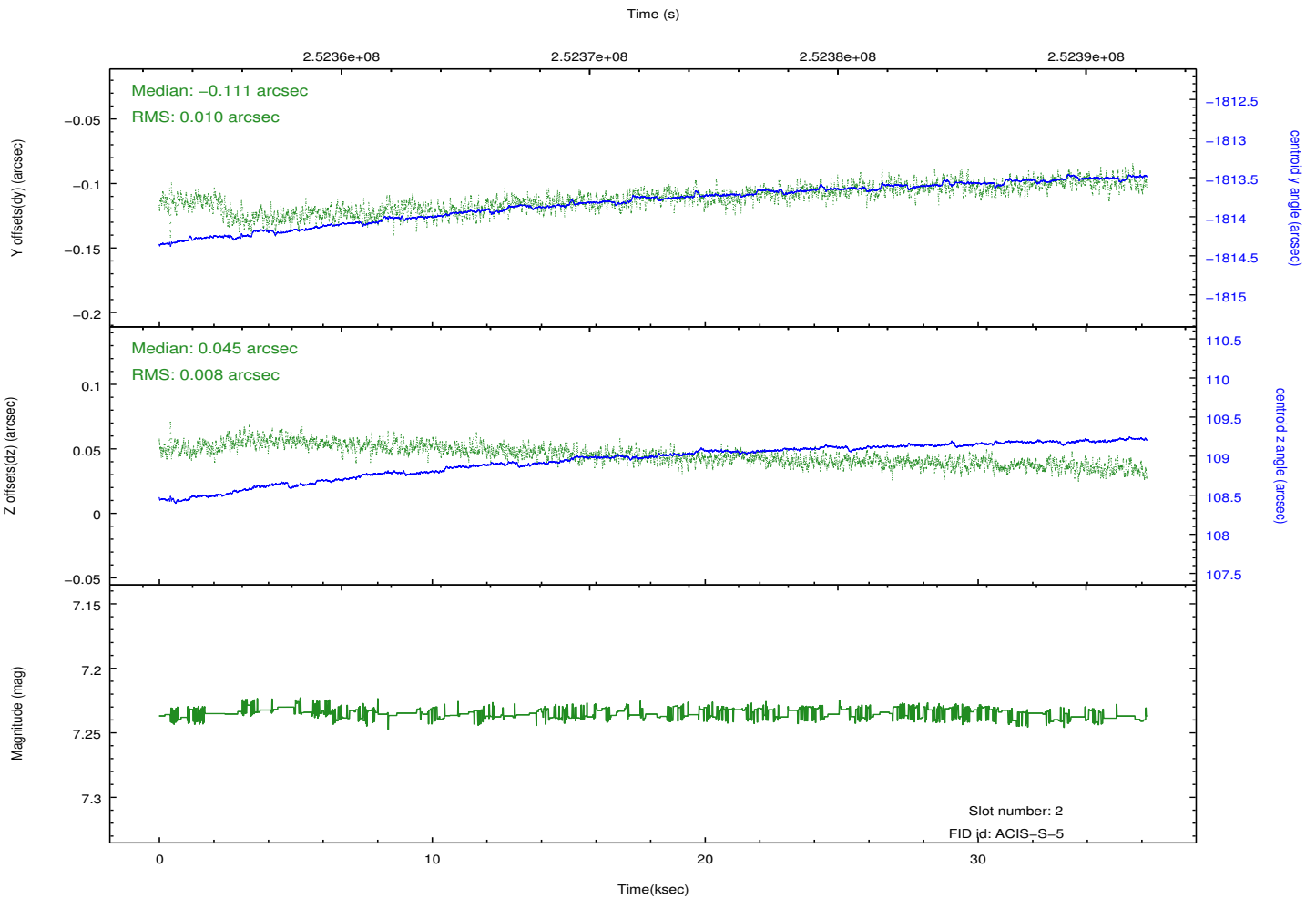
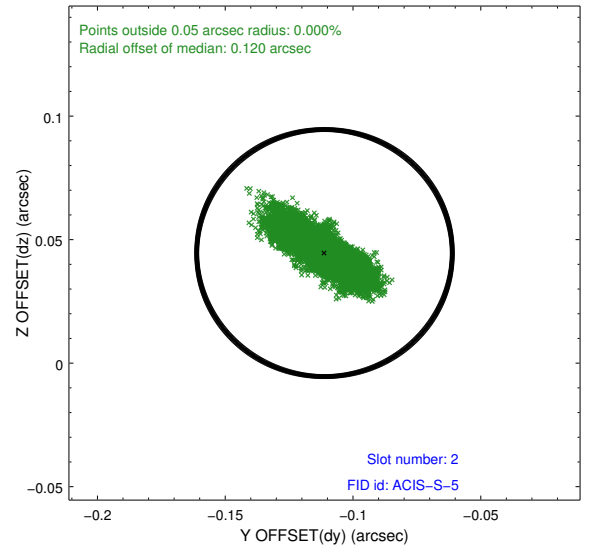
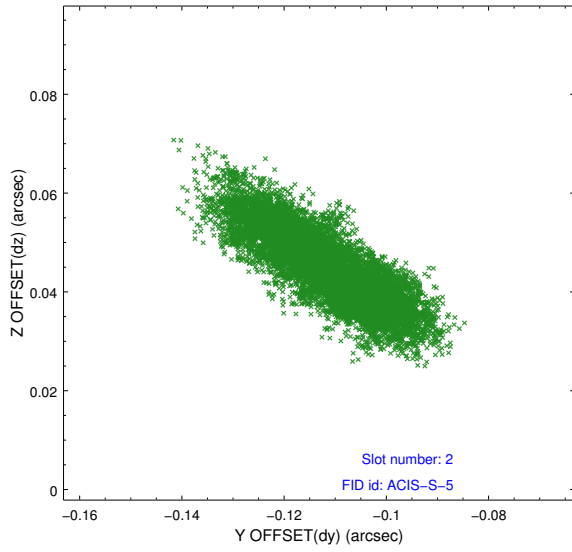
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2

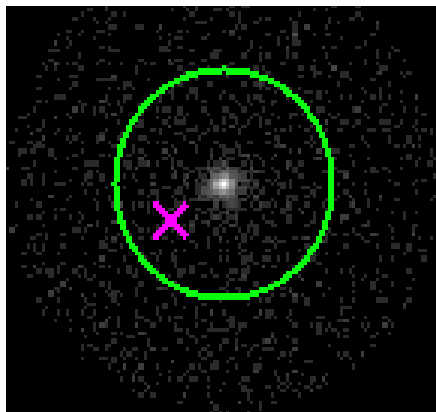


### 3 Gratings

#### 3.1 HEG Arm



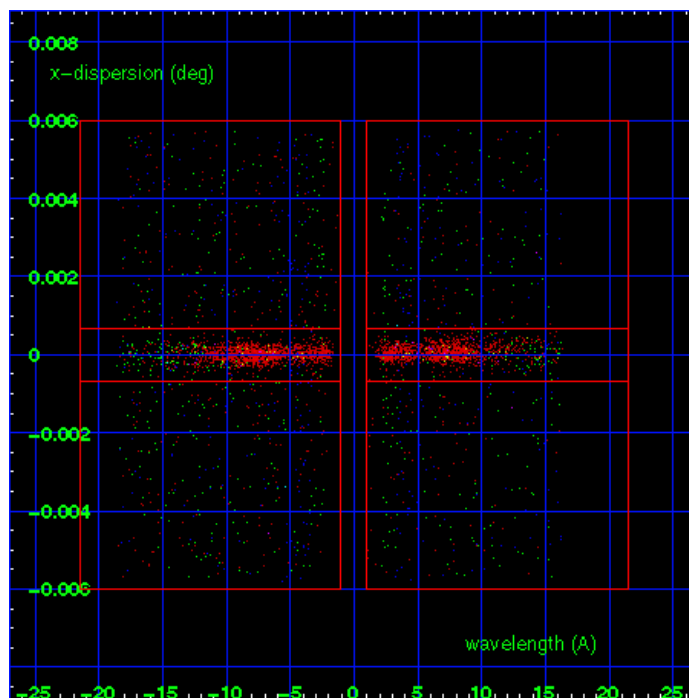
HEG Order Sort 123



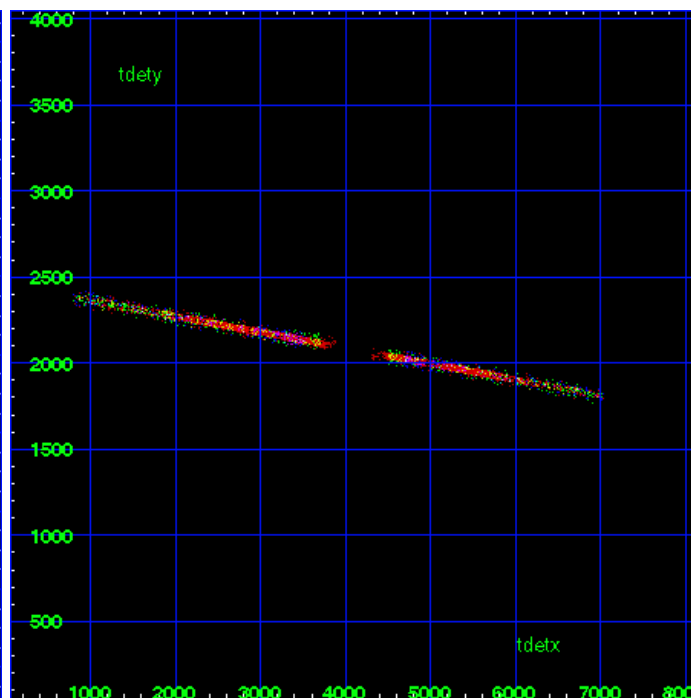
HEG Zero Order



HEG Order Sort ALL

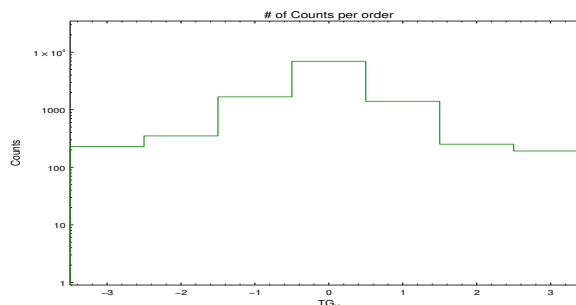


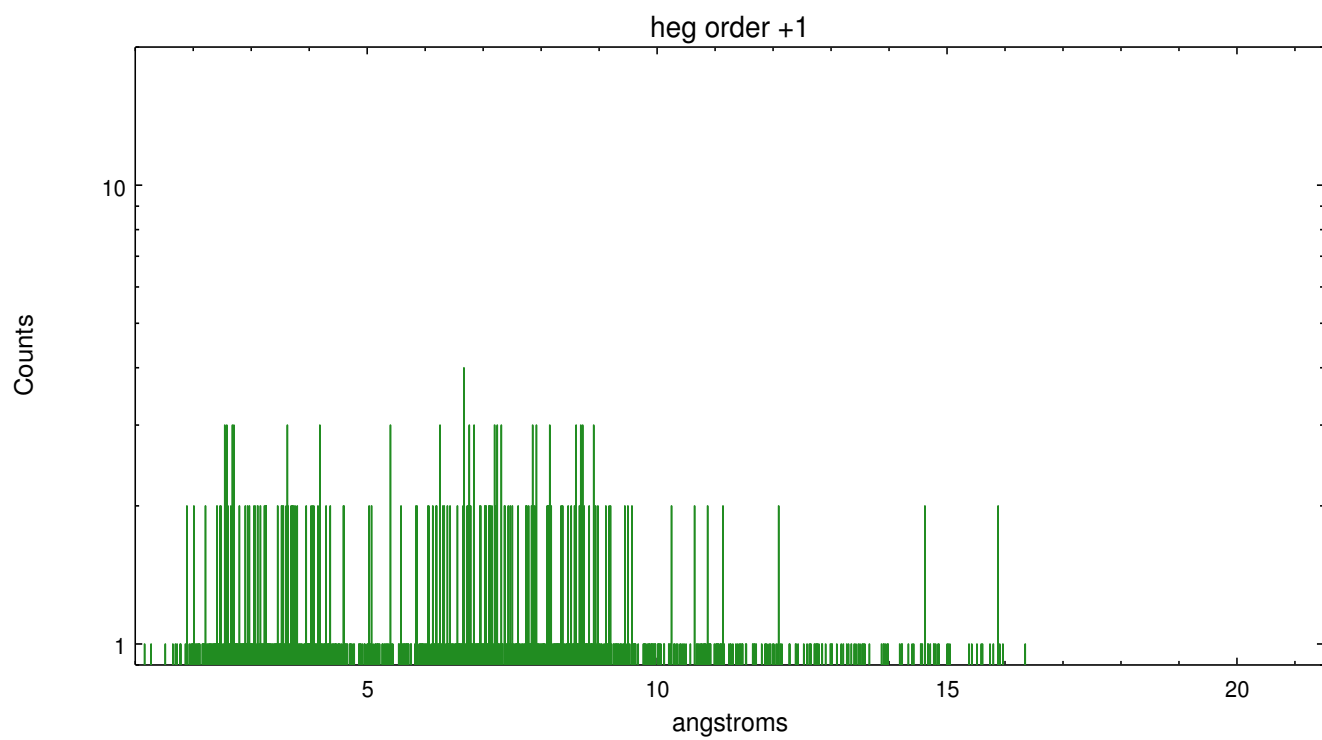
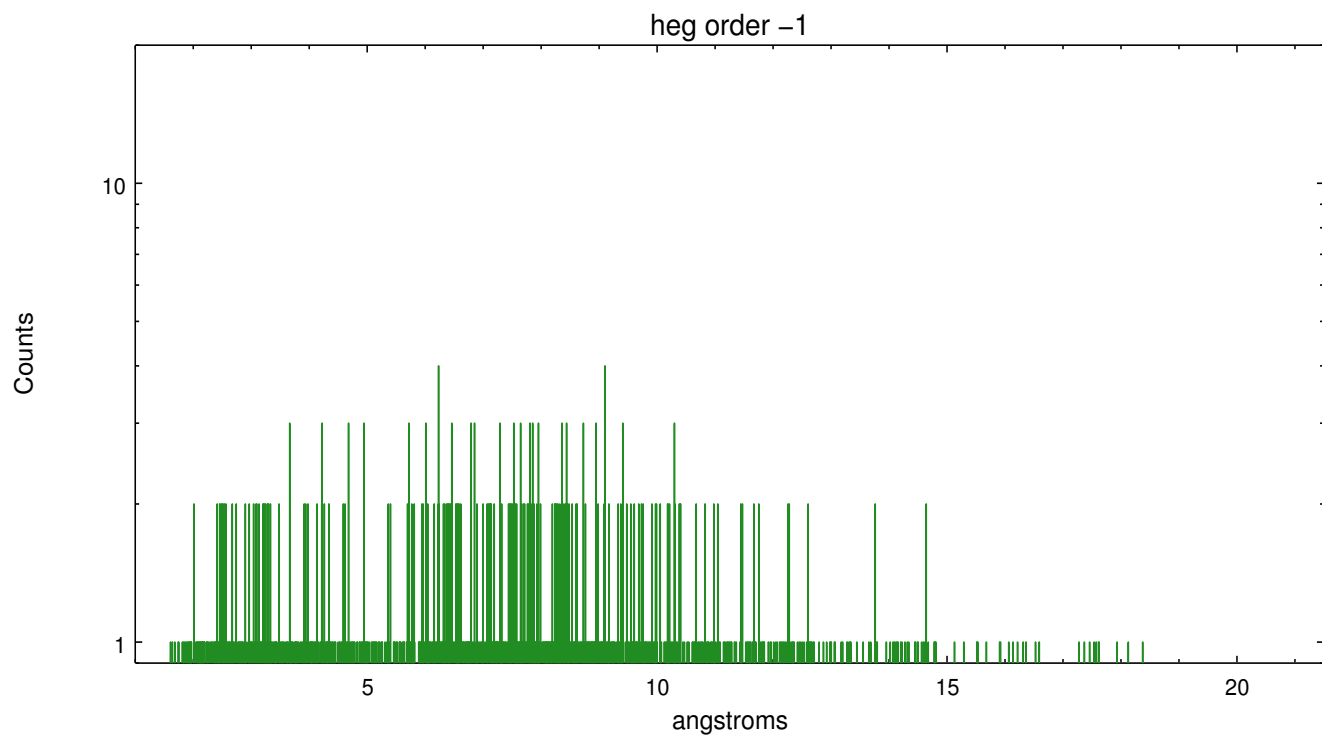
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	229	351	1674	6952	1403	252	192

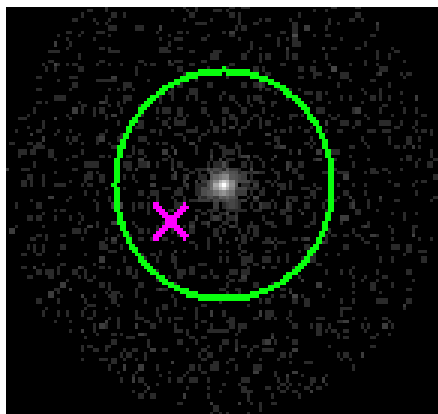




### 3.2 MEG Arm



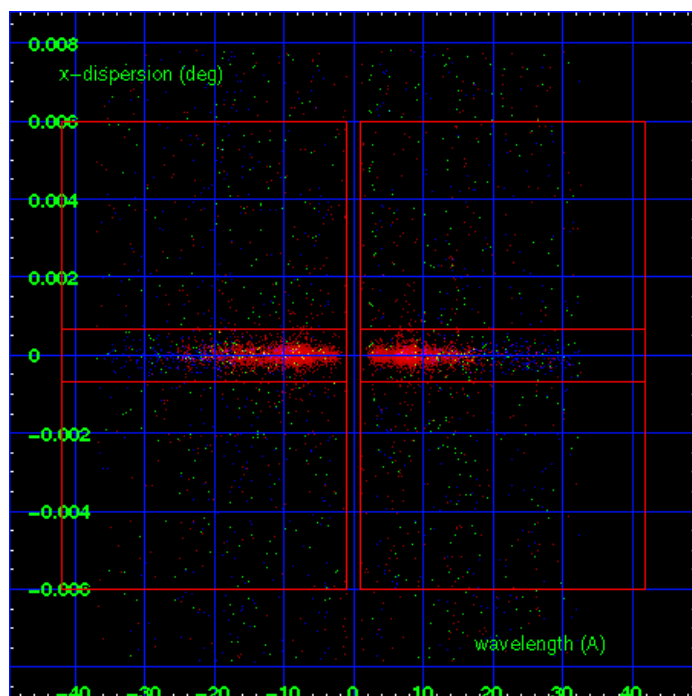
MEG Order Sort 123



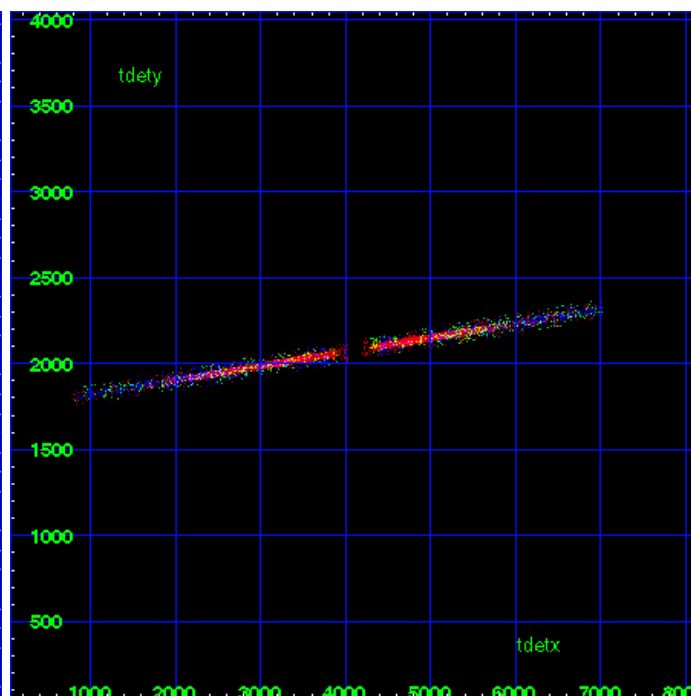
MEG Zero Order



MEG Order Sort ALL

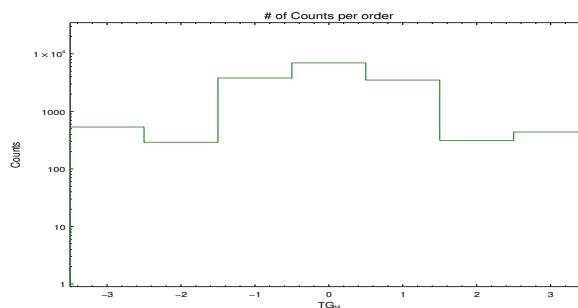


Spot Image MEG

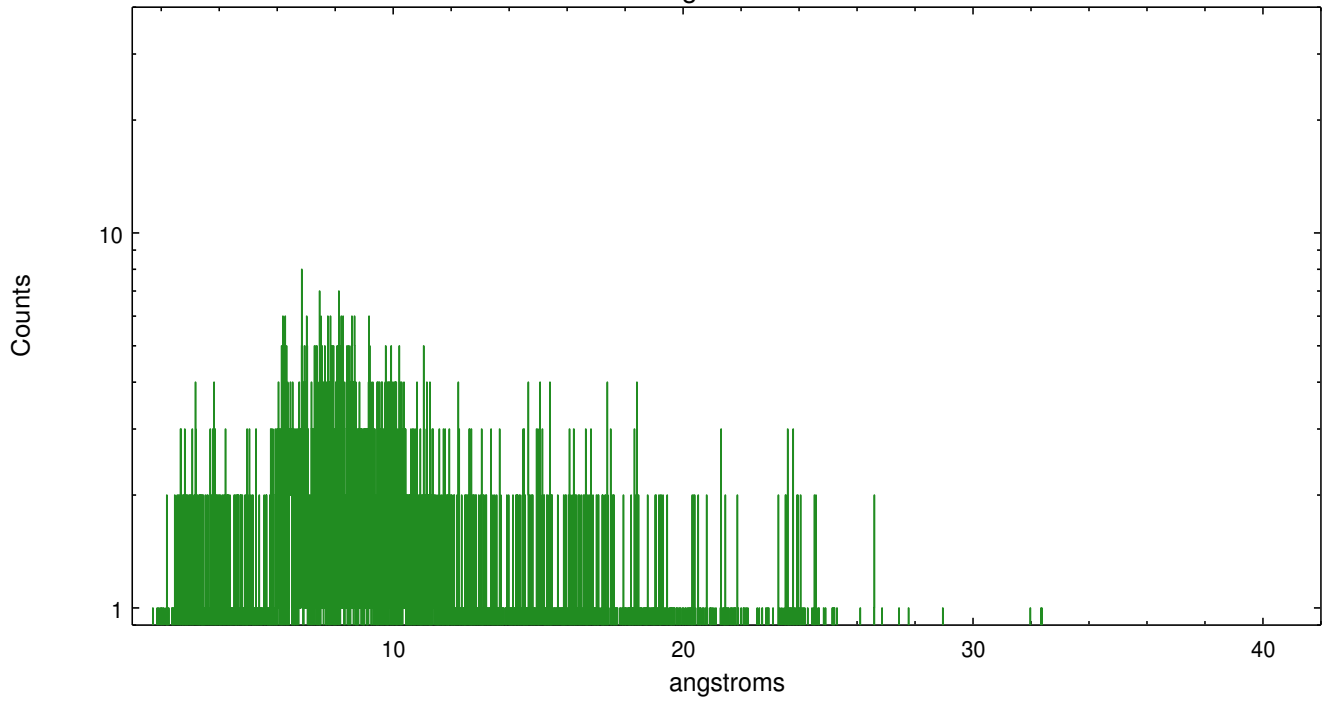


Full Detector MEG

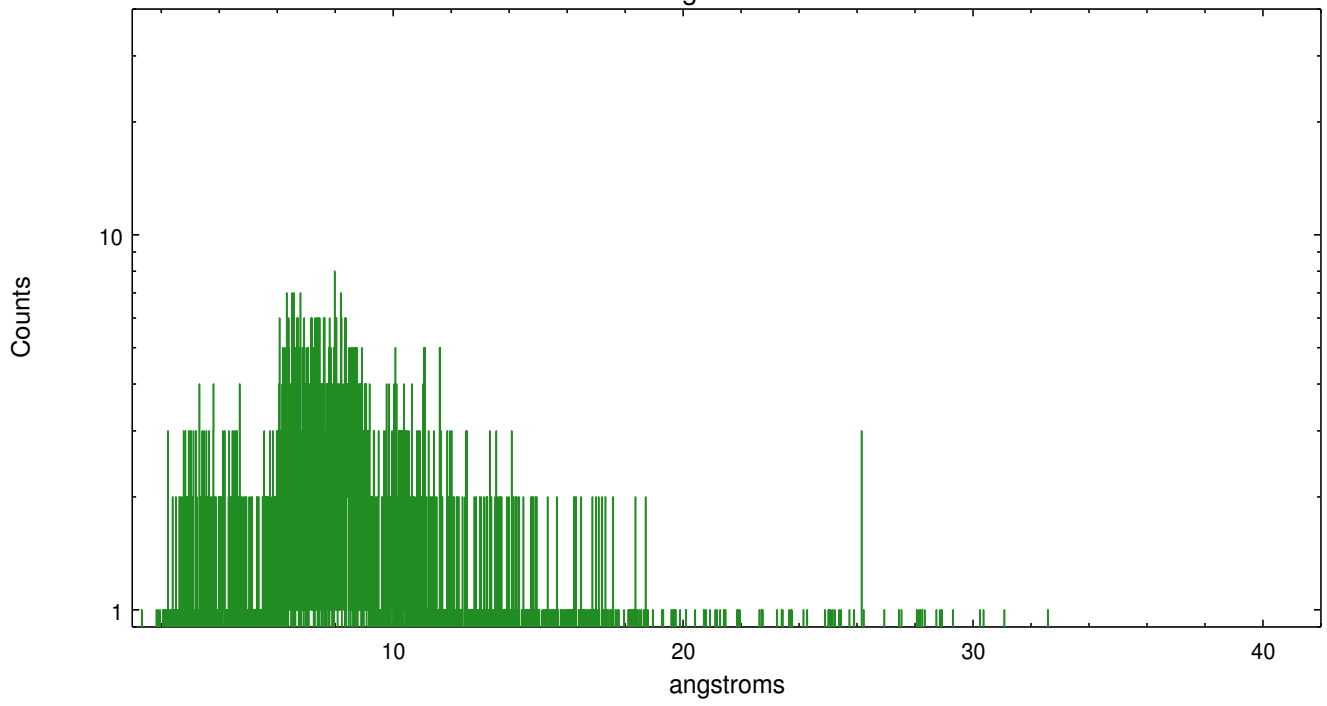
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	535	291	3804	6952	3501	312	438



meg order -1



meg order +1



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.03.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	36.18

### A.2 Comments