

# V&V Reference Report

## L2 ASCDS Version : 8.4.3.1

Observation 6568 - L2 Version 2  
Chandra X-Ray Center

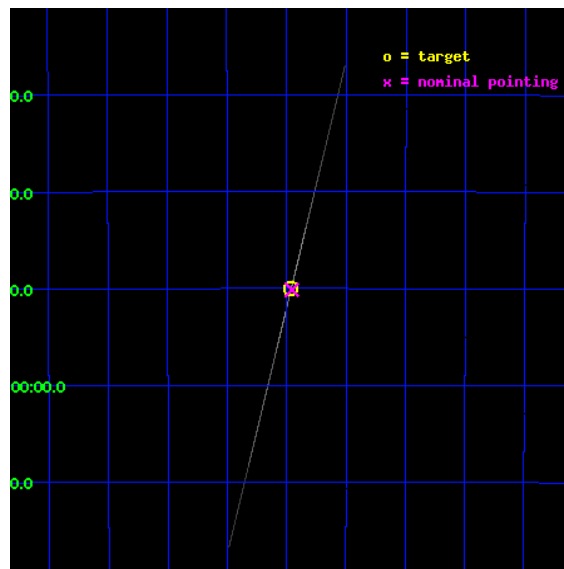
L2 Processing Date : Apr 5 2012

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# 1 Front

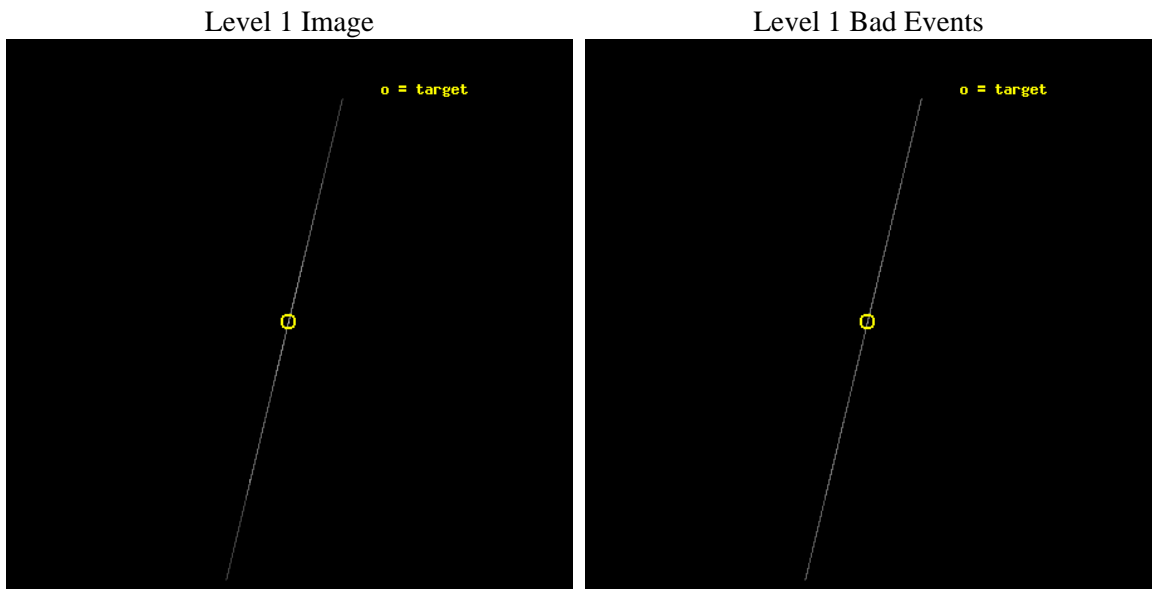
seq_num	400473	Sequence number
obs_id	6568	Observation id
title	Transient radiative winds from He-rich thermonuclear bursts	Propos
observer	Prof Claude Canizares	Principal investigator
object	4U 1728-34	Source name
ra_targ	262.990417	Observer's specified target RA [deg]
dec_targ	-33.834028	Observer's specified target Dec [deg]
ra_nom	262.98882633968	Nominal RA [deg]
dec_nom	-33.835634947207	Nominal Dec [deg]
roll_nom	283.6857457111	Nominal Roll [deg]
revision	2	Processing version of data
ontime	49490.0	Sum of GTIs [s]
livetime	49296.6796875	Livetime [s]
ontime4	49490.0	Sum of GTIs [s]
ontime5	49490.0	Sum of GTIs [s]
ontime6	49490.0	Sum of GTIs [s]
ontime7	49490.0	Sum of GTIs [s]
ontime8	49490.0	Sum of GTIs [s]
ontime9	49490.0	Sum of GTIs [s]
l2events	4130066	Number of level 2 events



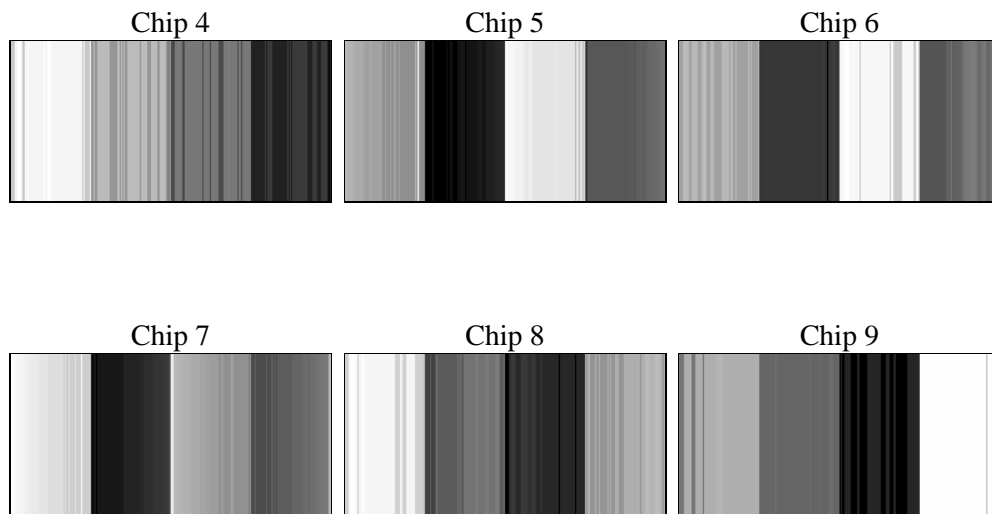
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	49413.344000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	49490.0	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime4	49490.0	Sum of GTIs [s]
date	2012-04-05T12:48:11	Date and time of file creation	ontime5	49490.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	49490.0	Sum of GTIs [s]
			ontime7	49490.0	Sum of GTIs [s]
			ontime8	49490.0	Sum of GTIs [s]
			ontime9	49490.0	Sum of GTIs [s]
			l1events	4875352	Number of level 1 events

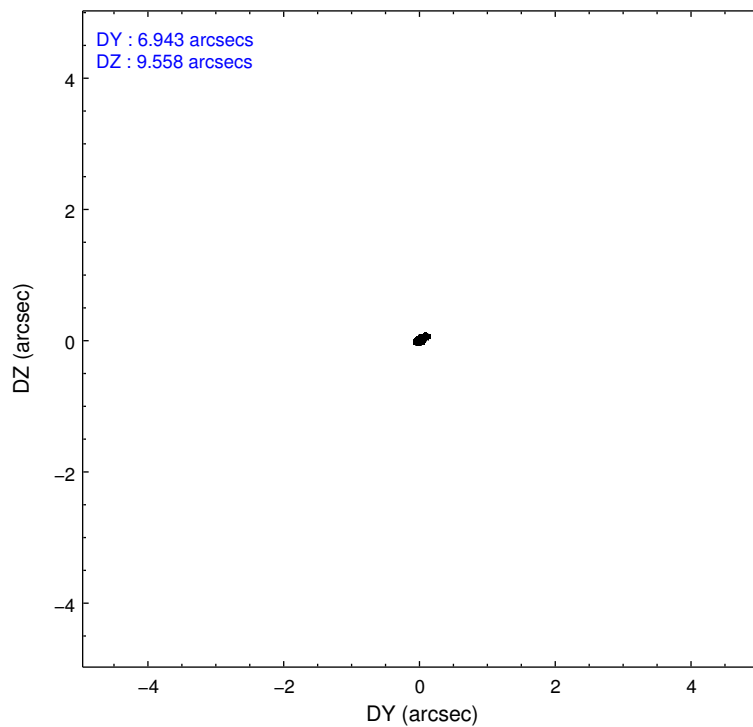
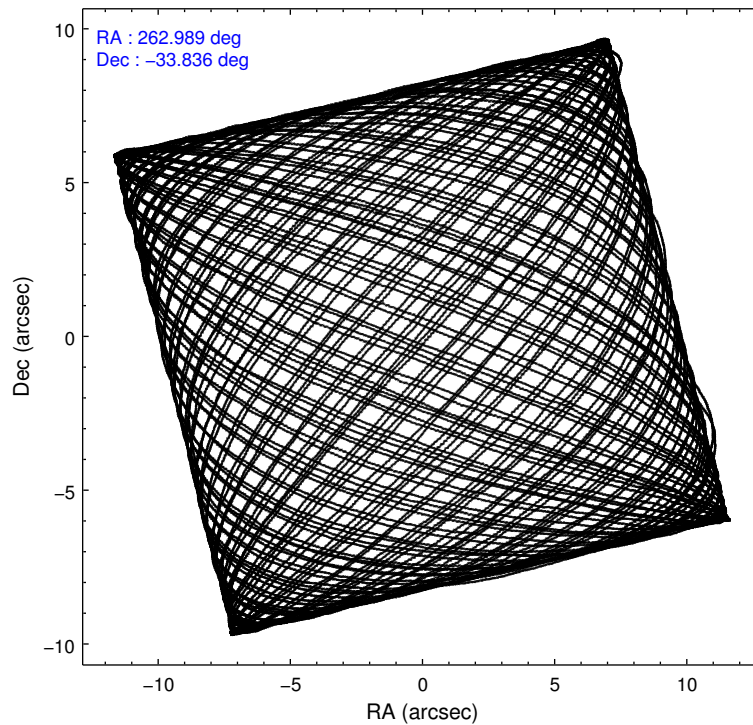
### 2.1.4 Events

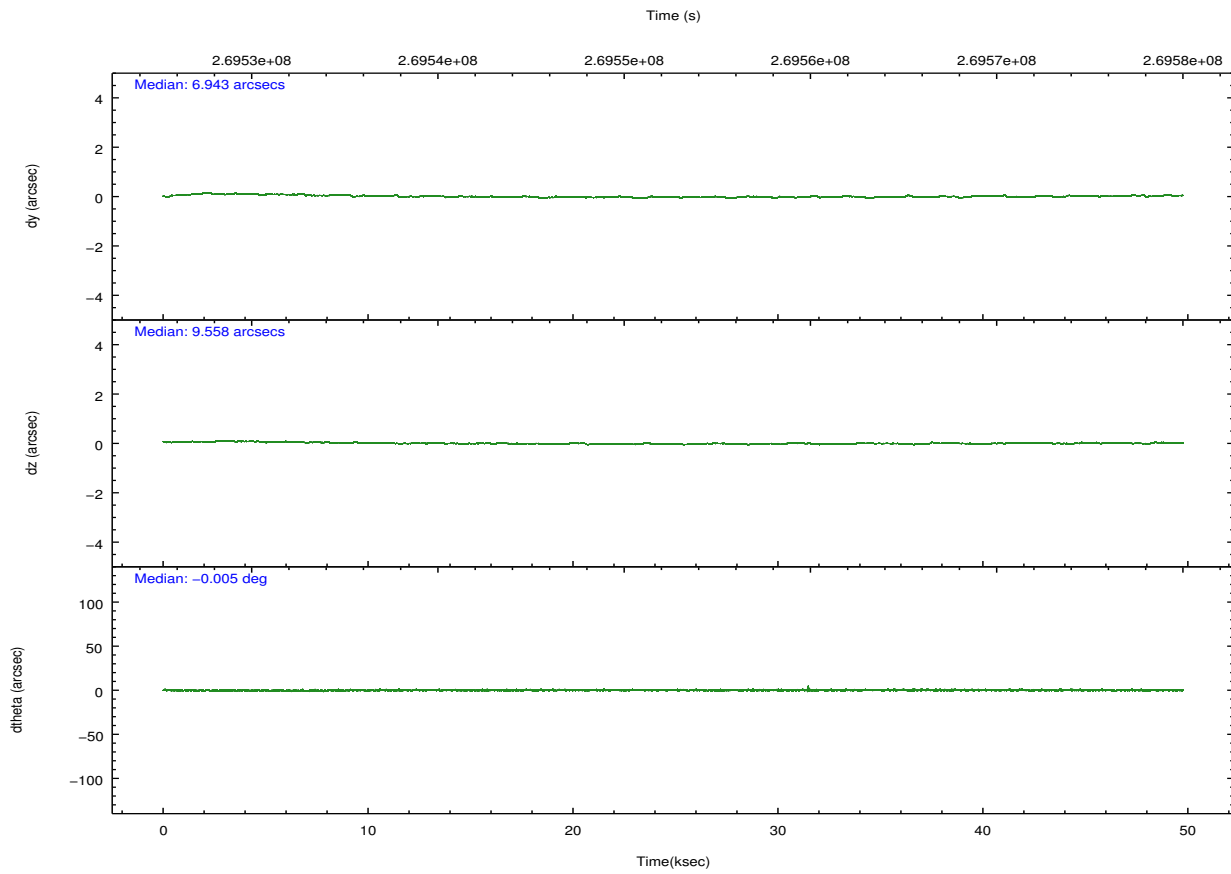
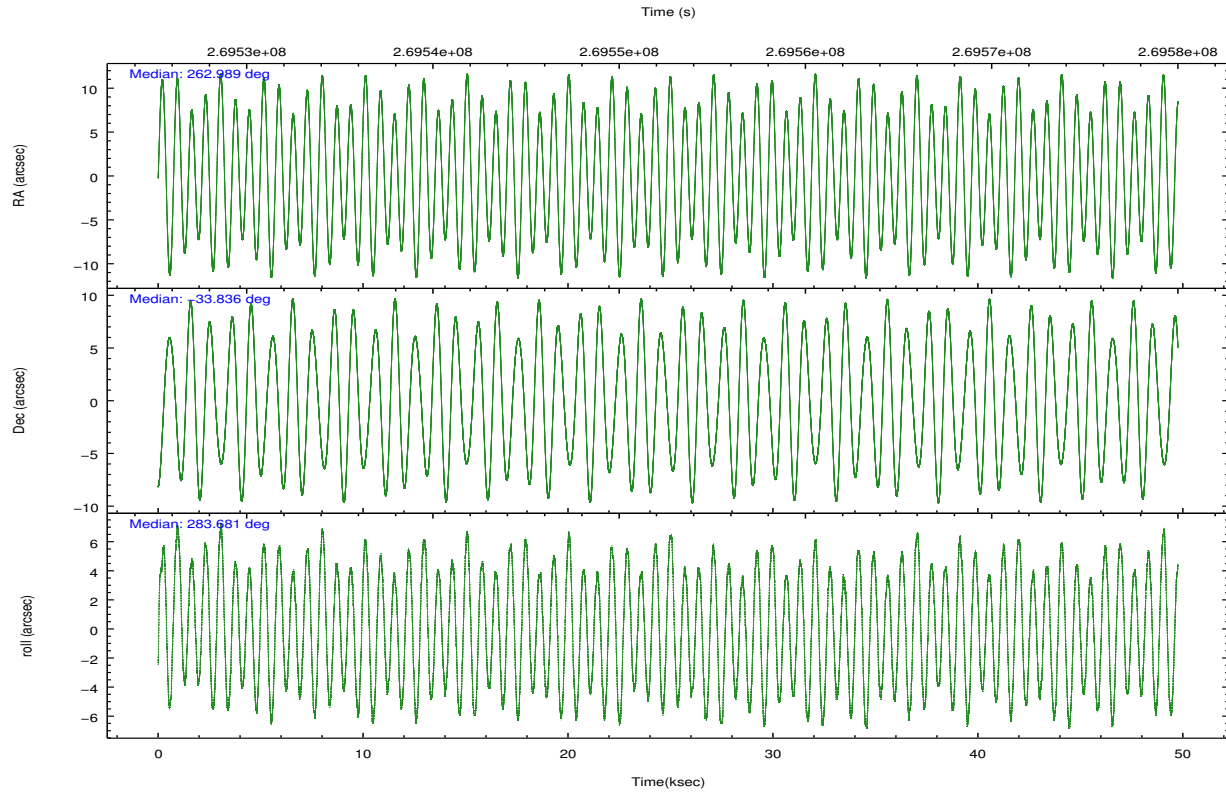
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	120896	673567	818713	2750183	377865	134128	grade 0 events	17302	209772	46355	482949	106395	20731
rejected events	17583	42024	23212	125271	28238	20520		14%	31%	5%	17%	28%	15%
rejected %	14%	6%	2%	4%	7%	15%	grade 1 events	429	716	493	15798	892	423
								0%	0%	0%	0%	0%	0%
							grade 2 events	45323	196142	622465	686542	142335	49591
								37%	29%	76%	24%	37%	36%
							grade 3 events	11272	11972	12572	257089	23181	10125
								9%	1%	1%	9%	6%	7%
							grade 4 events	11474	11407	12198	253363	22280	10900
								9%	1%	1%	9%	5%	8%
							grade 5 events	17151	41272	22671	109312	27324	20093
								14%	6%	2%	3%	7%	14%
							grade 6 events	17945	202286	101959	945130	55458	22265
								14%	30%	12%	34%	14%	16%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

## 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	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	262.965858	262.988826339677	Subarray requested	NONE	NONE
[deg] Pointing Dec	-33.816194	-33.83563494720698	Alternating exposures requested	N	N
[deg] Pointing Roll	283.516335	283.6857457111024	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-186.132523	-186.1397904050899			
[mm] SIM translation stage offset	-4	-3.992732177917873			
[s] Observation start time (MET)	269528090.184000	269527386.21095			
Observation start date	2006-07-17T12:53:45	2006-07-17T12:43:06			
[s] Observation end time (MET)	269577503.184000	269577723.96331			
Observation end date	2006-07-18T02:37:18	2006-07-18T02:42:03			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



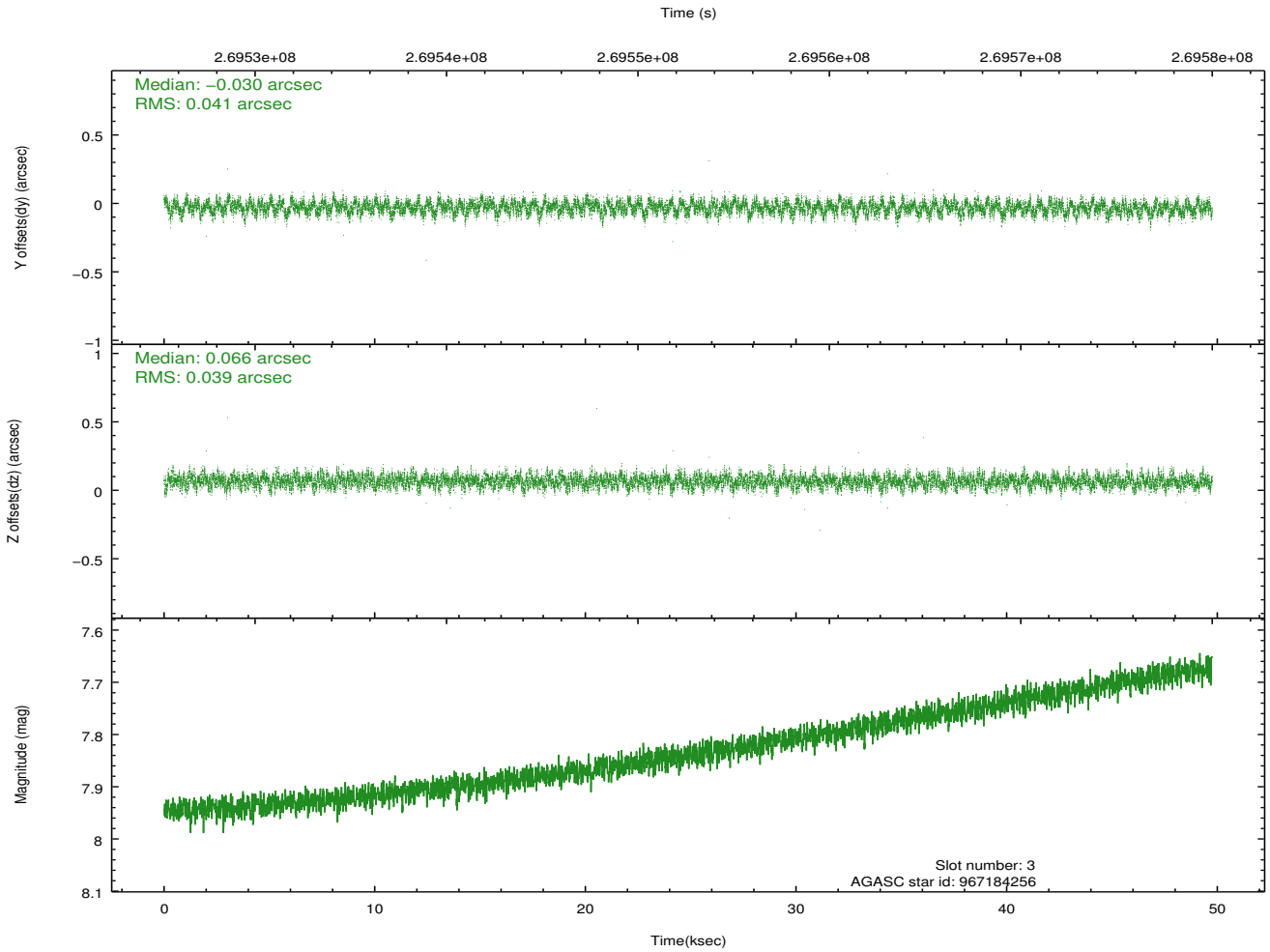
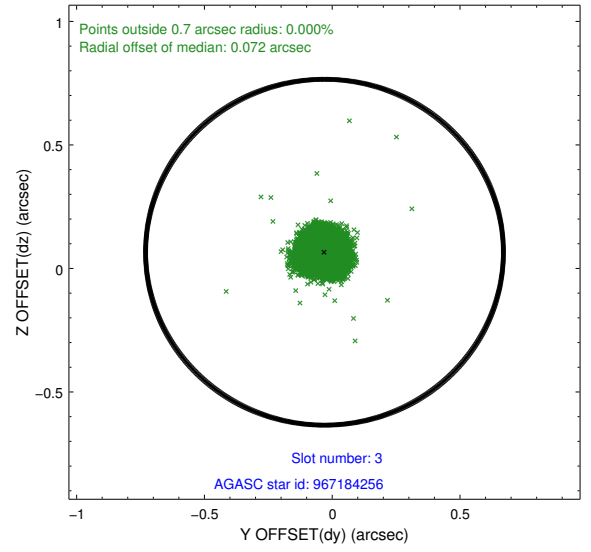
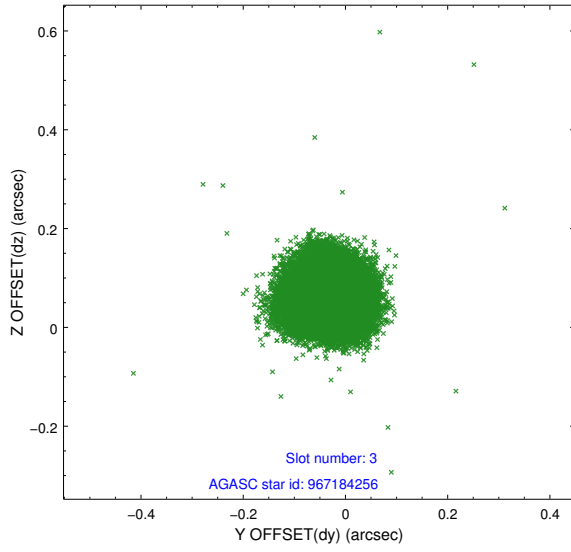


### Slot Statistics

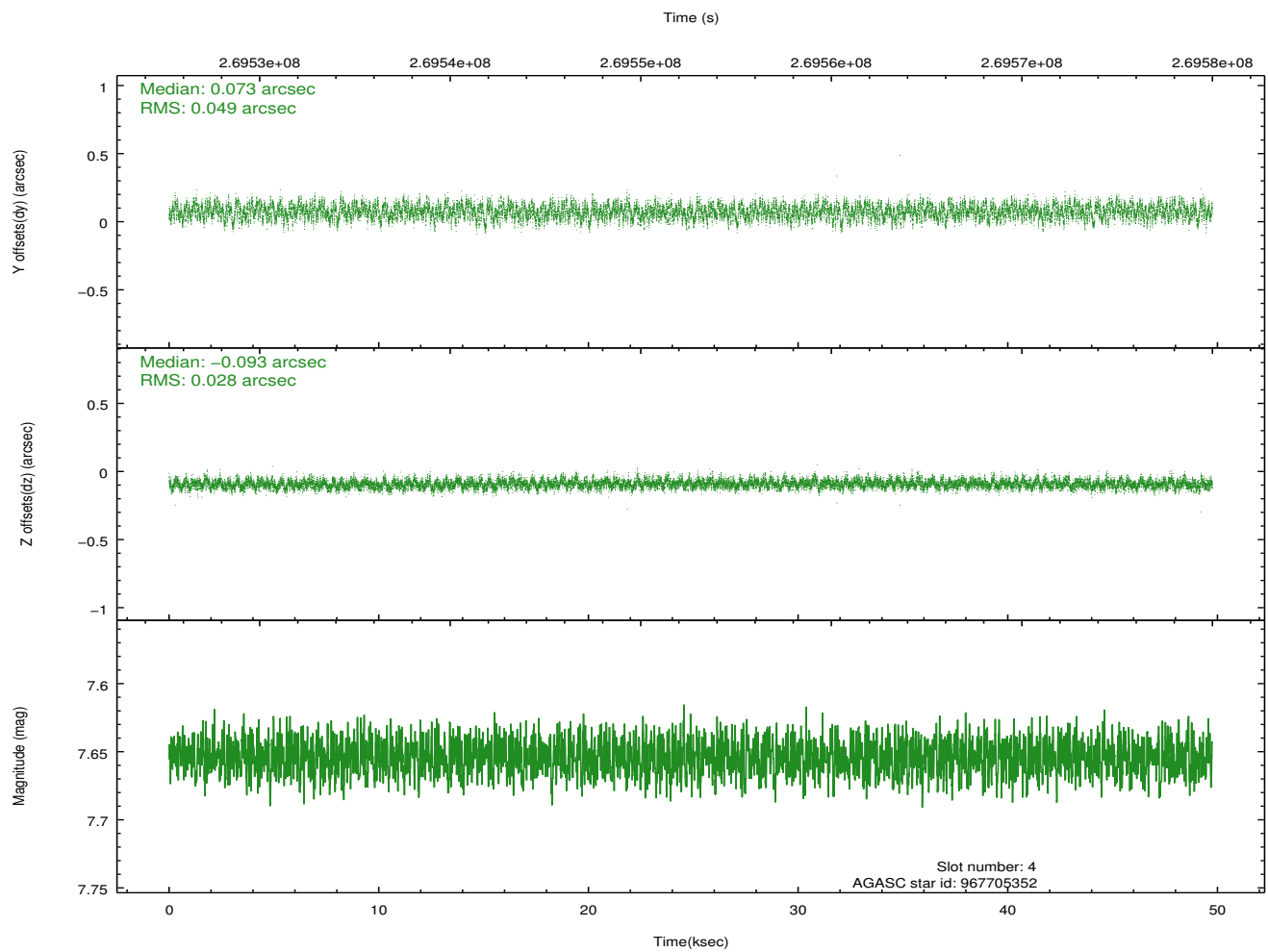
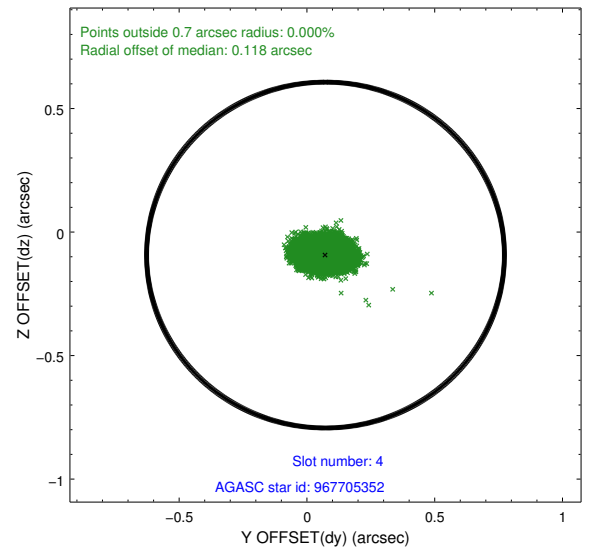
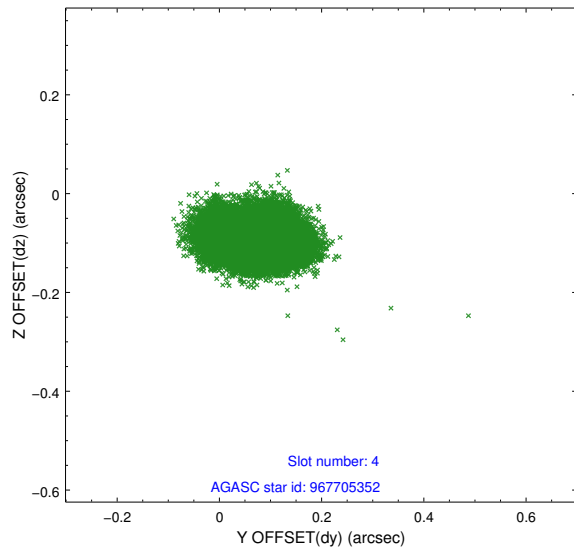
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	12135	0.098	0.004	0.006	0.010	0.000000	0.000000	936.69	-1808.81
1	FID	ACIS-S-2	7.09	12137	-0.066	-0.088	0.007	0.011	0.000000	0.000000	-759.39	-1813.42
2	FID	ACIS-S-5	7.23	12137	-0.056	0.090	0.006	0.011	0.000000	0.000000	-1812.59	88.88
3	GUIDE	967184256	7.84	24265	-0.030	0.066	0.061	0.095	262.701584	-33.609898	-905.96	-597.02
4	GUIDE	967705352	7.65	24270	0.073	-0.093	0.060	0.098	262.627740	-34.539041	2297.97	-1583.45
5	GUIDE	967839200	8.34	24267	0.167	0.021	0.065	0.103	263.484278	-34.076934	1278.24	1282.87
6	GUIDE	967705480	8.54	24265	-0.041	-0.042	0.066	0.110	262.356652	-33.760572	-614.64	-1727.17
7	GUIDE	967837824	7.49	24270	-0.166	0.052	0.051	0.079	263.710184	-34.276828	2137.70	1763.71

## 2.4 Star Slots

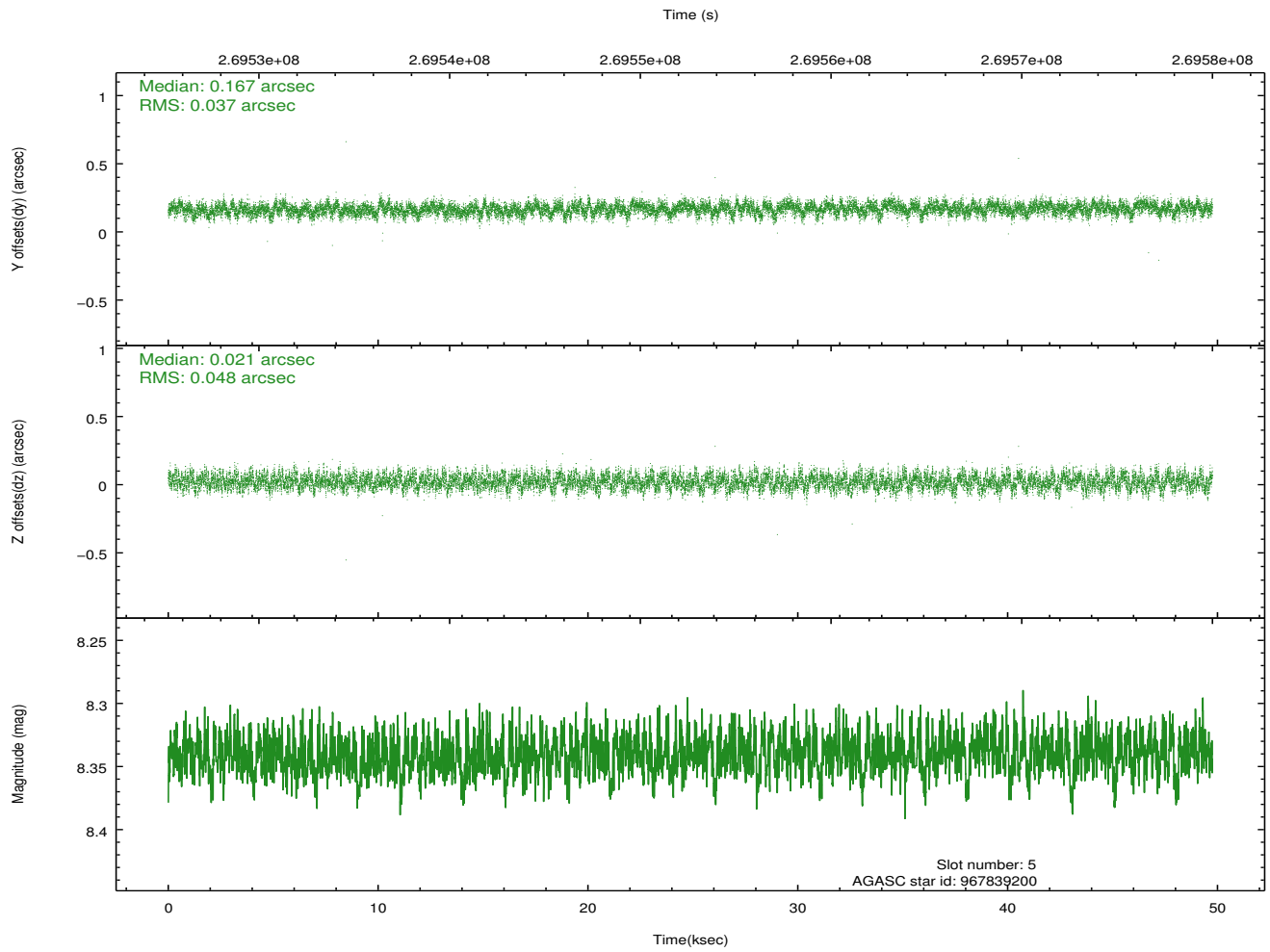
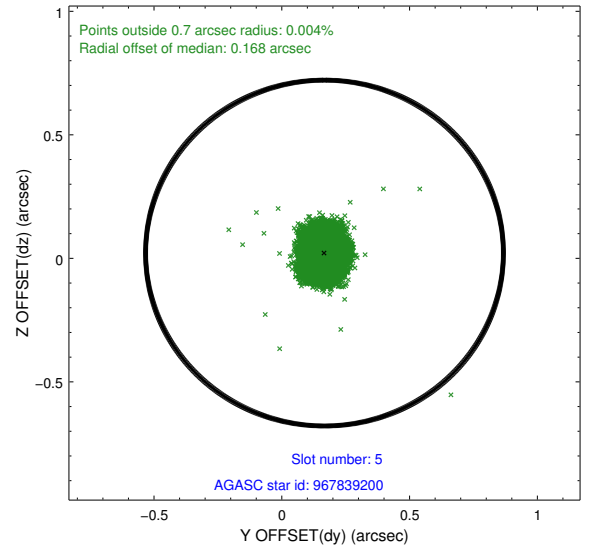
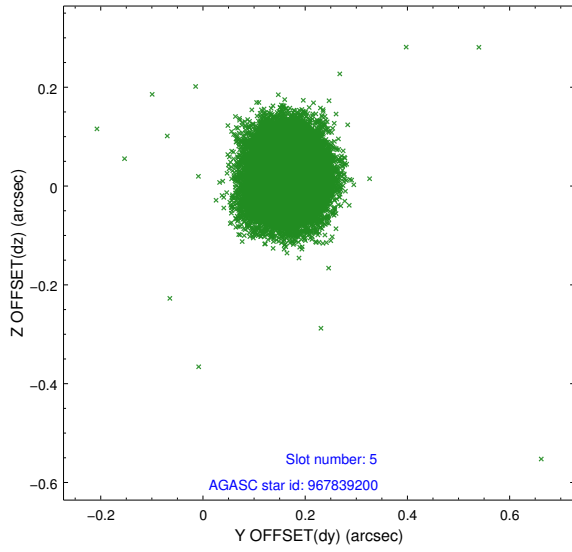
### 2.4.1 Slot 3



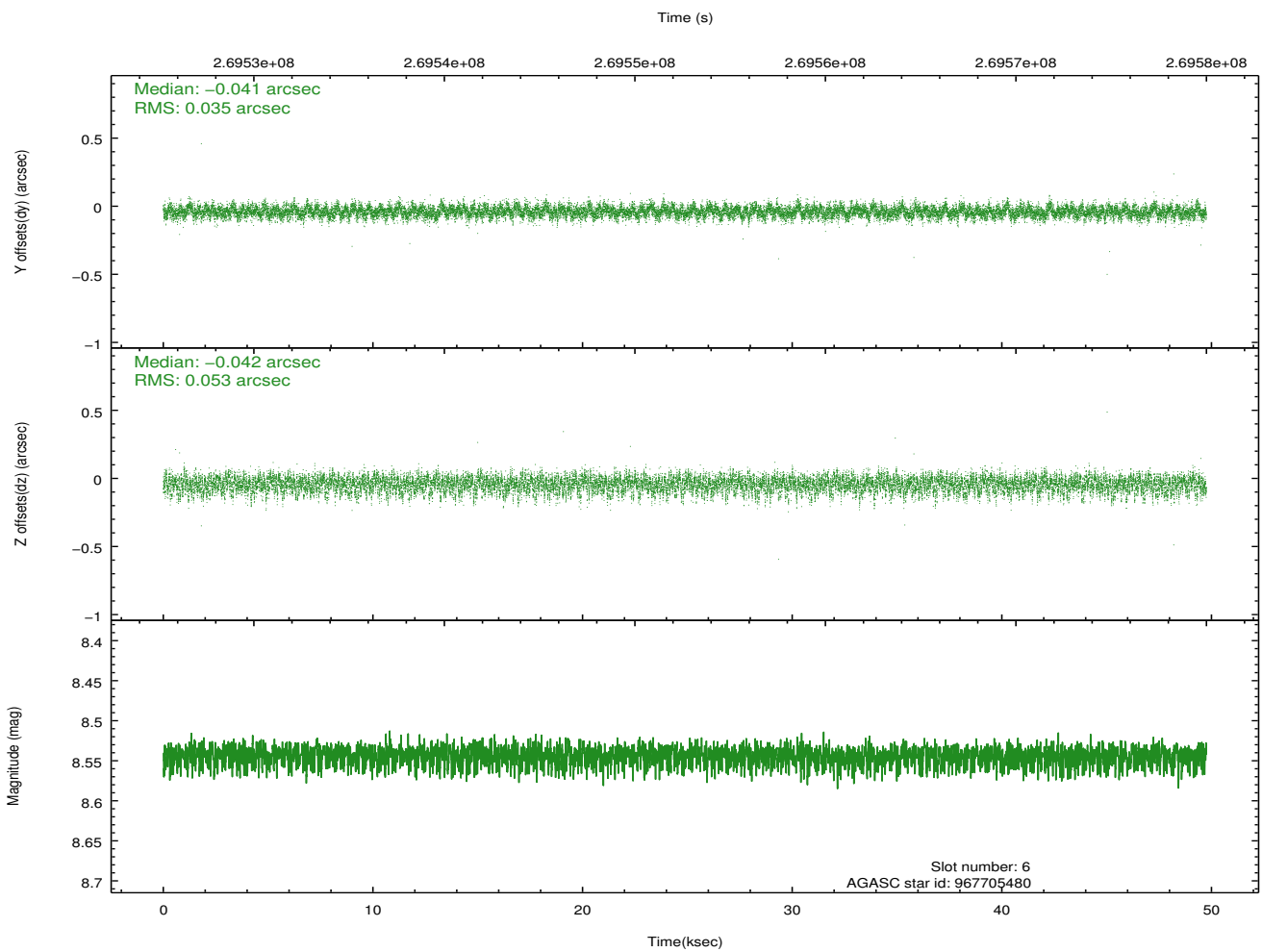
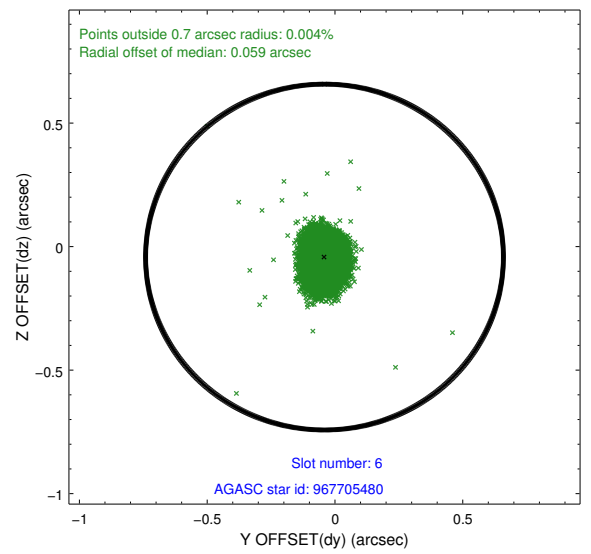
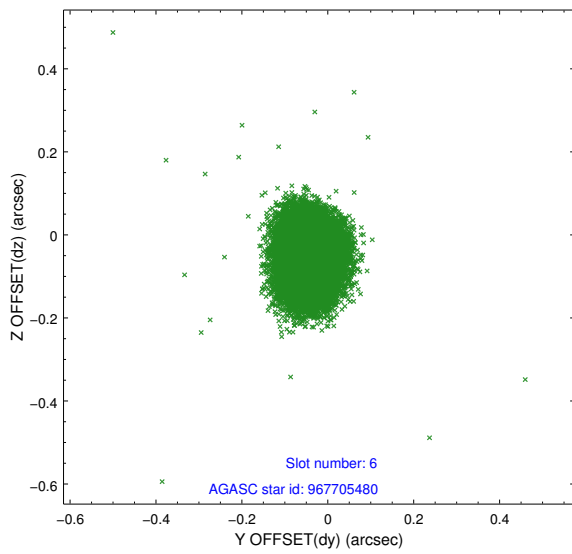
## 2.4.2 Slot 4



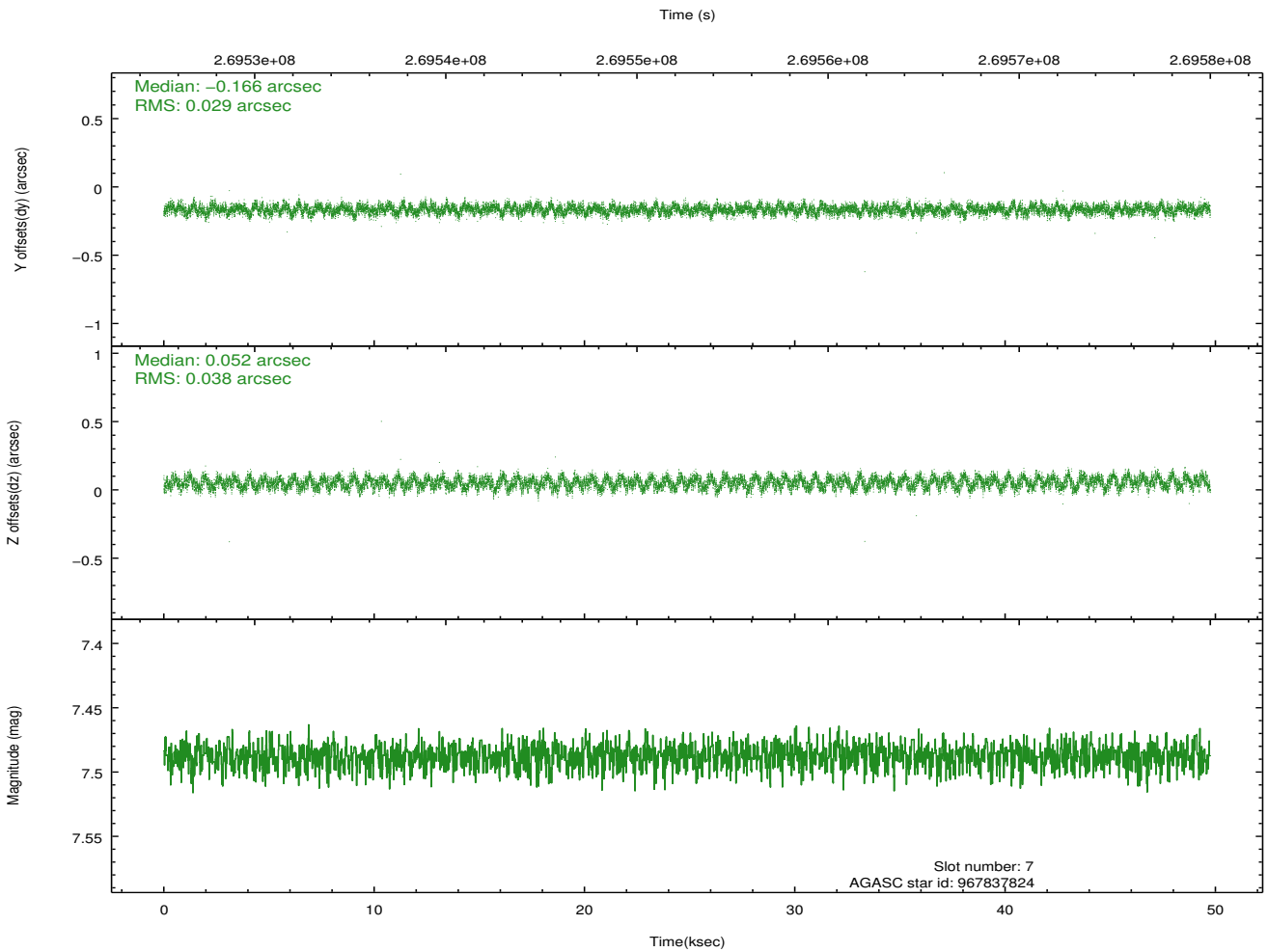
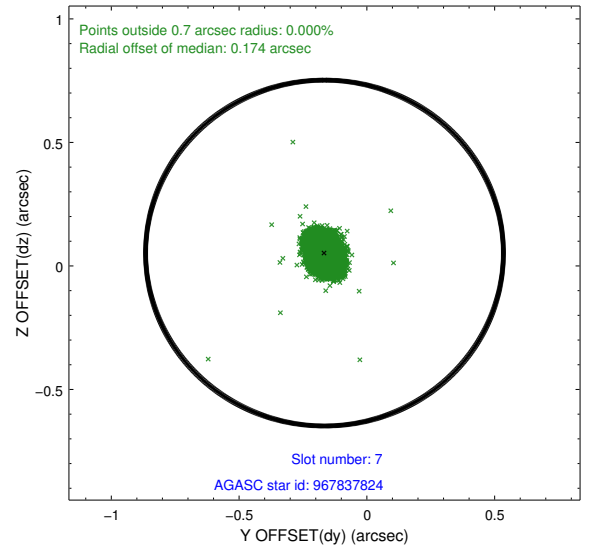
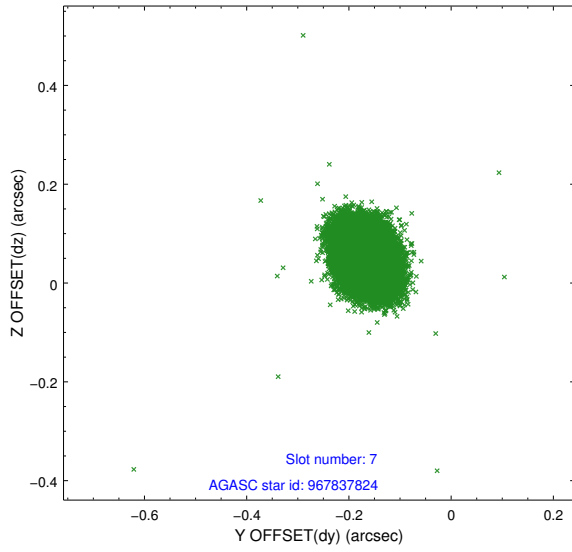
### 2.4.3 Slot 5



### 2.4.4 Slot 6

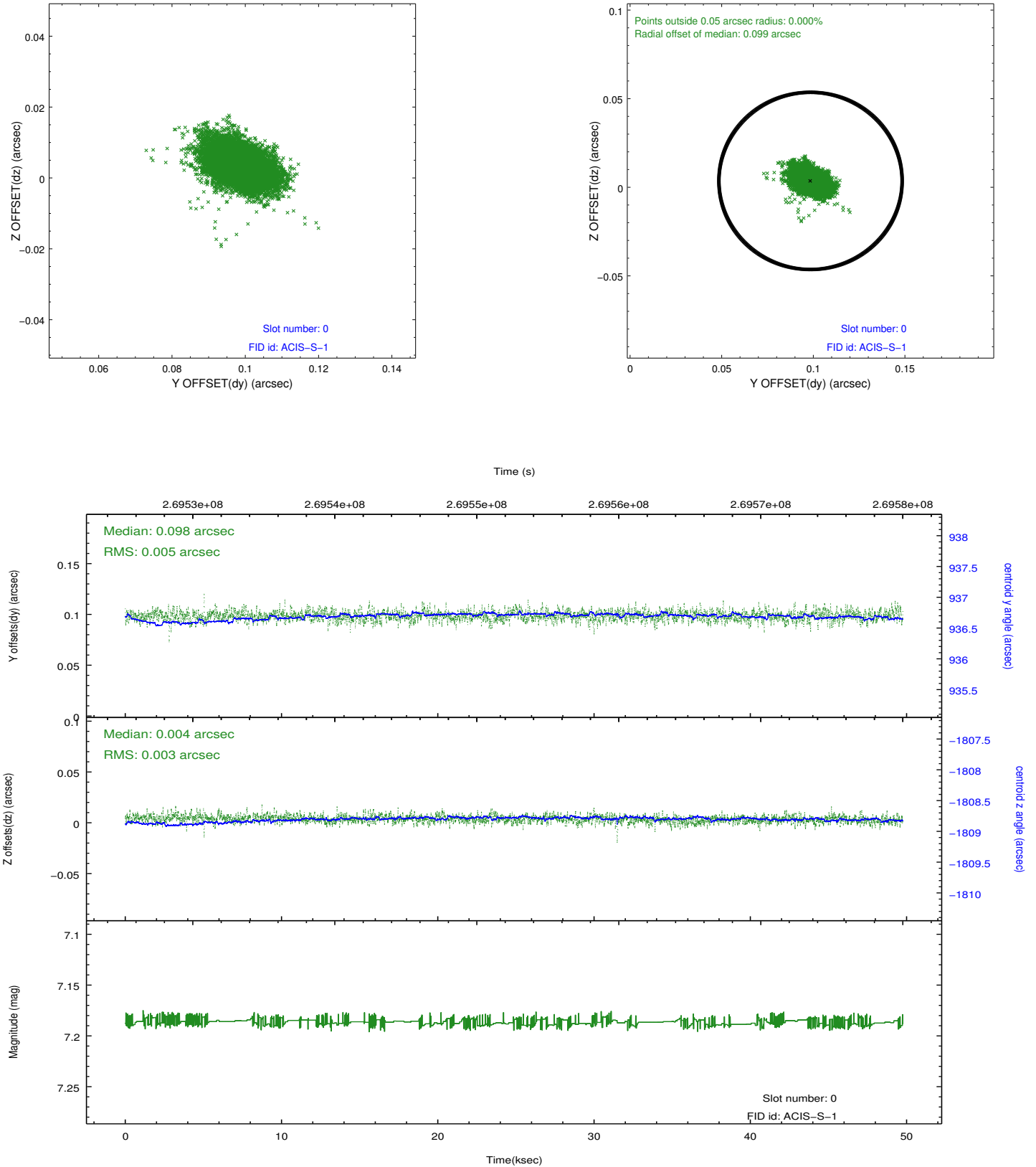


### 2.4.5 Slot 7

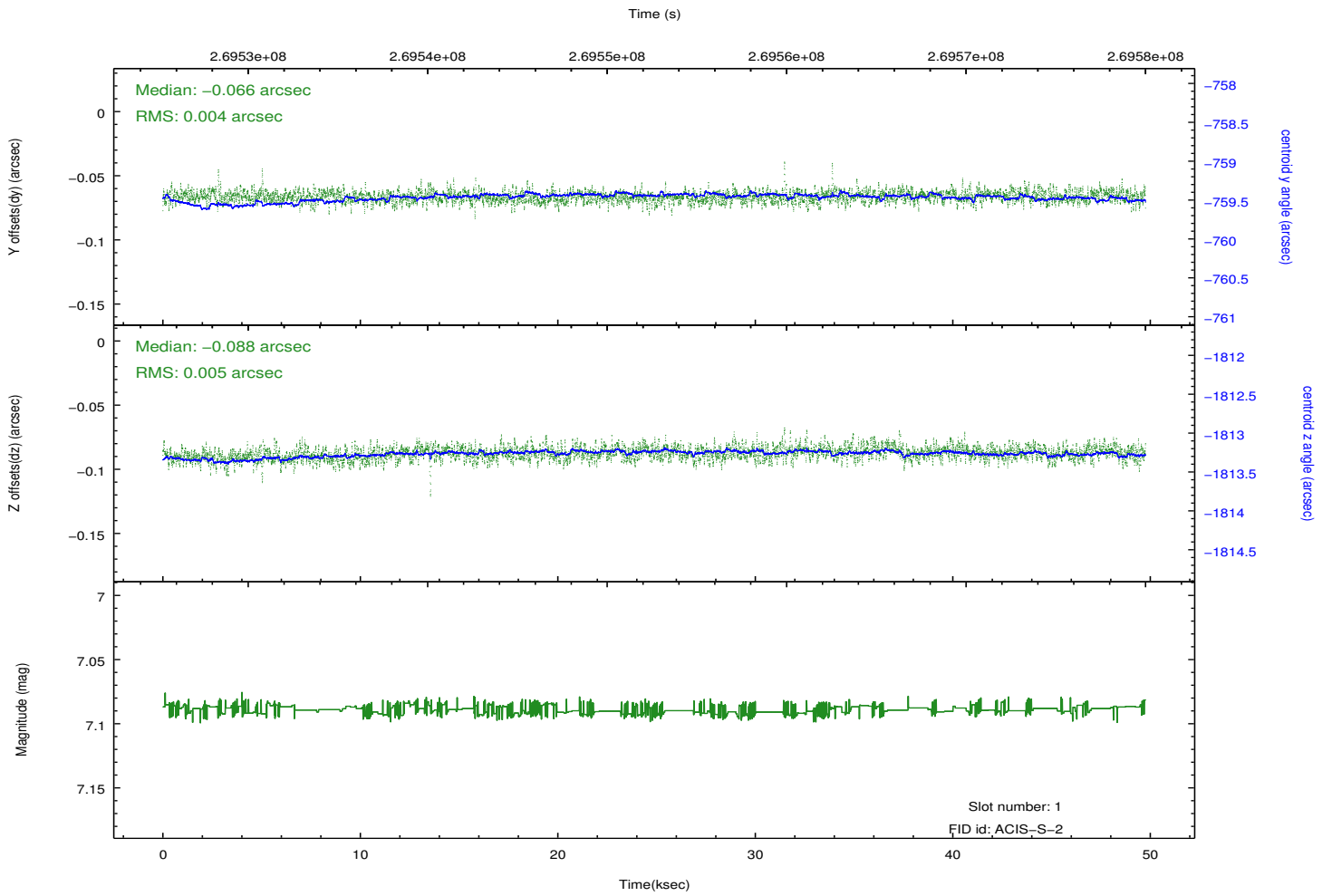
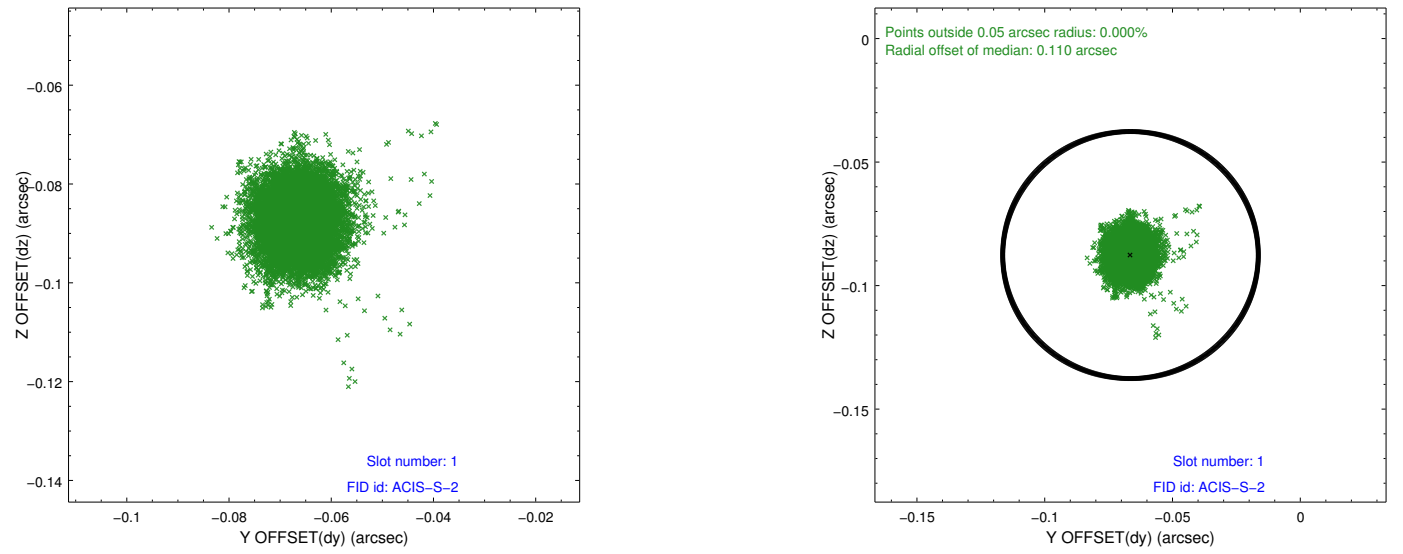


## 2.5 FID Slots

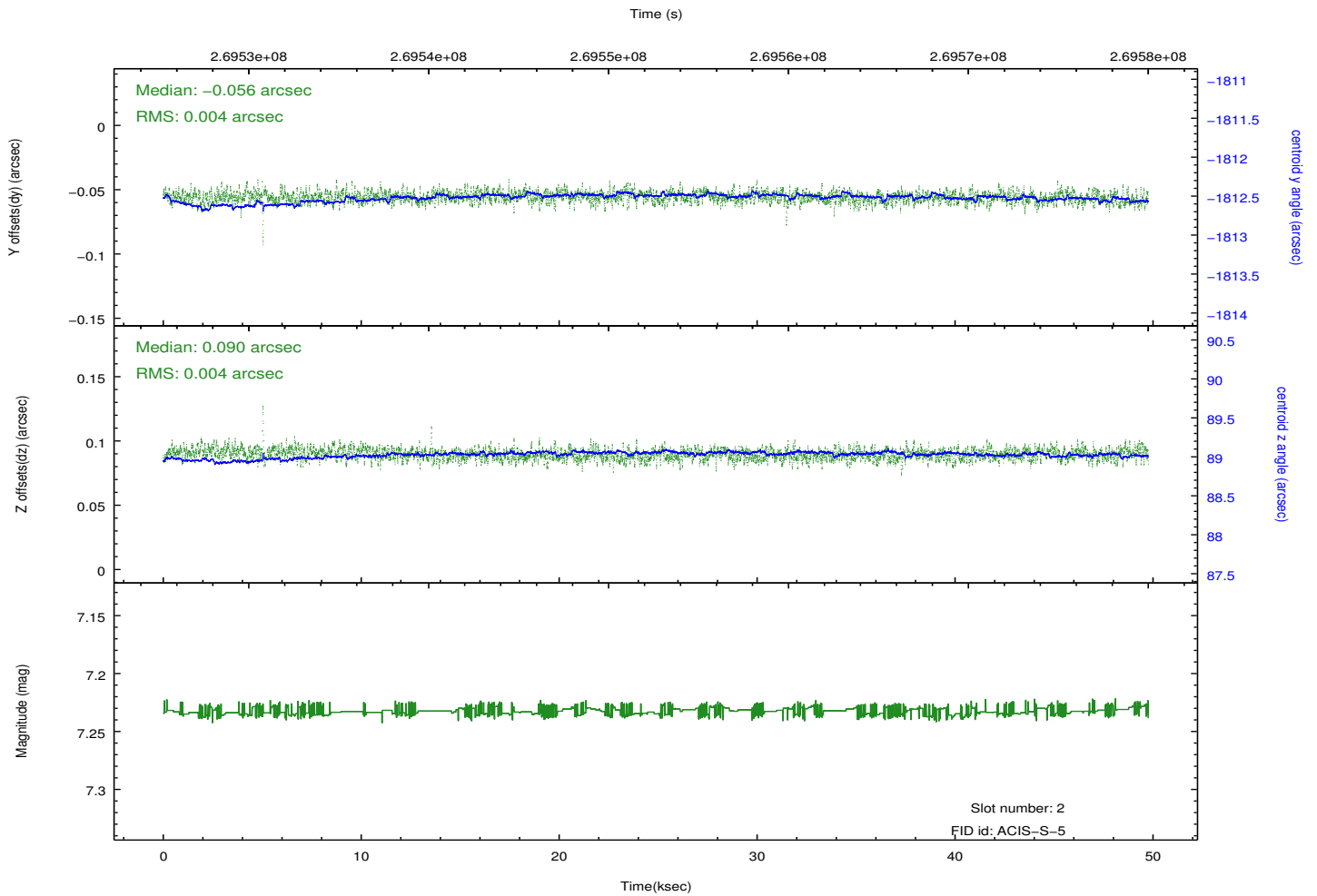
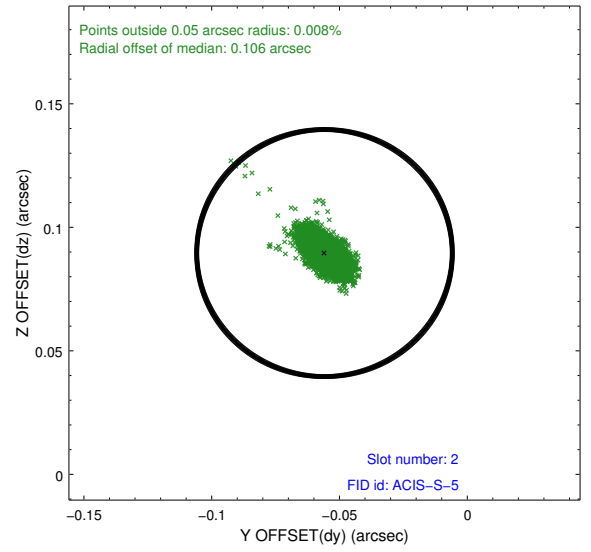
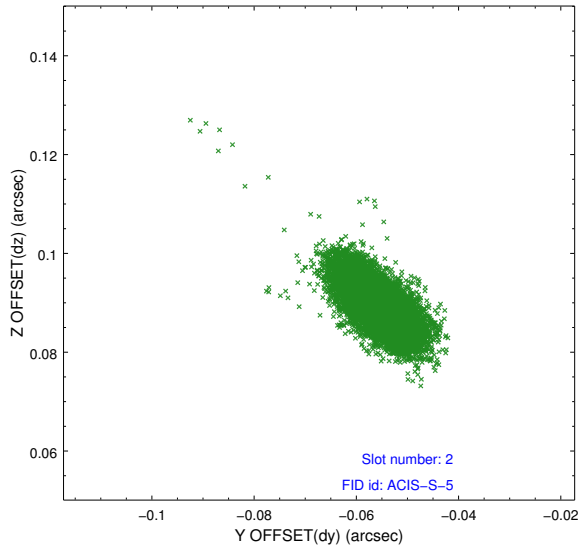
### 2.5.1 Slot 0



## 2.5.2 Slot 1

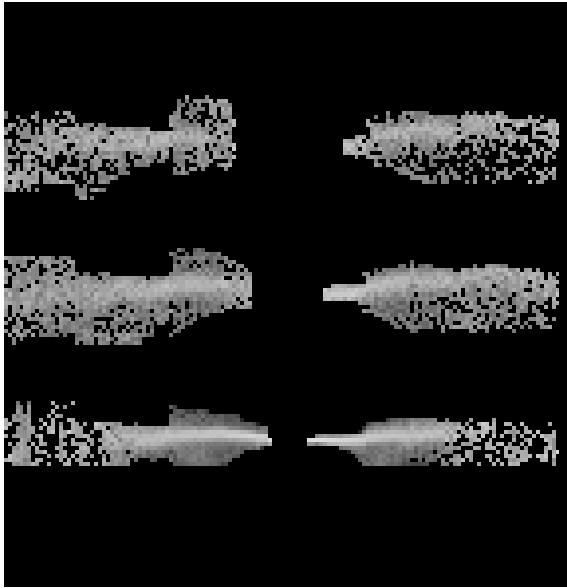


### 2.5.3 Slot 2

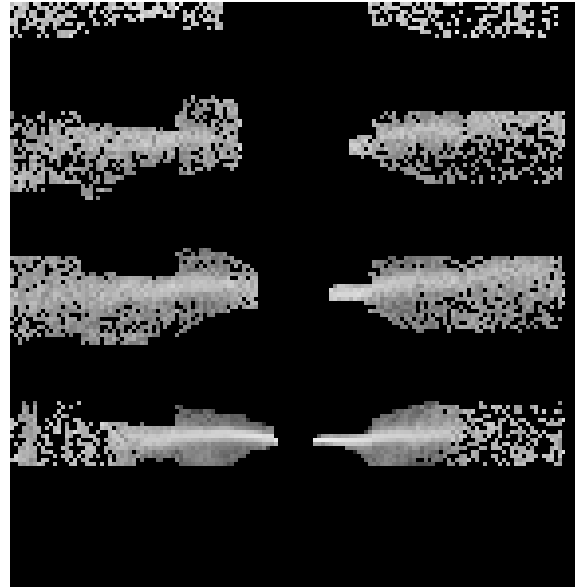


# 3 Gratings

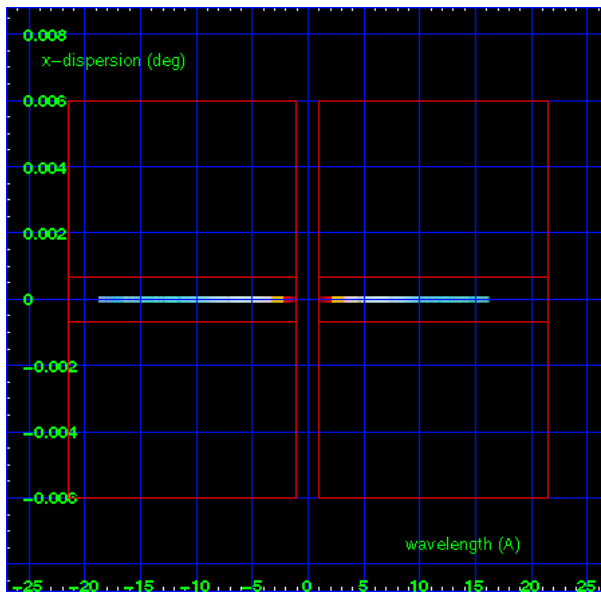
## 3.1 HEG Arm



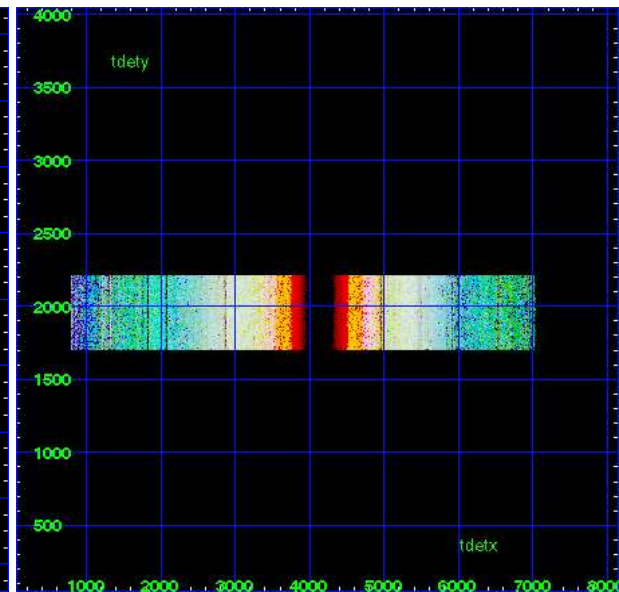
HEG Order Sort 123



HEG Order Sort ALL

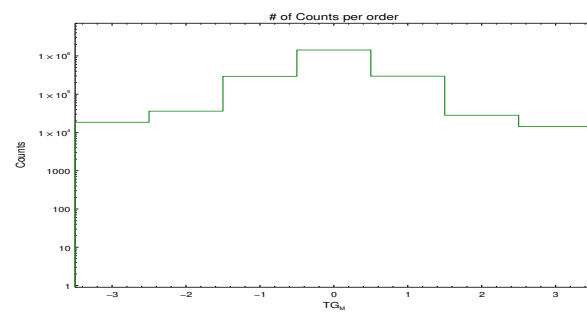


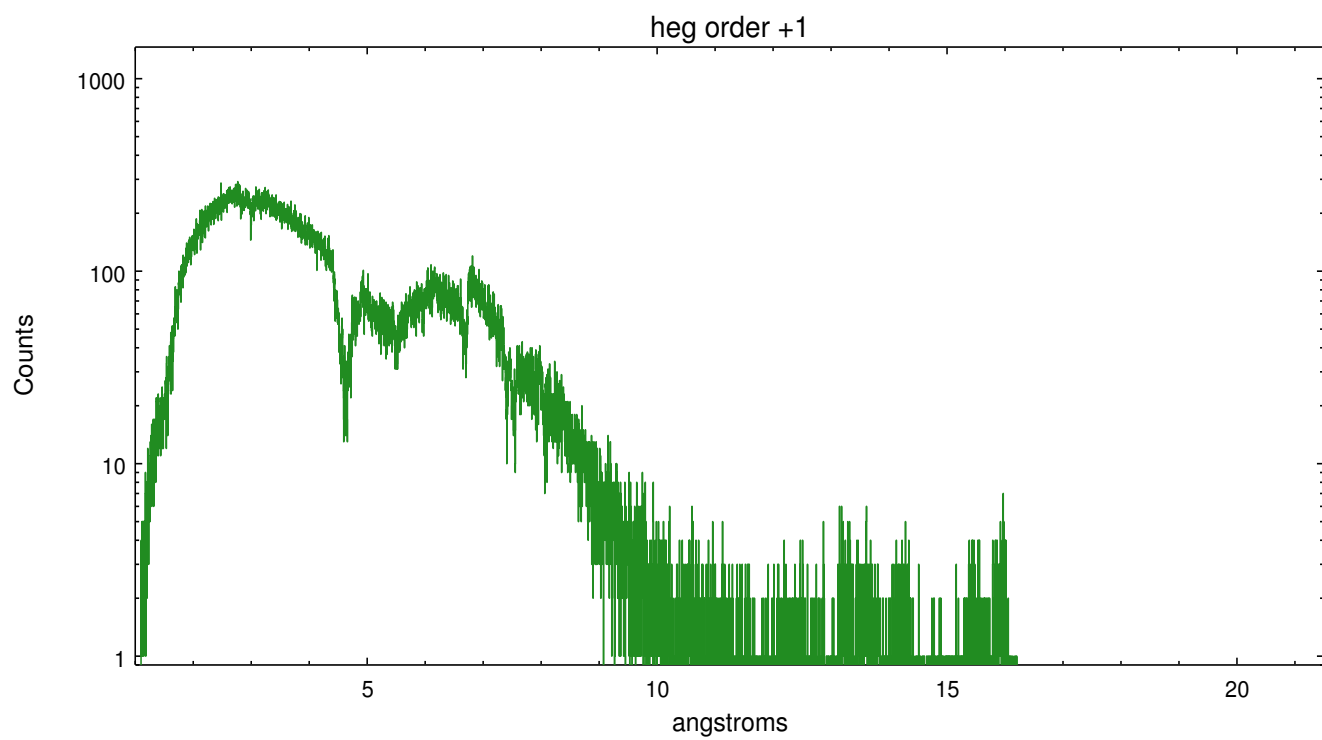
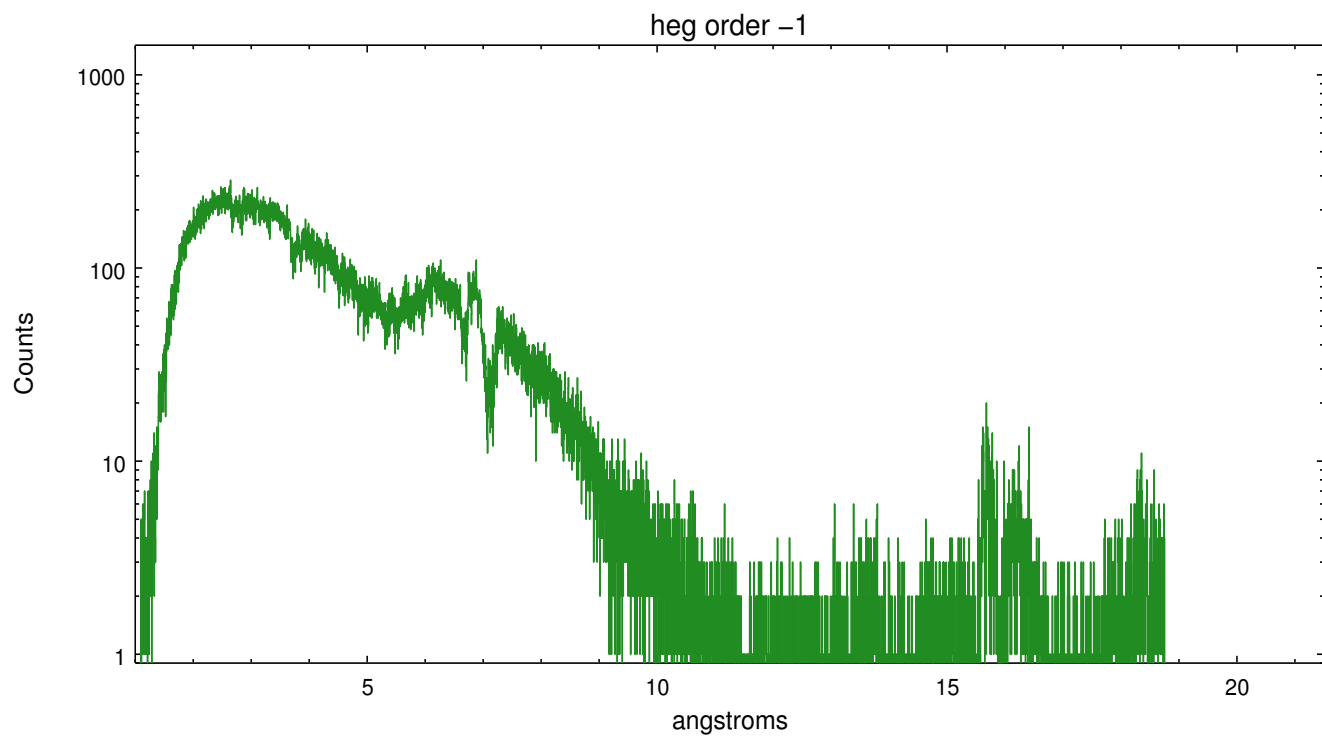
Spot Image HEG



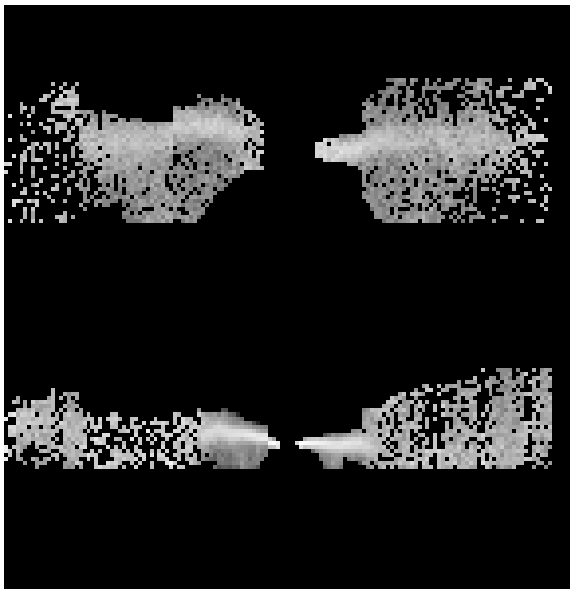
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	18414	35999	292874	1427177	295415	28143	14368





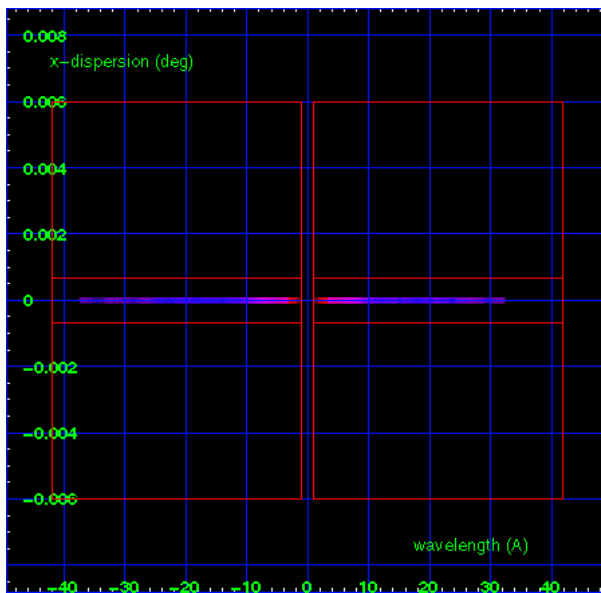
### 3.2 MEG Arm



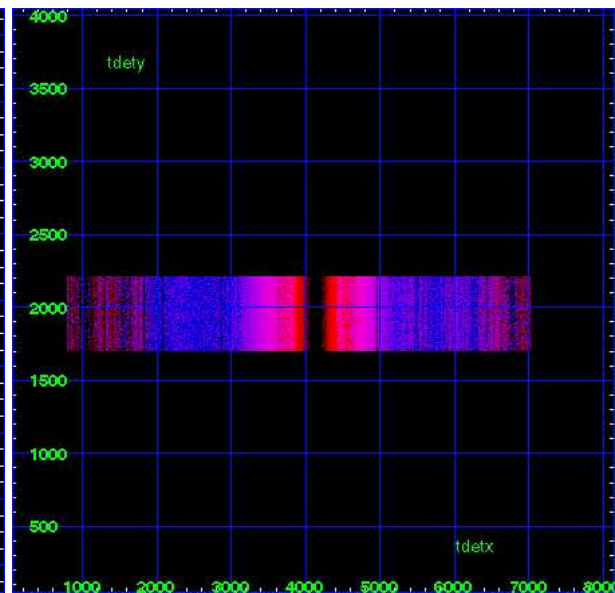
MEG Order Sort 123



MEG Order Sort ALL

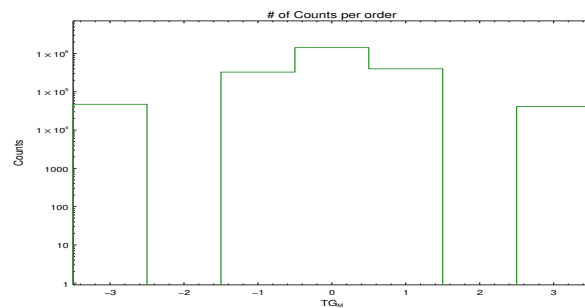


Spot Image MEG

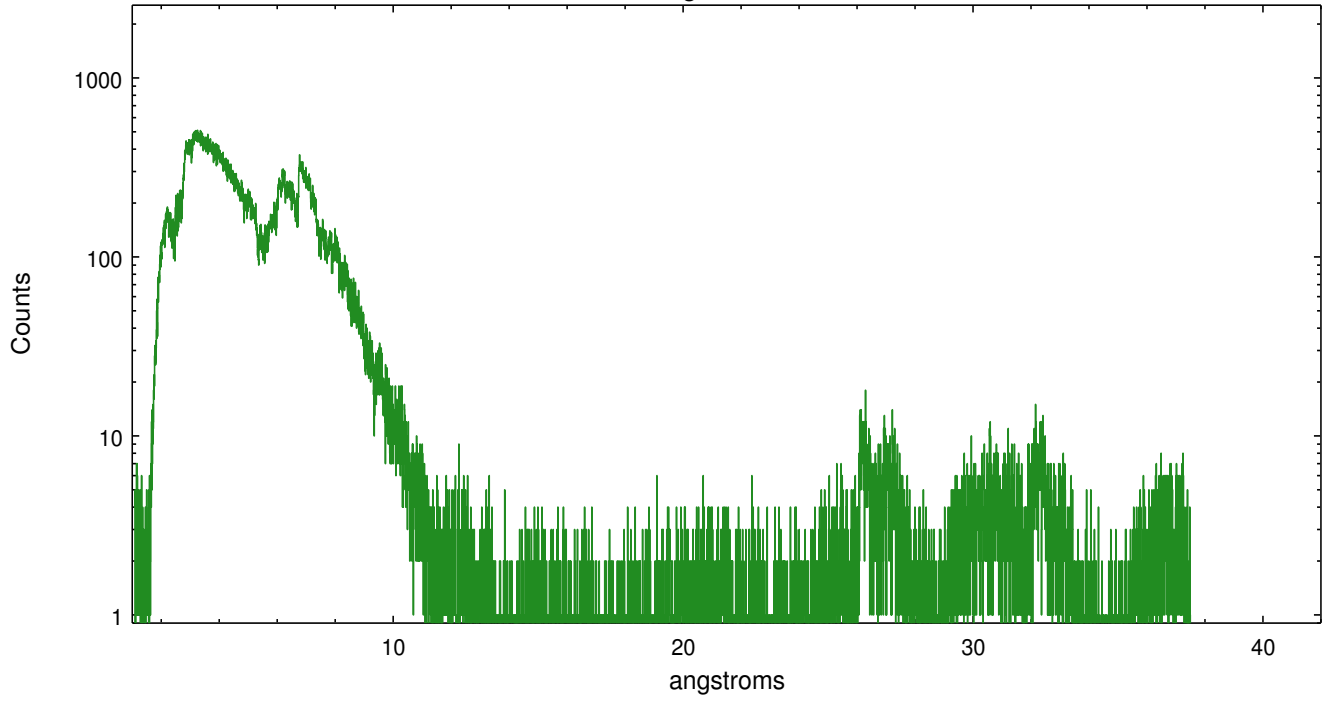


Full Detector MEG

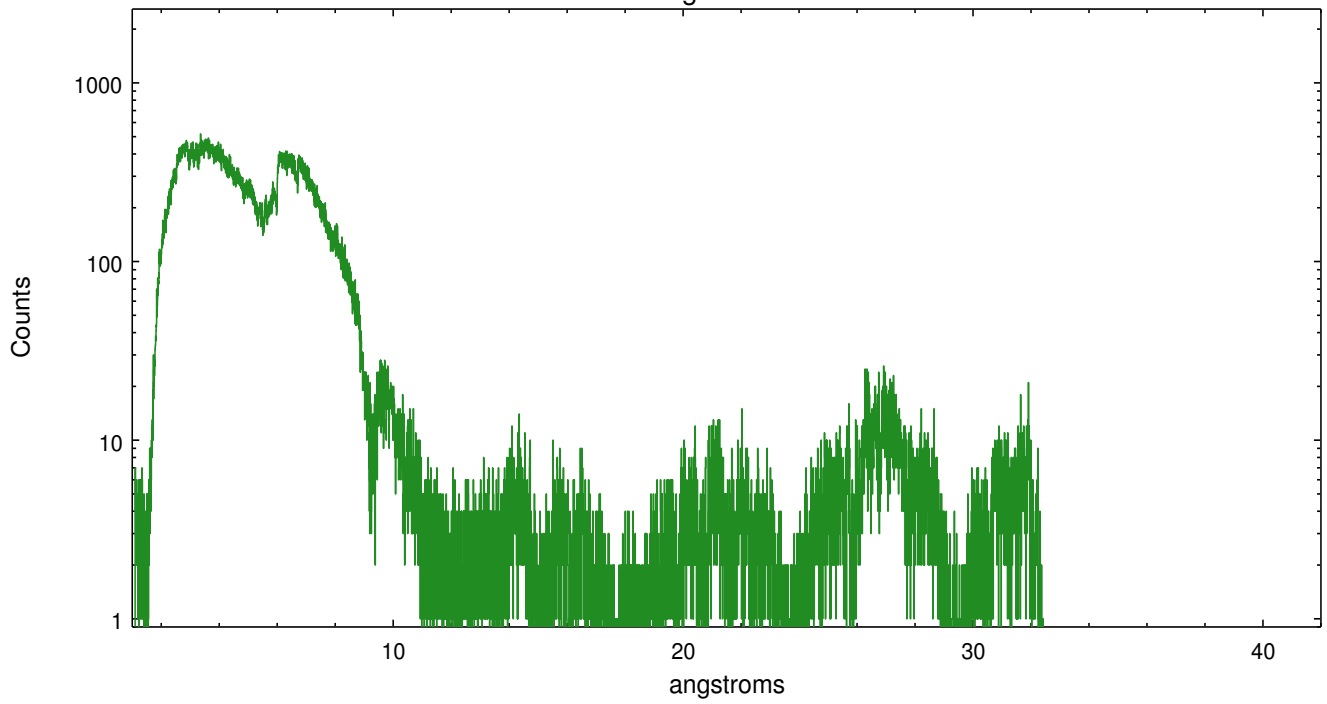
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	47187	0	327203	1427177	399337	0	41152



meg order -1



meg order +1



# A Summary

## A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.04.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.49

## A.2 Comments