

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 6632 - L2 Version 2  
Chandra X-Ray Center

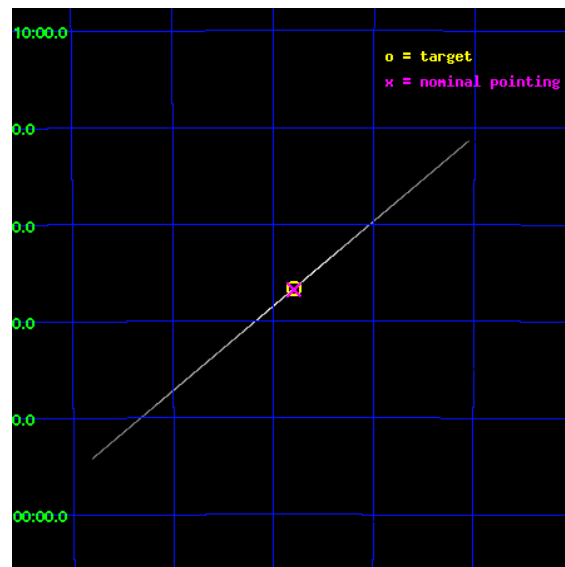
L2 Processing Date : Apr 4 2012

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# 1 Front

seq_num	400537	Sequence number
obs_id	6632	Observation id
title	CHAZSS: The Chandra HETGS Atoll/Z Spectroscopic Survey	Proposal ti
observer	Dr Jon Miller	Principal investigator
object	GX 340+0	Source name
ra_targ	251.44875	Observer's specified target RA [deg]
dec_targ	-45.611111	Observer's specified target Dec [deg]
ra_nom	251.44856209704	Nominal RA [deg]
dec_nom	-45.613191494264	Nominal Dec [deg]
roll_nom	320.14780984176	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23658.75	Sum of GTIs [s]
livetime	23566.333007812	Livetime [s]
ontime4	23658.75	Sum of GTIs [s]
ontime5	23658.75	Sum of GTIs [s]
ontime6	23658.75	Sum of GTIs [s]
ontime7	23658.75	Sum of GTIs [s]
ontime8	23658.75	Sum of GTIs [s]
ontime9	23658.75	Sum of GTIs [s]
l2events	2828933	Number of level 2 events

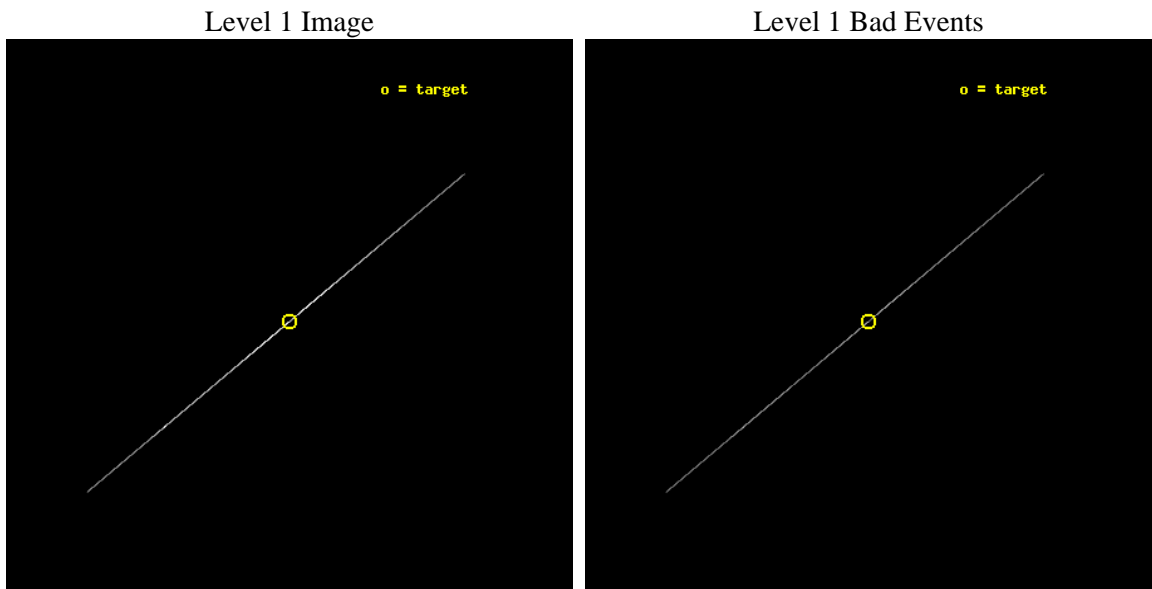




## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	23481.741000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	23658.75	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime4	23658.75	Sum of GTIs [s]
date	2012-04-04T00:54:49	Date and time of file creation	ontime5	23658.75	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	23658.75	Sum of GTIs [s]
			ontime7	23658.75	Sum of GTIs [s]
			ontime8	23658.75	Sum of GTIs [s]
			ontime9	23658.75	Sum of GTIs [s]
			l1events	3224342	Number of level 1 events

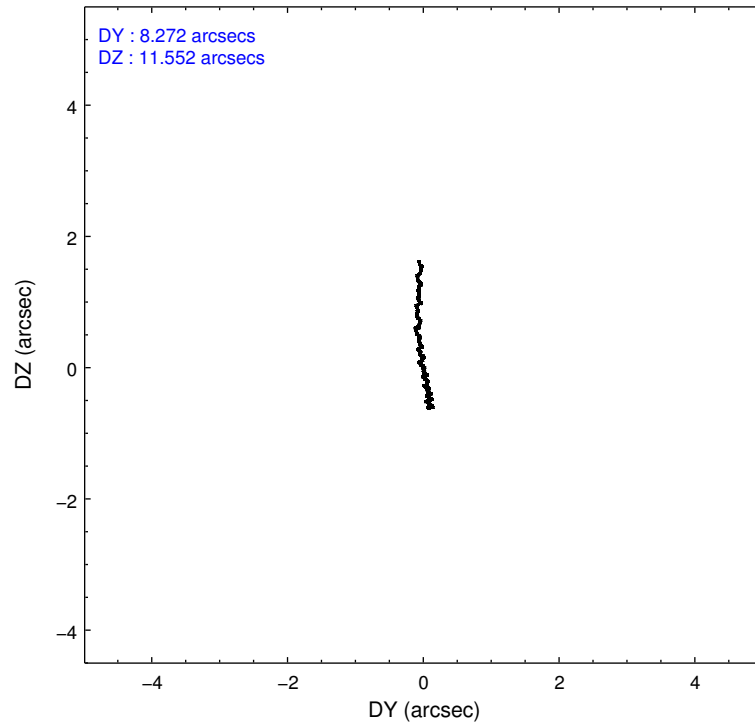
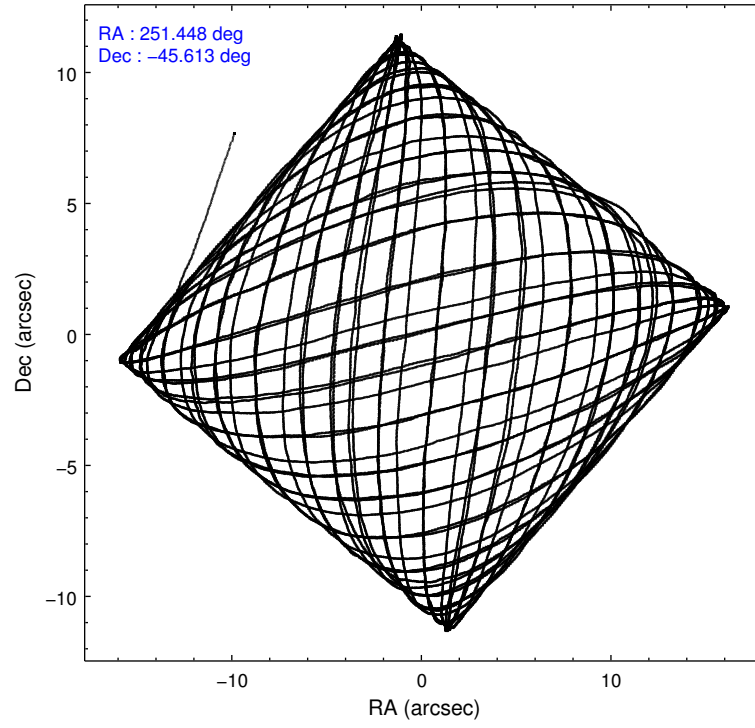
### 2.1.3 Events

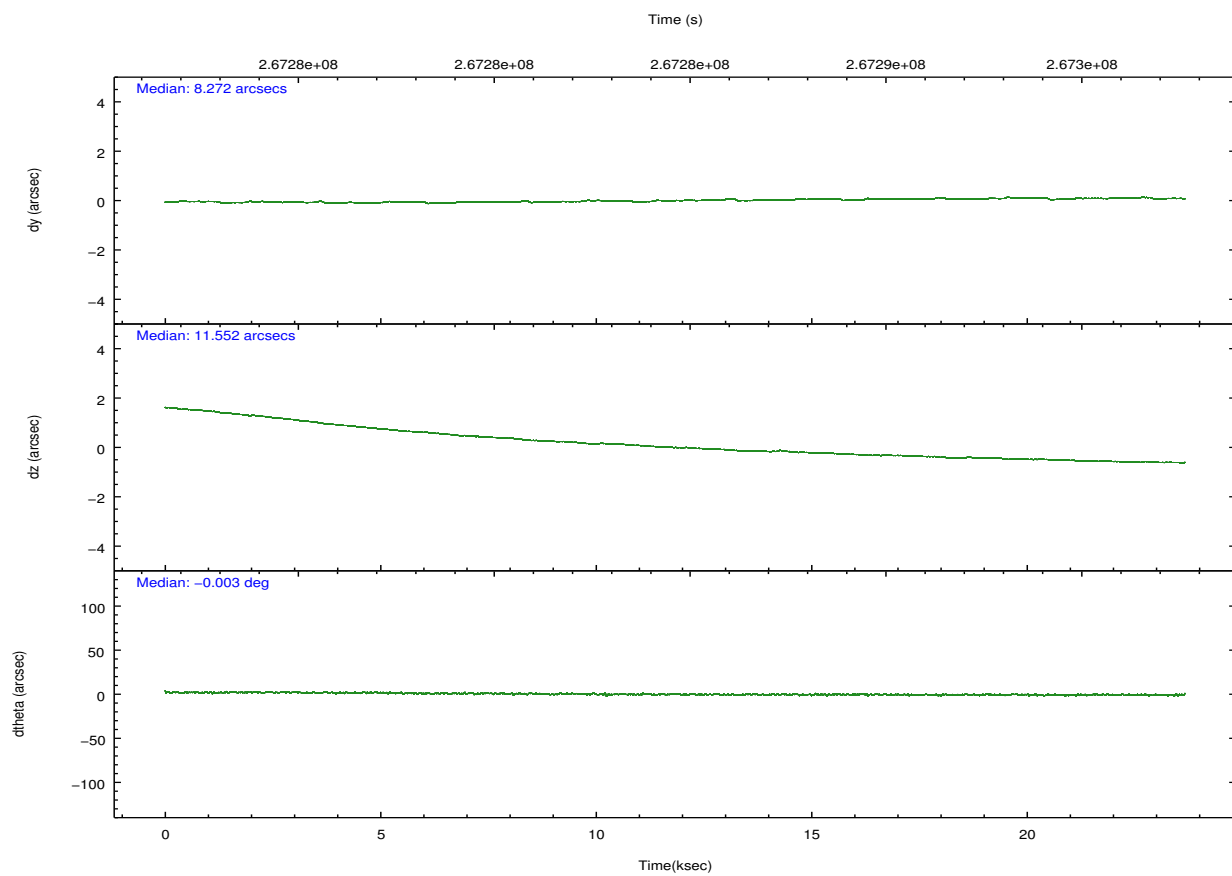
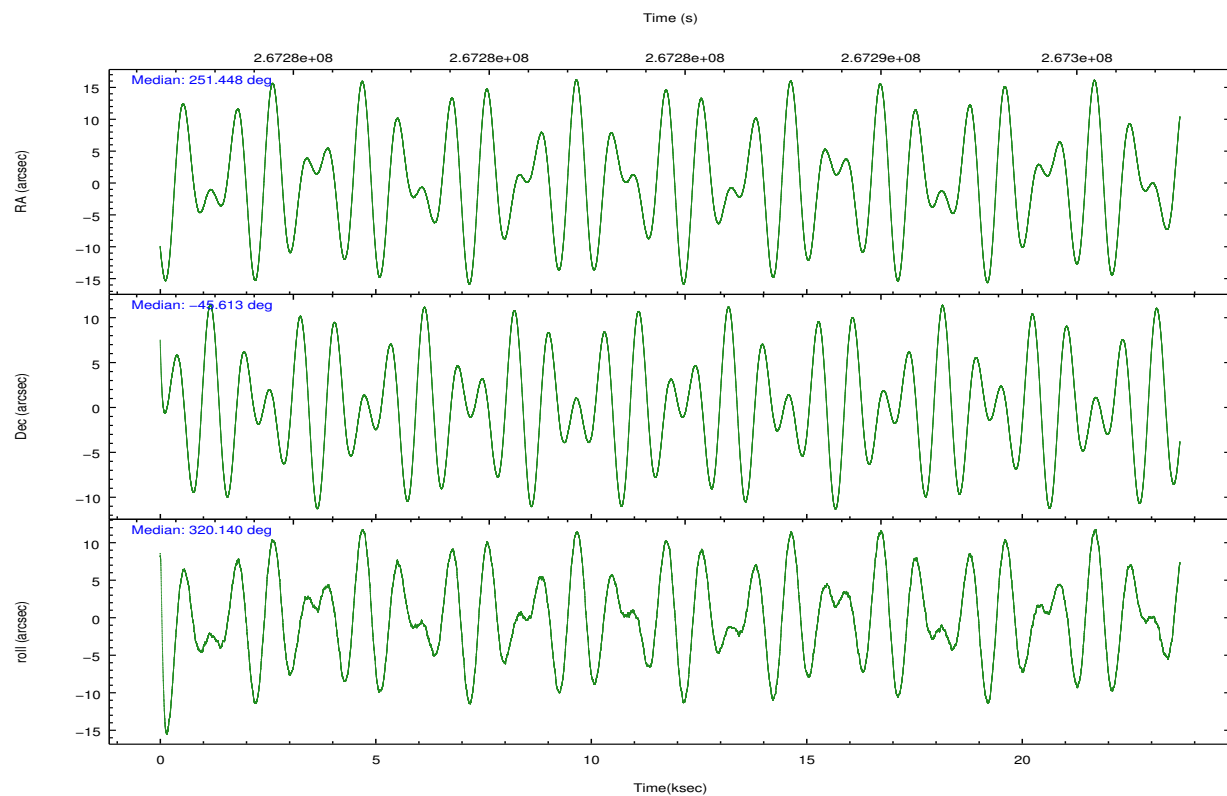
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	63803	318053	974785	1549921	248088	69692	grade 0 events	5288	74029	135118	185945	82811	7782
rejected events	10003	27915	22698	51159	18842	11990		8%	23%	13%	11%	33%	11%
rejected %	15%	8%	2%	3%	7%	17%	grade 1 events	165	292	675	1890	595	168
								0%	0%	0%	0%	0%	0%
							grade 2 events	28806	94915	665761	466513	89840	28733
								45%	29%	68%	30%	36%	41%
							grade 3 events	5337	4972	13319	109718	13241	4986
								8%	1%	1%	7%	5%	7%
							grade 4 events	5561	4768	13280	108789	12992	5406
								8%	1%	1%	7%	5%	7%
							grade 5 events	8085	18501	15600	37682	13936	10056
								12%	5%	1%	2%	5%	14%
							grade 6 events	10561	120576	131032	639384	34673	12561
								16%	37%	13%	41%	13%	18%
							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_GRADED	CC33_GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	251.410136	251.4485620970378	Subarray requested	NONE	NONE
[deg] Pointing Dec	-45.608880	-45.61319149426417	Alternating exposures requested	N	N
[deg] Pointing Roll	319.963707	320.1478098417585	[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	-182.632523	-182.6398635053184			
[mm] SIM translation stage offset	-7.5	-7.49265907768941			
[s] Observation start time (MET)	267272960.184000	267271776.23032			
Observation start date	2006-06-21T10:28:15	2006-06-21T10:09:36			
[s] Observation end time (MET)	267296442.184000	267296659.64399			
Observation end date	2006-06-21T16:59:37	2006-06-21T17:04:19			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



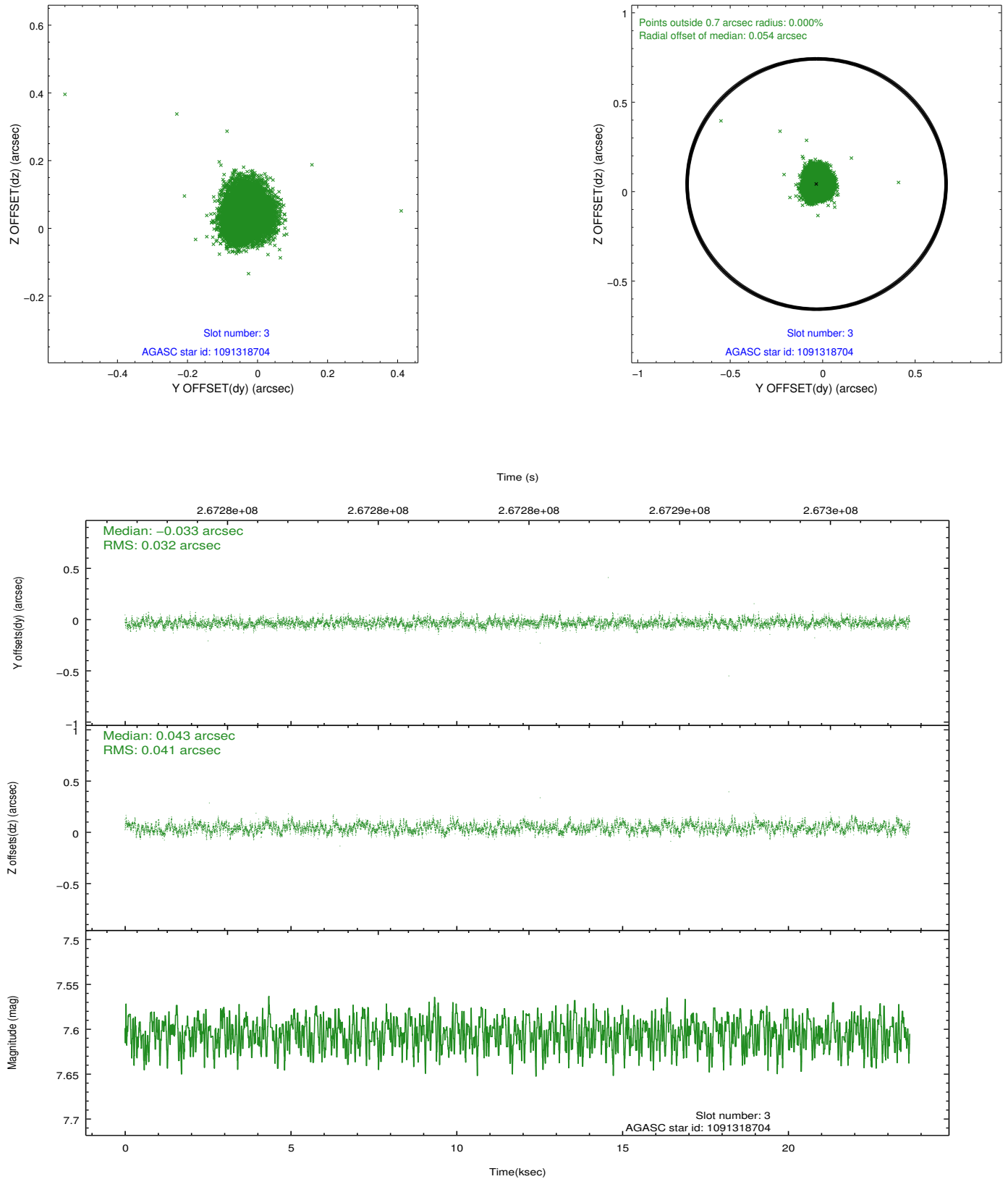


### Slot Statistics

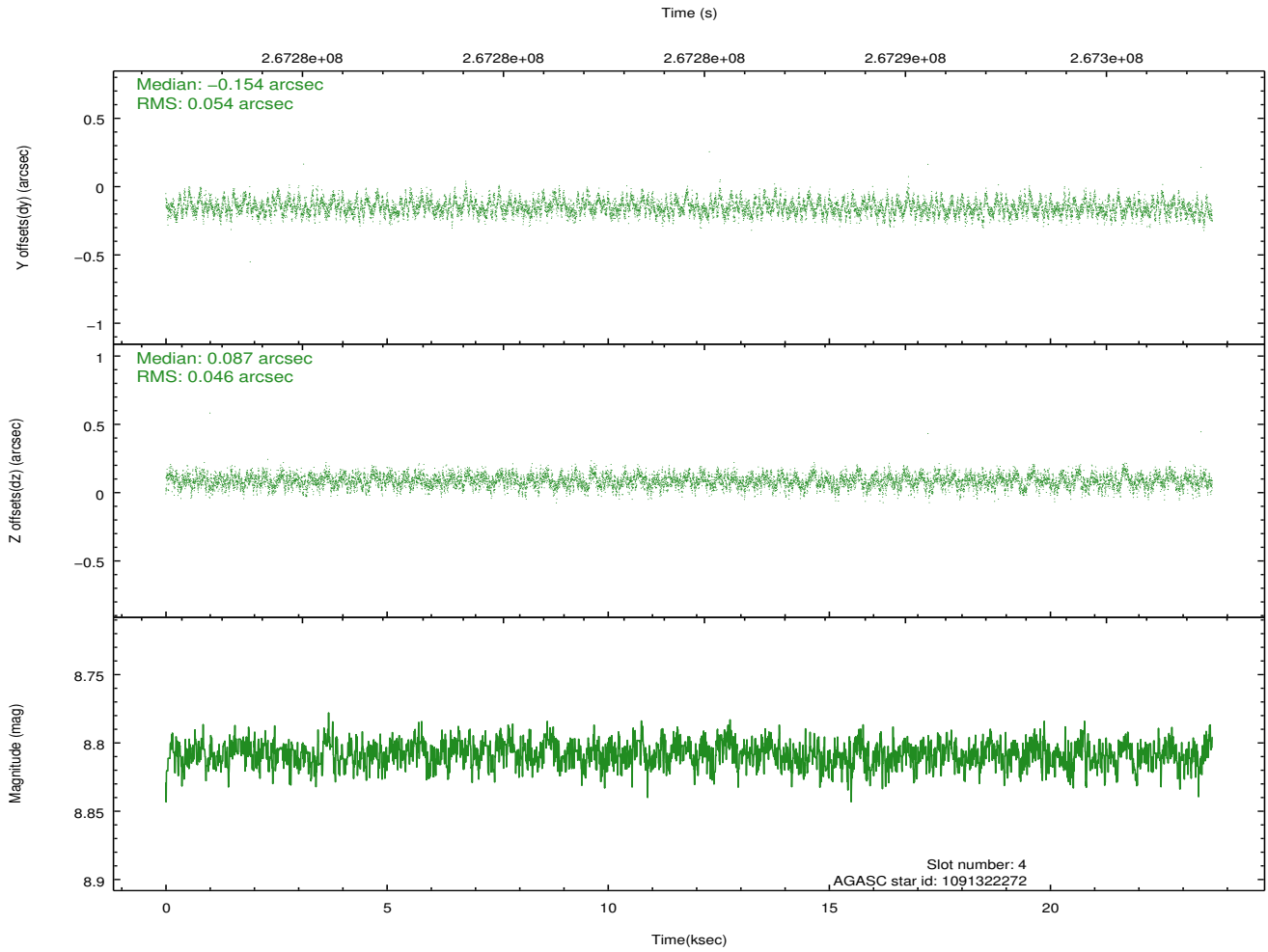
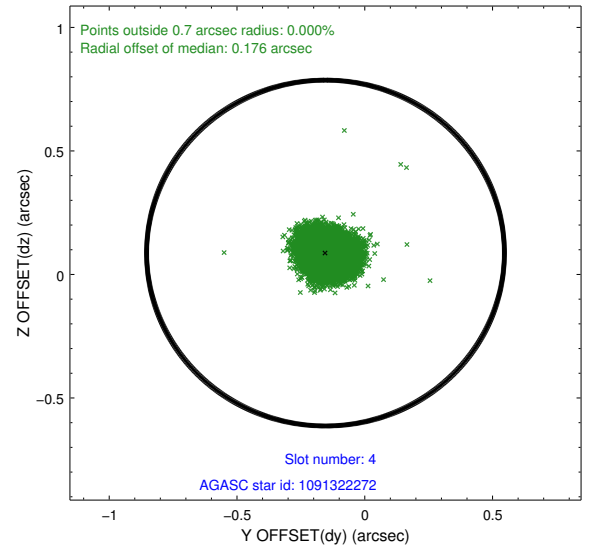
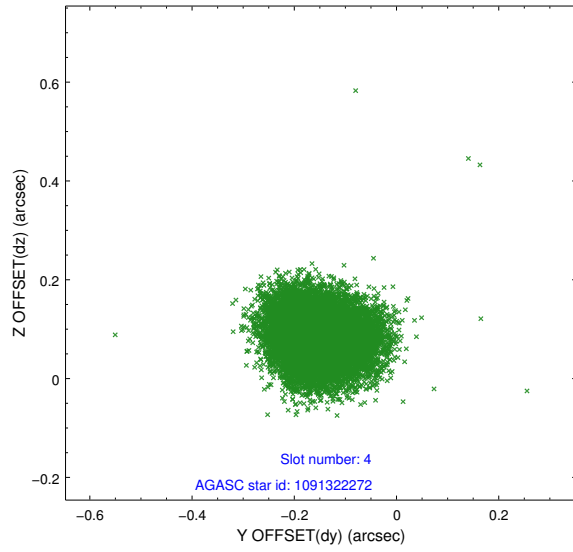
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.08	5772	-0.021	-0.115	0.032	0.045	0.000000	0.000000	-760.59	-1887.49
1	FID	ACIS-S-5	7.23	5772	-0.030	0.044	0.023	0.038	0.000000	0.000000	-1813.73	14.50
2	FID	ACIS-S-6	7.40	5772	0.024	0.079	0.014	0.021	0.000000	0.000000	400.98	658.53
3	GUIDE	1091318704	7.60	11541	-0.033	0.043	0.055	0.088	251.955714	-45.390313	553.03	1486.39
4	GUIDE	1091322272	8.81	11541	-0.154	0.087	0.076	0.119	250.346731	-45.544106	-2190.90	-1559.73
5	GUIDE	1091326848	8.84	11540	-0.057	-0.015	0.088	0.139	252.143808	-45.528706	1236.35	1404.93
6	GUIDE	1091321752	7.00	11543	0.048	-0.012	0.068	0.118	251.516776	-46.486101	2234.84	-2247.50
7	GUIDE	1091343368	6.97	11542	0.191	-0.104	0.111	0.189	251.526552	-46.531998	2359.89	-2359.19

## 2.4 Star Slots

### 2.4.1 Slot 3

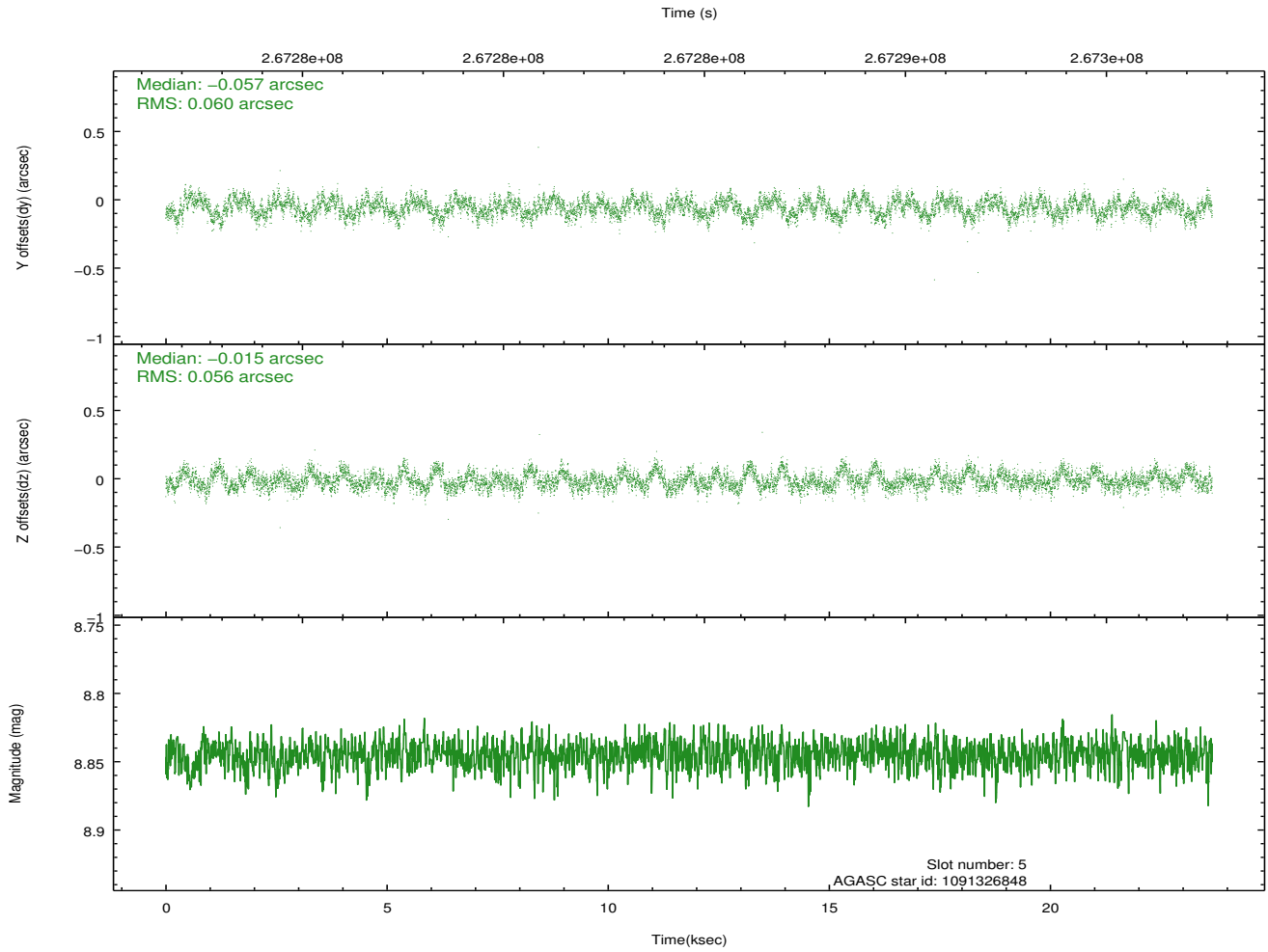
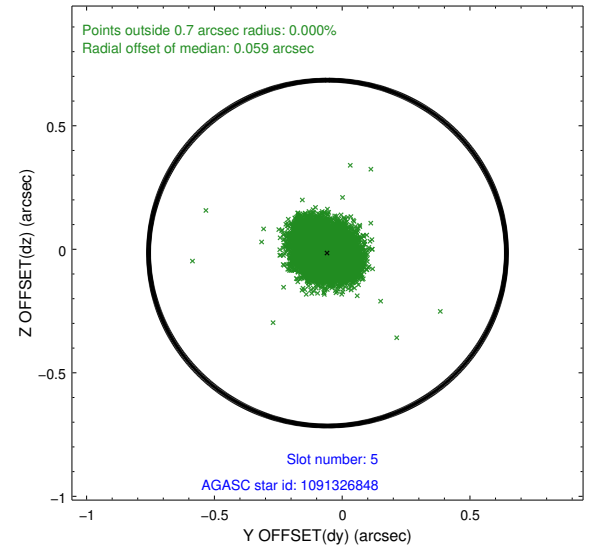
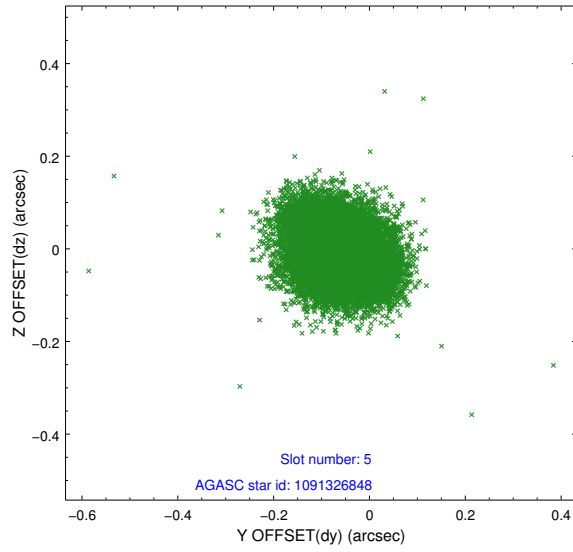


## 2.4.2 Slot 4

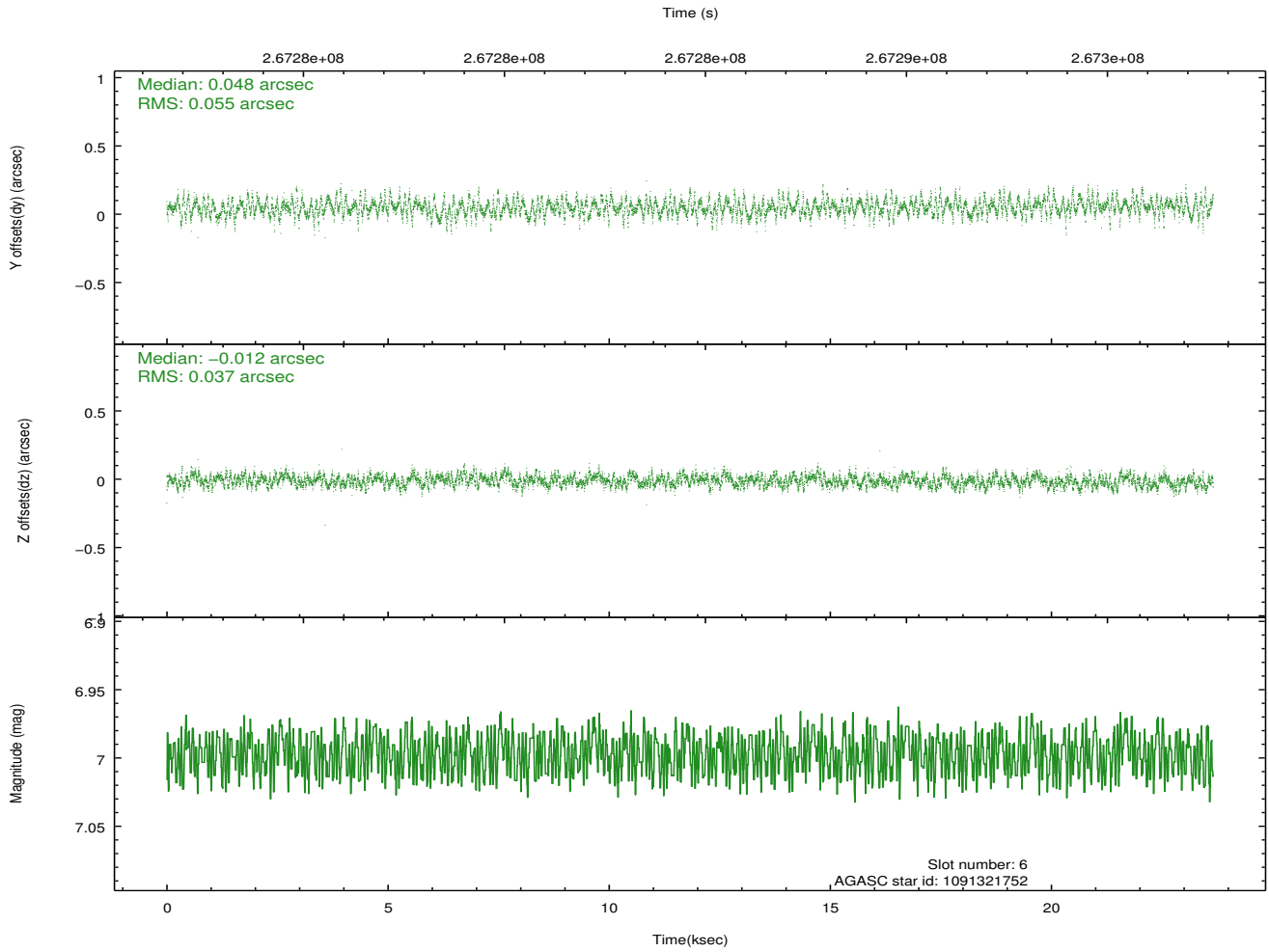
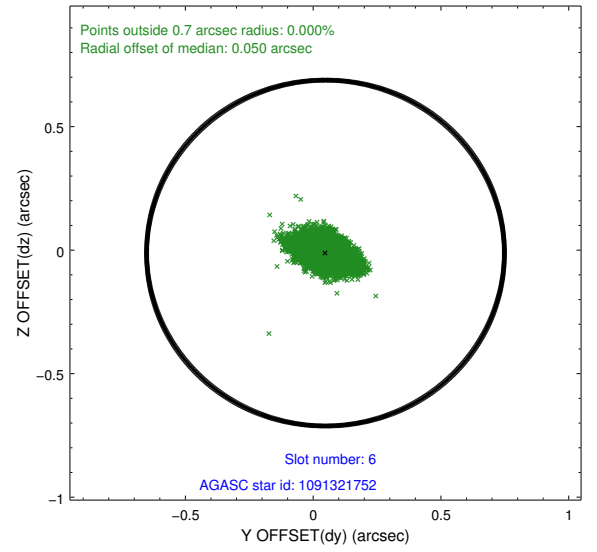
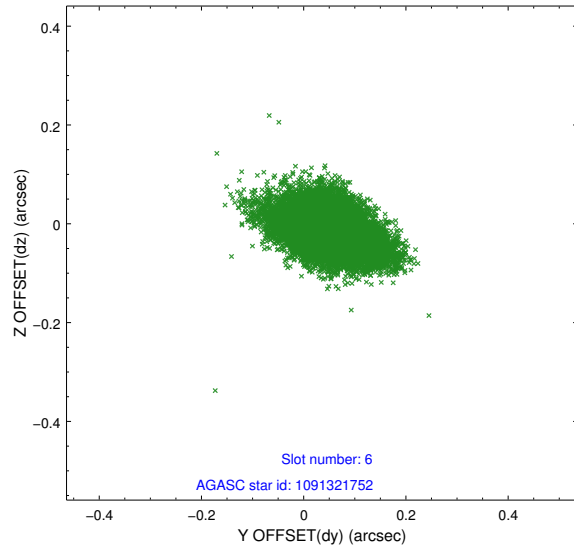




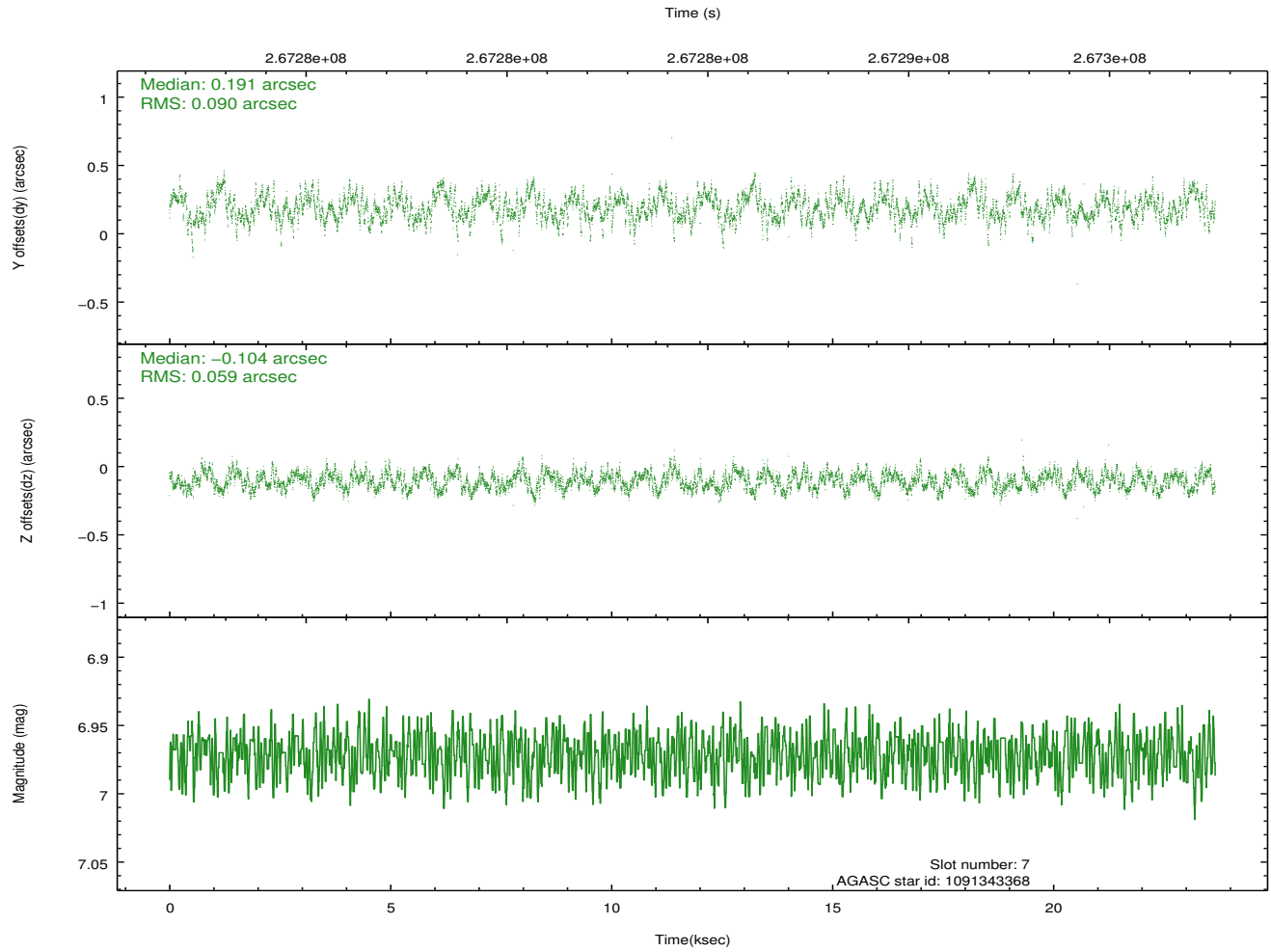
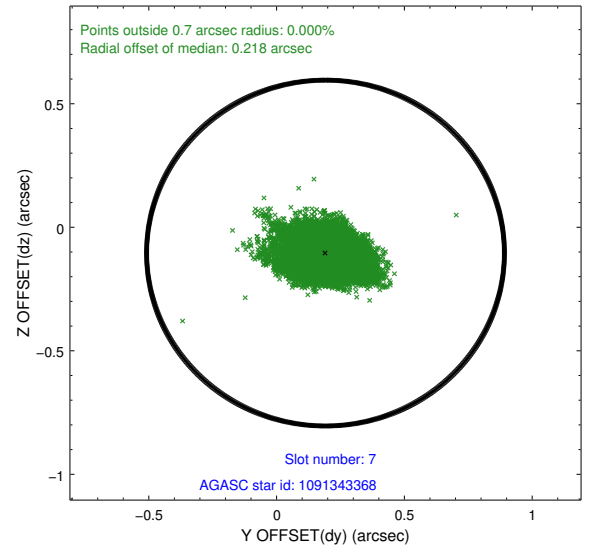
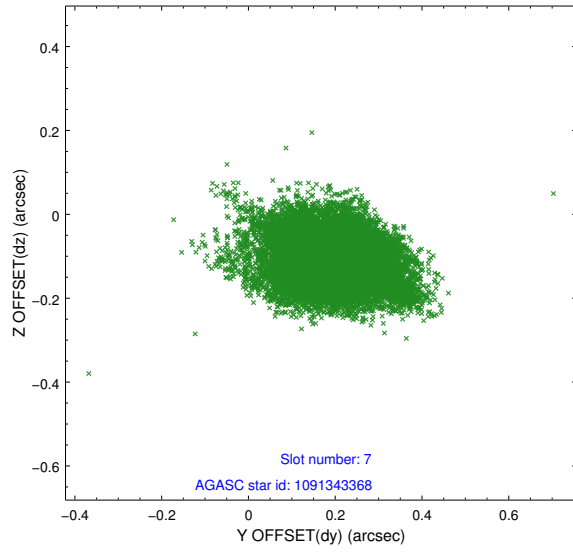
### 2.4.3 Slot 5



## 2.4.4 Slot 6

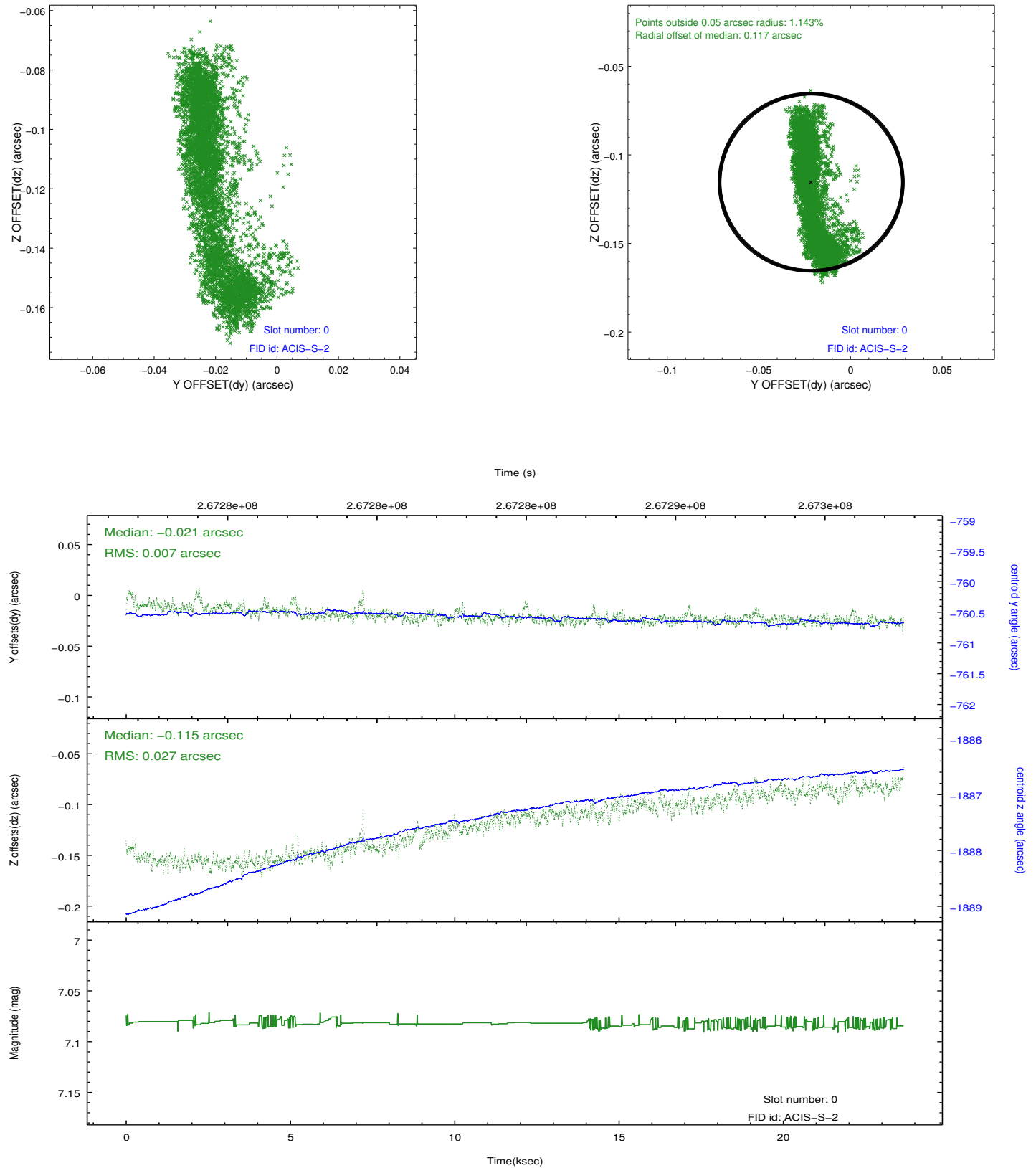


## 2.4.5 Slot 7

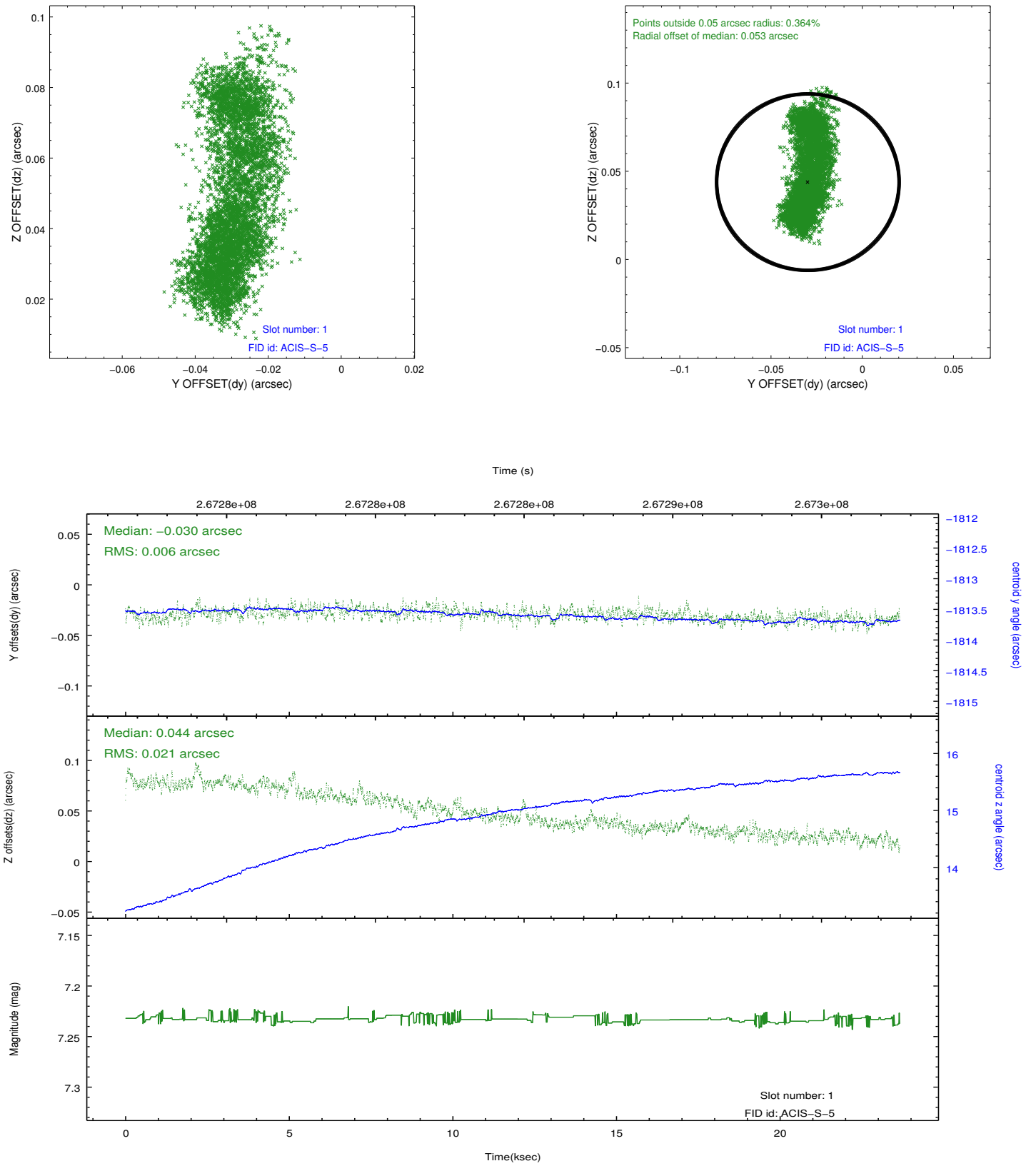


## 2.5 FID Slots

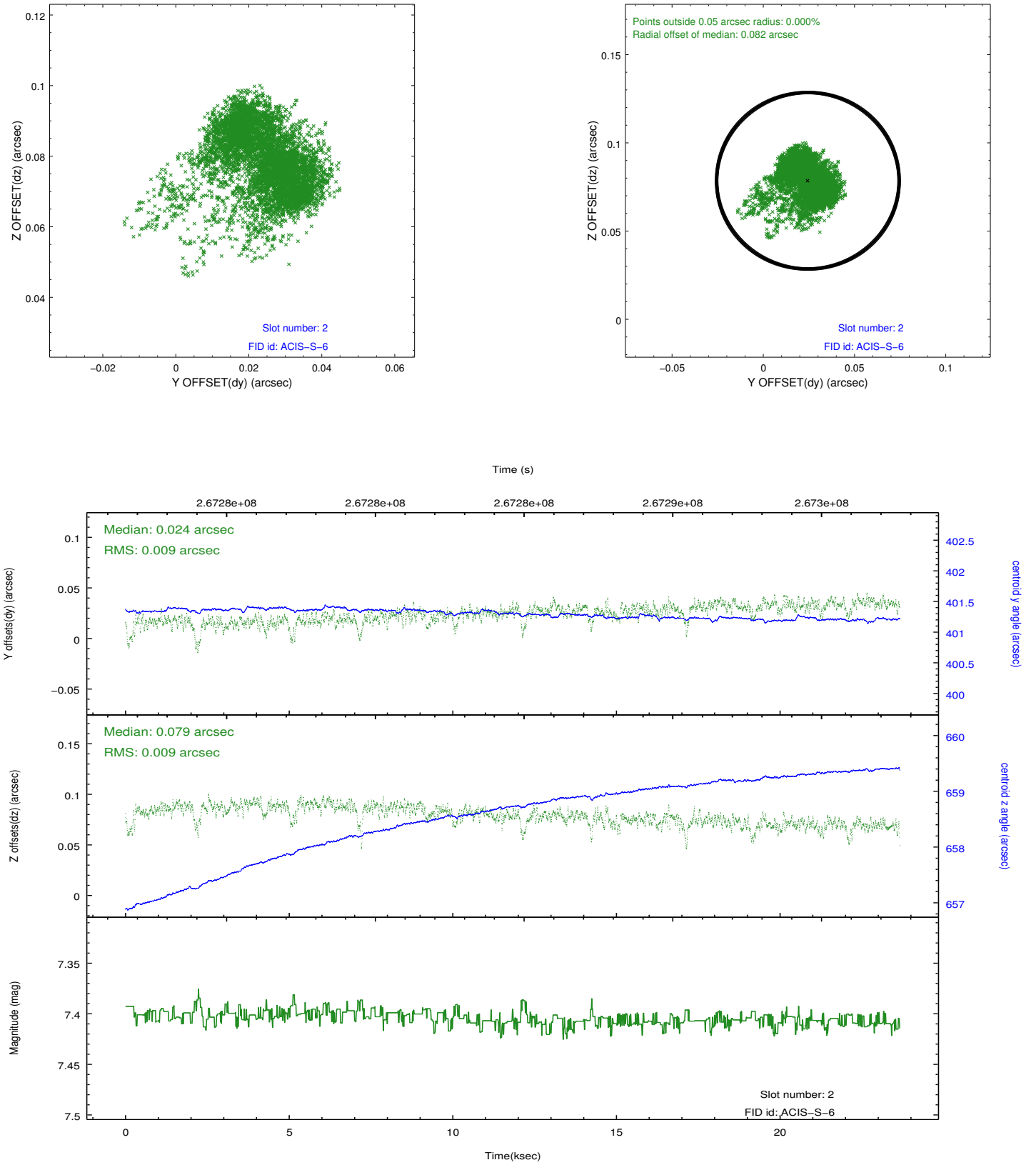
### 2.5.1 Slot 0



## 2.5.2 Slot 1

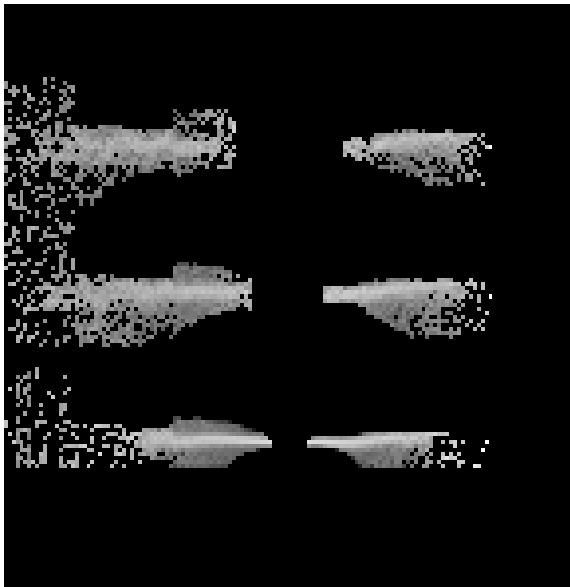


### 2.5.3 Slot 2

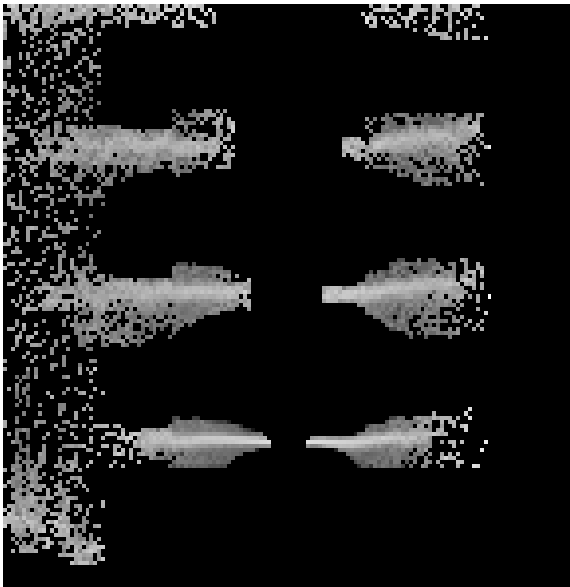


# 3 Gratings

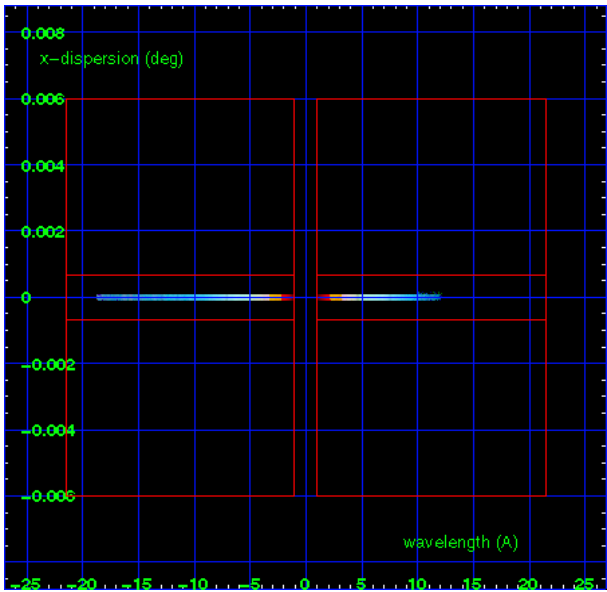
## 3.1 HEG Arm



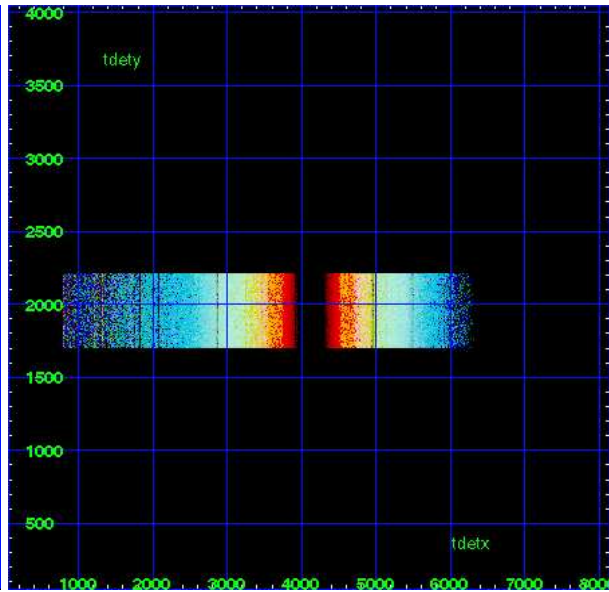
HEG Order Sort 123



HEG Order Sort ALL

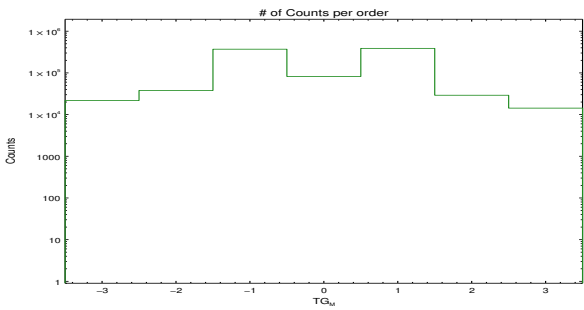


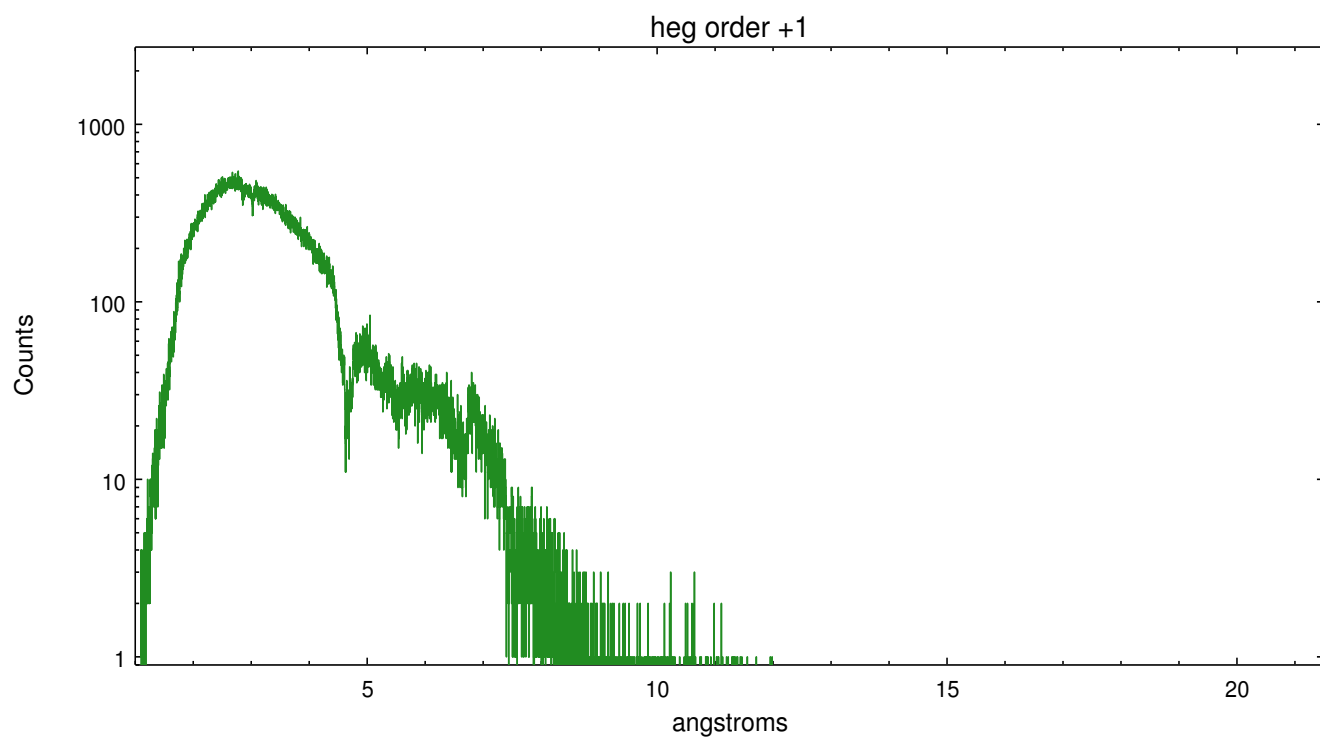
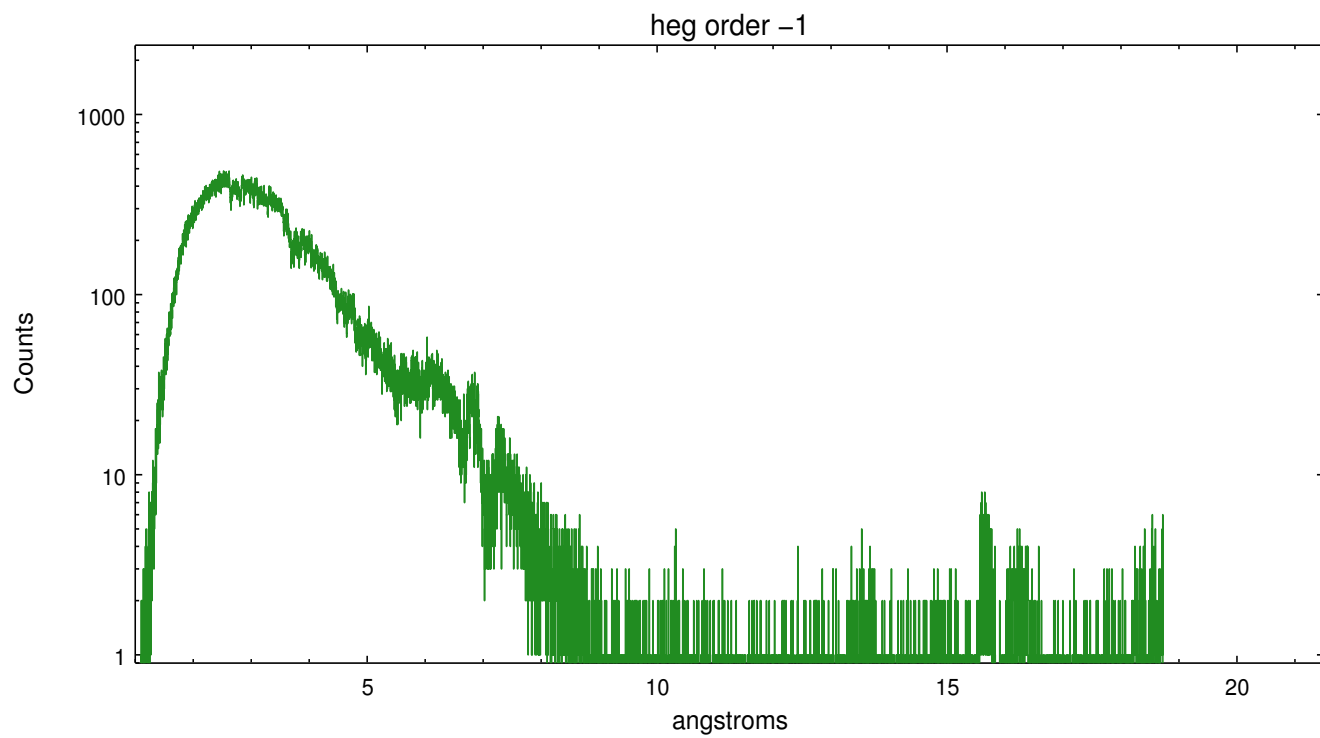
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	21795	37927	370259	82141	387381	29093	14283







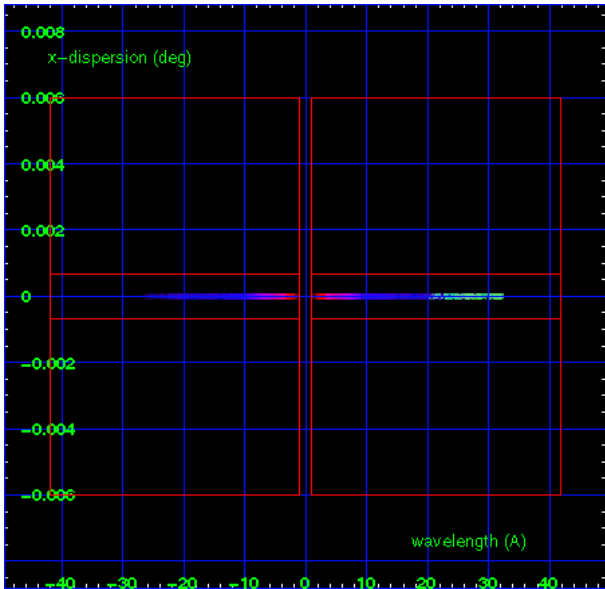
3.2 MEG Arm



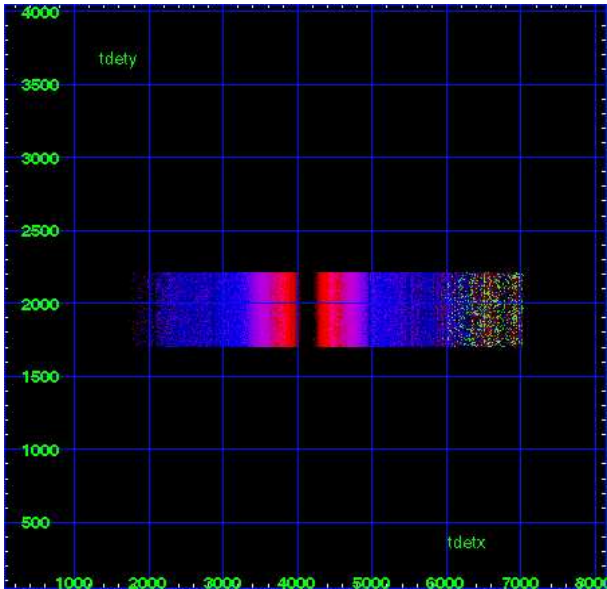
MEG Order Sort 123



MEG Order Sort ALL

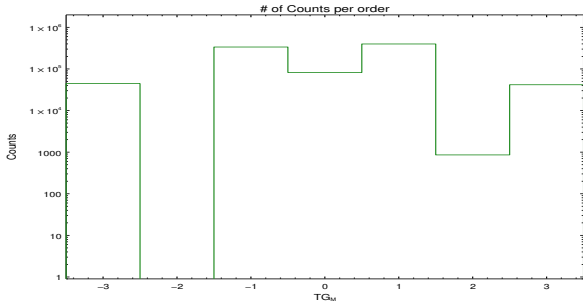


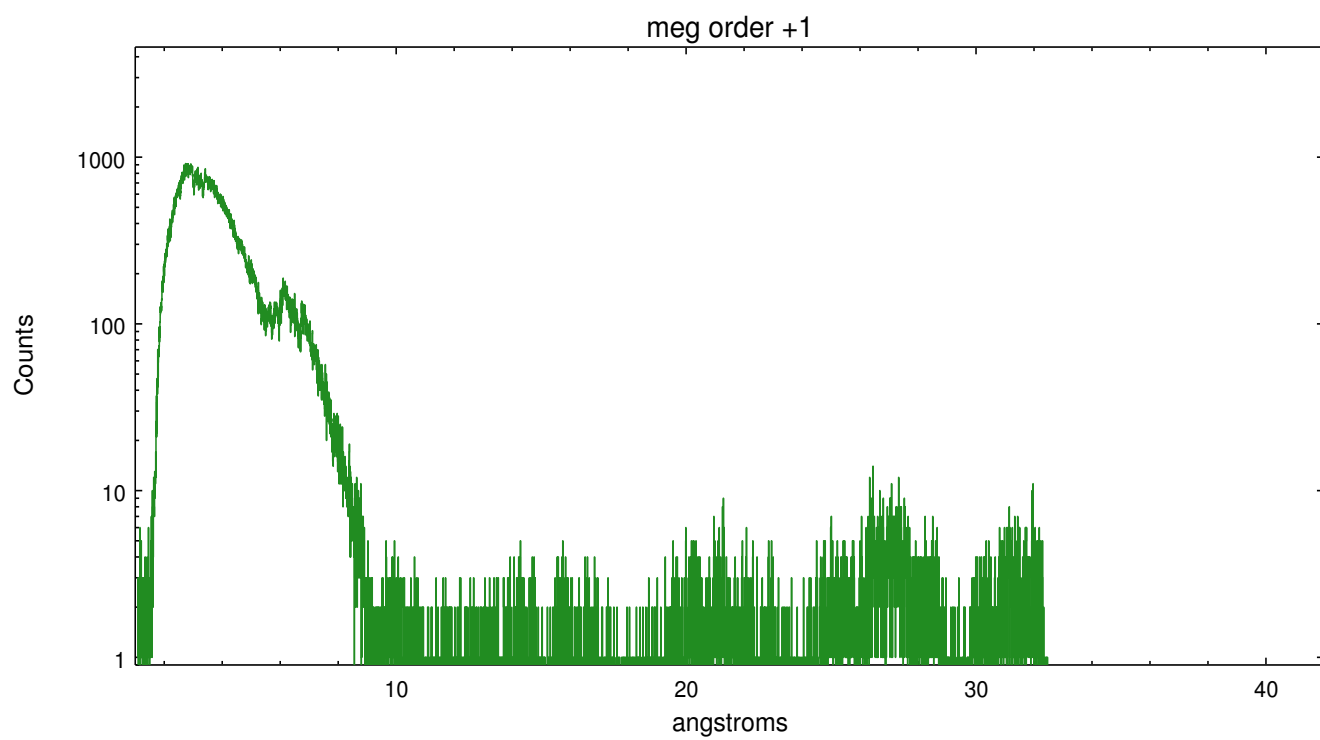
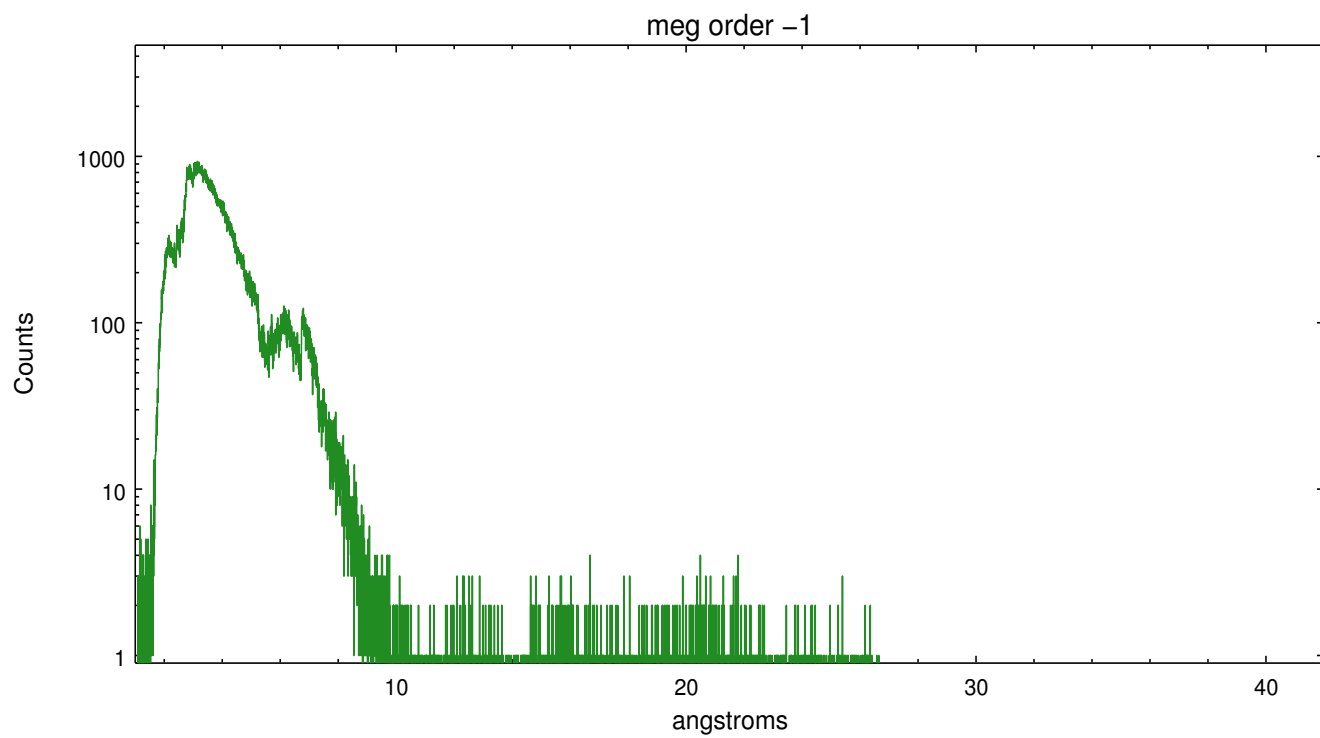
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	44481	0	336468	82141	398390	859	41744





## A Summary

### A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.04.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.65875

### A.2 Comments