

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 4513 - L2 Version 3  
Chandra X-Ray Center

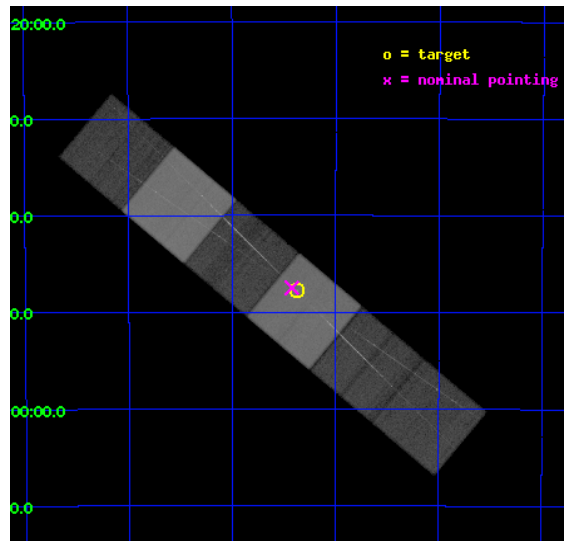
L2 Processing Date : Dec 10 2012

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# 1 Front

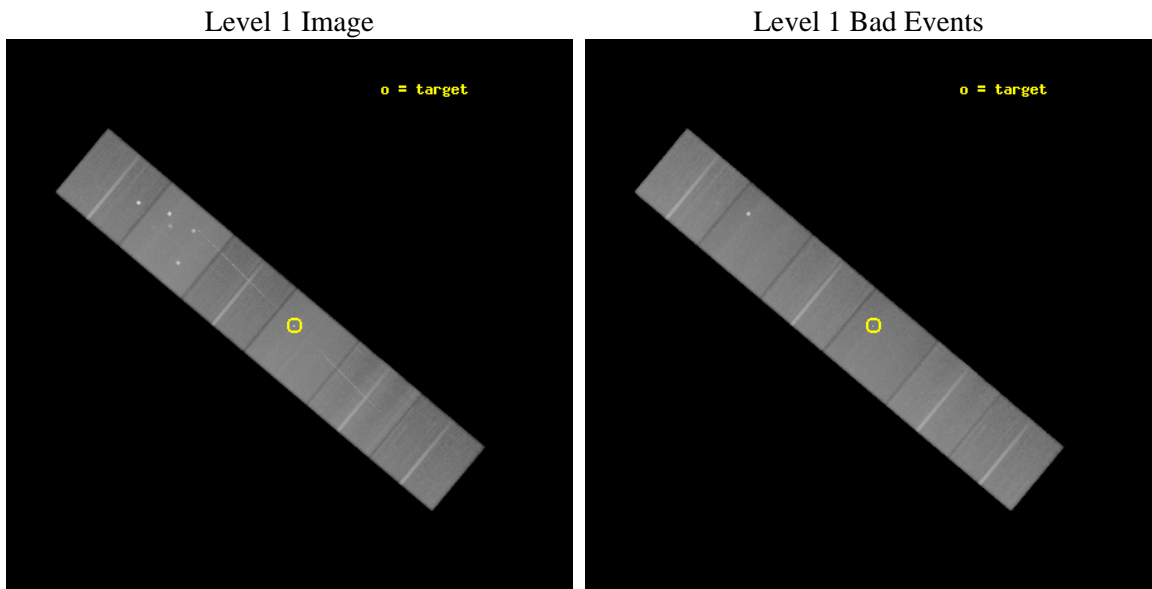
seq_num	200282	Sequence number
obs_id	4513	Observation id
title	From Photosphere to Corona: Magnetic Fields and Coronal Emission from the Active Binary CC Eridani	Proposal title
observer	Dr. rachel osten	Principal investigator
object	CC Eri	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	38.594167	Observer's specified target RA [deg]
dec_targ	-43.796361	Observer's specified target Dec [deg]
ra_nom	38.605802963905	Nominal RA [deg]
dec_nom	-43.79154857388	Nominal Dec [deg]
roll_nom	39.914677867656	Nominal Roll [deg]
revision	3	Processing version of data
ontime	90601.563025117	Sum of GTIs [s]
liveltime	89454.311480381	Livetime [s]
ontime4	90598.358682185	Sum of GTIs [s]
ontime5	90601.521985114	Sum of GTIs [s]
ontime6	90601.48094511	Sum of GTIs [s]
ontime7	90601.563025117	Sum of GTIs [s]
ontime8	90601.439905107	Sum of GTIs [s]
ontime9	90598.157884866	Sum of GTIs [s]
l2events	1149627	Number of level 2 events



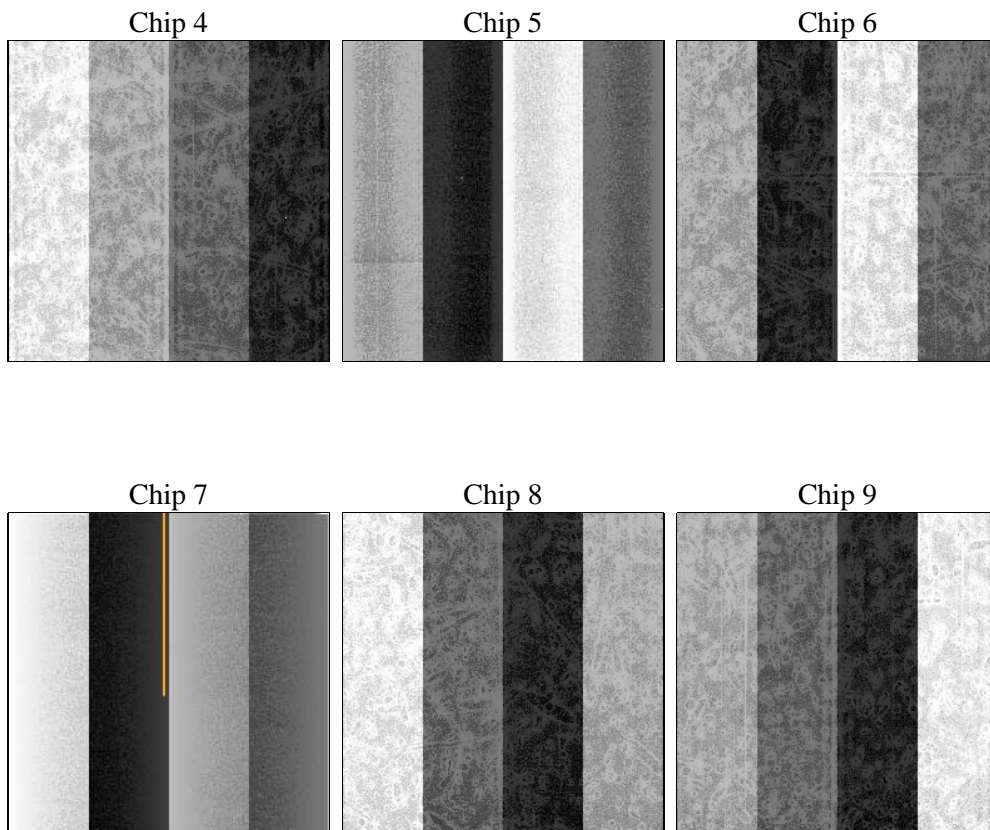
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	90646.442000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	90601.563025117	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime4	90598.358682185	Sum of GTIs [s]
date	2012-12-09T21:35:57	Date and time of file creation	ontime5	90601.521985114	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	90601.48094511	Sum of GTIs [s]
			ontime7	90601.563025117	Sum of GTIs [s]
			ontime8	90601.439905107	Sum of GTIs [s]
			ontime9	90598.157884866	Sum of GTIs [s]
			l1events	5116308	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	801242	1059589	716864	953022	886641	698950	grade 0 events	64335	61757	40887	38768	65803	35739
rejected events	688873	571635	625089	550031	693661	613493		8%	5%	5%	4%	7%	5%
rejected %	85%	53%	87%	57%	78%	87%	grade 1 events	826	15885	392	1270	626	394
								0%	1%	0%	0%	0%	0%
							grade 2 events	17852	138422	18028	80886	41773	16670
								2%	13%	2%	8%	4%	2%
							grade 3 events	8742	19683	8162	36341	19228	8650
								1%	1%	1%	3%	2%	1%
							grade 4 events	8349	19429	8128	35881	18062	8223
								1%	1%	1%	3%	2%	1%
							grade 5 events	30879	77472	31978	91737	41889	33867
								3%	7%	4%	9%	4%	4%
							grade 6 events	13091	248691	16574	211129	48119	16178
								1%	23%	2%	22%	5%	2%
							grade 7 events	657168	478250	592715	457010	651141	579229
								82%	45%	82%	47%	73%	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	38.593310	38.6058029639054	Subarray requested	NONE	NONE
[deg] Pointing Dec	-43.817257	-43.79154857387984	Alternating exposures requested	N	N
[deg] Pointing Roll	39.749404	39.91467786765592	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-187.132523	-187.1254020033014			
[mm] SIM translation stage offset	-3	-3.007120579706367			
[s] Observation start time (MET)	213052510.184000	213051279.67115			
Observation start date	2004-10-01T21:14:06	2004-10-01T20:54:39			
[s] Observation end time (MET)	213143157.184000	213143374.90026			
Observation end date	2004-10-02T22:24:53	2004-10-02T22:29:34			
Read mode	TIMED	TIMED			

## 2.3 Aspect



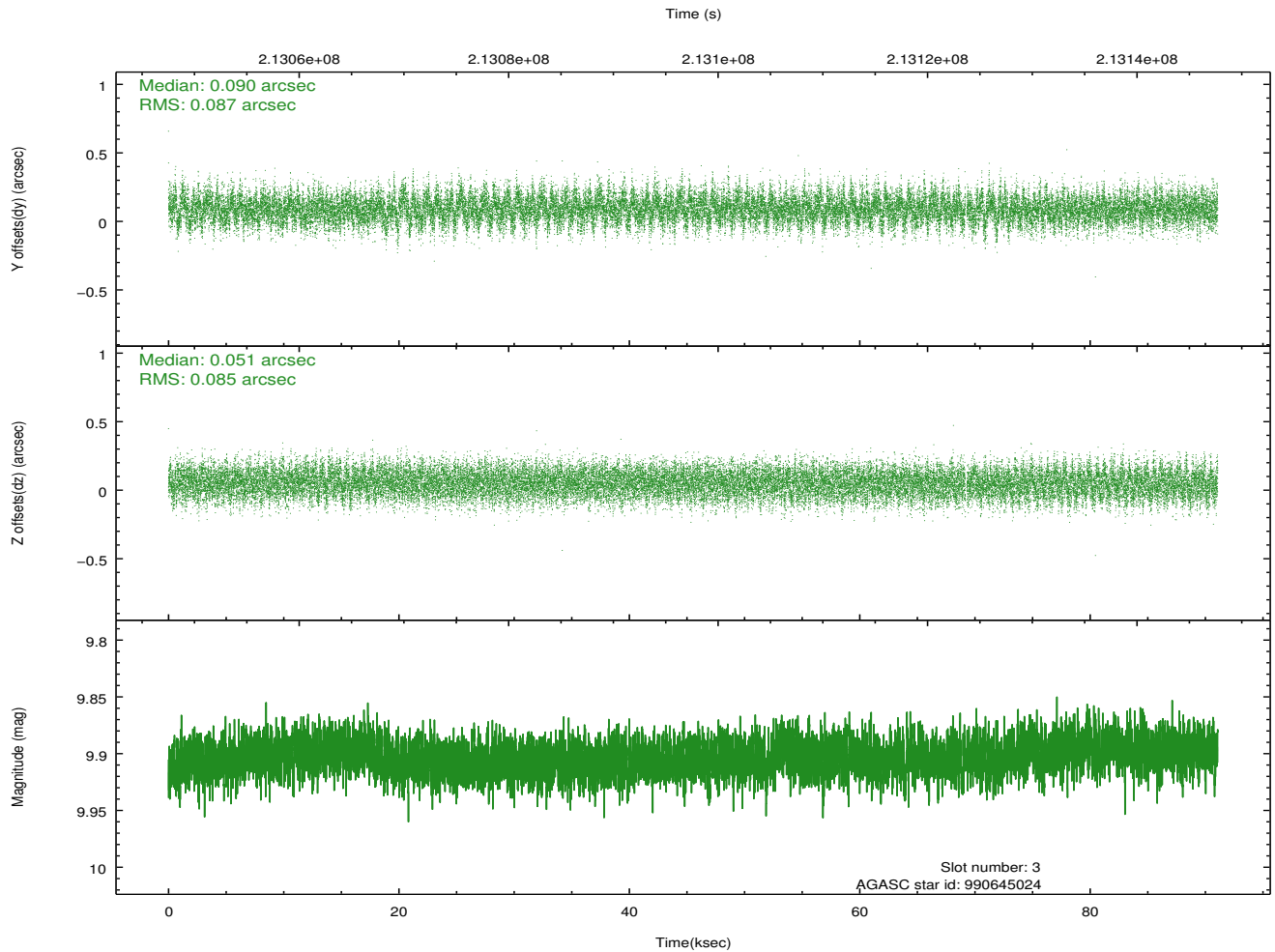
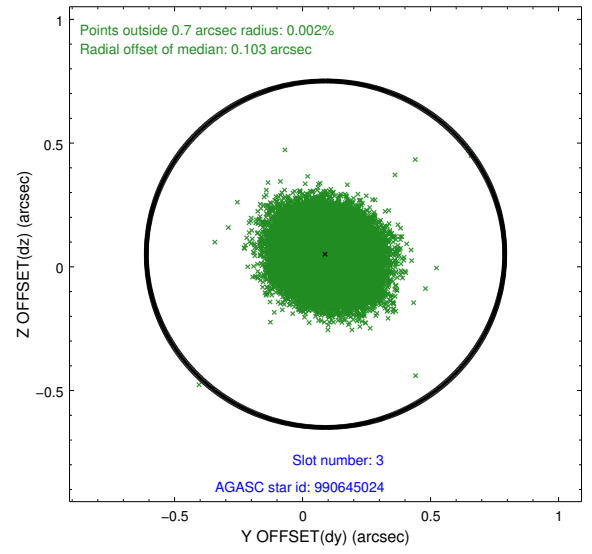
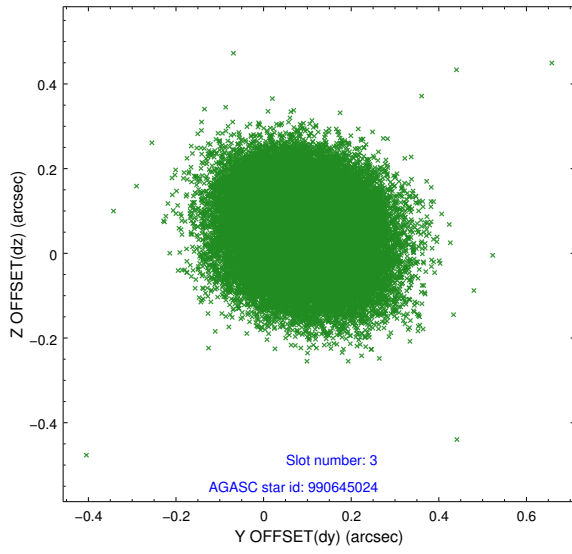
### Slot Statistics

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	22212	-0.051	-0.067	0.013	0.019	0.000000	0.000000	-760.58	-1793.06
1	FID	ACIS-S-4	7.19	22216	0.108	0.043	0.011	0.017	0.000000	0.000000	2152.90	115.59
2	FID	ACIS-S-5	7.23	22214	-0.092	0.035	0.018	0.029	0.000000	0.000000	-1813.56	109.18
3	GUIDE	990645024	9.90	44280	0.090	0.051	0.130	0.208	39.438677	-43.570616	2256.47	-735.46
4	GUIDE	990646688	9.83	44371	0.010	0.015	0.135	0.216	39.195111	-43.949146	892.67	-1366.85
5	GUIDE	990646896	9.06	44403	-0.062	-0.129	0.084	0.138	39.157415	-43.282359	2364.93	531.51
6	GUIDE	990647840	9.66	44389	-0.035	0.001	0.114	0.189	39.476651	-43.890480	1586.15	-1677.39
7	GUIDE	990648904	9.32	44396	0.006	0.069	0.102	0.170	39.426522	-43.673133	1994.32	-996.95

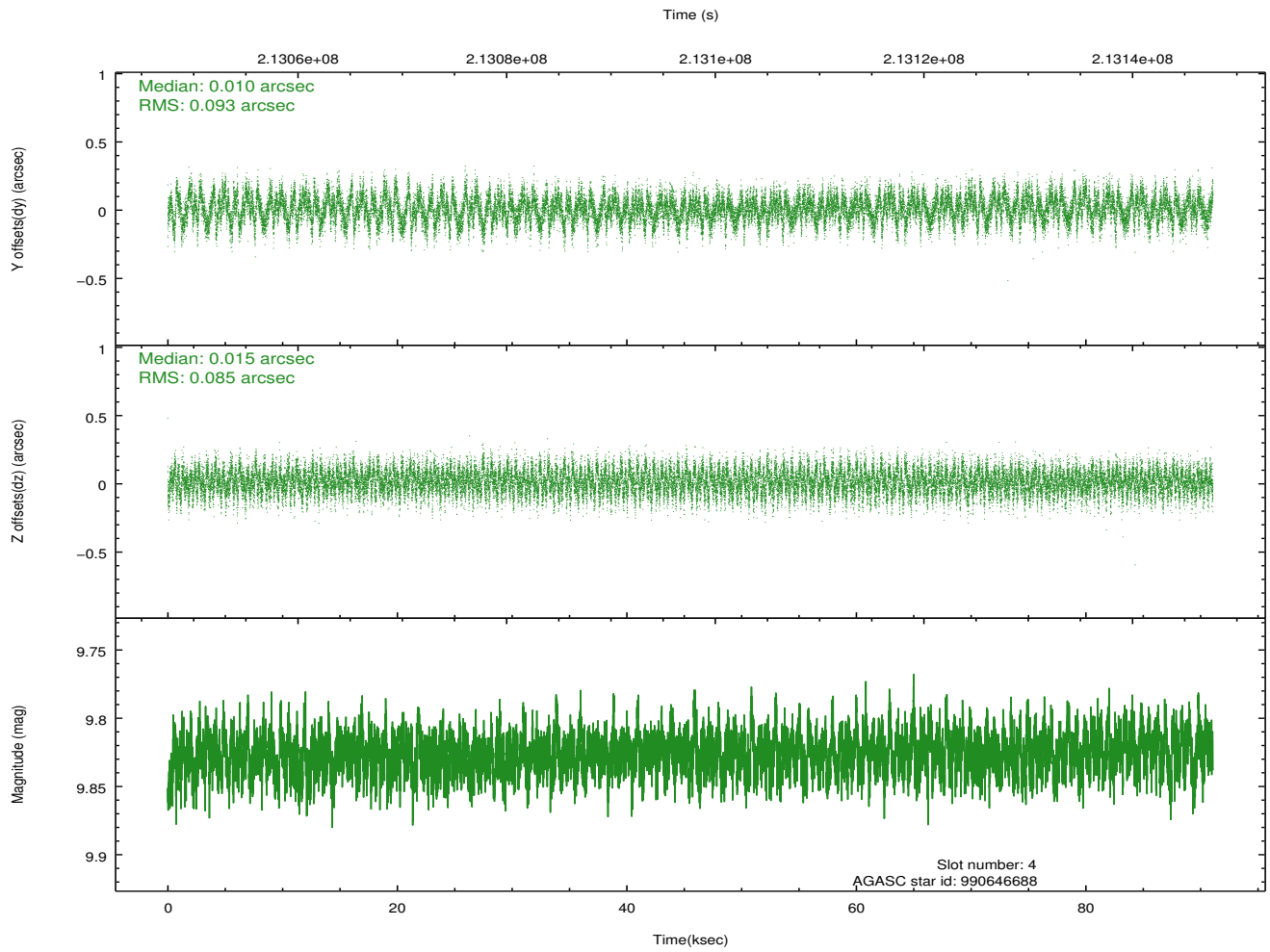
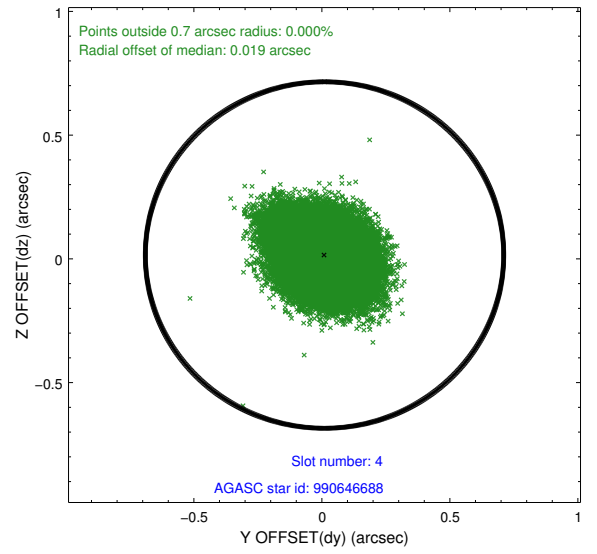
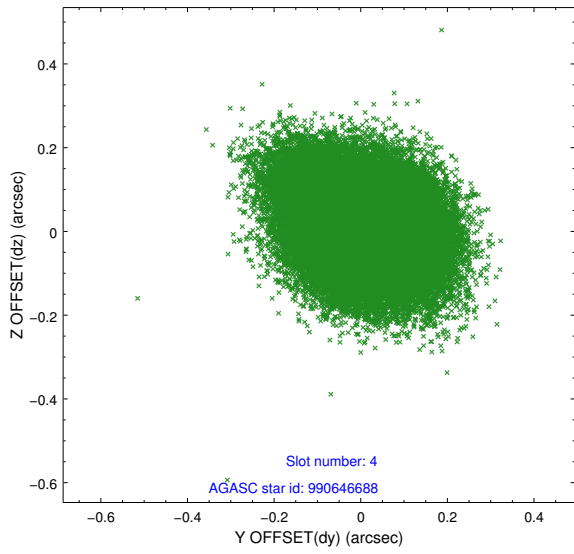
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## 2.4 Star Slots

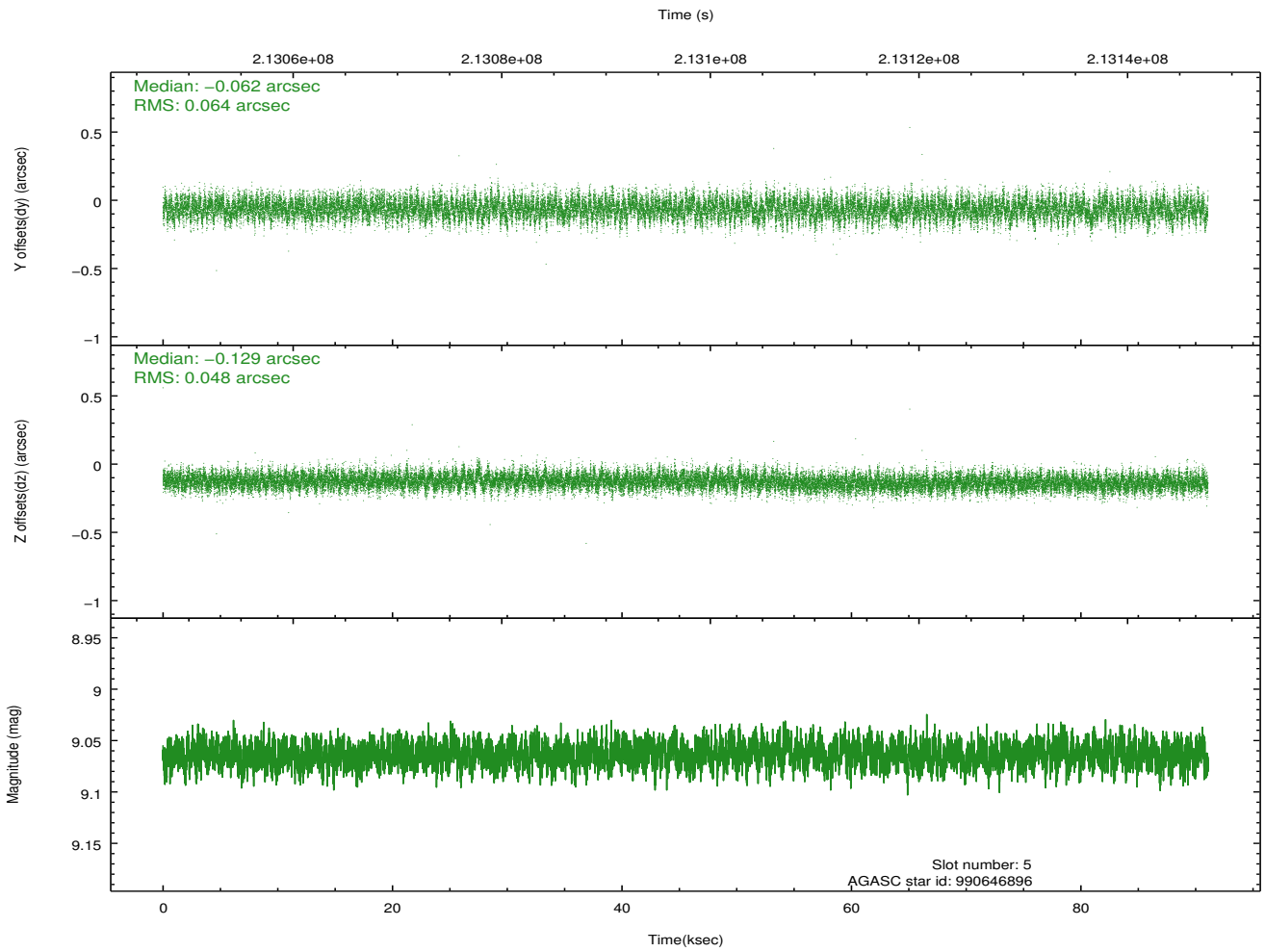
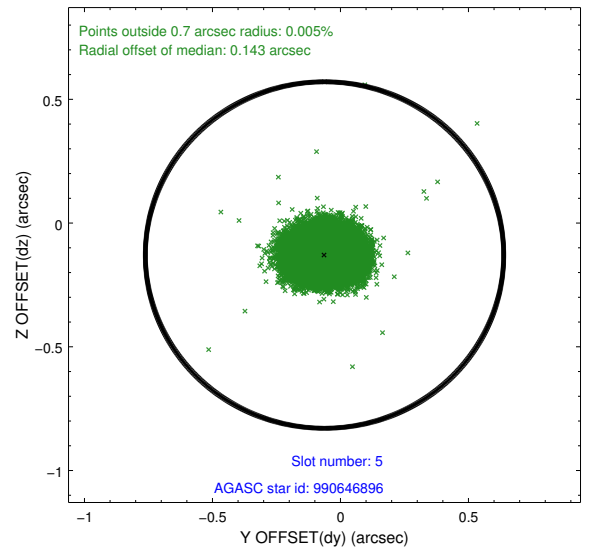
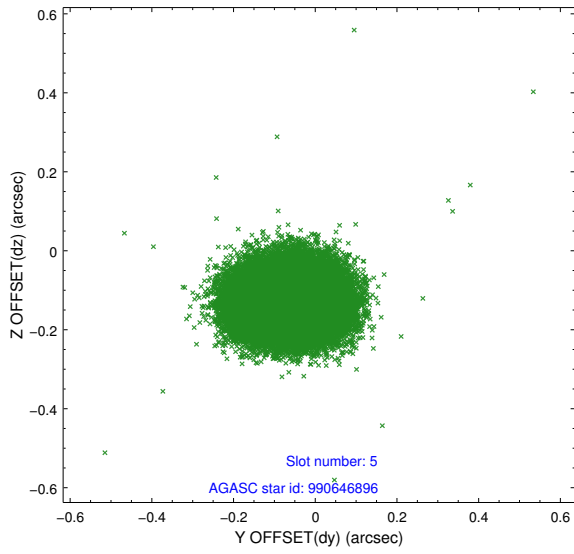
### 2.4.1 Slot 3



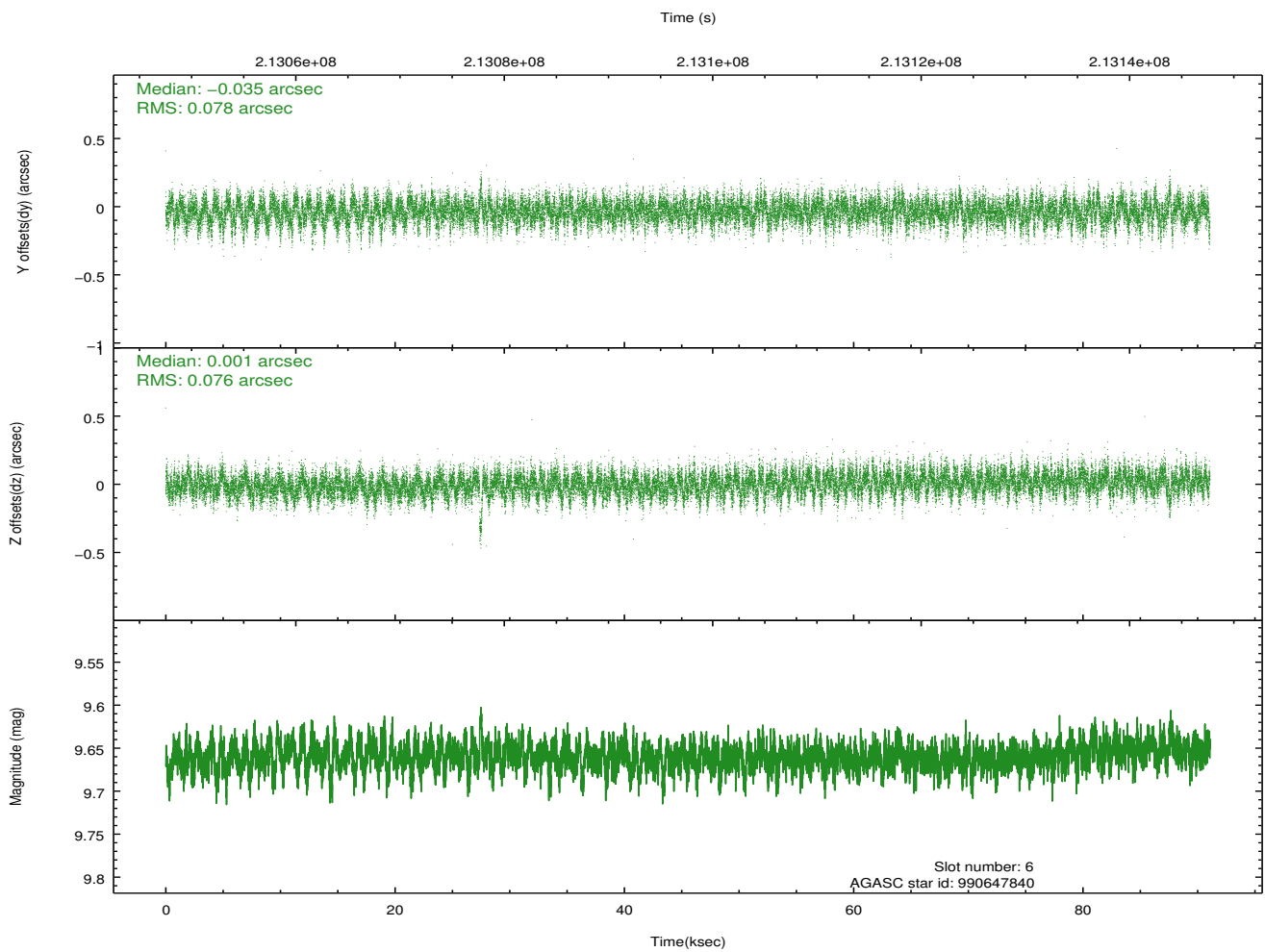
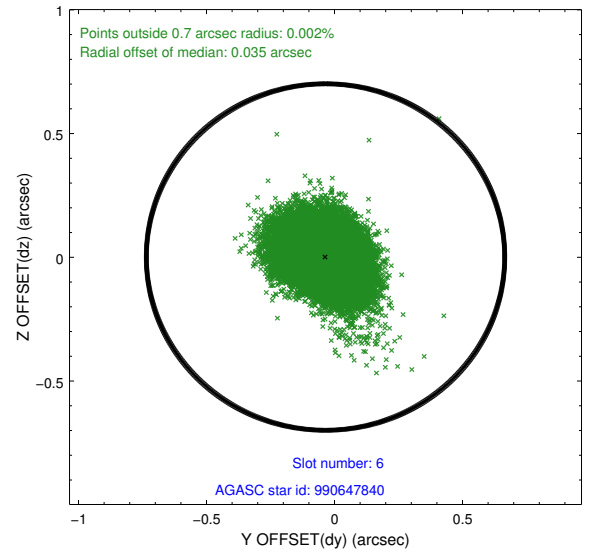
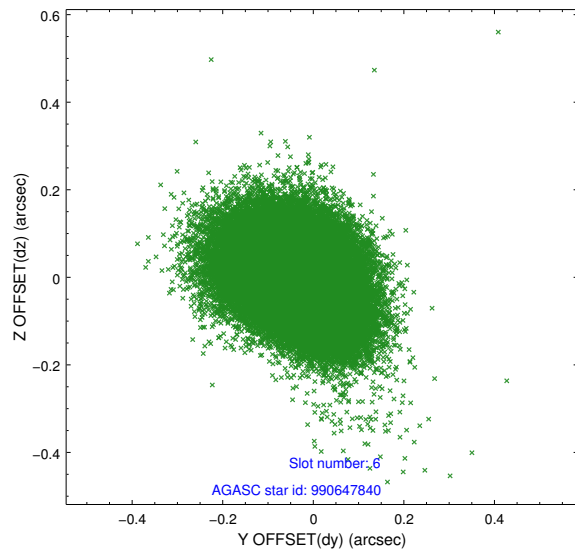
### 2.4.2 Slot 4



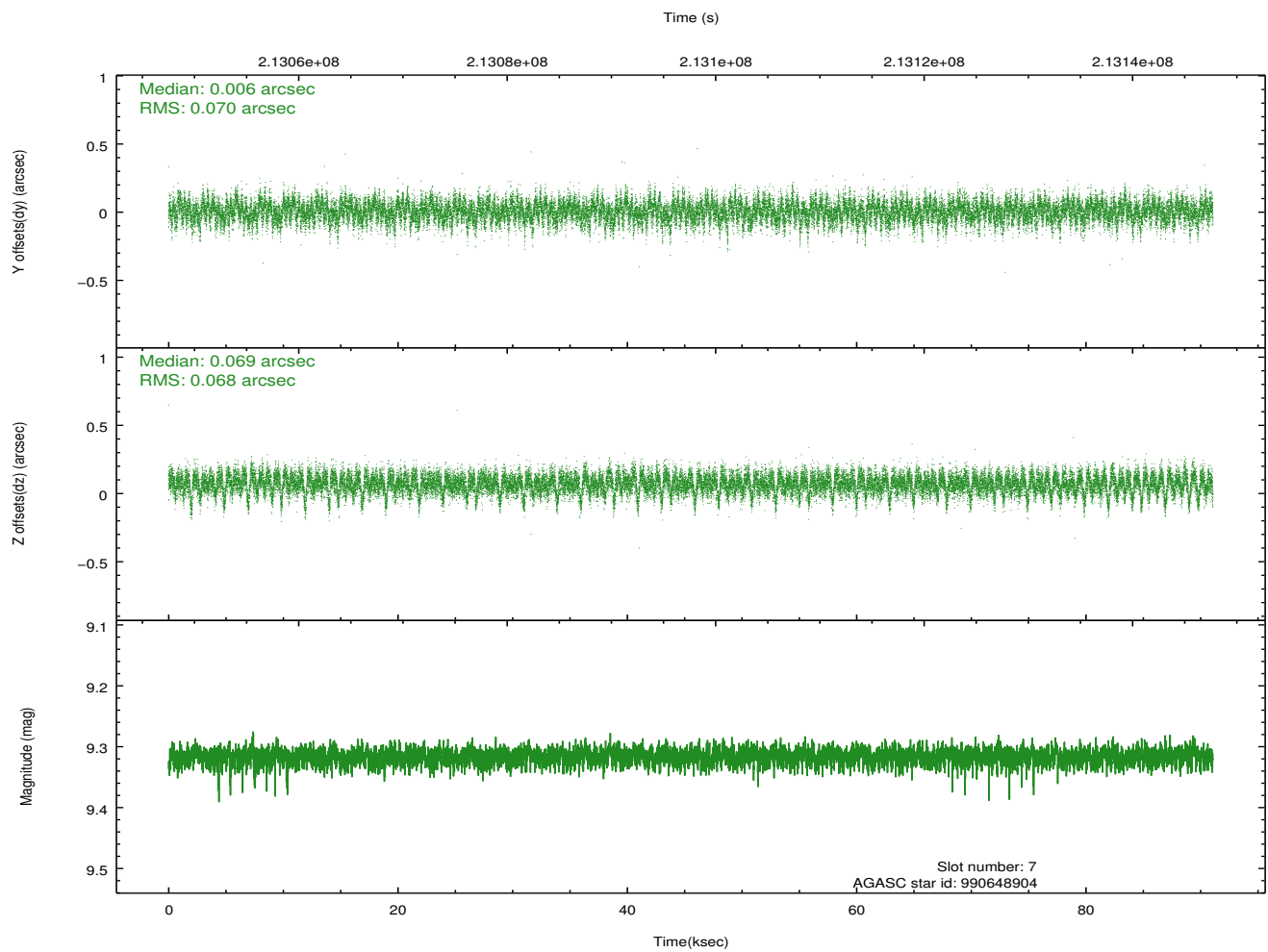
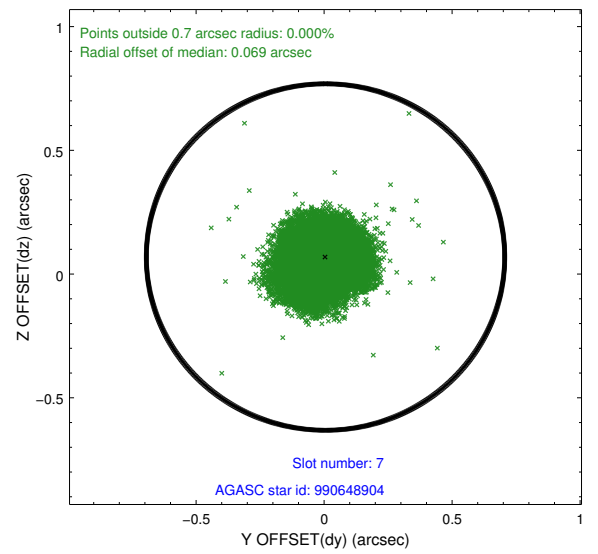
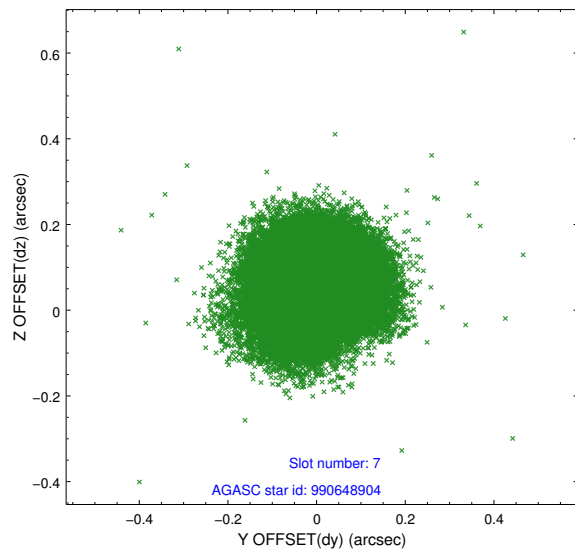
### 2.4.3 Slot 5



## 2.4.4 Slot 6

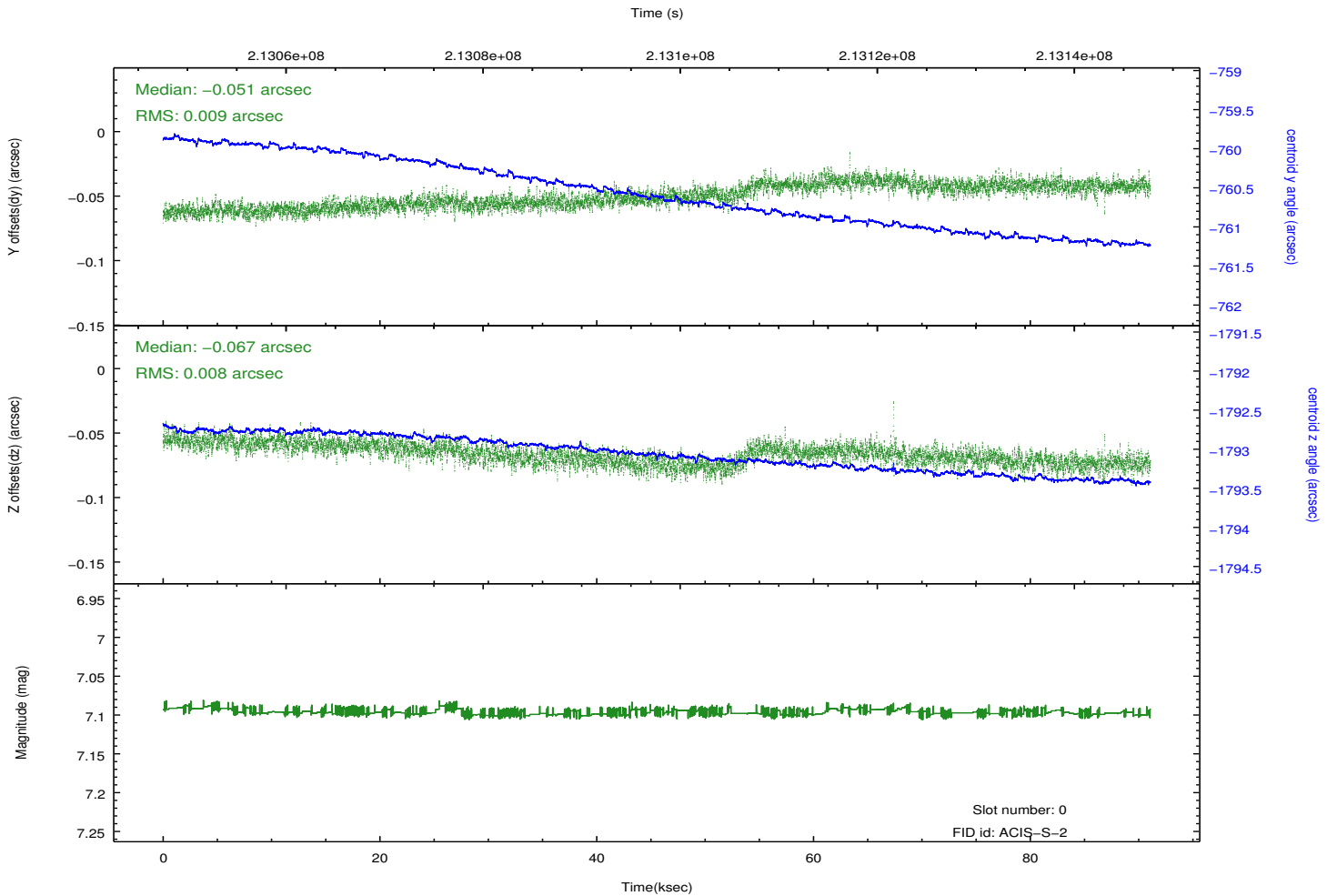
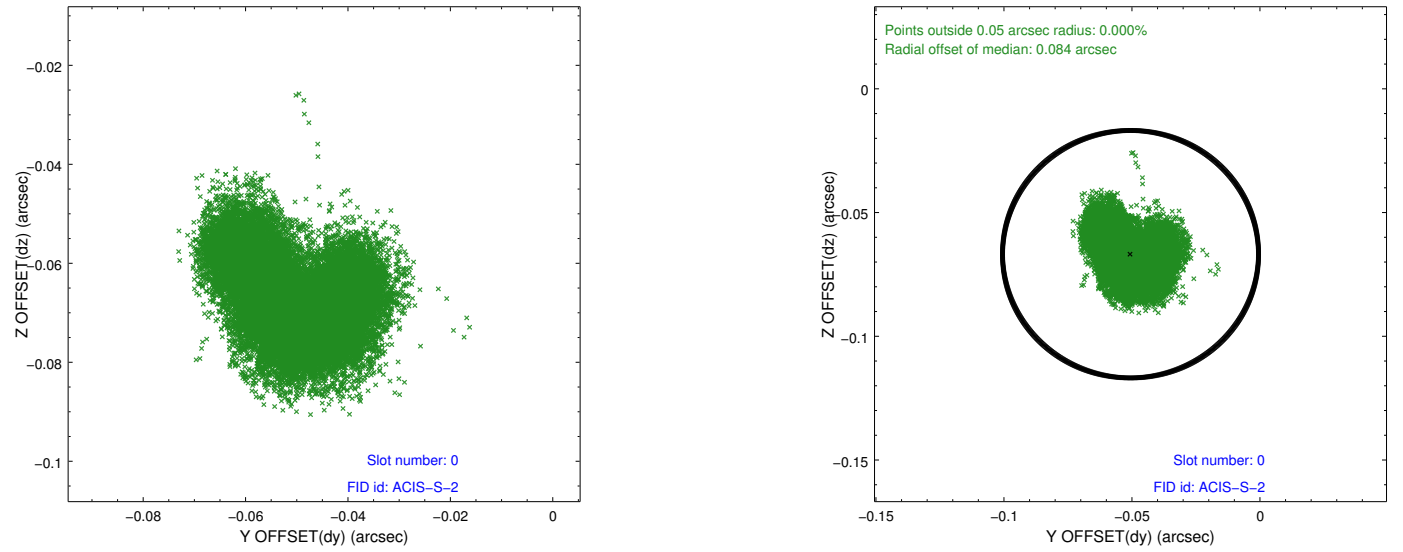


## 2.4.5 Slot 7

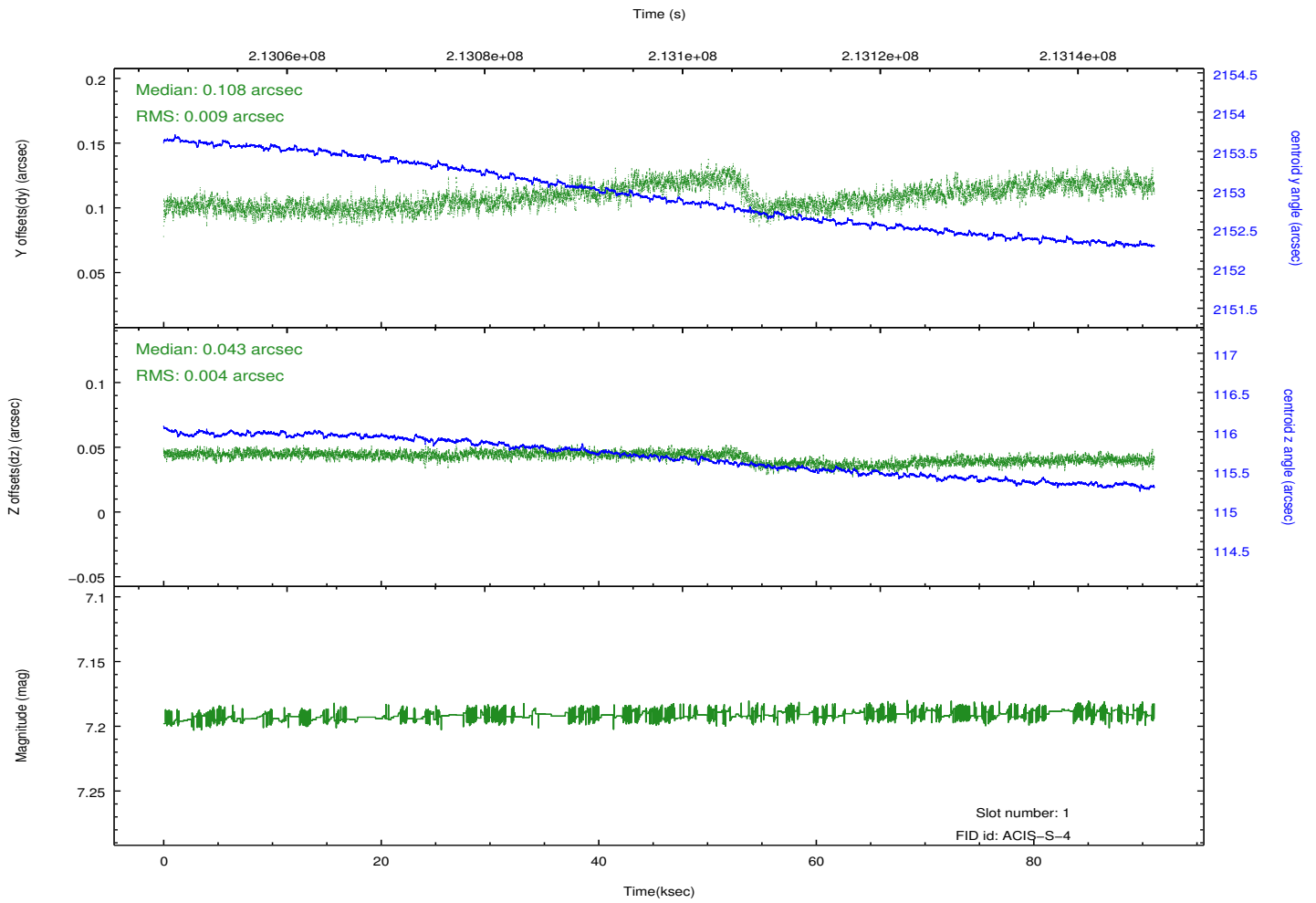
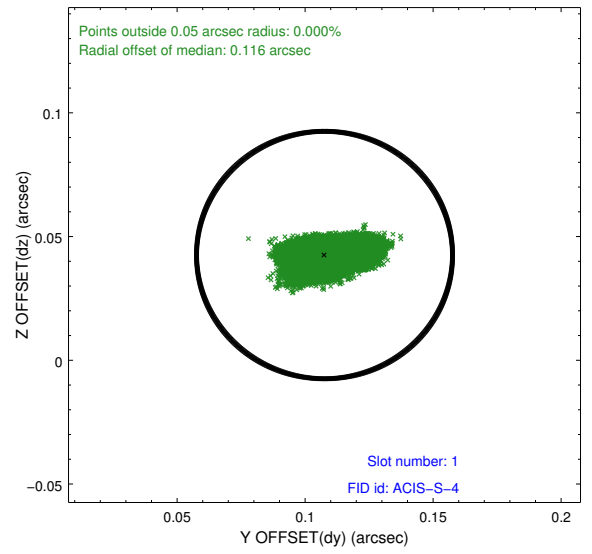
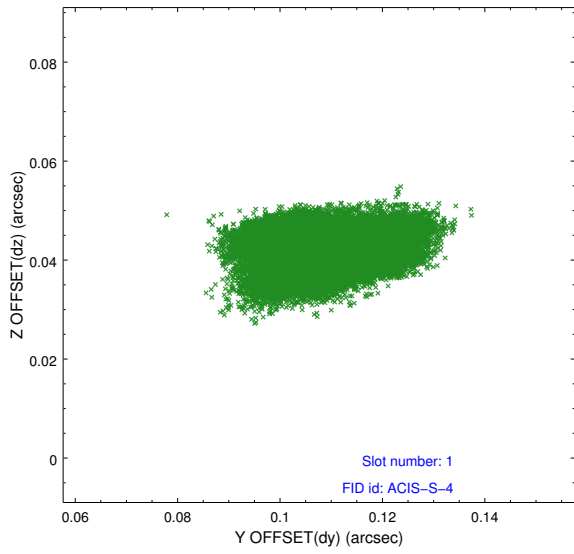


## 2.5 FID Slots

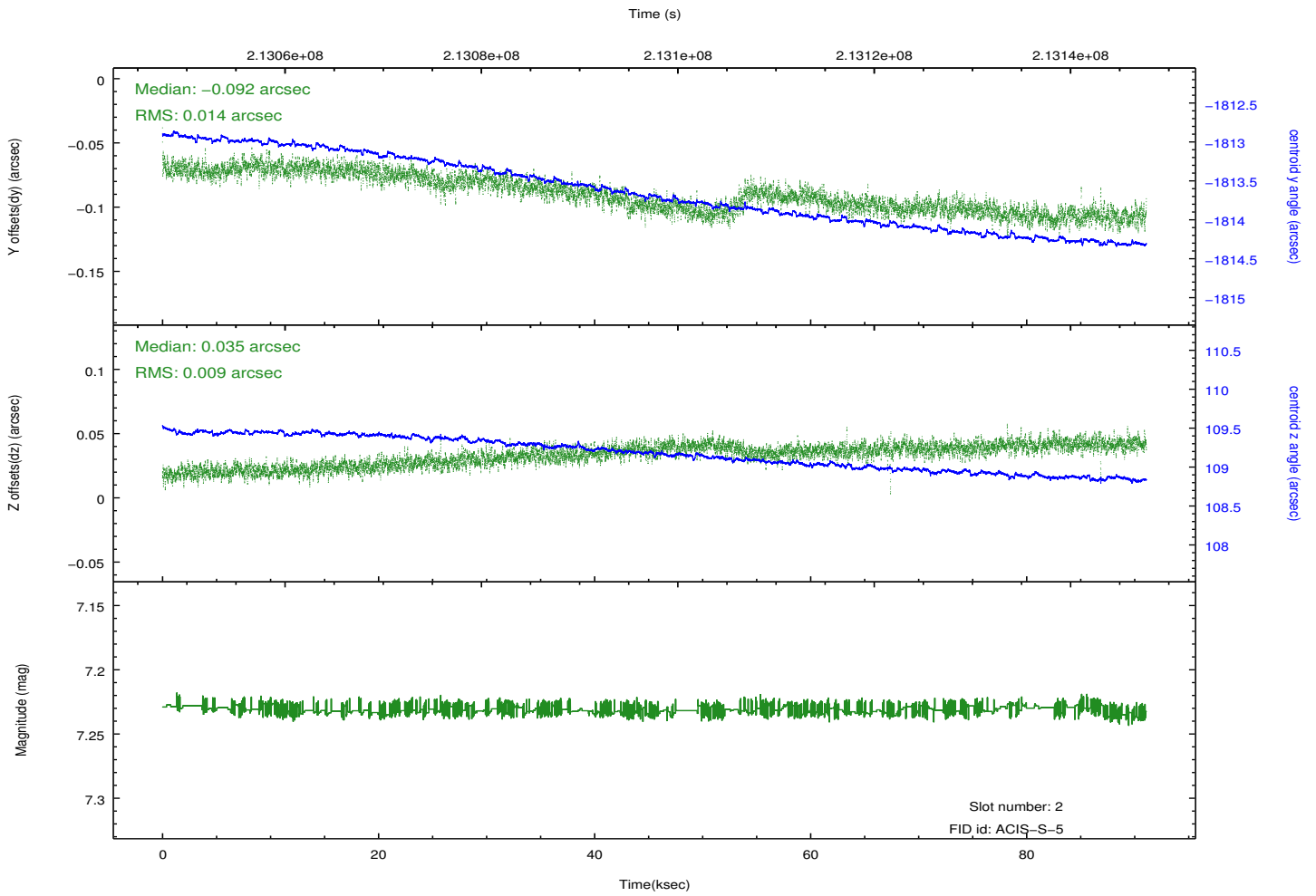
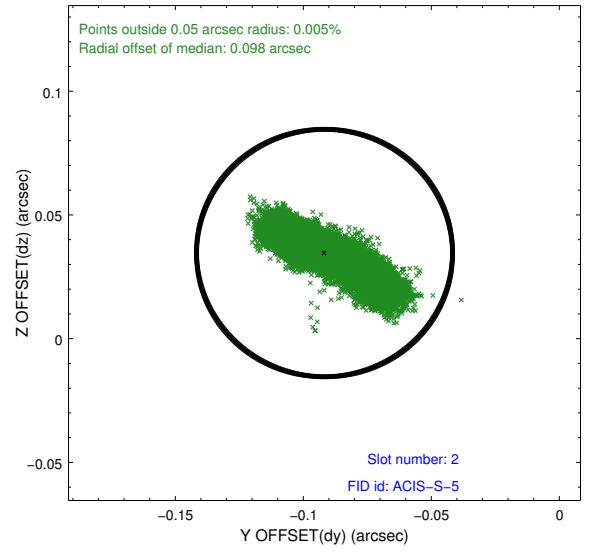
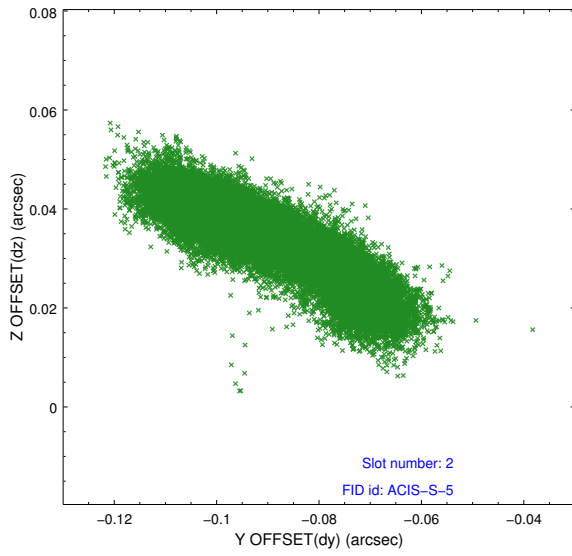
### 2.5.1 Slot 0



## 2.5.2 Slot 1

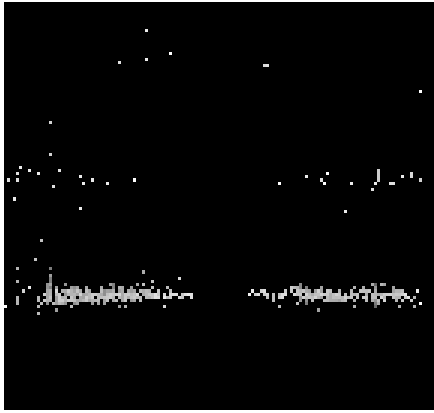


### 2.5.3 Slot 2

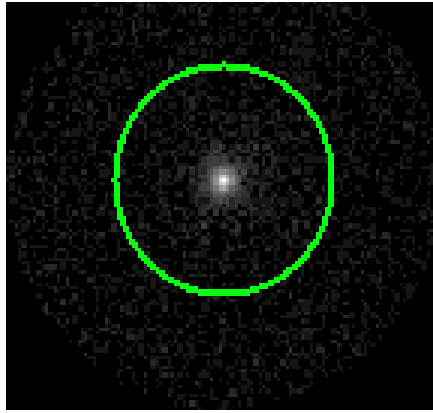


# 3 Gratings

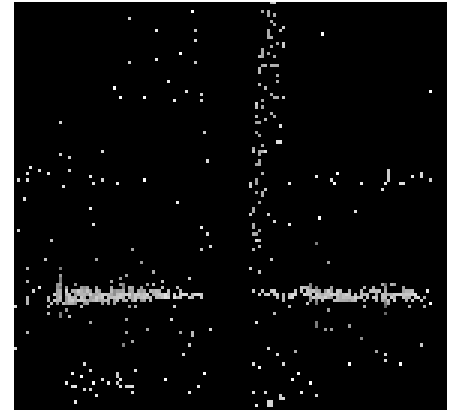
## 3.1 HEG Arm



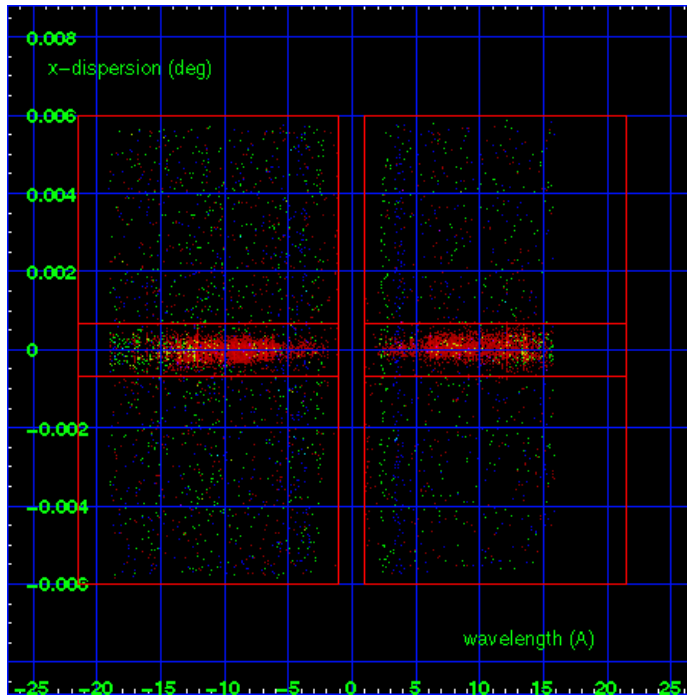
HEG Order Sort 123



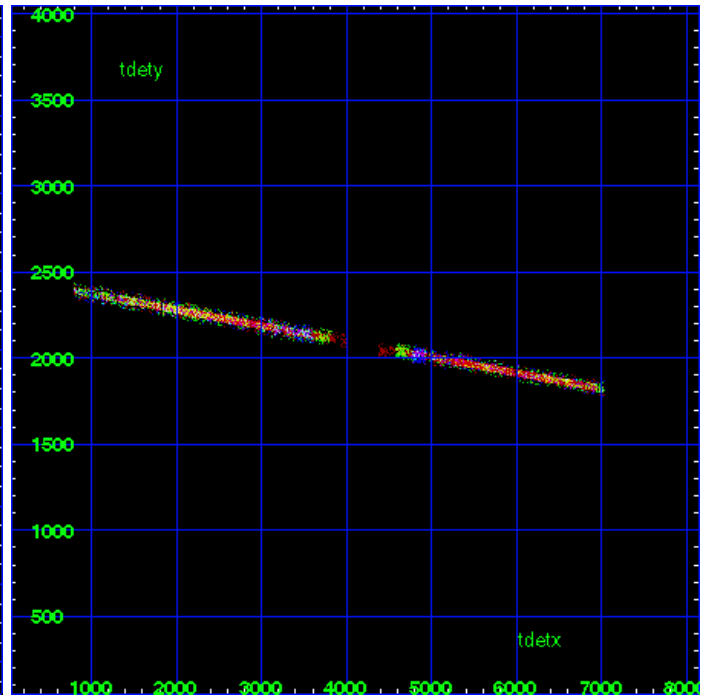
HEG Zero Order



HEG Order Sort ALL

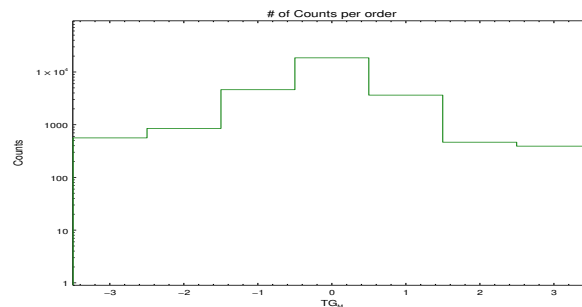


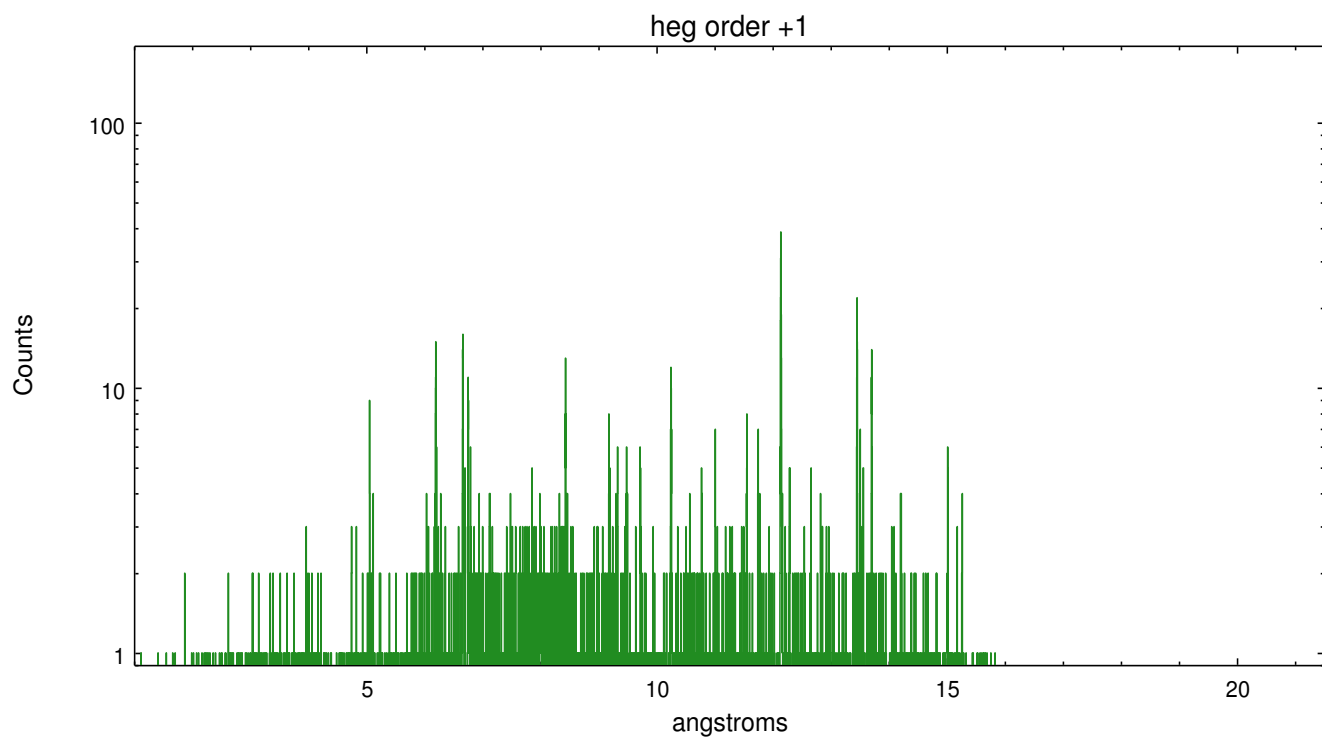
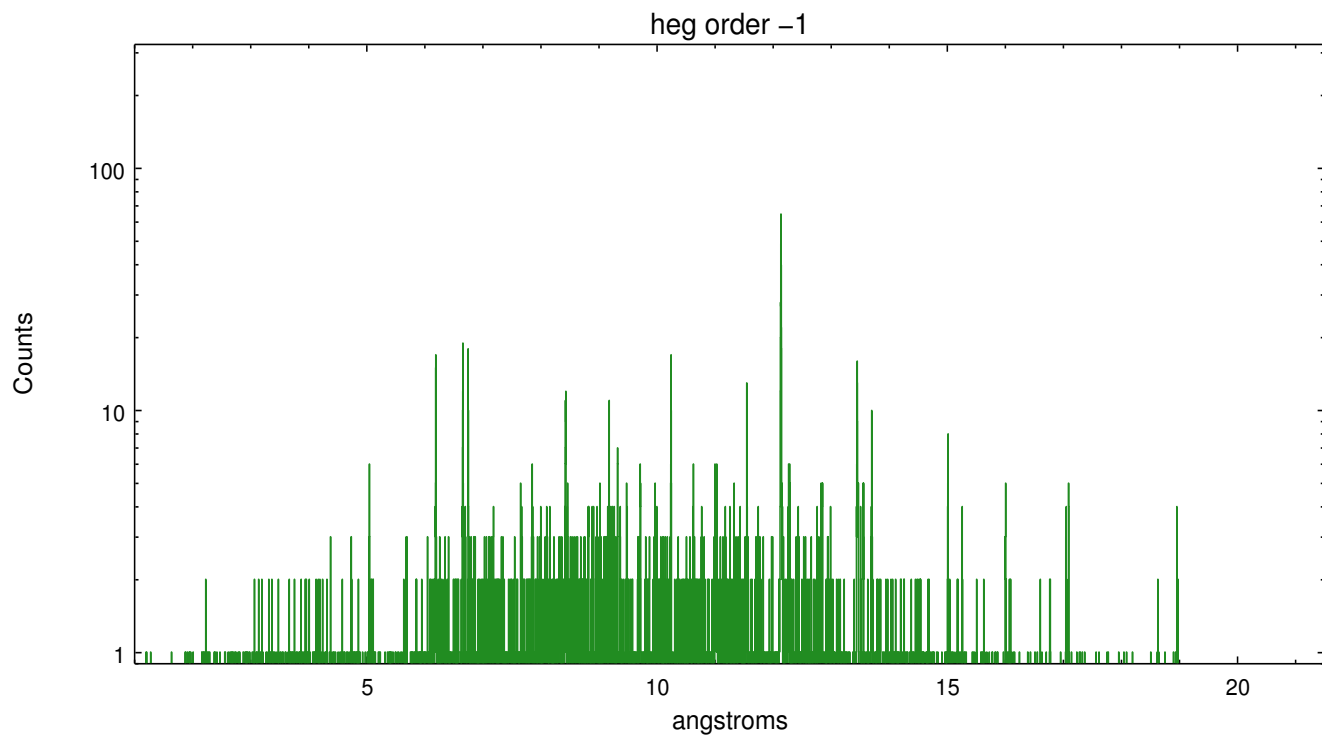
Spot Image HEG



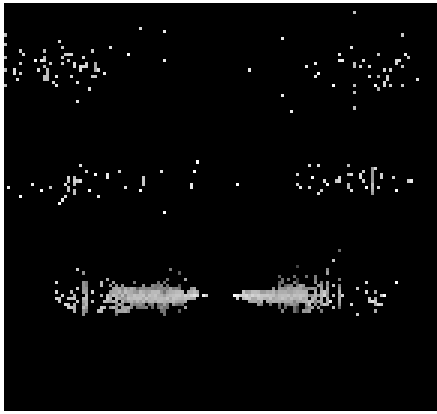
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	563	852	4641	18700	3656	466	392

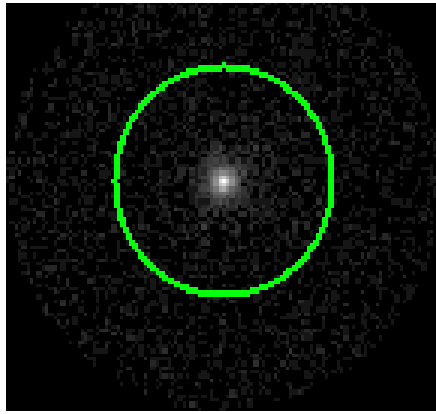




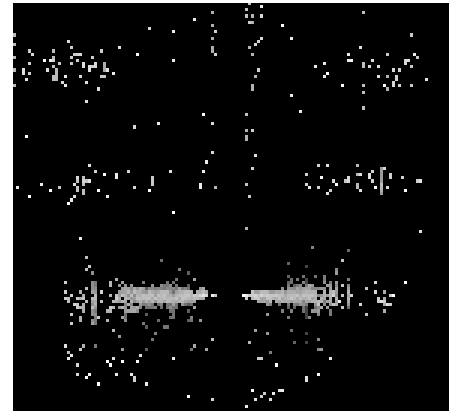
### 3.2 MEG Arm



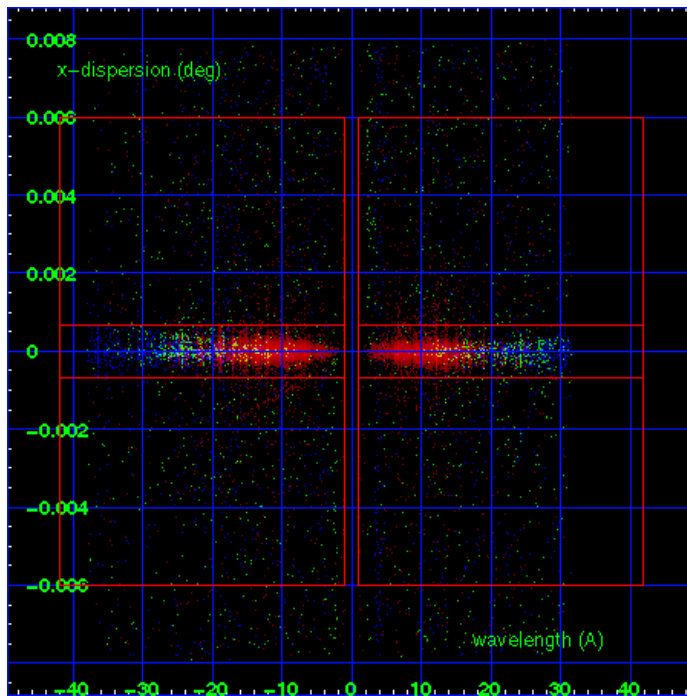
MEG Order Sort 123



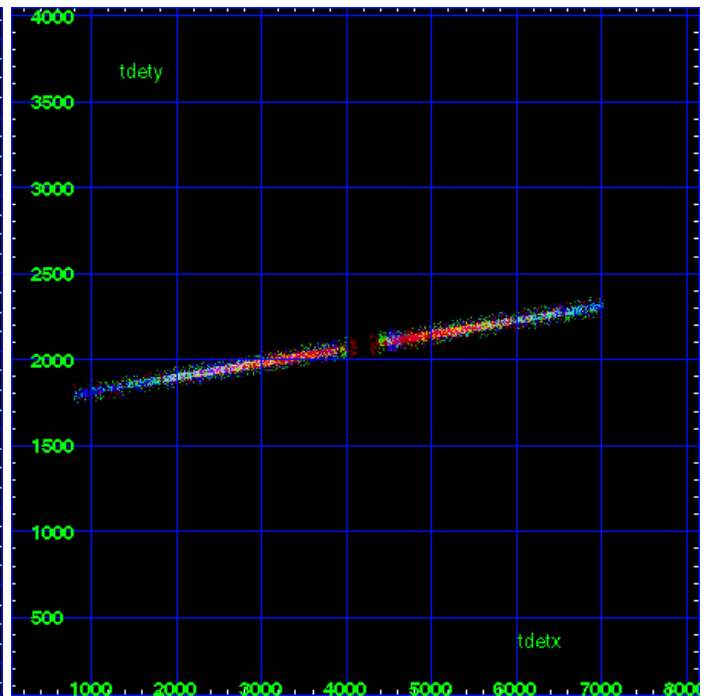
MEG Zero Order



MEG Order Sort ALL

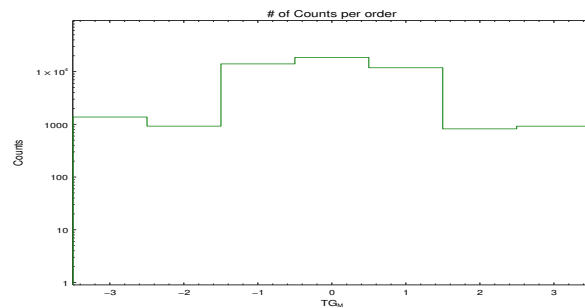


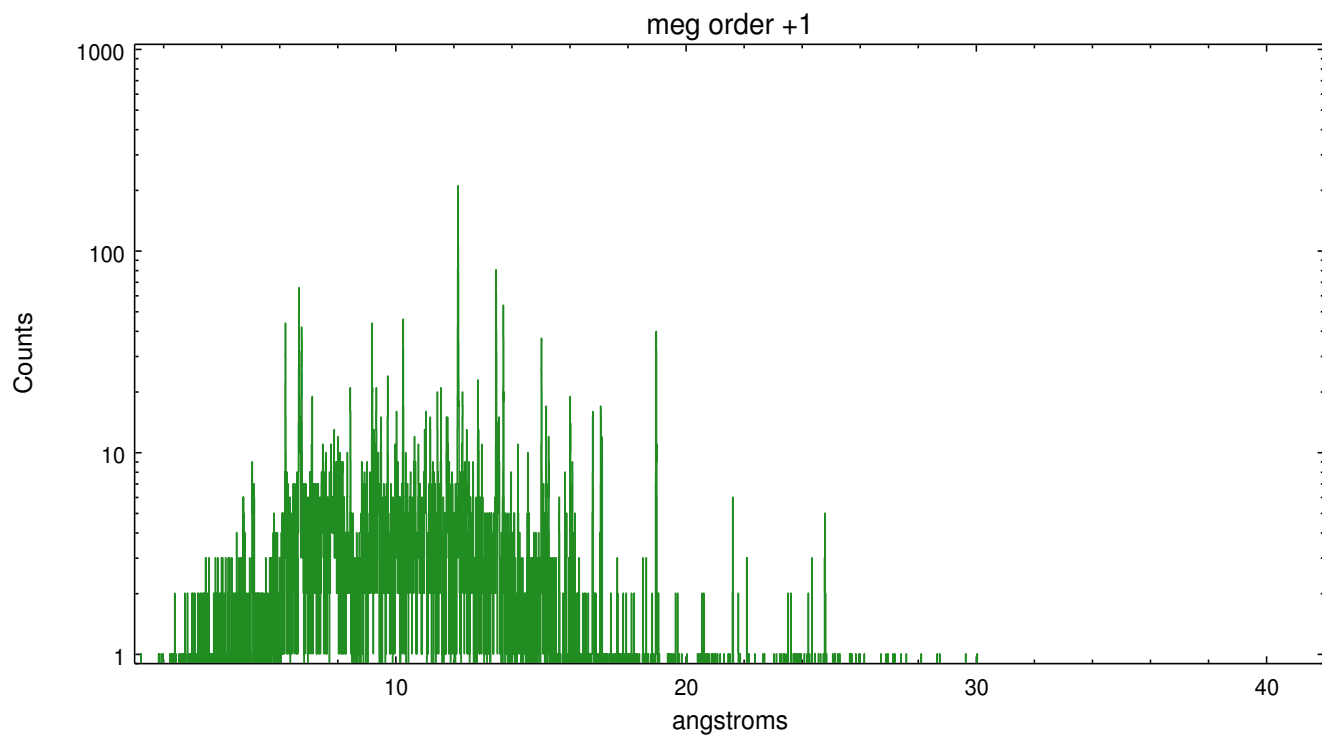
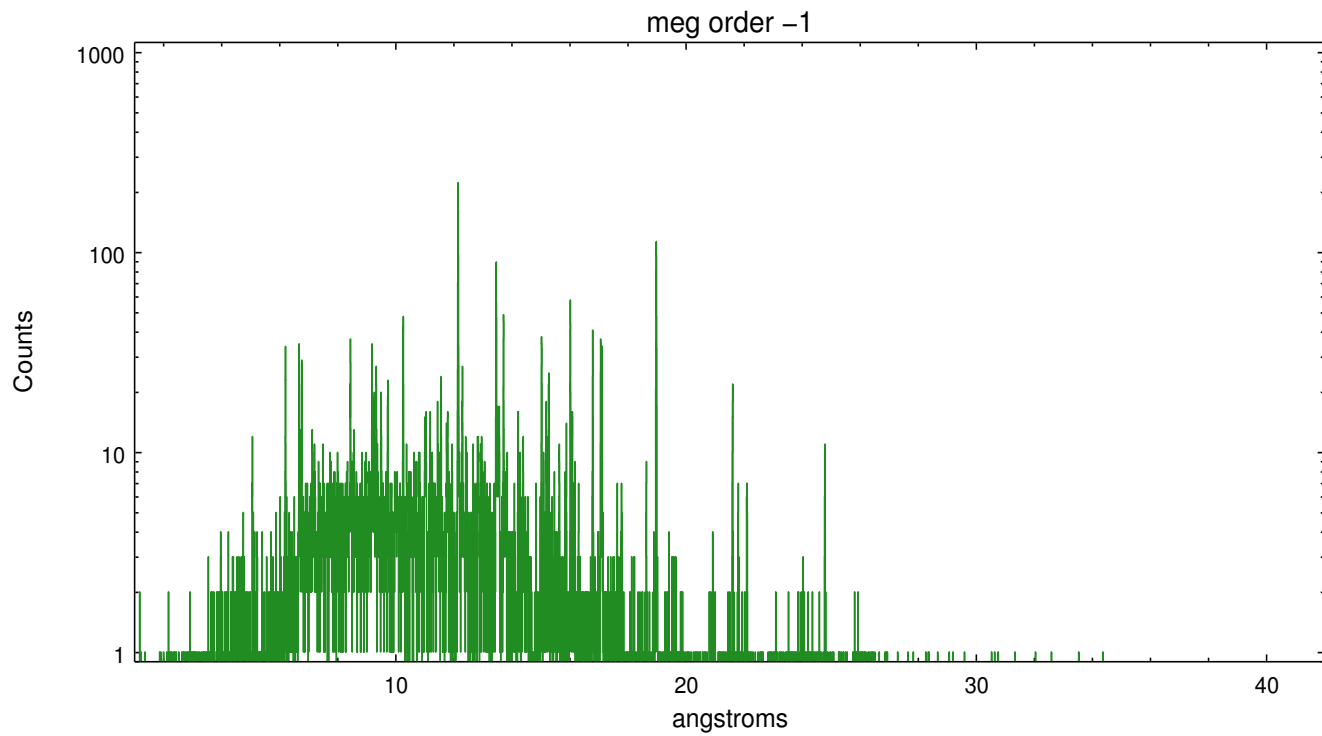
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1381	926	14123	18700	11925	823	924





## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	90.601

### A.2 Comments