

# V&V Reference Report

## L2 ASCDS Version : 8.4.3.1

Observation 5433 - L2 Version 3  
Chandra X-Ray Center

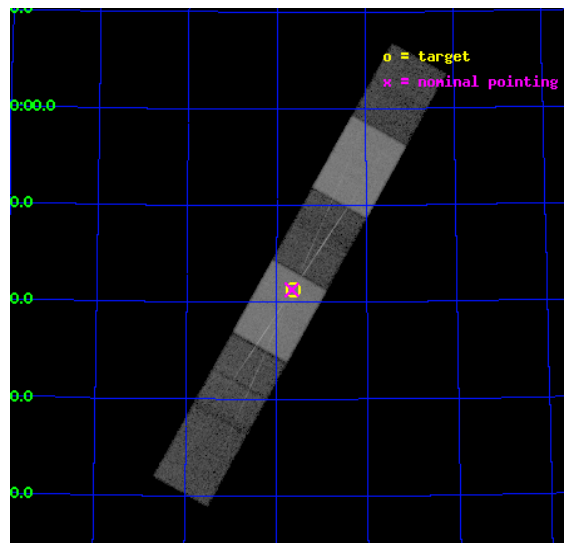
L2 Processing Date : Mar 23 2012

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# 1 Front

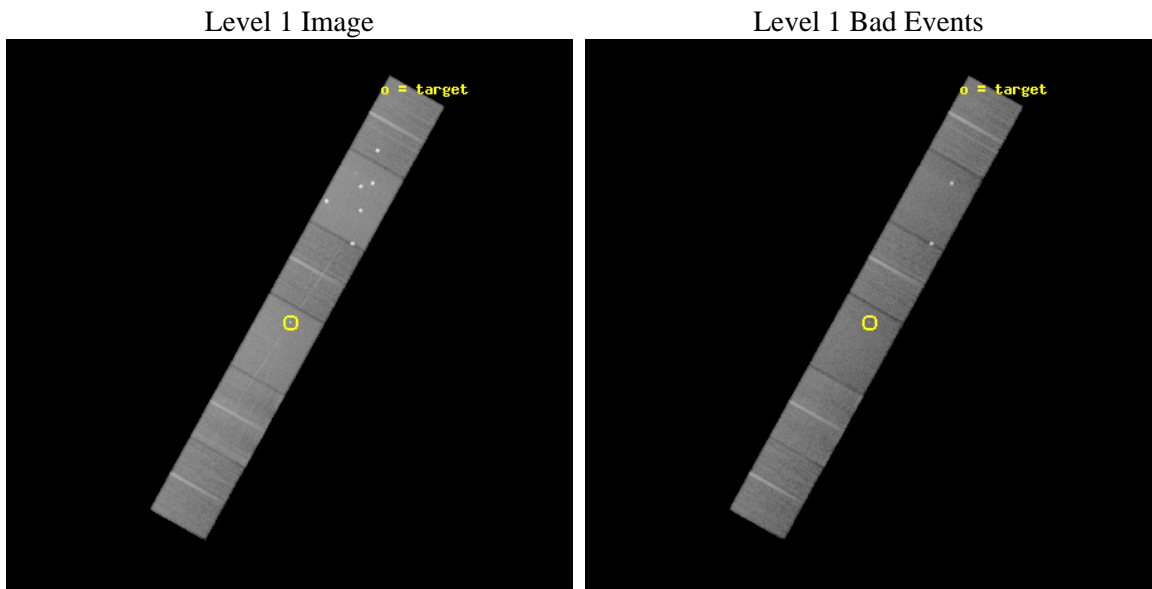
seq_num	300149	Sequence number
obs_id	5433	Observation id
title	Plasma and Kinematic Diagnoses of the Post-Shock Cooling Plasma in the Intermediate Polar YY Draconis	Proposal title
observer	Dr Koji Mukai	Principal investigator
object	YY Draconis	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	175.909583	Observer's specified target RA [deg]
dec_targ	71.689	Observer's specified target Dec [deg]
ra_nom	175.91649292837	Nominal RA [deg]
dec_nom	71.688528707439	Nominal Dec [deg]
roll_nom	119.15006734581	Nominal Roll [deg]
revision	3	Processing version of data
ontime	32277.5	Sum of GTIs [s]
livetime	31756.190378742	Livetime [s]
ontime4	32277.5	Sum of GTIs [s]
ontime5	32277.5	Sum of GTIs [s]
ontime6	32277.5	Sum of GTIs [s]
ontime7	32277.5	Sum of GTIs [s]
ontime8	32277.5	Sum of GTIs [s]
ontime9	32274.958989799	Sum of GTIs [s]
l2events	341775	Number of level 2 events



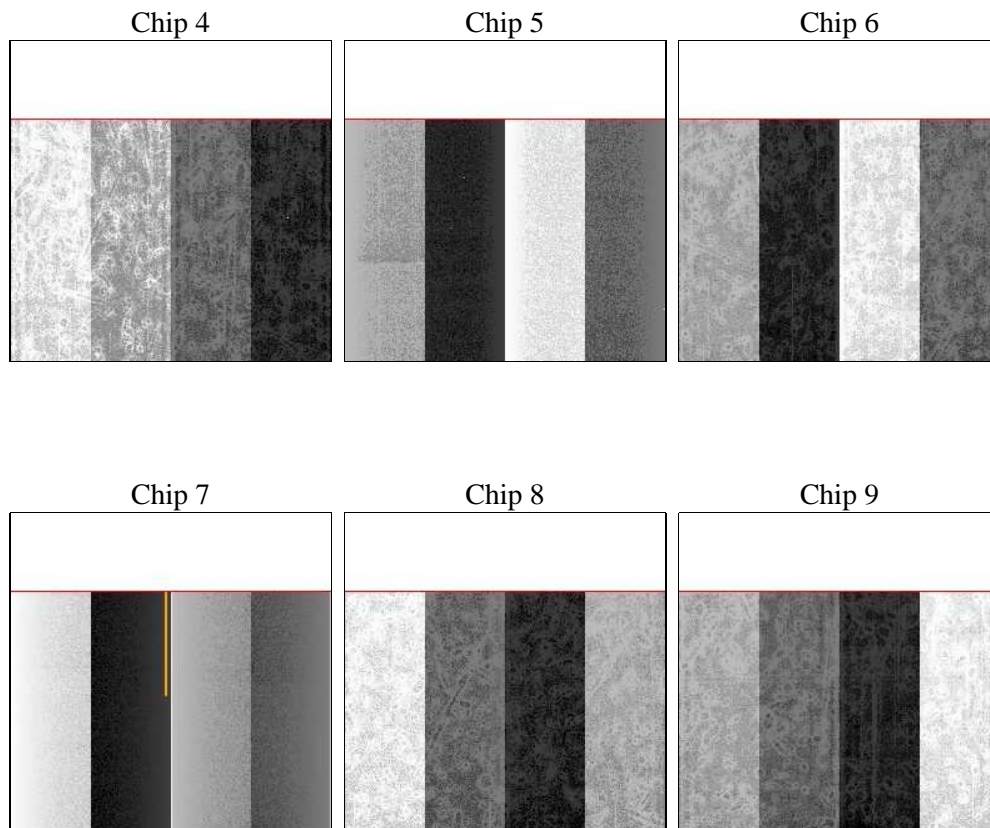
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32120.579000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	32277.5	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime4	32277.5	Sum of GTIs [s]
date	2012-03-23T15:07:20	Date and time of file creation	ontime5	32277.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	32277.5	Sum of GTIs [s]
			ontime7	32277.5	Sum of GTIs [s]
			ontime8	32277.5	Sum of GTIs [s]
			ontime9	32274.958989799	Sum of GTIs [s]
			l1events	1529379	Number of level 1 events

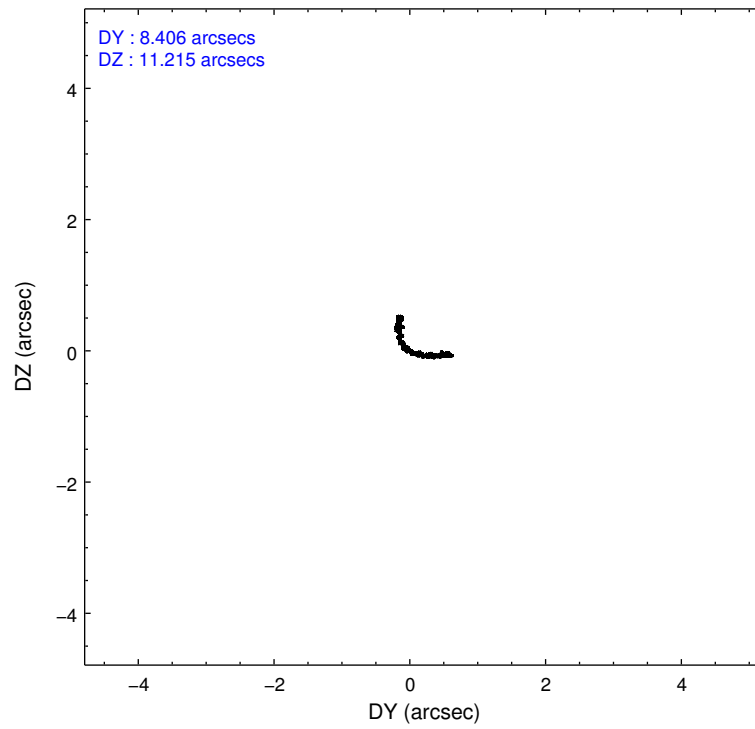
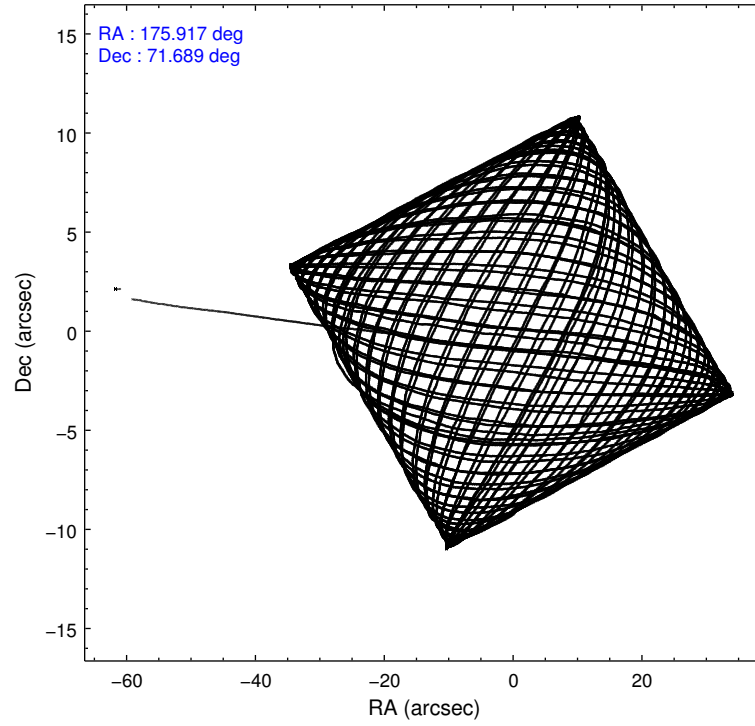
### 2.1.4 Events

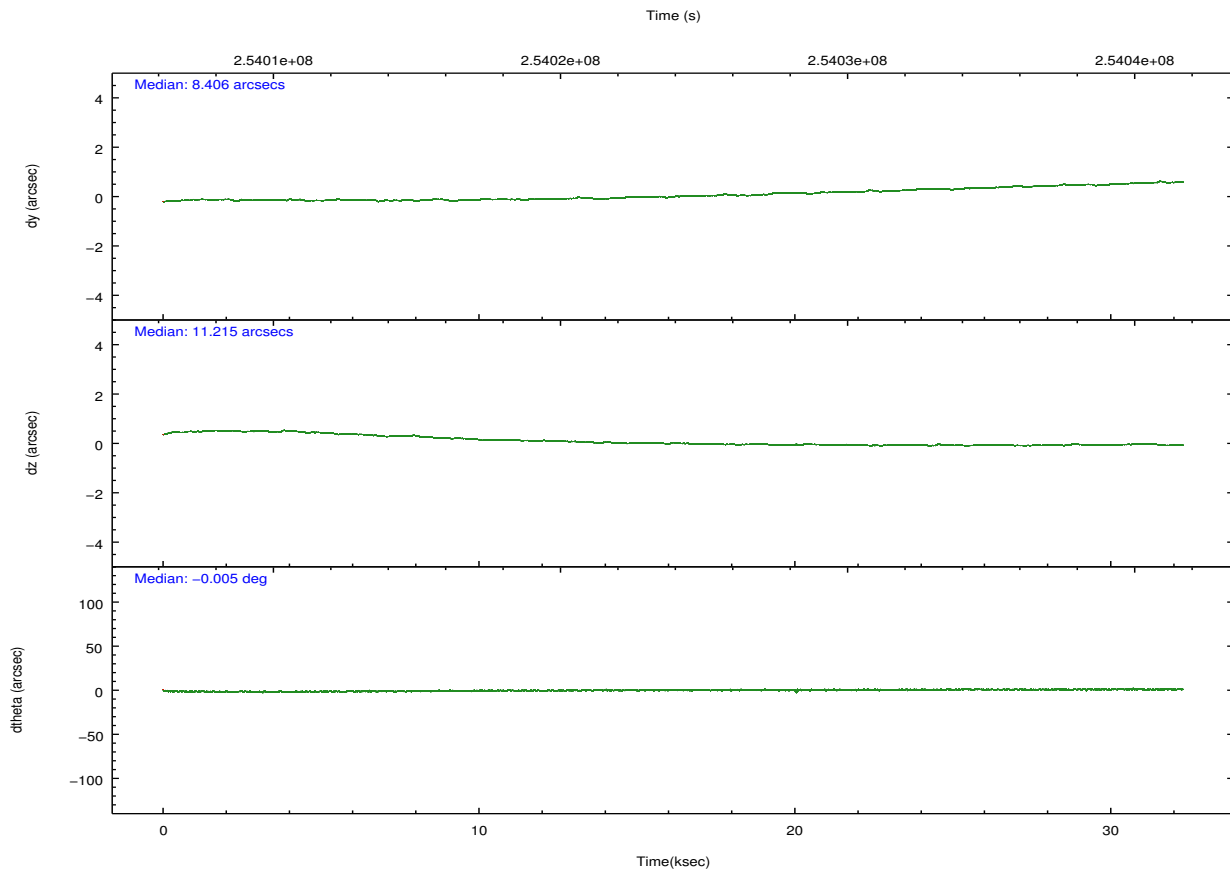
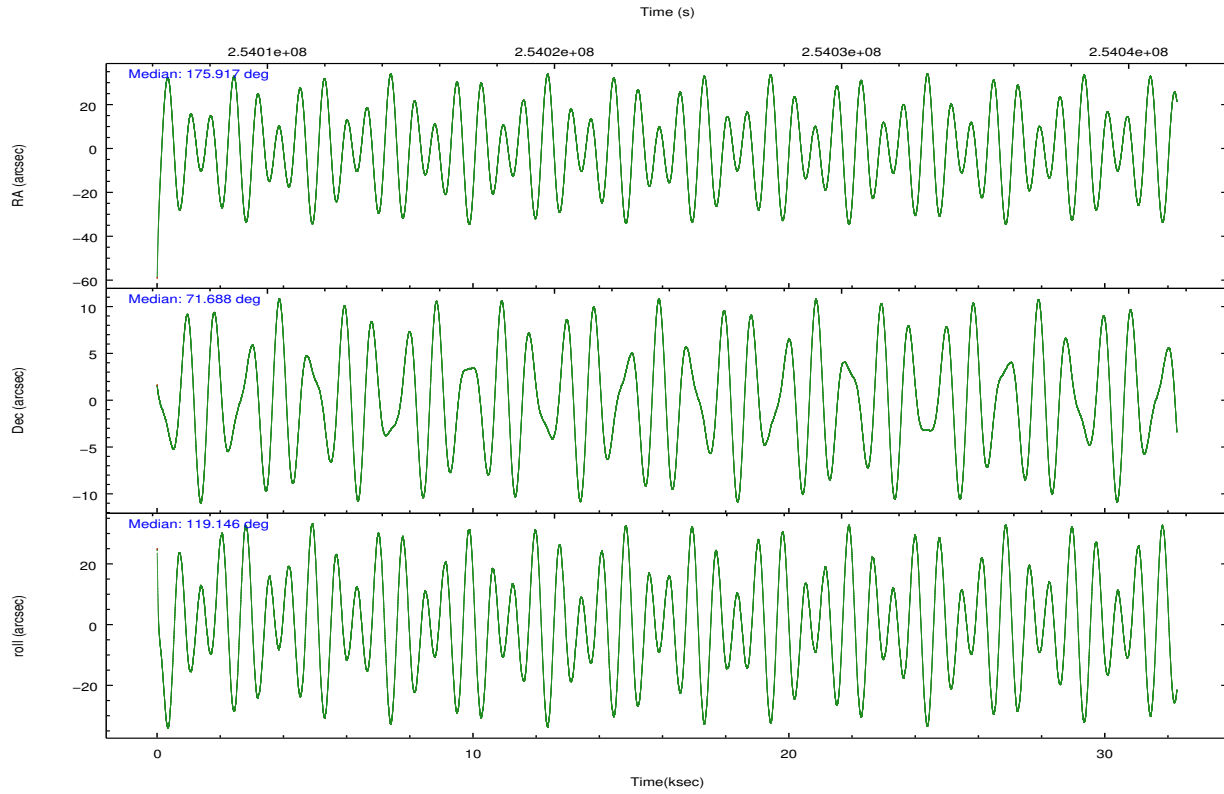
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	236179	346593	205728	281189	258181	201509	grade 0 events	22527	41118	11973	11393	18275	10143
rejected events	198876	171276	178226	159396	200296	176558		9%	11%	5%	4%	7%	5%
rejected %	84%	49%	86%	56%	77%	87%	grade 1 events	215	1881	105	318	170	91
								0%	0%	0%	0%	0%	0%
							grade 2 events	5401	46008	5388	24811	12672	4874
								2%	13%	2%	8%	4%	2%
							grade 3 events	2732	6550	2672	11135	6013	2651
								1%	1%	1%	3%	2%	1%
							grade 4 events	2577	6444	2504	11113	5631	2520
								1%	1%	1%	3%	2%	1%
							grade 5 events	8922	25834	8988	26170	11980	9868
								3%	7%	4%	9%	4%	4%
							grade 6 events	4083	75263	4979	63386	15316	4772
								1%	21%	2%	22%	5%	2%
							grade 7 events	189722	143495	169119	132863	188124	166590
								80%	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	175.991464	175.9164929283749	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	71.674866	71.68852870743919	Subarray start row	1	1
[deg] Pointing Roll	118.922276	119.1500673458141	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)	254007941.184000	254006919.0251			
Observation start date	2006-01-18T21:44:36	2006-01-18T21:28:39			
[s] Observation end time (MET)	254040061.184000	254040283.80165			
Observation end date	2006-01-19T06:39:56	2006-01-19T06:44:43			
Read mode	TIMED	TIMED			

## 2.3 Aspect



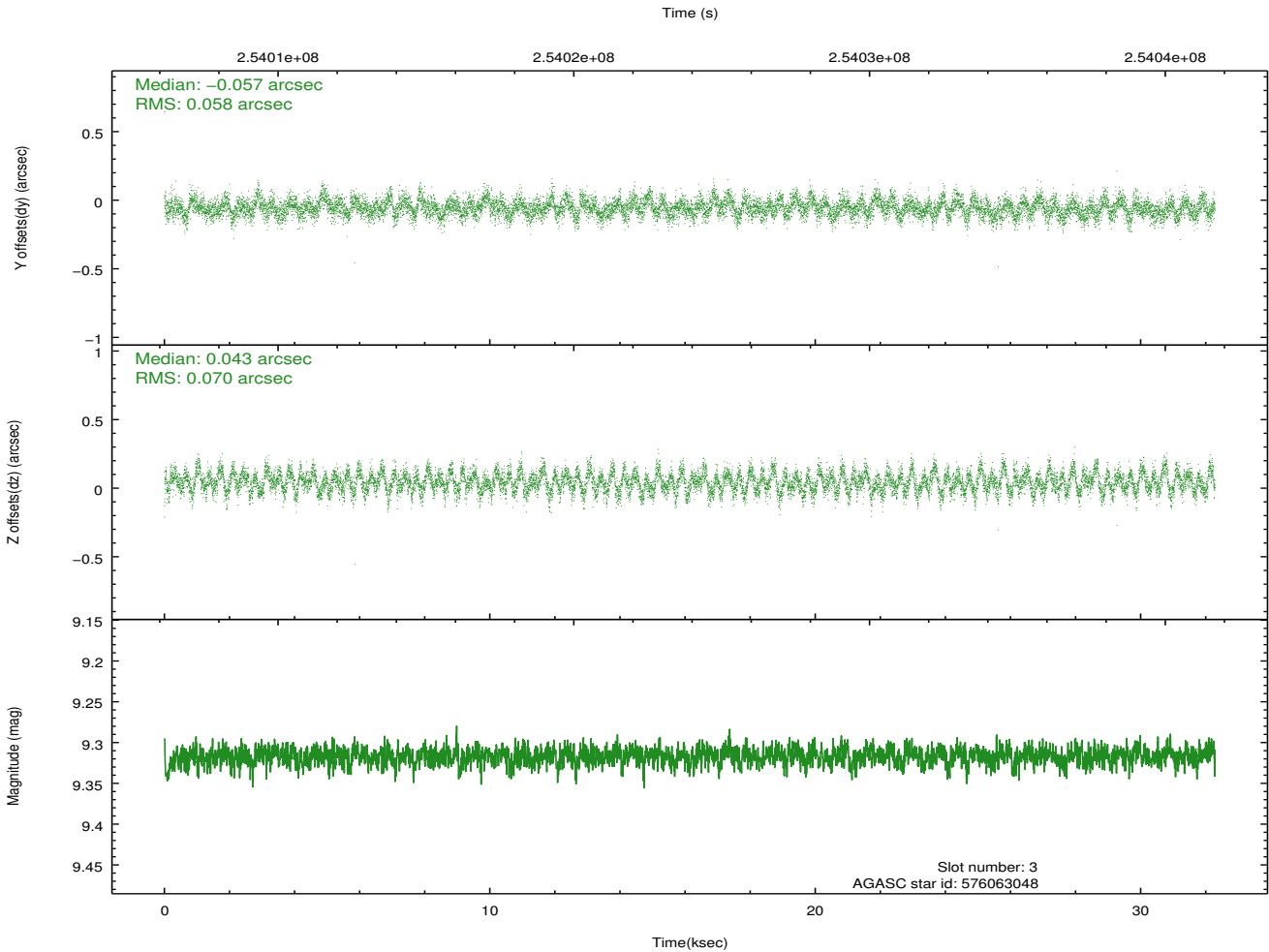
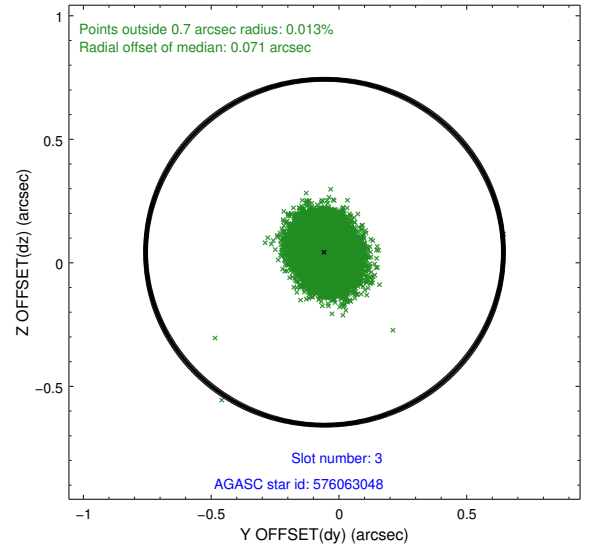
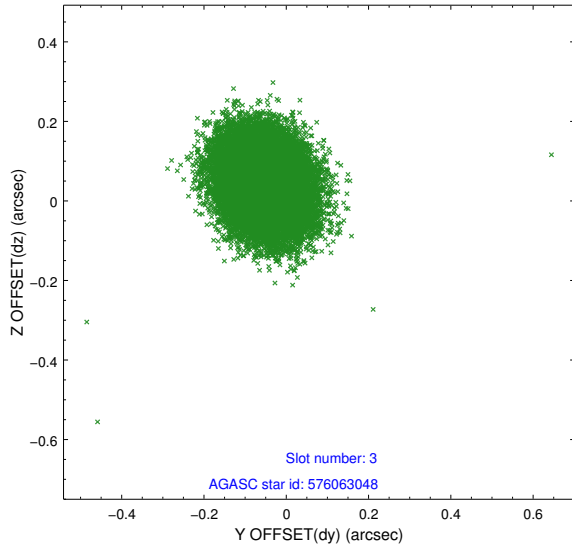


### Slot Statistics

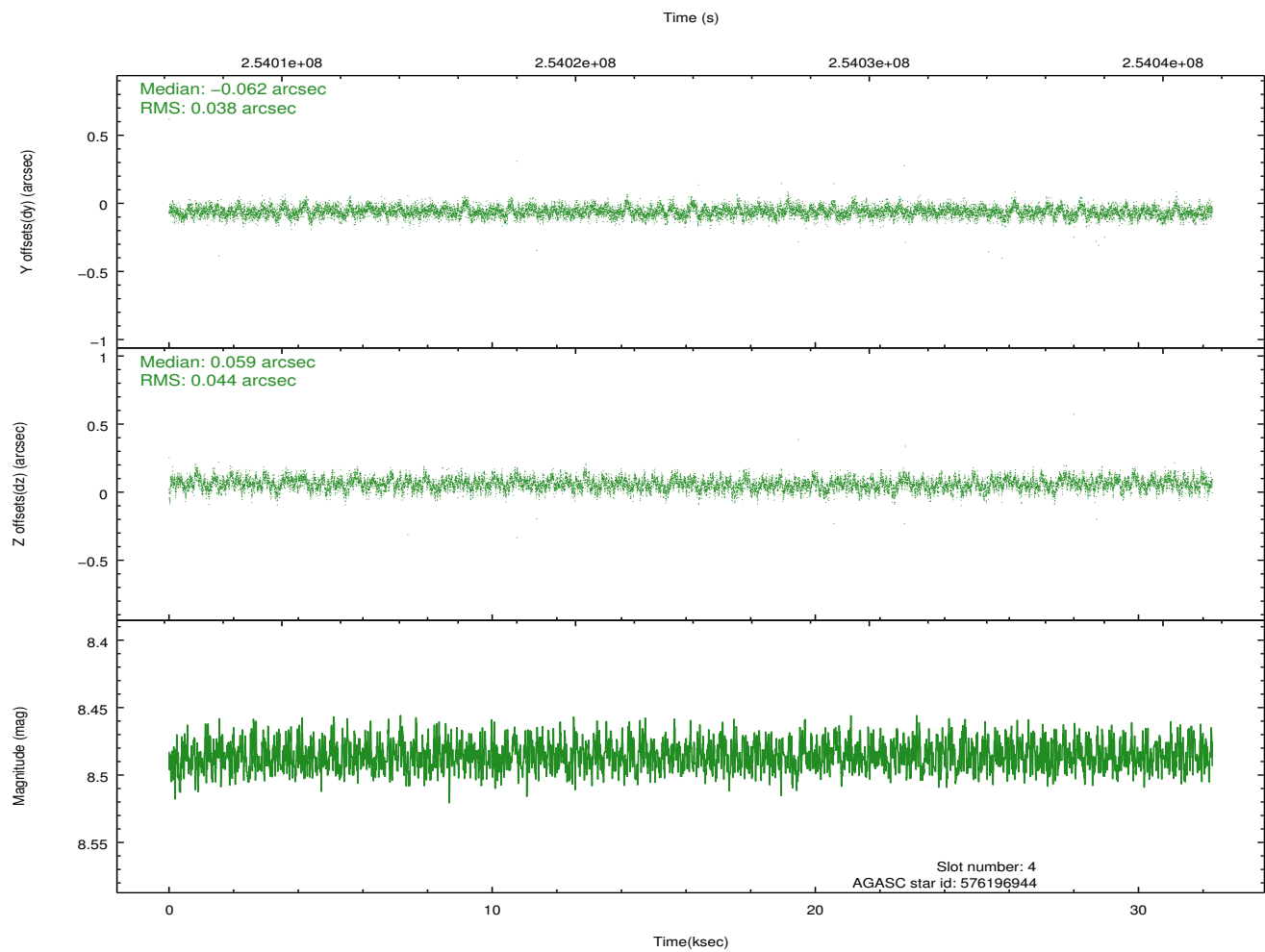
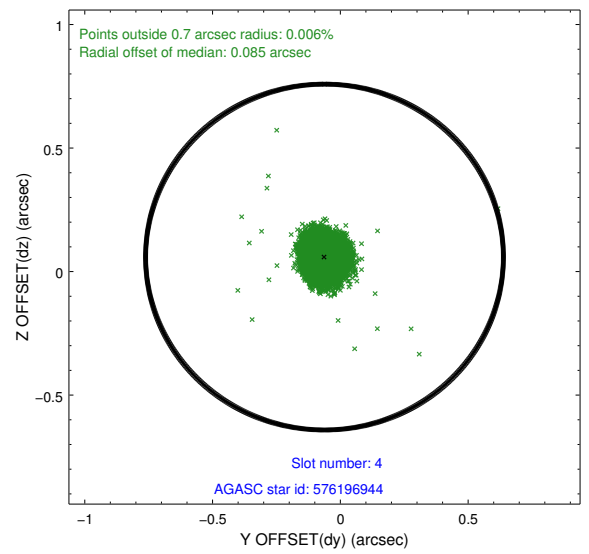
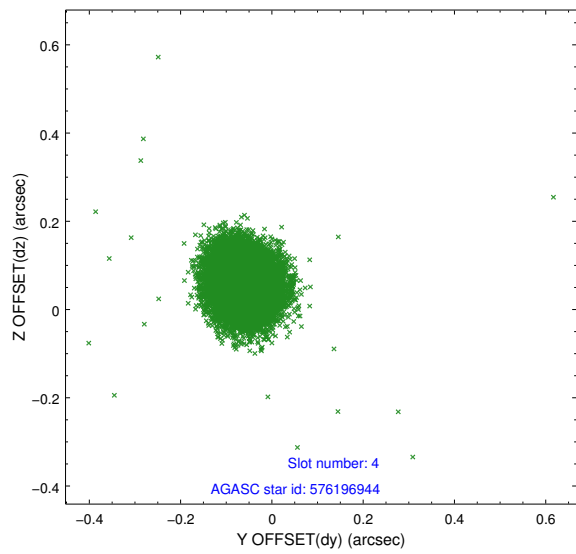
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	7874	0.051	0.038	0.011	0.017	0.000000	0.000000	934.99	-1790.34
1	FID	ACIS-S-4	7.20	7874	0.105	-0.046	0.009	0.014	0.000000	0.000000	2152.49	113.66
2	FID	ACIS-S-5	7.23	7873	-0.181	0.020	0.010	0.019	0.000000	0.000000	-1814.03	107.40
3	GUIDE	576063048	9.32	15731	-0.057	0.043	0.097	0.155	175.839657	72.109524	1451.21	-609.53
4	GUIDE	576196944	8.49	15741	-0.062	0.059	0.061	0.098	176.483968	72.095688	1064.98	-1210.78
5	GUIDE	576197680	8.99	15740	-0.043	0.072	0.104	0.171	177.799182	71.774257	-643.84	-1968.68
6	GUIDE	576064704	9.53	15738	-0.044	0.050	0.146	0.234	173.877683	72.064026	2395.39	1353.68
7	GUIDE	576070904	10.31	15725	0.200	-0.214	0.167	0.269	175.036924	70.880403	-1950.91	2364.19

## 2.4 Star Slots

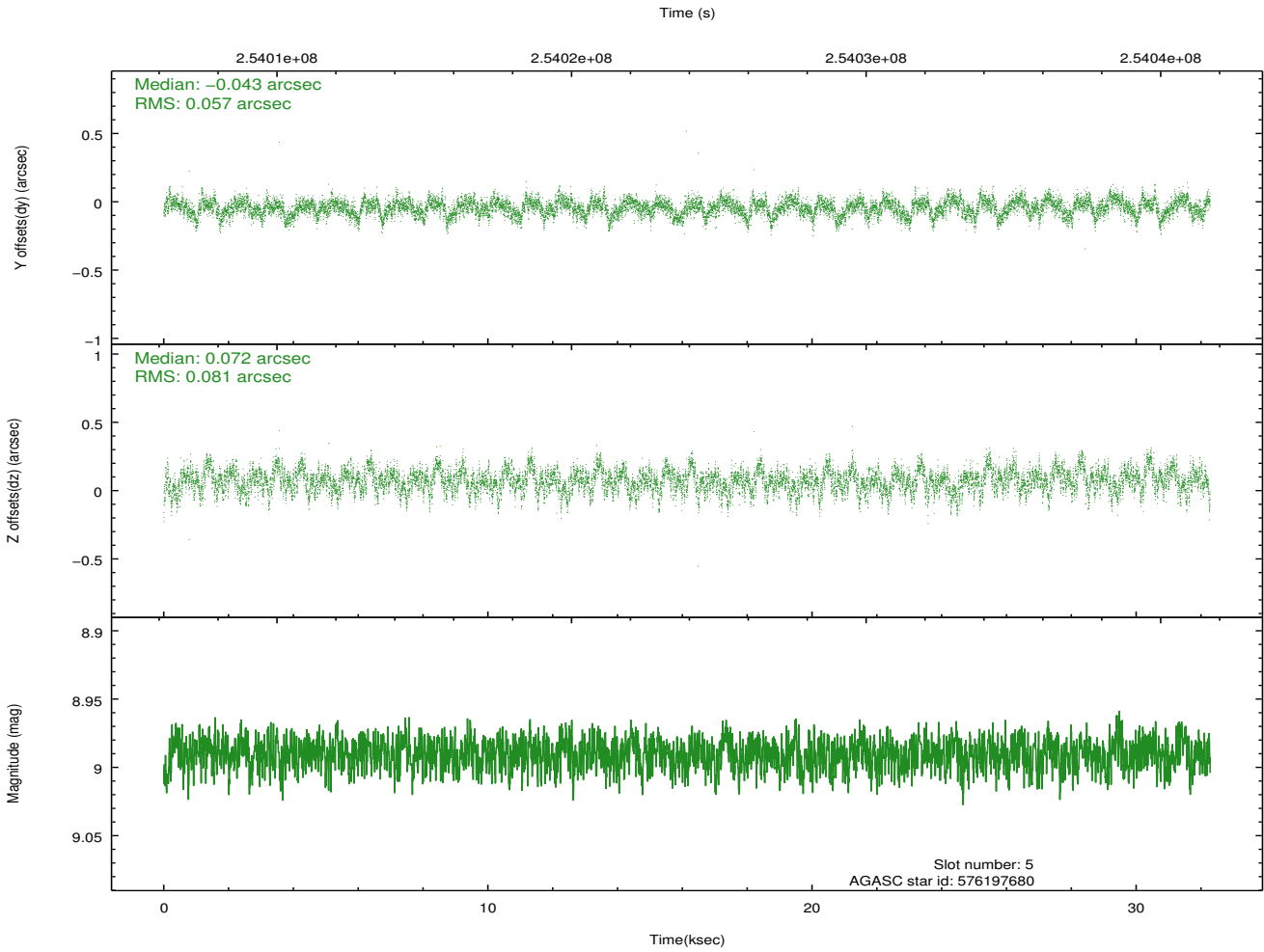
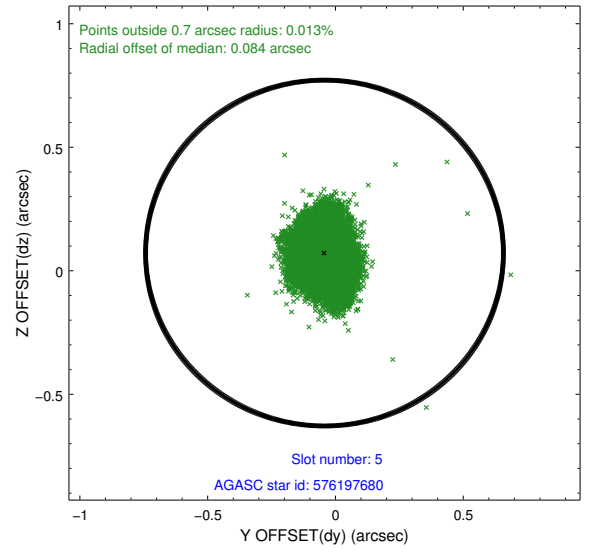
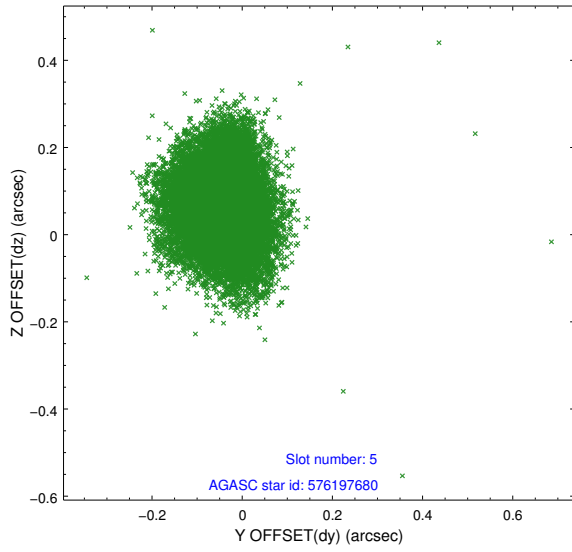
### 2.4.1 Slot 3



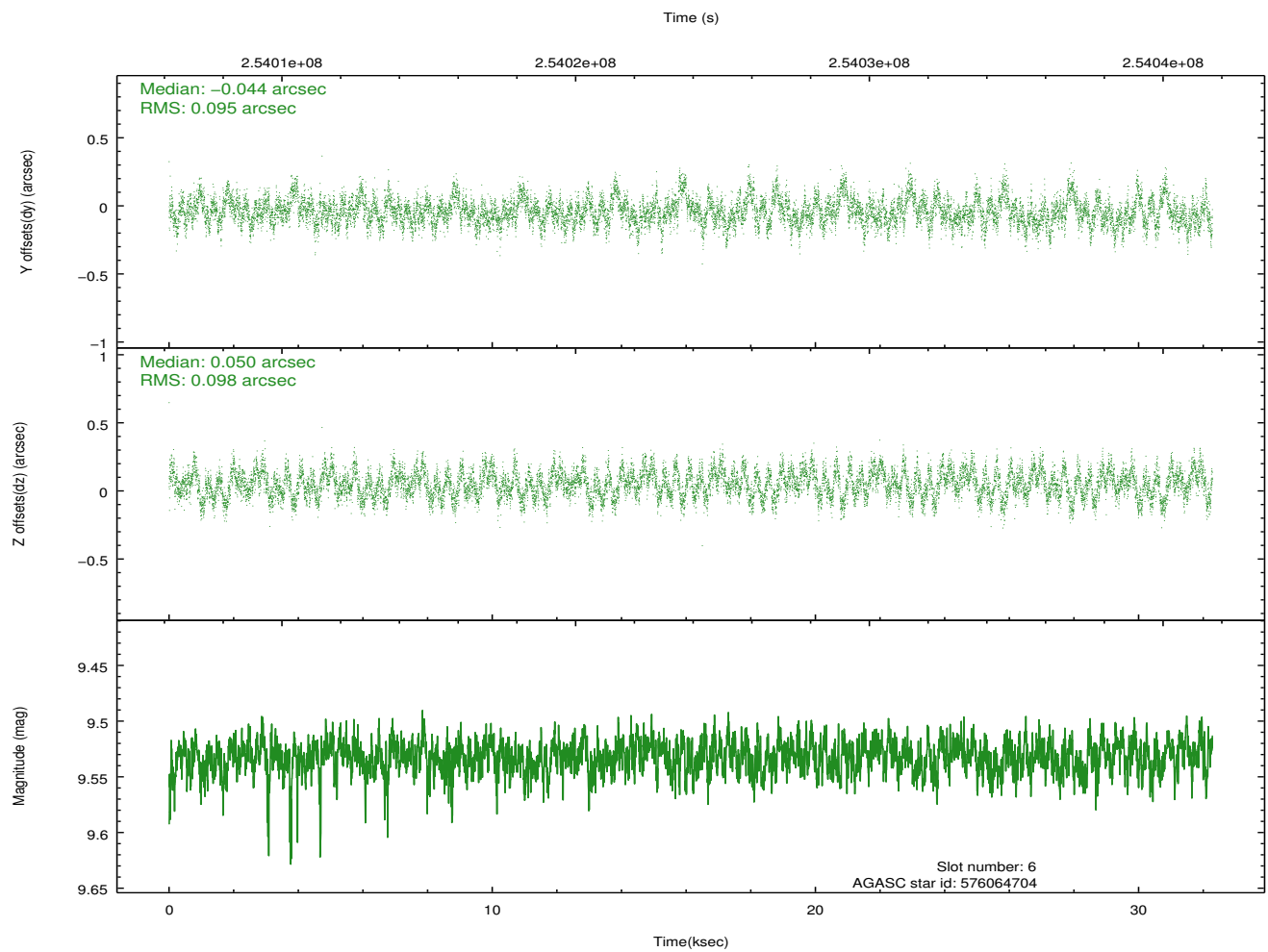
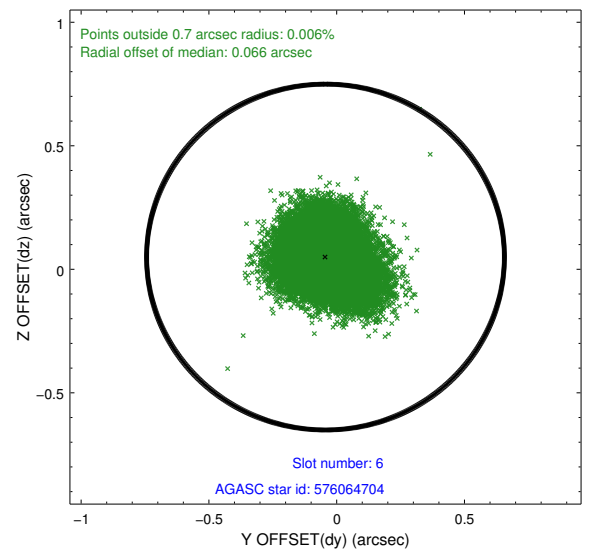
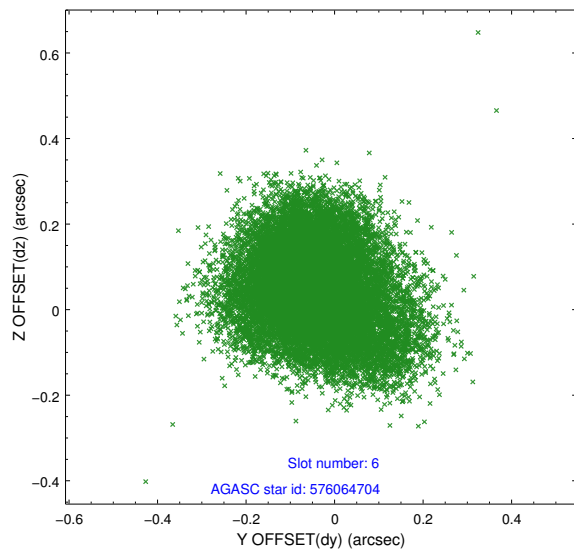
## 2.4.2 Slot 4



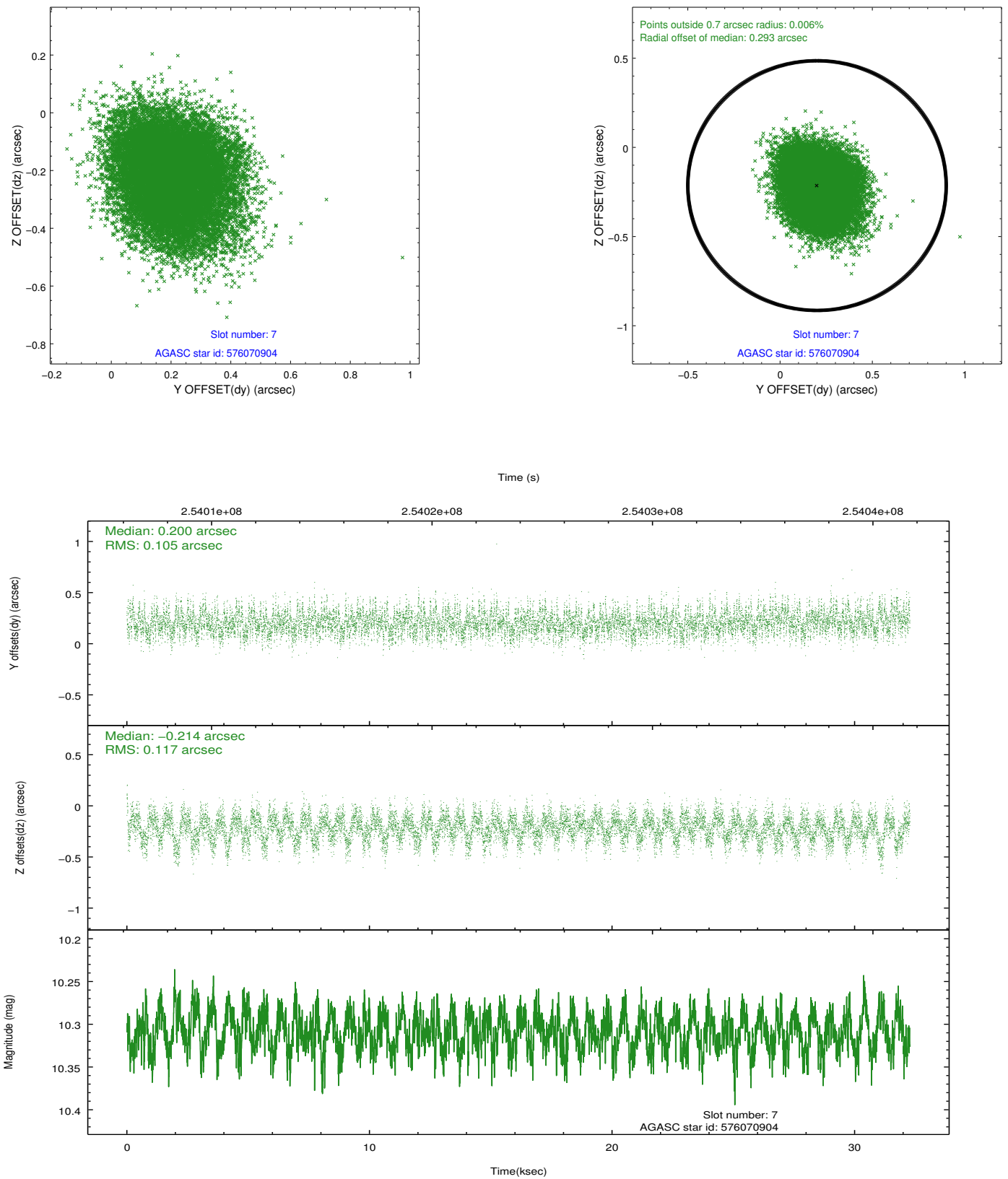
### 2.4.3 Slot 5



## 2.4.4 Slot 6

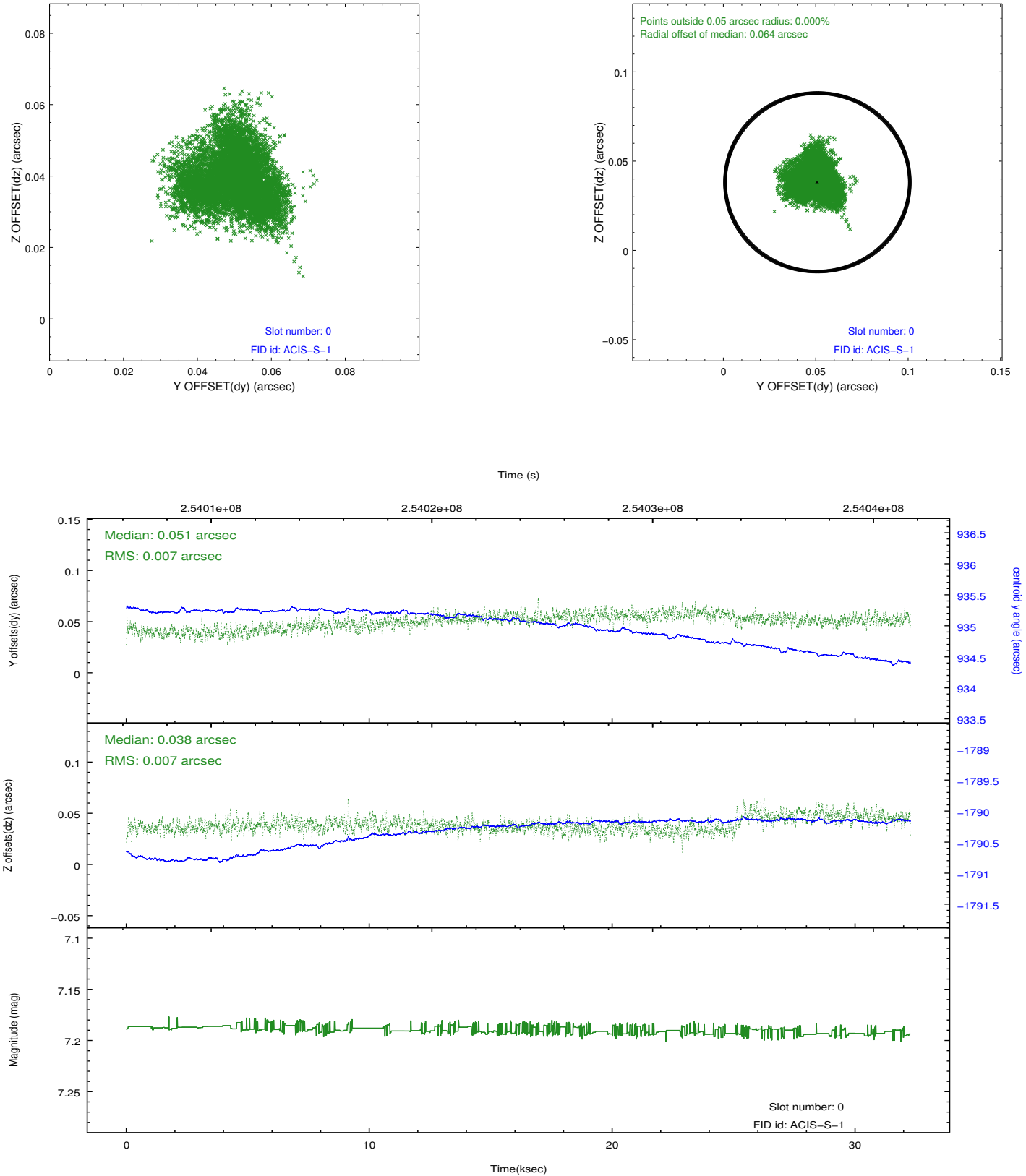


## 2.4.5 Slot 7

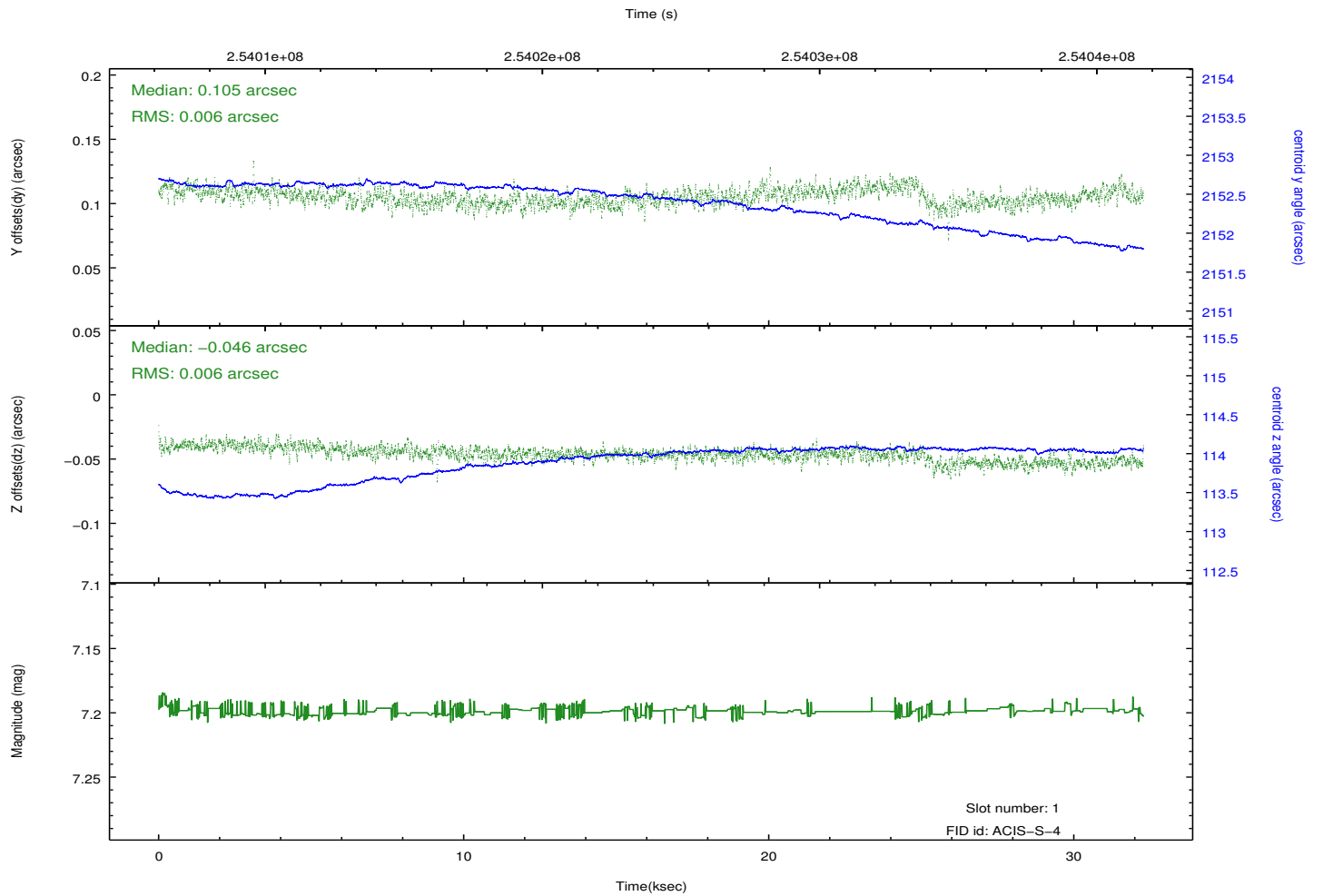
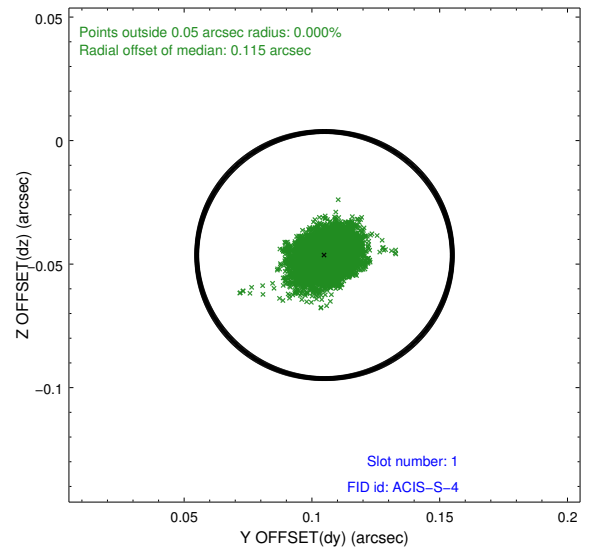
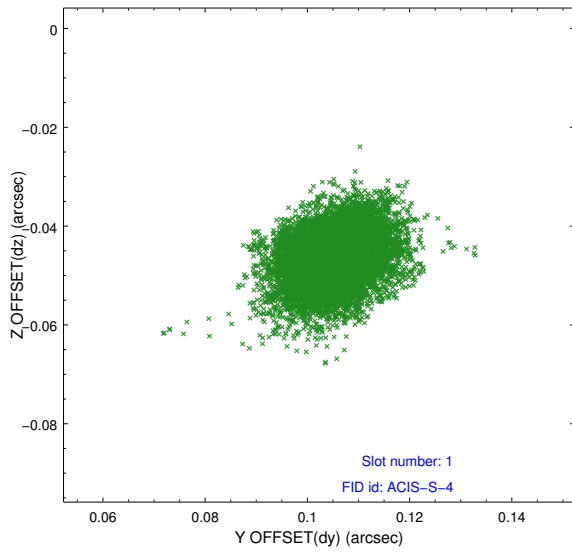


## 2.5 FID Slots

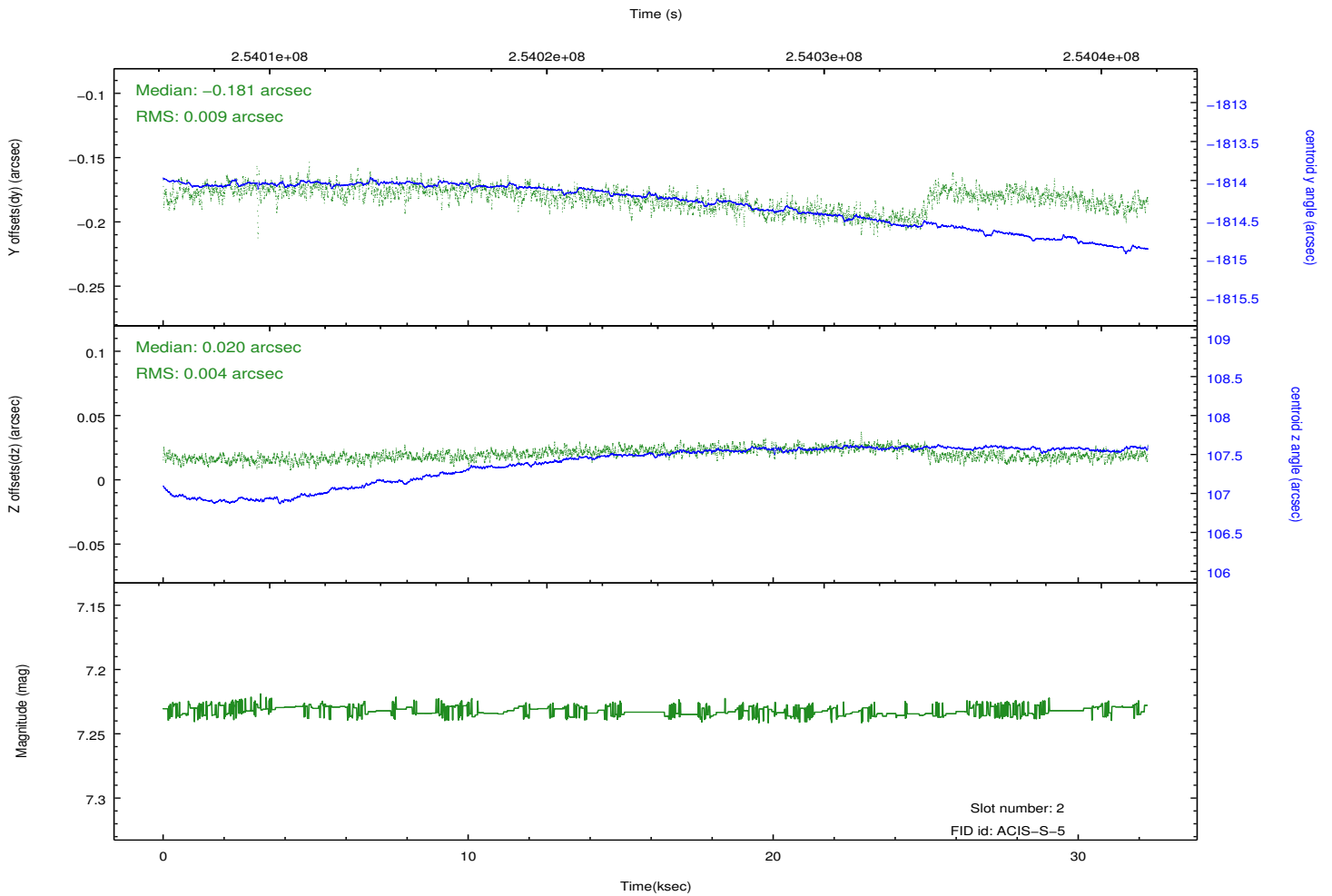
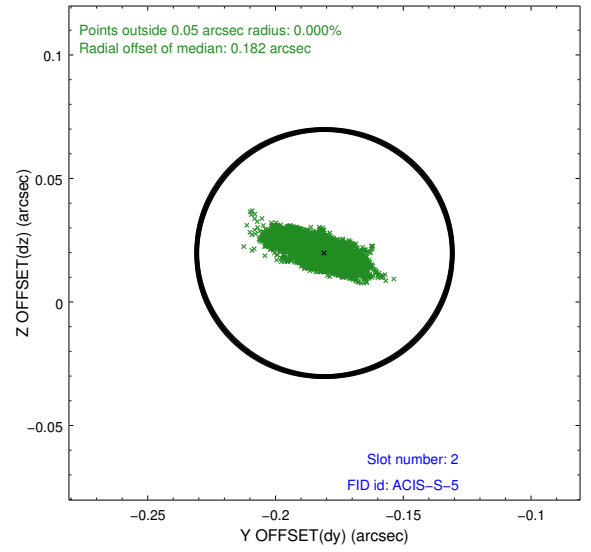
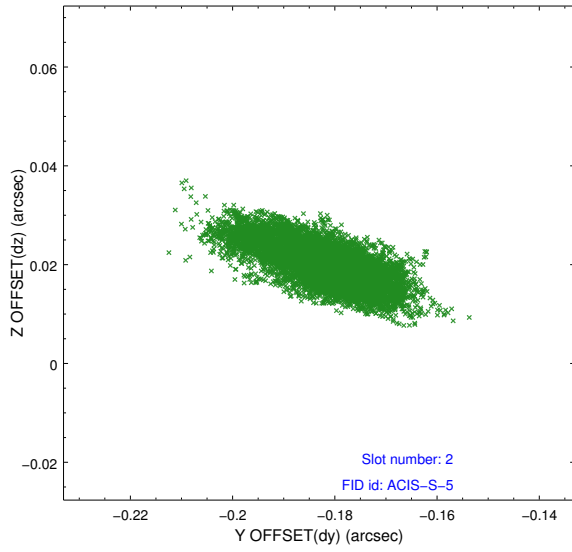
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2

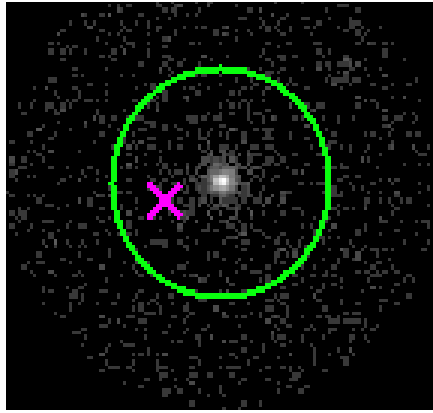


### 3 Gratings

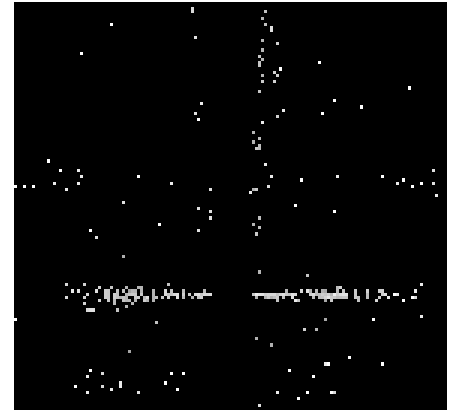
#### 3.1 HEG Arm



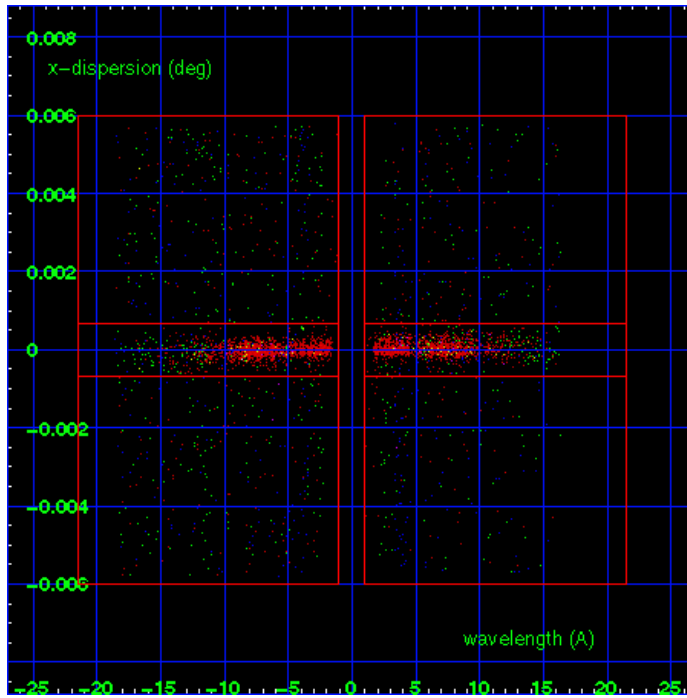
HEG Order Sort 123



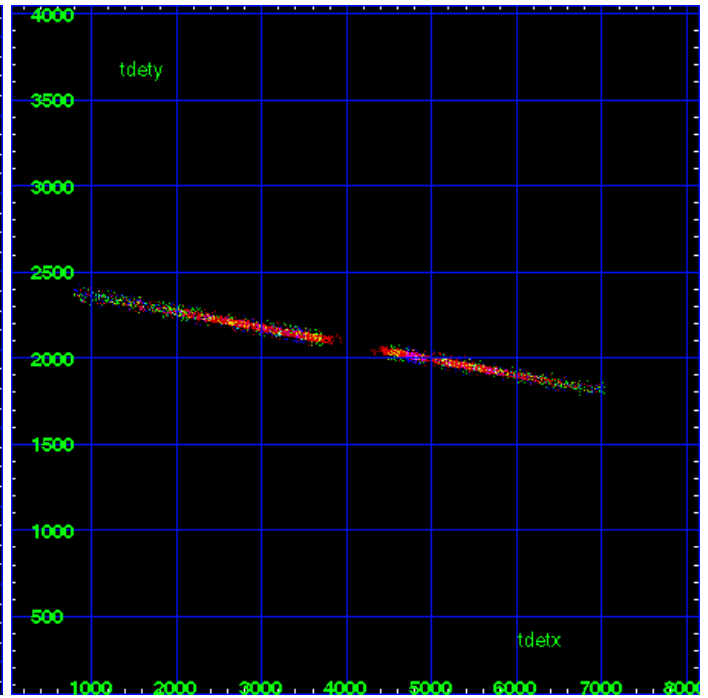
HEG Zero Order



HEG Order Sort ALL

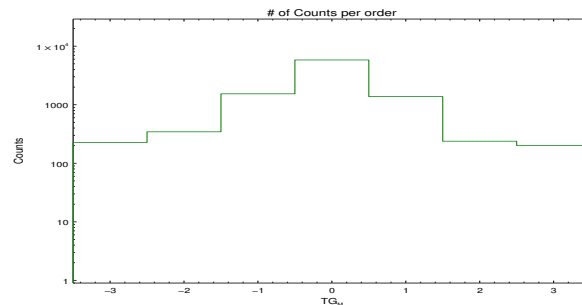


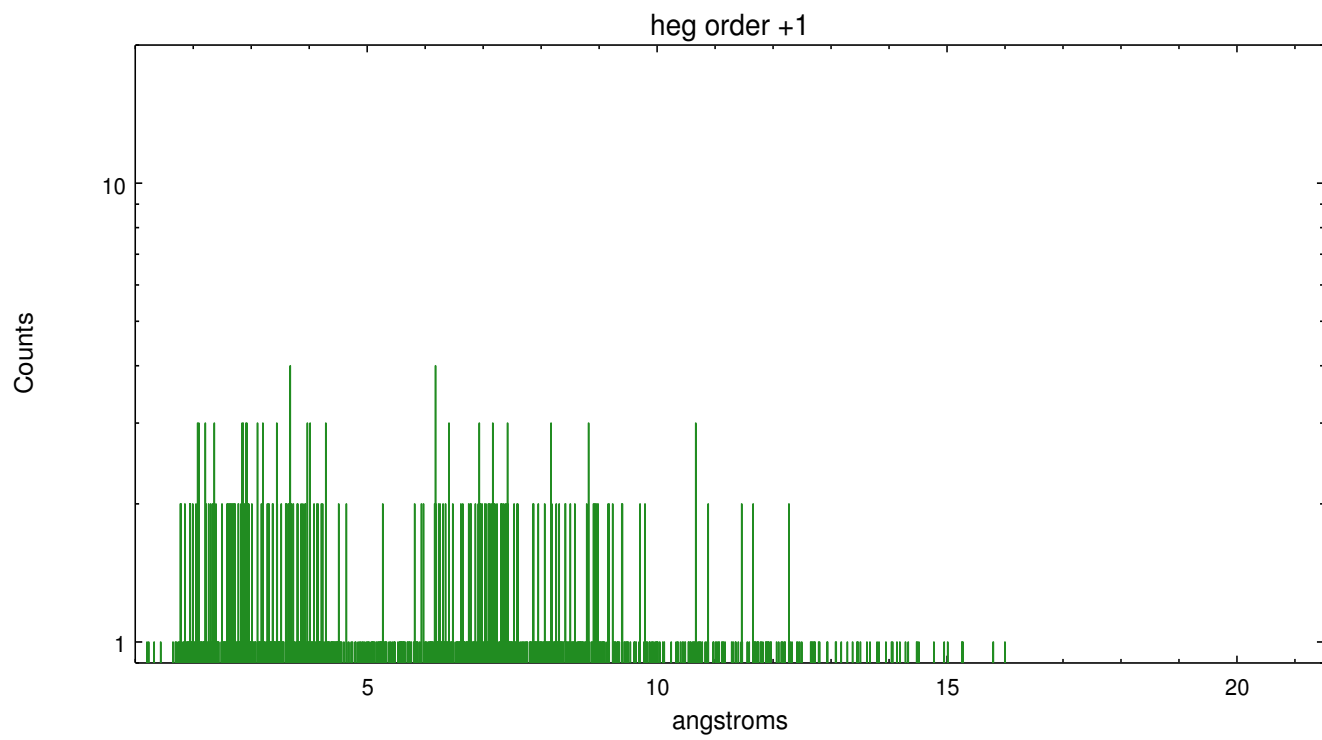
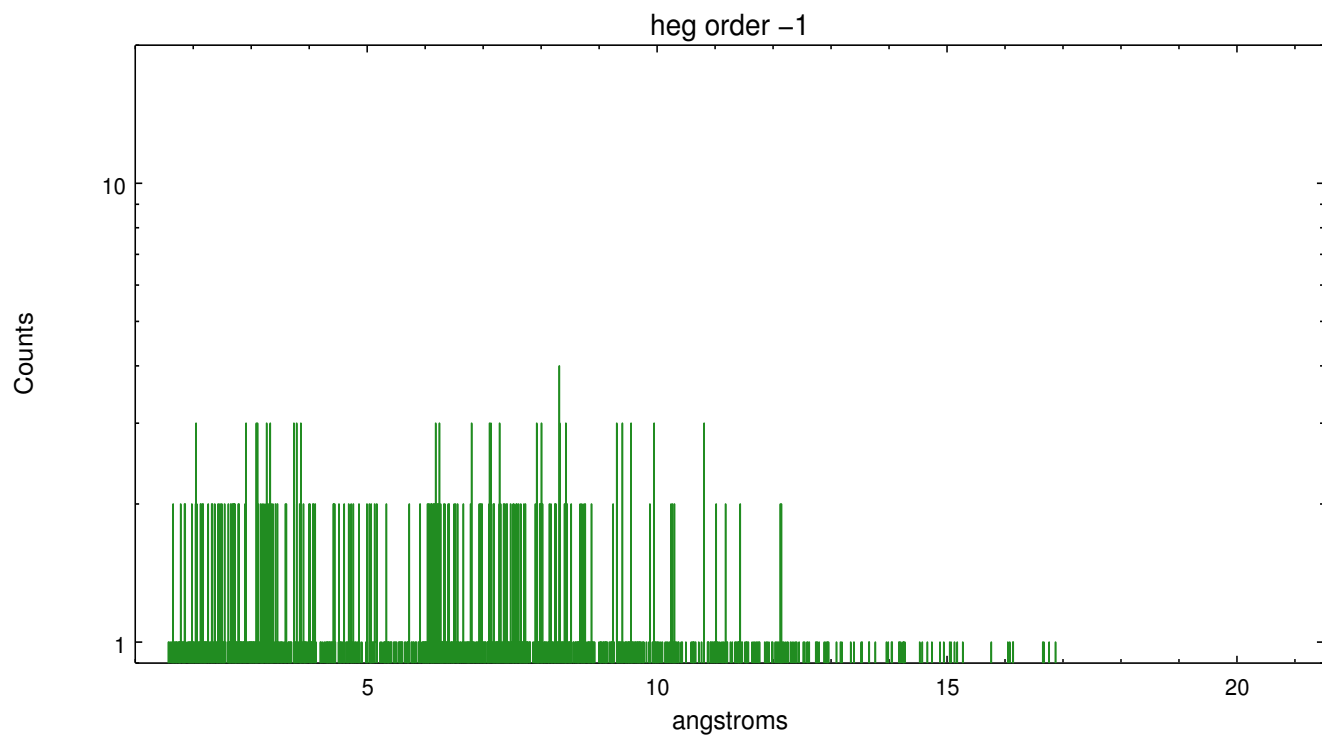
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	227	345	1538	5816	1378	238	201

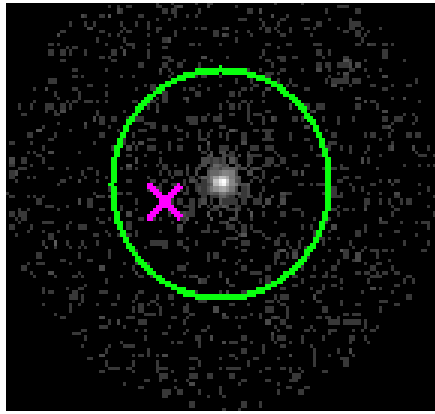




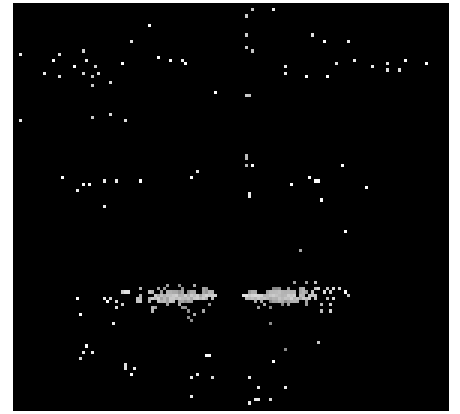
### 3.2 MEG Arm



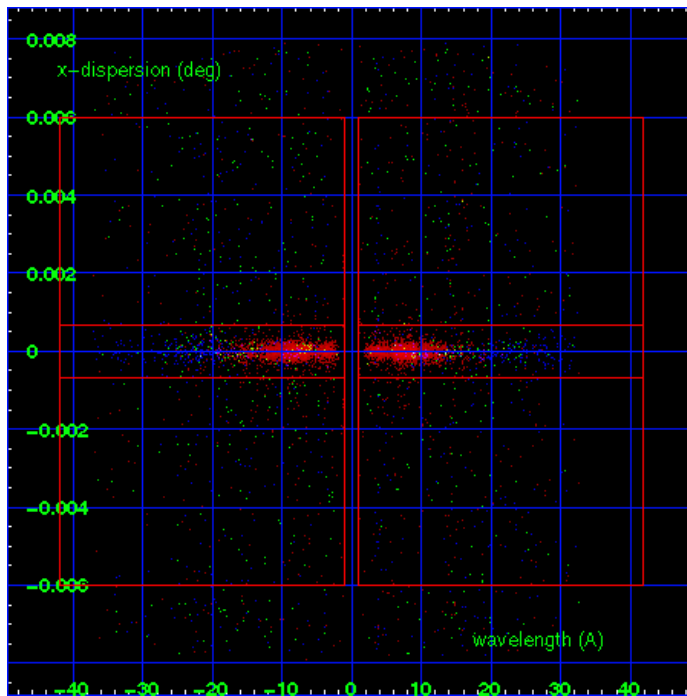
MEG Order Sort 123



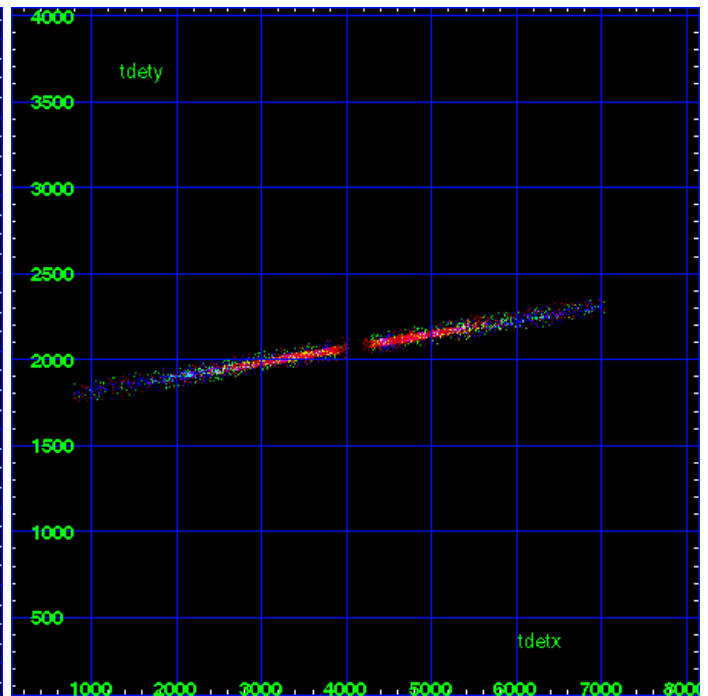
MEG Zero Order



MEG Order Sort ALL

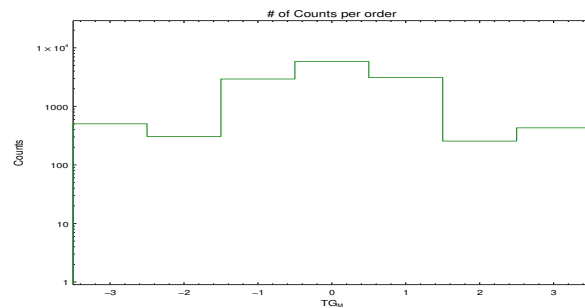


Spot Image MEG

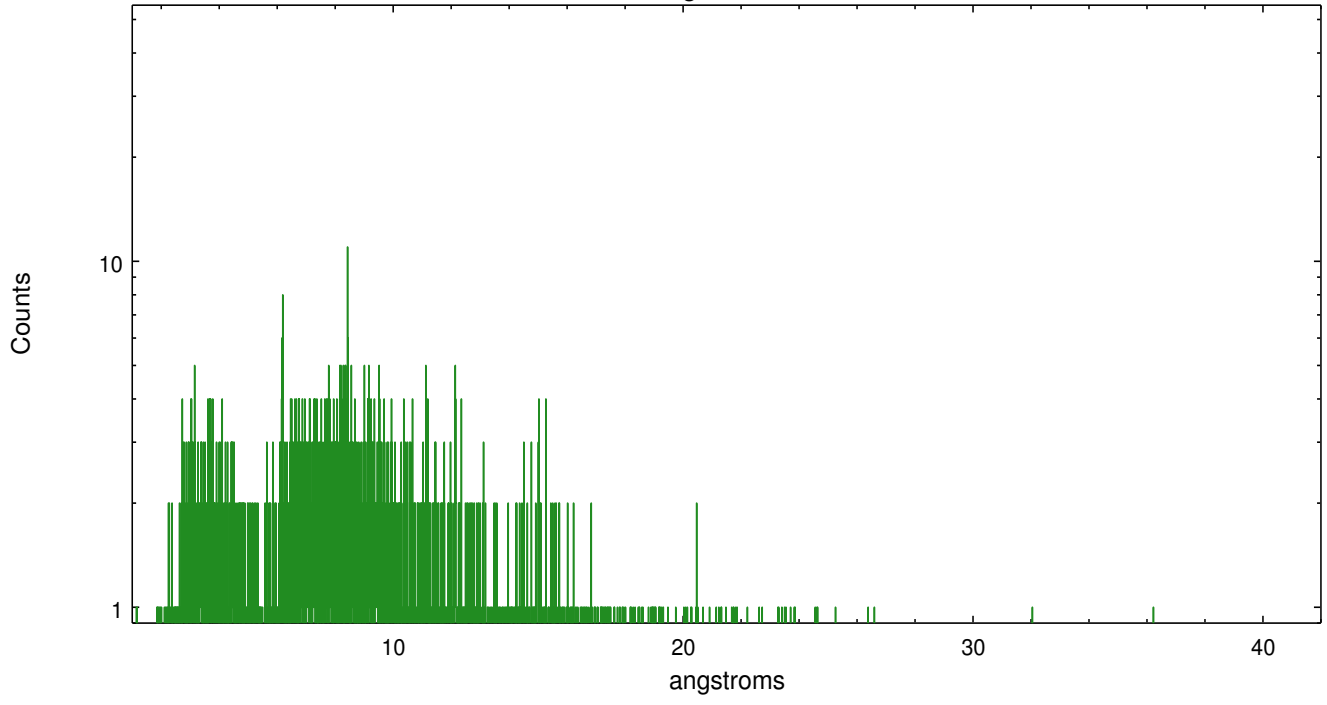


Full Detector MEG

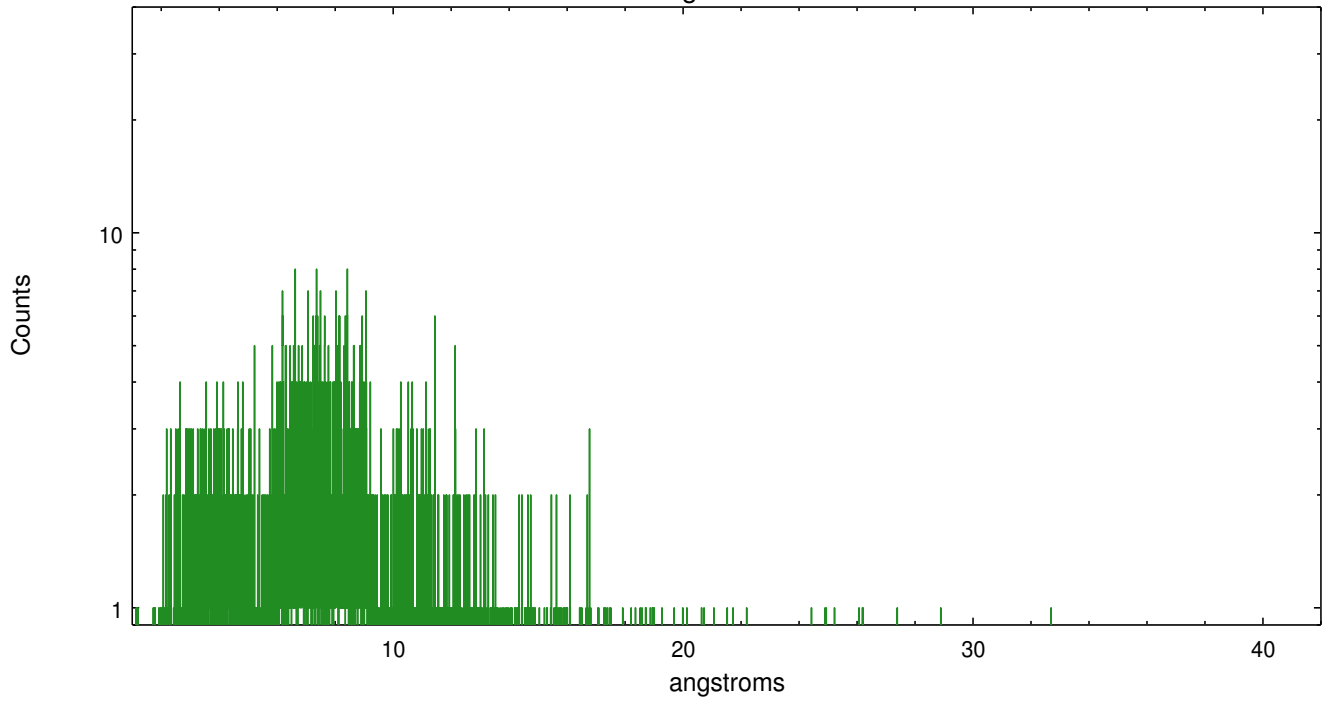
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	504	306	2933	5816	3099	255	430



meg order -1



meg order +1



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.2775

## A.2 Comments