

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 17789 - L2 Version 1
Chandra X-Ray Center

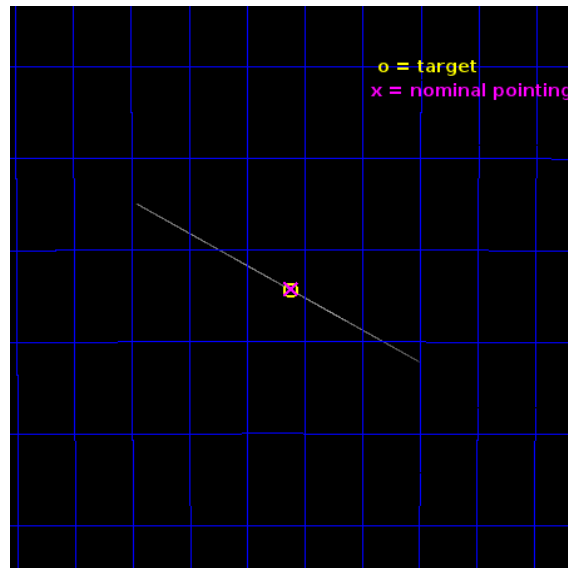
L2 Processing Date : May 27 2016

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1 Front

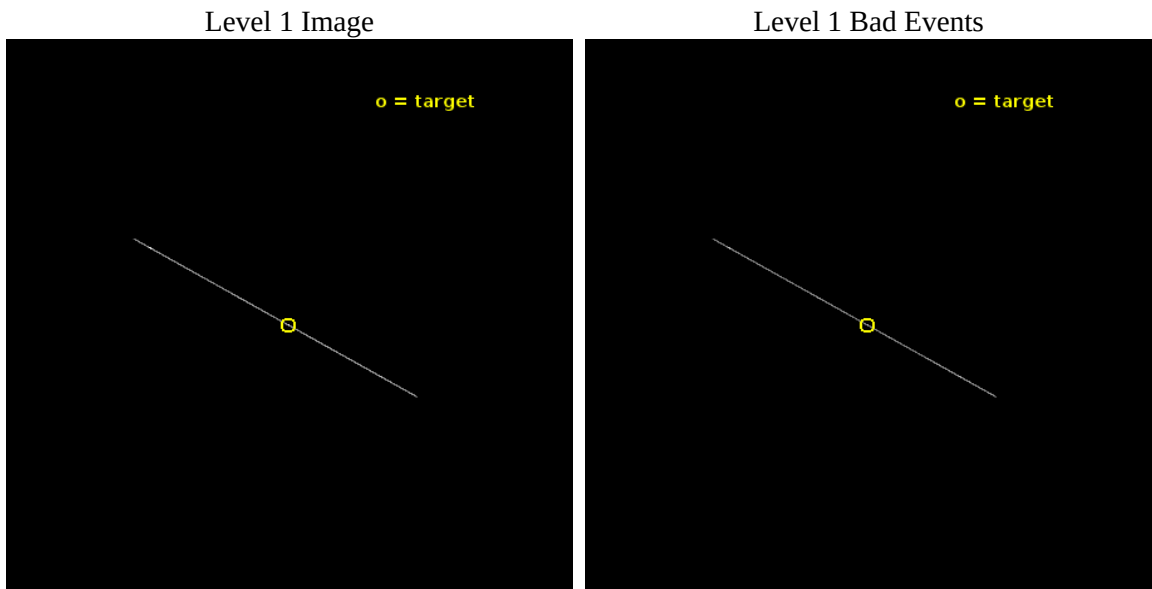
seq_num	401721	Sequence number
obs_id	17789	Observation id
title	FOLLOWING THE ULTRA-FAST WINDS IN STELLAR-MASS BLACK HOLE, IGR J17091-3624	Proposal title
observer	Dr. Ashley King	Principal investigator
object	IGR J17091-3624	Source name
ra_targ	257.279167	Observer's specified target RA [deg]
dec_targ	-36.406944	Observer's specified target Dec [deg]
ra_nom	257.27867231293	Nominal RA [deg]
dec_nom	-36.404291923557	Nominal Dec [deg]
roll_nom	30.156361310224	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20128.291894317	Sum of GTIs [s]
livetime	20049.665754104	Livetime [s]
ontime5	20129.75	Sum of GTIs [s]
ontime6	20129.75	Sum of GTIs [s]
ontime7	20128.291894317	Sum of GTIs [s]
ontime8	20129.75	Sum of GTIs [s]
l2events	706813	Number of level 2 events



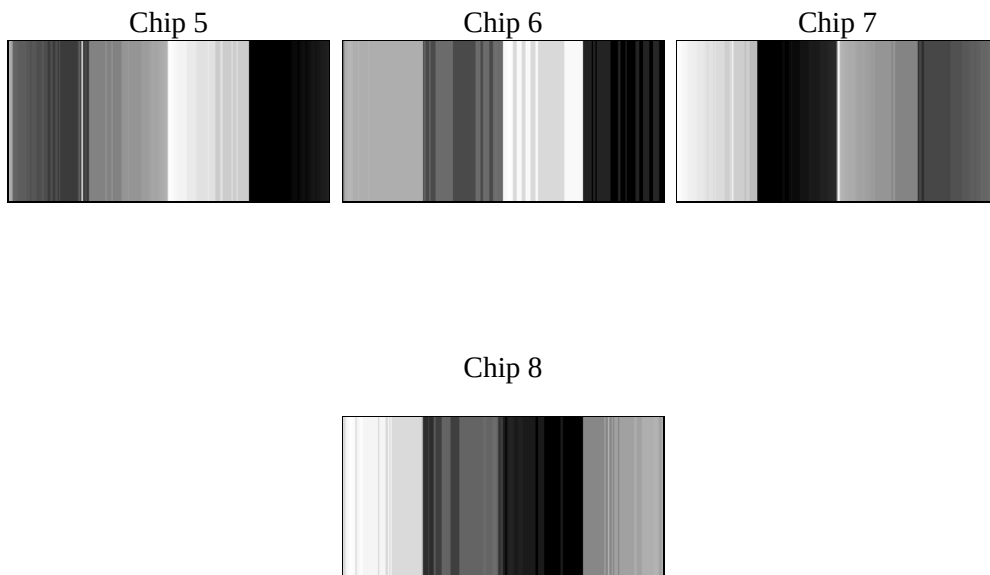
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	20128.291894317	Sum of GTIs [s]
caldsver	4.7.1	 	ontime5	20129.75	Sum of GTIs [s]
date	2016-05-27T15:40:06	Date and time of file creation	ontime6	20129.75	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	20128.291894317	Sum of GTIs [s]
			ontime8	20129.75	Sum of GTIs [s]
			l1events	2074211	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4082.62, 4083.48)	src1a sky pixel position

2.1.4 Events

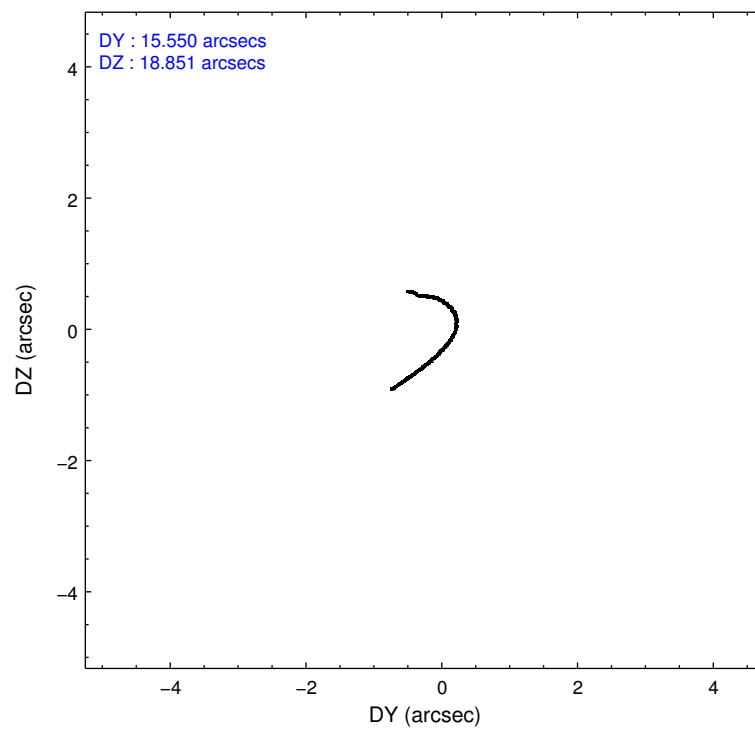
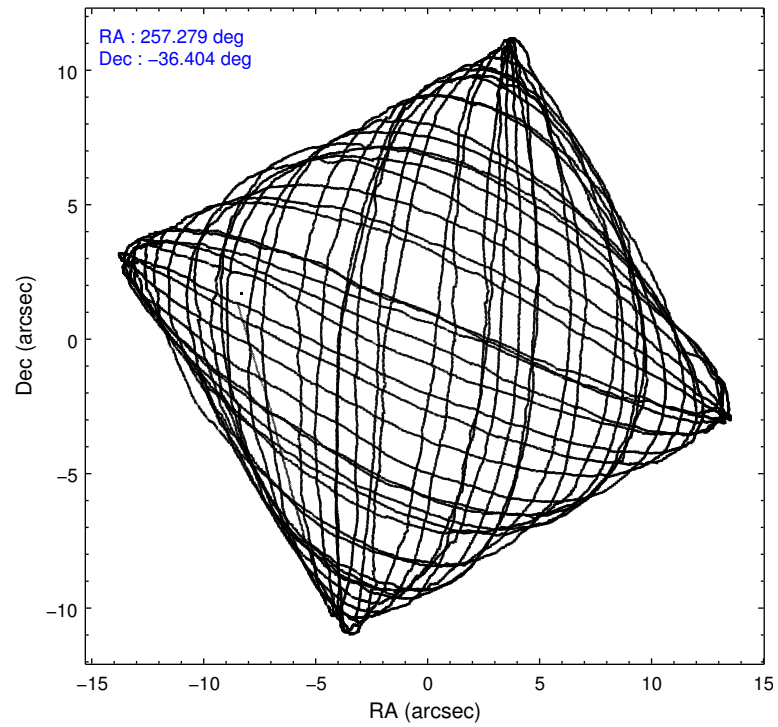
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	712285	349278	599419	413229
rejected events	252616	208496	196169	309969
rejected %	35%	59%	32%	75%

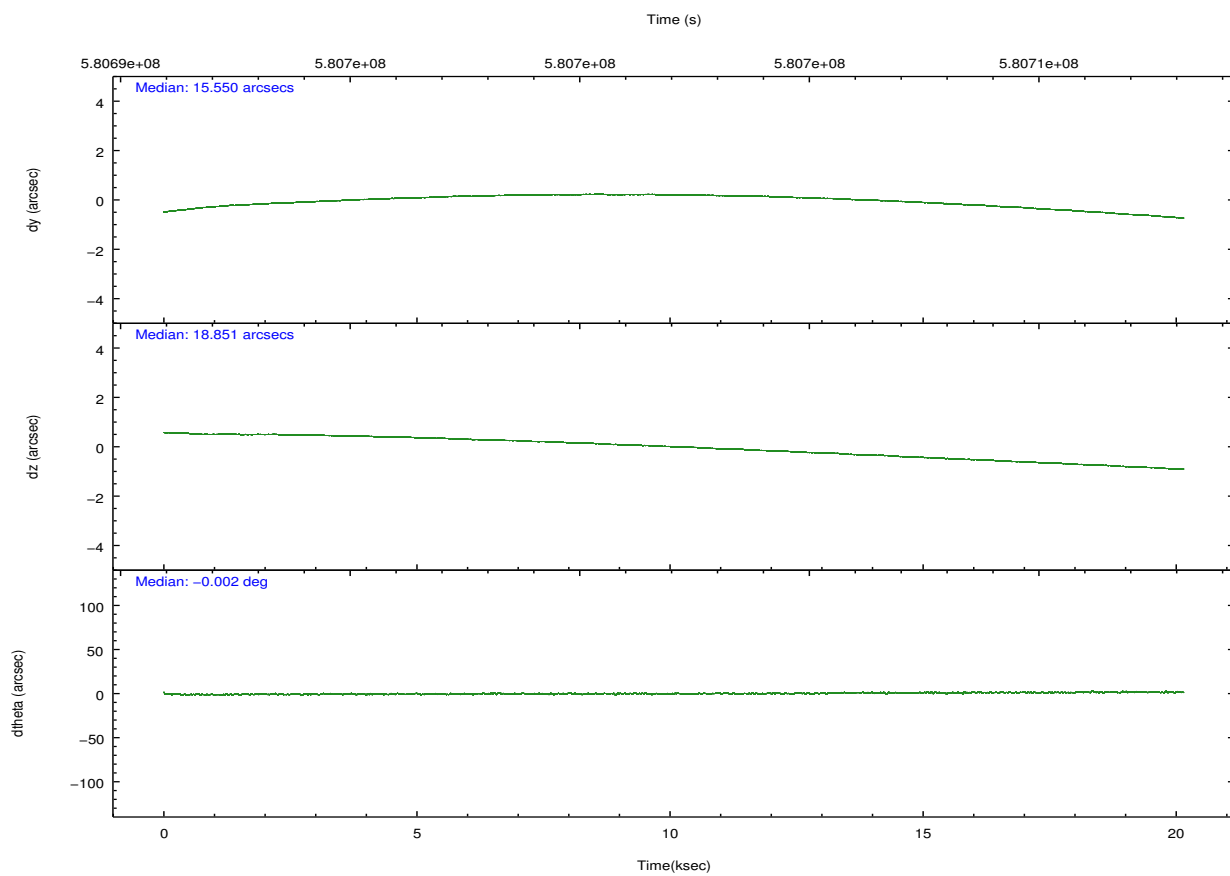
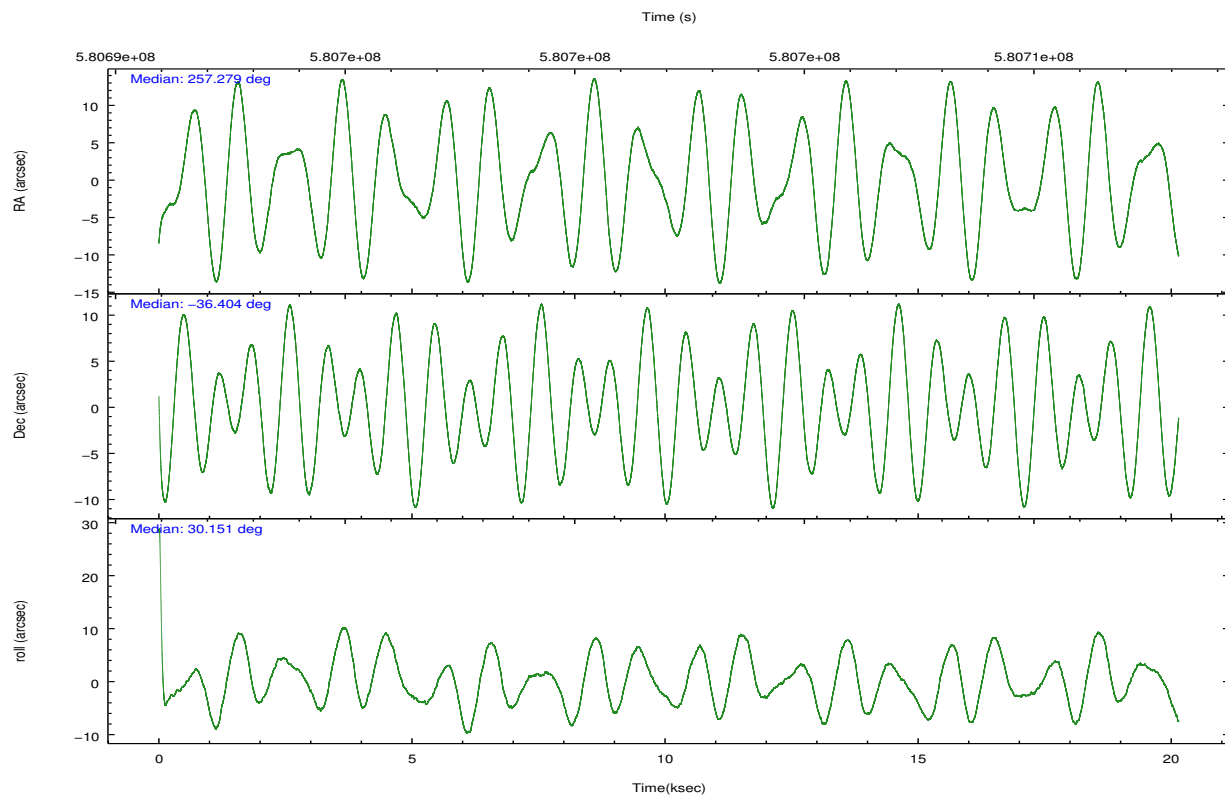
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	168071	5497	58913	25782
	23%	1%	9%	6%
grade 1 events	266	124	886	269
	0%	0%	0%	0%
grade 2 events	217288	112619	123872	44622
	30%	32%	20%	10%
grade 3 events	3087	2958	31059	7424
	0%	0%	5%	1%
grade 4 events	2947	2815	30997	7013
	0%	0%	5%	1%
grade 5 events	14403	7068	20441	9876
	2%	2%	3%	2%
grade 6 events	68414	16917	158467	18428
	9%	4%	26%	4%
grade 7 events	237809	201280	174784	299815
	33%	57%	29%	72%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	257.262104	257.2786723129296	Subarray requested	NONE	NONE
[deg] Pointing Dec	-36.428260	-36.40429192355739	Alternating exposures requested	N	N
[deg] Pointing Roll	29.989868	30.15636131022433	[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	-187.132523	-187.1254020033014			
[mm] SIM translation stage offset	-3	-3.007120579706367			
[s] Observation start time (MET)	580692116.184000	580690988.5993201			
Observation start date	2016-05-26T23:20:48	2016-05-26T23:03:08			
[s] Observation end time (MET)	580712116.184000	580713171.13809			
Observation end date	2016-05-27T04:54:08	2016-05-27T05:12:51			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



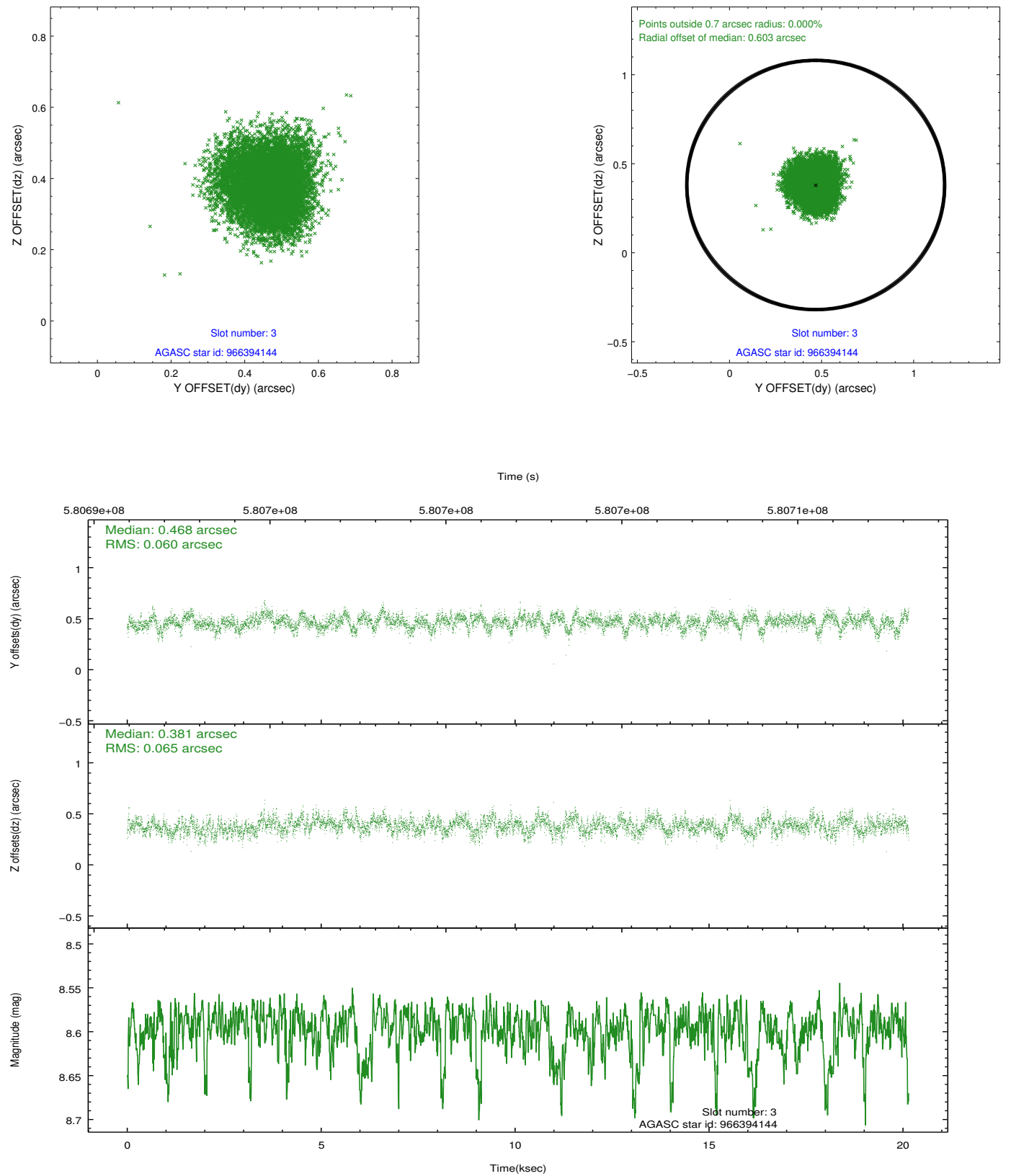


Slot Statistics

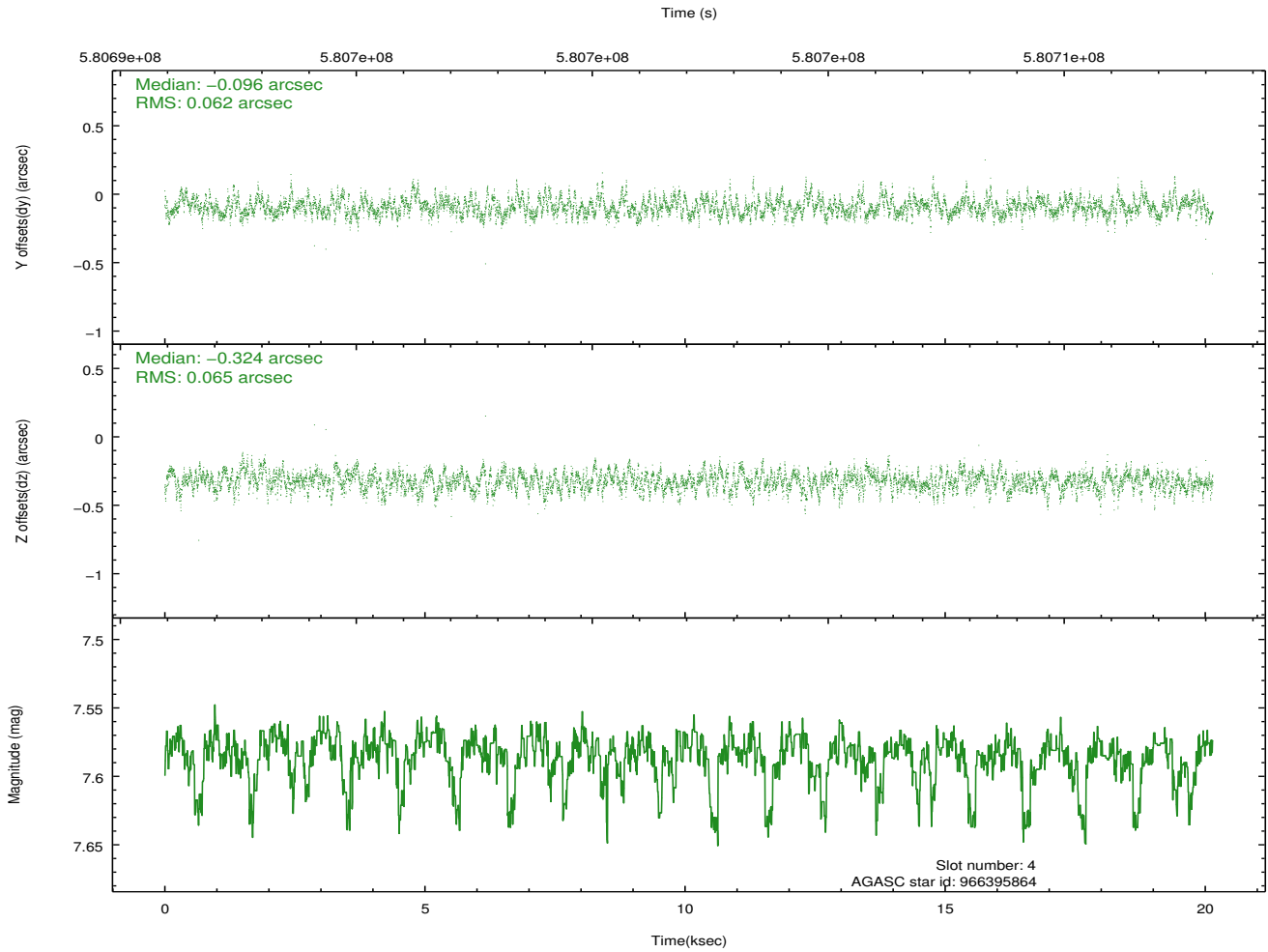
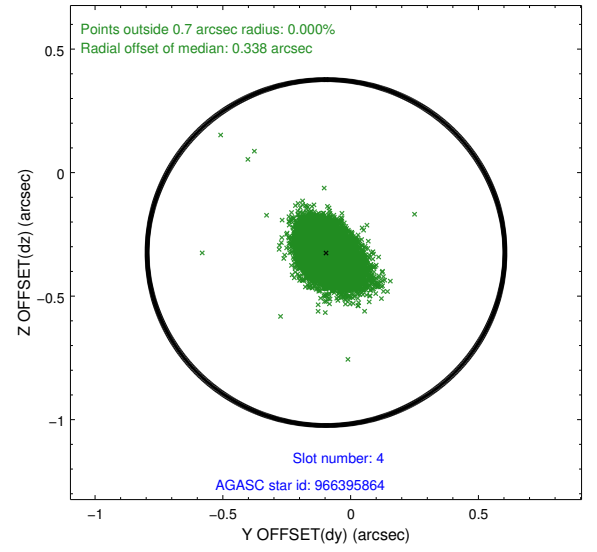
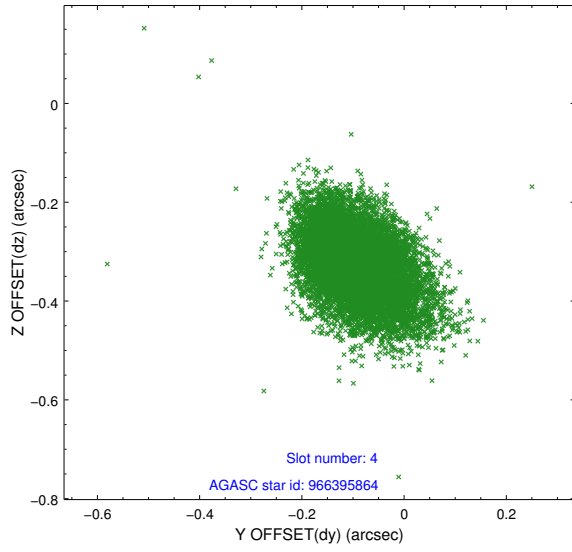
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.10	4914	-0.276	-0.182	0.010	0.015	0.000000	0.000000	-768.59	-1802.52
1	FID		ACIS-S-4	7.21	4914	0.285	0.165	0.015	0.023	0.000000	0.000000	2145.22	106.01
2	FID		ACIS-S-6	7.38	4912	-0.035	0.024	0.013	0.022	0.000000	0.000000	393.95	743.53
3	GUIDE	used	966394144	8.60	9823	0.468	0.381	0.094	0.155	256.902901	-37.062041	-2035.08	-1461.79
4	GUIDE	used	966395864	7.58	9825	-0.096	-0.324	0.093	0.157	256.670769	-36.077904	-862.57	1947.49
5	GUIDE	used	966396120	7.82	9827	0.087	0.401	0.080	0.127	256.737004	-36.720258	-1839.52	-156.32
6	GUIDE	used	966402904	8.05	9827	-0.307	-0.119	0.066	0.107	257.709598	-36.005094	1888.45	665.64
7	GUIDE	used	966398520	8.31	9825	-0.153	-0.340	0.076	0.128	256.842646	-35.892866	-97.40	2277.66

2.4 Star Slots

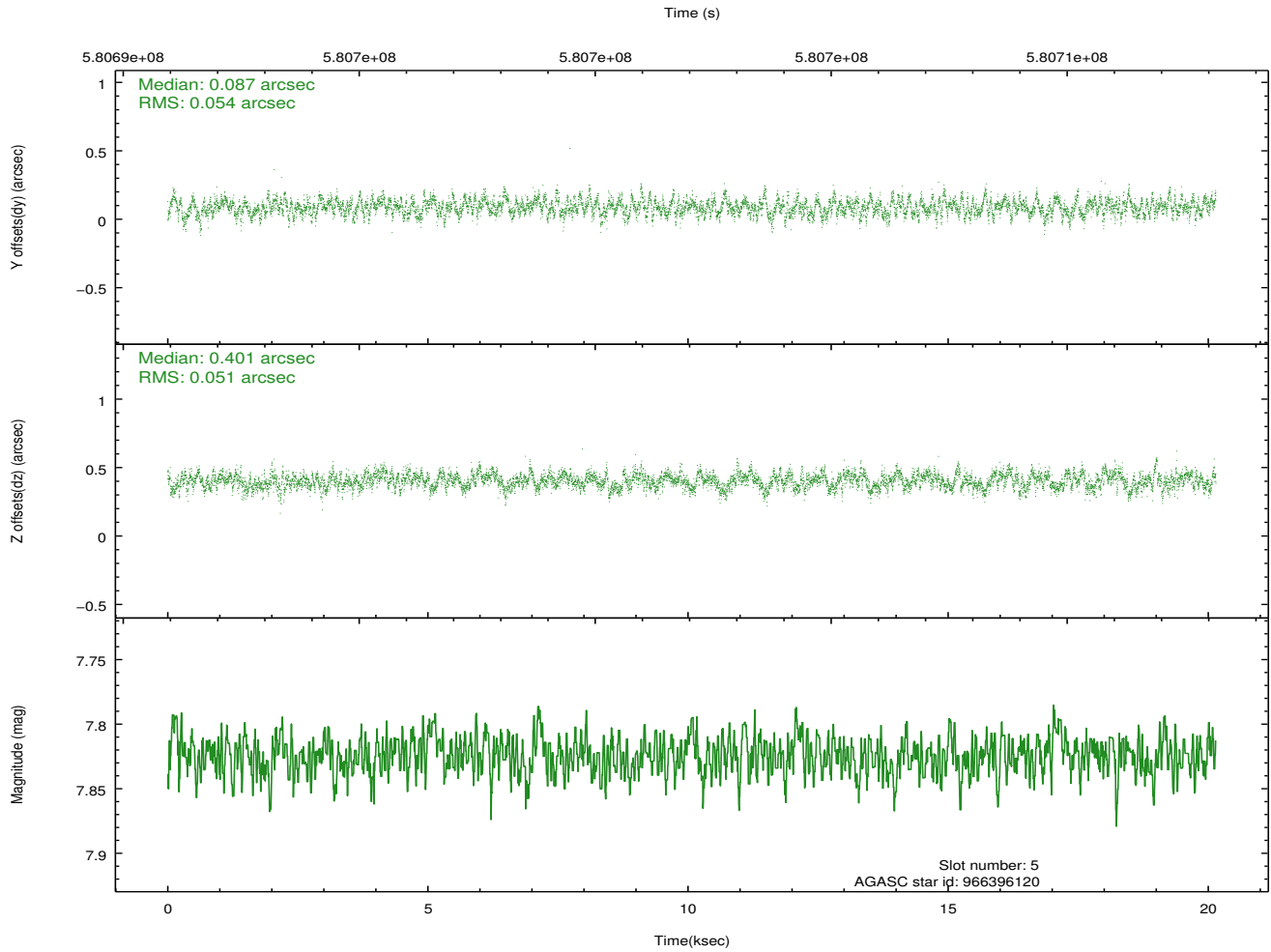
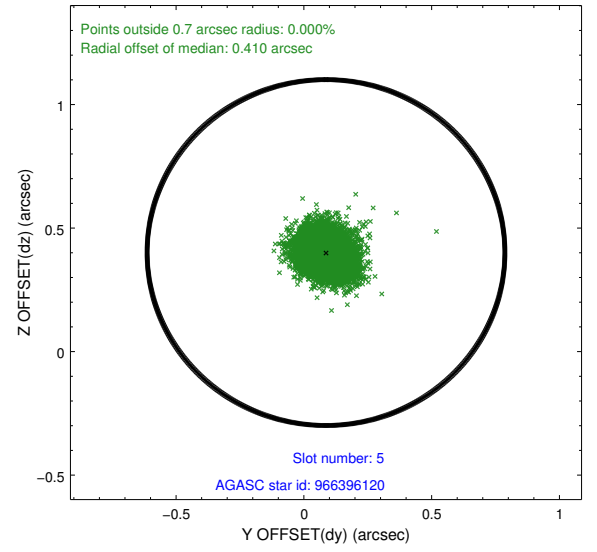
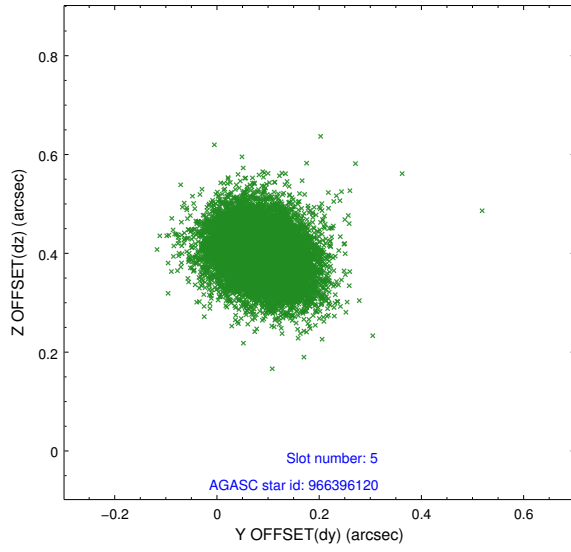
2.4.1 Slot 3



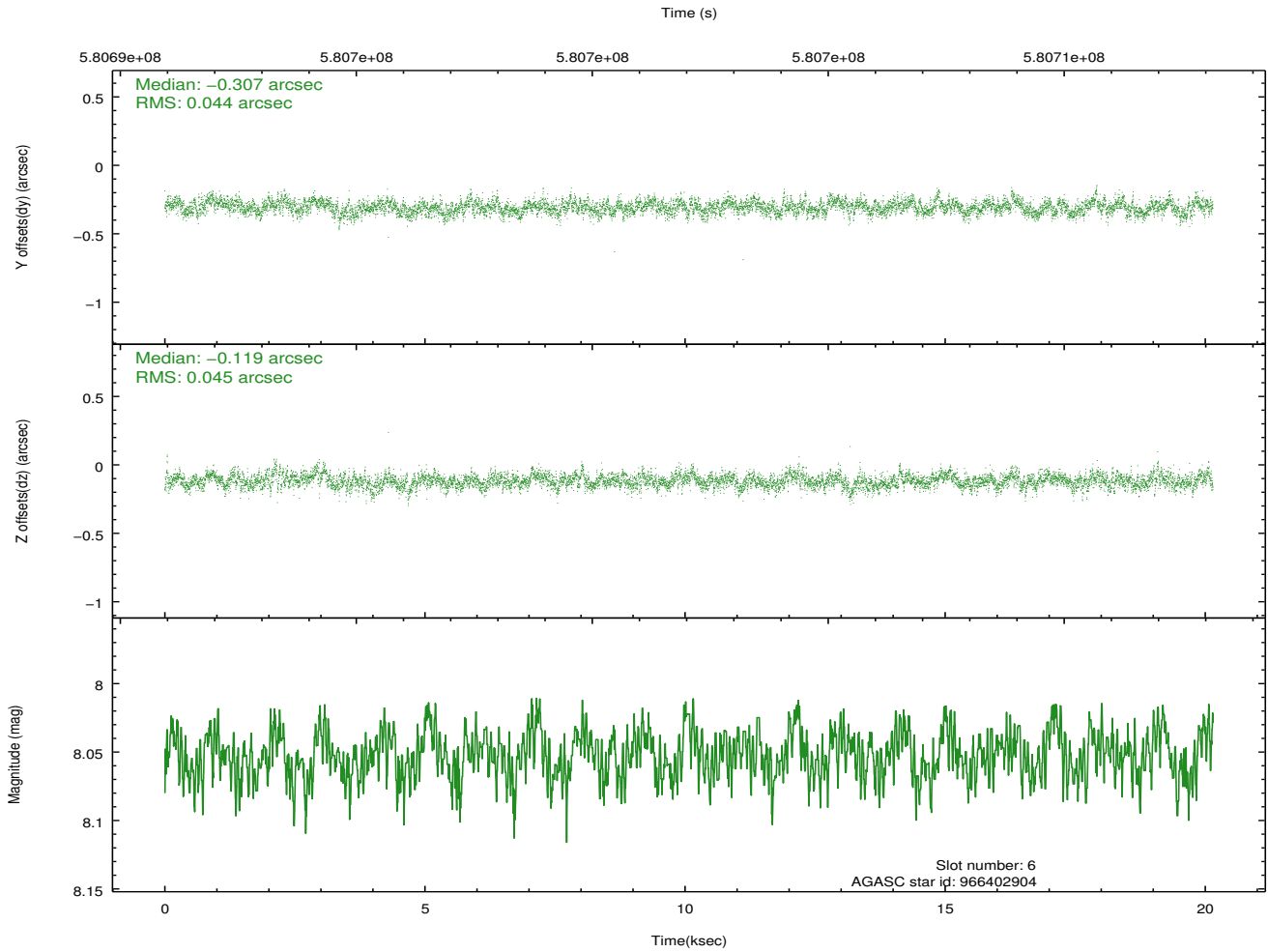
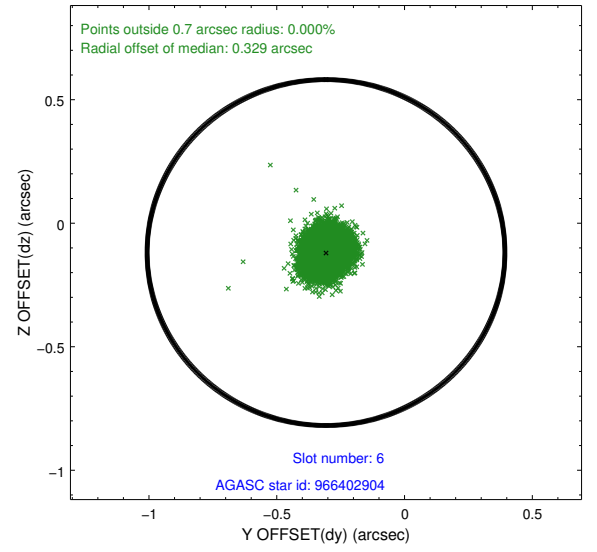
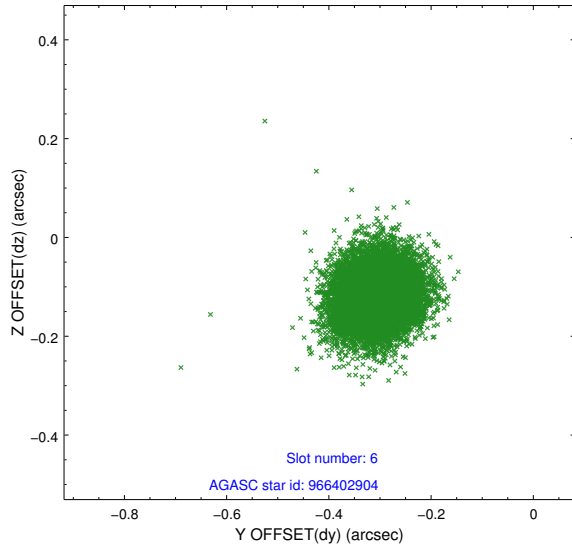
2.4.2 Slot 4



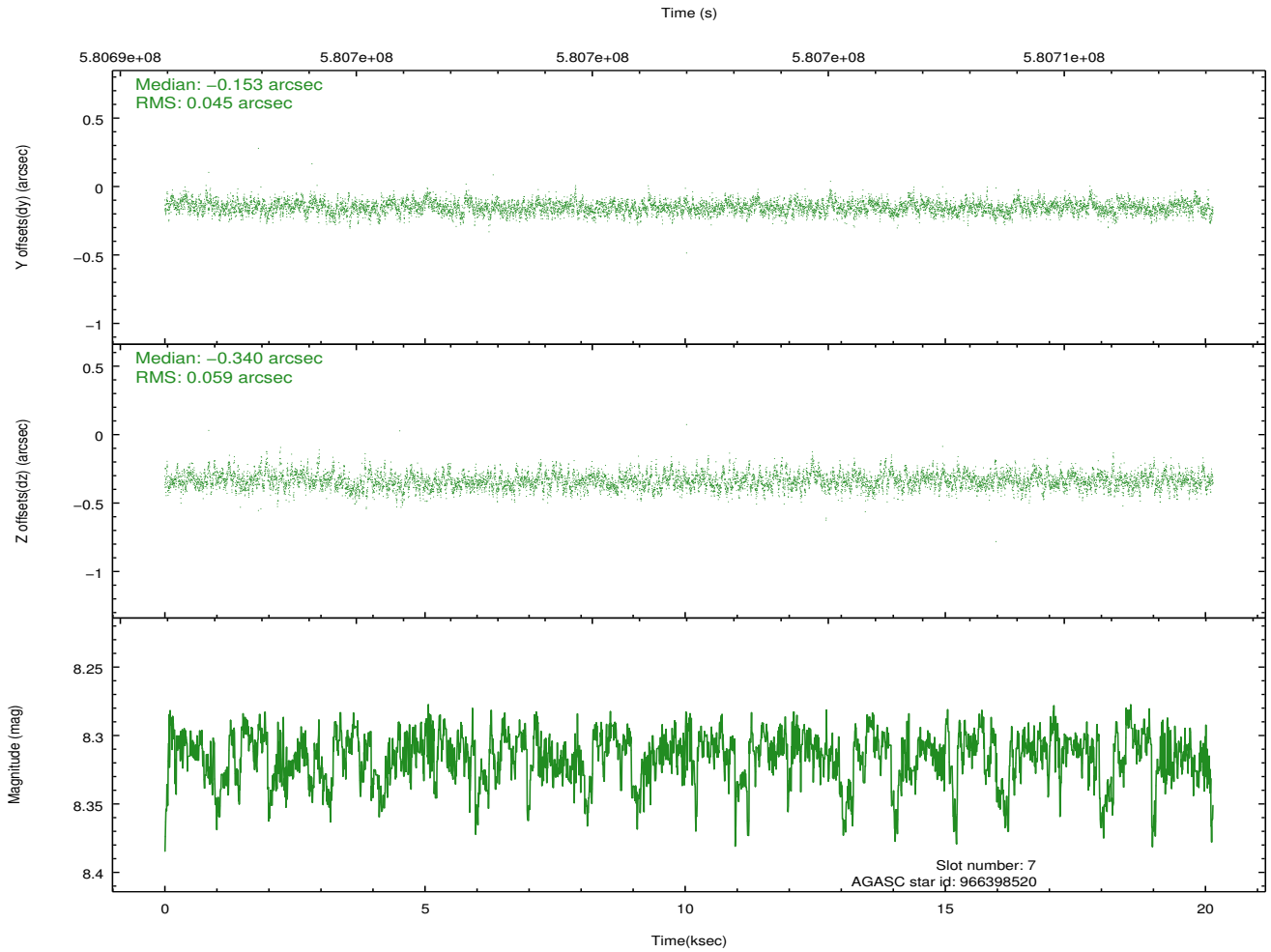
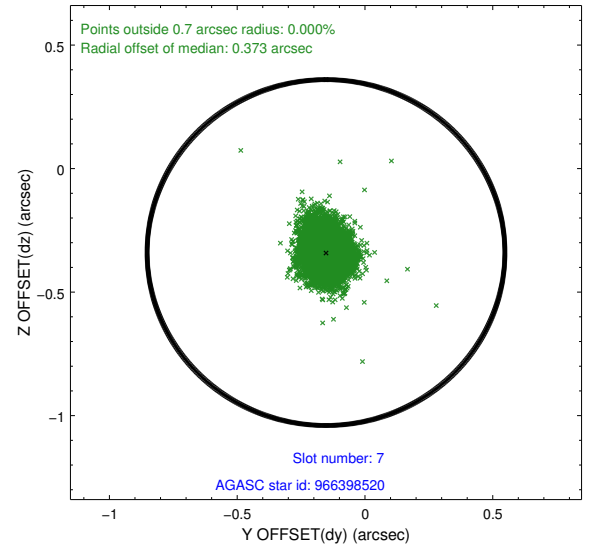
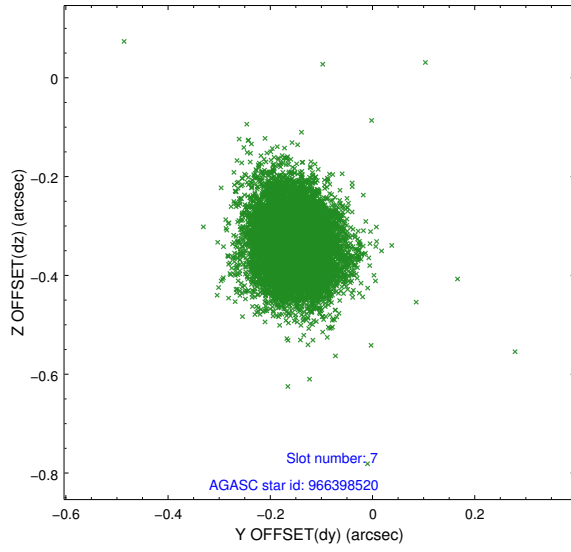
2.4.3 Slot 5



2.4.4 Slot 6

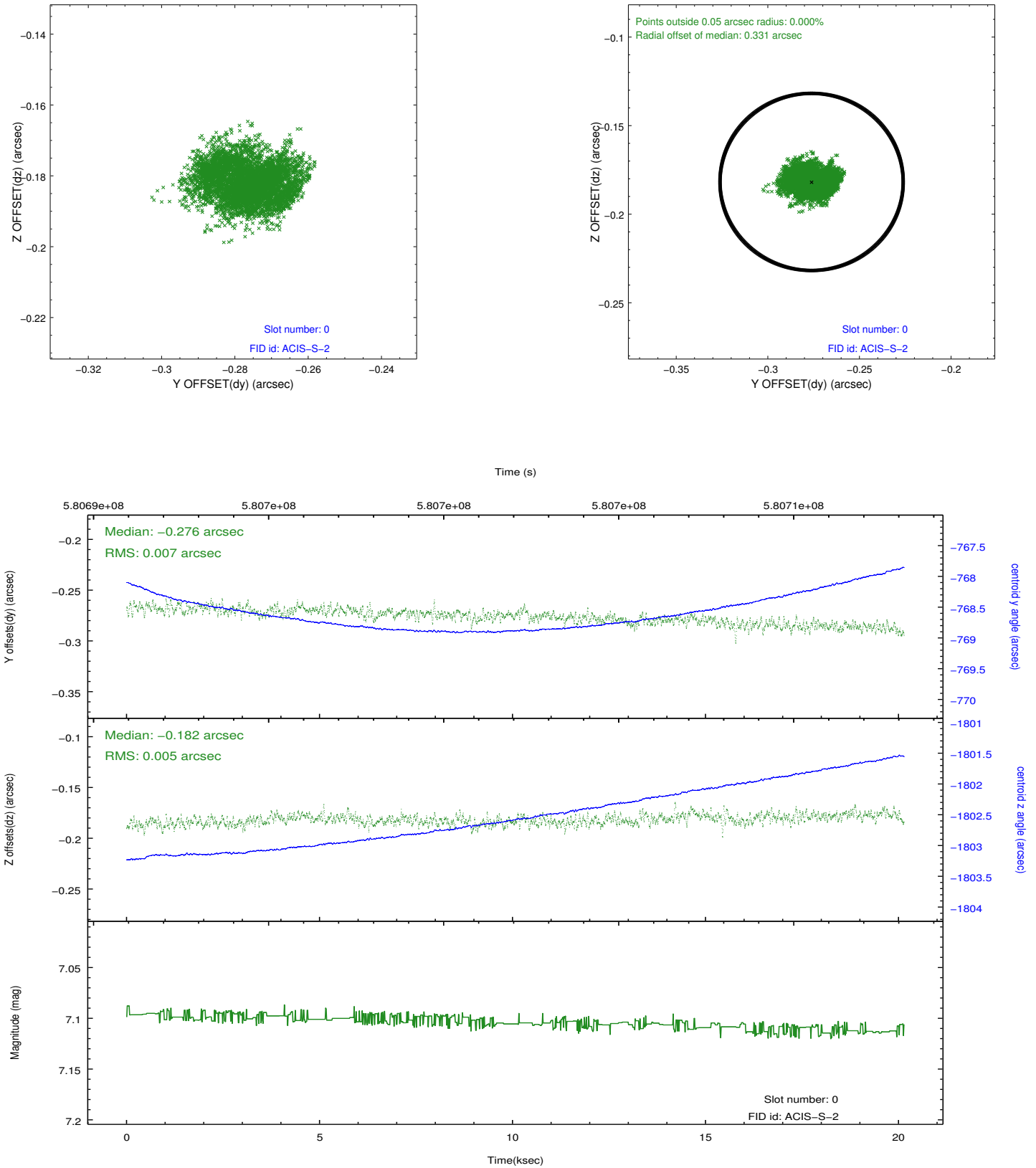


2.4.5 Slot 7

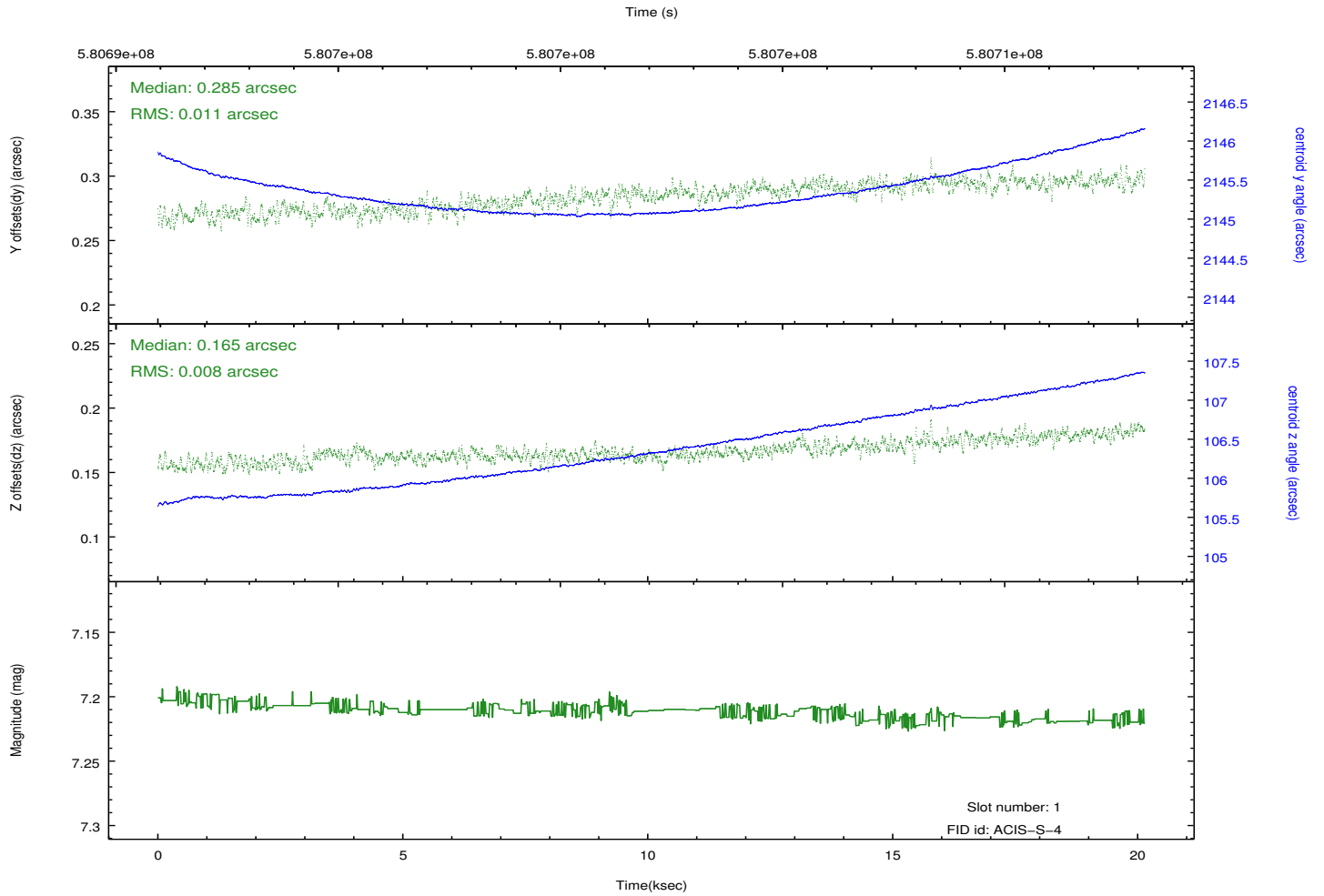
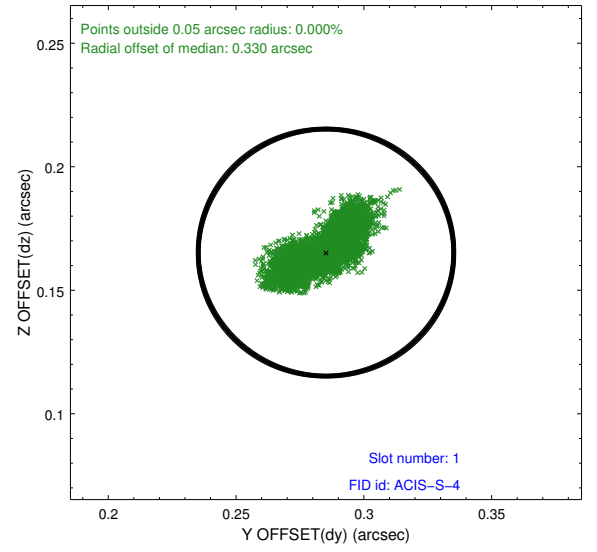
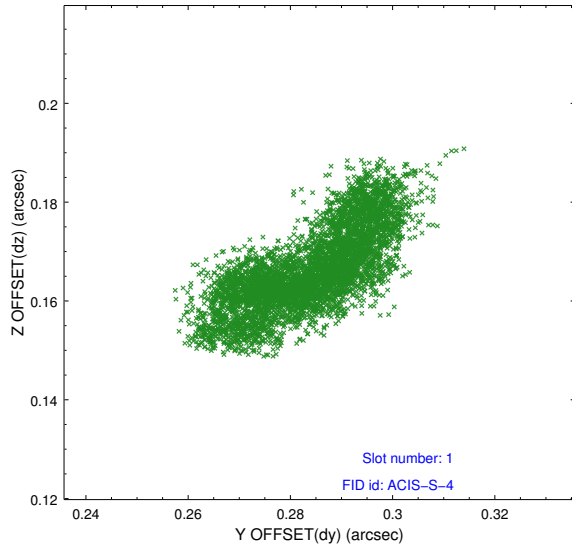


2.5 FID Slots

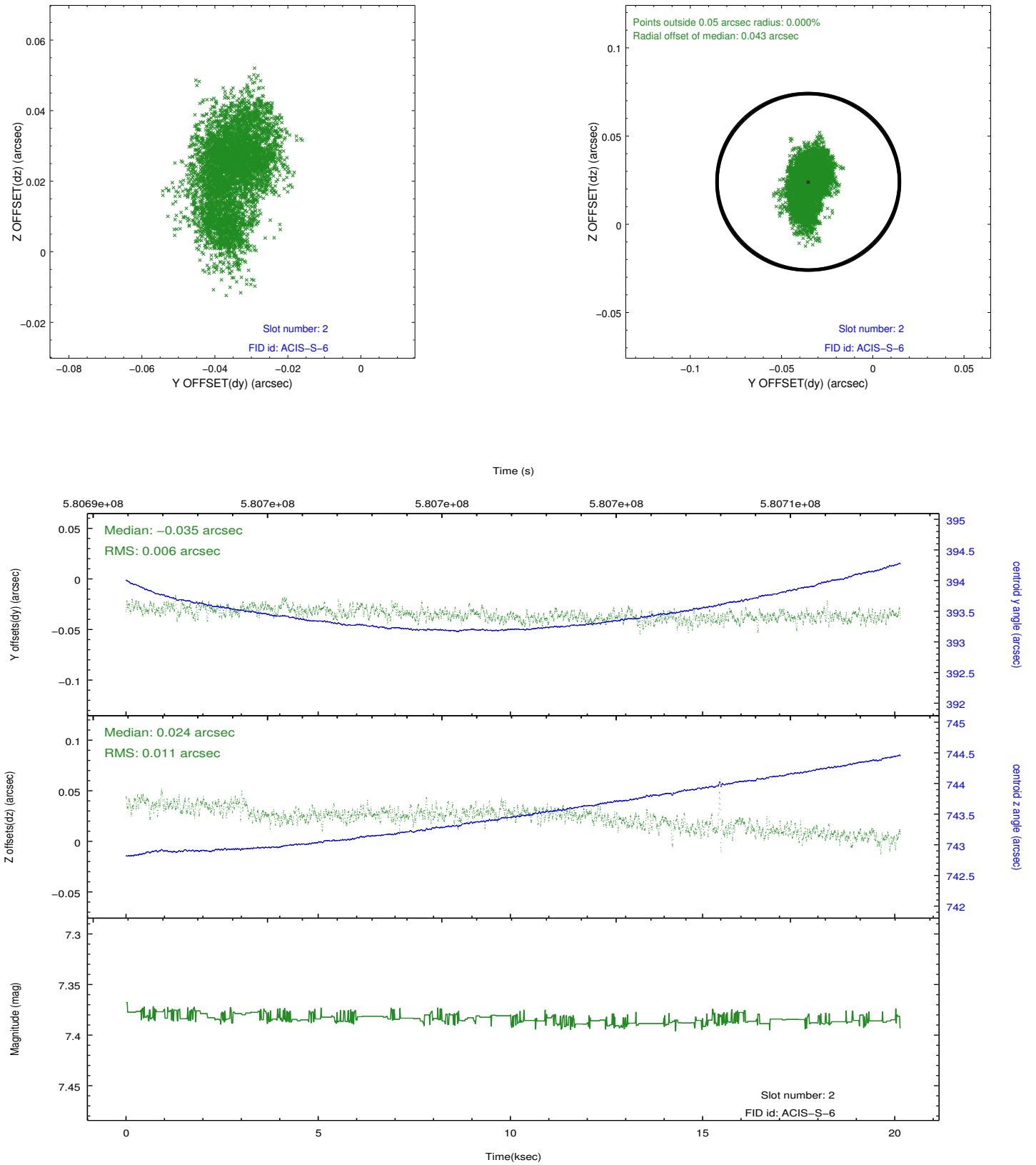
2.5.1 Slot 0



2.5.2 Slot 1

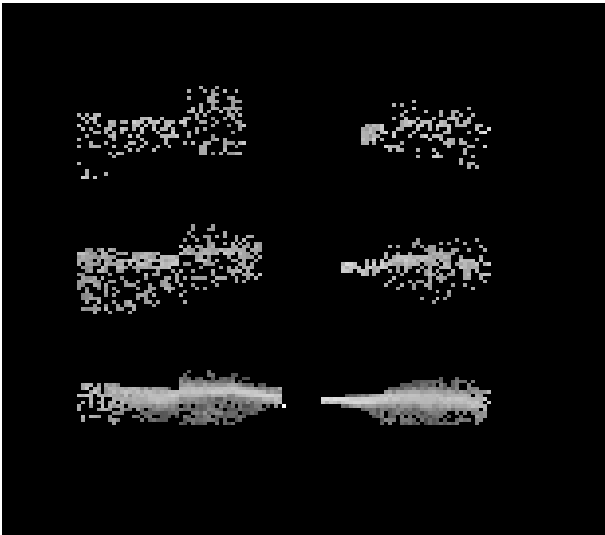


2.5.3 Slot 2

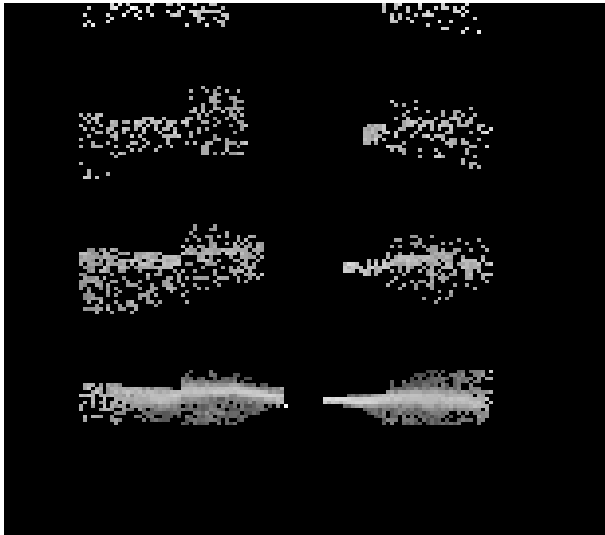


3 Gratings

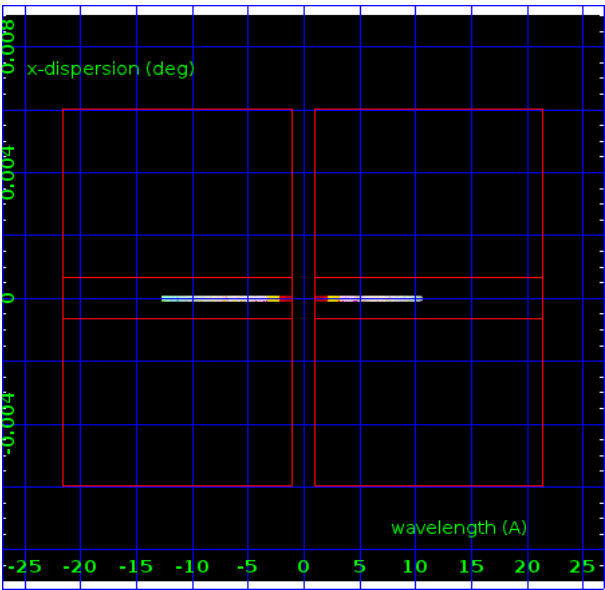
3.1 HEG Arm



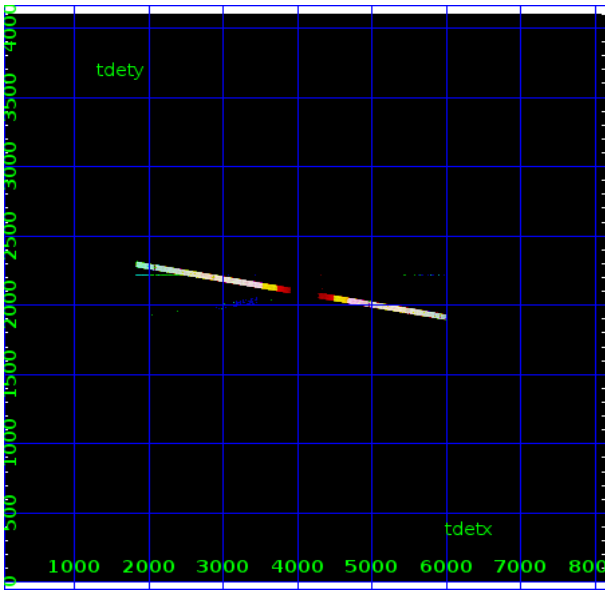
HEG Order Sort 123



HEG Order Sort ALL

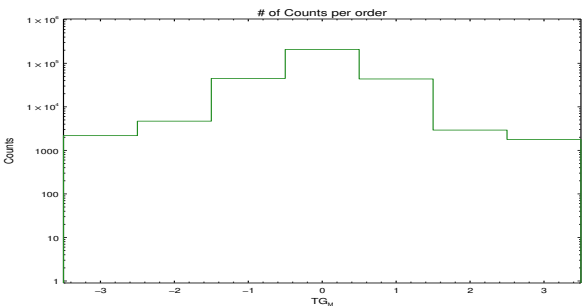


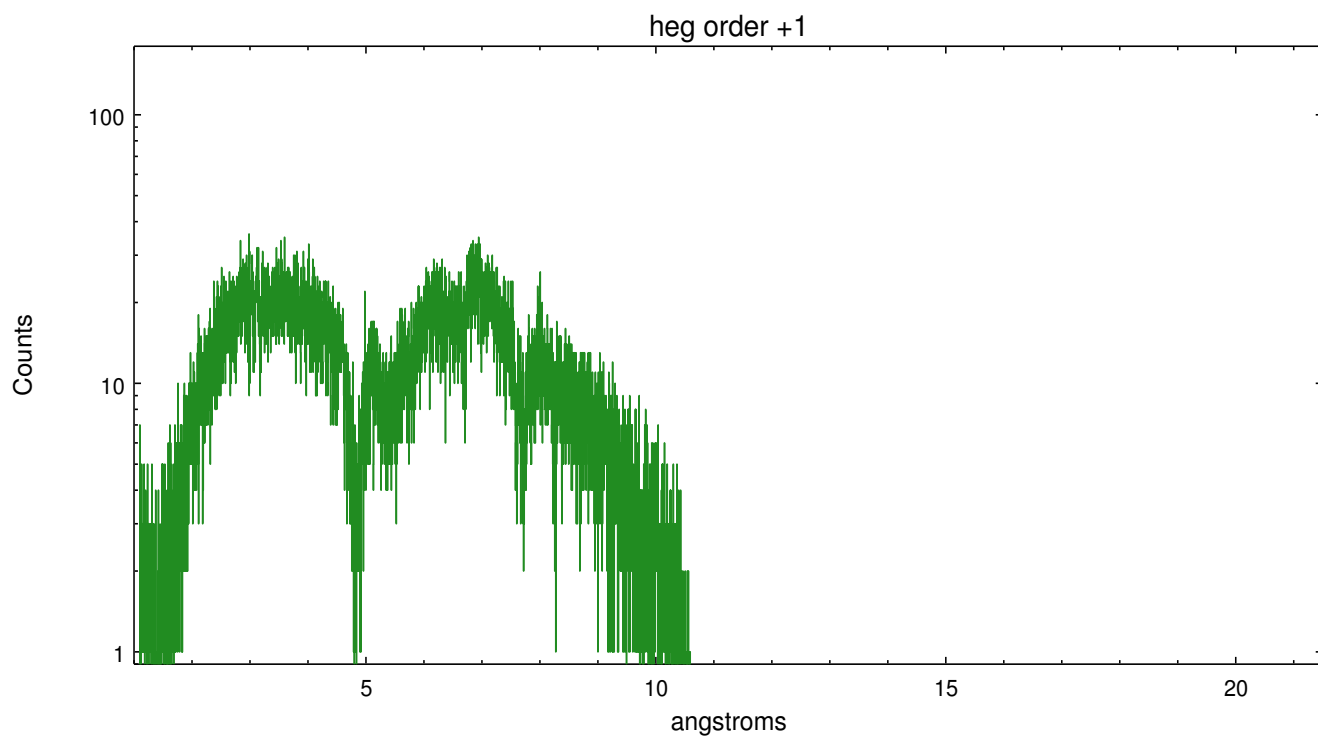
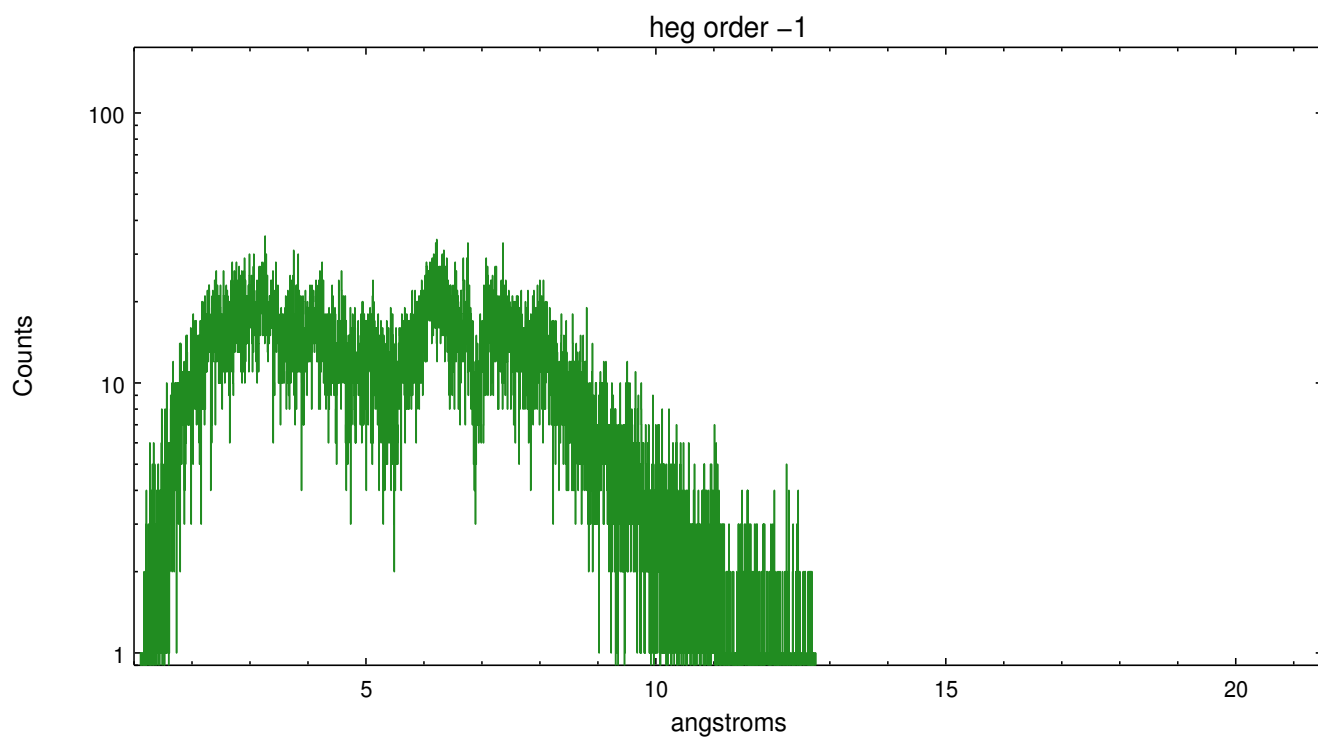
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2183	4687	44936	208237	43651	2923	1782





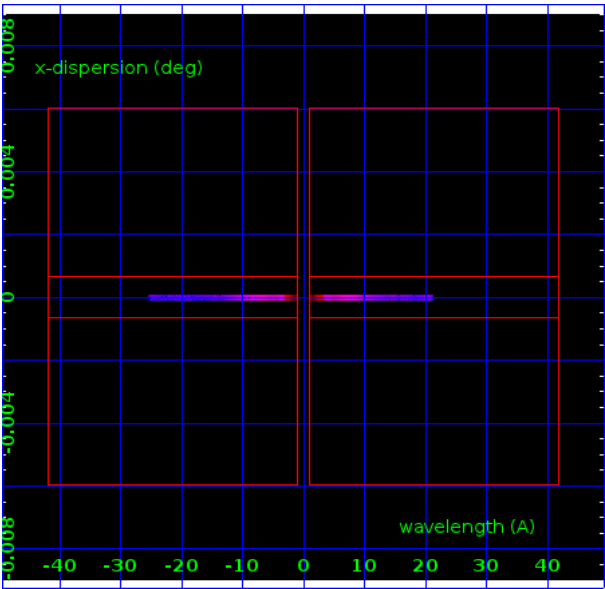
3.2 MEG Arm



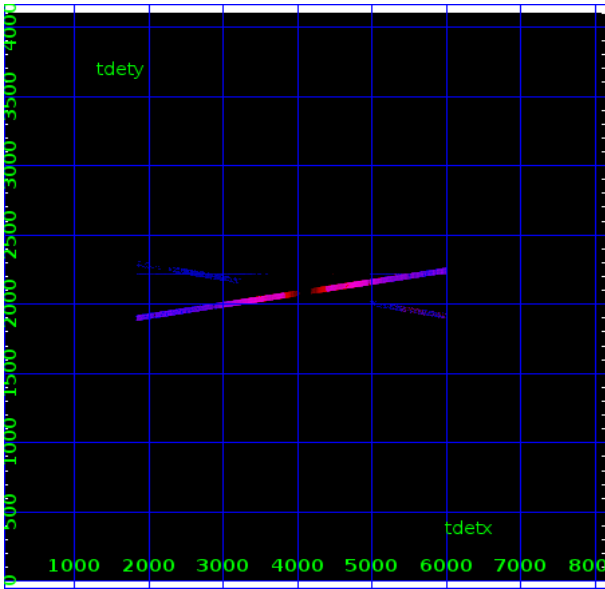
MEG Order Sort 123



MEG Order Sort ALL

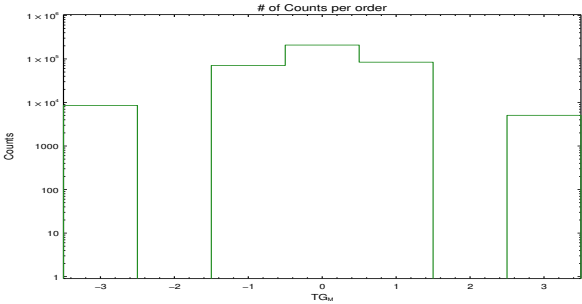


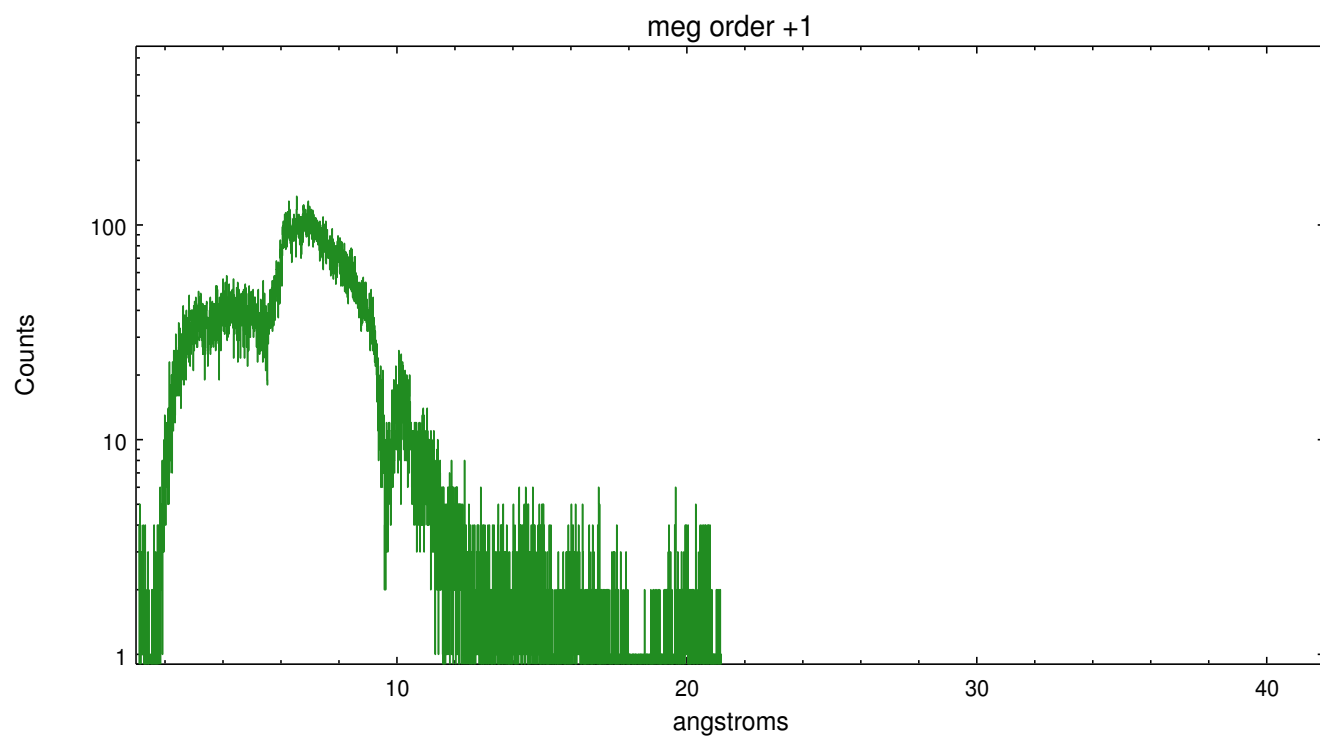
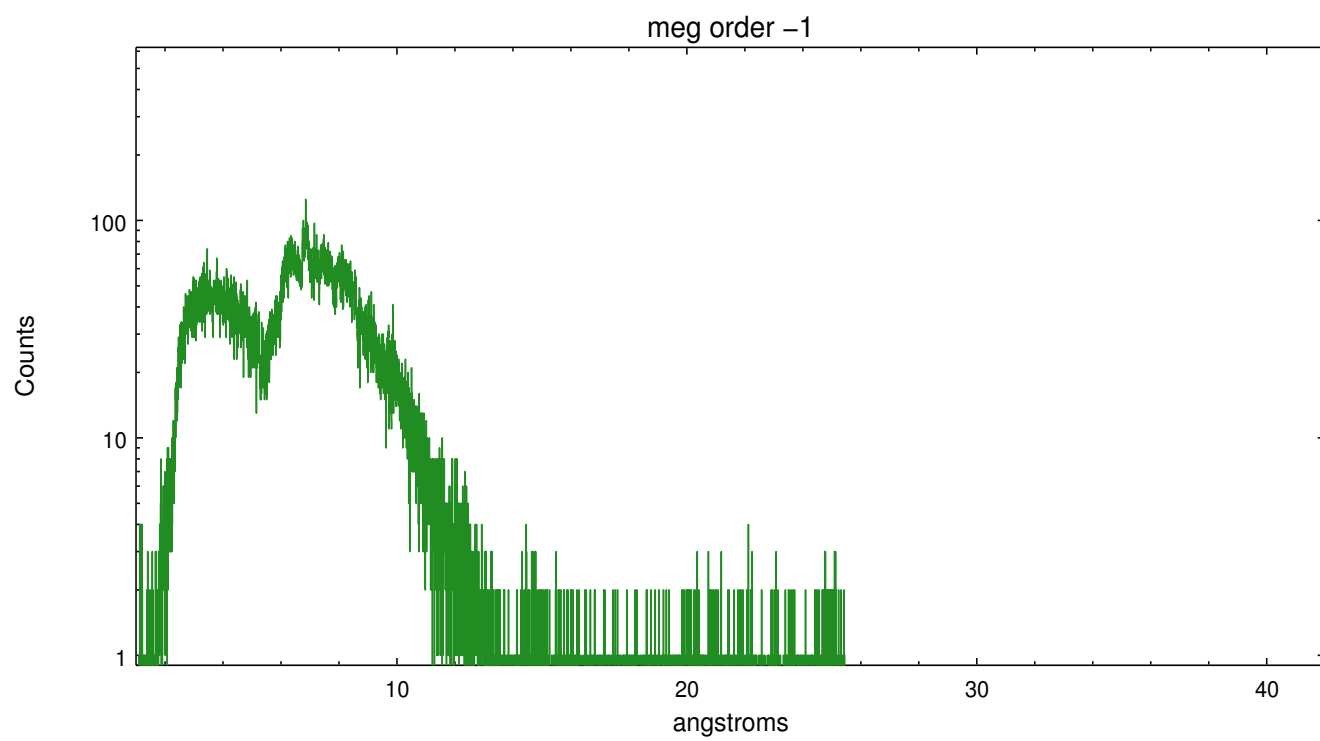
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	8560	0	70740	208237	84169	0	5064





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2016.05.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.128291894317

A.2 Comments