

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1252 - L2 Version 5
Chandra X-Ray Center

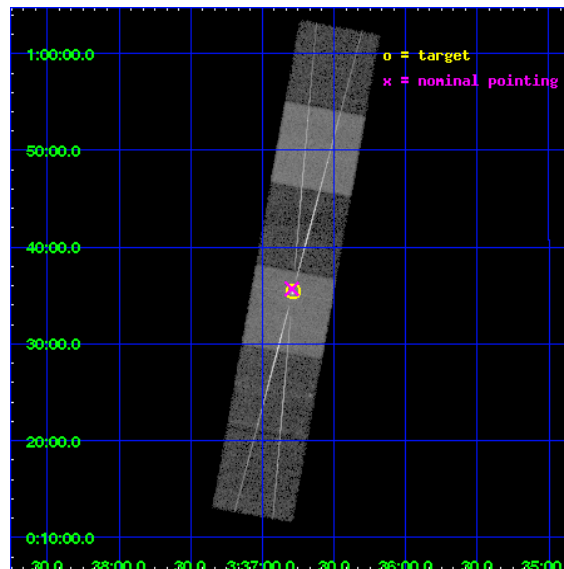
L2 Processing Date : Dec 3 2009

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1 Front

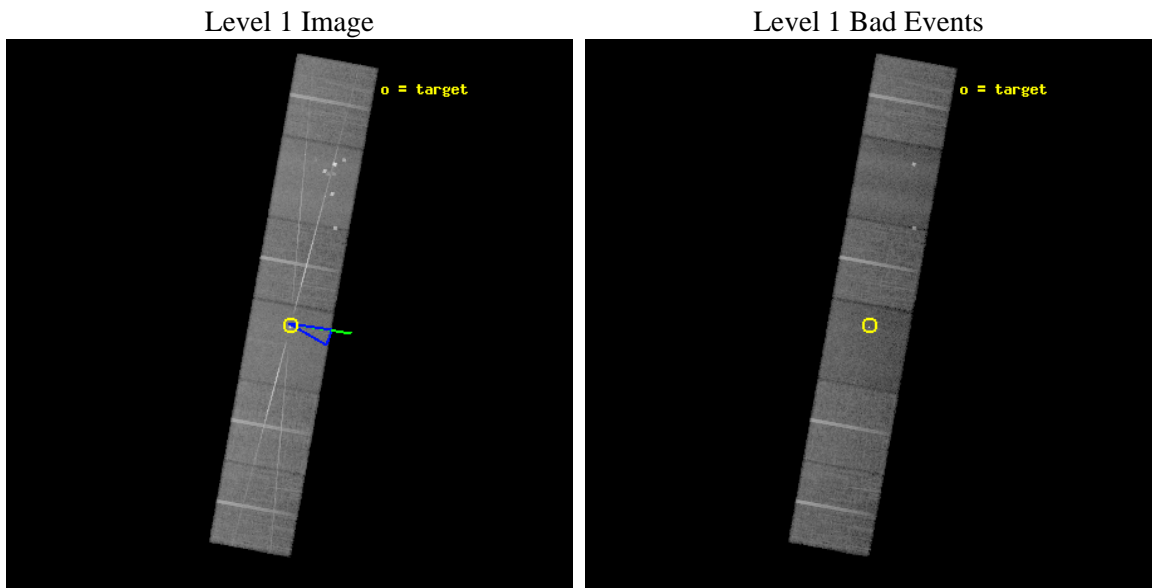
seq_num	280202	Sequence number
obs_id	1252	Observation id
title	GRATINGS CALIBRATION OBSERVATION OF AN EMISSION LINE SOURCE: HR 1099	
observer	Dr. CXC Calibration	Principal investigator
object	HR1099	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	54.197083	Observer's specified target RA
dec_targ	0.589972	Observer's specified target Dec
ra_nom	54.198350375105	Nominal RA
dec_nom	0.59490882966685	Nominal Dec
roll_nom	100.27762300882	Nominal Roll
revision	5	Processing version of data
ontime	14940.513692439	Sum of GTIs [s]
livetime	14751.327911968	Livetime [s]
ontime4	14940.431612439	Sum of GTIs [s]
ontime5	14940.472652435	Sum of GTIs [s]
ontime6	14940.308492437	Sum of GTIs [s]
ontime7	14940.513692439	Sum of GTIs [s]
ontime8	14940.390572436	Sum of GTIs [s]
ontime9	14940.34953244	Sum of GTIs [s]
l2events	243215	Number of level 2 events



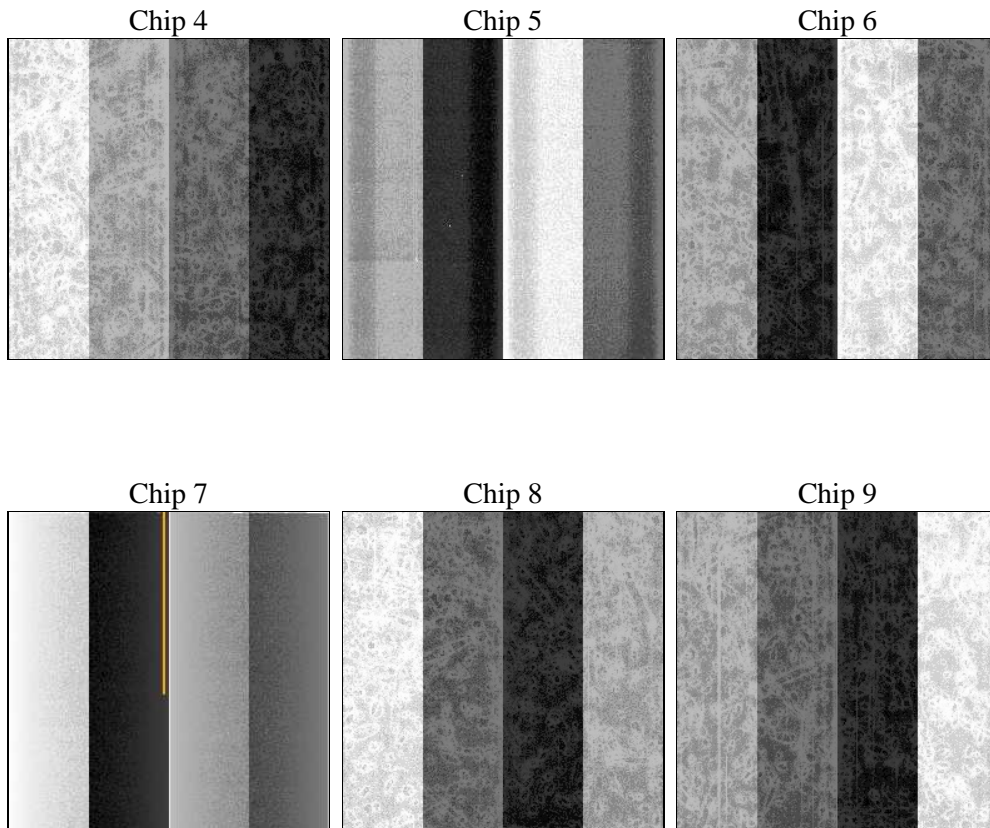
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16500.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	14940.513692439	Sum of GTIs [s]
caldbver	4.1.4	 	ontime4	14940.431612439	Sum of GTIs [s]
date	2009-11-17T10:41:50	Date and time of file creation	ontime5	14940.472652435	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	14940.308492437	Sum of GTIs [s]
			ontime7	14940.513692439	Sum of GTIs [s]
			ontime8	14940.390572436	Sum of GTIs [s]
			ontime9	14940.34953244	Sum of GTIs [s]
			l1events	1036117	Number of level 1 events

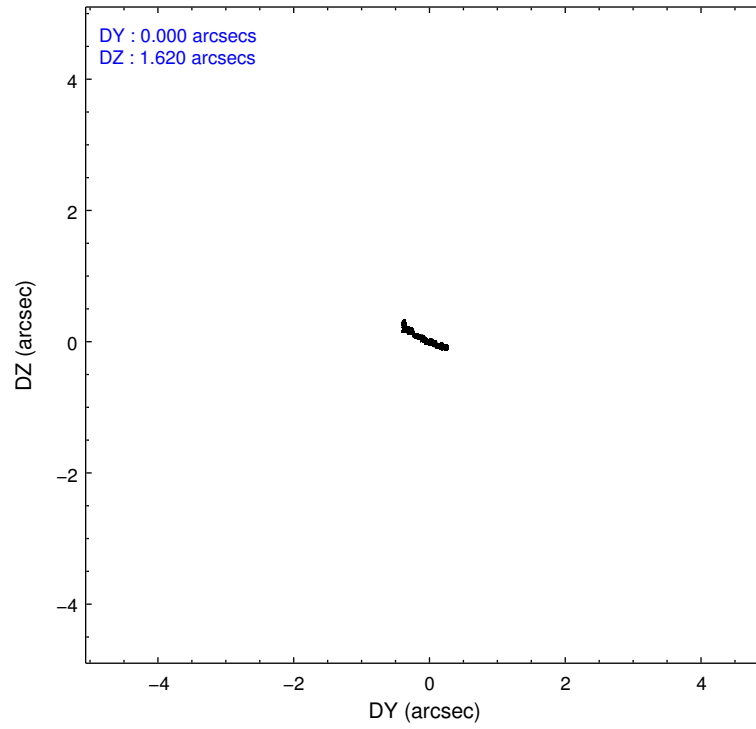
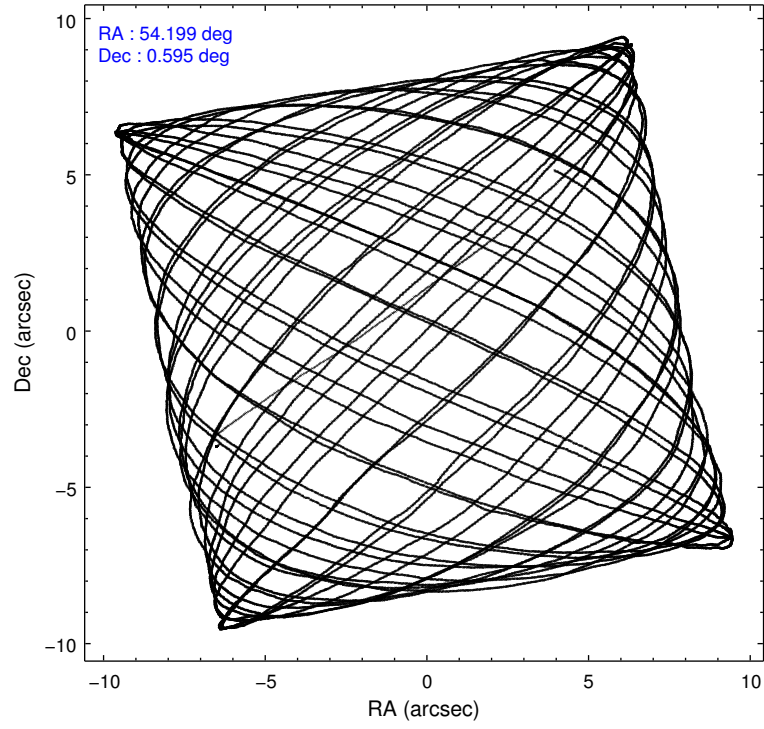
2.1.4 Events

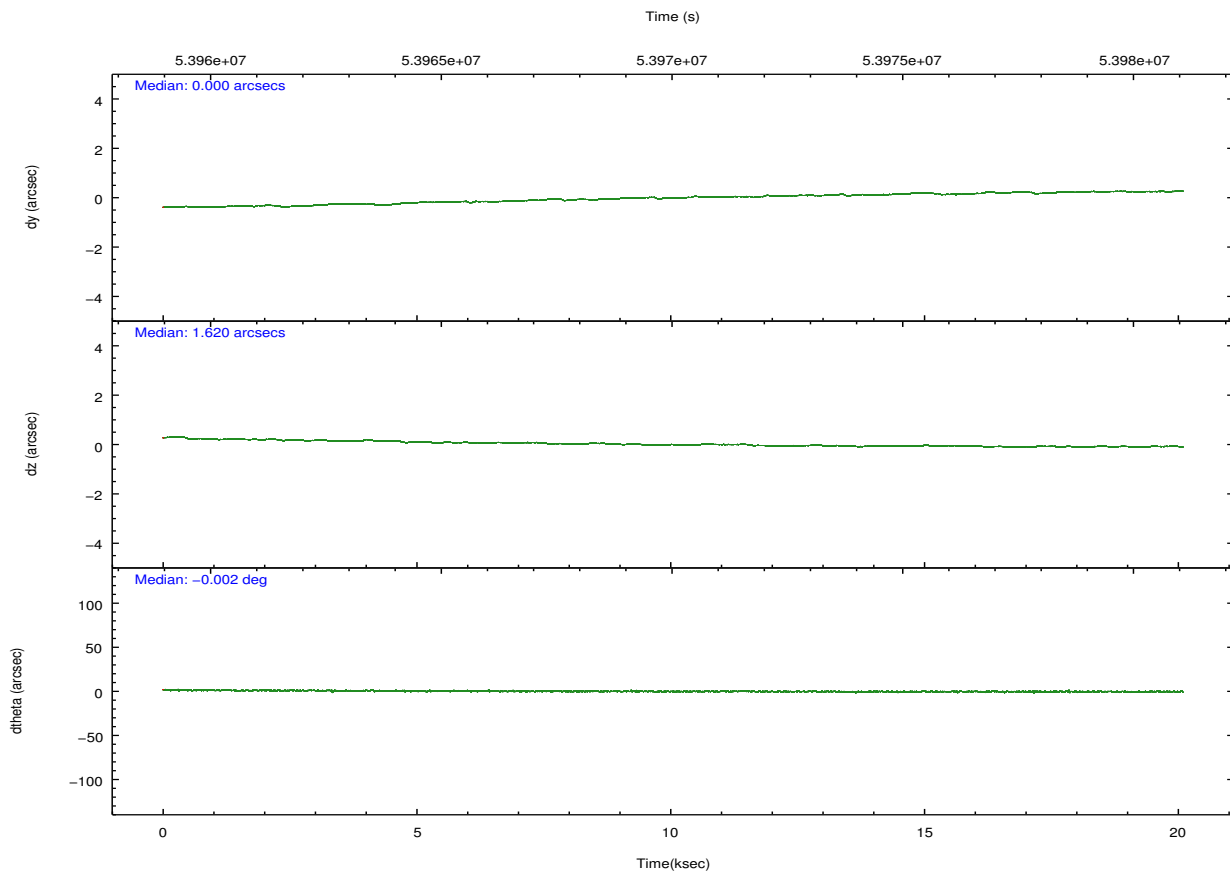
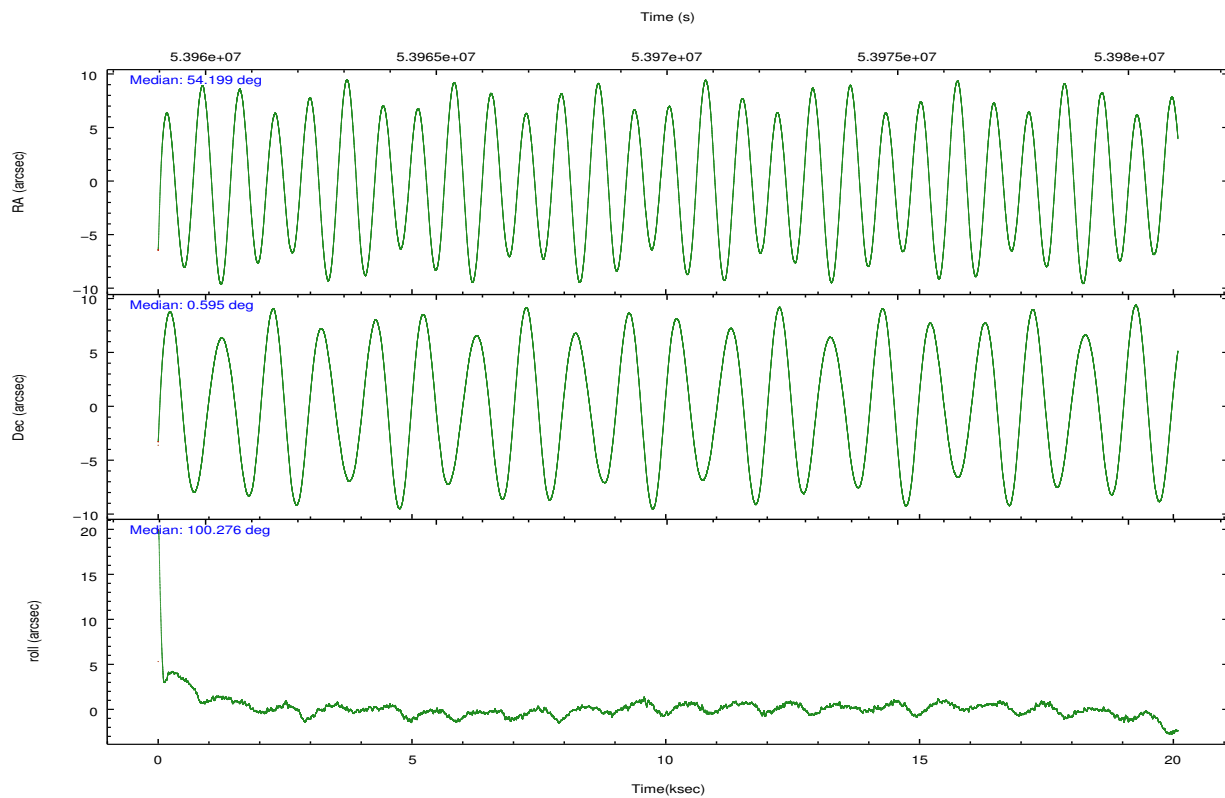
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	165018	199082	167189	168935	187091	148802	grade 0 events	3904	19411	16651	6508	19415	5404
rejected events	148787	103795	131087	95493	143169	131200		2%	9%	9%	3%	10%	3%
rejected %	90%	52%	78%	56%	76%	88%	grade 1 events	33	770	90	153	113	33
								0%	0%	0%	0%	0%	0%
							grade 2 events	7189	22200	12273	16631	11177	6406
								4%	11%	7%	9%	5%	4%
							grade 3 events	803	3387	1350	5079	2505	969
								0%	1%	0%	3%	1%	0%
							grade 4 events	837	3214	1375	4657	2217	974
								0%	1%	0%	2%	1%	0%
							grade 5 events	2231	7292	2901	9194	3898	2973
								1%	3%	1%	5%	2%	1%
							grade 6 events	3500	47089	4463	40586	8617	3850
								2%	23%	2%	24%	4%	2%
							grade 7 events	146521	95719	128086	86127	139149	128193
								88%	48%	76%	50%	74%	86%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	54.215902	54.19835037510545	Subarray requested	NONE	NONE
Pointing Dec	0.573697	0.5949088296668547	Alternating exposures requested	N	N
Pointing Roll	100.120799	100.2776230088176	Primary exposure time	0.000000	3.2
Roll angle	110.000000	110.000000			
Roll tolerance	10.000000	10.000000			
Roll constraint allows 180D rotation	N	N			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1199515274594			
SIM translation stage offset (mm)	0	-0.012571055548392			
Observation start time	53960464.184000	53959390.876095			
Observation start date	1999-09-17T13:00:00	1999-09-17T12:43:10			
Observation end time	53976964.184000	53980067.176837			
Observation end date	1999-09-17T17:35:00	1999-09-17T18:27:47			
Read mode	TIMED	TIMED			

2.3 Aspect



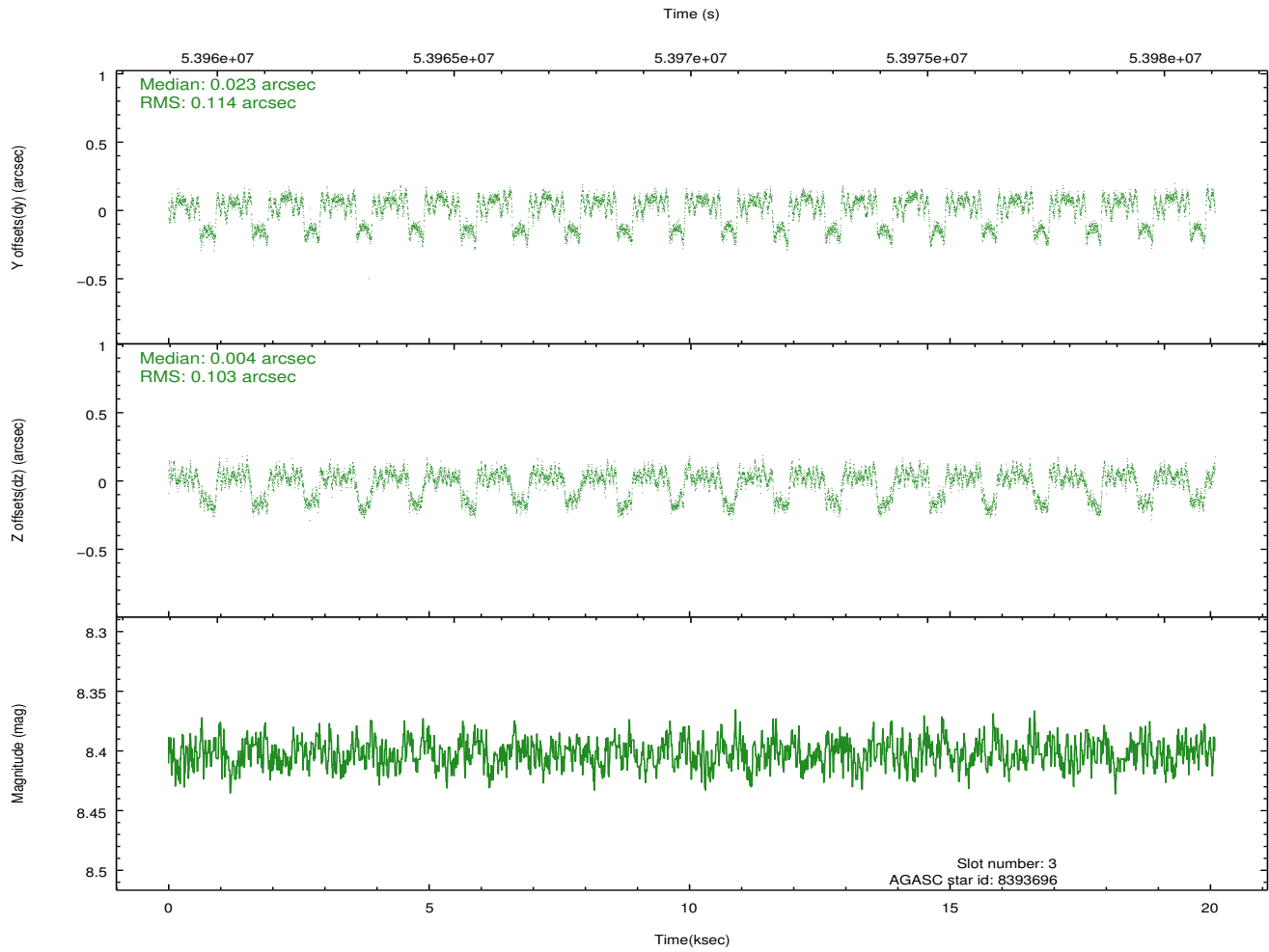
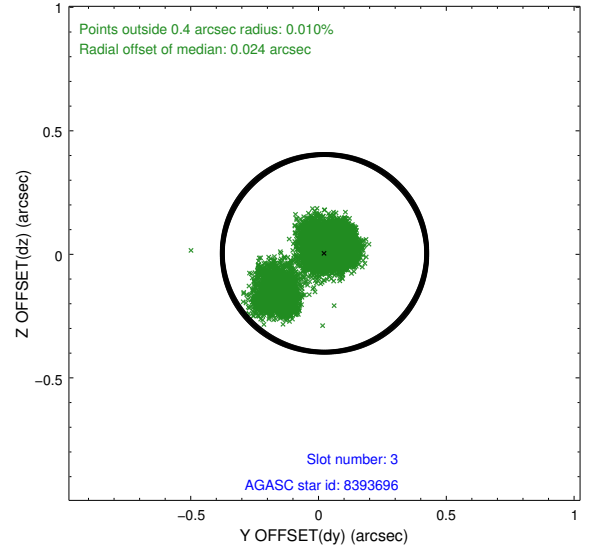
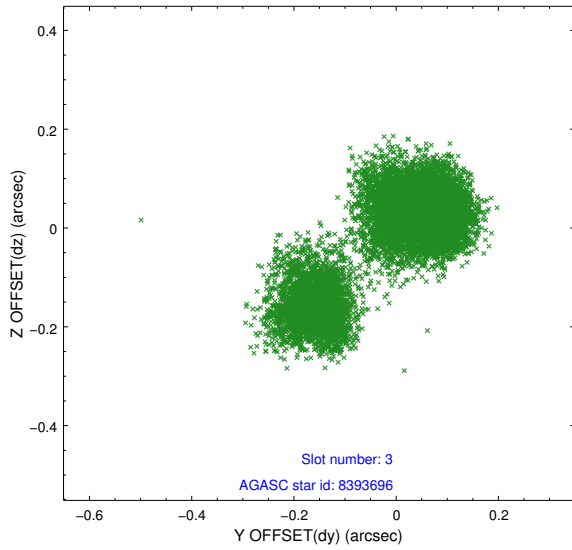


Slot Statistics

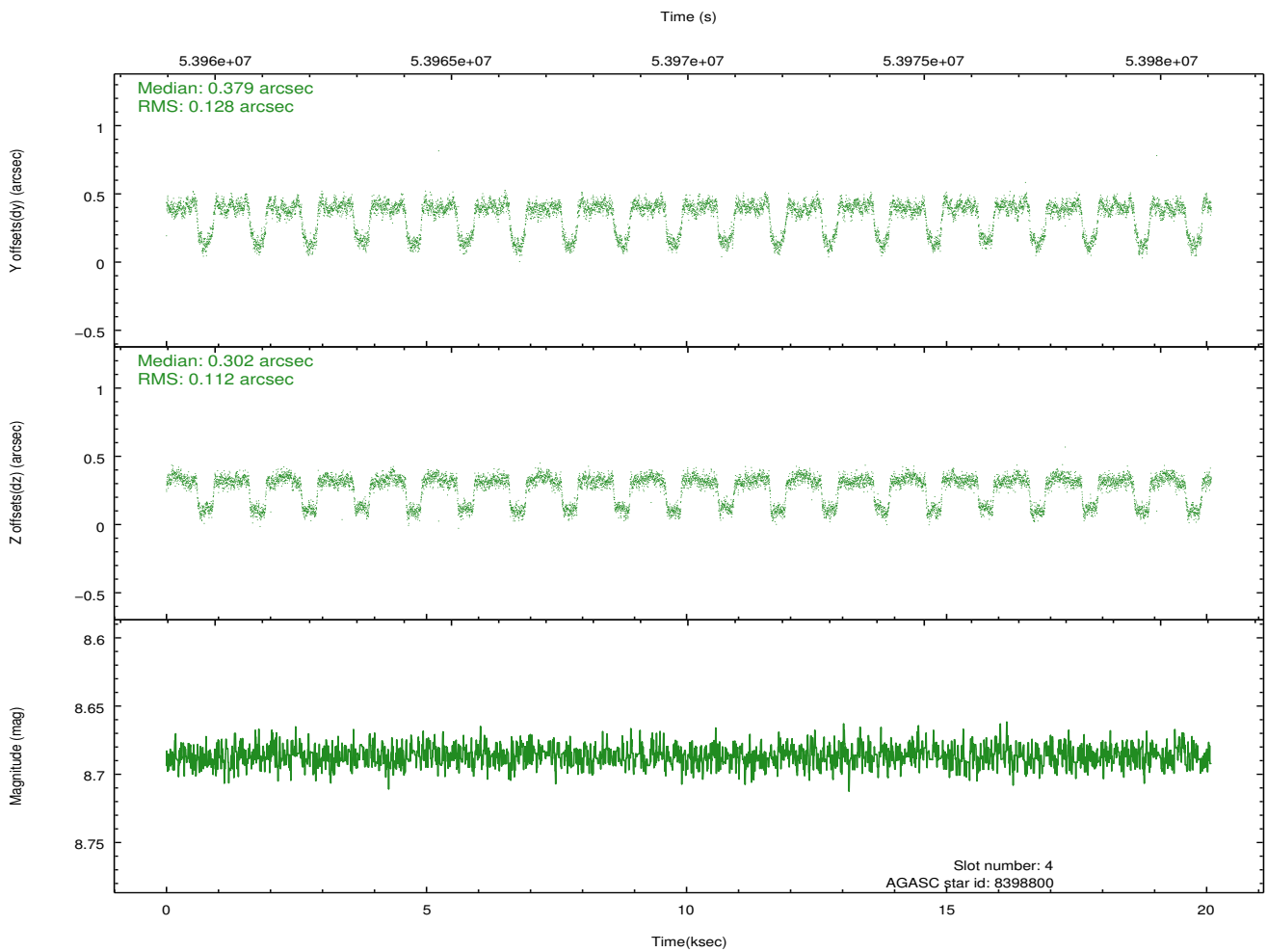
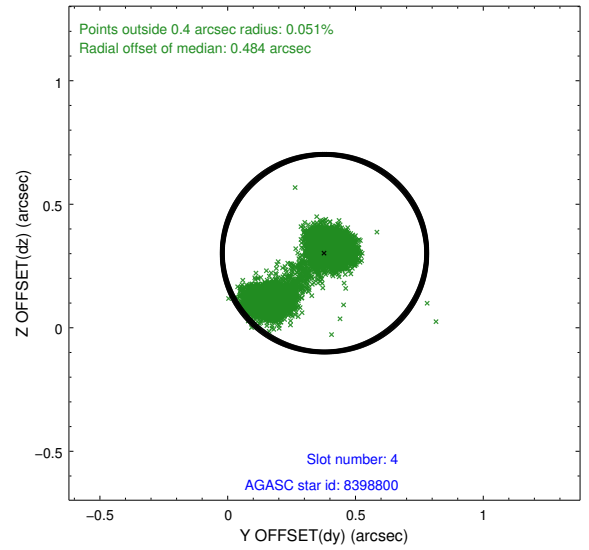
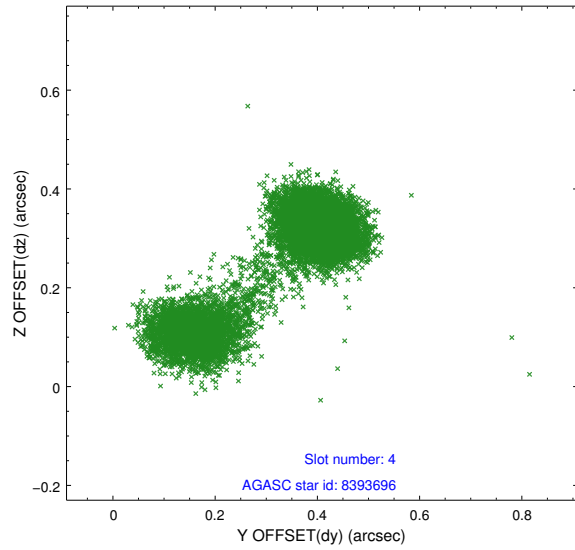
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	9801	-0.009	-0.008	0.009	0.013	0.000000	0.000000	-752.58	-1723.07
1	FID	ACIS-S-4	7.21	9801	0.087	0.006	0.006	0.011	0.000000	0.000000	2160.83	185.33
2	FID	ACIS-S-5	7.24	9797	-0.109	0.010	0.007	0.013	0.000000	0.000000	-1805.46	179.13
3	GUIDE	8393696	8.40	9799	0.023	0.004	0.140	0.287	53.645666	0.680479	740.07	1953.99
4	GUIDE	8398800	8.69	9799	0.379	0.302	0.115	0.335	54.242352	0.922024	1219.00	-312.81
5	GUIDE	8390744	9.02	9795	-0.091	0.147	0.157	0.341	53.677290	0.926294	1591.23	1686.47
6	GUIDE	8395104	8.66	9798	0.524	0.272	0.156	0.298	54.744893	0.796520	456.75	-2014.31
7	BAD	8397176	9.60	6838	-0.976	-0.846	0.114	0.177	54.271296	1.290456	2503.34	-648.72

2.4 Star Slots

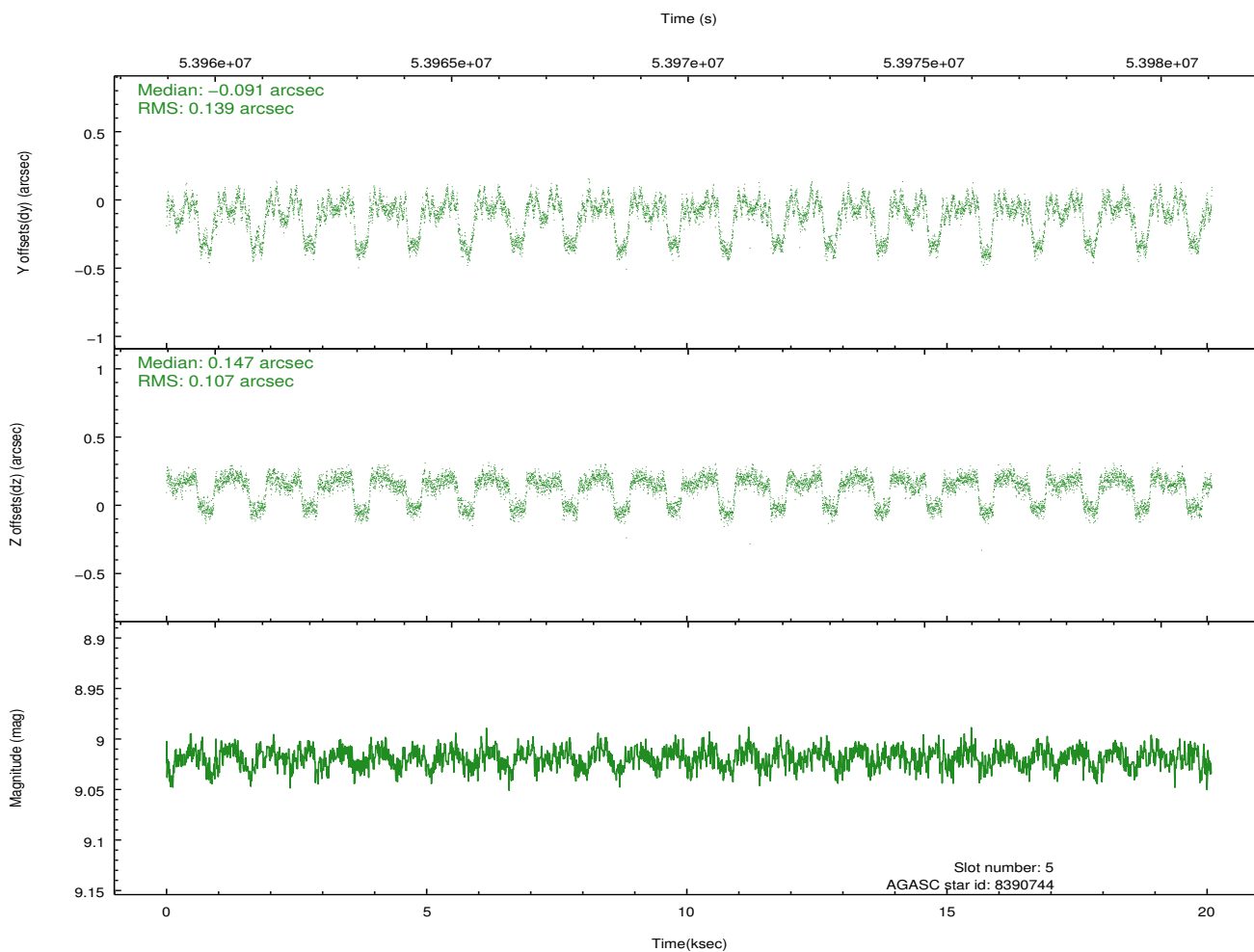
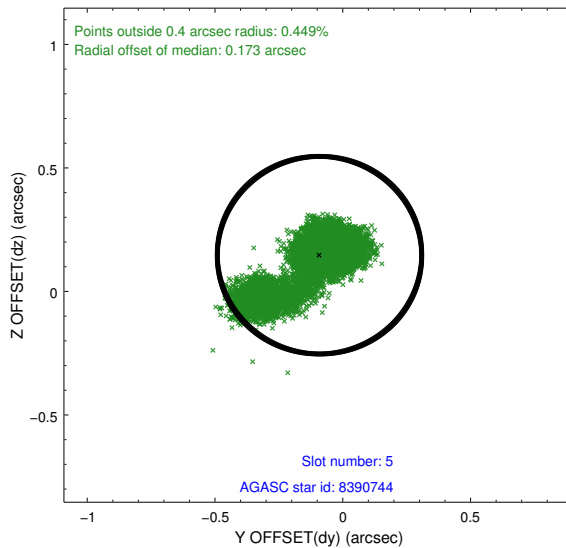
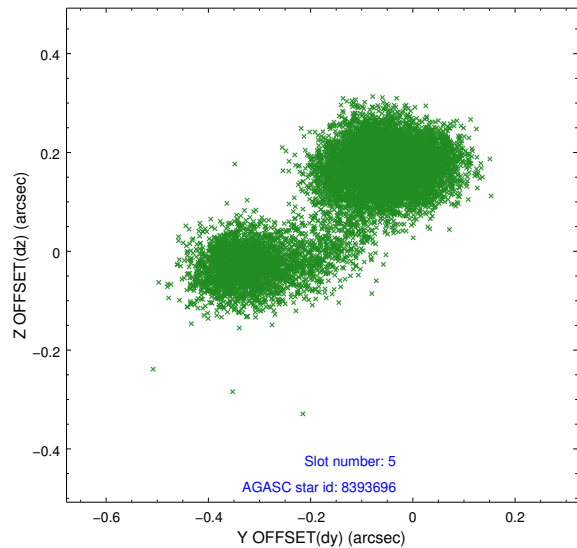
2.4.1 Slot 3



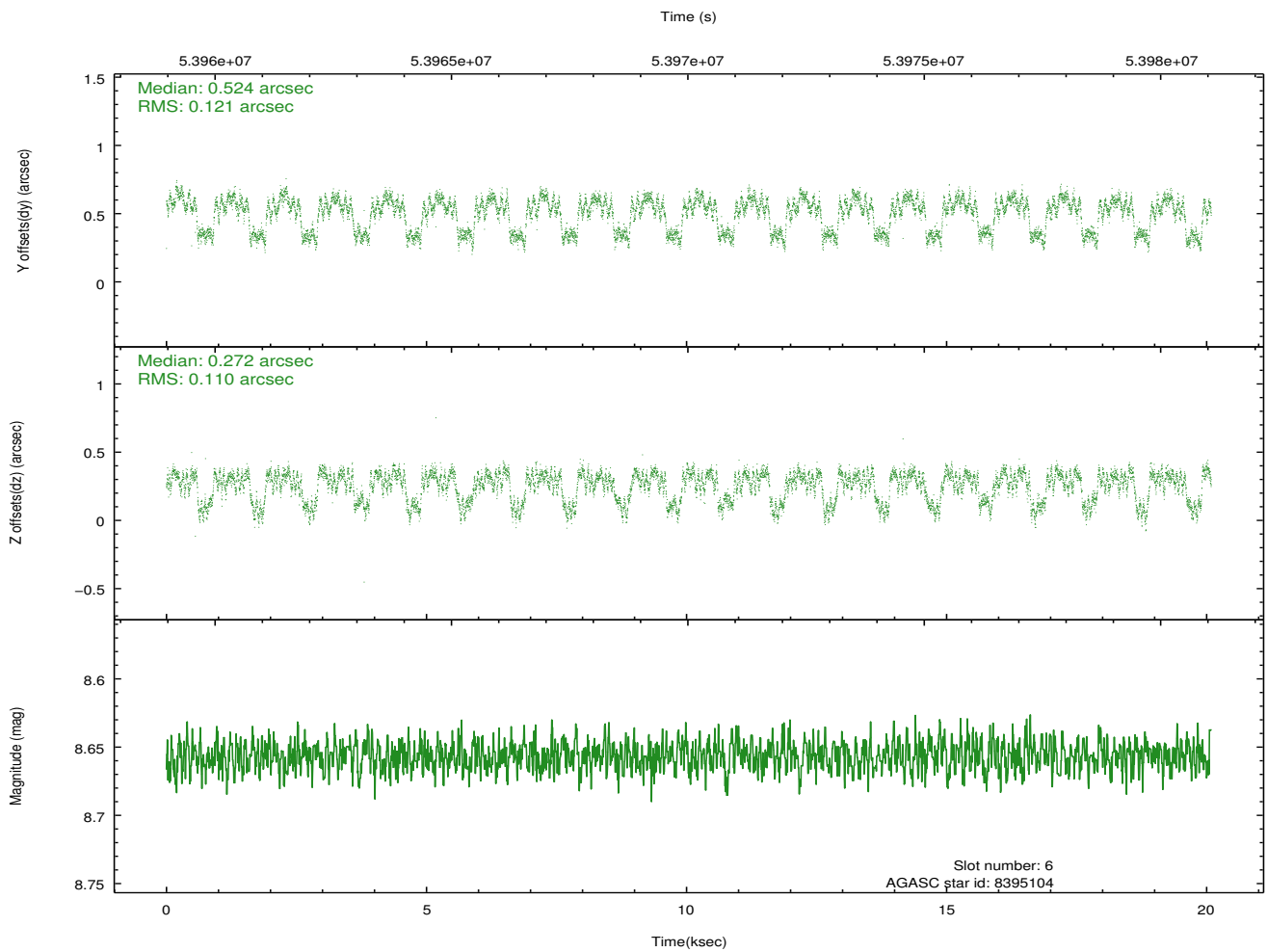
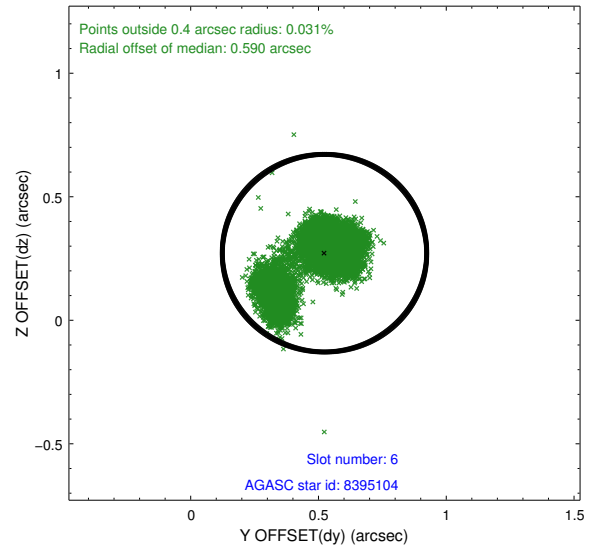
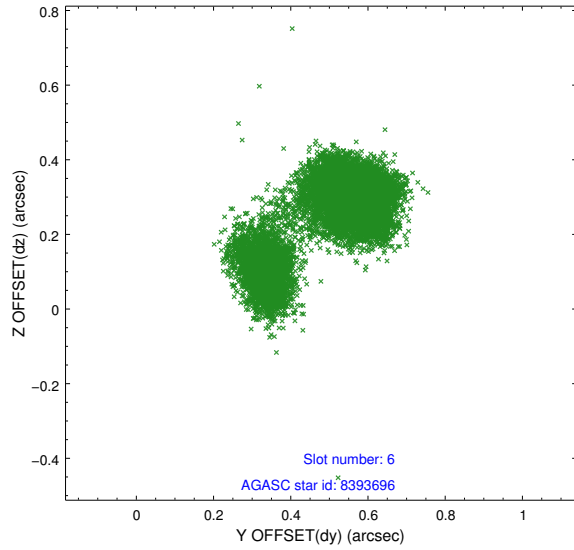
2.4.2 Slot 4



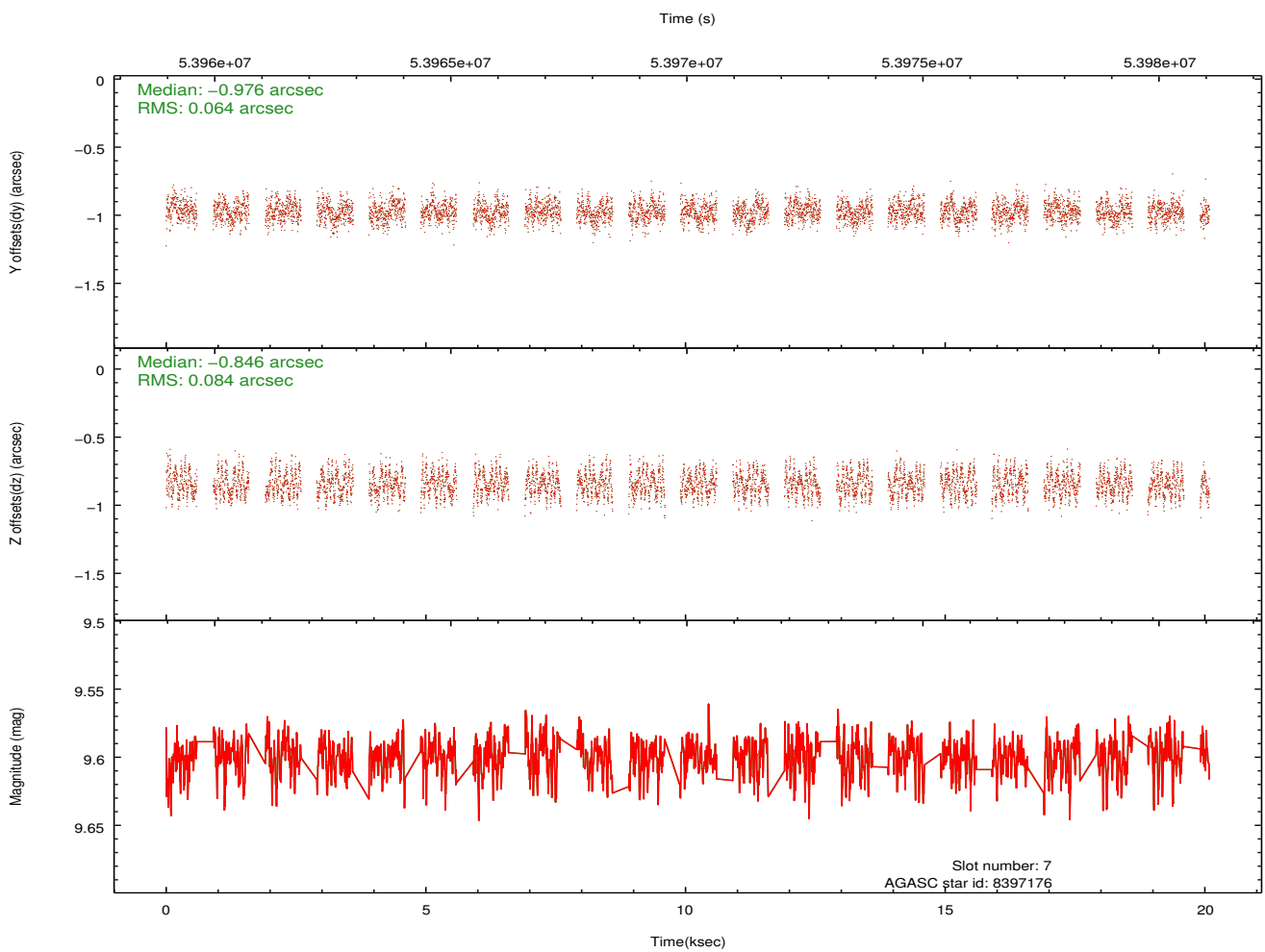
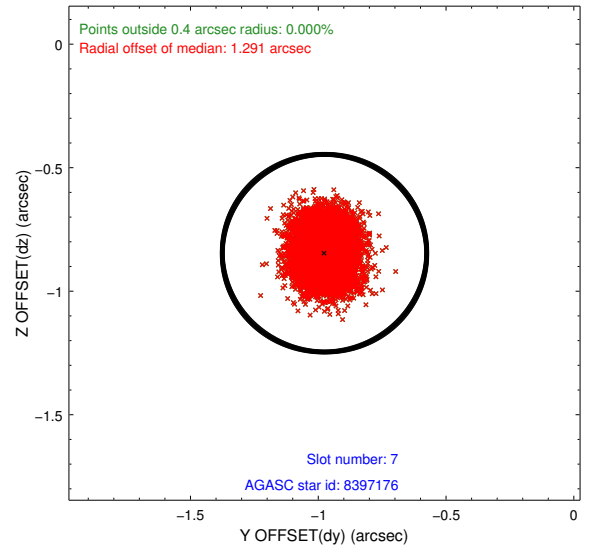
2.4.3 Slot 5



2.4.4 Slot 6

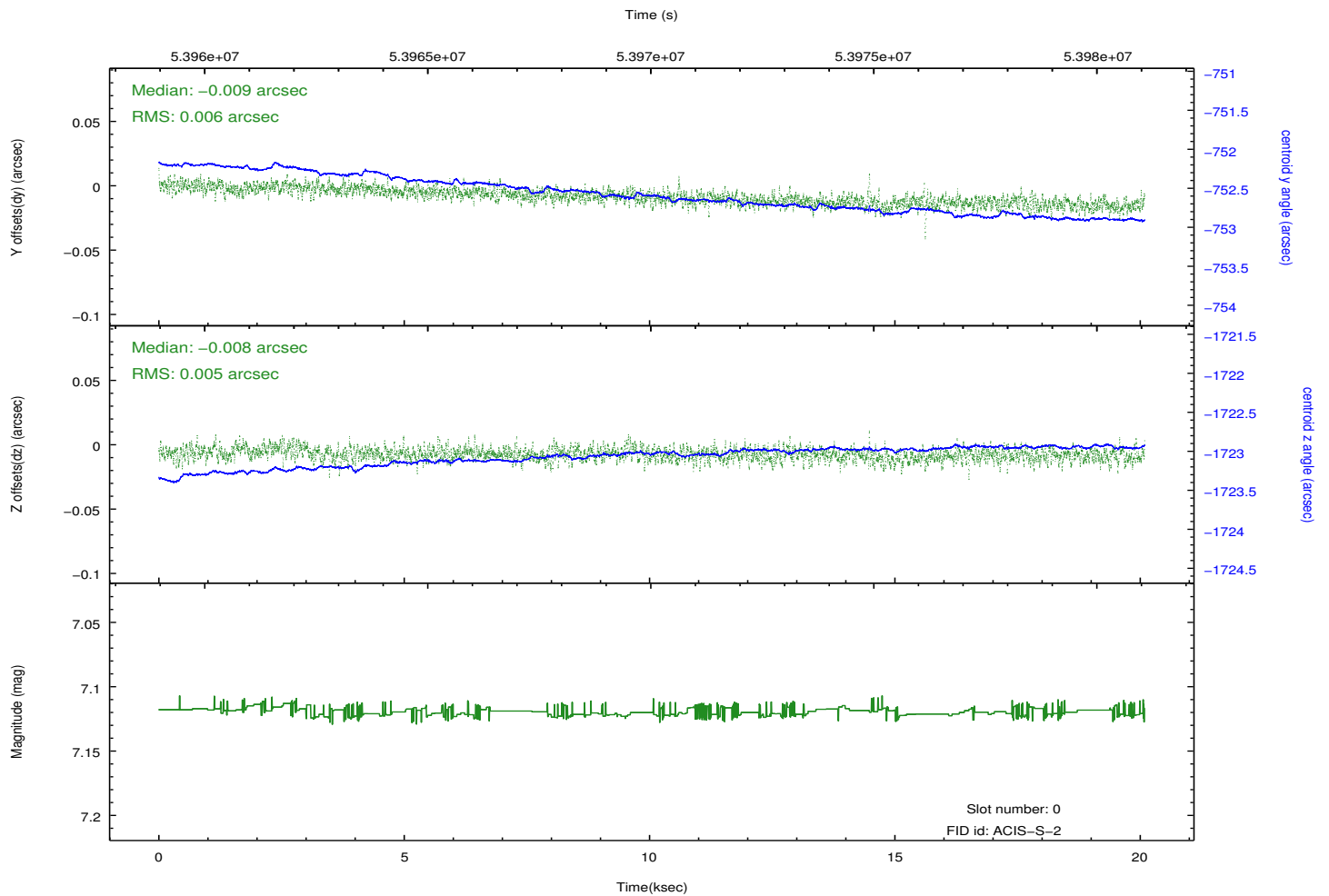
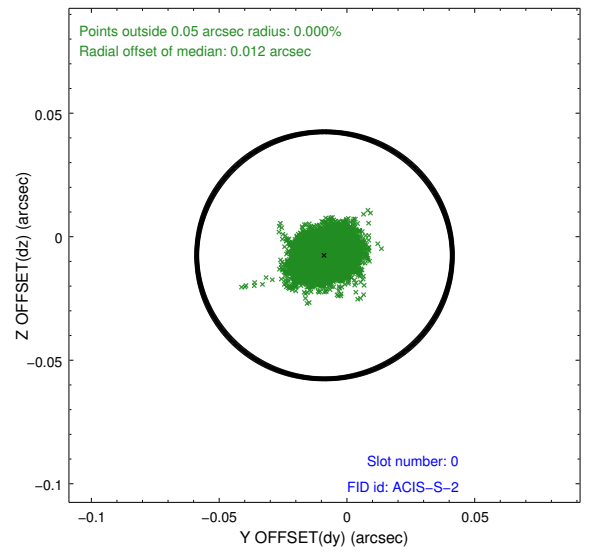
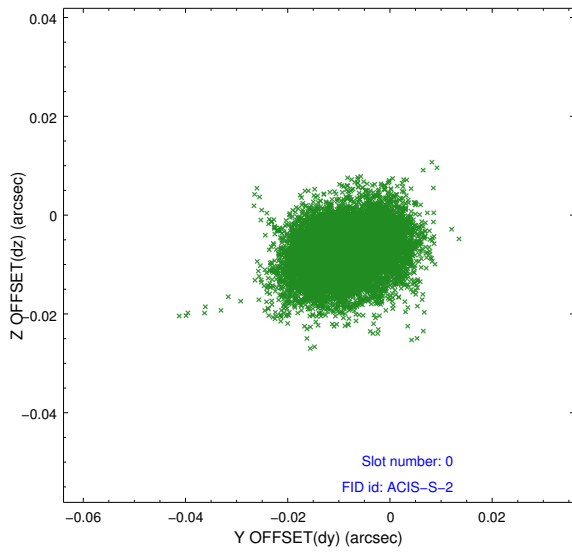


2.4.5 Slot 7

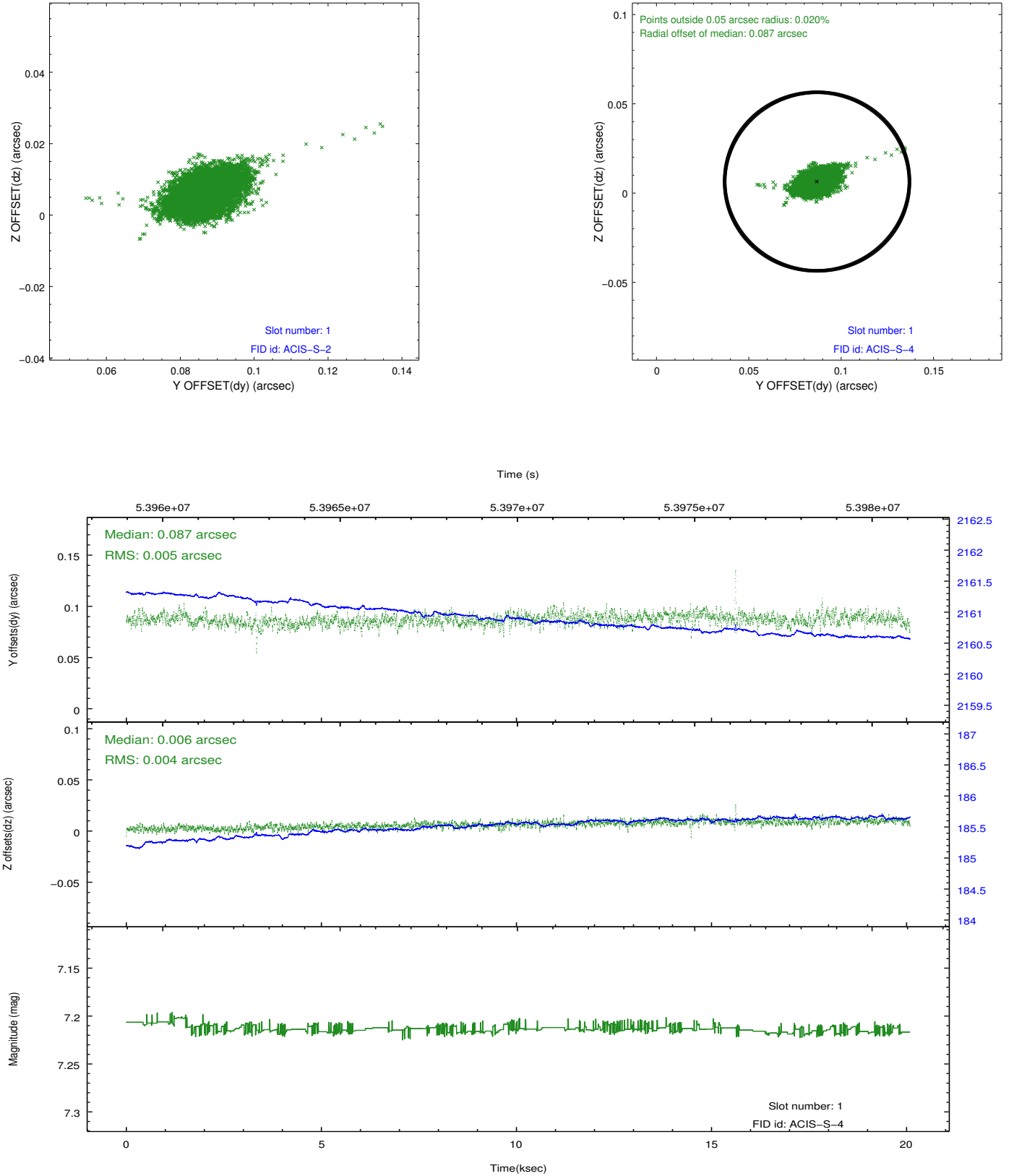


2.5 FID Slots

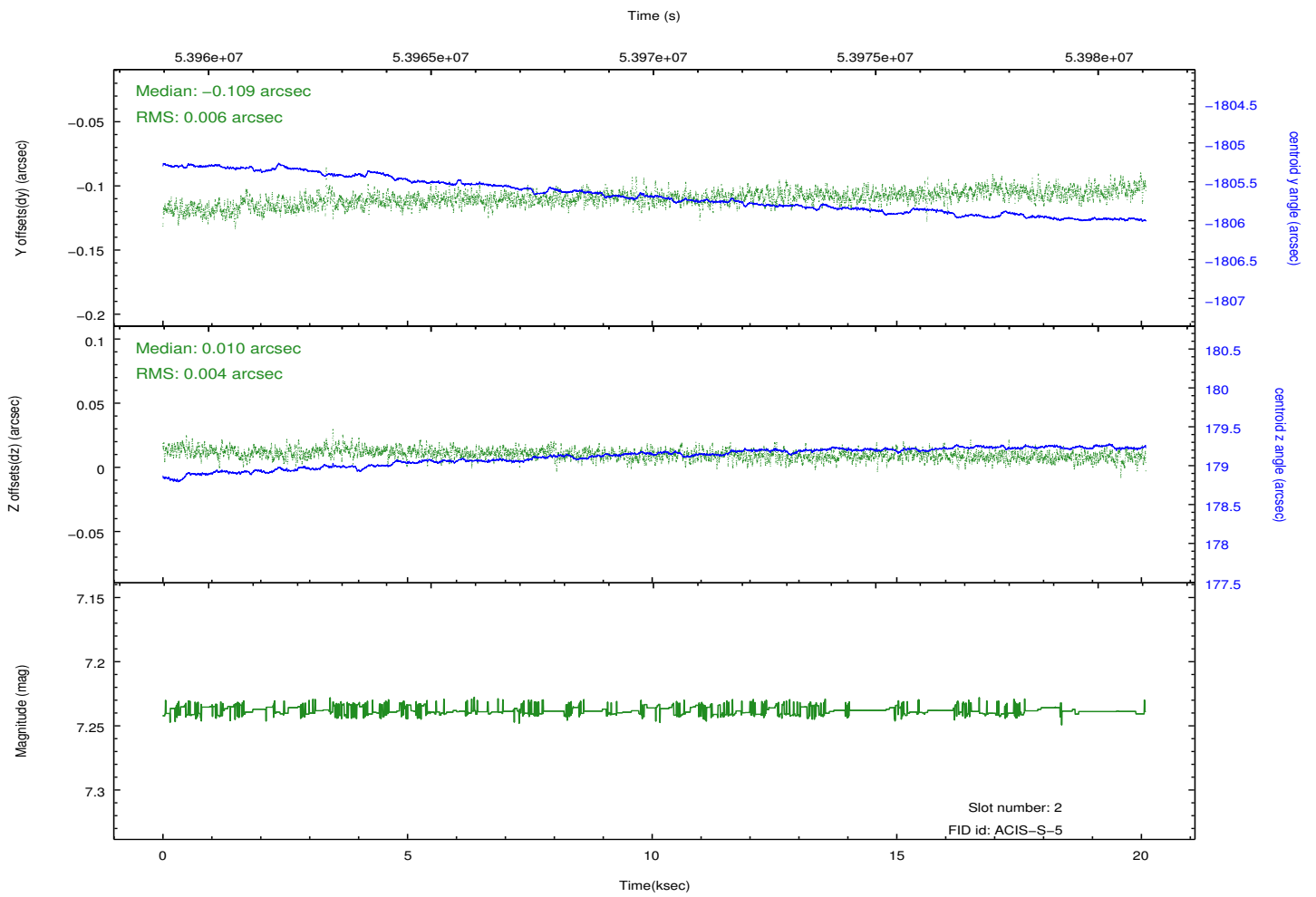
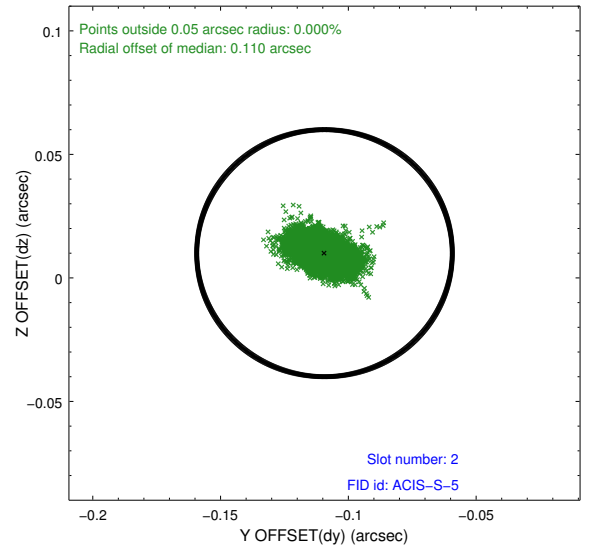
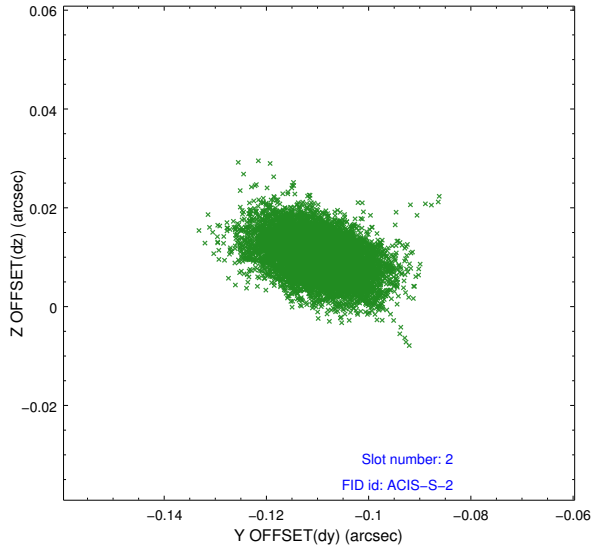
2.5.1 Slot 0



2.5.2 Slot 1

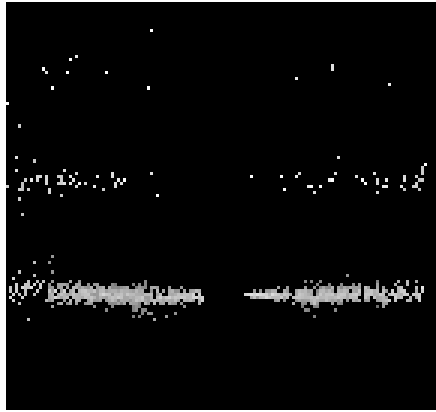


2.5.3 Slot 2

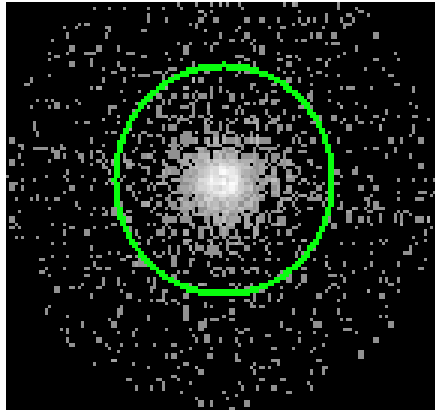


3 Gratings

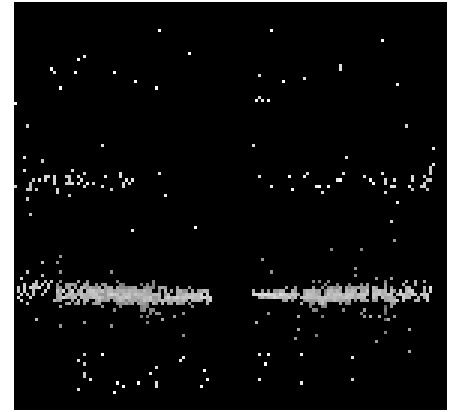
3.1 HEG Arm



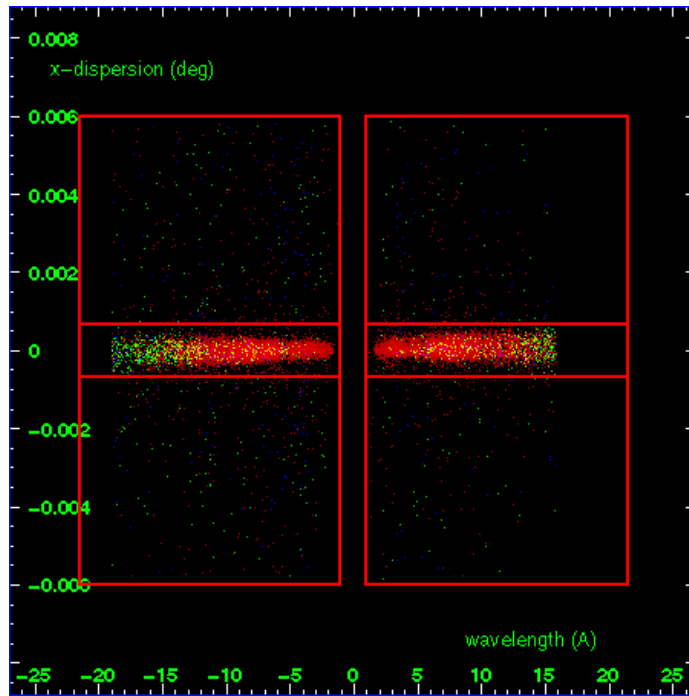
HEG Order Sort 123



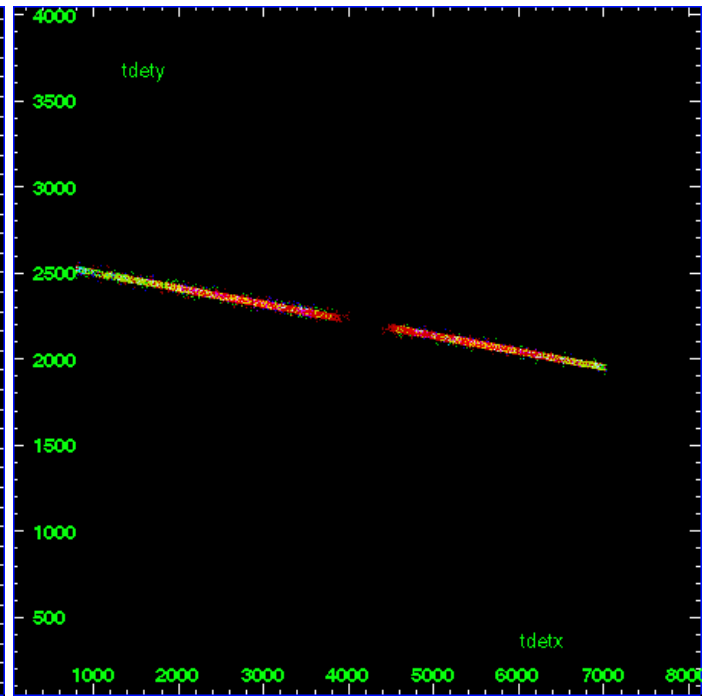
HEG Zero Order



HEG Order Sort ALL

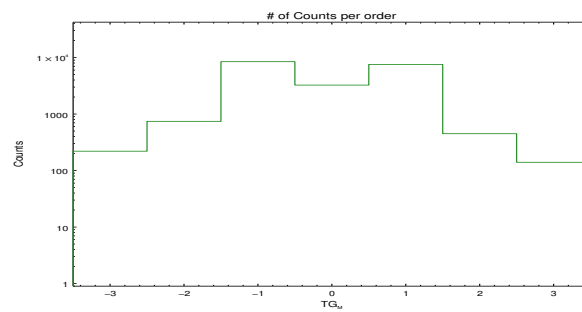


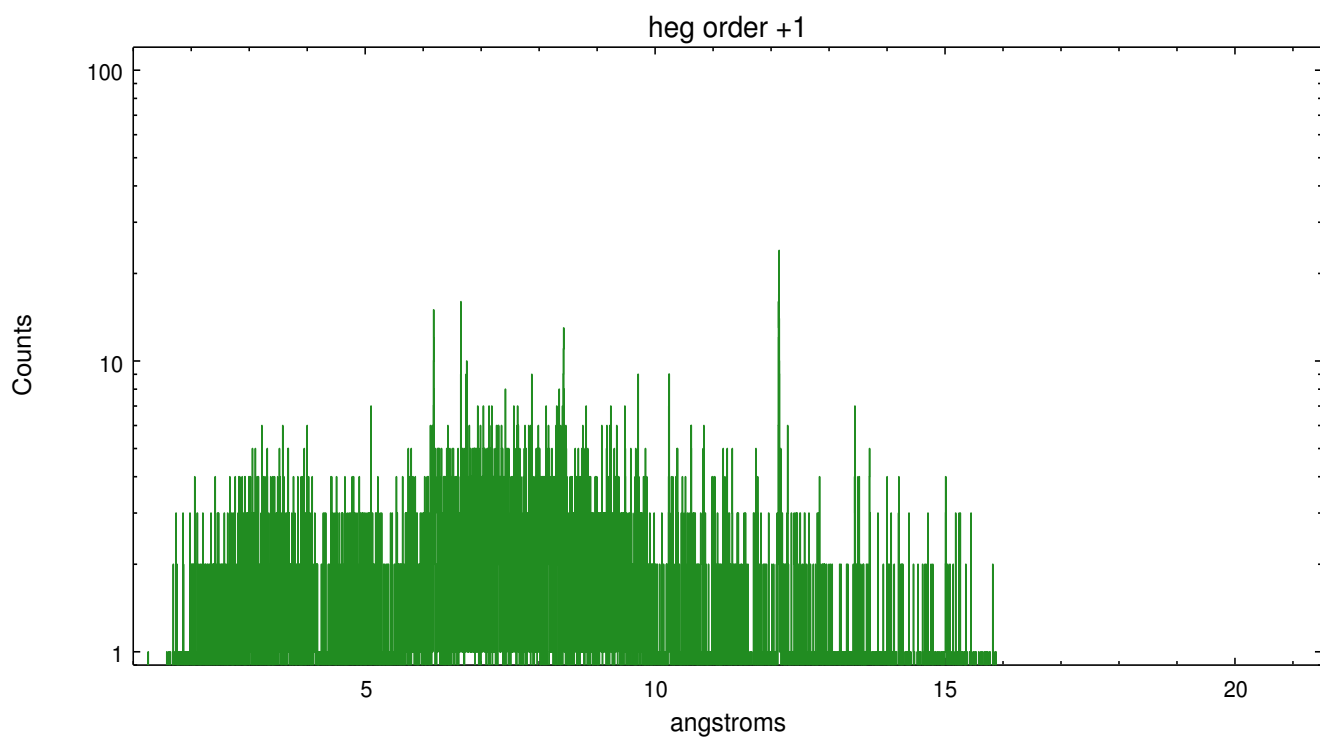
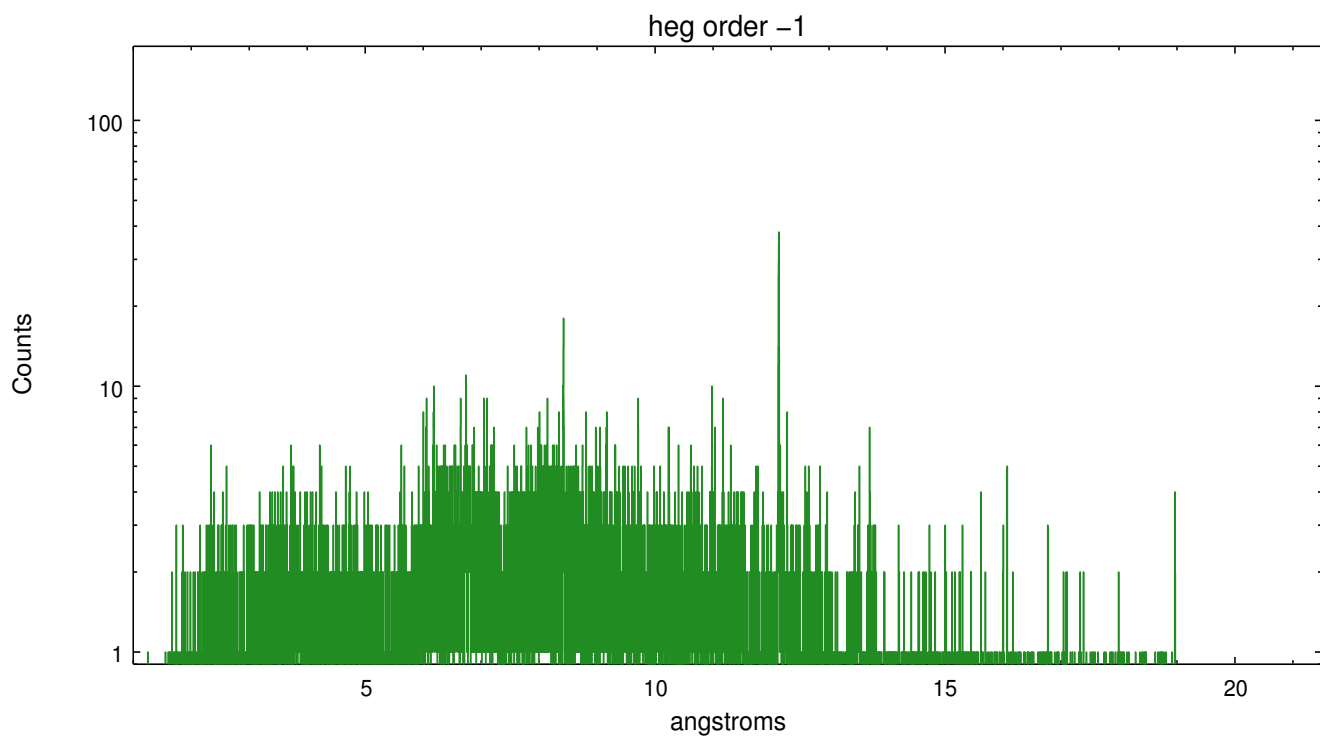
Spot Image HEG



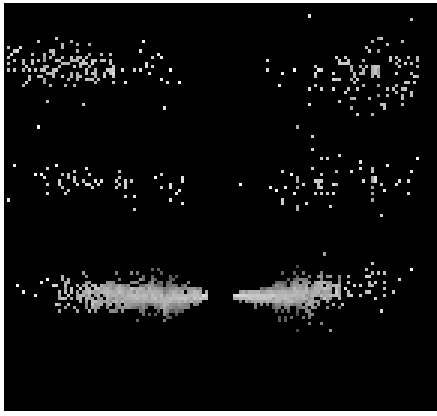
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	220	743	8452	3255	7554	449	140

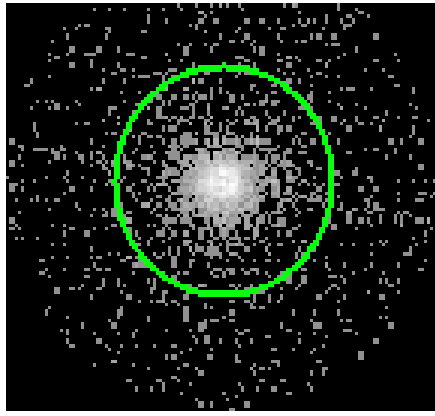




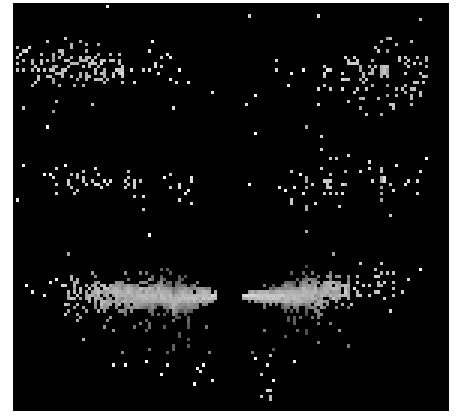
3.2 MEG Arm



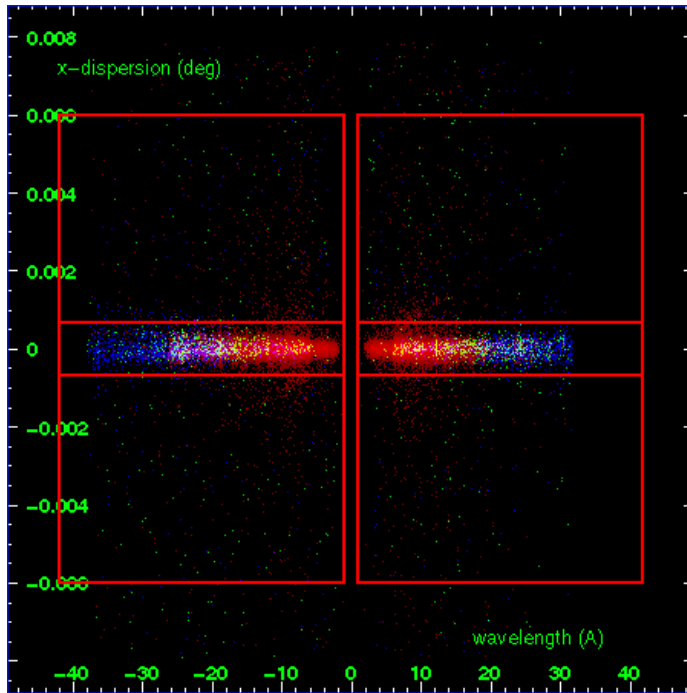
MEG Order Sort 123



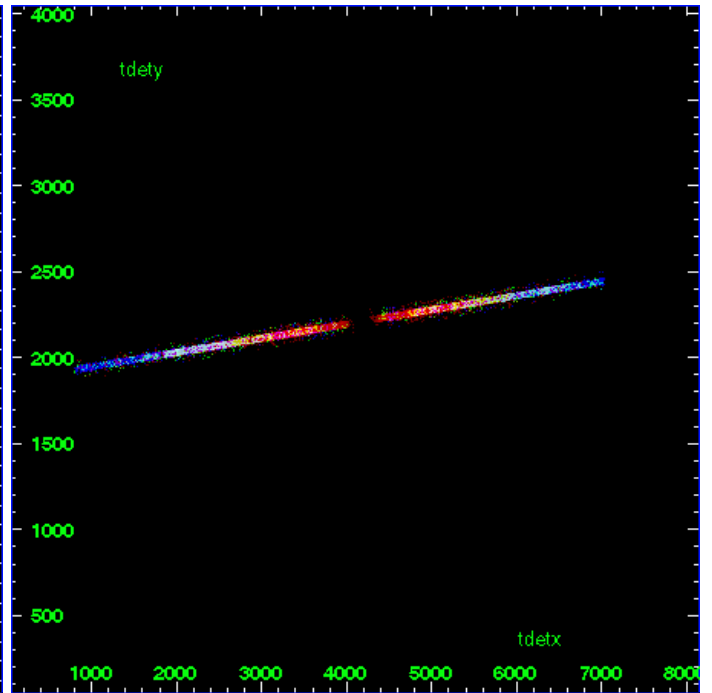
MEG Zero Order



MEG Order Sort ALL

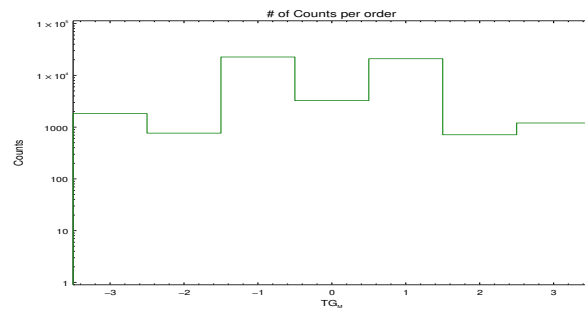


Spot Image MEG

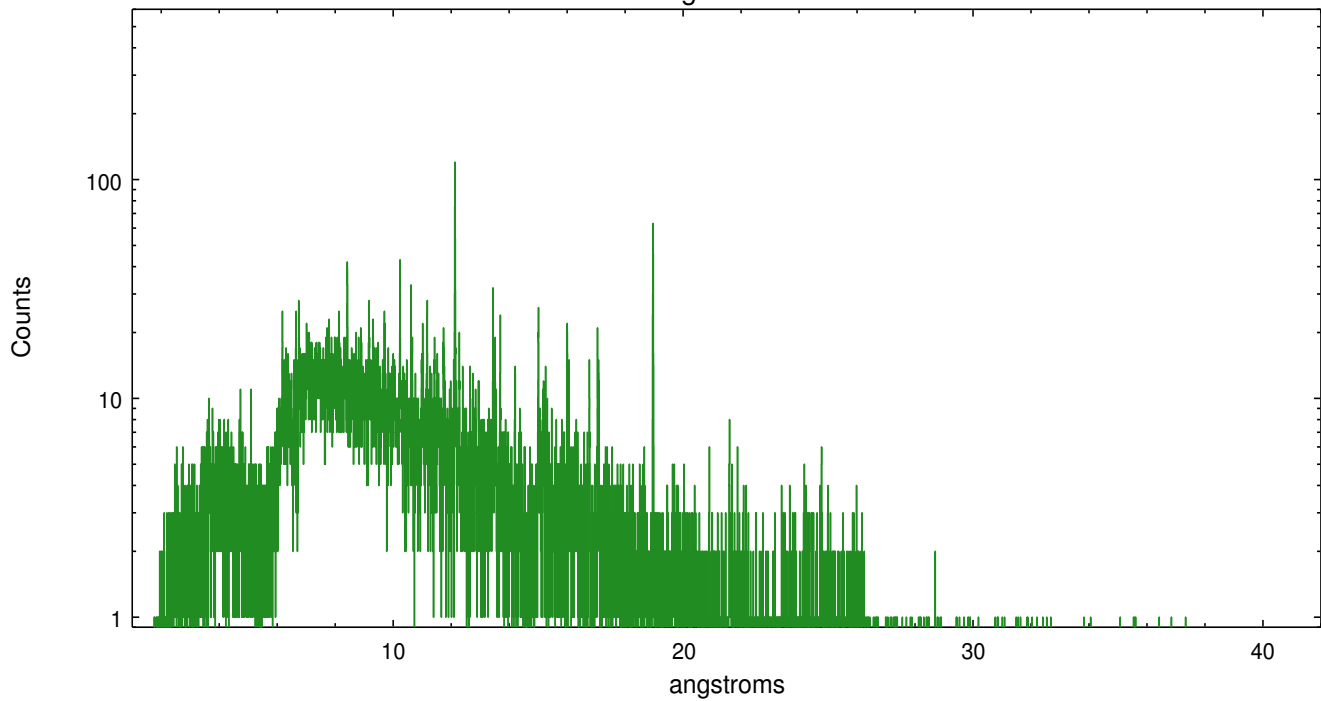


Full Detector MEG

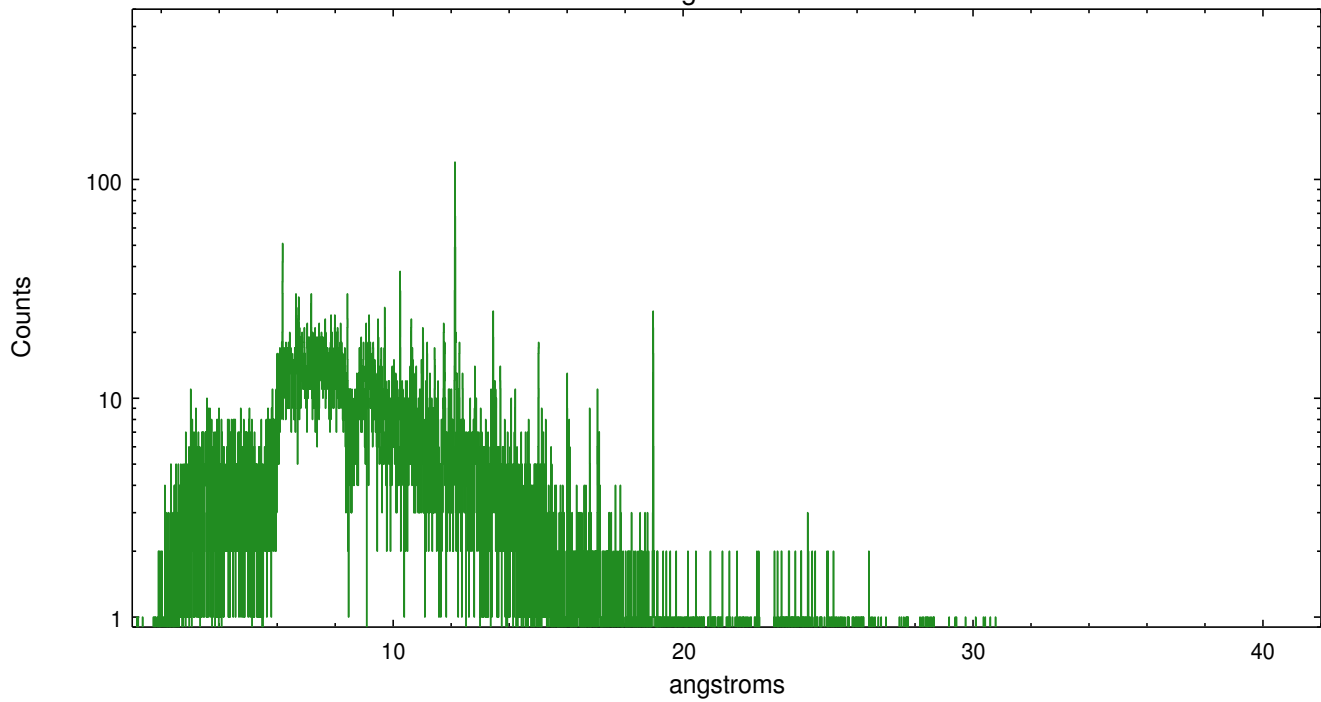
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1825	765	22641	3255	20970	713	1202



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2010.09.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.94

A.2 Comments