

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13221 - L2 Version 2
Chandra X-Ray Center

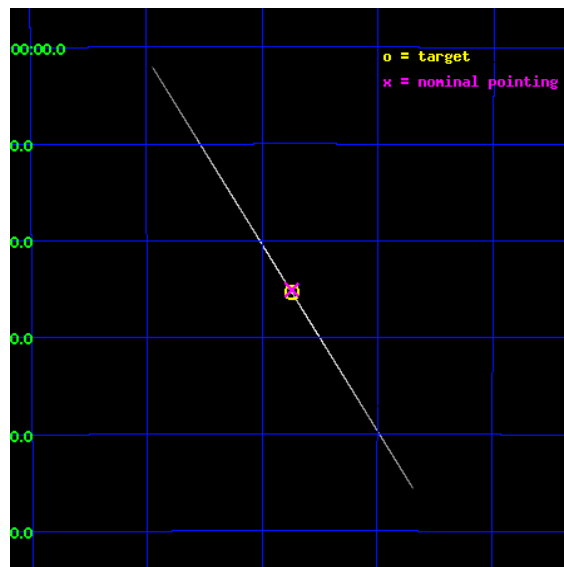
L2 Processing Date : Feb 11 2012

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1 Front

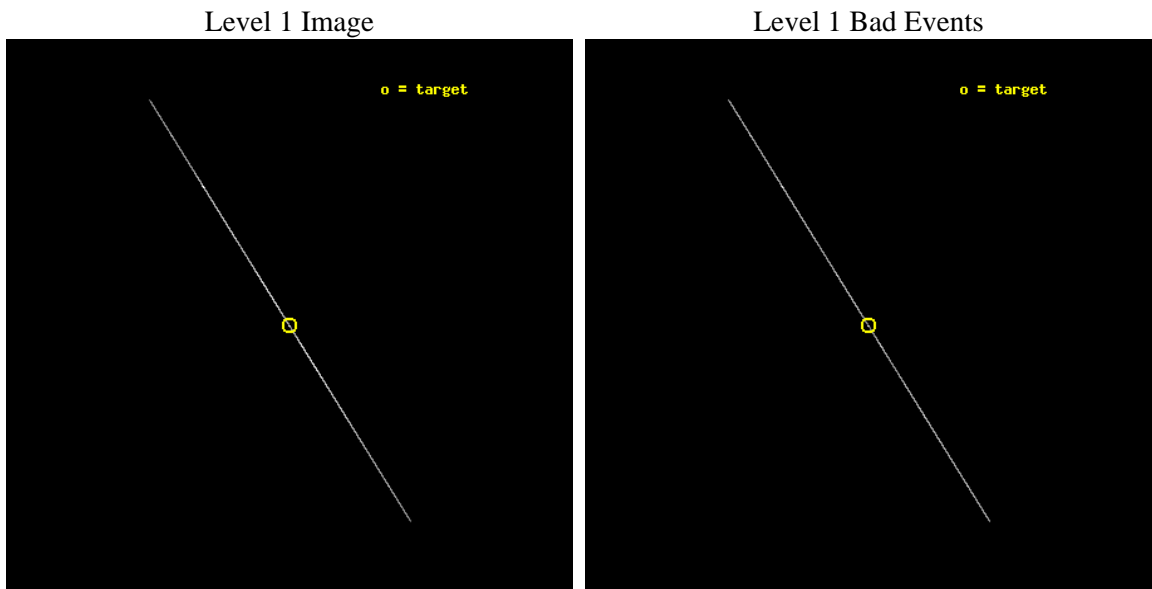
seq_num	900983	Sequence number
obs_id	13221	Observation id
title	ISM Absorption and Broad Line Emission in the Bright Z-Source GX 349+1	Proposal title
observer	Prof. Claude Canizares	Principal investigator
object	GX 349+2	Source name
ra_targ	256.435417	Observer's specified target RA [deg]
dec_targ	-36.423083	Observer's specified target Dec [deg]
ra_nom	256.43546221592	Nominal RA [deg]
dec_nom	-36.418233892566	Nominal Dec [deg]
roll_nom	57.905891485625	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16584.752526581	Sum of GTIs [s]
livetime	16519.968337024	Livetime [s]
ontime4	21827.51040262	Sum of GTIs [s]
ontime5	40069.0	Sum of GTIs [s]
ontime6	15665.381586254	Sum of GTIs [s]
ontime7	16584.752526581	Sum of GTIs [s]
ontime8	20852.802832425	Sum of GTIs [s]
ontime9	23283.884370506	Sum of GTIs [s]
l2events	4832041	Number of level 2 events



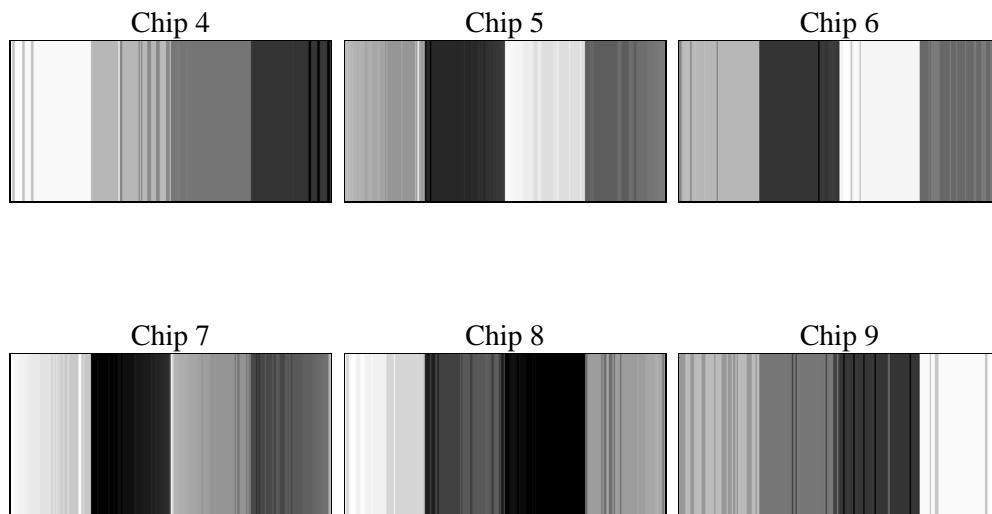
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	16584.752526581	Sum of GTIs [s]
caldbver	4.4.7	 	ontime4	21827.51040262	Sum of GTIs [s]
date	2012-02-10T07:37:12	Date and time of file creation	ontime5	40069.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15665.381586254	Sum of GTIs [s]
			ontime7	16584.752526581	Sum of GTIs [s]
			ontime8	20852.802832425	Sum of GTIs [s]
			ontime9	23283.884370506	Sum of GTIs [s]
			l1events	6962453	Number of level 1 events

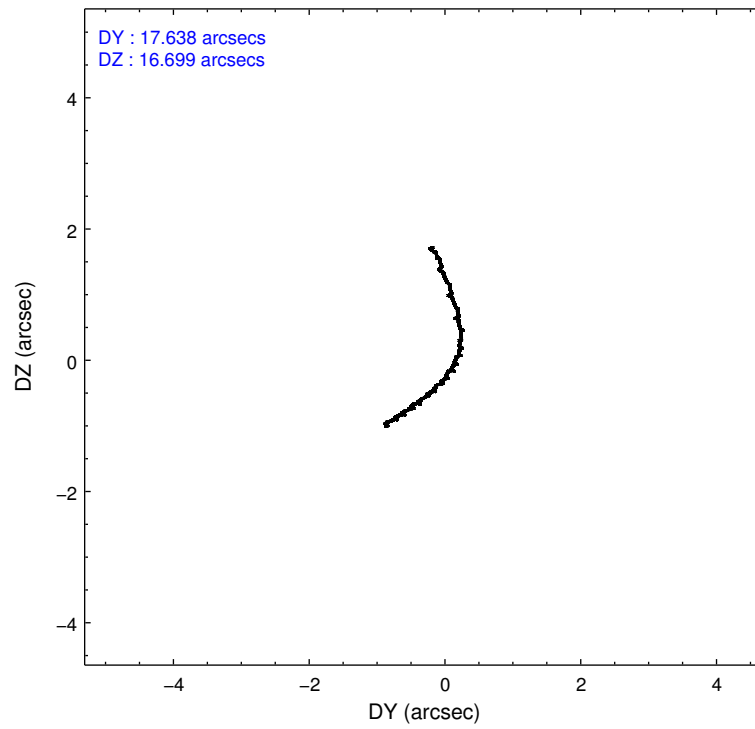
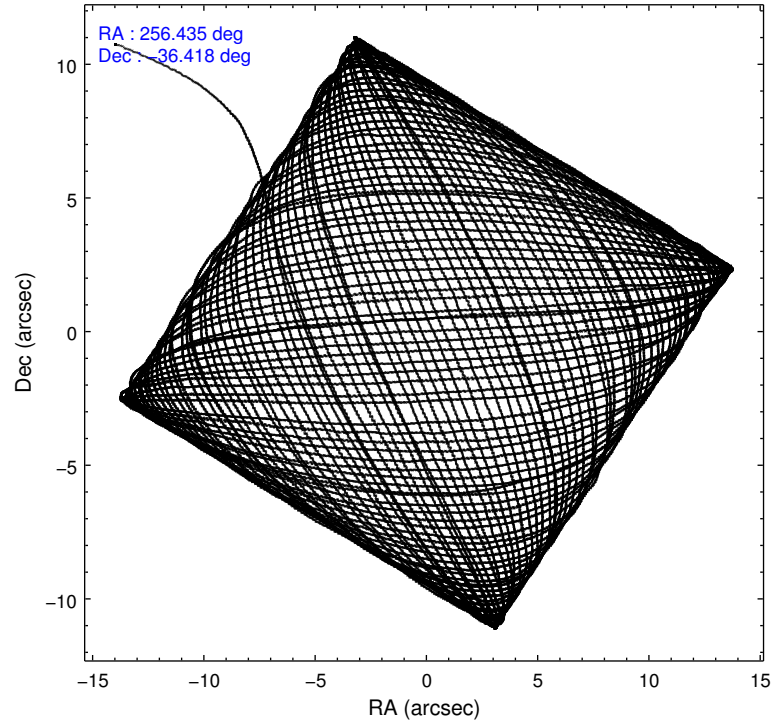
2.1.4 Events

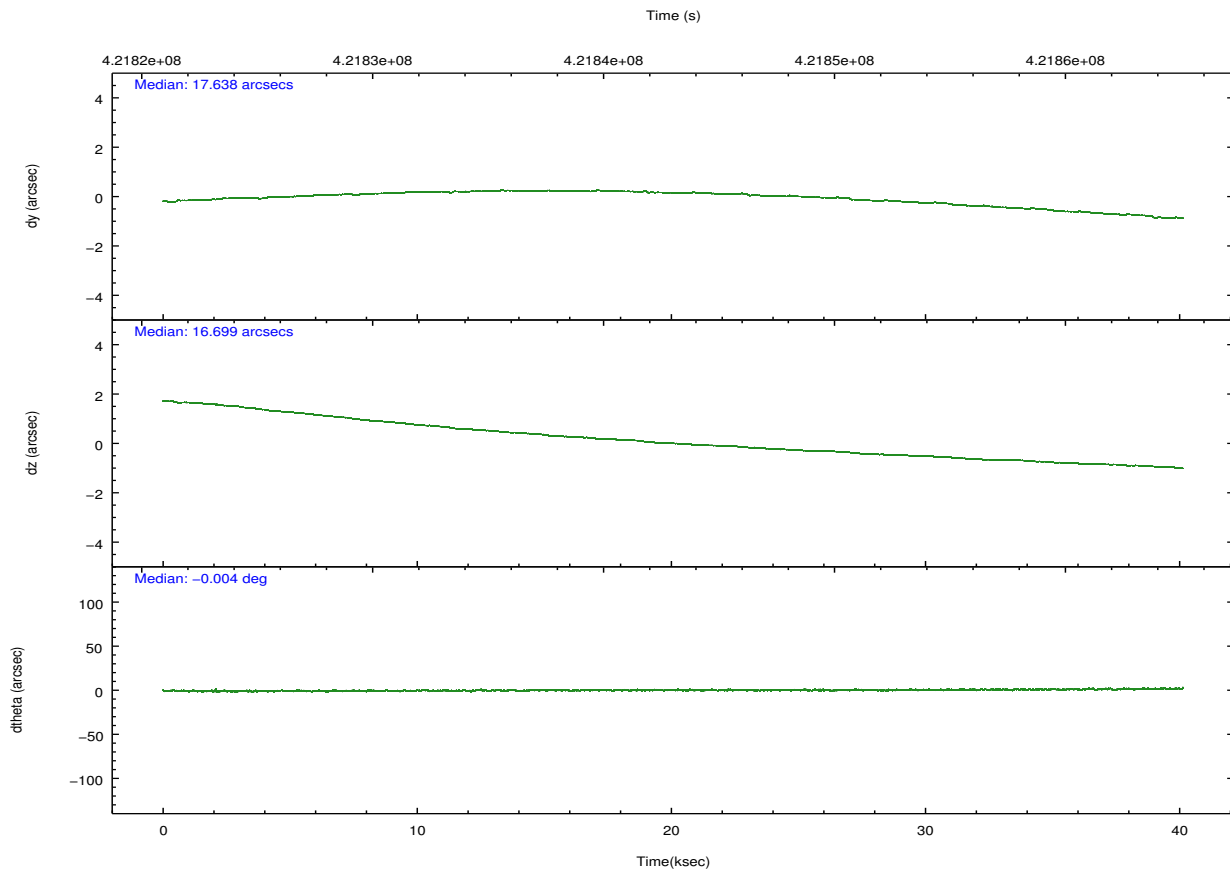
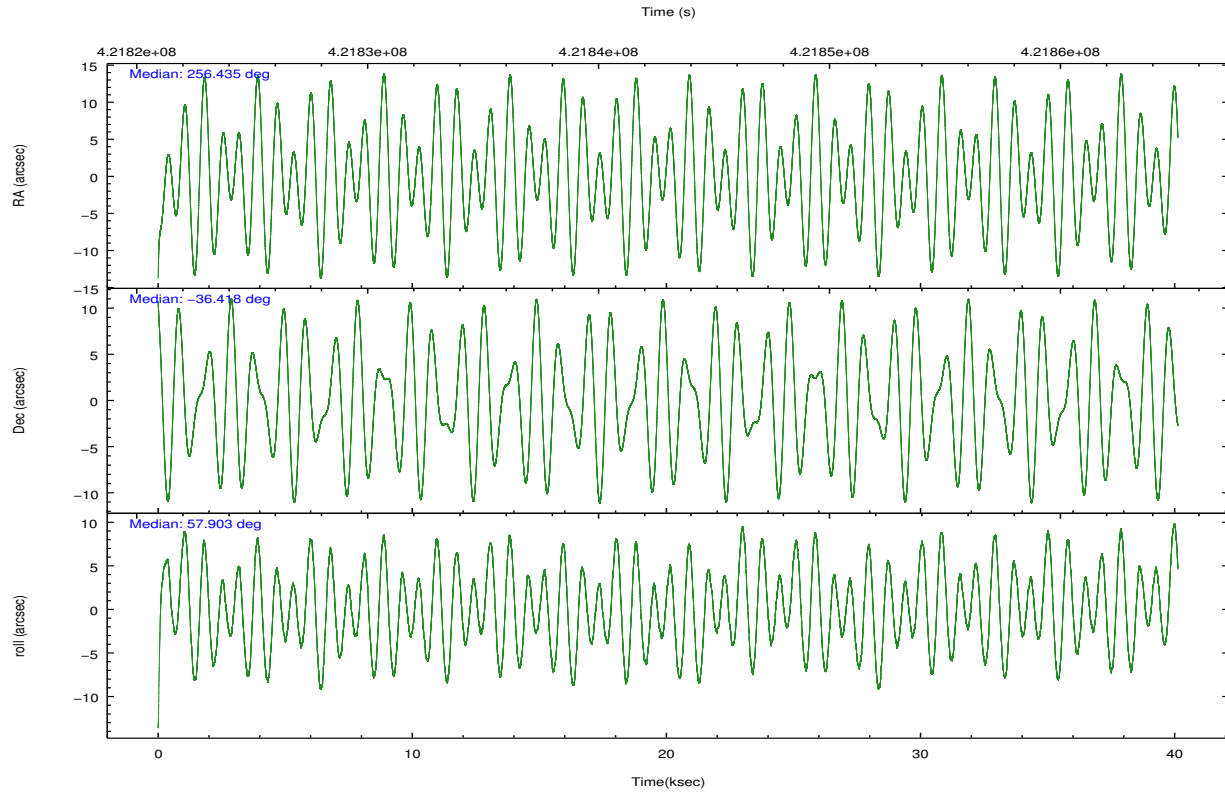
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	310387	1393354	1784204	2103822	996741	373945	grade 0 events	28156	130490	219235	317424	395784	46081
rejected events	209443	332667	262368	234695	285881	216520		9%	9%	12%	15%	39%	12%
rejected %	67%	23%	14%	11%	28%	57%	grade 1 events	183	391	712	4995	1223	327
								0%	0%	0%	0%	0%	0%
							grade 2 events	56504	624866	1131339	575435	232733	89205
								18%	44%	63%	27%	23%	23%
							grade 3 events	4538	36126	13410	161610	22375	5073
								1%	2%	0%	7%	2%	1%
							grade 4 events	4486	35571	13376	161827	22293	5457
								1%	2%	0%	7%	2%	1%
							grade 5 events	3893	27076	10838	39647	8396	5154
								1%	1%	0%	1%	0%	1%
							grade 6 events	7276	233905	144711	653134	37692	11622
								2%	16%	8%	31%	3%	3%
							grade 7 events	205351	304929	250583	189750	276245	211026
								66%	21%	14%	9%	27%	56%

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_FAINT	CC33_FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	256.434686	256.4354622159232	CCD I2 on	N	N
[deg] Pointing Dec	-36.445564	-36.418233892566	CCD I3 on	N	N
[deg] Pointing Roll	57.748807	57.90589148562541	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-183.992523	-183.9900508222561	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.14	-6.142471760751675	CCD S4 on	Y	Y
[s] Observation start time (MET)	421823072.184000	421821894.02319	CCD S5 on	Y	Y
Observation start date	2011-05-15T05:03:26	2011-05-15T04:44:54	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	421863072.184000	421863522.35035	On-chip summing requested	N	N
Observation end date	2011-05-15T16:10:06	2011-05-15T16:18:42	Subarray requested	NONE	NONE
Read mode	CONTINUOUS	CONTINUOUS	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0

2.3 Aspect



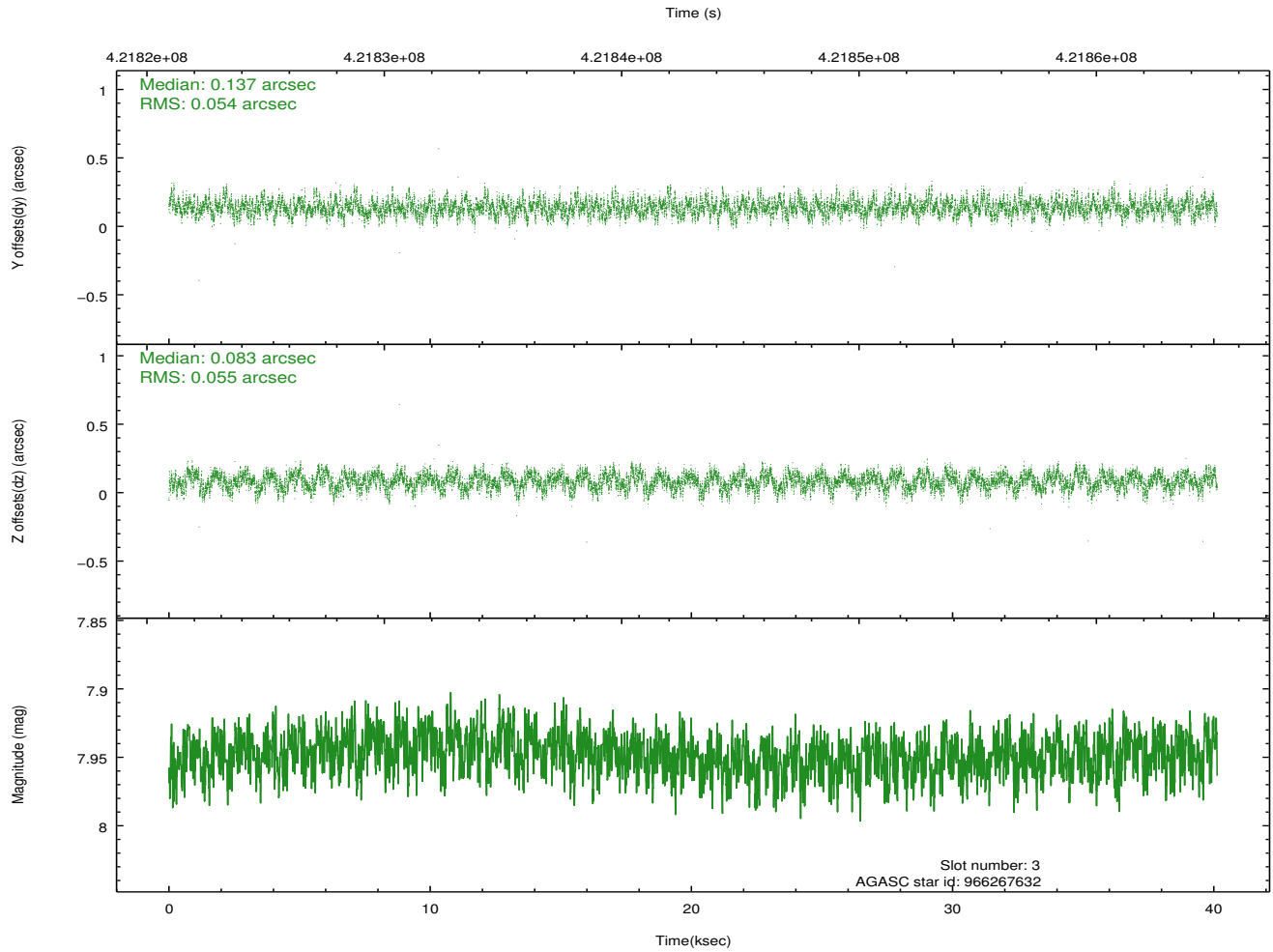
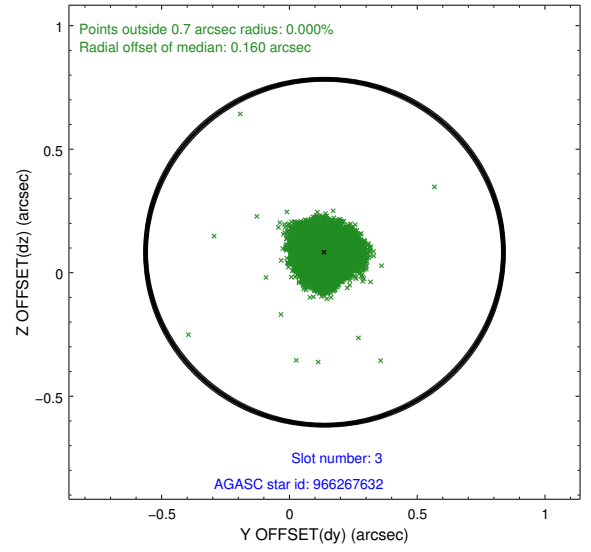
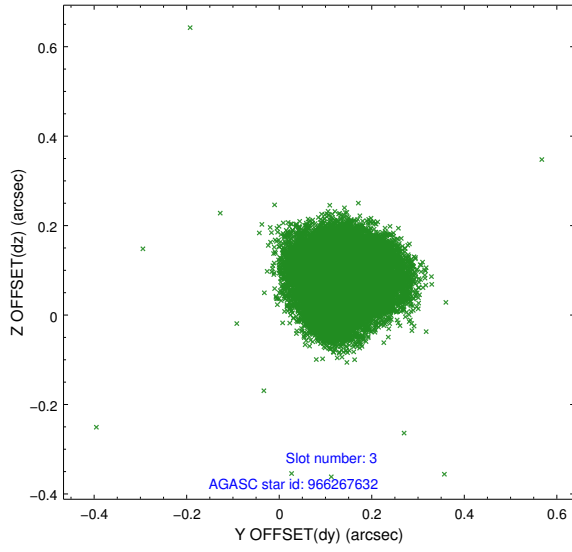


Slot Statistics

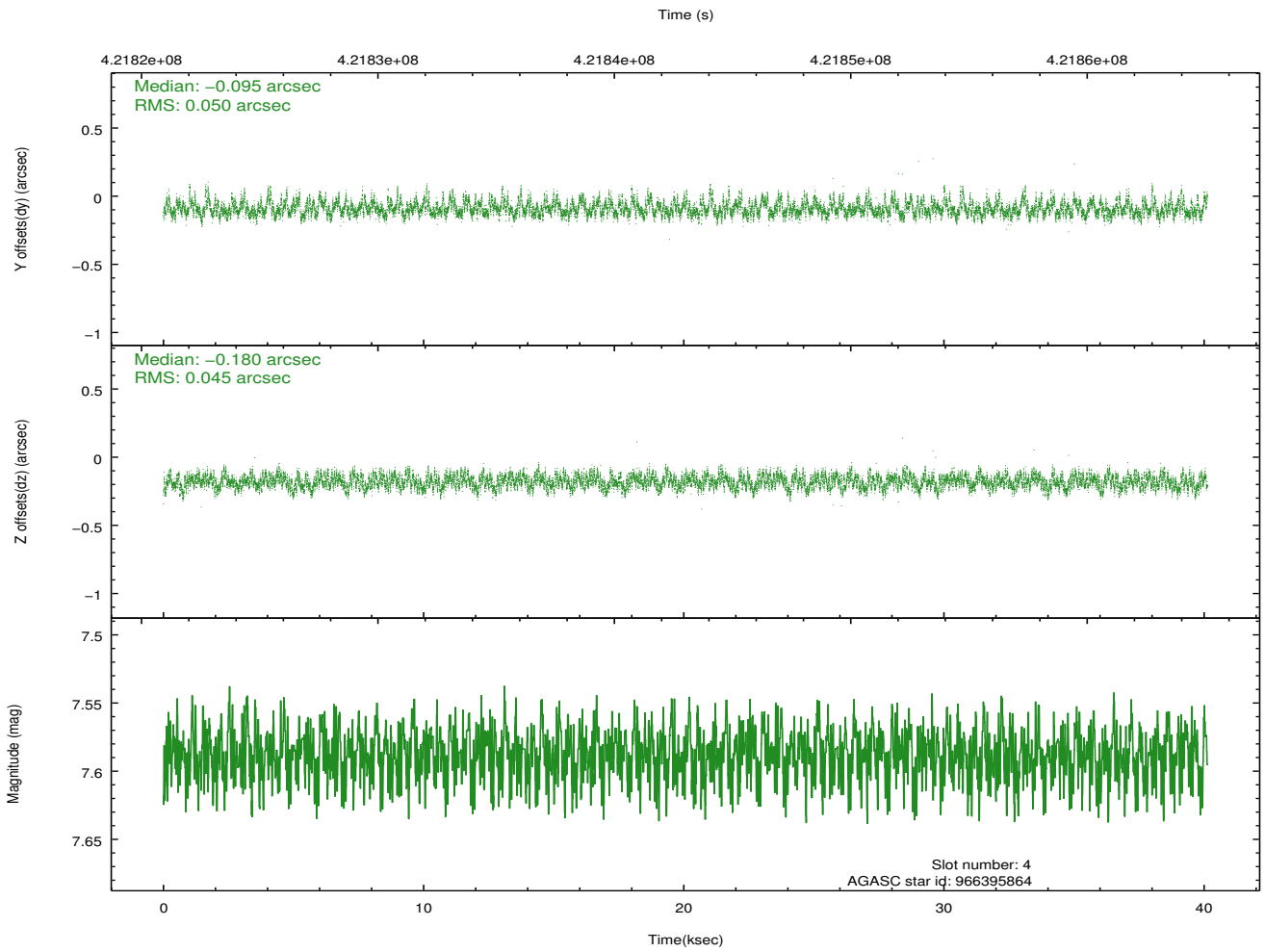
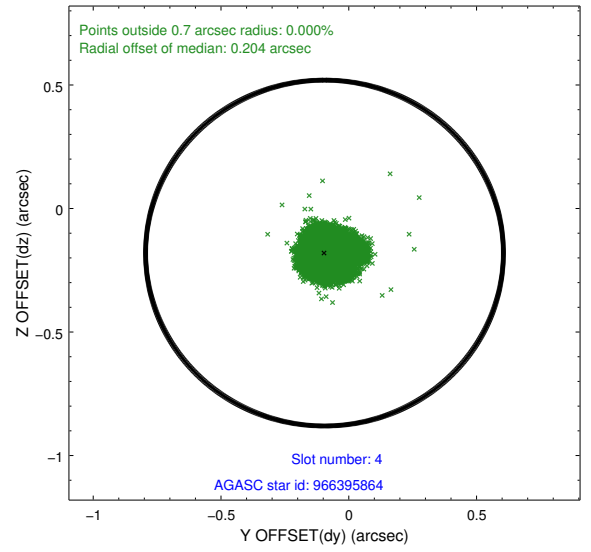
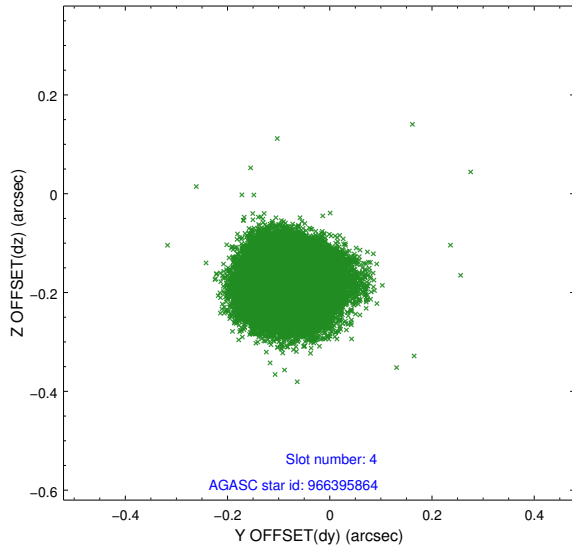
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.92	9788	-0.122	-0.071	0.015	0.022	0.000000	0.000000	-770.29	-1864.94
1	FID	ACIS-S-4	7.00	9788	0.136	0.069	0.008	0.013	0.000000	0.000000	2143.26	43.61
2	FID	ACIS-S-6	7.20	9788	-0.043	0.009	0.018	0.027	0.000000	0.000000	391.82	680.99
3	GUIDE	966267632	7.95	19569	0.137	0.083	0.084	0.130	256.428991	-36.740525	-906.23	-552.68
4	GUIDE	966395864	7.59	19576	-0.095	-0.180	0.072	0.115	256.670769	-36.077904	1485.48	124.83
5	GUIDE	966263464	8.61	19556	-0.175	-0.057	0.067	0.109	256.403645	-35.929342	1523.65	1068.30
6	GUIDE	966398520	8.32	19454	-0.128	-0.071	0.073	0.117	256.842646	-35.892866	2315.58	53.87
7	GUIDE	966394144	8.64	19563	0.255	0.232	0.079	0.125	256.902901	-37.062041	-1161.57	-2323.21

2.4 Star Slots

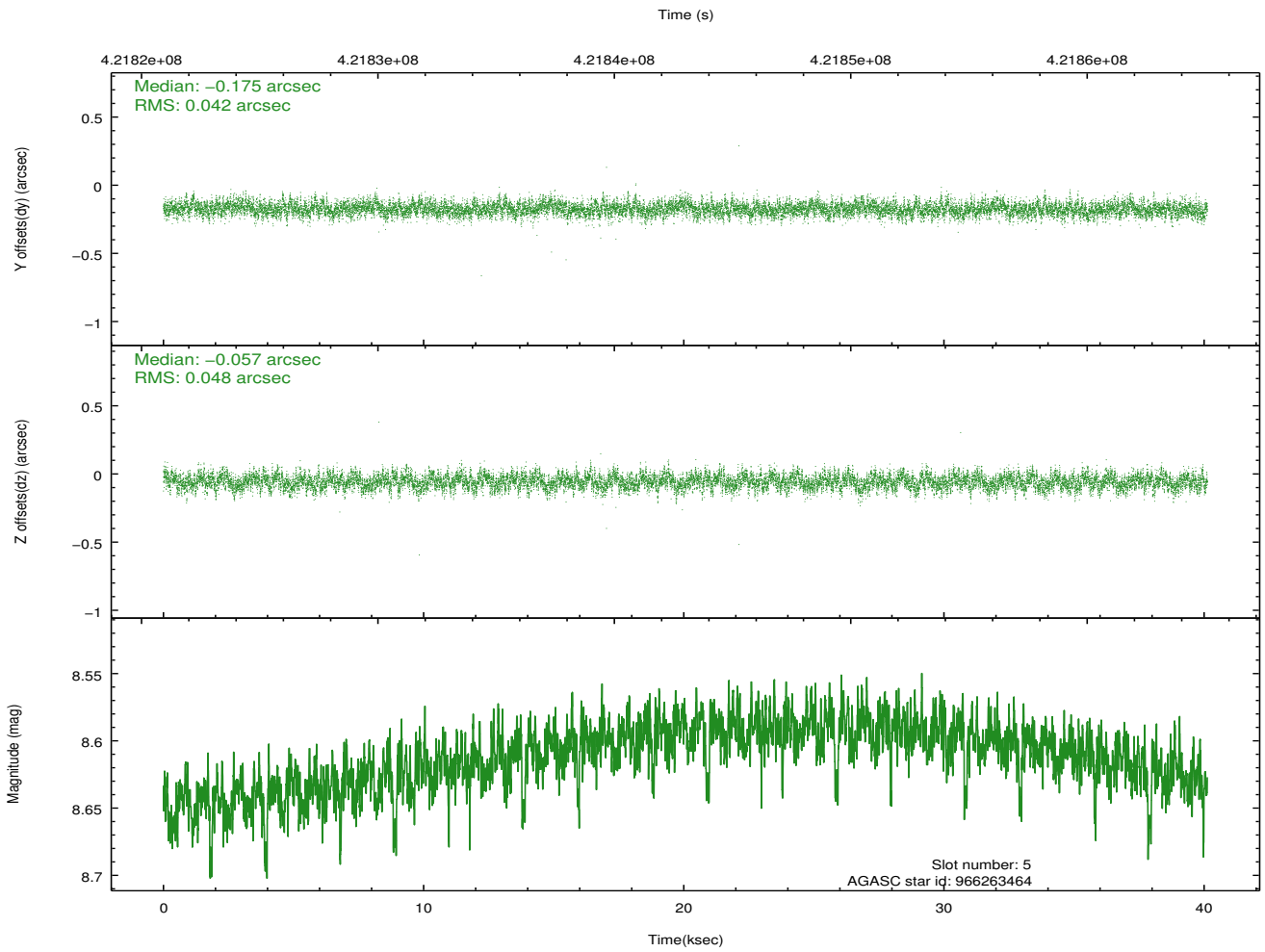
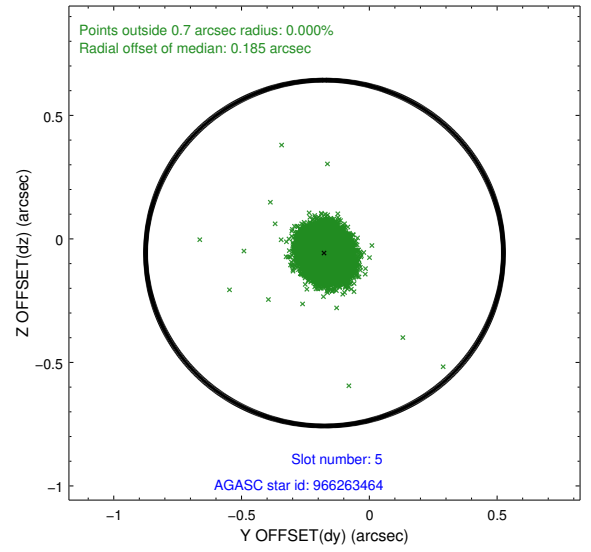
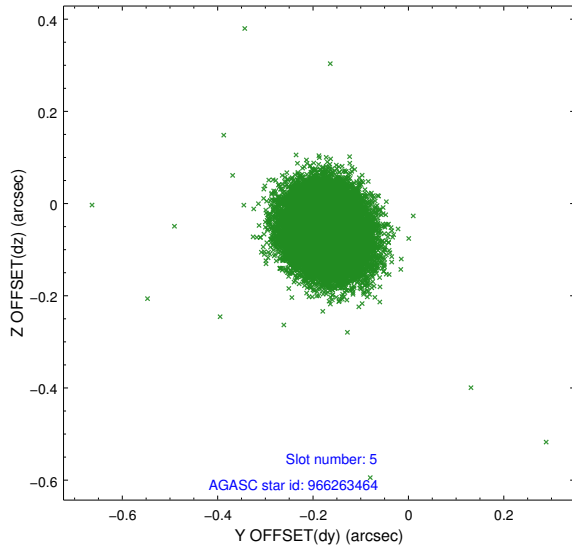
2.4.1 Slot 3



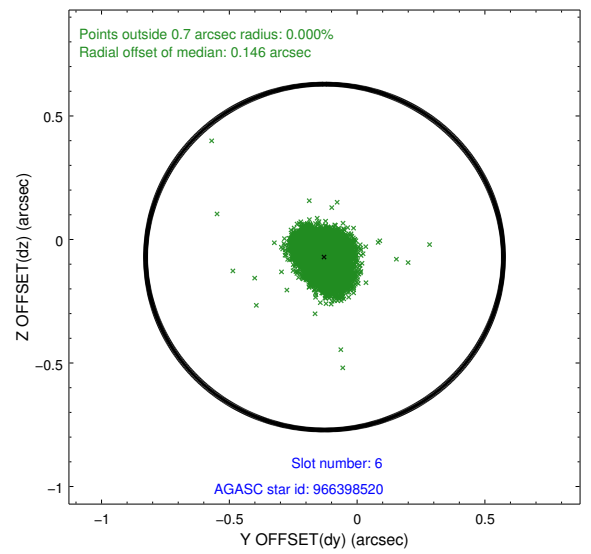
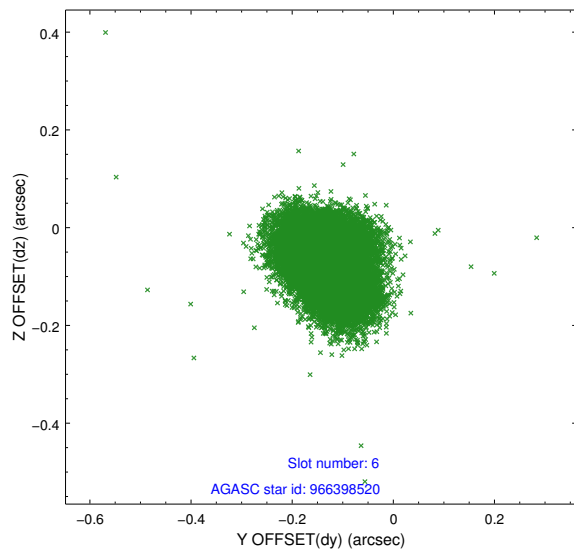
2.4.2 Slot 4



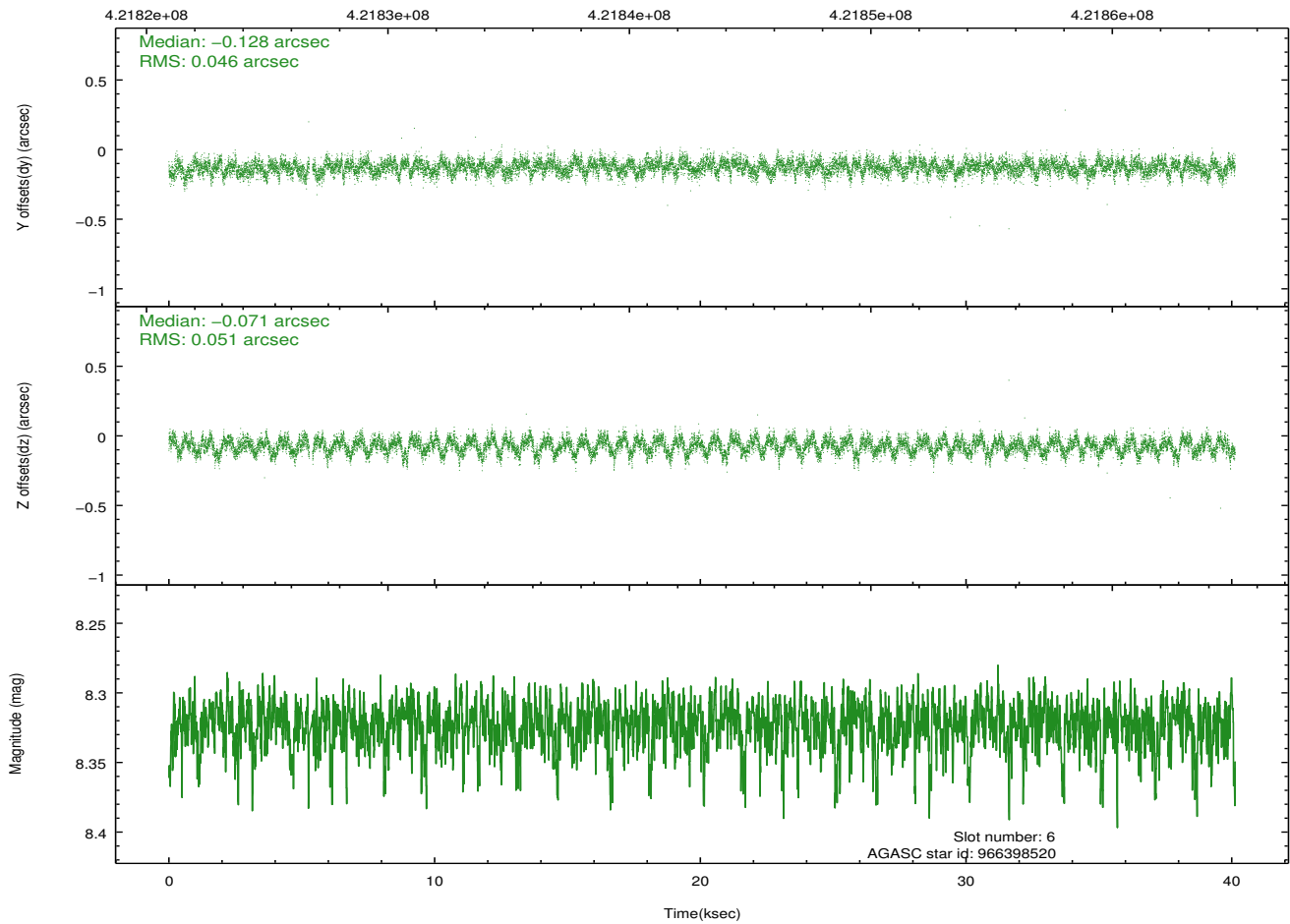
2.4.3 Slot 5



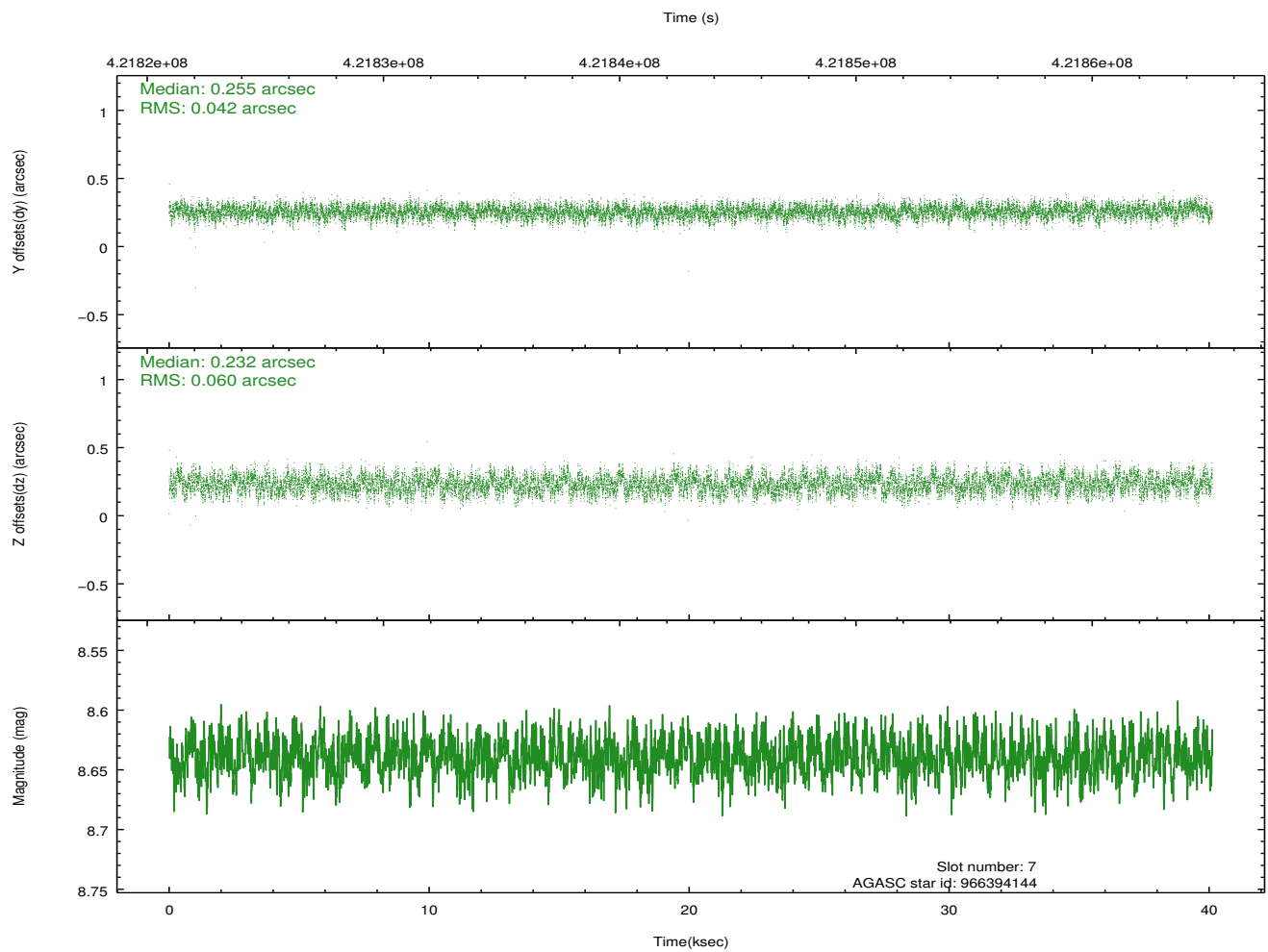
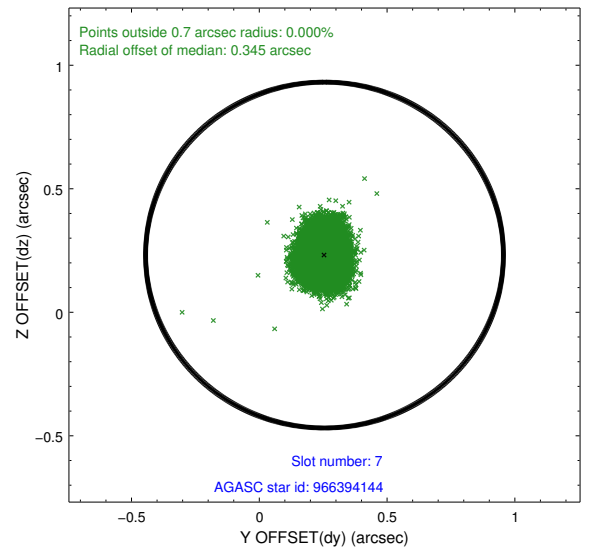
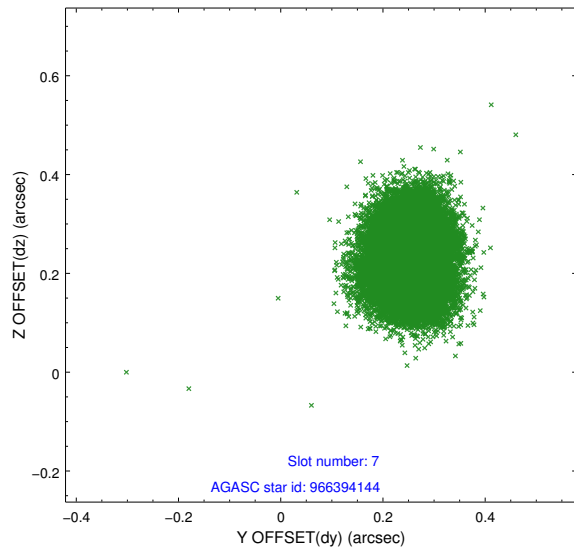
2.4.4 Slot 6



Time (s)

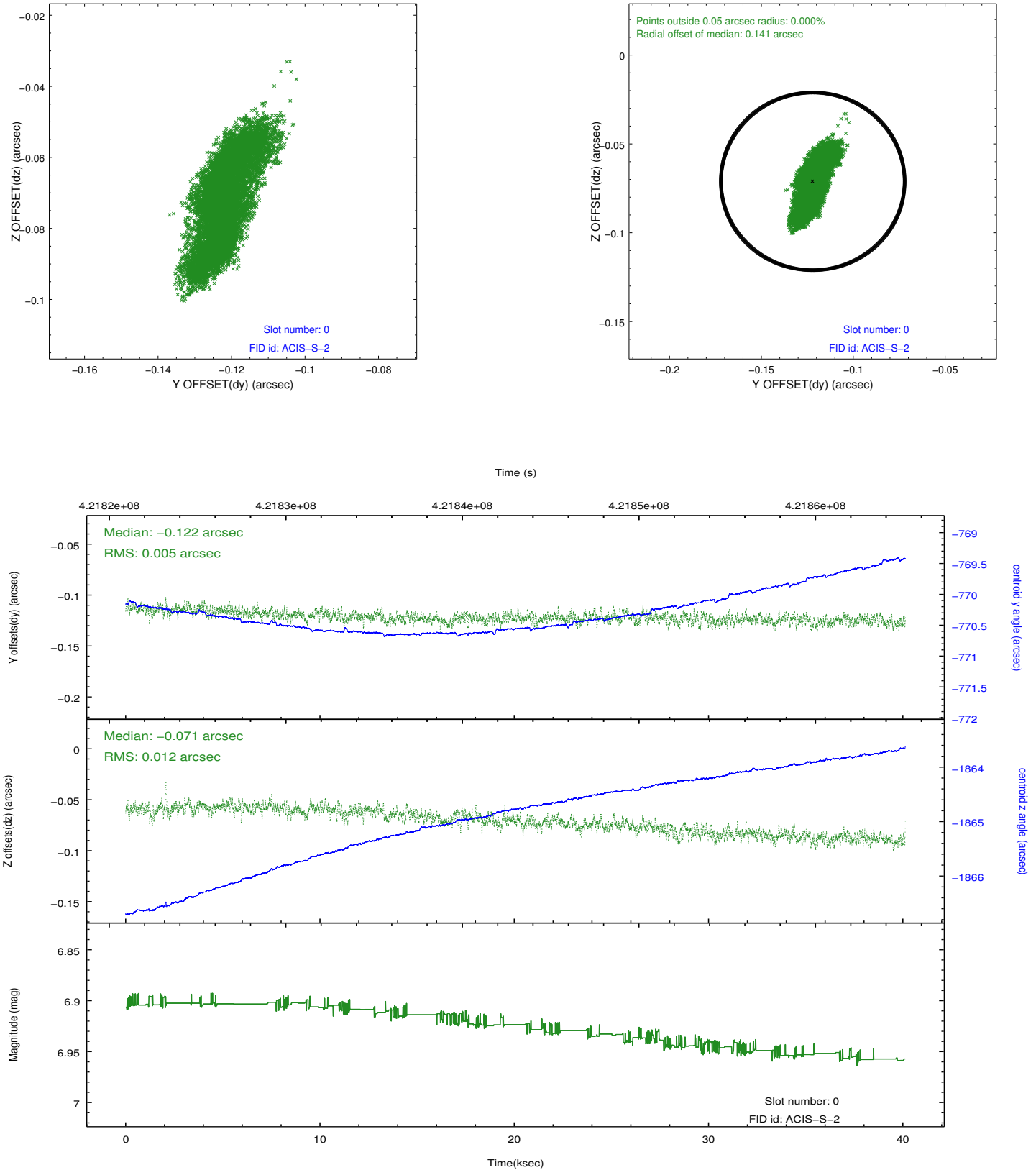


2.4.5 Slot 7

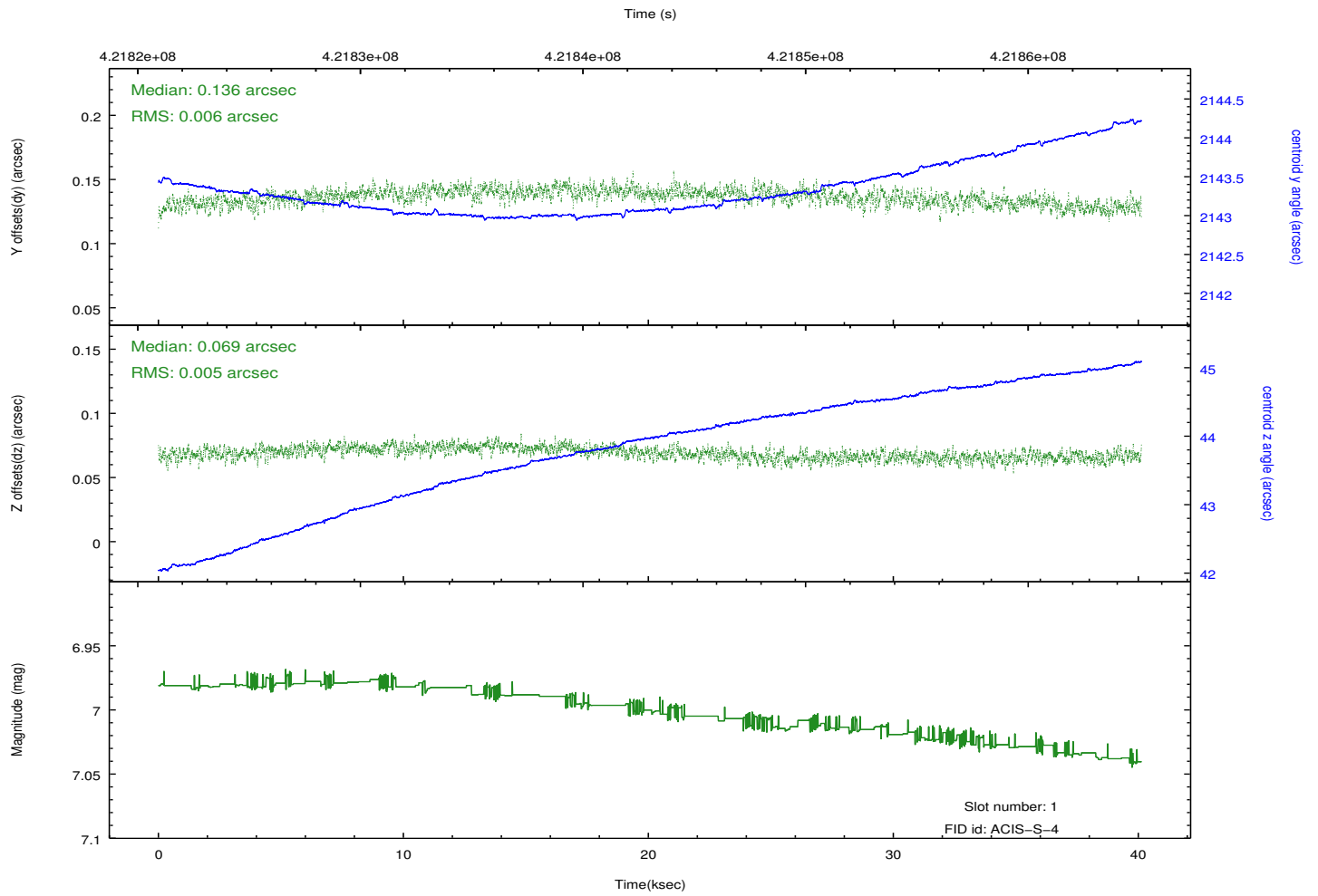
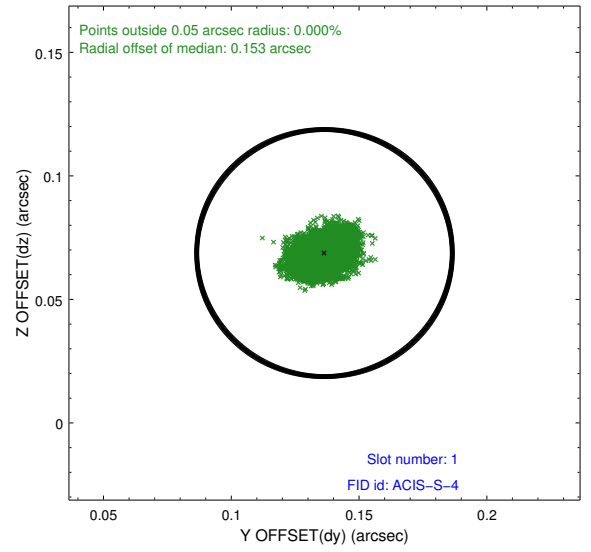
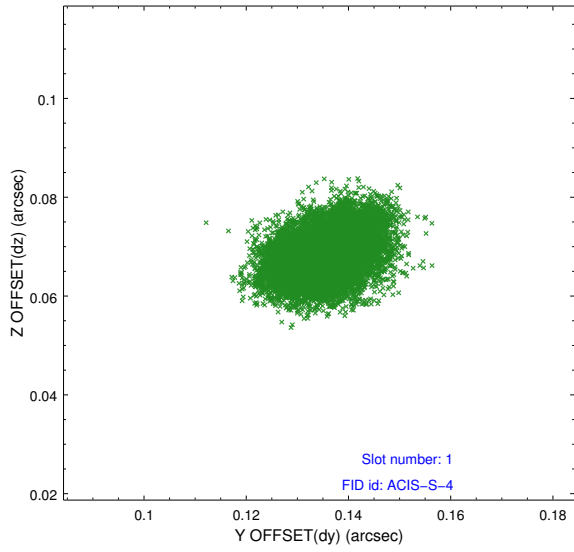


2.5 FID Slots

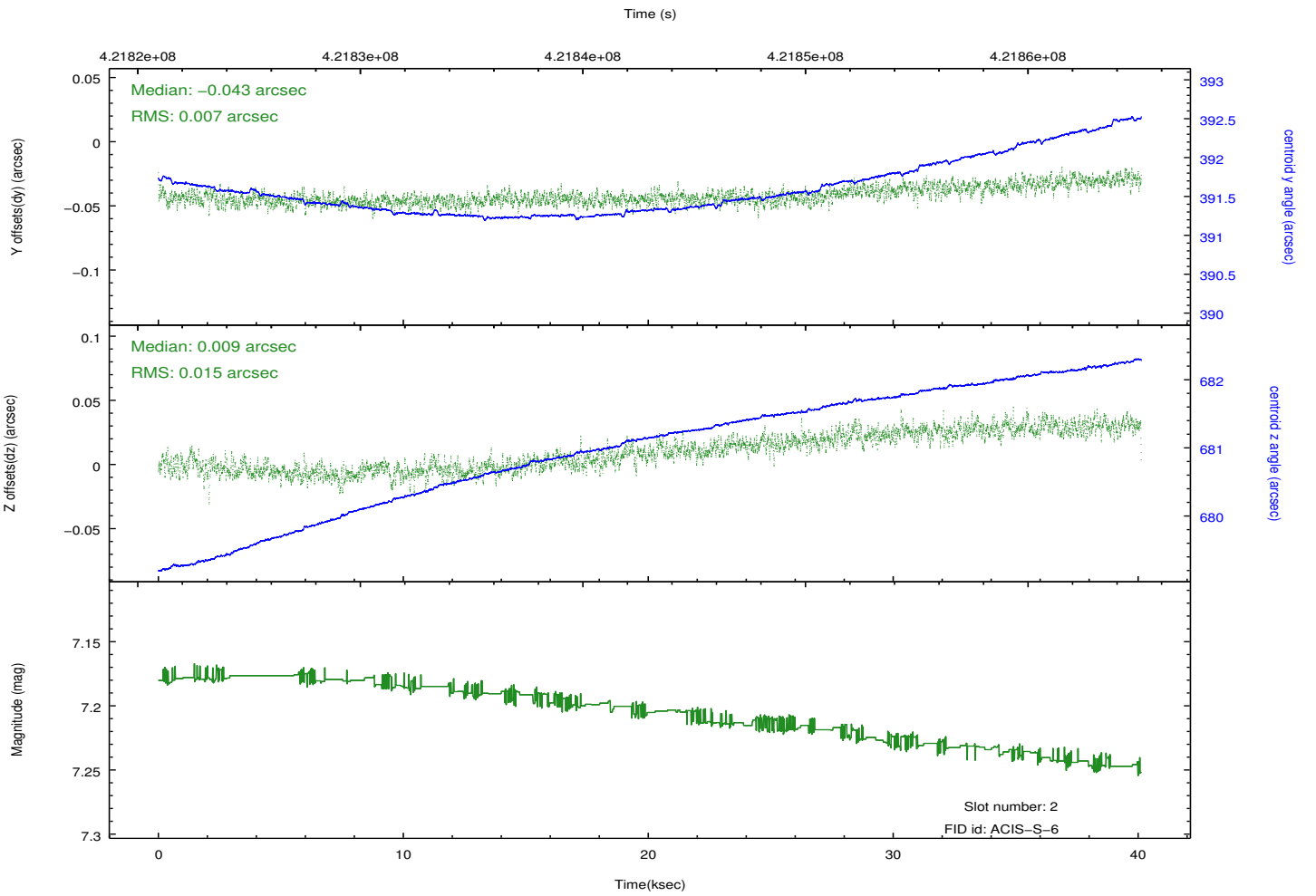
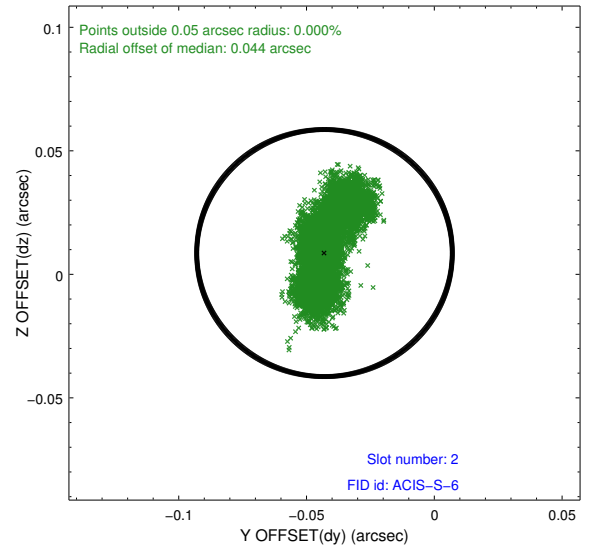
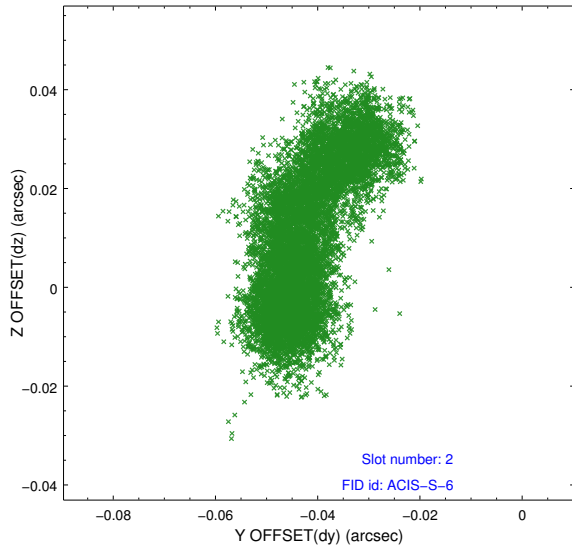
2.5.1 Slot 0



2.5.2 Slot 1

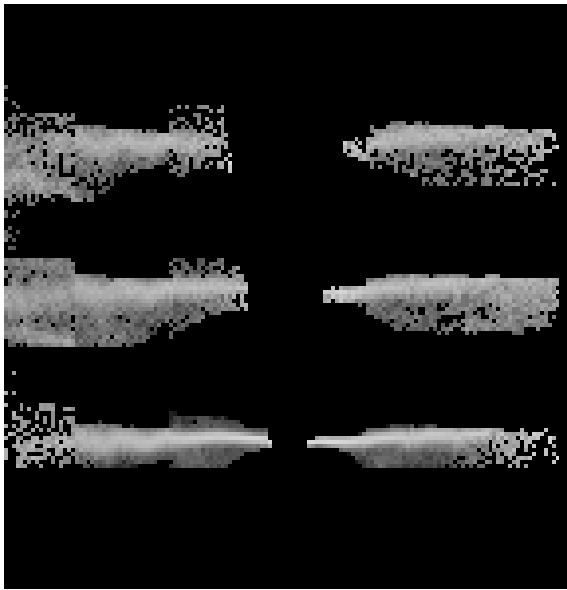


2.5.3 Slot 2

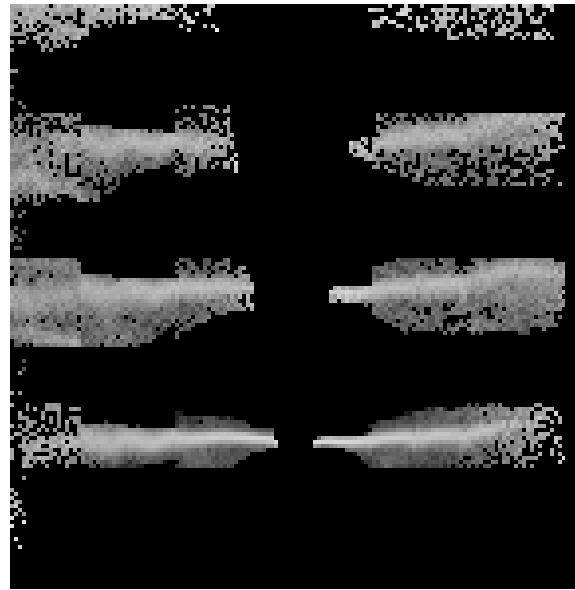


3 Gratings

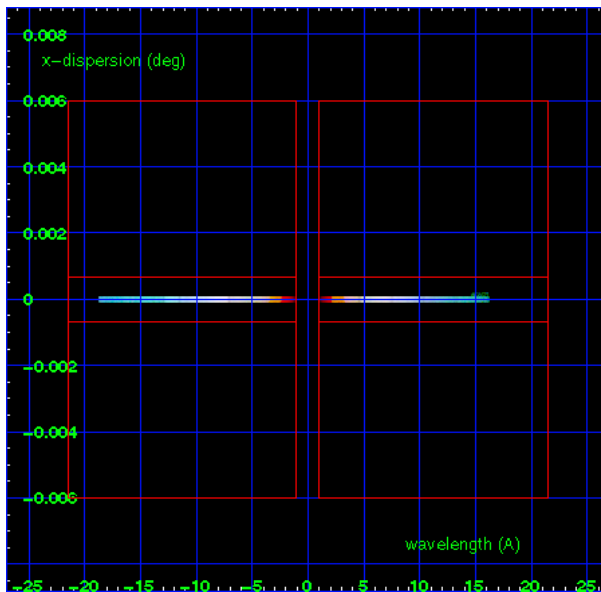
3.1 HEG Arm



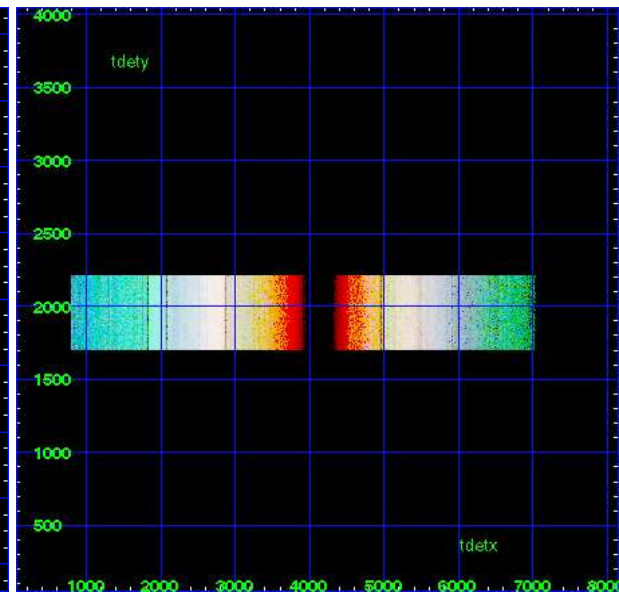
HEG Order Sort 123



HEG Order Sort ALL

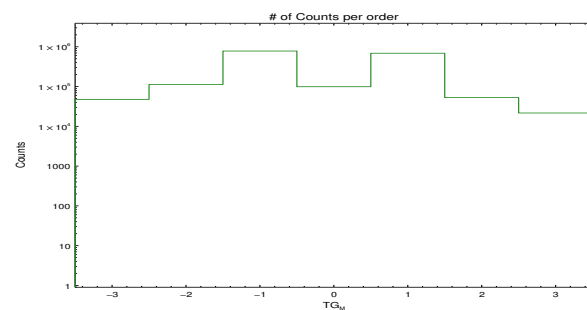


Spot Image HEG

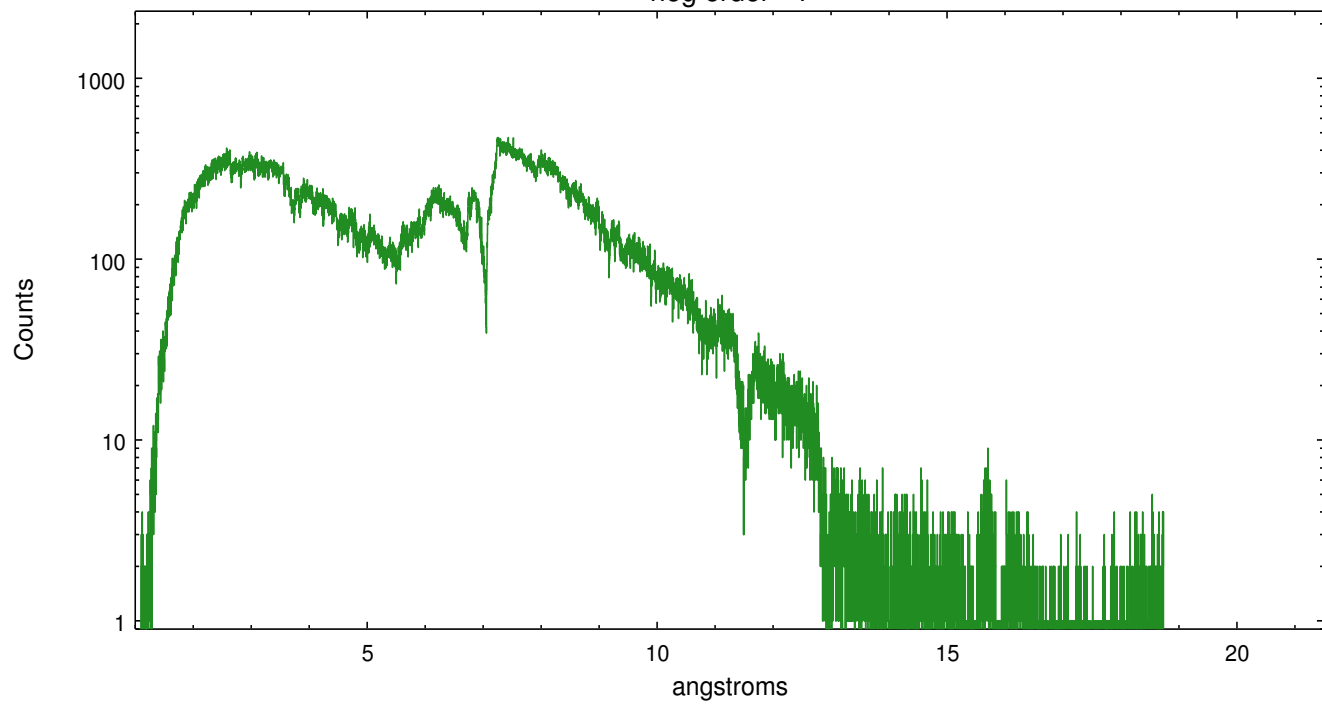


Full Detector HEG

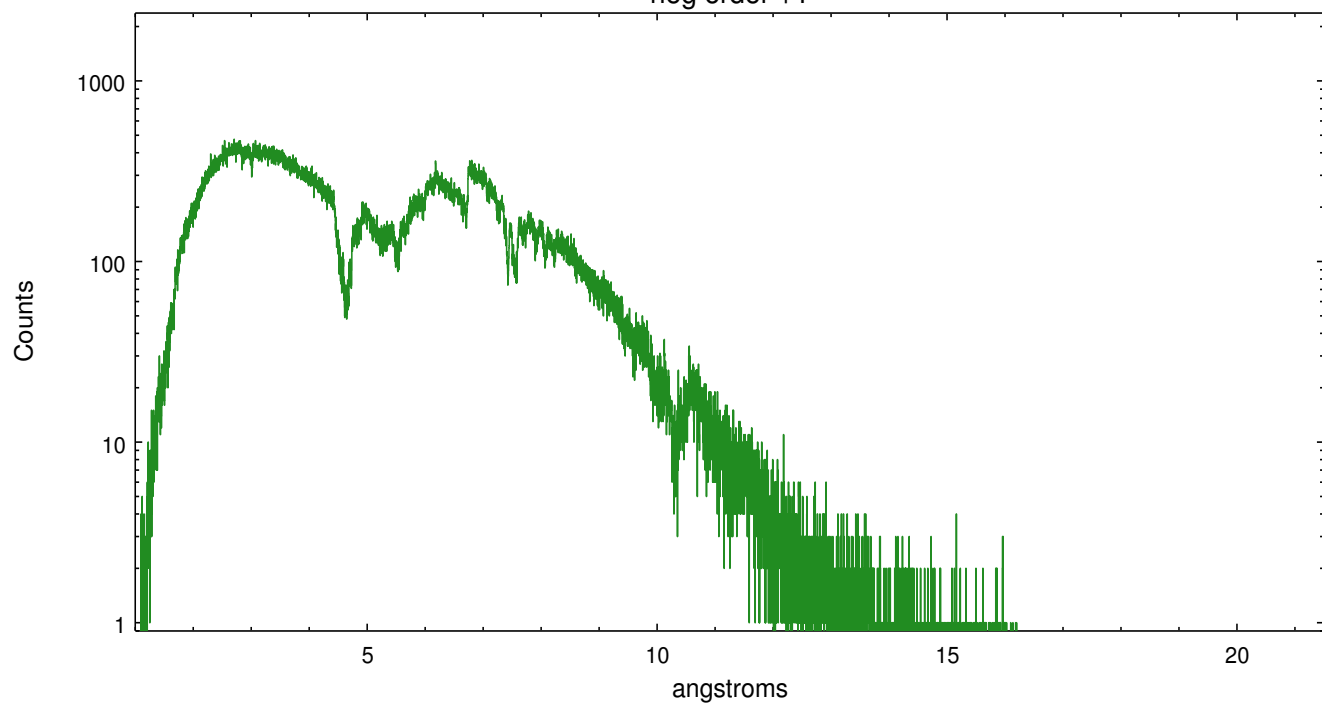
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	47614	112975	781311	99125	688355	52752	21637



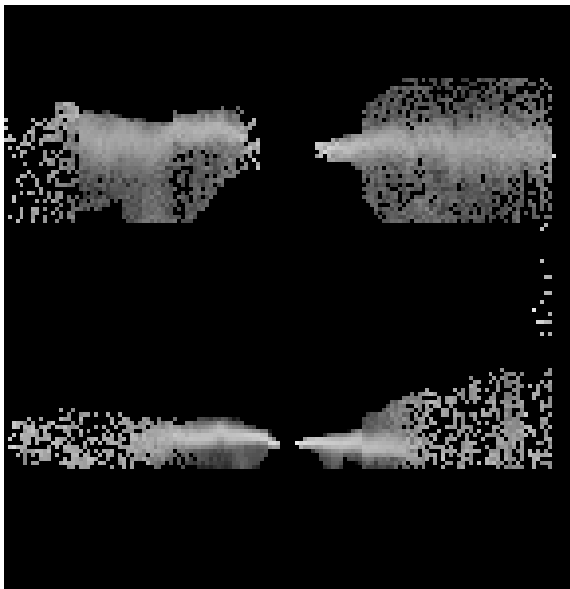
heg order -1



heg order +1



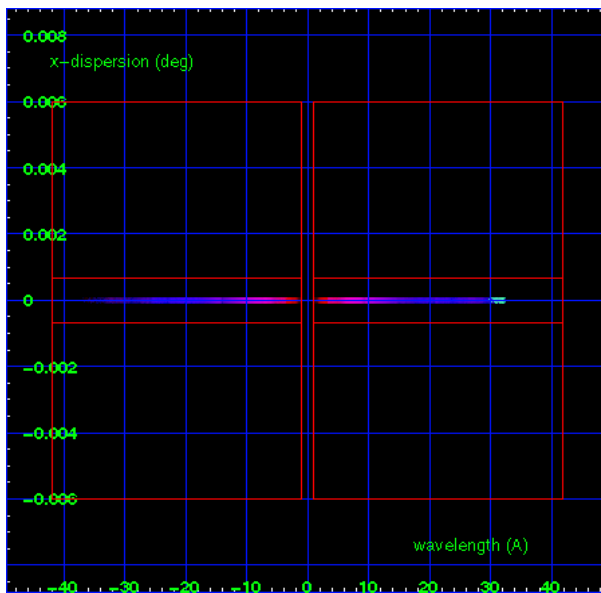
3.2 MEG Arm



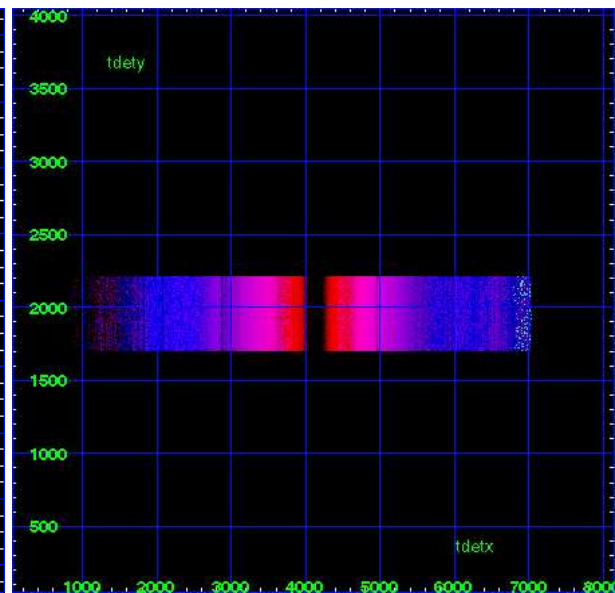
MEG Order Sort 123



MEG Order Sort ALL

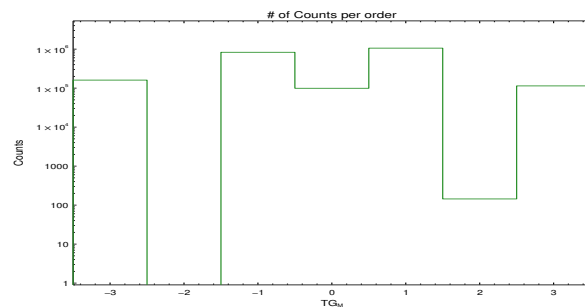


Spot Image MEG

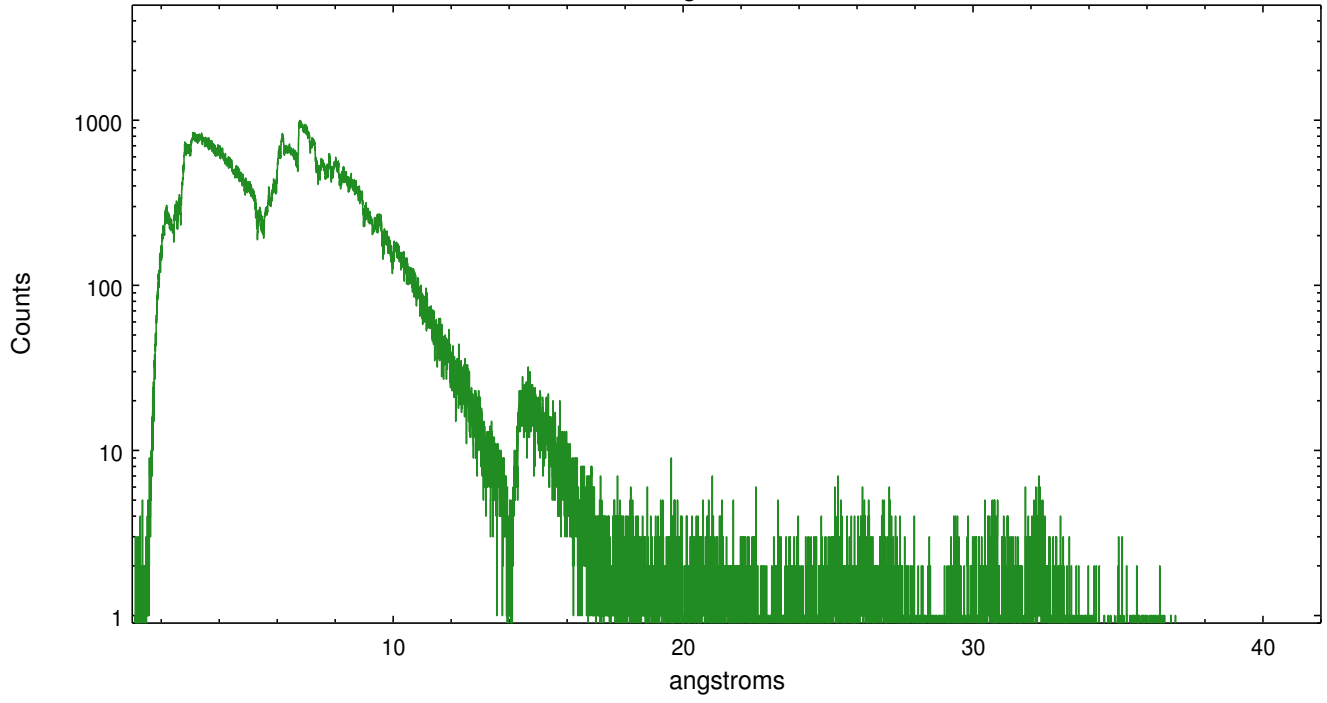


Full Detector MEG

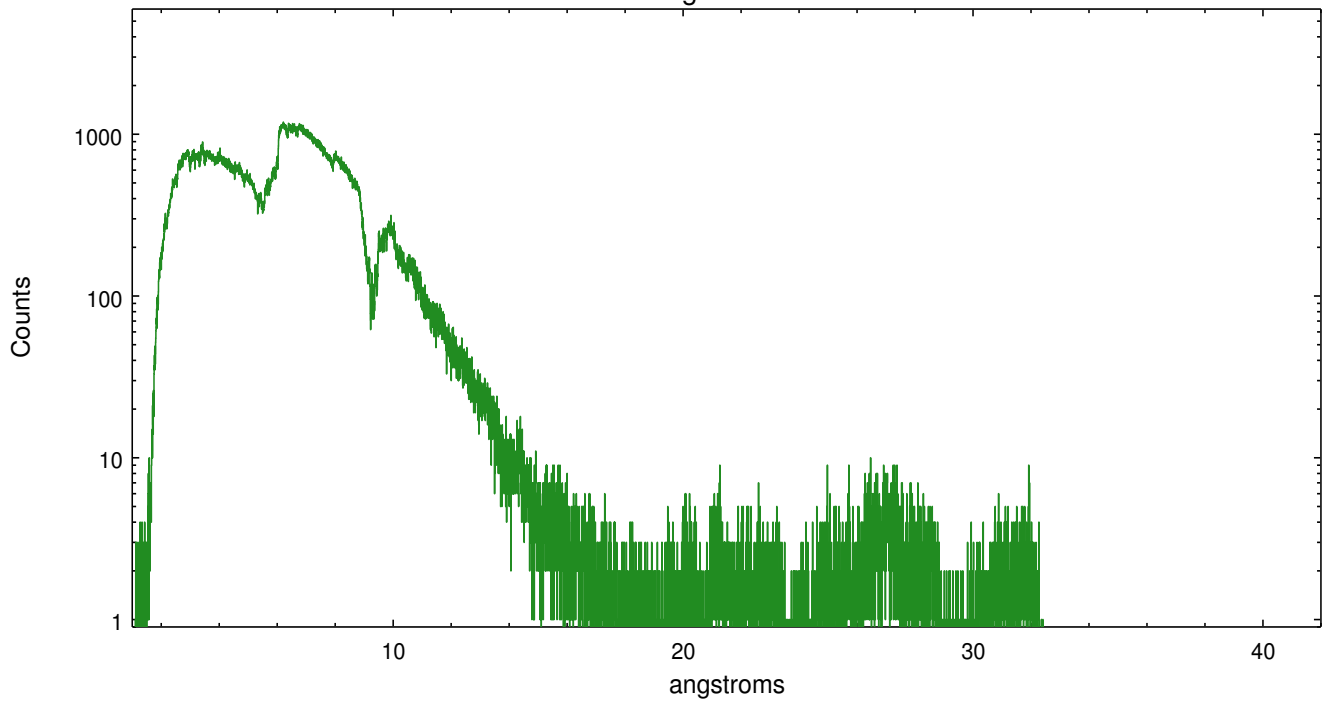
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	160606	0	830345	99125	1060362	144	114063



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.02.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.069

A.2 Comments