

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10778 - L2 Version 2
Chandra X-Ray Center

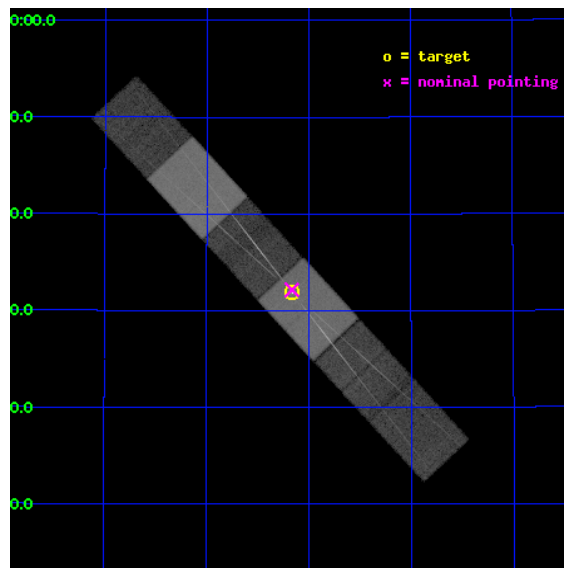
L2 Processing Date : May 24 2012

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1 Front

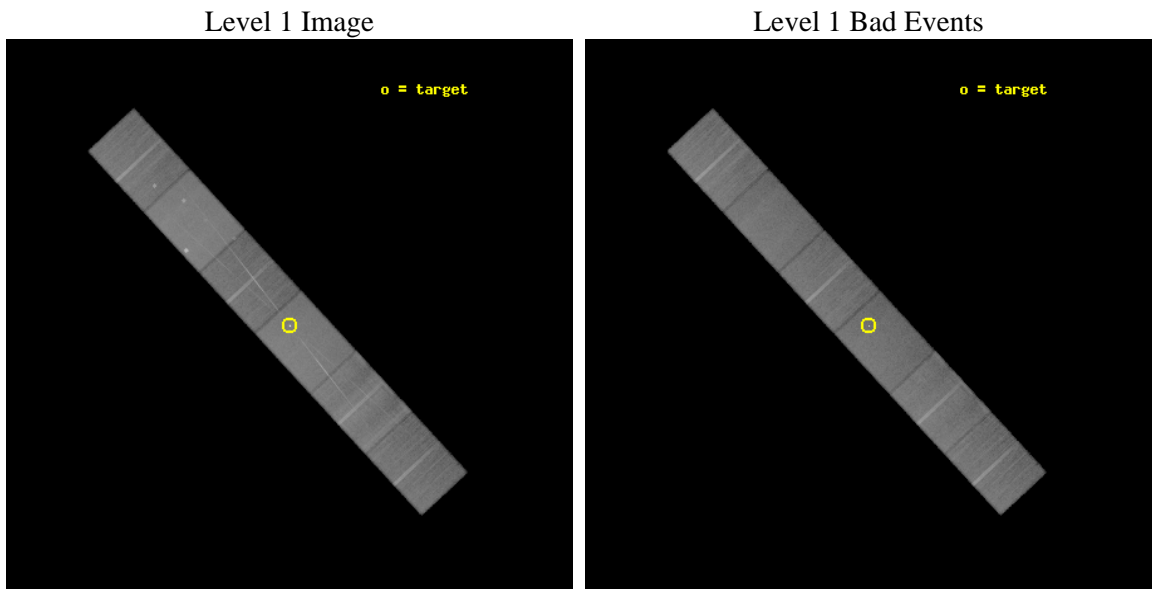
seq_num	701946	Sequence number
obs_id	10778	Observation id
title	Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 4051	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.79	Observer's specified target RA [deg]
dec_targ	44.531333	Observer's specified target Dec [deg]
ra_nom	180.79131016265	Nominal RA [deg]
dec_nom	44.536093575267	Nominal Dec [deg]
roll_nom	47.155729338639	Nominal Roll [deg]
revision	2	Processing version of data
ontime	34125.0	Sum of GTIs [s]
livetime	33573.851651292	Livetime [s]
ontime4	34125.0	Sum of GTIs [s]
ontime5	34125.0	Sum of GTIs [s]
ontime6	34119.917969763	Sum of GTIs [s]
ontime7	34125.0	Sum of GTIs [s]
ontime8	34125.0	Sum of GTIs [s]
ontime9	34122.459009767	Sum of GTIs [s]
l2events	485515	Number of level 2 events



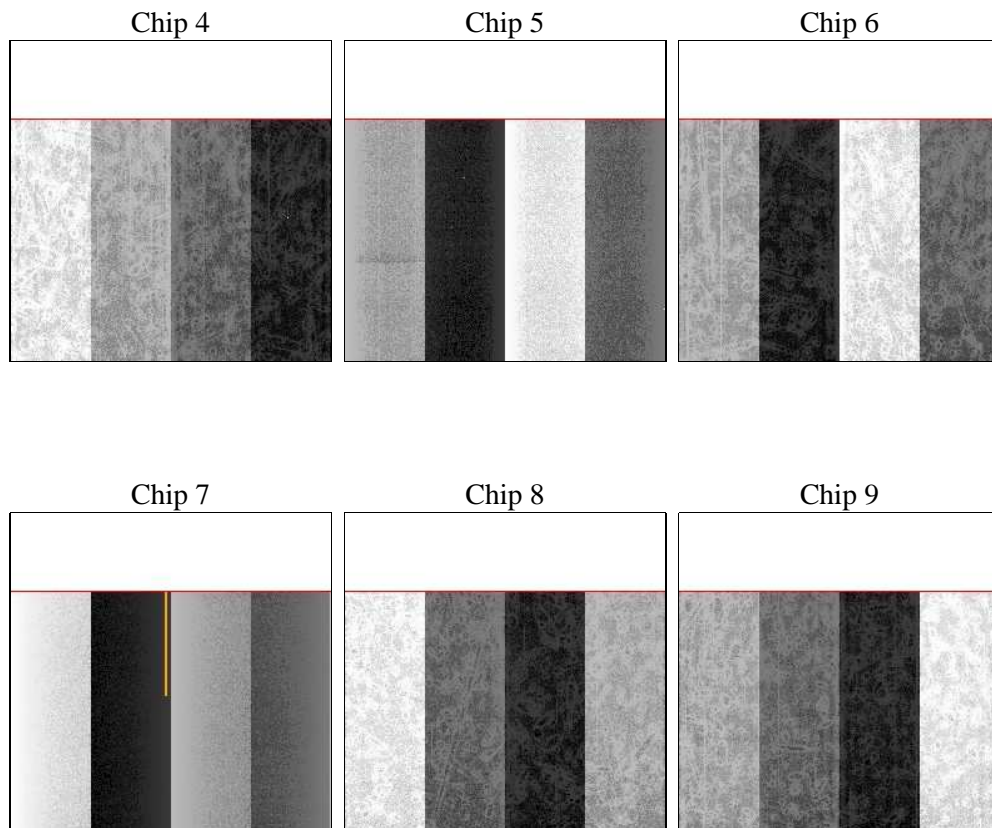
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	34125.0	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	34125.0	Sum of GTIs [s]
date	2012-05-24T03:08:11	Date and time of file creation	ontime5	34125.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	34119.917969763	Sum of GTIs [s]
			ontime7	34125.0	Sum of GTIs [s]
			ontime8	34125.0	Sum of GTIs [s]
			ontime9	34122.459009767	Sum of GTIs [s]
			l1events	1983609	Number of level 1 events

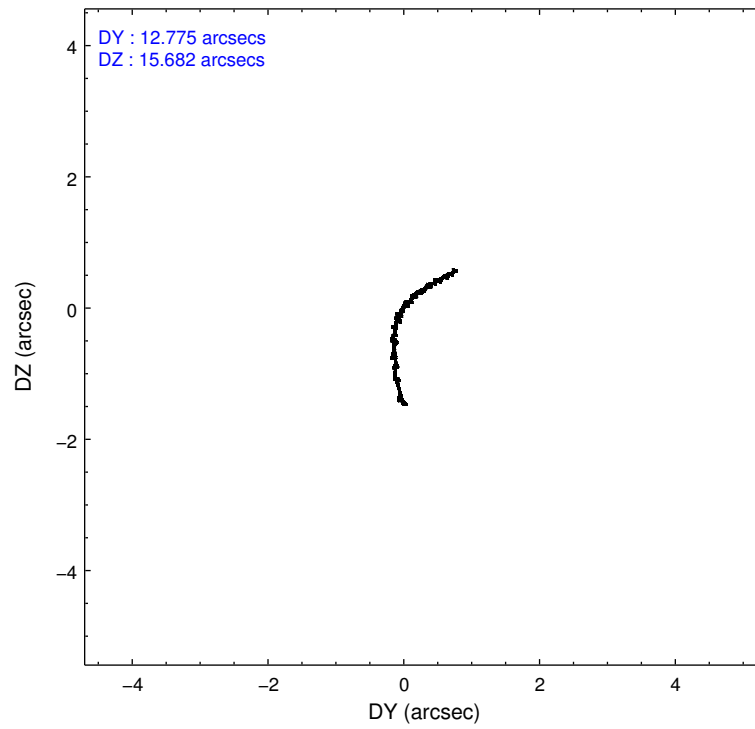
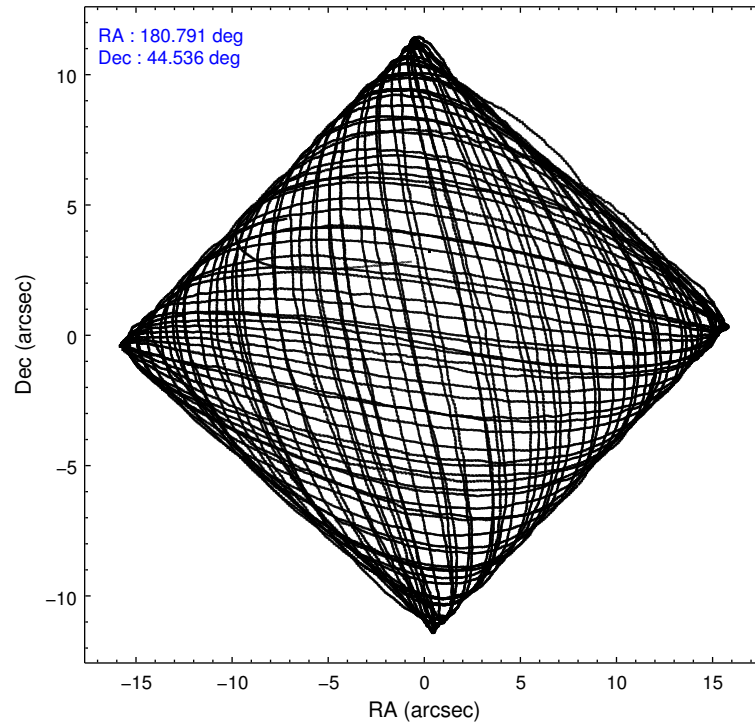
2.1.4 Events

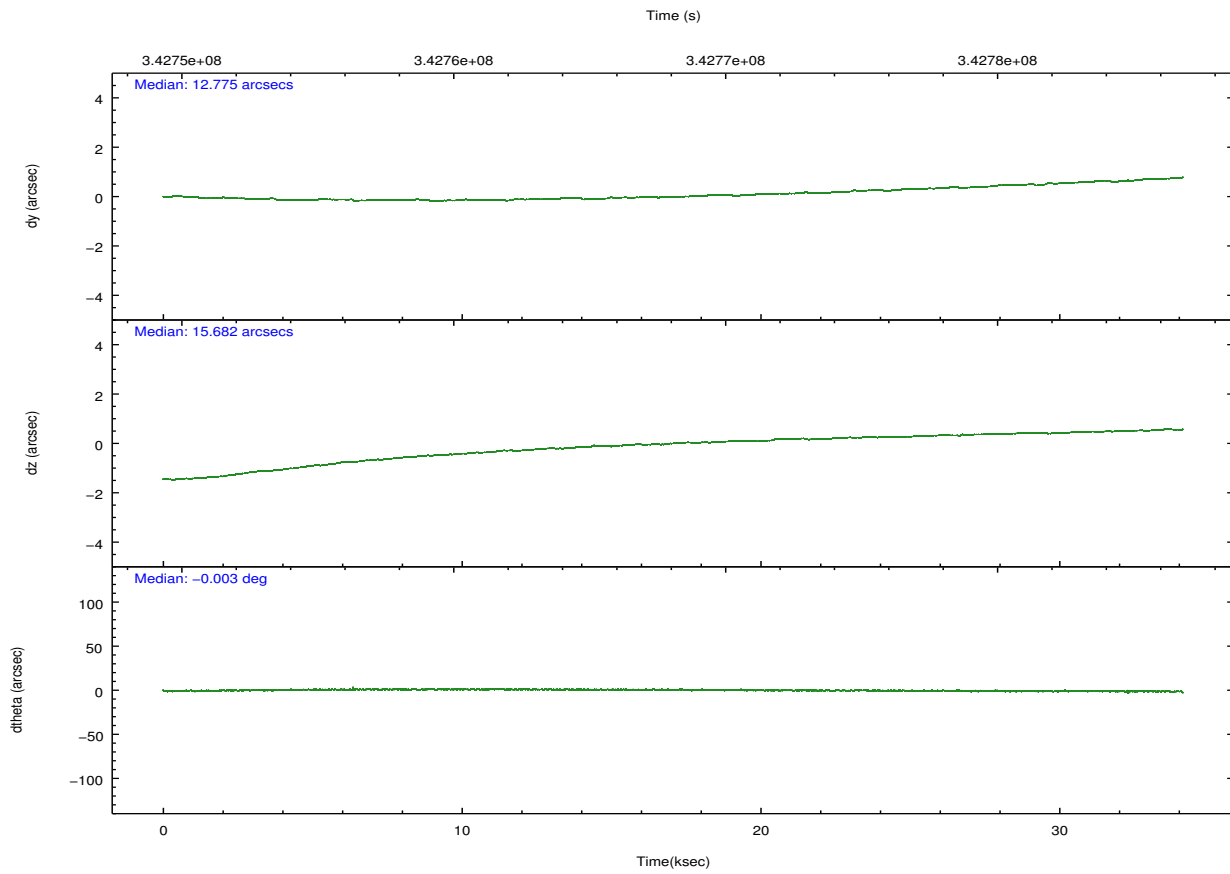
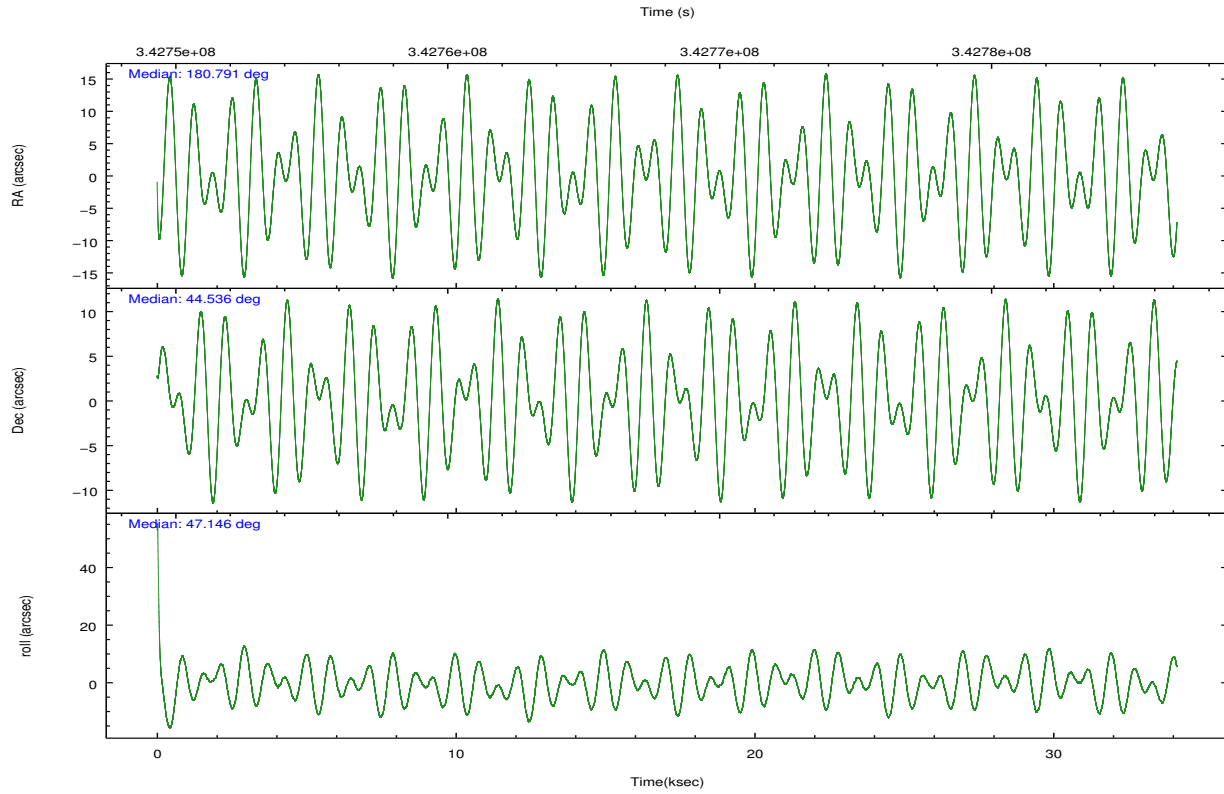
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	294585	415694	274251	386840	349466	262773	grade 0 events	17587	22851	21720	17065	30137	14668
rejected events	256956	221065	230639	216567	261896	228299		5%	5%	7%	4%	8%	5%
rejected %	87%	53%	84%	55%	74%	86%	grade 1 events	252	680	157	653	242	153
								0%	0%	0%	0%	0%	0%
							grade 2 events	7926	57479	8303	35788	18909	6988
								2%	13%	3%	9%	5%	2%
							grade 3 events	3626	8640	3764	15273	8922	3420
								1%	2%	1%	3%	2%	1%
							grade 4 events	3349	8394	3455	15220	8355	3263
								1%	2%	1%	3%	2%	1%
							grade 5 events	12236	30709	12397	35204	16505	13359
								4%	7%	4%	9%	4%	5%
							grade 6 events	5584	99641	6790	88856	22164	6536
								1%	23%	2%	22%	6%	2%
							grade 7 events	244025	187300	217665	178781	244232	214386
								82%	45%	79%	46%	69%	81%

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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	180.783309	180.7913101626544	CCD I2 on	N	N
[deg] Pointing Dec	44.509353	44.53609357526714	CCD I3 on	N	N
[deg] Pointing Roll	47.004694	47.15572933863934	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	-187.132523	-187.1228876879999	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.009634895007935	CCD S4 on	Y	Y
[s] Observation start time (MET)	342751129.184000	342749986.50504	CCD S5 on	Y	Y
Observation start date	2008-11-11T00:37:44	2008-11-11T00:19:46	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	342785129.184000	342785896.35681	On-chip summing requested	N	N
Observation end date	2008-11-11T10:04:24	2008-11-11T10:18:16	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	774	774
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	2.5

2.3 Aspect



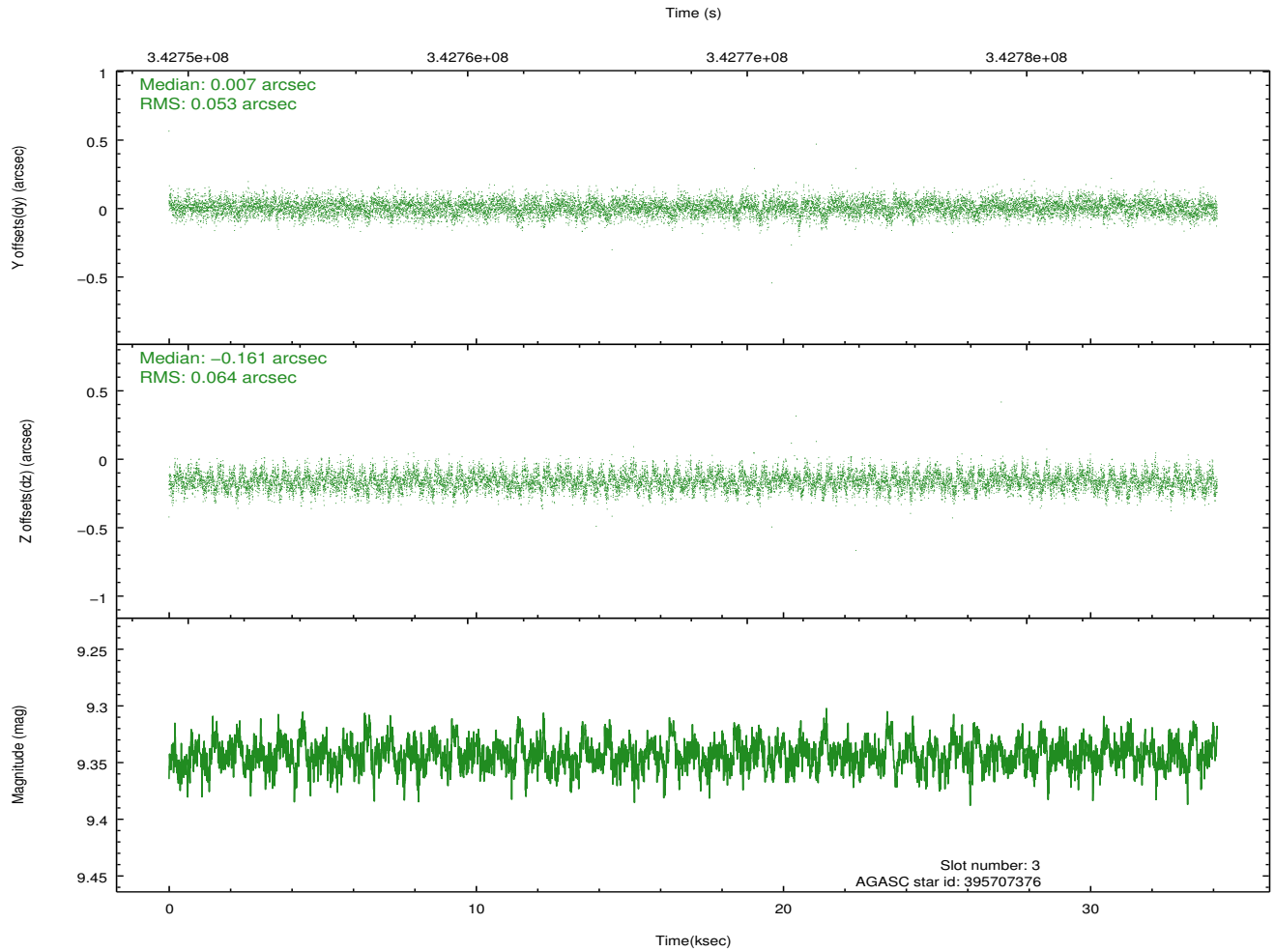
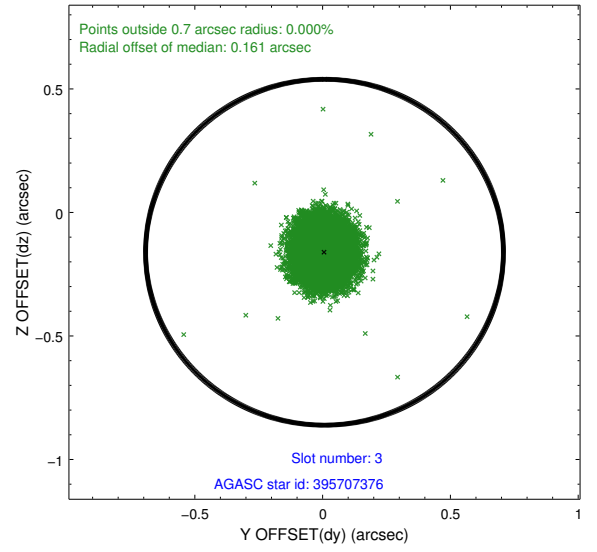
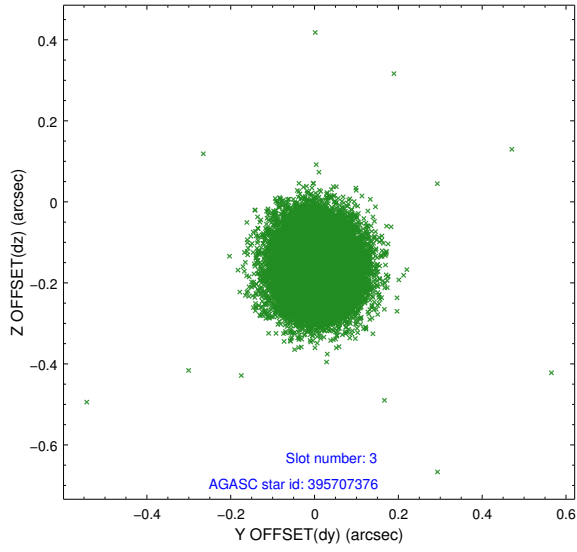


Slot Statistics

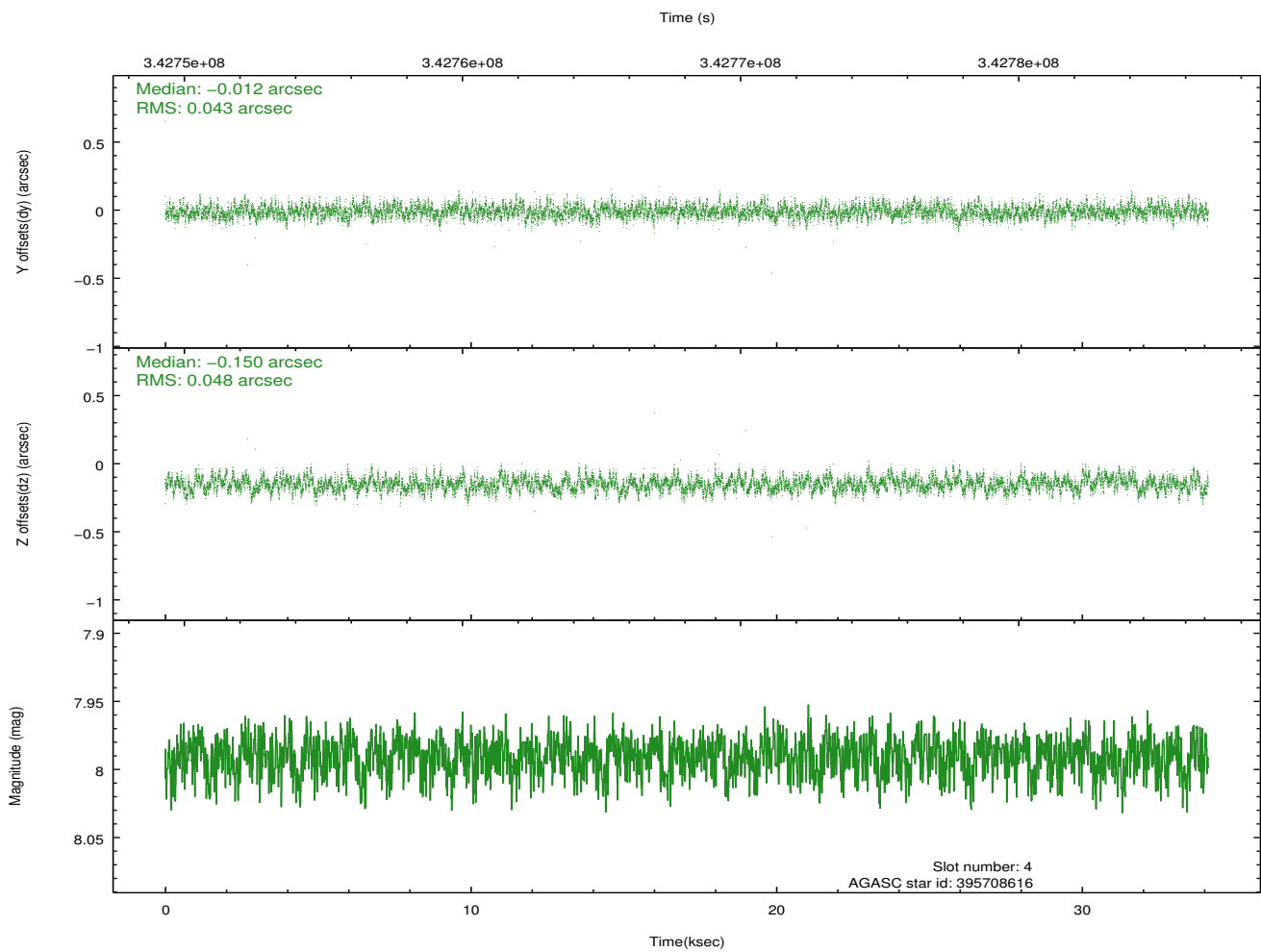
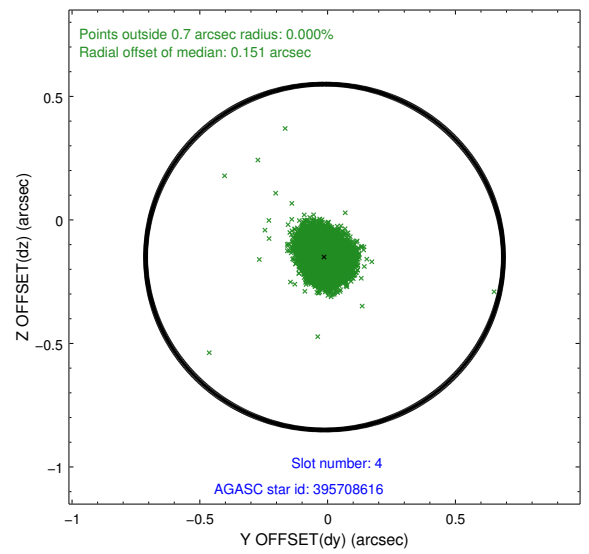
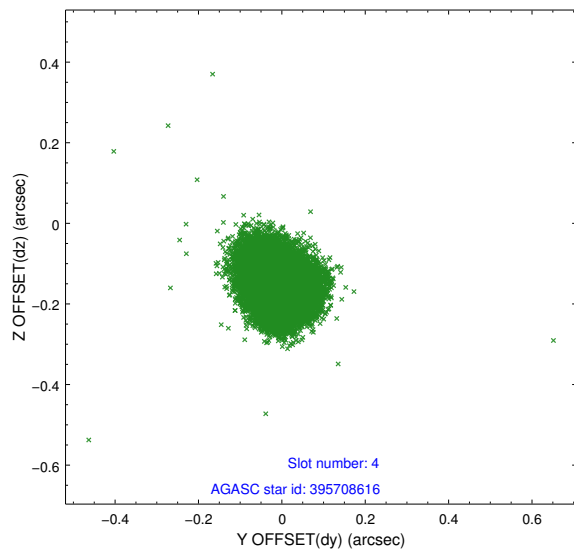
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.87	8324	-0.072	-0.085	0.011	0.026	0.000000	0.000000	-765.70	-1799.12
1	FID	ACIS-S-4	6.94	8324	0.160	0.057	0.011	0.022	0.000000	0.000000	2147.82	109.40
2	FID	ACIS-S-5	7.00	8324	-0.119	0.036	0.012	0.024	0.000000	0.000000	-1818.50	103.15
3	GUIDE	395707376	9.34	16636	0.007	-0.161	0.088	0.142	180.967983	44.858789	1241.70	513.57
4	GUIDE	395708616	7.99	16638	-0.012	-0.150	0.069	0.110	180.101872	44.630343	-866.50	1578.71
5	GUIDE	395708696	8.88	16636	0.008	0.074	0.082	0.131	180.383726	44.624291	-393.67	1032.94
6	GUIDE	395709608	8.35	16640	0.046	0.118	0.068	0.107	181.055130	44.450389	322.37	-654.53
7	GUIDE	395710032	8.79	16636	-0.051	0.121	0.082	0.130	181.512910	44.376001	935.80	-1694.42

2.4 Star Slots

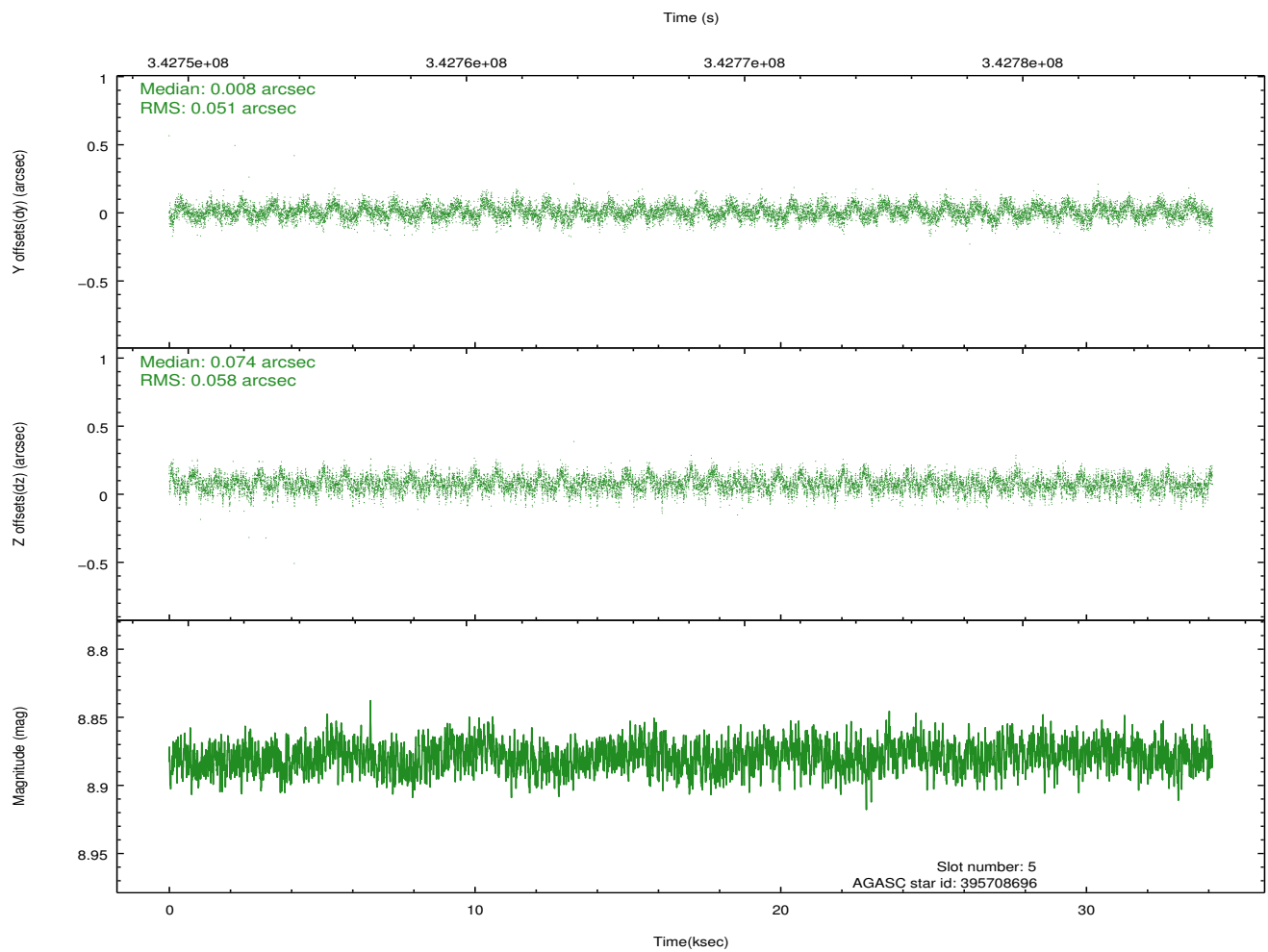
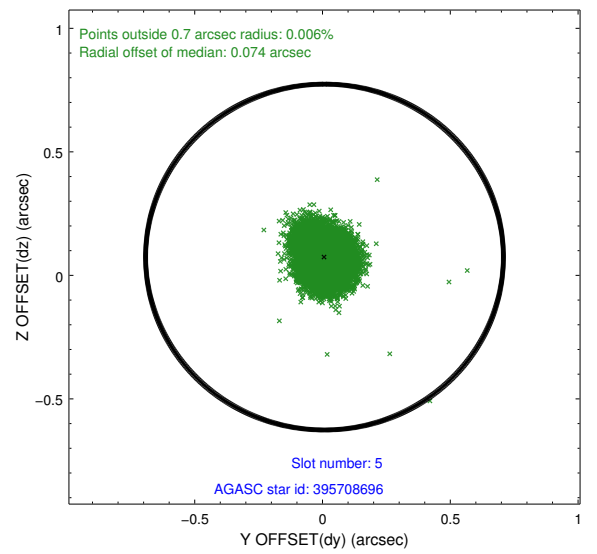
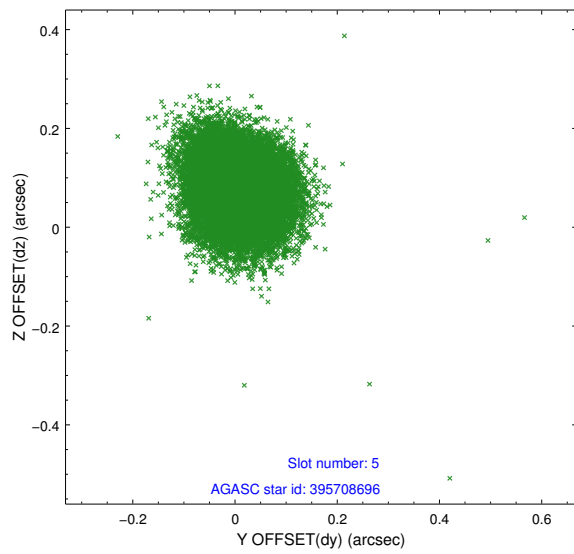
2.4.1 Slot 3



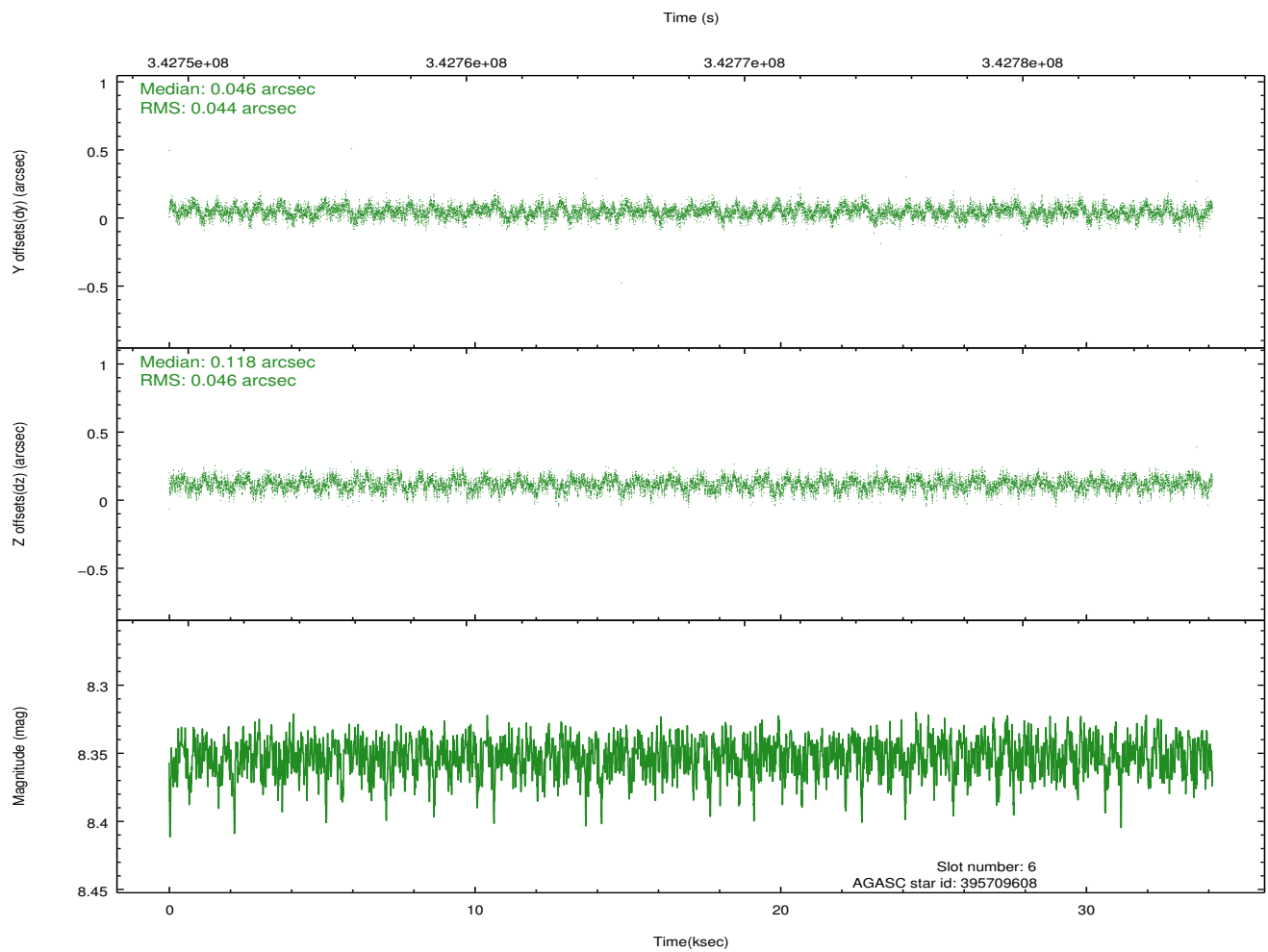
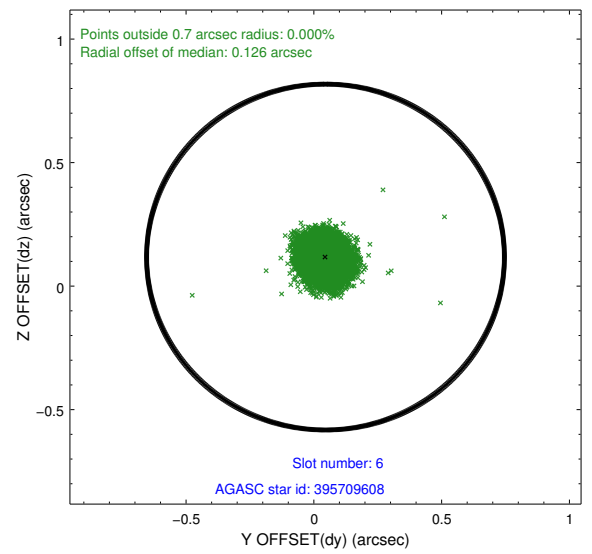
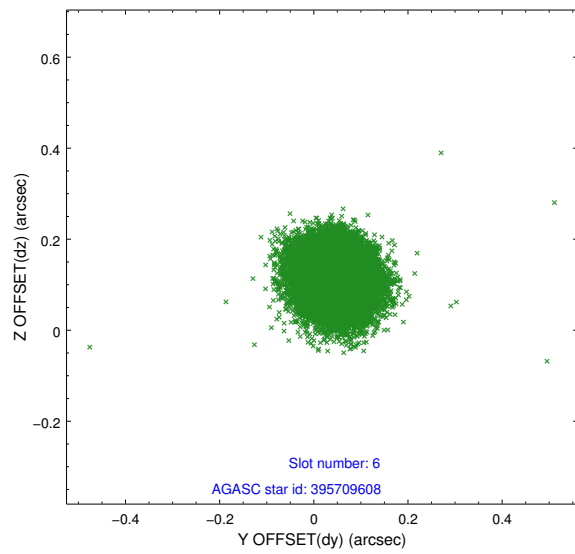
2.4.2 Slot 4



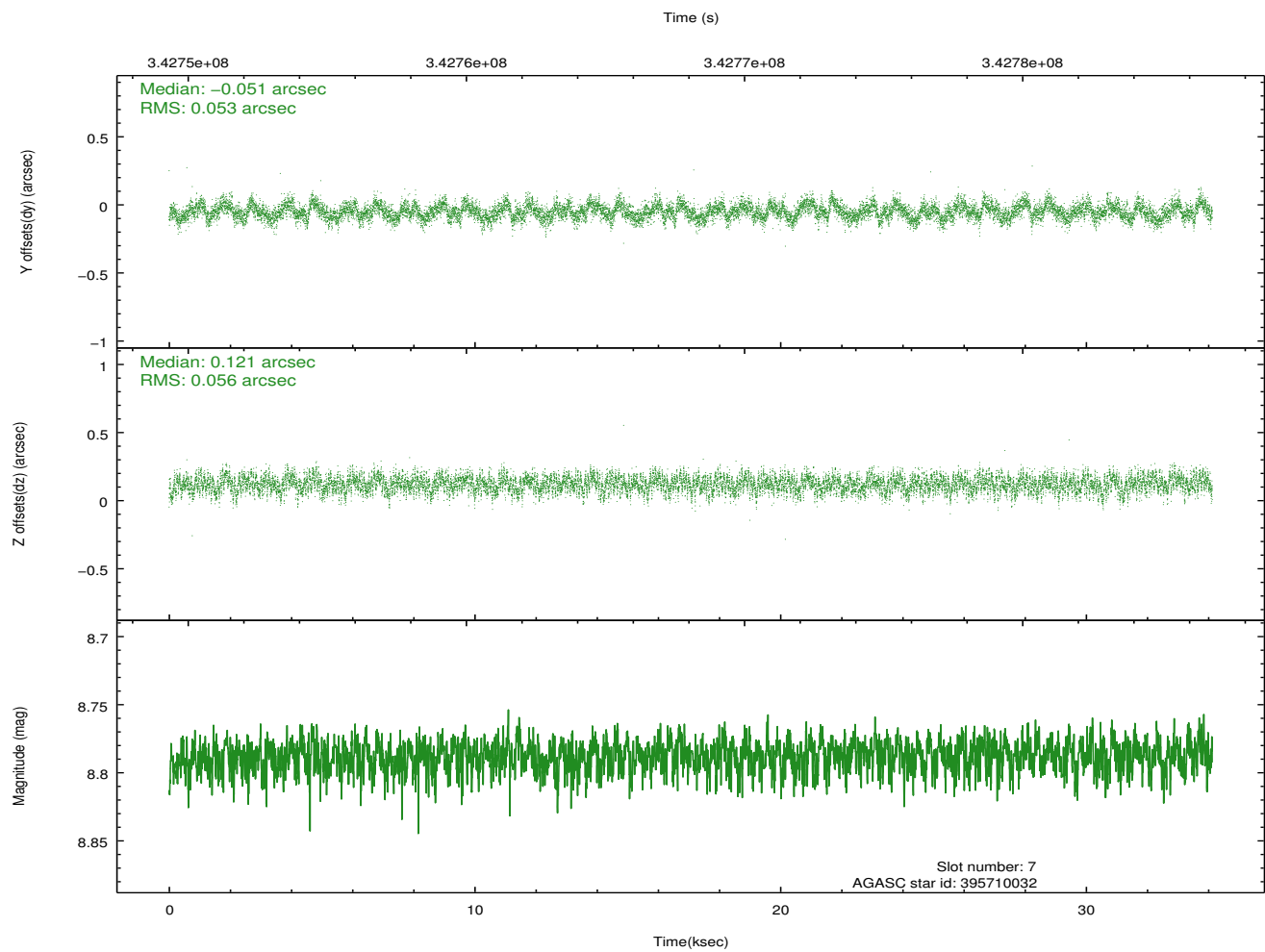
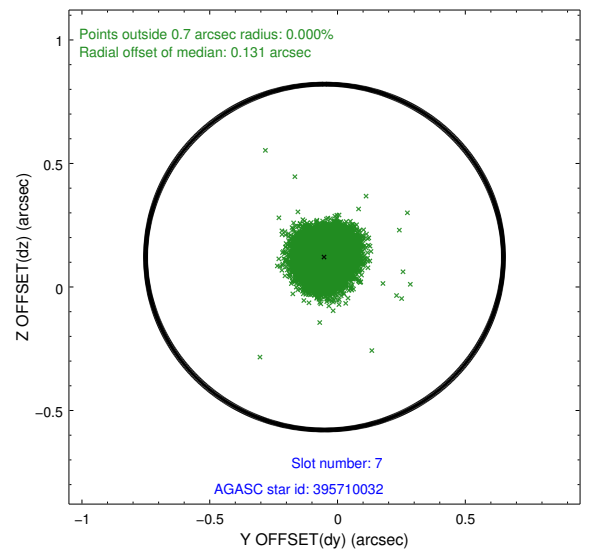
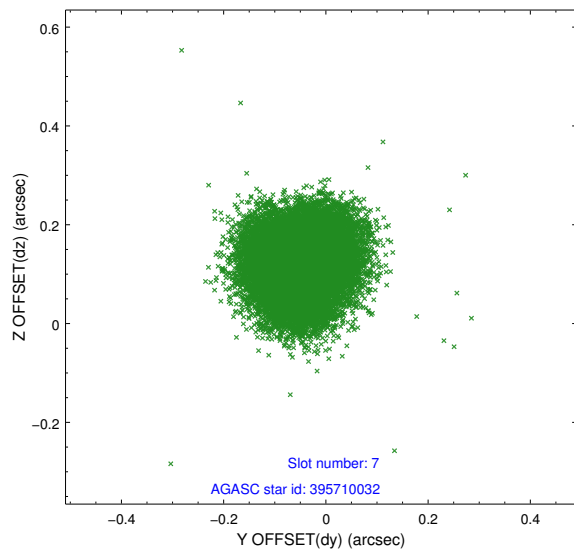
2.4.3 Slot 5



2.4.4 Slot 6

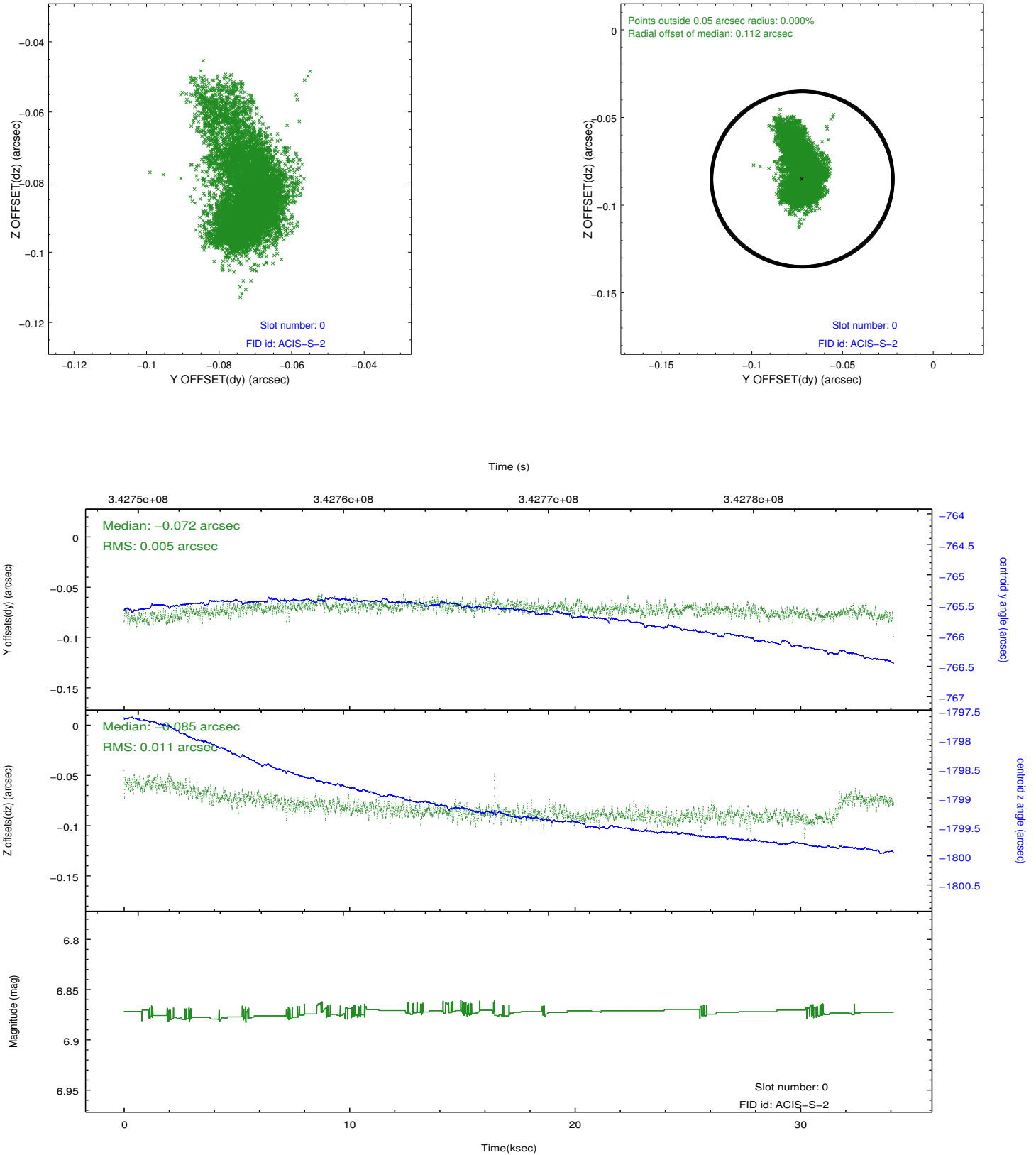


2.4.5 Slot 7

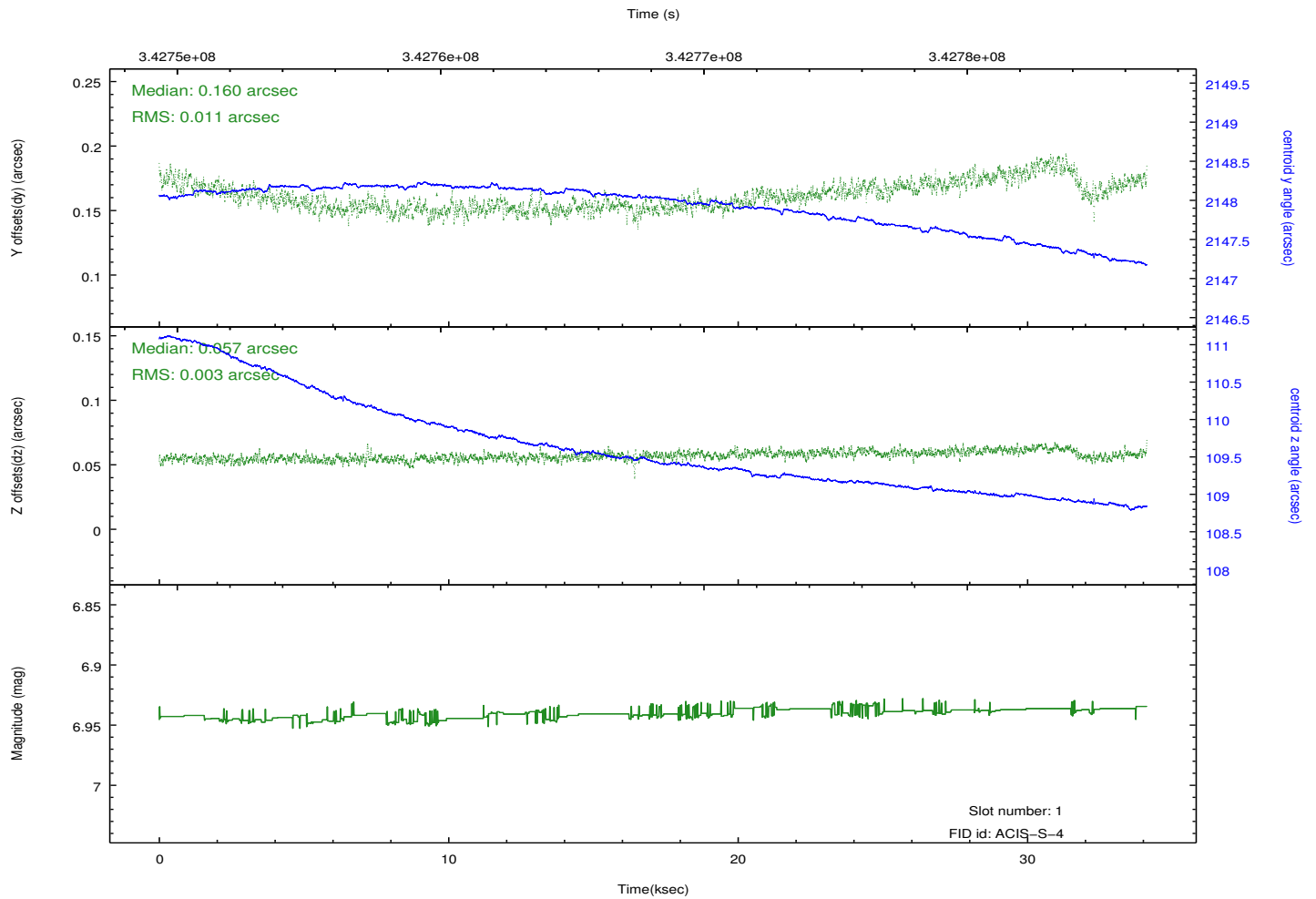
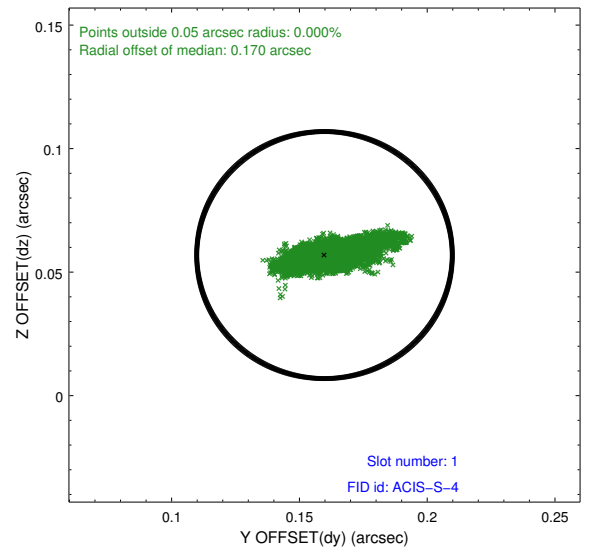
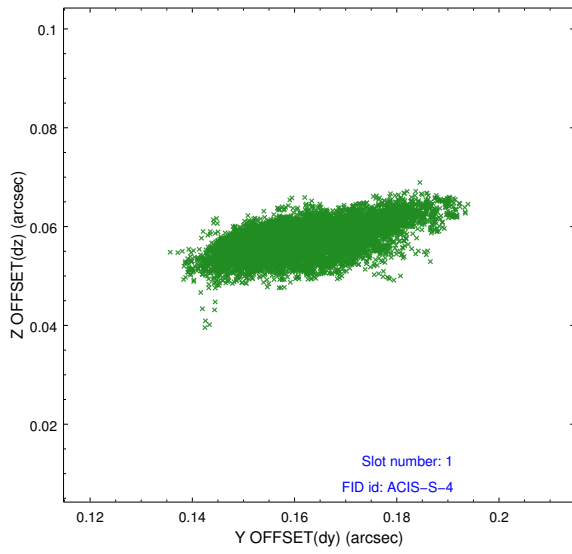


2.5 FID Slots

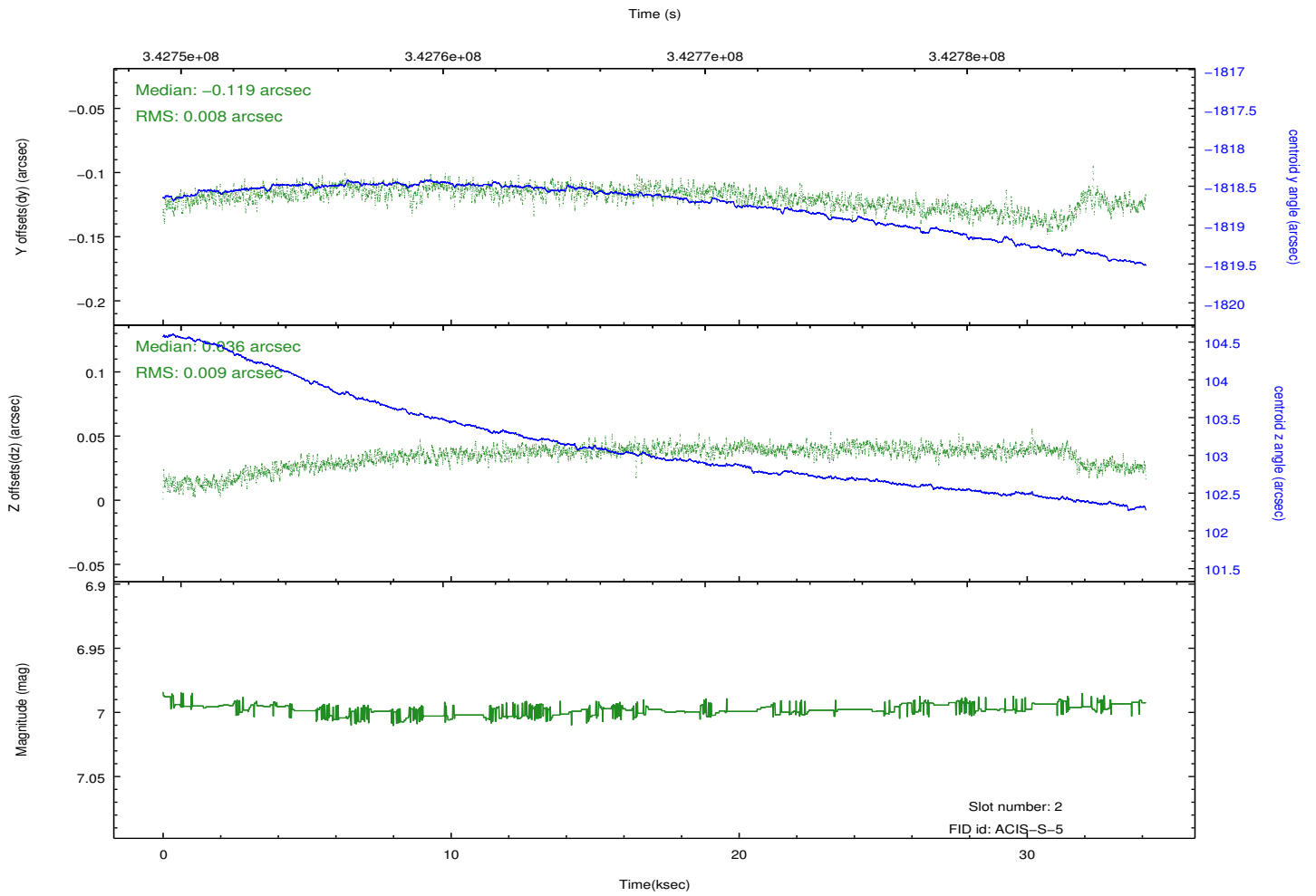
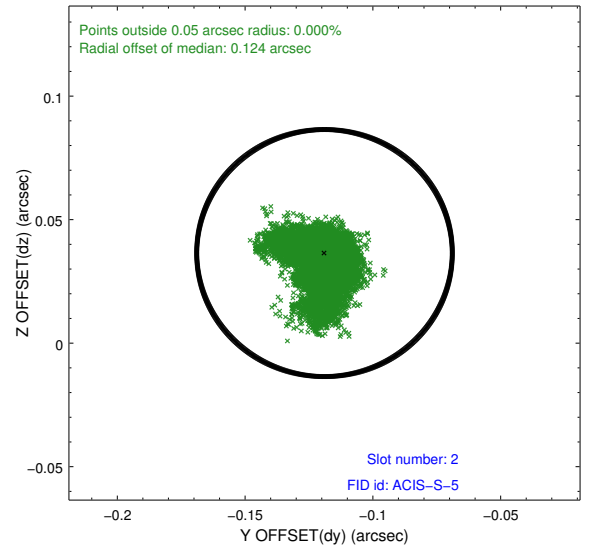
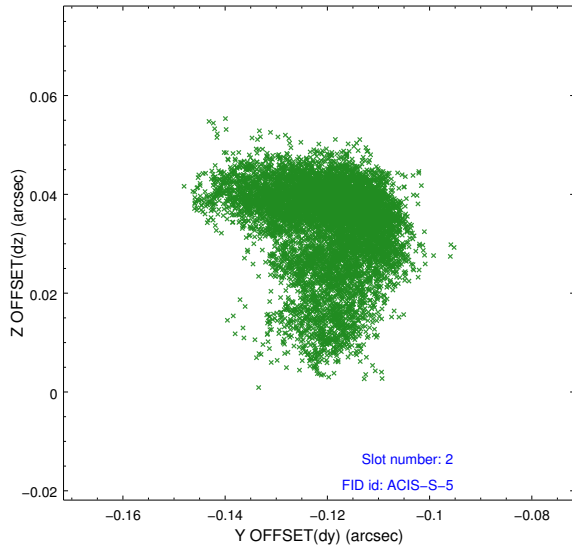
2.5.1 Slot 0



2.5.2 Slot 1

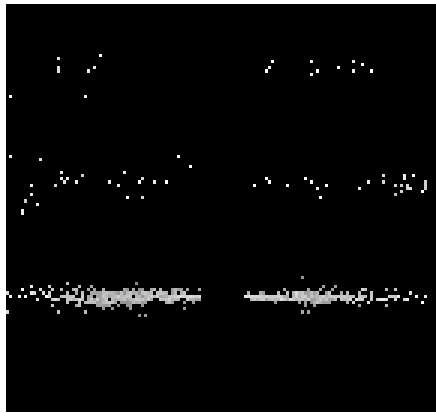


2.5.3 Slot 2

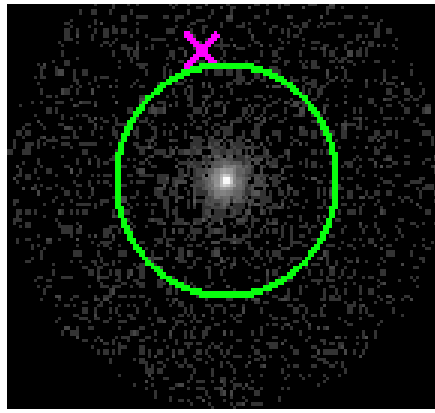


3 Gratings

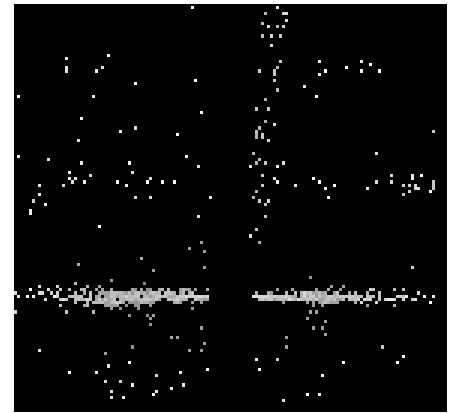
3.1 HEG Arm



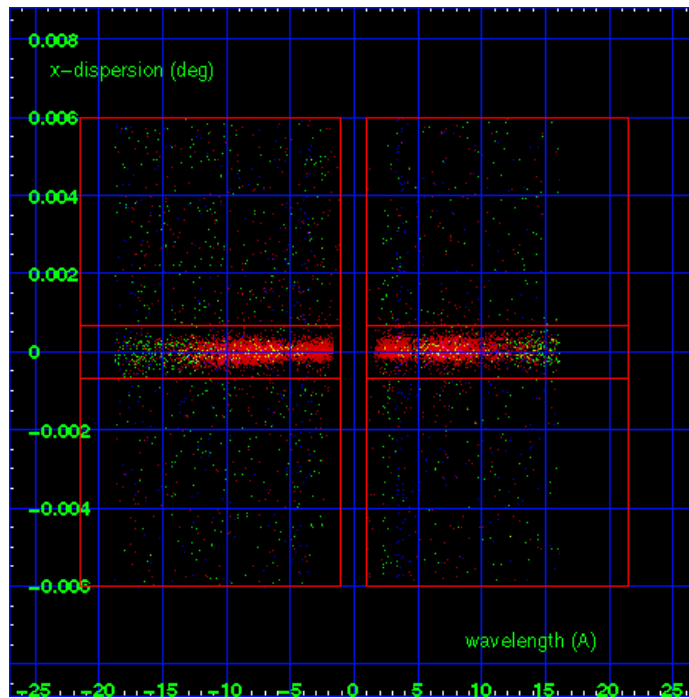
HEG Order Sort 123



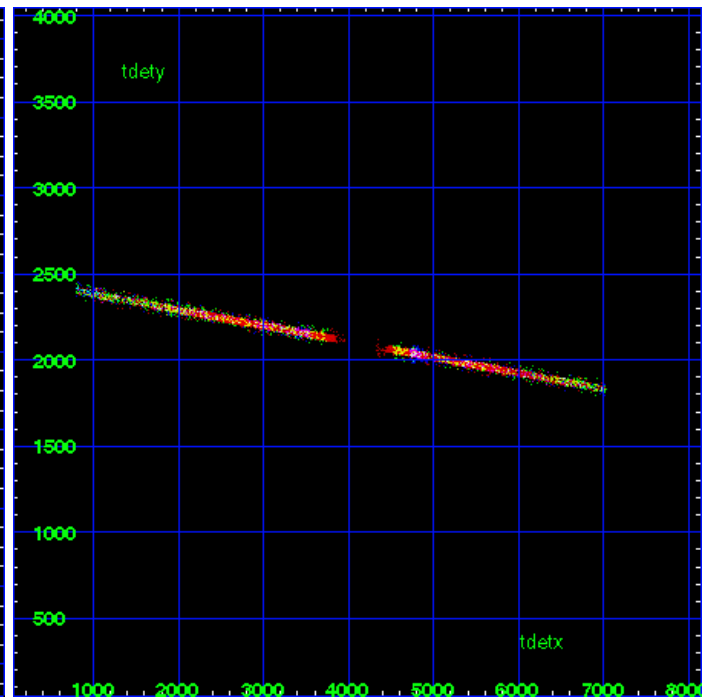
HEG Zero Order



HEG Order Sort ALL

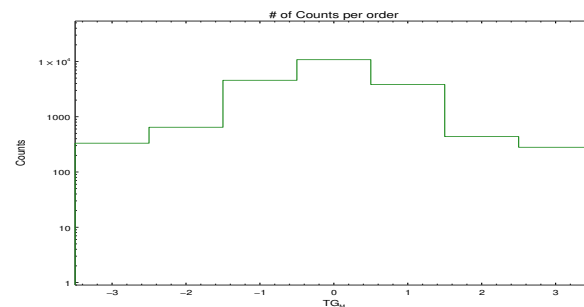


Spot Image HEG

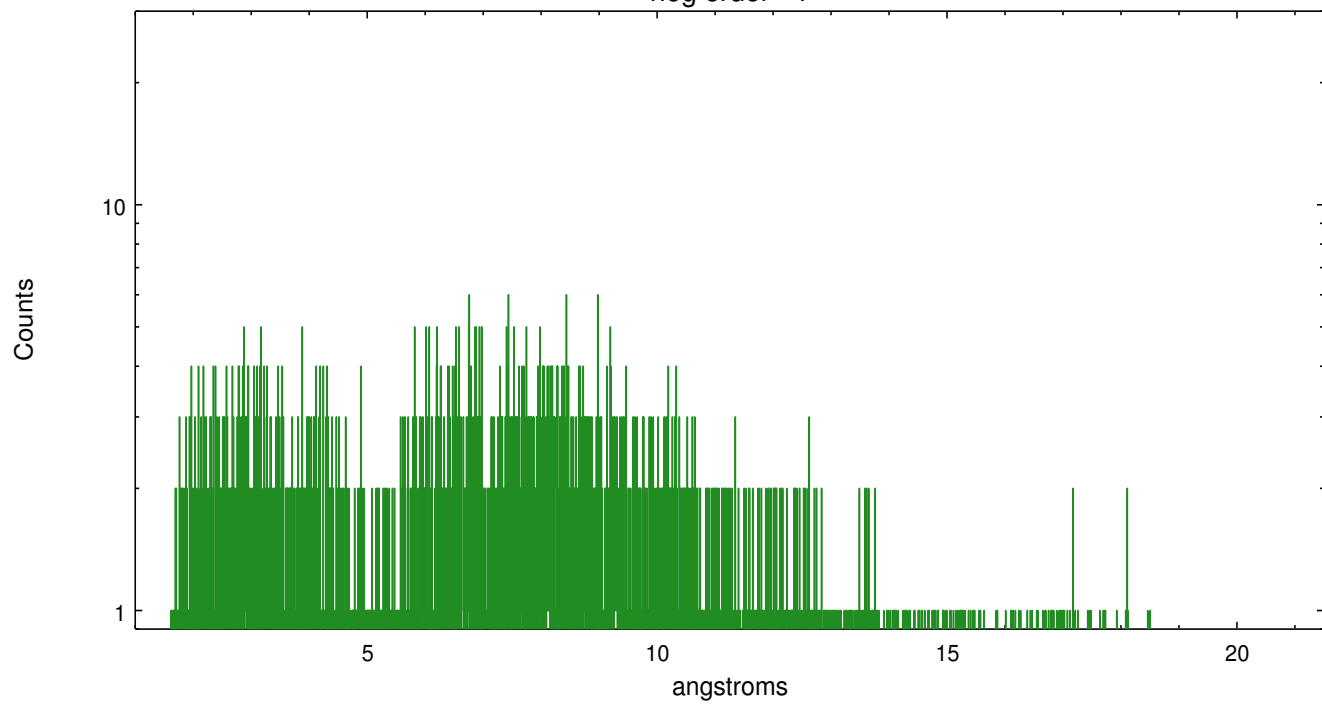


Full Detector HEG

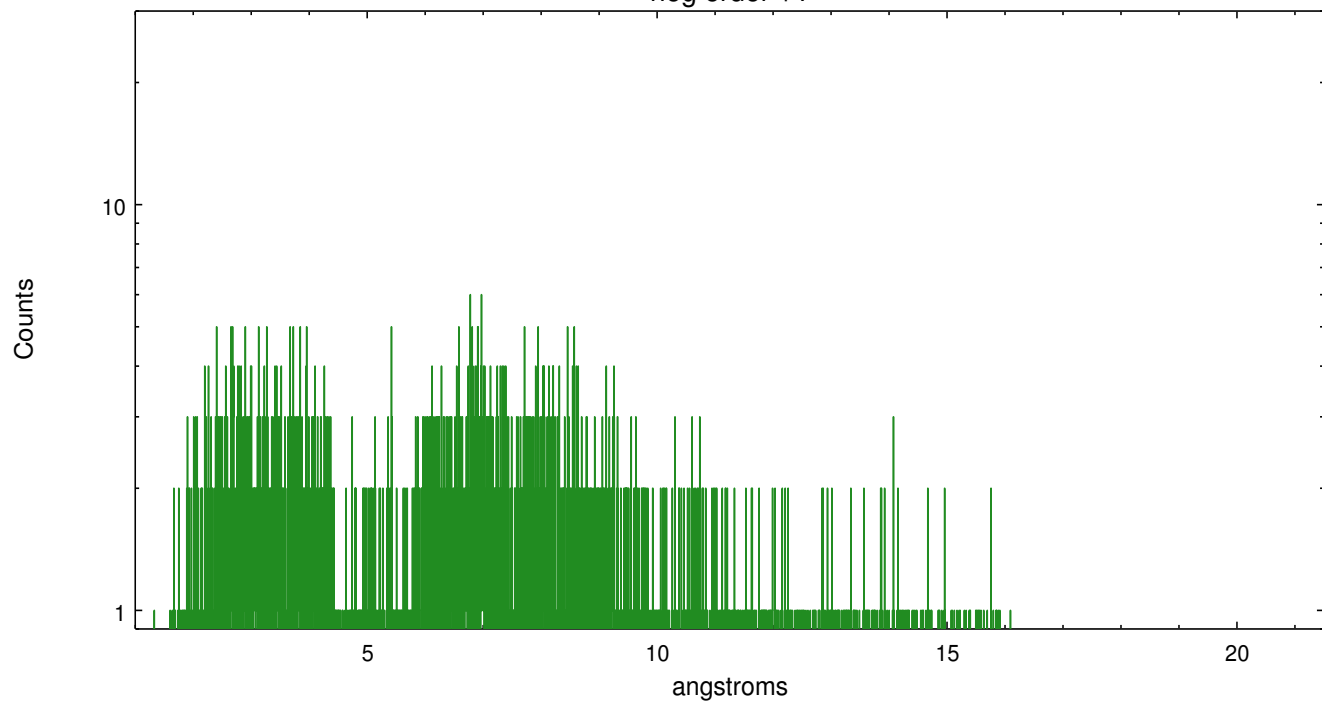
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	332	645	4565	10780	3826	437	280



heg order -1



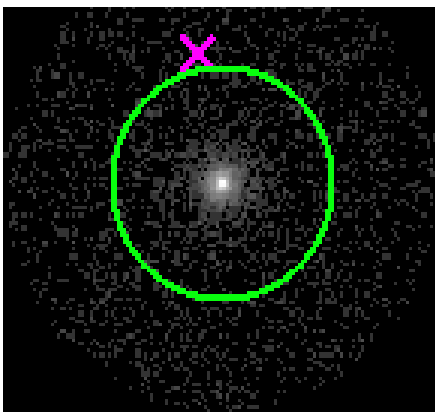
heg order +1



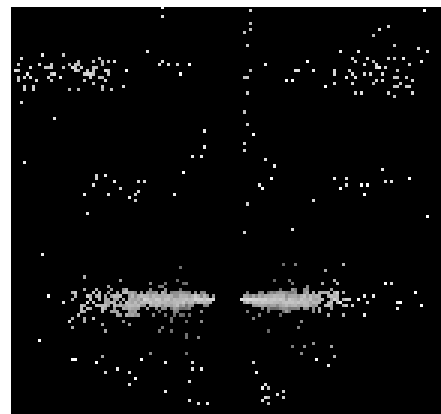
3.2 MEG Arm



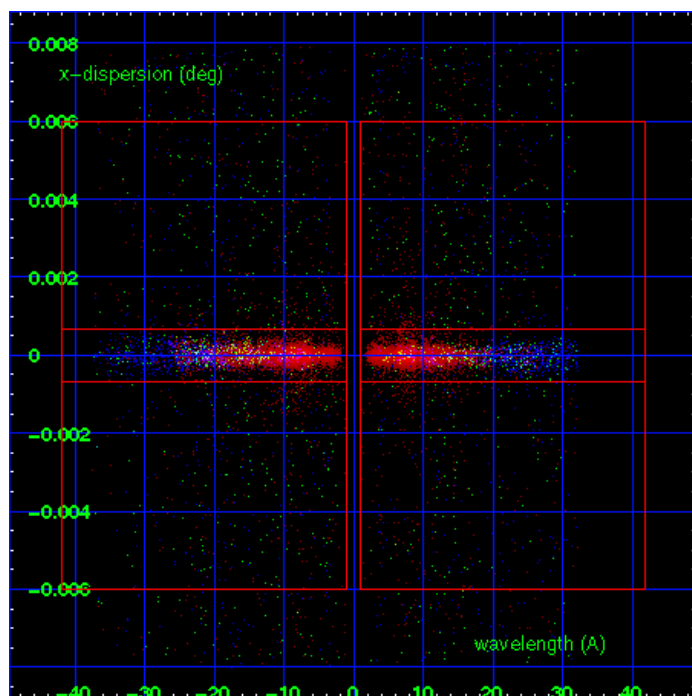
MEG Order Sort 123



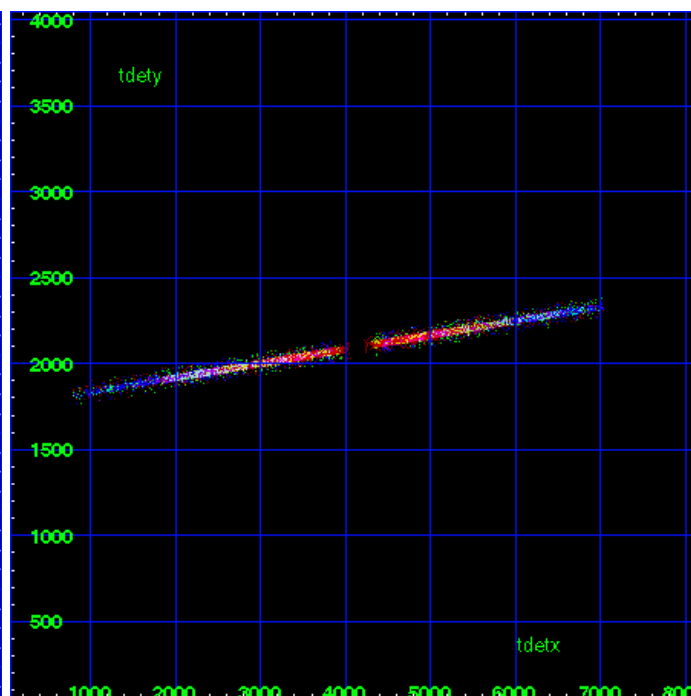
MEG Zero Order



MEG Order Sort ALL

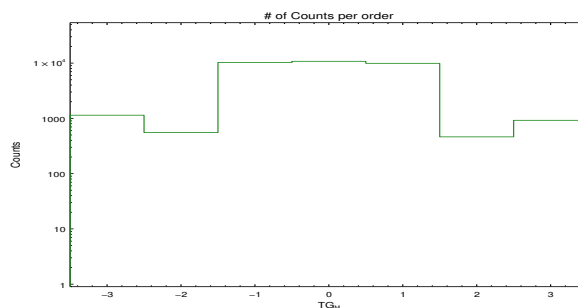


Spot Image MEG

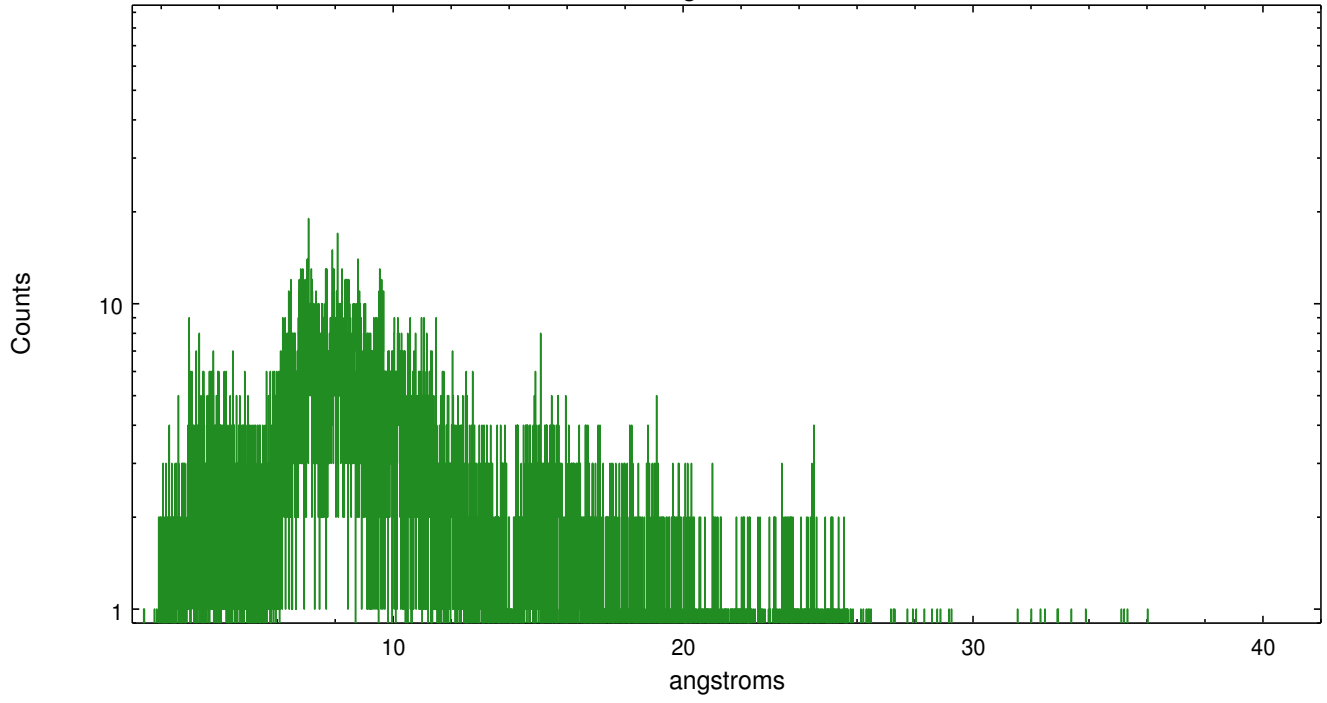


Full Detector MEG

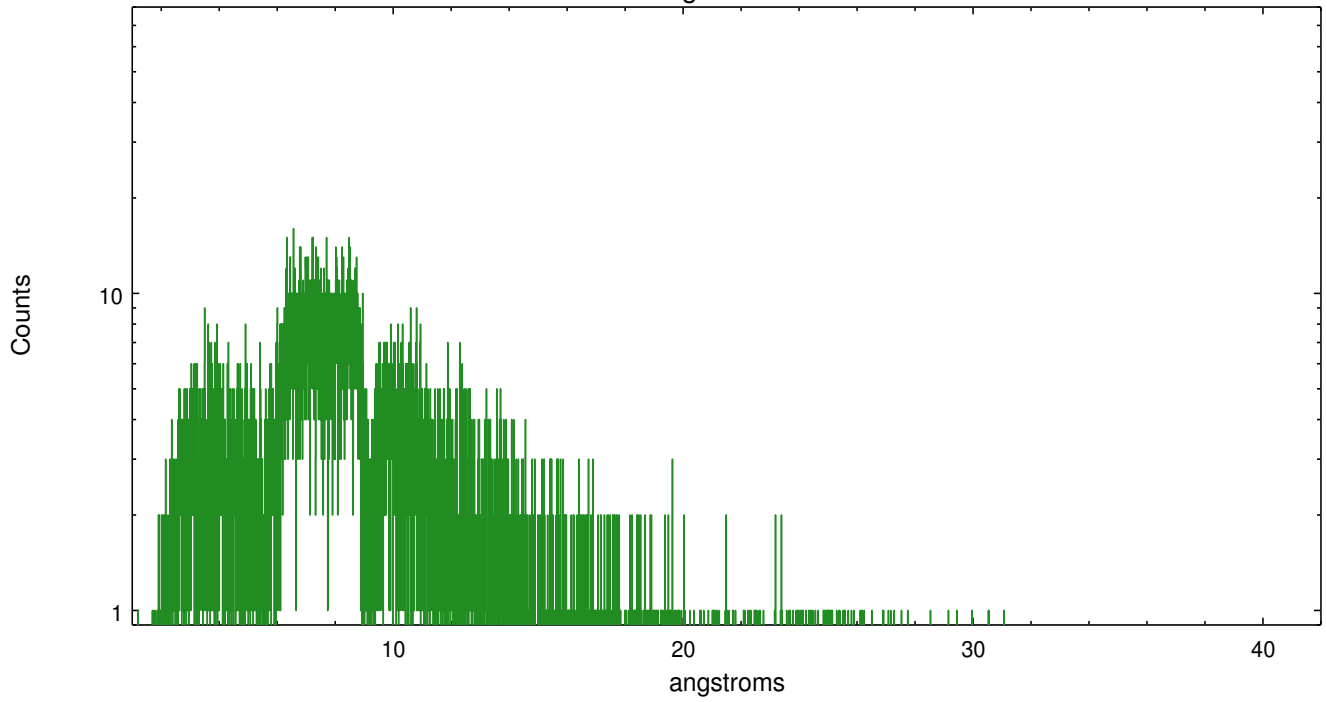
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1141	555	10272	10780	9905	463	922



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	John Houck
V&V Date (YYYY-MM-DD)	2012.05.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.125

A.2 Comments

Joint proposal with HST.