

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10824 - L2 Version 2
Chandra X-Ray Center

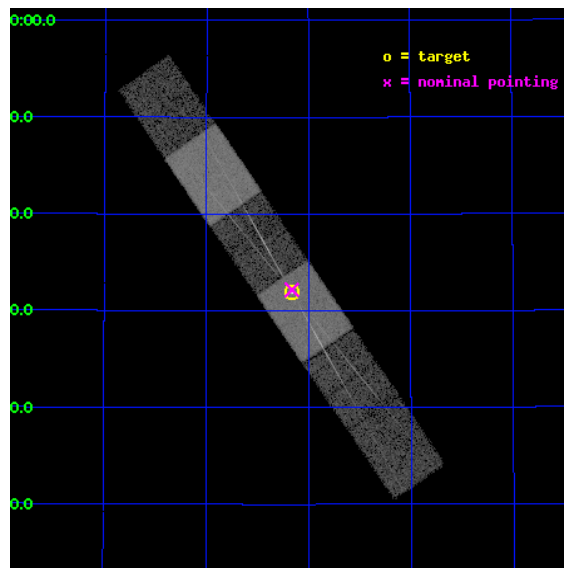
L2 Processing Date : May 24 2012

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1 Front

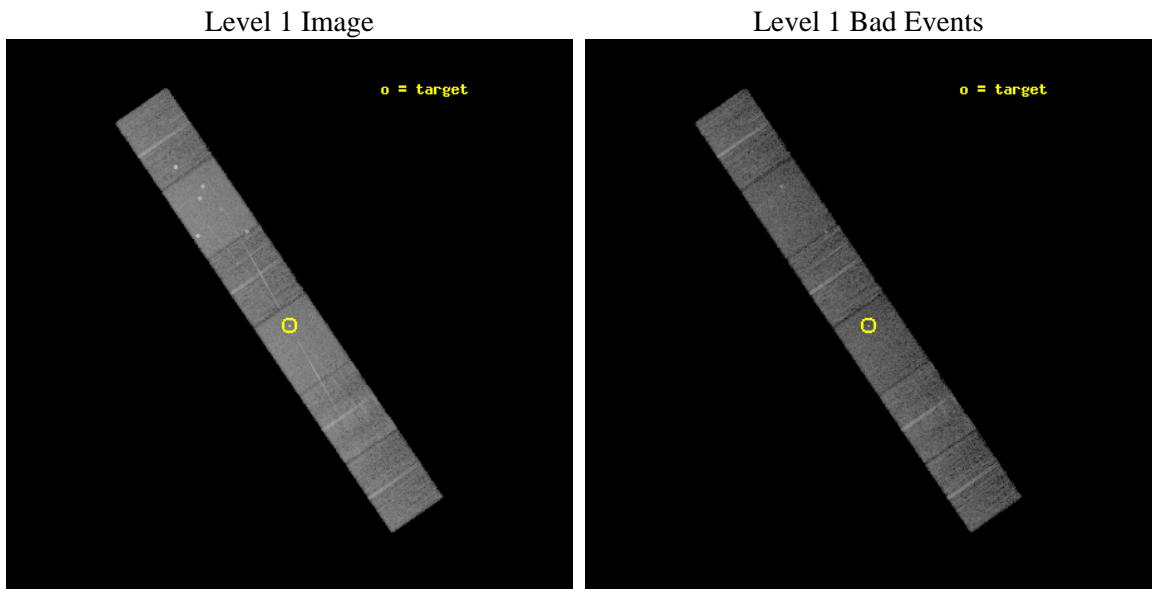
seq_num	701946	Sequence number
obs_id	10824	Observation id
title	Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 4051	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.79	Observer's specified target RA [deg]
dec_targ	44.531333	Observer's specified target Dec [deg]
ra_nom	180.79033756178	Nominal RA [deg]
dec_nom	44.536209547365	Nominal Dec [deg]
roll_nom	55.656402115326	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9147.5	Sum of GTIs [s]
liveltime	8999.7599408116	Livetime [s]
ontime4	9147.5	Sum of GTIs [s]
ontime5	9147.5	Sum of GTIs [s]
ontime6	9147.5	Sum of GTIs [s]
ontime7	9147.5	Sum of GTIs [s]
ontime8	9147.5	Sum of GTIs [s]
ontime9	9147.5	Sum of GTIs [s]
l2events	130189	Number of level 2 events



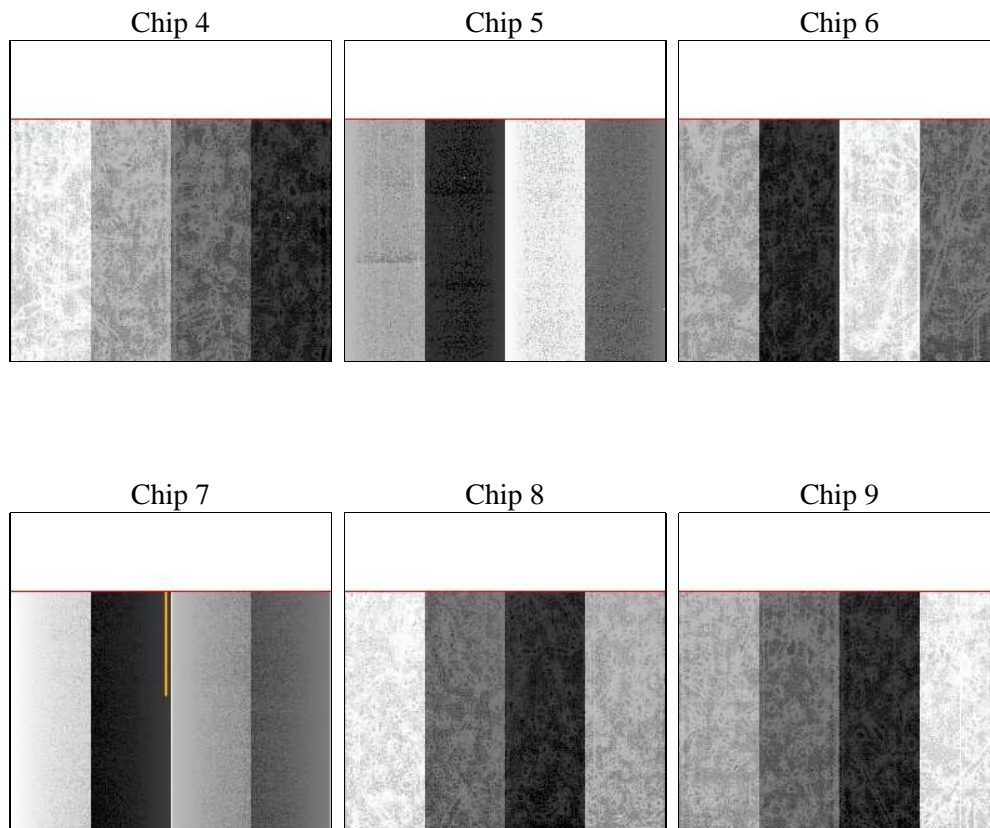
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	9147.5	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	9147.5	Sum of GTIs [s]
date	2012-05-24T17:05:26	Date and time of file creation	ontime5	9147.5	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	9147.5	Sum of GTIs [s]
			ontime7	9147.5	Sum of GTIs [s]
			ontime8	9147.5	Sum of GTIs [s]
			ontime9	9147.5	Sum of GTIs [s]
			l1events	535478	Number of level 1 events

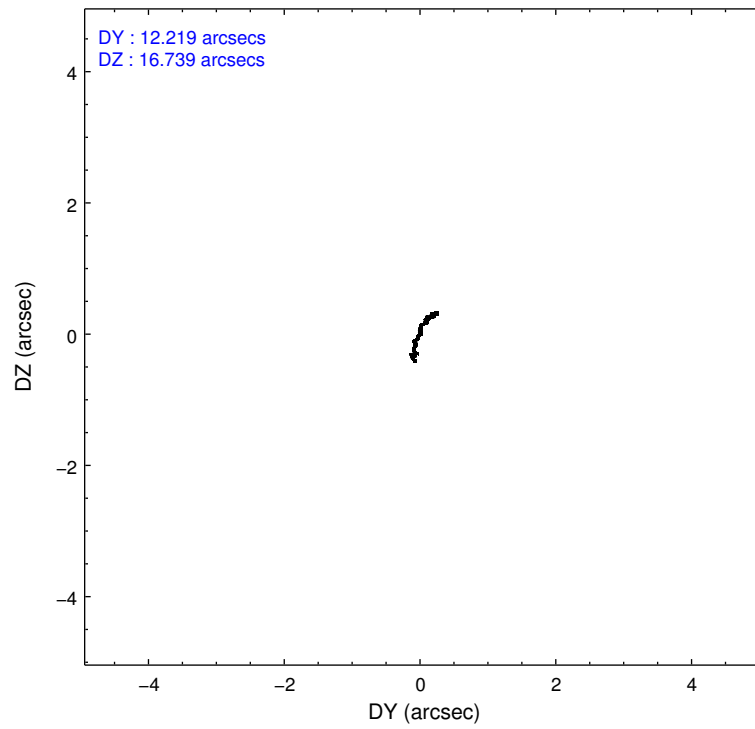
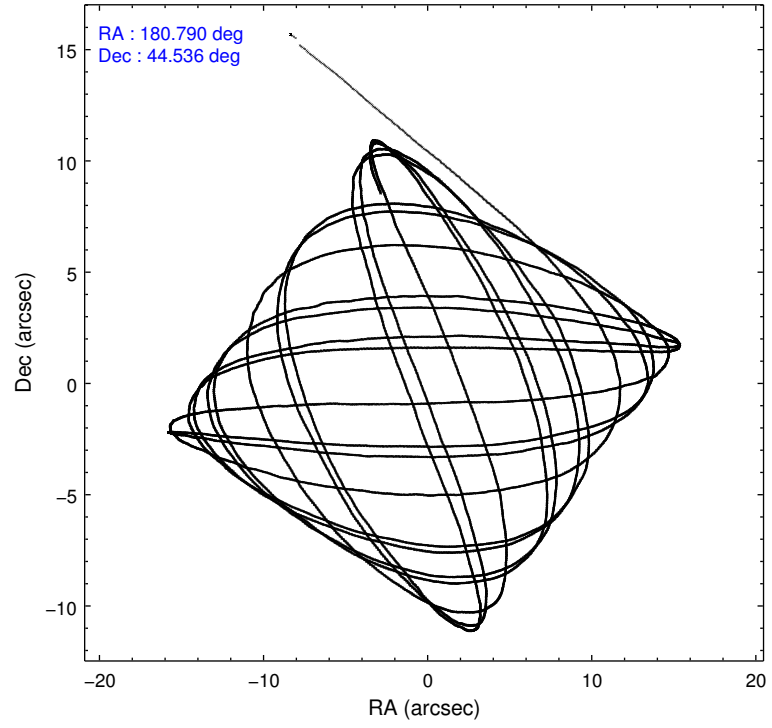
2.1.4 Events

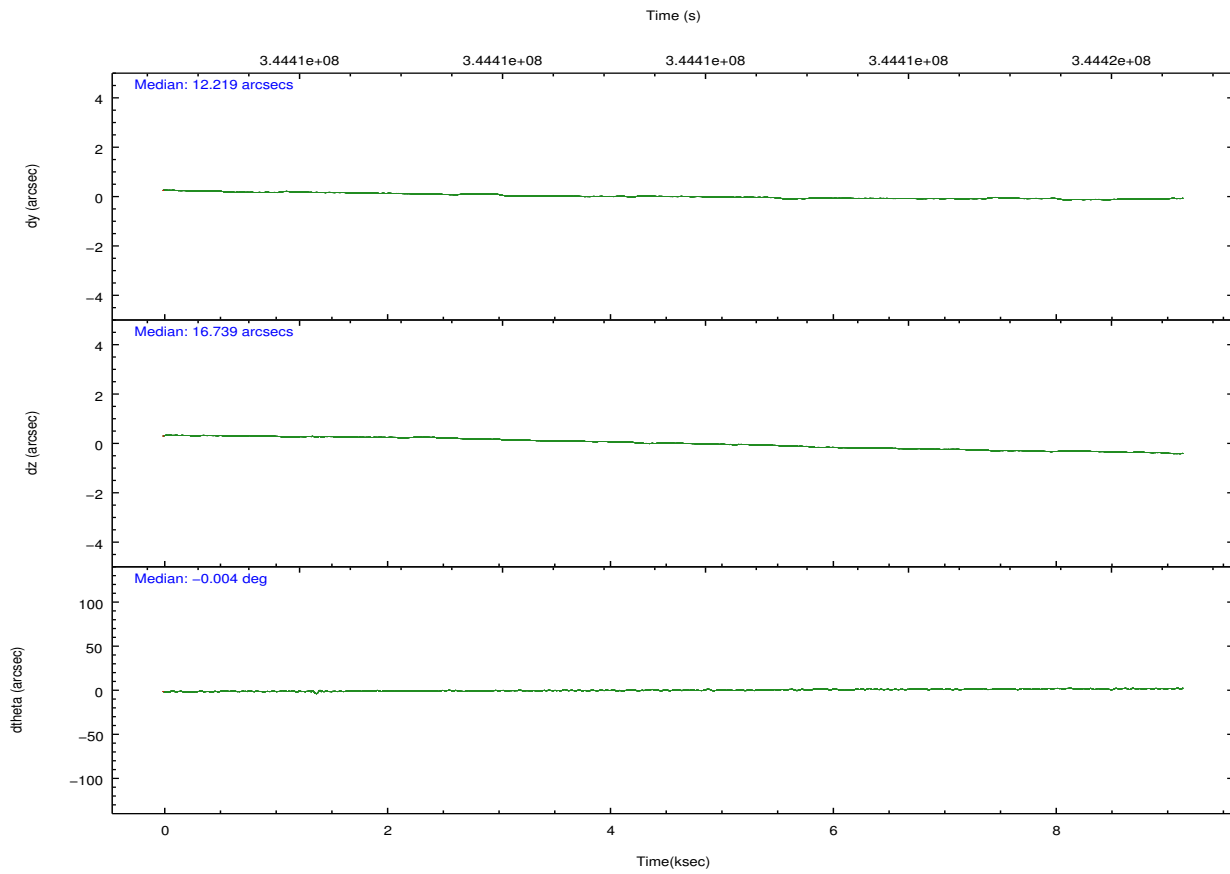
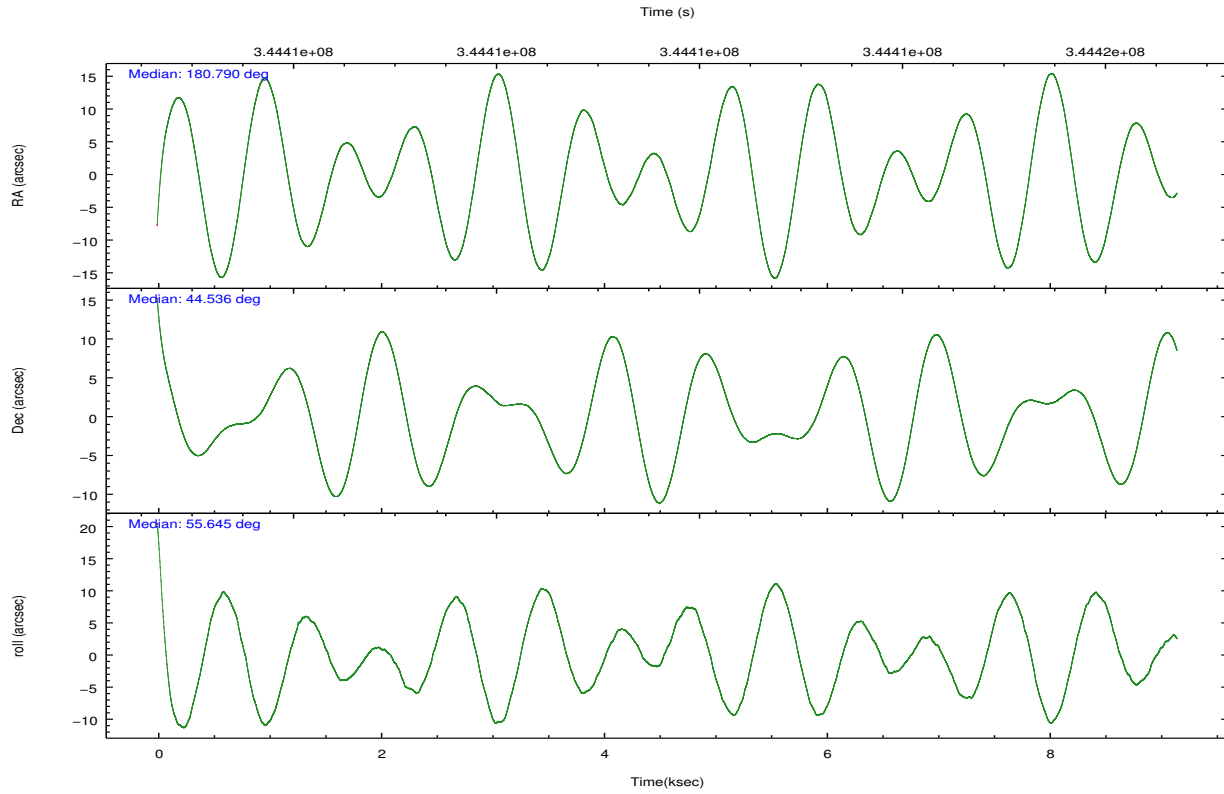
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	78258	116526	74301	104840	92685	68868	grade 0 events	6274	8086	5808	4630	7780	4001
rejected events	66715	60977	62614	58959	70485	59541		8%	6%	7%	4%	8%	5%
rejected %	85%	52%	84%	56%	76%	86%	grade 1 events	91	262	49	168	71	38
								0%	0%	0%	0%	0%	0%
							grade 2 events	2040	16719	2251	9717	5057	1923
								2%	14%	3%	9%	5%	2%
							grade 3 events	964	2357	968	4070	2019	933
								1%	2%	1%	3%	2%	1%
							grade 4 events	920	2177	963	4026	1971	894
								1%	1%	1%	3%	2%	1%
							grade 5 events	3238	8529	3282	9369	4468	3683
								4%	7%	4%	8%	4%	5%
							grade 6 events	1574	27237	1867	24265	5818	1752
								2%	23%	2%	23%	6%	2%
							grade 7 events	63157	51159	59113	48595	65501	55644
								80%	43%	79%	46%	70%	80%

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	180.787928	180.7903375617812	CCD I2 on	N	N
[deg] Pointing Dec	44.508892	44.53620954736452	CCD I3 on	N	N
[deg] Pointing Roll	55.501456	55.65640211532646	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	-187.1254020033014	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.007120579706367	CCD S4 on	Y	Y
[s] Observation start time (MET)	344407241.184000	344406059.09926	CCD S5 on	Y	Y
Observation start date	2008-11-30T04:39:36	2008-11-30T04:20:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	344416241.184000	344417120.38731	On-chip summing requested	N	N
Observation end date	2008-11-30T07:09:36	2008-11-30T07:25:20	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



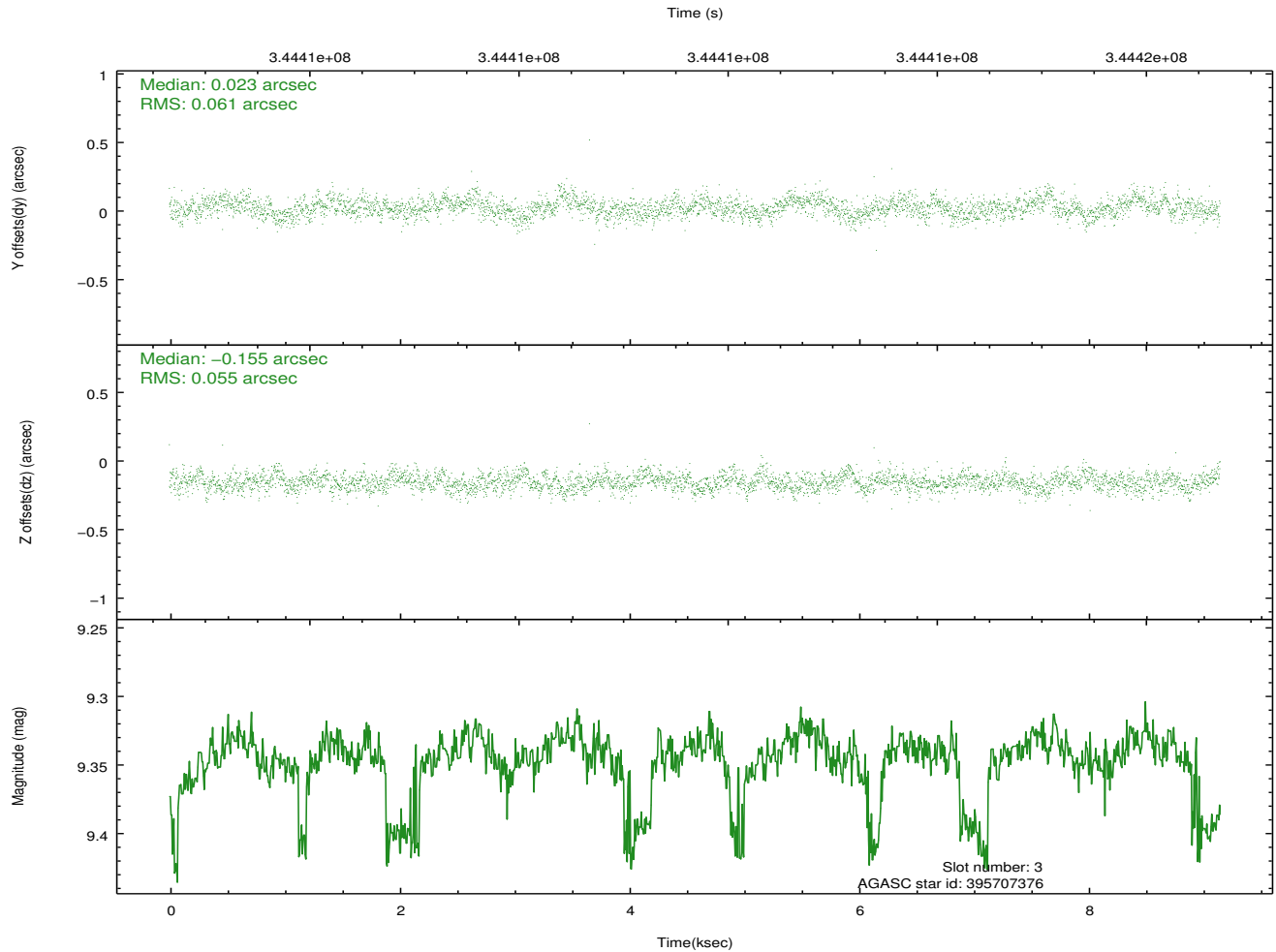
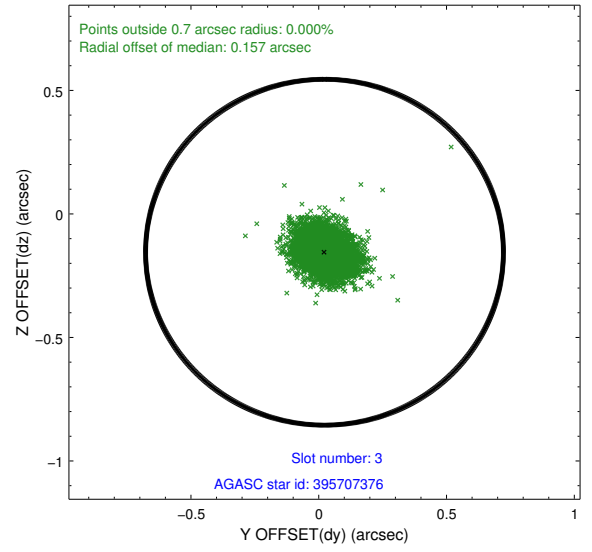
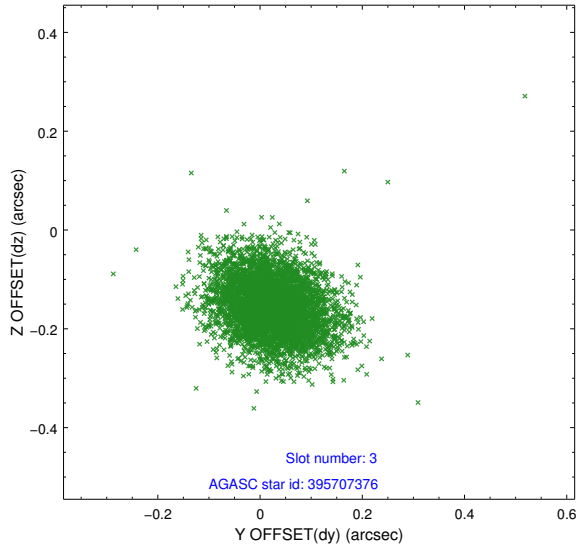


Slot Statistics

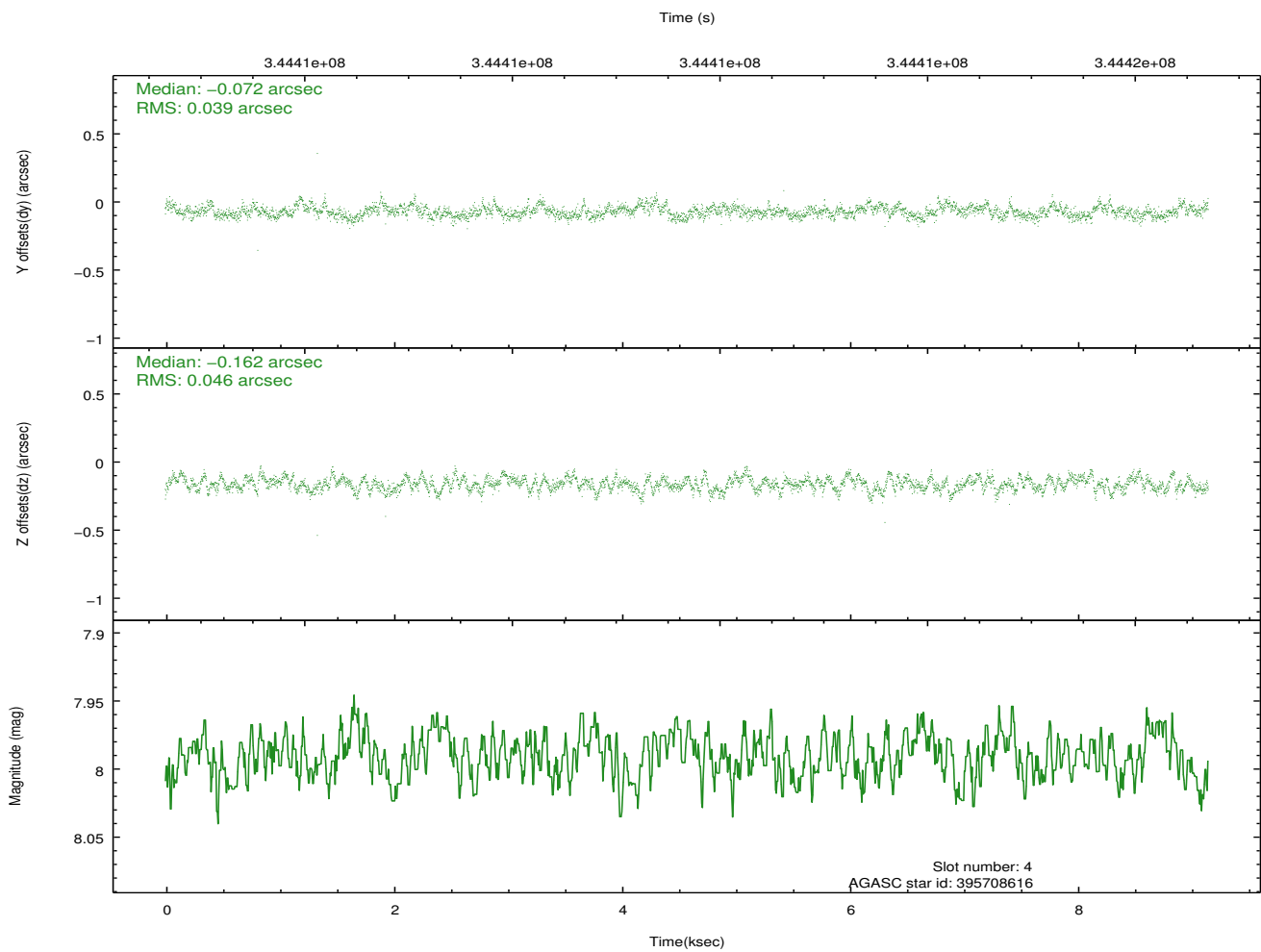
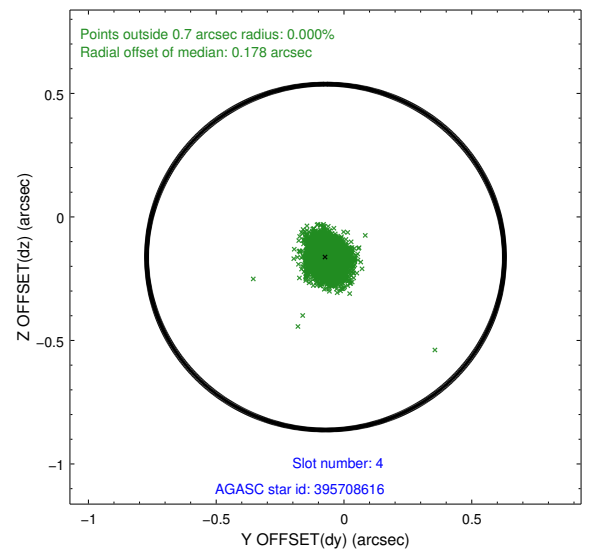
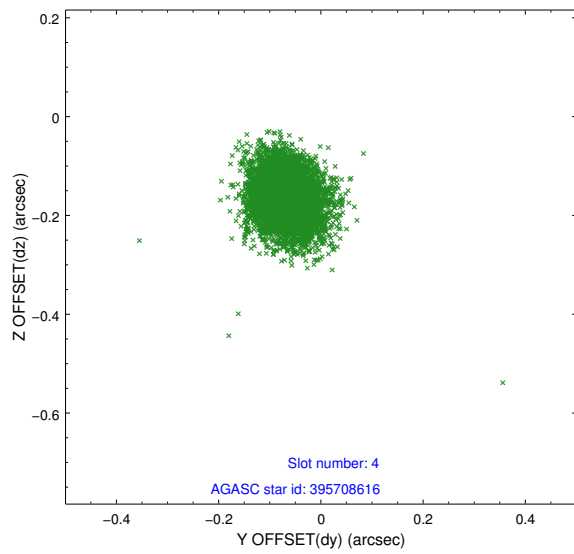
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.86	2232	-0.081	-0.043	0.011	0.017	0.000000	0.000000	-765.00	-1800.29
1	FID	ACIS-S-4	6.93	2233	0.113	0.051	0.006	0.011	0.000000	0.000000	2148.19	107.64
2	FID	ACIS-S-5	6.99	2233	-0.064	0.001	0.010	0.016	0.000000	0.000000	-1817.07	101.94
3	GUIDE	395707376	9.34	4447	0.023	-0.155	0.086	0.142	180.967983	44.858789	1298.49	335.16
4	GUIDE	395708616	7.99	4462	-0.072	-0.162	0.063	0.103	180.101872	44.630343	-628.99	1700.23
5	GUIDE	395708696	8.88	4462	0.046	0.086	0.070	0.114	180.383726	44.624291	-242.27	1090.82
6	GUIDE	395709608	8.36	4460	0.060	0.082	0.066	0.105	181.055130	44.450389	216.54	-684.08
7	GUIDE	395710032	8.80	4463	-0.059	0.153	0.073	0.119	181.512910	44.376001	669.59	-1803.44

2.4 Star Slots

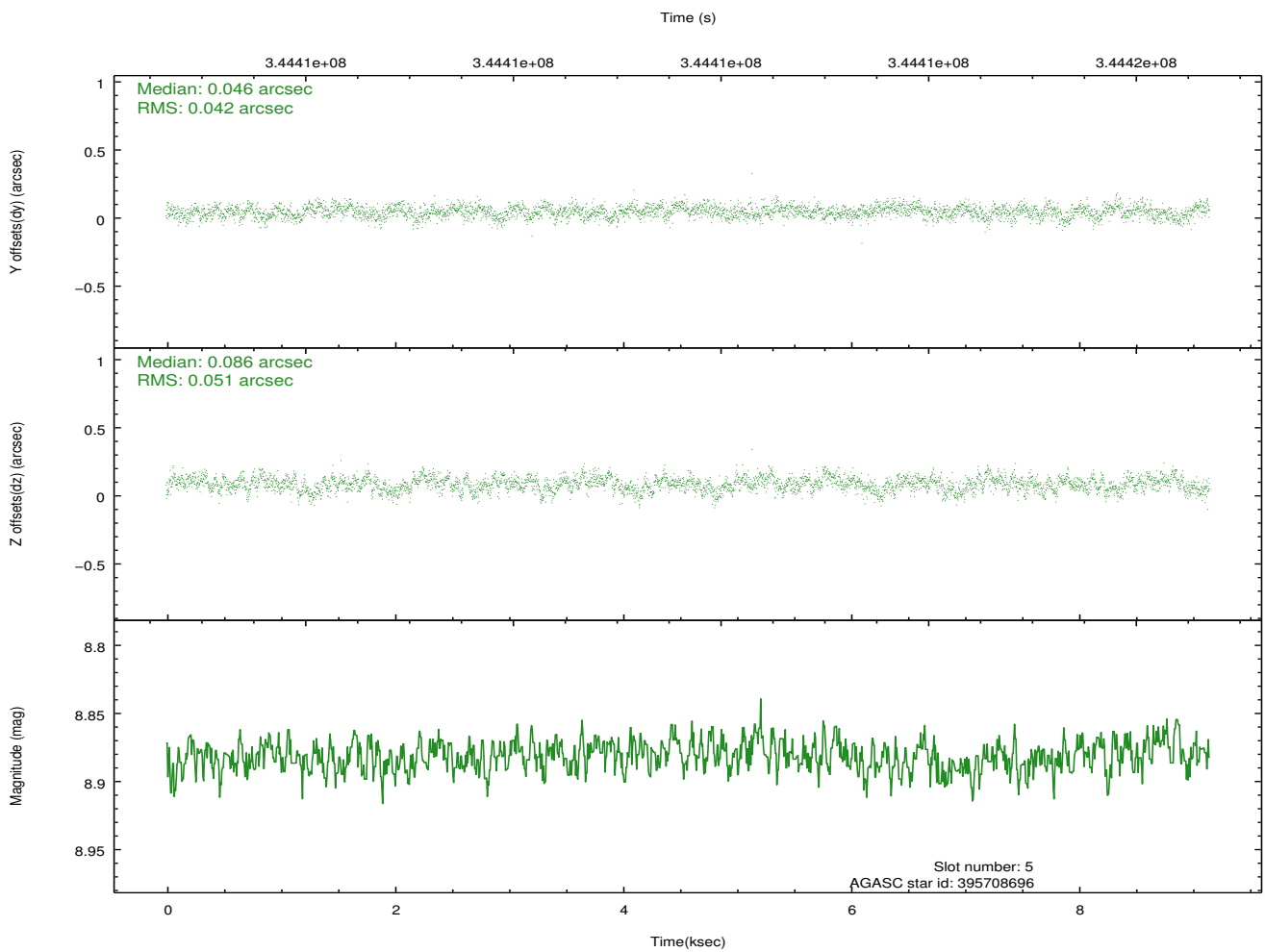
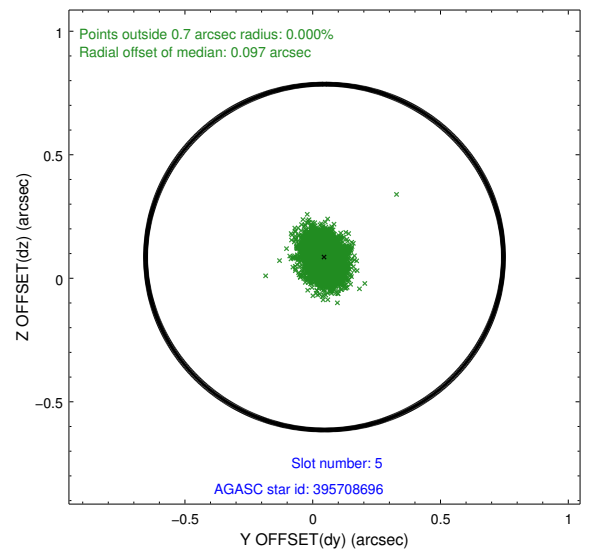
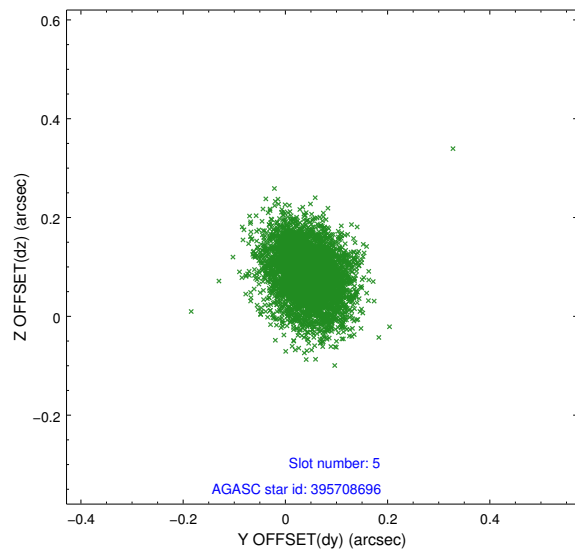
2.4.1 Slot 3



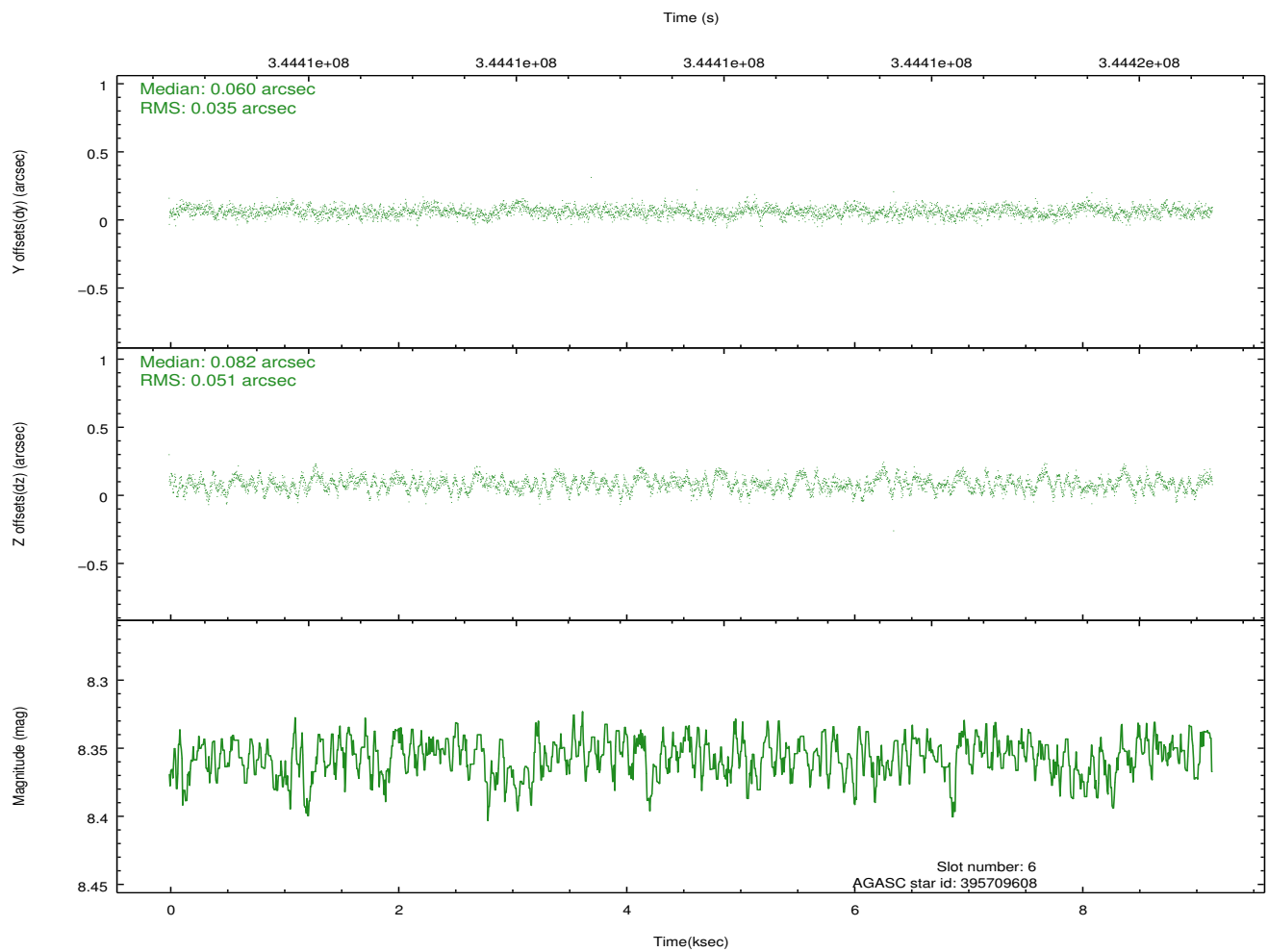
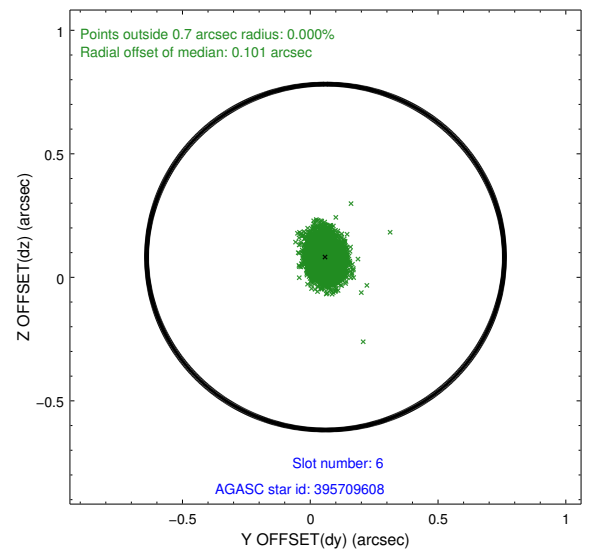
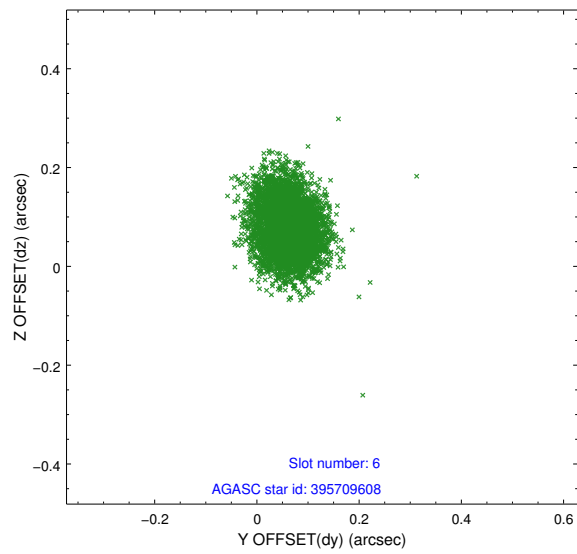
2.4.2 Slot 4



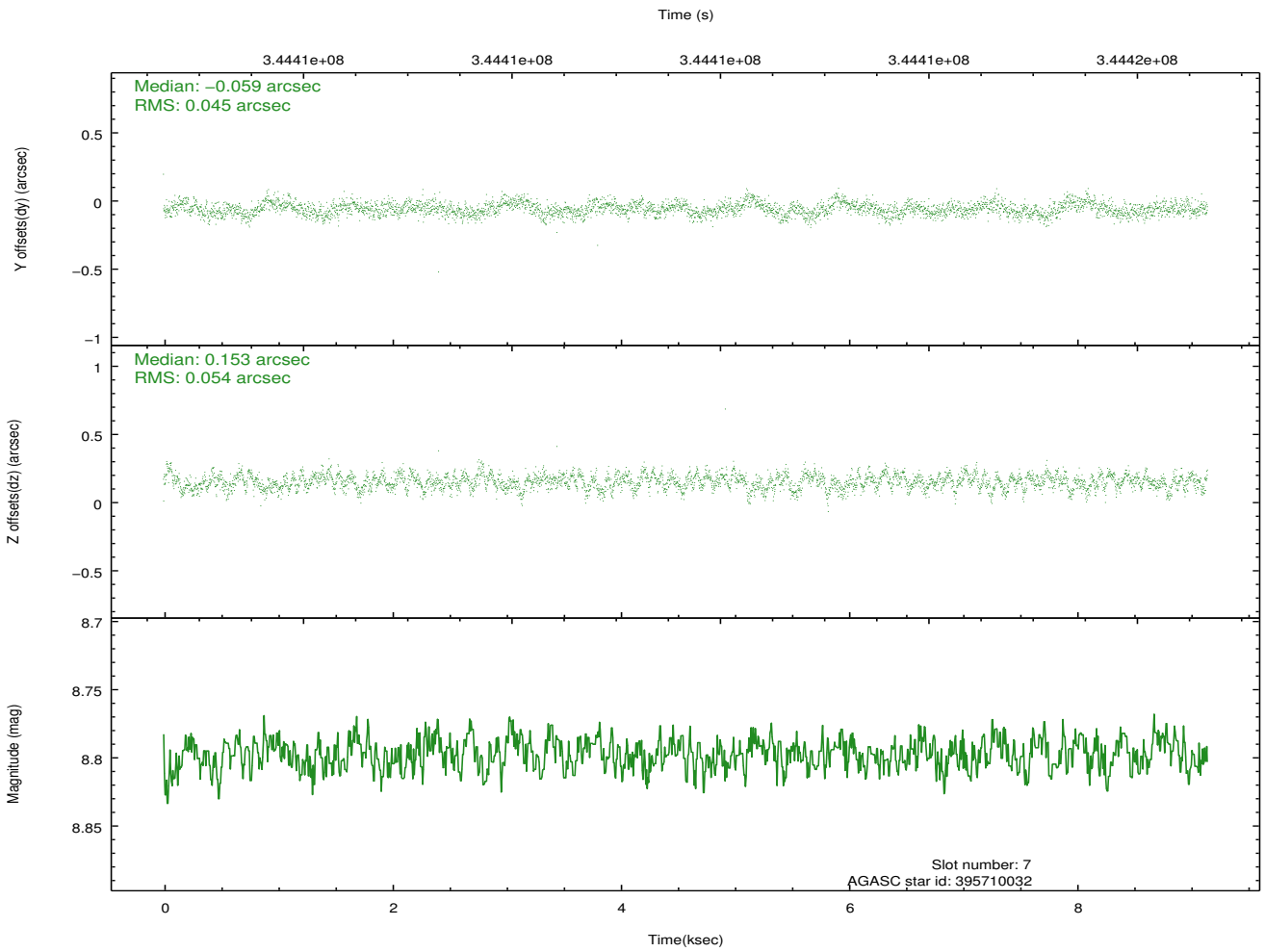
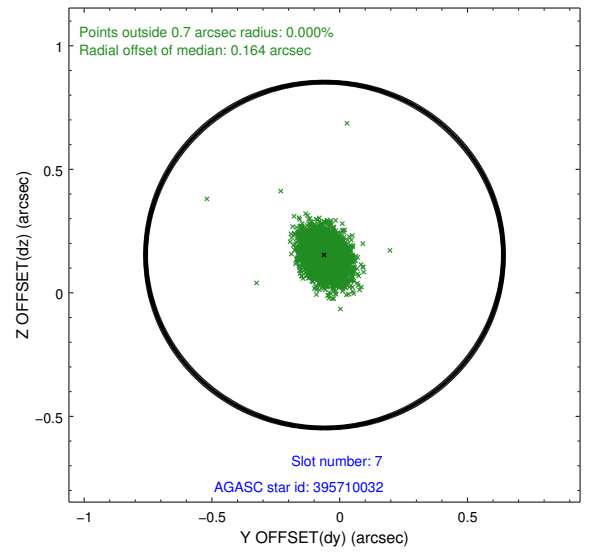
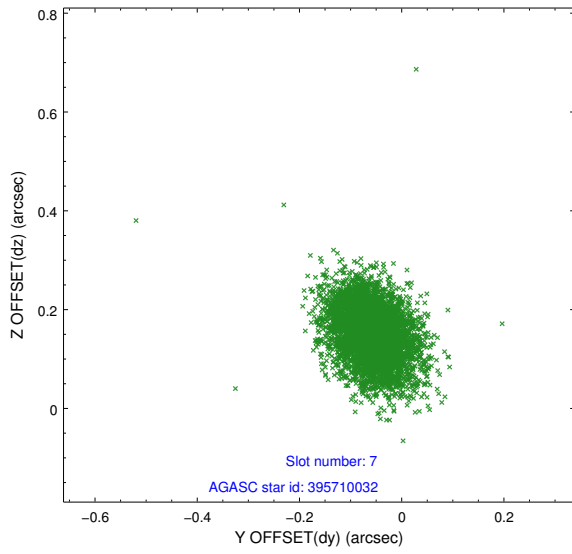
2.4.3 Slot 5



2.4.4 Slot 6

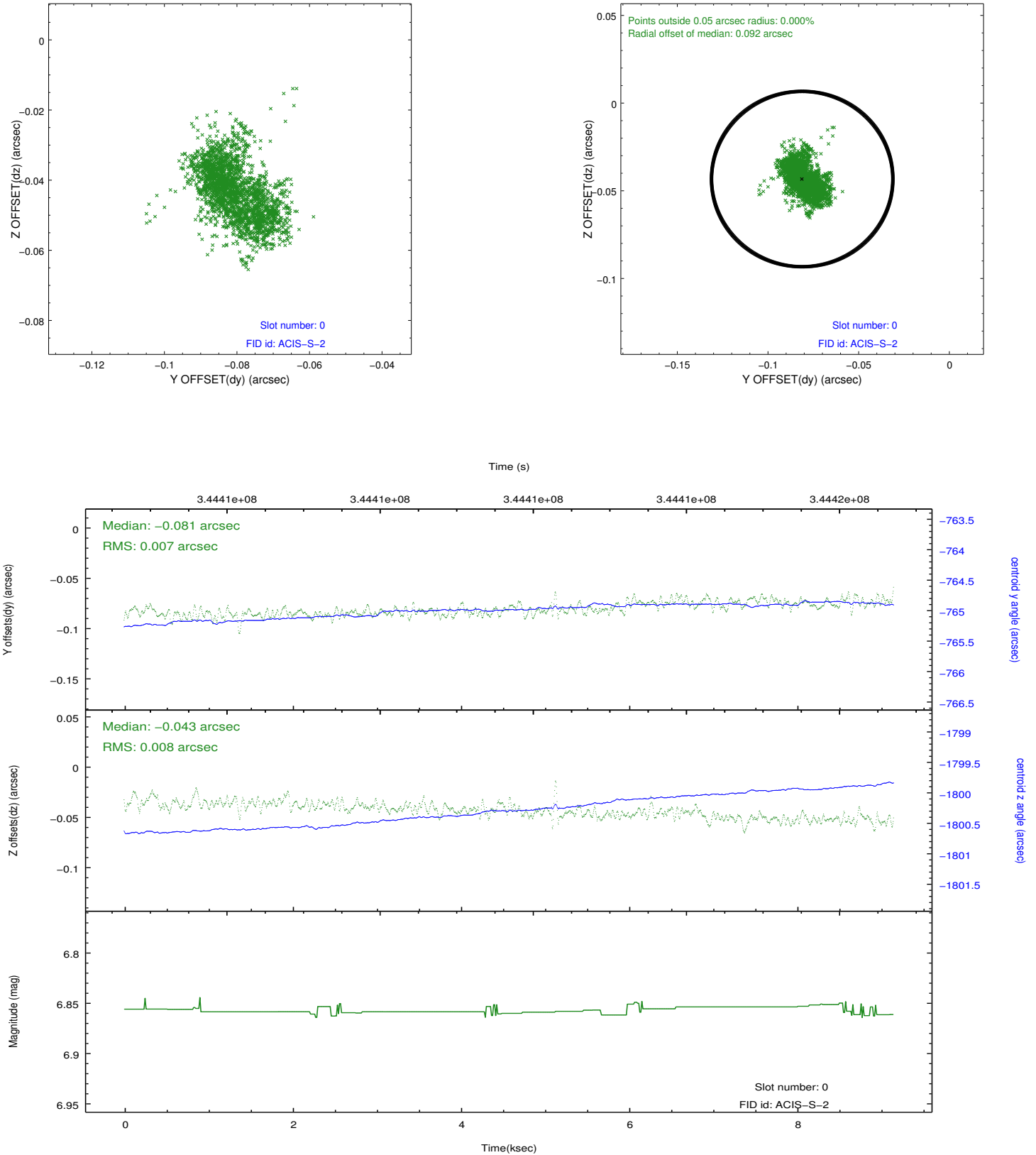


2.4.5 Slot 7

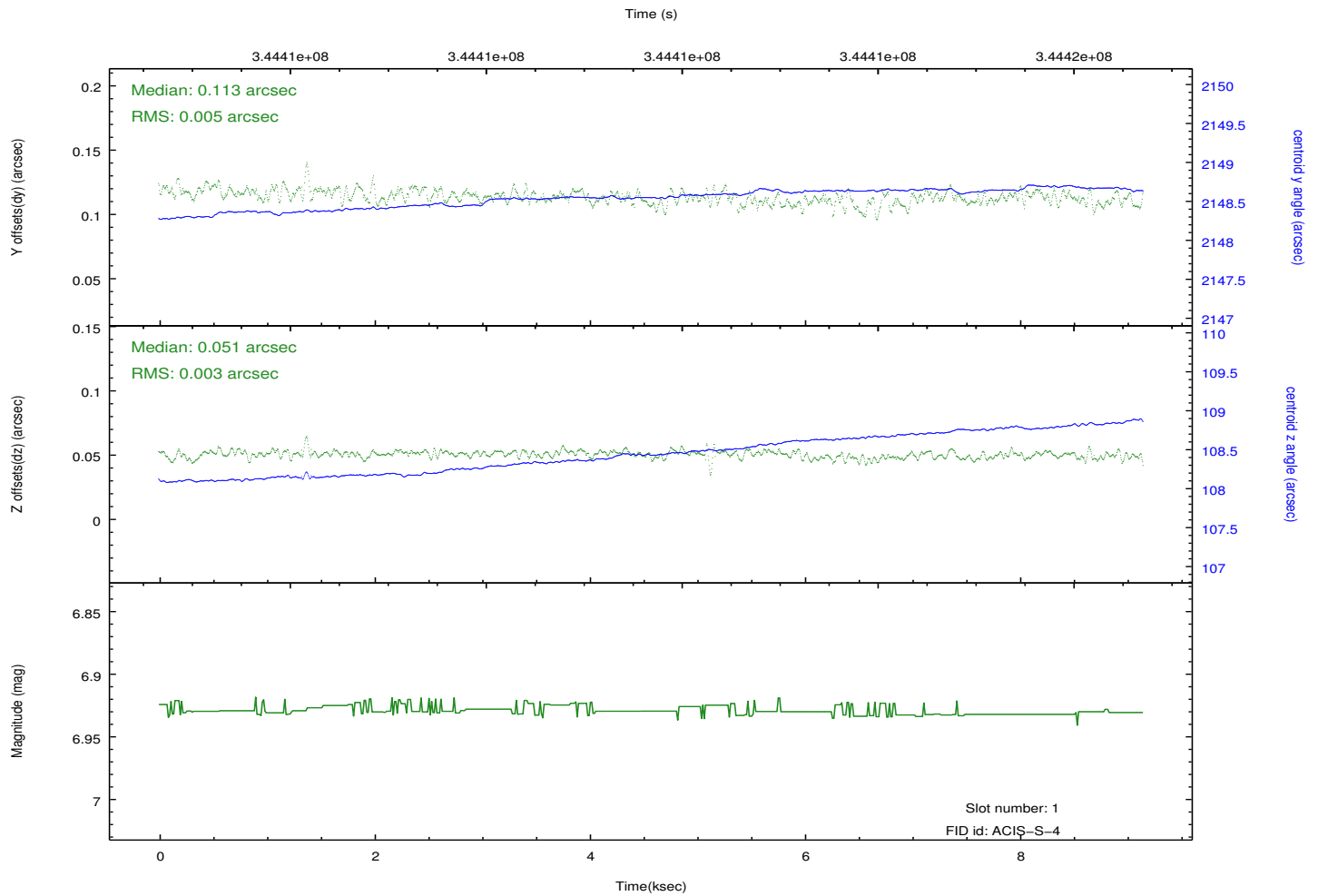
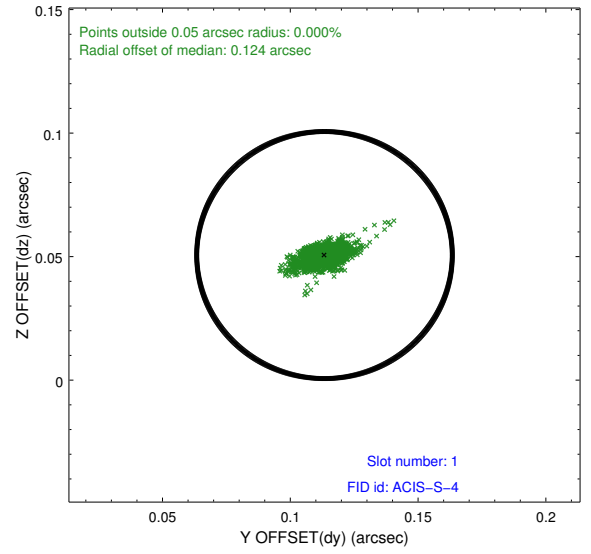
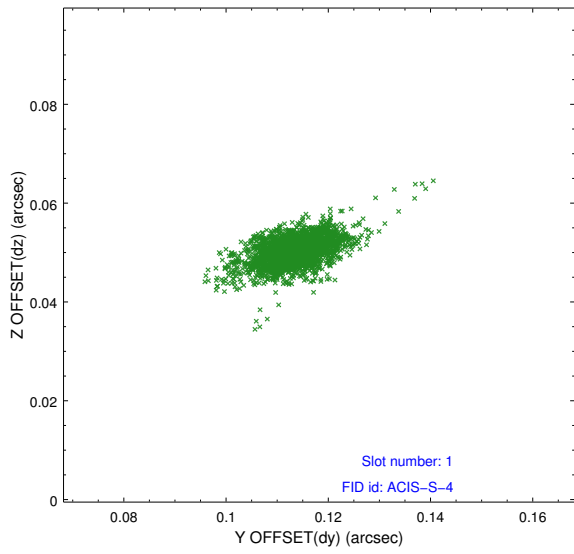


2.5 FID Slots

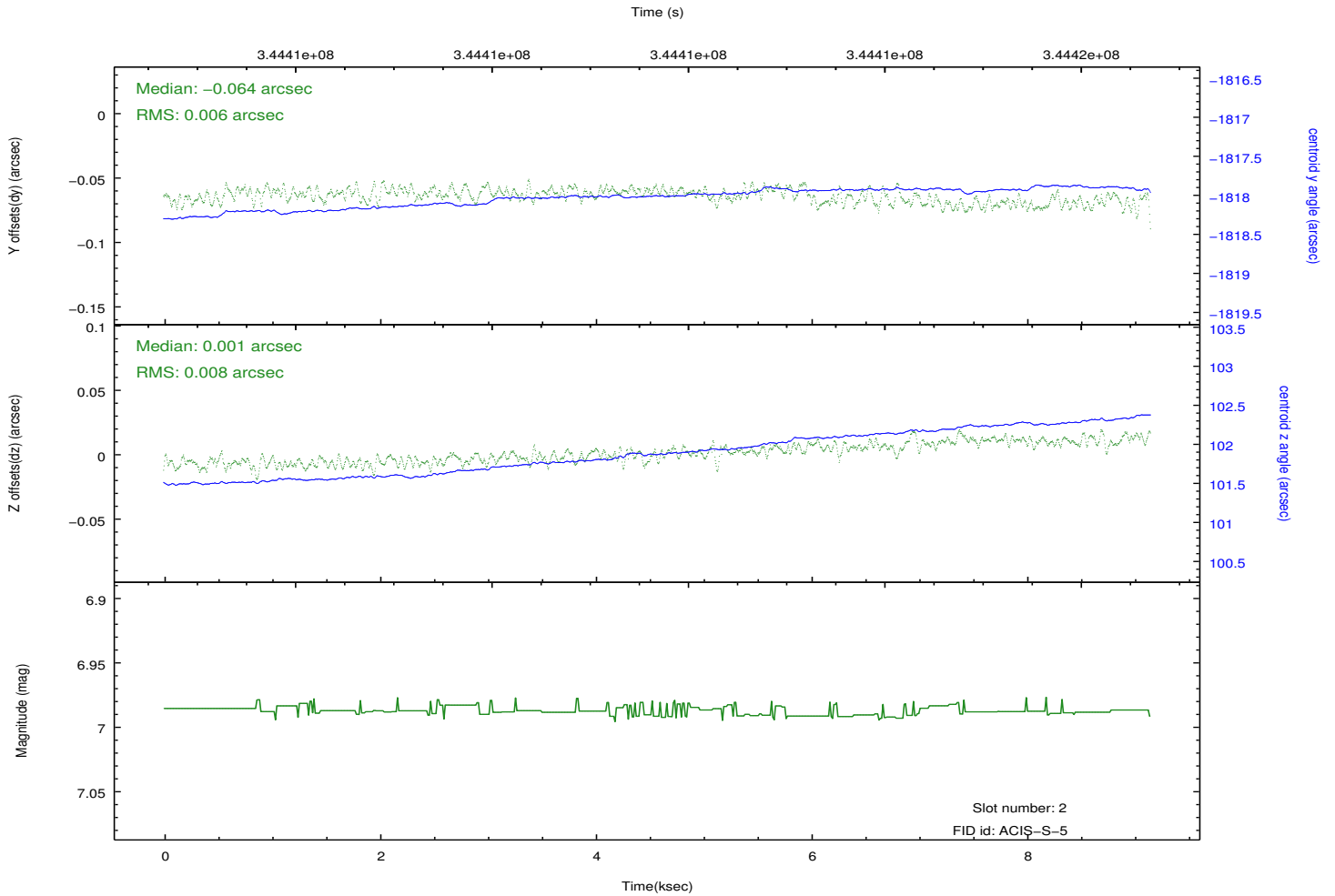
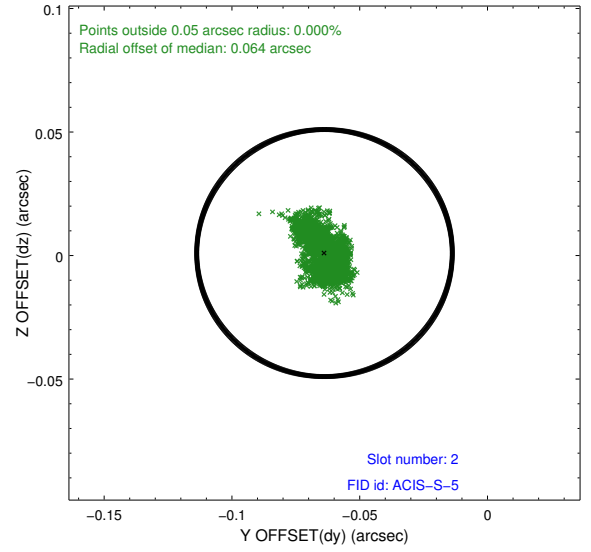
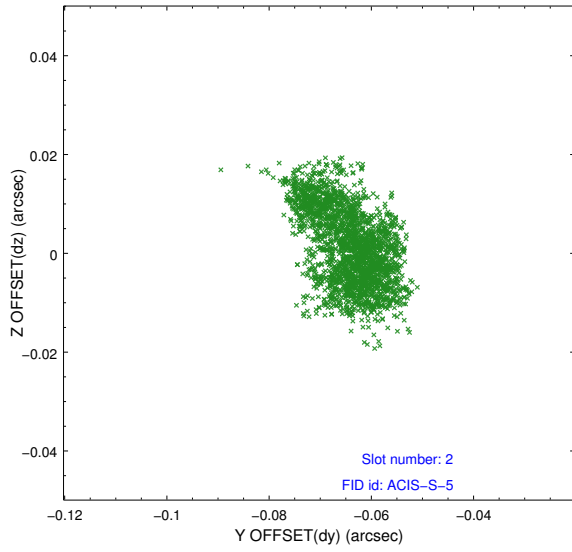
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

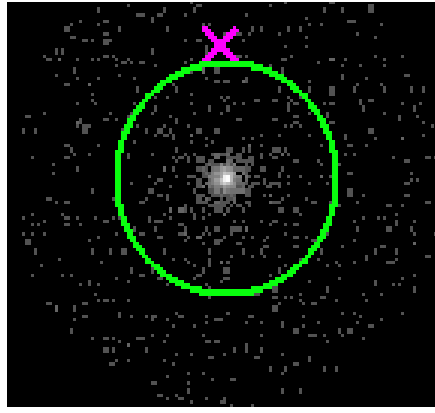


3 Gratings

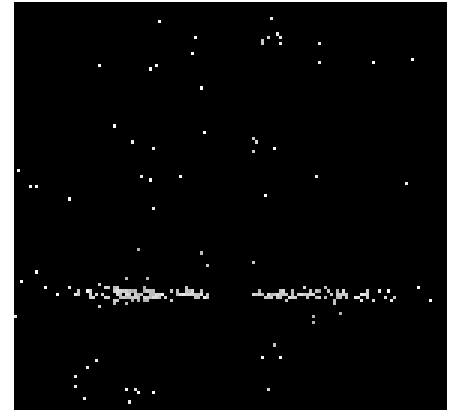
3.1 HEG Arm



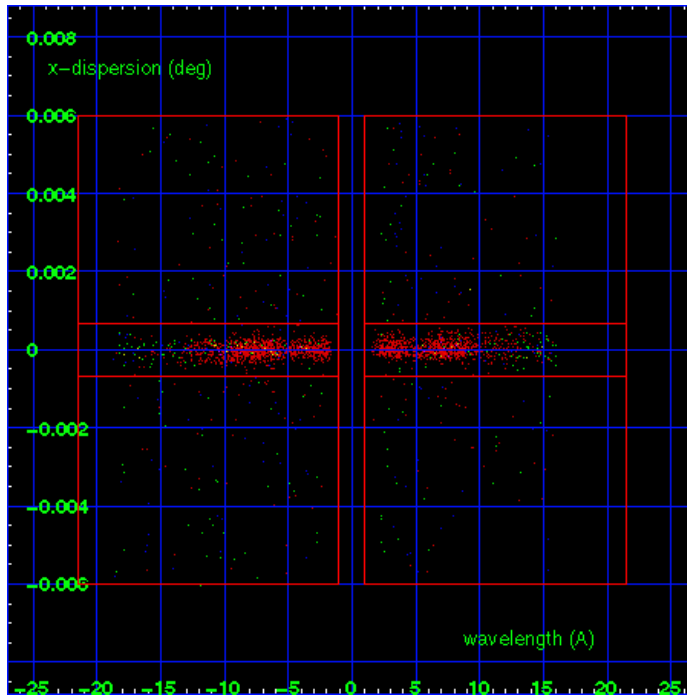
HEG Order Sort 123



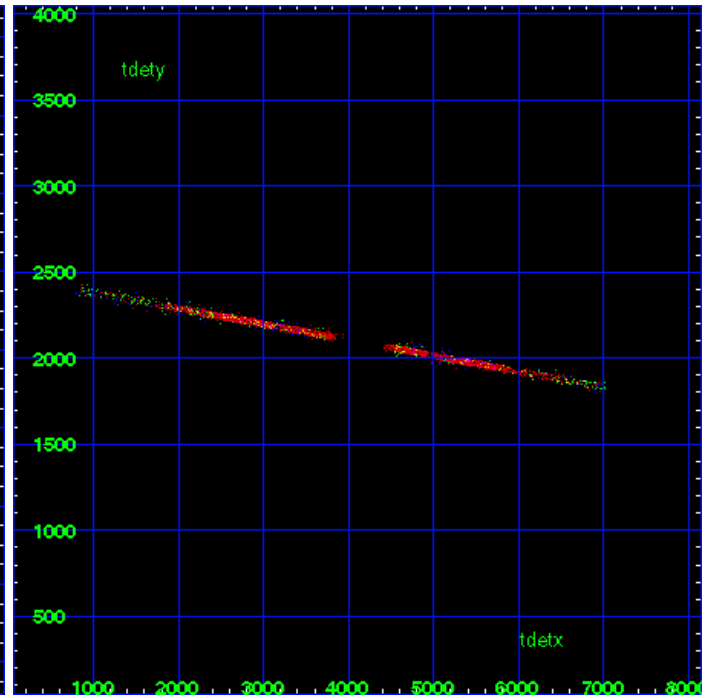
HEG Zero Order



HEG Order Sort ALL

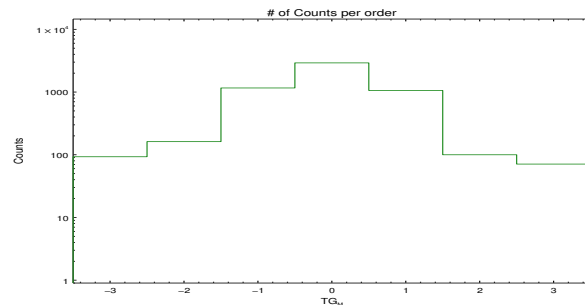


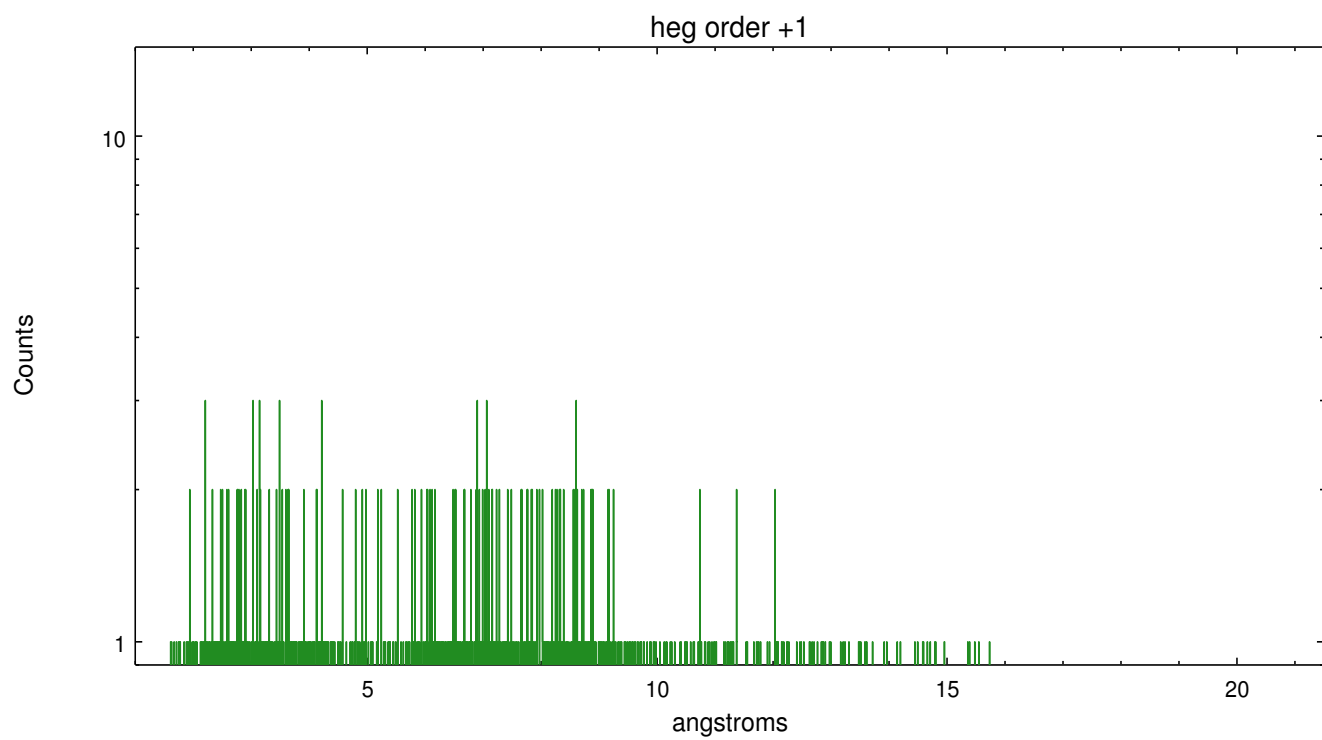
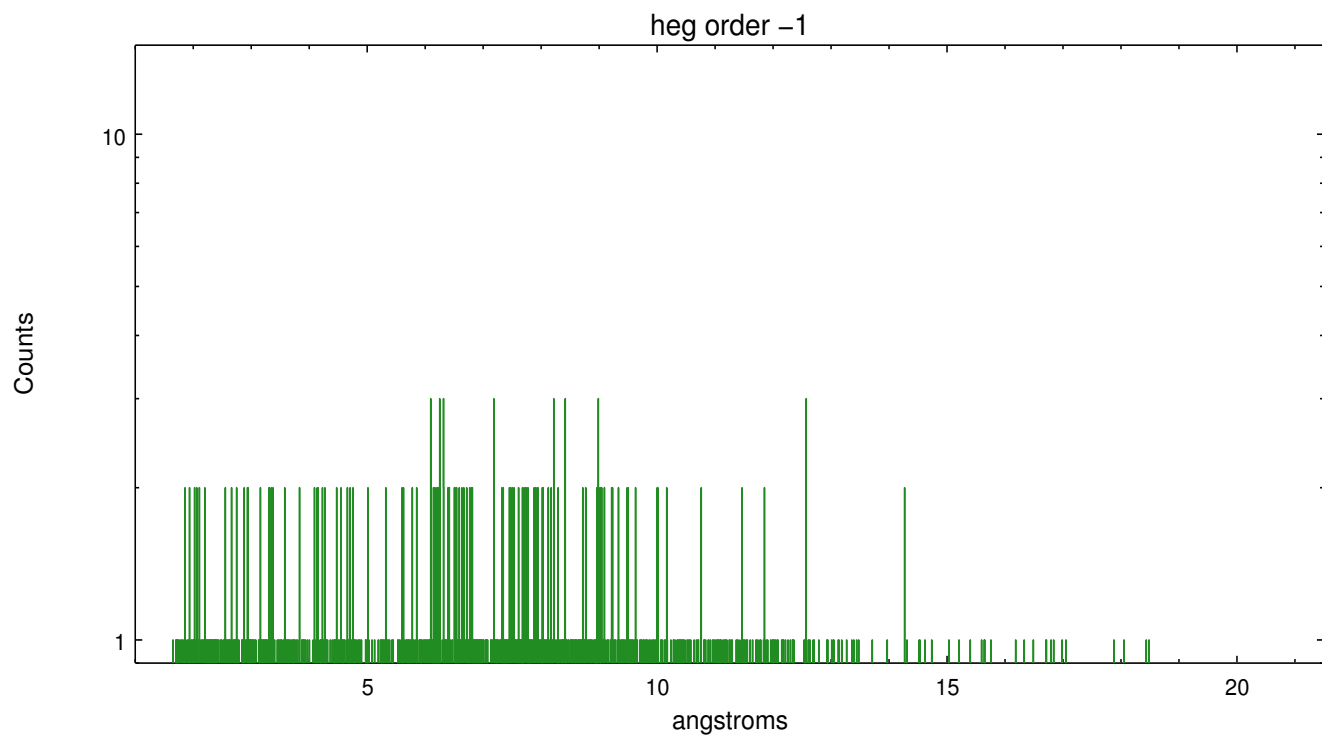
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	93	162	1162	2919	1060	100	71

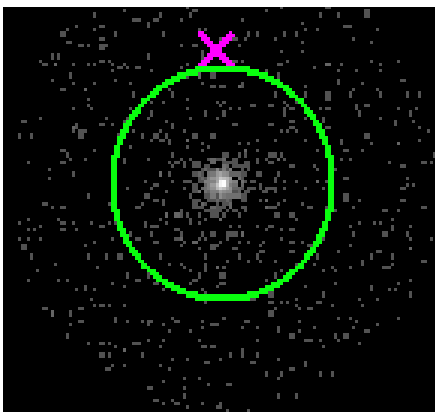




3.2 MEG Arm



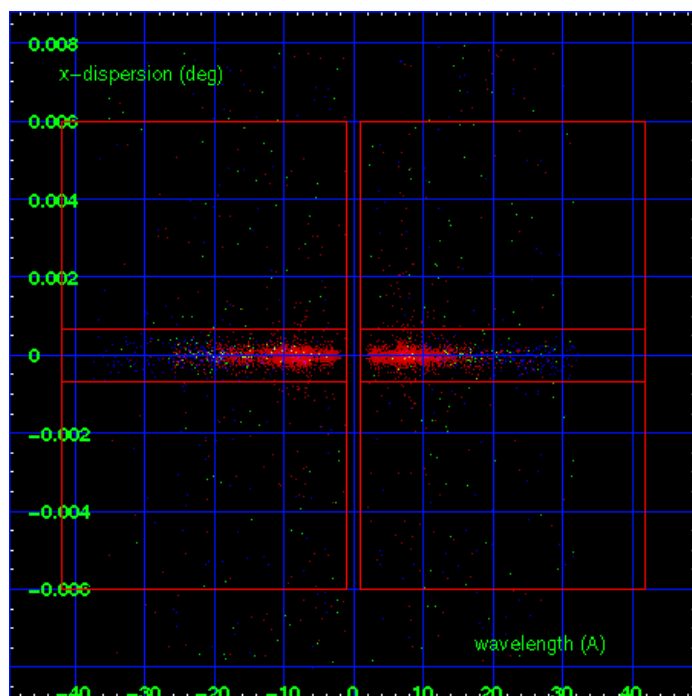
MEG Order Sort 123



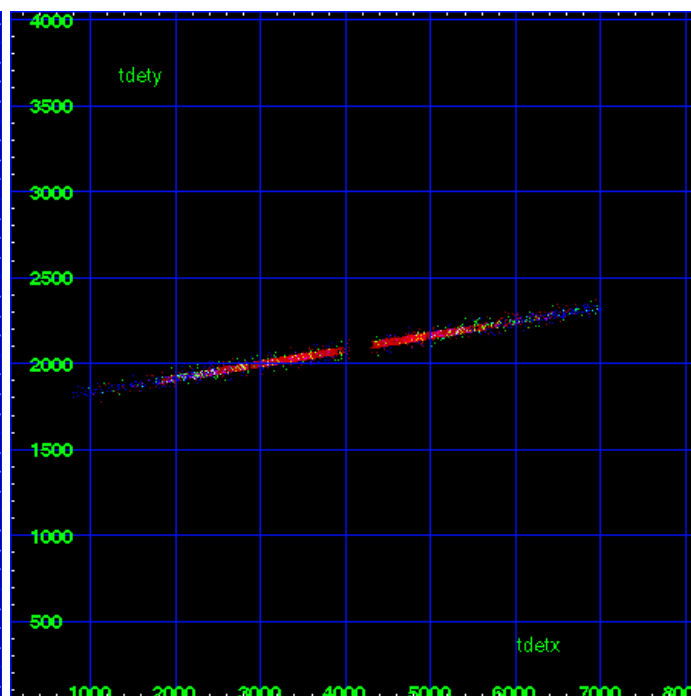
MEG Zero Order



MEG Order Sort ALL

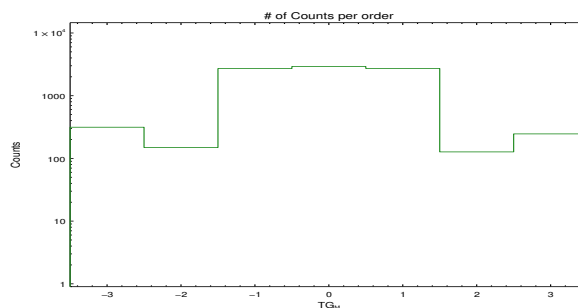


Spot Image MEG

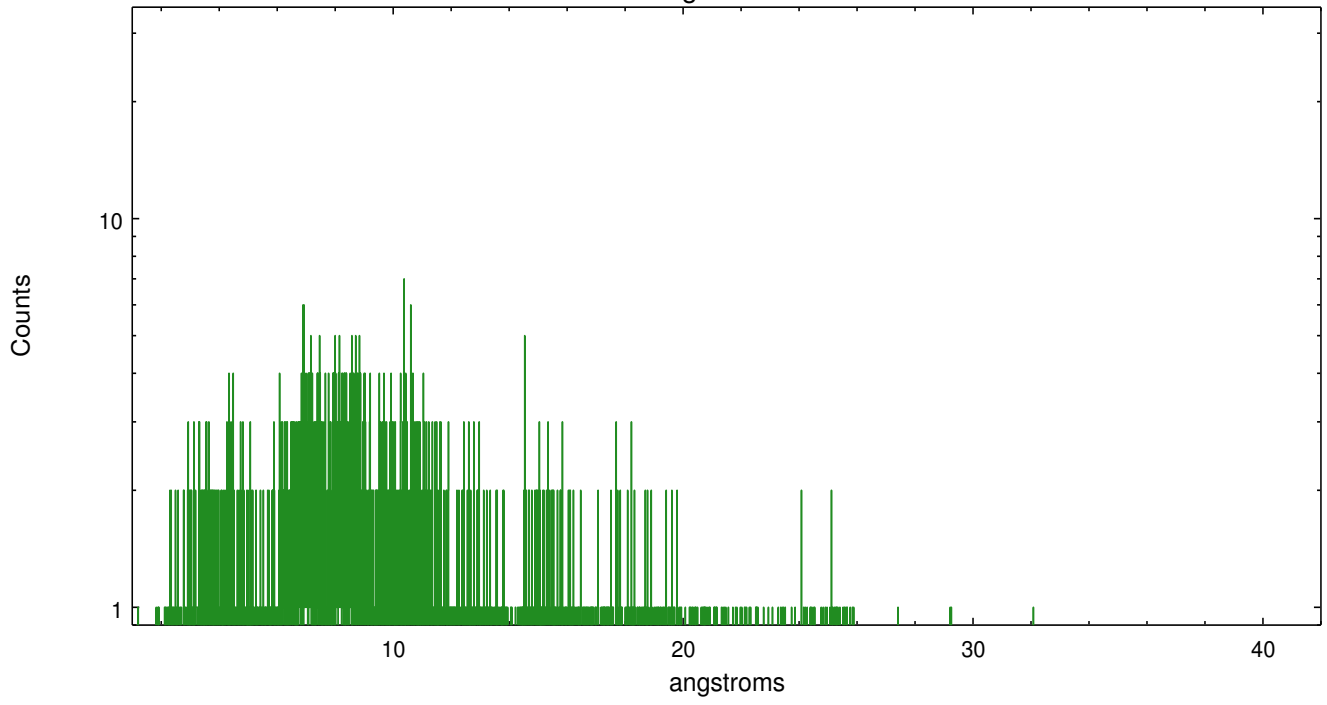


Full Detector MEG

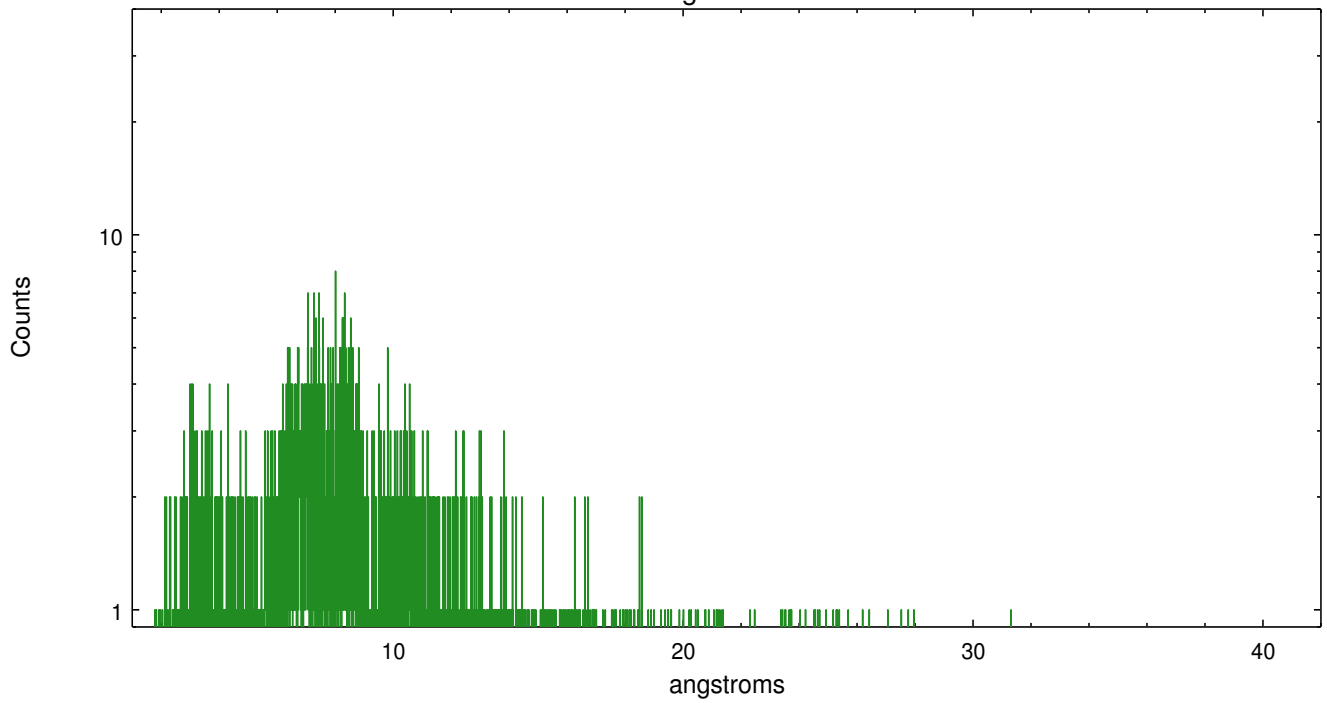
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	314	149	2707	2919	2719	127	246



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.1475

A.2 Comments