

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10777 - L2 Version 2
Chandra X-Ray Center

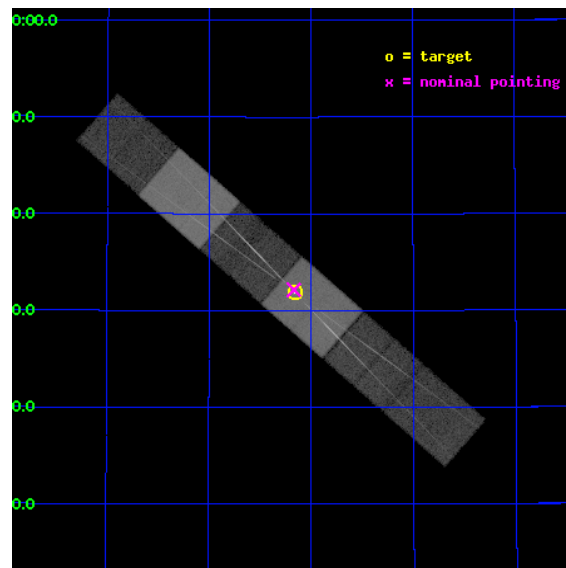
L2 Processing Date : May 23 2012

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1 Front

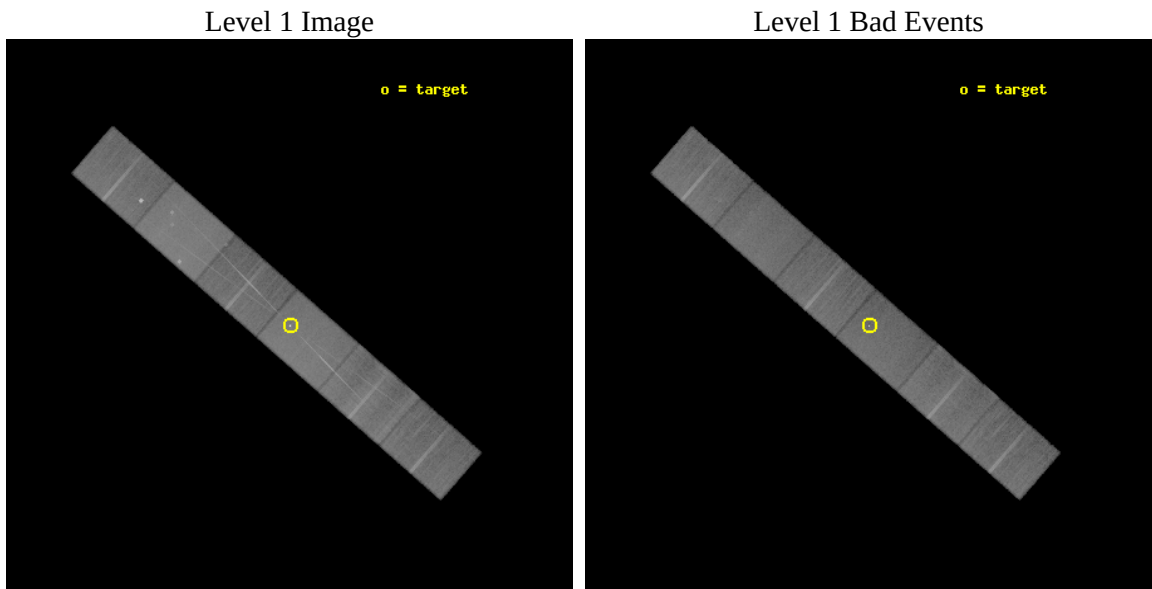
seq_num	701946	Sequence number
obs_id	10777	Observation id
title	Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 4051	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.79	Observer's specified target RA [deg]
dec_targ	44.531333	Observer's specified target Dec [deg]
ra_nom	180.79203157713	Nominal RA [deg]
dec_nom	44.535969440118	Nominal Dec [deg]
roll_nom	41.155215384017	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27835.0	Sum of GTIs [s]
livetime	27385.440606995	Livetime [s]
ontime4	27832.459029555	Sum of GTIs [s]
ontime5	27835.0	Sum of GTIs [s]
ontime6	27835.0	Sum of GTIs [s]
ontime7	27835.0	Sum of GTIs [s]
ontime8	27835.0	Sum of GTIs [s]
ontime9	27835.0	Sum of GTIs [s]
l2events	404225	Number of level 2 events



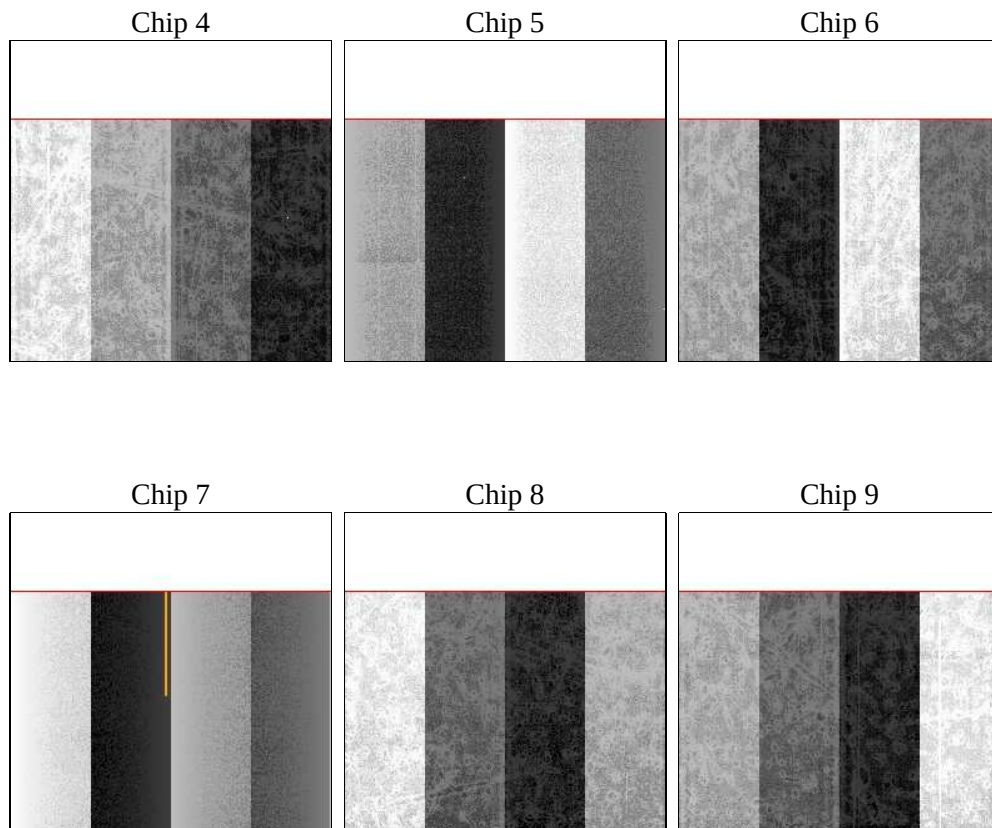
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	27835.0	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	27832.459029555	Sum of GTIs [s]
date	2012-05-23T13:11:54	Date and time of file creation	ontime5	27835.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	27835.0	Sum of GTIs [s]
			ontime7	27835.0	Sum of GTIs [s]
			ontime8	27835.0	Sum of GTIs [s]
			ontime9	27835.0	Sum of GTIs [s]
			l1events	1629034	Number of level 1 events

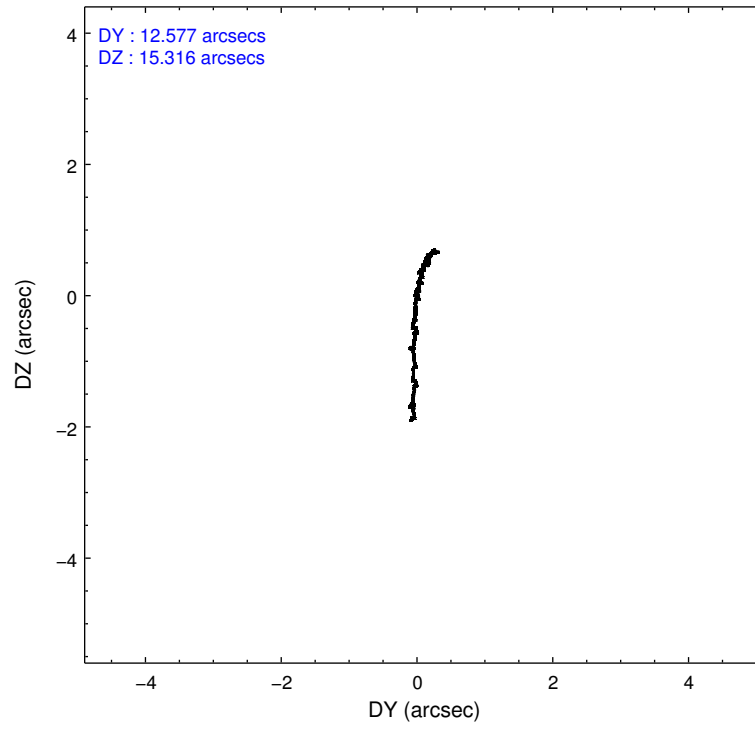
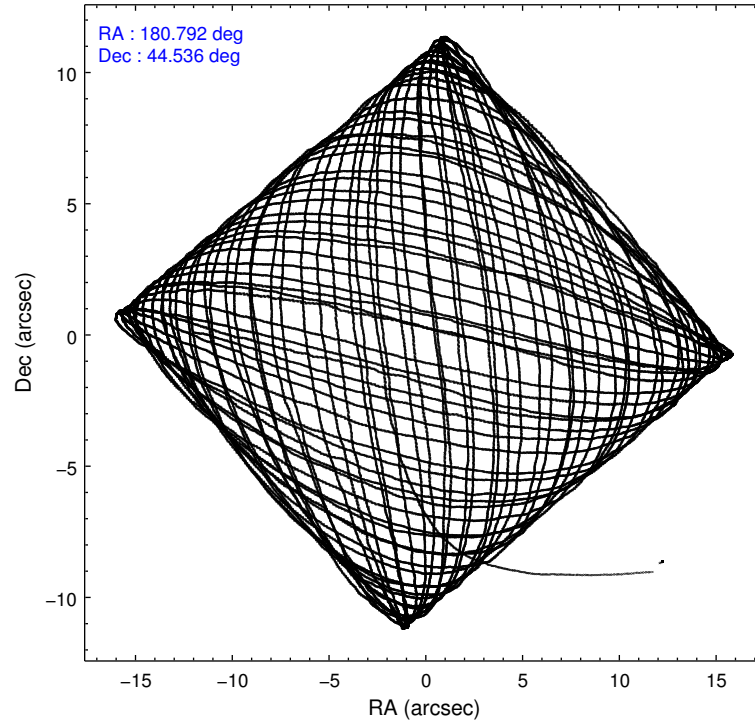
2.1.4 Events

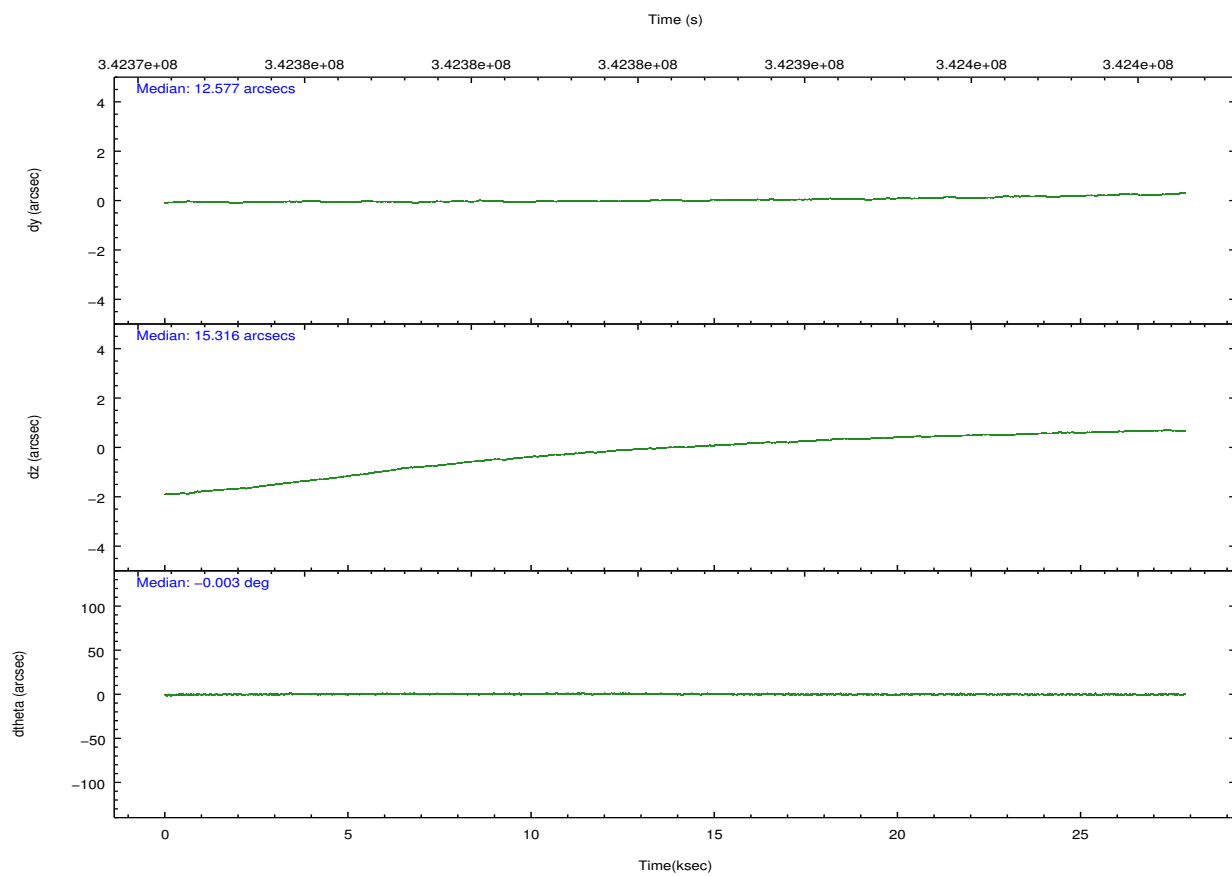
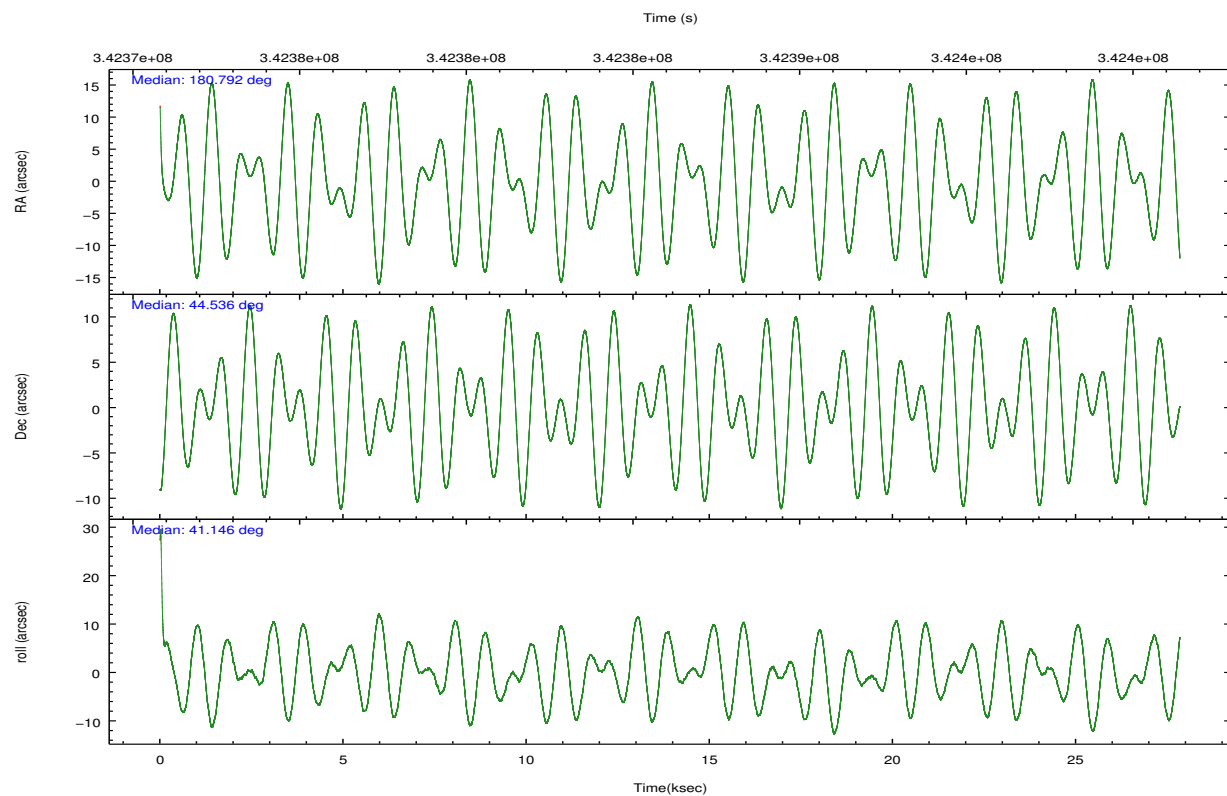
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	245818	340372	225556	321184	280486	215618	grade 0 events	19505	15956	19753	14507	25672	12311
rejected events	209956	182266	187450	178826	210727	186907		7%	4%	8%	4%	9%	5%
rejected %	85%	53%	83%	55%	75%	86%	grade 1 events	258	655	132	509	210	133
								0%	0%	0%	0%	0%	0%
							grade 2 events	6364	48006	7010	30223	14881	5781
								2%	14%	3%	9%	5%	2%
							grade 3 events	3003	6969	3009	12501	7012	2851
								1%	2%	1%	3%	2%	1%
							grade 4 events	2758	6728	3037	12449	6547	2779
								1%	1%	1%	3%	2%	1%
							grade 5 events	9908	24628	10017	28882	13623	10972
								4%	7%	4%	8%	4%	5%
							grade 6 events	4661	82291	5722	74217	16396	5342
								1%	24%	2%	23%	5%	2%
							grade 7 events	199361	155139	176876	147896	196145	175449
								81%	45%	78%	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	180.780120	180.7920315771298	CCD I2 on	N	N
[deg] Pointing Dec	44.509963	44.53596944011825	CCD I3 on	N	N
[deg] Pointing Roll	41.006923	41.15521538401694	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)	342372341.184000	342371182.36136	CCD S5 on	Y	Y
Observation start date	2008-11-06T15:24:36	2008-11-06T15:06:22	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	342400041.184000	342400926.83783	On-chip summing requested	N	N
Observation end date	2008-11-06T23:06:16	2008-11-06T23:22:06	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



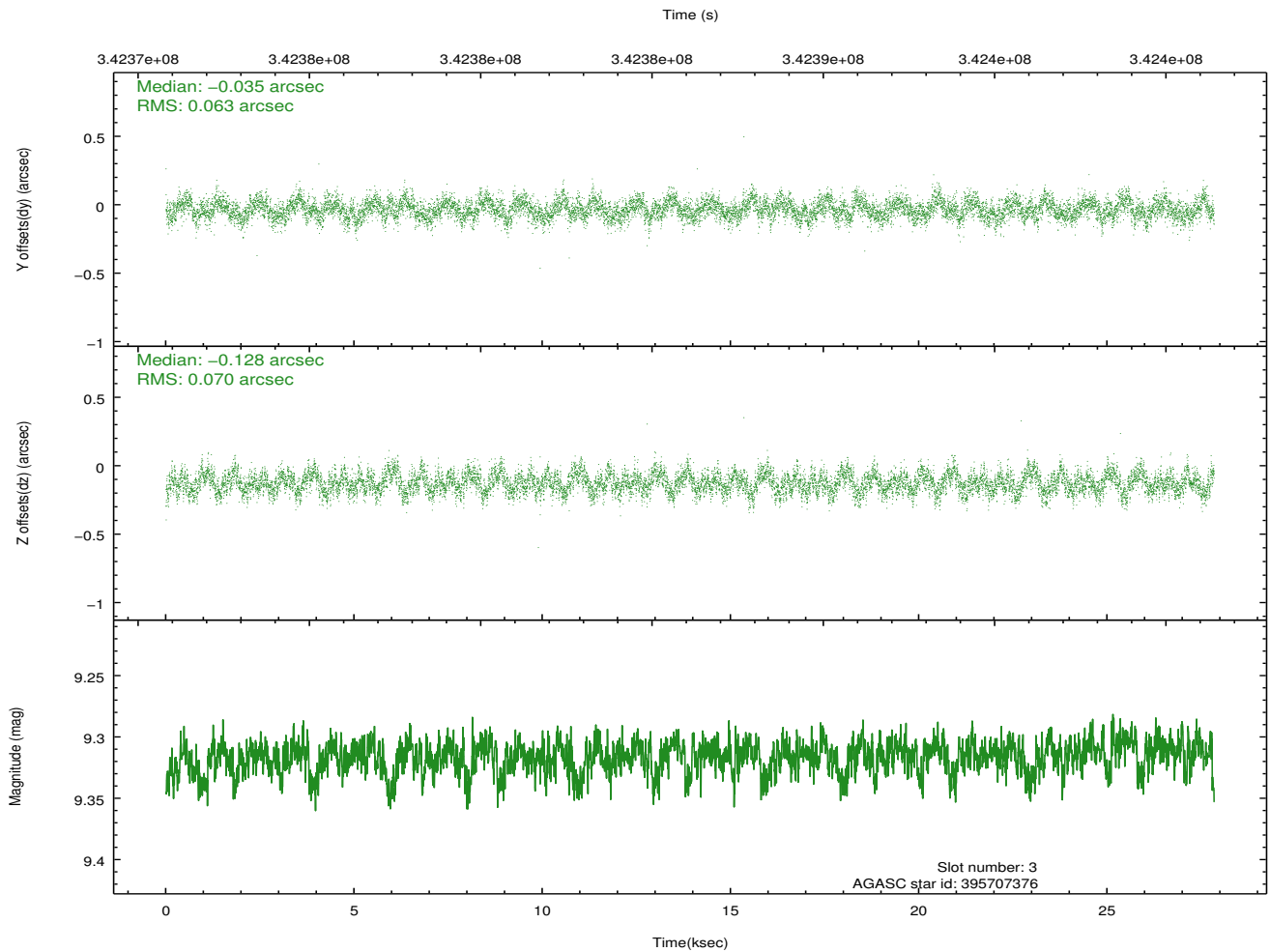
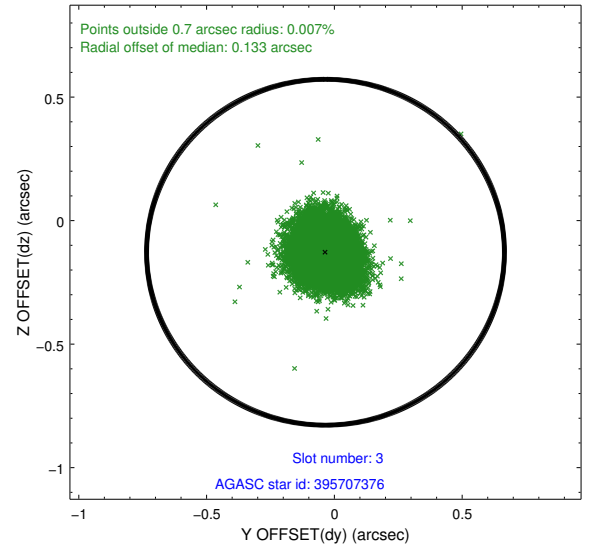
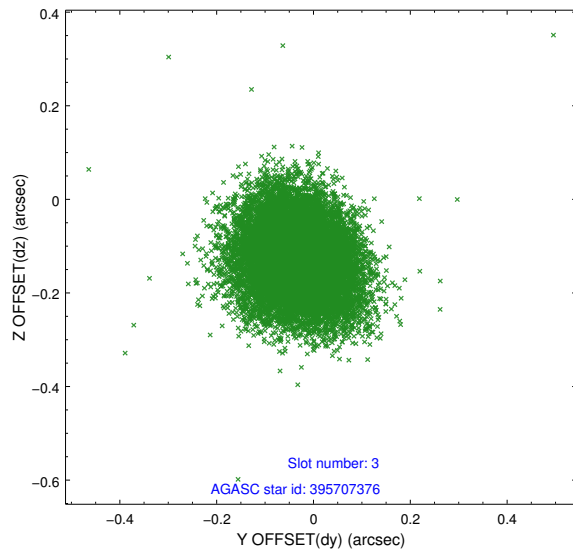


Slot Statistics

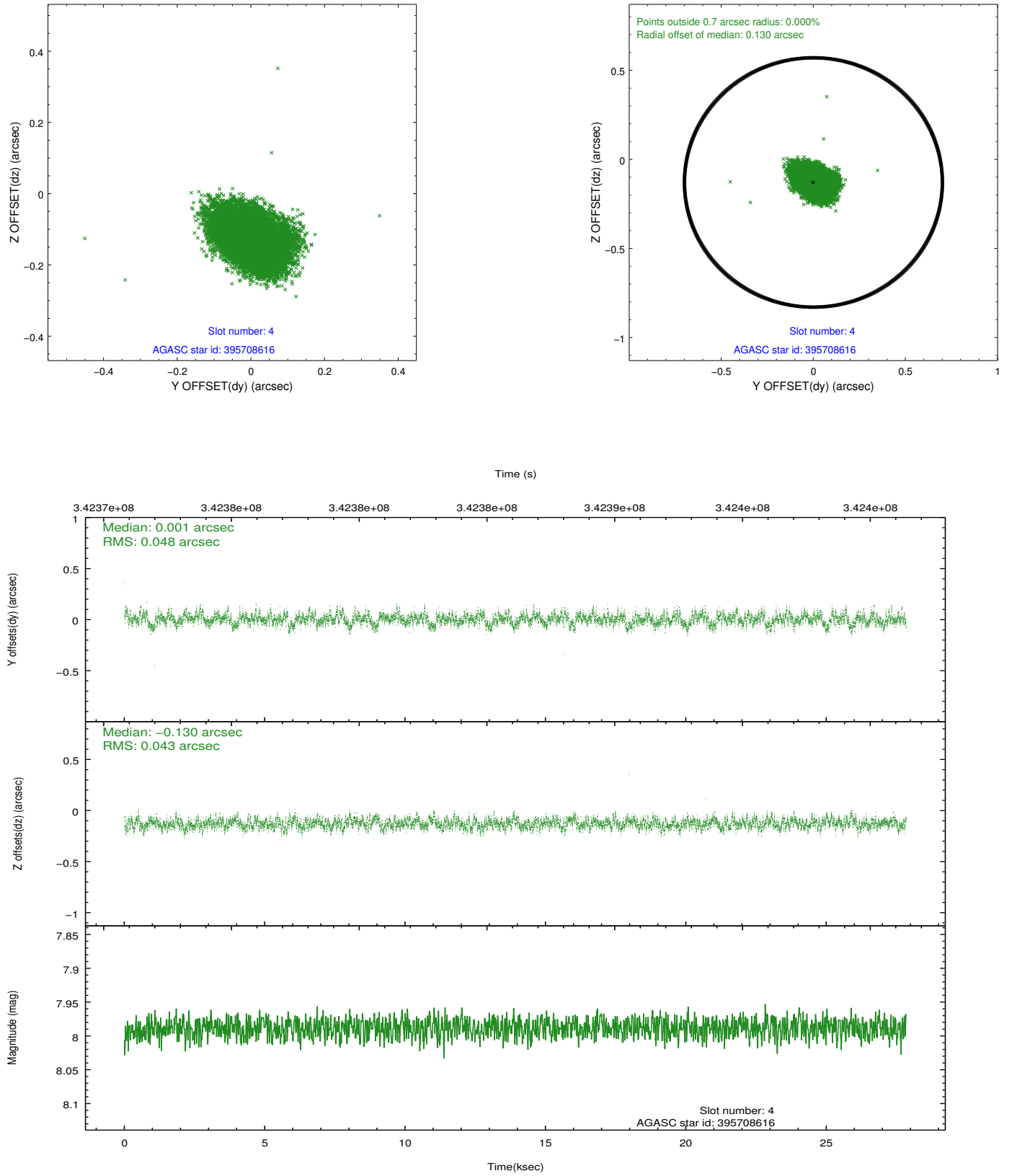
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	6791	-0.110	-0.079	0.009	0.016	0.000000	0.000000	-765.44	-1798.62
1	FID	ACIS-S-4	7.00	6791	0.116	0.055	0.009	0.015	0.000000	0.000000	2148.04	109.86
2	FID	ACIS-S-6	7.18	6791	-0.033	0.031	0.008	0.016	0.000000	0.000000	396.76	747.35
3	GUIDE	395707376	9.32	13556	-0.035	-0.128	0.100	0.161	180.967983	44.858789	1185.85	633.51
4	GUIDE	395708616	7.99	13578	0.001	-0.130	0.067	0.113	180.101872	44.630343	-1022.05	1472.48
5	GUIDE	395708696	8.88	13569	0.032	0.086	0.096	0.160	180.383726	44.624291	-494.77	979.10
6	GUIDE	395709608	8.36	13576	0.062	0.096	0.064	0.103	181.055130	44.450389	393.72	-624.32
7	GUIDE	395710032	8.79	13569	-0.057	0.079	0.080	0.128	181.512910	44.376001	1112.46	-1594.44

2.4 Star Slots

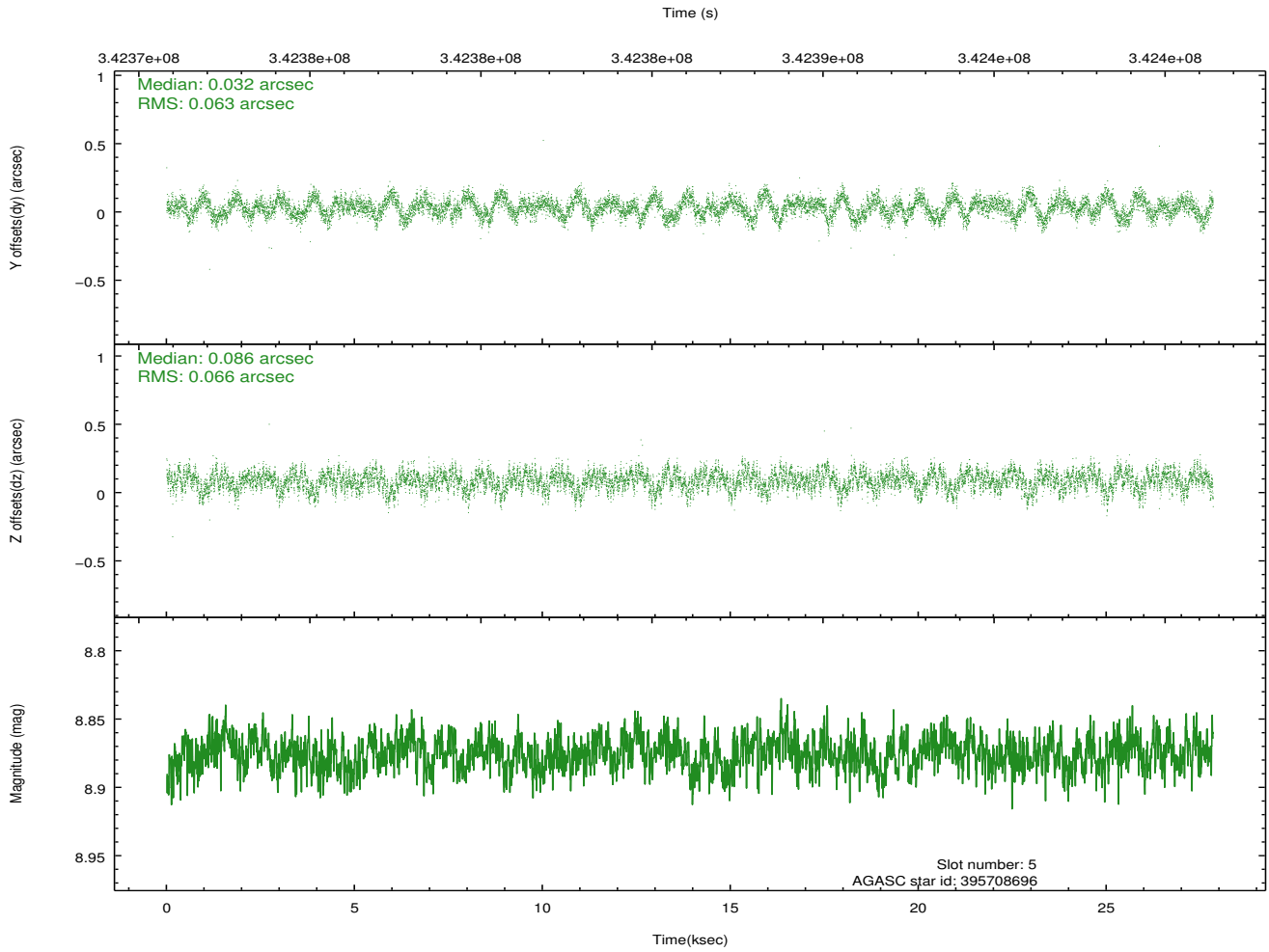
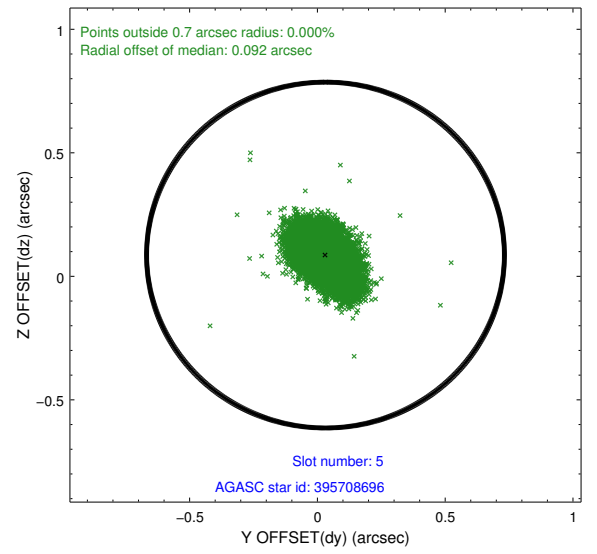
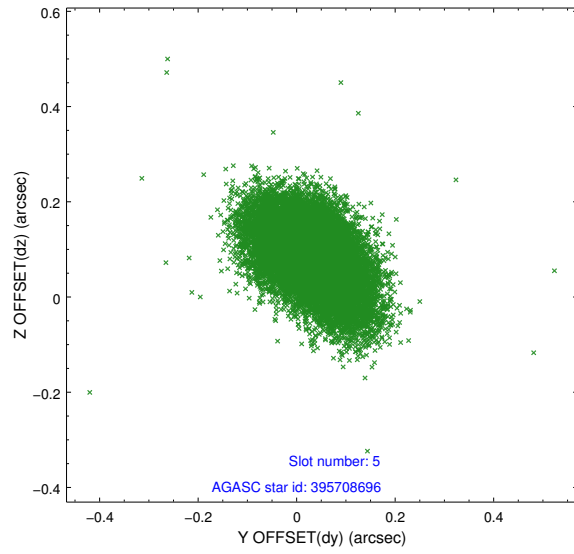
2.4.1 Slot 3



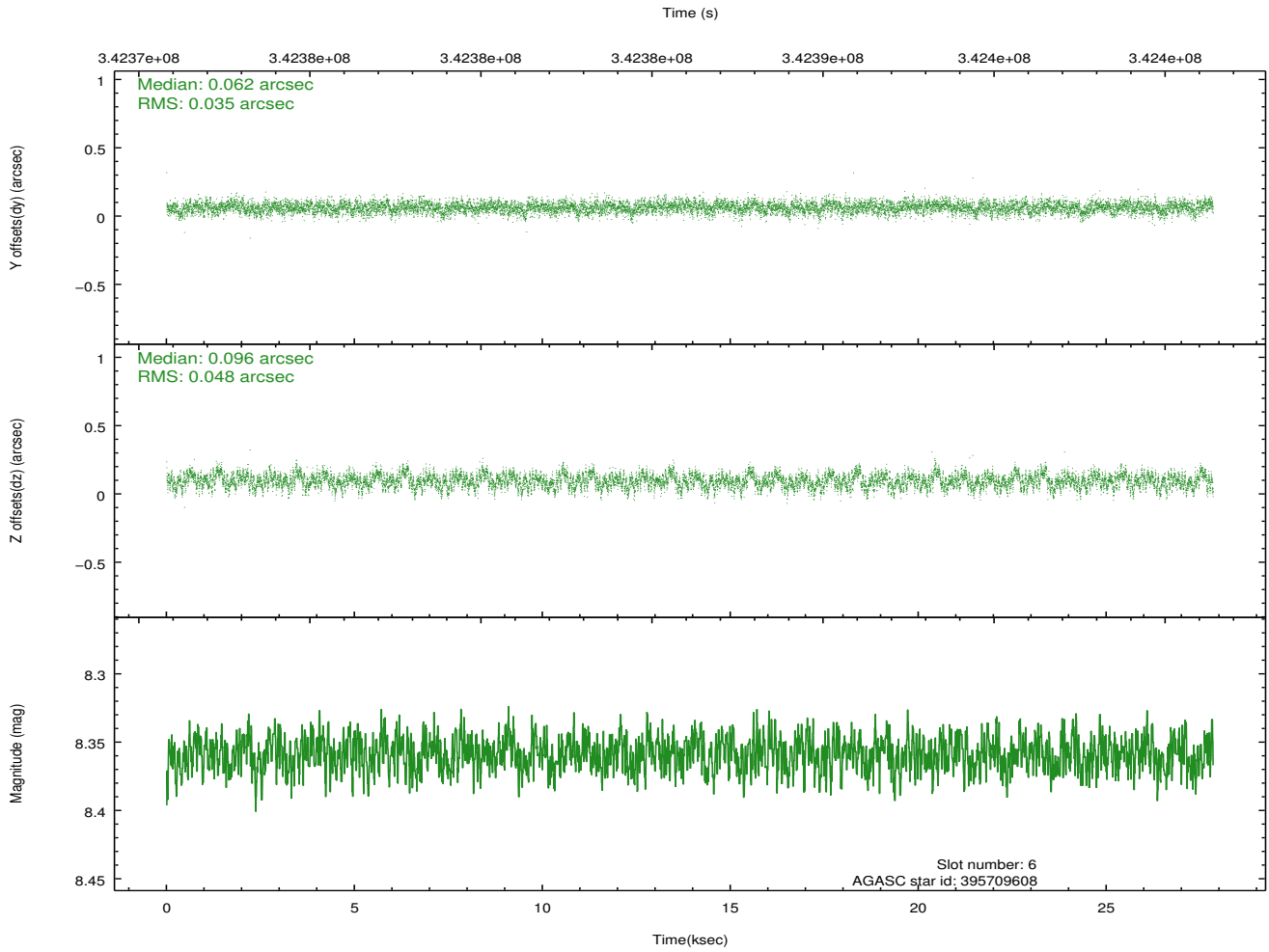
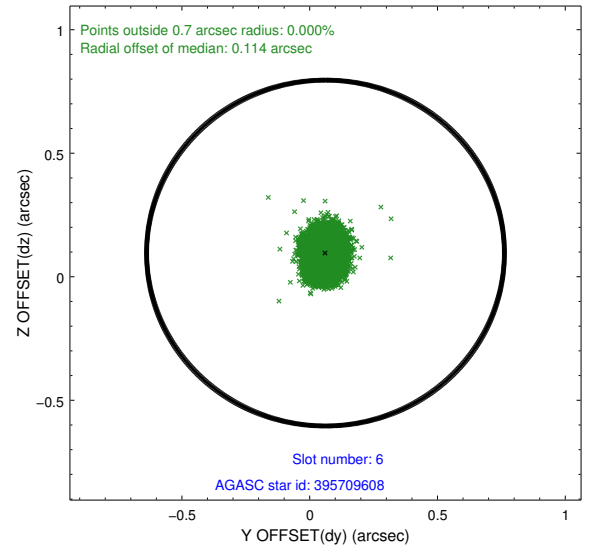
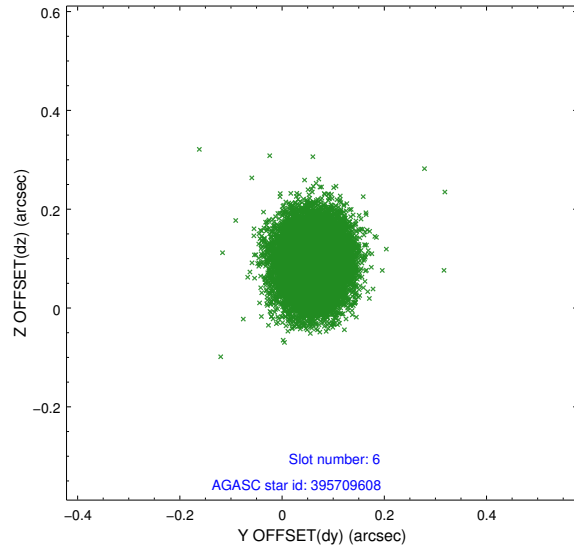
2.4.2 Slot 4



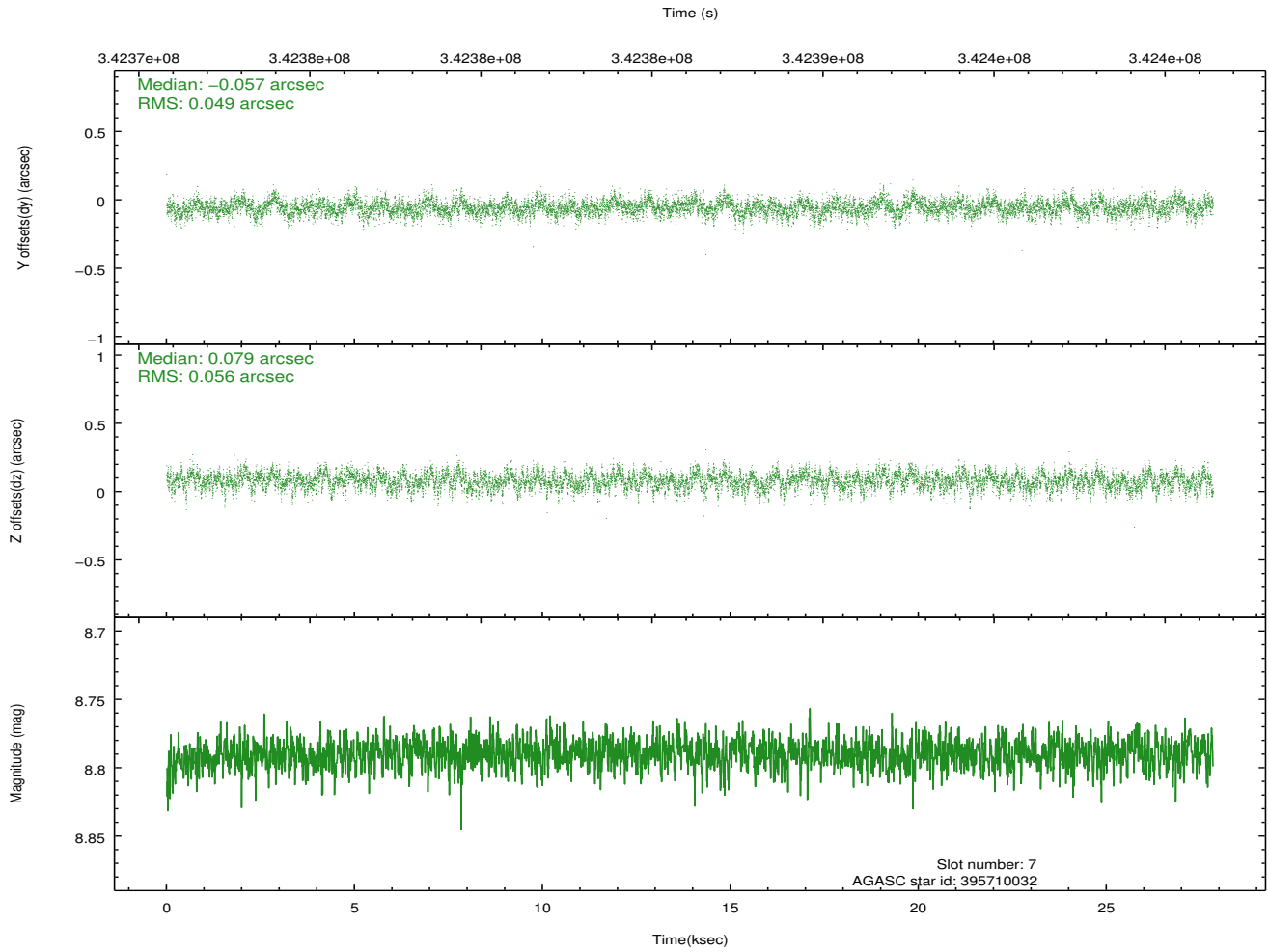
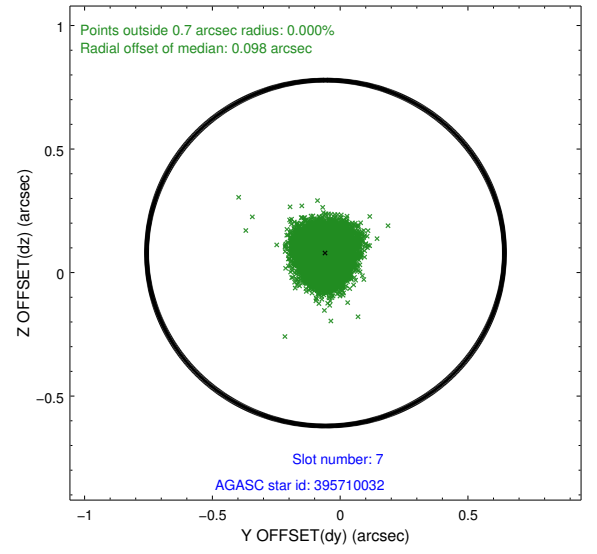
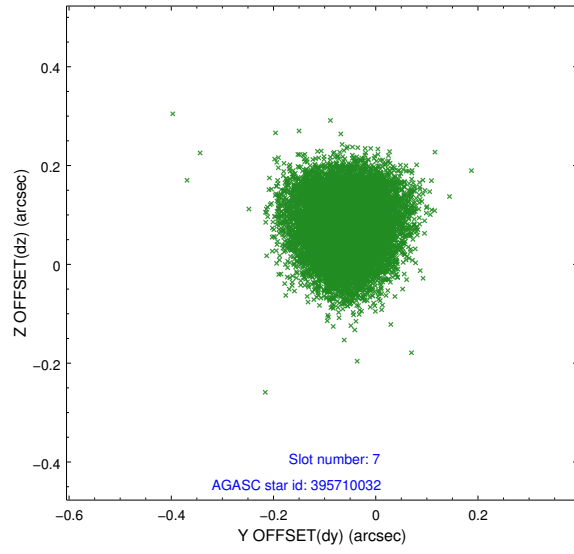
2.4.3 Slot 5



2.4.4 Slot 6

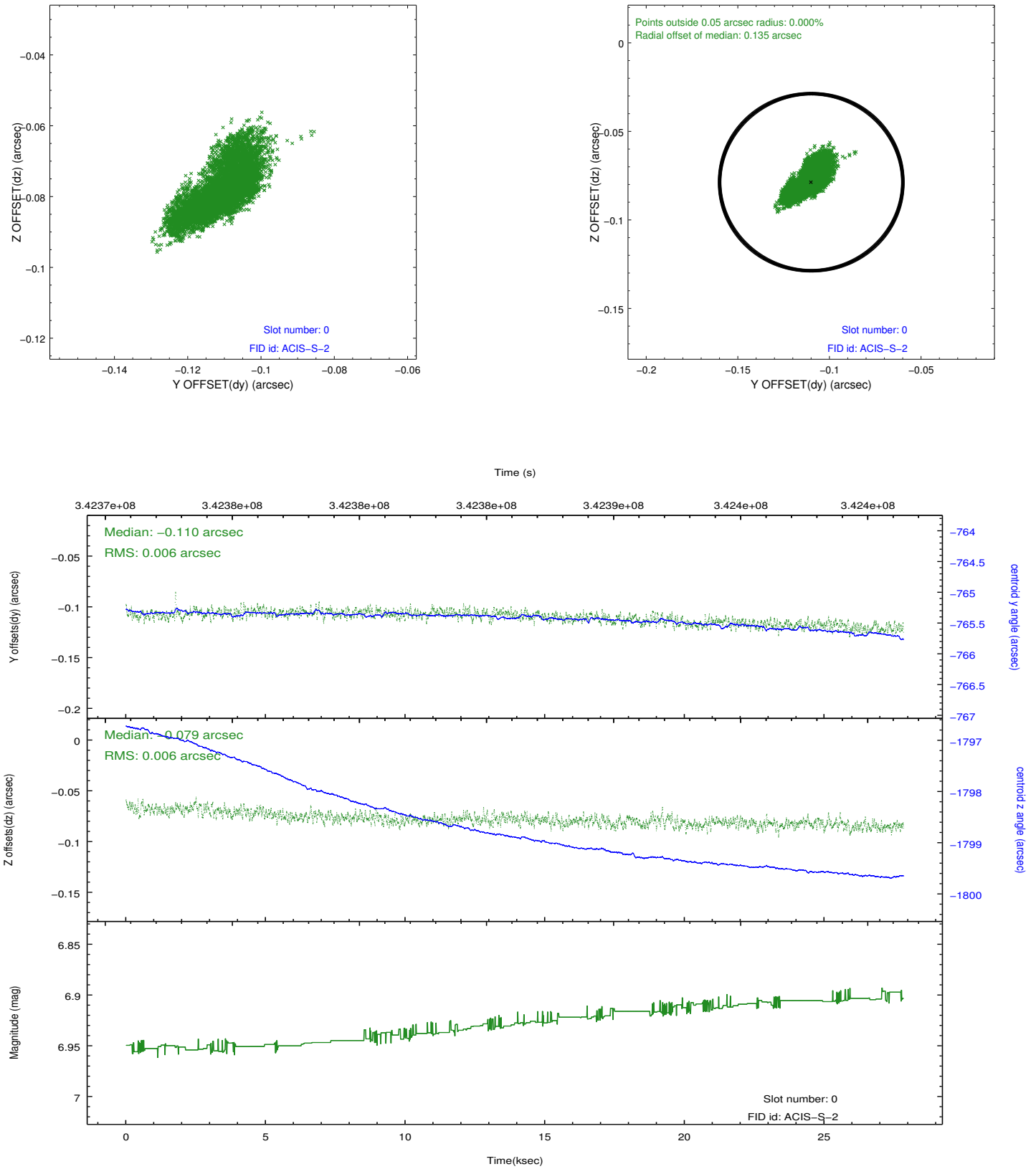


2.4.5 Slot 7

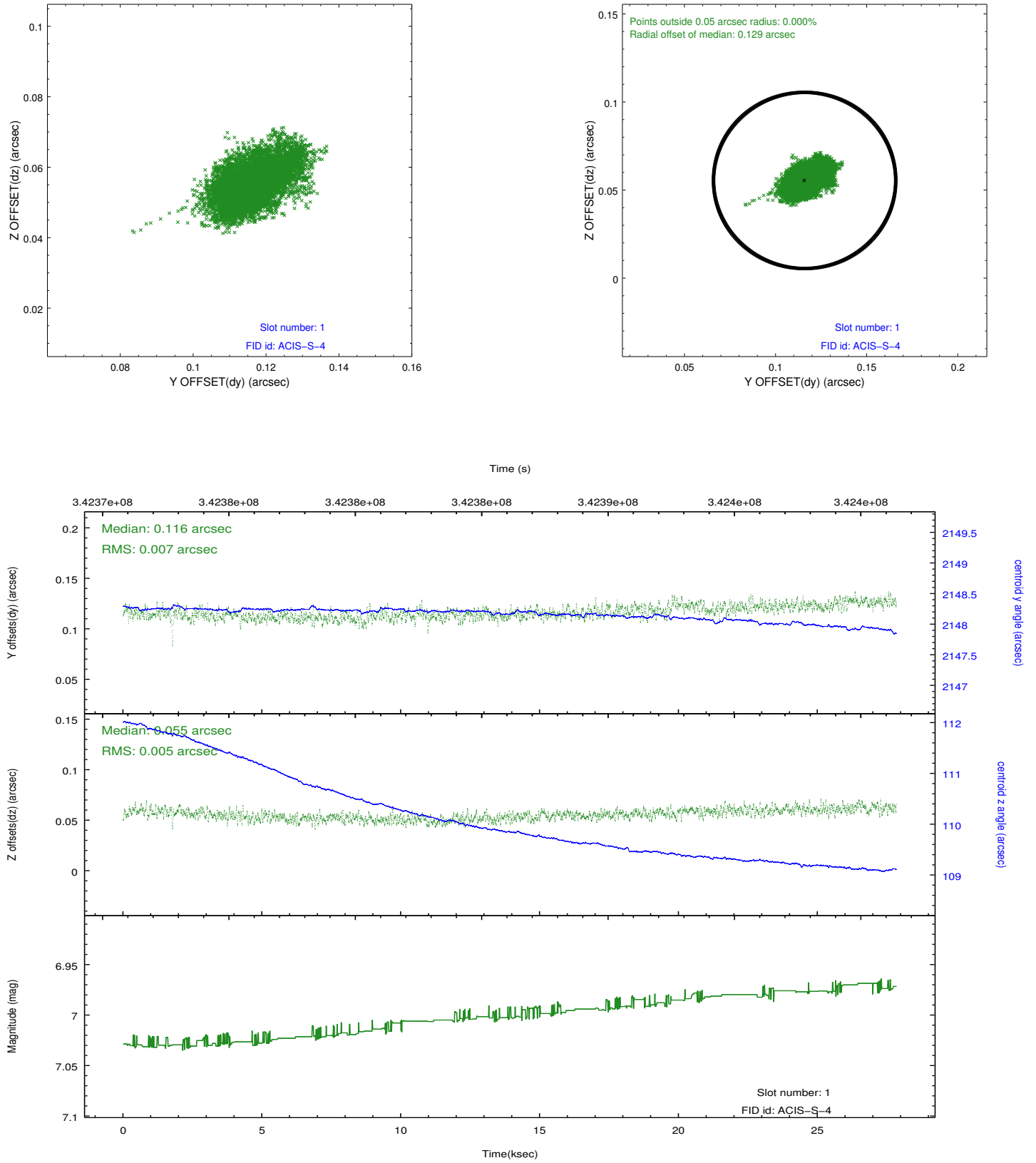


2.5 FID Slots

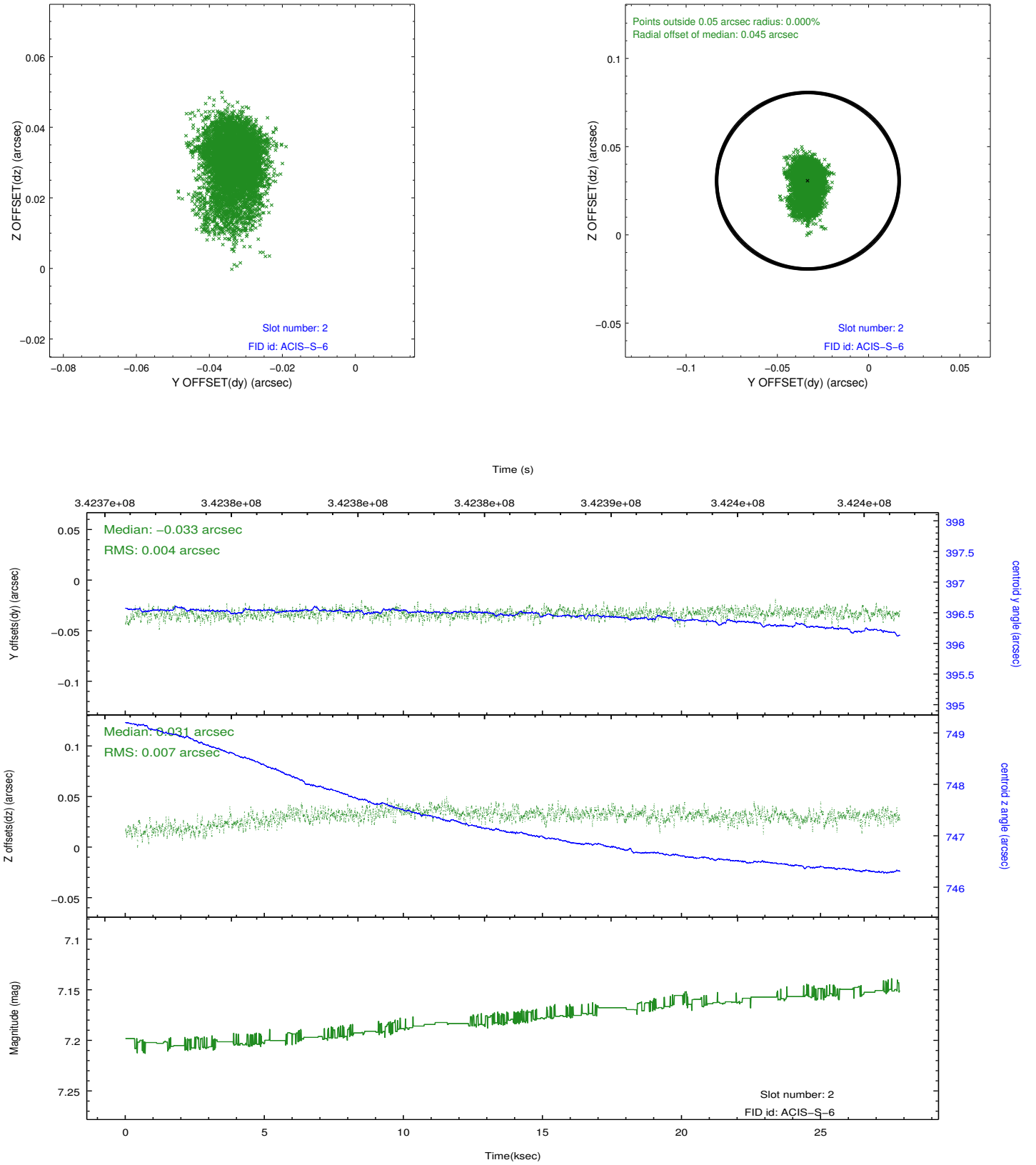
2.5.1 Slot 0



2.5.2 Slot 1

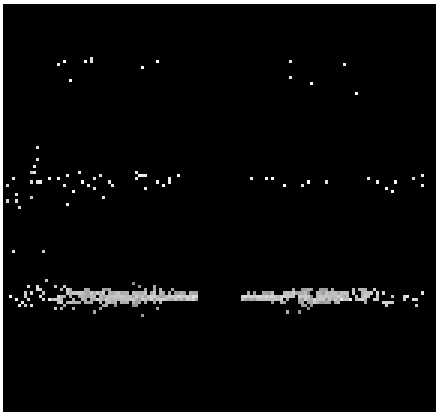


2.5.3 Slot 2

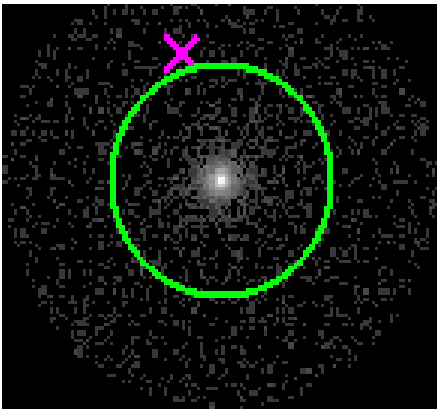


3 Gratings

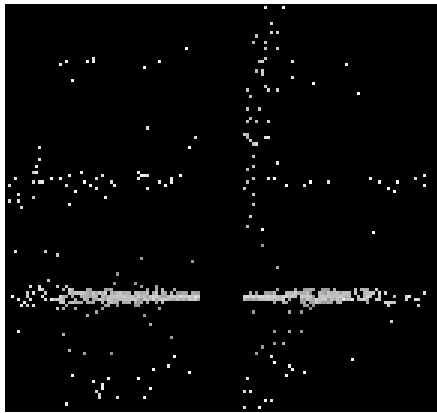
3.1 HEG Arm



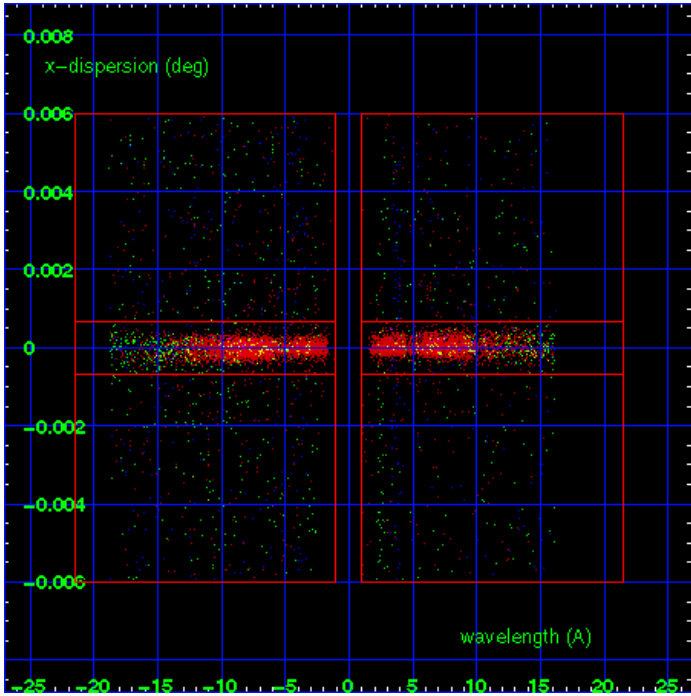
HEG Order Sort 123



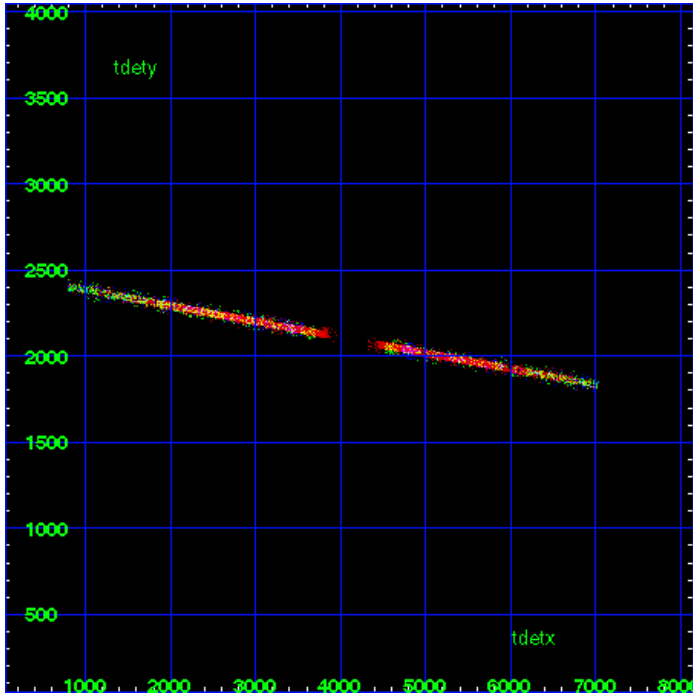
HEG Zero Order



HEG Order Sort ALL

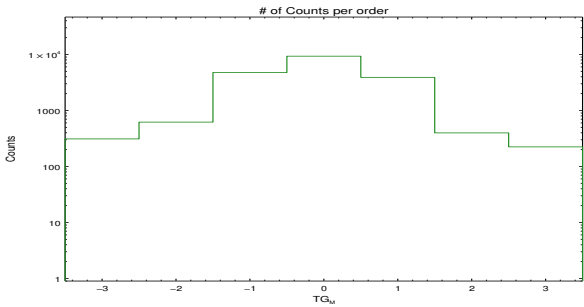


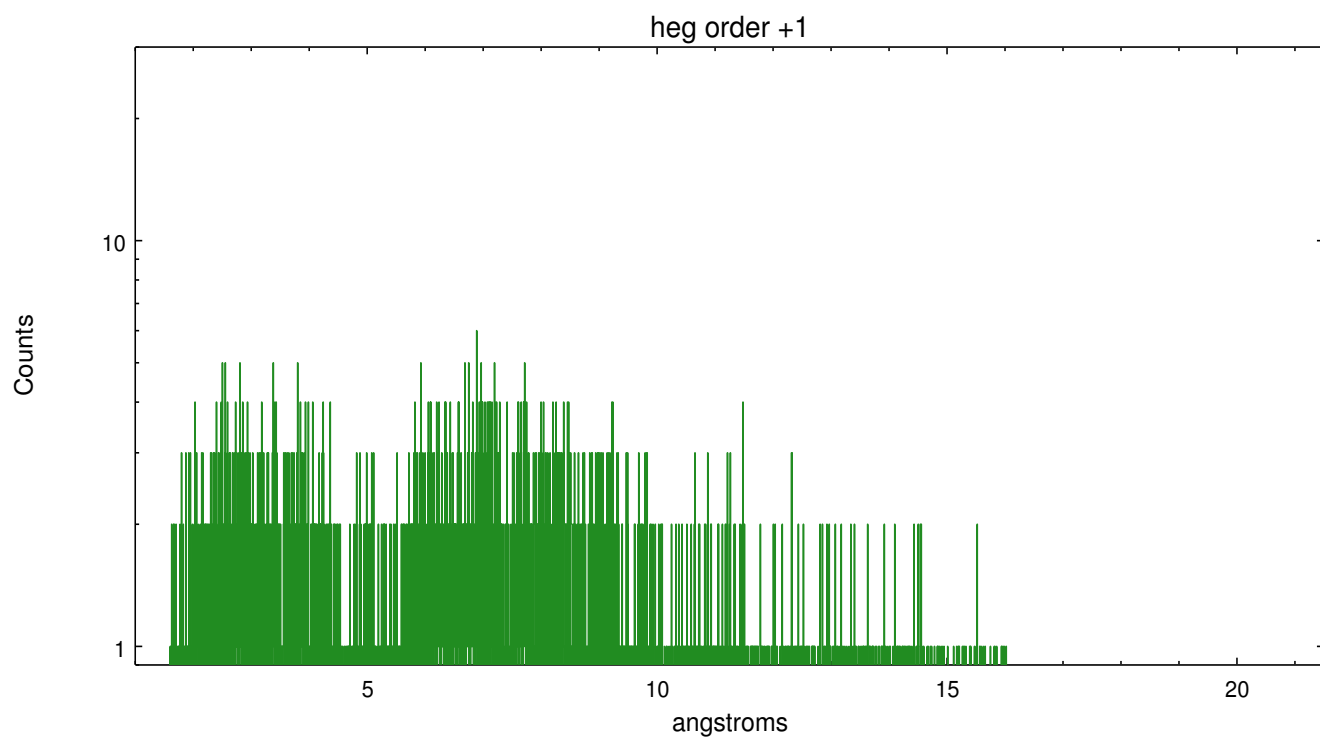
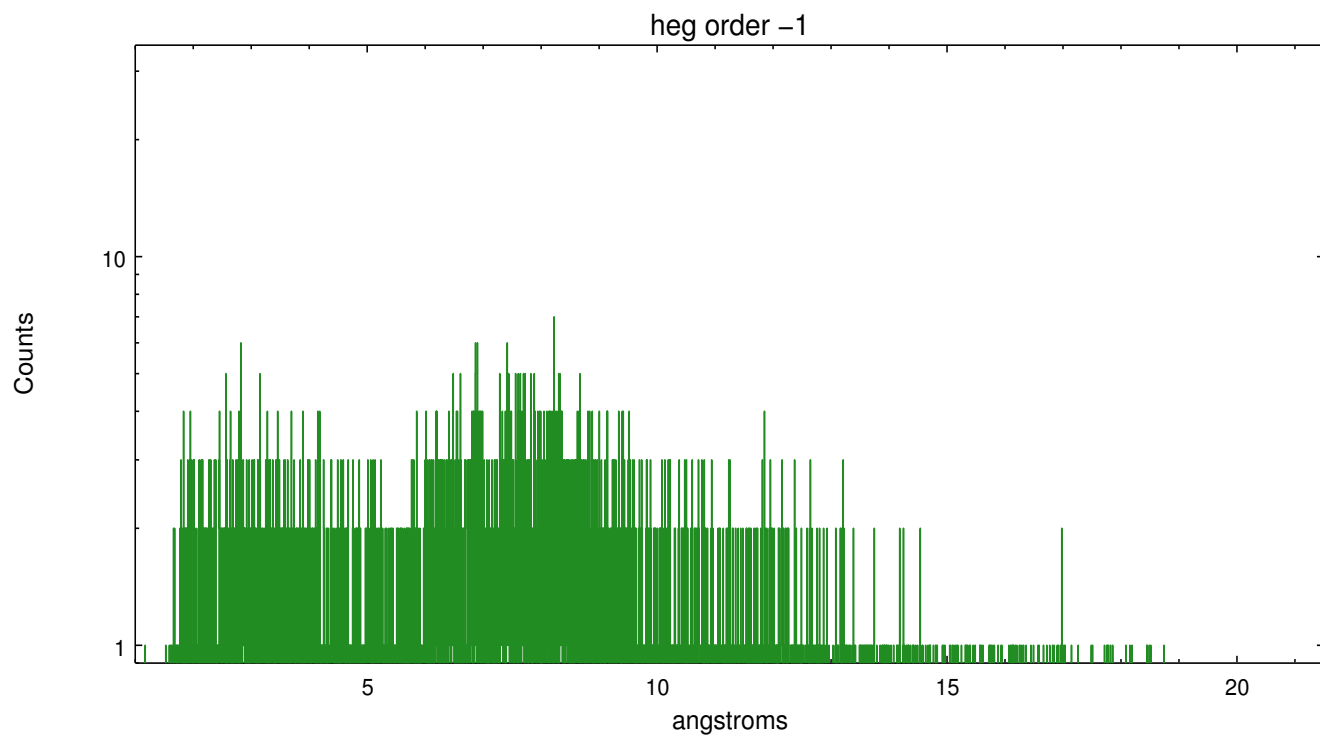
Spot Image HEG



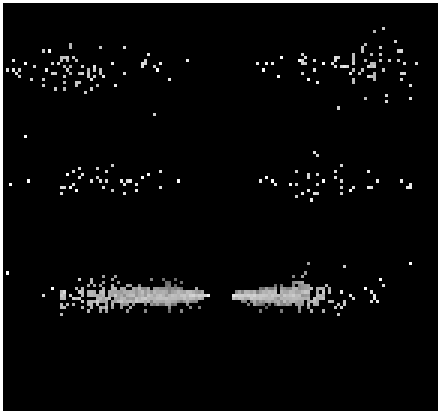
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	311	620	4764	9327	3903	398	224

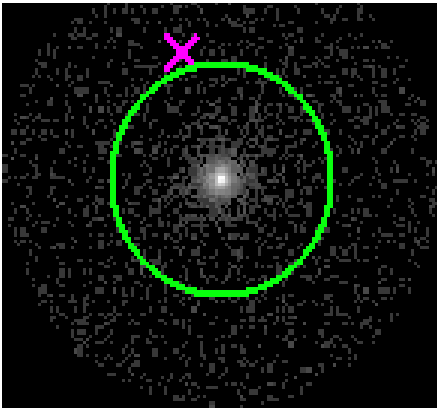




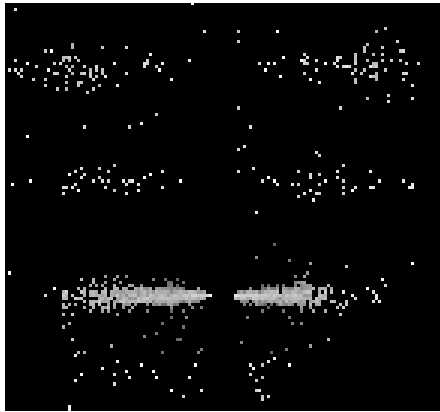
3.2 MEG Arm



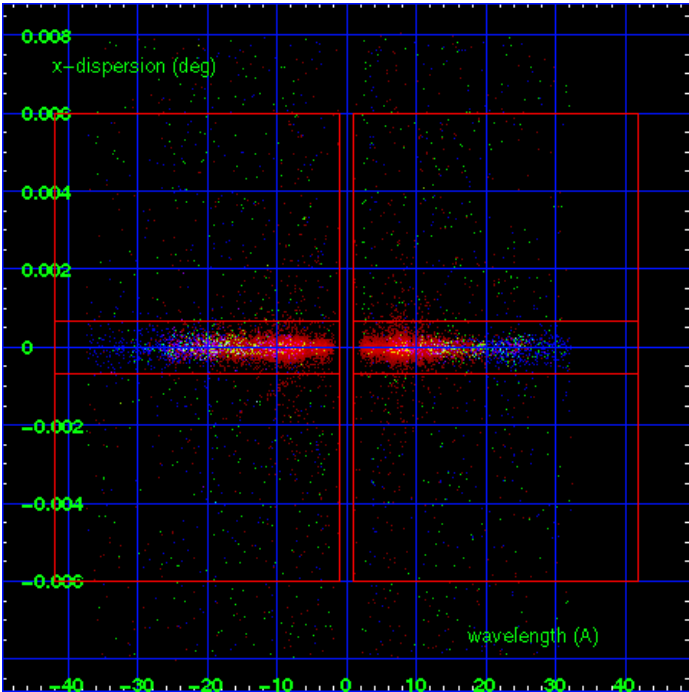
MEG Order Sort 123



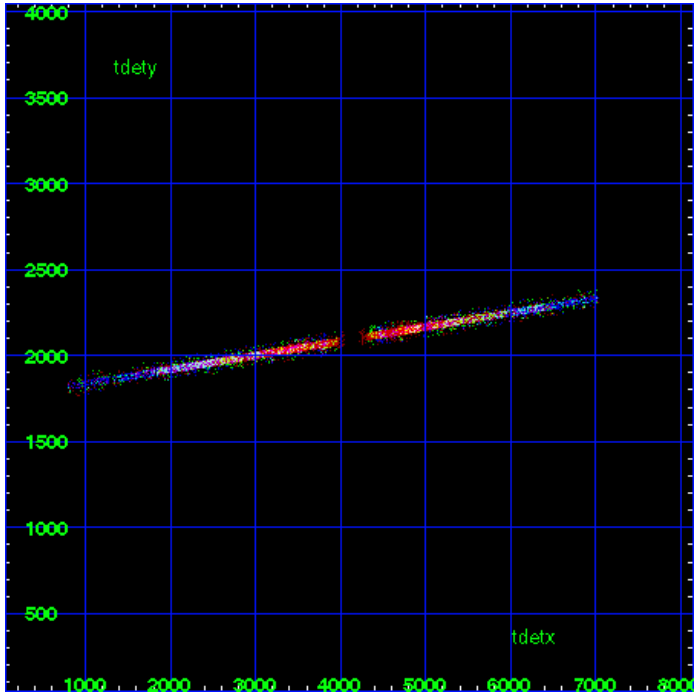
MEG Zero Order



MEG Order Sort ALL

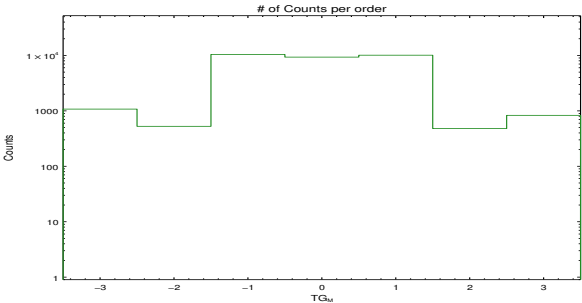


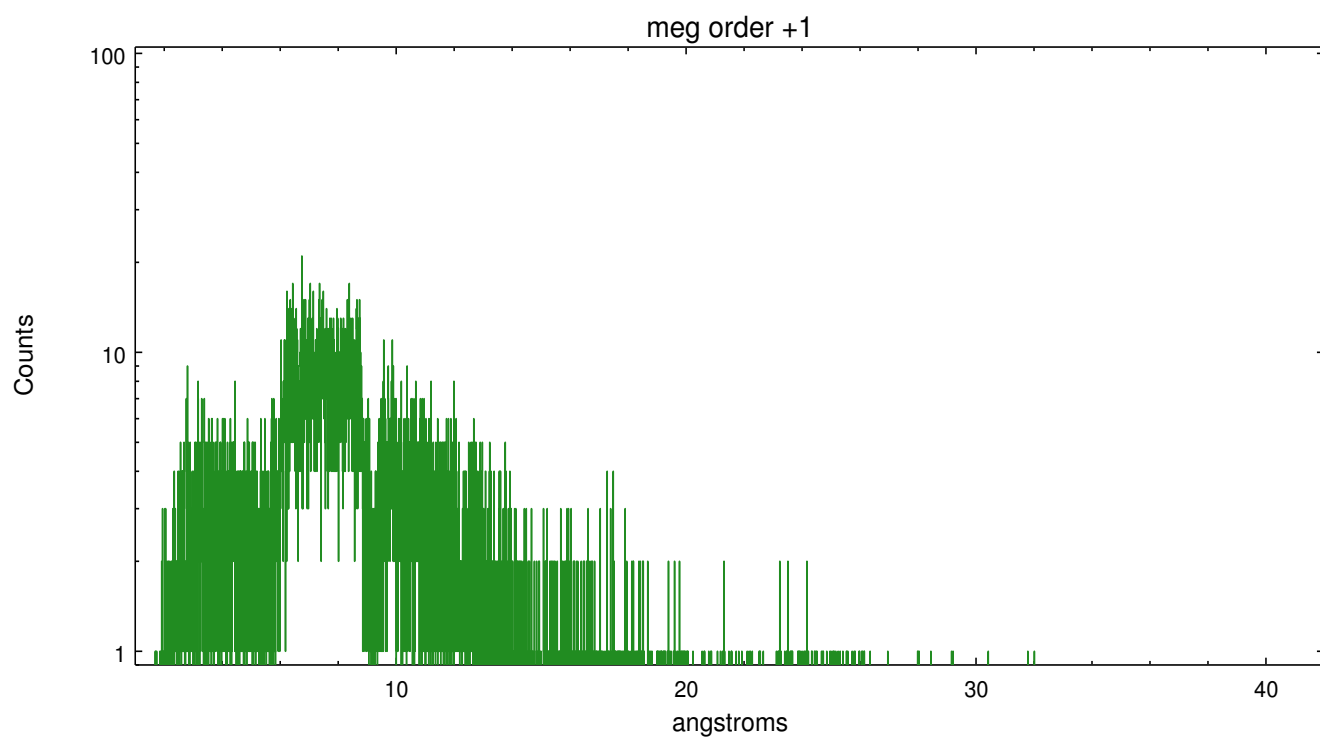
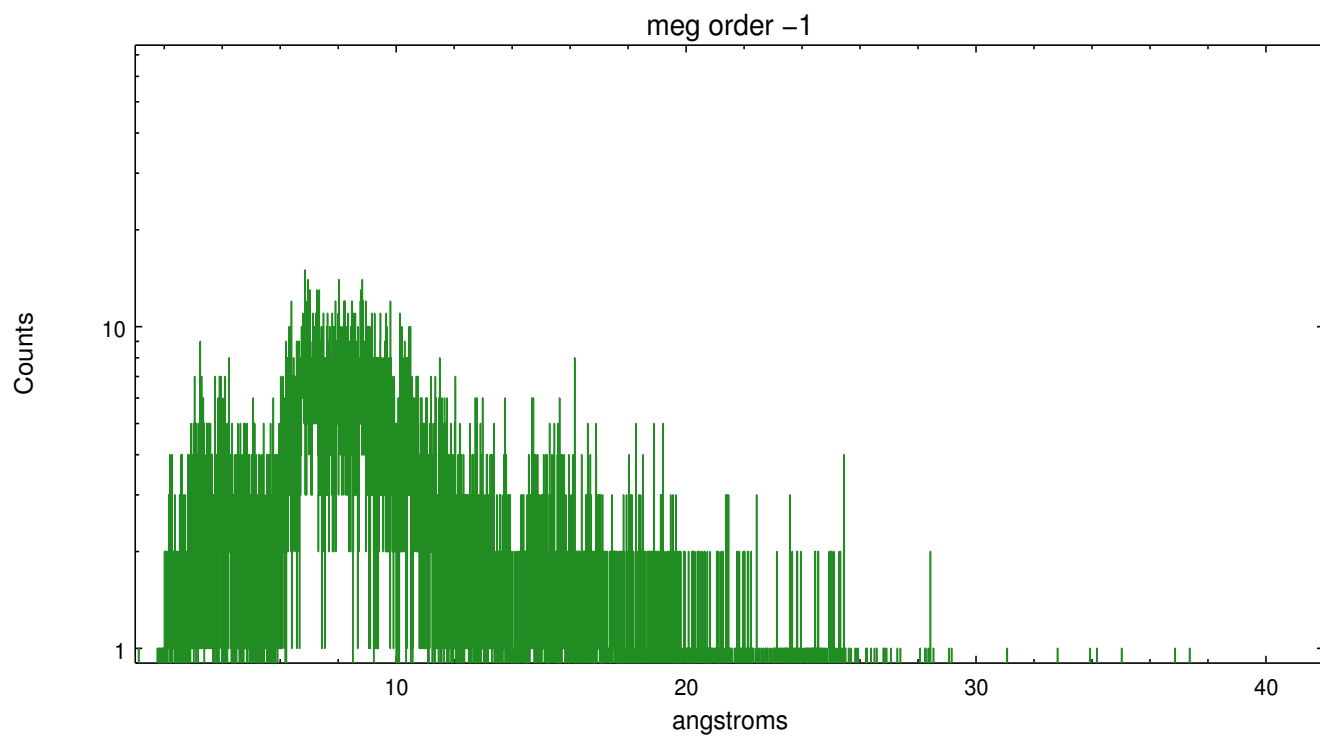
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1076	526	10432	9327	10101	479	830





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	27.835

A.2 Comments

Joint program with HST,Suzaku.