

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 14373 - L2 Version 3
Chandra X-Ray Center

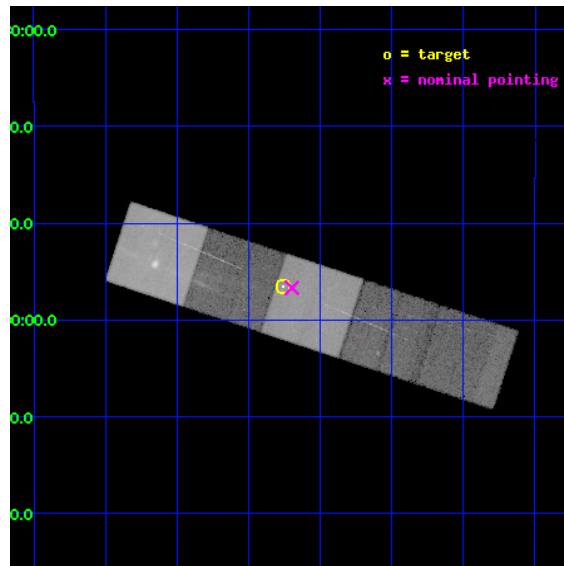
L2 Processing Date : Feb 28 2012

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1 Front

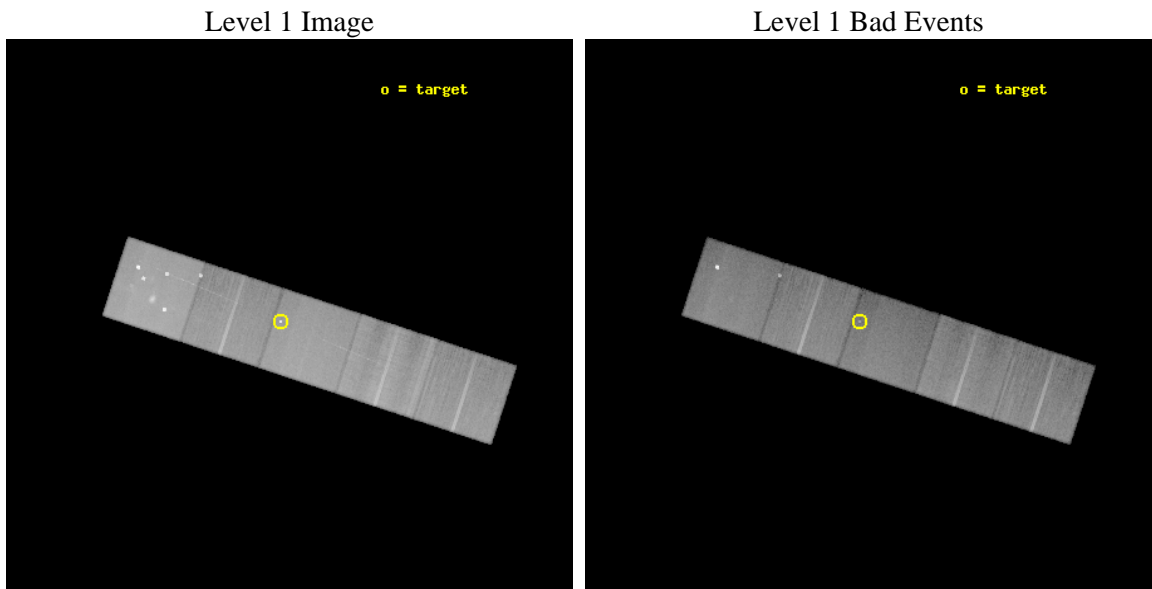
seq_num	200757	Sequence number
obs_id	14373	Observation id
title	A systematic measurement of the mass-loss rate of Zeta Ori	Proposa
observer	Dr. Maurice Leutenegger	Principal investigator
object	Zeta Orionis	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	85.189583	Observer's specified target RA [deg]
dec_targ	-1.942556	Observer's specified target Dec [deg]
ra_nom	85.17446670312	Nominal RA [deg]
dec_nom	-1.9447754868517	Nominal Dec [deg]
roll_nom	18.156117370229	Nominal Roll [deg]
revision	3	Processing version of data
ontime	47039.139369667	Sum of GTIs [s]
livetime	46424.538384091	Livetime [s]
ontime5	47039.098329663	Sum of GTIs [s]
ontime6	47039.05728966	Sum of GTIs [s]
ontime7	47039.139369667	Sum of GTIs [s]
ontime8	47032.734158397	Sum of GTIs [s]
ontime9	47029.552148521	Sum of GTIs [s]
l2events	510692	Number of level 2 events



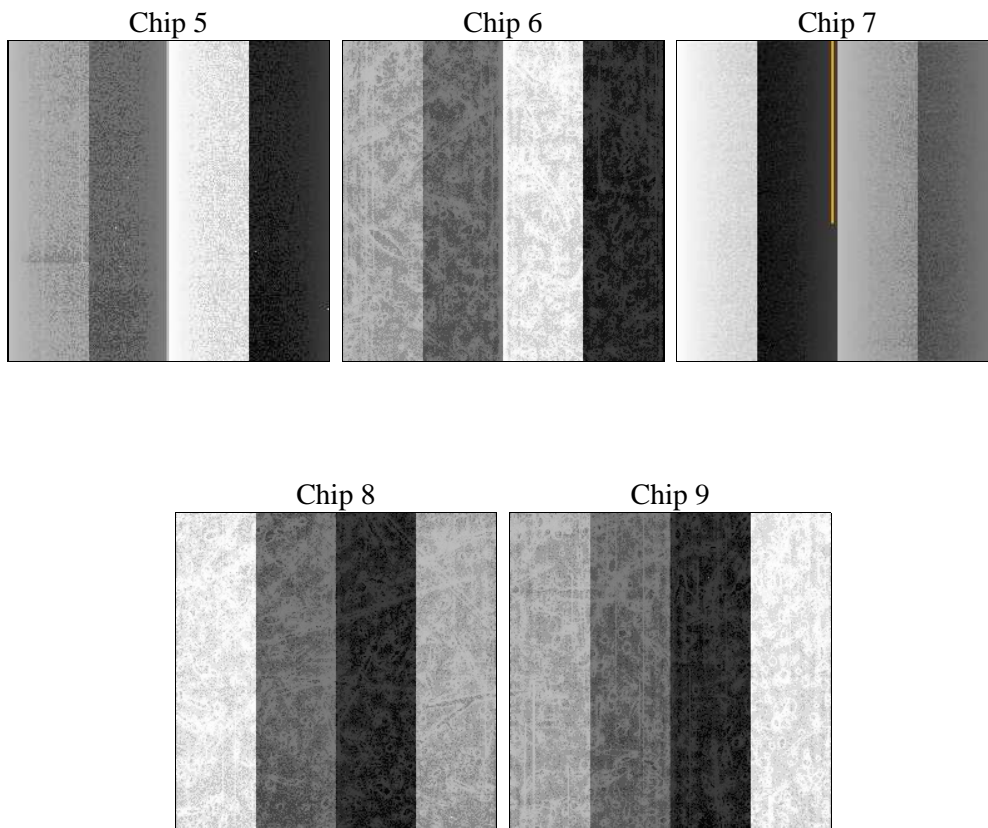
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	47000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	47039.139369667	Sum of GTIs [s]
caldbver	4.4.8	 	ontime5	47039.098329663	Sum of GTIs [s]
date	2012-02-28T03:47:17	Date and time of file creation	ontime6	47039.05728966	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	47039.139369667	Sum of GTIs [s]
			ontime8	47032.734158397	Sum of GTIs [s]
			ontime9	47029.552148521	Sum of GTIs [s]
			l1events	1936987	Number of level 1 events

2.1.4 Events

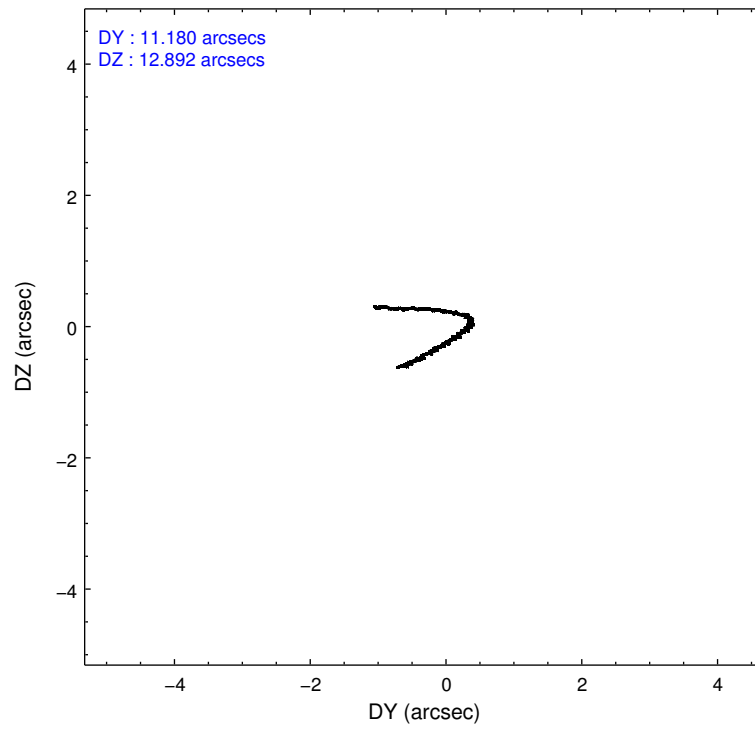
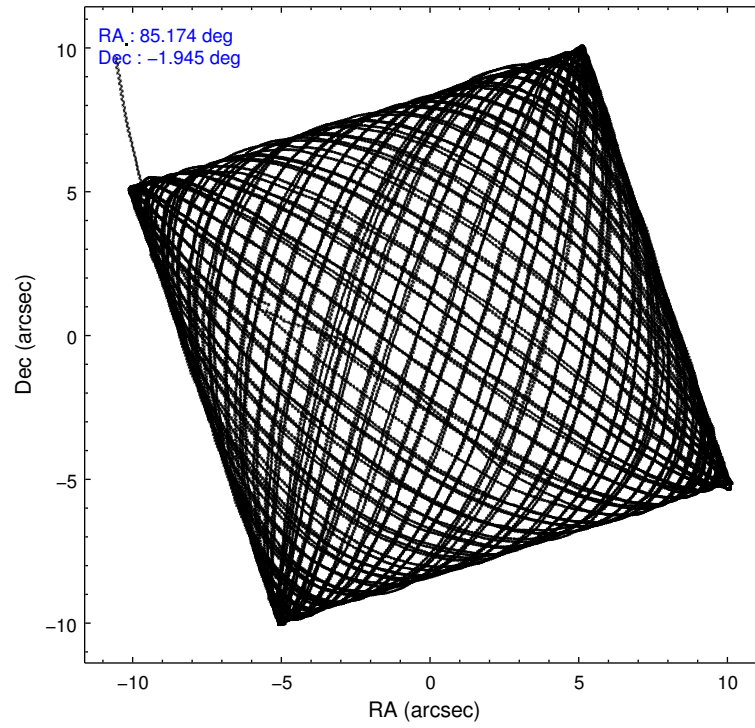
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	533120	309980	392658	397470	303759
rejected events	258026	270850	216209	294729	265790
rejected %	48%	87%	55%	74%	87%

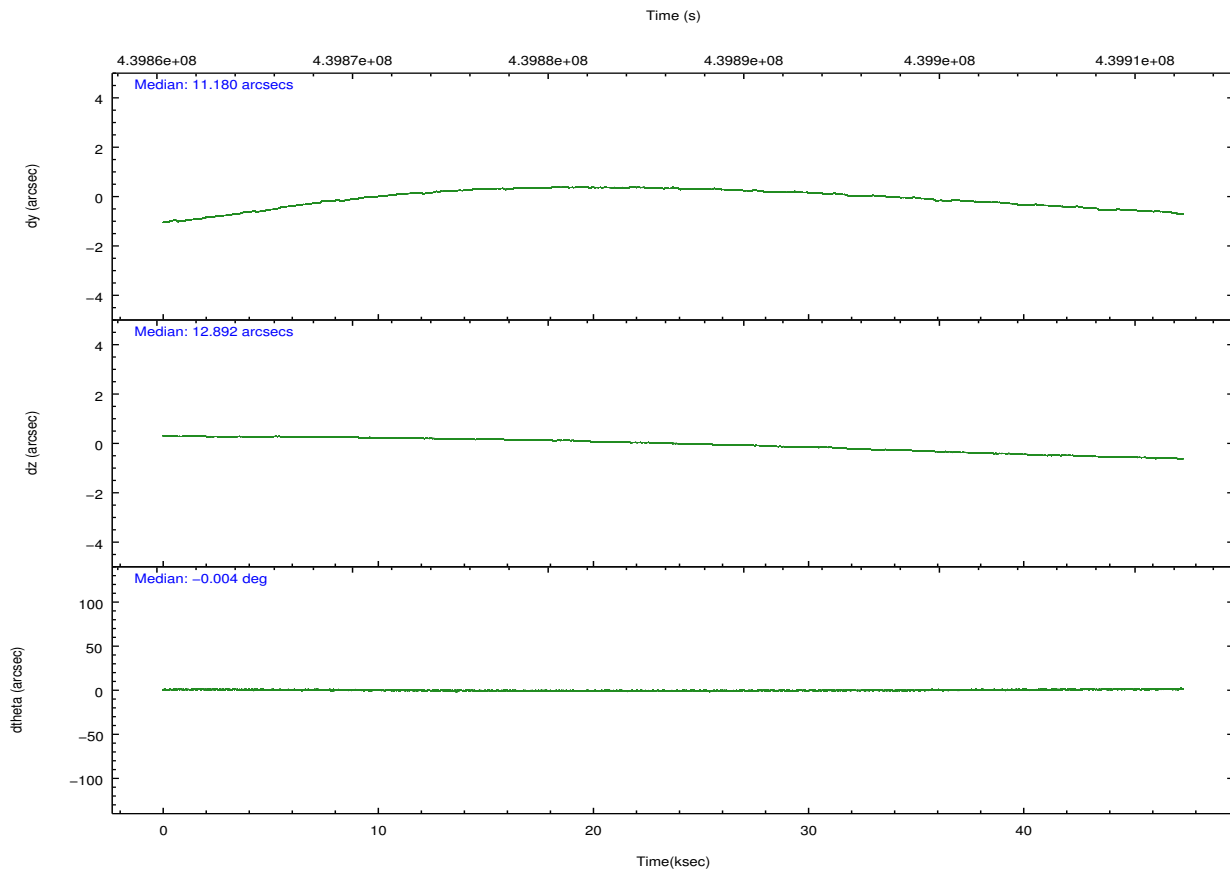
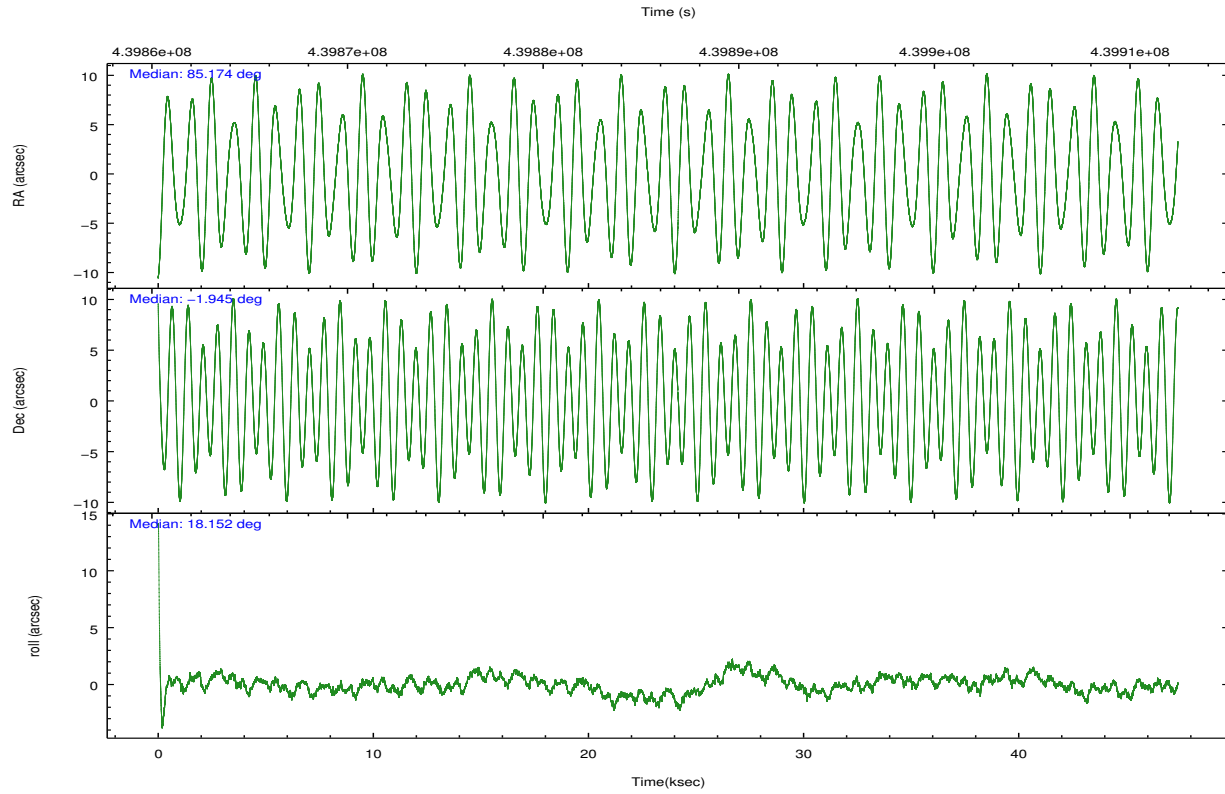
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	45673	15110	16633	28997	13982
	8%	4%	4%	7%	4%
grade 1 events	1566	164	605	306	190
	0%	0%	0%	0%	0%
grade 2 events	79799	8393	36748	25183	8058
	14%	2%	9%	6%	2%
grade 3 events	9804	3838	15307	10728	3967
	1%	1%	3%	2%	1%
grade 4 events	9221	3787	15452	9889	3860
	1%	1%	3%	2%	1%
grade 5 events	37833	14600	40141	21133	16162
	7%	4%	10%	5%	5%
grade 6 events	130617	8005	92321	27948	8106
	24%	2%	23%	7%	2%
grade 7 events	218607	256083	175451	273286	249434
	41%	82%	44%	68%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	85.156506	85.17446670311961	CCD I2 on	N	N
[deg] Pointing Dec	-1.965388	-1.944775486851723	CCD I3 on	N	N
[deg] Pointing Roll	17.998876	18.15611737022872	CCD S0 on	O1	N
[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)	439863088.184000	439861906.68293	CCD S5 on	O2	Y
Observation start date	2011-12-10T00:10:22	2011-12-09T23:51:46	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	439910088.184000	439910813.53551	On-chip summing requested	N	N
Observation end date	2011-12-10T13:13:42	2011-12-10T13:26:53	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



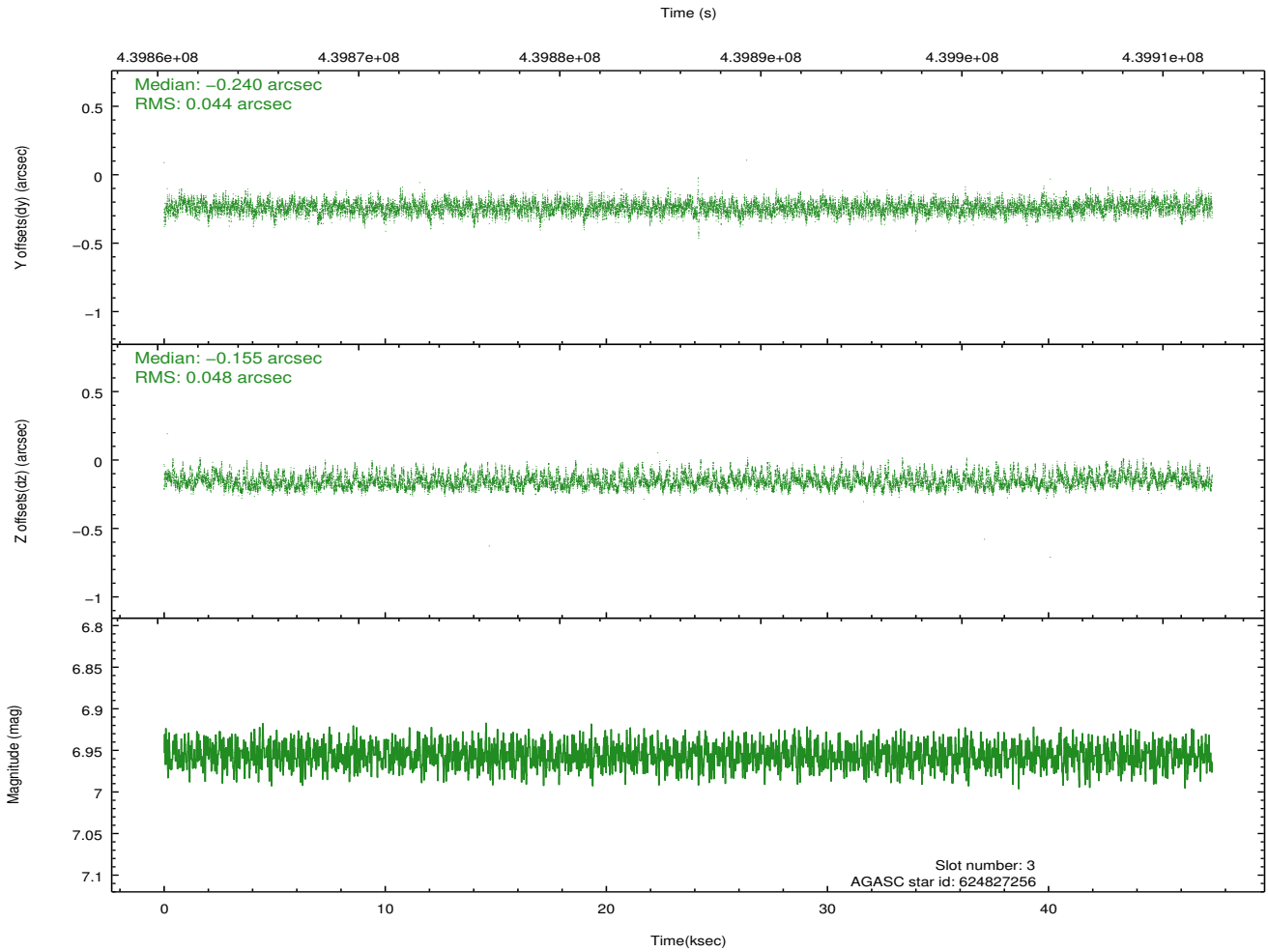
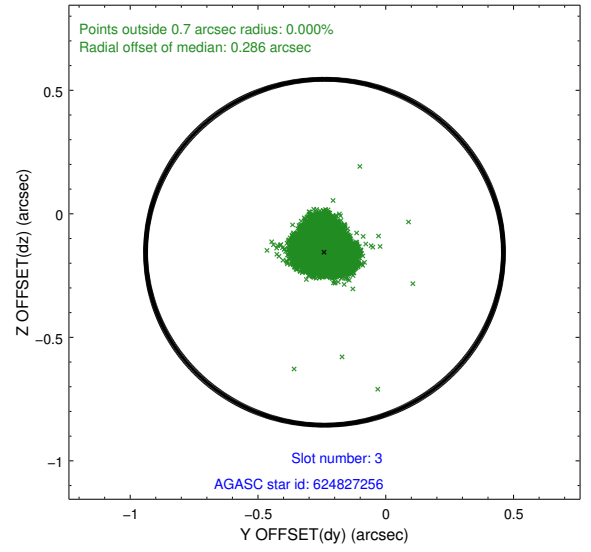
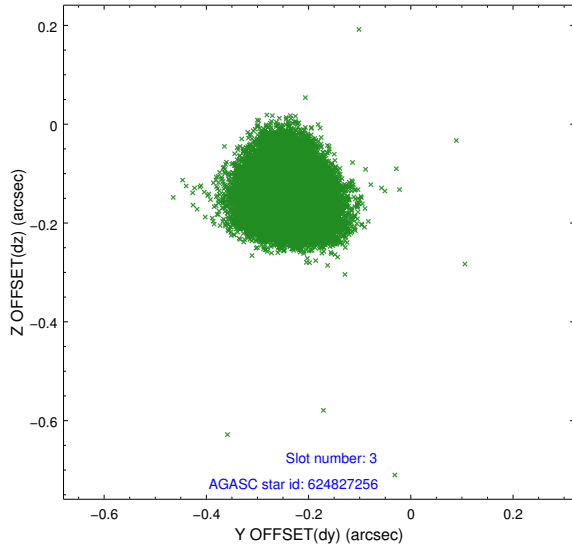


Slot Statistics

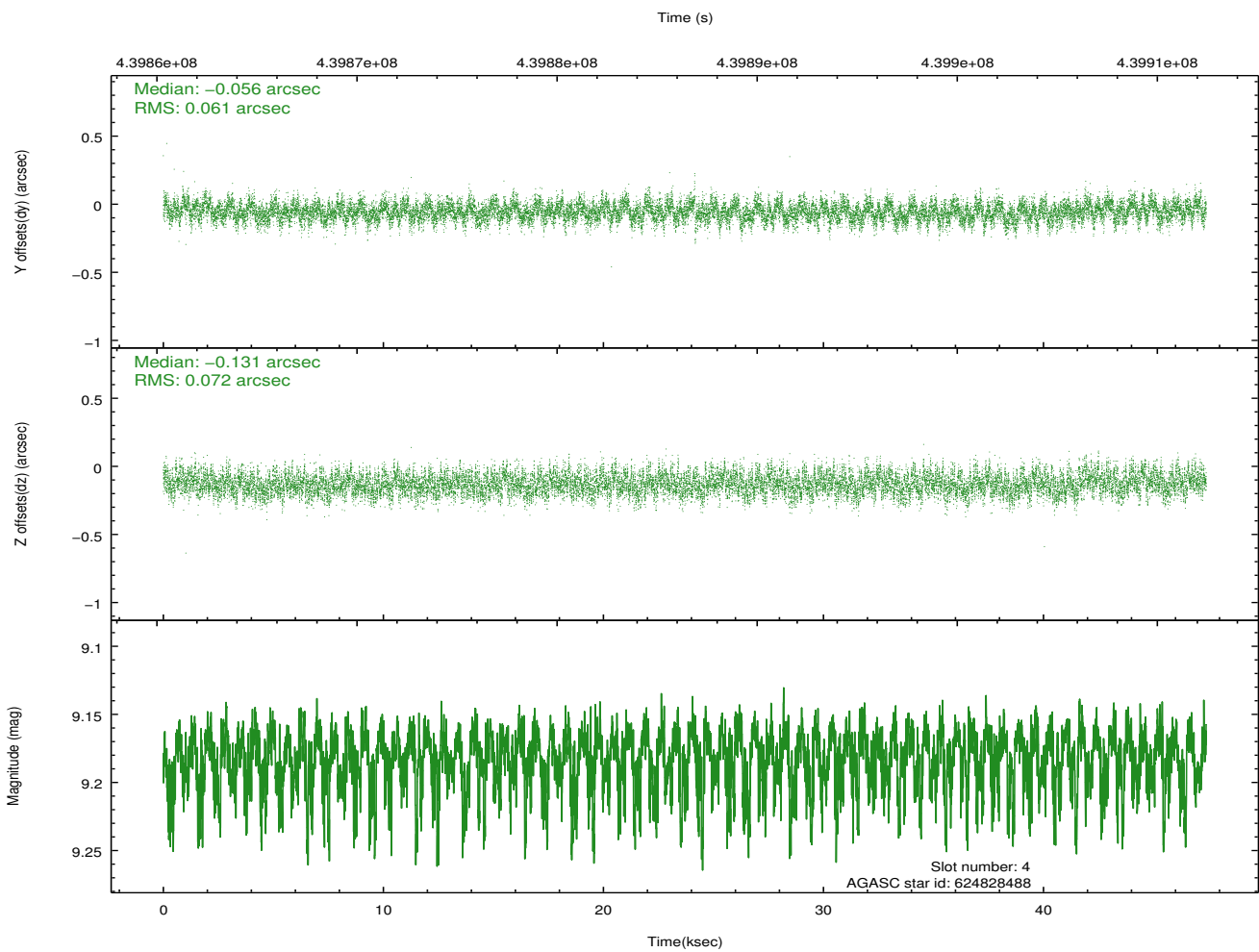
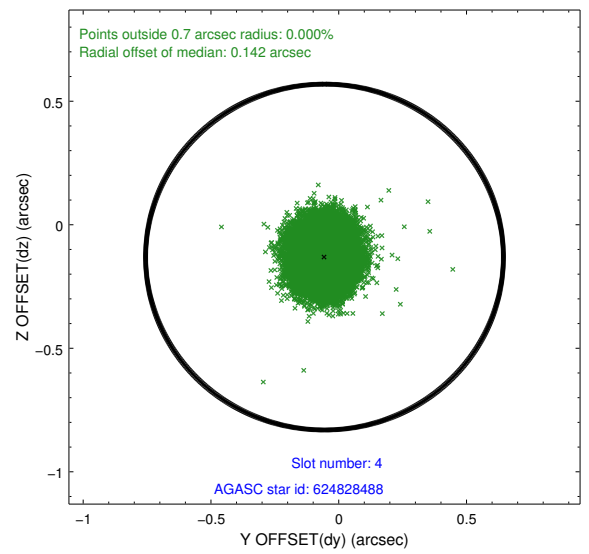
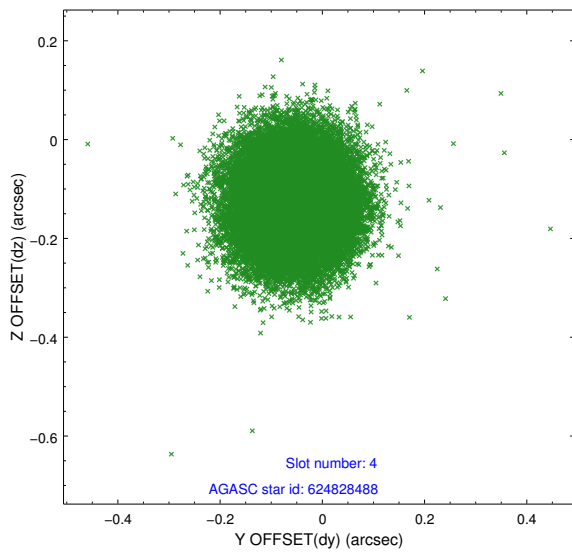
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.98	11562	-0.123	-0.056	0.010	0.024	0.000000	0.000000	-763.88	-1796.29
1	FID	ACIS-S-4	7.06	11562	0.247	0.075	0.012	0.034	0.000000	0.000000	2149.78	112.31
2	FID	ACIS-S-5	7.10	11562	-0.155	-0.010	0.011	0.034	0.000000	0.000000	-1816.77	105.91
3	GUIDE	624827256	6.96	23118	-0.240	-0.155	0.069	0.112	85.016618	-1.425471	121.66	2004.14
4	GUIDE	624828488	9.18	23101	-0.056	-0.131	0.101	0.159	85.333320	-1.326548	1315.97	1990.85
5	GUIDE	624829760	8.89	23112	0.124	-0.015	0.095	0.153	85.013848	-1.712852	-206.93	1023.45
6	GUIDE	625353096	8.76	23114	0.092	0.178	0.089	0.142	84.812755	-2.527118	-1800.28	-1541.19
7	GUIDE	625353336	8.50	23116	0.081	0.125	0.094	0.147	84.756223	-2.648990	-2129.20	-1895.93

2.4 Star Slots

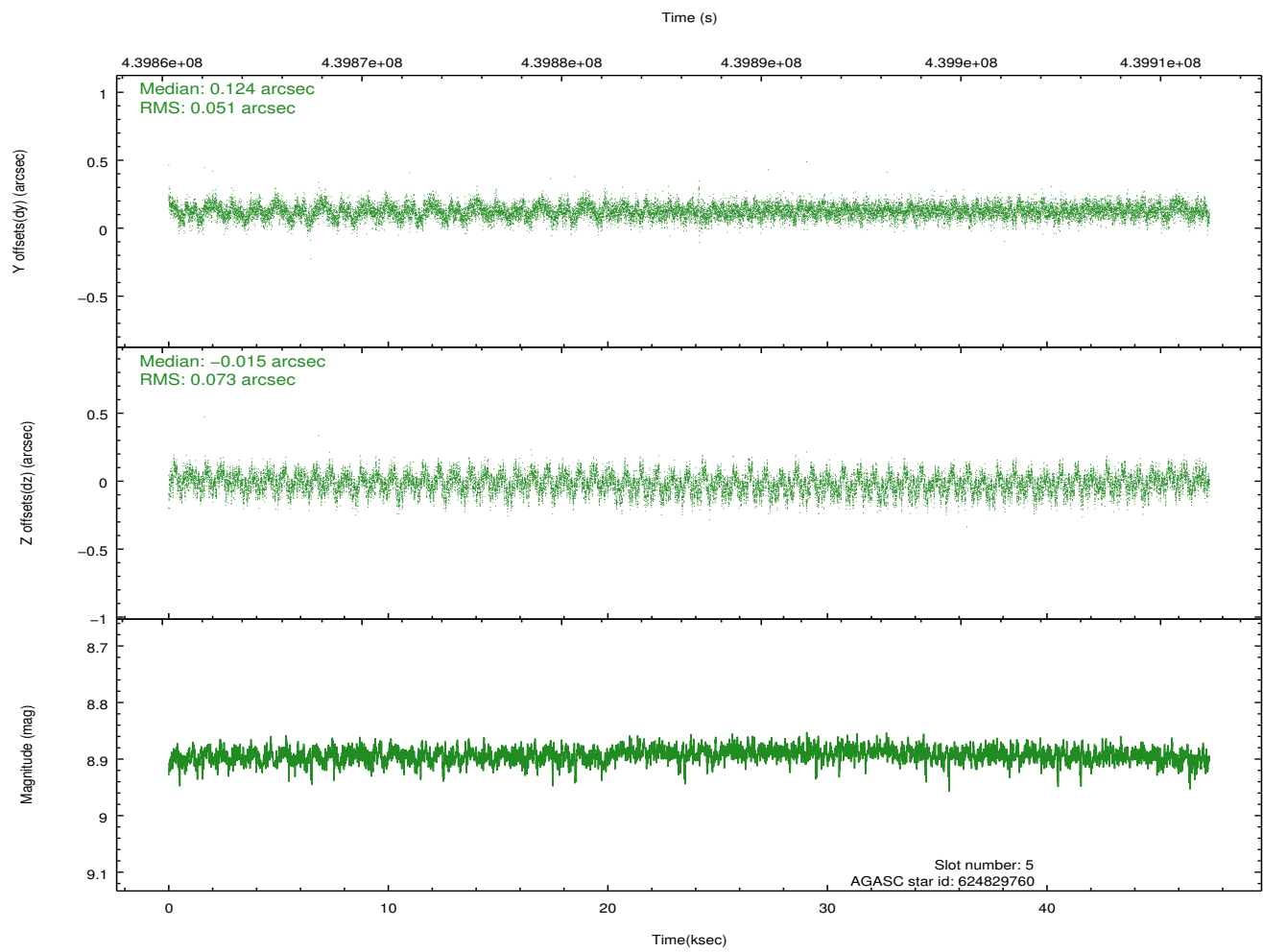
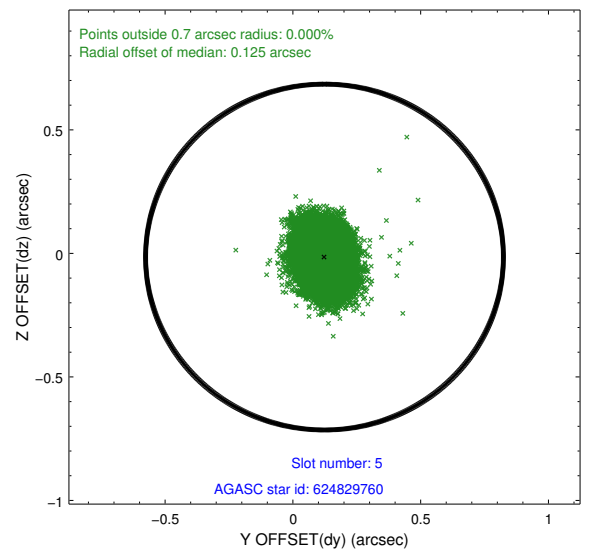
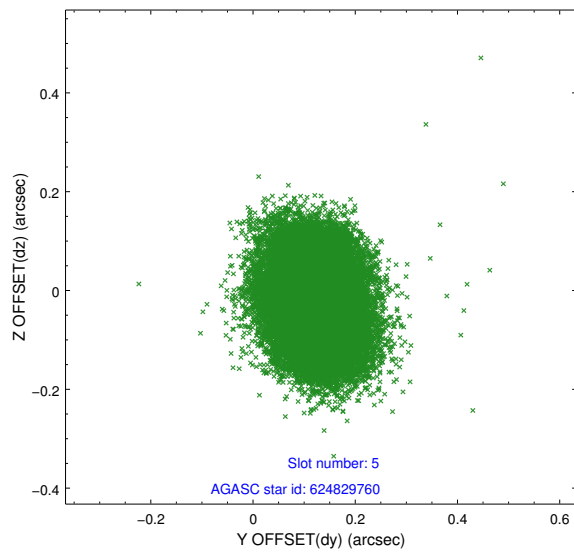
2.4.1 Slot 3



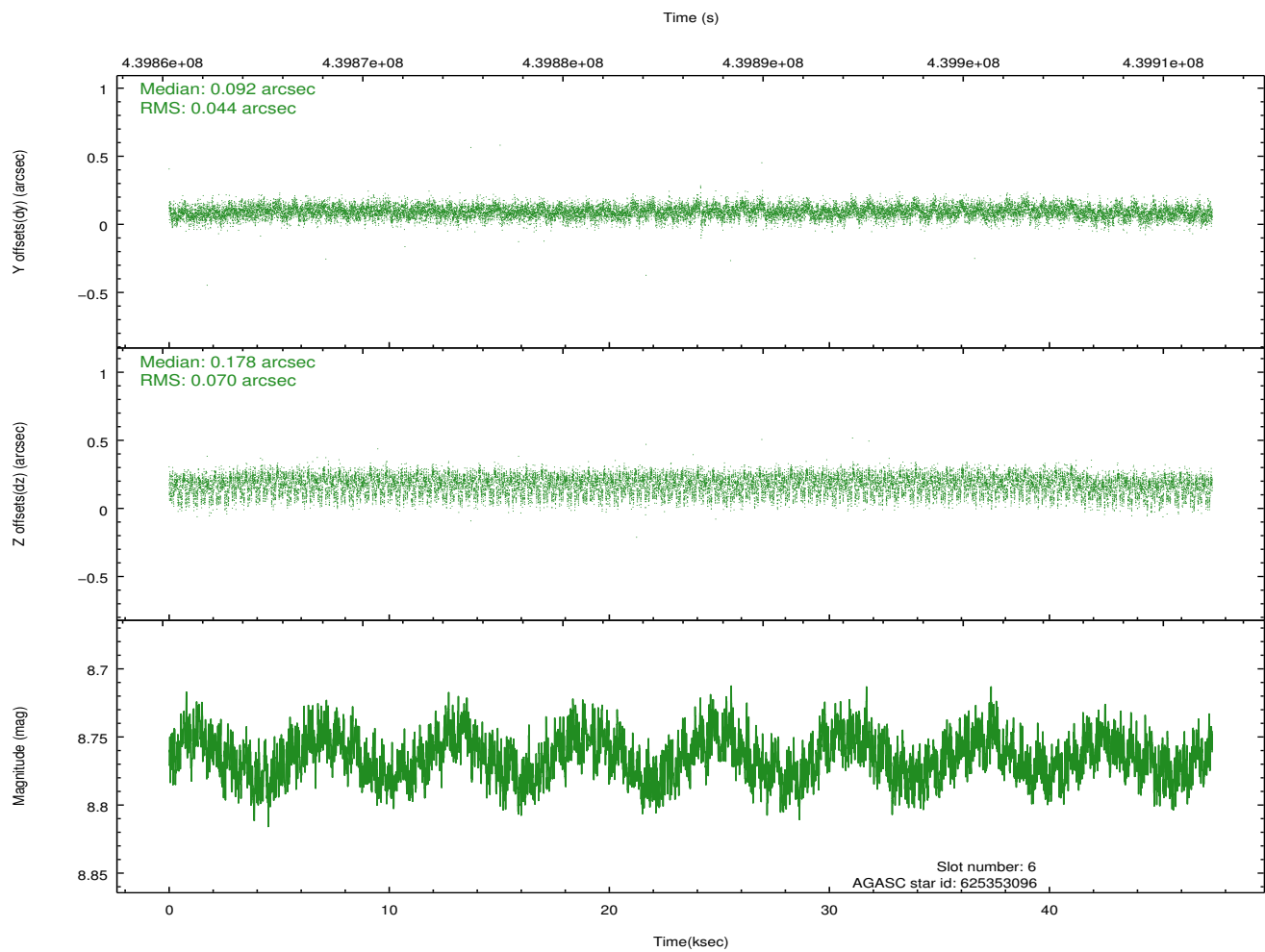
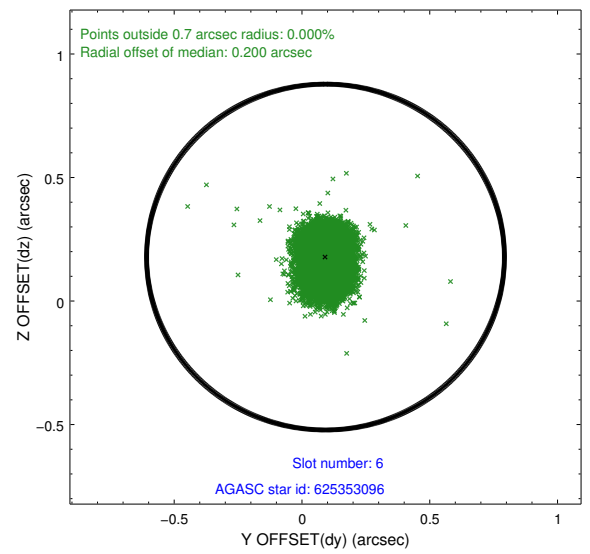
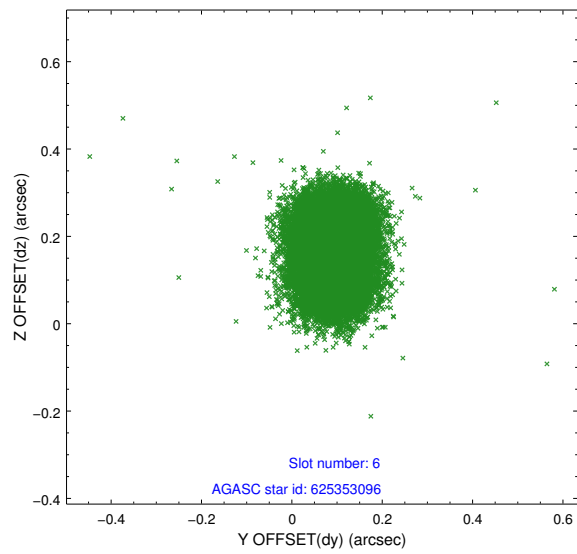
2.4.2 Slot 4



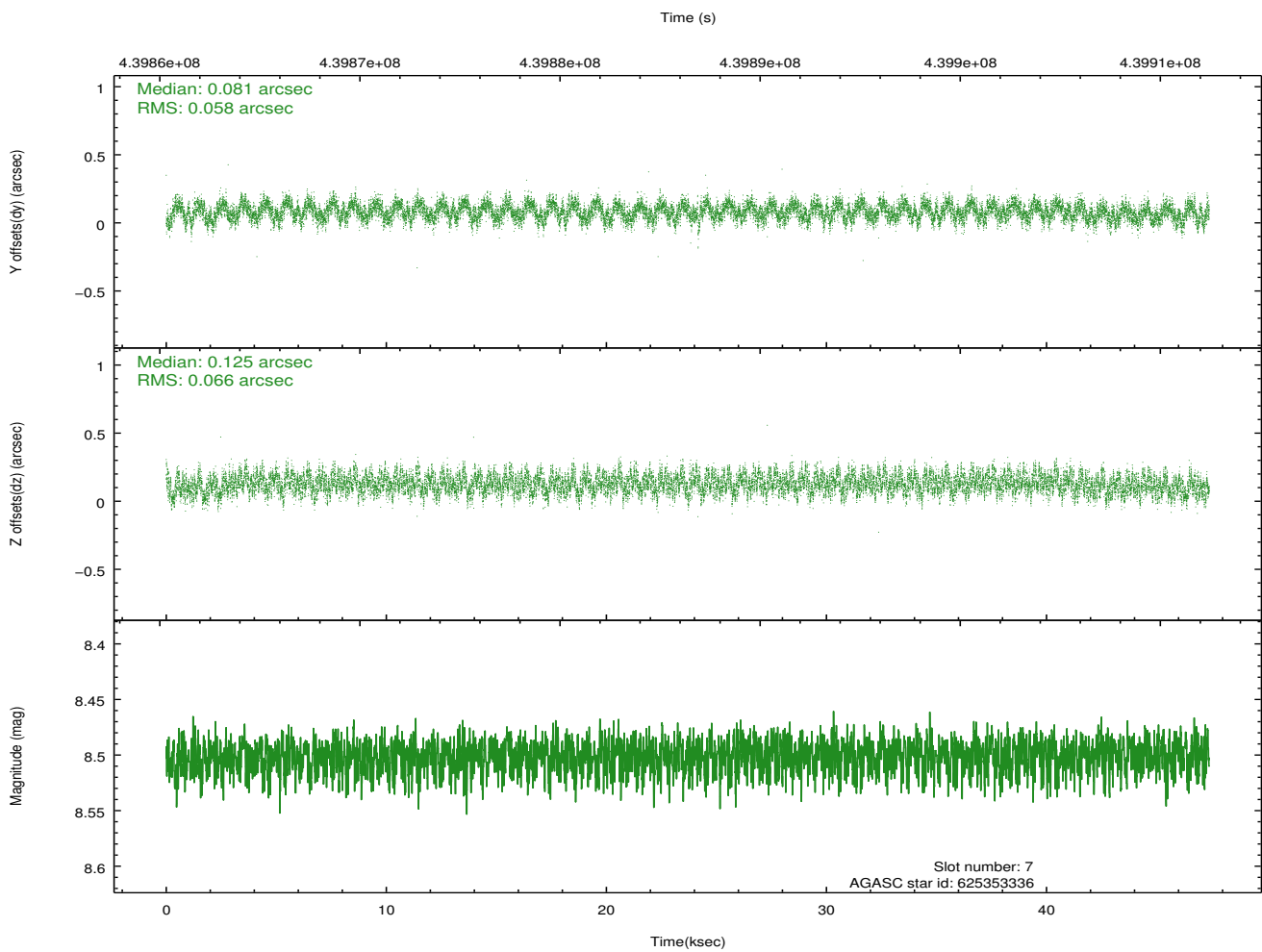
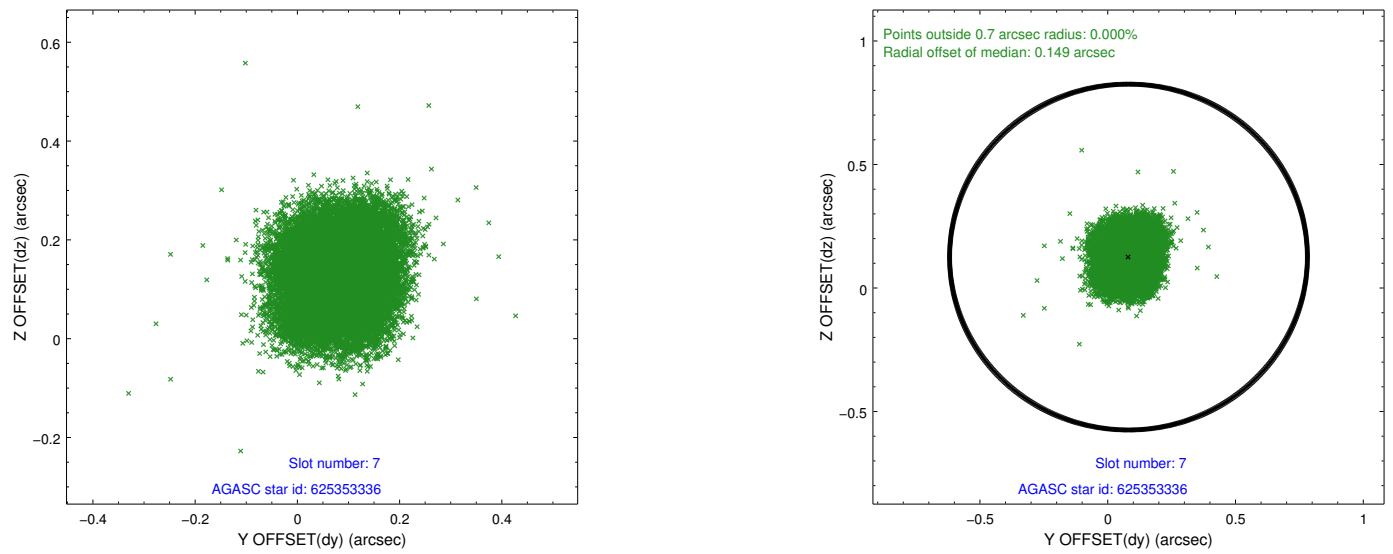
2.4.3 Slot 5



2.4.4 Slot 6

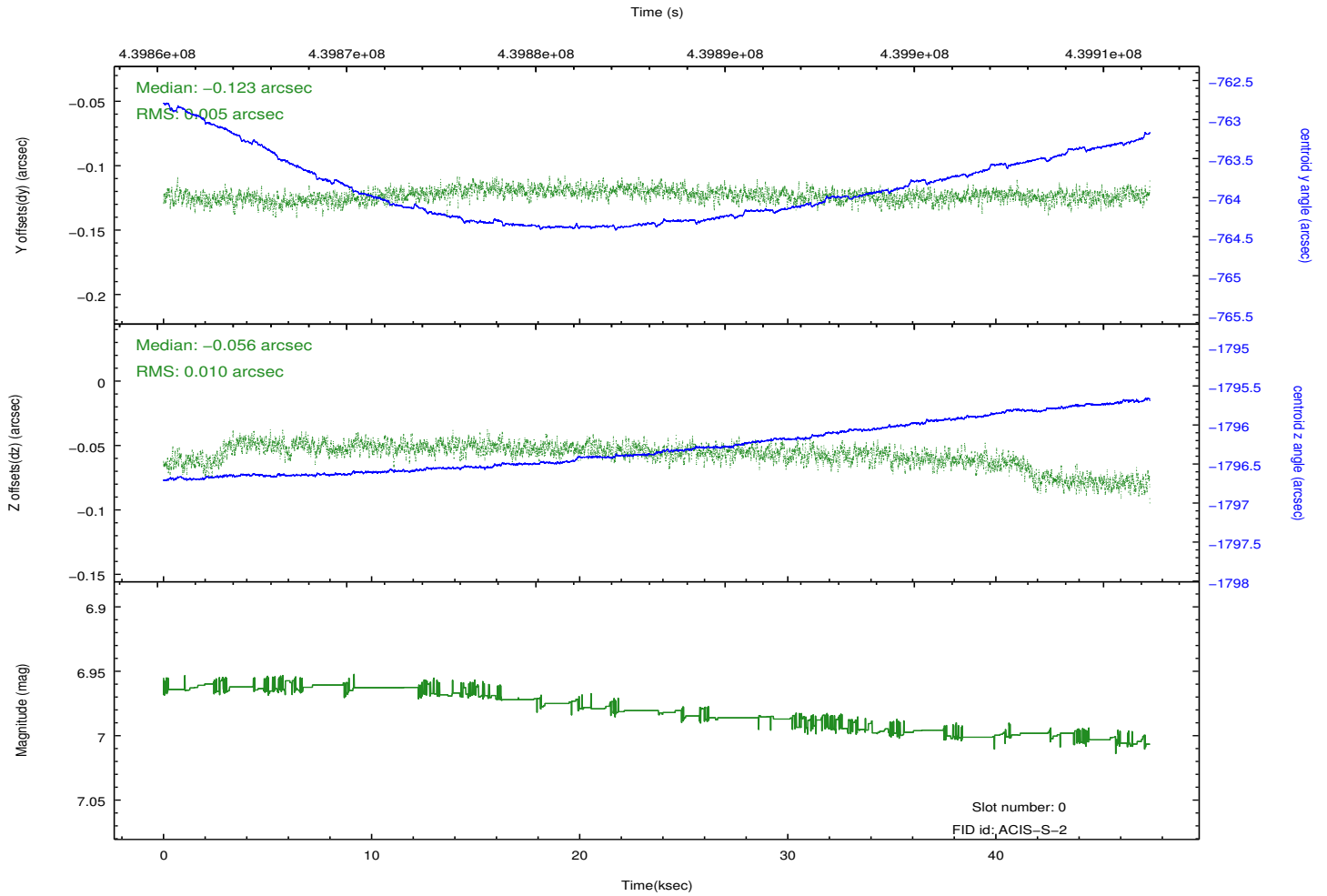
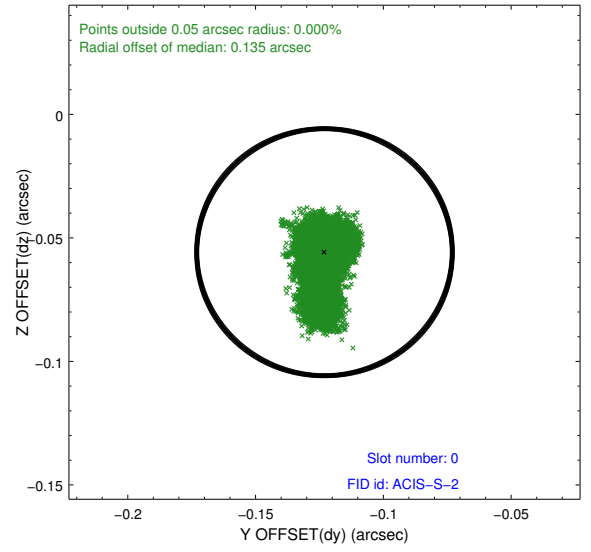
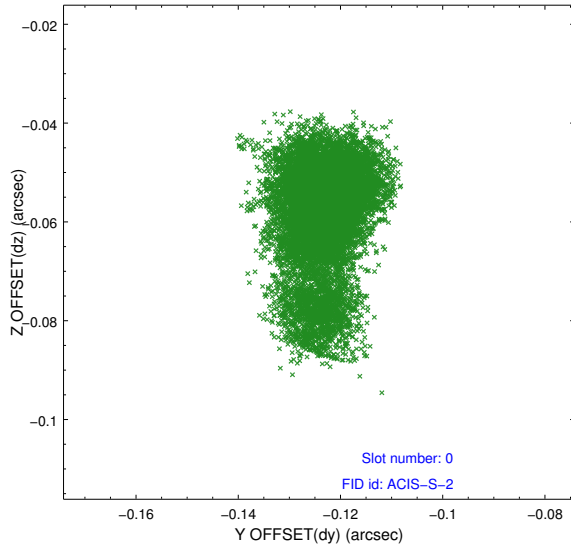


2.4.5 Slot 7

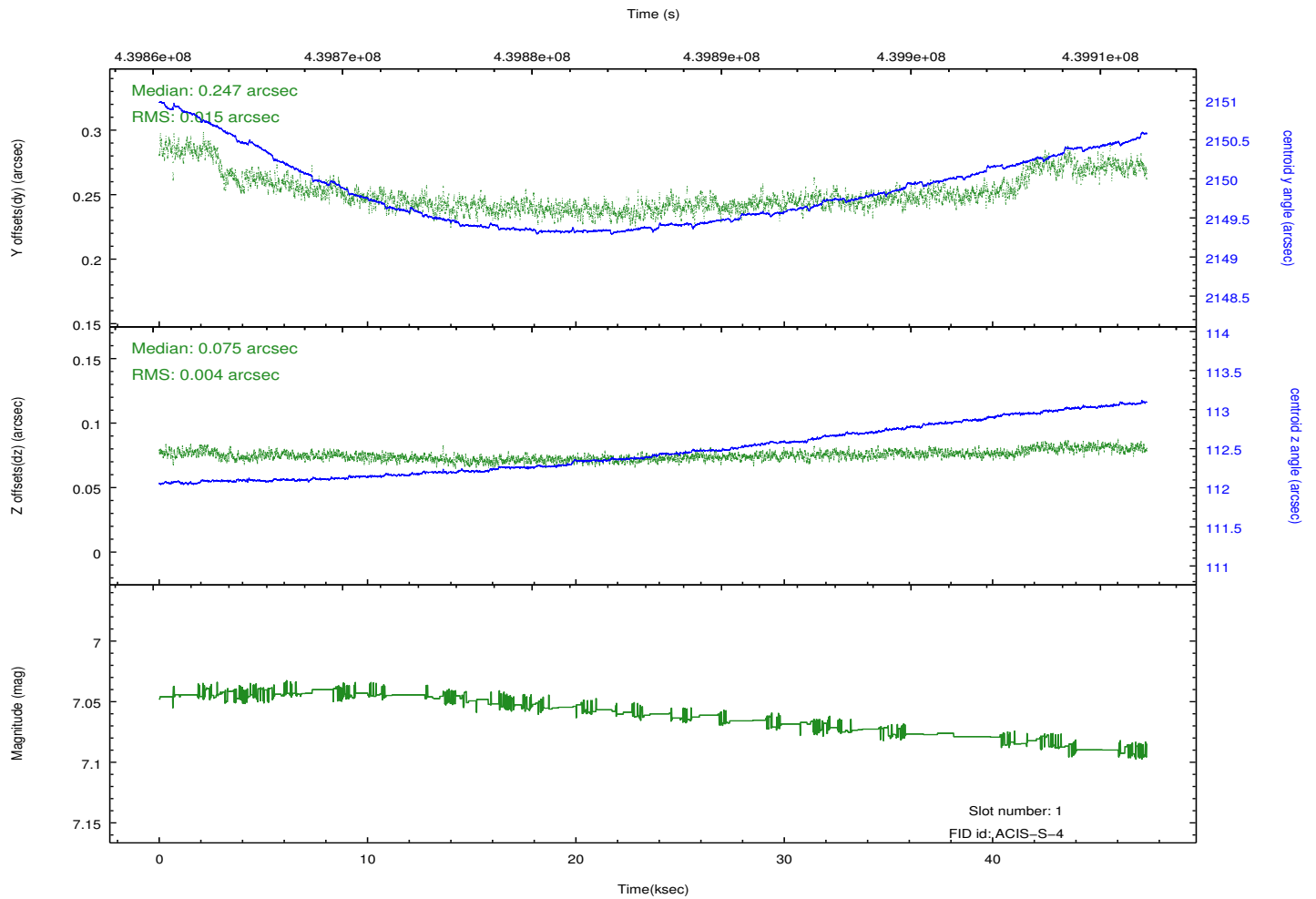
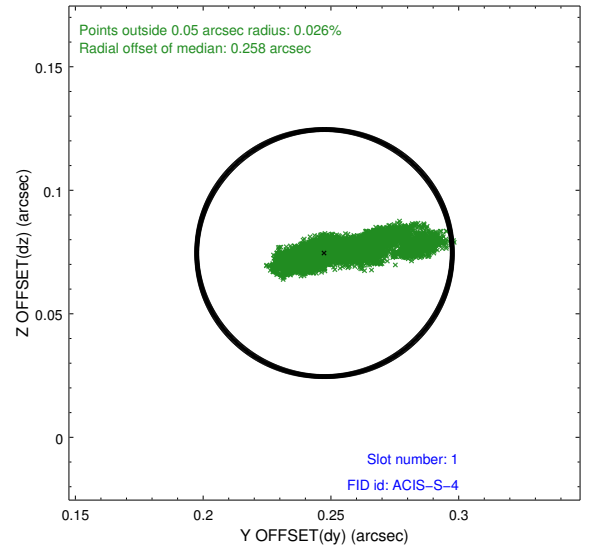
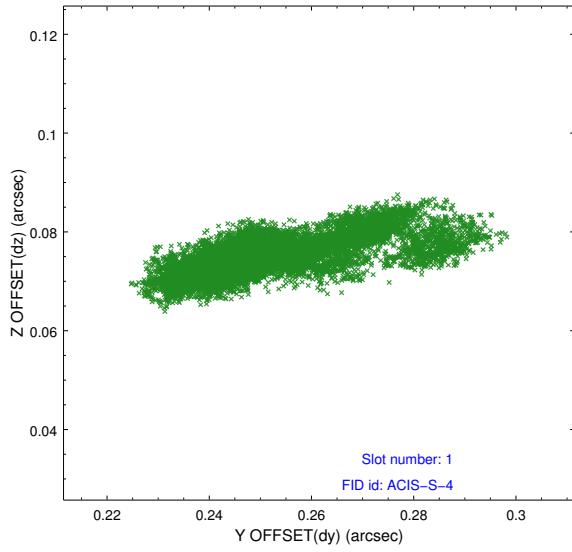


2.5 FID Slots

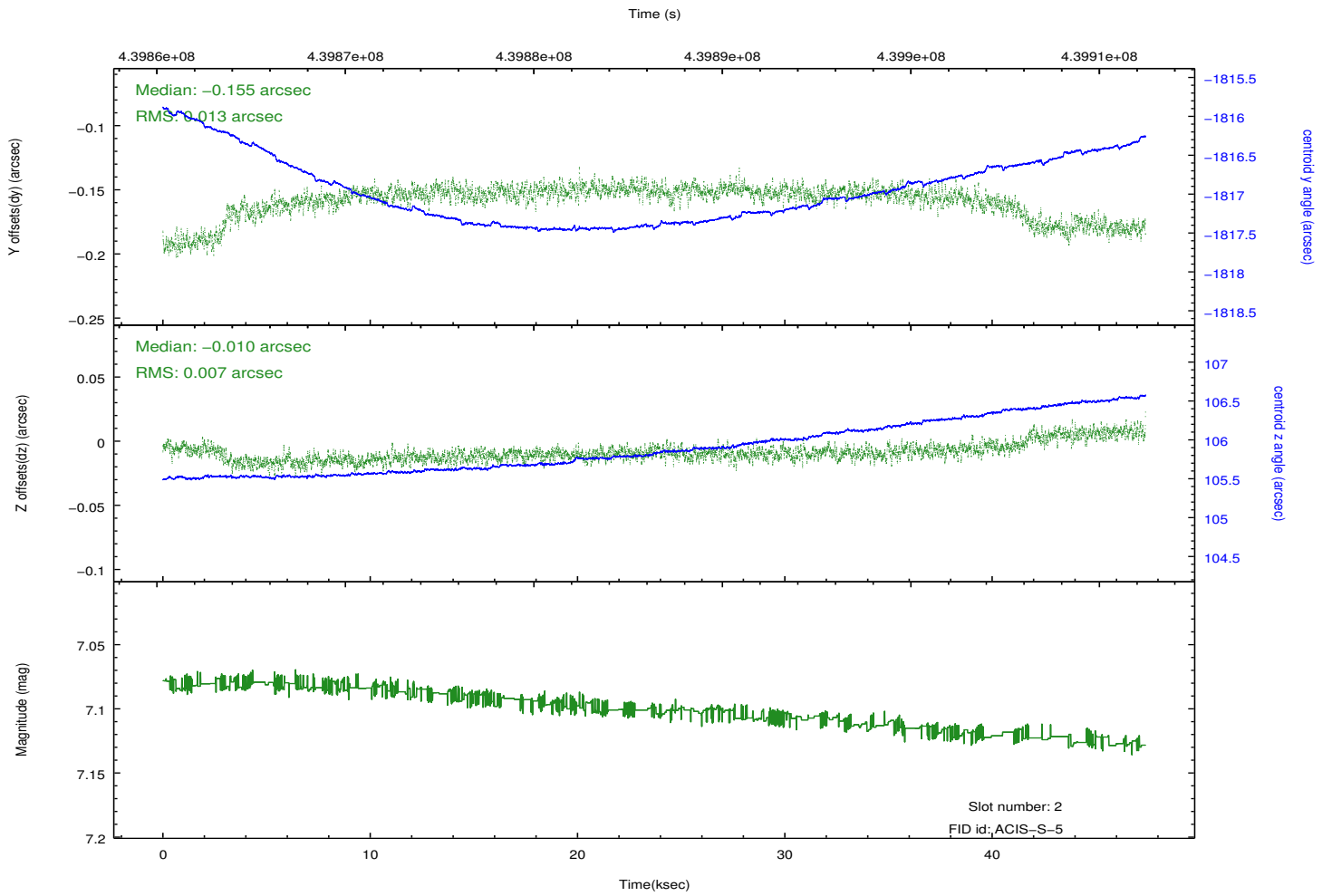
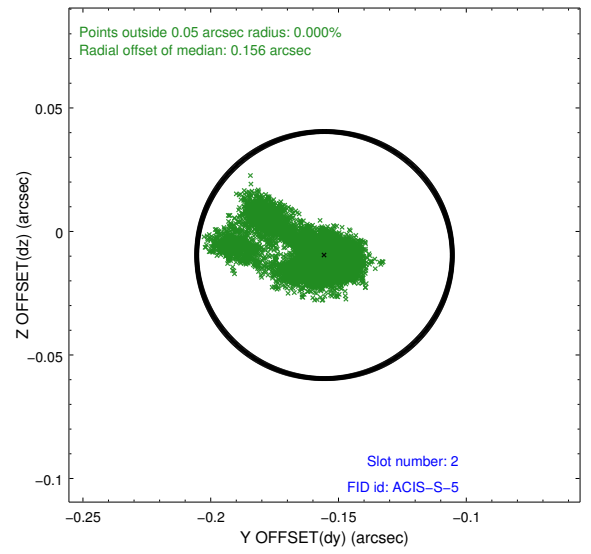
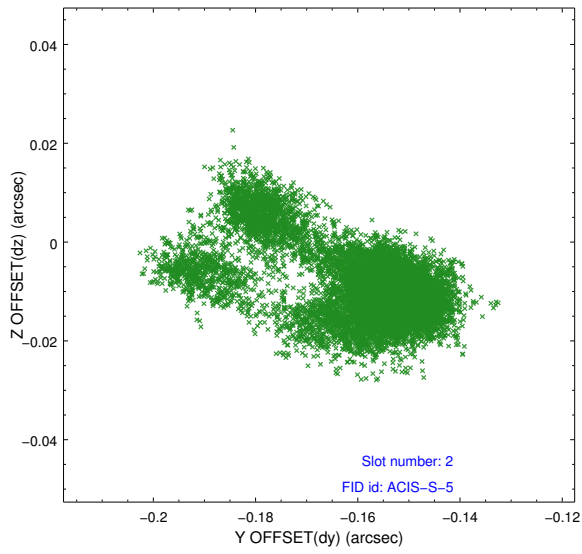
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

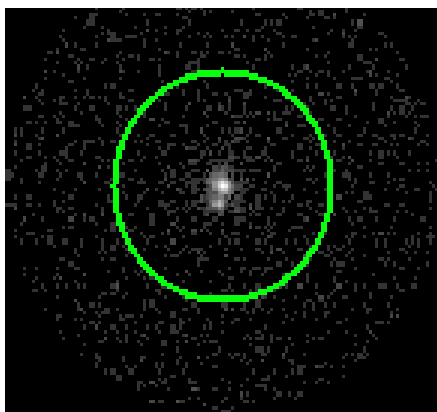


3 Gratings

3.1 HEG Arm



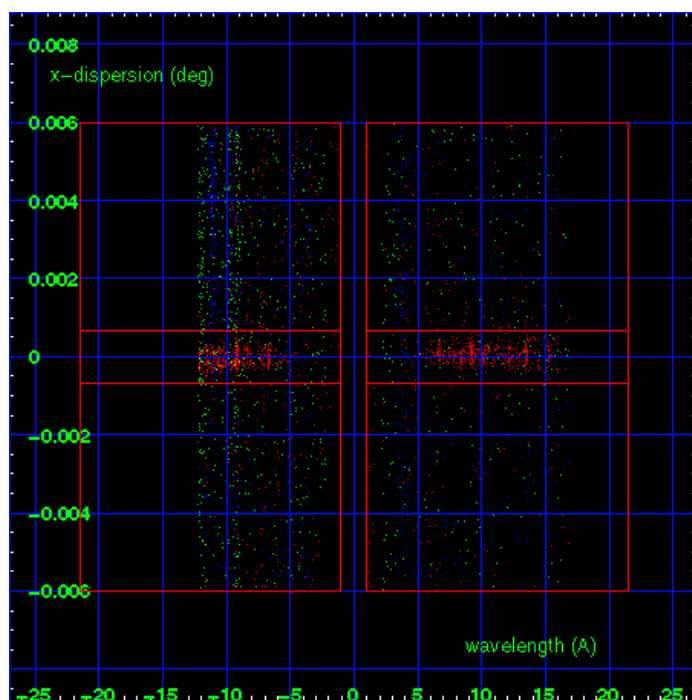
HEG Order Sort 123



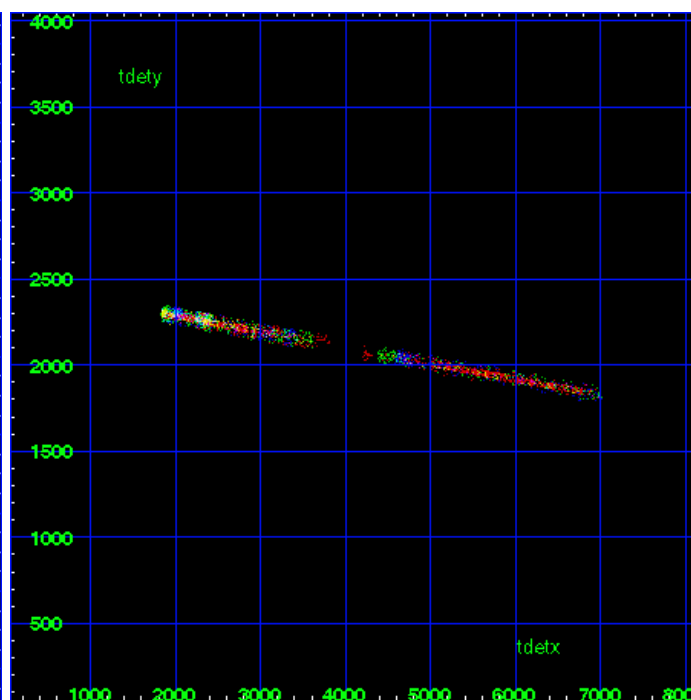
HEG Zero Order



HEG Order Sort ALL

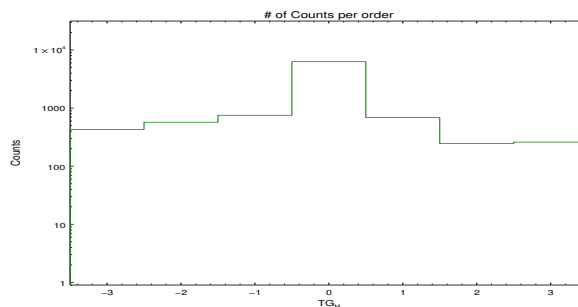


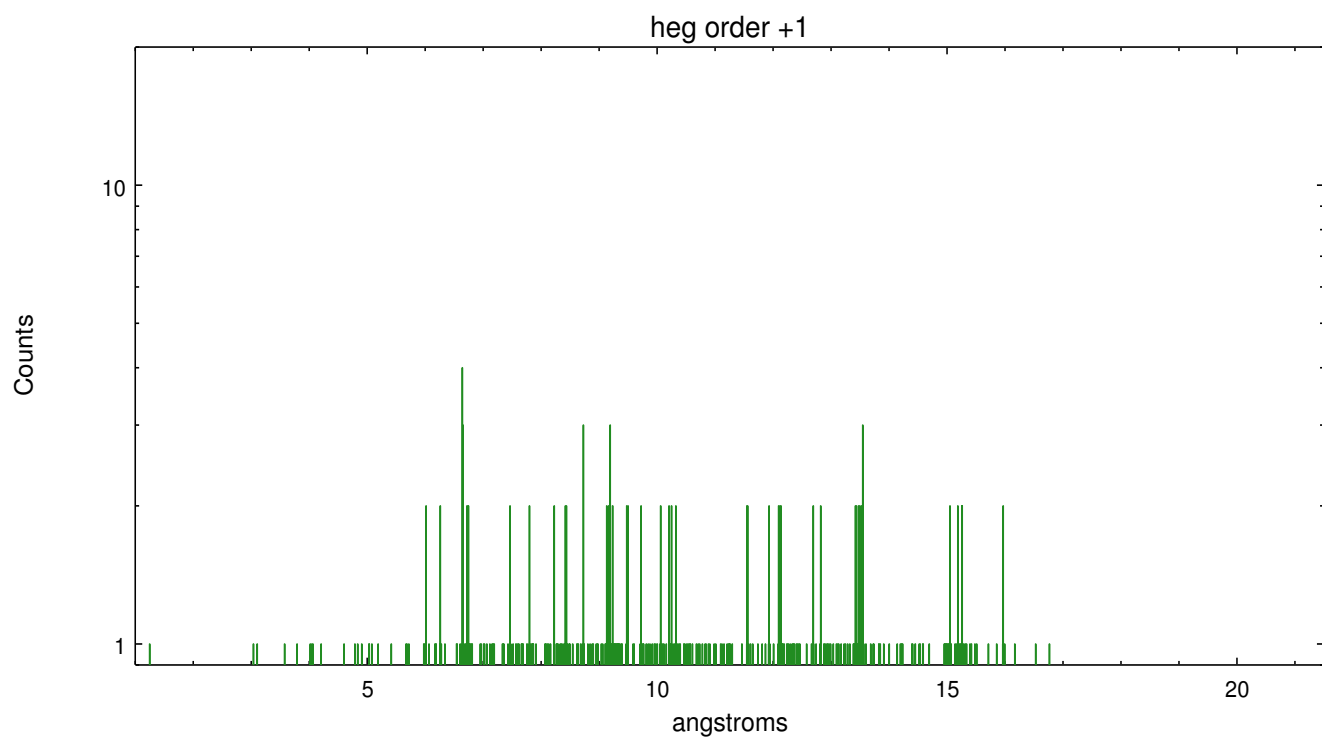
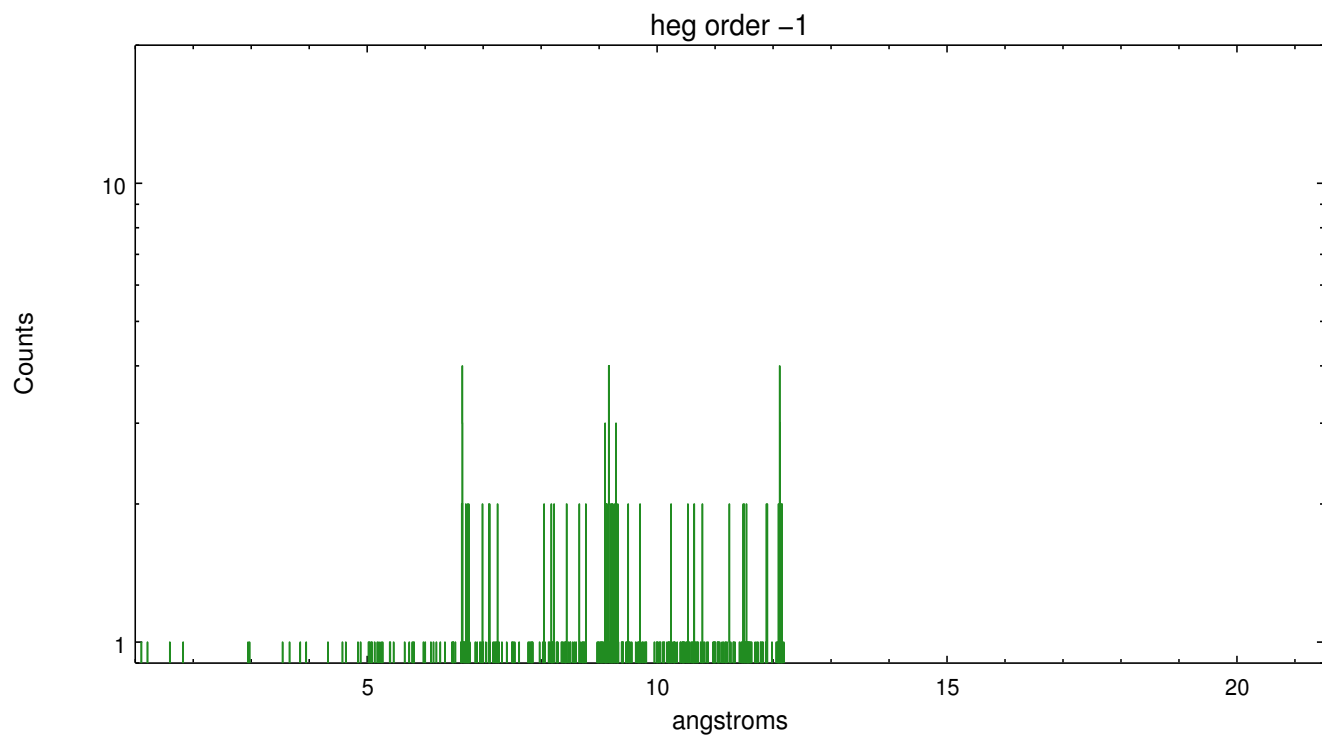
Spot Image HEG



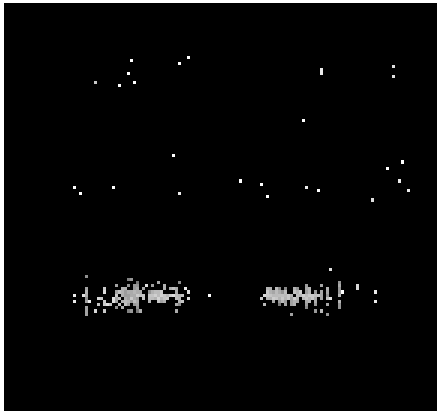
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	430	571	752	6307	686	246	260

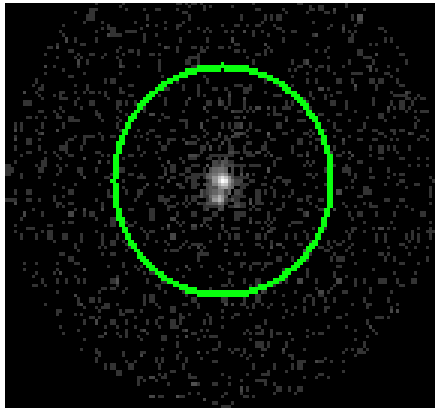




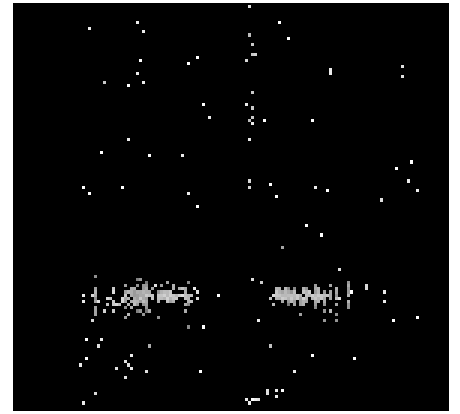
3.2 MEG Arm



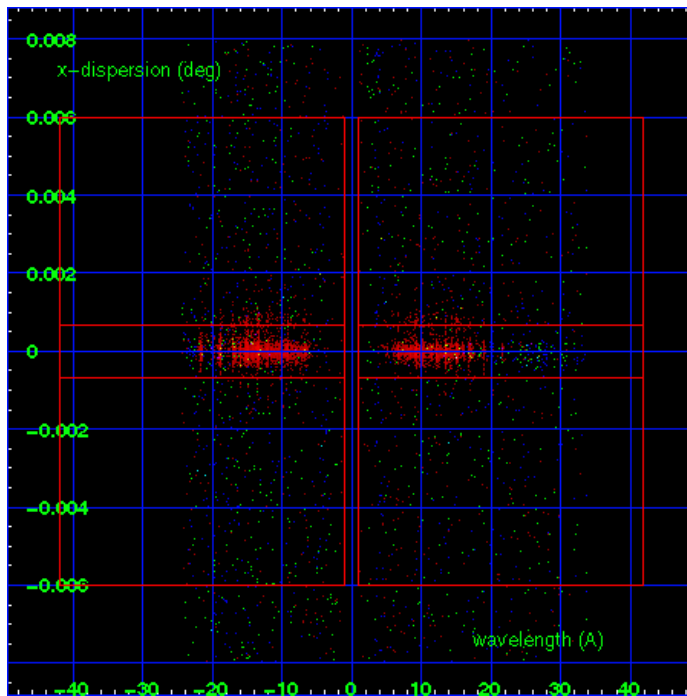
MEG Order Sort 123



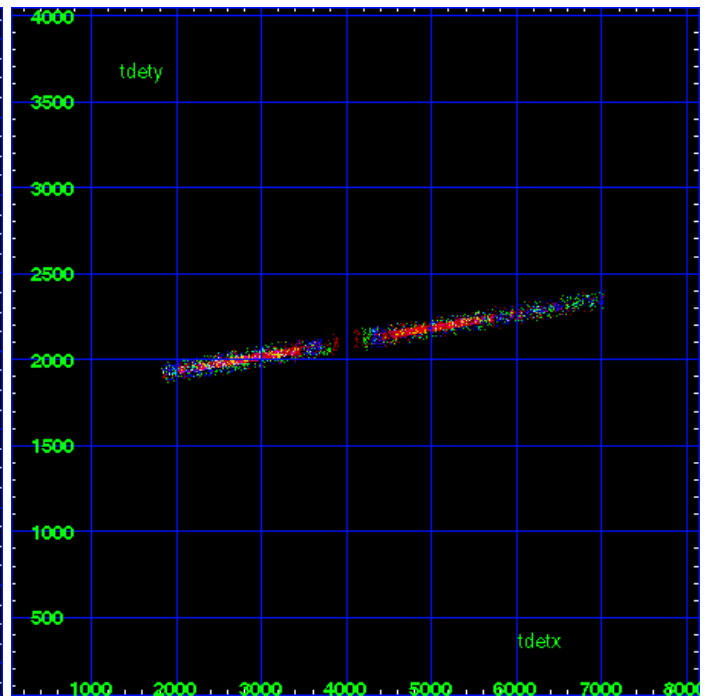
MEG Zero Order



MEG Order Sort ALL

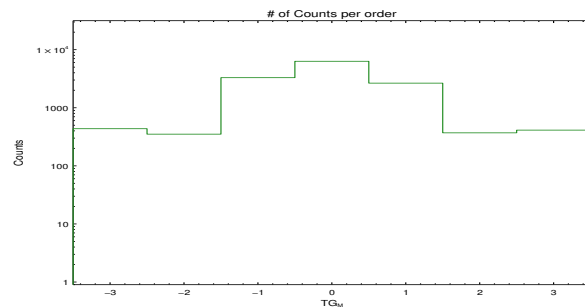


Spot Image MEG

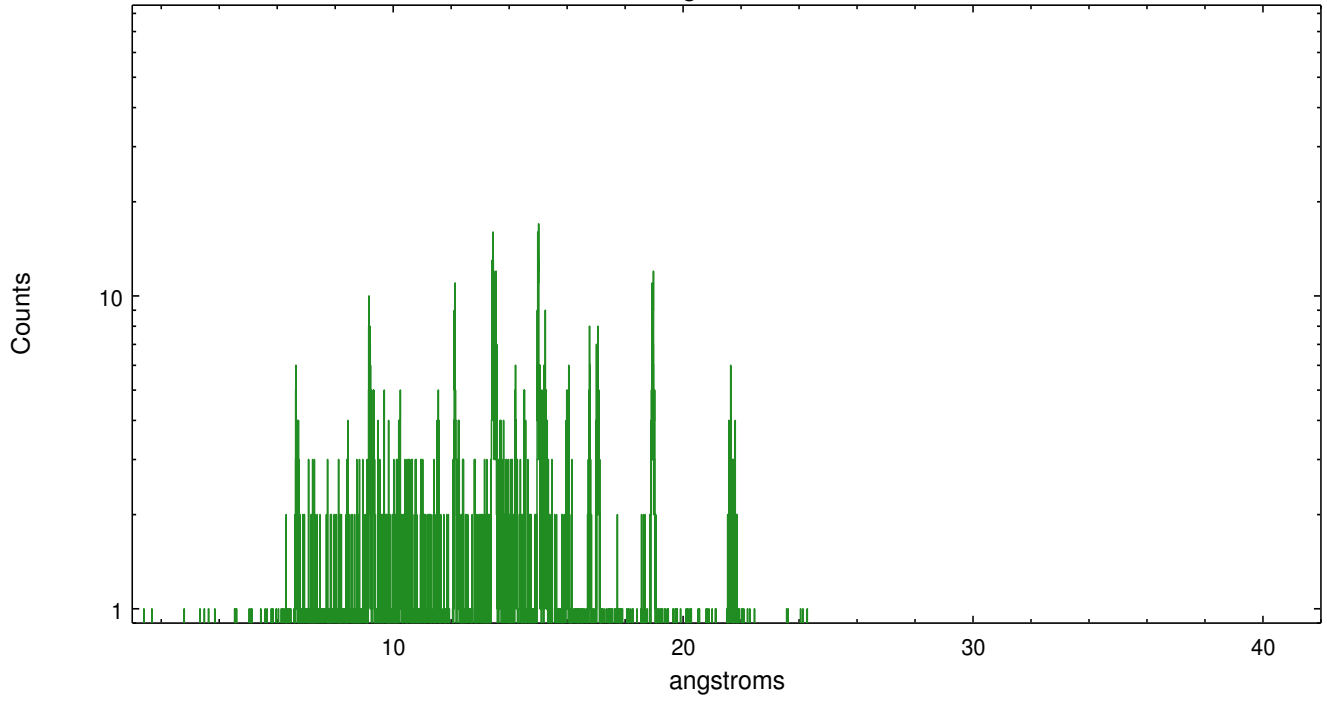


Full Detector MEG

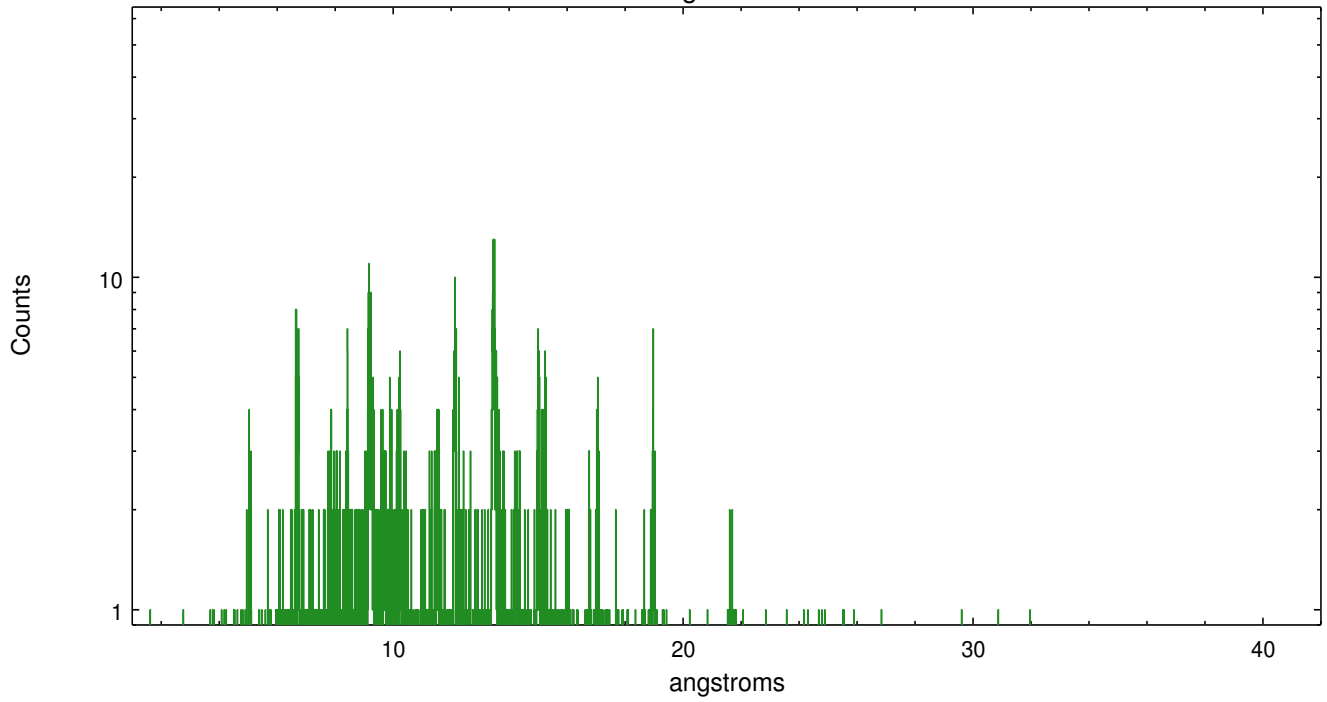
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	436	351	3296	6307	2652	370	412



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.03.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.039139374256

A.2 Comments

Spectral extraction is centered on the brighter source. Note: there is a fainter source about 3 arcsec from the brighter source used to center the spectral extraction. However, the extracted spectrum will contain some contribution from this faint source. Custom analysis may be required to determine the relative contributions.