

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 14375 - L2 Version 3
Chandra X-Ray Center

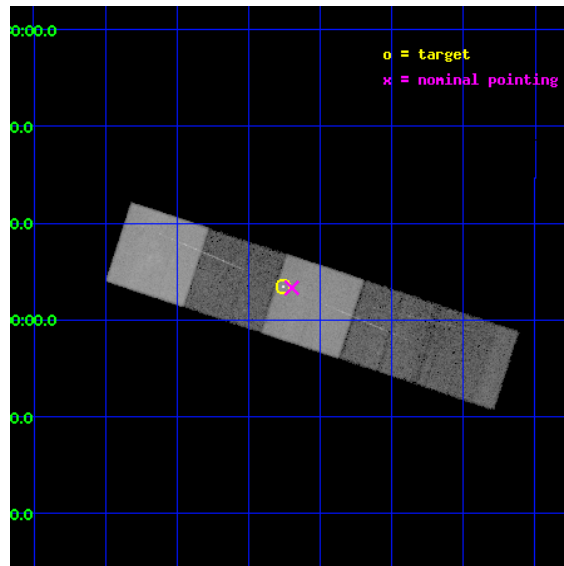
L2 Processing Date : Feb 29 2012

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1 Front

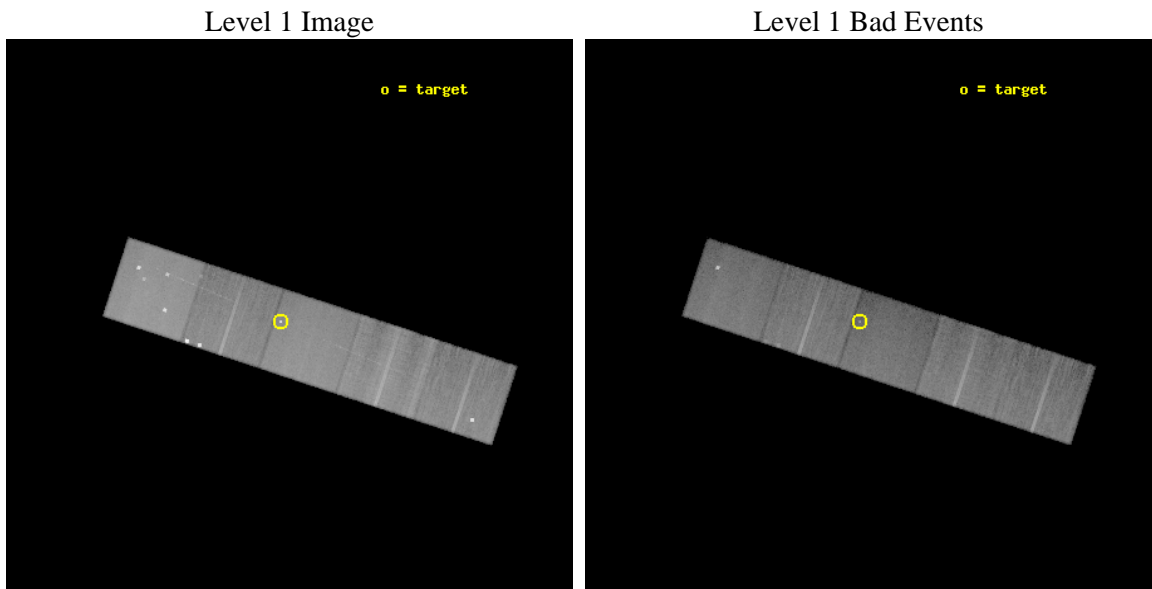
seq_num	200757	Sequence number
obs_id	14375	Observation id
title	A systematic measurement of the mass-loss rate of Zeta Ori	Proposa
observer	Dr. Maurice Leutenegger	Principal investigator
object	Zeta Orionis	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	85.189583	Observer's specified target RA [deg]
dec_targ	-1.942556	Observer's specified target Dec [deg]
ra_nom	85.174475703161	Nominal RA [deg]
dec_nom	-1.9447760139847	Nominal Dec [deg]
roll_nom	18.156115053465	Nominal Roll [deg]
revision	3	Processing version of data
ontime	36539.700281024	Sum of GTIs [s]
livetime	36062.282196716	Livetime [s]
ontime5	36539.700281024	Sum of GTIs [s]
ontime6	36536.559290648	Sum of GTIs [s]
ontime7	36539.700281024	Sum of GTIs [s]
ontime8	36533.418220043	Sum of GTIs [s]
ontime9	36536.559220672	Sum of GTIs [s]
l2events	388705	Number of level 2 events



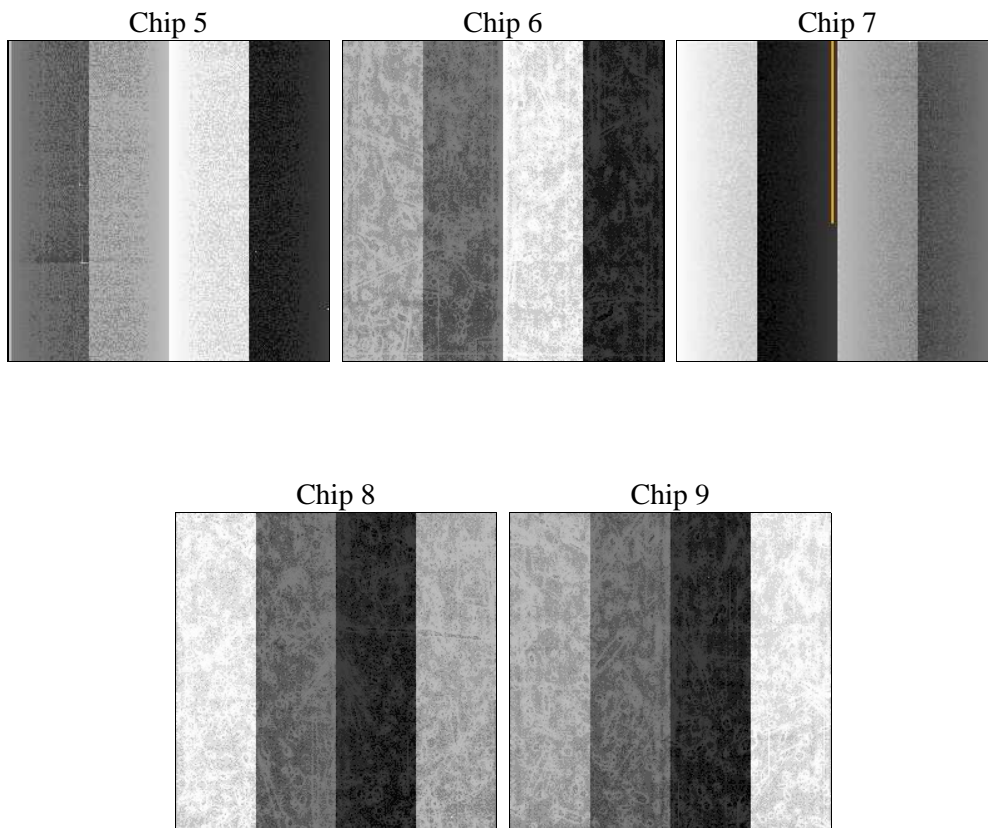
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	36539.700281024	Sum of GTIs [s]
caldsver	4.4.8	 	ontime5	36539.700281024	Sum of GTIs [s]
date	2012-02-28T17:00:38	Date and time of file creation	ontime6	36536.559290648	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	36539.700281024	Sum of GTIs [s]
			ontime8	36533.418220043	Sum of GTIs [s]
			ontime9	36536.559220672	Sum of GTIs [s]
			l1events	1524232	Number of level 1 events

2.1.4 Events

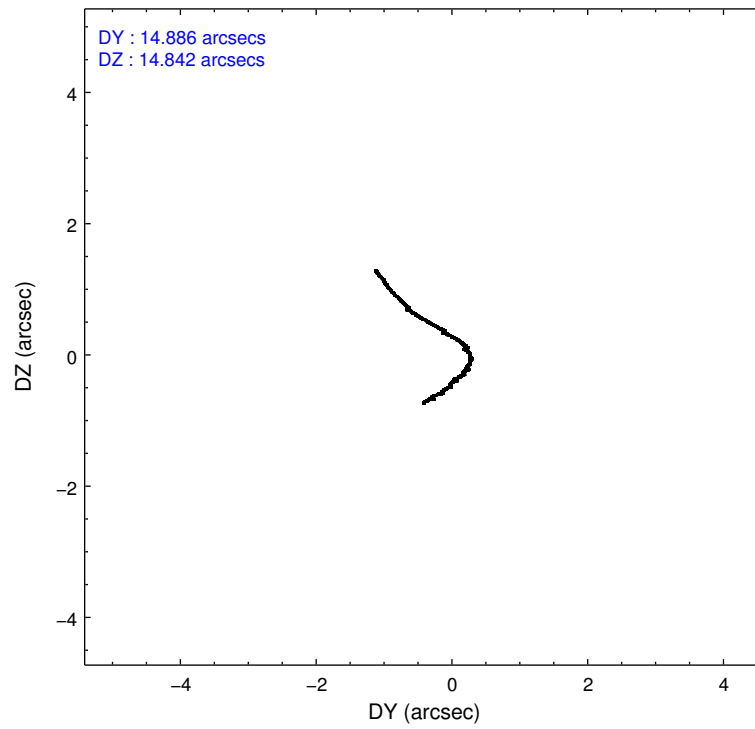
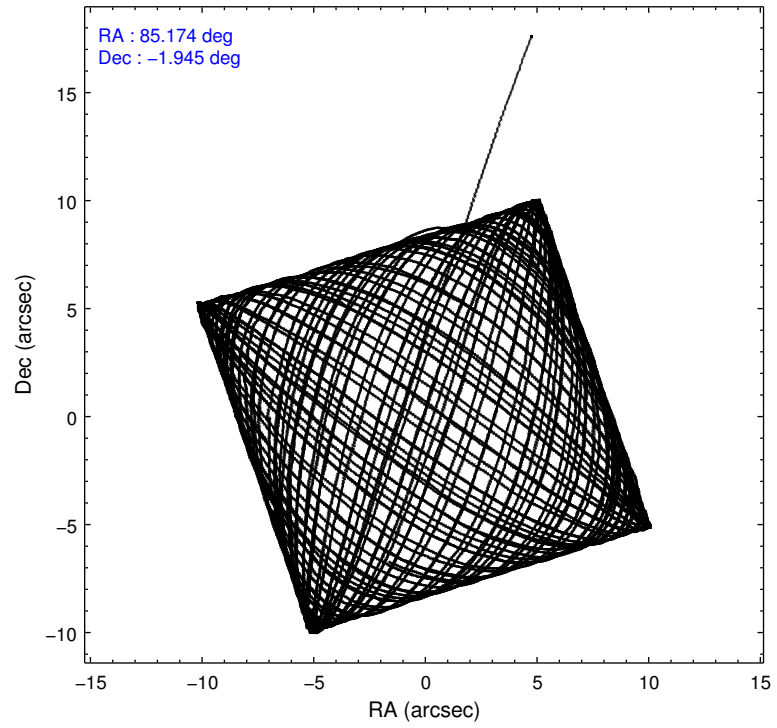
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	390524	273582	302944	311687	245495
rejected events	192082	212220	166762	230772	205404
rejected %	49%	77%	55%	74%	83%

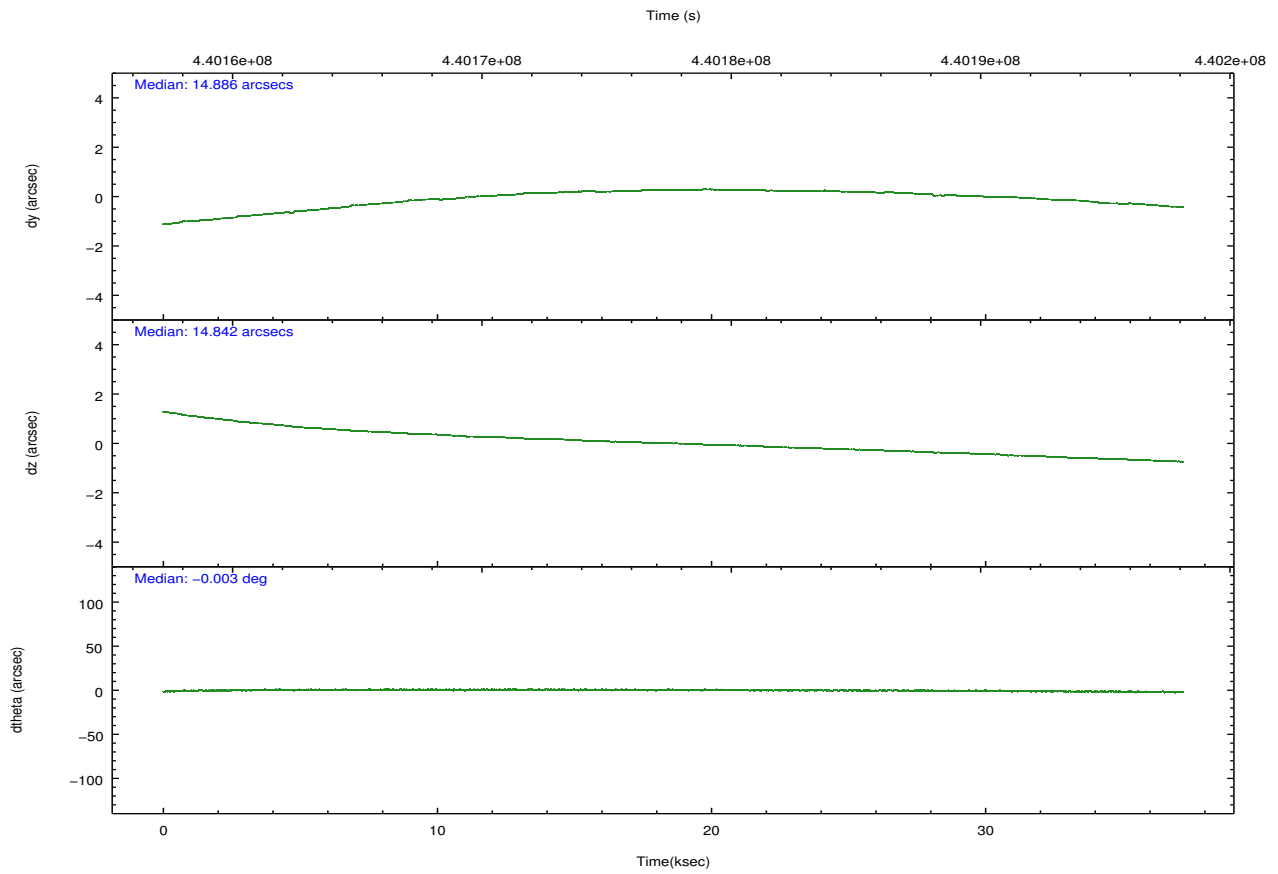
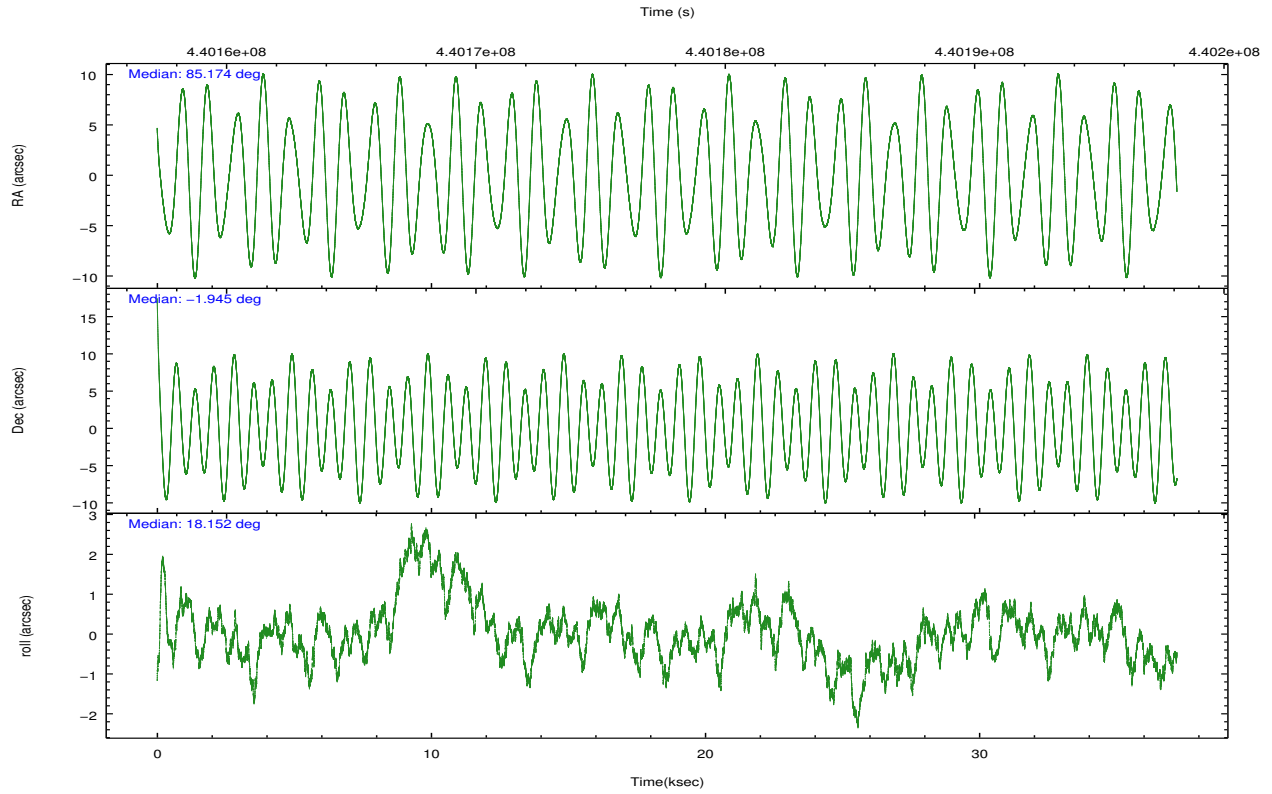
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	26313	10824	13209	23070	10541
	6%	3%	4%	7%	4%
grade 1 events	685	138	436	232	164
	0%	0%	0%	0%	0%
grade 2 events	59803	6276	28281	19551	17438
	15%	2%	9%	6%	7%
grade 3 events	7455	17672	11936	8400	2952
	1%	6%	3%	2%	1%
grade 4 events	6755	20367	11846	7934	2966
	1%	7%	3%	2%	1%
grade 5 events	29696	11642	30945	16735	12438
	7%	4%	10%	5%	5%
grade 6 events	98158	6235	70938	21966	6204
	25%	2%	23%	7%	2%
grade 7 events	161659	200428	135353	213799	192792
	41%	73%	44%	68%	78%

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	85.17447570316135	CCD I2 on	N	N
[deg] Pointing Dec	-1.965388	-1.944776013984722	CCD I3 on	N	N
[deg] Pointing Roll	17.998876	18.15611505346477	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)	440159772.184000	440158435.61107	CCD S5 on	O2	Y
Observation start date	2011-12-13T10:35:06	2011-12-13T10:13:55	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	440196272.184000	440197214.43812	On-chip summing requested	N	N
Observation end date	2011-12-13T20:43:26	2011-12-13T21:00:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



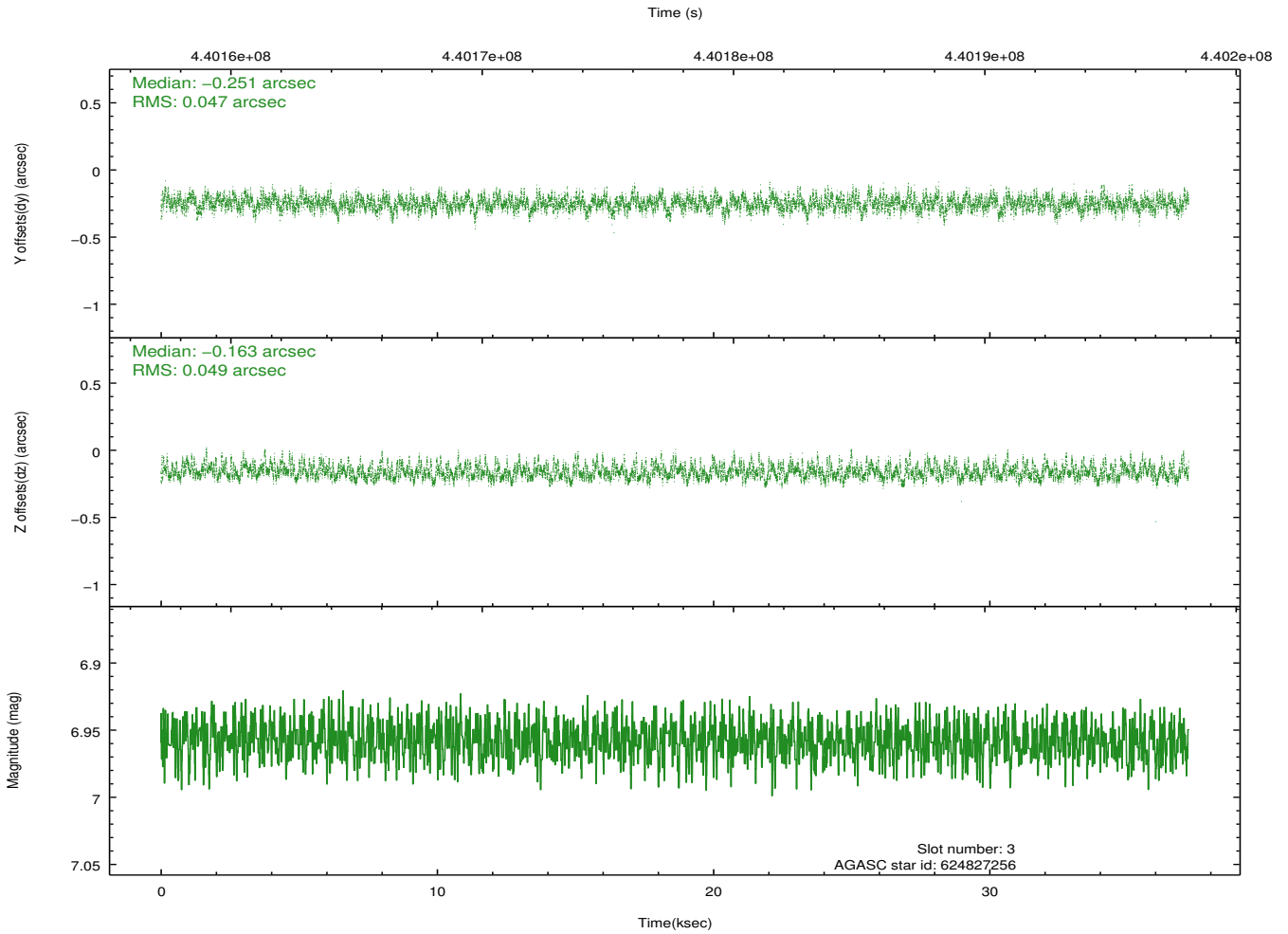
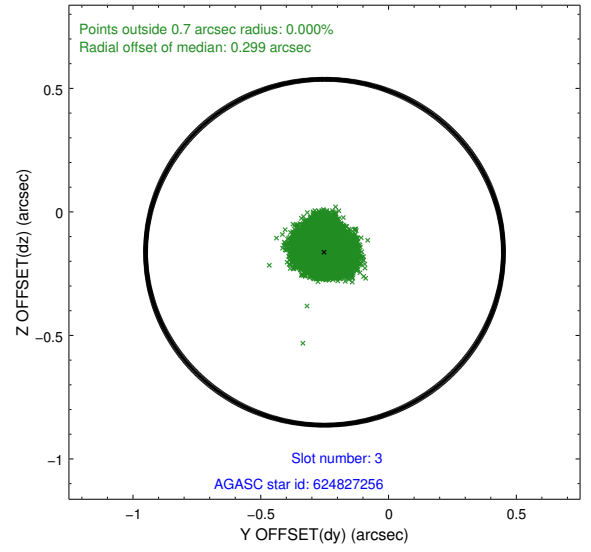
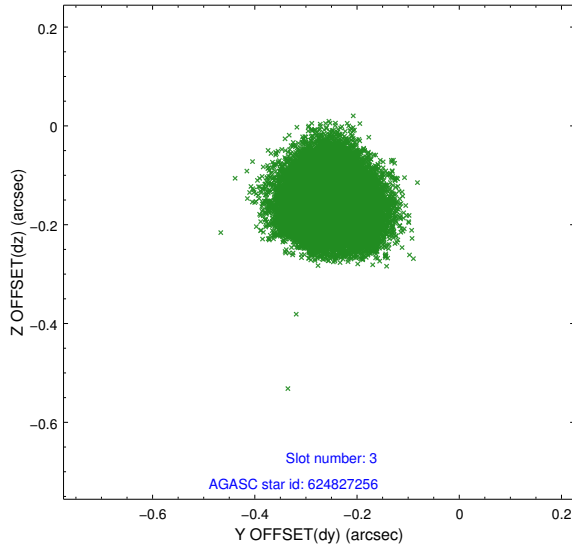


Slot Statistics

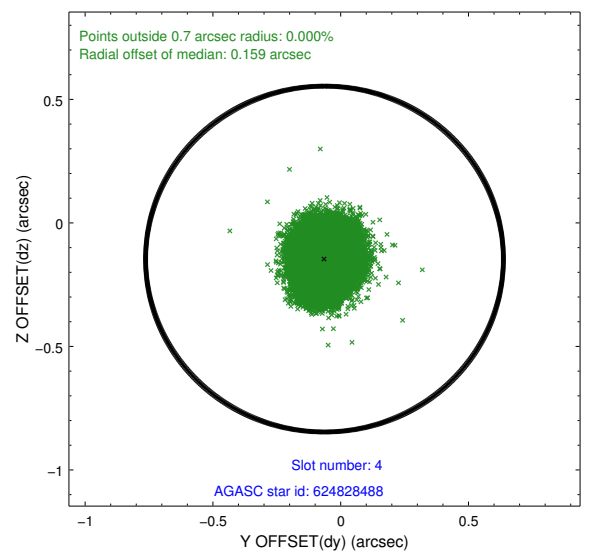
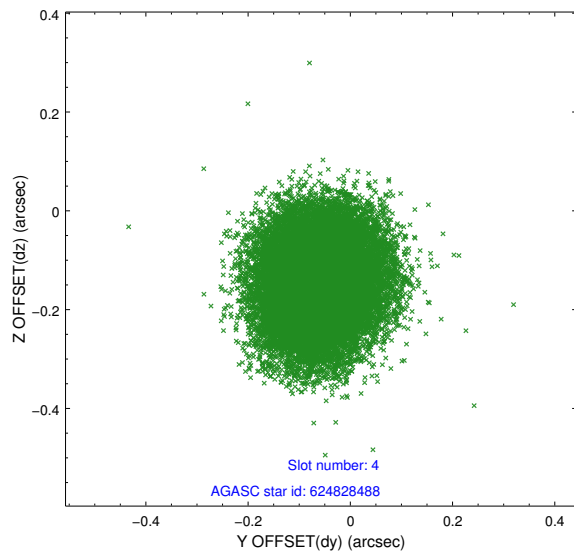
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	9075	-0.111	-0.099	0.019	0.031	0.000000	0.000000	-767.68	-1798.43
1	FID	ACIS-S-4	7.03	9073	0.269	0.078	0.010	0.022	0.000000	0.000000	2146.00	110.12
2	FID	ACIS-S-5	7.07	9074	-0.191	0.027	0.016	0.026	0.000000	0.000000	-1820.53	103.86
3	GUIDE	624827256	6.96	18151	-0.251	-0.163	0.074	0.116	85.016618	-1.425471	121.63	2004.15
4	GUIDE	624828488	9.18	18130	-0.063	-0.146	0.106	0.166	85.333320	-1.326548	1315.94	1990.87
5	GUIDE	624829760	8.90	18066	0.117	-0.020	0.096	0.159	85.013848	-1.712852	-206.94	1023.47
6	GUIDE	625353096	8.76	18138	0.091	0.196	0.092	0.146	84.812755	-2.527118	-1800.32	-1541.13
7	GUIDE	625353336	8.50	18143	0.105	0.133	0.094	0.146	84.756223	-2.648990	-2129.23	-1895.92

2.4 Star Slots

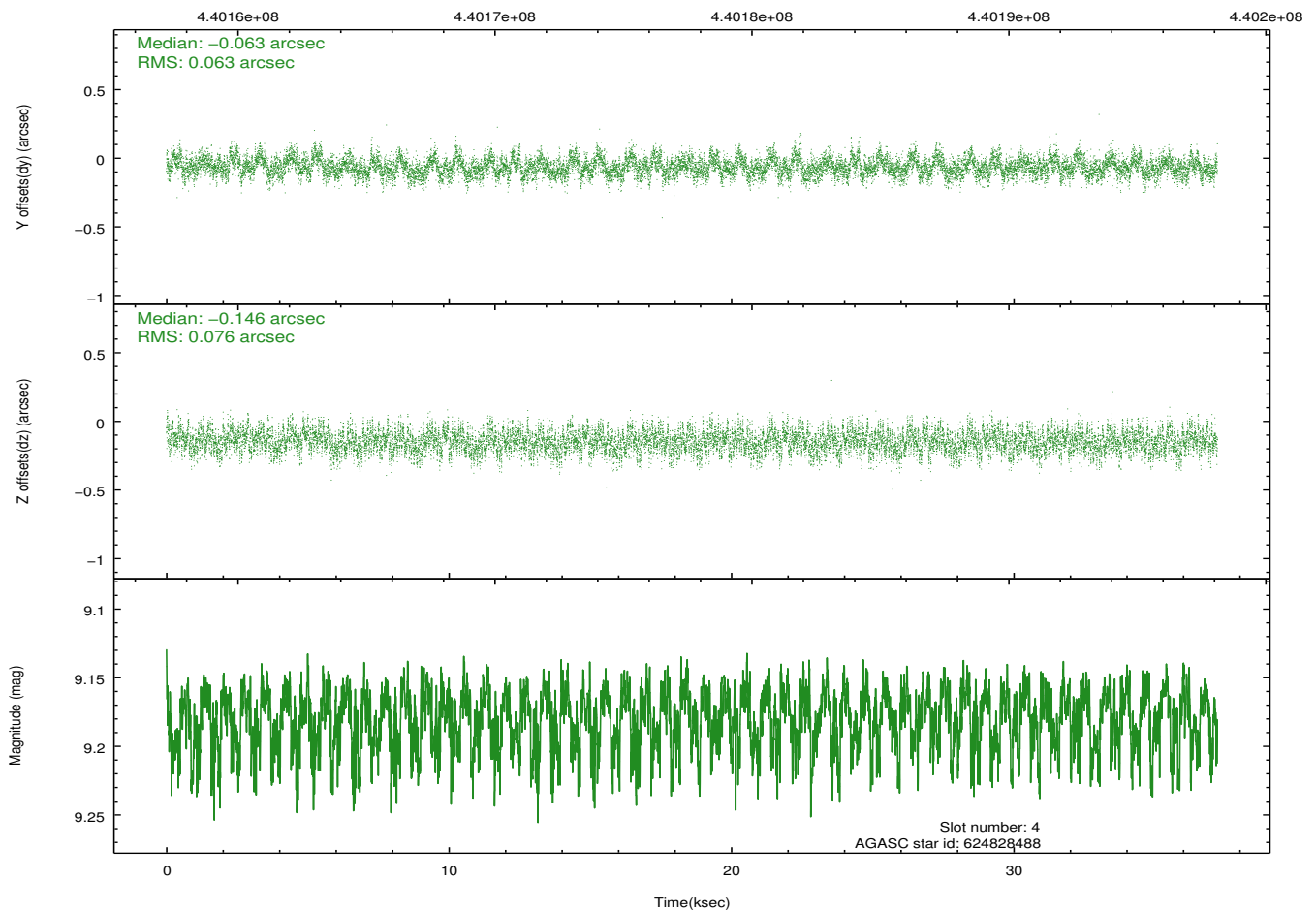
2.4.1 Slot 3



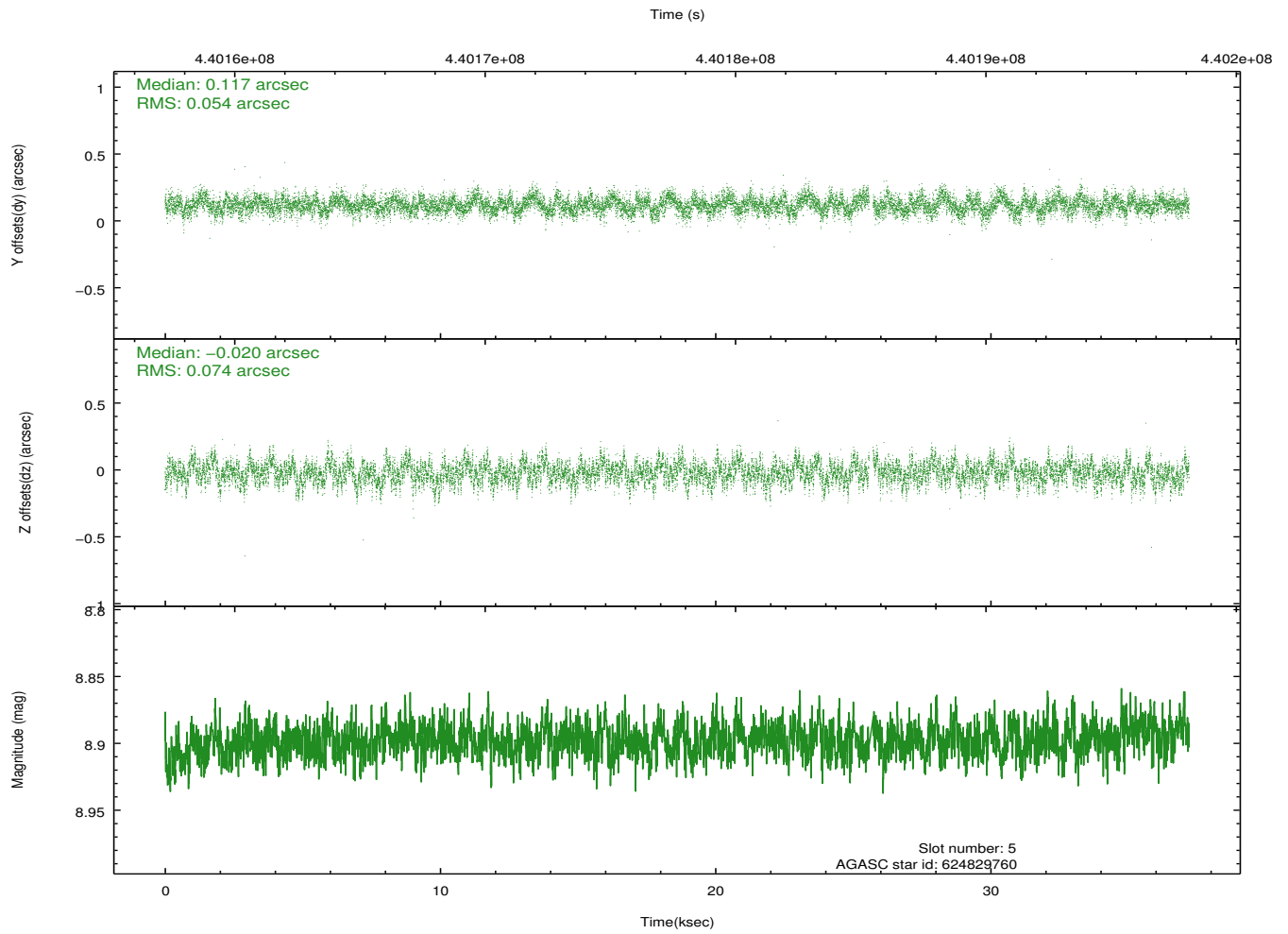
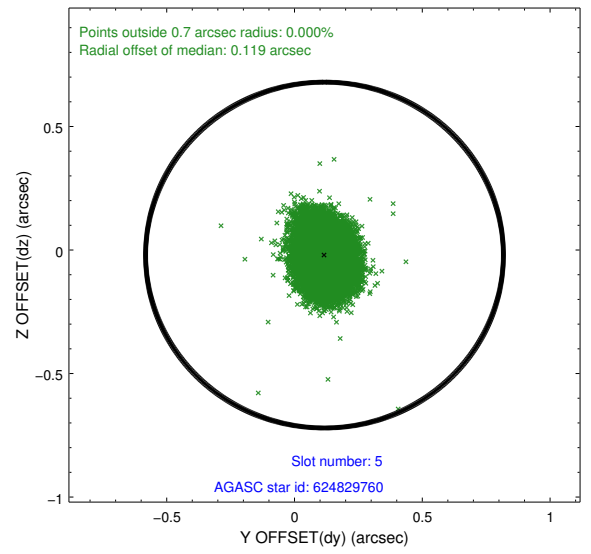
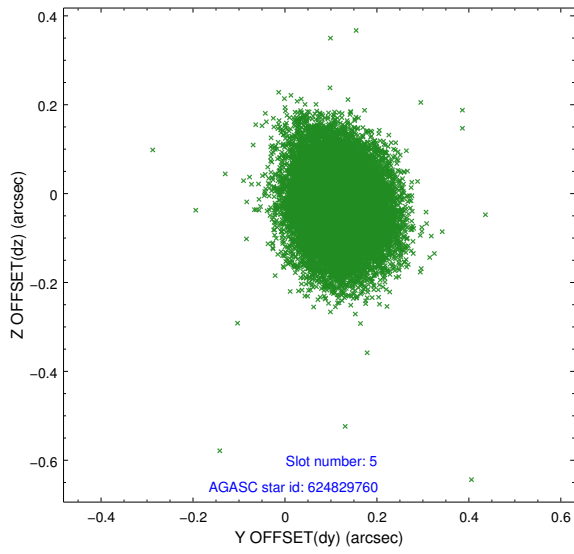
2.4.2 Slot 4



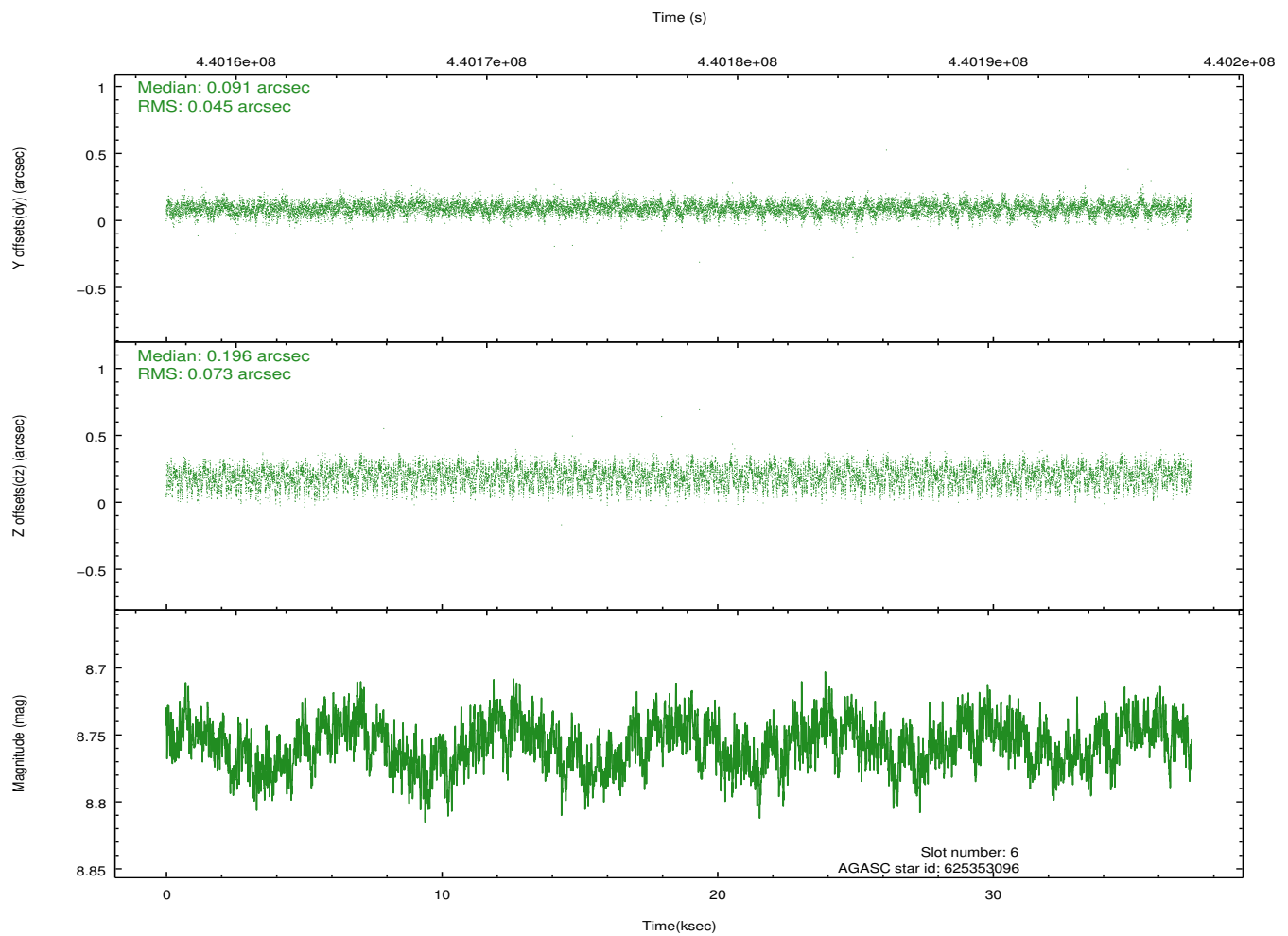
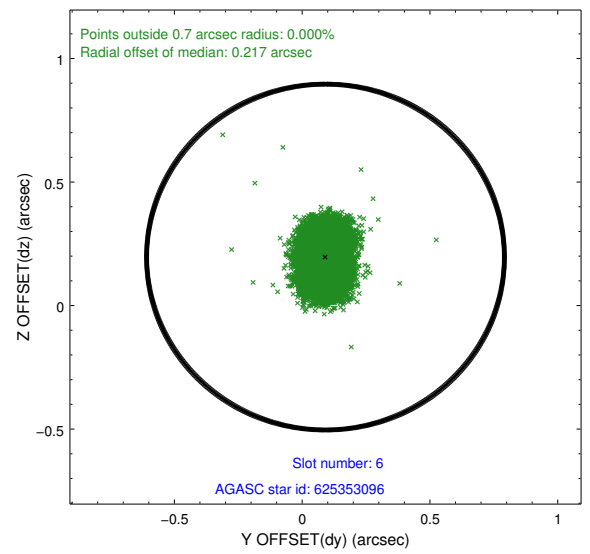
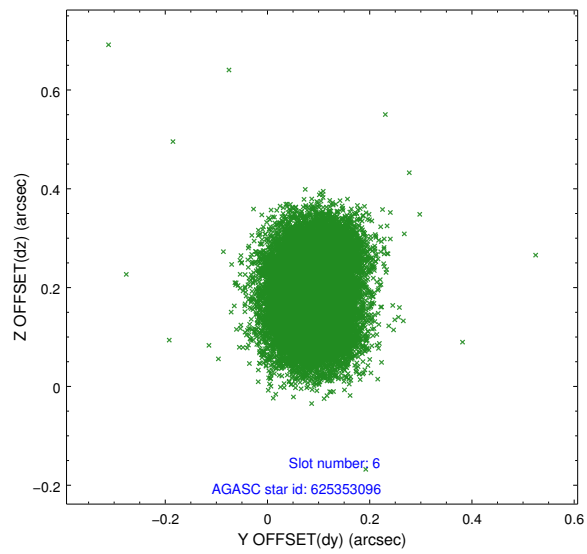
Time (s)



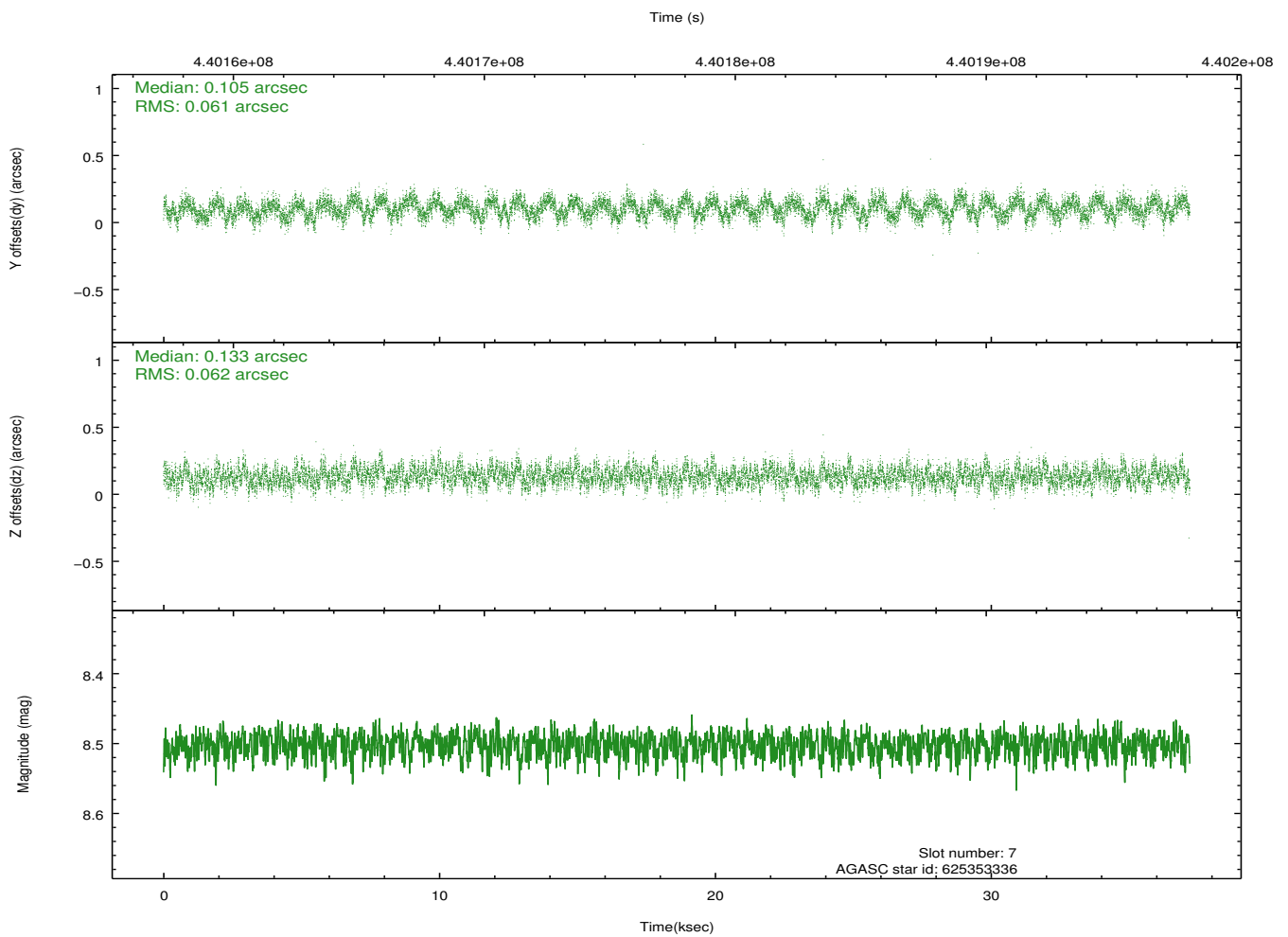
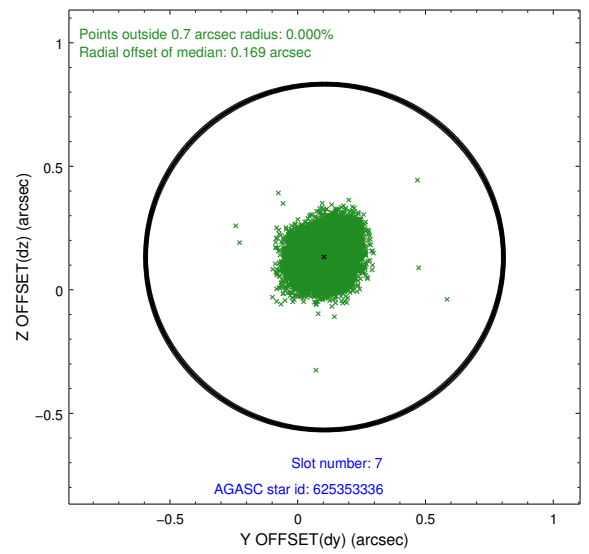
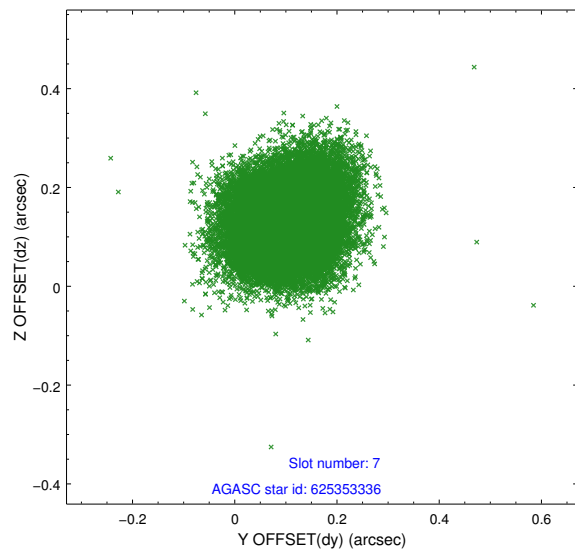
2.4.3 Slot 5



2.4.4 Slot 6

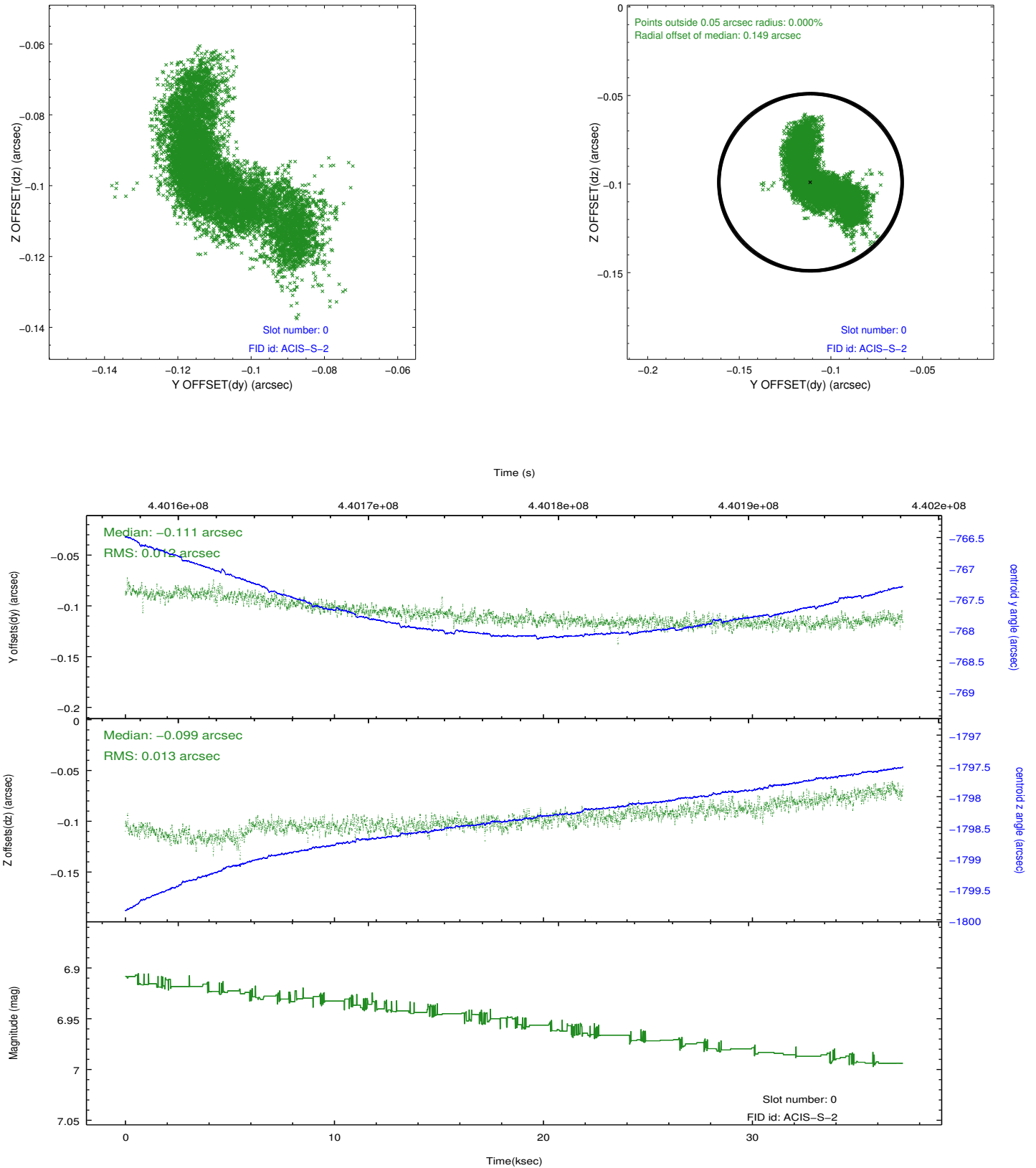


2.4.5 Slot 7

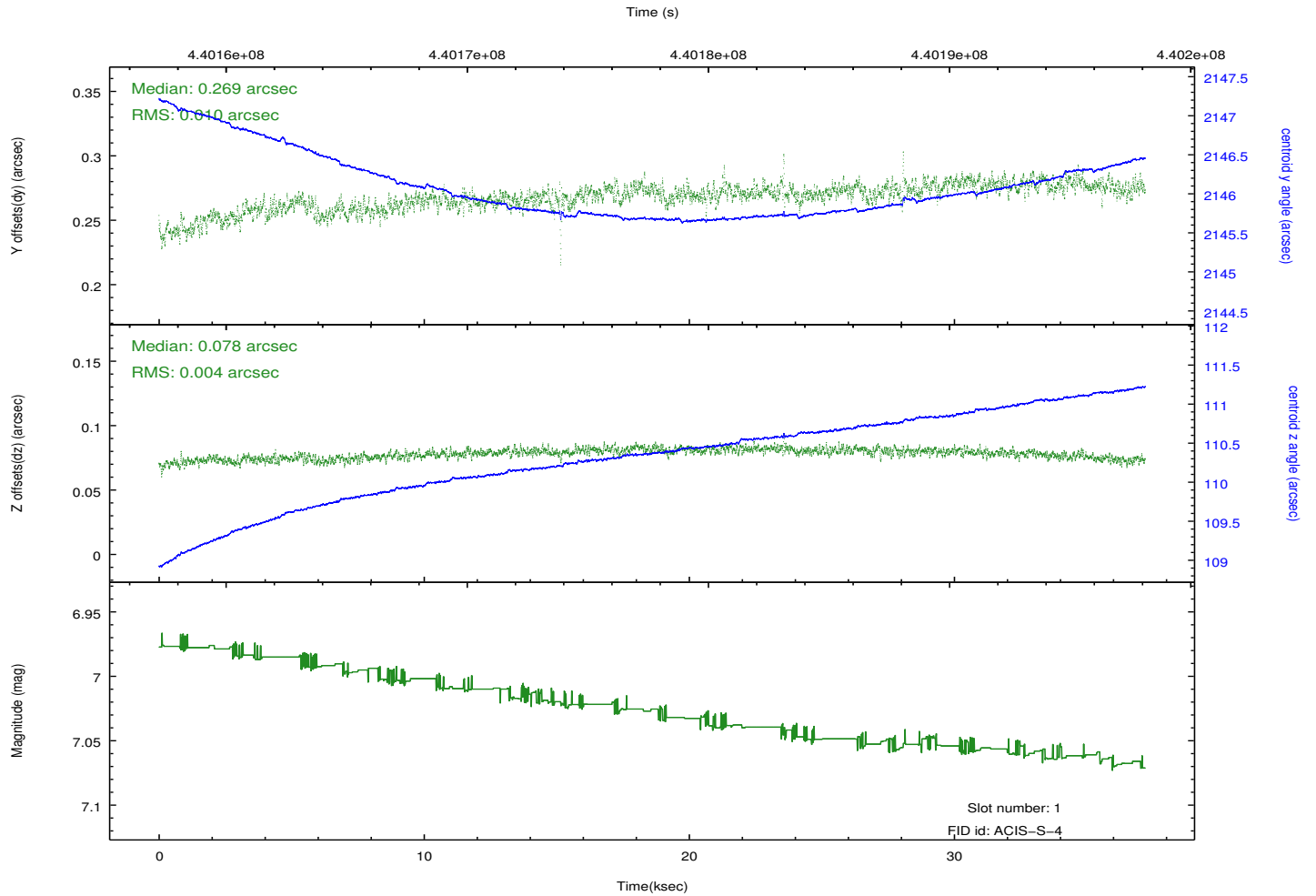
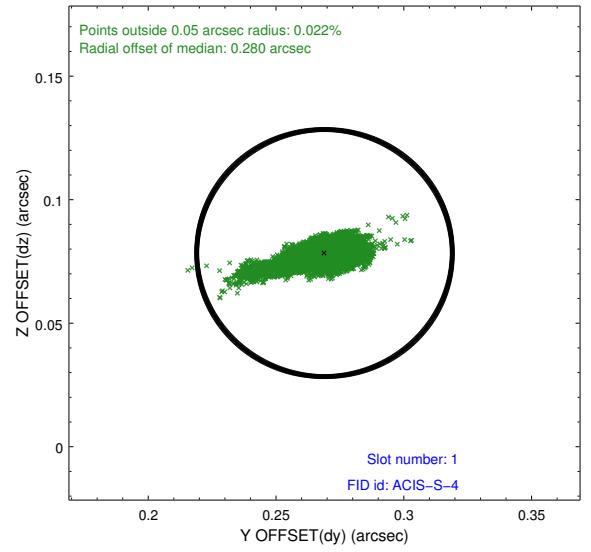
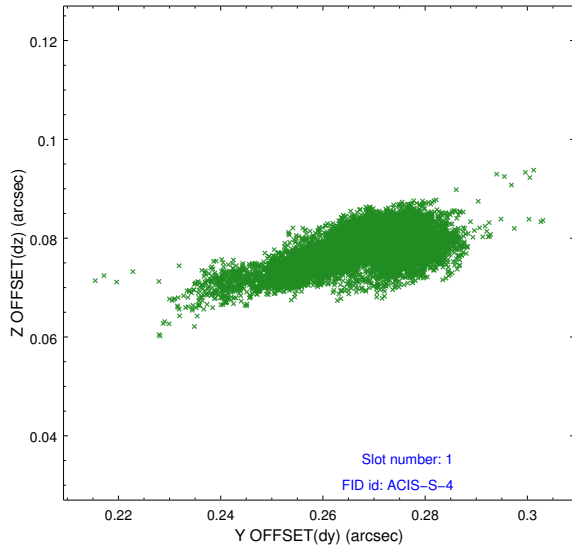


2.5 FID Slots

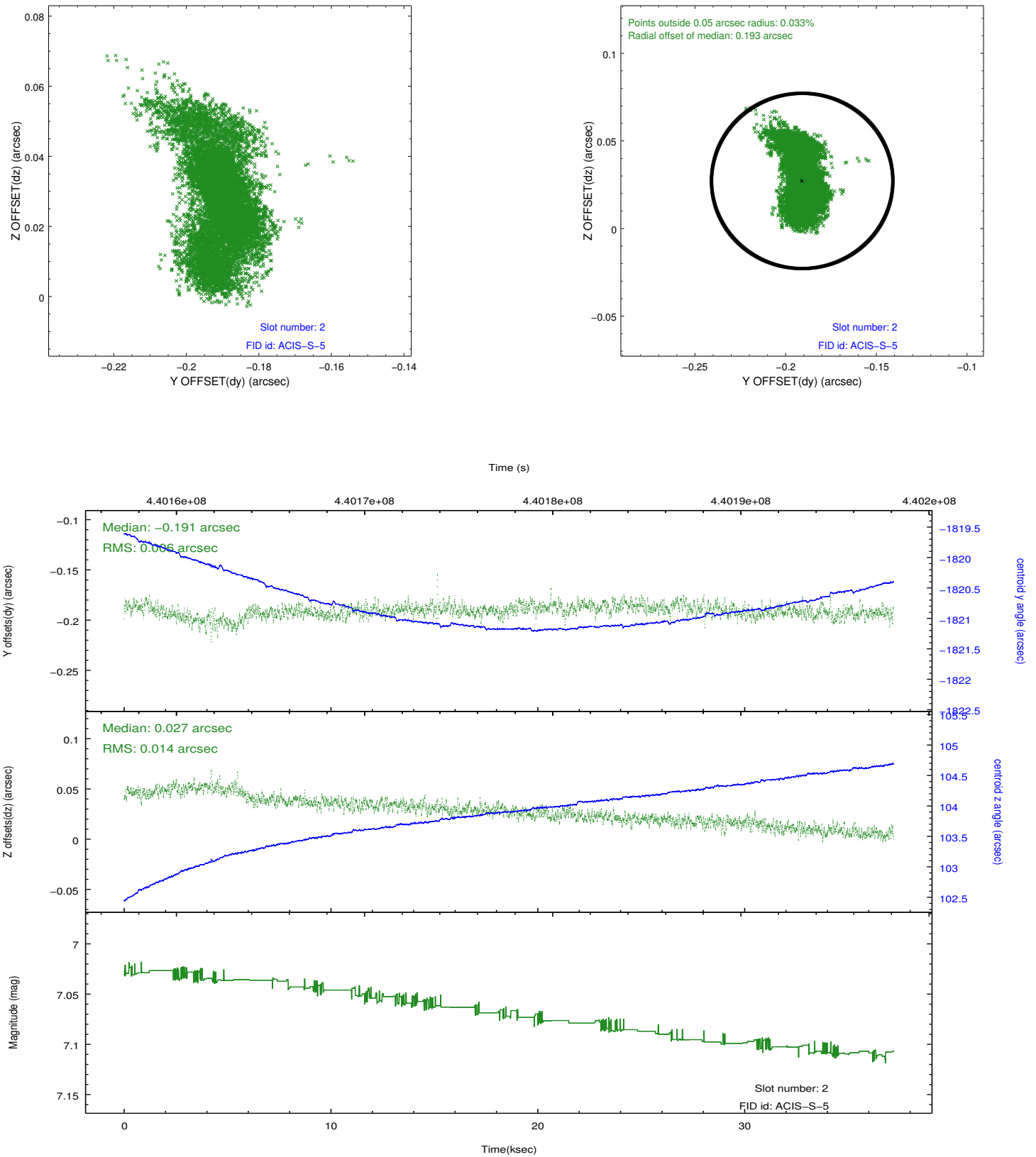
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

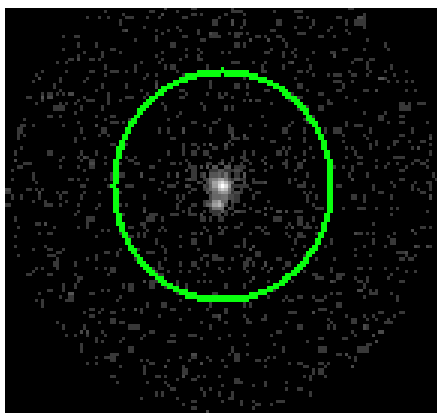


3 Gratings

3.1 HEG Arm



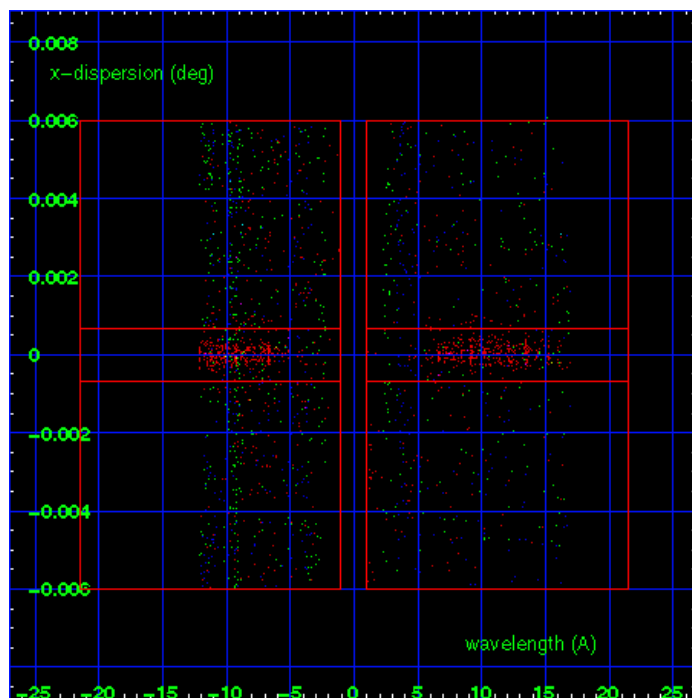
HEG Order Sort 123



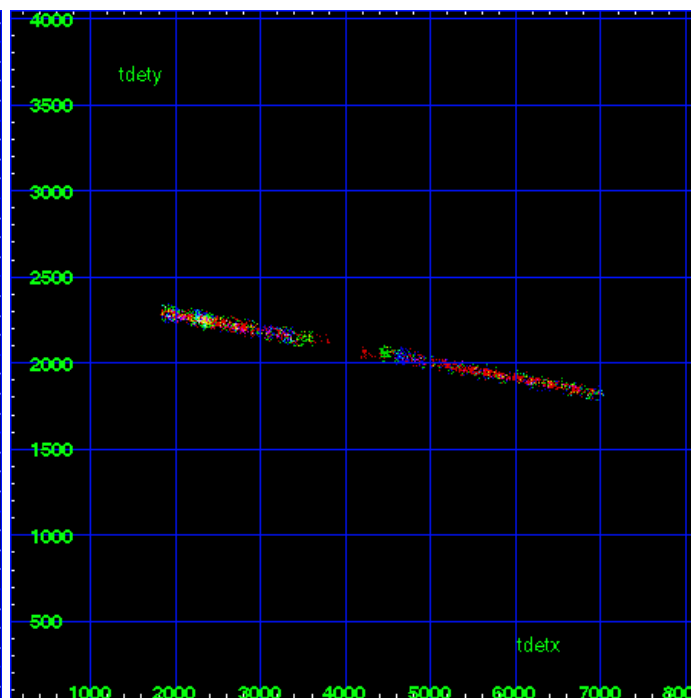
HEG Zero Order



HEG Order Sort ALL

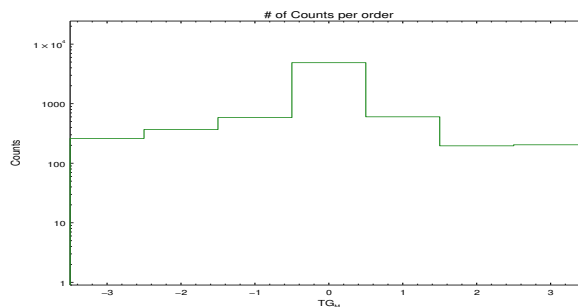


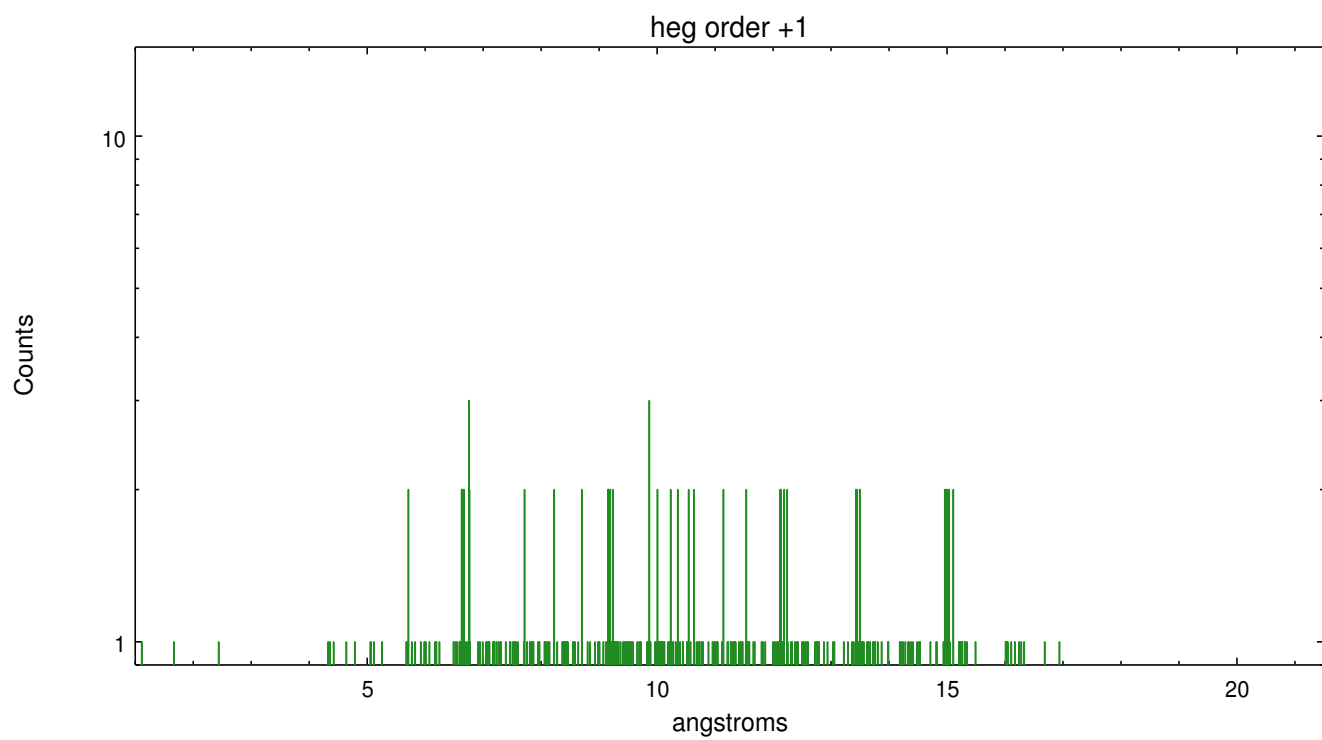
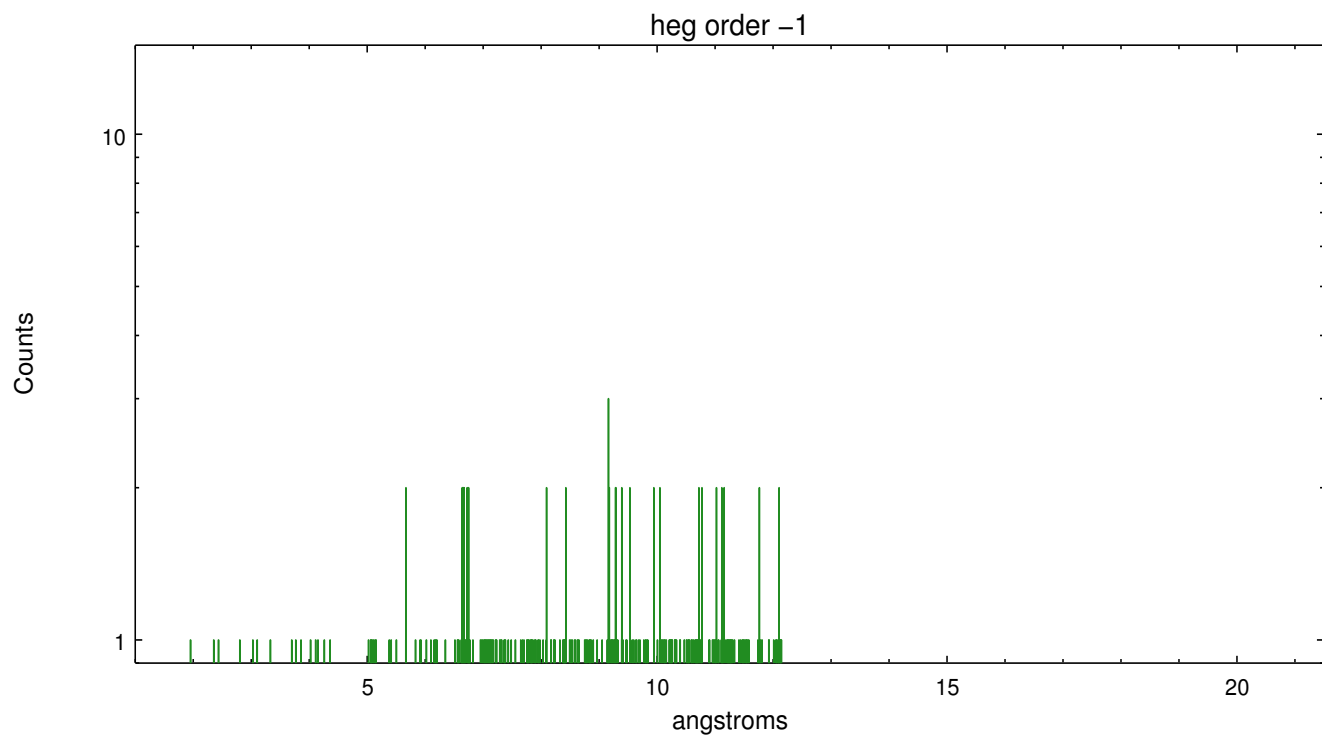
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	261	368	584	4883	602	196	204

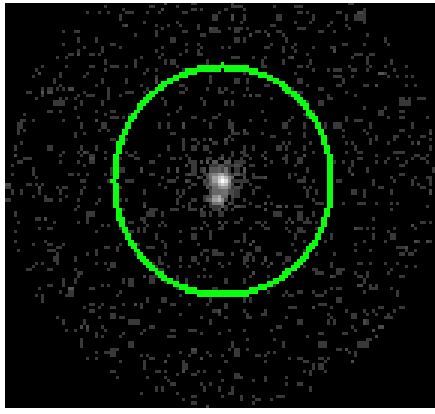




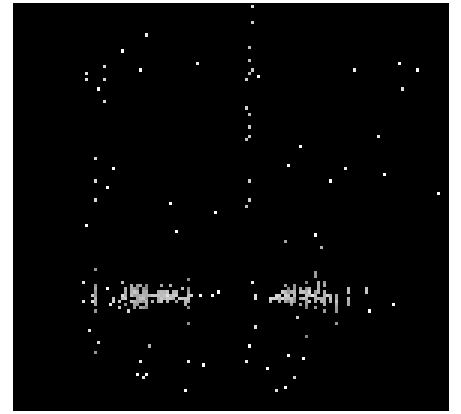
3.2 MEG Arm



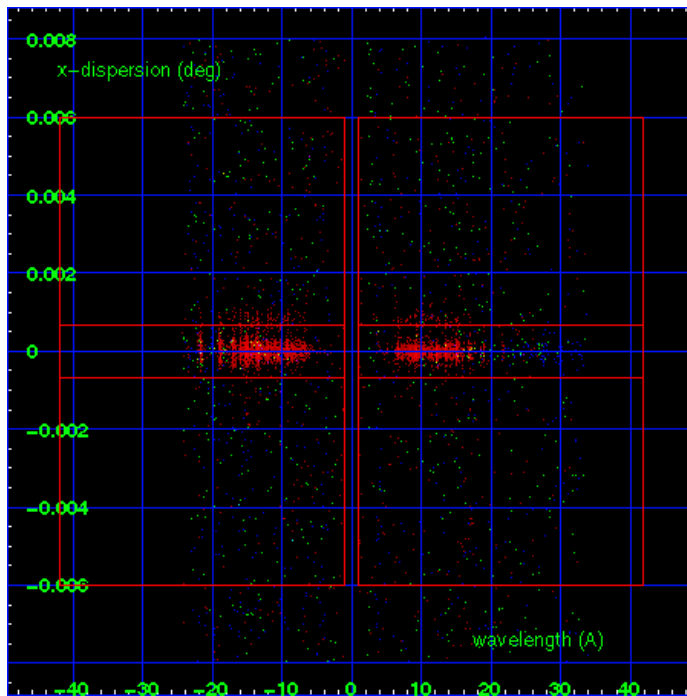
MEG Order Sort 123



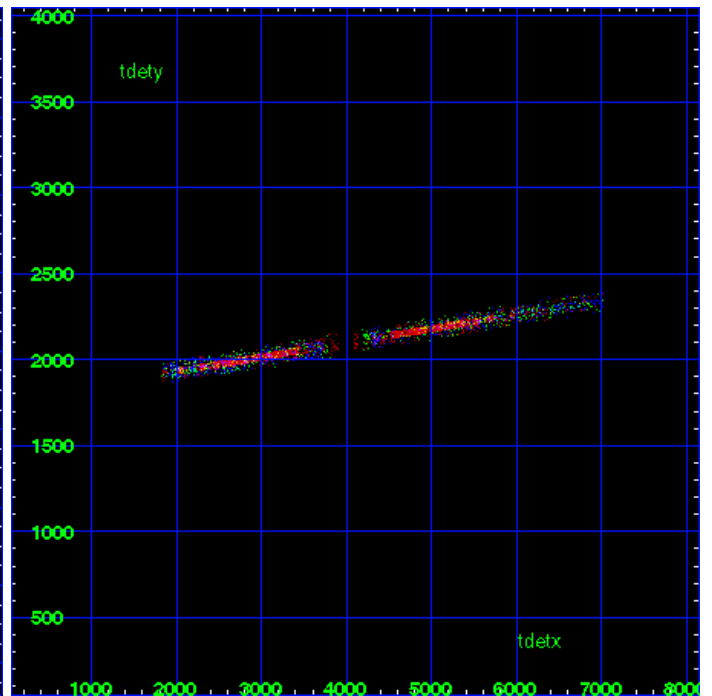
MEG Zero Order



MEG Order Sort ALL

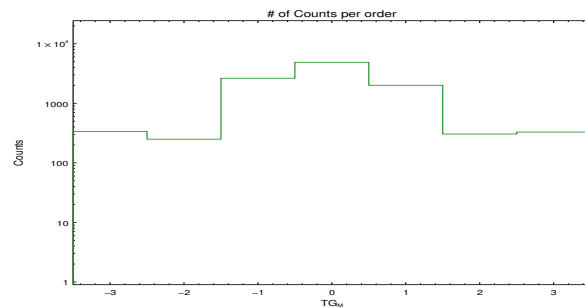


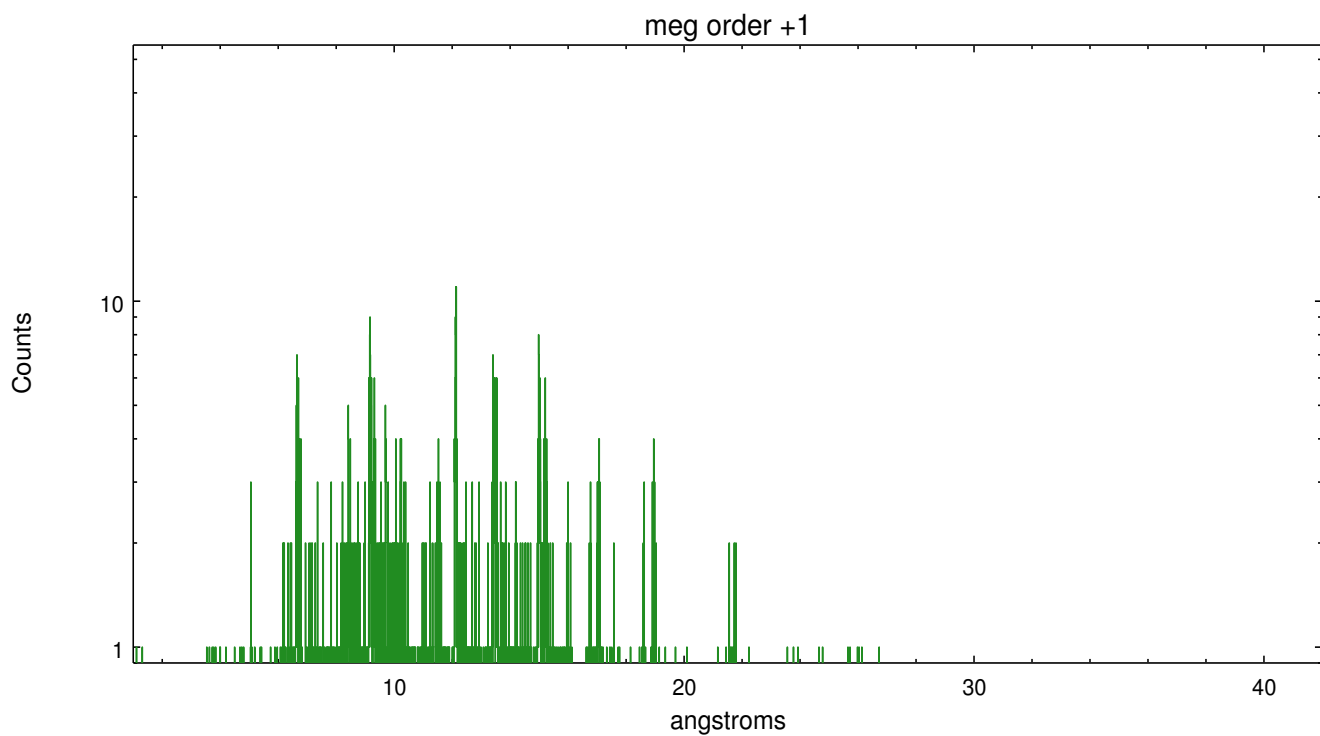
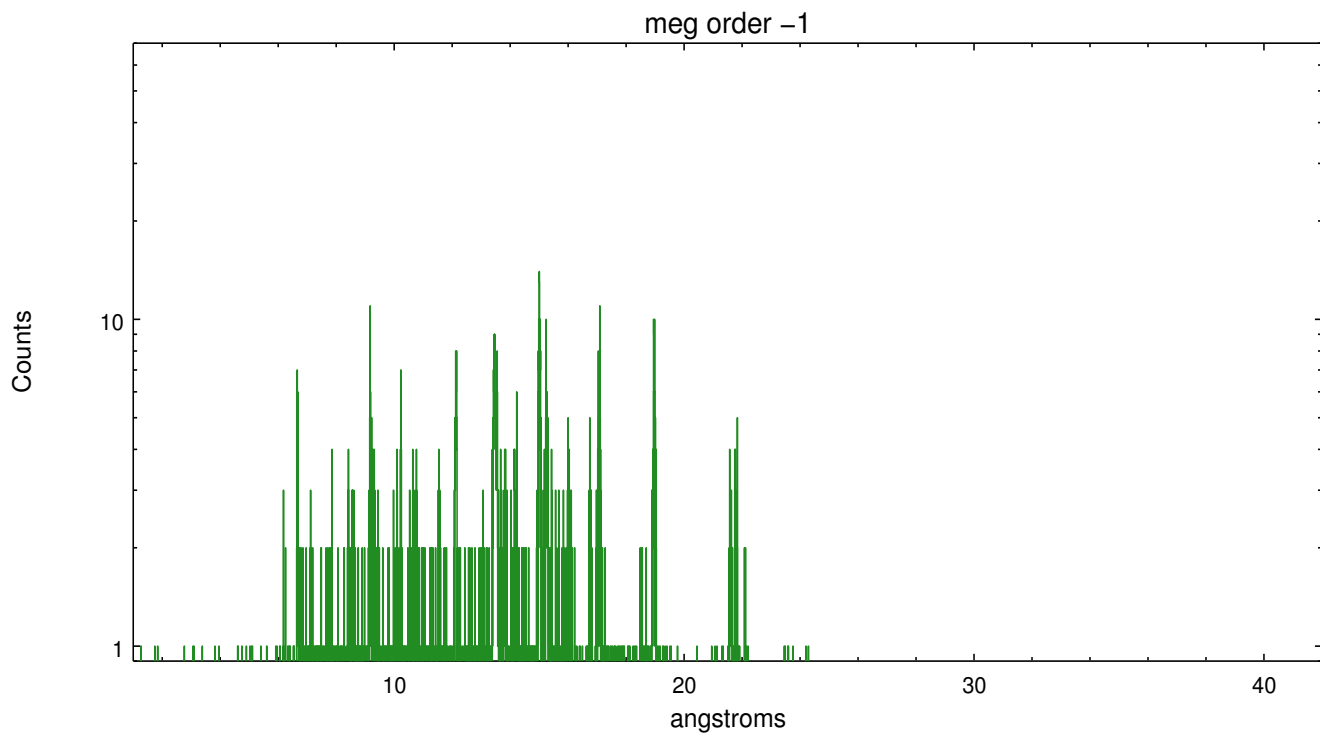
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	336	250	2638	4883	2008	305	329





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	36.539700281024

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.