

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9940 - L2 Version 2
Chandra X-Ray Center

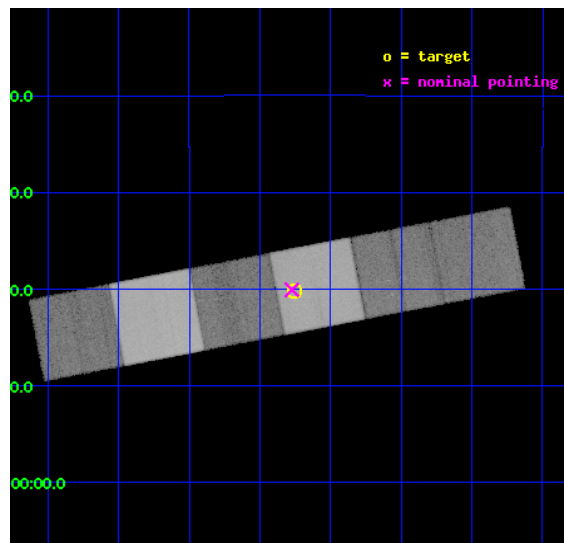
L2 Processing Date : May 30 2012

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1 Front

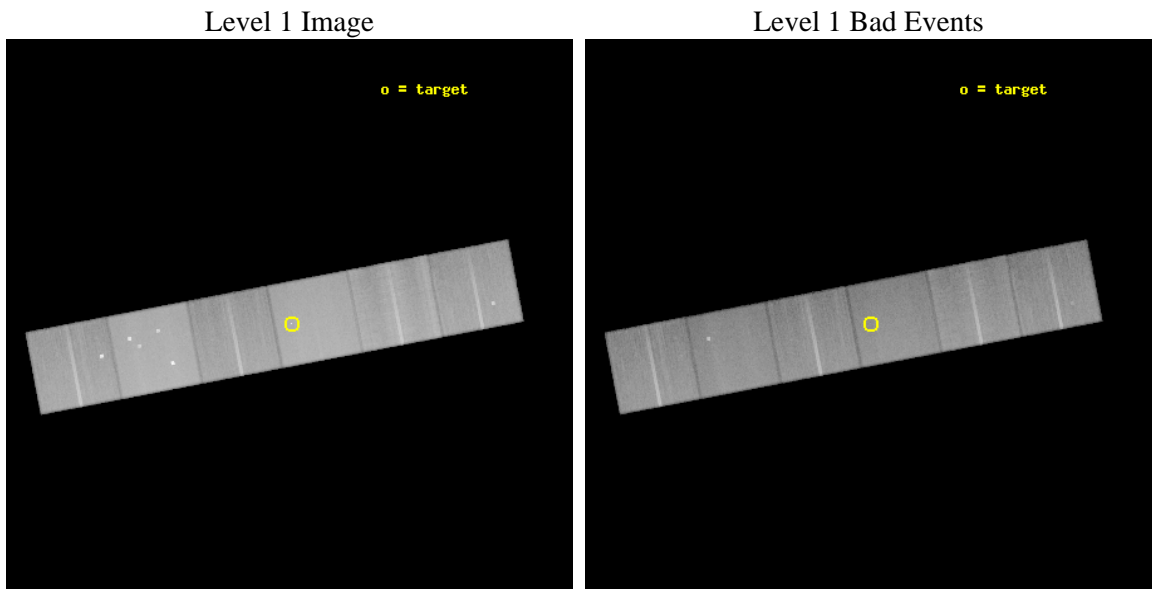
seq_num	200555	Sequence number
obs_id	9940	Observation id
title	Using a Cool B Supergiant to Probe the Deepest X-Ray Emitting Layers of a Dense Stellar Wind	Proposal title
observer	Dr Wayne Waldron	Principal investigator
object	Kappa Ori	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	86.93875	Observer's specified target RA [deg]
dec_targ	-9.669722	Observer's specified target Dec [deg]
ra_nom	86.943347449035	Nominal RA [deg]
dec_nom	-9.667994751235	Nominal Dec [deg]
roll_nom	349.15740450572	Nominal Roll [deg]
revision	2	Processing version of data
ontime	41942.399843812	Sum of GTIs [s]
livetime	41411.299922308	Livetime [s]
ontime4	41942.399843812	Sum of GTIs [s]
ontime5	41942.399843812	Sum of GTIs [s]
ontime6	41942.399843812	Sum of GTIs [s]
ontime7	41942.399843812	Sum of GTIs [s]
ontime8	41942.399843812	Sum of GTIs [s]
ontime9	41942.399843812	Sum of GTIs [s]
l2events	711493	Number of level 2 events



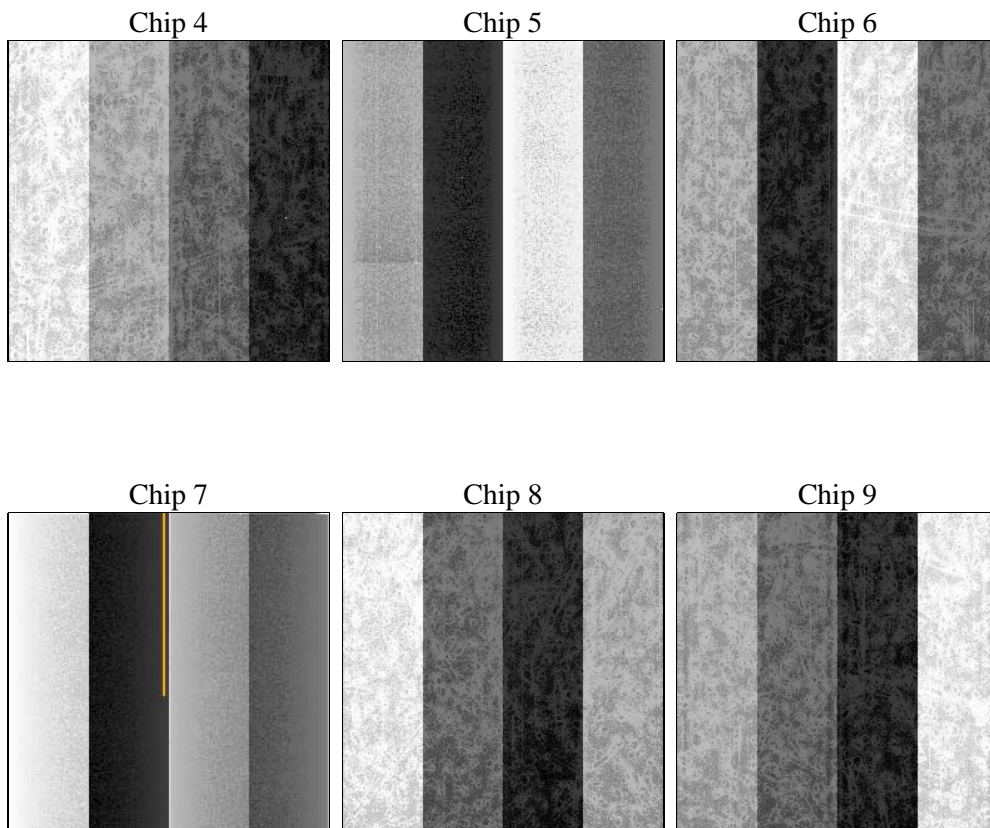
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	41800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	41942.399843812	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	41942.399843812	Sum of GTIs [s]
date	2012-05-29T19:03:47	Date and time of file creation	ontime5	41942.399843812	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	41942.399843812	Sum of GTIs [s]
			ontime7	41942.399843812	Sum of GTIs [s]
			ontime8	41942.399843812	Sum of GTIs [s]
			ontime9	41942.399843812	Sum of GTIs [s]
			l1events	3180183	Number of level 1 events

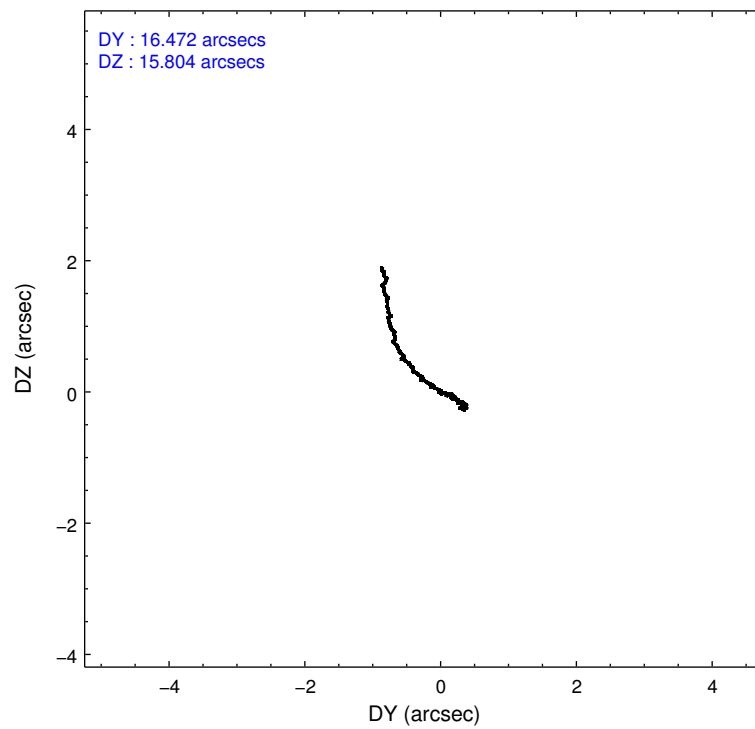
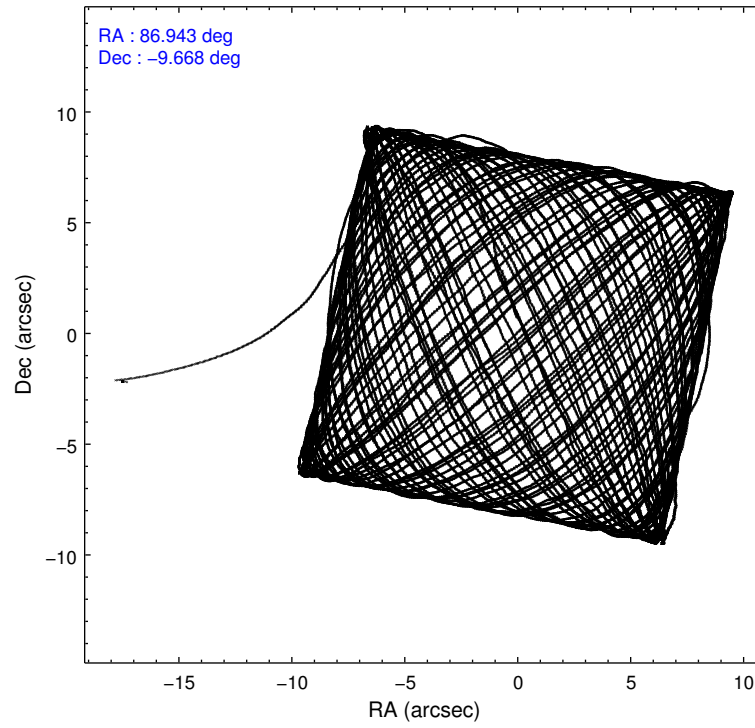
2.1.4 Events

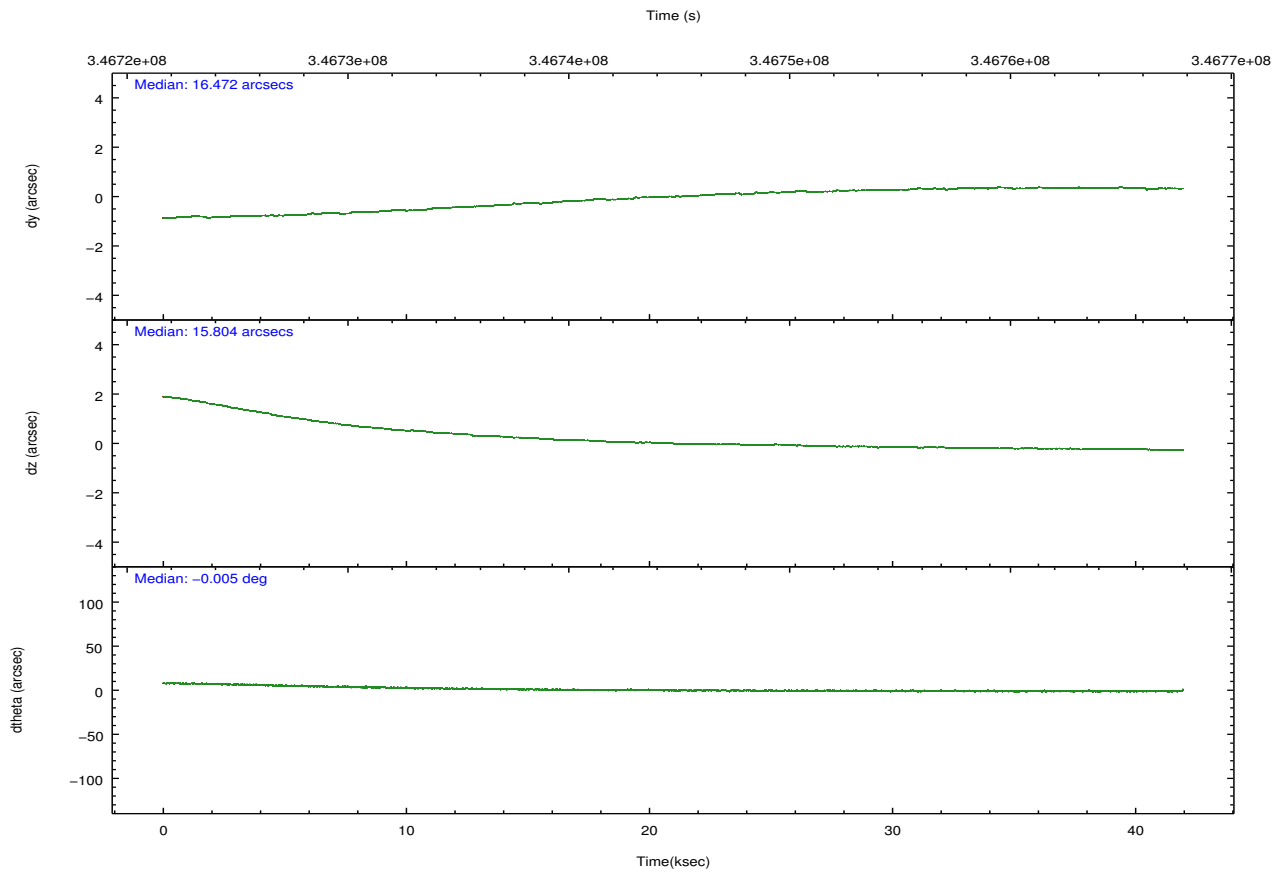
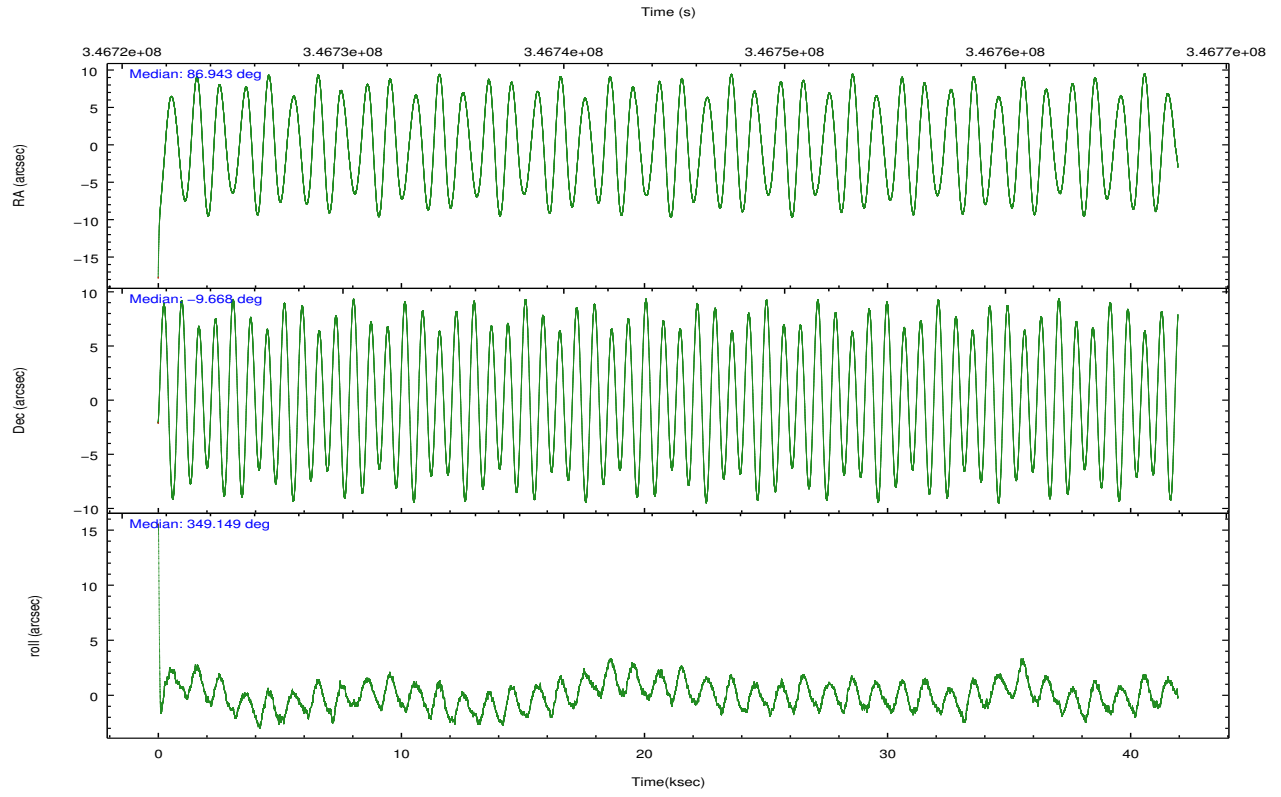
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	478729	682491	429929	600036	555031	433967	grade 0 events	33435	32641	19777	20782	39218	21786
rejected events	415058	367625	378546	353668	428837	378352		6%	4%	4%	3%	7%	5%
rejected %	86%	53%	88%	58%	77%	87%	grade 1 events	585	920	234	623	427	292
								0%	0%	0%	0%	0%	0%
							grade 2 events	11793	100363	11573	51122	29439	13463
								2%	14%	2%	8%	5%	3%
							grade 3 events	5202	10377	4910	20834	12862	5232
								1%	1%	1%	3%	2%	1%
							grade 4 events	5084	10071	4736	20904	12272	5046
								1%	1%	1%	3%	2%	1%
							grade 5 events	20166	47487	20840	56611	28554	22486
								4%	6%	4%	9%	5%	5%
							grade 6 events	8695	163946	10812	134726	33573	10536
								1%	24%	2%	22%	6%	2%
							grade 7 events	393769	316686	357047	294434	398686	355126
								82%	46%	83%	49%	71%	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	86.917276	86.94334744903537	CCD I2 on	N	N
[deg] Pointing Dec	-9.677320	-9.667994751235039	CCD I3 on	N	N
[deg] Pointing Roll	348.996387	349.1574045057184	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	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	346723889.184000	346722665.3013	CCD S5 on	O2	Y
Observation start date	2008-12-27T00:10:24	2008-12-26T23:51:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	346765689.184000	346766671.11597	On-chip summing requested	N	N
Observation end date	2008-12-27T11:47:04	2008-12-27T12:04:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



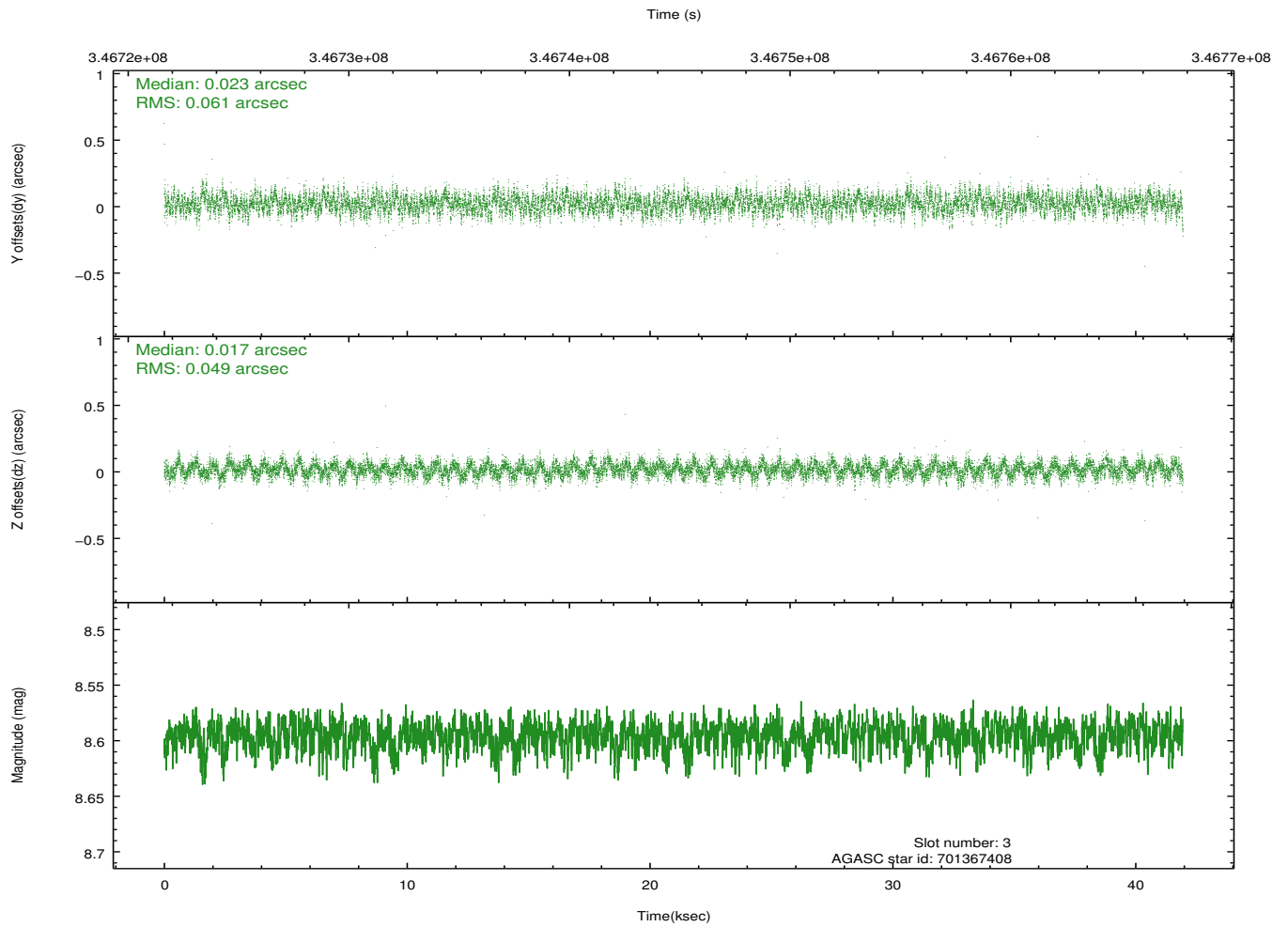
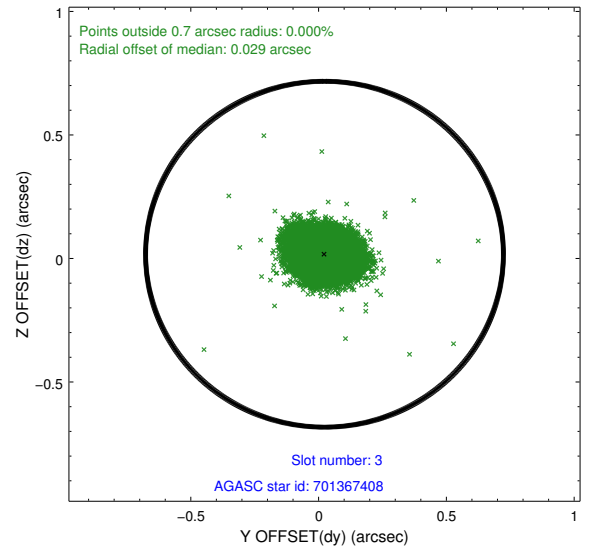
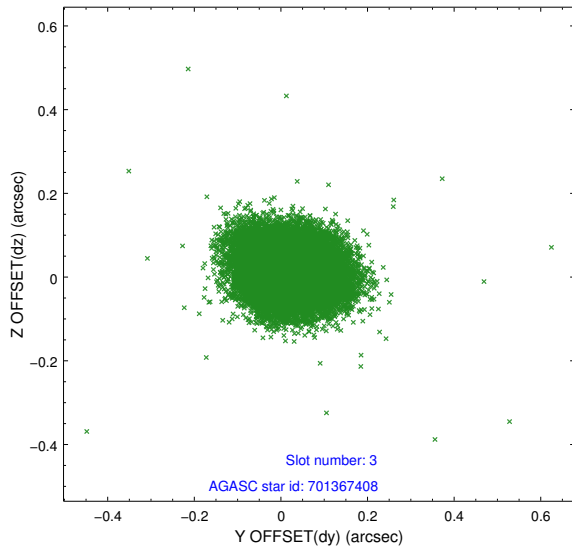


Slot Statistics

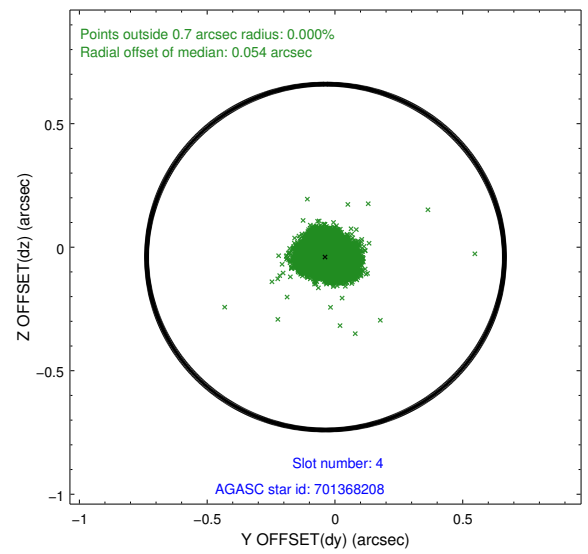
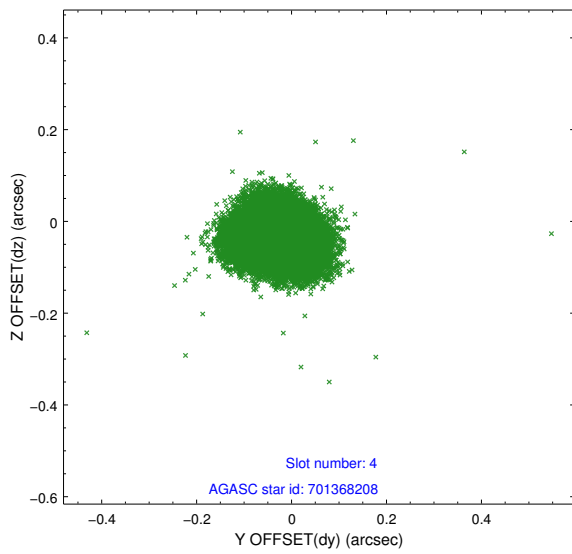
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.92	10232	-0.087	-0.008	0.013	0.040	0.000000	0.000000	-769.44	-1737.48
1	FID	ACIS-S-4	7.01	10231	0.166	0.045	0.010	0.016	0.000000	0.000000	2144.07	171.06
2	FID	ACIS-S-5	7.04	10231	-0.109	-0.027	0.013	0.043	0.000000	0.000000	-1822.31	164.66
3	GUIDE	701367408	8.60	20447	0.023	0.017	0.083	0.133	87.317763	-10.299239	1821.13	-1927.27
4	GUIDE	701368208	7.42	20458	-0.037	-0.040	0.066	0.106	86.739759	-9.838895	-506.38	-691.58
5	GUIDE	701369896	8.97	20436	-0.066	0.110	0.088	0.138	87.316713	-9.377889	1187.26	1328.44
6	GUIDE	701371368	8.50	20454	-0.021	-0.007	0.083	0.130	87.172717	-10.269772	1295.85	-1920.59
7	GUIDE	701369032	8.62	20453	0.102	-0.081	0.083	0.133	87.612873	-9.684453	2429.00	443.72

2.4 Star Slots

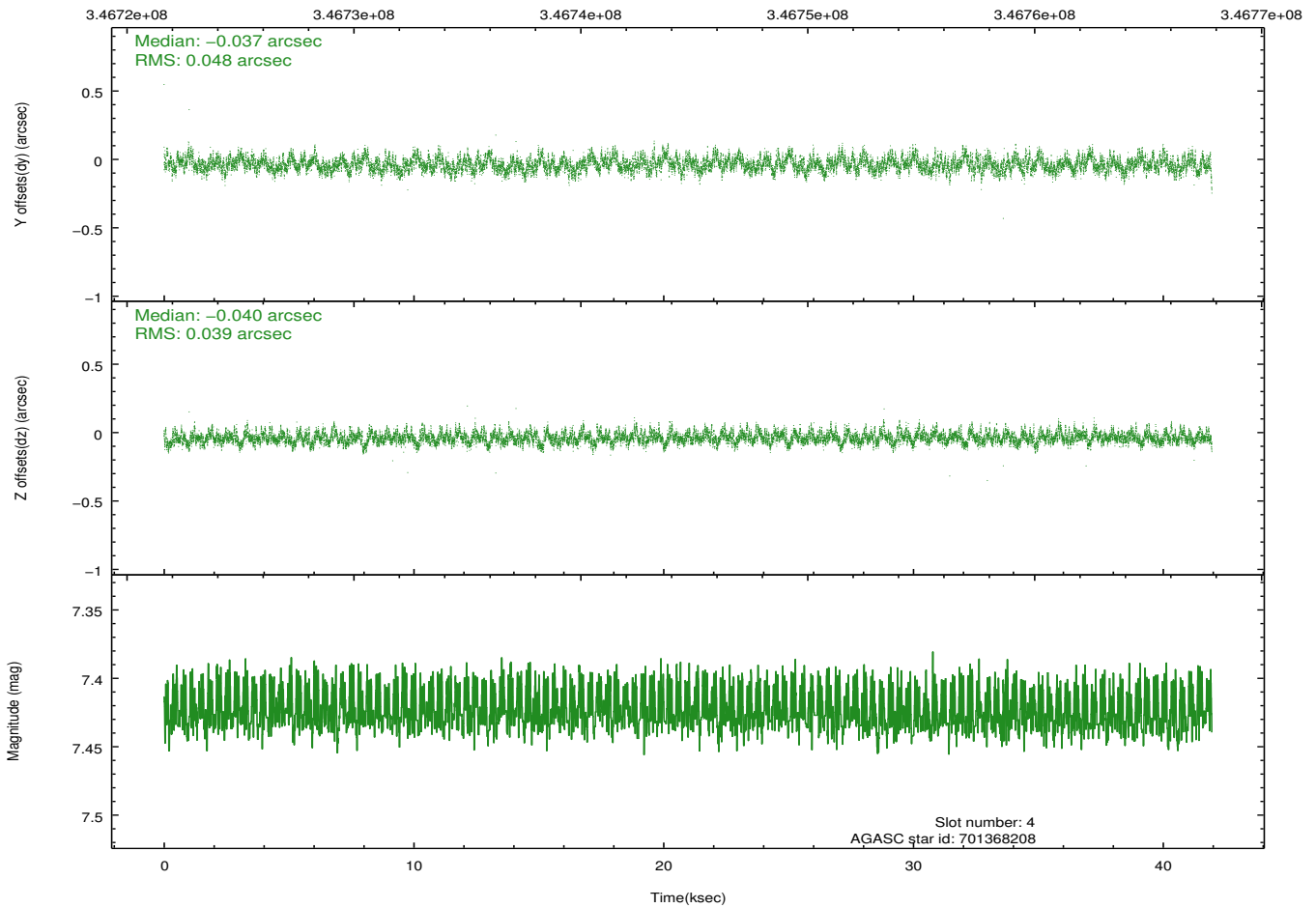
2.4.1 Slot 3



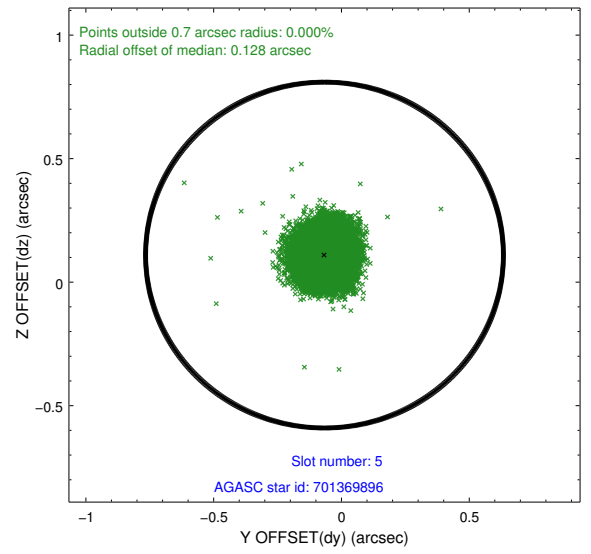
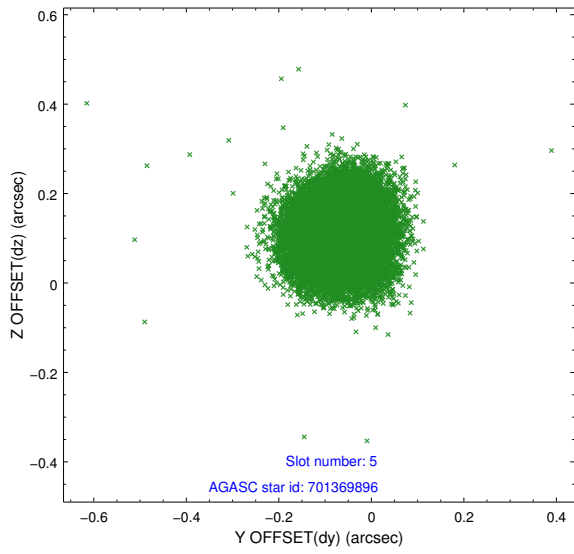
2.4.2 Slot 4



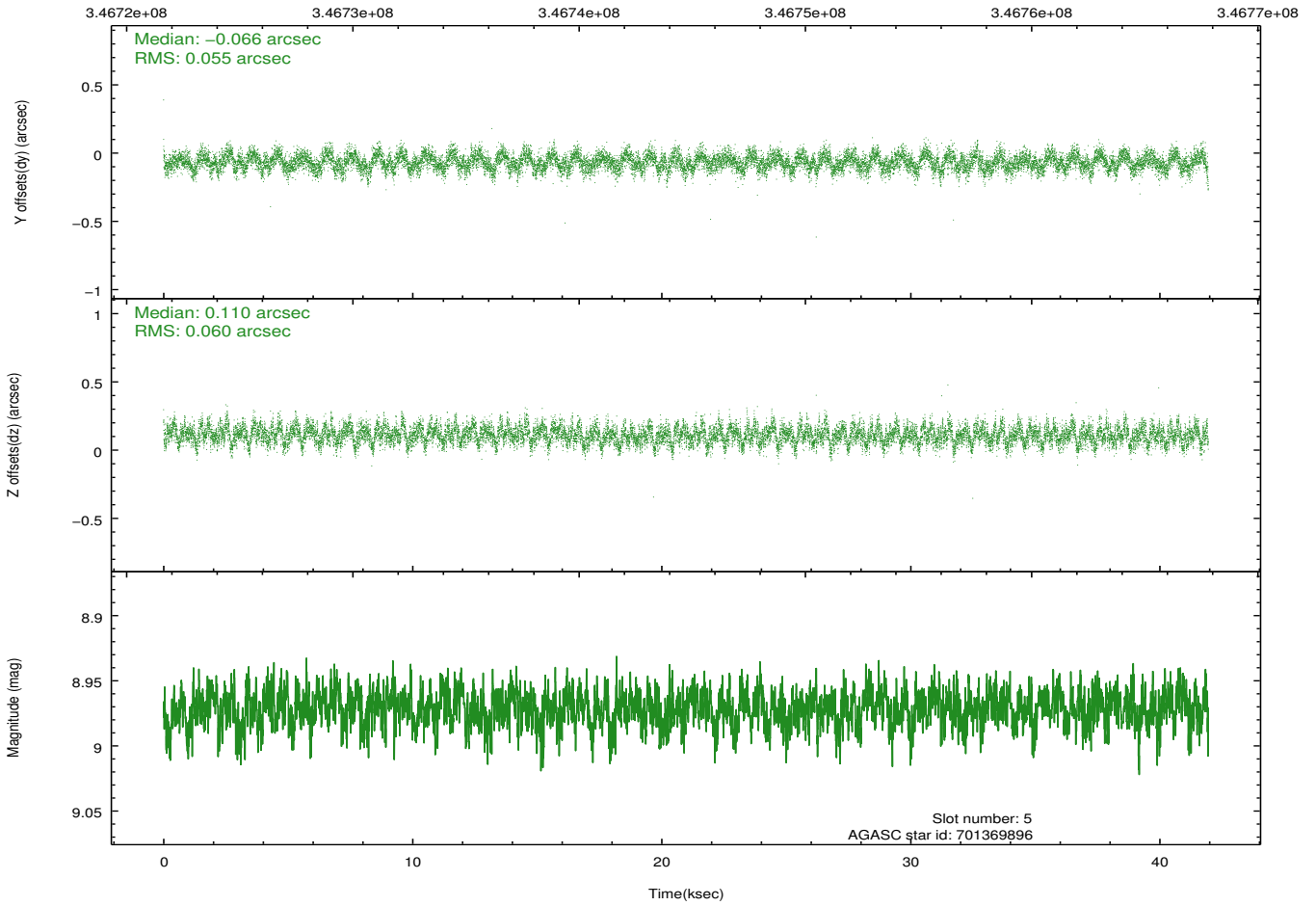
Time (s)



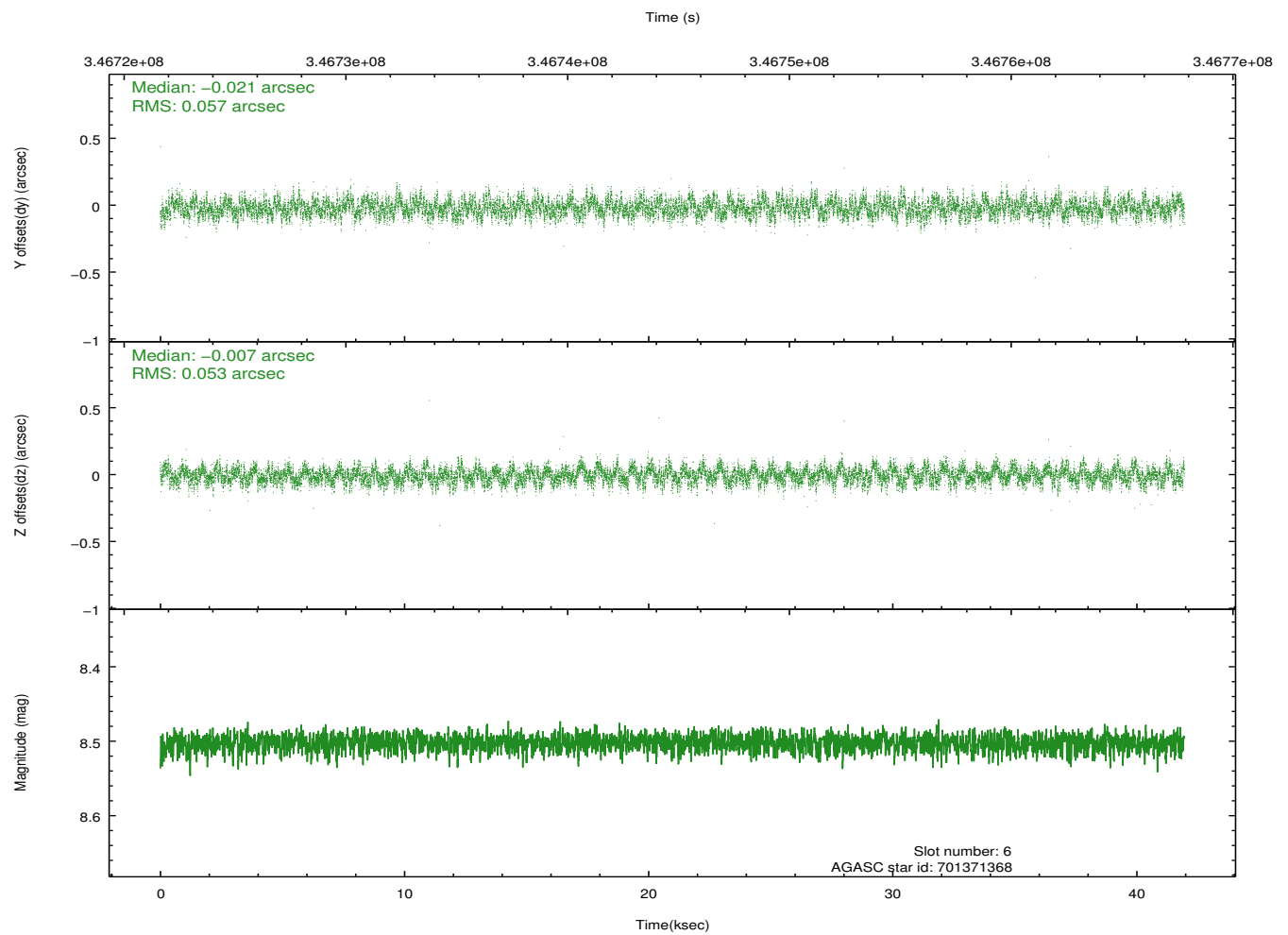
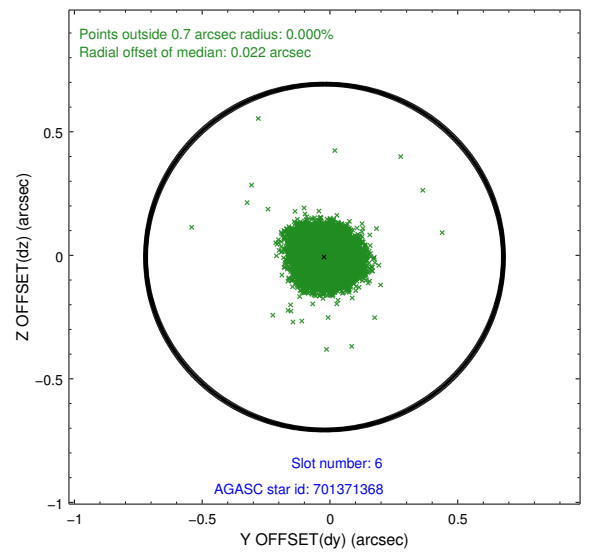
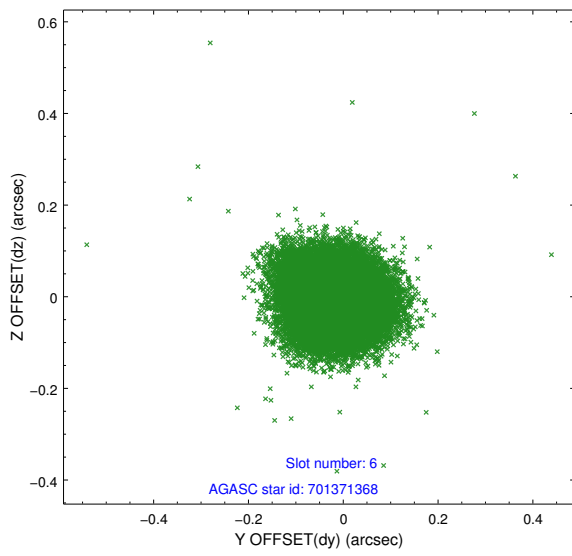
2.4.3 Slot 5



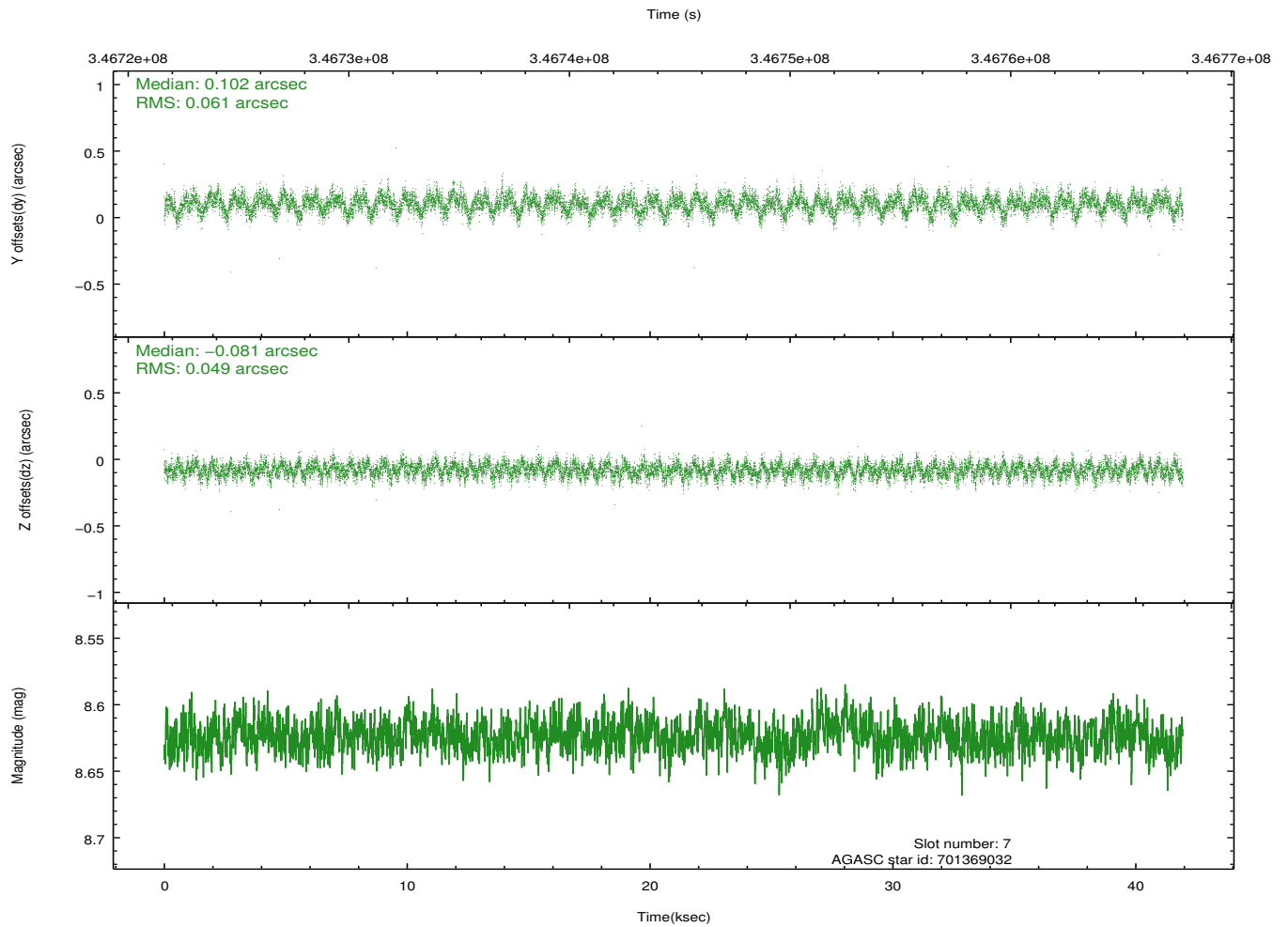
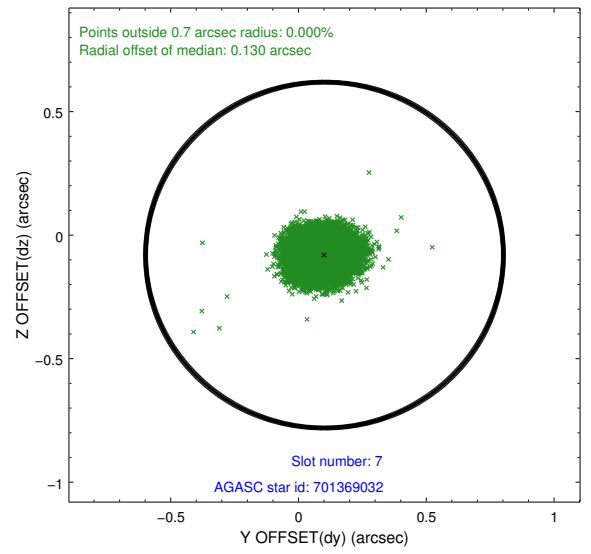
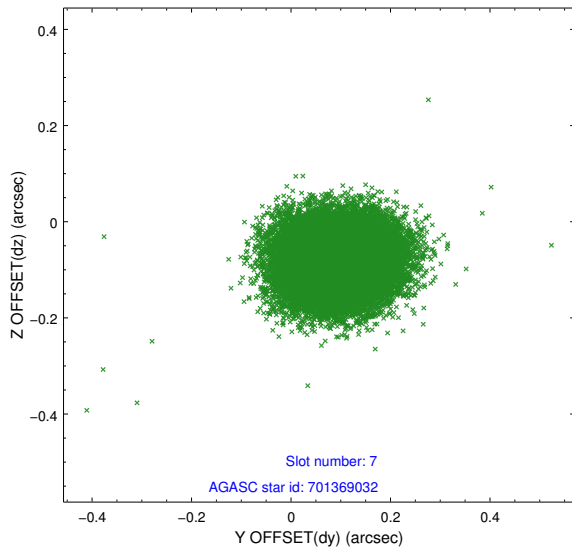
Time (s)



2.4.4 Slot 6

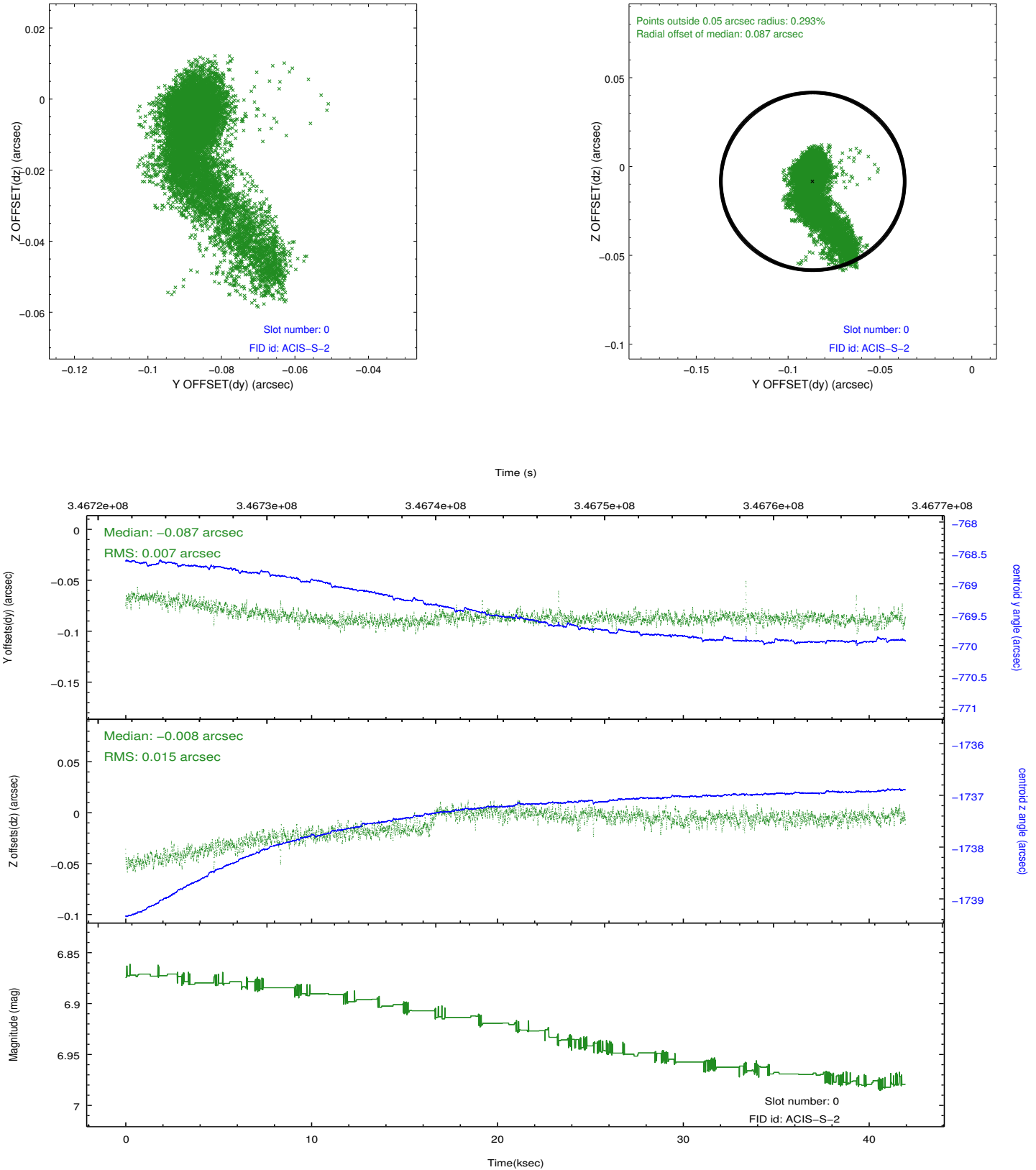


2.4.5 Slot 7

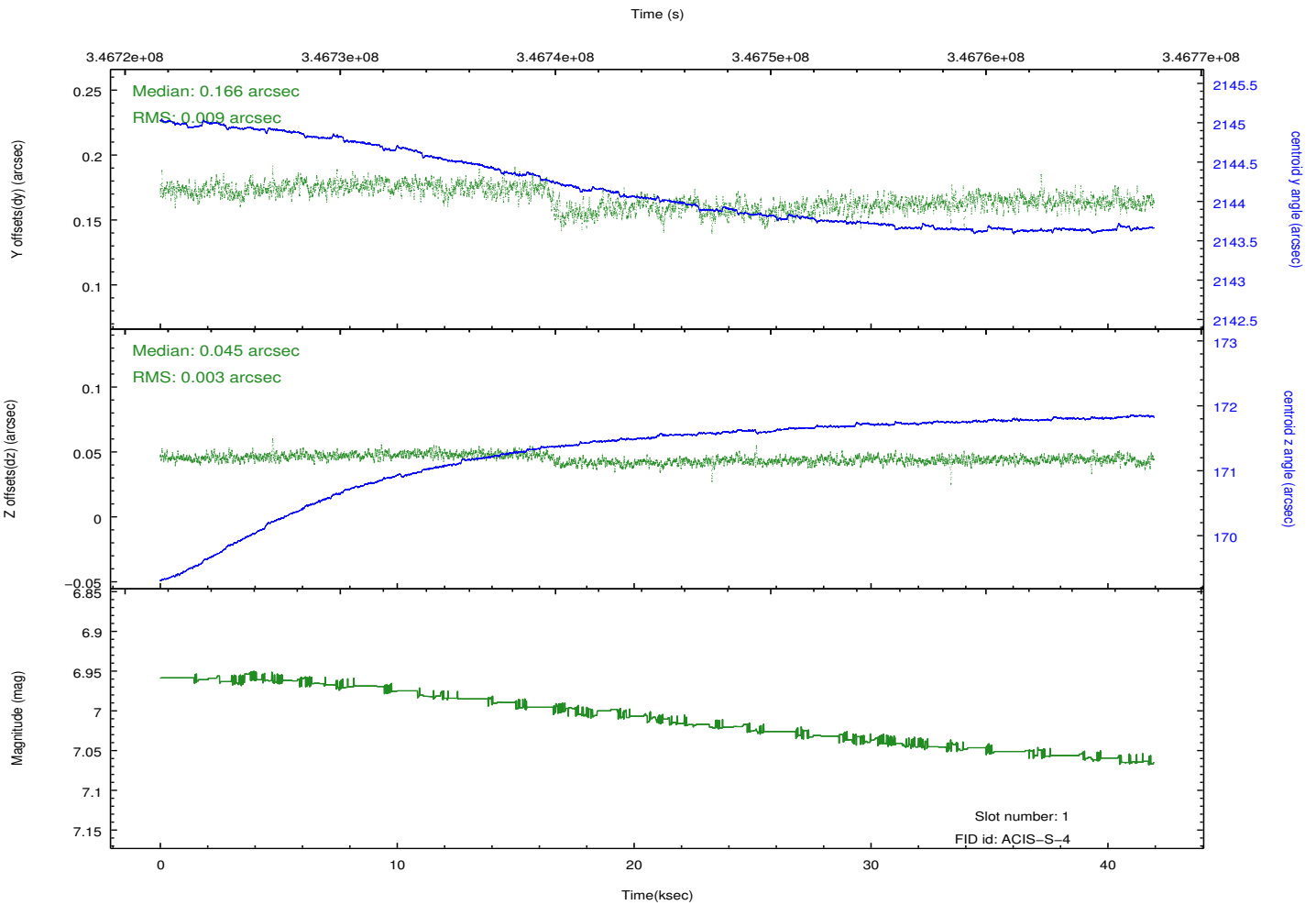
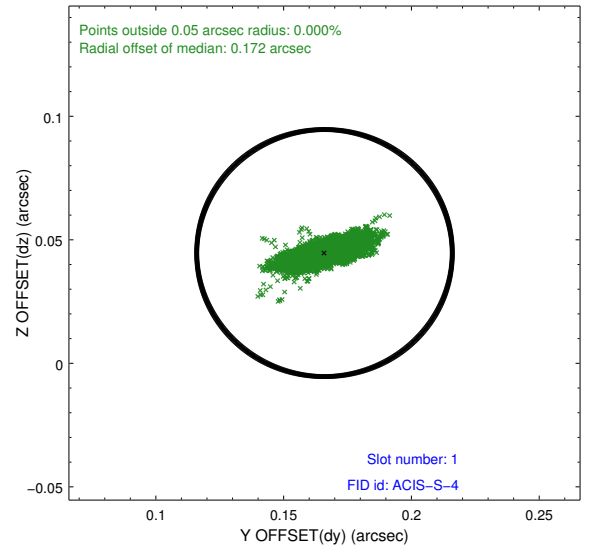
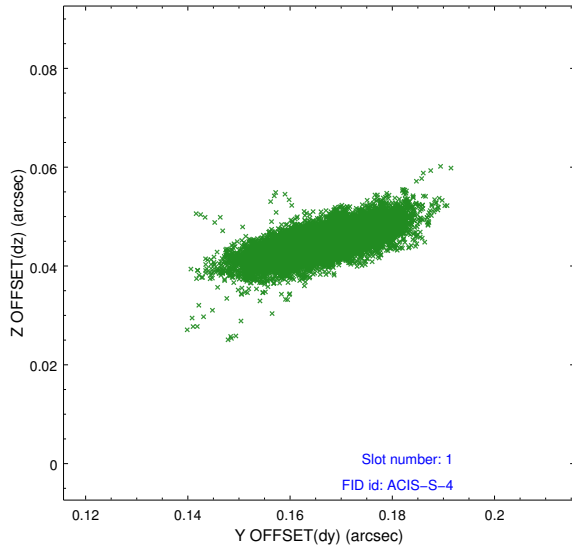


2.5 FID Slots

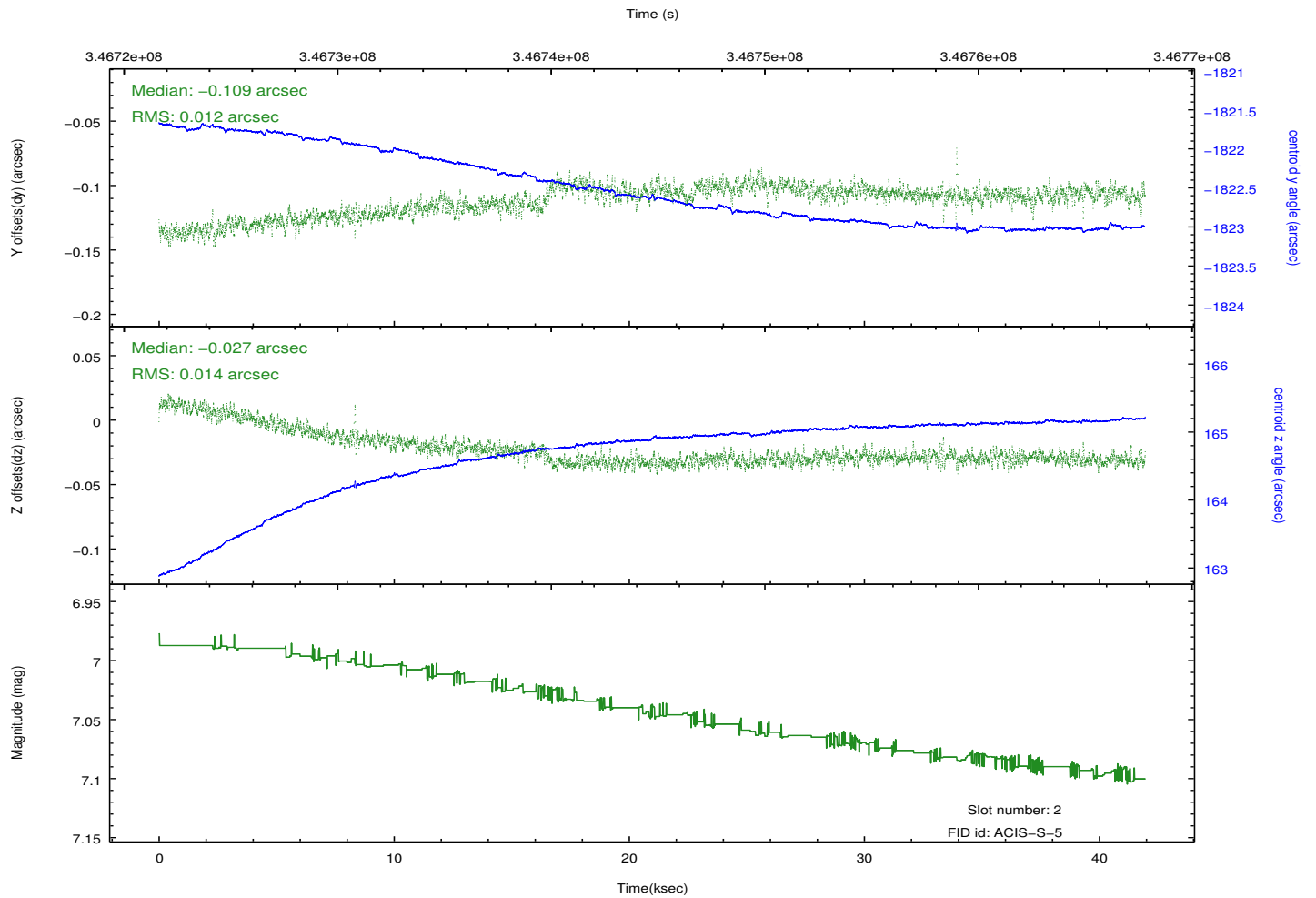
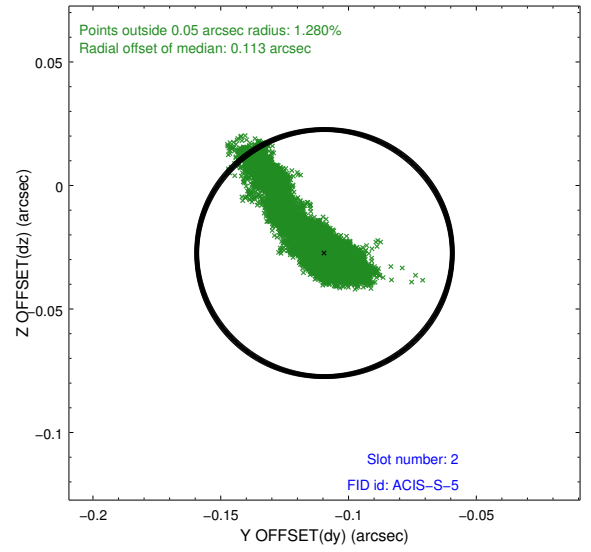
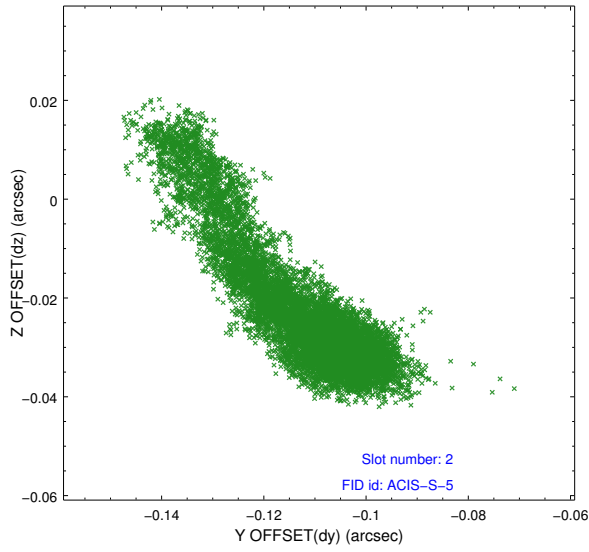
2.5.1 Slot 0



2.5.2 Slot 1

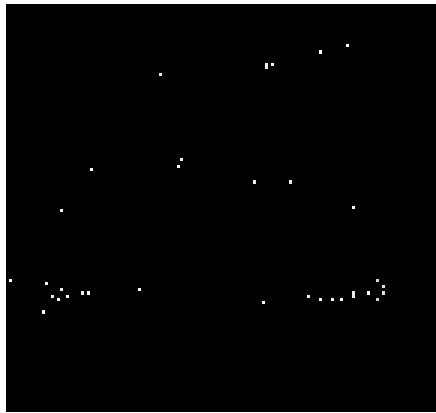


2.5.3 Slot 2

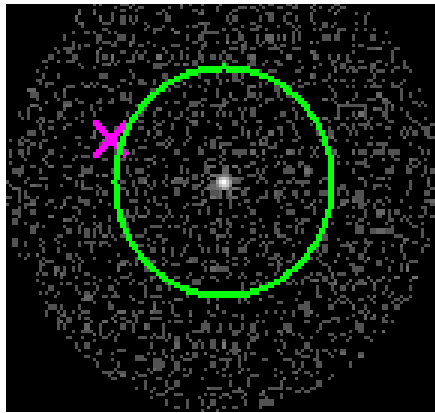


3 Gratings

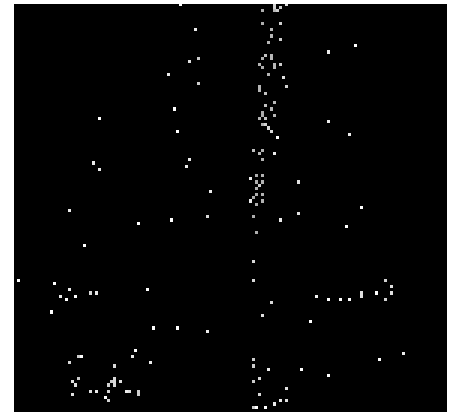
3.1 HEG Arm



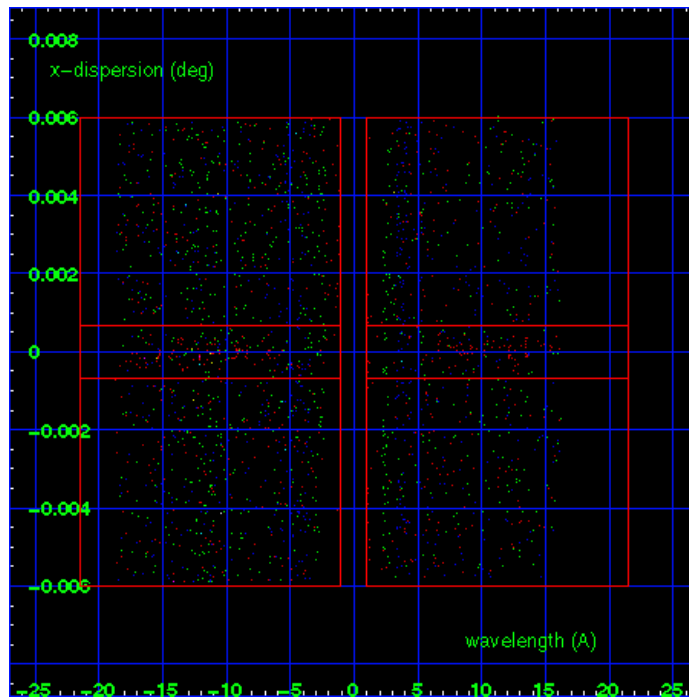
HEG Order Sort 123



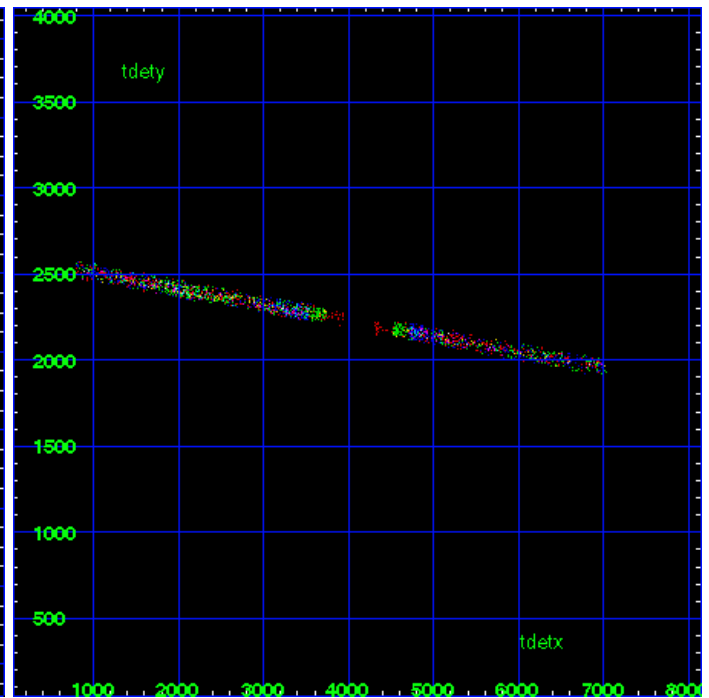
HEG Zero Order



HEG Order Sort ALL

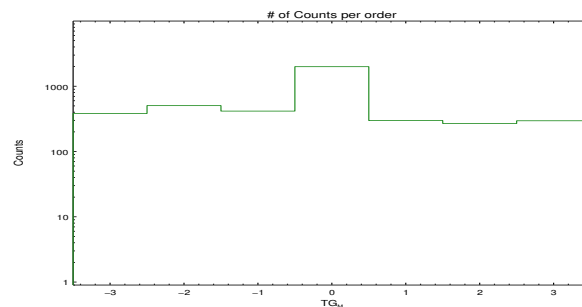


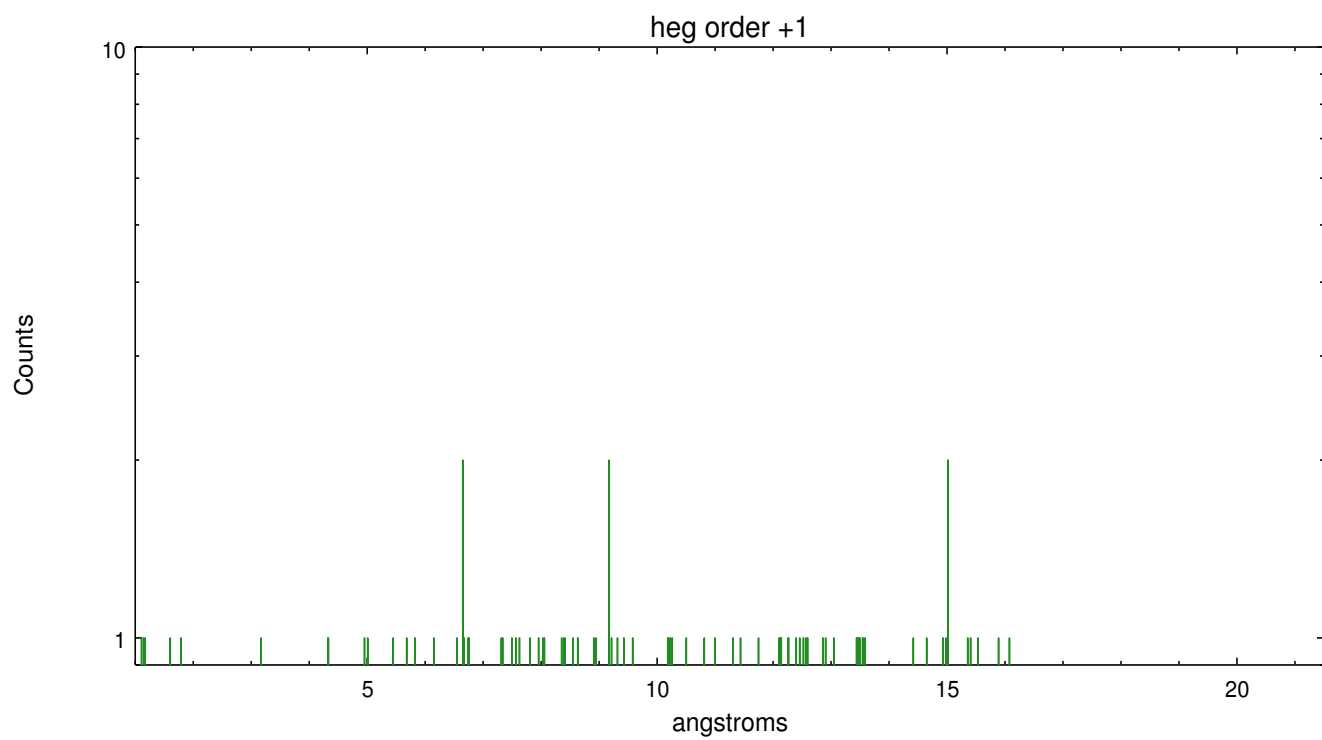
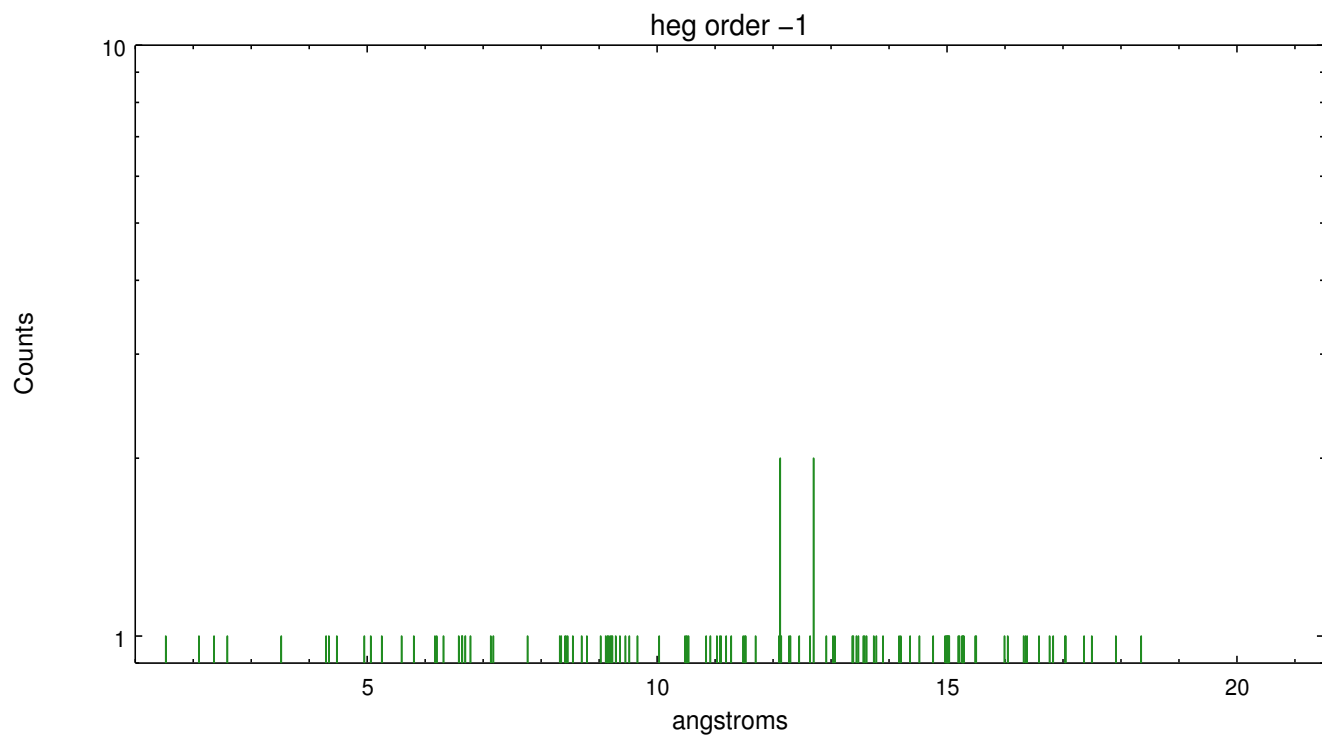
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	383	505	416	1995	298	269	296

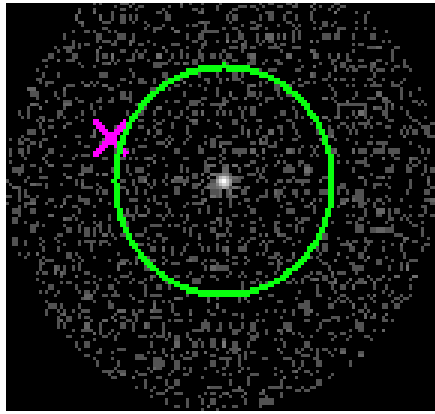




3.2 MEG Arm



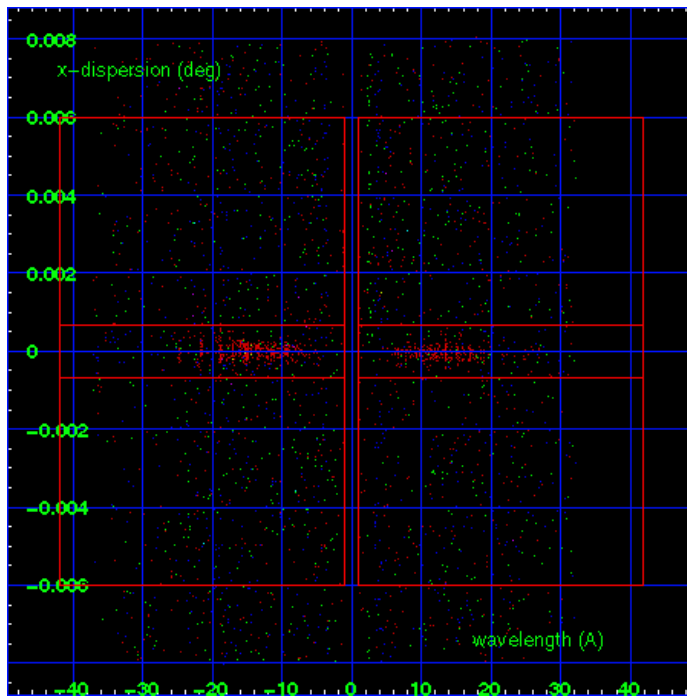
MEG Order Sort 123



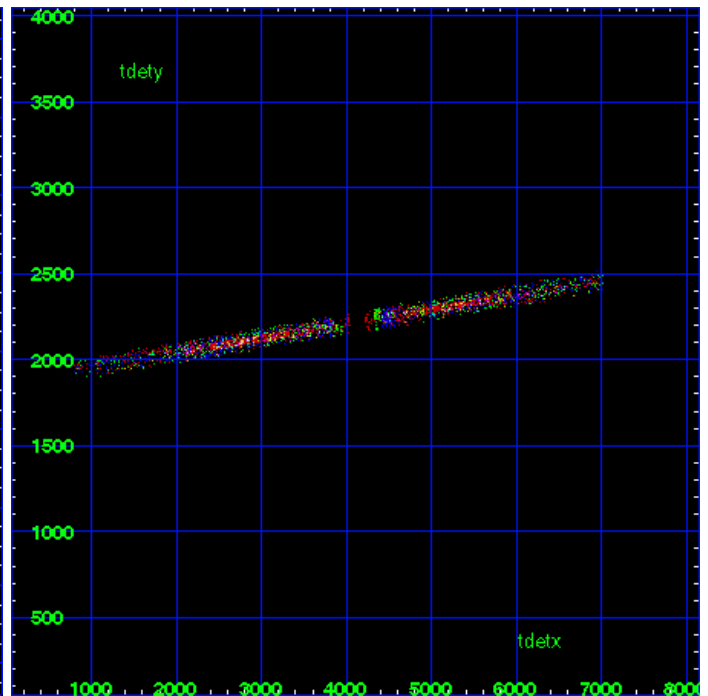
MEG Zero Order



MEG Order Sort ALL

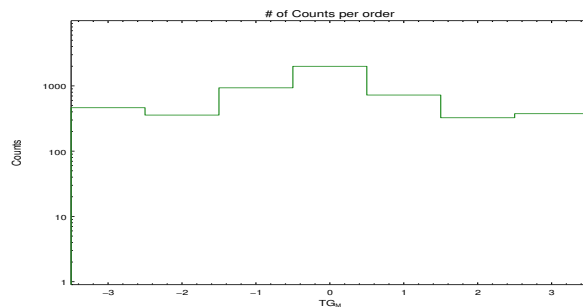


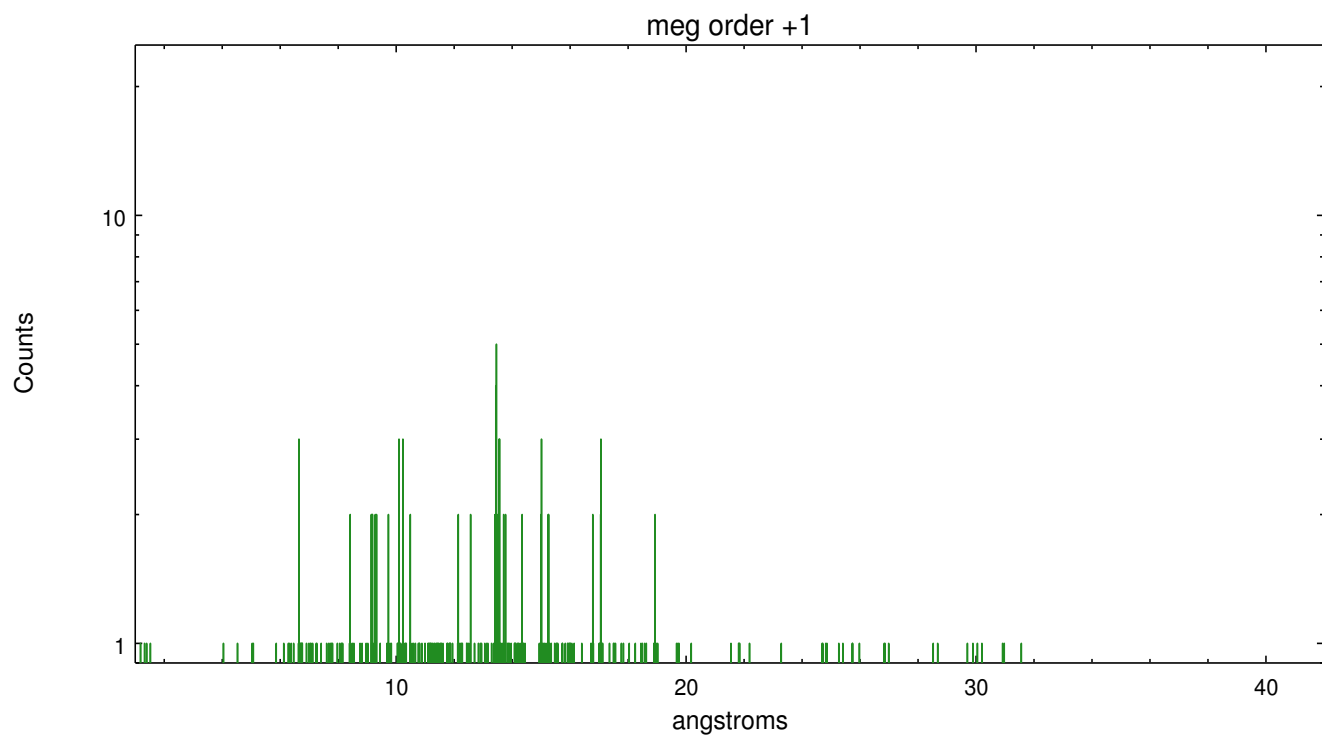
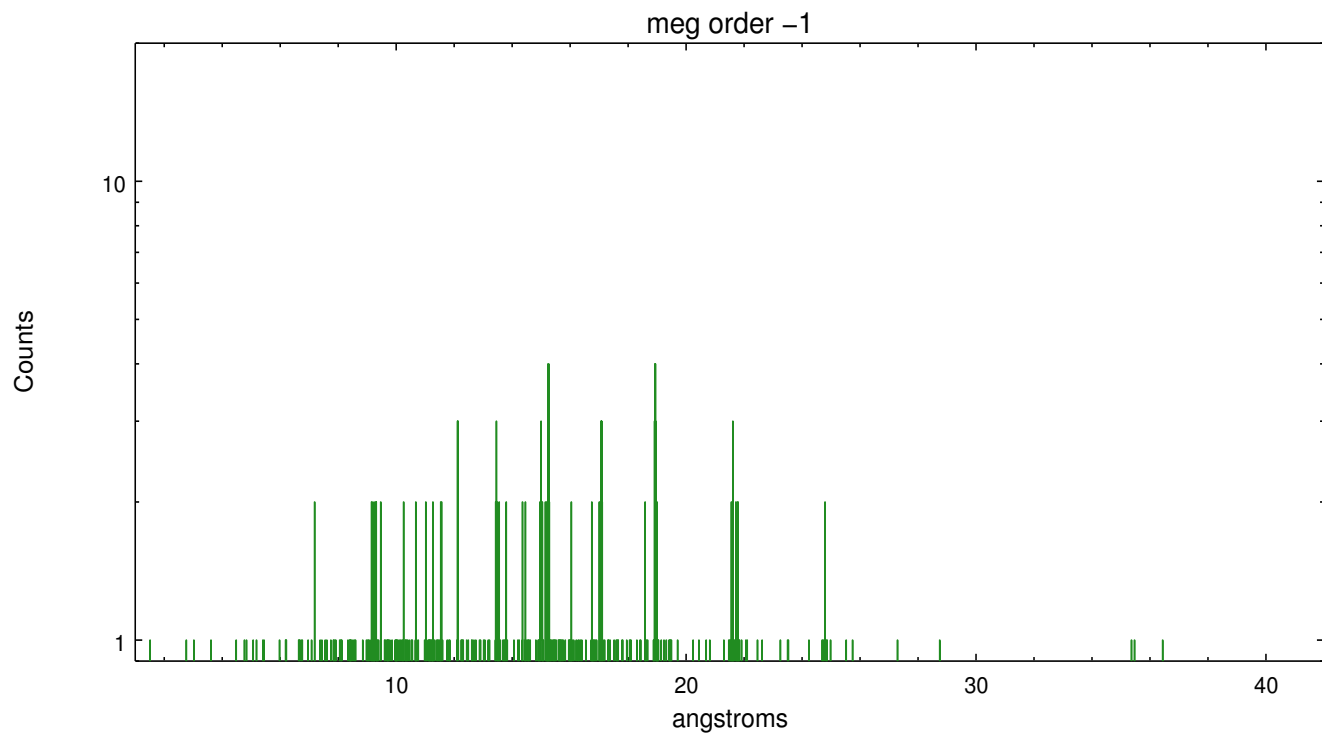
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	463	357	934	1995	724	325	375





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	41.9423998

A.2 Comments