

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9945 - L2 Version 2
Chandra X-Ray Center

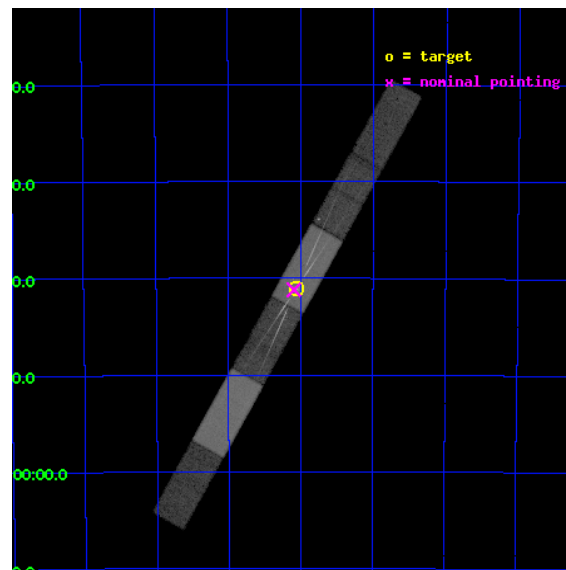
L2 Processing Date : Jun 4 2012

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1 Front

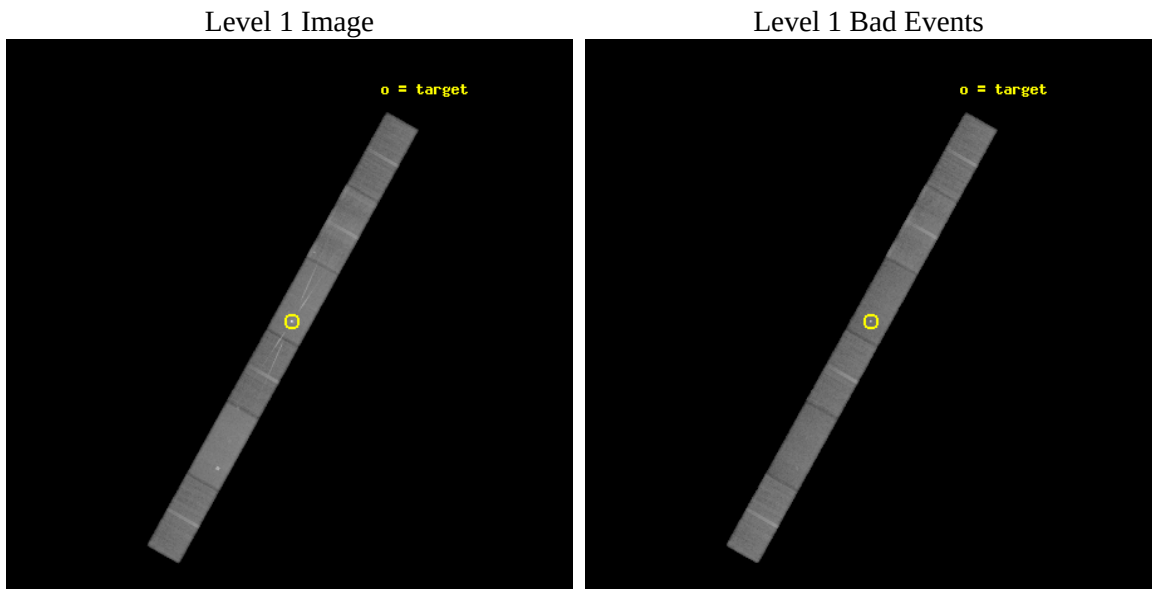
seq_num	200558	Sequence number
obs_id	9945	Observation id
title	Testing Shock Dynamics in Eta Carinae with HETGS After the 2009 Periastron Passage	Proposal title
observer	Dr Michael Corcoran	Principal investigator
object	Eta Car, Post-Minimum	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.265	Observer's specified target RA [deg]
dec_targ	-59.684528	Observer's specified target Dec [deg]
ra_nom	161.27335814822	Nominal RA [deg]
dec_nom	-59.686884360544	Nominal Dec [deg]
roll_nom	299.16384723353	Nominal Roll [deg]
revision	2	Processing version of data
ontime	32131.313752532	Sum of GTIs [s]
livetime	31275.612981362	Livetime [s]
ontime4	32129.813762367	Sum of GTIs [s]
ontime5	32131.272712529	Sum of GTIs [s]
ontime6	32129.690632463	Sum of GTIs [s]
ontime7	32131.313752532	Sum of GTIs [s]
ontime8	32131.190632522	Sum of GTIs [s]
ontime9	32131.149592519	Sum of GTIs [s]
l2events	313646	Number of level 2 events



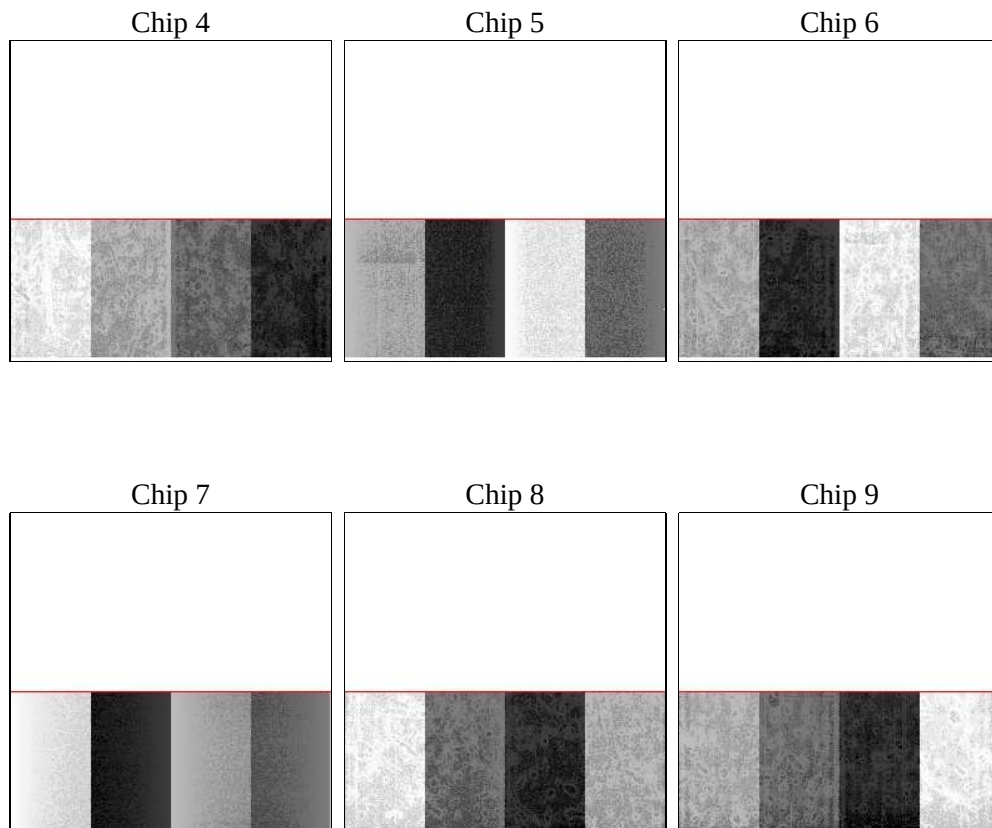
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32045.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	32131.313752532	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	32129.813762367	Sum of GTIs [s]
date	2012-06-04T16:13:03	Date and time of file creation	ontime5	32131.272712529	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	32129.690632463	Sum of GTIs [s]
			ontime7	32131.313752532	Sum of GTIs [s]
			ontime8	32131.190632522	Sum of GTIs [s]
			ontime9	32131.149592519	Sum of GTIs [s]
			l1events	1178121	Number of level 1 events

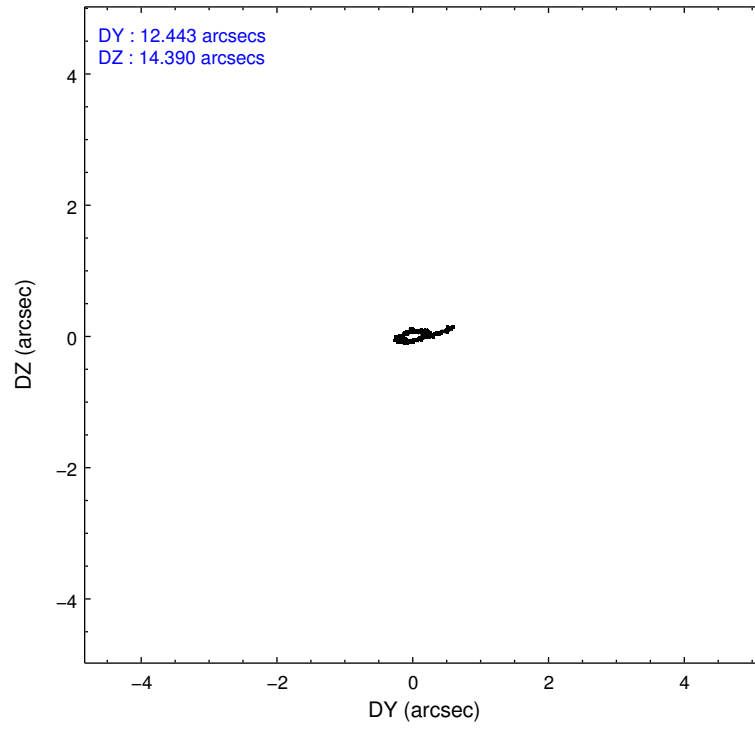
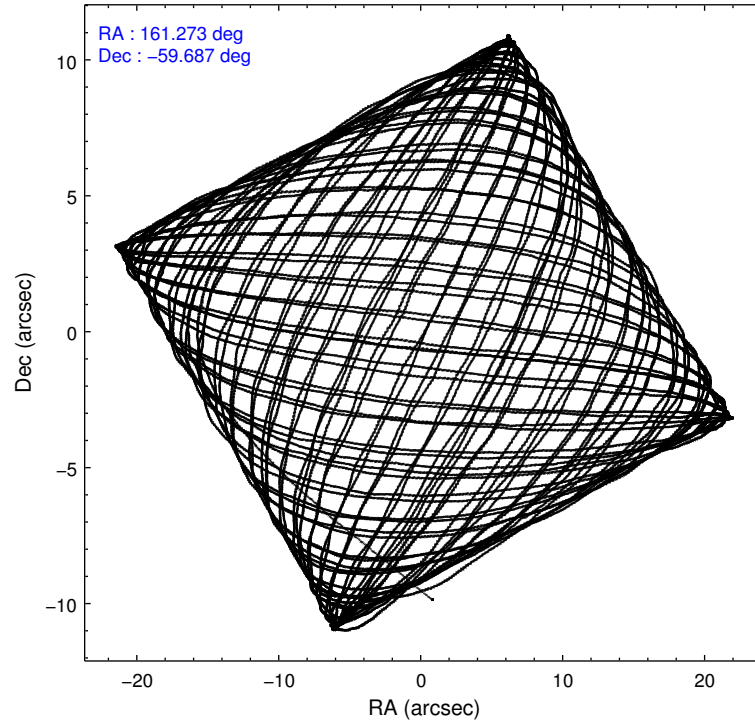
2.1.4 Events

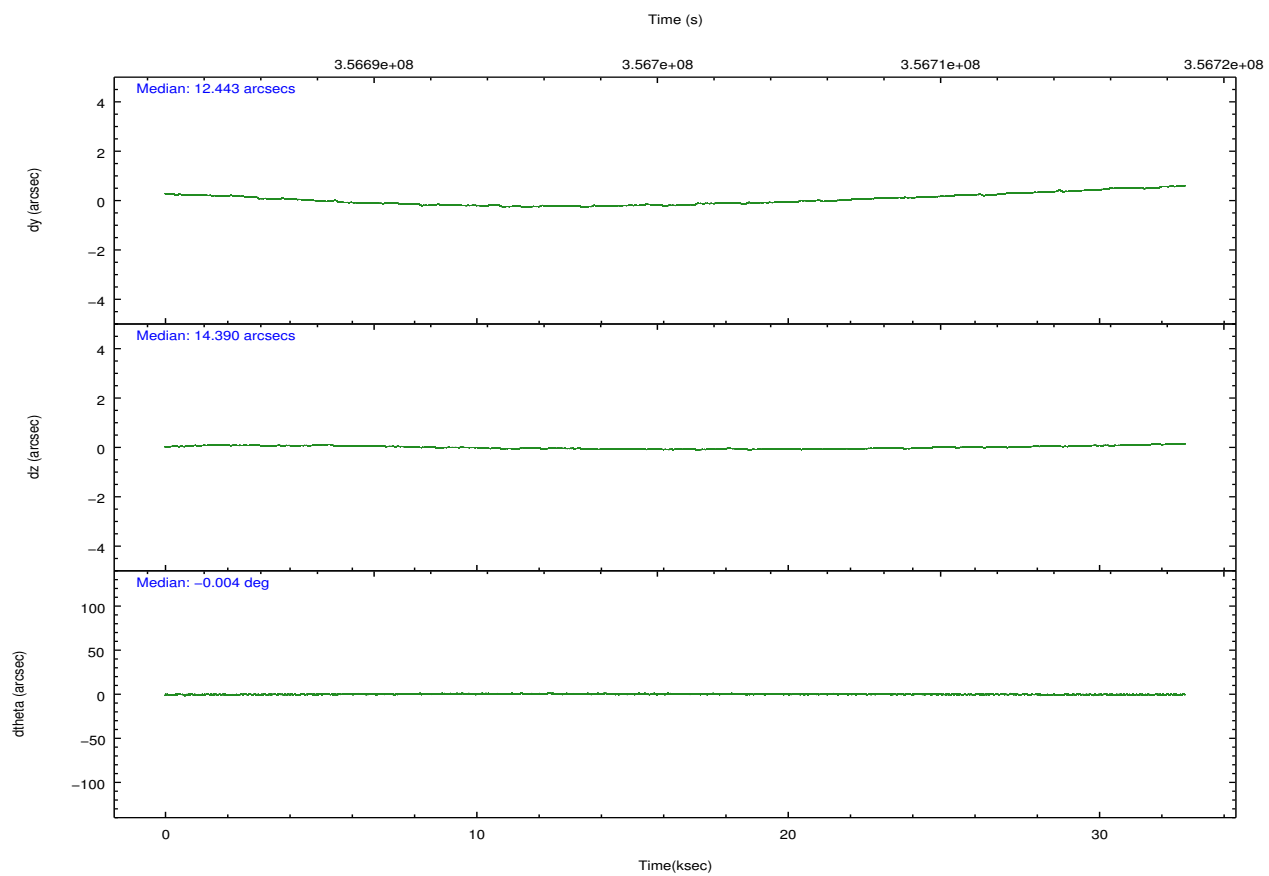
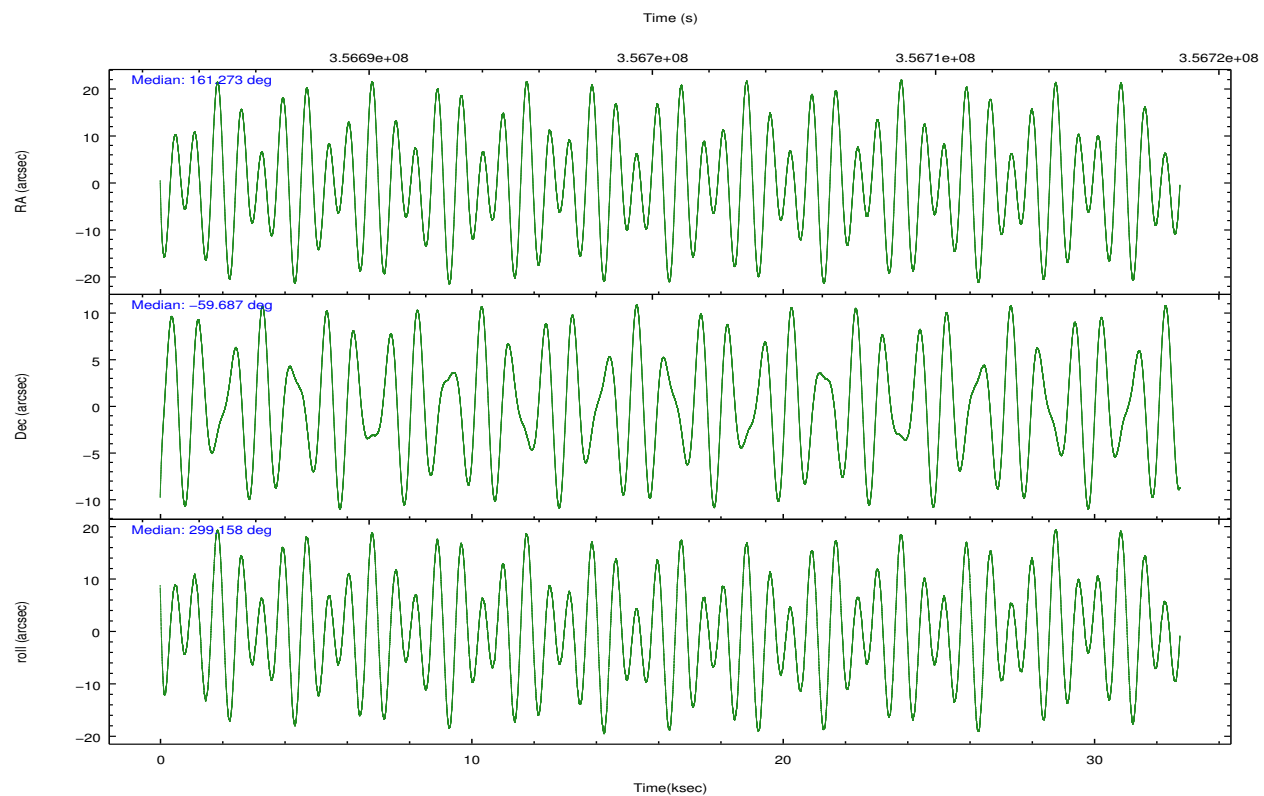
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	172042	238155	167655	244781	207072	148416	grade 0 events	9373	14027	16950	14052	17792	9013
rejected events	150103	123711	134684	123294	154443	127258		5%	5%	10%	5%	8%	6%
rejected %	87%	51%	80%	50%	74%	85%	grade 1 events	119	626	114	522	136	79
								0%	0%	0%	0%	0%	0%
							grade 2 events	4710	32164	5761	25744	11122	3925
								2%	13%	3%	10%	5%	2%
							grade 3 events	2317	6168	2812	11679	5442	2264
								1%	2%	1%	4%	2%	1%
							grade 4 events	2183	6121	2761	11470	5005	2216
								1%	2%	1%	4%	2%	1%
							grade 5 events	6582	18202	7037	20671	9070	7130
								3%	7%	4%	8%	4%	4%
							grade 6 events	3356	55969	4688	58546	13269	3740
								1%	23%	2%	23%	6%	2%
							grade 7 events	143402	104878	127532	102097	145236	120049
								83%	44%	76%	41%	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	161.226515	161.2733581482214	CCD I2 on	N	N
[deg] Pointing Dec	-59.673196	-59.68688436054417	CCD I3 on	N	N
[deg] Pointing Roll	298.966787	299.1638472335272	CCD S0 on	O1	Y
[s] Window start time (MET)	356572866.184000	356572866.184000	CCD S1 on	Y	Y
[s] Window stop time (MET)	357436866.184000	357436866.184000	CCD S2 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S3 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S4 on	Y	Y
[mm] SIM translation stage pos	-183.332523	-183.3212429520412	CCD S5 on	O2	Y
[mm] SIM translation stage offset	-6.8	-6.811279630966652	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	356684953.184000	356683595.29549	On-chip summing requested	N	N
Observation start date	2009-04-21T07:08:07	2009-04-21T06:46:35	Subarray requested	CUSTOM	CUSTOM
[s] Observation end time (MET)	356716998.184000	356717890.7722	Subarray start row	15	15
Observation end date	2009-04-21T16:02:12	2009-04-21T16:18:10	Subarray row count	440	440
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.5

2.3 Aspect



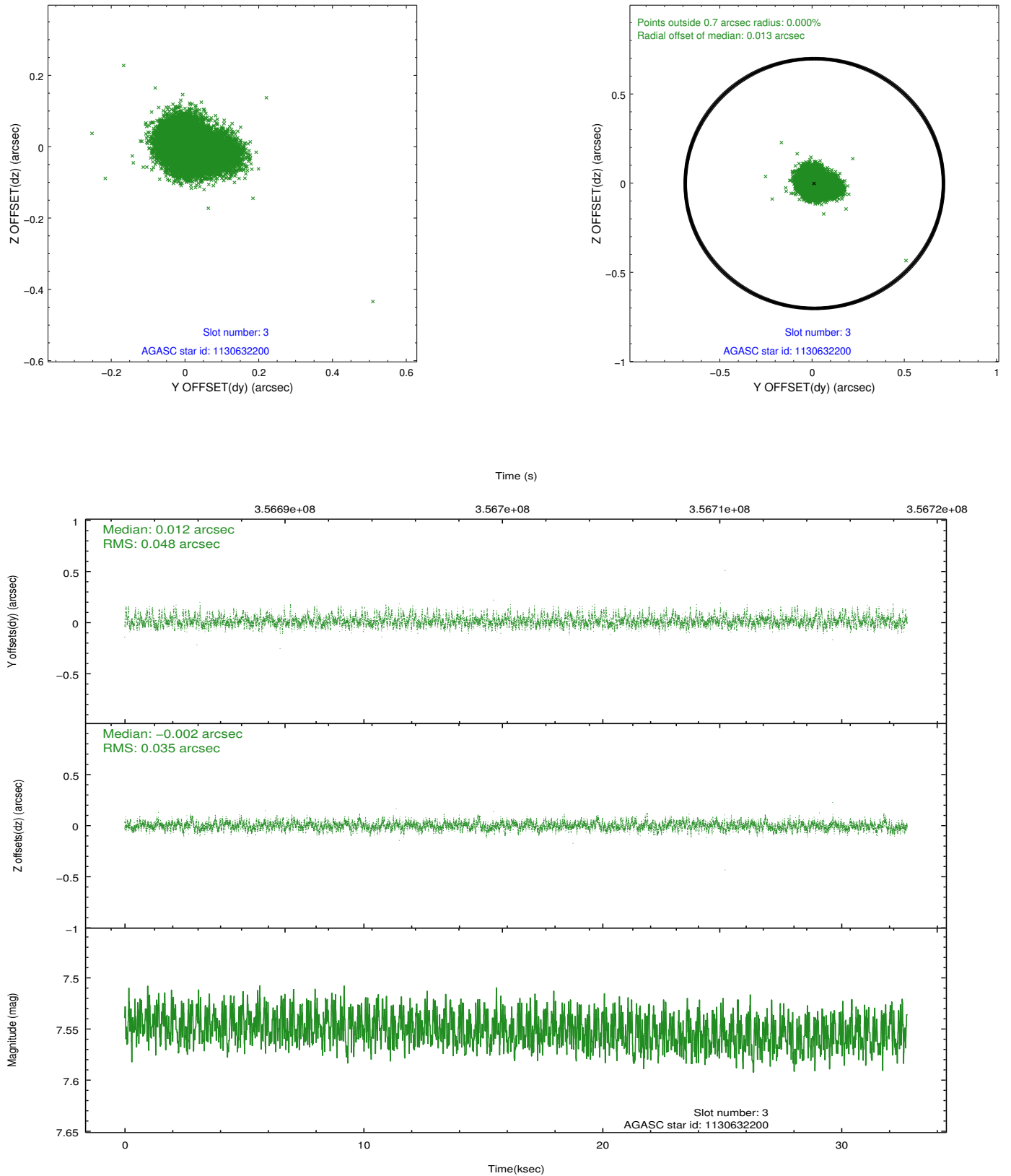


Slot Statistics

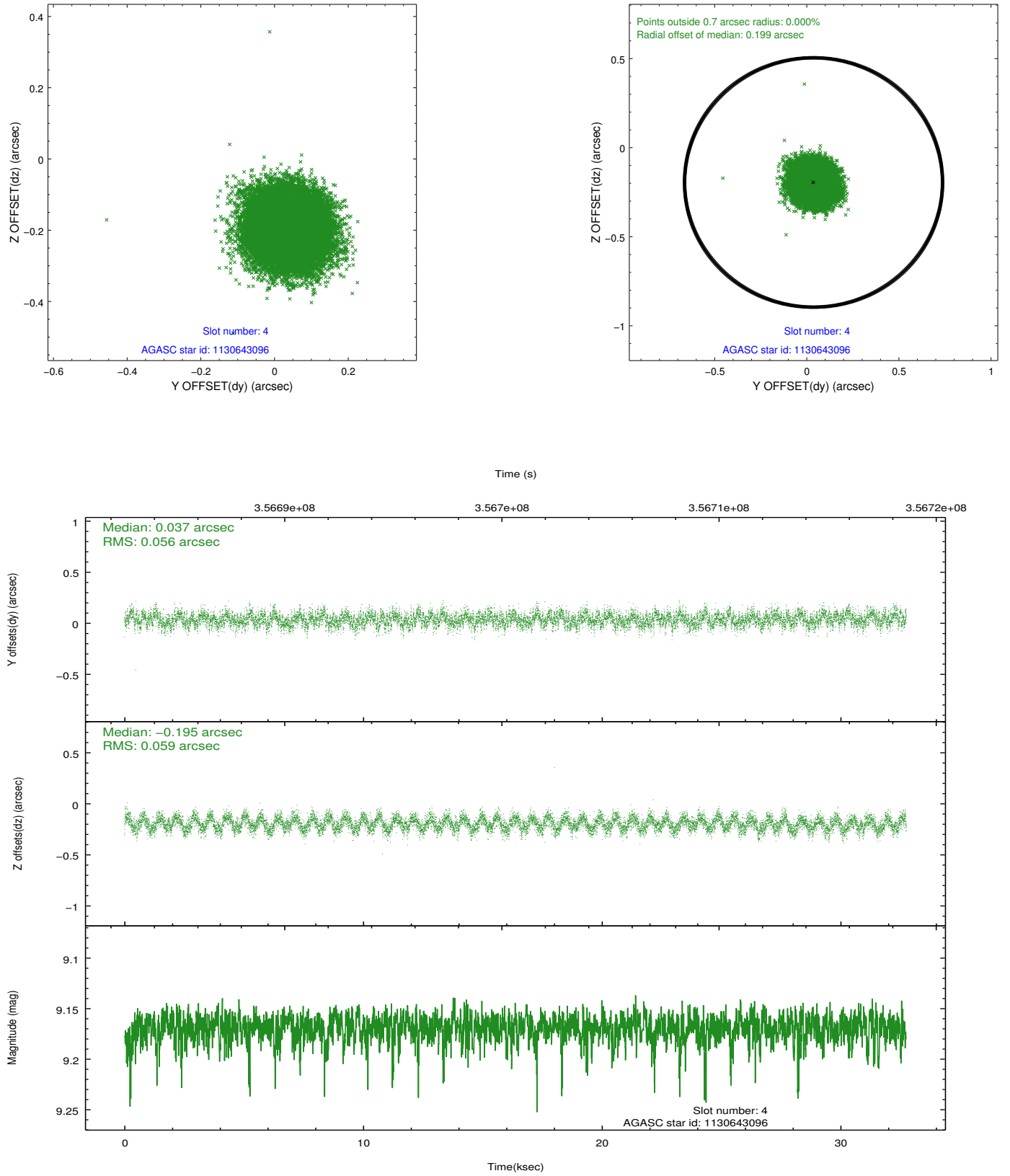
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	7988	-0.092	-0.072	0.010	0.019	0.000000	0.000000	-764.99	-1876.19
1	FID	ACIS-S-4	6.97	7989	0.173	0.064	0.010	0.022	0.000000	0.000000	2148.52	32.35
2	FID	ACIS-S-5	7.02	7989	-0.112	0.016	0.008	0.017	0.000000	0.000000	-1817.79	26.02
3	GUIDE	1130632200	7.55	15976	0.012	-0.002	0.062	0.105	161.433843	-59.407820	-651.17	794.81
4	GUIDE	1130643096	9.17	15957	0.037	-0.195	0.088	0.137	161.501095	-59.121086	-1492.25	1405.83
5	GUIDE	1130647960	8.62	15969	0.101	0.139	0.067	0.109	160.287471	-59.247776	-2166.05	-776.36
6	GUIDE	1130640672	8.26	15970	-0.050	0.009	0.075	0.122	162.096044	-59.540805	360.50	1614.21
7	GUIDE	1174012960	7.16	15974	-0.104	0.048	0.056	0.094	160.855674	-60.332270	1757.81	-1727.71

2.4 Star Slots

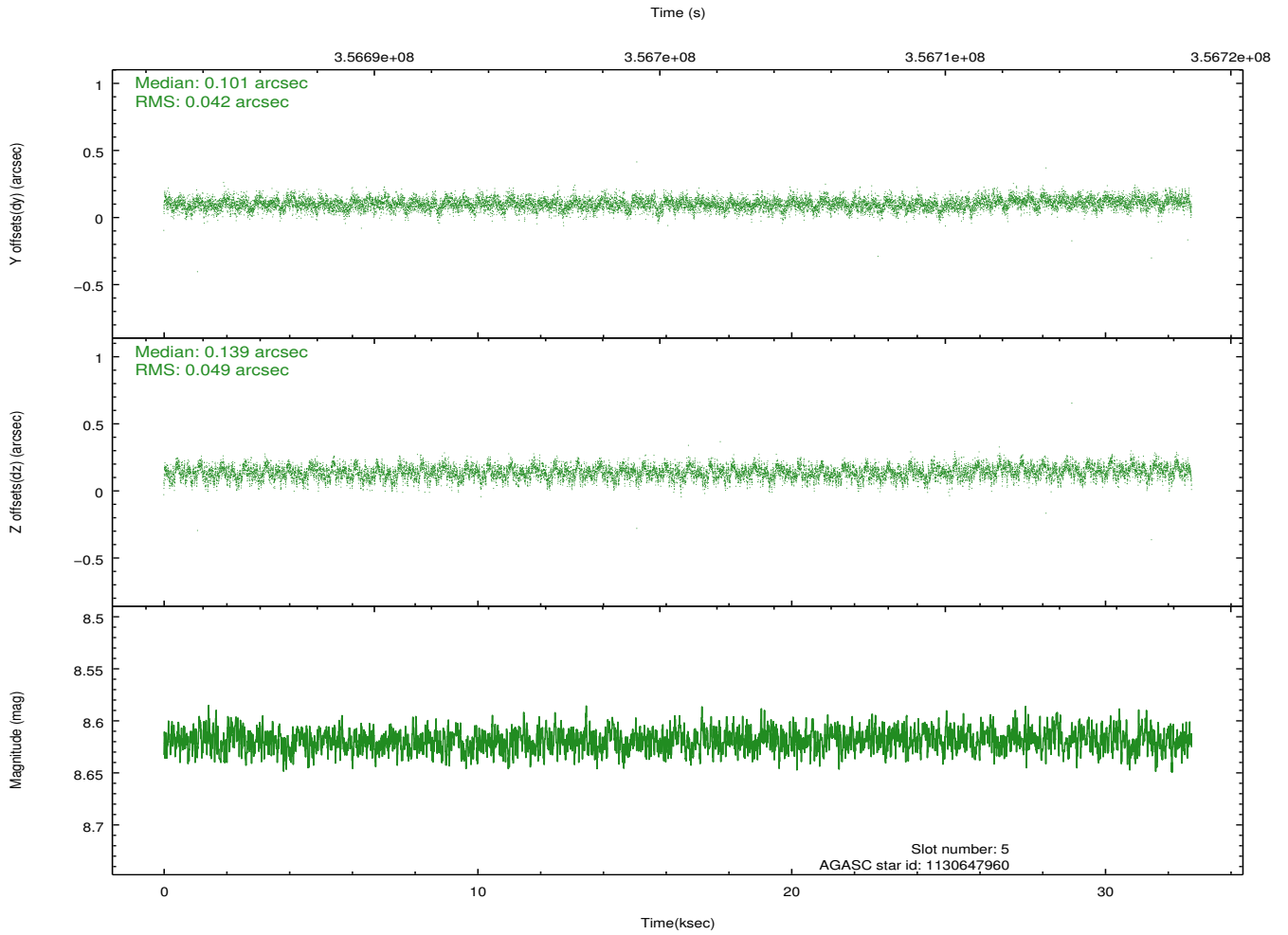
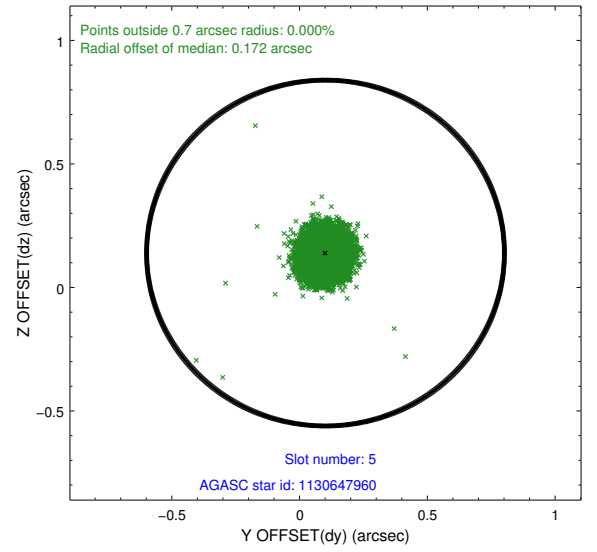
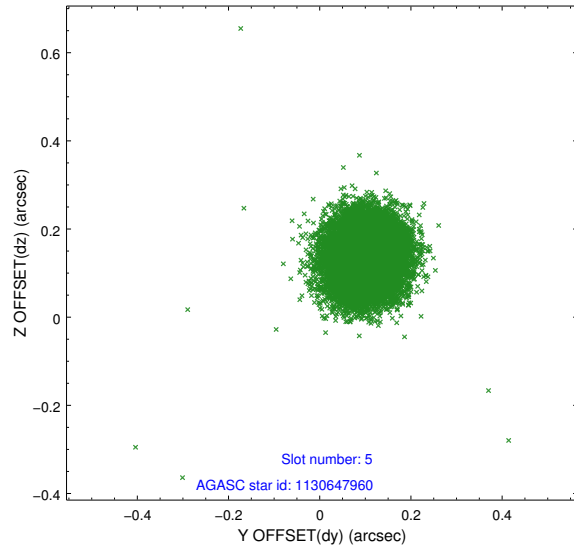
2.4.1 Slot 3



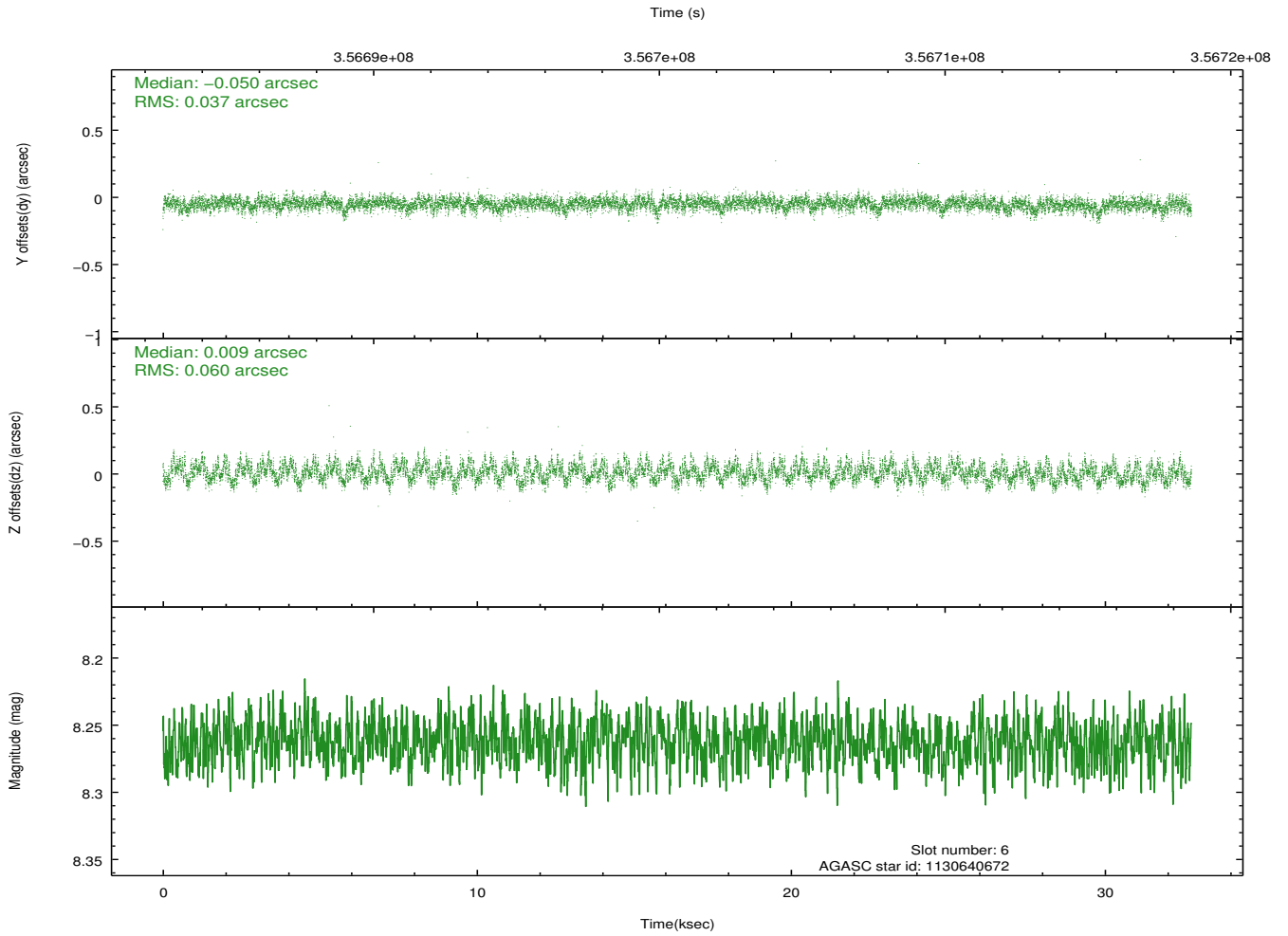
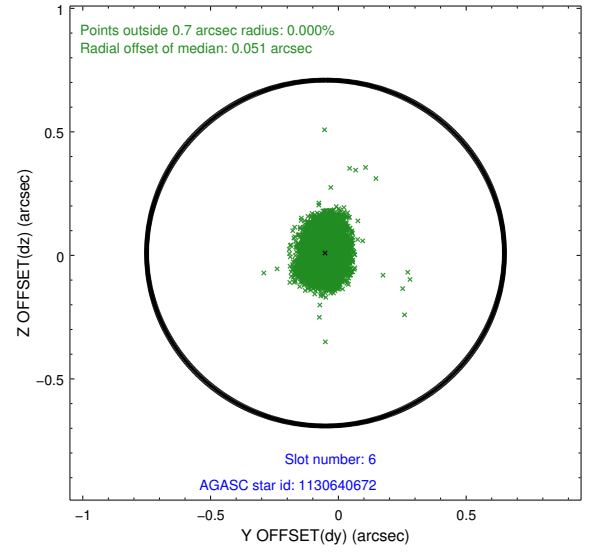
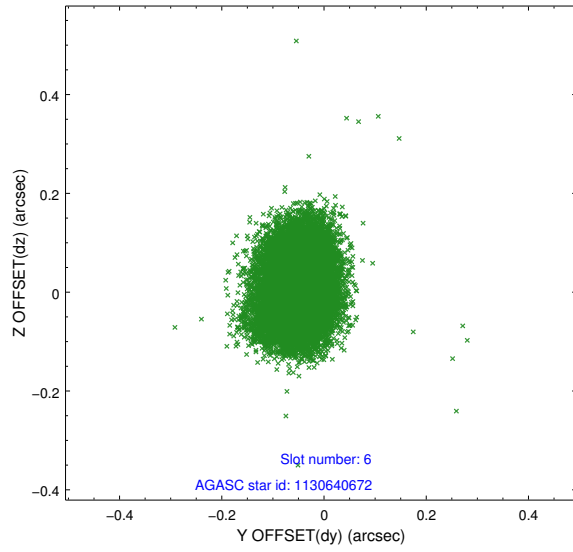
2.4.2 Slot 4



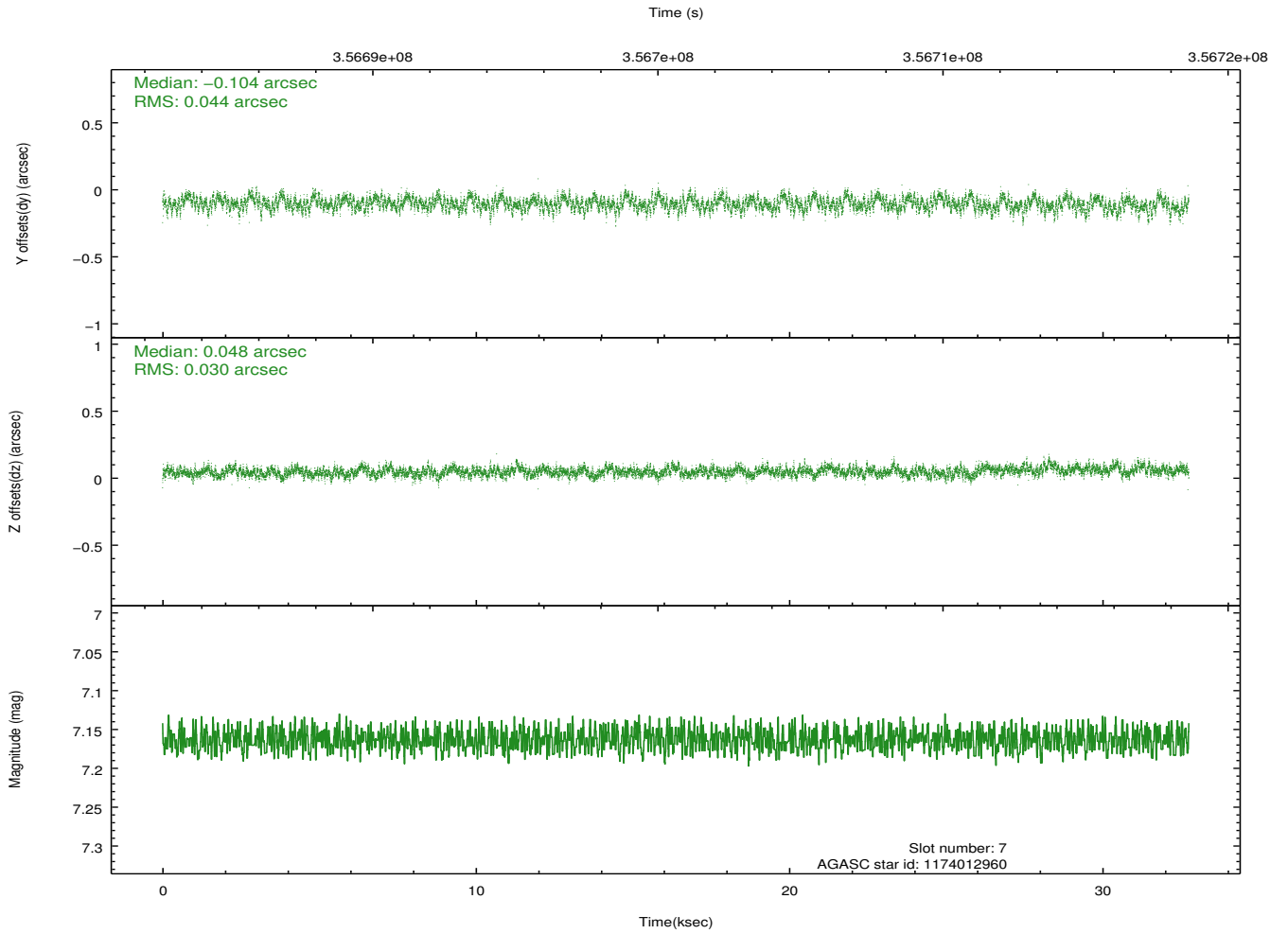
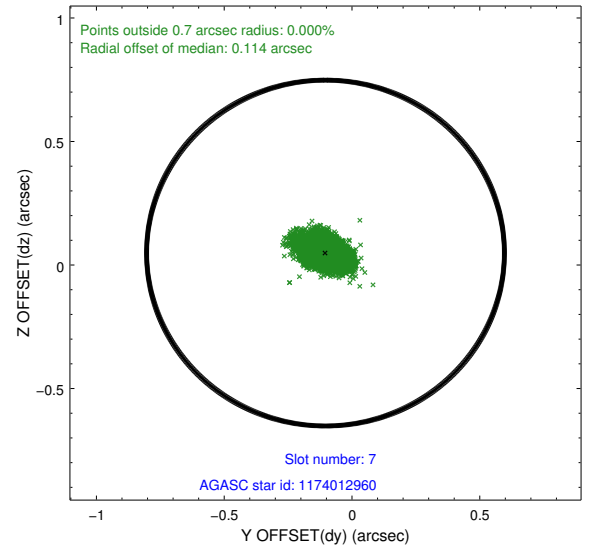
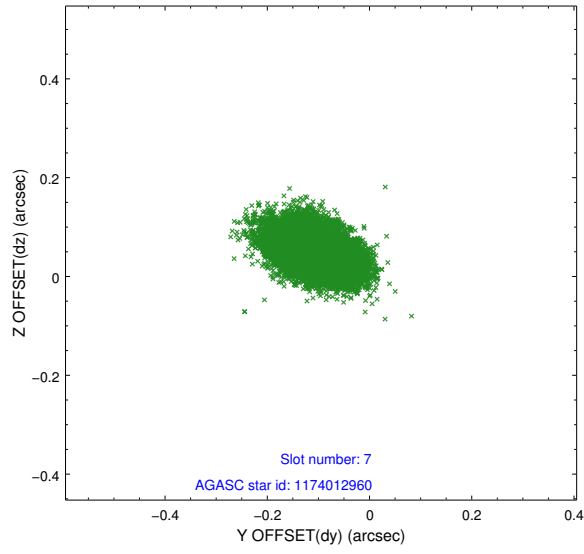
2.4.3 Slot 5



2.4.4 Slot 6

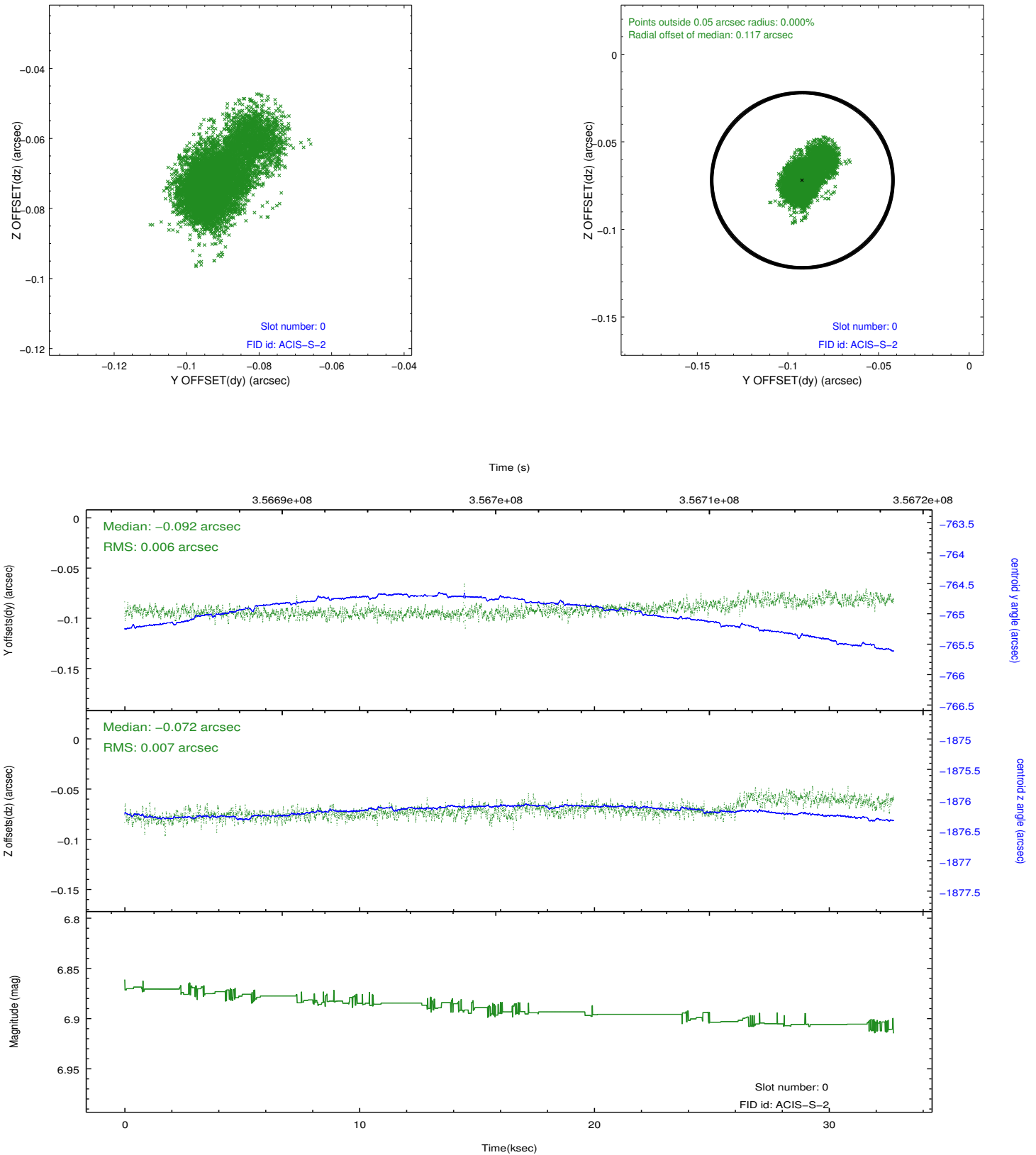


2.4.5 Slot 7

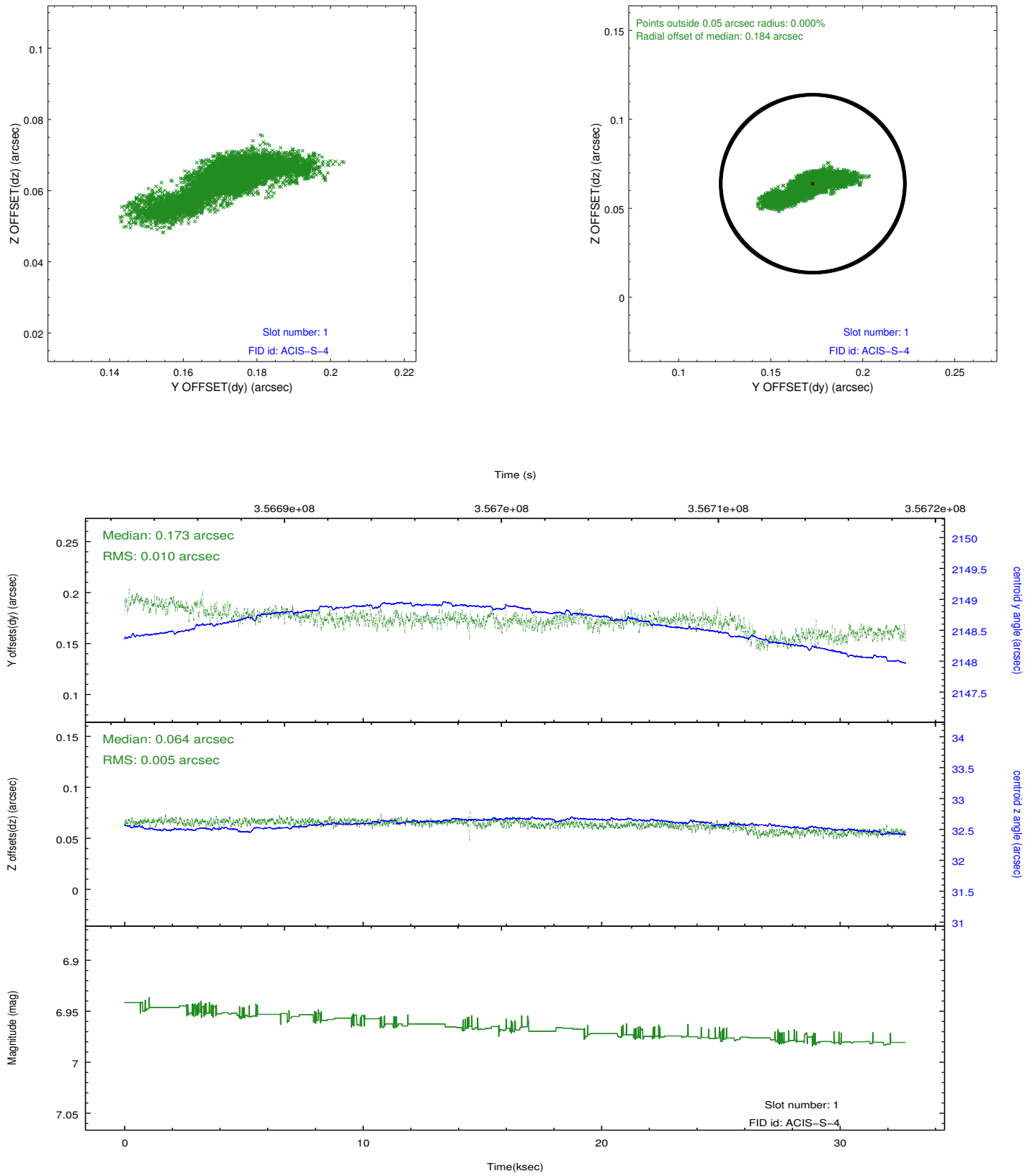


2.5 FID Slots

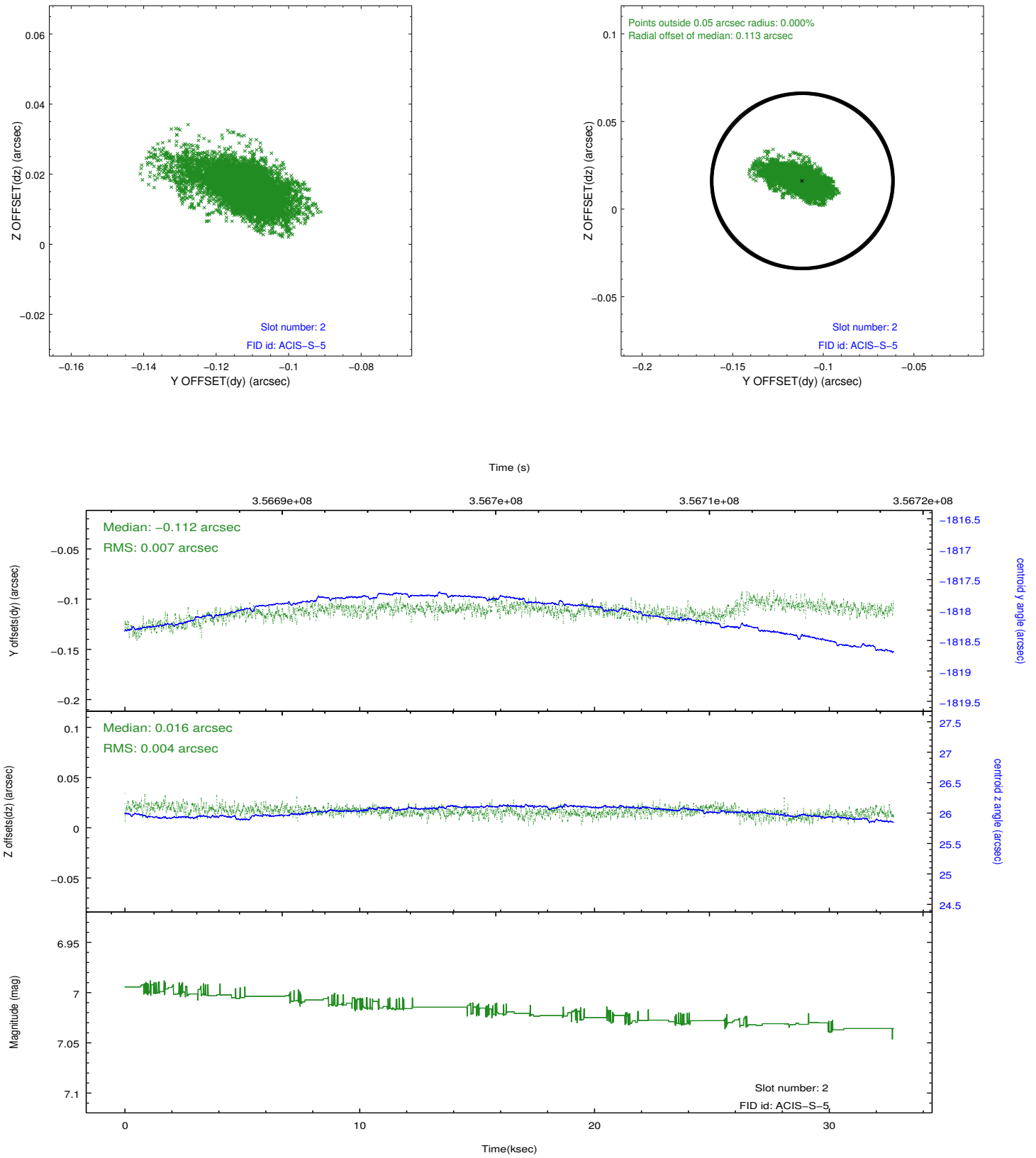
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

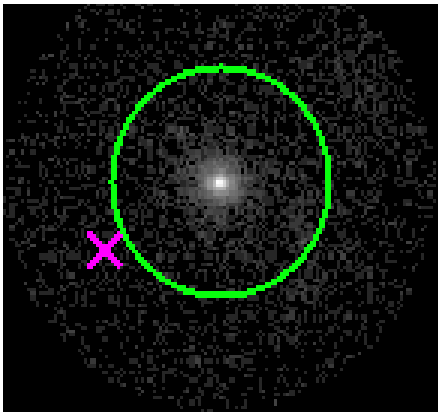


3 Gratings

3.1 HEG Arm



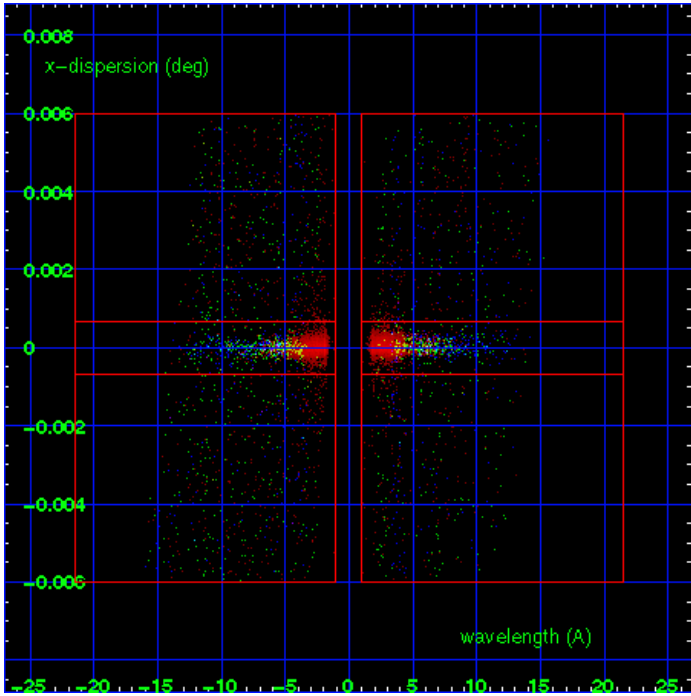
HEG Order Sort 123



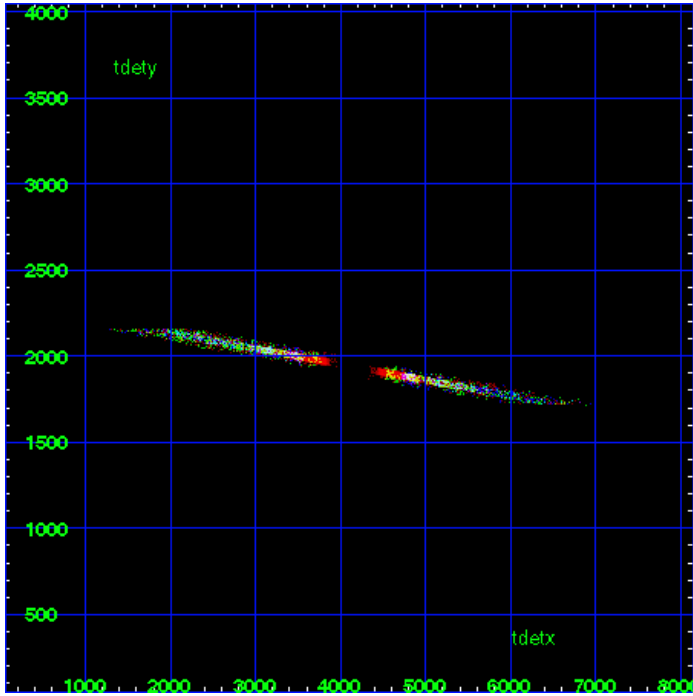
HEG Zero Order



HEG Order Sort ALL

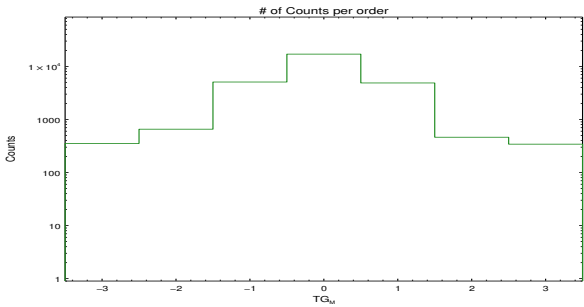


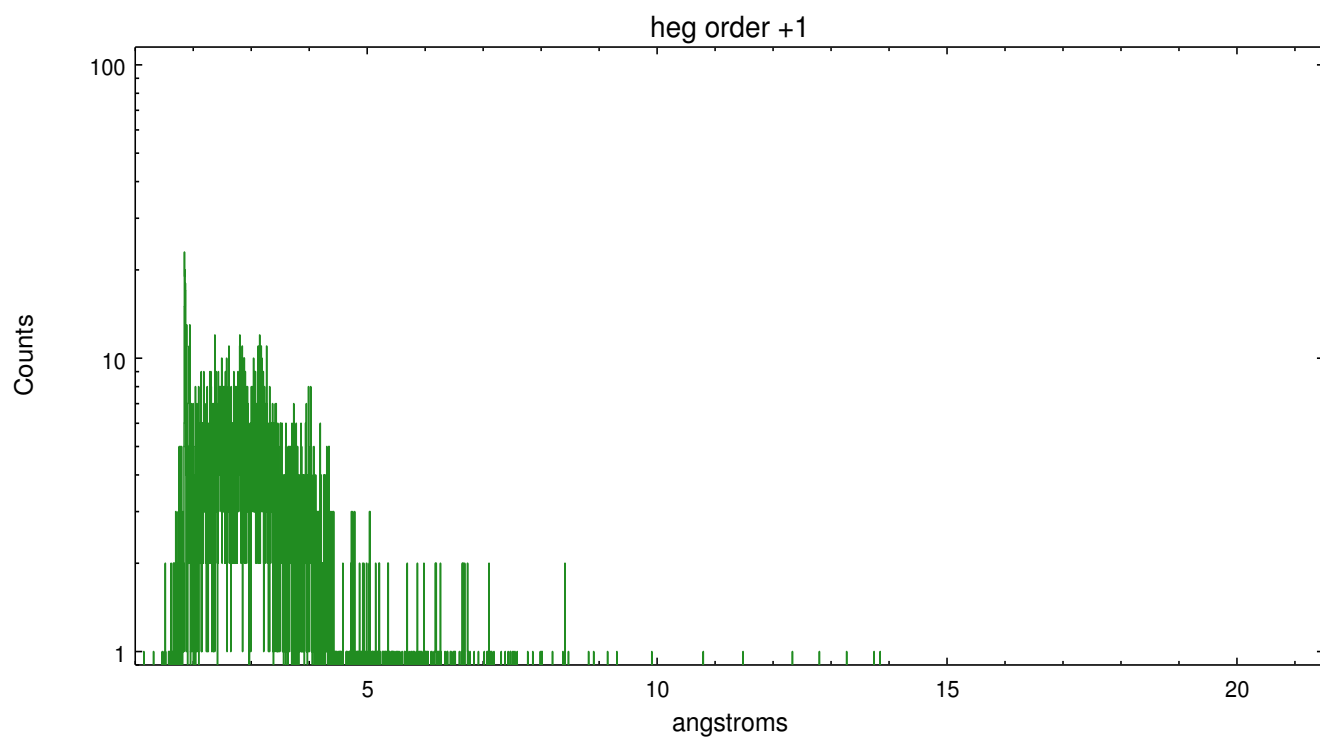
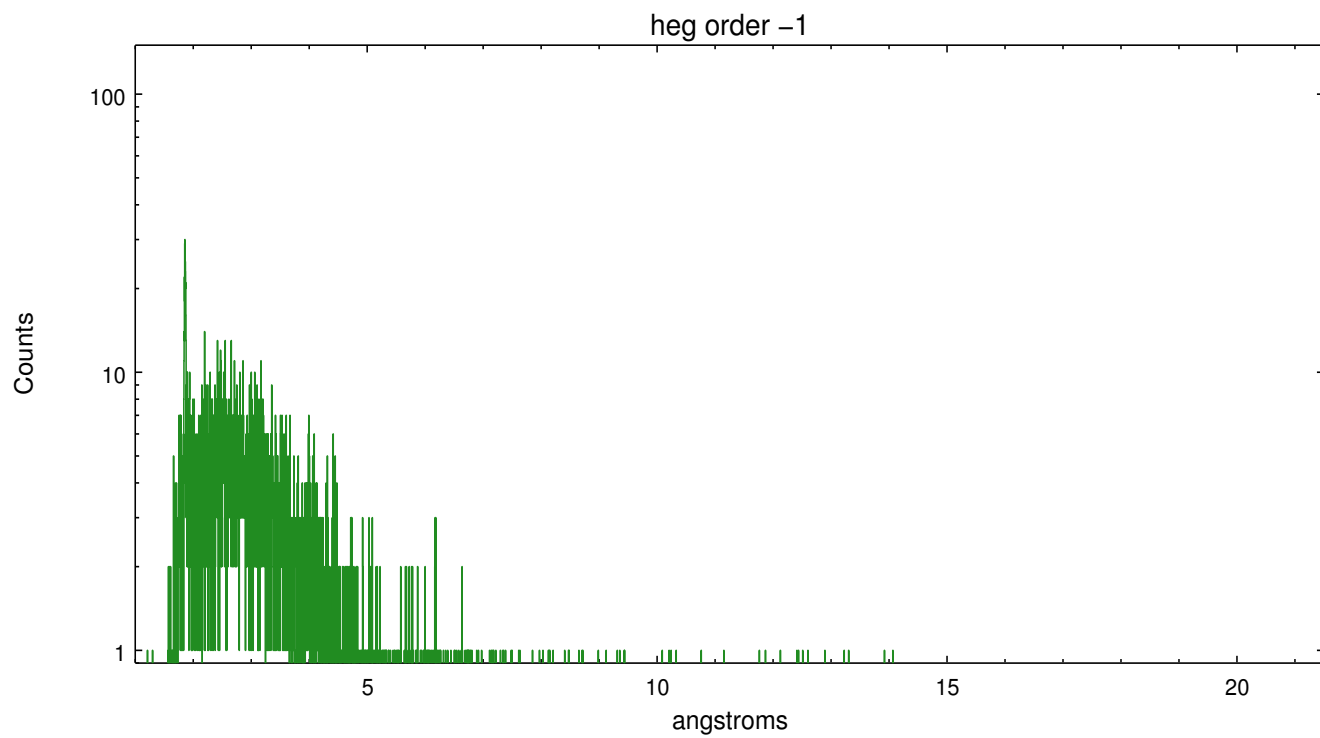
Spot Image HEG



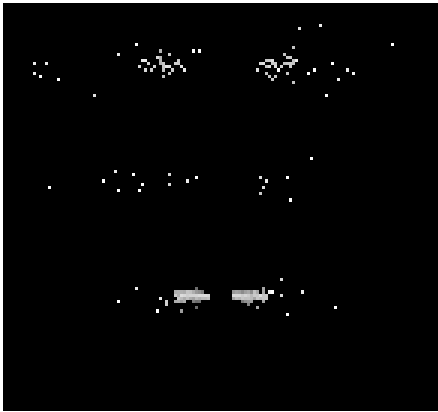
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	353	655	5077	17032	4874	462	342

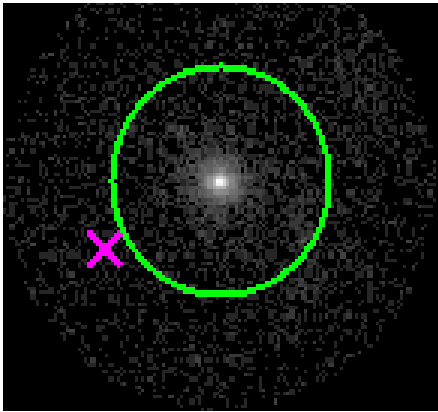




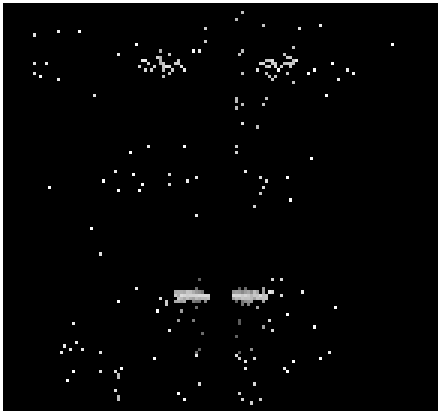
3.2 MEG Arm



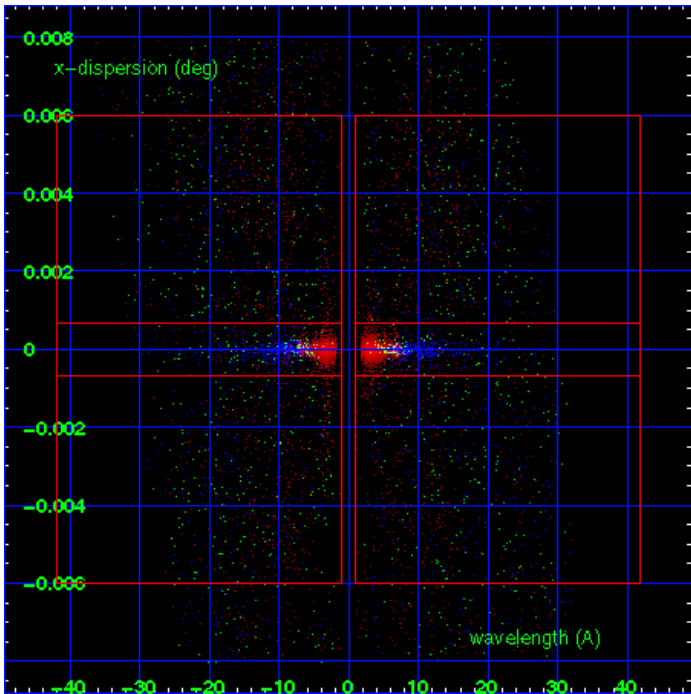
MEG Order Sort 123



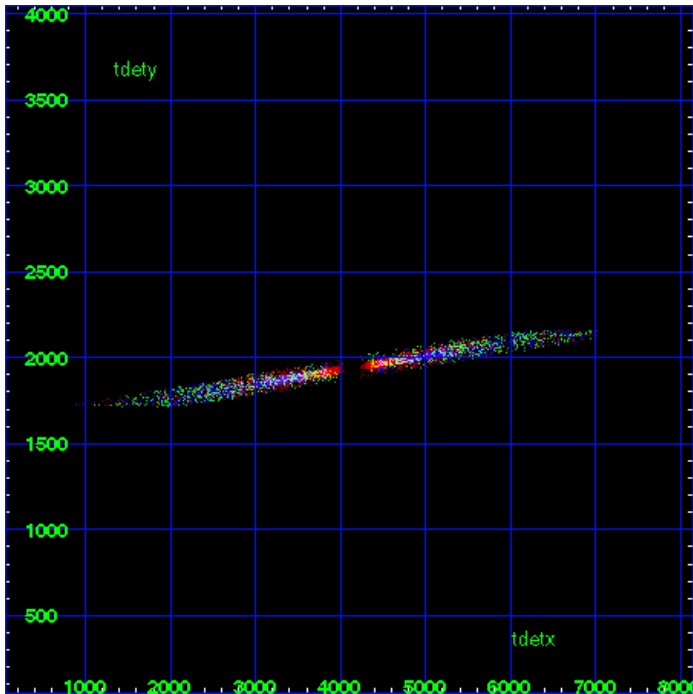
MEG Zero Order



MEG Order Sort ALL

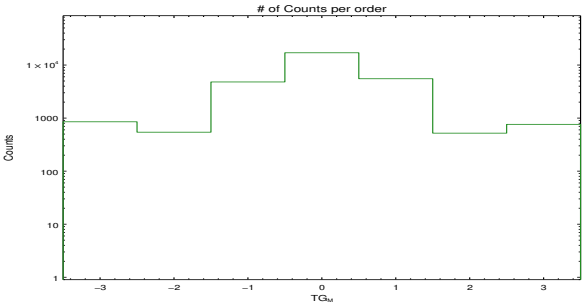


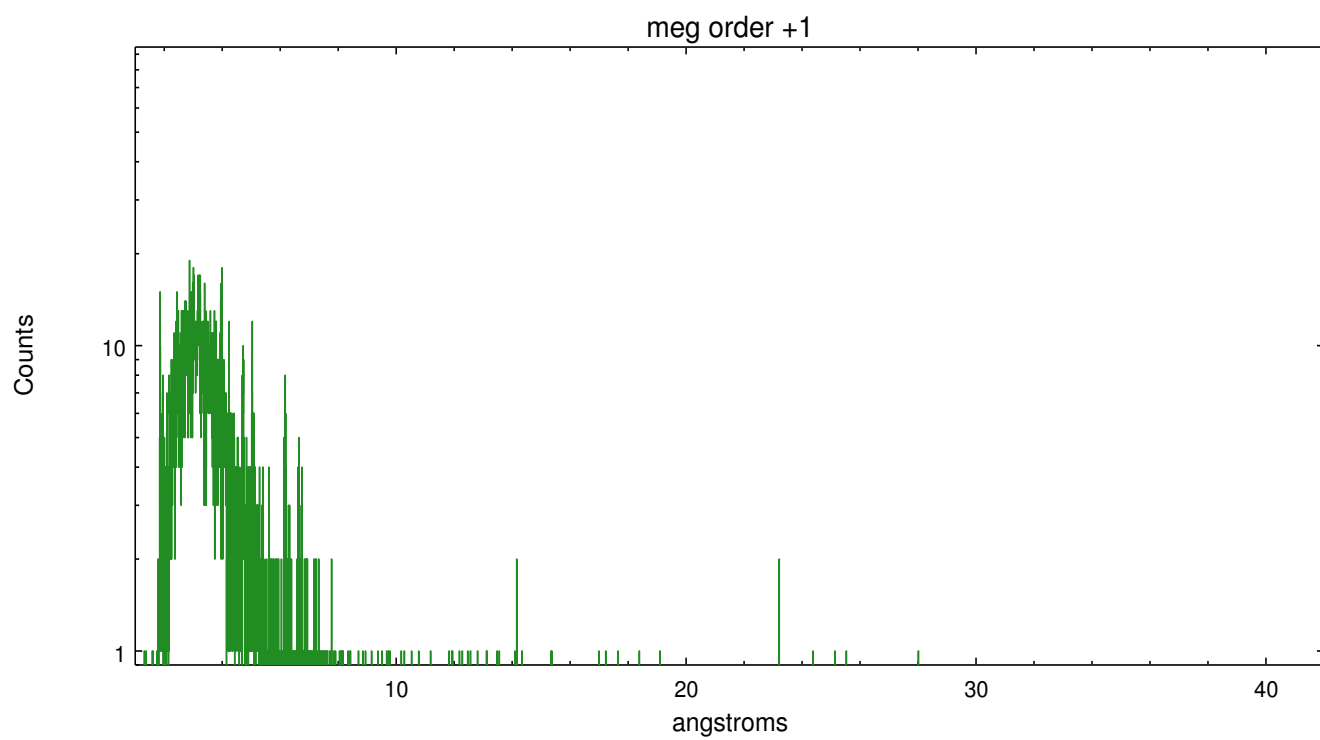
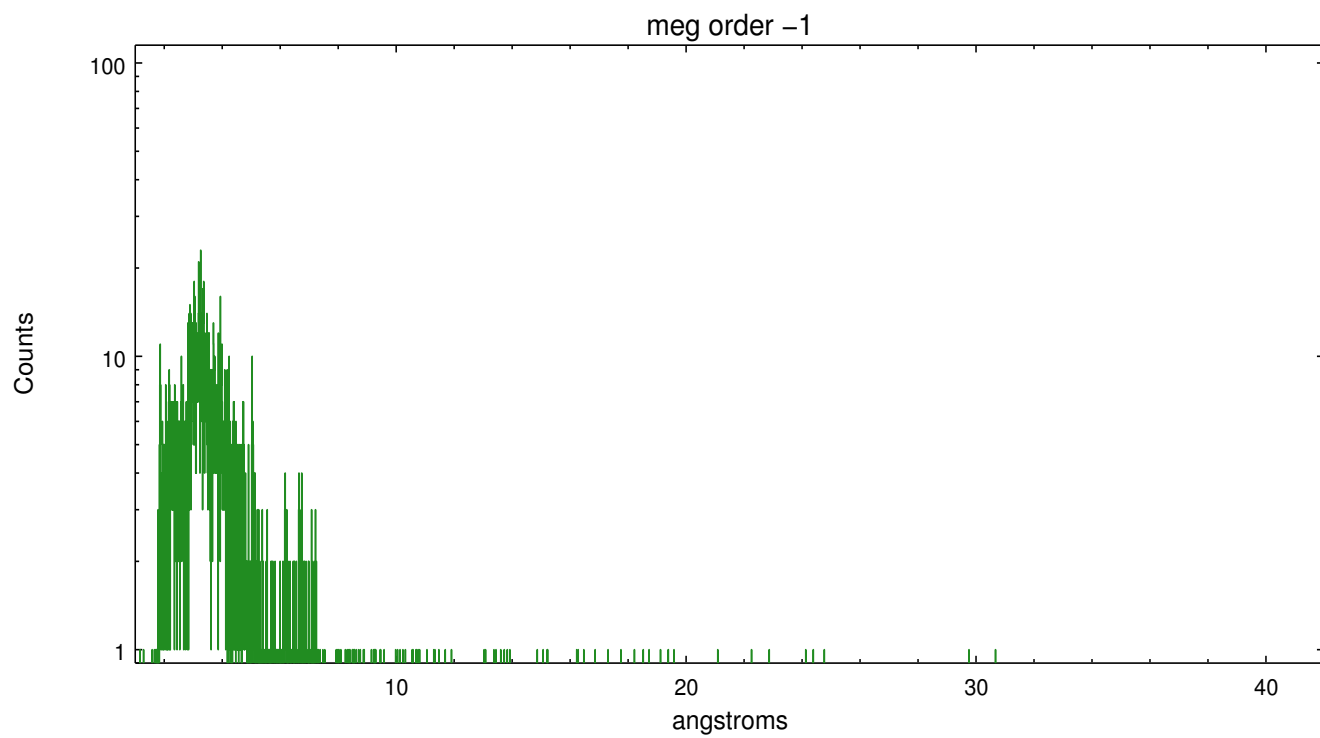
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	852	542	4800	17032	5520	520	762





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.1315

A.2 Comments

Slightly extended, spatially complex source. Extraction was centered on the bright central source (standard tgdetect method). The subarray chosen does not record the long wavelength ends of the spectral arms.