

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10793 - L2 Version 2
Chandra X-Ray Center

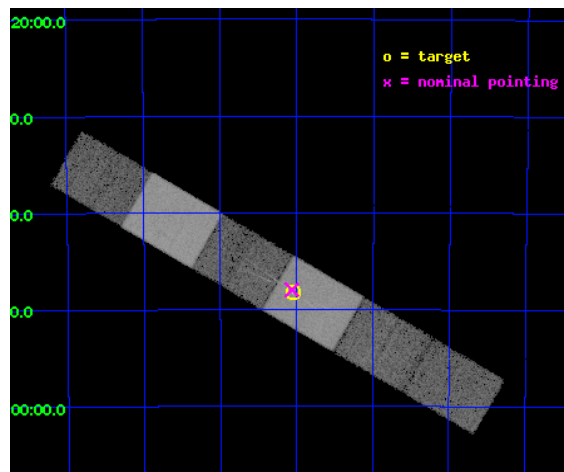
L2 Processing Date : May 30 2012

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1 Front

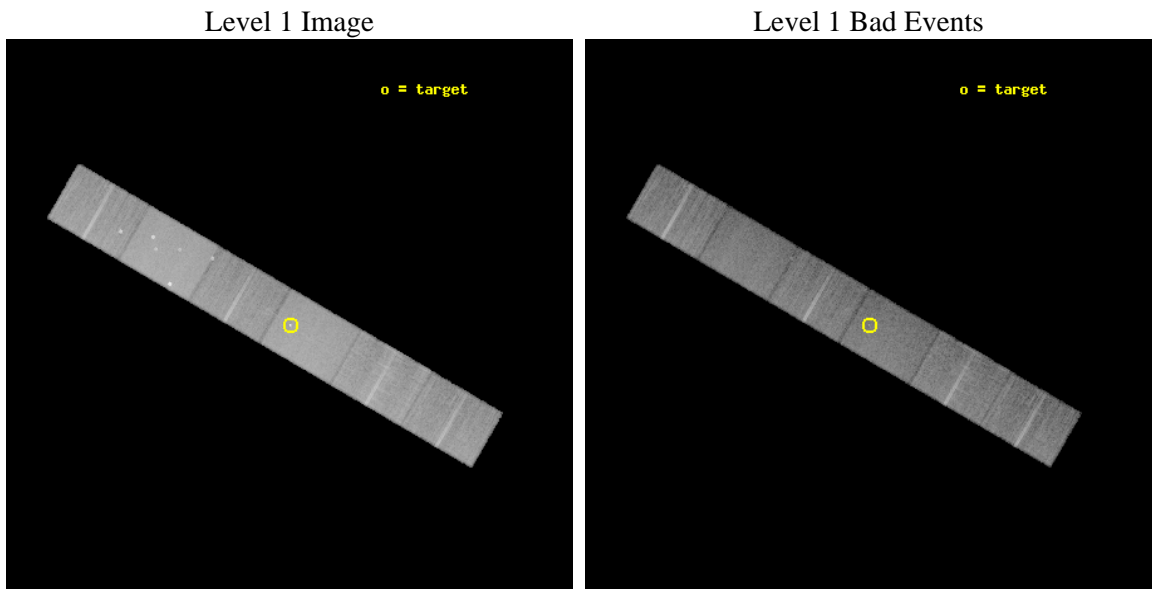
seq_num	300223	Sequence number
obs_id	10793	Observation id
title	The Symbiotic Star SS73 17: What Generates the Hard X-rays?	Propos
observer	Dr. Randall Smith	Principal investigator
object	SS73 17	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	152.762083	Observer's specified target RA [deg]
dec_targ	-57.803861	Observer's specified target Dec [deg]
ra_nom	152.76629768913	Nominal RA [deg]
dec_nom	-57.799593559055	Nominal Dec [deg]
roll_nom	30.160200427905	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16702.072664142	Sum of GTIs [s]
livetime	16432.319703883	Livetime [s]
ontime4	16702.113704145	Sum of GTIs [s]
ontime5	16702.031624138	Sum of GTIs [s]
ontime6	16701.990584135	Sum of GTIs [s]
ontime7	16702.072664142	Sum of GTIs [s]
ontime8	16701.949544132	Sum of GTIs [s]
ontime9	16701.908504128	Sum of GTIs [s]
l2events	222195	Number of level 2 events



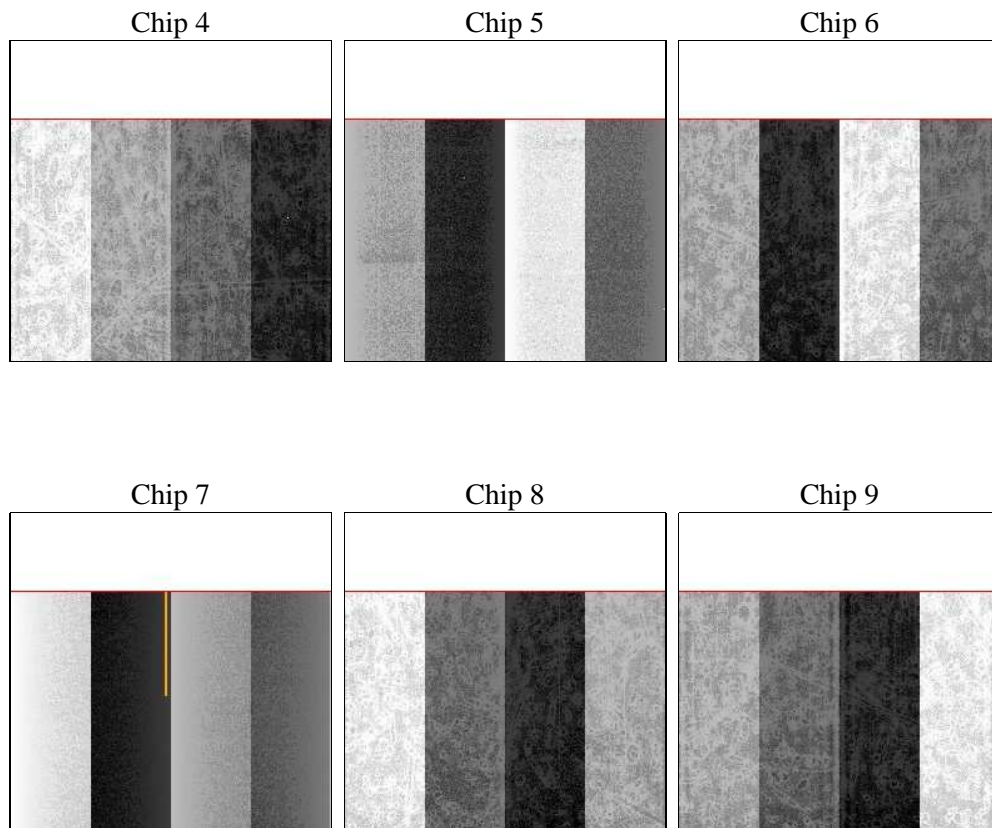
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	16480.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	16702.072664142	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	16702.113704145	Sum of GTIs [s]
date	2012-05-30T06:02:23	Date and time of file creation	ontime5	16702.031624138	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	16701.990584135	Sum of GTIs [s]
			ontime7	16702.072664142	Sum of GTIs [s]
			ontime8	16701.949544132	Sum of GTIs [s]
			ontime9	16701.908504128	Sum of GTIs [s]
			l1events	947309	Number of level 1 events

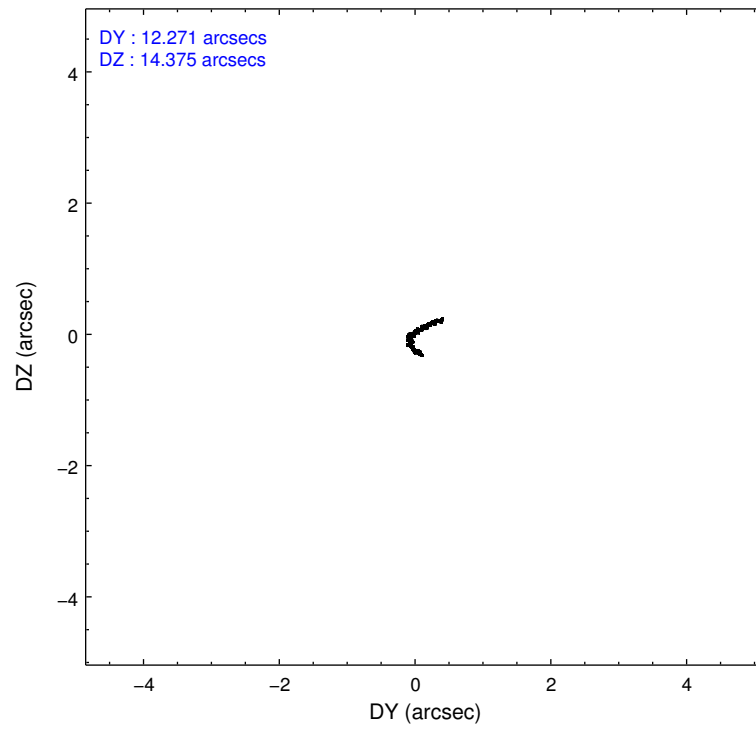
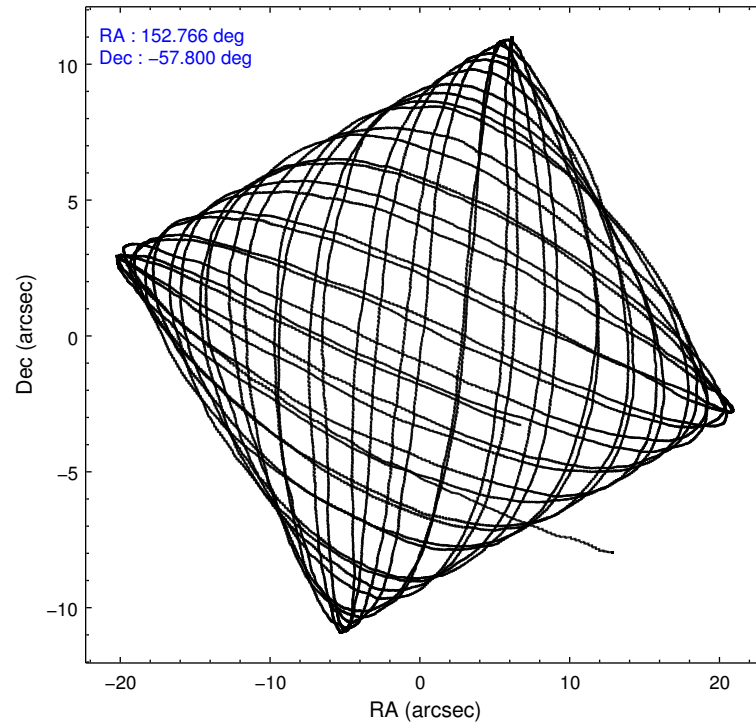
2.1.4 Events

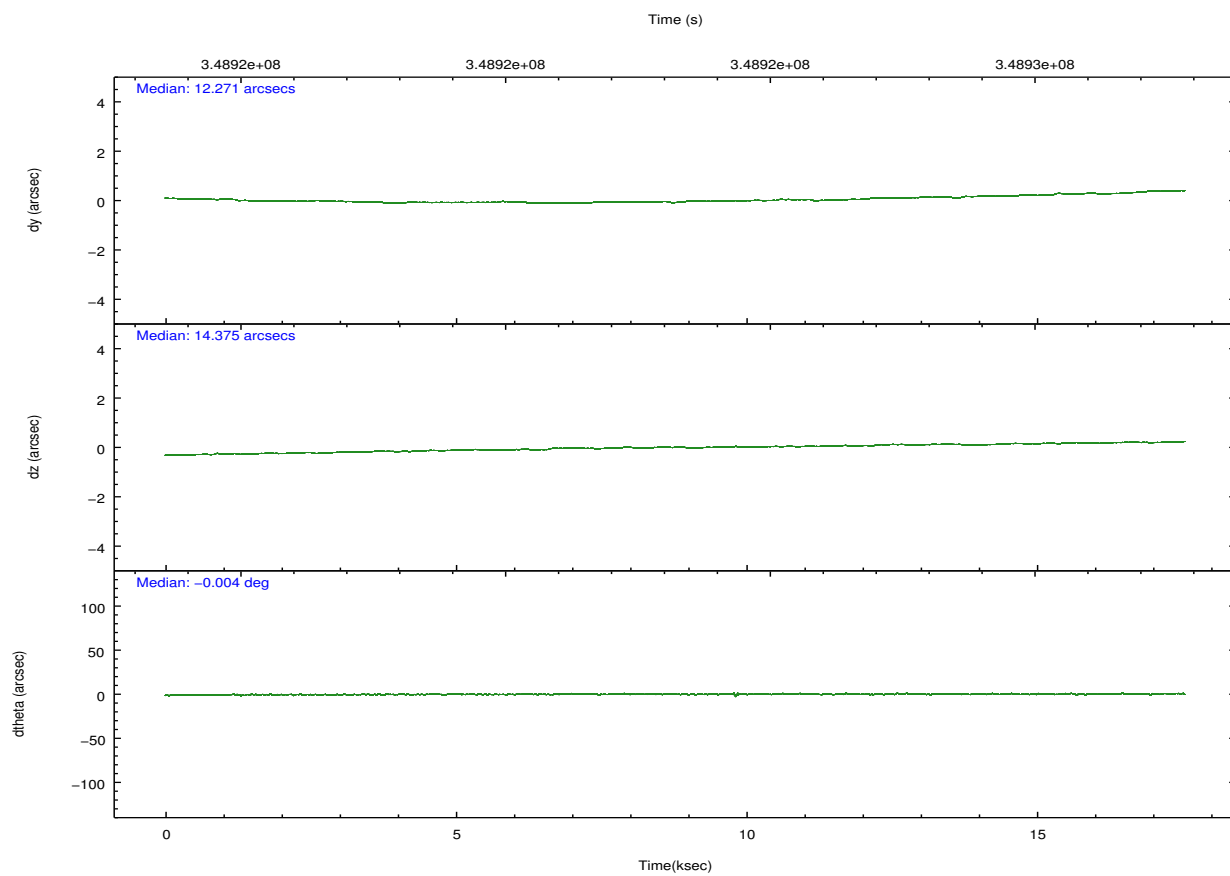
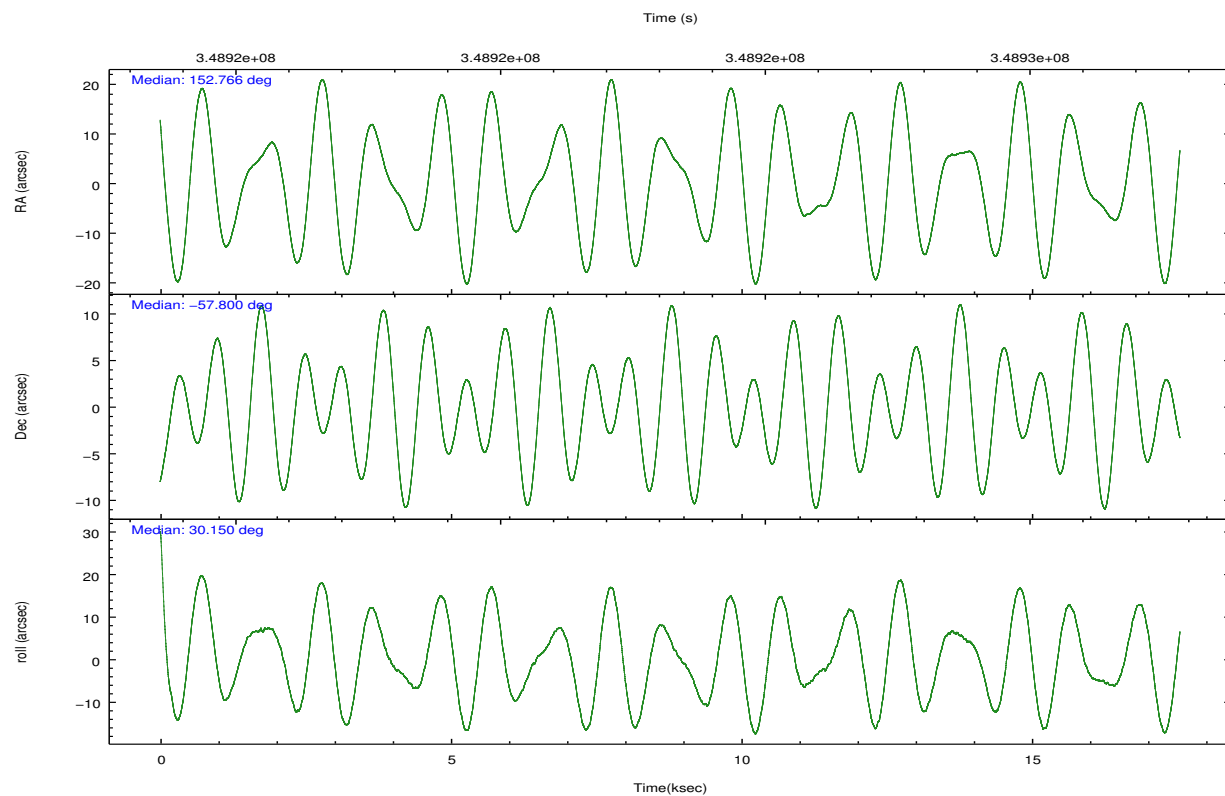
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	144418	204548	129347	181635	161458	125903	grade 0 events	8858	13191	6404	6901	11707	6788
rejected events	125849	107379	112884	103698	123890	109362		6%	6%	4%	3%	7%	5%
rejected %	87%	52%	87%	57%	76%	86%	grade 1 events	121	397	60	200	114	96
								0%	0%	0%	0%	0%	0%
							grade 2 events	3756	27776	3576	16014	8489	3337
								2%	13%	2%	8%	5%	2%
							grade 3 events	1669	3764	1651	6787	3916	1675
								1%	1%	1%	3%	2%	1%
							grade 4 events	1672	3636	1572	7008	3626	1547
								1%	1%	1%	3%	2%	1%
							grade 5 events	5840	14585	6221	17110	8205	6466
								4%	7%	4%	9%	5%	5%
							grade 6 events	2617	48817	3265	41244	9839	3196
								1%	23%	2%	22%	6%	2%
							grade 7 events	119885	92382	106598	86371	115562	102798
								83%	45%	82%	47%	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	152.741439	152.7662976891343	CCD I2 on	N	N
[deg] Pointing Dec	-57.823490	-57.79959355905544	CCD I3 on	N	N
[deg] Pointing Roll	29.982528	30.16020042790514	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	-187.1228876879999	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.009634895007935	CCD S4 on	Y	Y
[s] Observation start time (MET)	348915309.184000	348913557.29715	CCD S5 on	O2	Y
Observation start date	2009-01-21T08:54:03	2009-01-21T08:25:57	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	348931789.184000	348932961.06061	On-chip summing requested	N	N
Observation end date	2009-01-21T13:28:43	2009-01-21T13:49:21	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



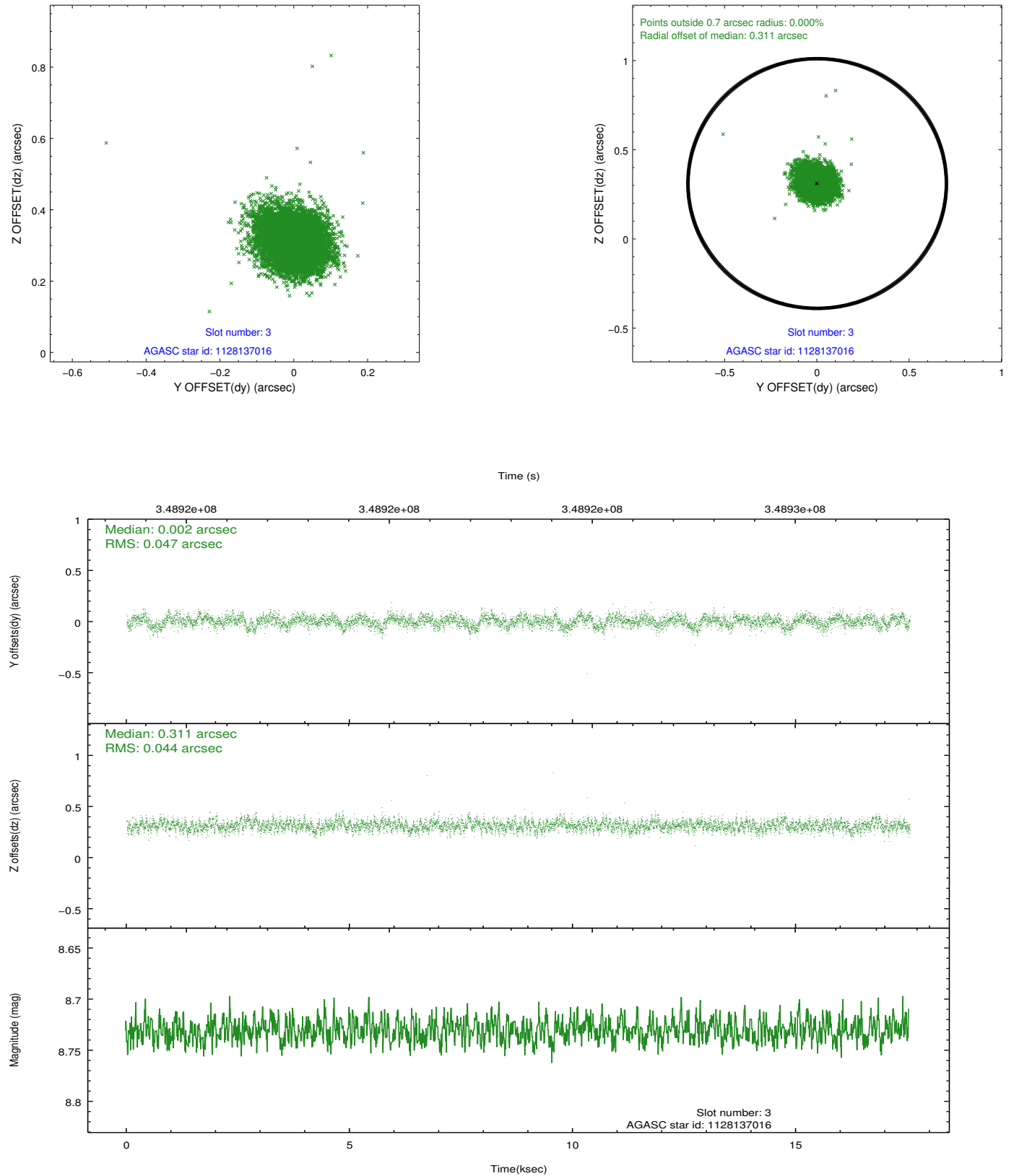


Slot Statistics

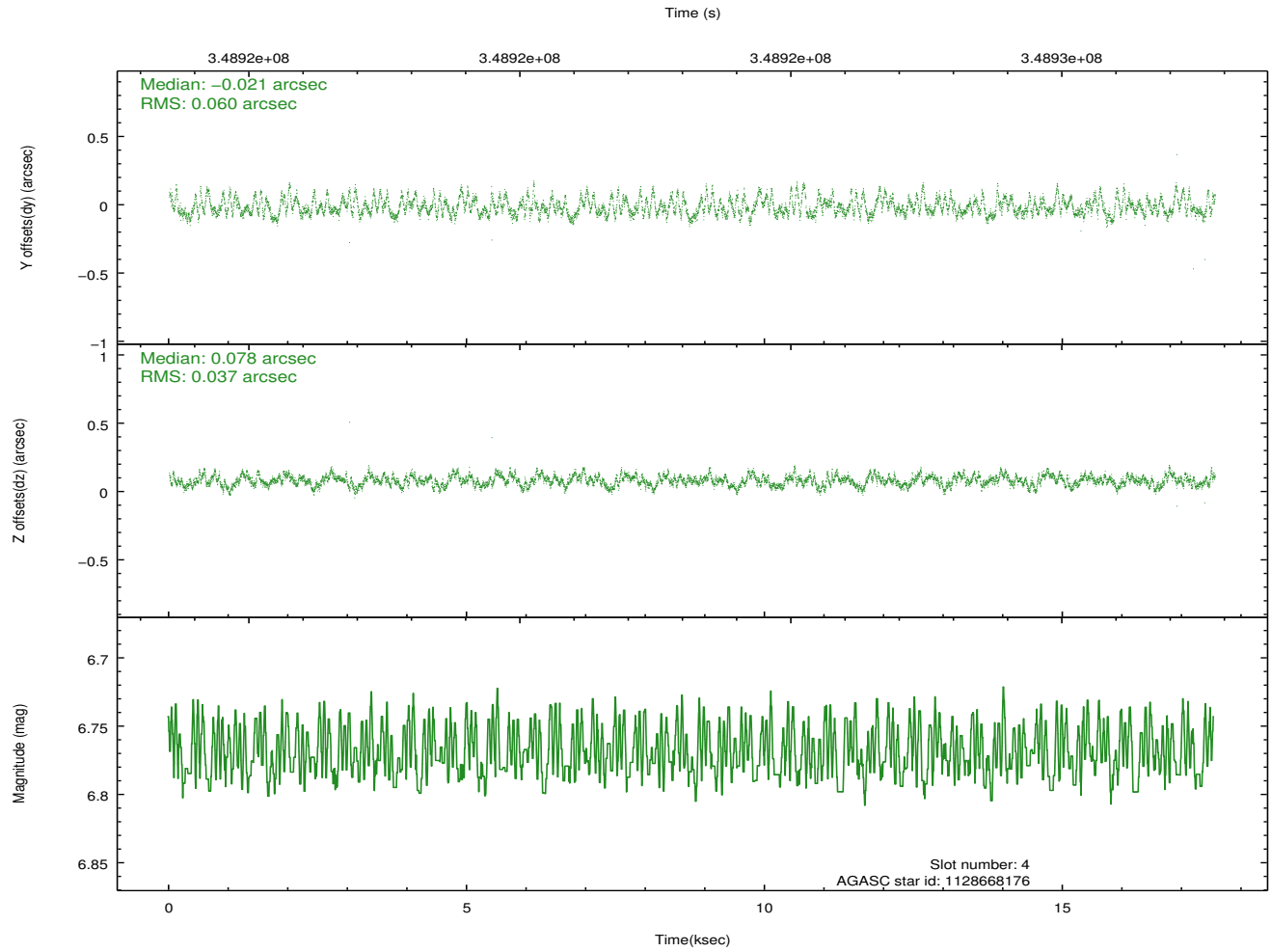
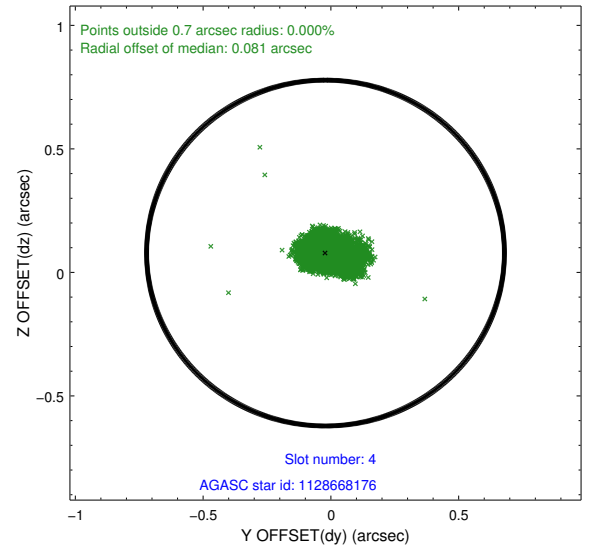
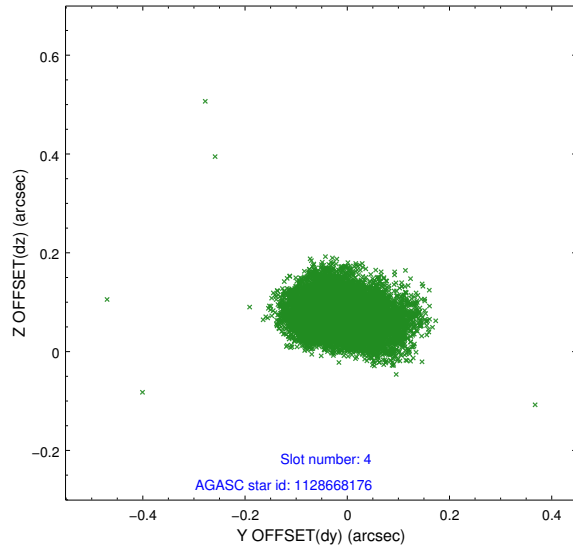
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	4281	-0.083	-0.059	0.010	0.015	0.000000	0.000000	-765.11	-1797.91
1	FID	ACIS-S-4	6.95	4281	0.161	0.056	0.007	0.014	0.000000	0.000000	2148.32	110.40
2	FID	ACIS-S-5	7.01	4282	-0.109	0.012	0.010	0.017	0.000000	0.000000	-1817.66	104.33
3	GUIDE	1128137016	8.73	8551	0.002	0.311	0.068	0.112	153.049284	-57.884001	401.29	-483.73
4	GUIDE	1128668176	6.77	8562	-0.021	0.078	0.074	0.125	152.075503	-58.198582	-1771.67	-543.81
5	GUIDE	1128142832	8.65	8560	0.039	-0.260	0.078	0.124	151.690539	-57.394211	-1001.62	2343.45
6	GUIDE	1128141880	8.96	8557	0.072	-0.076	0.097	0.155	152.082849	-57.289838	-152.87	2299.28
7	GUIDE	1128136880	8.27	4279	-0.189	-0.105	0.074	0.118	152.762282	-57.803859	70.12	41.85

2.4 Star Slots

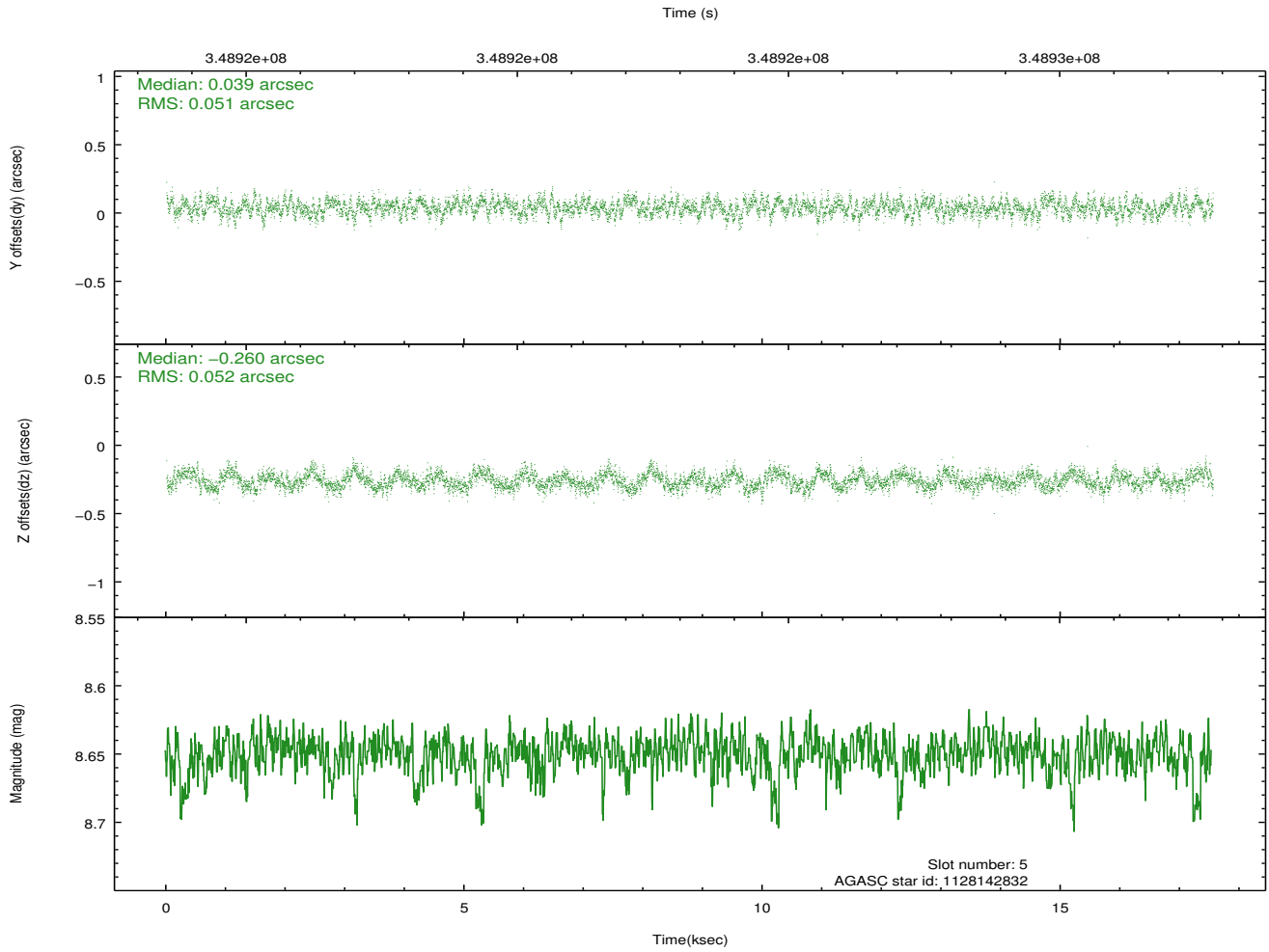
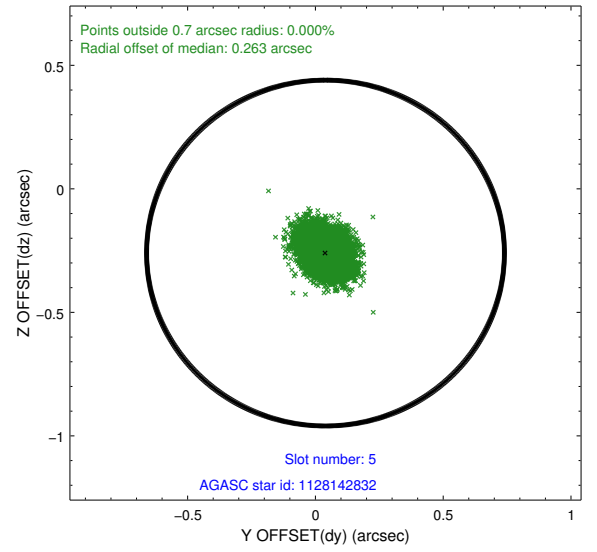
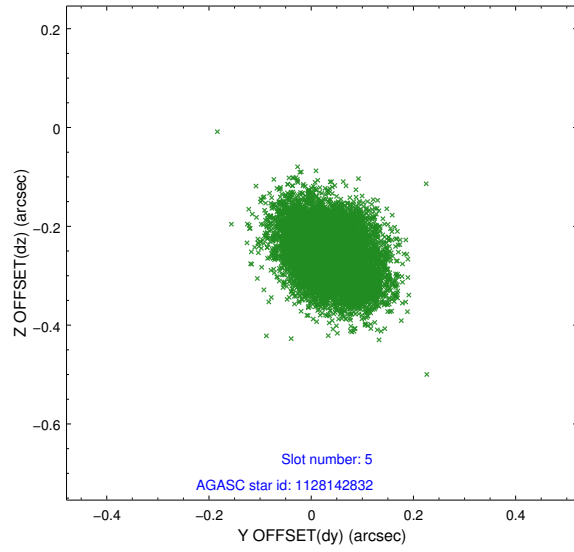
2.4.1 Slot 3



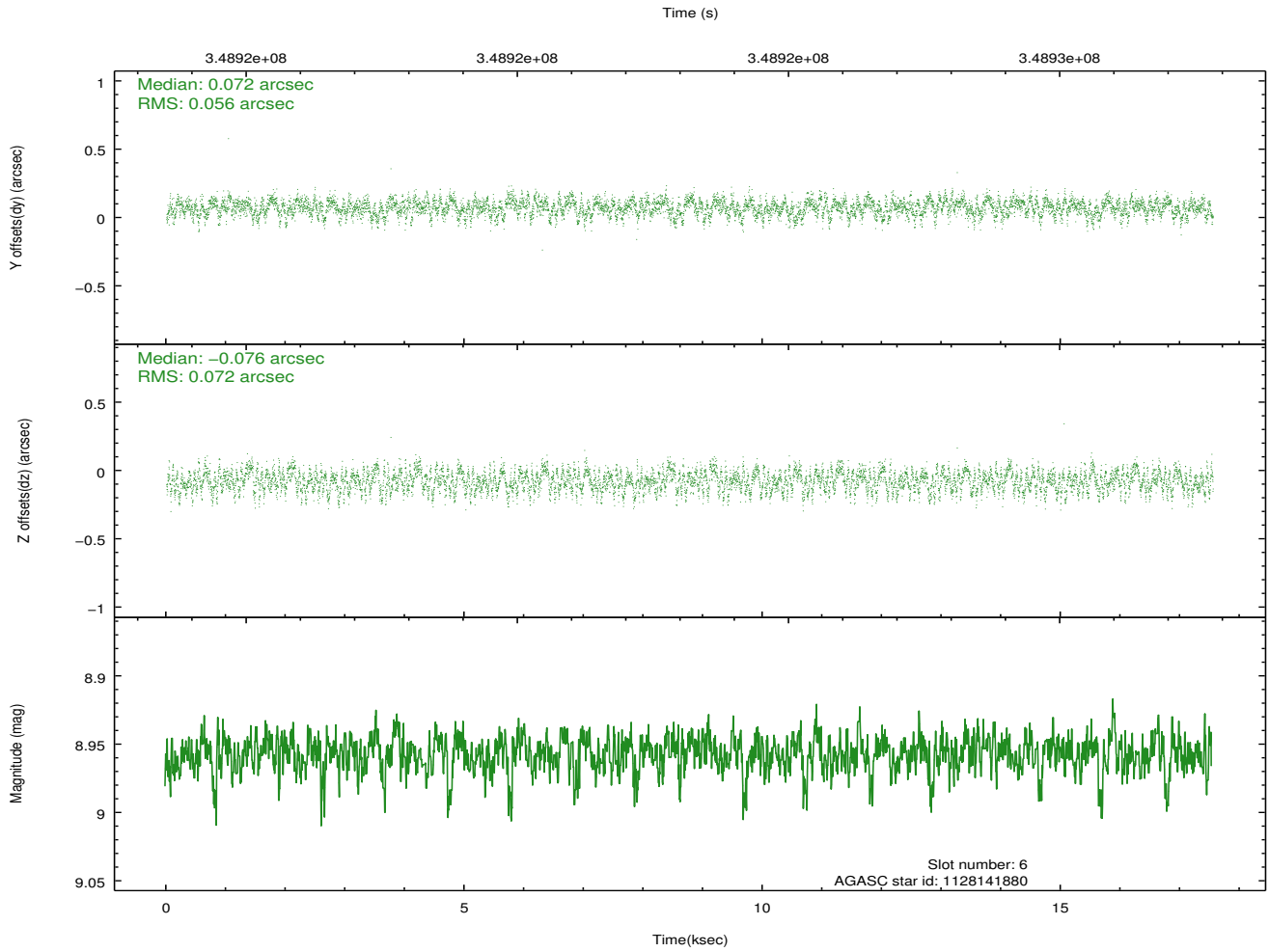
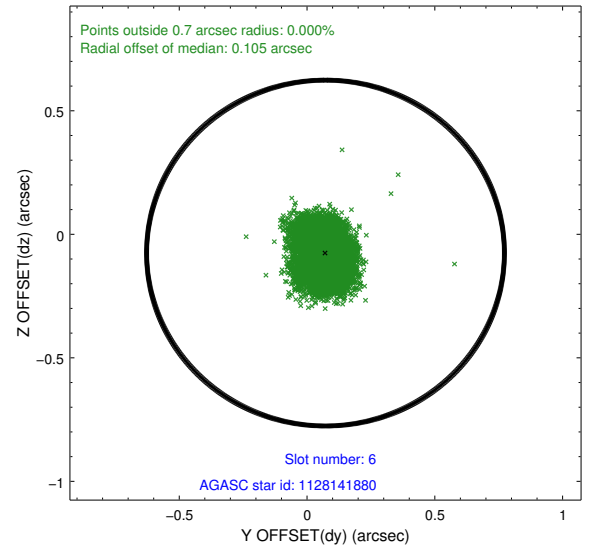
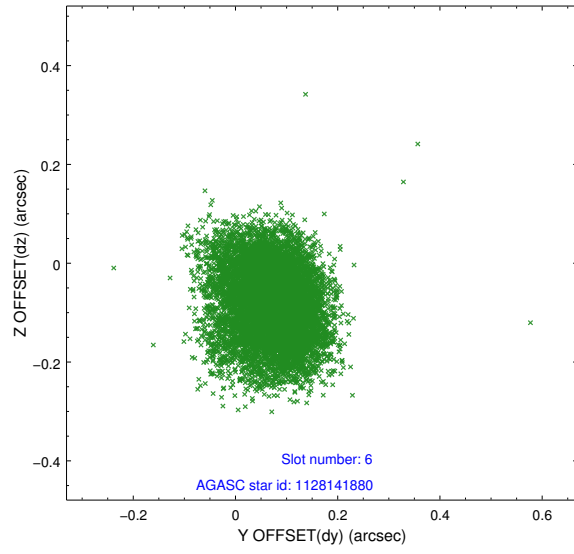
2.4.2 Slot 4



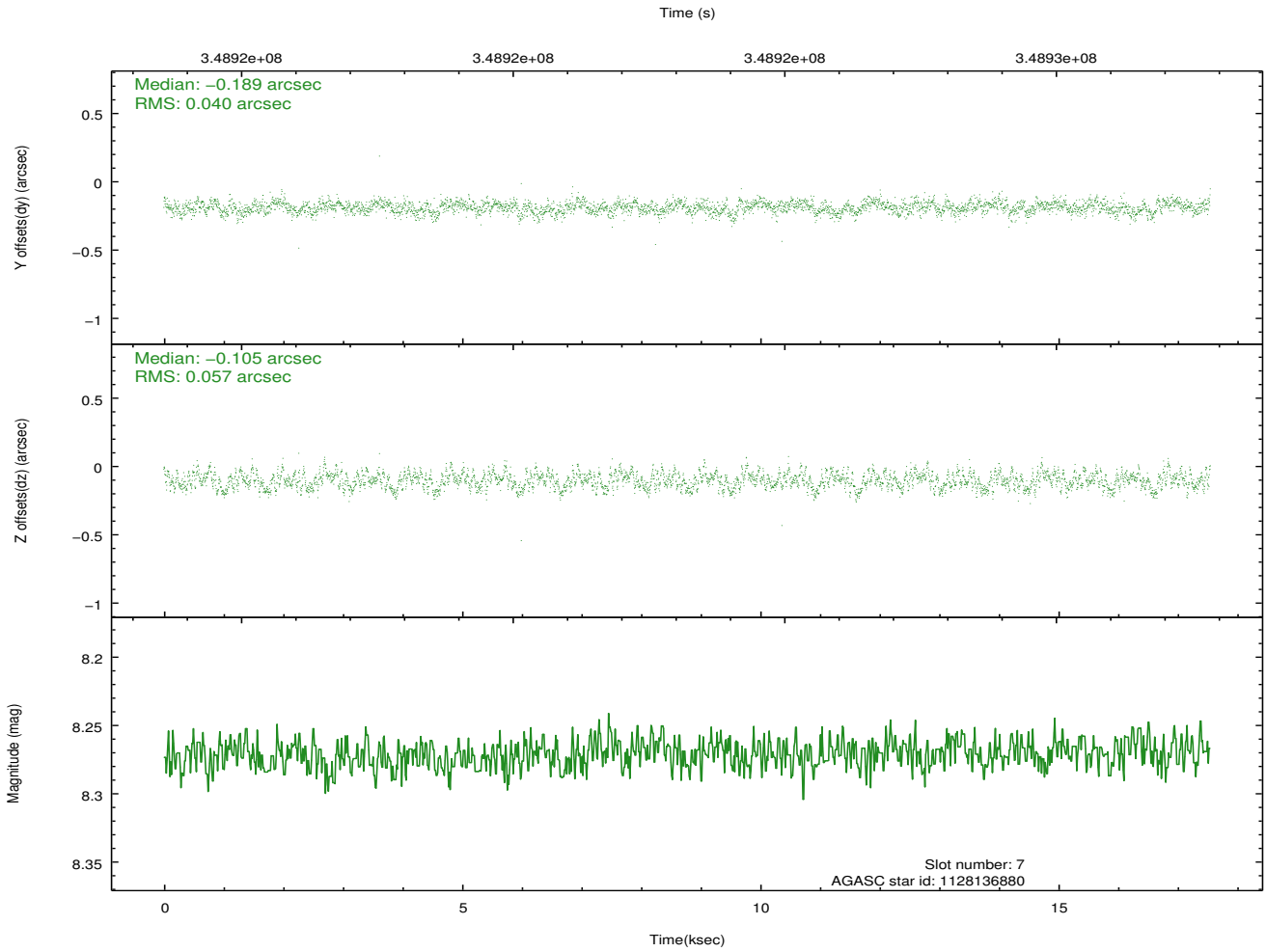
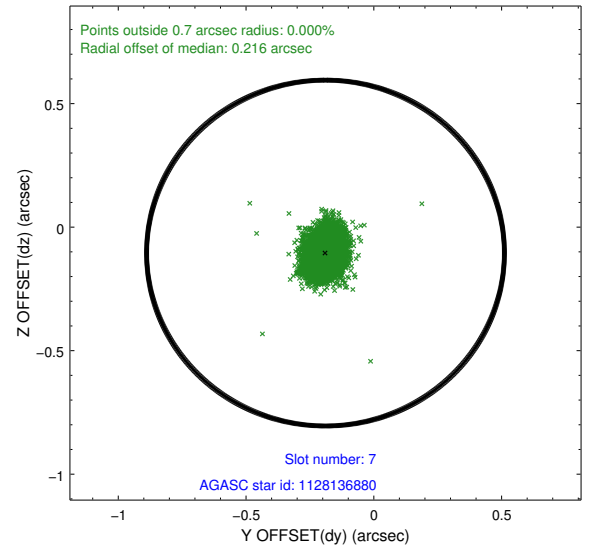
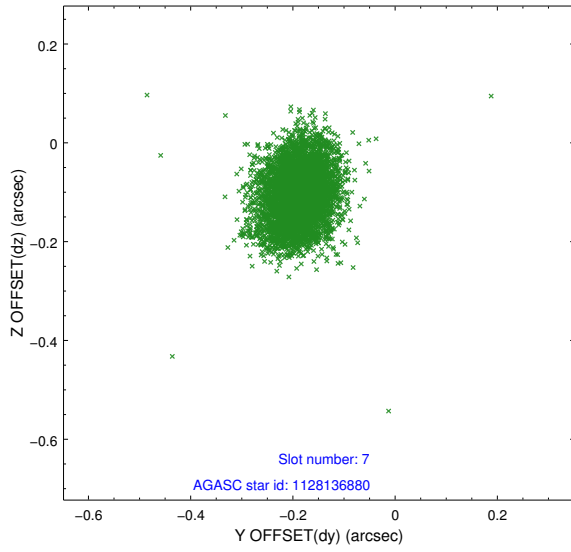
2.4.3 Slot 5



2.4.4 Slot 6

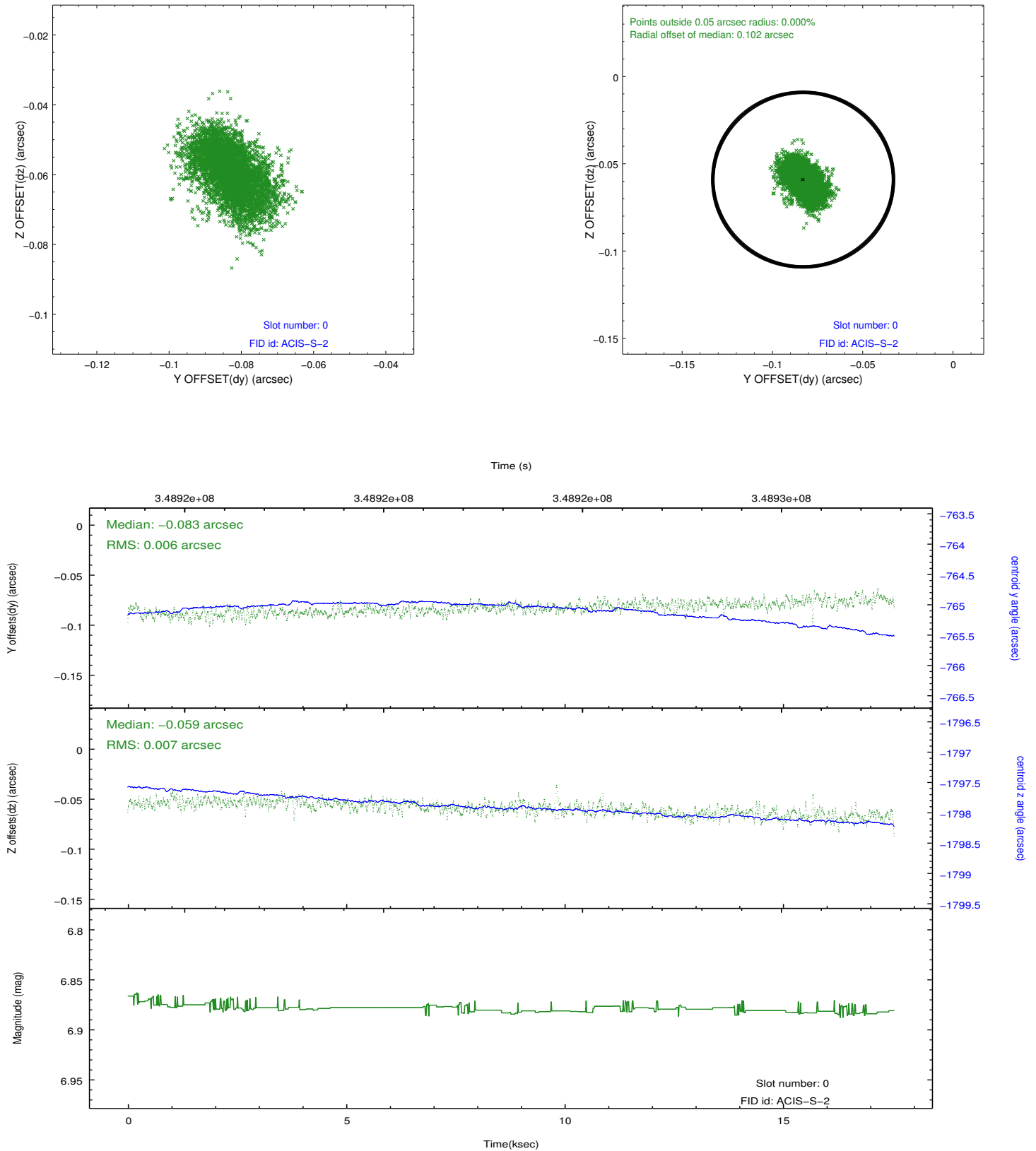


2.4.5 Slot 7

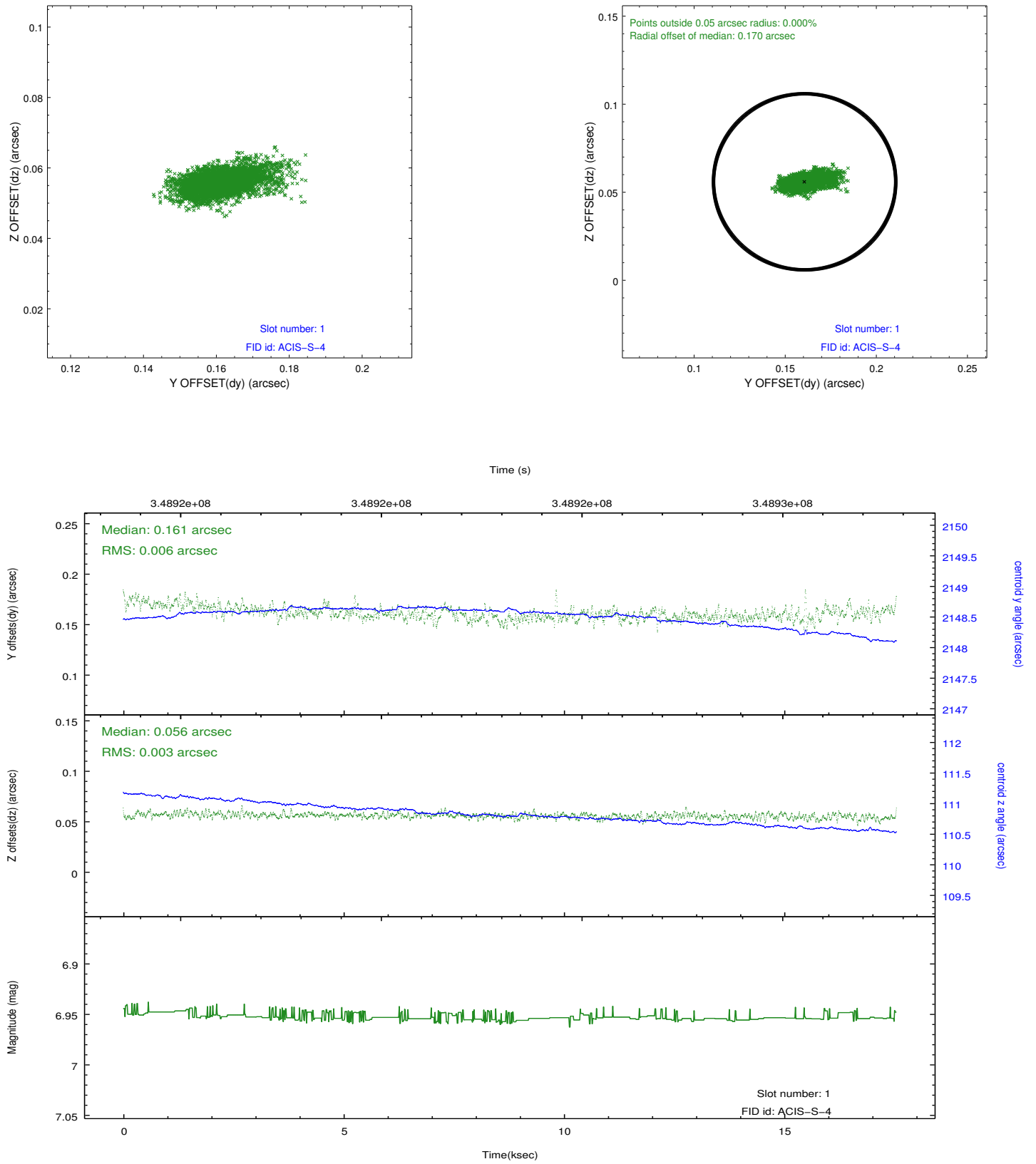


2.5 FID Slots

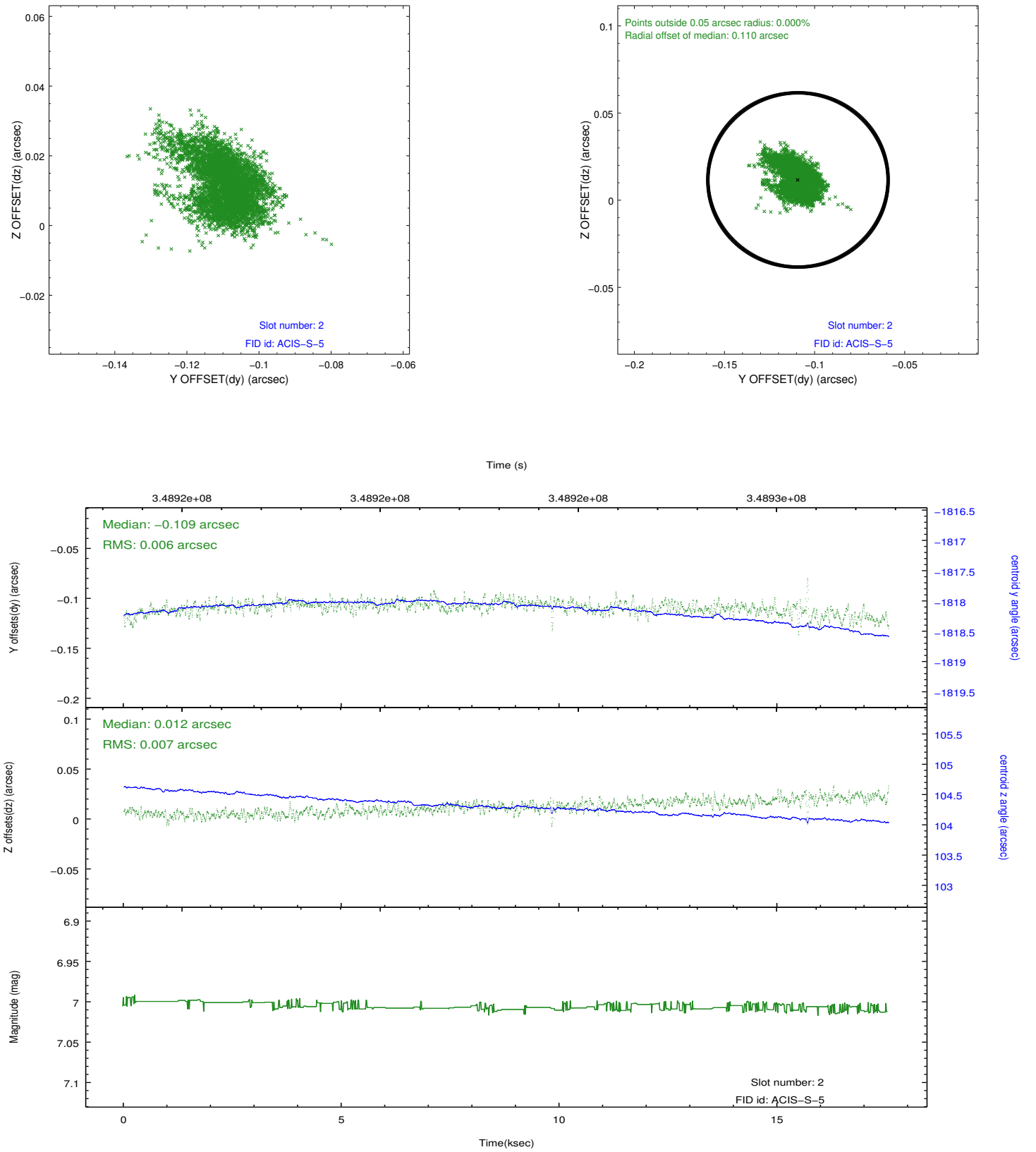
2.5.1 Slot 0



2.5.2 Slot 1

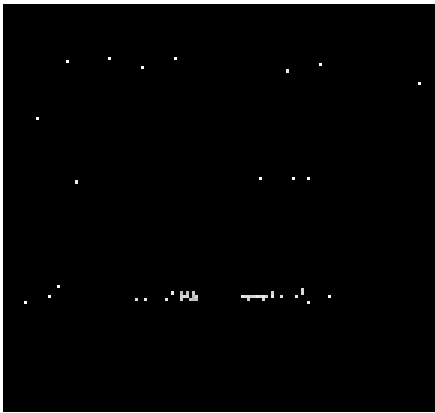


2.5.3 Slot 2

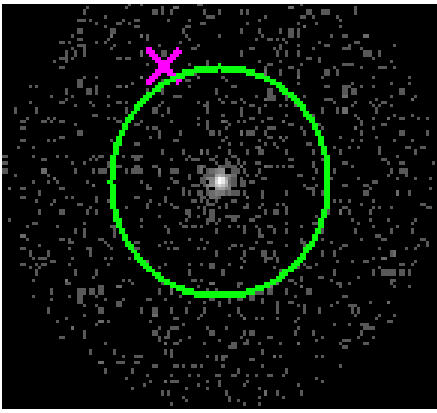


3 Gratings

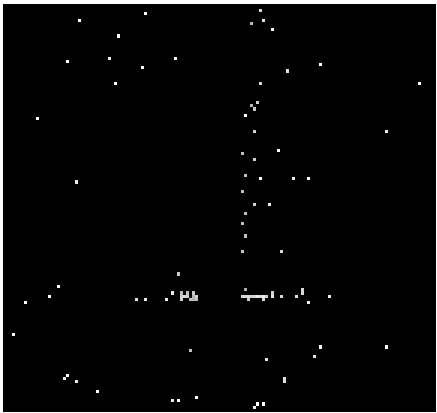
3.1 HEG Arm



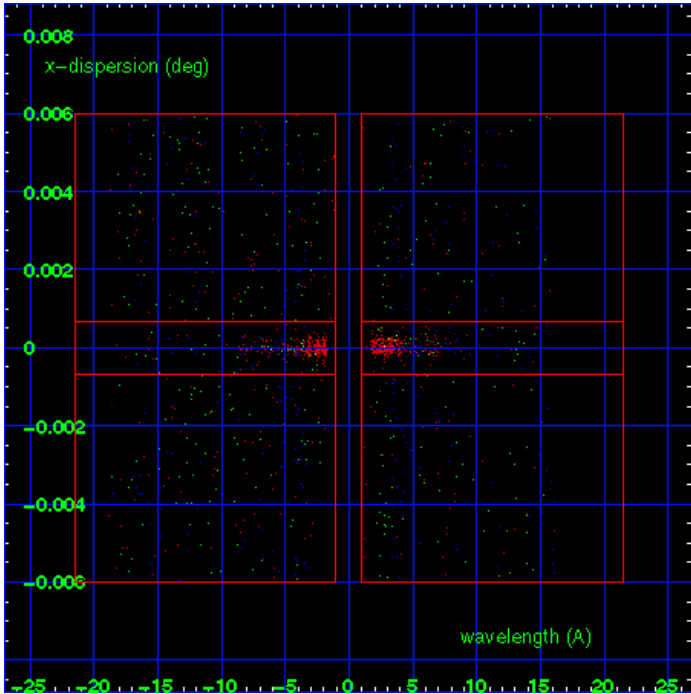
HEG Order Sort 123



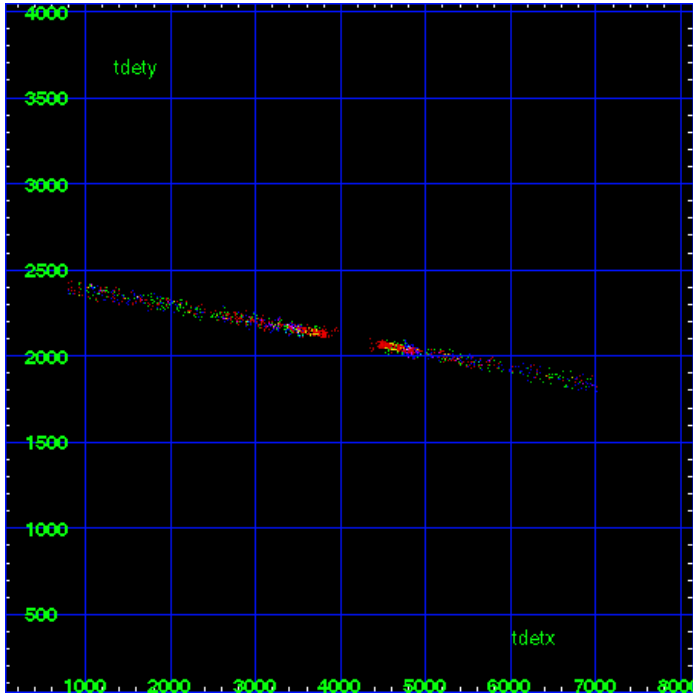
HEG Zero Order



HEG Order Sort ALL

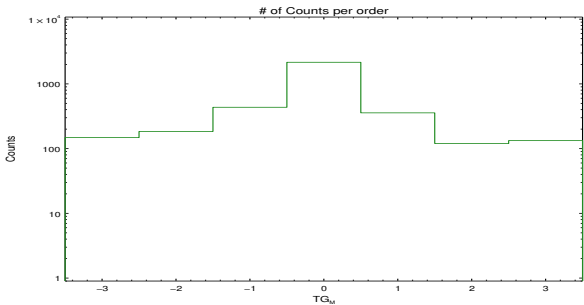


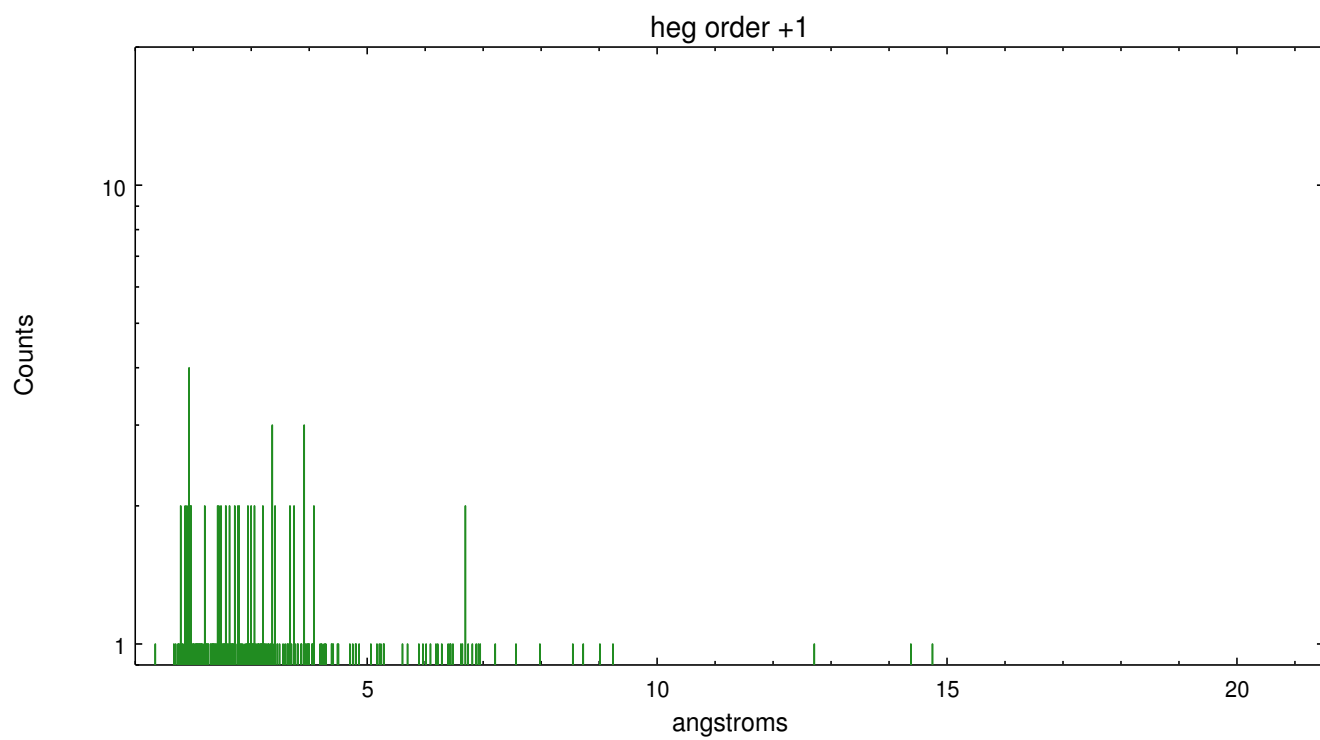
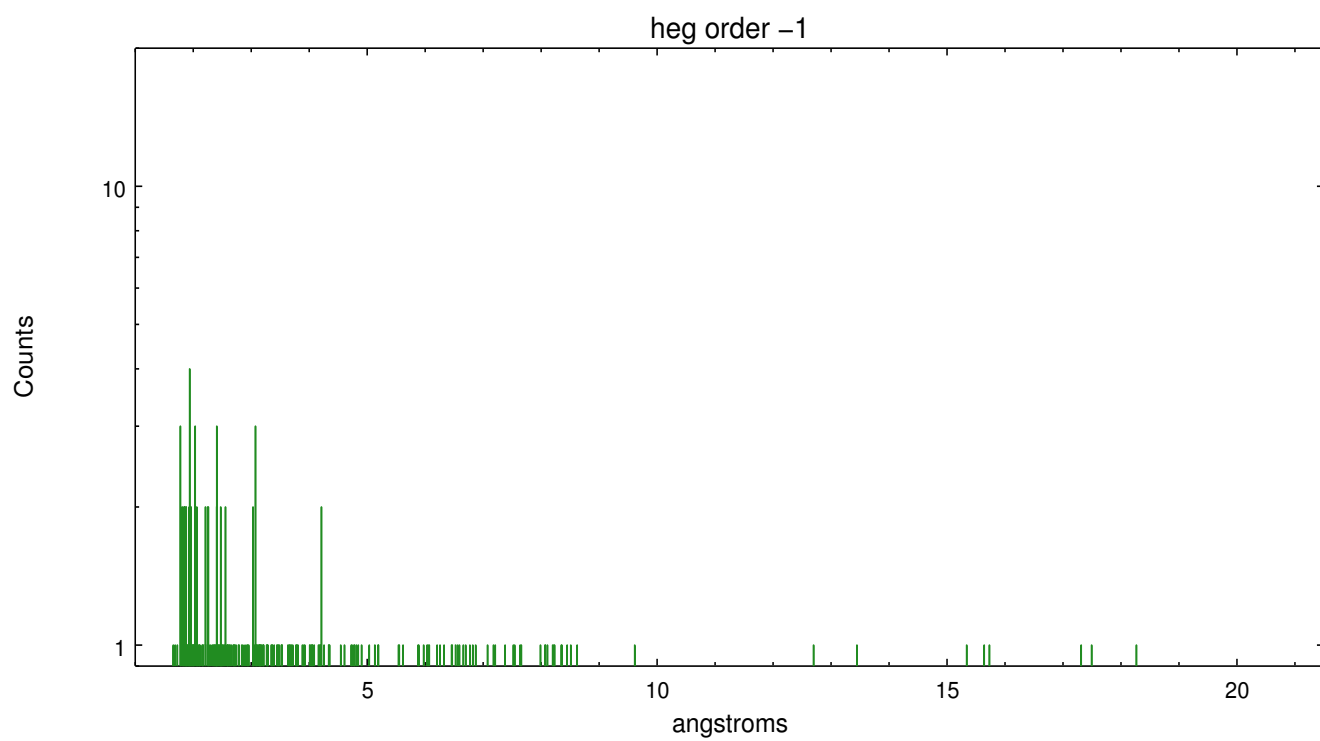
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	148	184	435	2156	357	120	133

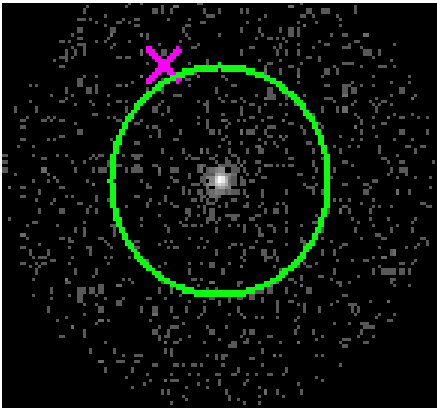




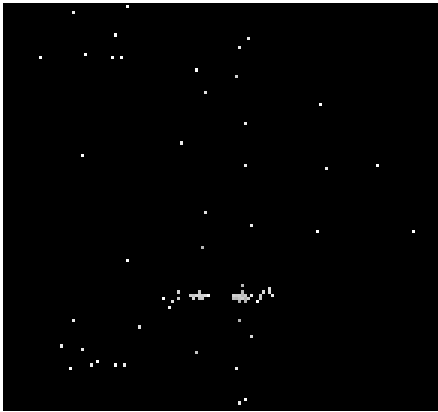
3.2 MEG Arm



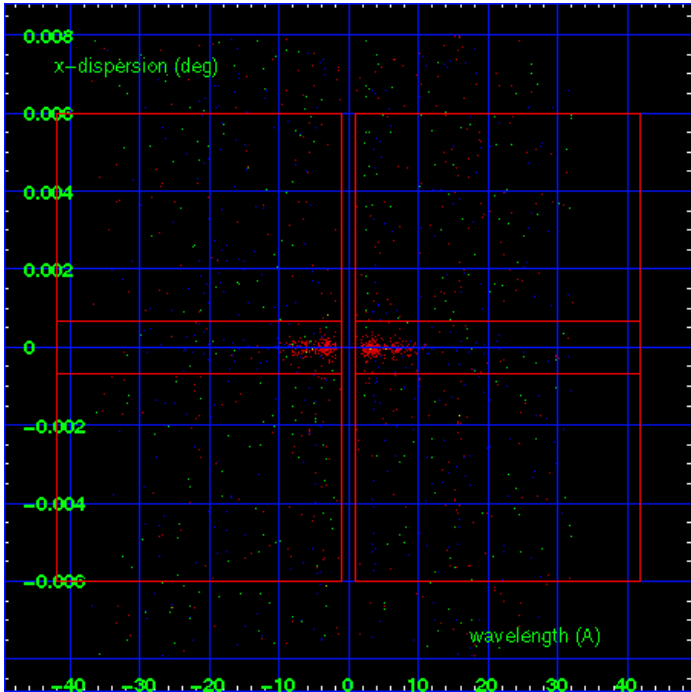
MEG Order Sort 123



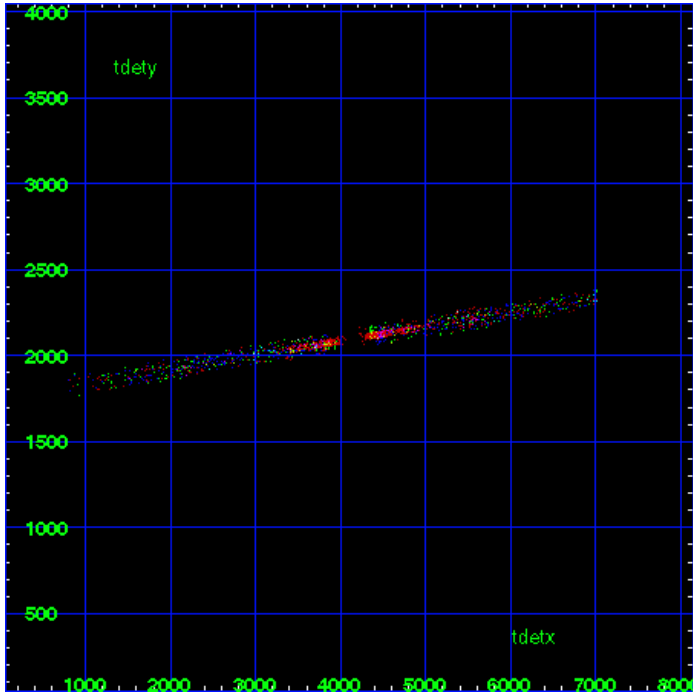
MEG Zero Order



MEG Order Sort ALL

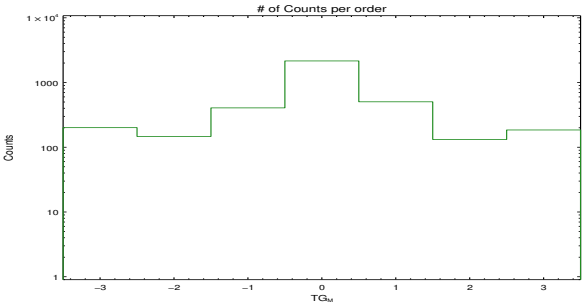


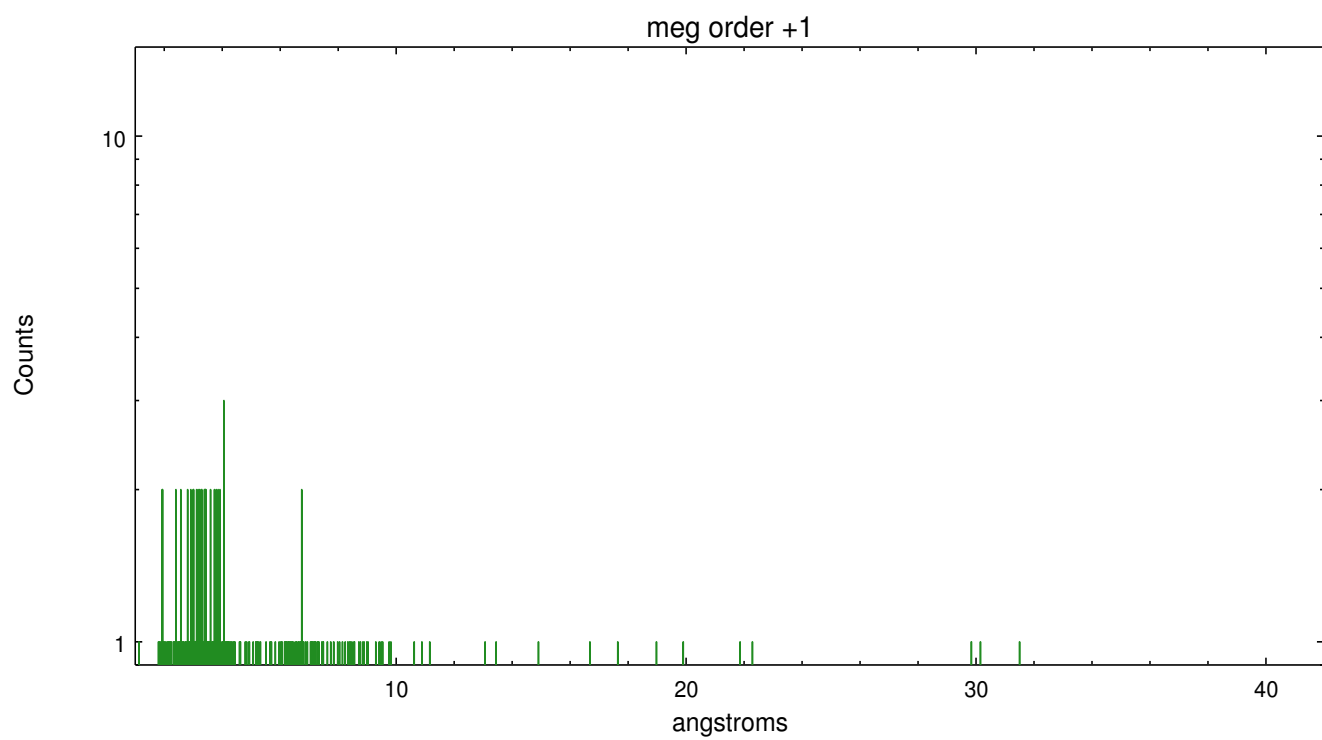
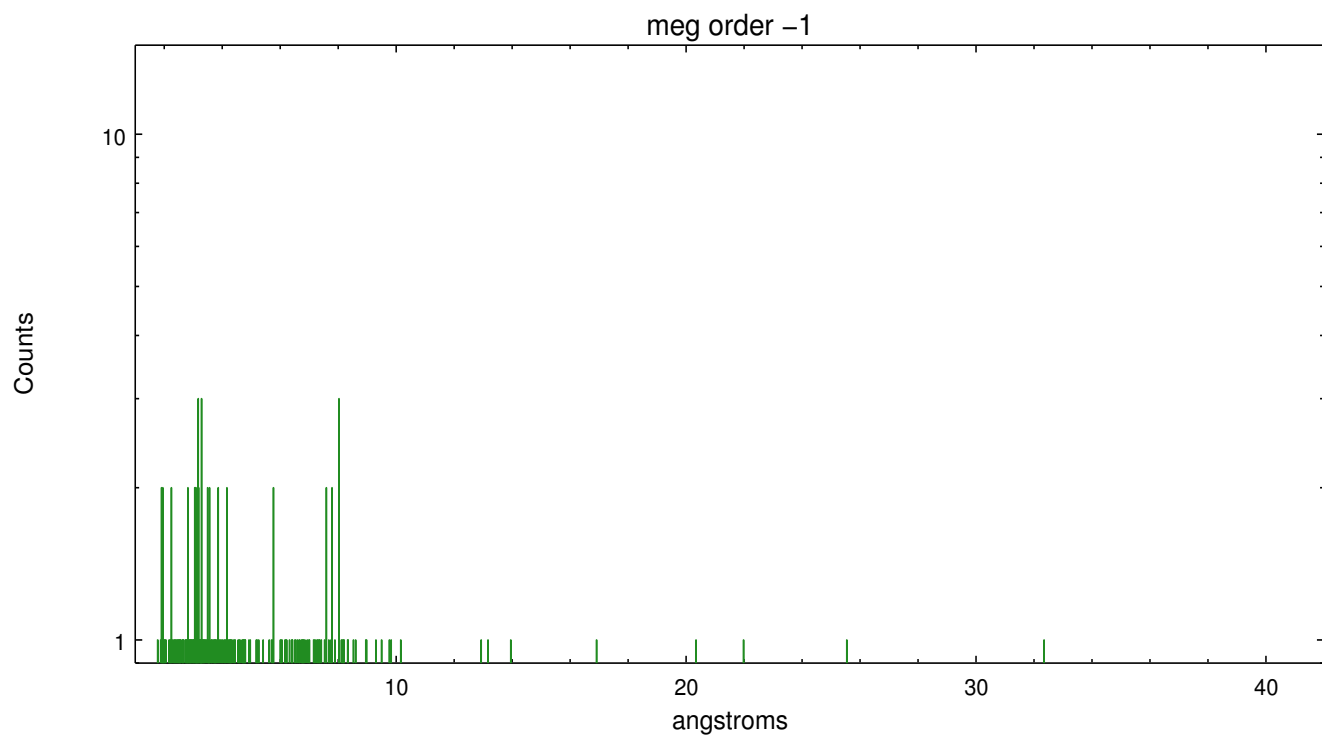
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	201	147	406	2156	504	132	185





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	16.7025

A.2 Comments

Optical monitoring of the target star (aka AGASC 1128136880) was requested for this observation, and that is what was observed in slot 7. This star was observed by the aspect camera at ~8.27 mag, though it has a catalog mag of ~9.5. The star was also used as a guide star for this observation.