

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10859 - L2 Version 2
Chandra X-Ray Center

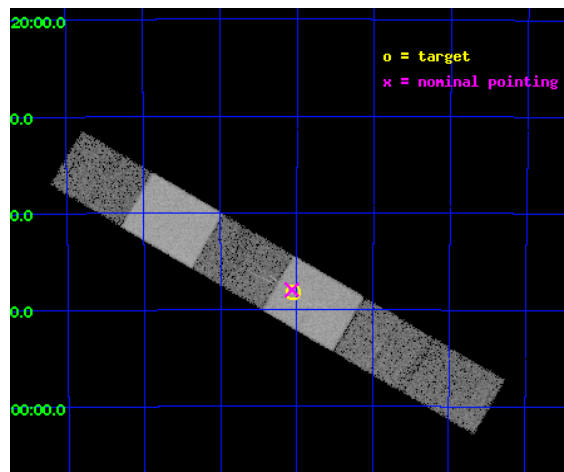
L2 Processing Date : May 29 2012

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1 Front

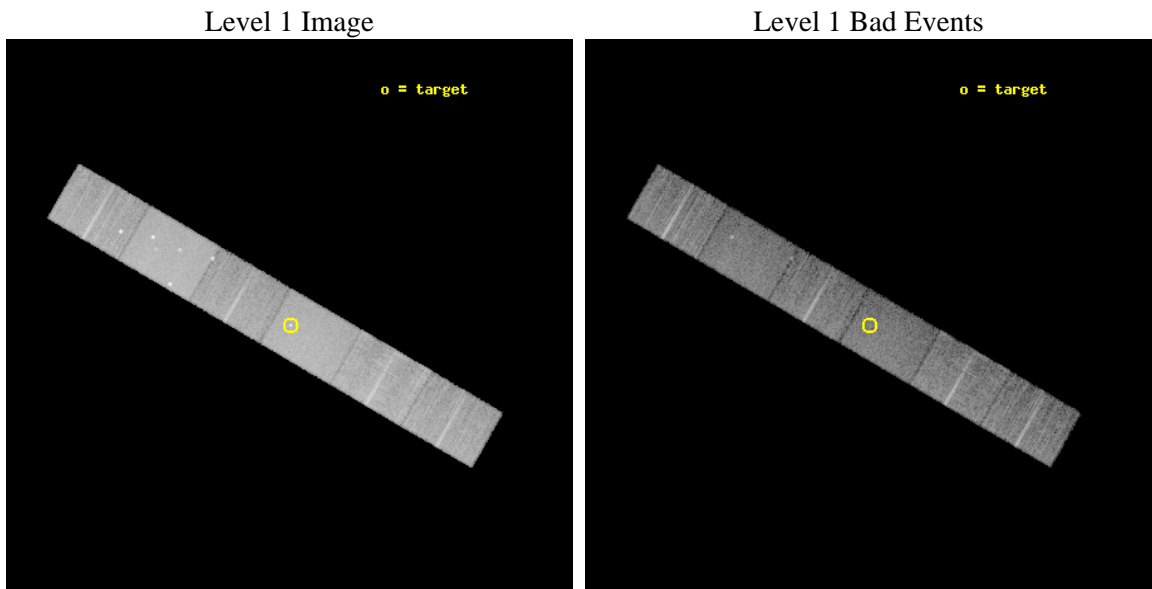
seq_num	300223	Sequence number
obs_id	10859	Observation id
title	The Symbiotic Star SS73 17: What Generates the Hard X-rays?	Propos
observer	Dr. Randall Smith	Principal investigator
object	SS73 17	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	152.762083	Observer's specified target RA [deg]
dec_targ	-57.803861	Observer's specified target Dec [deg]
ra_nom	152.76645397317	Nominal RA [deg]
dec_nom	-57.799567244608	Nominal Dec [deg]
roll_nom	30.160346017303	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10509.282869041	Sum of GTIs [s]
livetime	10339.54883536	Livetime [s]
ontime4	10509.323909044	Sum of GTIs [s]
ontime5	10509.241829038	Sum of GTIs [s]
ontime6	10509.200789034	Sum of GTIs [s]
ontime7	10509.282869041	Sum of GTIs [s]
ontime8	10509.159749031	Sum of GTIs [s]
ontime9	10509.118709028	Sum of GTIs [s]
l2events	139836	Number of level 2 events



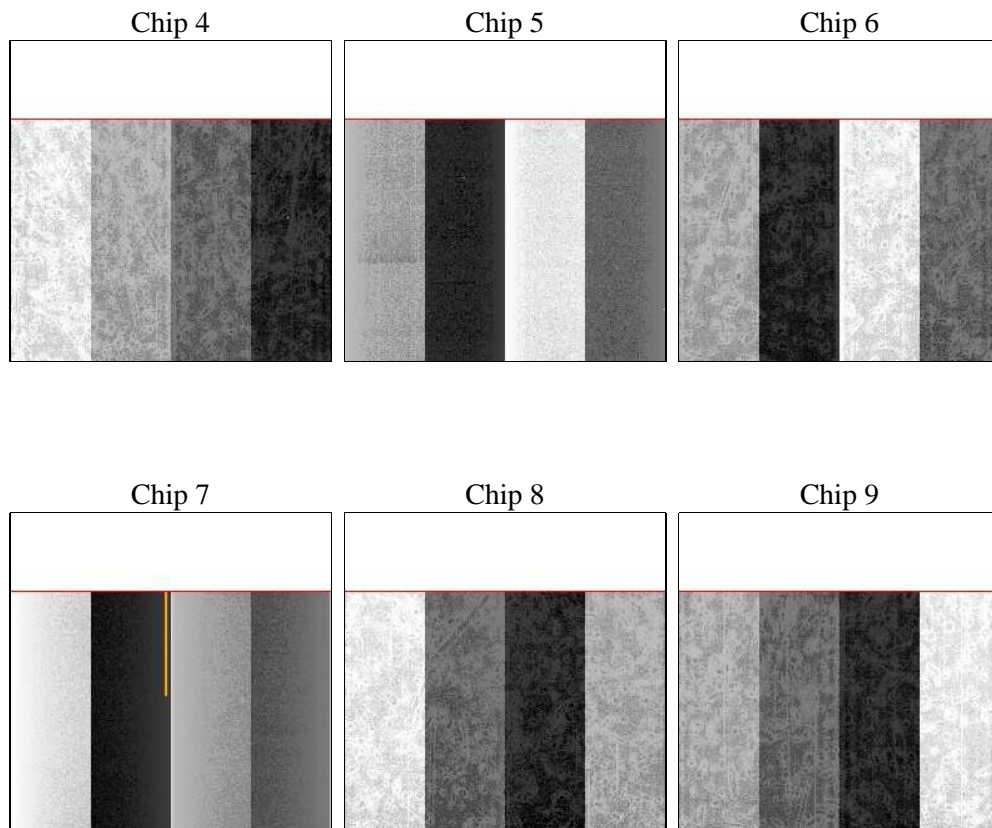
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10379.172000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	10509.282869041	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	10509.323909044	Sum of GTIs [s]
date	2012-05-29T02:55:15	Date and time of file creation	ontime5	10509.241829038	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10509.200789034	Sum of GTIs [s]
			ontime7	10509.282869041	Sum of GTIs [s]
			ontime8	10509.159749031	Sum of GTIs [s]
			ontime9	10509.118709028	Sum of GTIs [s]
			l1events	598796	Number of level 1 events

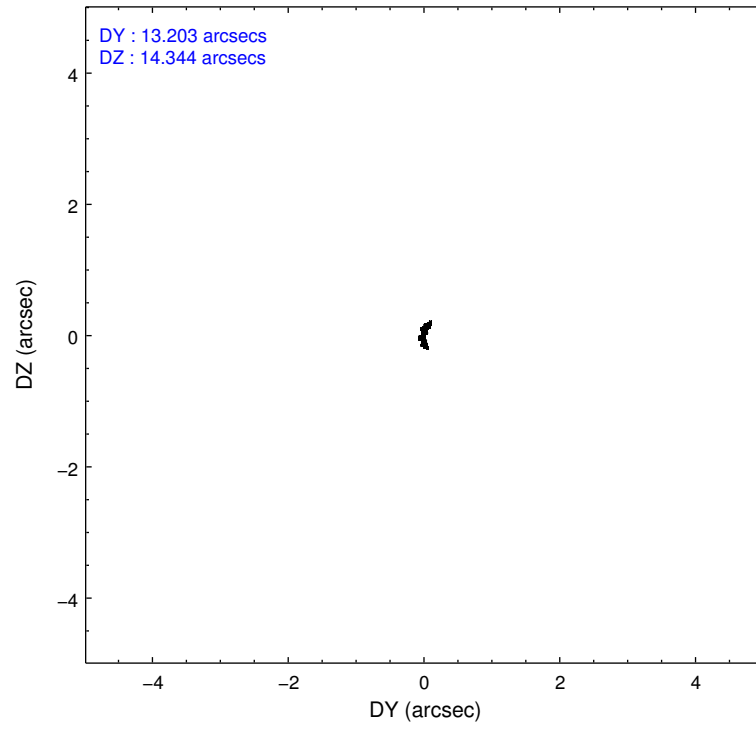
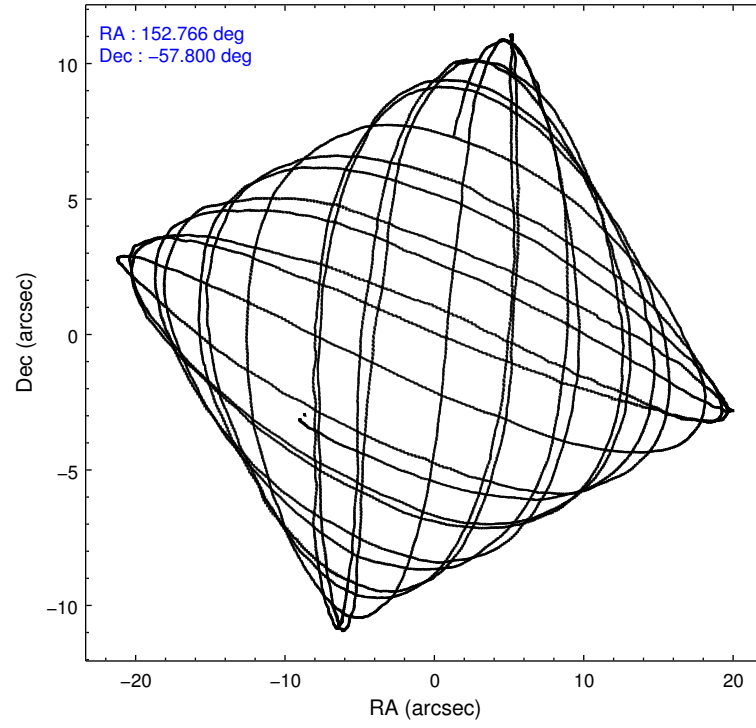
2.1.4 Events

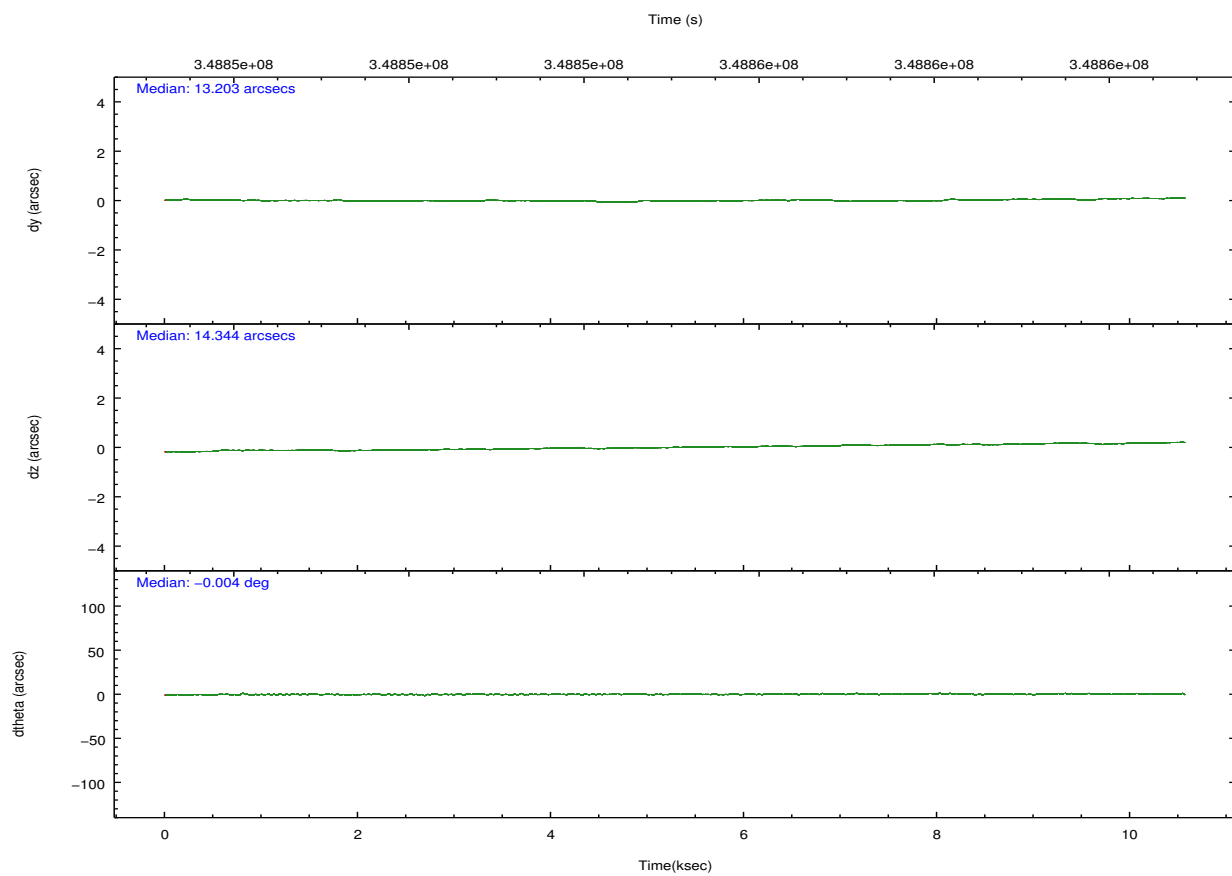
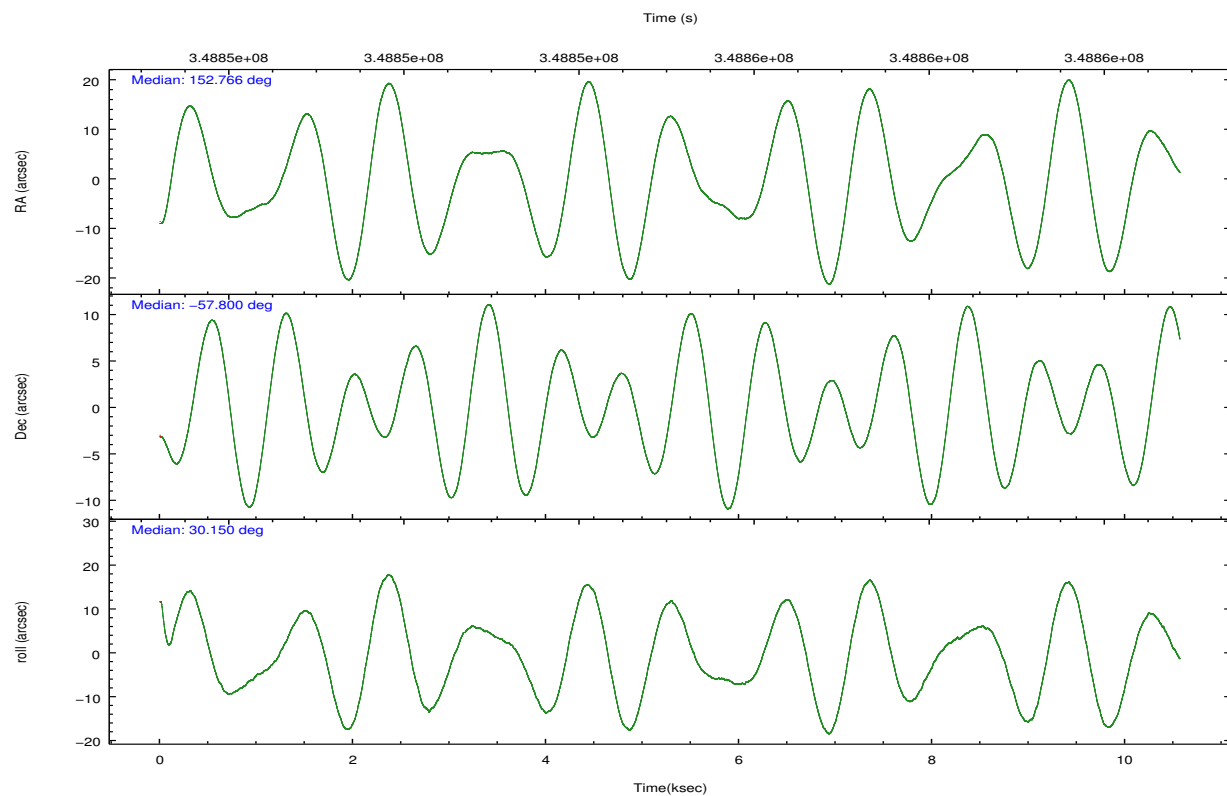
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	91120	128052	79987	113596	105474	80567	grade 0 events	6415	6850	4083	4393	7670	4351
rejected events	78577	67617	69582	64757	80315	69930		7%	5%	5%	3%	7%	5%
rejected %	86%	52%	86%	57%	76%	86%	grade 1 events	80	302	38	115	68	58
								0%	0%	0%	0%	0%	0%
							grade 2 events	2288	18465	2240	10095	5695	2067
								2%	14%	2%	8%	5%	2%
							grade 3 events	1103	2424	1004	4280	2717	1070
								1%	1%	1%	3%	2%	1%
							grade 4 events	1022	2299	988	4290	2477	1012
								1%	1%	1%	3%	2%	1%
							grade 5 events	3577	9302	3762	10563	4988	4196
								3%	7%	4%	9%	4%	5%
							grade 6 events	1715	30411	2093	25794	6605	2140
								1%	23%	2%	22%	6%	2%
							grade 7 events	74920	57999	65779	54066	75254	65673
								82%	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	152.7664539731658	CCD I2 on	N	N
[deg] Pointing Dec	-57.823490	-57.79956724460843	CCD I3 on	N	N
[deg] Pointing Roll	29.982528	30.16034601730274	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	-187.1254020033014	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.007120579706367	CCD S4 on	Y	Y
[s] Observation start time (MET)	348849955.184000	348848951.03146	CCD S5 on	O2	Y
Observation start date	2009-01-20T14:44:49	2009-01-20T14:29:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	348860334.184000	348860551.46953	On-chip summing requested	N	N
Observation end date	2009-01-20T17:37:48	2009-01-20T17:42:31	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



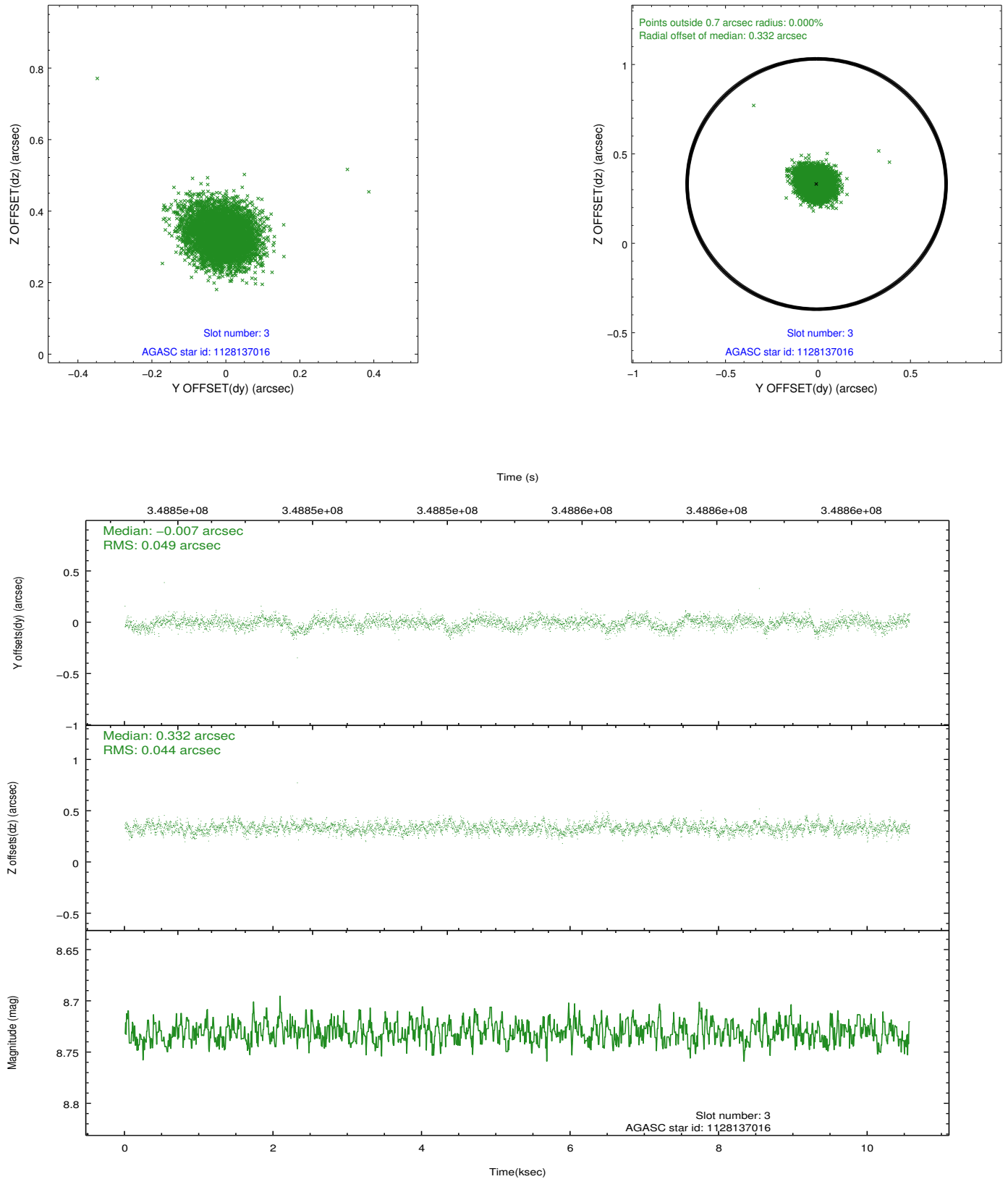


Slot Statistics

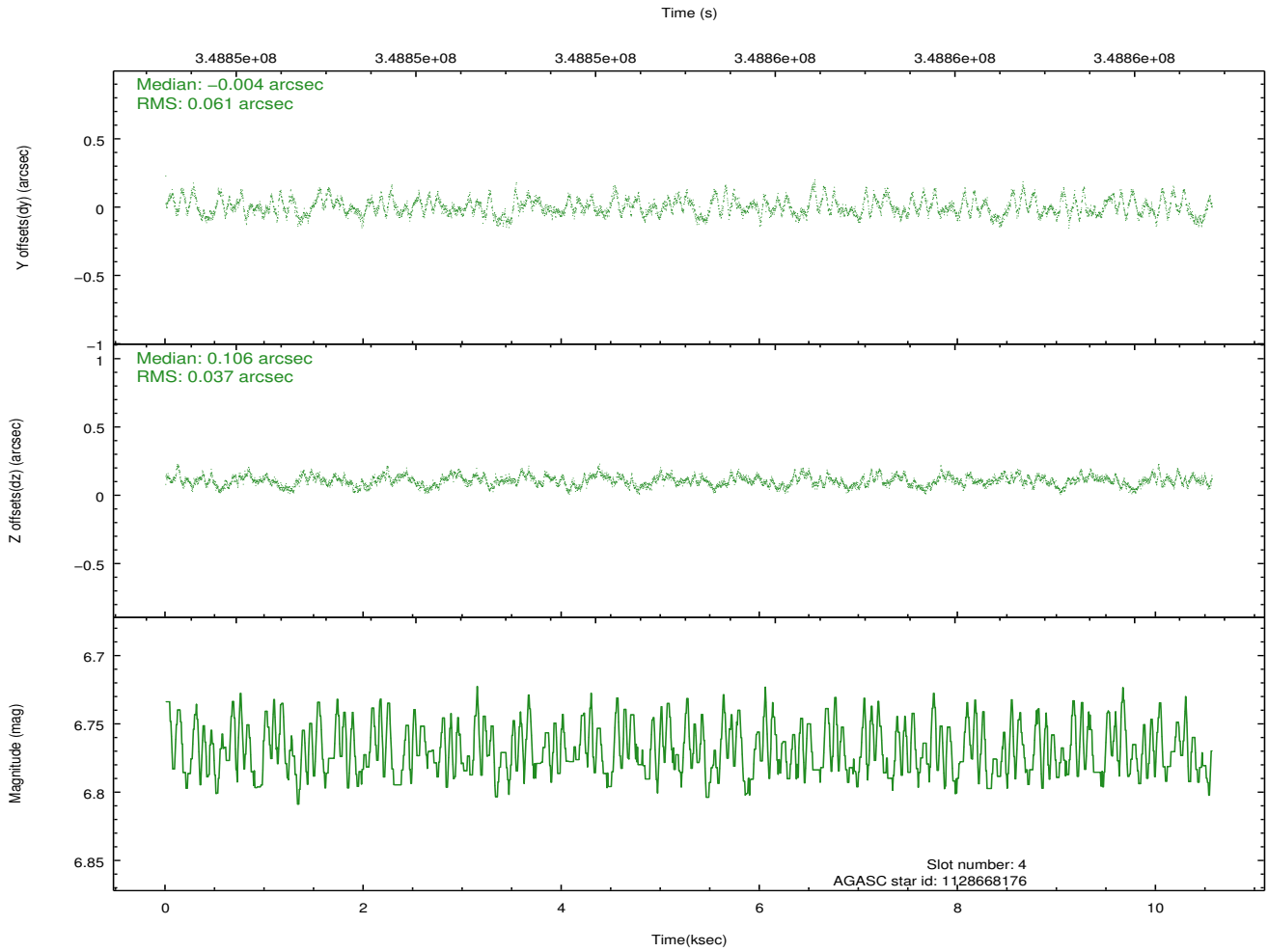
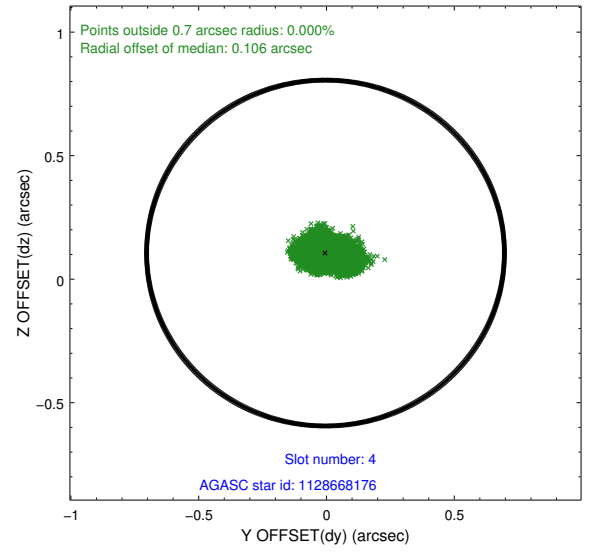
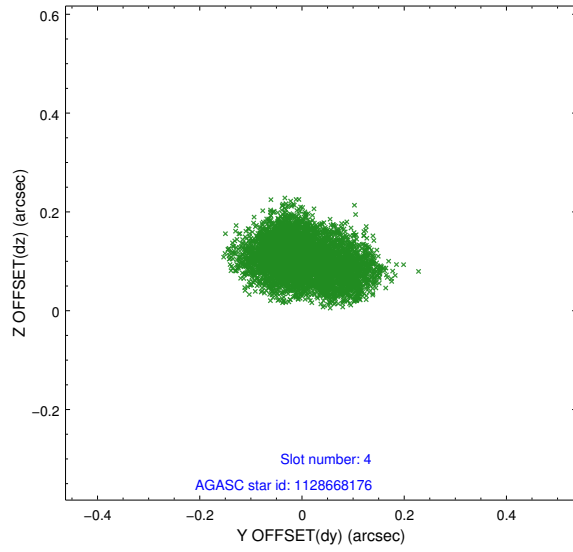
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.93	2578	-0.074	-0.054	0.009	0.013	0.000000	0.000000	-766.01	-1797.84
1	FID	ACIS-S-4	7.00	2577	0.166	0.050	0.005	0.010	0.000000	0.000000	2147.29	110.18
2	FID	ACIS-S-5	7.06	2576	-0.123	0.012	0.008	0.013	0.000000	0.000000	-1818.26	104.40
3	GUIDE	1128137016	8.73	5152	-0.007	0.332	0.069	0.112	153.049284	-57.884001	400.99	-483.64
4	GUIDE	1128668176	6.77	5155	-0.004	0.106	0.075	0.127	152.075503	-58.198582	-1771.92	-543.76
5	GUIDE	1128142832	8.65	5148	0.042	-0.283	0.077	0.125	151.690539	-57.394211	-1002.04	2343.45
6	GUIDE	1128141880	8.96	5148	0.066	-0.103	0.098	0.154	152.082849	-57.289838	-153.24	2299.50
7	GUIDE	1128136880	8.28	2577	-0.193	-0.106	0.072	0.116	152.762282	-57.803859	69.80	42.27

2.4 Star Slots

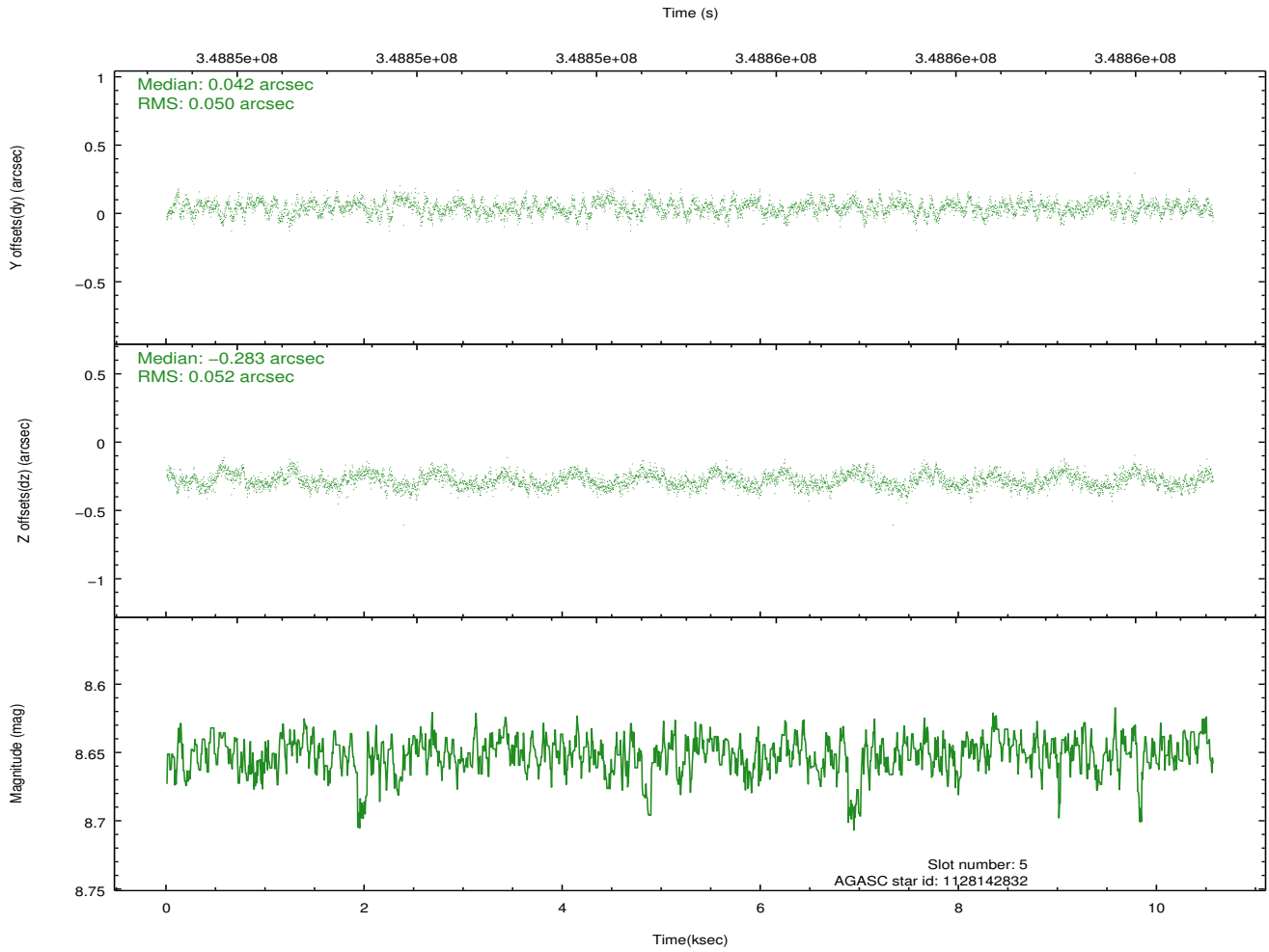
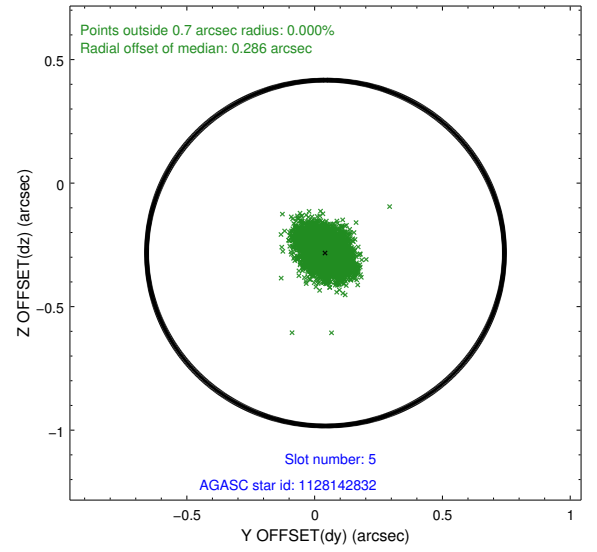
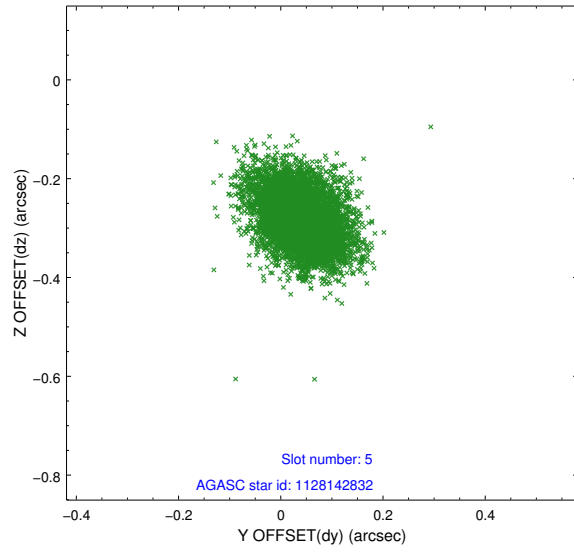
2.4.1 Slot 3



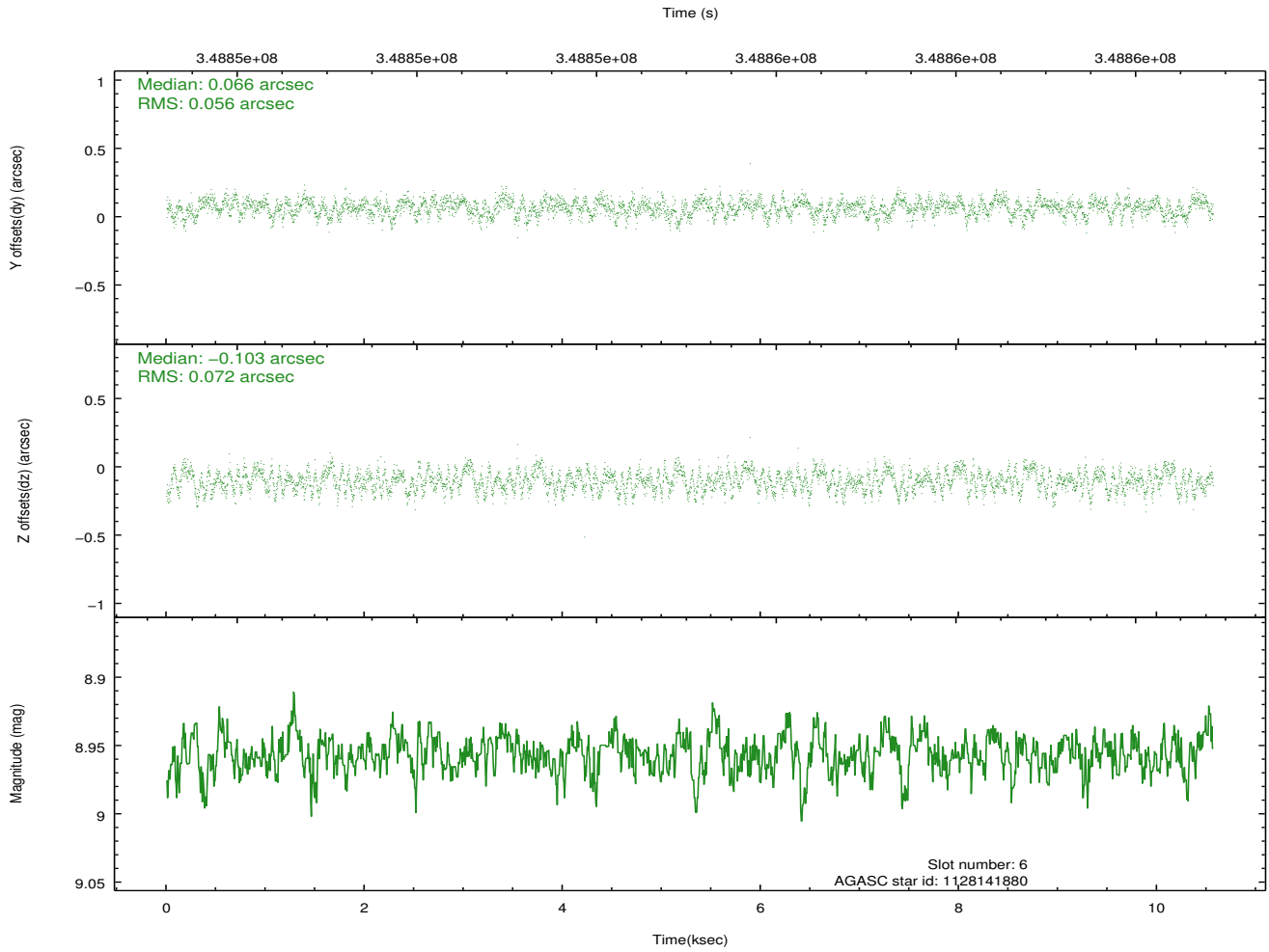
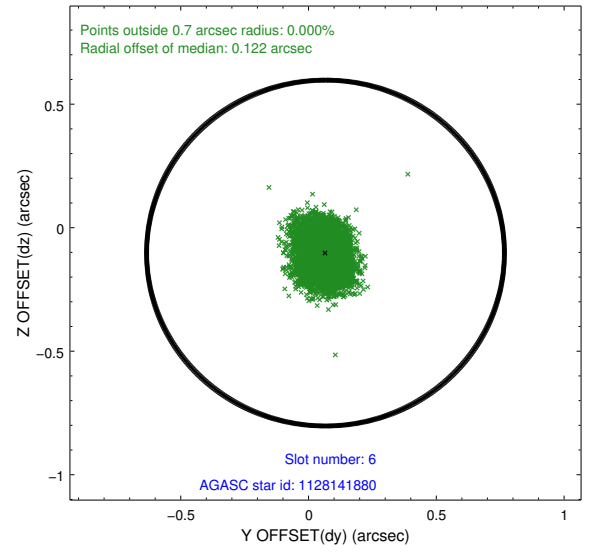
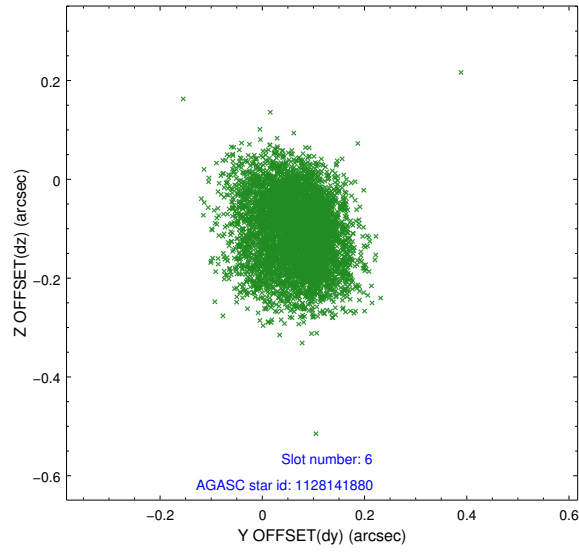
2.4.2 Slot 4



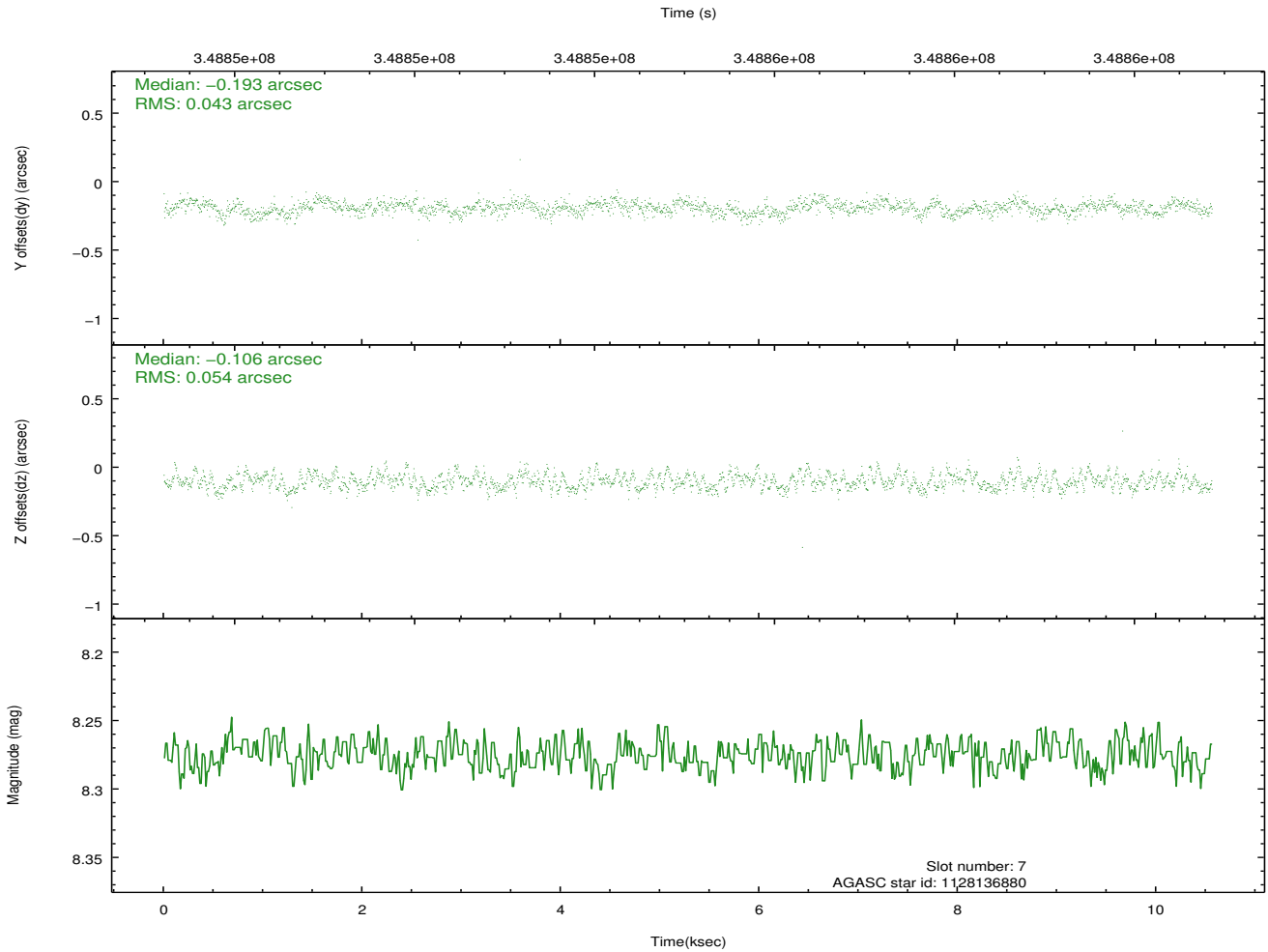
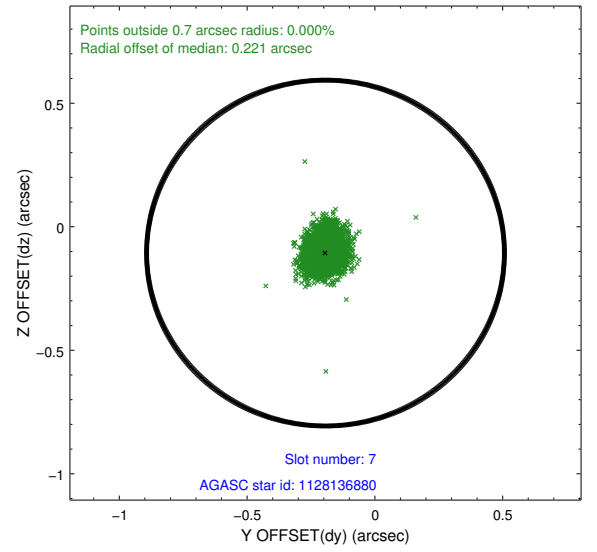
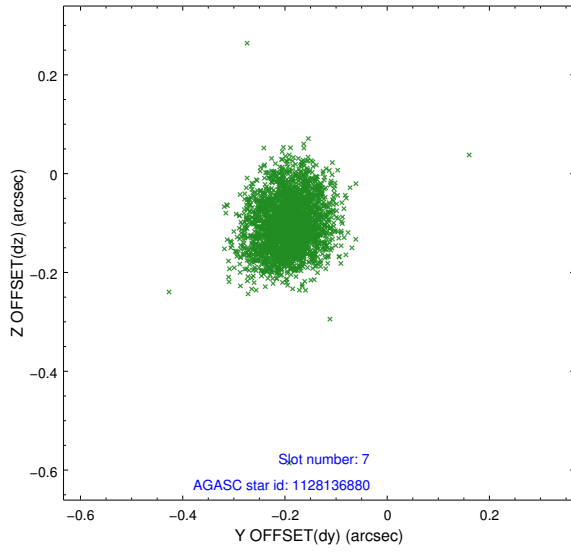
2.4.3 Slot 5



2.4.4 Slot 6

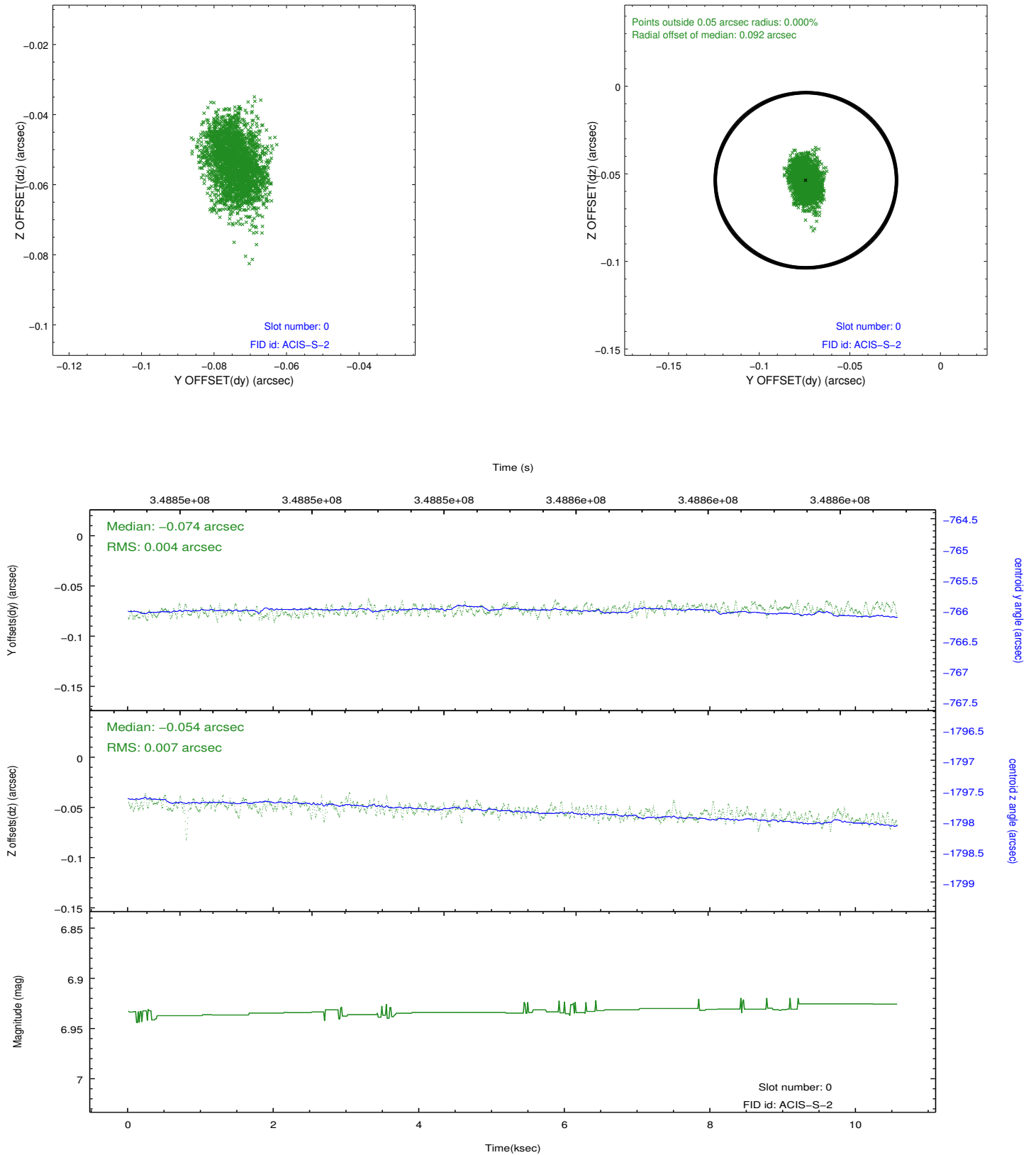


2.4.5 Slot 7

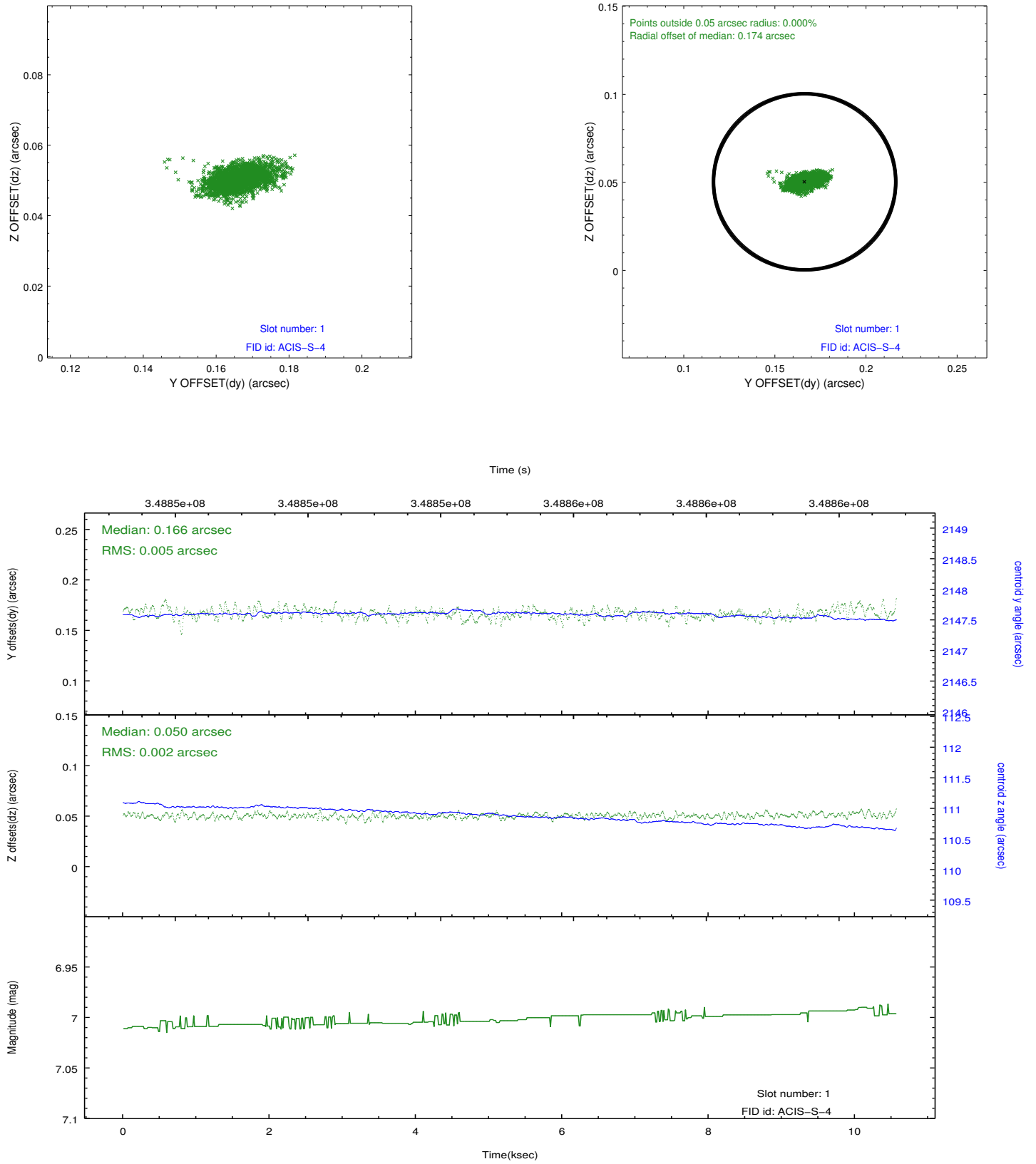


2.5 FID Slots

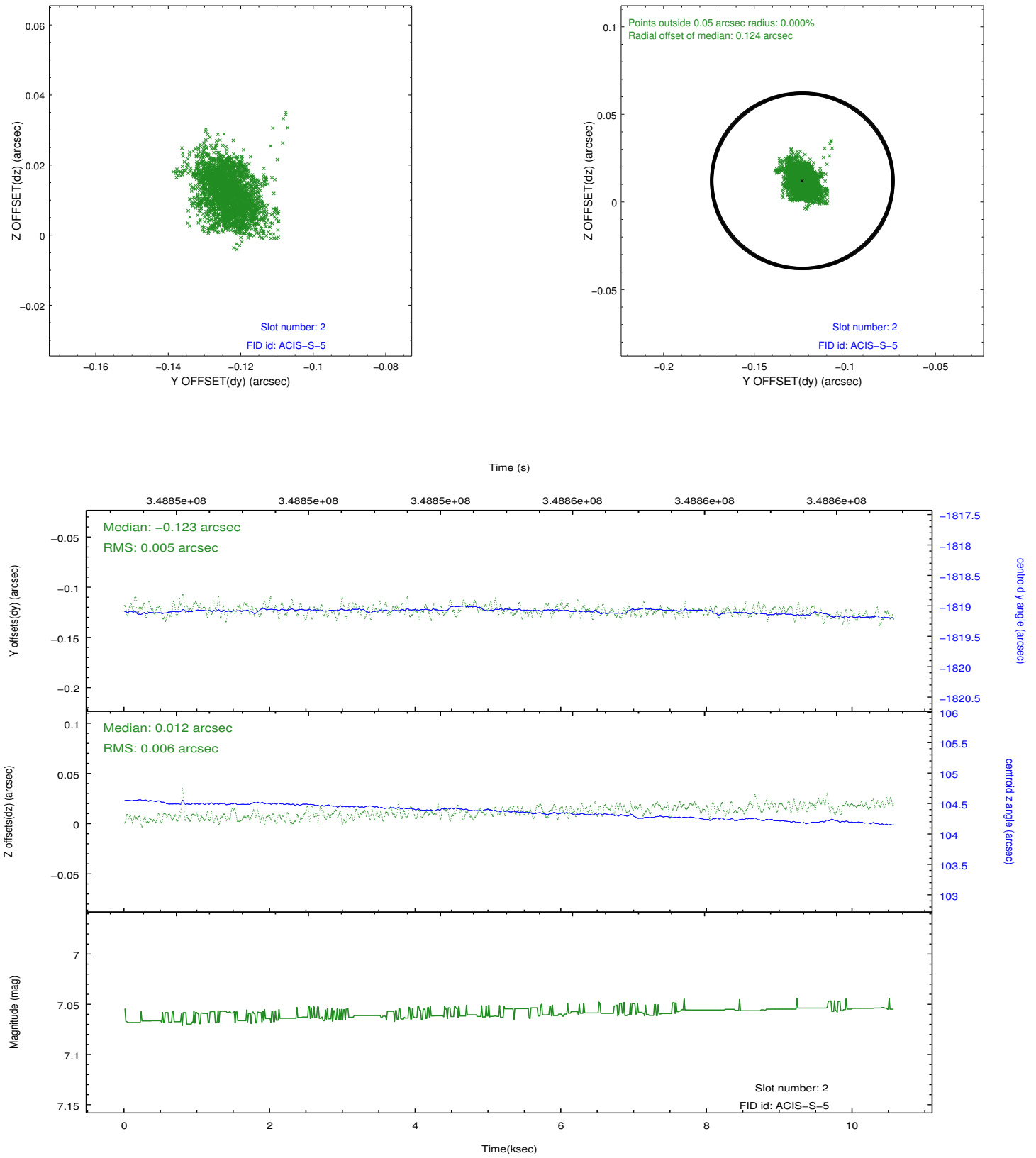
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

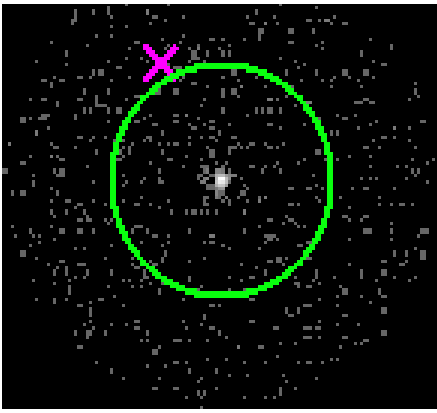


3 Gratings

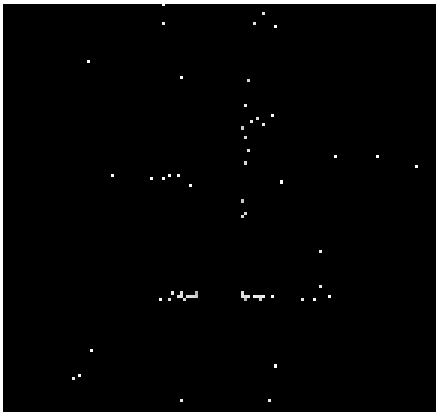
3.1 HEG Arm



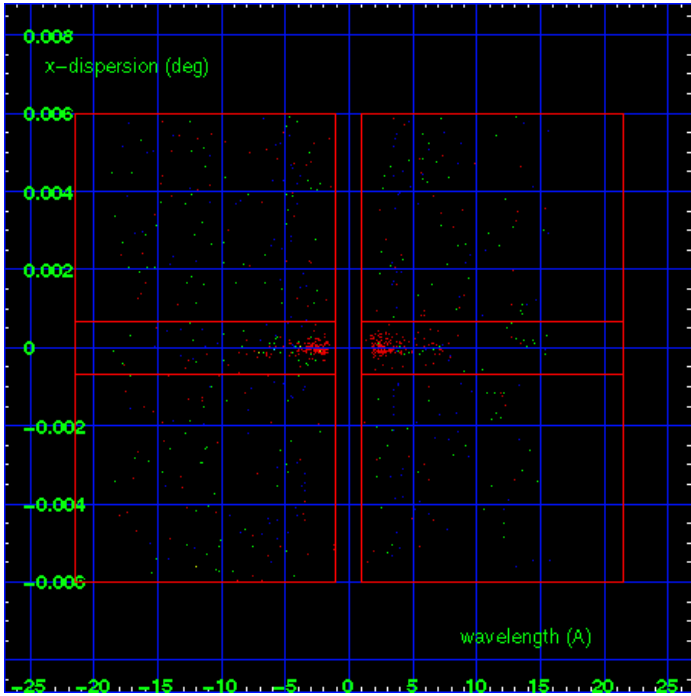
HEG Order Sort 123



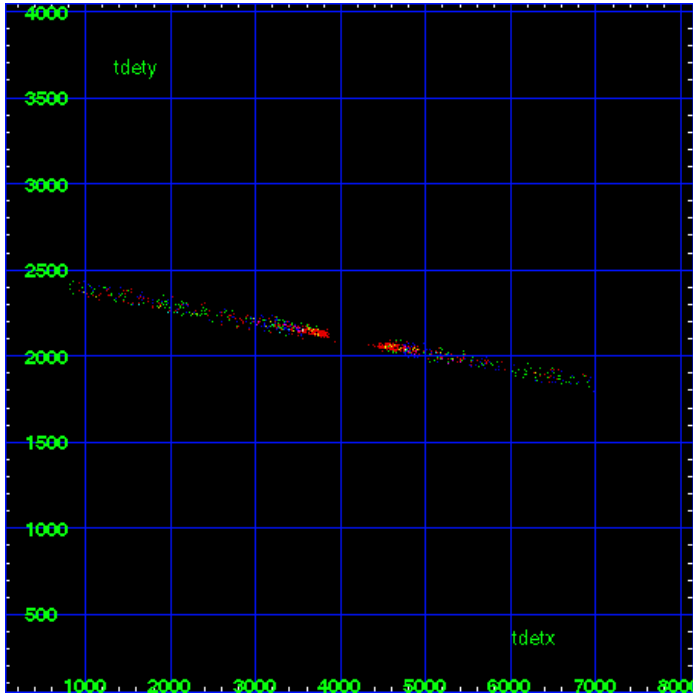
HEG Zero Order



HEG Order Sort ALL

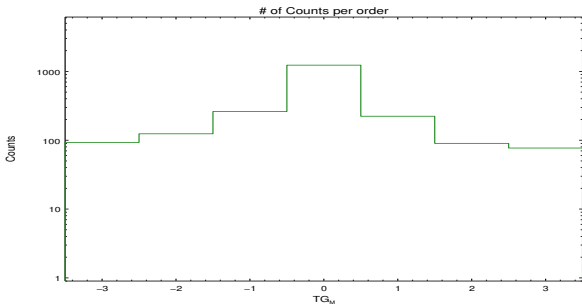


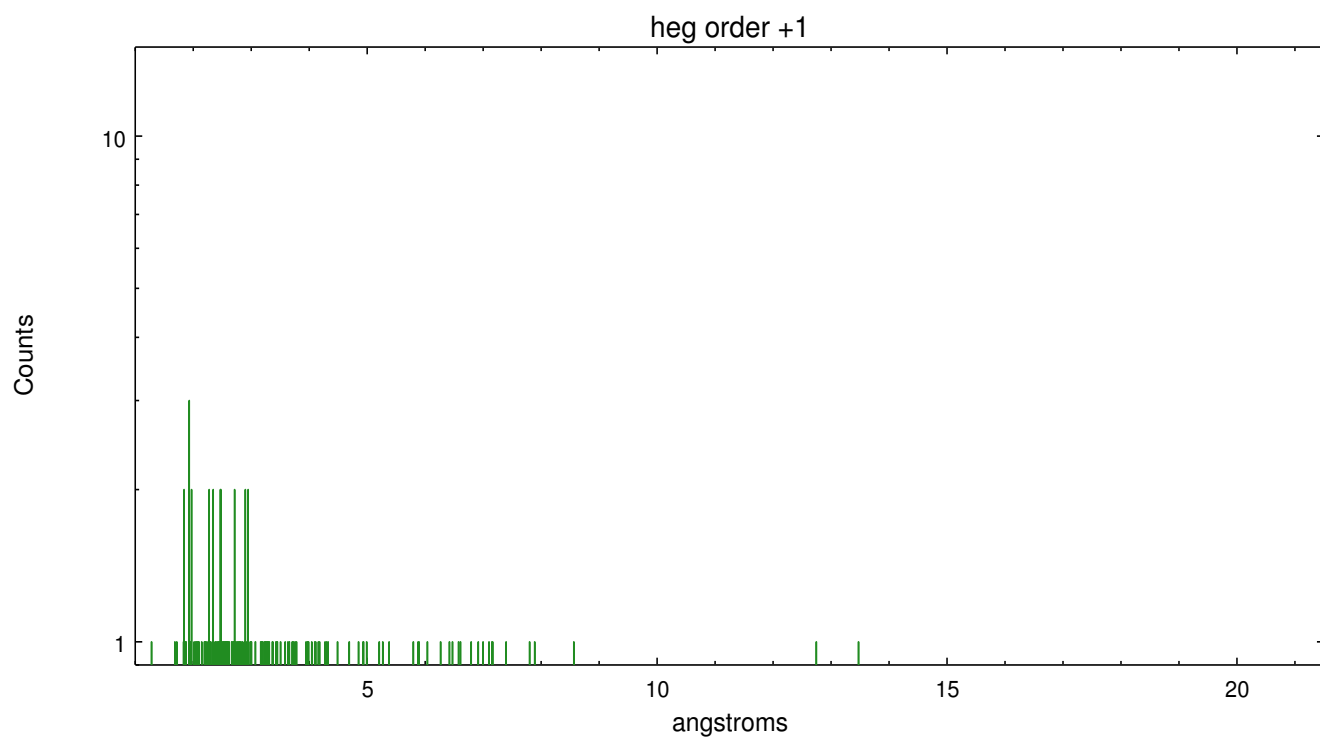
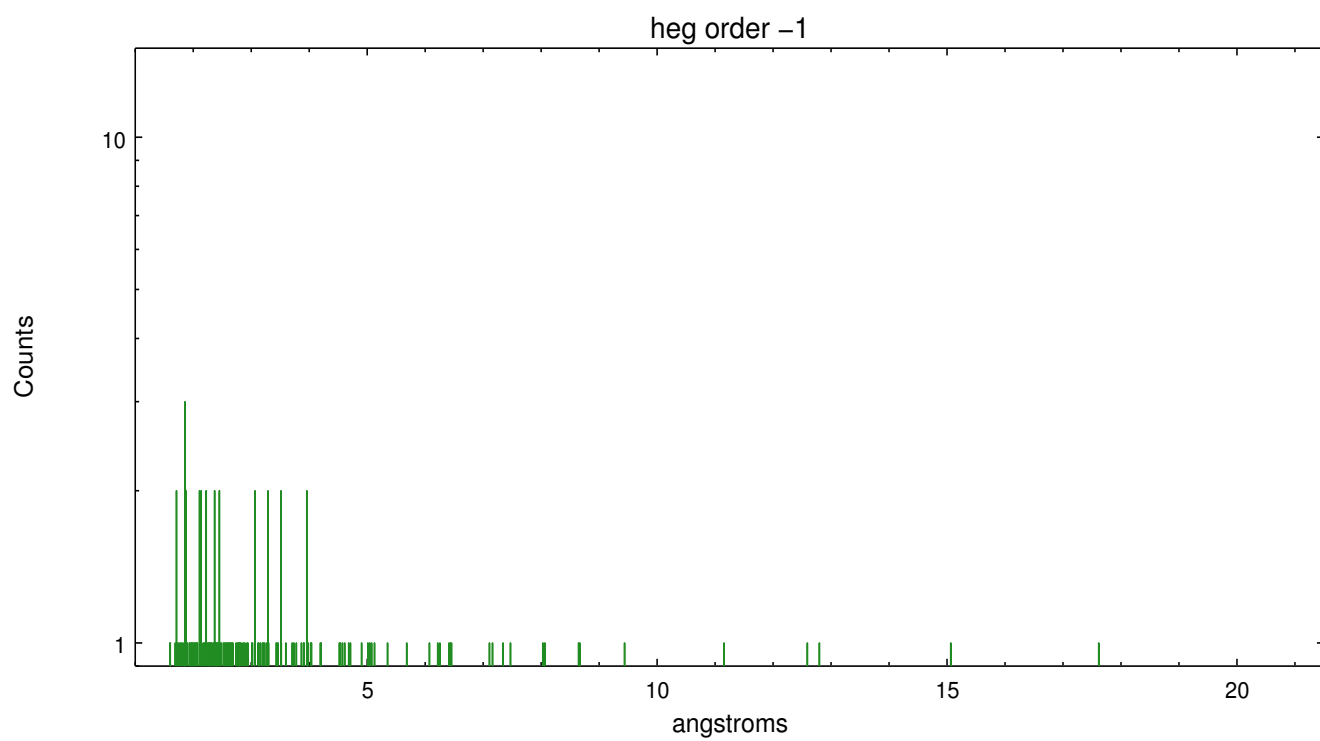
Spot Image HEG



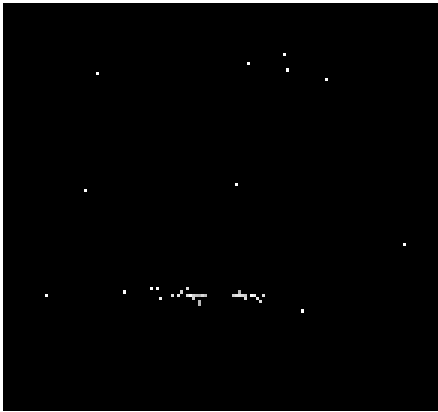
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	93	124	261	1232	223	90	77

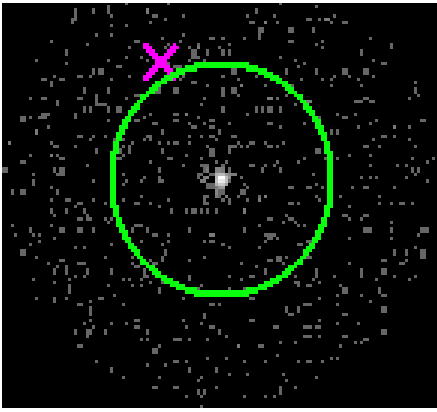




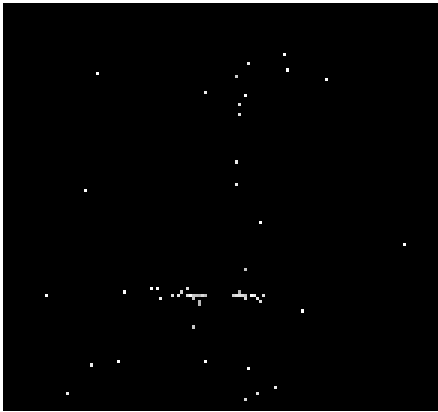
3.2 MEG Arm



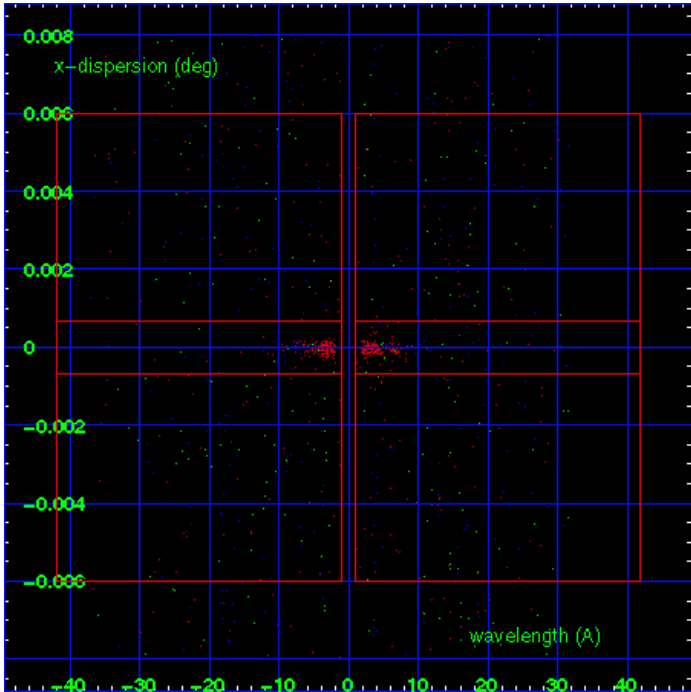
MEG Order Sort 123



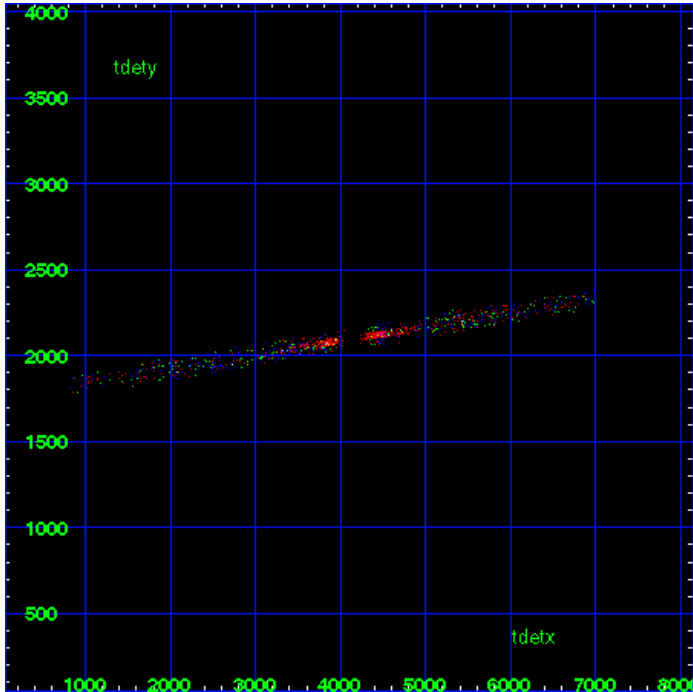
MEG Zero Order



MEG Order Sort ALL

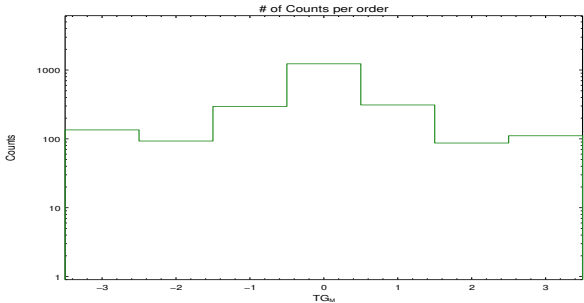


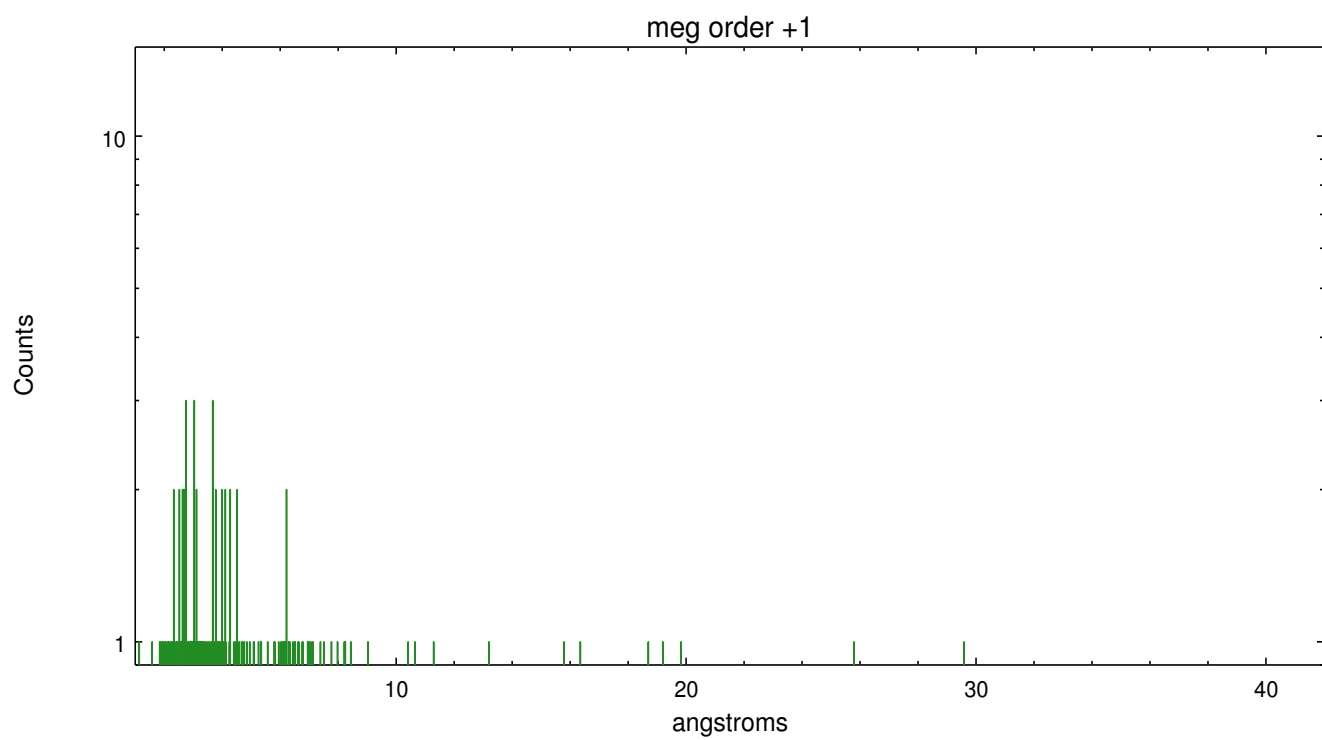
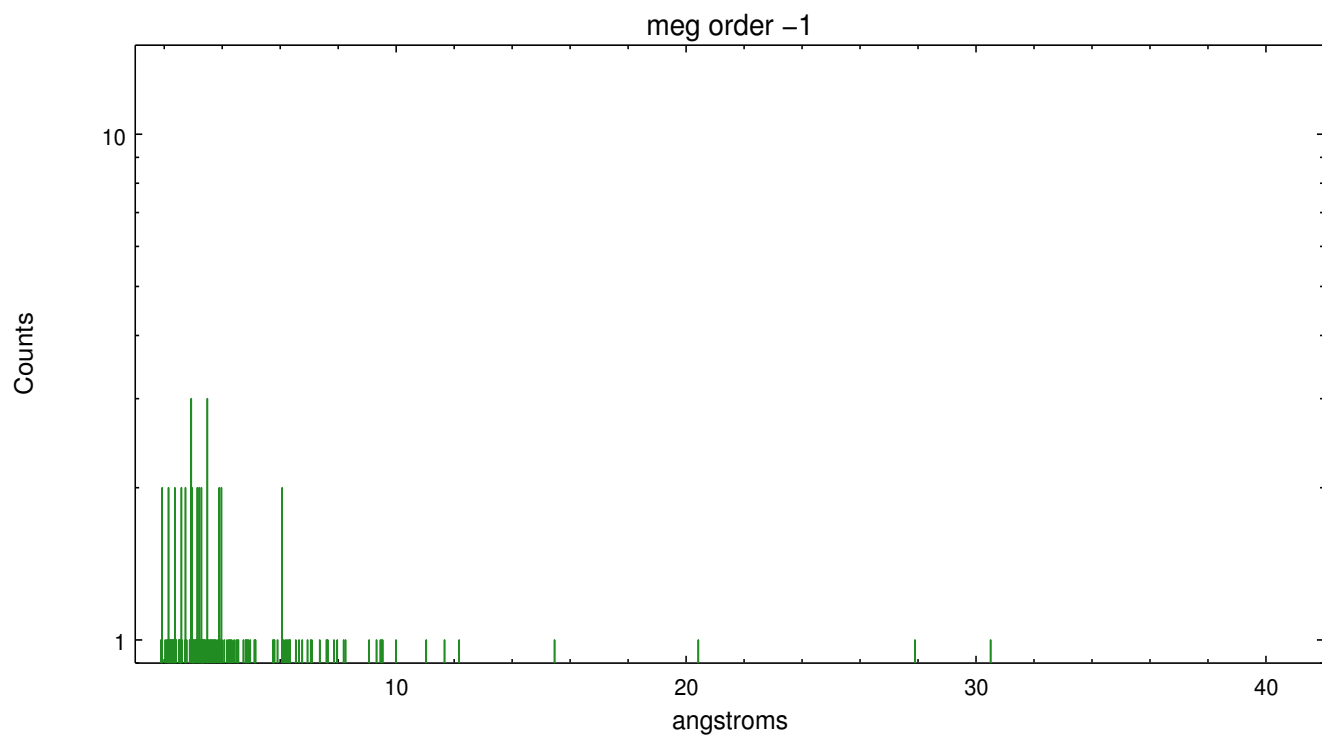
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	135	93	296	1232	311	87	111





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.51

A.2 Comments

Optical photometry of the target star (AGASC 1128136880) was requested in the OR for this observation, and that is what was observed in slot 7. The magnitude of the star as observed by the Aspect Camera is ~8.27 mag, though it has a catalog mag of ~9.5. The star was also used as a guide star for this observation.