

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10765 - L2 Version 2
Chandra X-Ray Center

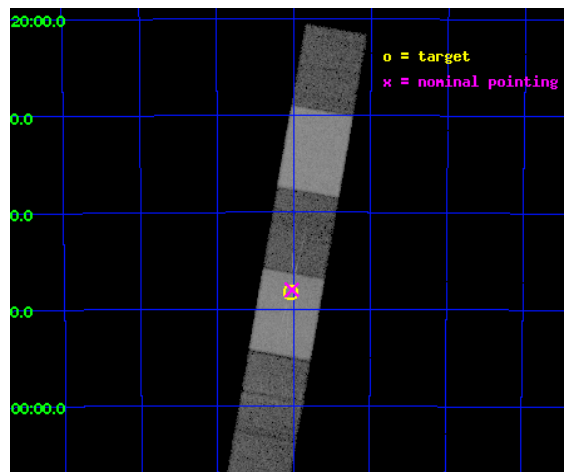
L2 Processing Date : May 23 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	HEG Arm	17
3.2	MEG Arm	19
A	Summary	21
A.1	Status	21
A.2	Comments	21

1 Front

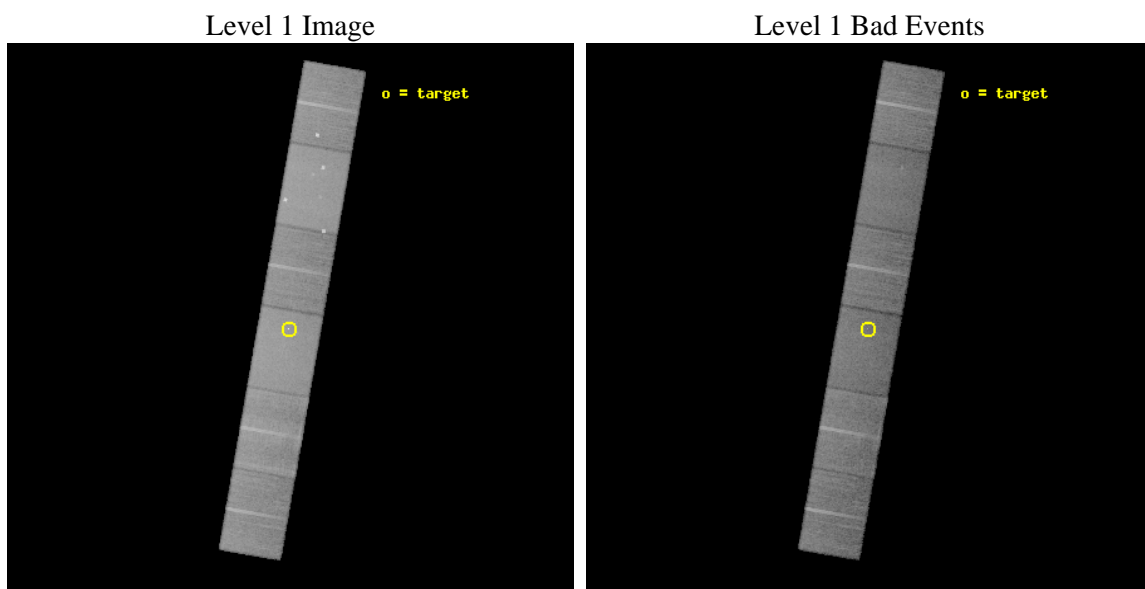
seq_num	300223	Sequence number
obs_id	10765	Observation id
title	The Symbiotic Star SS73 17: What Generates the Hard X-rays?	Propos
observer	Dr. Randall Smith	Principal investigator
object	SS73 17	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	152.762083	Observer's specified target RA [deg]
dec_targ	-57.803861	Observer's specified target Dec [deg]
ra_nom	152.75606549618	Nominal RA [deg]
dec_nom	-57.800238080165	Nominal Dec [deg]
roll_nom	99.970033216047	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19615.0	Sum of GTIs [s]
livetime	19298.200736706	Livetime [s]
ontime4	19615.0	Sum of GTIs [s]
ontime5	19615.0	Sum of GTIs [s]
ontime6	19615.0	Sum of GTIs [s]
ontime7	19615.0	Sum of GTIs [s]
ontime8	19615.0	Sum of GTIs [s]
ontime9	19615.0	Sum of GTIs [s]
l2events	260509	Number of level 2 events



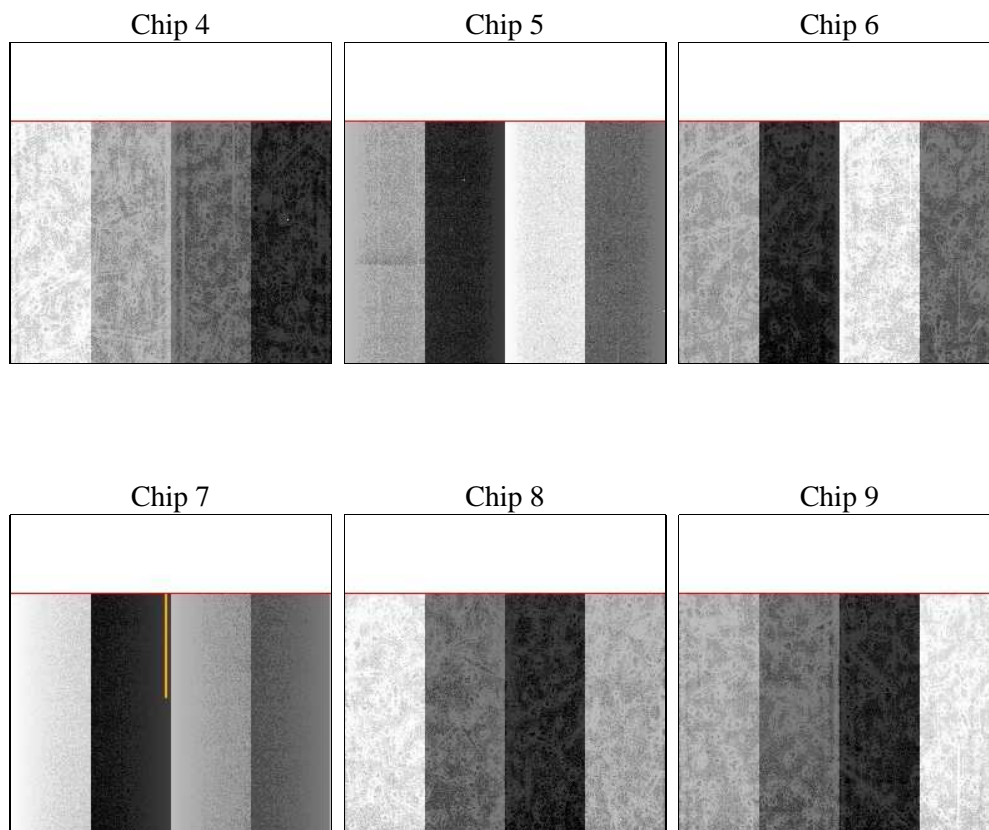
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	19615.0	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	19615.0	Sum of GTIs [s]
date	2012-05-23T12:50:01	Date and time of file creation	ontime5	19615.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19615.0	Sum of GTIs [s]
			ontime7	19615.0	Sum of GTIs [s]
			ontime8	19615.0	Sum of GTIs [s]
			ontime9	19615.0	Sum of GTIs [s]
			l1events	1134880	Number of level 1 events

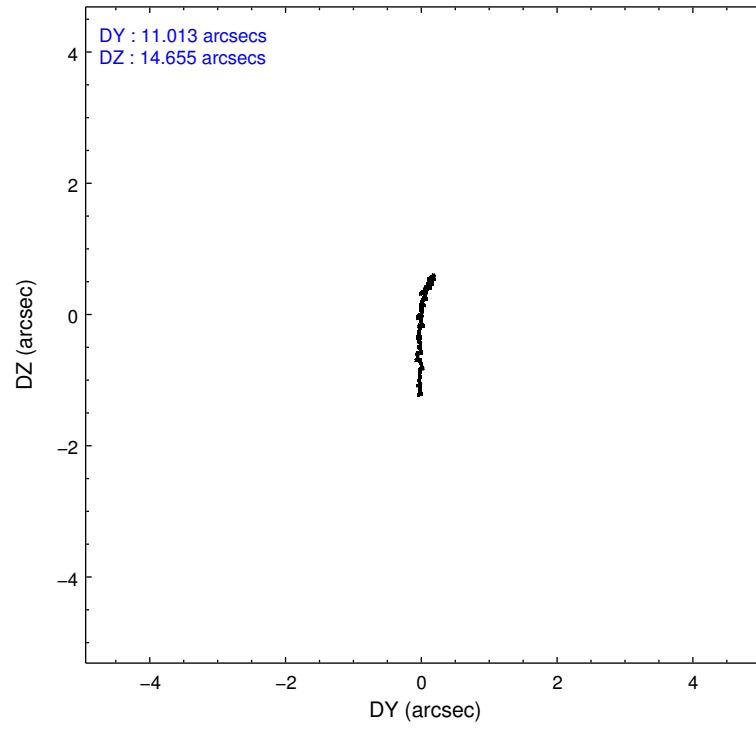
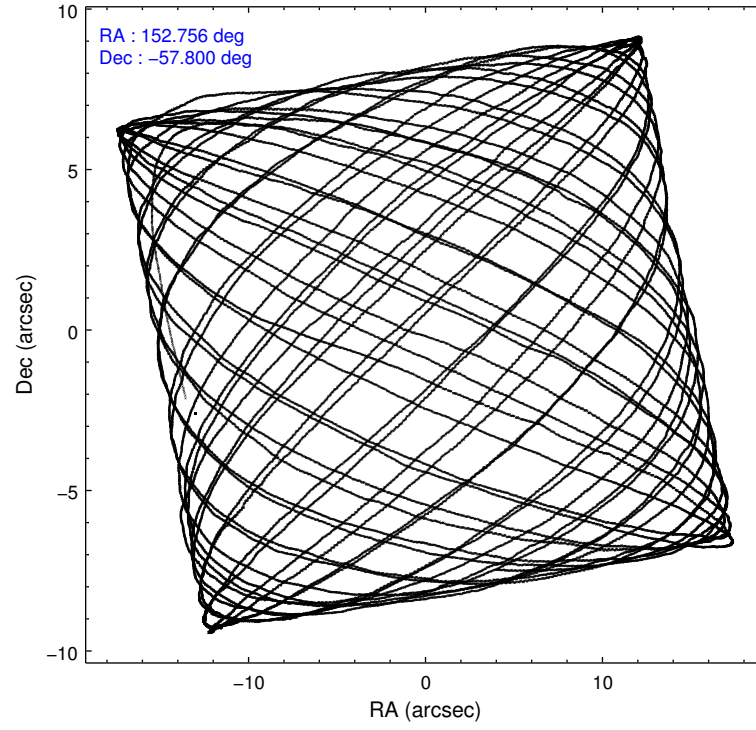
2.1.4 Events

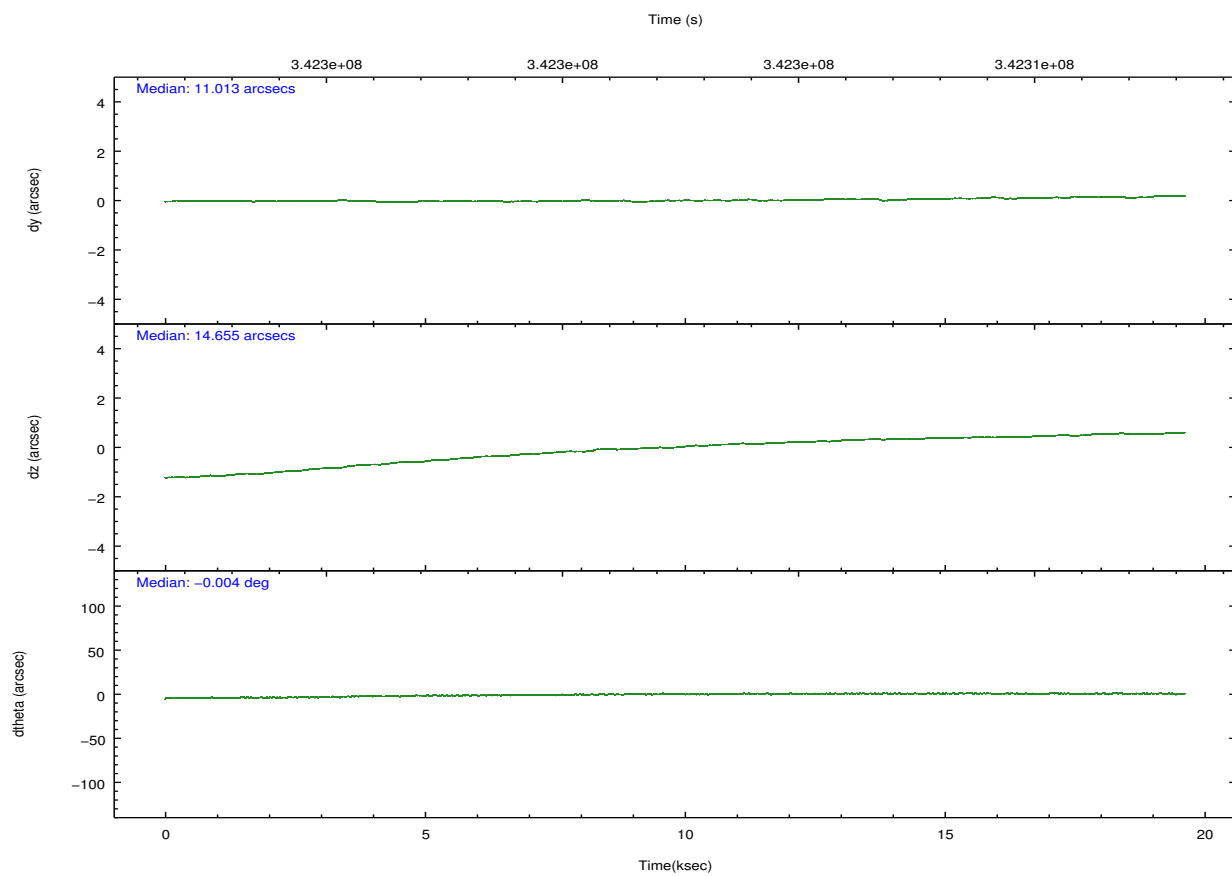
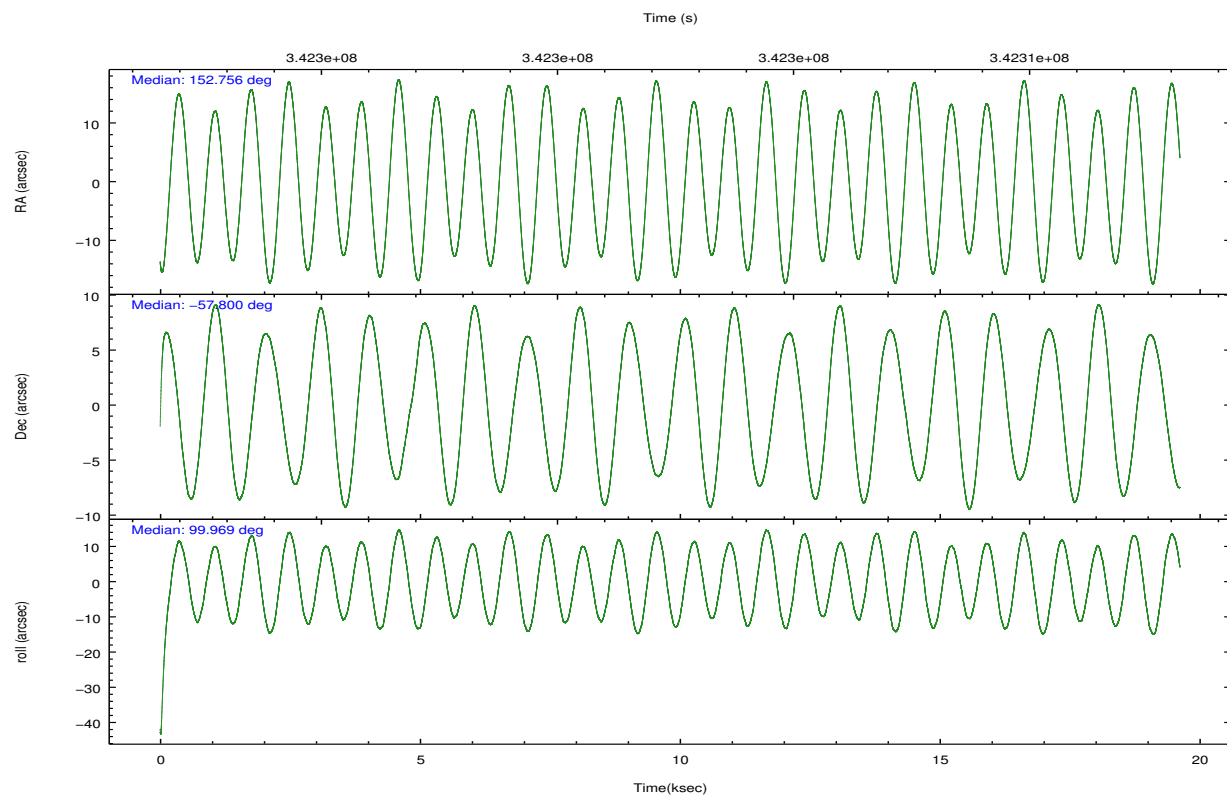
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	173089	242685	155669	215609	197679	150149	grade 0 events	12072	14859	7855	8224	14131	7883
rejected events	149649	129723	136280	124866	151728	130909		6%	6%	5%	3%	7%	5%
rejected %	86%	53%	87%	57%	76%	87%	grade 1 events	159	574	84	242	150	80
								0%	0%	0%	0%	0%	0%
							grade 2 events	4505	33250	4254	19135	10575	4009
								2%	13%	2%	8%	5%	2%
							grade 3 events	2066	4794	1949	8188	4938	1978
								1%	1%	1%	3%	2%	1%
							grade 4 events	2027	4506	1791	7945	4474	1892
								1%	1%	1%	3%	2%	1%
							grade 5 events	6920	17598	7466	19795	9664	7736
								3%	7%	4%	9%	4%	5%
							grade 6 events	3209	57956	3915	49004	12527	3848
								1%	23%	2%	22%	6%	2%
							grade 7 events	142131	109148	128355	103076	141220	122723
								82%	44%	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	152.789541	152.7560654961795	CCD I2 on	N	N
[deg] Pointing Dec	-57.820951	-57.80023808016517	CCD I3 on	N	N
[deg] Pointing Roll	99.841757	99.97003321604697	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)	342292688.184000	342291497.31993	CCD S5 on	O2	Y
Observation start date	2008-11-05T17:17:03	2008-11-05T16:58:17	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	342312188.184000	342313070.496	On-chip summing requested	N	N
Observation end date	2008-11-05T22:42:03	2008-11-05T22:57:50	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



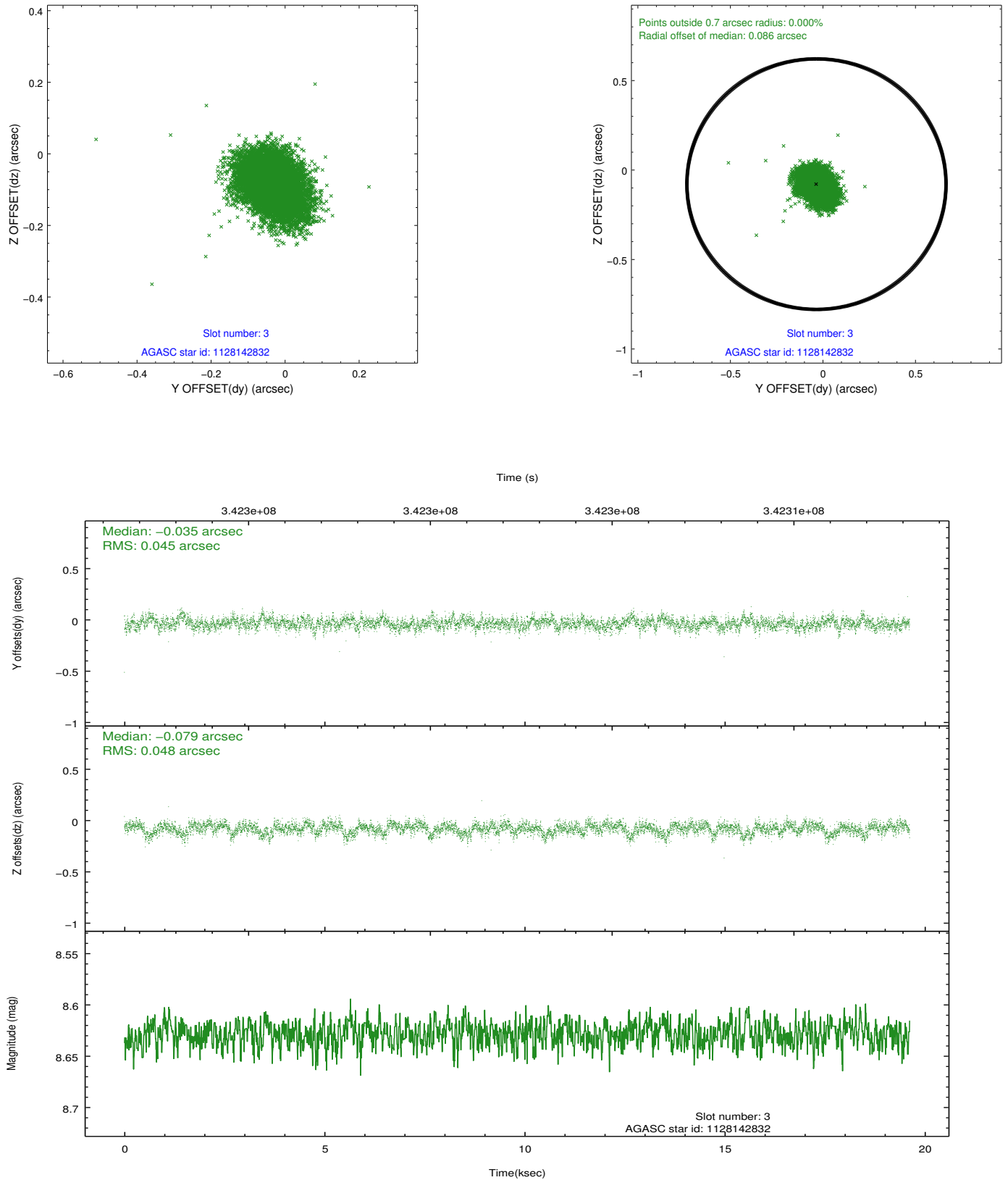


Slot Statistics

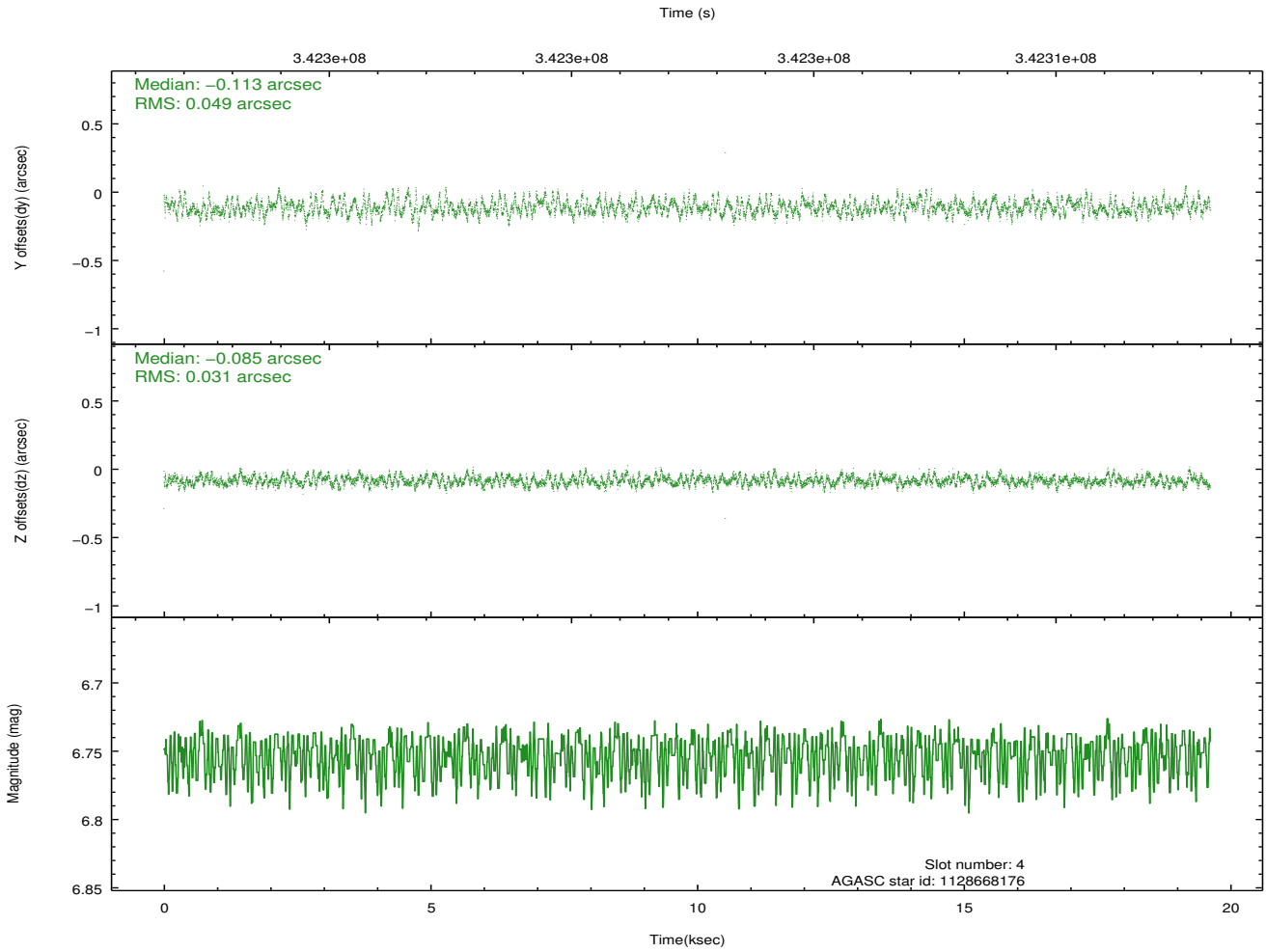
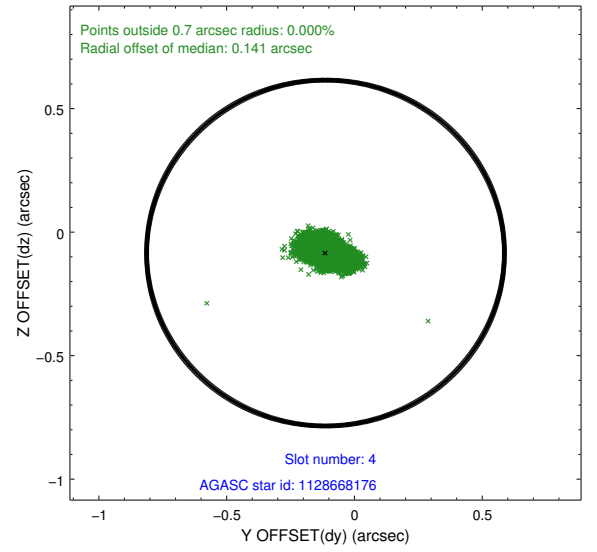
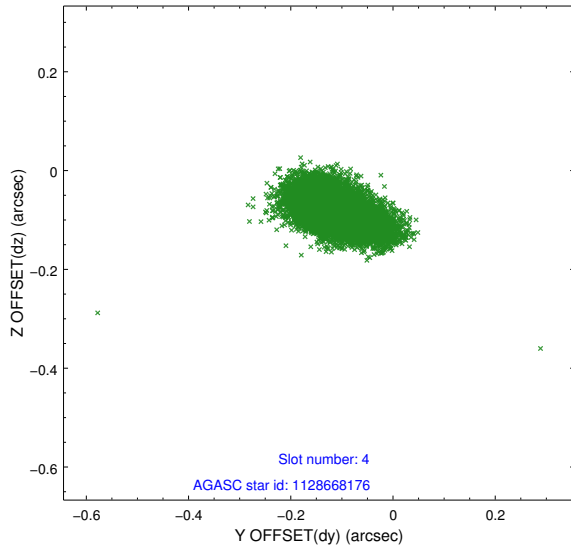
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.95	4785	0.028	-0.016	0.019	0.028	0.000000	0.000000	932.33	-1793.70
1	FID	ACIS-S-4	6.95	4784	0.110	0.003	0.018	0.026	0.000000	0.000000	2149.96	110.23
2	FID	ACIS-S-5	7.00	4785	-0.165	0.025	0.006	0.011	0.000000	0.000000	-1816.45	104.14
3	GUIDE	1128142832	8.63	9566	-0.035	-0.079	0.068	0.117	151.690539	-57.394211	1861.20	1841.02
4	GUIDE	1128668176	6.75	9571	-0.113	-0.085	0.060	0.103	152.075503	-58.198582	-1114.83	1568.47
5	GUIDE	1128141880	8.94	9561	0.102	0.072	0.070	0.113	152.082849	-57.289838	2111.89	1029.38
6	GUIDE	1128798008	8.54	9566	0.111	0.143	0.060	0.097	153.338718	-58.362994	-2103.60	-687.22
7	GUIDE	1128136880	8.21	4782	-0.137	-0.098	0.061	0.097	152.762282	-57.803859	69.09	40.87

2.4 Star Slots

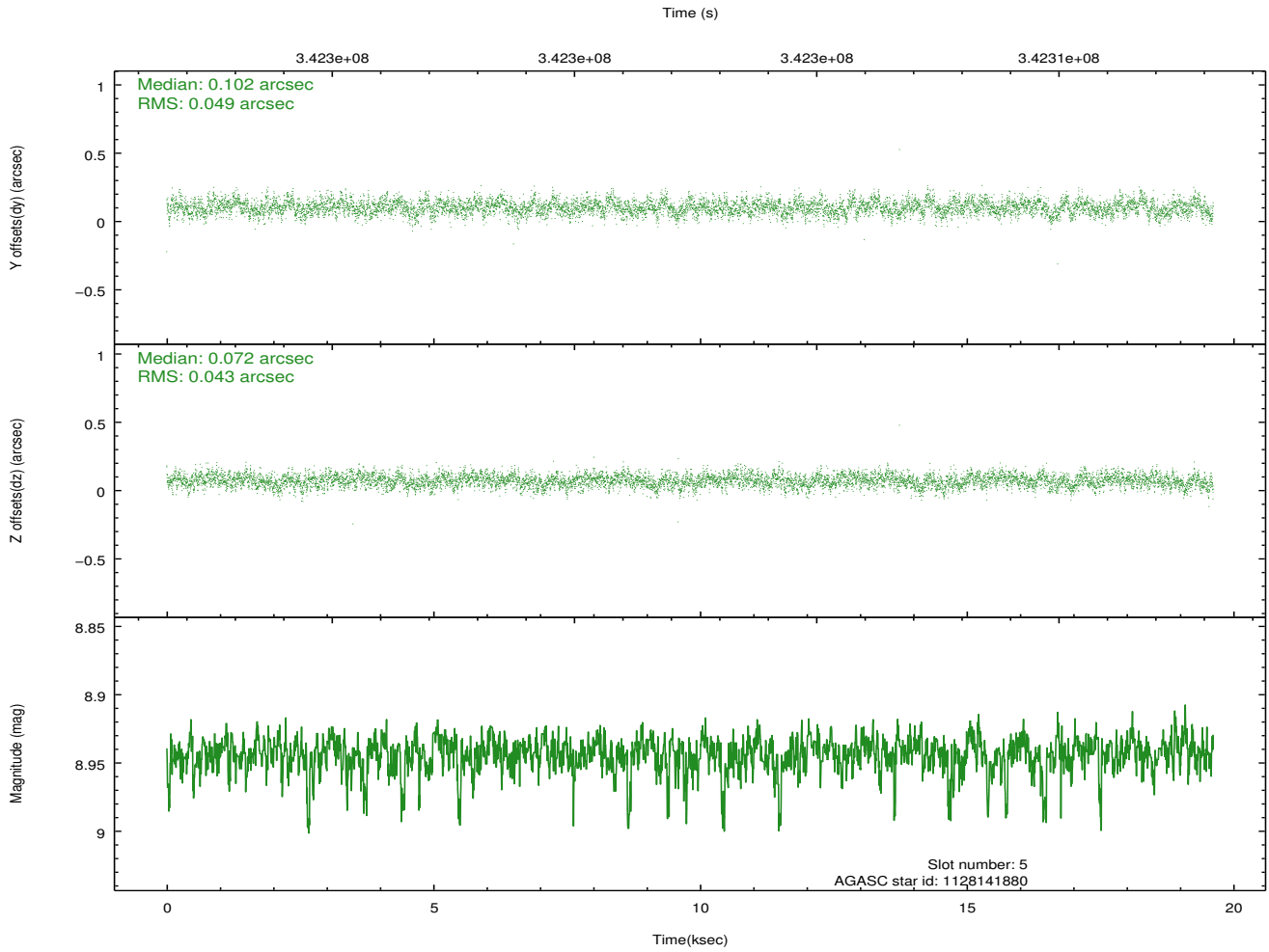
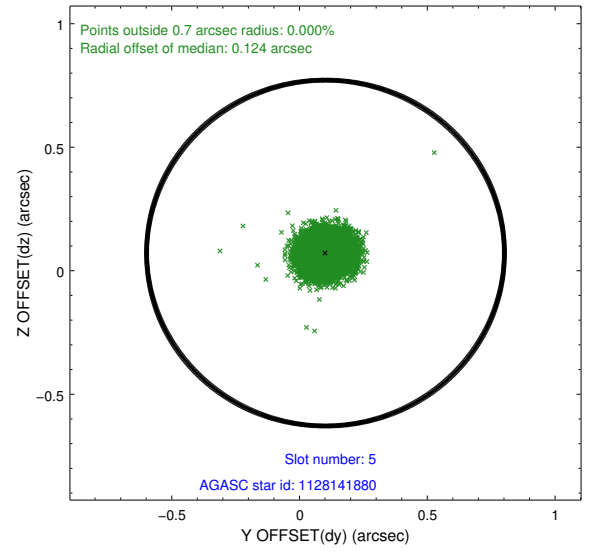
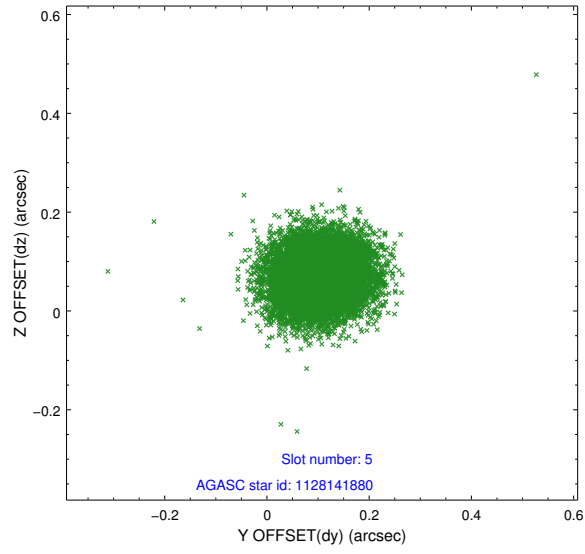
2.4.1 Slot 3



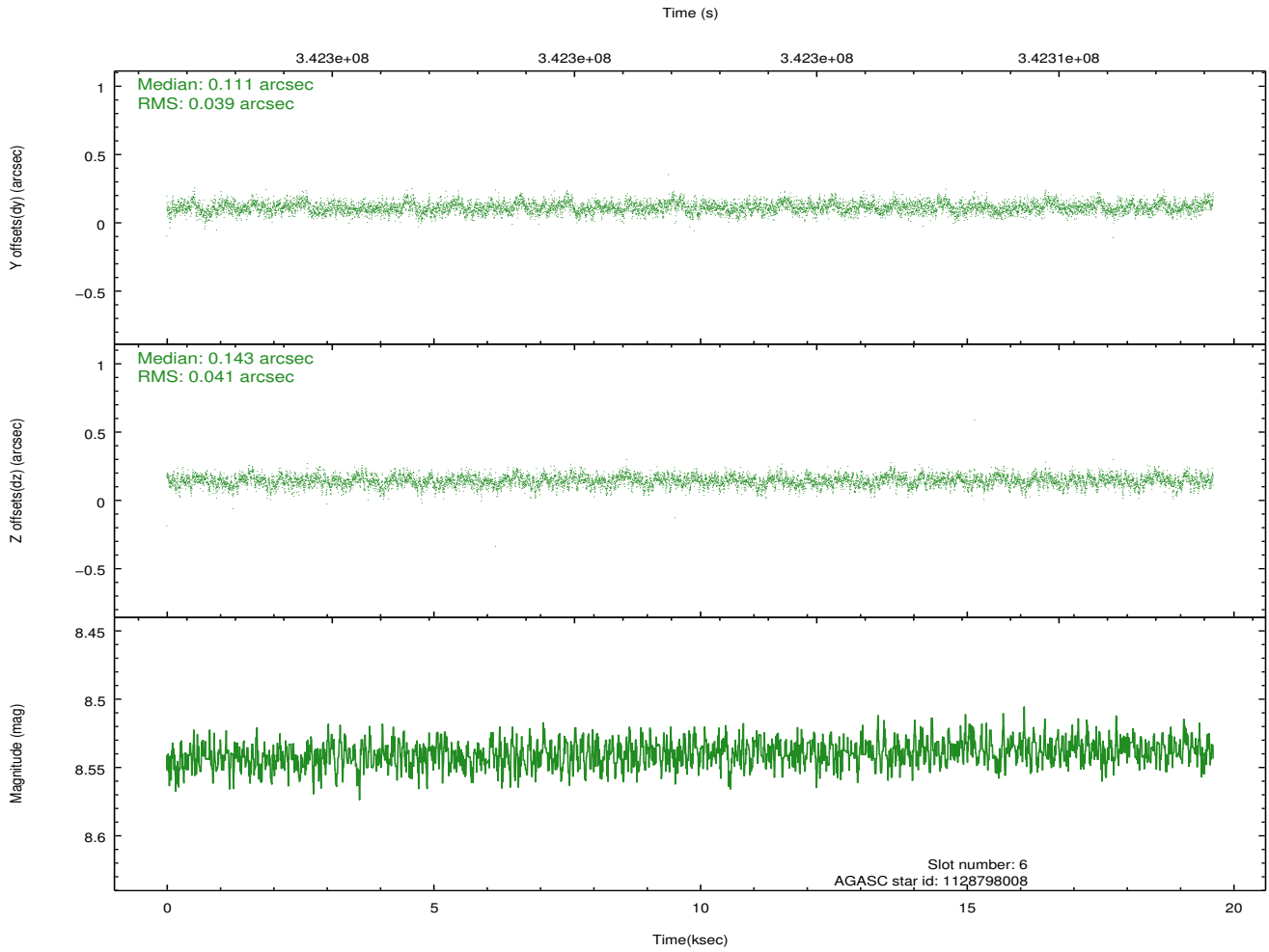
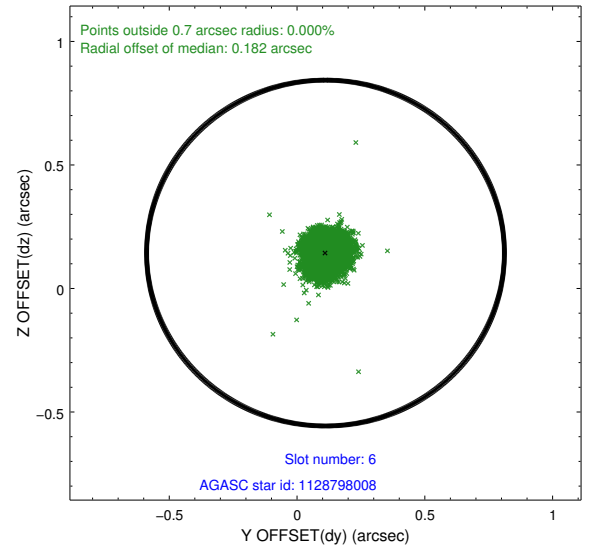
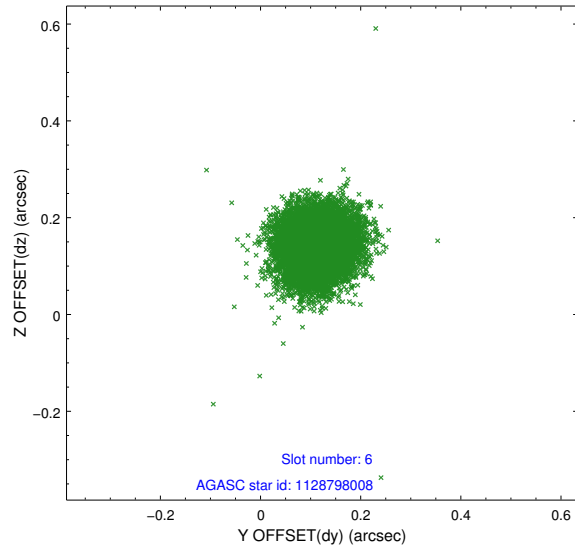
2.4.2 Slot 4



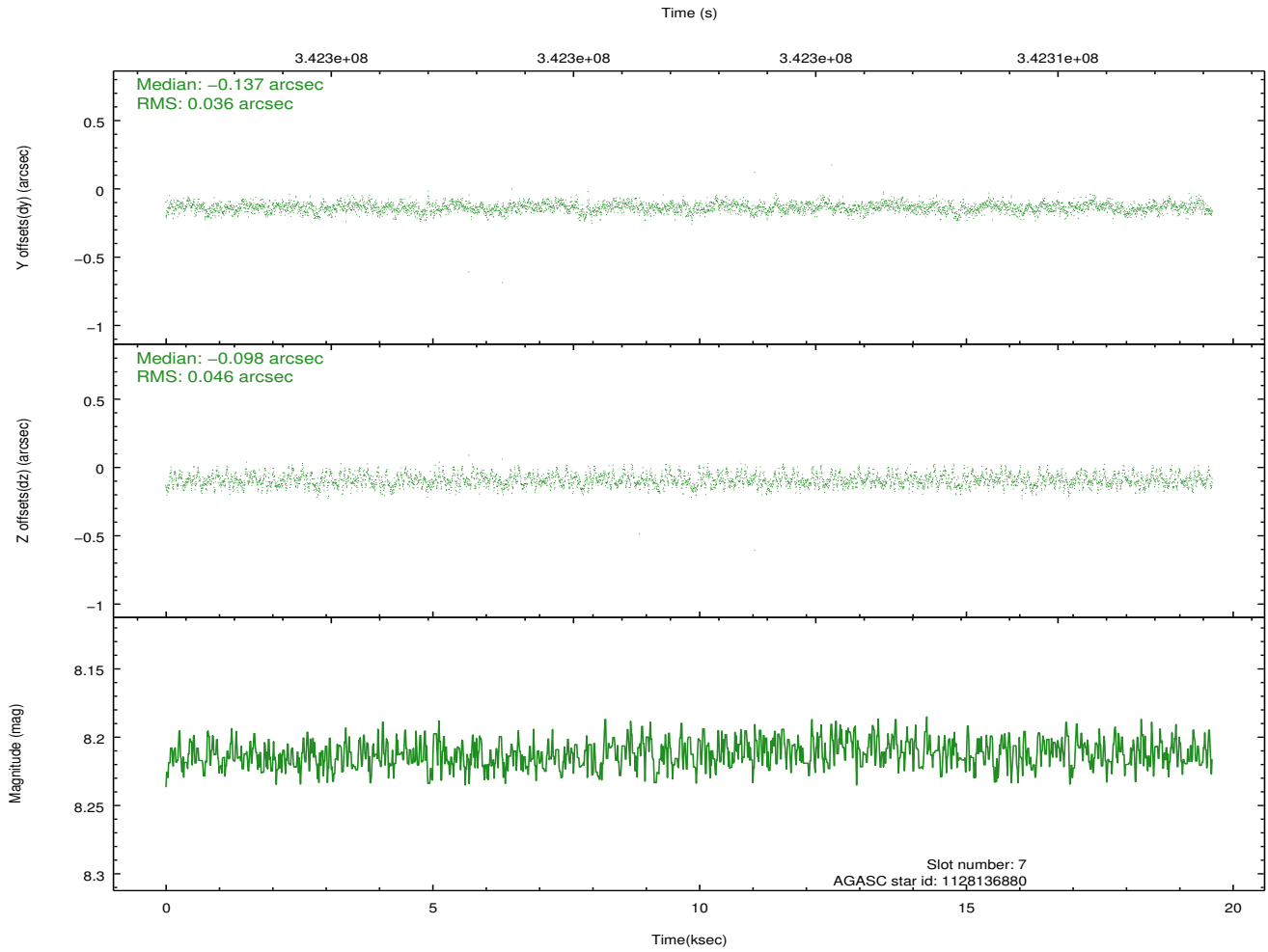
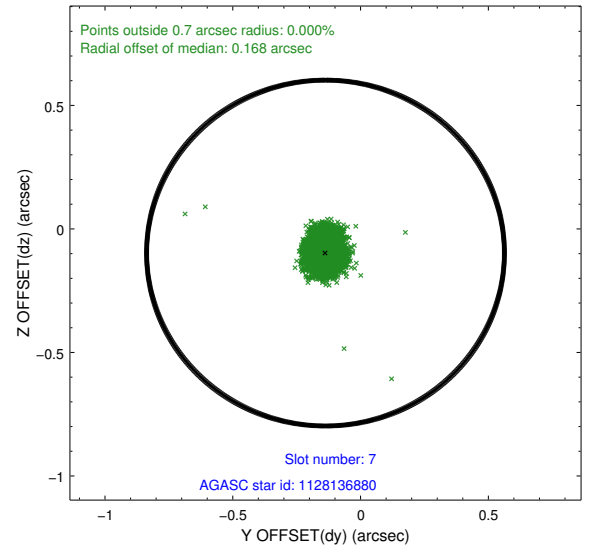
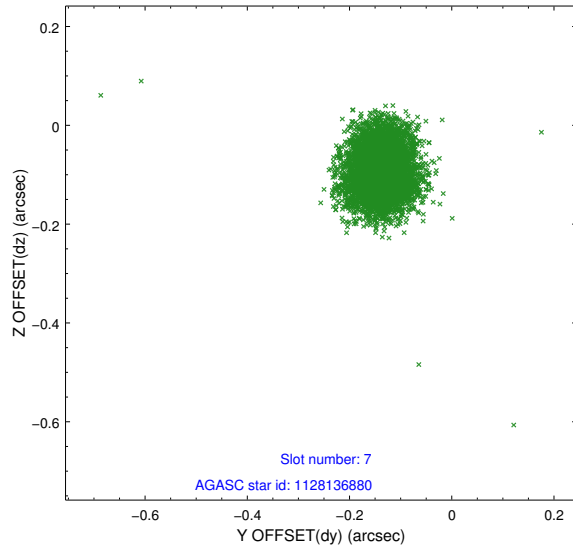
2.4.3 Slot 5



2.4.4 Slot 6

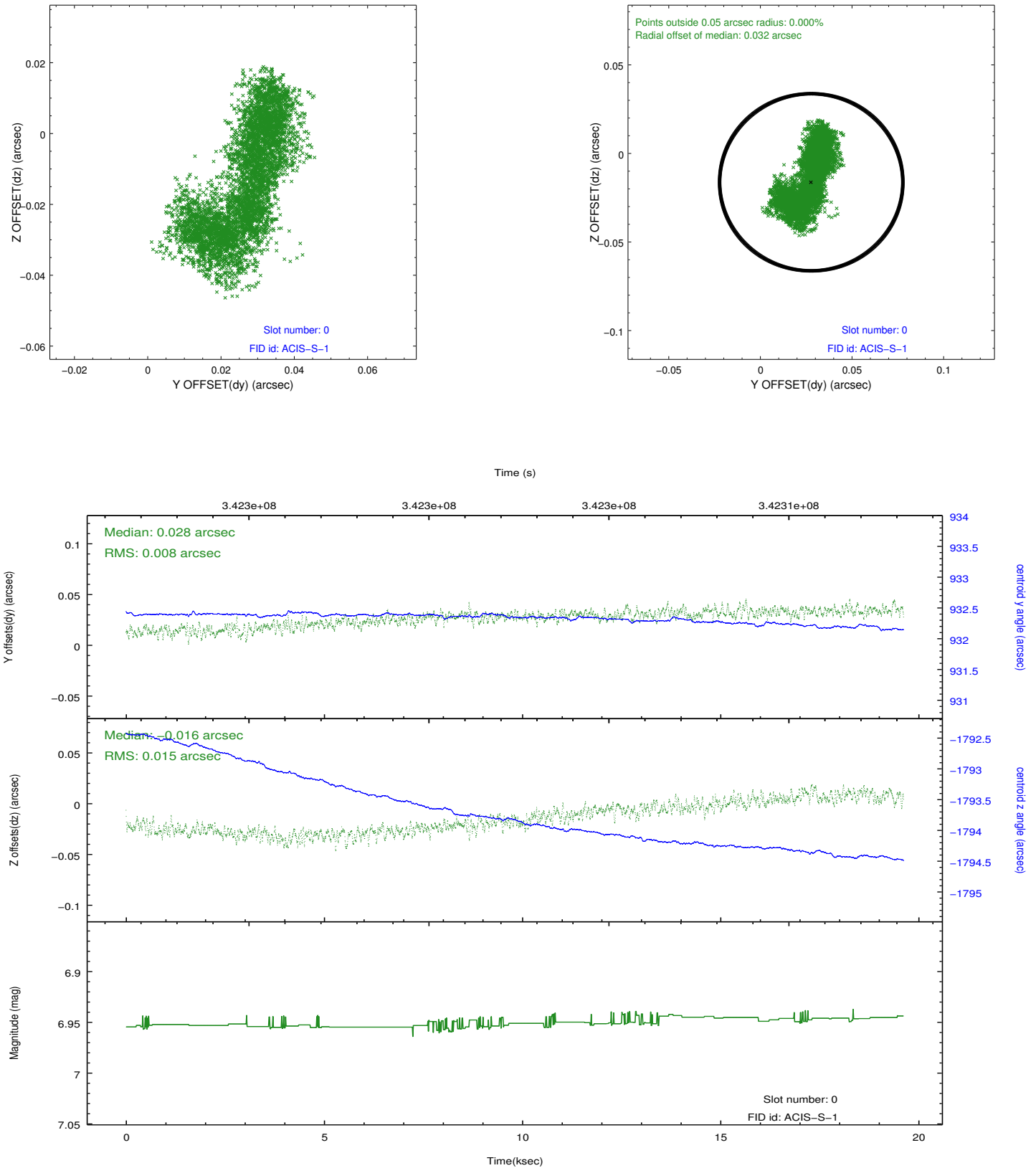


2.4.5 Slot 7

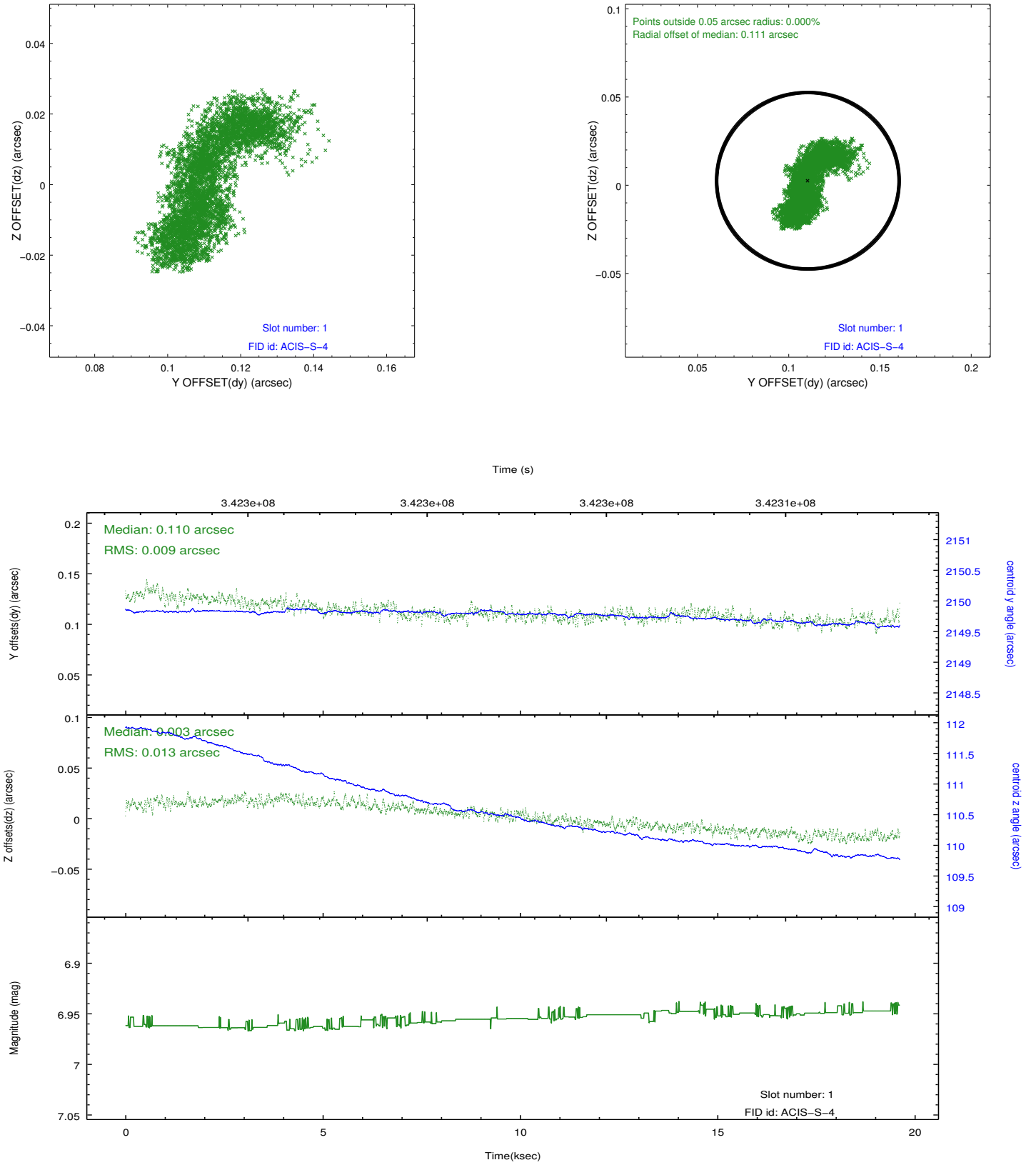


2.5 FID Slots

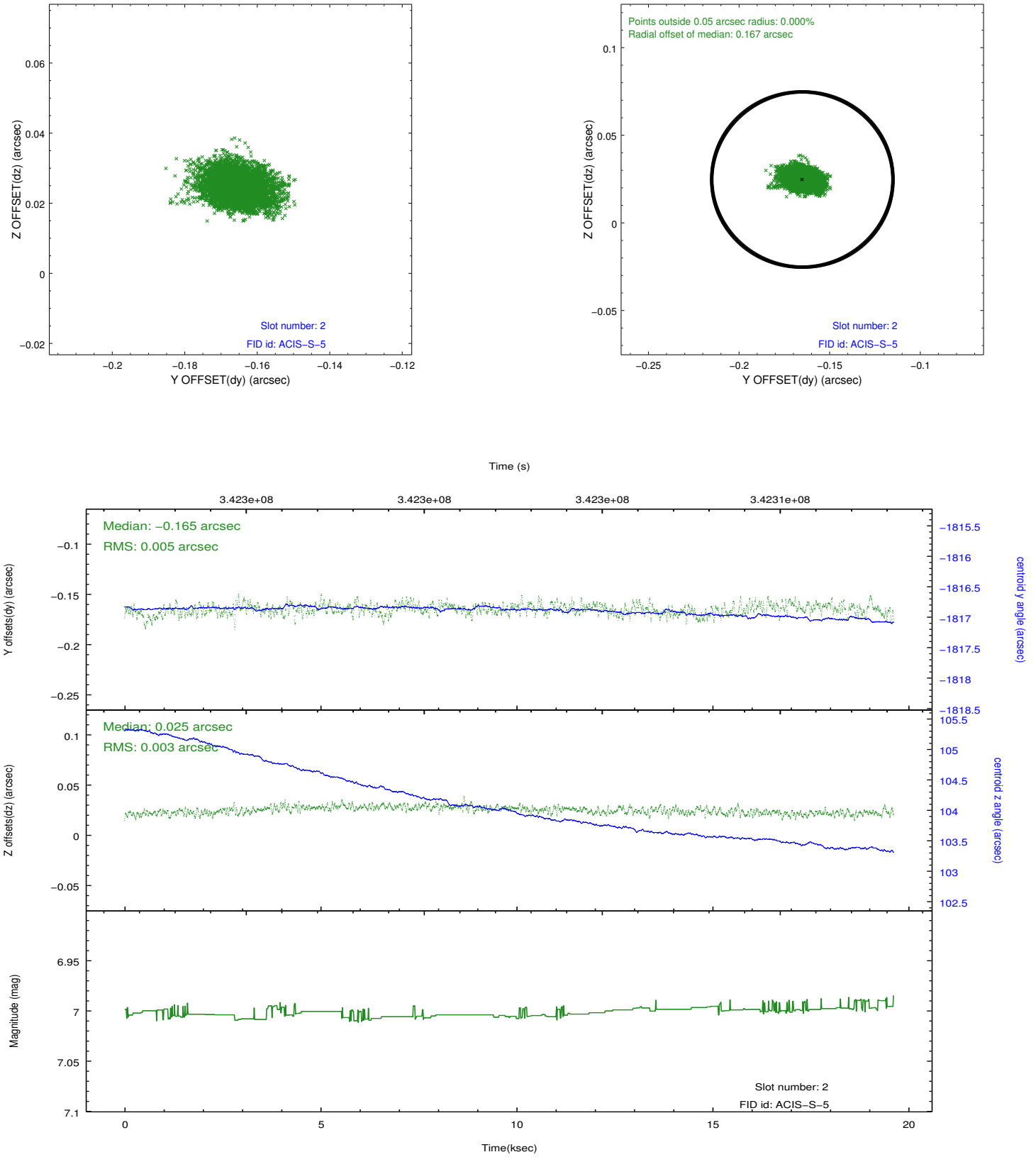
2.5.1 Slot 0



2.5.2 Slot 1

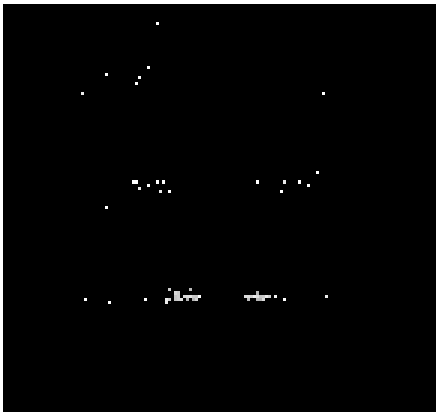


2.5.3 Slot 2

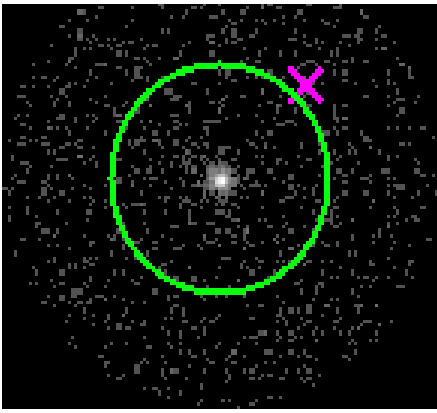


3 Gratings

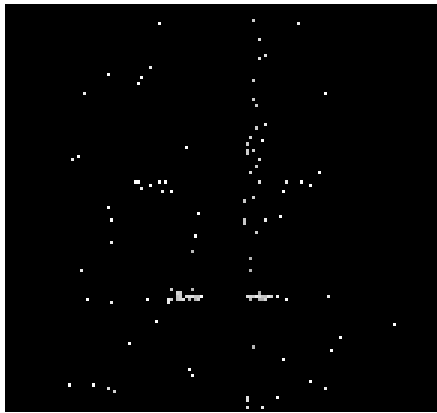
3.1 HEG Arm



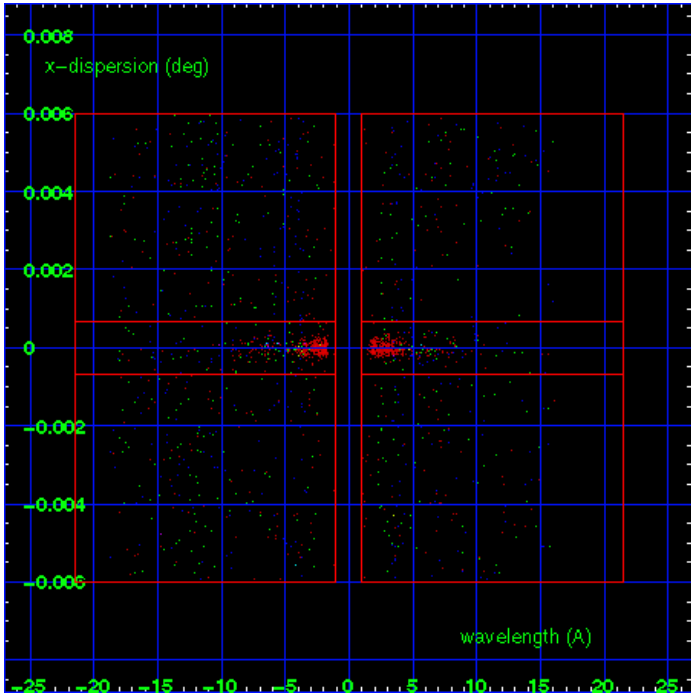
HEG Order Sort 123



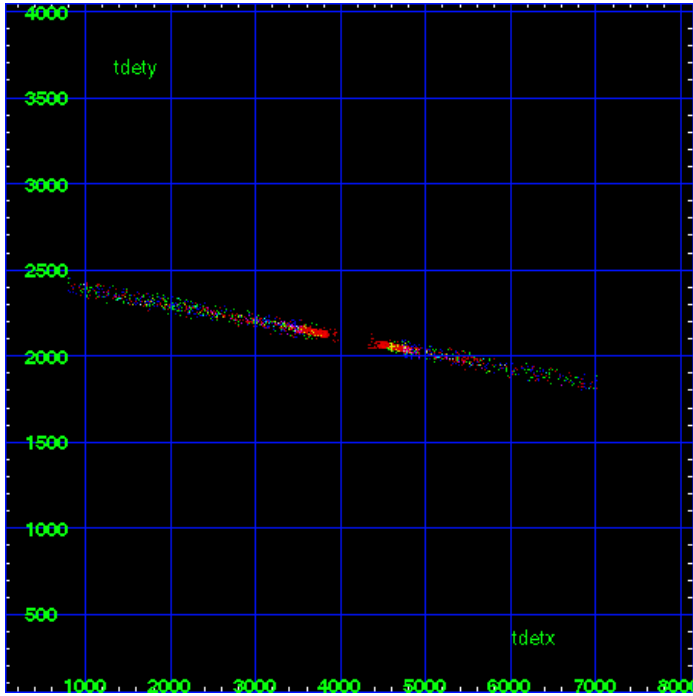
HEG Zero Order



HEG Order Sort ALL

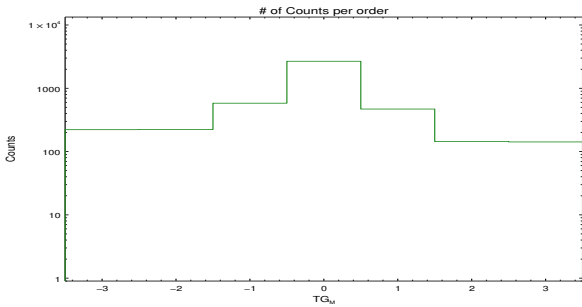


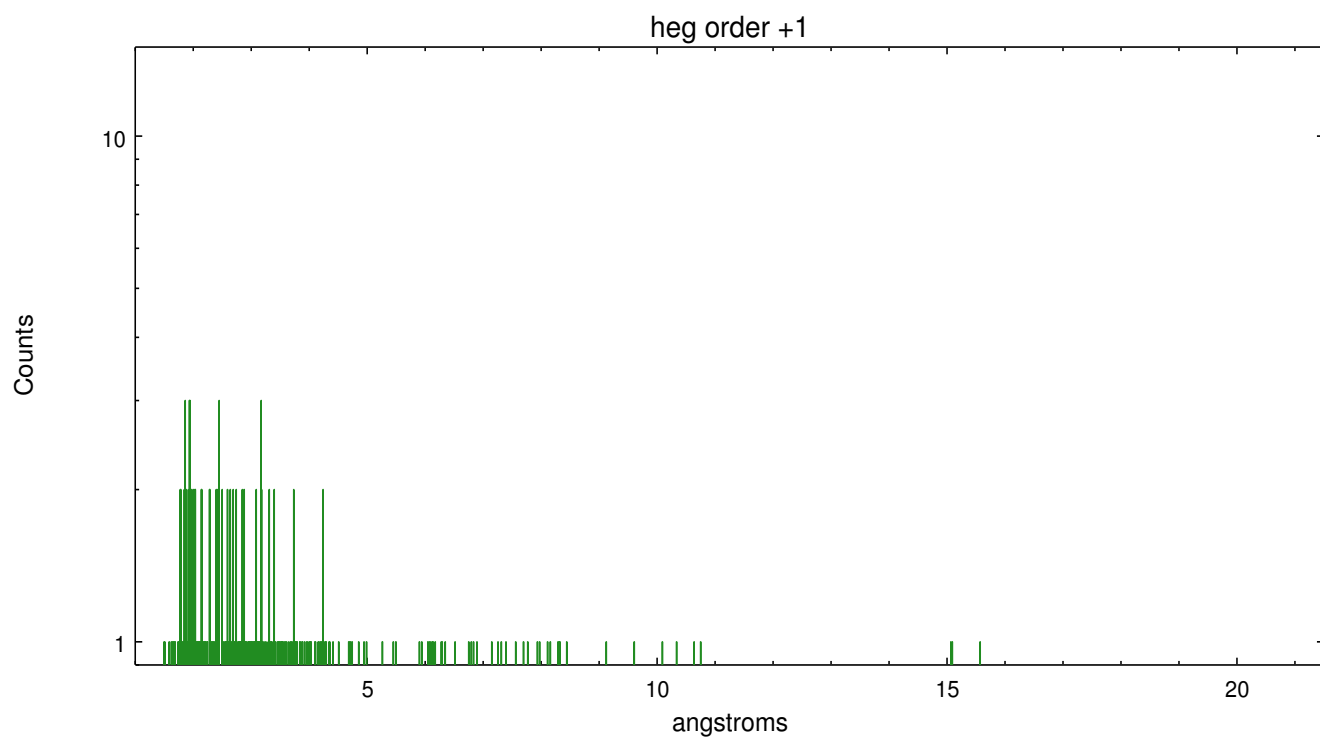
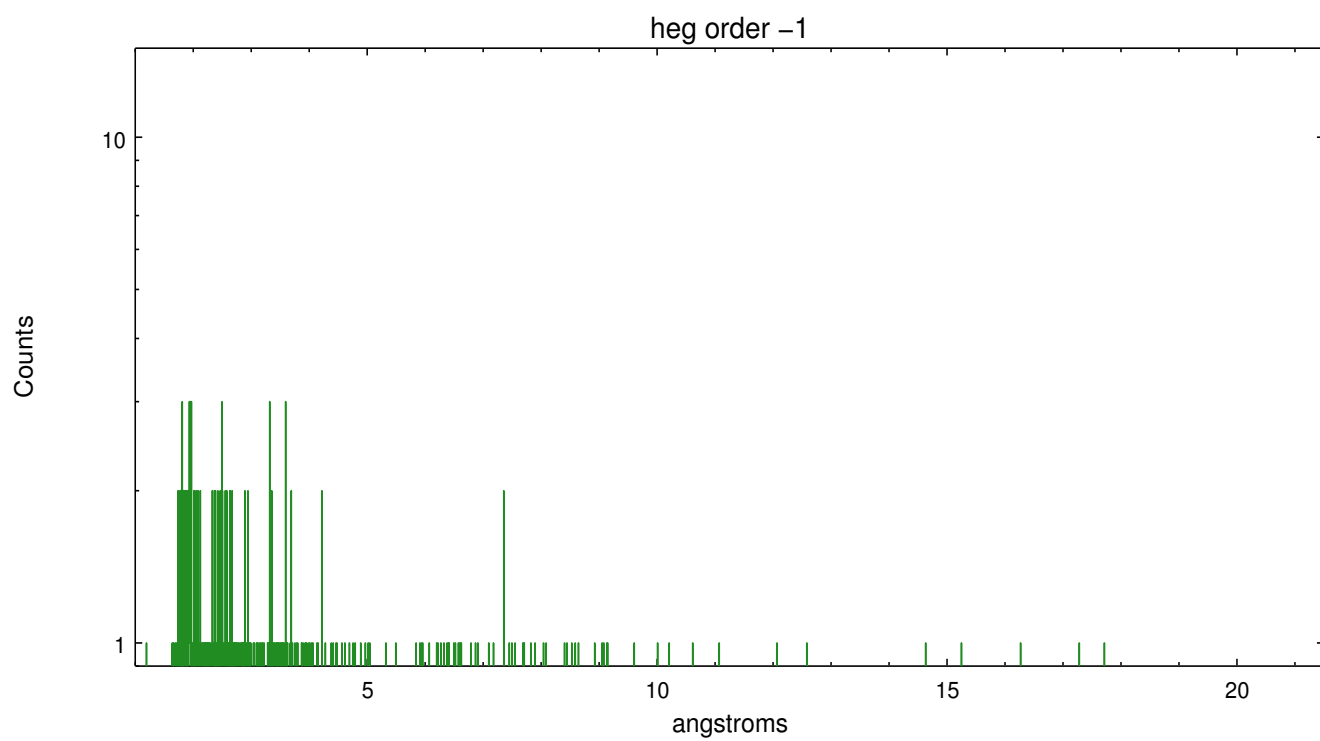
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	222	223	581	2671	470	144	142

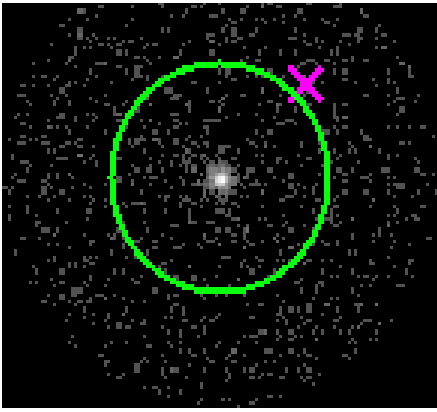




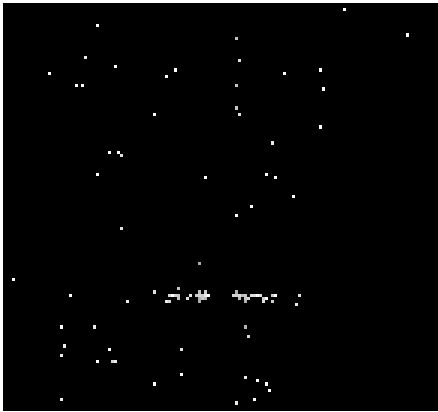
3.2 MEG Arm



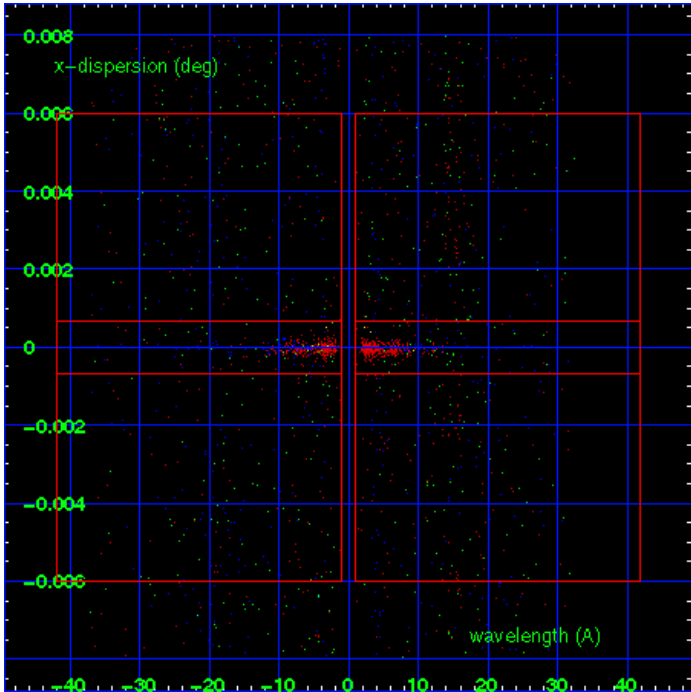
MEG Order Sort 123



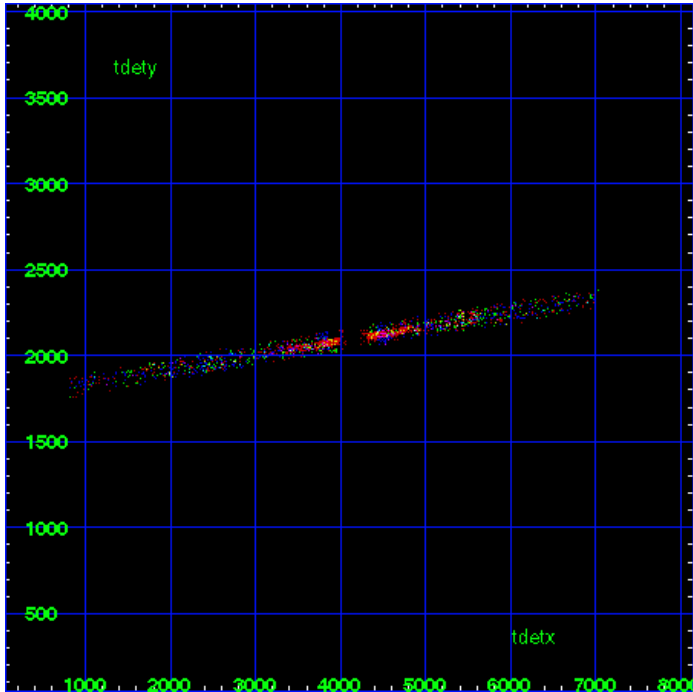
MEG Zero Order



MEG Order Sort ALL

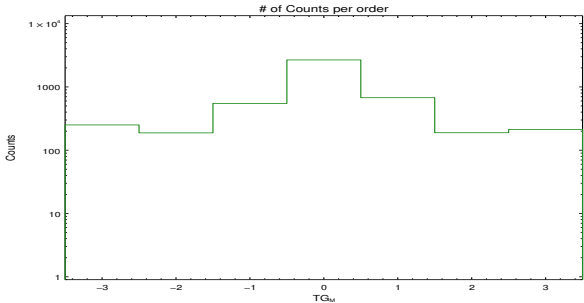


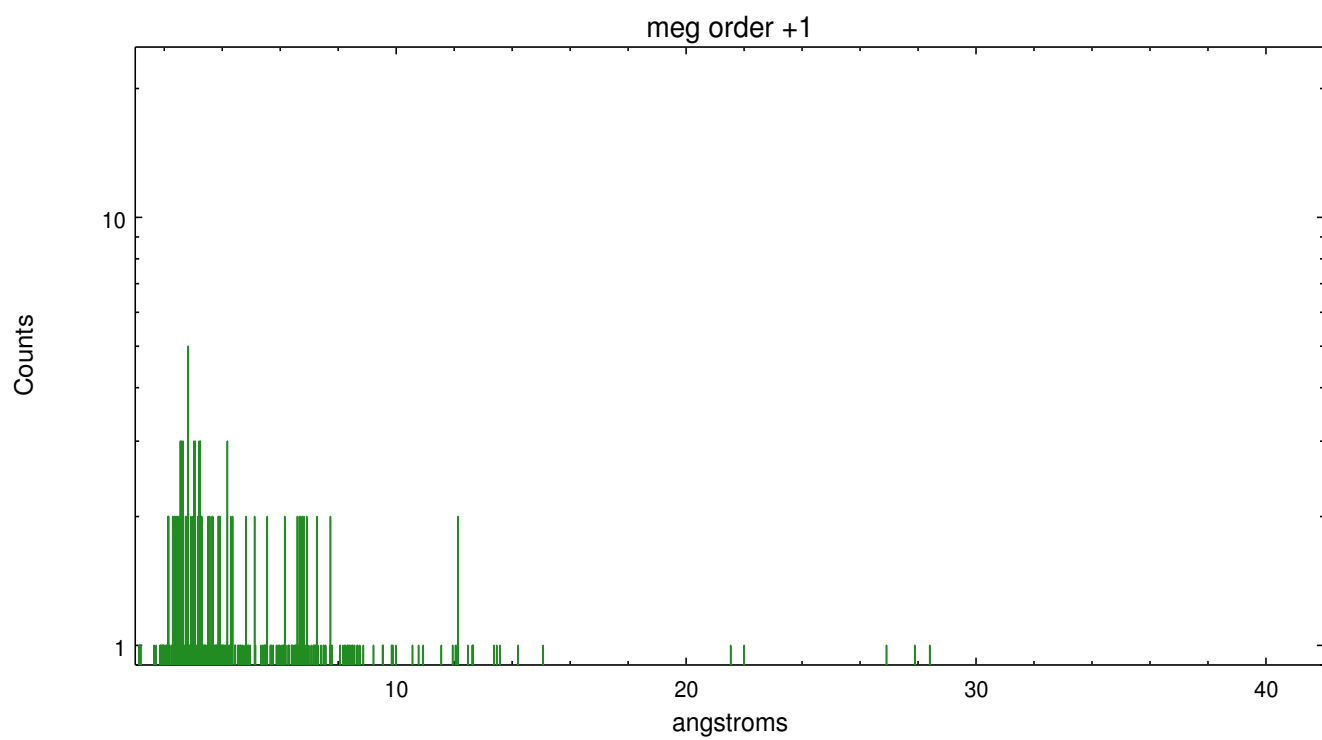
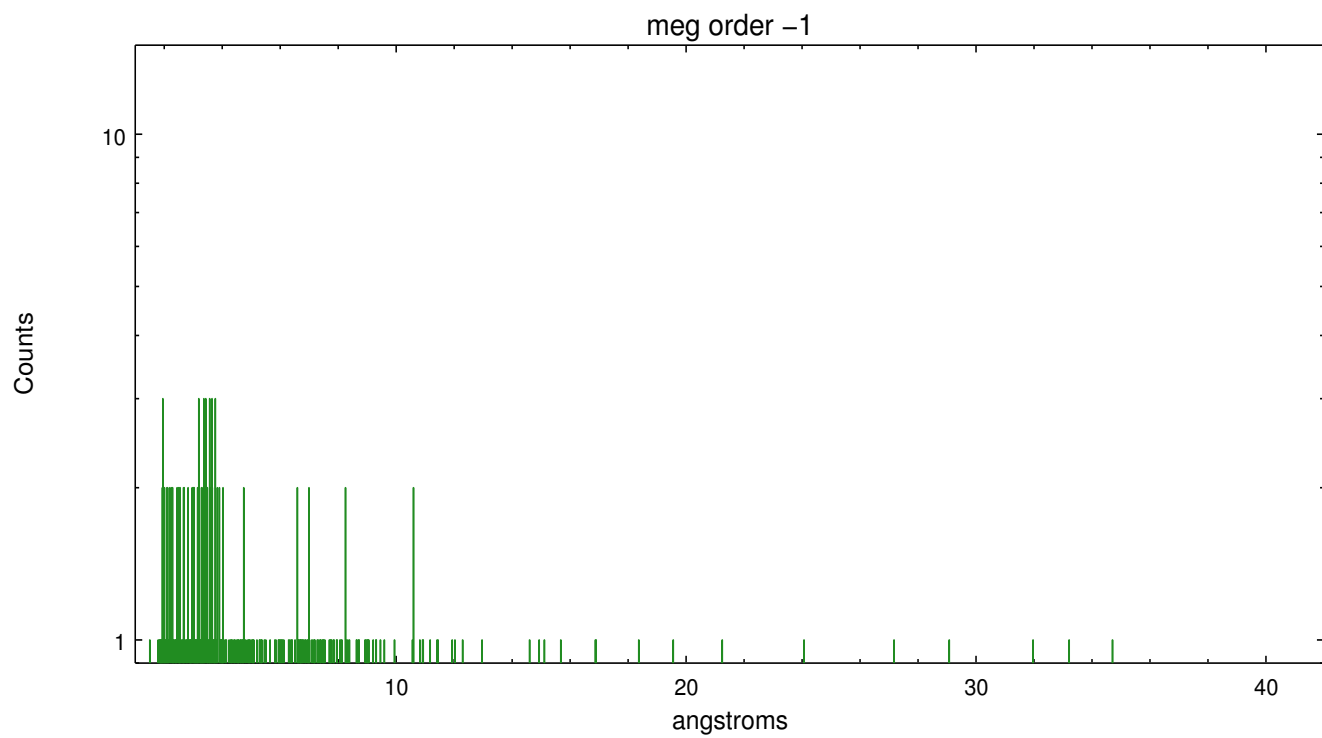
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	251	188	549	2671	676	189	212





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.615

A.2 Comments