

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 7228 - L2 Version 3
Chandra X-Ray Center

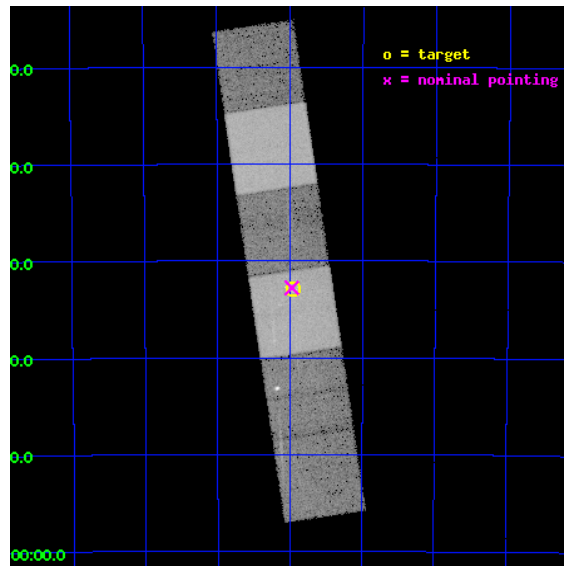
L2 Processing Date : Apr 13 2012

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

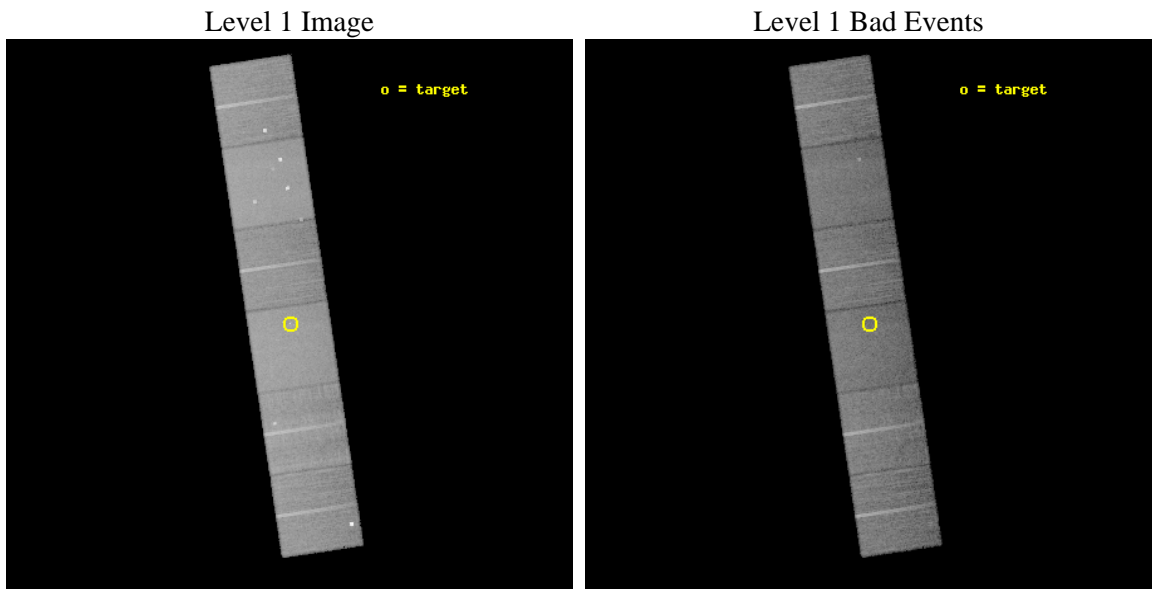
seq_num	200332	Sequence number
obs_id	7228	Observation id
title	A Chandra HETGS Survey of O-Stars	Proposal title
observer	DR. Wayne Waldron	Principal investigator
object	HD93129AB	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	160.989583	Observer's specified target RA [deg]
dec_targ	-59.5475	Observer's specified target Dec [deg]
ra_nom	160.99315094357	Nominal RA [deg]
dec_nom	-59.546517865318	Nominal Dec [deg]
roll_nom	81.459709068524	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19950.970156997	Sum of GTIs [s]
livetime	19698.338959838	Livetime [s]
ontime4	19951.011197001	Sum of GTIs [s]
ontime5	19950.929116994	Sum of GTIs [s]
ontime6	19950.888076991	Sum of GTIs [s]
ontime7	19950.970156997	Sum of GTIs [s]
ontime8	19950.847036988	Sum of GTIs [s]
ontime9	19950.805997014	Sum of GTIs [s]
l2events	279375	Number of level 2 events



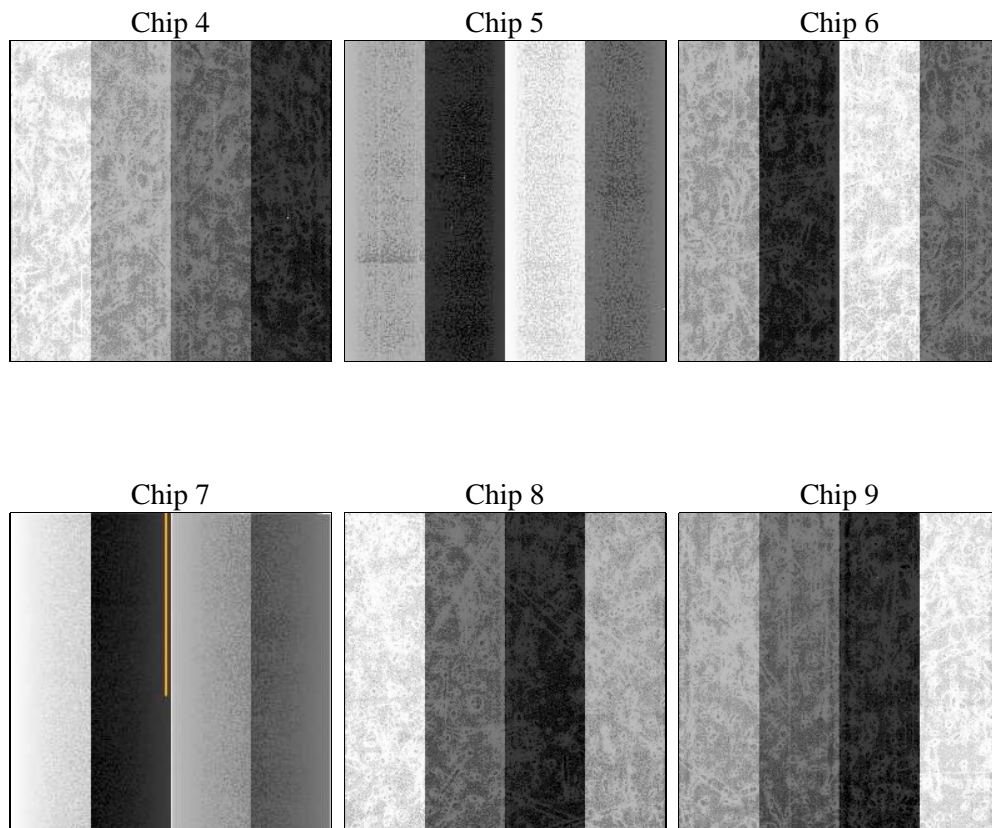
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	19950.970156997	Sum of GTIs [s]
caldsver	4.4.8	 	ontime4	19951.011197001	Sum of GTIs [s]
date	2012-03-18T09:01:00	Date and time of file creation	ontime5	19950.929116994	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19950.888076991	Sum of GTIs [s]
			ontime7	19950.970156997	Sum of GTIs [s]
			ontime8	19950.847036988	Sum of GTIs [s]
			ontime9	19950.805997014	Sum of GTIs [s]
			l1events	1215492	Number of level 1 events

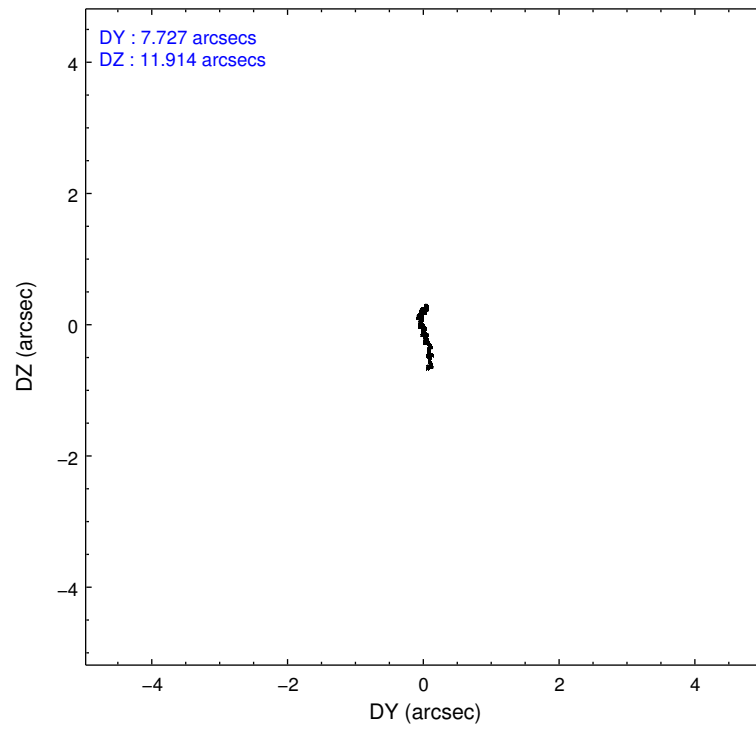
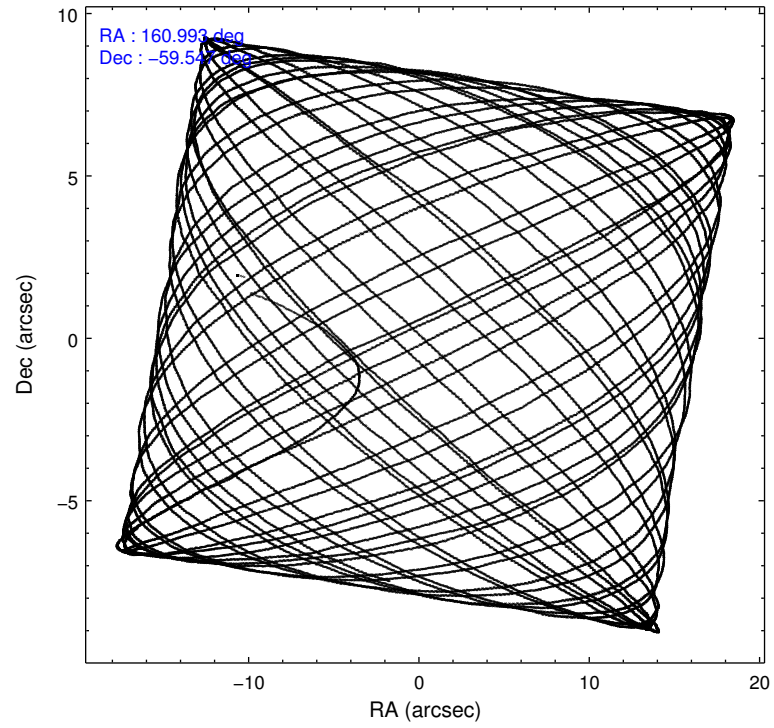
2.1.4 Events

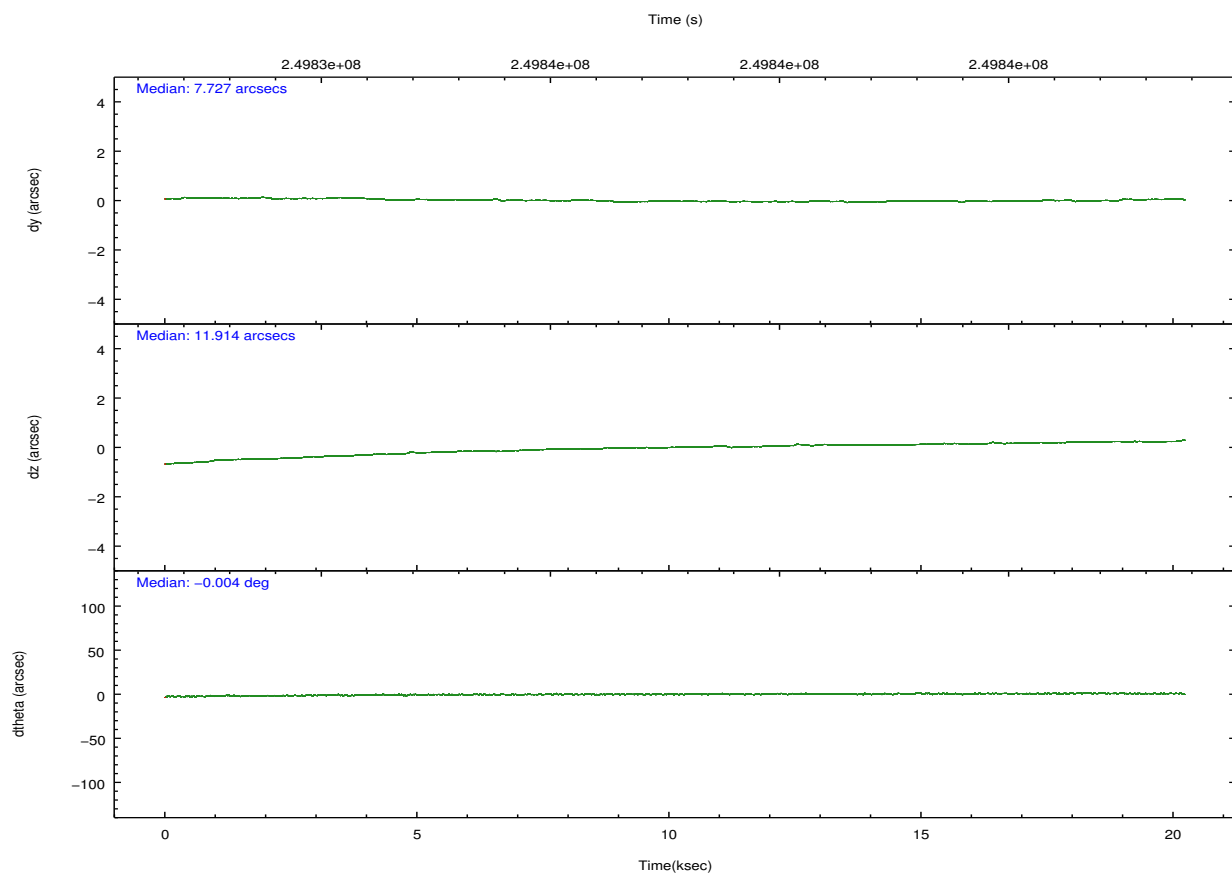
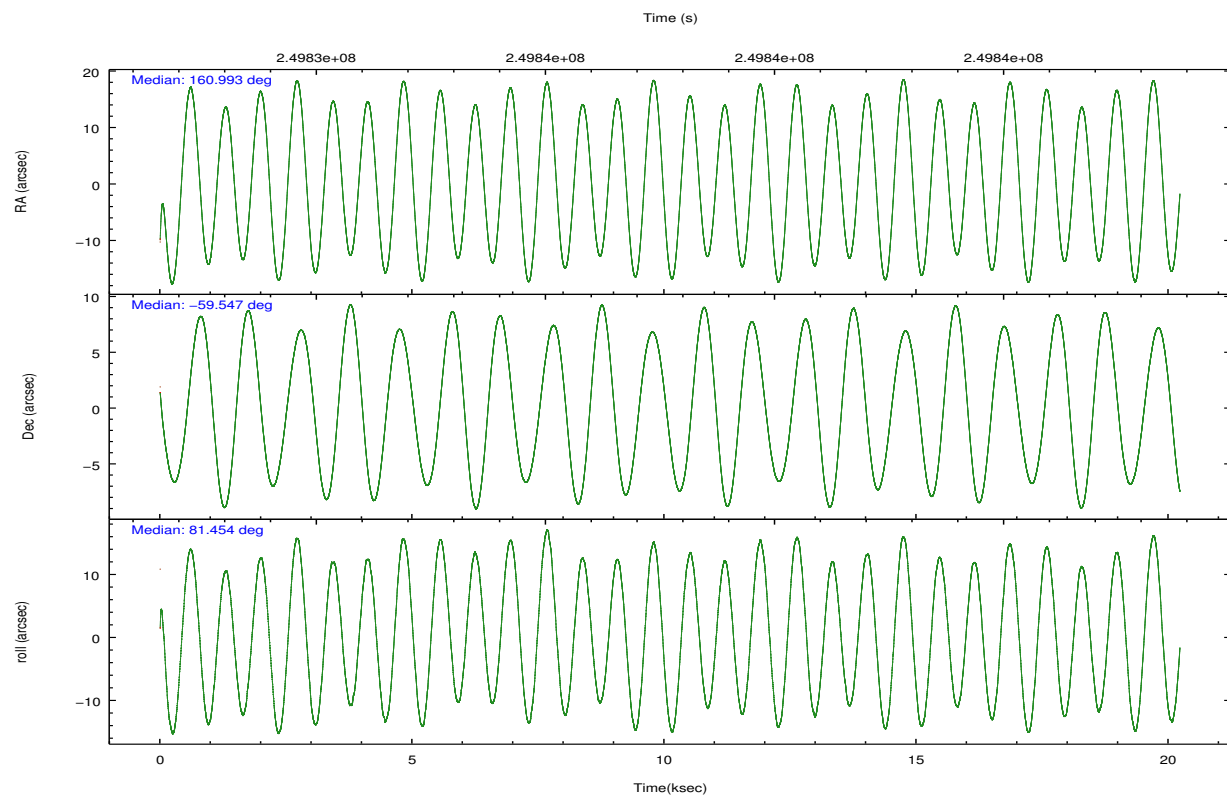
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	186385	248228	166193	227040	210933	176713	grade 0 events	13263	15023	10034	9568	18174	10796
rejected events	161715	131393	144071	129242	160854	144053		7%	6%	6%	4%	8%	6%
rejected %	86%	52%	86%	56%	76%	81%	grade 1 events	193	742	86	216	160	100
								0%	0%	0%	0%	0%	0%
							grade 2 events	4153	34415	4346	20265	10446	14103
								2%	13%	2%	8%	4%	7%
							grade 3 events	2105	4371	1905	8719	4774	1959
								1%	1%	1%	3%	2%	1%
							grade 4 events	1973	4277	1911	8700	4437	1909
								1%	1%	1%	3%	2%	1%
							grade 5 events	7215	17315	7602	20682	10009	7985
								3%	6%	4%	9%	4%	4%
							grade 6 events	3179	58773	3928	50560	12253	3913
								1%	23%	2%	22%	5%	2%
							grade 7 events	154304	113312	136381	108330	150680	135948
								82%	45%	82%	47%	71%	76%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	161.013559	160.9931509435687	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.571717	-59.5465178653176	Alternating exposures requested	N	N
[deg] Pointing Roll	81.320669	81.45970906852423	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	249827837.184000	249826793.04407			
Observation start date	2005-12-01T12:36:13	2005-12-01T12:19:53			
[s] Observation end time (MET)	249847837.184000	249849234.90761			
Observation end date	2005-12-01T18:09:33	2005-12-01T18:33:54			
Read mode	TIMED	TIMED			

2.3 Aspect



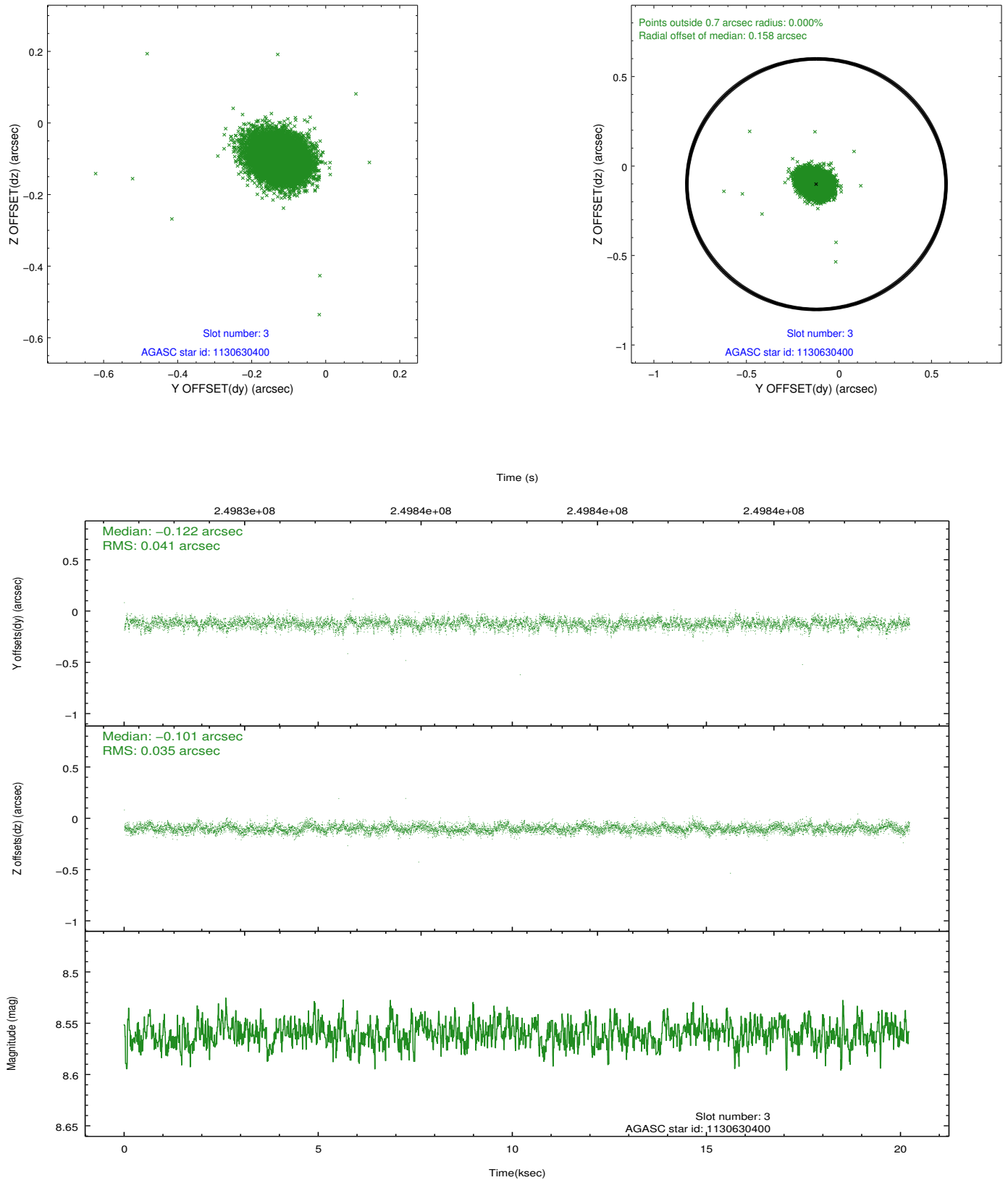


Slot Statistics

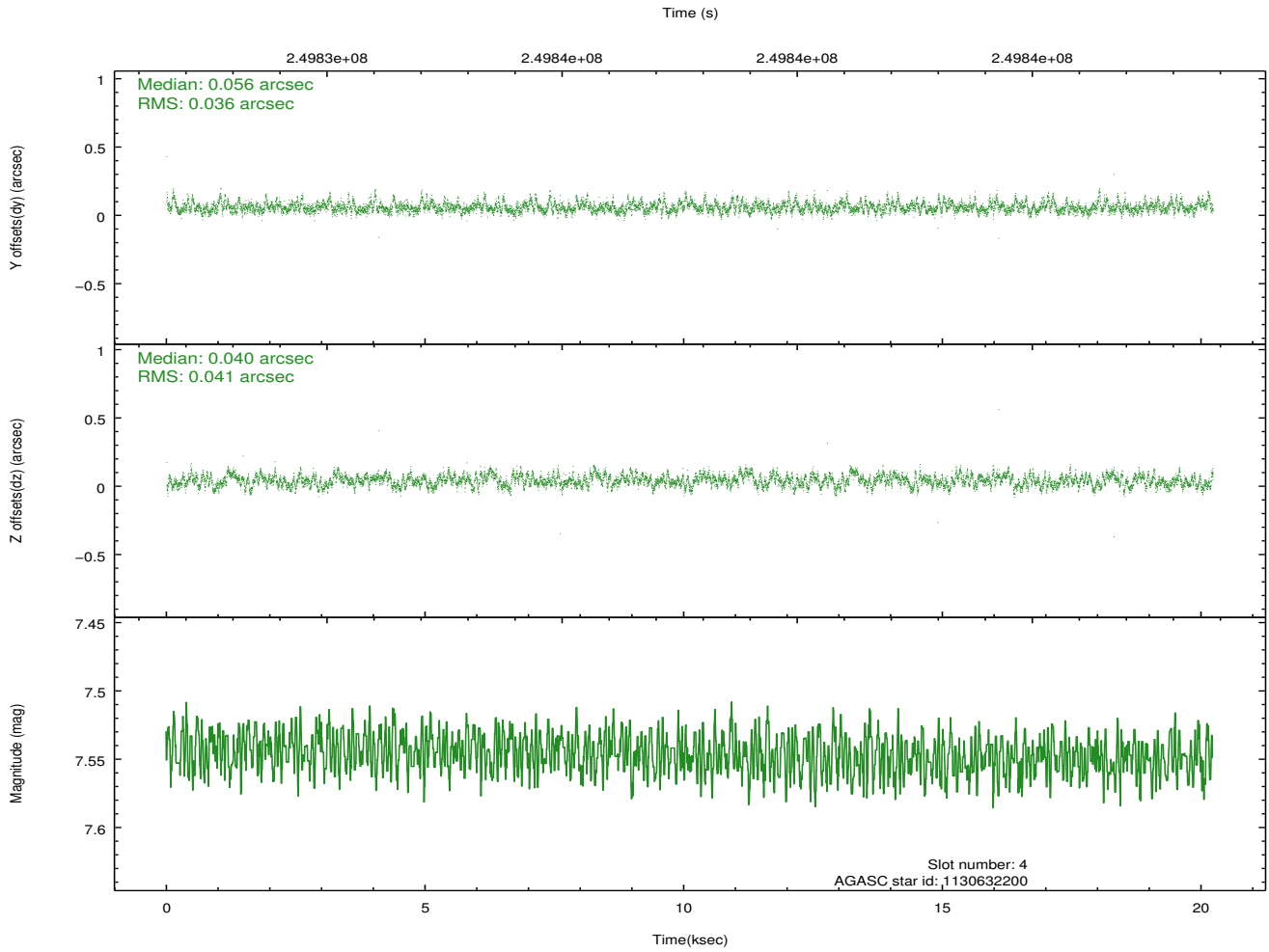
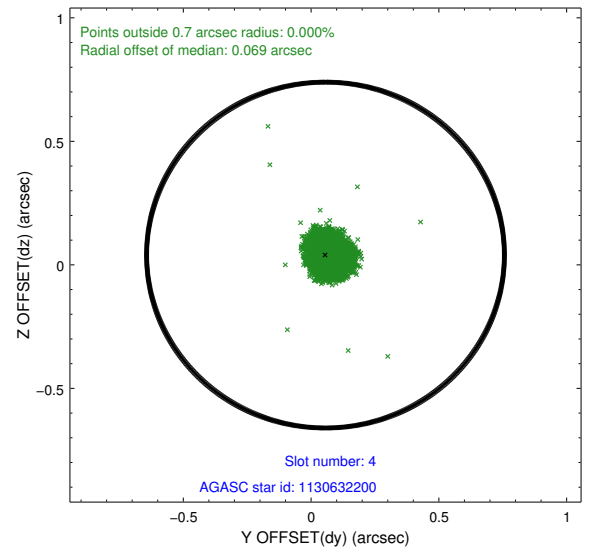
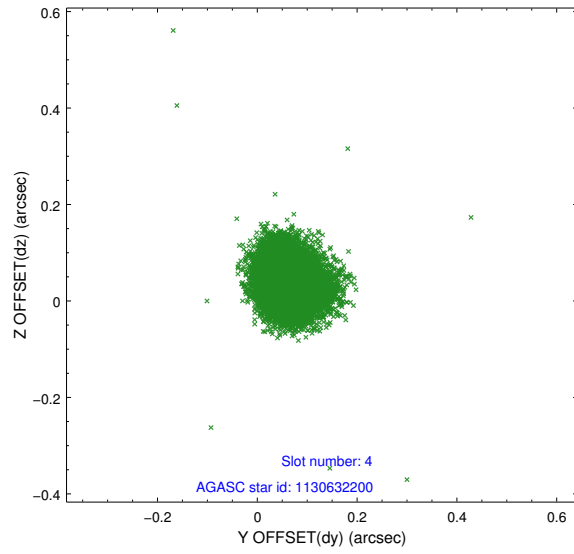
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4935	-0.020	-0.021	0.010	0.016	0.000000	0.000000	-760.53	-1733.12
1	FID	ACIS-S-4	7.20	4935	0.084	0.015	0.008	0.016	0.000000	0.000000	2152.77	175.22
2	FID	ACIS-S-5	7.23	4934	-0.095	0.014	0.009	0.015	0.000000	0.000000	-1813.21	169.09
3	GUIDE	1130630400	8.56	9867	-0.122	-0.101	0.055	0.092	160.235909	-58.888840	2203.72	1799.98
4	GUIDE	1130632200	7.55	9868	0.056	0.040	0.057	0.091	161.433843	-59.407820	697.77	-672.20
5	GUIDE	1130643264	6.64	9868	0.009	-0.099	0.062	0.106	160.322990	-59.676912	-569.91	1182.43
6	GUIDE	1130640672	8.28	9865	-0.033	0.088	0.060	0.096	162.096044	-59.540805	392.66	-1938.11
7	GUIDE	1174033144	8.43	9866	0.083	0.075	0.064	0.102	161.168741	-60.059230	-1692.67	-540.81

2.4 Star Slots

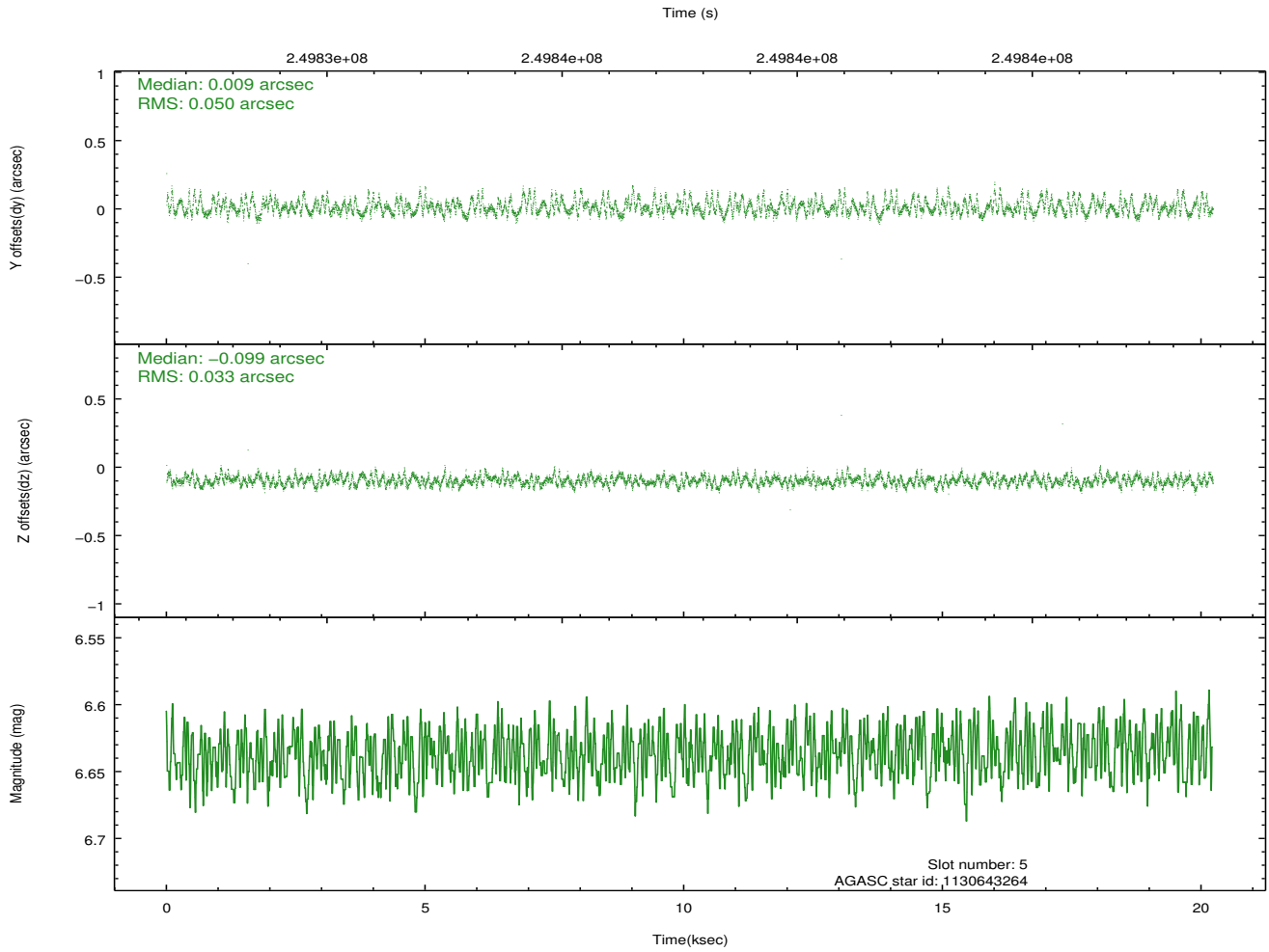
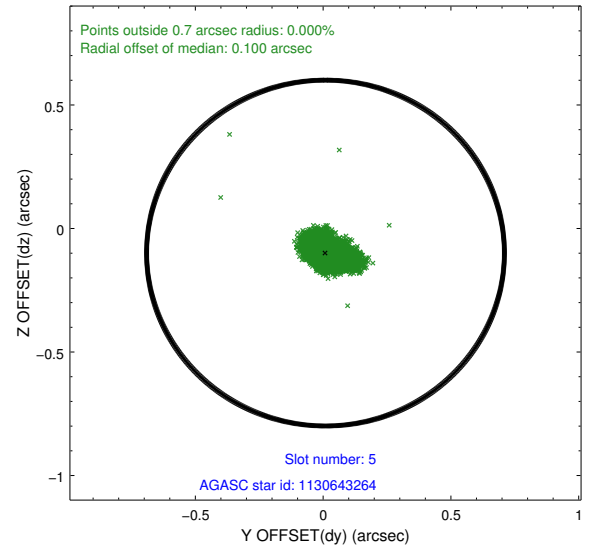
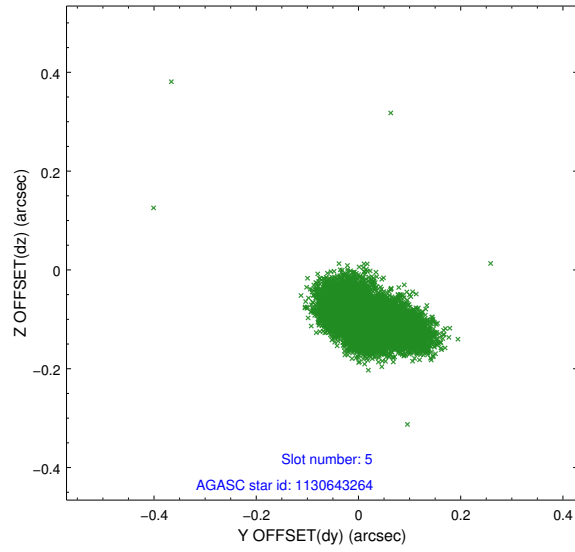
2.4.1 Slot 3



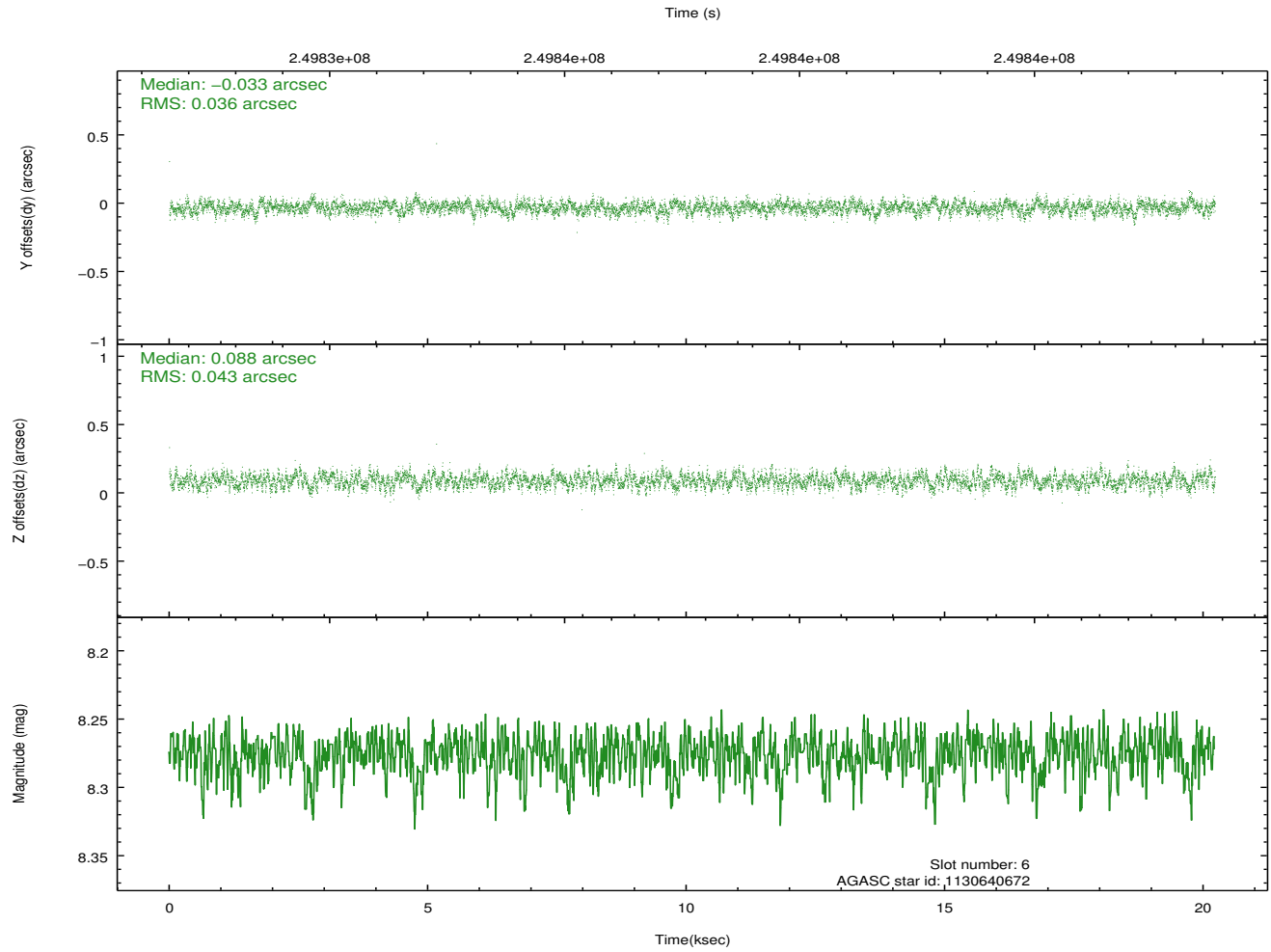
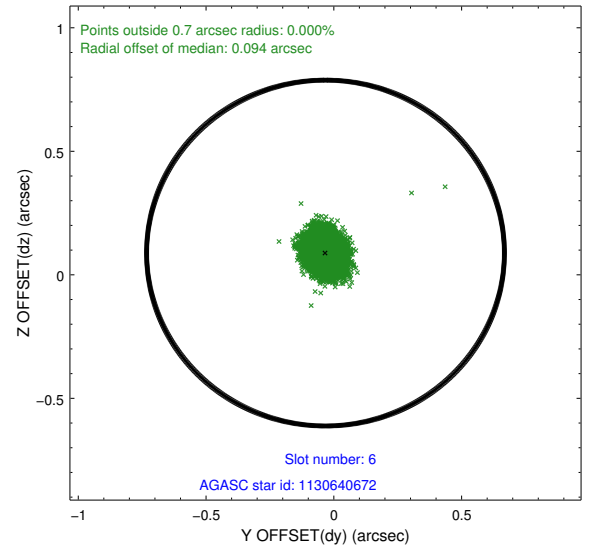
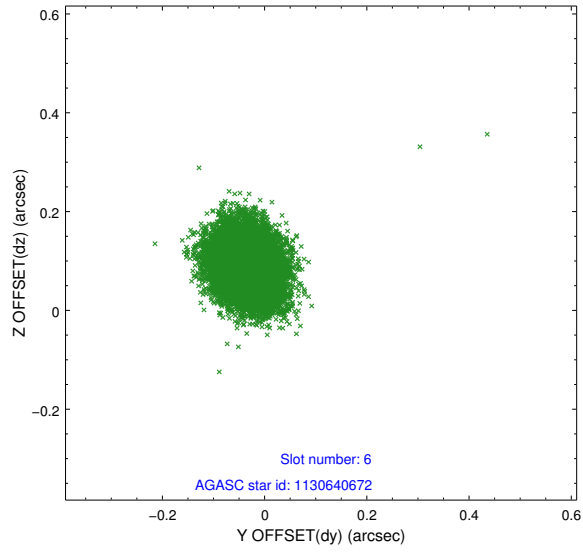
2.4.2 Slot 4



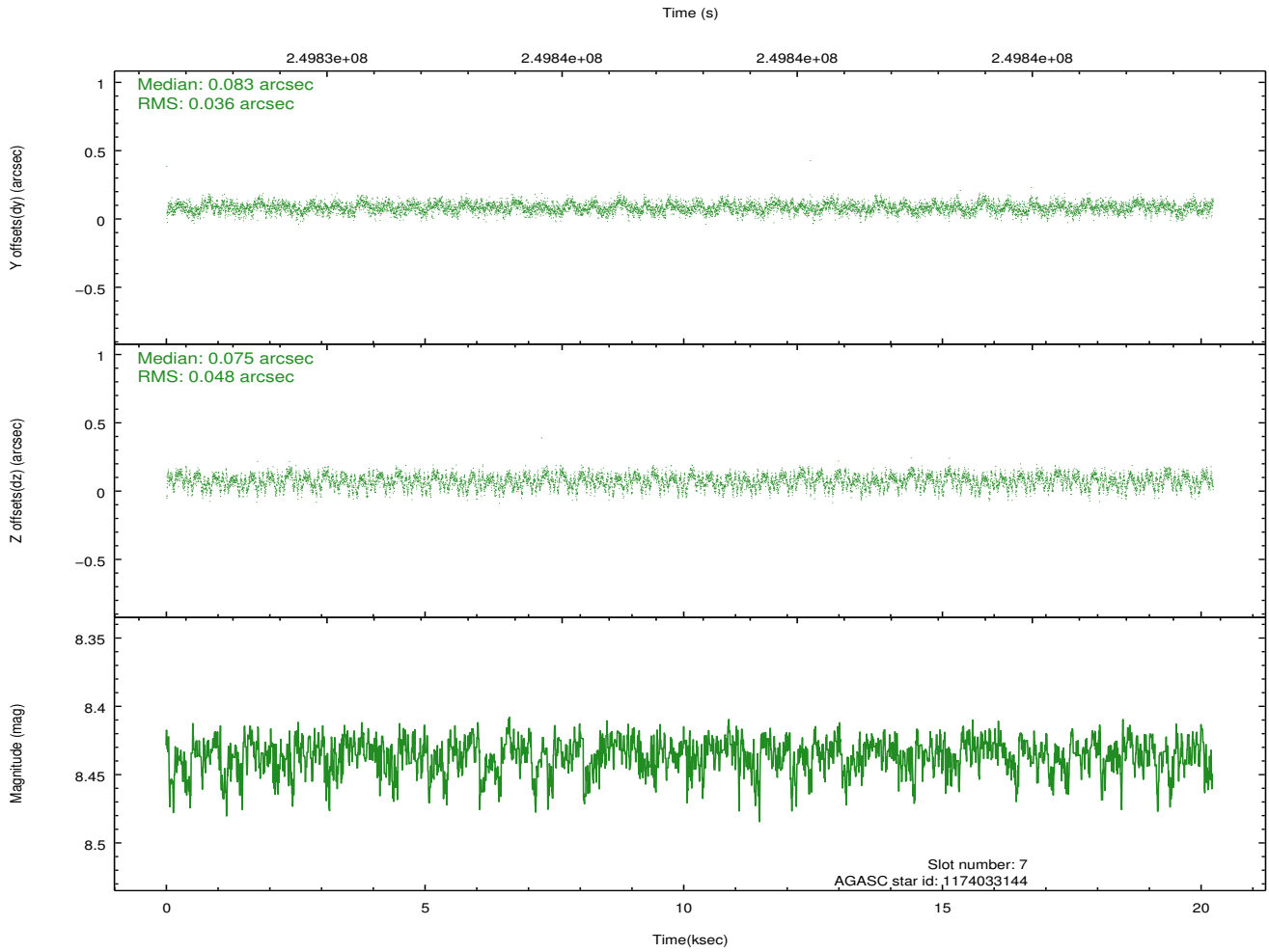
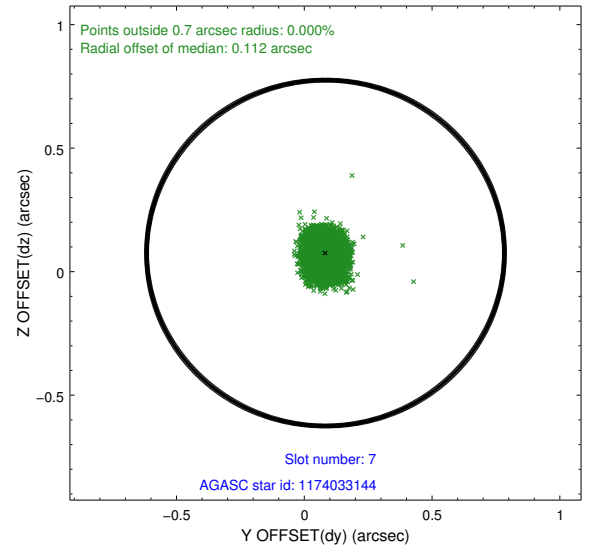
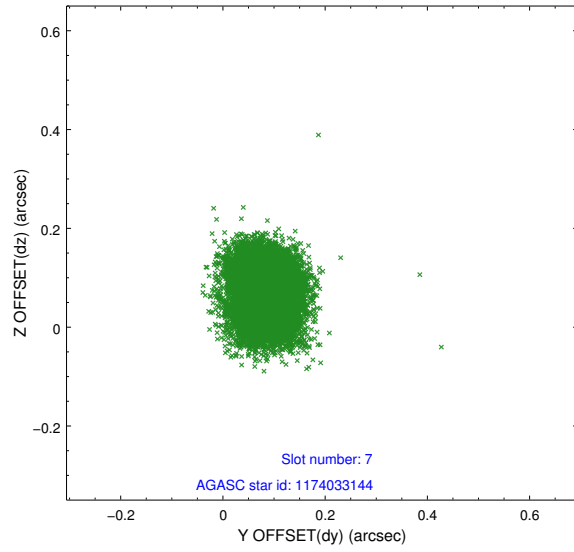
2.4.3 Slot 5



2.4.4 Slot 6

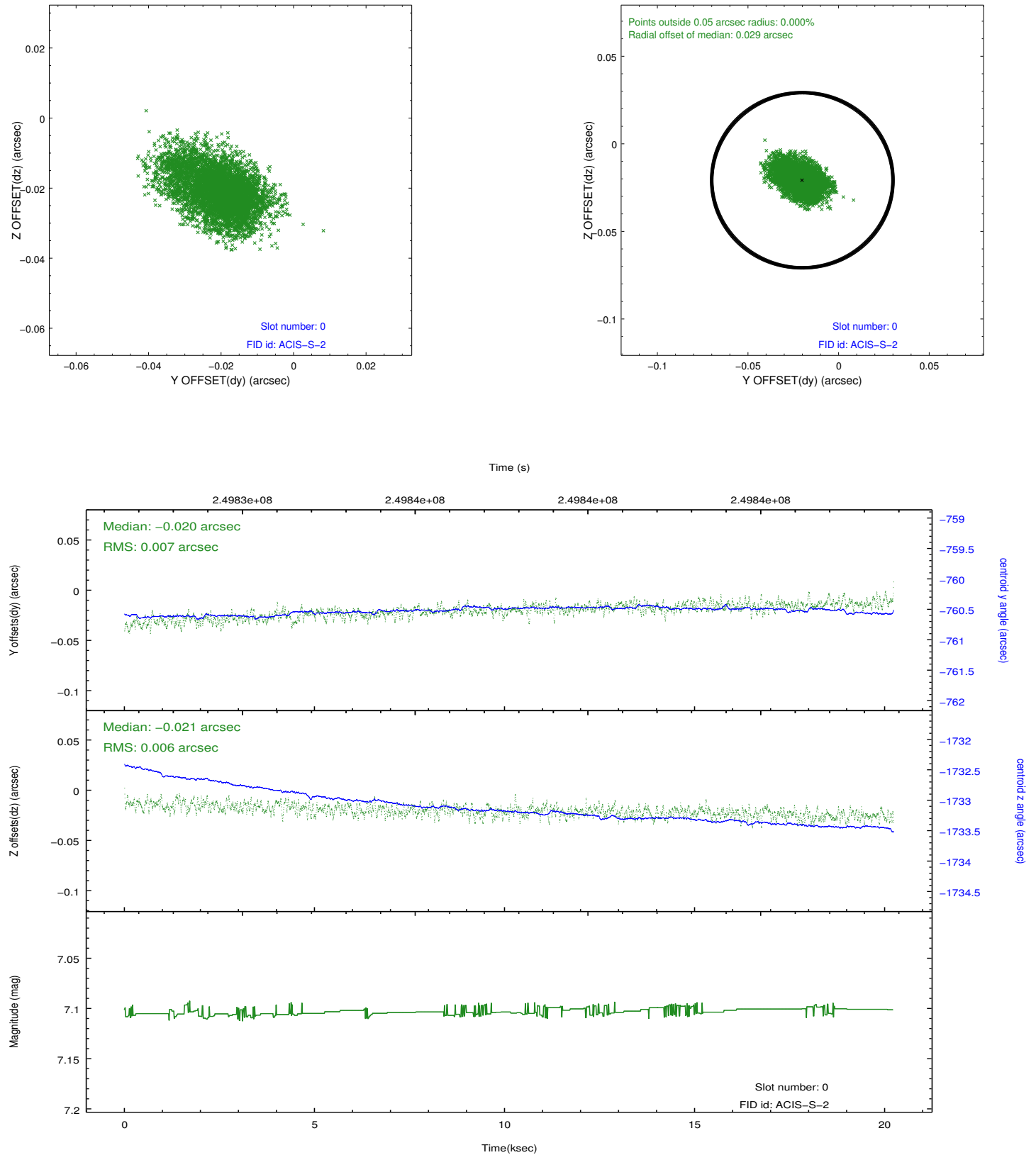


2.4.5 Slot 7

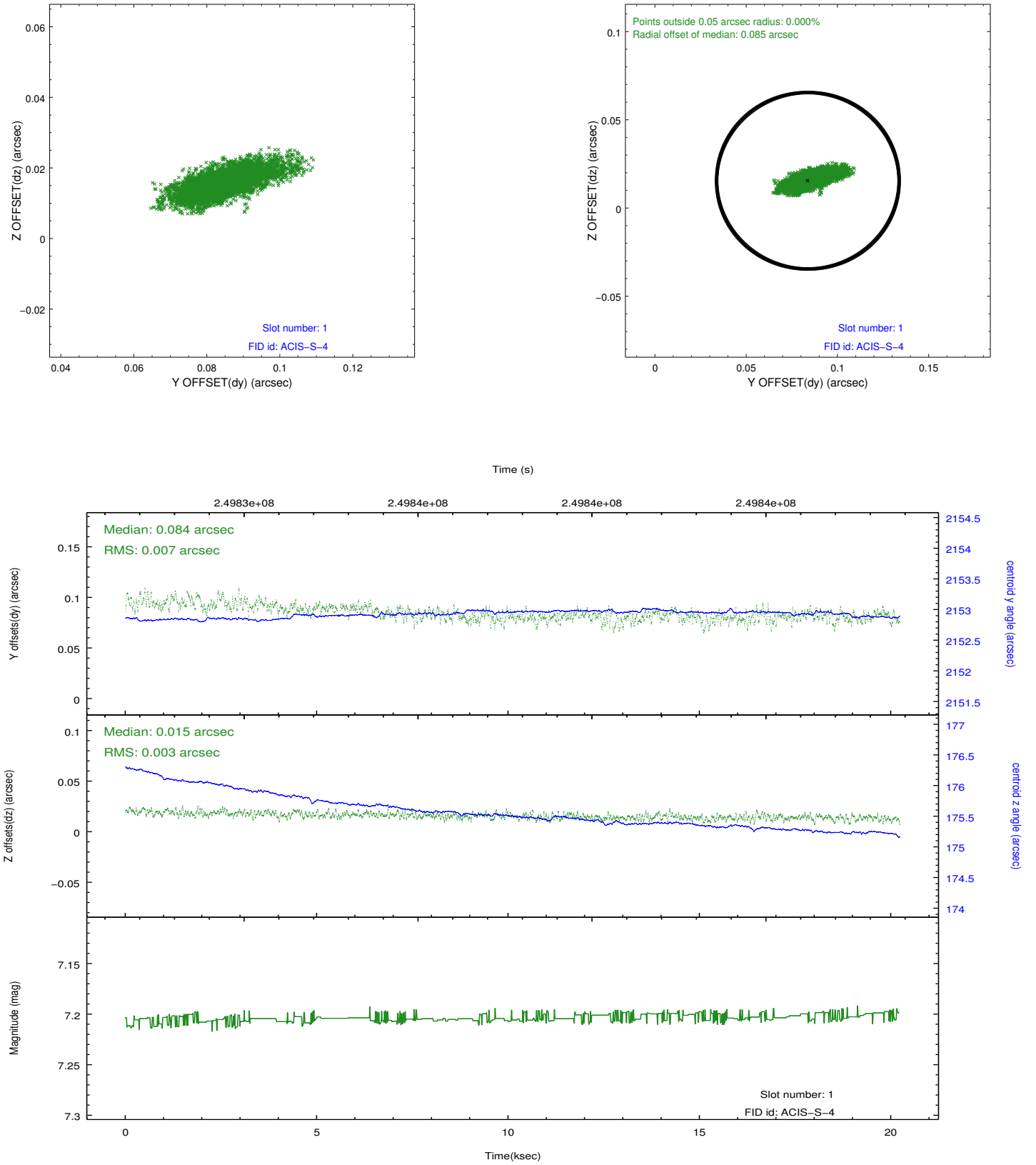


2.5 FID Slots

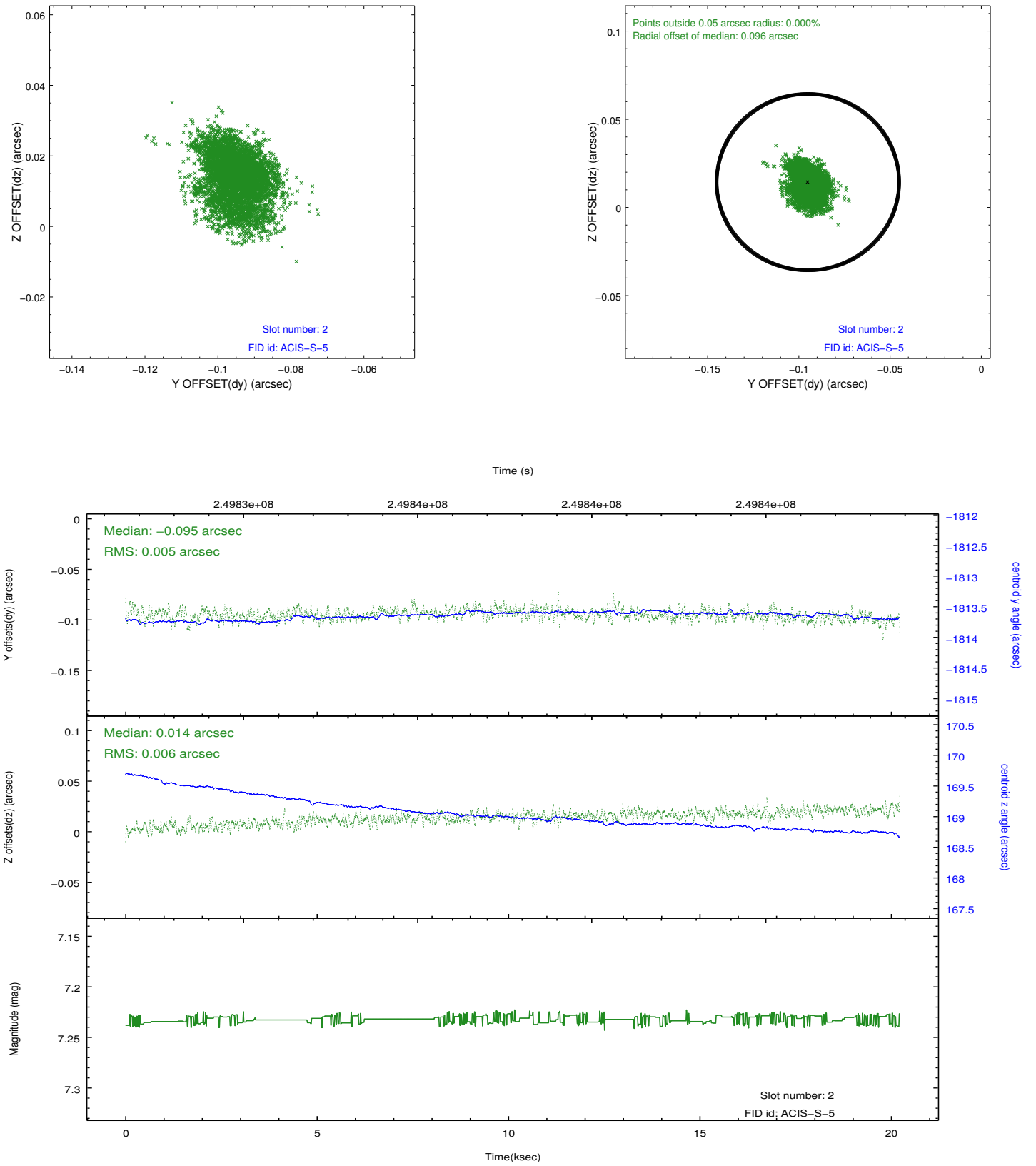
2.5.1 Slot 0



2.5.2 Slot 1

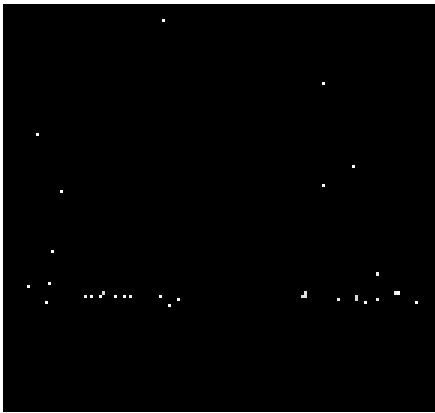


2.5.3 Slot 2

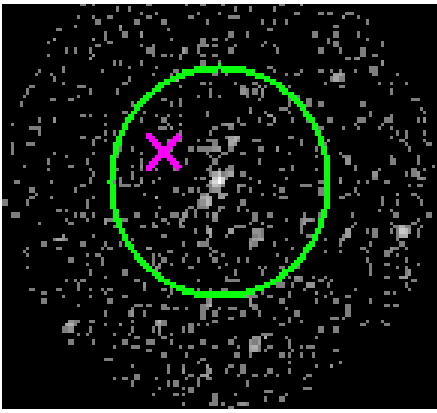


3 Gratings

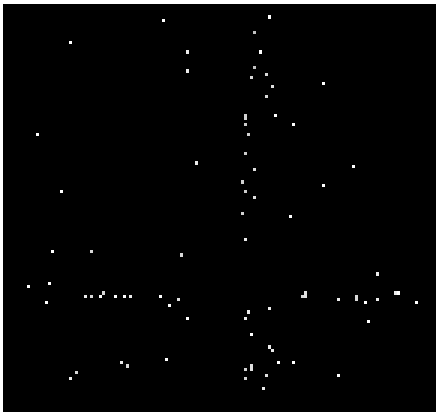
3.1 HEG Arm



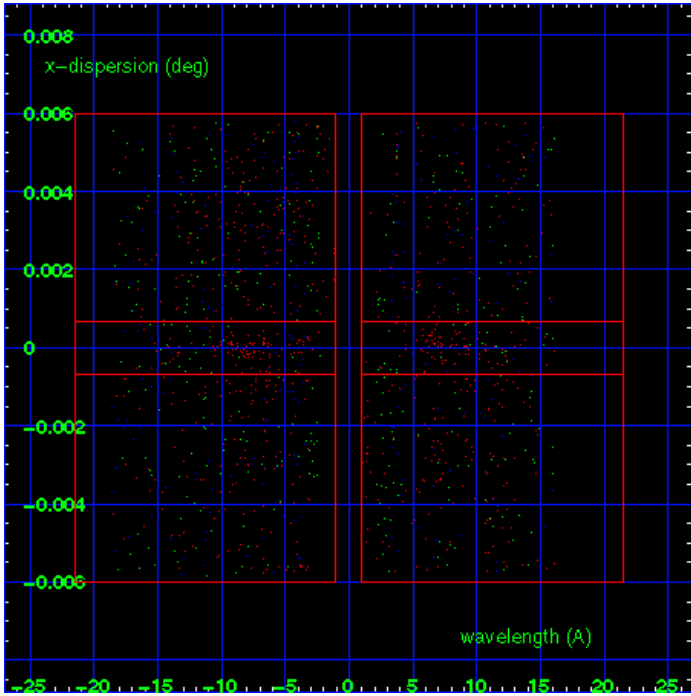
HEG Order Sort 123



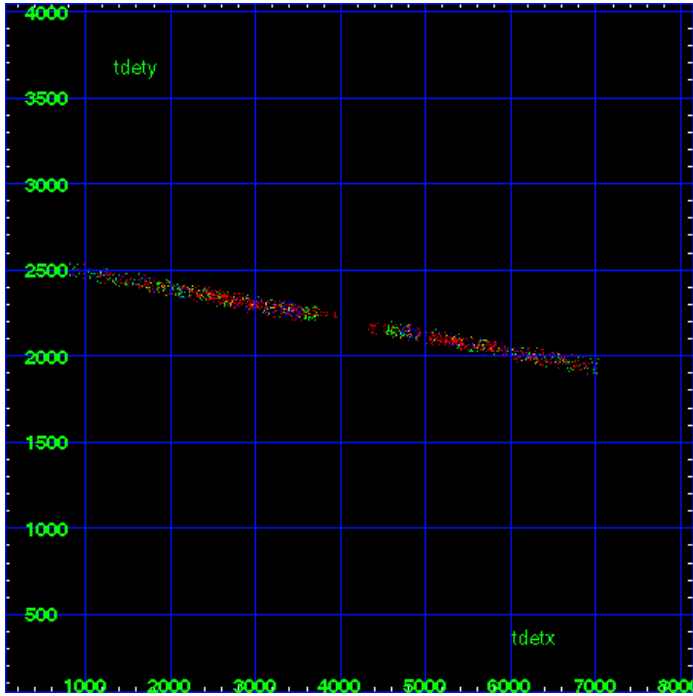
HEG Zero Order



HEG Order Sort ALL

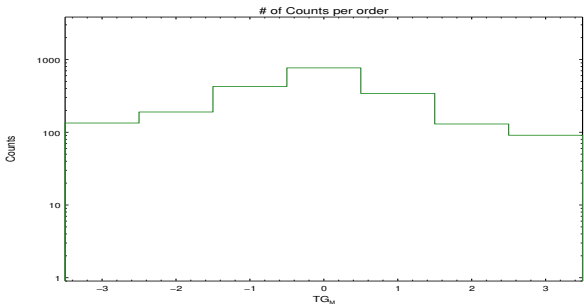


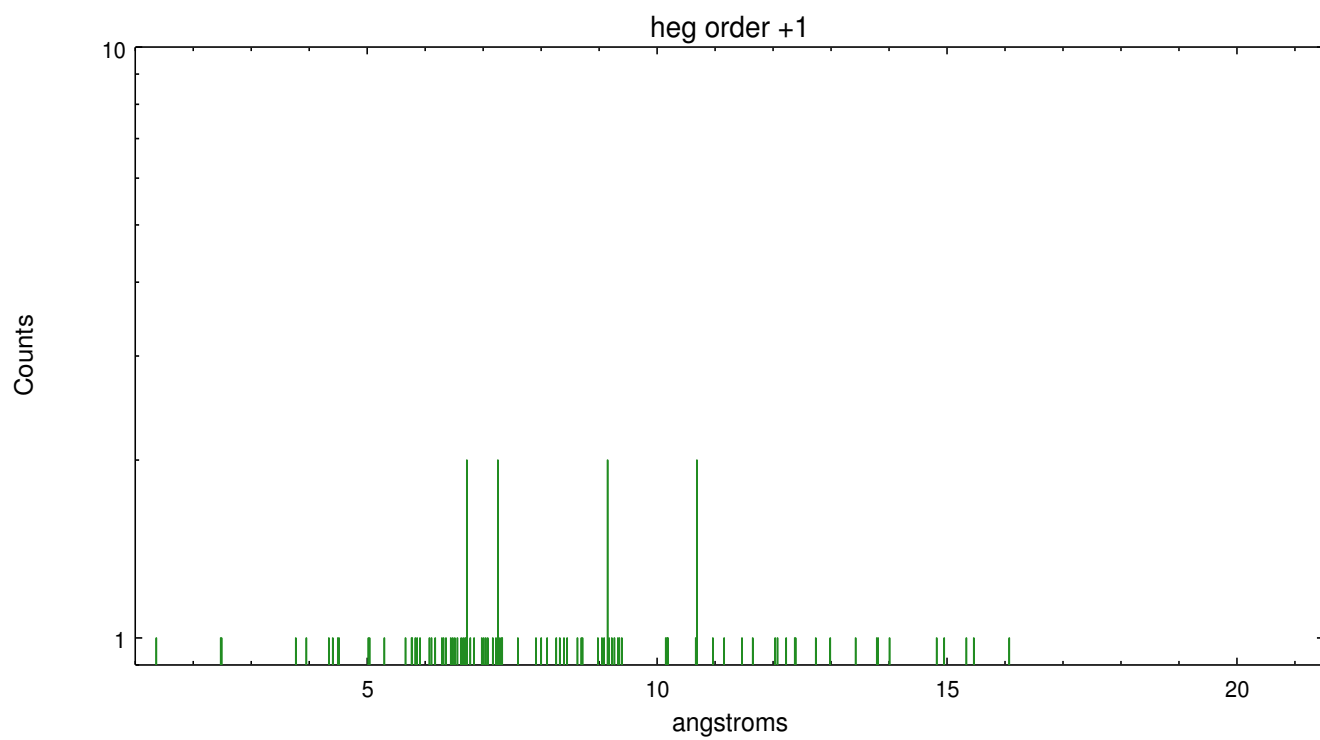
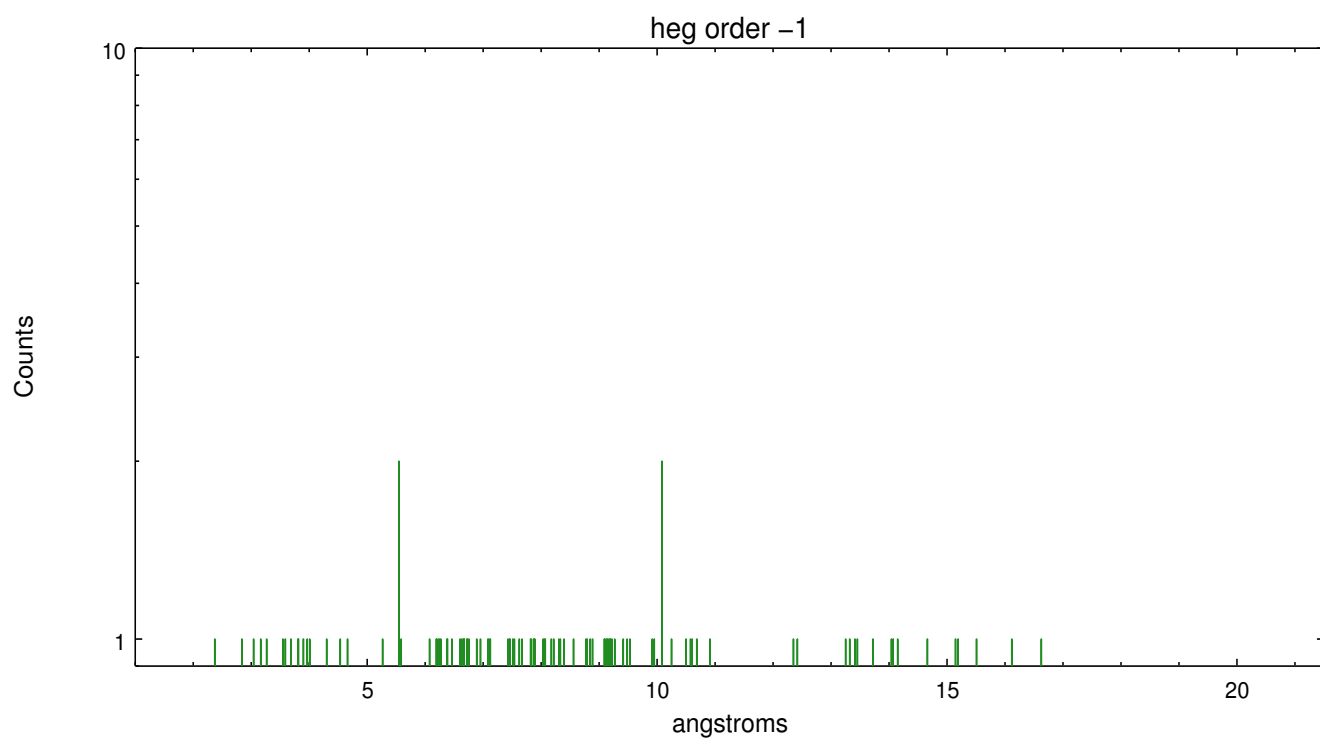
Spot Image HEG



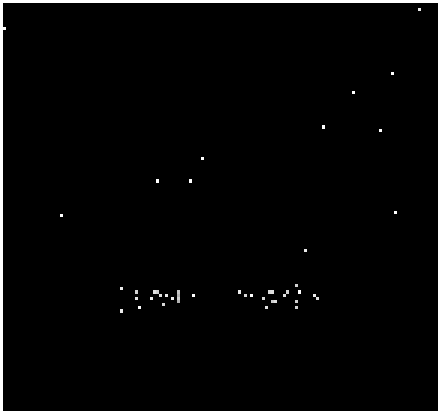
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	134	190	426	768	342	130	91

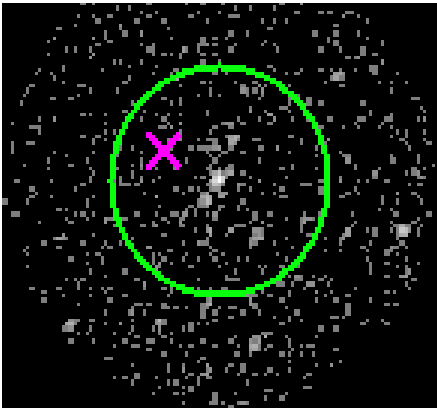




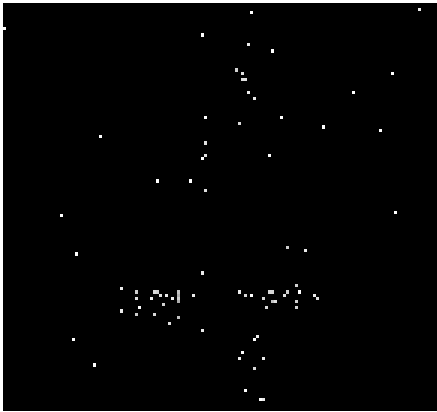
3.2 MEG Arm



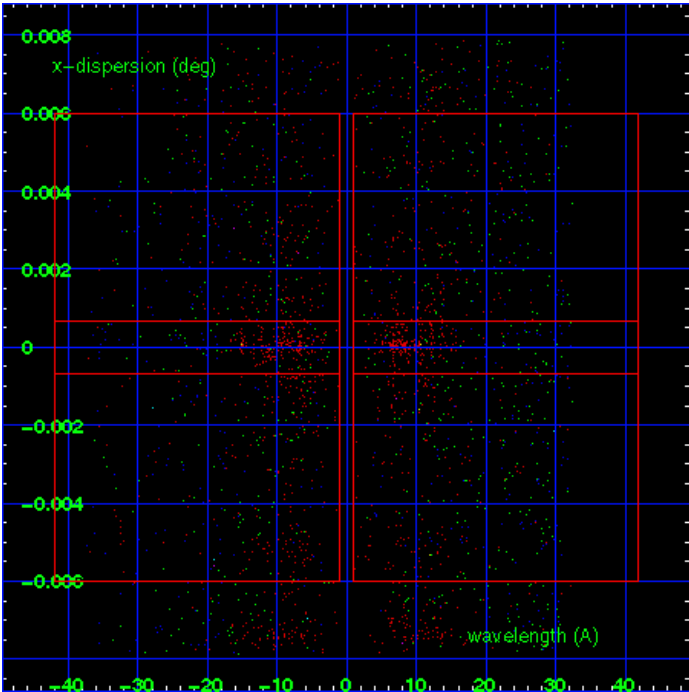
MEG Order Sort 123



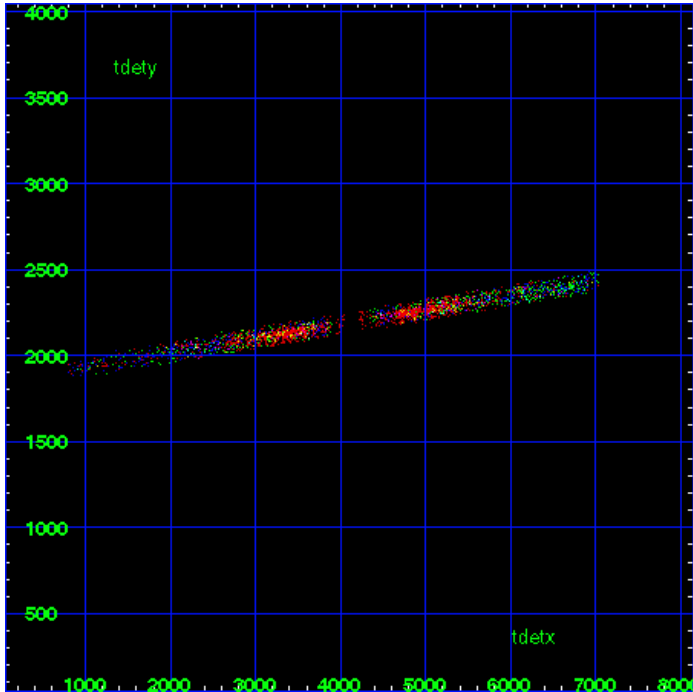
MEG Zero Order



MEG Order Sort ALL

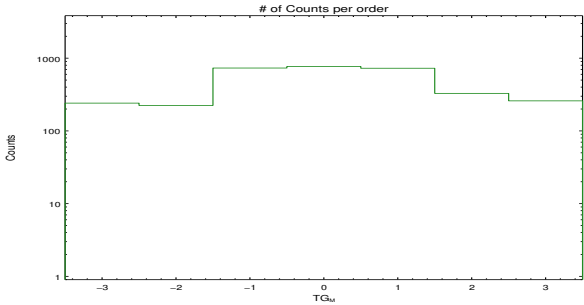


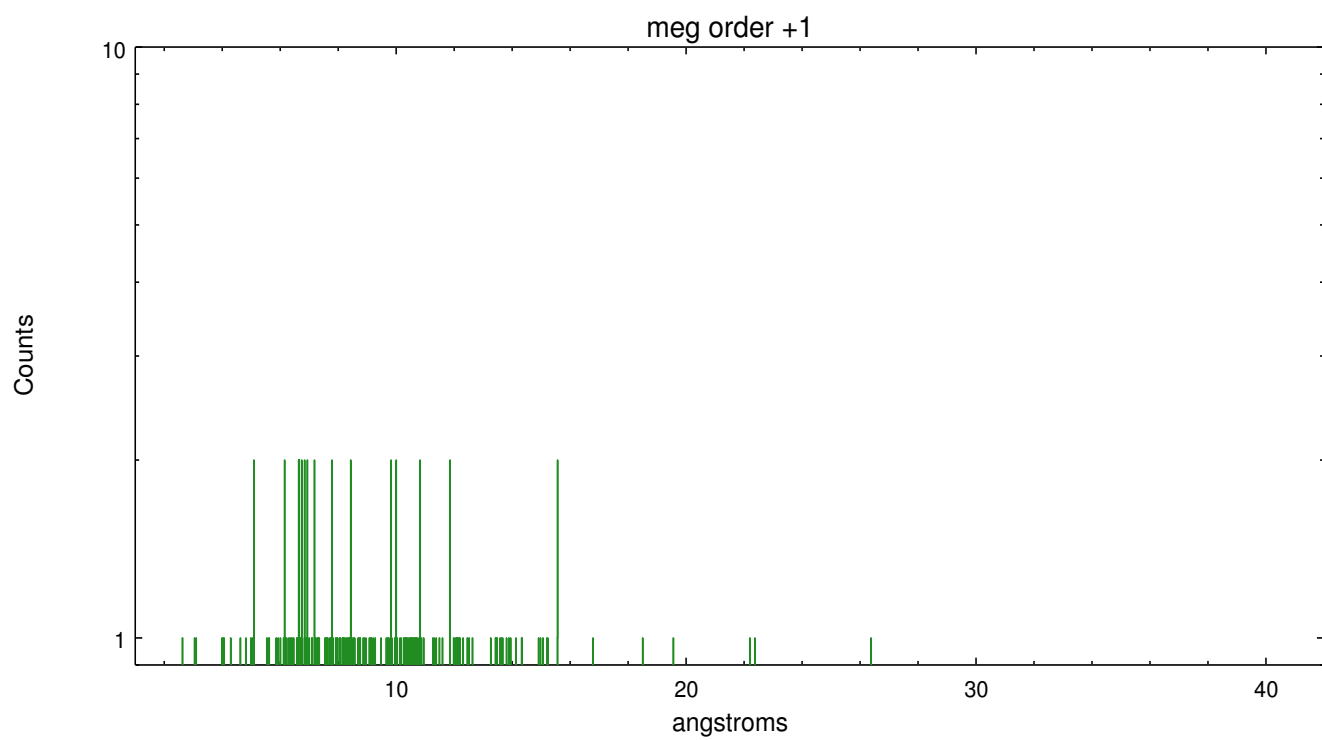
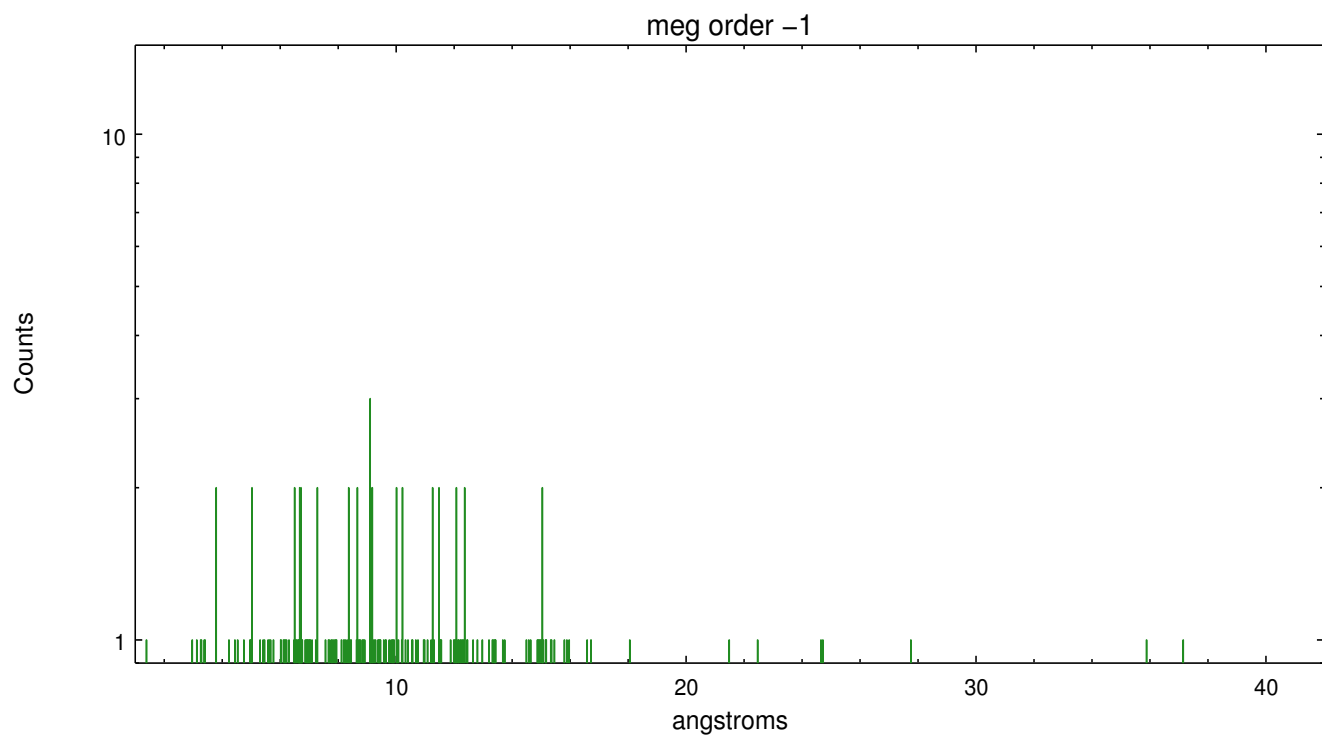
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	241	224	732	768	727	328	259





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.95199

A.2 Comments

This is one of 7 obsids of this target. The zeroth order has been set to x=4110.39, y=4088.65 for this obsid. The zeroth order positions are based on ra=10:43:57.457, dec=-59:32:51.32 for all of these obsids, which is the mean position of the peak of the X-ray source. tgdetect does not give a good position for the zeroth order because of flaring nearby sources that influence the source finding software. === Multiple sources in the field may cause contamination of the primary extraction at some wavelengths. Extraction is of HD 93129A. Comment: Complex source: [ESW2004] is within 2 arcsec of the target in the dispersion direction. Extraction probably includes both sources with offset in wavelength. These two spectra cannot be extracted separately.