

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2533 - L2 Version 3
Chandra X-Ray Center

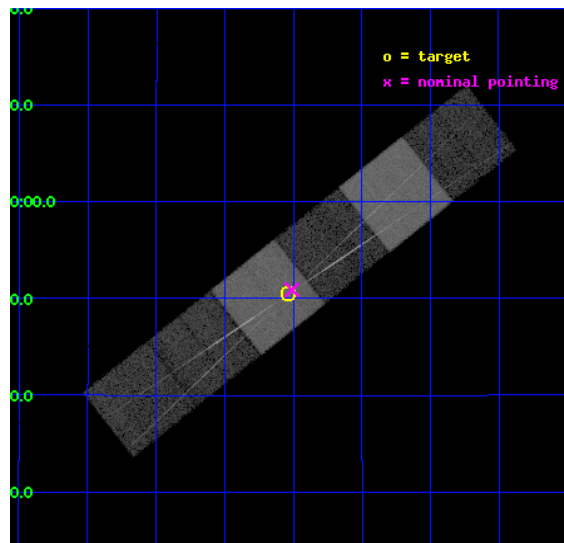
L2 Processing Date : Oct 12 2012

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1 Front

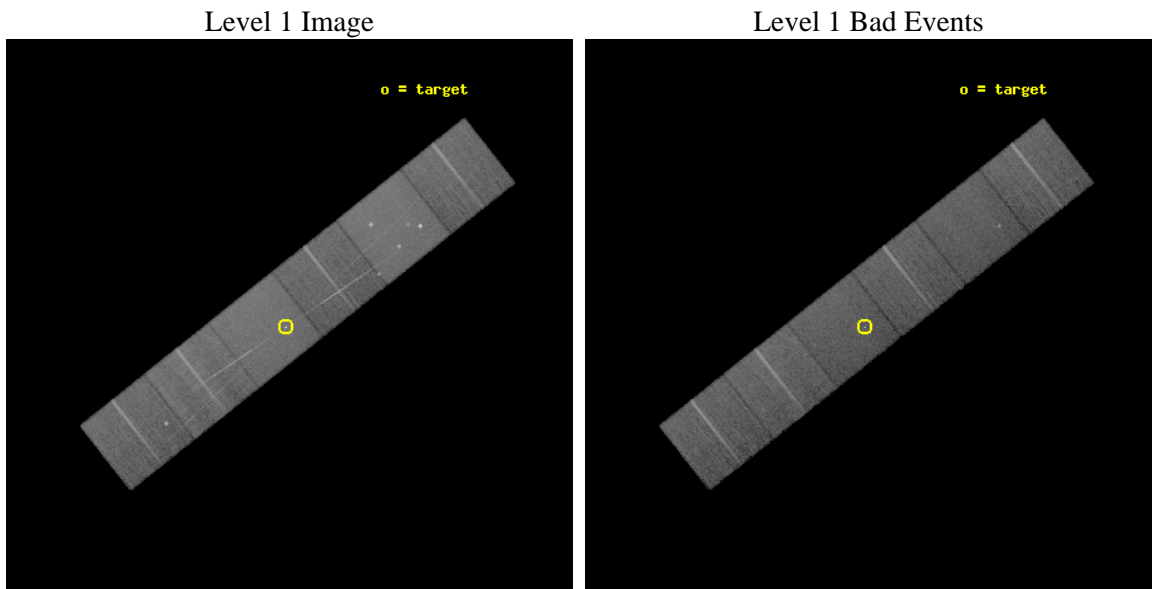
seq_num	200141	Sequence number
obs_id	2533	Observation id
title	HETGS SPECTROSCOPY OF THE LONG-PERIOD ACTIVE BINARY, IM PEGASI.	Pr
observer	Dr. David Huenemoerder	Principal investigator
object	IM PEG	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	343.259583	Observer's specified target RA [deg]
dec_targ	16.841194	Observer's specified target Dec [deg]
ra_nom	343.25286067294	Nominal RA [deg]
dec_nom	16.848469259028	Nominal Dec [deg]
roll_nom	141.5888375172	Nominal Roll [deg]
revision	3	Processing version of data
ontime	23996.799910605	Sum of GTIs [s]
livetime	23692.937980999	Livetime [s]
ontime4	23993.558930337	Sum of GTIs [s]
ontime5	23996.799910605	Sum of GTIs [s]
ontime6	23996.799910605	Sum of GTIs [s]
ontime7	23996.799910605	Sum of GTIs [s]
ontime8	23996.799910605	Sum of GTIs [s]
ontime9	23996.799910605	Sum of GTIs [s]
l2events	245927	Number of level 2 events



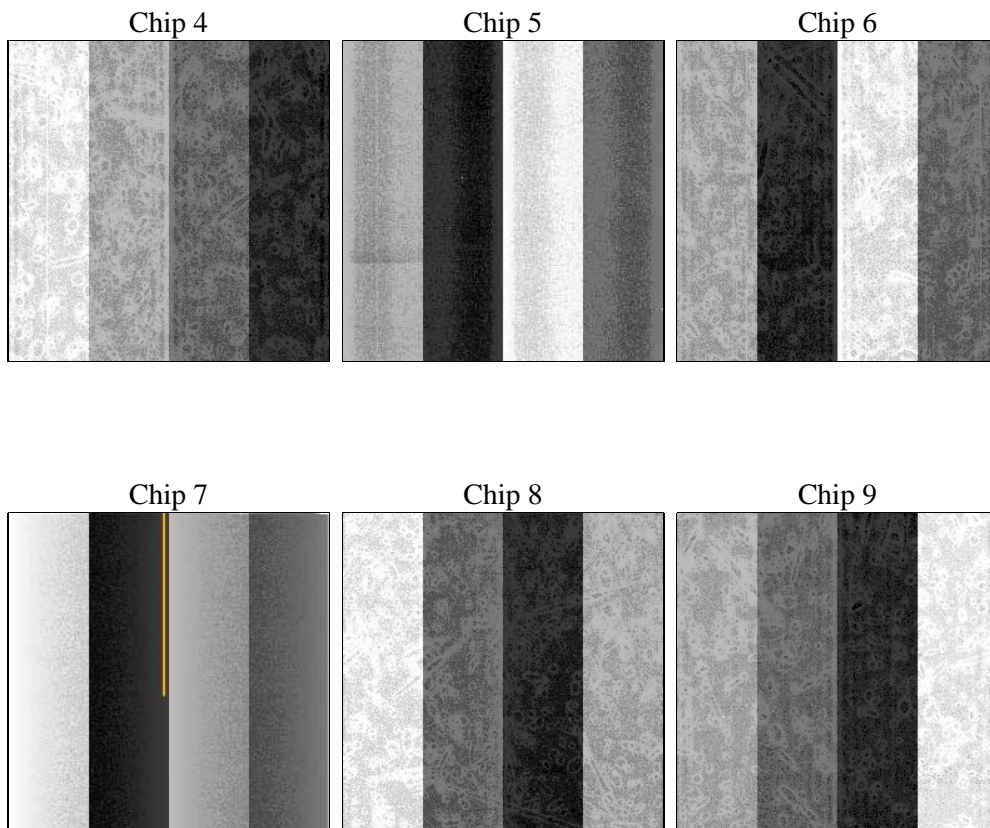
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24300.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	23996.799910605	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	23993.558930337	Sum of GTIs [s]
date	2012-10-11T21:50:16	Date and time of file creation	ontime5	23996.799910605	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	23996.799910605	Sum of GTIs [s]
			ontime7	23996.799910605	Sum of GTIs [s]
			ontime8	23996.799910605	Sum of GTIs [s]
			ontime9	23996.799910605	Sum of GTIs [s]
			l1events	1046253	Number of level 1 events

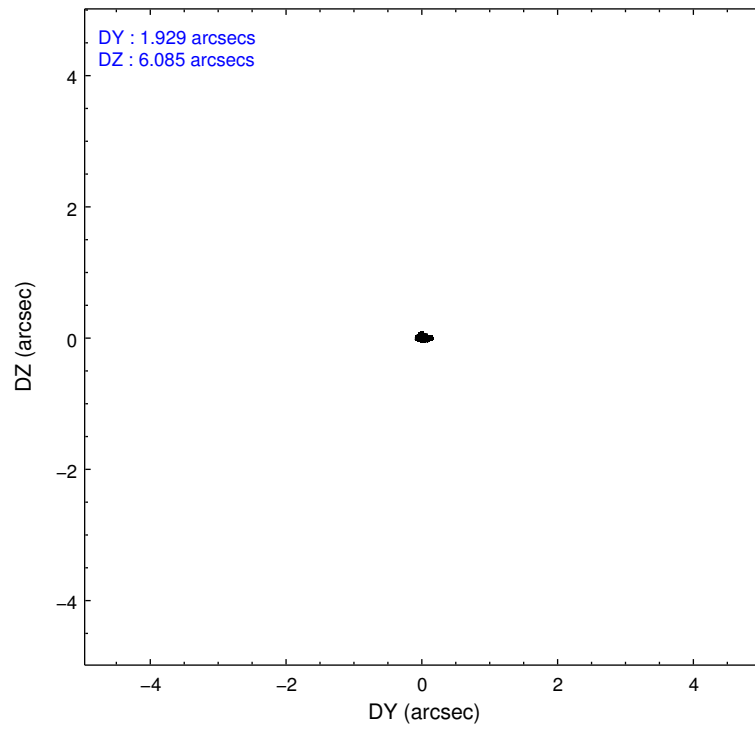
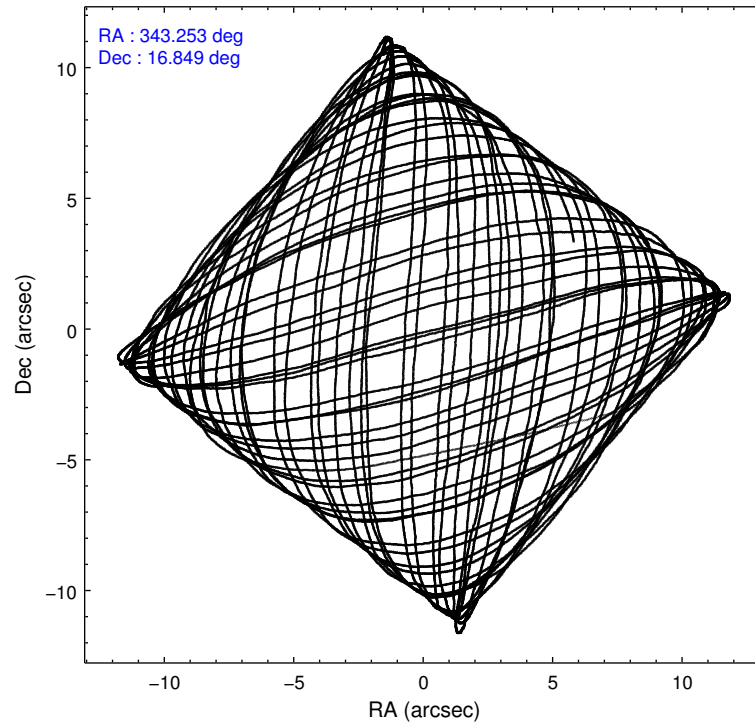
2.1.4 Events

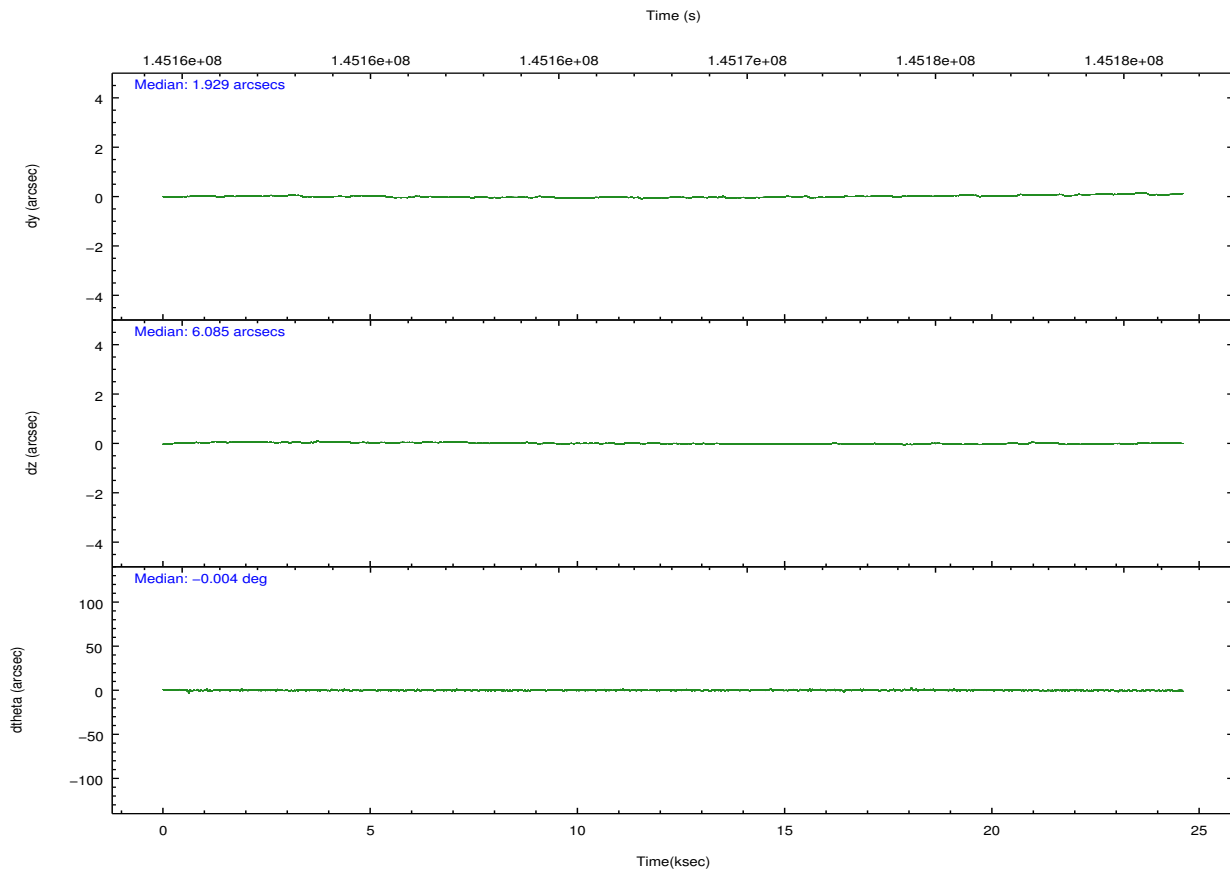
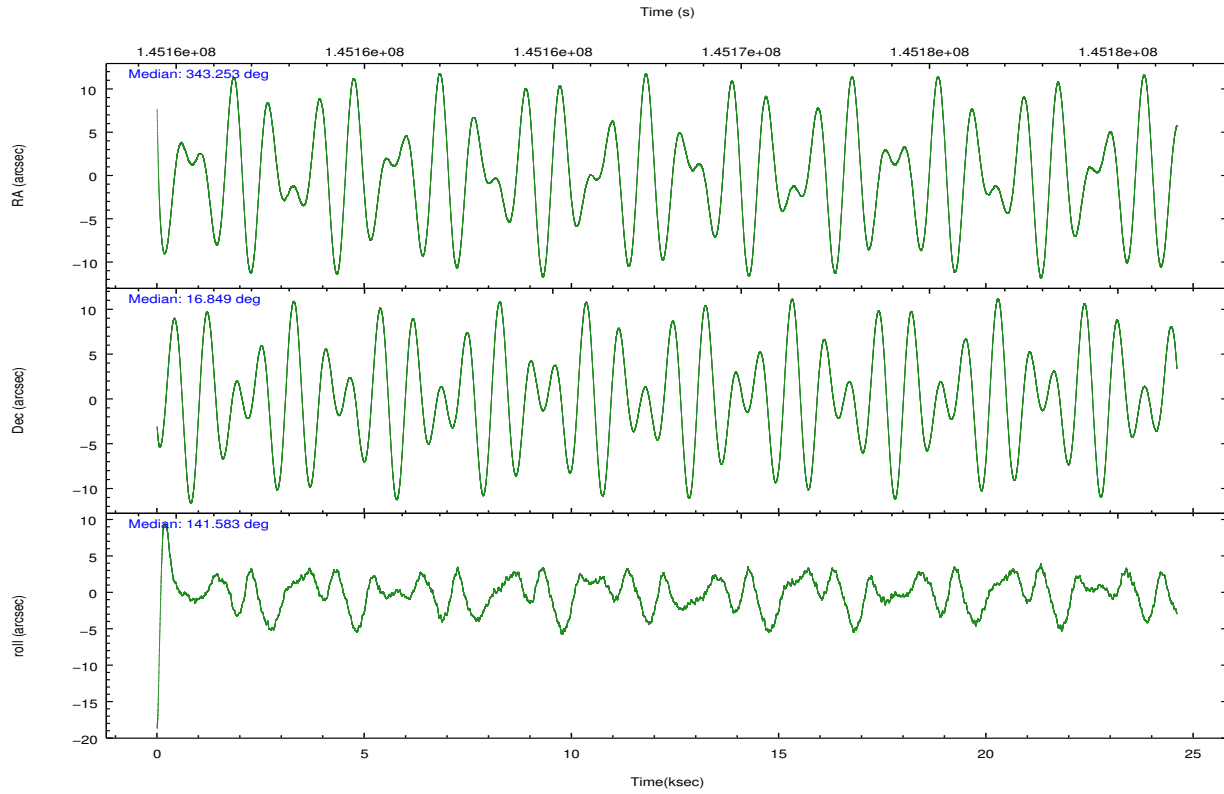
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	153780	215886	148372	199744	184647	143824	grade 0 events	8139	18007	12410	8864	16078	9845
rejected events	135876	112722	124806	113932	143049	123761		5%	8%	8%	4%	8%	6%
rejected %	88%	52%	84%	57%	77%	86%	grade 1 events	141	768	82	327	129	86
								0%	0%	0%	0%	0%	0%
							grade 2 events	3478	27827	3954	17107	8247	3403
								2%	12%	2%	8%	4%	2%
							grade 3 events	1805	4226	1932	7945	4060	1829
								1%	1%	1%	3%	2%	1%
							grade 4 events	1781	4093	1834	7892	3717	1705
								1%	1%	1%	3%	2%	1%
							grade 5 events	5927	15535	6351	19217	8170	6796
								3%	7%	4%	9%	4%	4%
							grade 6 events	2704	49049	3442	44023	9508	3288
								1%	22%	2%	22%	5%	2%
							grade 7 events	129805	96381	118367	94369	134738	116872
								84%	44%	79%	47%	72%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	343.281090	343.2528606729396	Subarray requested	NONE	NONE
[deg] Pointing Dec	16.844816	16.84846925902772	Alternating exposures requested	N	N
[deg] Pointing Roll	141.424034	141.5888375172008	[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	-187.132523	-187.1254020033014			
[mm] SIM translation stage offset	-3	-3.007120579706367			
[s] Observation start time (MET)	145156038.184000	145155022.04399			
Observation start date	2002-08-08T01:06:14	2002-08-08T00:50:22			
[s] Observation end time (MET)	145180338.184000	145181093.94507			
Observation end date	2002-08-08T07:51:14	2002-08-08T08:04:53			
Read mode	TIMED	TIMED			

2.3 Aspect





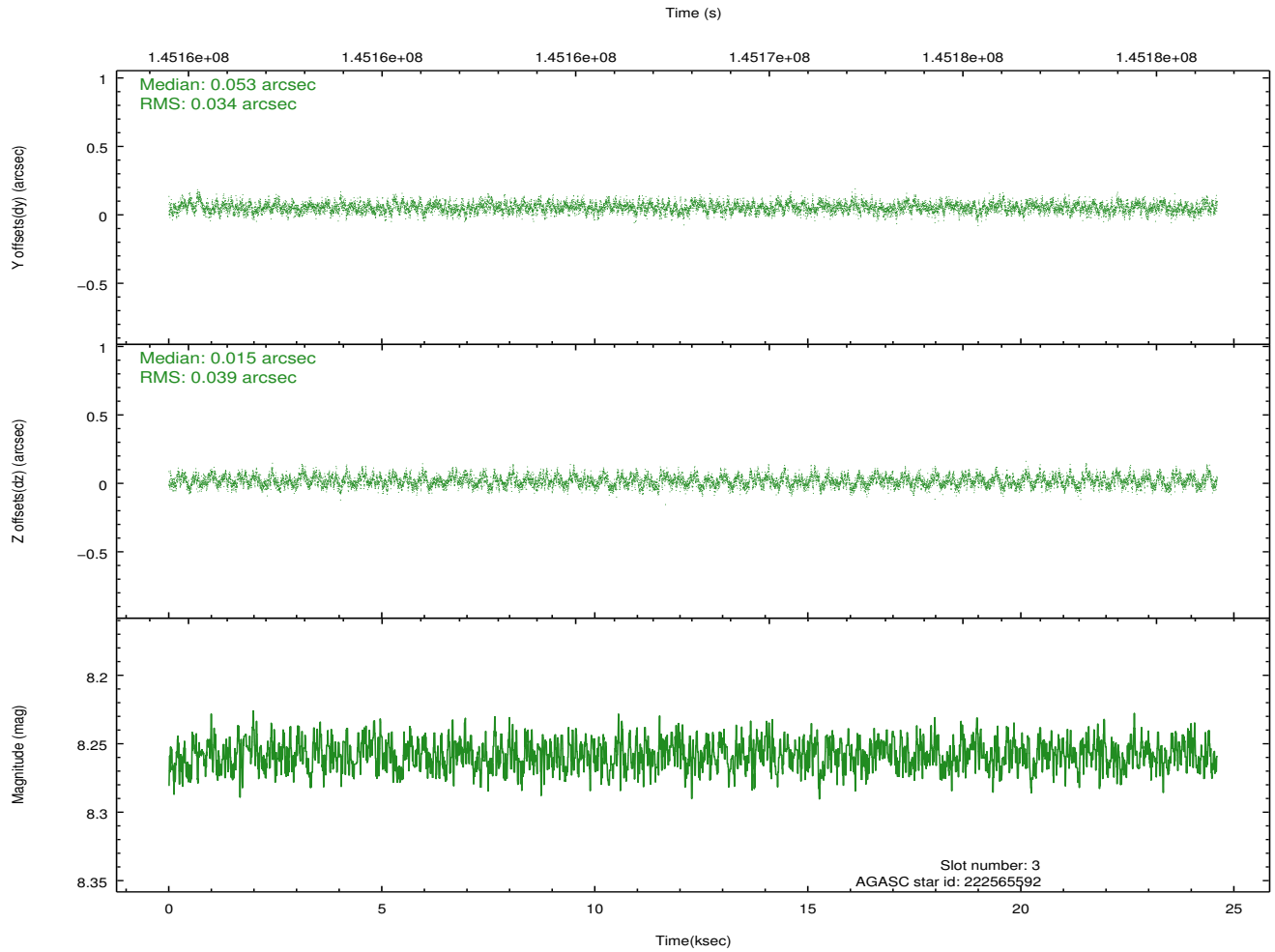
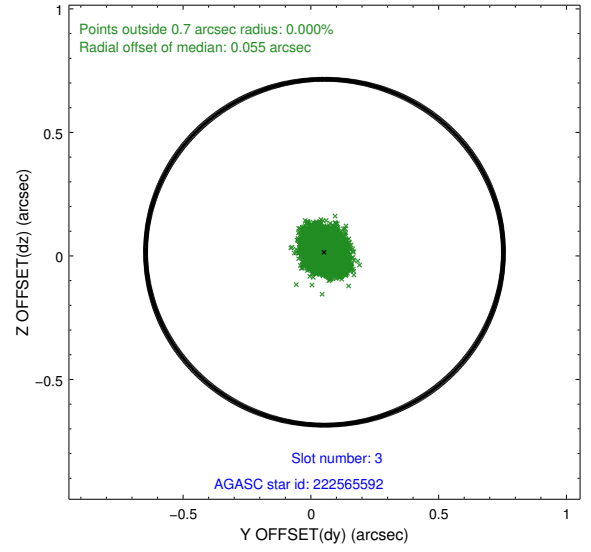
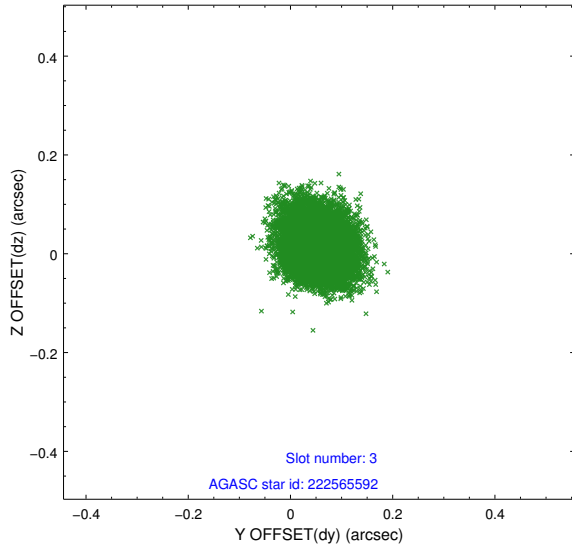
Slot Statistics

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	5996	-0.057	-0.031	0.006	0.011	0.000000	0.000000	-754.39	-1789.35
1	FID	ACIS-S-4	7.20	6001	0.017	0.044	0.006	0.010	0.000000	0.000000	2158.90	119.08
2	FID	ACIS-S-6	7.39	6001	0.012	-0.007	0.007	0.011	0.000000	0.000000	407.81	756.56
3	GUIDE	222565592	8.26	12000	0.053	0.015	0.055	0.089	343.291662	16.508291	-783.40	925.20
4	GUIDE	222563744	8.74	11998	-0.115	-0.100	0.064	0.101	342.392259	16.776439	2246.15	2098.51
5	GUIDE	222562432	8.94	11934	0.203	0.007	0.077	0.122	343.698150	16.309399	-2326.80	607.85
6	GUIDE	222563736	8.83	12000	0.010	-0.150	0.067	0.106	343.076284	16.308502	-650.47	1950.65
7	GUIDE	223089808	9.09	12000	-0.148	0.225	0.083	0.135	343.220223	17.508272	1652.93	-1736.04

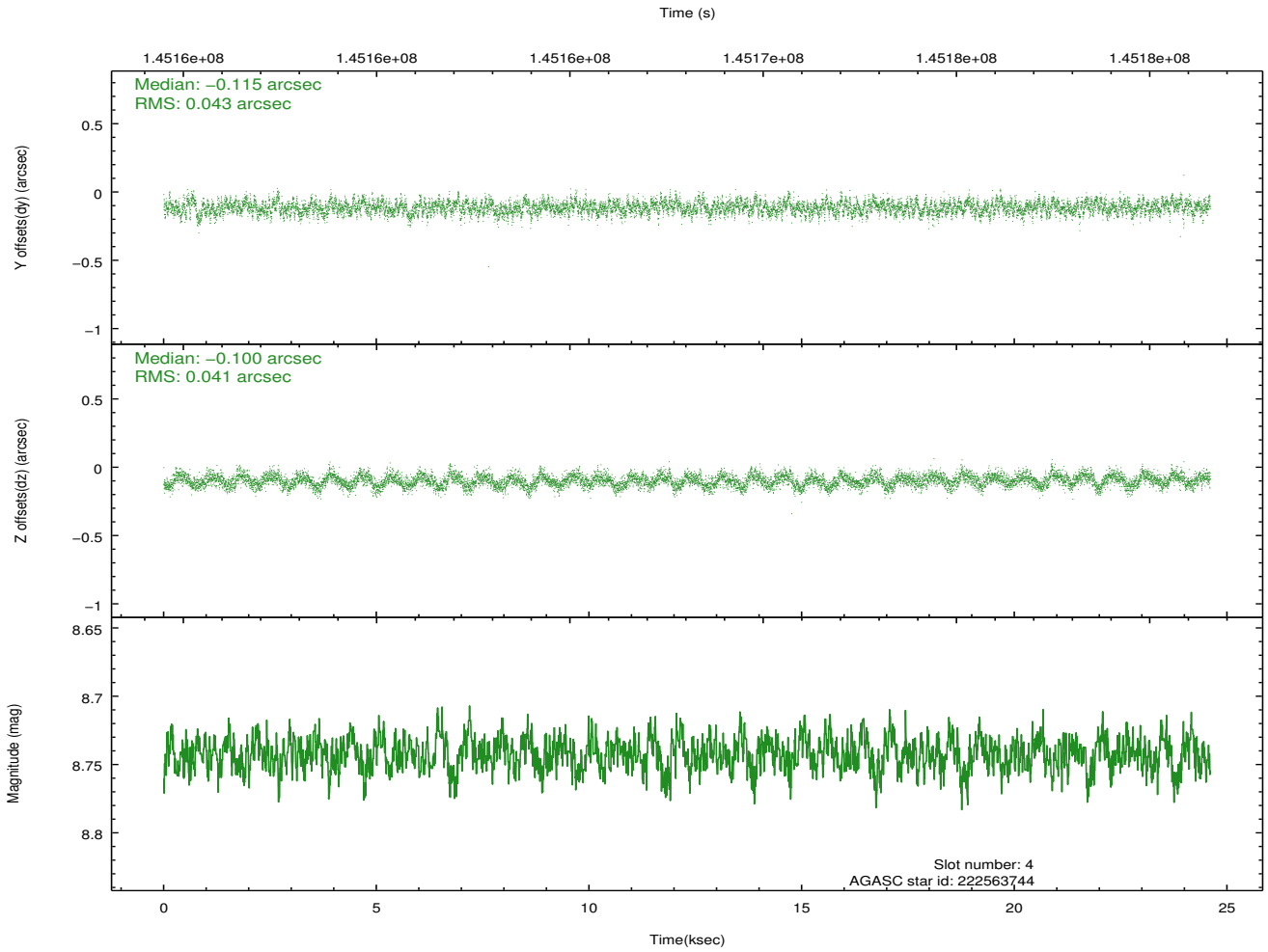
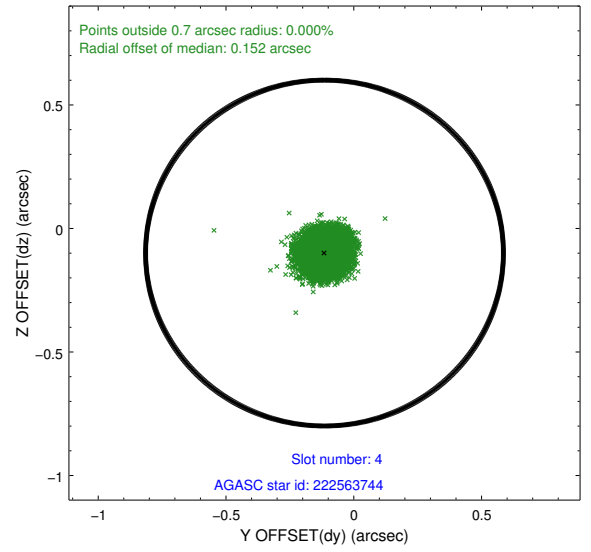
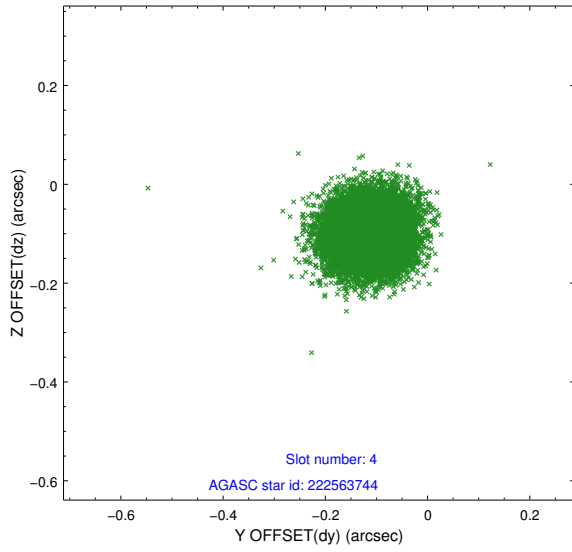
∞

2.4 Star Slots

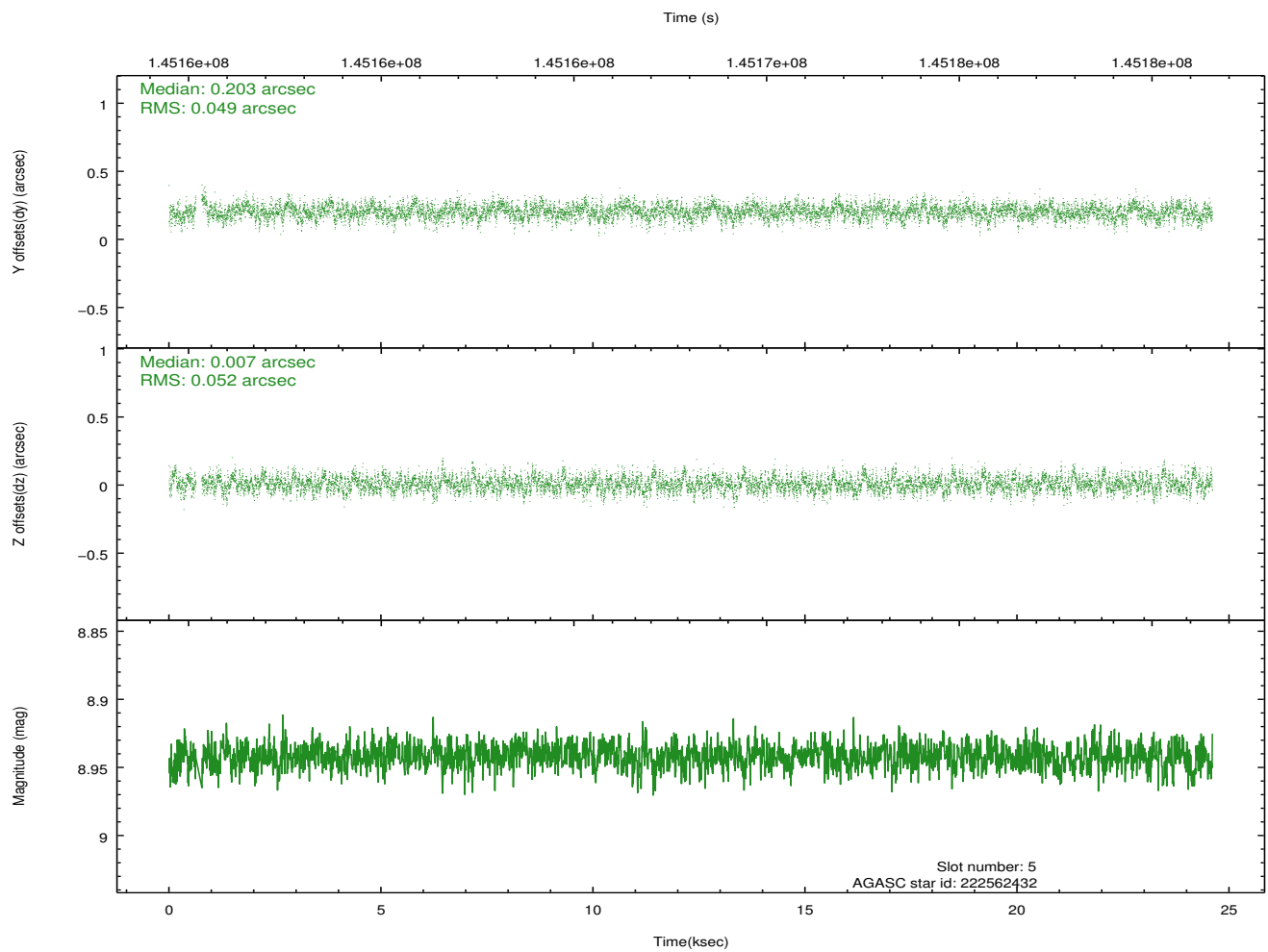
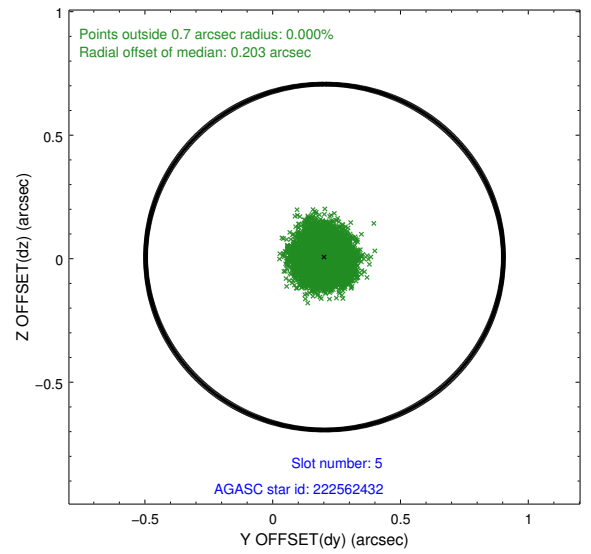
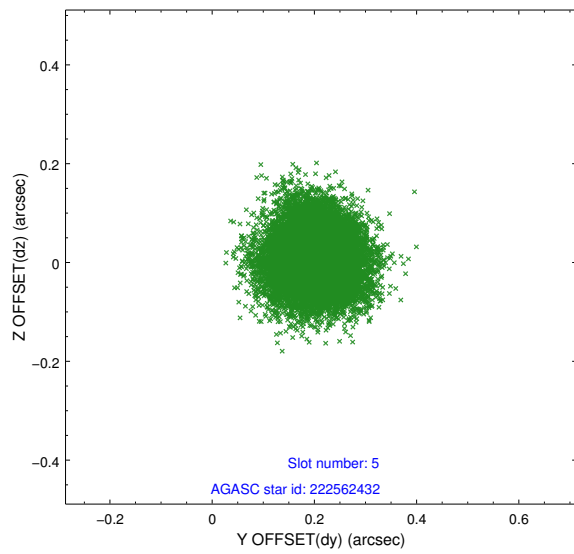
2.4.1 Slot 3



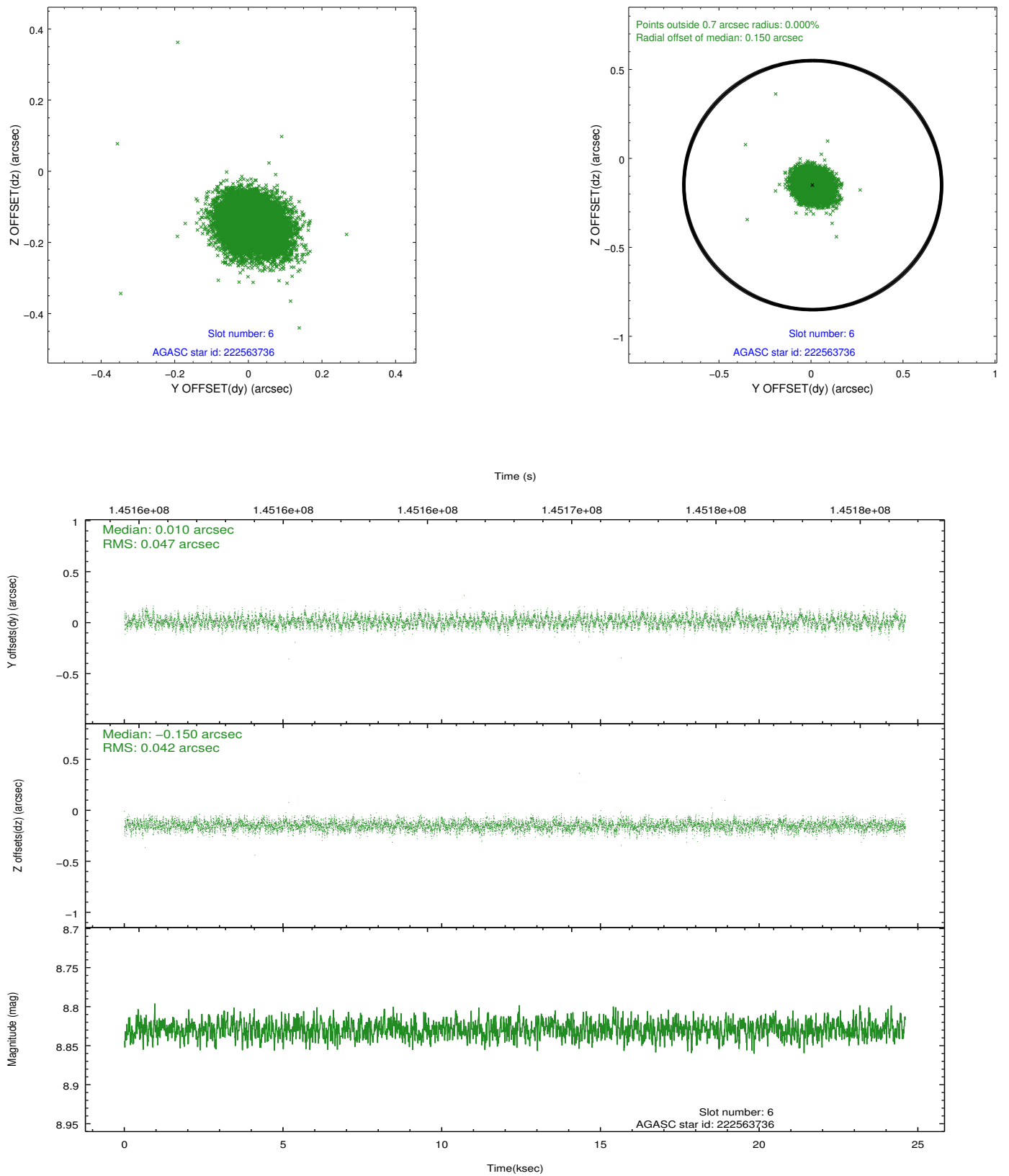
2.4.2 Slot 4



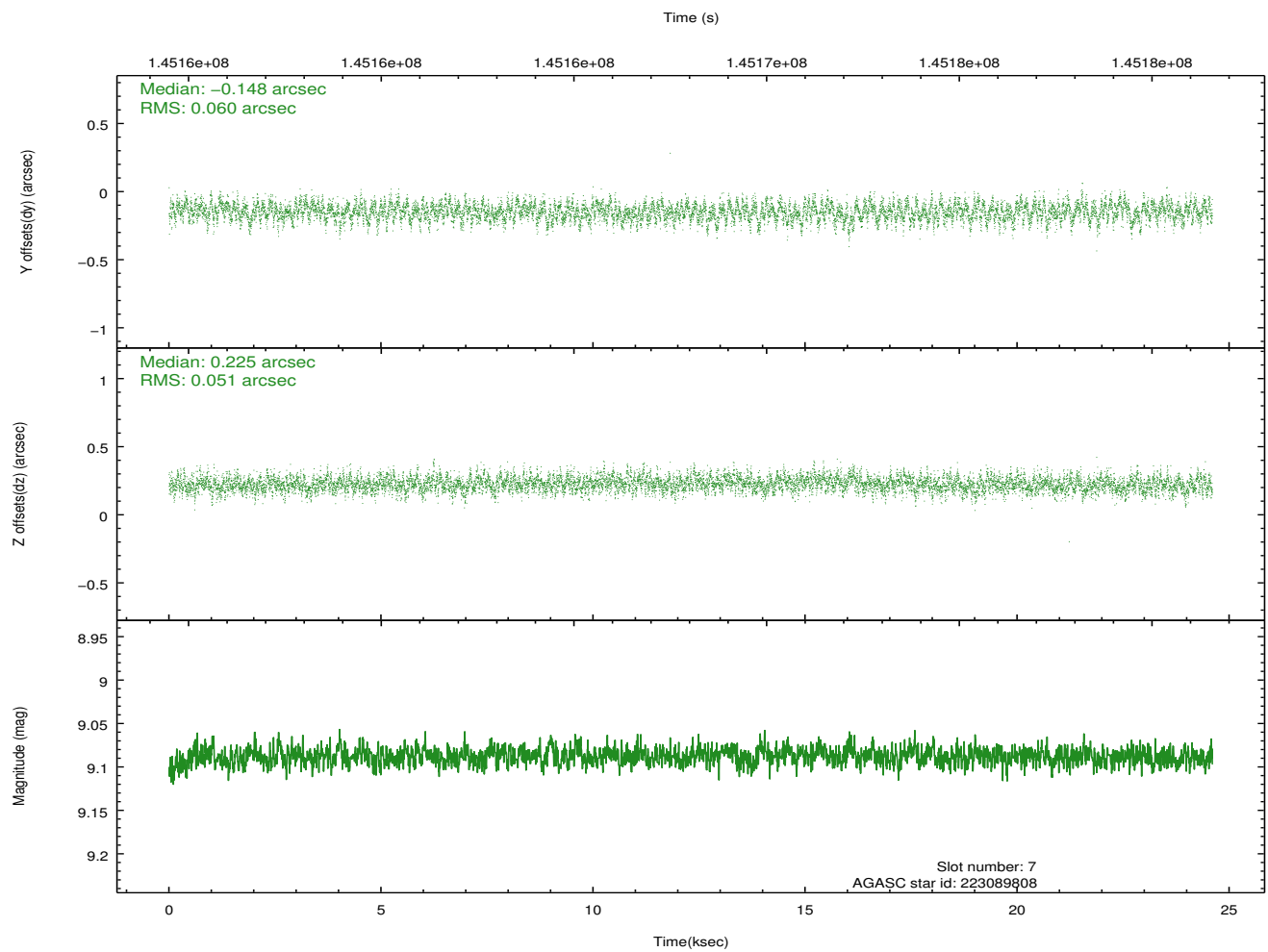
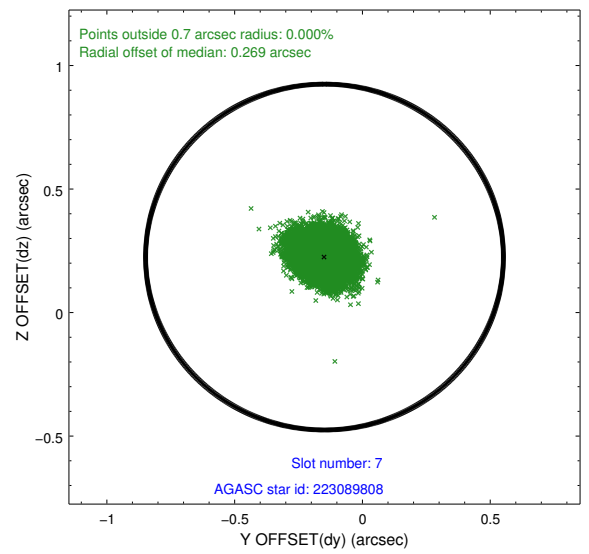
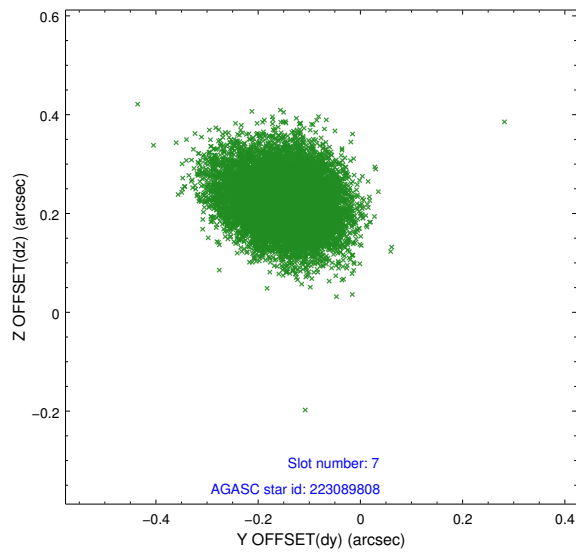
2.4.3 Slot 5



2.4.4 Slot 6

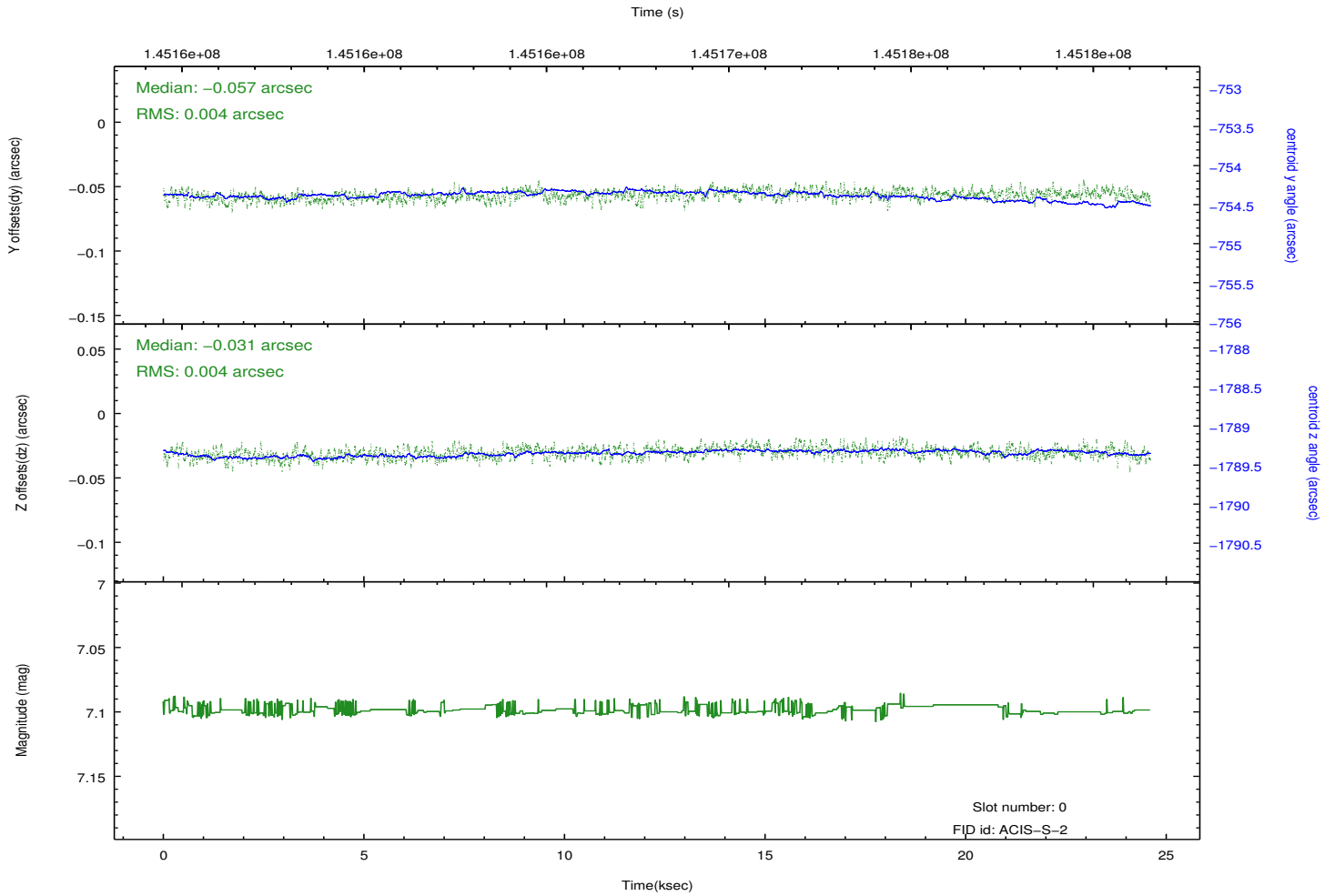
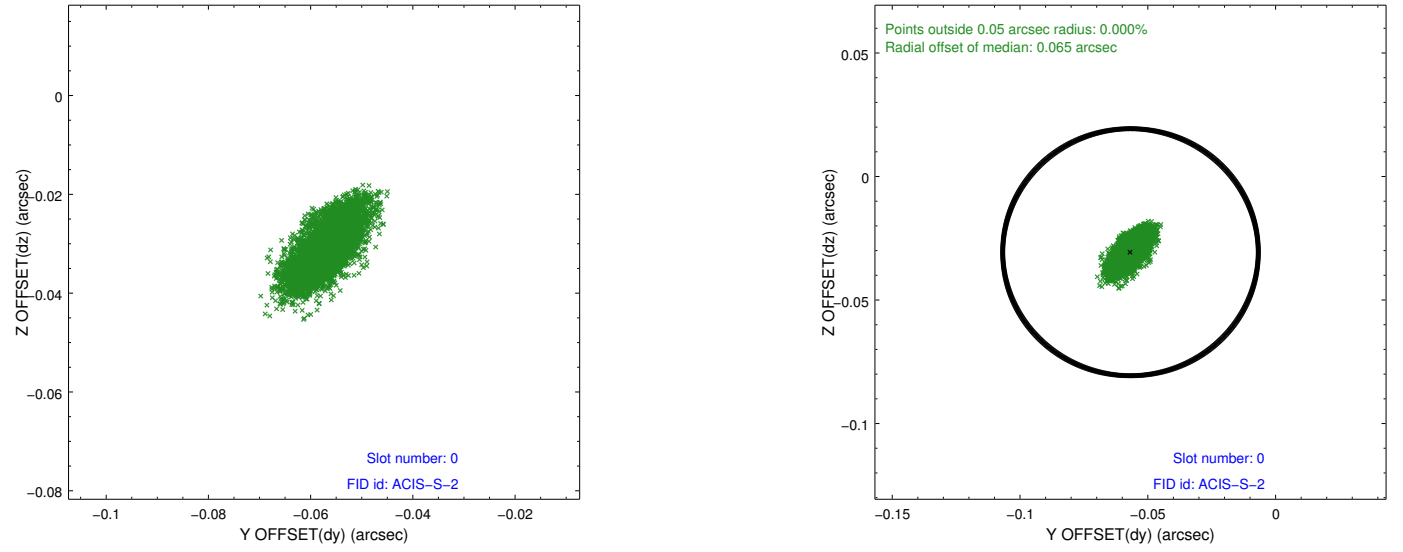


2.4.5 Slot 7

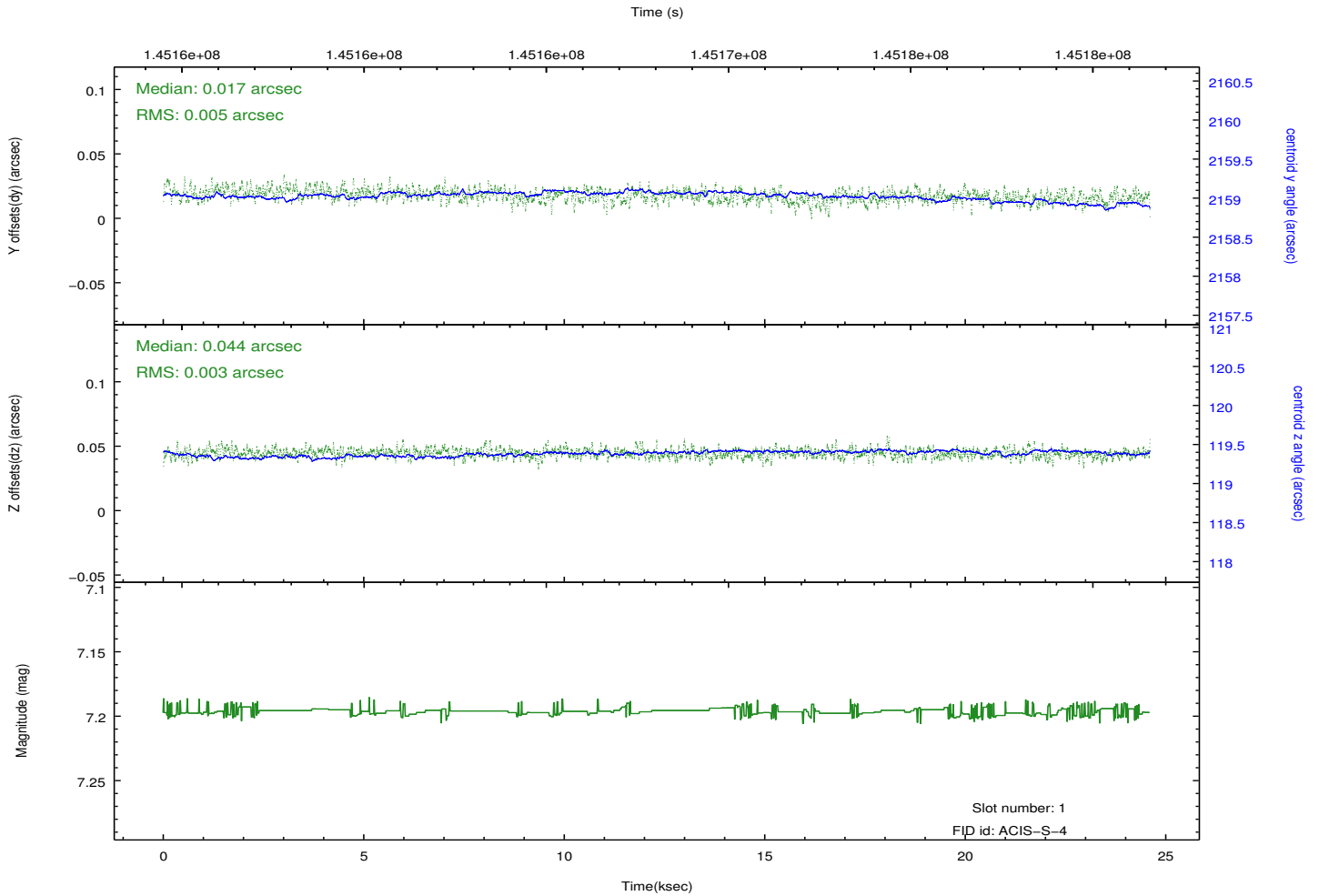
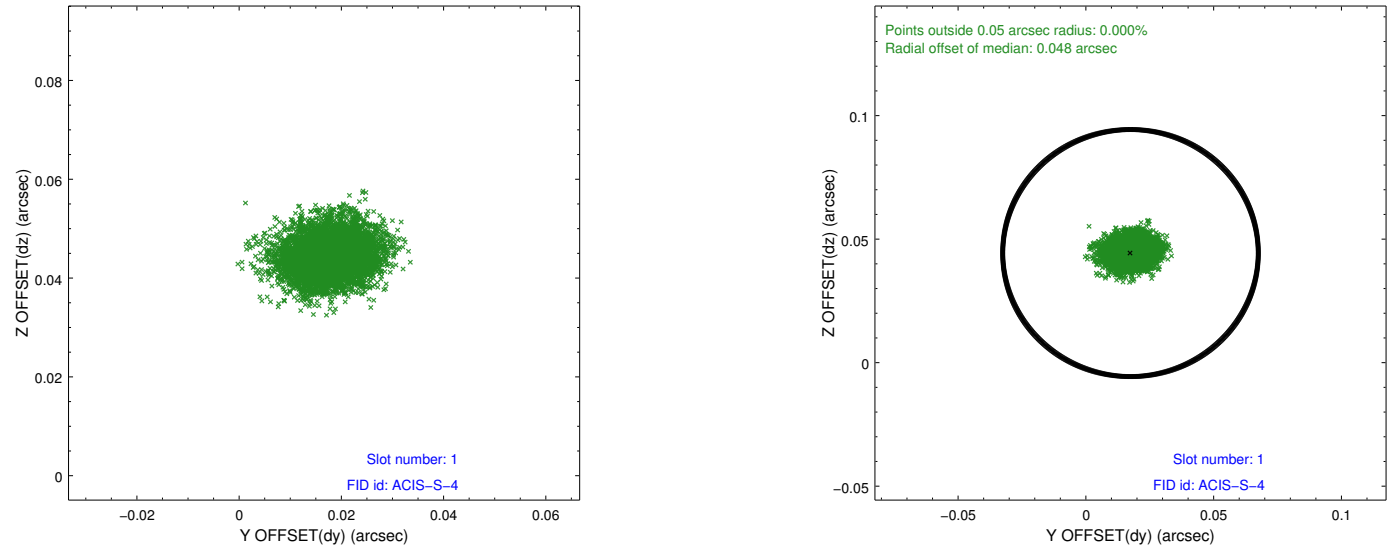


2.5 FID Slots

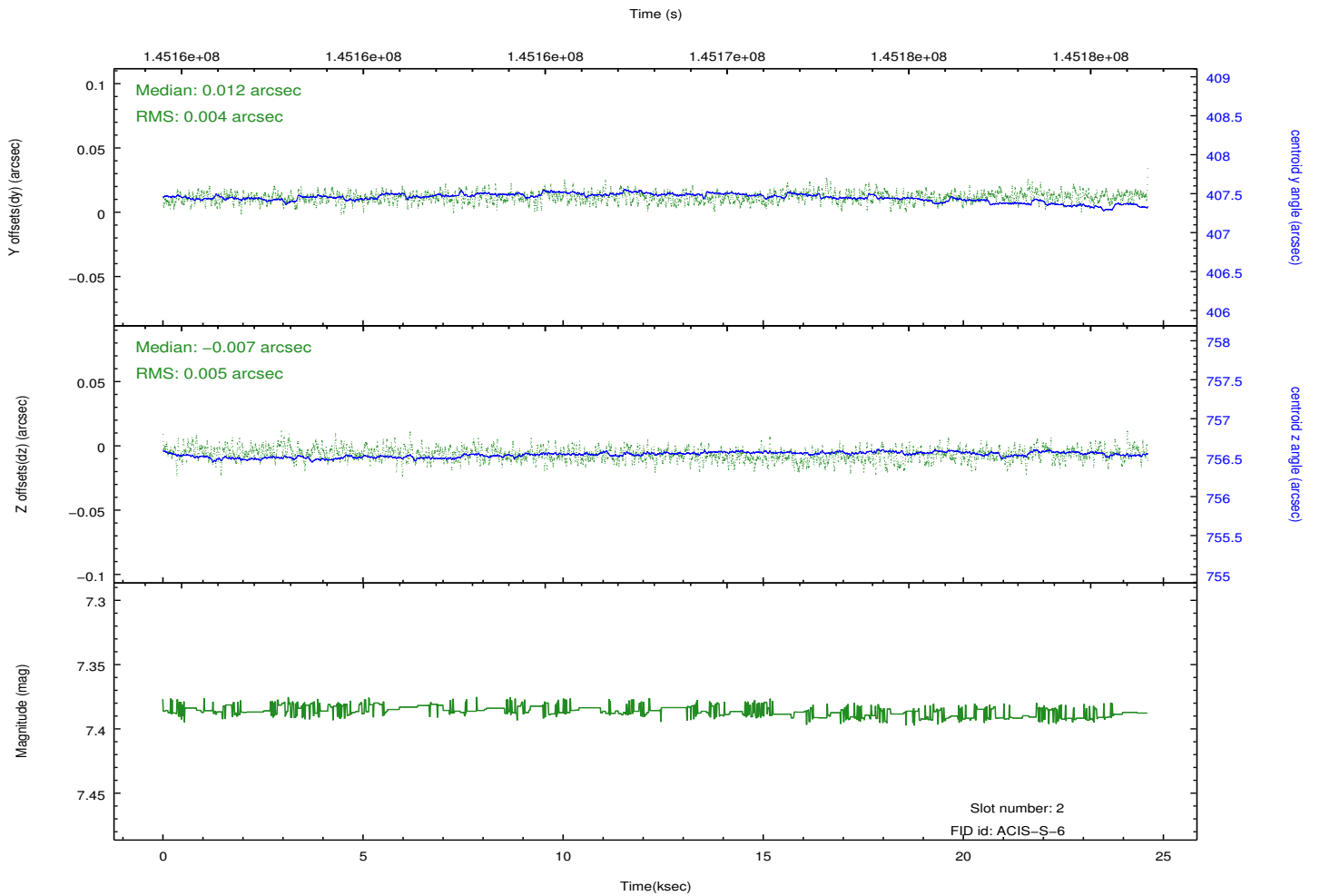
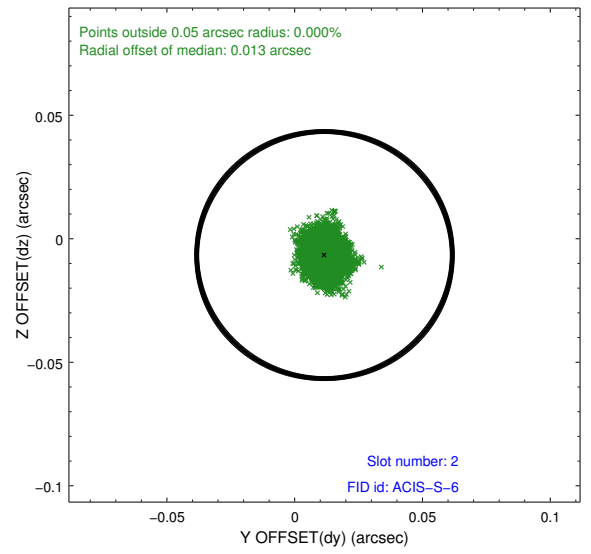
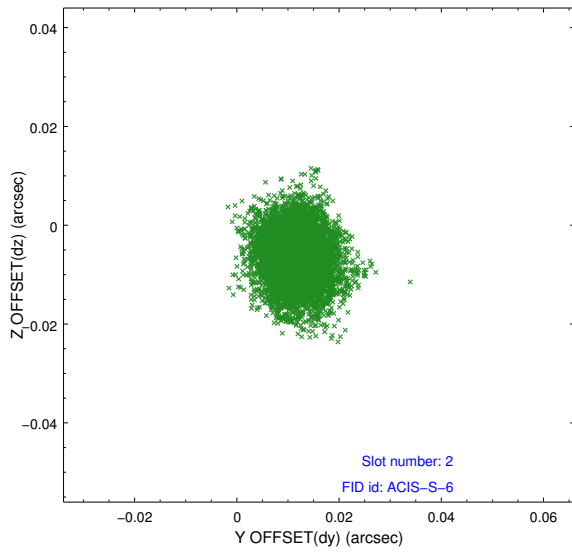
2.5.1 Slot 0



2.5.2 Slot 1

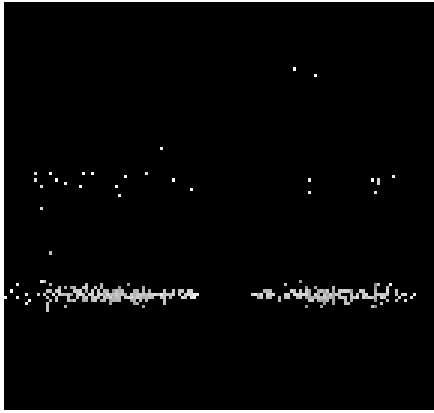


2.5.3 Slot 2

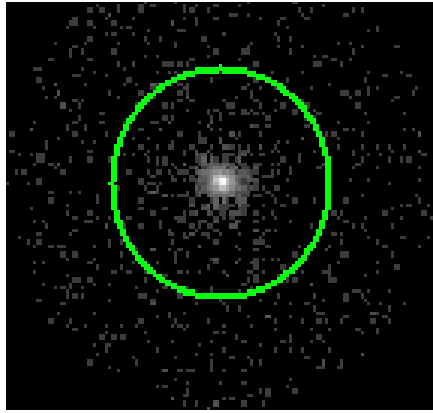


3 Gratings

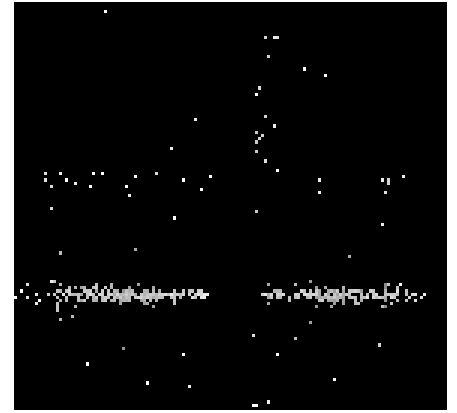
3.1 HEG Arm



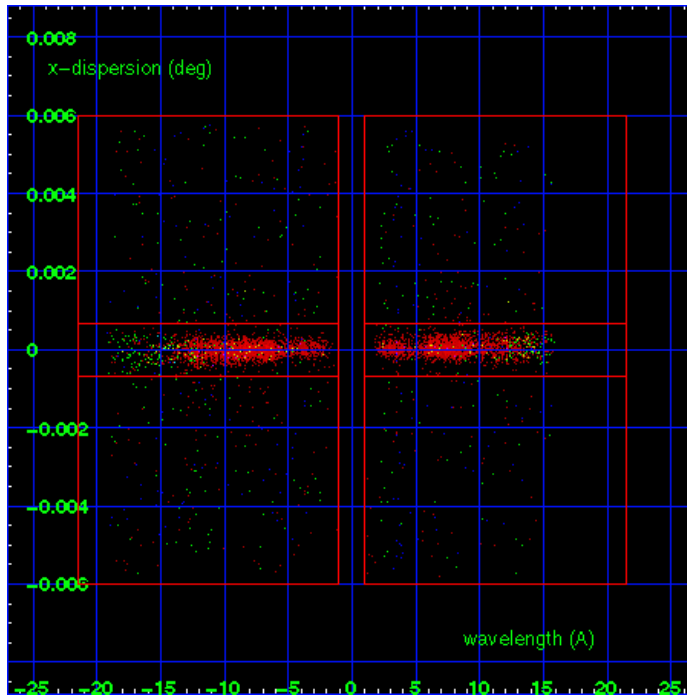
HEG Order Sort 123



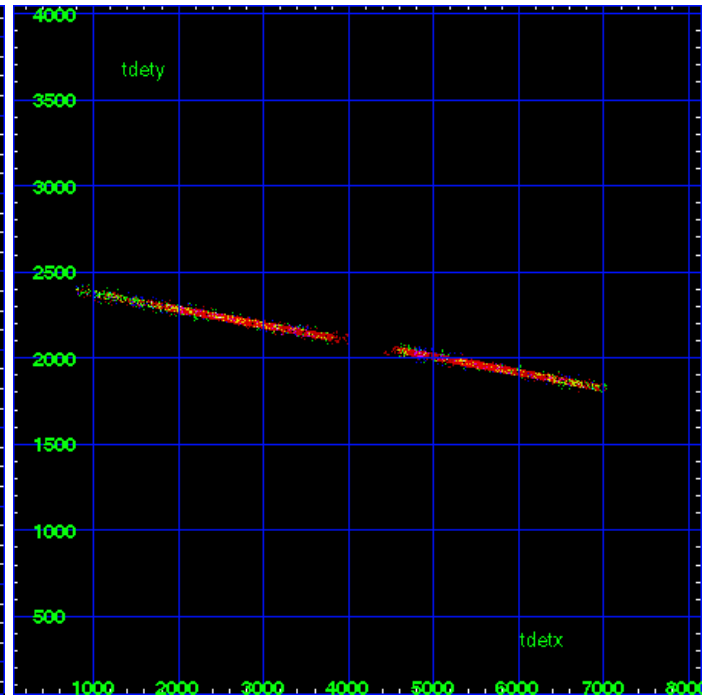
HEG Zero Order



HEG Order Sort ALL

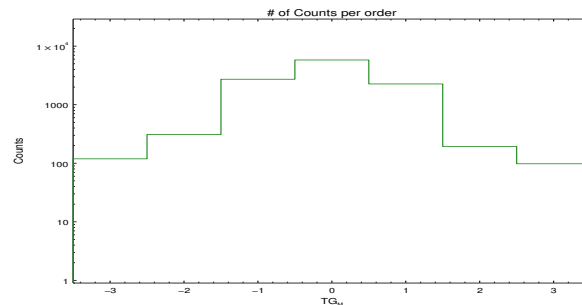


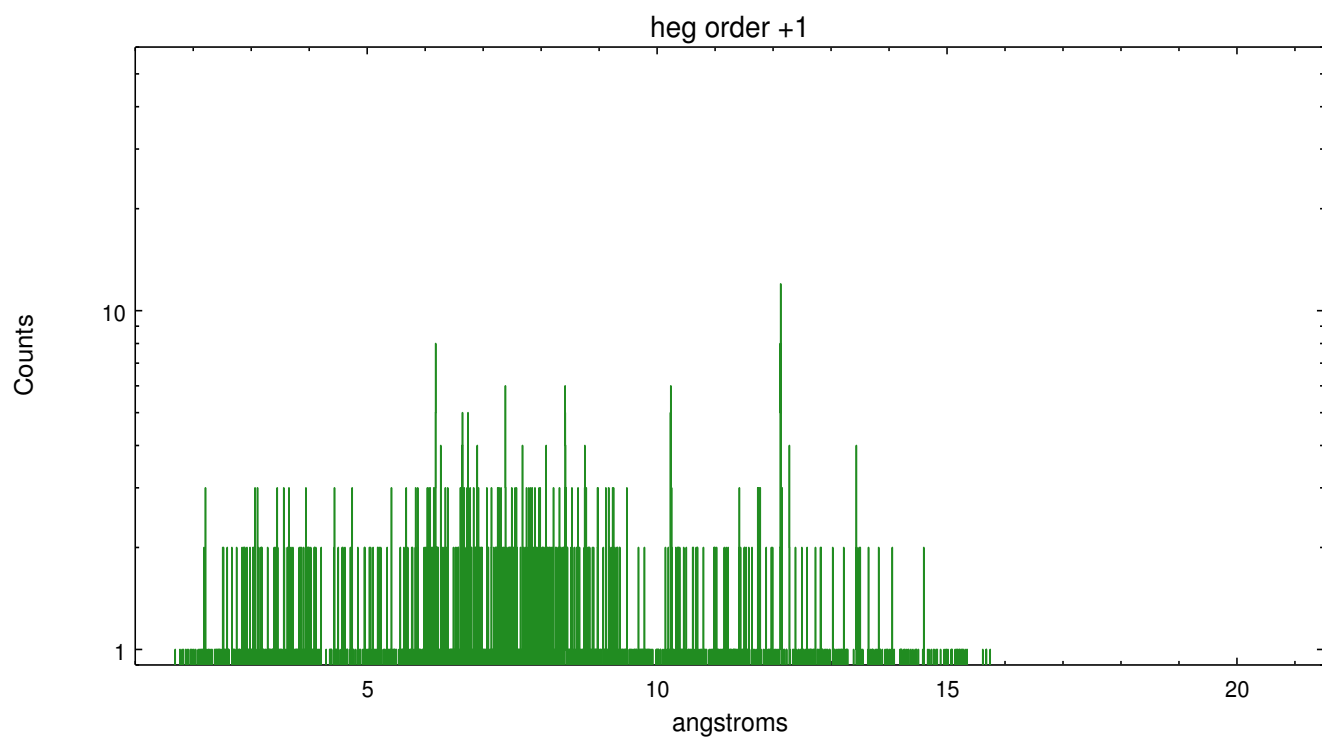
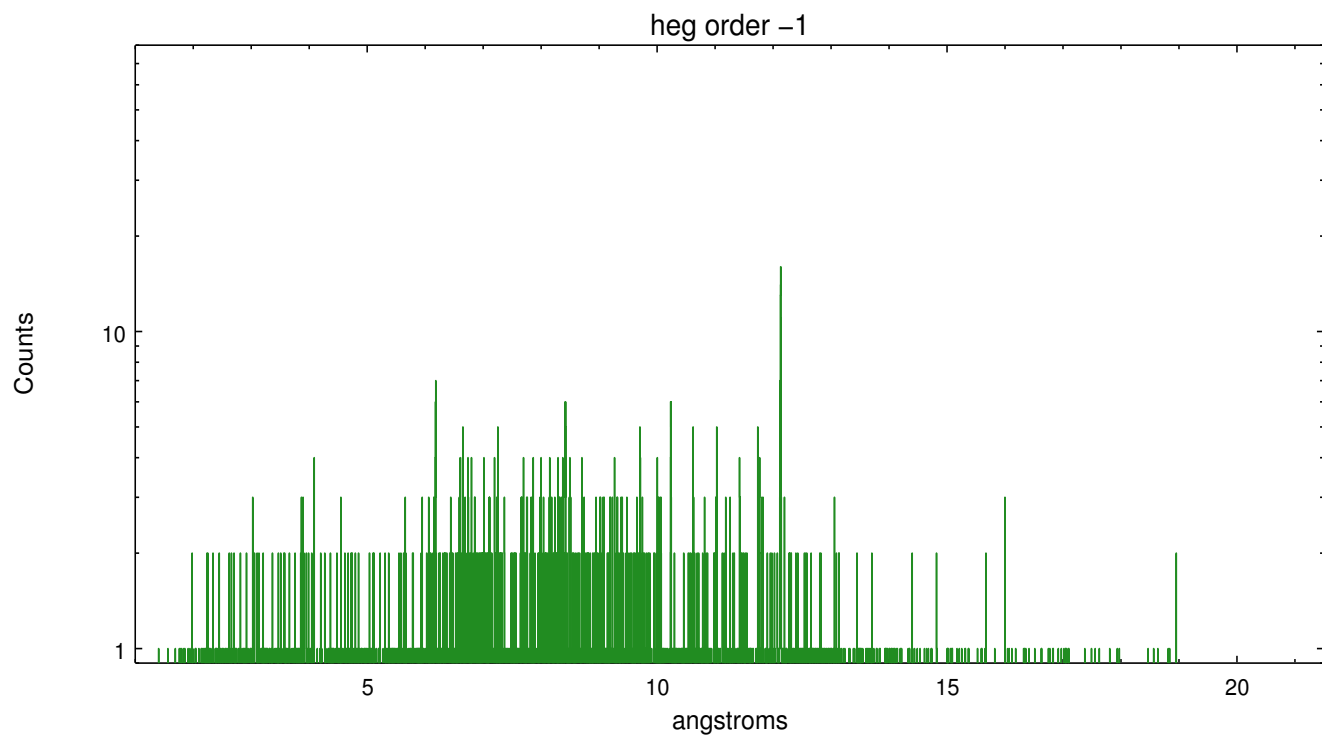
Spot Image HEG



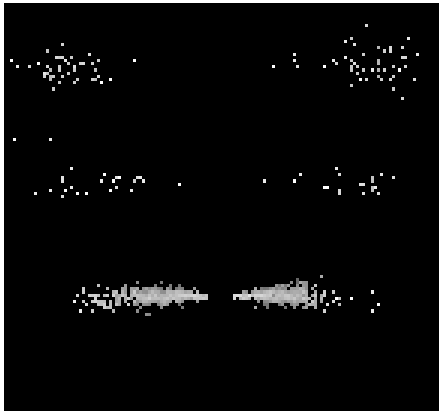
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	119	310	2719	5804	2261	193	98

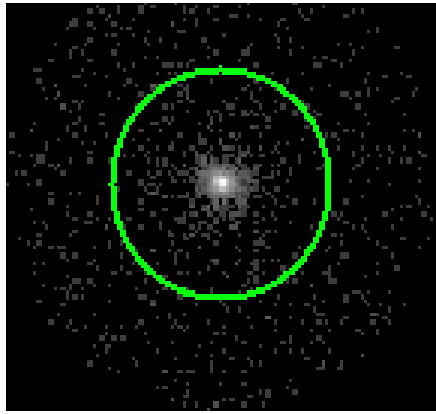




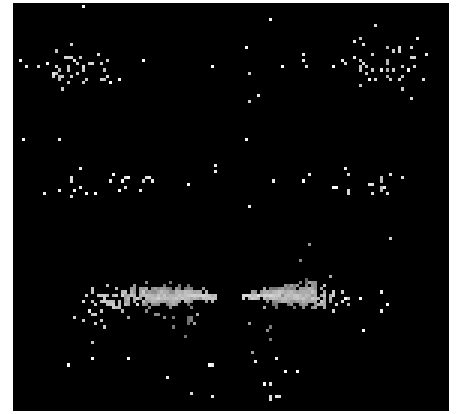
3.2 MEG Arm



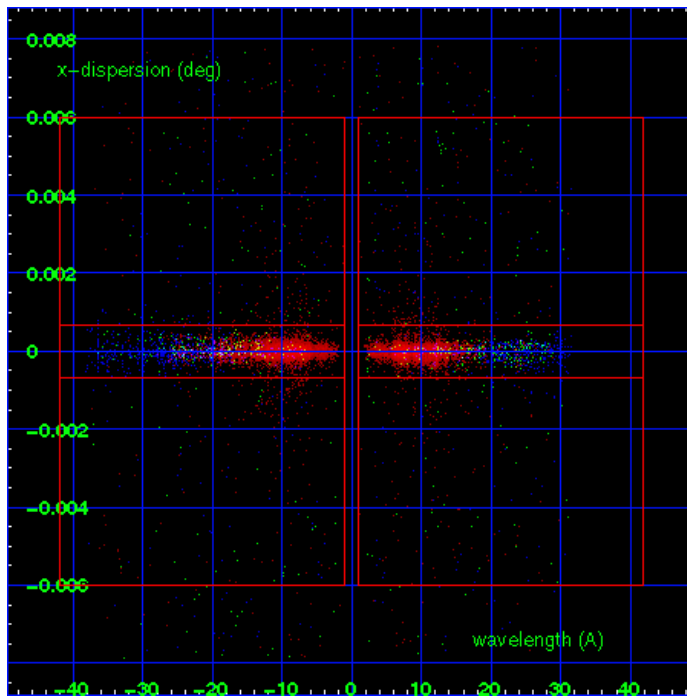
MEG Order Sort 123



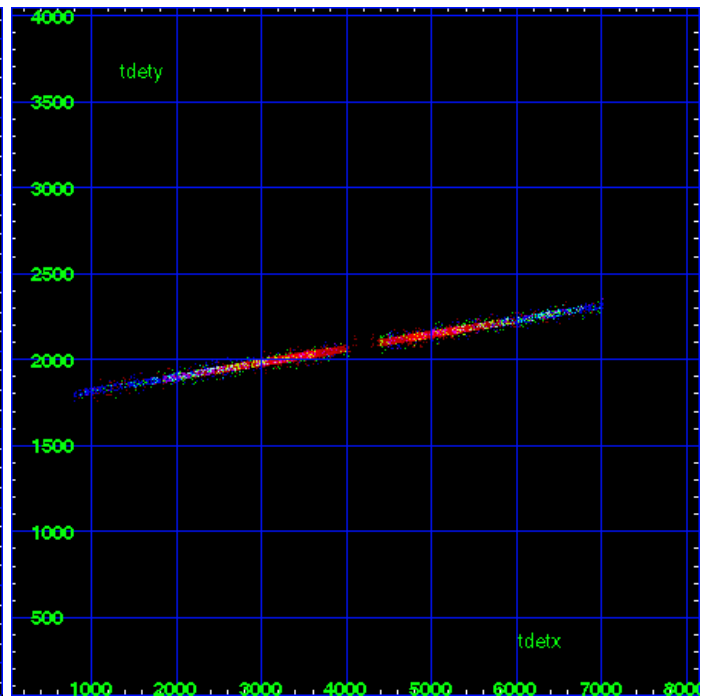
MEG Zero Order



MEG Order Sort ALL

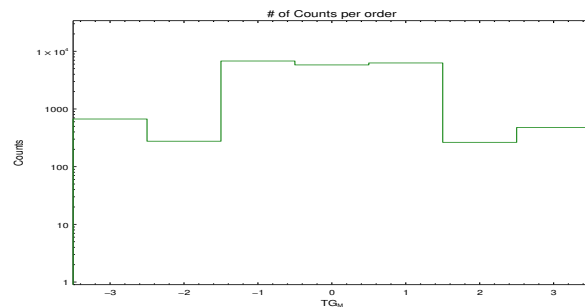


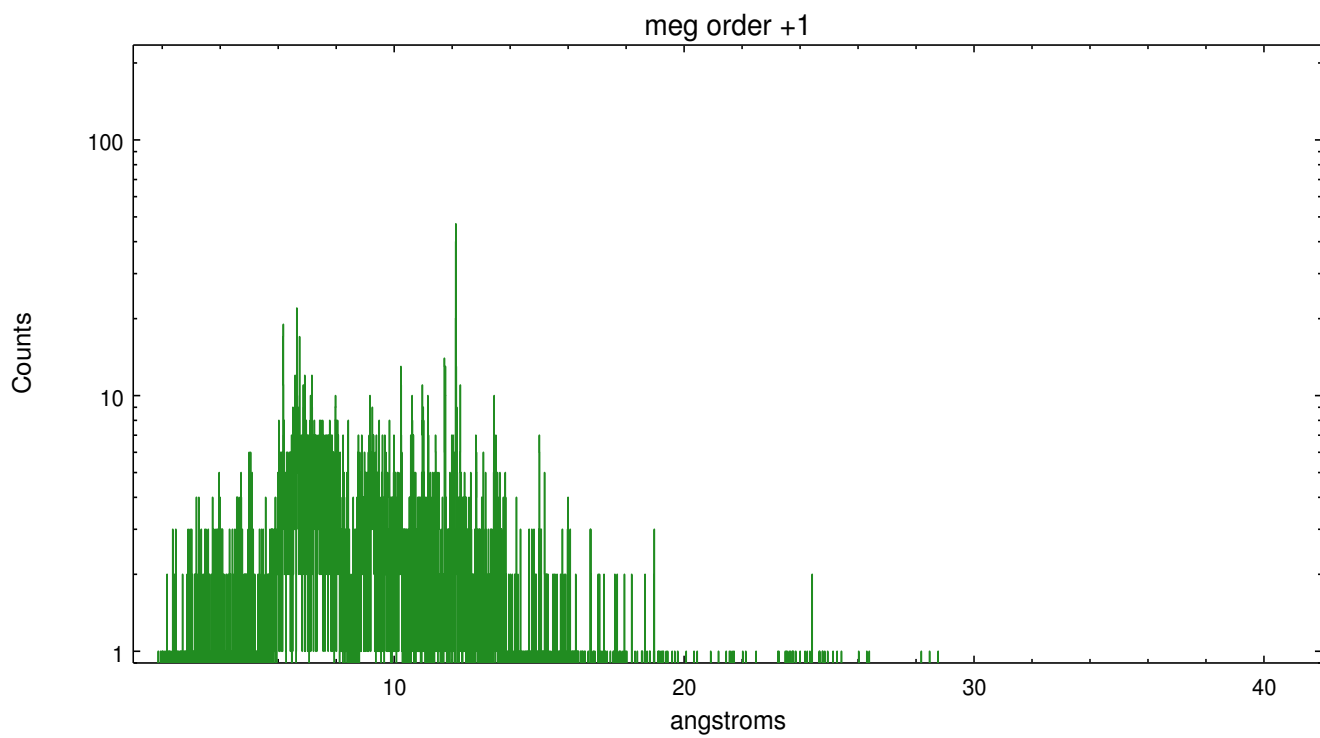
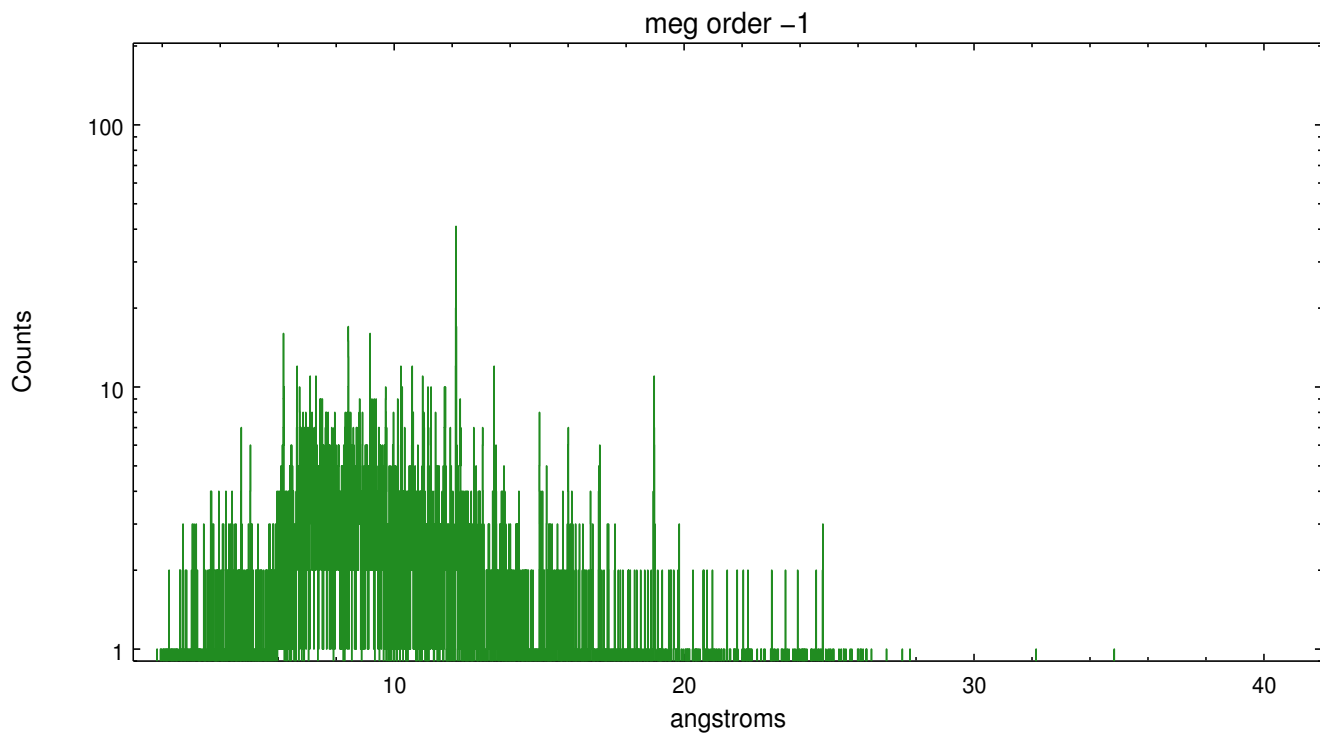
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	670	276	6784	5804	6278	264	477





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24

A.2 Comments