

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2528 - L2 Version 3
Chandra X-Ray Center

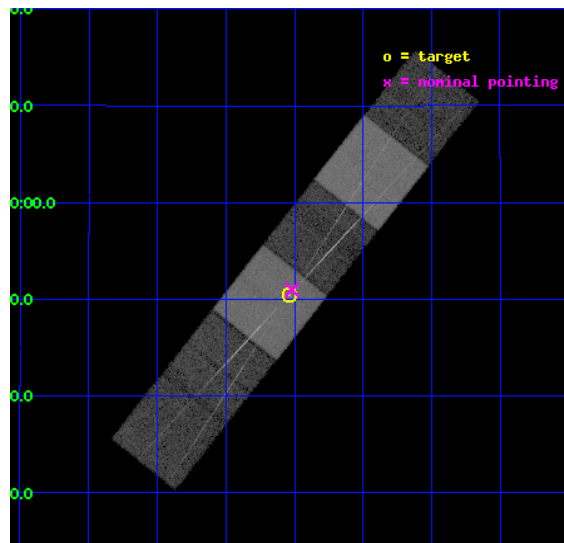
L2 Processing Date : Oct 11 2012

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1 Front

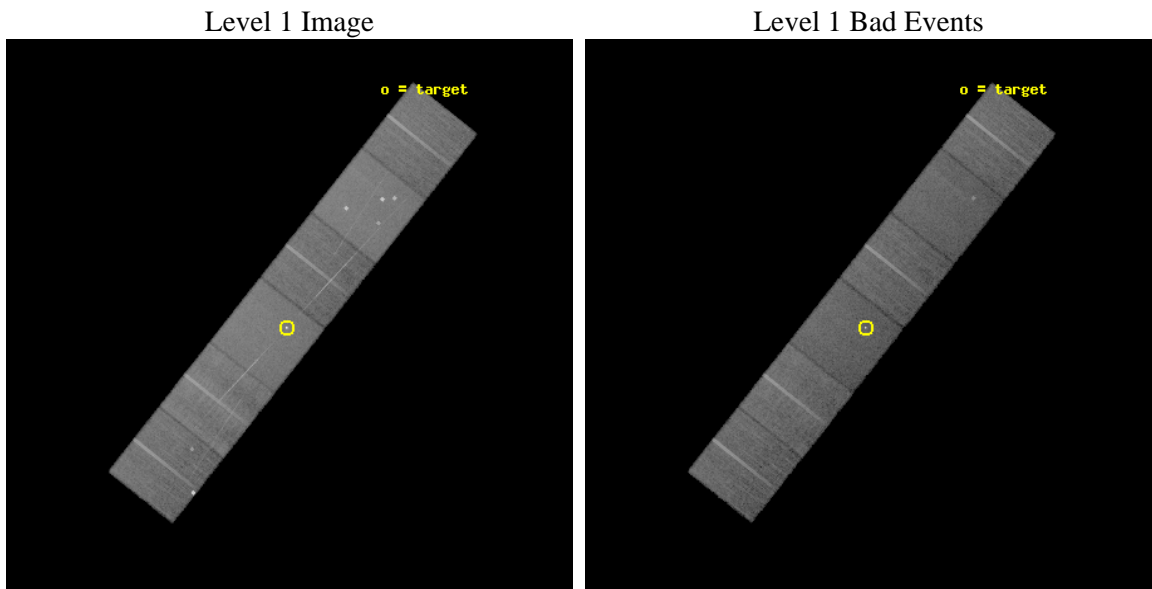
seq_num	200136	Sequence number
obs_id	2528	Observation id
title	HETGS SPECTROSCOPY OF THE LONG-PERIOD ACTIVE BINARY, IM PEGASI.	Pr
observer	Dr. David Huenemoerder	Principal investigator
object	IM PEG	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	343.259583	Observer's specified target RA [deg]
dec_targ	16.841194	Observer's specified target Dec [deg]
ra_nom	343.25479535641	Nominal RA [deg]
dec_nom	16.84974735339	Nominal Dec [deg]
roll_nom	128.35289271725	Nominal Roll [deg]
revision	3	Processing version of data
ontime	25145.599906325	Sum of GTIs [s]
livetime	24827.191179449	Livetime [s]
ontime4	25142.358936071	Sum of GTIs [s]
ontime5	25145.599906325	Sum of GTIs [s]
ontime6	25145.599906325	Sum of GTIs [s]
ontime7	25145.599906325	Sum of GTIs [s]
ontime8	25145.599906325	Sum of GTIs [s]
ontime9	25145.599906325	Sum of GTIs [s]
l2events	296388	Number of level 2 events



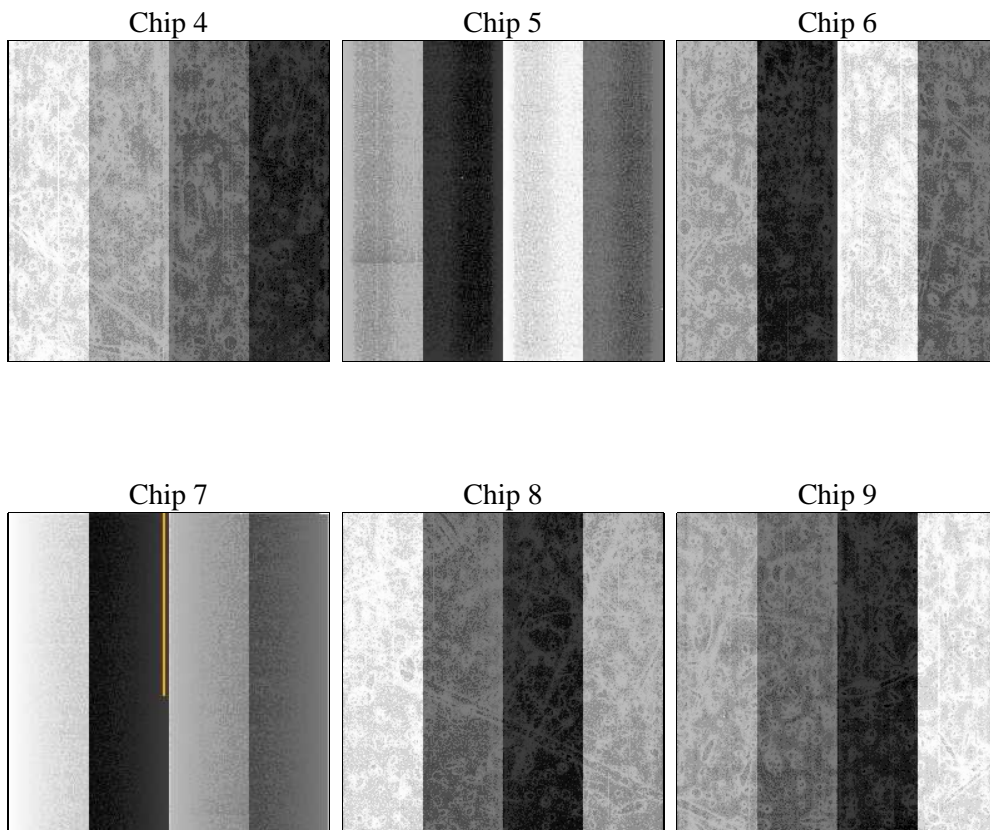
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	25145.599906325	Sum of GTIs [s]
caldbver	4.5.2	 	ontime4	25142.358936071	Sum of GTIs [s]
date	2012-10-11T13:02:23	Date and time of file creation	ontime5	25145.599906325	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	25145.599906325	Sum of GTIs [s]
			ontime7	25145.599906325	Sum of GTIs [s]
			ontime8	25145.599906325	Sum of GTIs [s]
			ontime9	25145.599906325	Sum of GTIs [s]
			l1events	1298687	Number of level 1 events

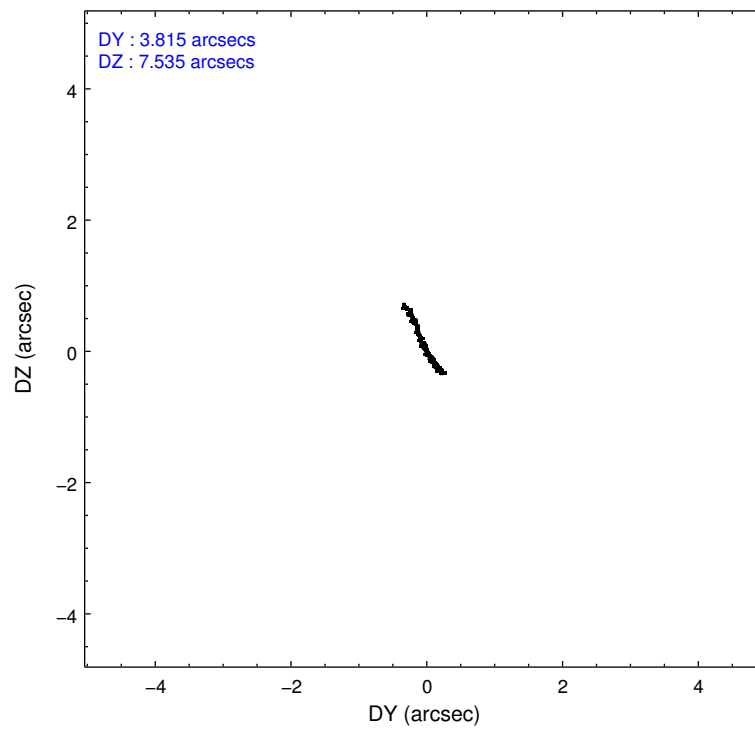
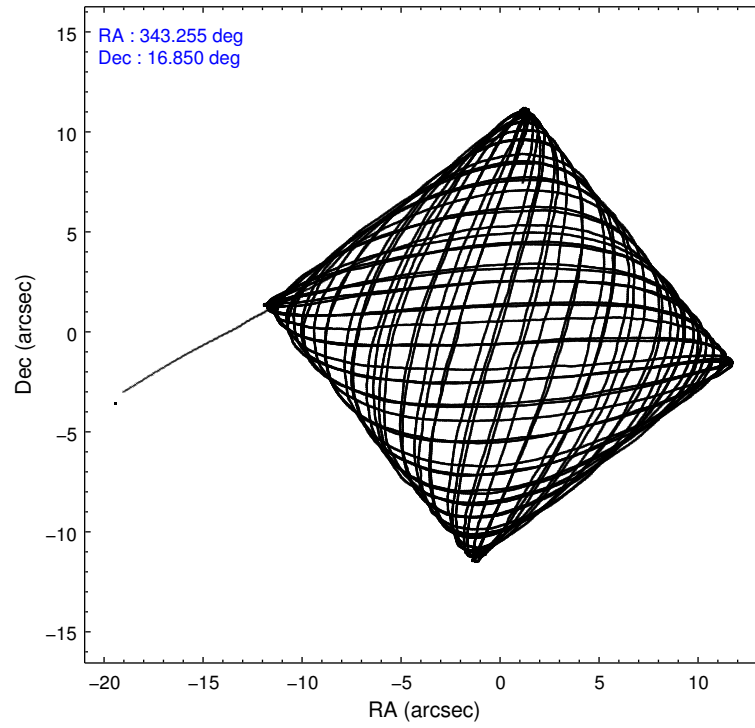
2.1.4 Events

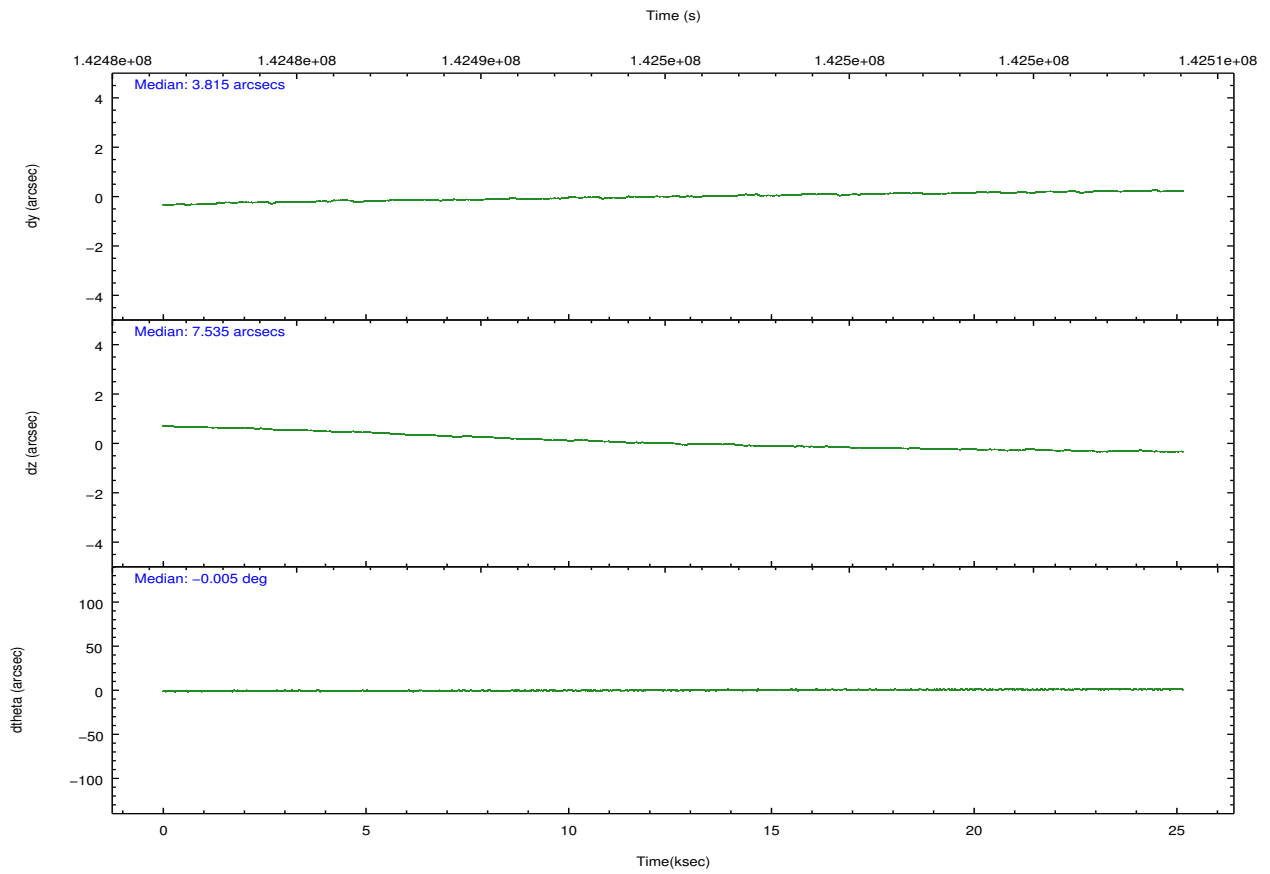
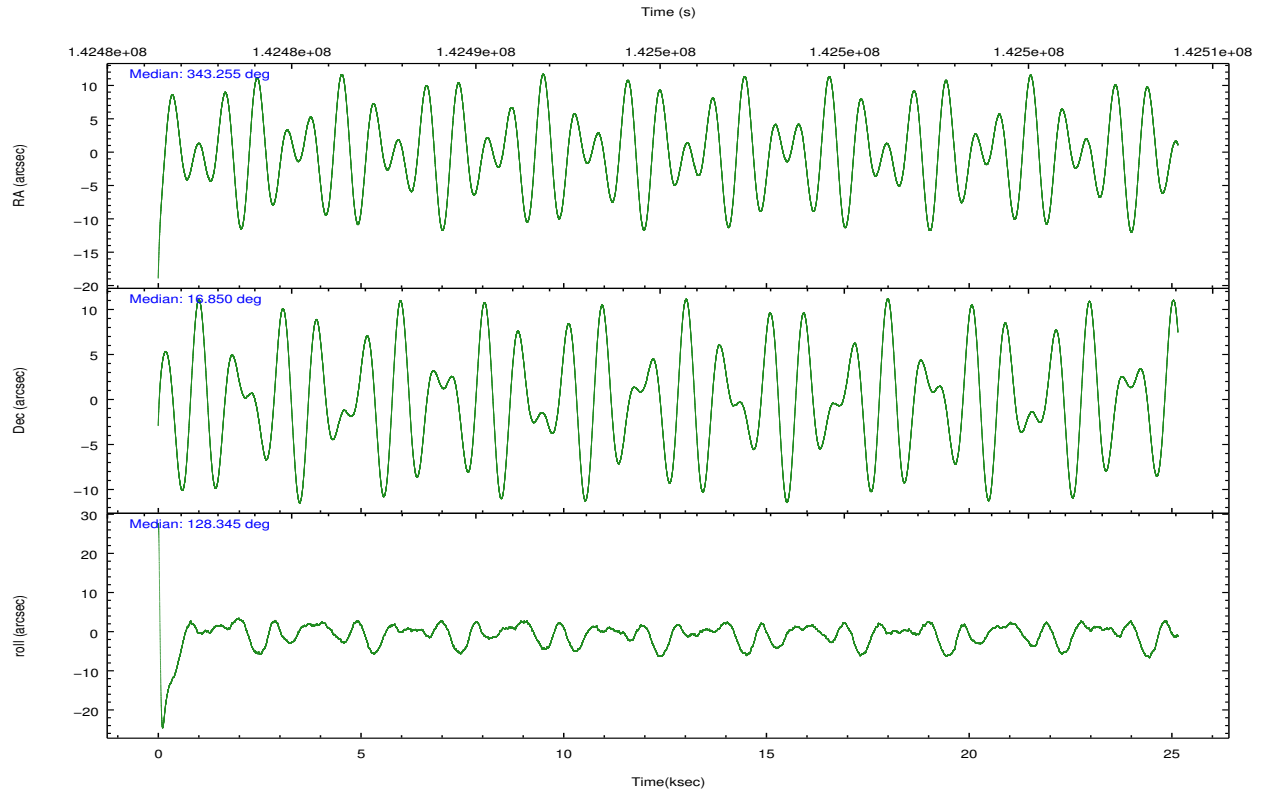
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	197099	264189	181870	238855	234163	182511	grade 0 events	9950	24279	14400	11180	21672	18722
rejected events	174289	138875	154360	135598	177827	151658		5%	9%	7%	4%	9%	10%
rejected %	88%	52%	84%	56%	75%	83%	grade 1 events	92	995	121	399	164	115
								0%	0%	0%	0%	0%	0%
							grade 2 events	5821	35194	5107	21765	11251	4820
								2%	13%	2%	9%	4%	2%
							grade 3 events	2001	5222	2275	9885	6341	2116
								1%	1%	1%	4%	2%	1%
							grade 4 events	1974	5019	2121	9906	5964	2045
								1%	1%	1%	4%	2%	1%
							grade 5 events	6290	18577	7440	22121	9532	7678
								3%	7%	4%	9%	4%	4%
							grade 6 events	3920	60509	4443	54453	13374	4380
								1%	22%	2%	22%	5%	2%
							grade 7 events	167051	114394	145963	109146	165865	142635
								84%	43%	80%	45%	70%	78%

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	343.281383	343.2547953564135	Subarray requested	NONE	NONE
[deg] Pointing Dec	16.840013	16.84974735338954	Alternating exposures requested	N	N
[deg] Pointing Roll	128.188532	128.3528927172536	[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)	142482790.184000	142481249.98409			
Observation start date	2002-07-08T02:32:06	2002-07-08T02:07:29			
[s] Observation end time (MET)	142507790.184000	142508140.34769			
Observation end date	2002-07-08T09:28:46	2002-07-08T09:35:40			
Read mode	TIMED	TIMED			

2.3 Aspect



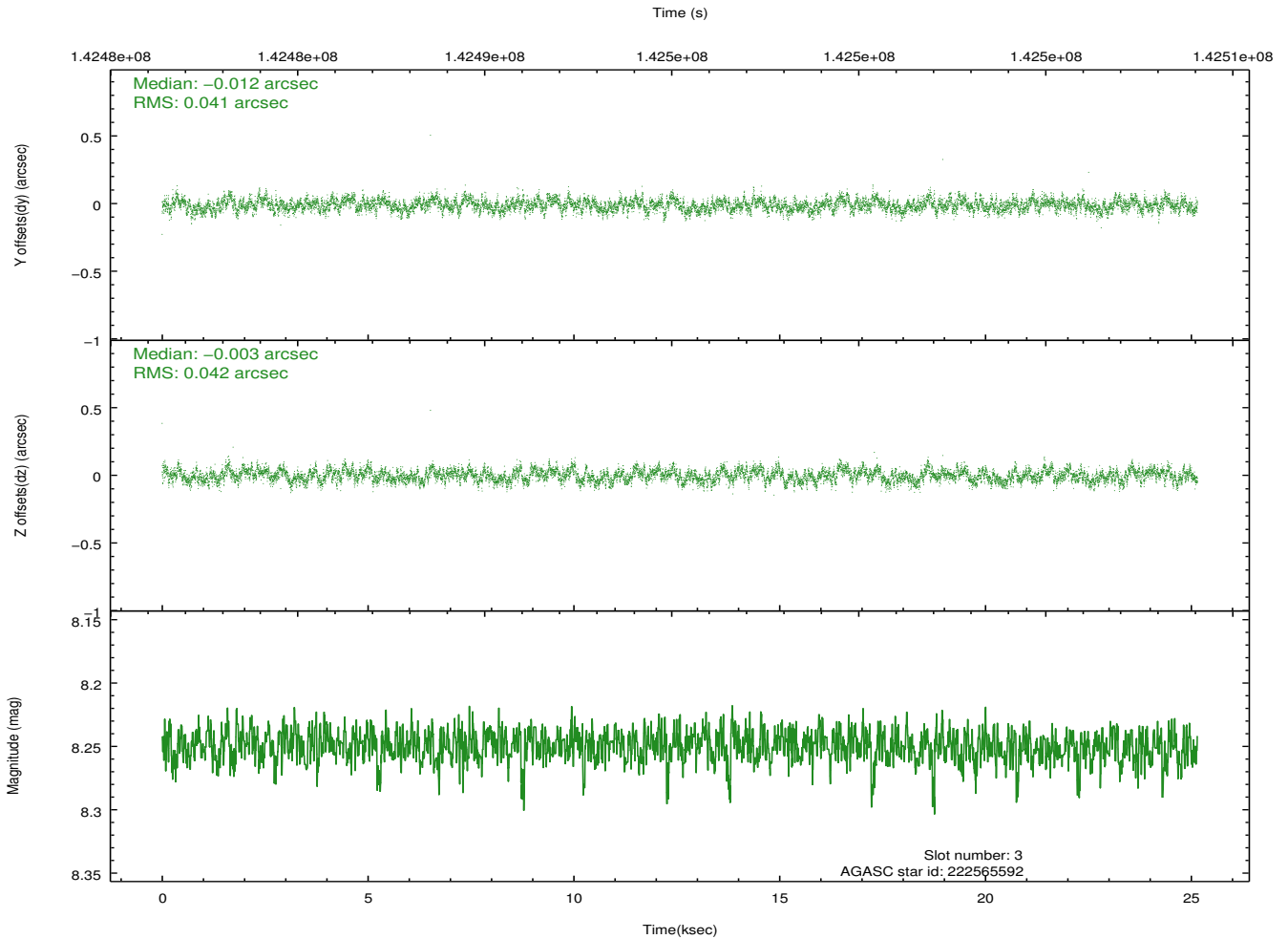
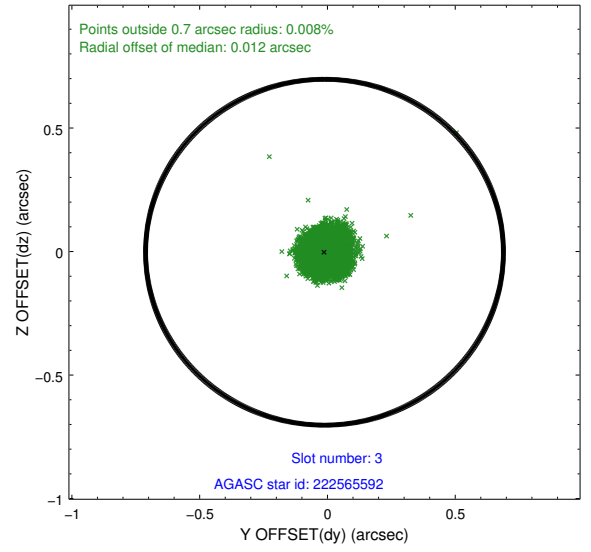
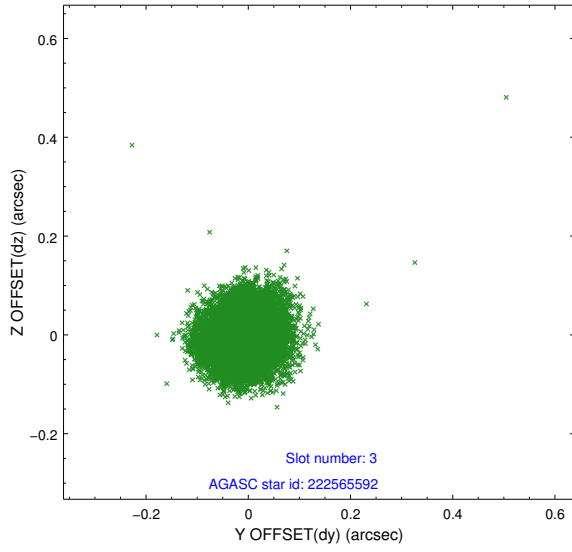


Slot Statistics

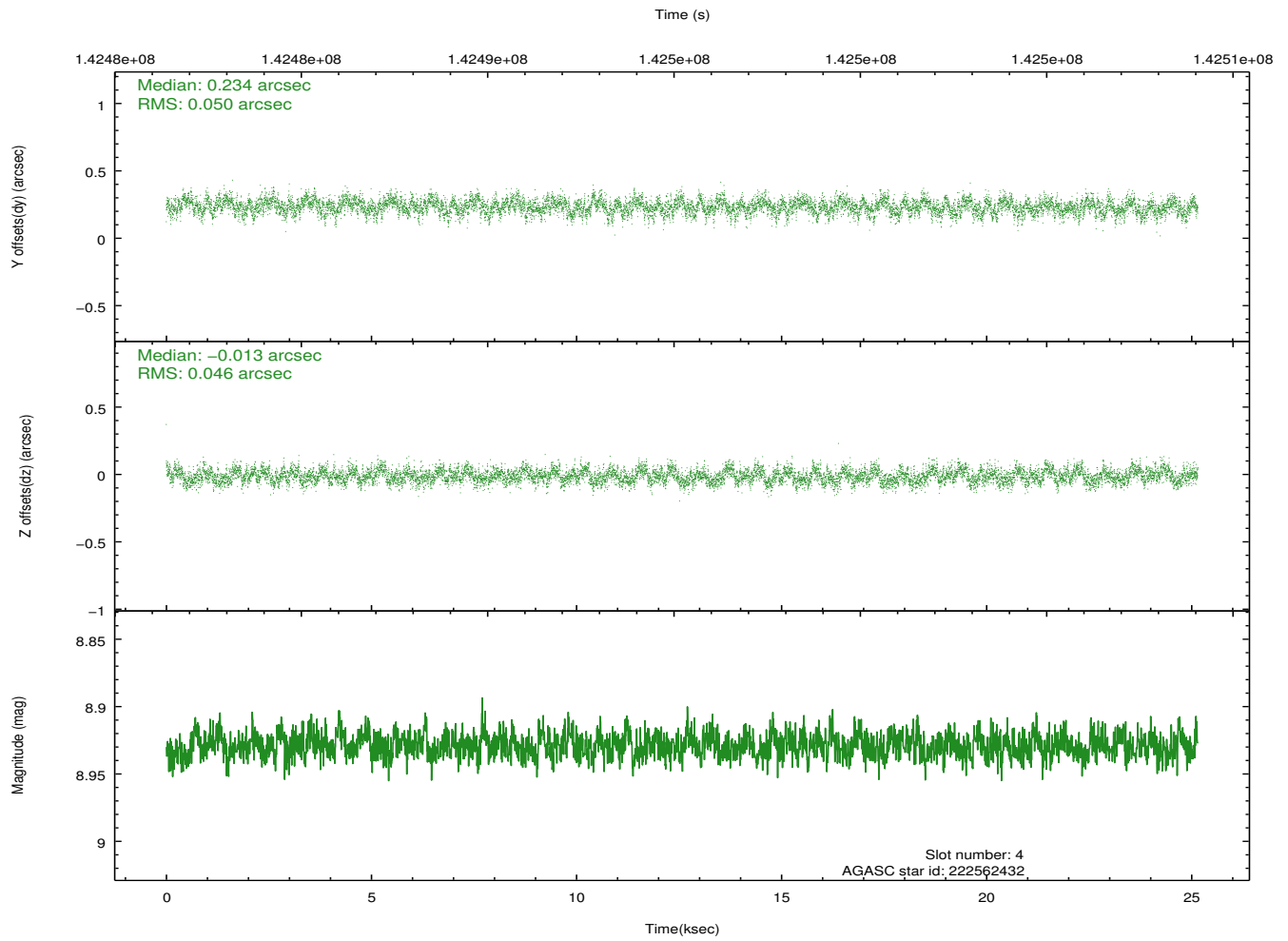
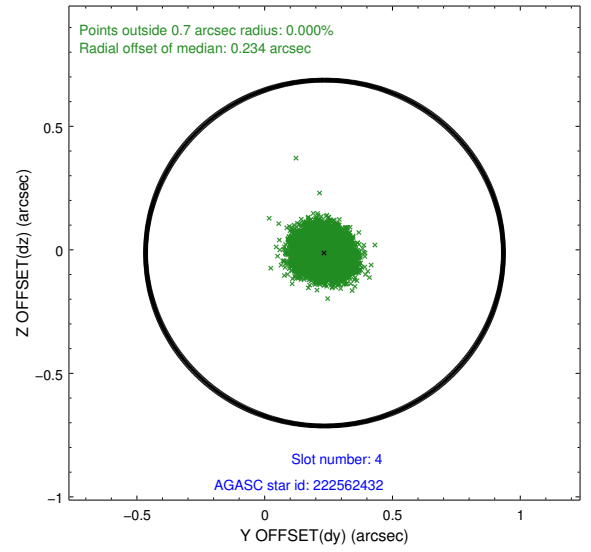
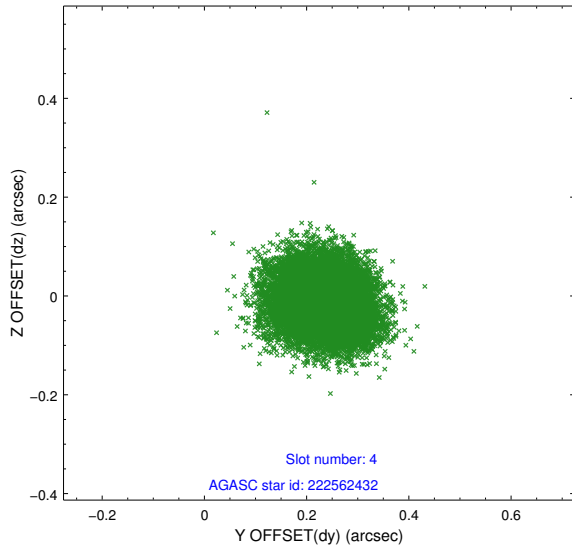
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6135	-0.060	-0.041	0.013	0.021	0.000000	0.000000	-756.28	-1790.93
1	FID	ACIS-S-4	7.20	6135	0.051	0.040	0.010	0.018	0.000000	0.000000	2157.01	117.55
2	FID	ACIS-S-5	7.24	6135	-0.021	0.009	0.014	0.021	0.000000	0.000000	-1808.97	111.24
3	GUIDE	222565592	8.25	12269	-0.012	-0.003	0.062	0.098	343.291662	16.508291	-961.10	711.10
4	GUIDE	222562432	8.93	12266	0.234	-0.013	0.074	0.118	343.698150	16.309399	-2390.89	48.53
5	GUIDE	222563736	8.82	12261	0.052	-0.159	0.074	0.121	343.076284	16.308502	-1066.45	1739.78
6	GUIDE	223089808	9.09	12265	-0.335	0.206	0.078	0.125	343.220223	17.508272	2019.81	-1321.48
7	GUIDE	222571232	9.54	12255	0.060	-0.033	0.129	0.198	343.021766	16.540282	-294.07	1371.39

2.4 Star Slots

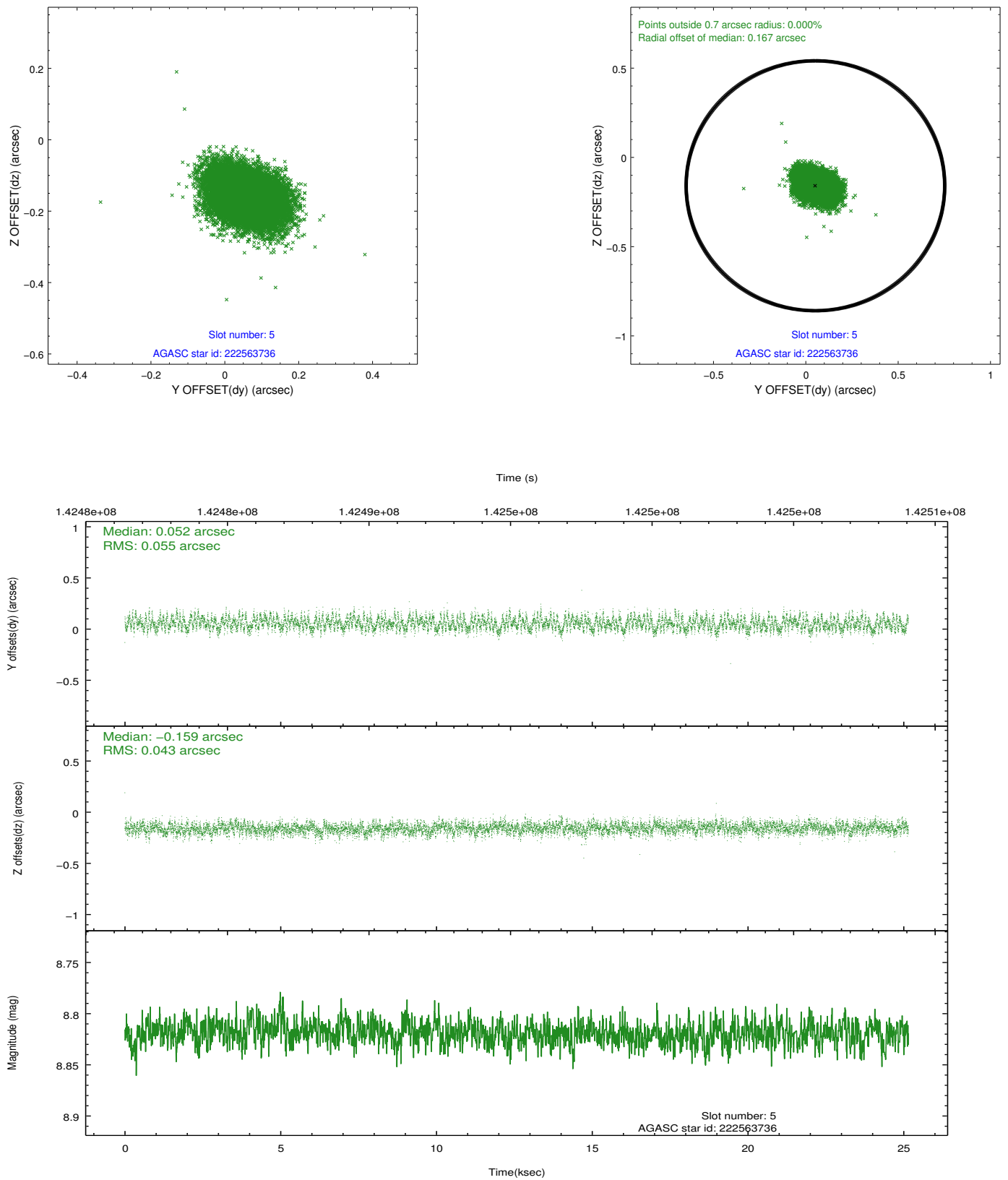
2.4.1 Slot 3



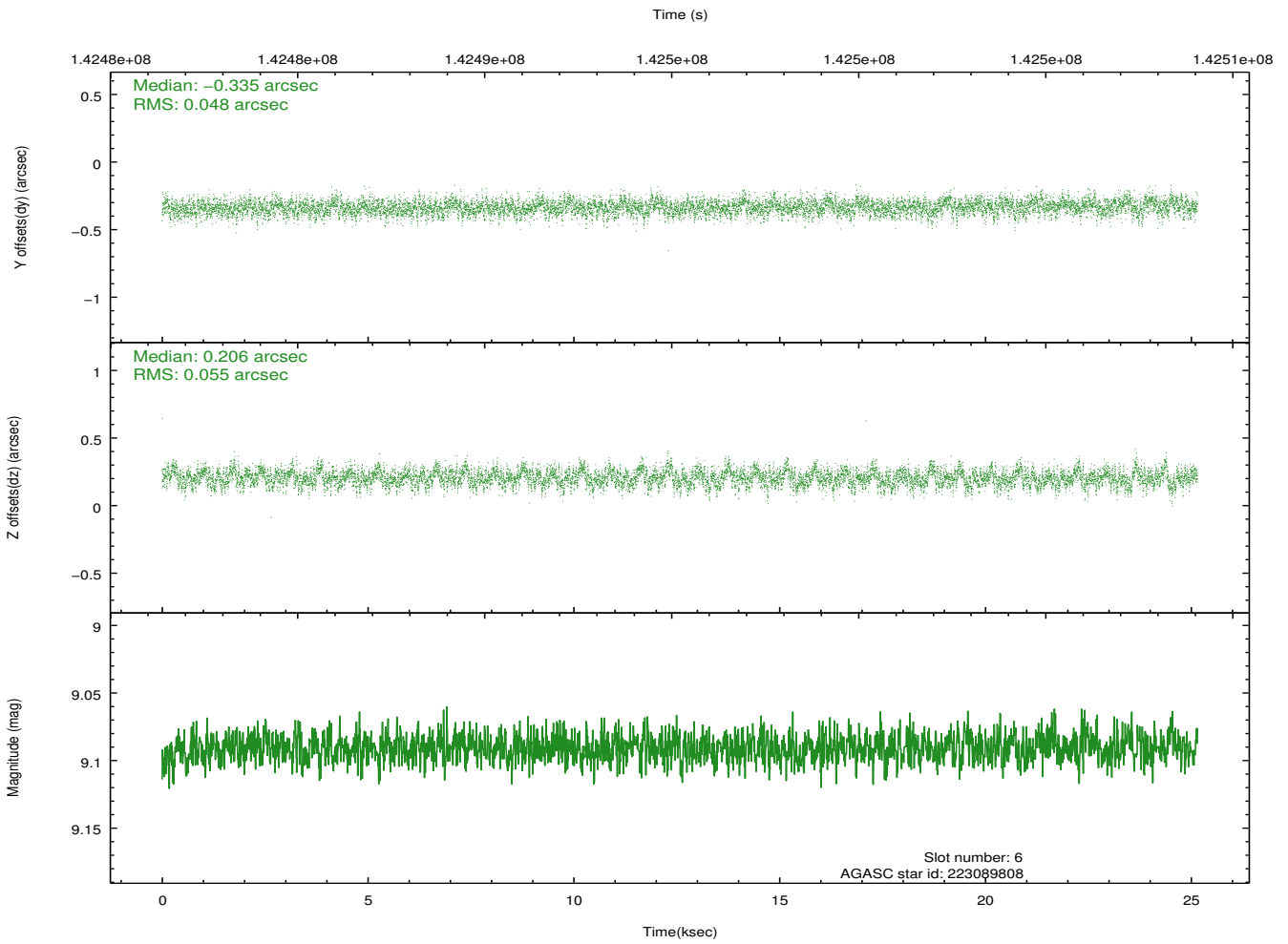
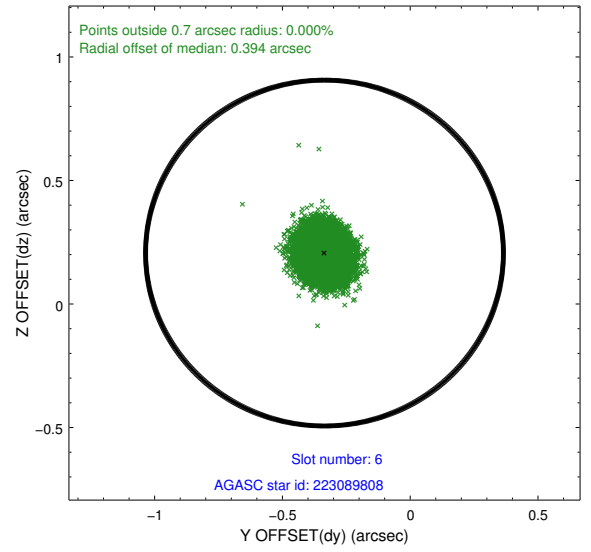
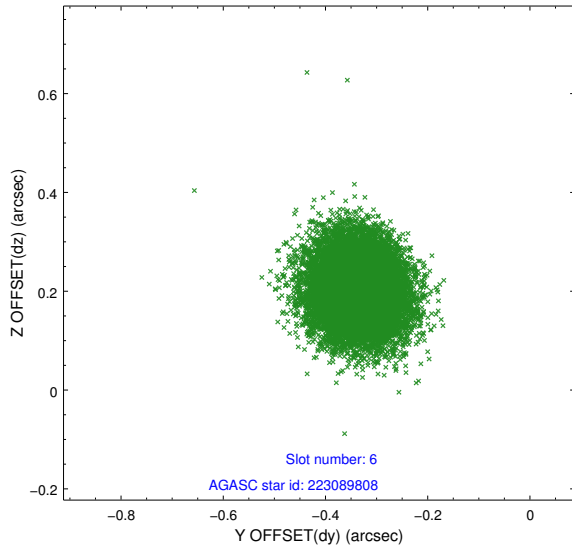
2.4.2 Slot 4



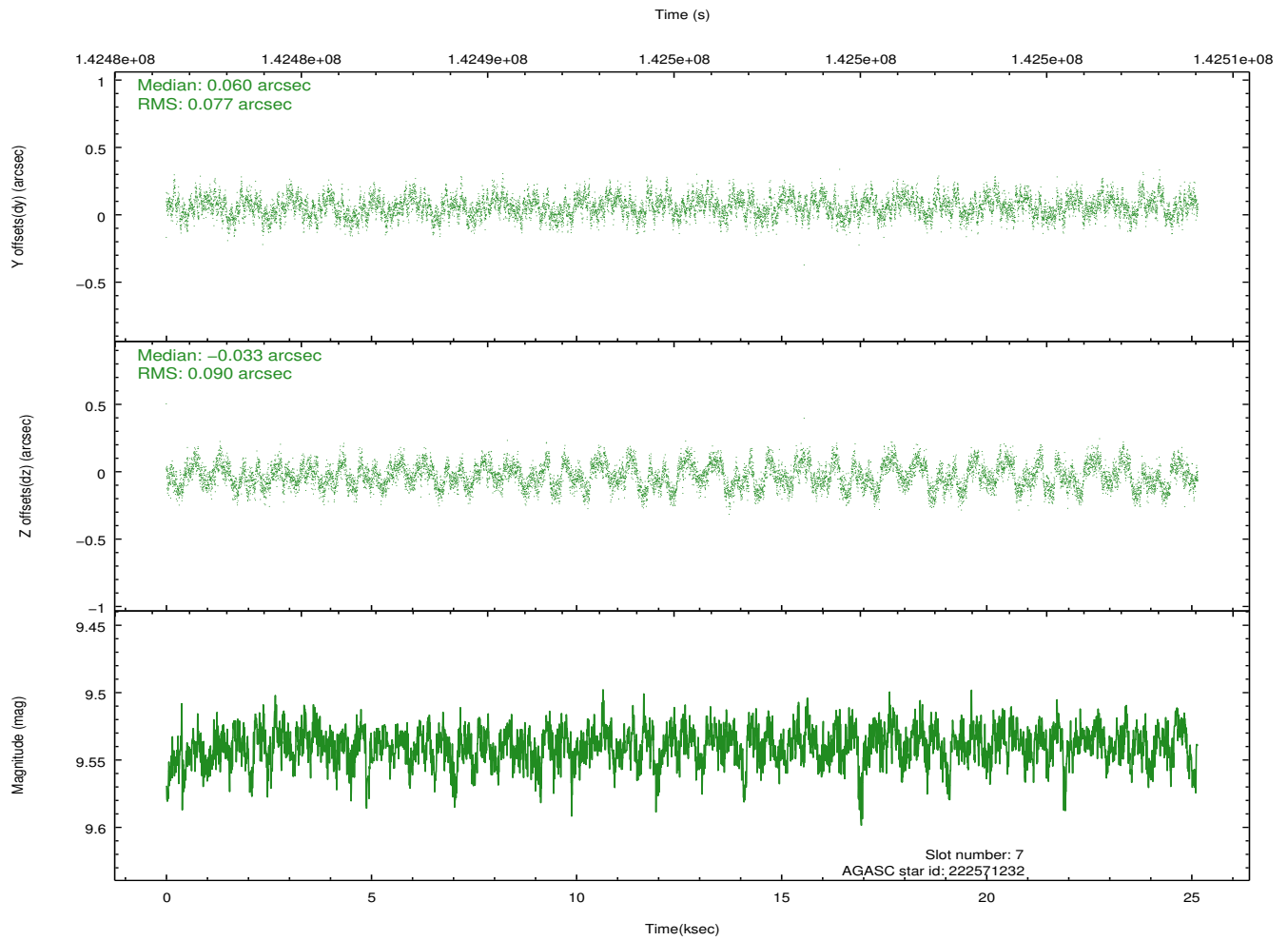
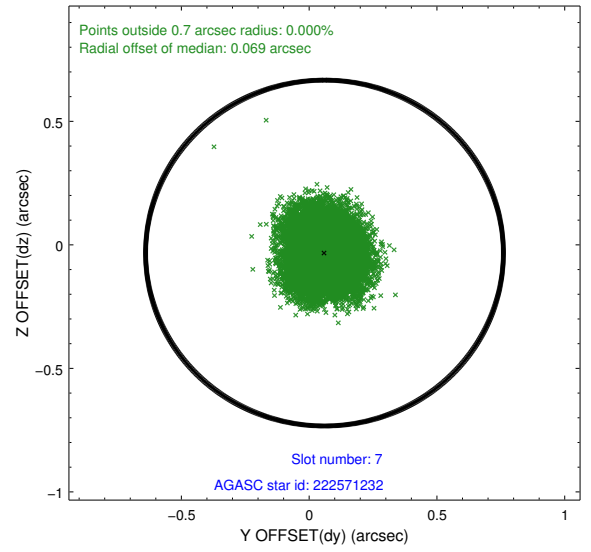
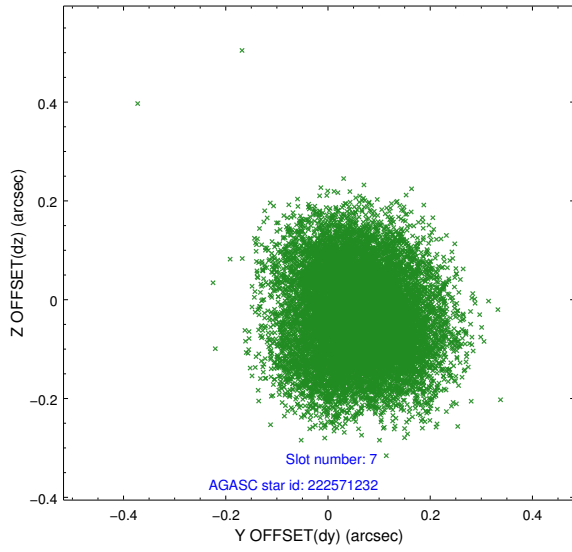
2.4.3 Slot 5



2.4.4 Slot 6

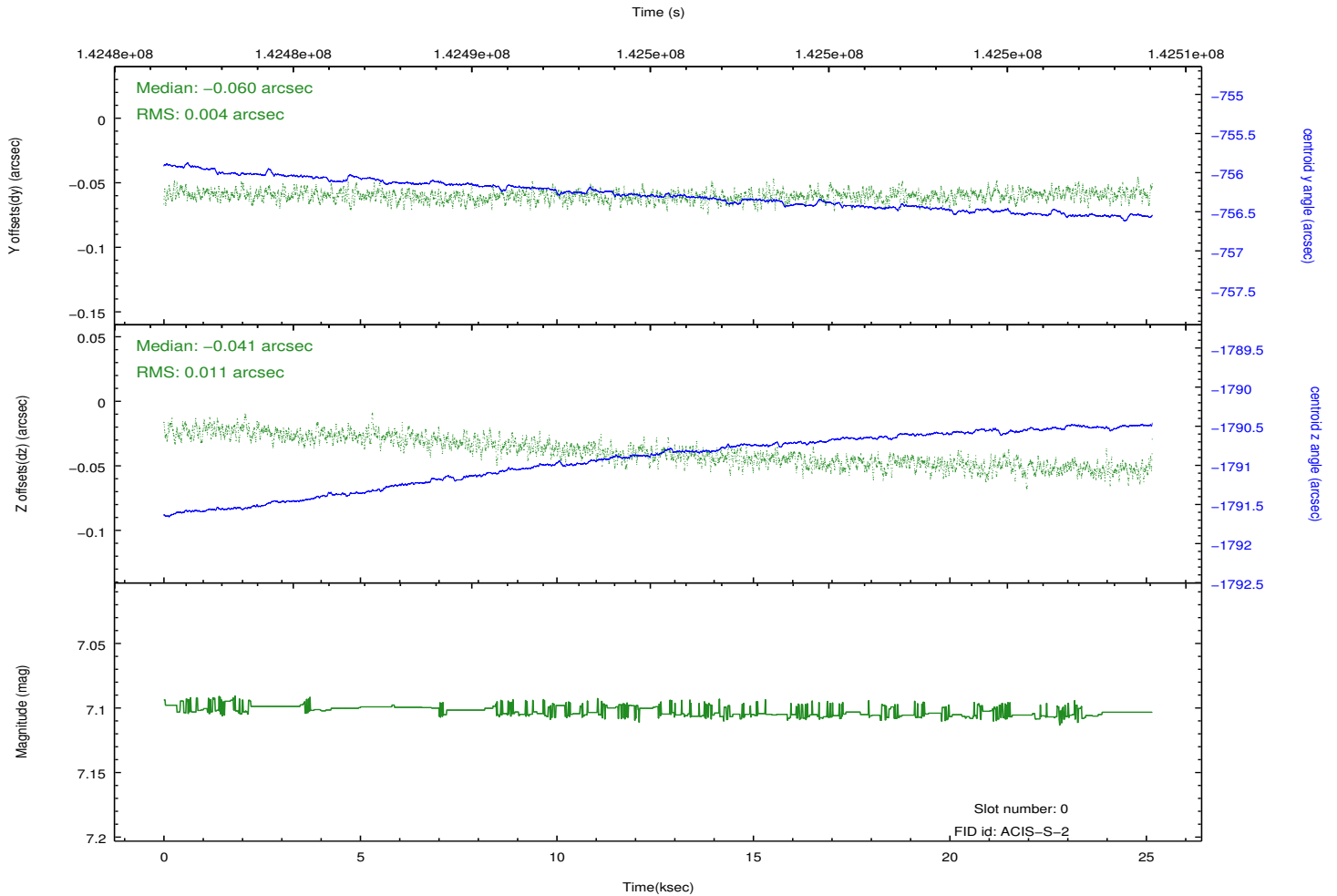
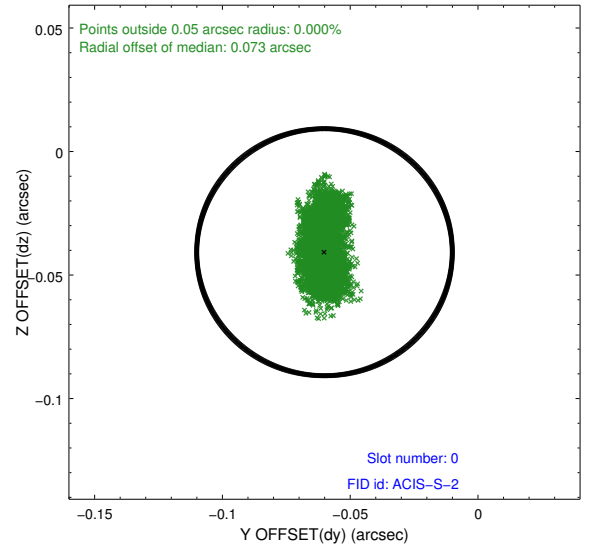
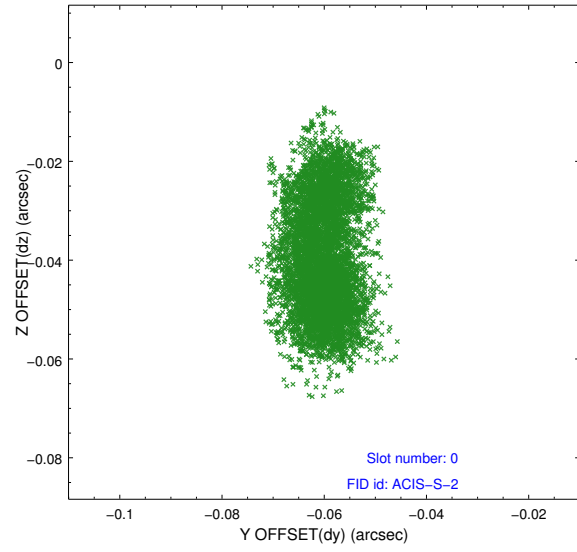


2.4.5 Slot 7

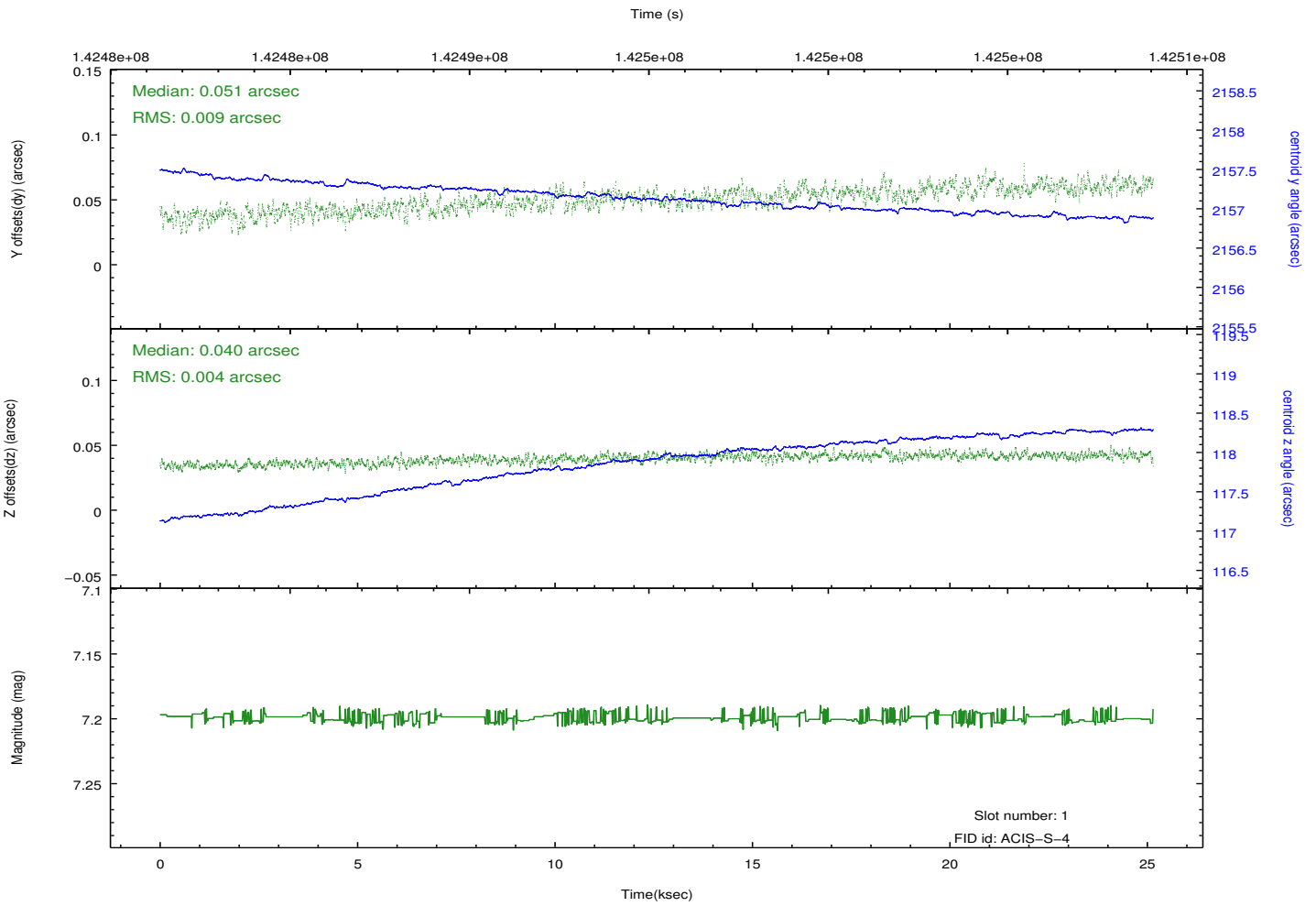
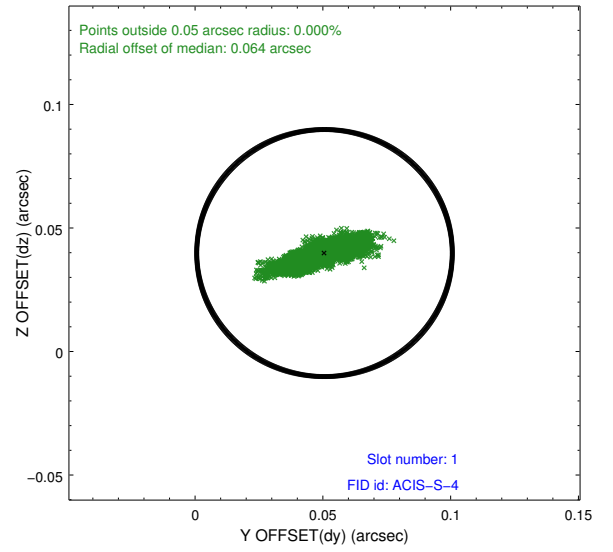
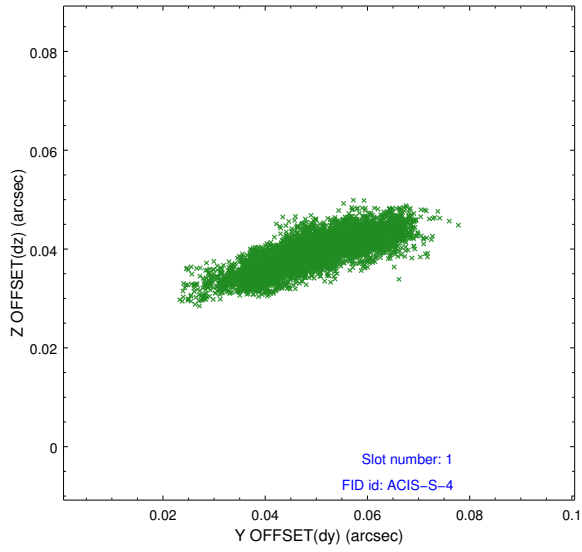


2.5 FID Slots

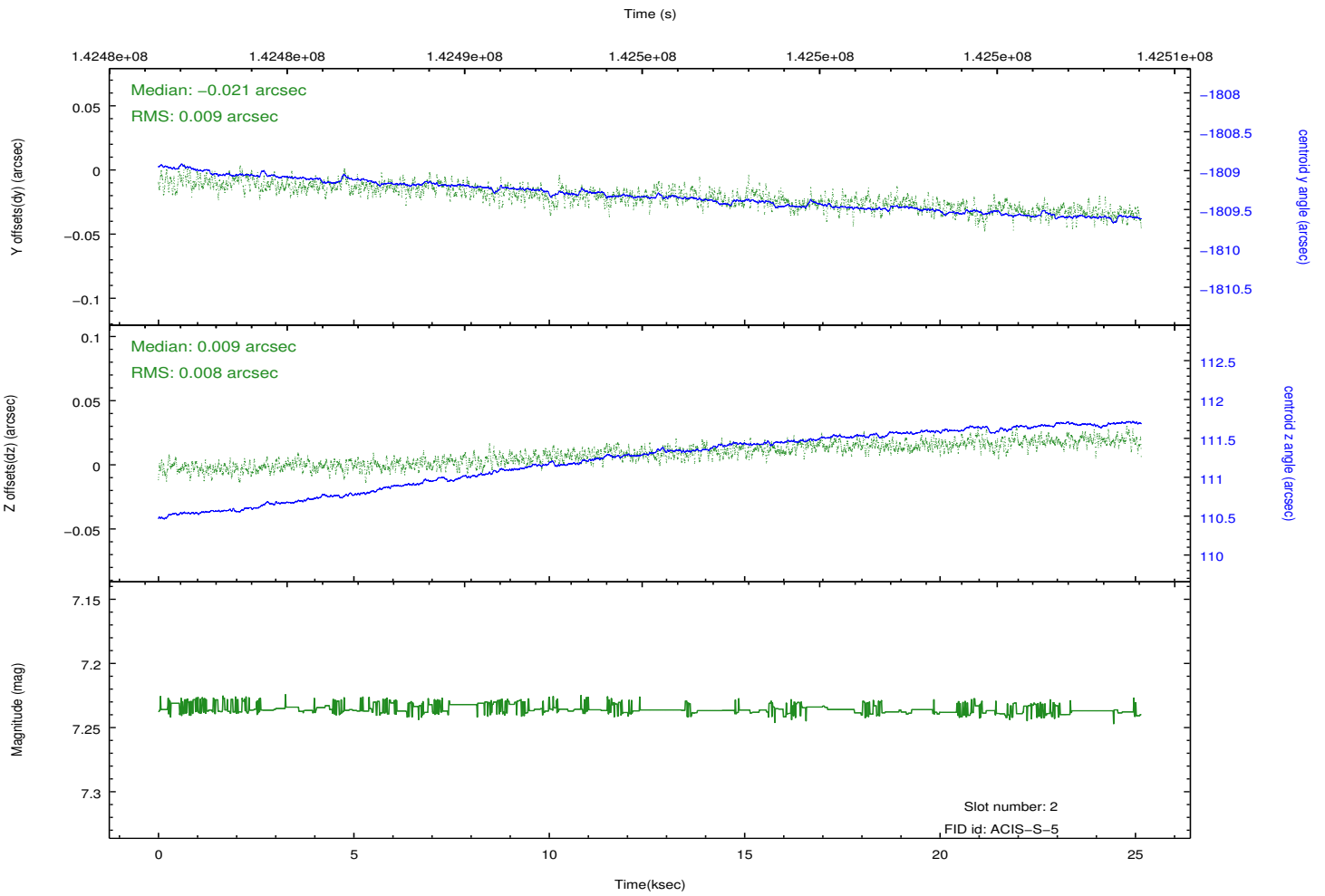
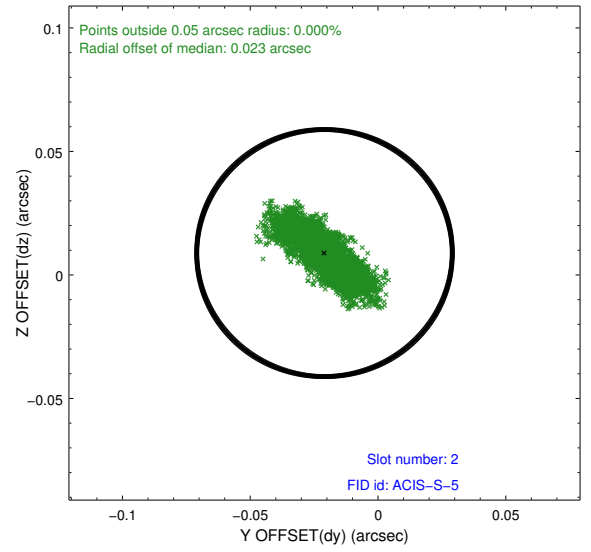
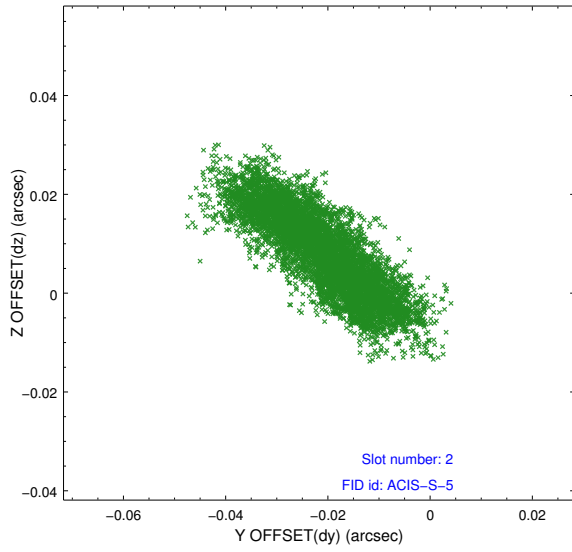
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

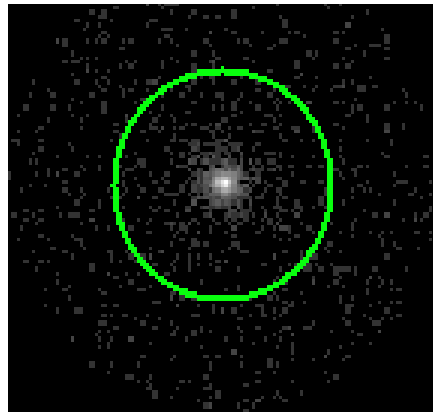


3 Gratings

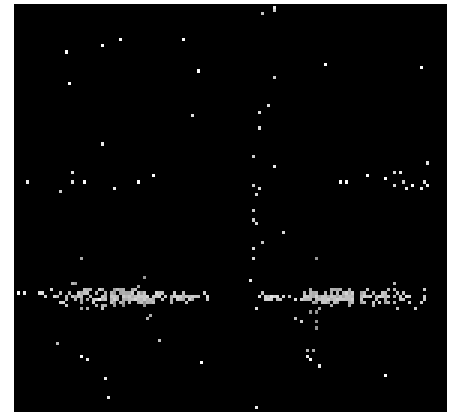
3.1 HEG Arm



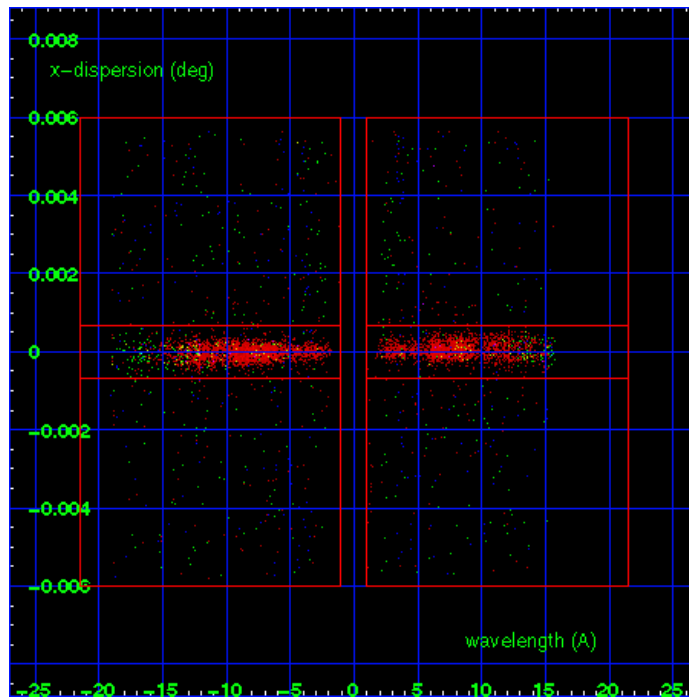
HEG Order Sort 123



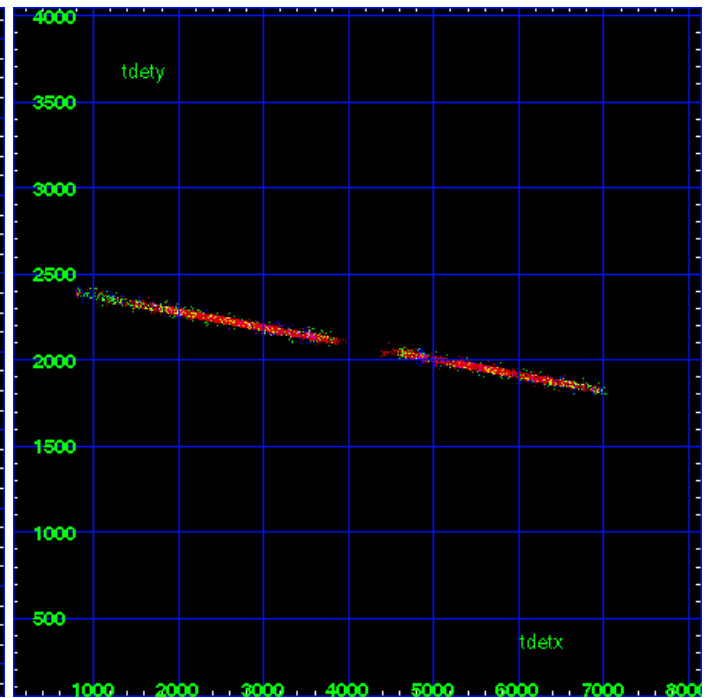
HEG Zero Order



HEG Order Sort ALL

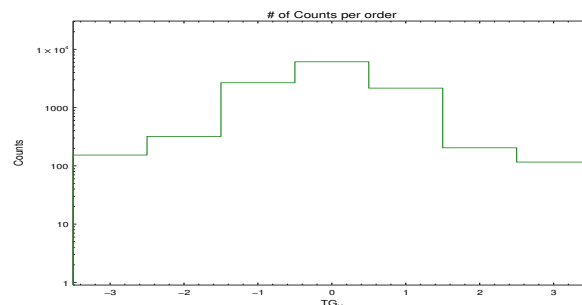


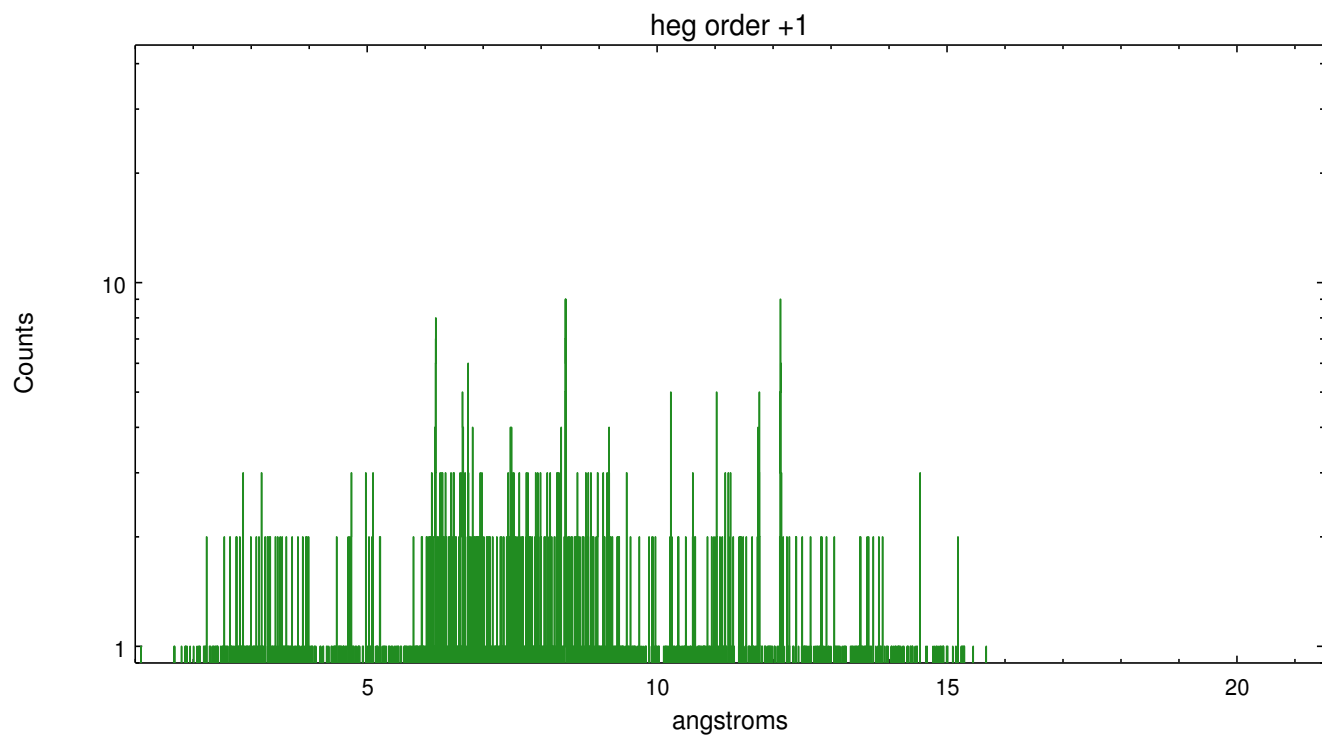
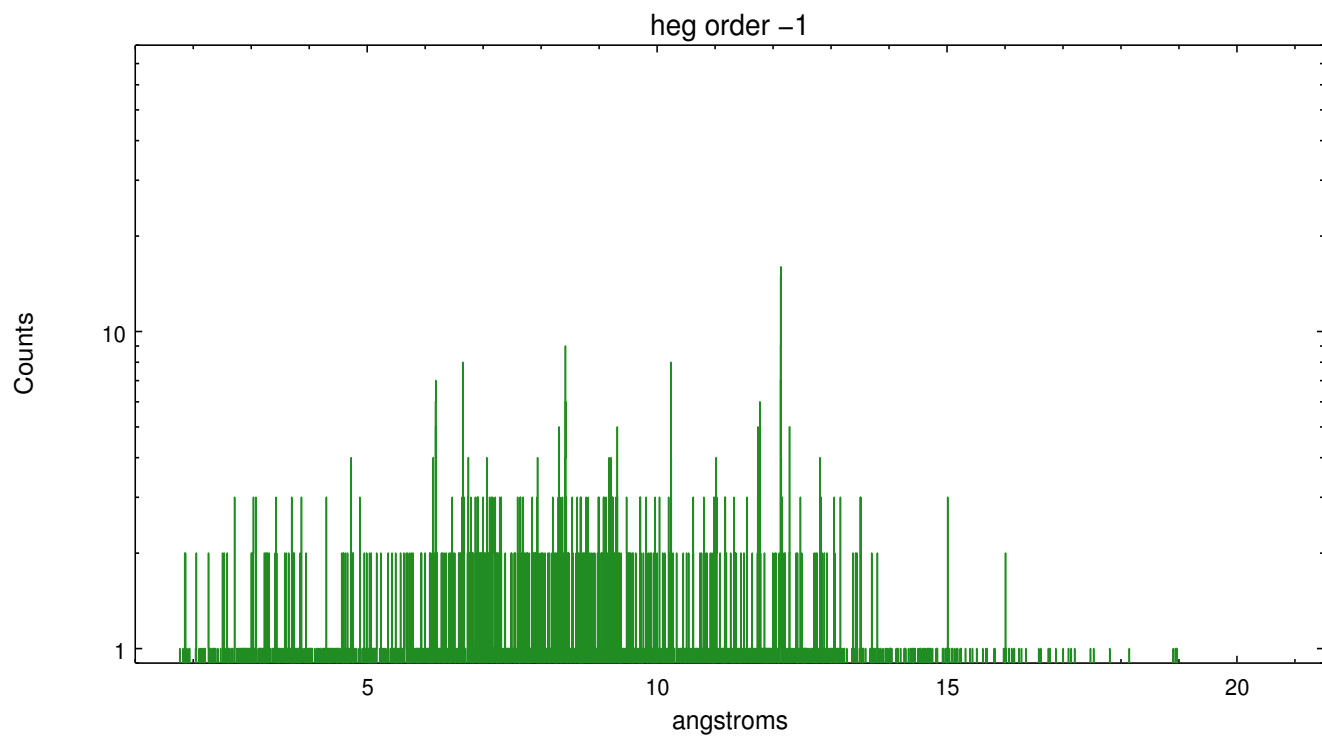
Spot Image HEG



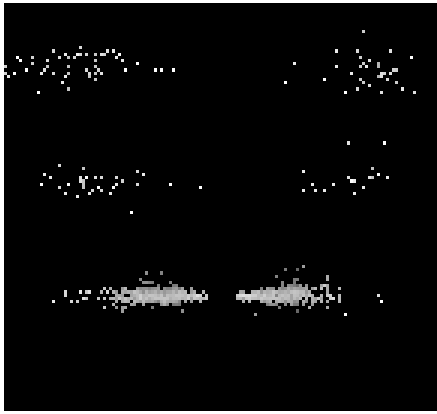
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	153	319	2666	6110	2156	204	116

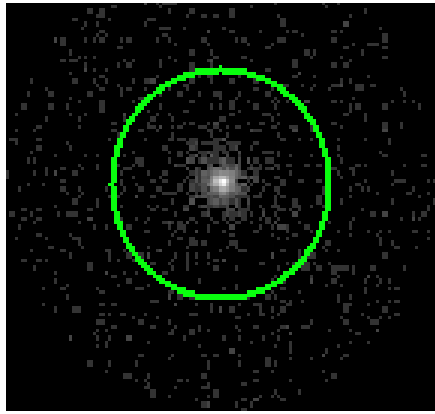




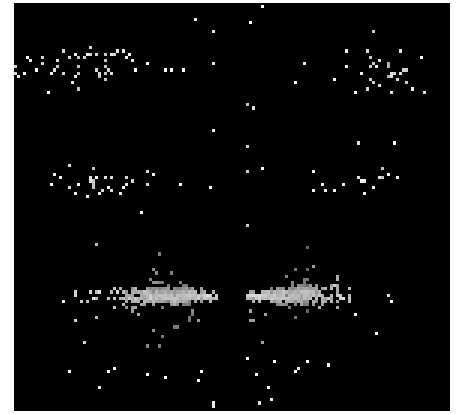
3.2 MEG Arm



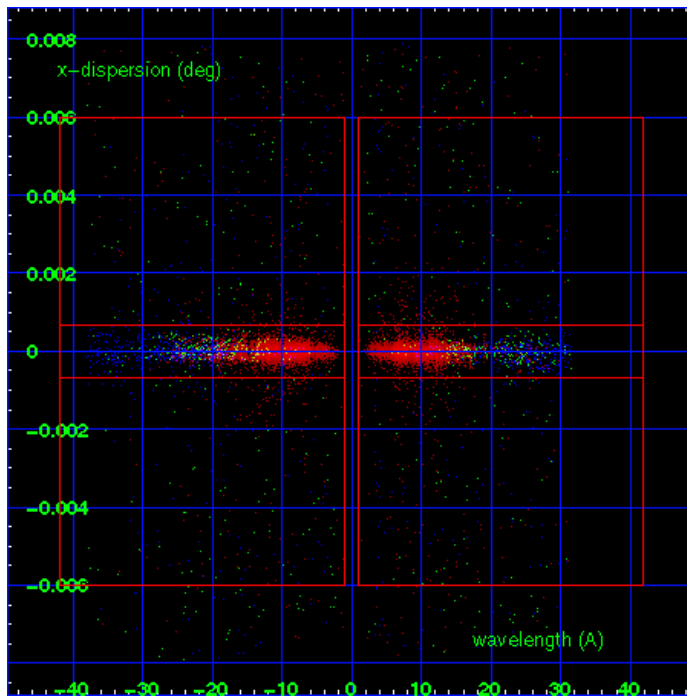
MEG Order Sort 123



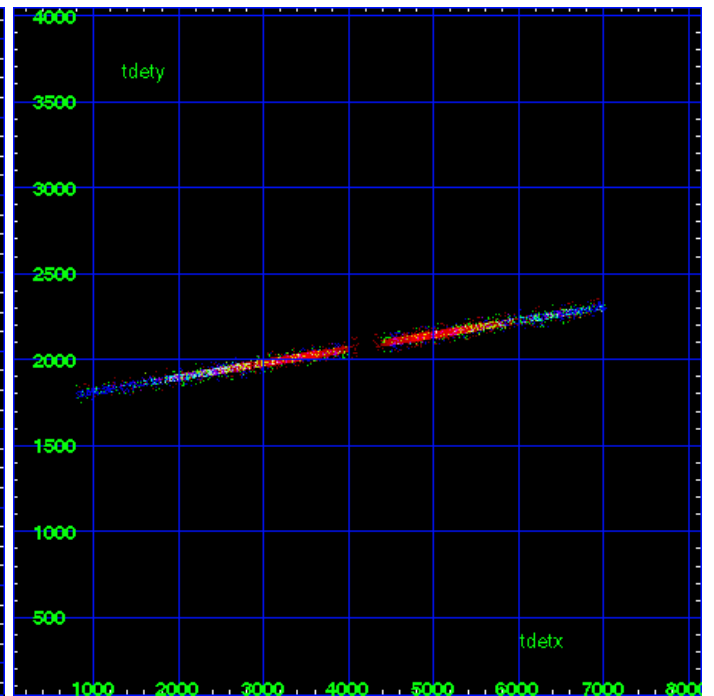
MEG Zero Order



MEG Order Sort ALL

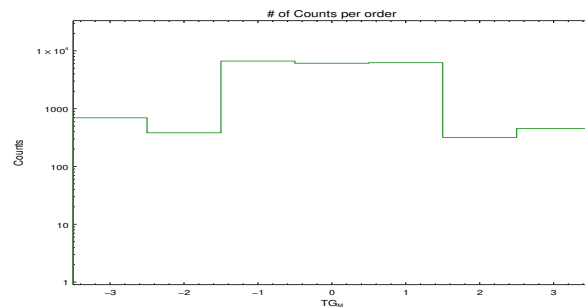


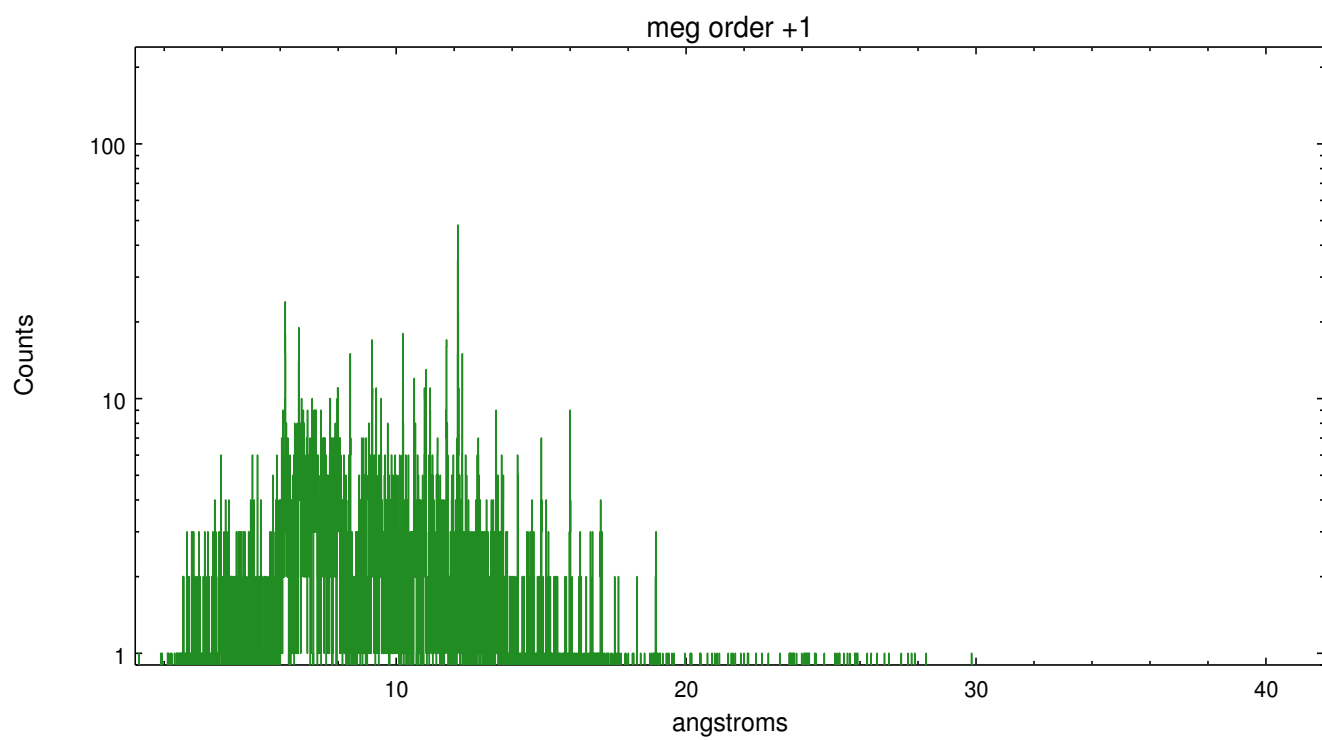
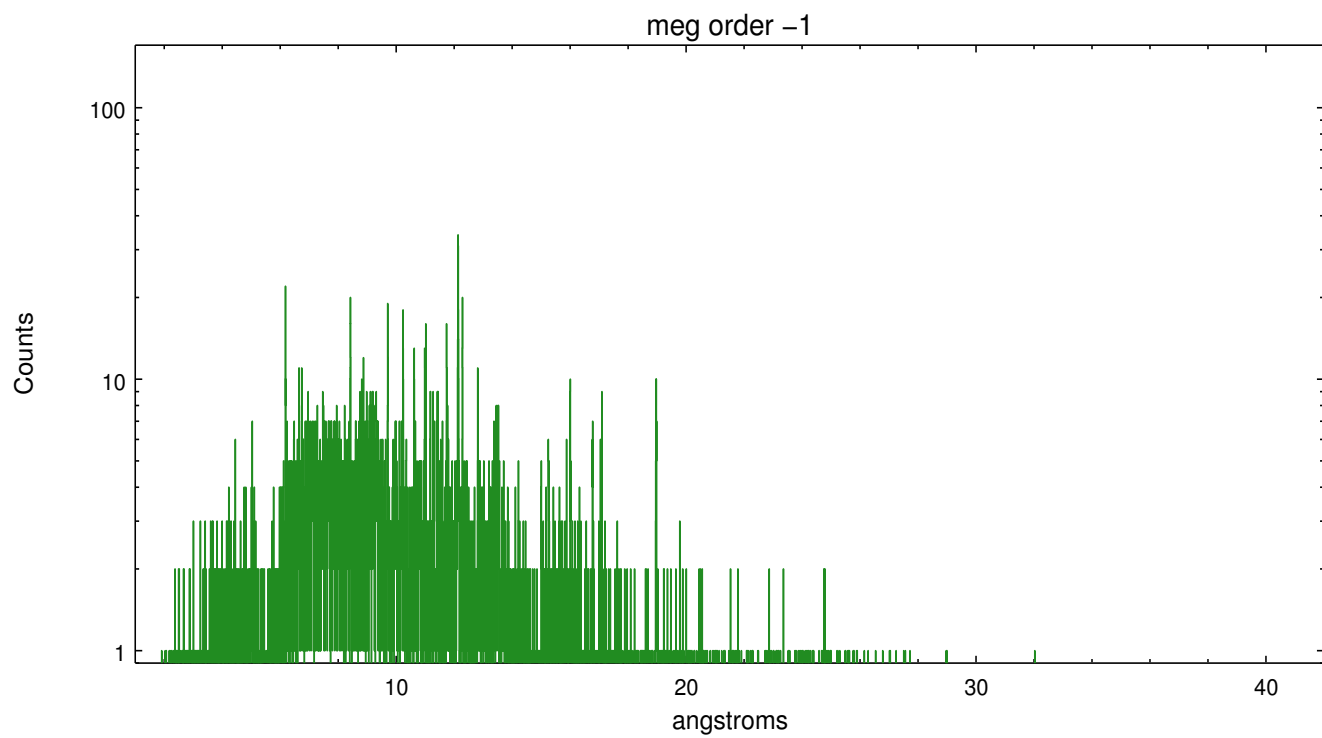
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	695	383	6664	6110	6248	318	454





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	25.129

A.2 Comments

This observation took place 6.5 days after obs2527, within window of 4.5-7.5 days