

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1904 - L2 Version 3
Chandra X-Ray Center

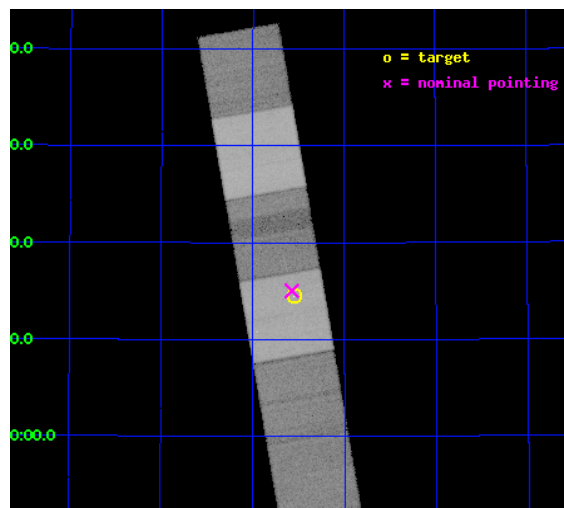
L2 Processing Date : Sep 15 2012

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1 Front

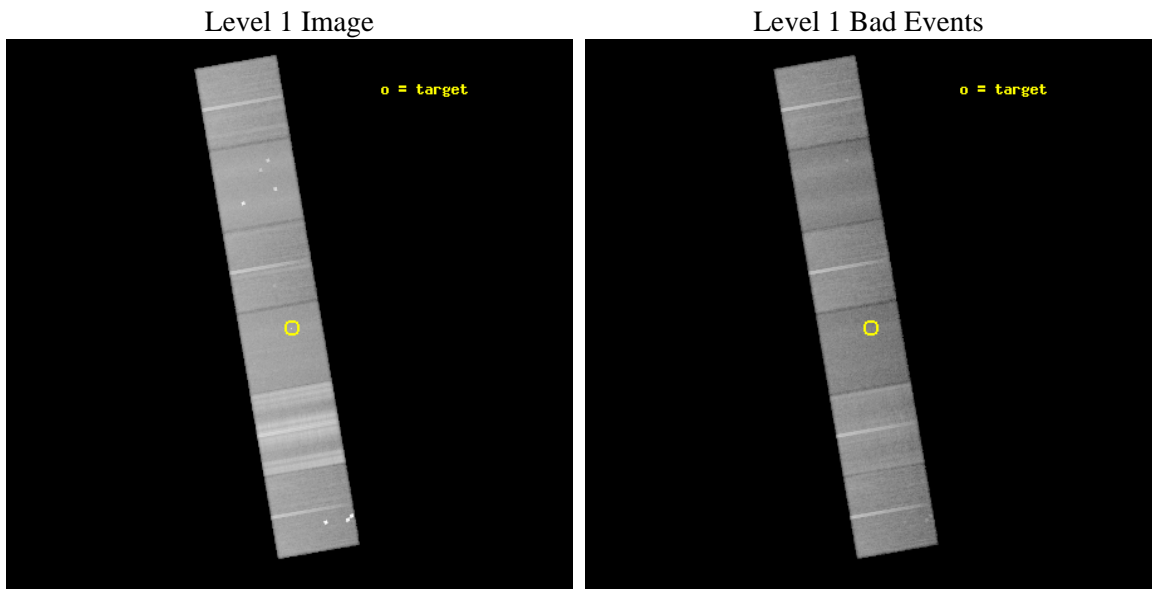
seq_num	300052	Sequence number
obs_id	1904	Observation id
title	HIGH-RESOLUTION X-RAY SPECTROSCOPY OF THE SYMBIOTIC STAR CH CYG: ANY NEED FOR COLLIDING WINDS IN SYMBIOTICS?	Proposal title
observer	Dr Peter Wheatley	Principal investigator
object	CH CYG	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	291.137917	Observer's specified target RA [deg]
dec_targ	50.241389	Observer's specified target Dec [deg]
ra_nom	291.14317602793	Nominal RA [deg]
dec_nom	50.250590711442	Nominal Dec [deg]
roll_nom	80.183092723728	Nominal Roll [deg]
revision	3	Processing version of data
ontime	47683.159084141	Sum of GTIs [s]
livetime	47079.366212466	Livetime [s]
ontime4	47683.159084141	Sum of GTIs [s]
ontime5	47683.159084141	Sum of GTIs [s]
ontime6	47683.159064218	Sum of GTIs [s]
ontime7	47683.159084141	Sum of GTIs [s]
ontime8	47683.159064233	Sum of GTIs [s]
ontime9	47686.400044397	Sum of GTIs [s]
l2events	546777	Number of level 2 events



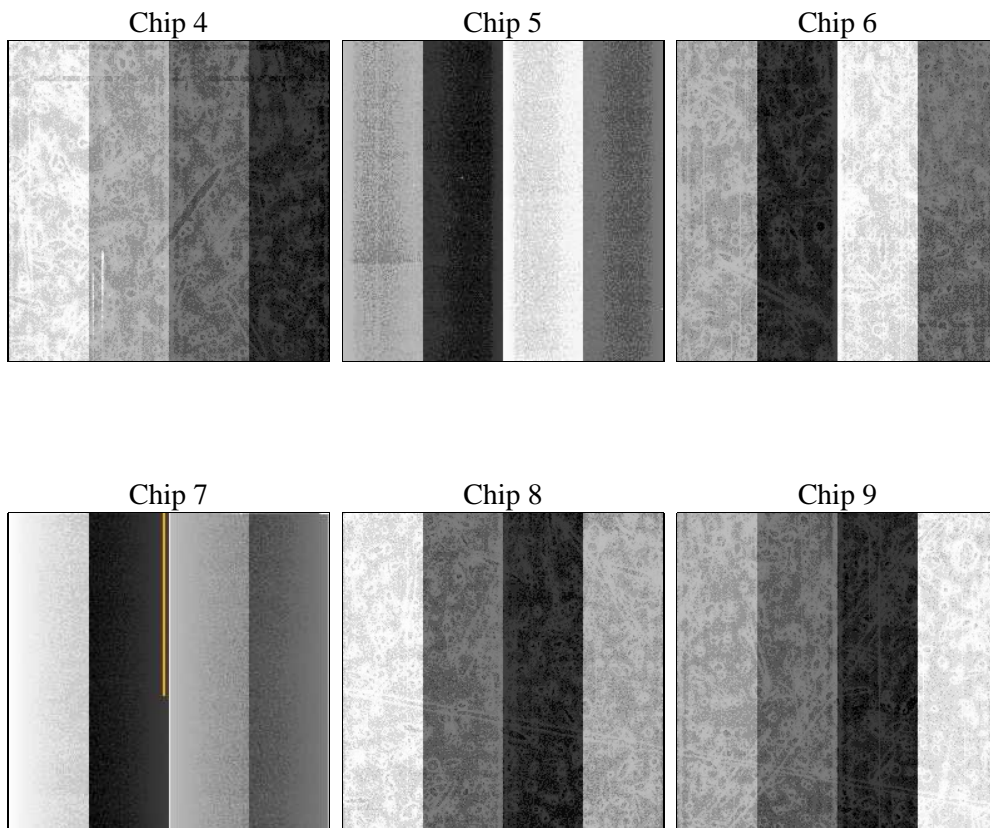
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	47724.418000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	47683.159084141	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime4	47683.159084141	Sum of GTIs [s]
date	2012-09-14T21:59:29	Date and time of file creation	ontime5	47683.159084141	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	47683.159064218	Sum of GTIs [s]
			ontime7	47683.159084141	Sum of GTIs [s]
			ontime8	47683.159064233	Sum of GTIs [s]
			ontime9	47686.400044397	Sum of GTIs [s]
			l1events	3048748	Number of level 1 events

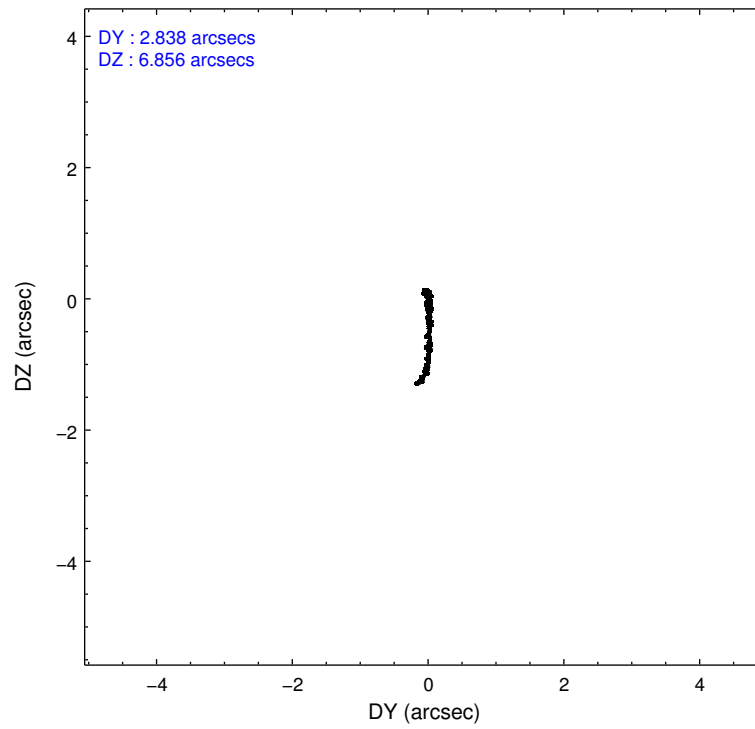
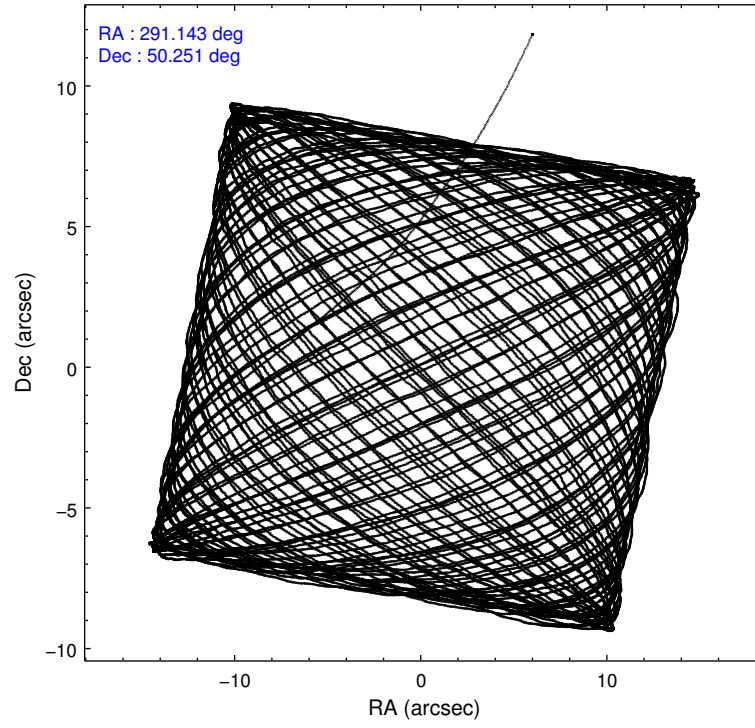
2.1.4 Events

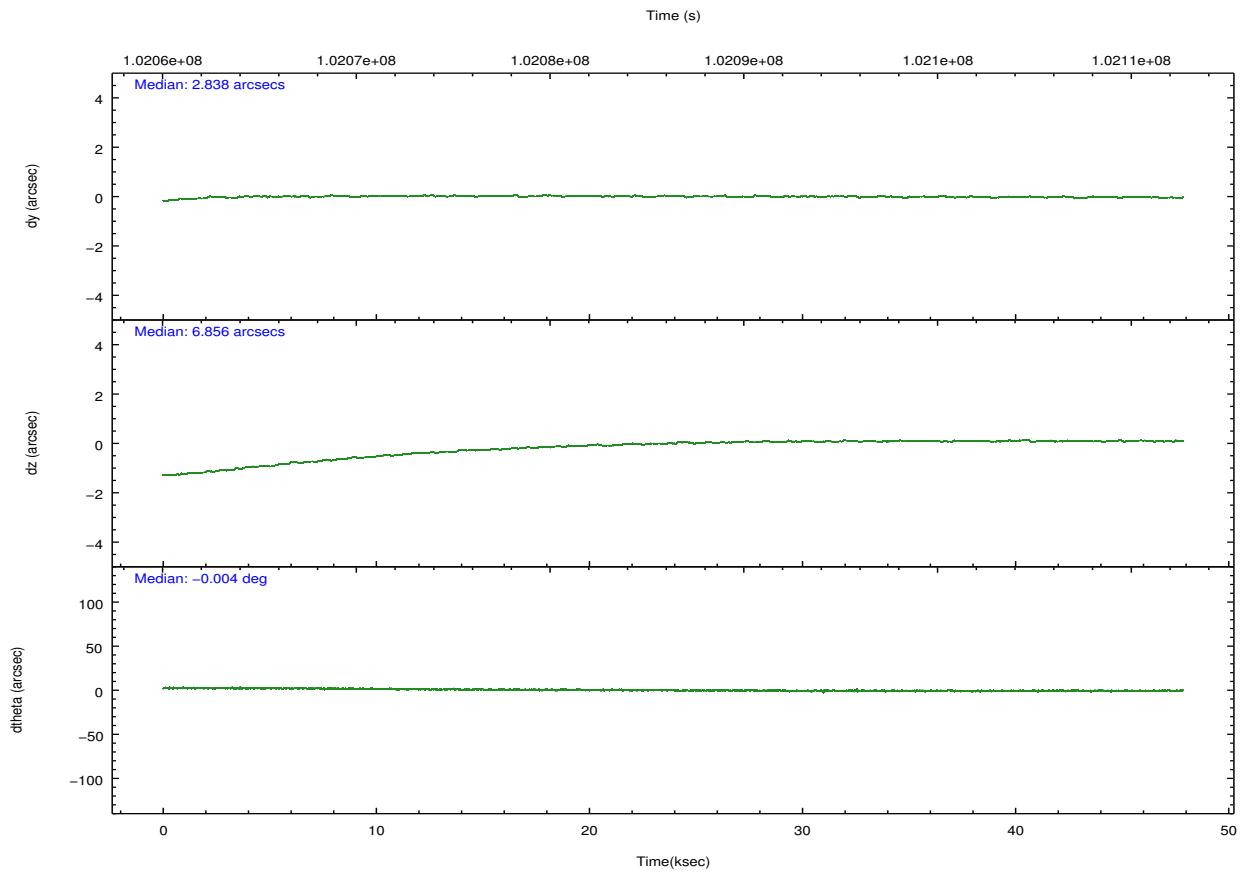
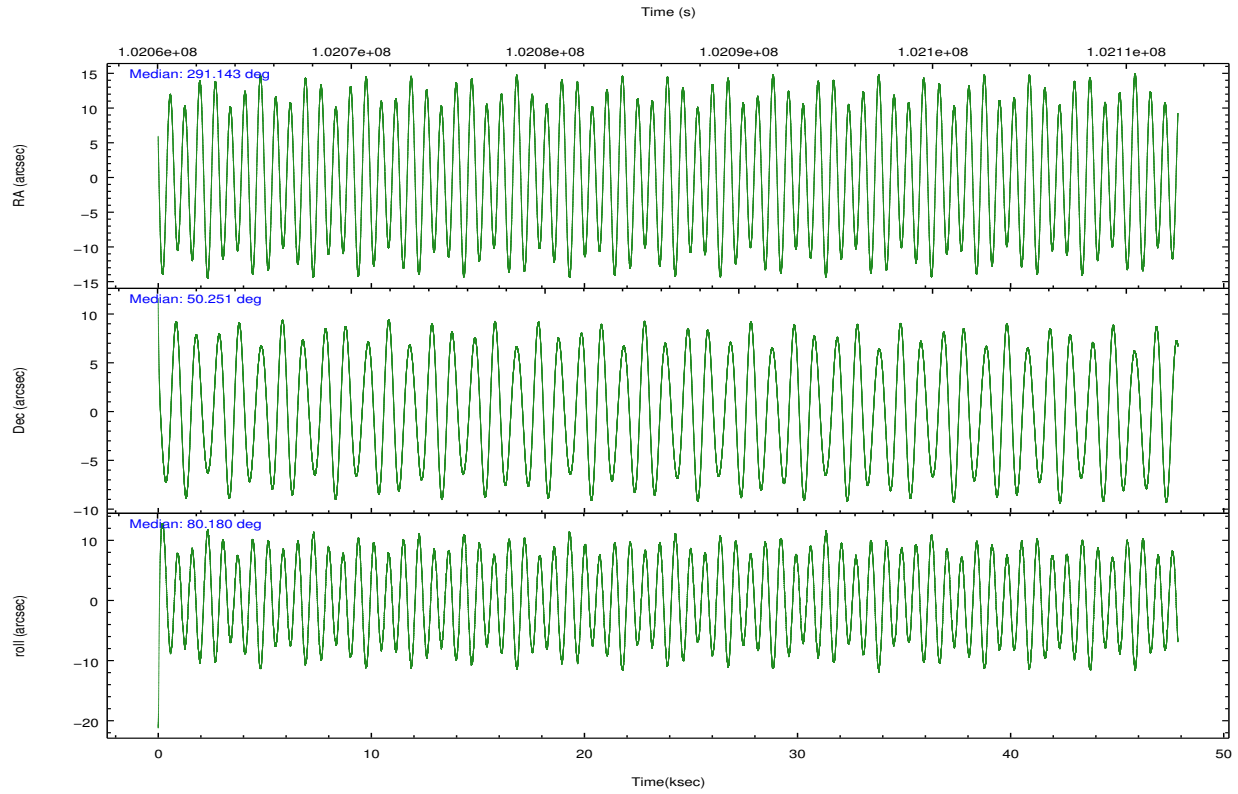
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	448953	475914	404793	405781	881755	431552	grade 0 events	31413	29972	22373	15634	155351	48304
rejected events	371102	259332	347587	235864	407003	332326		6%	6%	5%	3%	17%	11%
rejected %	82%	54%	85%	58%	46%	77%	grade 1 events	382	867	225	530	1378	314
								0%	0%	0%	0%	0%	0%
							grade 2 events	24435	61856	15523	35497	58803	29934
								5%	12%	3%	8%	6%	6%
							grade 3 events	4159	10816	3692	15865	92065	3983
								0%	2%	0%	3%	10%	0%
							grade 4 events	4435	10158	3729	15700	81529	3948
								0%	2%	0%	3%	9%	0%
							grade 5 events	11009	33550	12698	38542	20886	13244
								2%	7%	3%	9%	2%	3%
							grade 6 events	13410	103797	11890	87228	87029	13064
								2%	21%	2%	21%	9%	3%
							grade 7 events	359710	224898	334663	196785	384714	318761
								80%	47%	82%	48%	43%	73%

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	291.158297	291.1431760279299	Subarray requested	NONE	NONE
[deg] Pointing Dec	50.225059	50.25059071144239	Alternating exposures requested	N	N
[deg] Pointing Roll	80.014846	80.18309272372819	[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)	102062551.184000	102061430.66017			
Observation start date	2001-03-27T06:41:27	2001-03-27T06:23:50			
[s] Observation end time (MET)	102110275.184000	102110589.66207			
Observation end date	2001-03-27T19:56:51	2001-03-27T20:03:09			
Read mode	TIMED	TIMED			

2.3 Aspect



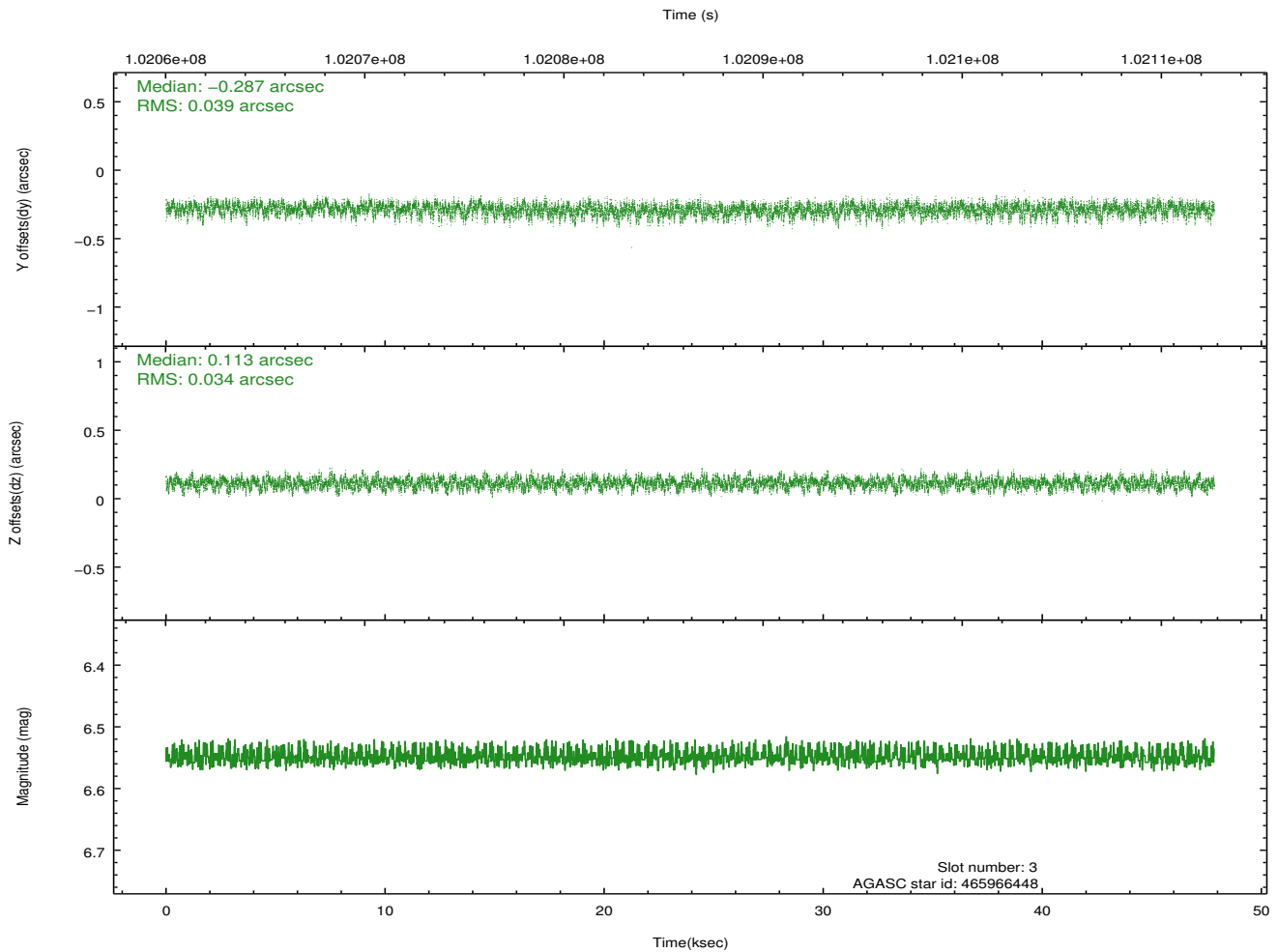
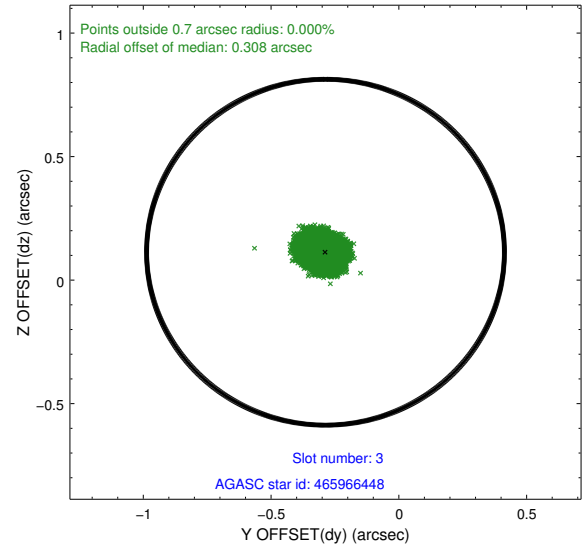
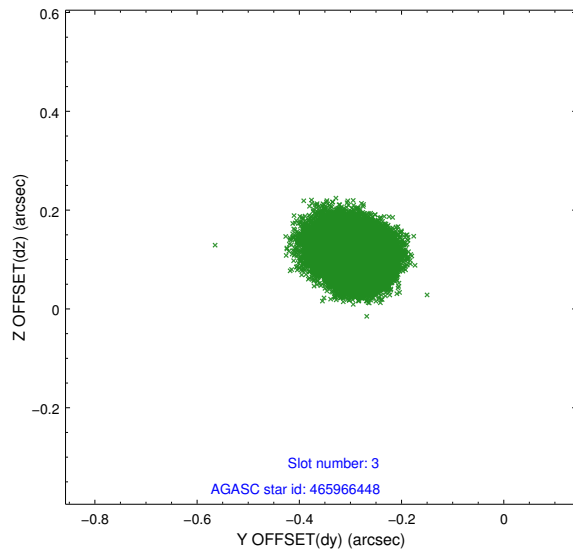


Slot Statistics

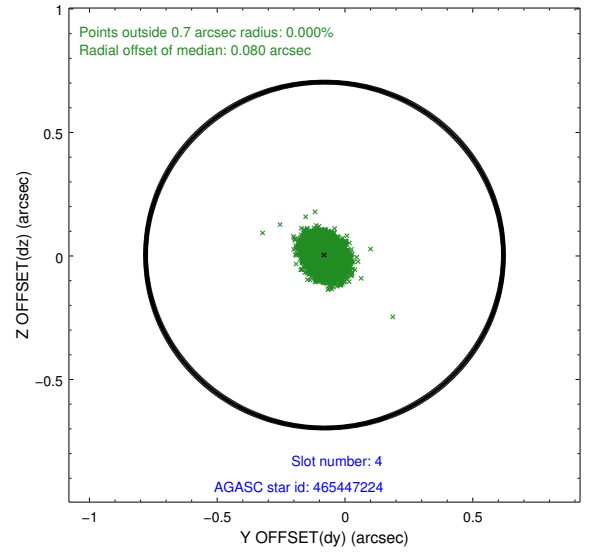
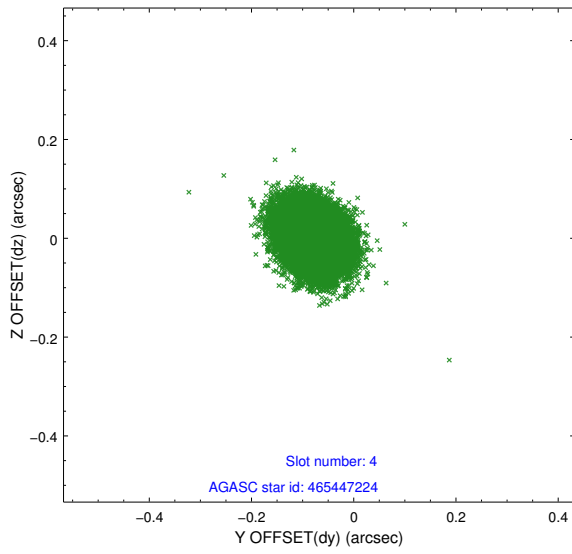
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	11669	-0.034	-0.050	0.013	0.021	0.000000	0.000000	-755.30	-1789.94
1	FID	ACIS-S-4	7.19	11668	-0.010	0.030	0.010	0.018	0.000000	0.000000	2158.01	118.63
2	FID	ACIS-S-5	7.23	11667	0.014	0.028	0.015	0.025	0.000000	0.000000	-1808.11	112.29
3	GUIDE	465966448	6.55	23340	-0.287	0.113	0.056	0.087	291.456533	50.851726	2340.70	-276.15
4	GUIDE	465447224	8.27	23336	-0.080	0.004	0.050	0.082	291.830226	50.402668	904.25	-1406.53
5	GUIDE	465451320	9.37	23327	0.112	-0.062	0.073	0.120	290.821054	49.774437	-1731.47	490.80
6	GUIDE	465455904	8.63	23333	0.120	-0.041	0.054	0.090	290.837212	49.607064	-2319.08	351.92
7	GUIDE	465447376	9.28	23329	0.135	-0.013	0.079	0.129	290.402186	49.787610	-1846.71	1458.98

2.4 Star Slots

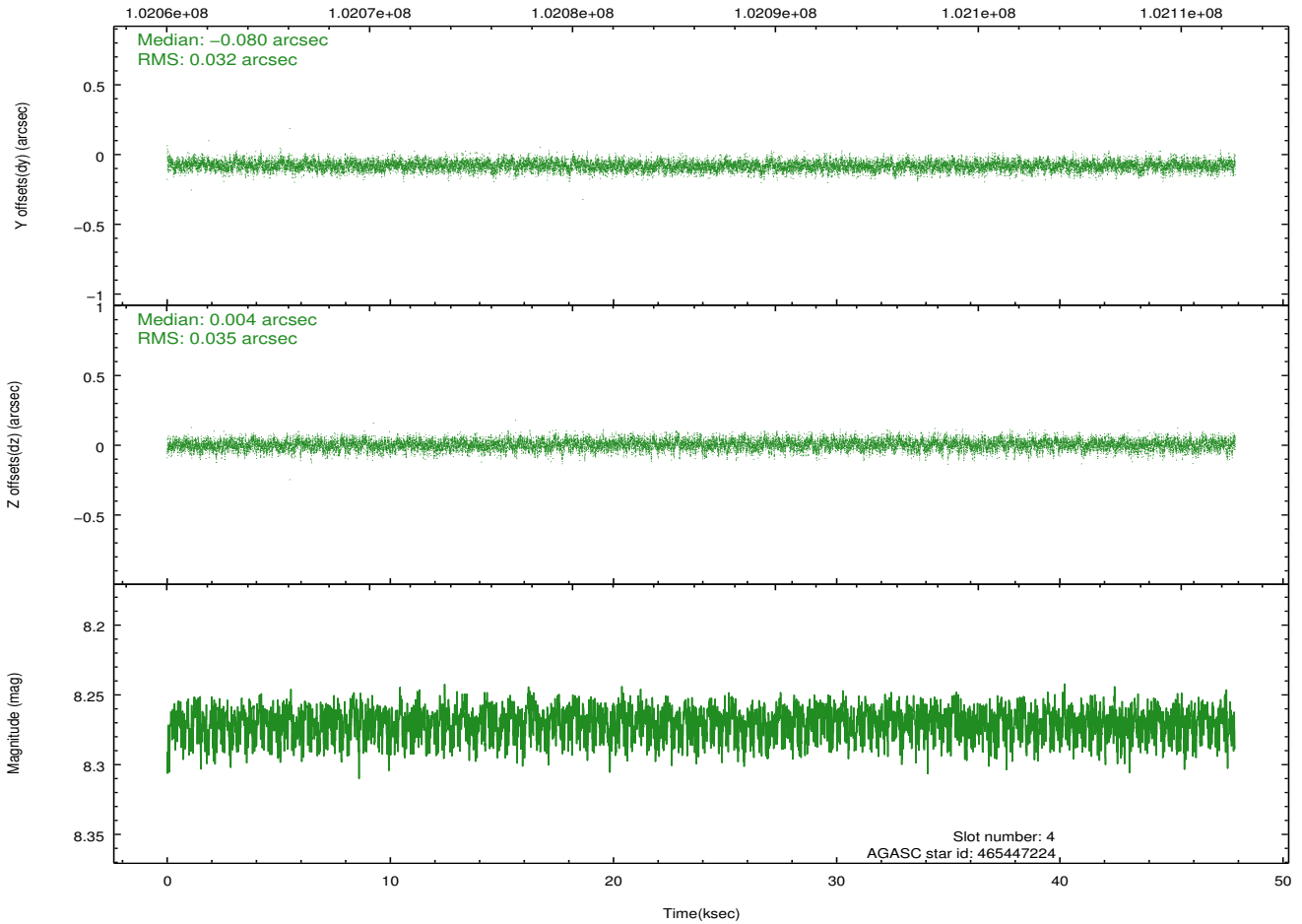
2.4.1 Slot 3



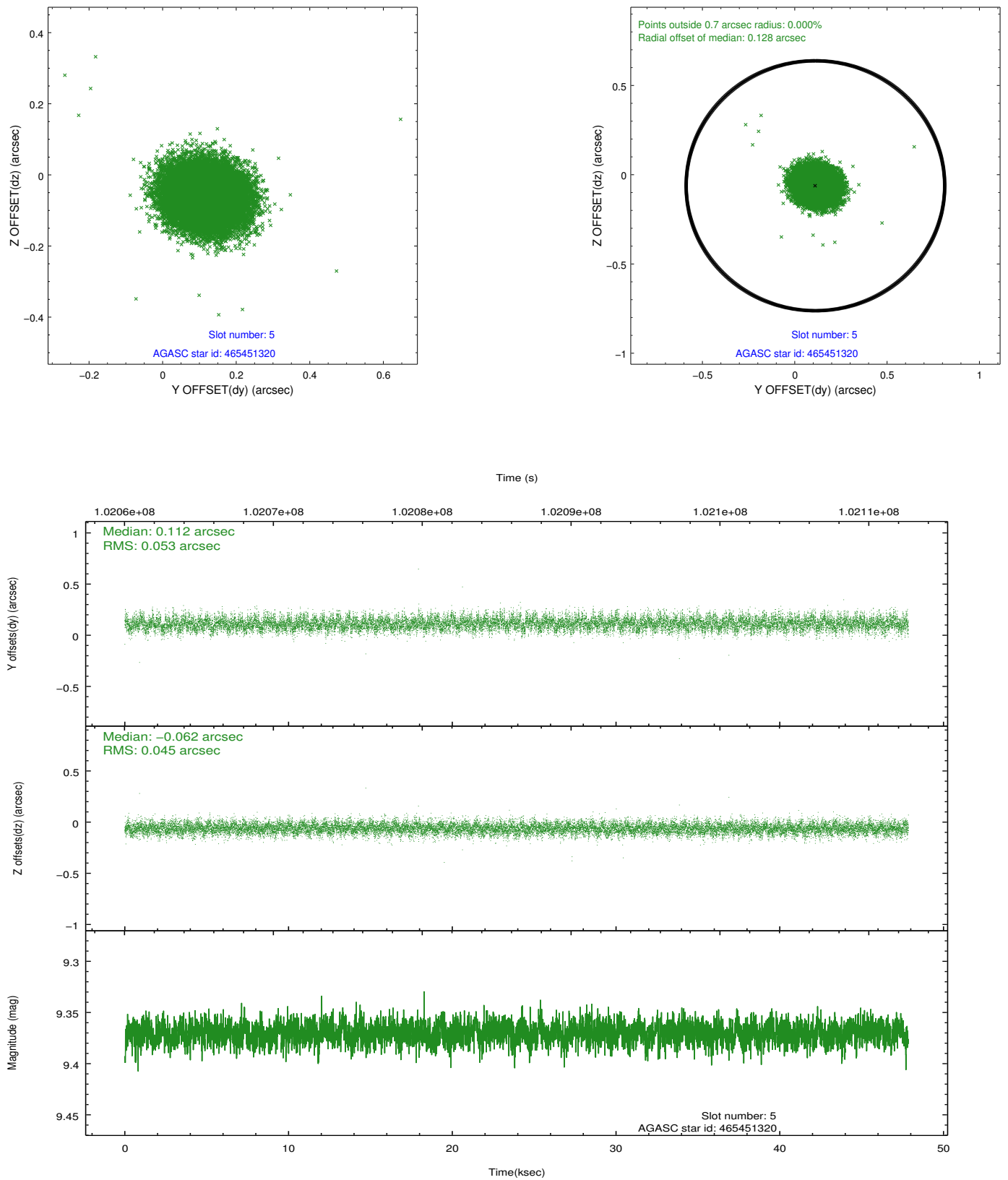
2.4.2 Slot 4



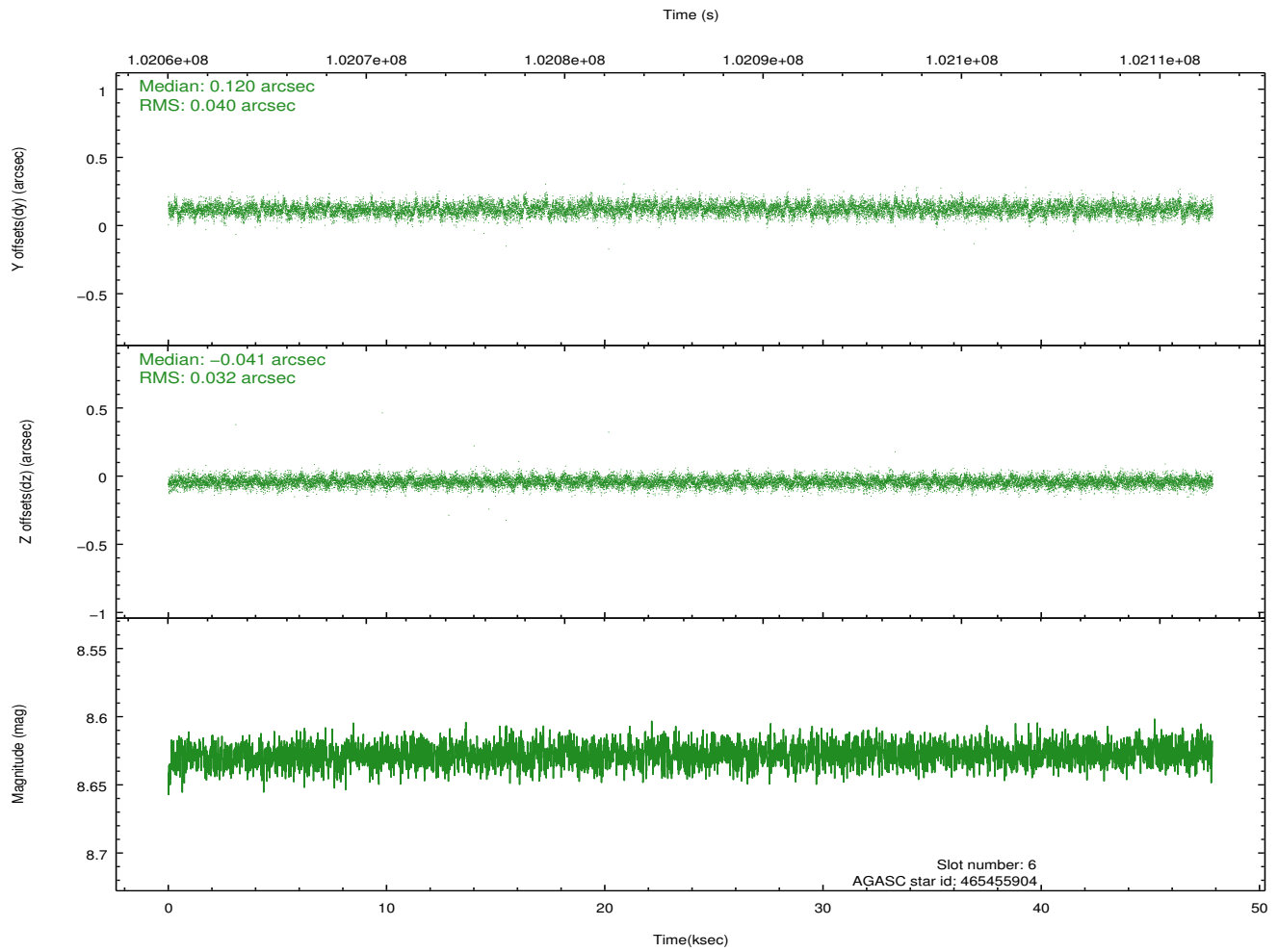
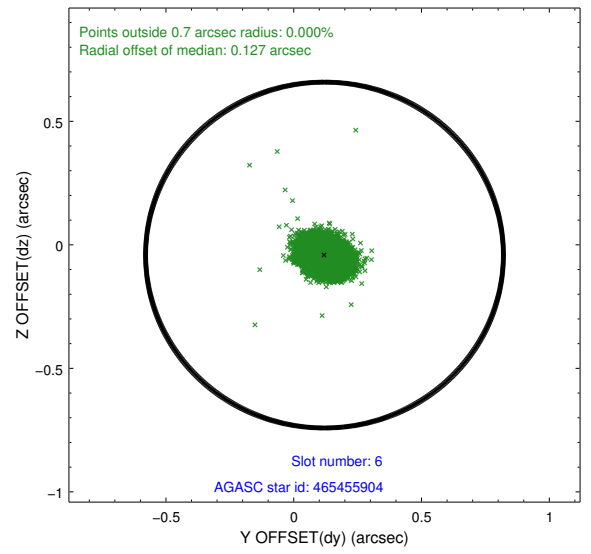
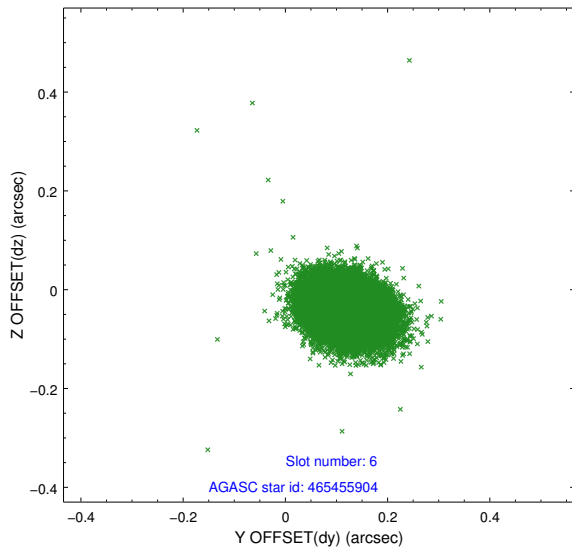
Time (s)



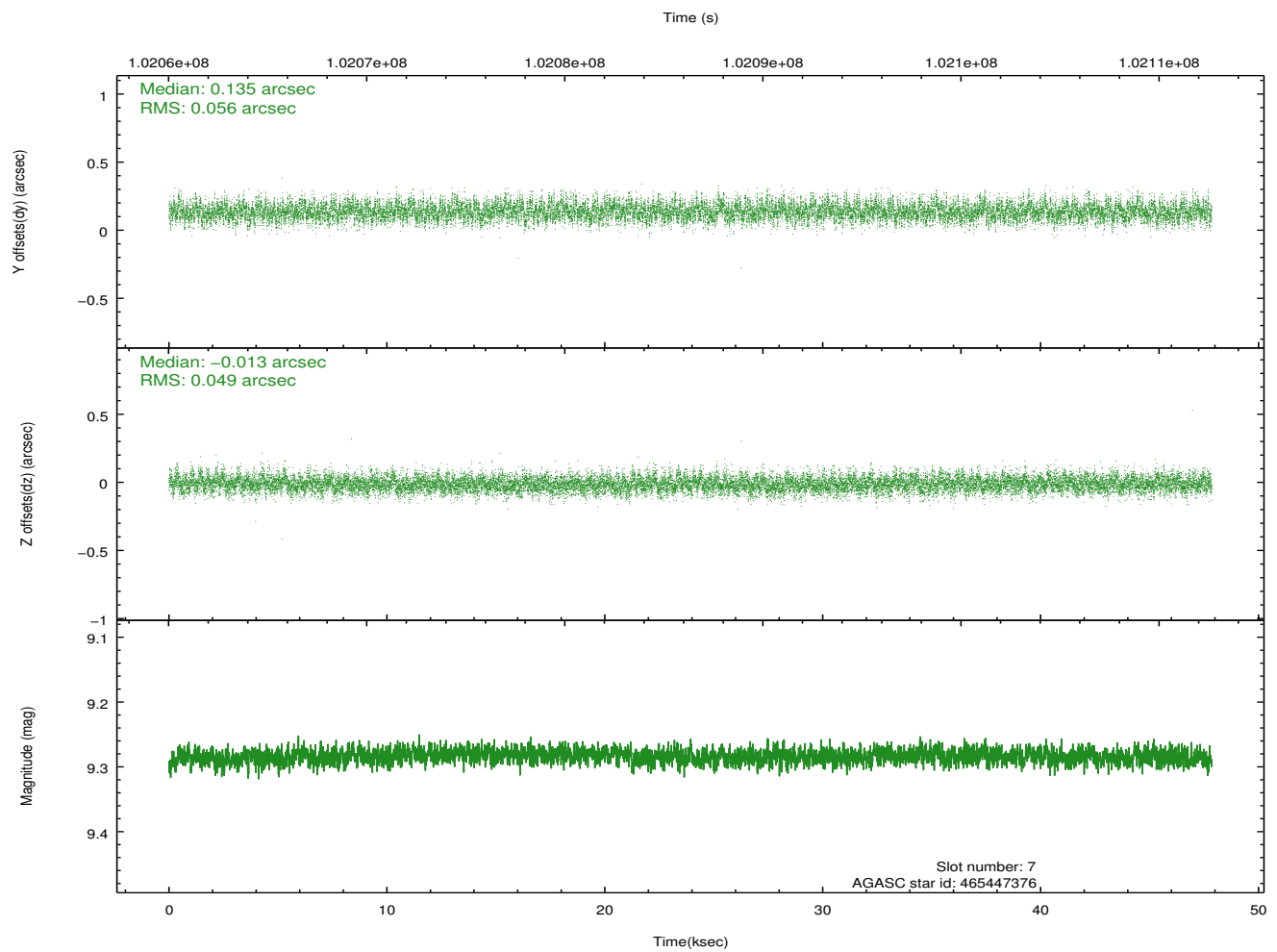
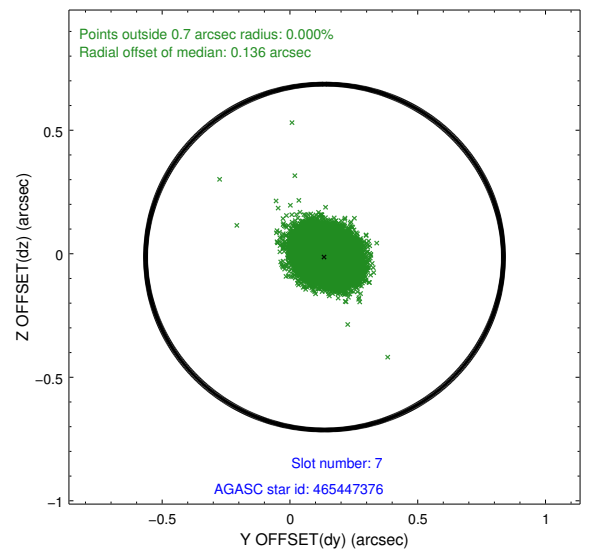
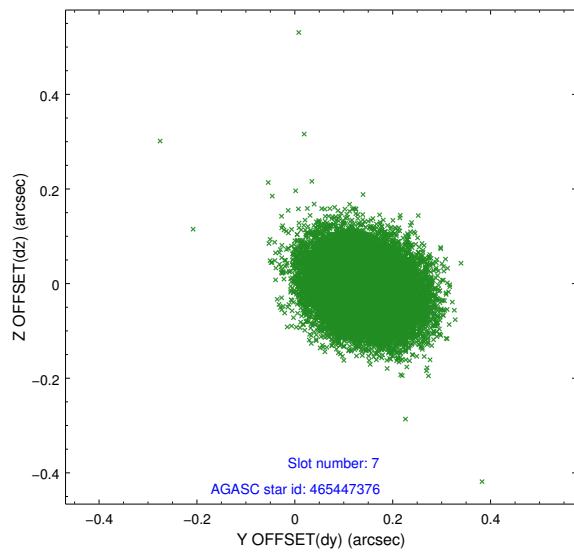
2.4.3 Slot 5



2.4.4 Slot 6

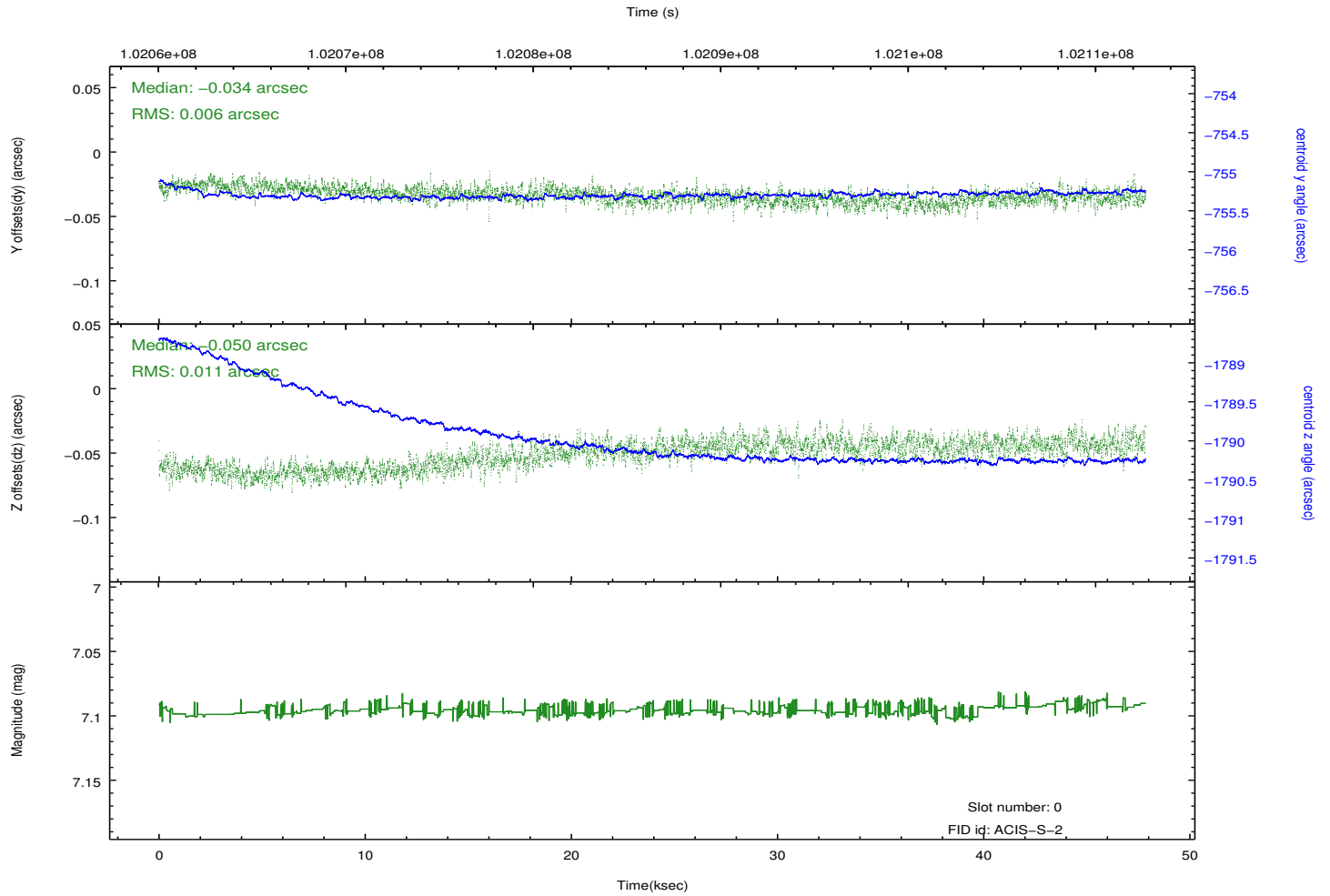
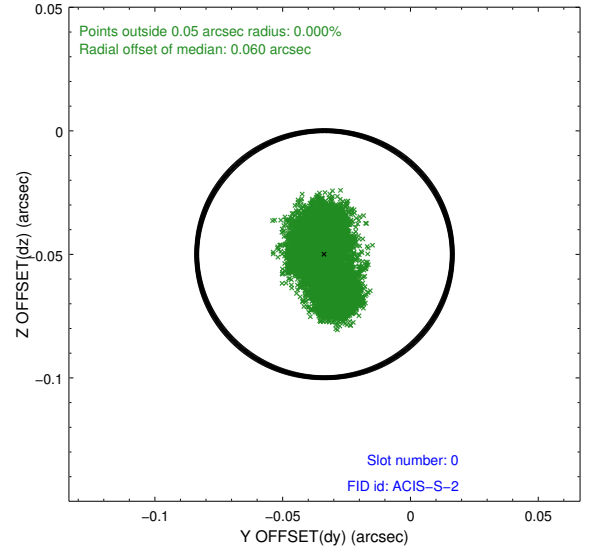
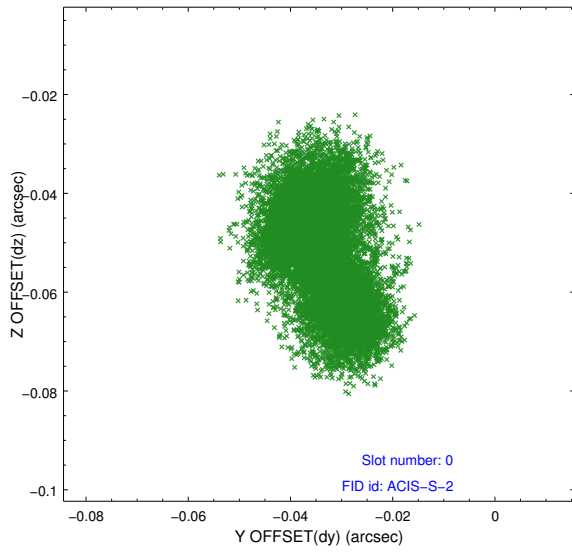


2.4.5 Slot 7

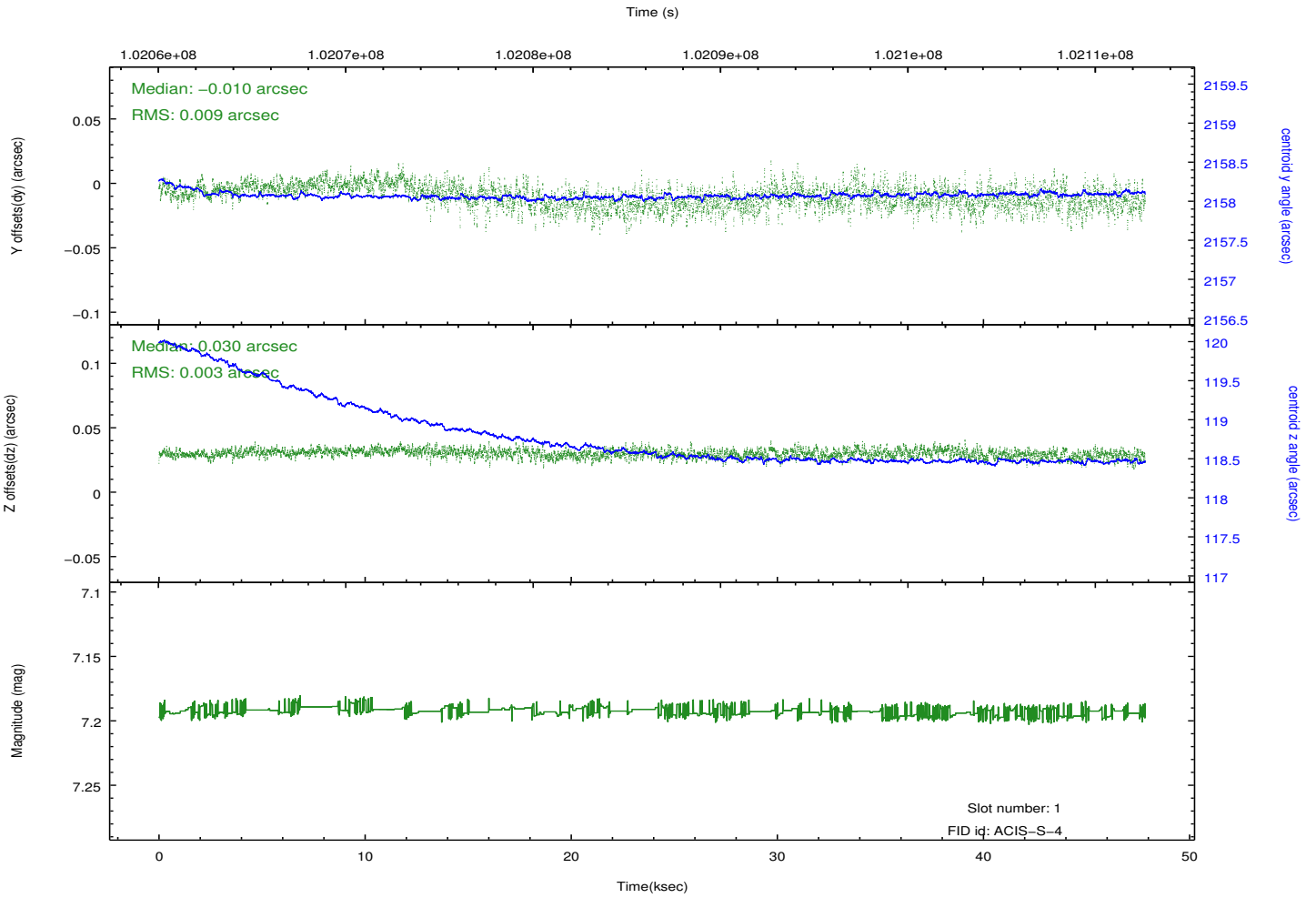
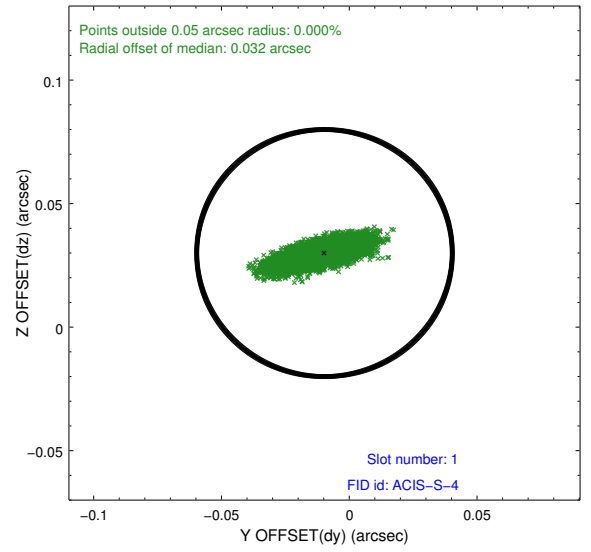
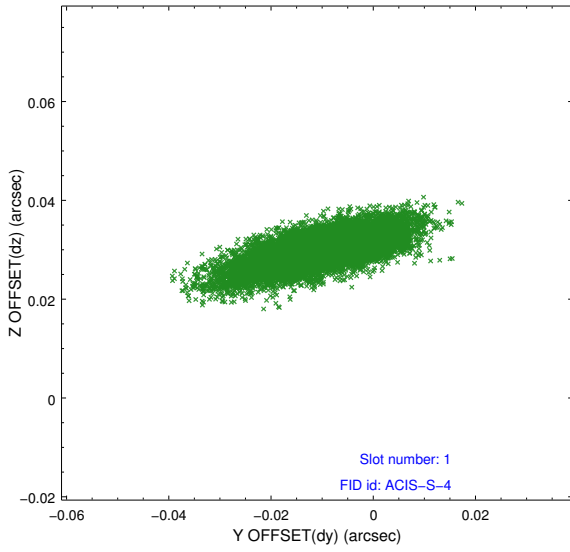


2.5 FID Slots

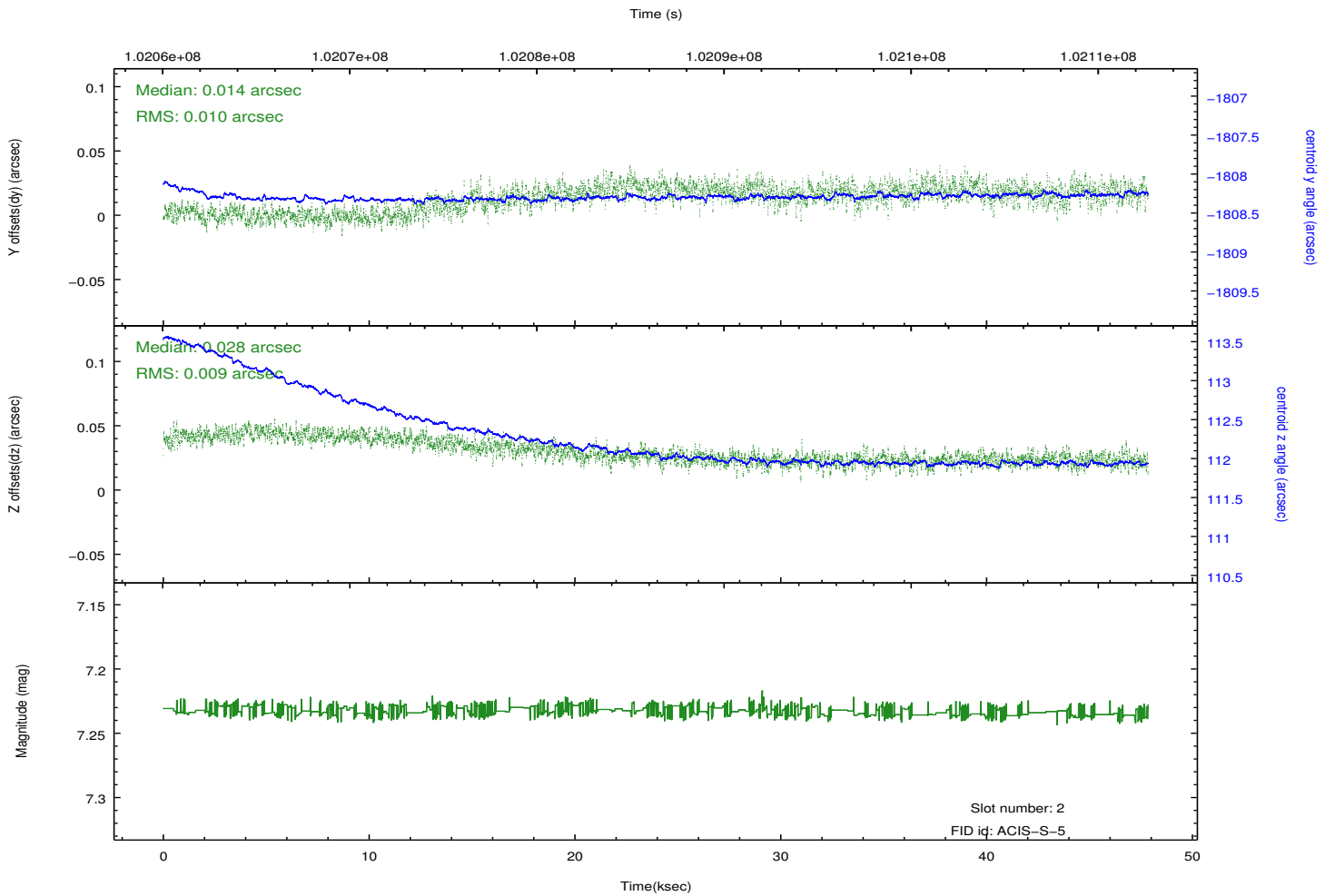
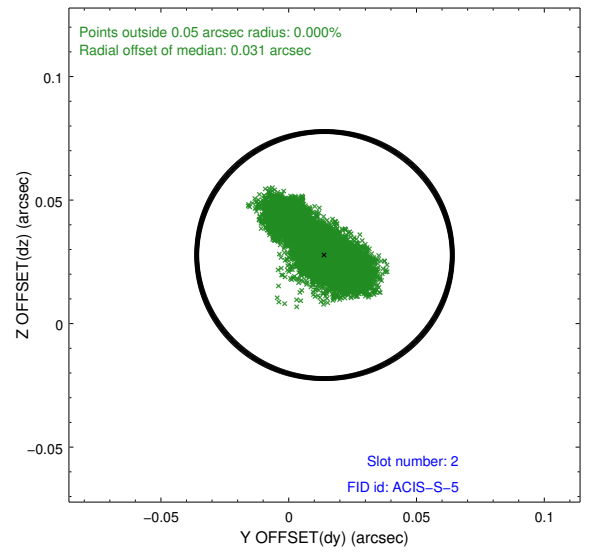
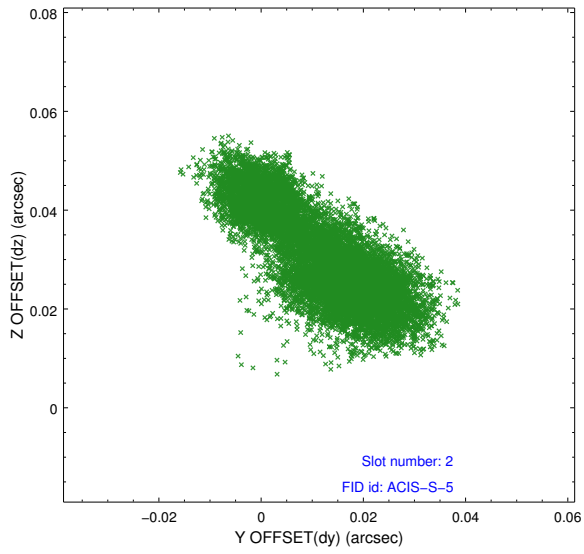
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

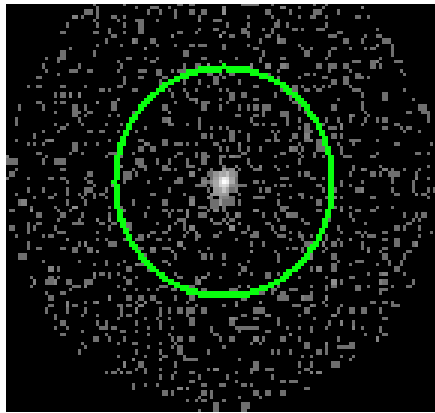


3 Gratings

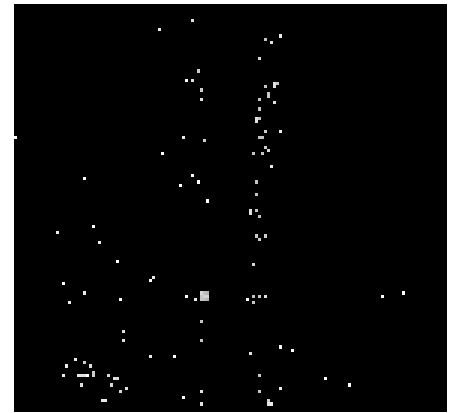
3.1 HEG Arm



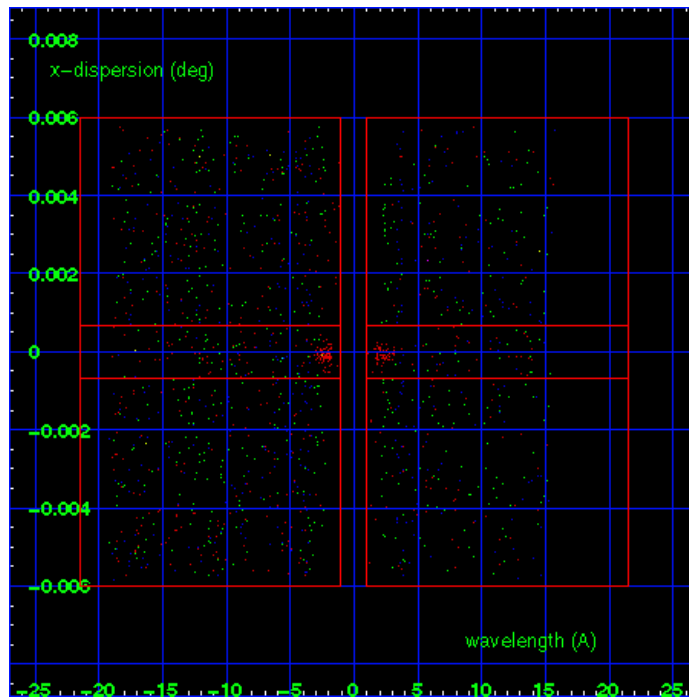
HEG Order Sort 123



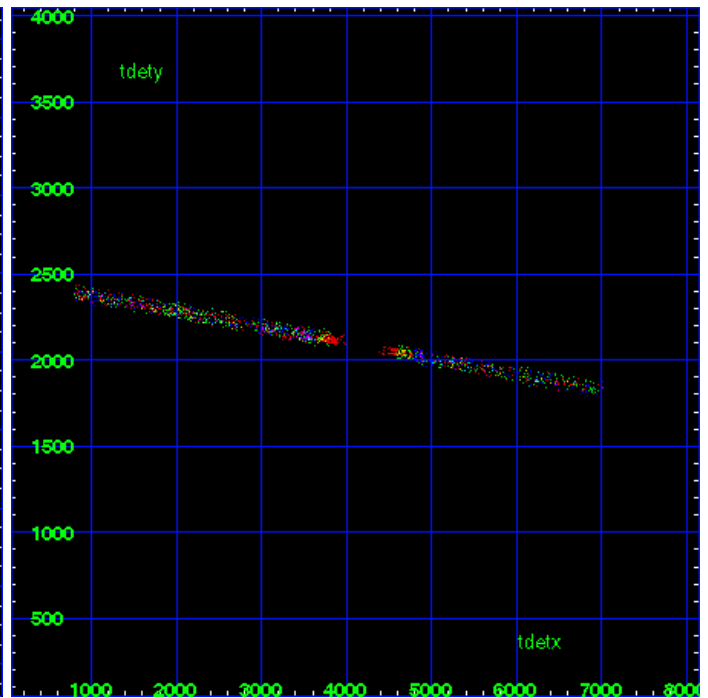
HEG Zero Order



HEG Order Sort ALL

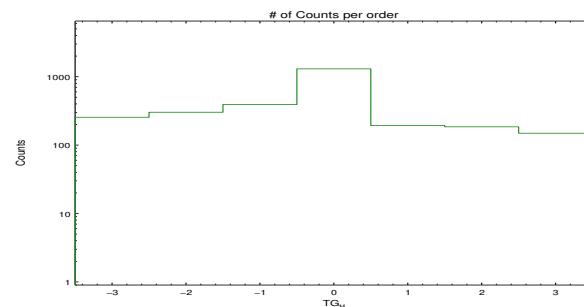


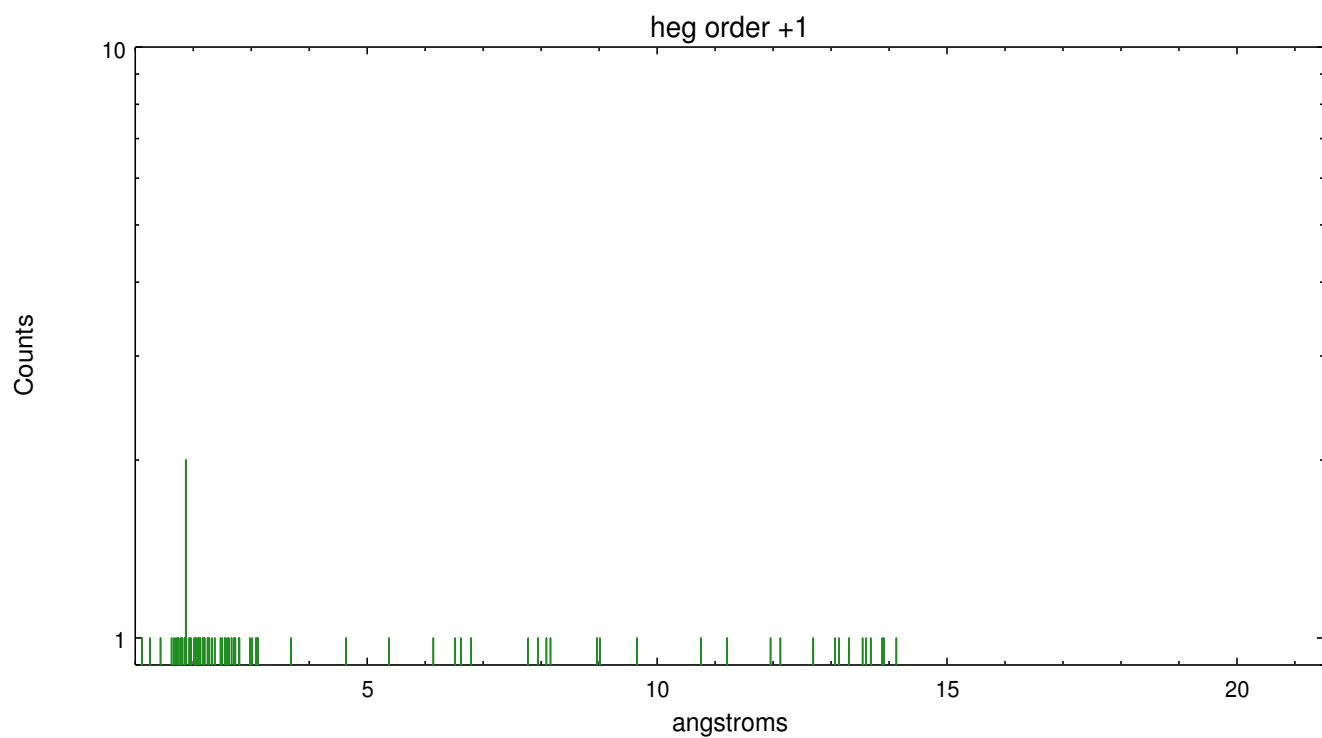
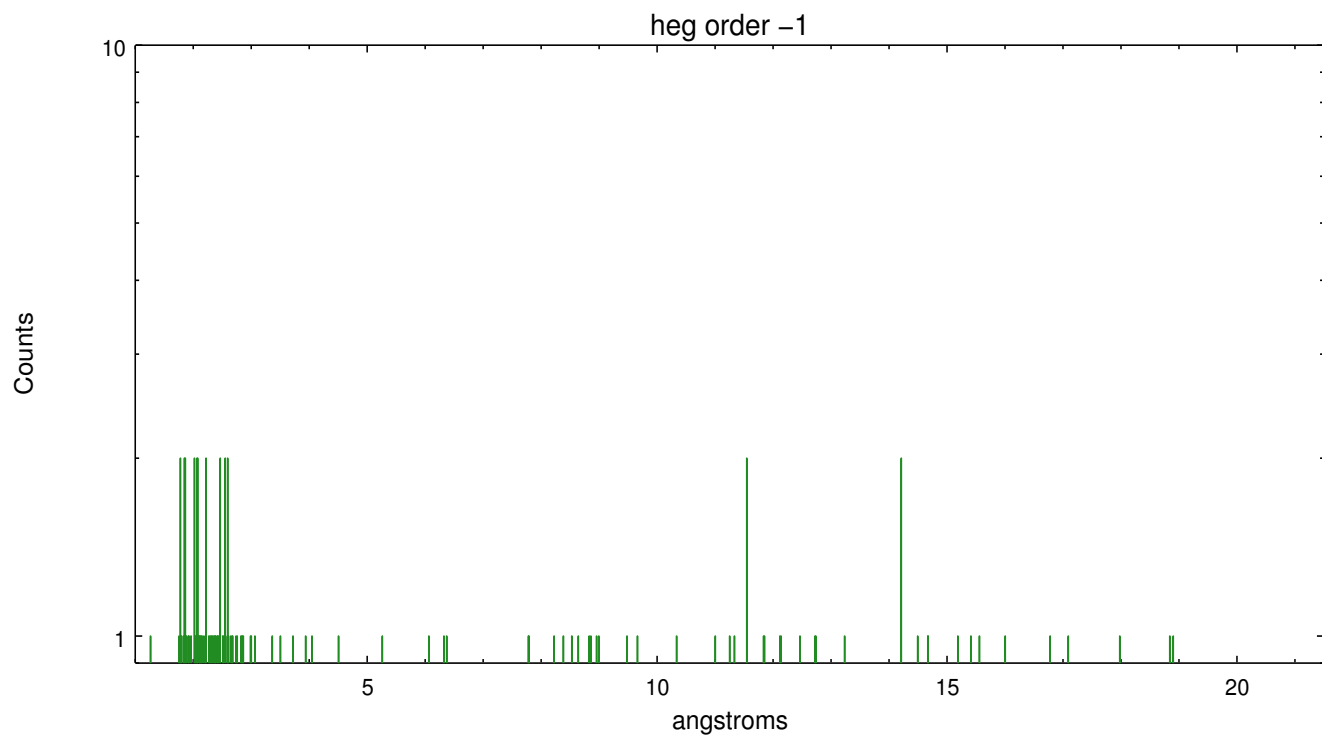
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	255	302	392	1301	193	185	149

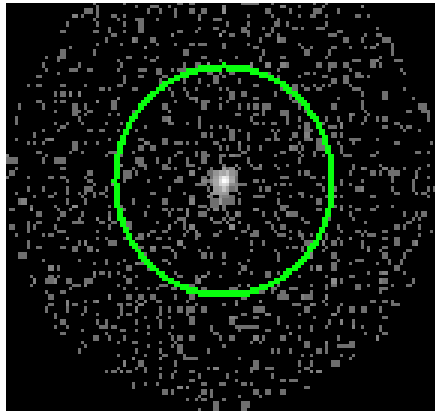




3.2 MEG Arm



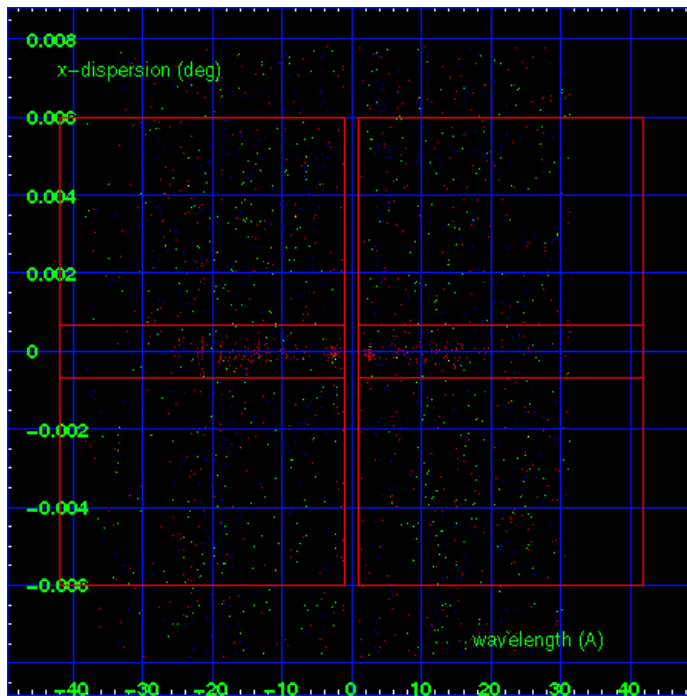
MEG Order Sort 123



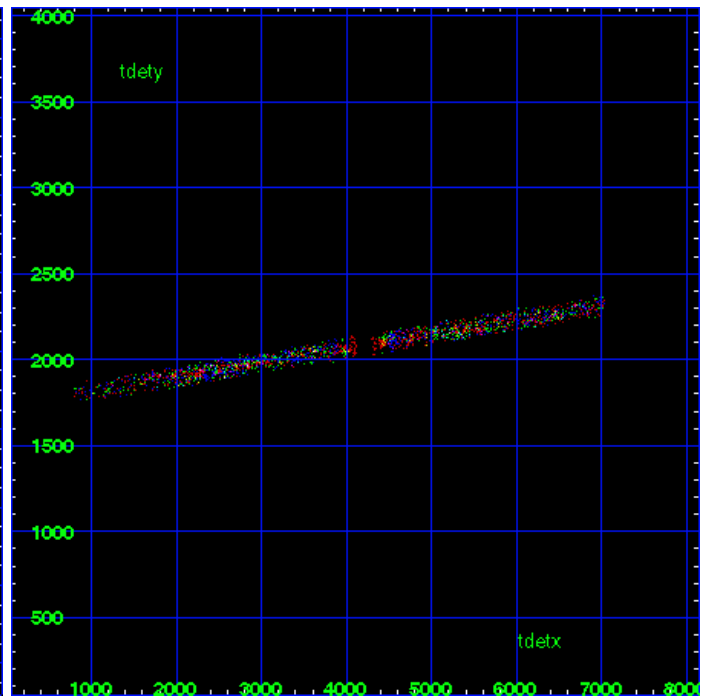
MEG Zero Order



MEG Order Sort ALL

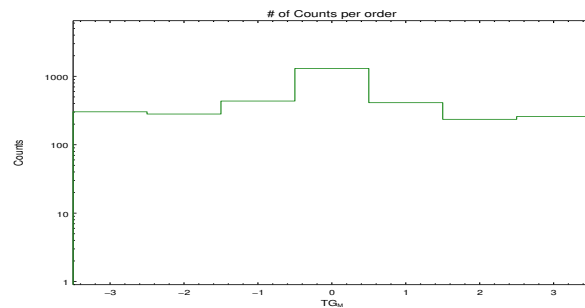


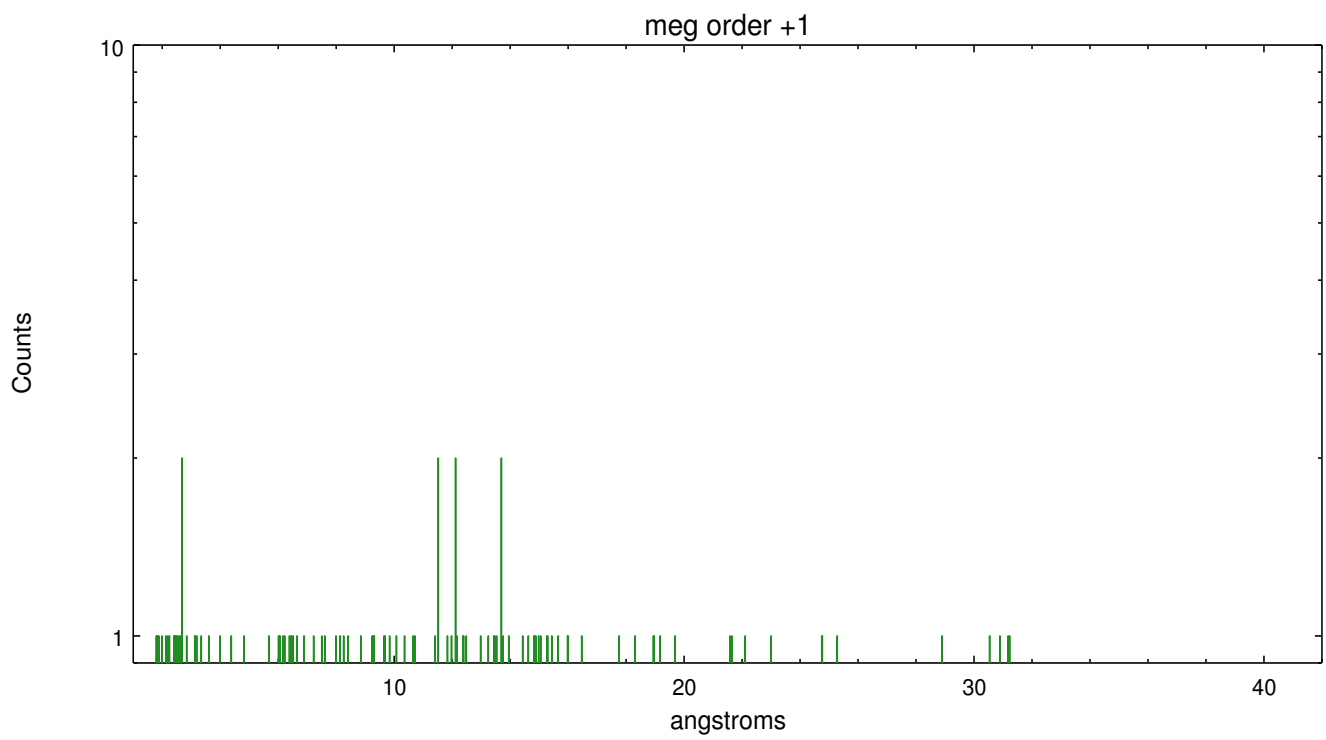
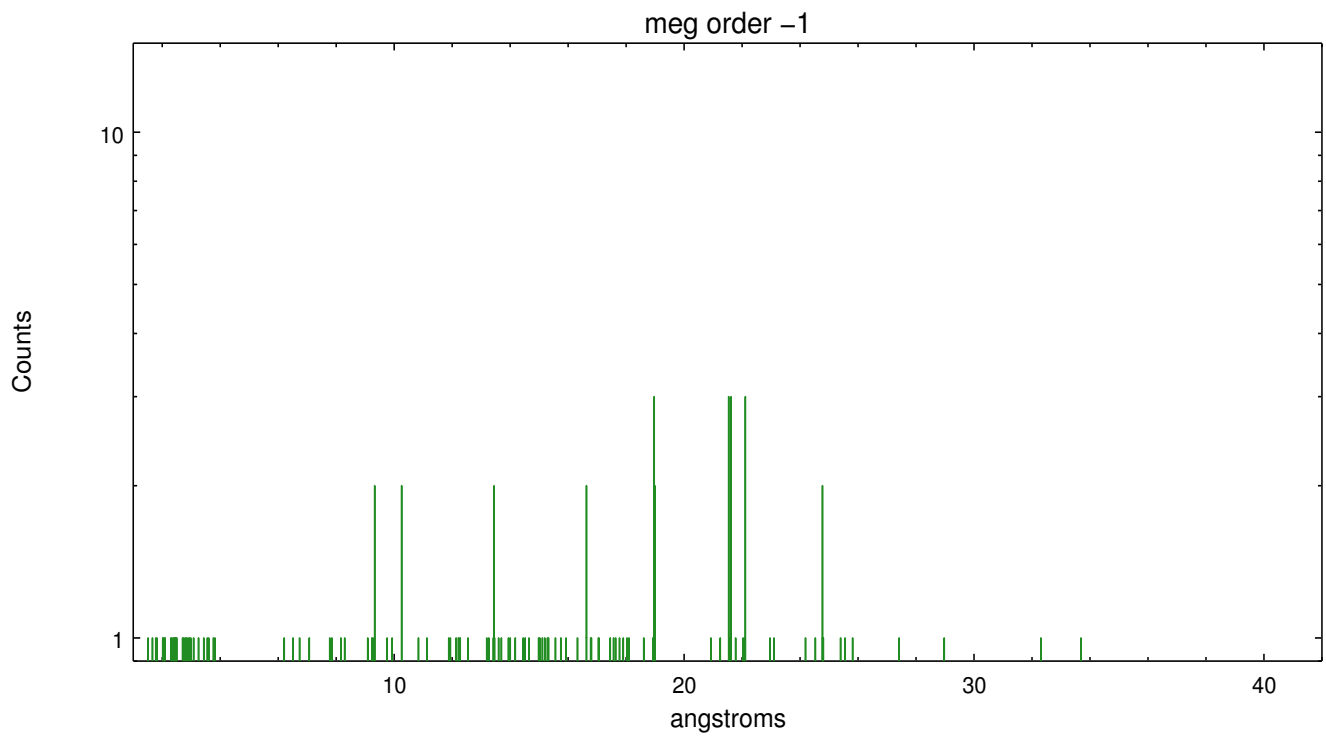
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	303	281	435	1301	412	235	258





A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.09.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.686

A.2 Comments

Small jet is projected nearly along the MEG dispersion direction.

===

The CCD bias map for CCD_ID=4 was incomplete because of data gaps in telemetry. The bias map for chip 4 was reconstructed using scaled data from a comparable bias map for another observation to fill the data gaps. Data gaps were from rows 895 - 914 and 995 - 1014. The region affected is bounded by the sky coordinates:

(291.37223,50.68850), (291.33422,50.55098), (291.33824,50.55054), (291.37627,50.68805)

(291.39345,50.68614), (291.35538,50.54863), (291.35940,50.54818), (291.39748,50.68569)