

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 7411 - L2 Version 2
Chandra X-Ray Center

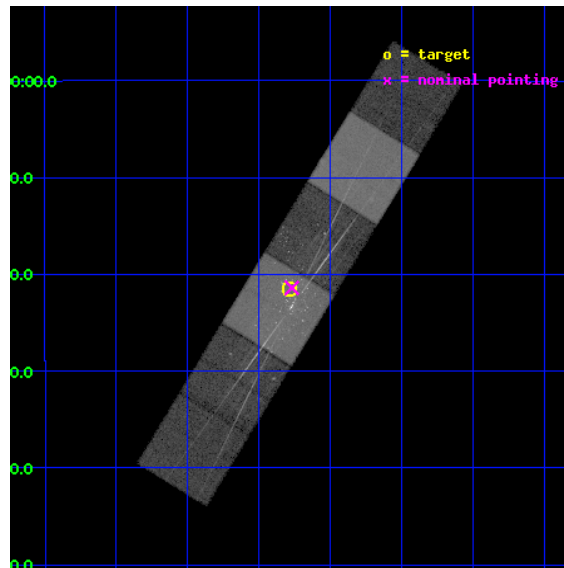
L2 Processing Date : Apr 30 2012

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1 Front

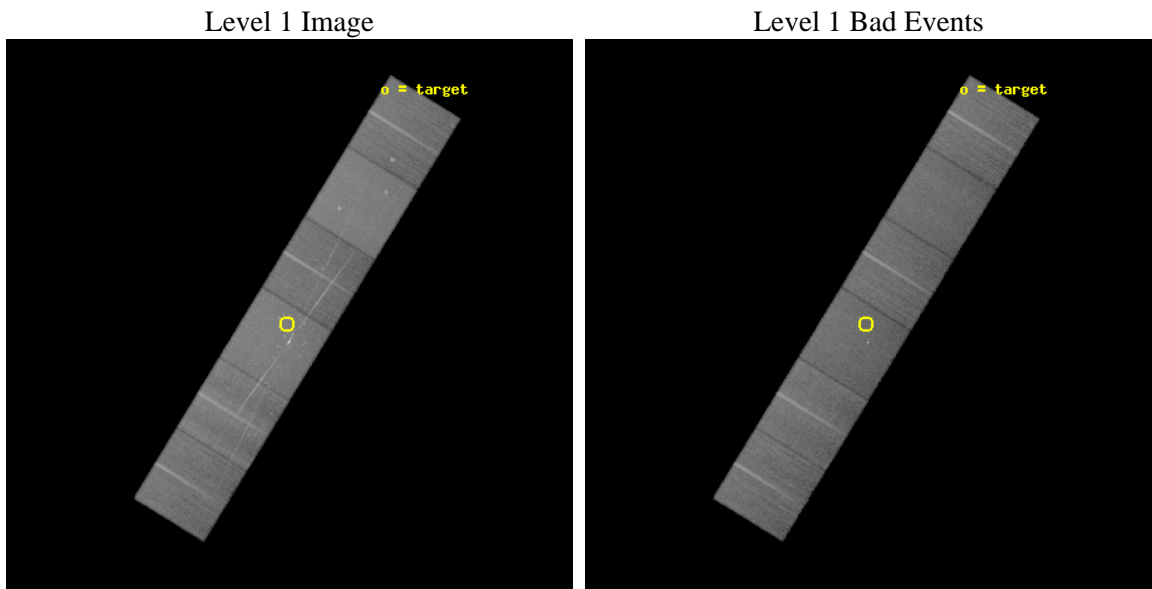
seq_num	200424	Sequence number
obs_id	7411	Observation id
title	High Resolution Studies of Pre-Main Sequence Stars in Orion	Propos
observer	Prof Claude Canizares	Principal investigator
object	Orion Trapezium Cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.821667	Observer's specified target RA [deg]
dec_targ	-5.358806	Observer's specified target Dec [deg]
ra_nom	83.8173233277	Nominal RA [deg]
dec_nom	-5.3566210186998	Nominal Dec [deg]
roll_nom	121.52146121486	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24947.199907124	Sum of GTIs [s]
livetime	24631.3034405	Livetime [s]
ontime4	24947.199907124	Sum of GTIs [s]
ontime5	24947.199907124	Sum of GTIs [s]
ontime6	24943.95893681	Sum of GTIs [s]
ontime7	24947.199907124	Sum of GTIs [s]
ontime8	24947.199907124	Sum of GTIs [s]
ontime9	24947.199907124	Sum of GTIs [s]
l2events	485733	Number of level 2 events



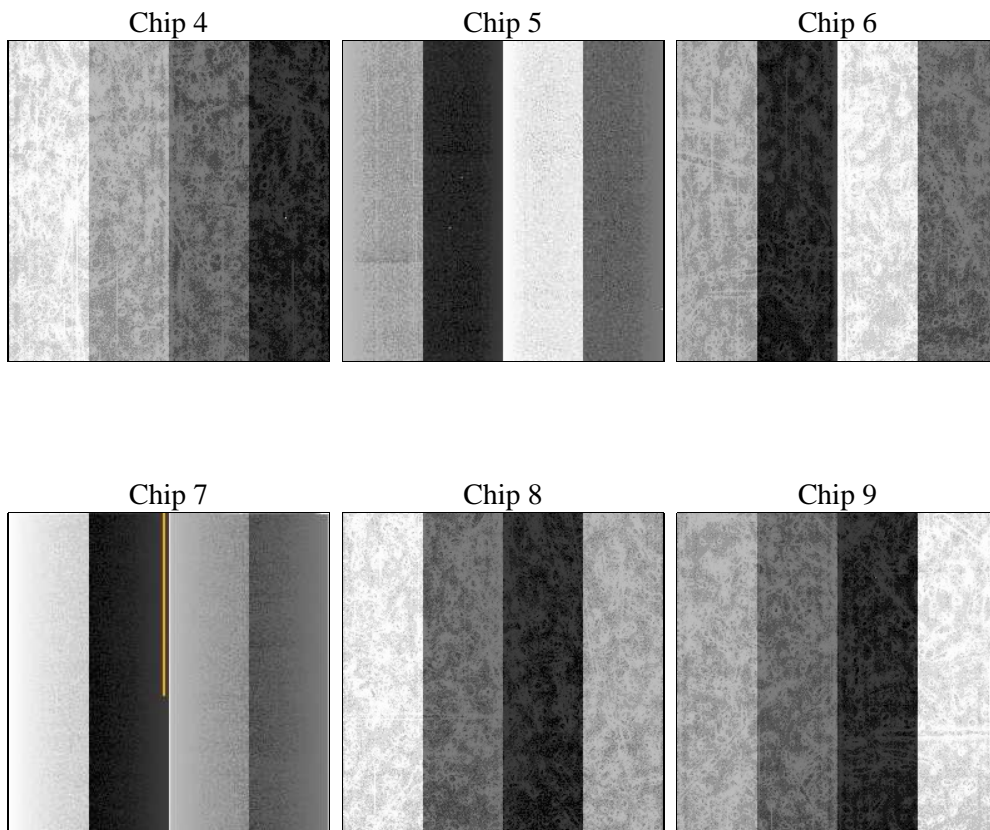
2 OBI

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	8.4.4	Processing system revision	ontime	24947.199907124	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	24947.199907124	Sum of GTIs [s]
date	2012-04-28T16:20:52	Date and time of file creation	ontime5	24947.199907124	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	24943.95893681	Sum of GTIs [s]
			ontime7	24947.199907124	Sum of GTIs [s]
			ontime8	24947.199907124	Sum of GTIs [s]
			ontime9	24947.199907124	Sum of GTIs [s]
			l1events	1863045	Number of level 1 events

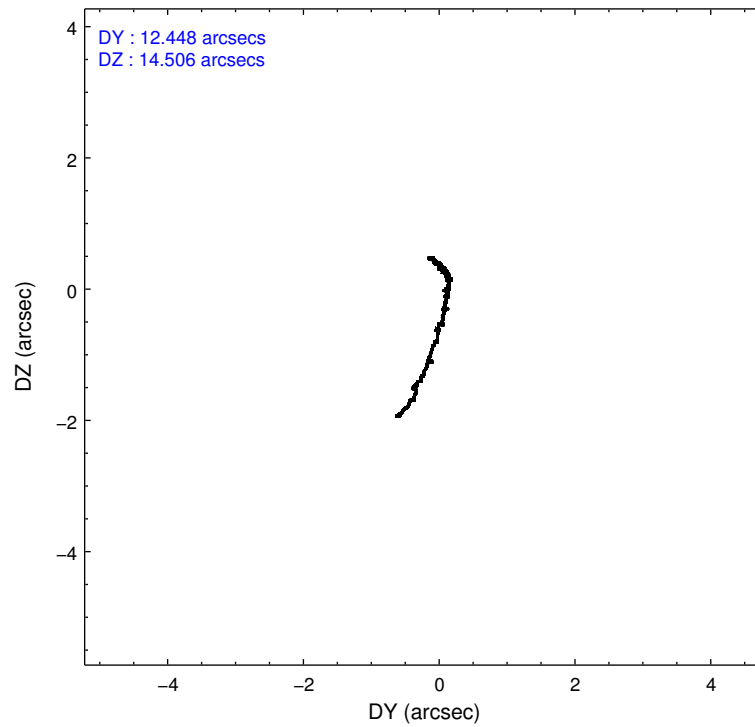
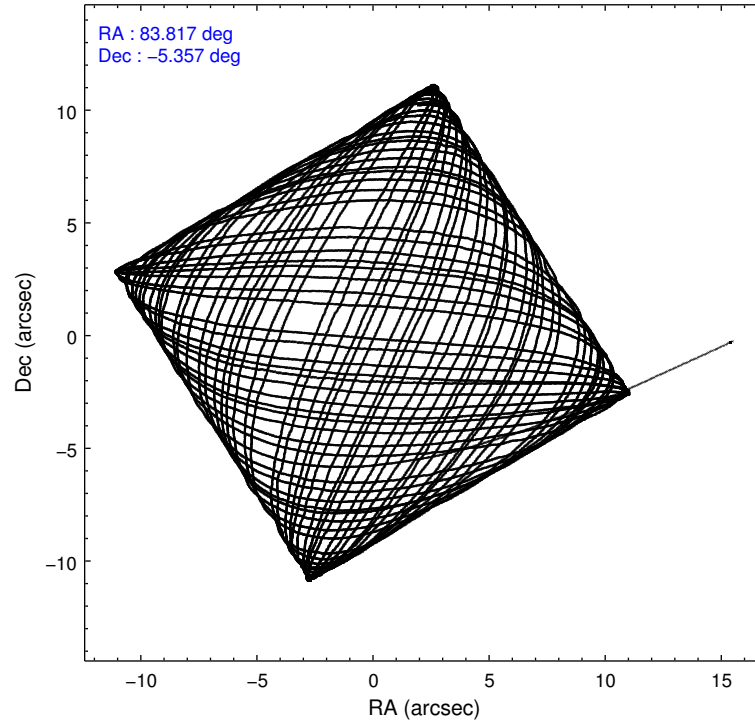
2.1.4 Events

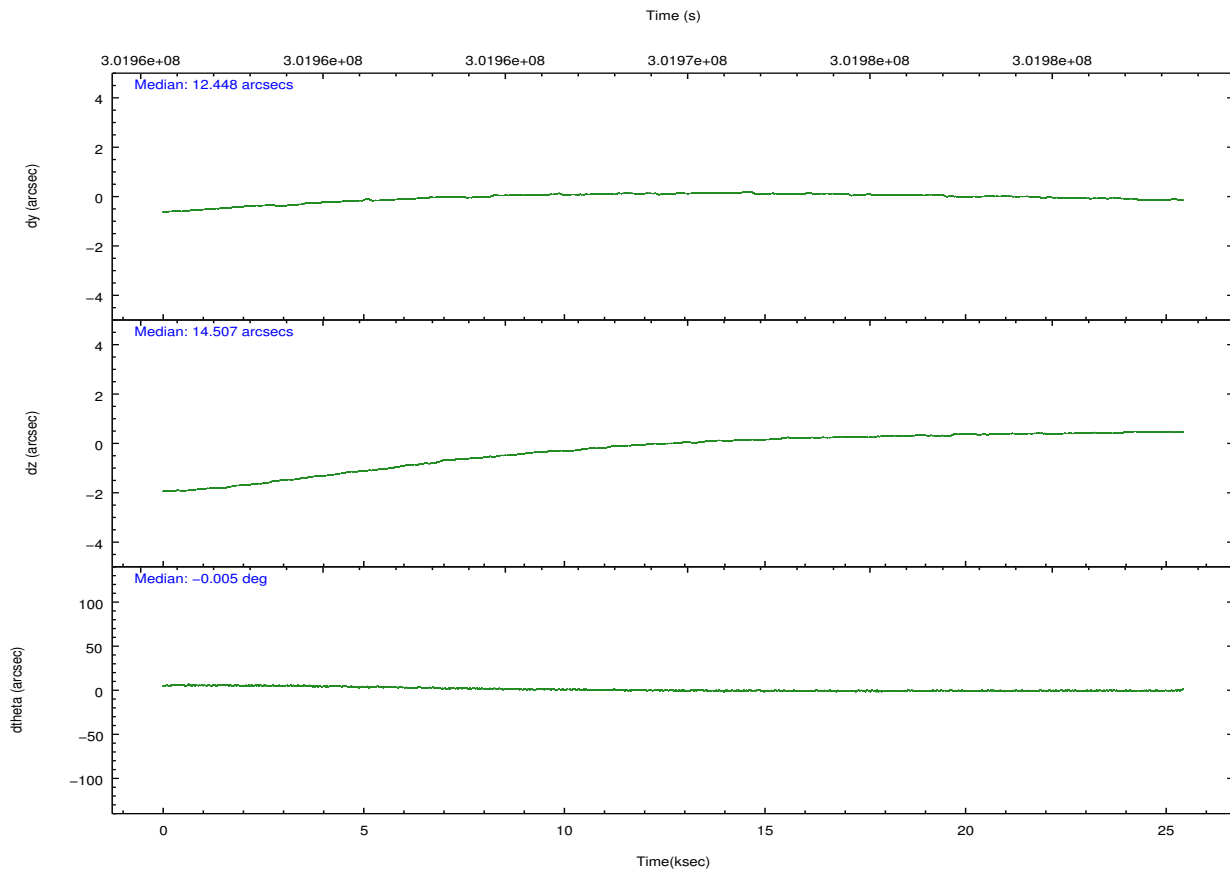
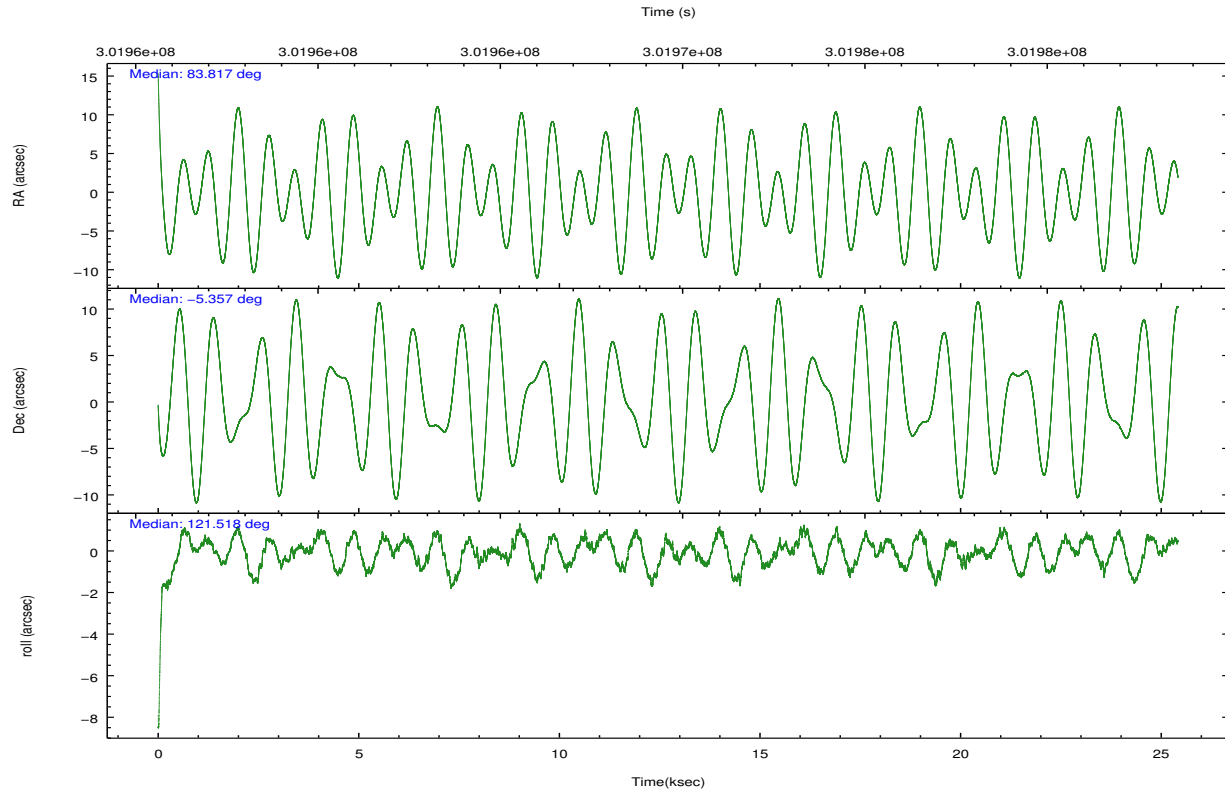
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	273053	371100	270212	375277	323836	249567	grade 0 events	16890	13683	29032	20629	34515	15188
rejected events	238778	198676	218921	196078	238036	216302		6%	3%	10%	5%	10%	6%
rejected %	87%	53%	81%	52%	73%	86%	grade 1 events	284	538	234	625	306	150
								0%	0%	0%	0%	0%	0%
							grade 2 events	6625	53688	8738	38296	17746	6220
								2%	14%	3%	10%	5%	2%
							grade 3 events	3045	6737	3566	16401	7553	3016
								1%	1%	1%	4%	2%	1%
							grade 4 events	3016	6487	3391	16468	7039	2890
								1%	1%	1%	4%	2%	1%
							grade 5 events	10850	26118	11211	32174	15142	12106
								3%	7%	4%	8%	4%	4%
							grade 6 events	4705	91888	6579	87426	18961	5966
								1%	24%	2%	23%	5%	2%
							grade 7 events	227638	171961	207461	163258	222574	204031
								83%	46%	76%	43%	68%	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	83.841643	83.81732333276977	Subarray requested	NONE	NONE
[deg] Pointing Dec	-5.369328	-5.356621018699808	Alternating exposures requested	N	N
[deg] Pointing Roll	121.367115	121.5214612148574	[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)	301957314.184000	301956082.01101			
Observation start date	2007-07-27T21:00:49	2007-07-27T20:41:22			
[s] Observation end time (MET)	301982314.184000	301983318.31232			
Observation end date	2007-07-28T03:57:29	2007-07-28T04:15:18			
Read mode	TIMED	TIMED			

2.3 Aspect



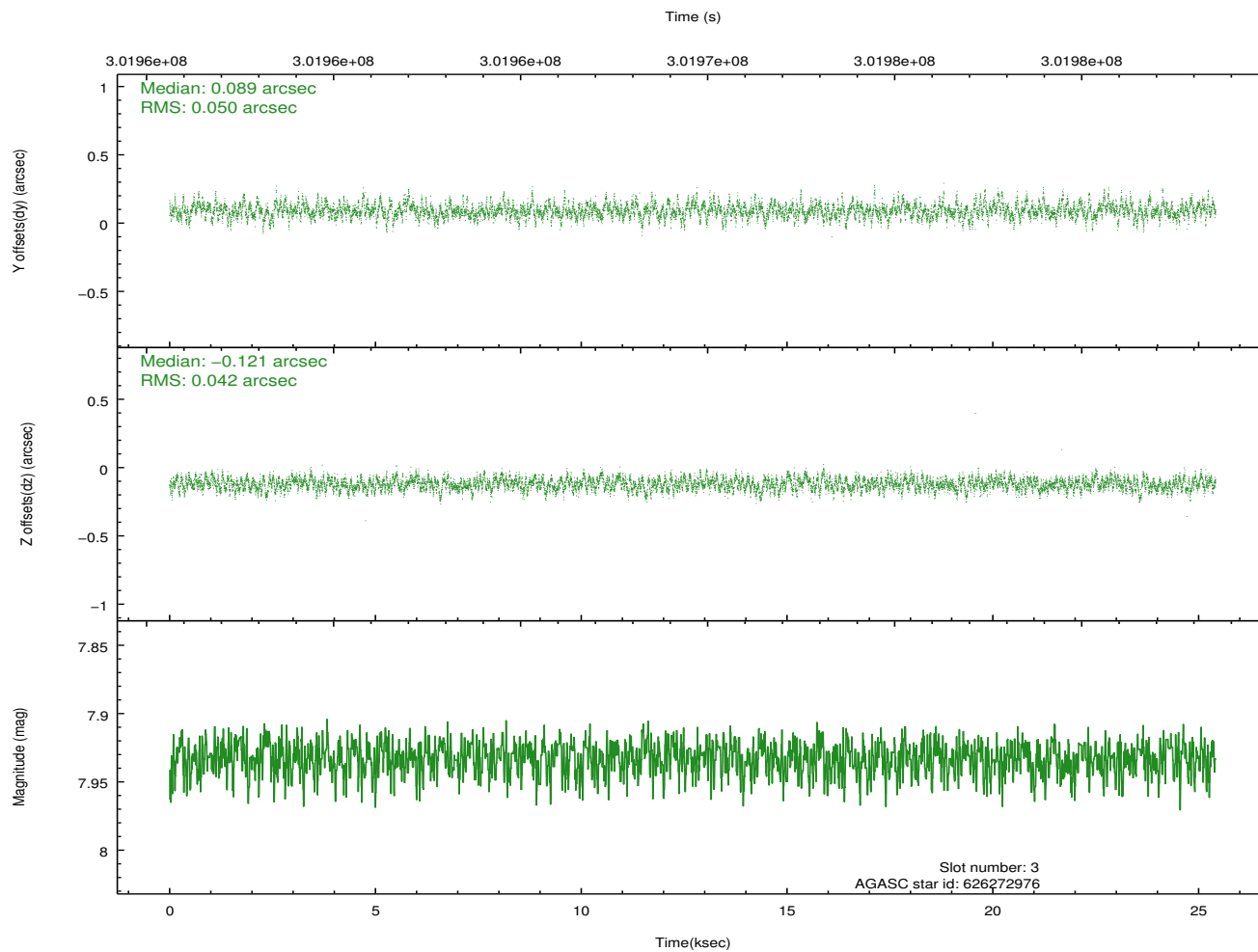
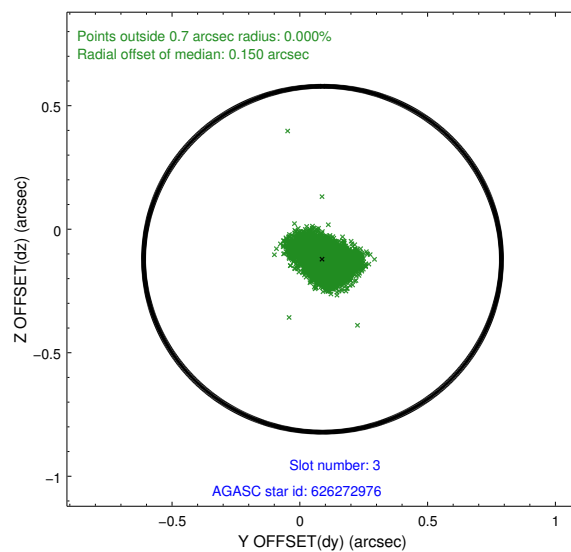
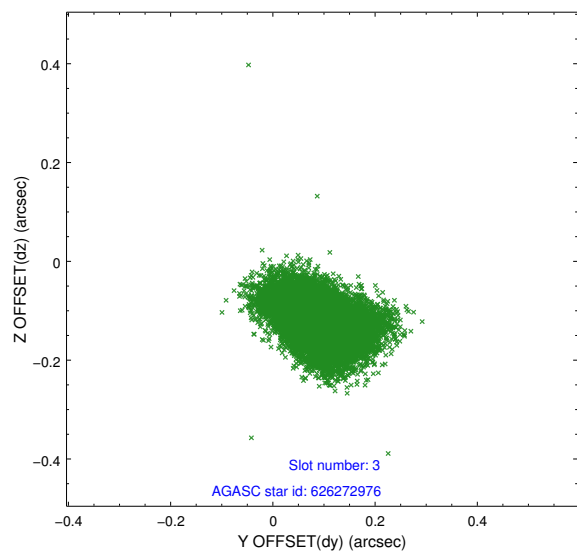


Slot Statistics

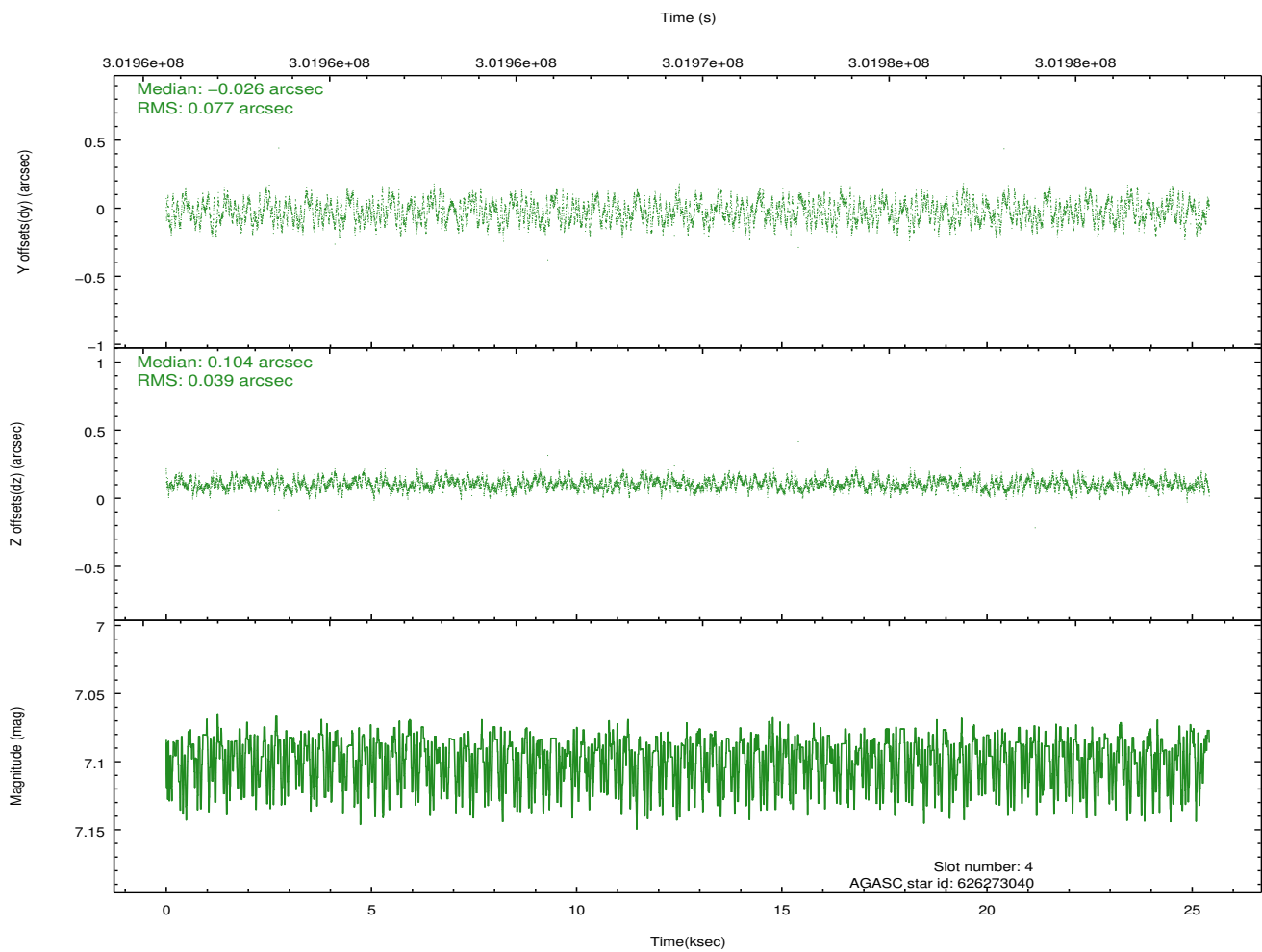
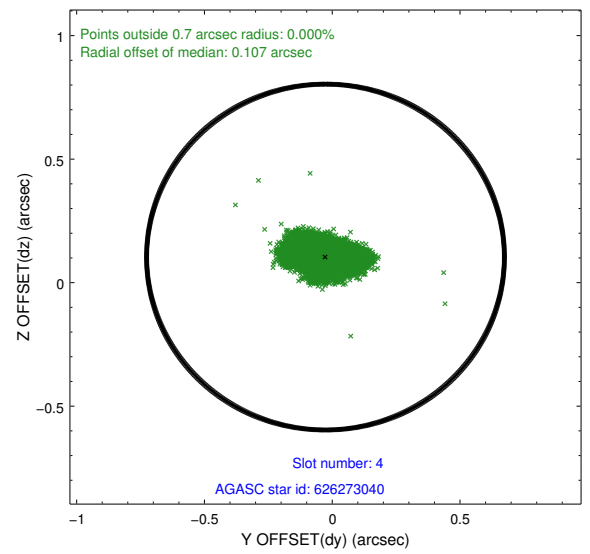
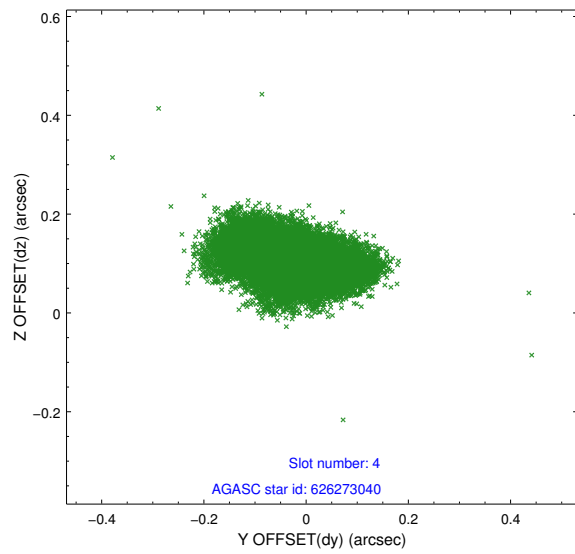
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	6199	0.052	-0.039	0.017	0.036	0.000000	0.000000	930.78	-1731.18
1	FID	ACIS-S-4	7.19	6200	0.112	0.007	0.016	0.034	0.000000	0.000000	2148.31	172.90
2	FID	ACIS-S-5	7.22	6200	-0.190	0.044	0.012	0.024	0.000000	0.000000	-1818.18	166.67
3	GUIDE	626272976	7.93	12397	0.089	-0.121	0.069	0.116	83.795875	-5.926912	-1628.54	1184.73
4	GUIDE	626273040	7.10	12396	-0.026	0.104	0.094	0.145	84.062610	-5.647920	-1268.59	-153.53
5	GUIDE	625745136	7.21	12400	-0.160	0.043	0.065	0.102	83.600341	-4.804339	2187.00	-319.29
6	GUIDE	625745144	7.84	12399	-0.056	0.053	0.073	0.122	83.888985	-4.837539	1546.56	-1141.24
7	GUIDE	626272880	7.64	12398	0.135	-0.079	0.073	0.119	83.815609	-6.032748	-1990.50	1322.64

2.4 Star Slots

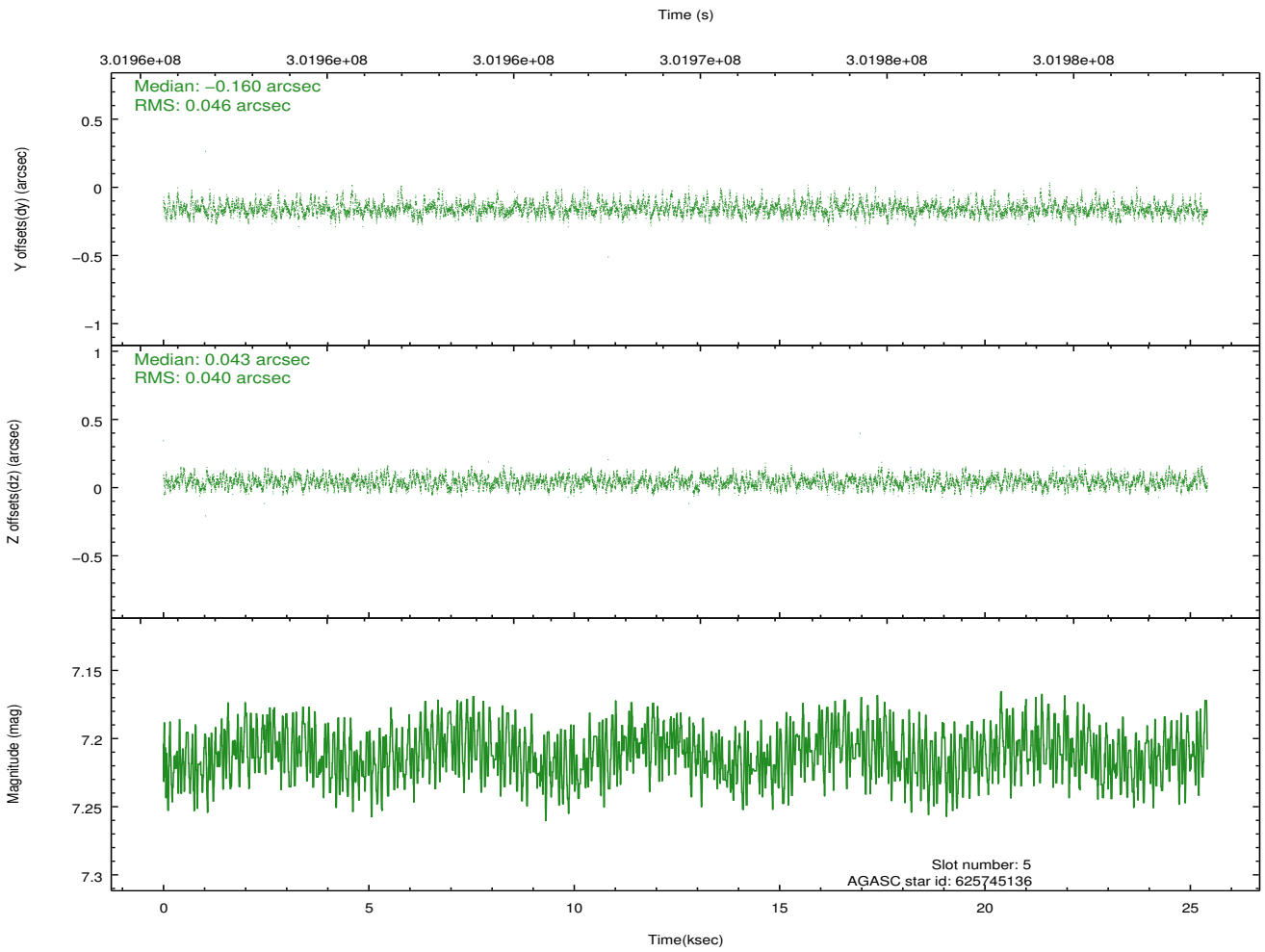
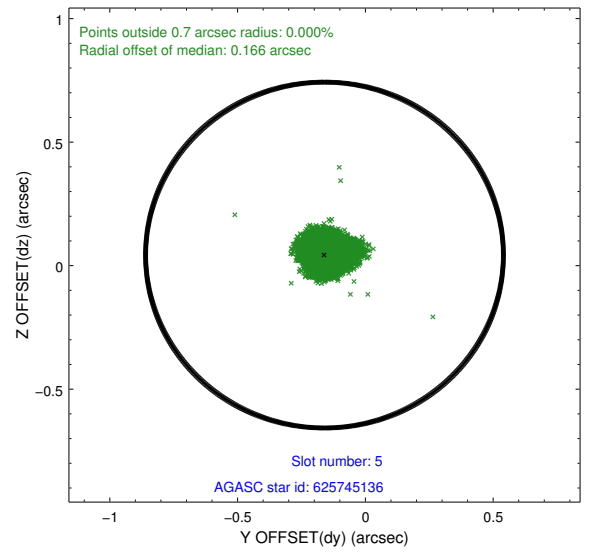
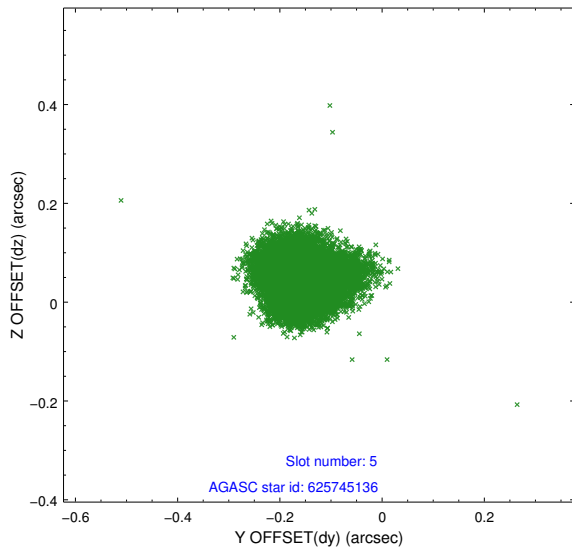
2.4.1 Slot 3



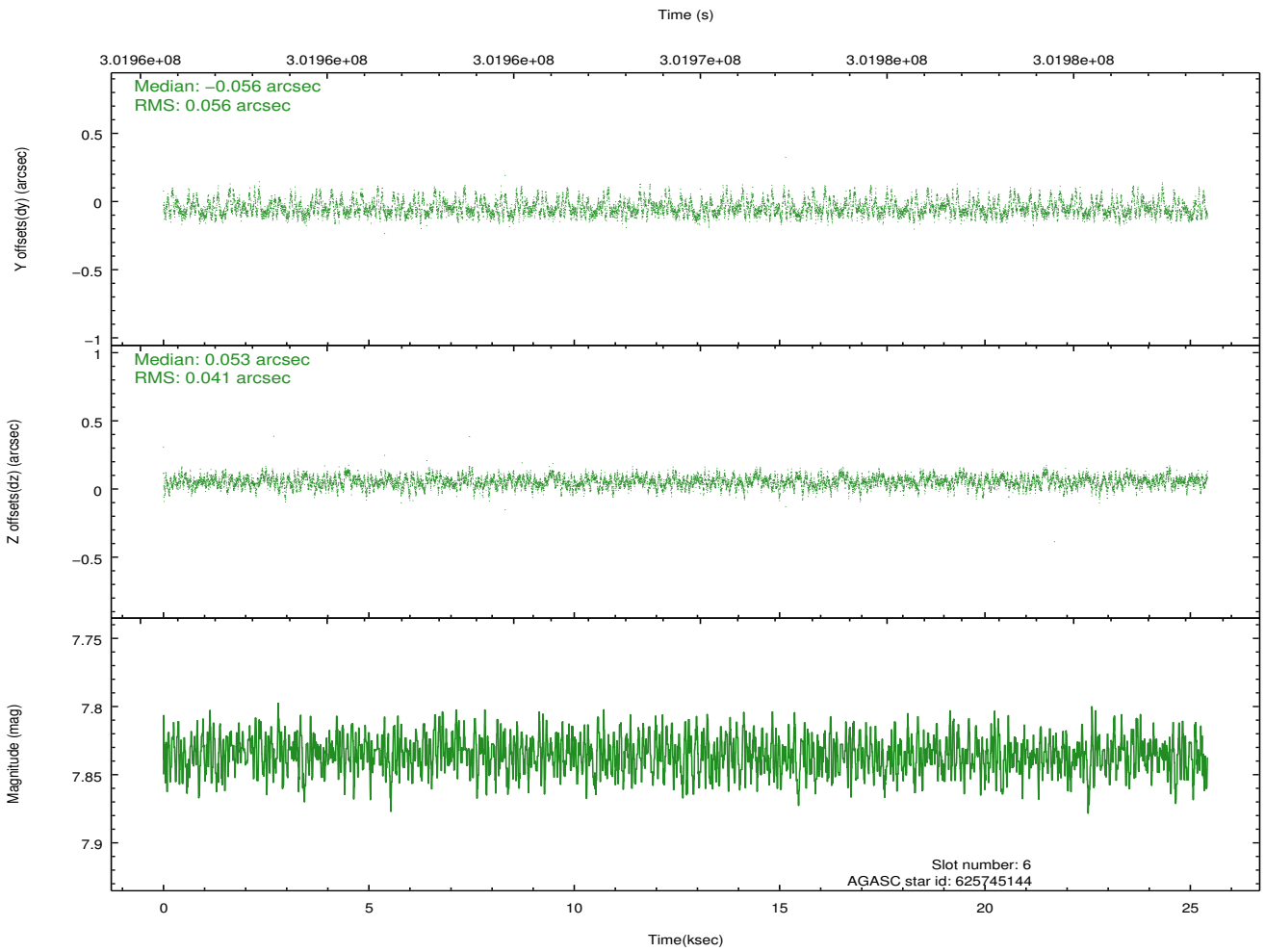
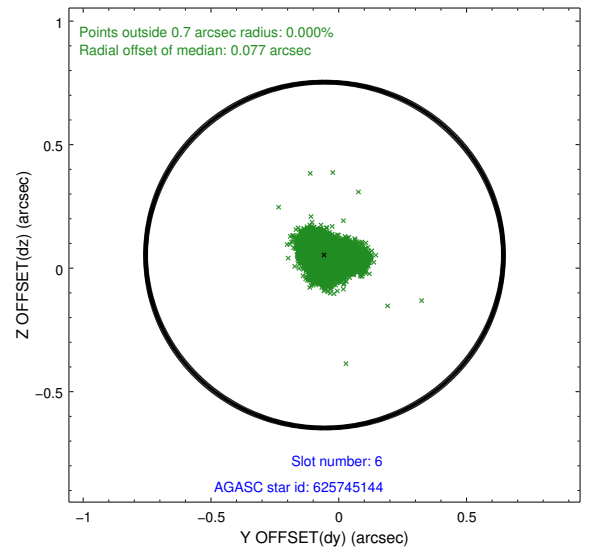
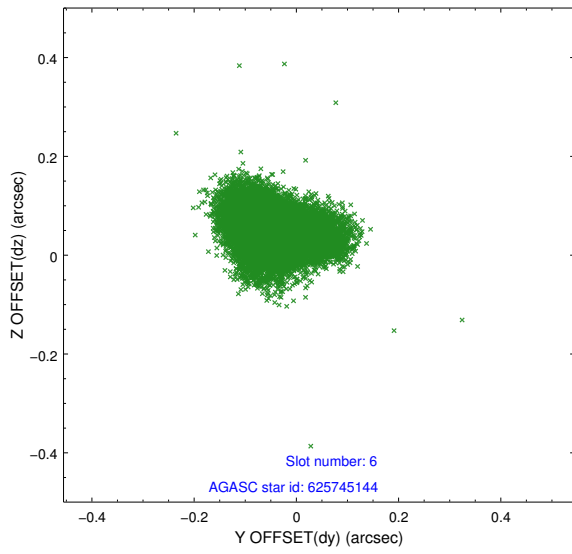
2.4.2 Slot 4



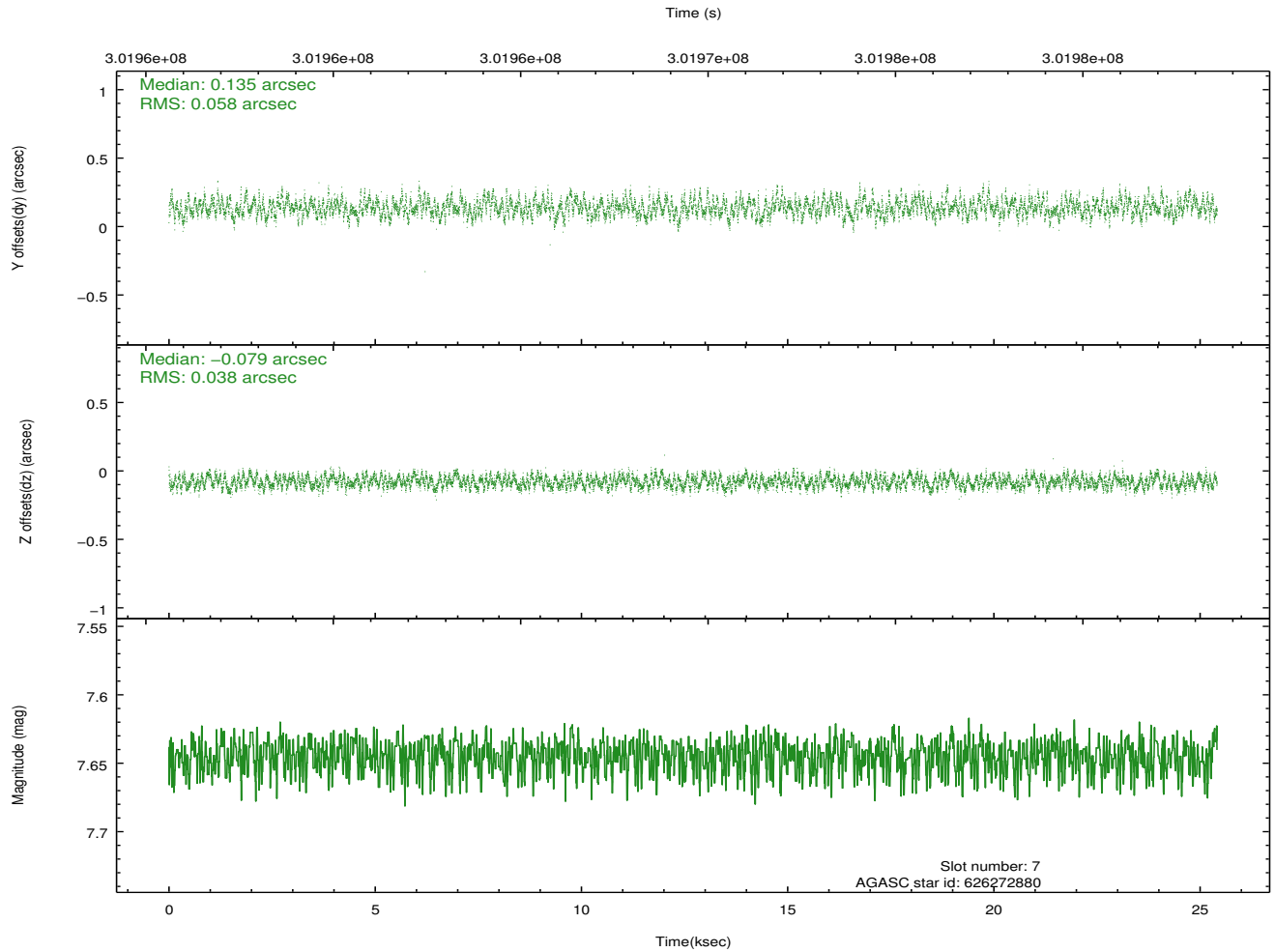
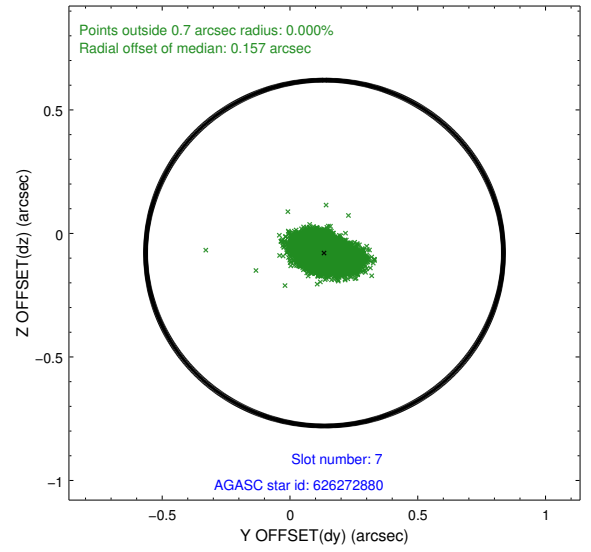
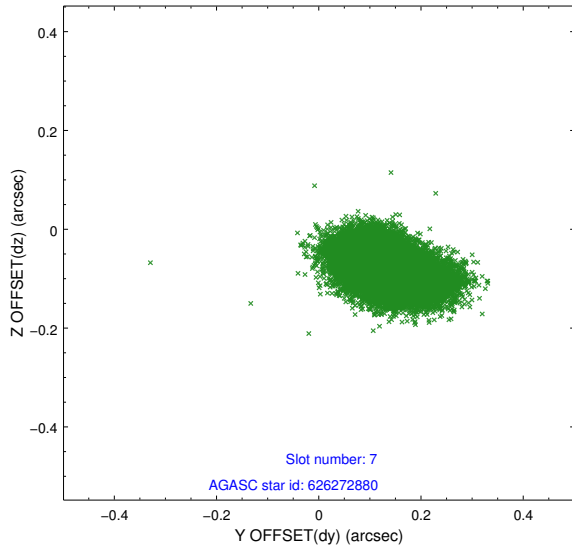
2.4.3 Slot 5



2.4.4 Slot 6

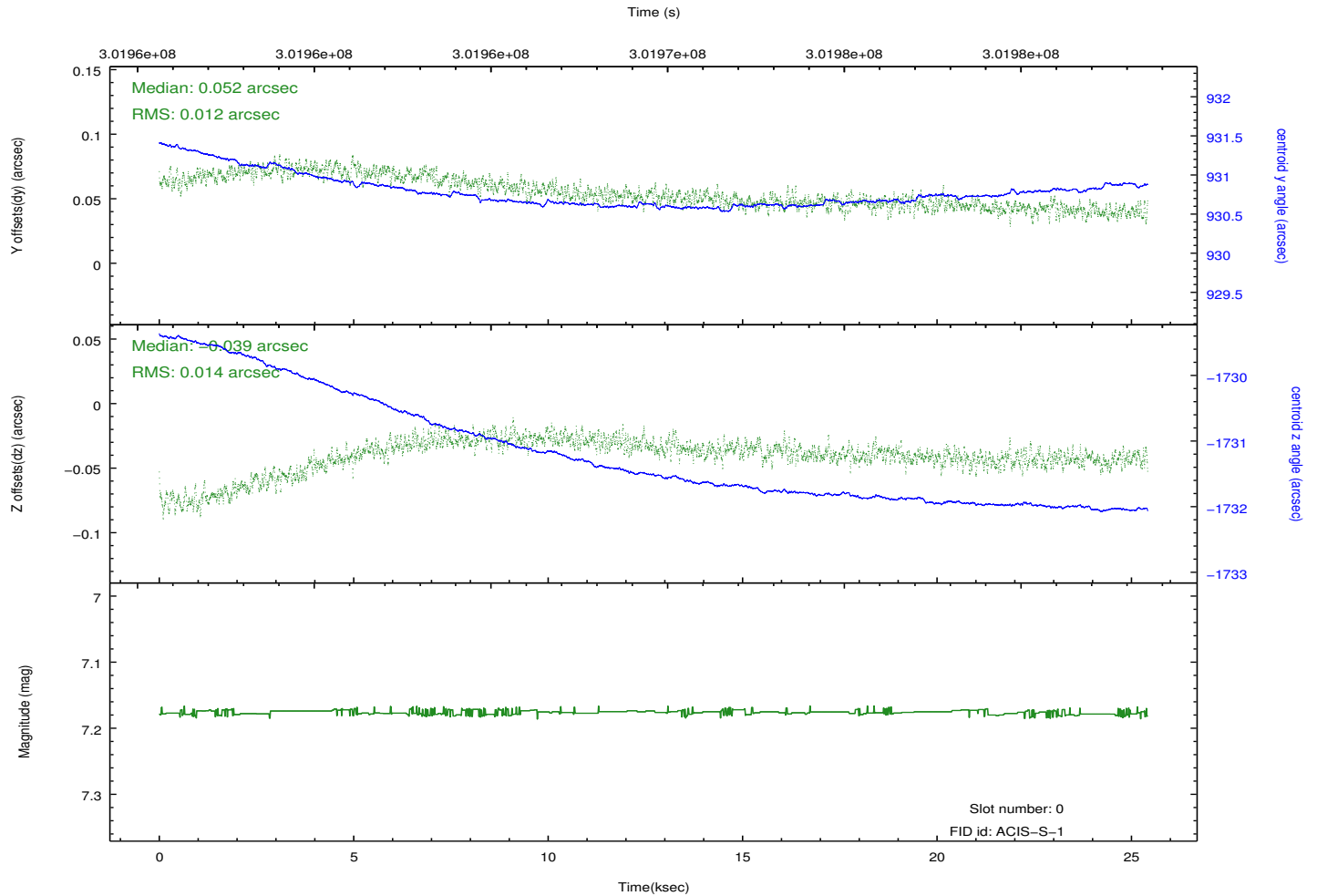
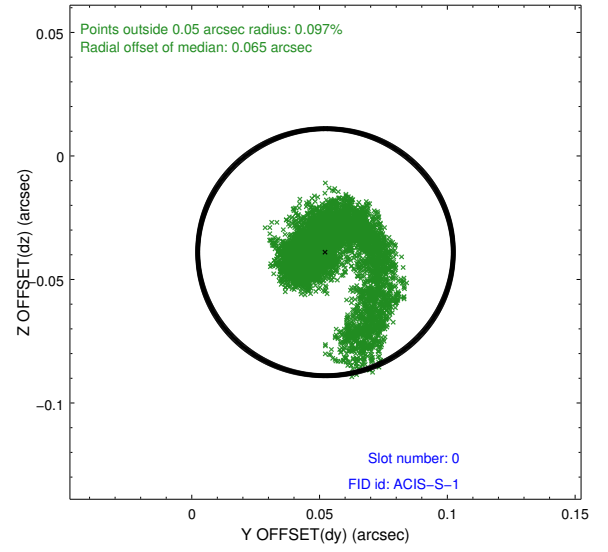
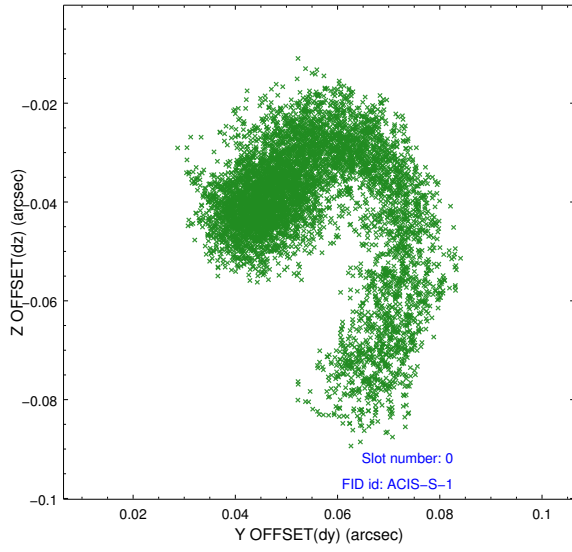


2.4.5 Slot 7

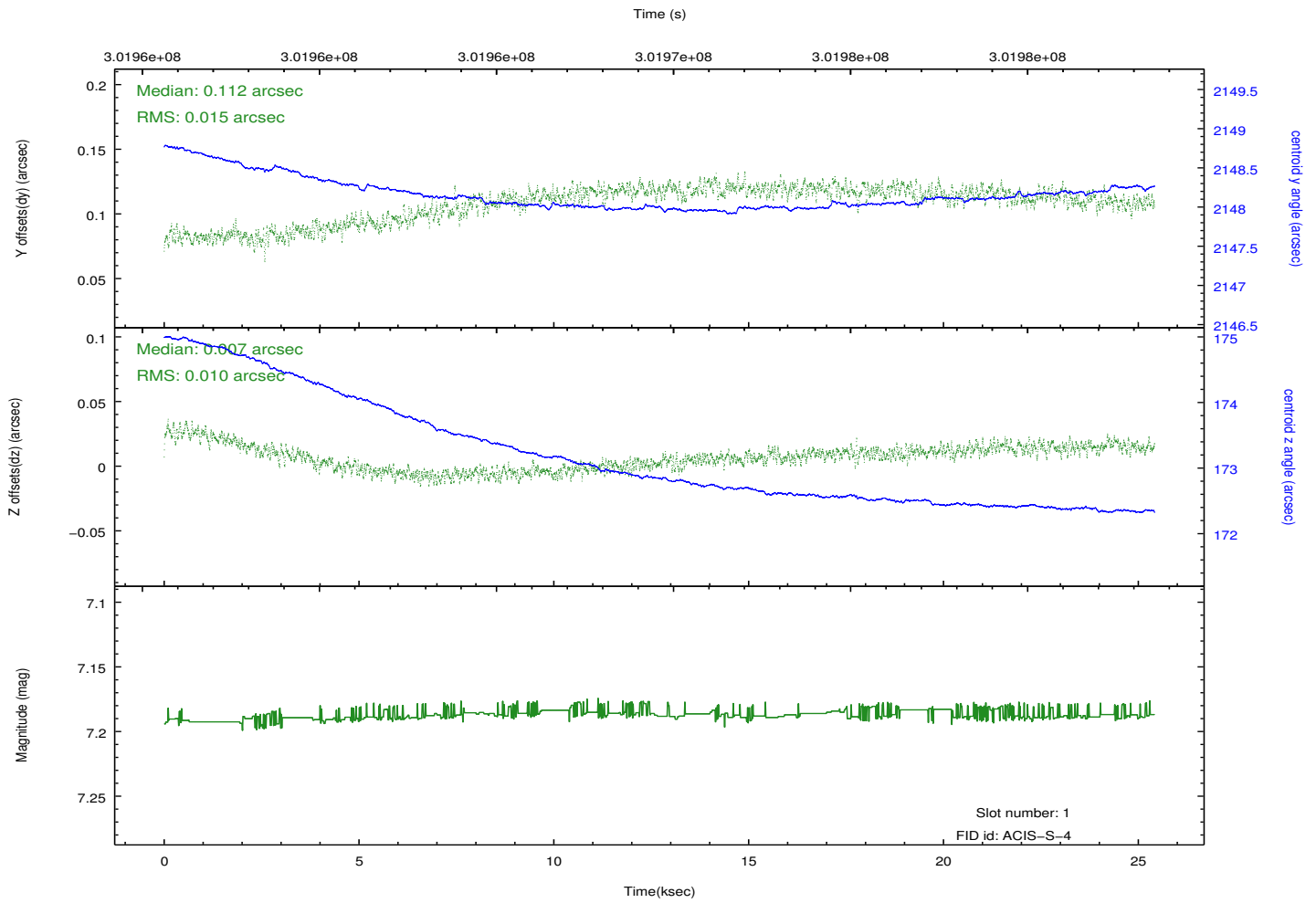
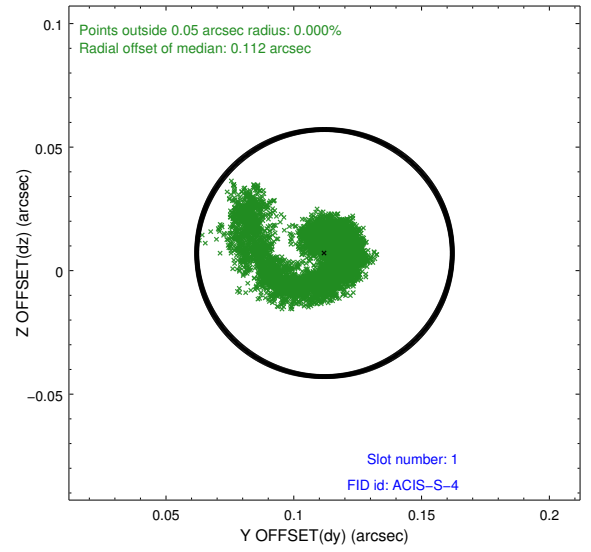
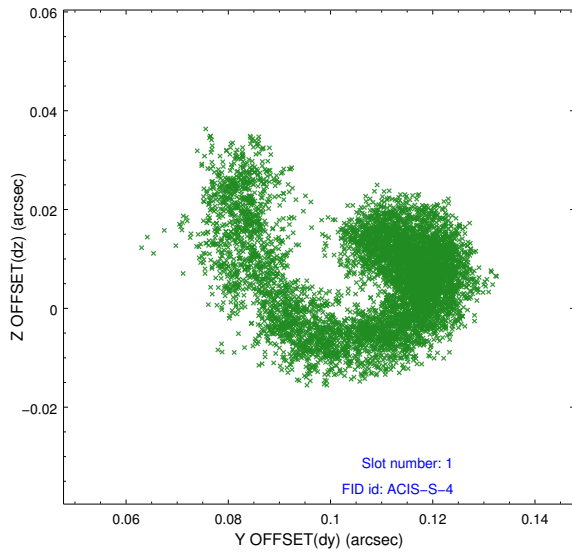


2.5 FID Slots

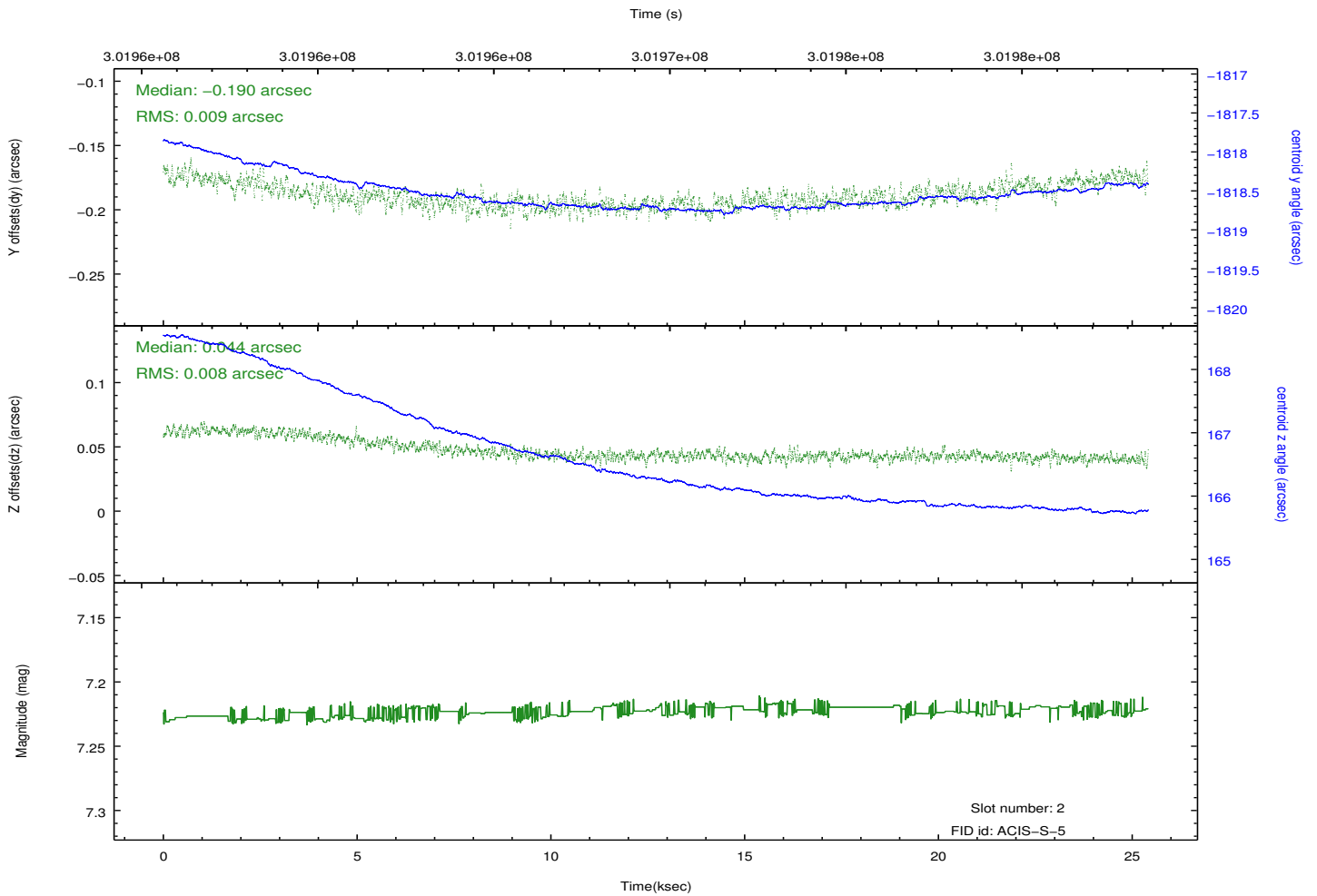
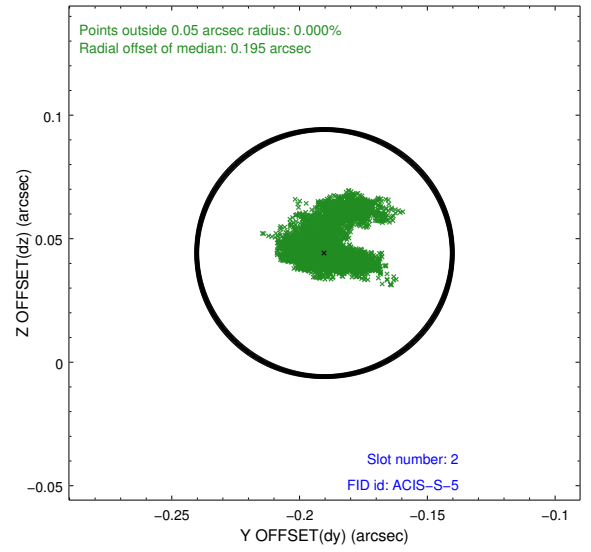
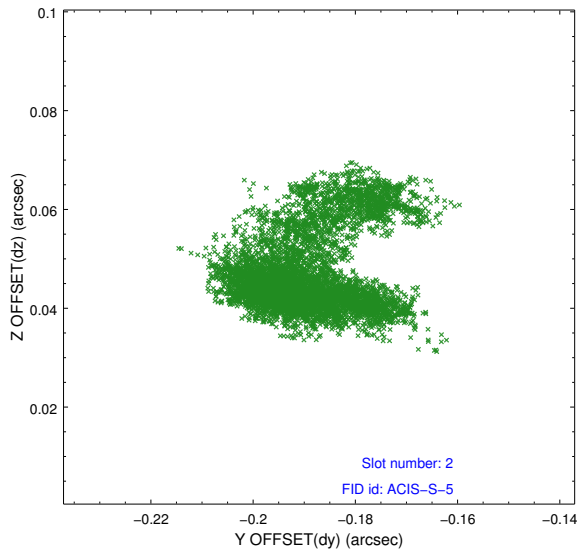
2.5.1 Slot 0



2.5.2 Slot 1

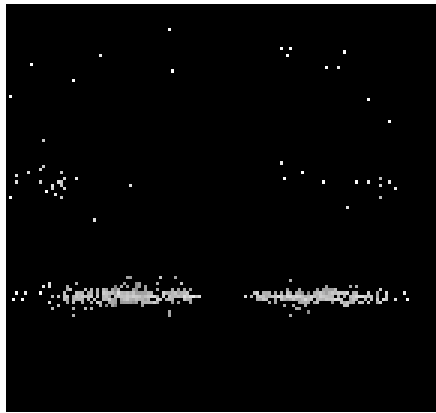


2.5.3 Slot 2

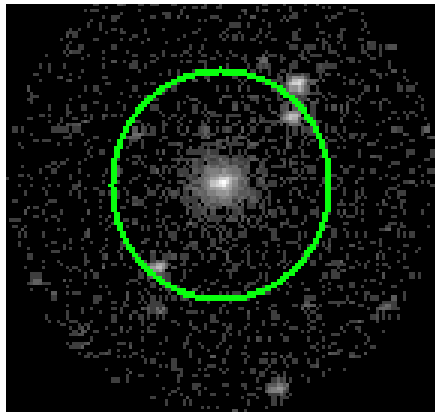


3 Gratings

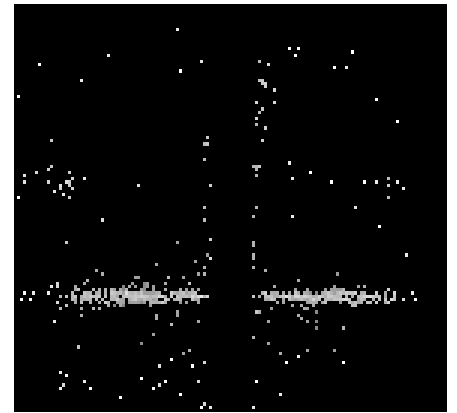
3.1 HEG Arm



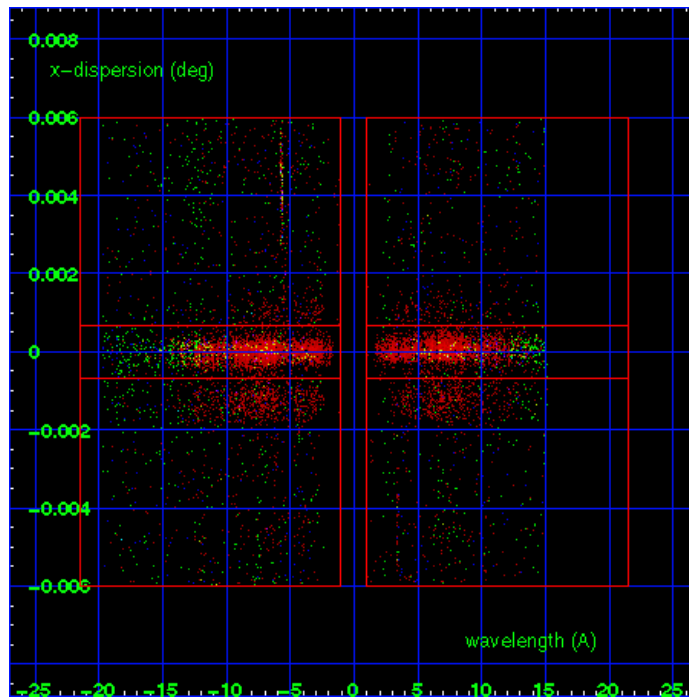
HEG Order Sort 123



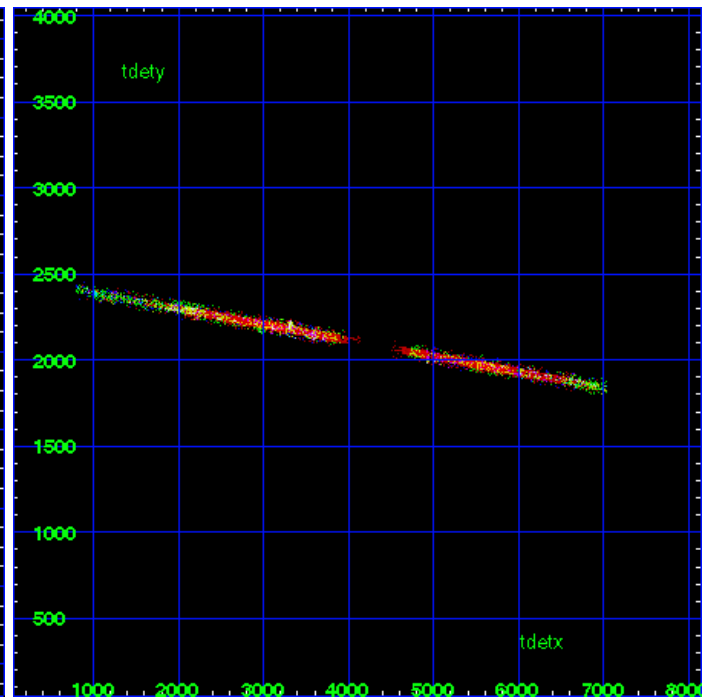
HEG Zero Order



HEG Order Sort ALL

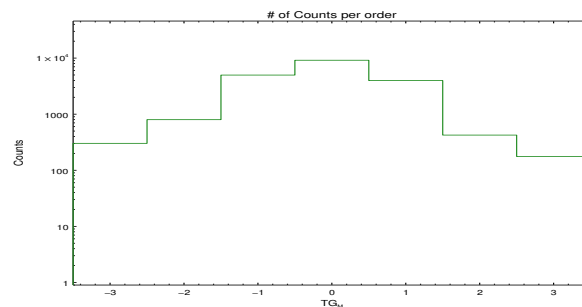


Spot Image HEG

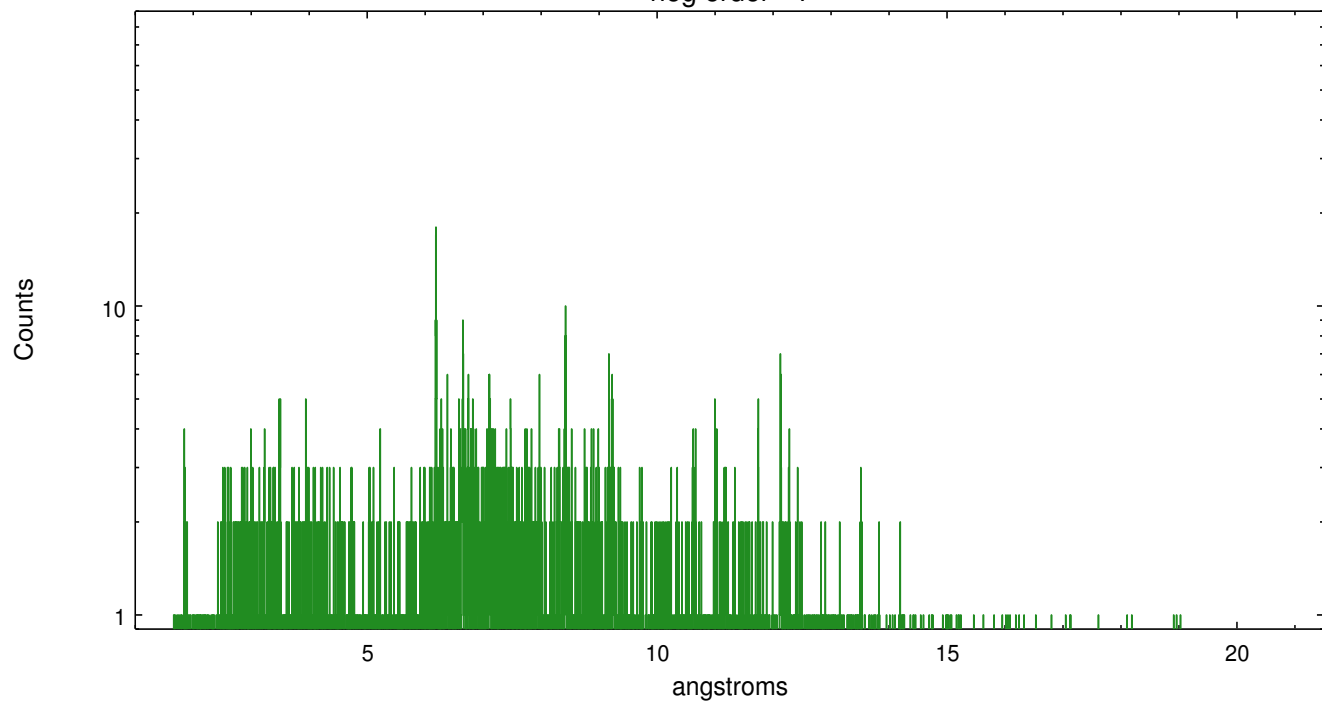


Full Detector HEG

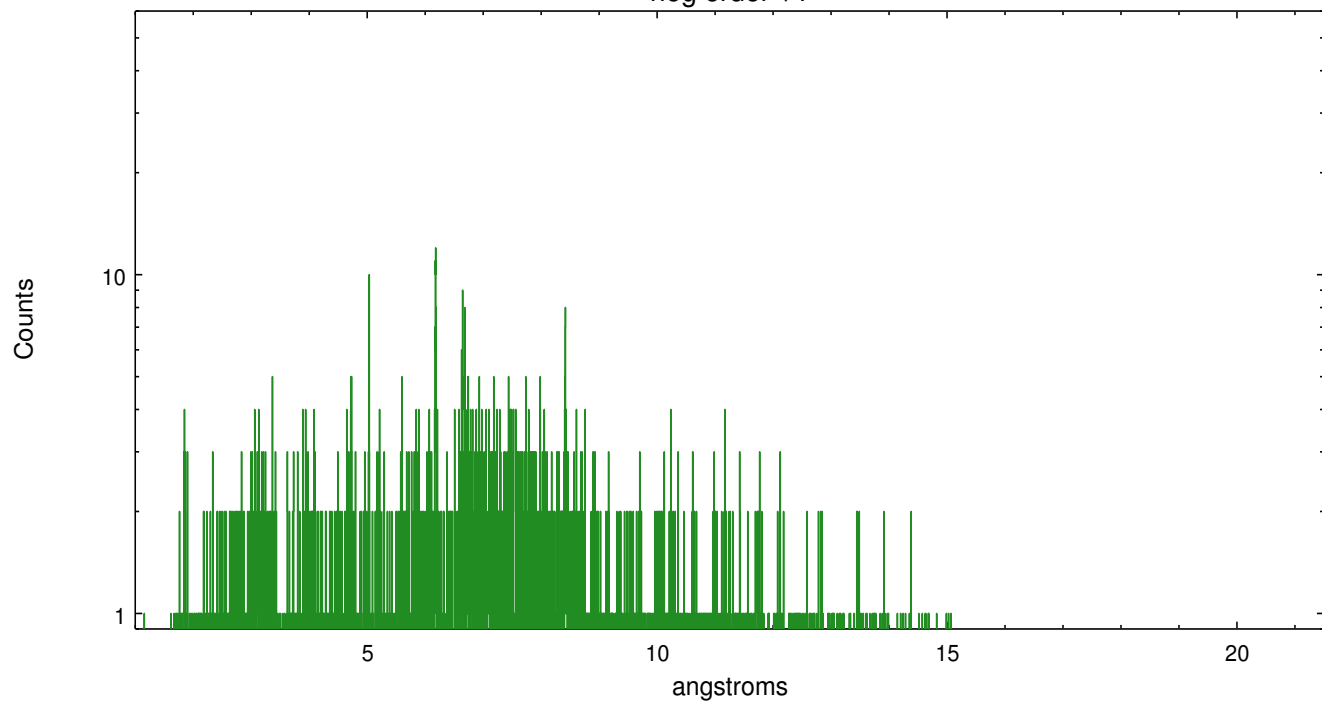
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	302	799	4979	9150	3973	424	176



heg order -1



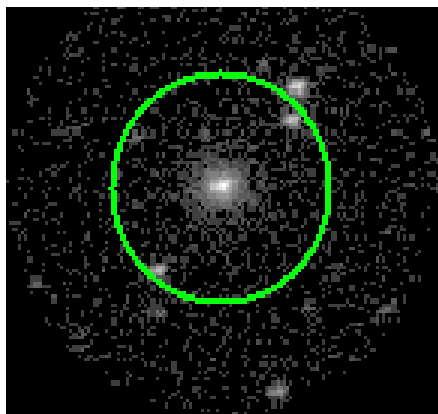
heg order +1



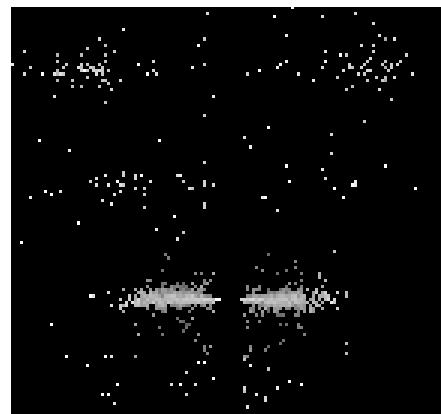
3.2 MEG Arm



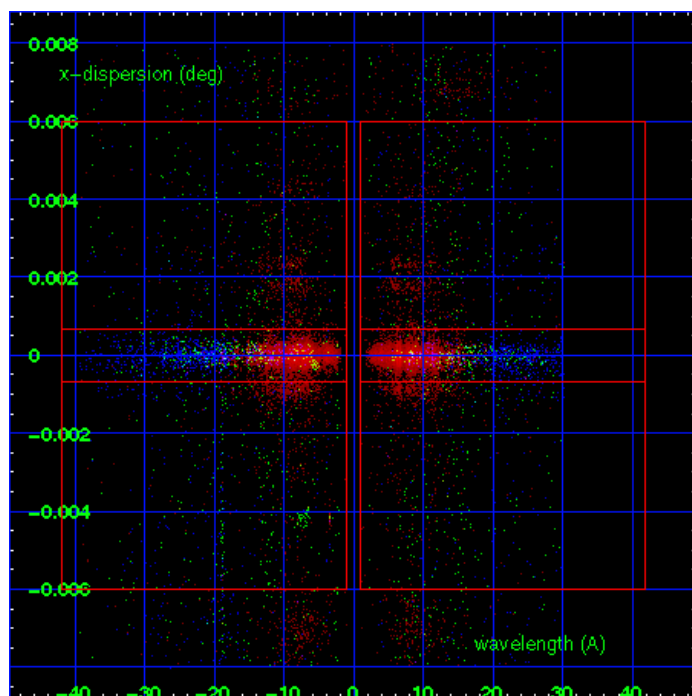
MEG Order Sort 123



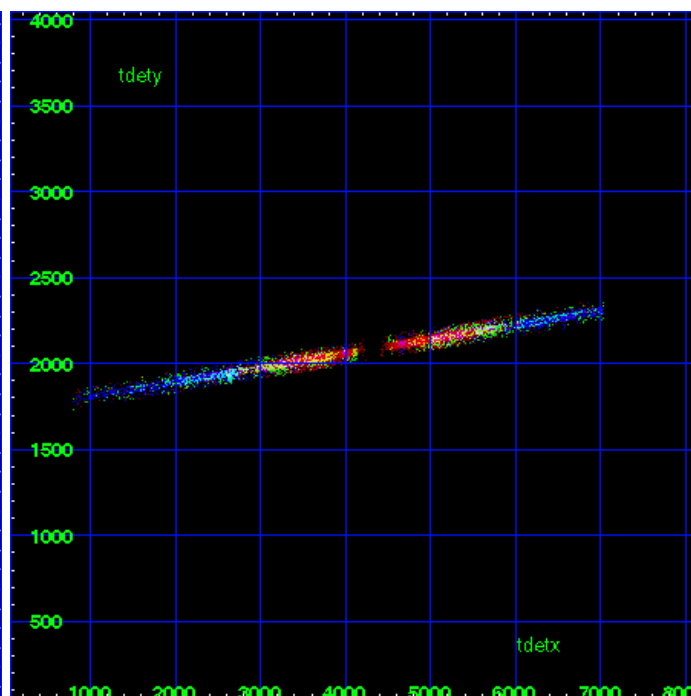
MEG Zero Order



MEG Order Sort ALL

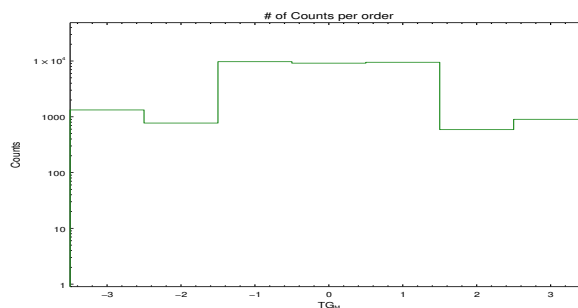


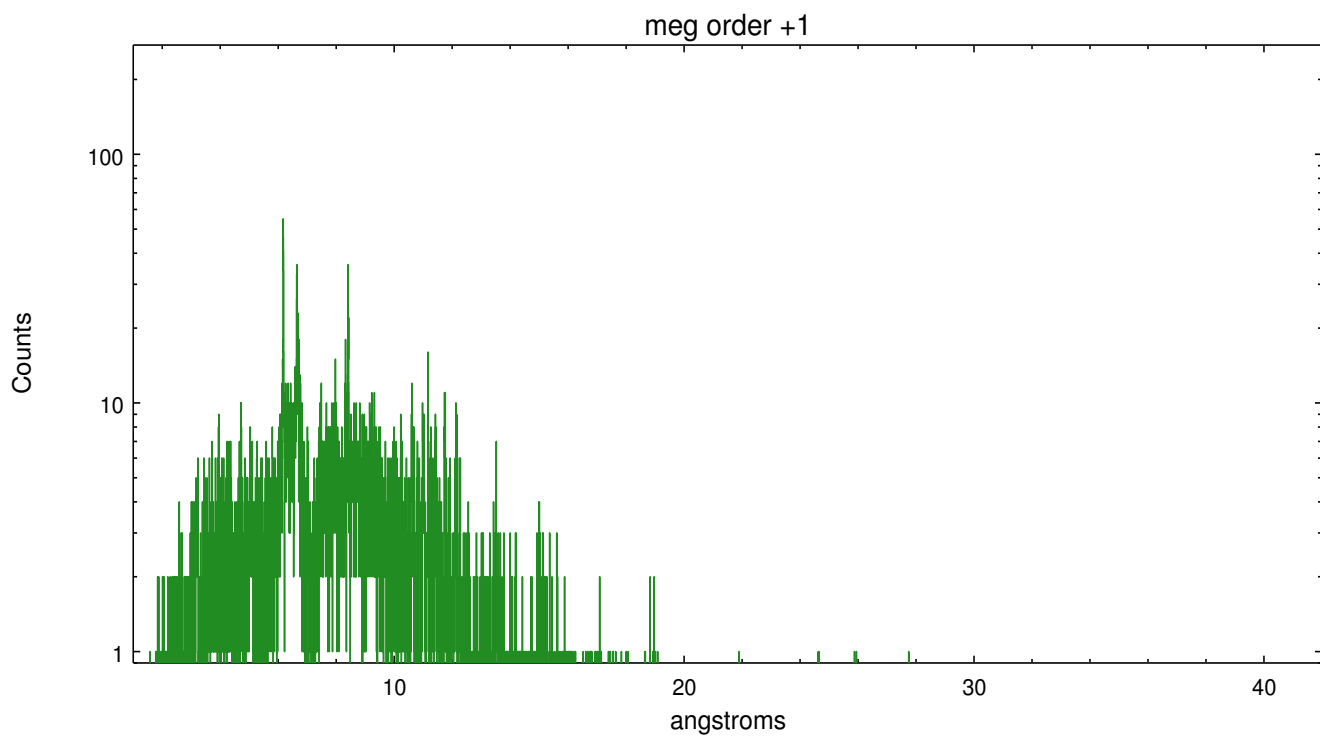
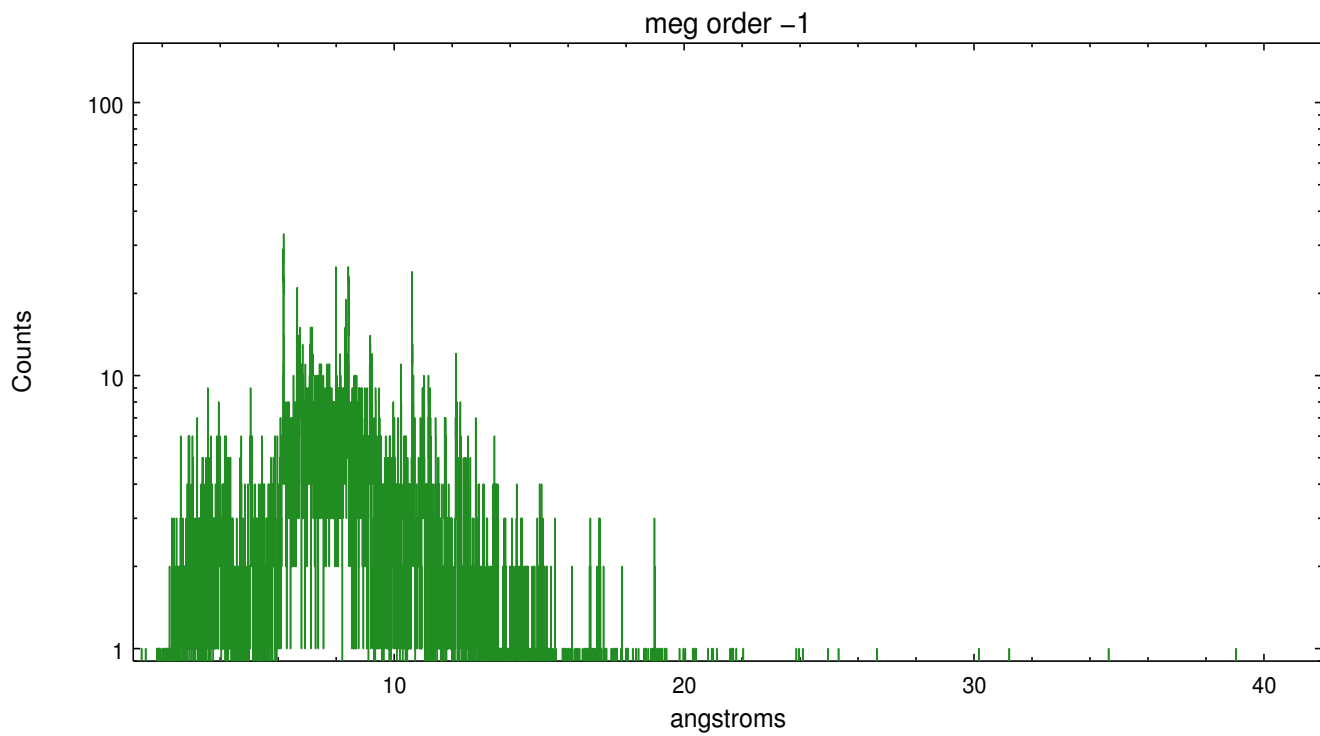
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1327	772	9731	9150	9491	589	901





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.9471999

A.2 Comments

Warning: very crowded field; spectral contamination is likely.
Spectral extraction has been manually centered on theta 1 Ori C using SIMBAD coordinates for this processing.

The newly determined zeroth order coordinates (x=4087.1885, y=3854.5992) have been placed in the *src1a.fits file, replacing the coordinates determined by tgdetect, which found a different source in the field. There are multiple dispersed spectra associated with different sources in this observation. Note that these corrected coordinates of the zeroth order cannot be reproduced by running tgdetect on the data.