

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 6 - L2 Version 4
Chandra X-Ray Center

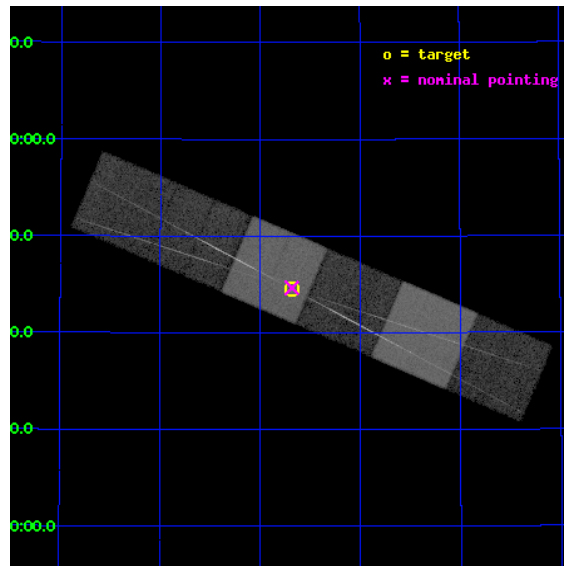
L2 Processing Date : Sep 1 2012

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1 Front

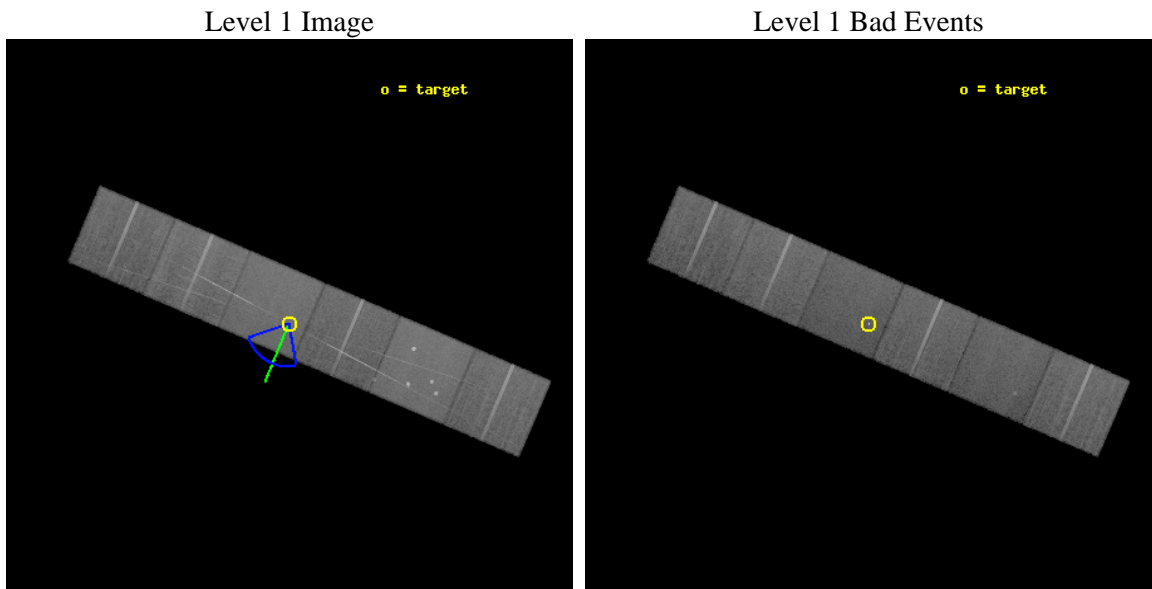
seq_num	200004	Sequence number
obs_id	6	Observation id
title	STELLAR CORONAL SPECTROSCOPY OF COOL STARS	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	AR LAC-1 ECLIPSE (1)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742222	Observer's specified target Dec [deg]
ra_nom	332.17066206241	Nominal RA [deg]
dec_nom	45.744324011438	Nominal Dec [deg]
roll_nom	203.13799381657	Nominal Roll [deg]
revision	4	Processing version of data
ontime	32505.062314957	Sum of GTIs [s]
livetime	32093.463643727	Livetime [s]
ontime4	32501.86239472	Sum of GTIs [s]
ontime5	32505.021274954	Sum of GTIs [s]
ontime6	32501.739274725	Sum of GTIs [s]
ontime7	32505.062314957	Sum of GTIs [s]
ontime8	32501.698354349	Sum of GTIs [s]
ontime9	32501.657214642	Sum of GTIs [s]
l2events	314346	Number of level 2 events



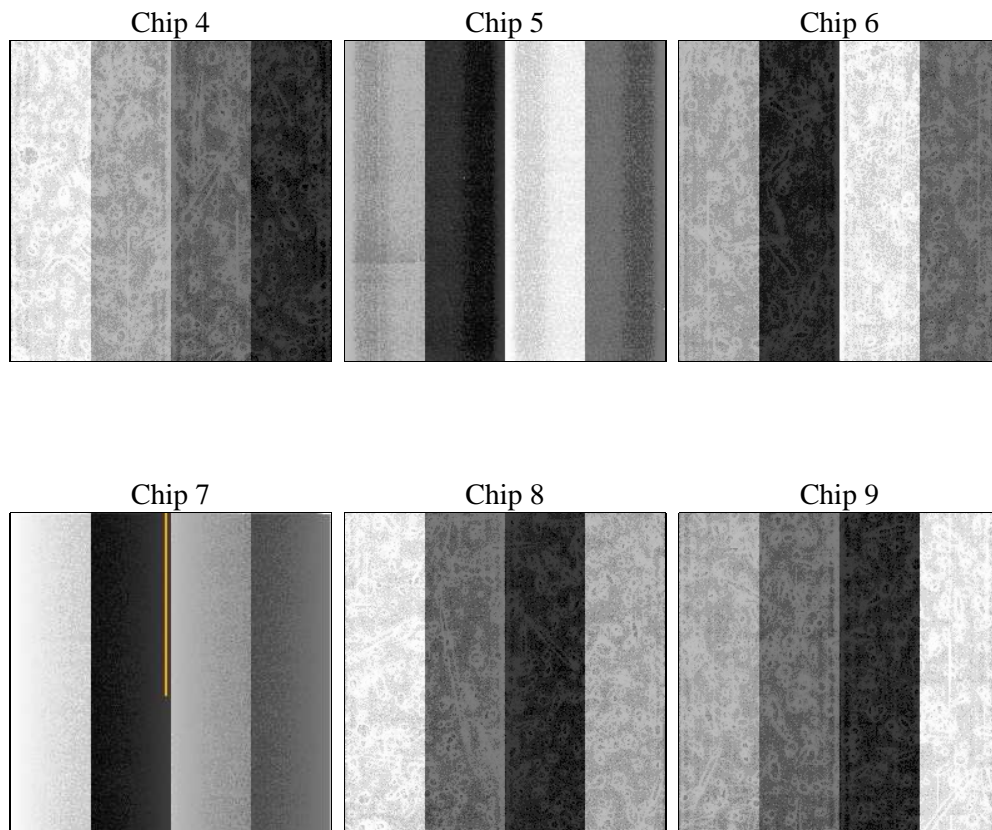
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32650.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	32505.062314957	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime4	32501.86239472	Sum of GTIs [s]
date	2012-09-01T16:02:42	Date and time of file creation	ontime5	32505.021274954	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	32501.739274725	Sum of GTIs [s]
			ontime7	32505.062314957	Sum of GTIs [s]
			ontime8	32501.698354349	Sum of GTIs [s]
			ontime9	32501.657214642	Sum of GTIs [s]
			l1events	1365326	Number of level 1 events

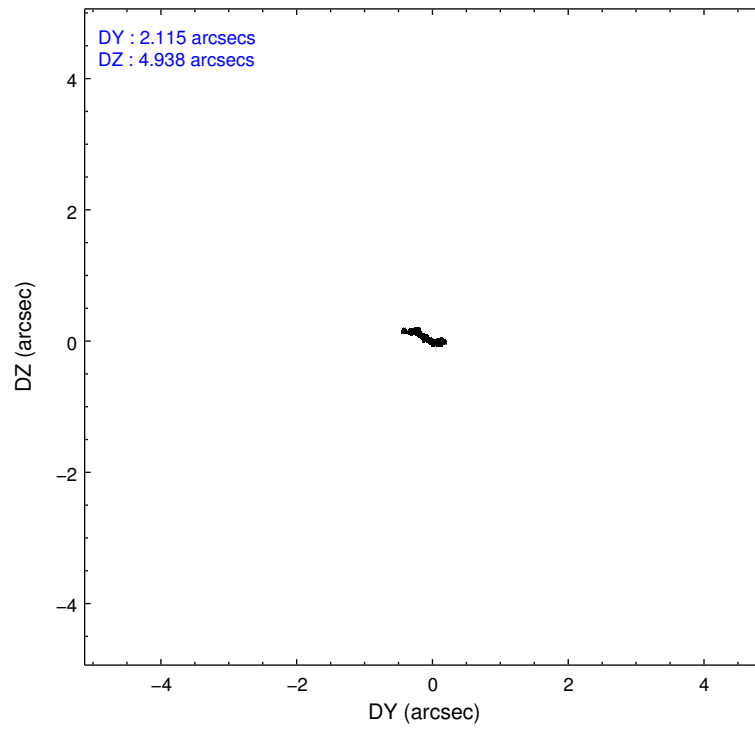
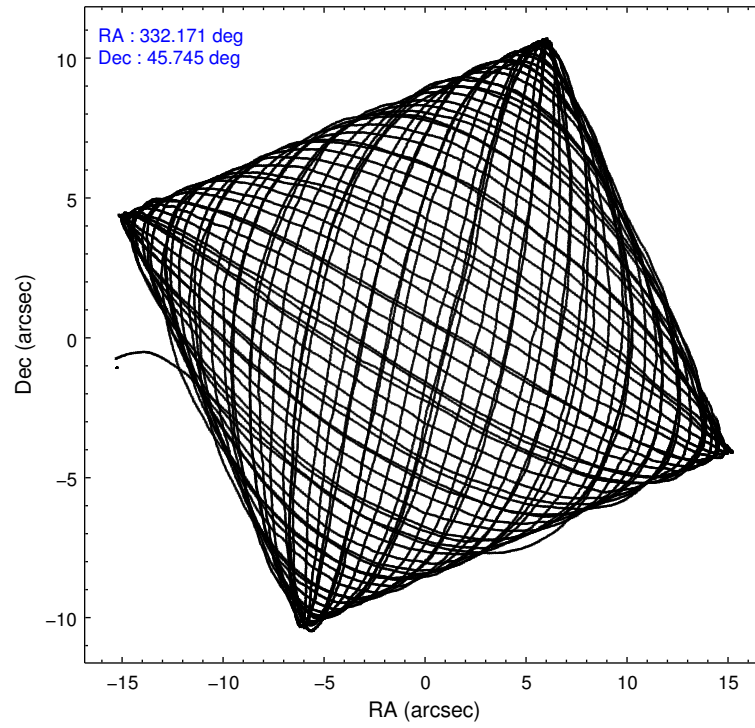
2.1.4 Events

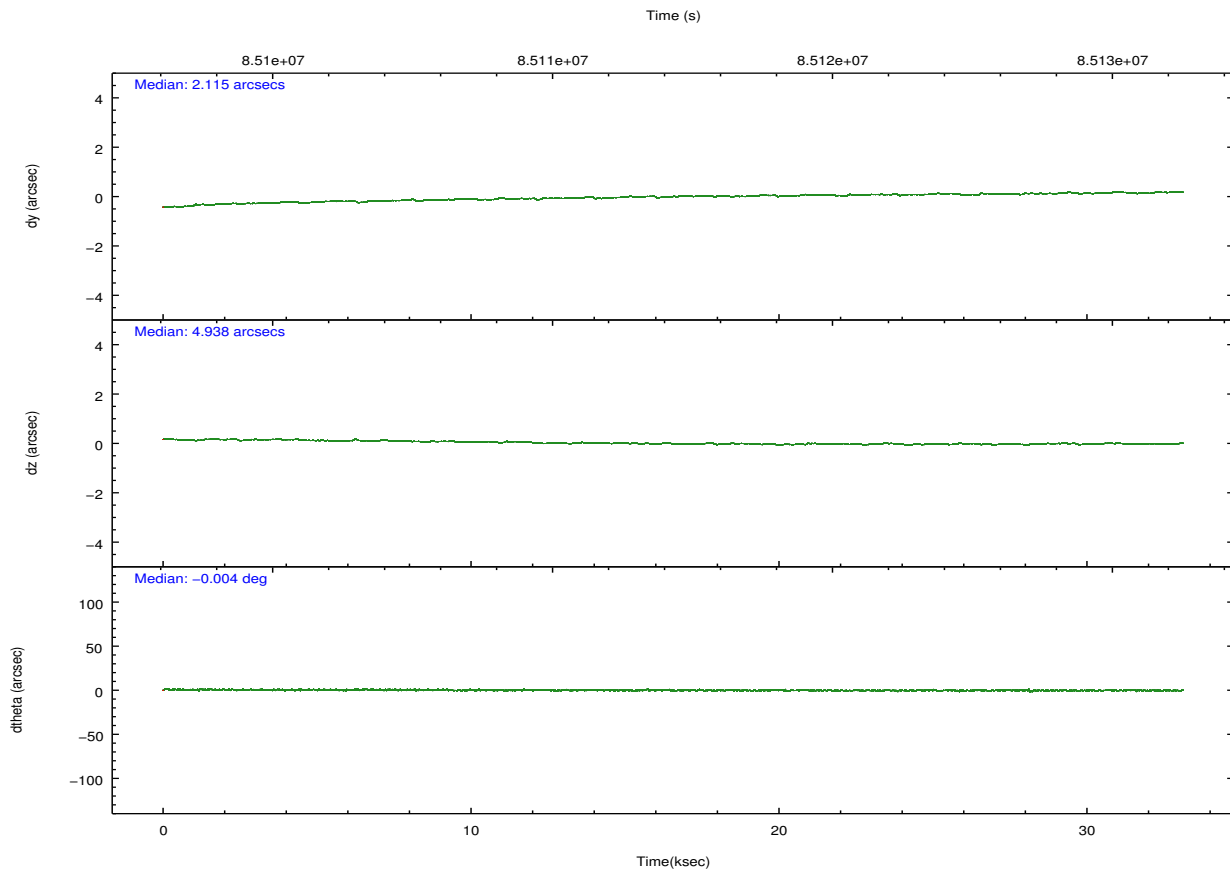
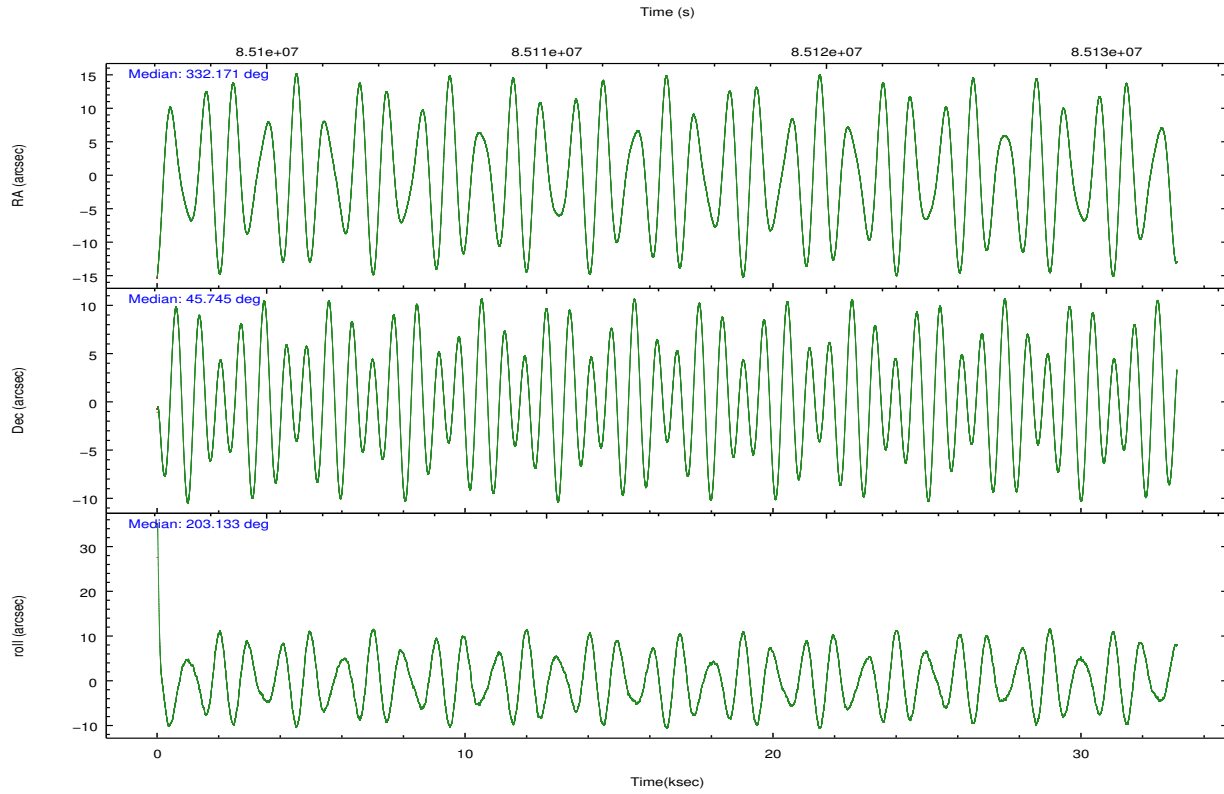
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	209733	270679	202400	249325	244838	188351	grade 0 events	10040	23949	17102	11146	21465	10278
rejected events	186771	138899	171139	140589	191159	165041		4%	8%	8%	4%	8%	5%
rejected %	89%	51%	84%	56%	78%	87%	grade 1 events	102	318	113	388	149	83
								0%	0%	0%	0%	0%	0%
							grade 2 events	5255	35860	5047	21803	10402	4413
								2%	13%	2%	8%	4%	2%
							grade 3 events	2070	5650	2488	10065	5226	2254
								0%	2%	1%	4%	2%	1%
							grade 4 events	1924	5378	2372	9925	4764	2123
								0%	1%	1%	3%	1%	1%
							grade 5 events	6441	19533	7531	23477	9660	7786
								3%	7%	3%	9%	3%	4%
							grade 6 events	3675	60966	4259	55825	11828	4247
								1%	22%	2%	22%	4%	2%
							grade 7 events	180226	119025	163488	116696	181344	157167
								85%	43%	80%	46%	74%	83%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	332.193996	332.1706620624122	Subarray requested	NONE	NONE
[deg] Pointing Dec	45.766339	45.74432401143822	Alternating exposures requested	N	N
[deg] Pointing Roll	202.964633	203.1379938165684	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	210.000000	210.000000			
[deg] Roll tolerance	40.000000	40.000000			
Roll constraint allows 180D rotation	N	N			
[s] Window start time (MET)	50061664.184000	50061664.184000			
[s] Window stop time (MET)	93754864.184000	93754864.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-187.132523	-187.1228876879999			
[mm] SIM translation stage offset	-3	-3.009634895007935			
Phase constraints	Y	Y			
[d] Phase period	1.983180	1.983180			
[d] Phase epoch (MJD)	48501.123200	48501.123200			
Phase start	0.898000	0.898000			
Phase end	0.102000	0.102000			
Phase start error	0.022000	0.022000			
Phase end error	0.022000	0.022000			
[s] Observation start time (MET)	85098210.184000	85097113.69953001			

2.3 Aspect





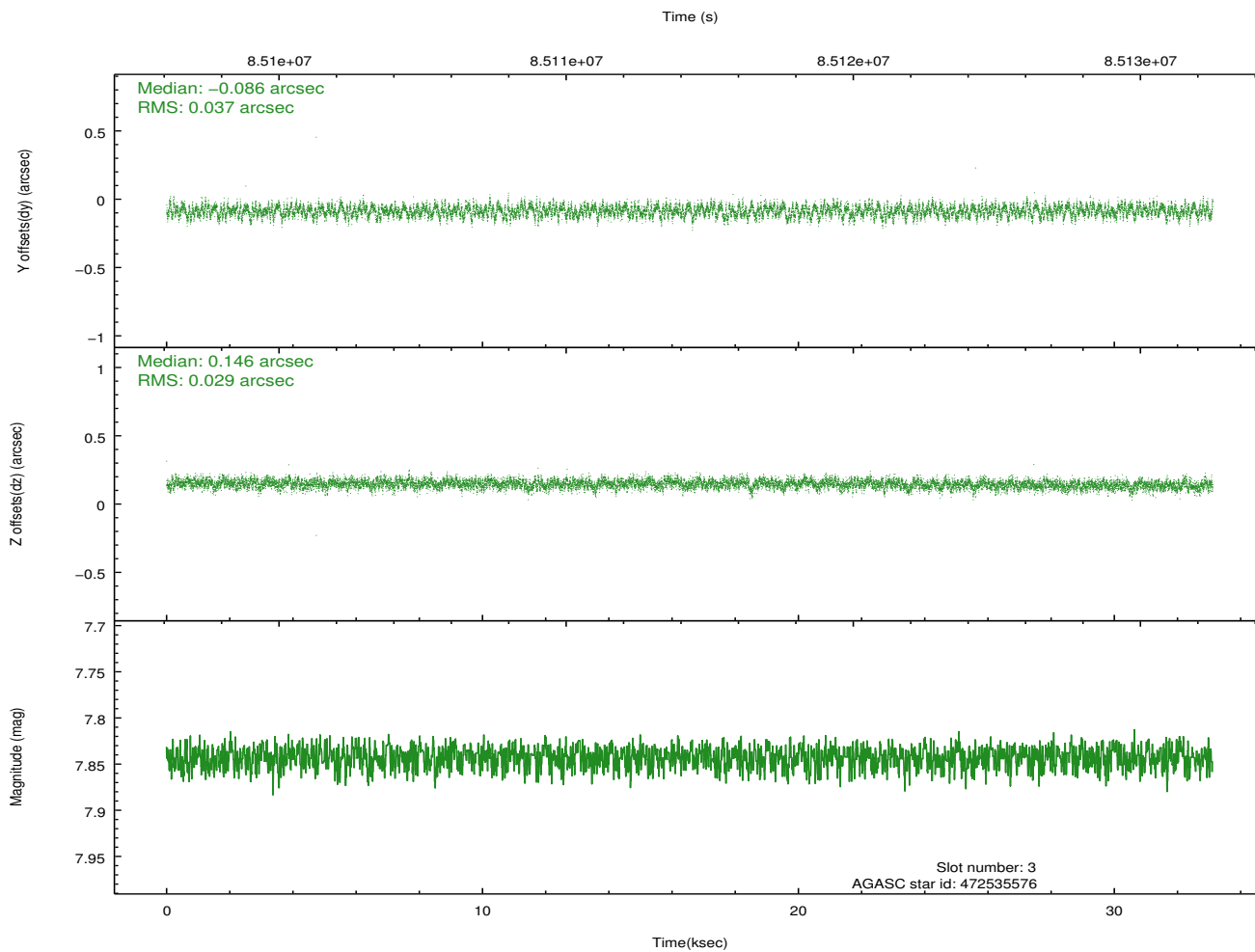
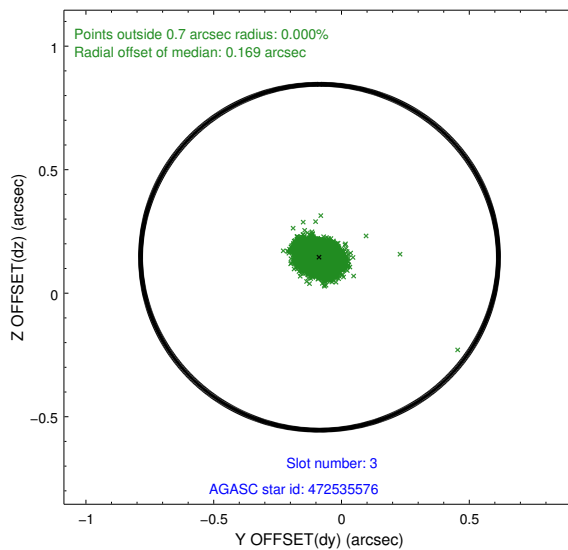
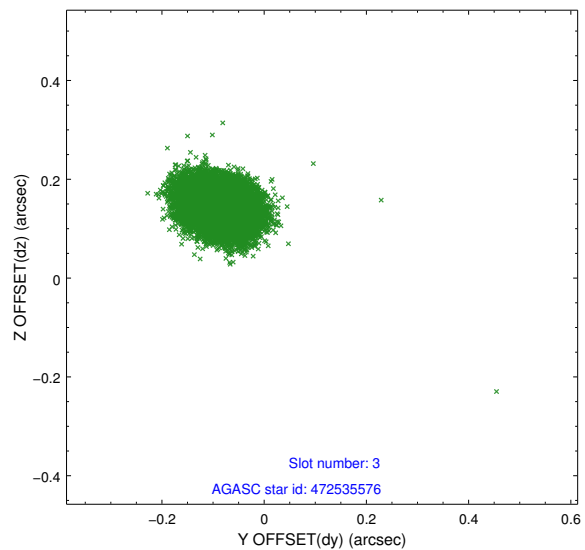
Slot Statistics

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	8076	-0.030	-0.024	0.007	0.013	0.000000	0.000000	-754.51	-1788.24
1	FID	ACIS-S-4	7.19	8077	0.009	0.013	0.009	0.015	0.000000	0.000000	2158.78	120.22
2	FID	ACIS-S-6	7.38	8077	-0.007	0.018	0.009	0.016	0.000000	0.000000	407.56	757.68
3	GUIDE	472535576	7.84	16152	-0.086	0.146	0.050	0.081	331.438373	46.291802	989.56	-2482.42
4	GUIDE	472523760	8.23	16153	-0.029	-0.044	0.054	0.085	331.645363	45.403260	1785.17	658.73
5	GUIDE	472659832	9.45	16144	0.078	0.002	0.079	0.131	332.780399	46.098139	-1815.51	-533.07
6	GUIDE	472655704	9.47	16139	-0.057	-0.015	0.104	0.168	332.167195	45.285228	738.22	1568.94
7	GUIDE	472646552	9.61	16142	0.091	-0.087	0.105	0.166	333.120915	45.571877	-1882.65	1544.06

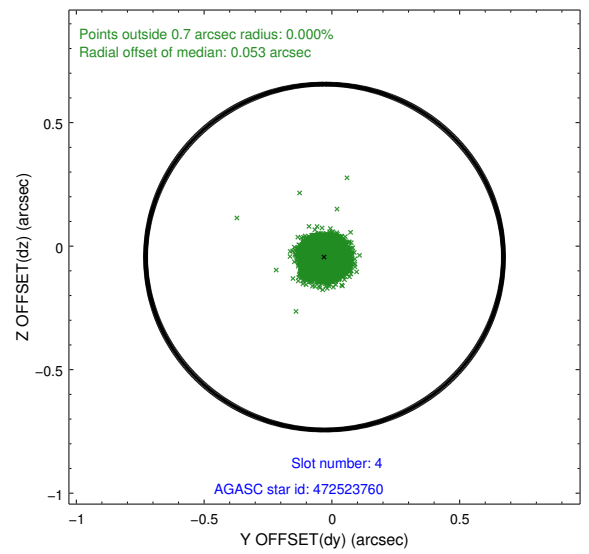
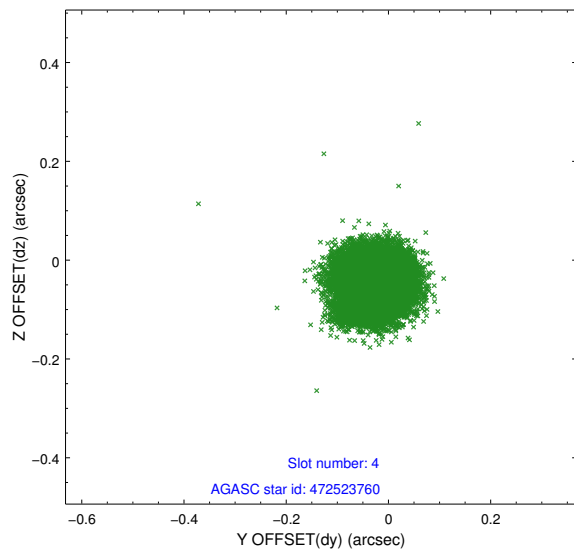
∞

2.4 Star Slots

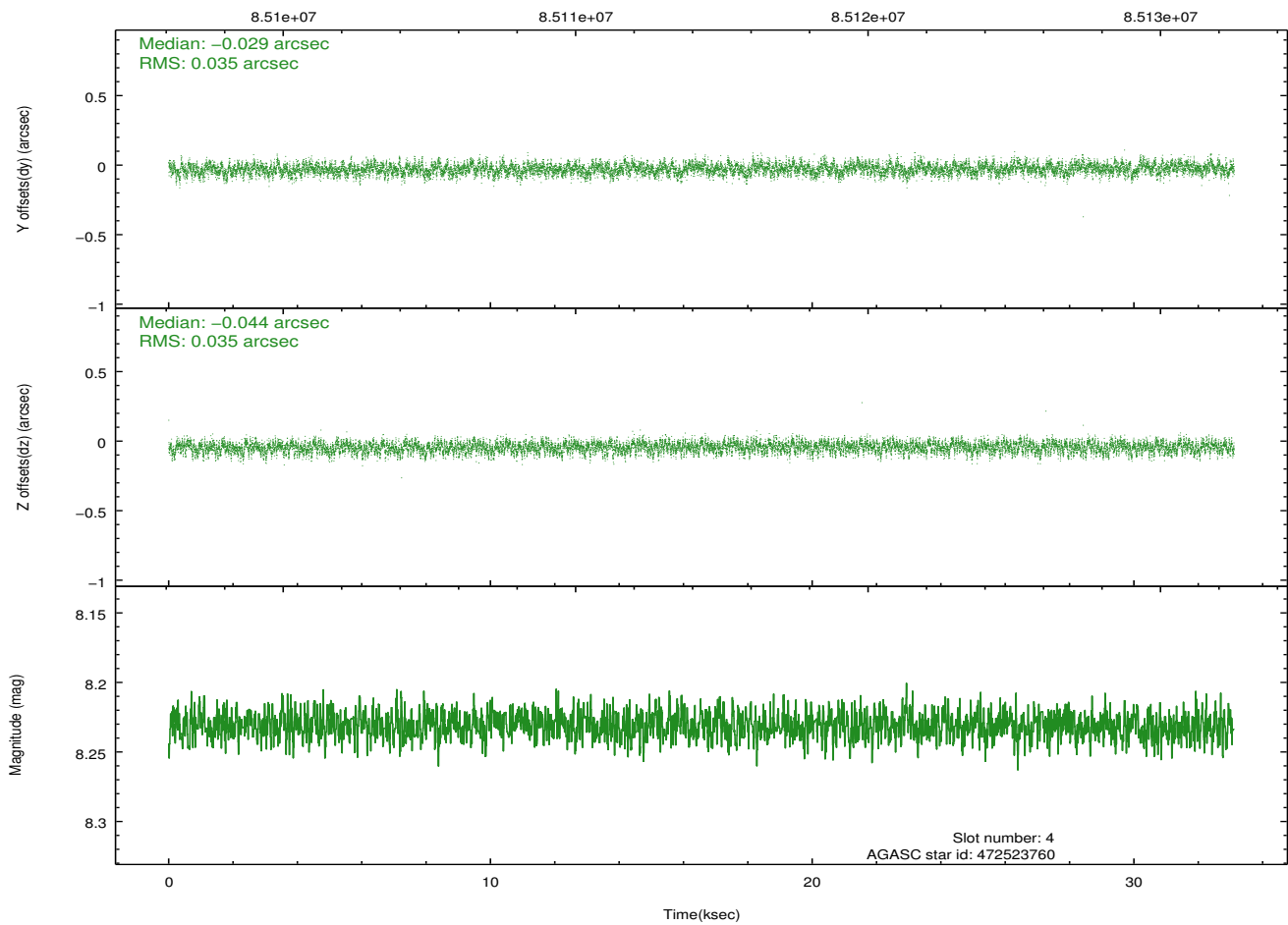
2.4.1 Slot 3



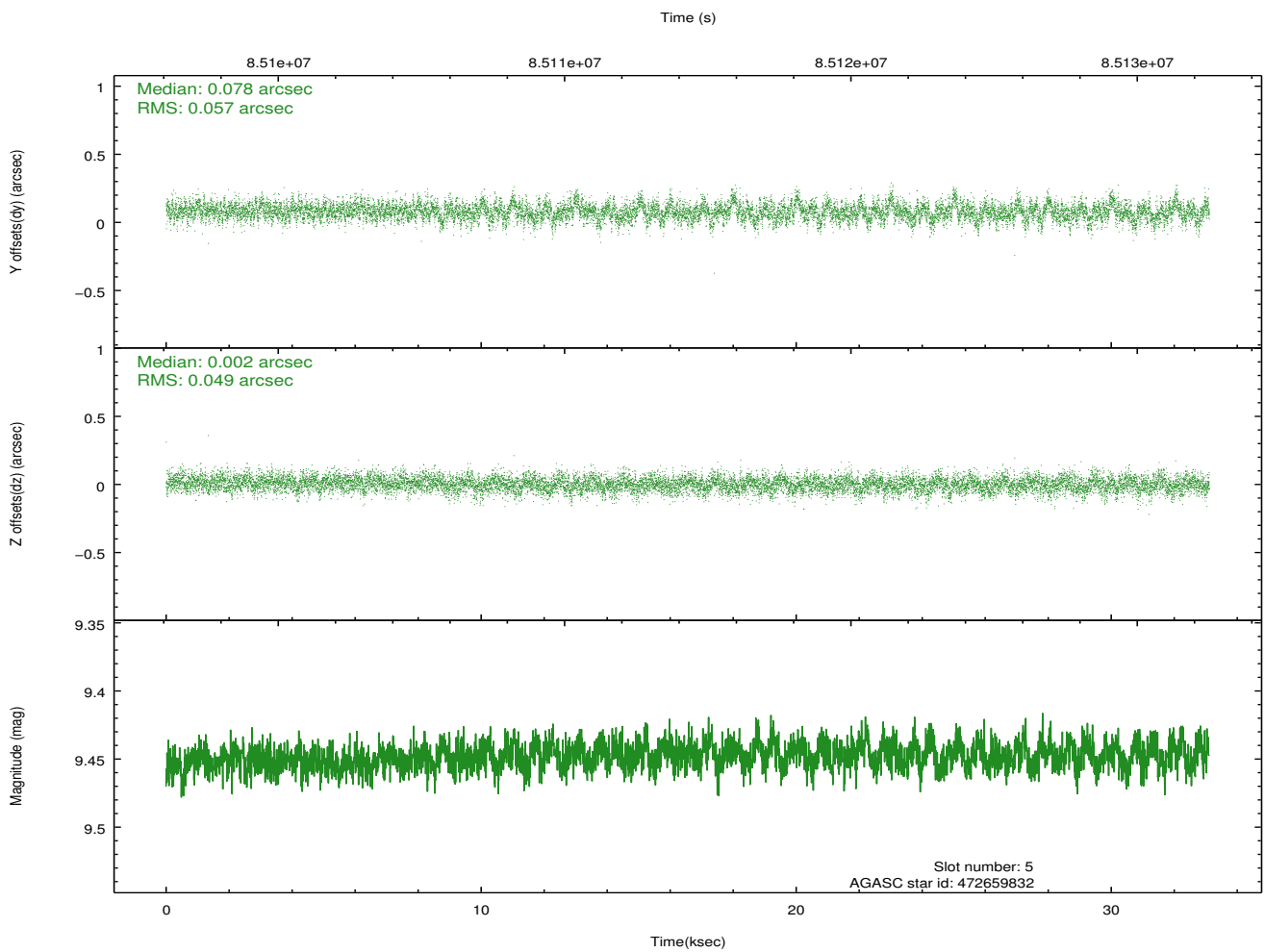
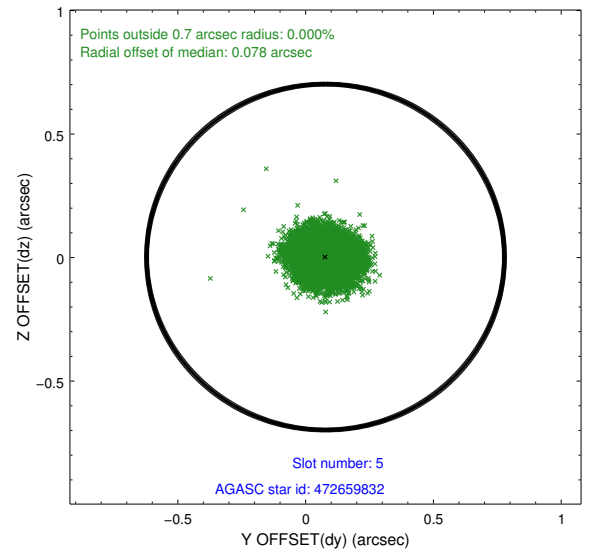
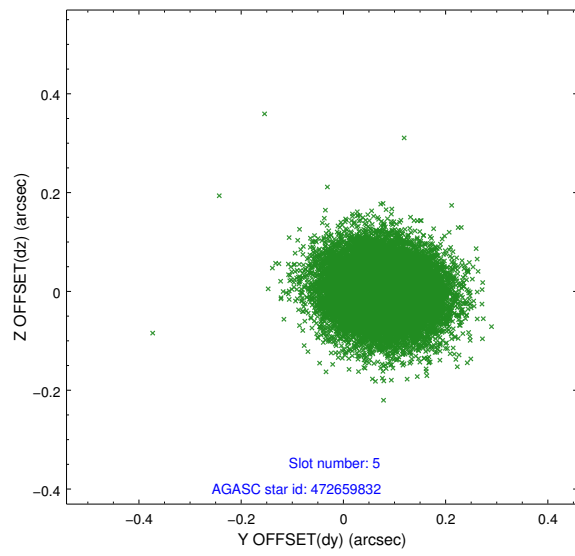
2.4.2 Slot 4



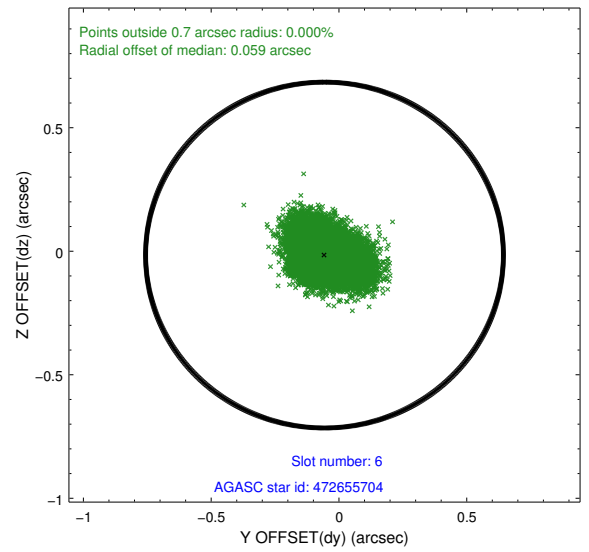
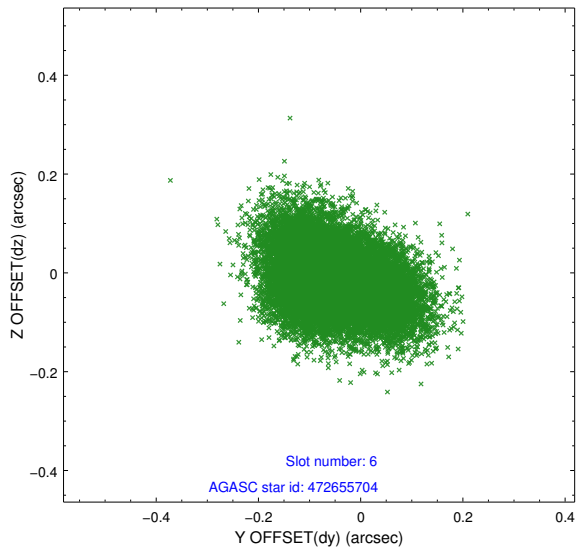
Time (s)



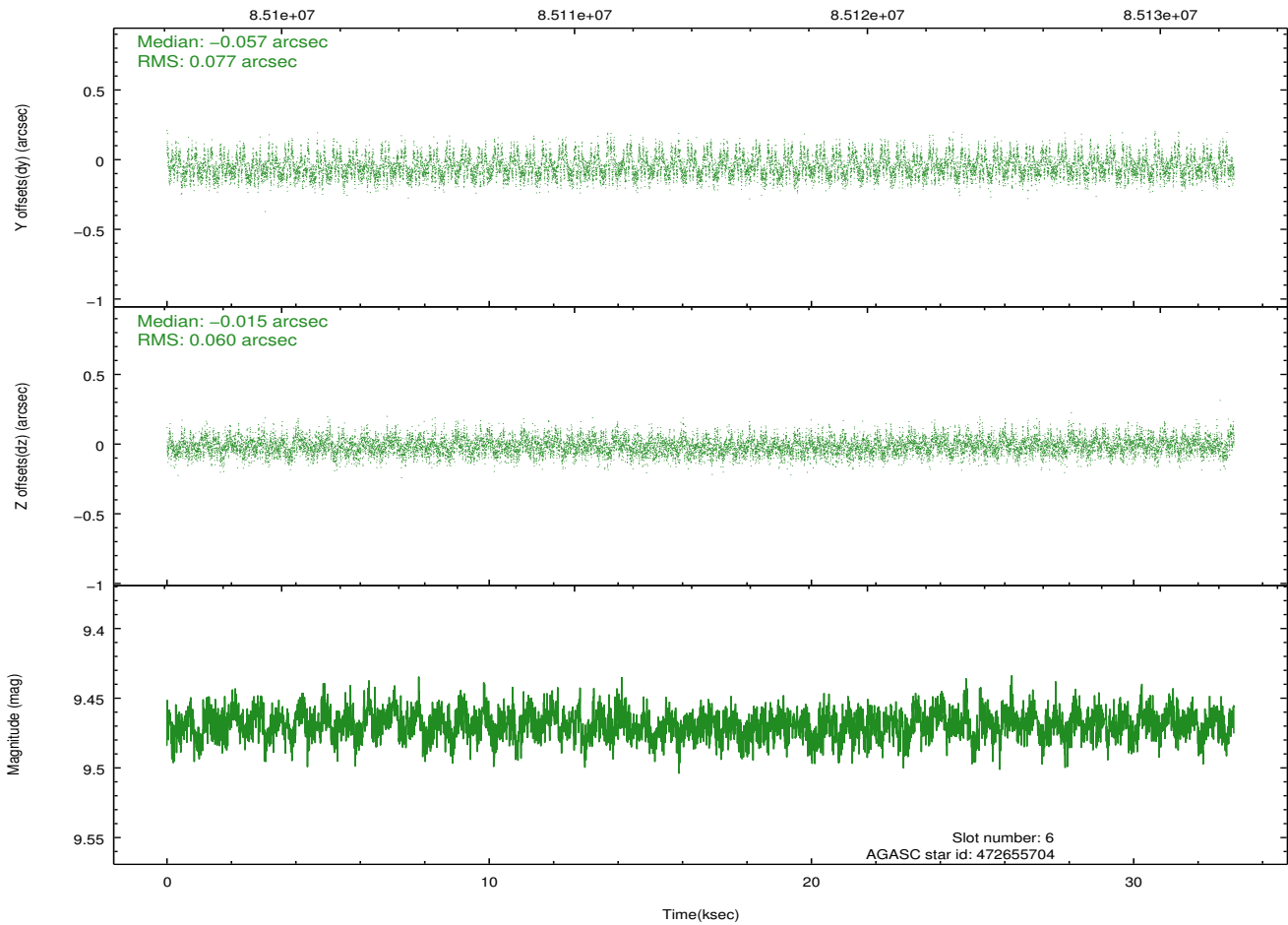
2.4.3 Slot 5



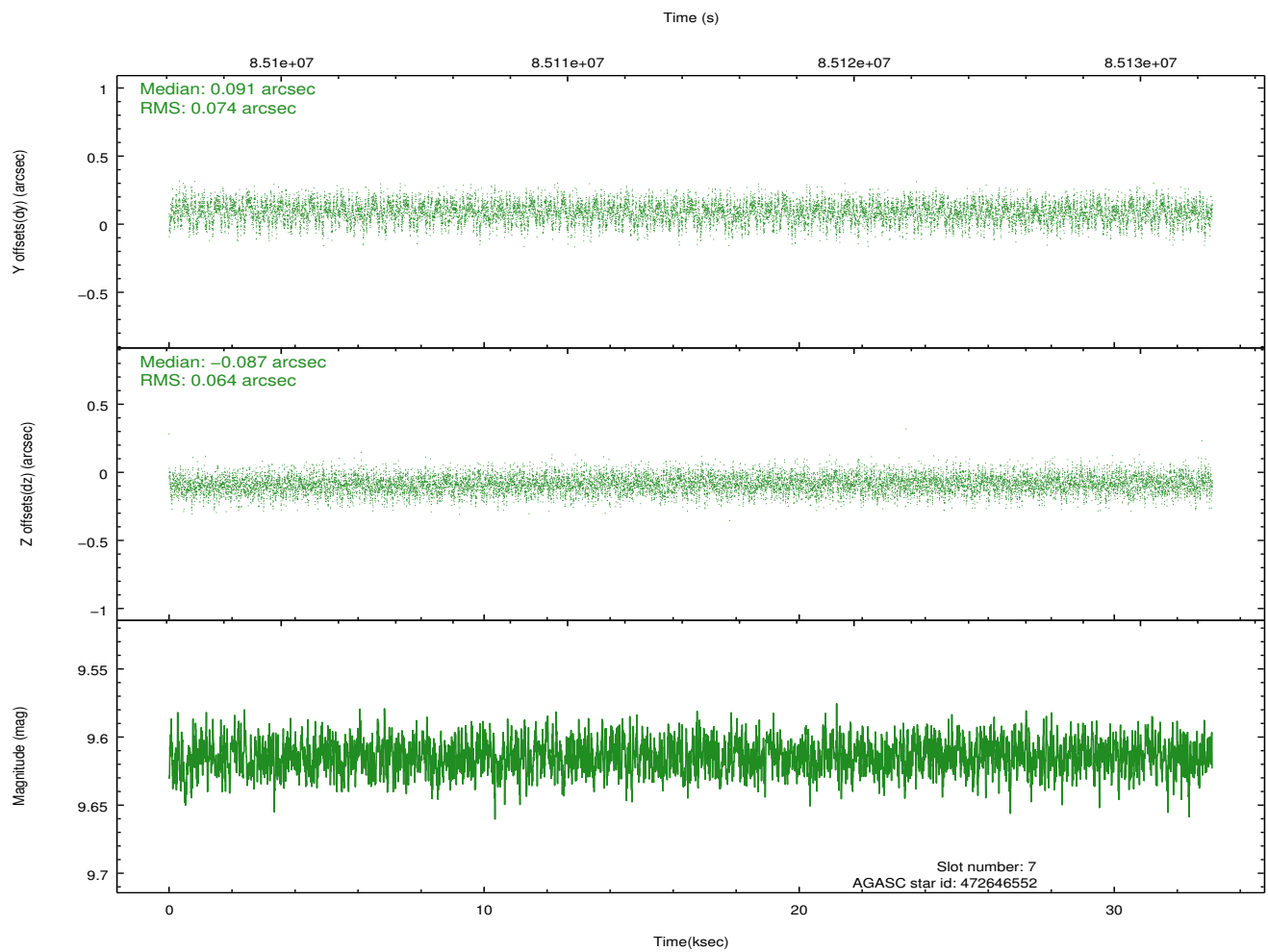
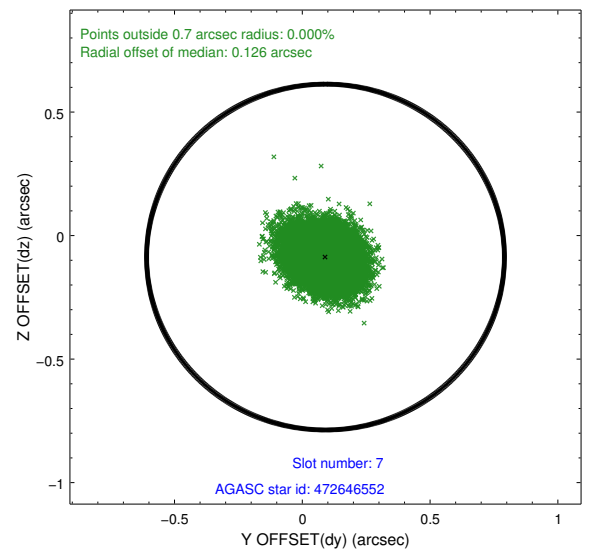
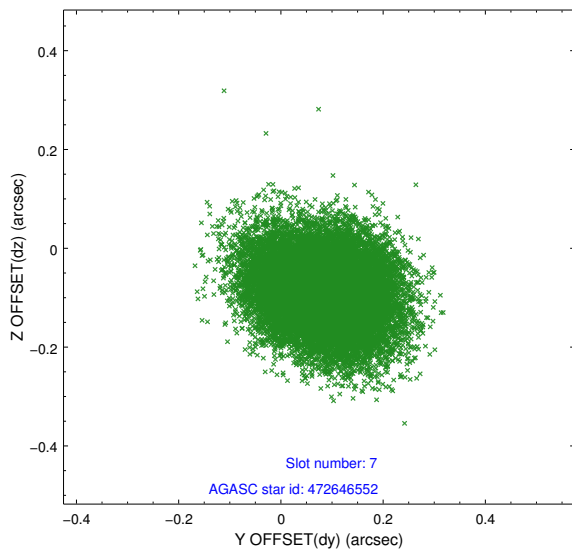
2.4.4 Slot 6



Time (s)

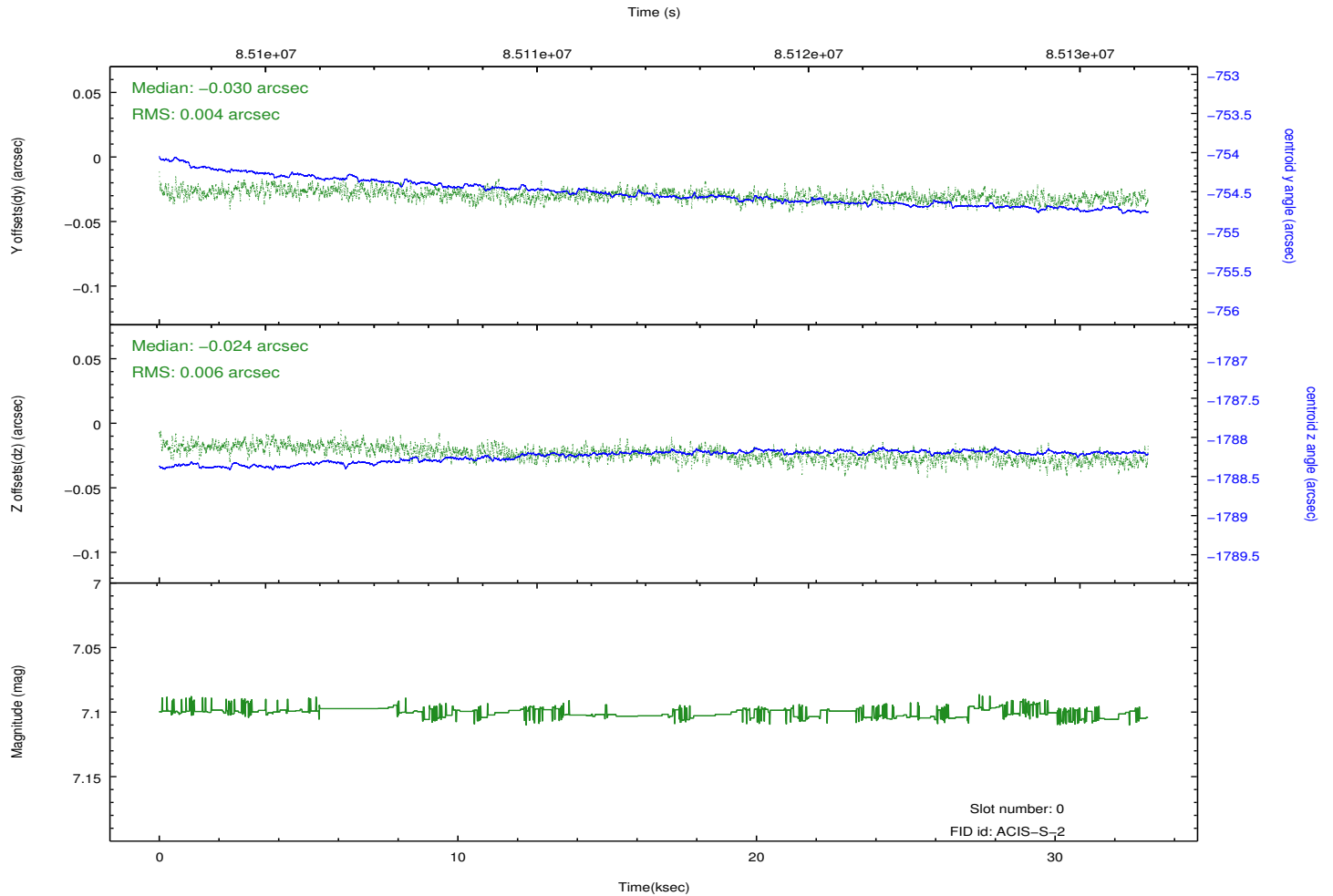
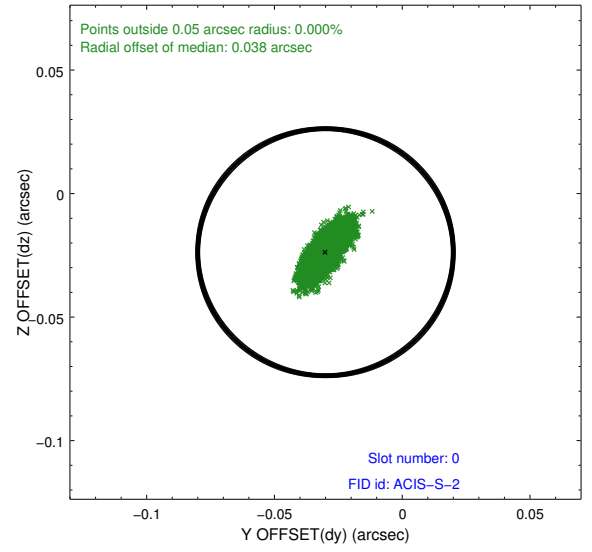
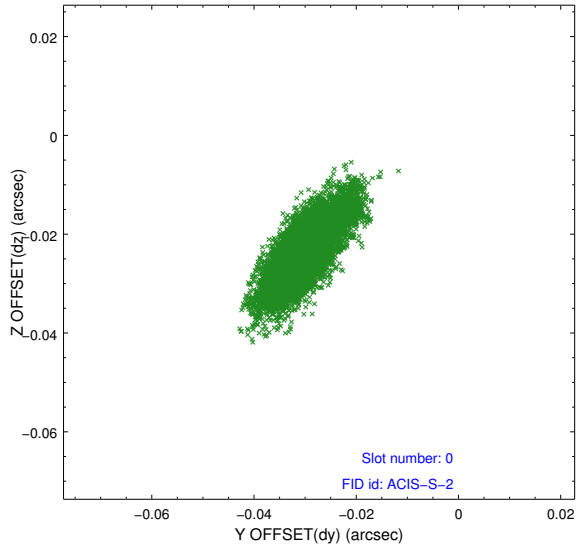


2.4.5 Slot 7

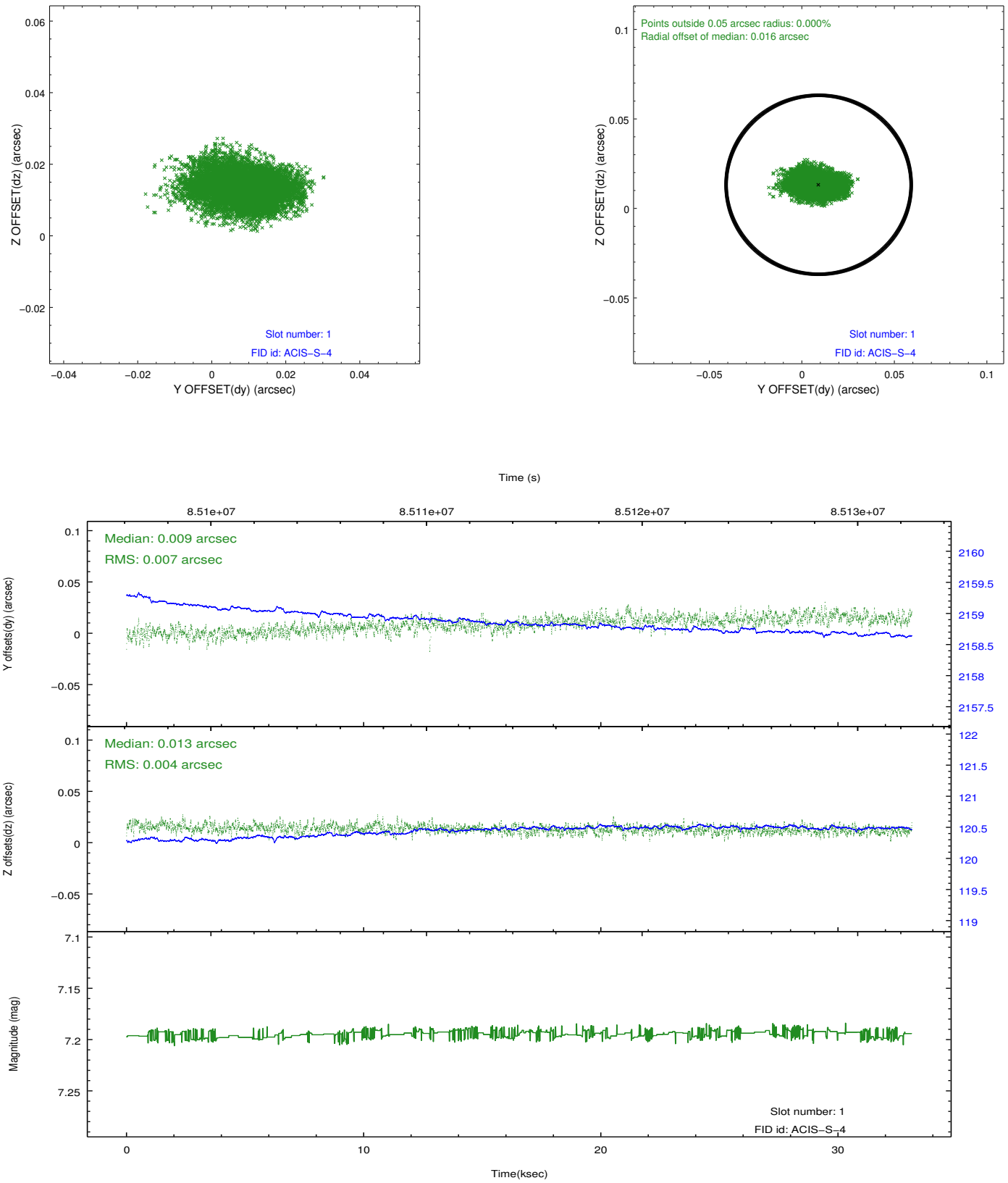


2.5 FID Slots

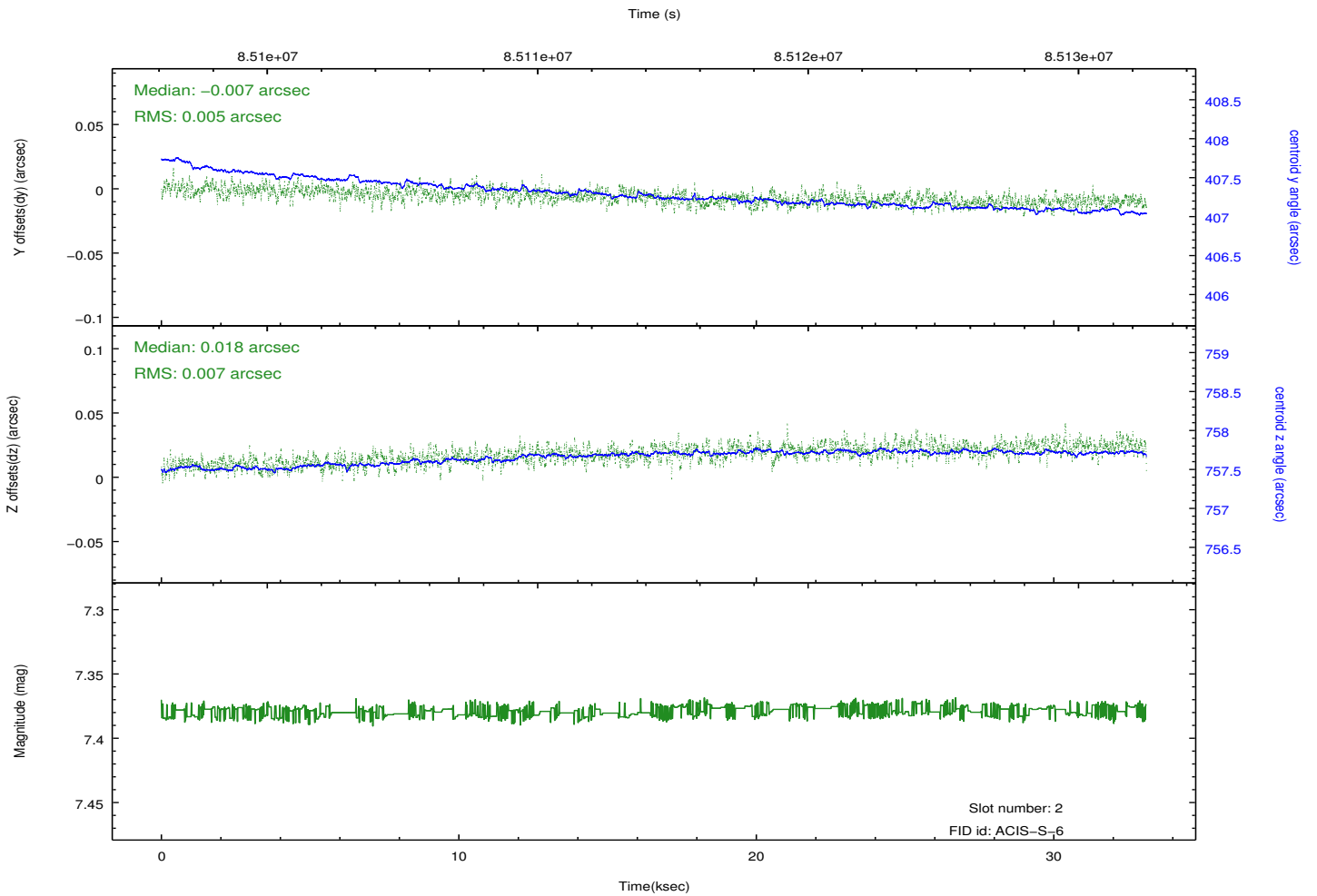
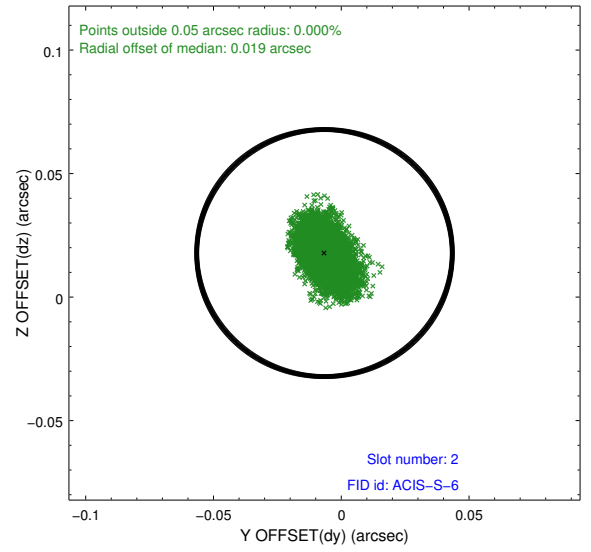
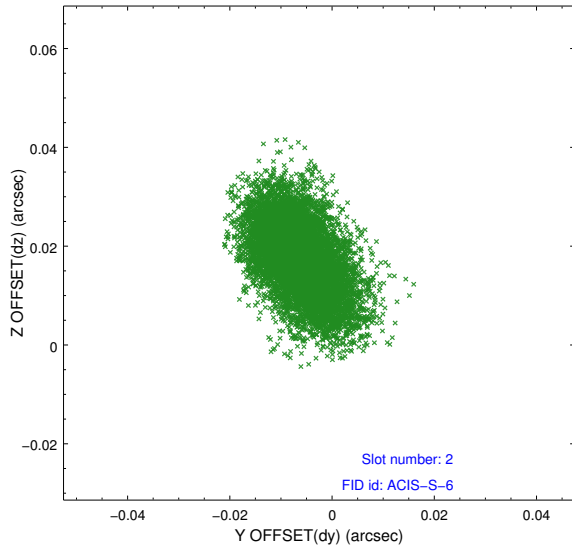
2.5.1 Slot 0



2.5.2 Slot 1

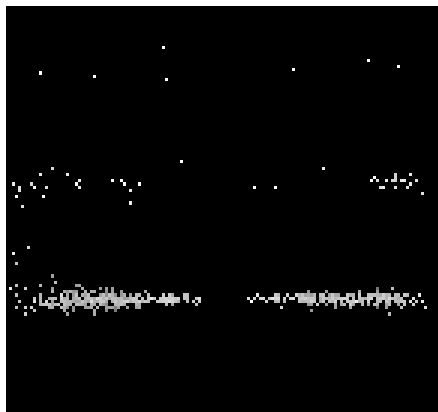


2.5.3 Slot 2

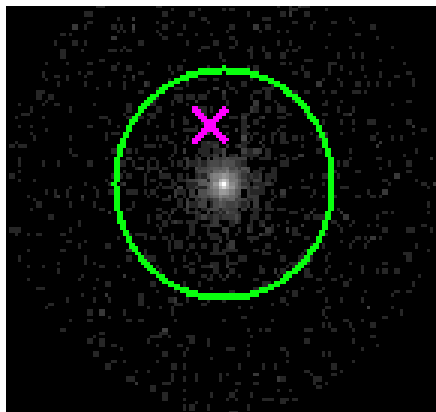


3 Gratings

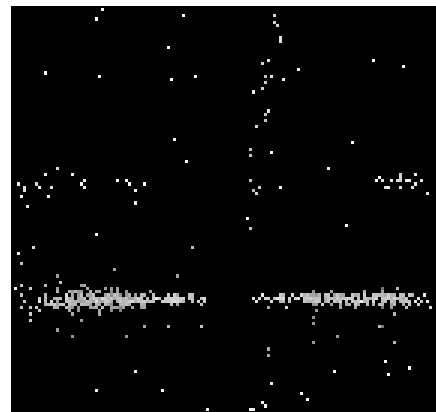
3.1 HEG Arm



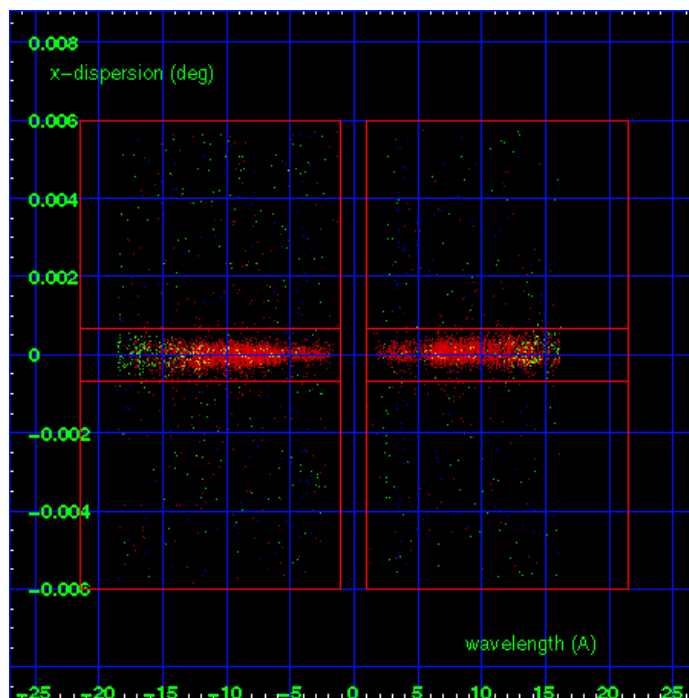
HEG Order Sort 123



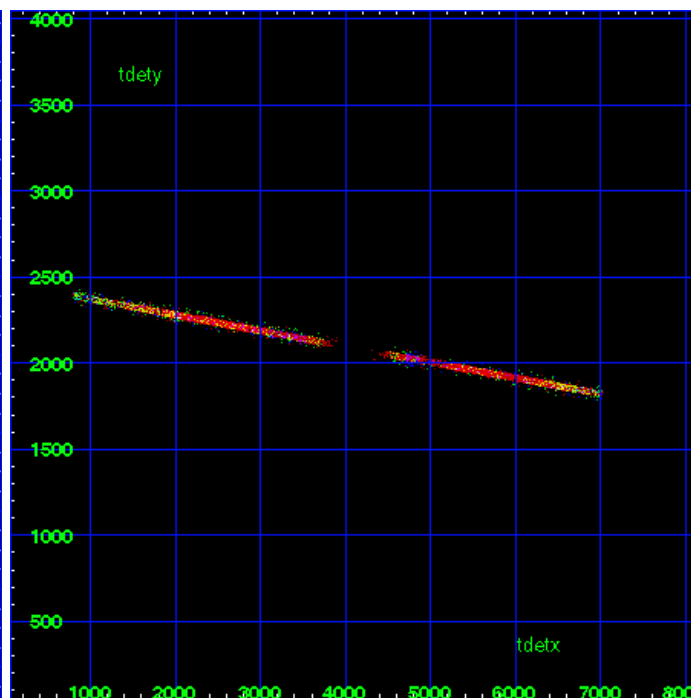
HEG Zero Order



HEG Order Sort ALL

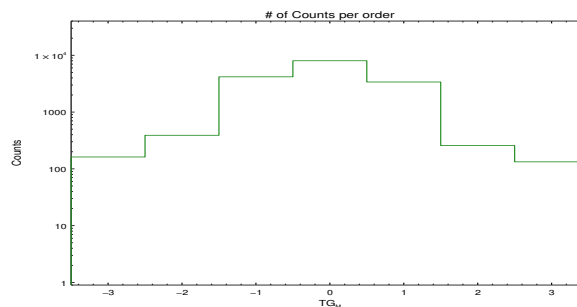


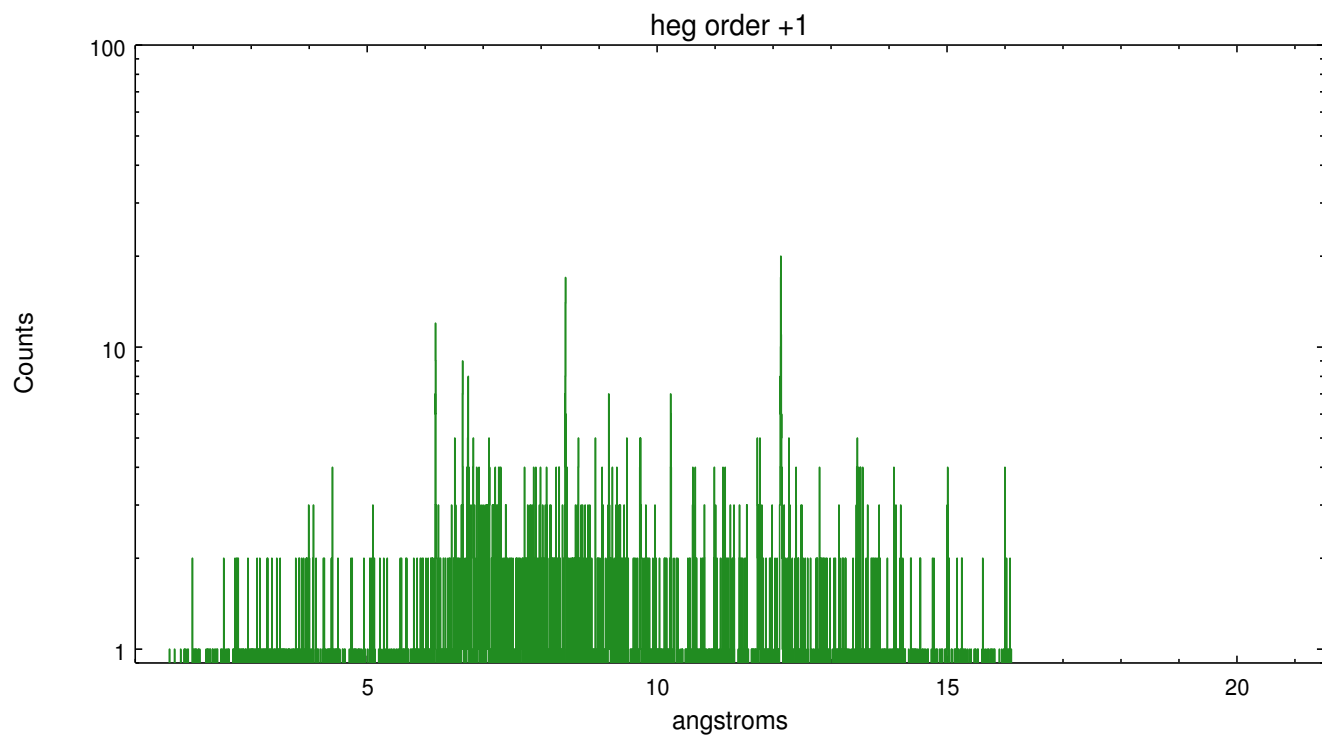
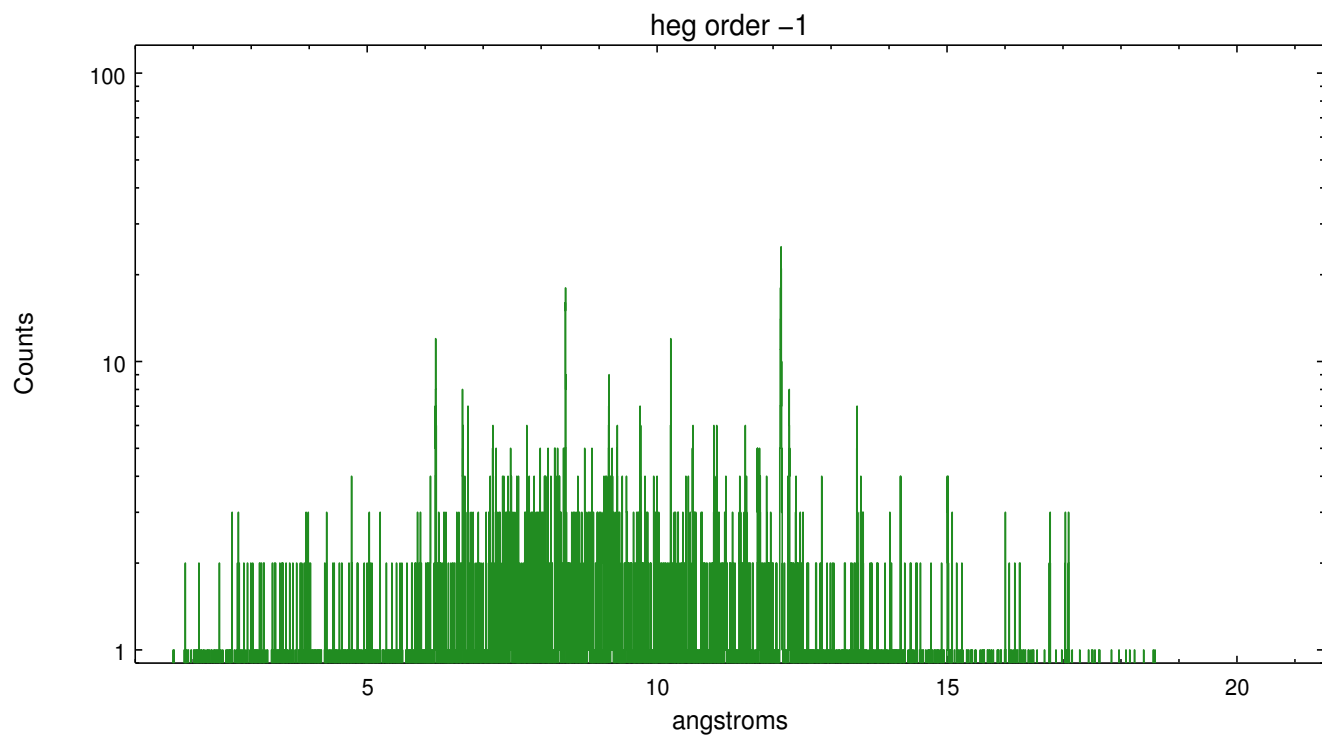
Spot Image HEG



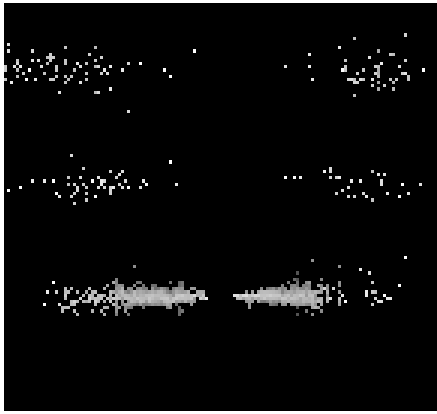
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	162	390	4178	8020	3386	257	133

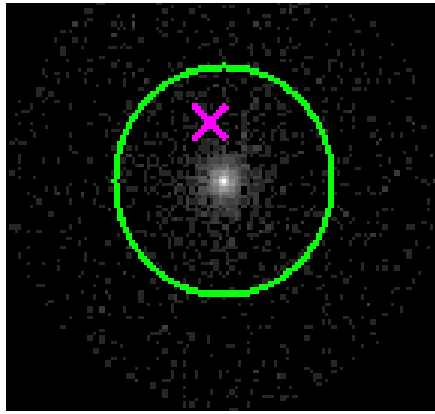




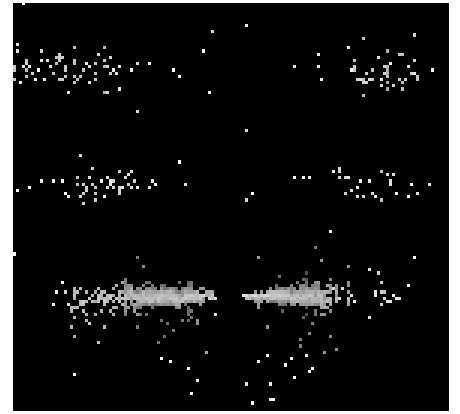
3.2 MEG Arm



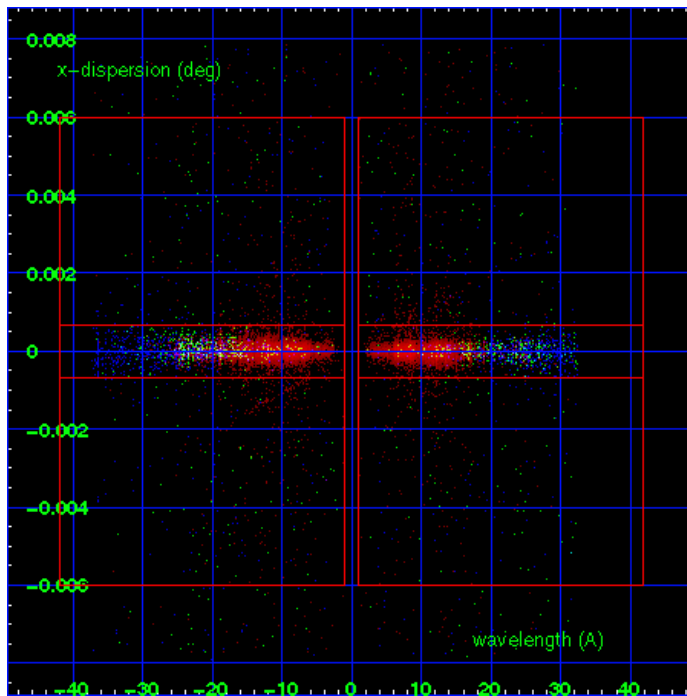
MEG Order Sort 123



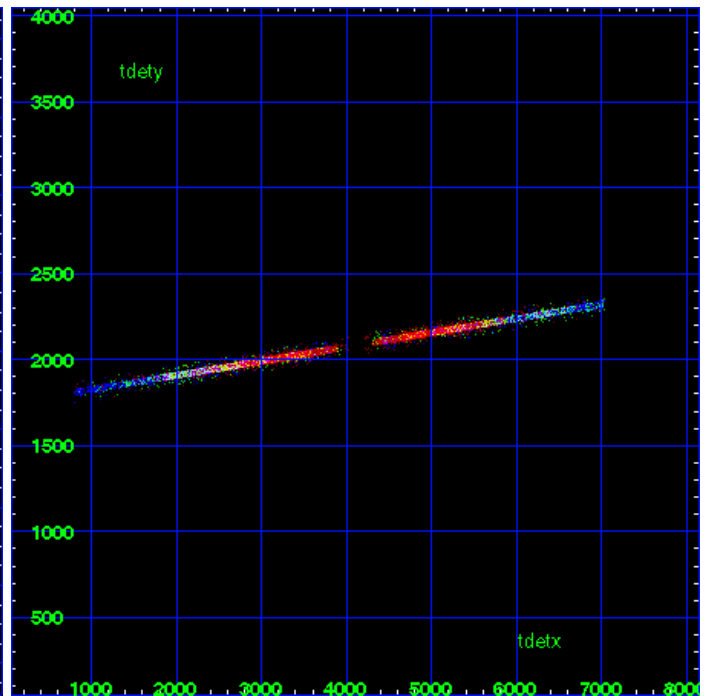
MEG Zero Order



MEG Order Sort ALL

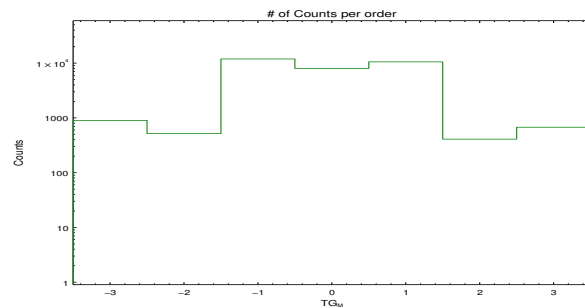


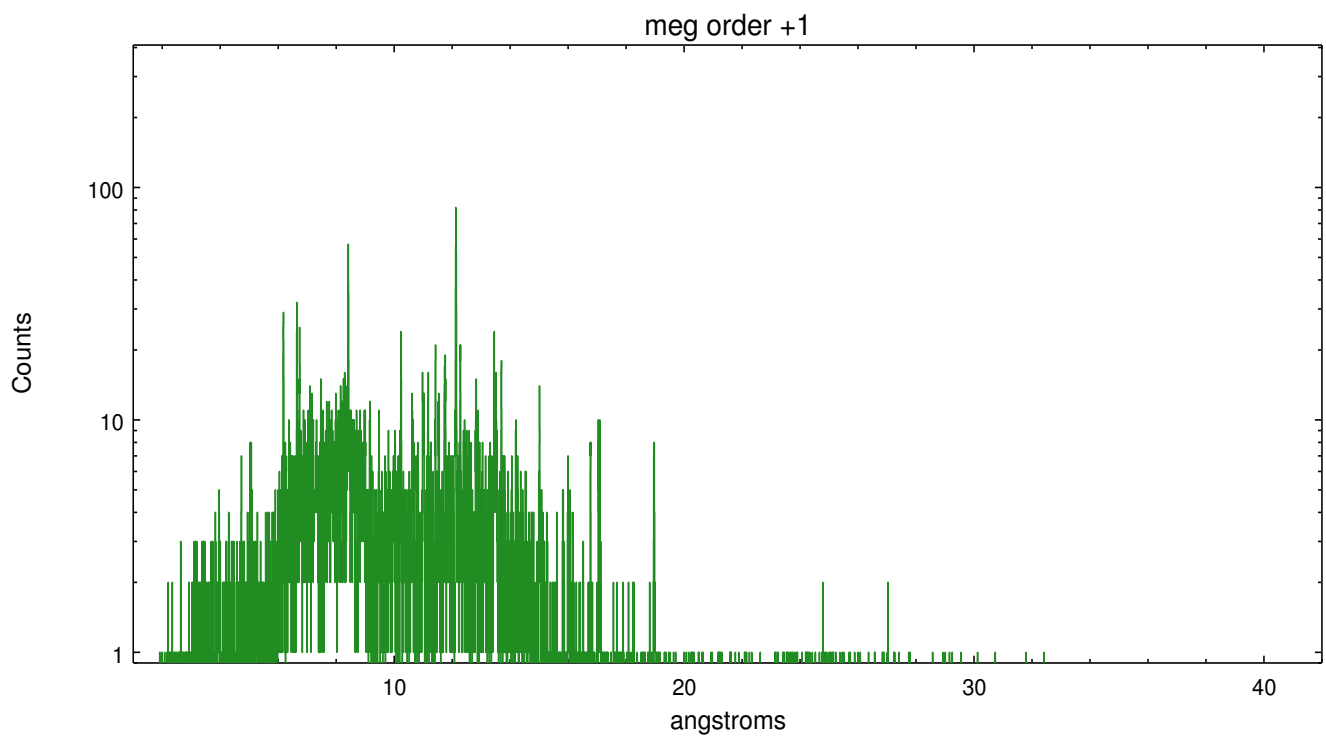
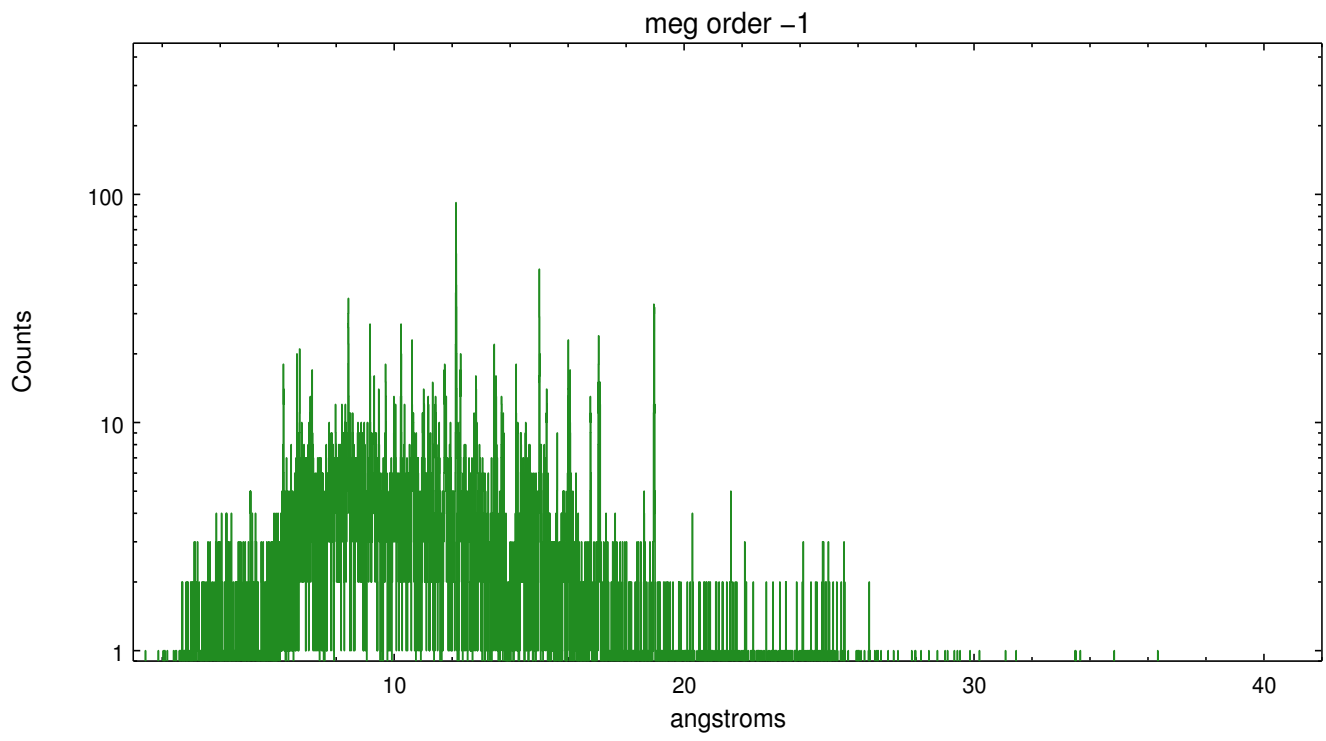
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	900	519	11916	8020	10558	409	675





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.09.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.505

A.2 Comments

Roll constraint met. Caveat: due to an 0.5 day ephemeris observer error, comments on the phase in the header 'OBJECT' are wrong.