

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 8 - L2 Version 3
Chandra X-Ray Center

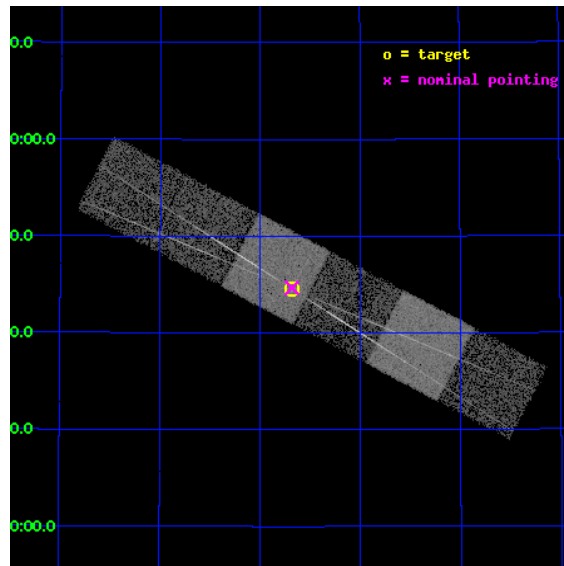
L2 Processing Date : Sep 1 2012

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1 Front

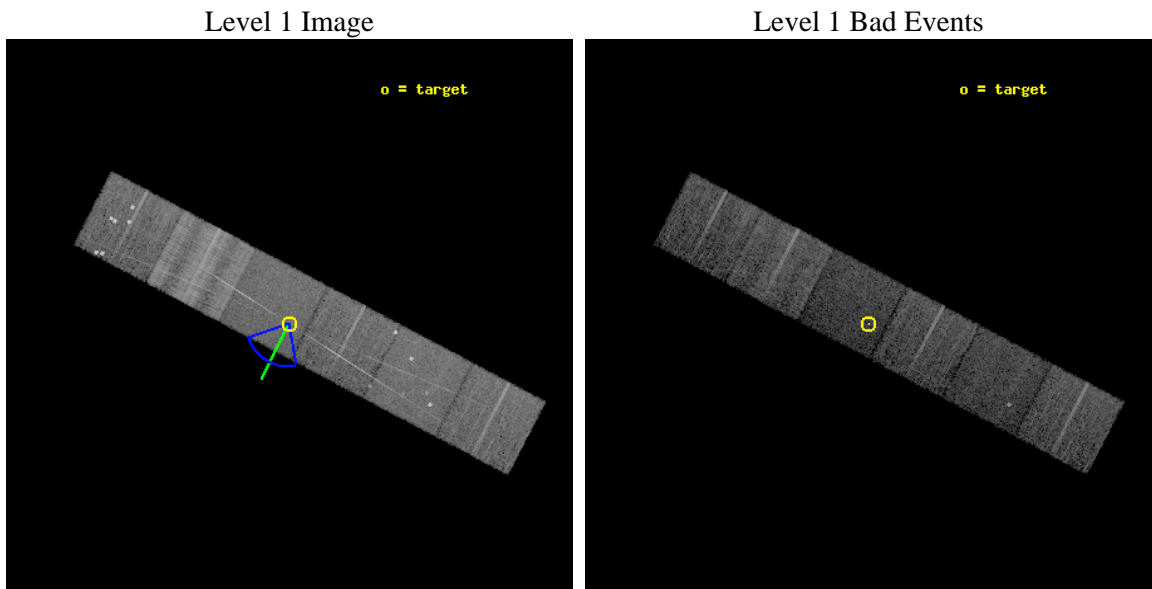
seq_num	200006	Sequence number
obs_id	8	Observation id
title	STELLAR CORONAL SPECTROSCOPY OF COOL STARS	Proposal title
observer	DR. CLAUDE CANIZARES	Principal investigator
object	AR LAC-3 LAST QUAD (1)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742222	Observer's specified target Dec [deg]
ra_nom	332.17052156298	Nominal RA [deg]
dec_nom	45.744352805833	Nominal Dec [deg]
roll_nom	207.66033774798	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7520.0000069886	Sum of GTIs [s]
livetime	7424.7772388998	Livetime [s]
ontime4	7520.0000069886	Sum of GTIs [s]
ontime5	7520.0000069886	Sum of GTIs [s]
ontime6	7520.0000069886	Sum of GTIs [s]
ontime7	7520.0000069886	Sum of GTIs [s]
ontime8	7520.0000069886	Sum of GTIs [s]
ontime9	7520.0000069886	Sum of GTIs [s]
l2events	89374	Number of level 2 events



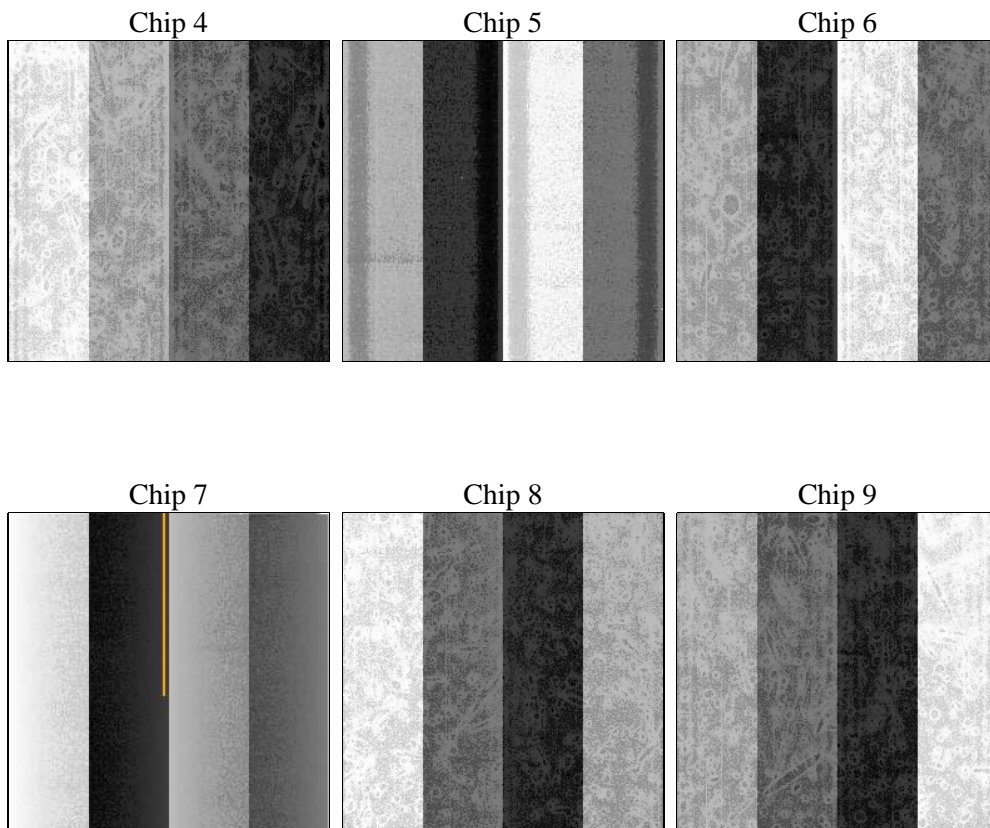
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	7594.479000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7520.0000069886	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime4	7520.0000069886	Sum of GTIs [s]
date	2012-09-01T17:21:34	Date and time of file creation	ontime5	7520.0000069886	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	7520.0000069886	Sum of GTIs [s]
			ontime7	7520.0000069886	Sum of GTIs [s]
			ontime8	7520.0000069886	Sum of GTIs [s]
			ontime9	7520.0000069886	Sum of GTIs [s]
			l1events	429929	Number of level 1 events

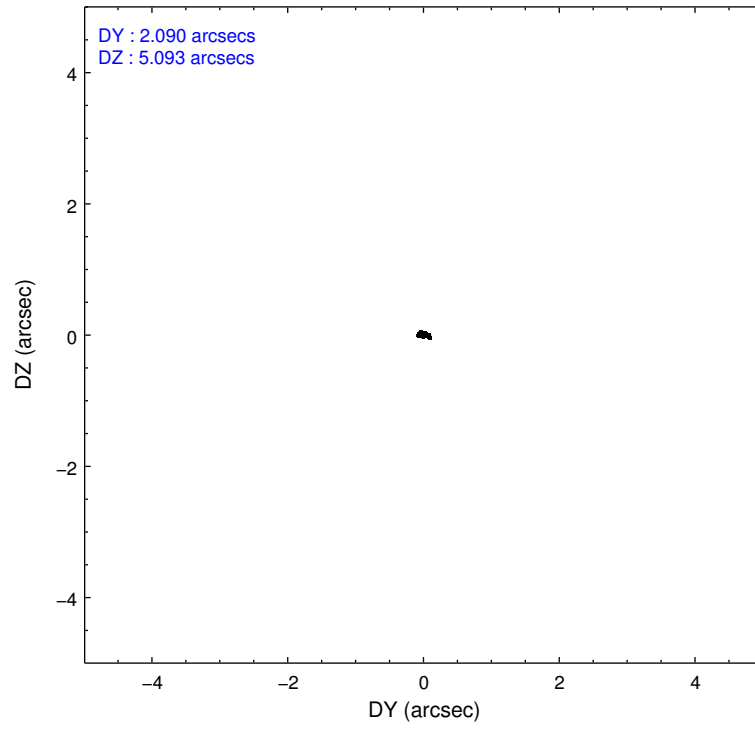
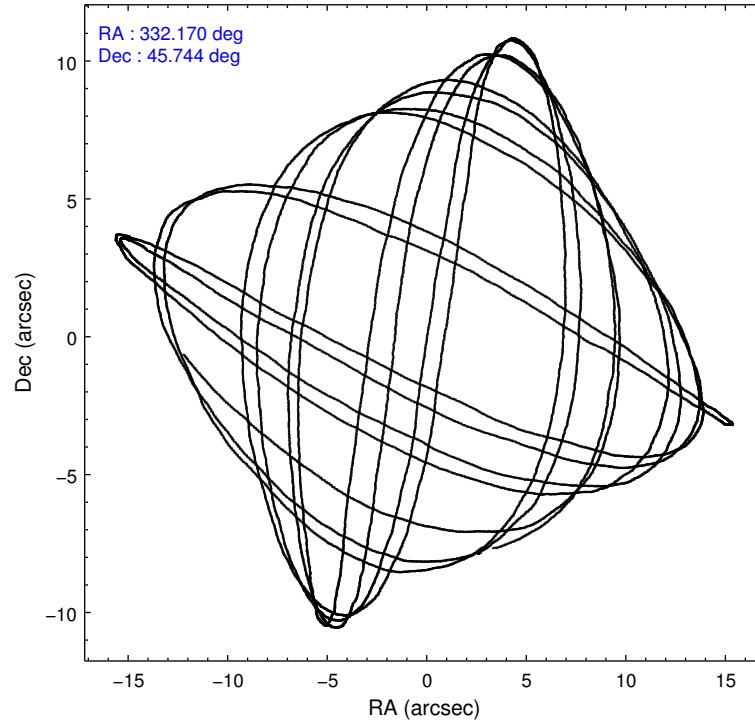
2.1.4 Events

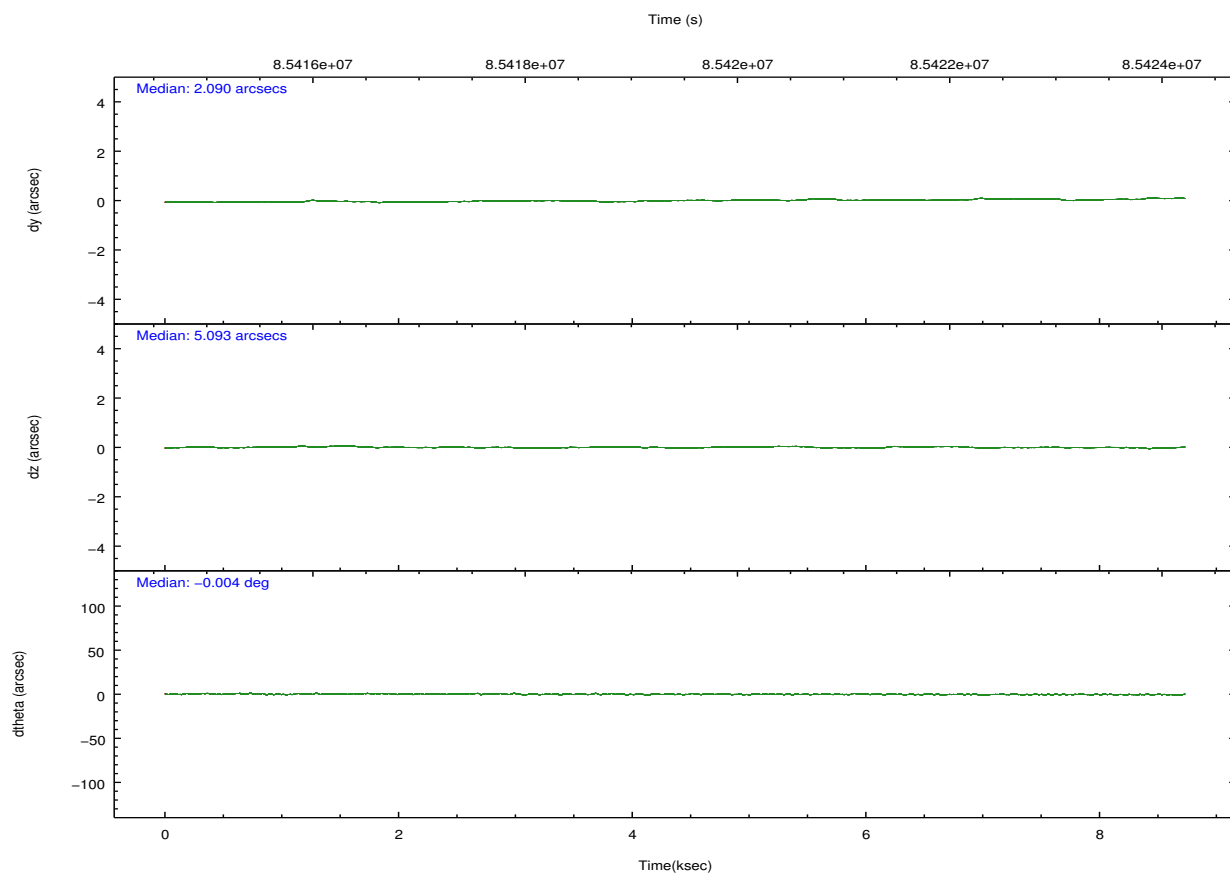
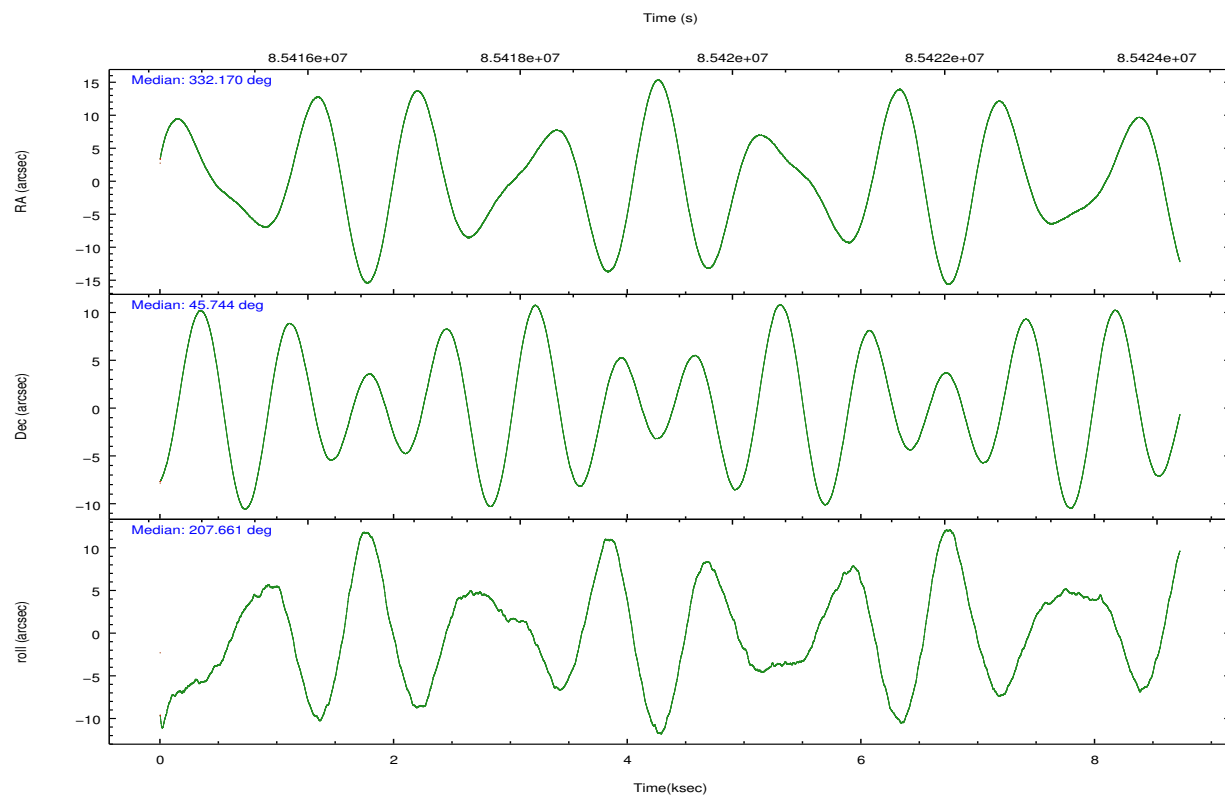
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	59485	69144	61388	62356	110510	67046	grade 0 events	3928	6295	9404	3256	16826	14553
rejected events	50443	34612	47031	33798	57811	46100		6%	9%	15%	5%	15%	21%
rejected %	84%	50%	76%	54%	52%	68%	grade 1 events	31	611	68	117	133	83
								0%	0%	0%	0%	0%	0%
							grade 2 events	2734	10331	2265	6068	8254	4035
								4%	14%	3%	9%	7%	6%
							grade 3 events	547	1788	685	2715	8316	526
								0%	2%	1%	4%	7%	0%
							grade 4 events	500	1689	726	2751	7427	594
								0%	2%	1%	4%	6%	0%
							grade 5 events	1623	4835	1823	5553	2873	1870
								2%	6%	2%	8%	2%	2%
							grade 6 events	1363	14587	1332	13895	12116	1321
								2%	21%	2%	22%	10%	1%
							grade 7 events	48759	29008	45085	28001	54565	44064
								81%	41%	73%	44%	49%	65%

2.2 Compared Parameters

date			Parameter	Planned	Actual
Read mode	TIMED	TIMED	Obspar format		
Instrument	ACIS	ACIS	version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	OVERRIDE	OVERRIDE
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	332.1705215629792	332.1705215629792	Subarray requested	NONE	NONE
[deg] Pointing Dec	45.74435280583313	45.7443528058331	Alternating exposures requested	N	N
[deg] Pointing Roll	207.6603377479797	207.6603377479797	[s] Primary exposure time	3.200000	3.200000
[deg] Roll angle	210	210			
[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	-0.68282252473119	-0.68282252473119			
[mm] SIM defocus	0.001444942264670734	0.001444942264670734			
[mm] SIM translation stage pos	-187.122887688	-187.122887688			
[mm] SIM translation stage offset	-3.00963541596721	-3.00963541596721			
Phase constraints	Y	Y			
[d] Phase period	1.983180	1.983180			
[d] Phase epoch (MJD)	48501.123200	48501.123200			
Phase start	0.728000	0.728000			

2.3 Aspect



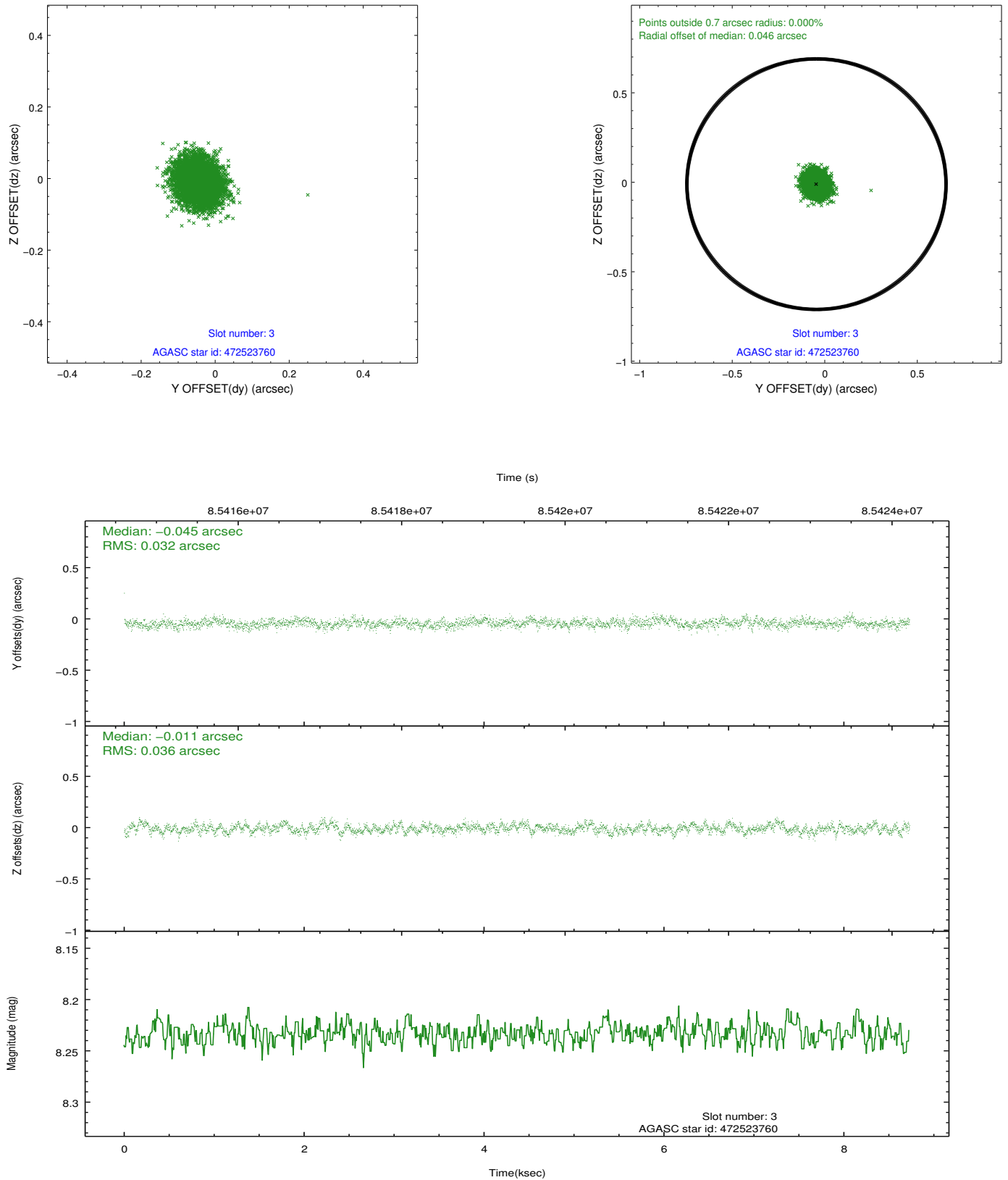


Slot Statistics

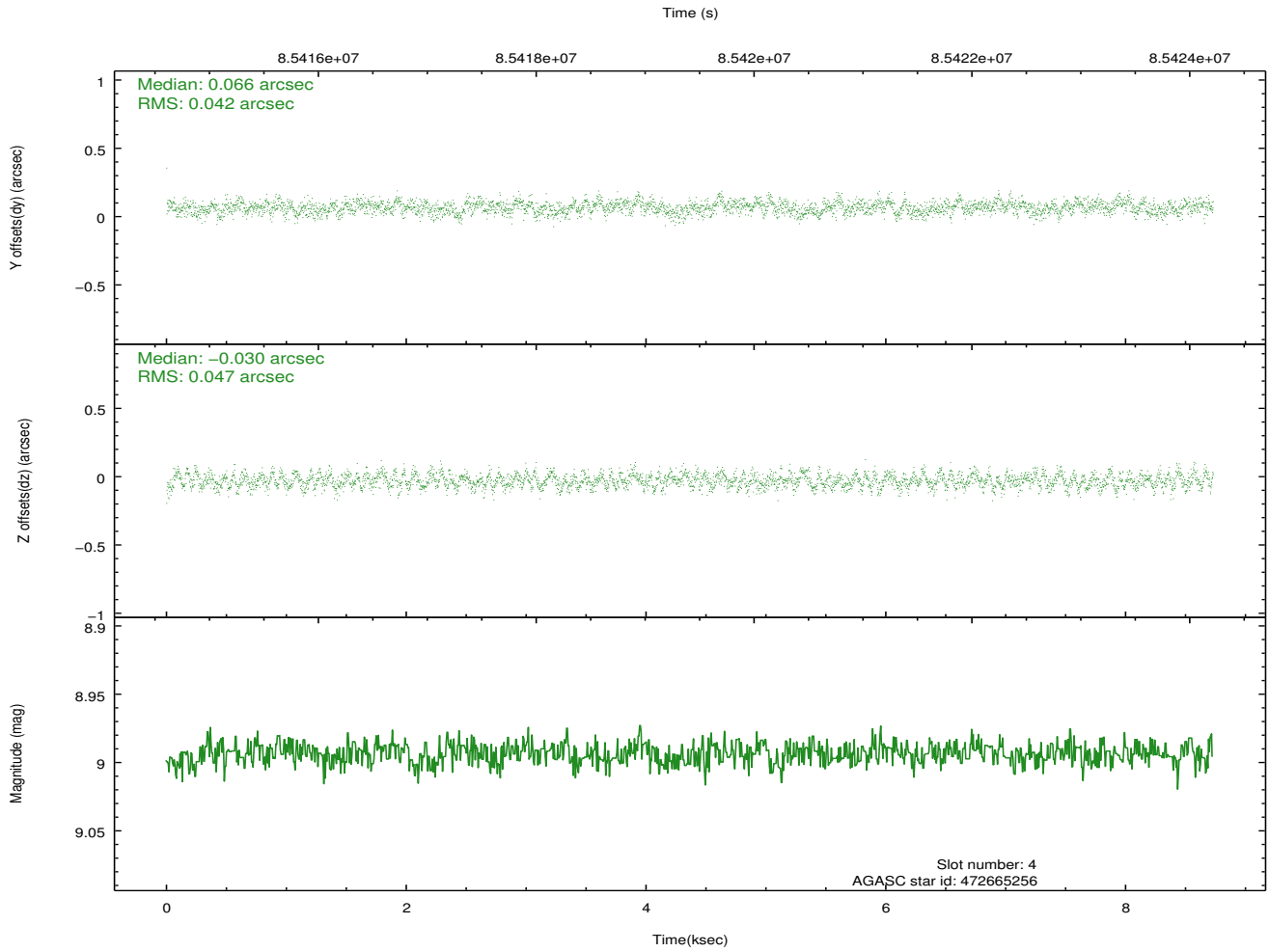
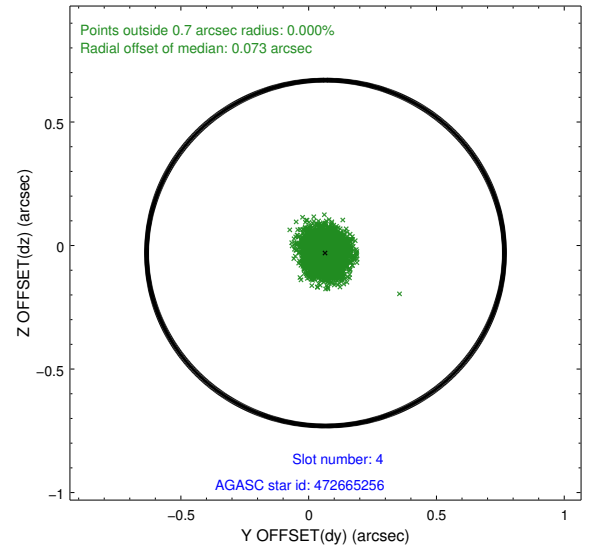
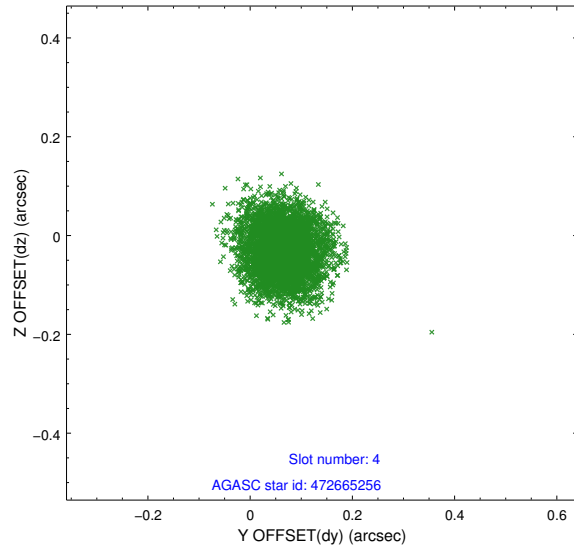
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	2130	-0.031	-0.026	0.005	0.009	0.000000	0.000000	-754.53	-1788.37
1	FID	ACIS-S-4	7.19	2130	0.011	0.013	0.006	0.009	0.000000	0.000000	2158.50	119.46
2	FID	ACIS-S-6	7.38	2130	-0.007	0.019	0.007	0.011	0.000000	0.000000	408.29	757.59
3	GUIDE	472523760	8.23	4259	-0.045	-0.011	0.052	0.082	331.645363	45.403260	1826.86	522.92
4	GUIDE	472665256	8.99	4256	0.066	-0.030	0.068	0.107	332.808125	46.195041	-2076.55	-660.28
5	GUIDE	472659832	9.45	4259	0.012	0.060	0.080	0.129	332.780399	46.098139	-1857.26	-381.23
6	GUIDE	472655704	9.47	4259	-0.049	0.024	0.090	0.151	332.167195	45.285228	854.77	1512.72
7	GUIDE	472523568	9.35	4256	0.014	-0.043	0.086	0.139	331.465966	45.371411	2281.54	411.99

2.4 Star Slots

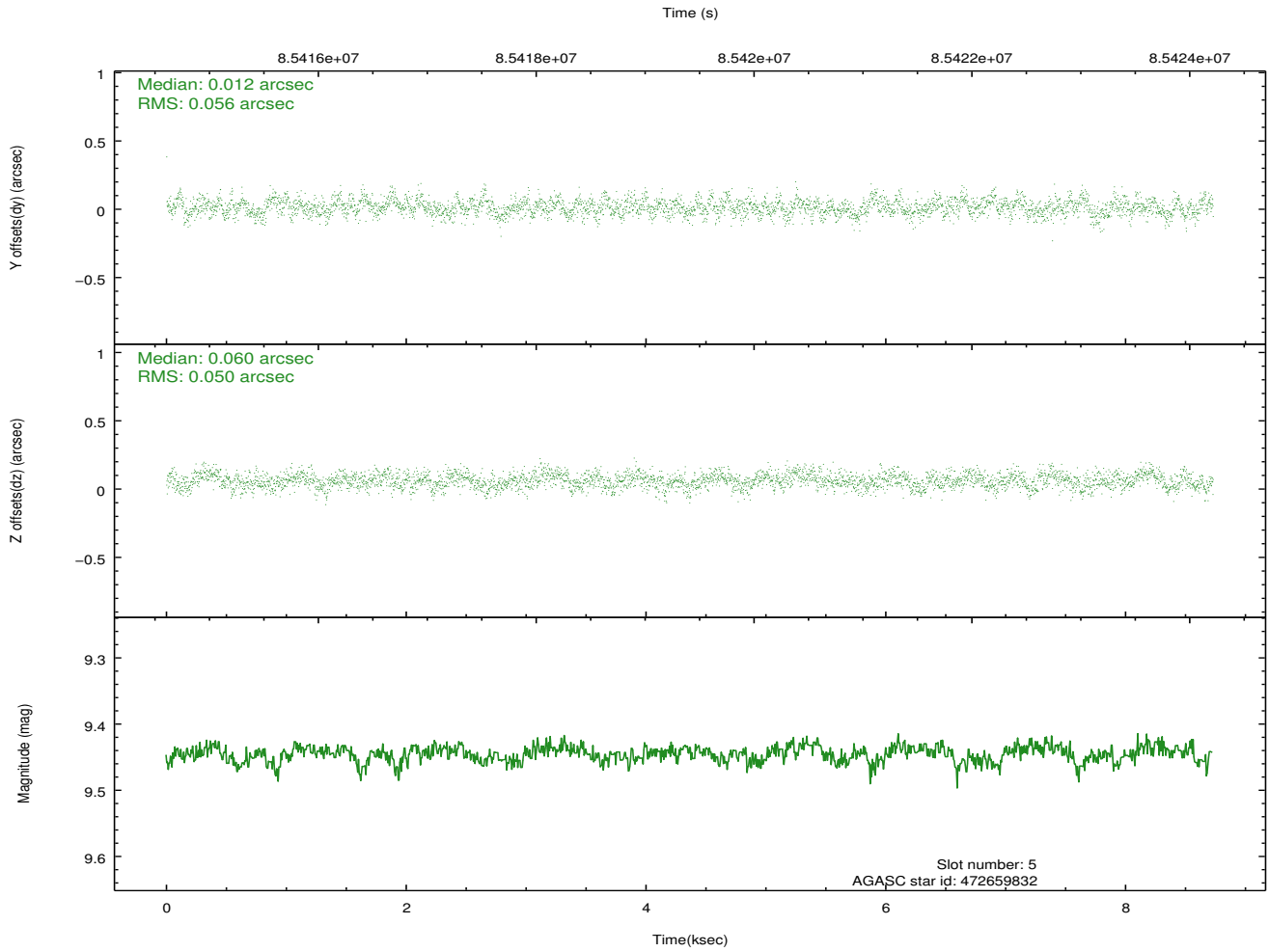
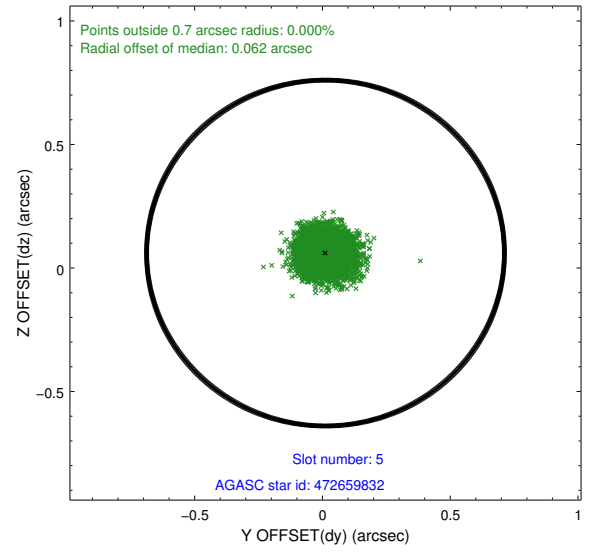
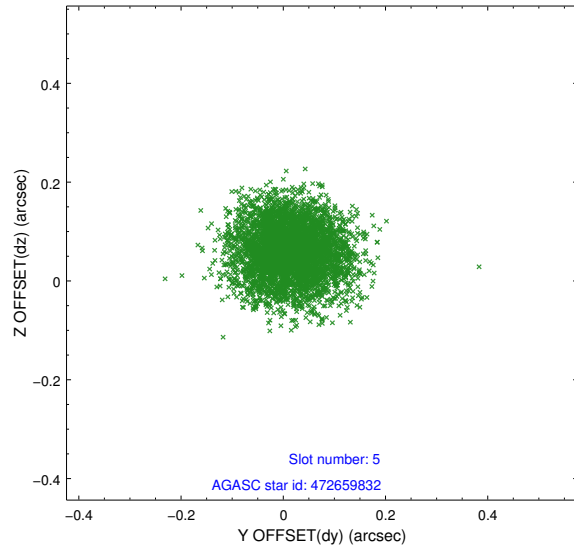
2.4.1 Slot 3



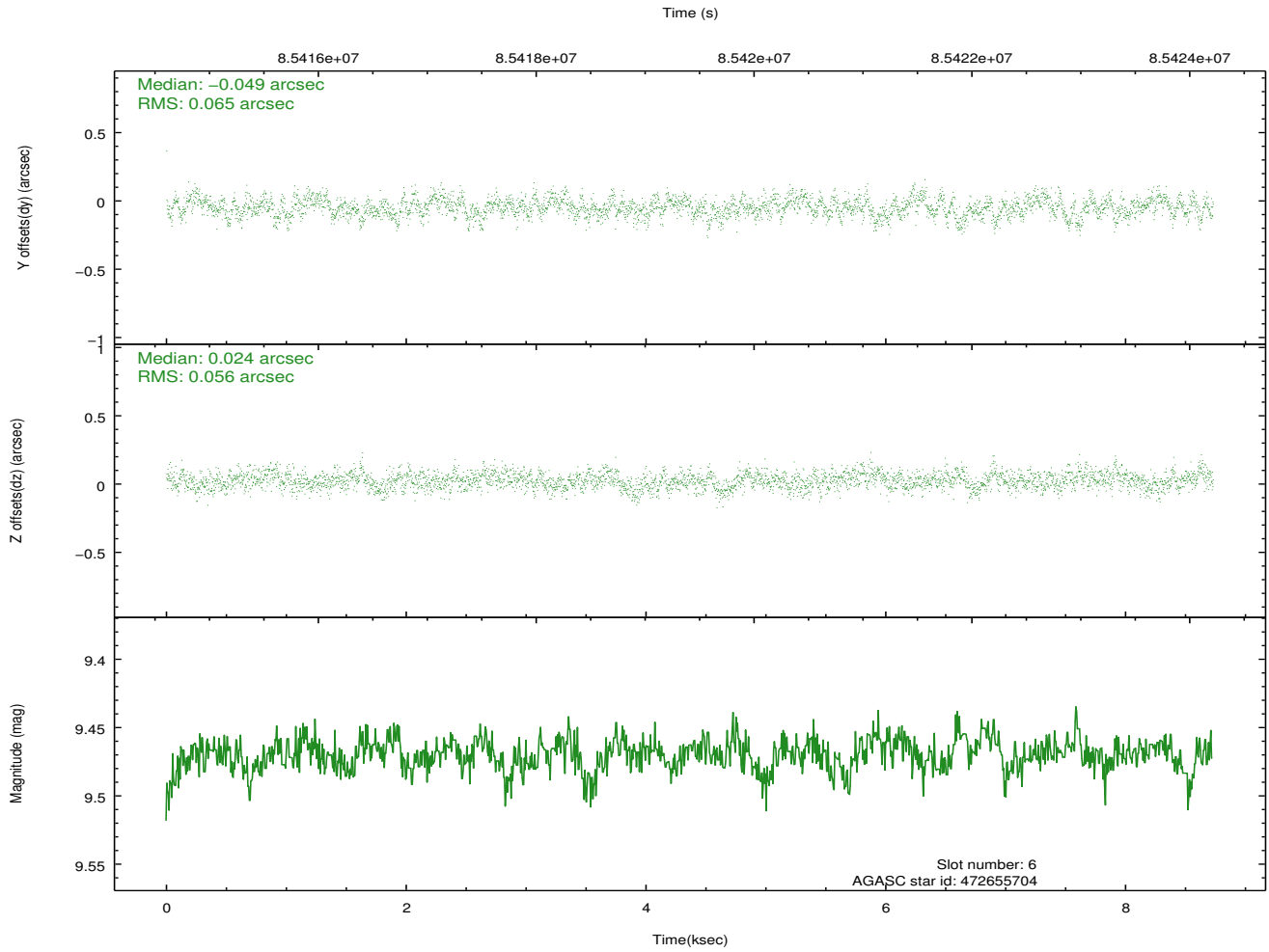
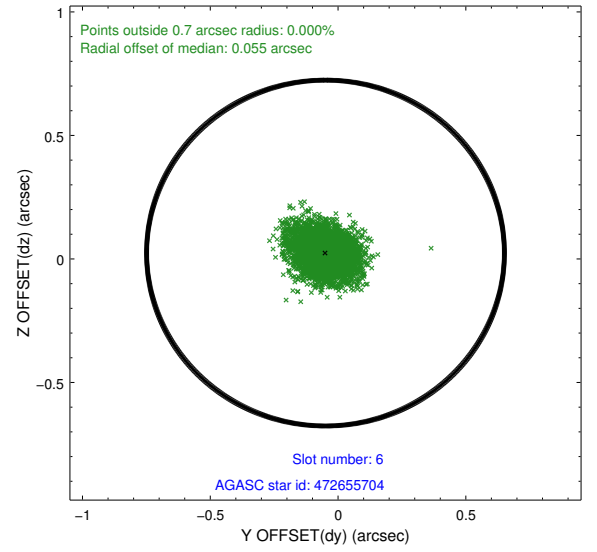
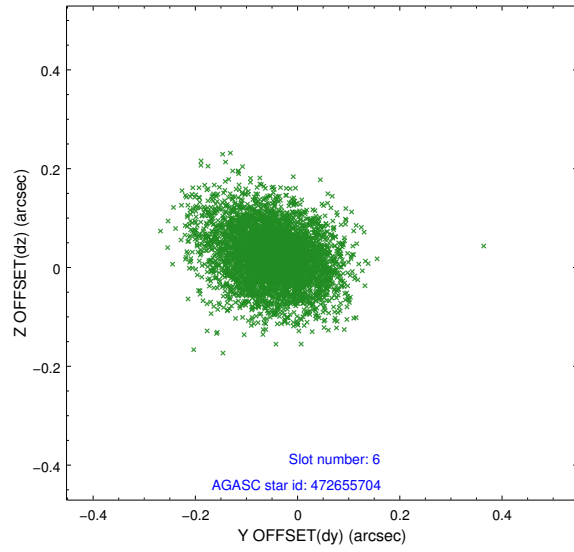
2.4.2 Slot 4



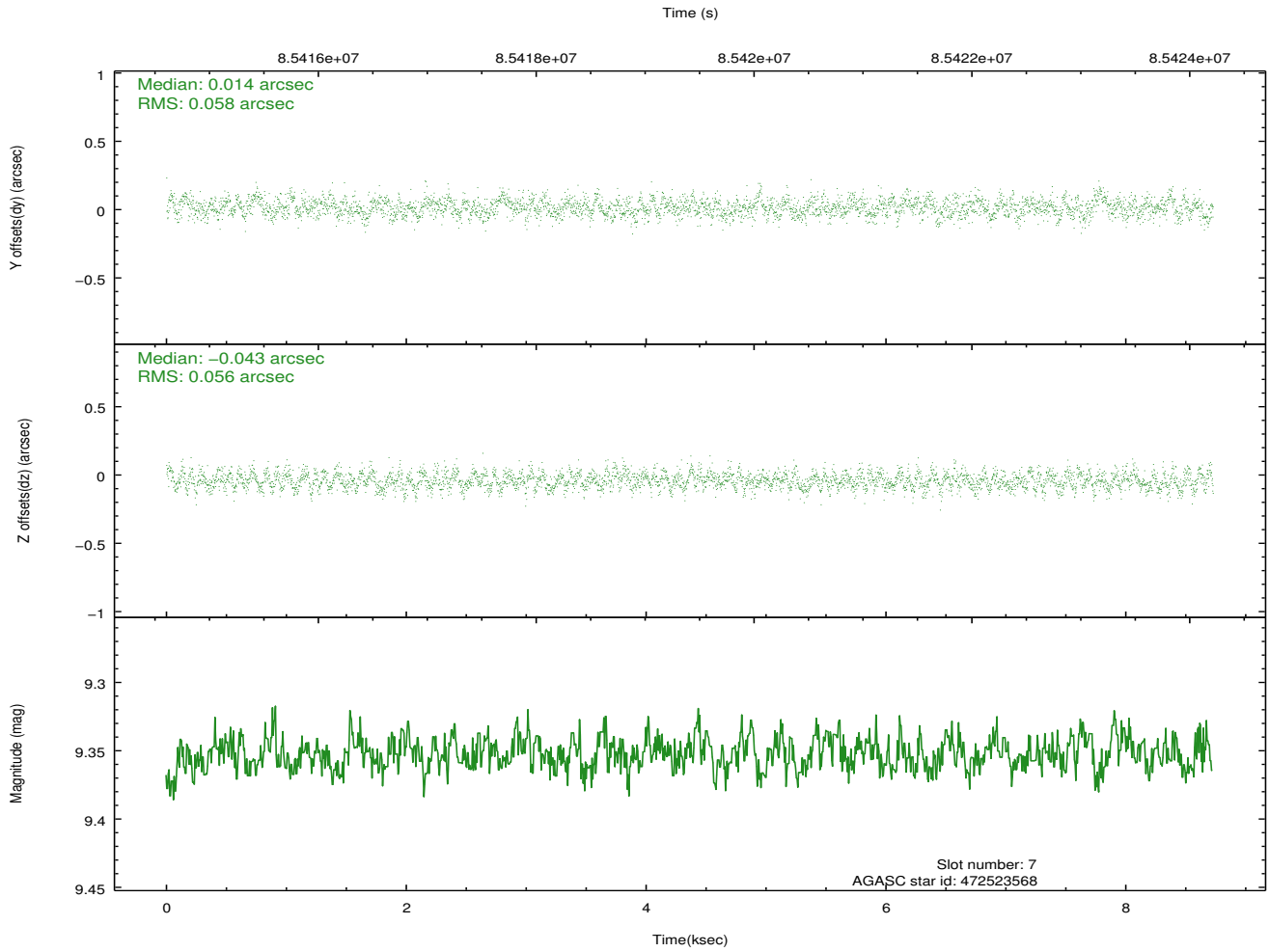
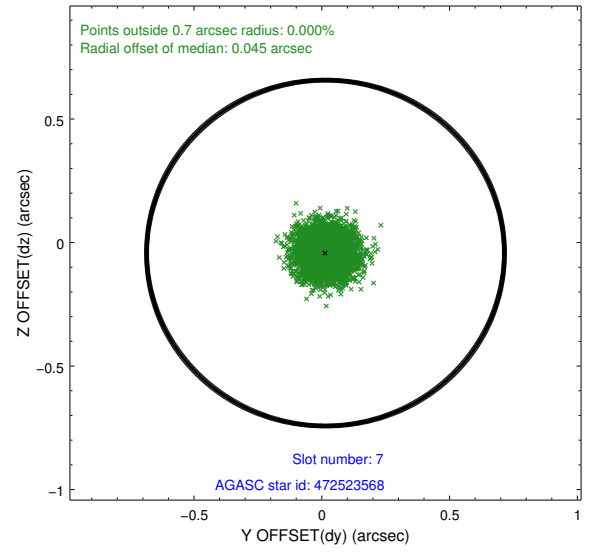
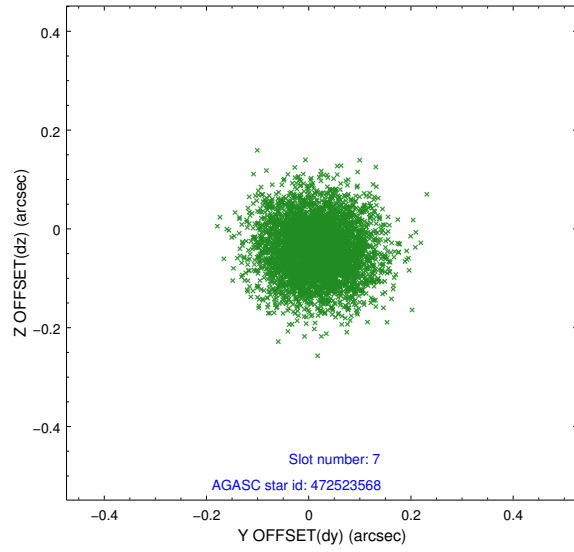
2.4.3 Slot 5



2.4.4 Slot 6

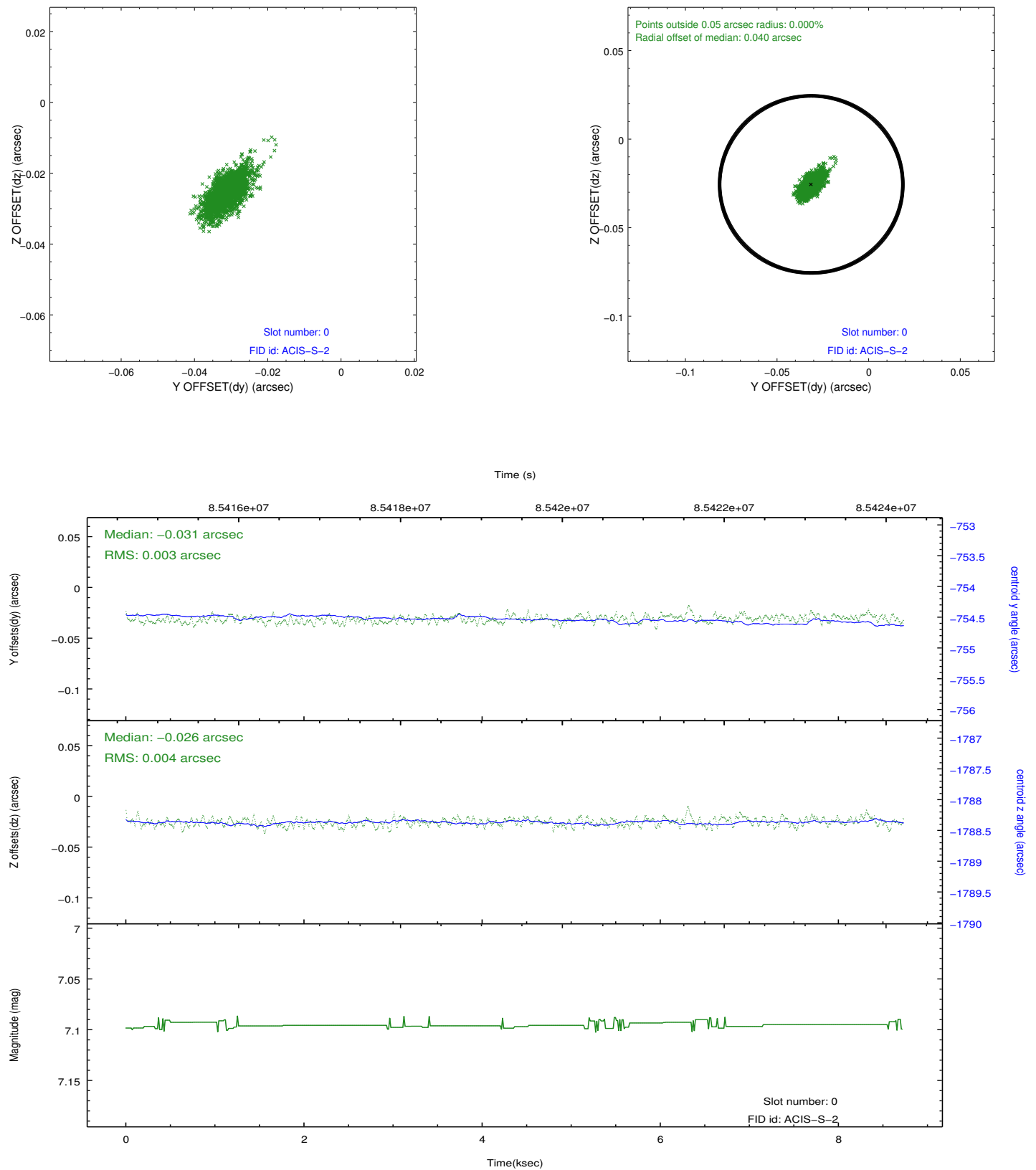


2.4.5 Slot 7

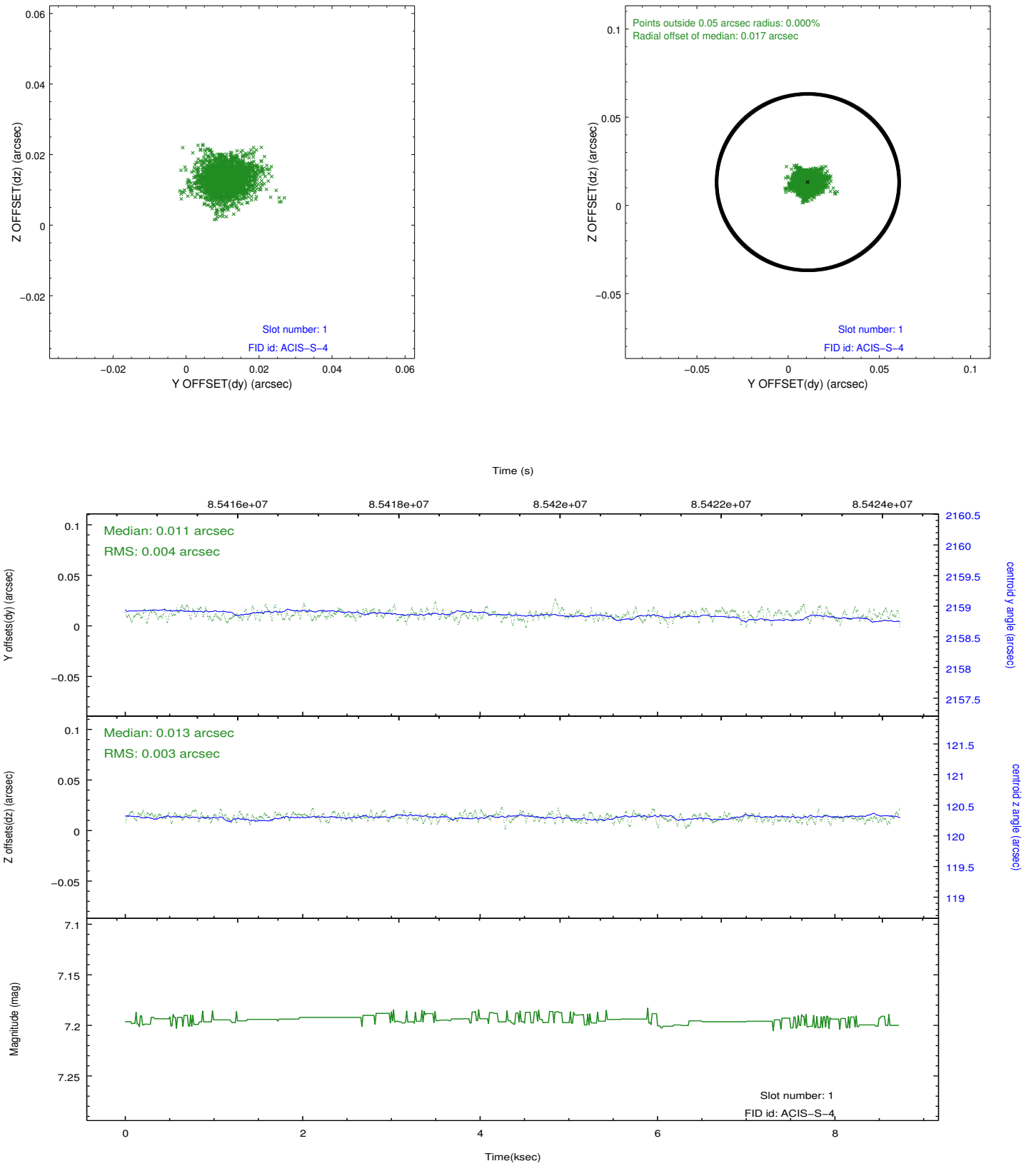


2.5 FID Slots

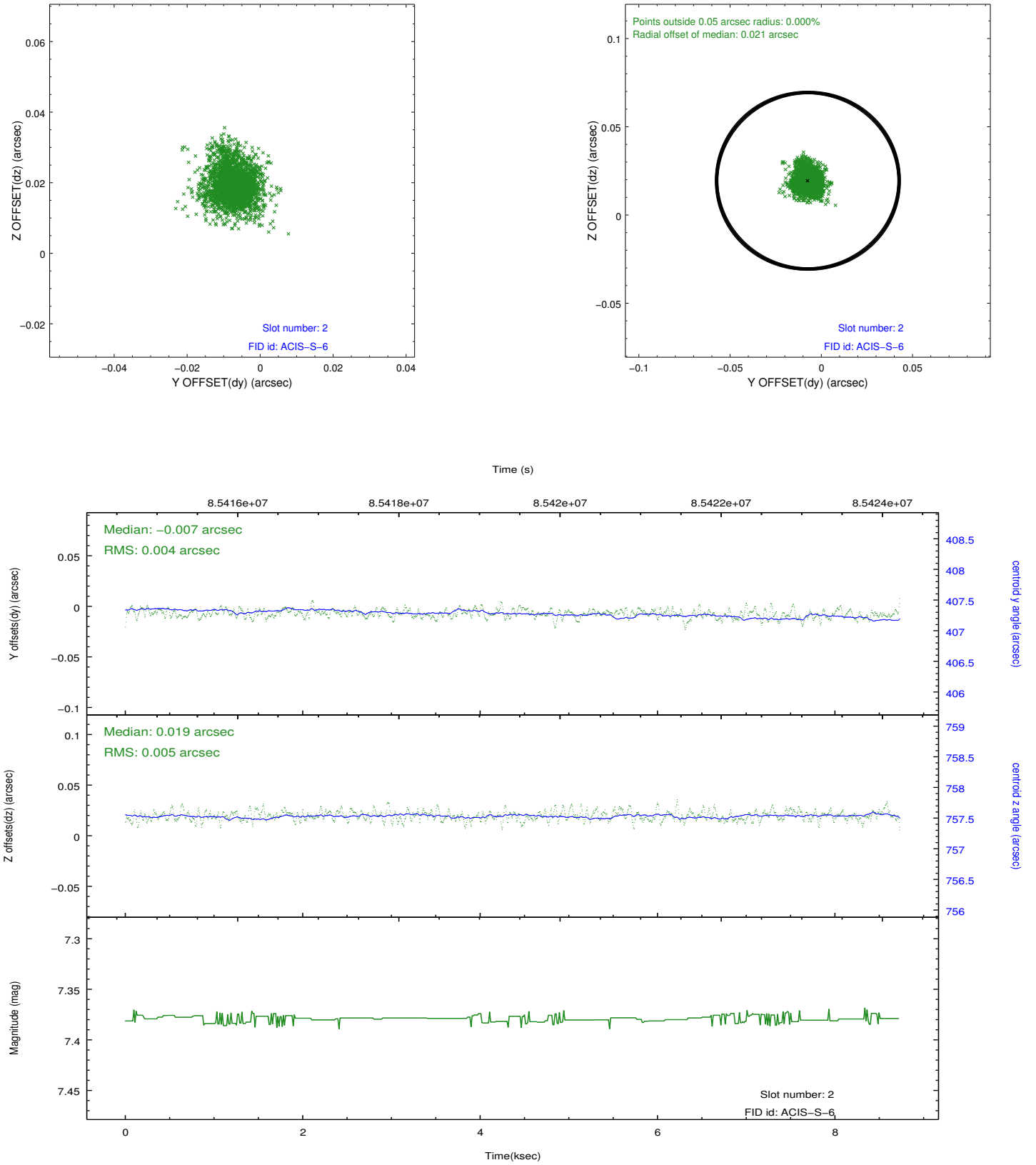
2.5.1 Slot 0



2.5.2 Slot 1

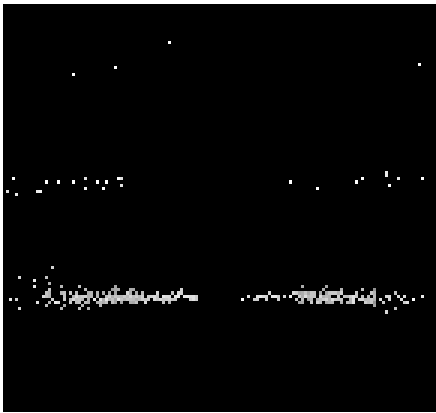


2.5.3 Slot 2

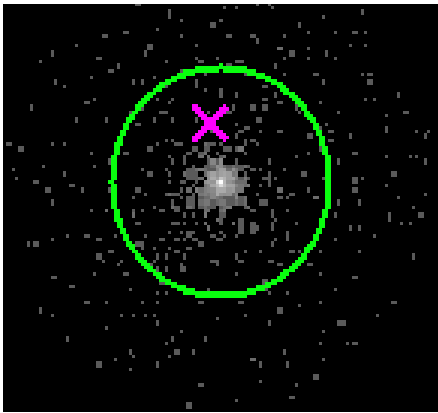


3 Gratings

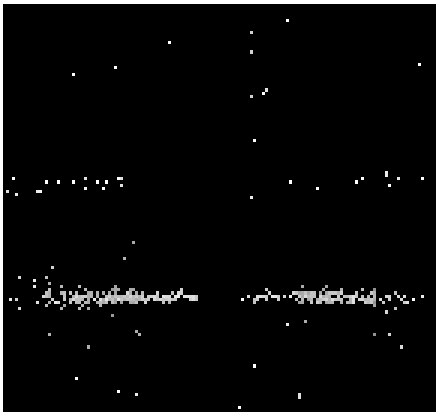
3.1 HEG Arm



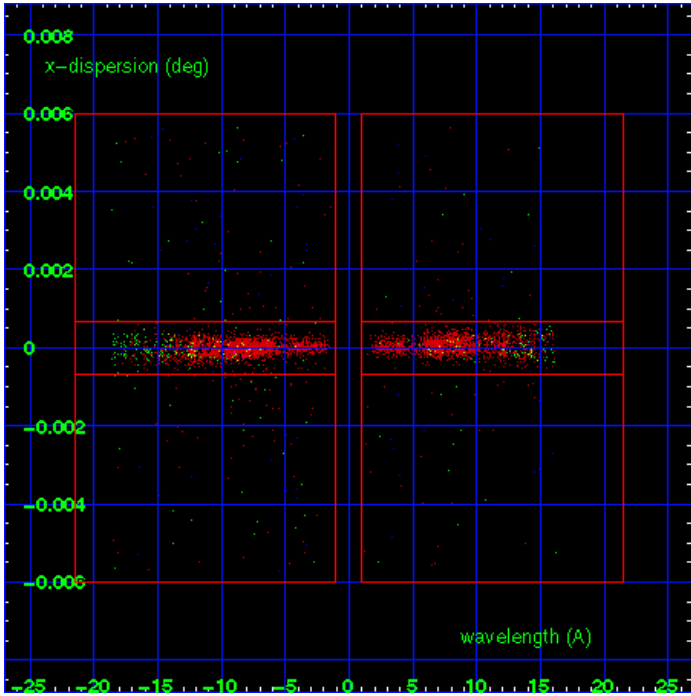
HEG Order Sort 123



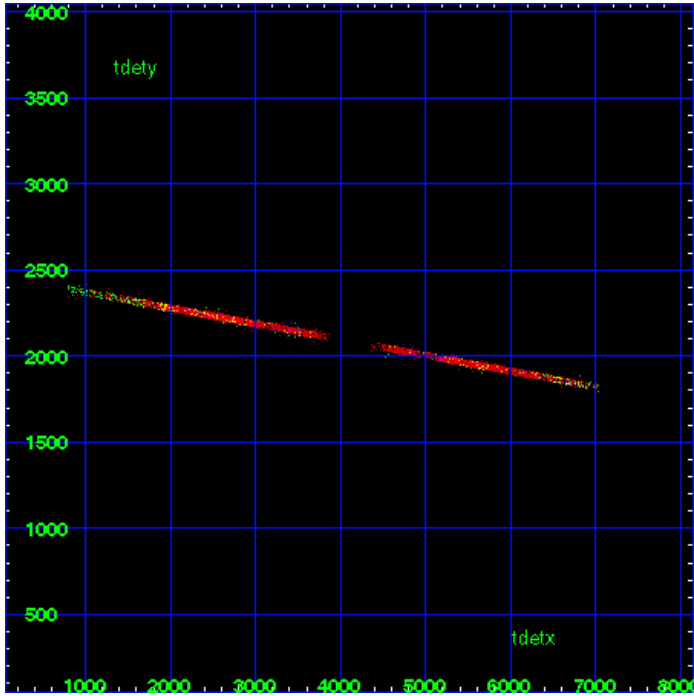
HEG Zero Order



HEG Order Sort ALL

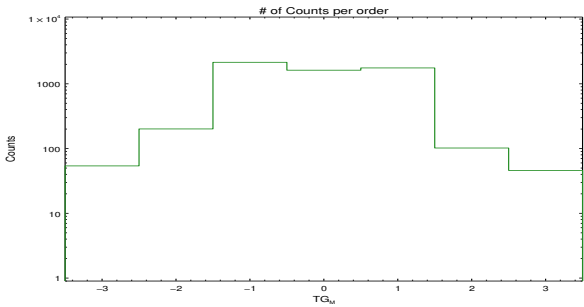


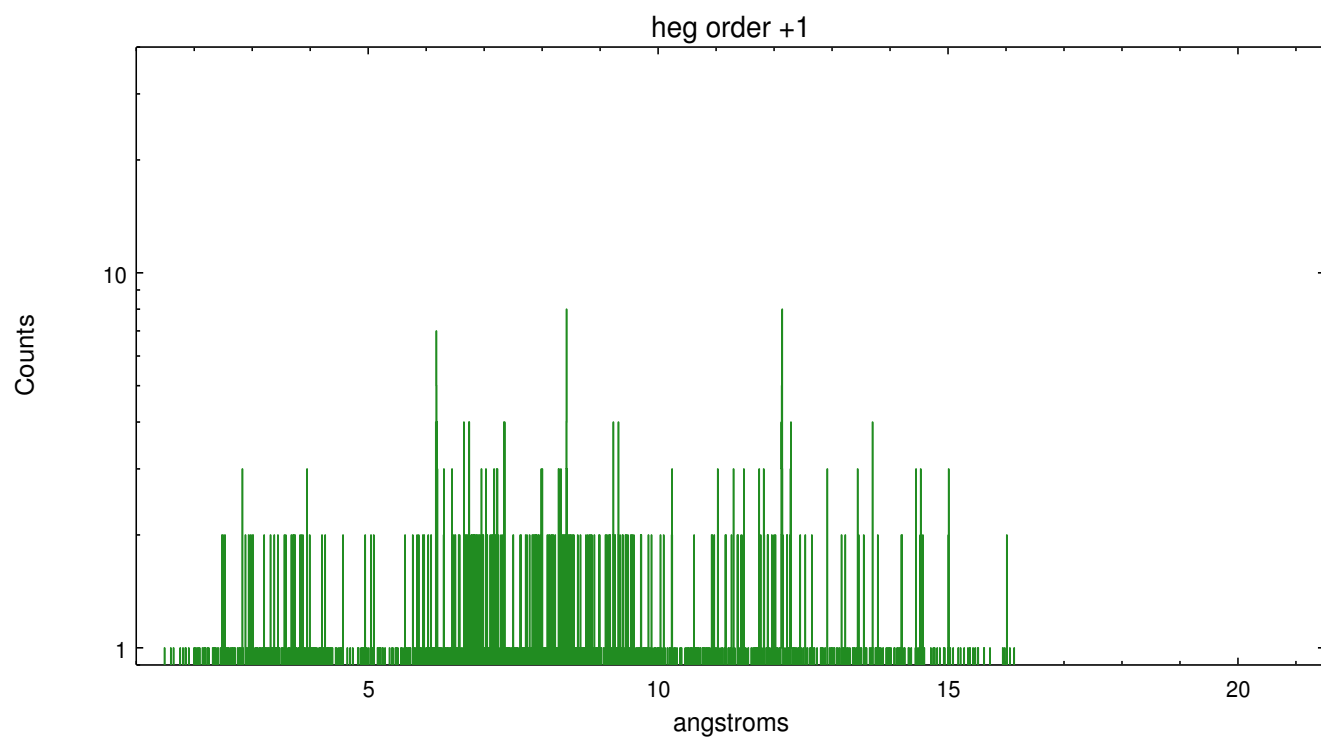
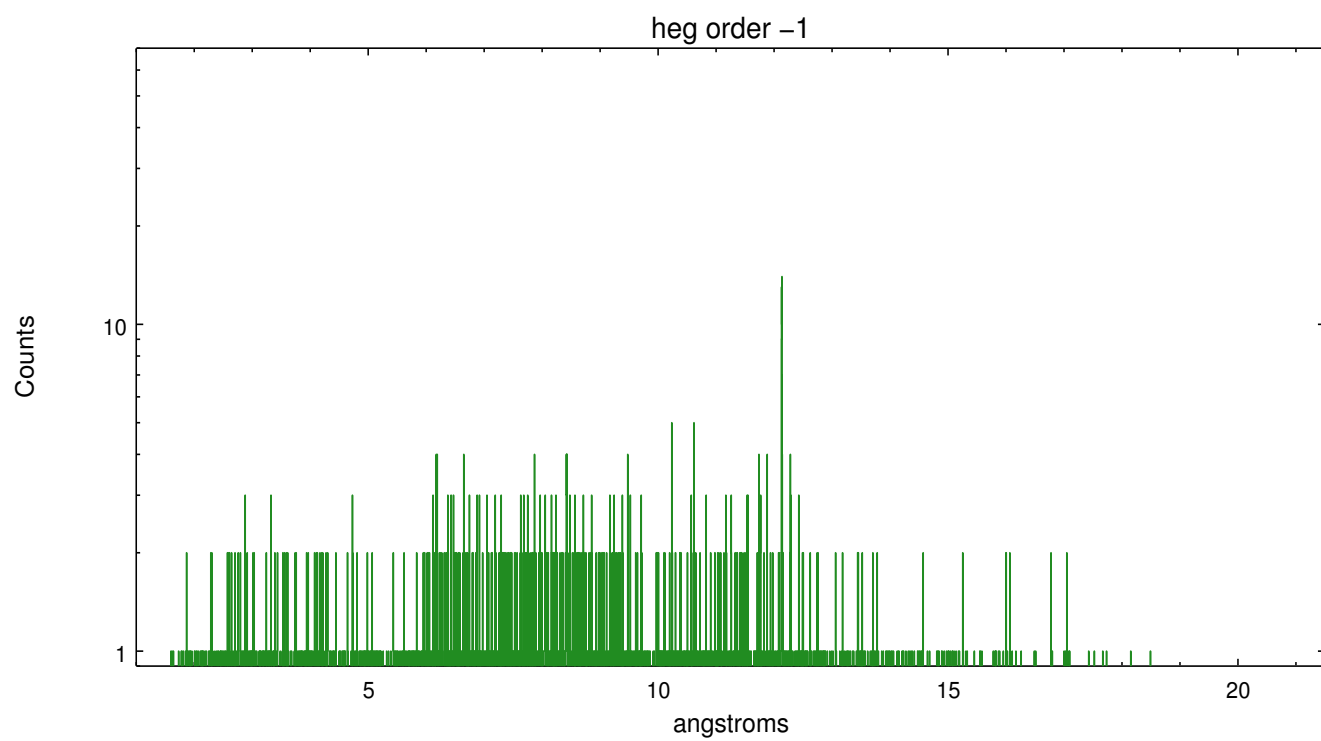
Spot Image HEG



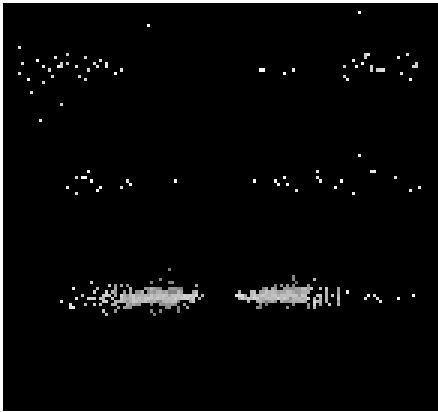
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	54	201	2148	1622	1759	102	46

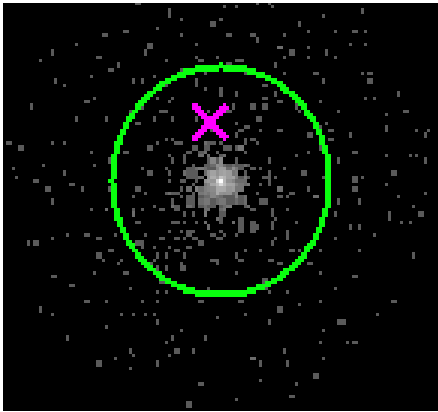




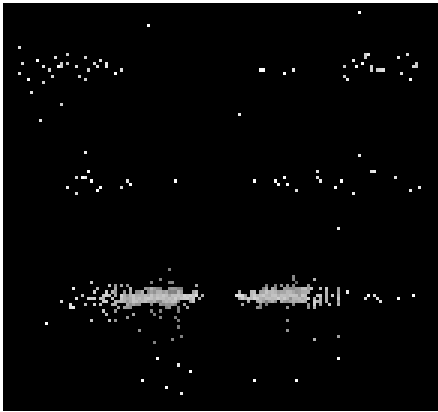
3.2 MEG Arm



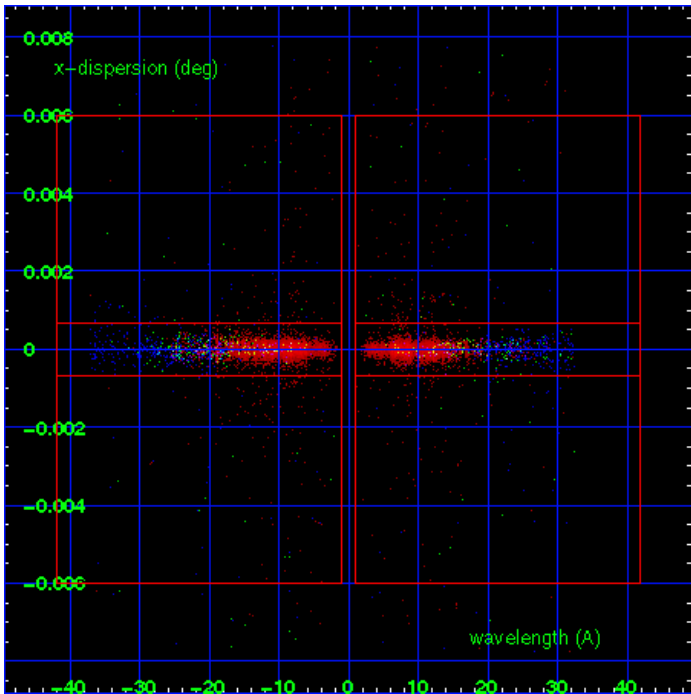
MEG Order Sort 123



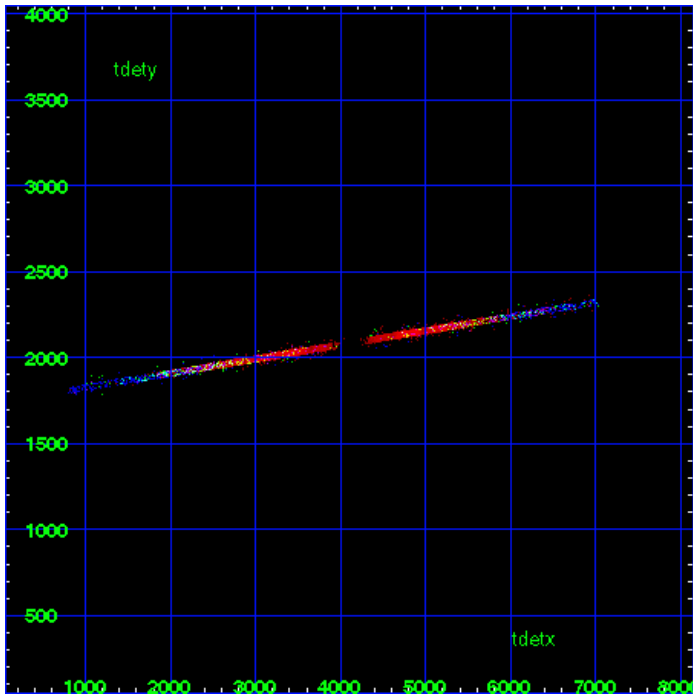
MEG Zero Order



MEG Order Sort ALL

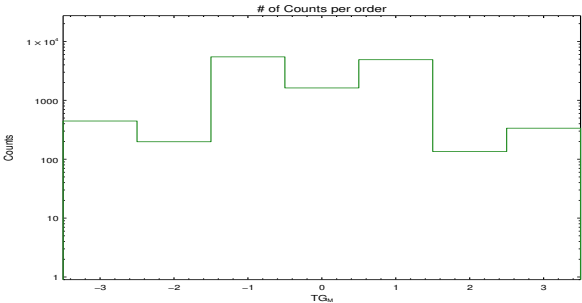


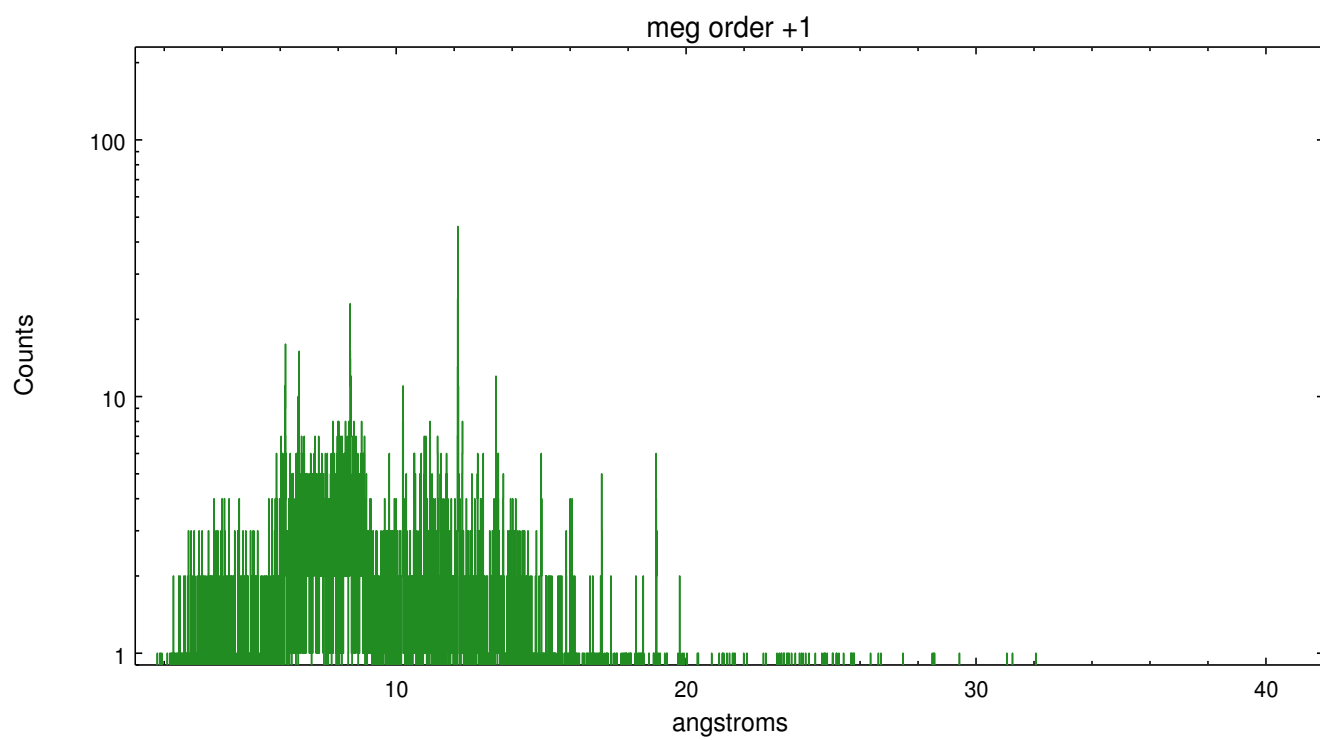
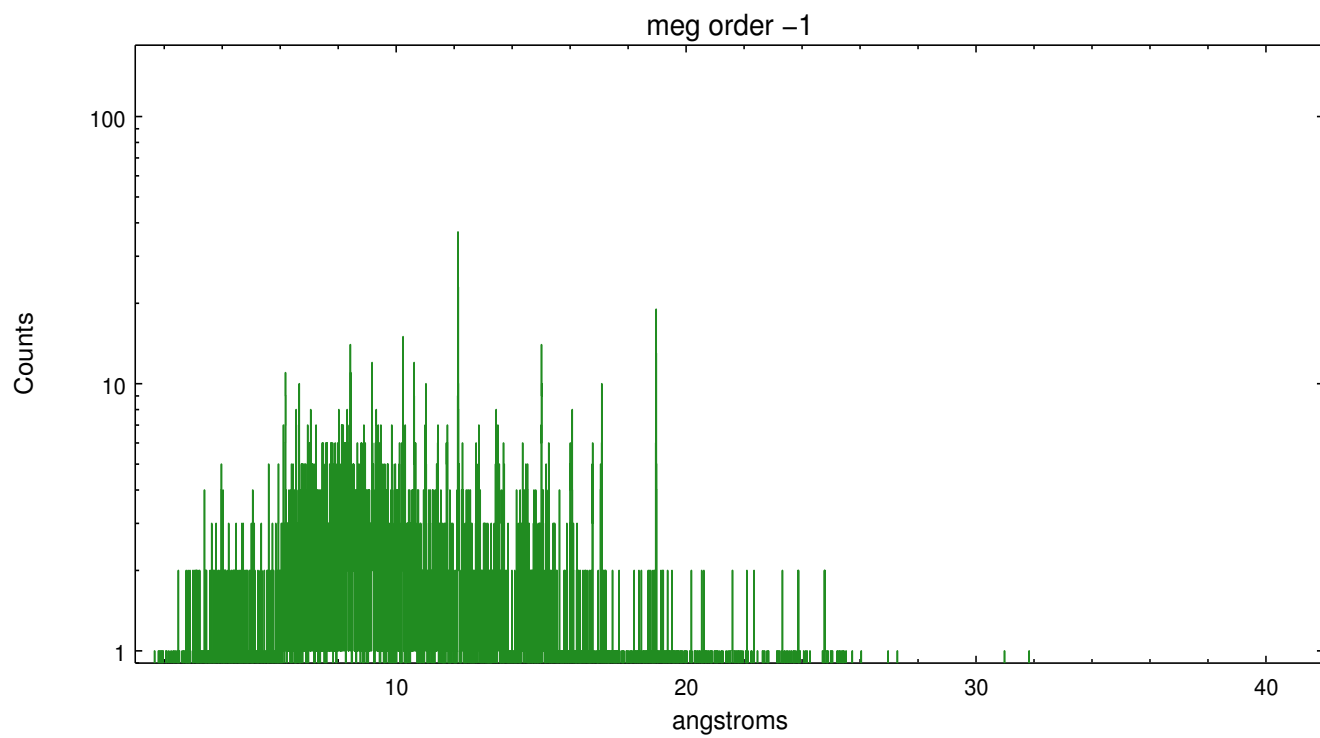
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	445	198	5469	1622	4897	135	336





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	7.548

A.2 Comments

Roll constraint met. Charge time for this ObsId remains at previous value of 7.548 ks, although the charge time with the current processing would be 7.52 ks. Caveat: due to an 0.5 day observer error on the ephemeris, comments on the phase in the header 'OBJECT' are wrong.