

V&V Reference Report

L2 ASCDS Version : 7.6.8

Observation 3822 - L2 Version 001
Chandra X-Ray Center

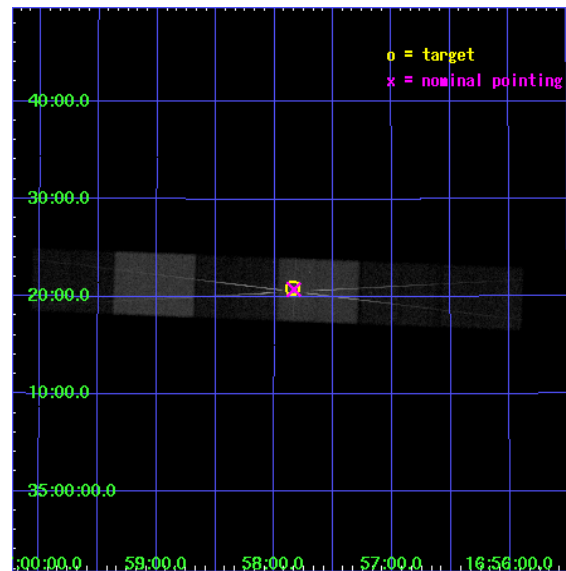
L2 Processing Date : Jun 23 2006

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1 Front

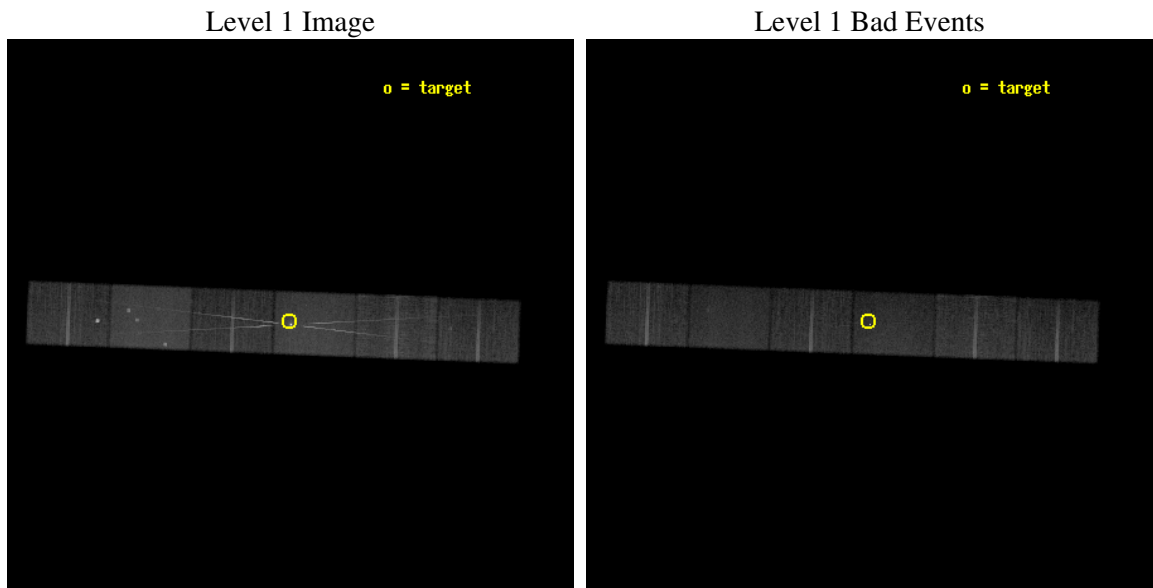
seq_num	400309
obs_id	3822
title	X-RAY TRANSMISSION SPECTROSCOPY DURING THE STAR-RISE OF HER X-1
observer	Dr. Mario Jimenez-Garate
object	HER X-1
dtcycle	0
cycle	P
ra_targ	254.460417
dec_targ	35.347778
ra_nom	254.45859080404
dec_nom	35.346042620816
roll_nom	2.2118839521992
revision	2
ontime	30137.5
livetime	29650.753234896
ontime4	30137.5
ontime5	30137.5
ontime6	30137.5
ontime7	30137.5
ontime8	30137.5
ontime9	30137.5
l2events	260866



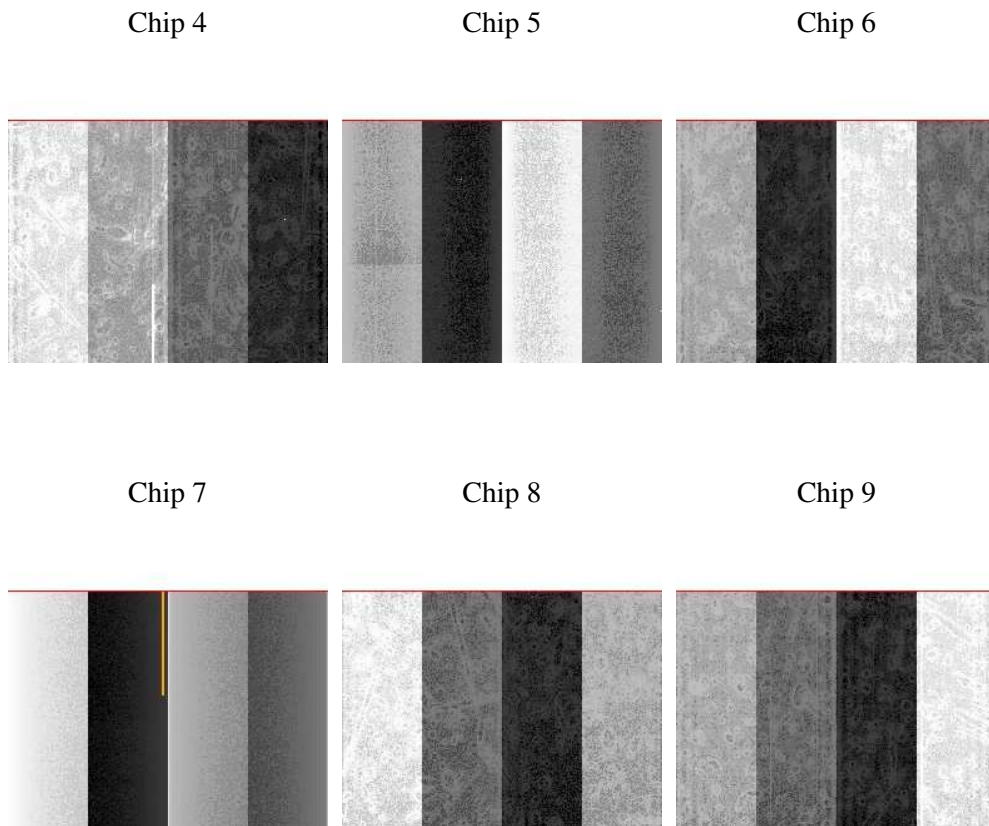
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2
ascdsver	7.6.8
caldsver	3.2.2
date	2006-06-23T13:07:20
revision	2

sched_exp_time	30000.000000
ontime	32110.730113089
ontime4	32001.465393096
ontime5	32110.730142981
ontime6	32011.62955308
ontime7	32110.730113089
ontime8	32016.714761615
ontime9	32009.088513076
l1events	1085839

2.1.4 Events

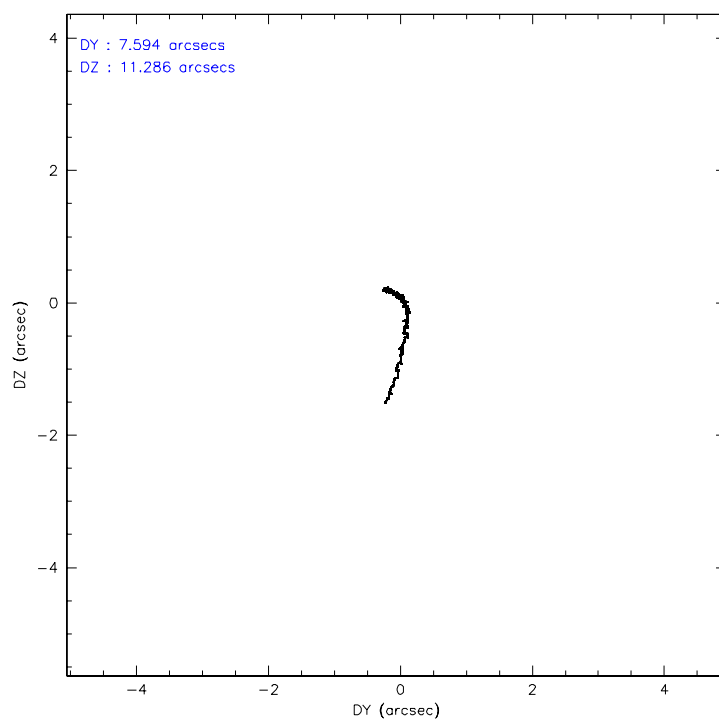
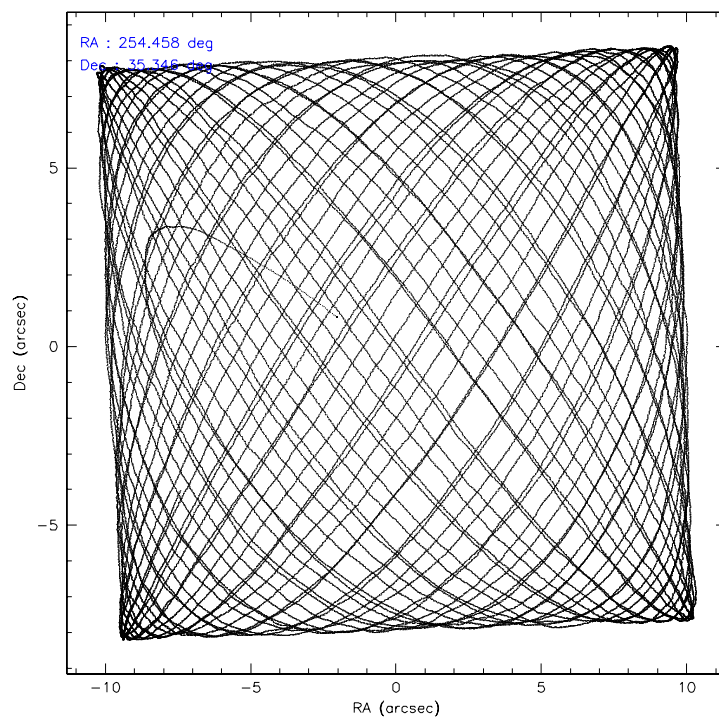
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	160416	215624	157815	224547	185452	141985
rejected events	135895	125632	124428	127602	144808	123555
rejected %	84%	58%	78%	56%	78%	87%

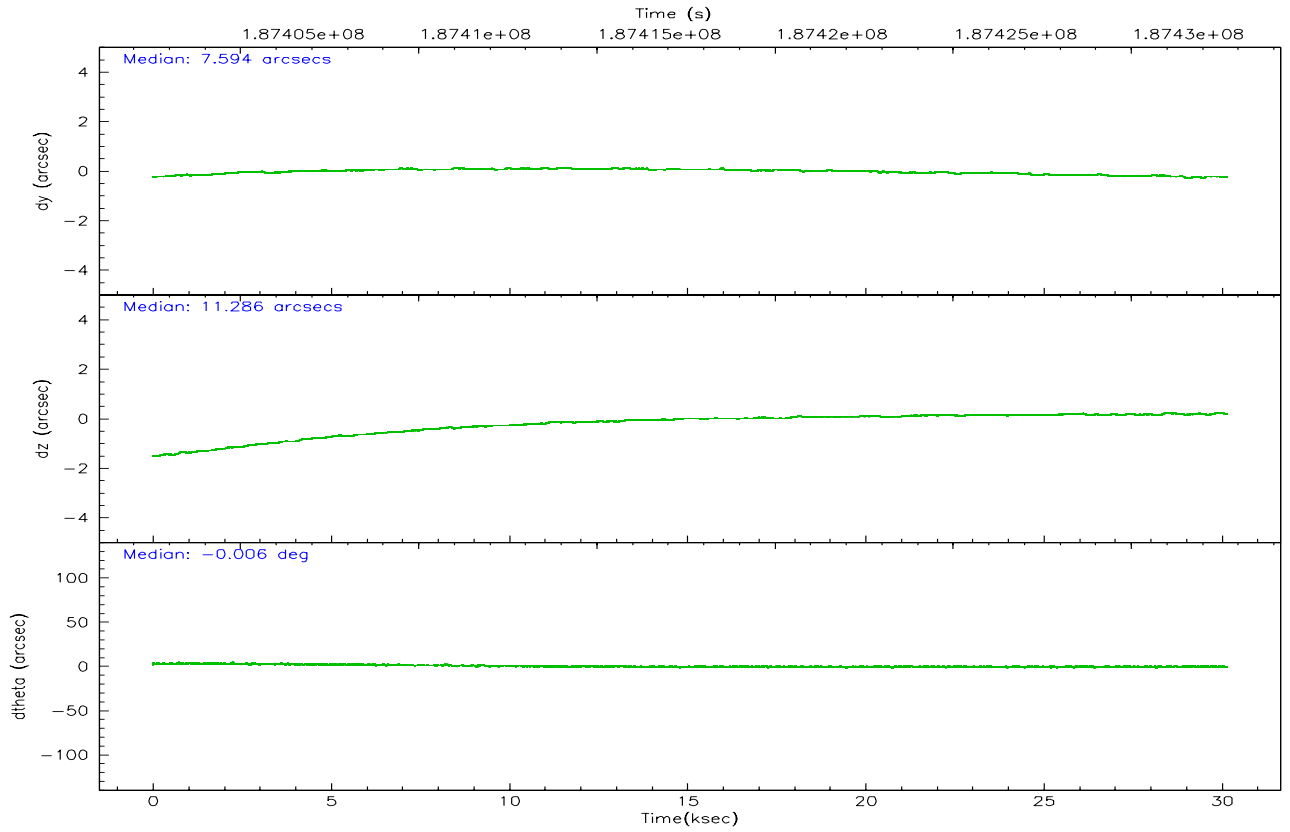
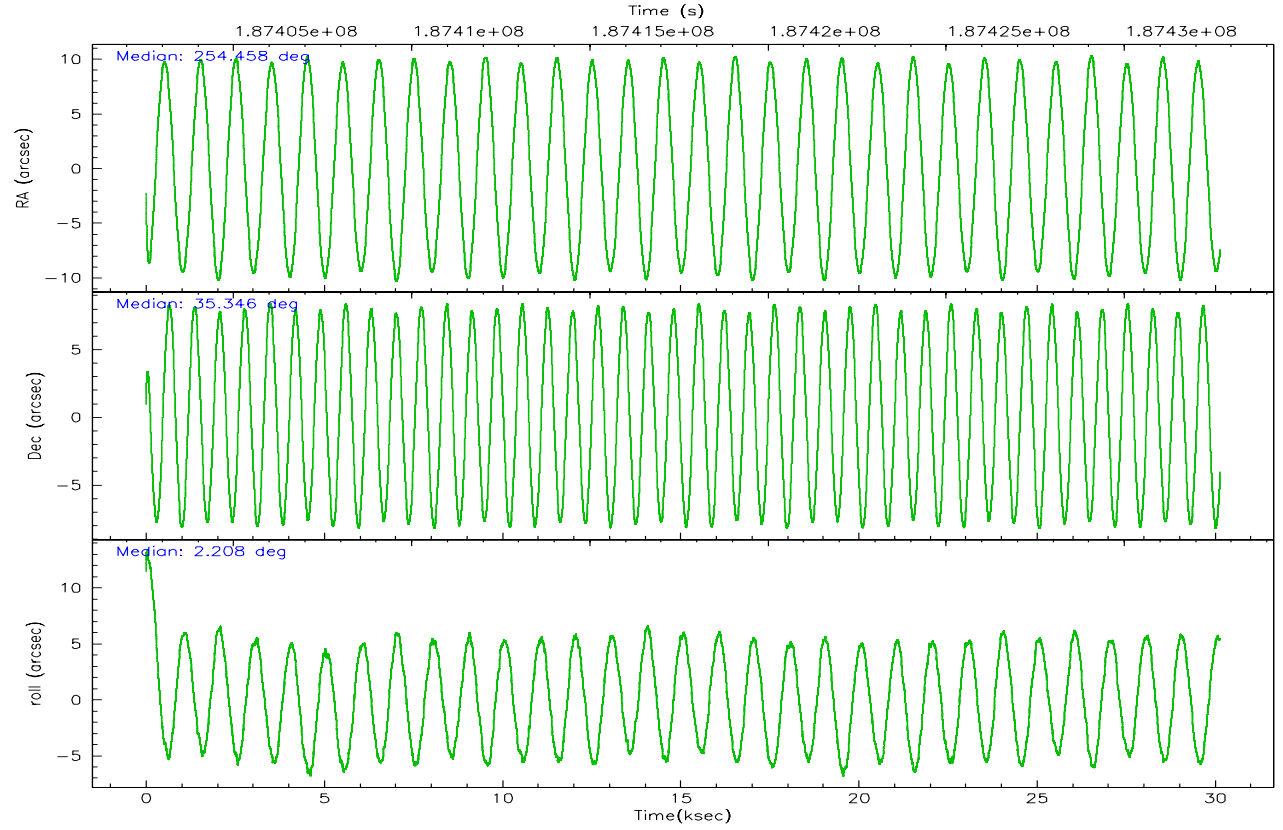
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	15623	8779	18737	9274	16240	8888
	9%	4%	11%	4%	8%	6%
grade 1 events	145	182	110	333	108	71
	0%	0%	0%	0%	0%	0%
grade 2 events	4045	29495	5897	25549	8736	3771
	2%	13%	3%	11%	4%	2%
grade 3 events	1995	3023	2718	6654	4348	1939
	1%	1%	1%	2%	2%	1%
grade 4 events	1910	2464	2631	6569	4102	1864
	1%	1%	1%	2%	2%	1%
grade 5 events	6104	10545	6599	15107	8419	6644
	3%	4%	4%	6%	4%	4%
grade 6 events	3051	53687	5097	55044	10241	3665
	1%	24%	3%	24%	5%	2%
grade 7 events	127543	107449	116026	106017	133258	115143
	79%	49%	73%	47%	71%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	CUSTOM
Pointing RA	254.430626	254.4585908040354	Subarray start row	1	1
Pointing Dec	35.331230	35.34604262081598	Subarray row count	774	774
Pointing Roll	2.071431	2.211883952199193	Alternating exposures requested	N	N
Window start time	187402504.184000	187402504.184000	Primary exposure time	0.000000	2.5
Window stop time	187432864.184000	187432864.184000			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1254020033014			
SIM translation stage offset (mm)	-3	-3.007120579706367			
Observation start time	187402680.184000	187400568.4653			
Observation start date	2003-12-10T00:16:56	2003-12-09T23:42:48			
Observation end time	187432680.184000	187434382.70427			
Observation end date	2003-12-10T08:36:56	2003-12-10T09:06:22			
Read mode	TIMED	TIMED			

2.3 Aspect



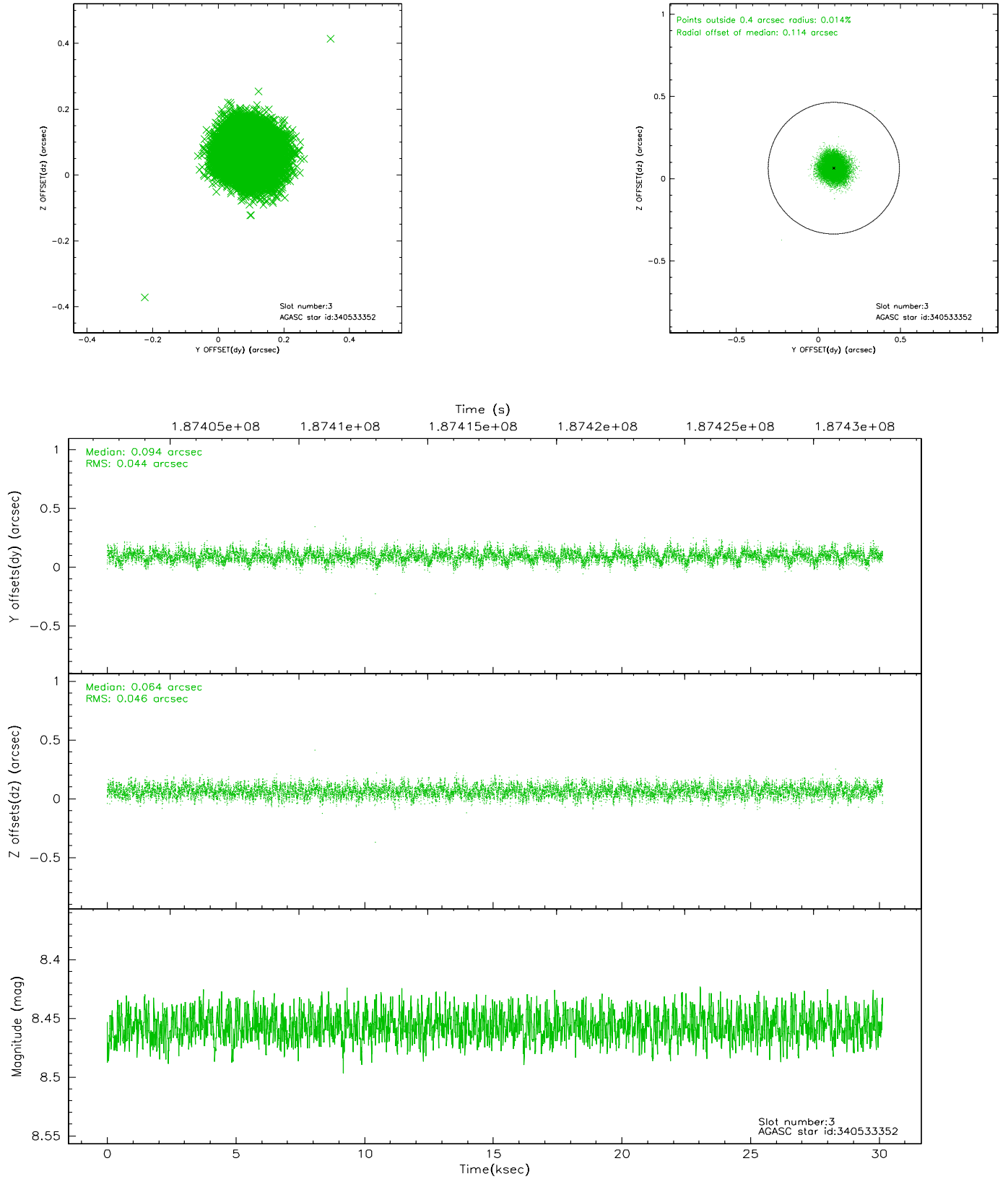


Slot Statistics

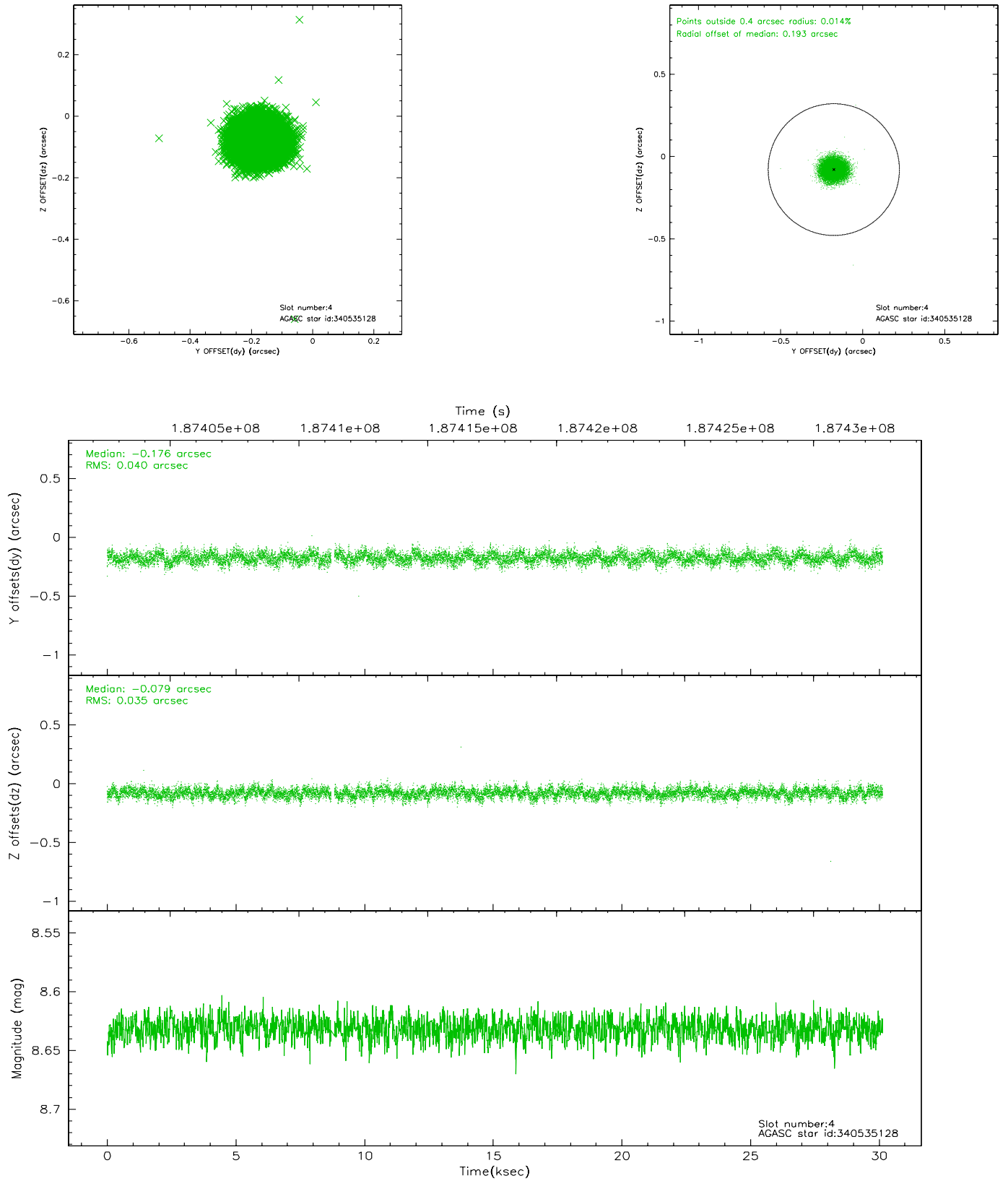
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	7352	0.015	0.073	0.018	0.056	0.000000	0.000000	935.92	-1789.99
1	FID	ACIS-S-5	7.23	7353	-0.042	0.035	0.011	0.017	0.000000	0.000000	-1813.09	107.46
2	FID	ACIS-S-6	7.37	7352	0.005	-0.095	0.010	0.047	0.000000	0.000000	401.39	751.36
3	GUIDE	340533352	8.46	14703	0.094	0.064	0.068	0.108	254.563691	34.717962	314.34	-2220.16
4	GUIDE	340535128	8.63	14637	-0.176	-0.079	0.057	0.092	255.168295	35.370645	2169.74	71.59
5	GUIDE	340536192	7.72	14669	0.050	0.048	0.064	0.098	254.294567	35.286536	-404.70	-145.91
6	GUIDE	341060696	9.20	14694	0.010	-0.037	0.083	0.136	254.855764	35.681180	1287.25	1217.86
7	GUIDE	340534080	8.84	14701	0.018	0.006	0.077	0.123	255.228954	35.471551	2358.23	429.98

2.4 Star Slots

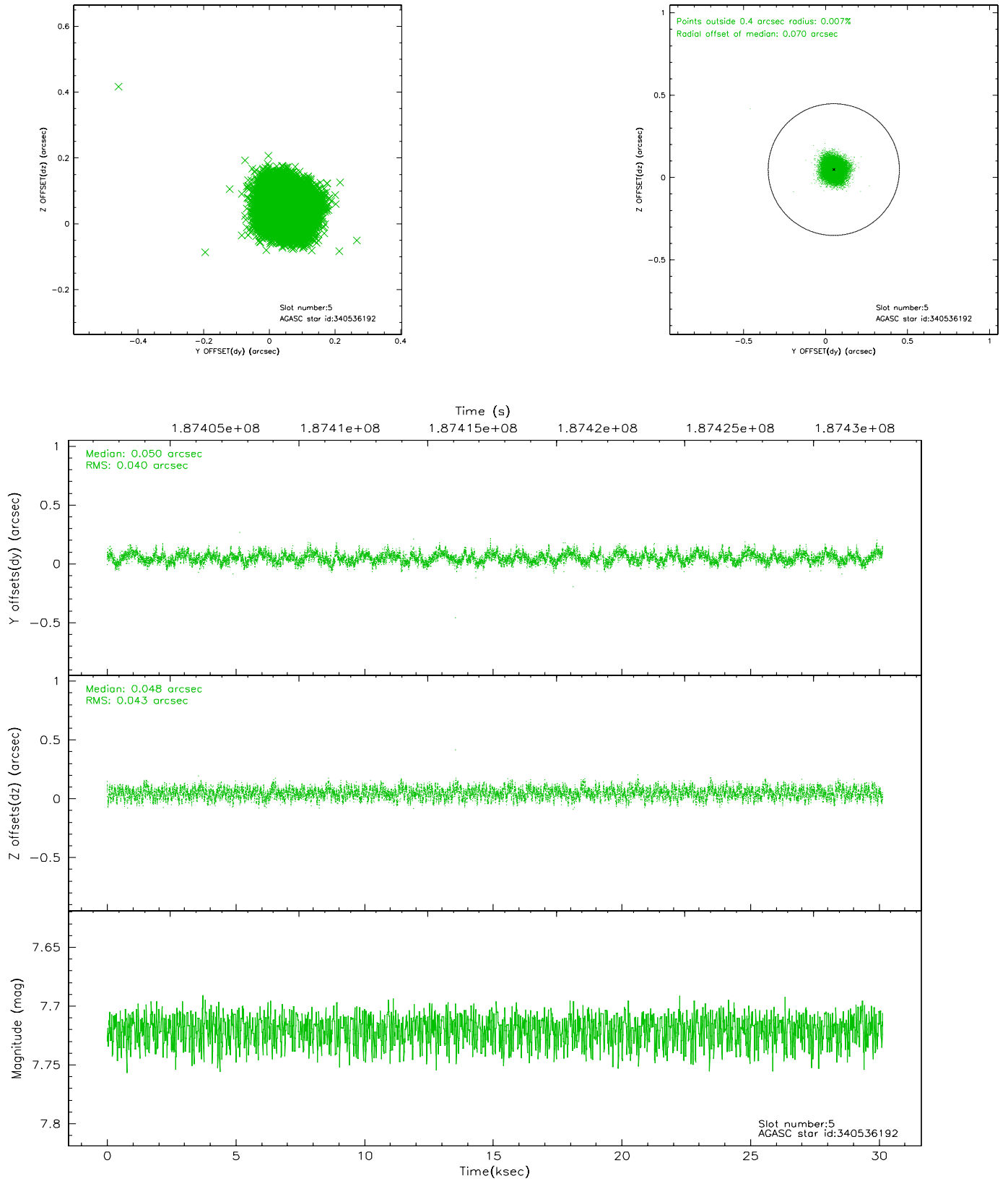
2.4.1 Slot 3



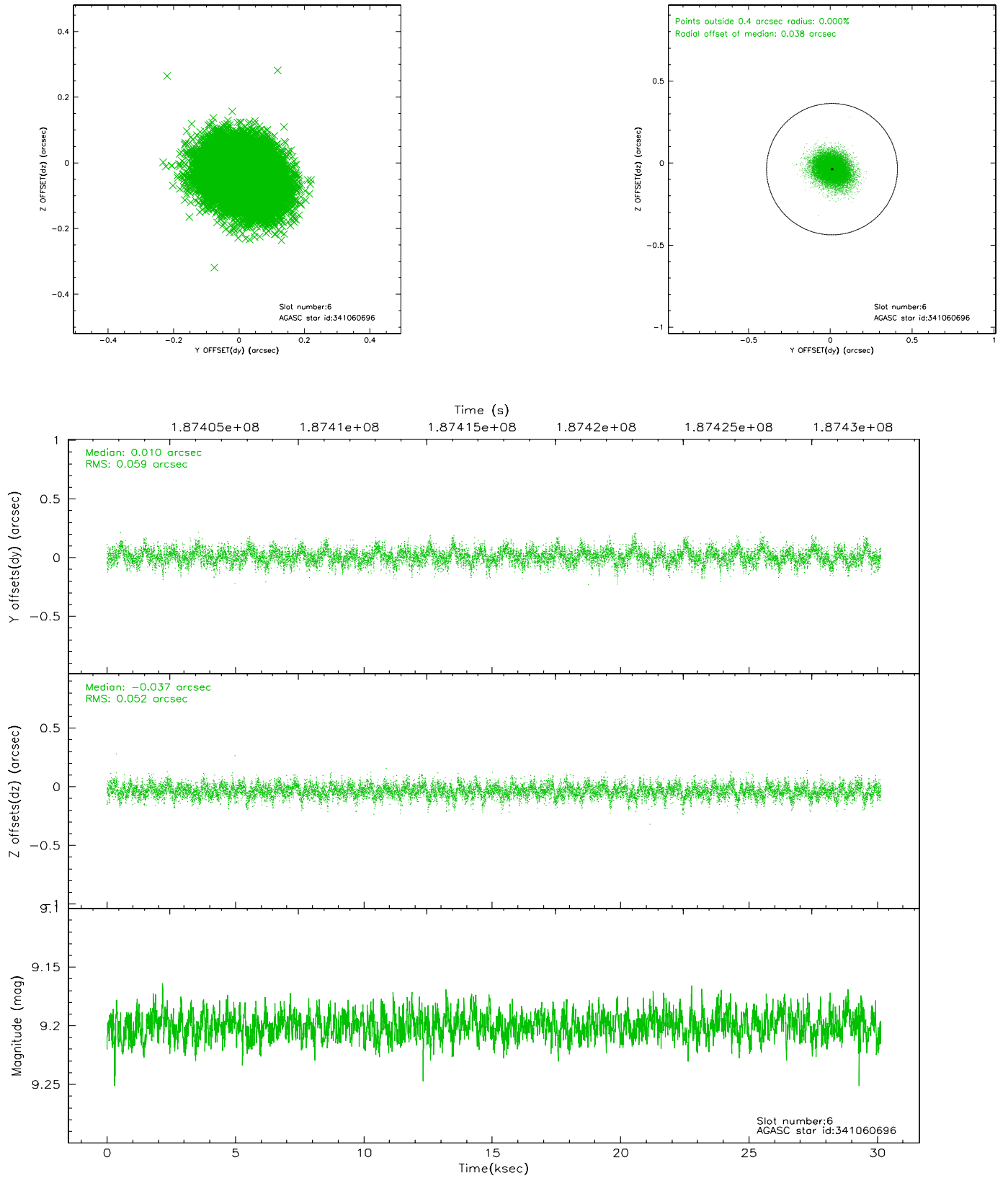
2.4.2 Slot 4



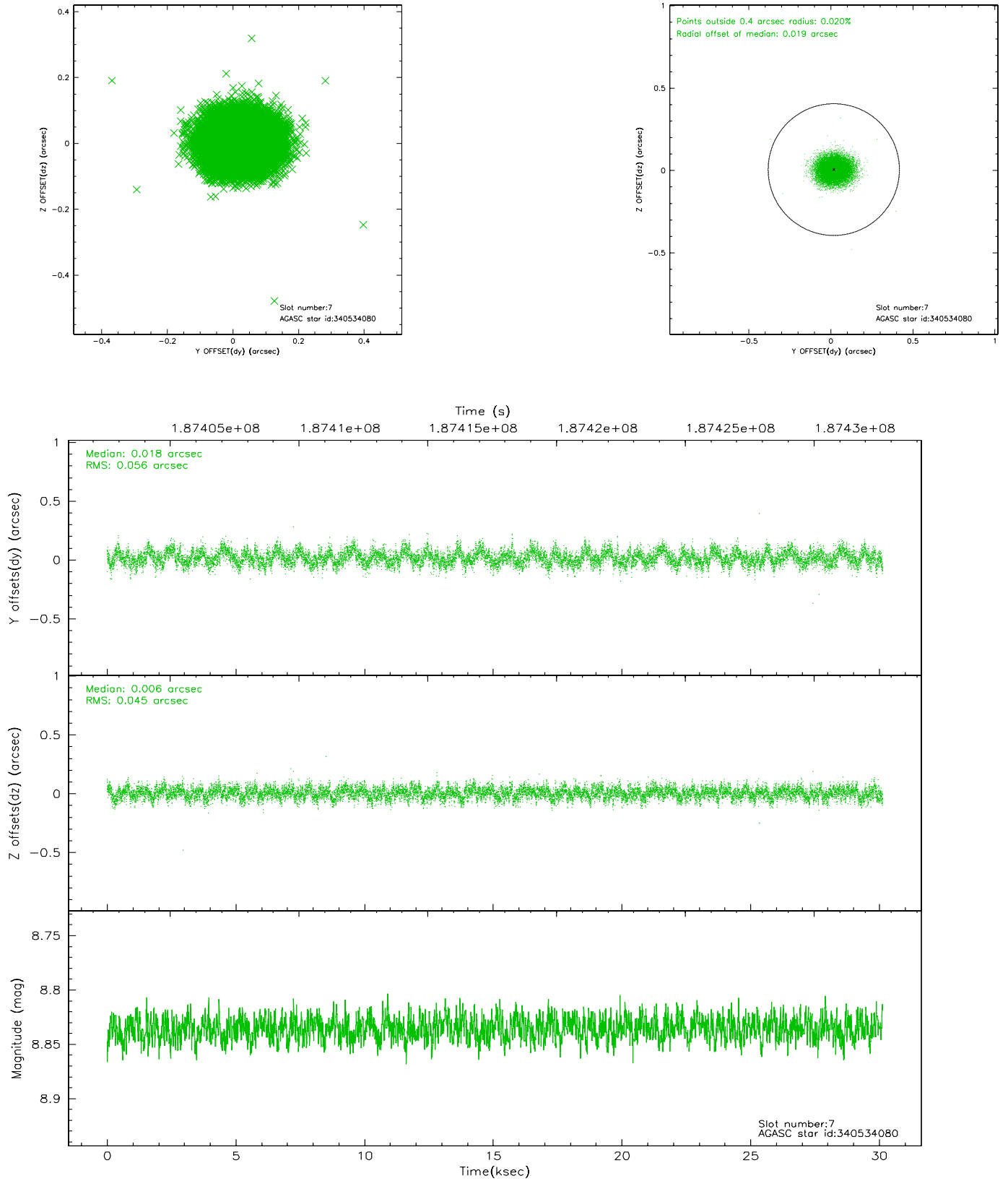
2.4.3 Slot 5



2.4.4 Slot 6

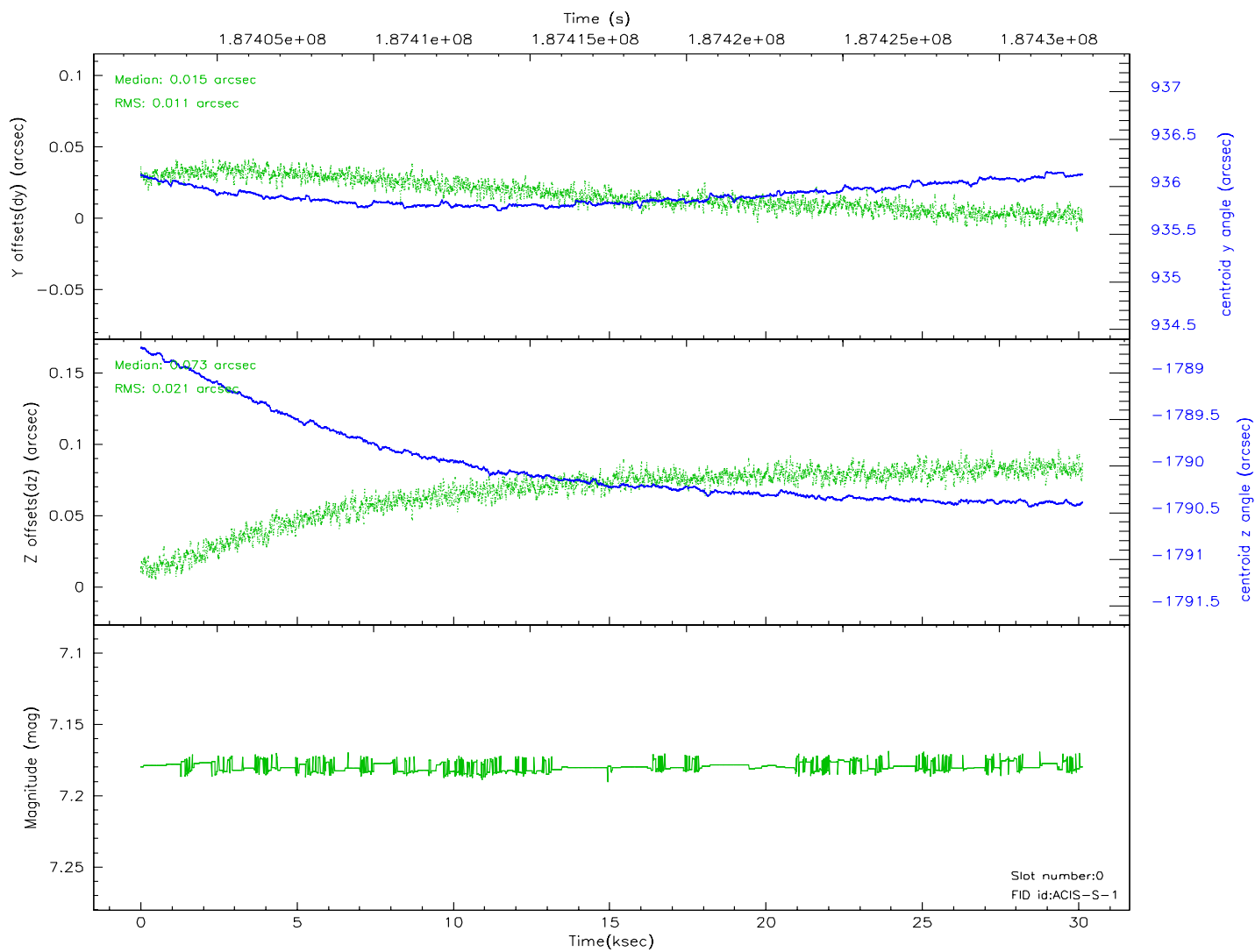
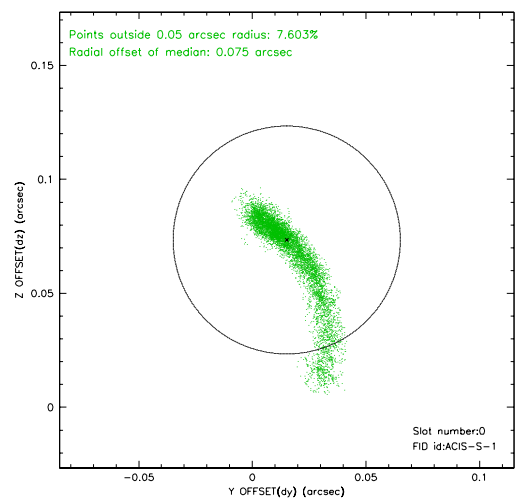
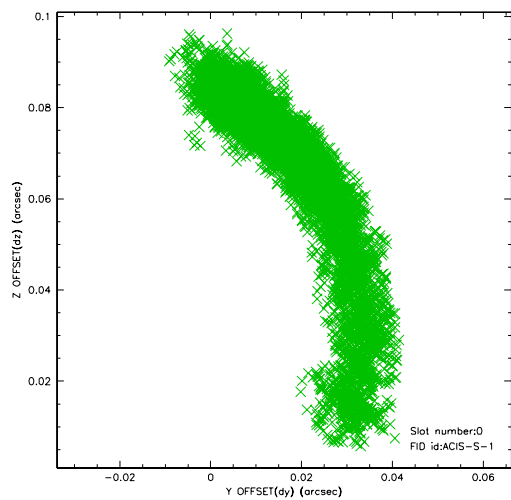


2.4.5 Slot 7

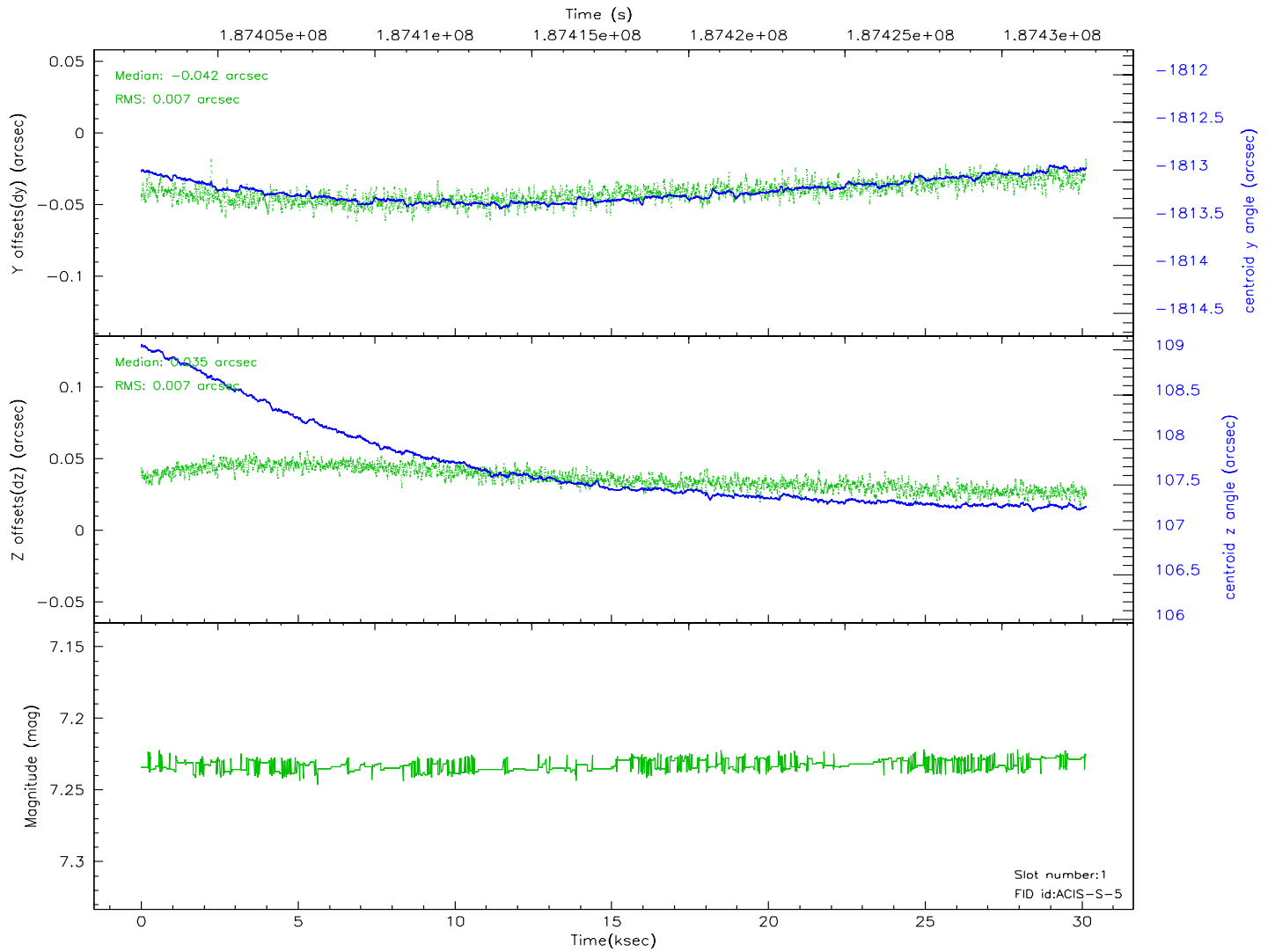
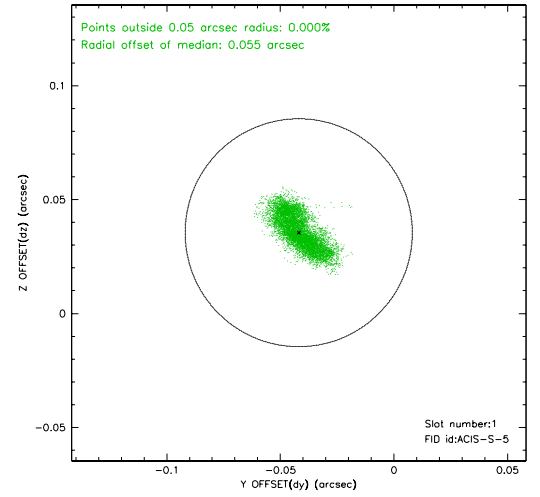
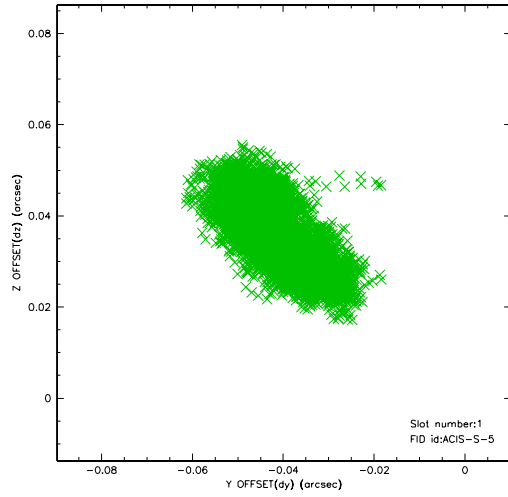


2.5 FID Slots

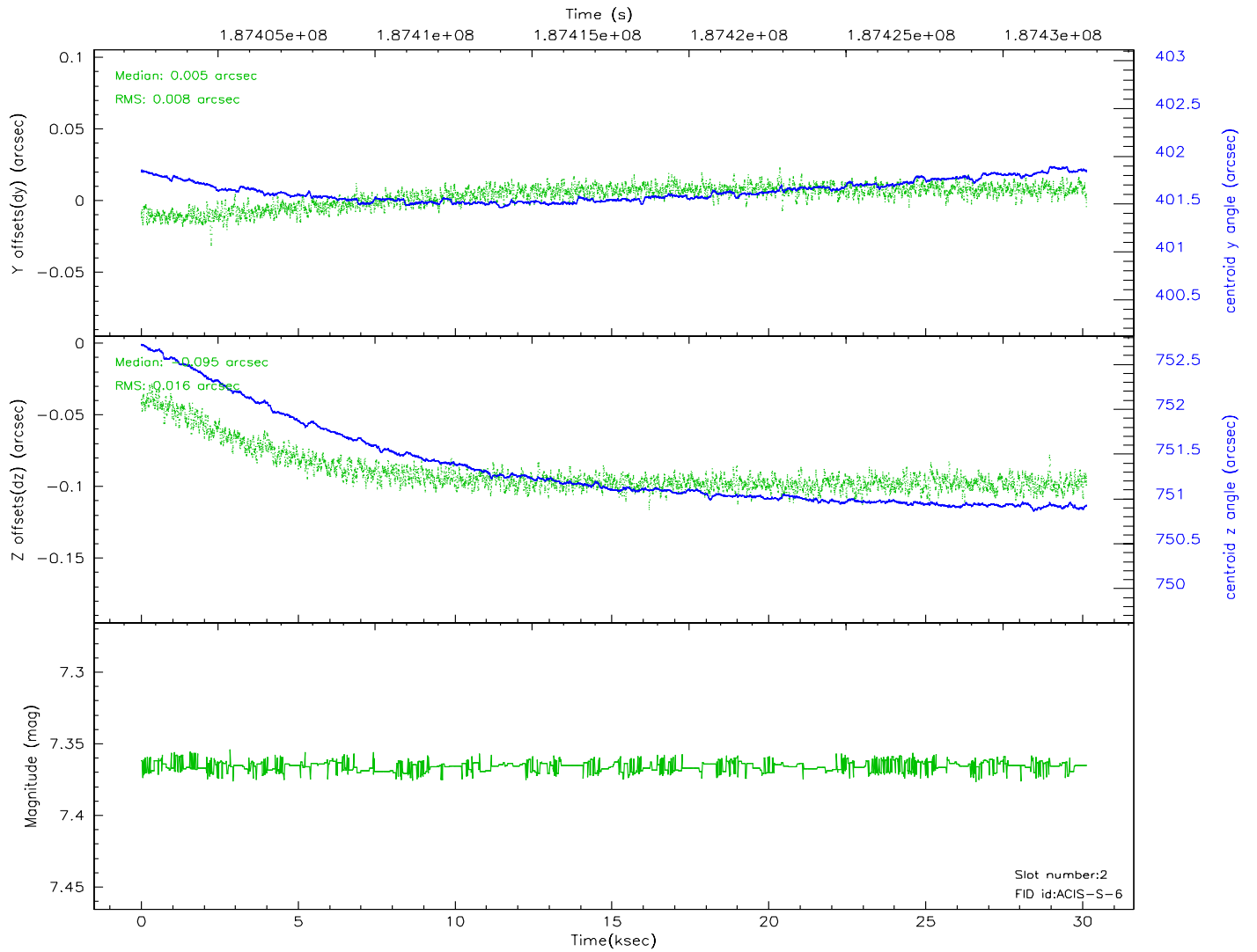
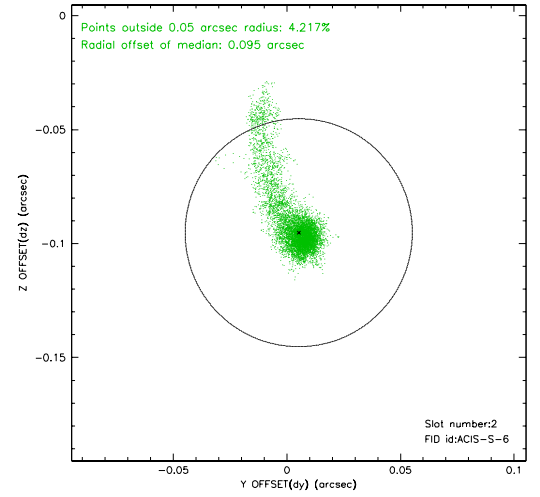
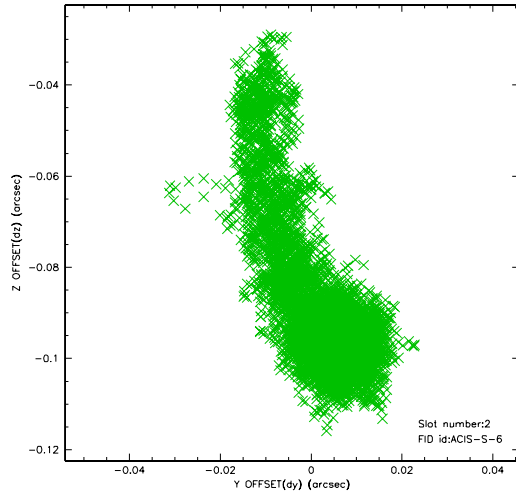
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

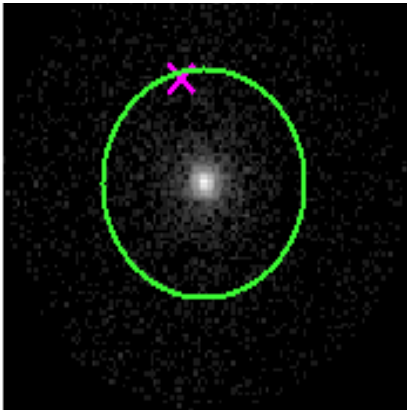


3 Gratings

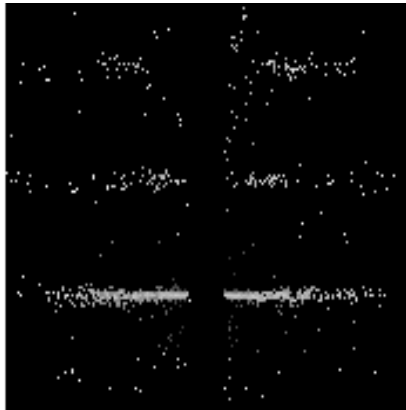
3.1 HEG Arm



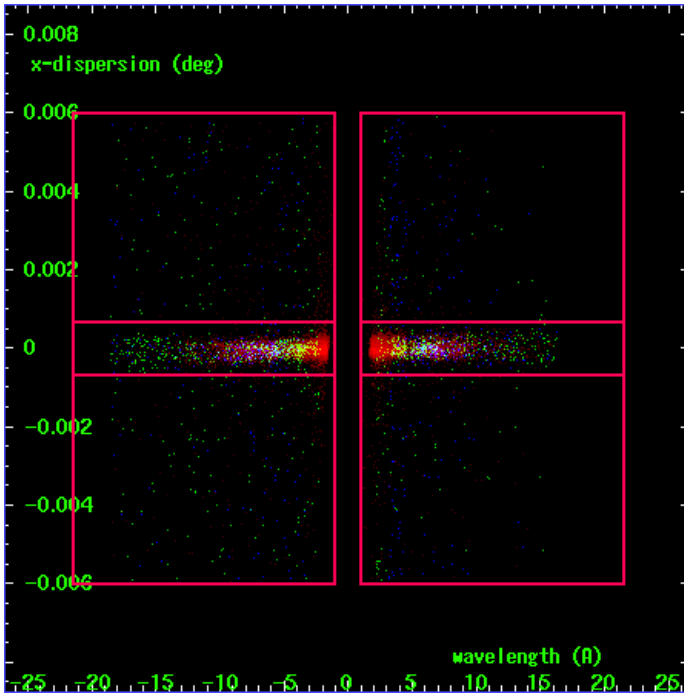
HEG Order Sort 123



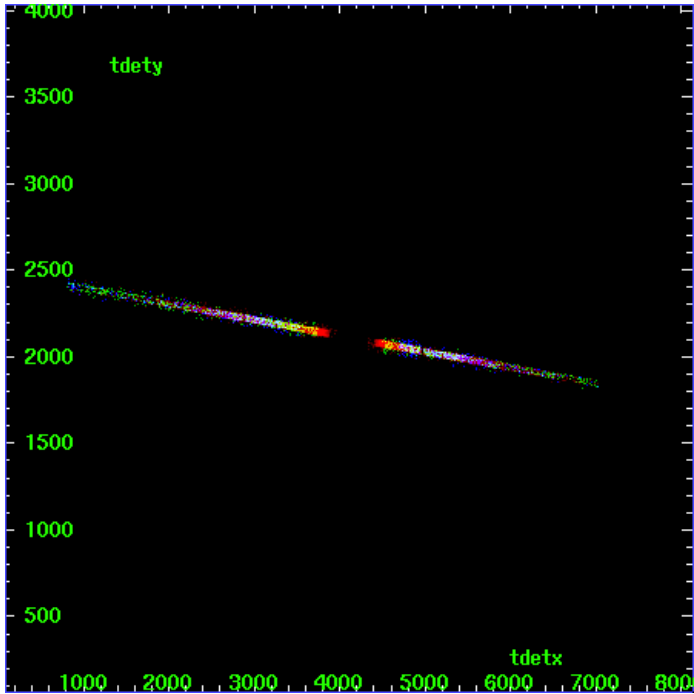
HEG Zero Order



HEG Order Sort ALL

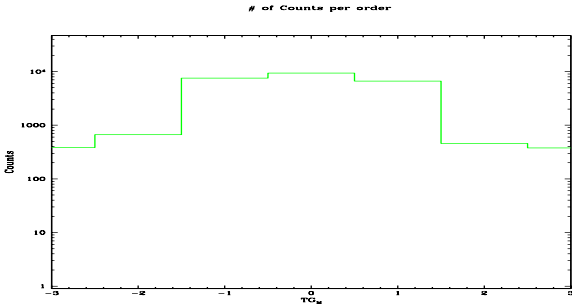


Spot Image HEG

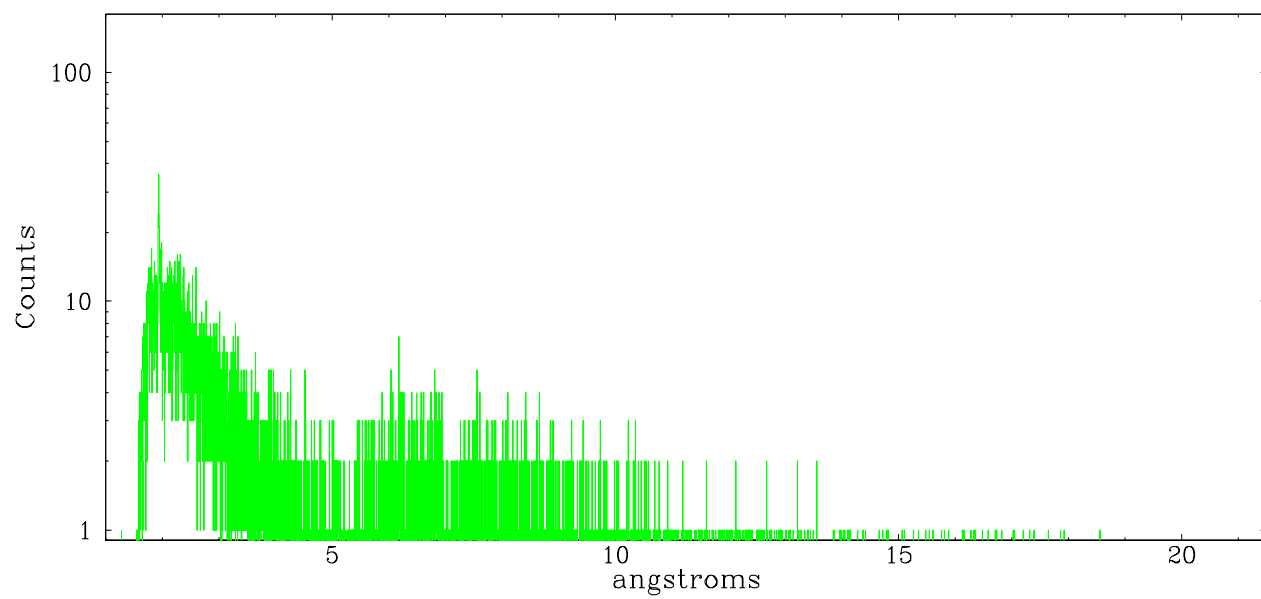


Full Detector HEG

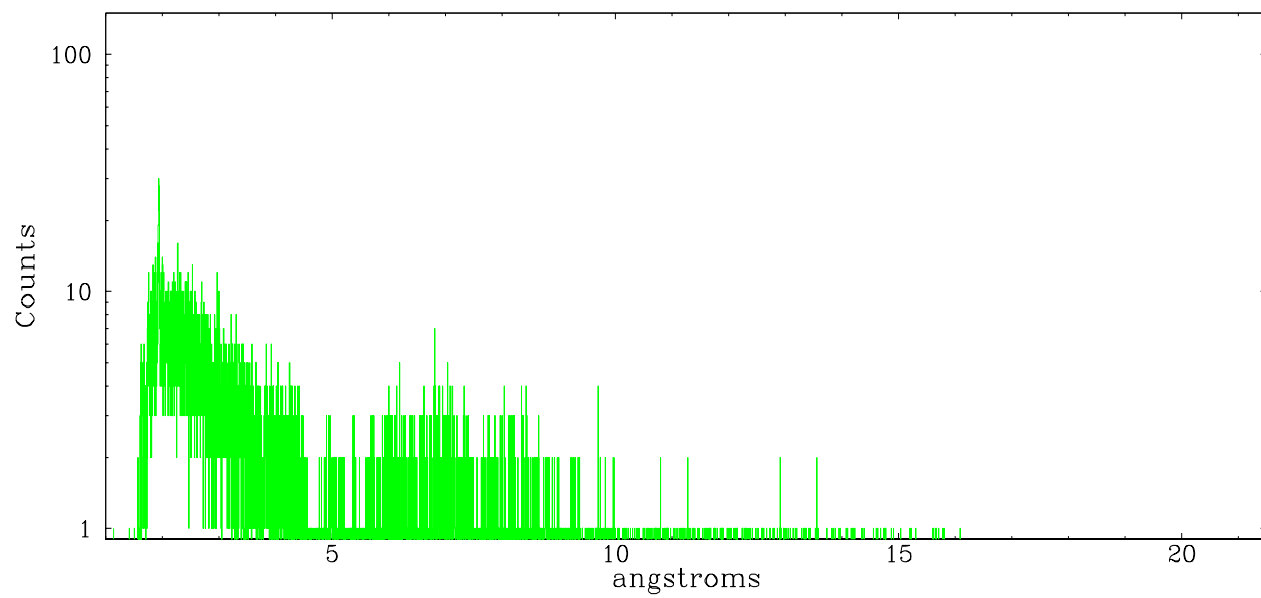
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	383	667	7532	9341	6639	456	376



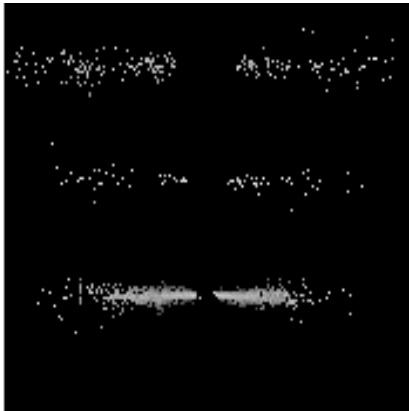
heg order -1



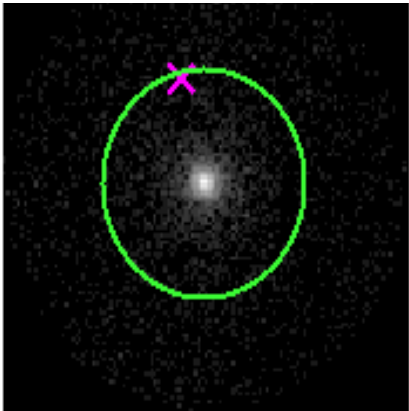
heg order +1



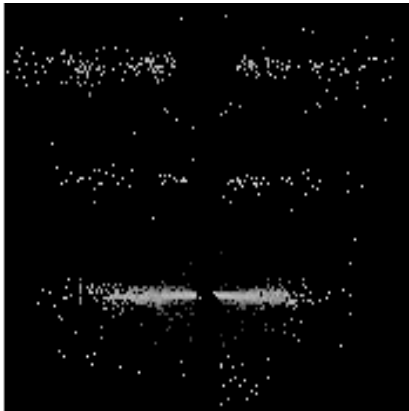
3.2 MEG Arm



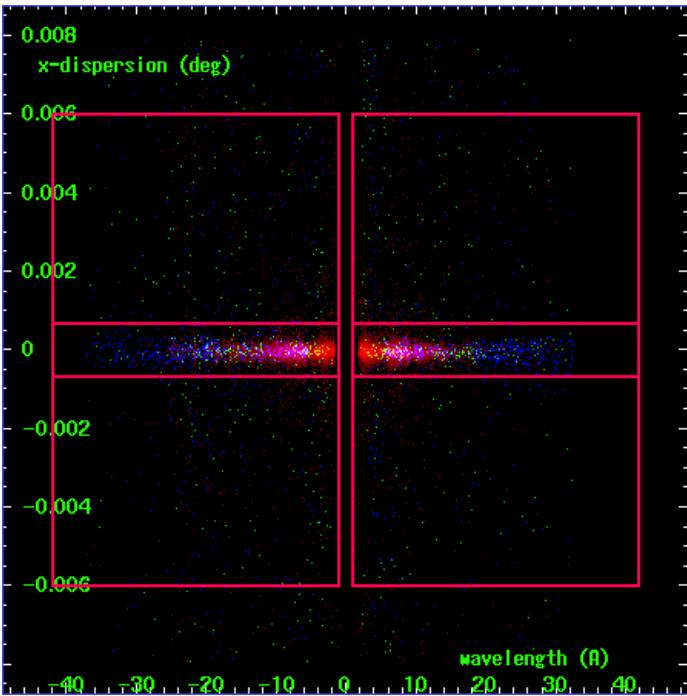
MEG Order Sort 123



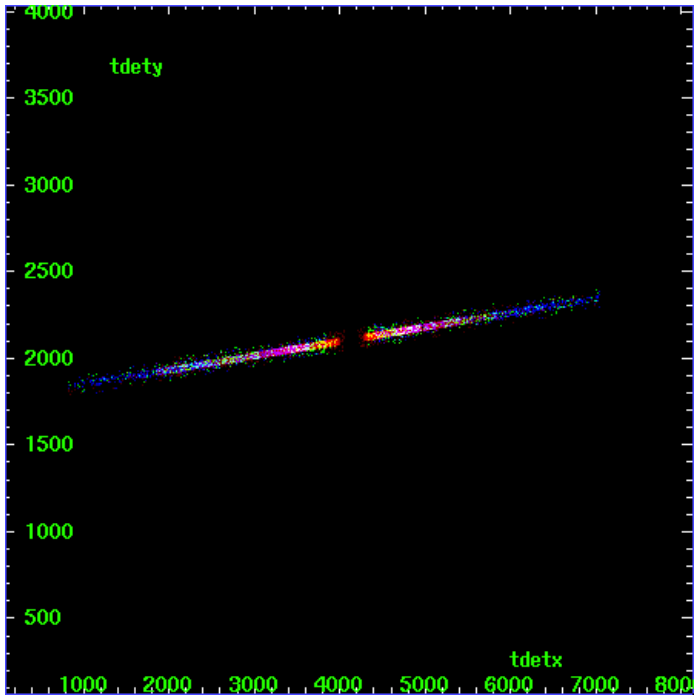
MEG Zero Order



MEG Order Sort ALL

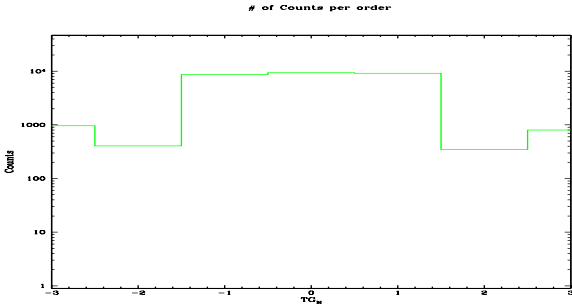


Spot Image MEG

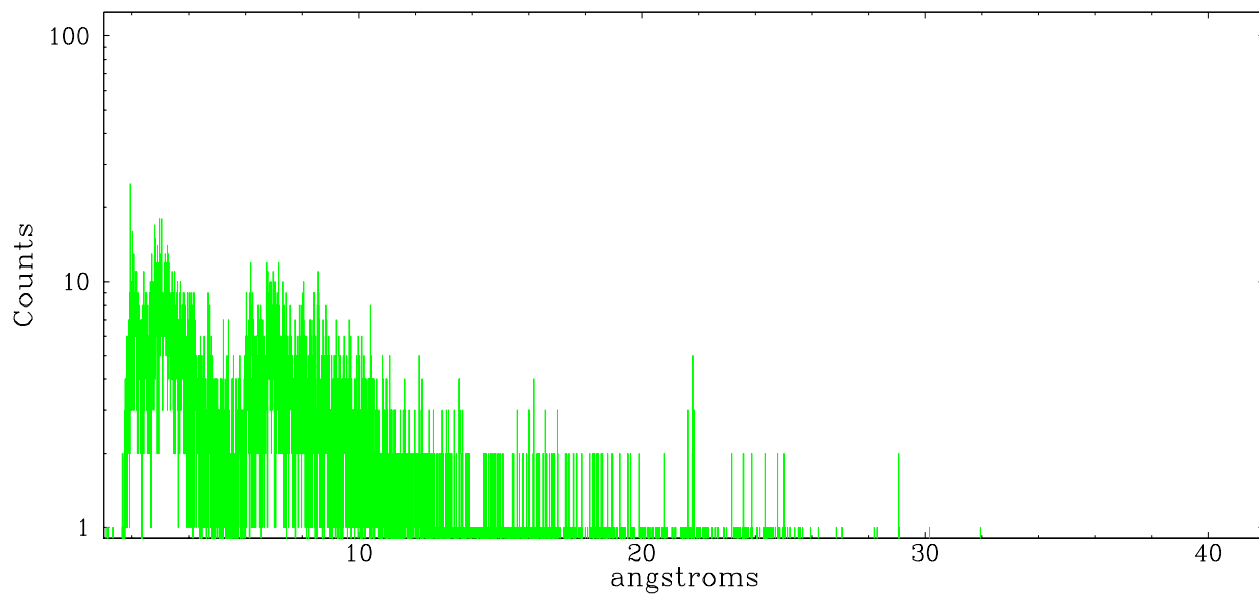


Full Detector MEG

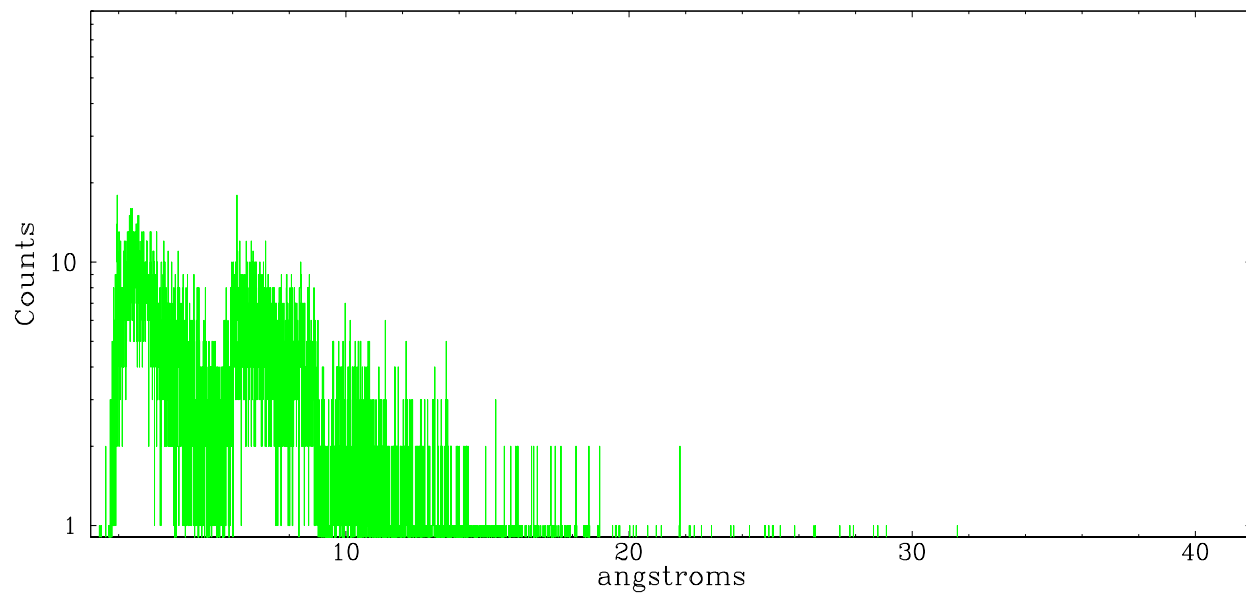
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	962	404	8659	9341	9163	345	803



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.06.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.137

A.2 Comments