

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 6150 - L2 Version 002
Chandra X-Ray Center

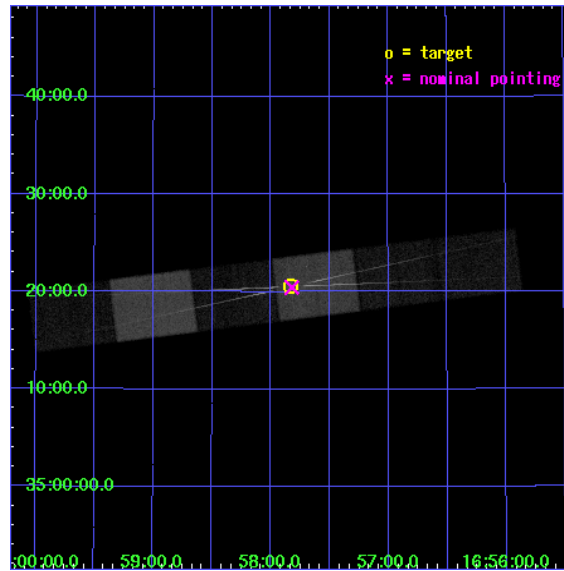
L2 Processing Date : Apr 10 2006

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1 Front

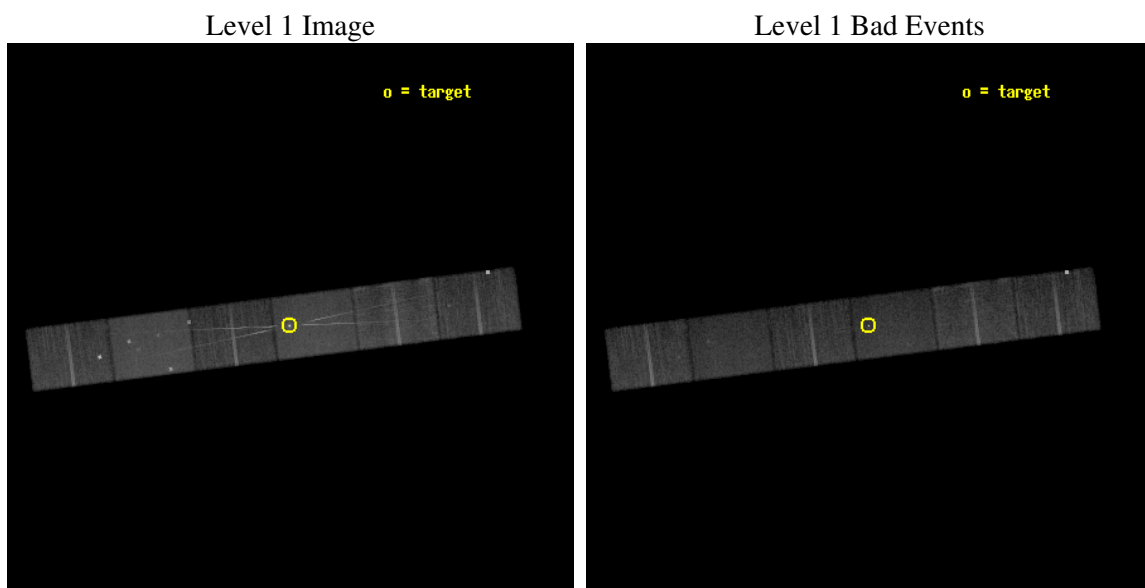
seq_num	400367
obs_id	6150
title	Using the Intensity Dips in Hercules X-1 to Probe the Inner Accretion Disk
observer	Dr. Mario Jimenez-Garate
object	Her X-1
dtcycle	0
cycle	P
ra_targ	254.4575
dec_targ	35.342389
ra_nom	254.45535674888
dec_nom	35.340932451953
roll_nom	352.83303647216
revision	2
ontime	22045.0
livetime	21688.954129018
ontime4	22045.0
ontime5	22045.0
ontime6	22045.0
ontime7	22045.0
ontime8	22045.0
ontime9	22042.459009796
l2events	232661



2 OBI

2.1 OBI

2.1.1 Images

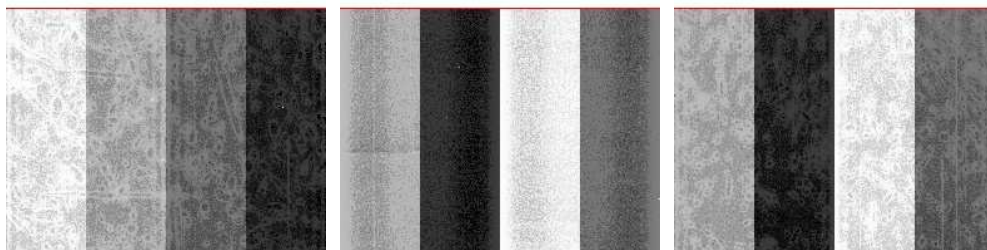


2.1.2 Bias

Chip 4

Chip 5

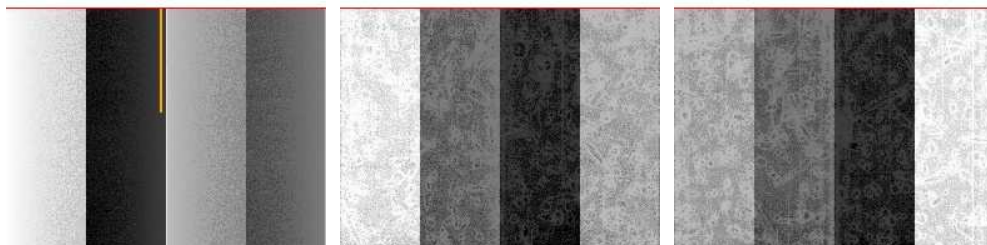
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-04-10T23:27:25
revision	2

sched_exp_time	22000.000000
ontime	22048.336241633
ontime4	22048.336241633
ontime5	22048.336241633
ontime6	22048.336241633
ontime7	22048.336241633
ontime8	22050.877261698
ontime9	22048.336271495
l1events	987372

2.1.4 Events

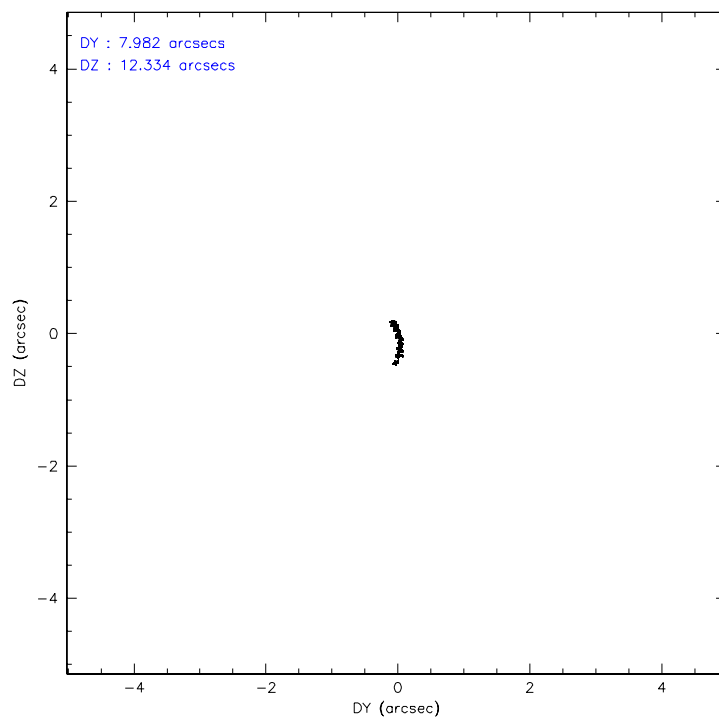
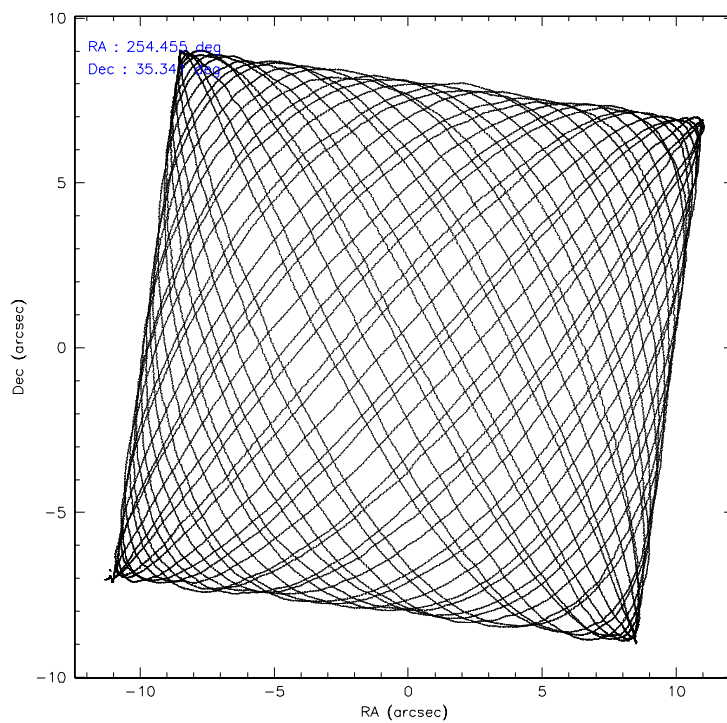
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	150967	194427	140500	192642	170332	138504
rejected events	128111	104568	114861	107398	131135	122076
rejected %	84%	53%	81%	55%	76%	88%

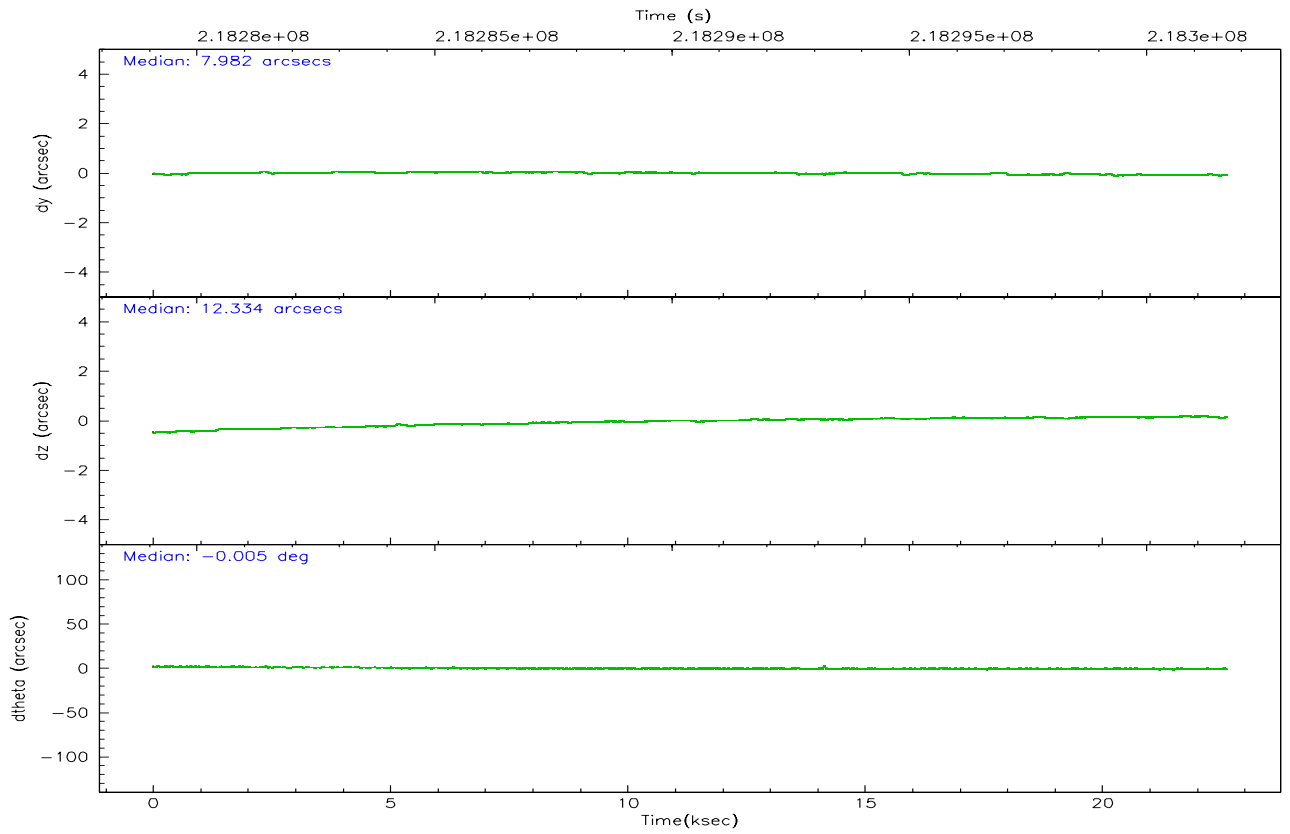
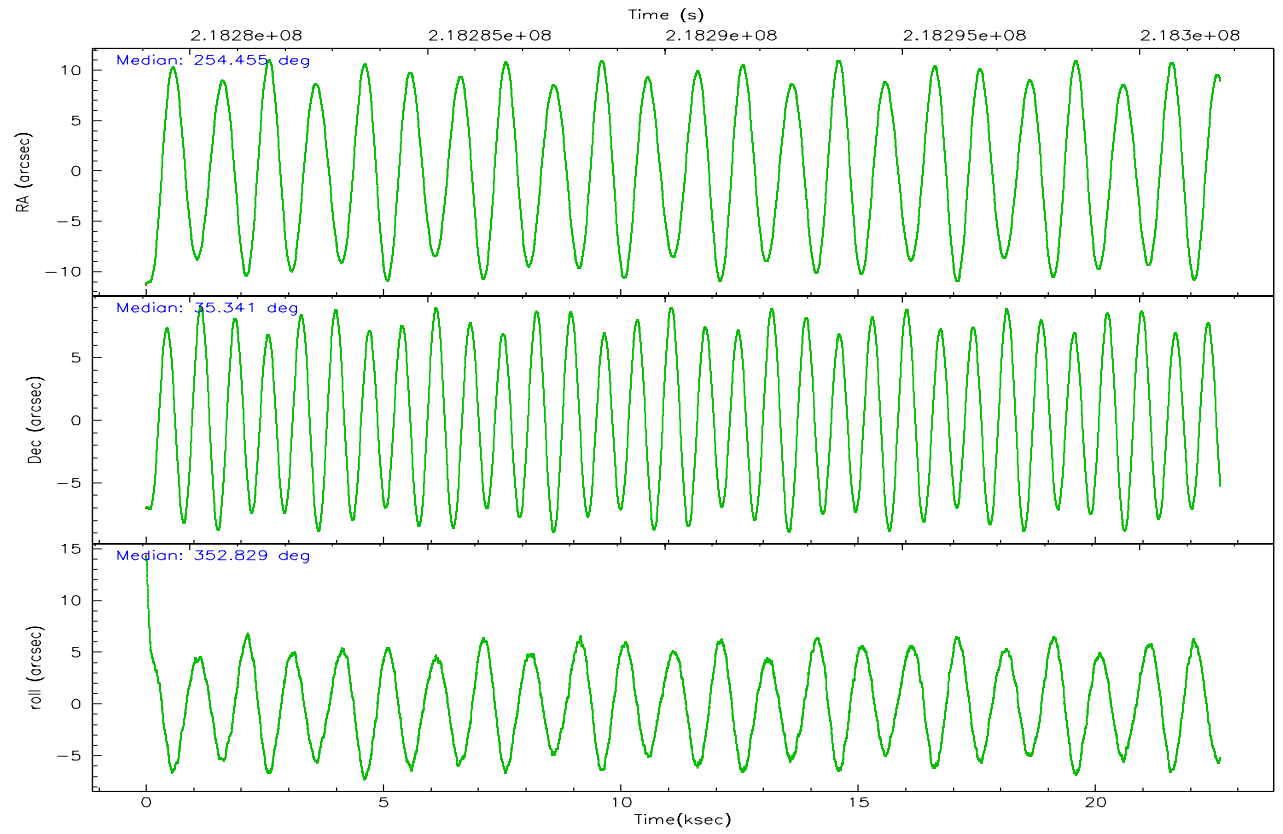
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	13387	10243	12966	7105	13340	6917
	8%	5%	9%	3%	7%	4%
grade 1 events	127	374	79	277	112	8554
	0%	0%	0%	0%	0%	6%
grade 2 events	3468	26400	4467	20928	8233	3080
	2%	13%	3%	10%	4%	2%
grade 3 events	1727	2478	2123	5437	3869	1721
	1%	1%	1%	2%	2%	1%
grade 4 events	1725	2572	2065	5405	3757	1641
	1%	1%	1%	2%	2%	1%
grade 5 events	5533	9631	5791	13393	7710	6152
	3%	4%	4%	6%	4%	4%
grade 6 events	2550	48175	4022	46379	10006	3071
	1%	24%	2%	24%	5%	2%
grade 7 events	122450	94554	108987	93718	123305	107368
	81%	48%	77%	48%	72%	77%

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	254.424802	254.4553567488784	Subarray start row	1	1
Pointing Dec	35.330024	35.34093245195269	Subarray row count	774	774
Pointing Roll	352.694077	352.8330364721632	Alternating exposures requested	N	N
Window start time	218272864.184000	218272864.184000	Primary exposure time	0.000000	2.5
Window stop time	218300464.184000	218300464.184000			
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			
Phase constraints	Y	Y			
Phase period	1.700167	1.700167			
Phase epoch	51310.760000	51310.760000			
Phase start	0.750000	0.750000			
Phase end	0.900000	0.900000			
Phase start error	0.020000	0.020000			
Phase end error	0.010000	0.010000			
Observation start time	218279695.184000	218278423.20538			
Observation start date	2004-12-01T09:13:51	2004-12-01T08:53:43			
Observation end time	218301695.184000	218302327.23145			
Observation end date	2004-12-01T15:20:31	2004-12-01T15:32:07			
Read mode	TIMED	TIMED			

2.3 Aspect



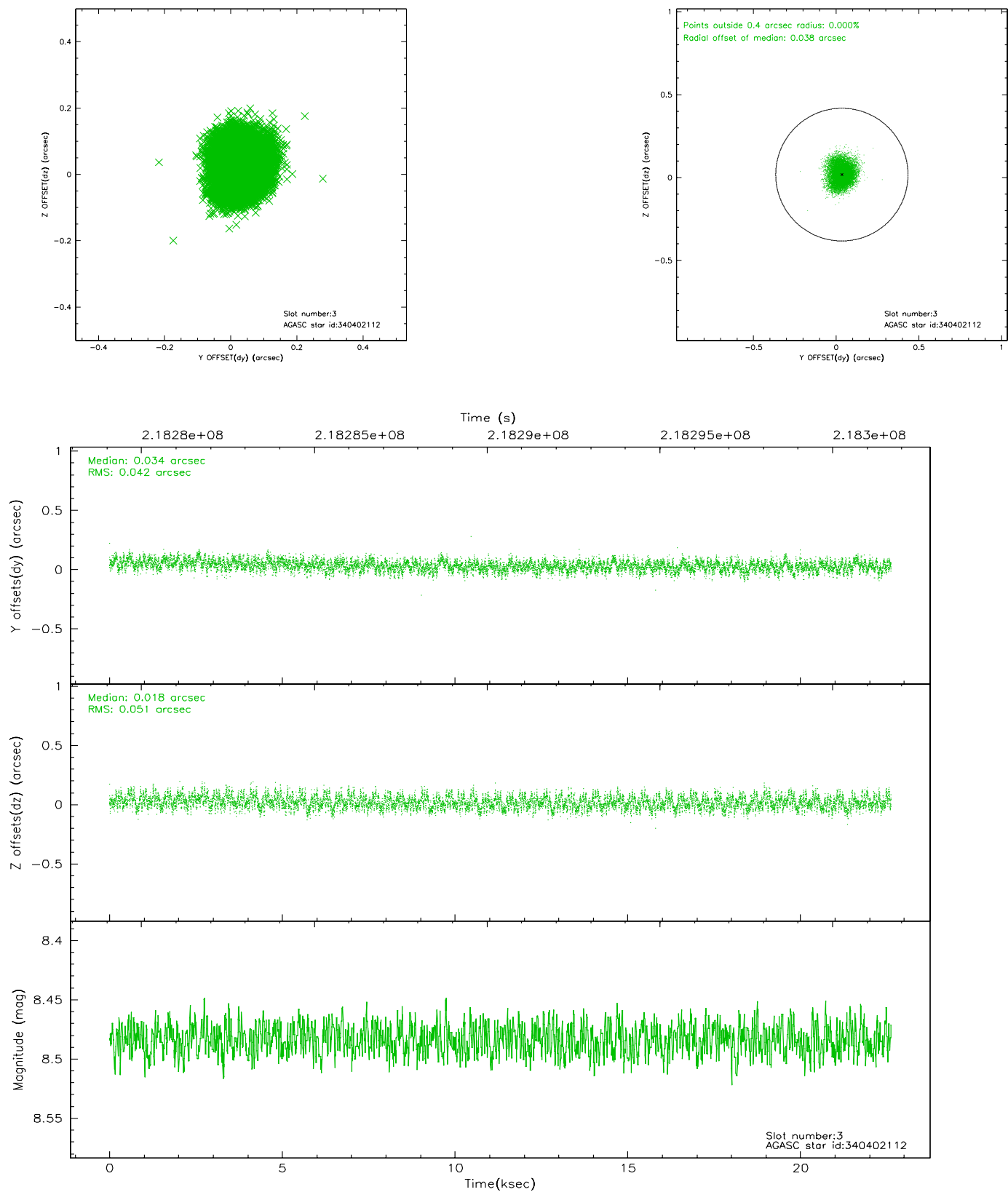


Slot Statistics

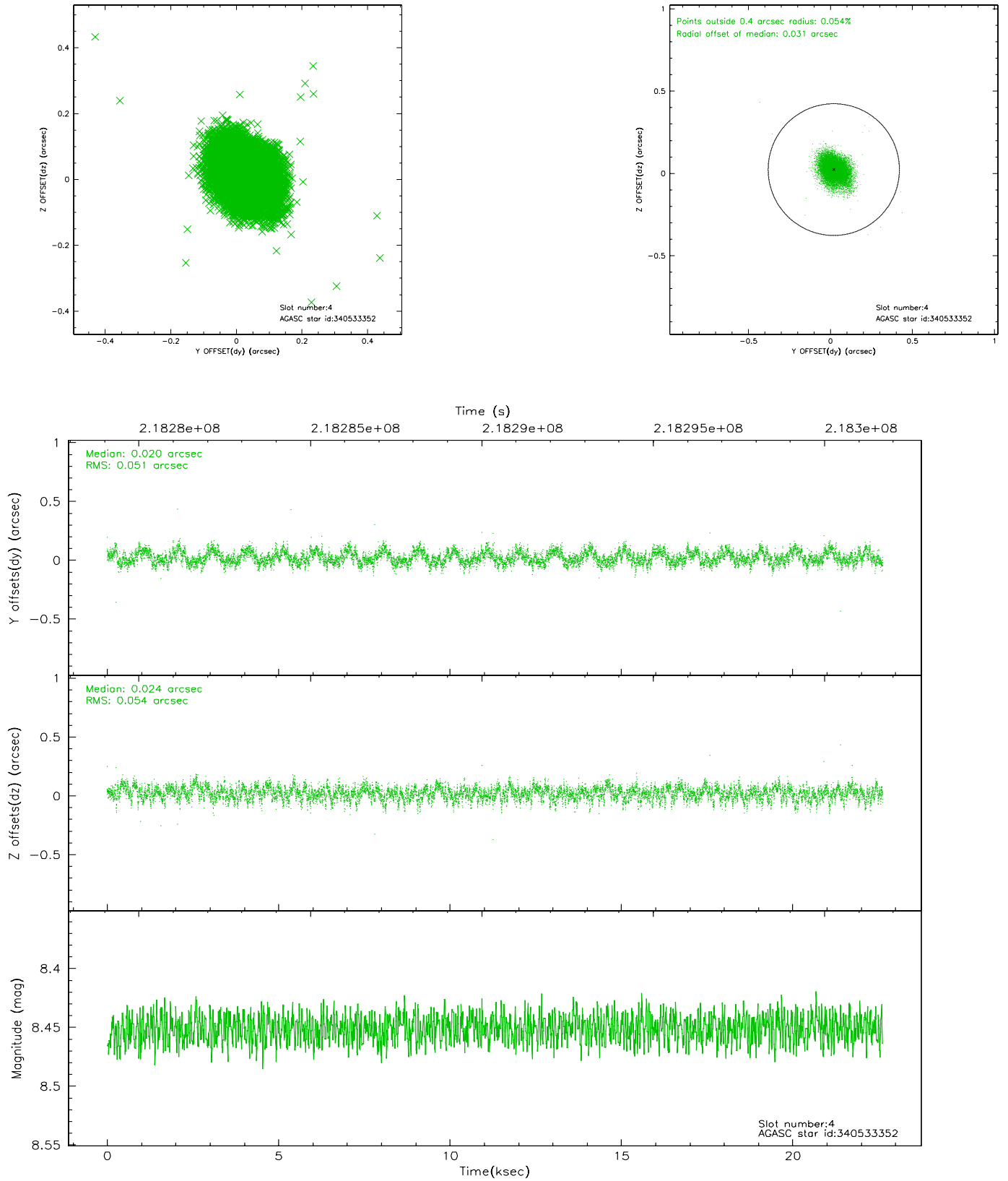
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	5520	-0.057	-0.047	0.009	0.016	0.000000	0.000000	-760.58	-1795.74
1	FID	ACIS-S-4	7.18	5520	0.089	0.040	0.009	0.027	0.000000	0.000000	2152.75	112.70
2	FID	ACIS-S-5	7.23	5520	-0.062	0.016	0.009	0.015	0.000000	0.000000	-1813.26	106.46
3	GUIDE	340402112	8.48	11039	0.034	0.018	0.071	0.113	253.640936	34.860529	-2082.45	-1961.92
4	GUIDE	340533352	8.45	11038	0.020	0.024	0.078	0.126	254.563691	34.717962	688.14	-2133.08
5	GUIDE	340534080	8.83	11034	0.052	-0.043	0.068	0.109	255.228954	35.471551	2273.01	814.71
6	GUIDE	340536192	7.73	11040	0.028	0.040	0.054	0.084	254.294567	35.286536	-359.09	-203.47
7	GUIDE	340534896	8.60	11037	-0.136	-0.037	0.058	0.095	255.288450	35.541682	2411.18	1088.76

2.4 Star Slots

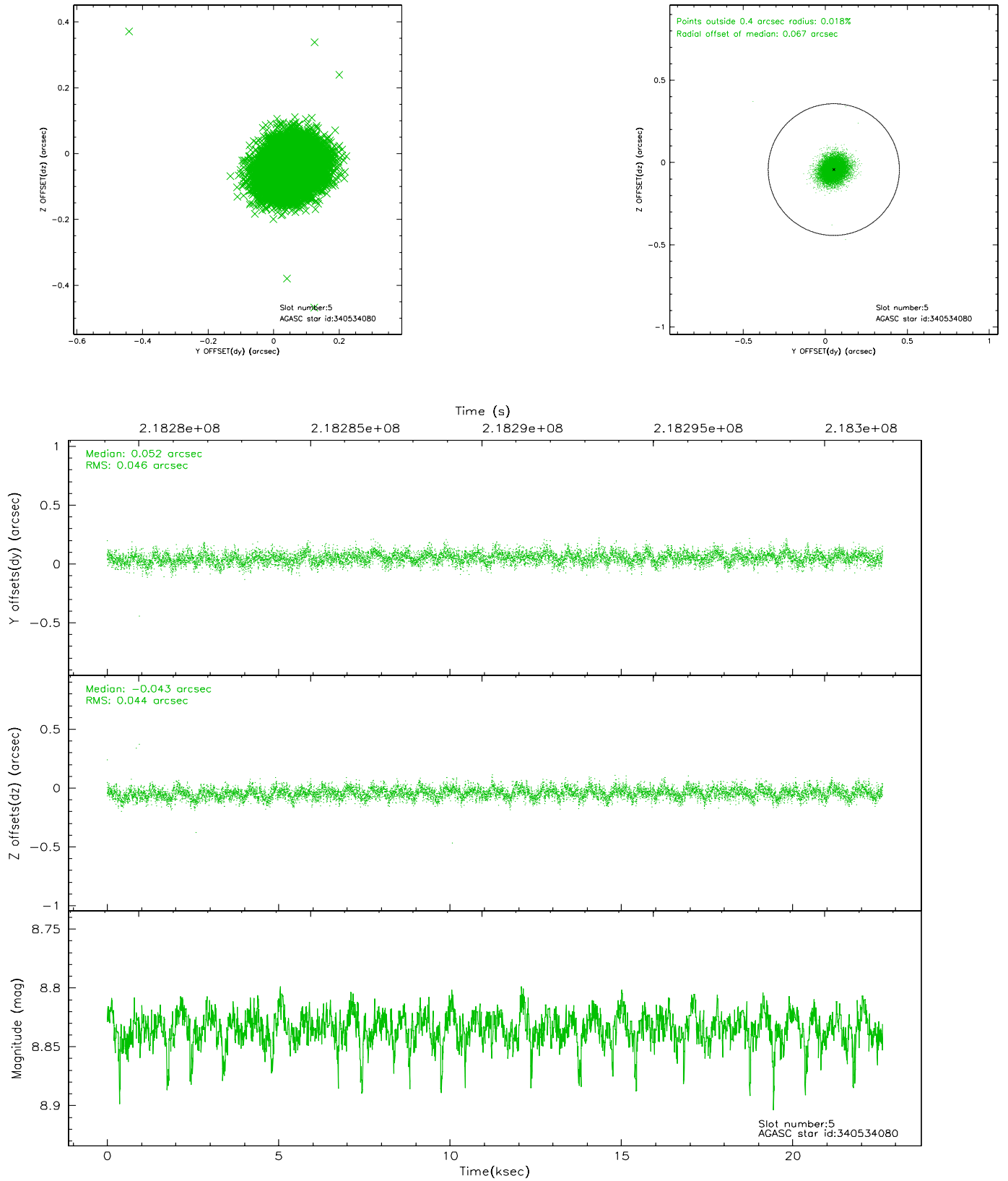
2.4.1 Slot 3



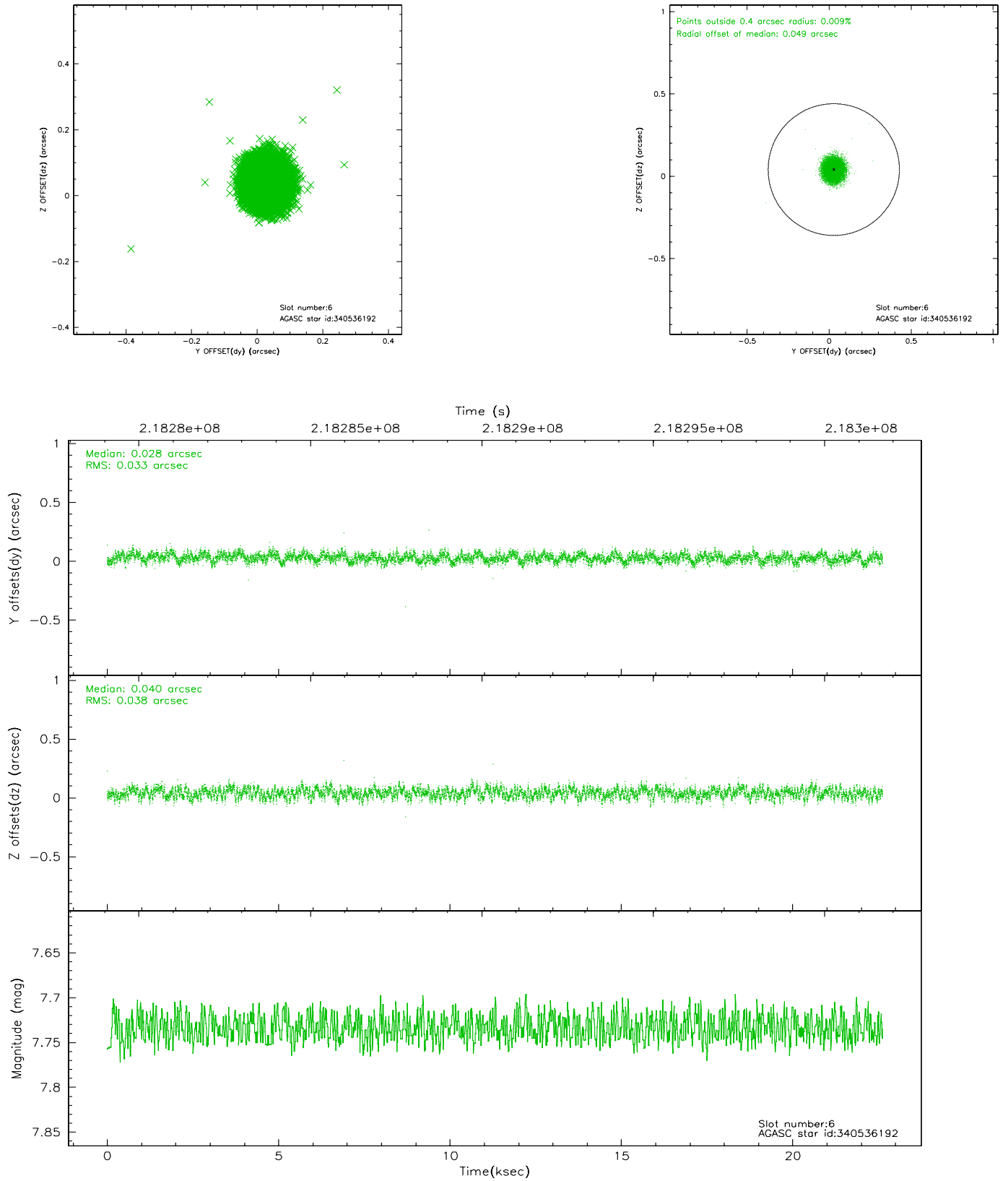
2.4.2 Slot 4



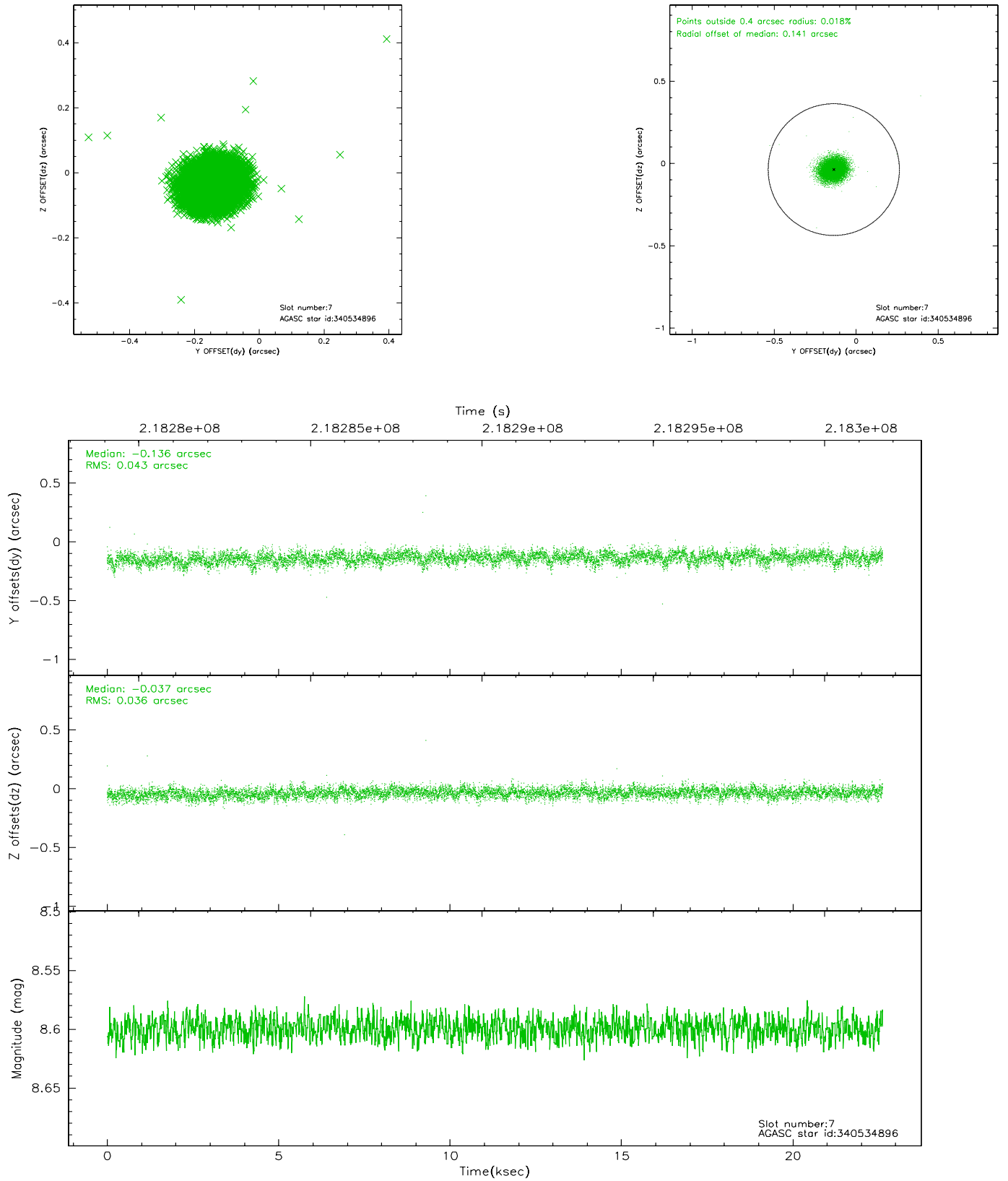
2.4.3 Slot 5



2.4.4 Slot 6

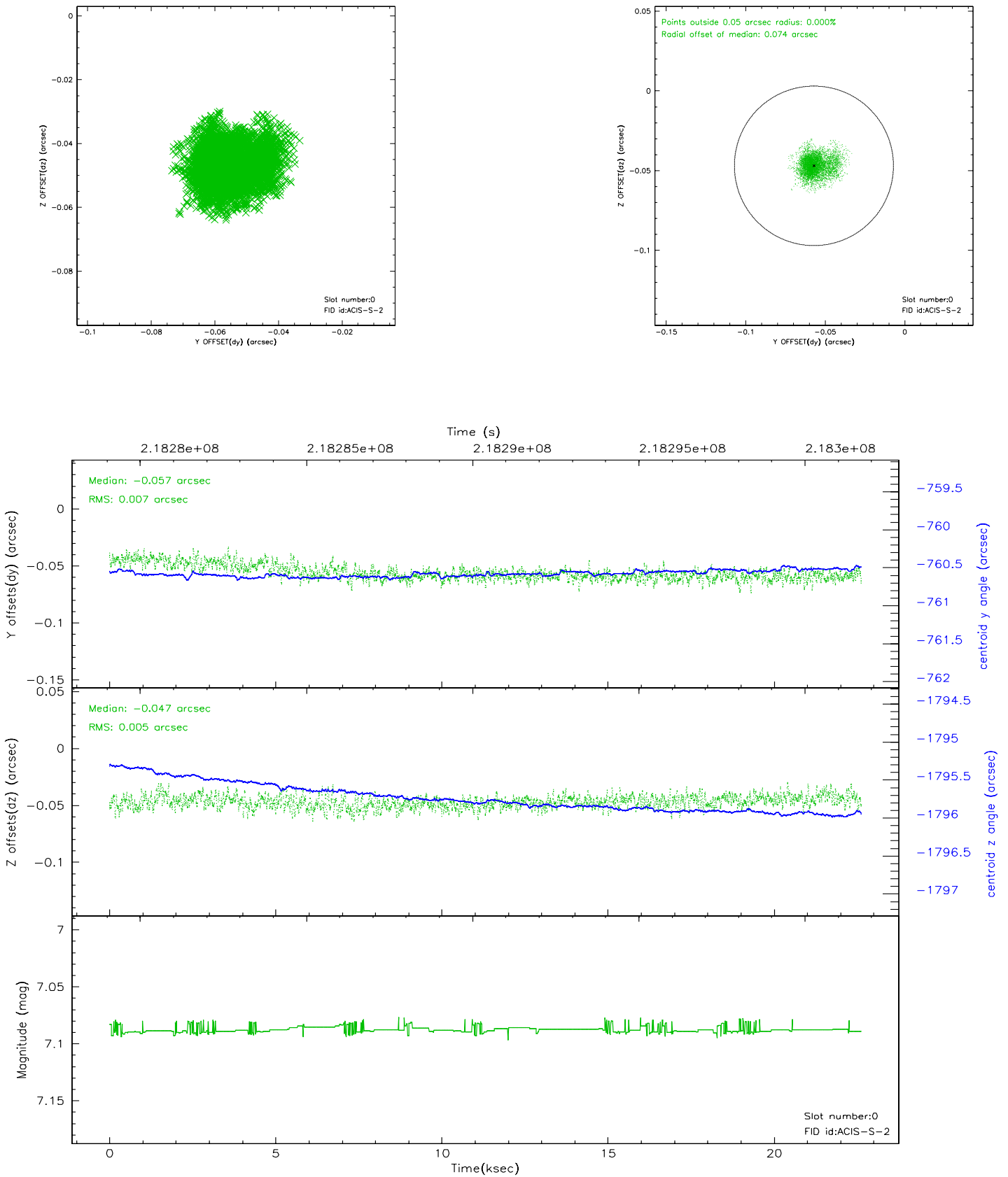


2.4.5 Slot 7

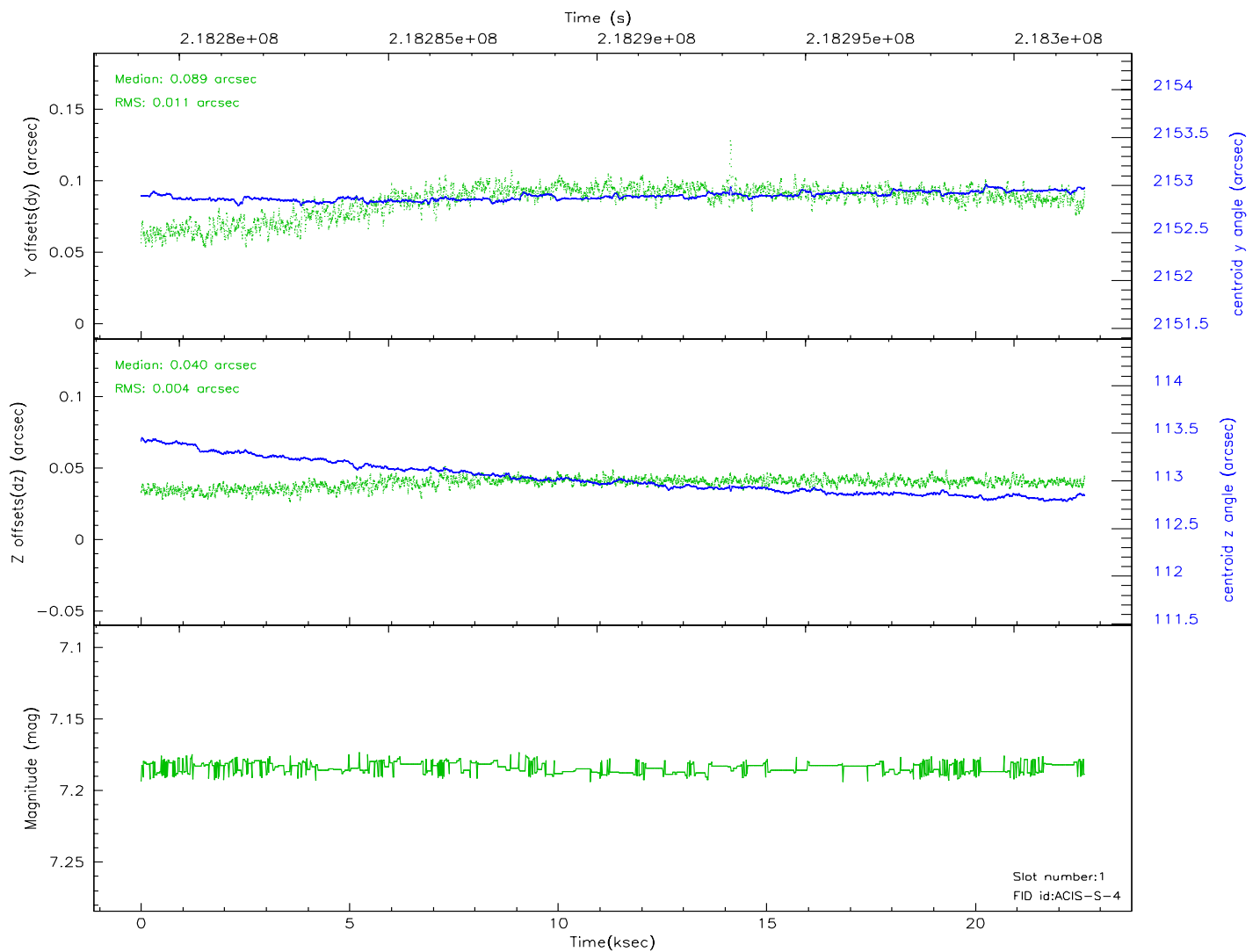
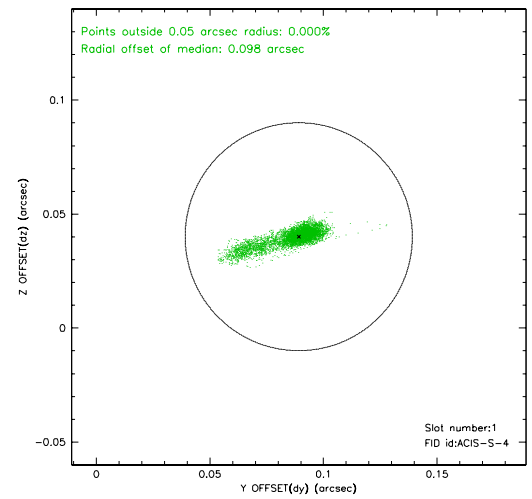
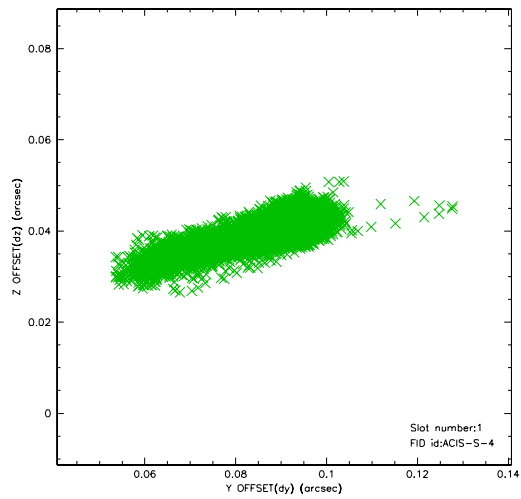


2.5 FID Slots

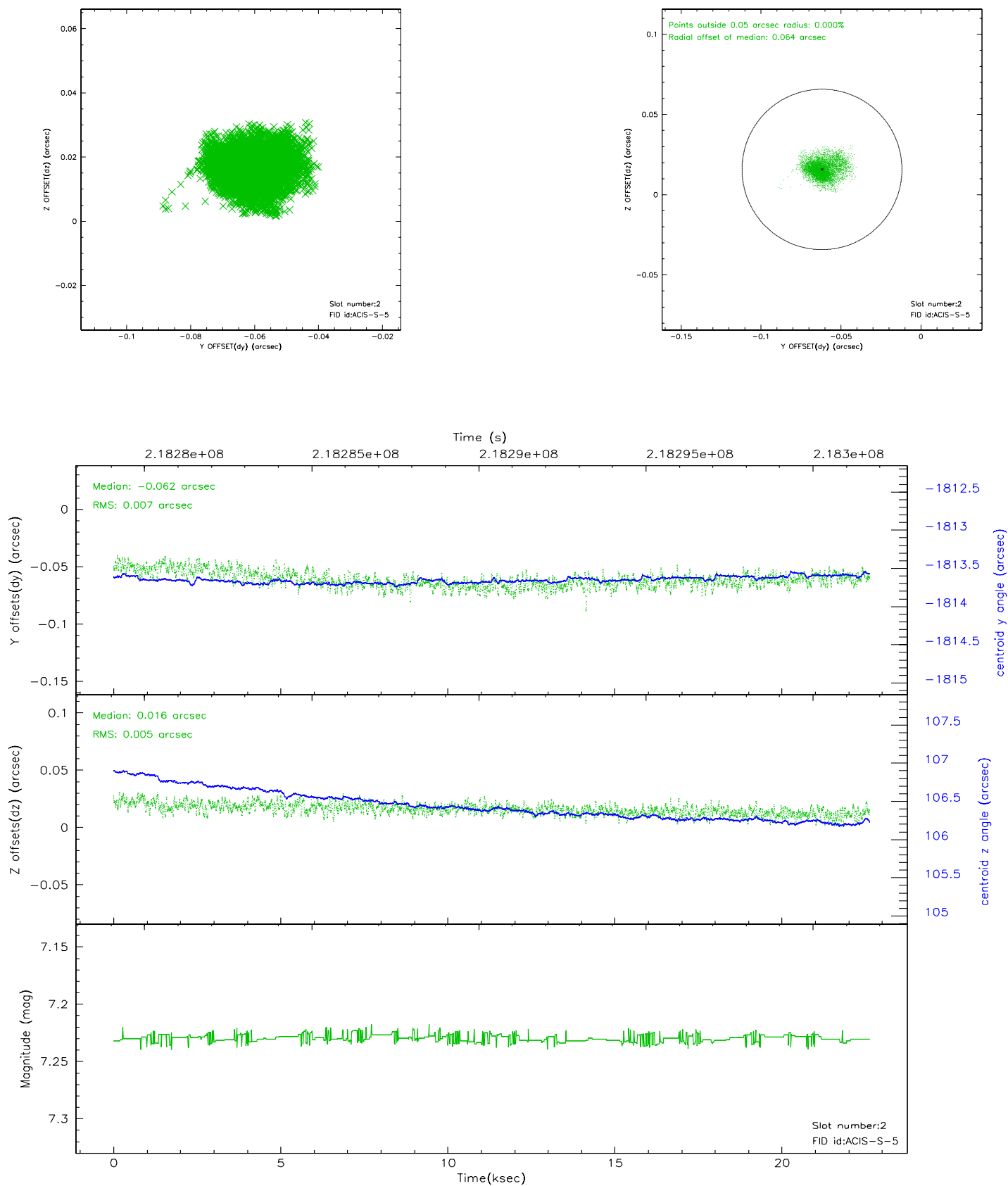
2.5.1 Slot 0



2.5.2 Slot 1

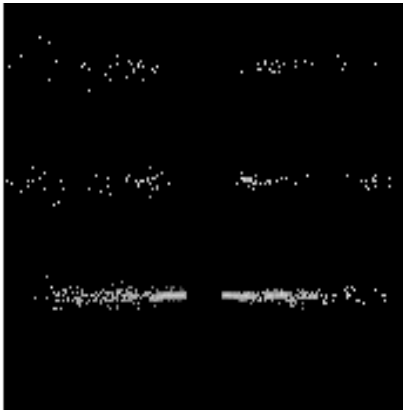


2.5.3 Slot 2

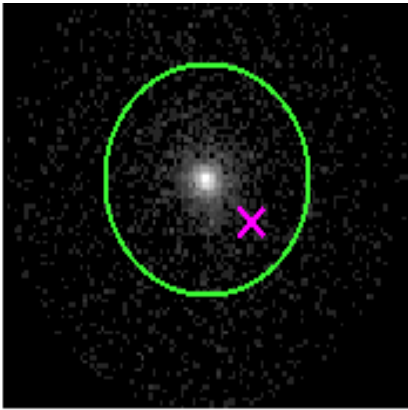


3 Gratings

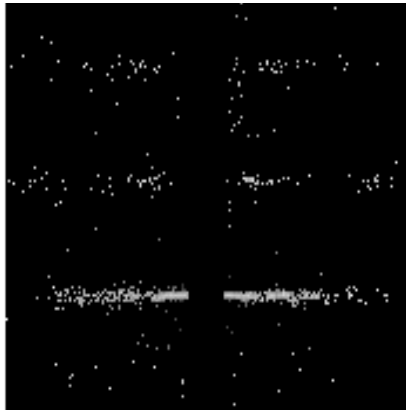
3.1 HEG Arm



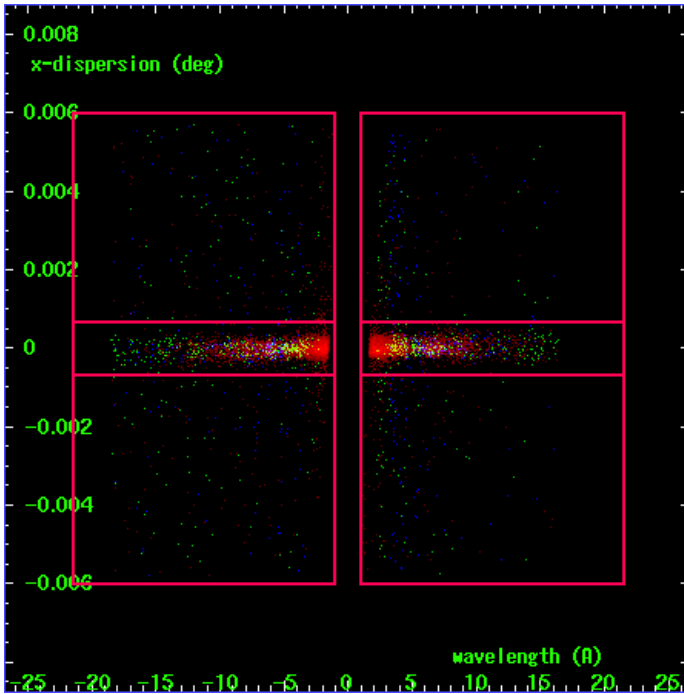
HEG Order Sort 123



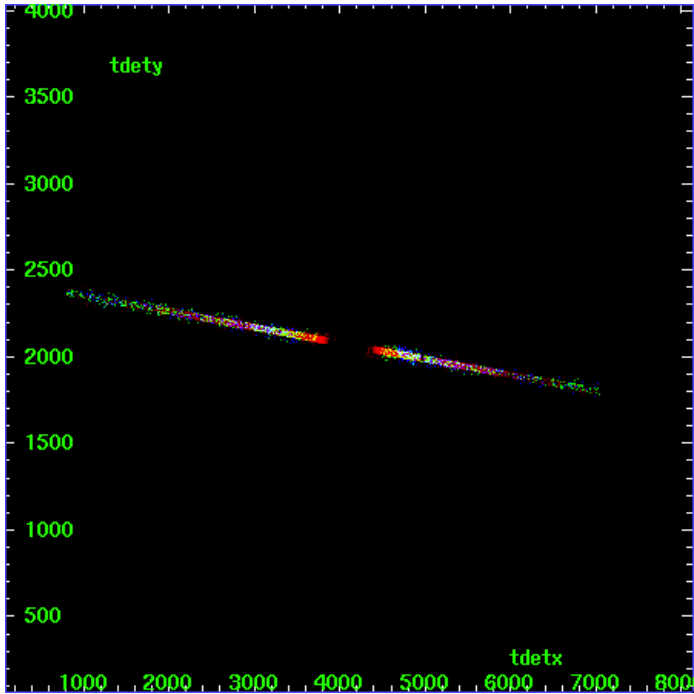
HEG Zero Order



HEG Order Sort ALL

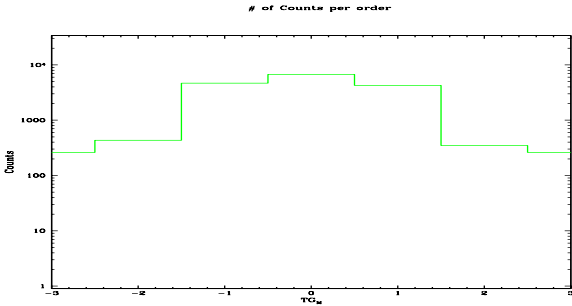


Spot Image HEG

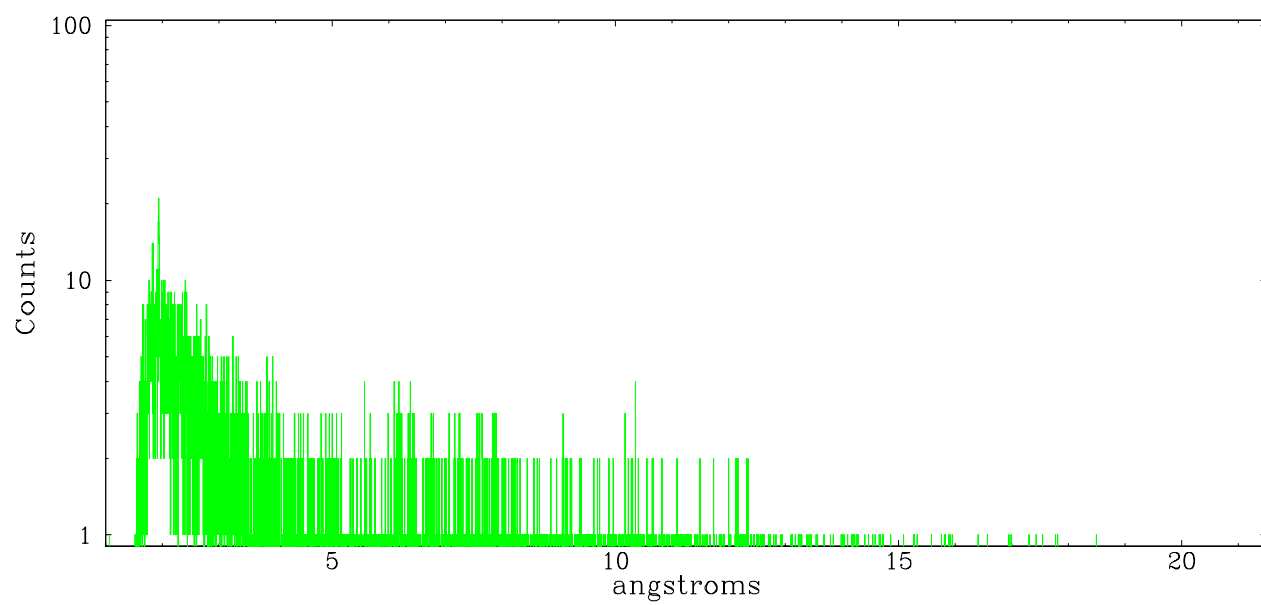


Full Detector HEG

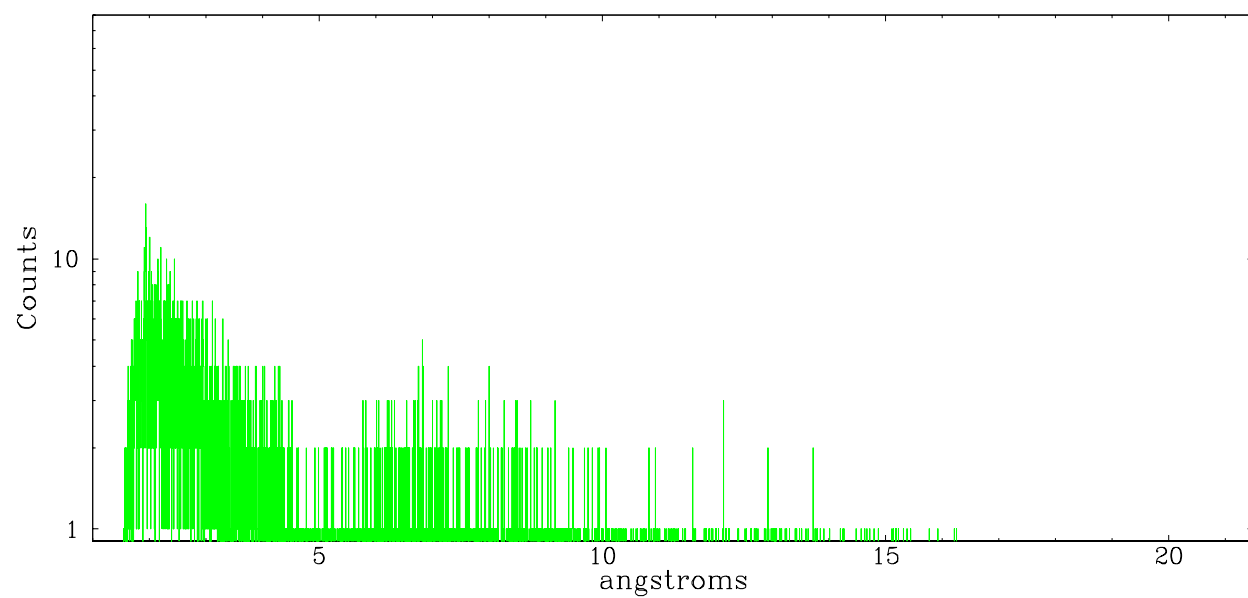
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	262	434	4685	6767	4260	350	262



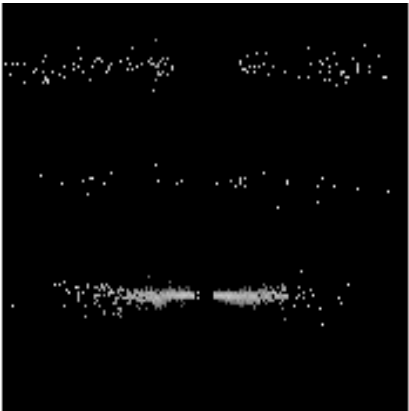
heg order -1



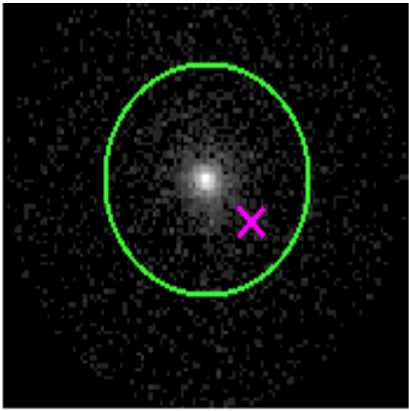
heg order +1



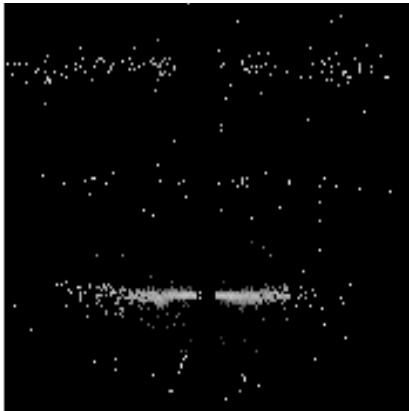
3.2 MEG Arm



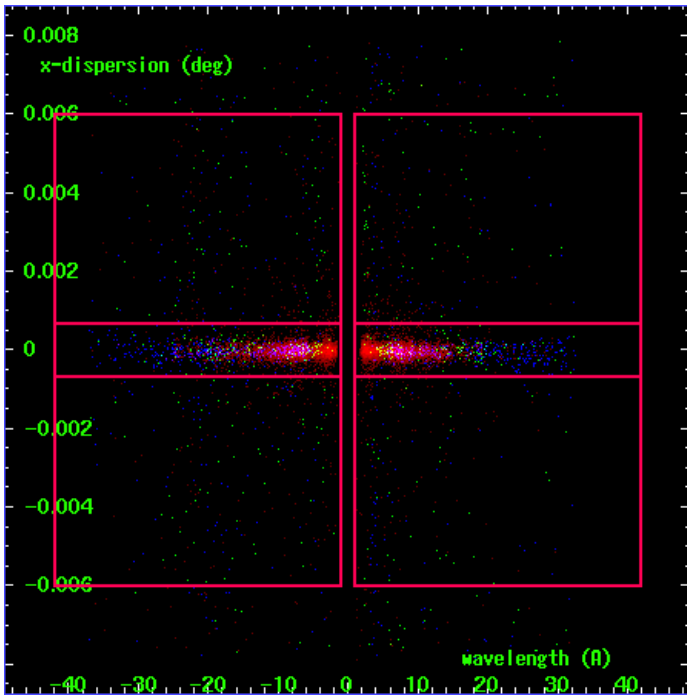
MEG Order Sort 123



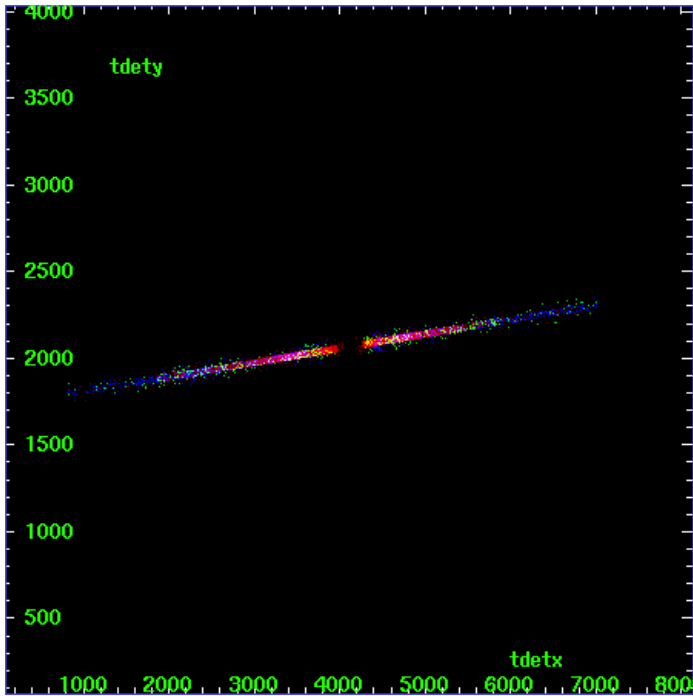
MEG Zero Order



MEG Order Sort ALL

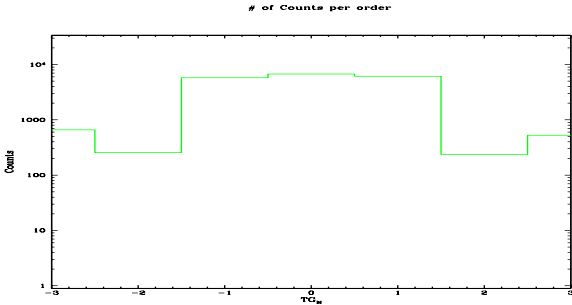


Spot Image MEG

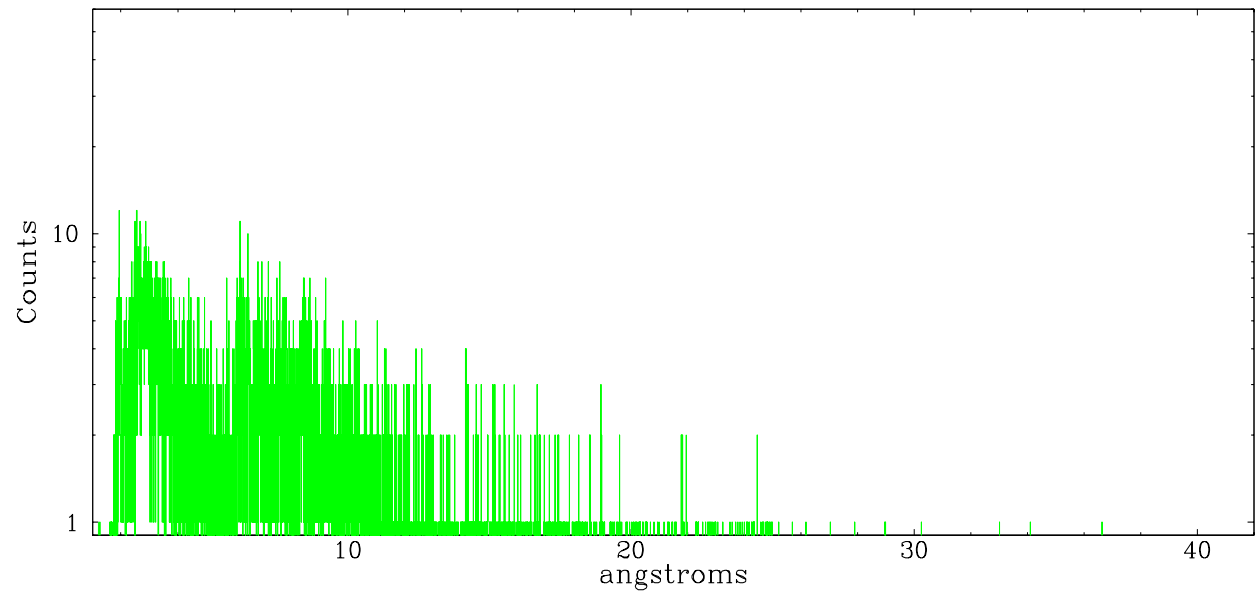


Full Detector MEG

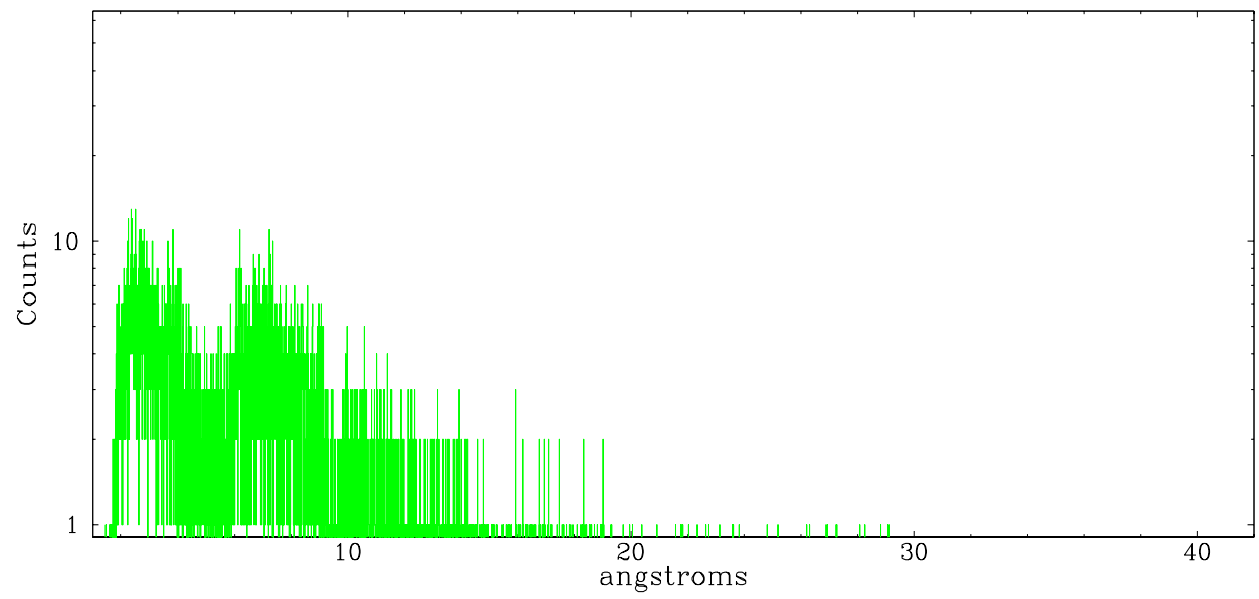
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	662	255	5775	6767	6136	237	528



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.045

A.2 Comments

Window constraint violated in the last ksec of the observation, met otherwise. Phase constraint met.