

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 3828 - L2 Version 001
Chandra X-Ray Center

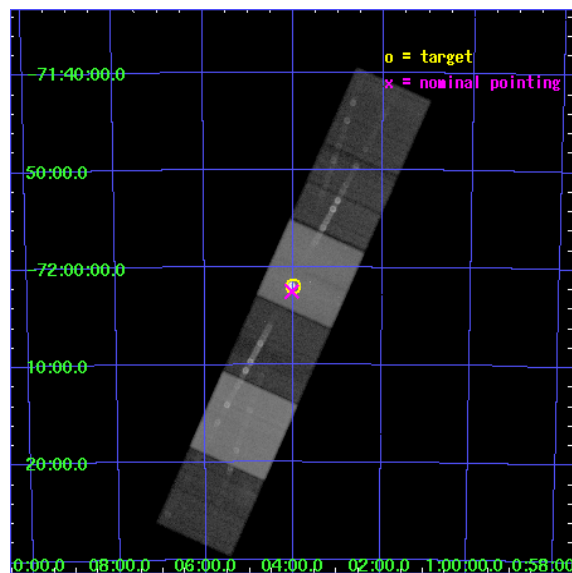
L2 Processing Date : Dec 8 2006

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1 Front

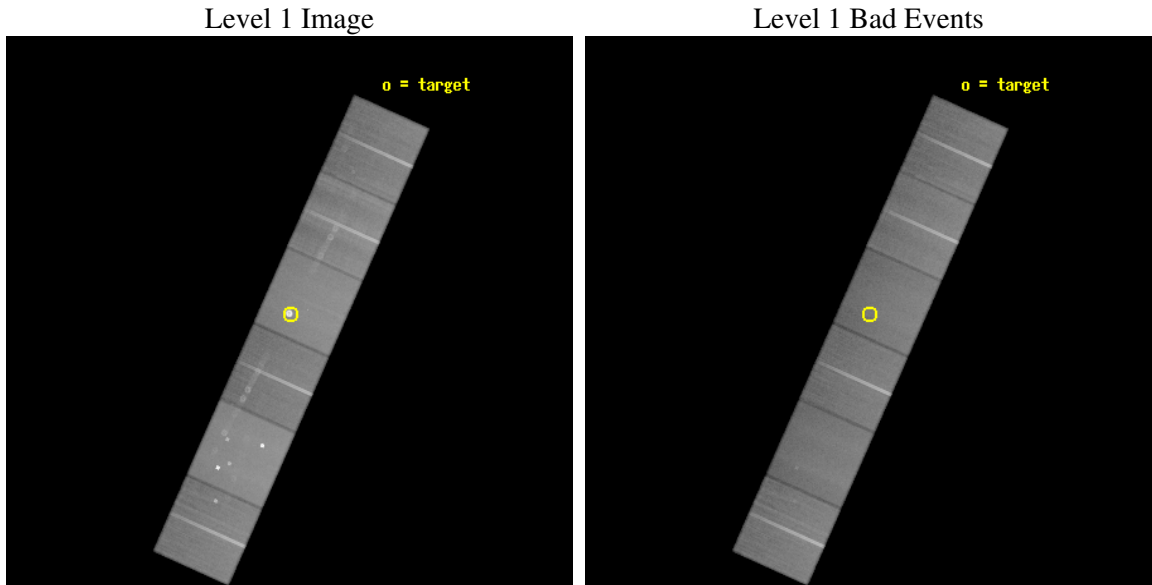
seq_num	500307
obs_id	3828
title	SNR E0102-72: COMPLETING THE PICTURE
observer	Prof. Claude Canizares
object	1E0102.2-7219
dtcycle	0
cycle	P
ra_targ	16.0
dec_targ	-72.032222
ra_nom	16.007538438099
dec_nom	-72.041592558611
roll_nom	294.03222618578
revision	2
ontime	137657.55851692
livetime	135914.45562355
ontime4	137654.3175666
ontime5	137660.79948717
ontime6	137660.79948717
ontime7	137657.55851692
ontime8	137657.55849698
ontime9	137654.31753674
l2events	1371762



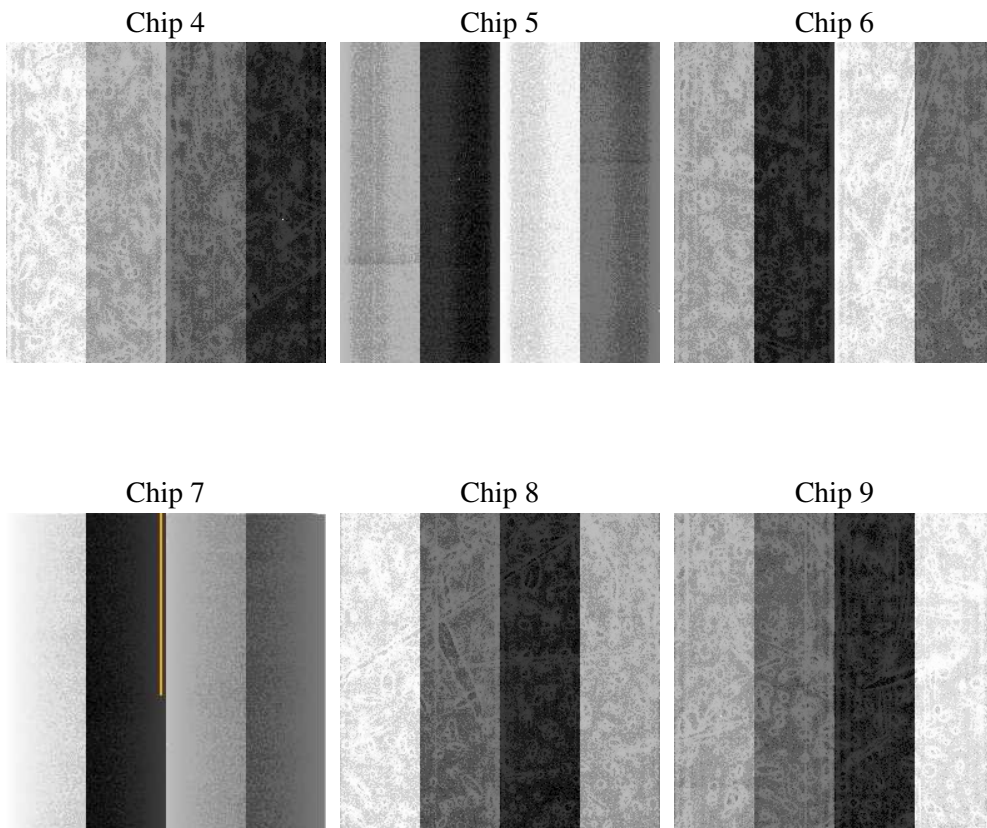
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-10-16T06:05:46
revision	2

sched_exp_time	137948.000000
ontime	137661.50291845
ontime4	137658.26196814
ontime5	137664.74388871
ontime6	137664.74388871
ontime7	137661.50291845
ontime8	137661.50289851
ontime9	137658.26193827
l1events	6079490

2.1.4 Events

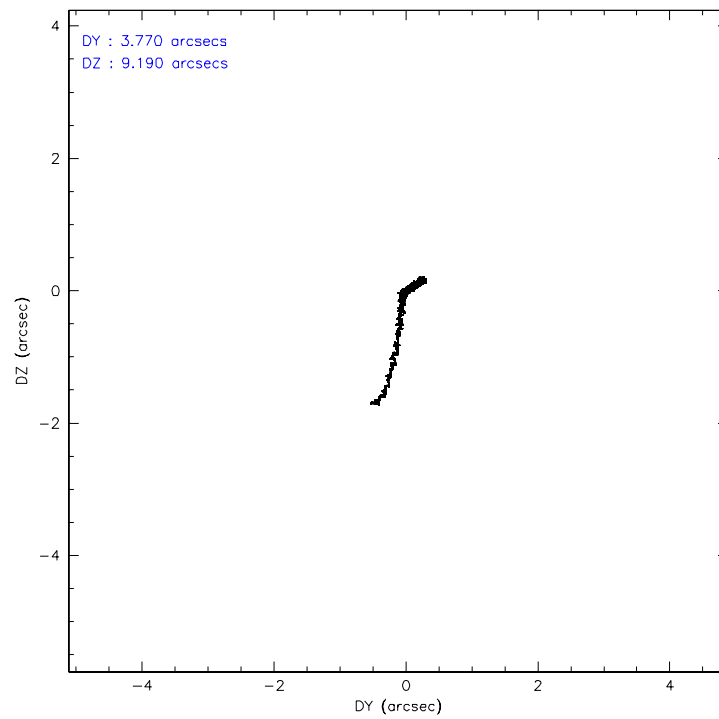
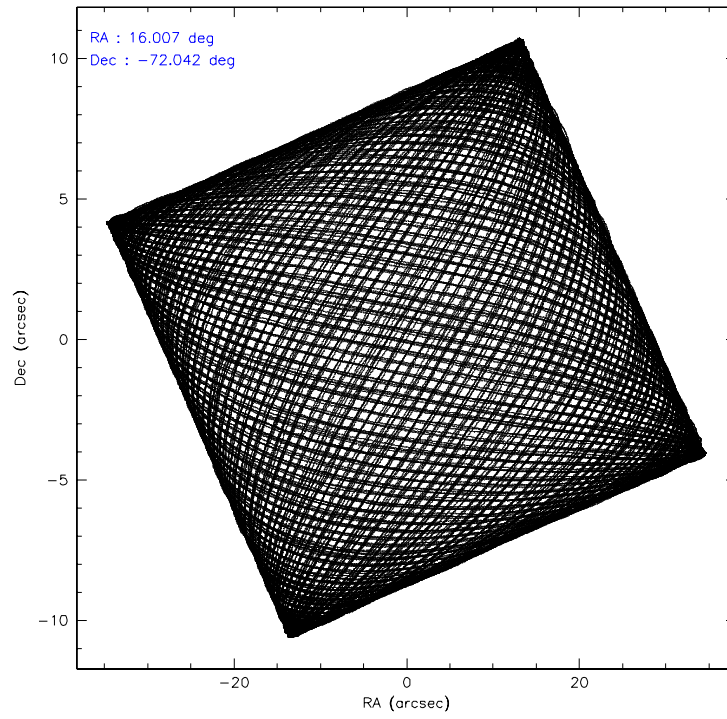
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	921707	1256211	852725	1154079	1065158	829610
rejected events	810016	667833	734208	675209	825930	725564
rejected %	87%	53%	86%	58%	77%	87%

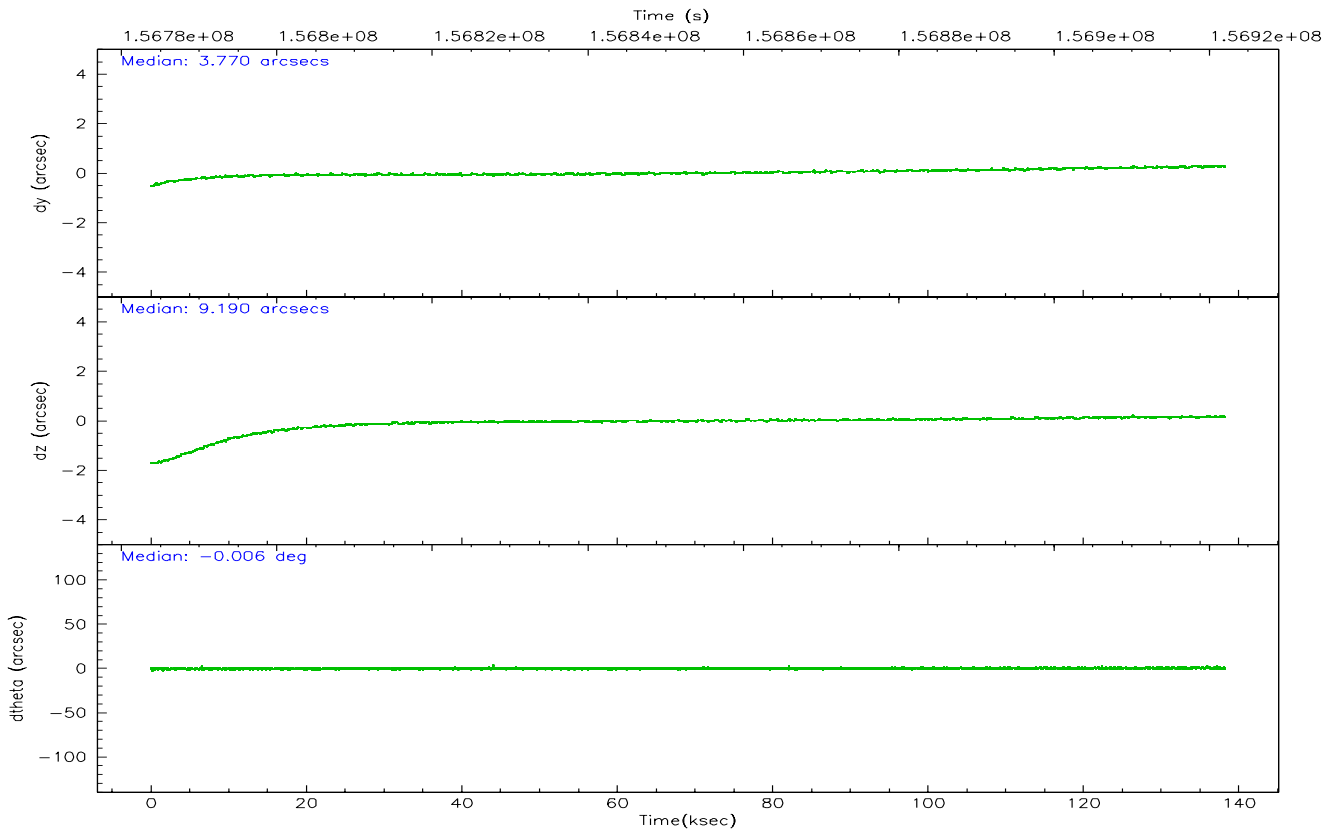
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	54127	85006	57105	44930	88148	44947
	5%	6%	6%	3%	8%	5%
grade 1 events	896	1494	437	693	755	464
	0%	0%	0%	0%	0%	0%
grade 2 events	21501	176684	21675	119473	48203	19852
	2%	14%	2%	10%	4%	2%
grade 3 events	10482	13204	10203	29729	24218	10224
	1%	1%	1%	2%	2%	1%
grade 4 events	9875	12907	9901	28670	22375	9920
	1%	1%	1%	2%	2%	1%
grade 5 events	35060	58829	37217	72930	49049	39386
	3%	4%	4%	6%	4%	4%
grade 6 events	15712	300601	19643	256100	56298	19105
	1%	23%	2%	22%	5%	2%
grade 7 events	774054	607486	696544	601554	776112	685712
	83%	48%	81%	52%	72%	82%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	15.935427	16.00753843809894	Subarray requested	NONE	NONE
Pointing Dec	-72.025896	-72.04159255861092	Alternating exposures requested	N	N
Pointing Roll	293.807012	294.0322261857771	Primary exposure time	0.000000	3.2
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	156784080.184000	156783062.7637			
Observation start date	2002-12-20T15:06:56	2002-12-20T14:51:02			
Observation end time	156922028.184000	156922831.25704			
Observation end date	2002-12-22T05:26:04	2002-12-22T05:40:31			
Read mode	TIMED	TIMED			

2.3 Aspect



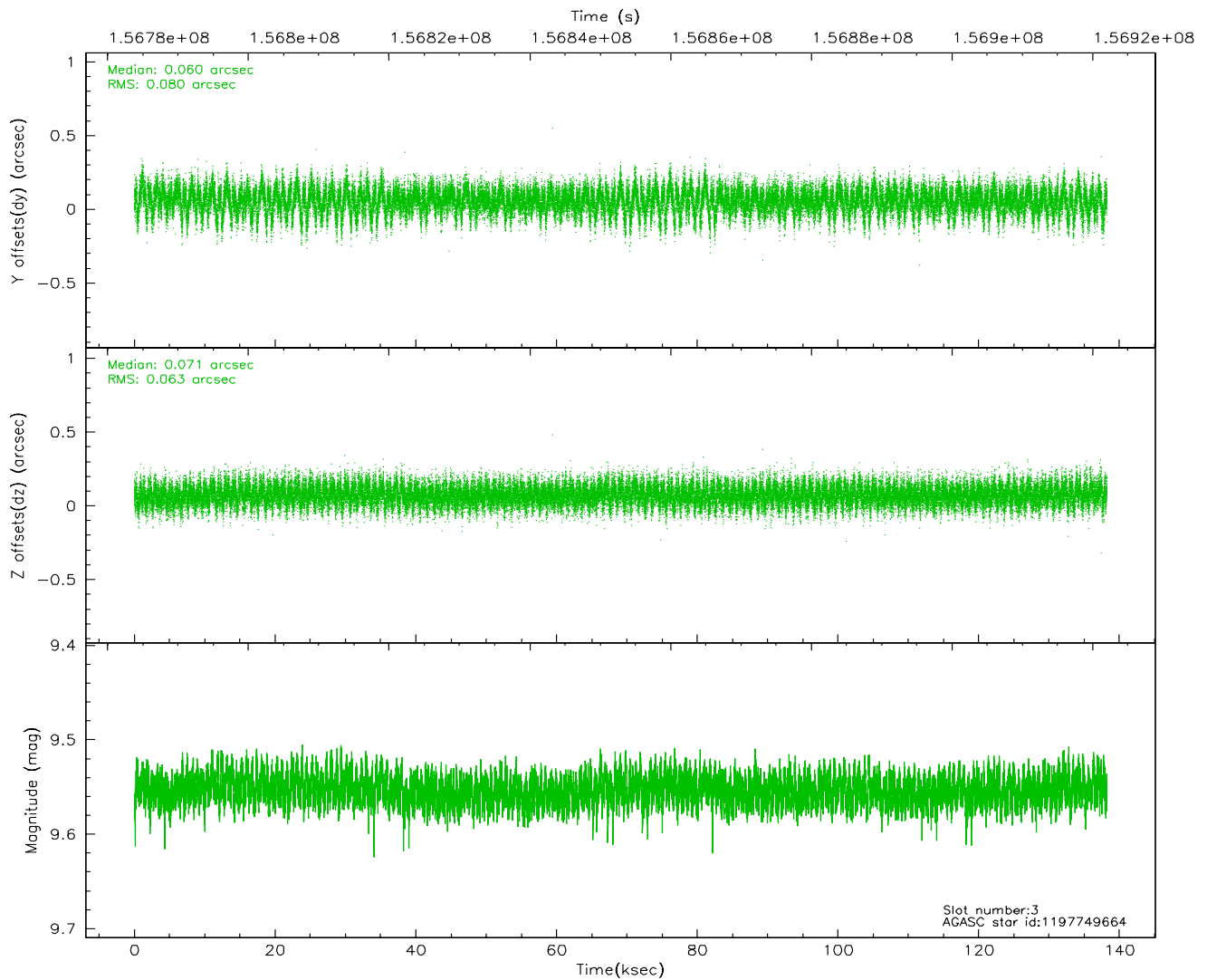
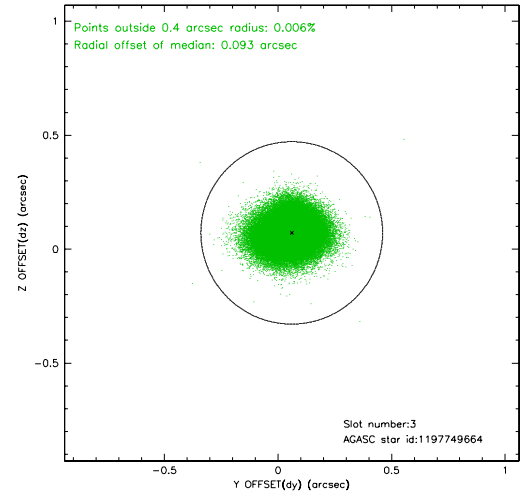
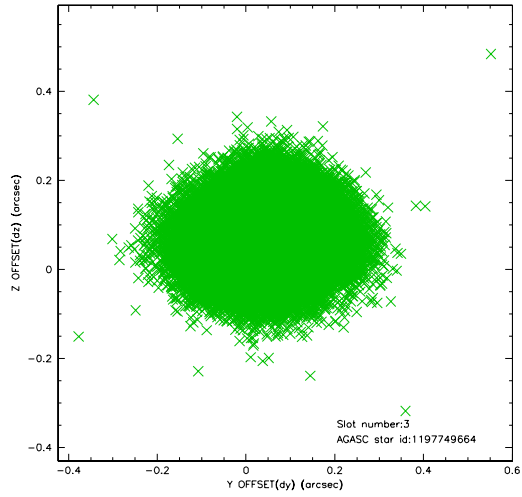


Slot Statistics

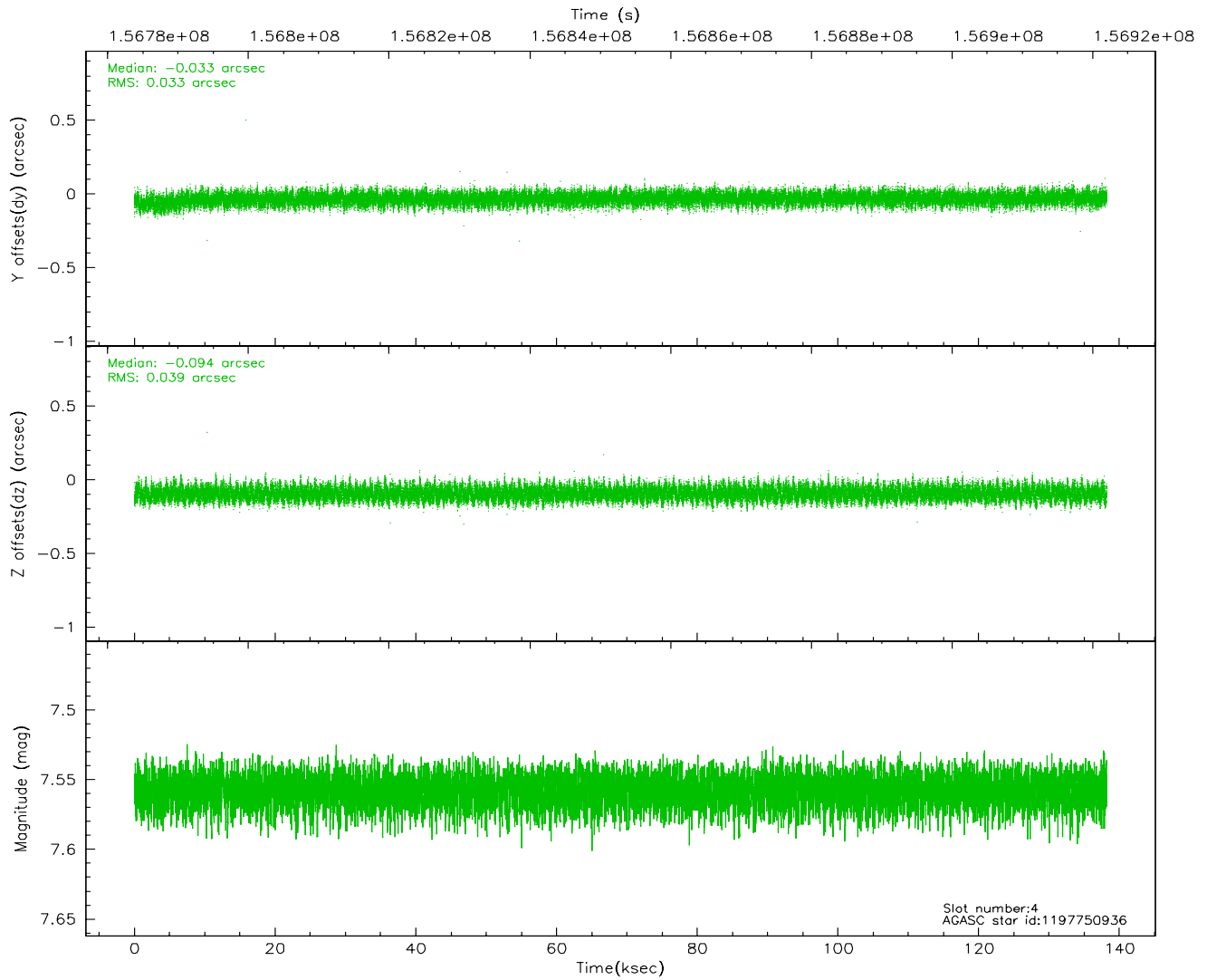
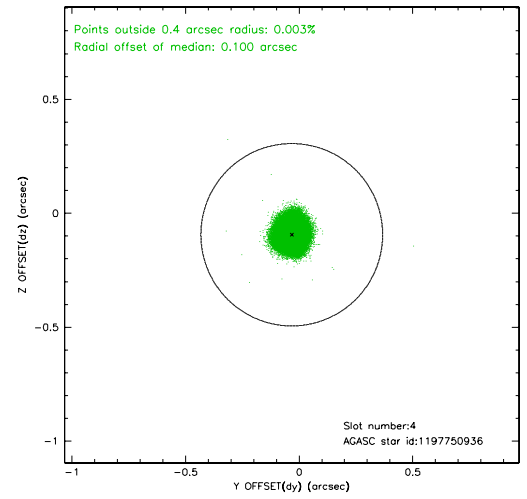
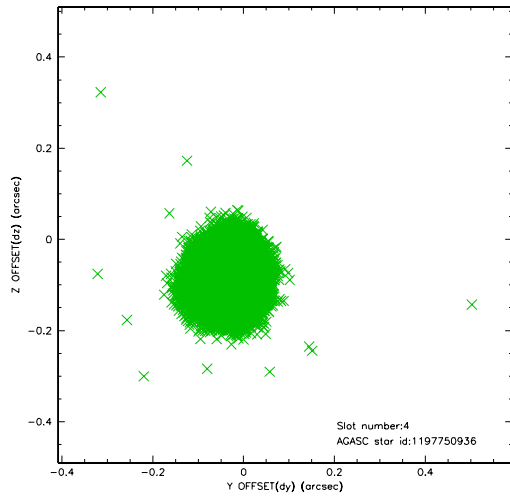
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	33715	0.005	0.028	0.007	0.019	0.000000	0.000000	939.81	-1787.98
1	FID	ACIS-S-4	7.20	33710	-0.035	-0.009	0.007	0.014	0.000000	0.000000	2157.09	116.26
2	FID	ACIS-S-6	7.37	33705	0.006	-0.007	0.007	0.021	0.000000	0.000000	405.58	753.48
3	GUIDE	1197749664	9.55	67382	0.060	0.071	0.108	0.175	15.809015	-72.366369	1066.29	-620.62
4	GUIDE	1197750936	7.56	67425	-0.033	-0.094	0.055	0.087	15.387940	-71.549550	-1817.76	120.14
5	GUIDE	1197884536	8.50	67419	0.078	0.047	0.066	0.105	17.160729	-71.835289	-59.81	1529.53
6	GUIDE	1197885328	7.22	67429	0.020	-0.035	0.056	0.088	16.283090	-71.733943	-802.02	783.04
7	GUIDE	1198189696	7.37	67421	-0.120	0.011	0.065	0.104	15.223750	-72.697522	1909.08	-1674.64

2.4 Star Slots

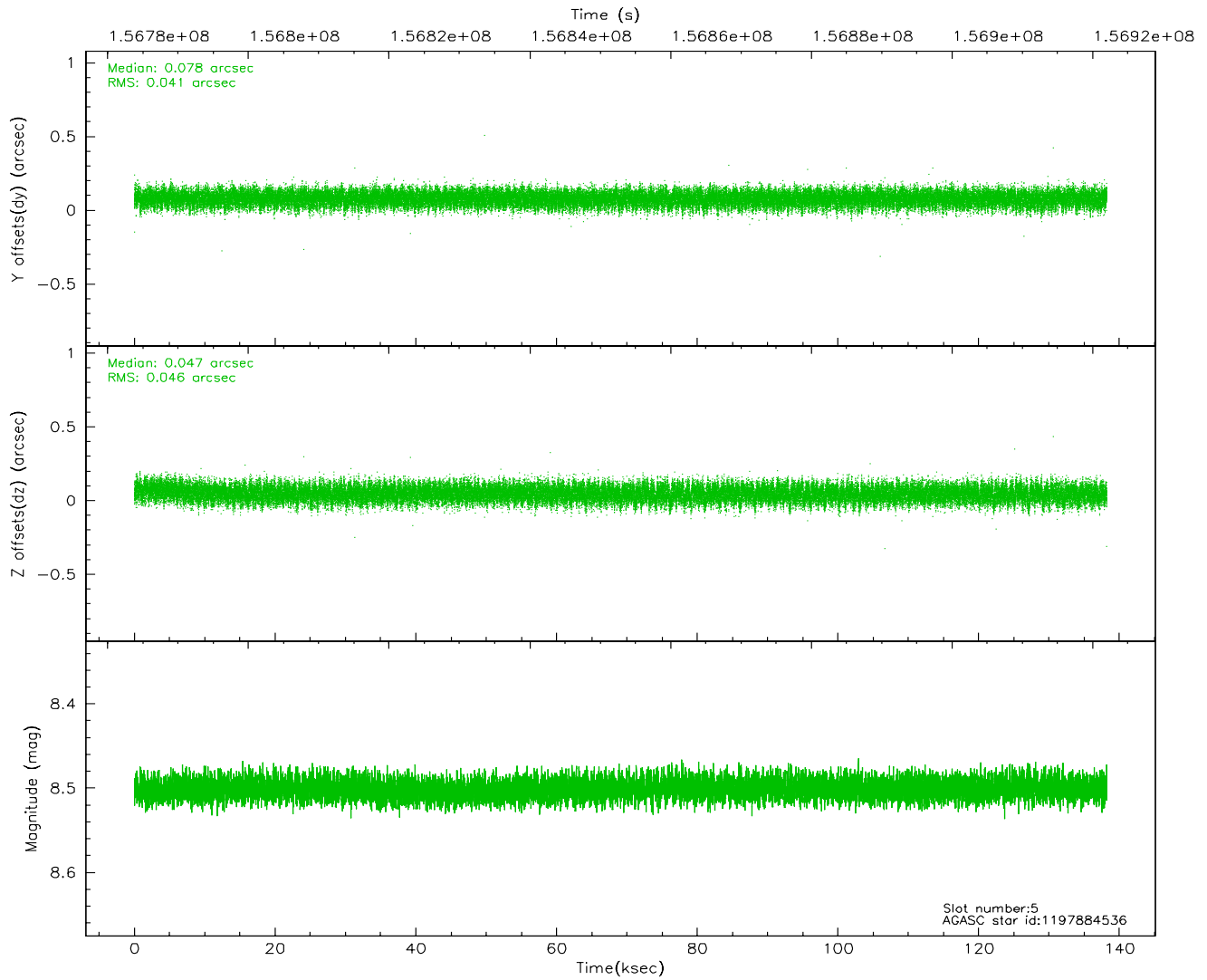
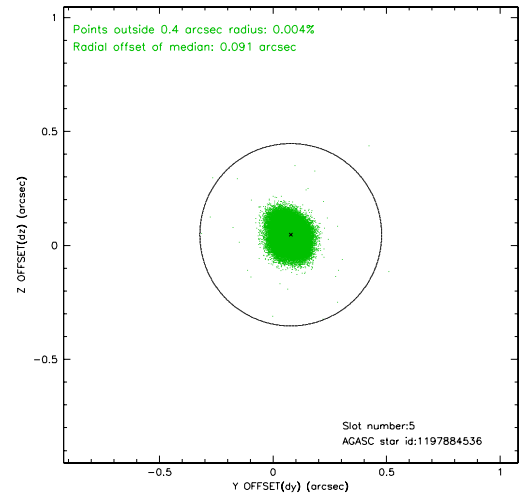
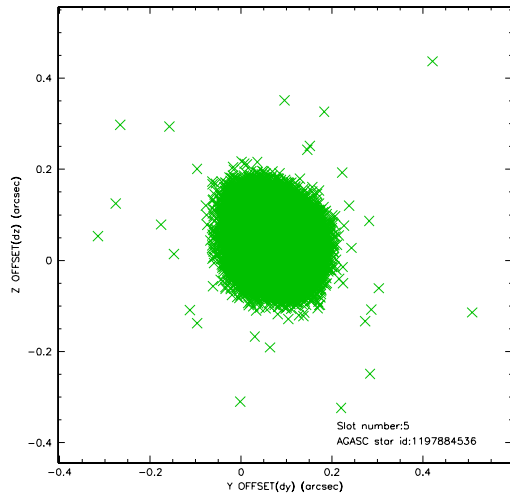
2.4.1 Slot 3



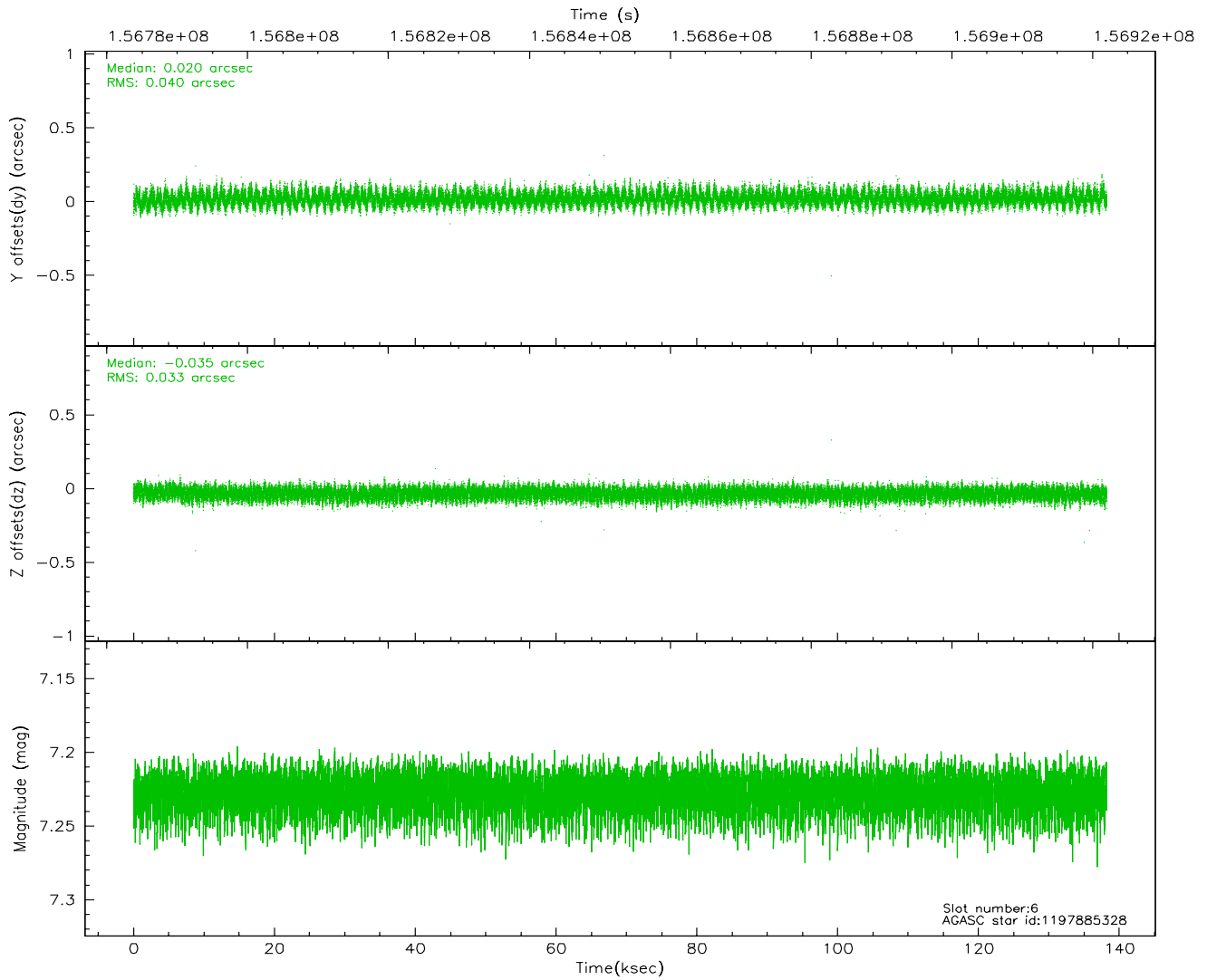
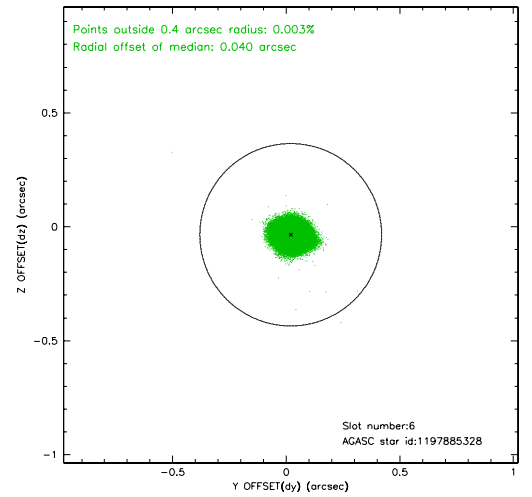
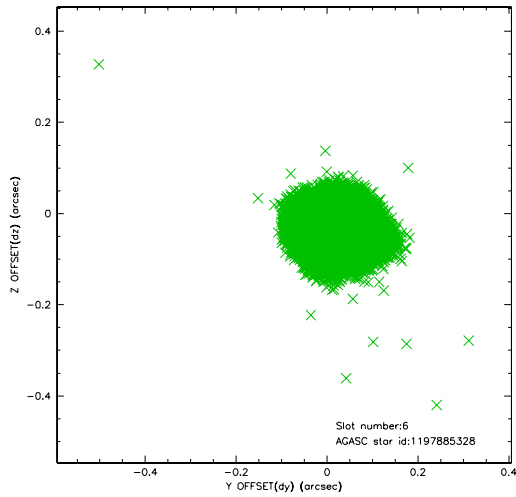
2.4.2 Slot 4



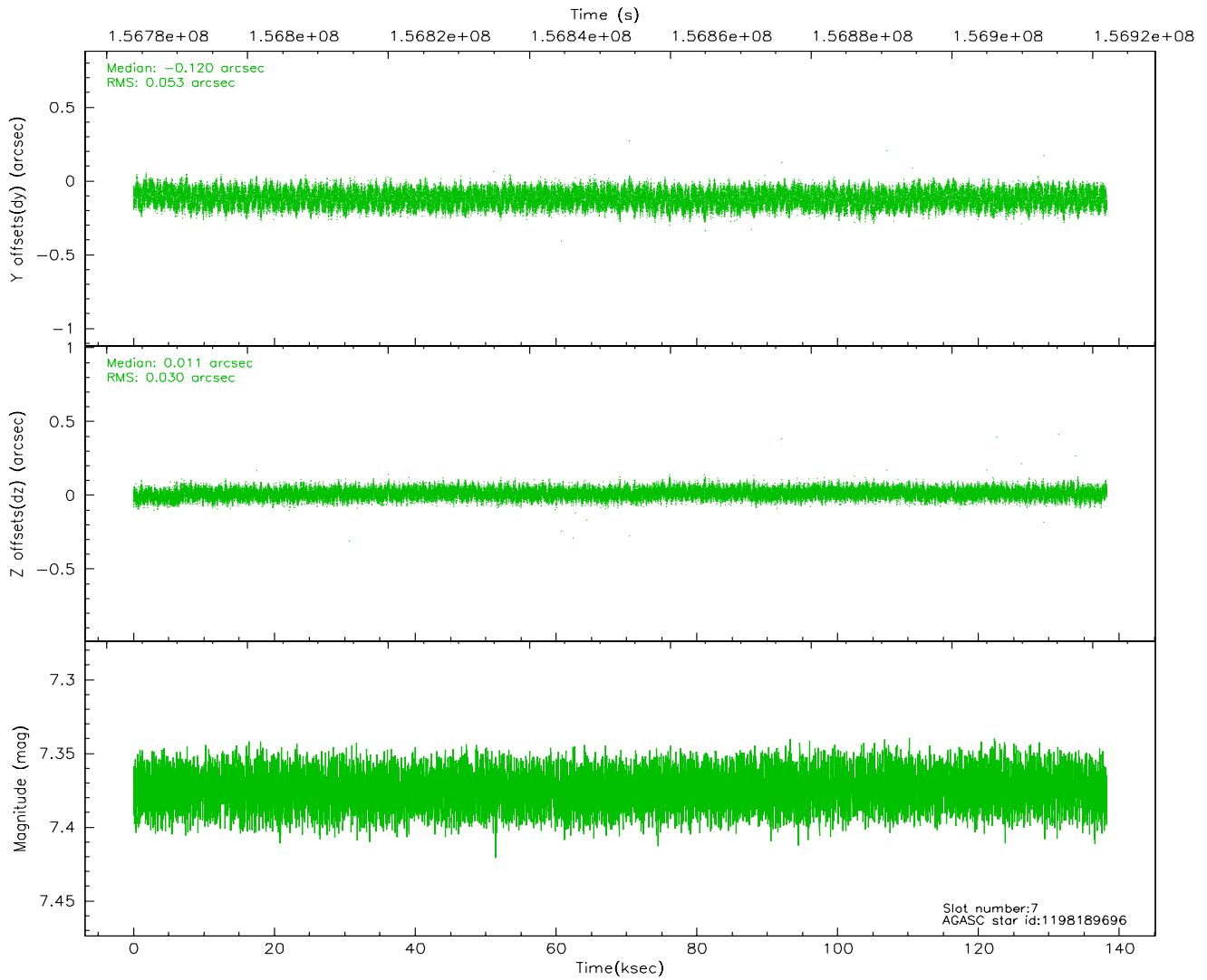
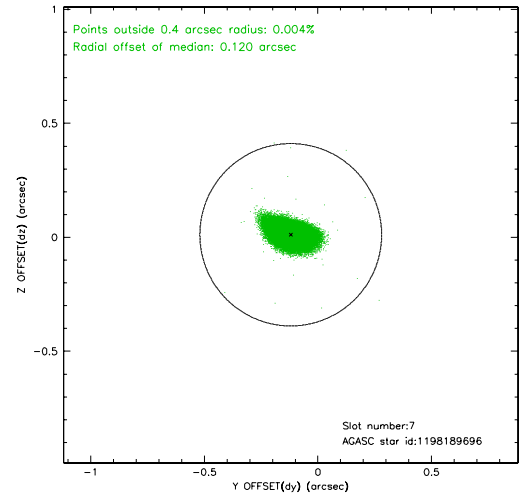
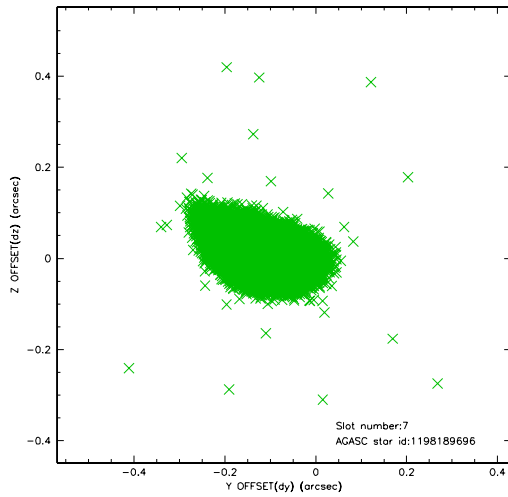
2.4.3 Slot 5



2.4.4 Slot 6

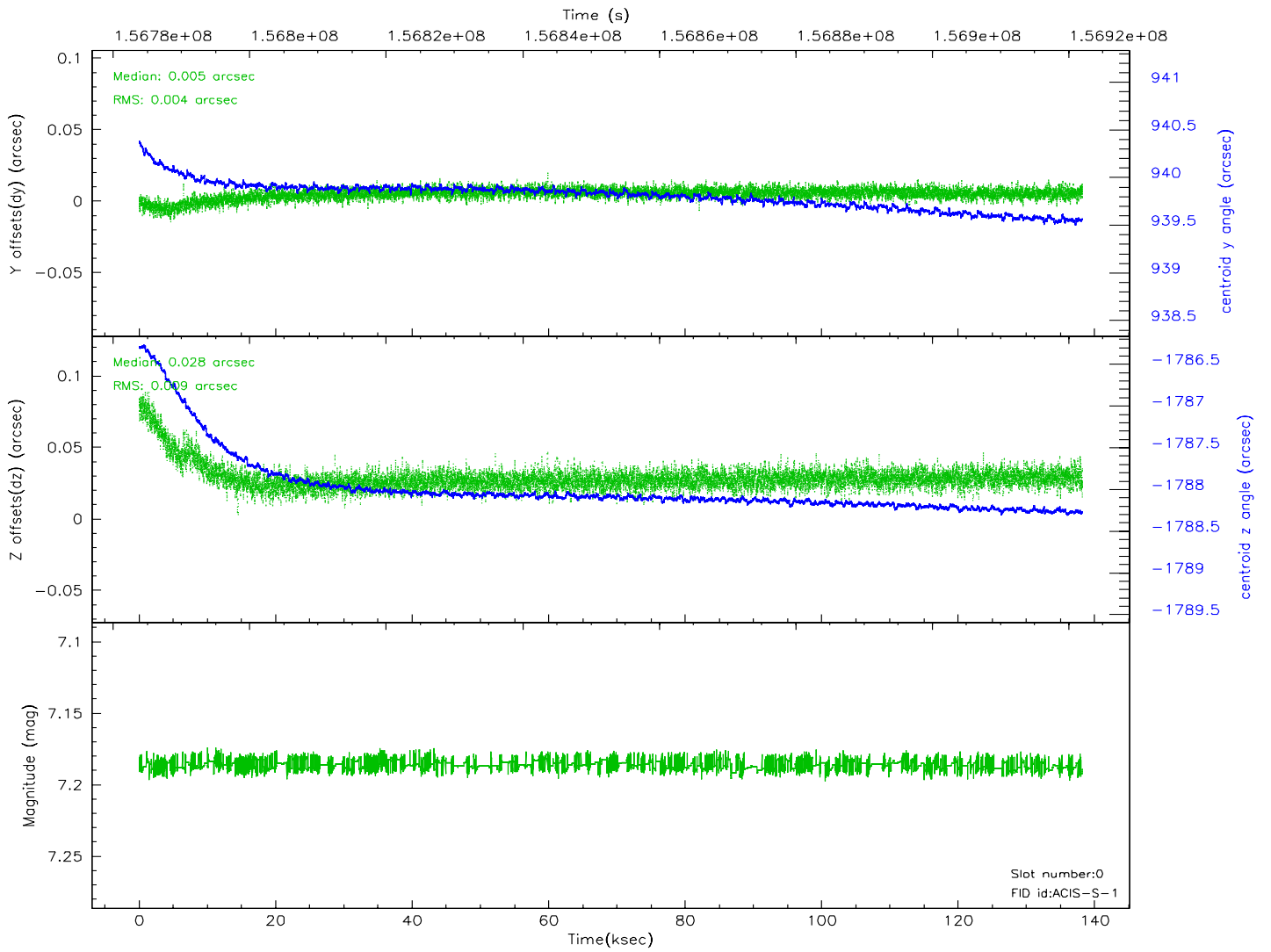
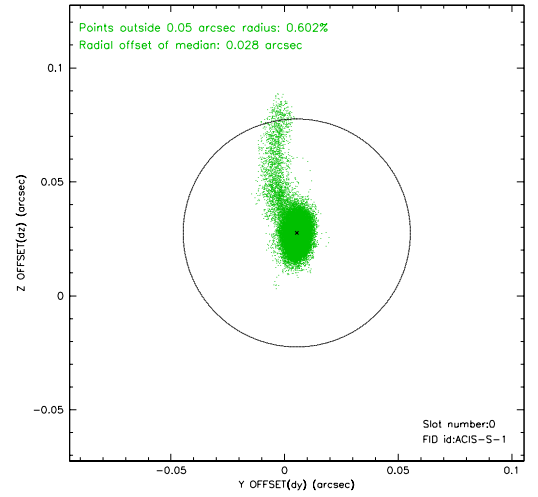
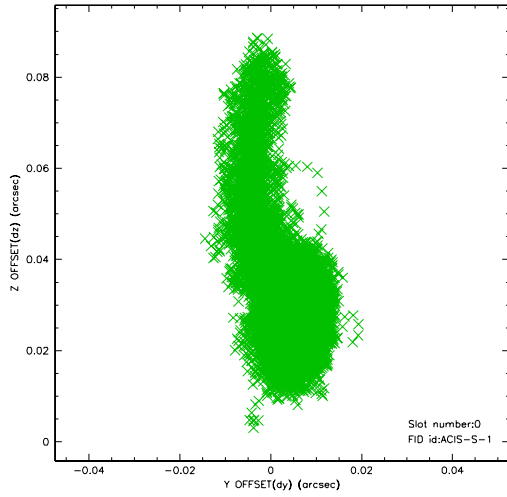


2.4.5 Slot 7

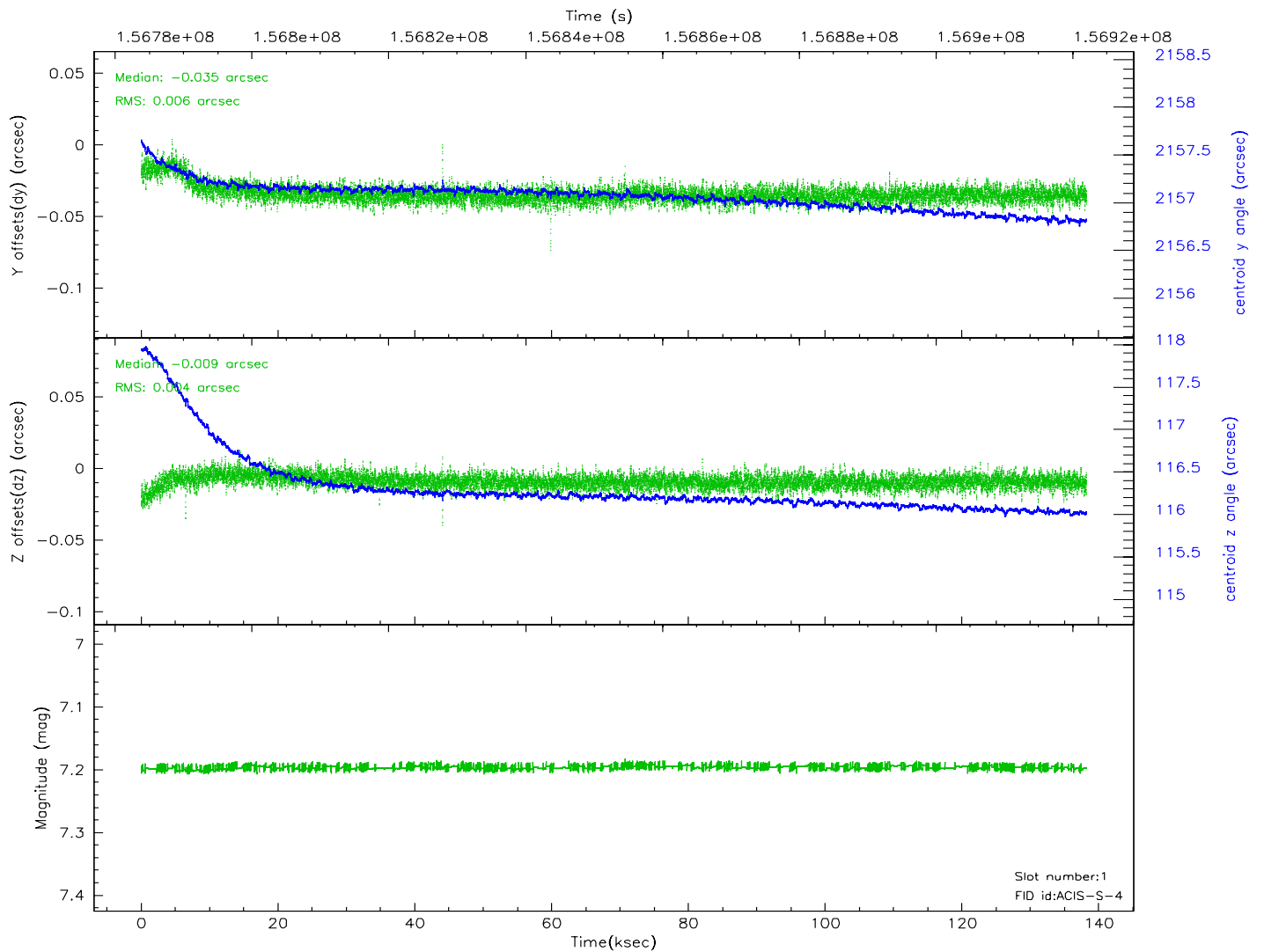
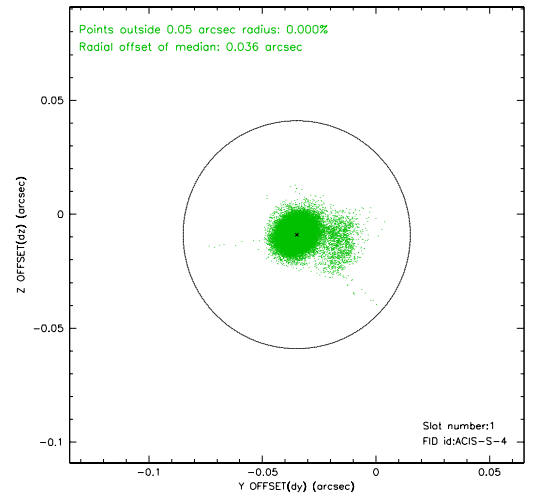
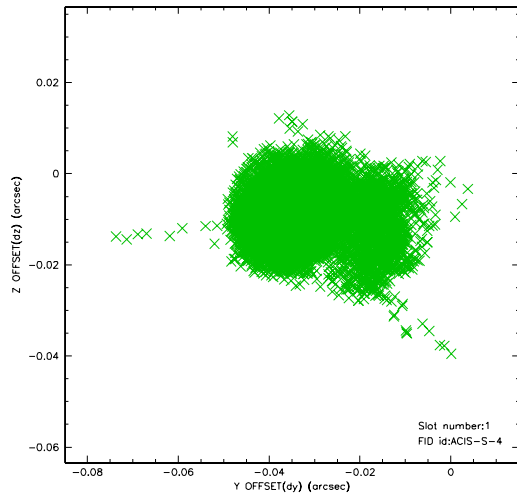


2.5 FID Slots

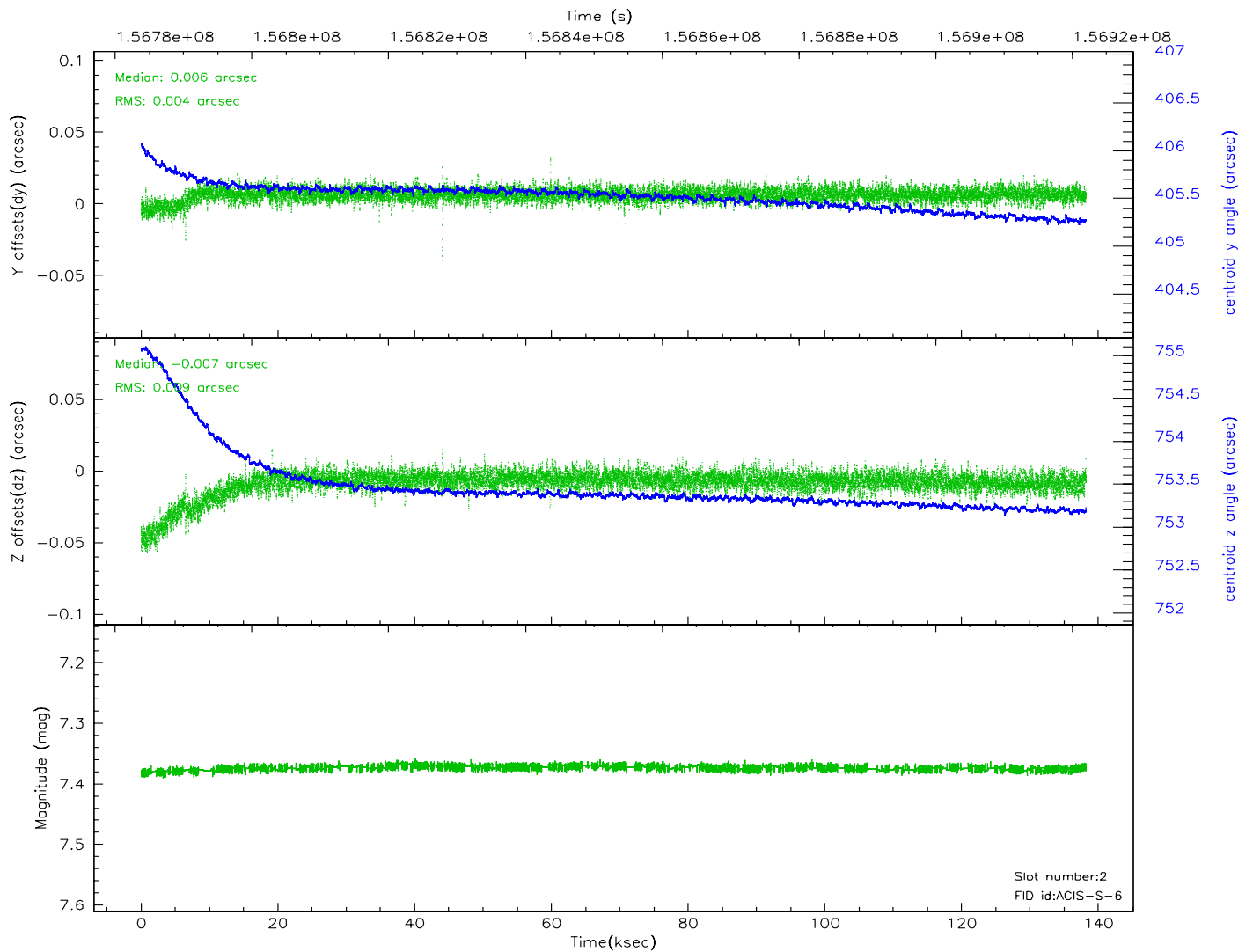
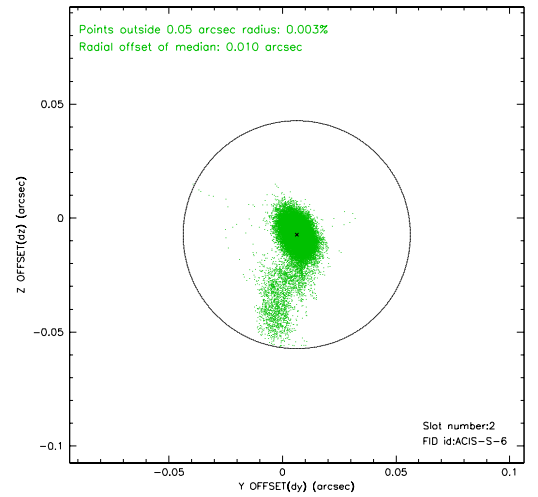
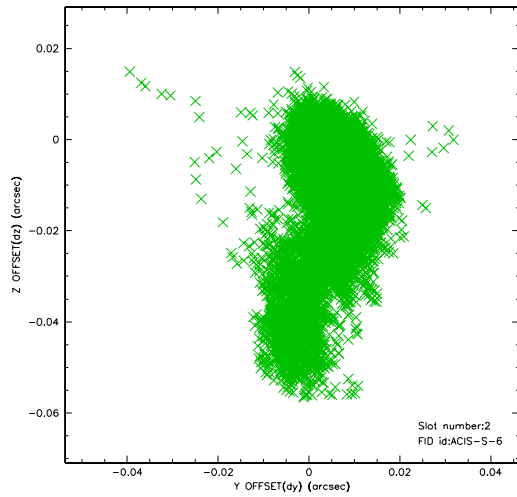
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

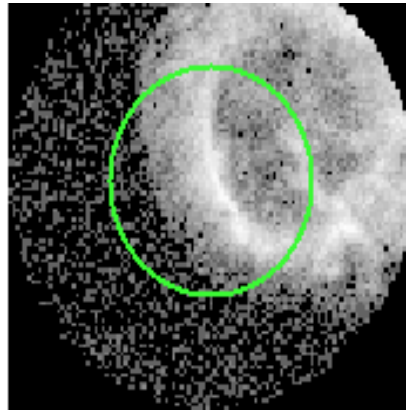


3 Gratings

3.1 HEG Arm



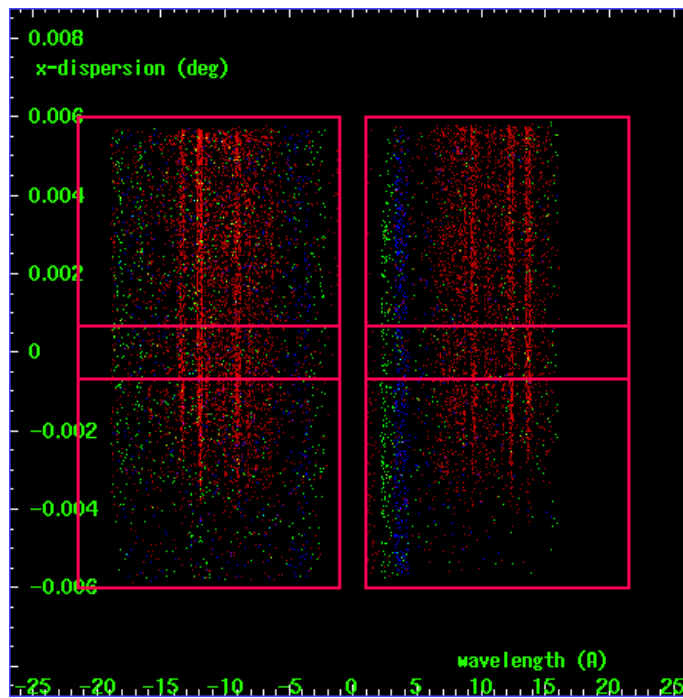
HEG Order Sort 123



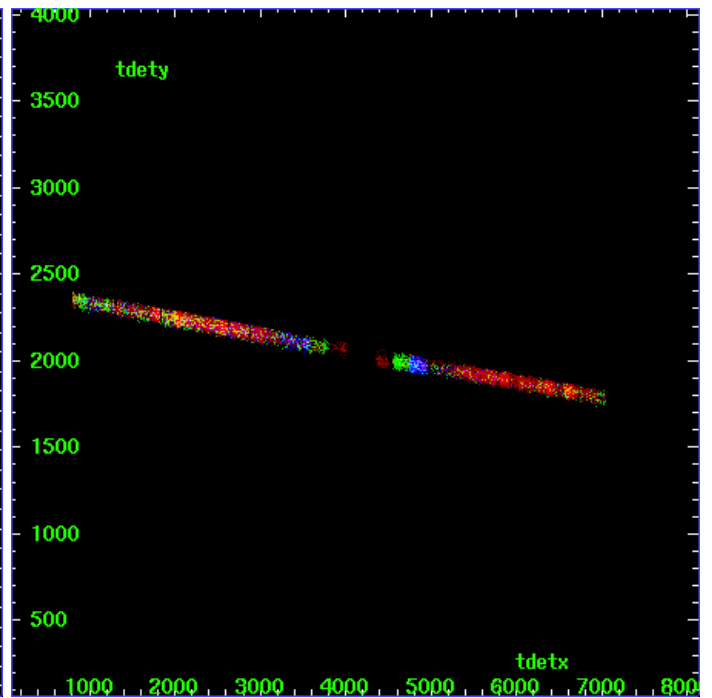
HEG Zero Order



HEG Order Sort ALL

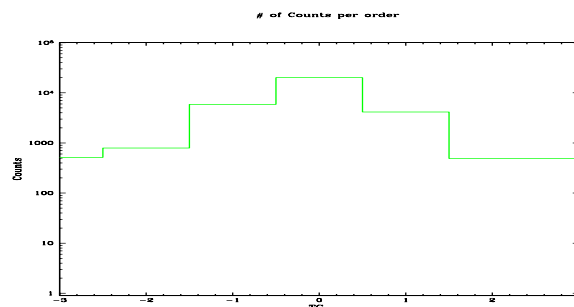


Spot Image HEG

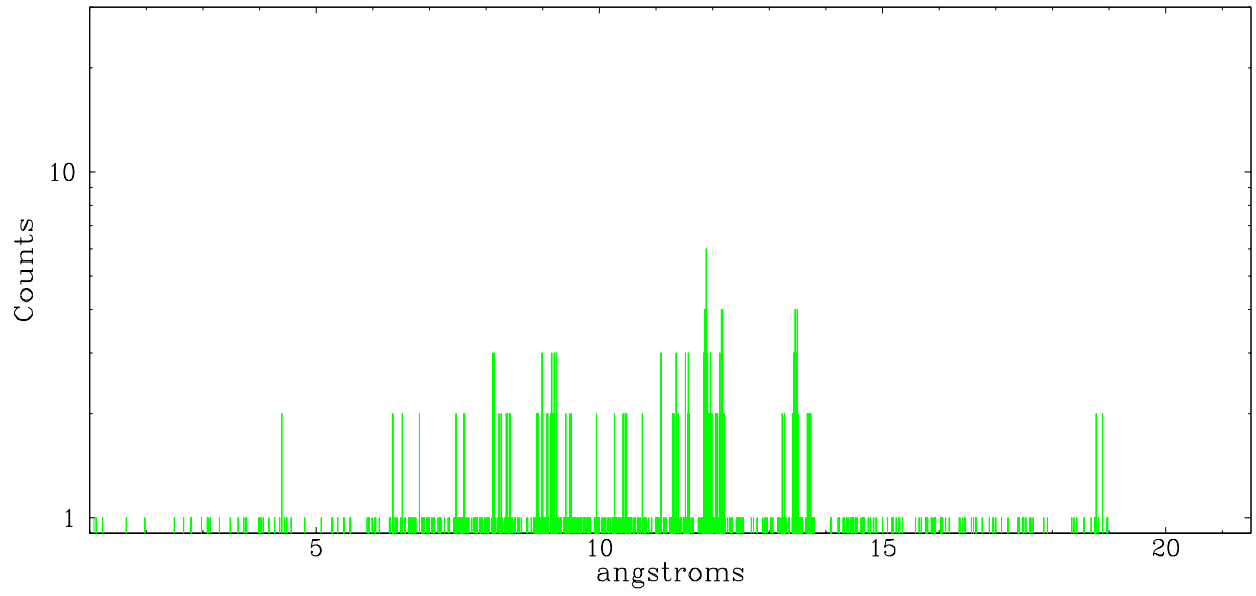


Full Detector HEG

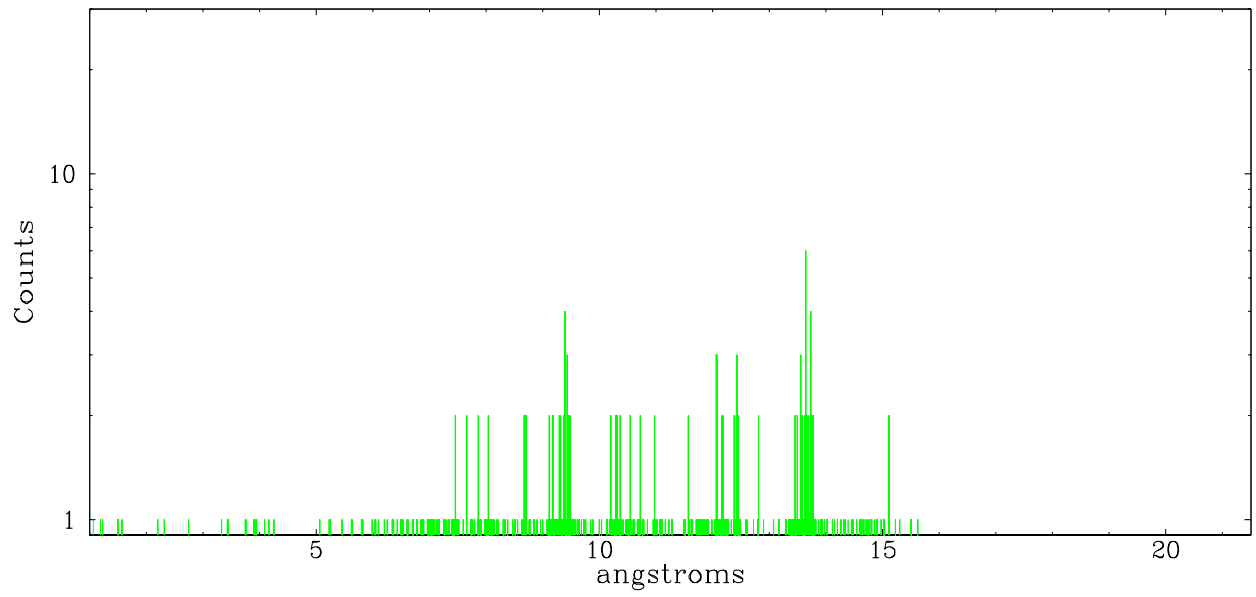
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	515	794	5900	20017	4128	491	489



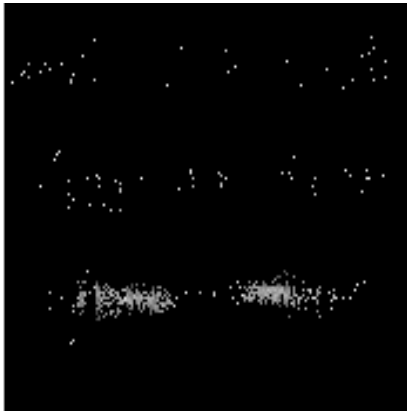
heg order -1



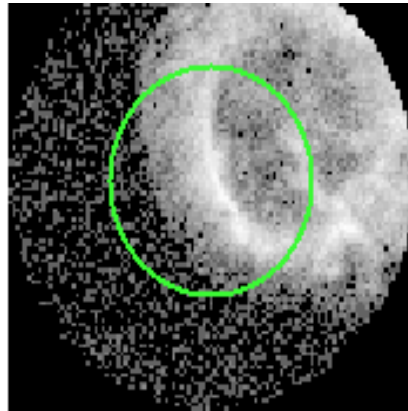
heg order +1



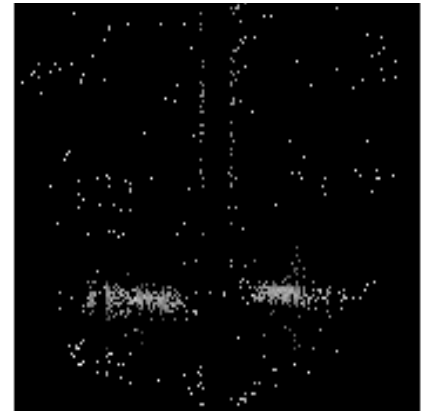
3.2 MEG Arm



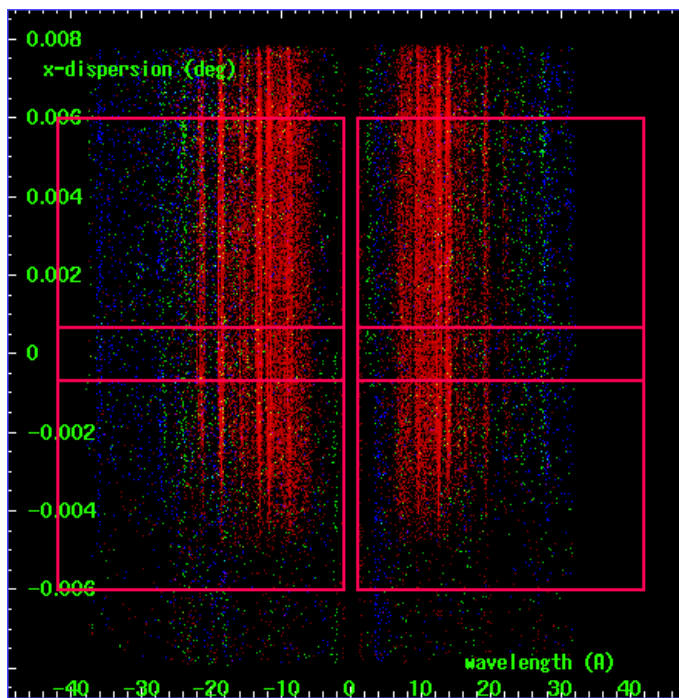
MEG Order Sort 123



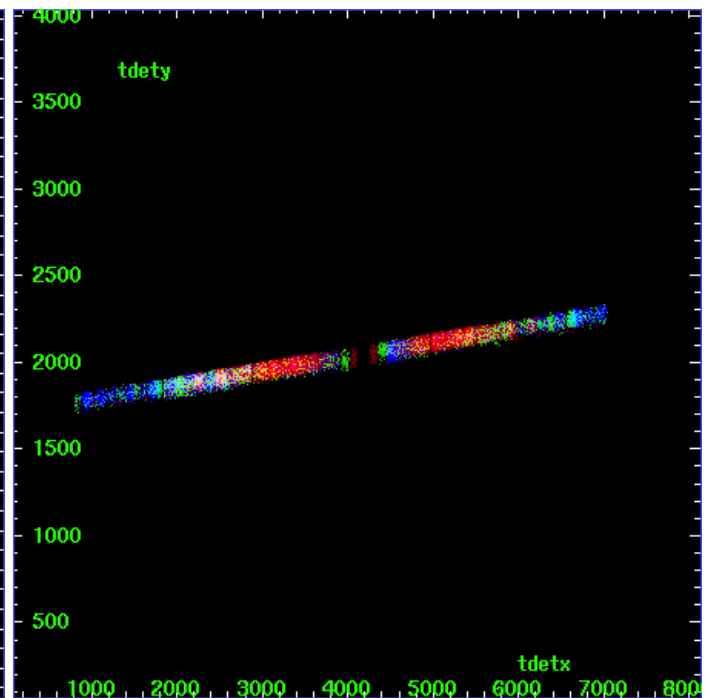
MEG Zero Order



MEG Order Sort ALL

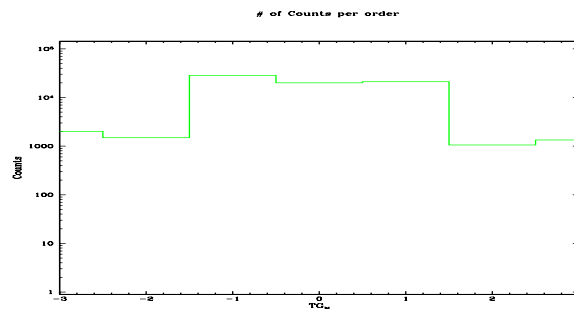


Spot Image MEG

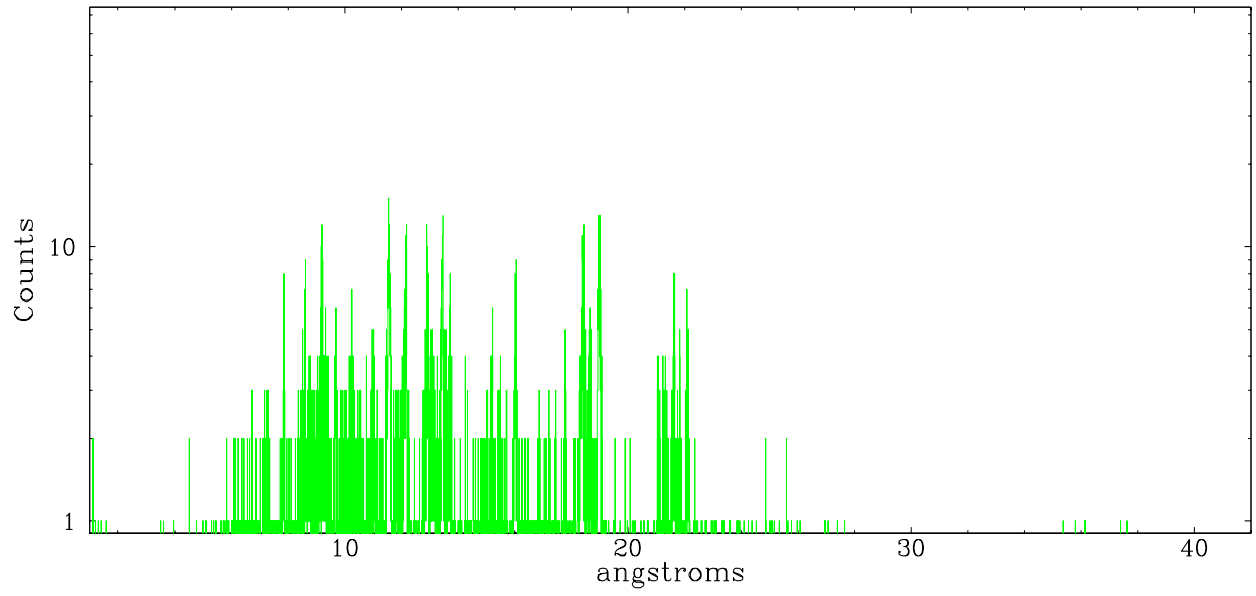


Full Detector MEG

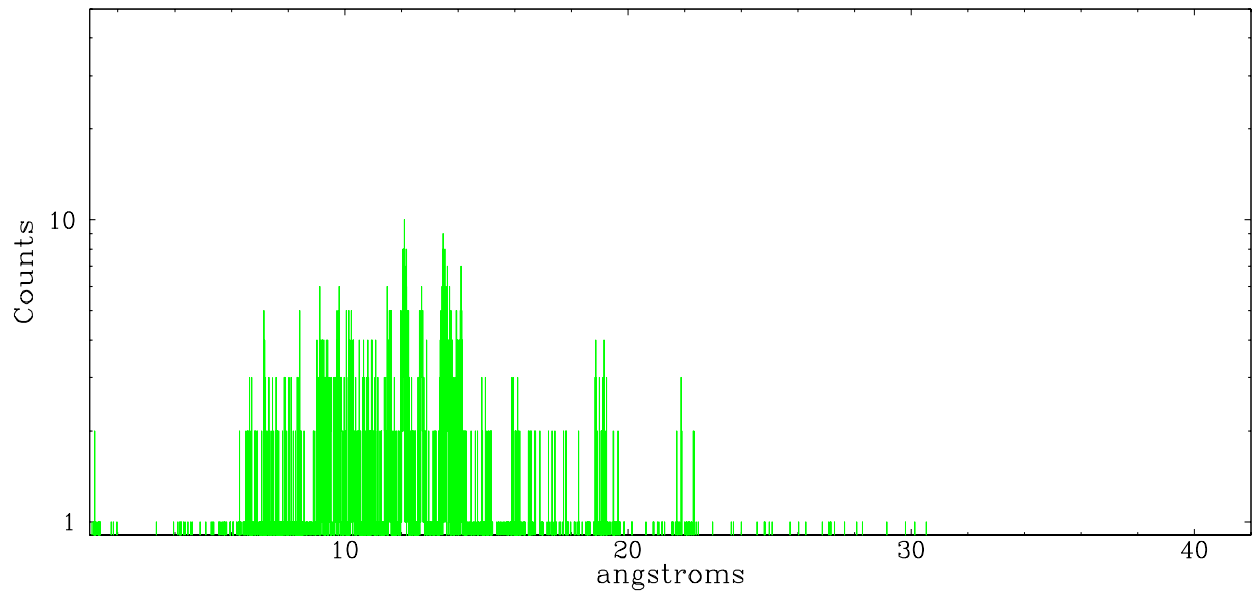
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2010	1495	28643	20017	21174	1053	1341



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	137.66

A.2 Comments

Zeroth order selected by pipeline tools is a bright filament southeast of the center of the supernova remnant. Therefore the extracted spectrum has correct energy assignments for this region, but not for the rest of the supernova. The user will need to select the region or source that is to be used for extracting the HEG and MEG spectra, then use software tools such as CIAO to specify the coordinates of the zeroth order of interest before running the tools to resolve the dispersed events.