

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1383 - L2 Version 2
Chandra X-Ray Center

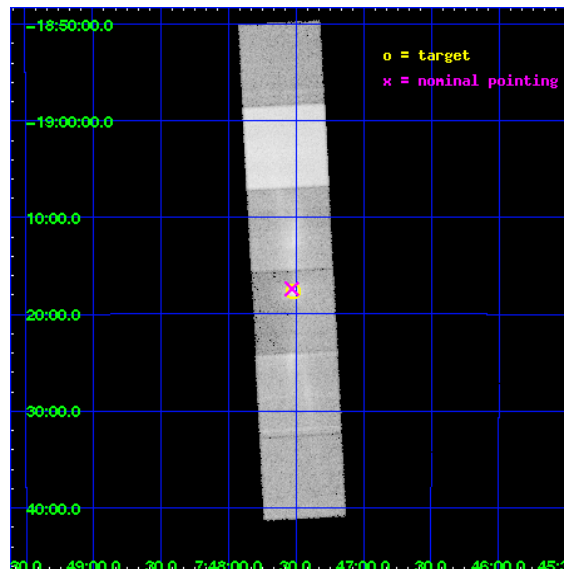
L2 Processing Date : Nov 19 2009

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1 Front

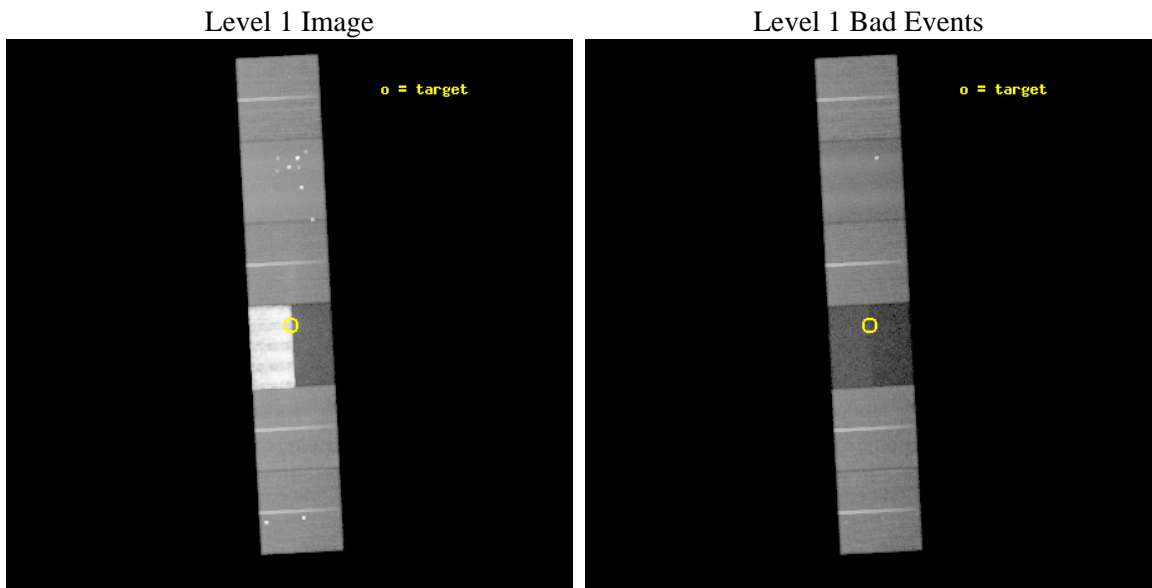
seq_num	800018	Sequence number
obs_id	1383	Observation id
title	HIGH RESOLUTION X-RAY SPECTRA OF CLUSTER COOLING FLOWS	Proposal ti
observer	Prof. Claude Canizares	Principal investigator
object	PKS 0745-191	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	116.880417	Observer's specified target RA
dec_targ	-19.294444	Observer's specified target Dec
ra_nom	116.88272995393	Nominal RA
dec_nom	-19.289931733649	Nominal Dec
roll_nom	86.975202546796	Nominal Roll
revision	2	Processing version of data
ontime	9031.3133153394	Sum of GTIs [s]
livetime	8916.9533881366	Livetime [s]
ontime4	37574.462157458	Sum of GTIs [s]
ontime5	42380.80003947	Sum of GTIs [s]
ontime6	41291.838526972	Sum of GTIs [s]
ontime7	9031.3133153394	Sum of GTIs [s]
ontime8	40766.802993432	Sum of GTIs [s]
ontime9	40432.985439412	Sum of GTIs [s]
l2events	398448	Number of level 2 events



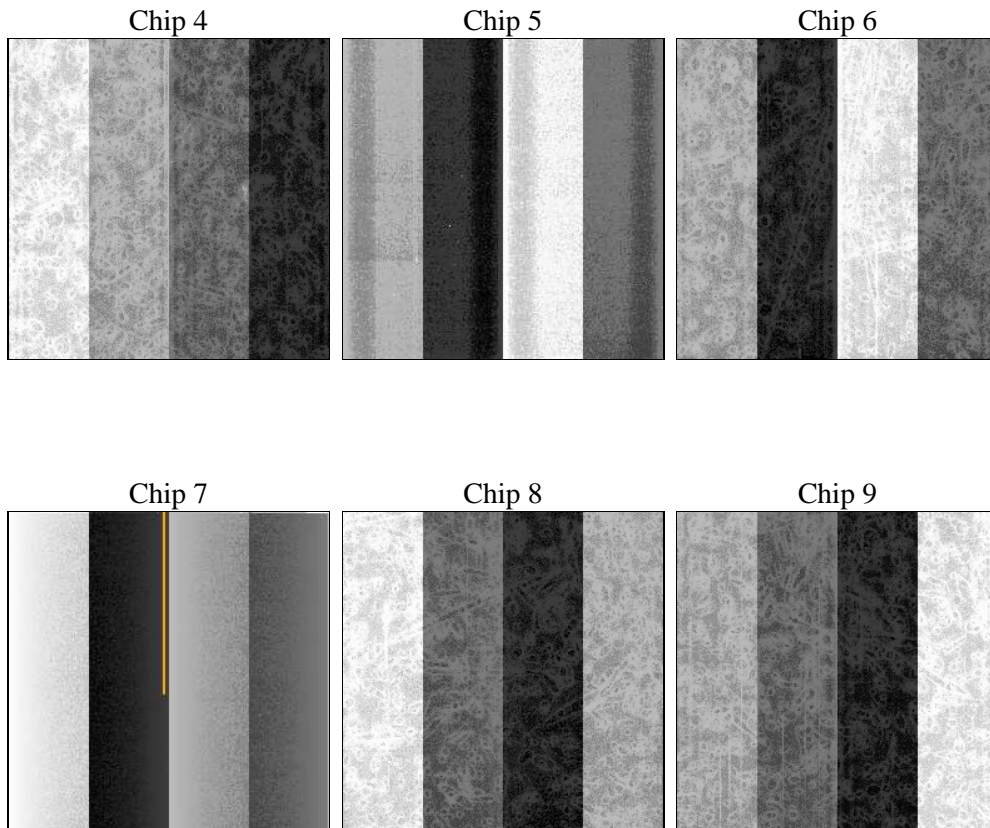
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	42750.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	9031.3133153394	Sum of GTIs [s]
caldbver	4.1.4	 	ontime4	37574.462157458	Sum of GTIs [s]
date	2009-11-19T16:08:54	Date and time of file creation	ontime5	42380.80003947	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	41291.838526972	Sum of GTIs [s]
			ontime7	9031.3133153394	Sum of GTIs [s]
			ontime8	40766.802993432	Sum of GTIs [s]
			ontime9	40432.985439412	Sum of GTIs [s]
			l1events	6699275	Number of level 1 events

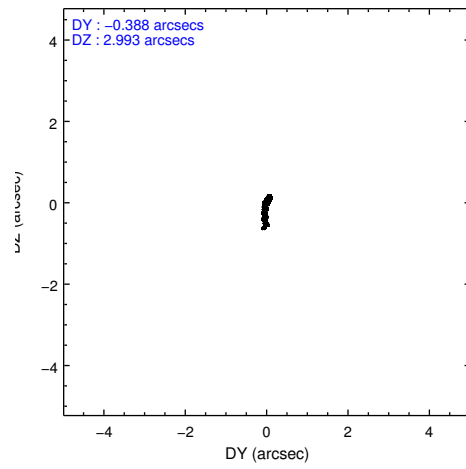
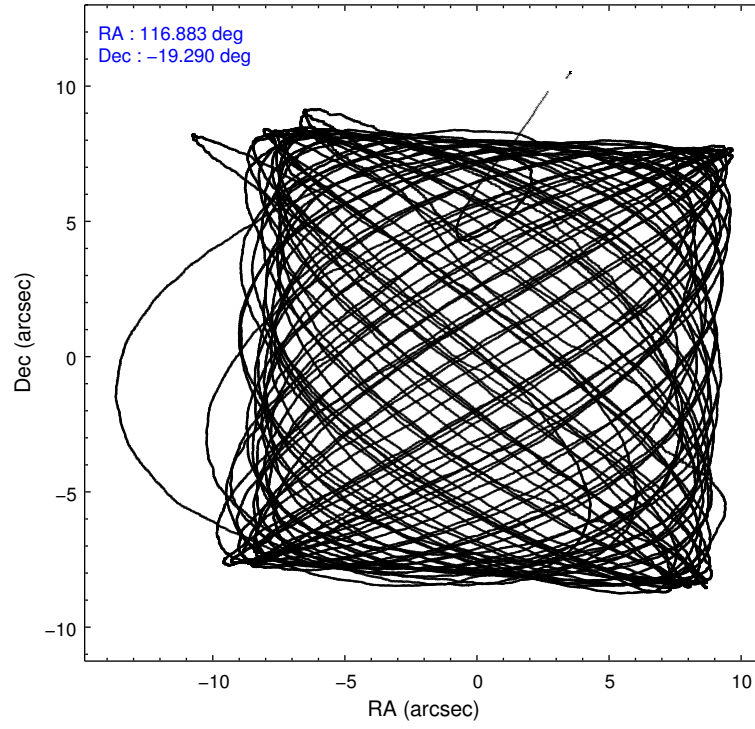
2.1.4 Events

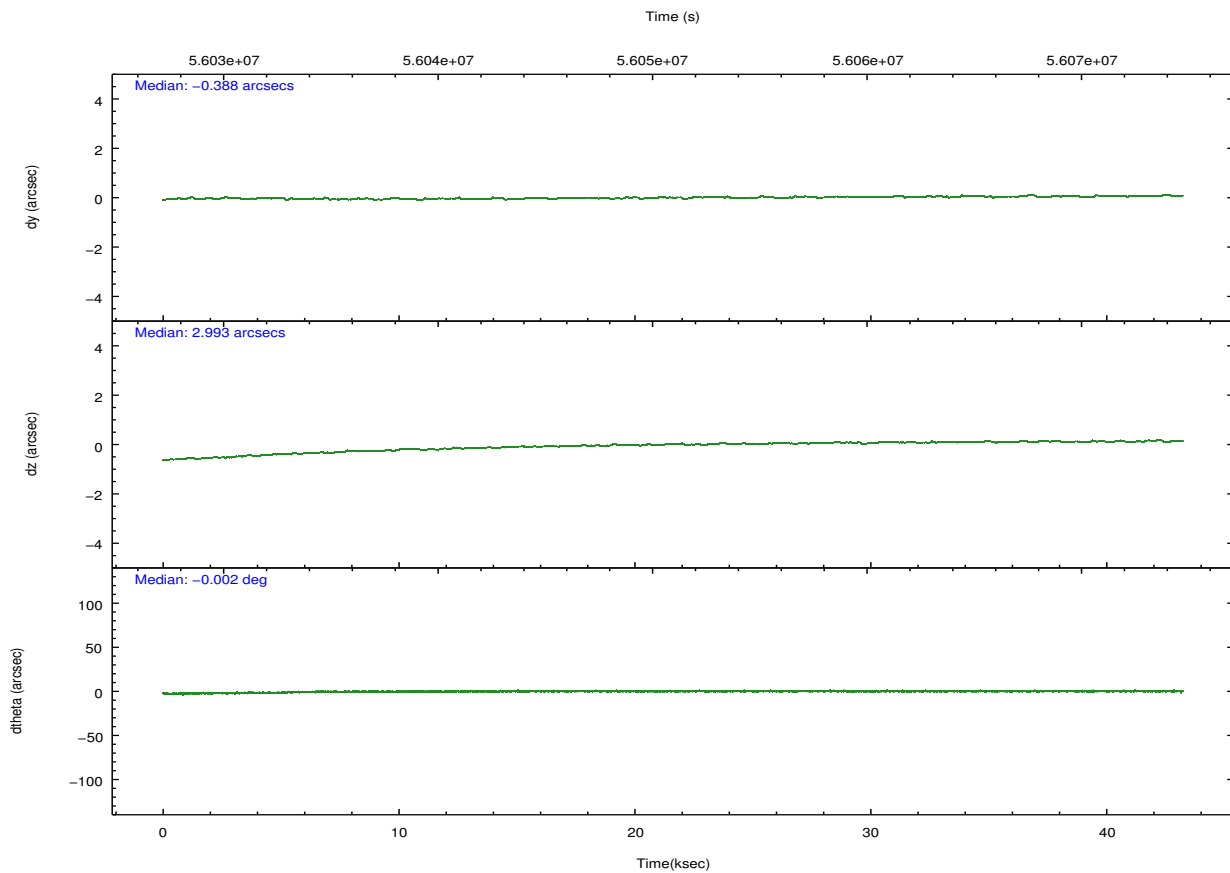
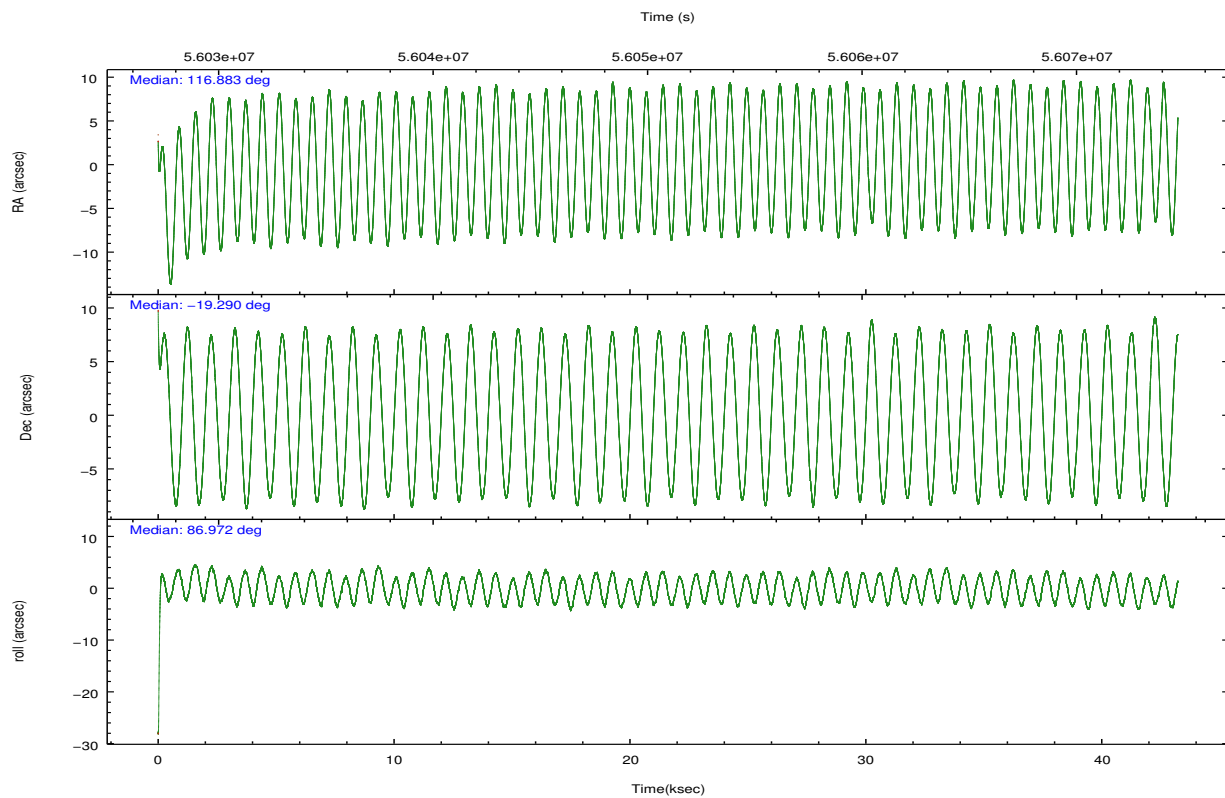
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	405560	522184	415266	4486226	470252	399787	grade 0 events	6414	47406	20722	4368390	25349	19820
rejected events	370965	285977	354298	67250	384057	338364		1%	9%	4%	97%	5%	4%
rejected %	91%	54%	85%	1%	81%	84%	grade 1 events	78	4410	109	3109	166	194
								0%	0%	0%	0%	0%	0%
							grade 2 events	15730	48662	22722	15194	26263	26492
								3%	9%	5%	0%	5%	6%
							grade 3 events	1992	7788	3082	5134	6478	2465
								0%	1%	0%	0%	1%	0%
							grade 4 events	1945	7256	2987	4600	6052	2412
								0%	1%	0%	0%	1%	0%
							grade 5 events	5629	19184	8142	9708	10640	7895
								1%	3%	1%	0%	2%	1%
							grade 6 events	8526	125151	11461	27928	22067	10245
								2%	23%	2%	0%	4%	2%
							grade 7 events	365246	262327	346041	52163	373237	330264
								90%	50%	83%	1%	79%	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	116.895856	116.8827299539288	Subarray requested	NONE	NONE
Pointing Dec	-19.314621	-19.28993173364946	Alternating exposures requested	N	N
Pointing Roll	86.822918	86.97520254679588	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)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	56029820.184000	56028713.74337			
Observation start date	1999-10-11T11:49:16	1999-10-11T11:31:53			
Observation end time	56072570.184000	56073094.194968			
Observation end date	1999-10-11T23:41:46	1999-10-11T23:51:34			
Read mode	TIMED	TIMED			

2.3 Aspect



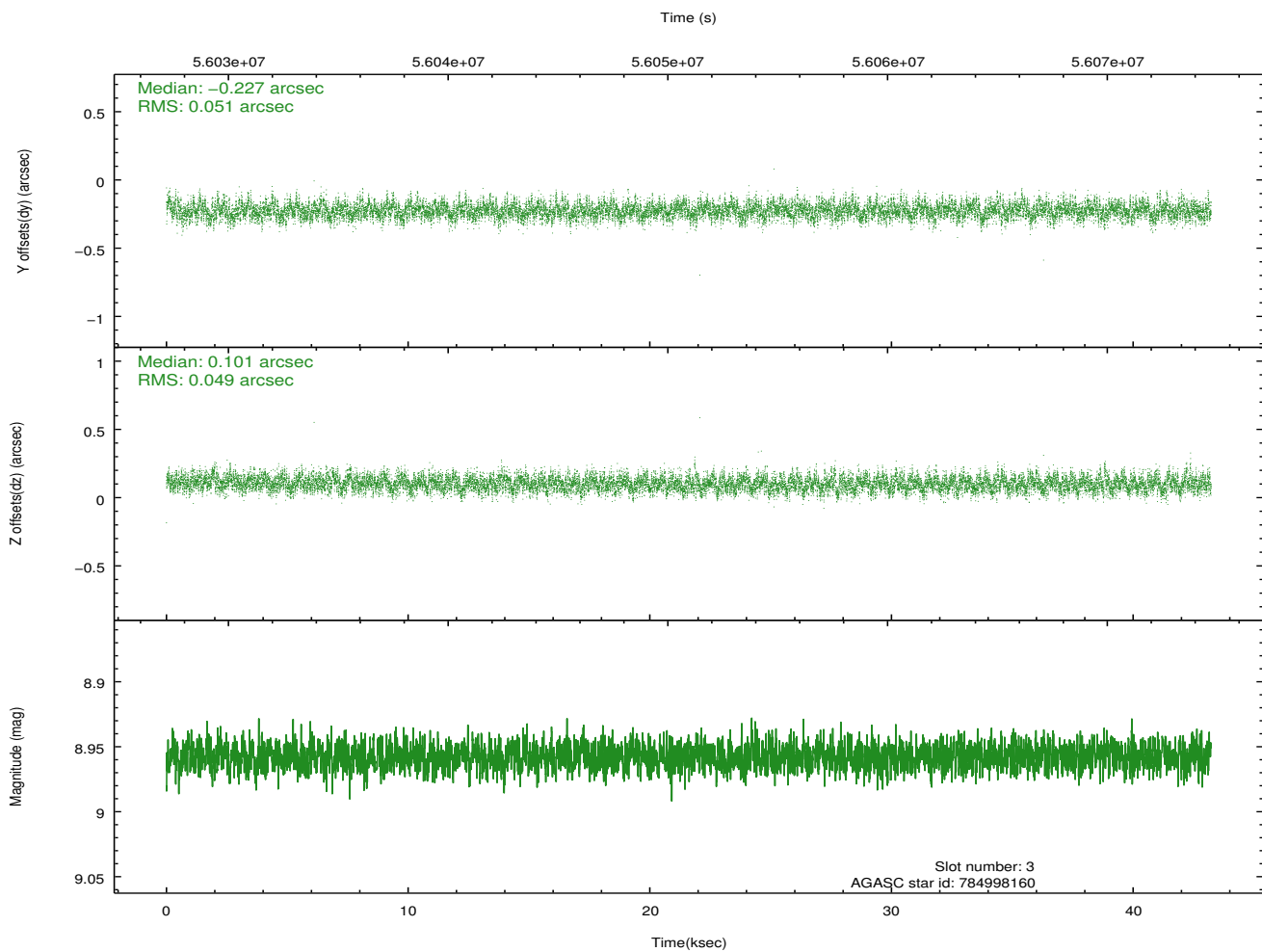
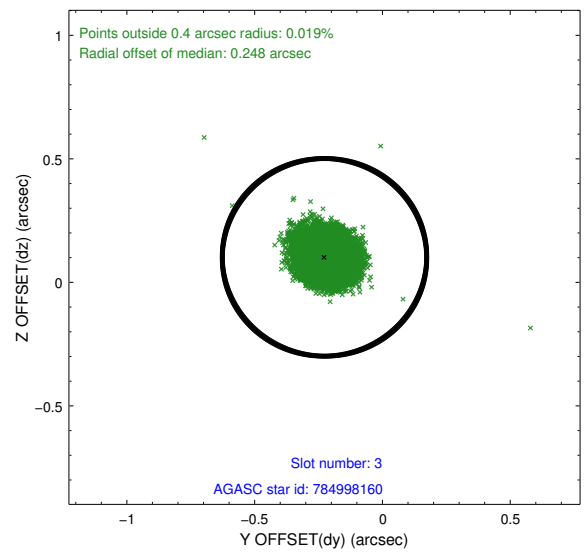
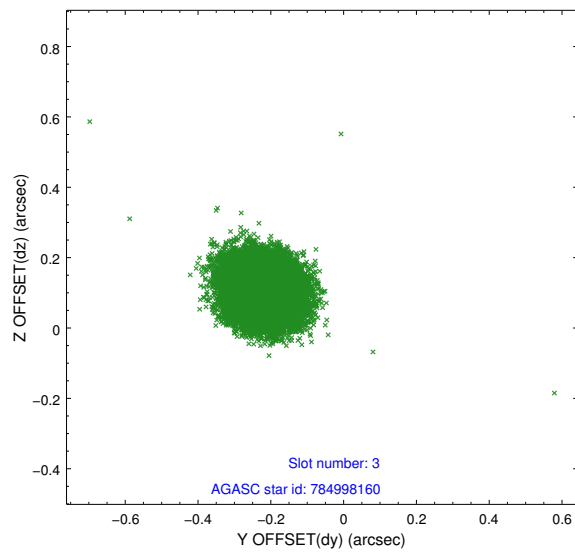


Slot Statistics

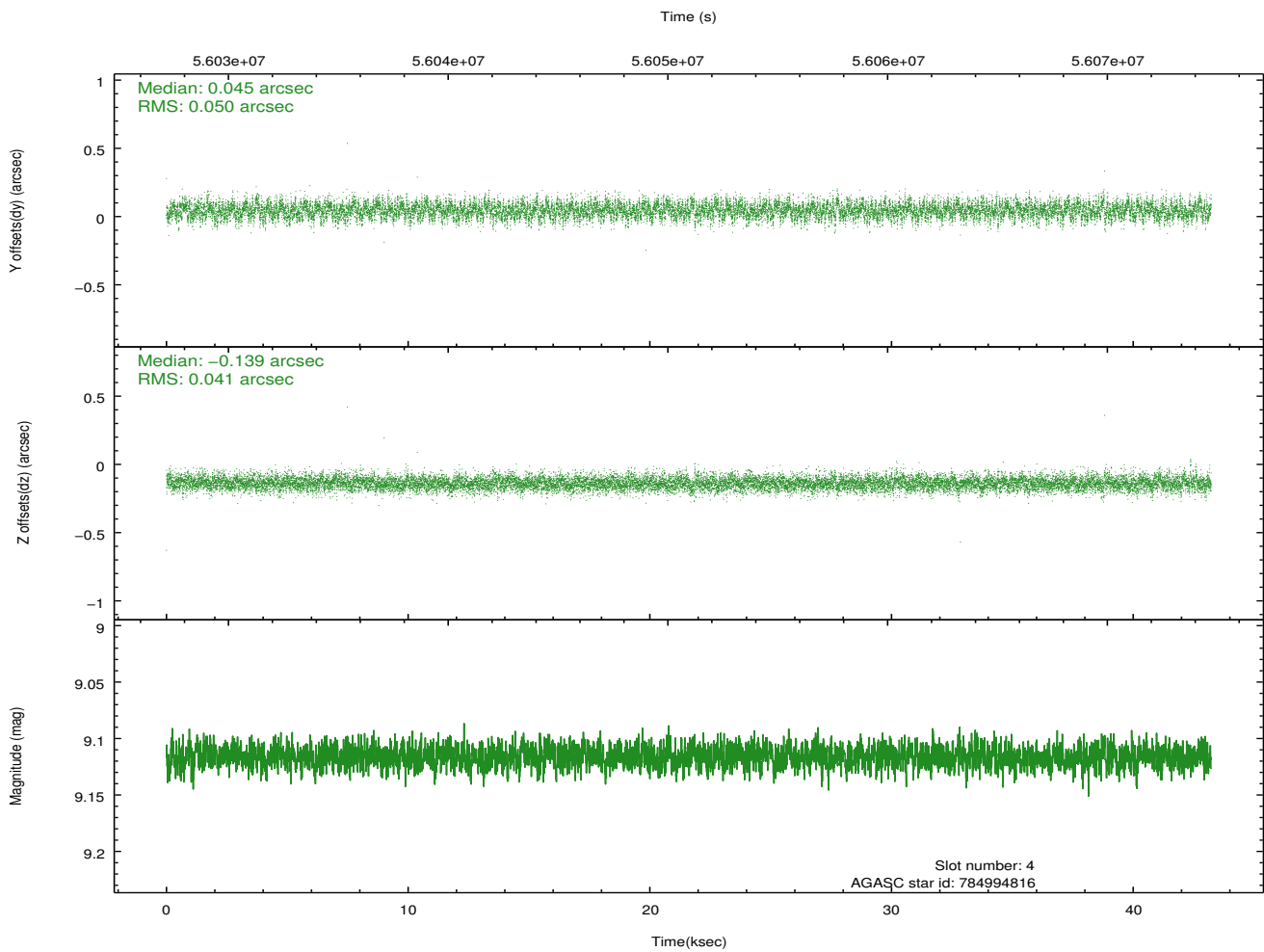
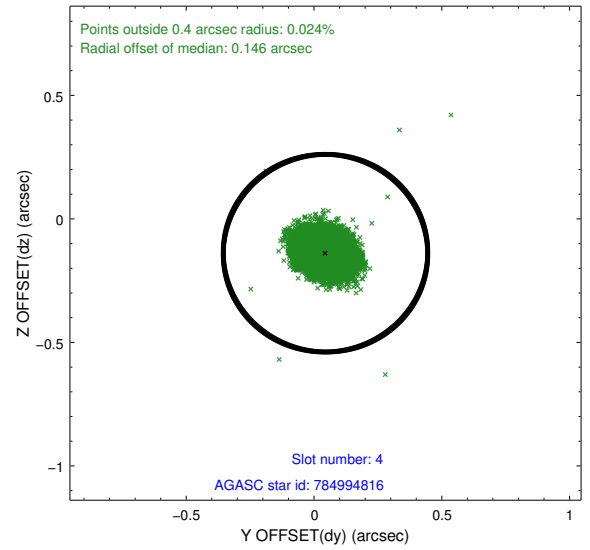
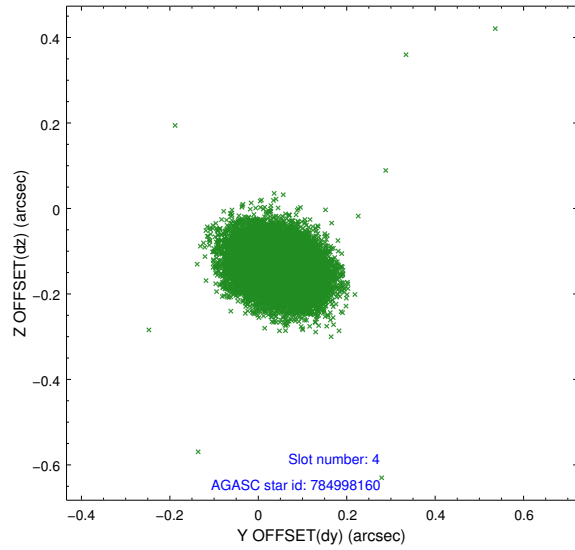
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	21084	0.020	-0.002	0.008	0.013	0.000000	0.000000	-752.21	-1723.94
1	FID	ACIS-S-4	7.21	21087	0.043	-0.009	0.006	0.012	0.000000	0.000000	2161.20	184.50
2	FID	ACIS-S-5	7.24	21085	-0.094	0.020	0.008	0.012	0.000000	0.000000	-1805.19	178.27
3	GUIDE	784998160	8.96	21075	-0.227	0.101	0.076	0.121	117.375733	-18.842479	1785.83	-1538.89
4	GUIDE	784994816	9.12	21079	0.045	-0.139	0.068	0.111	116.505488	-19.434301	-504.61	1298.36
5	GUIDE	785006264	8.46	21084	0.210	0.047	0.060	0.098	116.941738	-19.984718	-2399.39	-289.38
6	GUIDE	785002880	9.43	21073	0.110	-0.113	0.084	0.135	116.663117	-19.555310	-909.02	739.45
7	GUIDE	784486568	9.48	21077	-0.137	0.103	0.086	0.136	116.984251	-18.735179	2099.71	-185.70

2.4 Star Slots

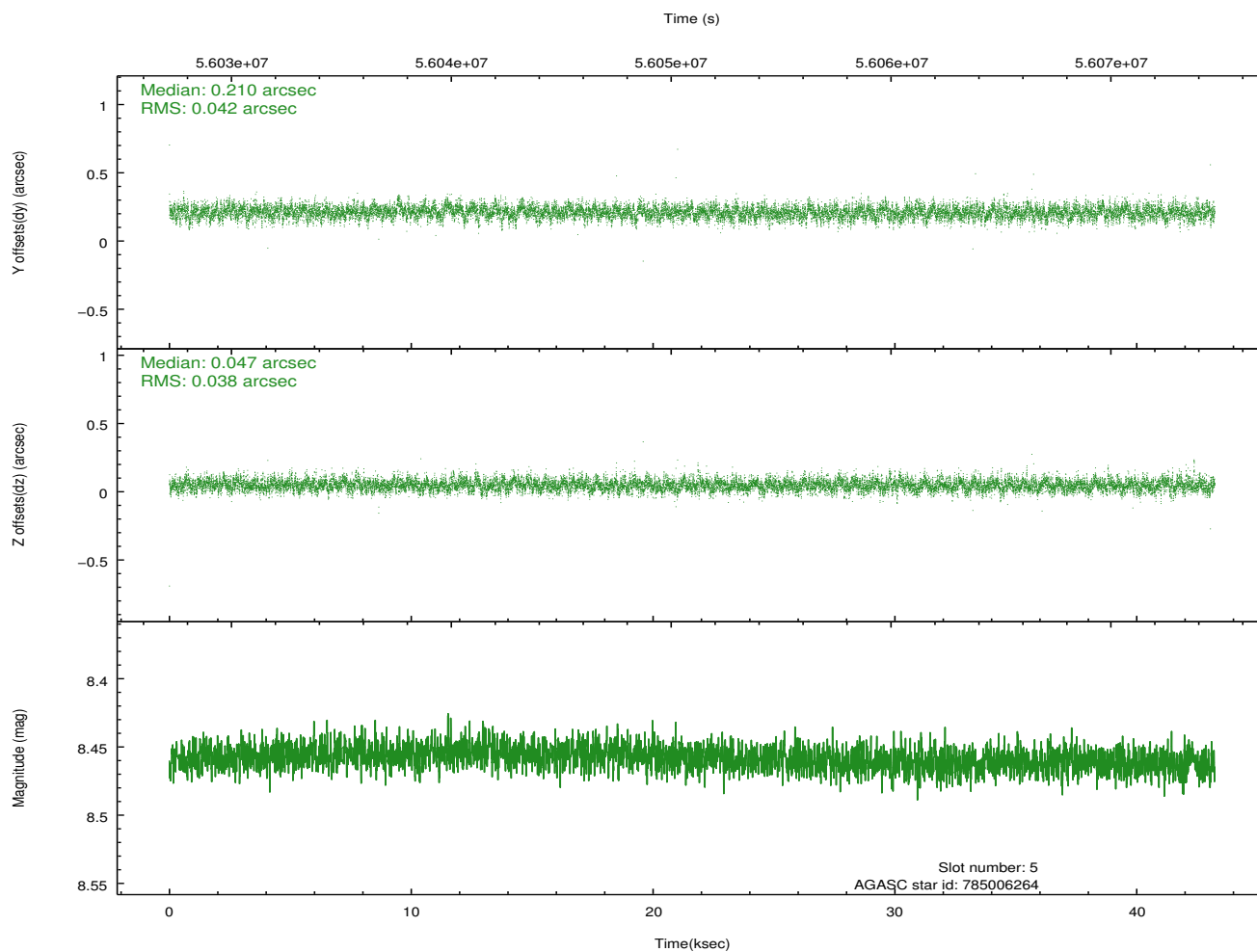
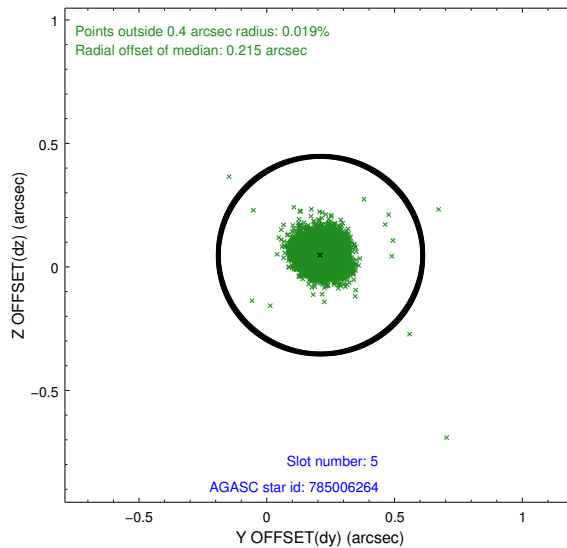
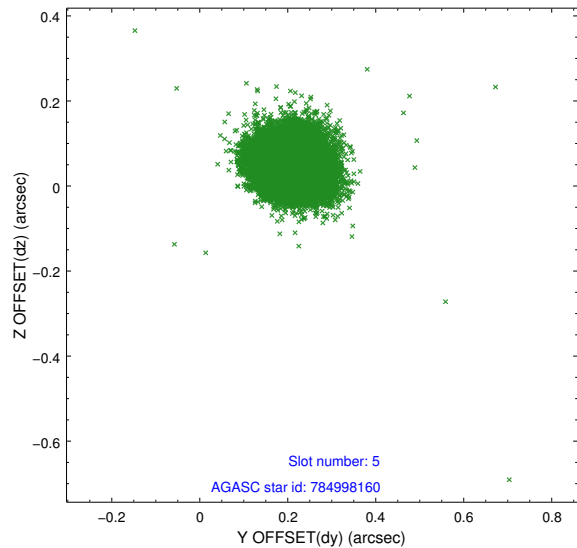
2.4.1 Slot 3



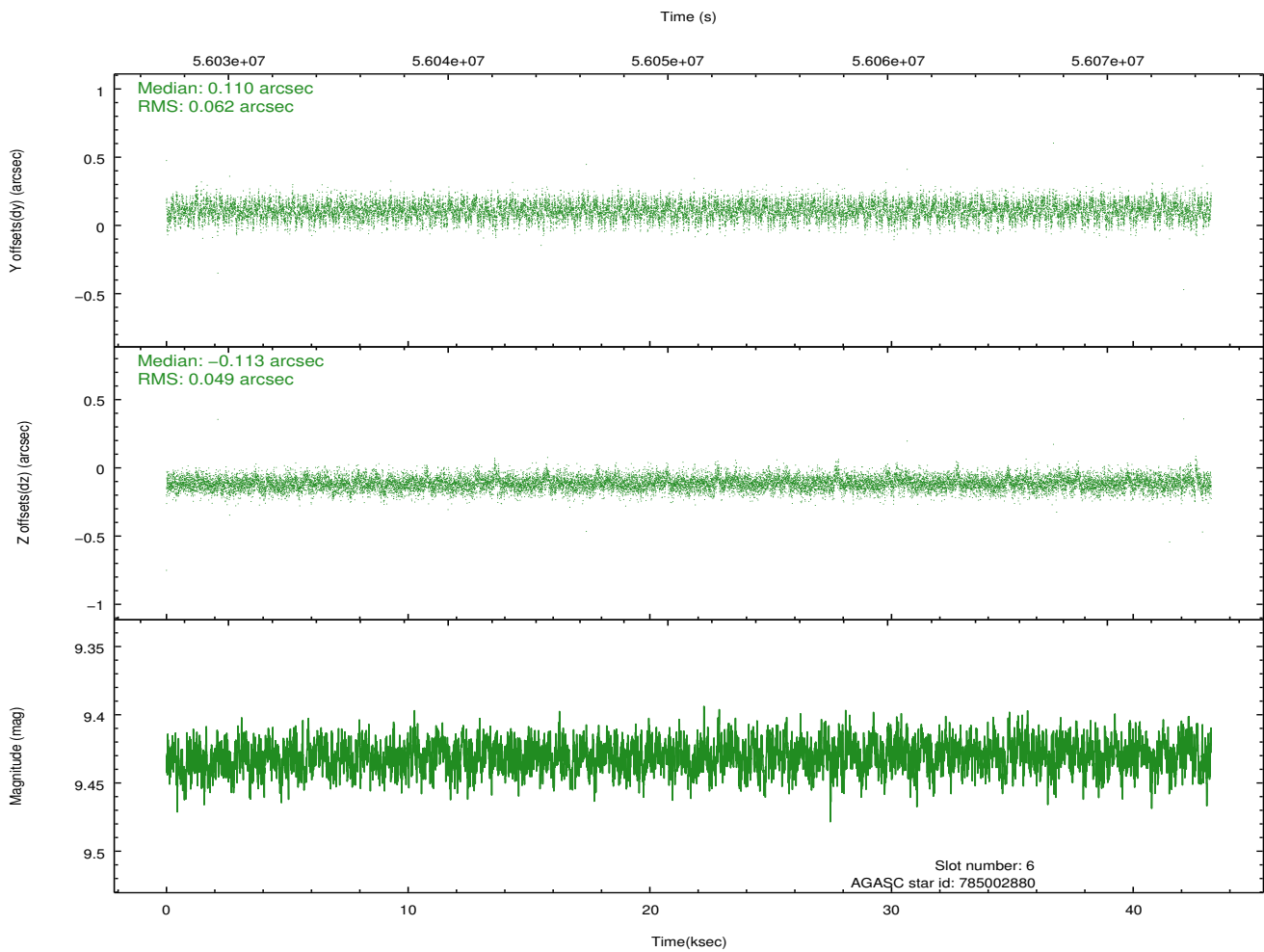
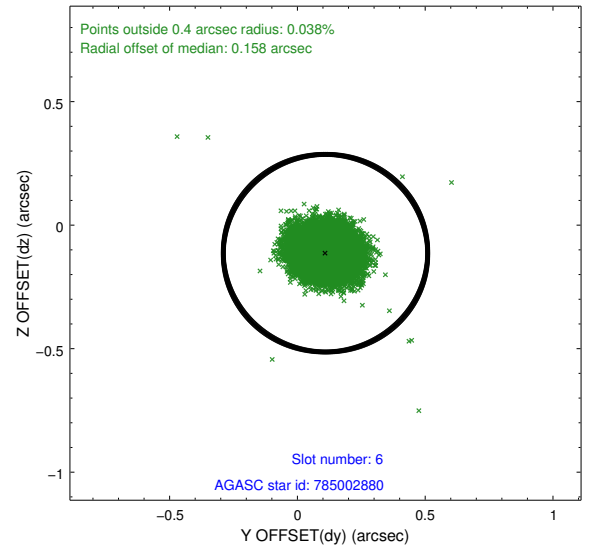
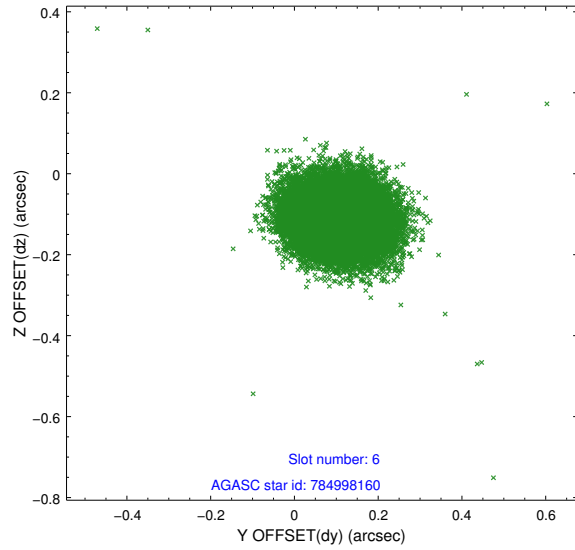
2.4.2 Slot 4



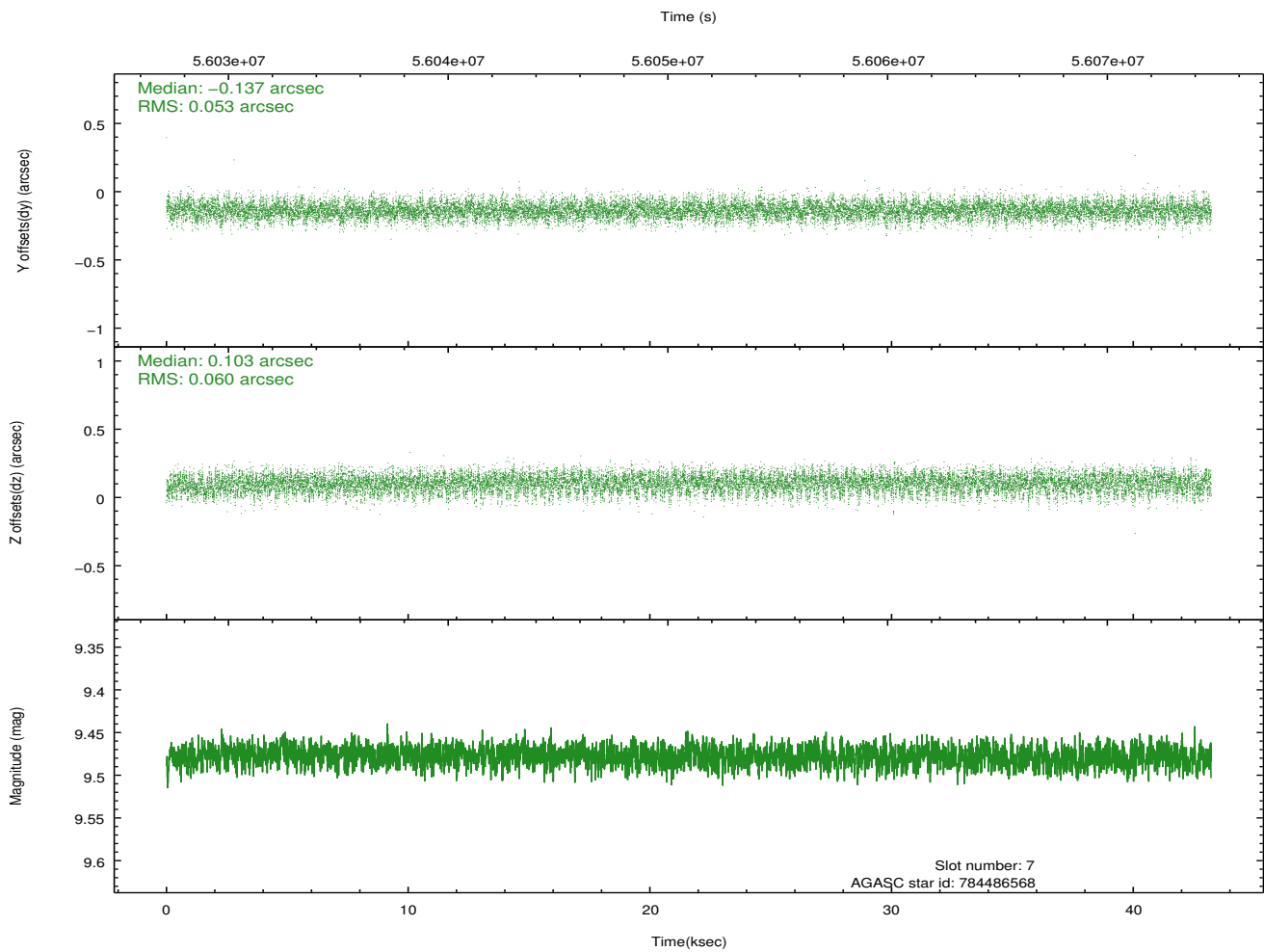
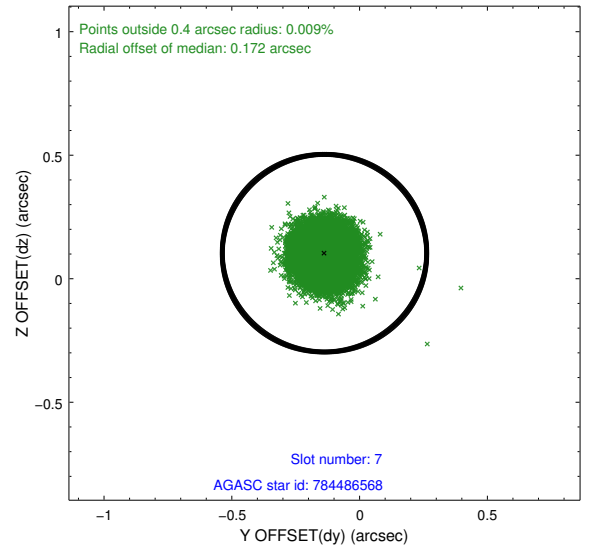
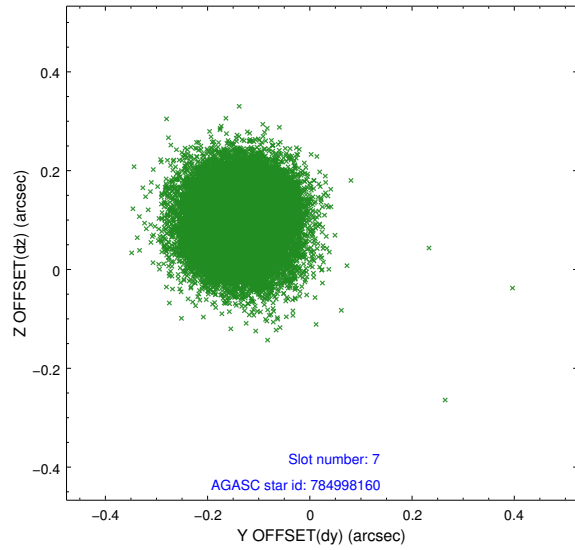
2.4.3 Slot 5



2.4.4 Slot 6

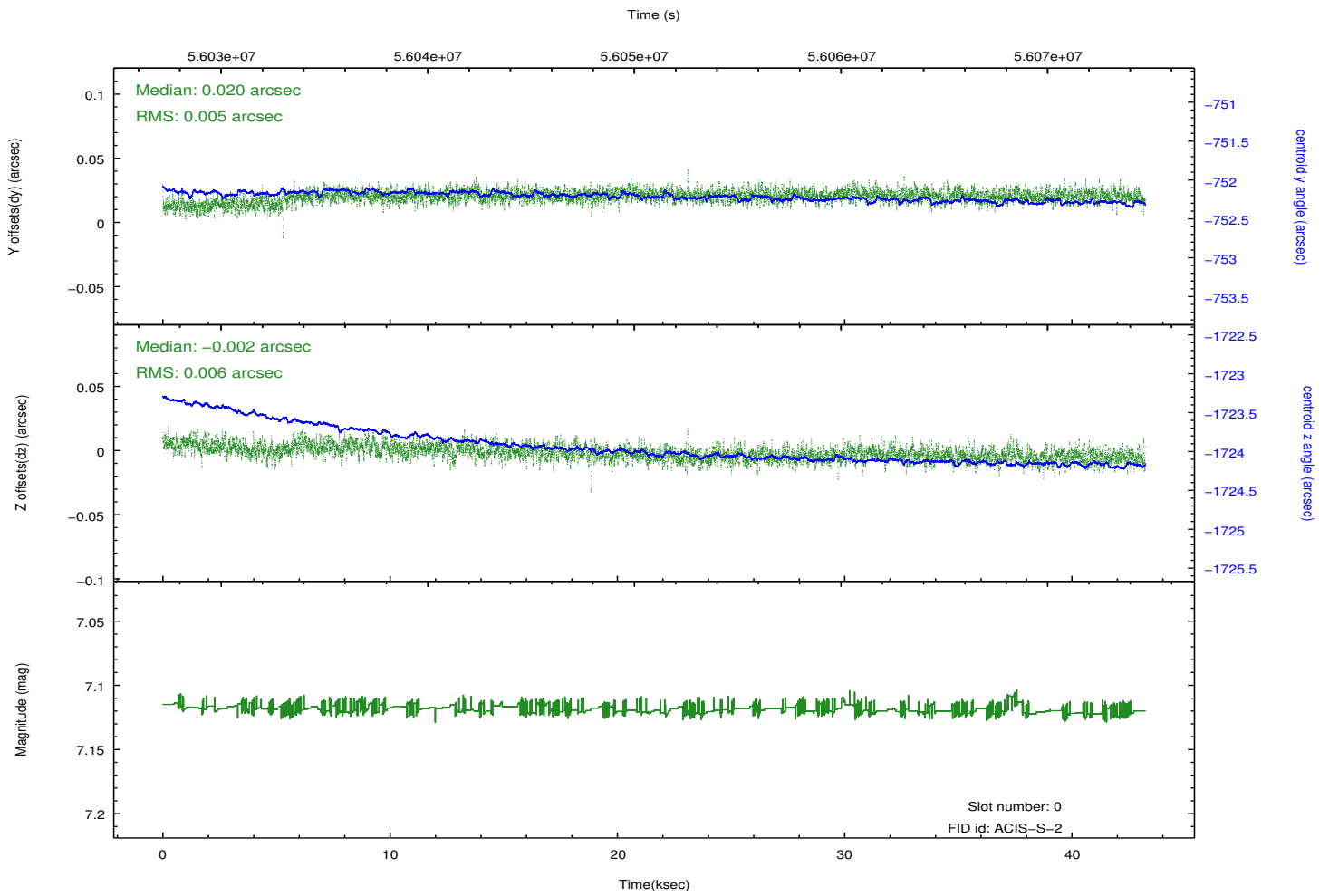
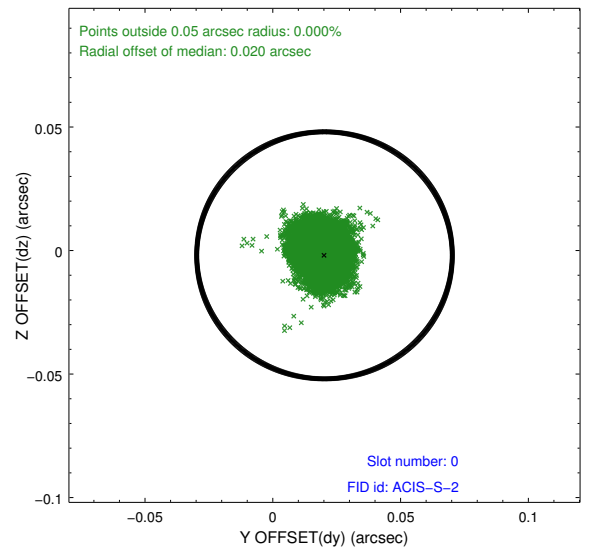
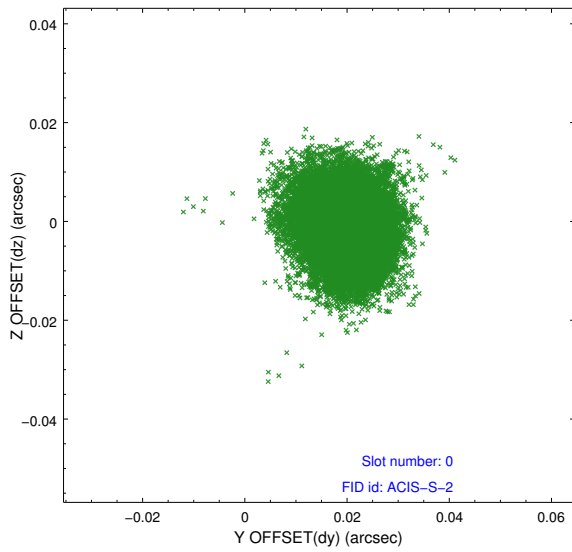


2.4.5 Slot 7

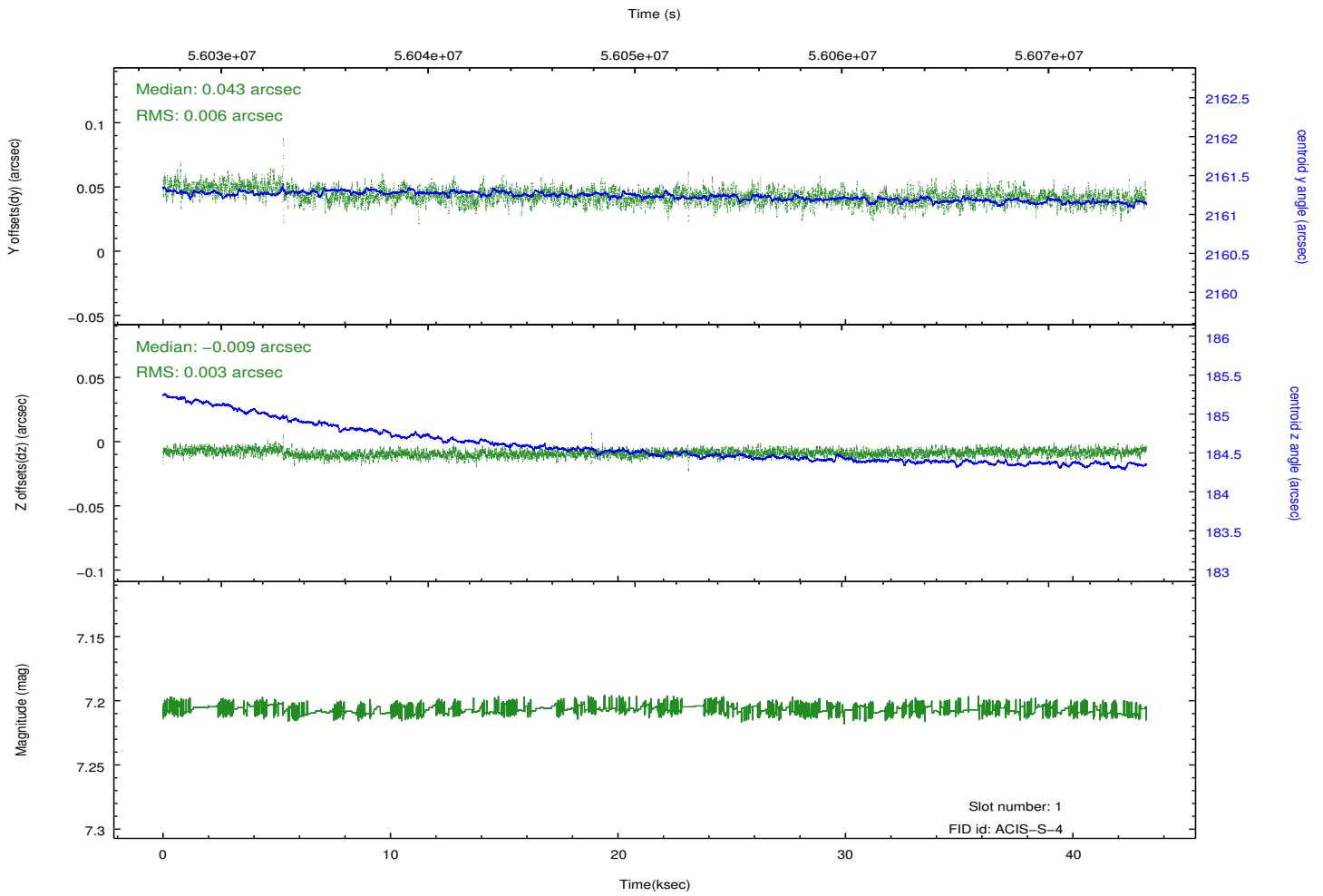
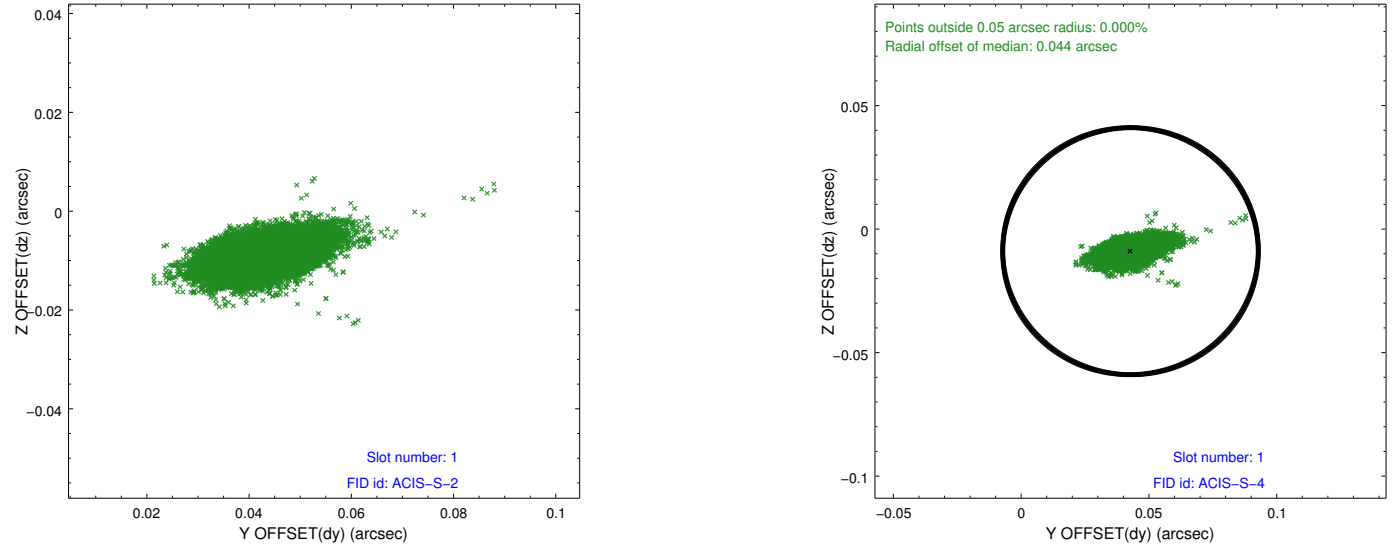


2.5 FID Slots

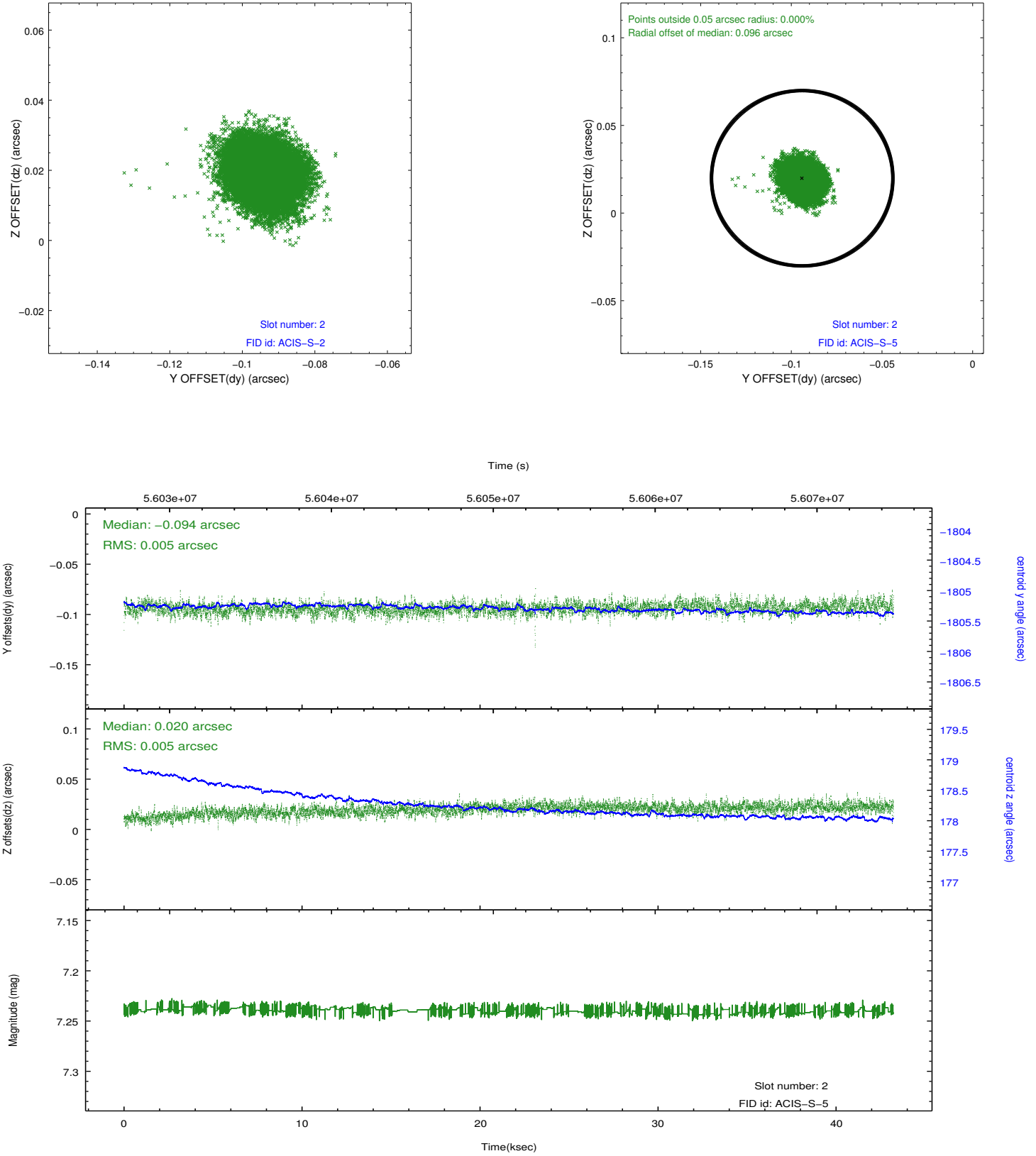
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

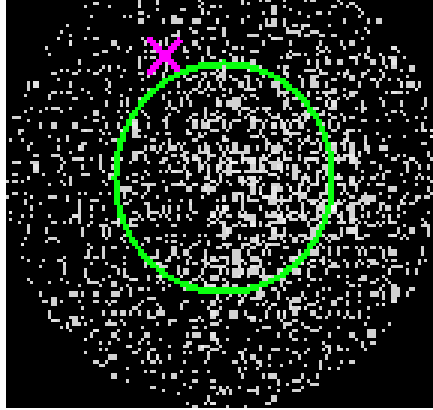


3 Gratings

3.1 HEG Arm



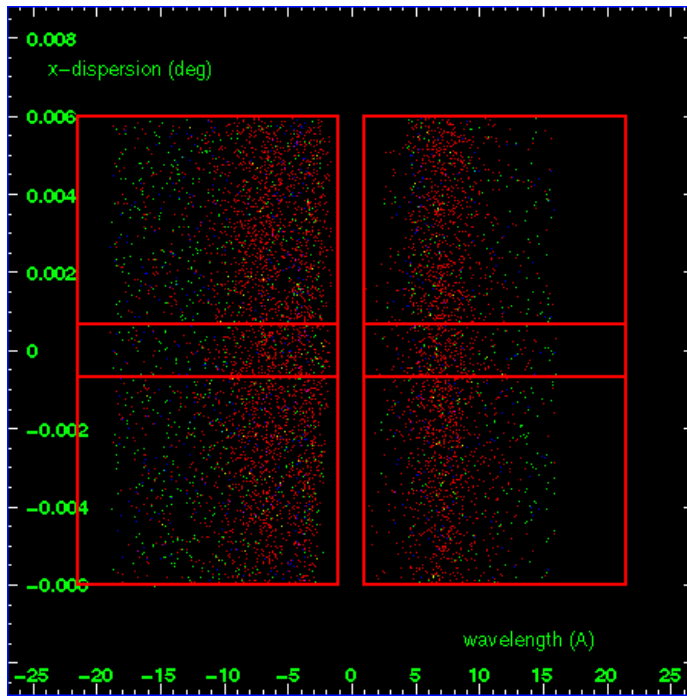
HEG Order Sort 123



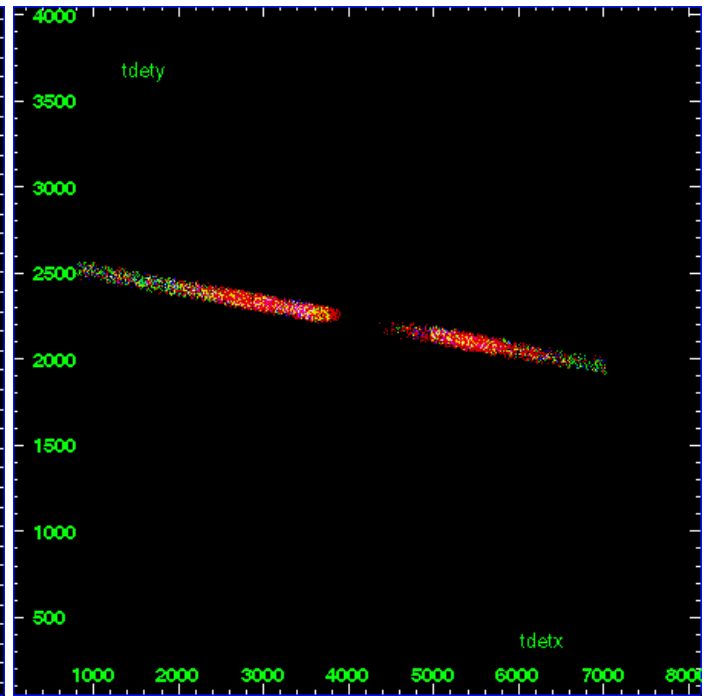
HEG Zero Order



HEG Order Sort ALL

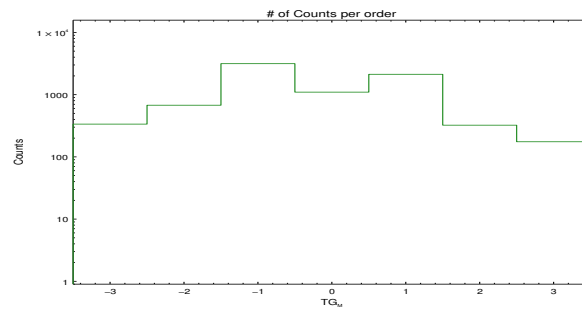


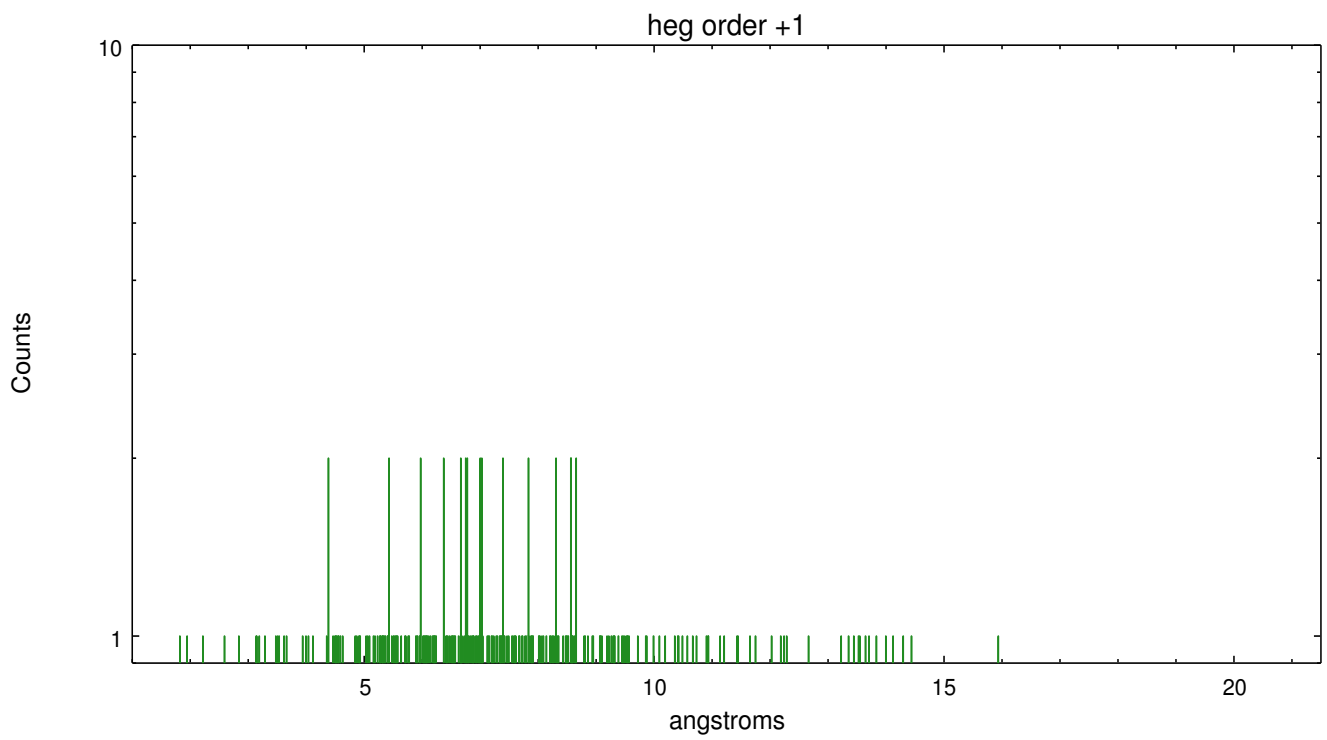
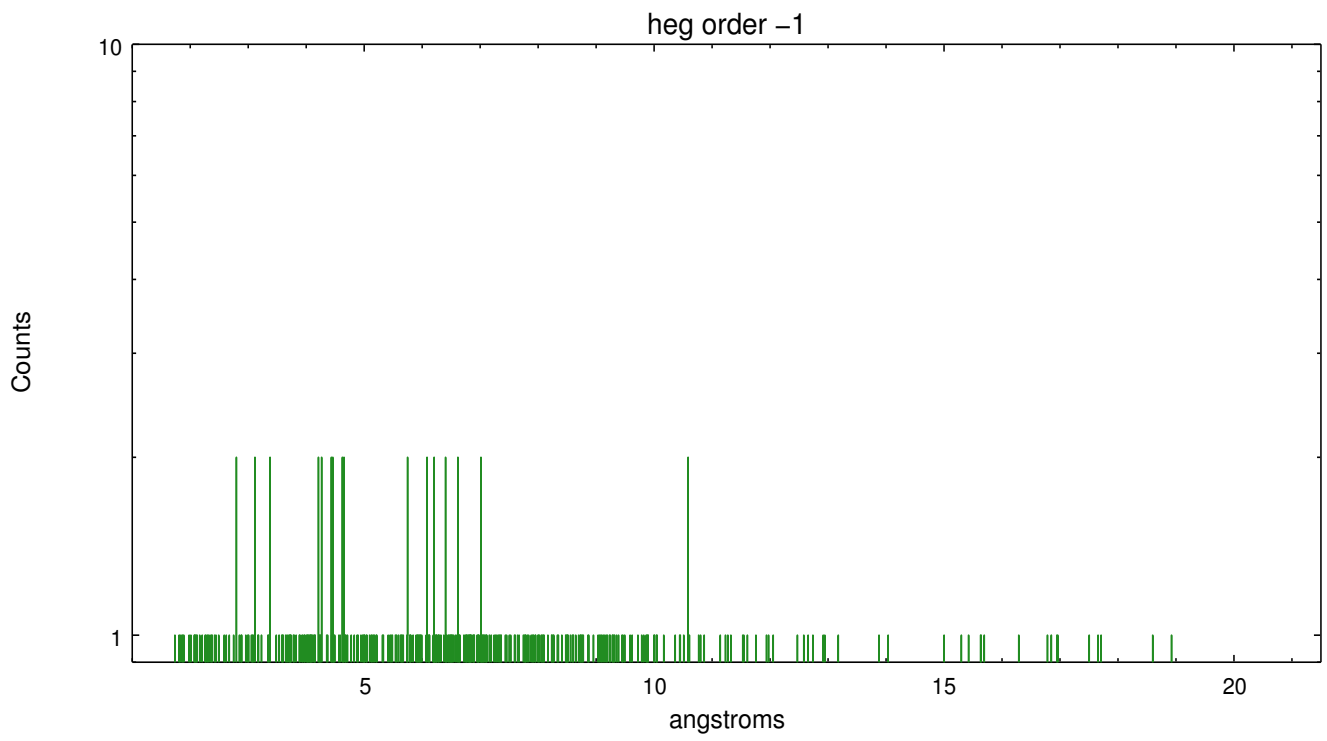
Spot Image HEG



Full Detector HEG

	order	order	order	order	order	order	order
	-3	-2	-1	0	1	2	3
Events	336	676	3148	1097	2123	323	175

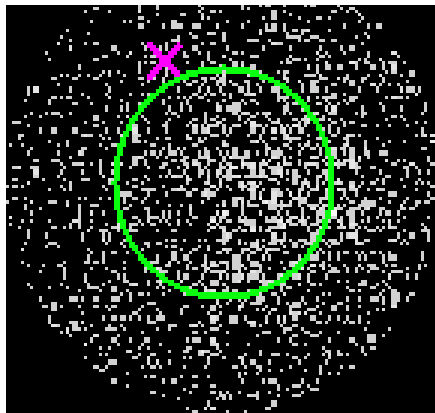




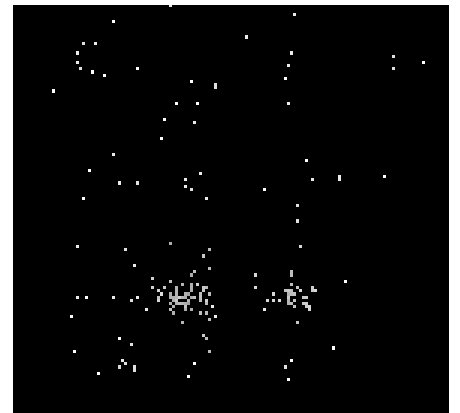
3.2 MEG Arm



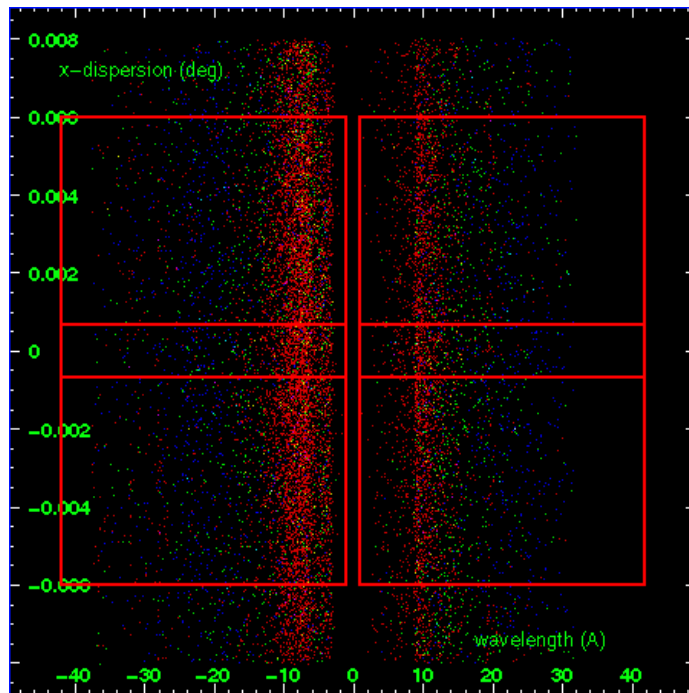
MEG Order Sort 123



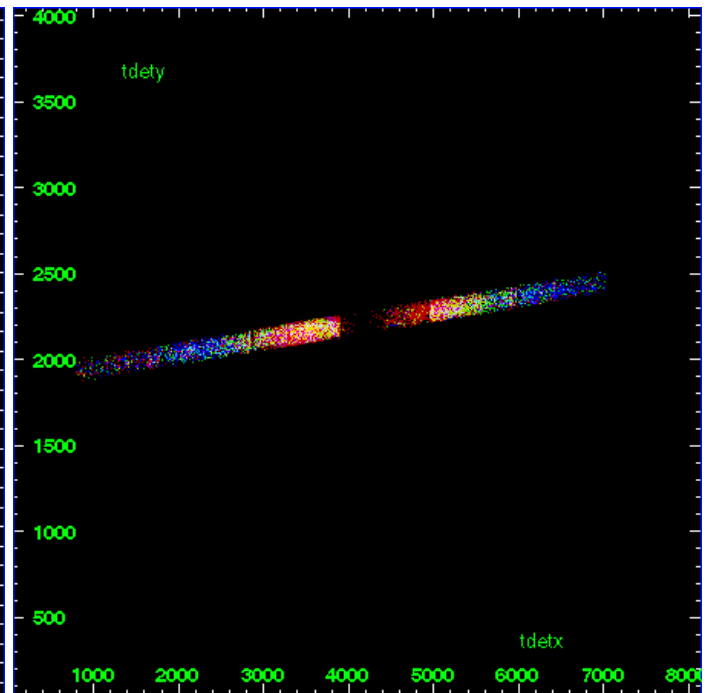
MEG Zero Order



MEG Order Sort ALL

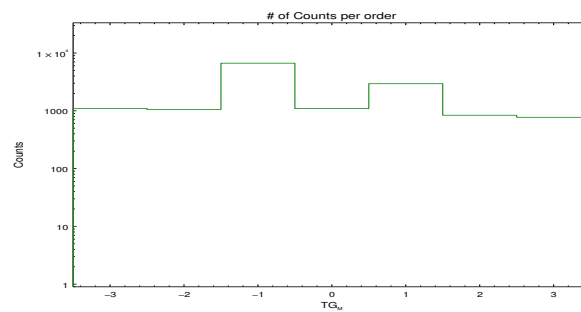


Spot Image MEG

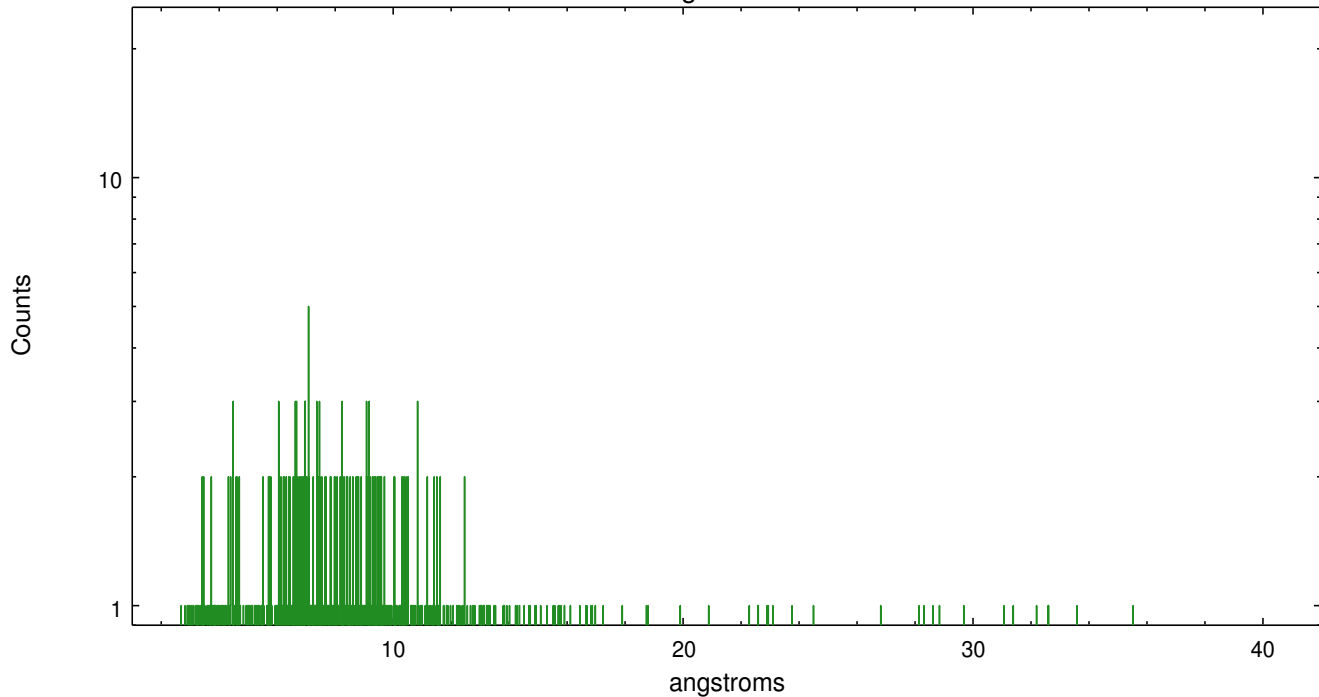


Full Detector MEG

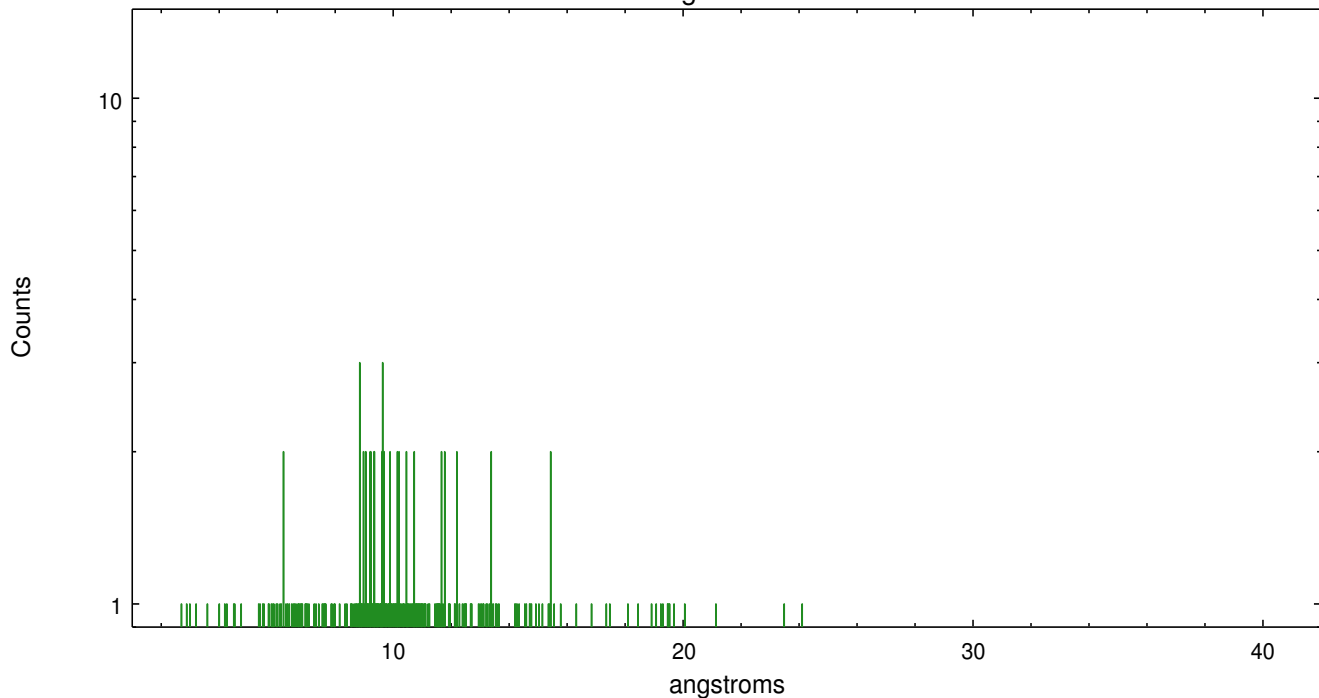
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1100	1056	6662	1097	2945	837	771



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Dan Dewey
V&V Date (YYYY-MM-DD)	2009.12.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.449

A.2 Comments

This observation suffers from FEPO problem (issue #61) effecting chip ACIS-S7.

Ontime for S7 is 9.03 ks; ontimes are 37.6 to 42.4 ks for the other ACIS-S chips.

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The source is very extended; see its entry at <http://tgcath.mit.edu> for appropriate custom processing.

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