

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15272 - L2 Version 2
Chandra X-Ray Center

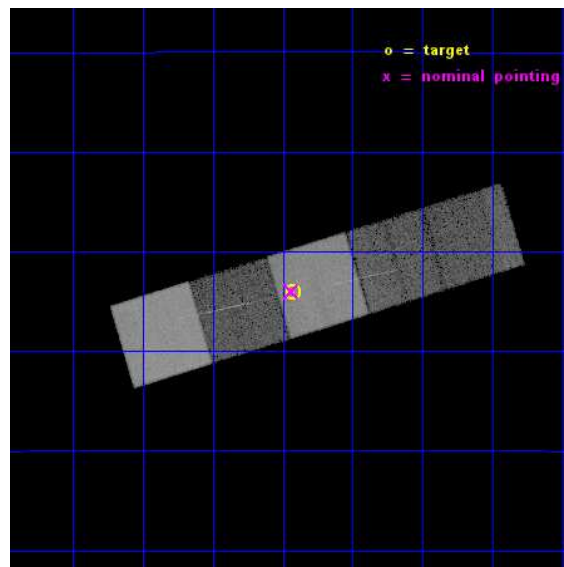
L2 Processing Date : Dec 1 2014

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1 Front

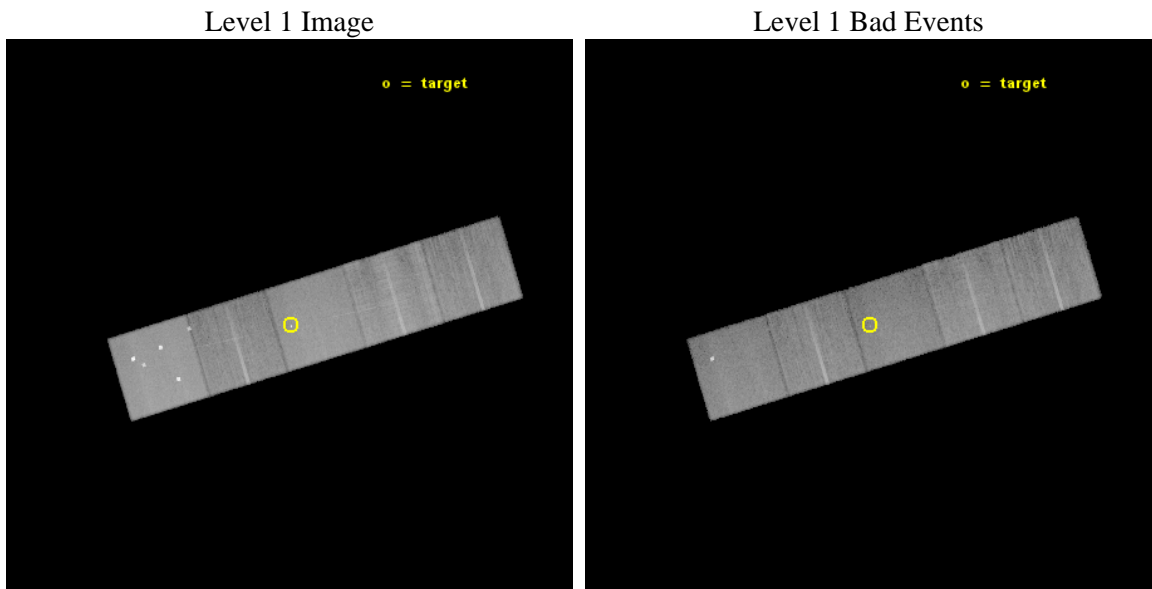
seq_num	200906	Sequence number
obs_id	15272	Observation id
title	How Active is HD 79826? Characterizing a new short-period binary.	
observer	Prof Claude Canizares	Principal investigator
object	HD 79826	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	138.982083	Observer's specified target RA [deg]
dec_targ	-12.235583	Observer's specified target Dec [deg]
ra_nom	138.98441999478	Nominal RA [deg]
dec_nom	-12.233610651752	Nominal Dec [deg]
roll_nom	343.15712350694	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30065.821859419	Sum of GTIs [s]
liveltime	29672.98976269	Livetime [s]
ontime5	30065.780819416	Sum of GTIs [s]
ontime6	30065.739779413	Sum of GTIs [s]
ontime7	30065.821859419	Sum of GTIs [s]
ontime8	30065.698739409	Sum of GTIs [s]
ontime9	30065.657699406	Sum of GTIs [s]
l2events	278189	Number of level 2 events



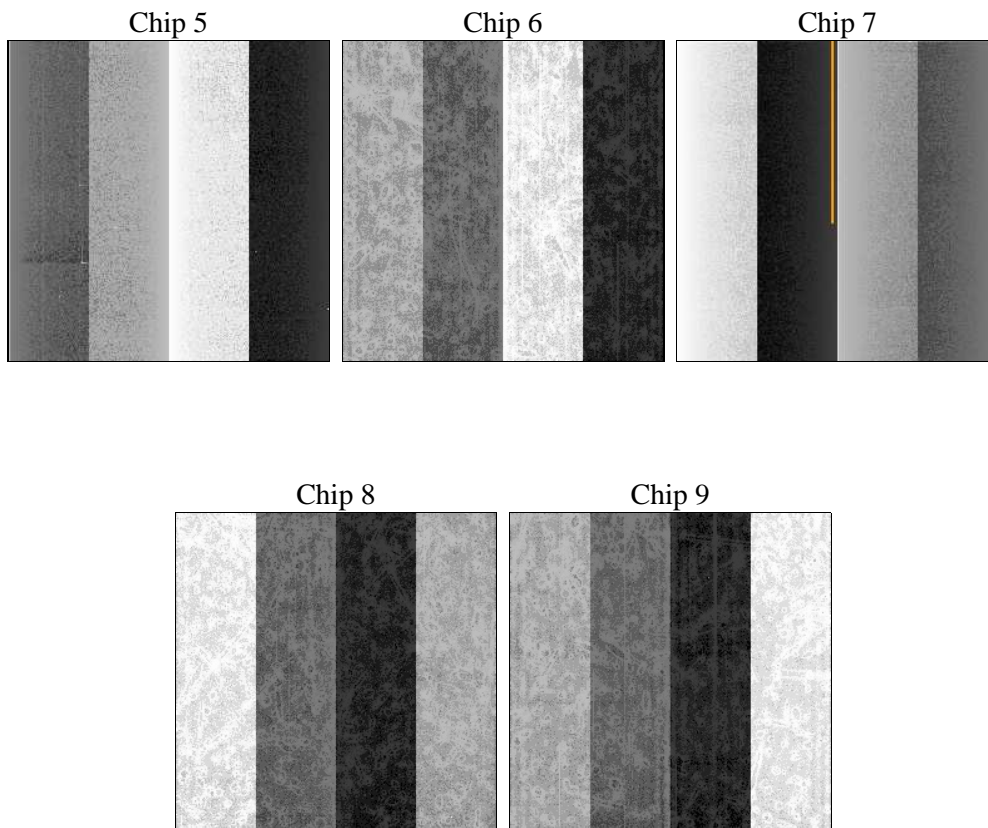
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	30065.821859419	Sum of GTIs [s]
caldsver	4.6.4	 	ontime5	30065.780819416	Sum of GTIs [s]
date	2014-12-01T11:35:18	Date and time of file creation	ontime6	30065.739779413	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	30065.821859419	Sum of GTIs [s]
			ontime8	30065.698739409	Sum of GTIs [s]
			ontime9	30065.657699406	Sum of GTIs [s]
			l1events	1088792	Number of level 1 events
			tgmethod	TGDETECT	Method used to create src1a file
			zo_pos	(4115.19, 4080.04)	src1a sky pixel position

2.1.4 Events

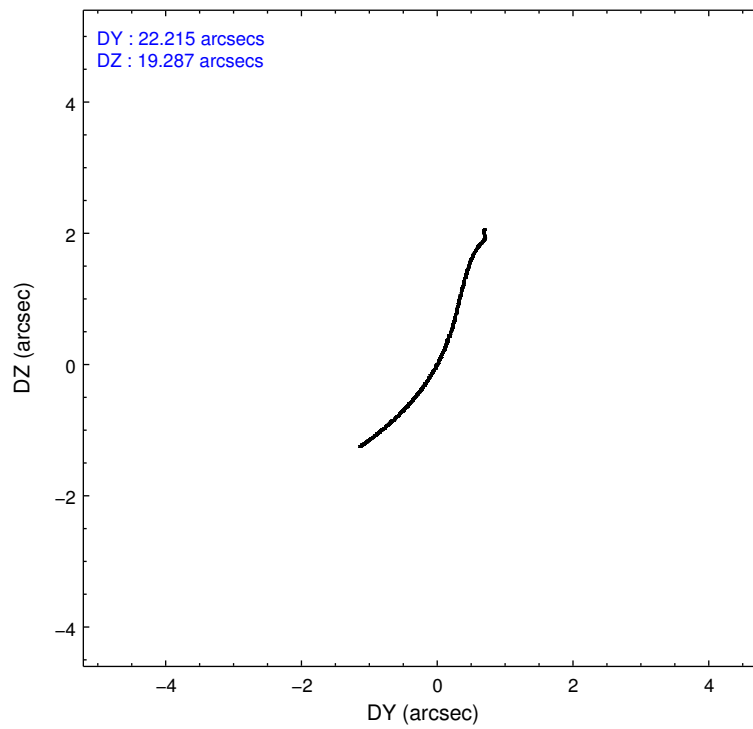
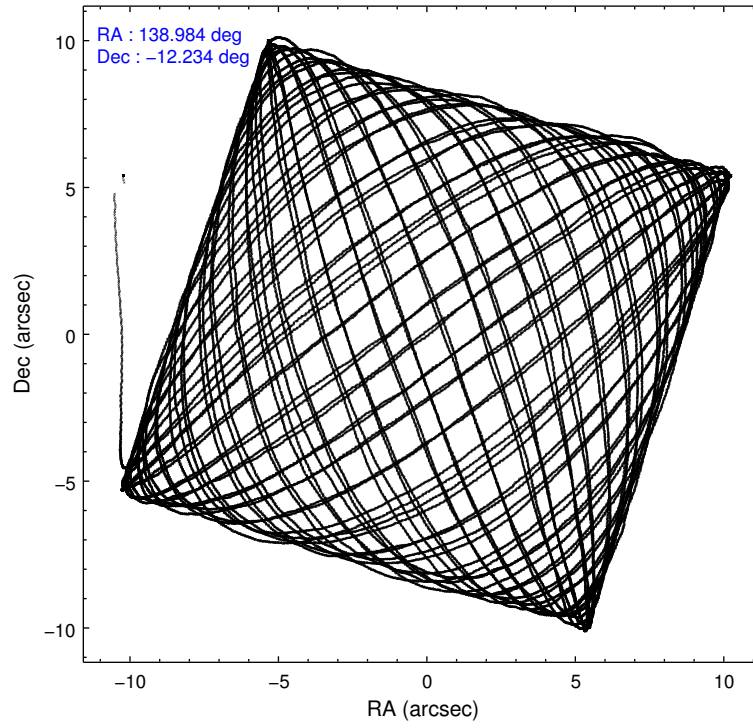
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	301535	168756	226065	224958	167478
rejected events	144722	148086	126578	166754	146381
rejected %	47%	87%	55%	74%	87%

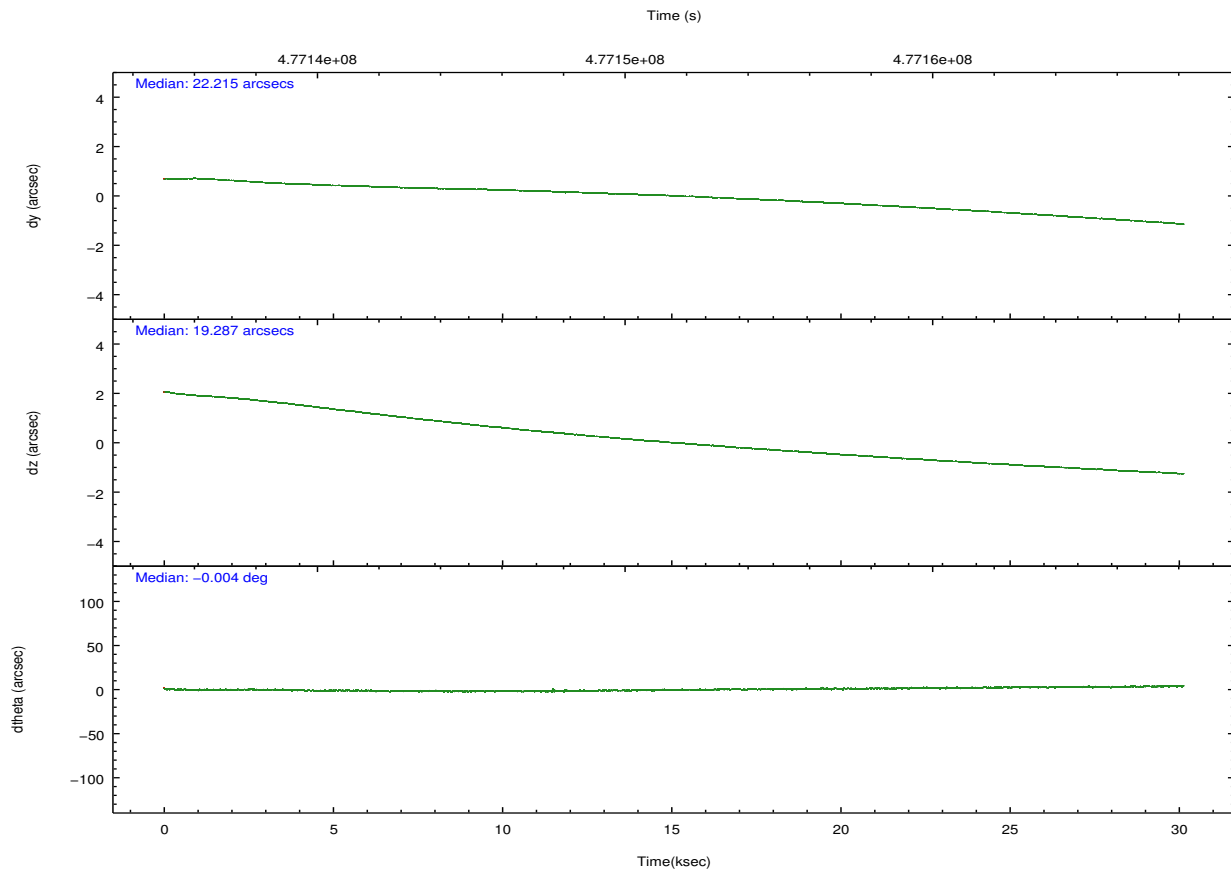
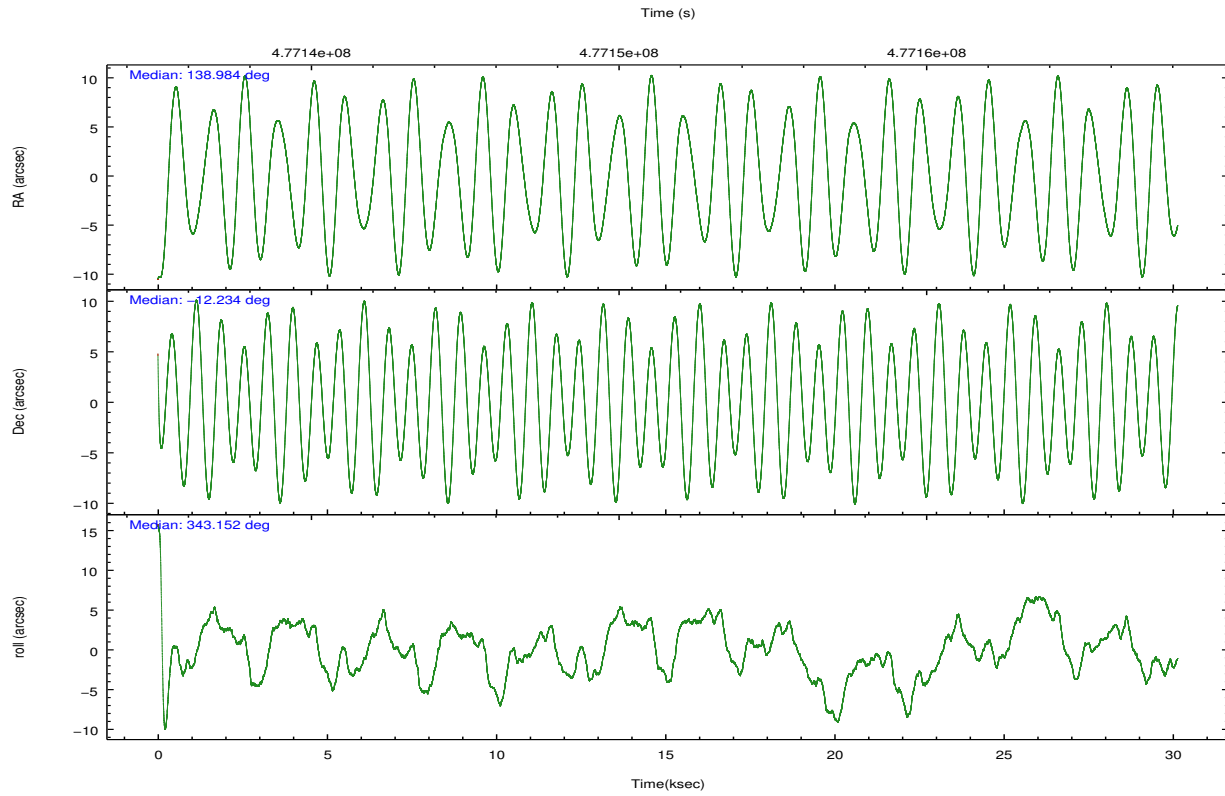
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	29852	7280	9173	16453	7581
	9%	4%	4%	7%	4%
grade 1 events	501	94	304	172	111
	0%	0%	0%	0%	0%
grade 2 events	46650	4649	20359	14035	4487
	15%	2%	9%	6%	2%
grade 3 events	4717	2075	8725	6134	2296
	1%	1%	3%	2%	1%
grade 4 events	4672	2057	8701	5718	2150
	1%	1%	3%	2%	1%
grade 5 events	21595	8541	23116	12668	9461
	7%	5%	10%	5%	5%
grade 6 events	70934	4610	52538	15906	4585
	23%	2%	23%	7%	2%
grade 7 events	122614	139450	103149	153872	136807
	40%	82%	45%	68%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	138.957282	138.9844199947765	CCD I2 on	N	N
[deg] Pointing Dec	-12.240195	-12.23361065175194	CCD I3 on	N	N
[deg] Pointing Roll	342.994742	343.1571235069434	CCD S0 on	O1	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	477136640.184000	477135445.8311	CCD S5 on	Y	Y
Observation start date	2013-02-13T09:56:13	2013-02-13T09:37:25	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	477166640.184000	477167440.69533	On-chip summing requested	N	N
Observation end date	2013-02-13T18:16:13	2013-02-13T18:30:40	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





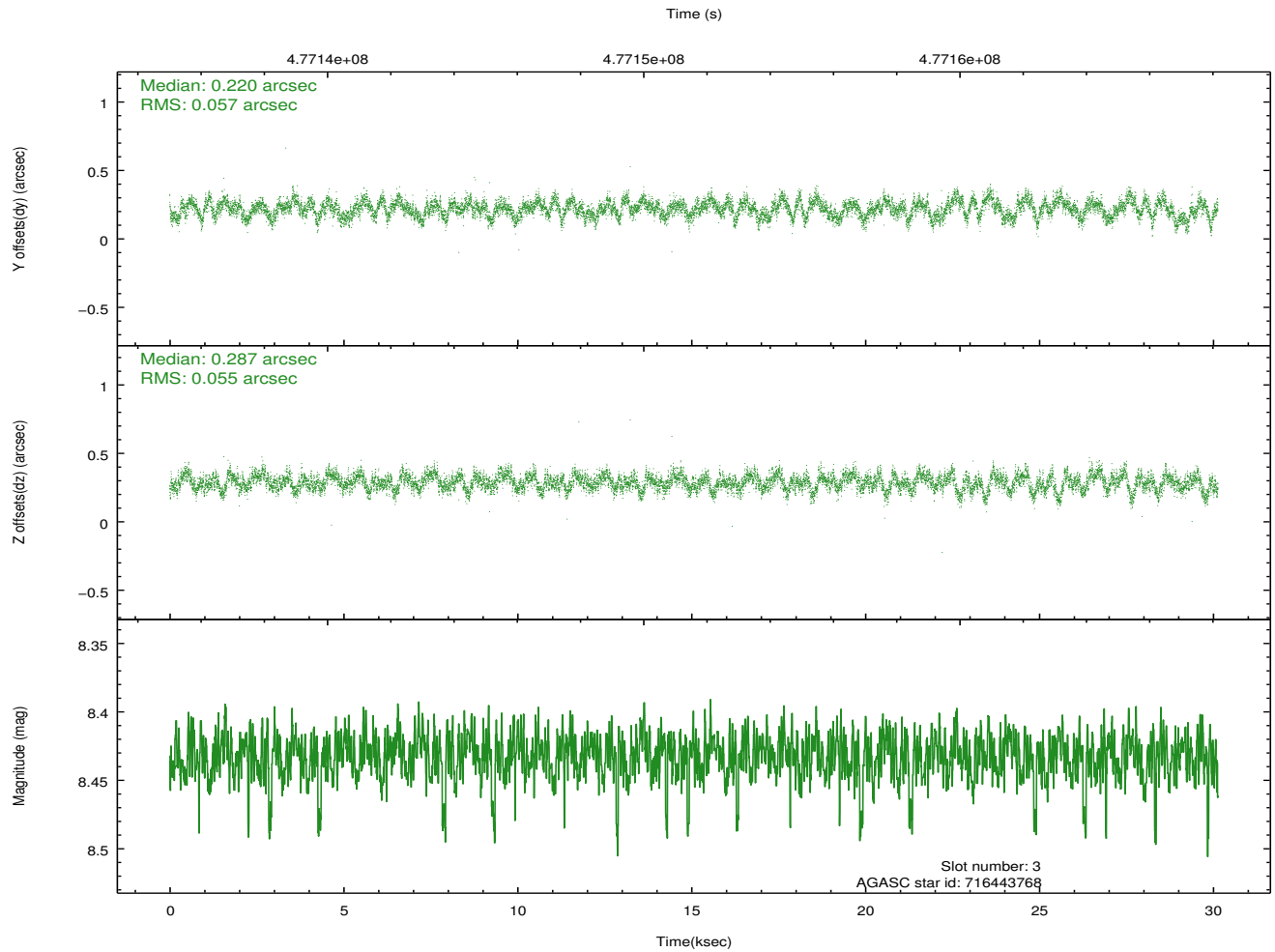
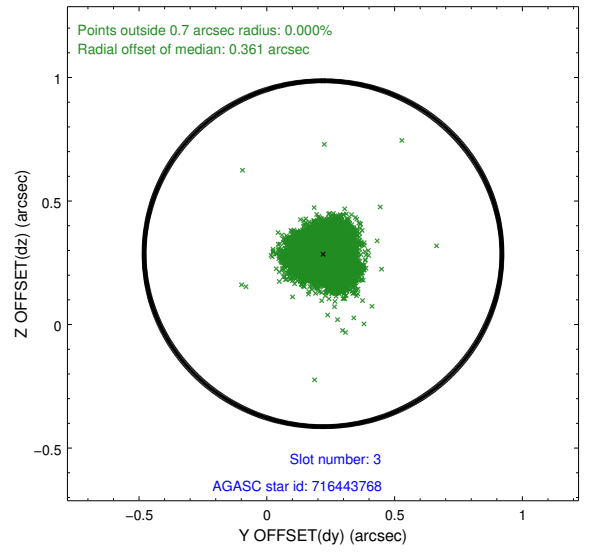
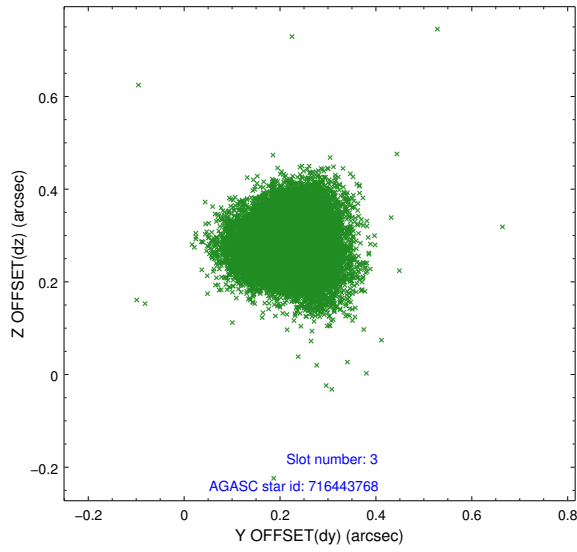
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.96	7351	-0.108	-0.040	0.020	0.029	0.000000	0.000000	-775.41	-1740.98
1	FID		ACIS-S-4	7.04	7351	0.264	0.063	0.024	0.035	0.000000	0.000000	2138.21	167.51
2	FID		ACIS-S-5	7.07	7351	-0.183	-0.016	0.026	0.034	0.000000	0.000000	-1828.22	161.20
3	GUIDE	used	716443768	8.43	14699	0.220	0.287	0.085	0.134	138.409907	-12.378258	-1694.15	-1039.94
4	GUIDE	used	716447528	6.95	14702	-0.264	-0.264	0.080	0.128	139.371683	-11.961966	1102.76	1382.94
5	GUIDE	used	716452568	9.29	14637	-0.027	-0.142	0.125	0.209	139.317316	-12.008019	967.93	1169.50
6	GUIDE	used	716443464	9.32	14559	0.121	0.200	0.119	0.197	138.792581	-12.863962	104.85	-2316.11
7	GUIDE	used	716452328	8.82	7337	-0.101	-0.140	0.093	0.155	138.982178	-12.235590	78.35	39.98

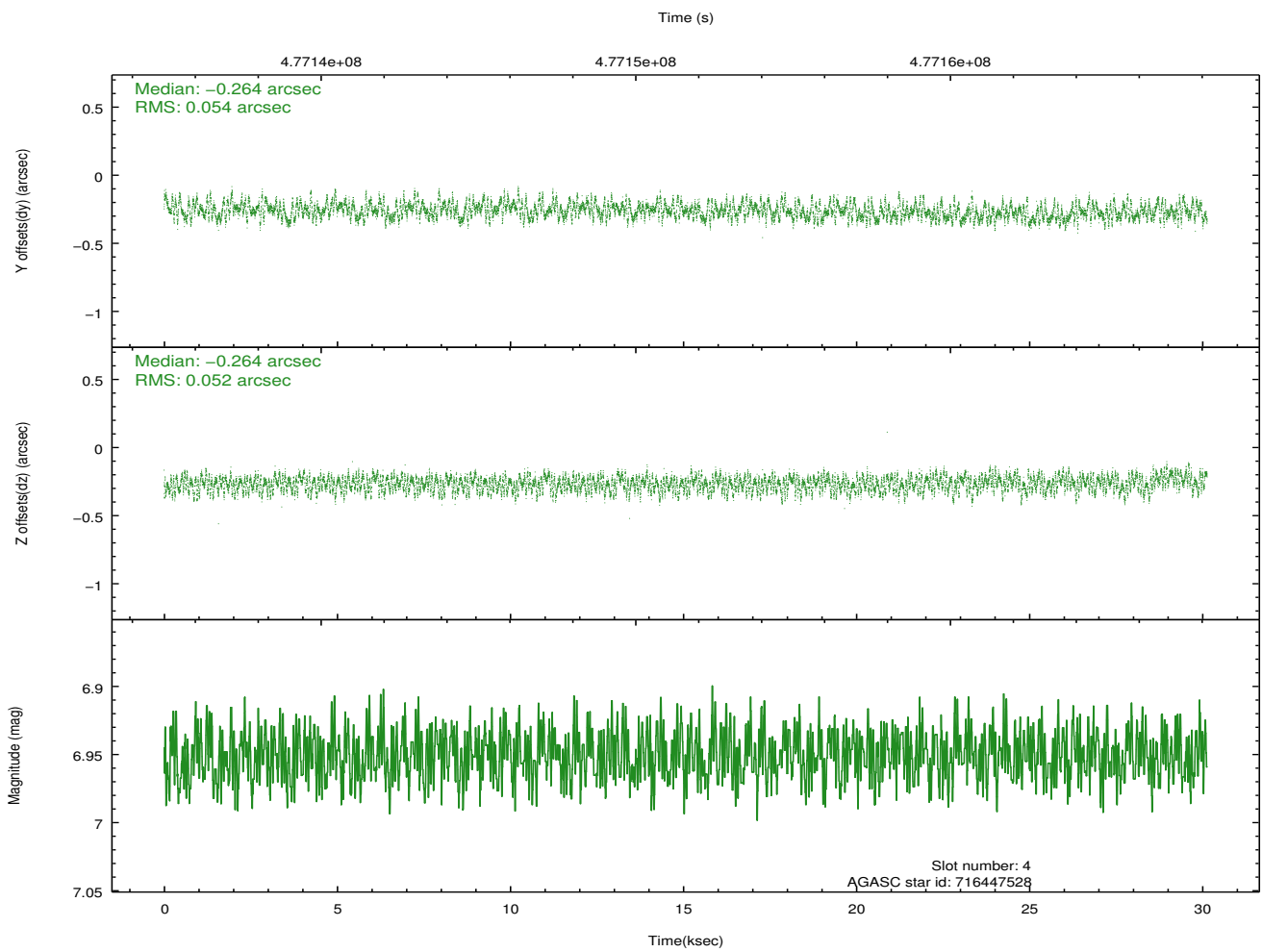
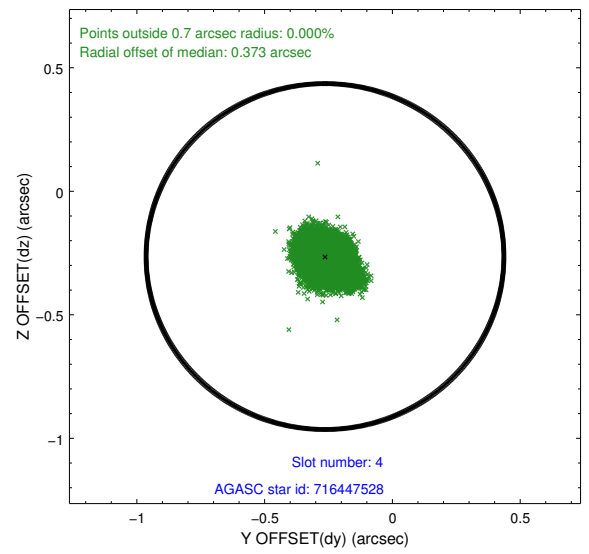
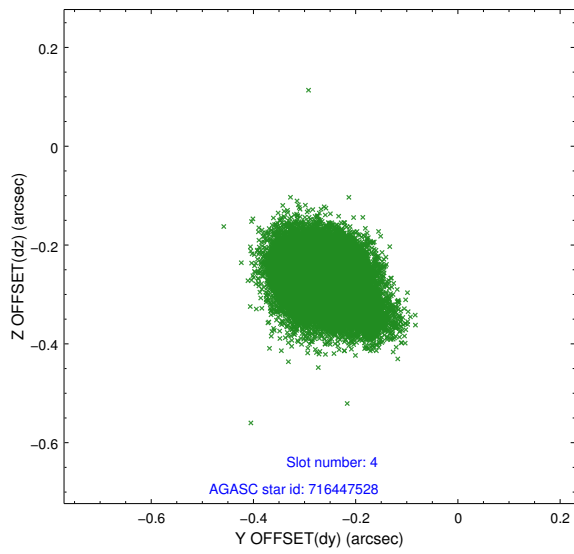
∞

2.4 Star Slots

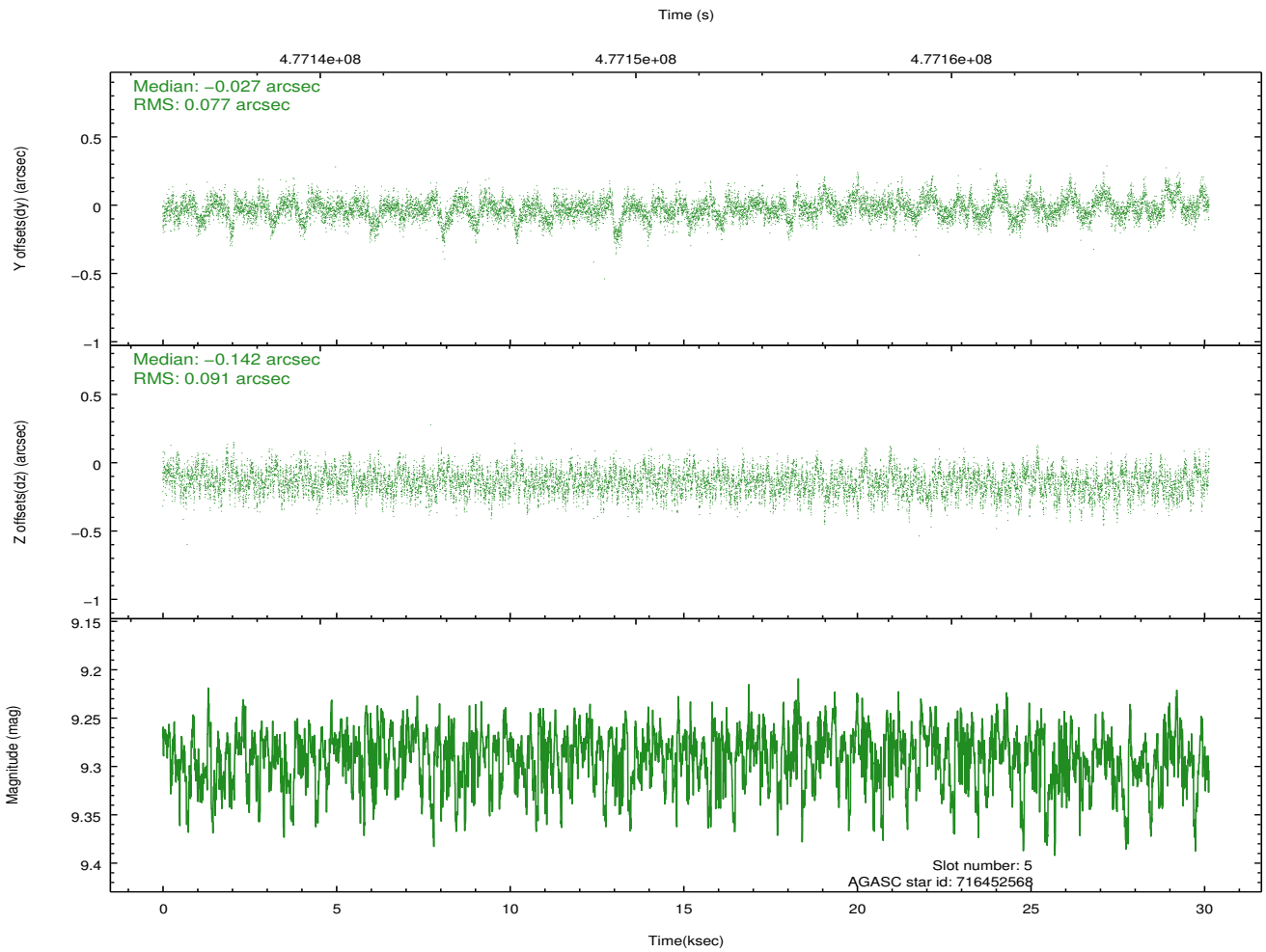
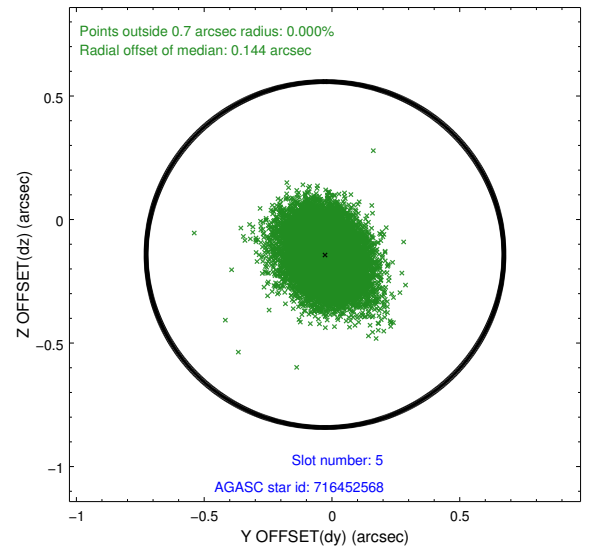
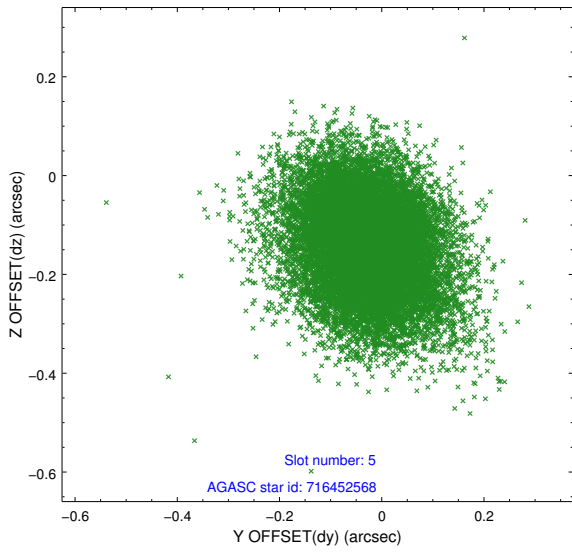
2.4.1 Slot 3



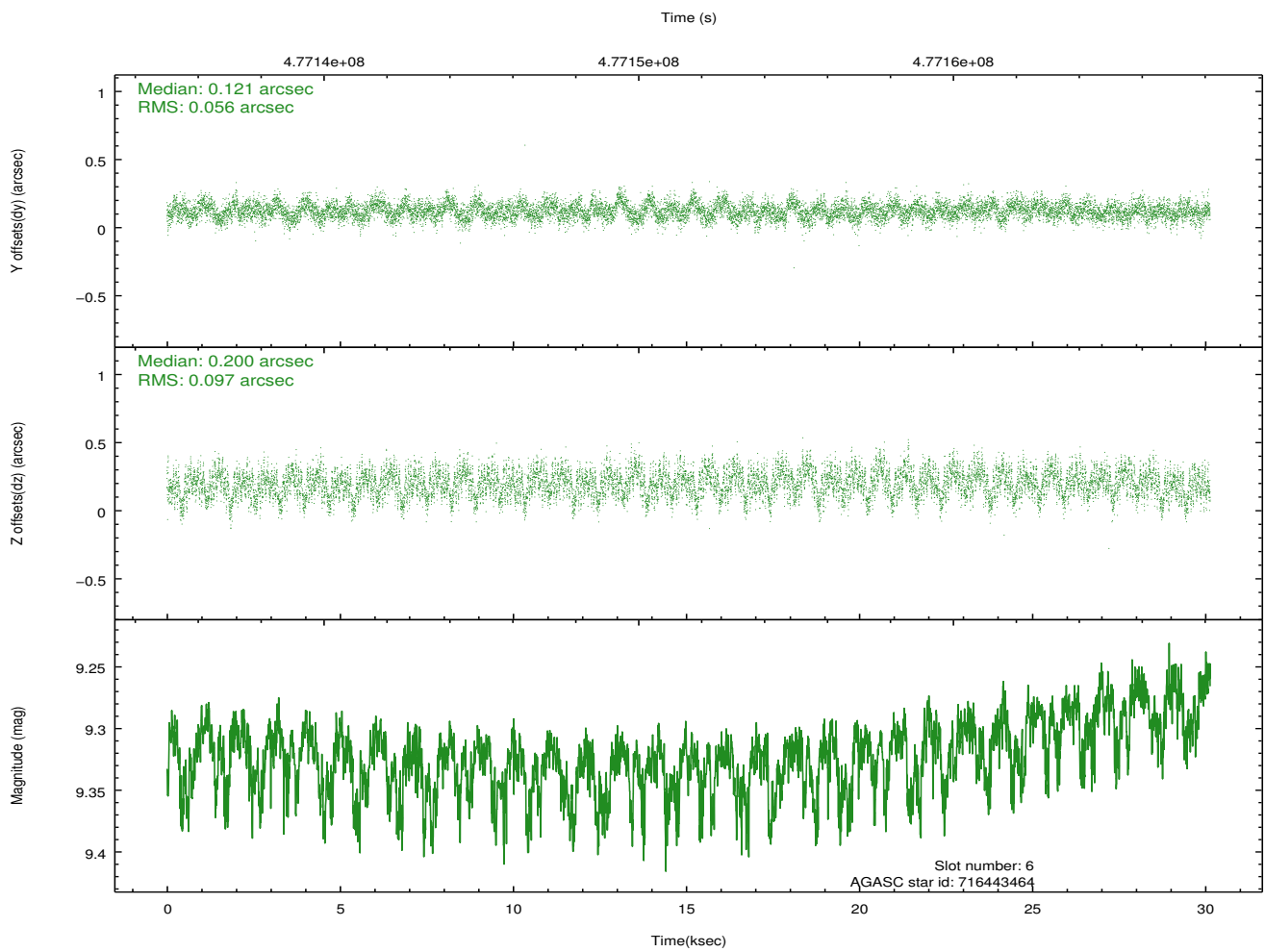
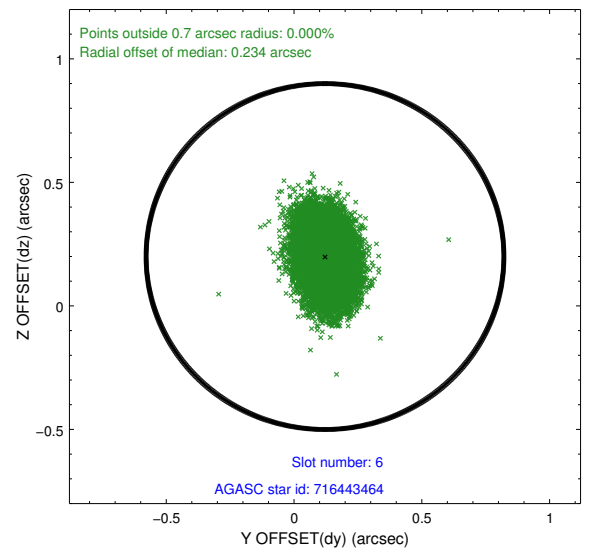
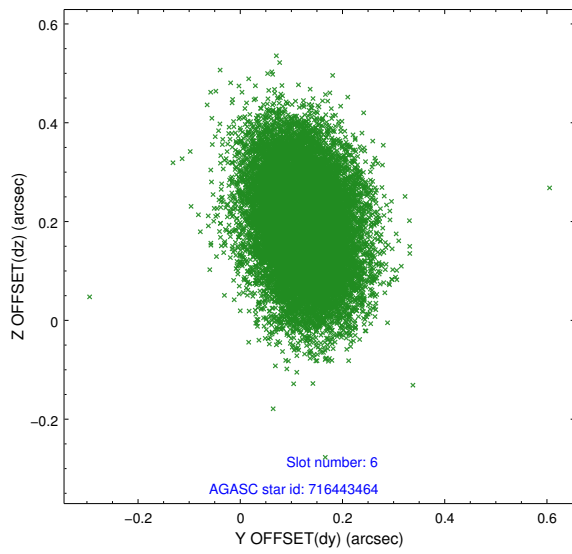
2.4.2 Slot 4



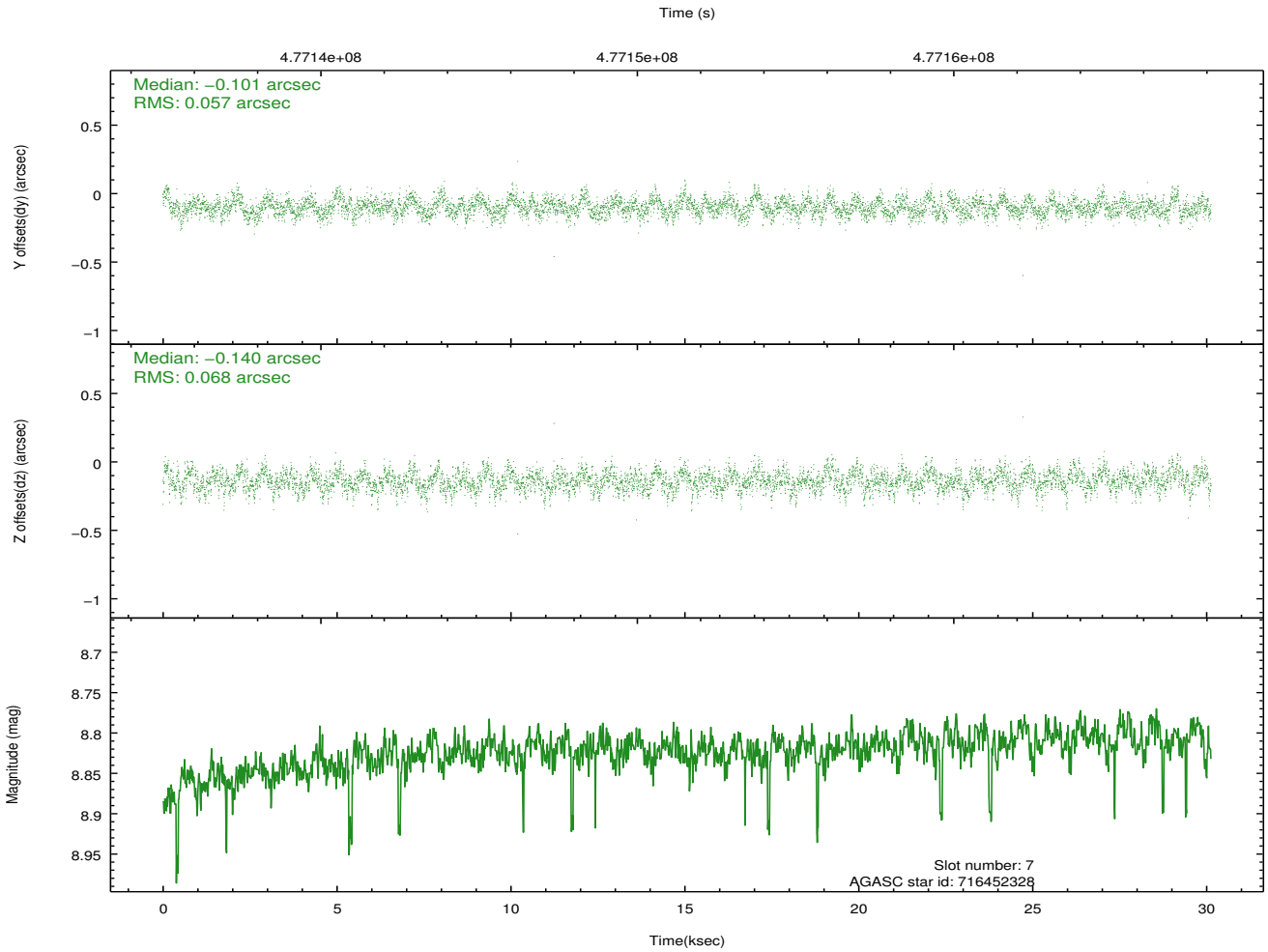
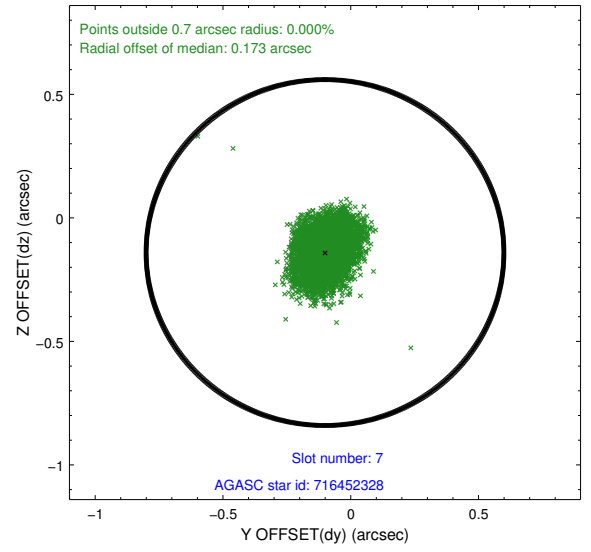
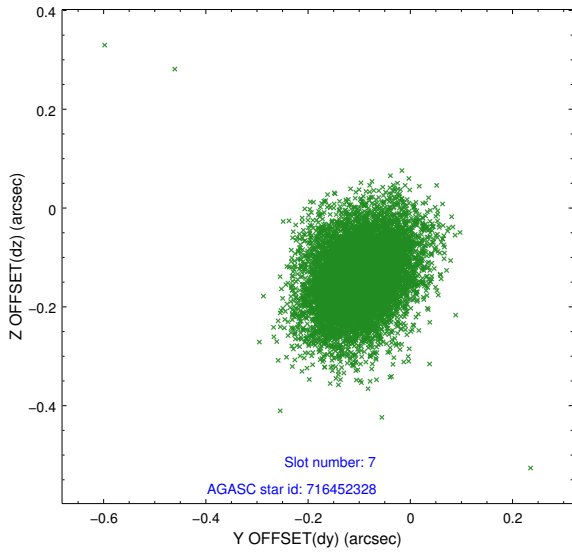
2.4.3 Slot 5



2.4.4 Slot 6

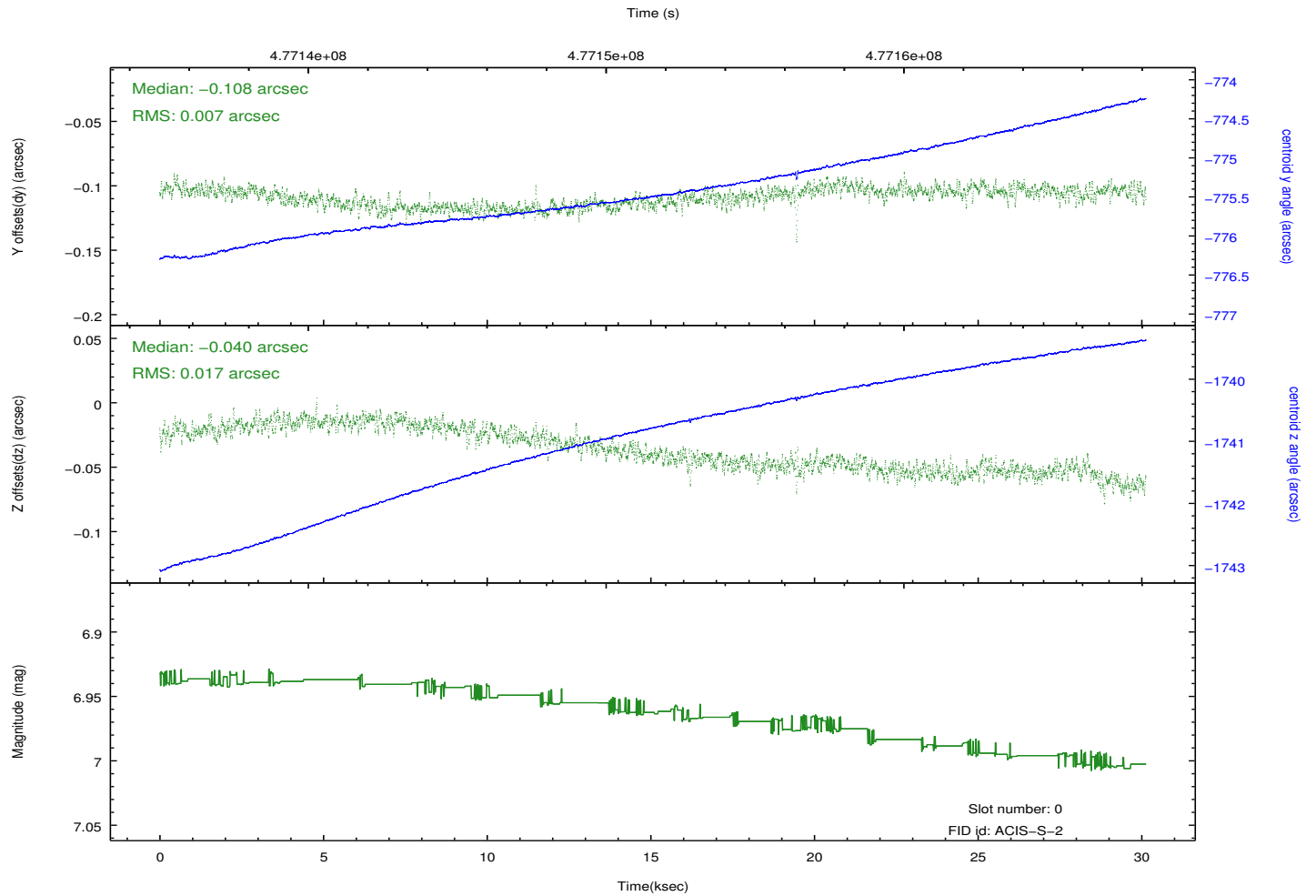
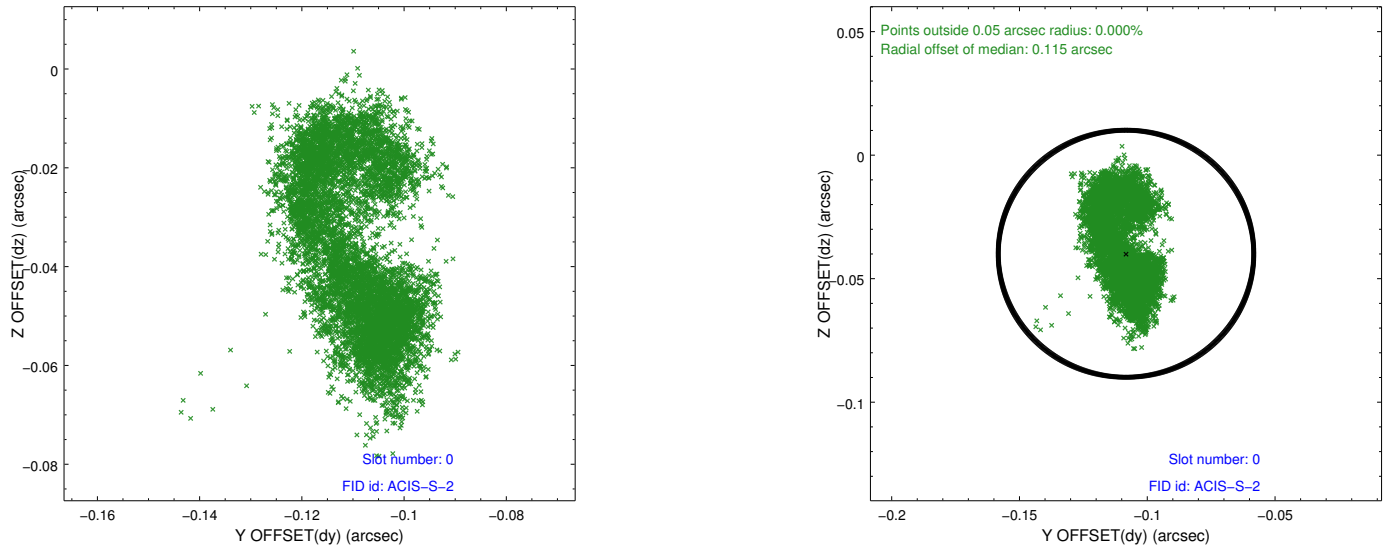


2.4.5 Slot 7

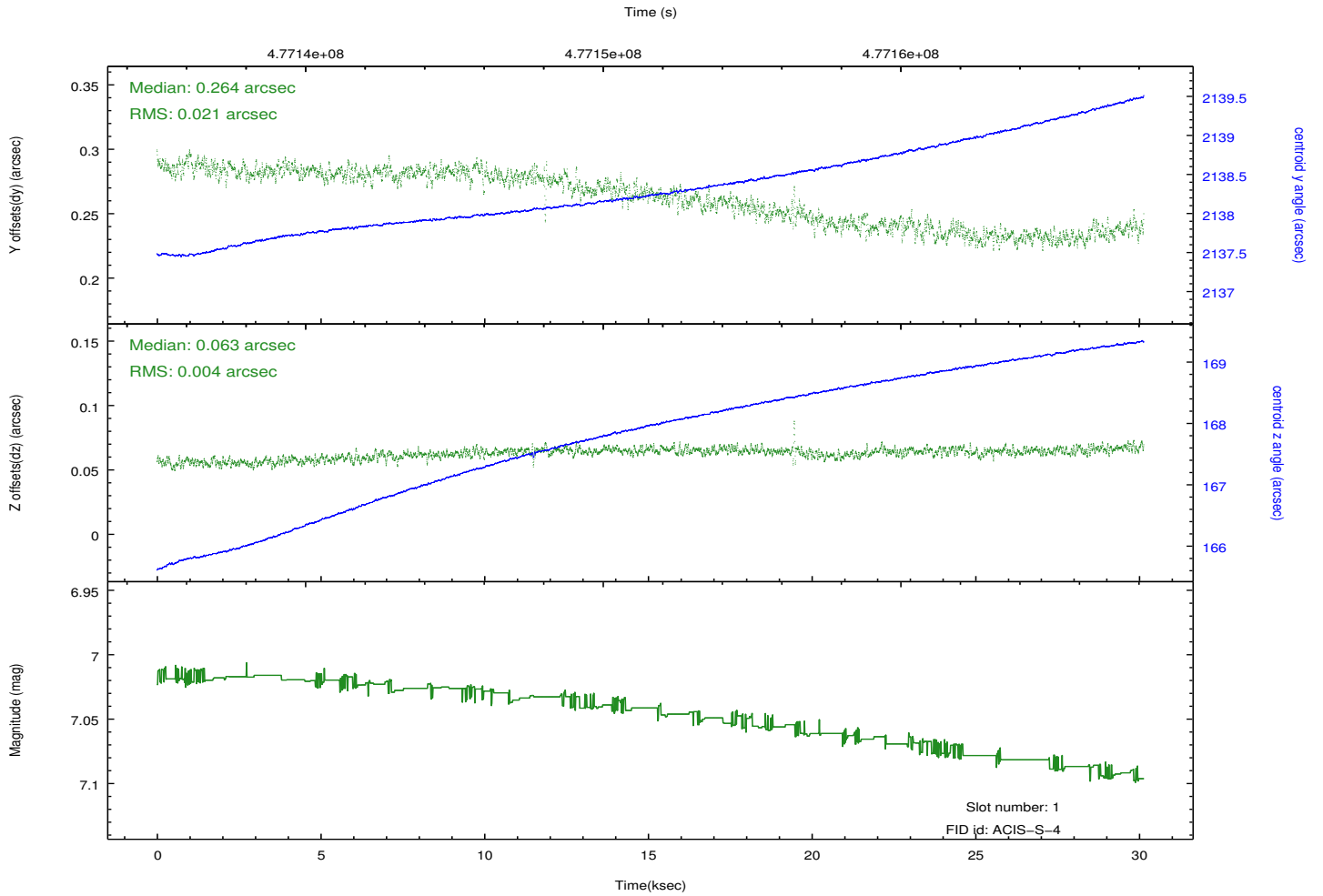
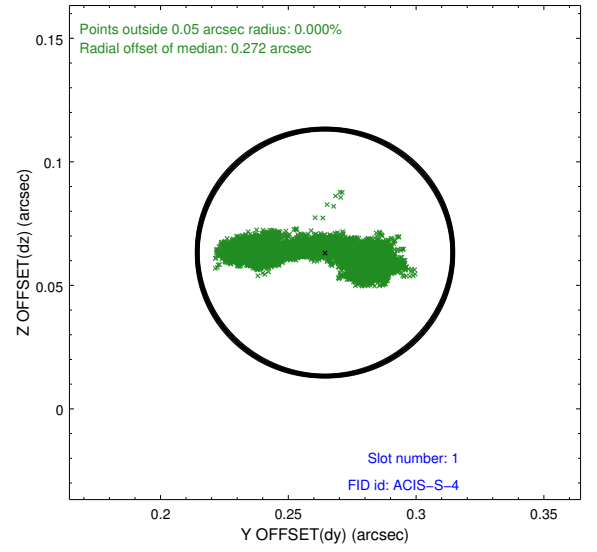
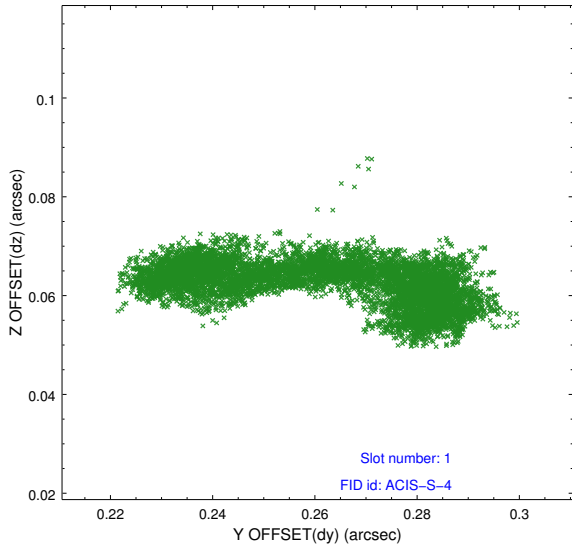


2.5 FID Slots

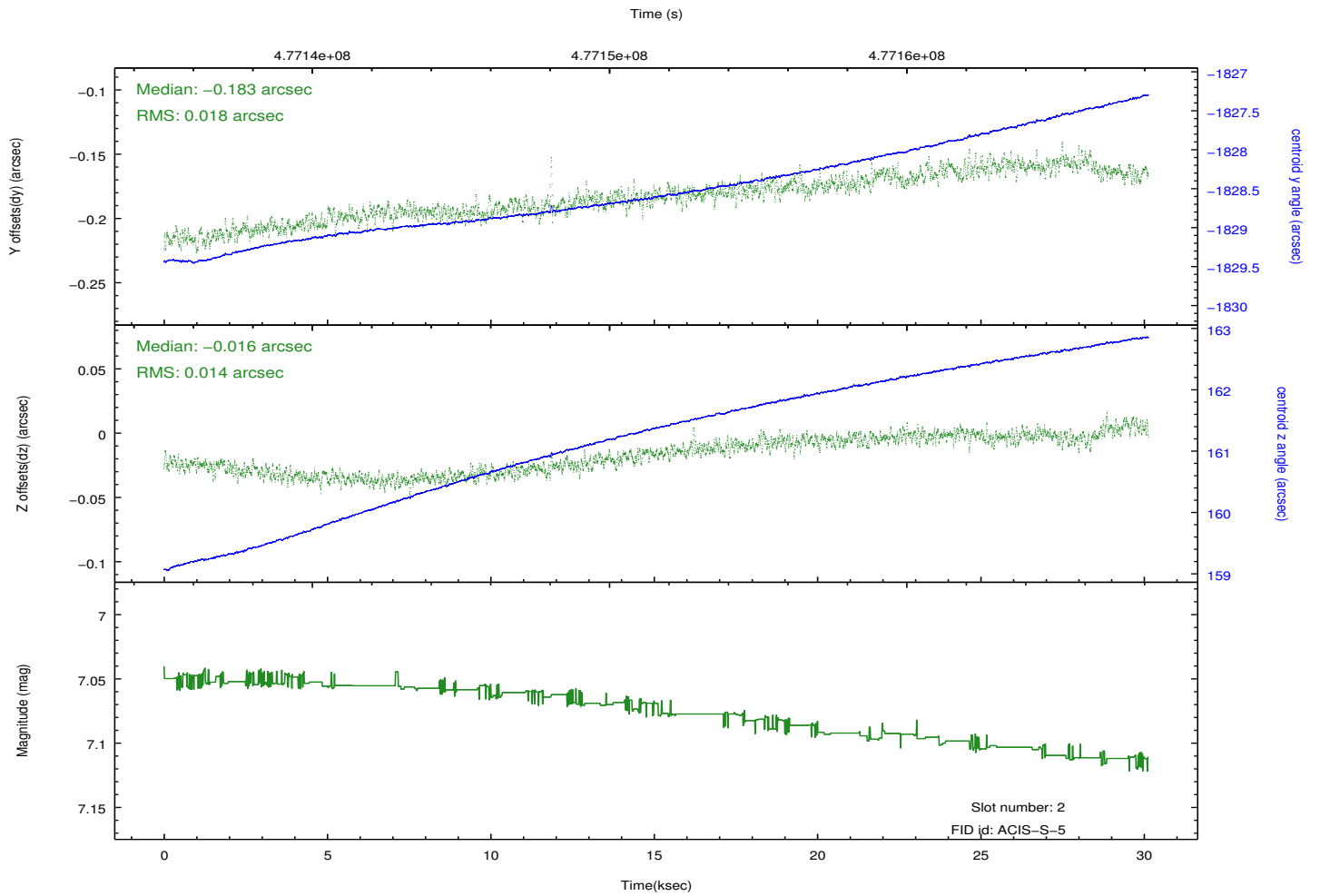
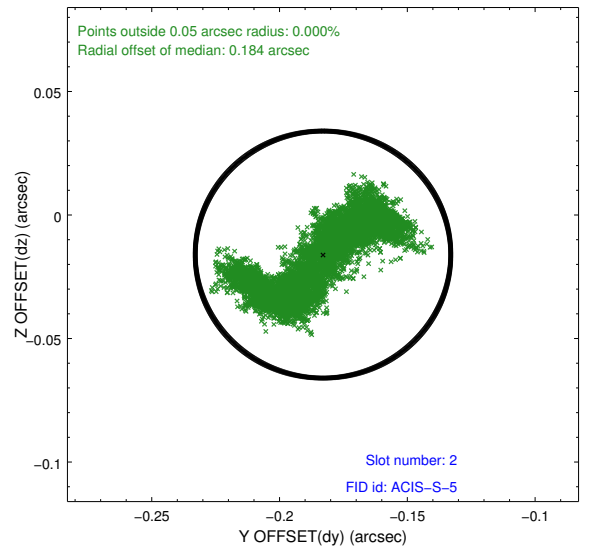
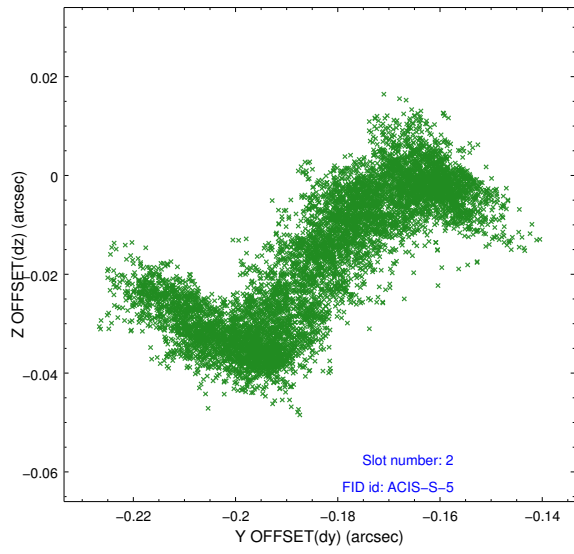
2.5.1 Slot 0



2.5.2 Slot 1

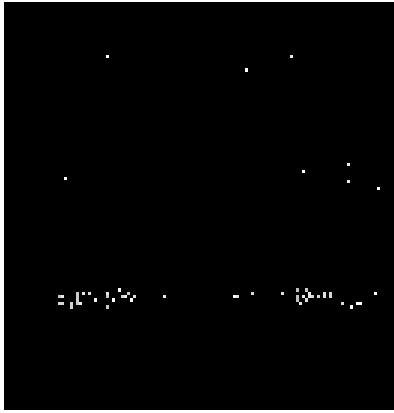


2.5.3 Slot 2

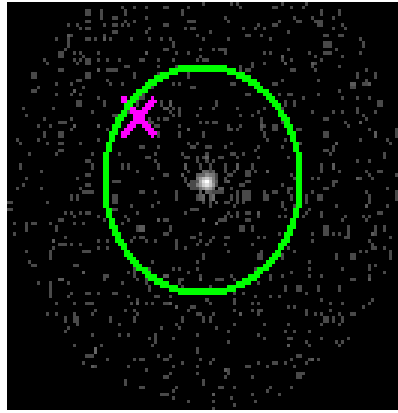


3 Gratings

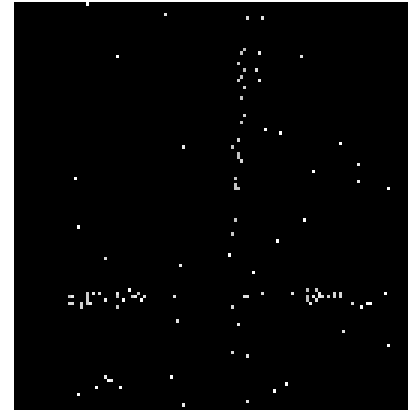
3.1 HEG Arm



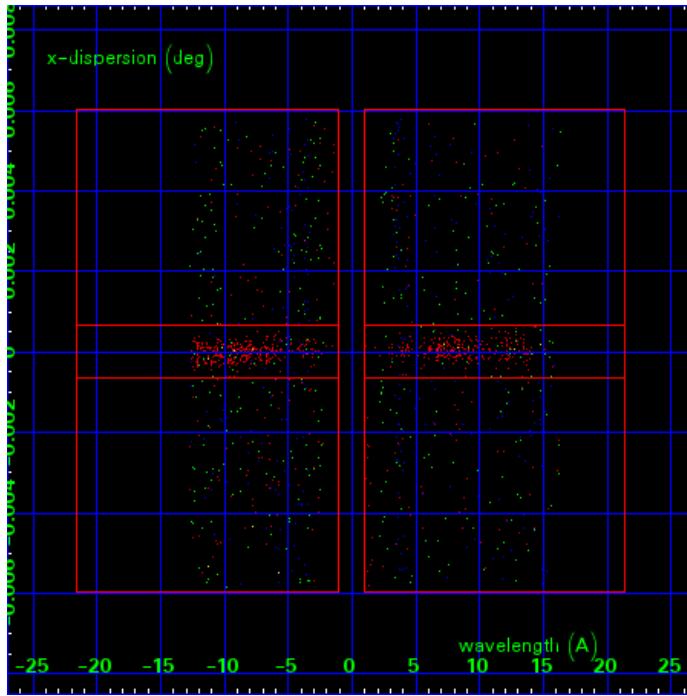
HEG Order Sort 123



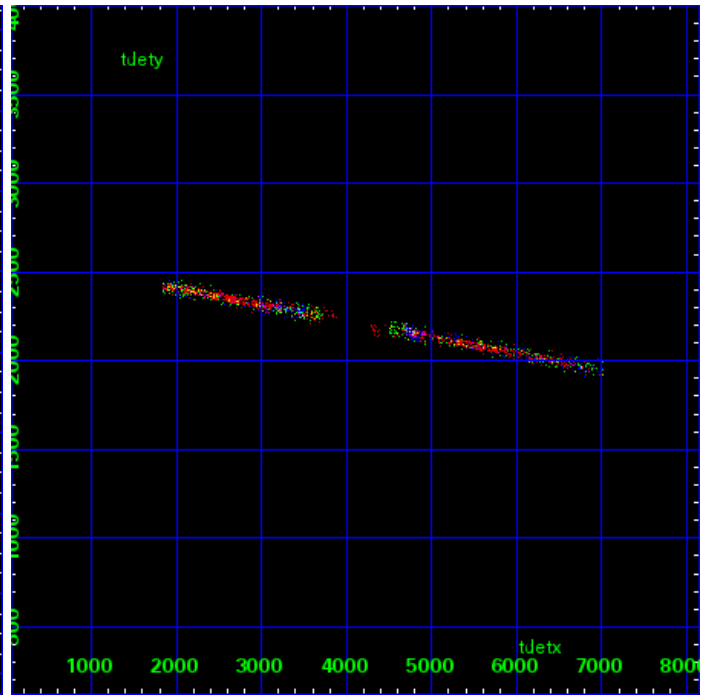
HEG Zero Order



HEG Order Sort ALL

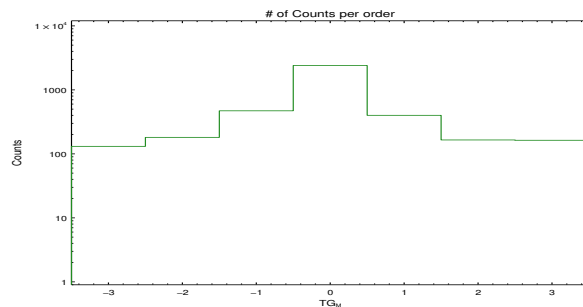


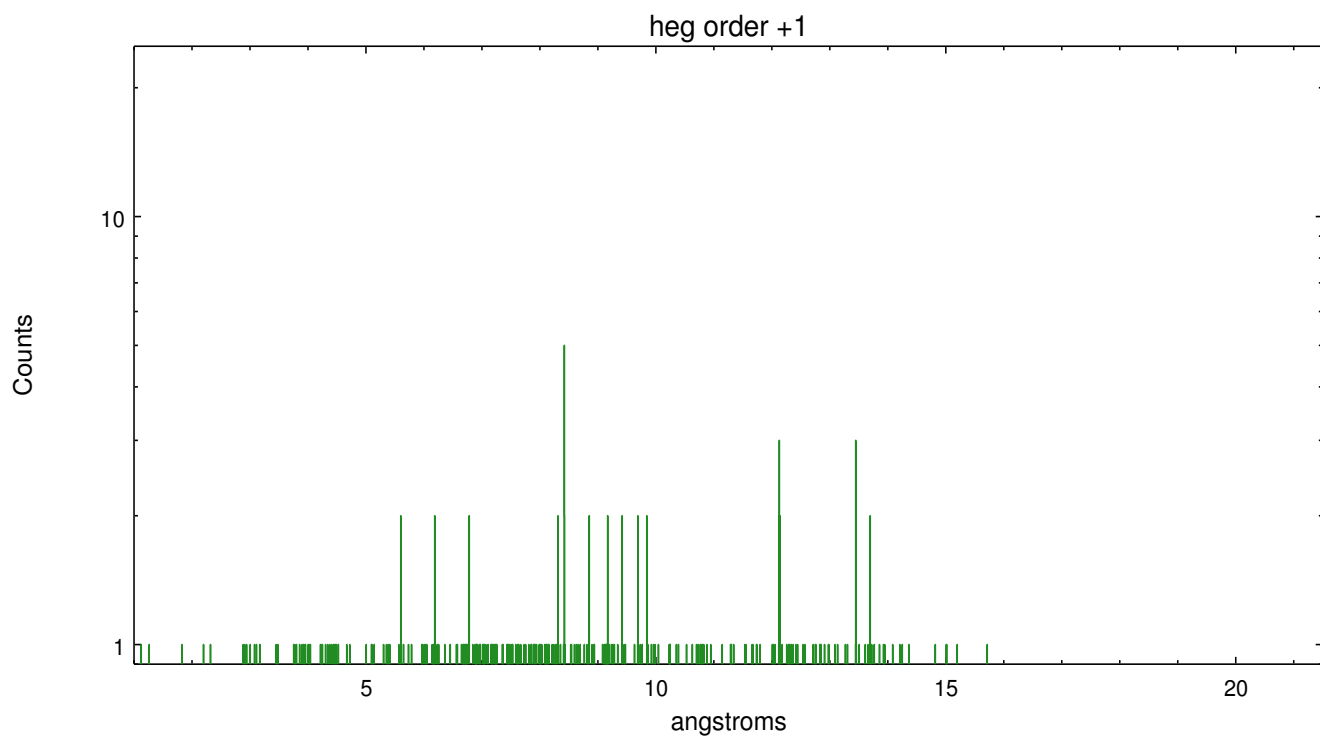
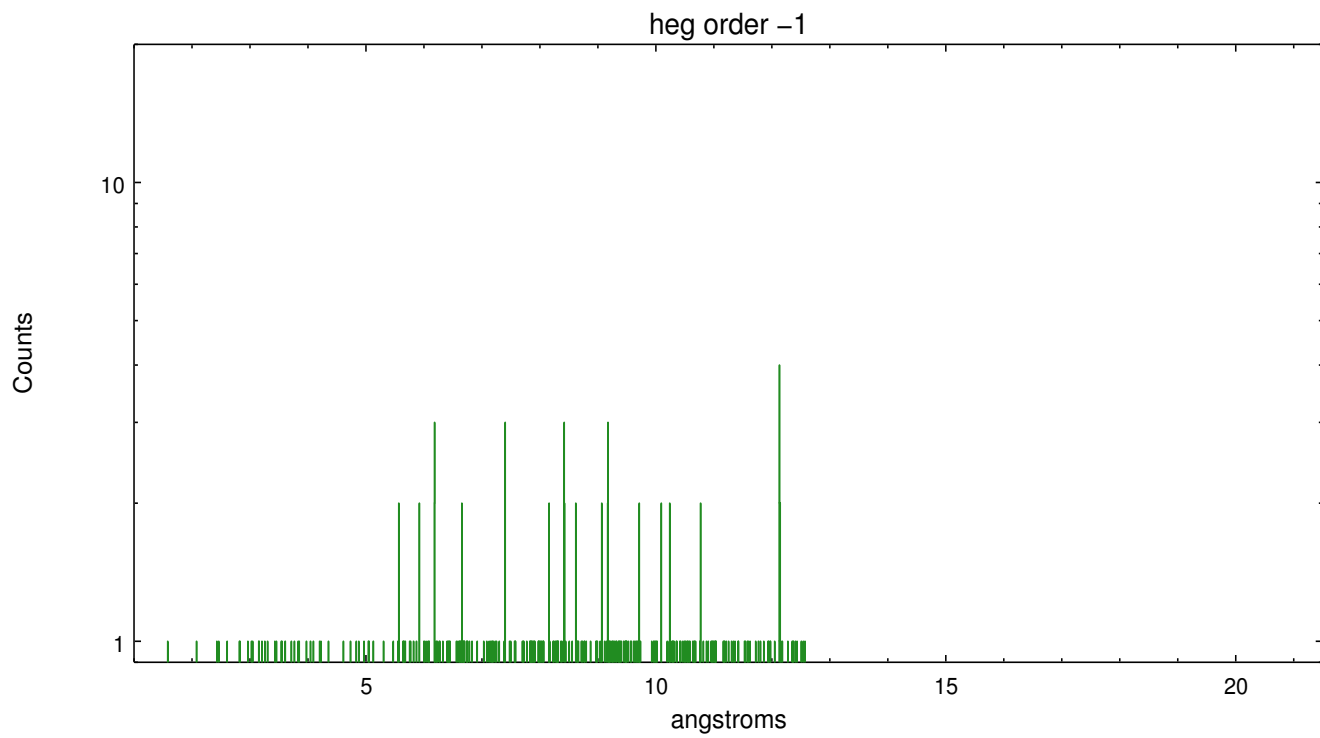
Spot Image HEG



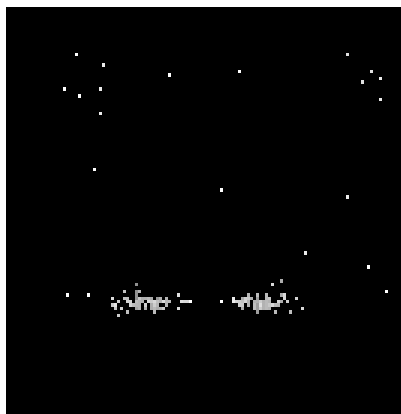
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	131	181	471	2402	400	165	163

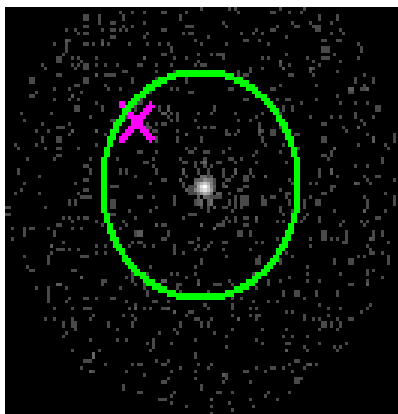




3.2 MEG Arm



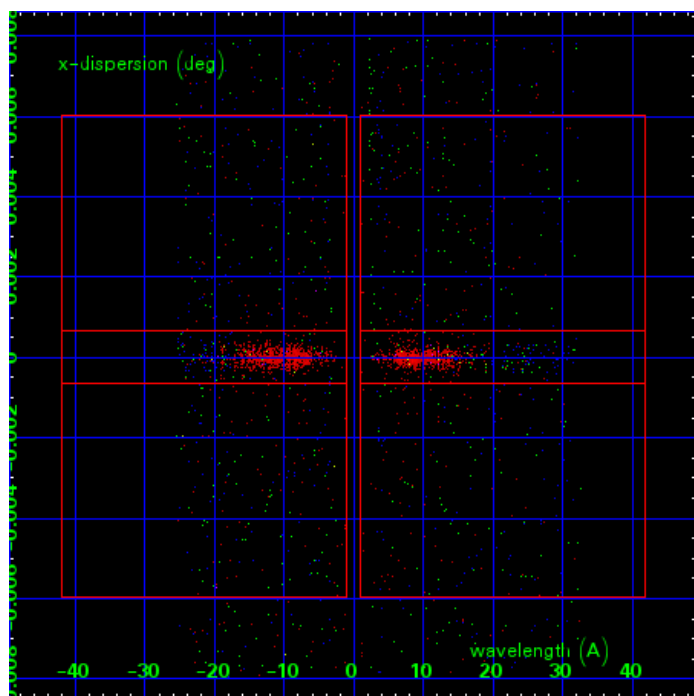
MEG Order Sort 123



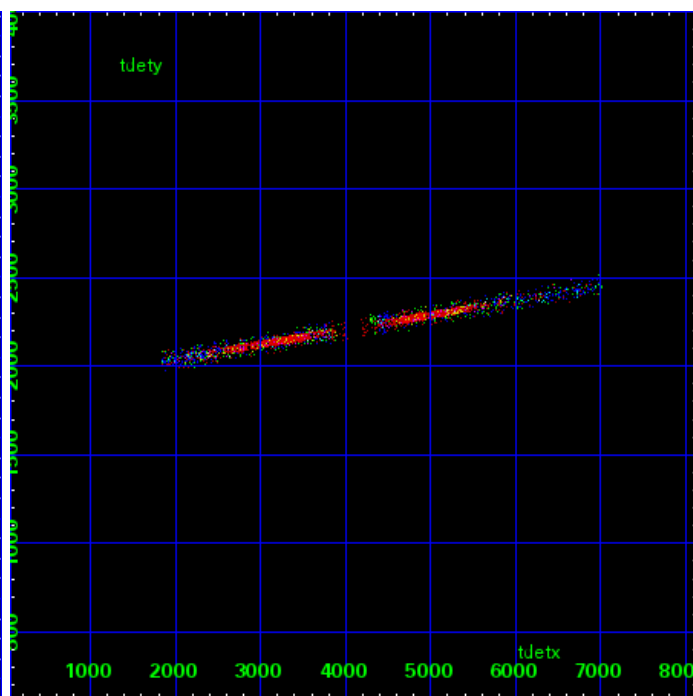
MEG Zero Order



MEG Order Sort ALL

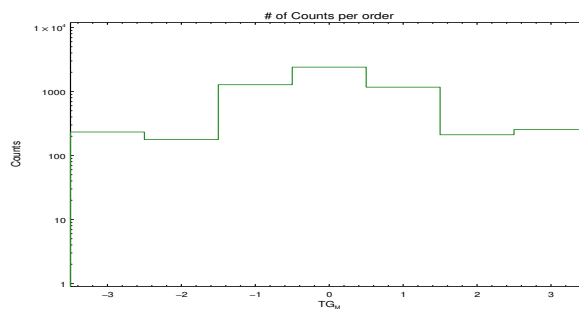


Spot Image MEG

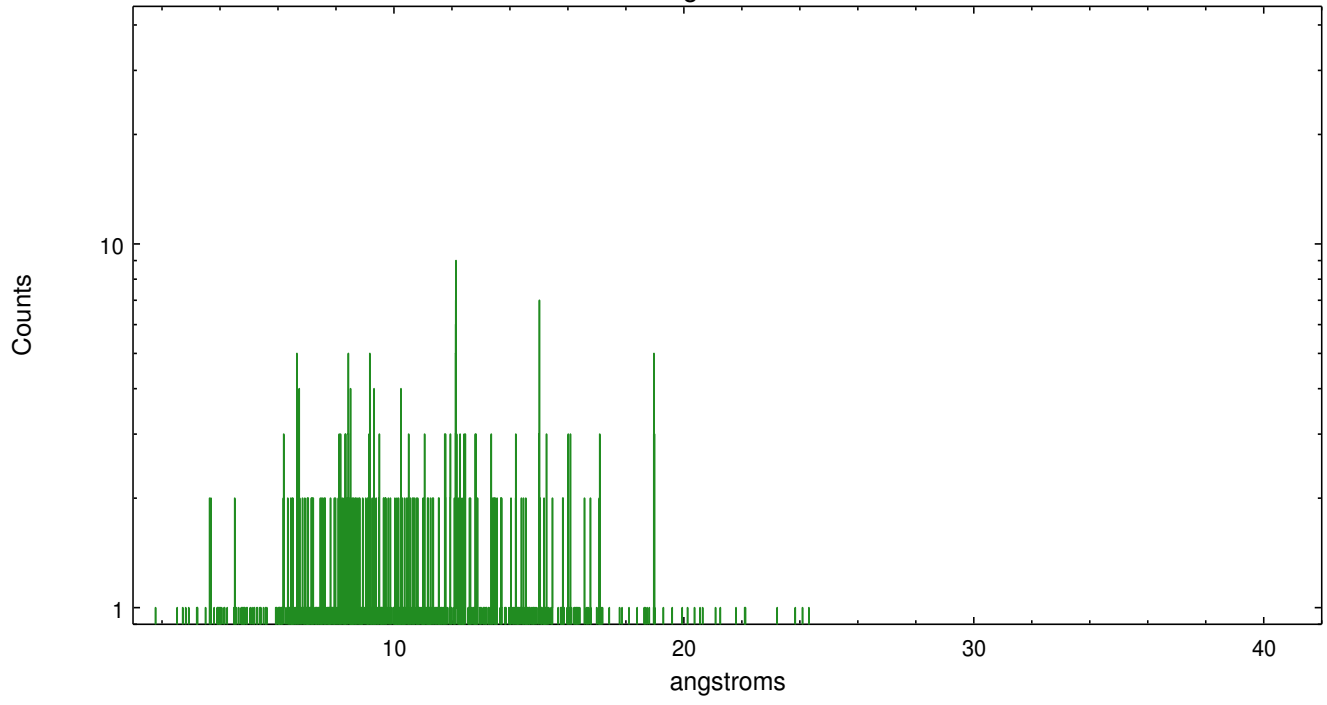


Full Detector MEG

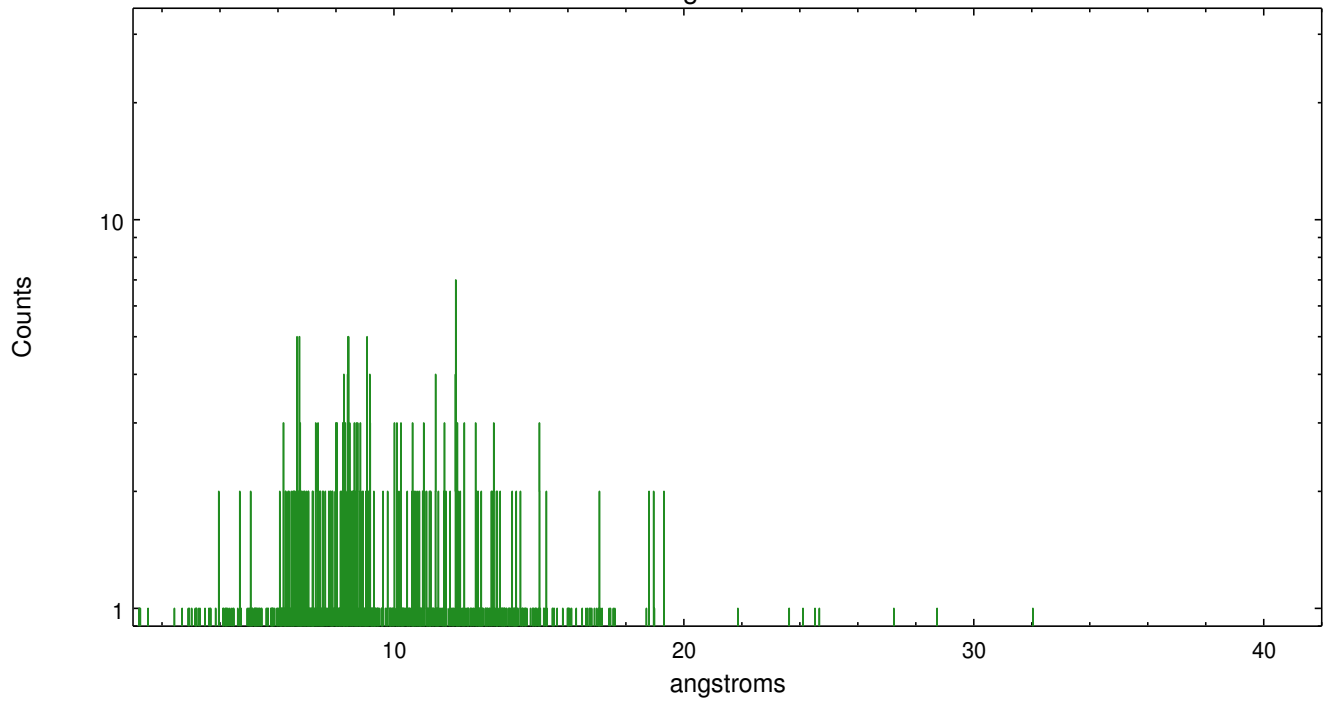
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	233	178	1278	2402	1169	211	254



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.065821859419

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.

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Target was monitored at optical wavelengths in slot 7 of the Aspect Camera during the observation.