

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 8897 - L2 Version 3
Chandra X-Ray Center

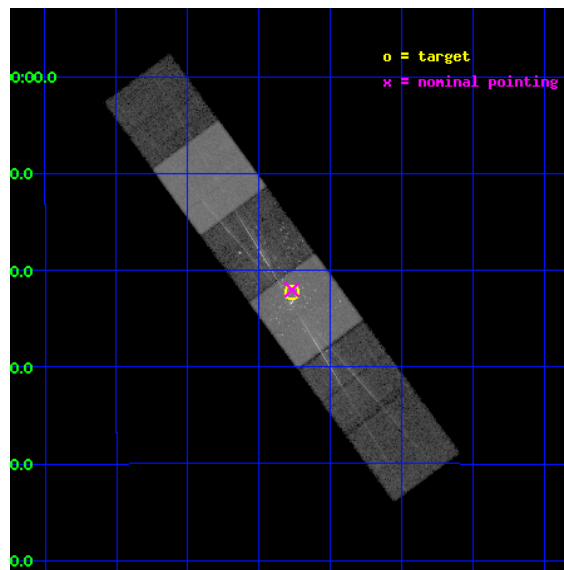
L2 Processing Date : May 4 2012

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1 Front

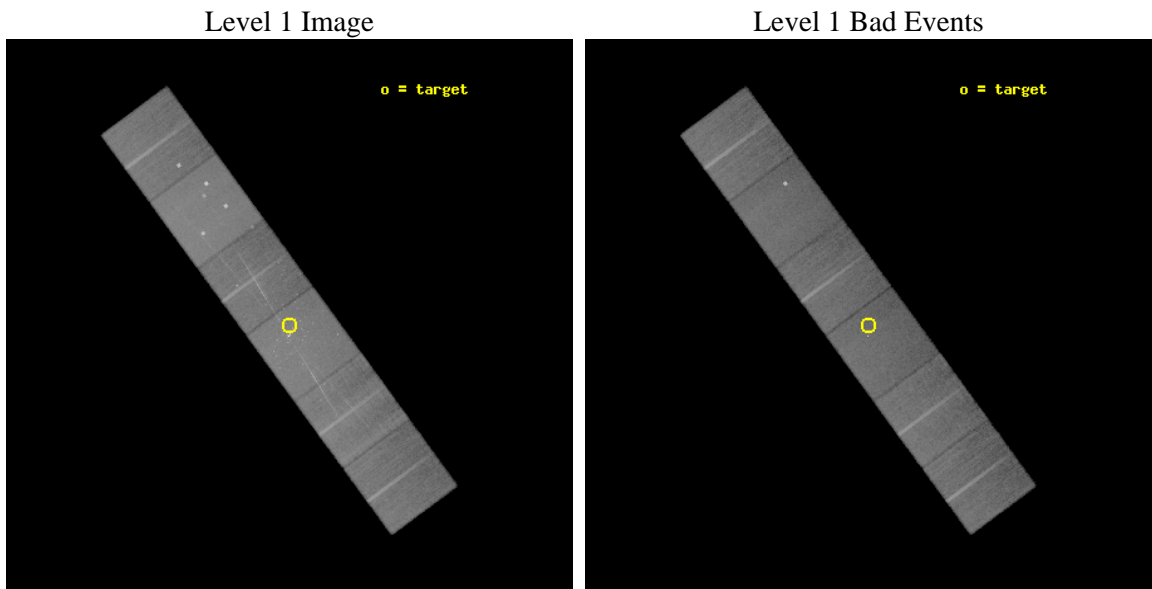
seq_num	200478	Sequence number
obs_id	8897	Observation id
title	The HETG Orion Legacy Project: PMS Stellar Studies of the Orion Trapezium Cluster	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	Orion Trapezium Cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.817083	Observer's specified target RA [deg]
dec_targ	-5.372083	Observer's specified target Dec [deg]
ra_nom	83.817466898899	Nominal RA [deg]
dec_nom	-5.3672407807883	Nominal Dec [deg]
roll_nom	53.63656940645	Nominal Roll [deg]
revision	3	Processing version of data
ontime	23948.799910843	Sum of GTIs [s]
livetime	23645.545786136	Livetime [s]
ontime4	23948.799910843	Sum of GTIs [s]
ontime5	23948.799910843	Sum of GTIs [s]
ontime6	23948.799910843	Sum of GTIs [s]
ontime7	23948.799910843	Sum of GTIs [s]
ontime8	23948.799910843	Sum of GTIs [s]
ontime9	23942.317870319	Sum of GTIs [s]
l2events	462601	Number of level 2 events



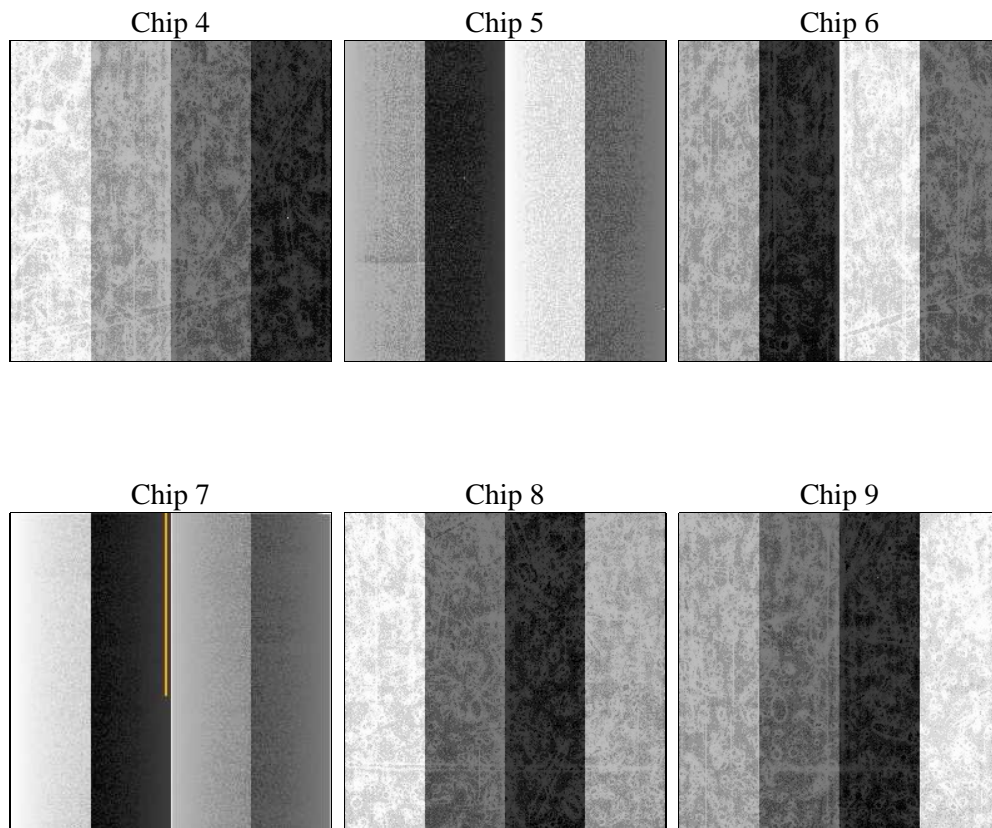
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	23948.799910843	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	23948.799910843	Sum of GTIs [s]
date	2012-05-04T14:29:42	Date and time of file creation	ontime5	23948.799910843	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	23948.799910843	Sum of GTIs [s]
			ontime7	23948.799910843	Sum of GTIs [s]
			ontime8	23948.799910843	Sum of GTIs [s]
			ontime9	23942.317870319	Sum of GTIs [s]
			l1events	1789697	Number of level 1 events

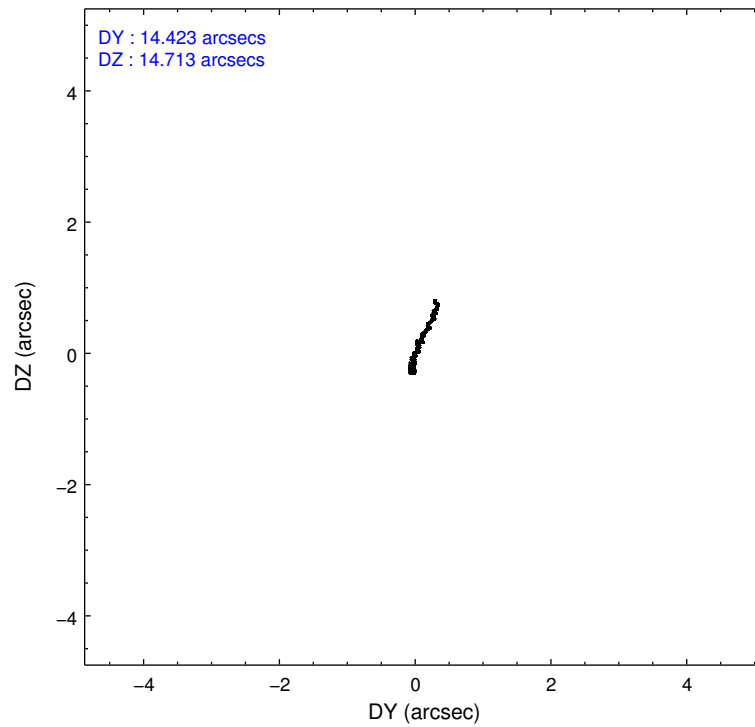
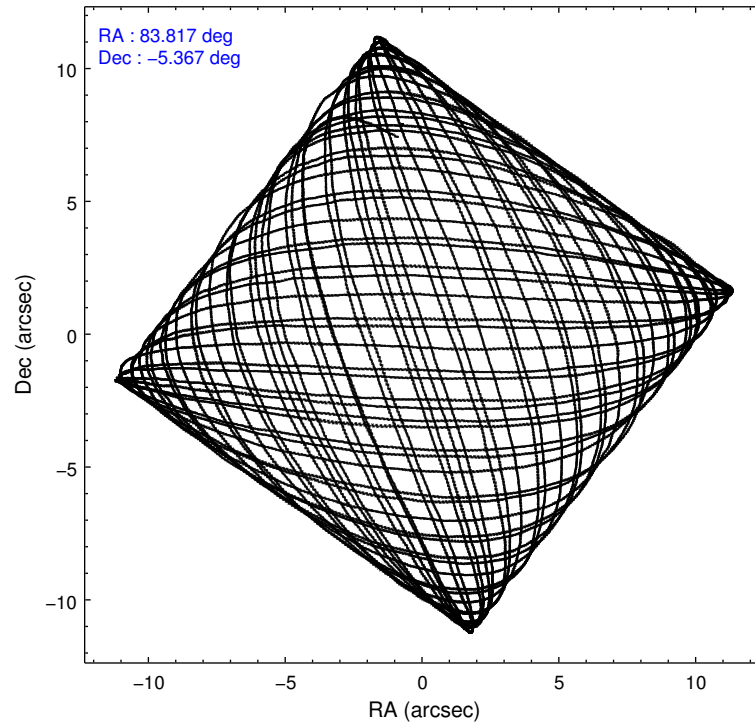
2.1.4 Events

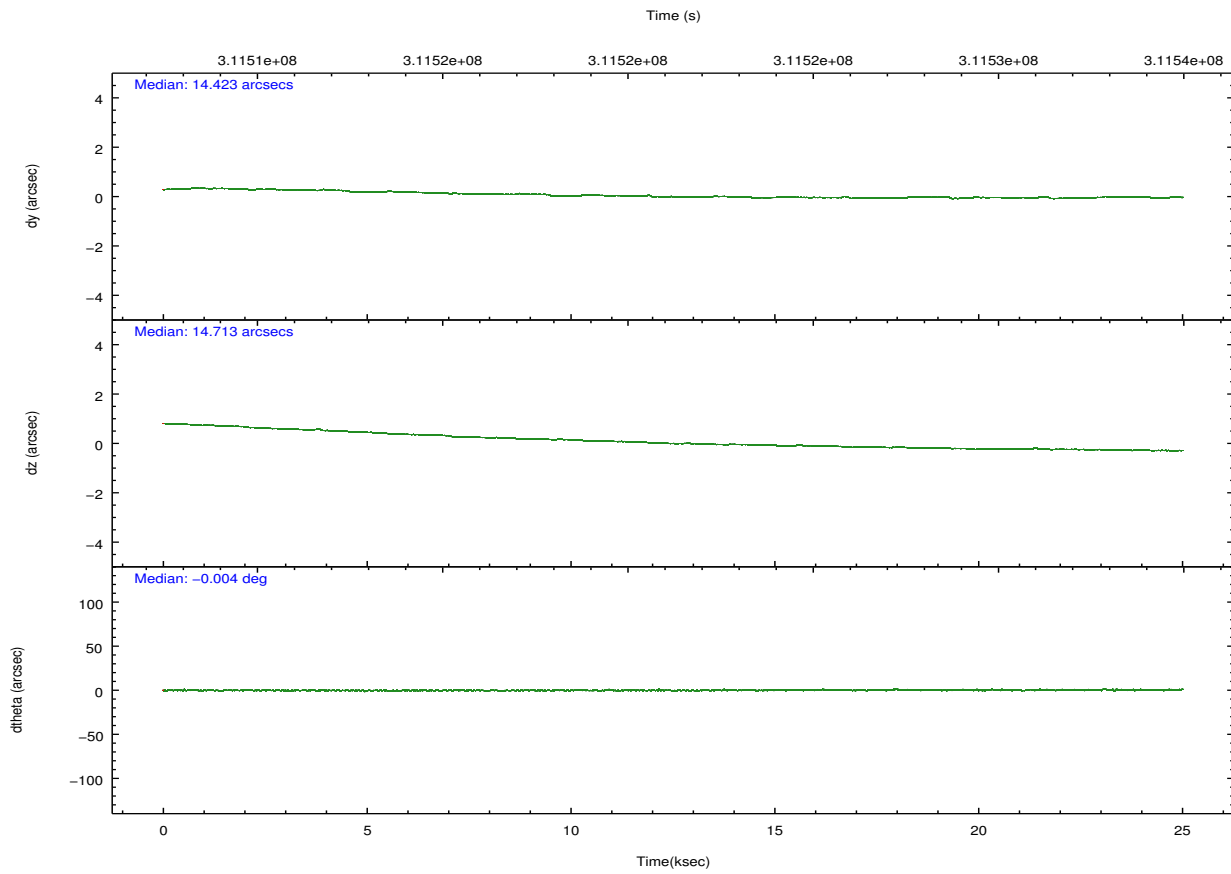
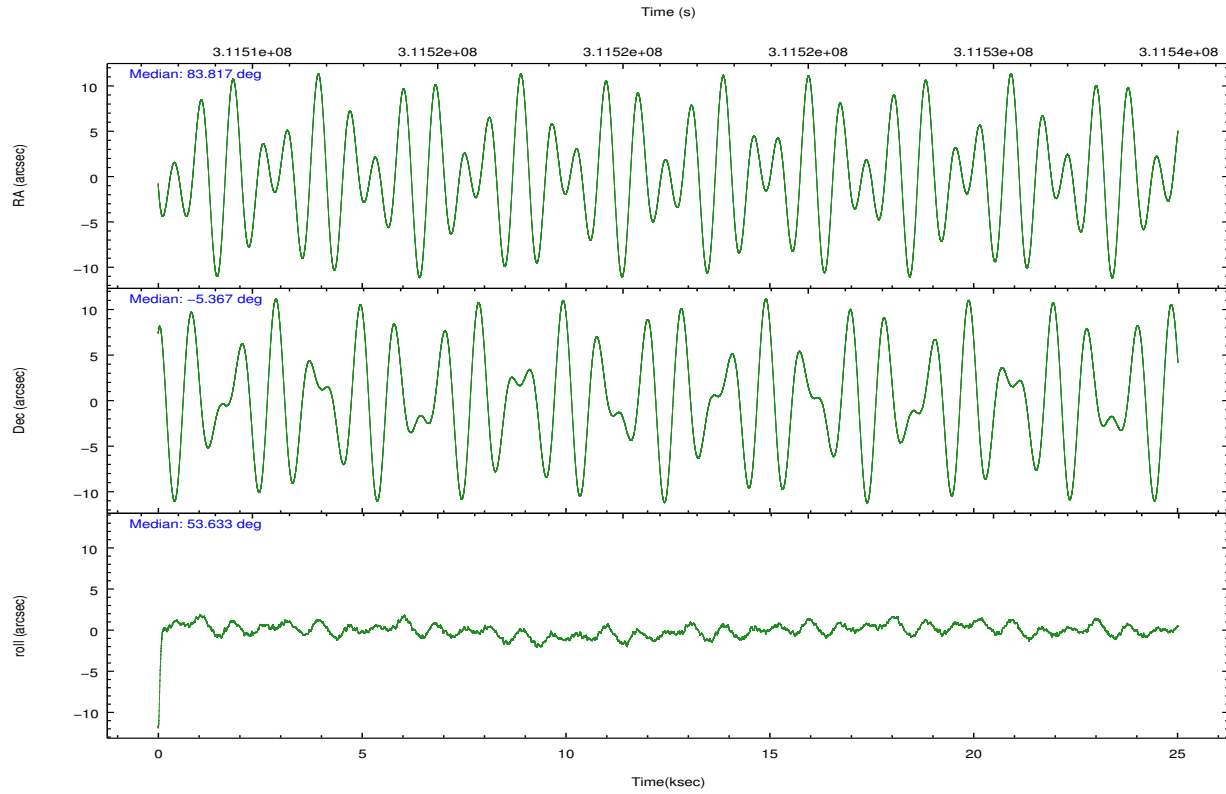
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	262723	371781	259984	355709	307829	231671	grade 0 events	19074	23975	28700	19778	31221	14251
rejected events	226946	195956	209536	186228	229723	200112		7%	6%	11%	5%	10%	6%
rejected %	86%	52%	80%	52%	74%	86%	grade 1 events	302	515	231	505	277	171
								0%	0%	0%	0%	0%	0%
							grade 2 events	6429	52060	8645	36465	16184	6023
								2%	14%	3%	10%	5%	2%
							grade 3 events	2948	6531	3358	15473	6834	2906
								1%	1%	1%	4%	2%	1%
							grade 4 events	2817	6160	3391	15294	6627	2775
								1%	1%	1%	4%	2%	1%
							grade 5 events	10737	26535	11044	30385	14643	11759
								4%	7%	4%	8%	4%	5%
							grade 6 events	4517	87147	6366	82512	17254	5607
								1%	23%	2%	23%	5%	2%
							grade 7 events	215899	168858	198249	155297	214789	188179
								82%	45%	76%	43%	69%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	83.814812	83.817466898899	CCD I2 on	N	N
[deg] Pointing Dec	-5.394466	-5.367240780788348	CCD I3 on	N	N
[deg] Pointing Roll	53.479697	53.63656940645028	CCD S0 on	O1	Y
[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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	311509713.184000	311508196.35832	CCD S5 on	Y	Y
Observation start date	2007-11-15T10:27:28	2007-11-15T10:03:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	311533713.184000	311534049.42207	On-chip summing requested	N	N
Observation end date	2007-11-15T17:07:28	2007-11-15T17:14:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



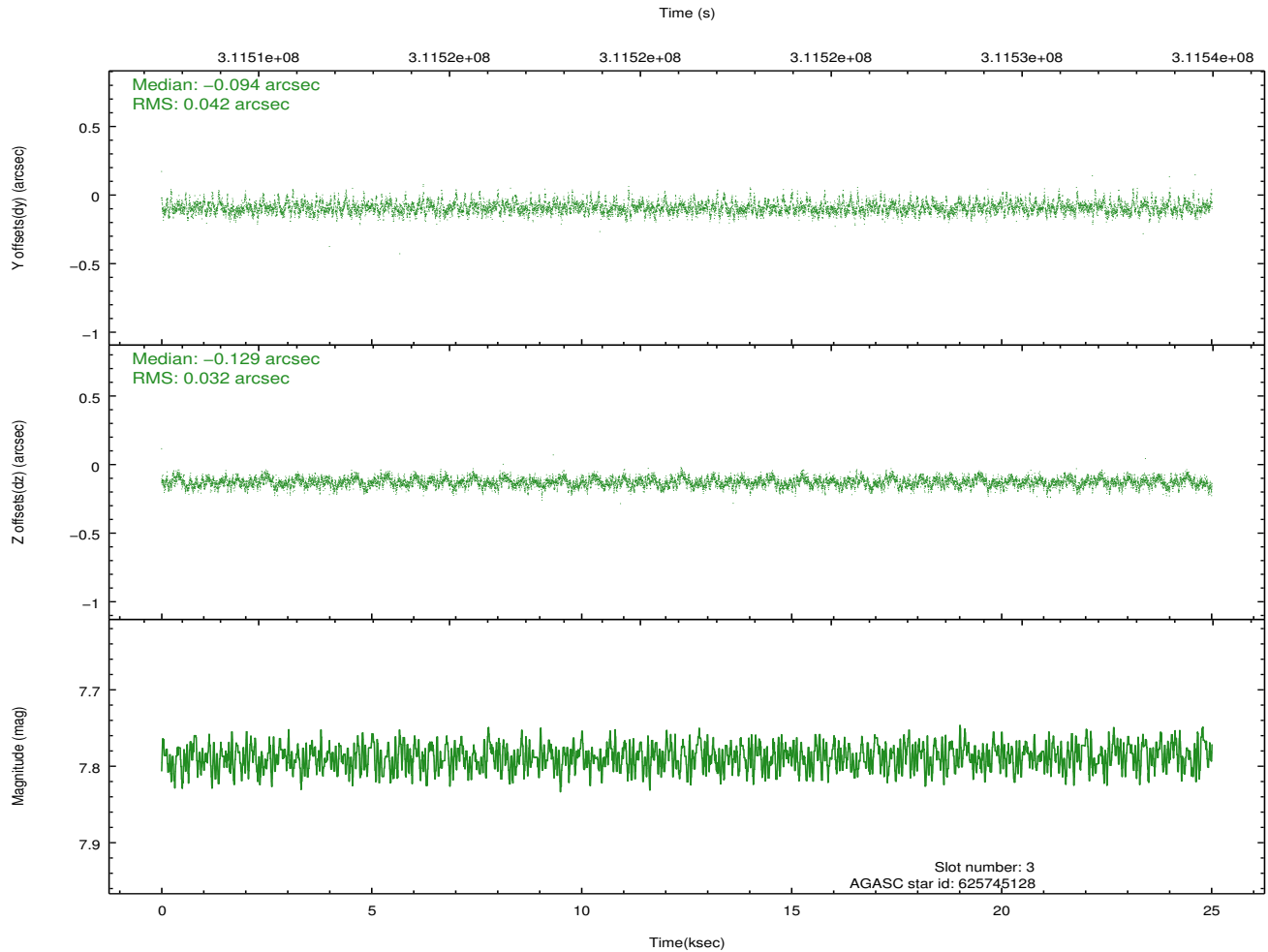
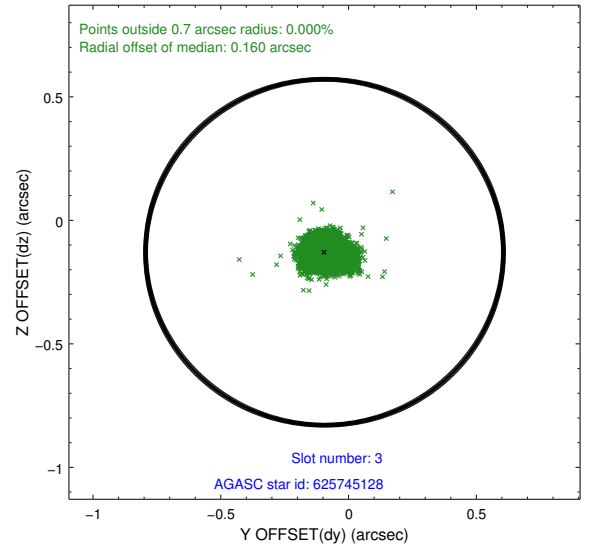
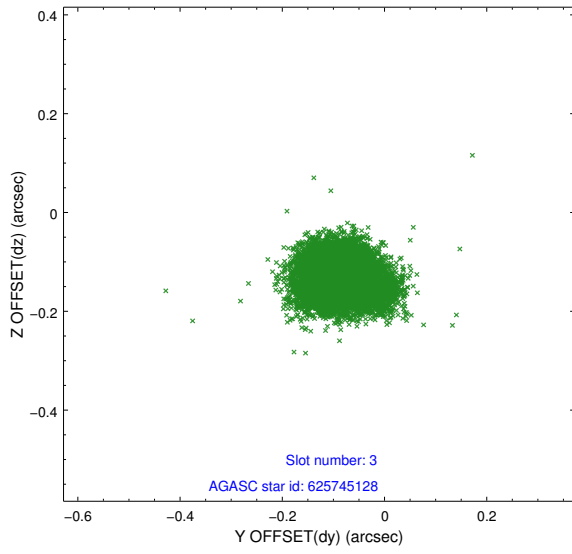


Slot Statistics

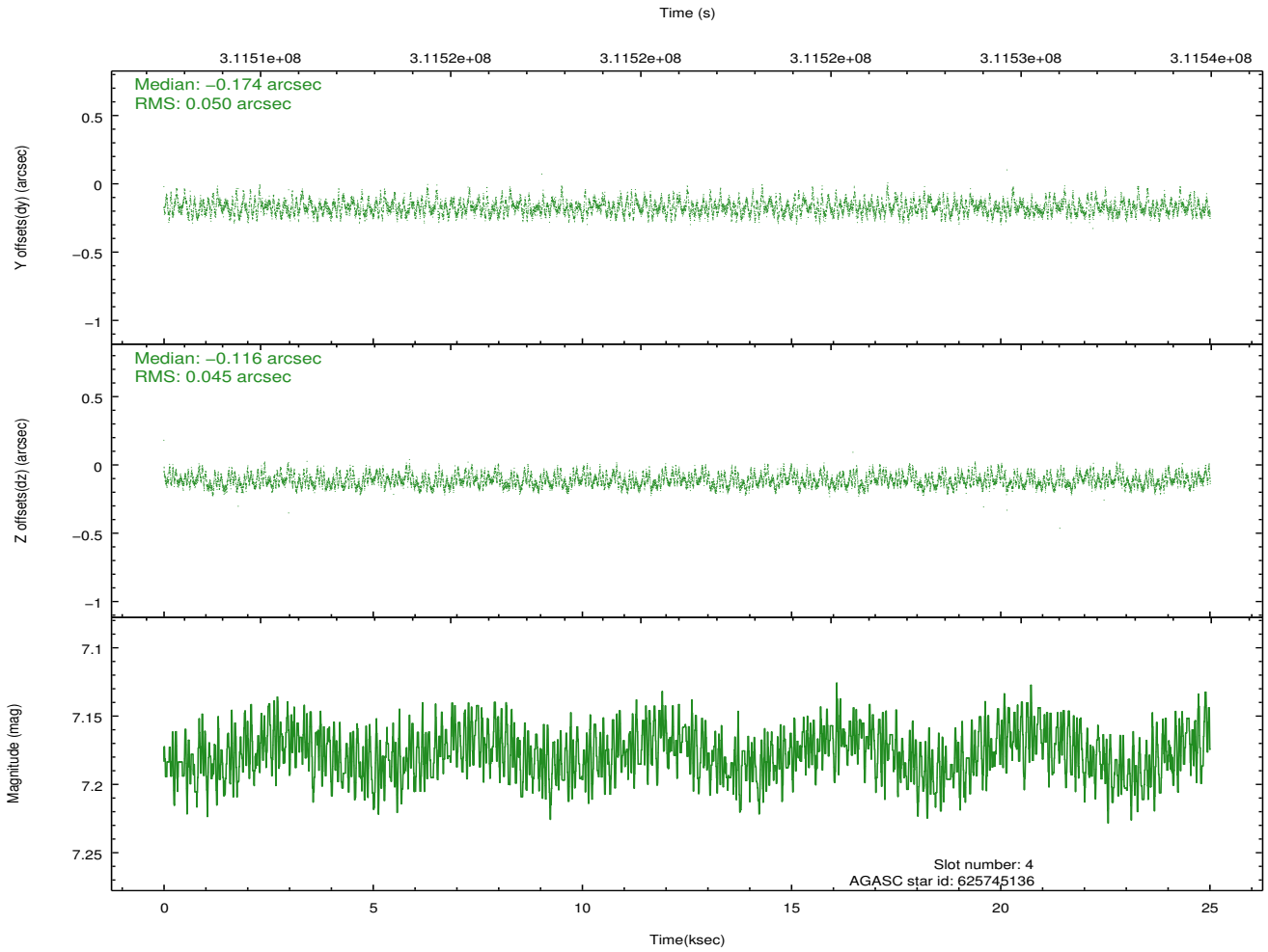
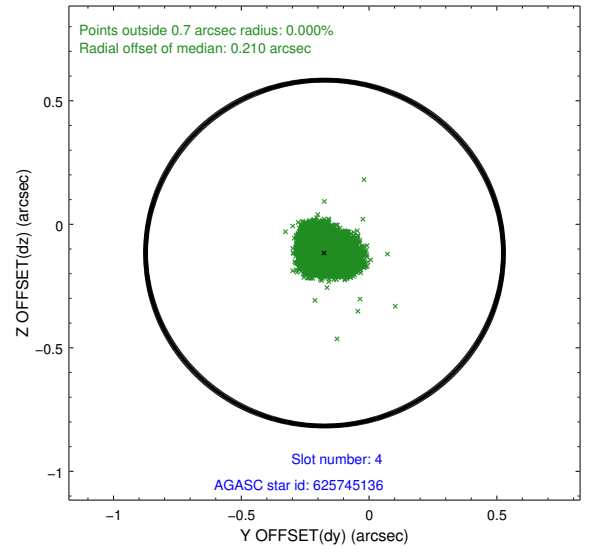
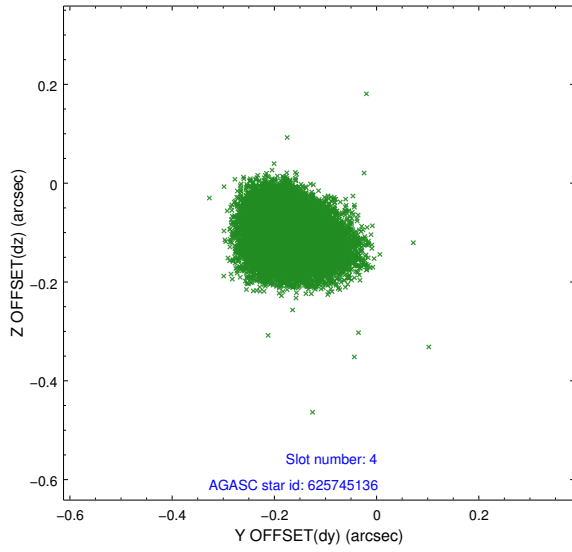
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6102	-0.085	-0.039	0.012	0.019	0.000000	0.000000	-767.52	-1736.18
1	FID	ACIS-S-4	7.19	6102	0.205	0.051	0.006	0.011	0.000000	0.000000	2145.98	172.28
2	FID	ACIS-S-5	7.22	6102	-0.152	-0.003	0.011	0.020	0.000000	0.000000	-1820.29	166.01
3	GUIDE	625745128	7.79	12200	-0.094	-0.129	0.055	0.094	83.769930	-4.731835	1821.27	1549.06
4	GUIDE	625745136	7.18	12203	-0.174	-0.116	0.073	0.114	83.600341	-4.804339	1249.52	1882.61
5	GUIDE	626272976	7.93	12201	0.086	0.081	0.076	0.117	83.795875	-5.926912	-1580.35	-1086.10
6	GUIDE	626273040	7.10	12200	0.105	0.007	0.075	0.127	84.062610	-5.647920	-204.86	-1256.62
7	GUIDE	626272880	7.65	12198	0.060	0.152	0.060	0.096	83.815609	-6.032748	-1844.63	-1369.84

2.4 Star Slots

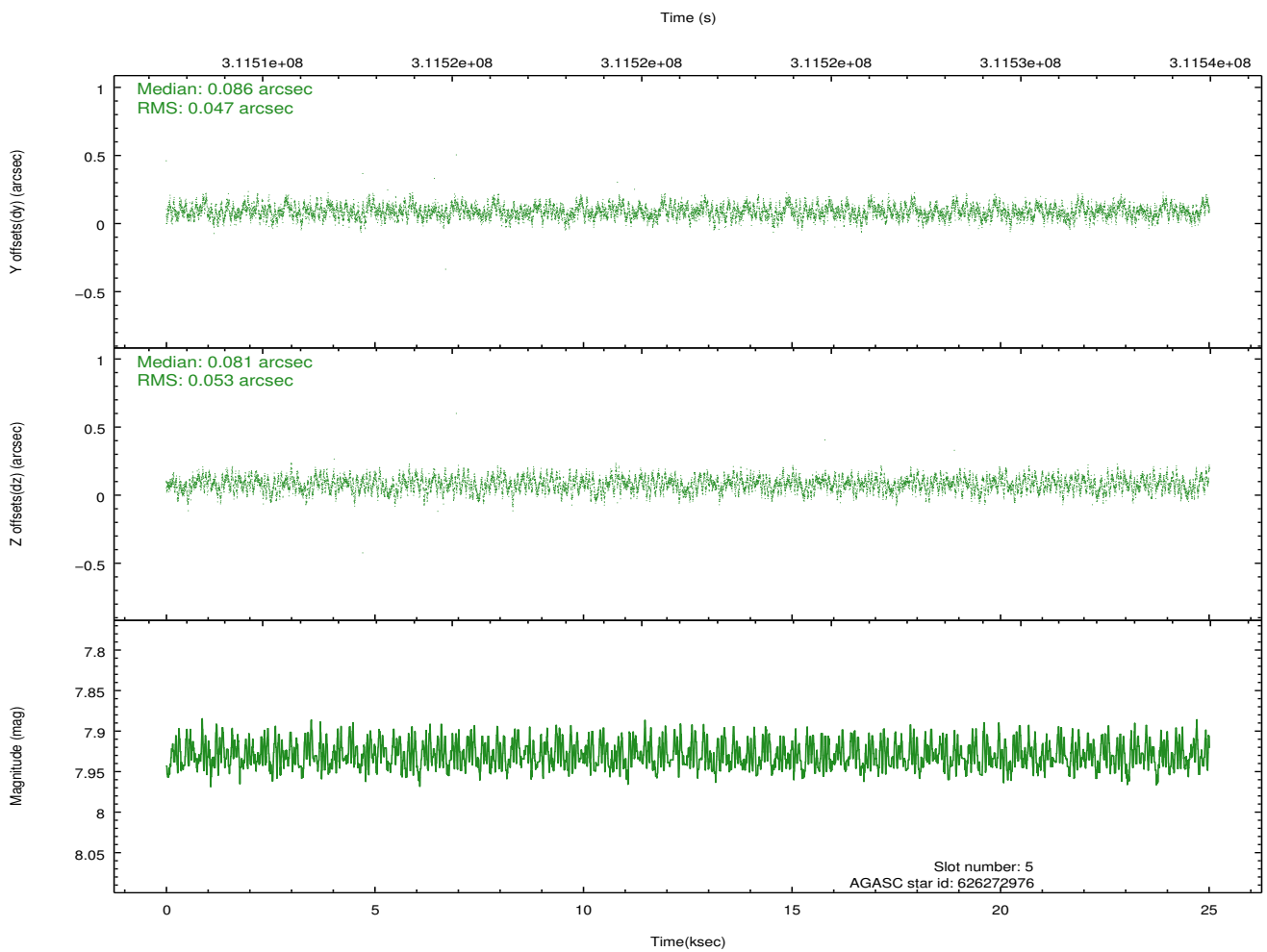
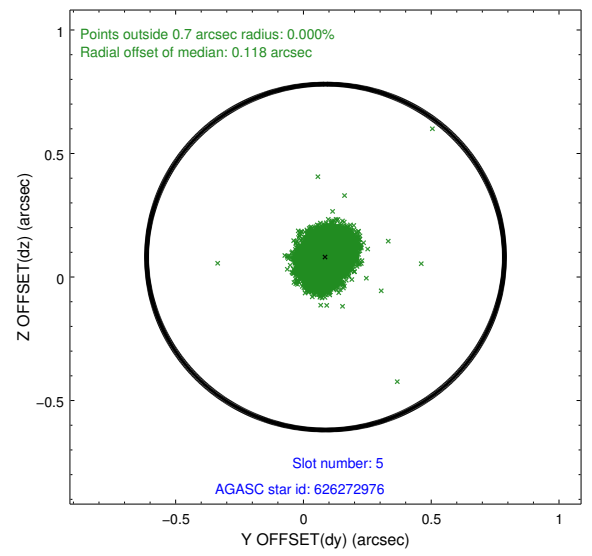
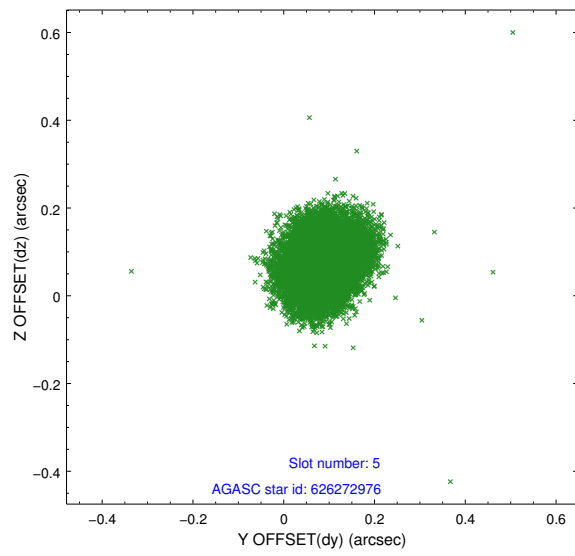
2.4.1 Slot 3



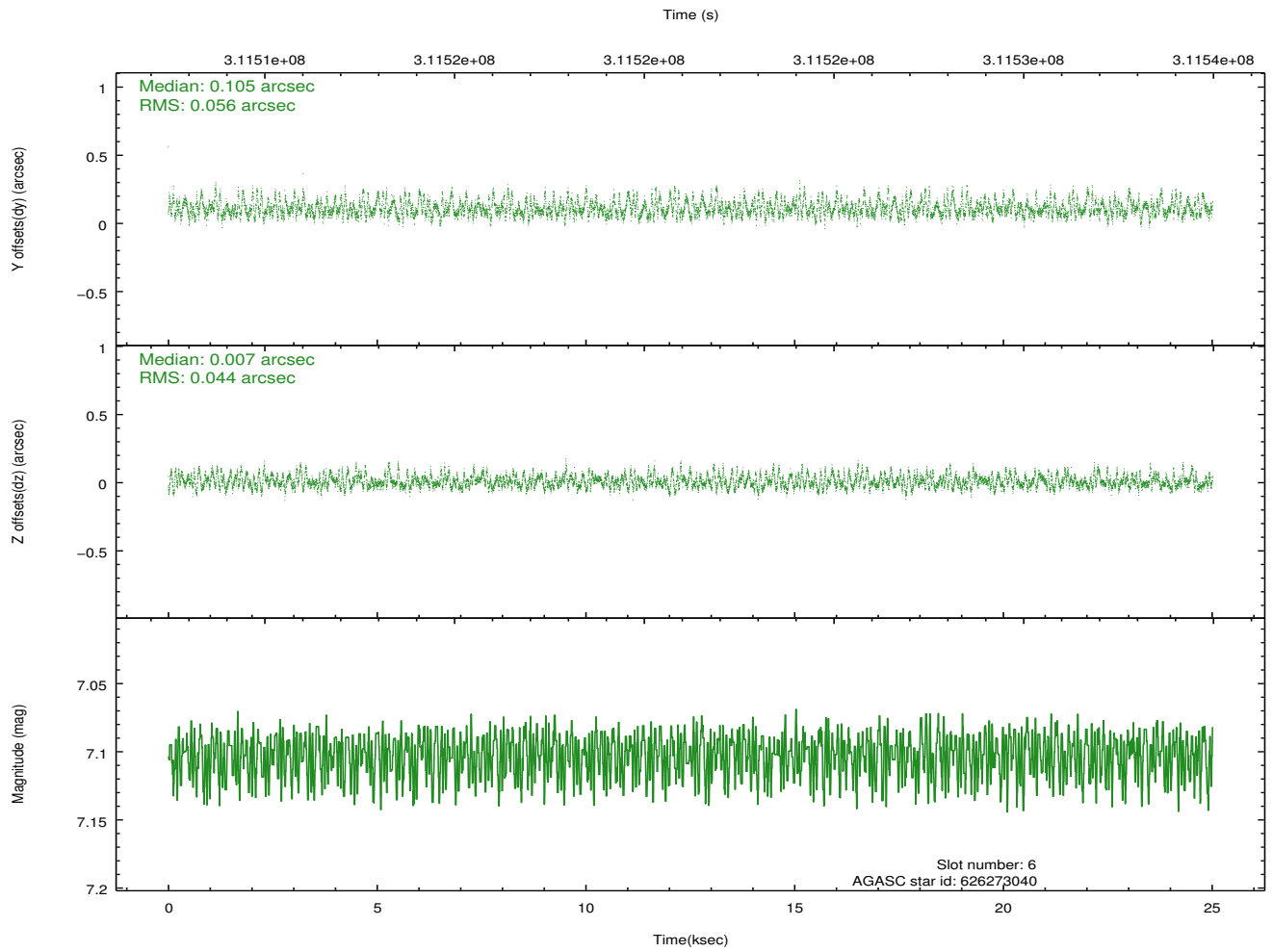
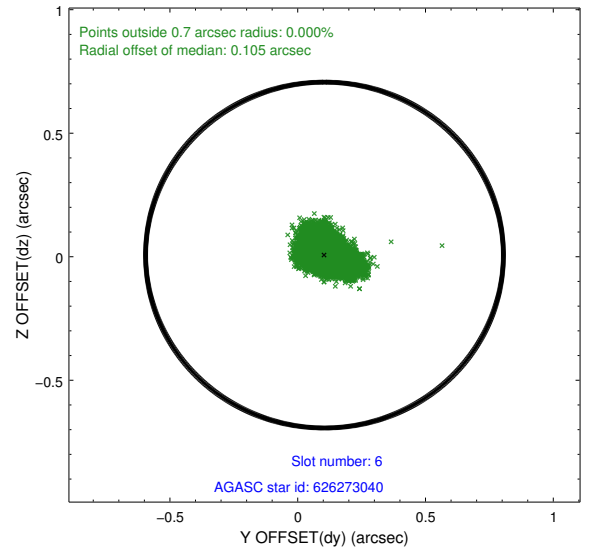
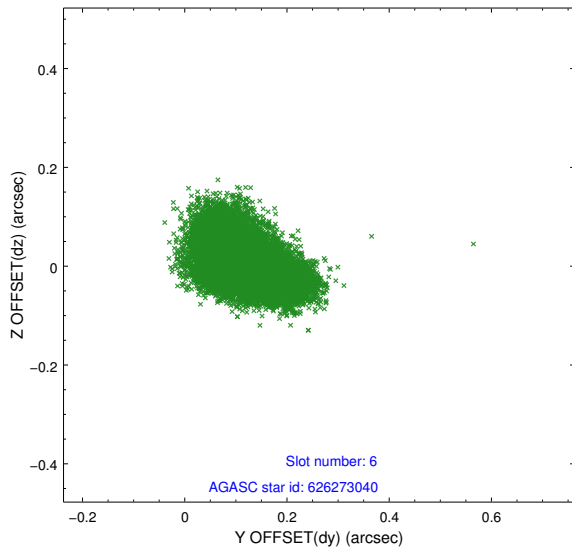
2.4.2 Slot 4



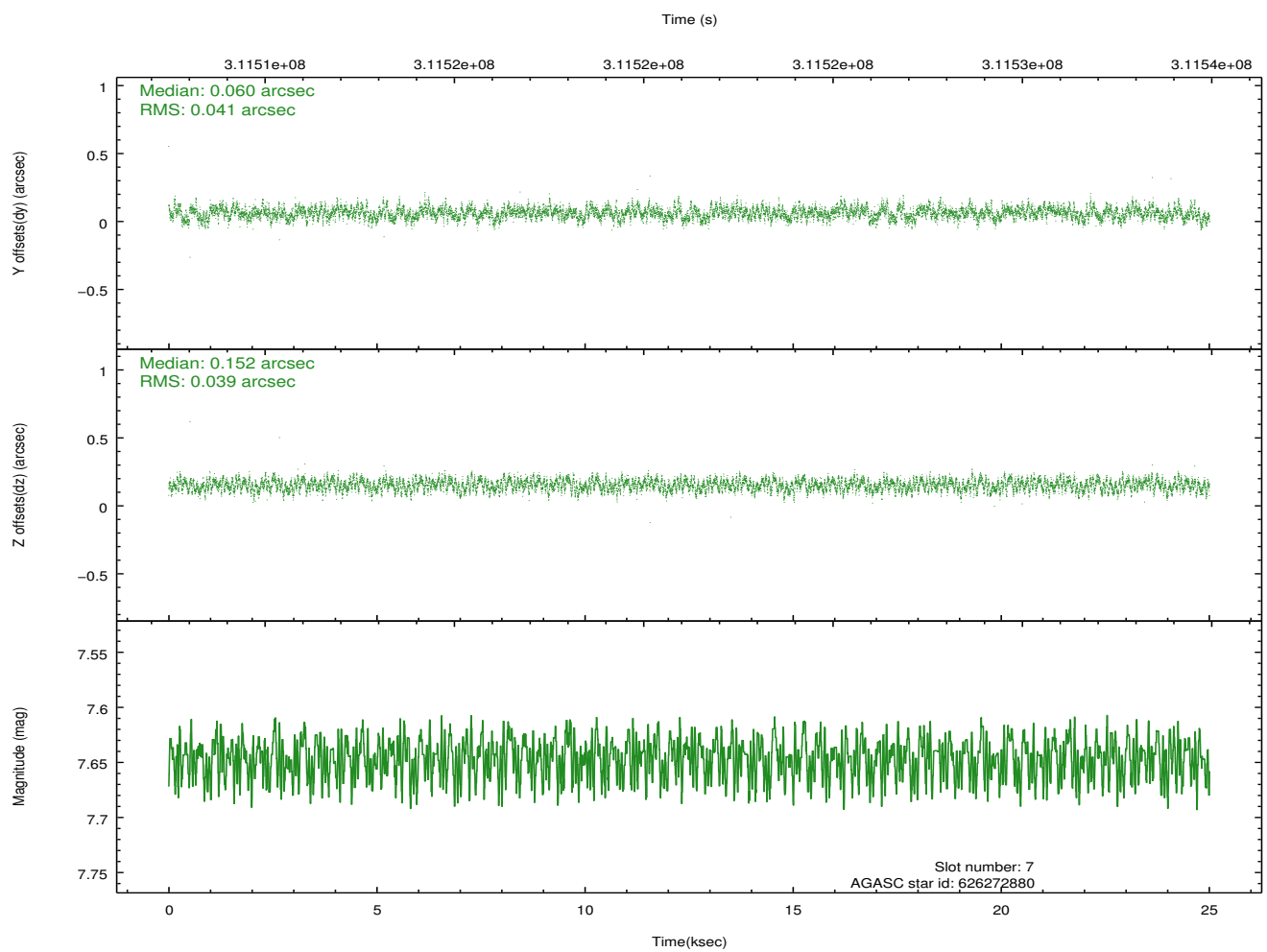
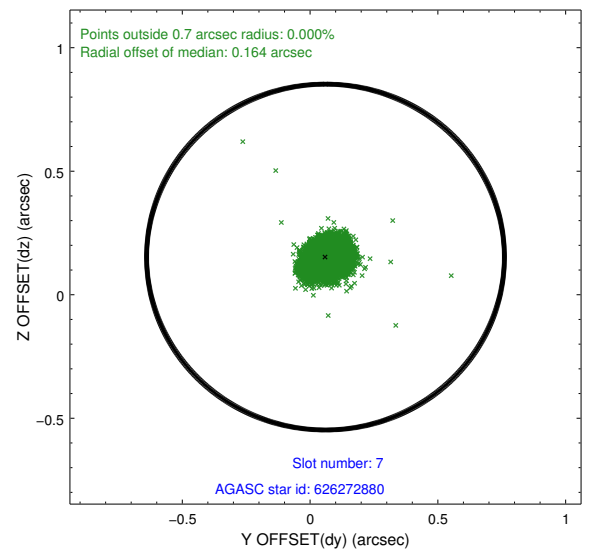
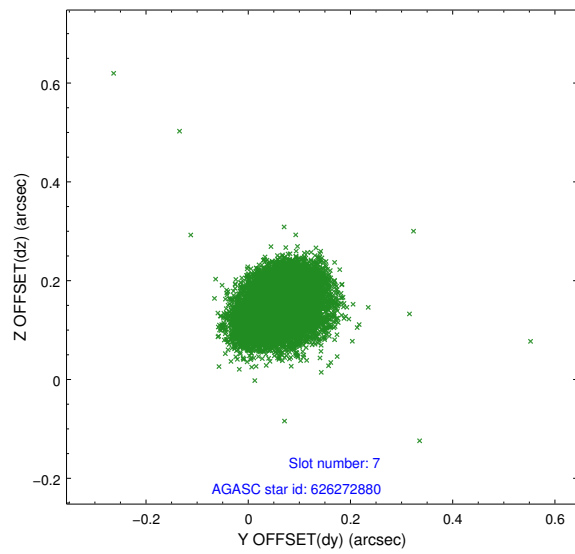
2.4.3 Slot 5



2.4.4 Slot 6

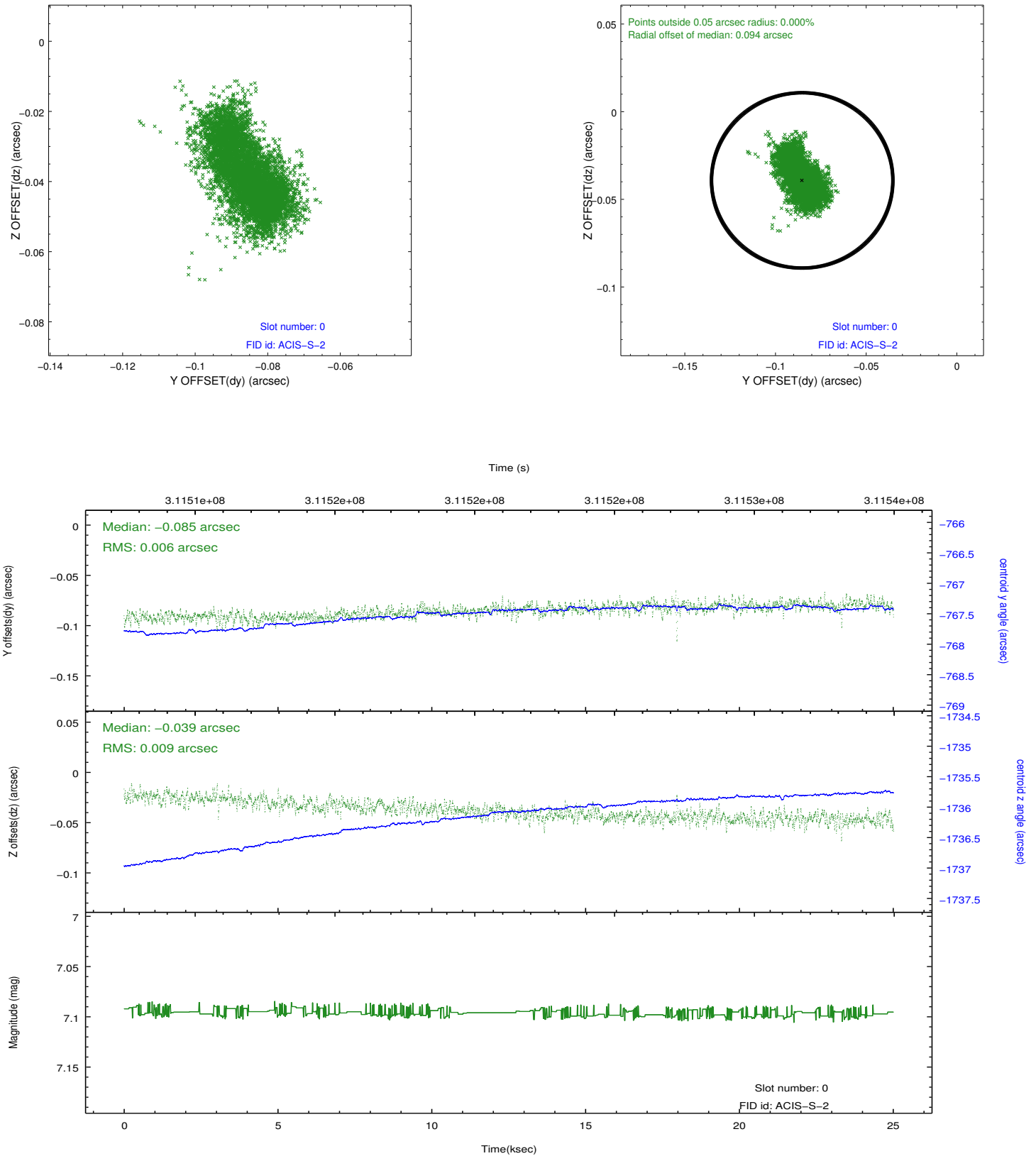


2.4.5 Slot 7

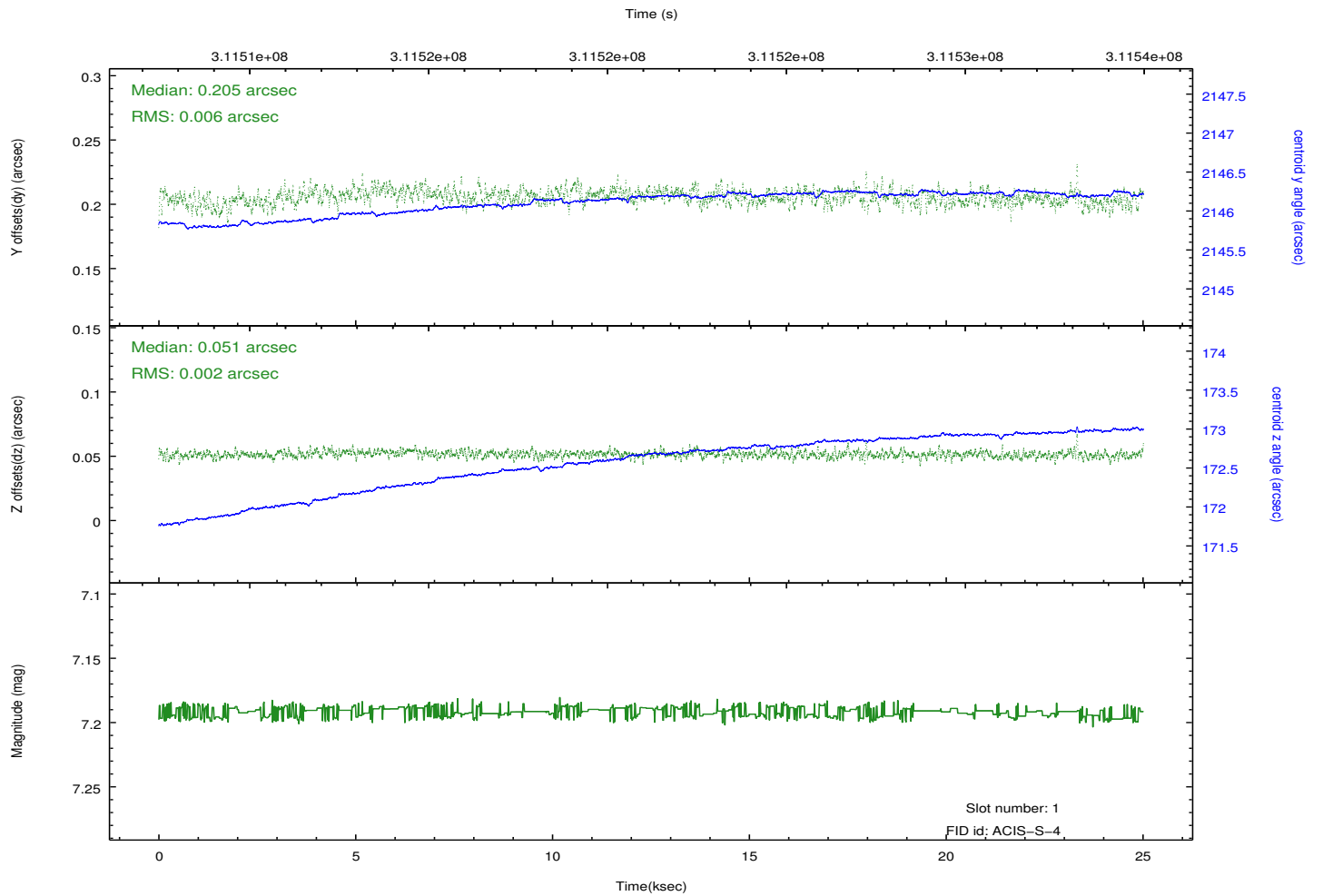
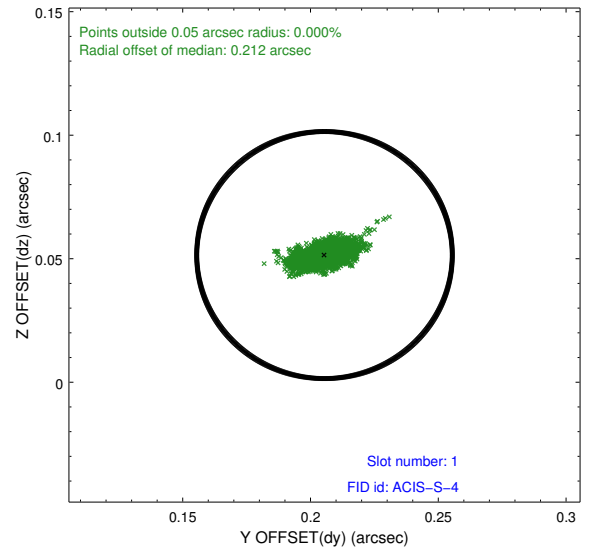
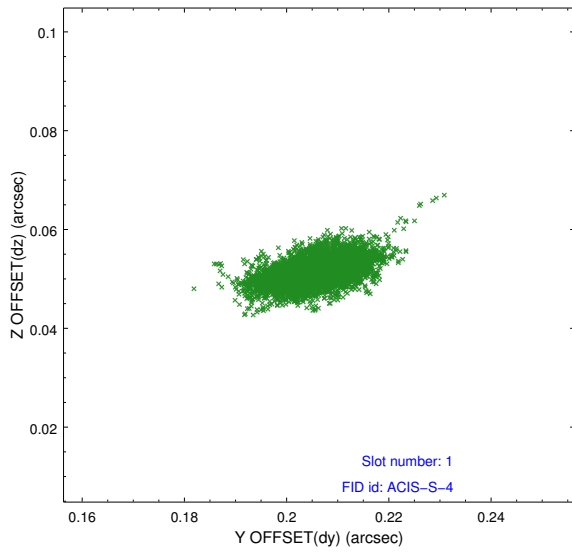


2.5 FID Slots

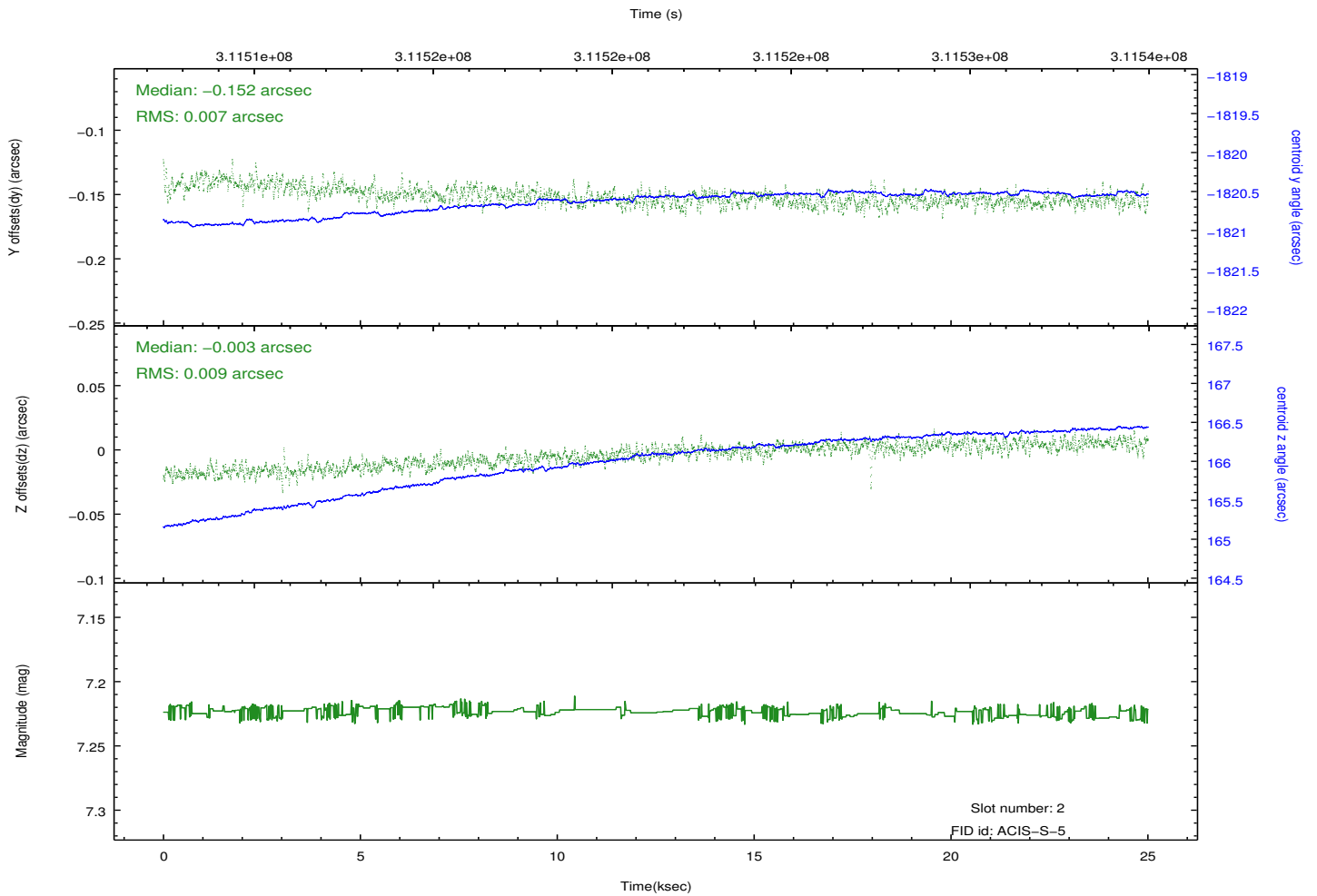
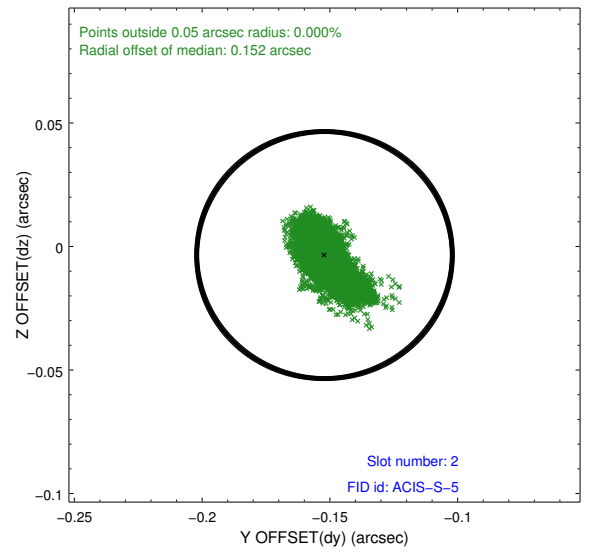
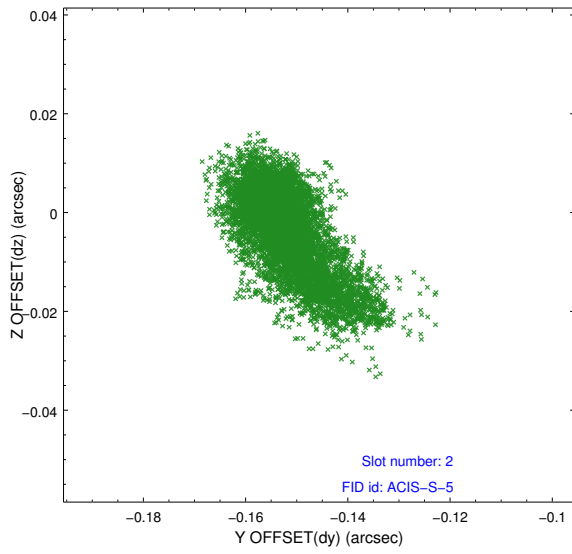
2.5.1 Slot 0



2.5.2 Slot 1

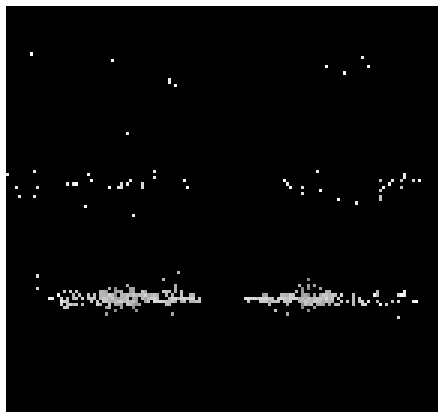


2.5.3 Slot 2

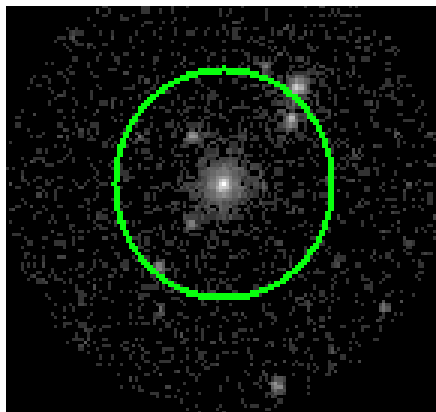


3 Gratings

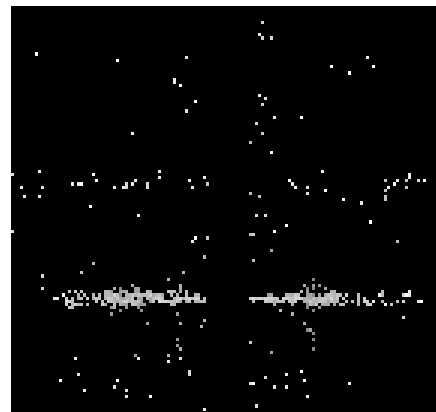
3.1 HEG Arm



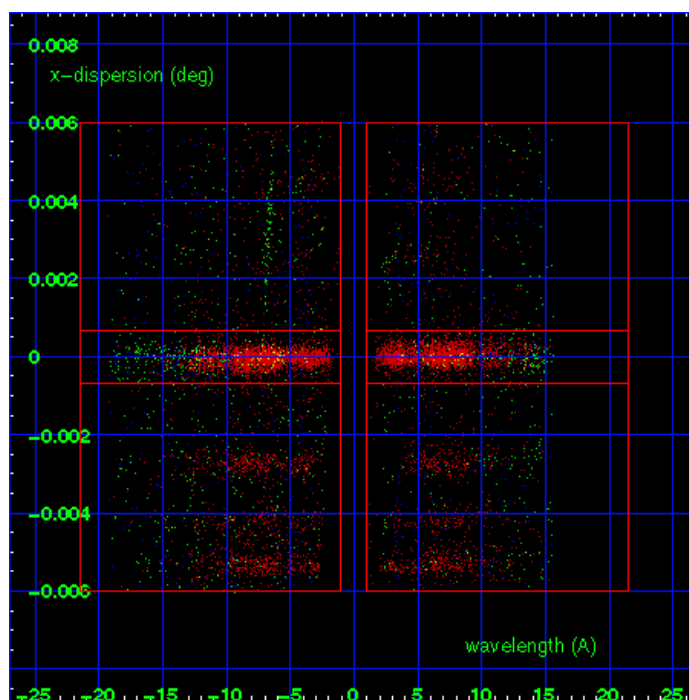
HEG Order Sort 123



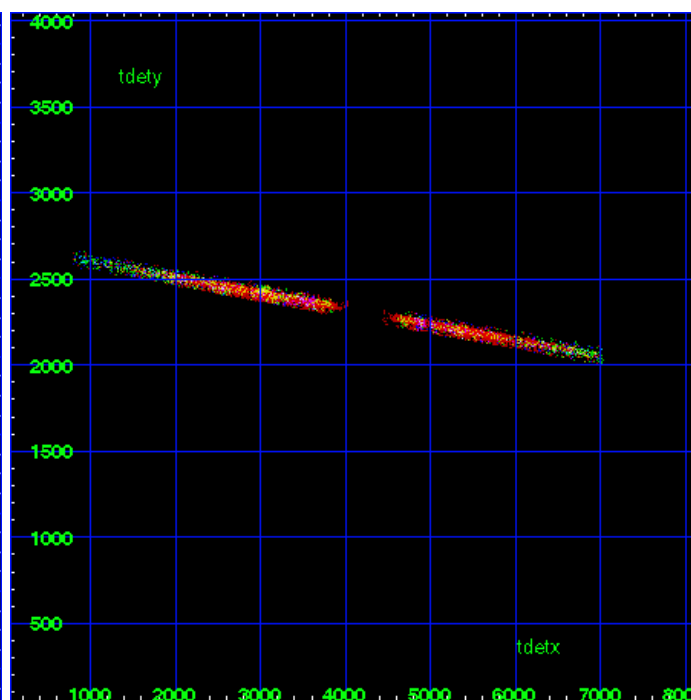
HEG Zero Order



HEG Order Sort ALL

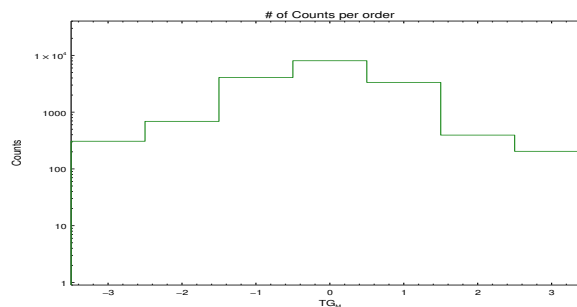


Spot Image HEG

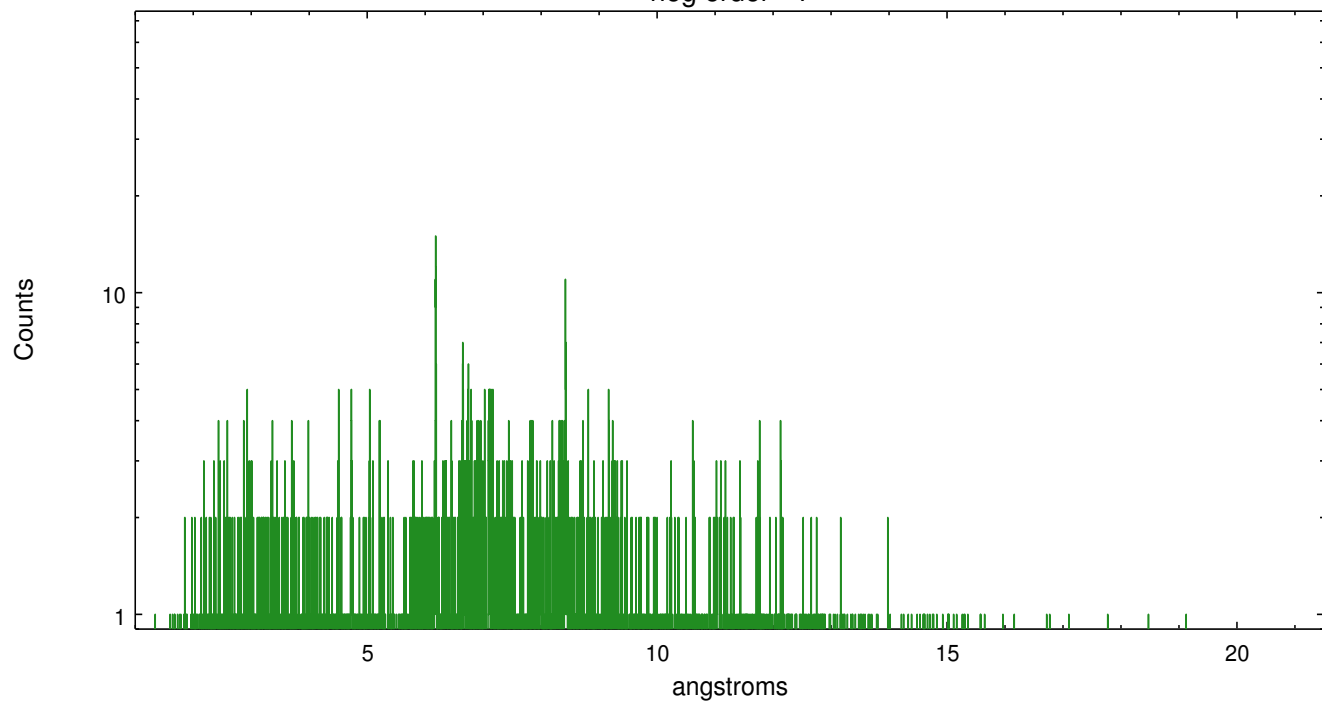


Full Detector HEG

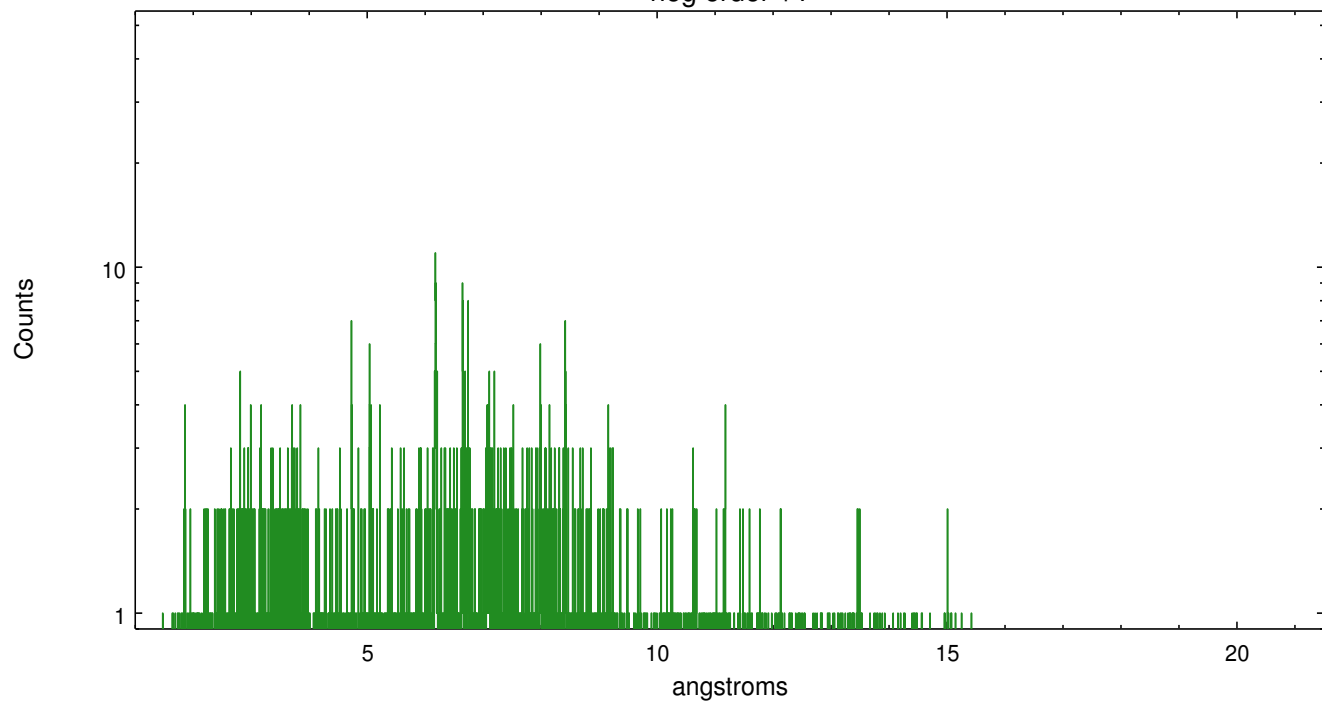
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	307	688	4078	8052	3343	394	204



heg order -1



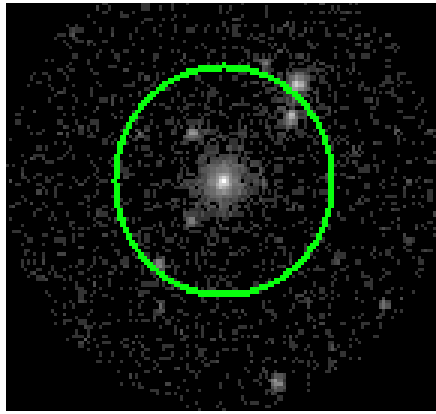
heg order +1



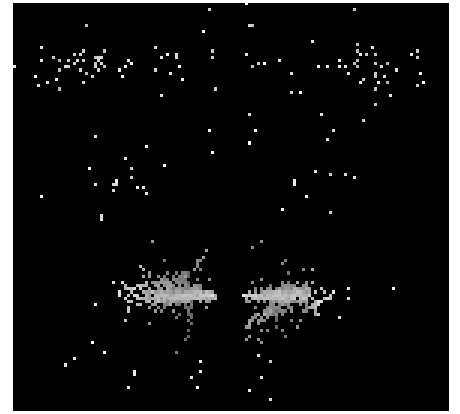
3.2 MEG Arm



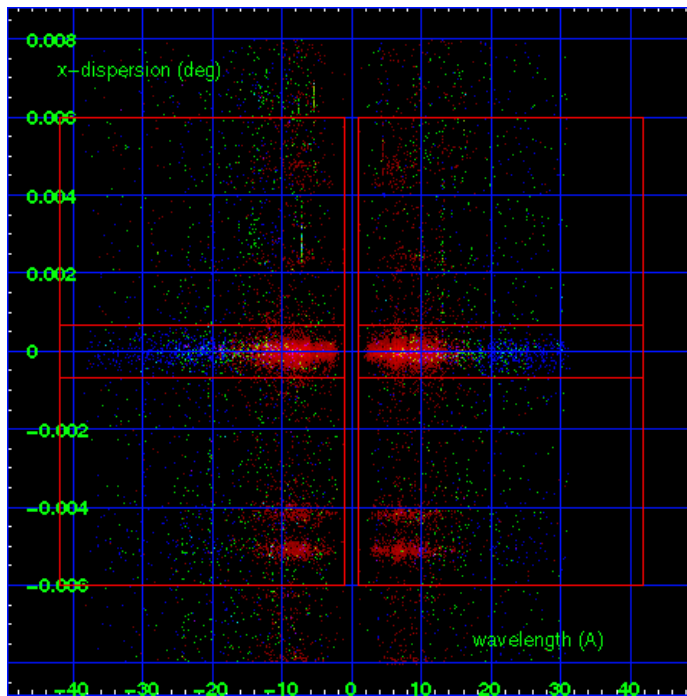
MEG Order Sort 123



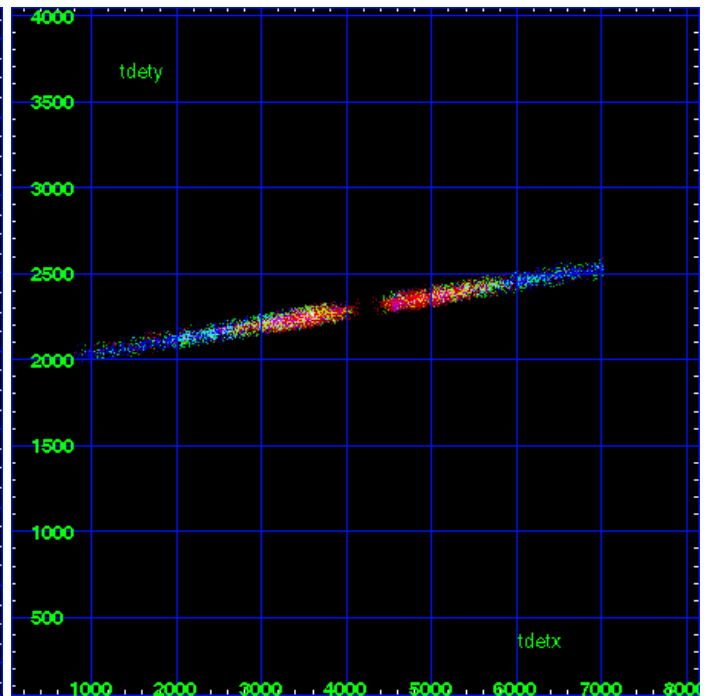
MEG Zero Order



MEG Order Sort ALL

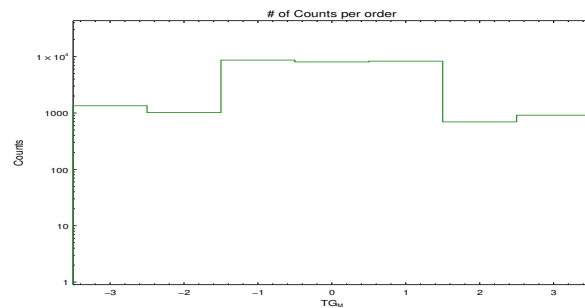


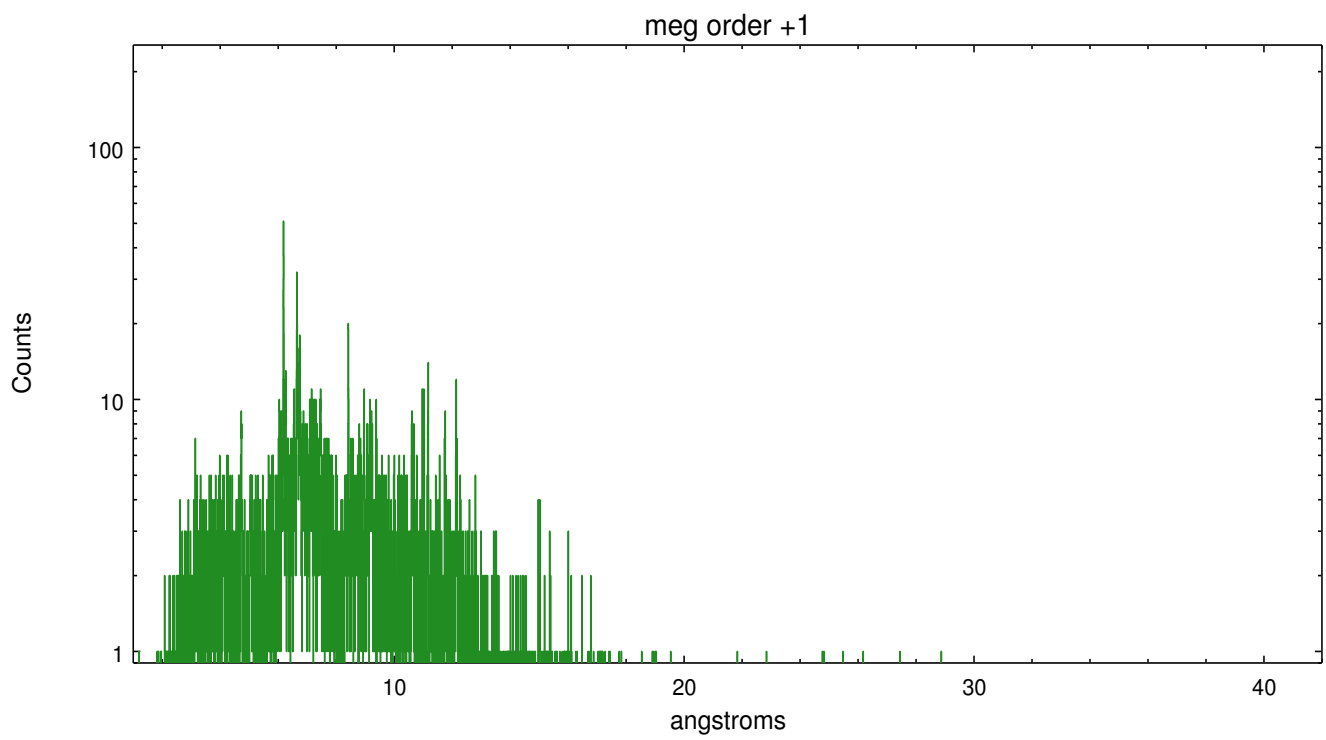
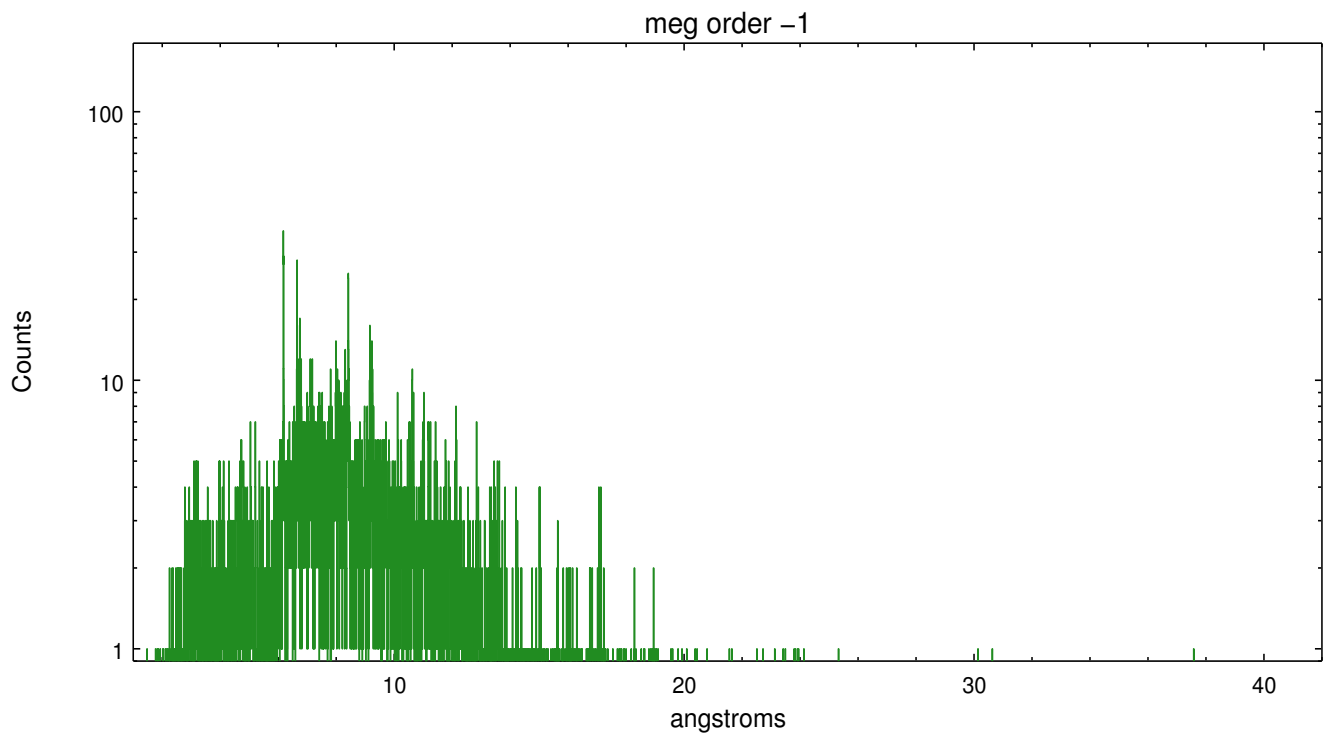
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1344	1020	8686	8052	8315	695	915





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.9487999

A.2 Comments

Spectral extraction is centered on theta 1 Ori C. This source was found

automatically by the software tool tgdetect. No manual intervention was needed. Warning: Multiple sources in the field may cause contamination of the primary extraction or background at some wavelengths.