

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7410 - L2 Version 2
Chandra X-Ray Center

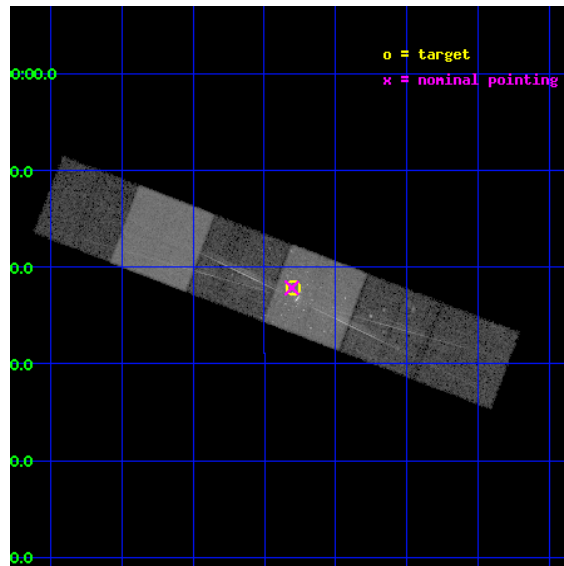
L2 Processing Date : Apr 14 2012

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1 Front

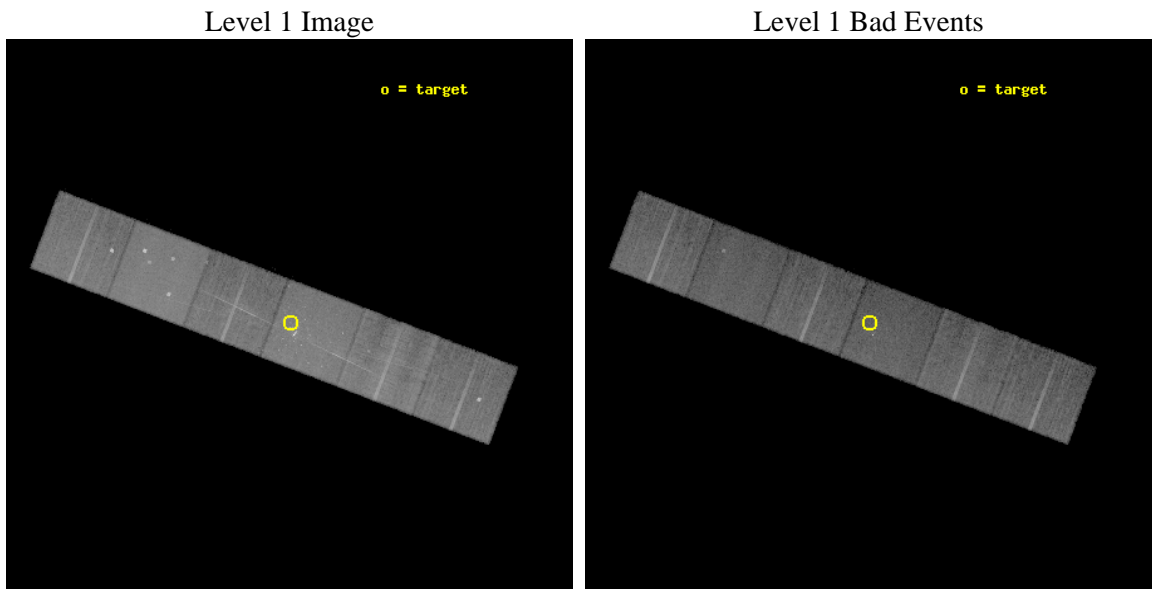
seq_num	200423	Sequence number
obs_id	7410	Observation id
title	High Resolution Studies of Pre-Main Sequence Stars in Orion	Propos
observer	Prof Claude Canizares	Principal investigator
object	Orion Trapezium Cluster	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.825	Observer's specified target RA [deg]
dec_targ	-5.368083	Observer's specified target Dec [deg]
ra_nom	83.826736130465	Nominal RA [deg]
dec_nom	-5.3691933416917	Nominal Dec [deg]
roll_nom	20.851335282442	Nominal Roll [deg]
revision	2	Processing version of data
ontime	13234.913723588	Sum of GTIs [s]
livetime	13067.325276912	Livetime [s]
ontime4	13234.954763591	Sum of GTIs [s]
ontime5	13234.872683585	Sum of GTIs [s]
ontime6	13234.831643581	Sum of GTIs [s]
ontime7	13234.913723588	Sum of GTIs [s]
ontime8	13231.549593449	Sum of GTIs [s]
ontime9	13234.749563575	Sum of GTIs [s]
l2events	277396	Number of level 2 events



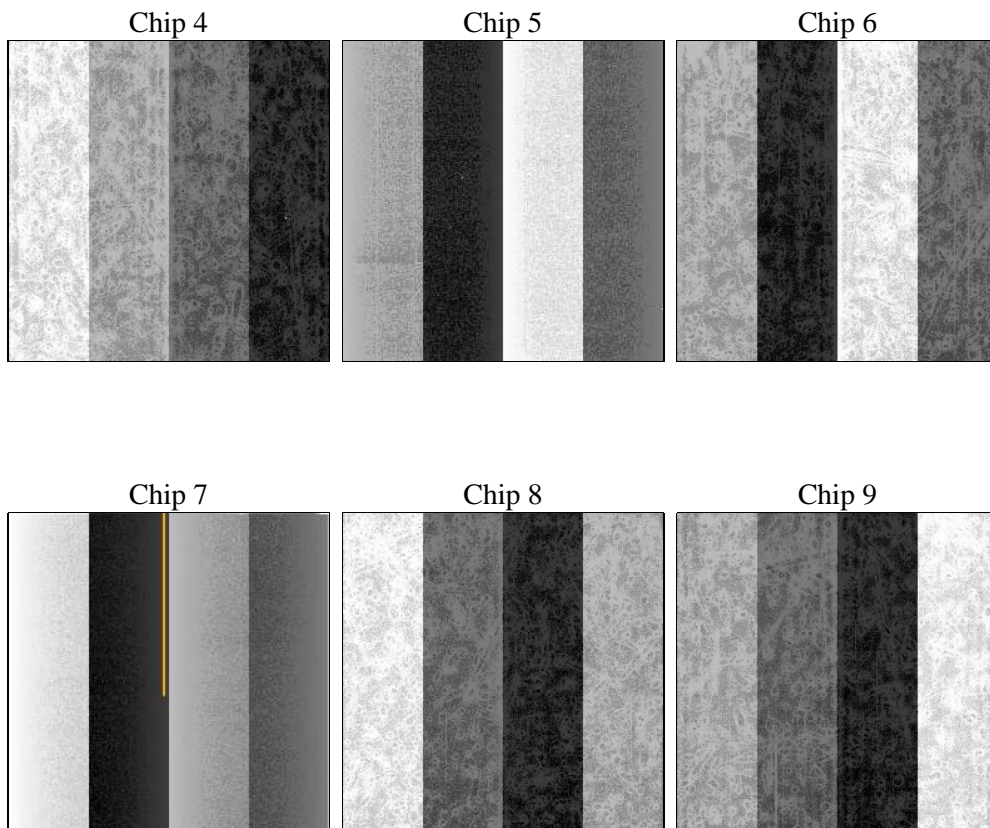
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	13234.913723588	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	13234.954763591	Sum of GTIs [s]
date	2012-04-14T17:30:48	Date and time of file creation	ontime5	13234.872683585	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	13234.831643581	Sum of GTIs [s]
			ontime7	13234.913723588	Sum of GTIs [s]
			ontime8	13231.549593449	Sum of GTIs [s]
			ontime9	13234.749563575	Sum of GTIs [s]
			l1events	1046652	Number of level 1 events

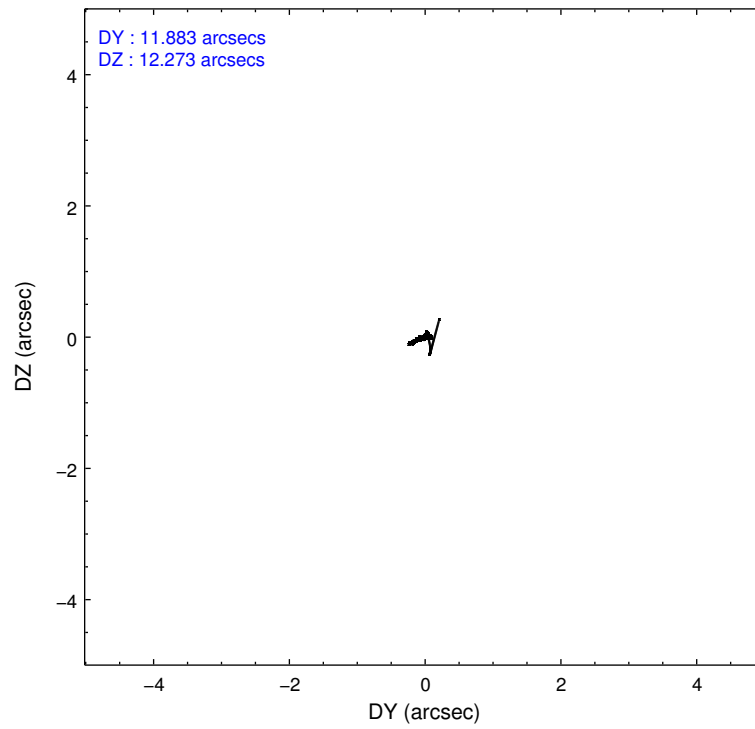
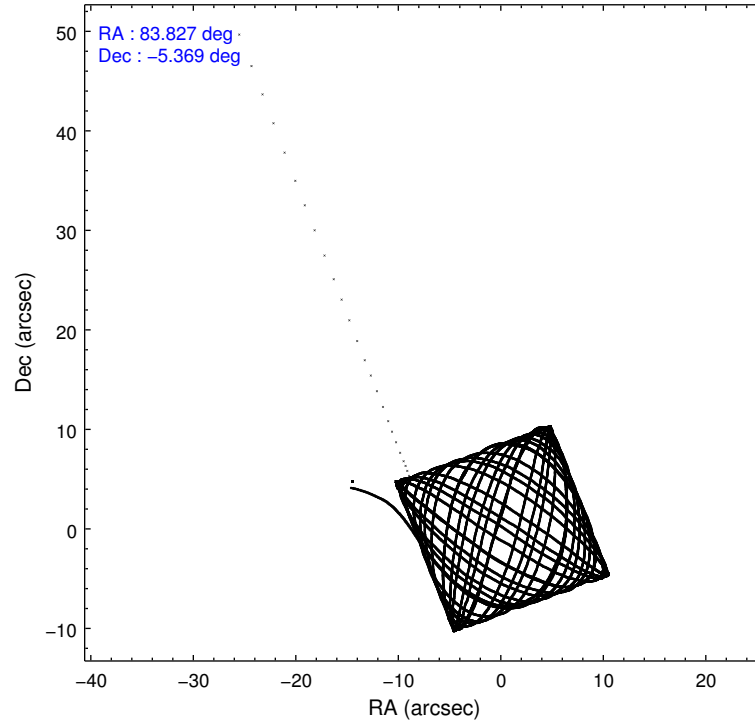
2.1.4 Events

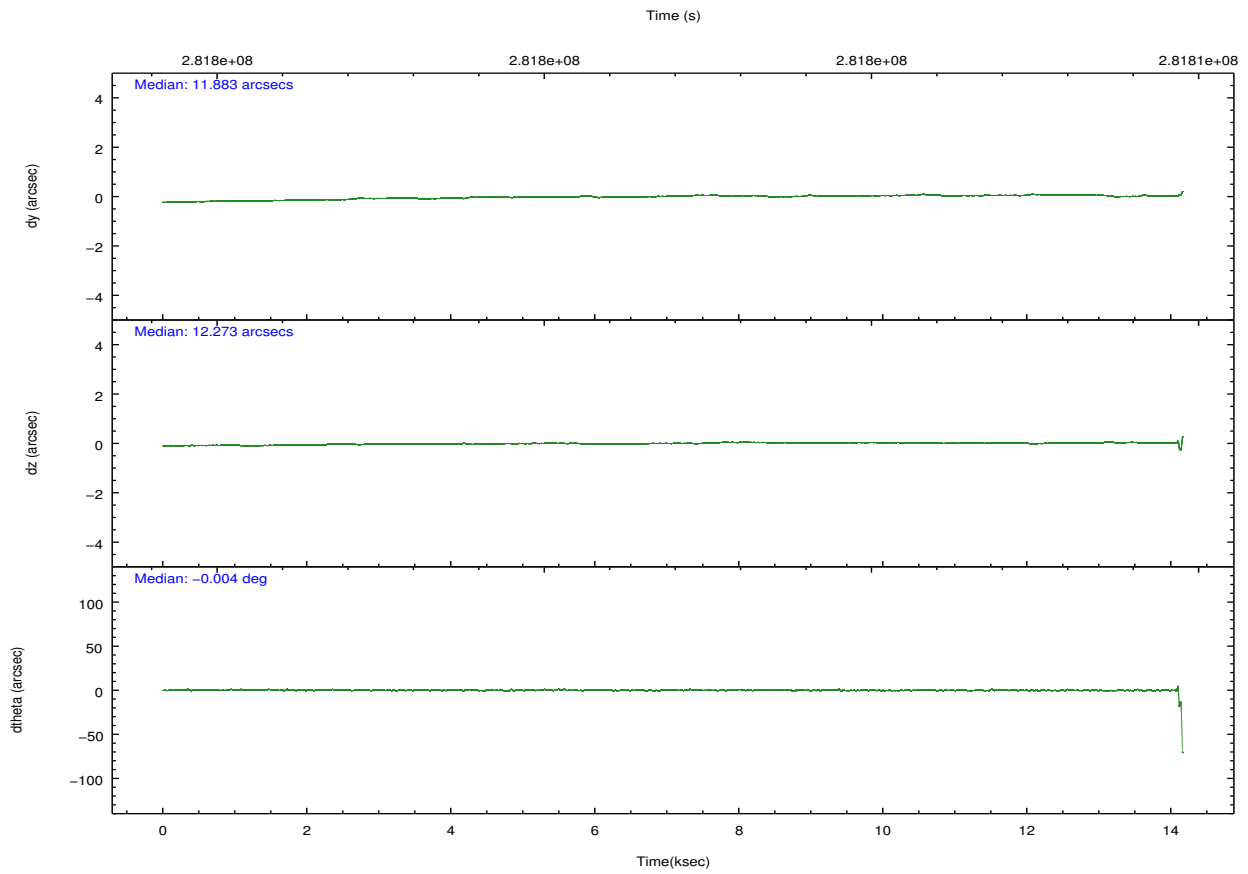
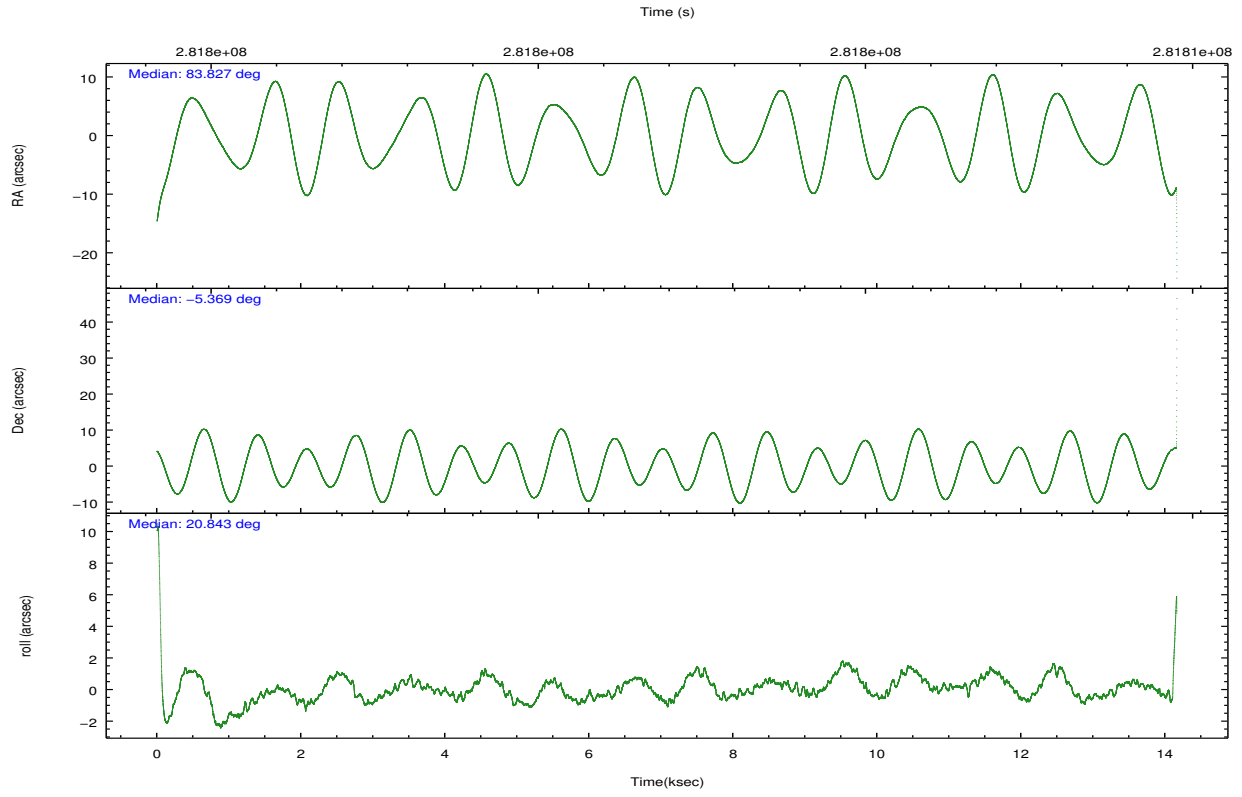
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	161593	206794	148425	202707	184413	142720	grade 0 events	13376	12704	16862	12594	22133	10079
rejected events	137944	104486	118931	101674	131091	119482		8%	6%	11%	6%	12%	7%
rejected %	85%	50%	80%	50%	71%	83%	grade 1 events	208	295	148	286	206	120
								0%	0%	0%	0%	0%	0%
							grade 2 events	3898	31690	5018	21953	10257	6415
								2%	15%	3%	10%	5%	4%
							grade 3 events	1822	4465	2025	9268	5156	1717
								1%	2%	1%	4%	2%	1%
							grade 4 events	1760	4179	1921	9198	4795	1684
								1%	2%	1%	4%	2%	1%
							grade 5 events	5539	14012	5846	16820	7673	6219
								3%	6%	3%	8%	4%	4%
							grade 6 events	2830	49498	3722	48224	11071	3386
								1%	23%	2%	23%	6%	2%
							grade 7 events	132160	89951	112883	84364	123122	113100
								81%	43%	76%	41%	66%	79%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	83.809780	83.82673613046461	Subarray requested	NONE	NONE
[deg] Pointing Dec	-5.390553	-5.369193341691744	Alternating exposures requested	N	N
[deg] Pointing Roll	20.693106	20.85133528244168	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	281795736.184000	281794297.22585			
Observation start date	2006-12-06T12:34:31	2006-12-06T12:11:37			
[s] Observation end time (MET)	281818736.184000	281809060.81405			
Observation end date	2006-12-06T18:57:51	2006-12-06T16:17:40			
Read mode	TIMED	TIMED			

2.3 Aspect



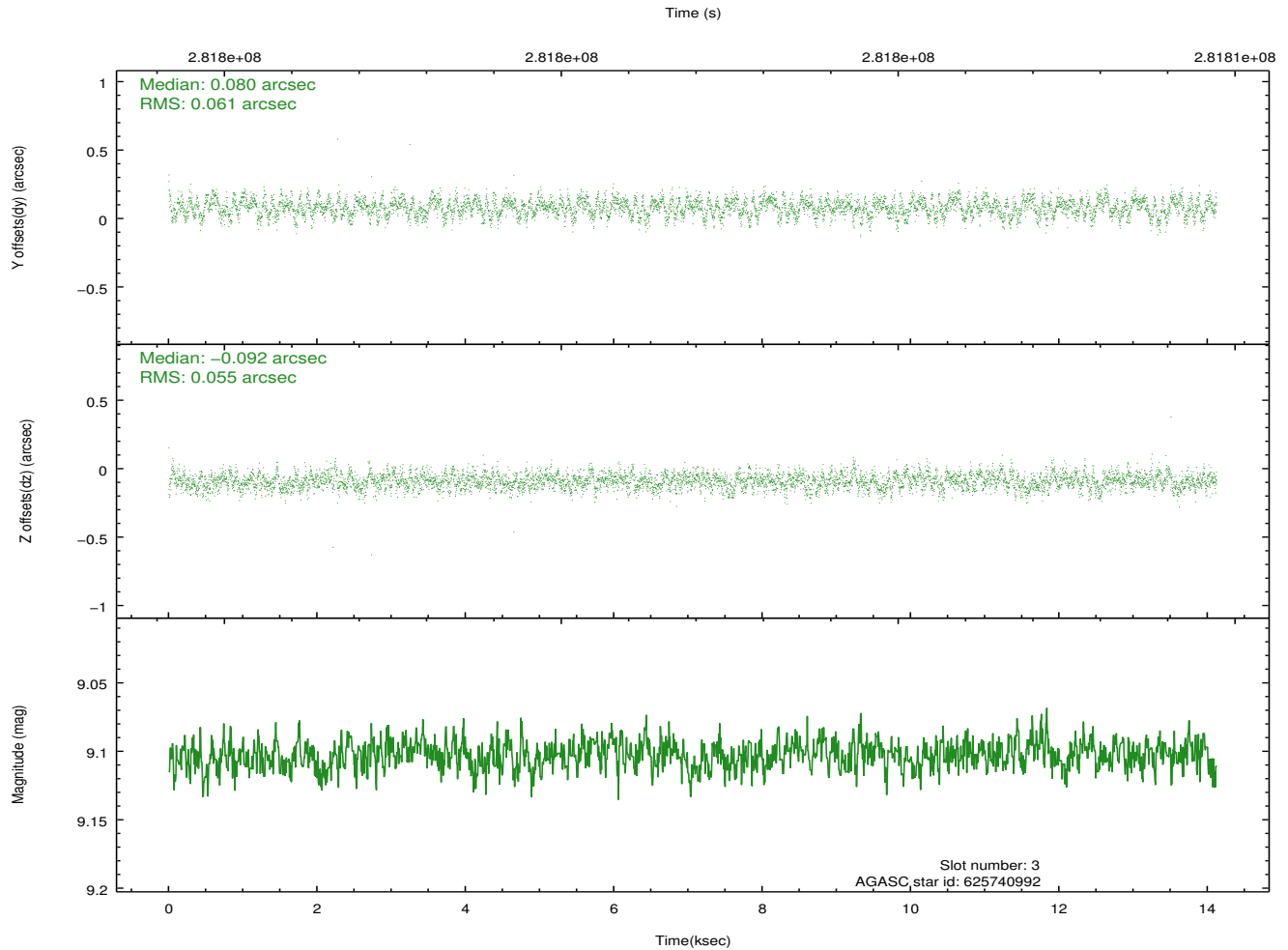
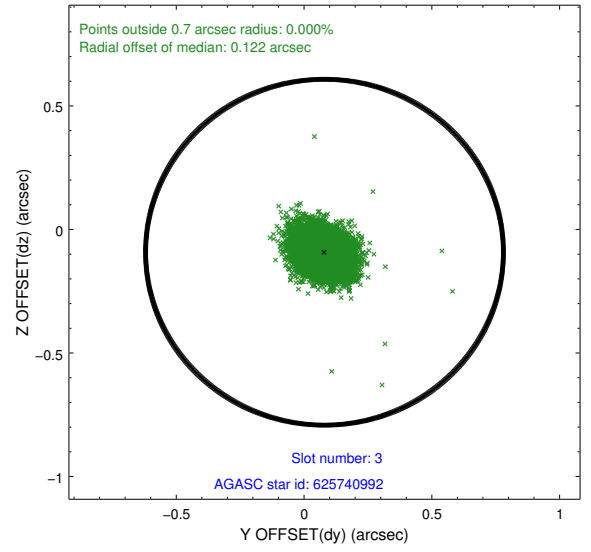
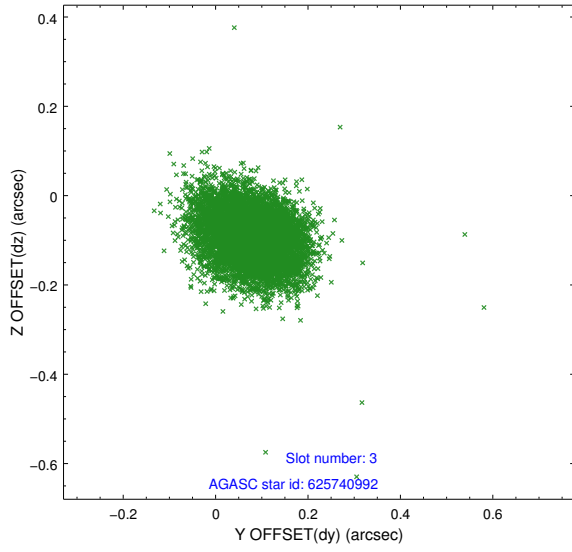


Slot Statistics

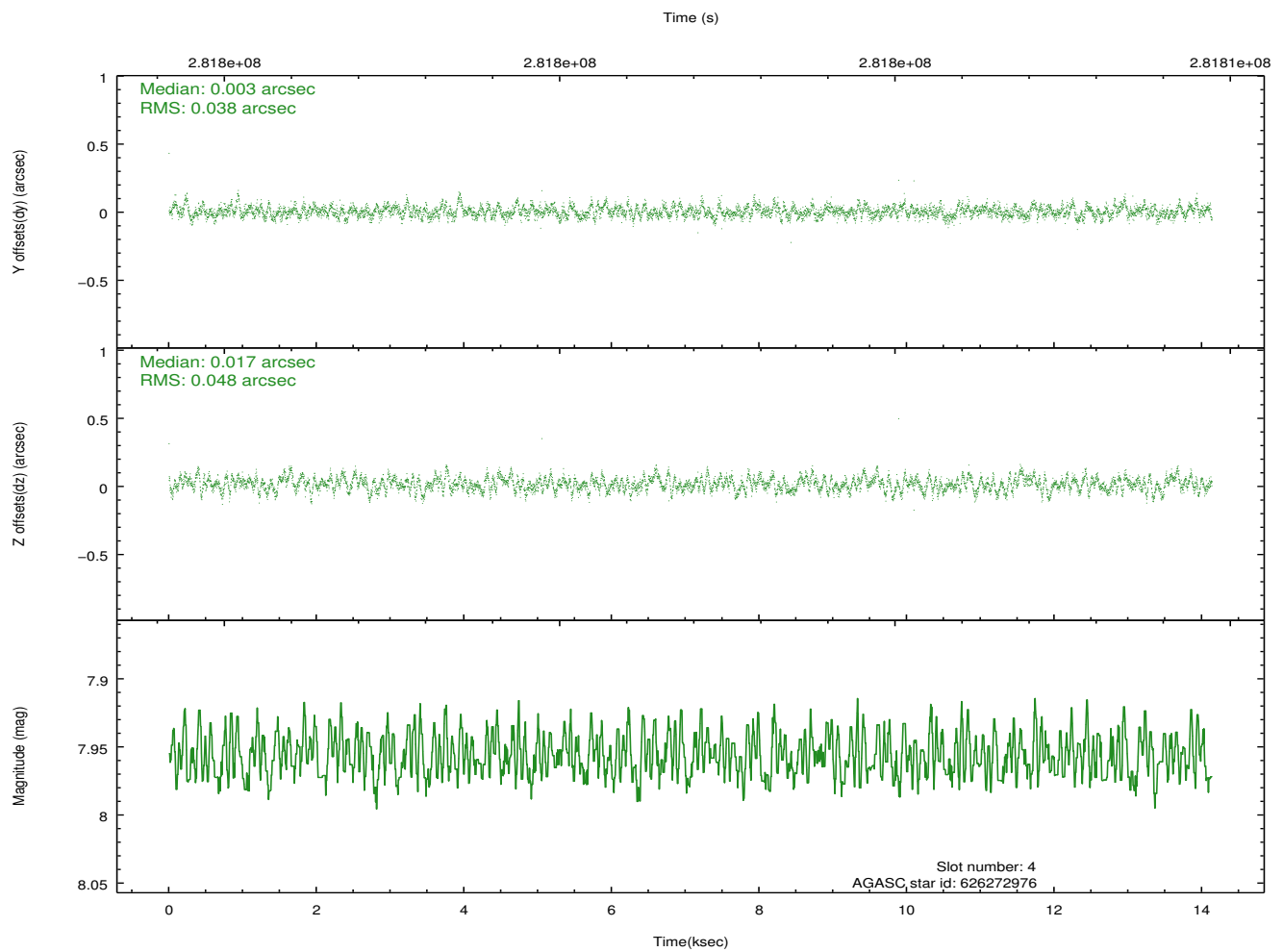
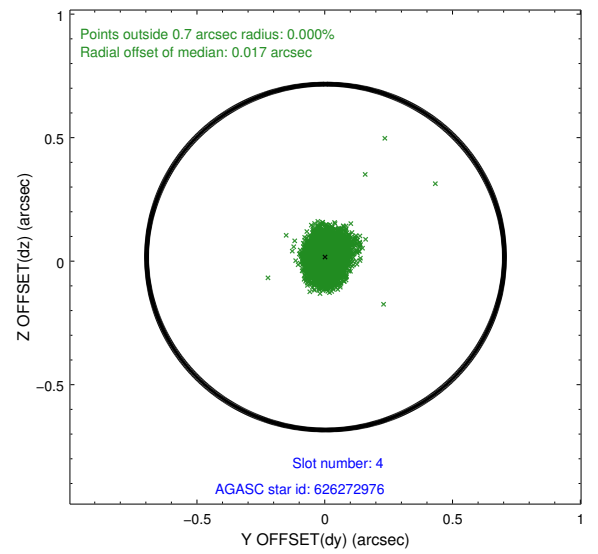
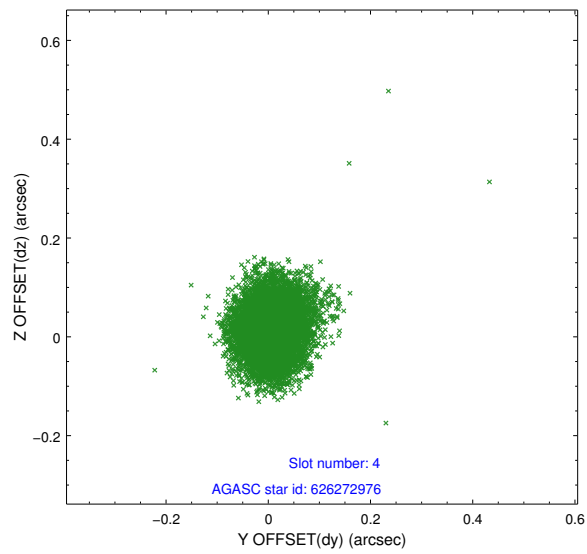
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	3443	0.059	-0.097	0.008	0.013	0.000000	0.000000	931.31	-1729.21
1	FID	ACIS-S-4	7.21	3442	0.091	0.044	0.006	0.011	0.000000	0.000000	2148.97	174.73
2	FID	ACIS-S-5	7.24	3452	-0.177	0.066	0.007	0.014	0.000000	0.000000	-1817.34	168.78
3	GUIDE	625740992	9.10	6881	0.080	-0.092	0.087	0.139	83.193672	-4.960928	-1520.96	2226.55
4	GUIDE	626272976	7.96	6896	0.003	0.017	0.065	0.105	83.795875	-5.926912	-728.47	-1788.35
5	GUIDE	626273040	7.11	6889	0.031	-0.009	0.084	0.140	84.062610	-5.647920	520.36	-1187.02
6	GUIDE	625745144	7.84	6878	-0.075	0.020	0.067	0.104	83.888985	-4.837539	969.40	1762.17
7	GUIDE	626272880	7.66	6889	-0.044	0.065	0.070	0.108	83.815609	-6.032748	-796.65	-2169.78

2.4 Star Slots

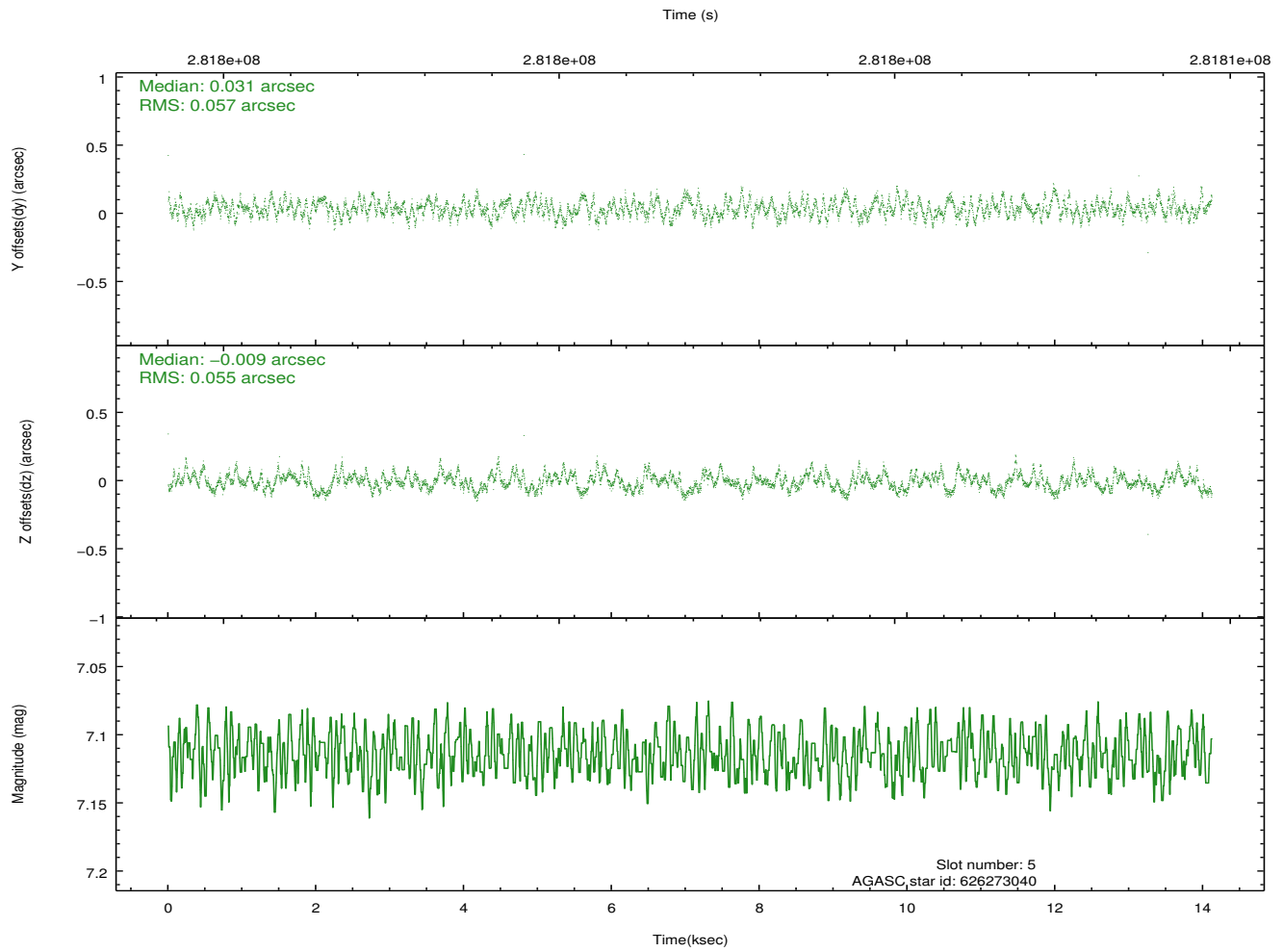
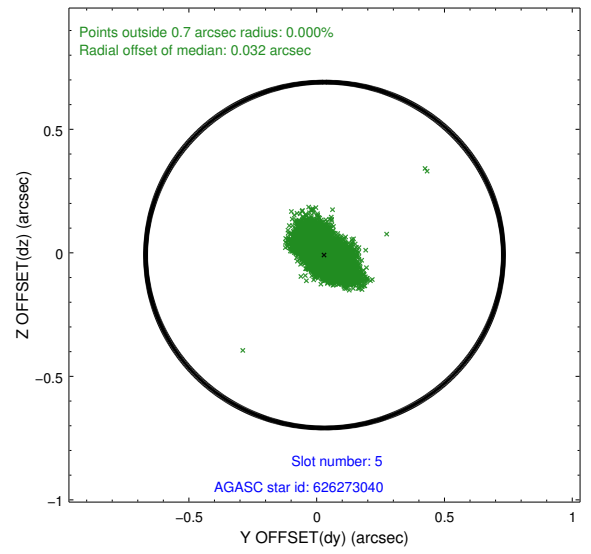
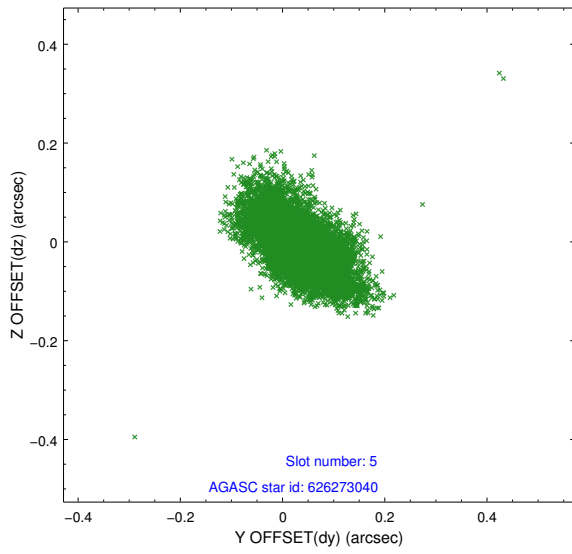
2.4.1 Slot 3



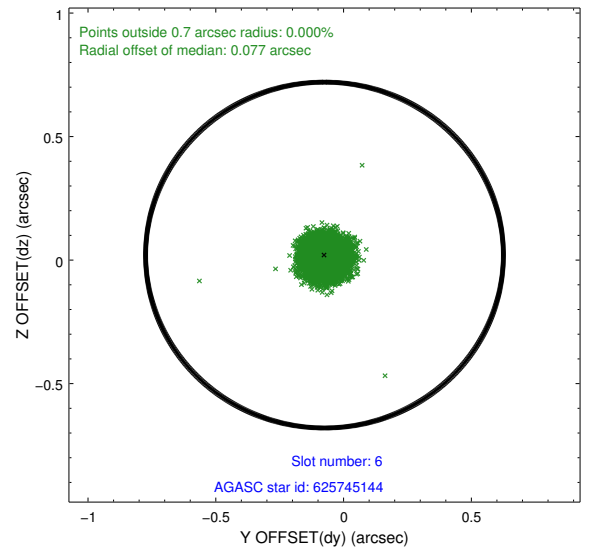
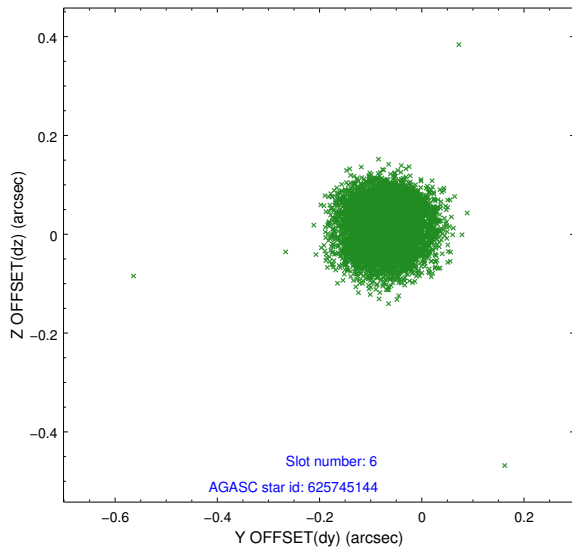
2.4.2 Slot 4



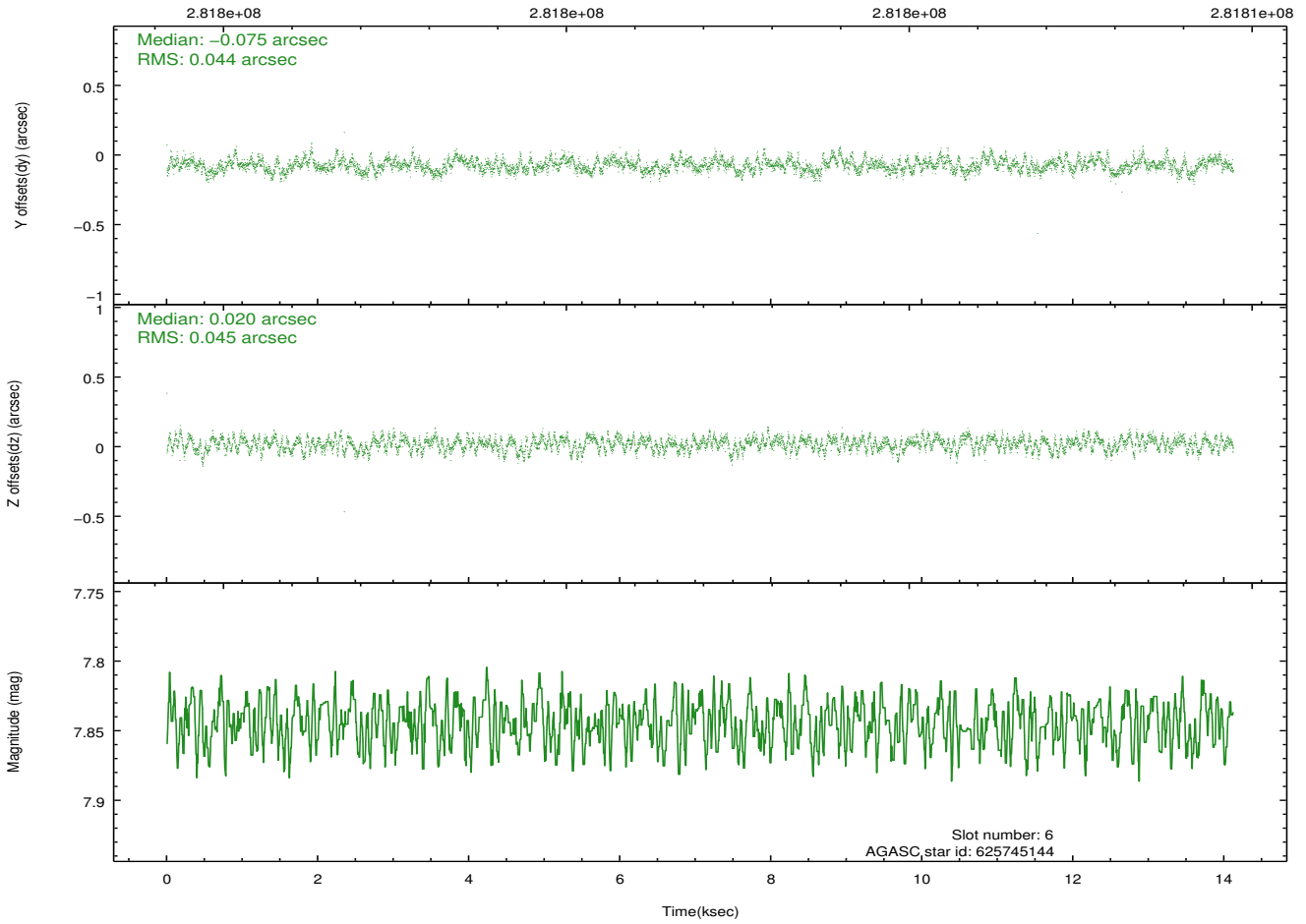
2.4.3 Slot 5



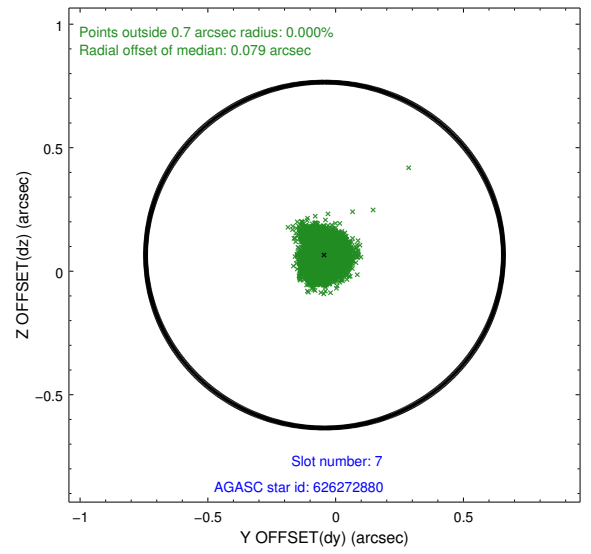
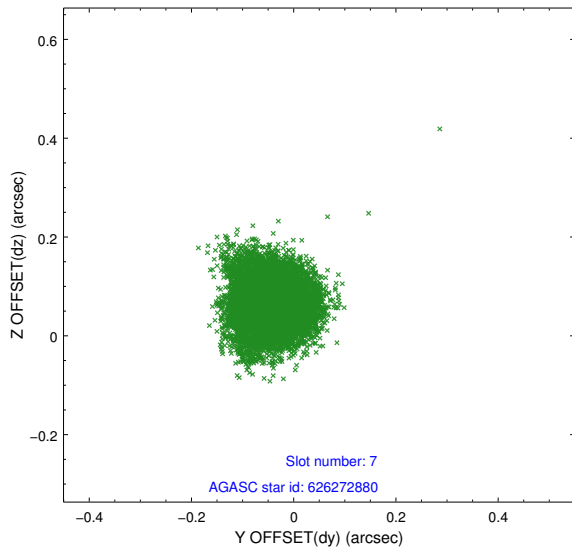
2.4.4 Slot 6



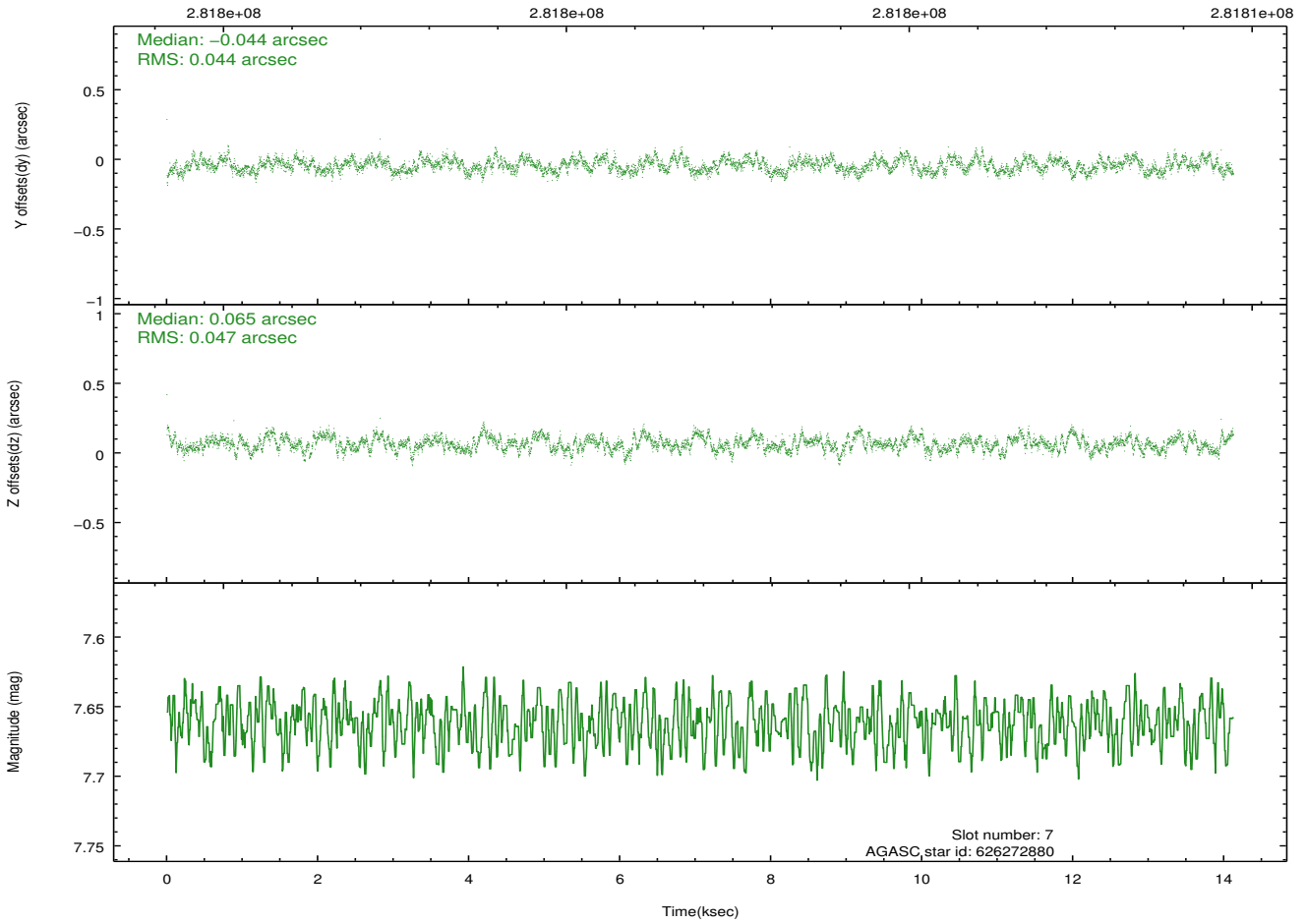
Time (s)



2.4.5 Slot 7

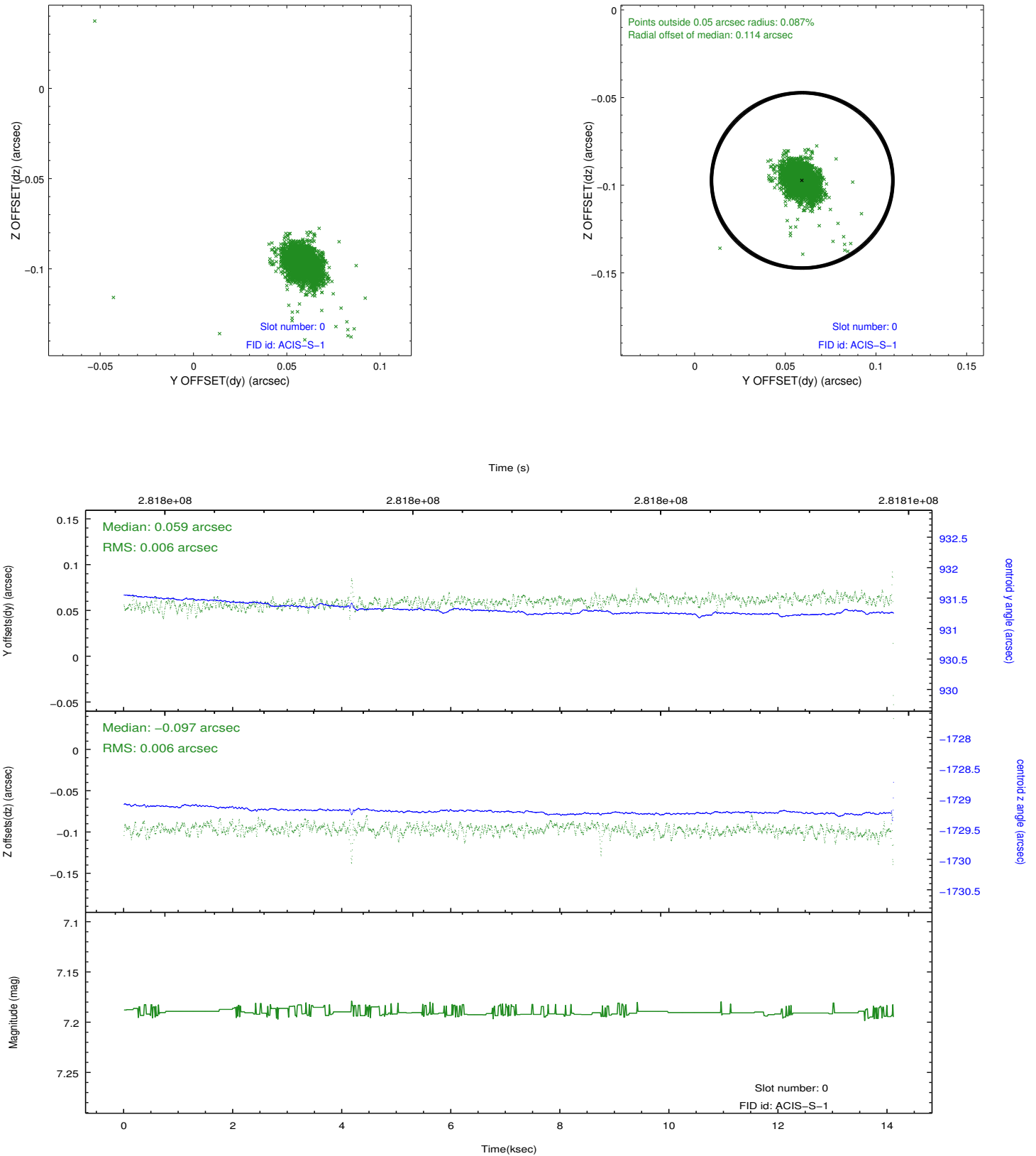


Time (s)

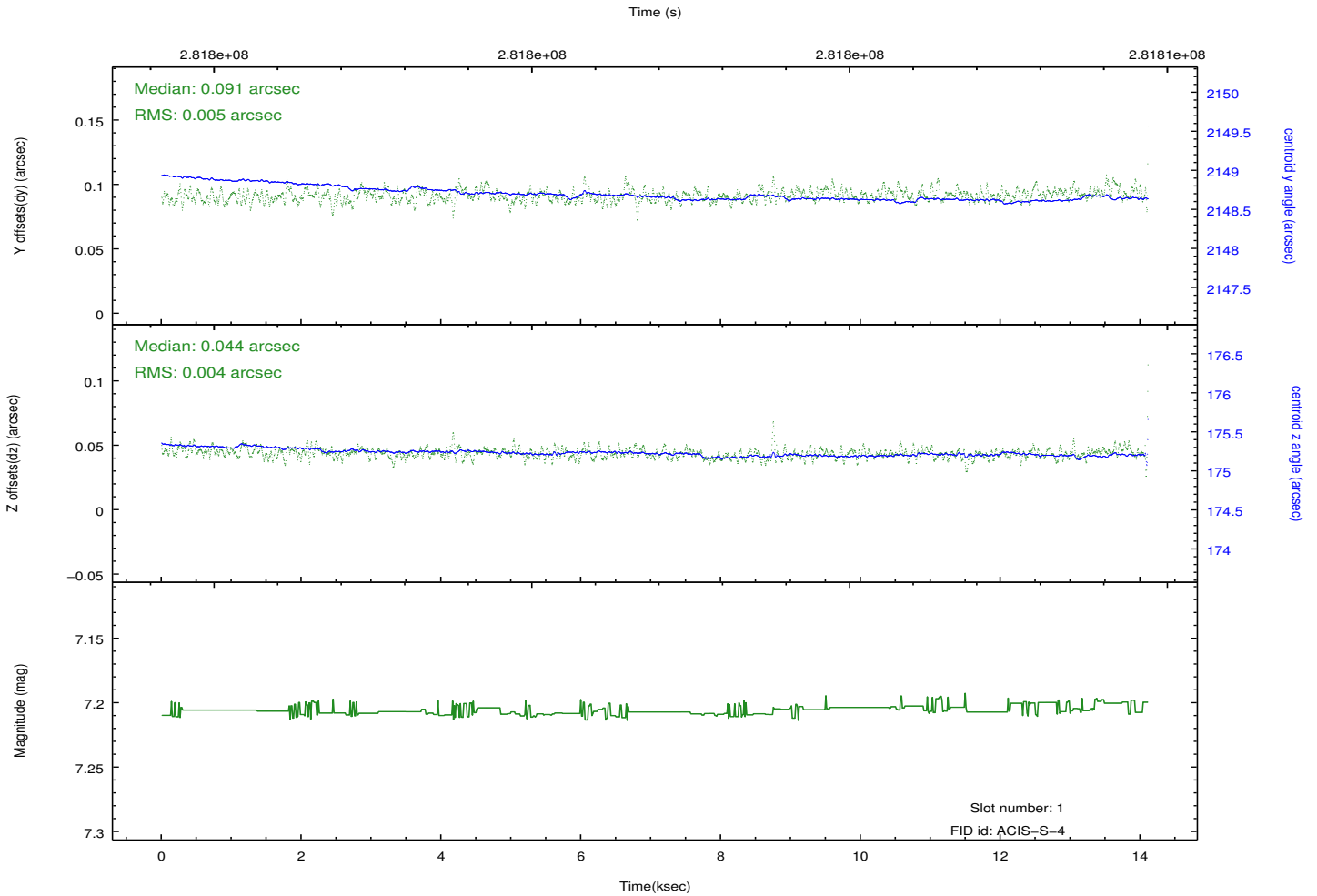
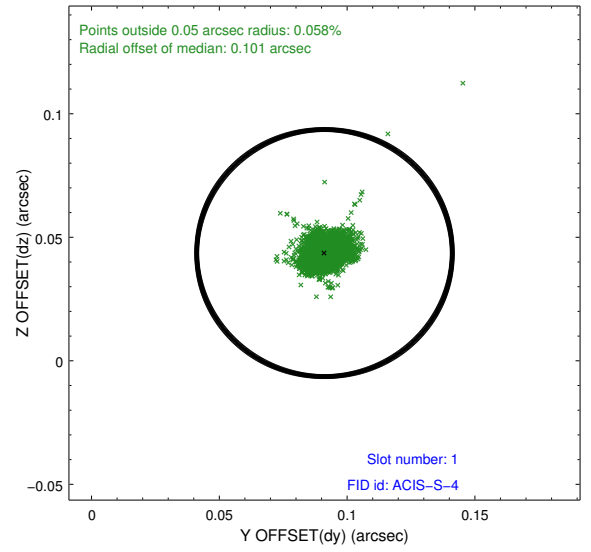
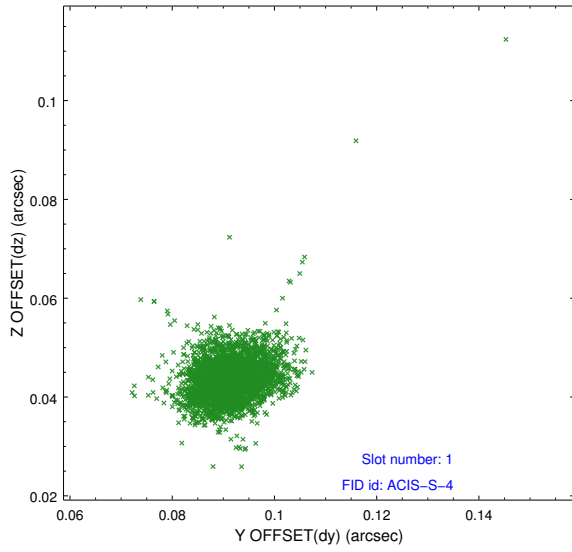


2.5 FID Slots

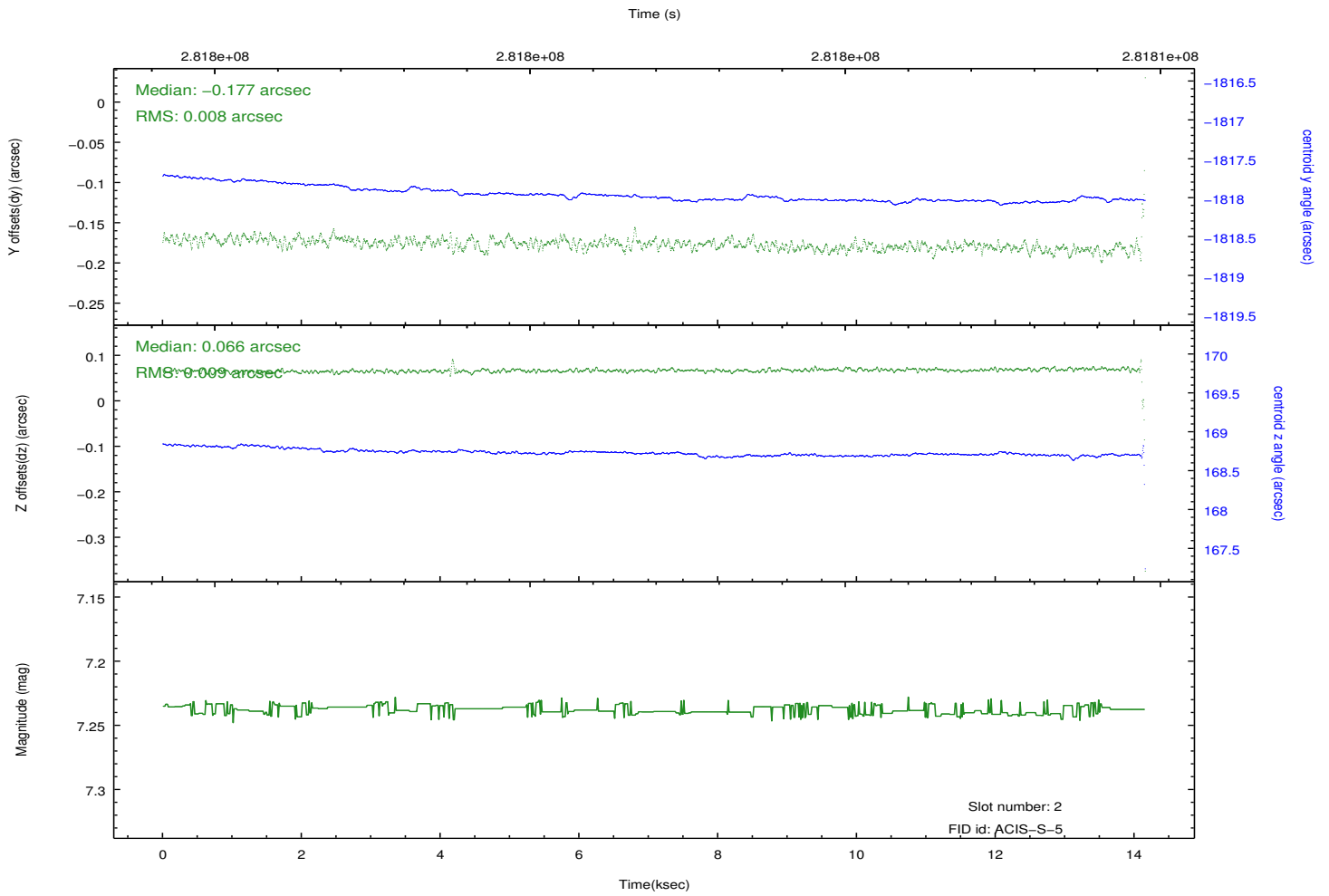
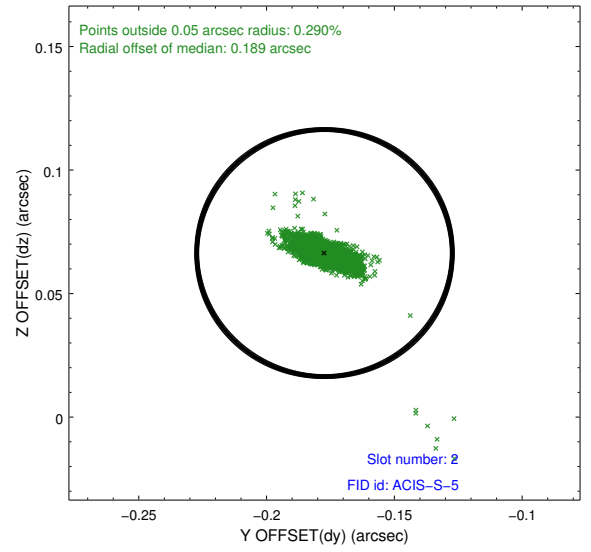
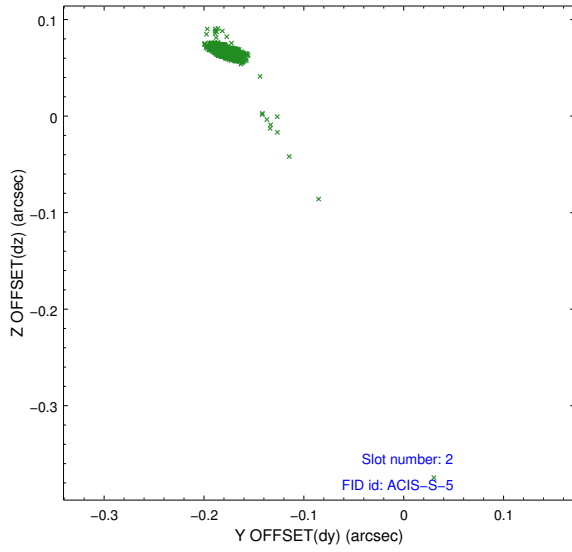
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

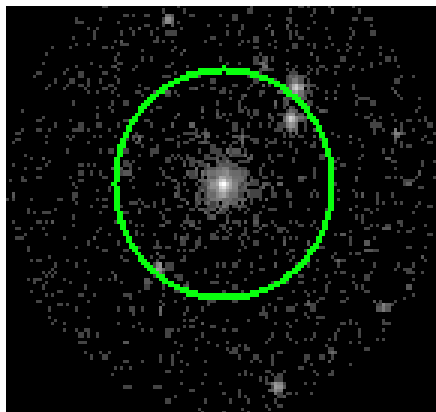


3 Gratings

3.1 HEG Arm



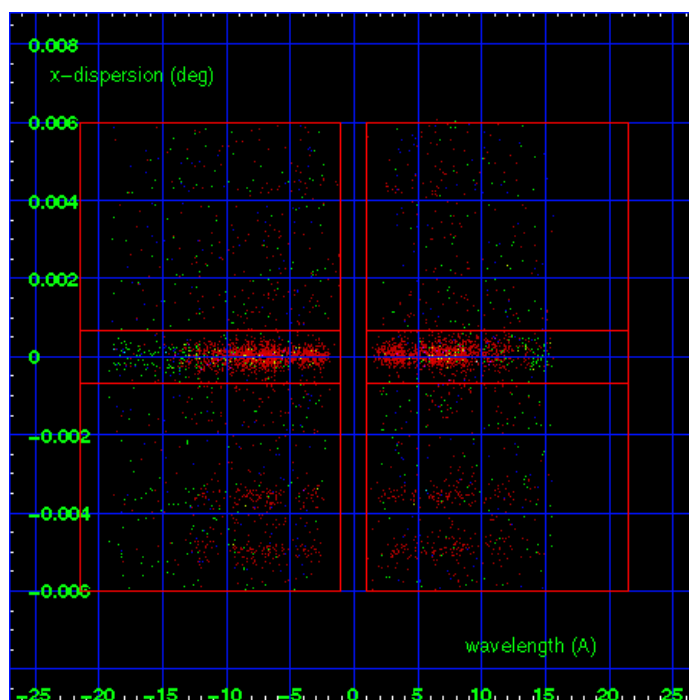
HEG Order Sort 123



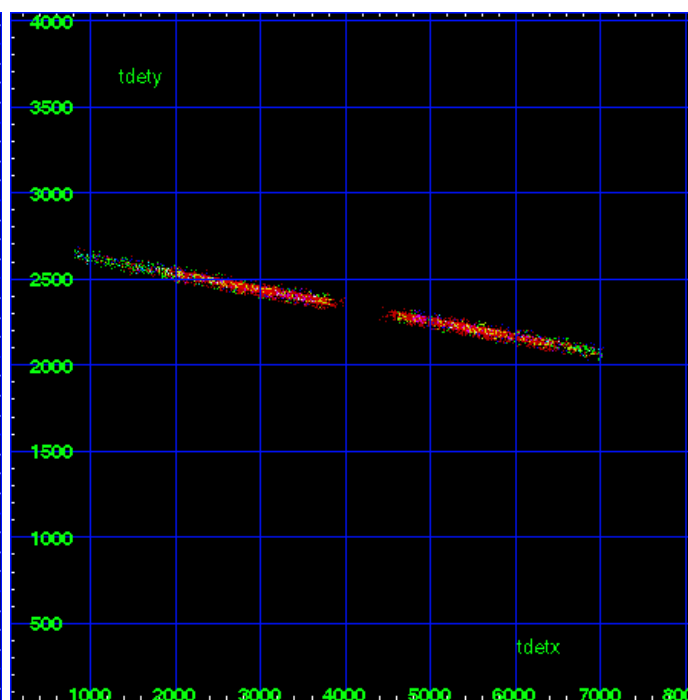
HEG Zero Order



HEG Order Sort ALL

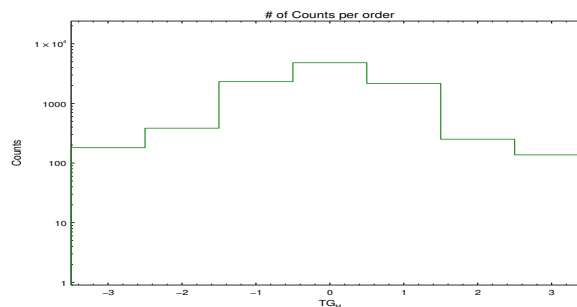


Spot Image HEG

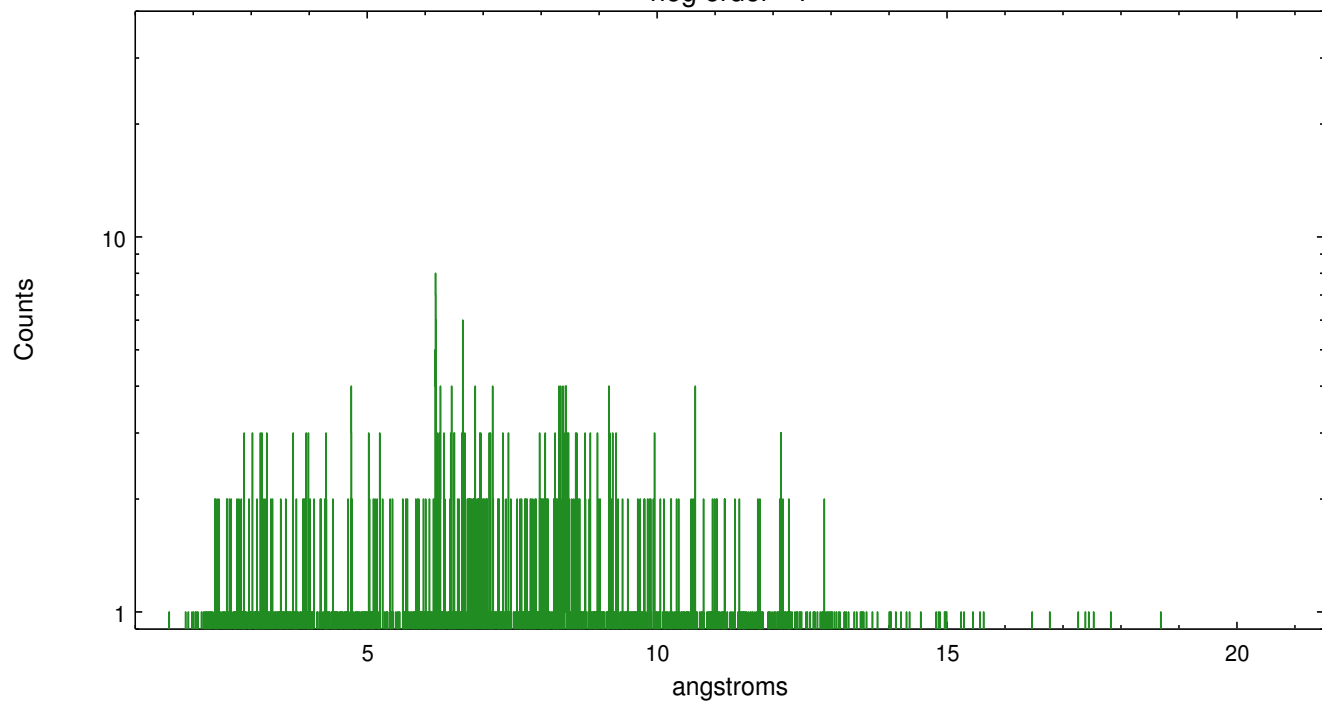


Full Detector HEG

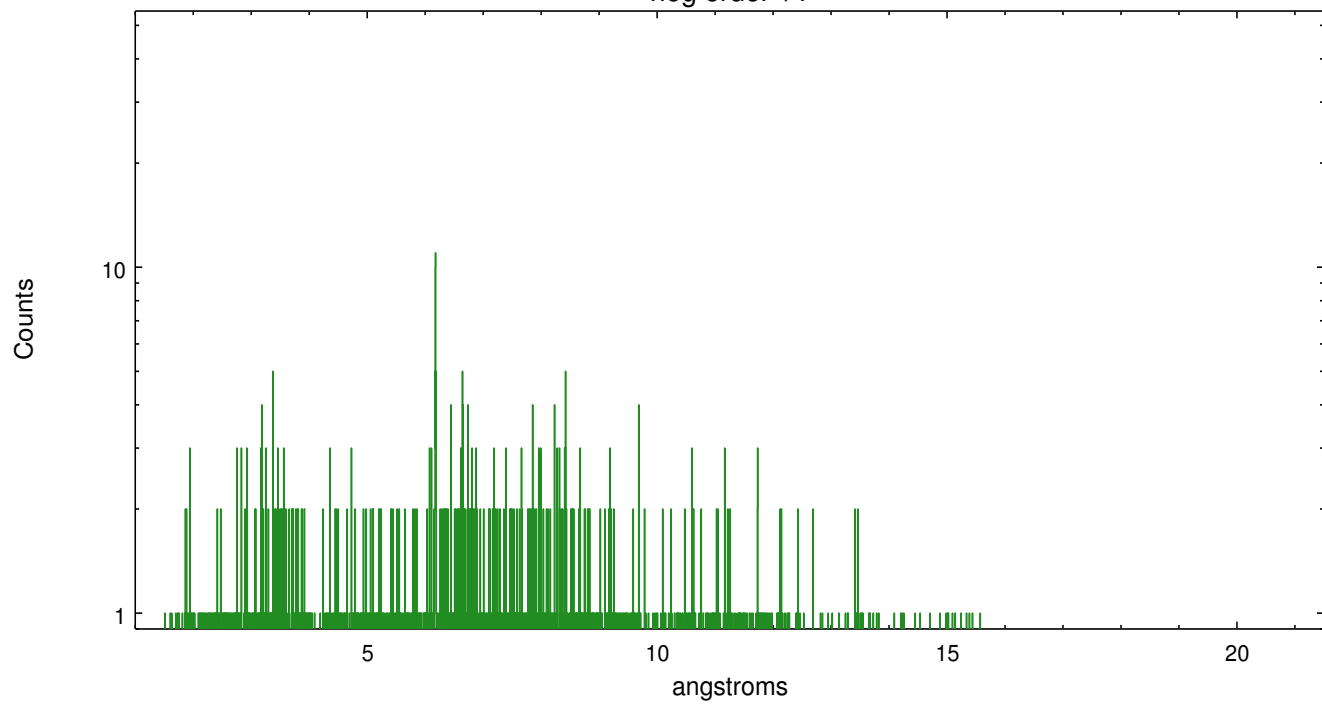
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	181	384	2316	4806	2159	251	137



heg order -1



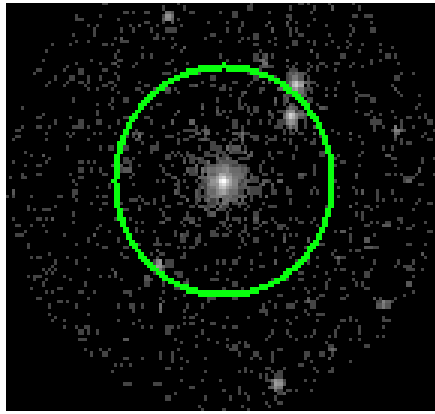
heg order +1



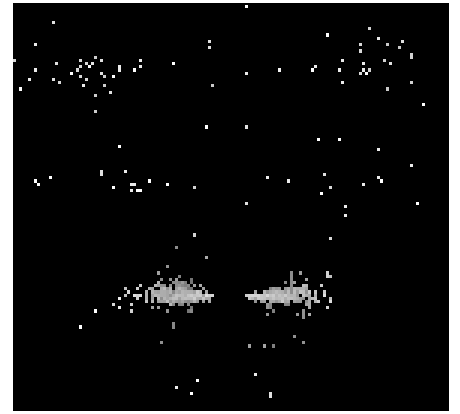
3.2 MEG Arm



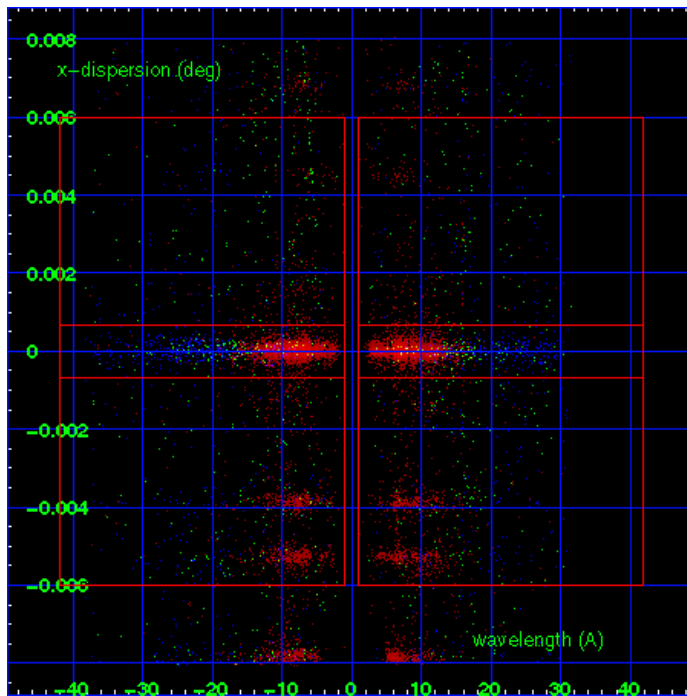
MEG Order Sort 123



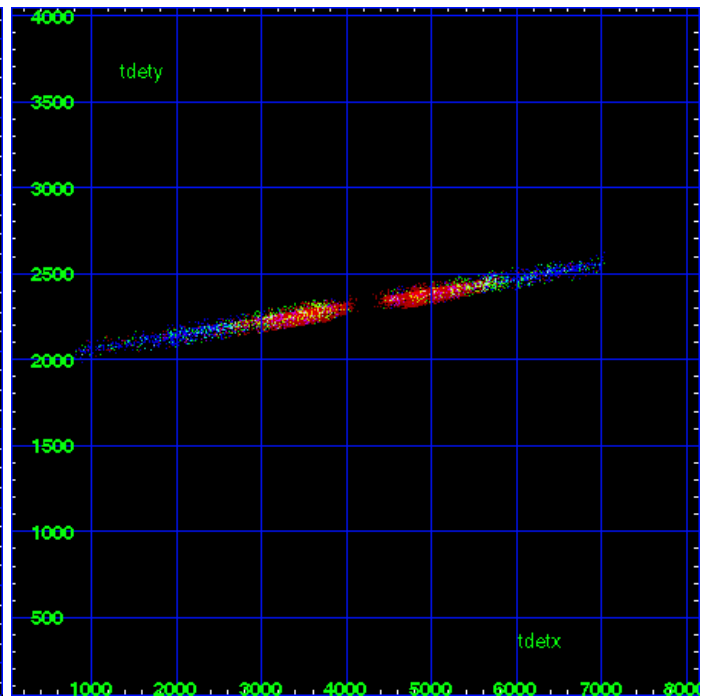
MEG Zero Order



MEG Order Sort ALL

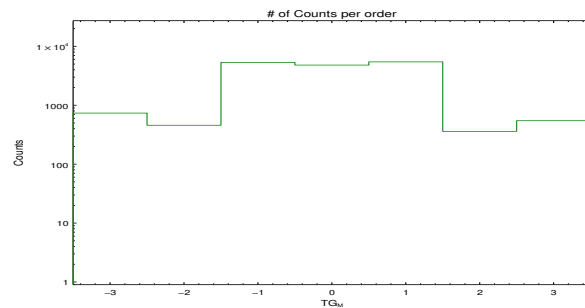


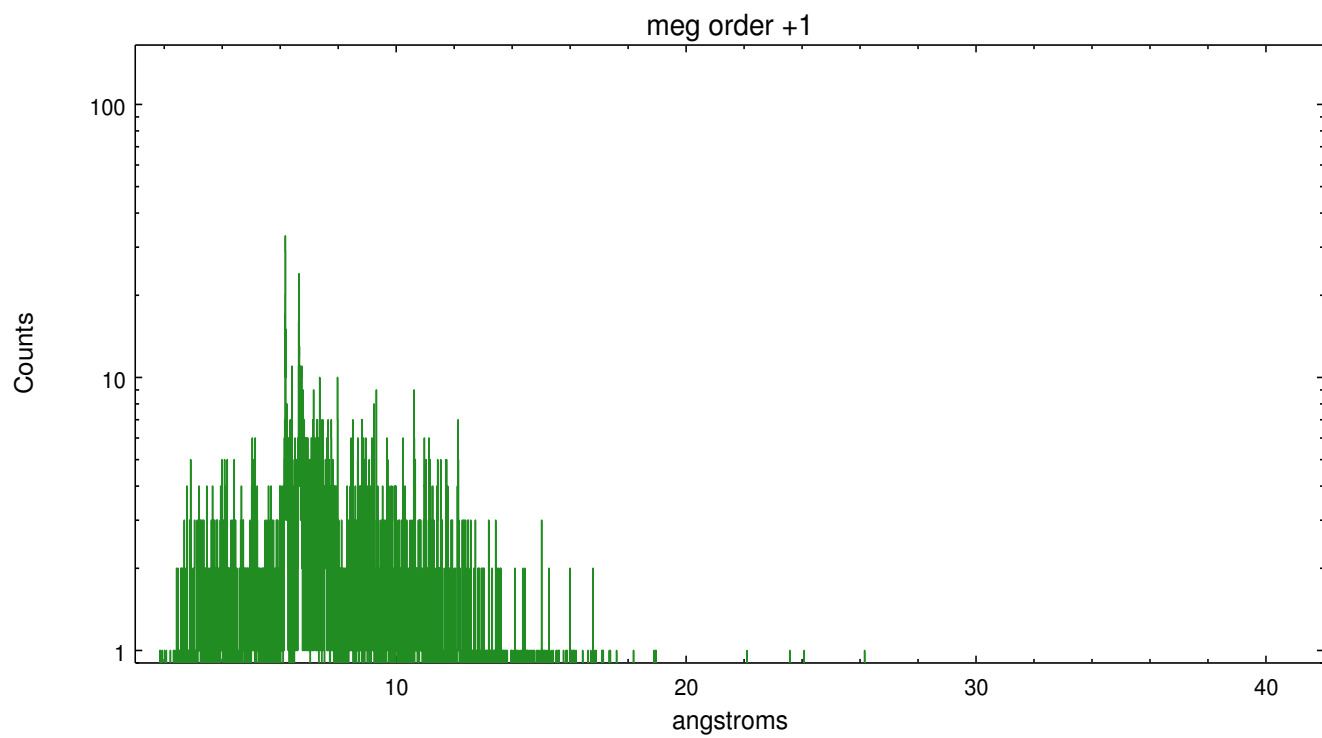
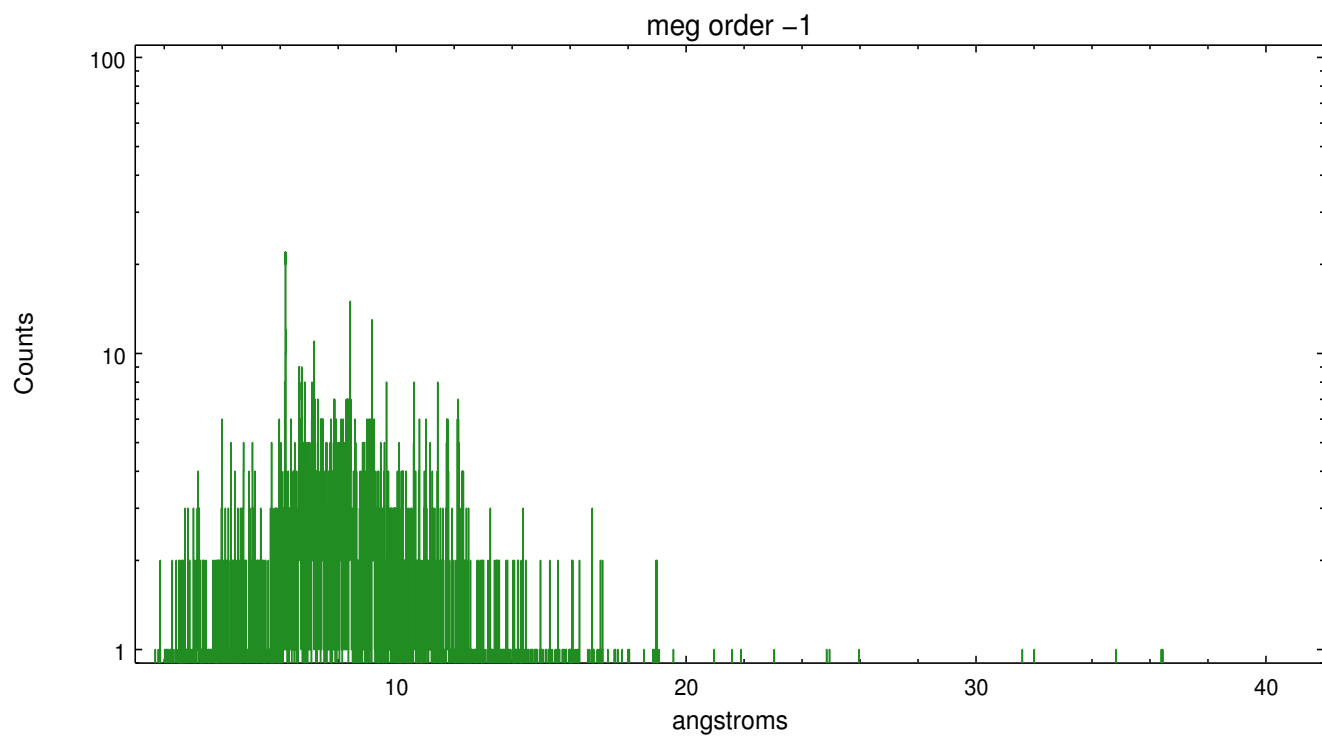
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	736	457	5334	4806	5451	360	547





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.2351999

A.2 Comments

Multiple sources in the field, some of which have dispersed spectra, may cause contamination of the primary extraction or background at some wavelengths. Extraction is of theta 1 Ori C.

===This observation was interrupted by safing of the science instruments onboard Chandra due to high solar radiation environment. The observation was interrupted at year=2006, day=340, 16:16 GMT. The data are possibly affected by high radiation at the end of the observation. The data products provided contain the dispersed spectral data for the source at ra=05:35:16.449, dec=-05:23:23.20. There are many X-ray sources in this observation, including several within about 15 arcsec of the extracted source. The user could extract the heg and meg spectra of other sources in this field using software tools such as CIAO to extract multiple spectra. Care should be taken when analyzing the data products provided in this distribution because the extracted heg and meg spectral arms for this source are intersected by dispersed spectral data from other sources. There could be contamination from these other dispersed sources.