

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7408 - L2 Version 3
Chandra X-Ray Center

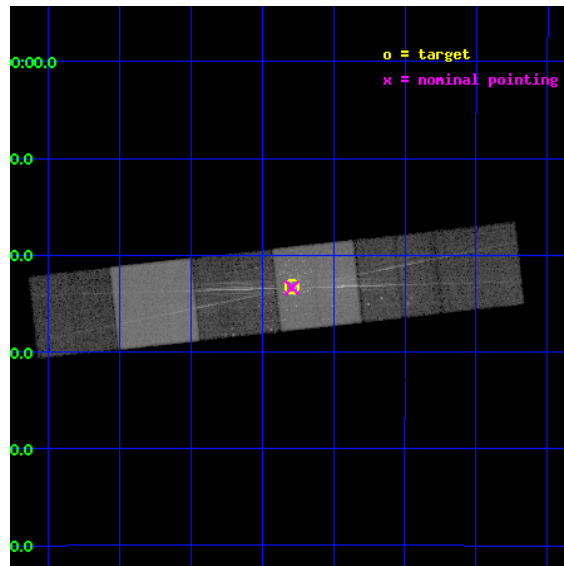
L2 Processing Date : Apr 15 2012

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1 Front

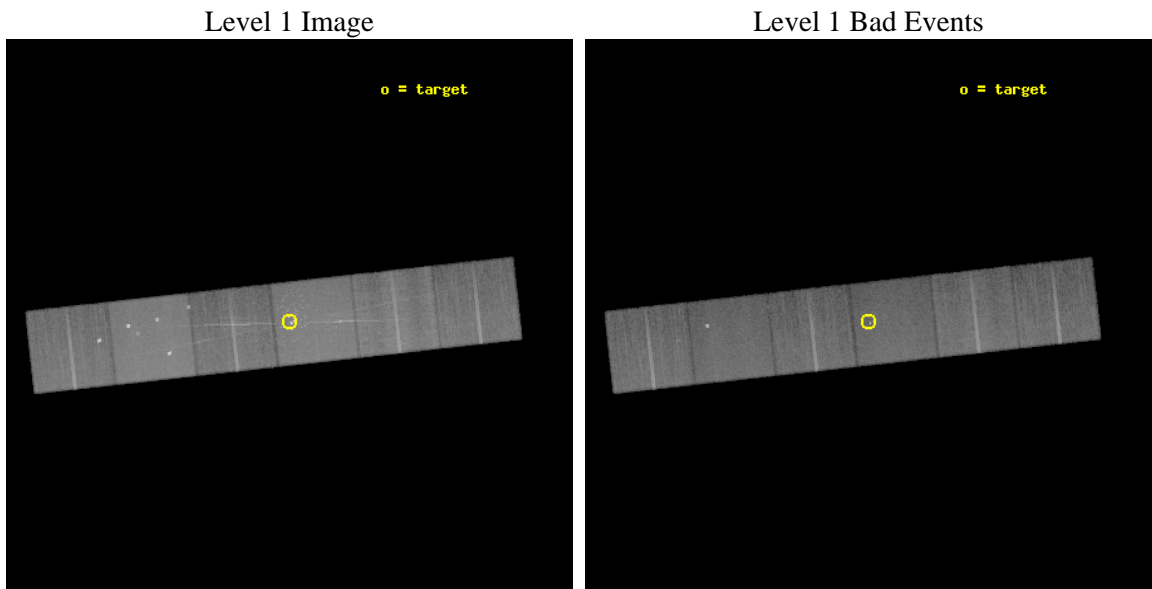
seq_num	200421	Sequence number
obs_id	7408	Observation id
title	High Resolution Studies of Pre-Main Sequence Stars in Orion	Propos
observer	Prof Claude Canizares	Principal investigator
object	Orion Trapezium Cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.821667	Observer's specified target RA [deg]
dec_targ	-5.387889	Observer's specified target Dec [deg]
ra_nom	83.822805239468	Nominal RA [deg]
dec_nom	-5.3896200999902	Nominal Dec [deg]
roll_nom	353.67562679202	Nominal Roll [deg]
revision	3	Processing version of data
ontime	25180.799906254	Sum of GTIs [s]
livetime	24861.945455783	Livetime [s]
ontime4	25180.799906254	Sum of GTIs [s]
ontime5	25180.799906254	Sum of GTIs [s]
ontime6	25180.799906254	Sum of GTIs [s]
ontime7	25180.799906254	Sum of GTIs [s]
ontime8	25180.799906254	Sum of GTIs [s]
ontime9	25180.799906254	Sum of GTIs [s]
l2events	422849	Number of level 2 events



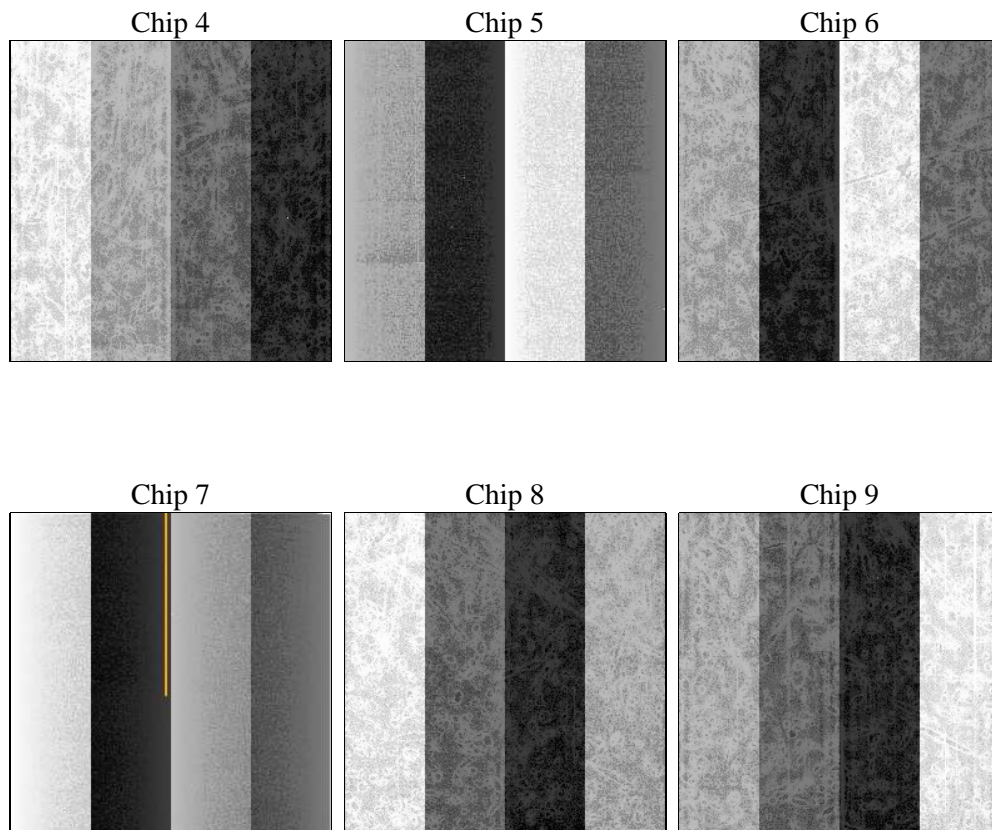
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	25180.799906254	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	25180.799906254	Sum of GTIs [s]
date	2012-04-15T16:05:18	Date and time of file creation	ontime5	25180.799906254	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	25180.799906254	Sum of GTIs [s]
			ontime7	25180.799906254	Sum of GTIs [s]
			ontime8	25180.799906254	Sum of GTIs [s]
			ontime9	25180.799906254	Sum of GTIs [s]
			l1events	1634634	Number of level 1 events

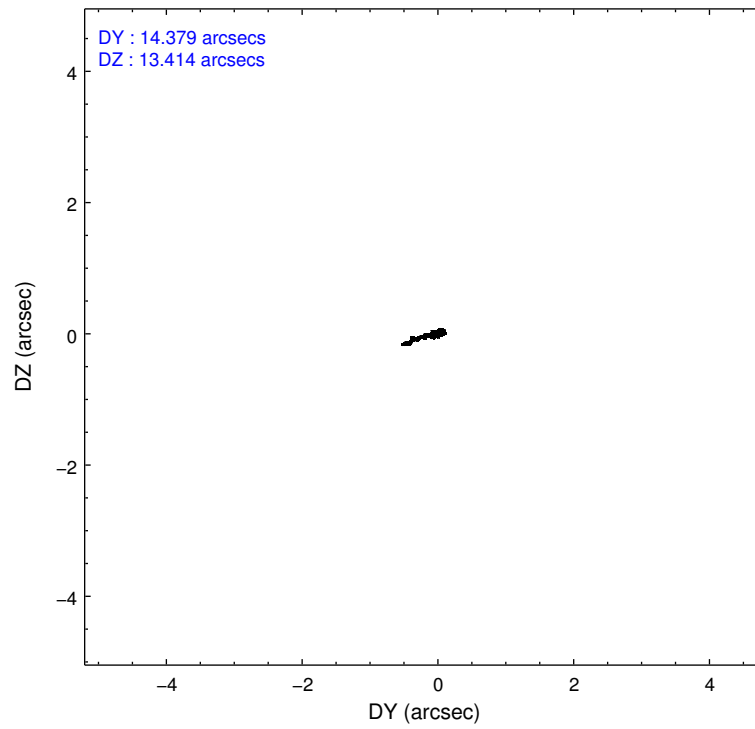
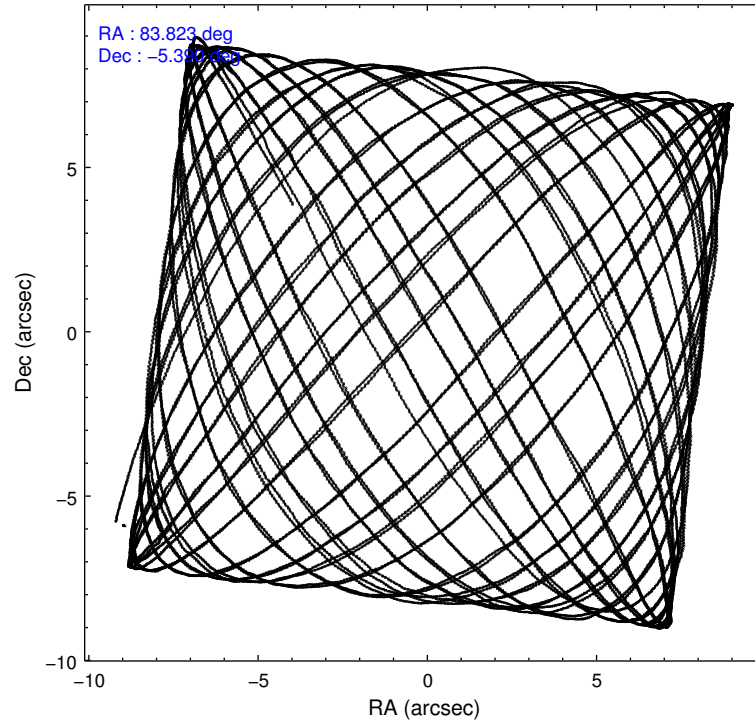
2.1.4 Events

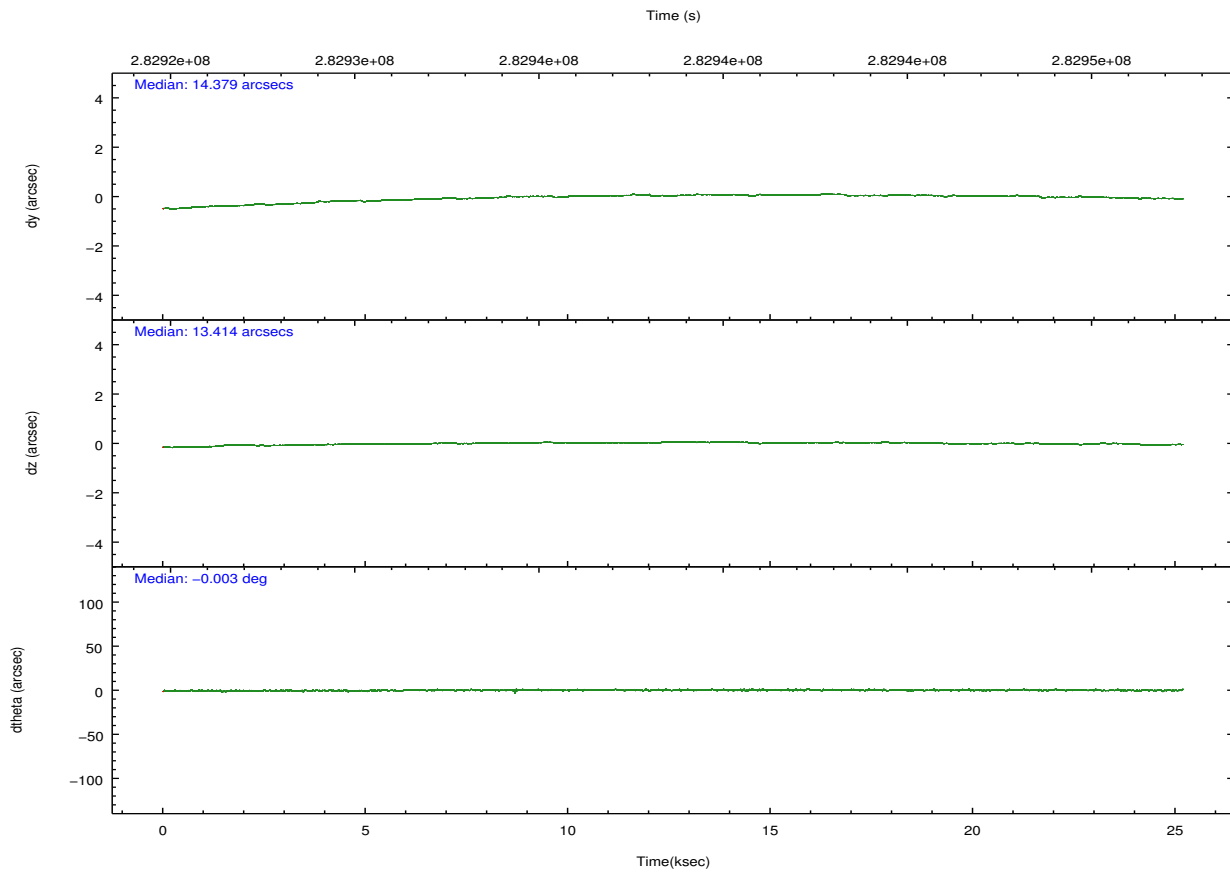
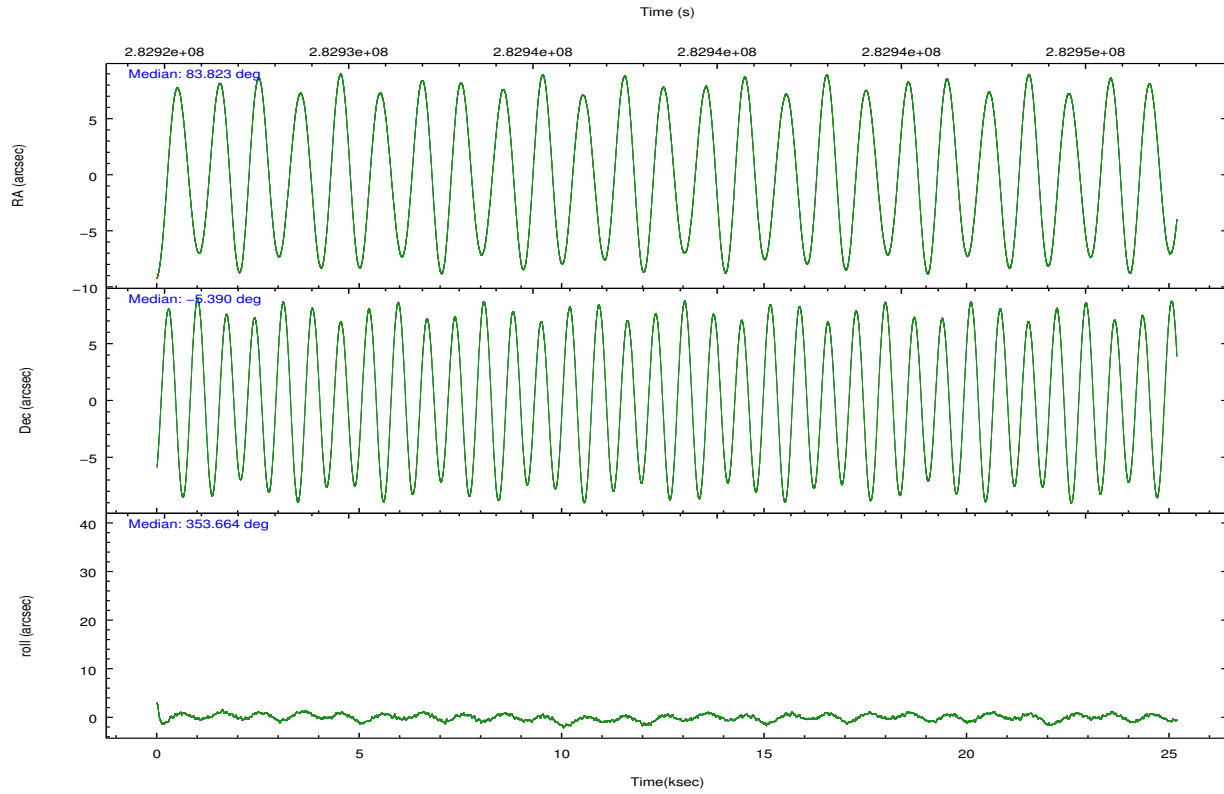
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	240639	340671	230637	331318	281334	210035	grade 0 events	19545	23917	26115	19652	28549	13076
rejected events	206075	179287	184927	171643	209681	181234		8%	7%	11%	5%	10%	6%
rejected %	85%	52%	80%	51%	74%	86%	grade 1 events	291	581	211	452	228	146
								0%	0%	0%	0%	0%	0%
							grade 2 events	5639	48304	7816	34653	14523	5446
								2%	14%	3%	10%	5%	2%
							grade 3 events	2730	6121	3153	15099	6650	2691
								1%	1%	1%	4%	2%	1%
							grade 4 events	2644	5761	3072	14669	6275	2527
								1%	1%	1%	4%	2%	1%
							grade 5 events	9780	23192	10039	27921	13232	10476
								4%	6%	4%	8%	4%	4%
							grade 6 events	4147	78059	5790	76344	15962	5169
								1%	22%	2%	23%	5%	2%
							grade 7 events	195863	154736	174441	142528	195915	170504
								81%	45%	75%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	83.797814	83.82280523946818	Subarray requested	NONE	NONE
[deg] Pointing Dec	-5.400959	-5.389620099990248	Alternating exposures requested	N	N
[deg] Pointing Roll	353.516648	353.6756267920168	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	282926245.184000	282925050.11684			
Observation start date	2006-12-19T14:36:20	2006-12-19T14:17:30			
[s] Observation end time (MET)	282951245.184000	282952197.75563			
Observation end date	2006-12-19T21:33:00	2006-12-19T21:49:57			
Read mode	TIMED	TIMED			

2.3 Aspect



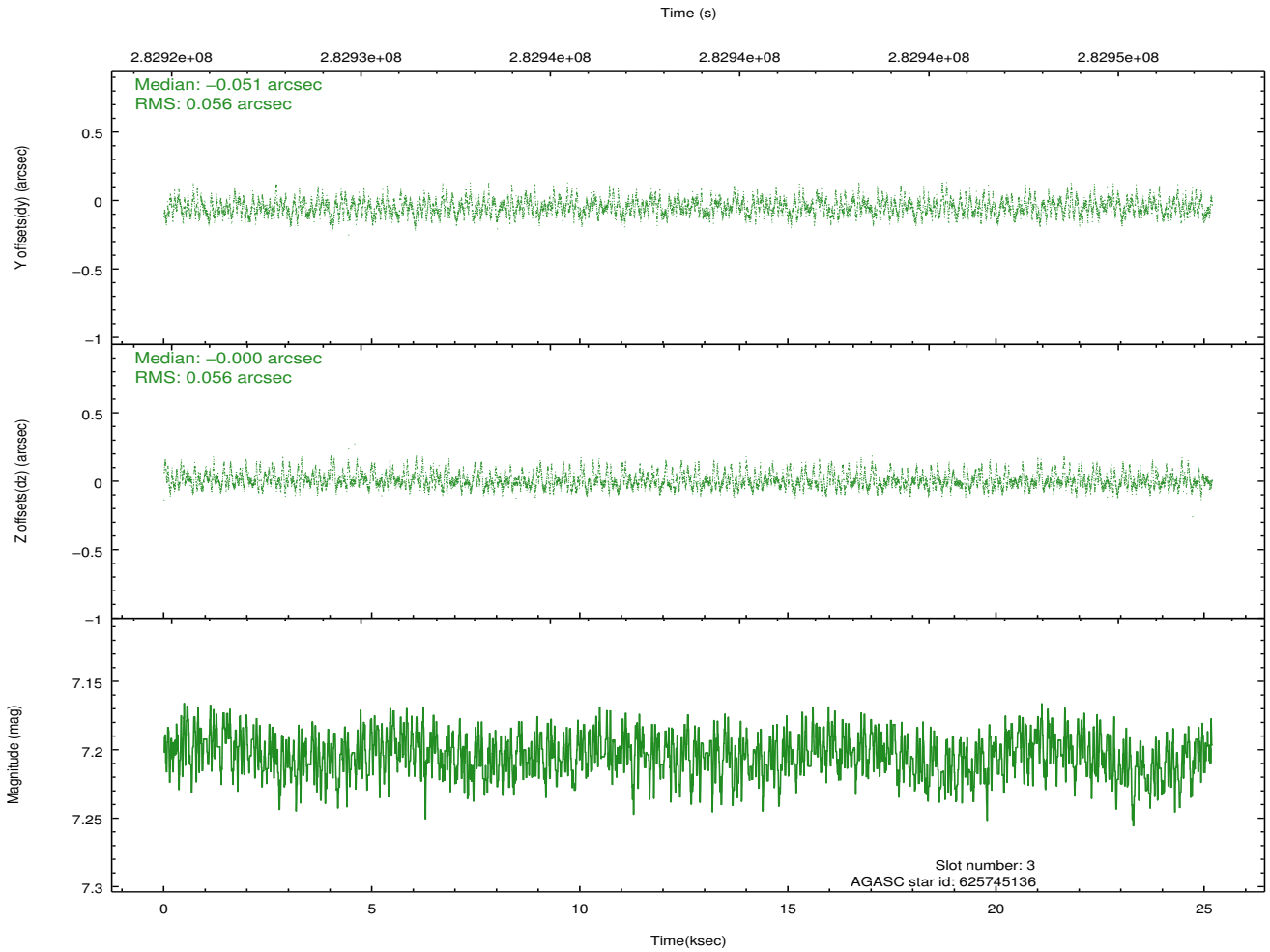
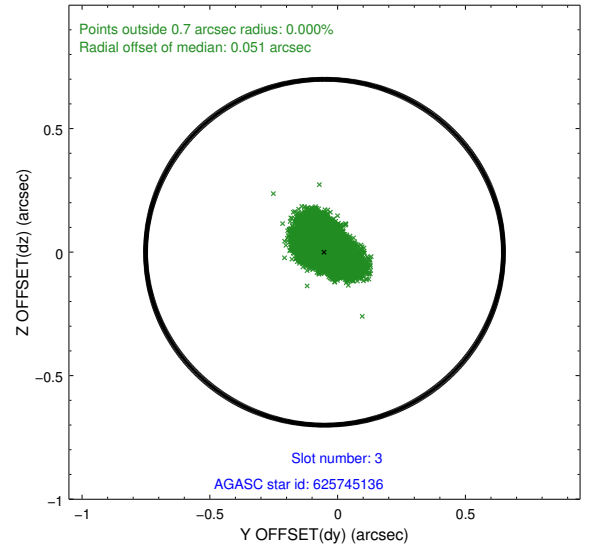
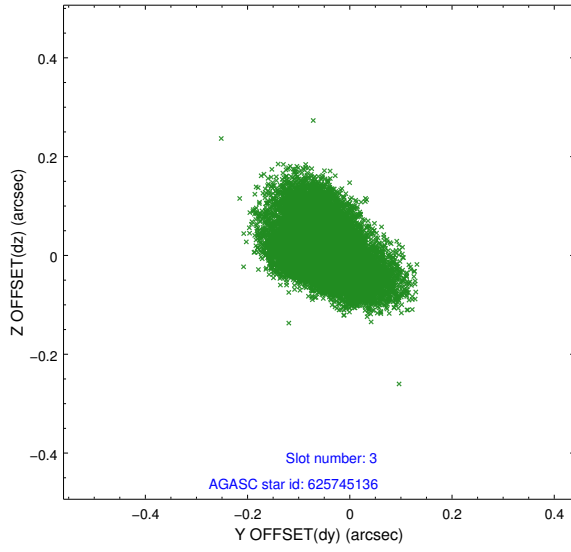


Slot Statistics

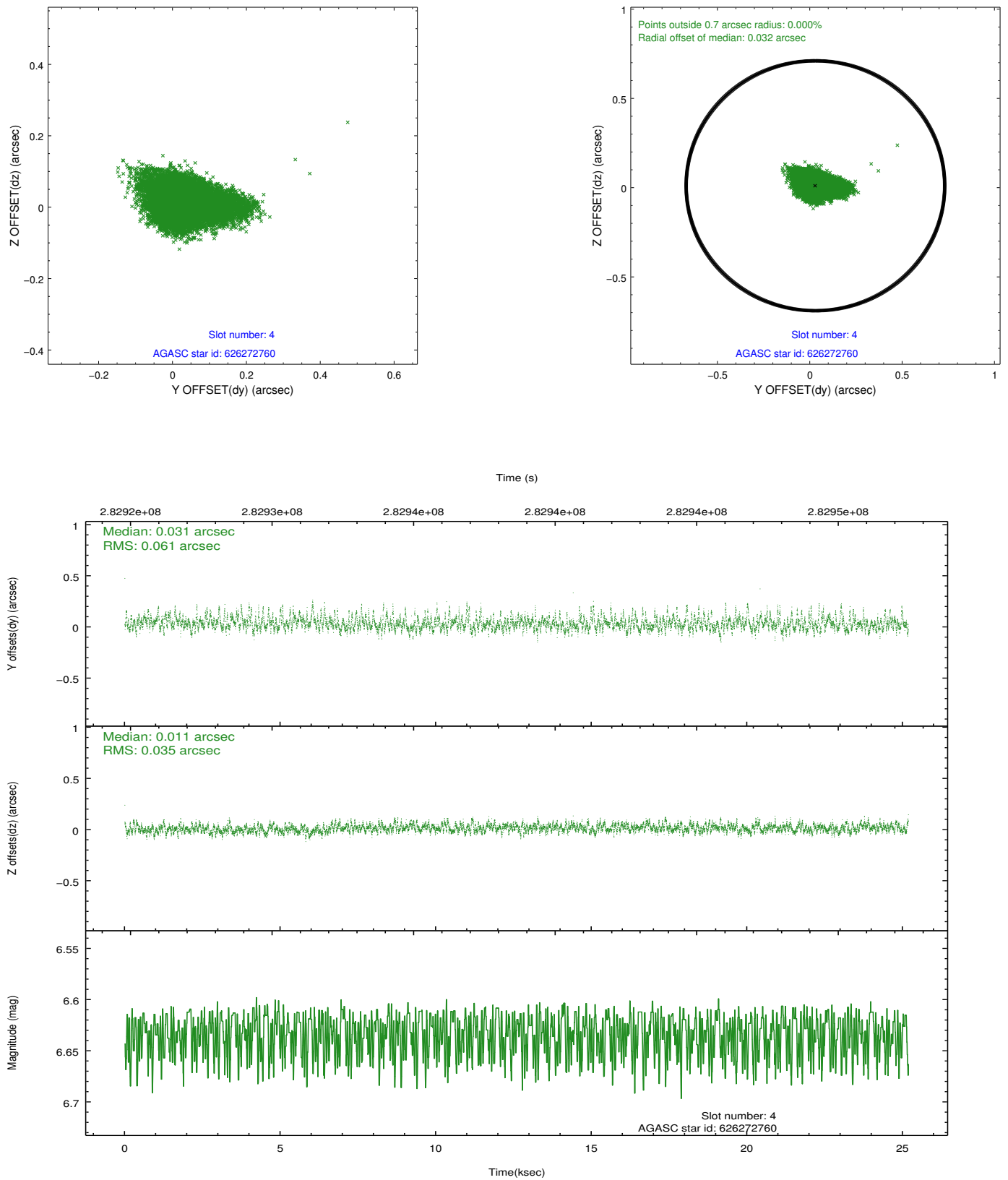
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6143	-0.124	-0.085	0.007	0.014	0.000000	0.000000	-767.43	-1734.76
1	FID	ACIS-S-4	7.20	6143	0.139	0.062	0.008	0.013	0.000000	0.000000	2146.10	173.69
2	FID	ACIS-S-6	7.35	6143	-0.042	0.031	0.009	0.017	0.000000	0.000000	394.84	811.23
3	GUIDE	625745136	7.20	12284	-0.051	-0.000	0.084	0.139	83.600341	-4.804339	-946.47	2053.93
4	GUIDE	626272760	6.63	12285	0.031	0.011	0.071	0.131	84.363987	-5.938389	2233.60	-1693.84
5	GUIDE	626272976	7.94	12282	-0.044	0.062	0.062	0.102	83.795875	-5.926912	207.75	-1882.11
6	GUIDE	625745128	7.82	12224	0.138	-0.093	0.071	0.116	83.769930	-4.731835	-371.36	2381.82
7	GUIDE	625745144	7.83	12278	-0.084	0.010	0.069	0.105	83.888985	-4.837539	95.74	2052.50

2.4 Star Slots

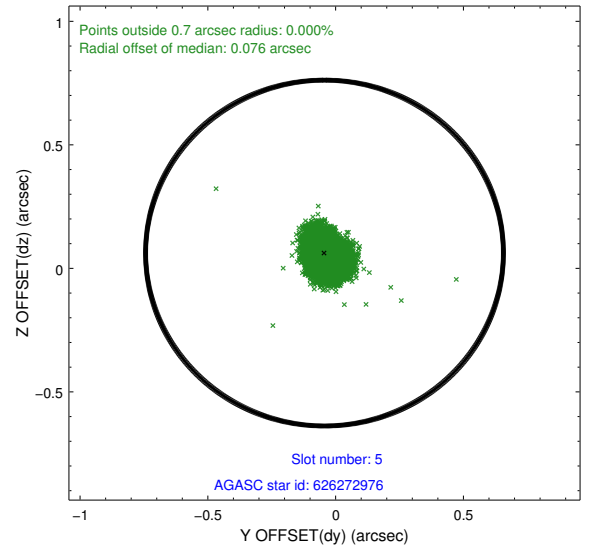
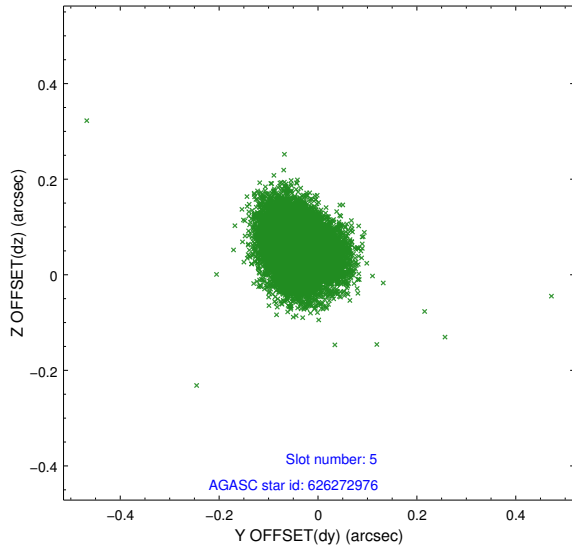
2.4.1 Slot 3



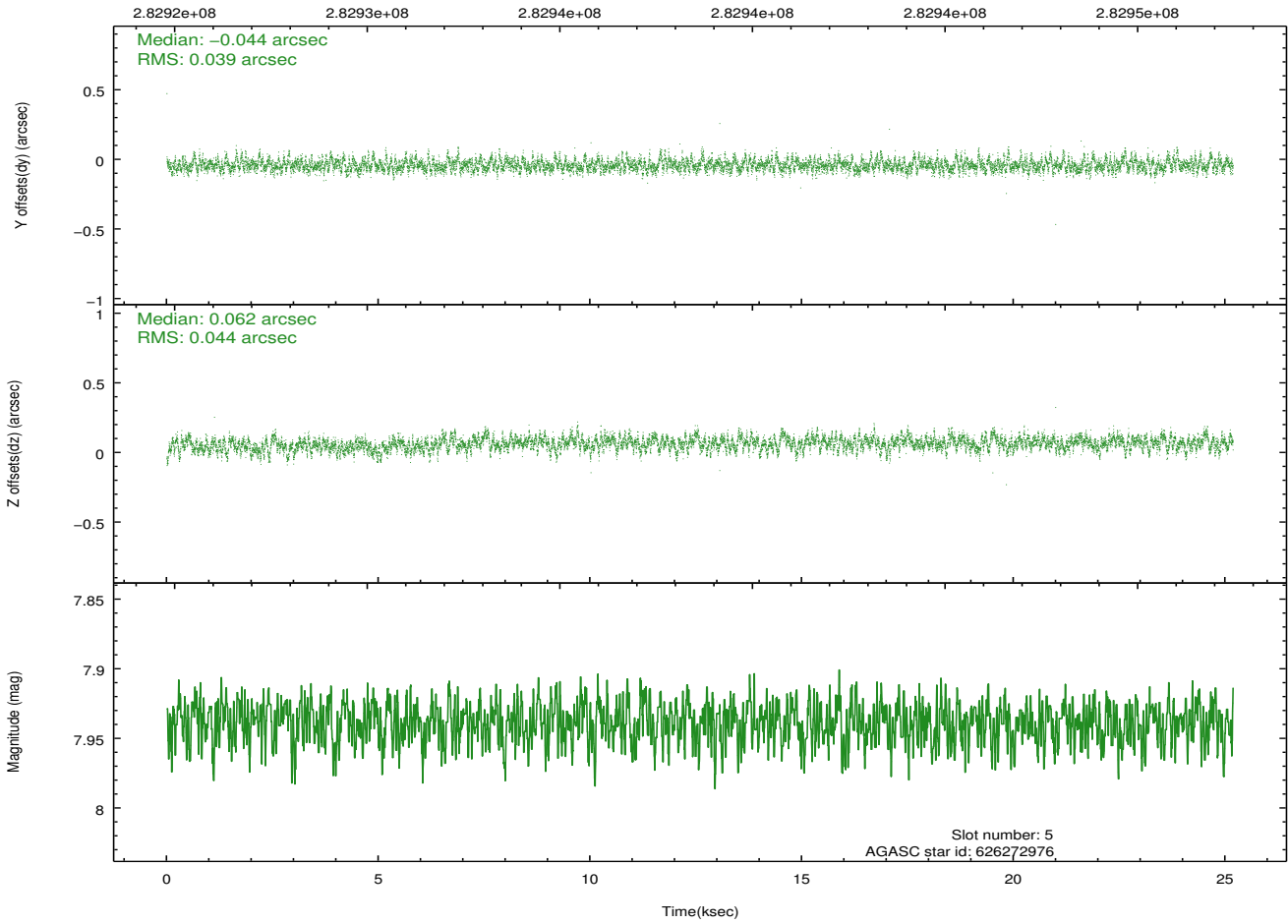
2.4.2 Slot 4



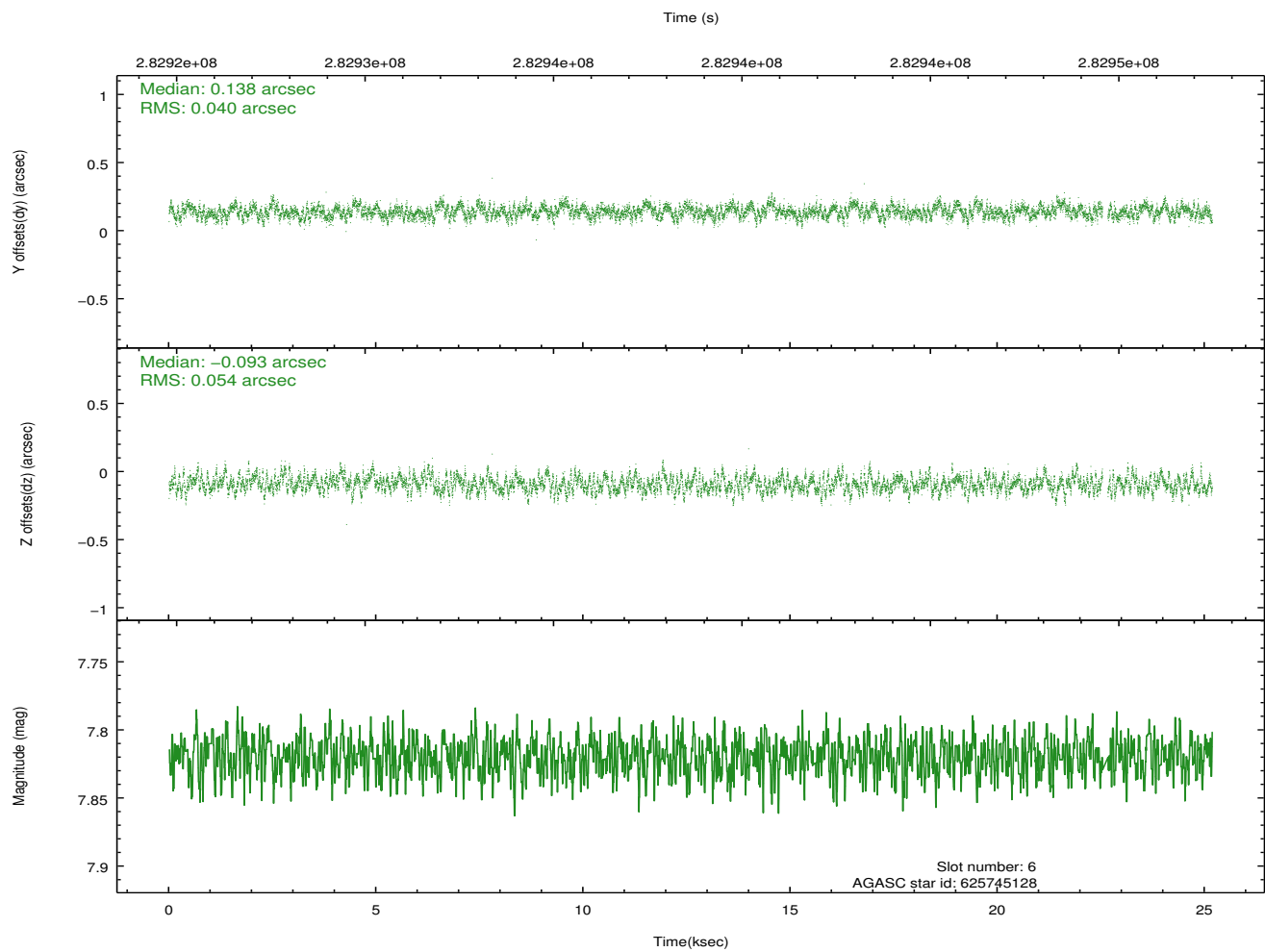
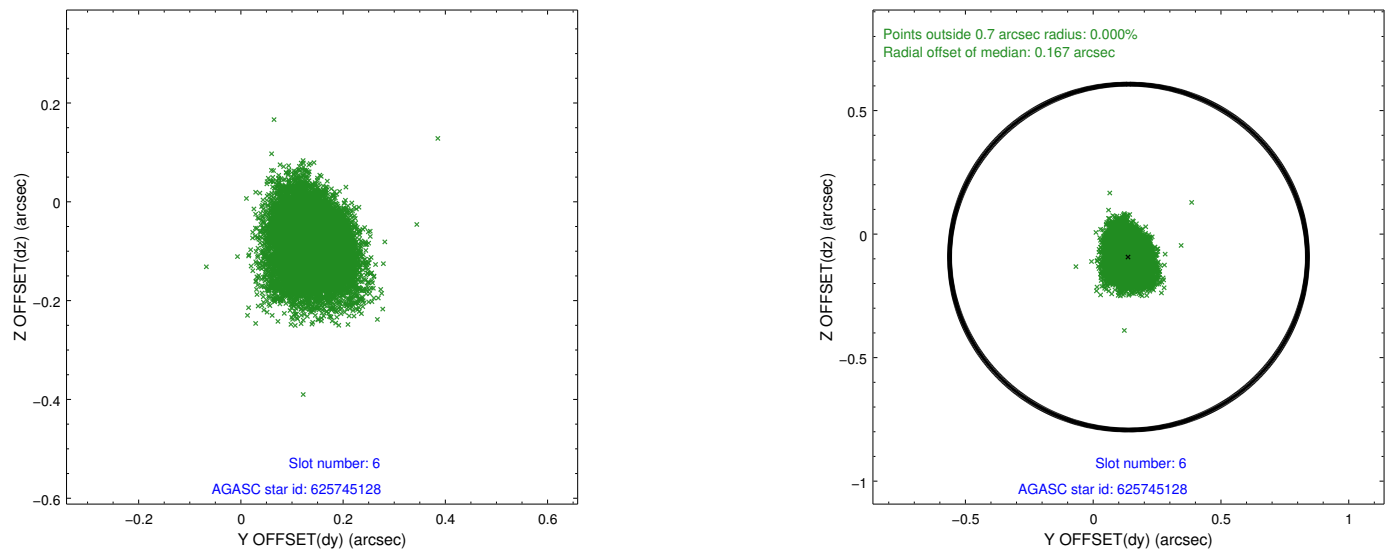
2.4.3 Slot 5



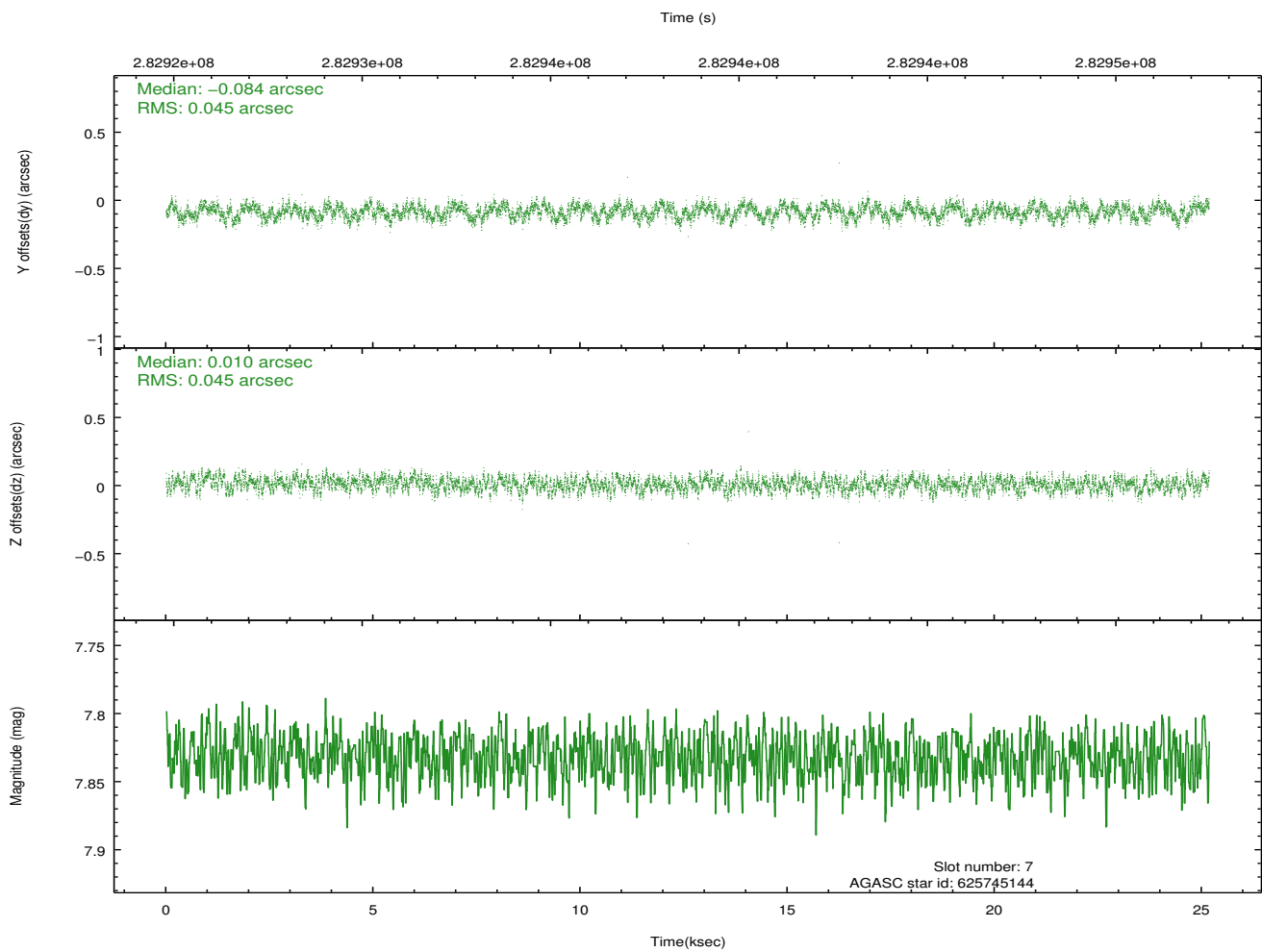
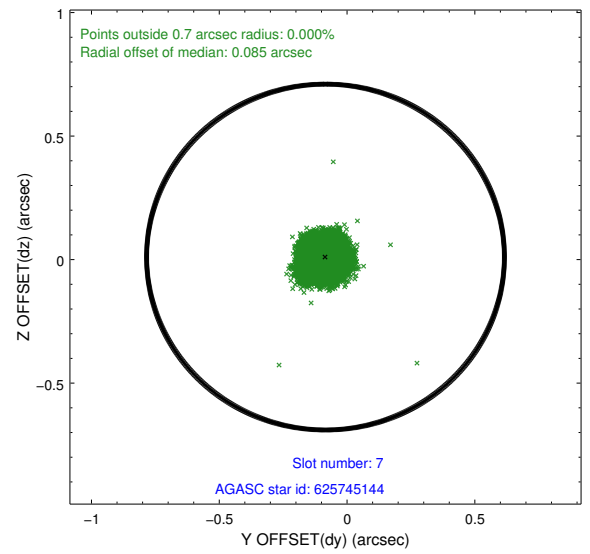
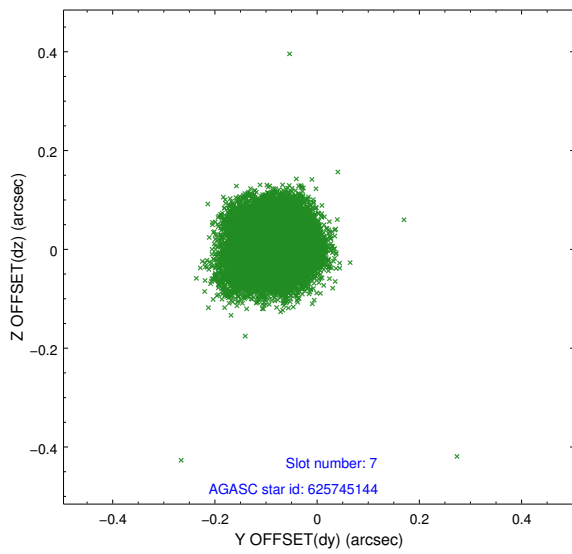
Time (s)



2.4.4 Slot 6

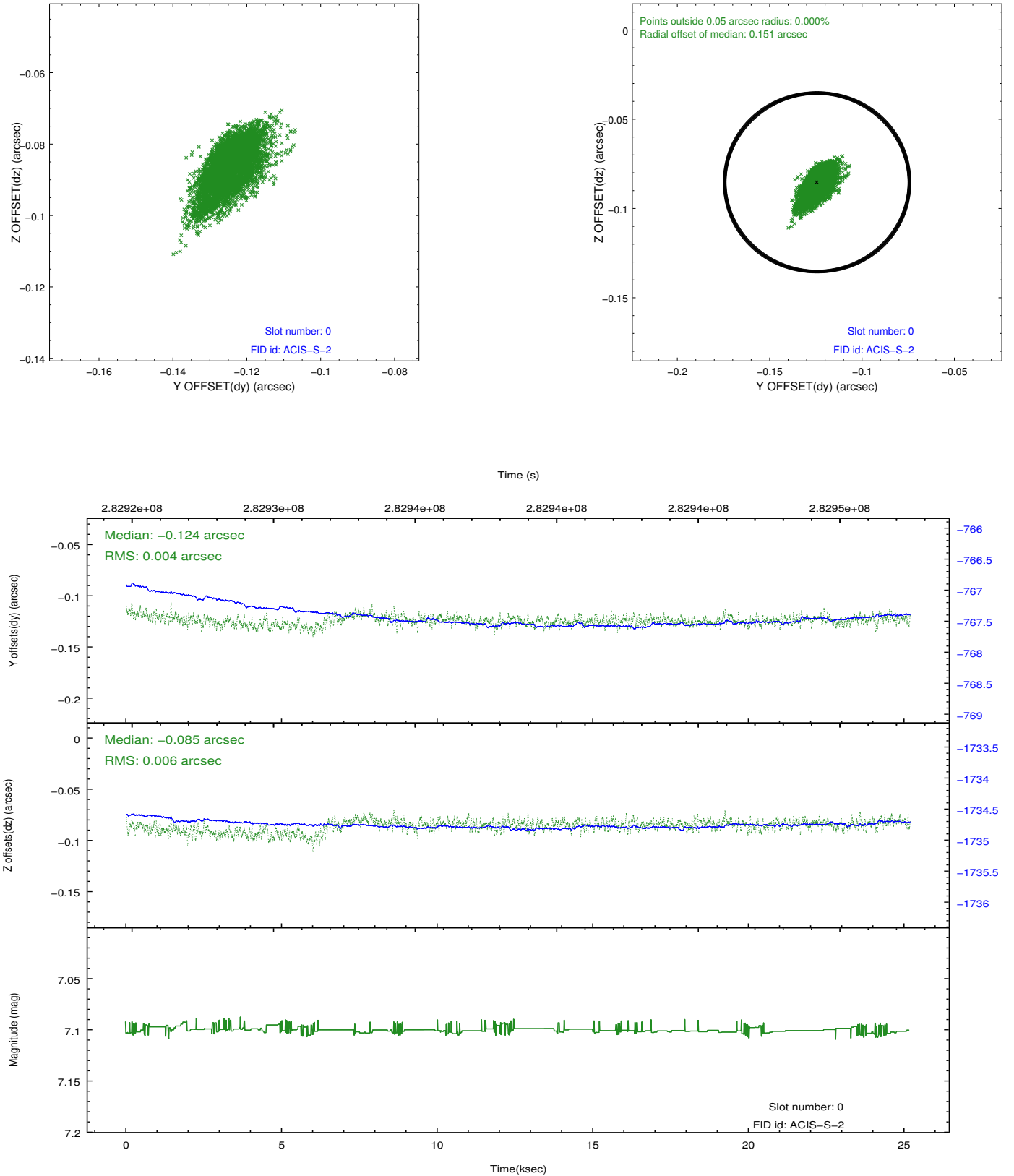


2.4.5 Slot 7

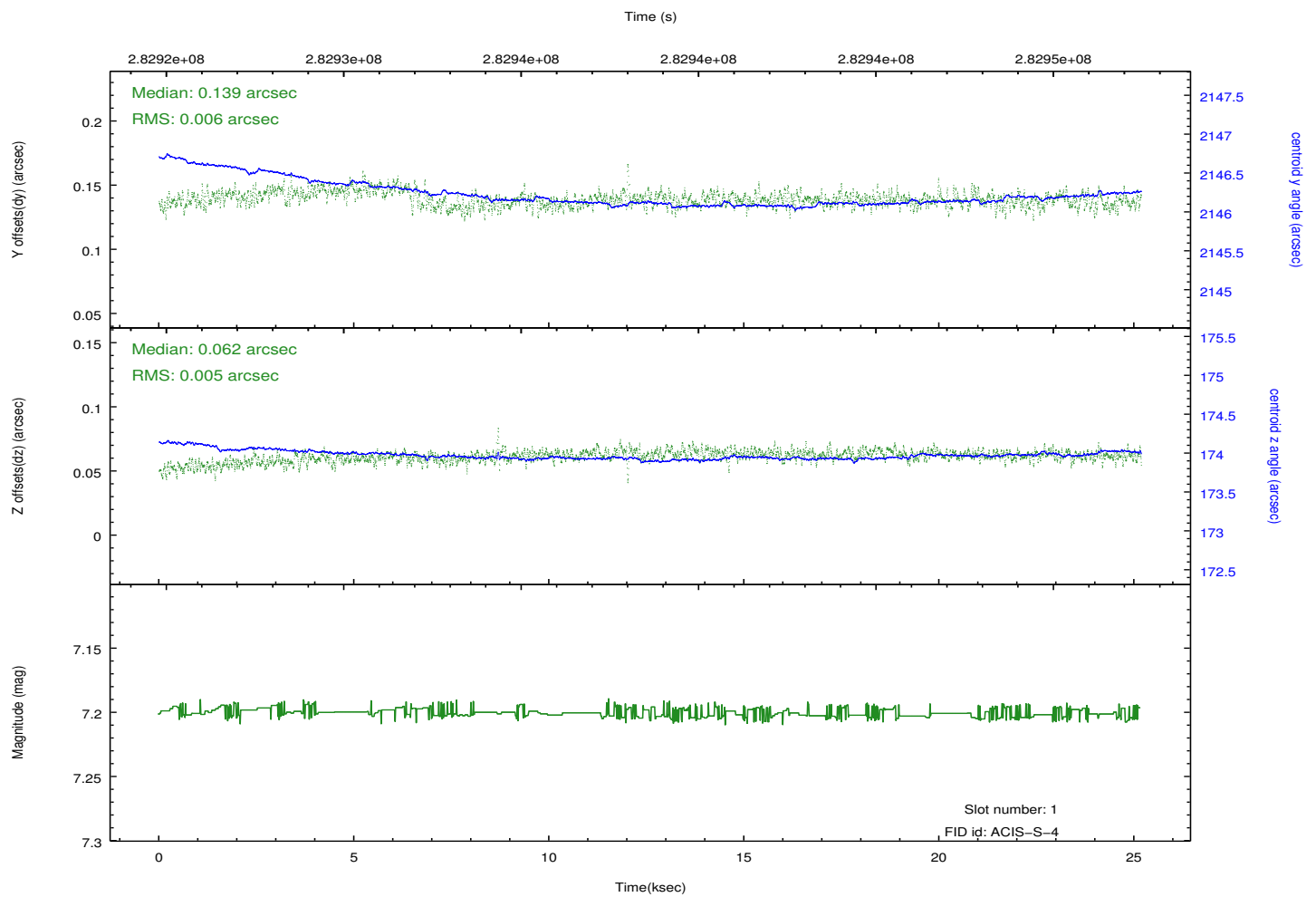
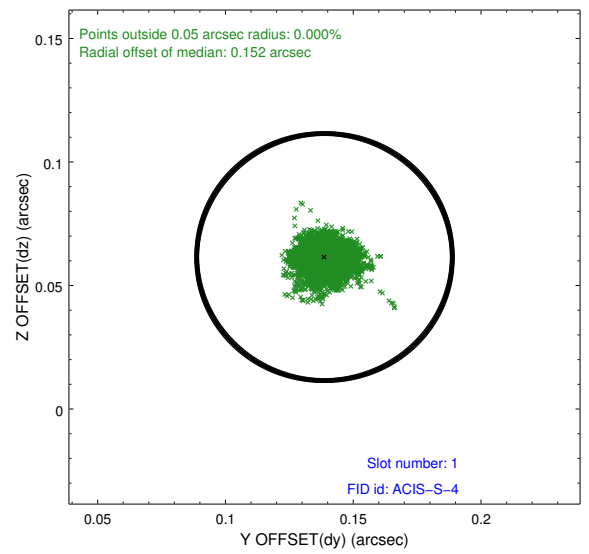
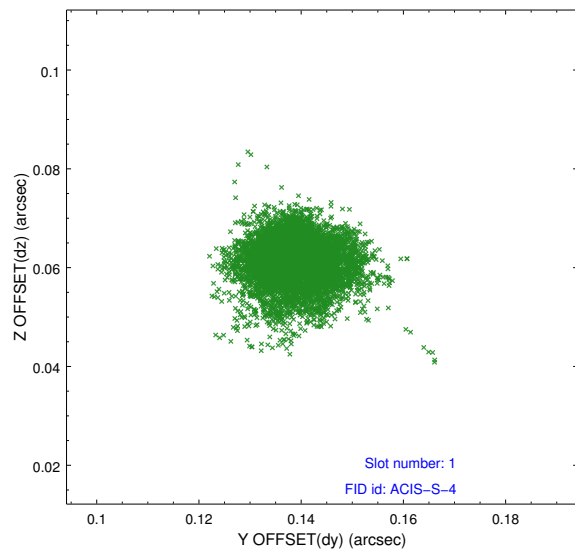


2.5 FID Slots

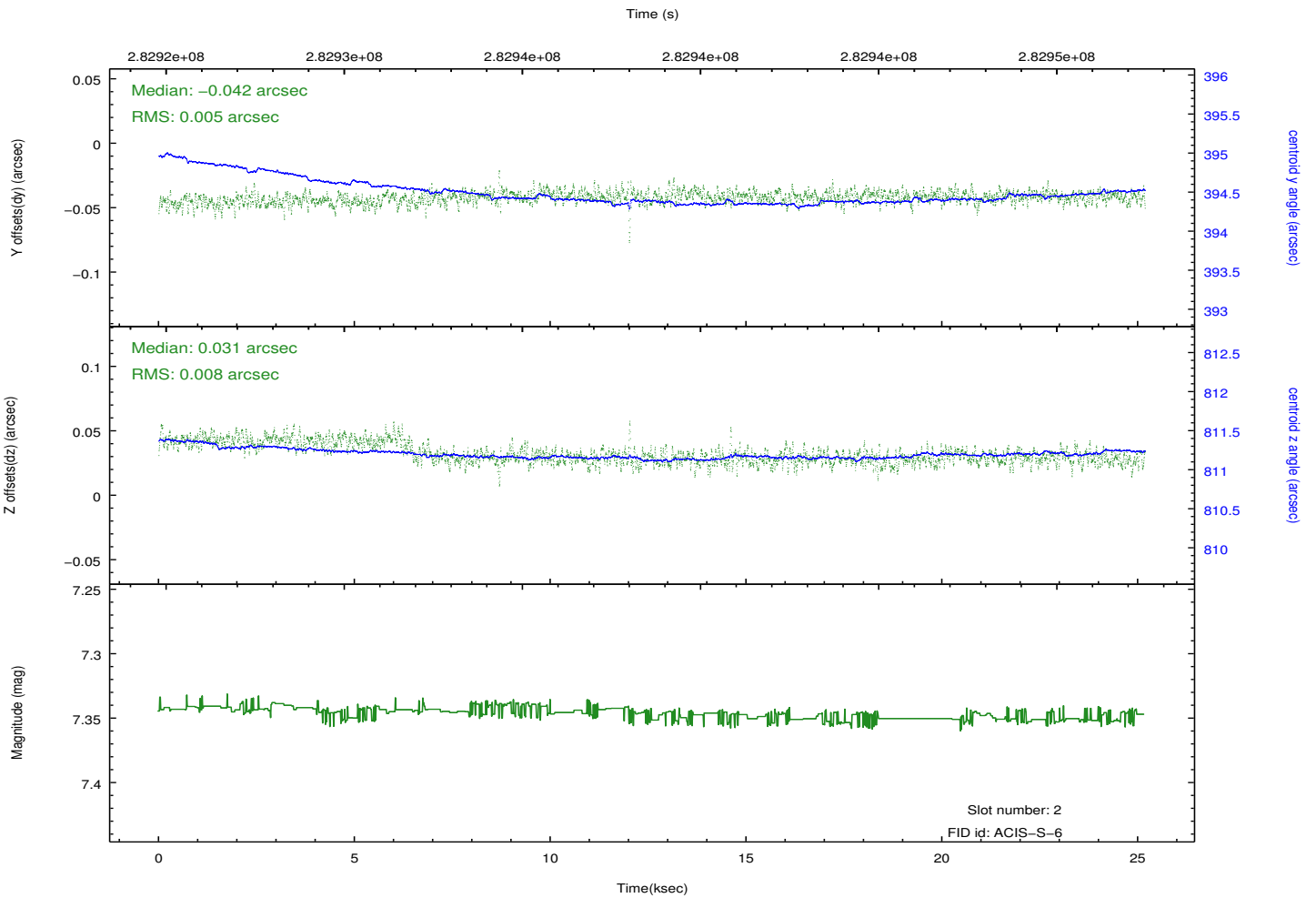
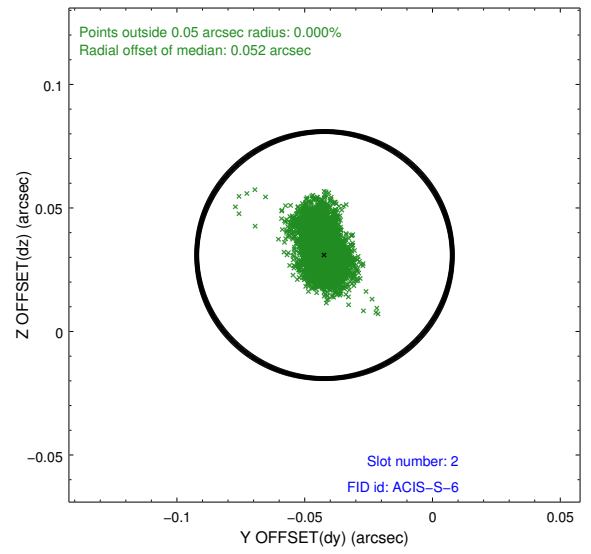
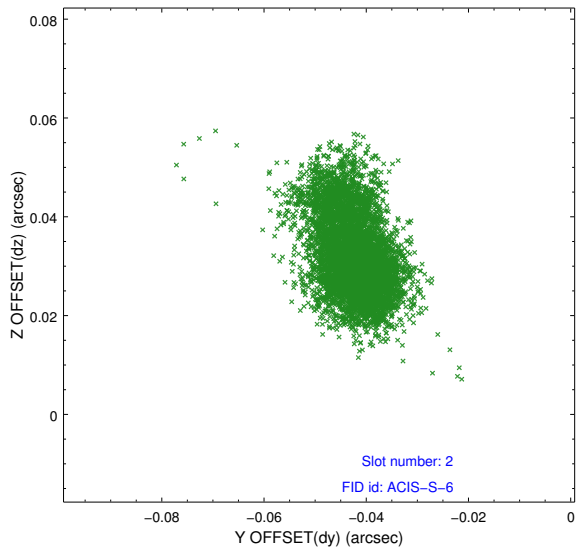
2.5.1 Slot 0



2.5.2 Slot 1

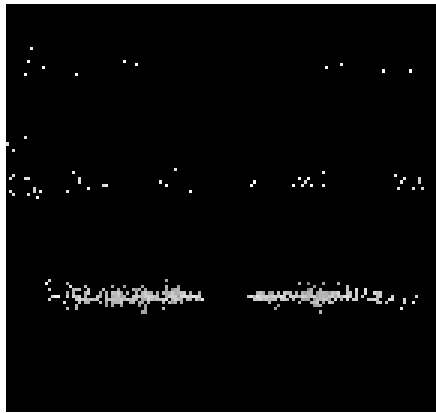


2.5.3 Slot 2

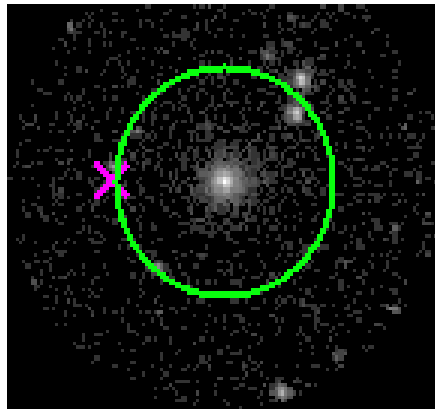


3 Gratings

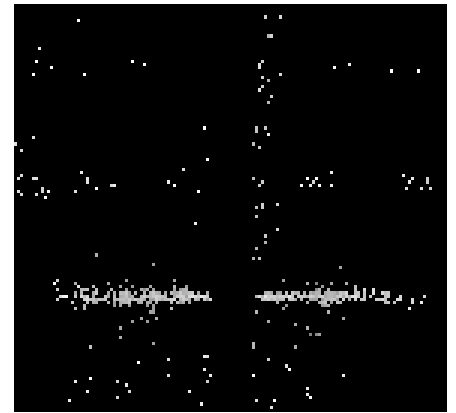
3.1 HEG Arm



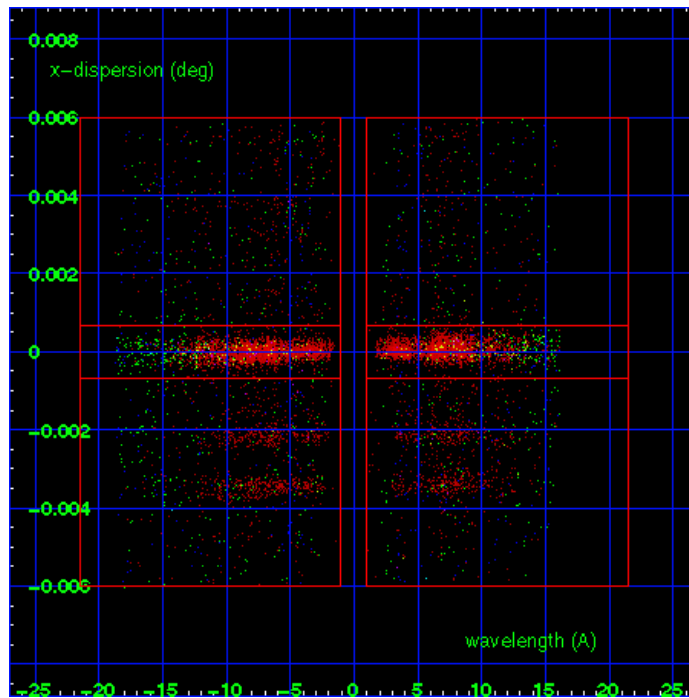
HEG Order Sort 123



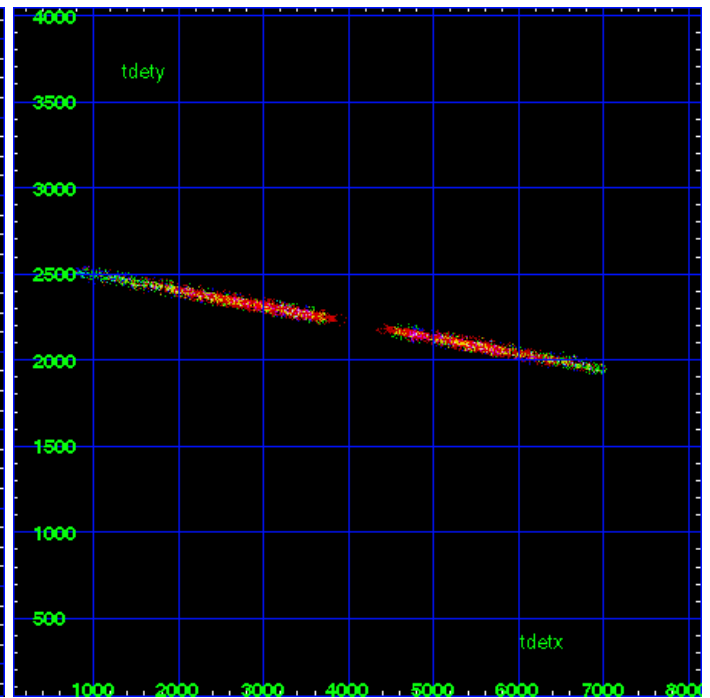
HEG Zero Order



HEG Order Sort ALL

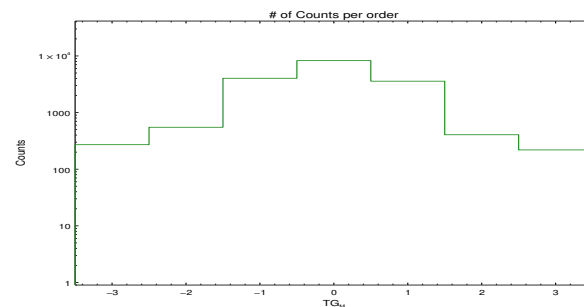


Spot Image HEG

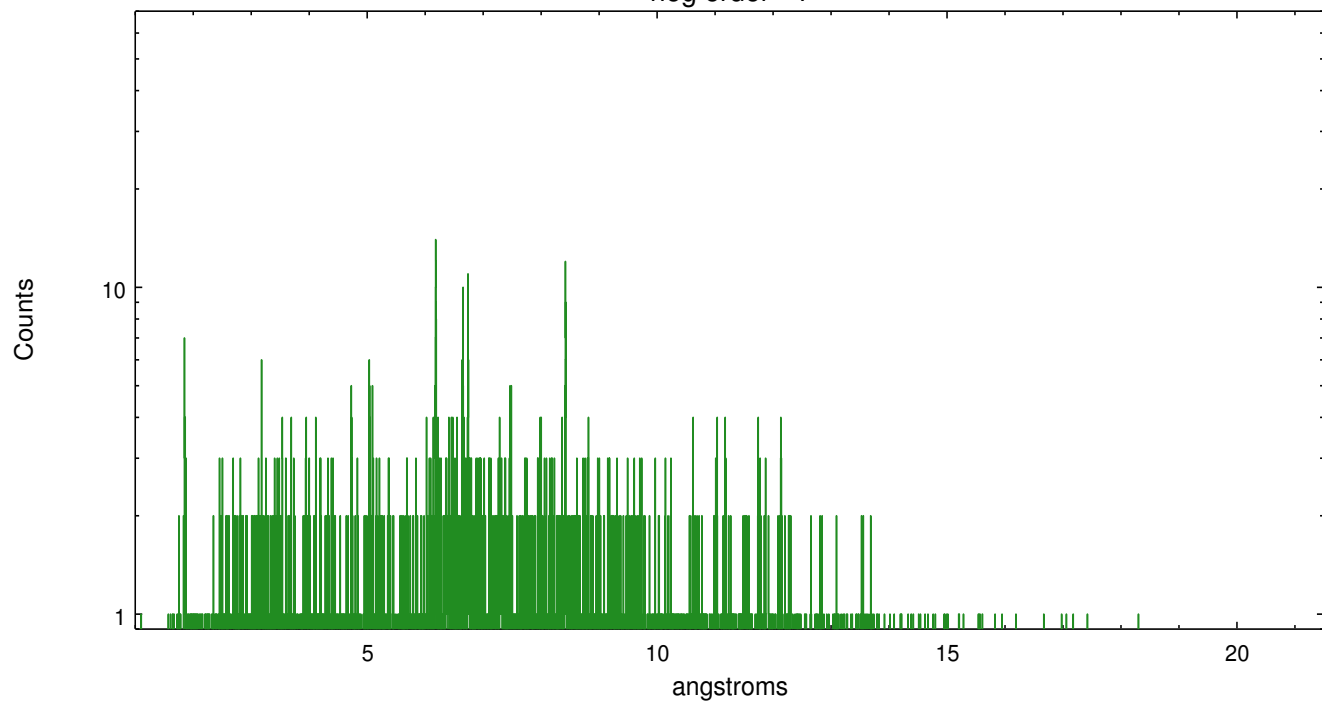


Full Detector HEG

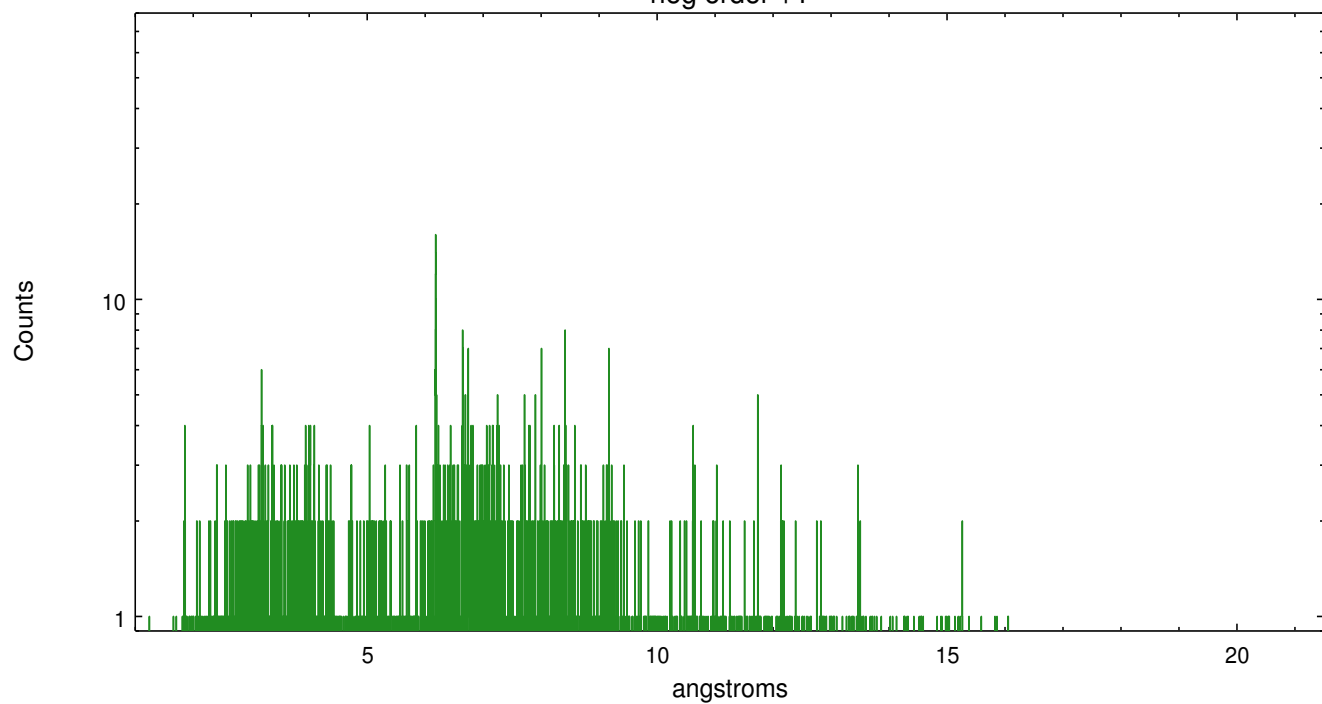
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	271	550	4031	8267	3581	406	219



heg order -1



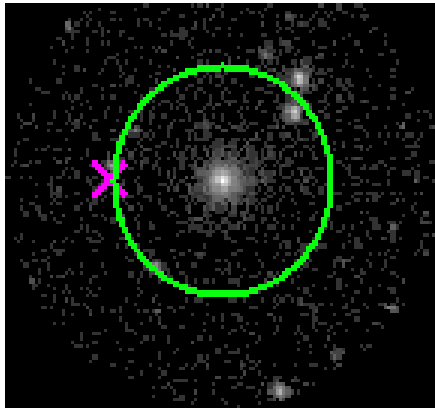
heg order +1



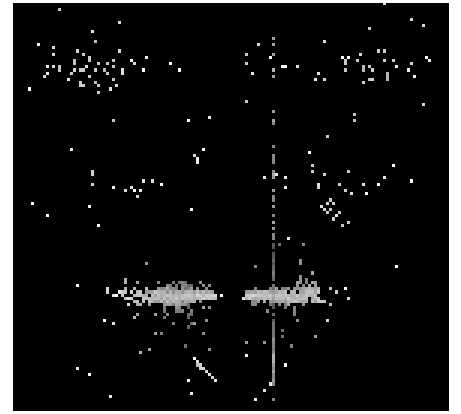
3.2 MEG Arm



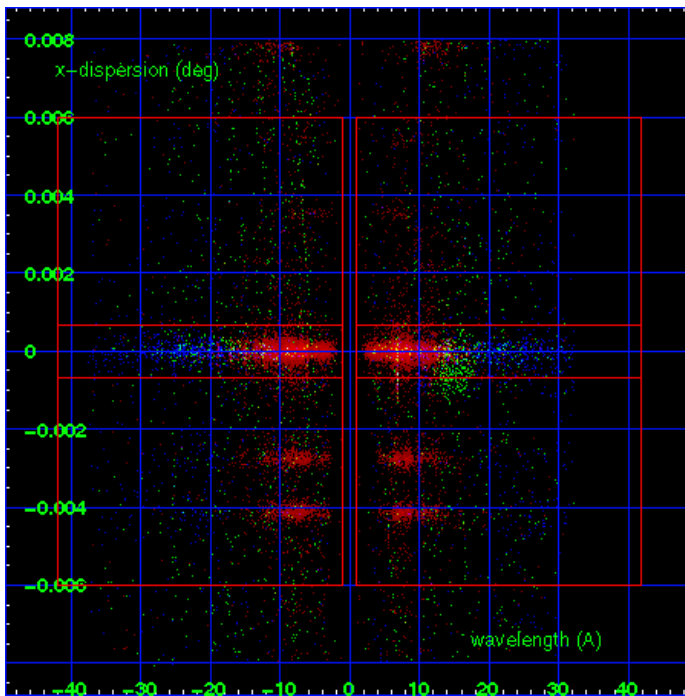
MEG Order Sort 123



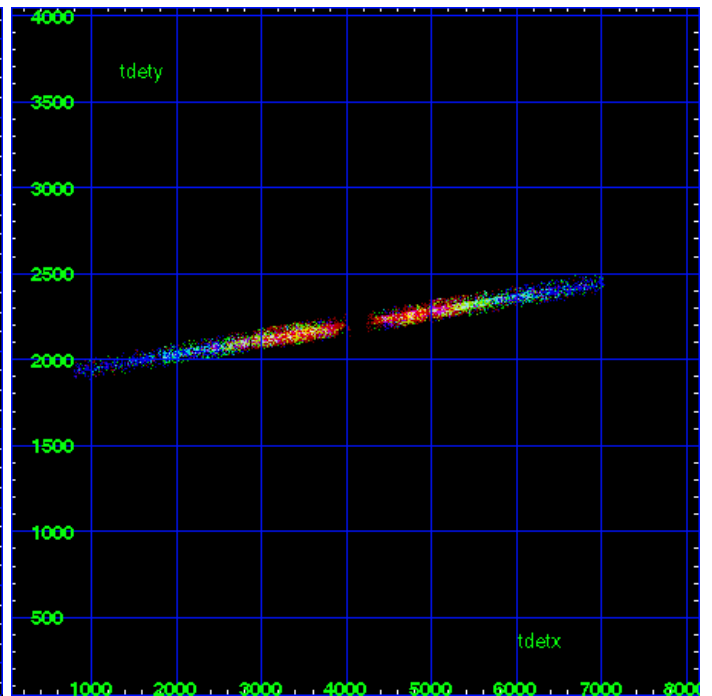
MEG Zero Order



MEG Order Sort ALL

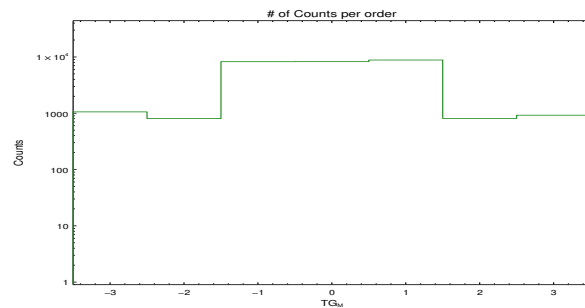


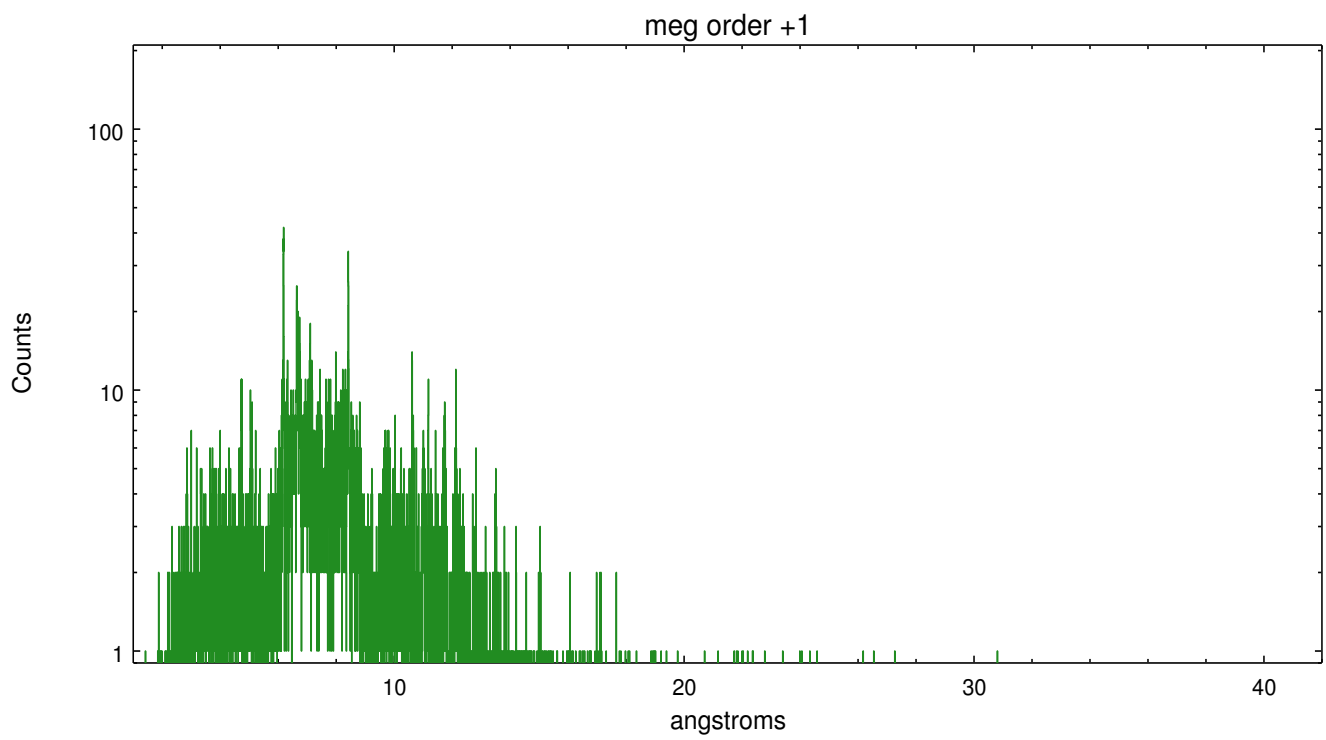
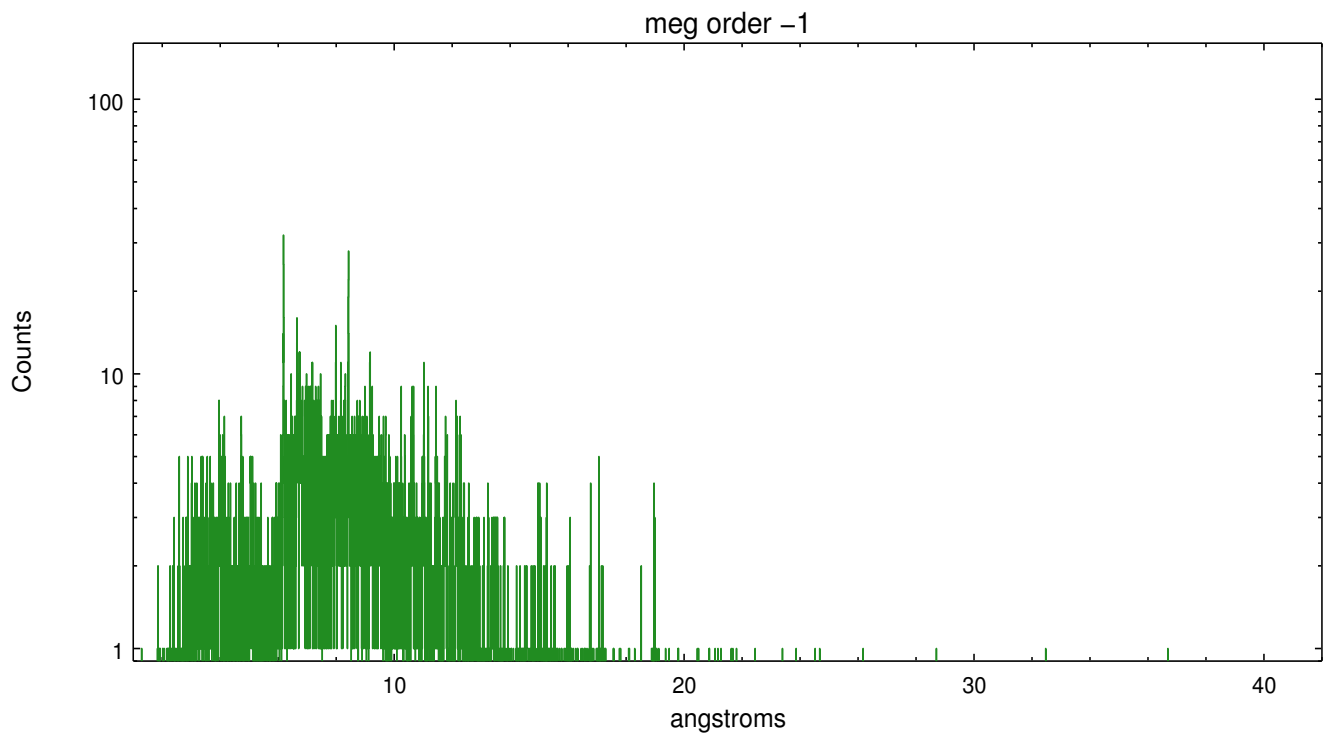
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1058	804	8249	8267	8825	810	923





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.1807999

A.2 Comments

Warning: 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.