

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2583 - L2 Version 3
Chandra X-Ray Center

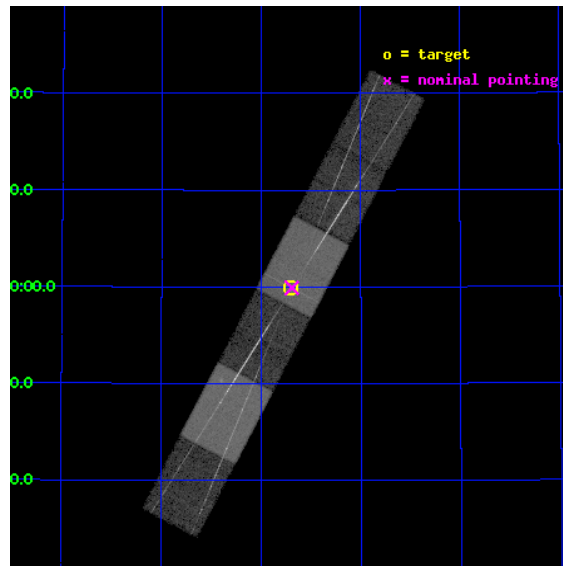
L2 Processing Date : Oct 7 2012

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1 Front

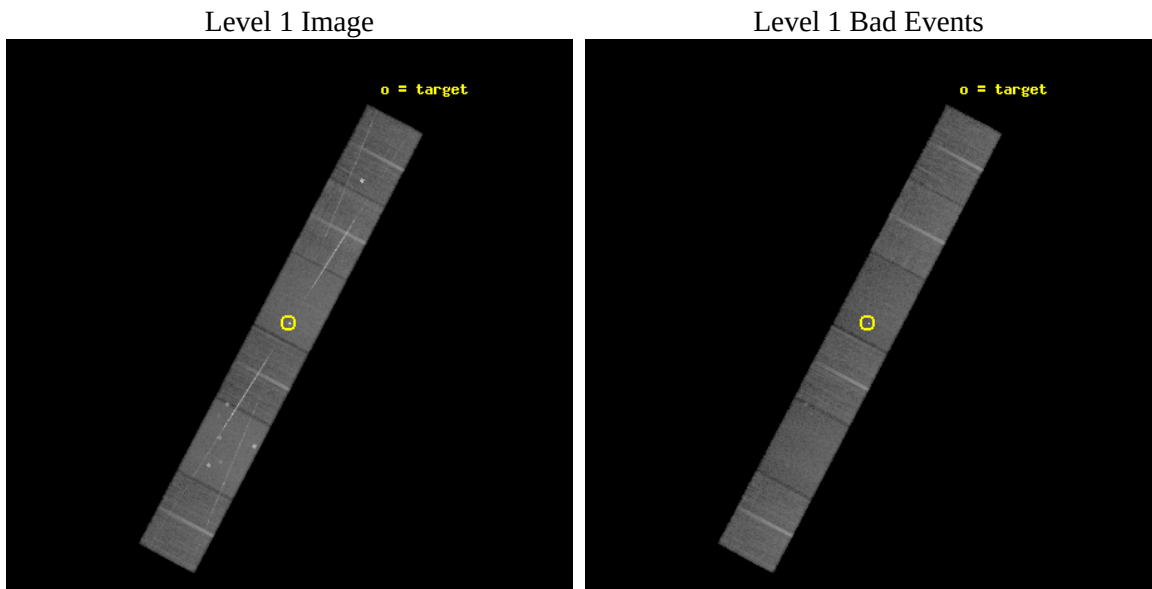
seq_num	290139	Sequence number
obs_id	2583	Observation id
title	AO3 CALIBRATION OBSERVATIONS OF CAPELLA	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAPELLA	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.17625	Observer's specified target RA [deg]
dec_targ	45.997889	Observer's specified target Dec [deg]
ra_nom	79.173100681863	Nominal RA [deg]
dec_nom	45.998399524514	Nominal Dec [deg]
roll_nom	297.74672016661	Nominal Roll [deg]
revision	3	Processing version of data
ontime	28056.519638181	Sum of GTIs [s]
livetime	27603.382510882	Livetime [s]
ontime4	28059.101768047	Sum of GTIs [s]
ontime5	28053.937637955	Sum of GTIs [s]
ontime6	28058.978697926	Sum of GTIs [s]
ontime7	28056.519638181	Sum of GTIs [s]
ontime8	28058.937777549	Sum of GTIs [s]
ontime9	28063.978618175	Sum of GTIs [s]
l2events	293280	Number of level 2 events



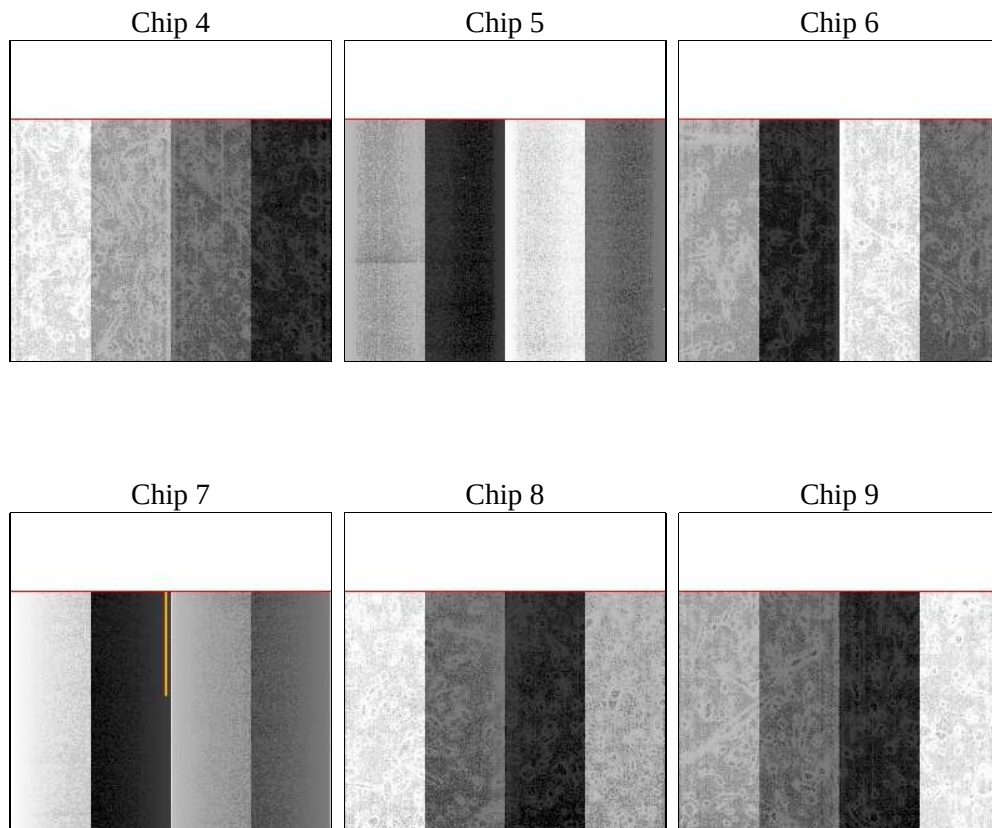
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	28056.519638181	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	28059.101768047	Sum of GTIs [s]
date	2012-10-07T08:53:57	Date and time of file creation	ontime5	28053.937637955	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	28058.978697926	Sum of GTIs [s]
			ontime7	28056.519638181	Sum of GTIs [s]
			ontime8	28058.937777549	Sum of GTIs [s]
			ontime9	28063.978618175	Sum of GTIs [s]
			l1events	1090878	Number of level 1 events

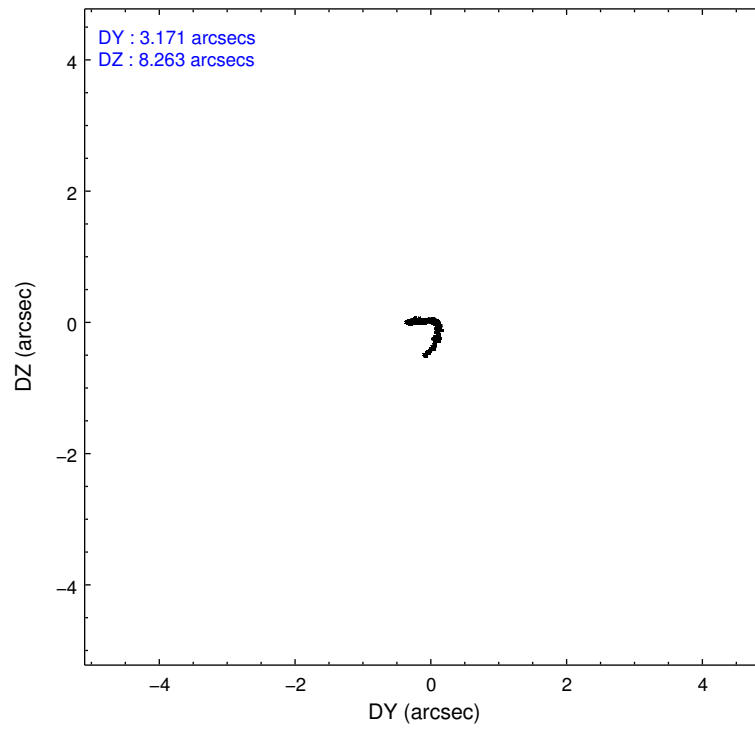
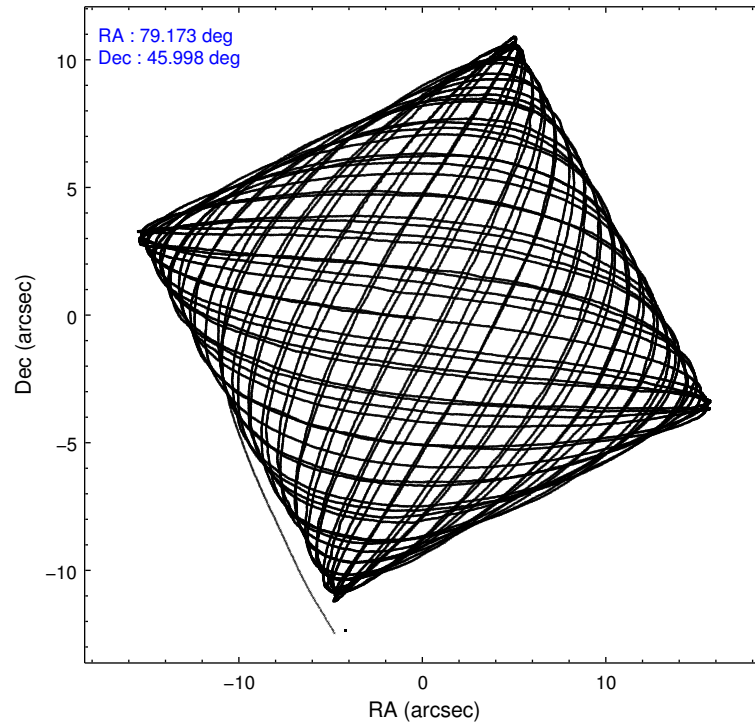
2.1.4 Events

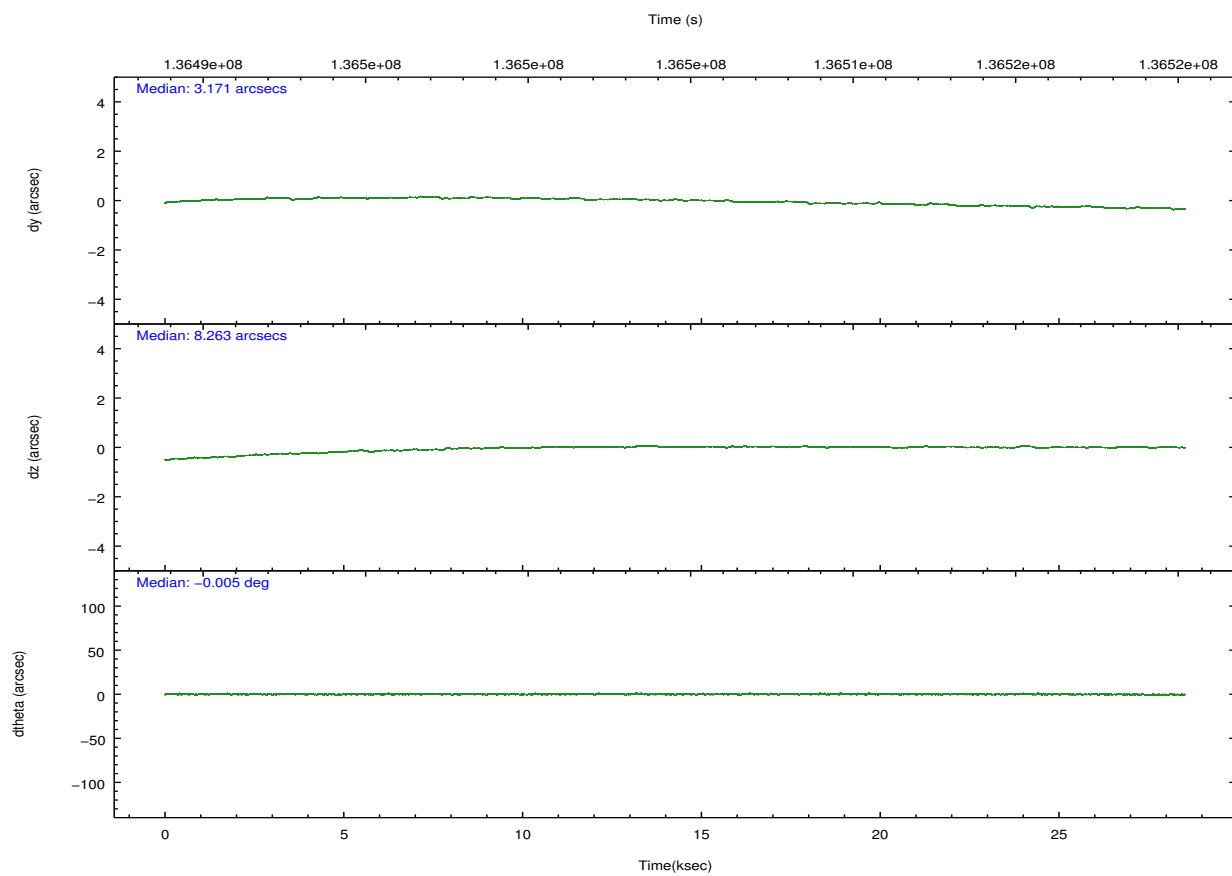
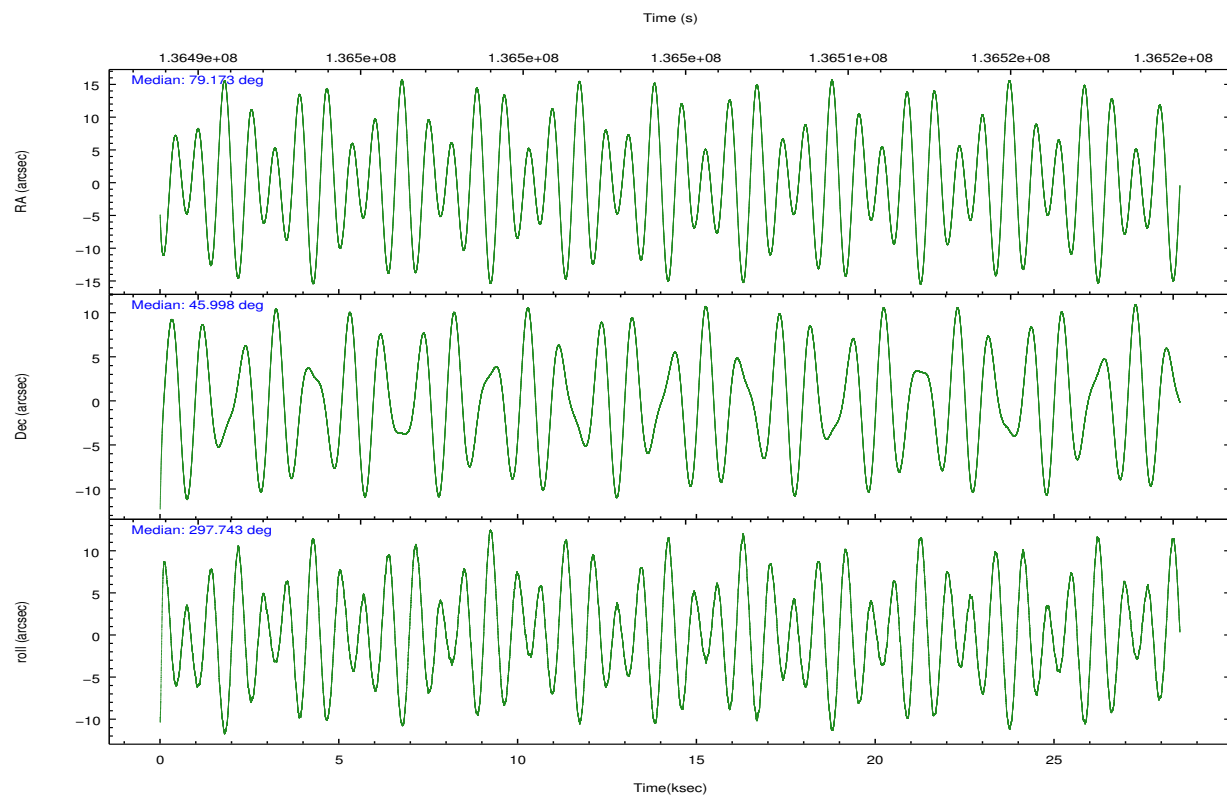
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	158510	222999	158825	200144	197235	153165	grade 0 events	10493	25908	22568	9930	30254	18144
rejected events	136912	105667	123618	111835	139428	121693		6%	11%	14%	4%	15%	11%
rejected %	86%	47%	77%	55%	70%	79%	grade 1 events	66	492	140	365	182	65
								0%	0%	0%	0%	0%	0%
							grade 2 events	4560	30984	4844	17951	9176	6217
								2%	13%	3%	8%	4%	4%
							grade 3 events	1780	6385	2308	8332	4529	1948
								1%	2%	1%	4%	2%	1%
							grade 4 events	1756	6280	2083	8208	4142	1831
								1%	2%	1%	4%	2%	1%
							grade 5 events	4975	15718	5787	17833	7599	5896
								3%	7%	3%	8%	3%	3%
							grade 6 events	3010	47818	3419	43897	9713	3338
								1%	21%	2%	21%	4%	2%
							grade 7 events	131870	89414	117676	93628	131640	115726
								83%	40%	74%	46%	66%	75%

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	79.139700	79.17310068186265	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	46.012643	45.99839952451376	Subarray start row	1	1
[deg] Pointing Roll	297.614131	297.7467201666062	Subarray row count	774	774
[s] Window start time (MET)	134006464.184000	134006464.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	139190464.184000	139190464.184000	[s] Primary exposure time	0.000000	2.5
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-187.132523	-187.1254020033014			
[mm] SIM translation stage offset	-3	-3.007120579706367			
[s] Observation start time (MET)	136490777.184000	136489644.52672			
Observation start date	2002-04-29T18:05:13	2002-04-29T17:47:24			
[s] Observation end time (MET)	136518777.184000	136519439.74043			
Observation end date	2002-04-30T01:51:53	2002-04-30T02:03:59			
Read mode	TIMED	TIMED			

2.3 Aspect



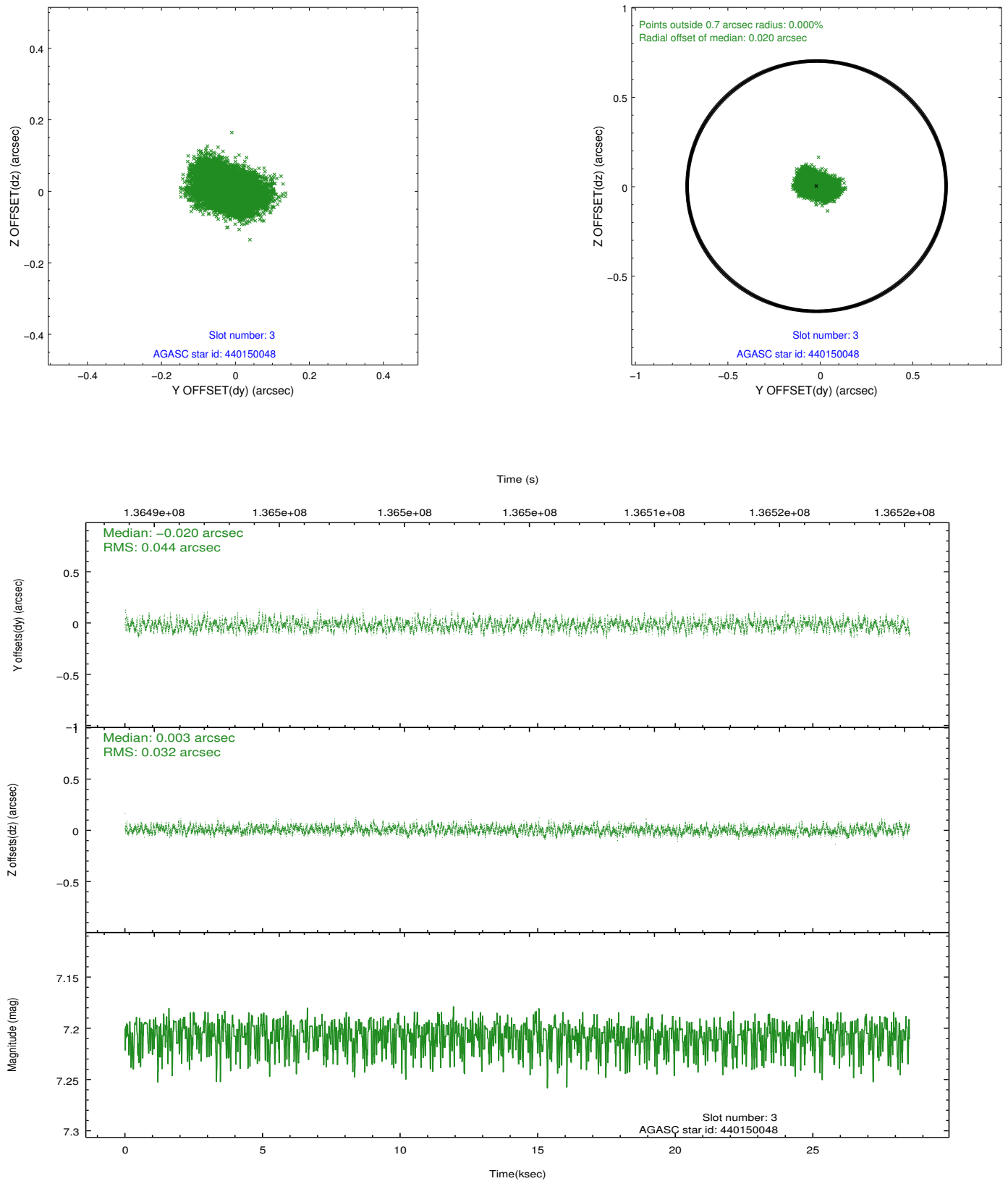


Slot Statistics

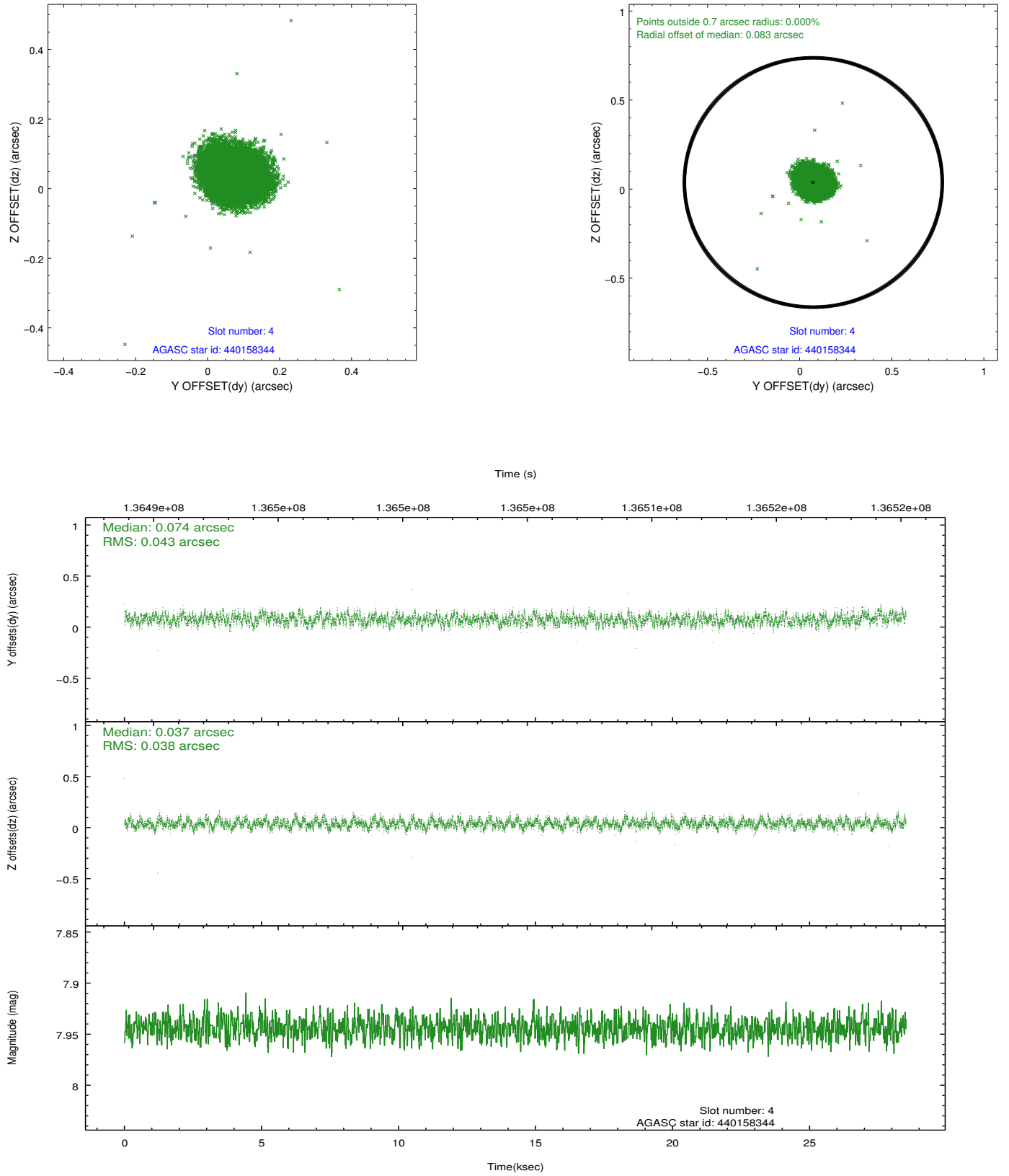
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6933	-0.052	-0.018	0.008	0.016	0.000000	0.000000	-755.57	-1791.52
1	FID	ACIS-S-4	7.20	6928	0.006	0.030	0.011	0.021	0.000000	0.000000	2157.68	116.98
2	FID	ACIS-S-5	7.23	6931	0.015	-0.003	0.009	0.016	0.000000	0.000000	-1808.28	110.62
3	GUIDE	440150048	7.21	13871	-0.020	0.003	0.058	0.095	79.112838	46.416060	-1318.16	613.90
4	GUIDE	440158344	7.94	13875	0.074	0.037	0.061	0.096	79.344888	45.394991	2209.97	-570.64
5	GUIDE	440149808	8.42	13875	-0.011	-0.092	0.074	0.122	78.873930	46.405955	-1561.58	71.87
6	GUIDE	438450792	8.81	13874	-0.023	0.109	0.075	0.124	78.654240	46.382628	-1742.40	-449.41
7	GUIDE	438460832	8.97	13870	-0.023	-0.056	0.091	0.145	78.414614	45.554782	605.76	-2379.96

2.4 Star Slots

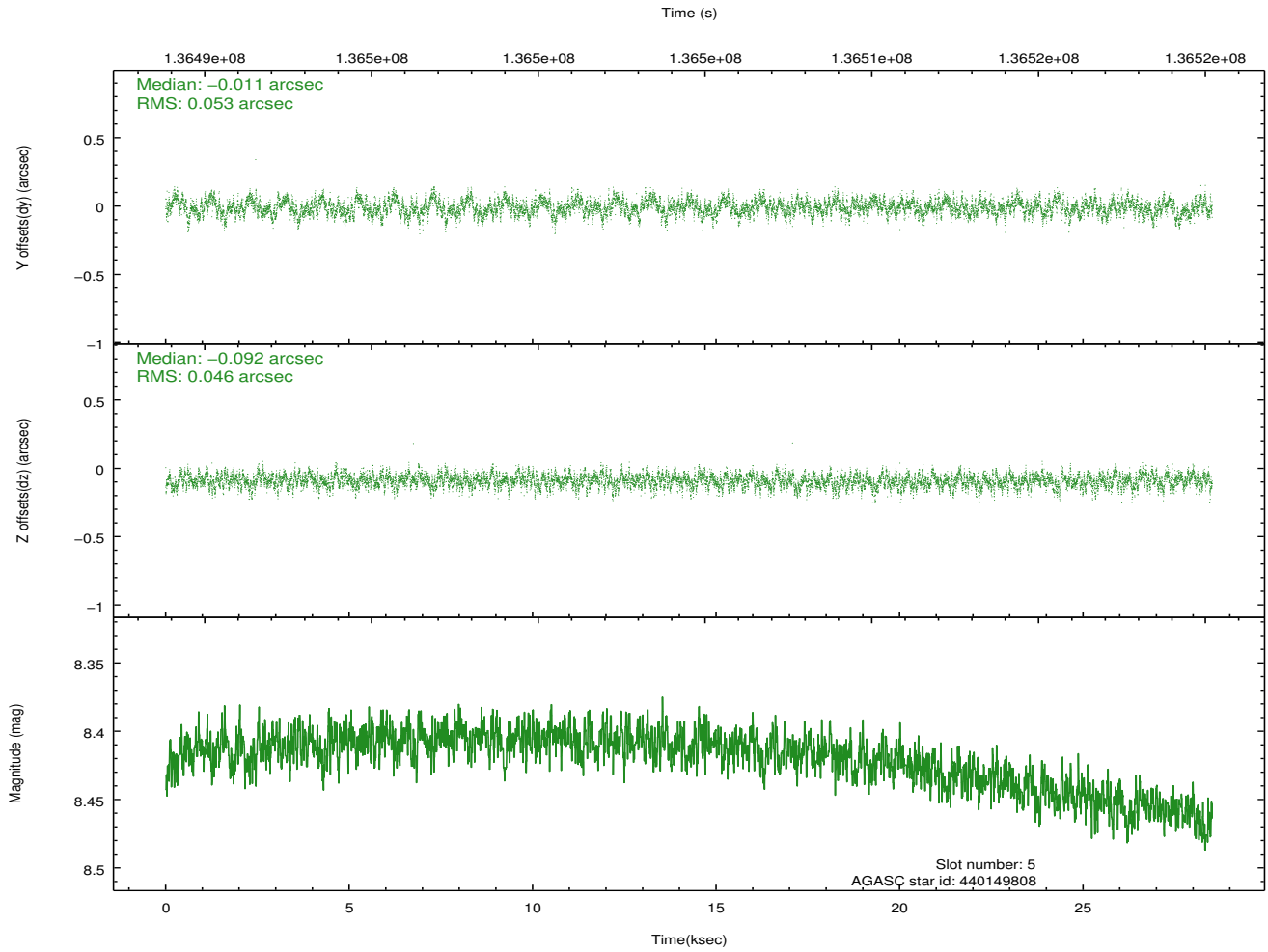
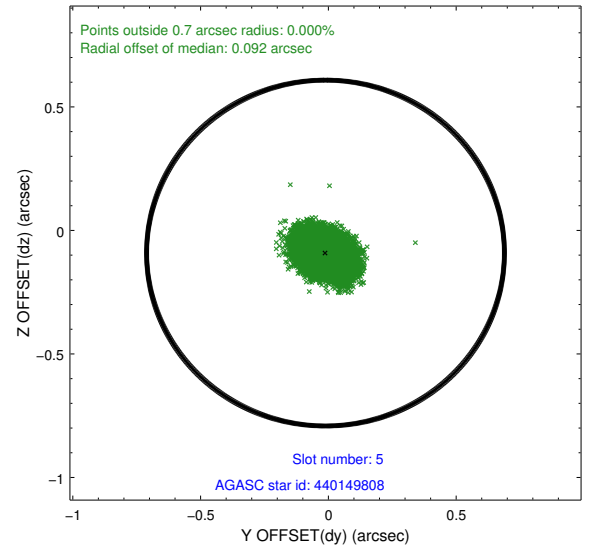
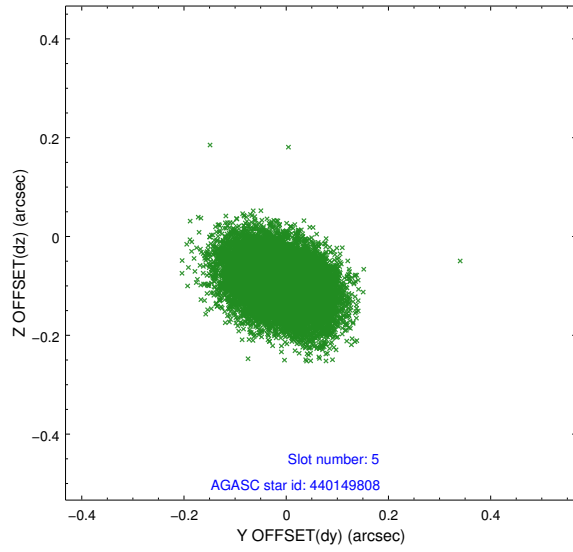
2.4.1 Slot 3



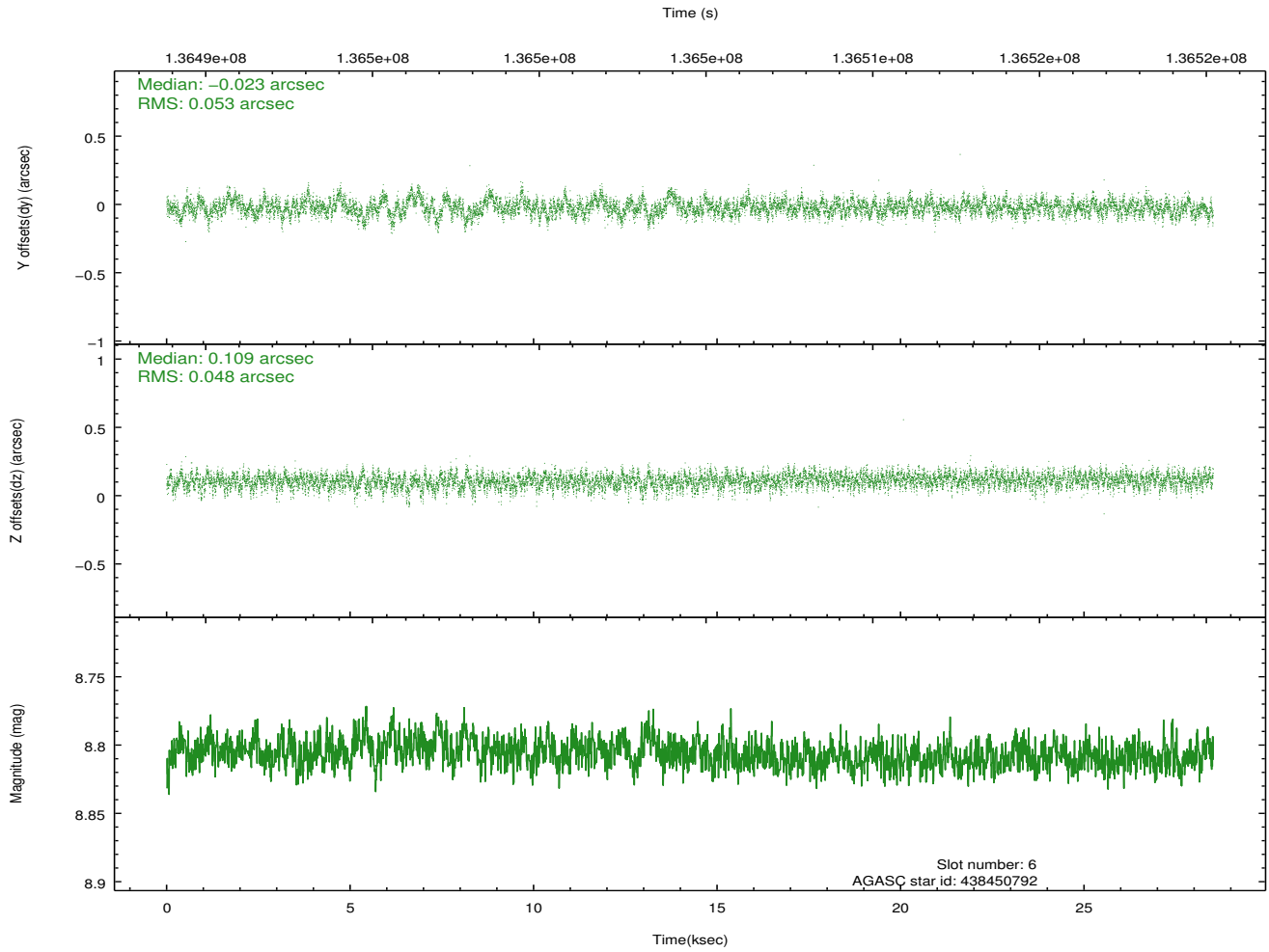
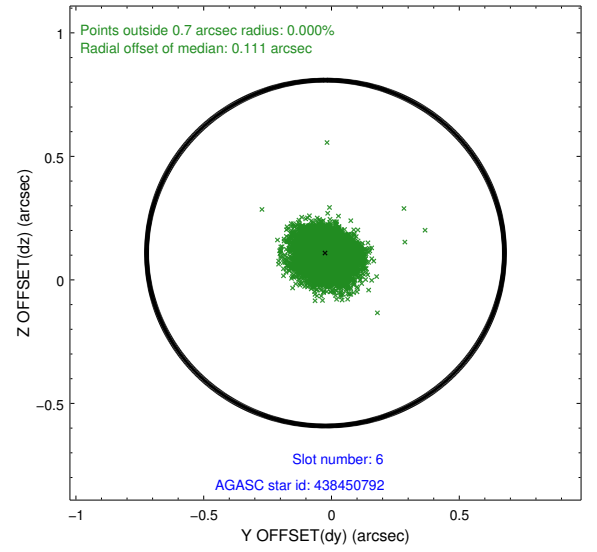
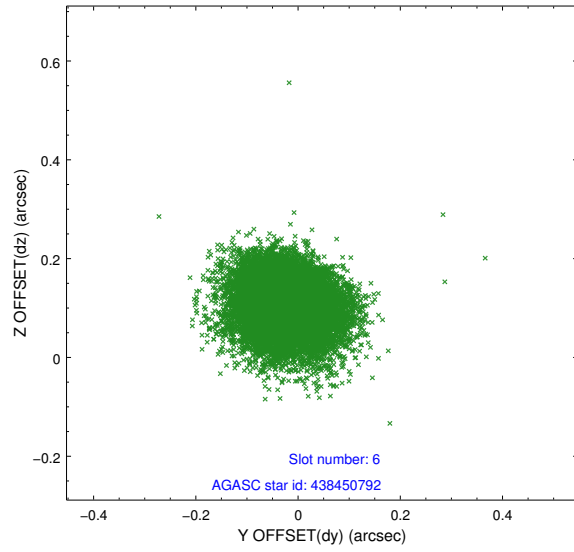
2.4.2 Slot 4



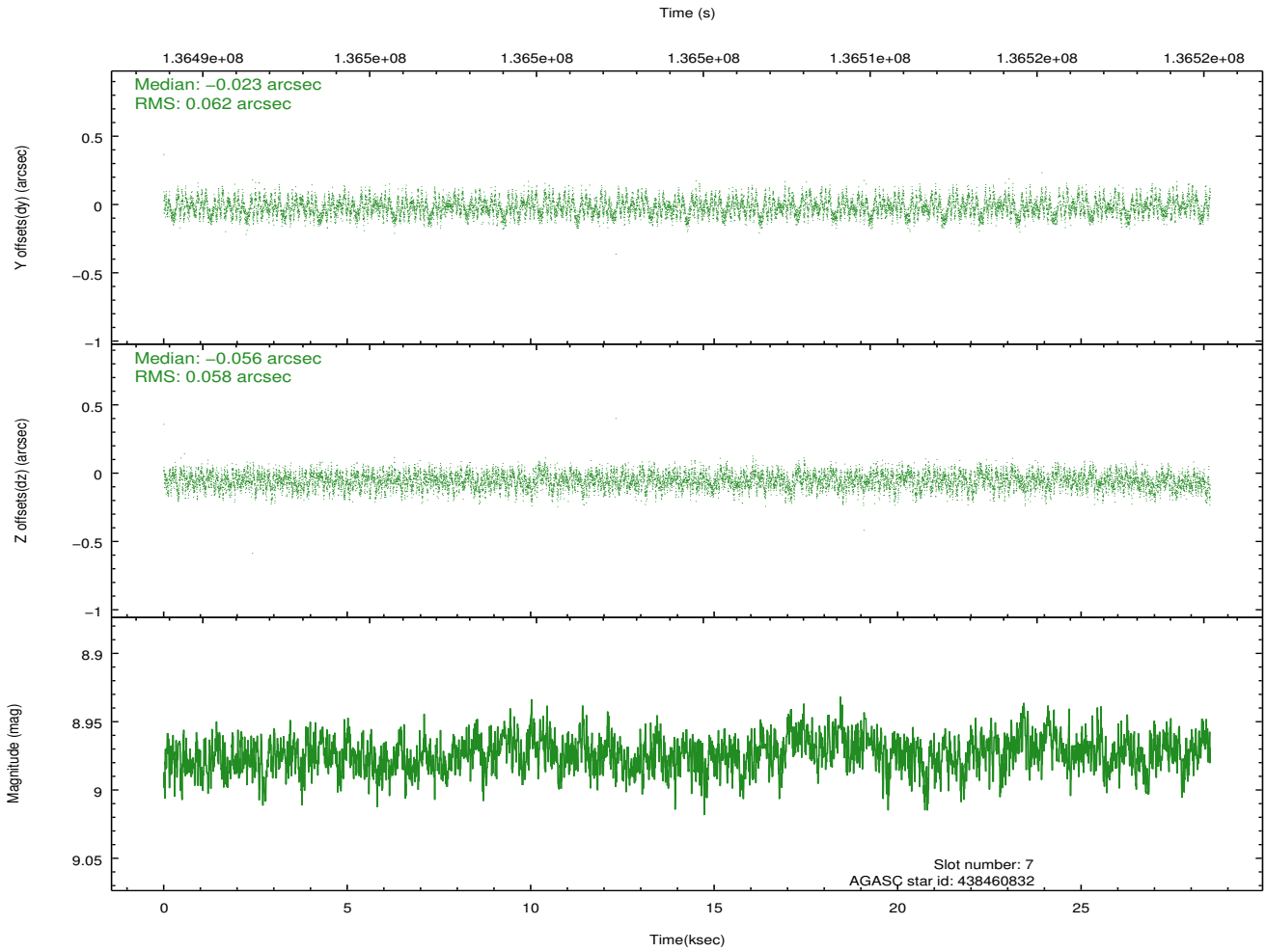
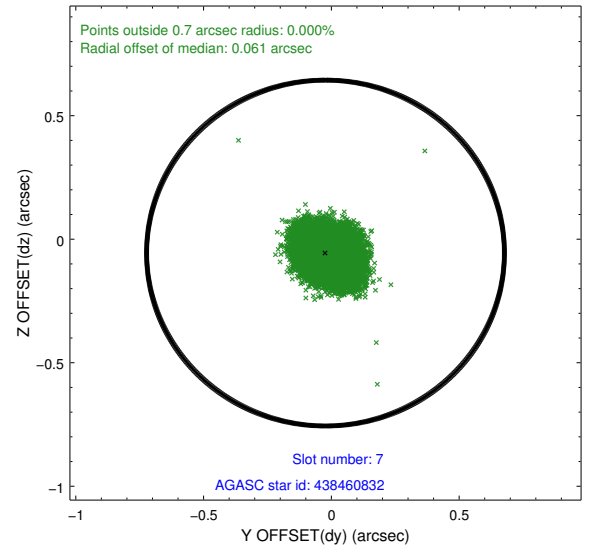
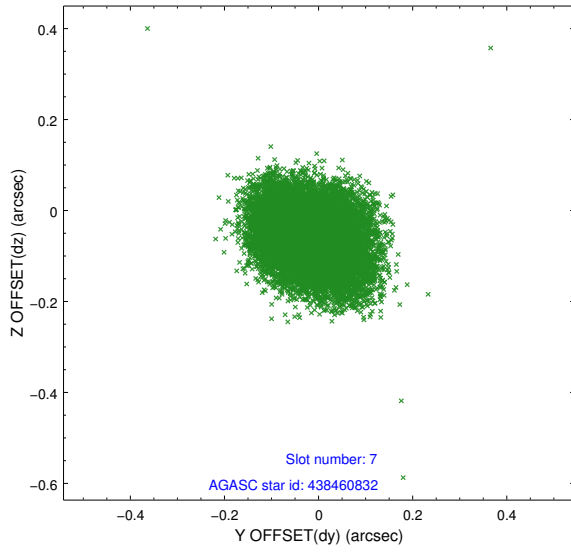
2.4.3 Slot 5



2.4.4 Slot 6

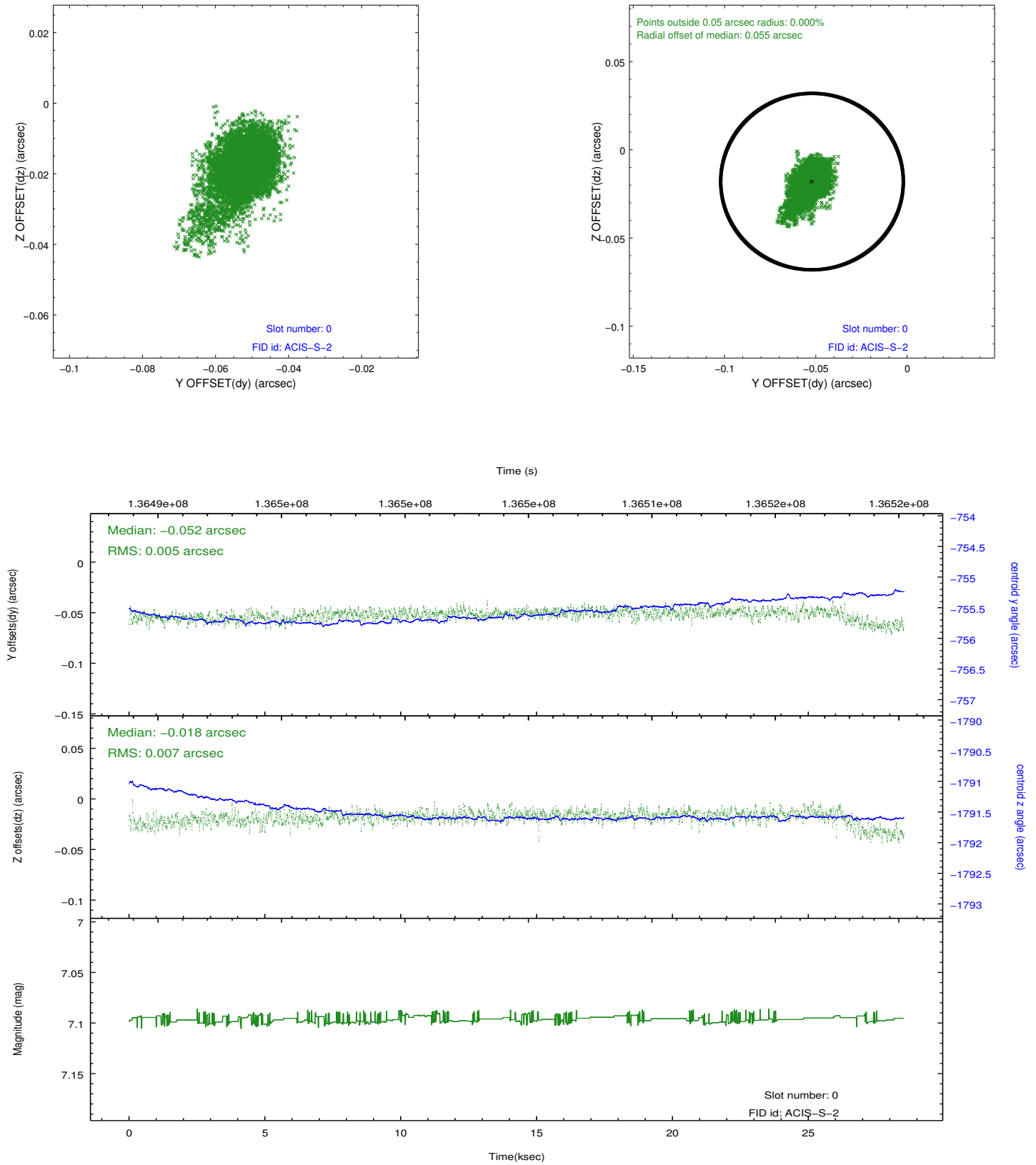


2.4.5 Slot 7

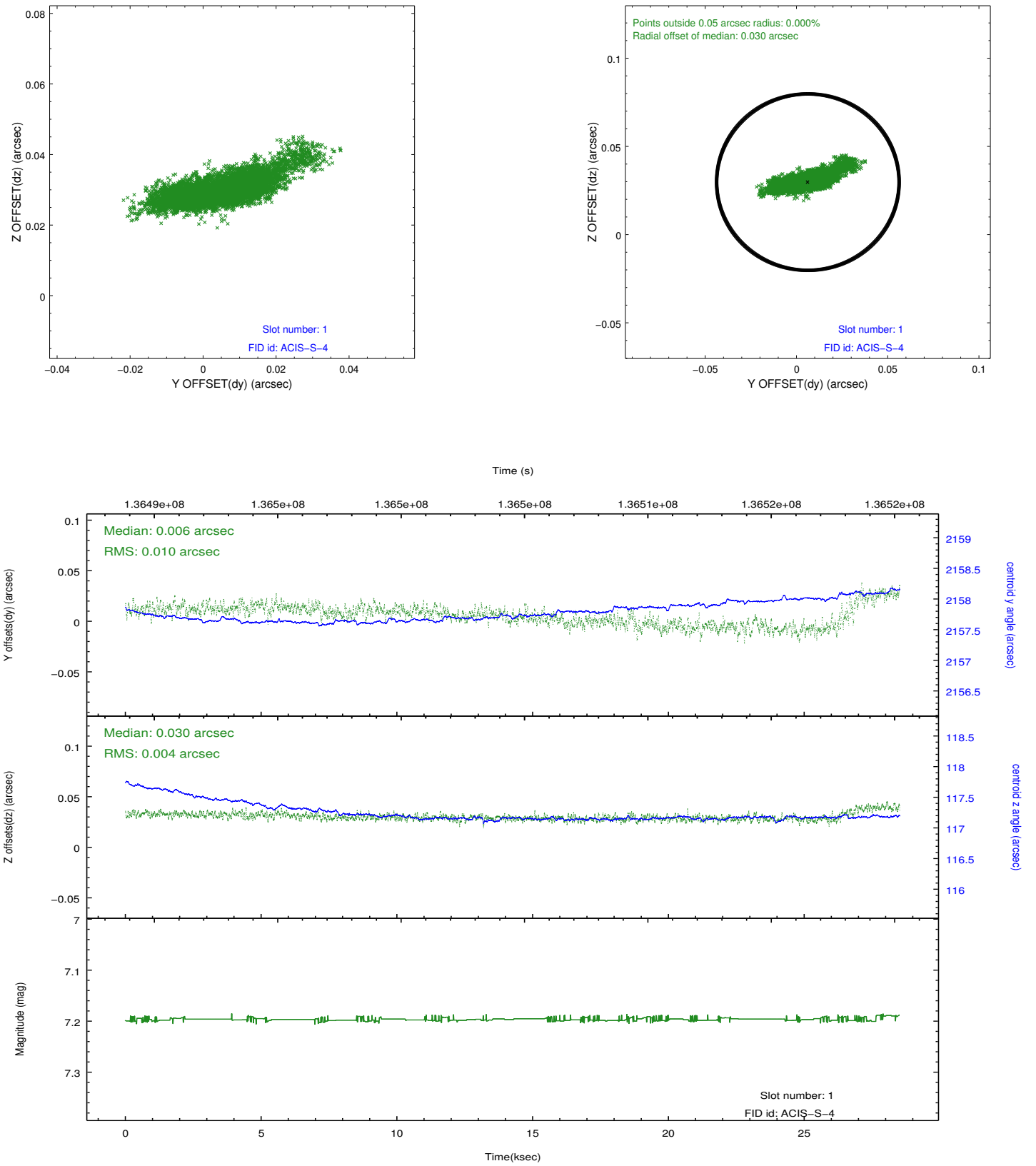


2.5 FID Slots

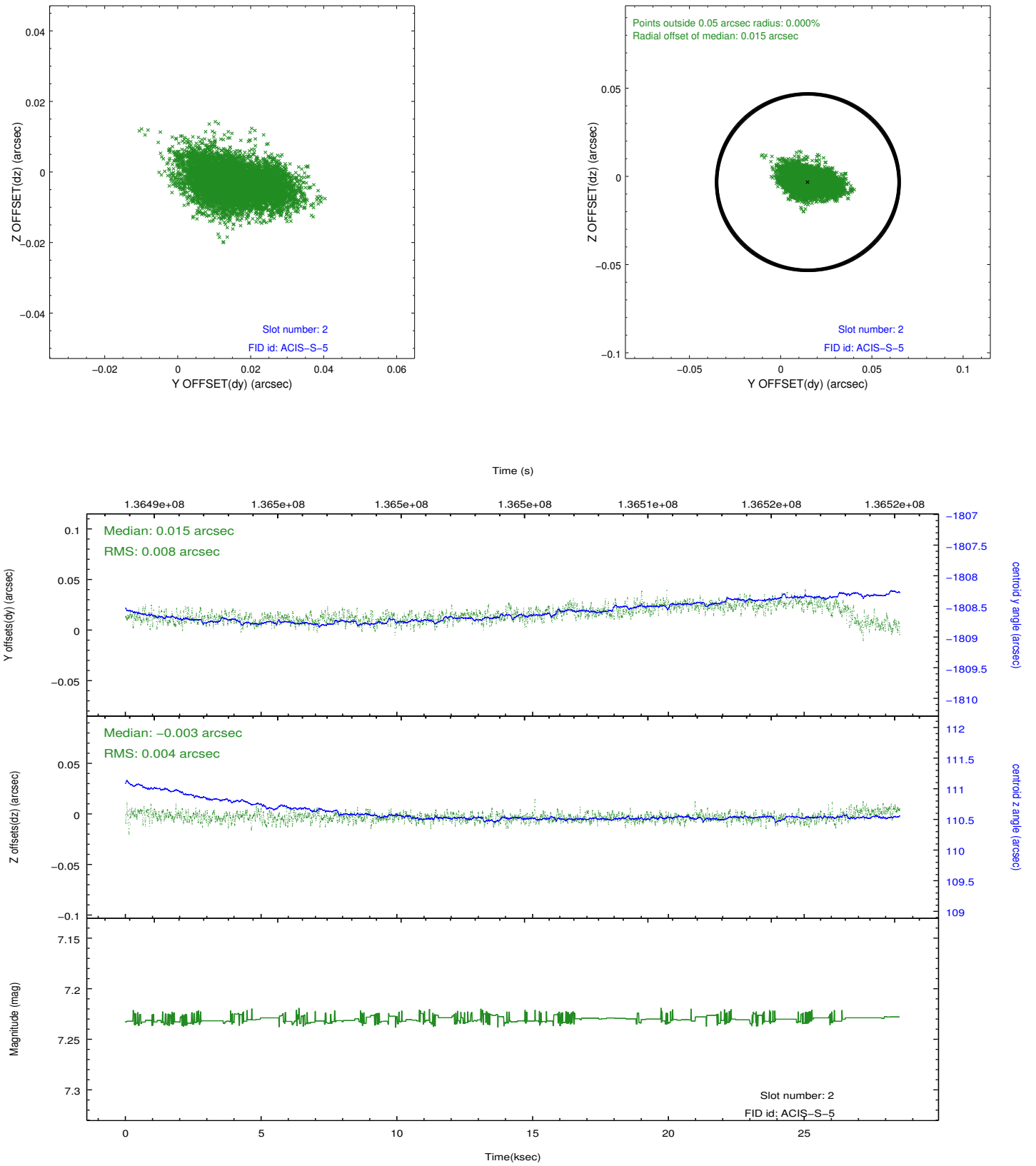
2.5.1 Slot 0



2.5.2 Slot 1

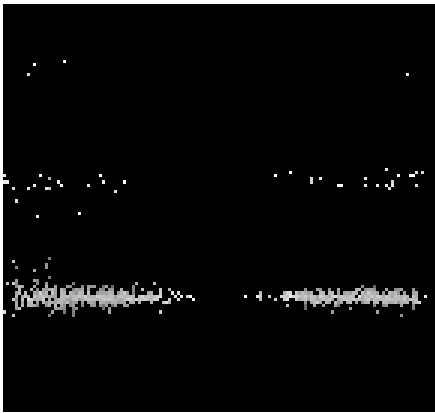


2.5.3 Slot 2

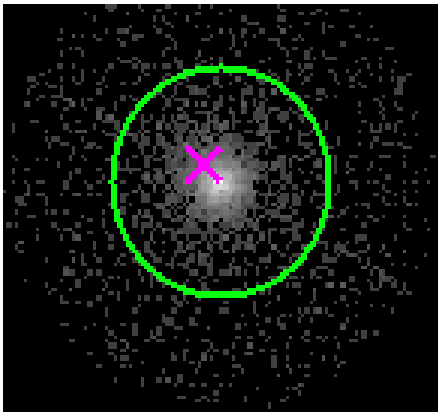


3 Gratings

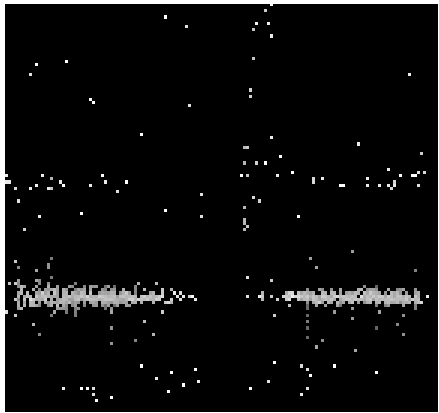
3.1 HEG Arm



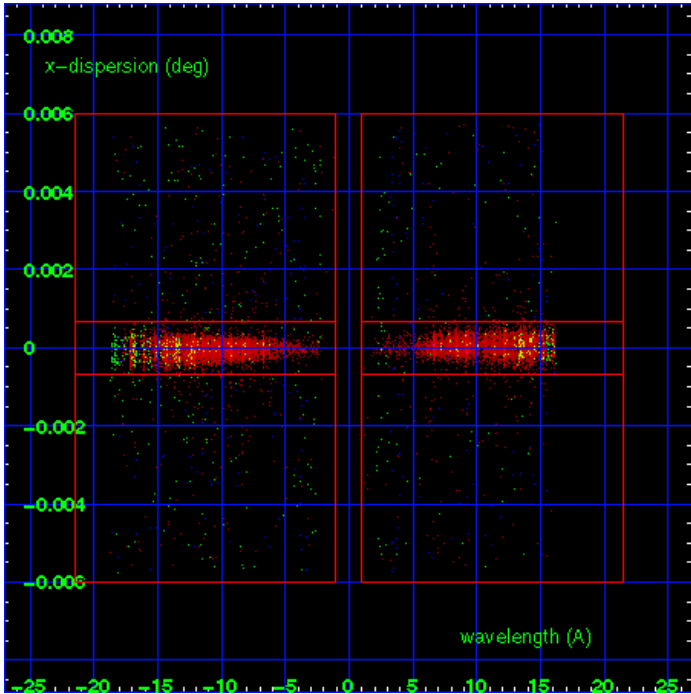
HEG Order Sort 123



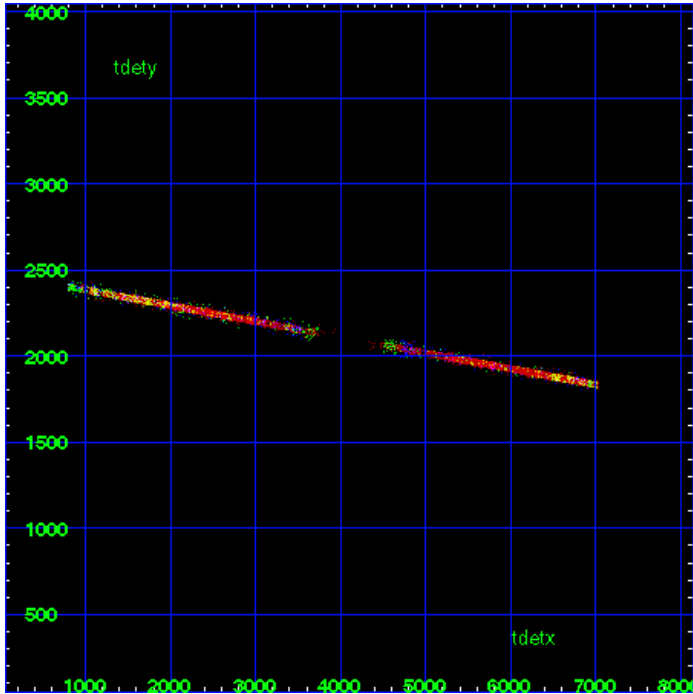
HEG Zero Order



HEG Order Sort ALL

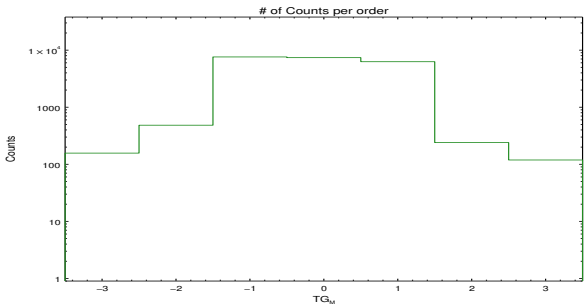


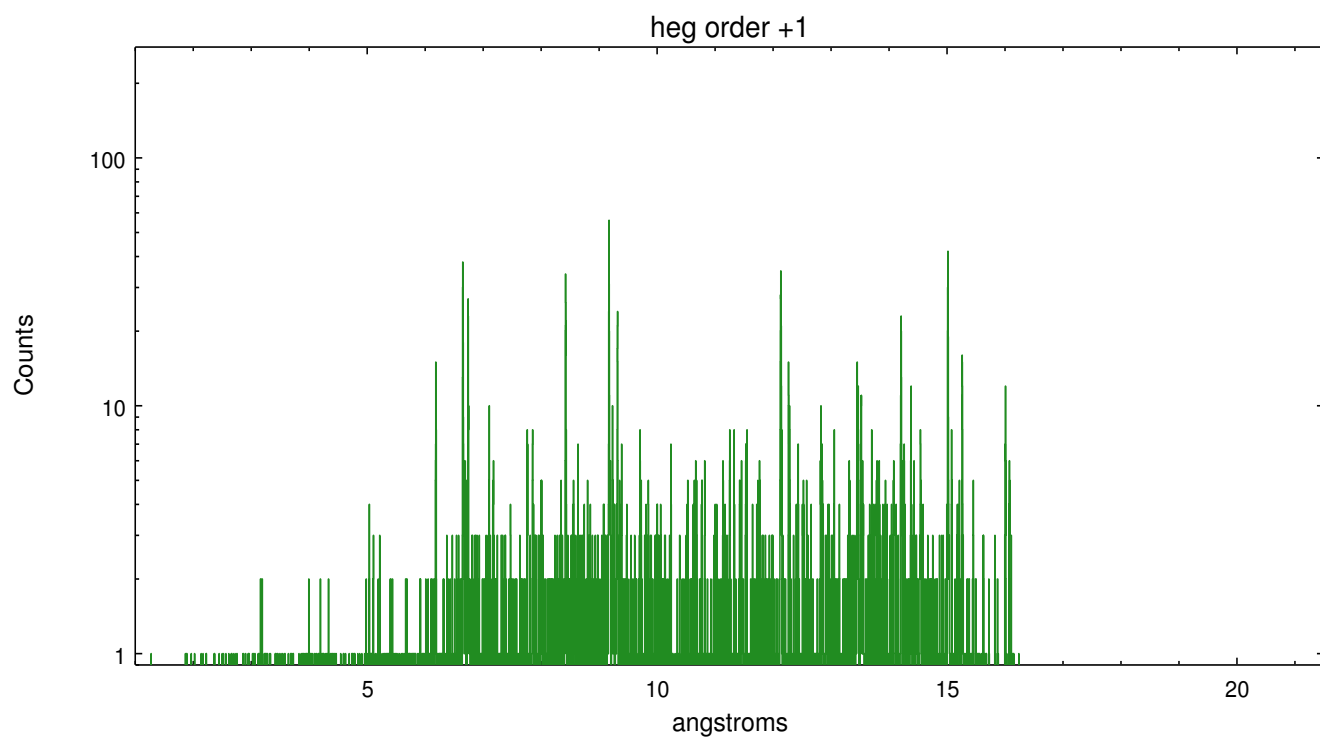
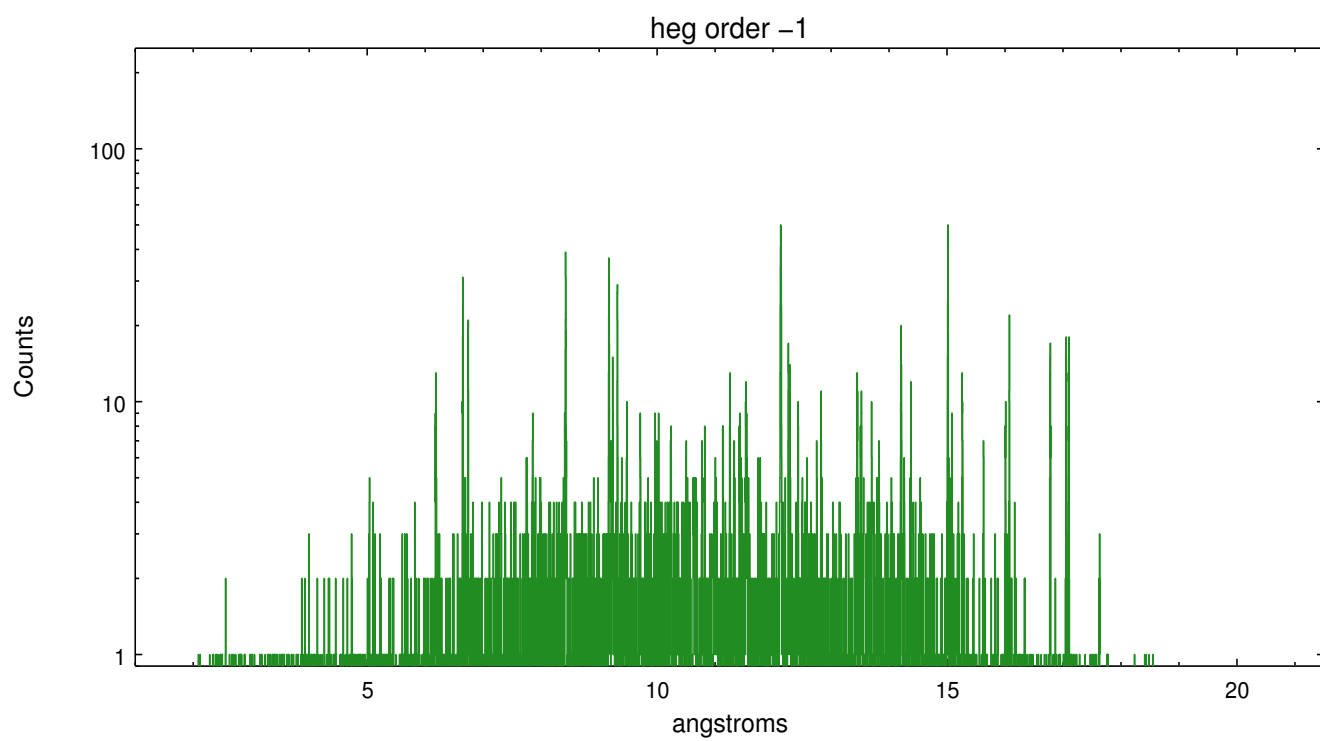
Spot Image HEG



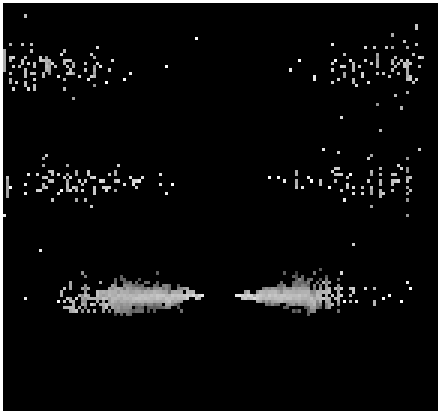
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	157	484	7608	7397	6278	240	119

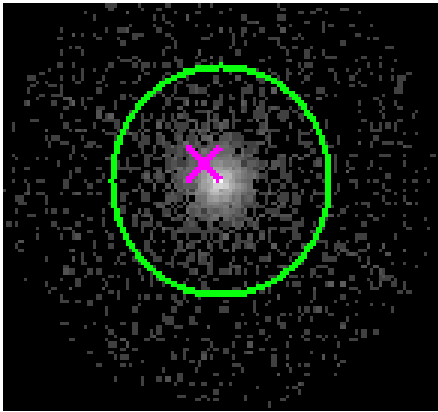




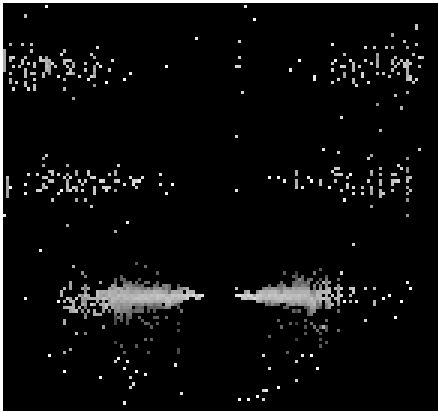
3.2 MEG Arm



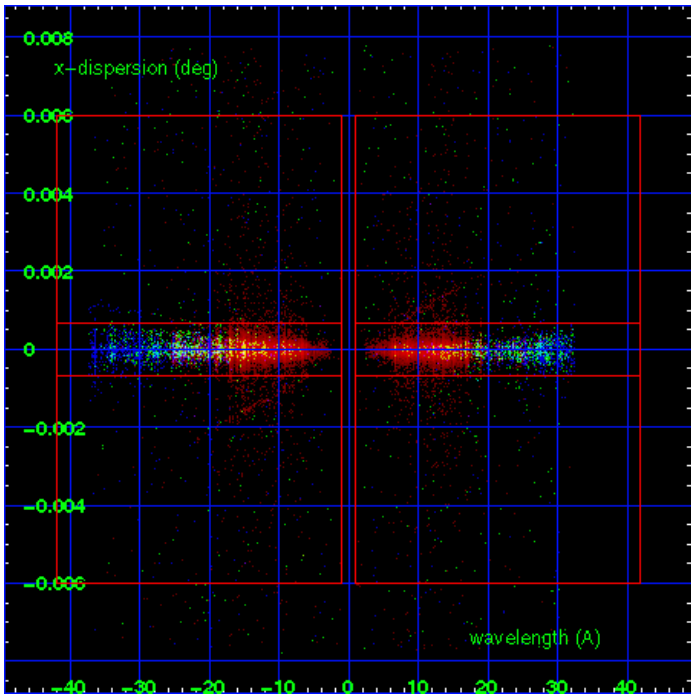
MEG Order Sort 123



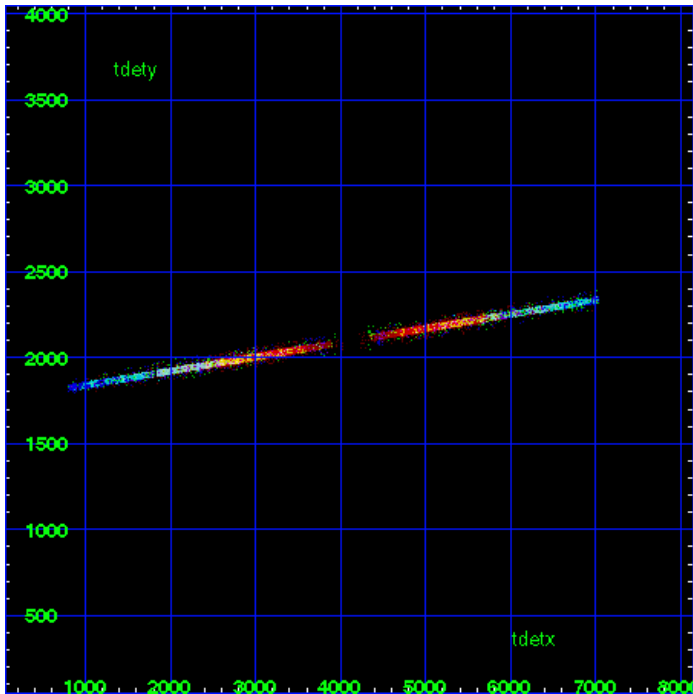
MEG Zero Order



MEG Order Sort ALL

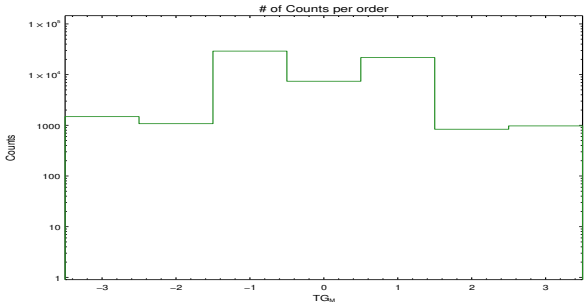


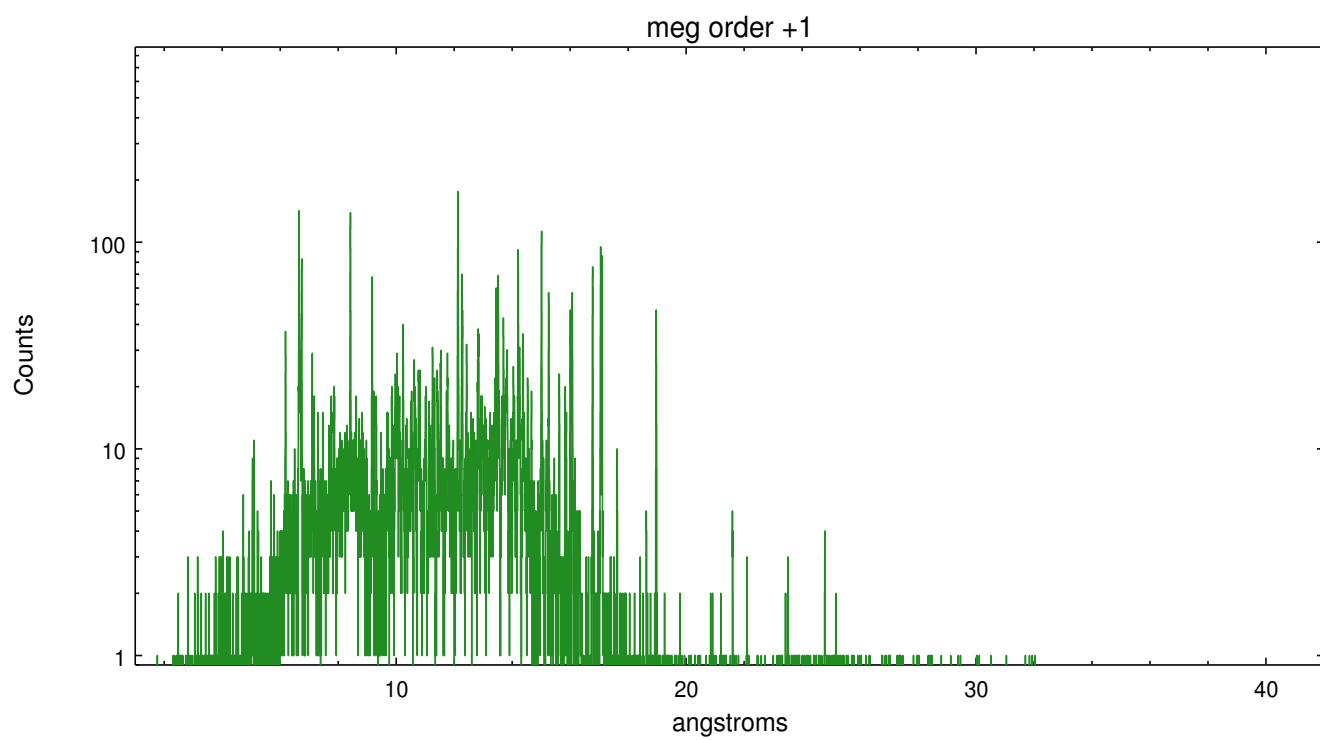
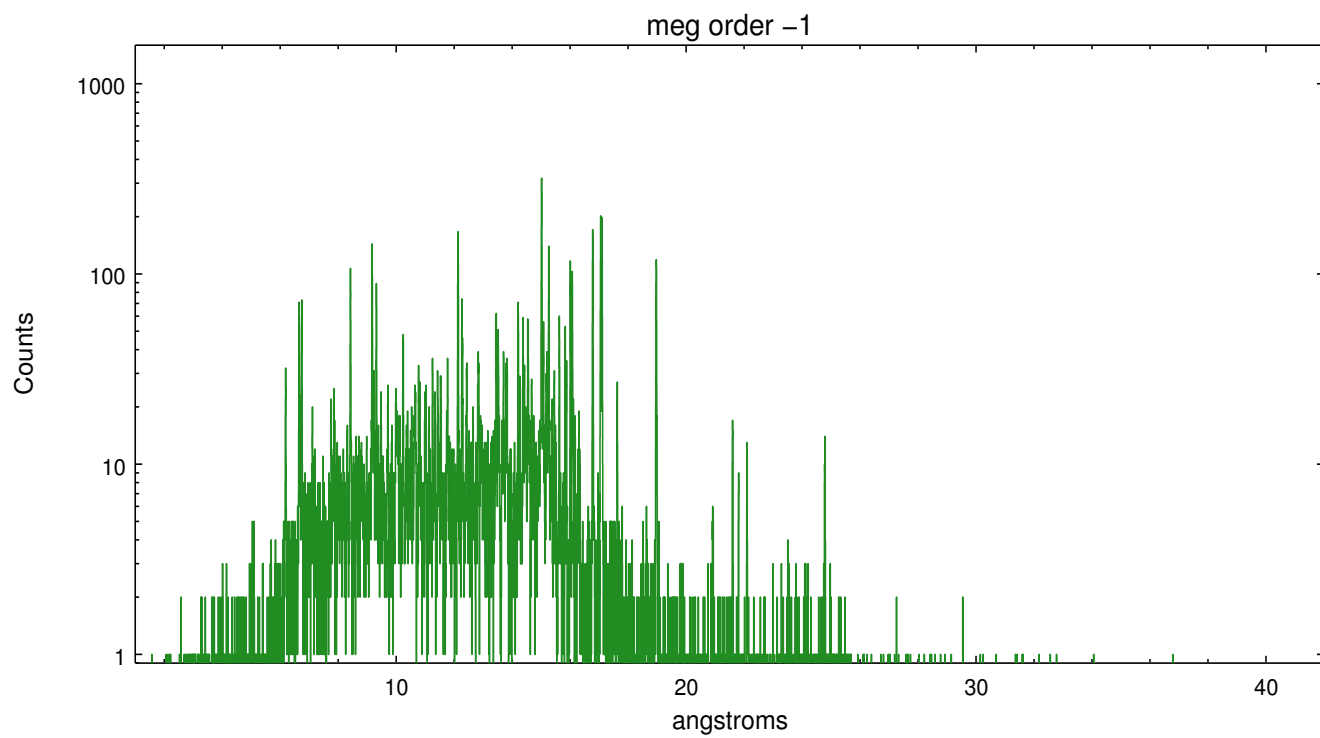
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1483	1077	29081	7397	21663	836	973





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.051

A.2 Comments

Requested coordinates are 05:16:42.30, +45:59:52.40. Coordinates for Capella are 05 16 41.3591, +45 59 52.768. The zeroth order was correctly identified by the software and the spectral data correctly extracted.