

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 14239 - L2 Version 2
Chandra X-Ray Center

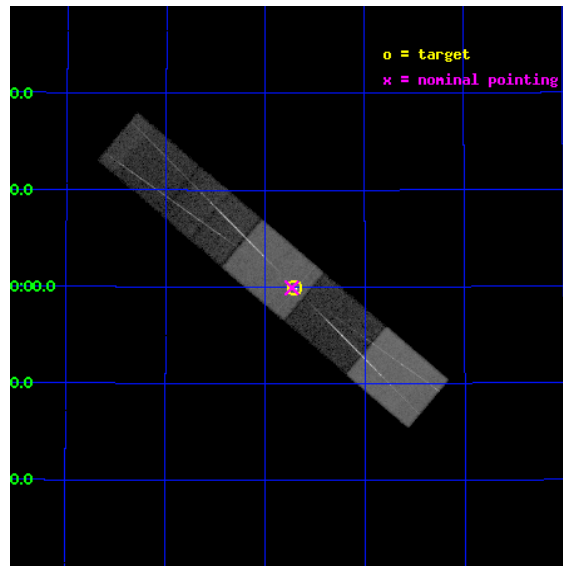
L2 Processing Date : Feb 29 2012

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1 Front

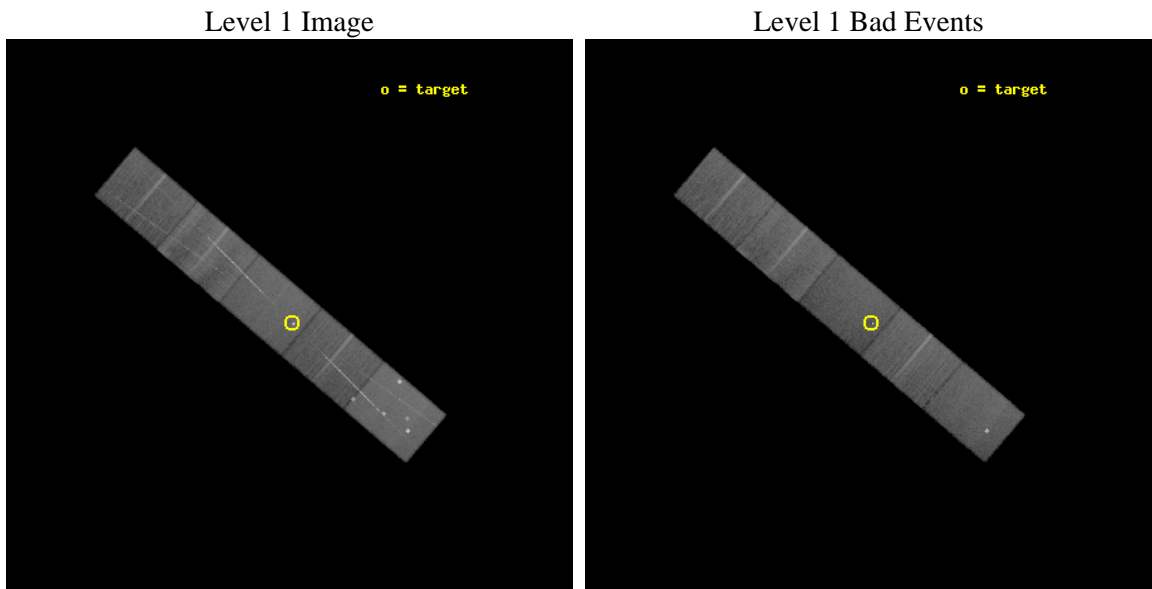
seq_num	291012	Sequence number
obs_id	14239	Observation id
title	AO-13 Calibration Observations of Capella	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	Capella	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.17625	Observer's specified target RA [deg]
dec_targ	45.997889	Observer's specified target Dec [deg]
ra_nom	79.182893645874	Nominal RA [deg]
dec_nom	45.998455769943	Nominal Dec [deg]
roll_nom	220.32594582394	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30035.416603088	Sum of GTIs [s]
livetime	29530.445976884	Livetime [s]
ontime5	30035.375563085	Sum of GTIs [s]
ontime6	30032.893492877	Sum of GTIs [s]
ontime7	30035.416603088	Sum of GTIs [s]
ontime8	30035.293483078	Sum of GTIs [s]
ontime9	30035.252443075	Sum of GTIs [s]
l2events	294493	Number of level 2 events



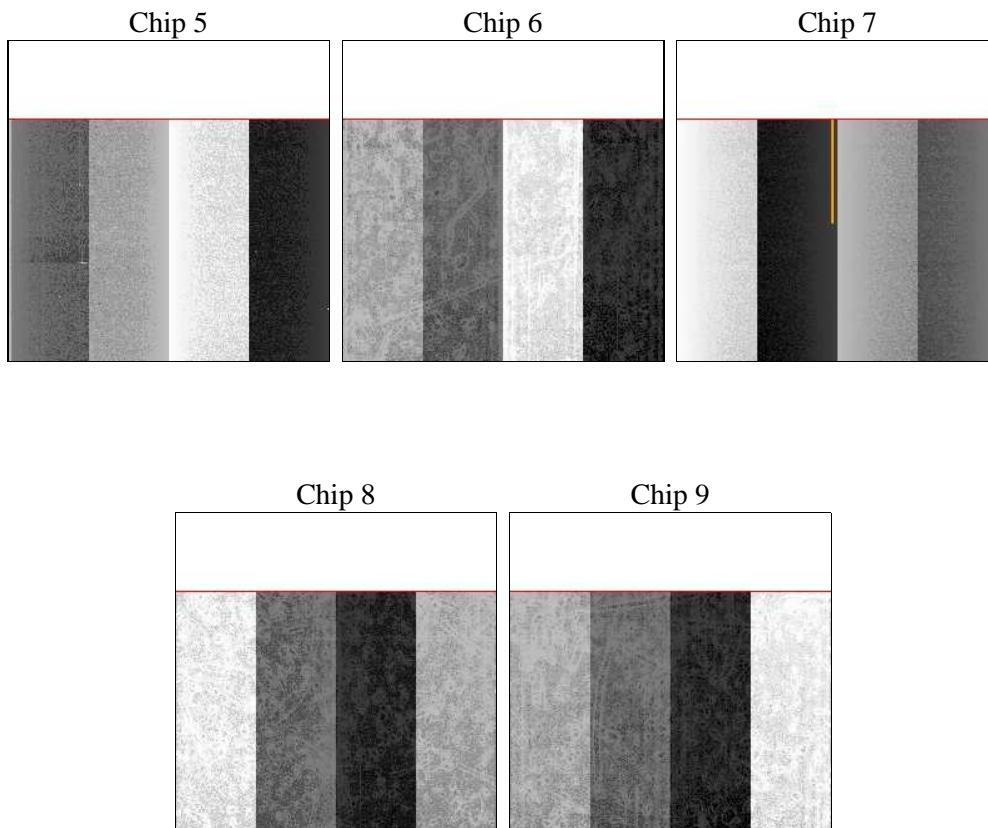
2 OBI

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	8.4.3	Processing system revision	ontime	30035.416603088	Sum of GTIs [s]
caldbver	4.4.8	 	ontime5	30035.375563085	Sum of GTIs [s]
date	2012-02-29T14:44:31	Date and time of file creation	ontime6	30032.893492877	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	30035.416603088	Sum of GTIs [s]
			ontime8	30035.293483078	Sum of GTIs [s]
			ontime9	30035.252443075	Sum of GTIs [s]
			l1events	991378	Number of level 1 events

2.1.4 Events

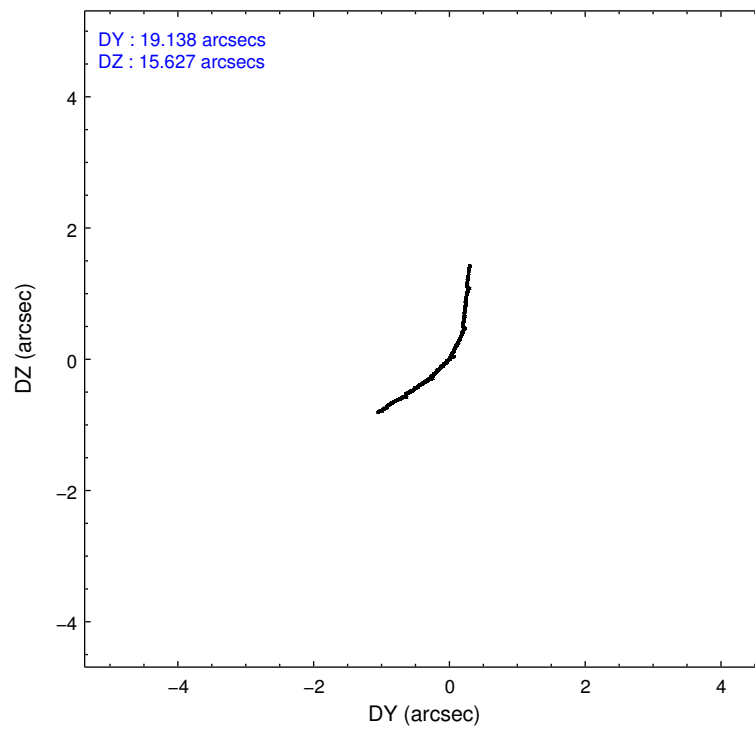
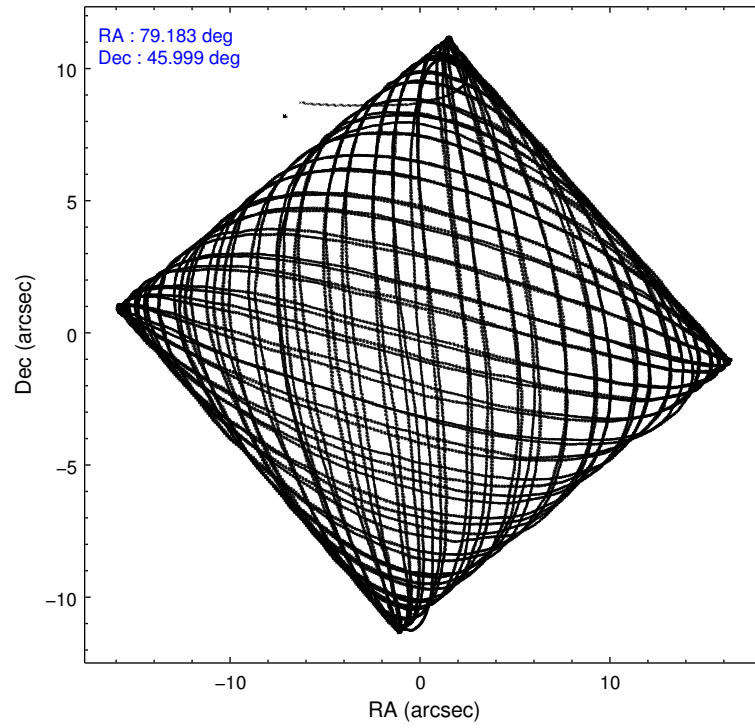
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	268574	160116	210021	207509	145158
rejected events	122864	130364	108948	142567	124051
rejected %	45%	81%	51%	68%	85%

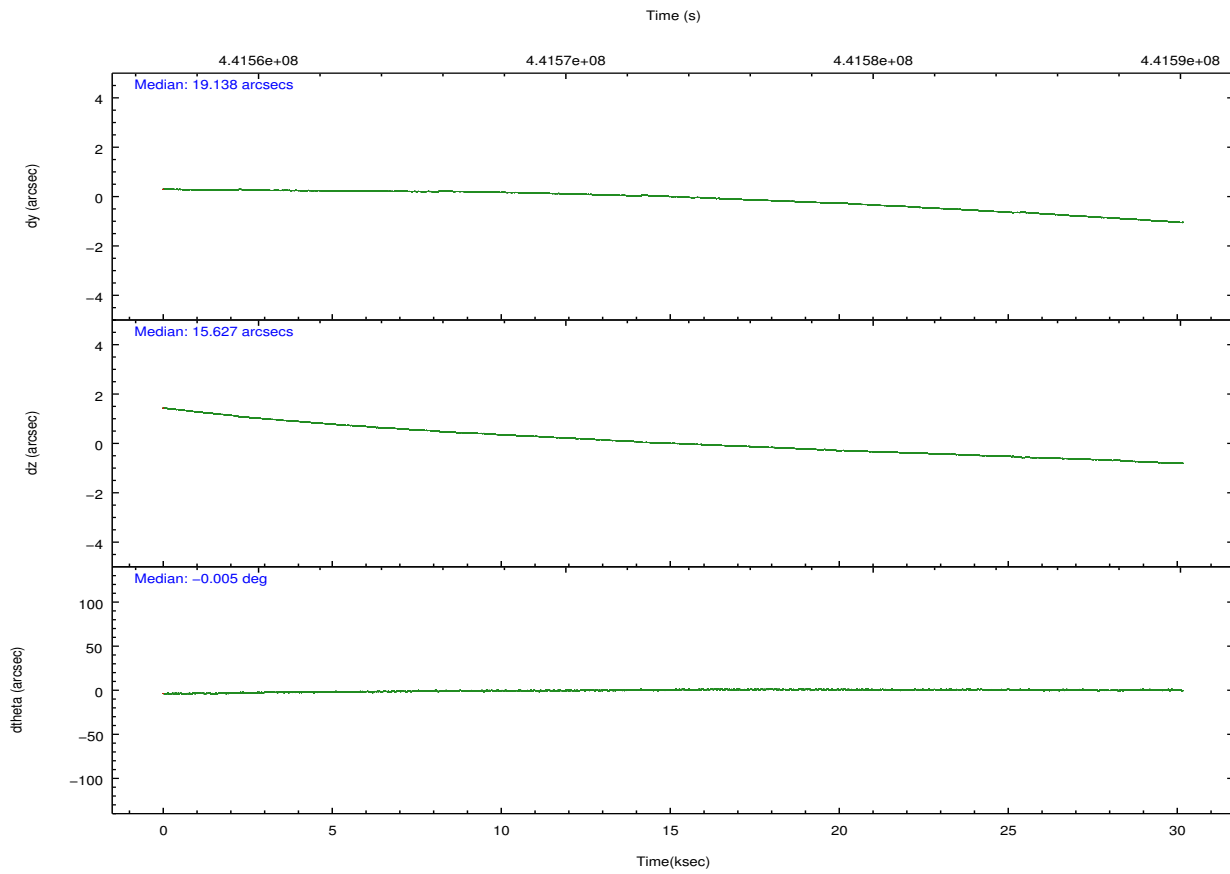
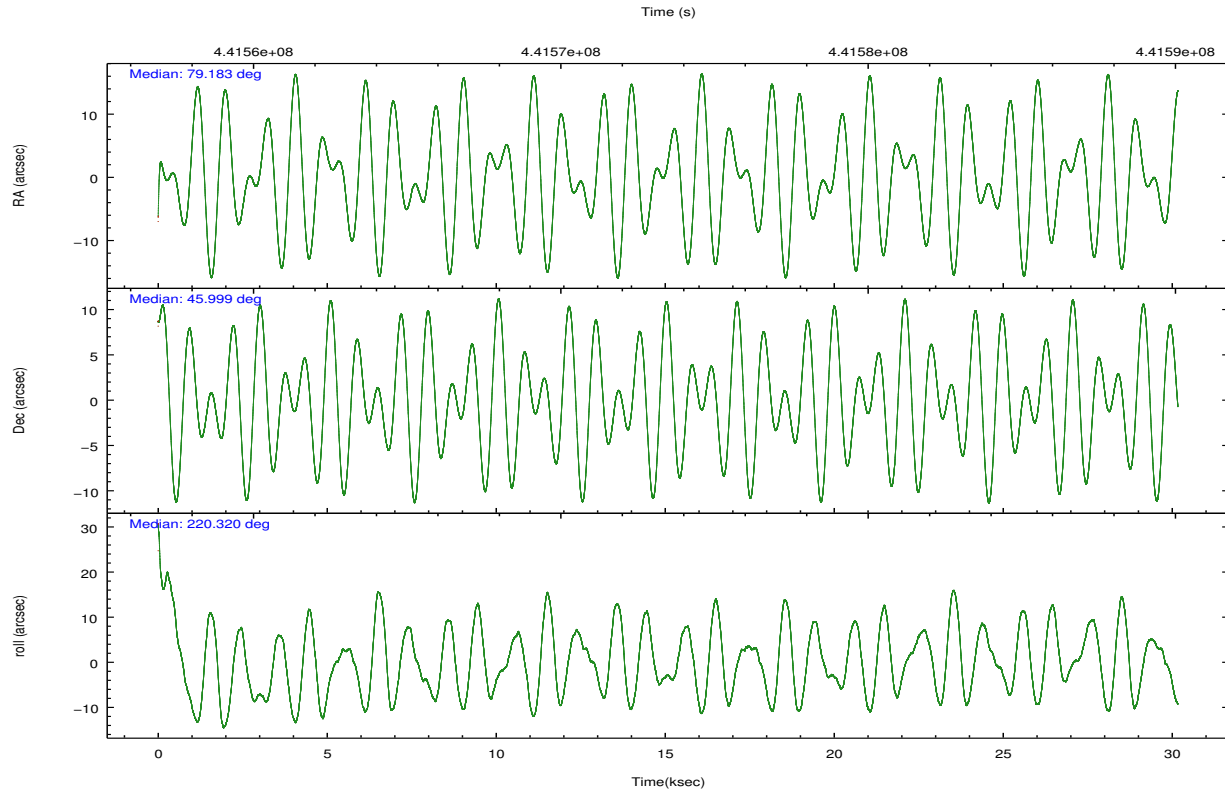
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	31843	16387	11526	26686	9143
	11%	10%	5%	12%	6%
grade 1 events	481	113	526	185	71
	0%	0%	0%	0%	0%
grade 2 events	41619	5014	21456	13125	4113
	15%	3%	10%	6%	2%
grade 3 events	6108	2199	9568	5692	2006
	2%	1%	4%	2%	1%
grade 4 events	5982	2251	9333	5403	1977
	2%	1%	4%	2%	1%
grade 5 events	18450	6913	20958	9937	7712
	6%	4%	9%	4%	5%
grade 6 events	60180	3905	49200	14044	3874
	22%	2%	23%	6%	2%
grade 7 events	103911	123334	87454	132437	116262
	38%	77%	41%	63%	80%

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	79.195644	79.18289364587389	CCD I2 on	N	N
[deg] Pointing Dec	46.024305	45.99845576994332	CCD I3 on	N	N
[deg] Pointing Roll	220.160137	220.3259458239409	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	-187.132523	-187.1254020033014	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.007120579706367	CCD S4 on	Y	Y
[s] Observation start time (MET)	441558568.184000	441557490.47245	CCD S5 on	Y	Y
Observation start date	2011-12-29T15:08:22	2011-12-29T14:51:30	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	441588568.184000	441589487.38664	On-chip summing requested	N	N
Observation end date	2011-12-29T23:28:22	2011-12-29T23:44:47	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	774	774
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	2.4

2.3 Aspect



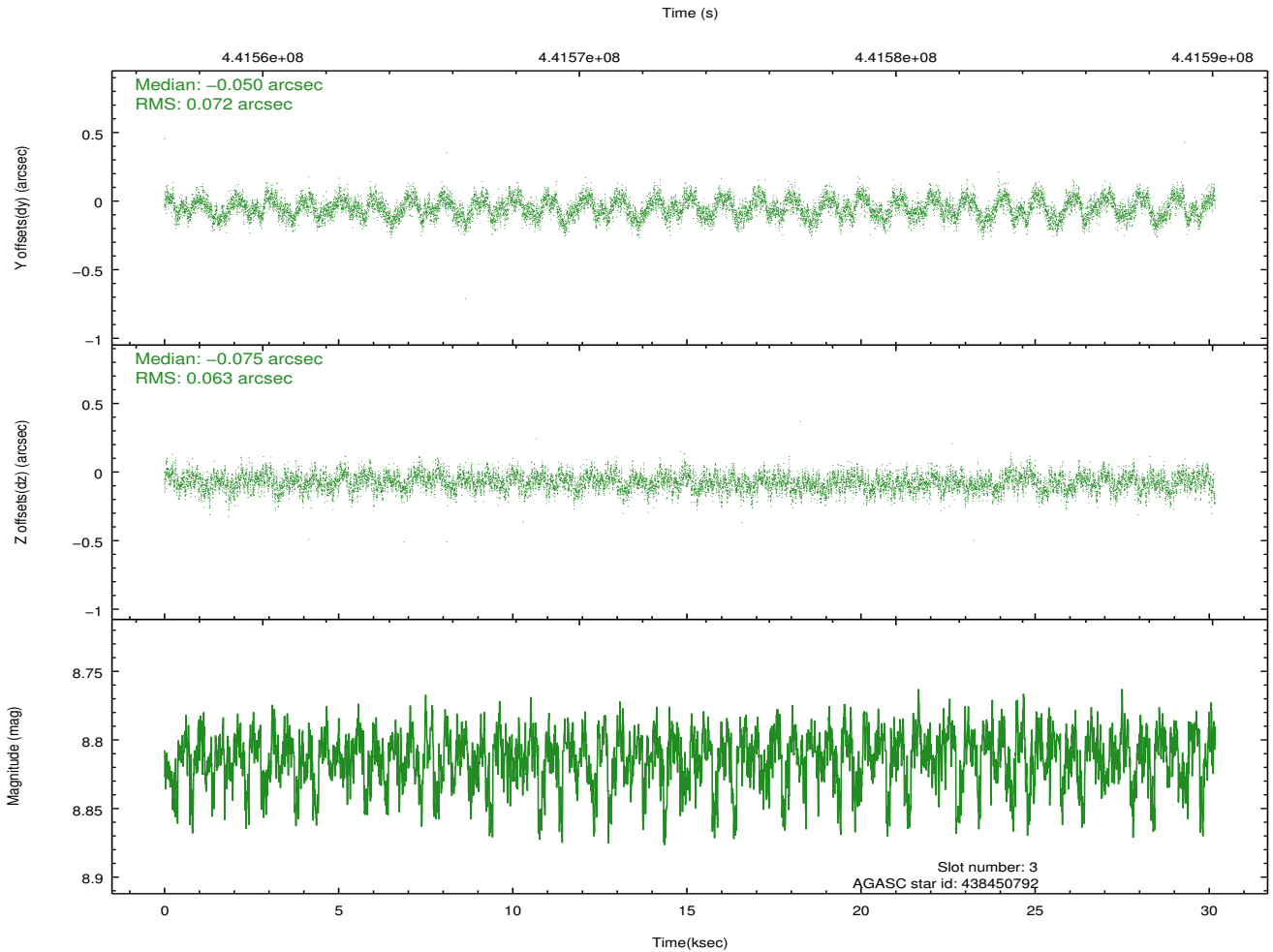
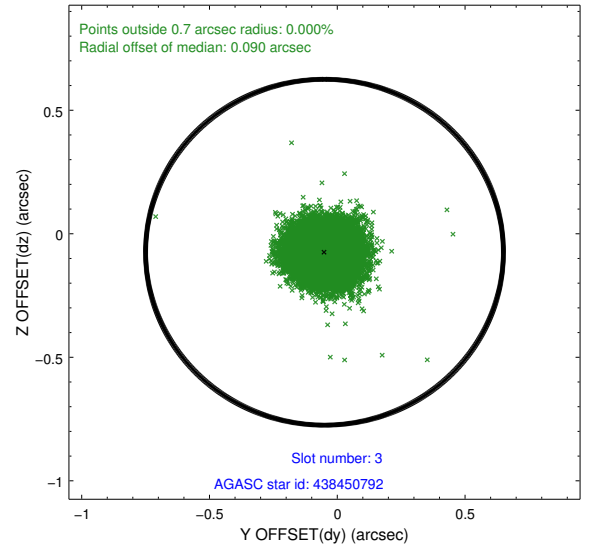
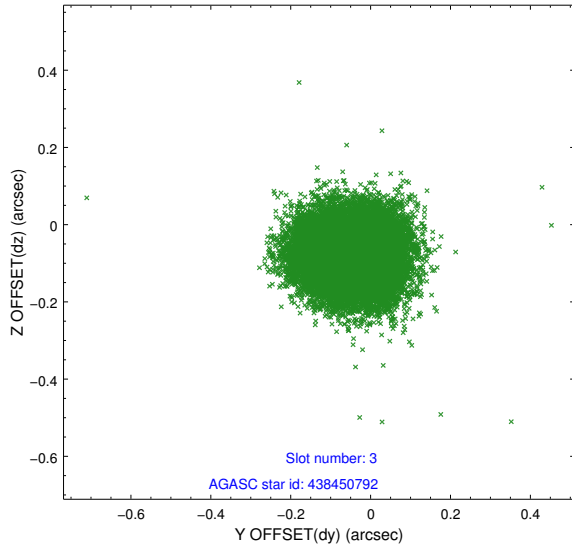


Slot Statistics

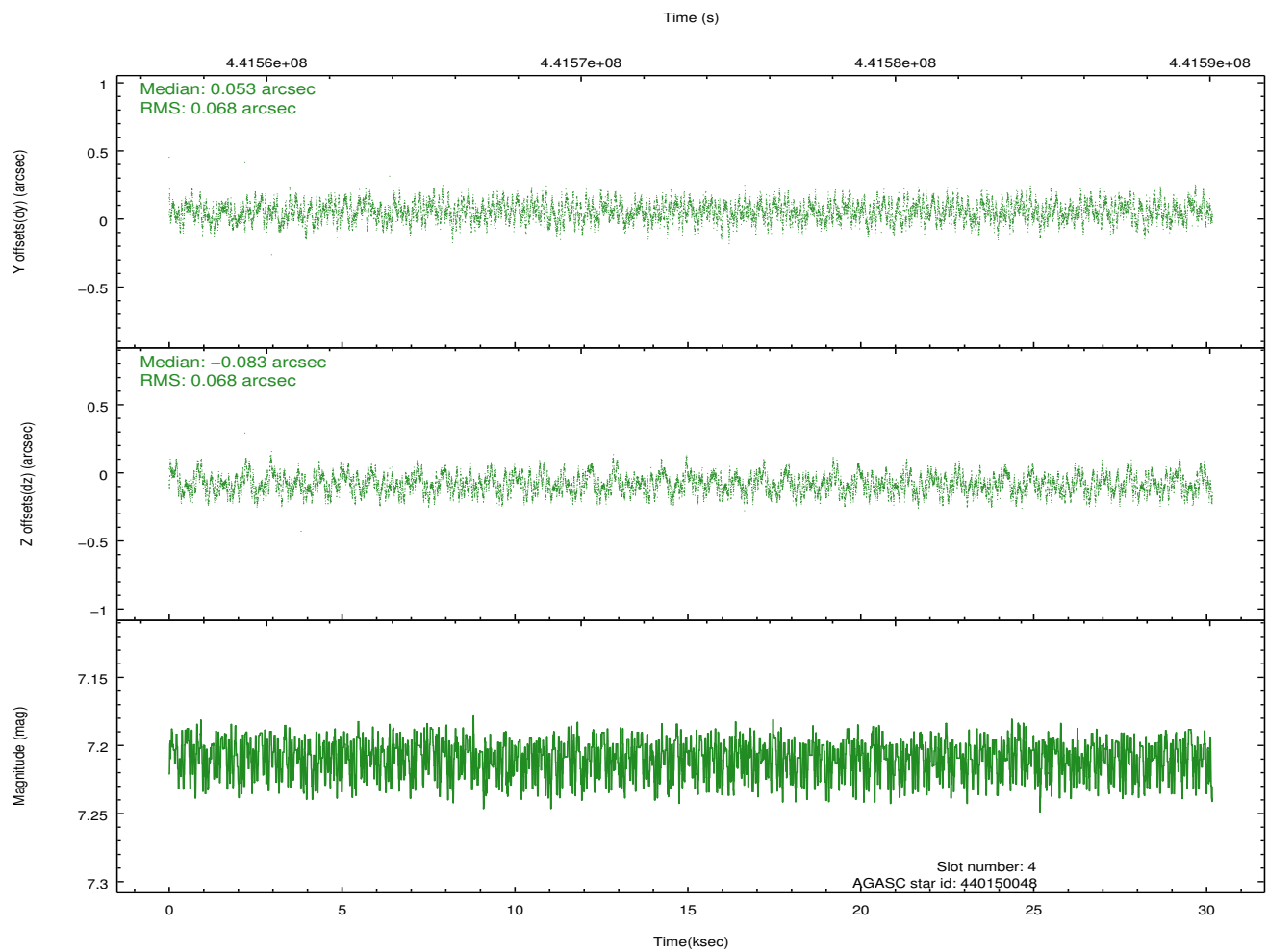
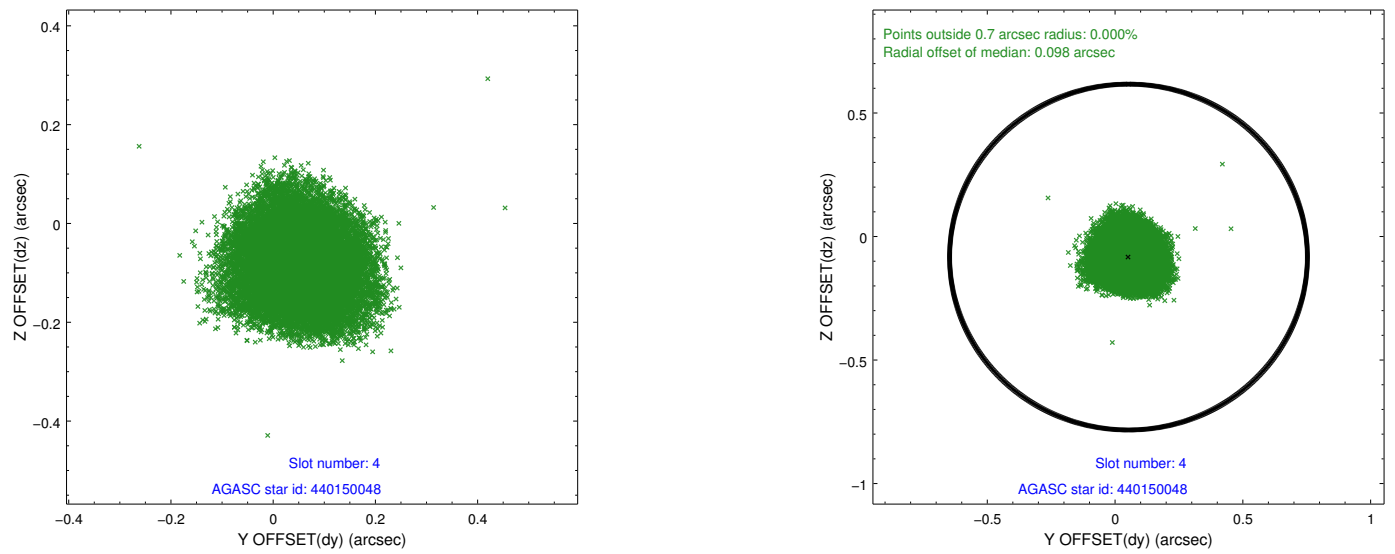
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.02	7359	0.060	0.025	0.026	0.035	0.000000	0.000000	924.21	-1794.82
1	FID	ACIS-S-4	7.01	7358	0.249	-0.043	0.022	0.041	0.000000	0.000000	2141.86	109.18
2	FID	ACIS-S-5	7.05	7359	-0.330	0.026	0.017	0.027	0.000000	0.000000	-1824.94	102.94
3	GUIDE	438450792	8.81	14713	-0.050	-0.075	0.104	0.159	78.654240	46.382628	194.08	-1854.68
4	GUIDE	440150048	7.21	14714	0.053	-0.083	0.106	0.157	79.112838	46.416060	-751.91	-1210.38
5	GUIDE	440163960	8.87	14707	-0.195	-0.114	0.088	0.140	79.298370	45.827072	260.78	708.90
6	GUIDE	440164960	8.31	14707	0.138	-0.030	0.079	0.130	79.132526	46.140947	-149.50	-421.55
7	GUIDE	440140240	9.94	14632	0.047	0.300	0.186	0.302	78.889349	46.726437	-1052.72	-2419.88

2.4 Star Slots

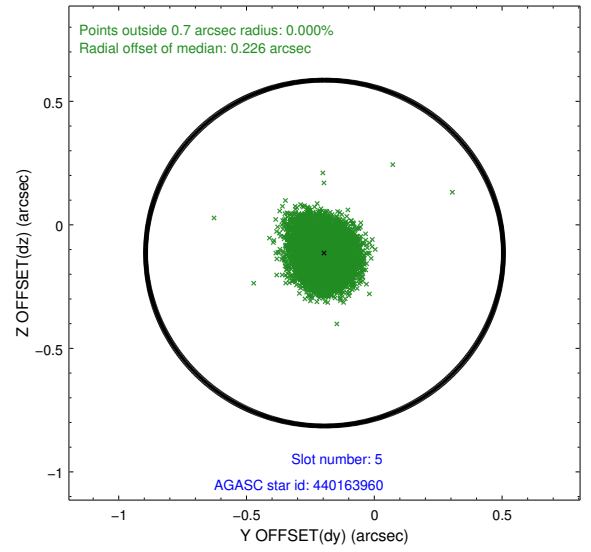
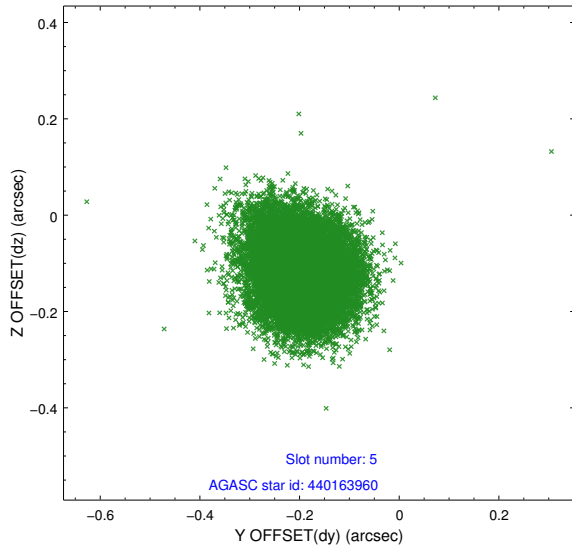
2.4.1 Slot 3



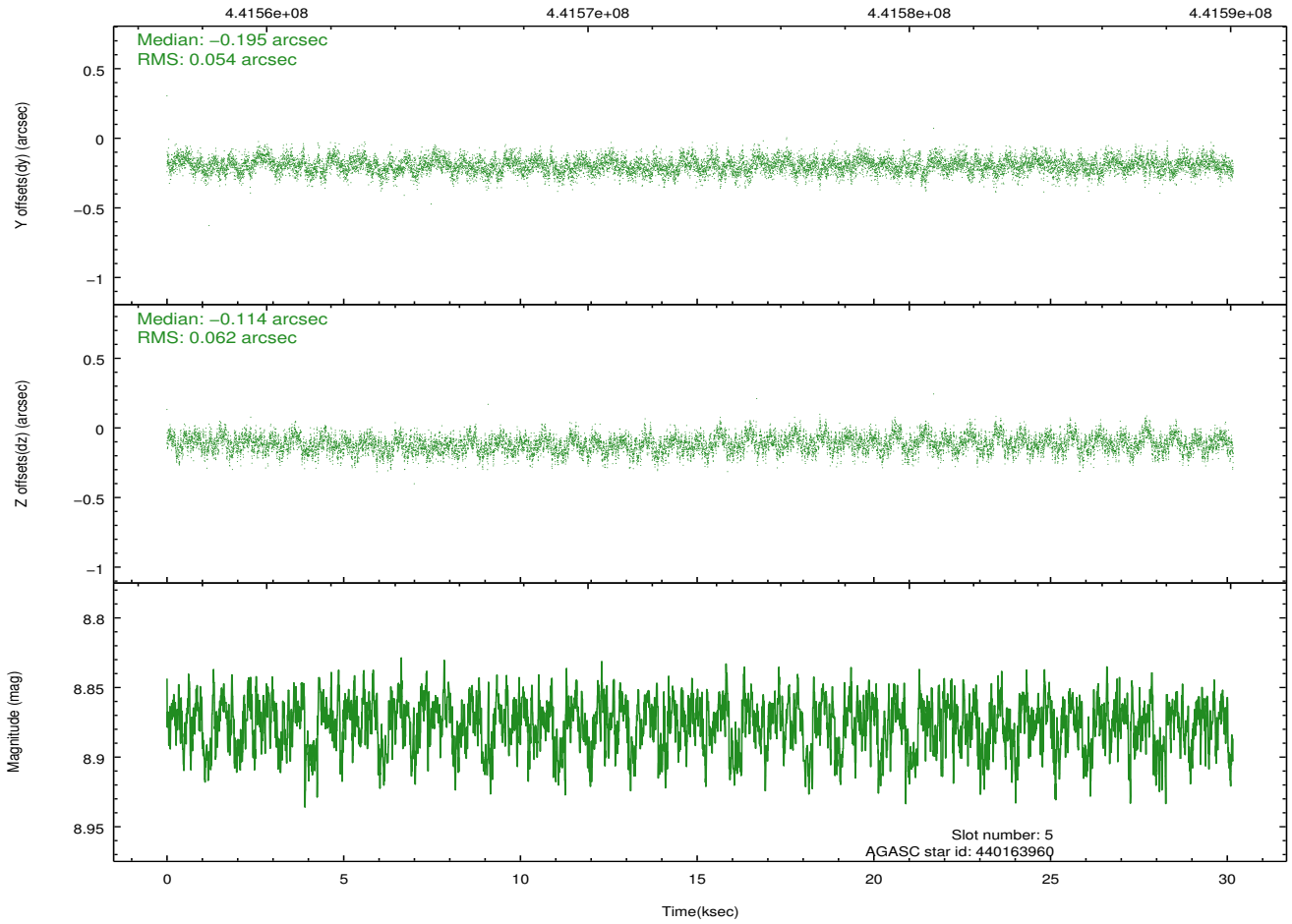
2.4.2 Slot 4



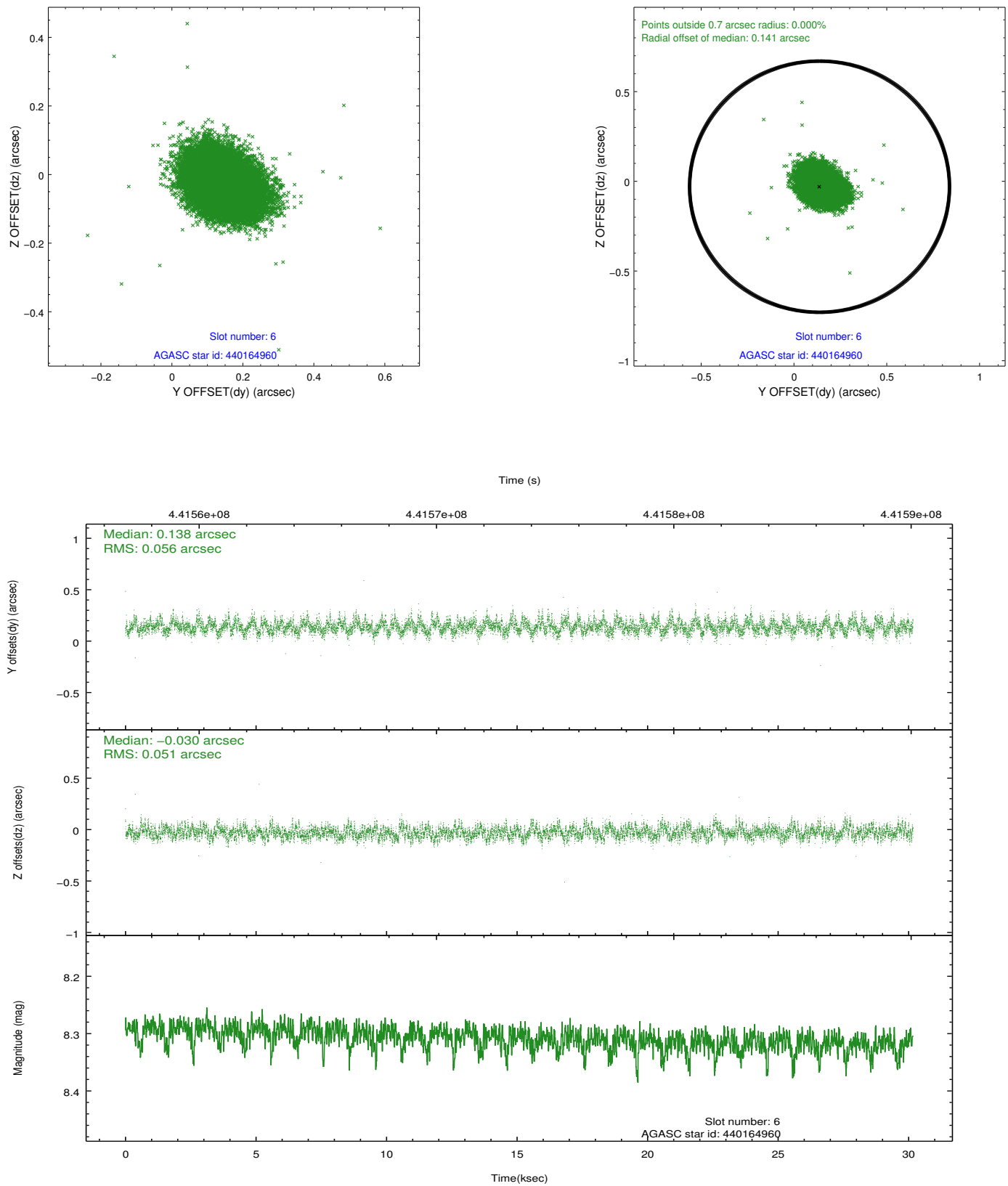
2.4.3 Slot 5



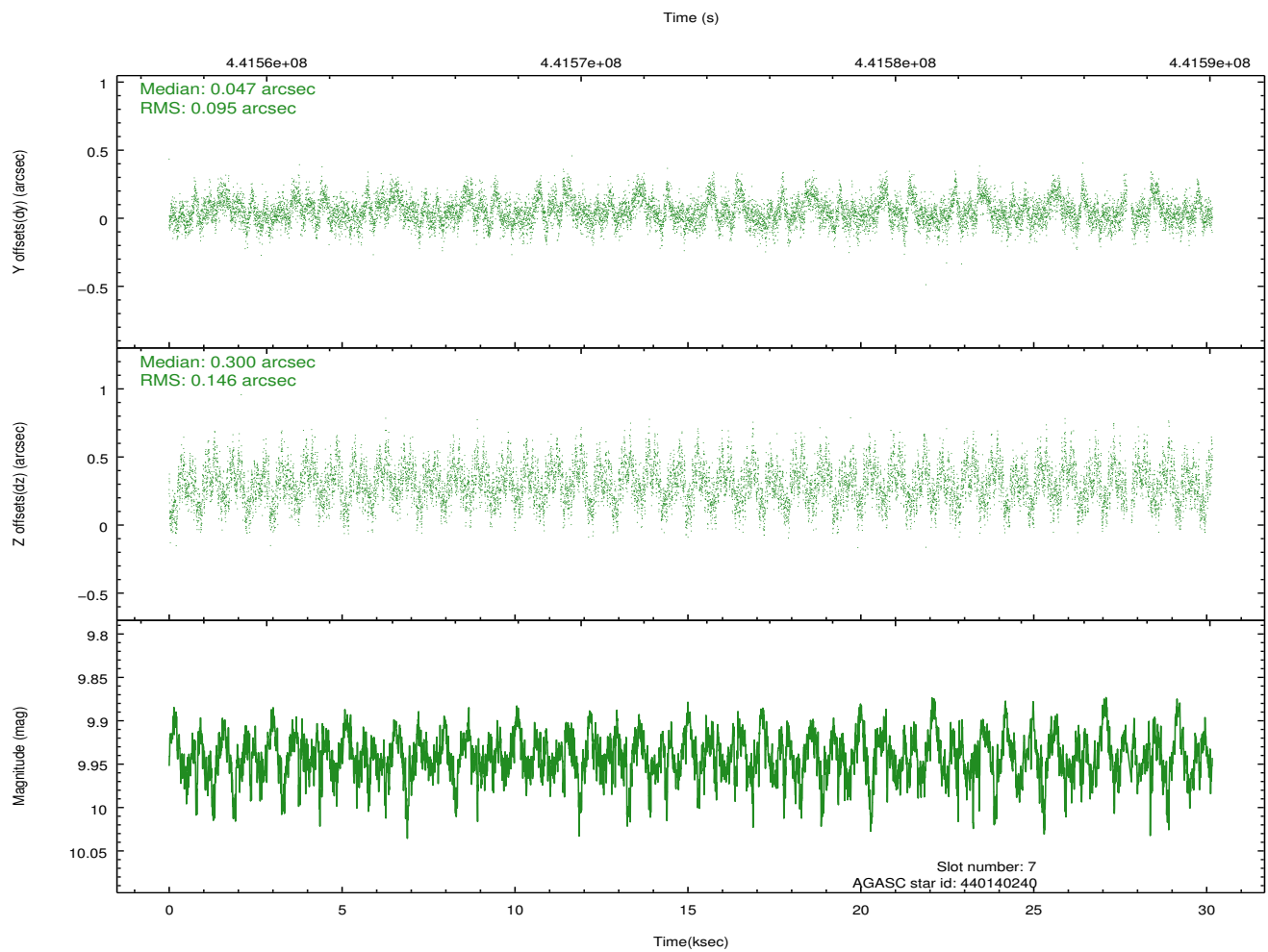
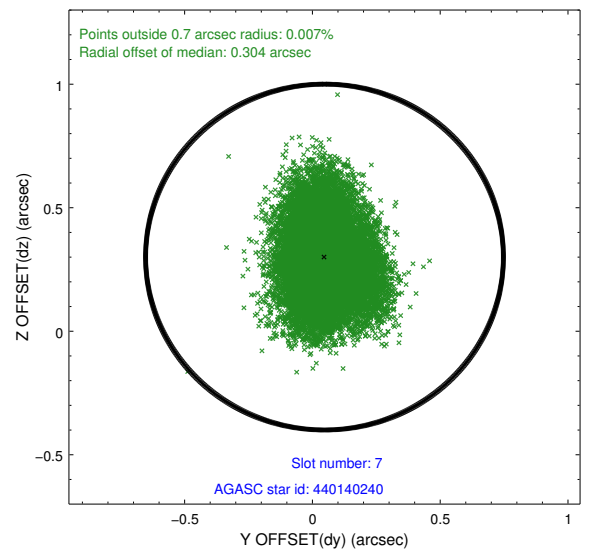
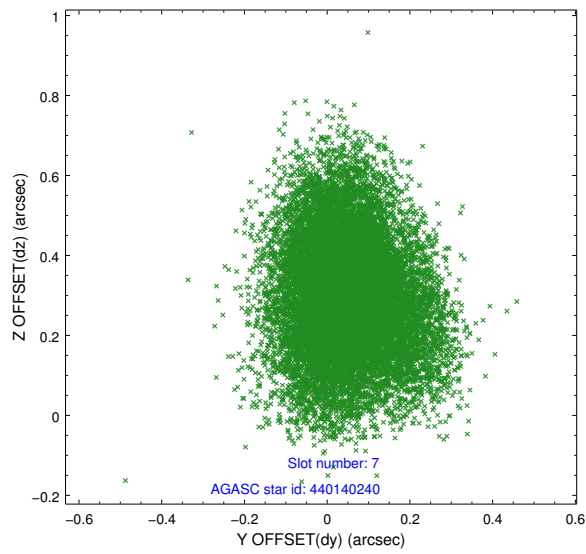
Time (s)



2.4.4 Slot 6

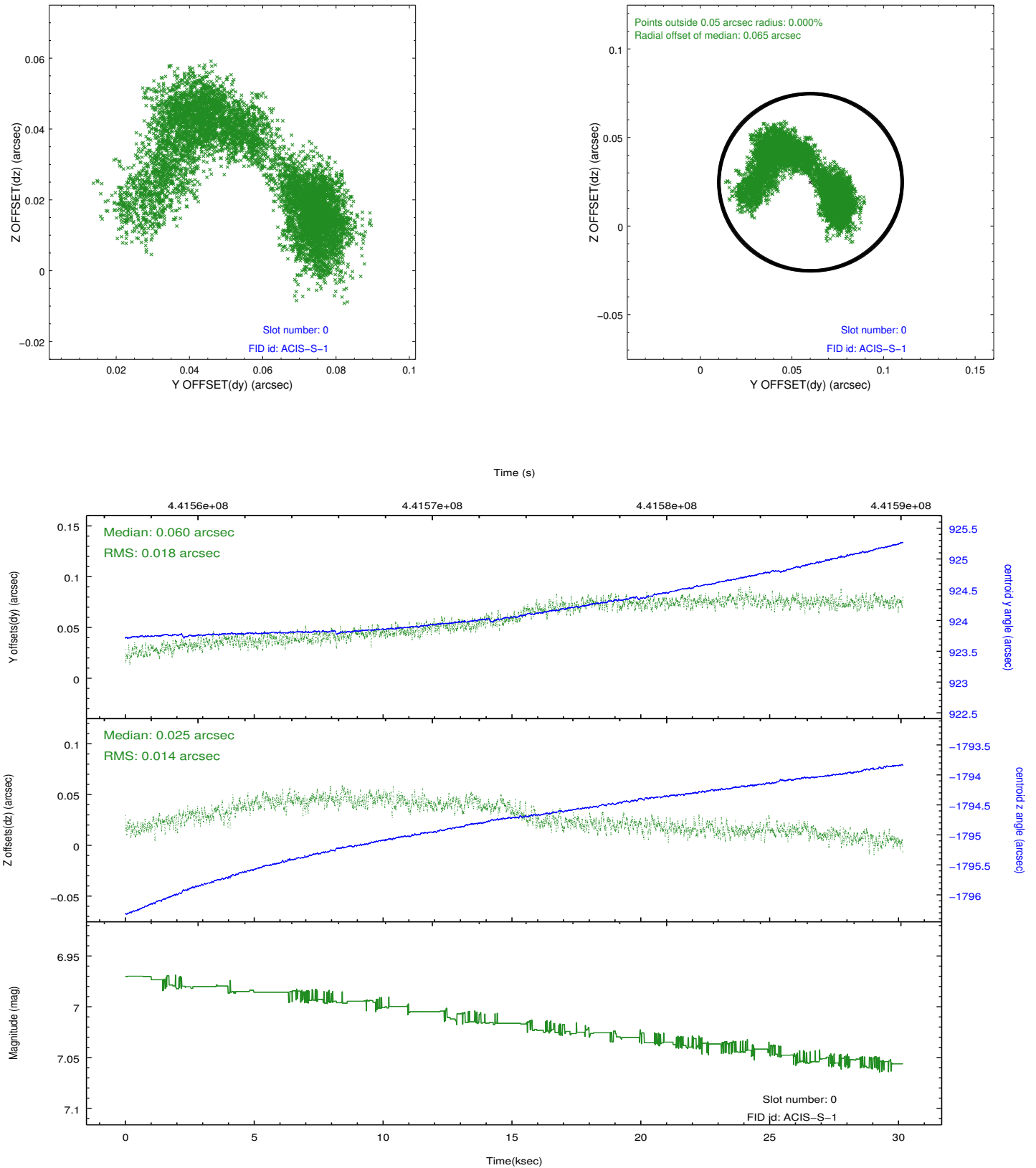


2.4.5 Slot 7

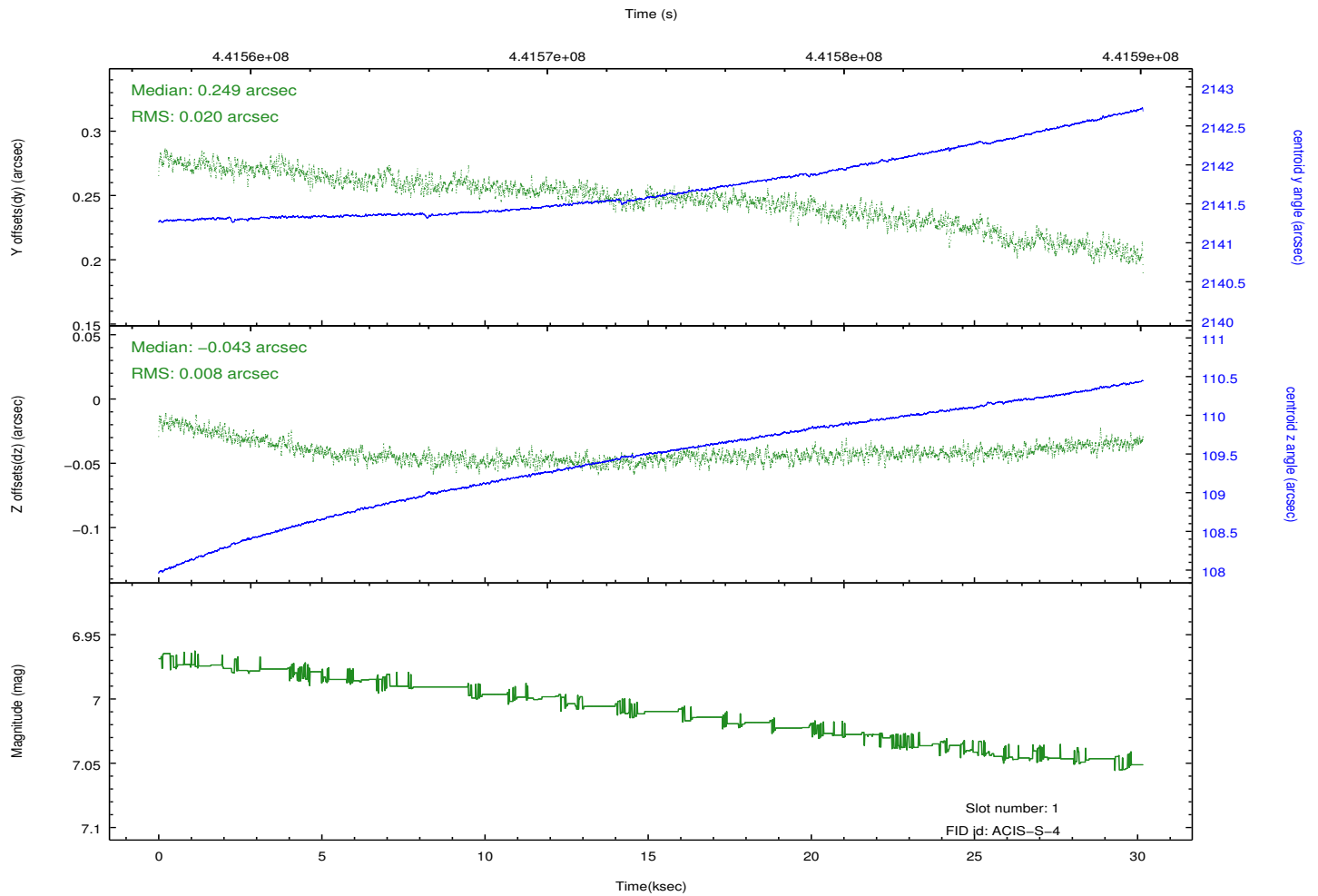
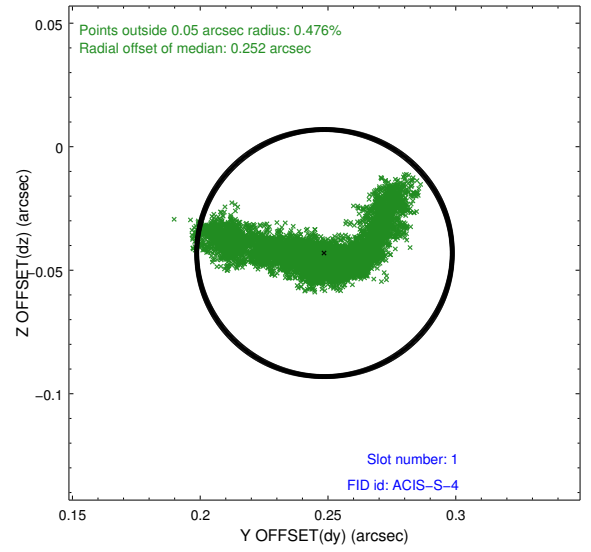
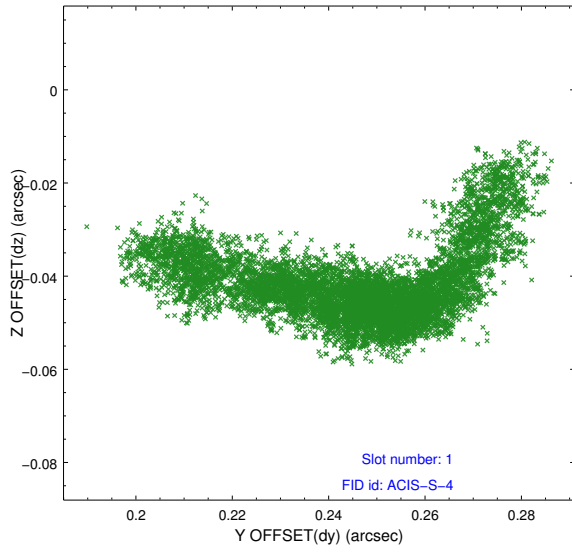


2.5 FID Slots

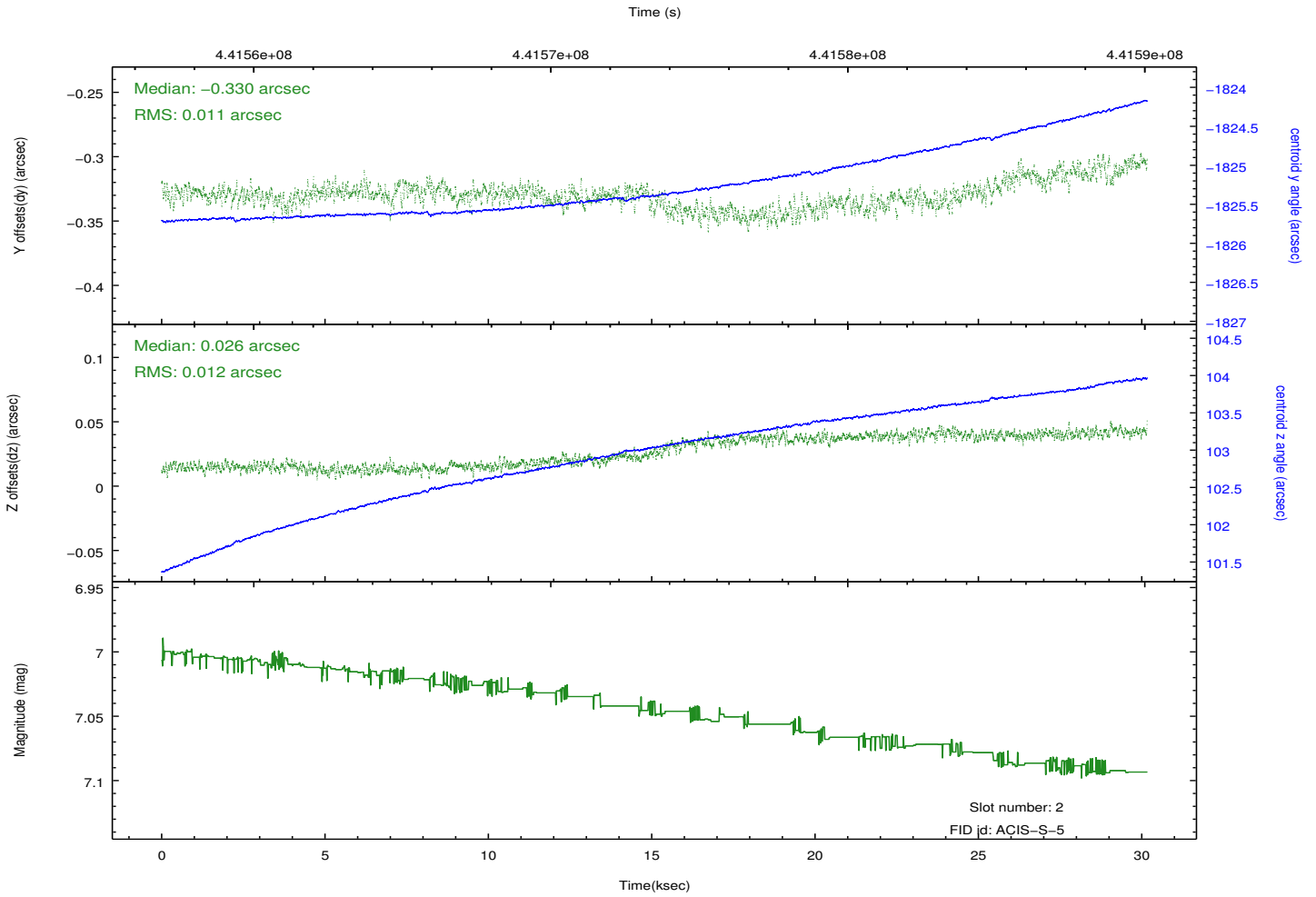
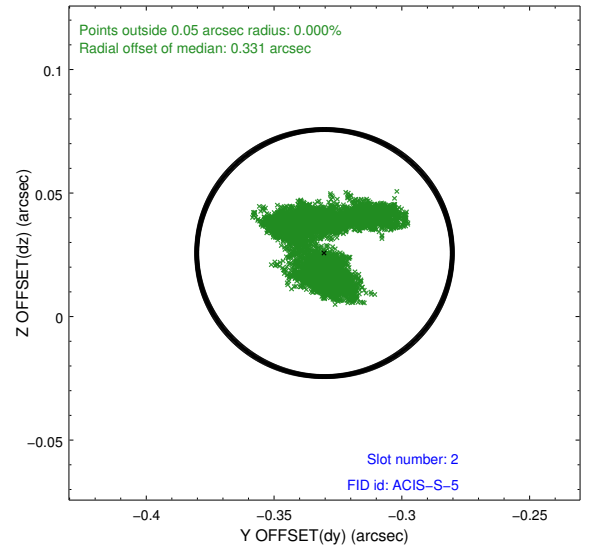
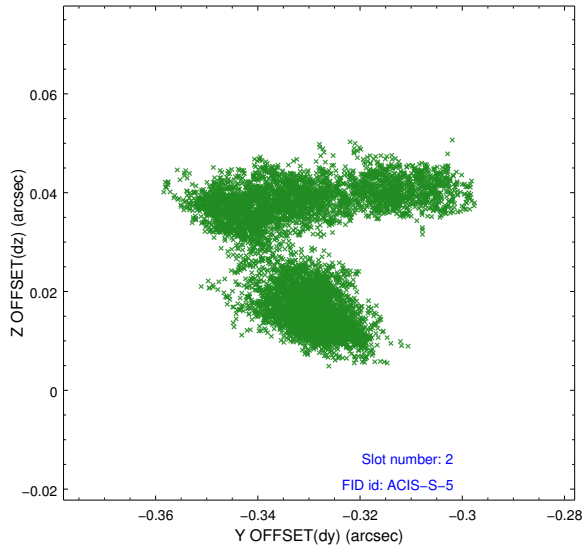
2.5.1 Slot 0



2.5.2 Slot 1

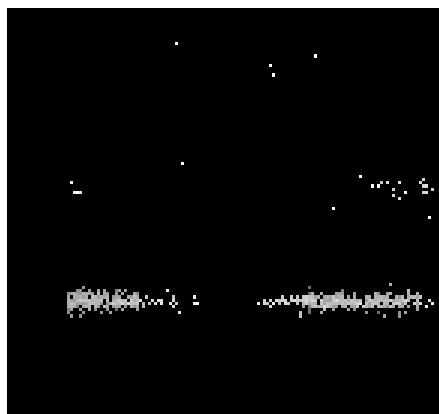


2.5.3 Slot 2

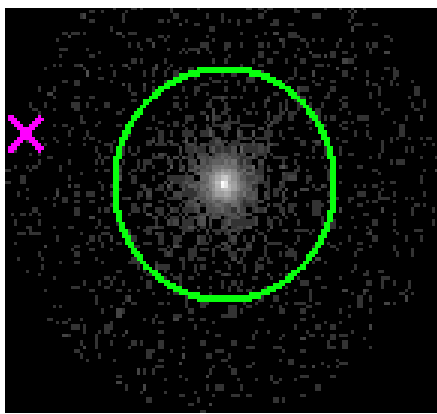


3 Gratings

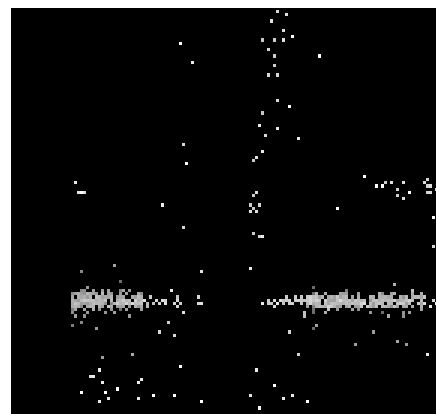
3.1 HEG Arm



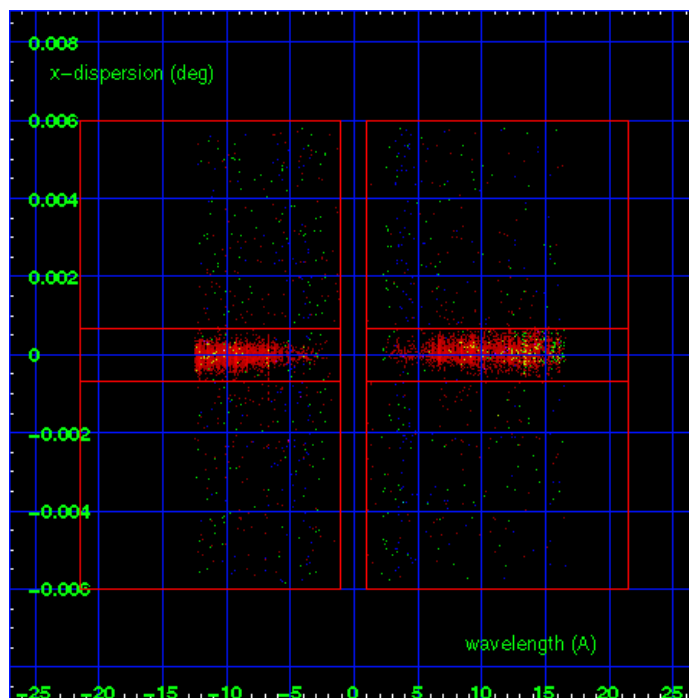
HEG Order Sort 123



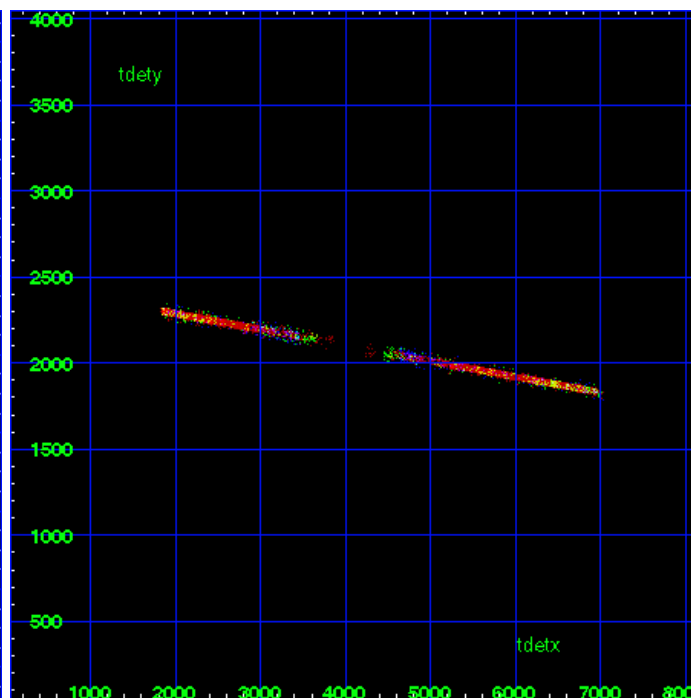
HEG Zero Order



HEG Order Sort ALL

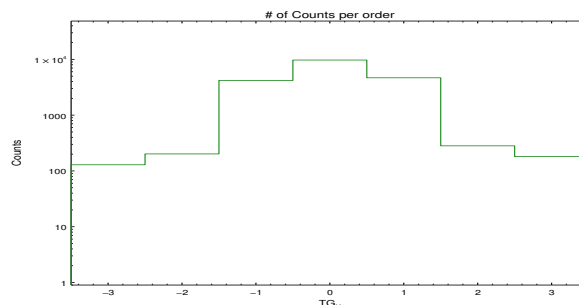


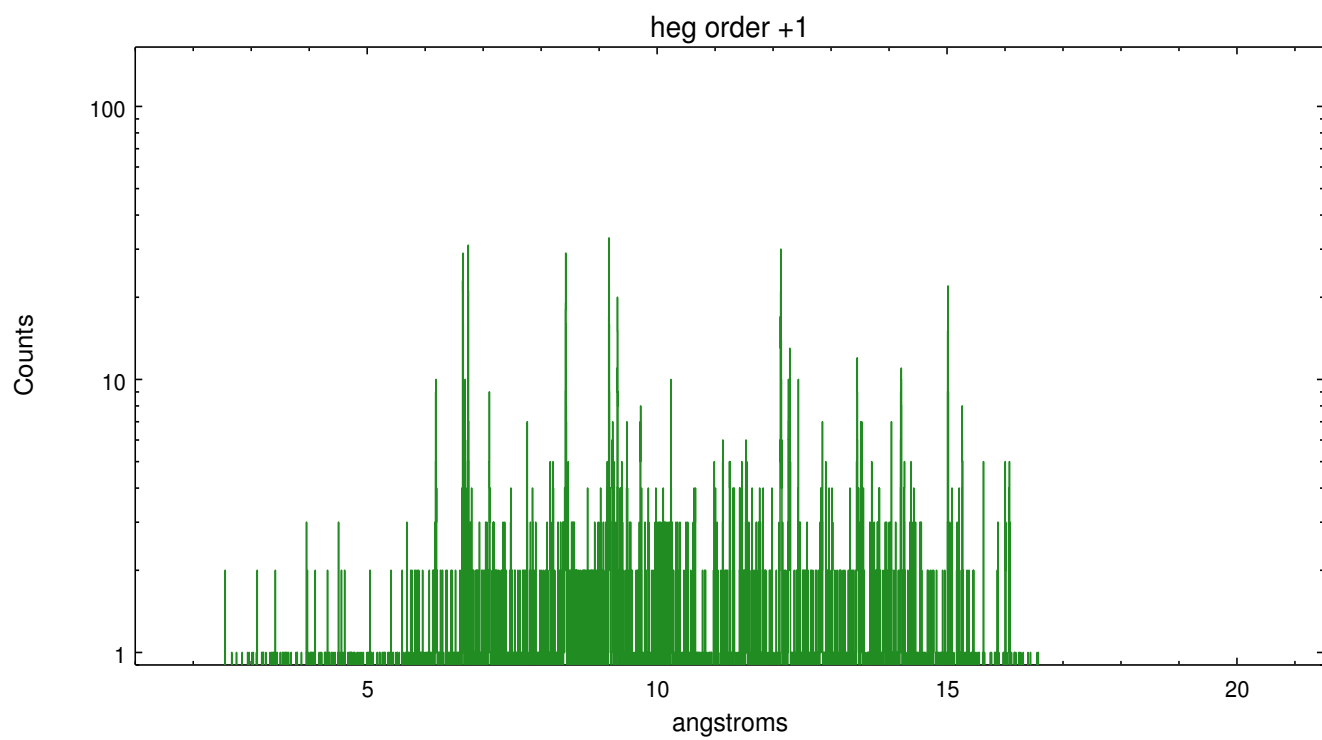
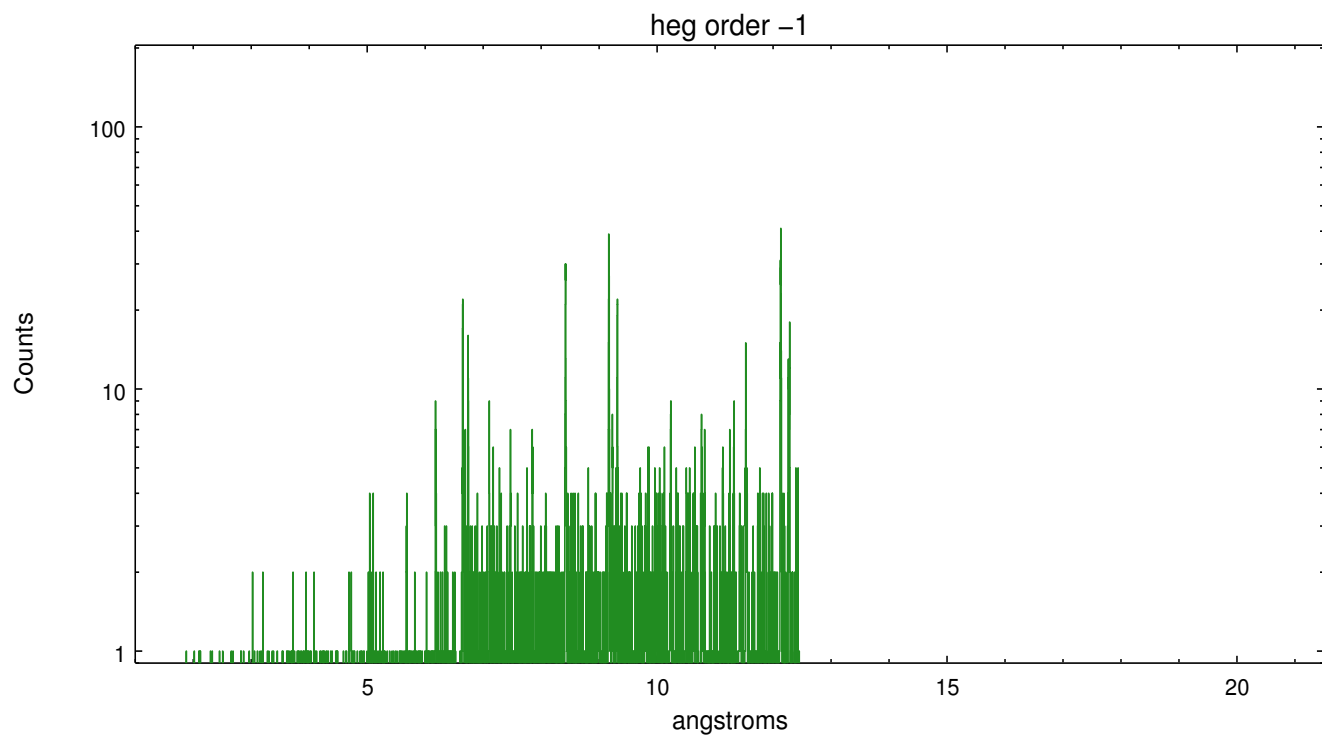
Spot Image HEG



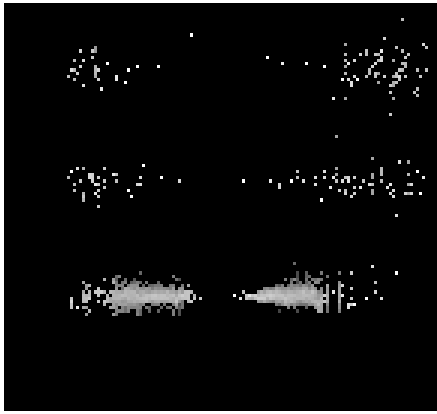
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	129	202	4191	9736	4678	282	181

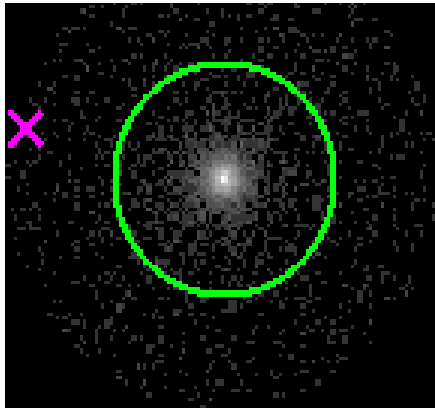




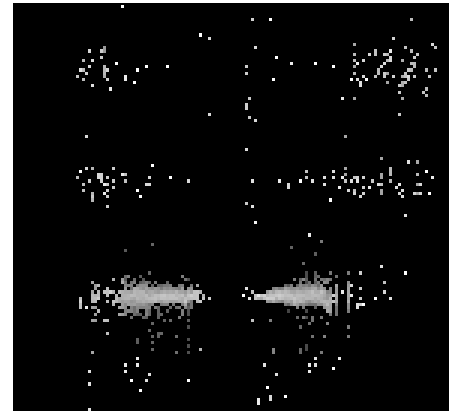
3.2 MEG Arm



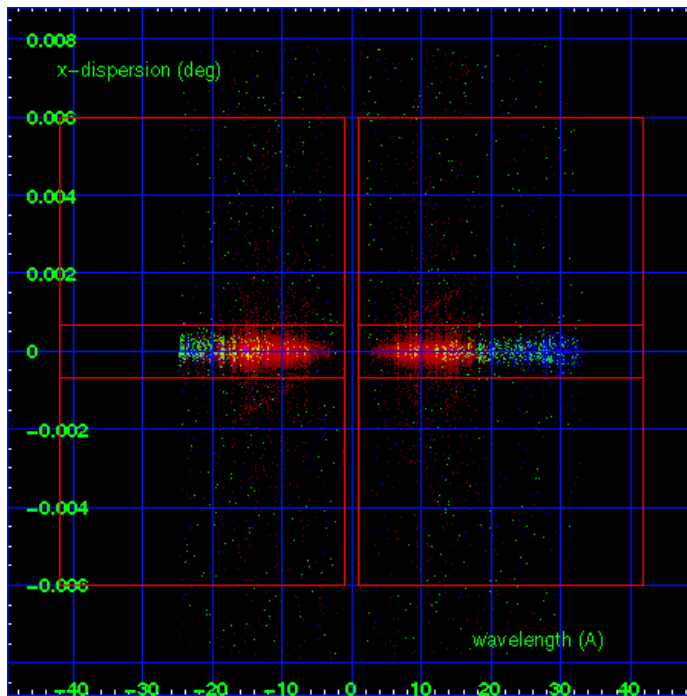
MEG Order Sort 123



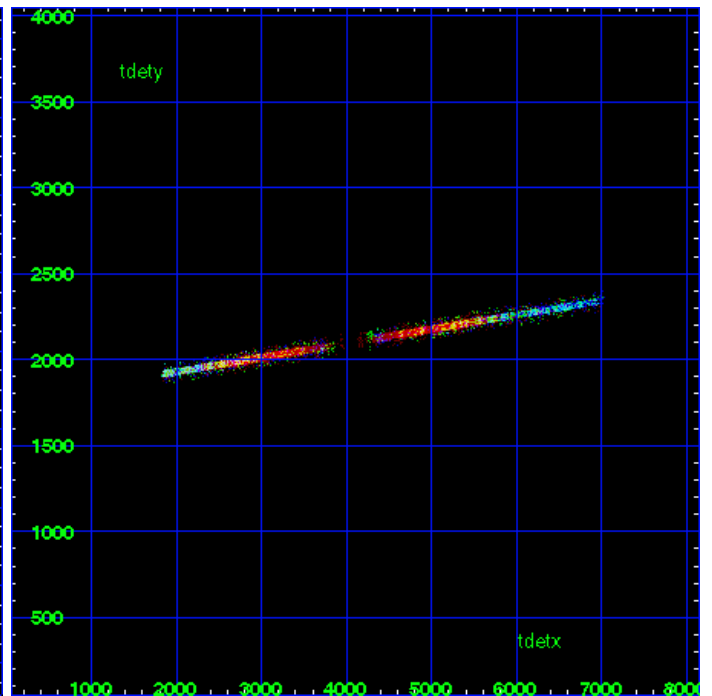
MEG Zero Order



MEG Order Sort ALL

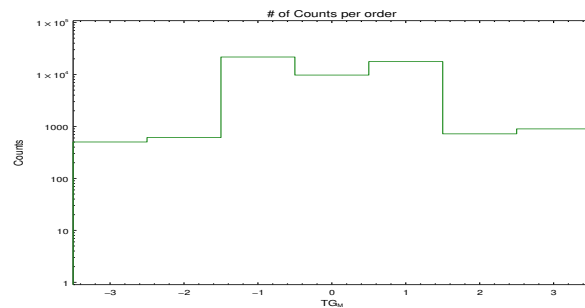


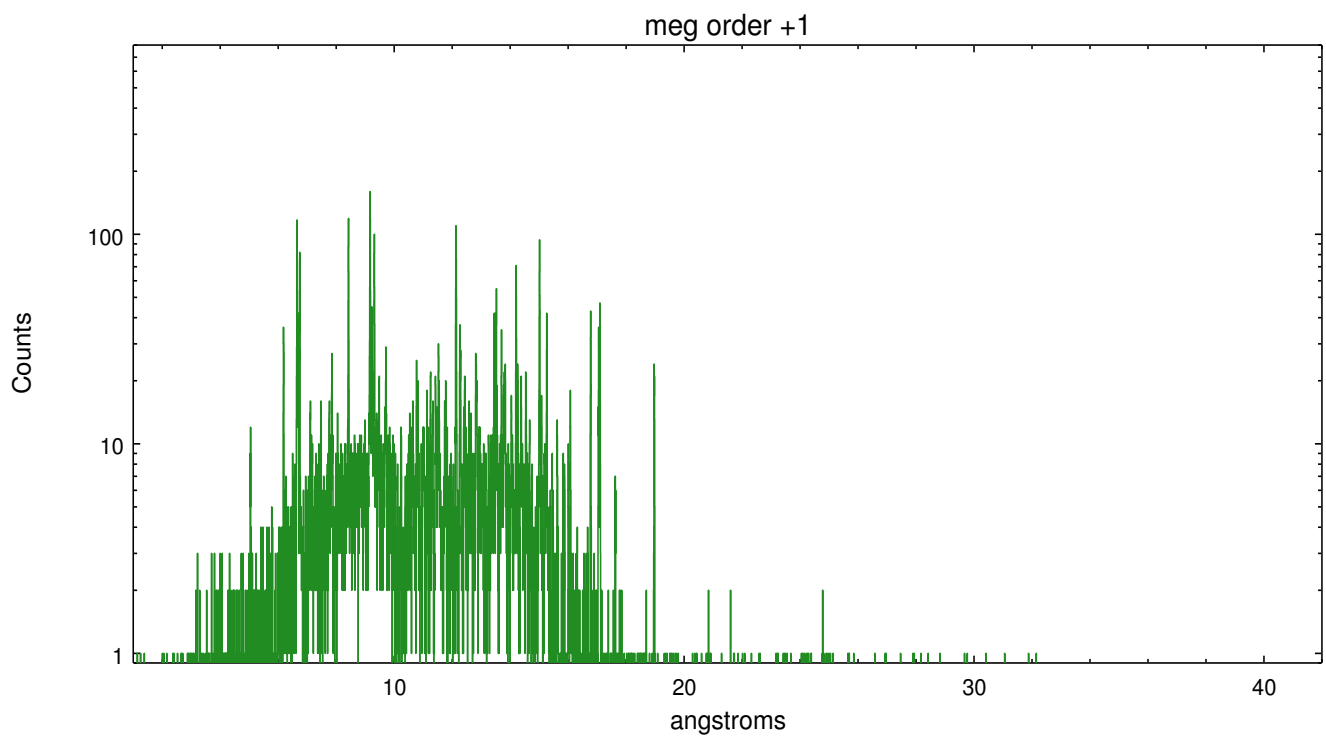
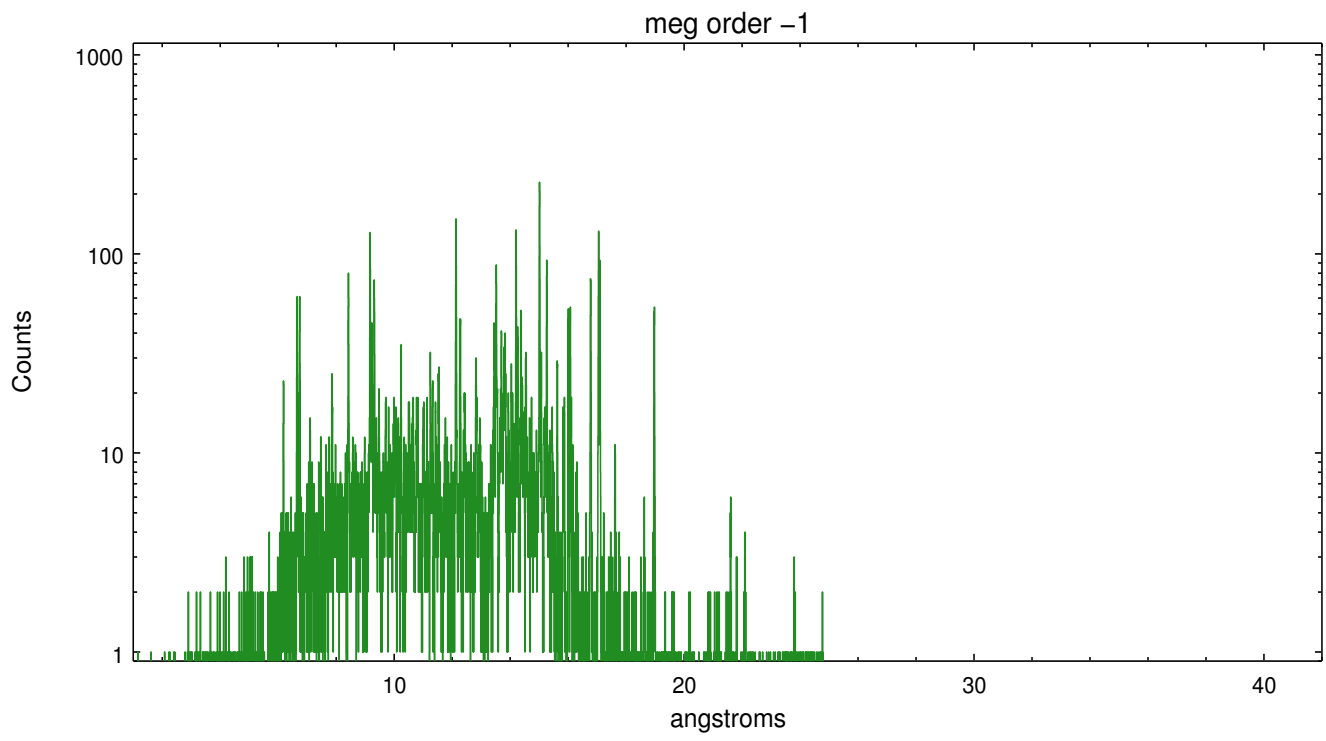
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	502	611	21691	9736	17691	720	897





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.03.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.035416607738

A.2 Comments