

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4284 - L2 Version 3
Chandra X-Ray Center

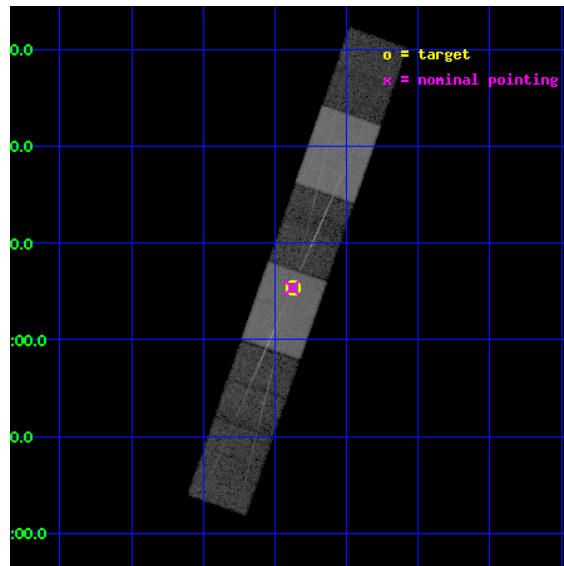
L2 Processing Date : Oct 12 2012

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1 Front

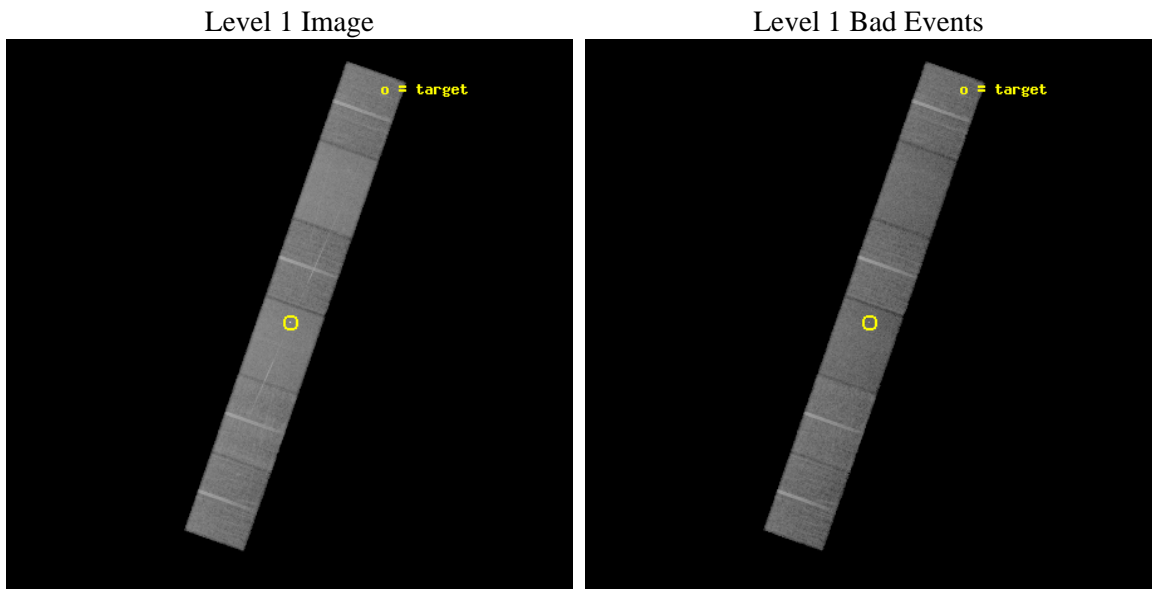
seq_num	700408	Sequence number
obs_id	4284	Observation id
title	PROBING THE INTERGALACTIC MEDIUM AT LOW REDSHIFT	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	1H 0414+009	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	64.218333	Observer's specified target RA [deg]
dec_targ	1.09	Observer's specified target Dec [deg]
ra_nom	64.220399226313	Nominal RA [deg]
dec_nom	1.0891711394652	Nominal Dec [deg]
roll_nom	109.26669335125	Nominal Roll [deg]
revision	3	Processing version of data
ontime	37040.0	Sum of GTIs [s]
livetime	36441.771872934	Livetime [s]
ontime4	37040.0	Sum of GTIs [s]
ontime5	37040.0	Sum of GTIs [s]
ontime6	37040.0	Sum of GTIs [s]
ontime7	37040.0	Sum of GTIs [s]
ontime8	37040.0	Sum of GTIs [s]
ontime9	37037.459009826	Sum of GTIs [s]
l2events	252189	Number of level 2 events



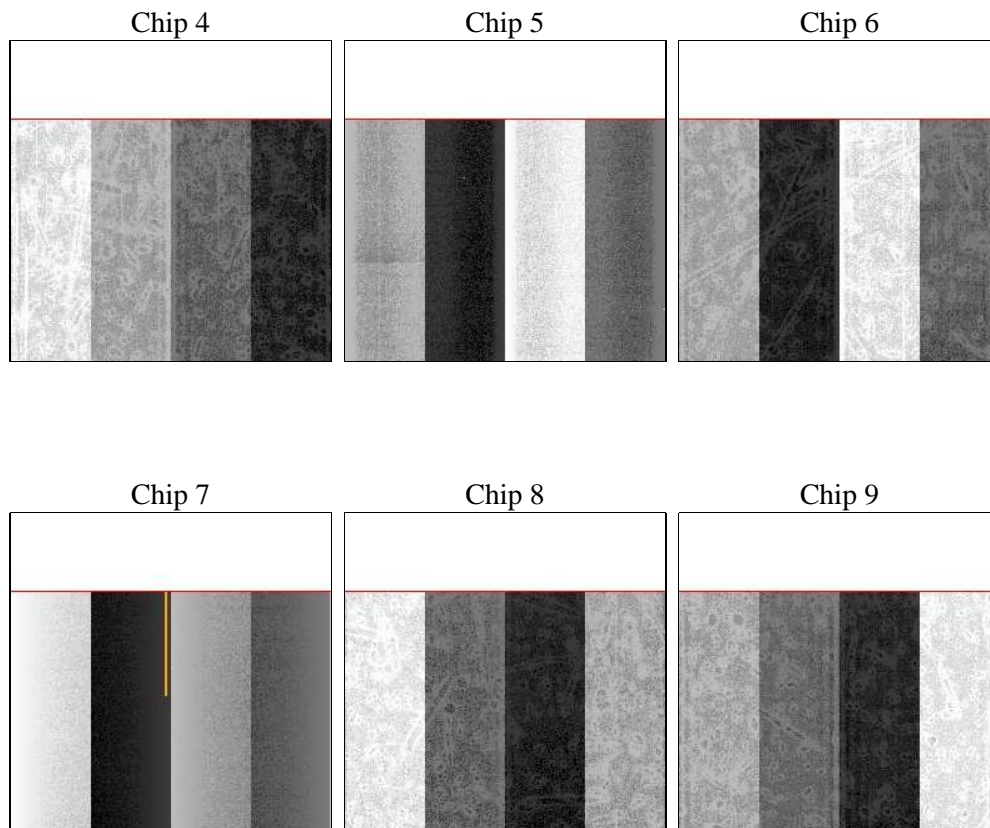
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36900.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	37040.0	Sum of GTIs [s]
caldbver	4.5.2	 	ontime4	37040.0	Sum of GTIs [s]
date	2012-10-11T23:40:18	Date and time of file creation	ontime5	37040.0	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	37040.0	Sum of GTIs [s]
			ontime7	37040.0	Sum of GTIs [s]
			ontime8	37040.0	Sum of GTIs [s]
			ontime9	37037.459009826	Sum of GTIs [s]
			l1events	1094127	Number of level 1 events

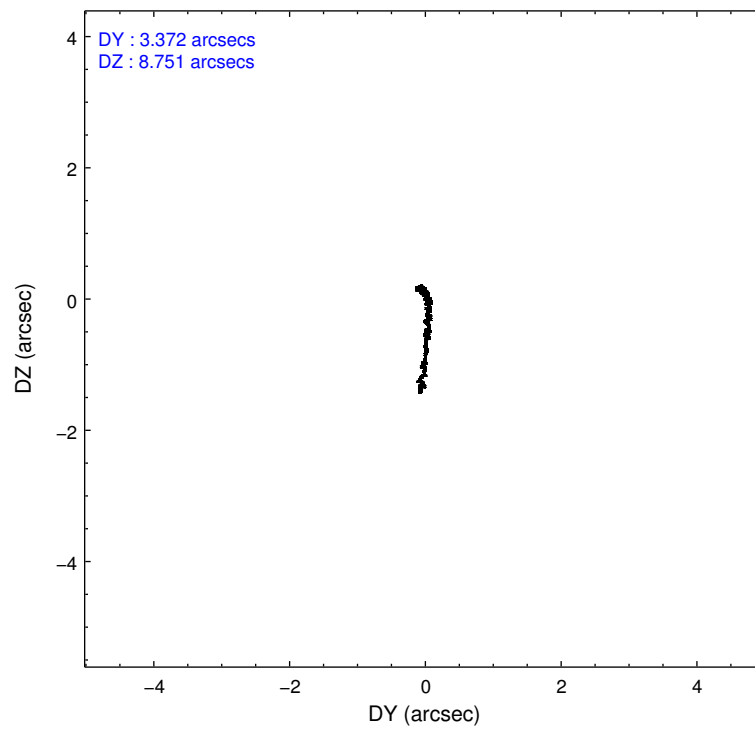
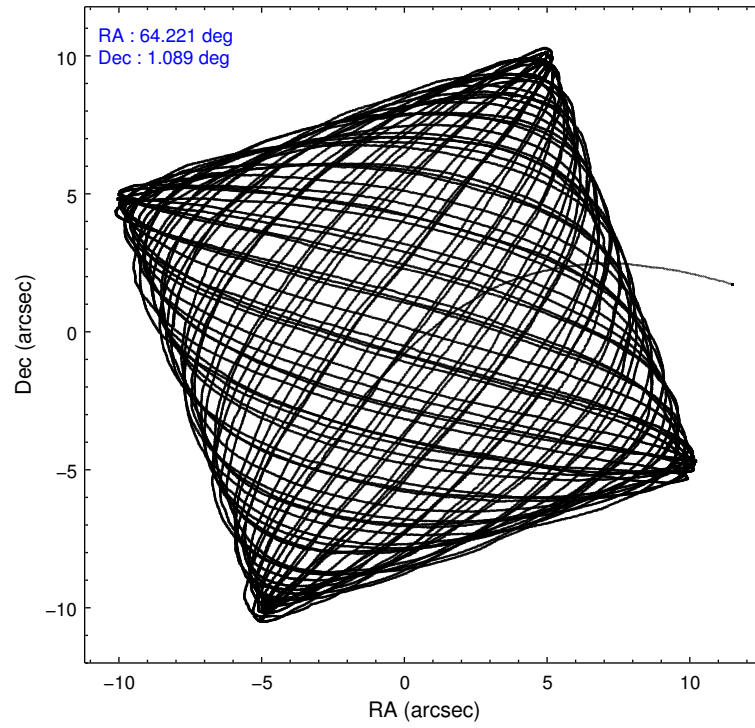
2.1.4 Events

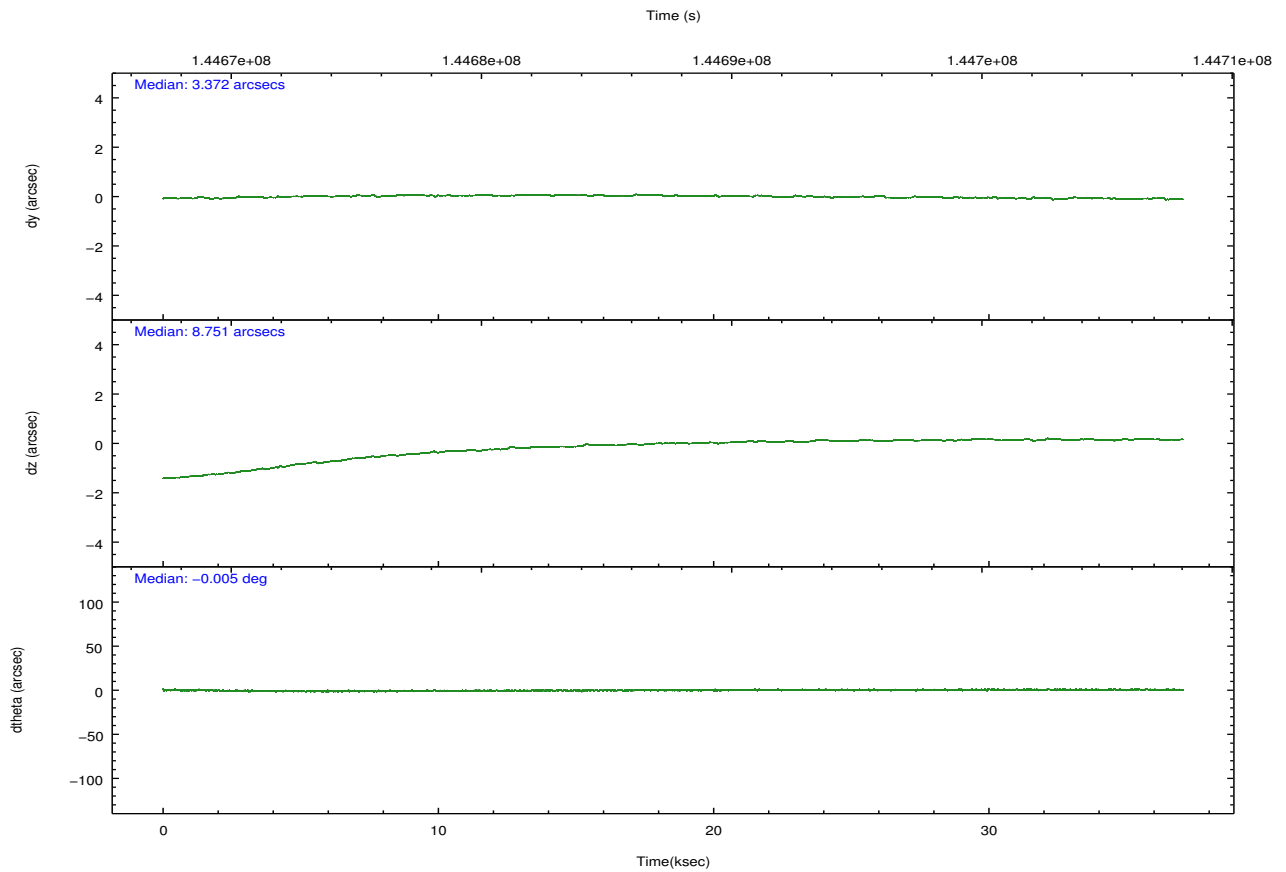
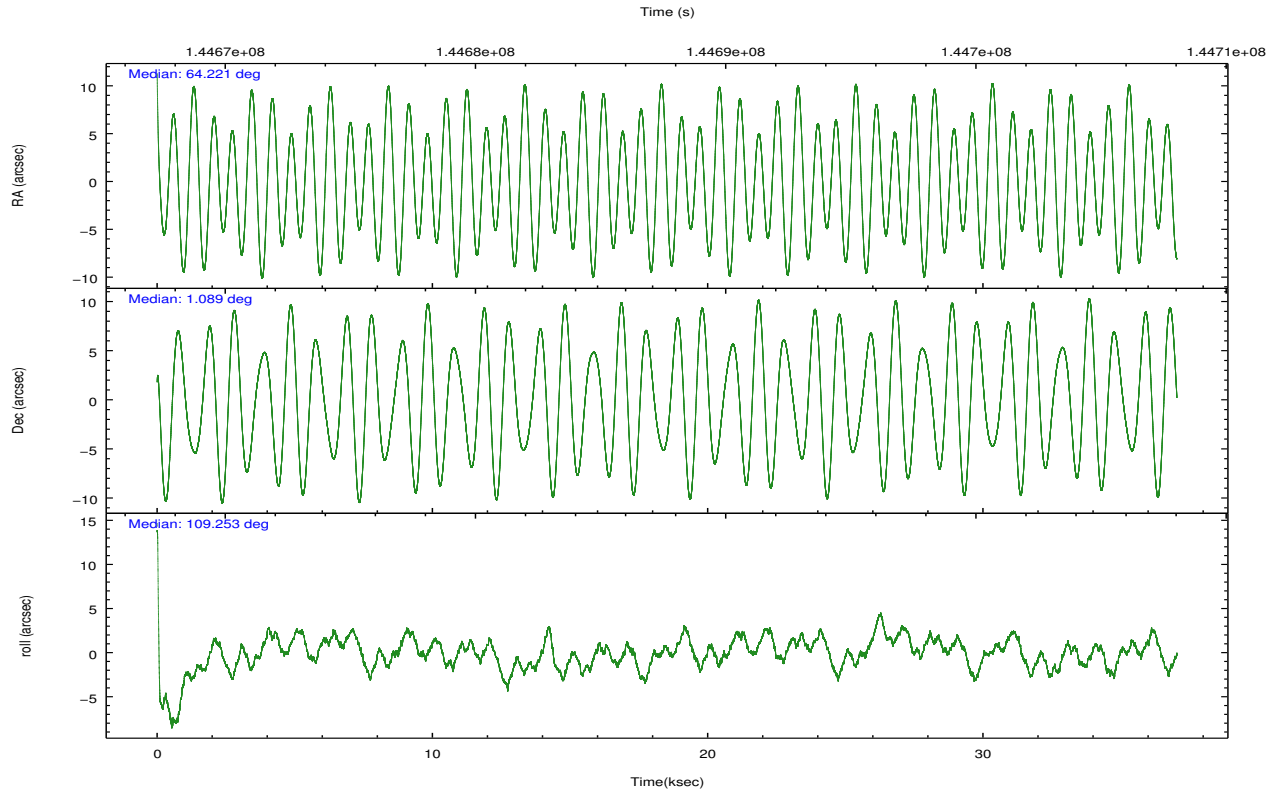
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	166285	216021	158990	207559	193574	151698	grade 0 events	8374	7501	9973	9159	14240	8150
rejected events	147169	118939	137371	118154	152345	132700		5%	3%	6%	4%	7%	5%
rejected %	88%	55%	86%	56%	78%	87%	grade 1 events	100	254	81	211	118	62
								0%	0%	0%	0%	0%	0%
							grade 2 events	3919	28595	4168	18411	8654	3601
								2%	13%	2%	8%	4%	2%
							grade 3 events	2008	5049	2021	8503	4350	2014
								1%	2%	1%	4%	2%	1%
							grade 4 events	1963	4809	1994	8402	4032	2002
								1%	2%	1%	4%	2%	1%
							grade 5 events	6286	17012	6516	19193	8682	7036
								3%	7%	4%	9%	4%	4%
							grade 6 events	3020	52096	3672	45650	10283	3494
								1%	24%	2%	21%	5%	2%
							grade 7 events	140615	100705	130565	98030	143215	125339
								84%	46%	82%	47%	73%	82%

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	64.241267	64.22039922631348	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	1.071663	1.08917113946522	Subarray start row	1	1
[deg] Pointing Roll	109.109666	109.2666933512477	Subarray row count	774	774
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	2.5
[mm] SIM translation stage pos	-187.132523	-187.1228876879999			
[mm] SIM translation stage offset	-3	-3.009634895007935			
[s] Observation start time (MET)	144669284.184000	144668168.03646			
Observation start date	2002-08-02T09:53:40	2002-08-02T09:36:08			
[s] Observation end time (MET)	144706184.184000	144706993.50056			
Observation end date	2002-08-02T20:08:40	2002-08-02T20:23:13			
Read mode	TIMED	TIMED			

2.3 Aspect



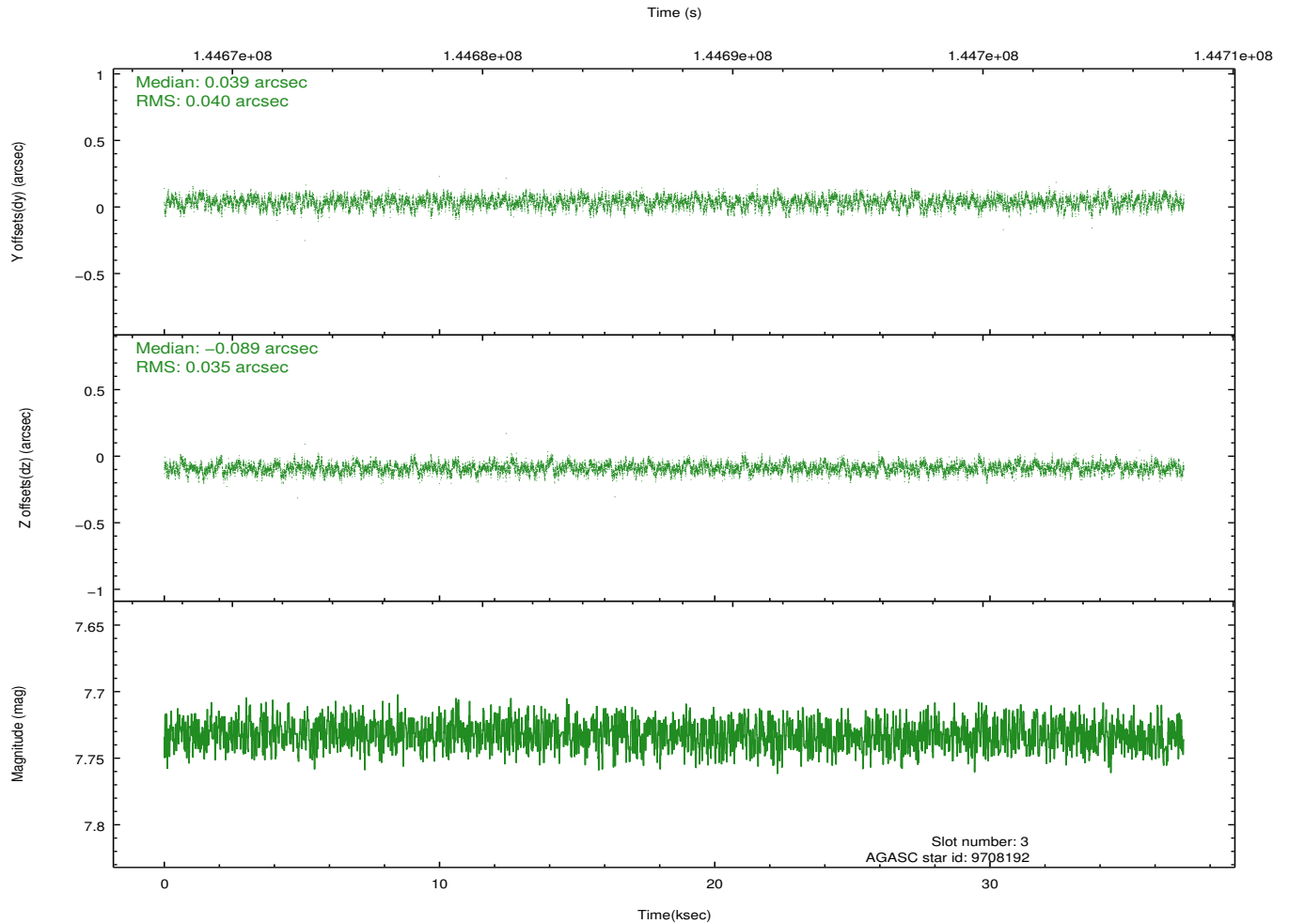
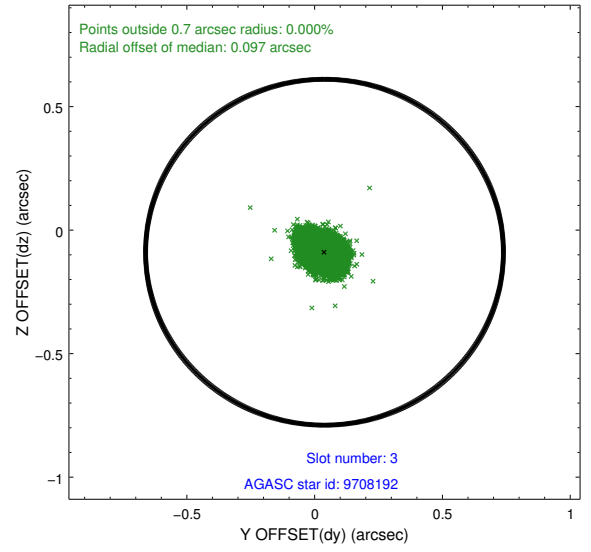
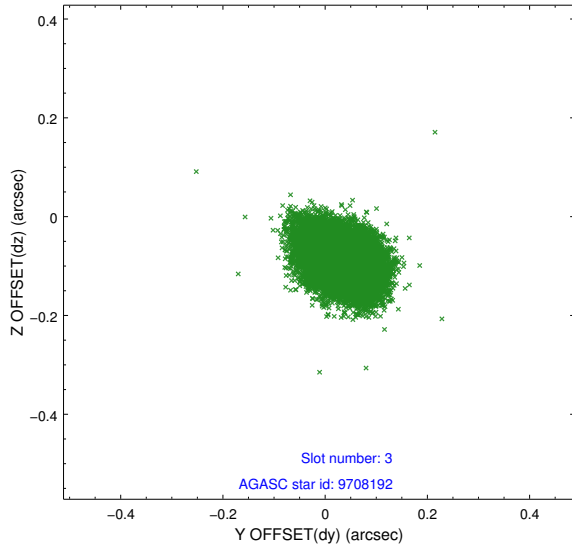


Slot Statistics

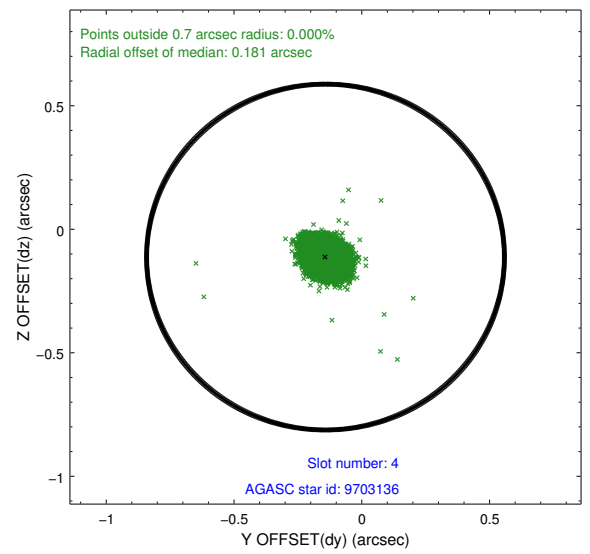
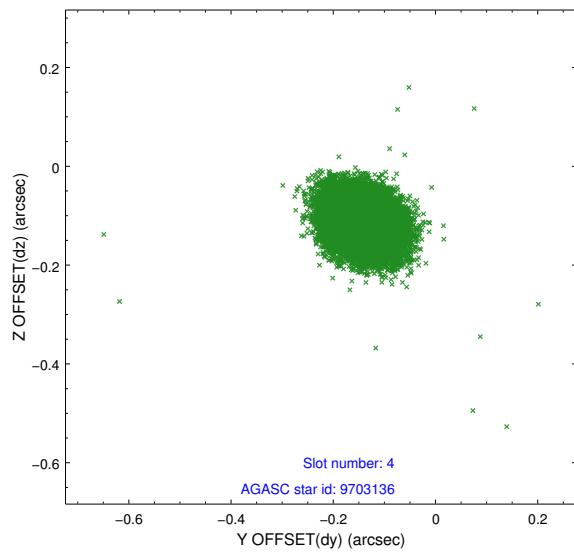
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	9035	-0.052	-0.027	0.009	0.015	0.000000	0.000000	-755.82	-1791.93
1	FID	ACIS-S-4	7.20	9034	0.028	0.032	0.009	0.015	0.000000	0.000000	2157.48	116.63
2	FID	ACIS-S-5	7.23	9036	-0.007	0.004	0.007	0.012	0.000000	0.000000	-1808.62	110.23
3	GUIDE	9708192	7.73	18067	0.039	-0.089	0.057	0.093	64.027355	0.597797	-1359.17	1286.22
4	GUIDE	9703136	8.43	18068	-0.142	-0.113	0.054	0.089	64.056984	1.240772	792.98	428.11
5	GUIDE	9700112	8.70	18066	-0.022	0.088	0.072	0.115	64.622877	1.272905	236.29	-1534.26
6	GUIDE	9709312	9.12	18069	0.098	0.136	0.078	0.126	64.499854	0.983917	-602.05	-775.63
7	GUIDE	9709912	9.27	18058	0.029	-0.021	0.080	0.130	63.953553	0.846814	-425.16	1243.93

2.4 Star Slots

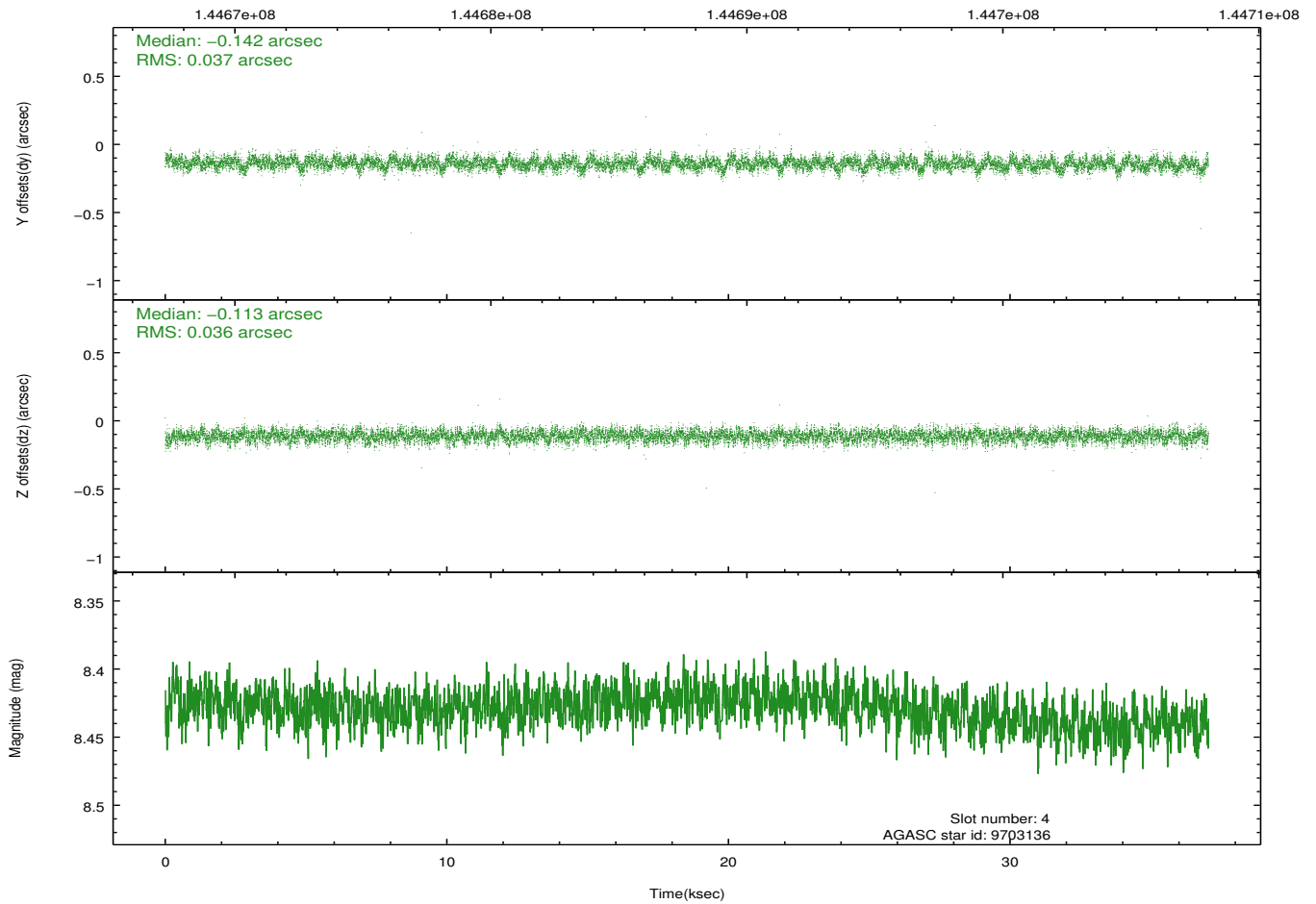
2.4.1 Slot 3



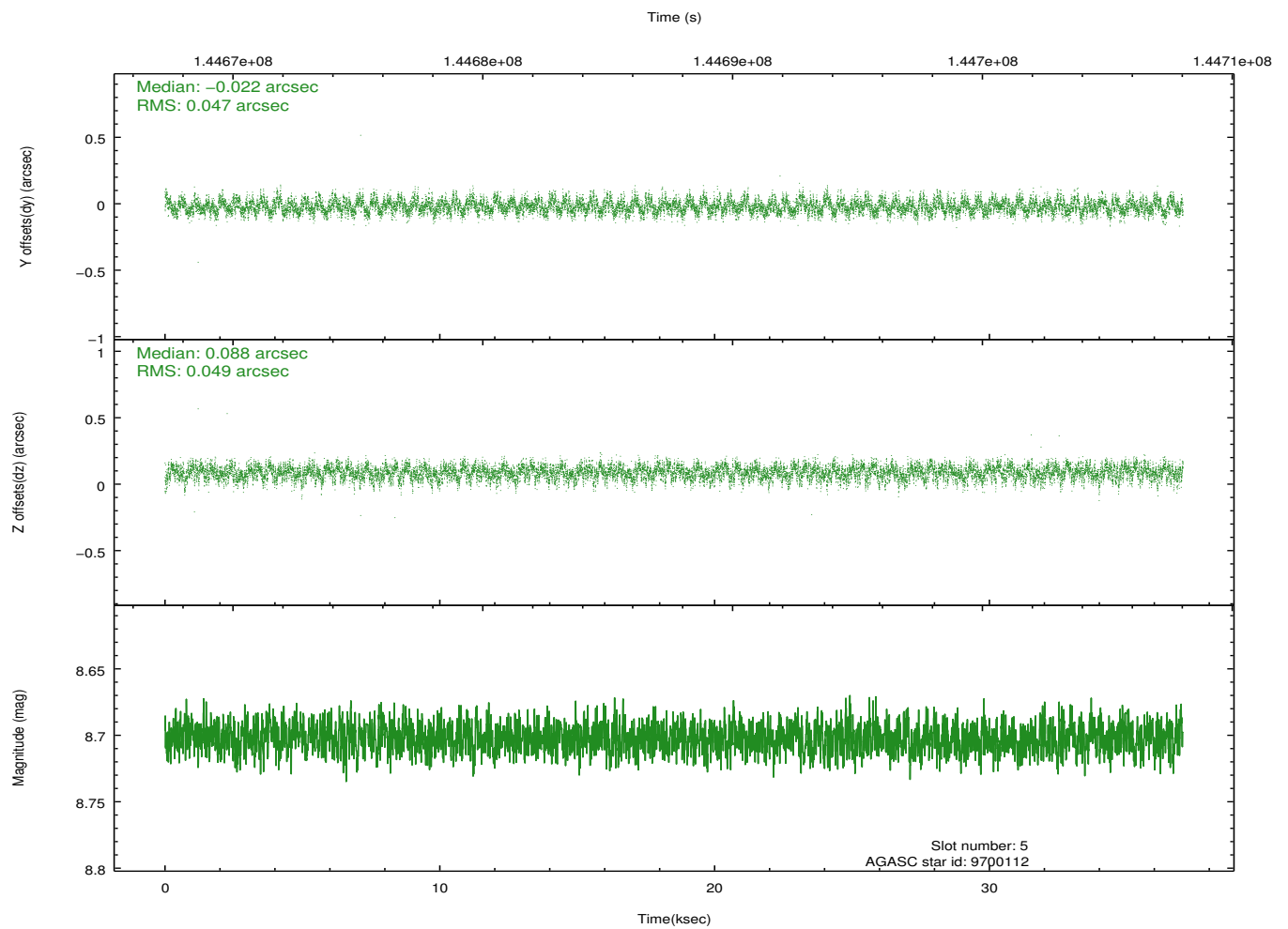
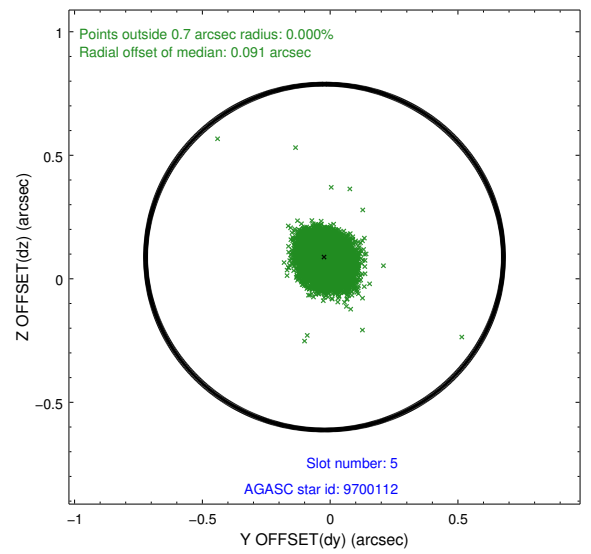
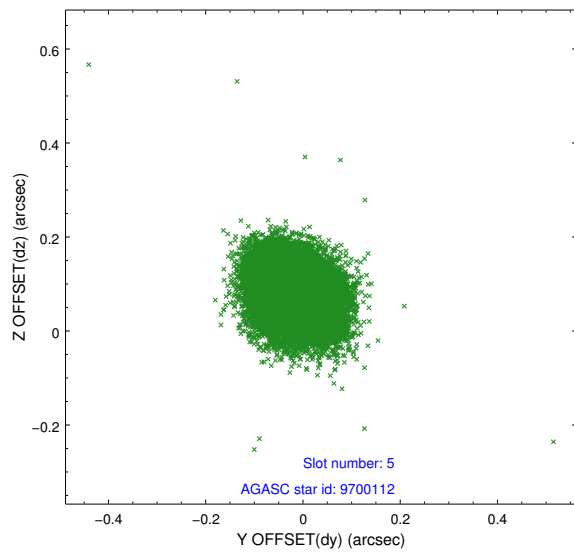
2.4.2 Slot 4



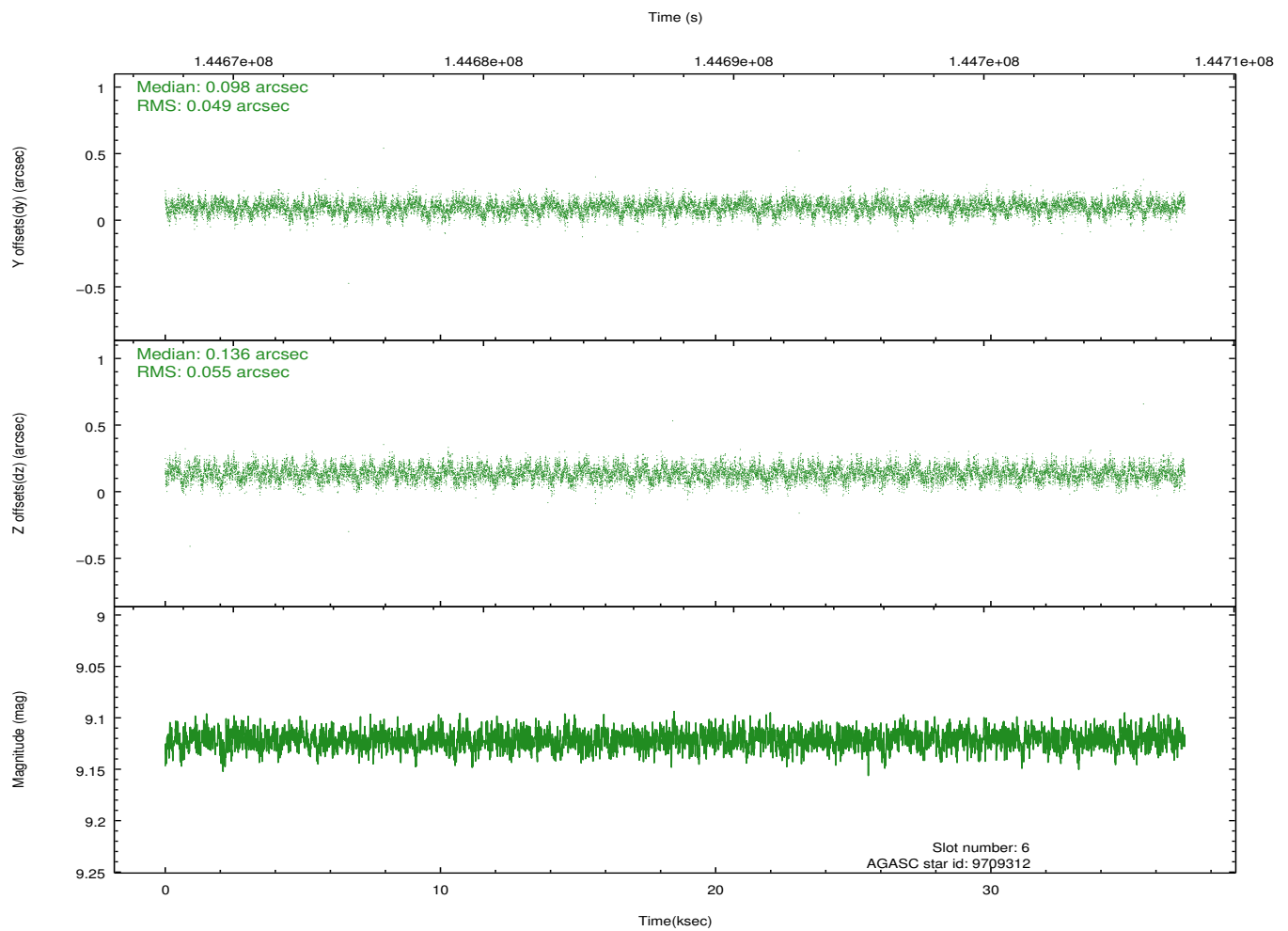
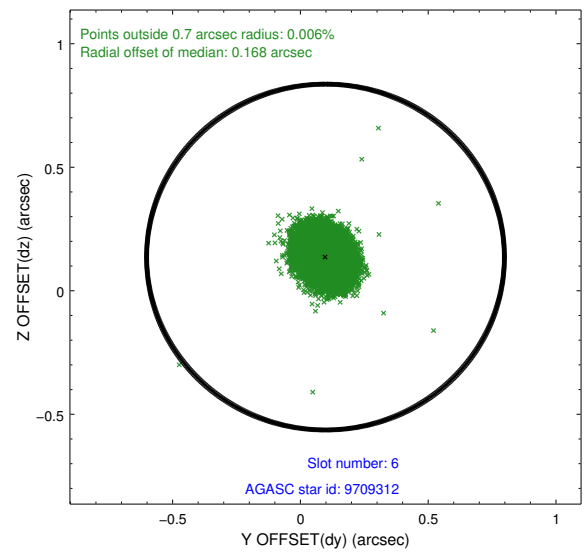
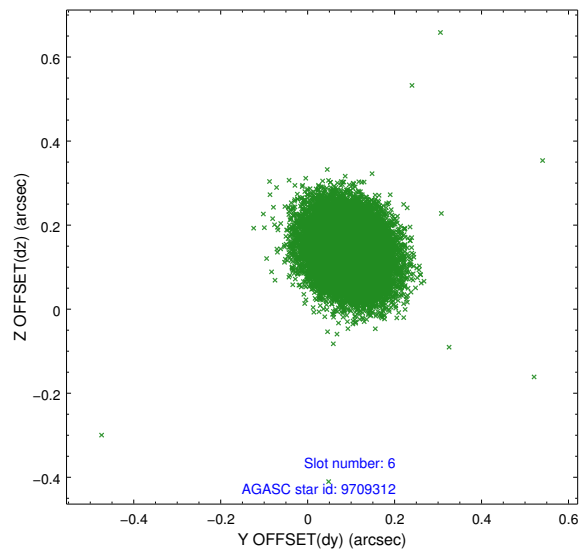
Time (s)



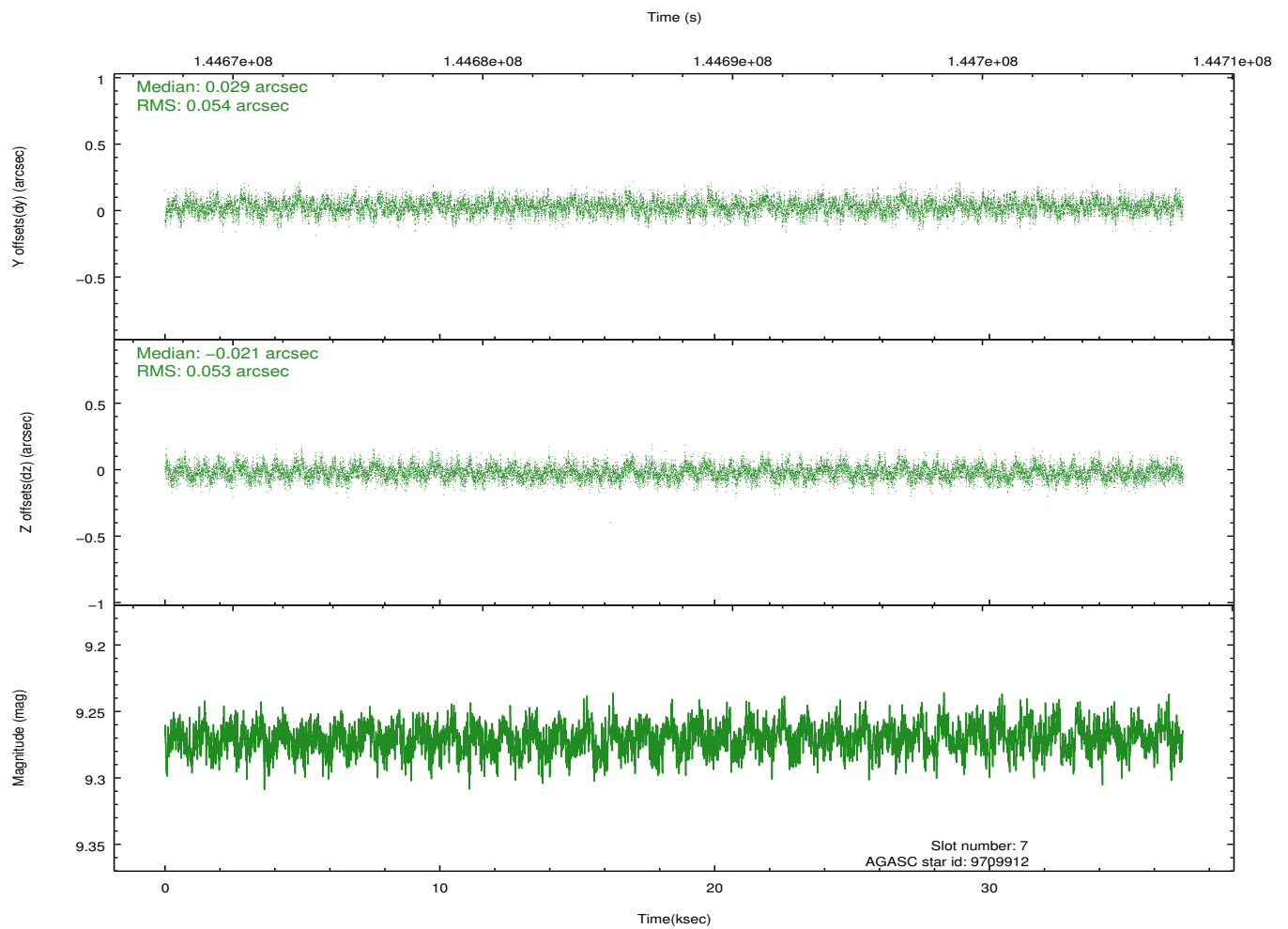
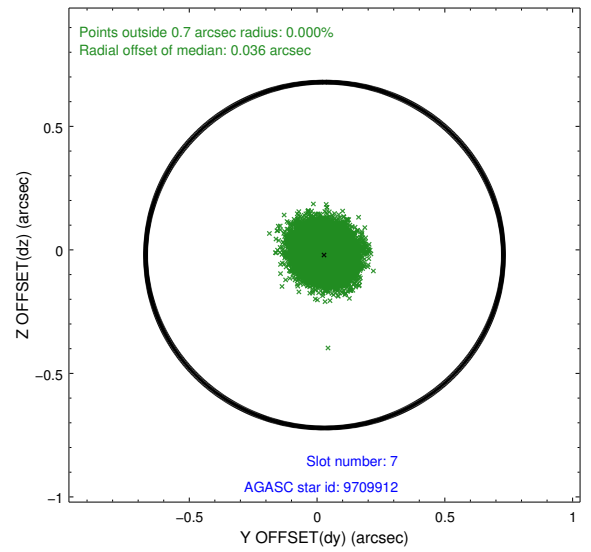
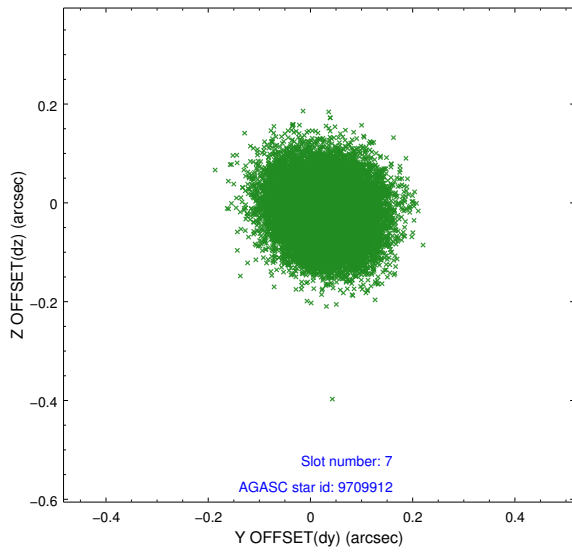
2.4.3 Slot 5



2.4.4 Slot 6

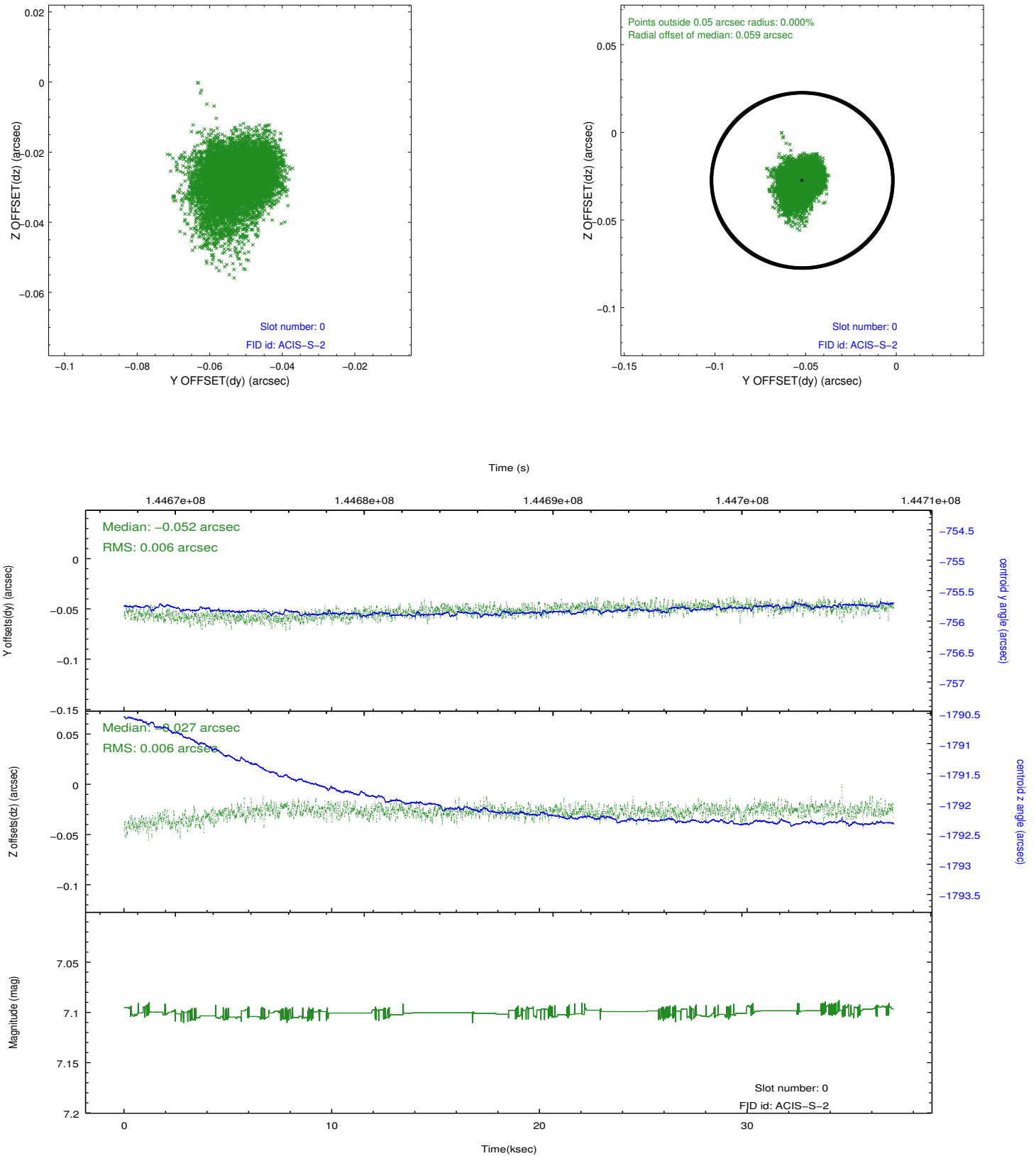


2.4.5 Slot 7

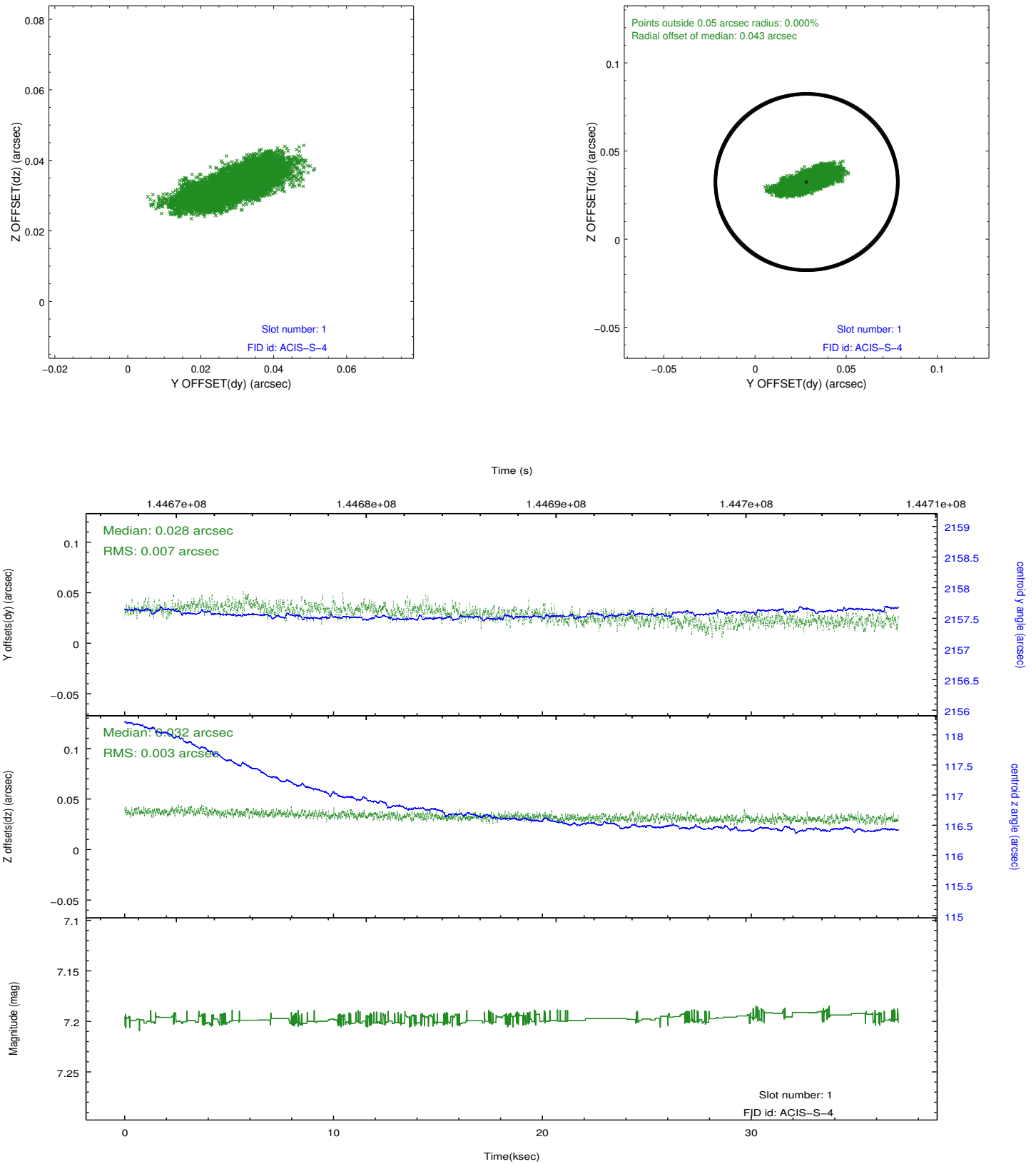


2.5 FID Slots

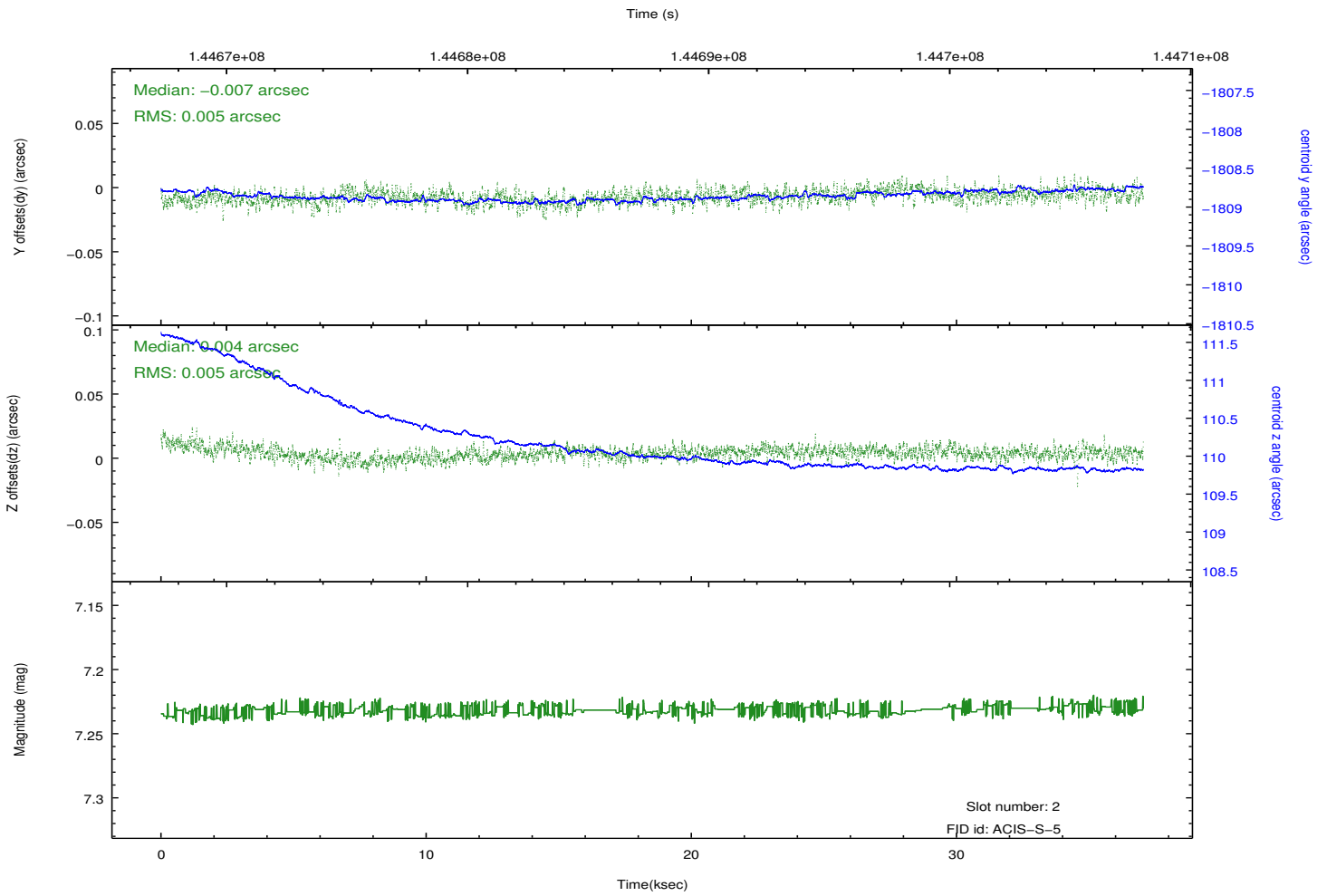
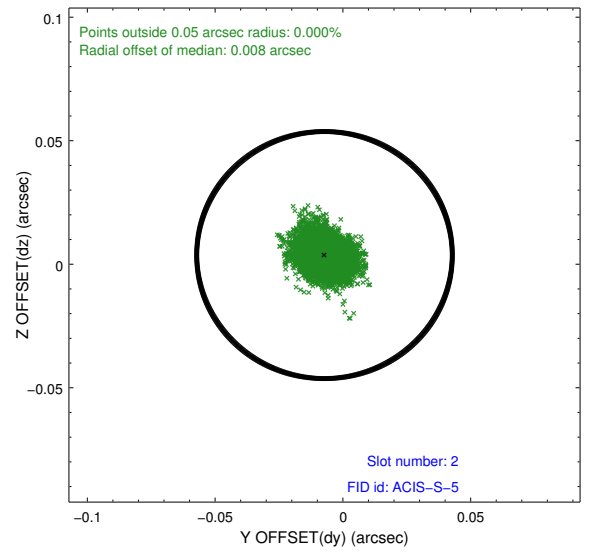
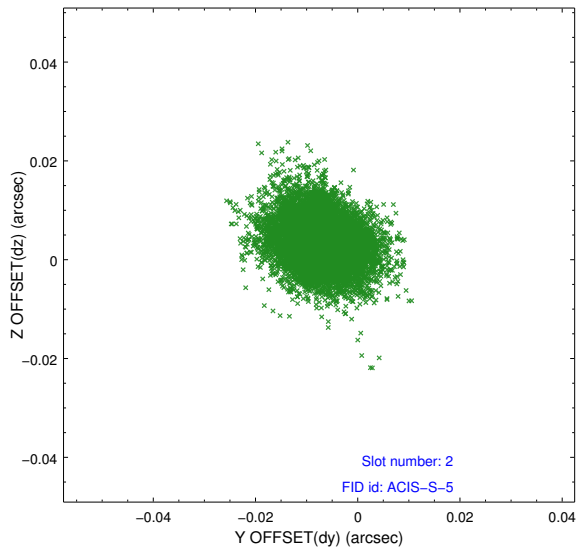
2.5.1 Slot 0



2.5.2 Slot 1

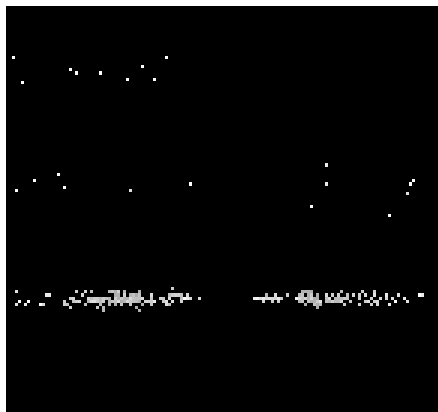


2.5.3 Slot 2

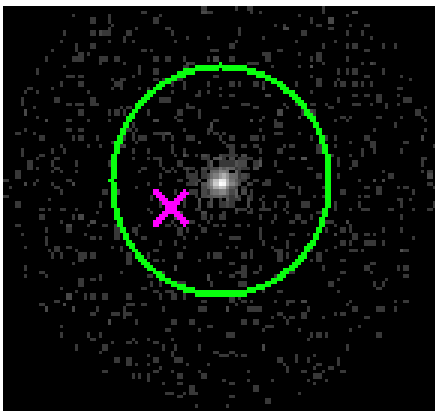


3 Gratings

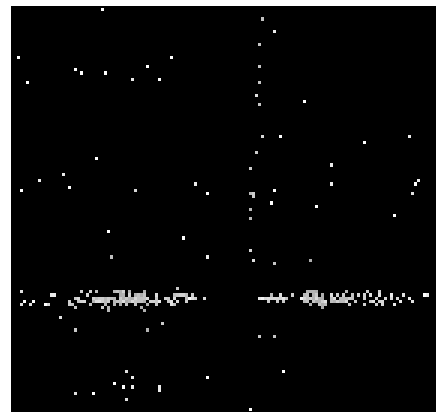
3.1 HEG Arm



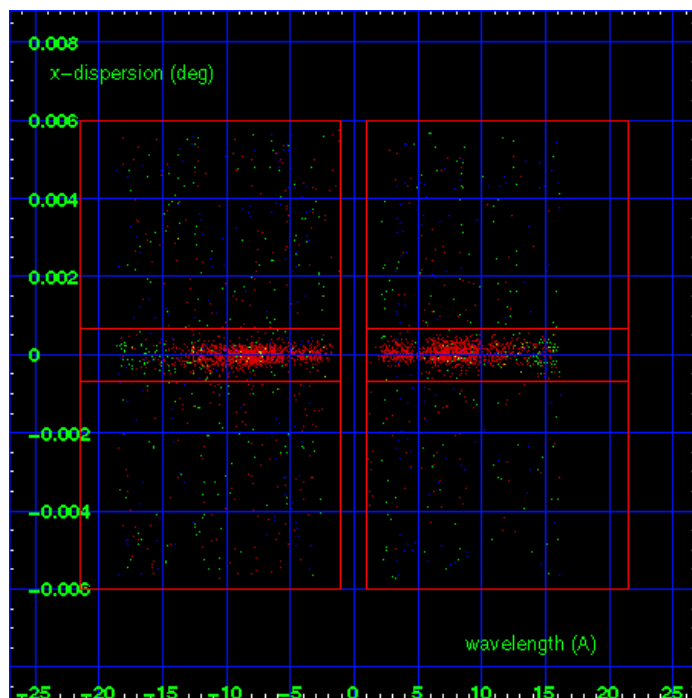
HEG Order Sort 123



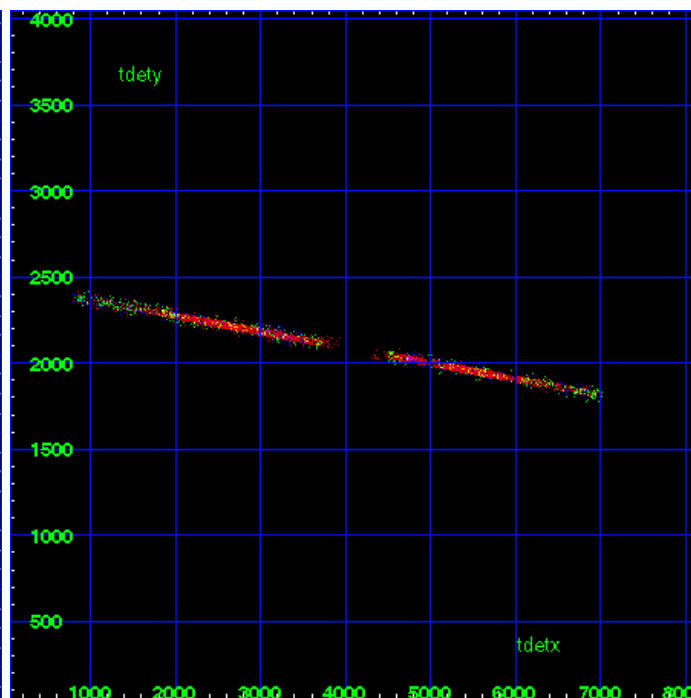
HEG Zero Order



HEG Order Sort ALL

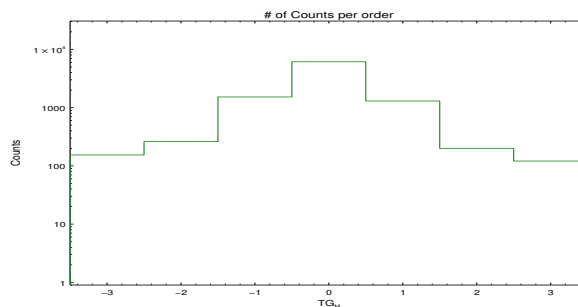


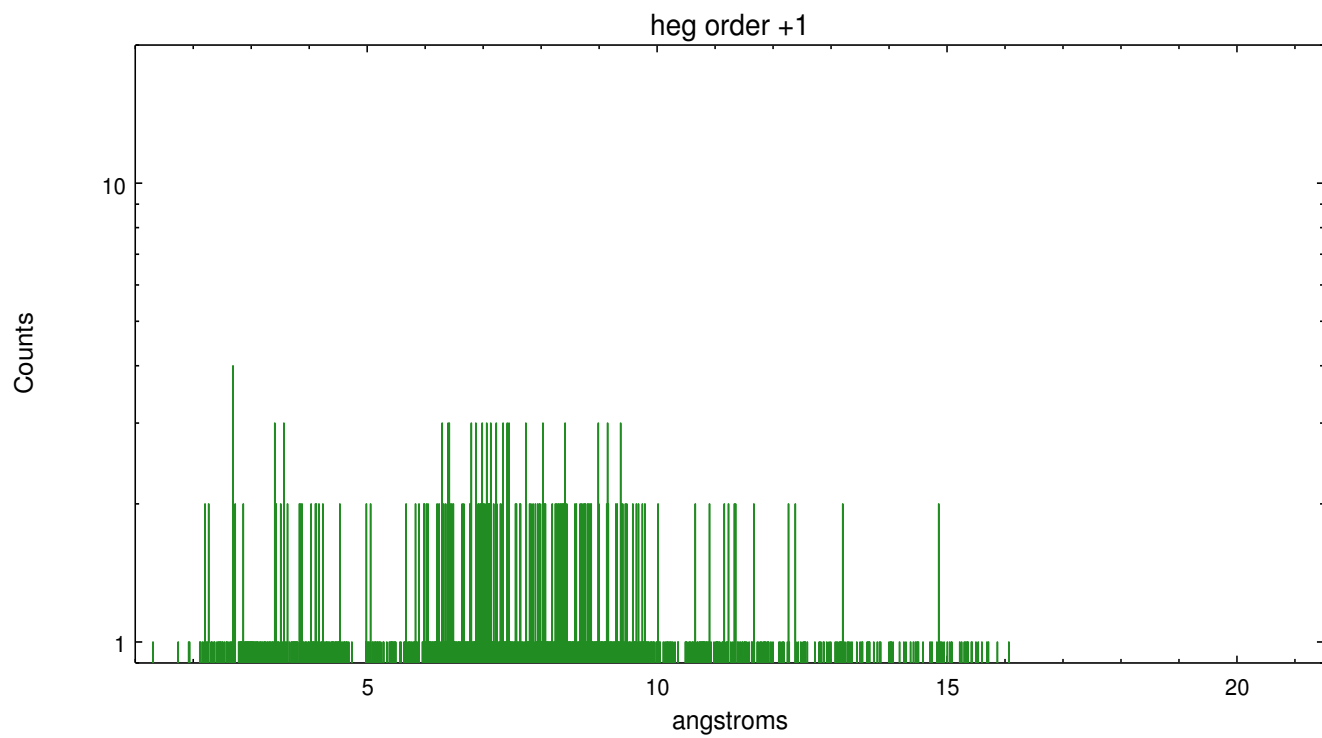
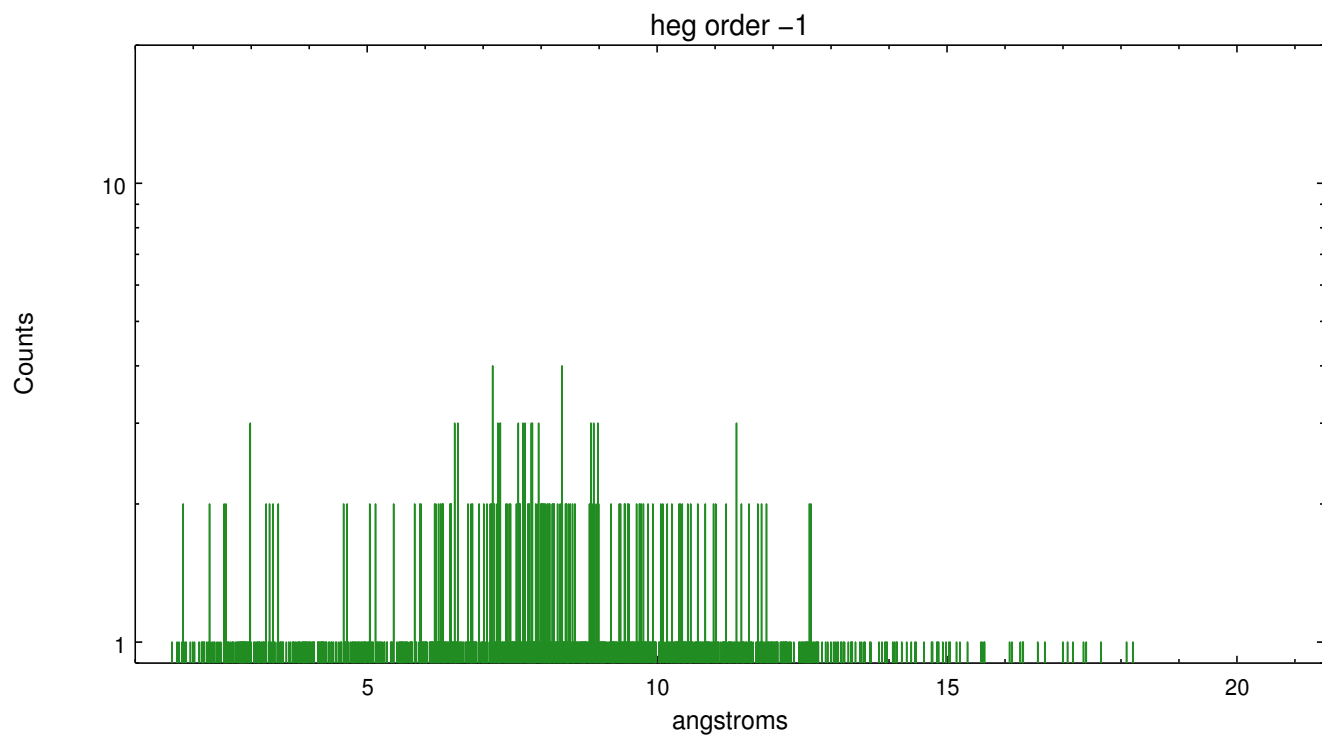
Spot Image HEG



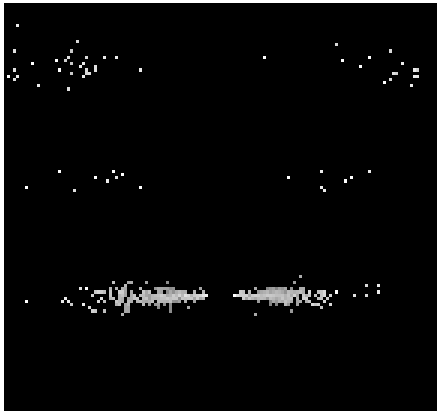
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	154	261	1524	6124	1299	199	121

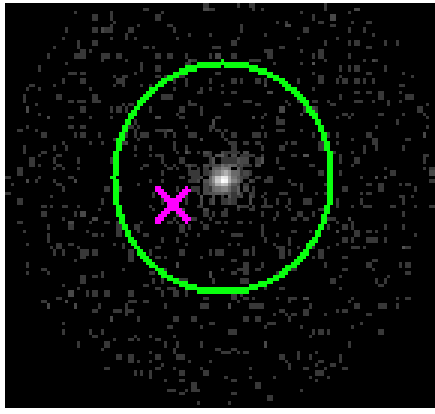




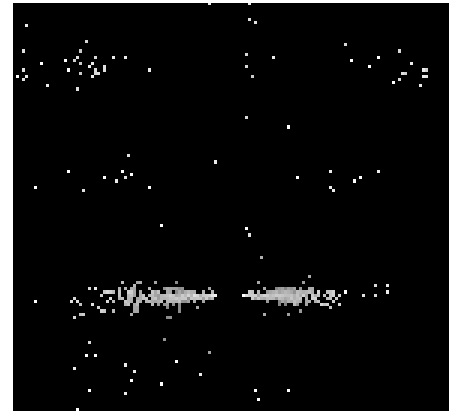
3.2 MEG Arm



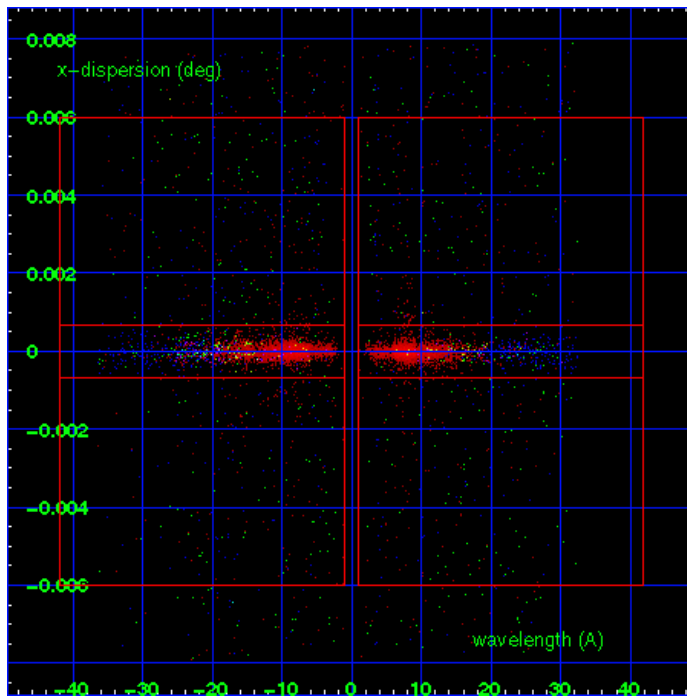
MEG Order Sort 123



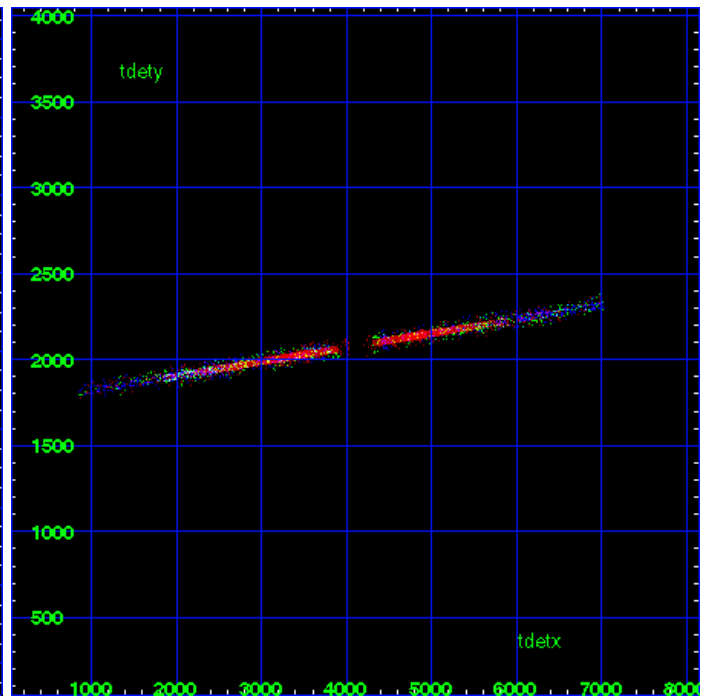
MEG Zero Order



MEG Order Sort ALL

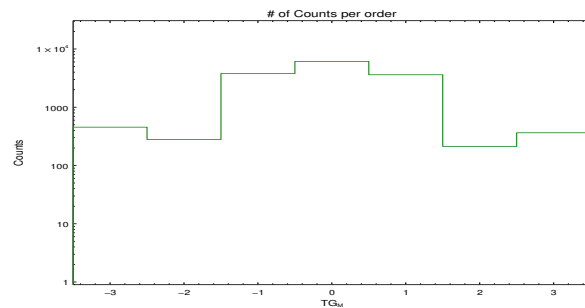


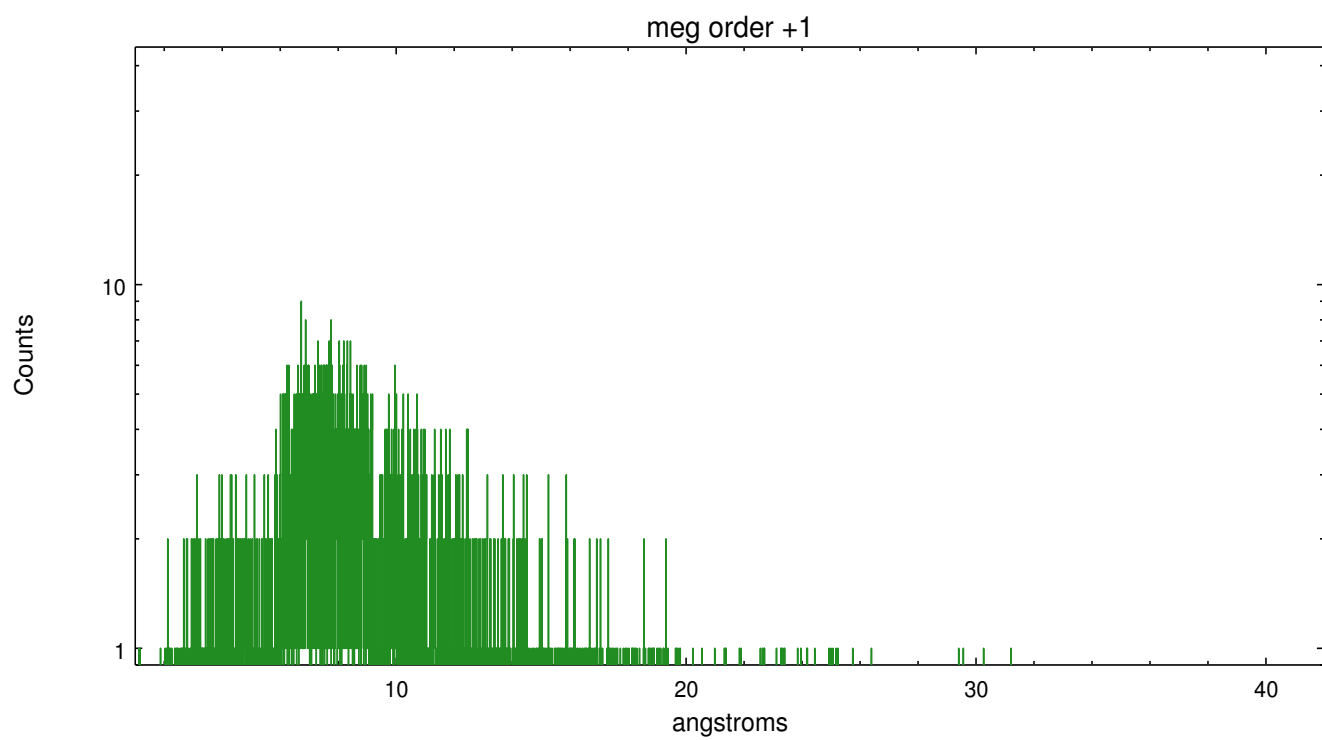
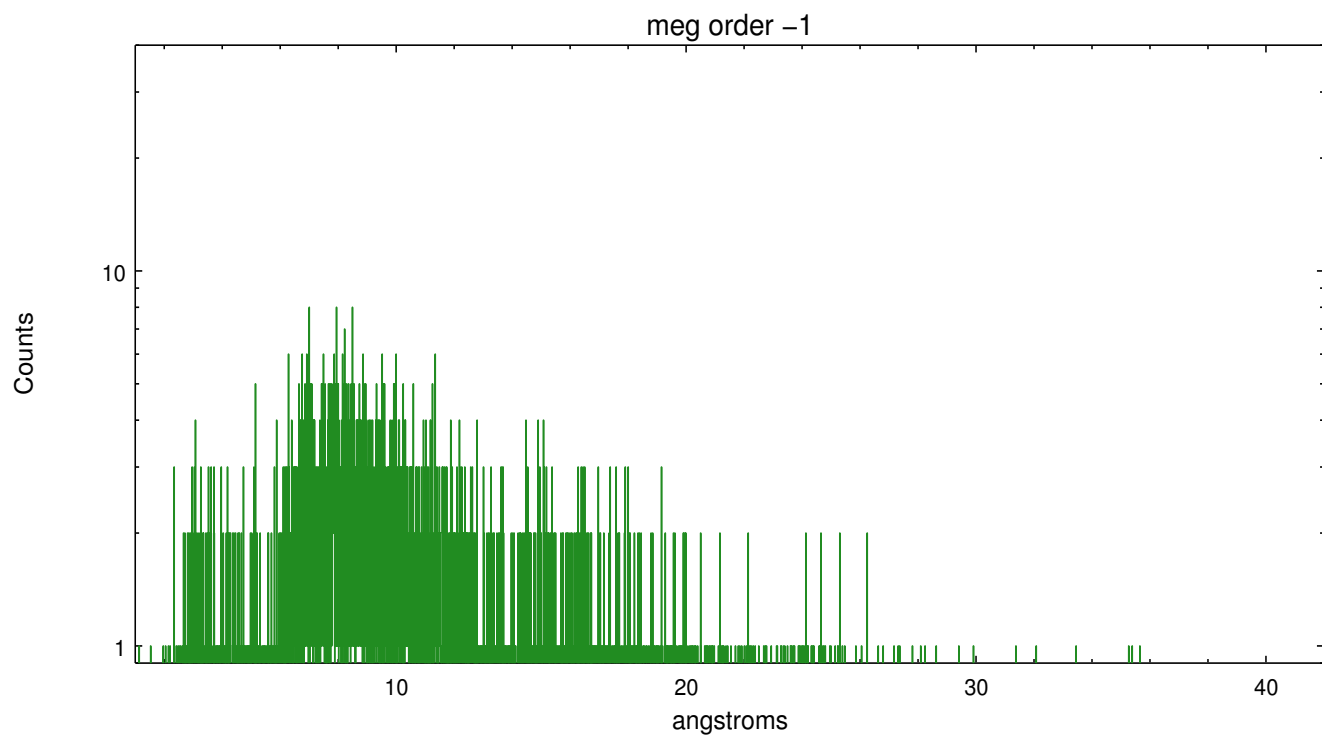
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	455	279	3780	6124	3615	213	365





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.11.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.04

A.2 Comments