

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 5431 - L2 Version 3
Chandra X-Ray Center

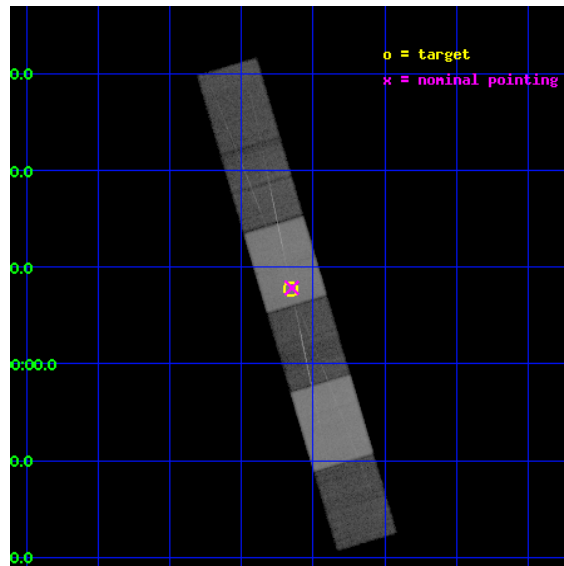
L2 Processing Date : Dec 28 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Gratings	17
3.1	HEG Arm	17
3.2	MEG Arm	19
A	Summary	21
A.1	Status	21
A.2	Comments	21

1 Front

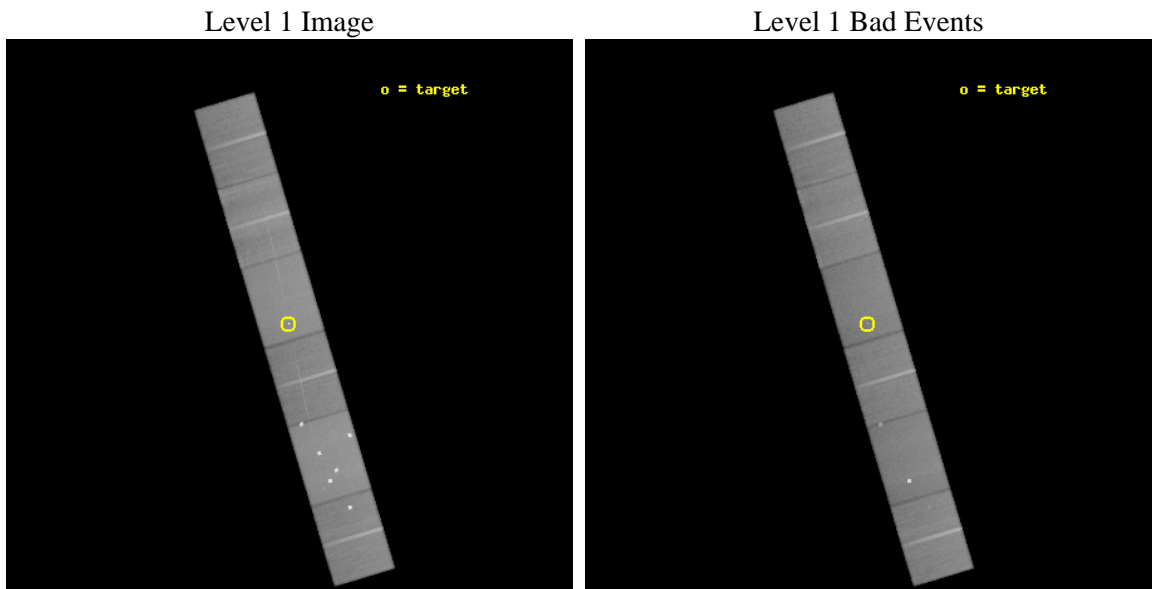
seq_num	300147	Sequence number
obs_id	5431	Observation id
title	Coordinated Multiwavelength Observations of AE Aqr	Proposal title
observer	Christopher Mauche	Principal investigator
object	AE Aqr	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	310.038333	Observer's specified target RA [deg]
dec_targ	-0.870861	Observer's specified target Dec [deg]
ra_nom	310.03716100608	Nominal RA [deg]
dec_nom	-0.8689715506118	Nominal Dec [deg]
roll_nom	253.33673469455	Nominal Roll [deg]
revision	3	Processing version of data
ontime	78177.5	Sum of GTIs [s]
livetime	76914.865566854	Livetime [s]
ontime4	78174.958989799	Sum of GTIs [s]
ontime5	78177.5	Sum of GTIs [s]
ontime6	78177.5	Sum of GTIs [s]
ontime7	78177.5	Sum of GTIs [s]
ontime8	78177.5	Sum of GTIs [s]
ontime9	78177.5	Sum of GTIs [s]
l2events	755351	Number of level 2 events



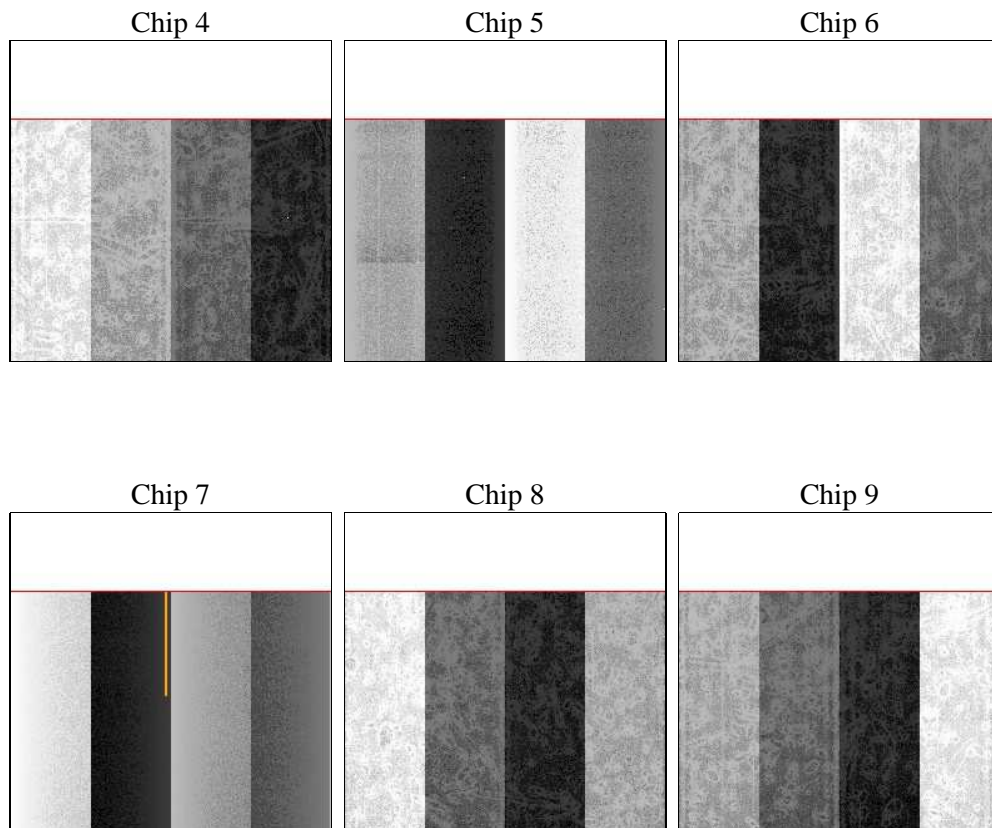
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	78000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	78177.5	Sum of GTIs [s]
caldbver	4.5.5	 	ontime4	78174.958989799	Sum of GTIs [s]
date	2012-12-28T03:15:20	Date and time of file creation	ontime5	78177.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	78177.5	Sum of GTIs [s]
			ontime7	78177.5	Sum of GTIs [s]
			ontime8	78177.5	Sum of GTIs [s]
			ontime9	78177.5	Sum of GTIs [s]
			l1events	3502422	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	535825	809335	471276	628098	594225	463663	grade 0 events	53556	111370	25320	24874	42994	23174
rejected events	449534	401152	411598	363312	460583	407299		9%	13%	5%	3%	7%	4%
rejected %	83%	49%	87%	57%	77%	87%	grade 1 events	516	6607	216	676	397	222
								0%	0%	0%	0%	0%	0%
							grade 2 events	12440	98568	12209	54363	29515	11137
								2%	12%	2%	8%	4%	2%
							grade 3 events	6022	20394	5853	24123	14298	5851
								1%	2%	1%	3%	2%	1%
							grade 4 events	5826	15537	5627	23952	13212	5824
								1%	1%	1%	3%	2%	1%
							grade 5 events	19806	55647	20706	58151	27492	22421
								3%	6%	4%	9%	4%	4%
							grade 6 events	9283	166111	11358	140533	34999	11025
								1%	20%	2%	22%	5%	2%
							grade 7 events	428376	335101	389987	301426	431318	384009
								79%	41%	82%	47%	72%	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	310.030524	310.0371610060838	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-0.842553	-0.8689715506117992	Subarray start row	1	1
[deg] Pointing Roll	253.180008	253.3367346945507	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)	241772514.184000	241771031.69802			
Observation start date	2005-08-30T07:00:50	2005-08-30T06:37:11			
[s] Observation end time (MET)	241850514.184000	241852007.72674			
Observation end date	2005-08-31T04:40:50	2005-08-31T05:06:47			
Read mode	TIMED	TIMED			

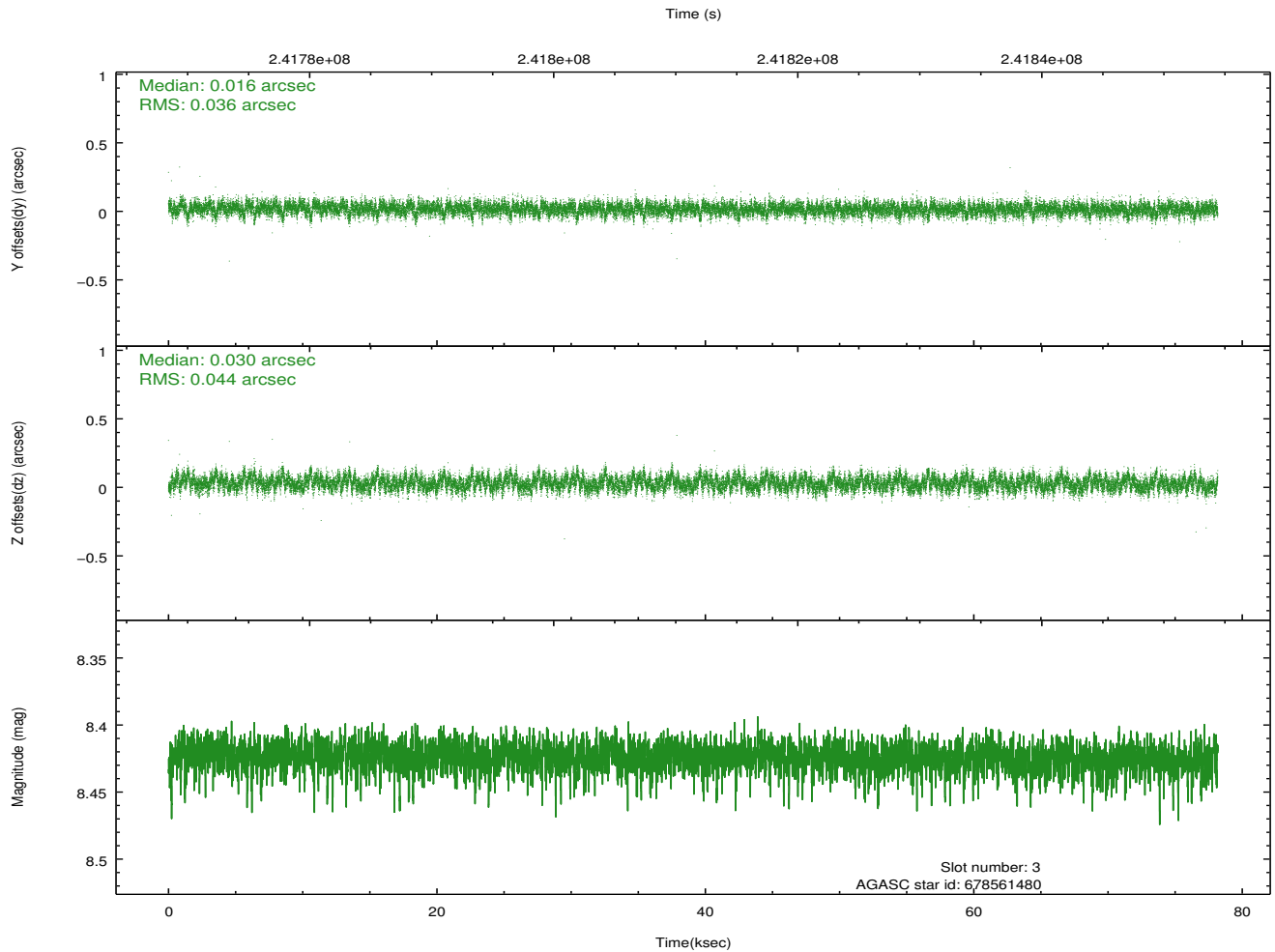
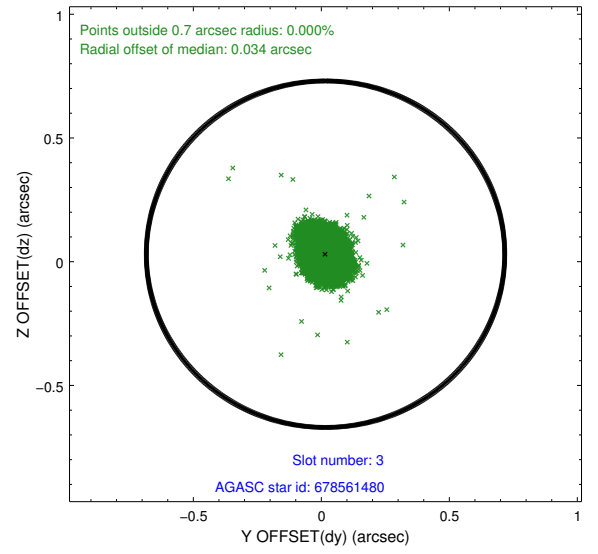
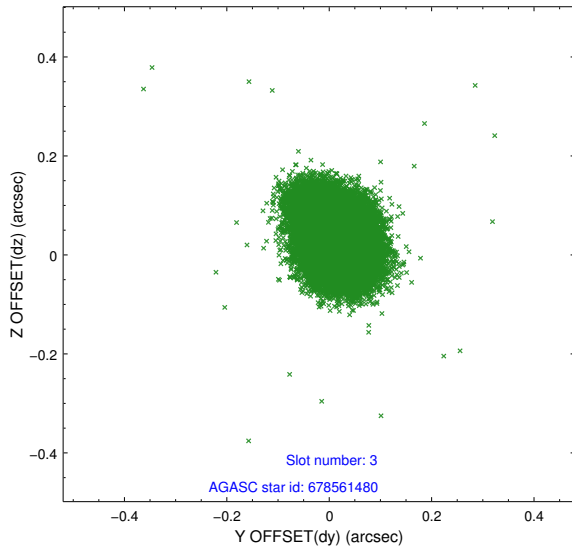
2.3 Aspect

Slot Statistics

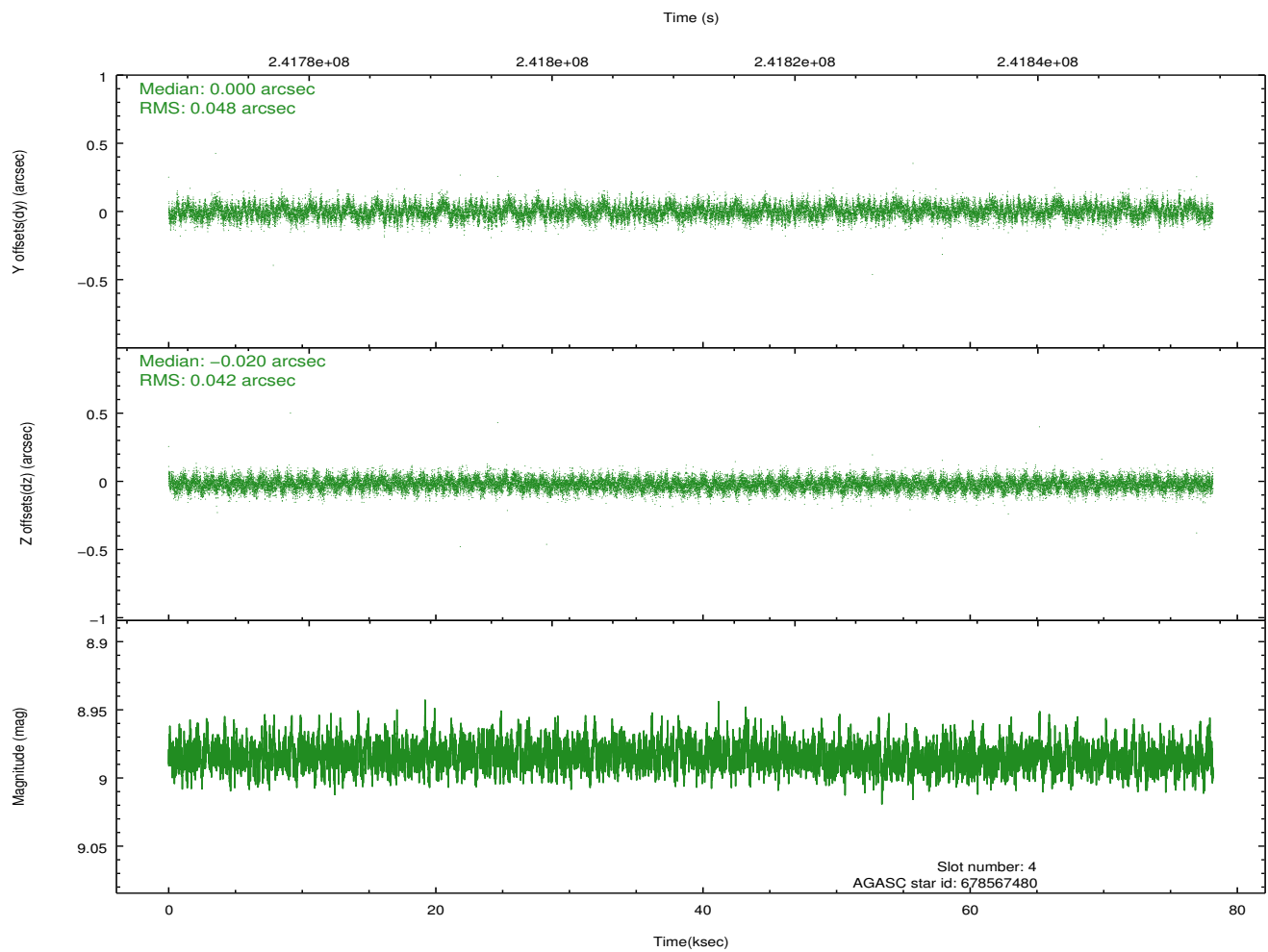
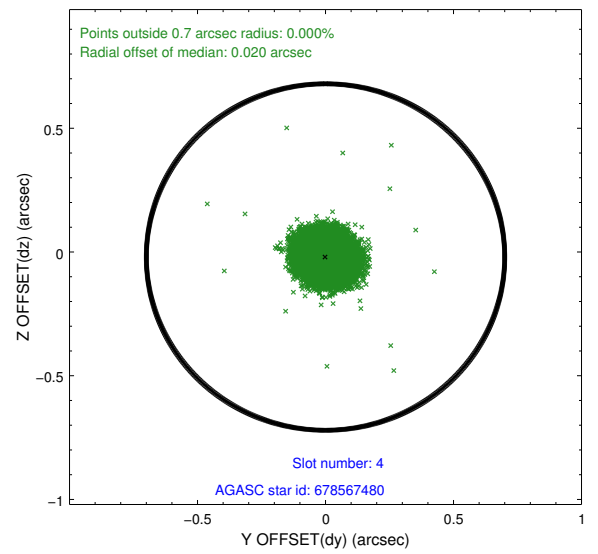
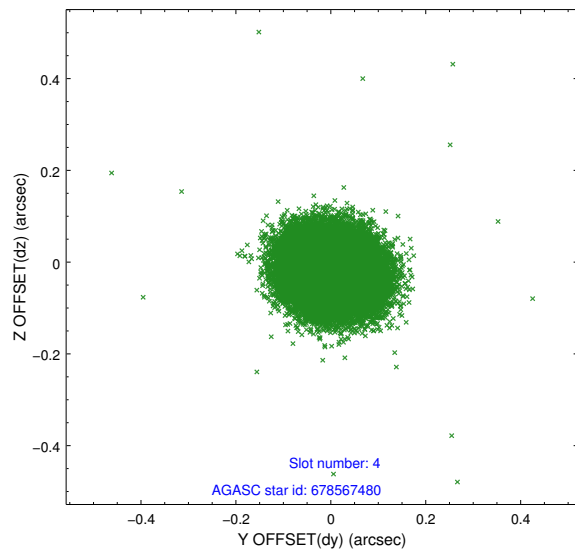
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	19065	-0.063	-0.083	0.012	0.020	0.000000	0.000000	-759.60	-1793.26
1	FID	ACIS-S-4	7.19	19065	0.117	0.053	0.006	0.011	0.000000	0.000000	2153.91	115.39
2	FID	ACIS-S-5	7.23	19066	-0.084	0.038	0.012	0.023	0.000000	0.000000	-1812.53	109.01
3	GUIDE	678561480	8.42	38124	0.016	0.030	0.059	0.099	310.388546	-1.531359	2000.95	1951.30
4	GUIDE	678567480	8.98	38112	0.000	-0.020	0.067	0.110	310.342585	-0.463802	-1630.03	680.83
5	GUIDE	678568944	9.26	38116	-0.188	-0.068	0.096	0.158	309.652969	-0.081267	-2229.95	-2094.31
6	GUIDE	678440656	9.07	38113	0.103	0.034	0.083	0.135	309.267349	-1.042435	1484.52	-2421.01
7	GUIDE	678567064	9.28	38042	0.069	0.023	0.103	0.159	310.550349	-1.419928	1448.58	2392.58

2.4 Star Slots

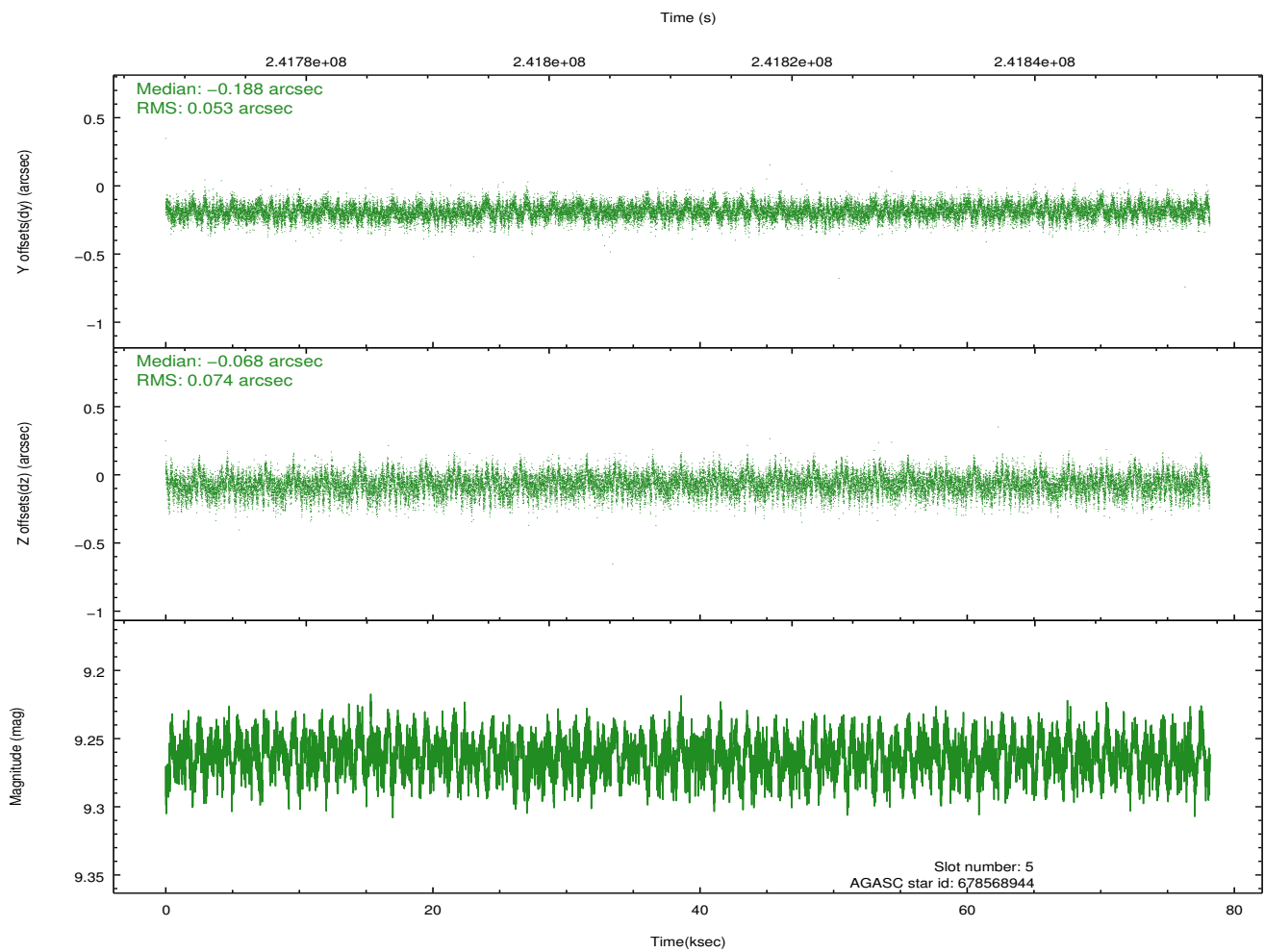
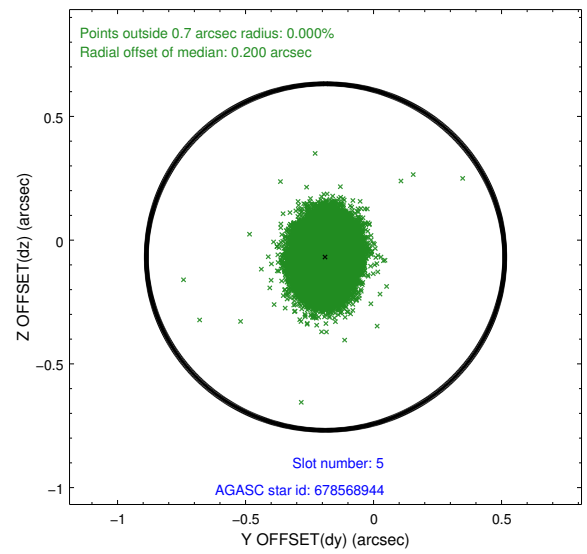
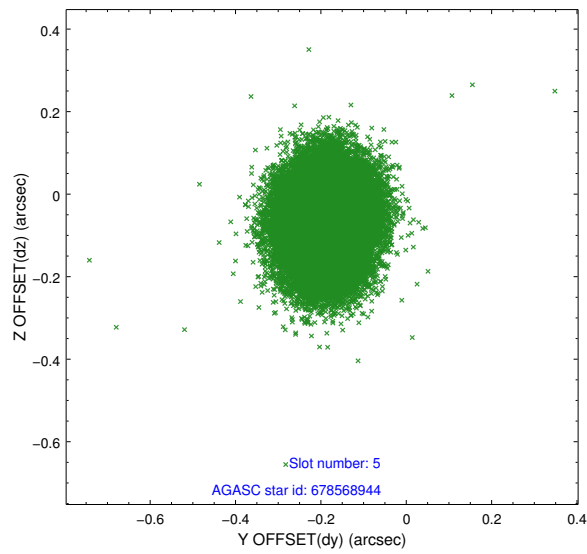
2.4.1 Slot 3



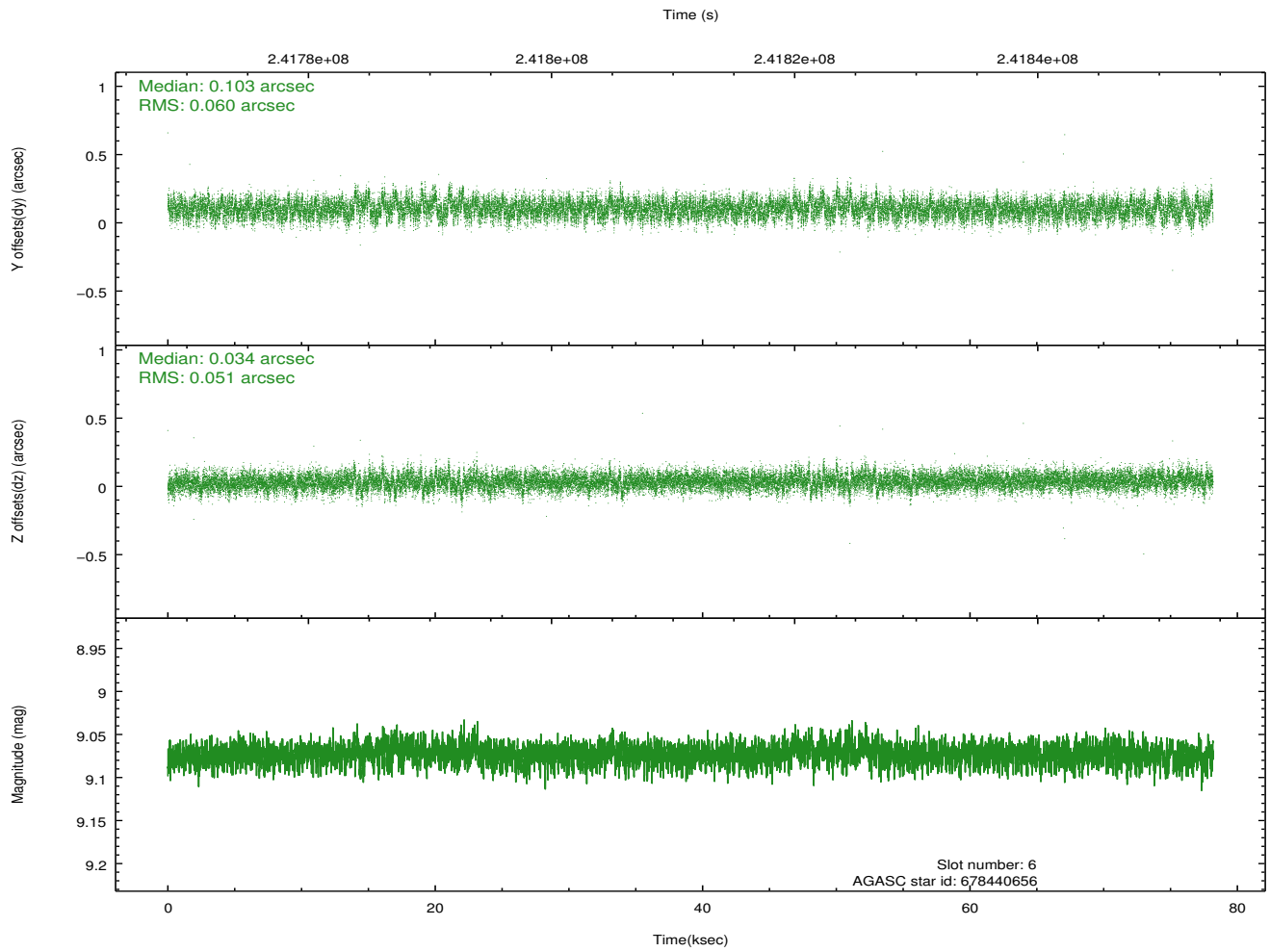
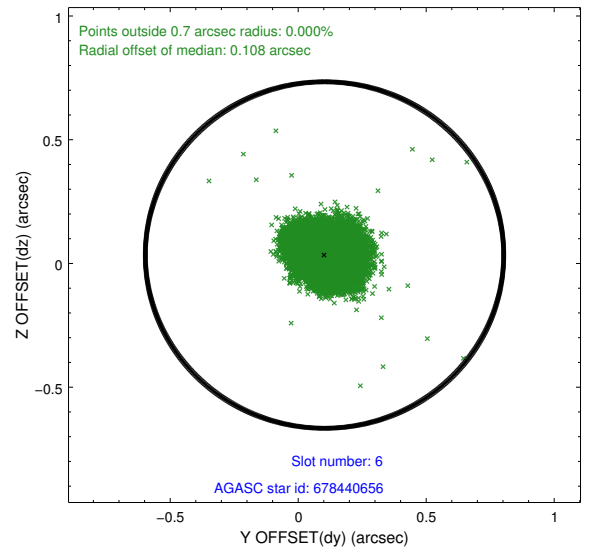
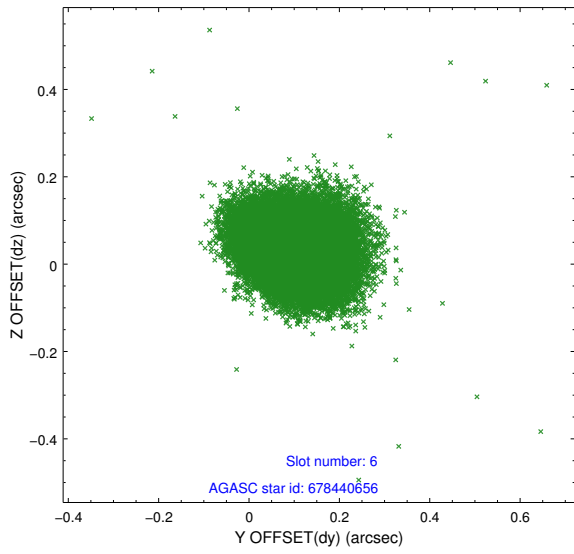
2.4.2 Slot 4



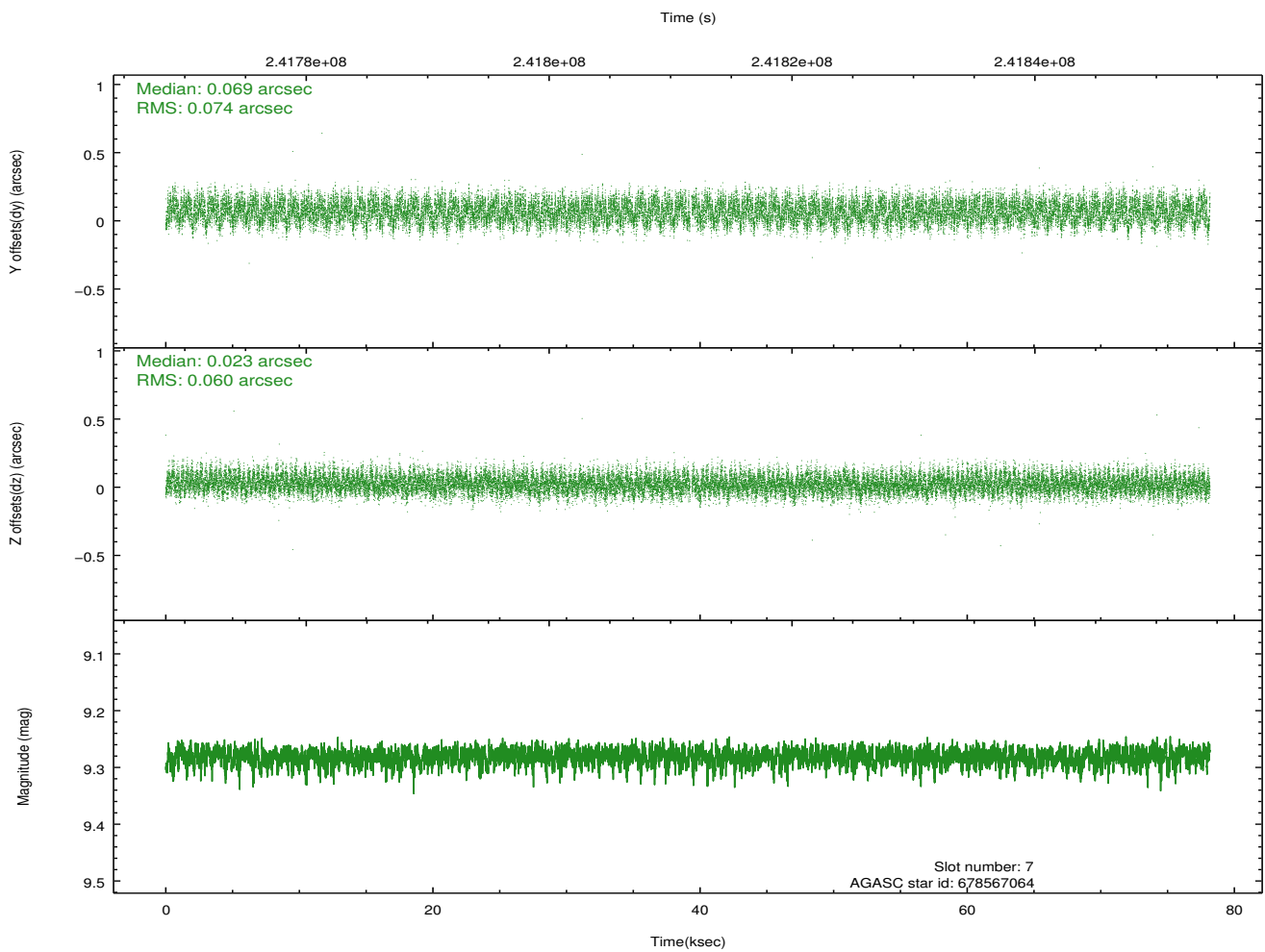
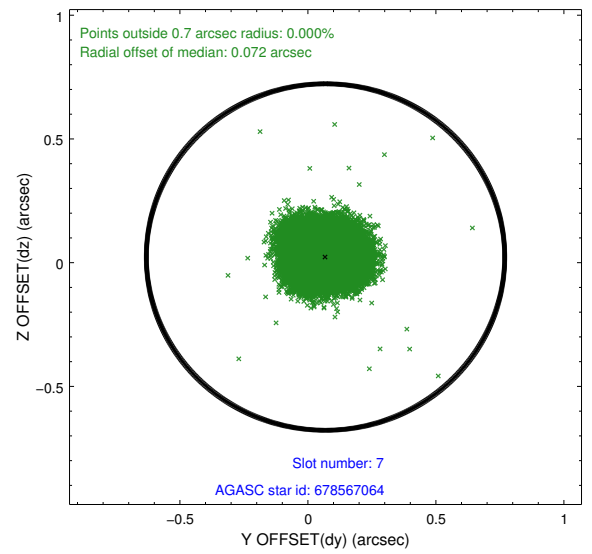
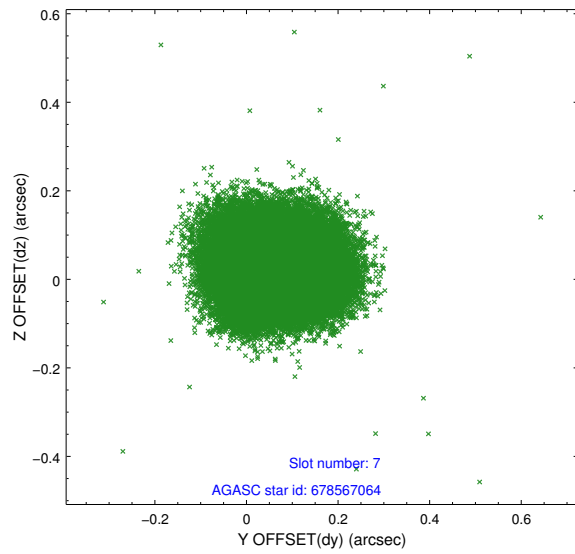
2.4.3 Slot 5



2.4.4 Slot 6

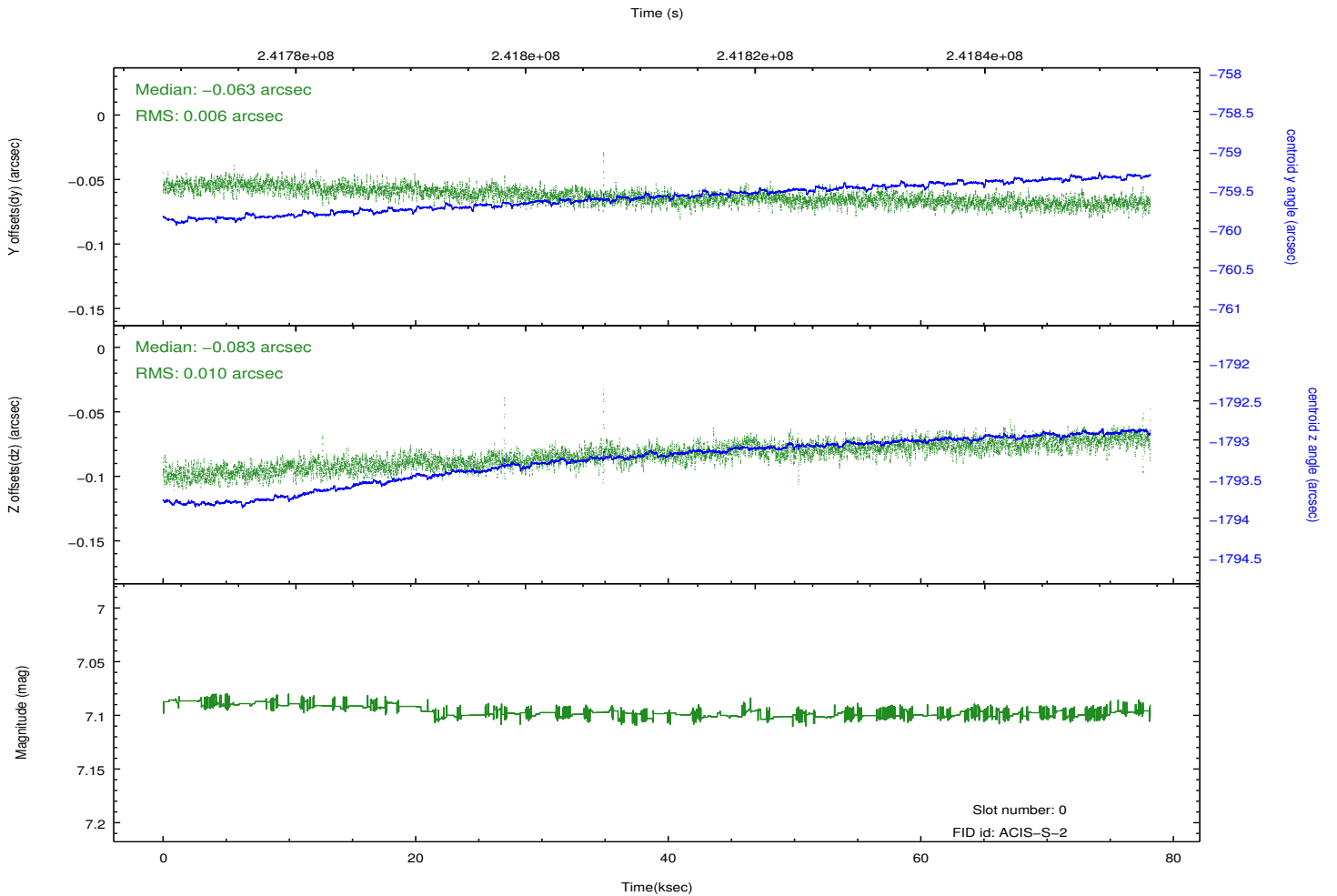
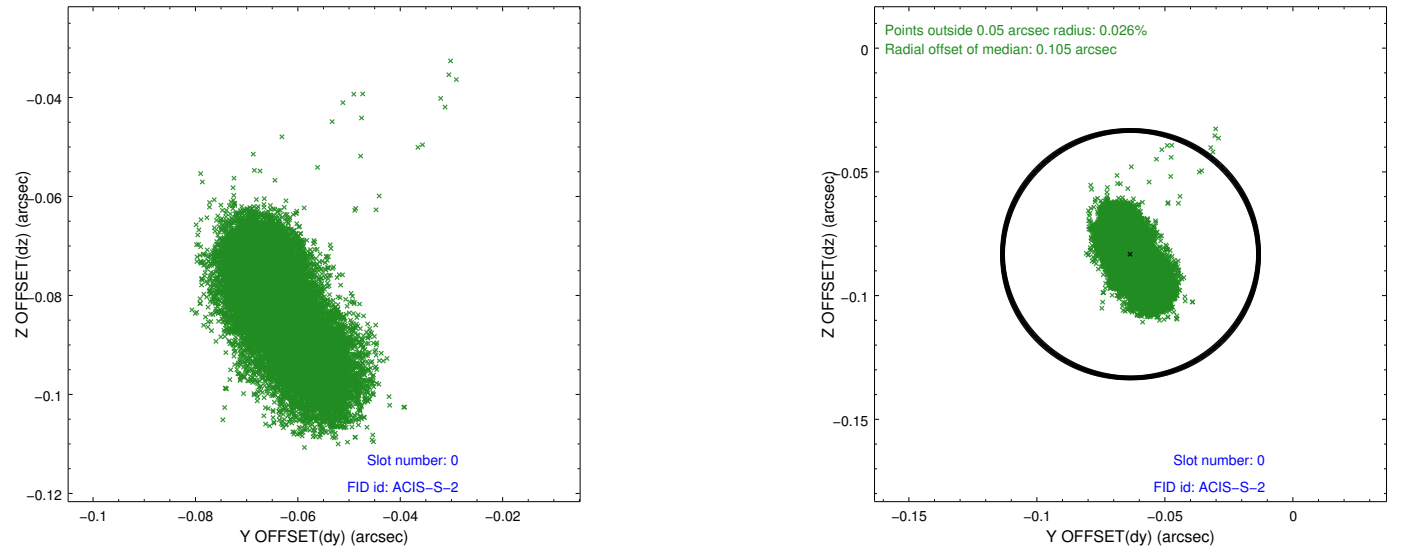


2.4.5 Slot 7

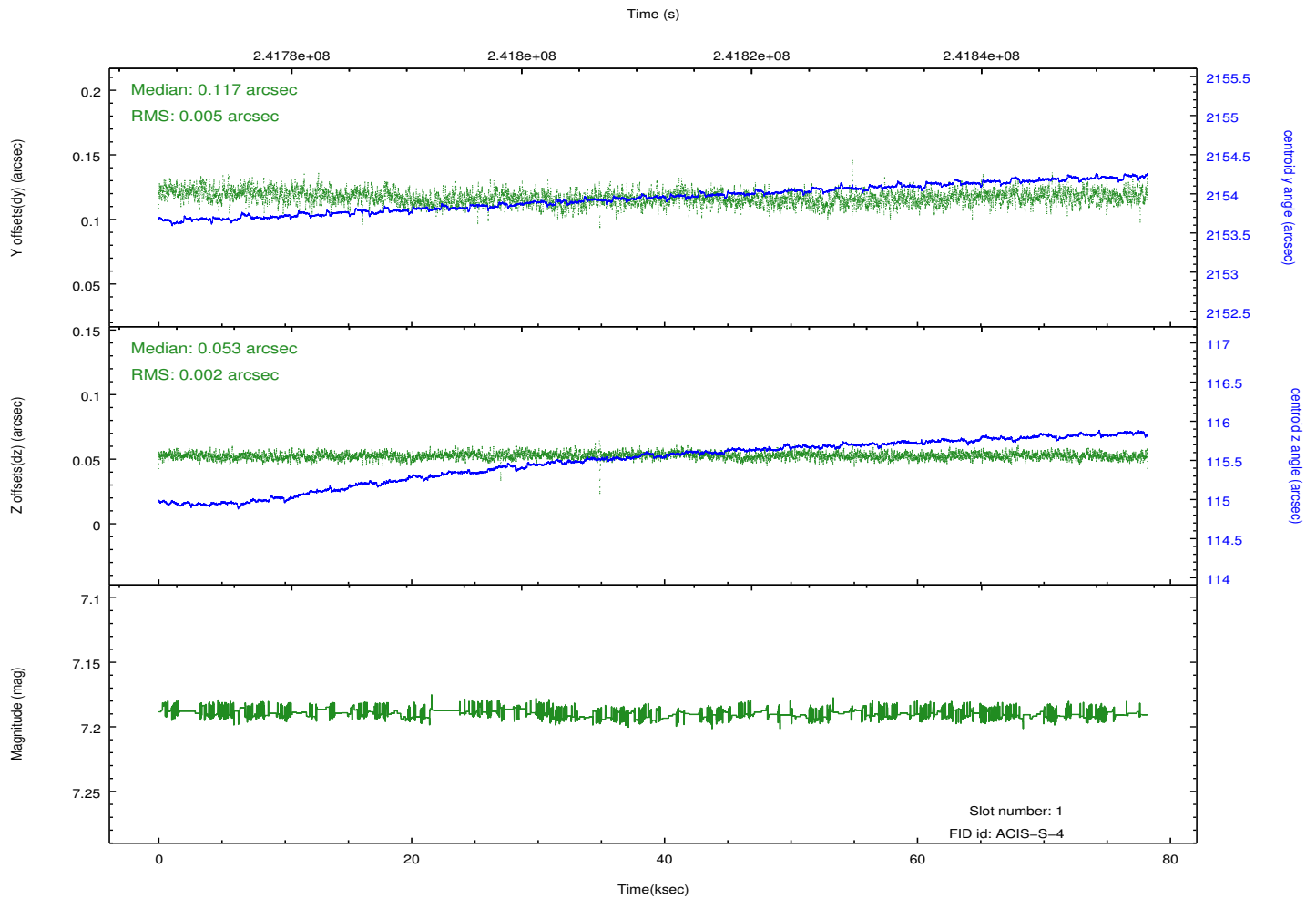
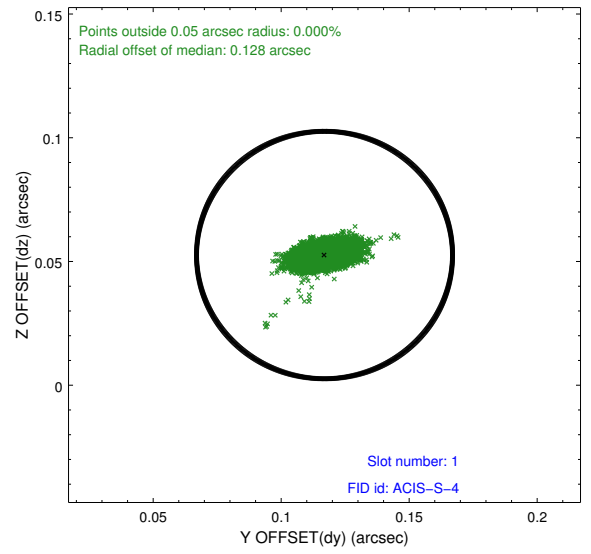
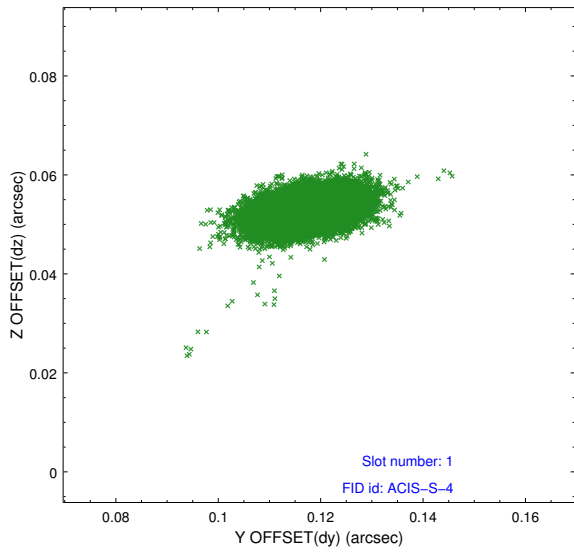


2.5 FID Slots

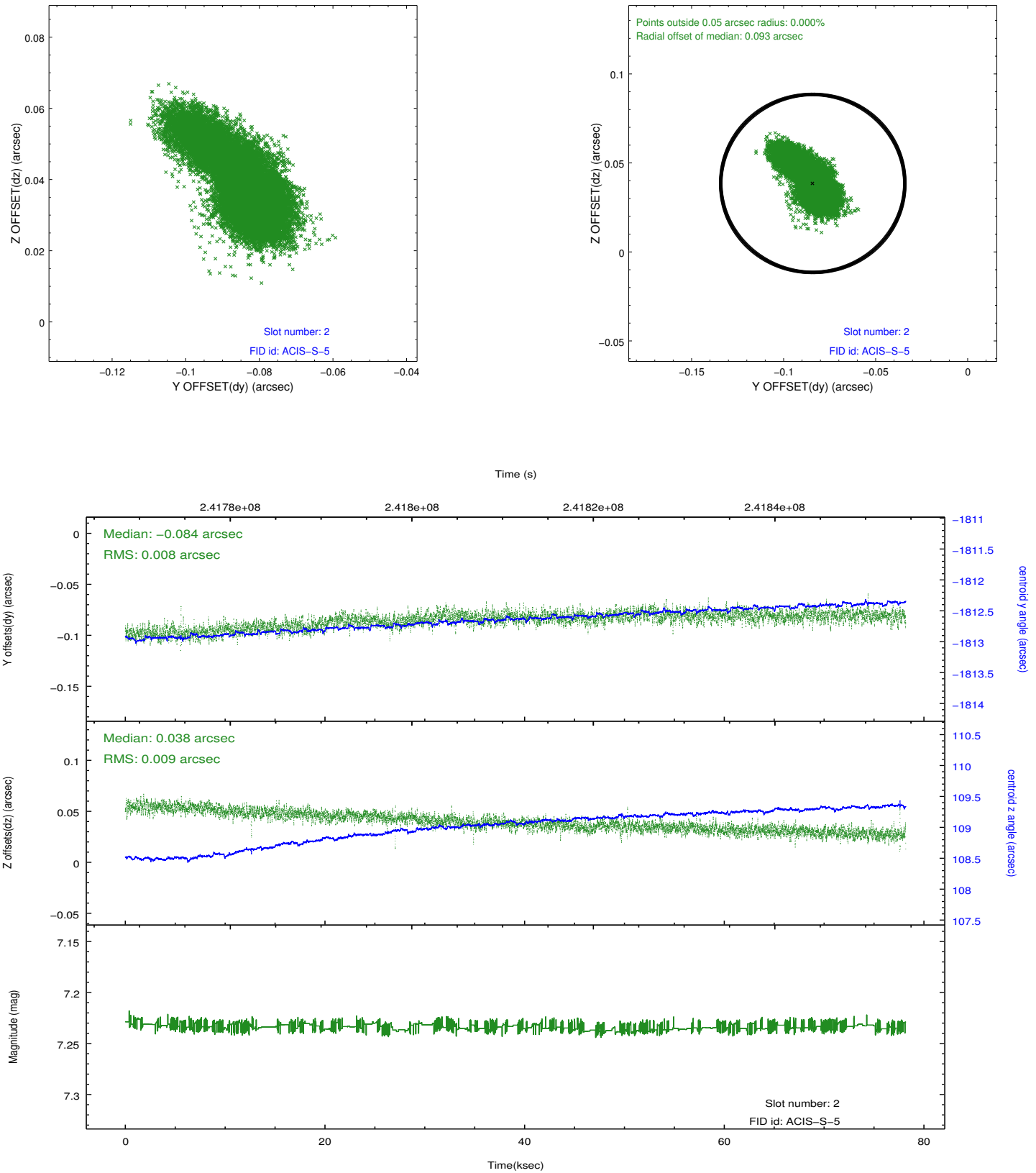
2.5.1 Slot 0



2.5.2 Slot 1

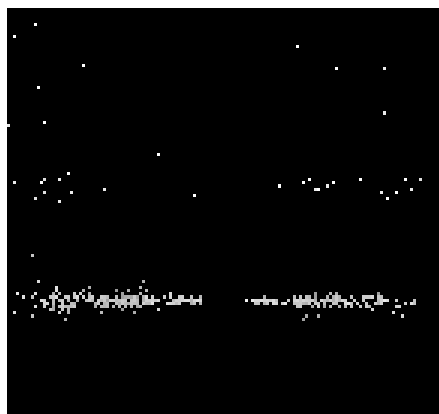


2.5.3 Slot 2

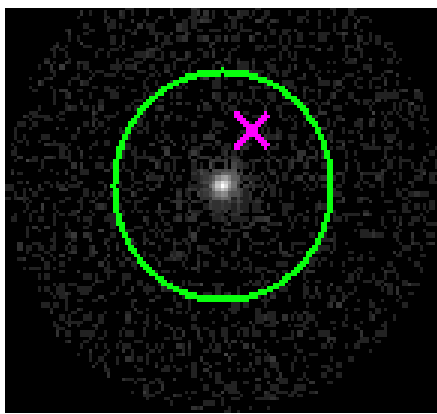


3 Gratings

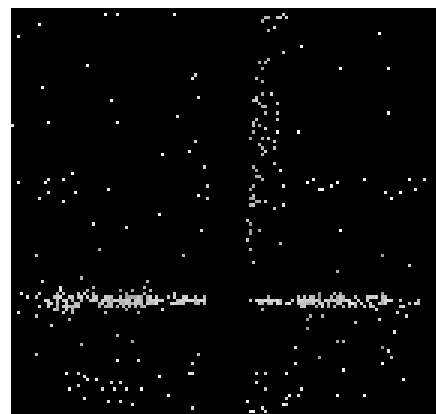
3.1 HEG Arm



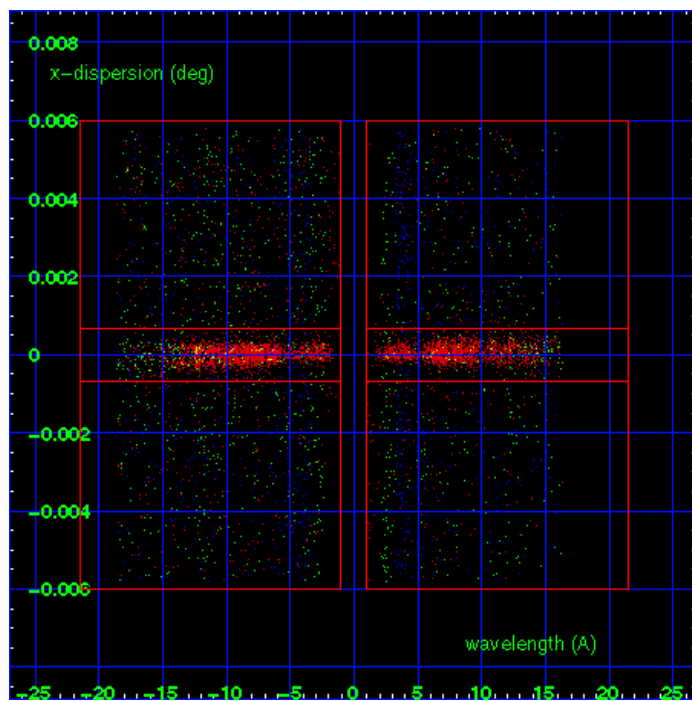
HEG Order Sort 123



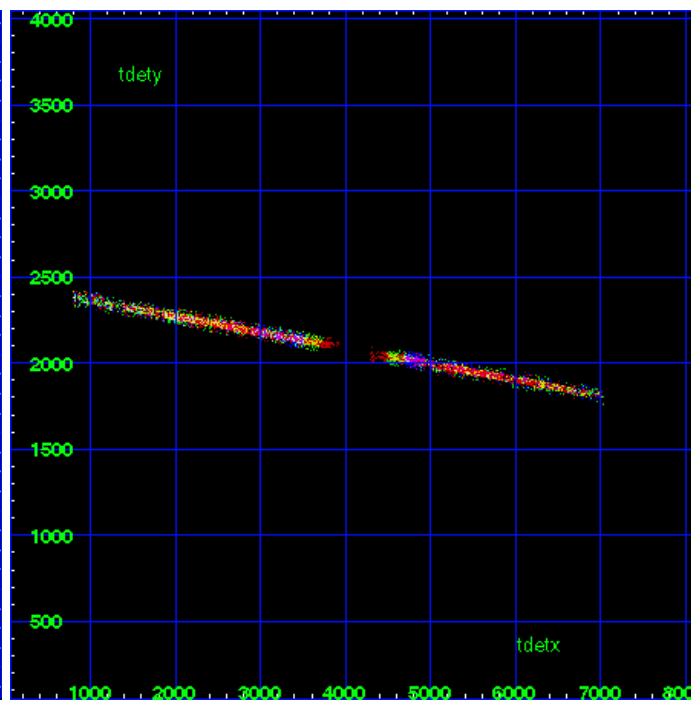
HEG Zero Order



HEG Order Sort ALL

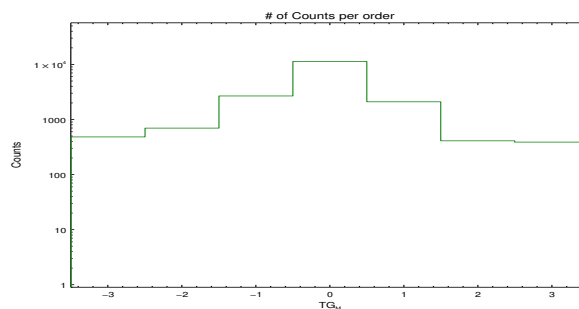


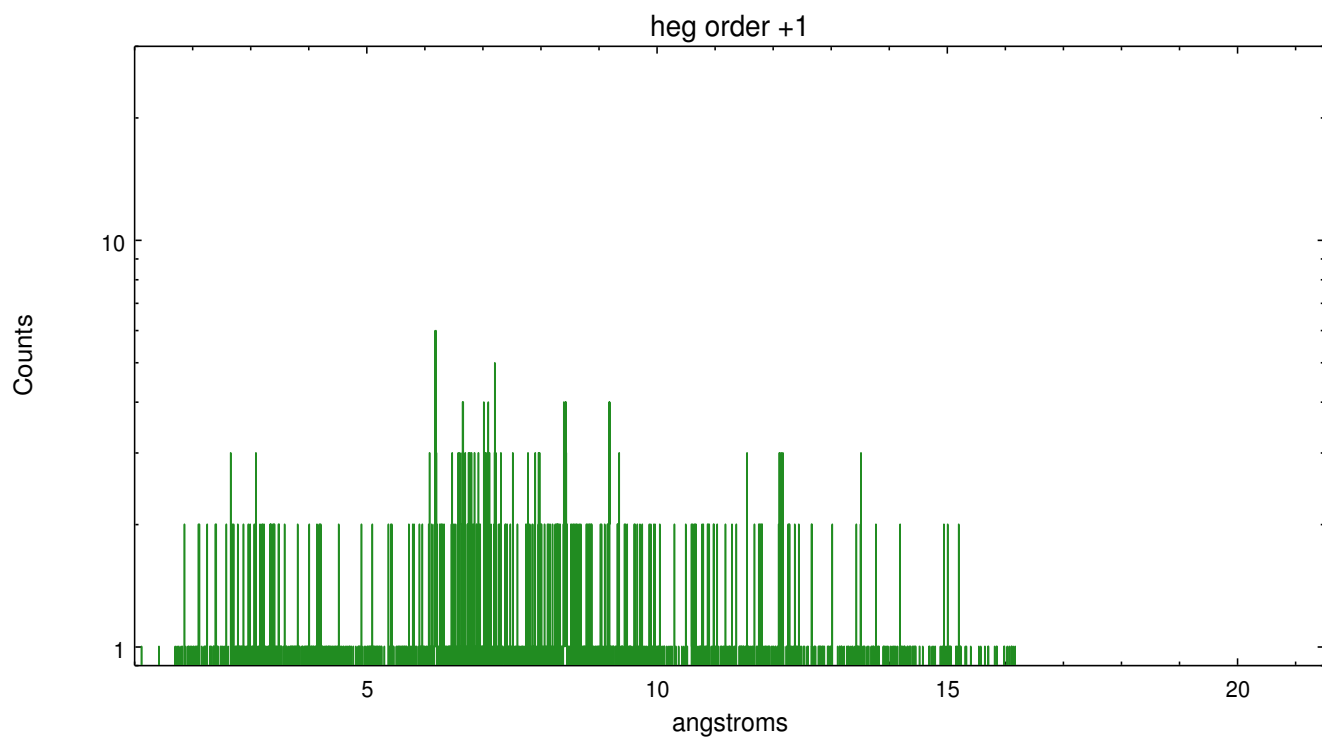
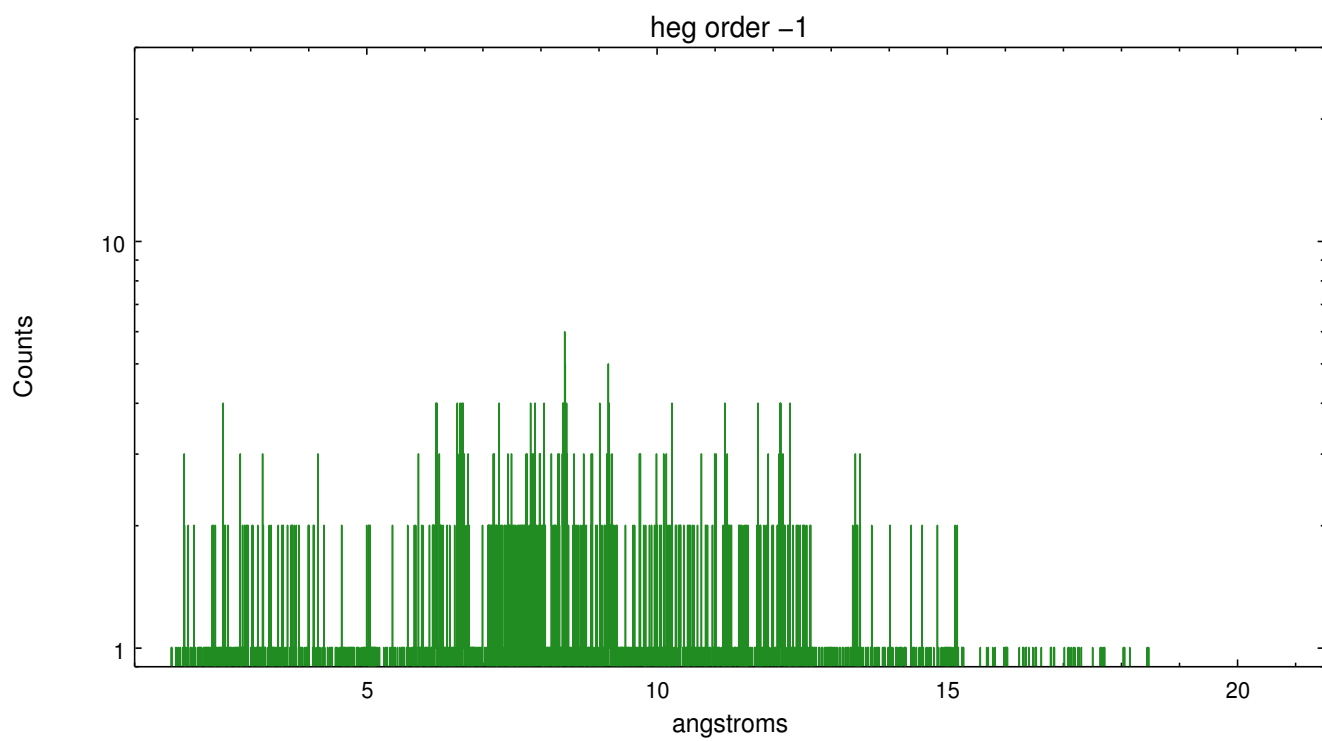
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	484	699	2689	11391	2107	411	389

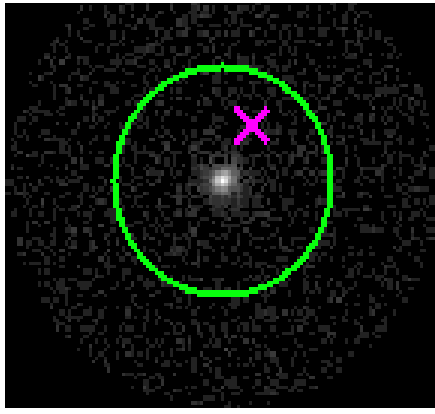




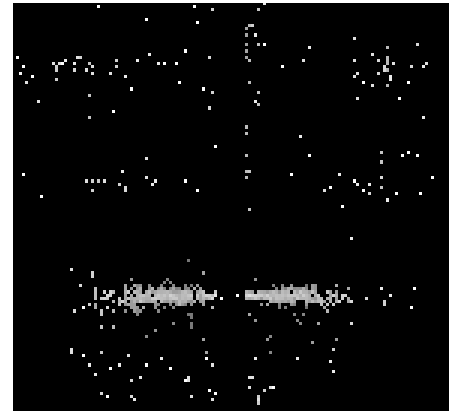
3.2 MEG Arm



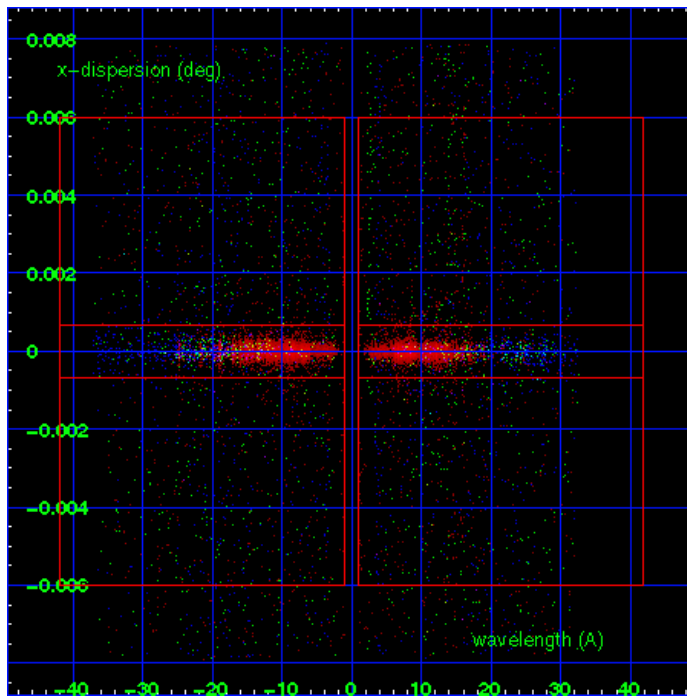
MEG Order Sort 123



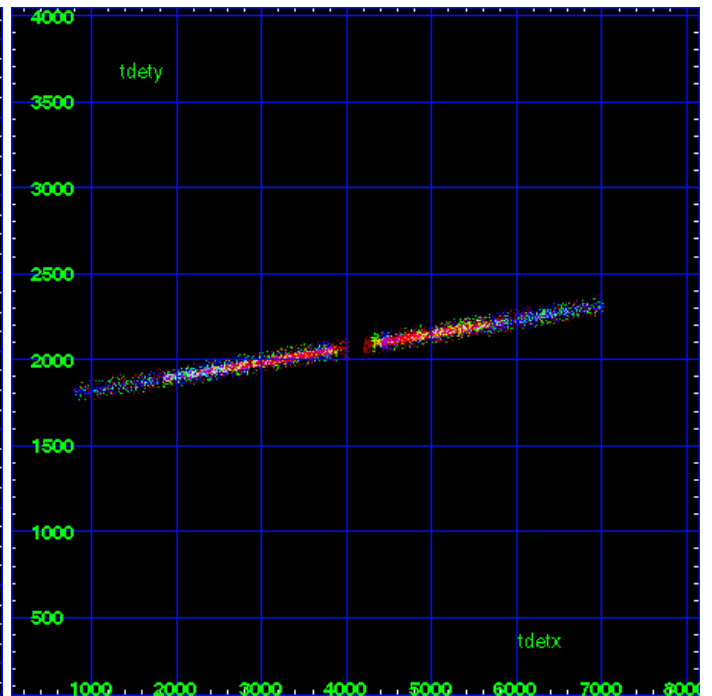
MEG Zero Order



MEG Order Sort ALL

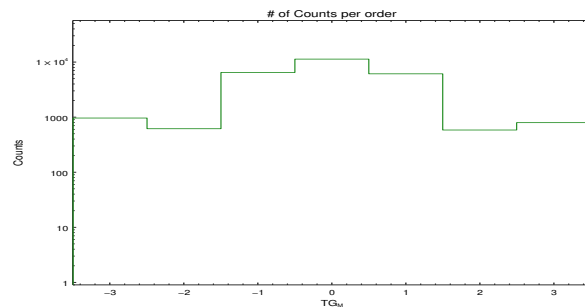


Spot Image MEG

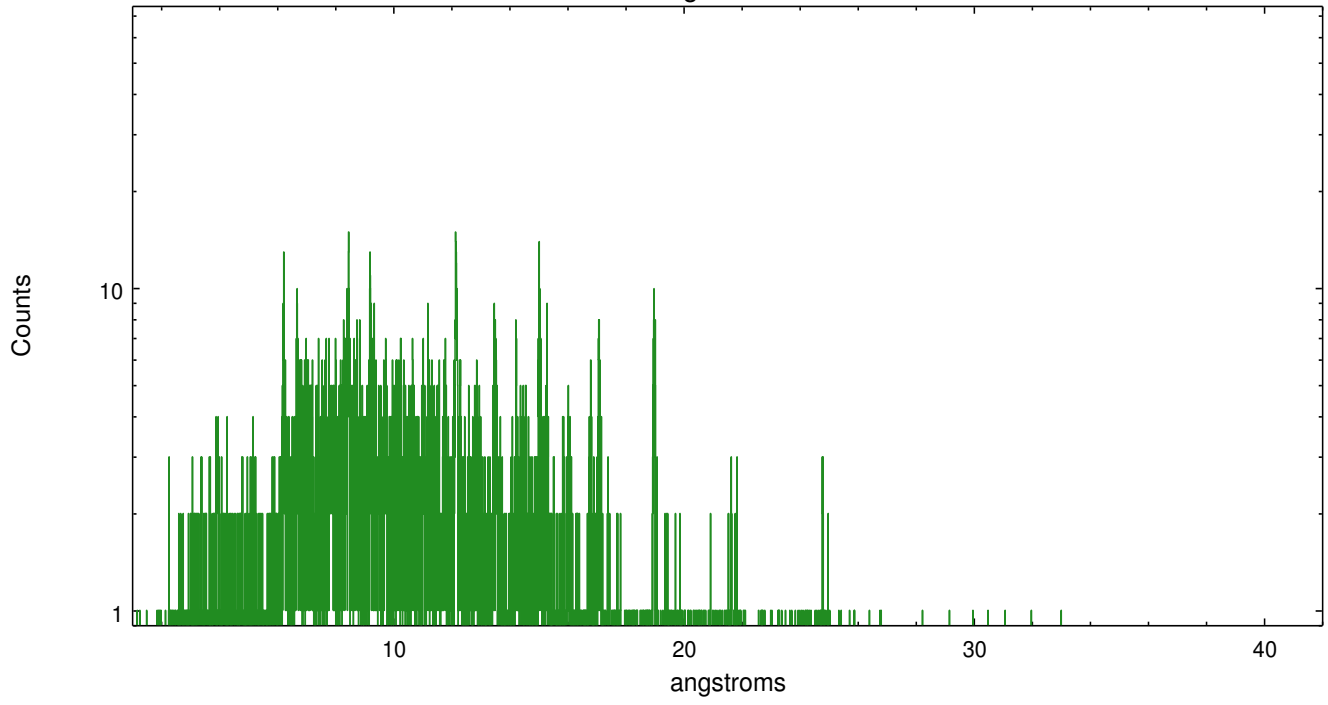


Full Detector MEG

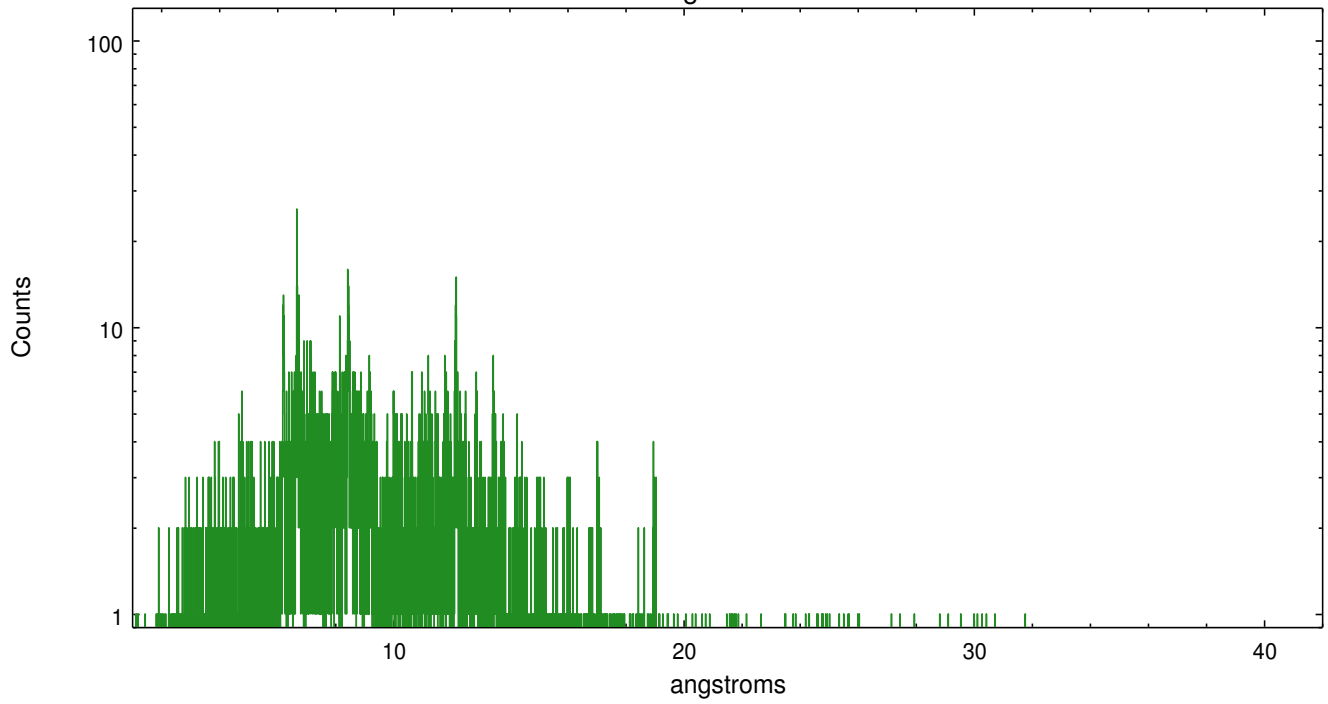
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	966	618	6507	11391	6156	585	797



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	78.1775

A.2 Comments