

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7291 - L2 Version 3
Chandra X-Ray Center

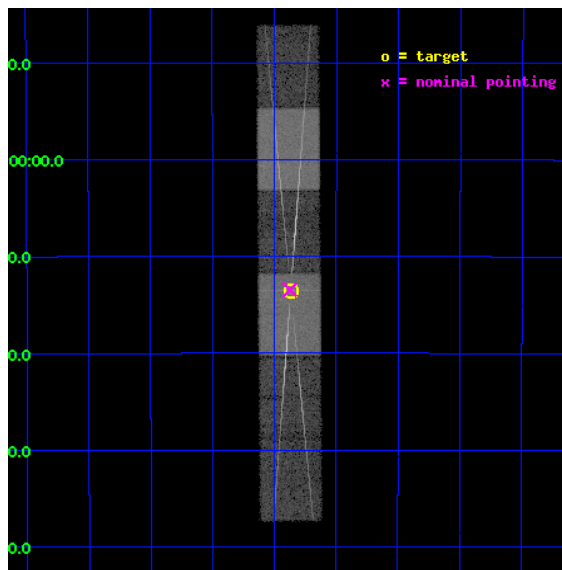
L2 Processing Date : Apr 4 2012

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

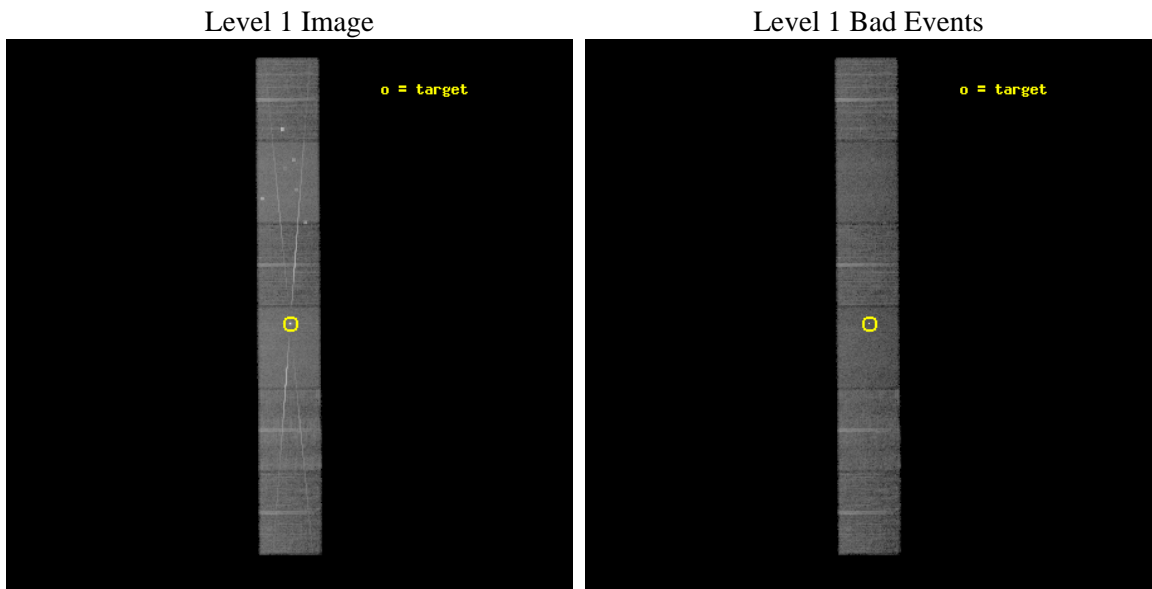
seq_num	790108	Sequence number
obs_id	7291	Observation id
title	AO7 Calibration Observations of PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.71859491495	Nominal RA [deg]
dec_nom	-30.224274881889	Nominal Dec [deg]
roll_nom	89.58220135041	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14034.908596635	Sum of GTIs [s]
livetime	13808.232649461	Livetime [s]
ontime4	14034.949636638	Sum of GTIs [s]
ontime5	14034.867556632	Sum of GTIs [s]
ontime6	14032.285526335	Sum of GTIs [s]
ontime7	14034.908596635	Sum of GTIs [s]
ontime8	14034.785476625	Sum of GTIs [s]
ontime9	14034.744436622	Sum of GTIs [s]
l2events	218621	Number of level 2 events



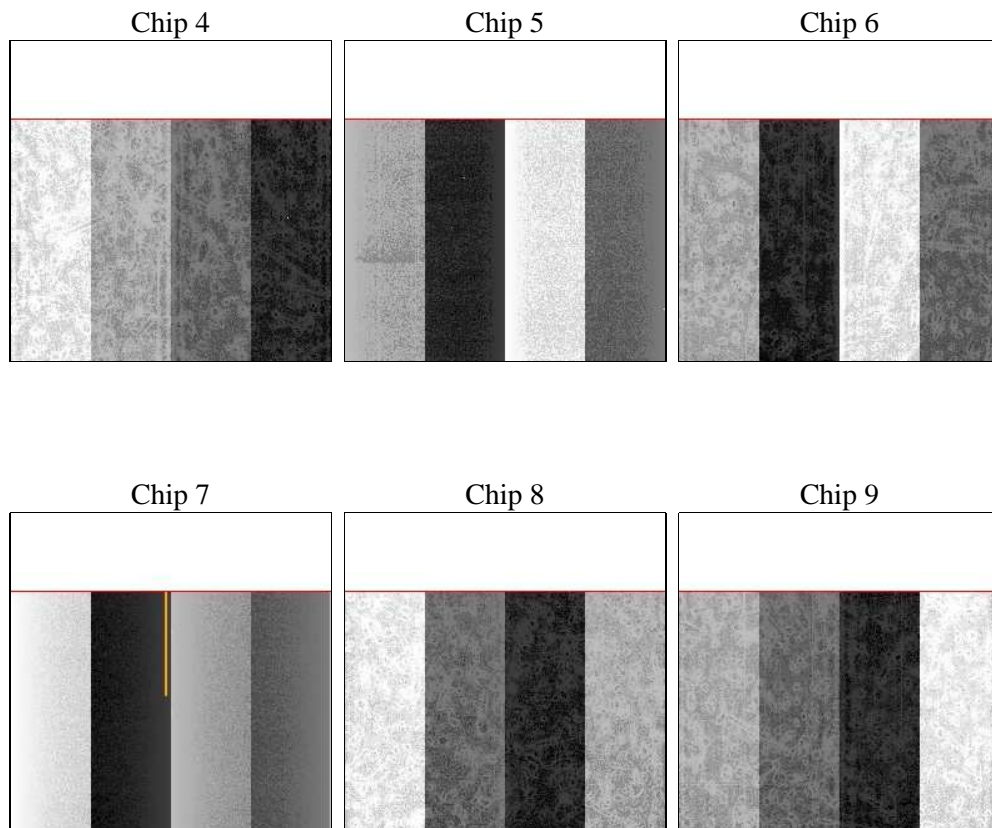
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14010.543000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	14034.908596635	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	14034.949636638	Sum of GTIs [s]
date	2012-04-04T20:28:48	Date and time of file creation	ontime5	14034.867556632	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	14032.285526335	Sum of GTIs [s]
			ontime7	14034.908596635	Sum of GTIs [s]
			ontime8	14034.785476625	Sum of GTIs [s]
			ontime9	14034.744436622	Sum of GTIs [s]
			l1events	772804	Number of level 1 events

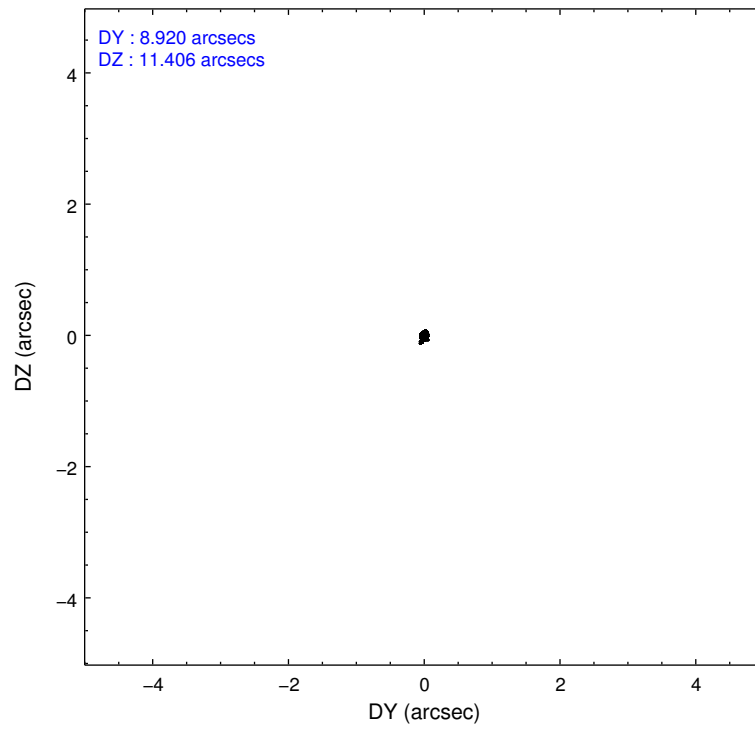
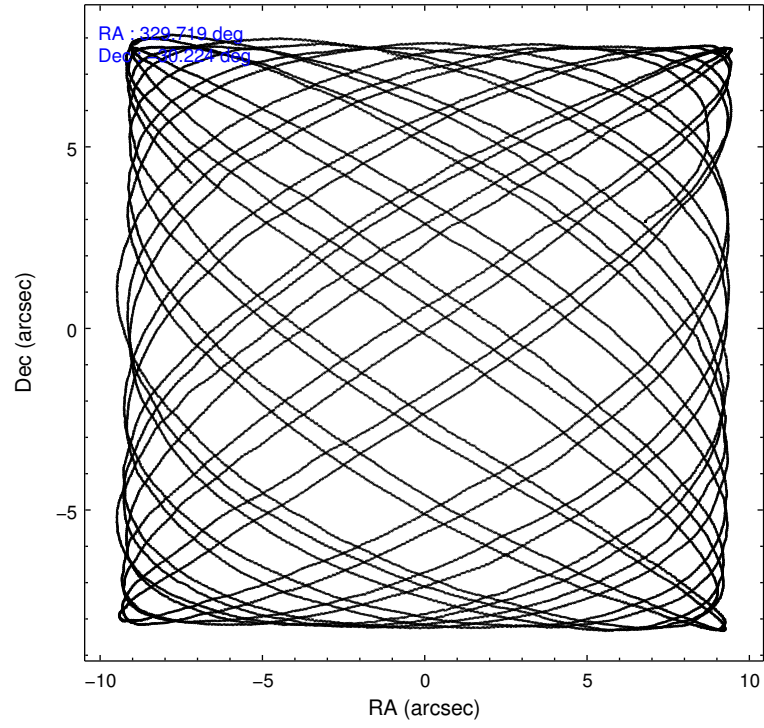
2.1.4 Events

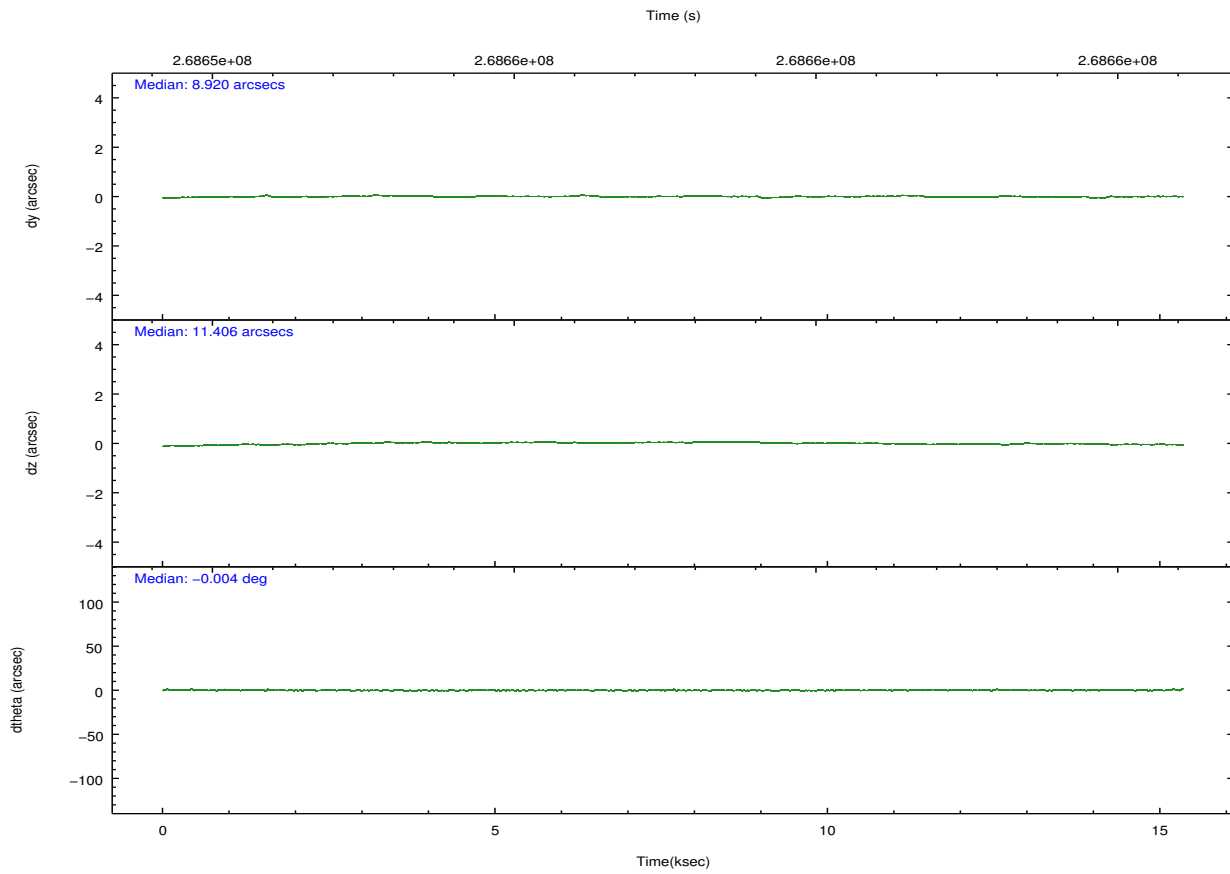
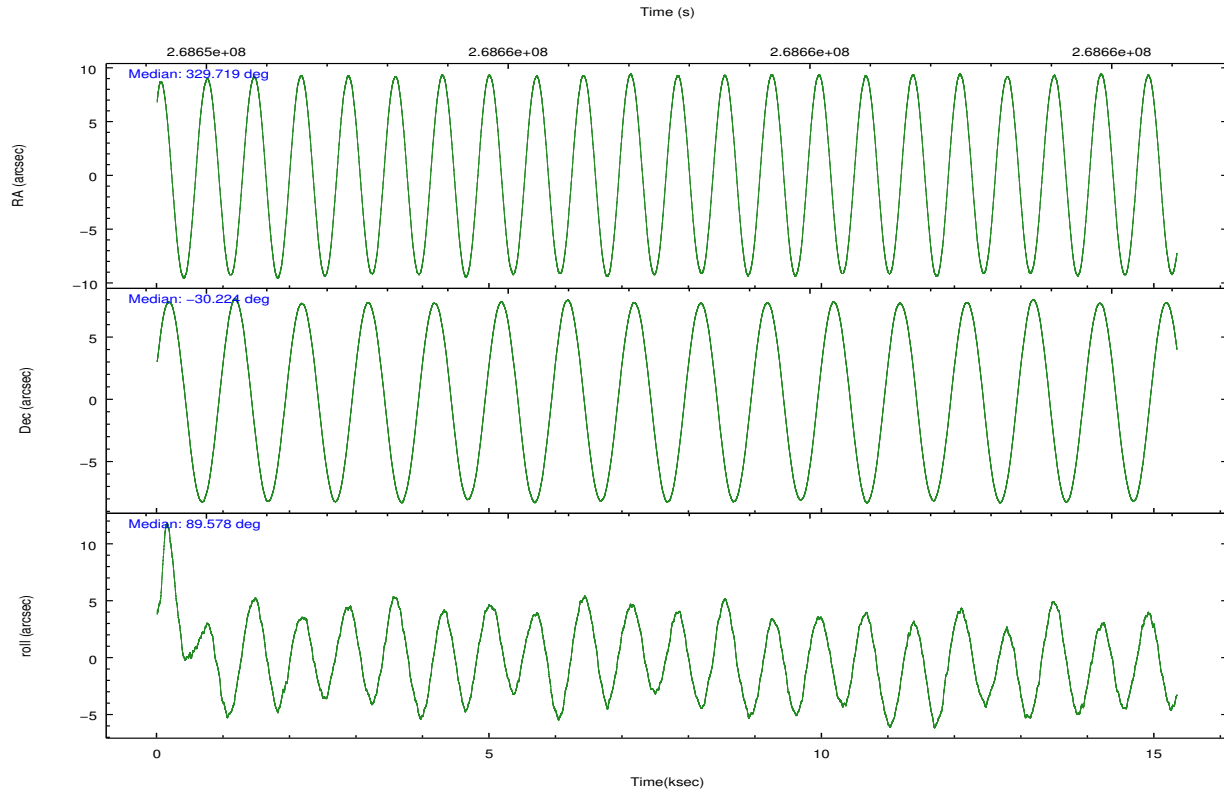
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	113473	155135	115097	151934	137068	100097	grade 0 events	11450	11877	18538	9020	19291	7769
rejected events	94004	77115	85796	80385	95726	84104		10%	7%	16%	5%	14%	7%
rejected %	82%	49%	74%	52%	69%	84%	grade 1 events	107	255	109	246	110	57
								0%	0%	0%	0%	0%	0%
							grade 2 events	3085	22479	4286	15337	7457	2800
								2%	14%	3%	10%	5%	2%
							grade 3 events	1357	4029	1729	6496	3518	1374
								1%	2%	1%	4%	2%	1%
							grade 4 events	1382	3745	1727	6526	3224	1360
								1%	2%	1%	4%	2%	1%
							grade 5 events	4272	11040	4360	12939	5800	4568
								3%	7%	3%	8%	4%	4%
							grade 6 events	2231	36020	3082	34288	7965	2716
								1%	23%	2%	22%	5%	2%
							grade 7 events	89589	65690	81266	67082	89703	79453
								78%	42%	70%	44%	65%	79%

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	OVERRIDE	OVERRIDE
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	329.7185947156156	329.7185949149537	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-30.22430272042688	-30.22427488188944	Subarray start row	1	1
[deg] Pointing Roll	89.58220124011163	89.58220135040976	Subarray row count	774	774
[mm] SIM focus pos	-0.68282252473119	-0.68282252473119	Alternating exposures requested	N	N
[mm] SIM defocus	0.001444942264670734	0.001444942264670734	[s] Primary exposure time	2.5	2.5
[mm] SIM translation stage pos	-187.122887688	-187.122887688			
[mm] SIM translation stage offset	-3.00963541596721	-3.00963541596721			
[s] Observation start time (MET)	268649961.057379	268649961.057379			
Observation start date	2006-07-07T09:20:25	2006-07-07T08:59:21			
[s] Observation end time (MET)	268665301.208099	268665301.208099			
Observation end date	2006-07-07T13:13:55	2006-07-07T13:15:01			
Read mode	TIMED	TIMED			

2.3 Aspect



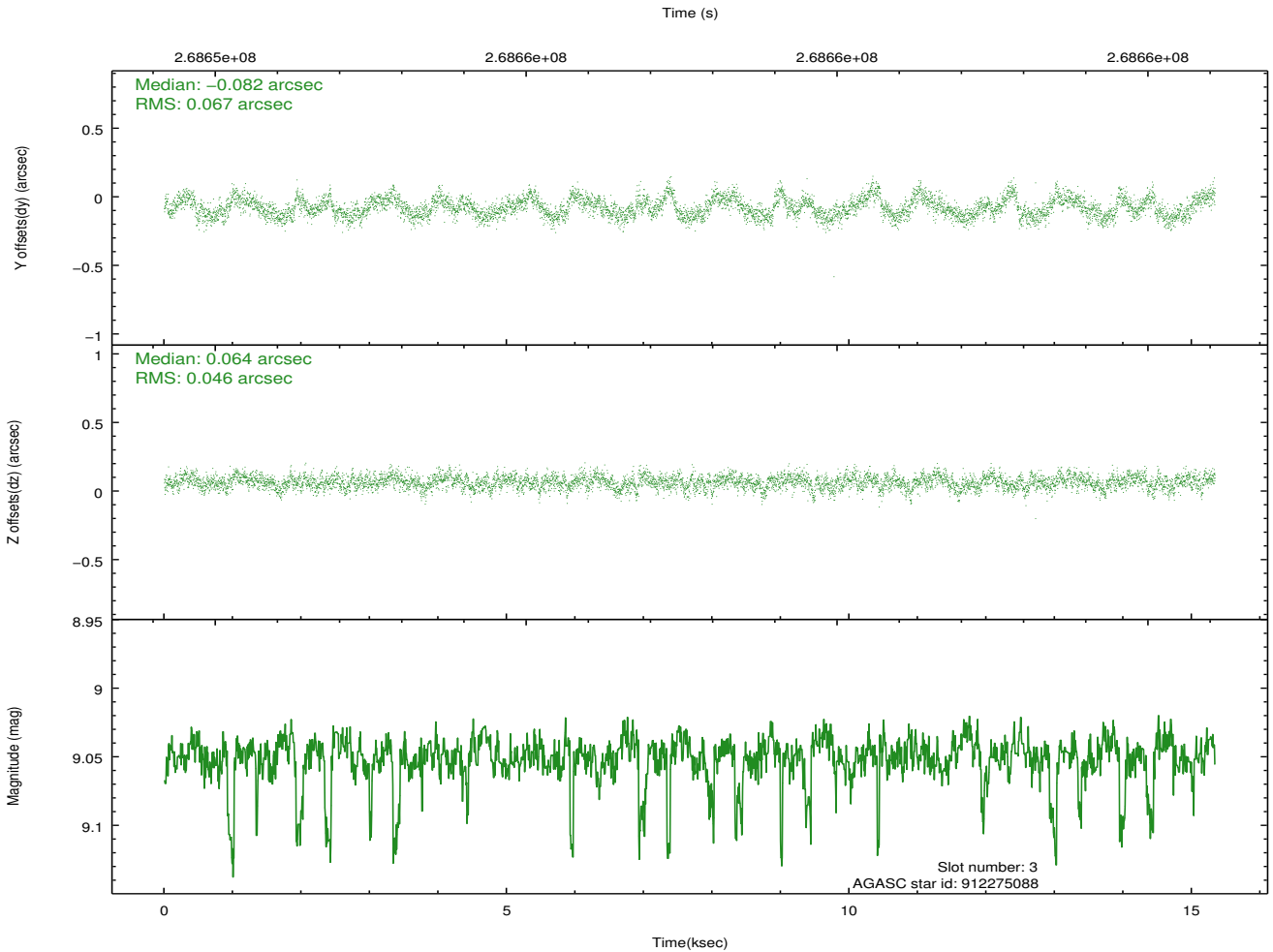
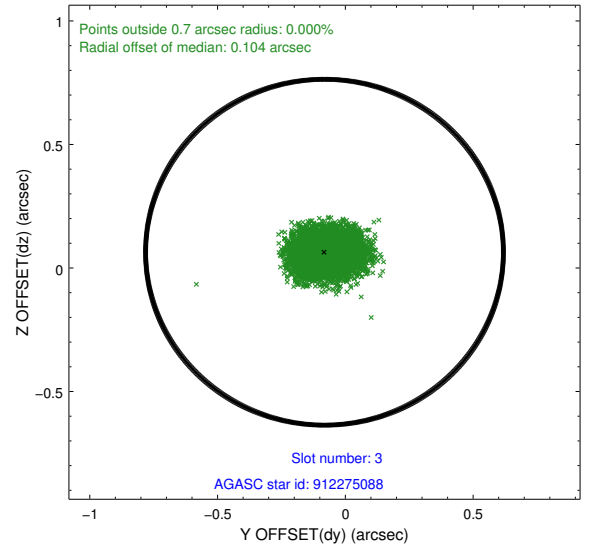
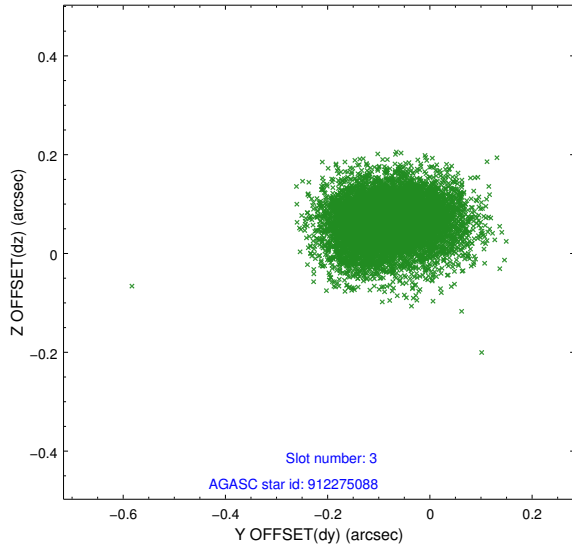


Slot Statistics

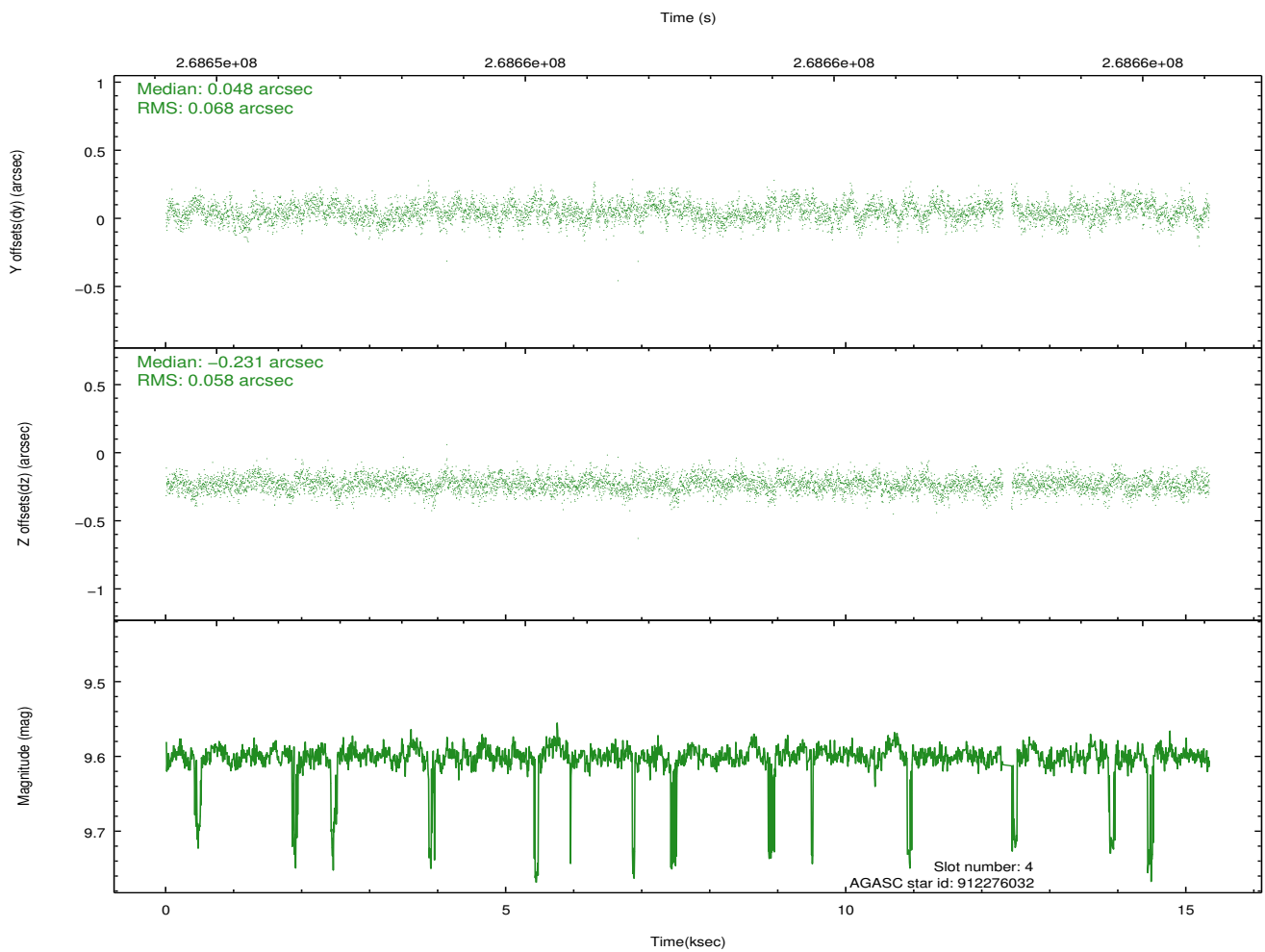
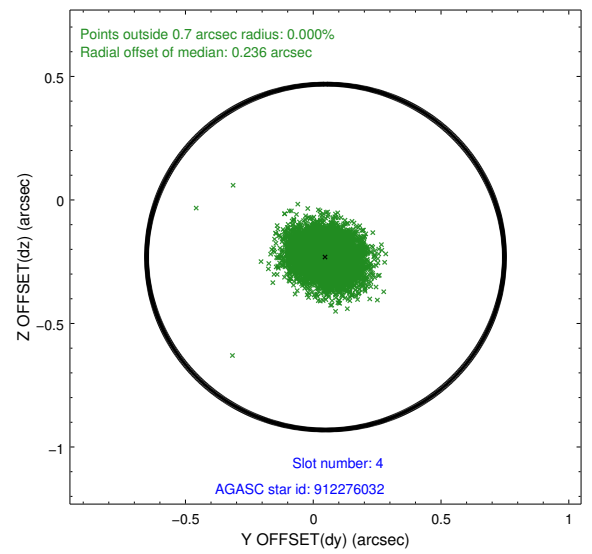
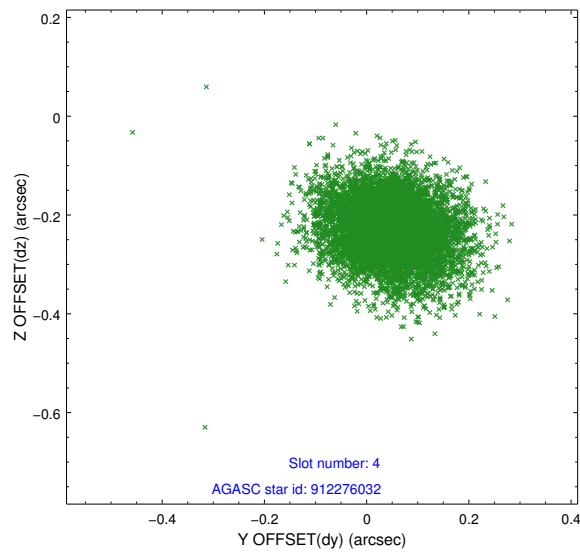
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	3741	-0.061	-0.105	0.007	0.011	0.000000	0.000000	-761.59	-1794.92
1	FID	ACIS-S-4	7.20	3741	0.172	0.057	0.006	0.010	0.000000	0.000000	2151.80	113.38
2	FID	ACIS-S-5	7.23	3741	-0.142	0.056	0.007	0.011	0.000000	0.000000	-1814.12	107.41
3	GUIDE	912275088	9.05	7459	-0.082	0.064	0.088	0.141	329.619228	-29.738698	1828.93	378.83
4	GUIDE	912276032	9.60	7365	0.048	-0.231	0.094	0.155	329.395967	-29.803466	1587.85	1073.47
5	GUIDE	981469488	9.59	7469	-0.111	0.119	0.120	0.190	329.261199	-30.045155	711.94	1482.52
6	GUIDE	981471664	6.35	7483	0.078	-0.125	0.071	0.114	328.981826	-30.605916	-1320.04	2319.04
7	GUIDE	981478152	9.41	7470	0.063	0.169	0.092	0.147	329.415589	-30.057192	674.84	1001.11

2.4 Star Slots

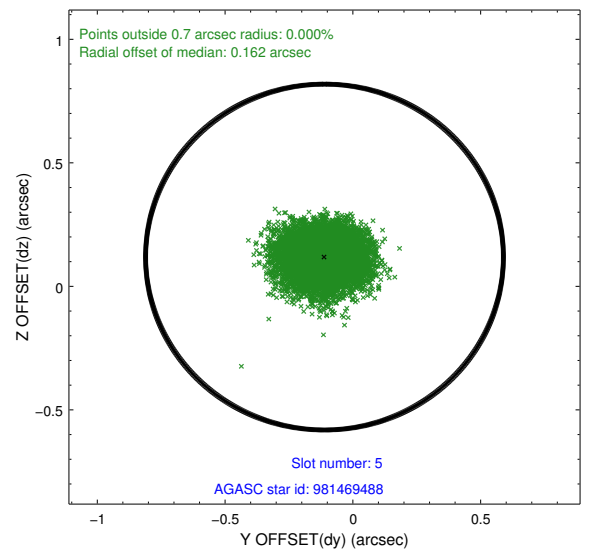
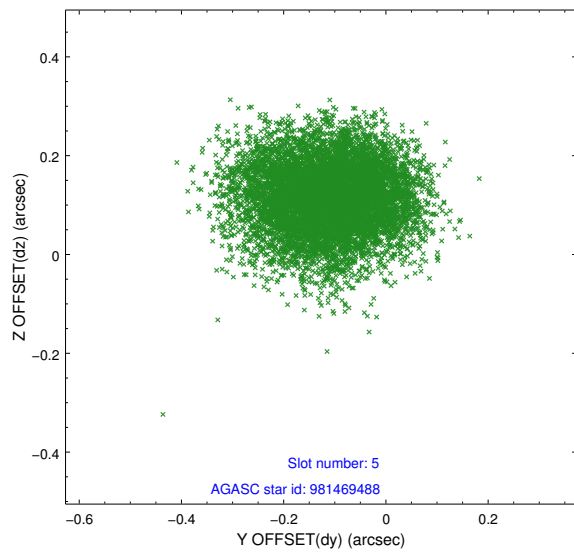
2.4.1 Slot 3



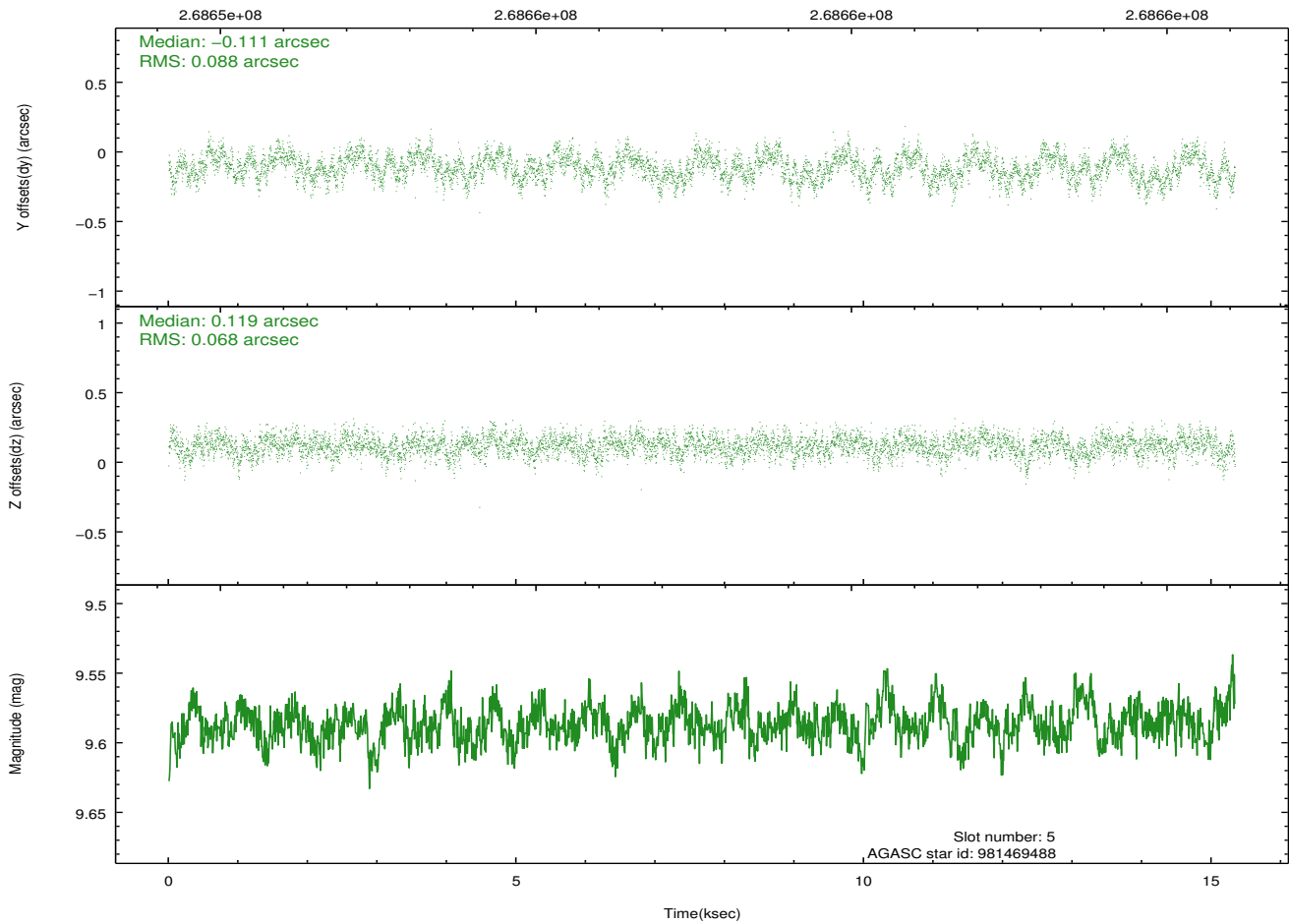
2.4.2 Slot 4



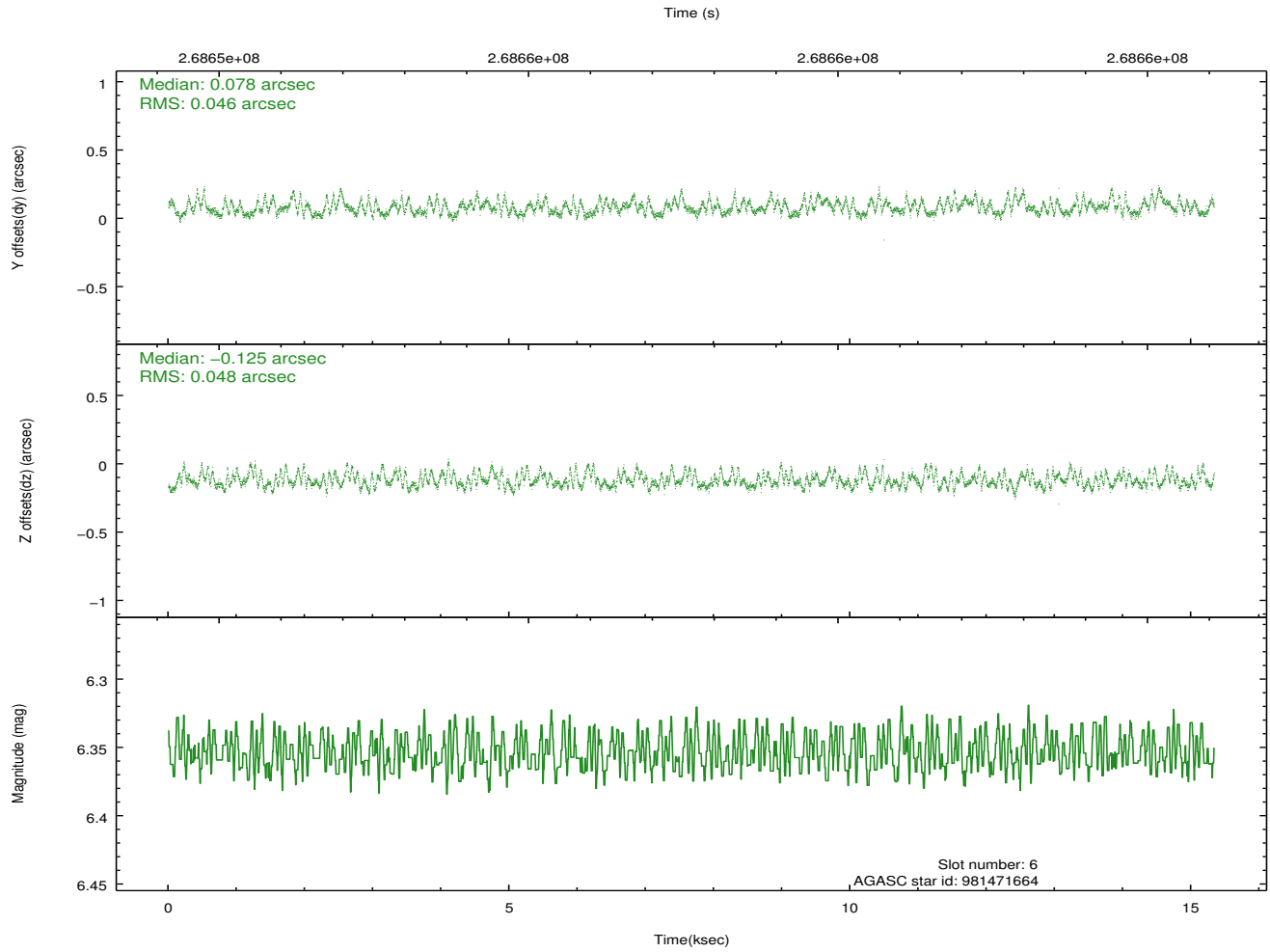
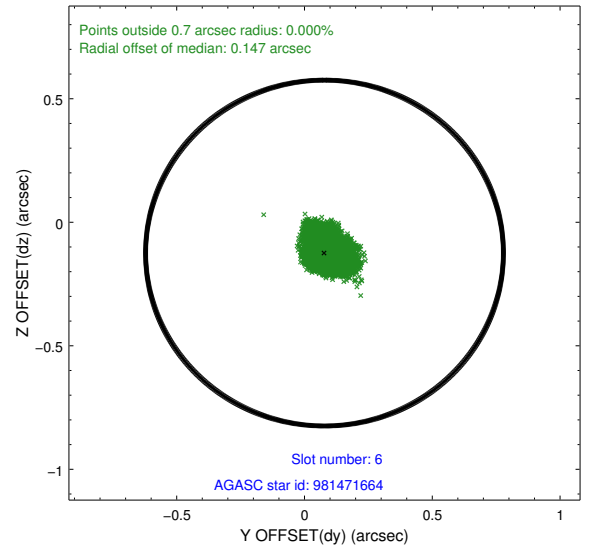
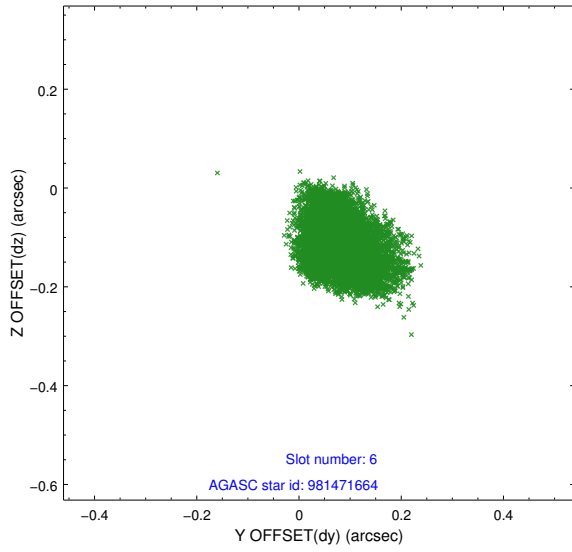
2.4.3 Slot 5



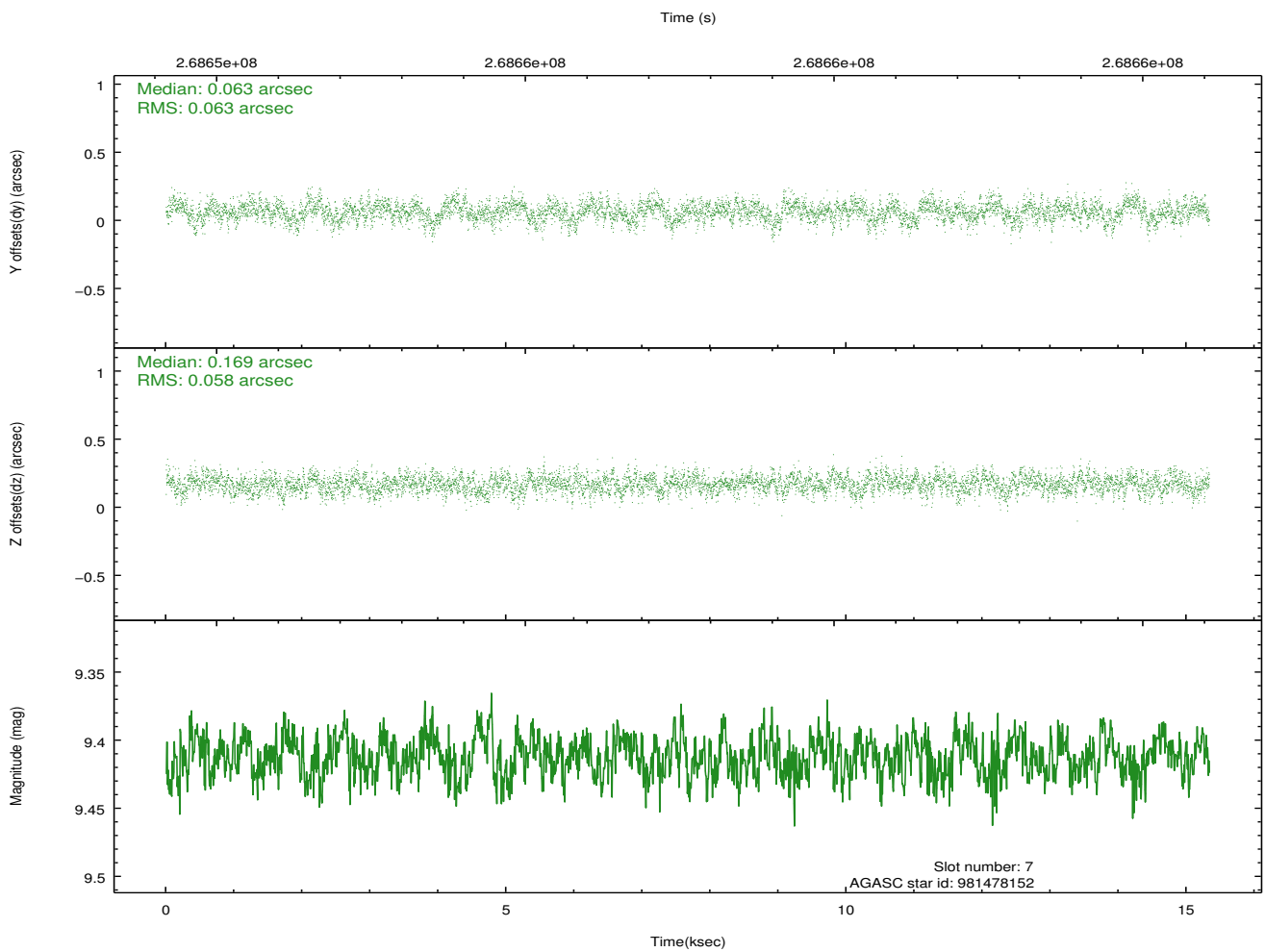
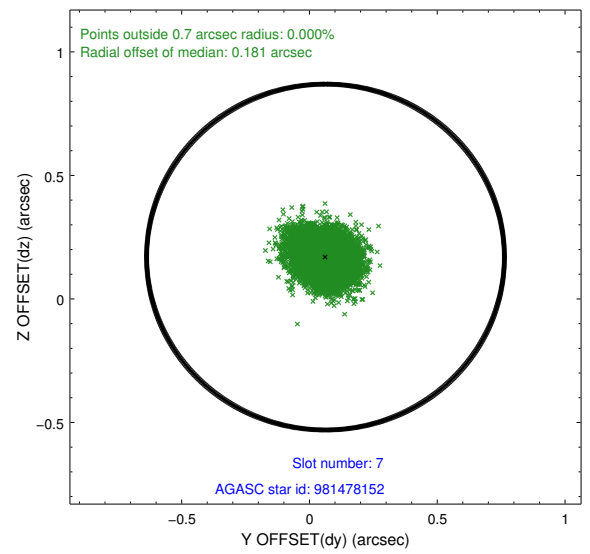
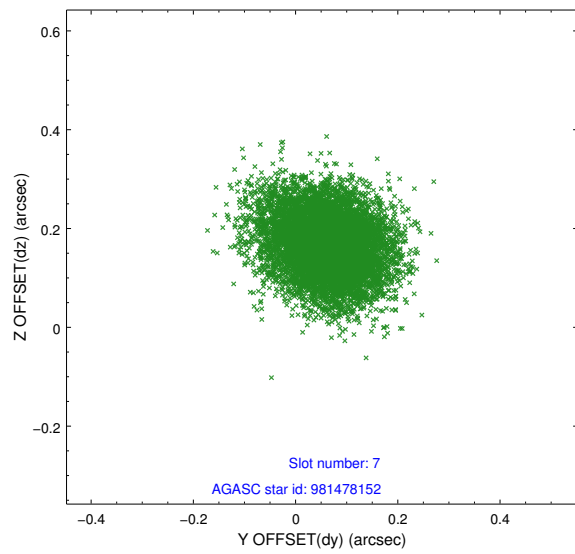
Time (s)



2.4.4 Slot 6

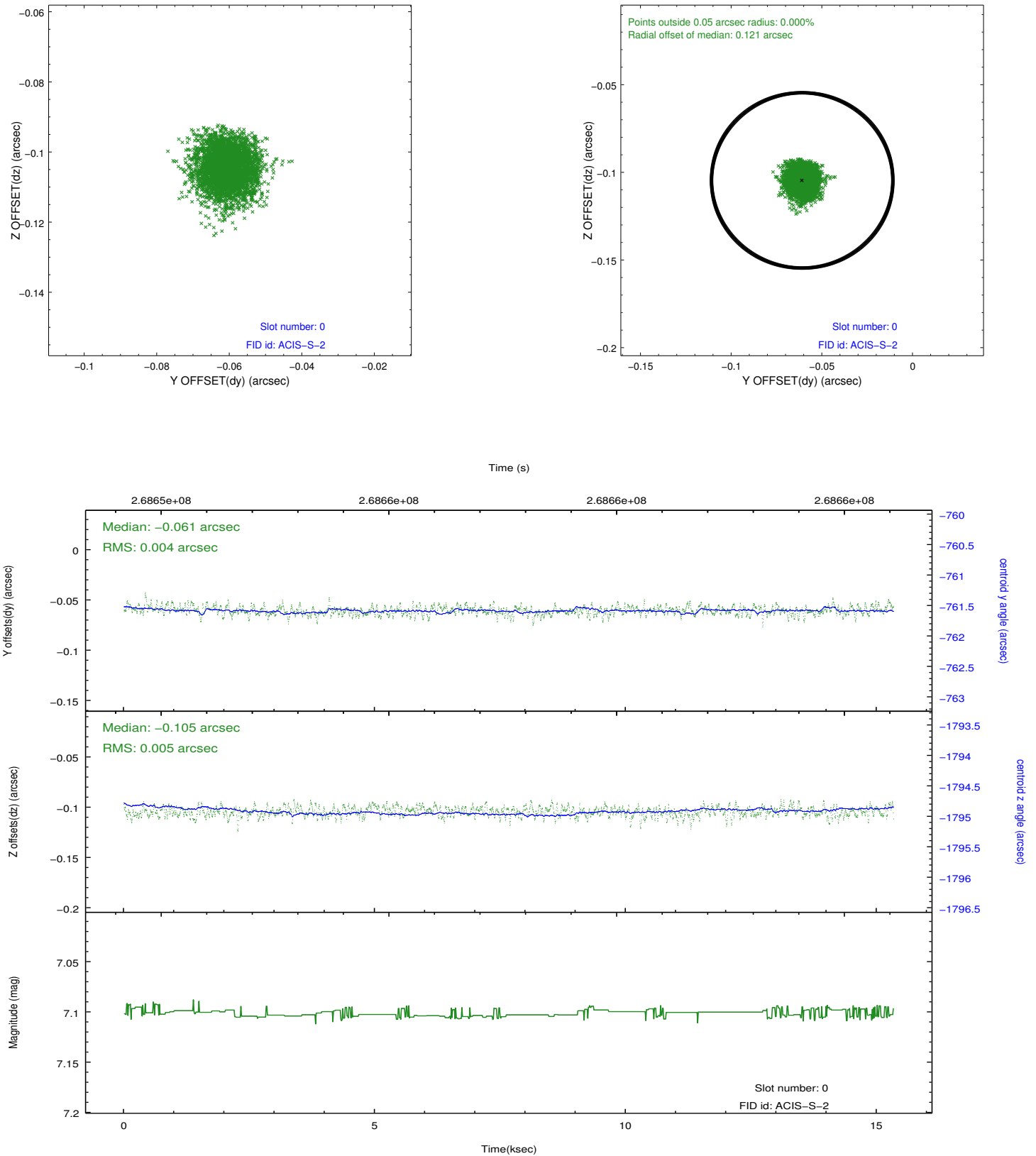


2.4.5 Slot 7

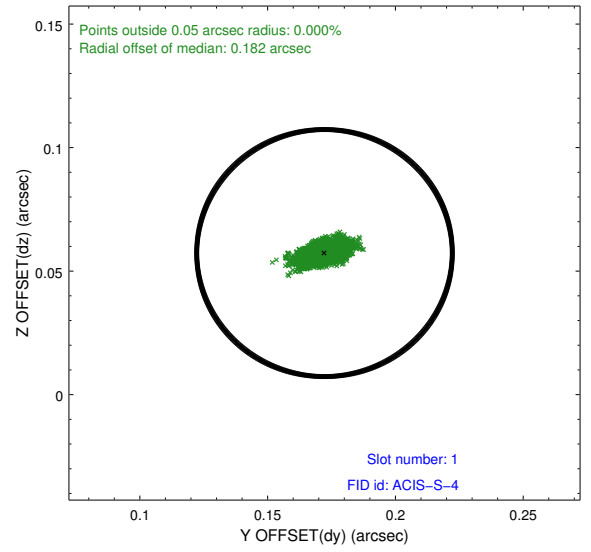
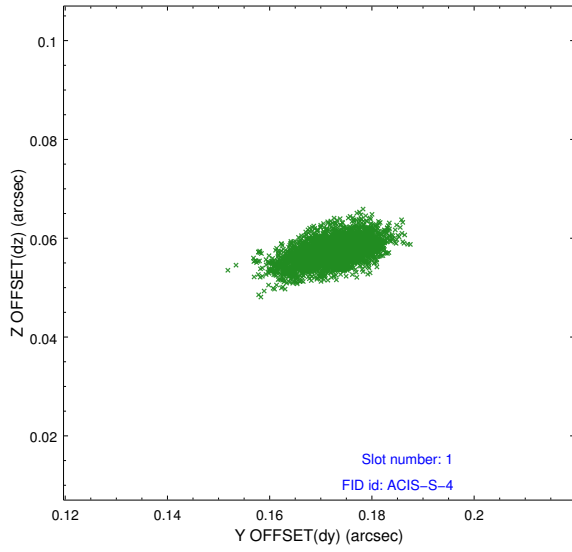


2.5 FID Slots

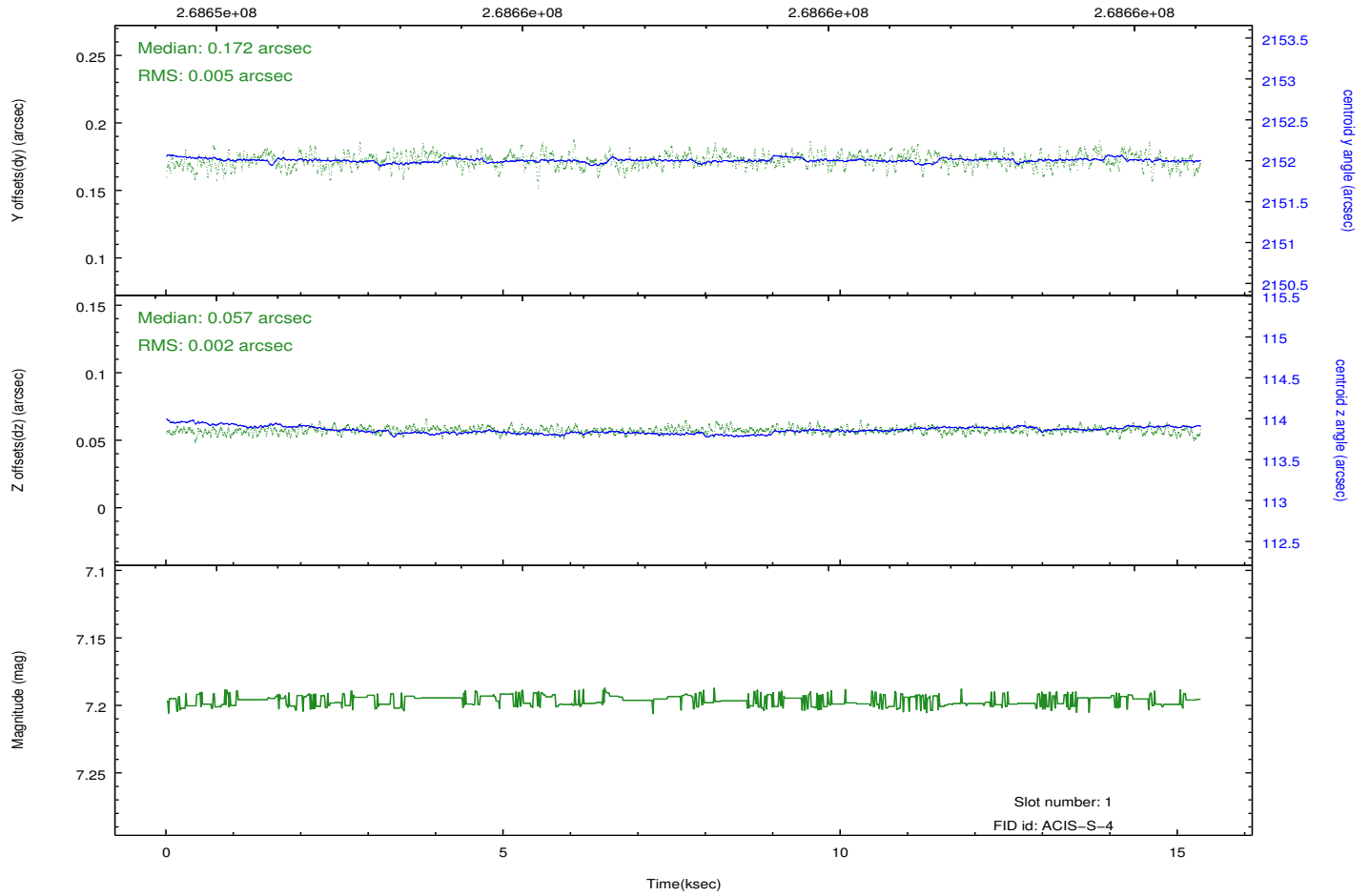
2.5.1 Slot 0



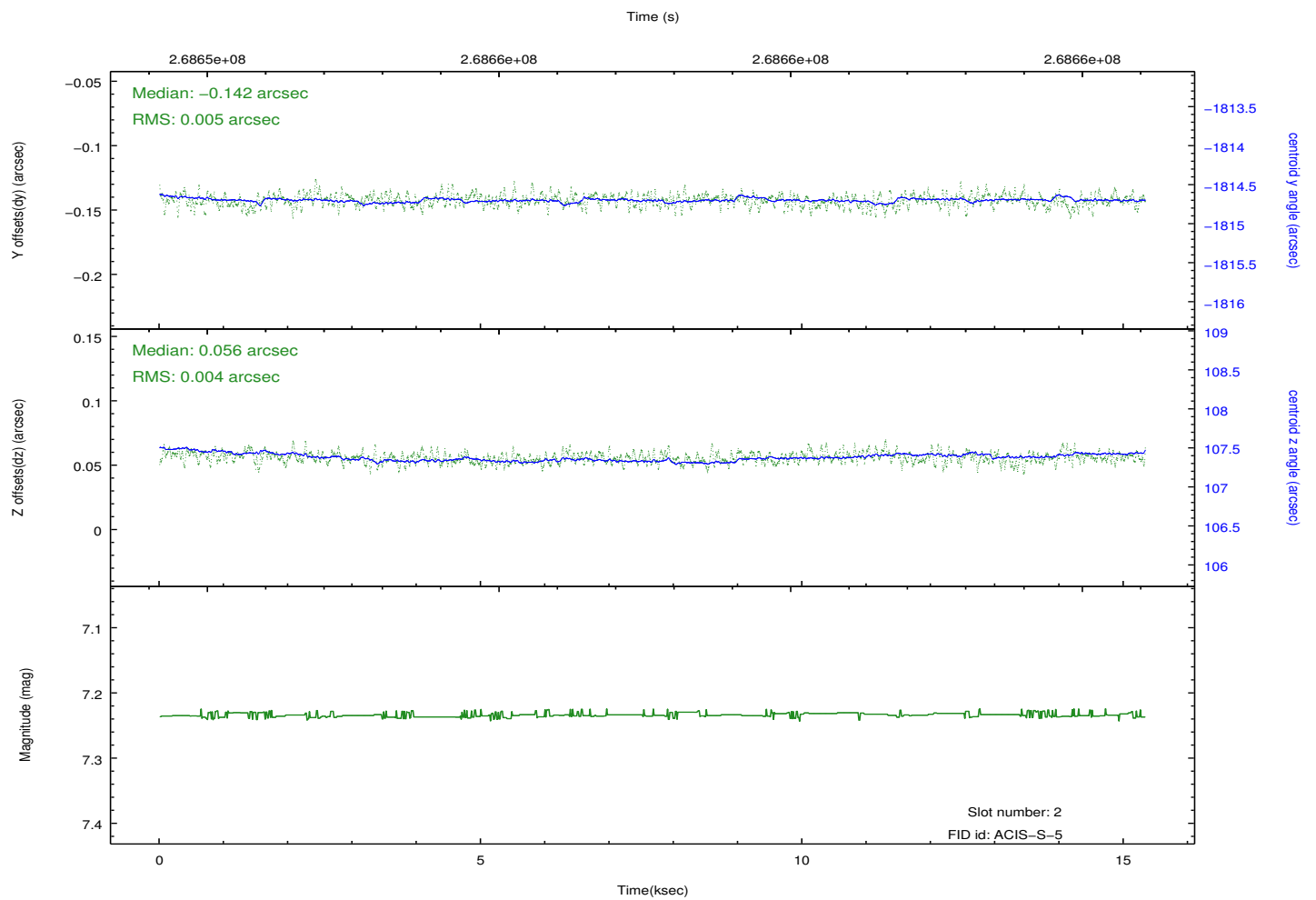
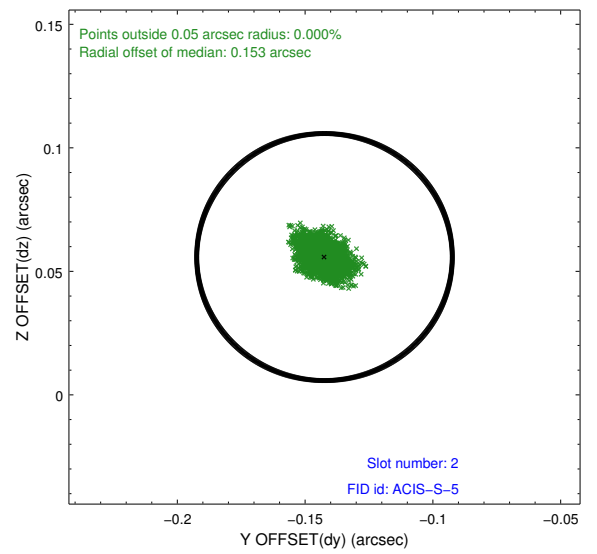
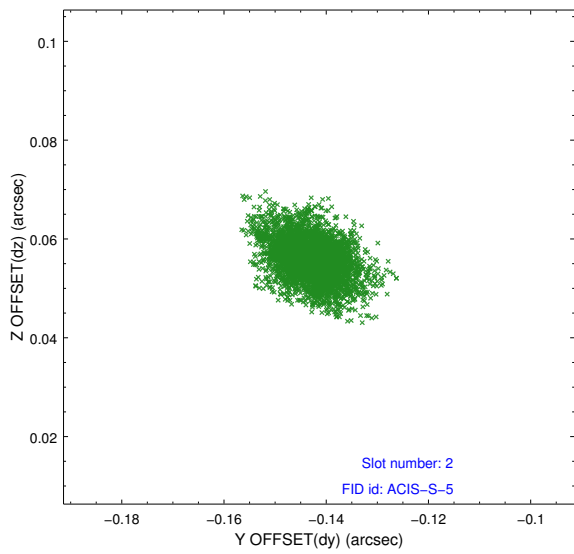
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2

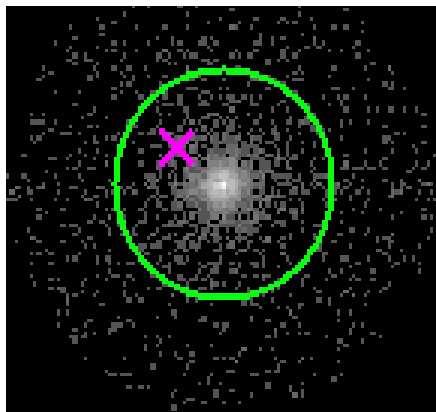


3 Gratings

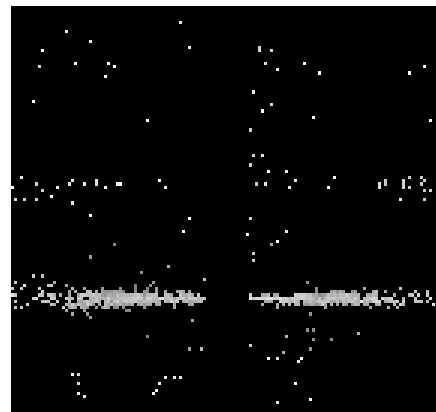
3.1 HEG Arm



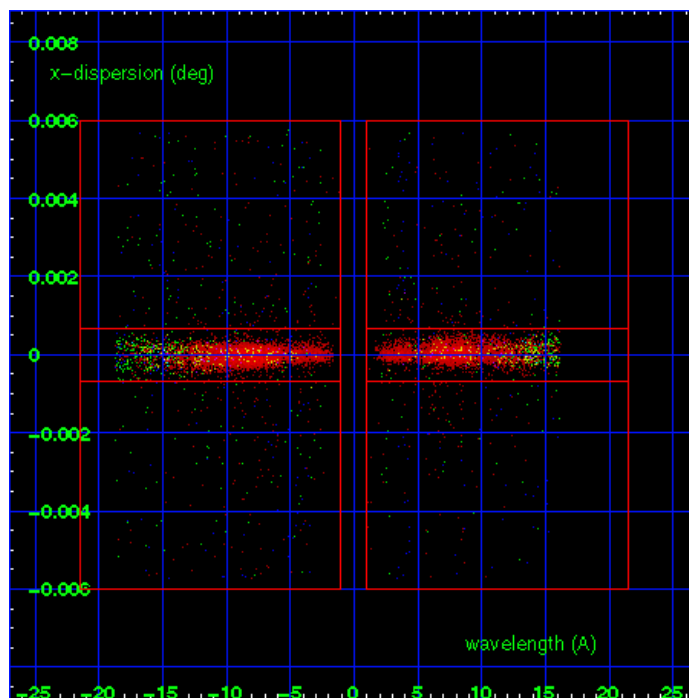
HEG Order Sort 123



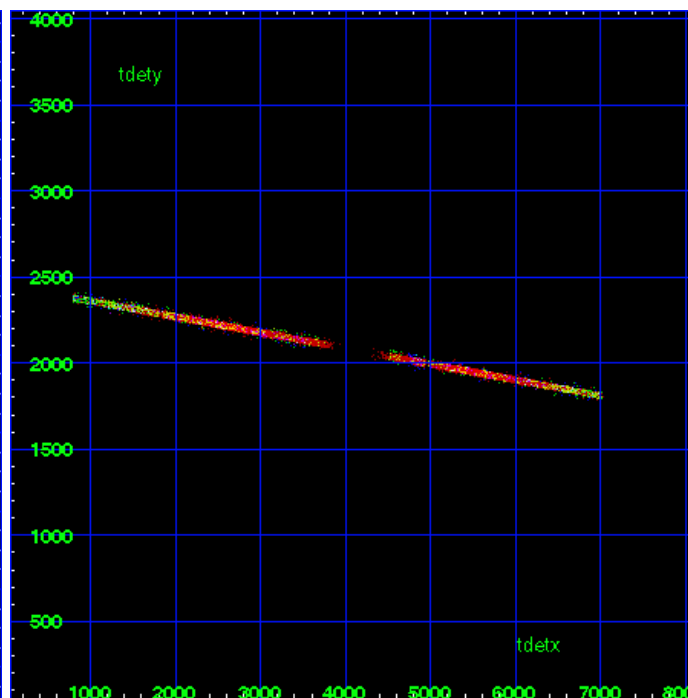
HEG Zero Order



HEG Order Sort ALL

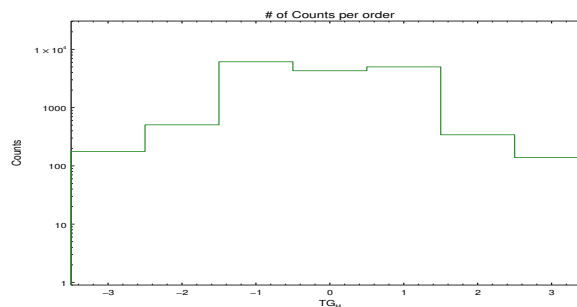


Spot Image HEG

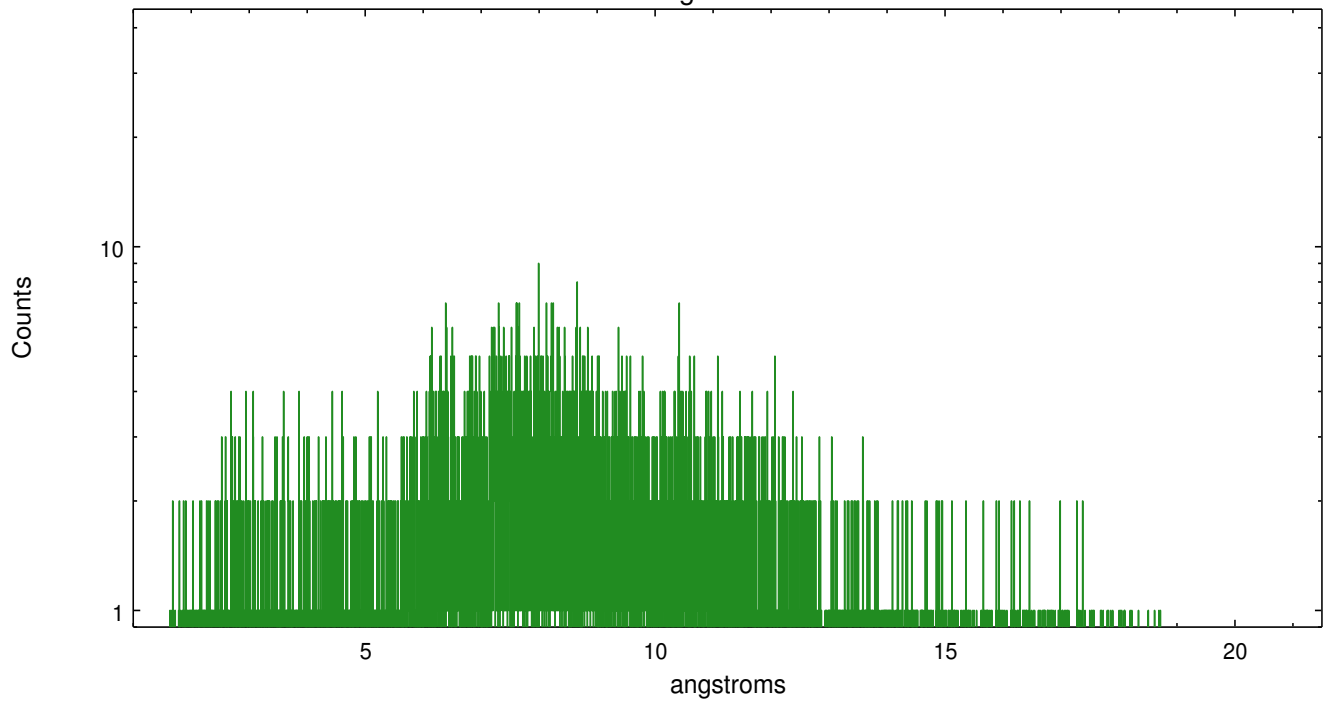


Full Detector HEG

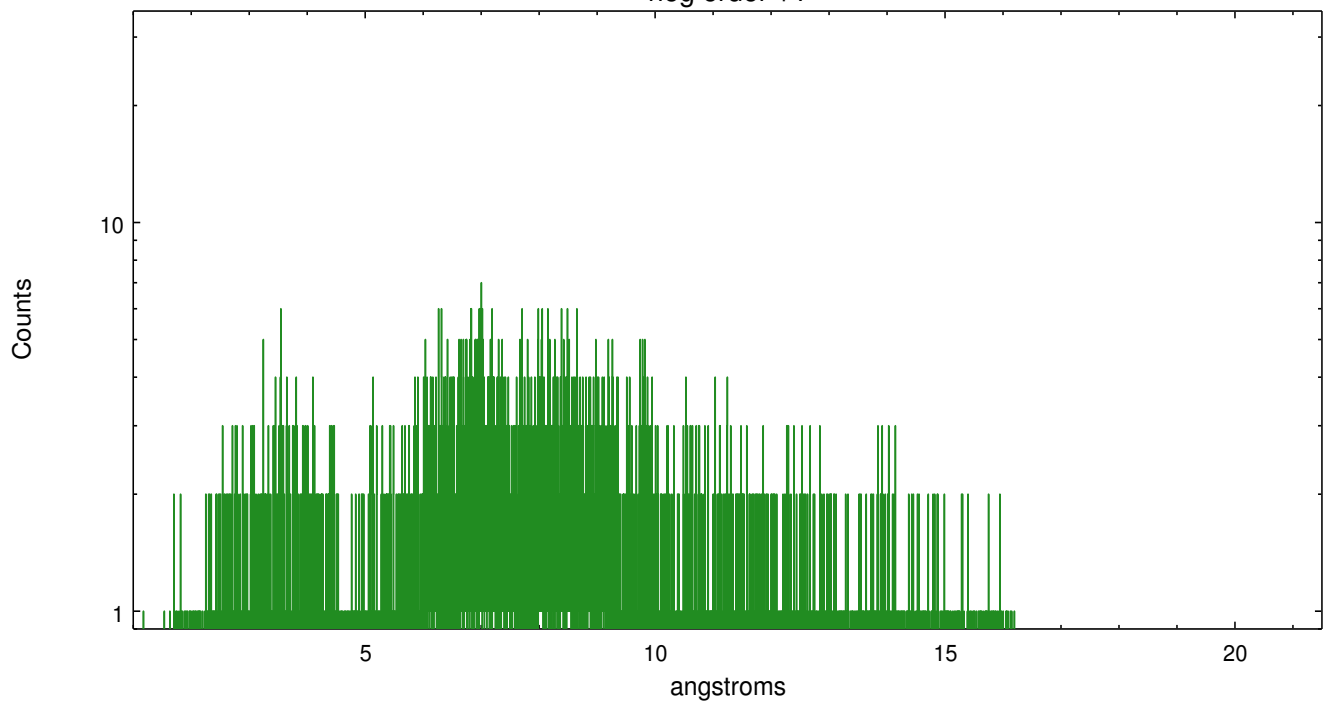
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	177	507	6129	4299	5012	342	139



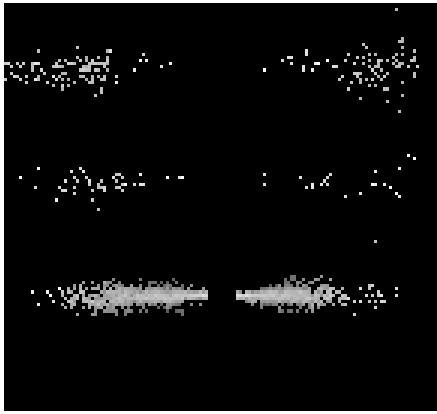
heg order -1



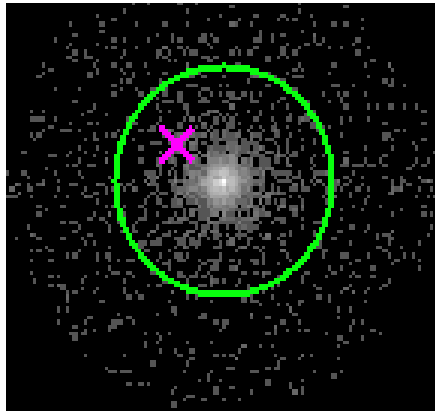
heg order +1



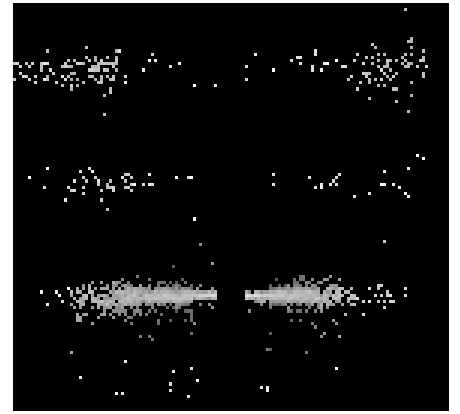
3.2 MEG Arm



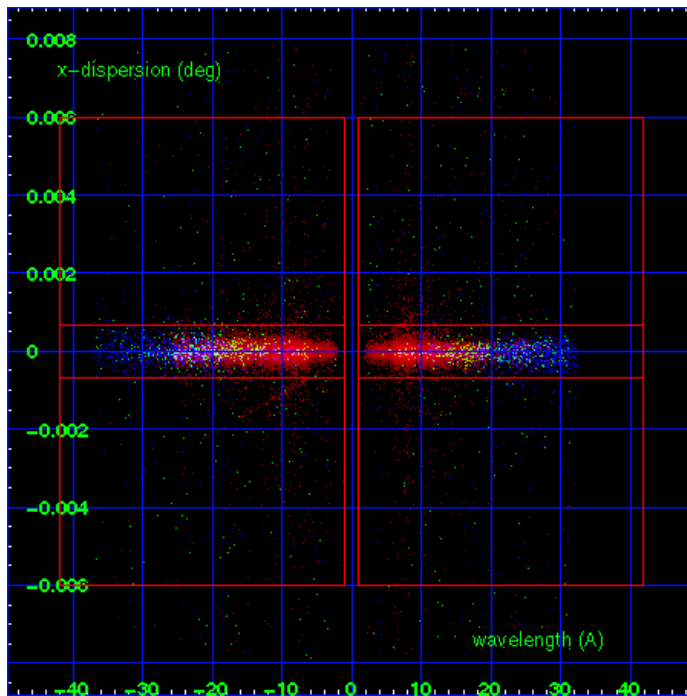
MEG Order Sort 123



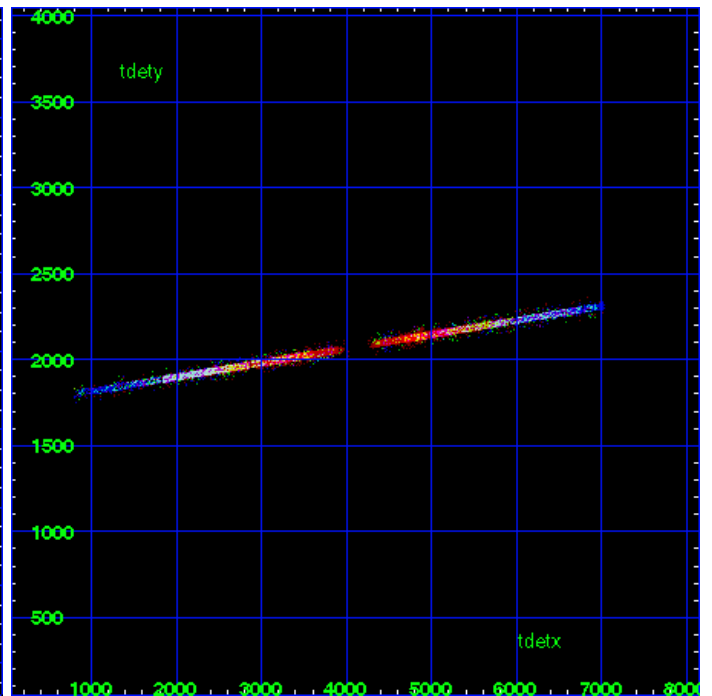
MEG Zero Order



MEG Order Sort ALL

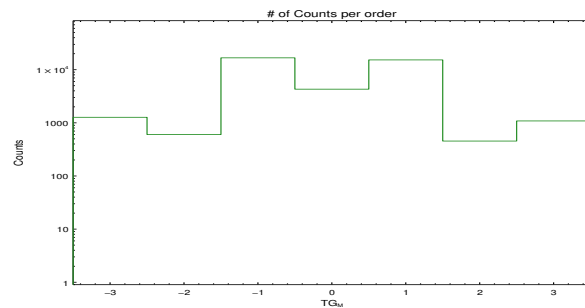


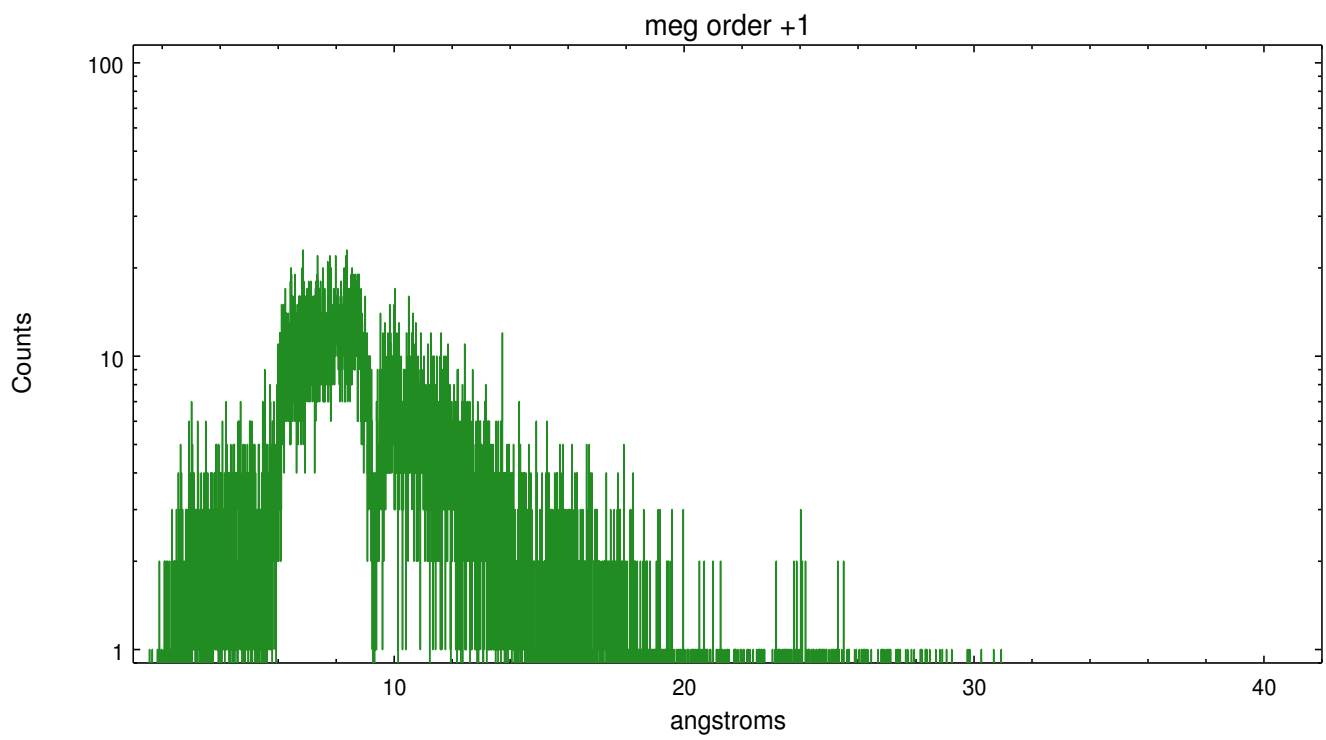
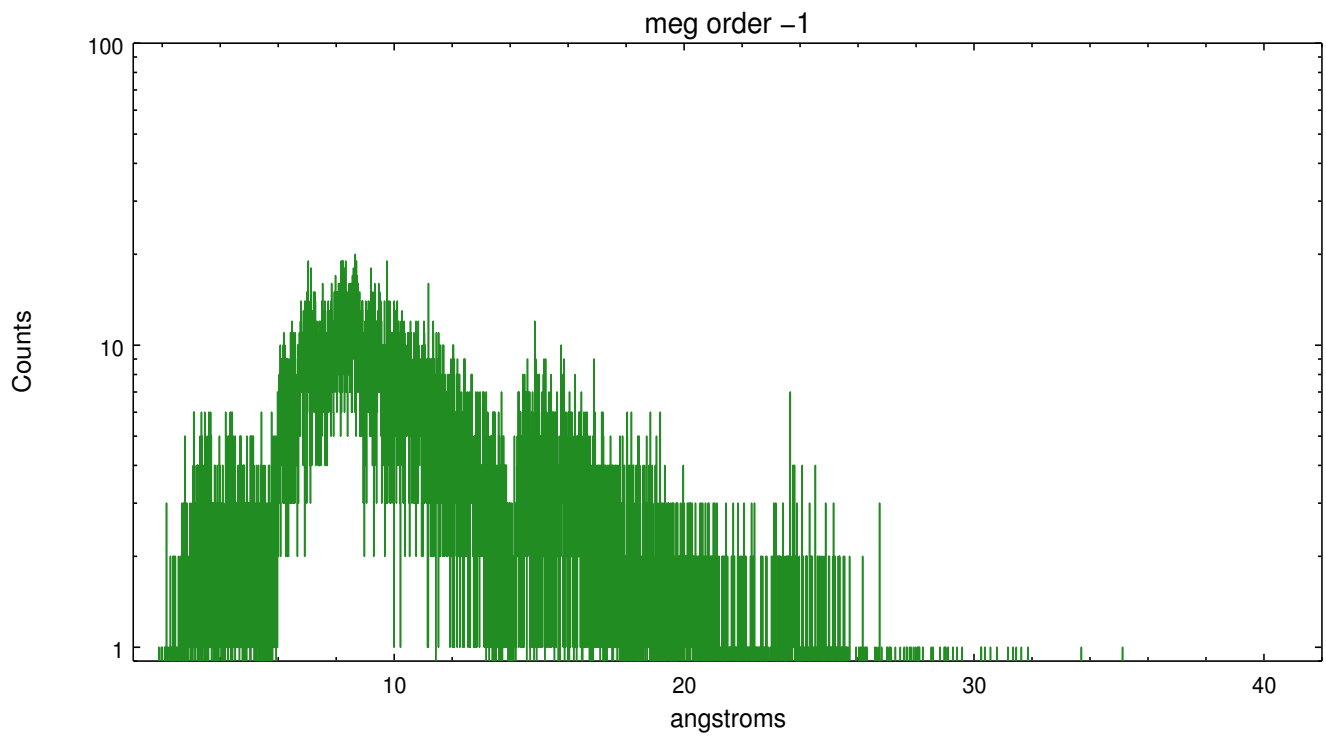
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1271	602	16726	4299	15287	454	1086





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.03475

A.2 Comments