

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3400 - L2 Version 3
Chandra X-Ray Center

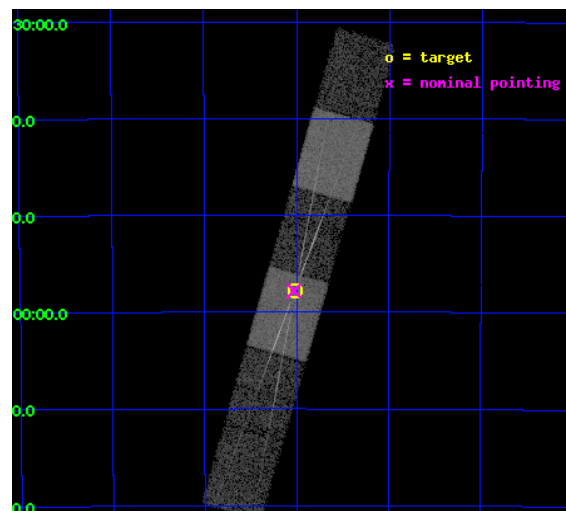
L2 Processing Date : Oct 1 2012

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

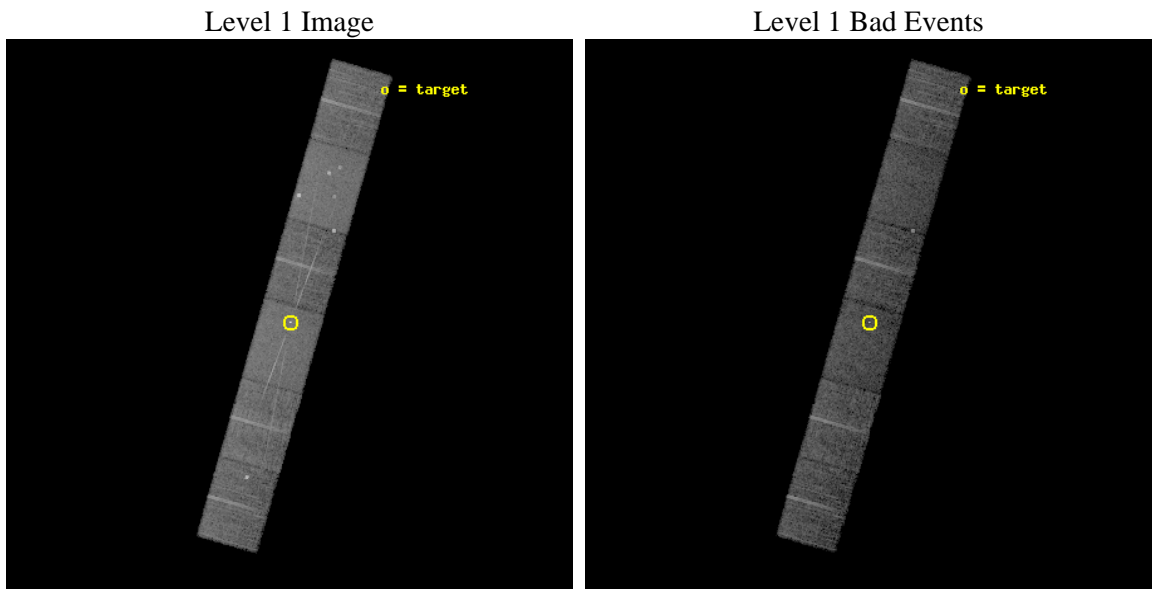
seq_num	400211	Sequence number
obs_id	3400	Observation id
title	BLACK HOLE X-RAY TRANSIENTS DURING OUTBURST DECAY	Proposal title
observer	Dr. John Tomsick	Principal investigator
object	XTE J1650-500	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	252.504167	Observer's specified target RA [deg]
dec_targ	-49.9625	Observer's specified target Dec [deg]
ra_nom	252.50734160025	Nominal RA [deg]
dec_nom	-49.963394465005	Nominal Dec [deg]
roll_nom	106.03029993827	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10162.5	Sum of GTIs [s]
livetime	9998.3668104398	Livetime [s]
ontime4	10162.5	Sum of GTIs [s]
ontime5	10162.5	Sum of GTIs [s]
ontime6	10162.5	Sum of GTIs [s]
ontime7	10162.5	Sum of GTIs [s]
ontime8	10162.5	Sum of GTIs [s]
ontime9	10162.5	Sum of GTIs [s]
l2events	90378	Number of level 2 events



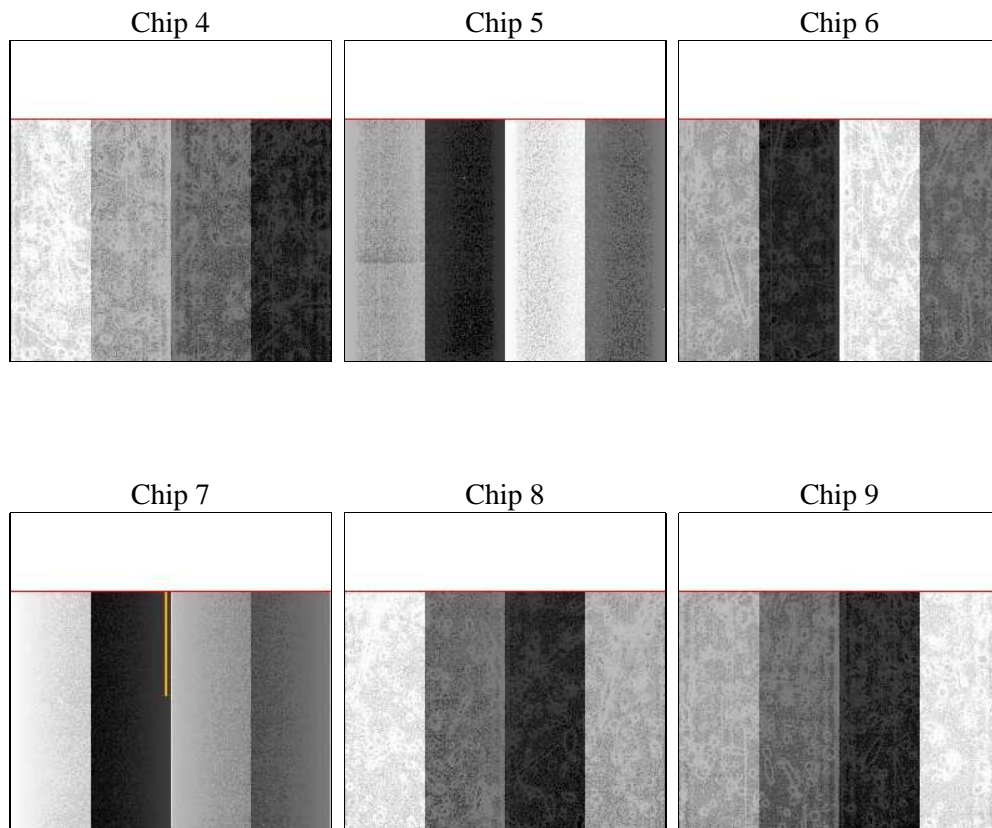
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10162.5	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	10162.5	Sum of GTIs [s]
date	2012-10-01T02:02:46	Date and time of file creation	ontime5	10162.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	10162.5	Sum of GTIs [s]
			ontime7	10162.5	Sum of GTIs [s]
			ontime8	10162.5	Sum of GTIs [s]
			ontime9	10162.5	Sum of GTIs [s]
			l1events	368829	Number of level 1 events

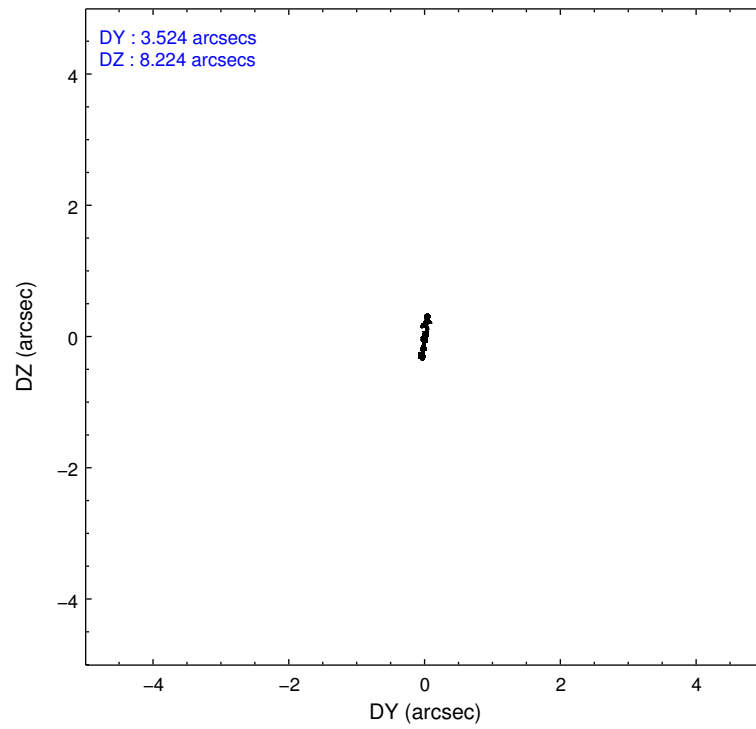
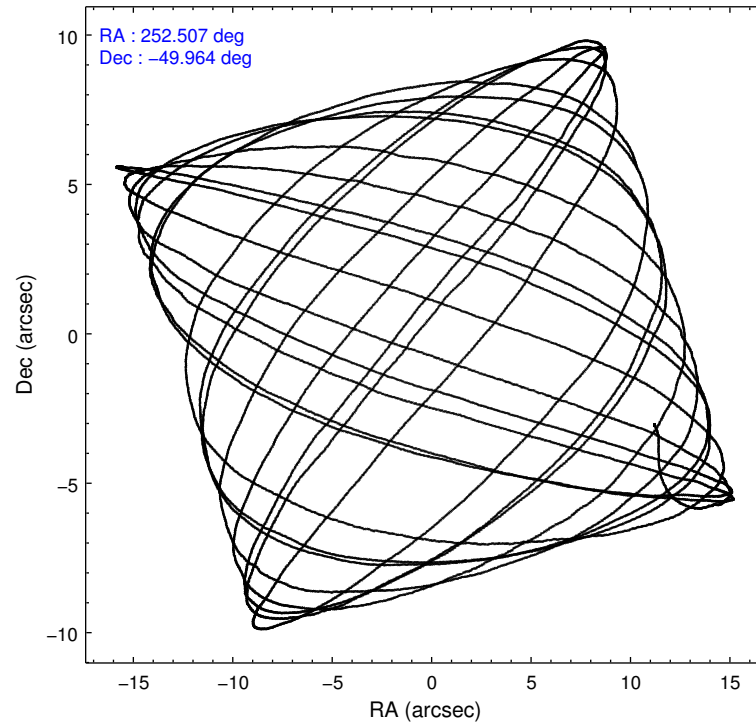
2.1.4 Events

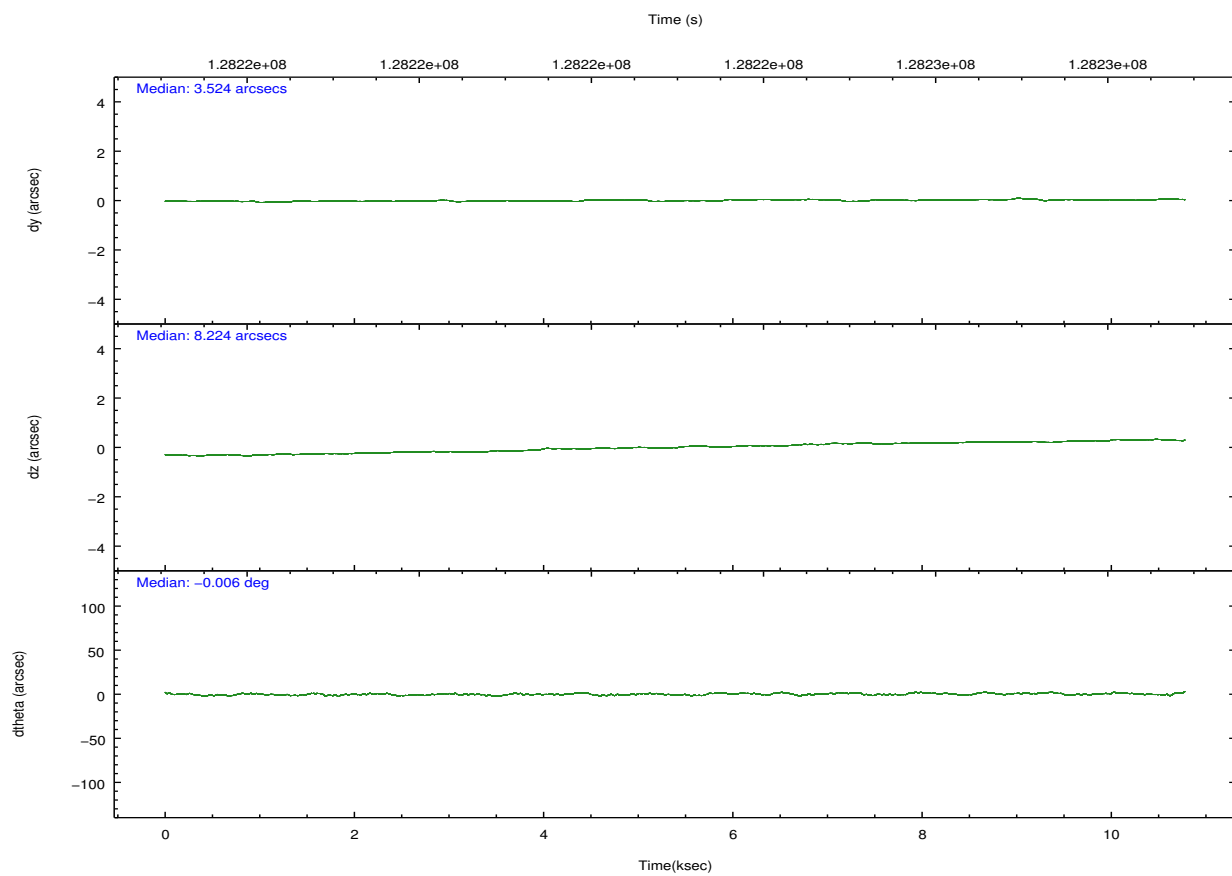
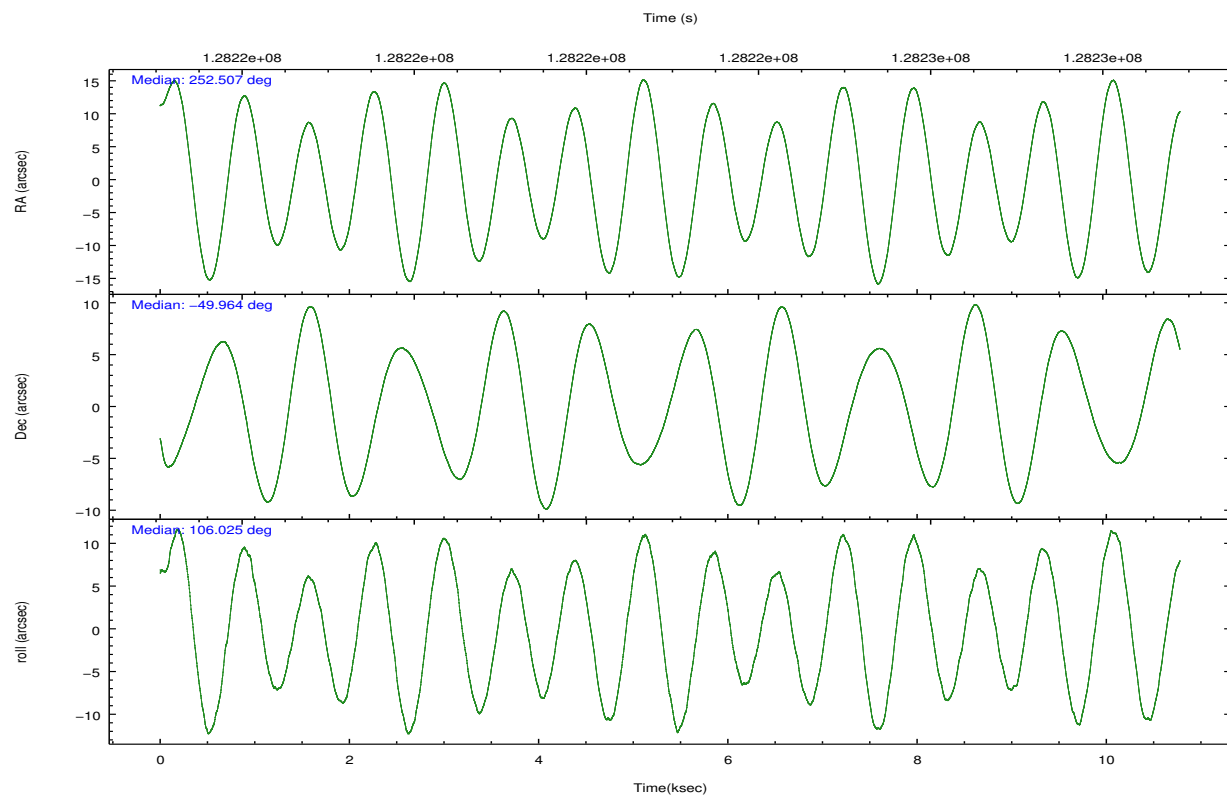
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	55198	75981	52560	71888	62875	50327	grade 0 events	2678	8337	5290	3845	5341	4445
rejected events	48798	38388	42766	38174	48154	42085		4%	10%	10%	5%	8%	8%
rejected %	88%	50%	81%	53%	76%	83%	grade 1 events	24	633	20	122	40	30
								0%	0%	0%	0%	0%	0%
							grade 2 events	1482	9388	1672	6944	3071	1328
								2%	12%	3%	9%	4%	2%
							grade 3 events	644	1677	785	3093	1464	651
								1%	2%	1%	4%	2%	1%
							grade 4 events	560	1609	792	3196	1314	632
								1%	2%	1%	4%	2%	1%
							grade 5 events	1820	5564	2109	6573	2633	2115
								3%	7%	4%	9%	4%	4%
							grade 6 events	1038	16596	1260	16641	3533	1191
								1%	21%	2%	23%	5%	2%
							grade 7 events	46952	32177	40632	31474	45479	39935
								85%	42%	77%	43%	72%	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	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	252.538165	252.5073416002538	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-49.982095	-49.9633944650046	Subarray start row	1	1
[deg] Pointing Roll	105.897279	106.0302999382669	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)	128218363.184000	128217104.42925			
Observation start date	2002-01-24T00:11:39	2002-01-23T23:51:44			
[s] Observation end time (MET)	128228363.184000	128229771.37976			
Observation end date	2002-01-24T02:58:19	2002-01-24T03:22:51			
Read mode	TIMED	TIMED			

2.3 Aspect



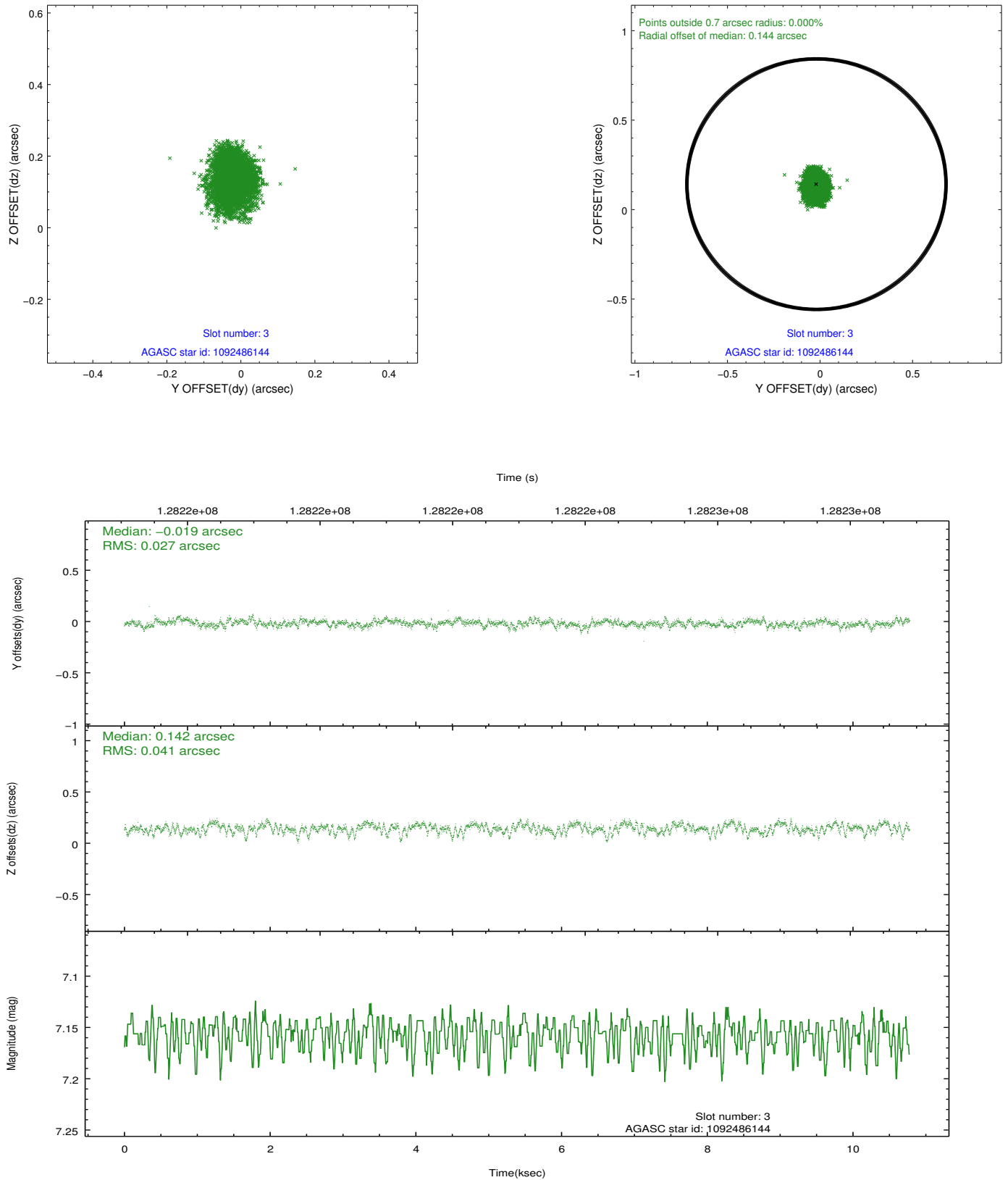


Slot Statistics

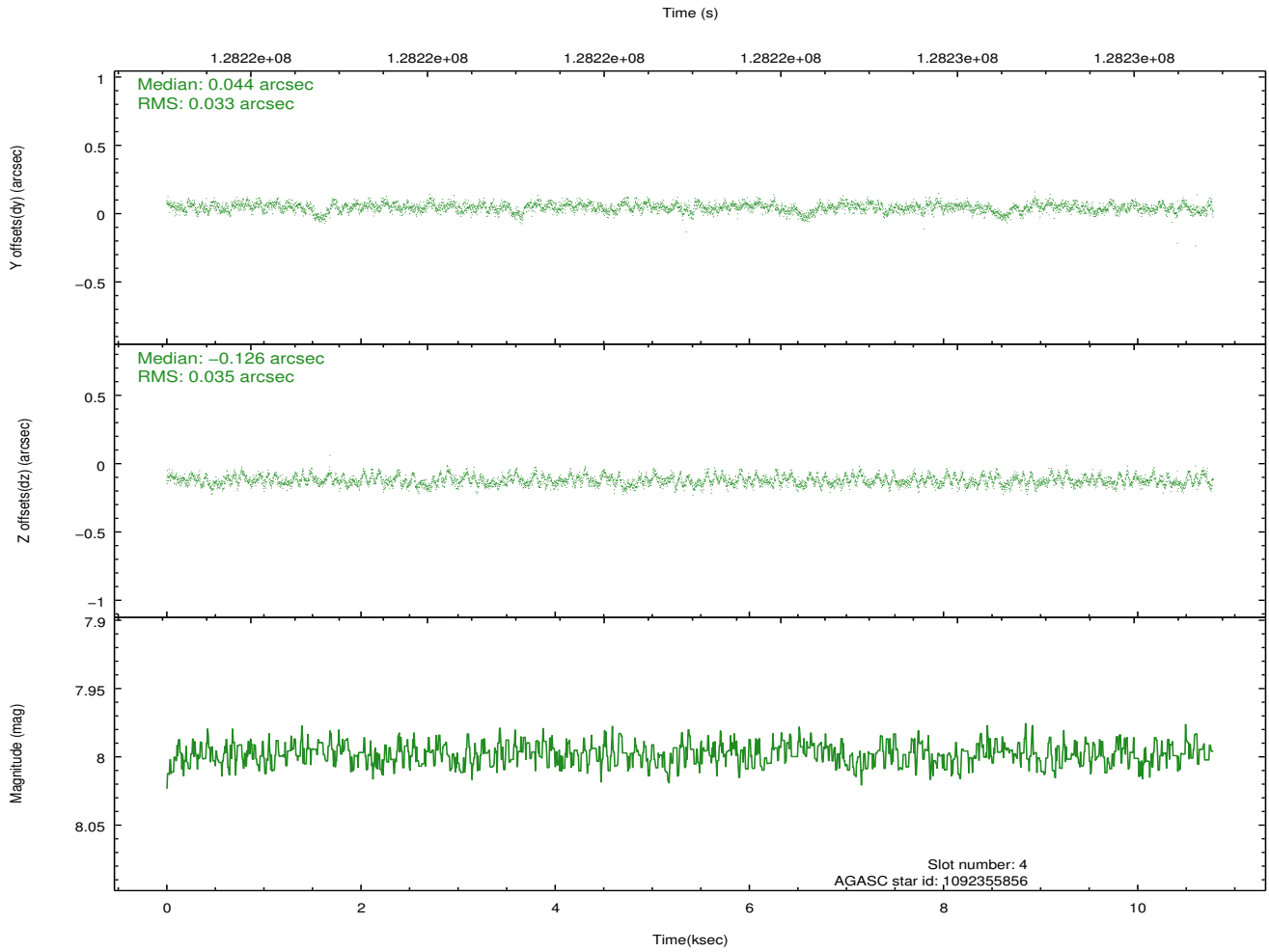
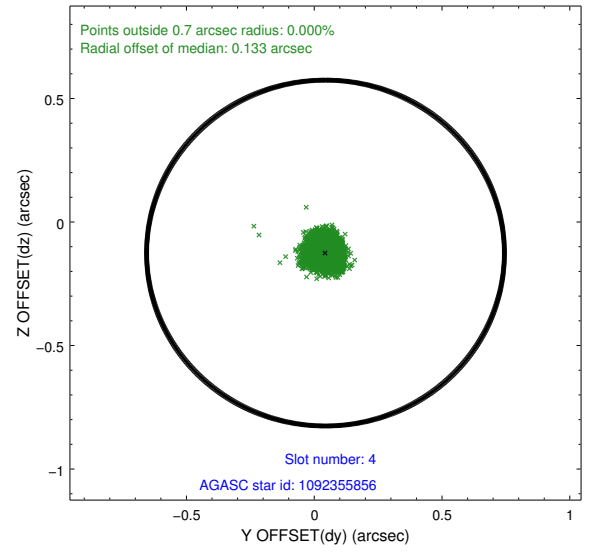
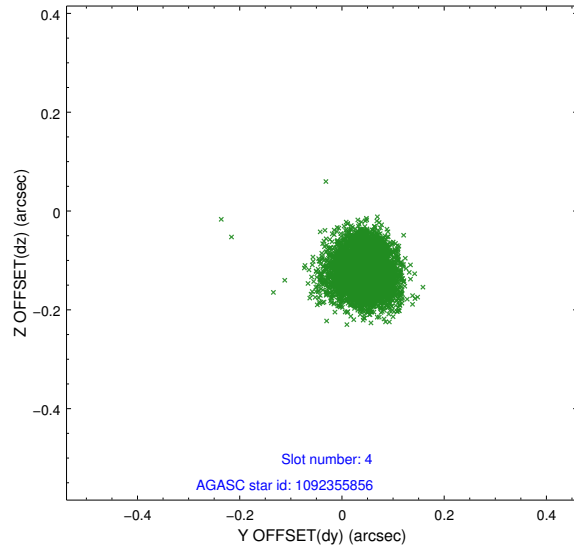
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	2629	-0.005	0.005	0.016	0.026	0.000000	0.000000	940.08	-1787.17
1	FID	ACIS-S-5	7.23	2630	-0.015	0.004	0.012	0.022	0.000000	0.000000	-1808.68	109.83
2	FID	ACIS-S-6	7.37	2629	-0.002	0.001	0.015	0.024	0.000000	0.000000	405.09	754.36
3	GUIDE	1092486144	7.16	5259	-0.019	0.142	0.051	0.089	253.742795	-50.189175	-1497.49	-2460.56
4	GUIDE	1092355856	8.00	5259	0.044	-0.126	0.051	0.082	252.380362	-50.402230	-1354.76	761.17
5	GUIDE	1092361264	8.20	5259	-0.058	-0.167	0.054	0.089	251.314813	-49.615883	2028.01	2388.95
6	GUIDE	1092357952	8.66	5258	-0.079	0.115	0.088	0.140	252.624295	-49.307047	2283.49	-860.10
7	GUIDE	1092487776	8.57	5257	0.113	0.035	0.085	0.135	253.418062	-50.236939	-1446.75	-1695.02

2.4 Star Slots

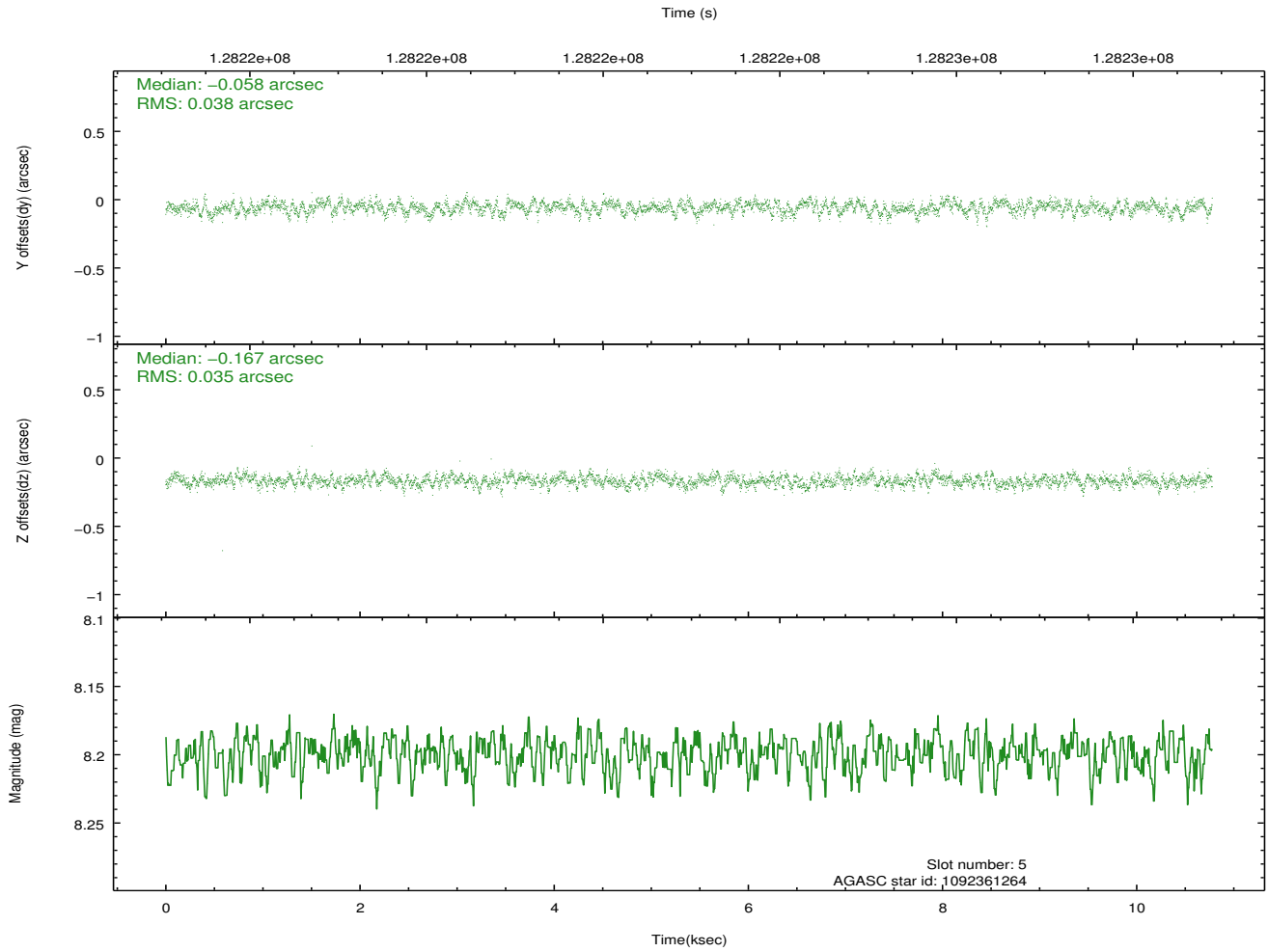
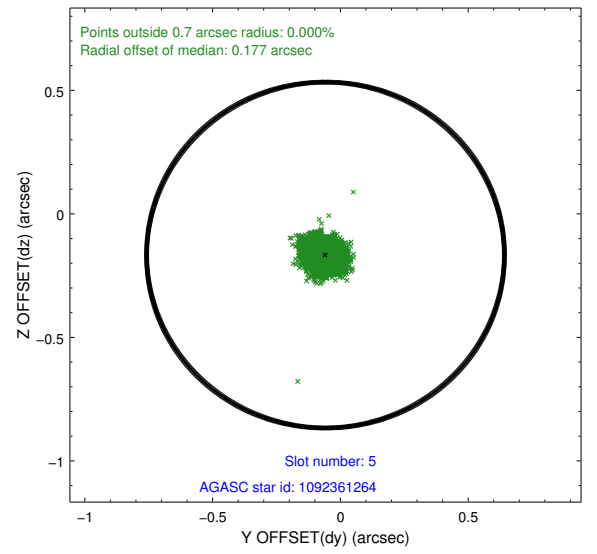
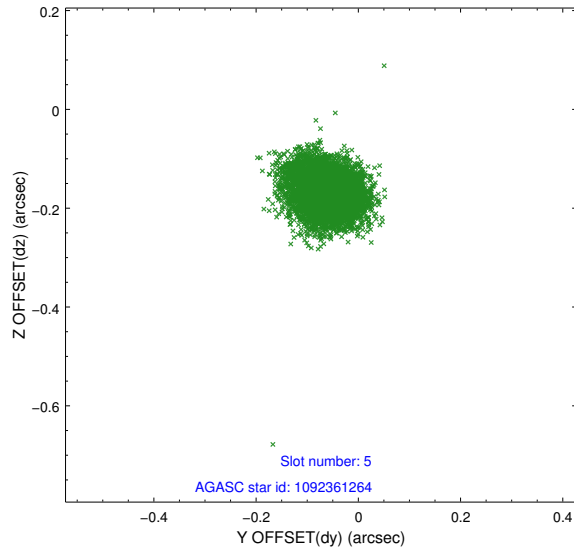
2.4.1 Slot 3



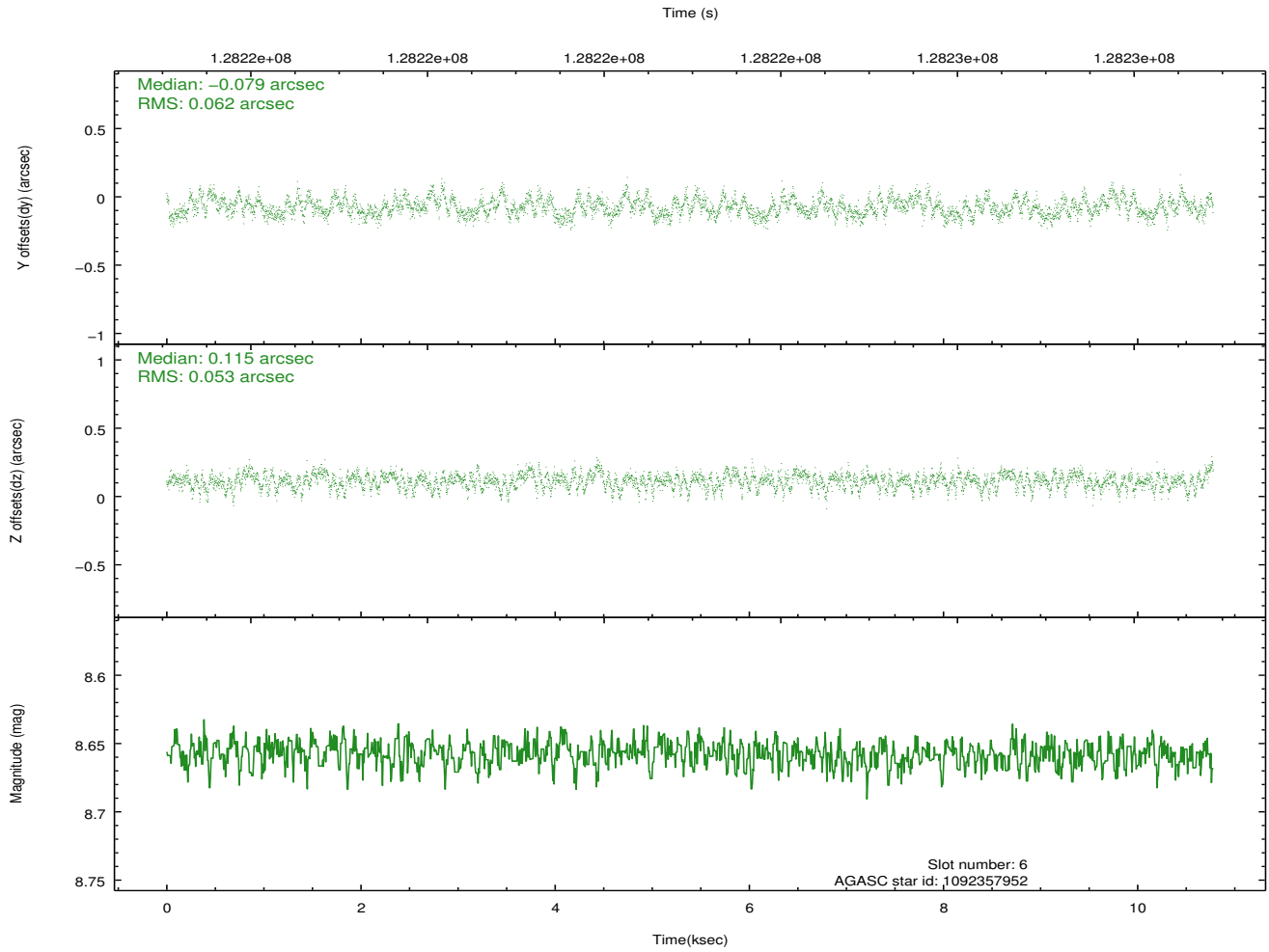
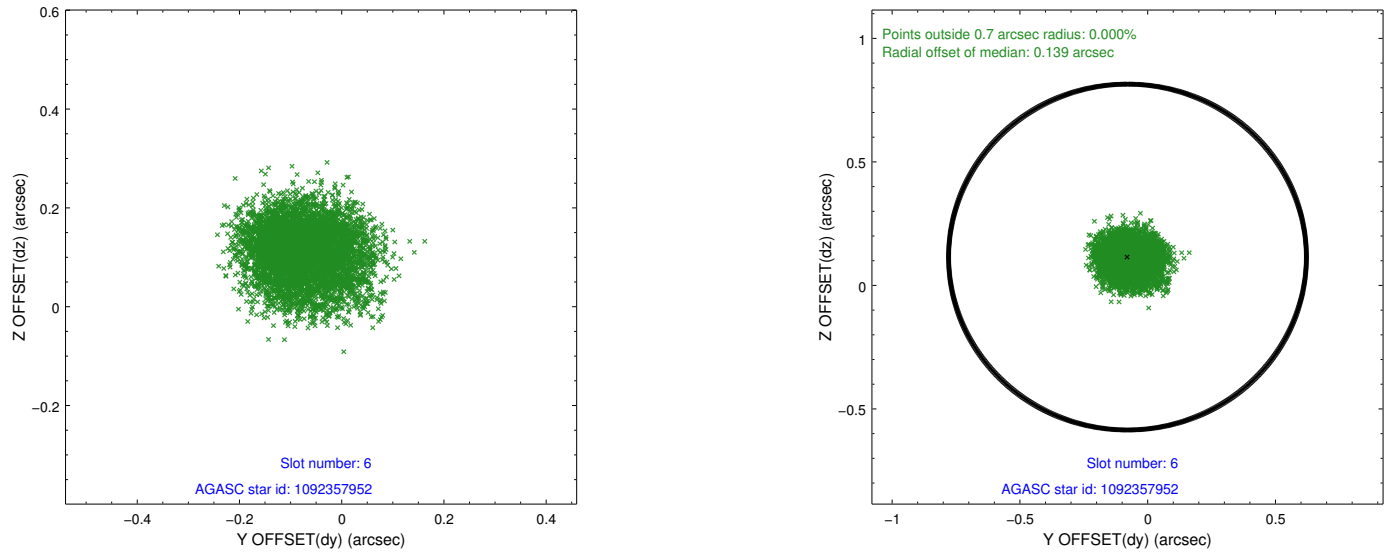
2.4.2 Slot 4



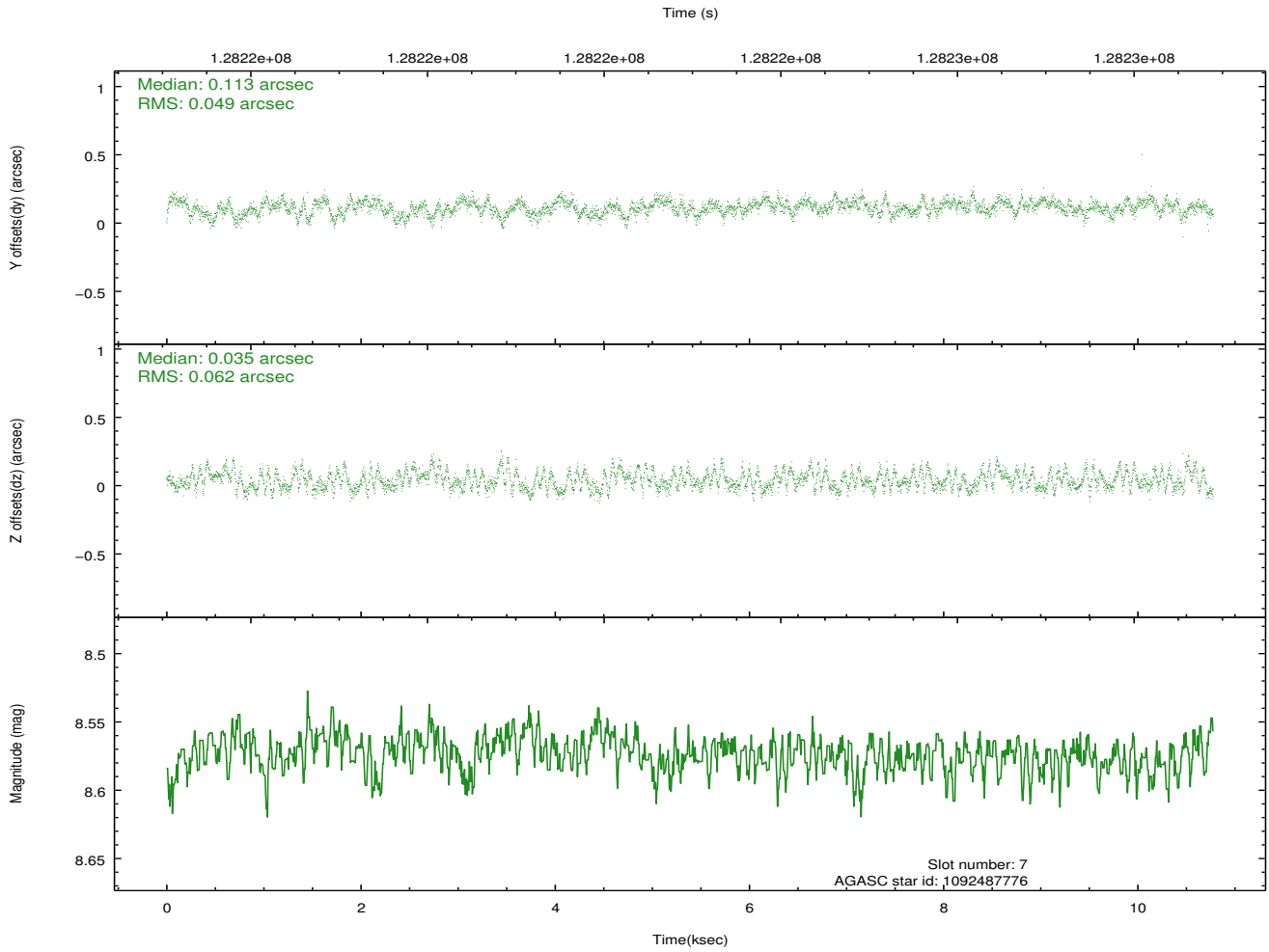
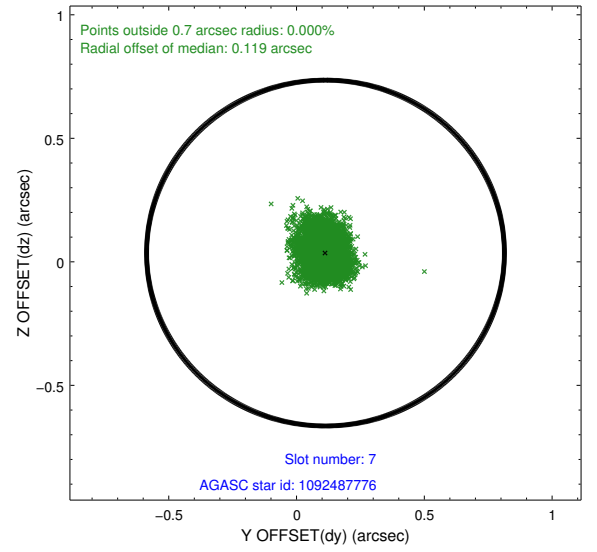
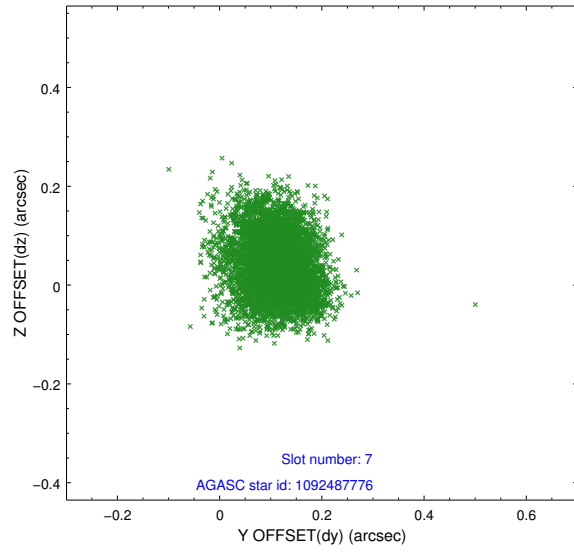
2.4.3 Slot 5



2.4.4 Slot 6

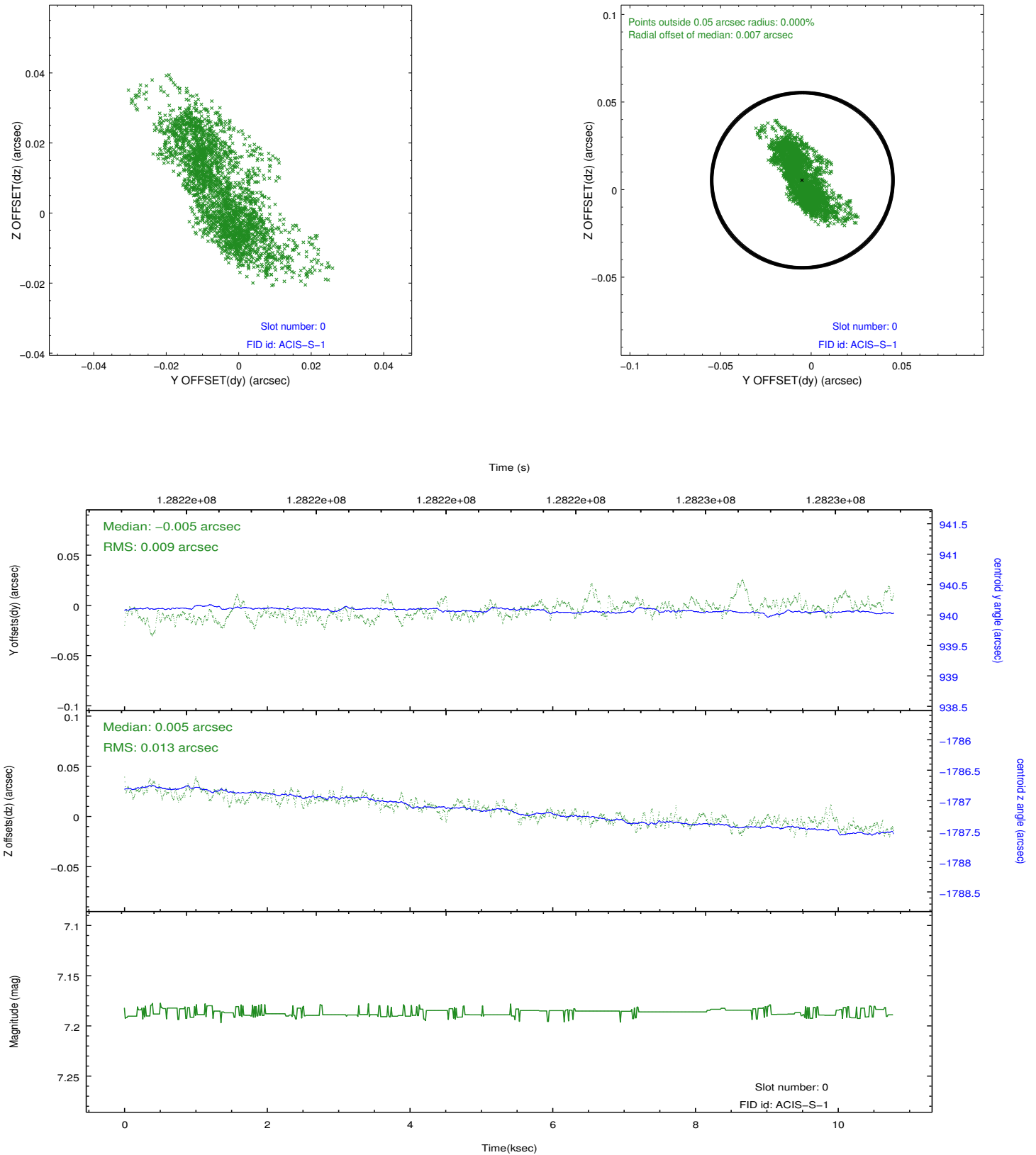


2.4.5 Slot 7

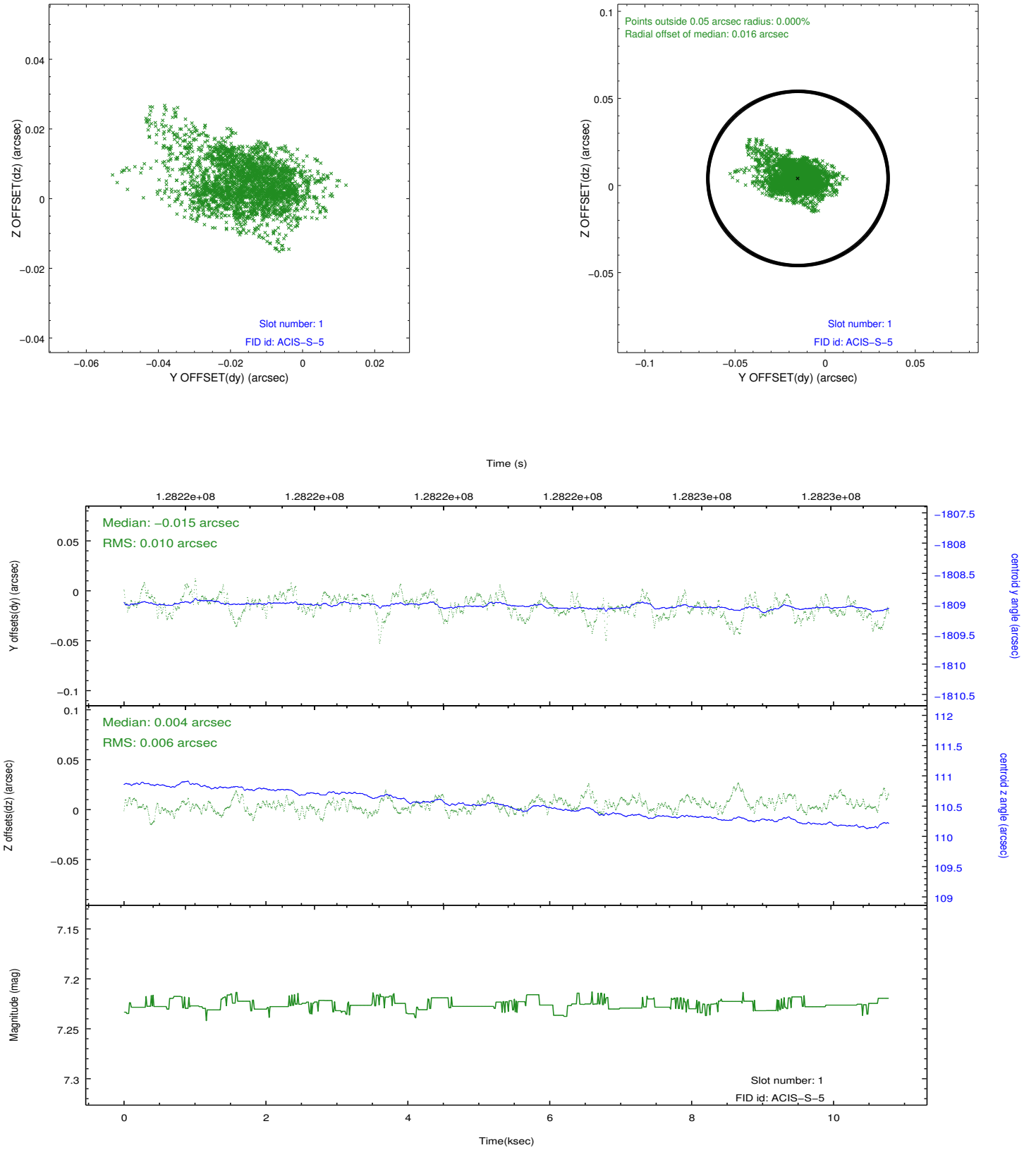


2.5 FID Slots

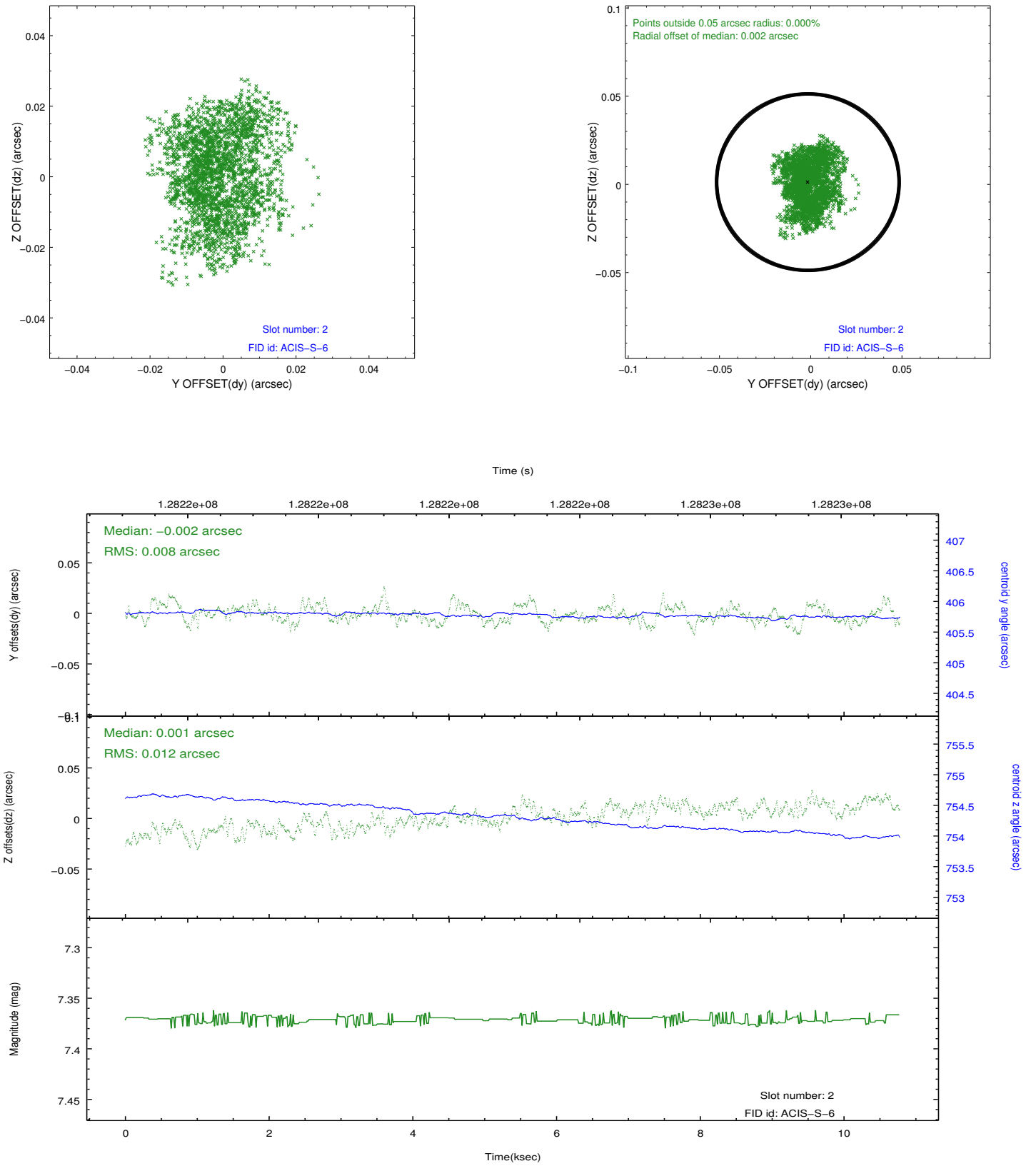
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

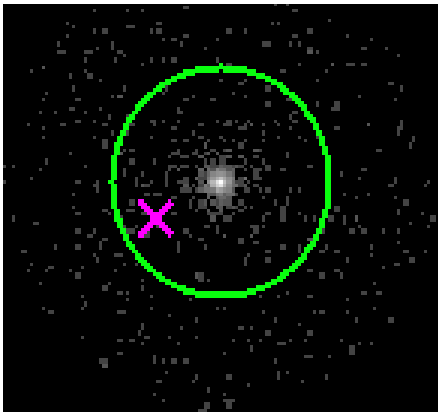


3 Gratings

3.1 HEG Arm



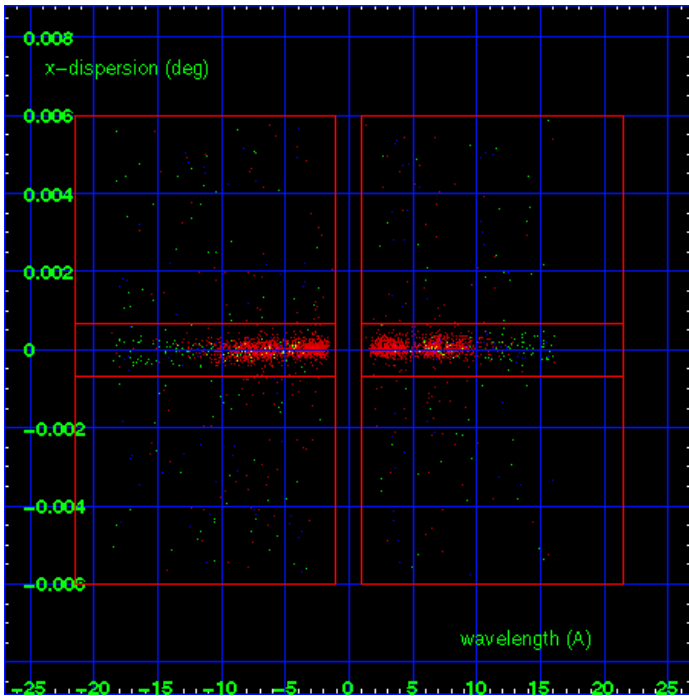
HEG Order Sort 123



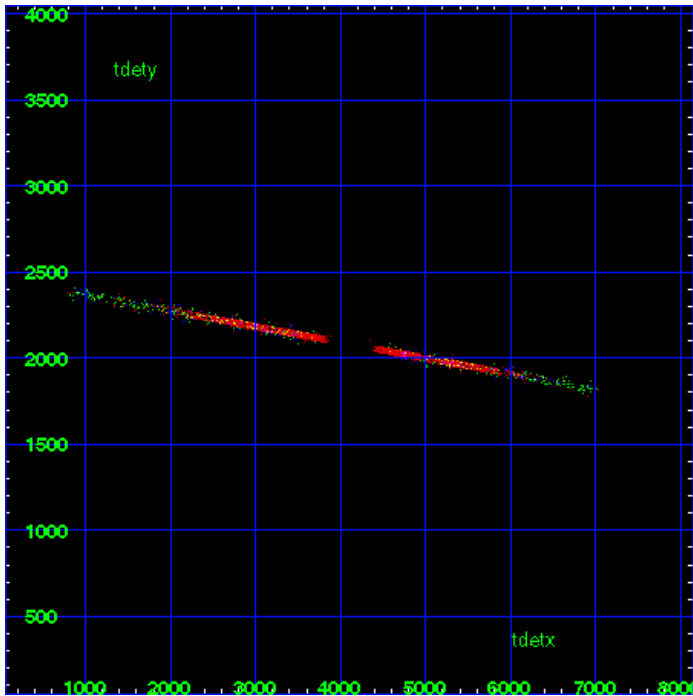
HEG Zero Order



HEG Order Sort ALL

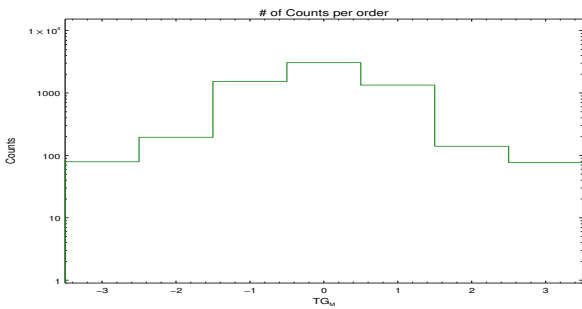


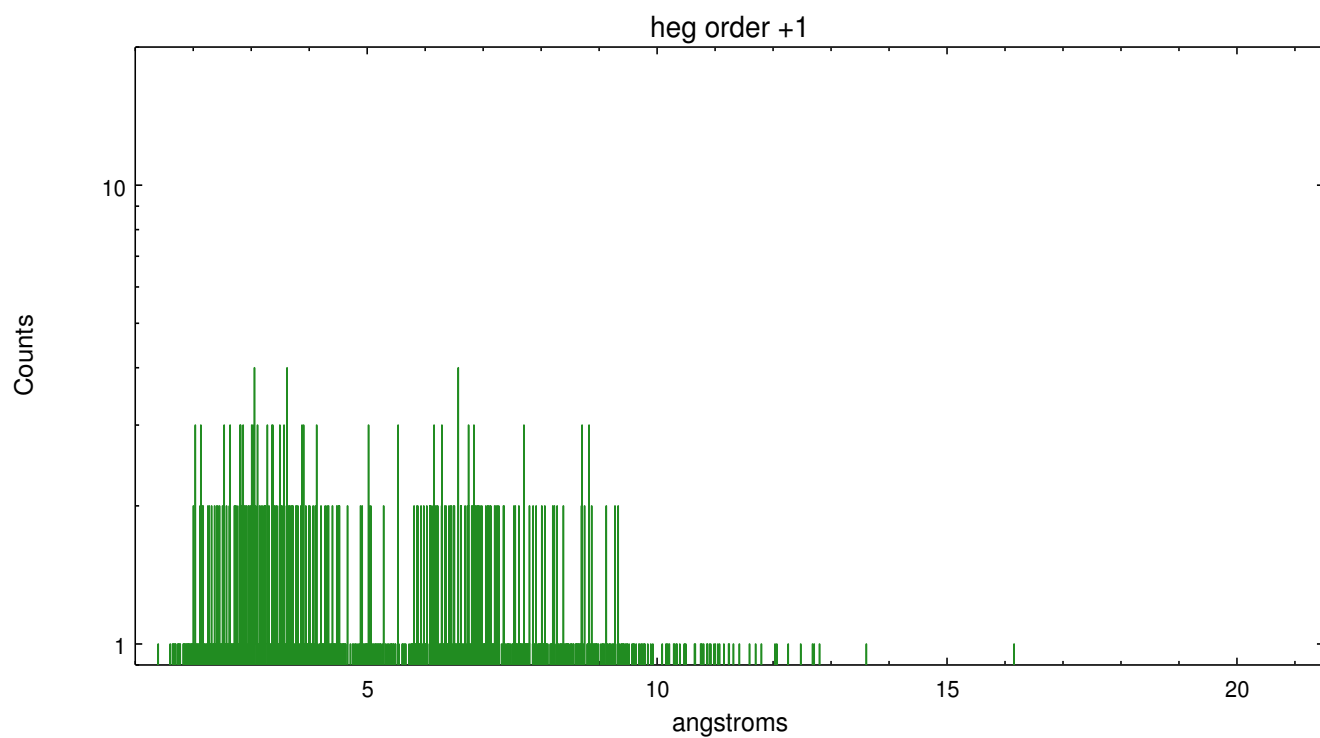
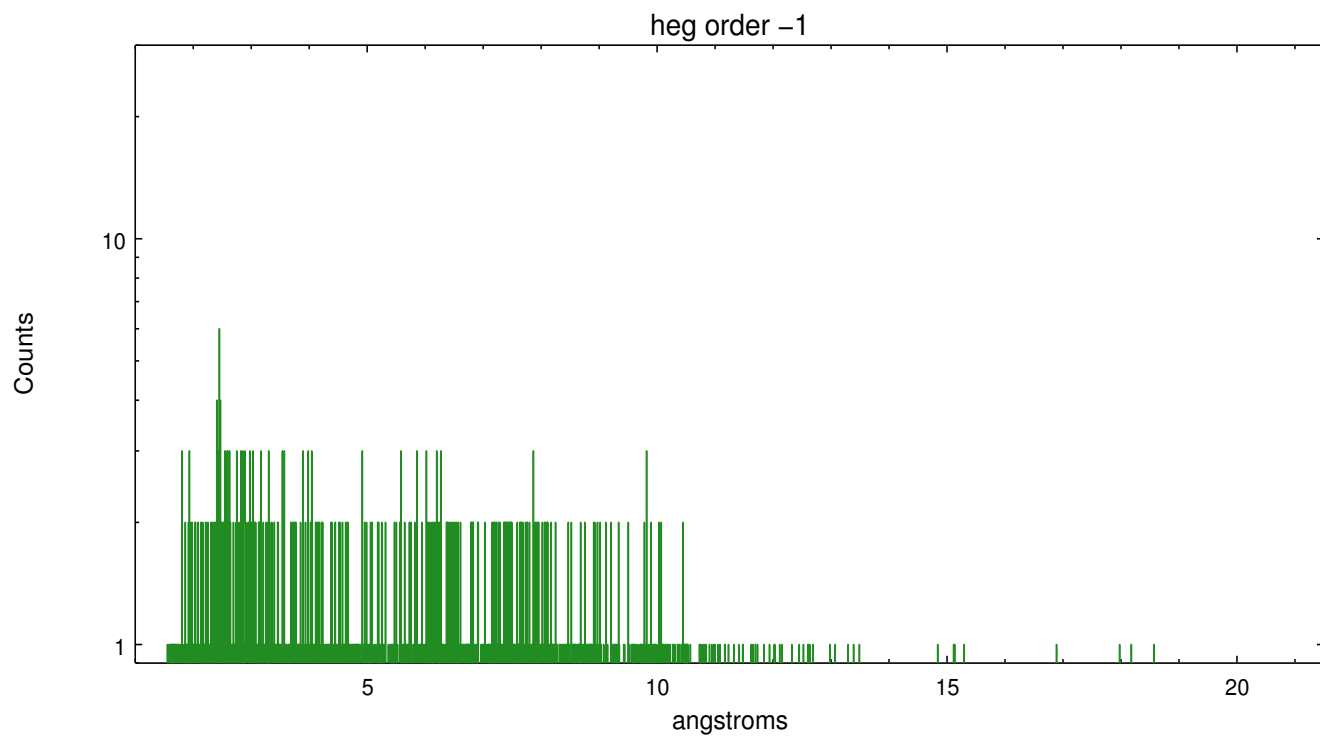
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	79	195	1525	3062	1338	140	77

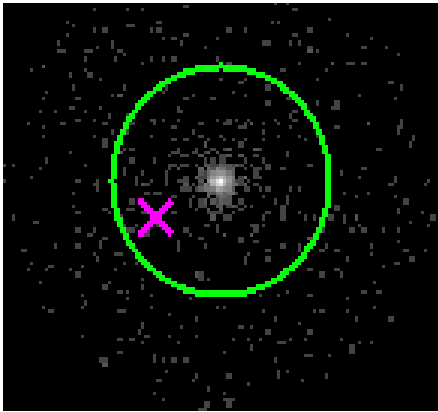




3.2 MEG Arm



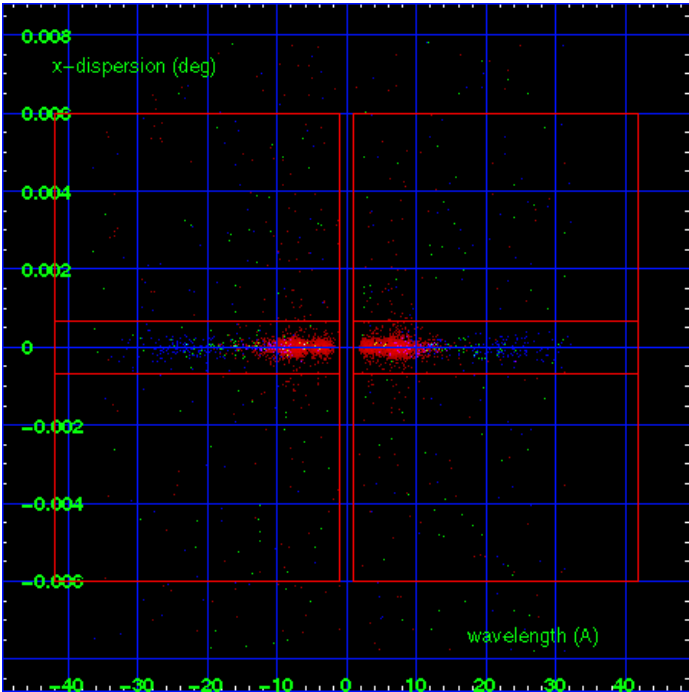
MEG Order Sort 123



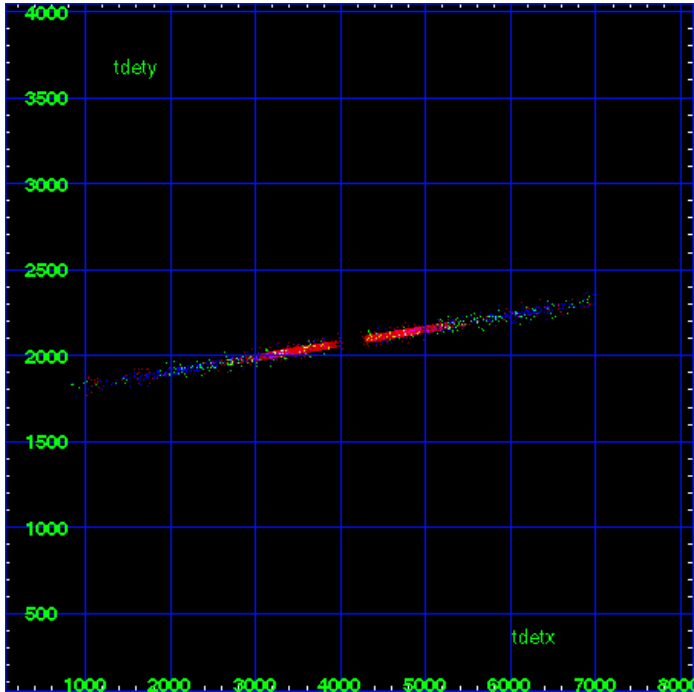
MEG Zero Order



MEG Order Sort ALL

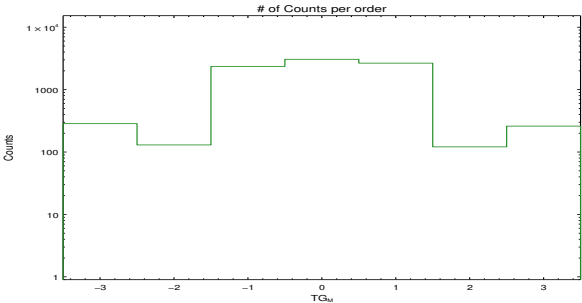


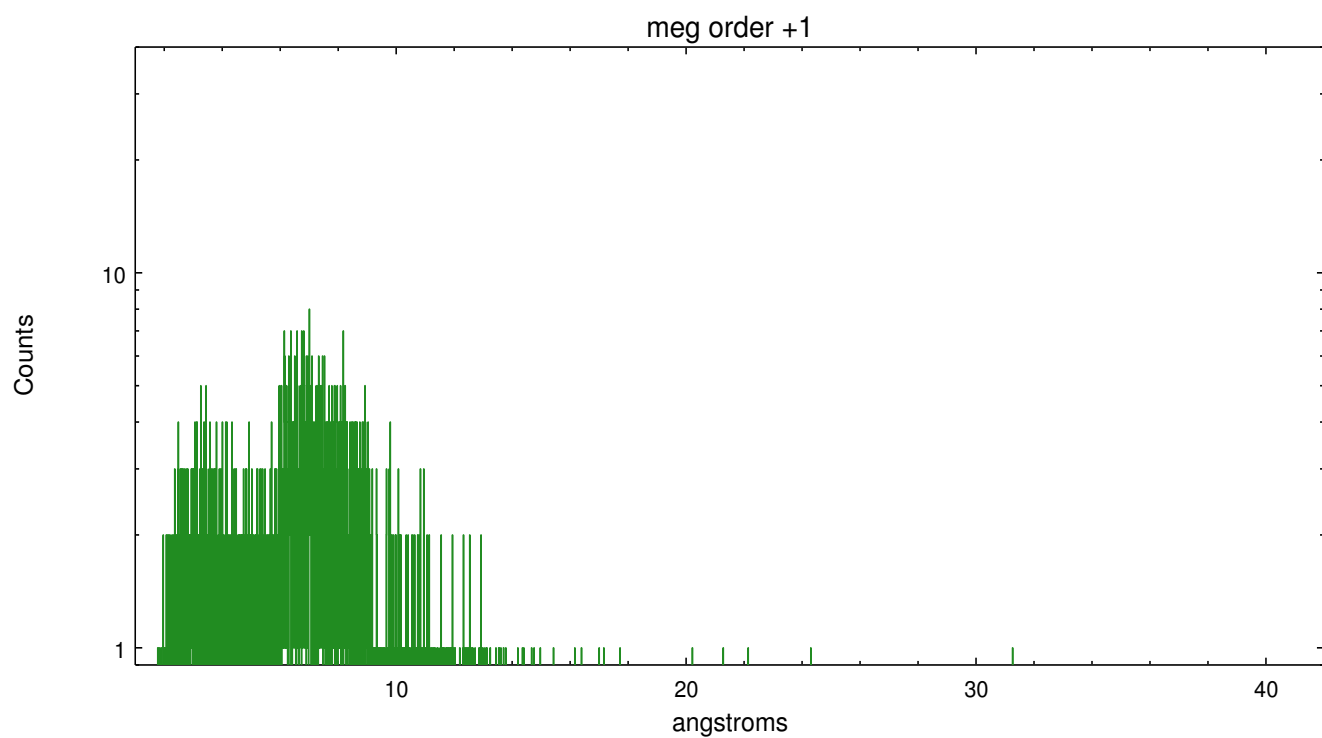
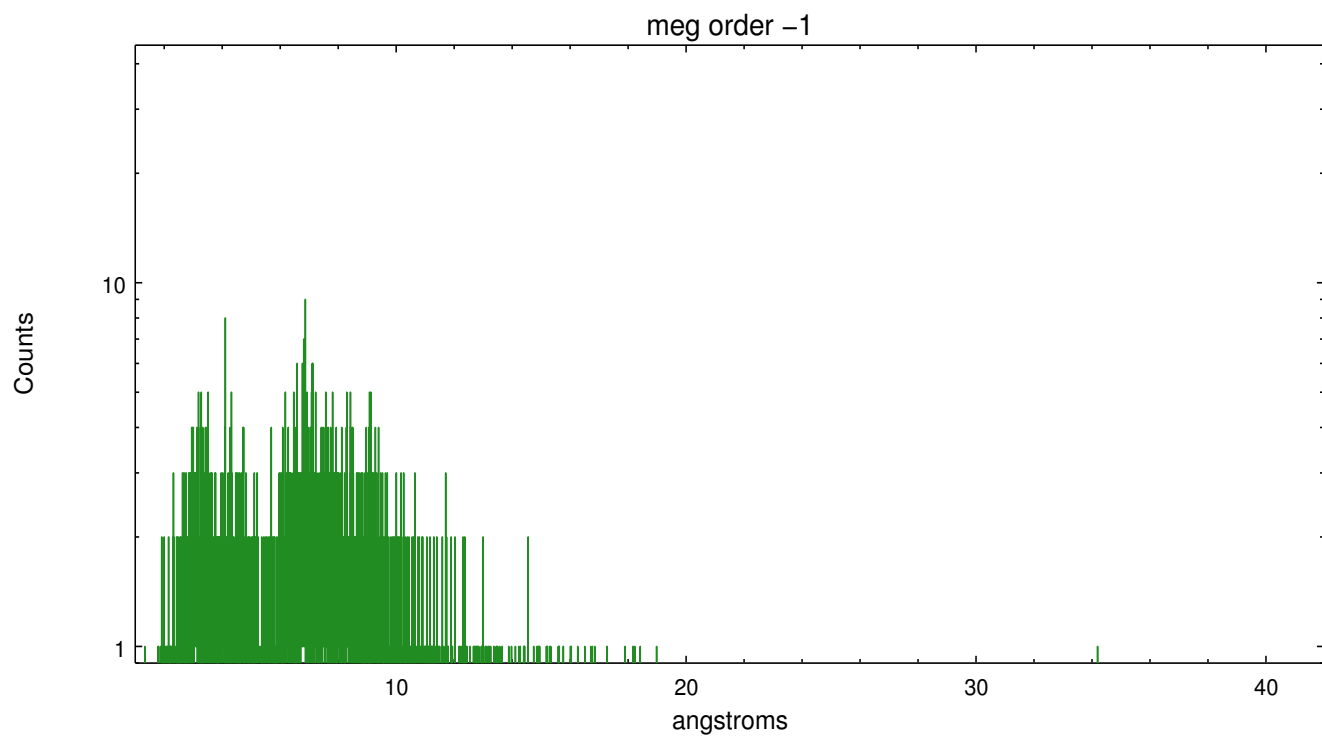
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	285	130	2358	3062	2657	121	260





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.165

A.2 Comments