

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1890 - L2 Version 4
Chandra X-Ray Center

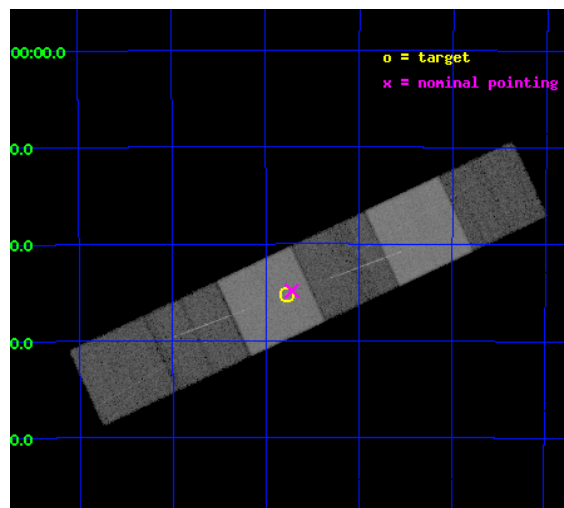
L2 Processing Date : Oct 16 2012

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1 Front

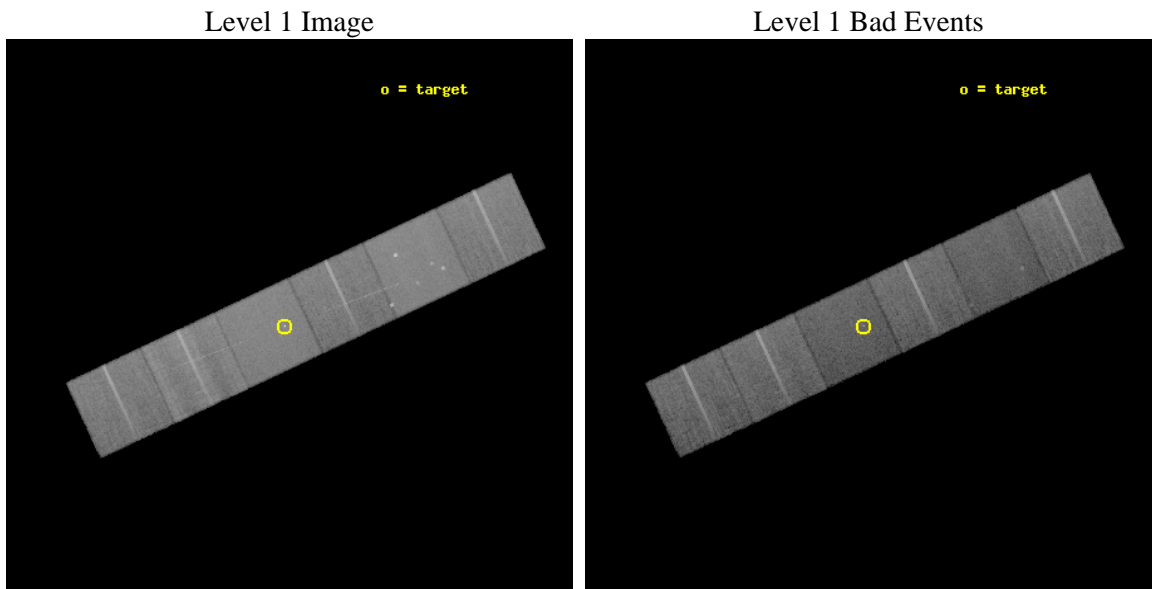
seq_num	200118	Sequence number
obs_id	1890	Observation id
title	TORTURED CORONAE IN THE RAPID BRAKING ZONE	Proposal title
observer	Dr. Thomas Ayres	Principal investigator
object	HD 93497	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.692083	Observer's specified target RA [deg]
dec_targ	-49.42	Observer's specified target Dec [deg]
ra_nom	161.67986393779	Nominal RA [deg]
dec_nom	-49.414365074722	Nominal Dec [deg]
roll_nom	154.93686176173	Nominal Roll [deg]
revision	4	Processing version of data
ontime	19606.359057993	Sum of GTIs [s]
livetime	19358.091534068	Livetime [s]
ontime4	19609.600018248	Sum of GTIs [s]
ontime5	19606.359057993	Sum of GTIs [s]
ontime6	19606.359057993	Sum of GTIs [s]
ontime7	19606.359057993	Sum of GTIs [s]
ontime8	19606.359057993	Sum of GTIs [s]
ontime9	19606.359057993	Sum of GTIs [s]
l2events	355190	Number of level 2 events



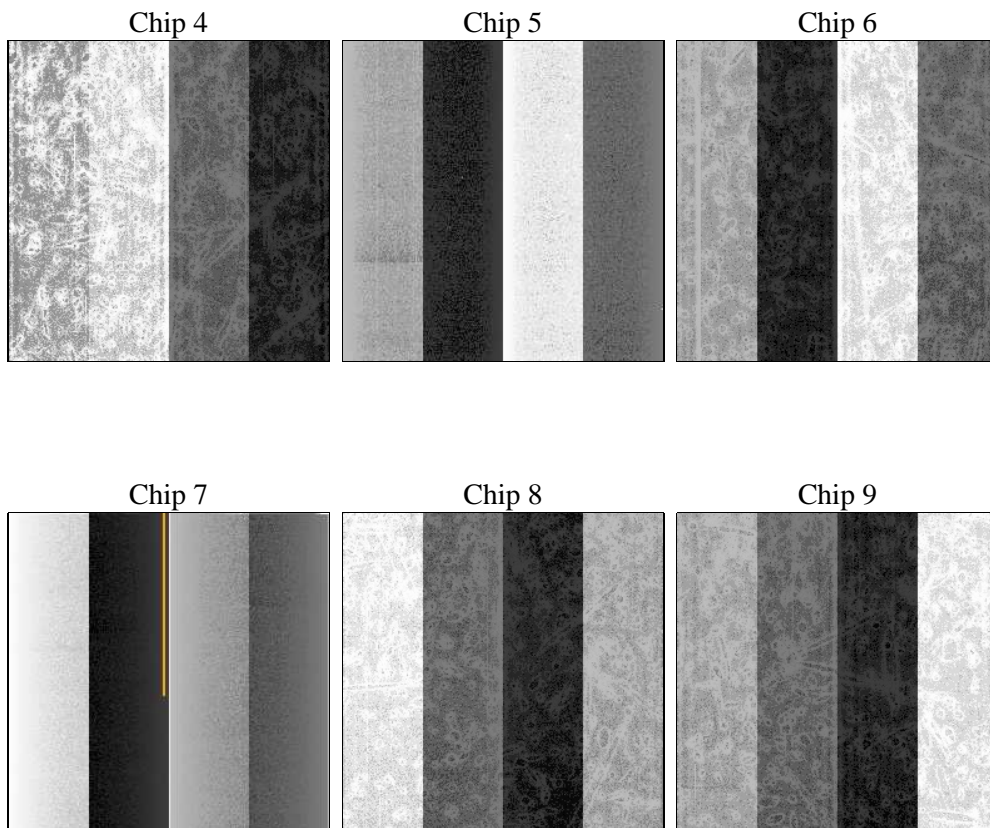
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	81000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19606.359057993	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	19609.600018248	Sum of GTIs [s]
date	2012-10-16T15:28:42	Date and time of file creation	ontime5	19606.359057993	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	19606.359057993	Sum of GTIs [s]
			ontime7	19606.359057993	Sum of GTIs [s]
			ontime8	19606.359057993	Sum of GTIs [s]
			ontime9	19606.359057993	Sum of GTIs [s]
			l1events	1230198	Number of level 1 events

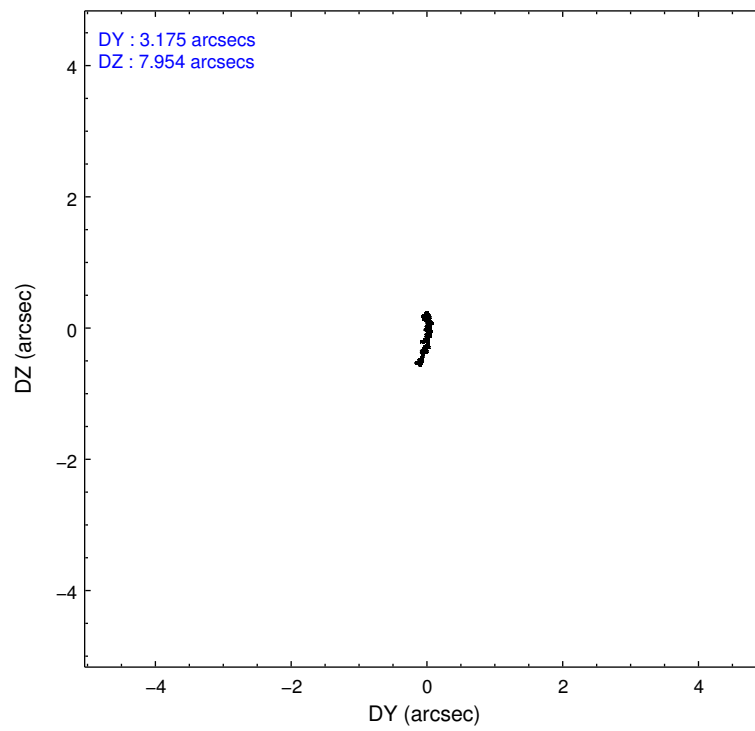
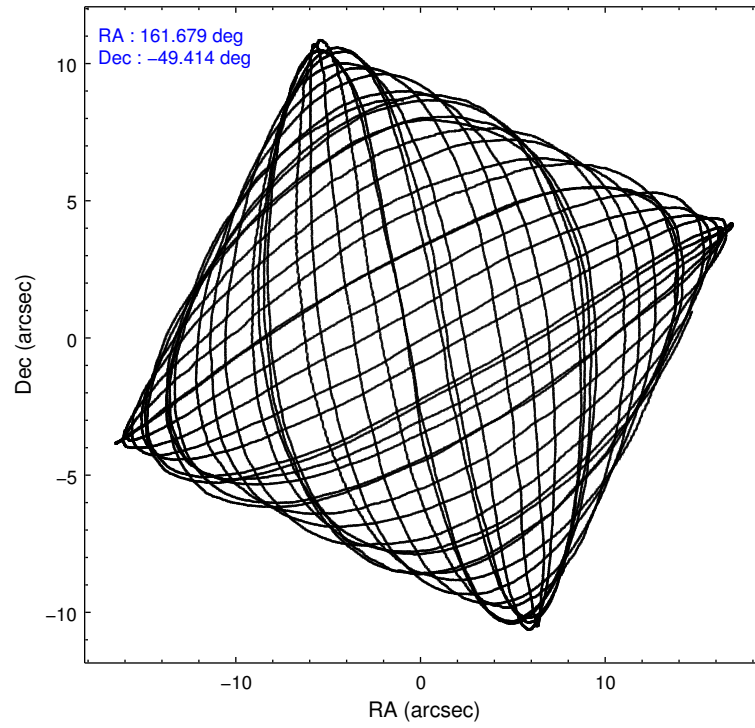
2.1.4 Events

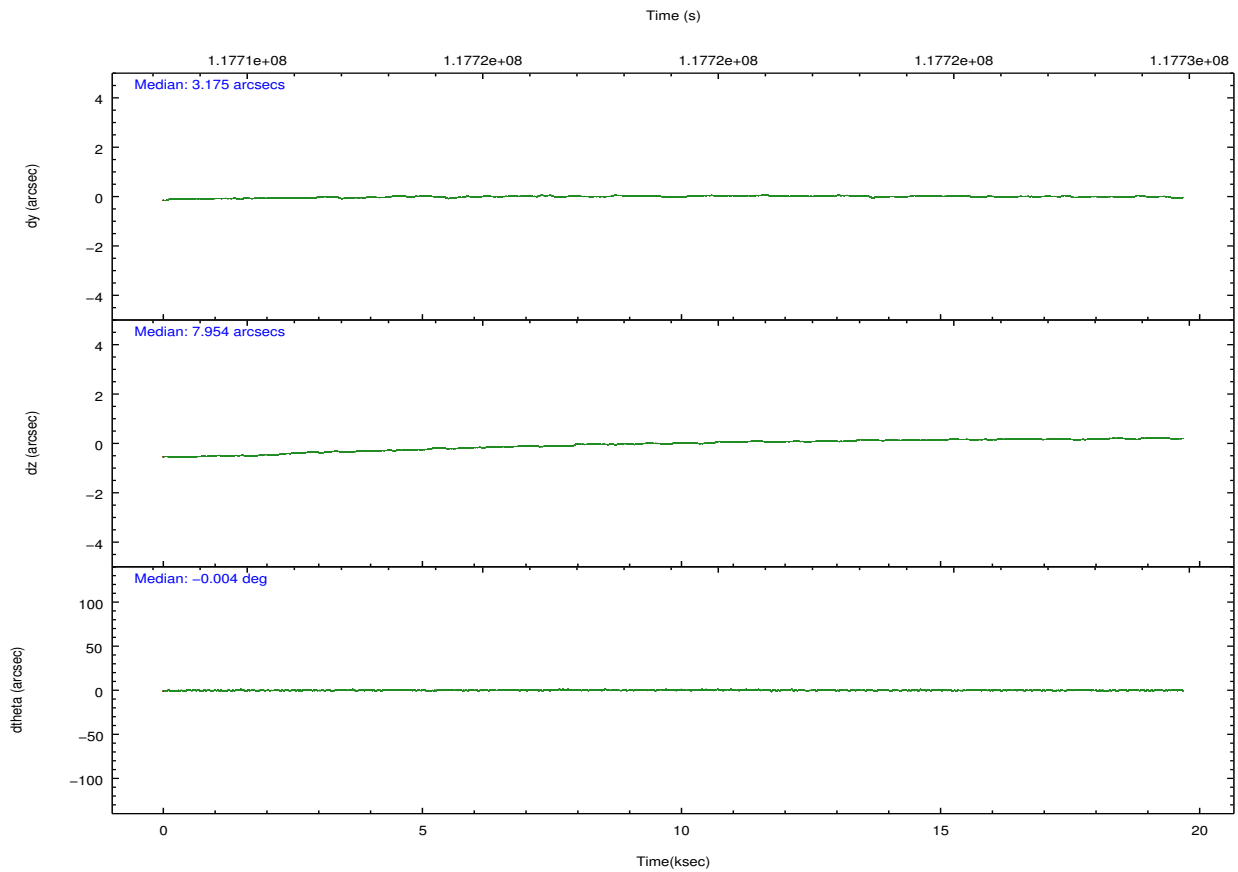
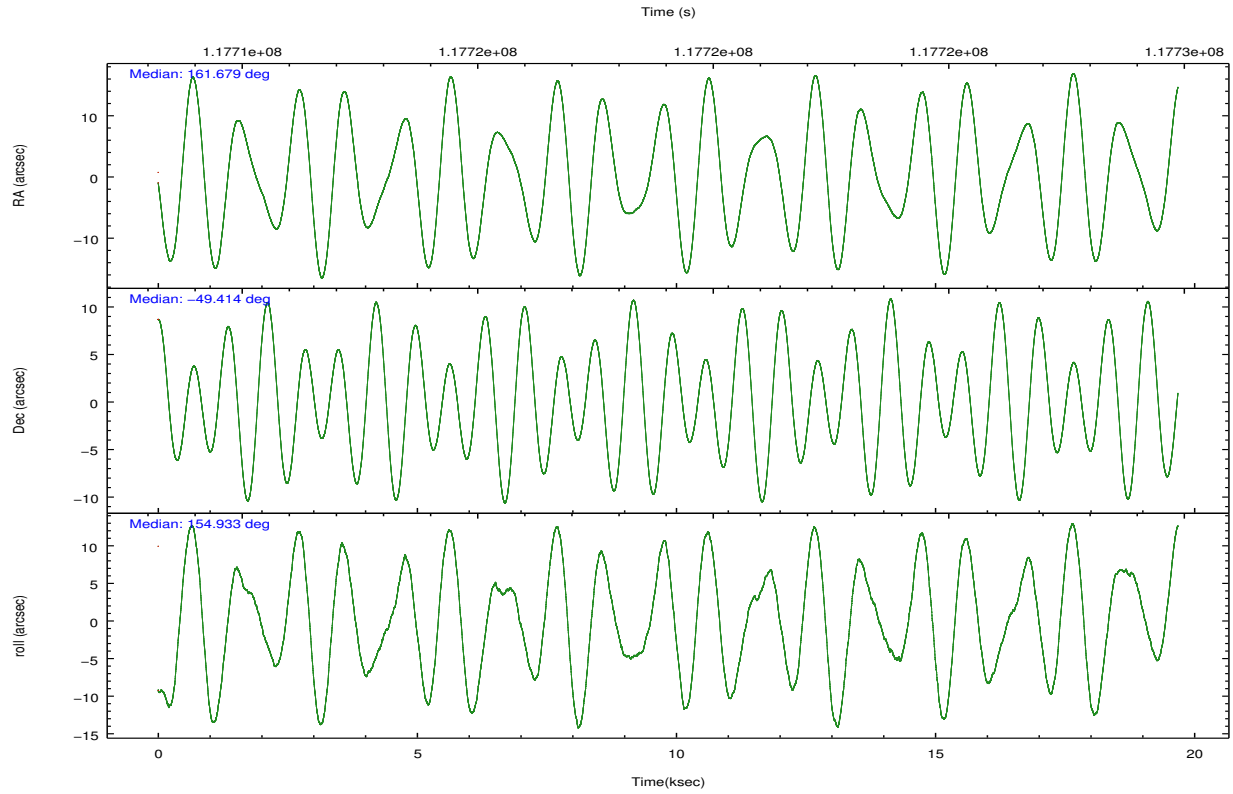
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	198747	237682	181347	217565	224979	169878	grade 0 events	15483	15211	16586	13701	28489	15216
rejected events	165054	107529	145955	102673	150241	136364		7%	6%	9%	6%	12%	8%
rejected %	83%	45%	80%	47%	66%	80%	grade 1 events	137	376	112	289	198	109
								0%	0%	0%	0%	0%	0%
							grade 2 events	7534	42840	6265	23667	13521	6161
								3%	18%	3%	10%	6%	3%
							grade 3 events	2349	6012	2593	10601	8586	2525
								1%	2%	1%	4%	3%	1%
							grade 4 events	2323	5810	2528	10492	7753	2448
								1%	2%	1%	4%	3%	1%
							grade 5 events	4716	15829	5577	17431	7394	5726
								2%	6%	3%	8%	3%	3%
							grade 6 events	6092	60696	7513	56812	16704	7272
								3%	25%	4%	26%	7%	4%
							grade 7 events	160113	90908	140173	84572	142334	130421
								80%	38%	77%	38%	63%	76%

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	161.721569	161.6798639377857	Subarray requested	NONE	NONE
[deg] Pointing Dec	-49.411705	-49.4143650747215	Alternating exposures requested	N	N
[deg] Pointing Roll	154.811879	154.9368617617307	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-0.6828225247311905	-0.6828225247311905			
[mm] SIM defocus	0.001444942264670179	0.001444942264670179			
[mm] SIM translation stage pos	-190.1400660498719	-190.1400660498719			
[mm] SIM translation stage offset	0.007542945904702947	0.007542945904702947			
[s] Observation start time (MET)	117709196.184000	117709196.184			
Observation start date	2001-09-24T08:58:52	2001-09-24T08:59:56			
[s] Observation end time (MET)	117728877.900000	117728877.9			
Observation end date	2001-09-24T14:27:58	2001-09-24T14:27:57			
Read mode	TIMED	TIMED			

2.3 Aspect



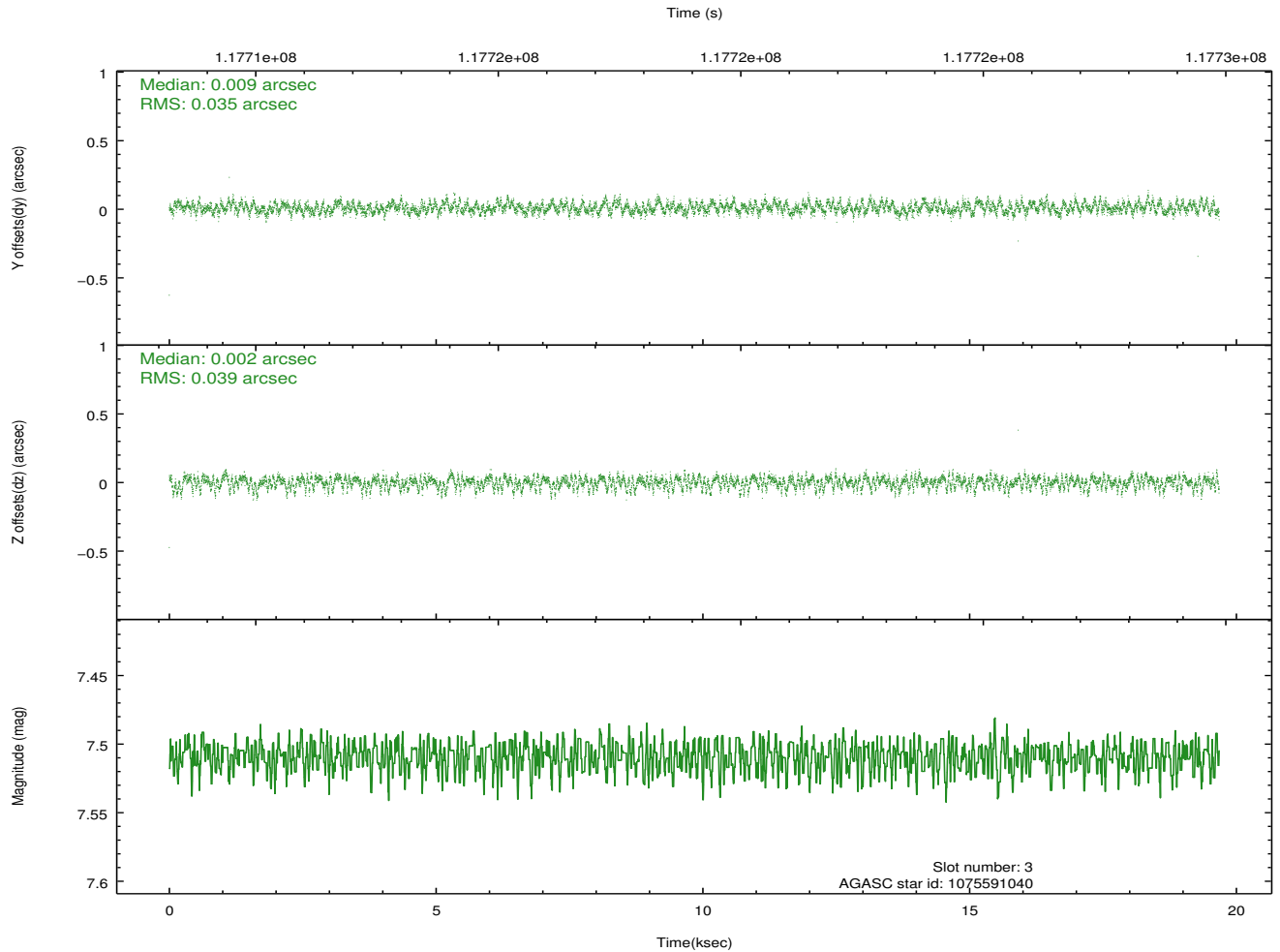
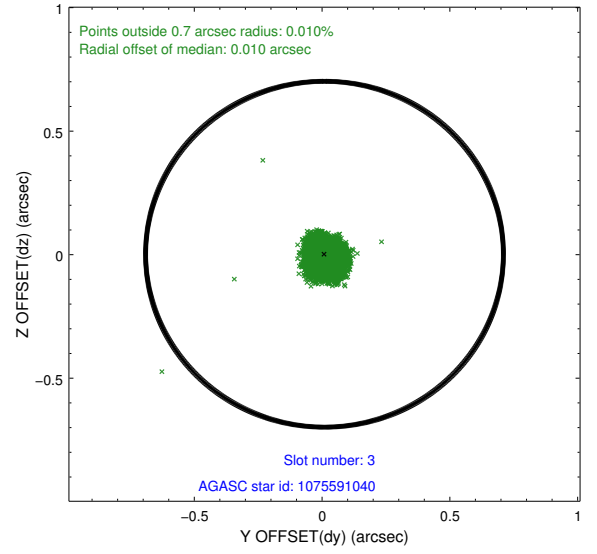
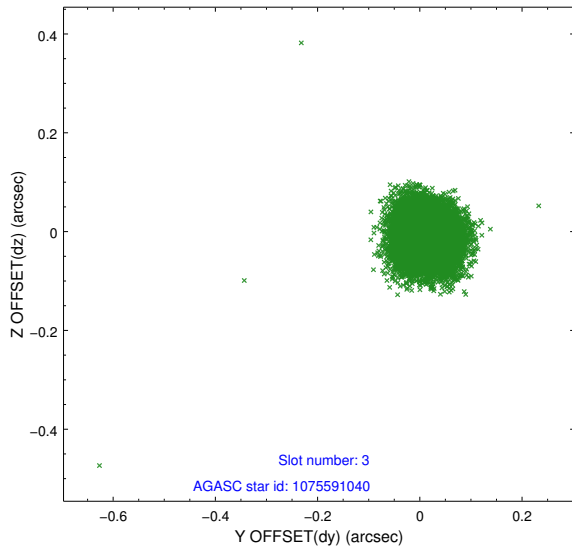


Slot Statistics

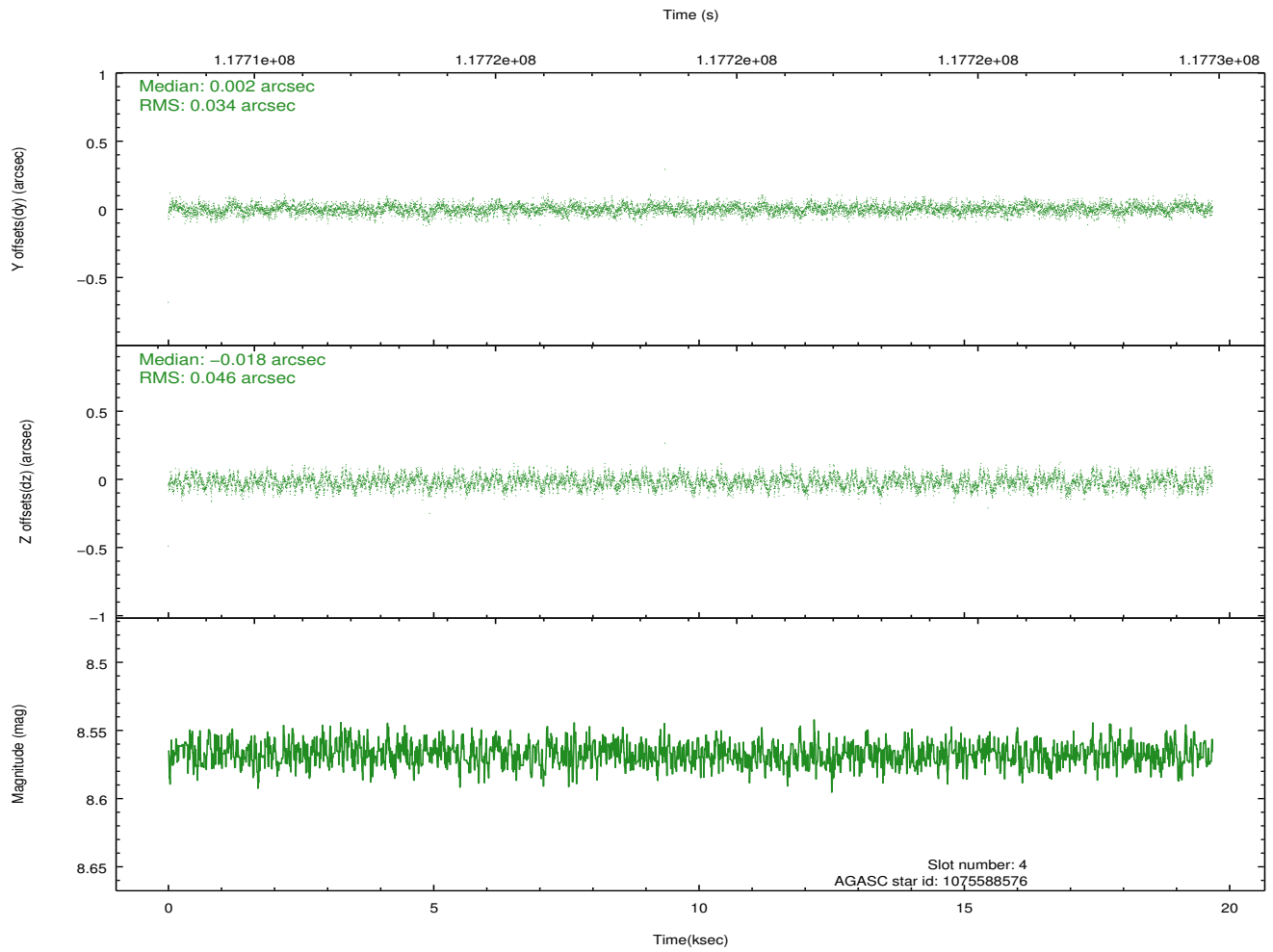
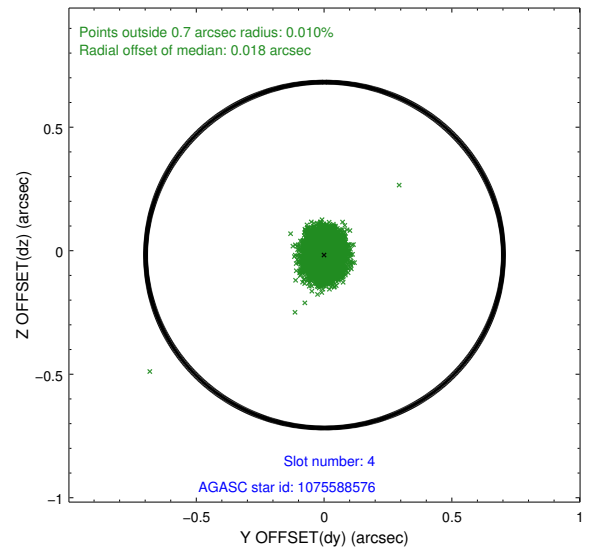
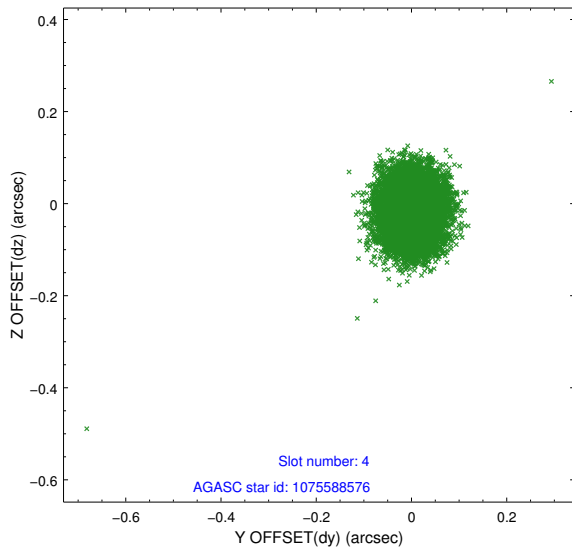
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	4800	0.009	0.001	0.008	0.013	0.000000	0.000000	-755.81	-1729.07
1	FID	ACIS-S-4	7.19	4800	-0.057	-0.005	0.006	0.011	0.000000	0.000000	2157.32	179.19
2	FID	ACIS-S-5	7.24	4799	0.016	0.013	0.008	0.014	0.000000	0.000000	-1808.39	173.12
3	GUIDE	1075591040	7.51	9597	0.009	0.002	0.054	0.088	162.767737	-49.503631	-2361.99	-726.50
4	GUIDE	1075588576	8.57	9599	0.002	-0.018	0.061	0.097	162.498014	-49.400454	-1633.87	-802.82
5	GUIDE	1075585824	8.52	9595	-0.032	0.026	0.058	0.096	161.885623	-48.861959	489.55	-1956.18
6	GUIDE	1075578760	8.91	9598	0.088	0.003	0.064	0.104	160.997233	-49.587657	1255.92	1299.64
7	GUIDE	1075593816	9.16	9597	-0.068	-0.008	0.075	0.123	160.844645	-49.710344	1383.77	1852.41

2.4 Star Slots

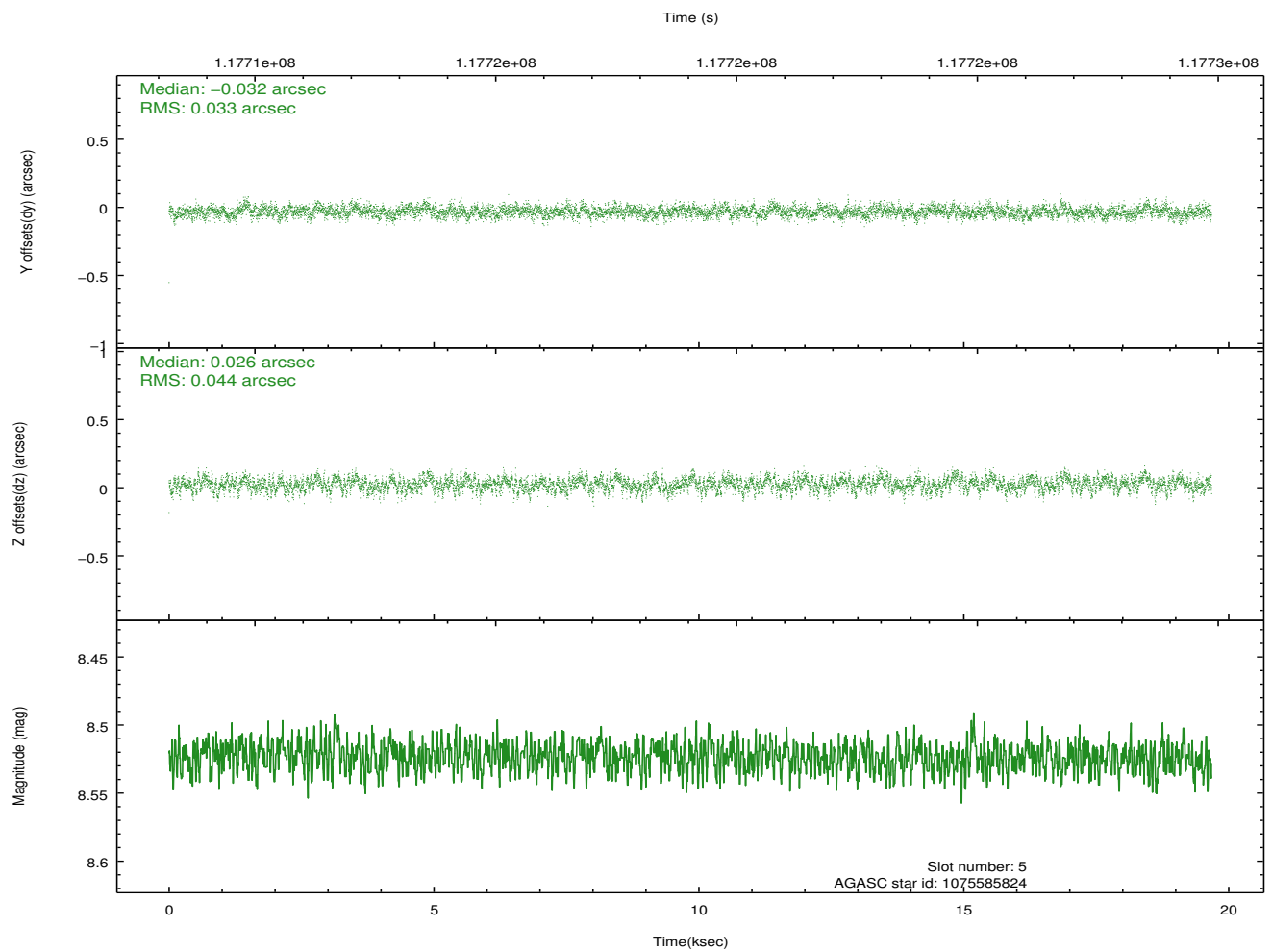
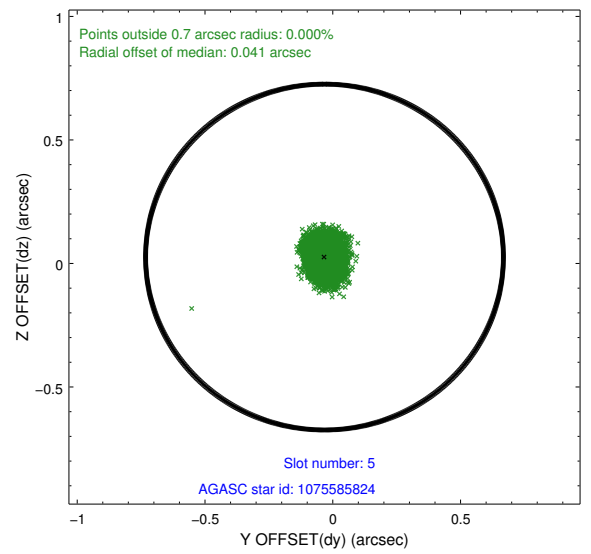
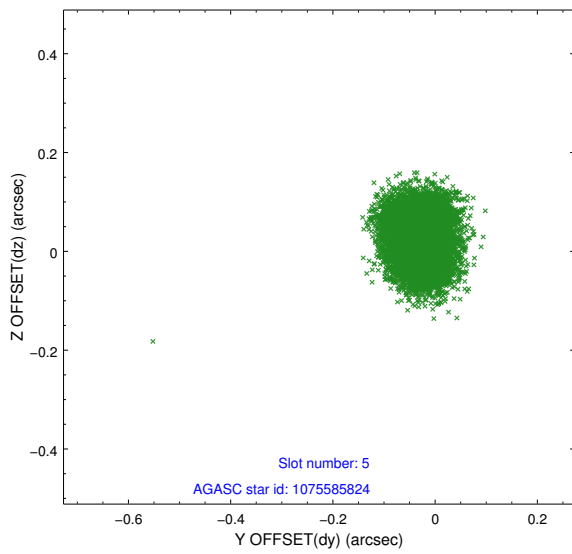
2.4.1 Slot 3



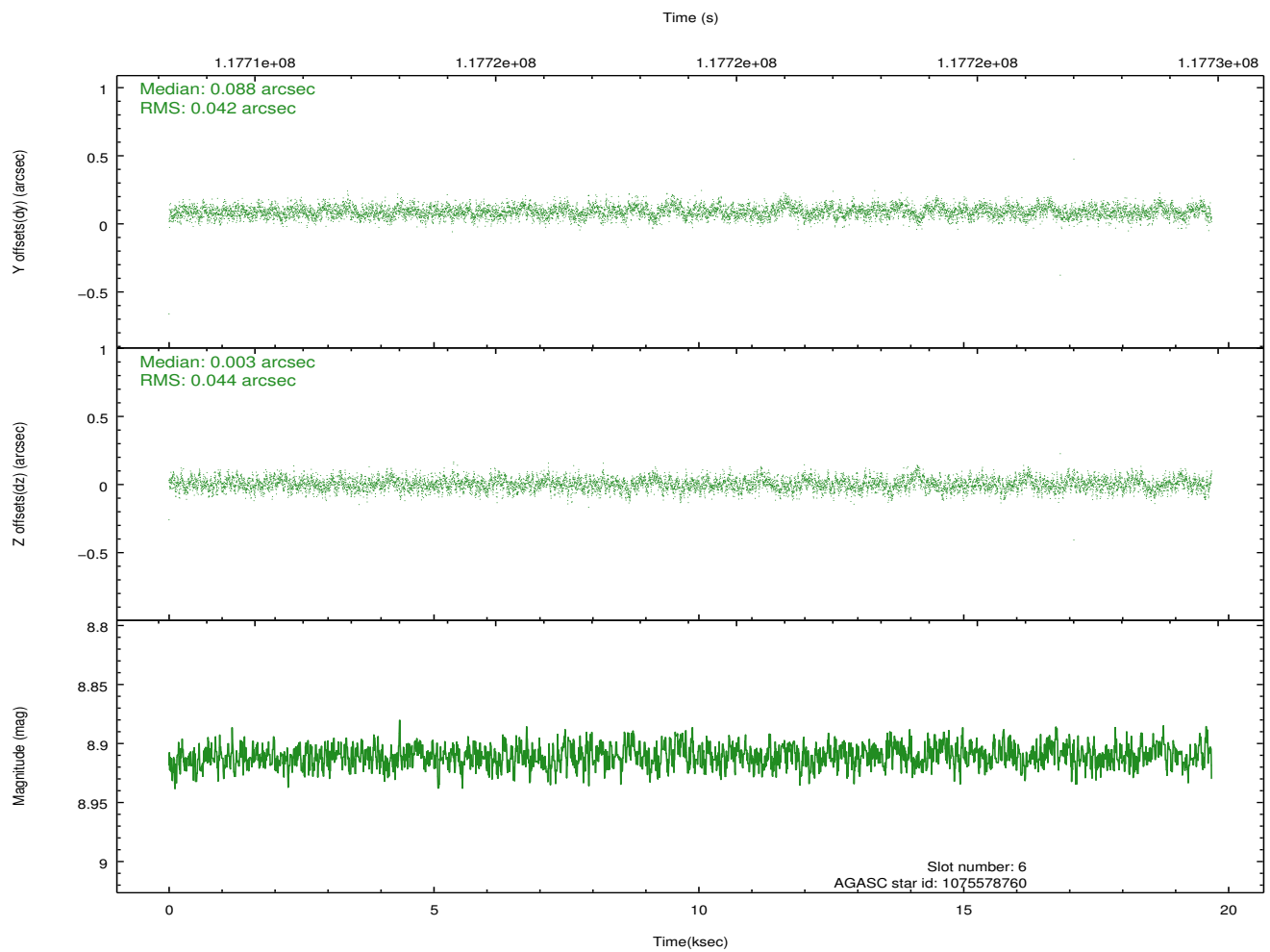
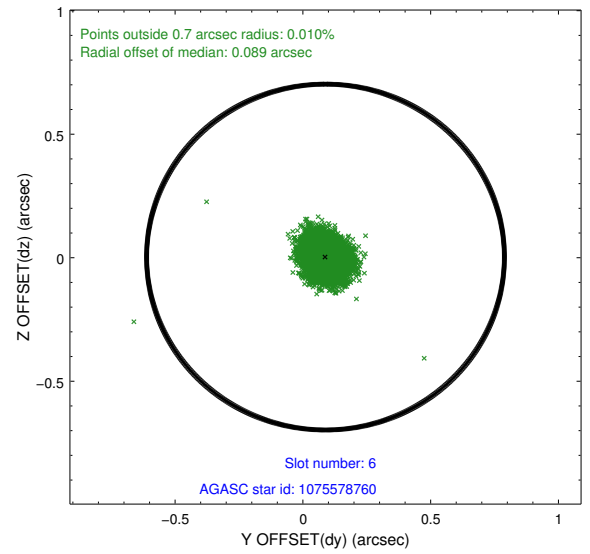
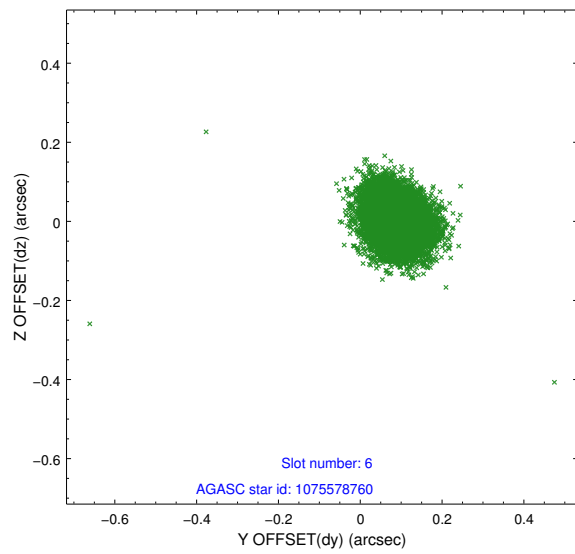
2.4.2 Slot 4



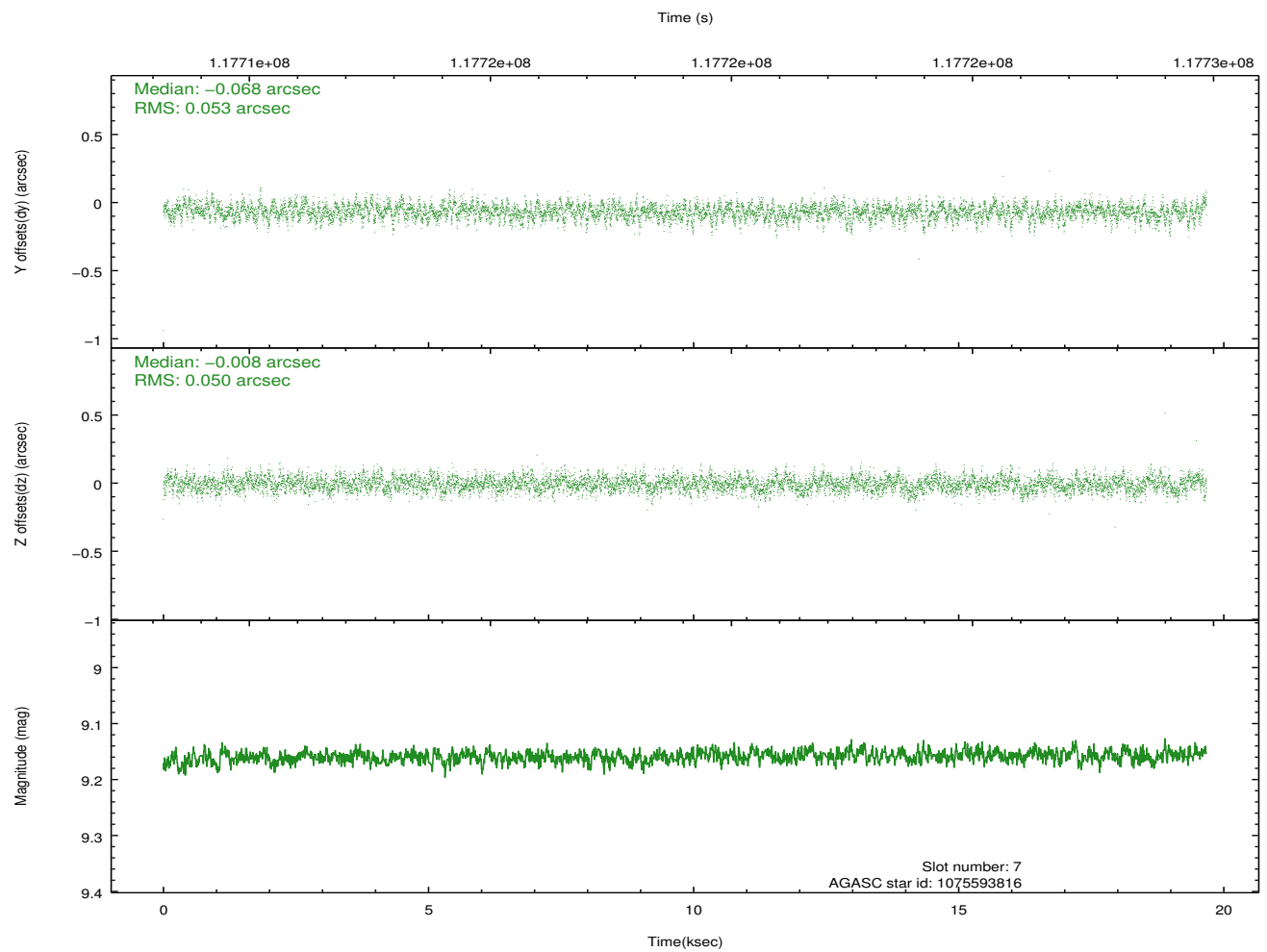
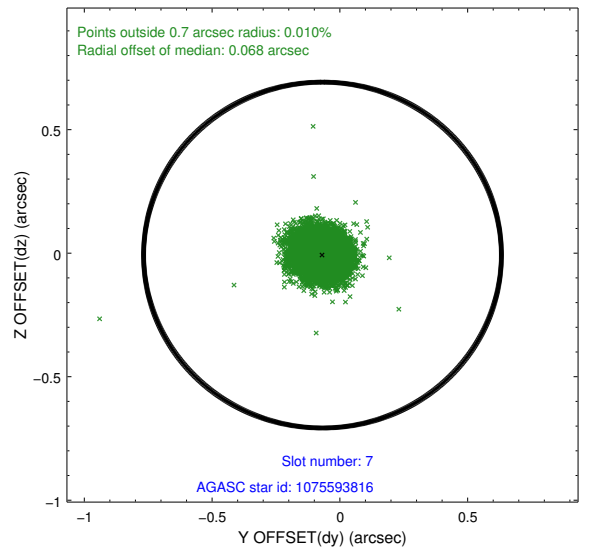
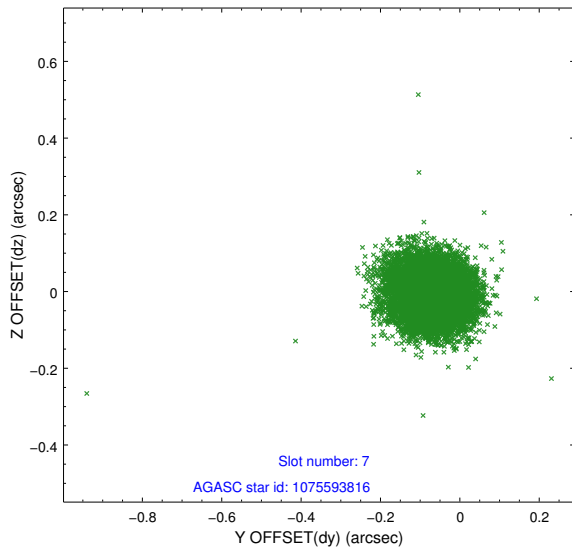
2.4.3 Slot 5



2.4.4 Slot 6

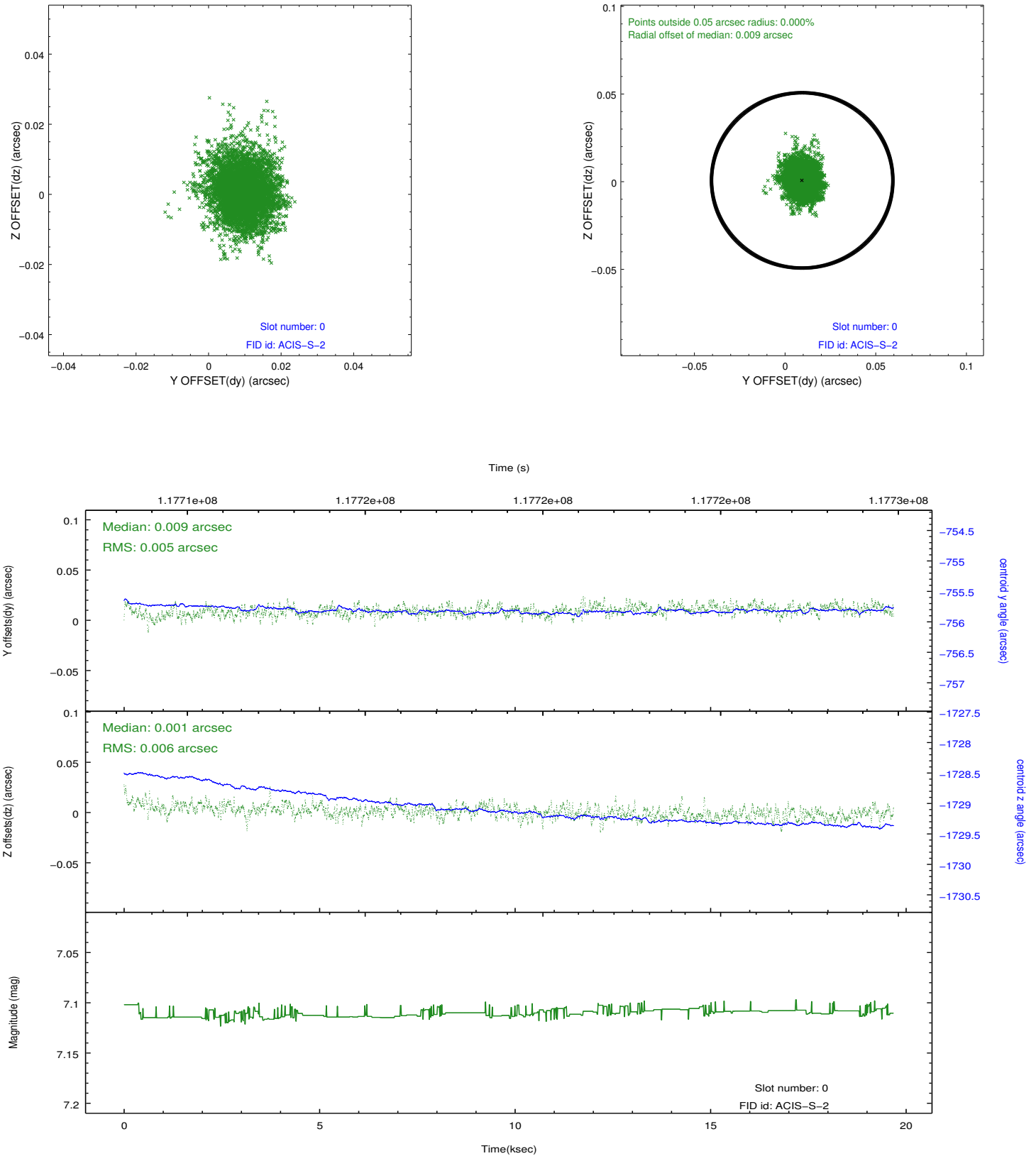


2.4.5 Slot 7

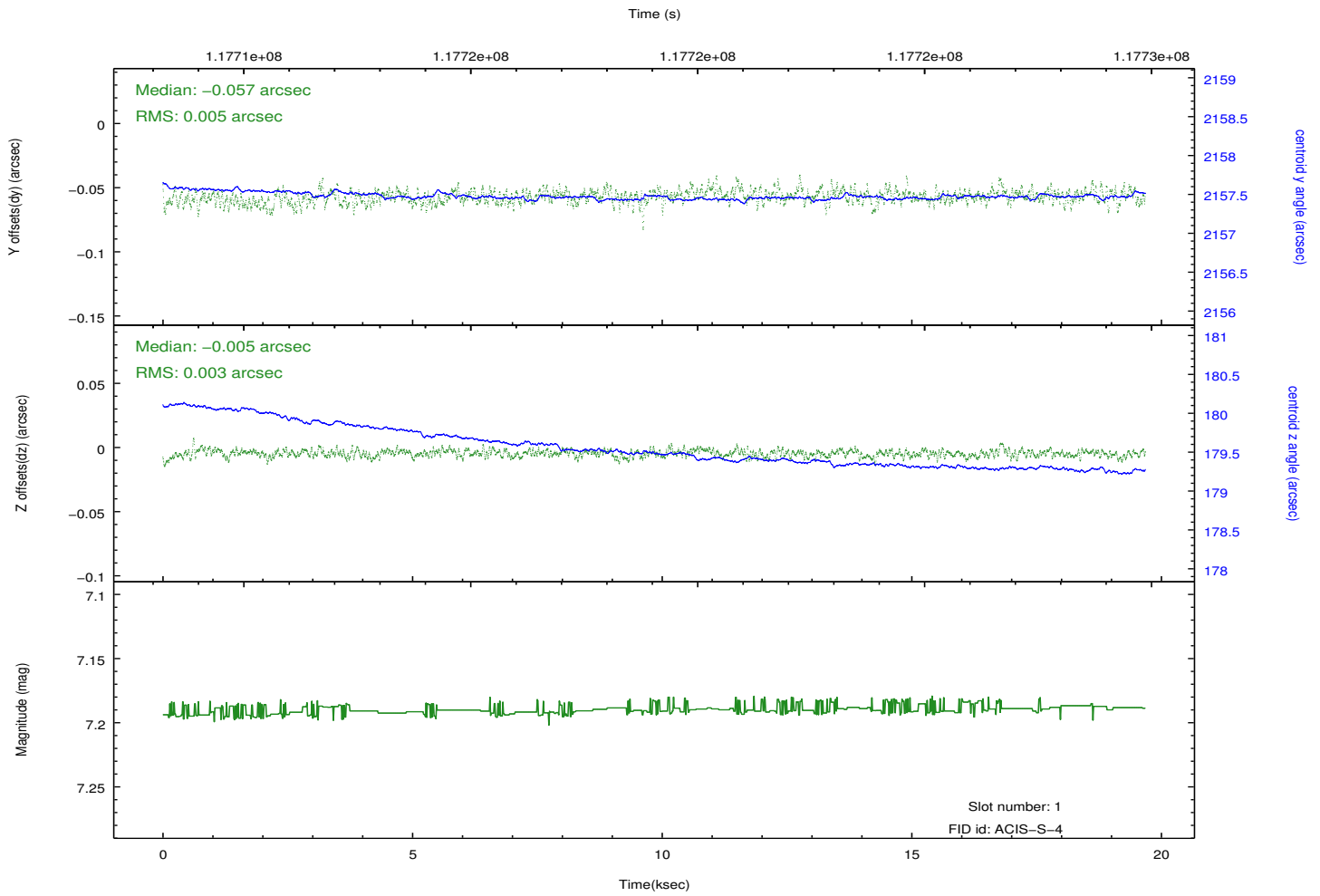
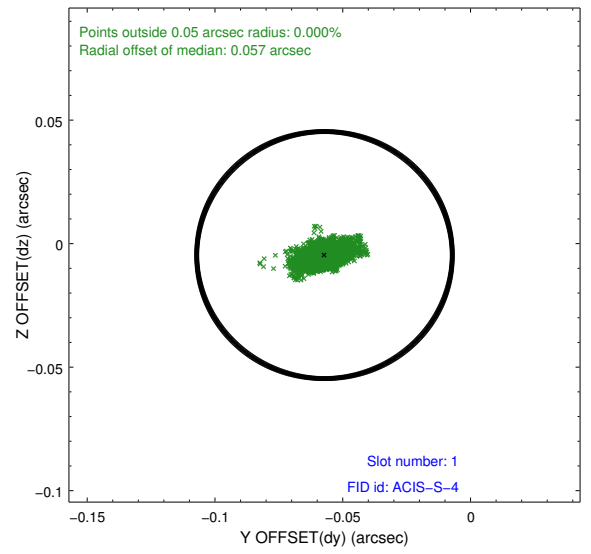
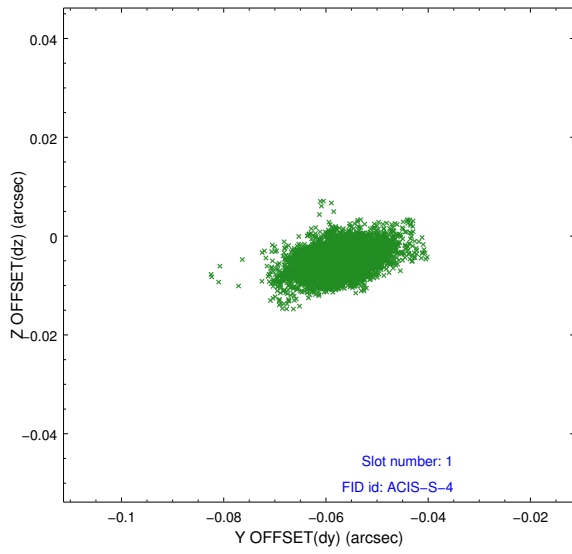


2.5 FID Slots

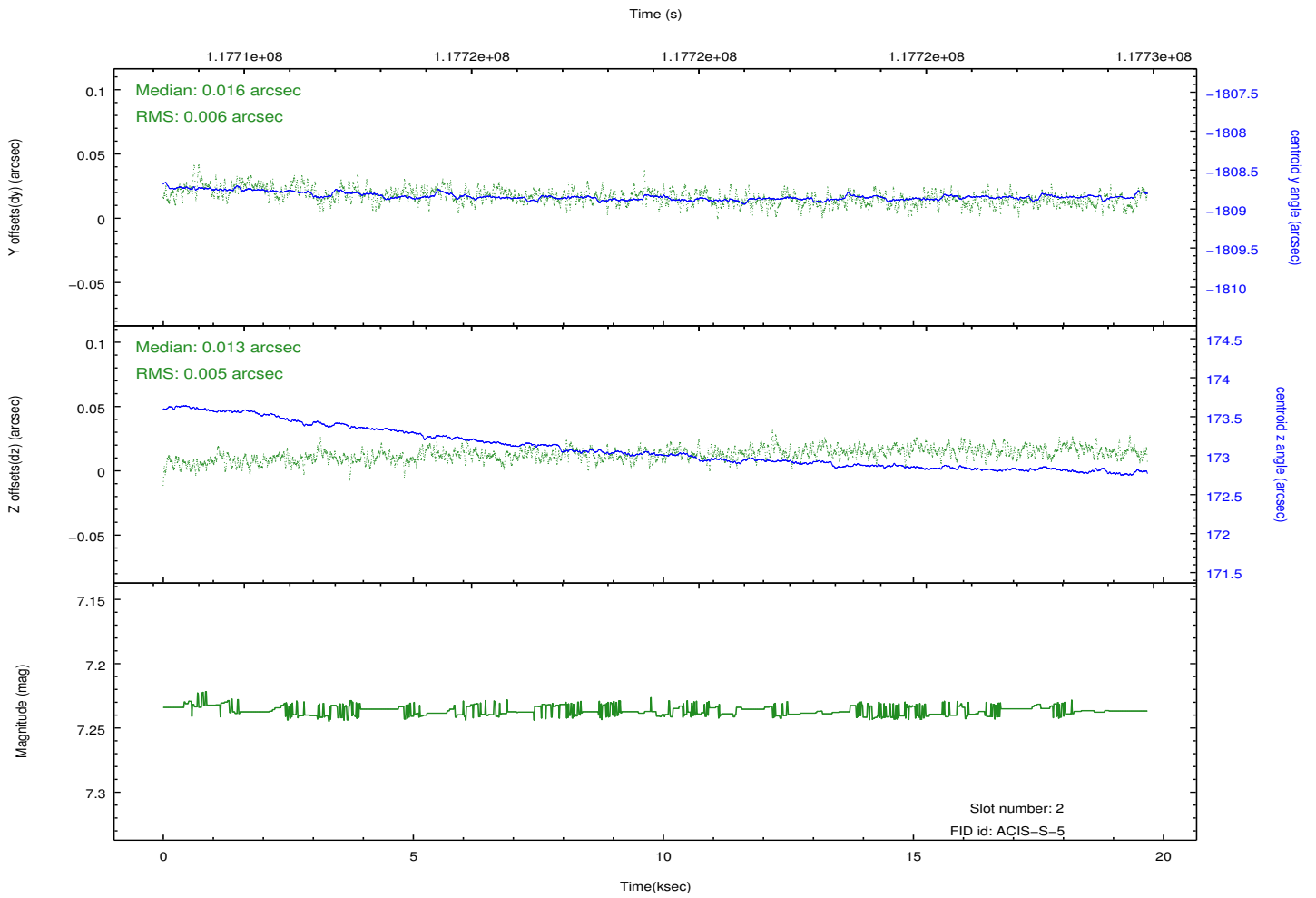
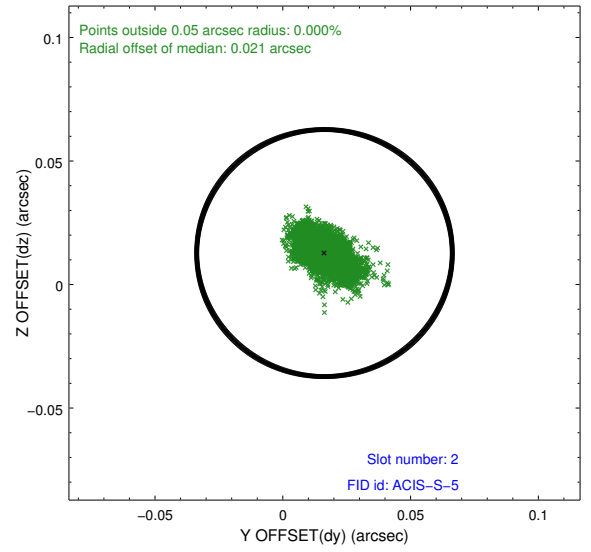
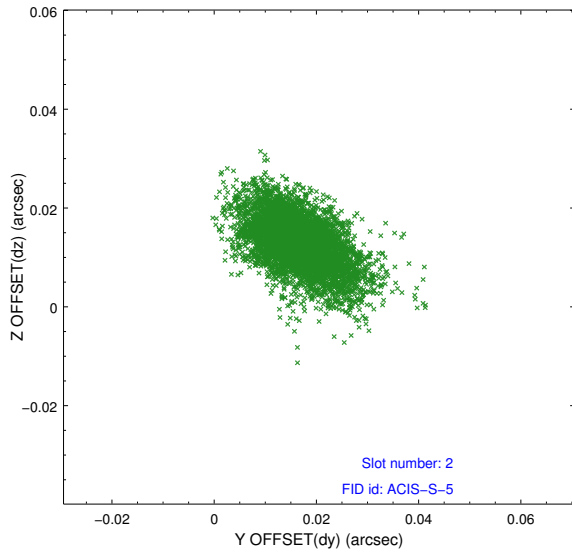
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

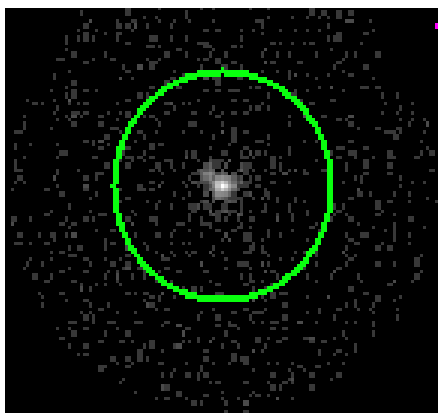


3 Gratings

3.1 HEG Arm



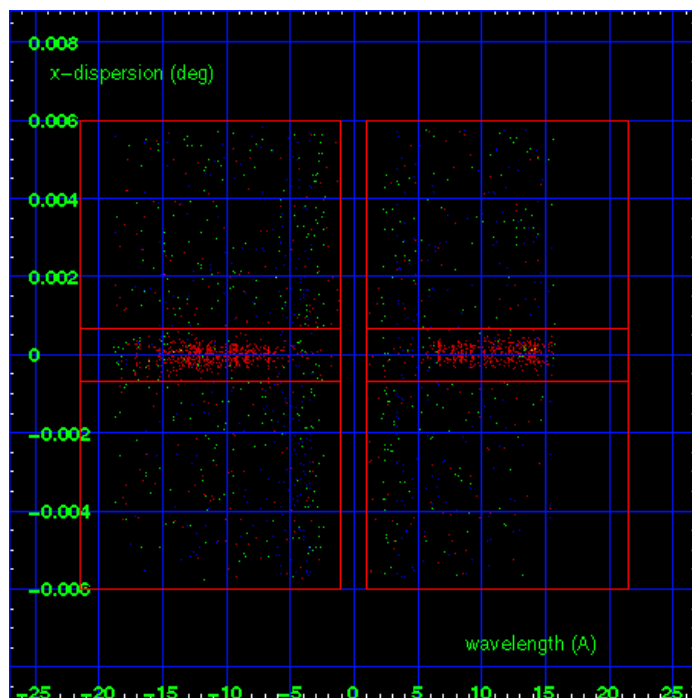
HEG Order Sort 123



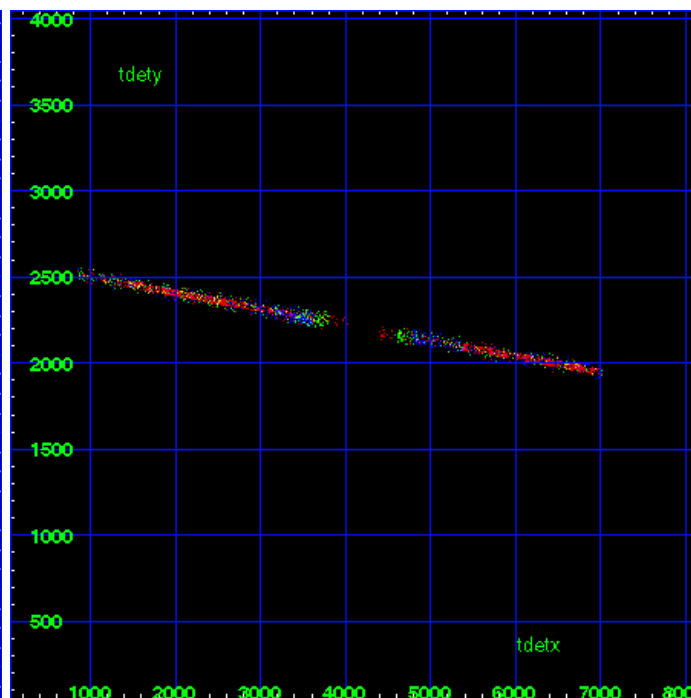
HEG Zero Order



HEG Order Sort ALL

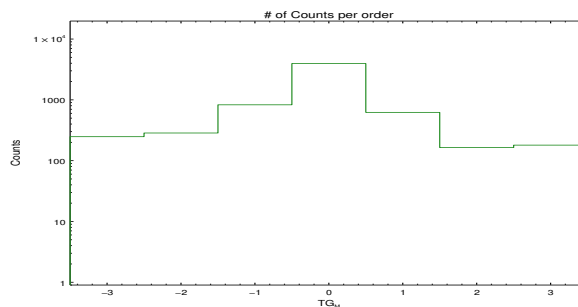


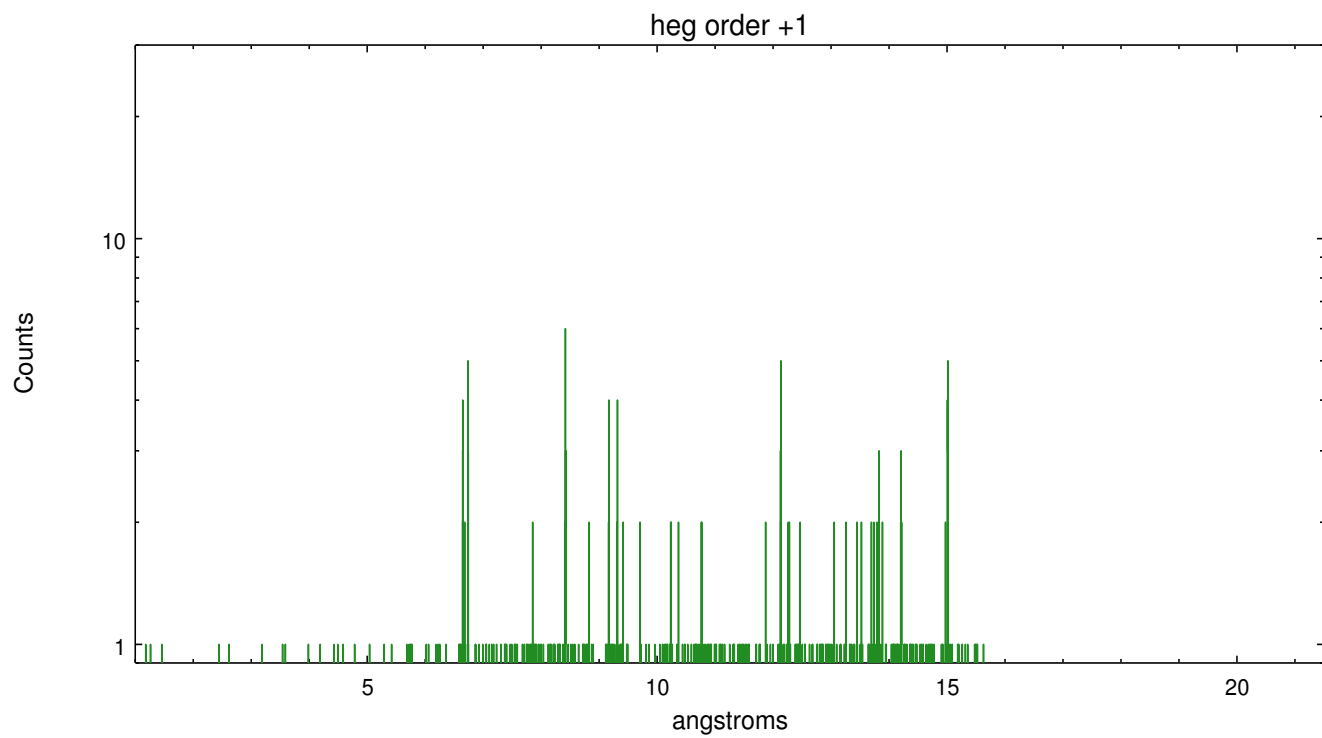
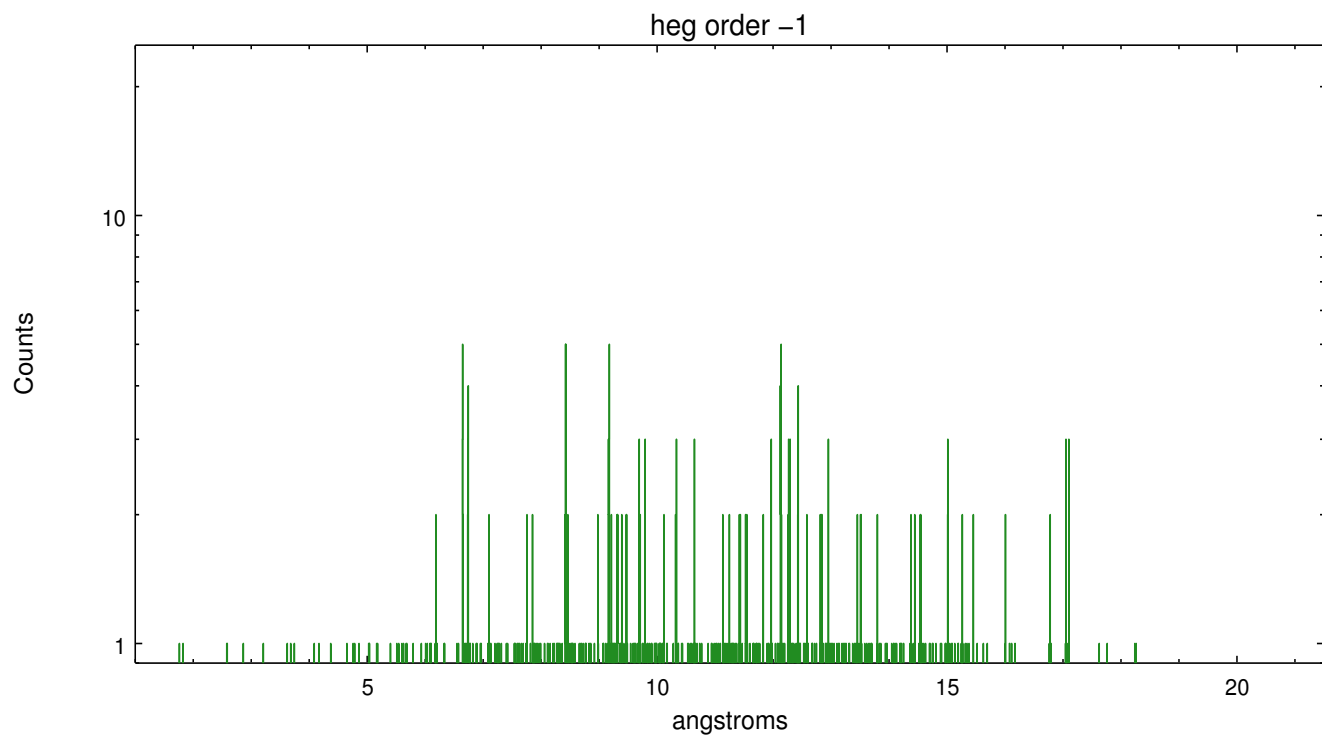
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	248	285	829	3954	622	164	180

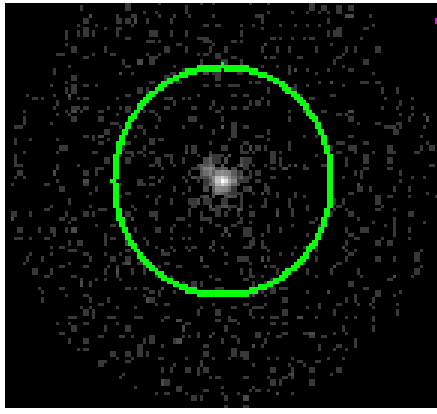




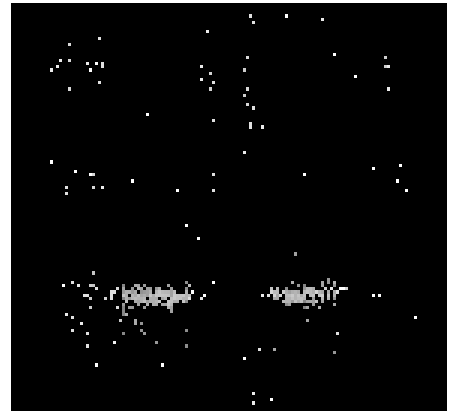
3.2 MEG Arm



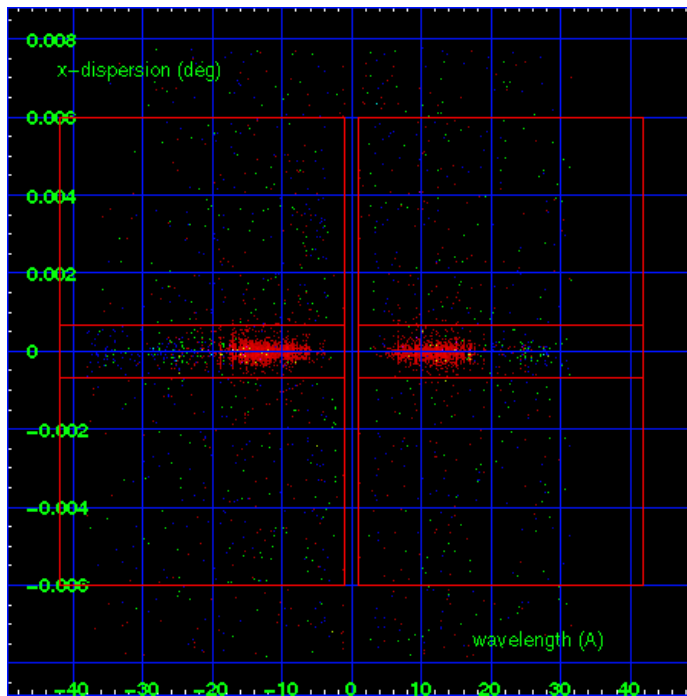
MEG Order Sort 123



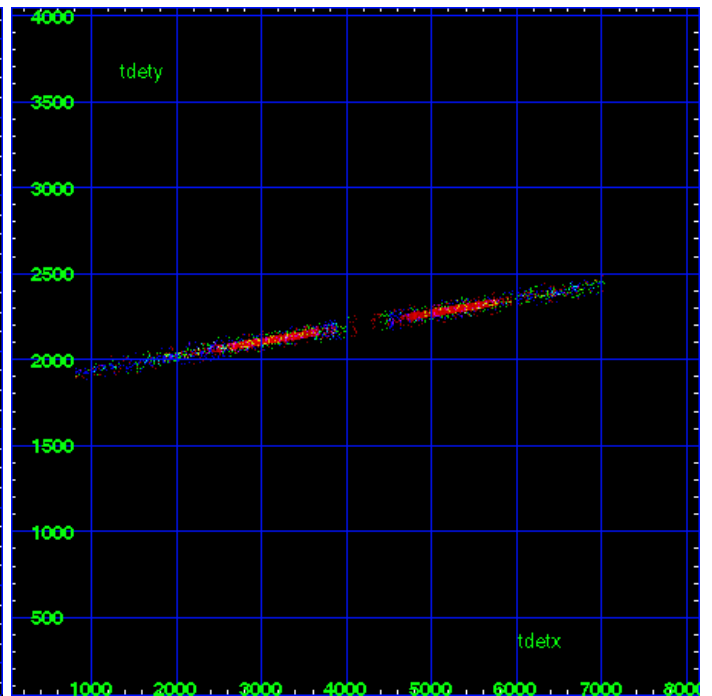
MEG Zero Order



MEG Order Sort ALL

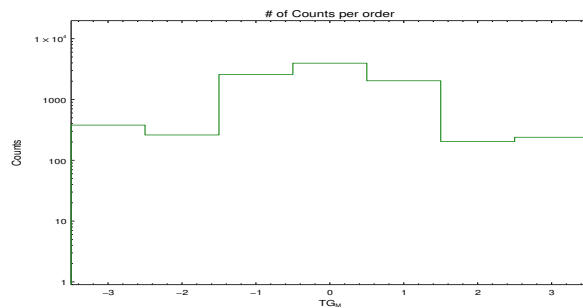


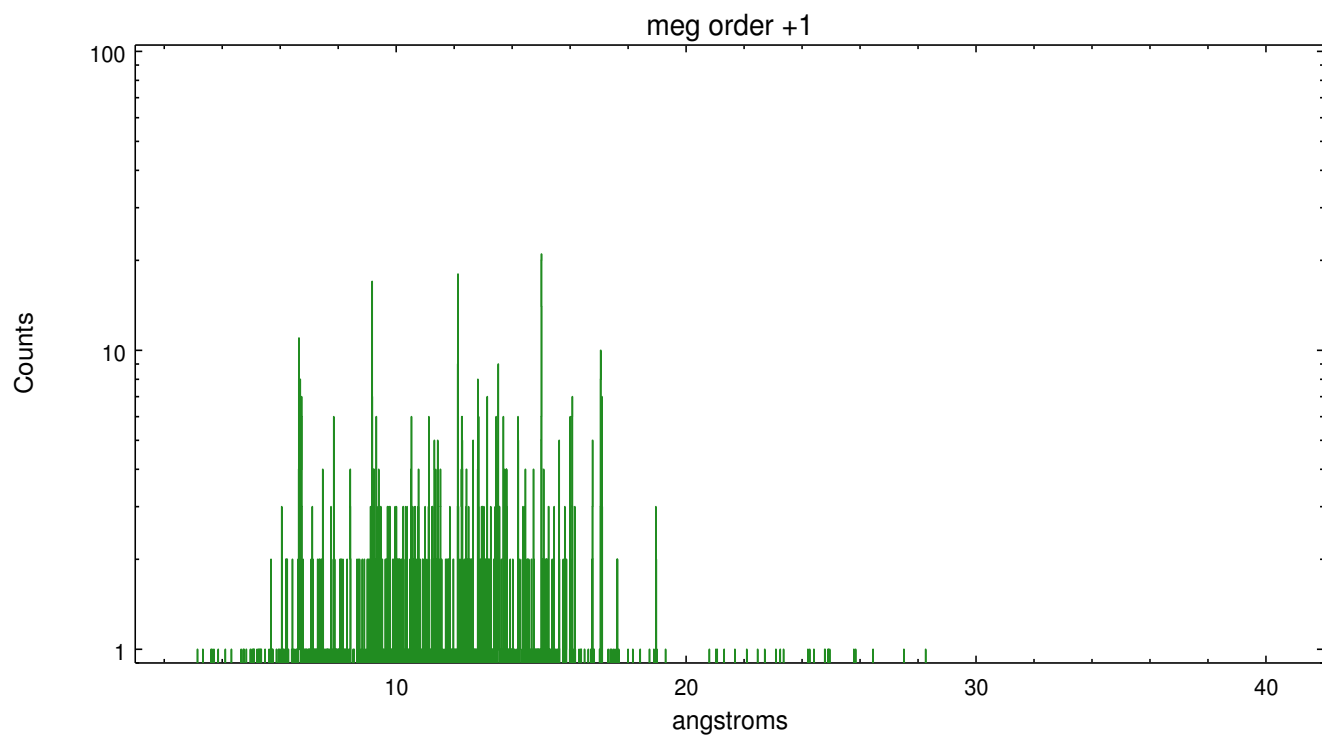
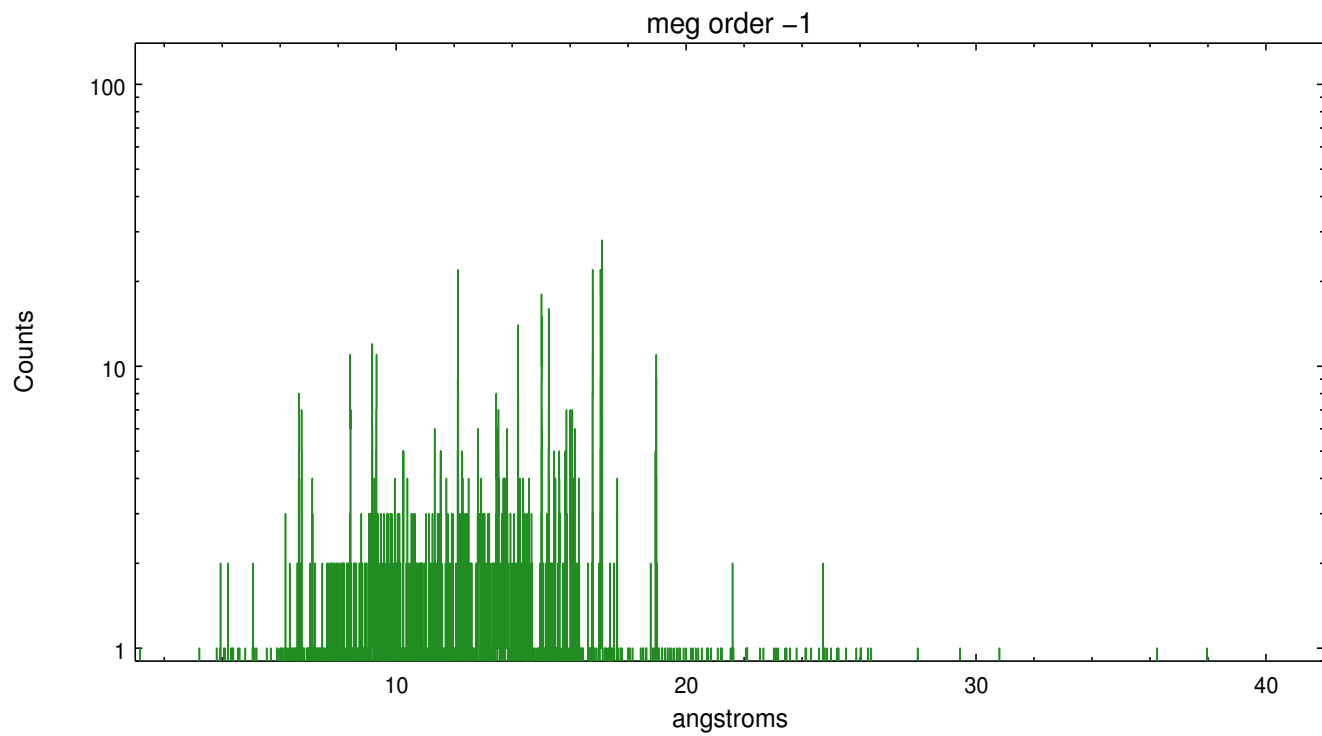
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	379	261	2584	3954	2033	204	239





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.916

A.2 Comments

High radiation environment caused safing of the ACIS instrument on Day 267 at 14:29:03 GMT. This observation was interrupted by the safing action. The high radiation environment was present and rising during the last half of this observation.

Charge time for this ObsId remains at previous value of 19.916 ks, although with the current processing the charge time would be 19.606 ks.