

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 4367 - L2 Version 001
Chandra X-Ray Center

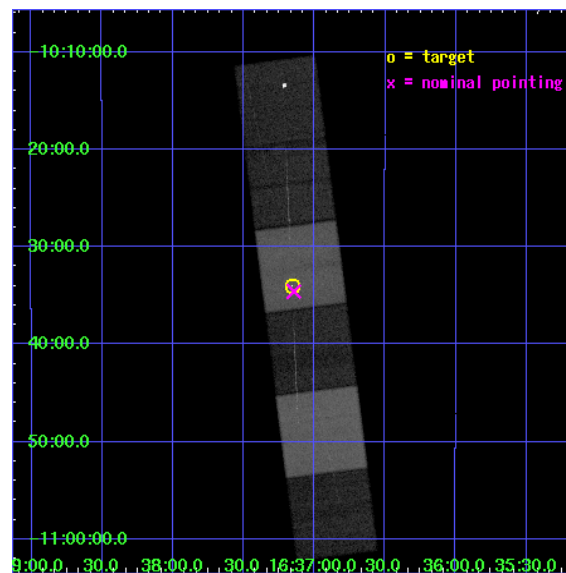
L2 Processing Date : Oct 13 2006

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1 Front

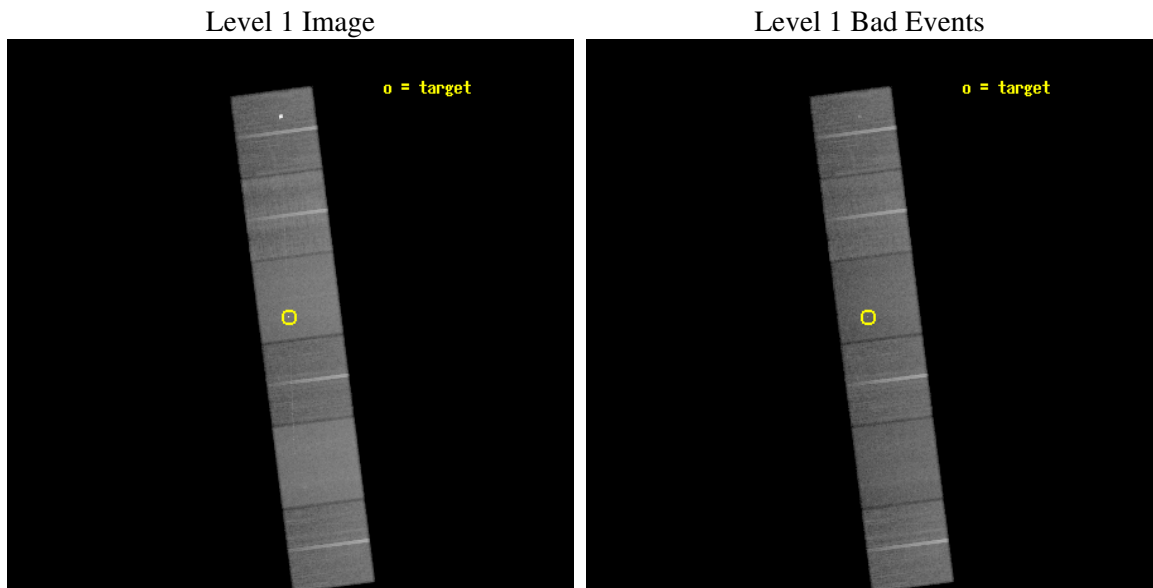
seq_num	200179
obs_id	4367
title	CHANDRA HETGS OBSERVATIONS OF THE RAPIDLY ROTATING OE STAR ZETA OPH
observer	Dr. Wayne Waldron
object	ZETA OPH
dtcycle	0
cycle	P
ra_targ	249.289167
dec_targ	-10.567222
ra_nom	249.28620103543
dec_nom	-10.57644736009
roll_nom	262.65407660861
revision	2
ontime	48956.799817622
livetime	48336.879340085
ontime4	48956.799817622
ontime5	48956.799817622
ontime6	48953.558857352
ontime7	48956.799817622
ontime8	48950.317847282
ontime9	48953.558857352
l2events	472917



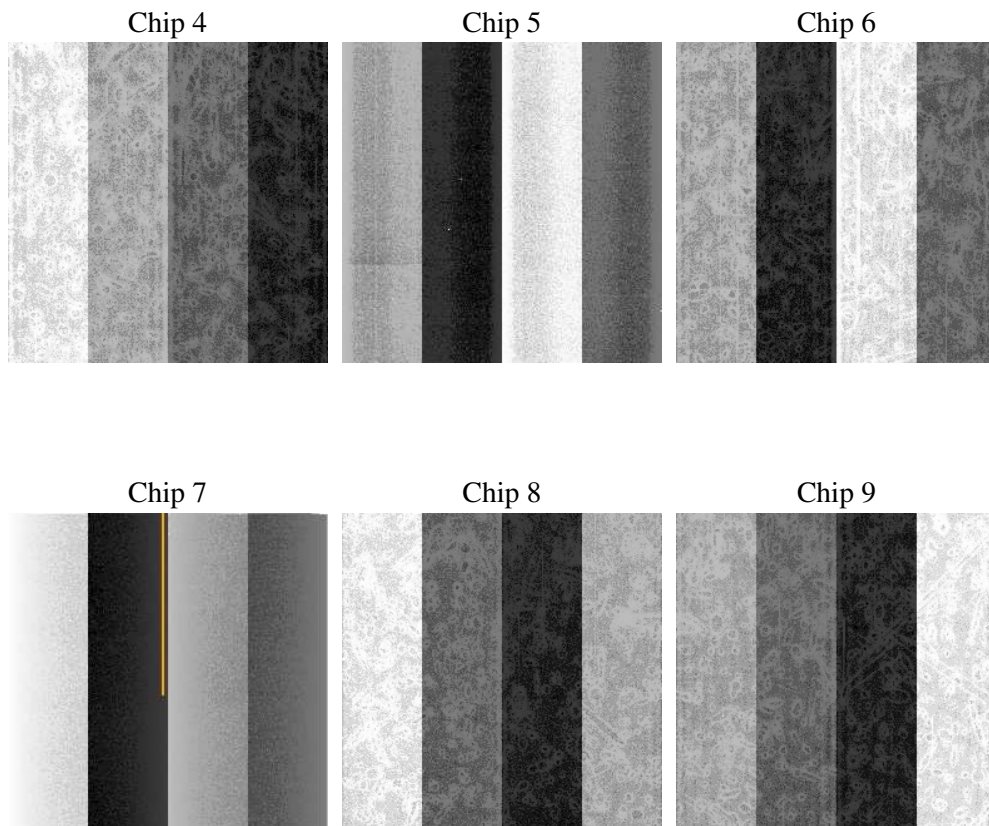
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-10-02T23:06:52
revision	2

sched_exp_time	49000.000000
ontime	48961.784941494
ontime4	48961.784911543
ontime5	48961.784941494
ontime6	48958.543951273
ontime7	48961.784941494
ontime8	48955.302941203
ontime9	48958.543981224
l1events	2171595

2.1.4 Events

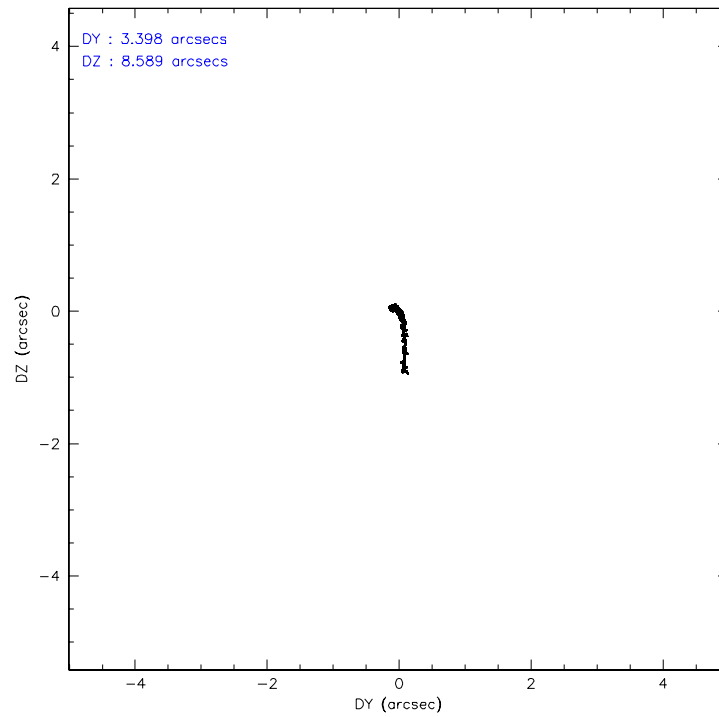
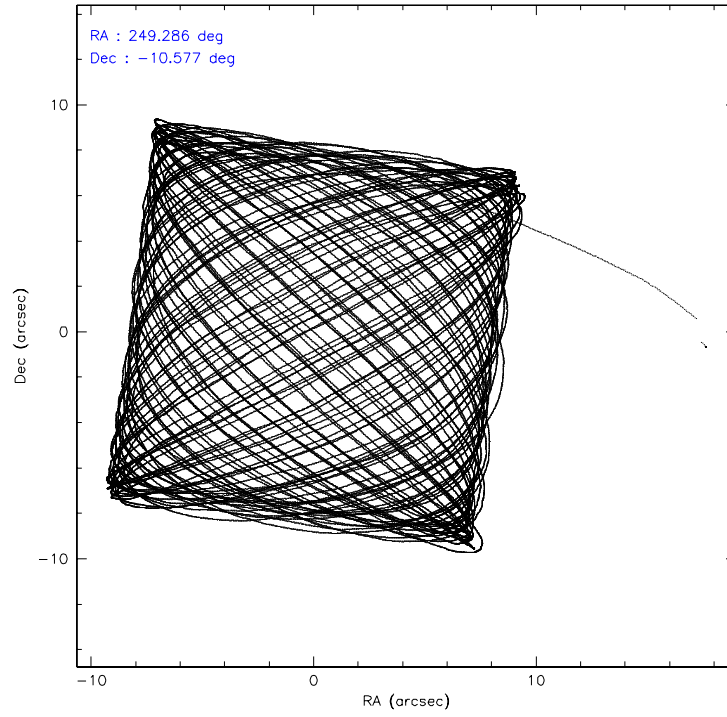
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	336115	424815	304943	398024	386547	321151
rejected events	299693	243148	269378	245795	306506	266897
rejected %	89%	57%	88%	61%	79%	83%

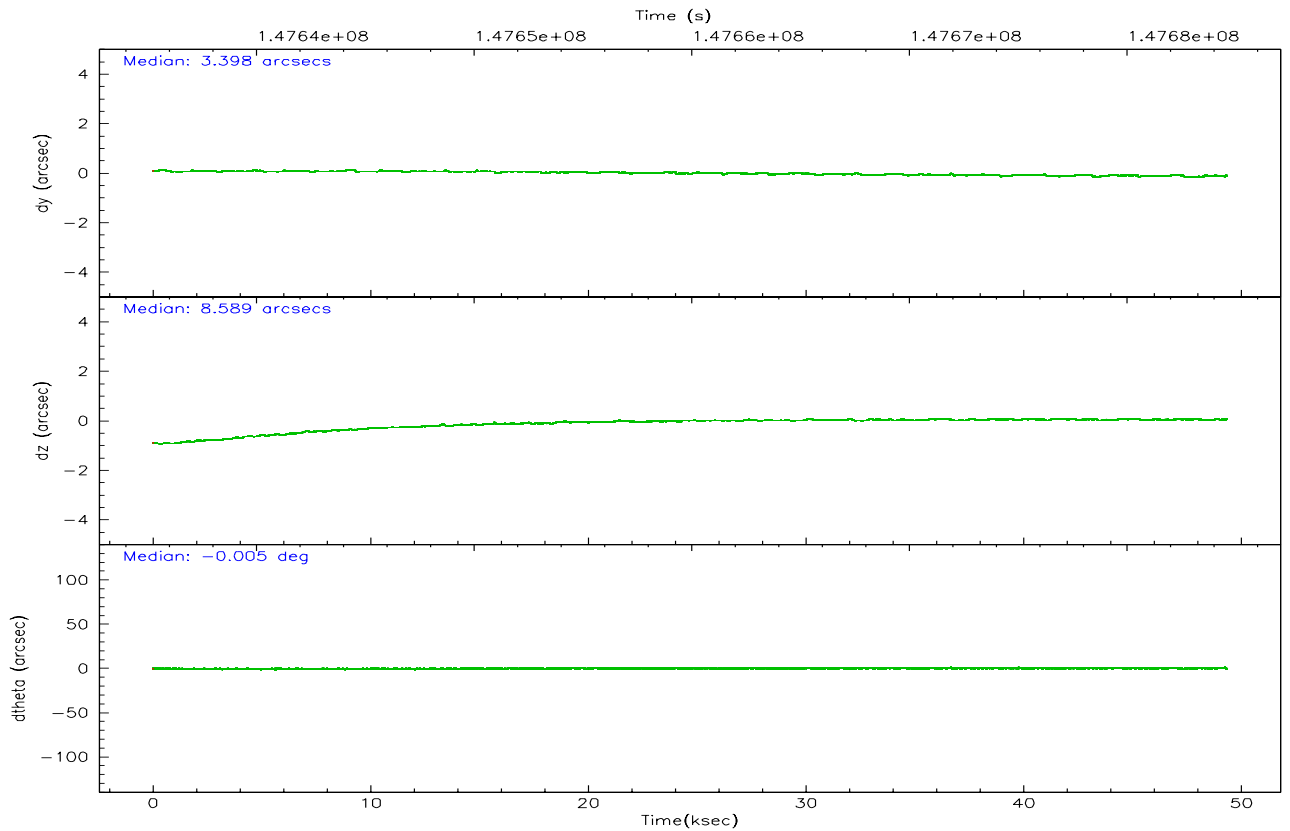
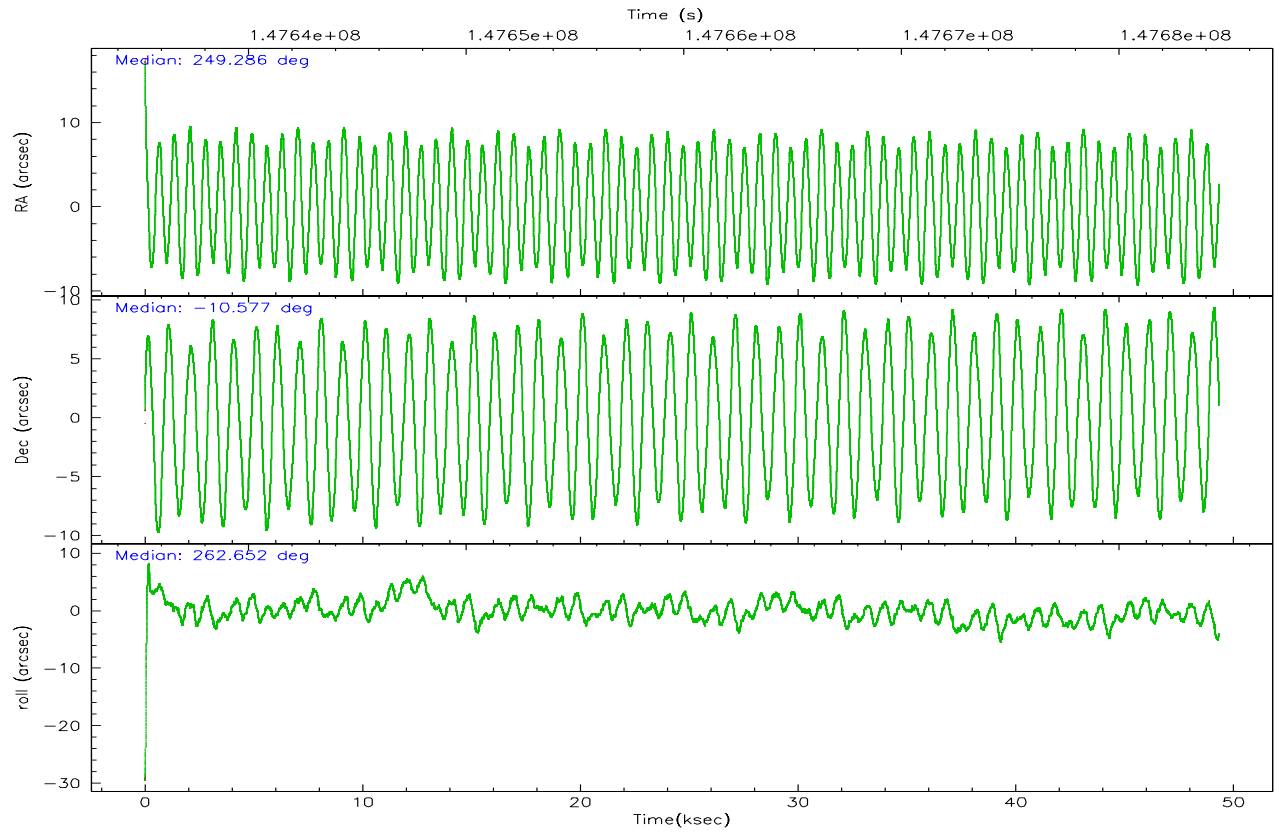
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	15920	7081	14404	9033	25896	33042
	4%	1%	4%	2%	6%	10%
grade 1 events	259	311	152	245	249	334
	0%	0%	0%	0%	0%	0%
grade 2 events	7411	57317	7238	37251	16899	6982
	2%	13%	2%	9%	4%	2%
grade 3 events	3736	4237	3390	7830	8585	3684
	1%	0%	1%	1%	2%	1%
grade 4 events	3605	3924	3482	7678	8005	3588
	1%	0%	1%	1%	2%	1%
grade 5 events	12762	21220	13478	26146	17740	14465
	3%	4%	4%	6%	4%	4%
grade 6 events	5754	109122	7053	90448	20678	6961
	1%	25%	2%	22%	5%	2%
grade 7 events	286668	221603	255746	219393	288495	252095
	85%	52%	83%	55%	74%	78%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	249.275207	249.2862010354303	Subarray requested	NONE	NONE
Pointing Dec	-10.551465	-10.57644736009012	Alternating exposures requested	N	N
Pointing Roll	262.495443	262.6540766086055	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-187.132523	-187.1228876879999			
SIM translation stage offset (mm)	-3	-3.009634895007935			
Observation start time	147635610.184000	147634577.09623			
Observation start date	2002-09-05T17:52:26	2002-09-05T17:36:17			
Observation end time	147684610.184000	147685173.66082			
Observation end date	2002-09-06T07:29:06	2002-09-06T07:39:33			
Read mode	TIMED	TIMED			

2.3 Aspect



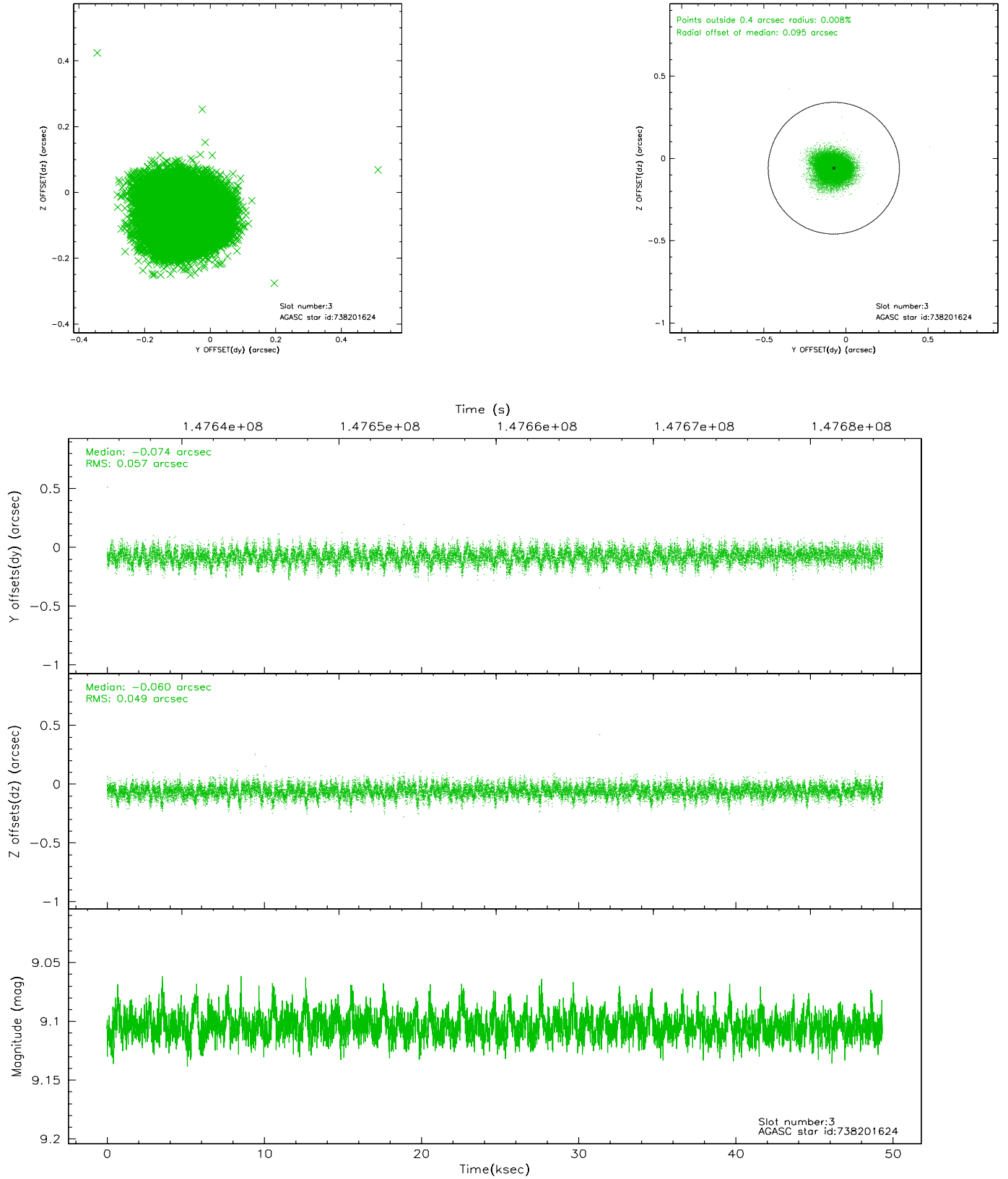


Slot Statistics

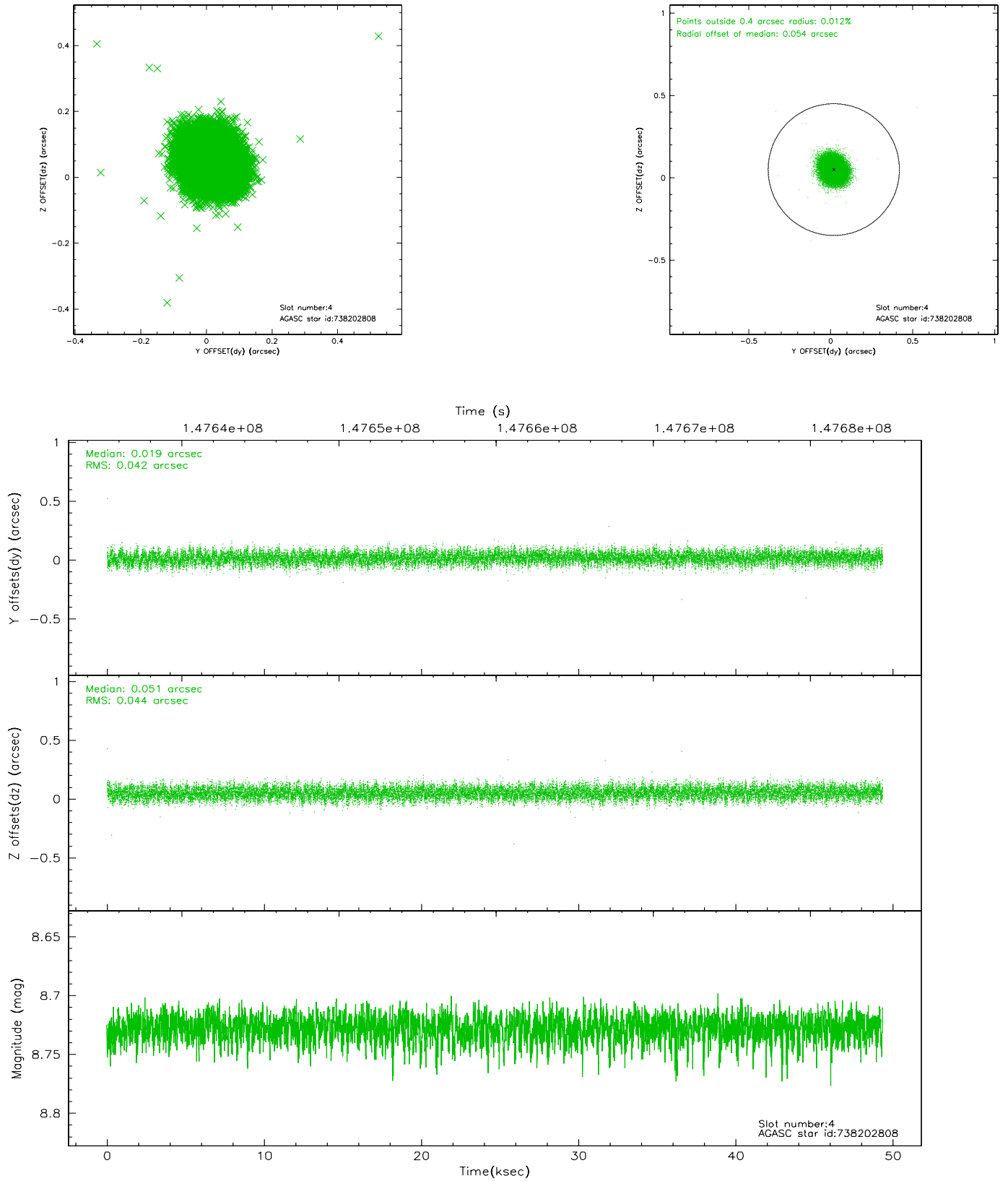
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	12033	-0.048	-0.004	0.008	0.014	0.000000	0.000000	-755.85	-1791.81
1	FID	ACIS-S-4	7.20	12032	-0.003	0.024	0.010	0.017	0.000000	0.000000	2157.44	116.76
2	FID	ACIS-S-5	7.23	12035	0.019	-0.012	0.008	0.013	0.000000	0.000000	-1808.68	110.30
3	GUIDE	738201624	9.10	24061	-0.074	-0.060	0.079	0.132	249.568343	-10.190982	-1422.41	860.92
4	GUIDE	738202808	8.73	24062	0.019	0.051	0.066	0.104	249.656095	-10.848137	883.23	1475.57
5	GUIDE	738205328	9.26	24060	0.153	-0.065	0.087	0.140	249.444382	-11.182115	2172.66	889.66
6	GUIDE	738203736	7.57	24069	-0.133	0.036	0.058	0.092	249.746198	-10.264513	-1241.39	1520.05
7	GUIDE	738202792	9.87	24042	0.036	0.038	0.108	0.173	249.110436	-10.037946	-1756.95	-819.76

2.4 Star Slots

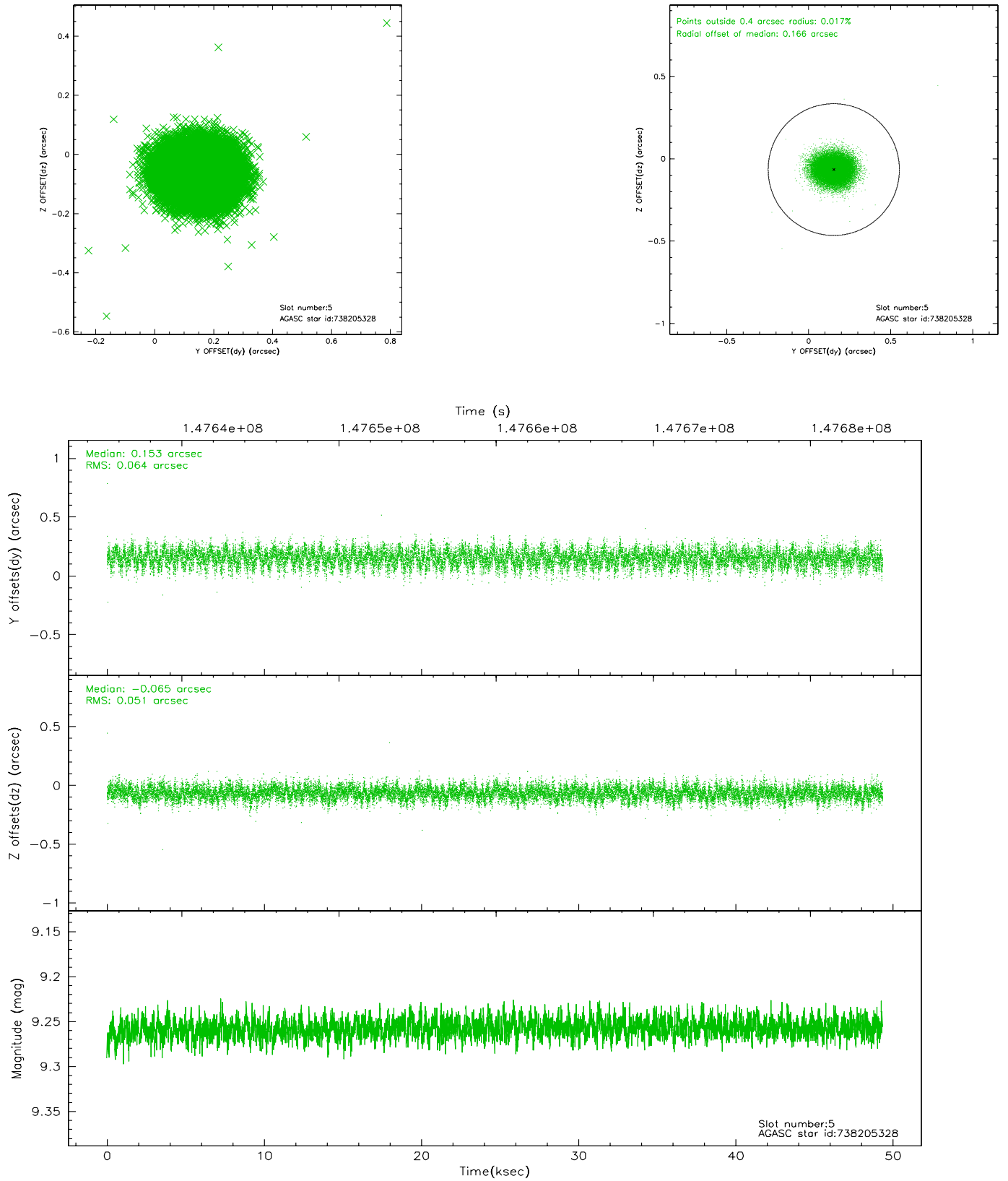
2.4.1 Slot 3



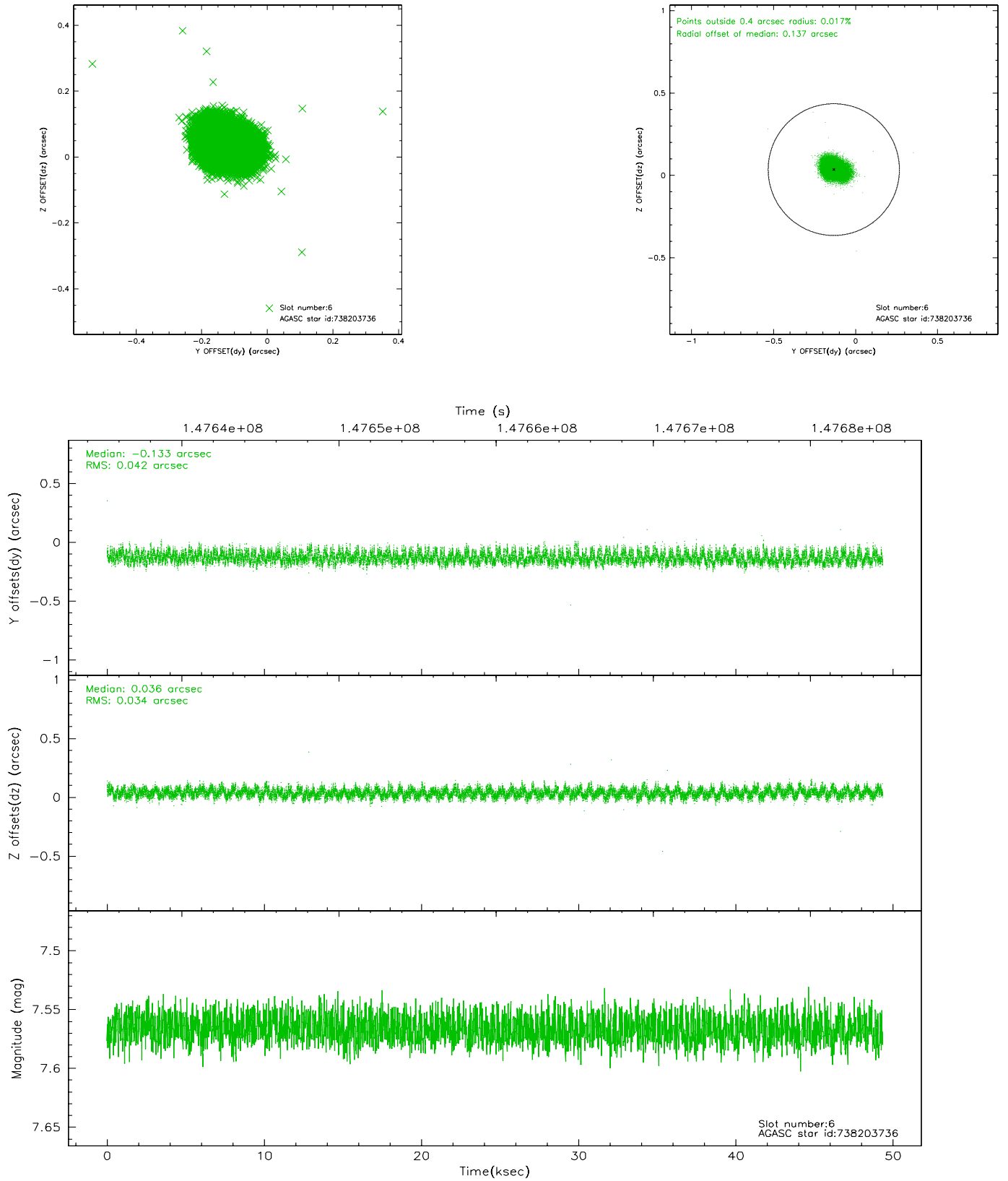
2.4.2 Slot 4



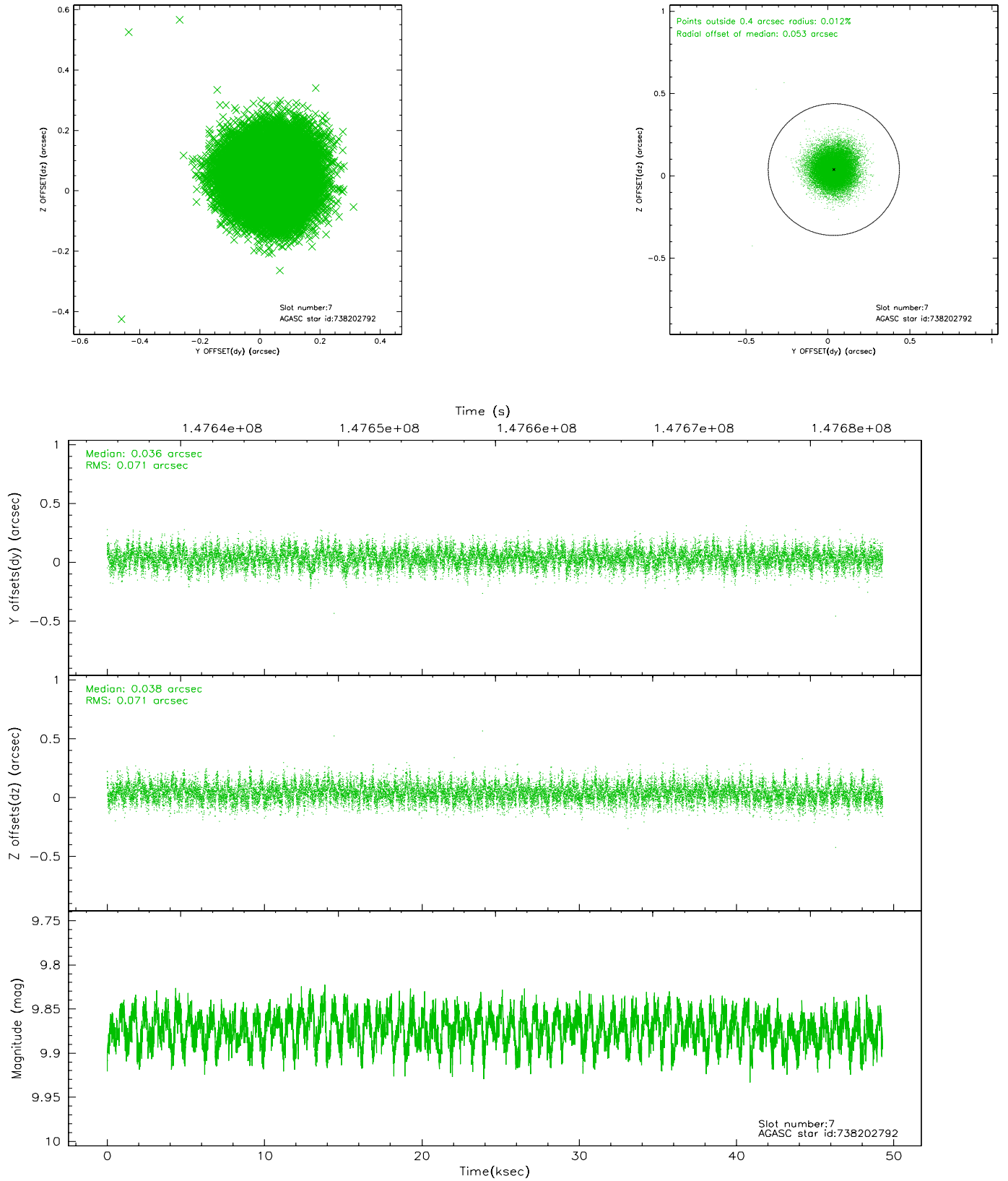
2.4.3 Slot 5



2.4.4 Slot 6

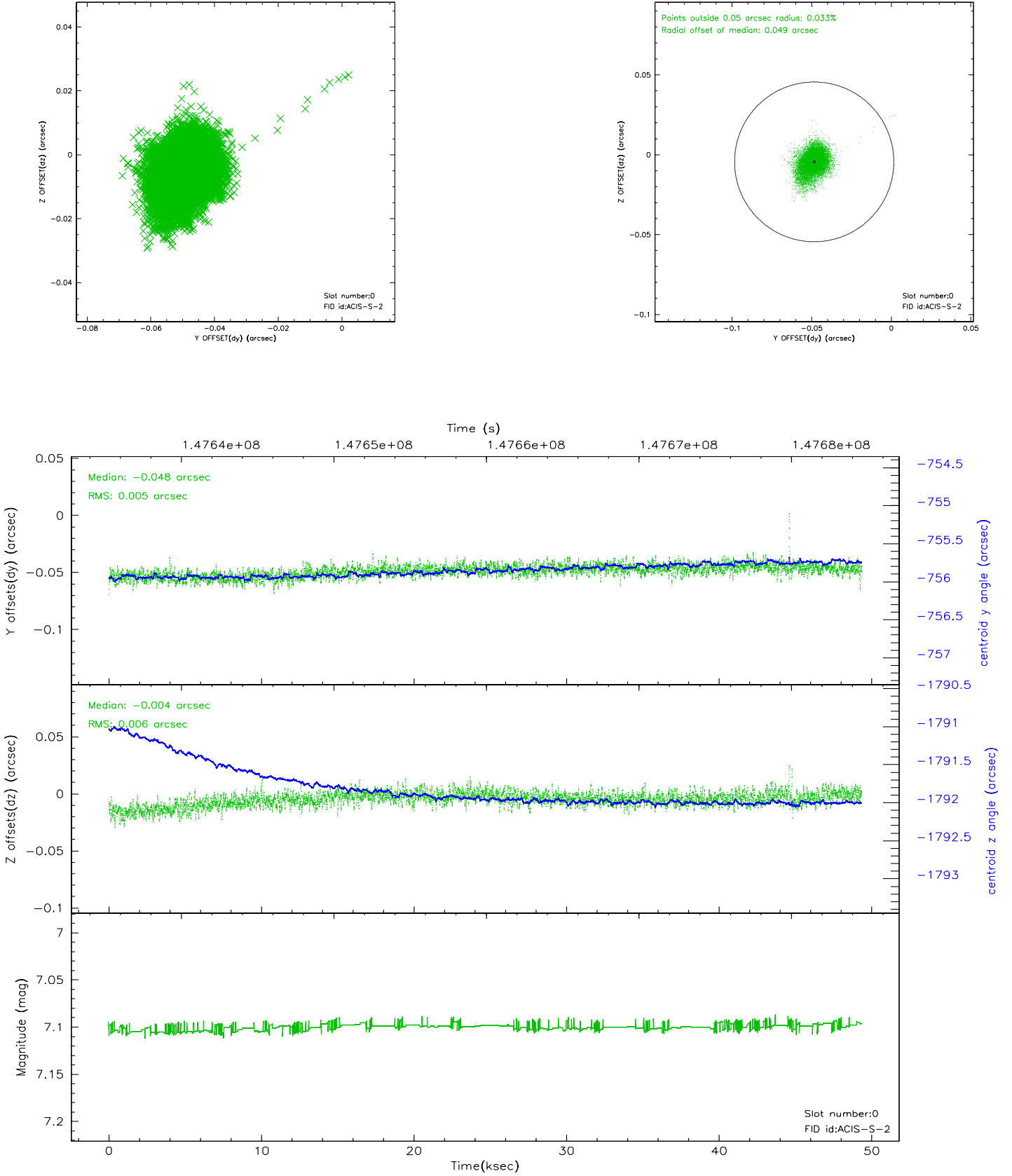


2.4.5 Slot 7

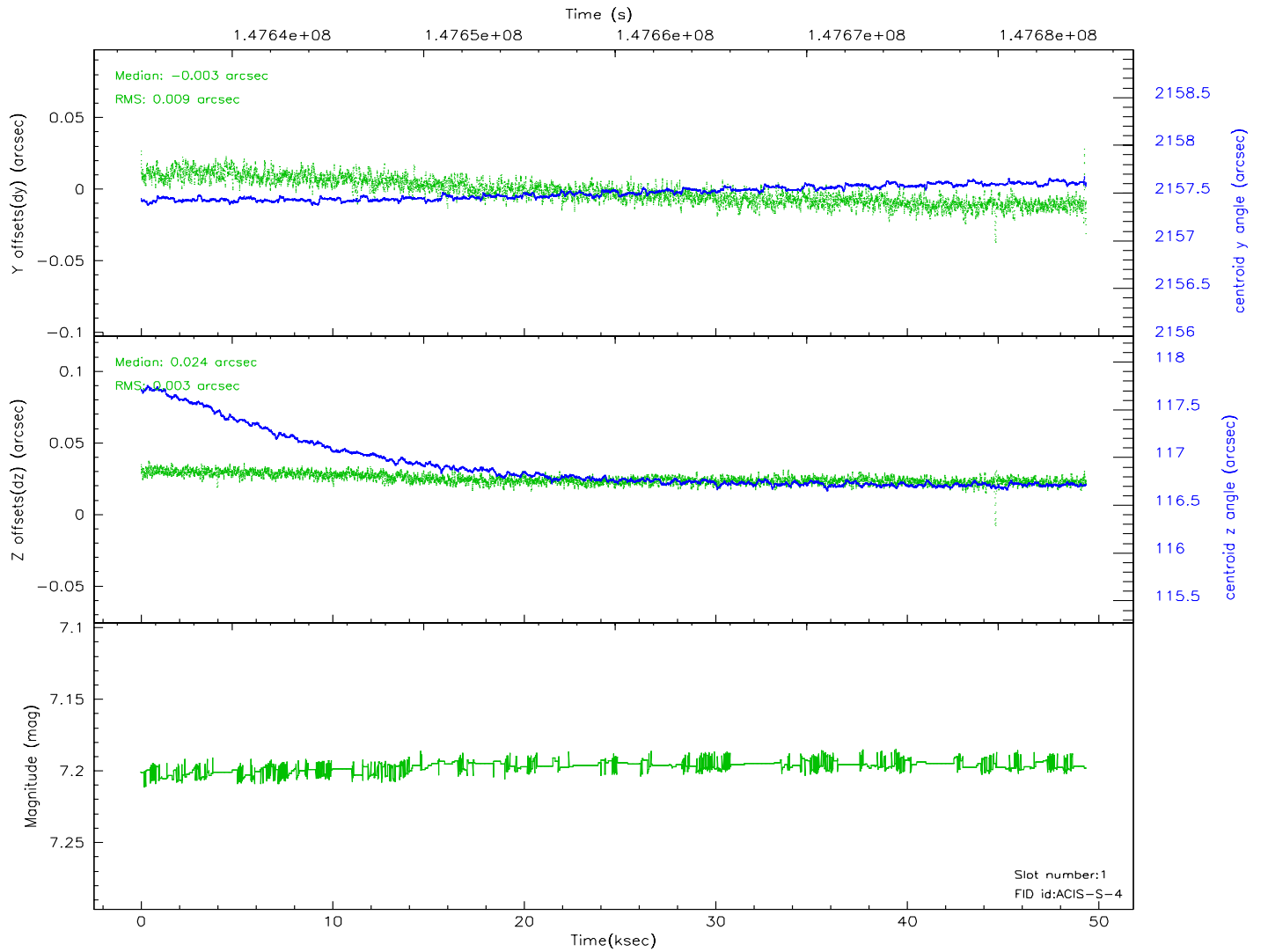
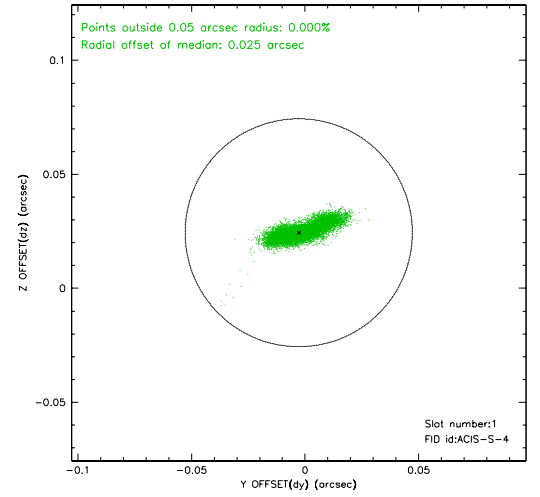
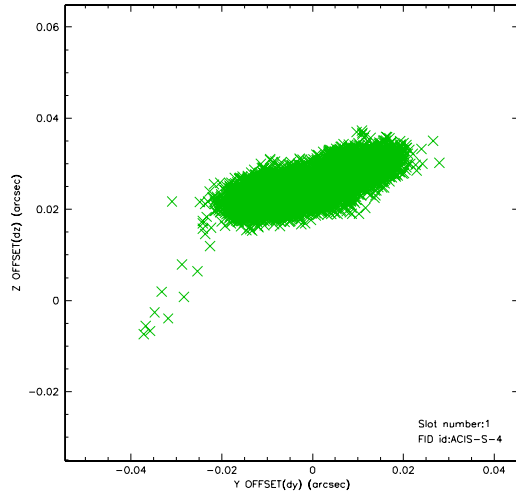


2.5 FID Slots

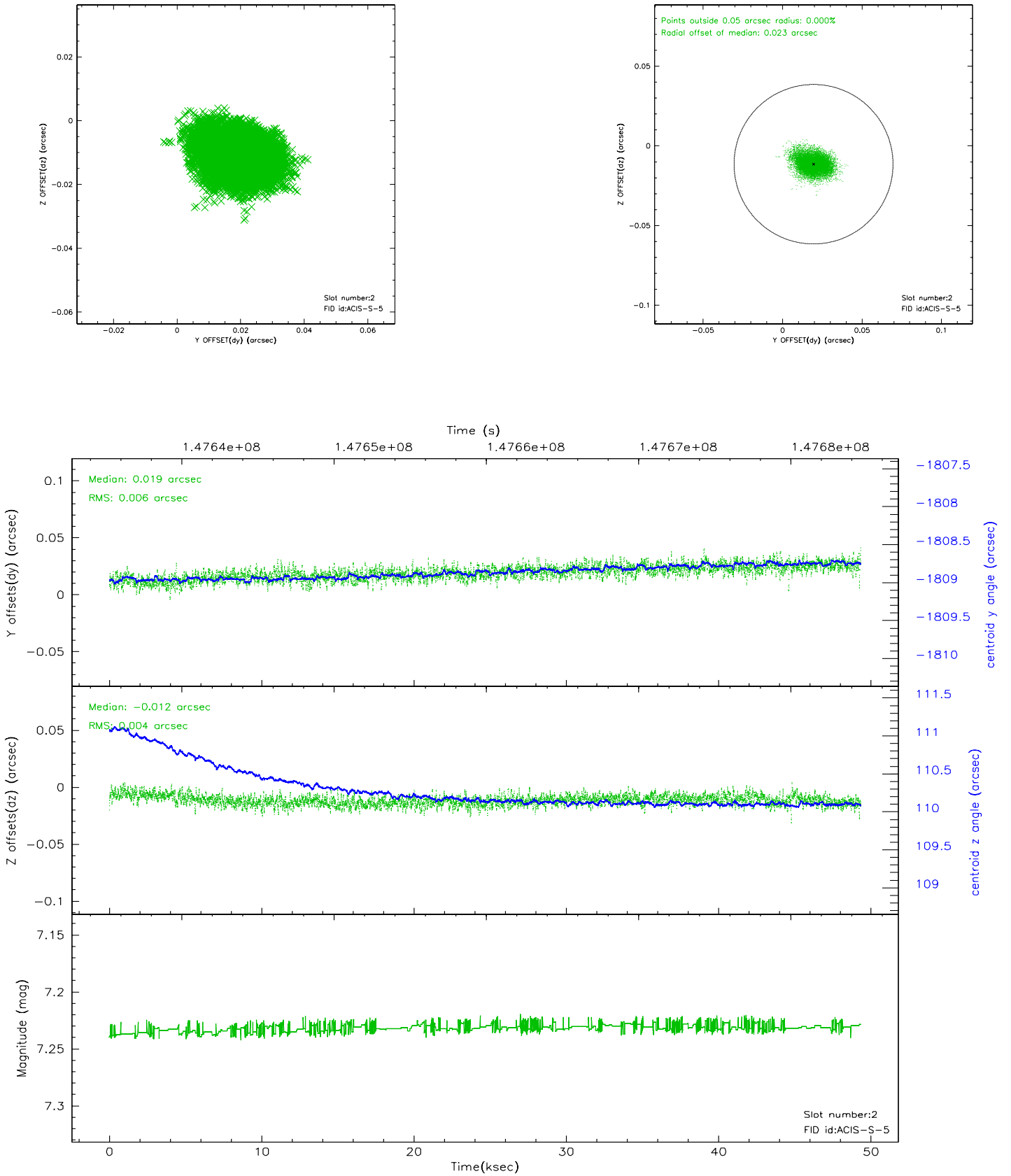
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

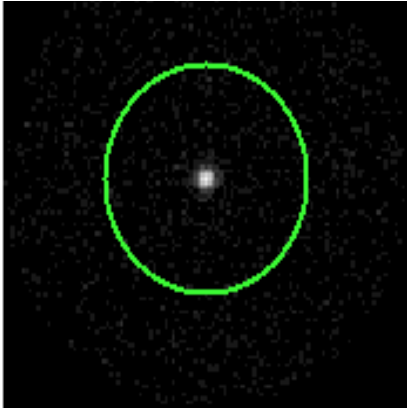


3 Gratings

3.1 HEG Arm



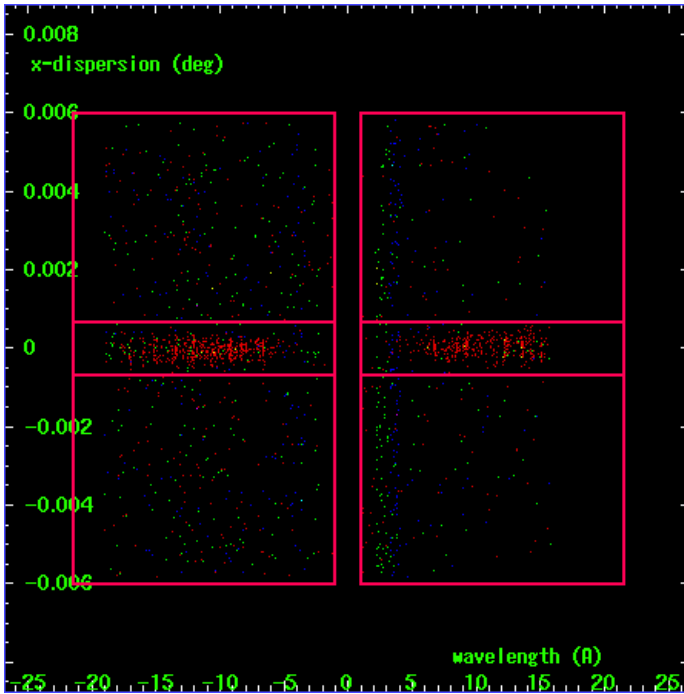
HEG Order Sort 123



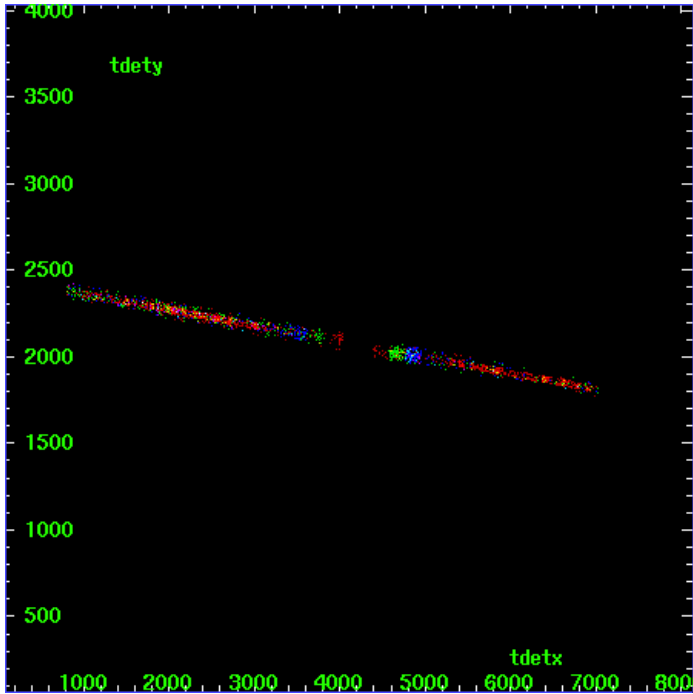
HEG Zero Order



HEG Order Sort ALL

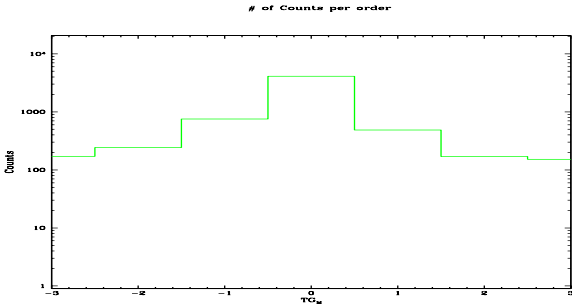


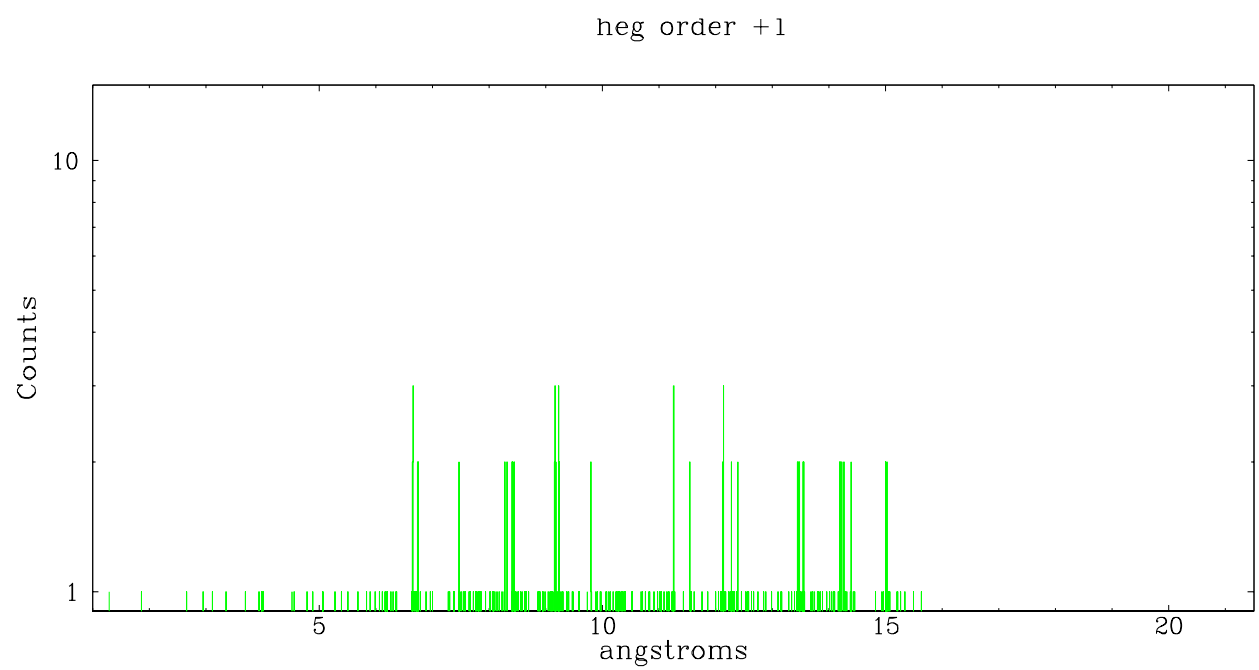
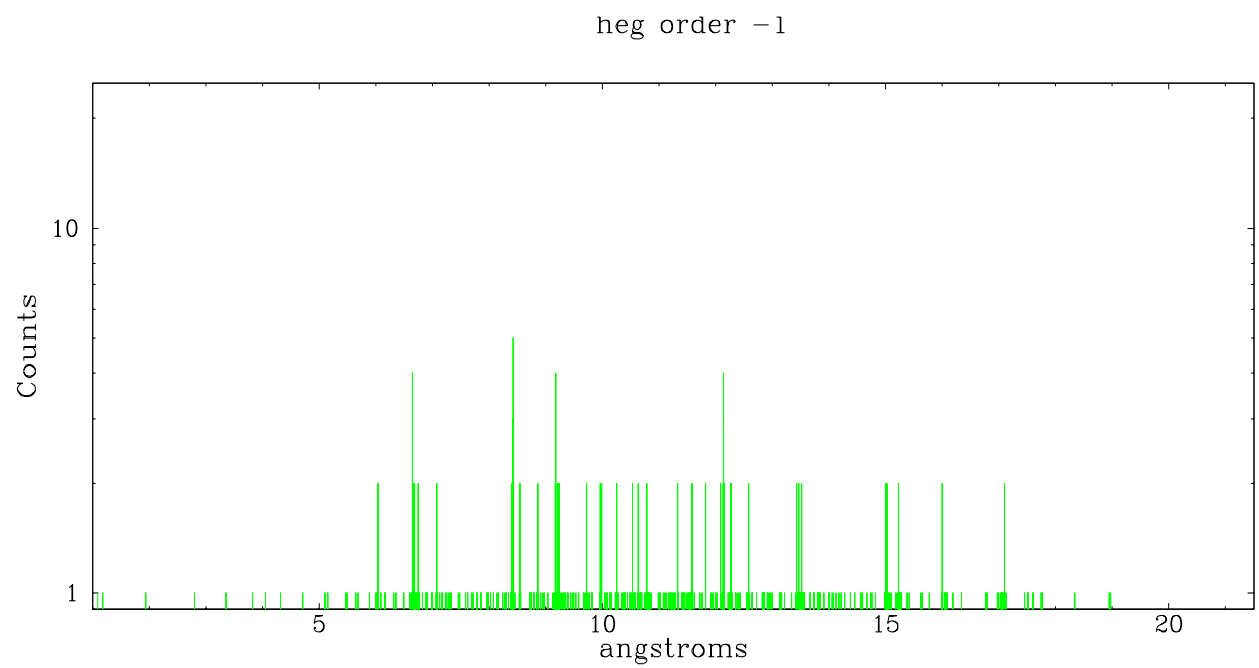
Spot Image HEG



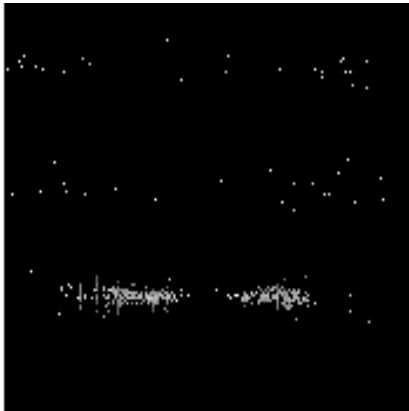
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	171	242	755	4114	485	170	152





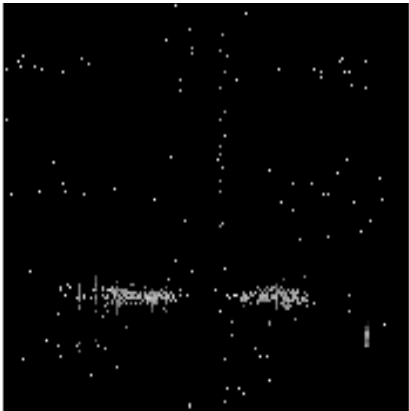
3.2 MEG Arm



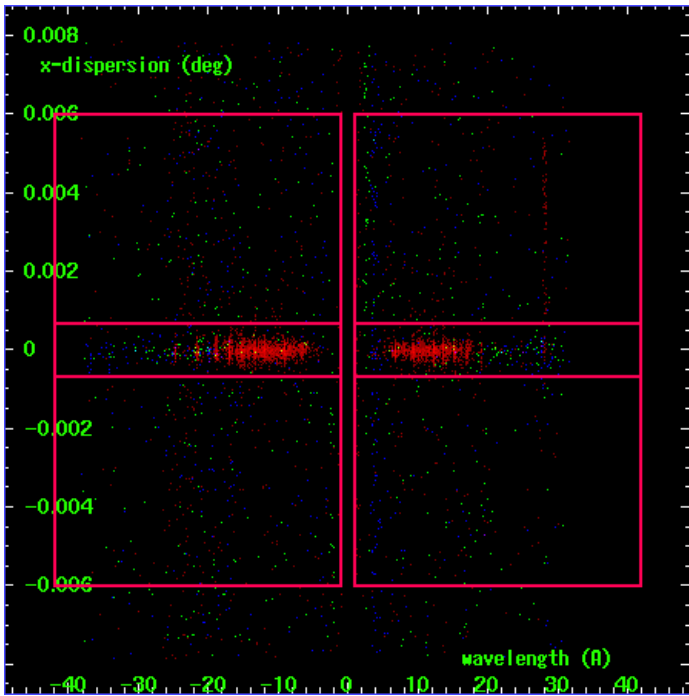
MEG Order Sort 123



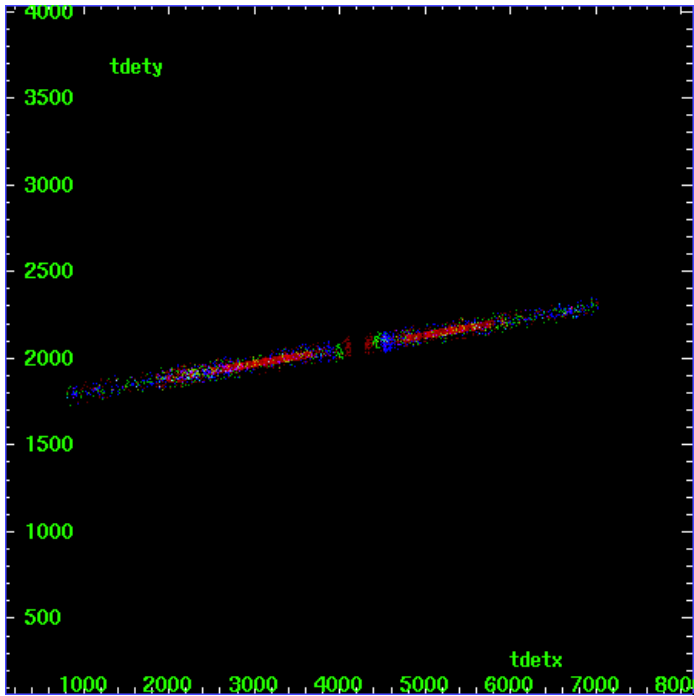
MEG Zero Order



MEG Order Sort ALL

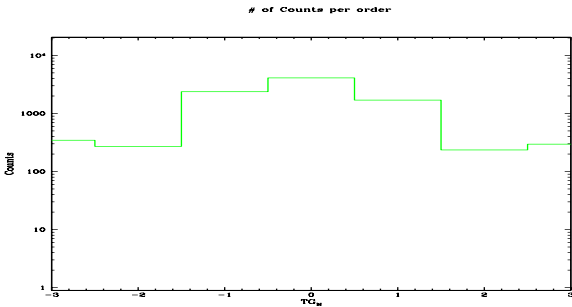


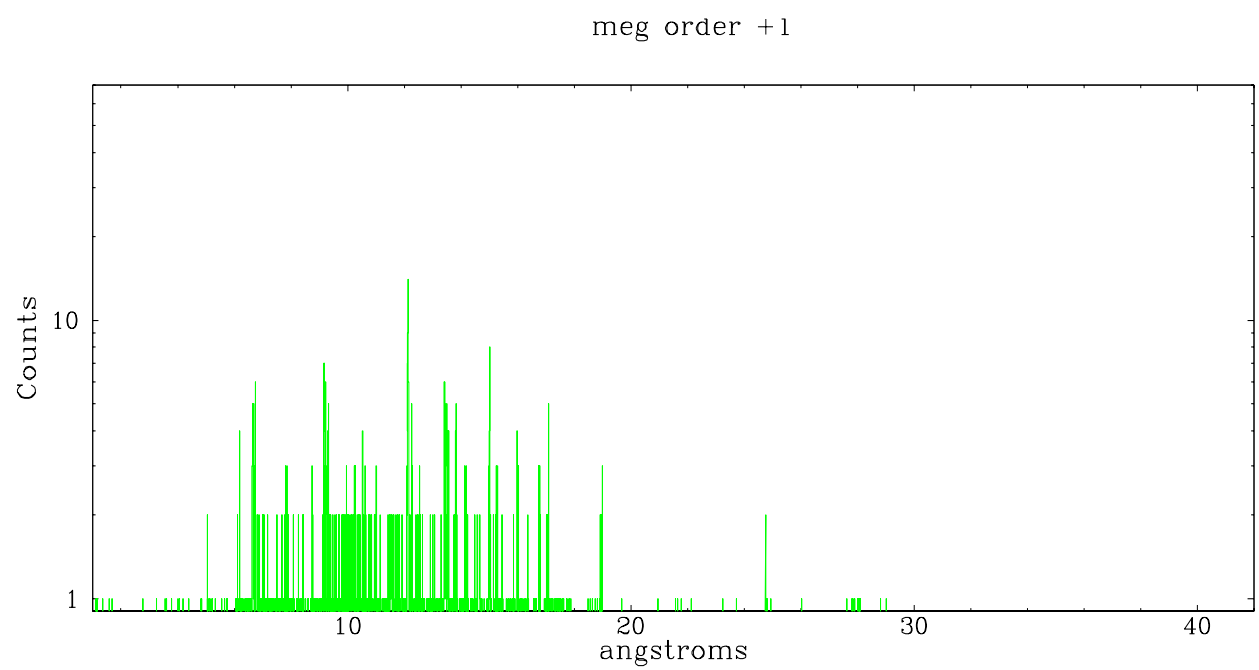
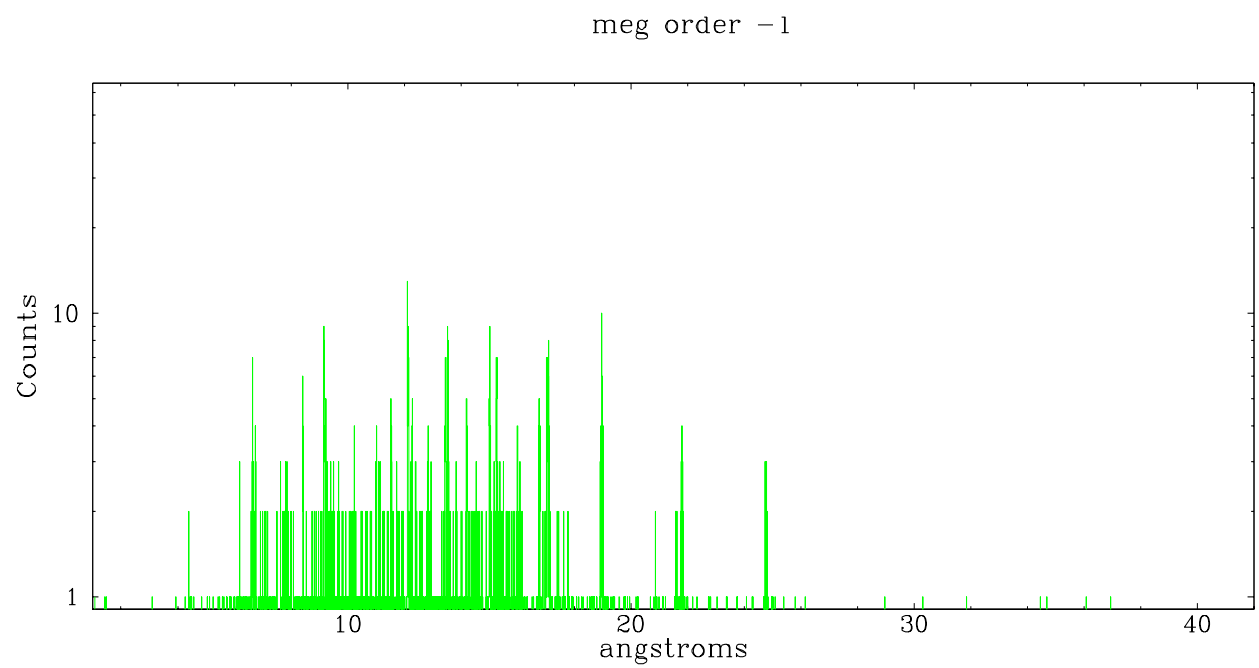
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	347	272	2378	4114	1700	235	296





A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.956

A.2 Comments

Focal plane temperature is warmer than -118.7 C degrees during the first ~6 ksec of this observation. The ACIS spectral response calibration for the front-illuminated chips is less accurate at these warmer temperatures than it is at -119.7 C. The back-illuminated chips are not affected at the focal plane temperatures recorded for this observation. Users whose science objectives depend on the most accurate spectral response (i.e.: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.