

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 7202 - L2 Version 002
Chandra X-Ray Center

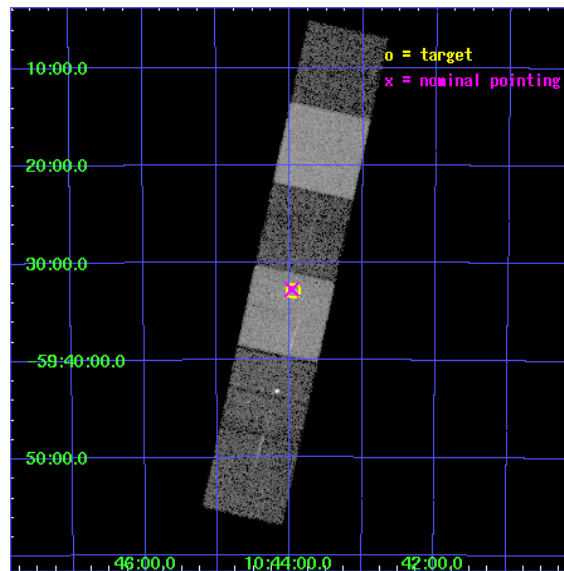
L2 Processing Date : Apr 4 2006

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1 Front

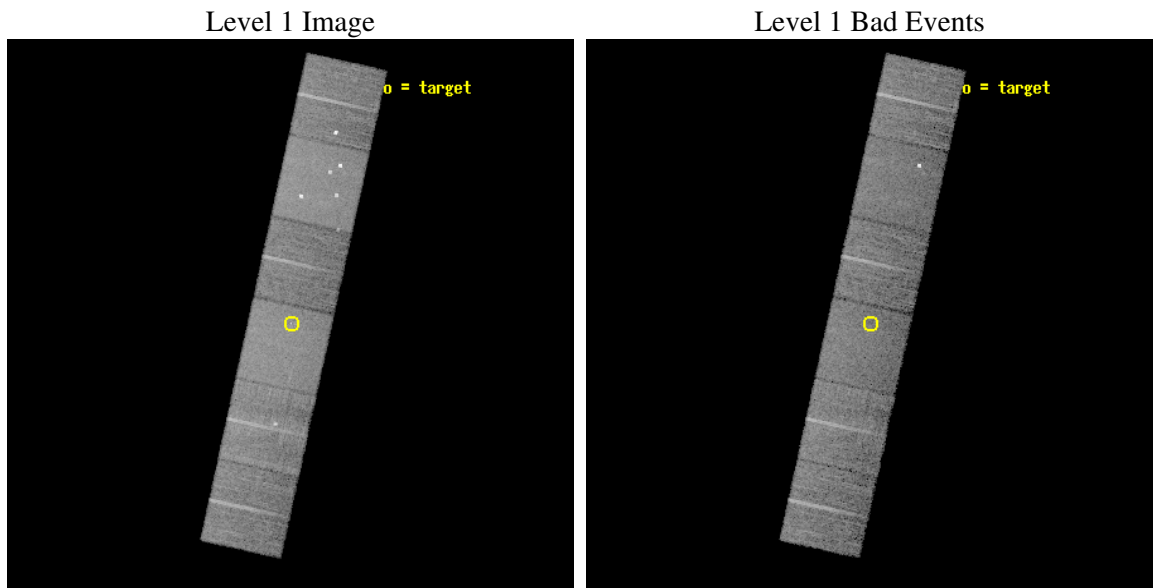
seq_num	200332
obs_id	7202
title	A Chandra HETGS Survey of O-Stars
observer	Dr. Wayne Waldron
object	HD93129AB
dtcycle	0
cycle	P
ra_targ	160.989583
dec_targ	-59.5475
ra_nom	160.99234471008
dec_nom	-59.545962127868
roll_nom	102.45898822443
revision	2
ontime	9631.999964118
livetime	9510.0337808783
ontime4	9631.999964118
ontime5	9631.999964118
ontime6	9631.999964118
ontime7	9631.999964118
ontime8	9631.999964118
ontime9	9631.999964118
l2events	130981



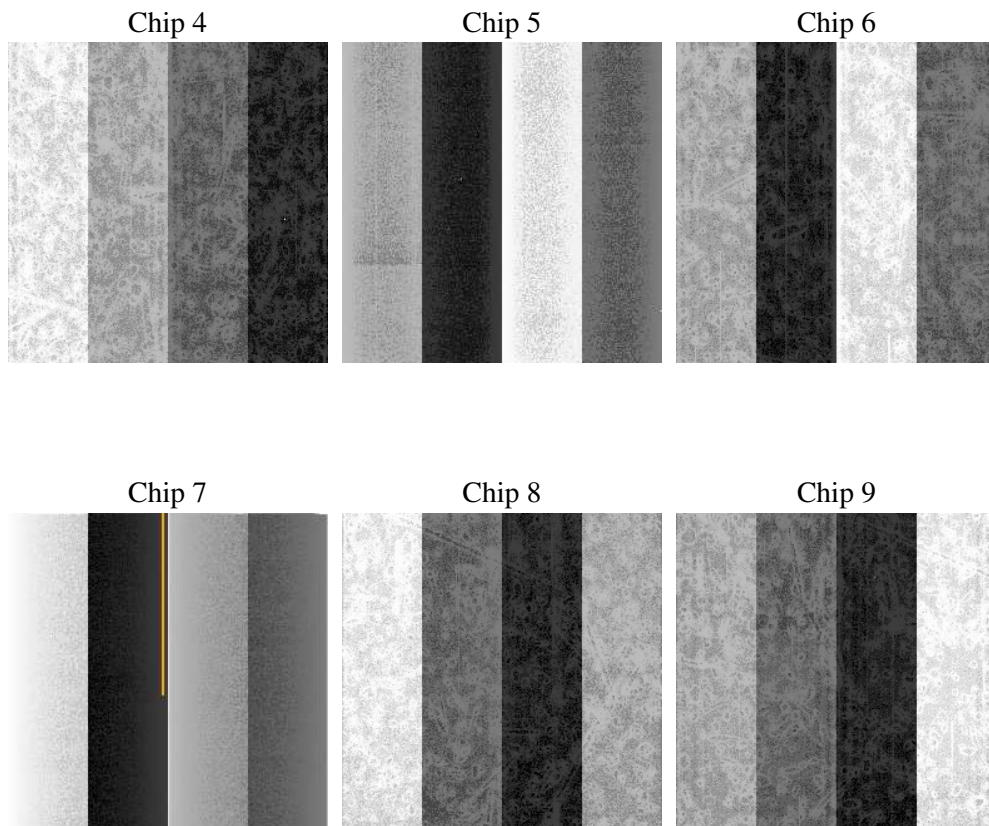
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-04-04T21:04:07
revision	2

sched_exp_time	9500.000000
ontime	11443.991678447
ontime4	11443.991678447
ontime5	11443.991678447
ontime6	11443.991678447
ontime7	11443.991678447
ontime8	11443.991678447
ontime9	11443.991678447
l1events	689177

2.1.4 Events

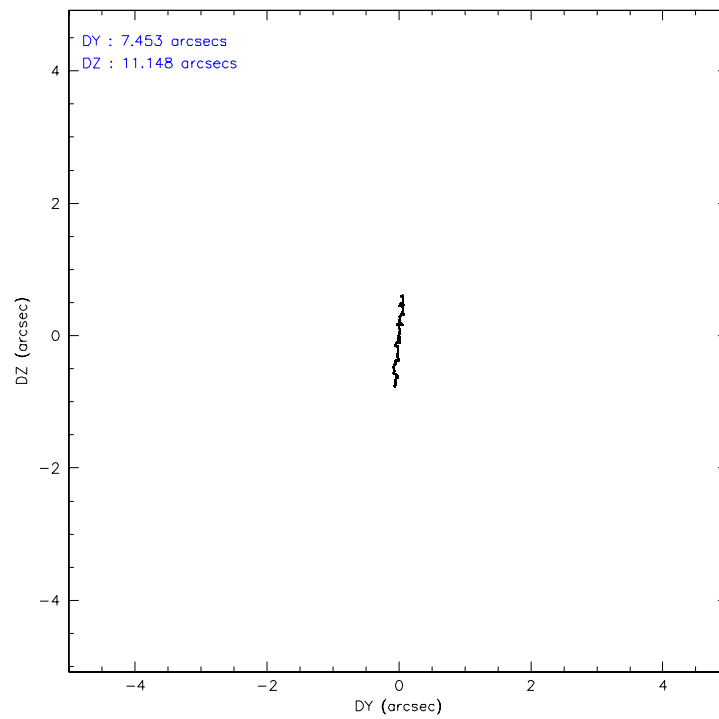
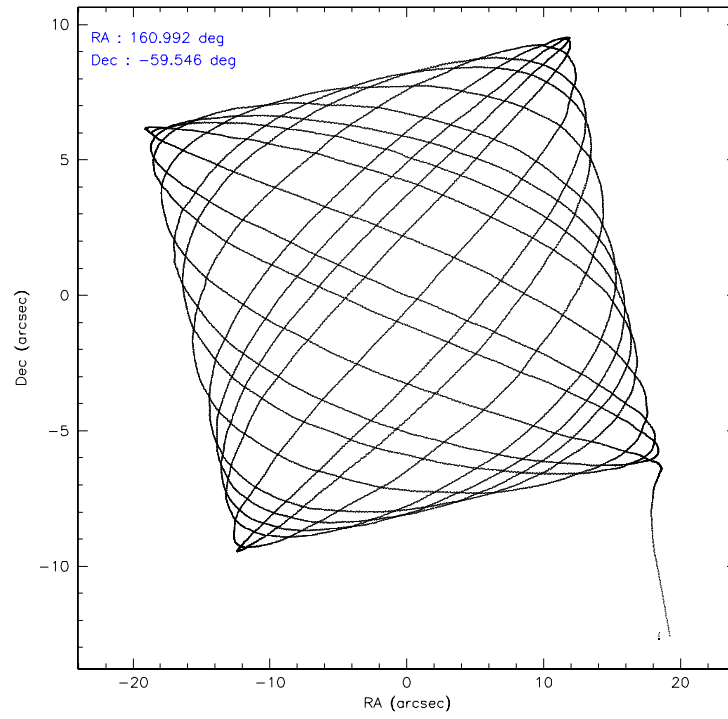
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	104563	146731	91879	130295	121016	94693
rejected events	92129	91750	81433	86398	96692	83131
rejected %	88%	62%	88%	66%	79%	87%

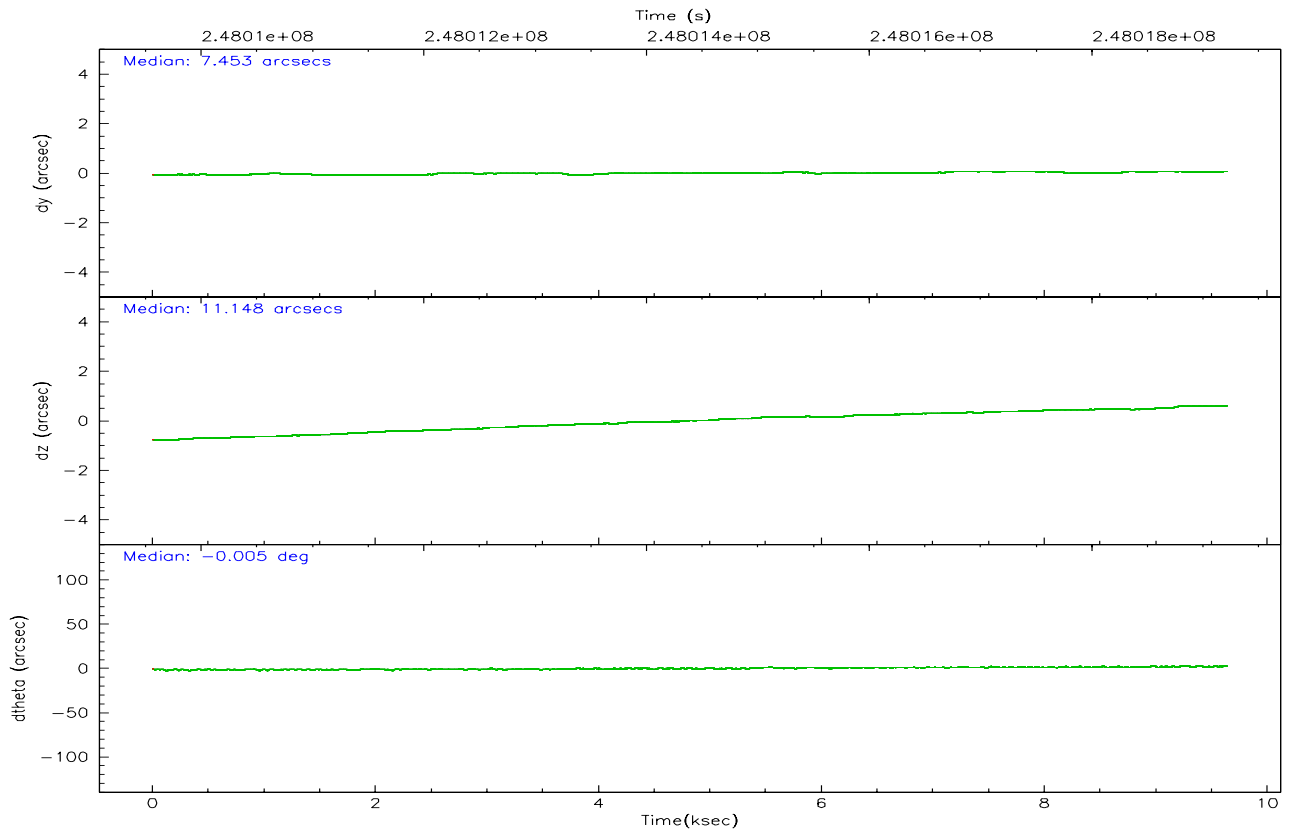
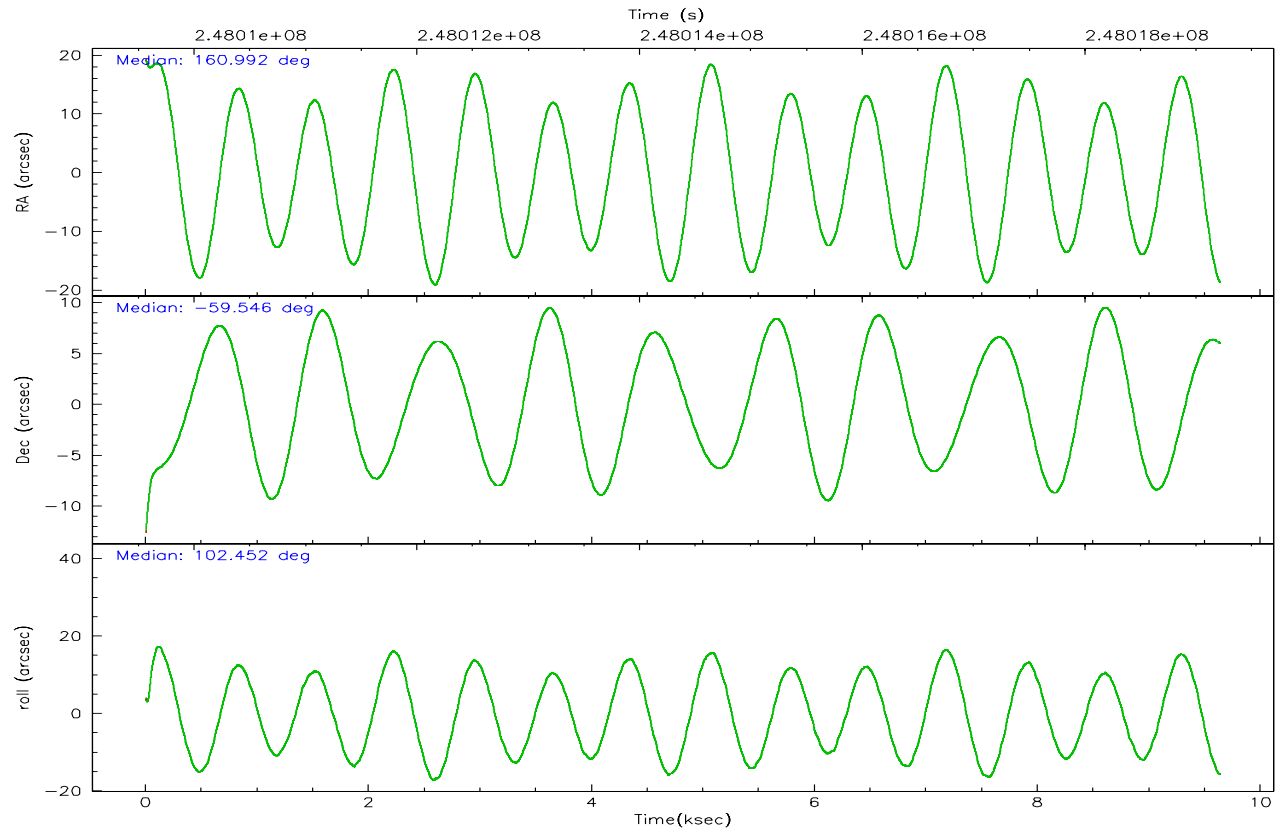
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	8220	8309	5240	3318	10428	6439
	7%	5%	5%	2%	8%	6%
grade 1 events	101	191	42	58	112	68
	0%	0%	0%	0%	0%	0%
grade 2 events	2332	18906	2413	12856	5870	2446
	2%	12%	2%	9%	4%	2%
grade 3 events	1156	1380	1135	2667	2850	1093
	1%	0%	1%	2%	2%	1%
grade 4 events	1114	1286	1079	2586	2605	1131
	1%	0%	1%	1%	2%	1%
grade 5 events	4108	7412	4151	8066	5553	4595
	3%	5%	4%	6%	4%	4%
grade 6 events	1840	35554	2318	29960	6758	2276
	1%	24%	2%	22%	5%	2%
grade 7 events	85692	73693	75501	70784	86840	76645
	81%	50%	82%	54%	71%	80%

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	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	161.029106	160.9923447100804	Alternating exposures requested	N	N
Pointing Dec	-59.565754	-59.54596212786829	Primary exposure time	0.000000	3.2
Pointing Roll	102.334079	102.4589882244257			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	248009709.184000	248007757.23506			
Observation start date	2005-11-10T11:34:05	2005-11-10T11:02:37			
Observation end time	248019209.184000	248020130.52313			
Observation end date	2005-11-10T14:12:25	2005-11-10T14:28:50			
Read mode	TIMED	TIMED			

2.3 Aspect



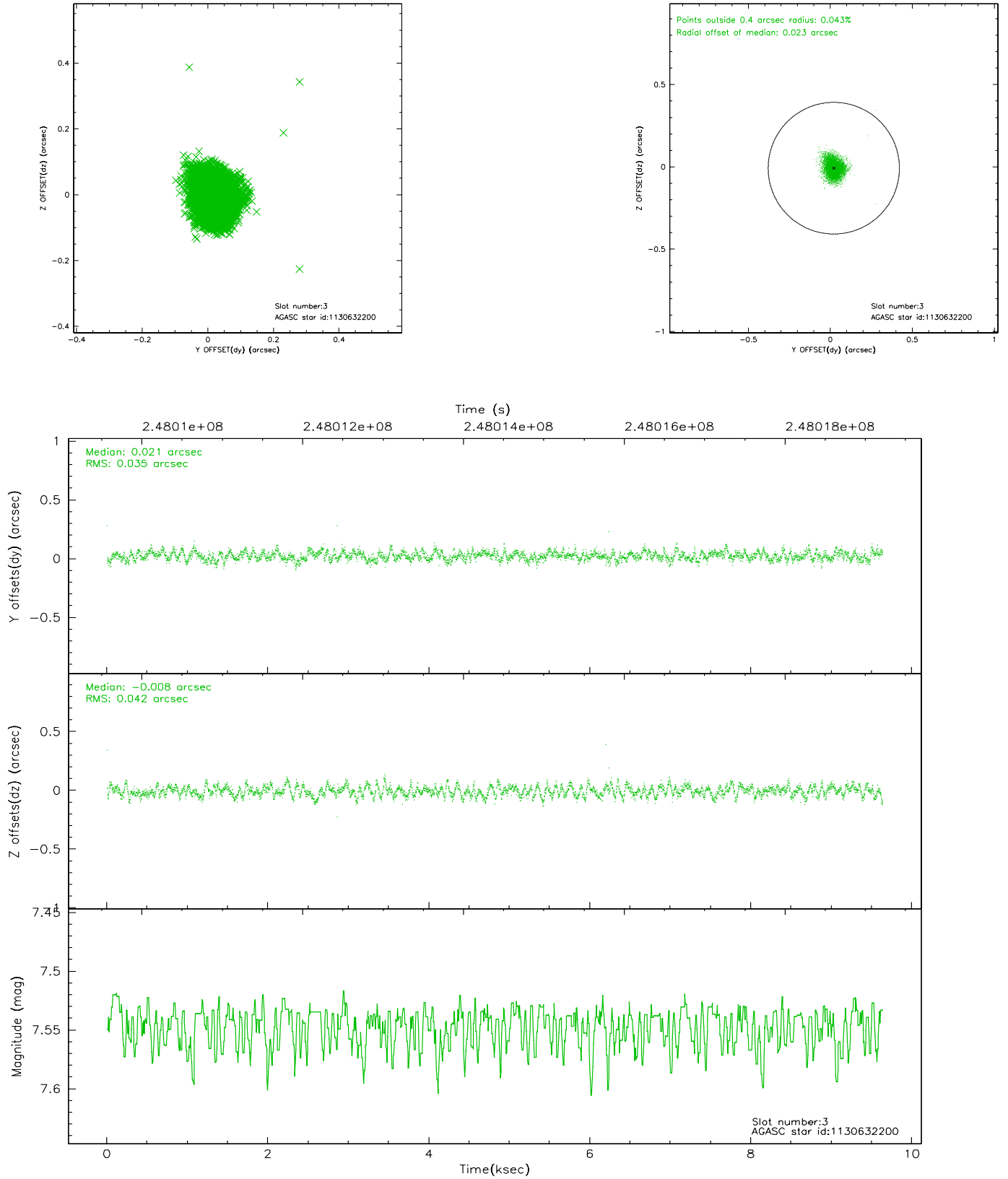


Slot Statistics

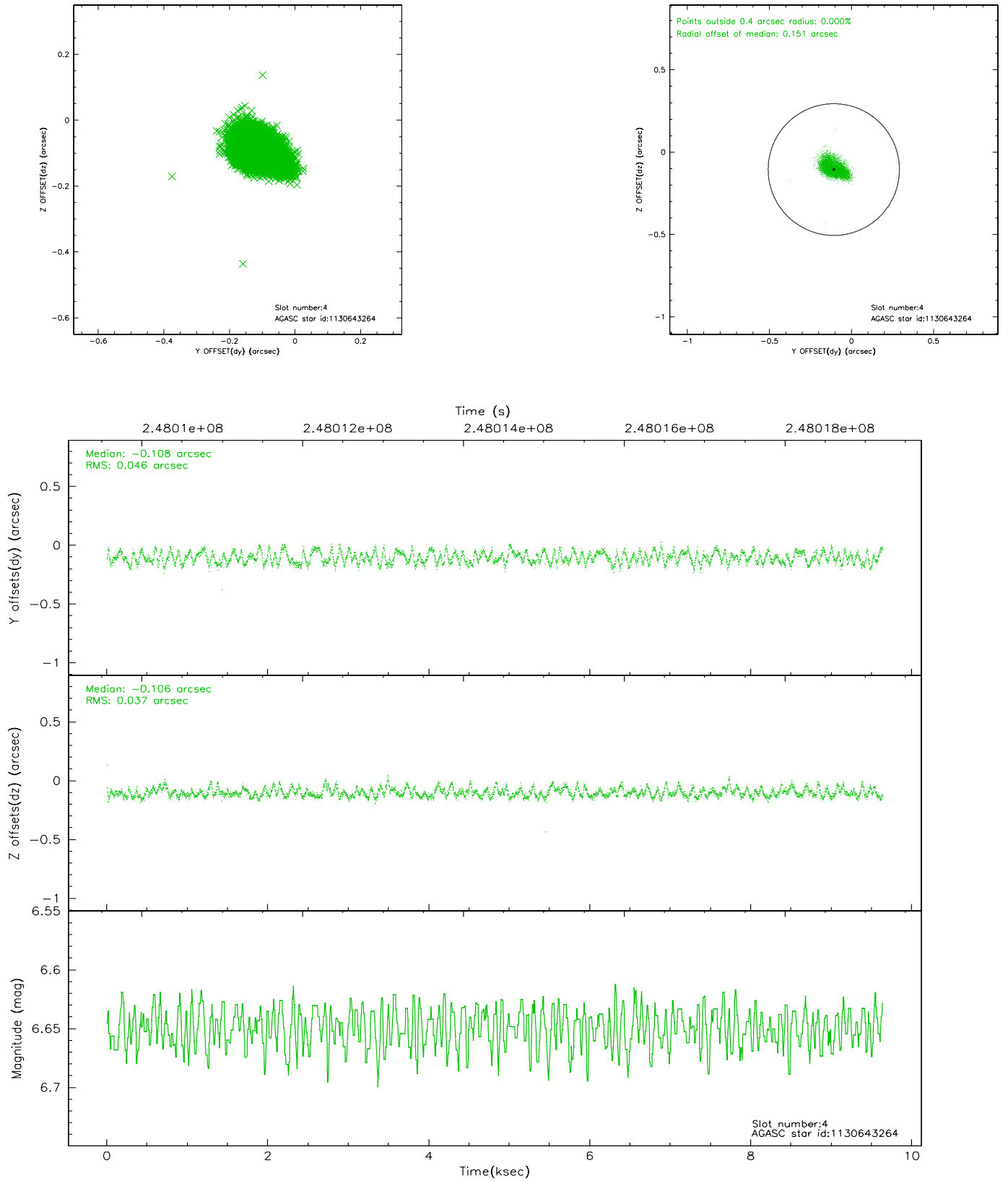
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	2351	-0.029	0.005	0.011	0.017	0.000000	0.000000	-760.21	-1732.40
1	FID	ACIS-S-4	7.21	2351	0.046	0.013	0.010	0.015	0.000000	0.000000	2152.86	175.56
2	FID	ACIS-S-5	7.23	2351	-0.049	-0.009	0.008	0.013	0.000000	0.000000	-1812.39	169.79
3	GUIDE	1130632200	7.55	4702	0.021	-0.008	0.058	0.092	161.433843	-59.407820	395.37	-845.15
4	GUIDE	1130643264	6.65	4702	-0.108	-0.106	0.063	0.100	160.322990	-59.676912	-123.23	1340.59
5	GUIDE	1130644984	8.76	4628	-0.046	0.043	0.068	0.107	162.123834	-59.745452	-1071.60	-1797.74
6	GUIDE	1128940640	8.36	4702	0.112	0.080	0.061	0.097	159.517239	-59.074495	2294.24	2361.65
7	GUIDE	1130640672	8.28	4701	0.019	-0.011	0.074	0.116	162.096044	-59.540805	-342.29	-1917.27

2.4 Star Slots

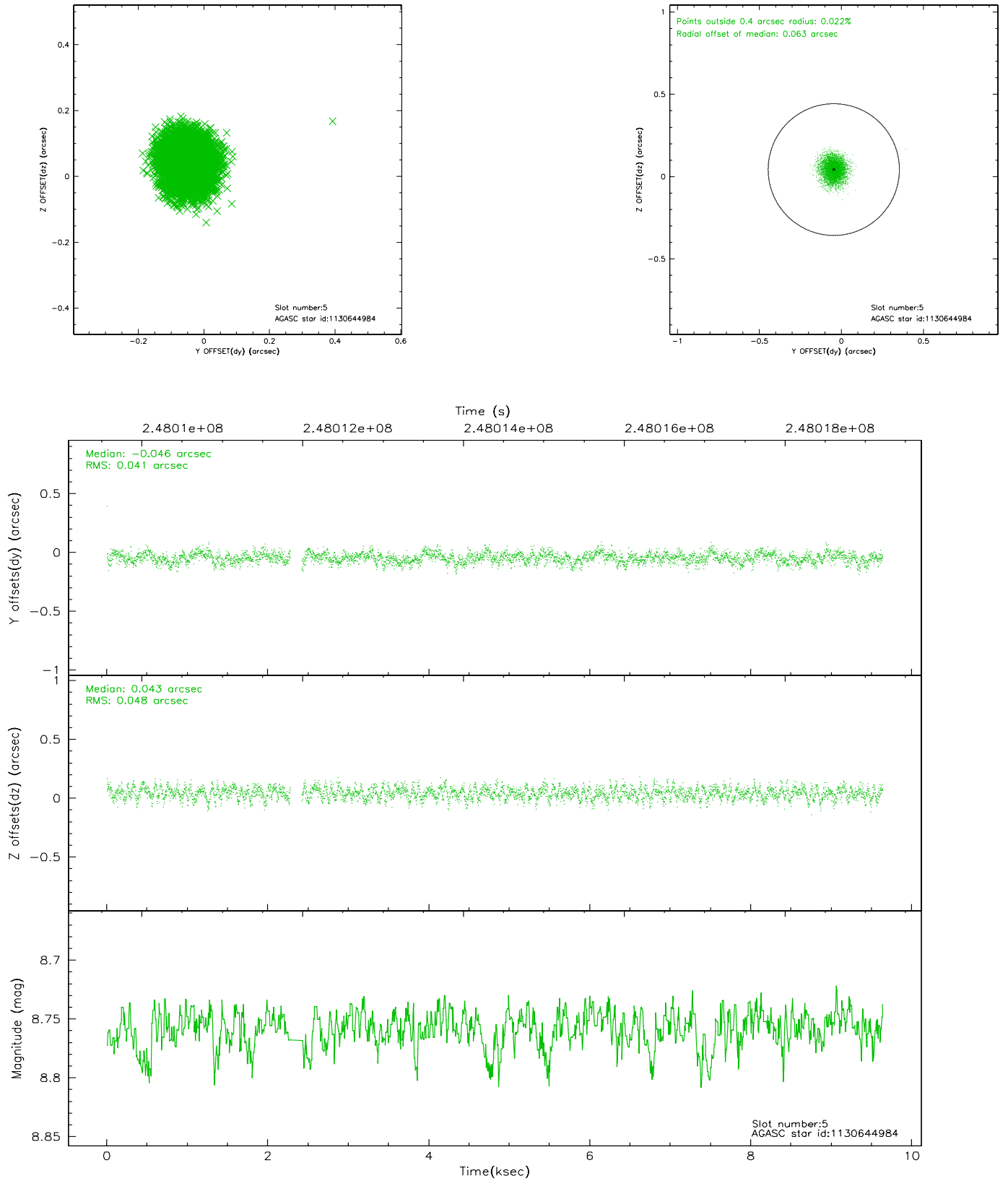
2.4.1 Slot 3



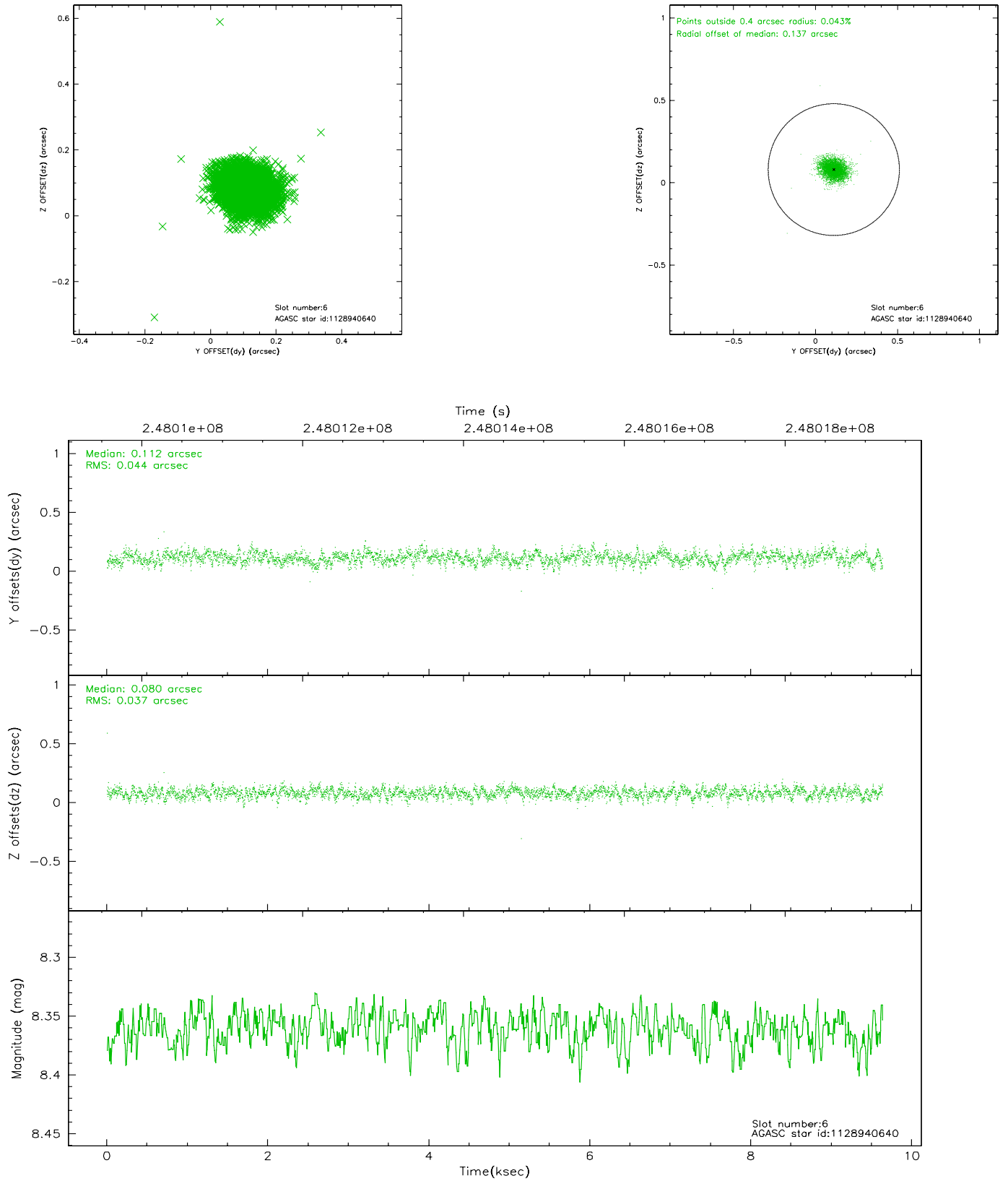
2.4.2 Slot 4



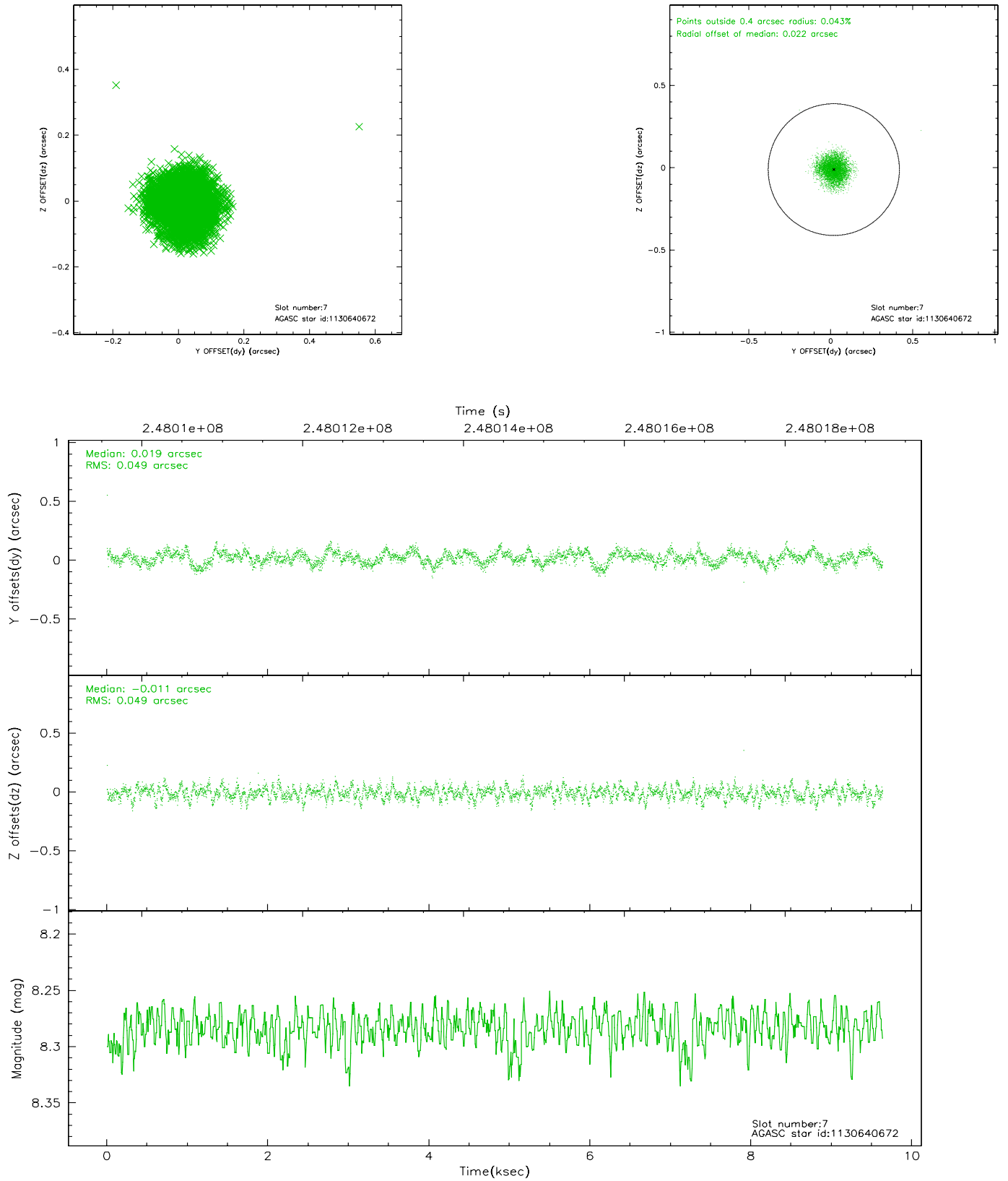
2.4.3 Slot 5



2.4.4 Slot 6

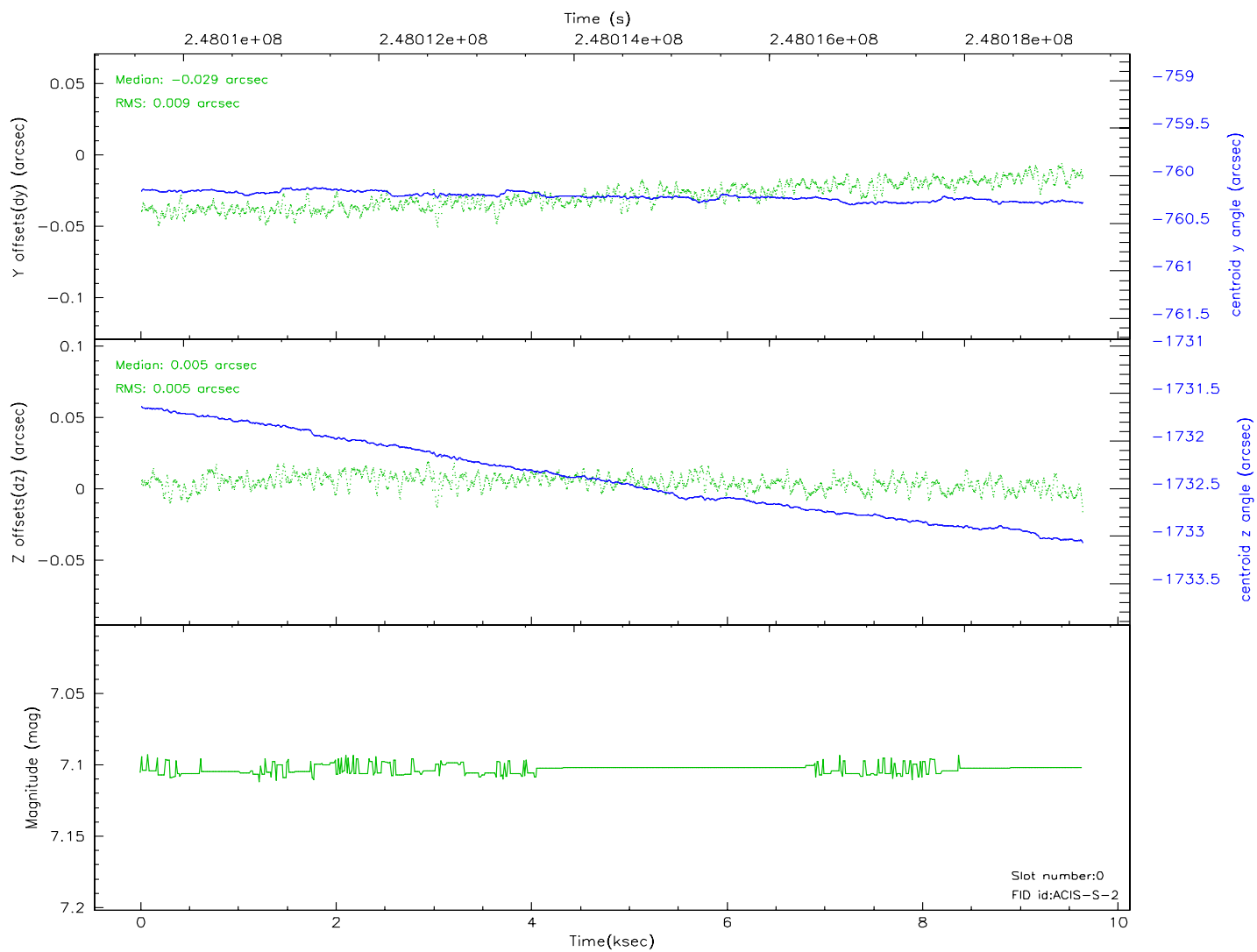
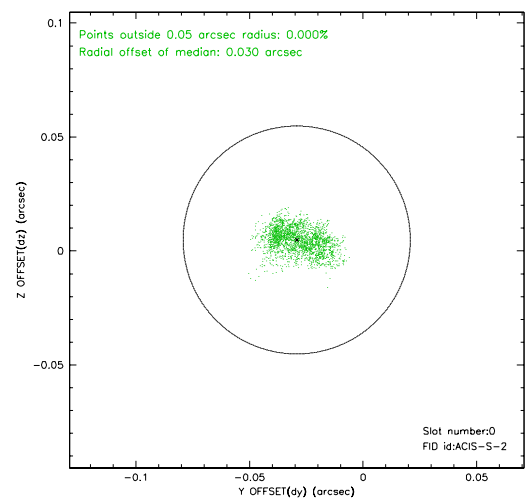
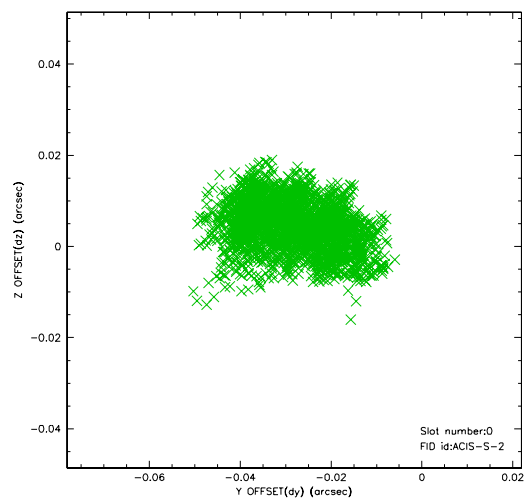


2.4.5 Slot 7

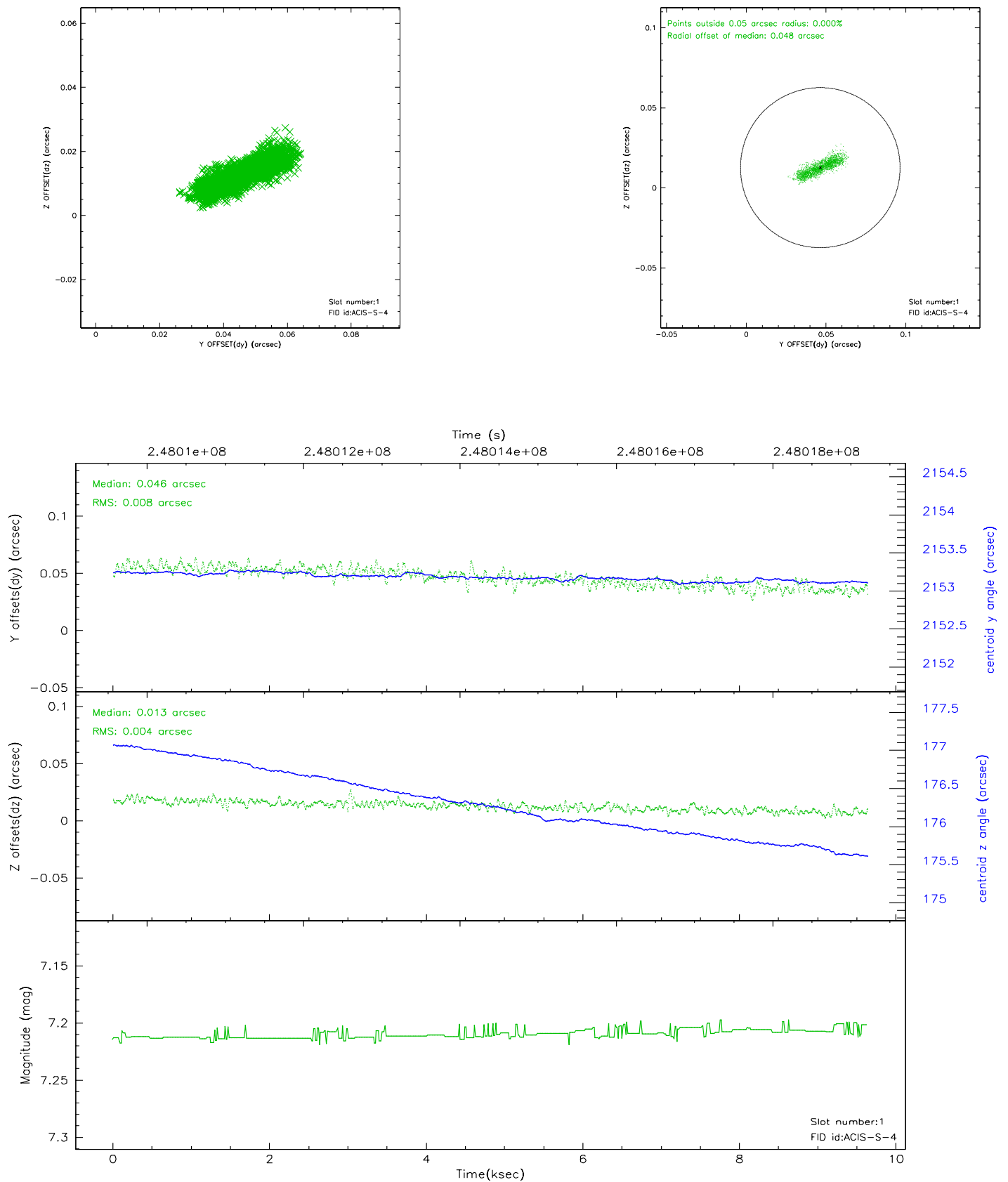


2.5 FID Slots

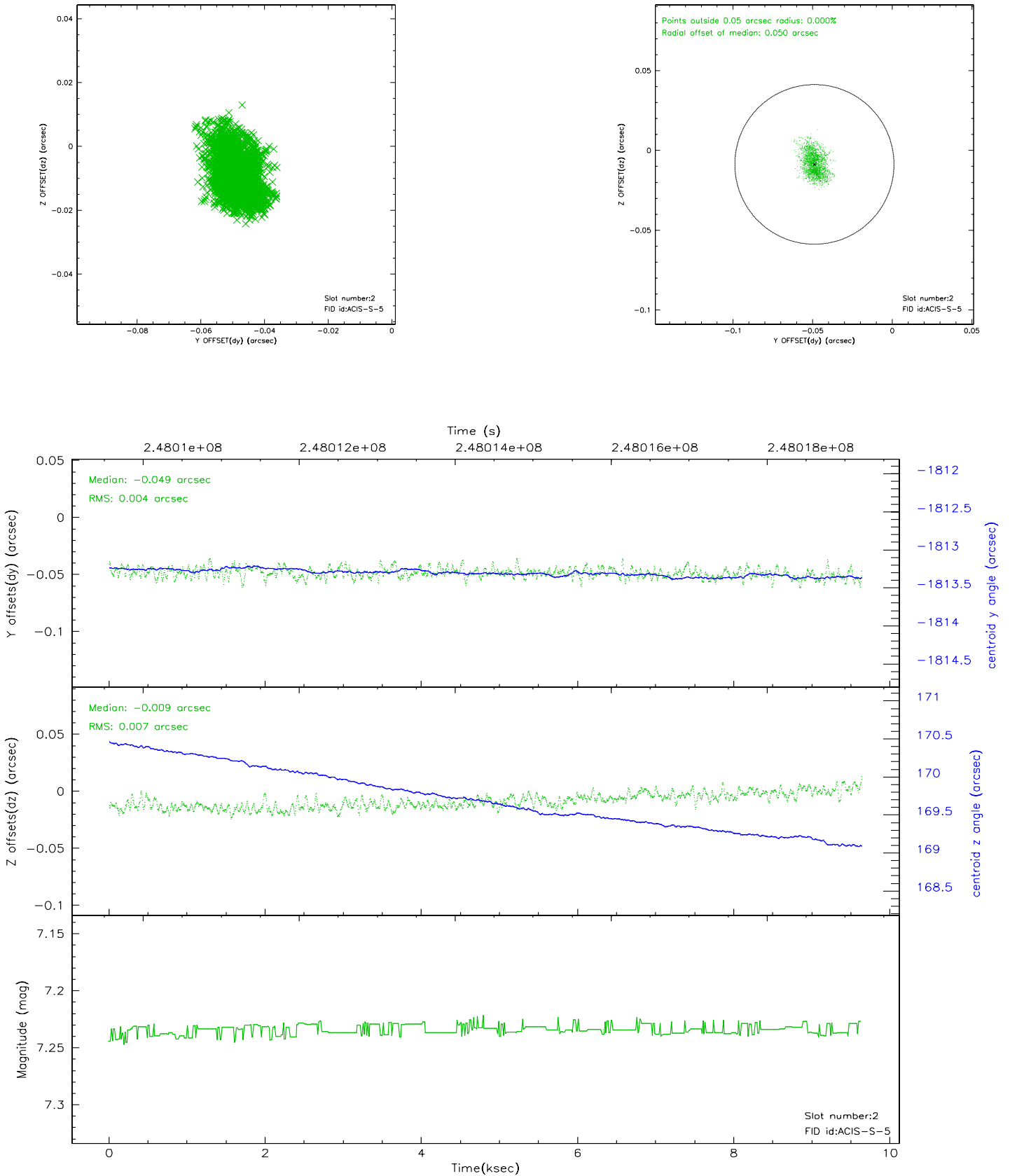
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

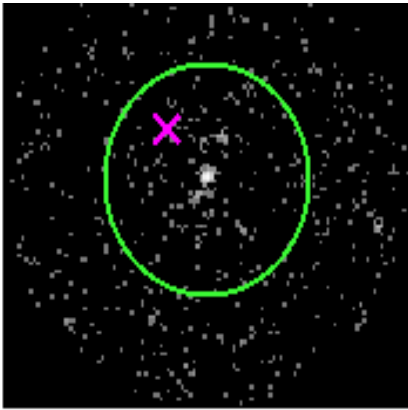


3 Gratings

3.1 HEG Arm



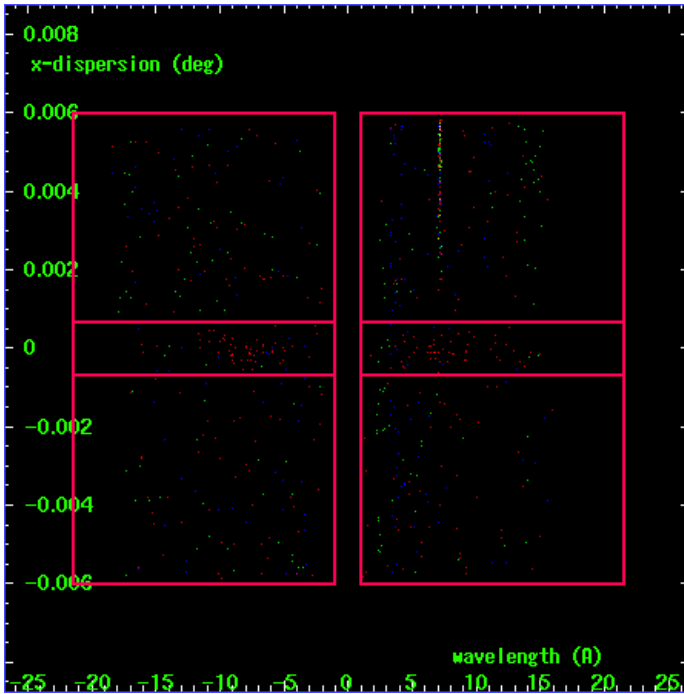
HEG Order Sort 123



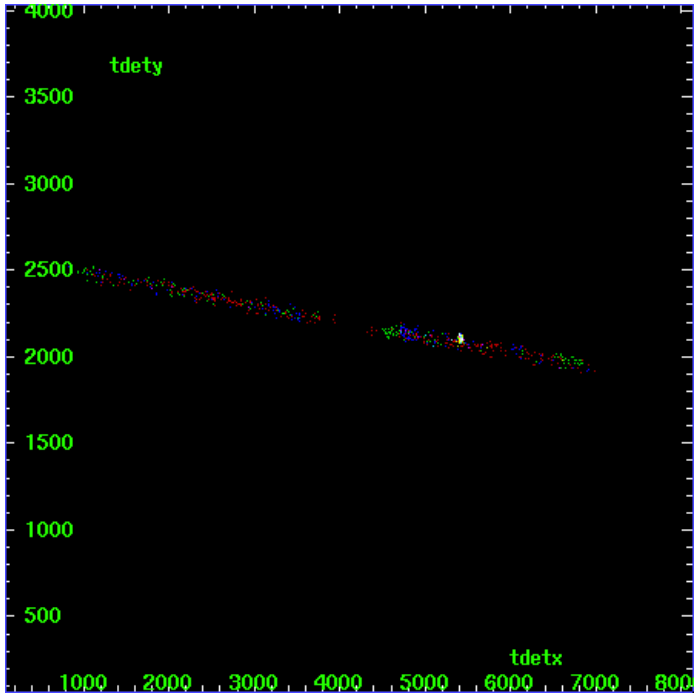
HEG Zero Order



HEG Order Sort ALL

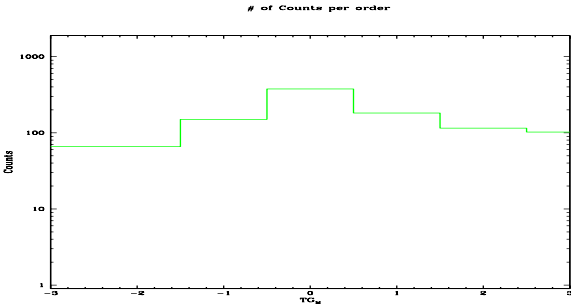


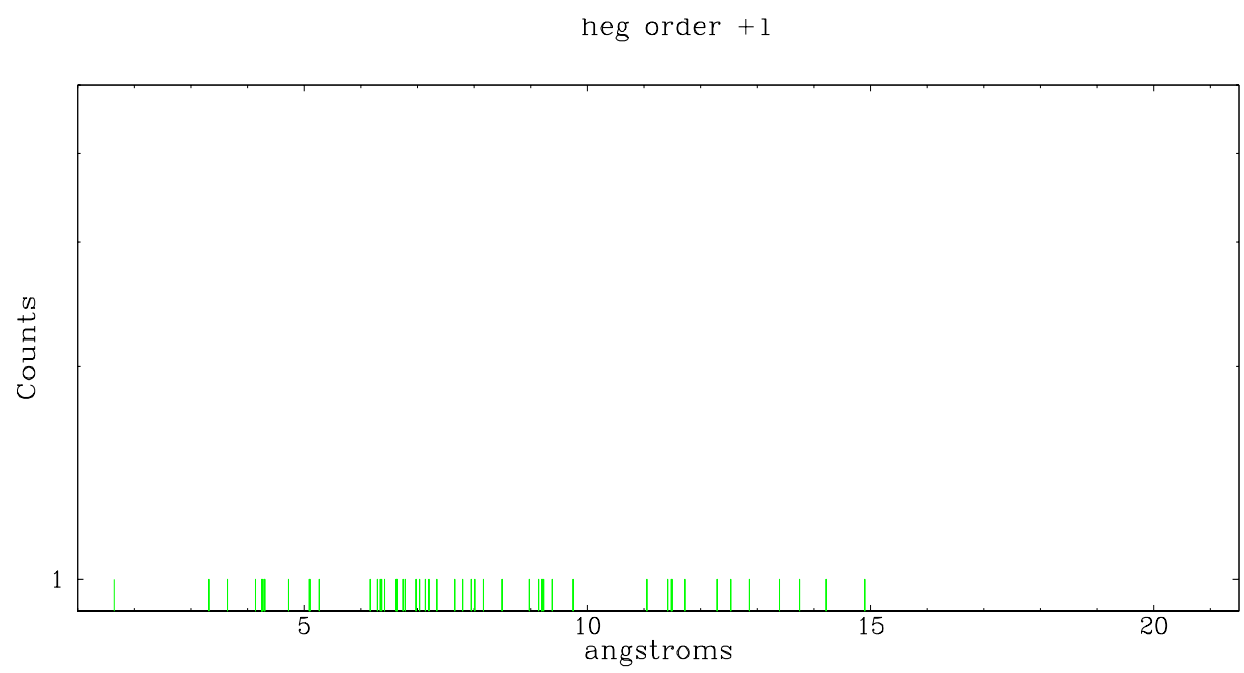
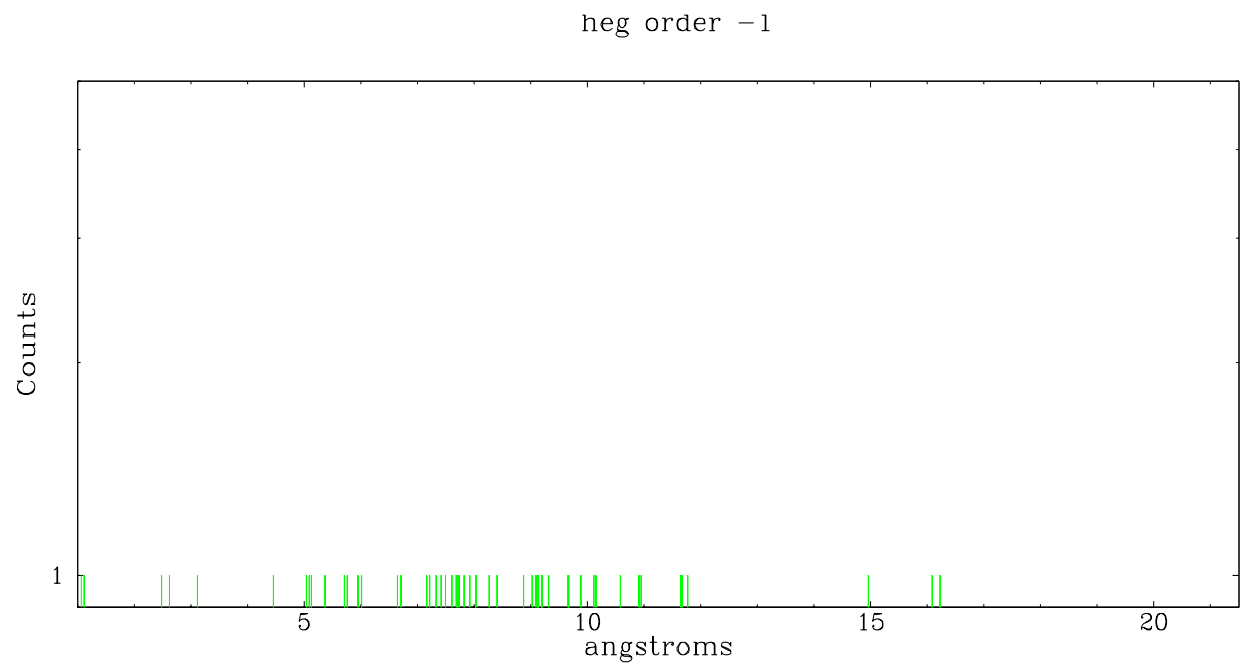
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	66	66	150	377	182	115	102

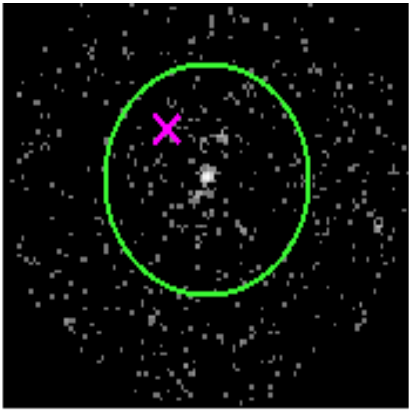




3.2 MEG Arm



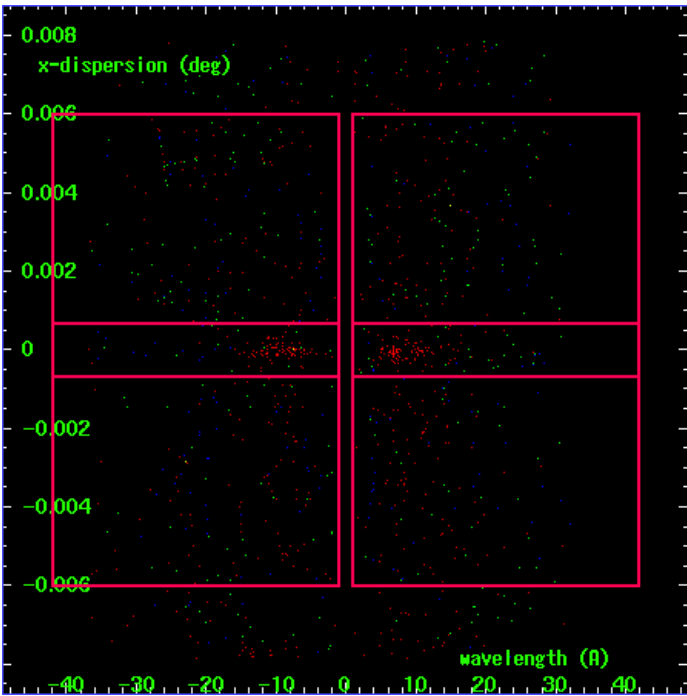
MEG Order Sort 123



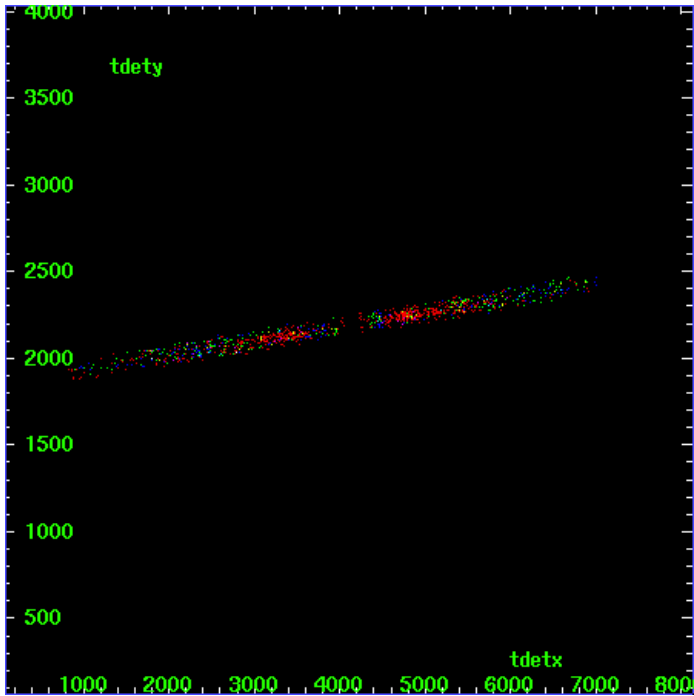
MEG Zero Order



MEG Order Sort ALL

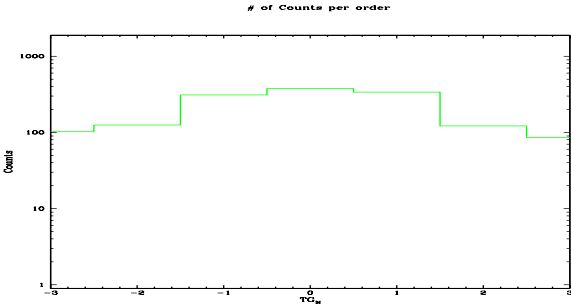


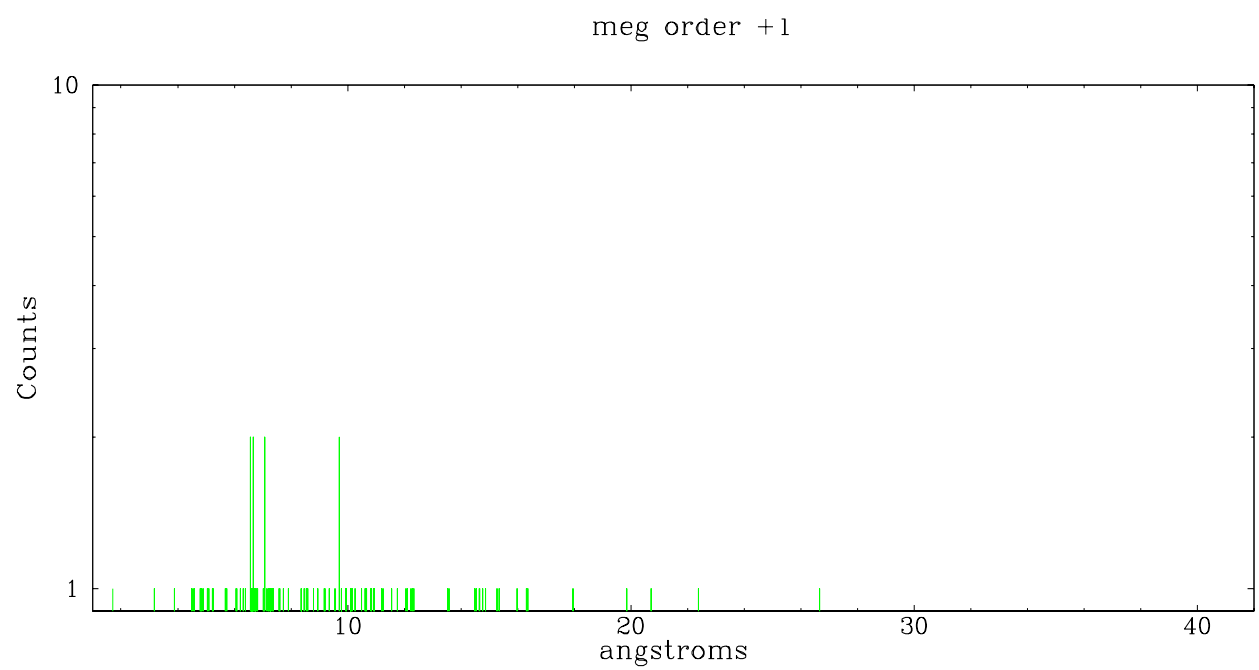
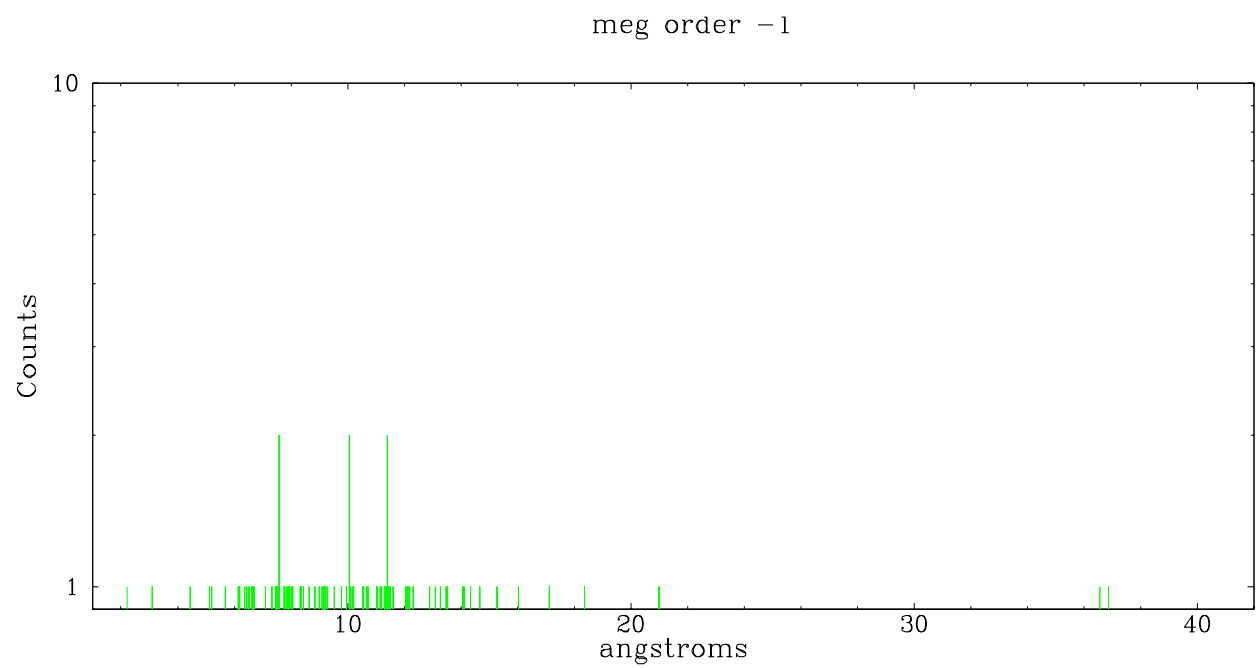
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	102	125	310	377	338	122	86





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.631999

A.2 Comments

Several x-ray sources are included in the region defining the zeroth order

and in the dispersed spectrum. Spectrum may need to be re-extracted in CIAO

to separate the sources. Serendipitous zeroth order image and dispersed spectrum of HD 93162 present; zeroth order of HD 93162 has a bad CCD raw and off-axis PSF. The zeroth order and the dispersed spectrum of HD 93162 lie on top of the spectral arm of the dispersed spectrum of the primary target.

Analysis will be tricky because spectra for several sources are superimposed. User could possibly exploit asymmetry in plus and minus orders.