

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2534 - L2 Version 001
Chandra X-Ray Center

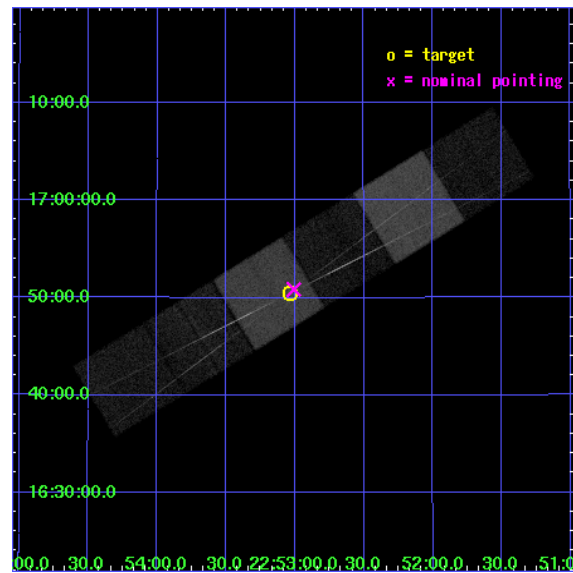
L2 Processing Date : Oct 6 2006

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

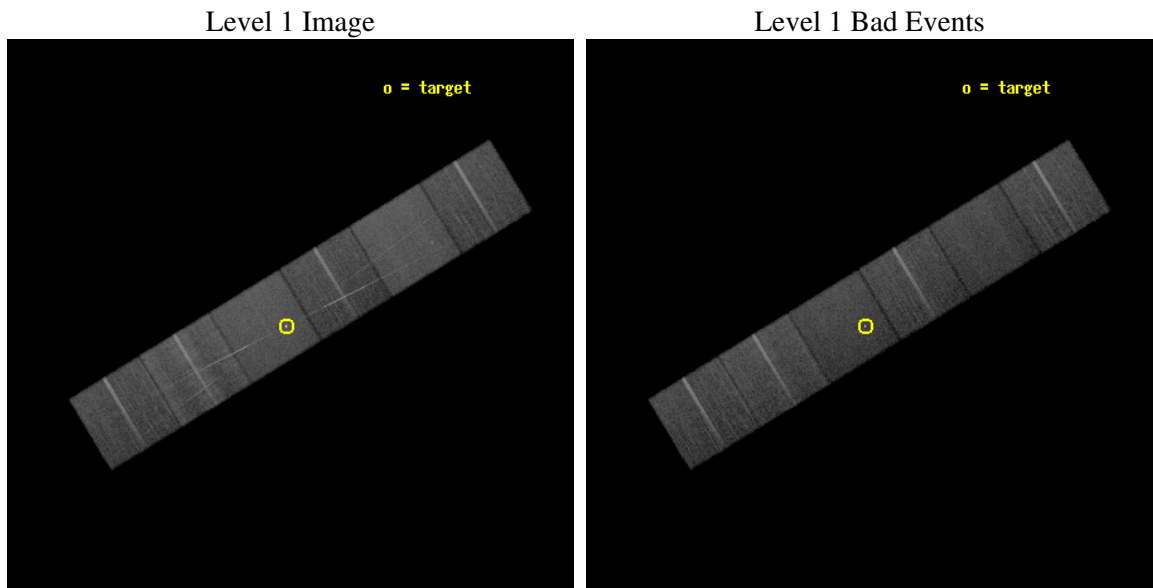
seq_num	200142
obs_id	2534
title	HETGS SPECTROSCOPY OF THE LONG-PERIOD ACTIVE BINARY, IM PEGASI.
observer	Dr. David Huenemoerder
object	IM PEG
dtcycle	0
cycle	P
ra_targ	343.259583
dec_targ	16.841194
ra_nom	343.25200983545
dec_nom	16.847605624906
roll_nom	148.62815320758
revision	2
ontime	24197.621354789
livetime	23891.216503136
ontime4	24204.103365004
ontime5	24194.380524039
ontime6	24207.34431532
ontime7	24197.621354789
ontime8	24213.826315671
ontime9	24210.585285604
l2events	252712



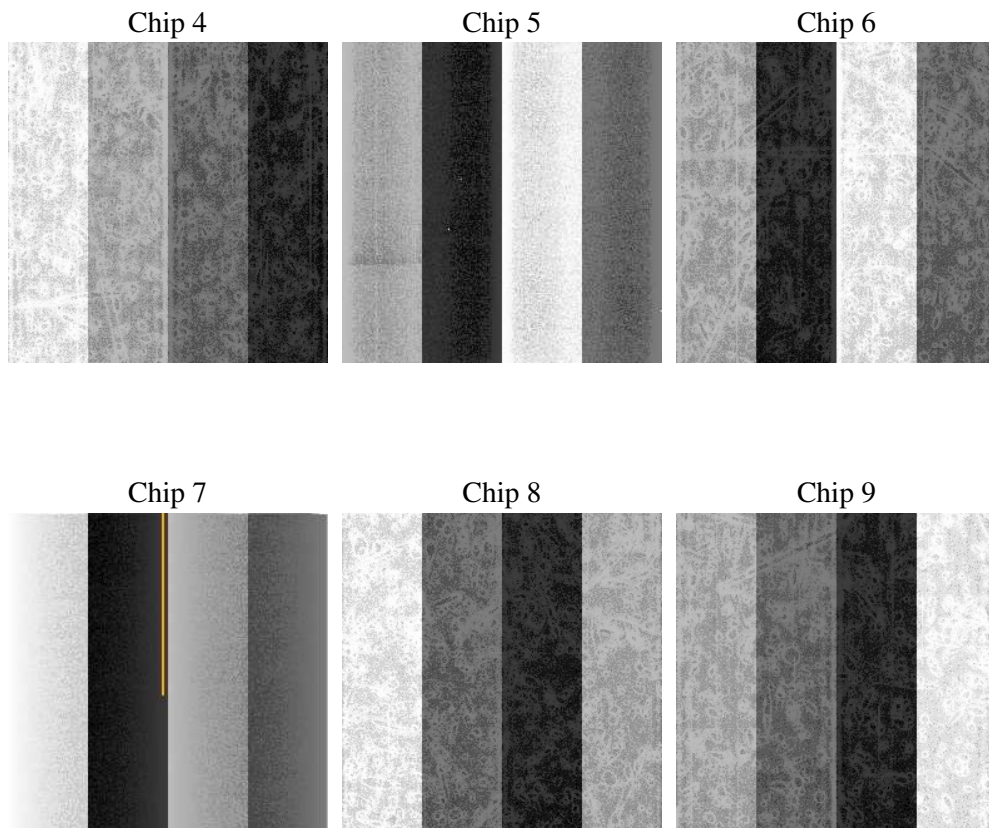
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldbver	3.2.3
date	2006-09-30T16:28:25
revision	2

sched_exp_time	24300.000000
ontime	24200.595845193
ontime4	24207.07783547
ontime5	24197.355014443
ontime6	24210.318785787
ontime7	24200.595845193
ontime8	24216.800786138
ontime9	24213.55975607
l1events	1142255

2.1.4 Events

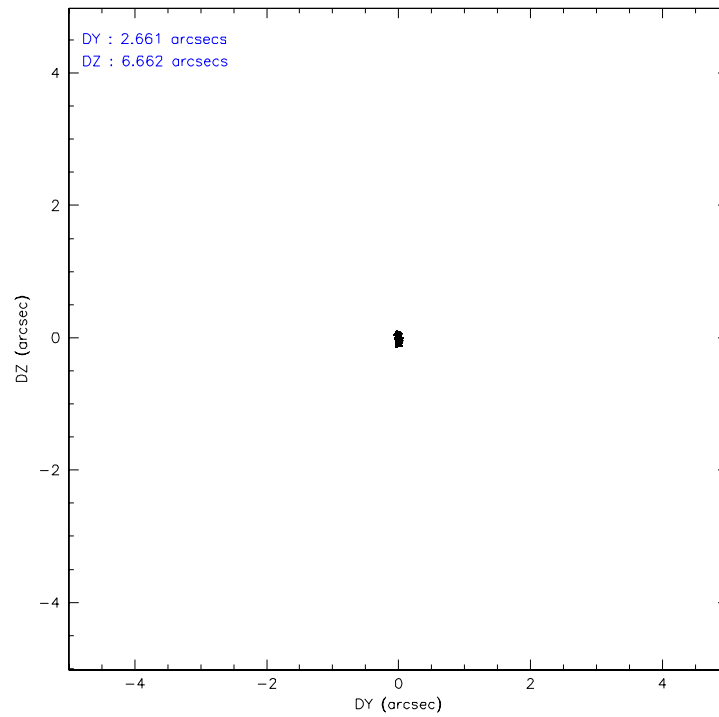
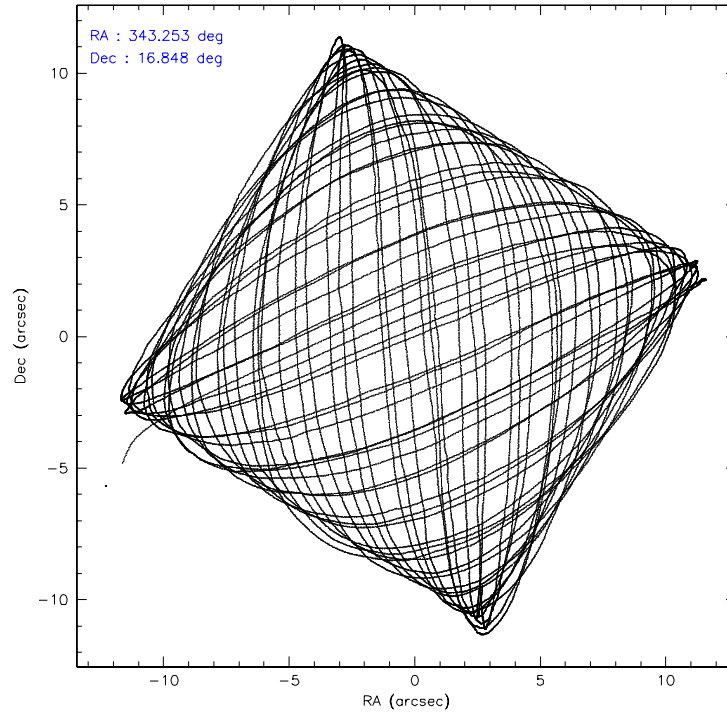
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	173878	218945	166898	212650	213588	156296
rejected events	154041	124548	142261	128714	158483	136657
rejected %	88%	56%	85%	60%	74%	87%

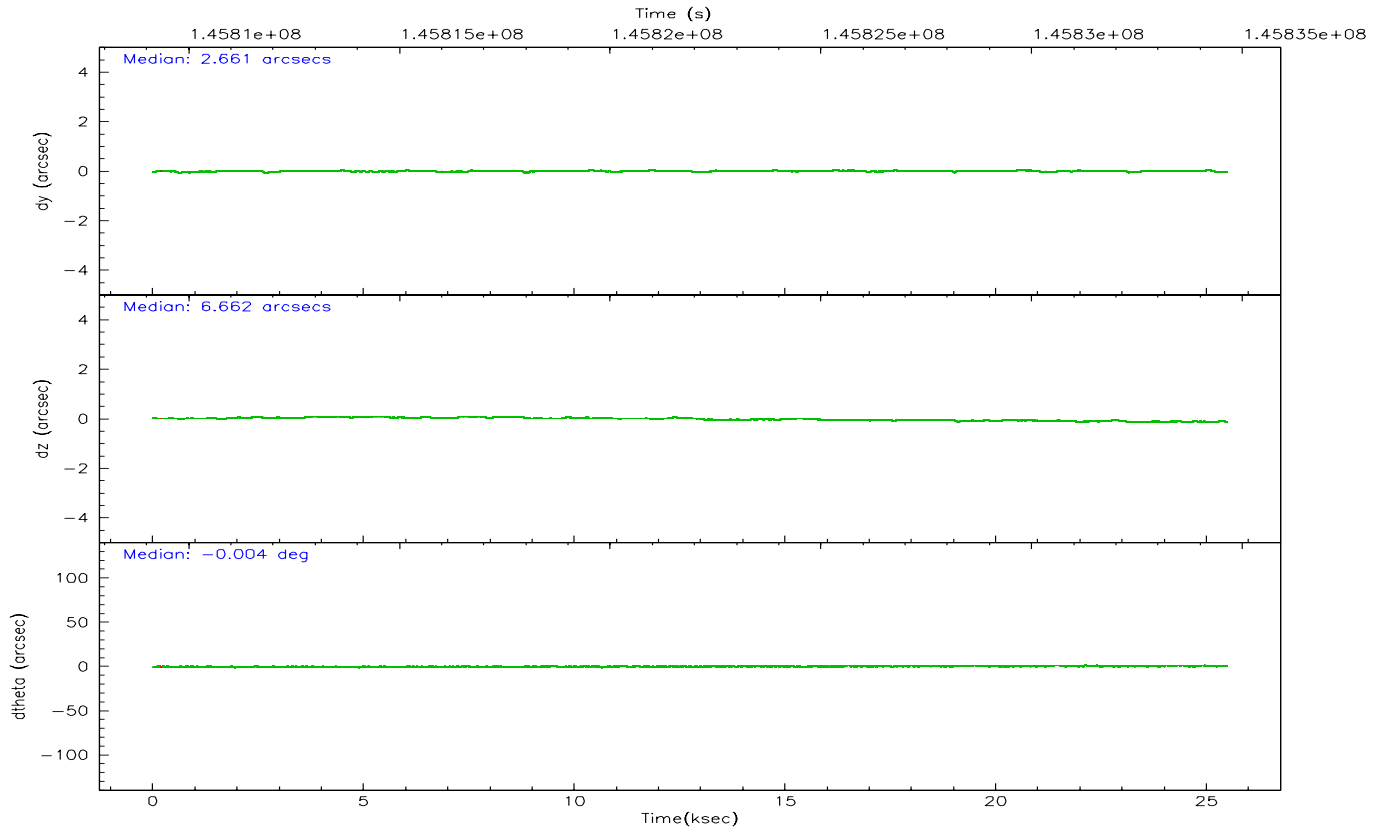
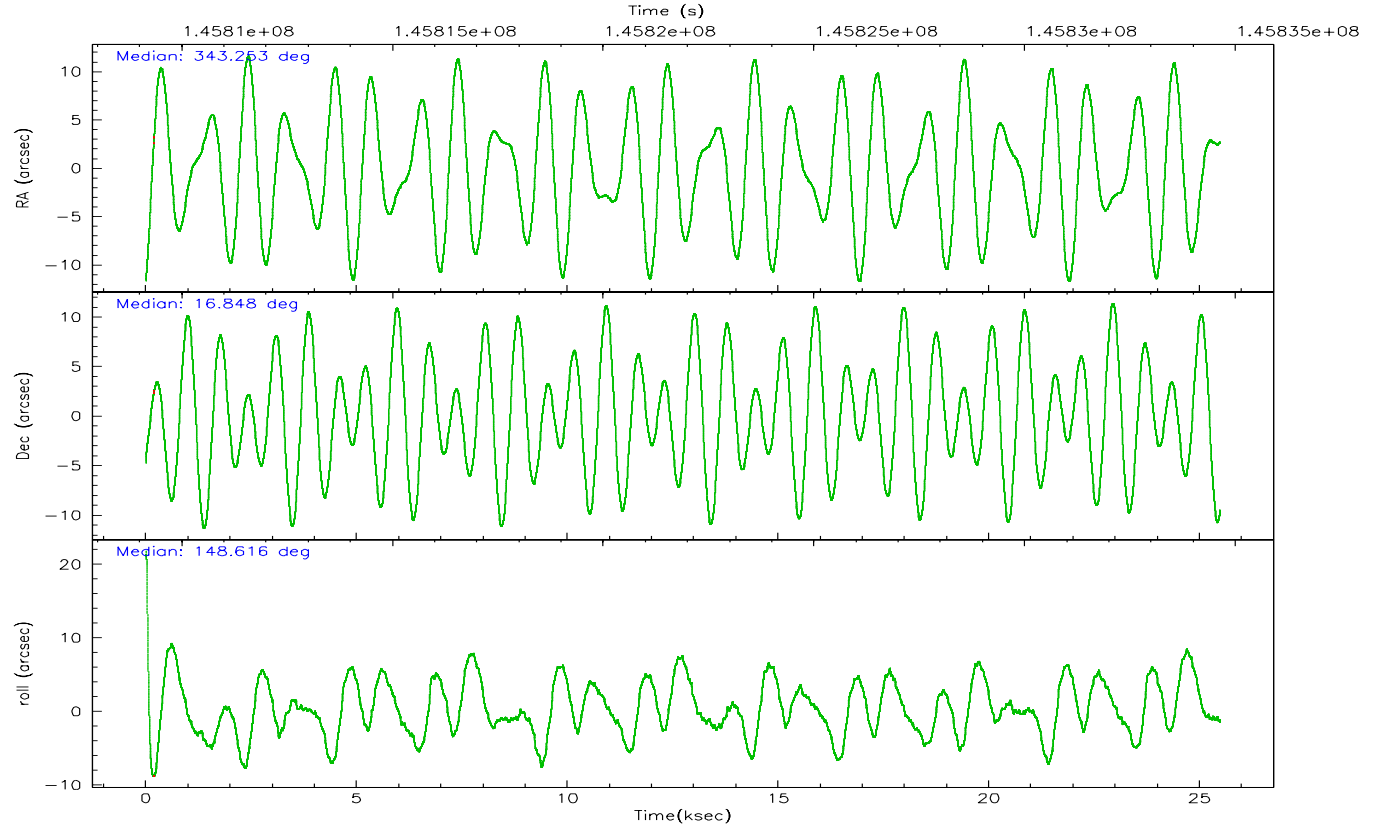
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	8833	4438	12316	5931	19351	8353
	5%	2%	7%	2%	9%	5%
grade 1 events	157	190	83	229	165	120
	0%	0%	0%	0%	0%	0%
grade 2 events	4158	29513	4499	20598	10761	3841
	2%	13%	2%	9%	5%	2%
grade 3 events	1953	2290	1979	4691	6147	1911
	1%	1%	1%	2%	2%	1%
grade 4 events	1920	2320	1960	4554	5628	1884
	1%	1%	1%	2%	2%	1%
grade 5 events	6511	10556	6747	13982	9068	7288
	3%	4%	4%	6%	4%	4%
grade 6 events	2978	55882	3886	48196	13222	3653
	1%	25%	2%	22%	6%	2%
grade 7 events	147368	113756	135428	114469	149246	129246
	84%	51%	81%	53%	69%	82%

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	343.280465	343.2520098354499	Subarray requested	NONE	NONE
Pointing Dec	16.847316	16.84760562490622	Alternating exposures requested	N	N
Pointing Roll	148.463268	148.6281532075845	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	145810347.184000	145808886.48343			
Observation start date	2002-08-15T14:51:23	2002-08-15T14:28:06			
Observation end time	145834647.184000	145834921.4845			
Observation end date	2002-08-15T21:36:23	2002-08-15T21:42:01			
Read mode	TIMED	TIMED			

2.3 Aspect



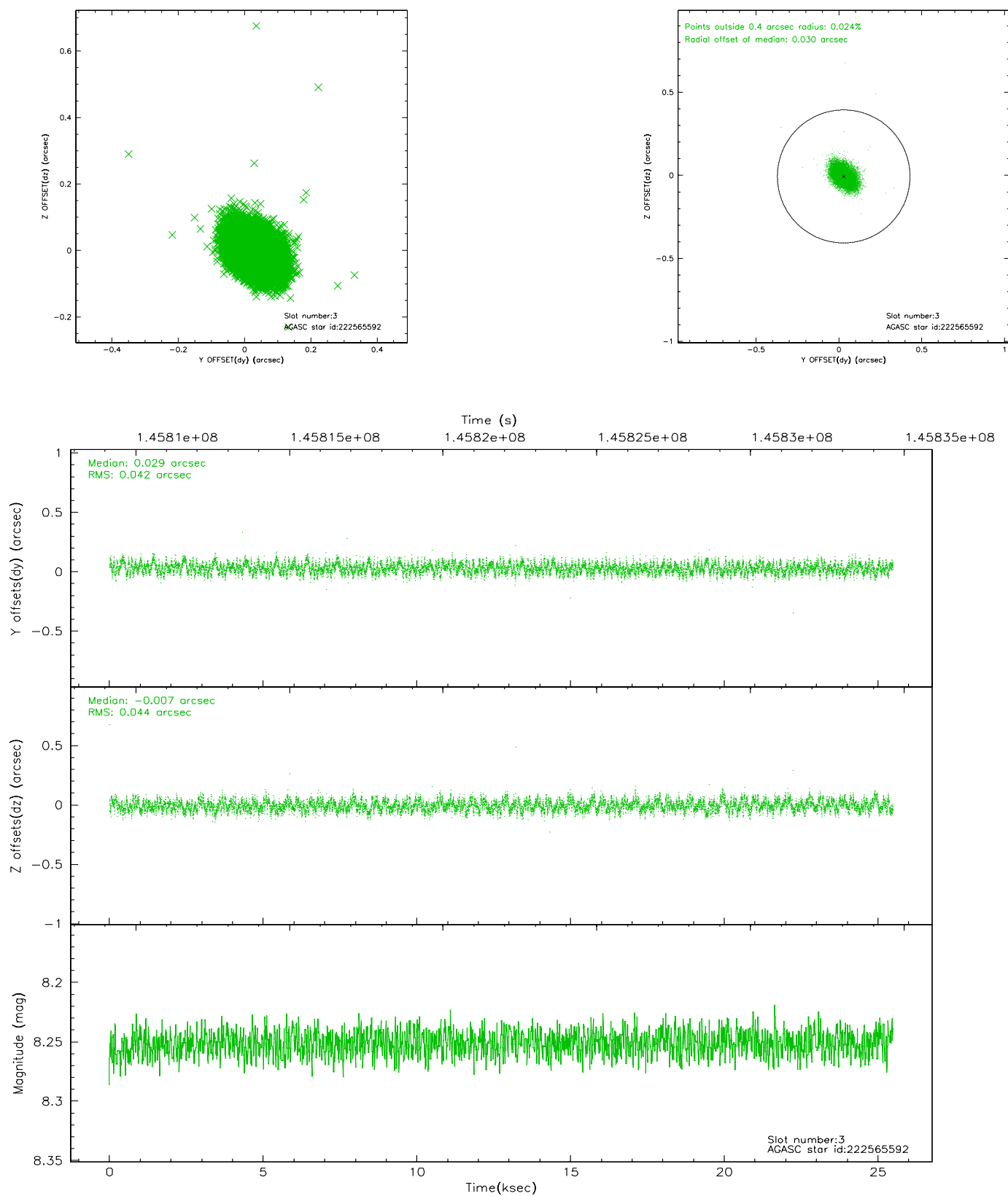


Slot Statistics

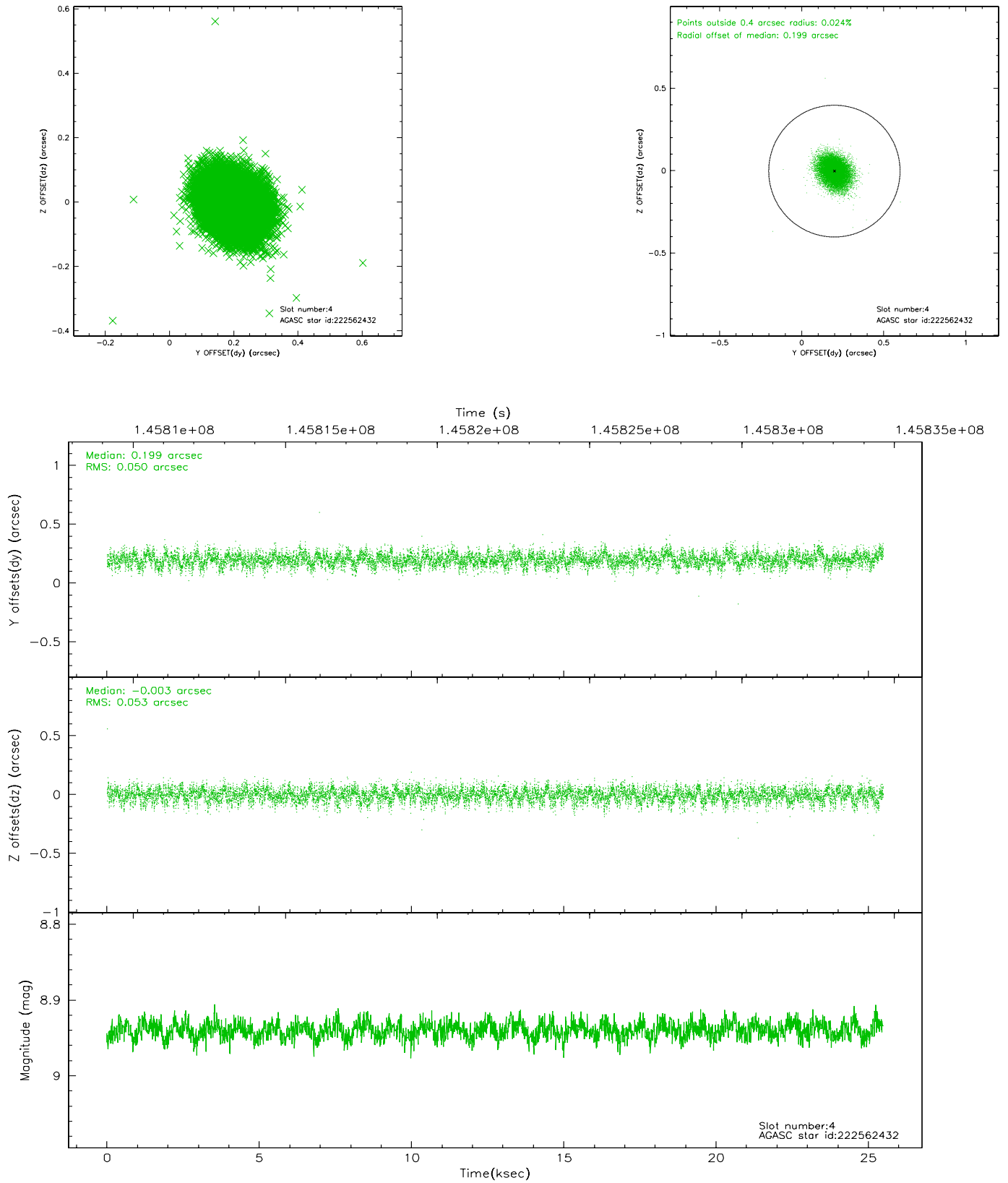
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	6166	-0.026	-0.027	0.007	0.011	0.000000	0.000000	-755.10	-1789.97
1	FID	ACIS-S-4	7.20	6150	-0.044	0.019	0.005	0.009	0.000000	0.000000	2158.10	118.43
2	FID	ACIS-S-5	7.23	6157	0.038	0.016	0.007	0.011	0.000000	0.000000	-1807.74	112.21
3	GUIDE	222565592	8.25	12350	0.029	-0.007	0.064	0.101	343.291662	16.508291	-669.89	1020.59
4	GUIDE	222562432	8.94	12358	0.199	-0.003	0.077	0.124	343.698150	16.309399	-2240.75	894.53
5	GUIDE	222563736	8.82	12344	-0.011	-0.195	0.074	0.118	343.076284	16.308502	-412.38	2022.01
6	GUIDE	223089808	9.09	12348	-0.161	0.215	0.083	0.135	343.220223	17.508272	1422.28	-1918.93
7	GUIDE	222571232	9.55	12342	-0.060	-0.011	0.089	0.149	343.021766	16.540282	184.45	1408.93

2.4 Star Slots

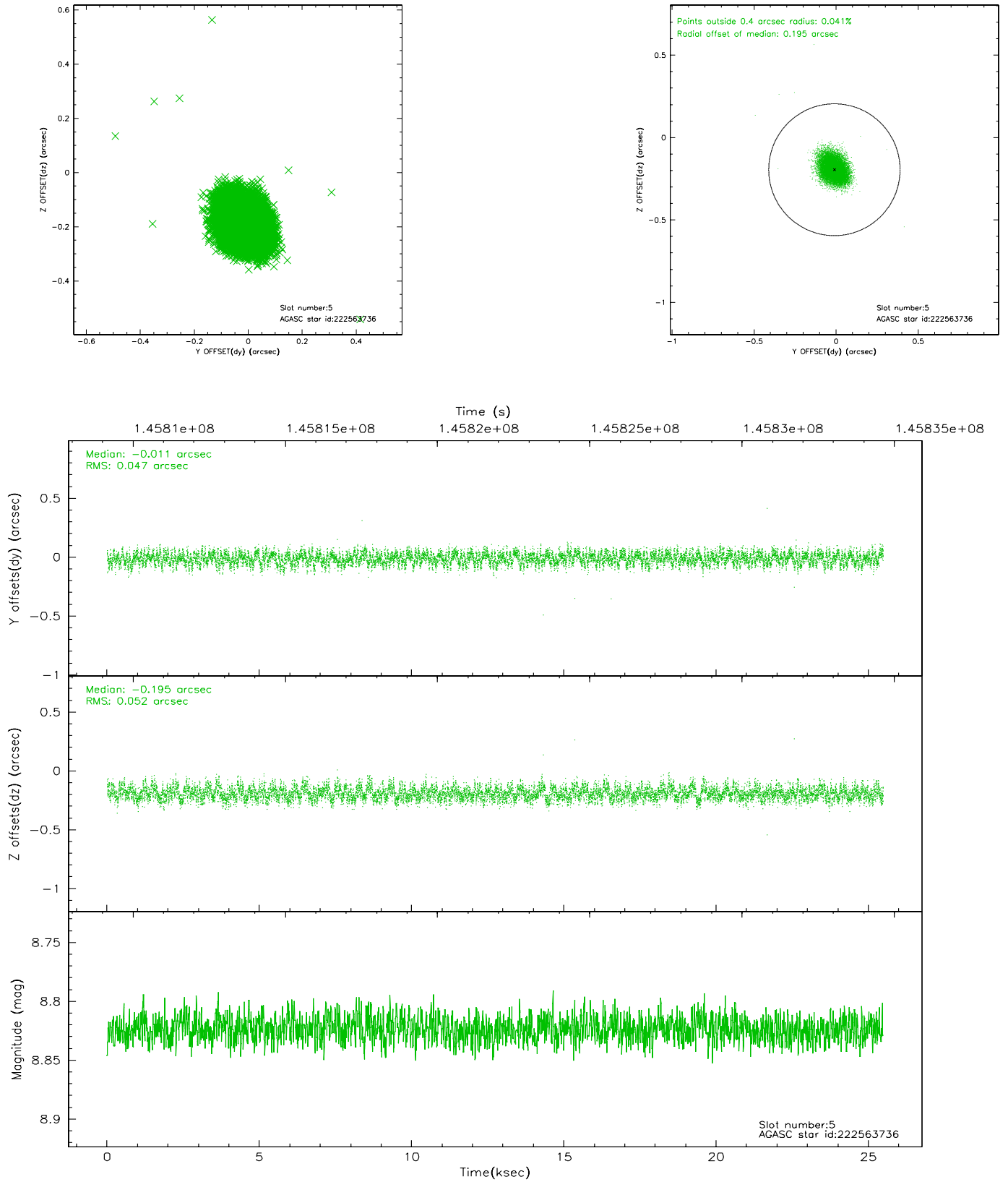
2.4.1 Slot 3



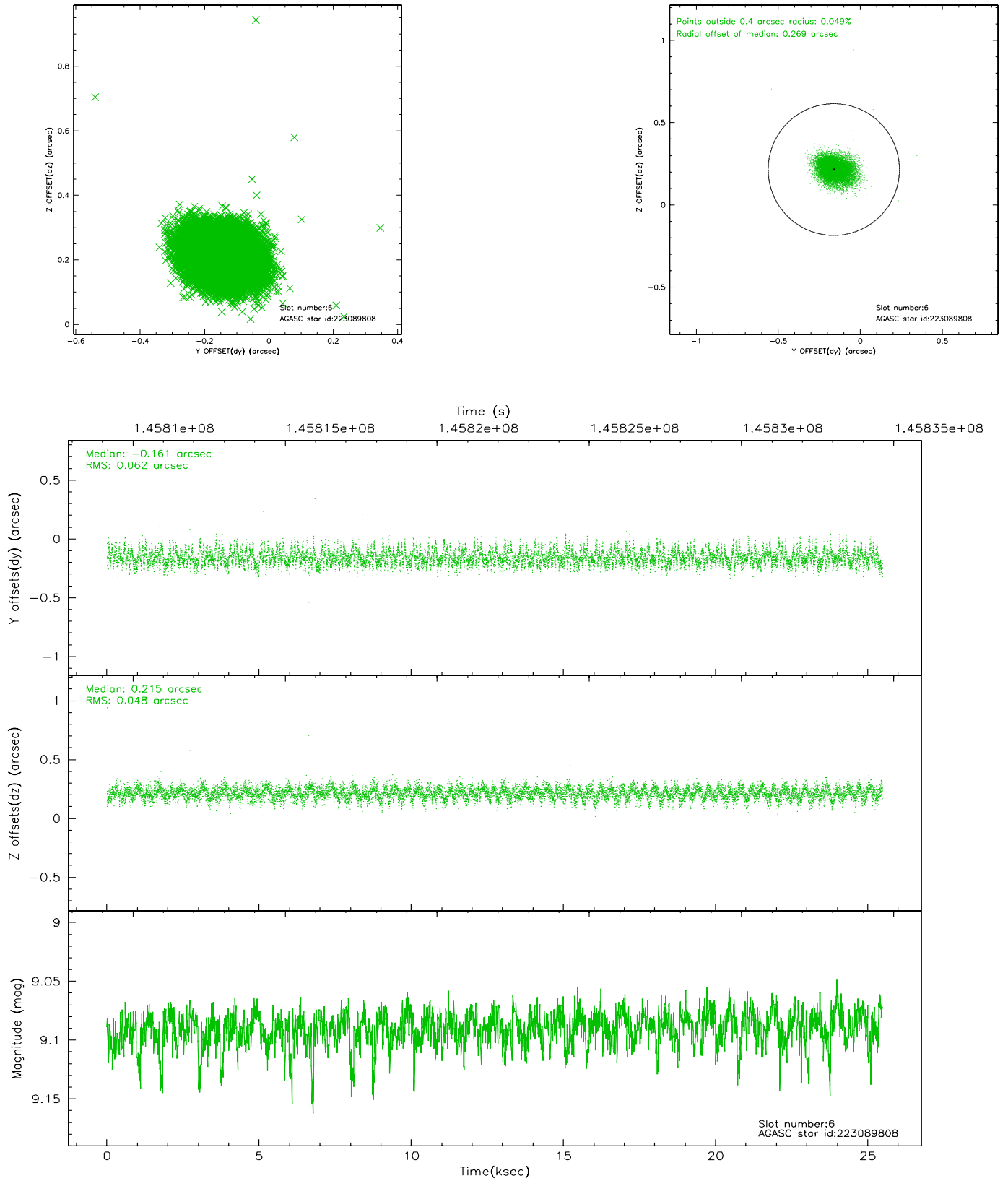
2.4.2 Slot 4



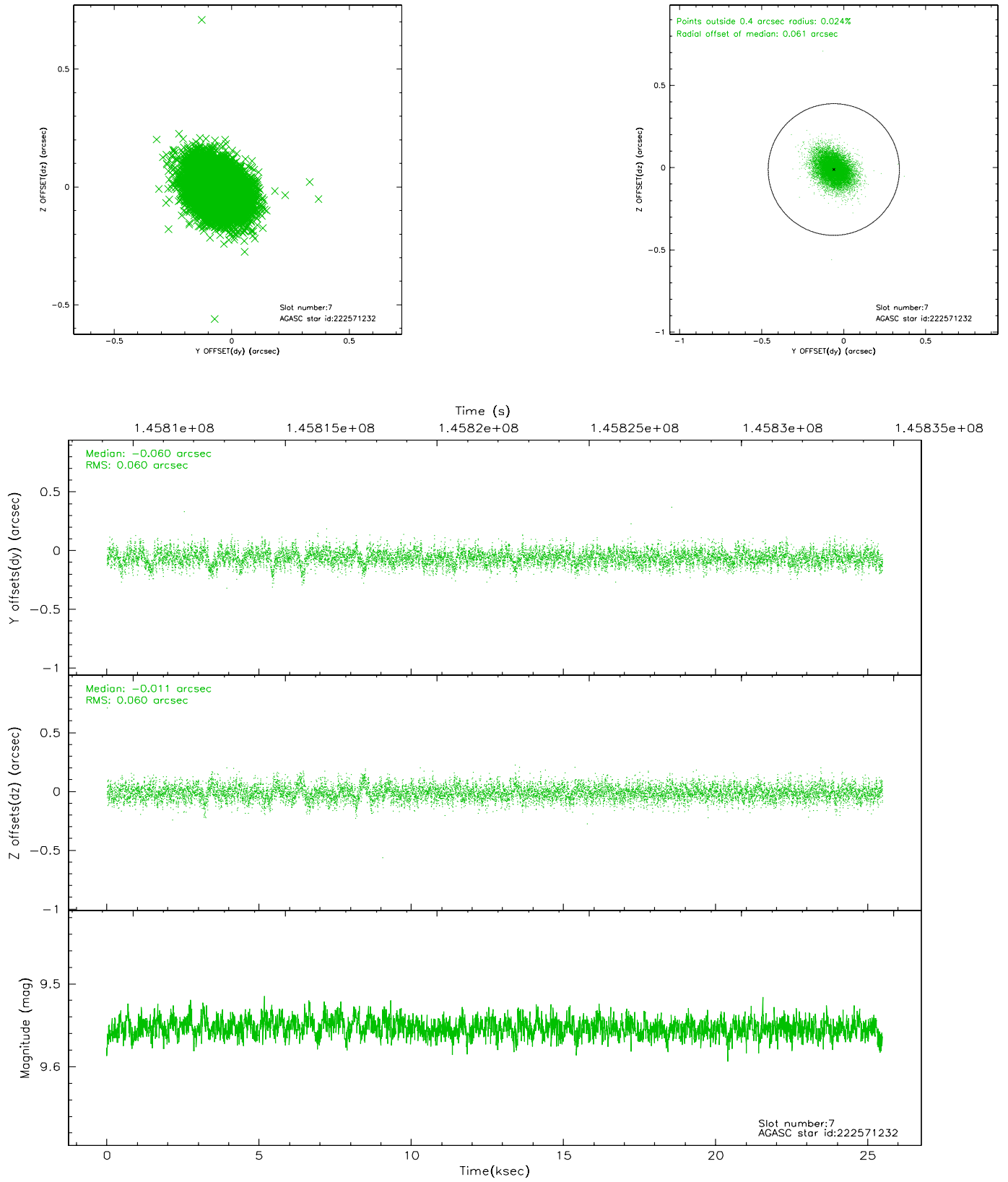
2.4.3 Slot 5



2.4.4 Slot 6

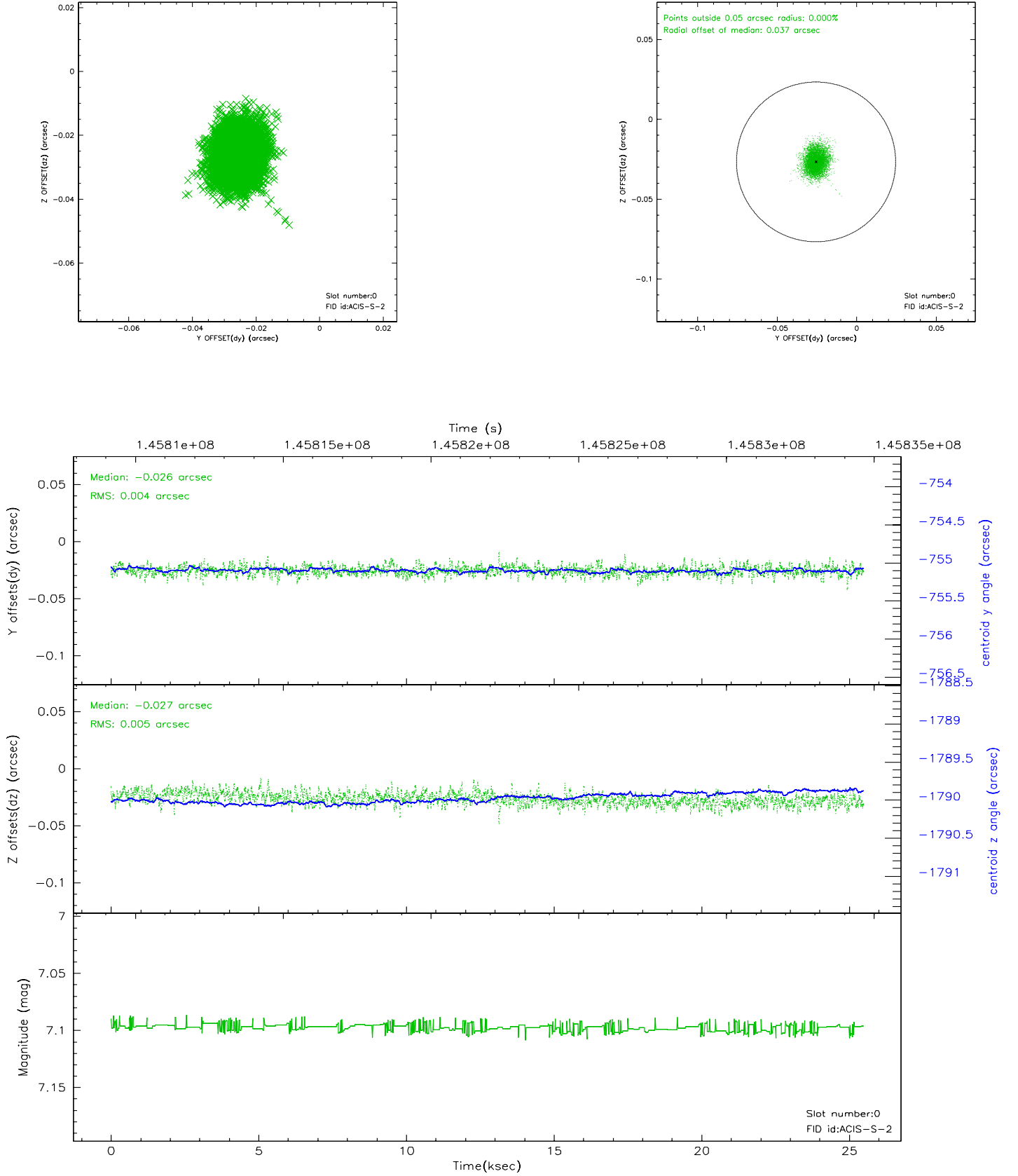


2.4.5 Slot 7

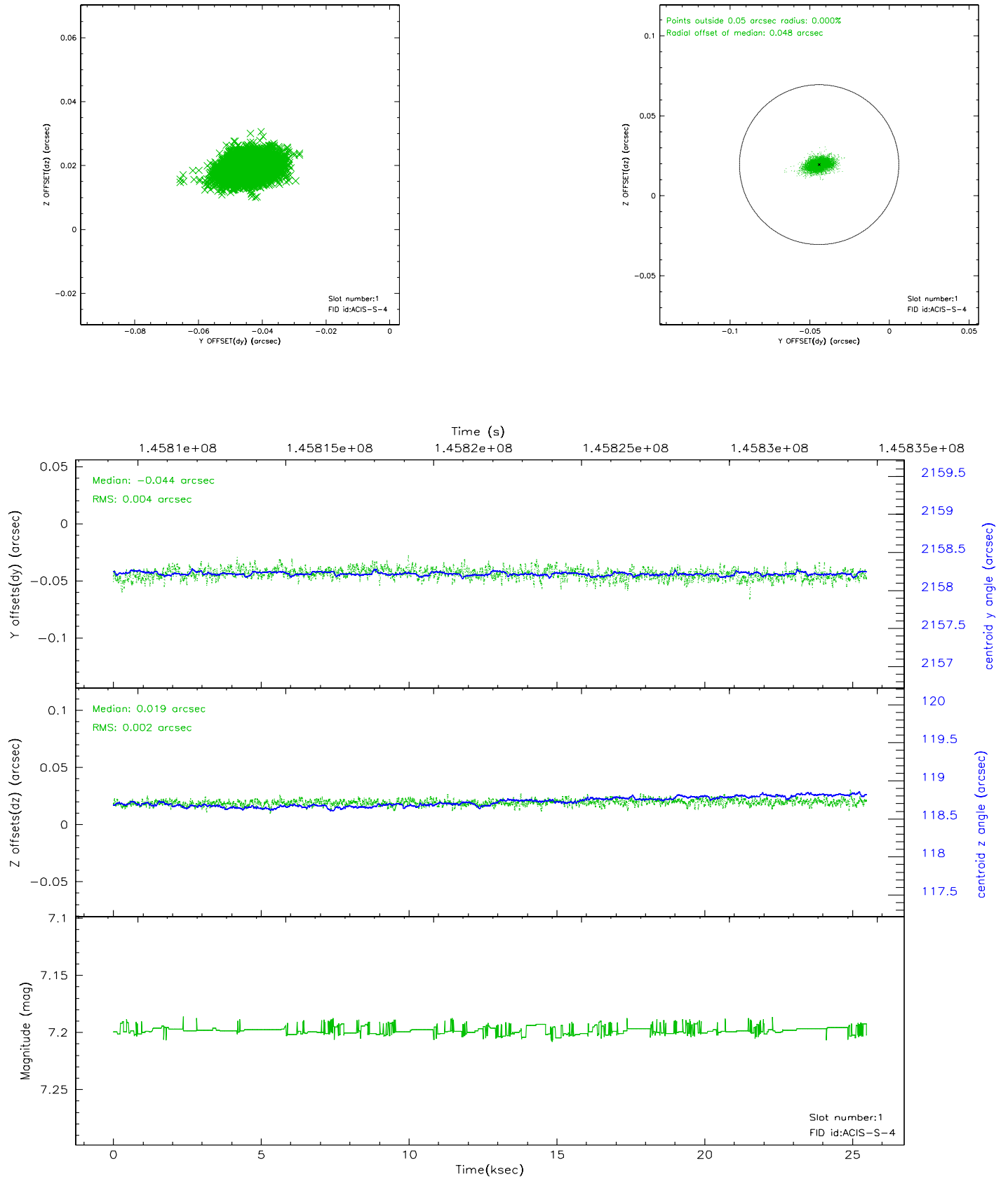


2.5 FID Slots

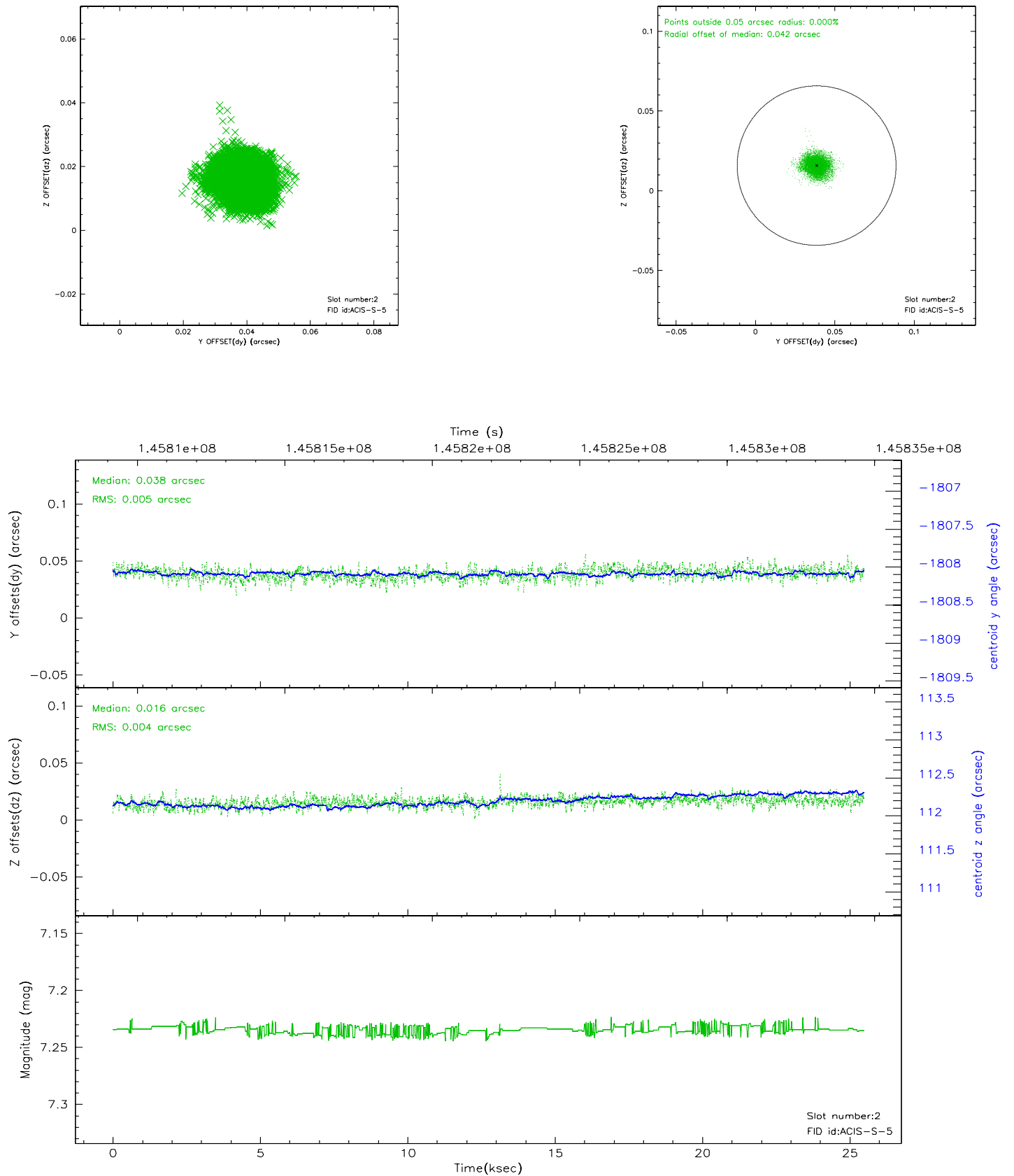
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

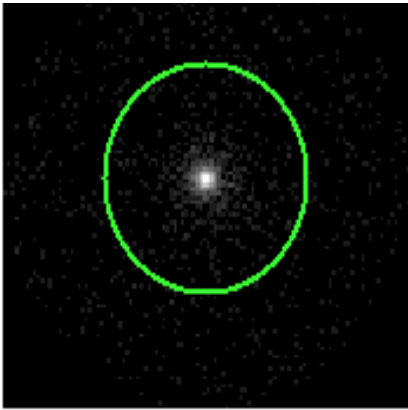


3 Gratings

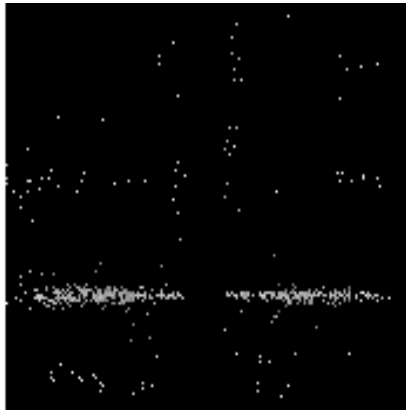
3.1 HEG Arm



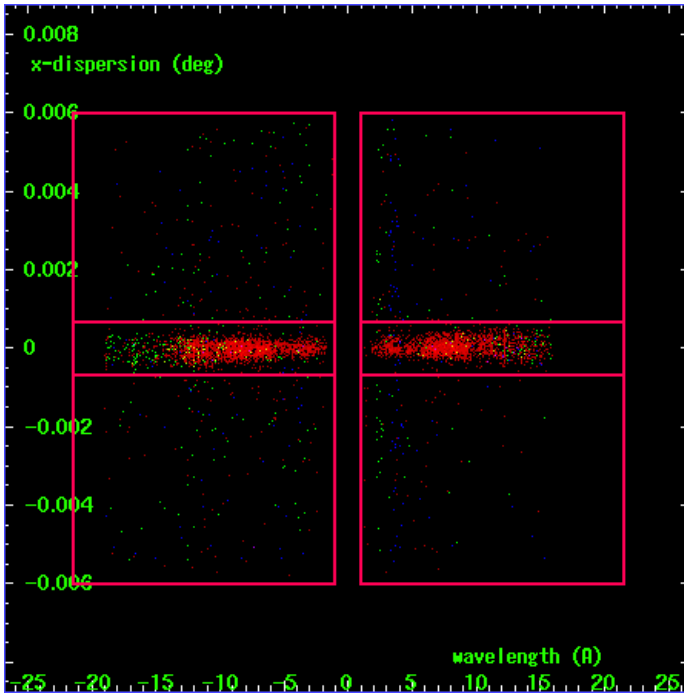
HEG Order Sort 123



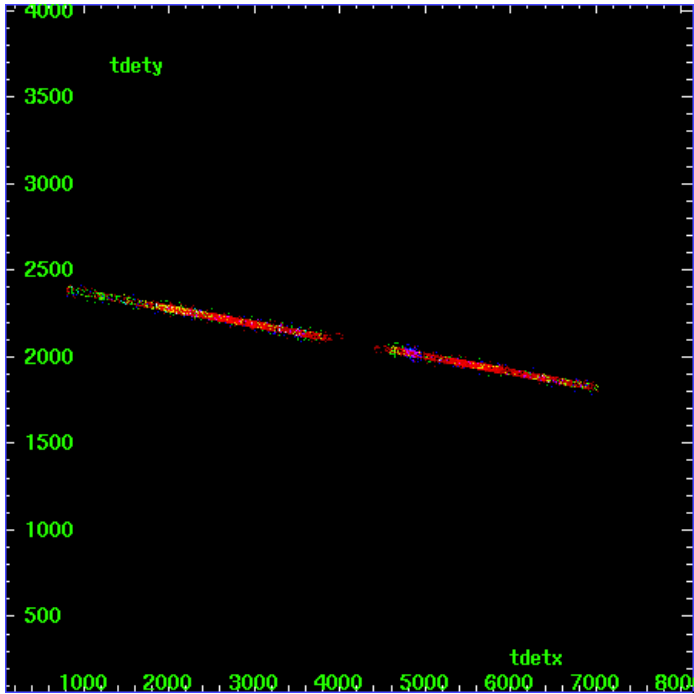
HEG Zero Order



HEG Order Sort ALL

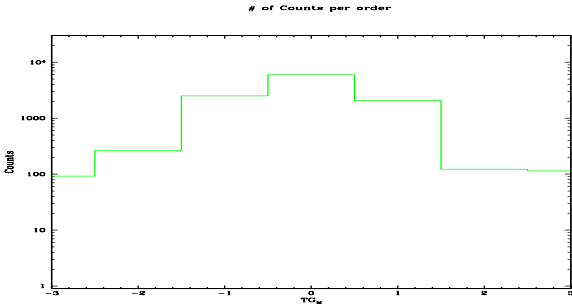


Spot Image HEG

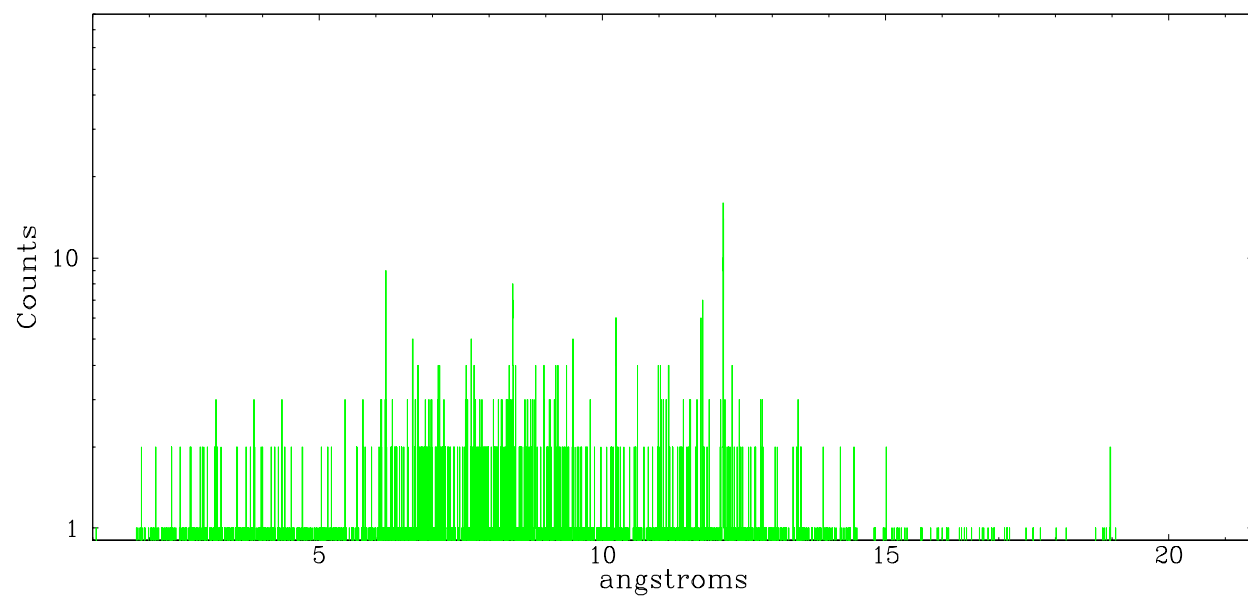


Full Detector HEG

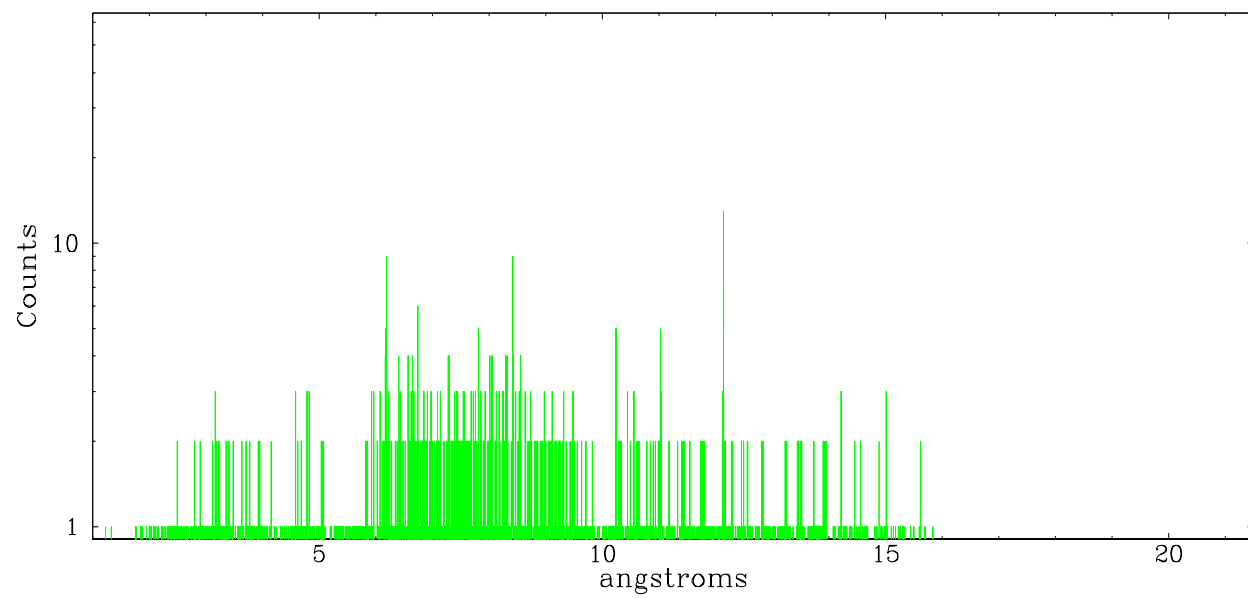
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	92	264	2501	5976	2074	123	114



heg order -1



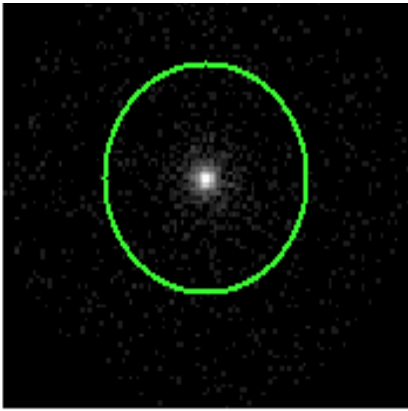
heg order +1



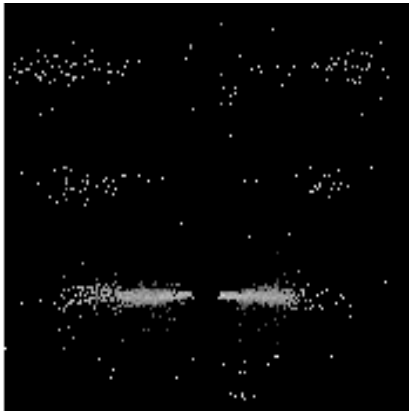
3.2 MEG Arm



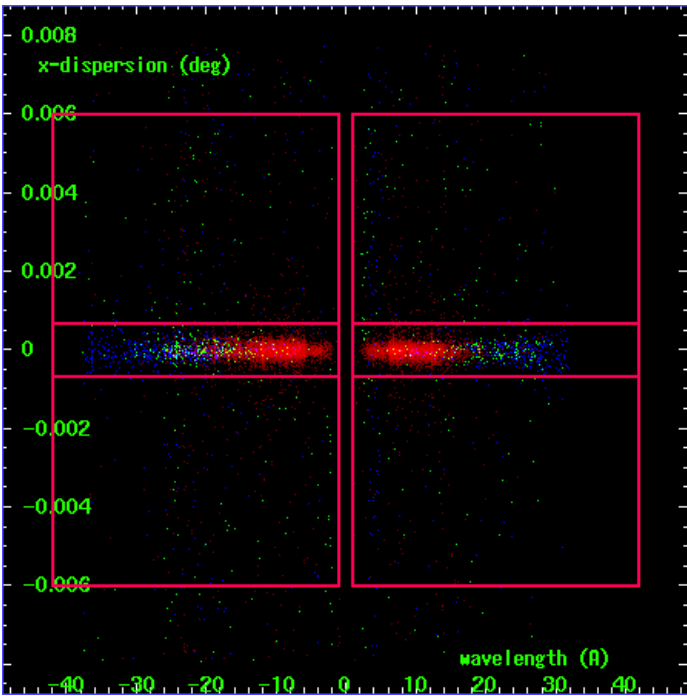
MEG Order Sort 123



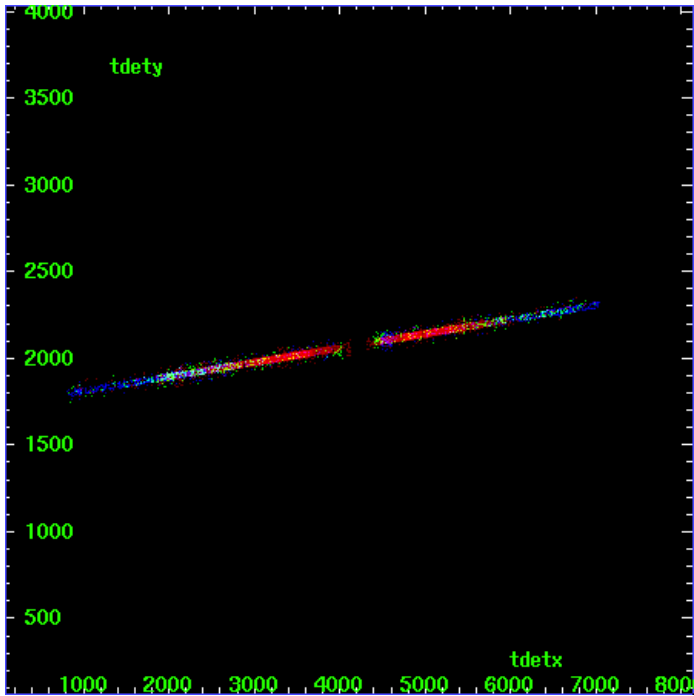
MEG Zero Order



MEG Order Sort ALL

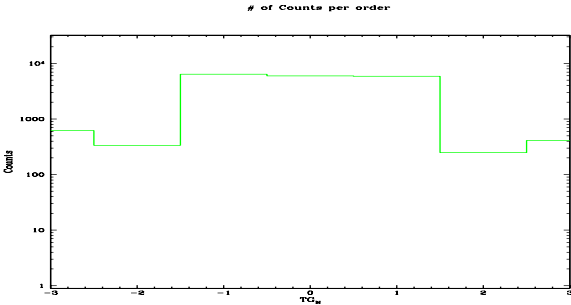


Spot Image MEG

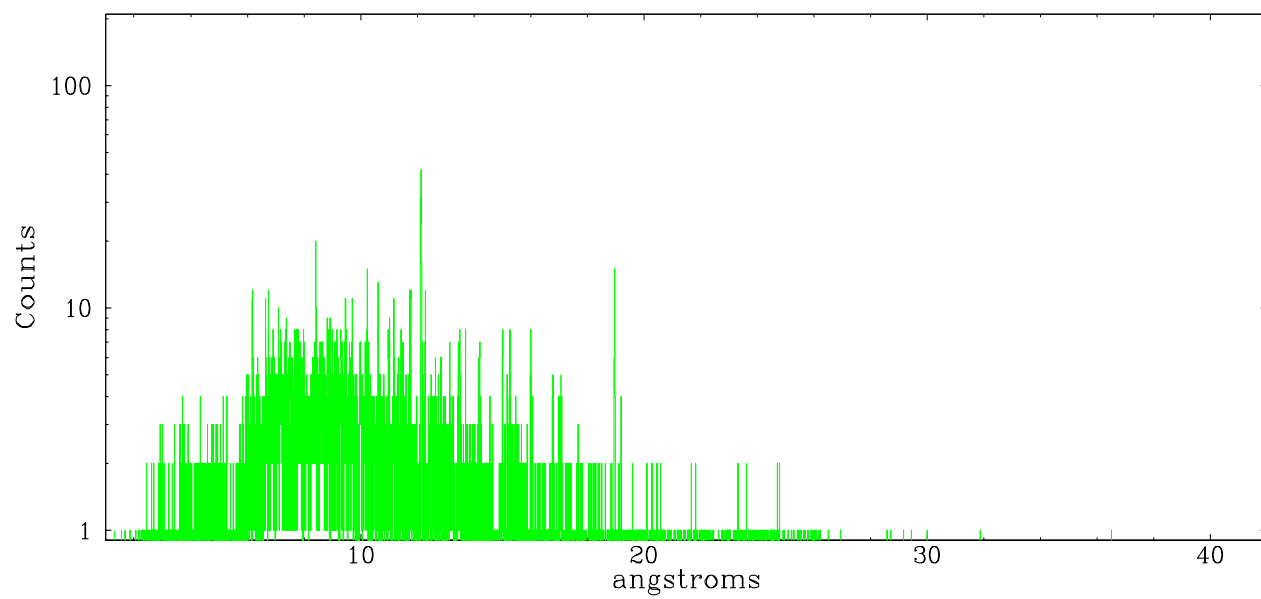


Full Detector MEG

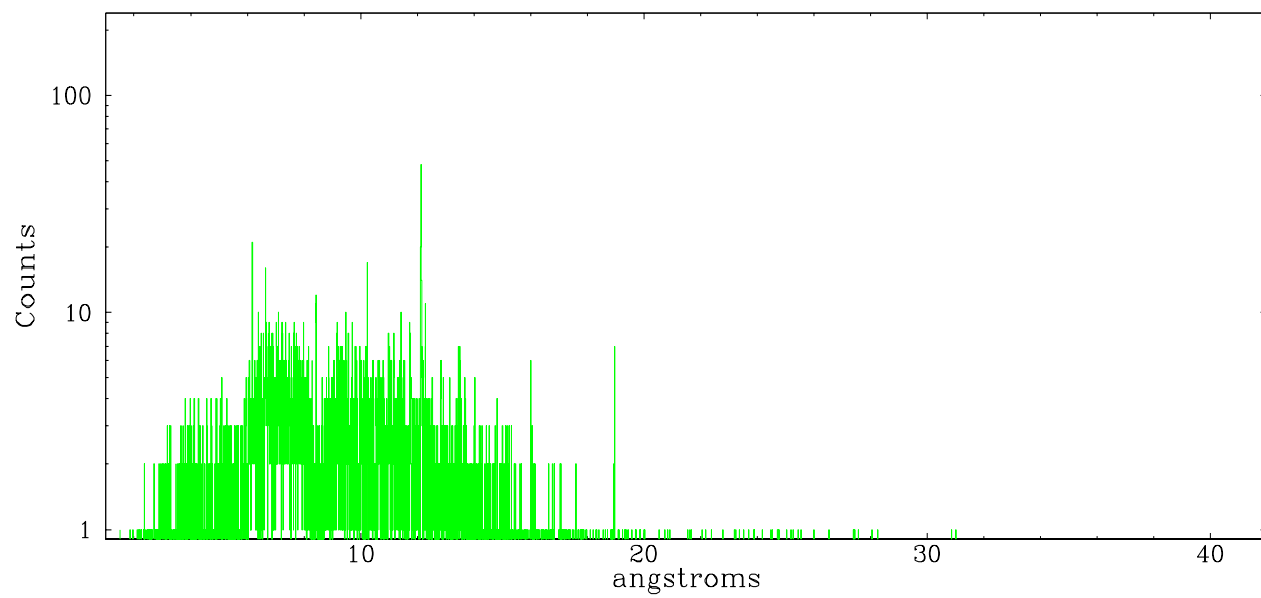
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	621	336	6428	5976	5897	248	410



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.197

A.2 Comments

Focal plane temperature is warmer than -118 degrees at beginning of observation. The ACIS calibrations are not verified or necessarily applicable for focal plane temperatures warmer than -118 degrees.