

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2304 - L2 Version 001
Chandra X-Ray Center

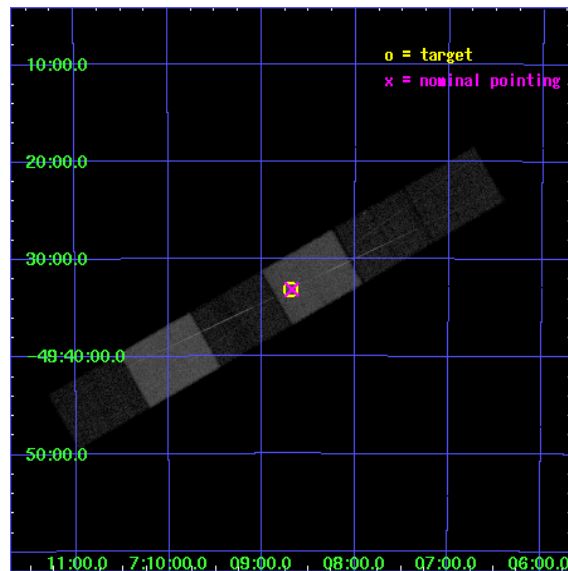
L2 Processing Date : Nov 6 2006

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

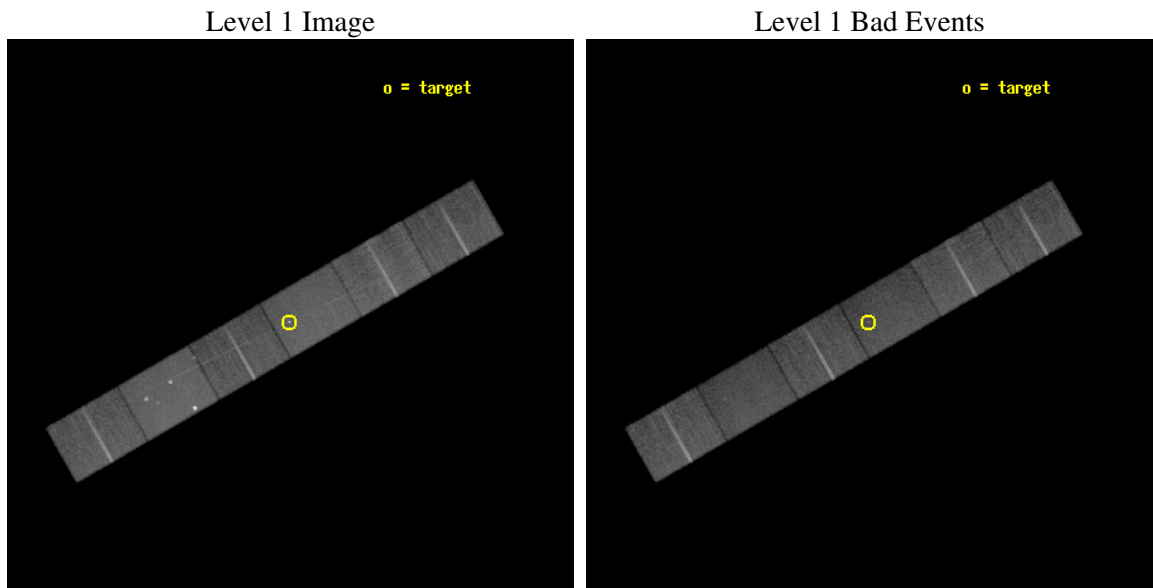
seq_num	700167
obs_id	2304
title	HETG OBSERVATIONS OF EXTREME NARROW-LINE SEYFERT 1 GALAXIES
observer	PROF. KAREN LEIGHTLY
object	1H 0707-495
dtcycle	0
cycle	P
ra_targ	107.172917
dec_targ	-49.551611
ra_nom	107.16979829654
dec_nom	-49.552430232656
roll_nom	330.10116874861
revision	2
ontime	34672.459039748
livetime	34112.468752703
ontime4	34672.459039778
ontime5	34672.459039778
ontime6	34675.0
ontime7	34672.459039748
ontime8	34672.459039778
ontime9	34675.0
l2events	235443



2 OBI

2.1 OBI

2.1.1 Images

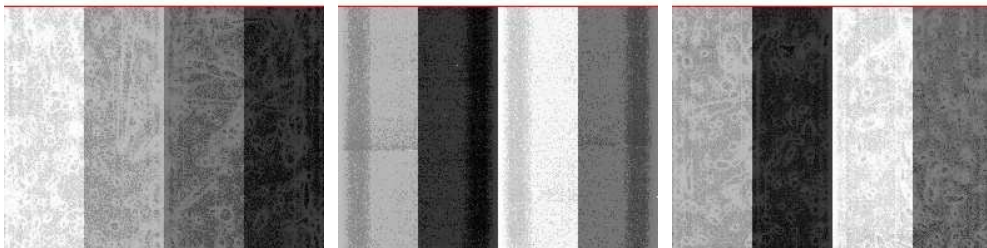


2.1.2 Bias

Chip 4

Chip 5

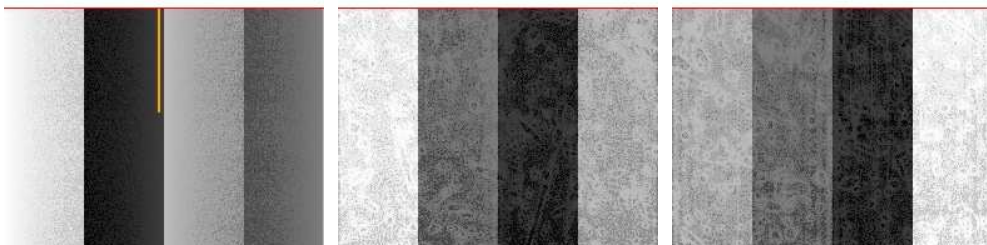
Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldsver	3.2.3
date	2006-11-06T12:48:45
revision	2

sched_exp_time	34767.013000
ontime	34677.130065739
ontime4	34677.130065769
ontime5	34677.130065769
ontime6	34679.671025991
ontime7	34677.130065739
ontime8	34677.130065769
ontime9	34679.671025991
l1events	1126348

2.1.4 Events

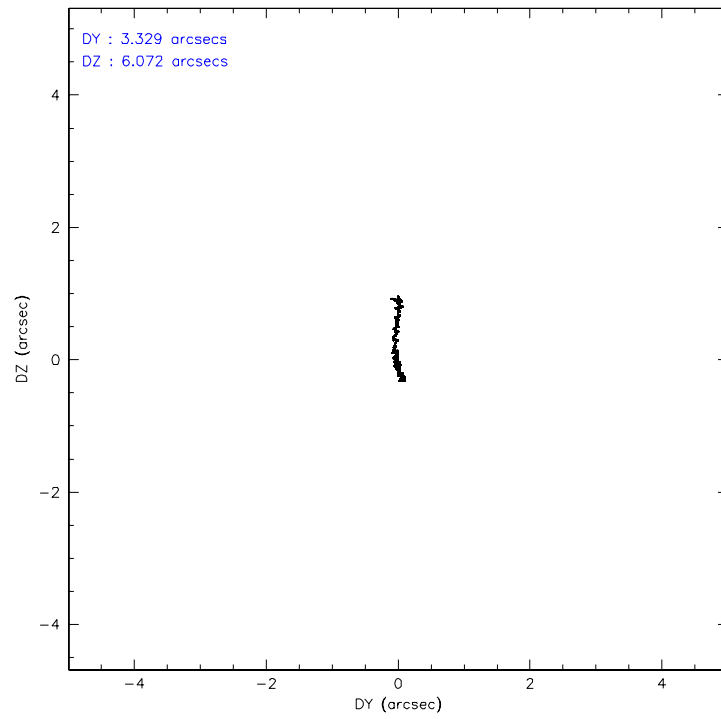
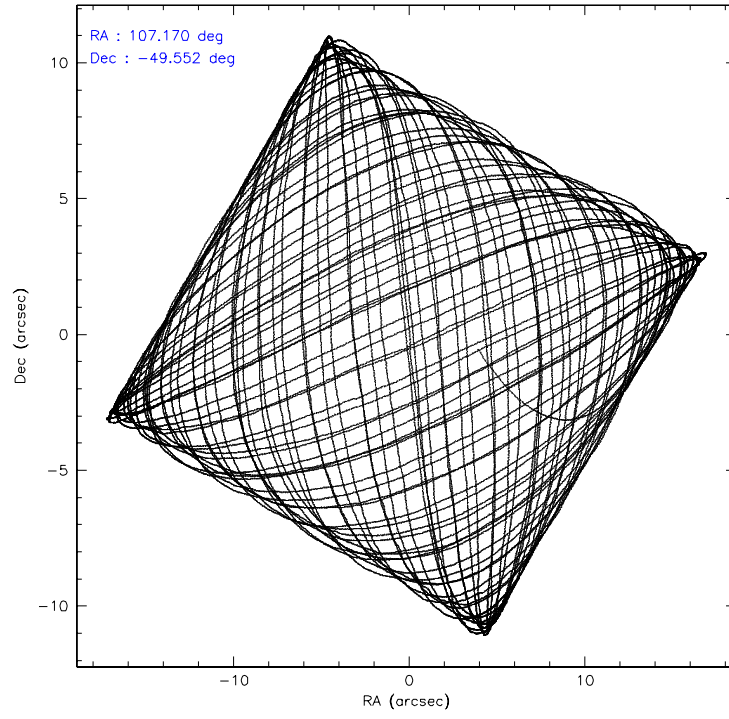
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	178481	228101	160640	202202	200436	156488
rejected events	159872	119882	141388	120455	161531	137952
rejected %	89%	52%	88%	59%	80%	88%

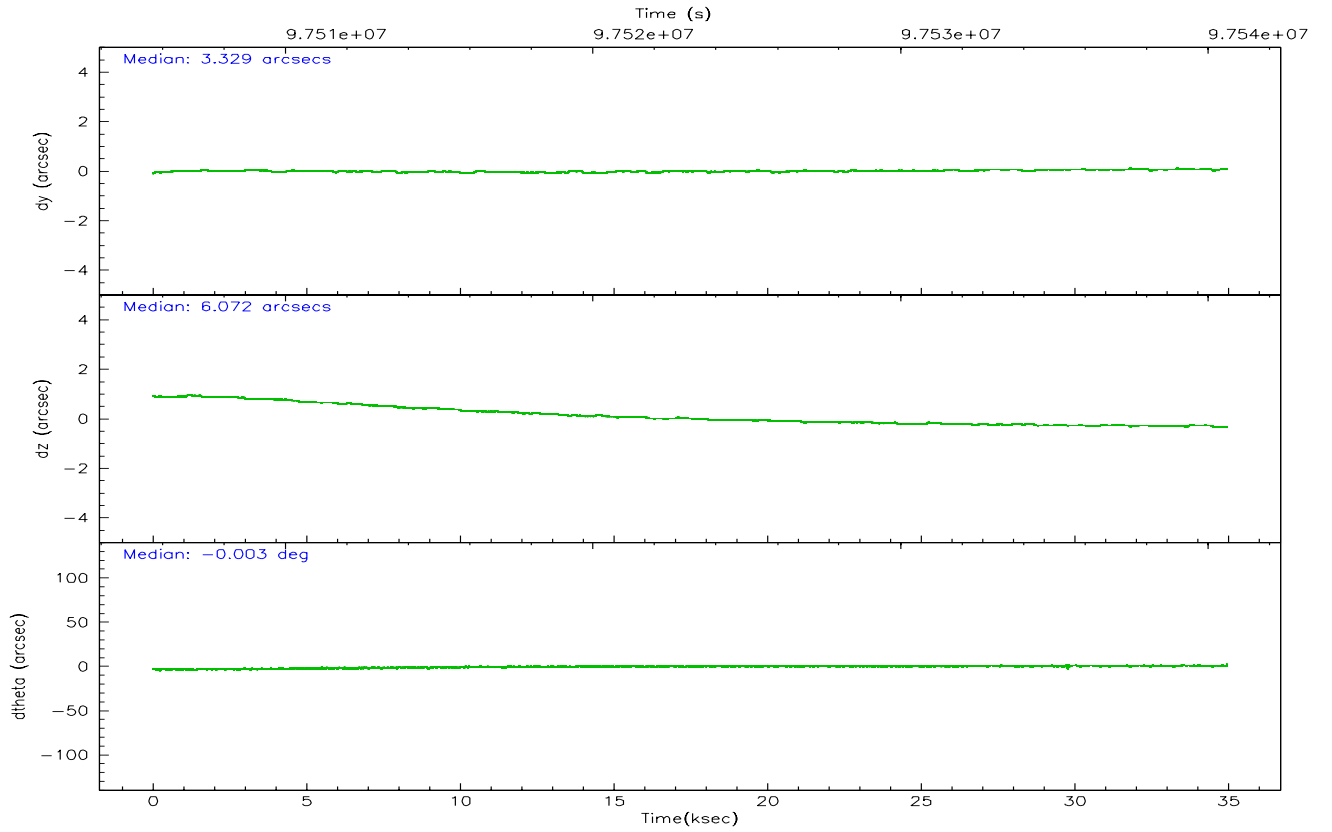
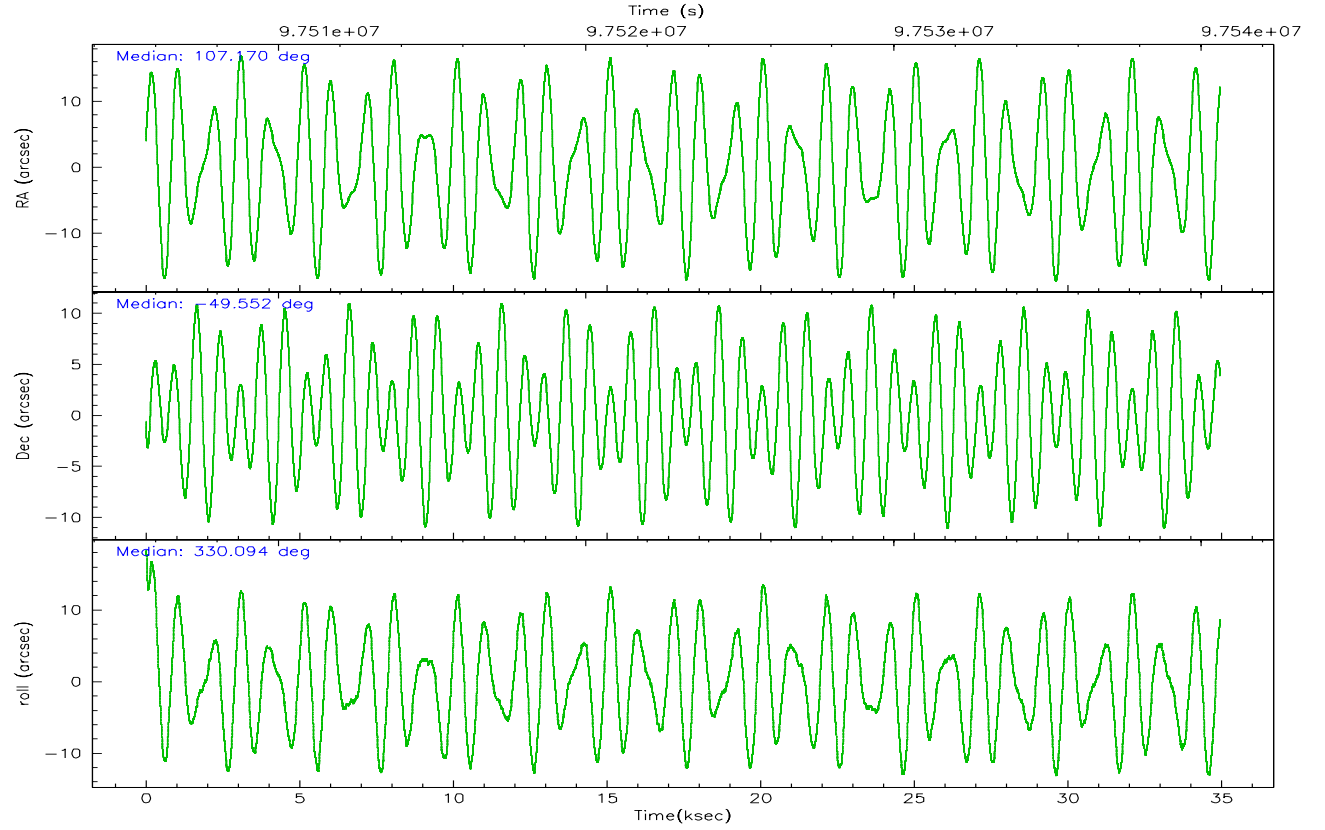
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	7495	20582	8165	6150	12526	7425
	4%	9%	5%	3%	6%	4%
grade 1 events	79	266	70	172	84	69
	0%	0%	0%	0%	0%	0%
grade 2 events	4250	28416	3721	19458	8255	3651
	2%	12%	2%	9%	4%	2%
grade 3 events	1895	2881	1919	5294	4093	1983
	1%	1%	1%	2%	2%	1%
grade 4 events	1915	2689	2009	5272	3870	1958
	1%	1%	1%	2%	1%	1%
grade 5 events	5460	11260	6321	14670	8222	6392
	3%	4%	3%	7%	4%	4%
grade 6 events	3056	53674	3445	45589	10163	3521
	1%	23%	2%	22%	5%	2%
grade 7 events	154331	108333	134990	105597	153223	131489
	86%	47%	84%	52%	76%	84%

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	107.127692	107.1697982965359	Subarray requested	CUSTOM	CUSTOM
Pointing Dec	-49.552719	-49.55243023265574	Subarray start row	1	1
Pointing Roll	329.912492	330.1011687486146	Subarray row count	774	774
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	3.200000	2.5
SIM translation stage pos (mm)	-187.132523	-187.1254020033014			
SIM translation stage offset (mm)	-3	-3.007120579706367			
Observation start time	97505869.184000	97504907.78423899			
Observation start date	2001-02-02T12:56:45	2001-02-02T12:41:47			
Observation end time	97540636.184000	97540950.885628			
Observation end date	2001-02-02T22:36:12	2001-02-02T22:42:30			
Read mode	TIMED	TIMED			

2.3 Aspect



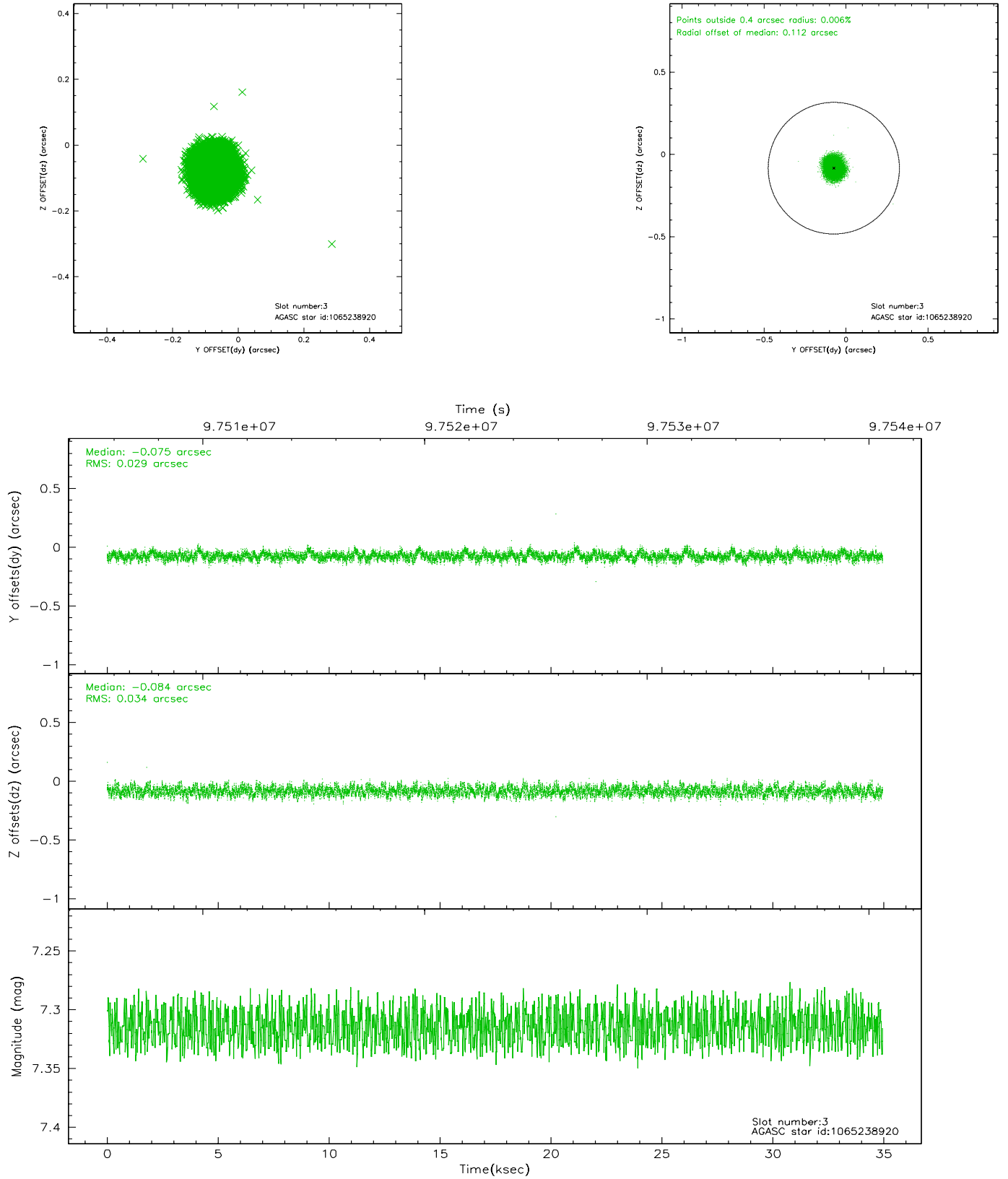


Slot Statistics

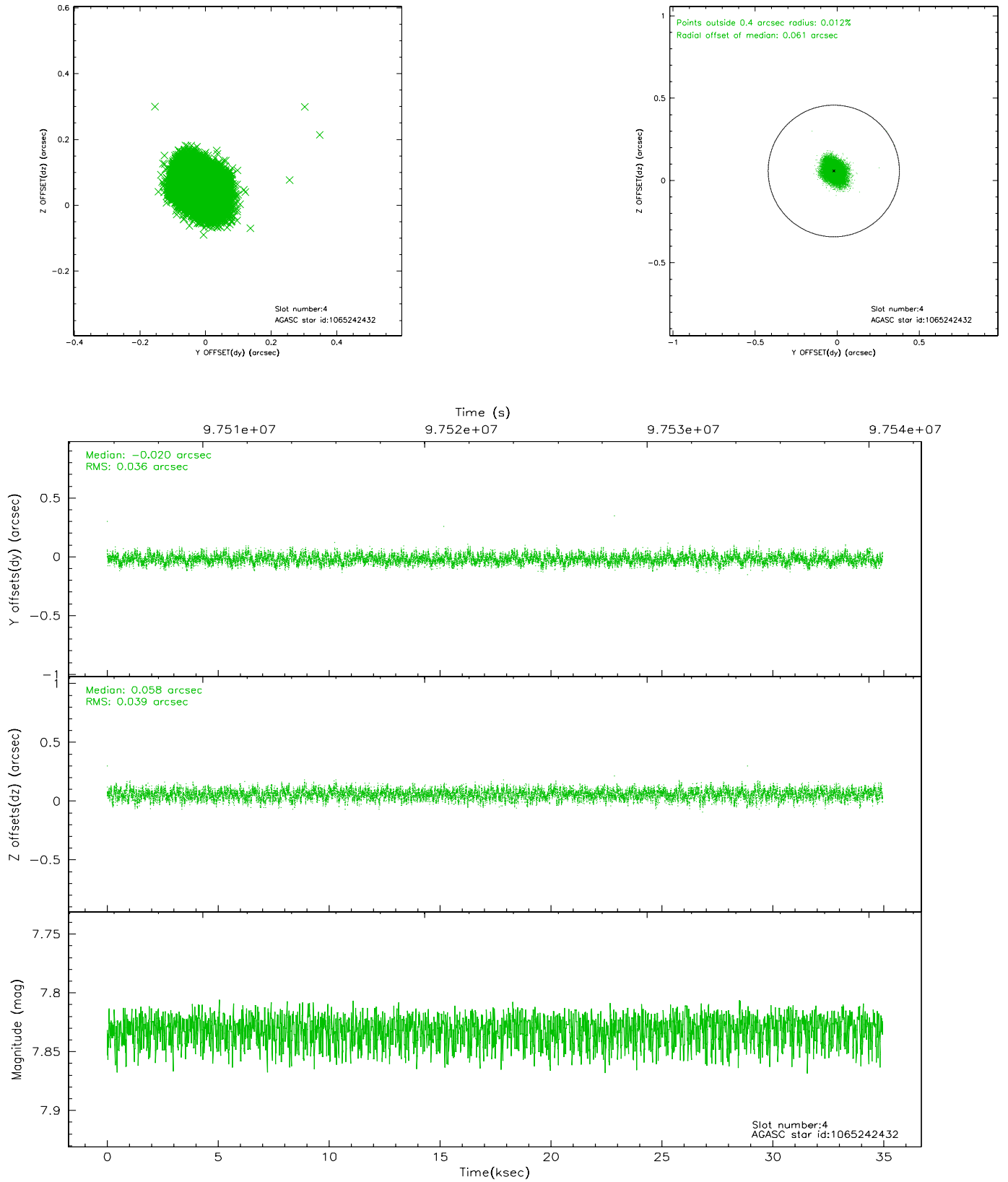
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	8524	-0.007	-0.028	0.010	0.021	0.000000	0.000000	-755.81	-1789.45
1	FID	ACIS-S-4	7.19	8524	-0.054	0.011	0.007	0.011	0.000000	0.000000	2157.43	118.99
2	FID	ACIS-S-5	7.24	8525	0.032	0.025	0.012	0.022	0.000000	0.000000	-1808.53	112.76
3	GUIDE	1065238920	7.31	17051	-0.075	-0.084	0.048	0.076	108.105033	-49.327001	1583.86	1840.11
4	GUIDE	1065242432	7.83	17046	-0.020	0.058	0.056	0.090	107.094192	-50.100313	921.68	-1744.12
5	GUIDE	1065234432	8.04	17040	-0.092	0.047	0.070	0.110	107.563286	-49.938653	1571.30	-698.44
6	GUIDE	1065109712	8.64	17047	0.085	0.005	0.058	0.094	106.590083	-49.796179	-639.03	-1388.51
7	GUIDE	1065237304	8.78	17045	0.107	-0.025	0.074	0.119	106.981941	-48.917125	-1445.52	1806.57

2.4 Star Slots

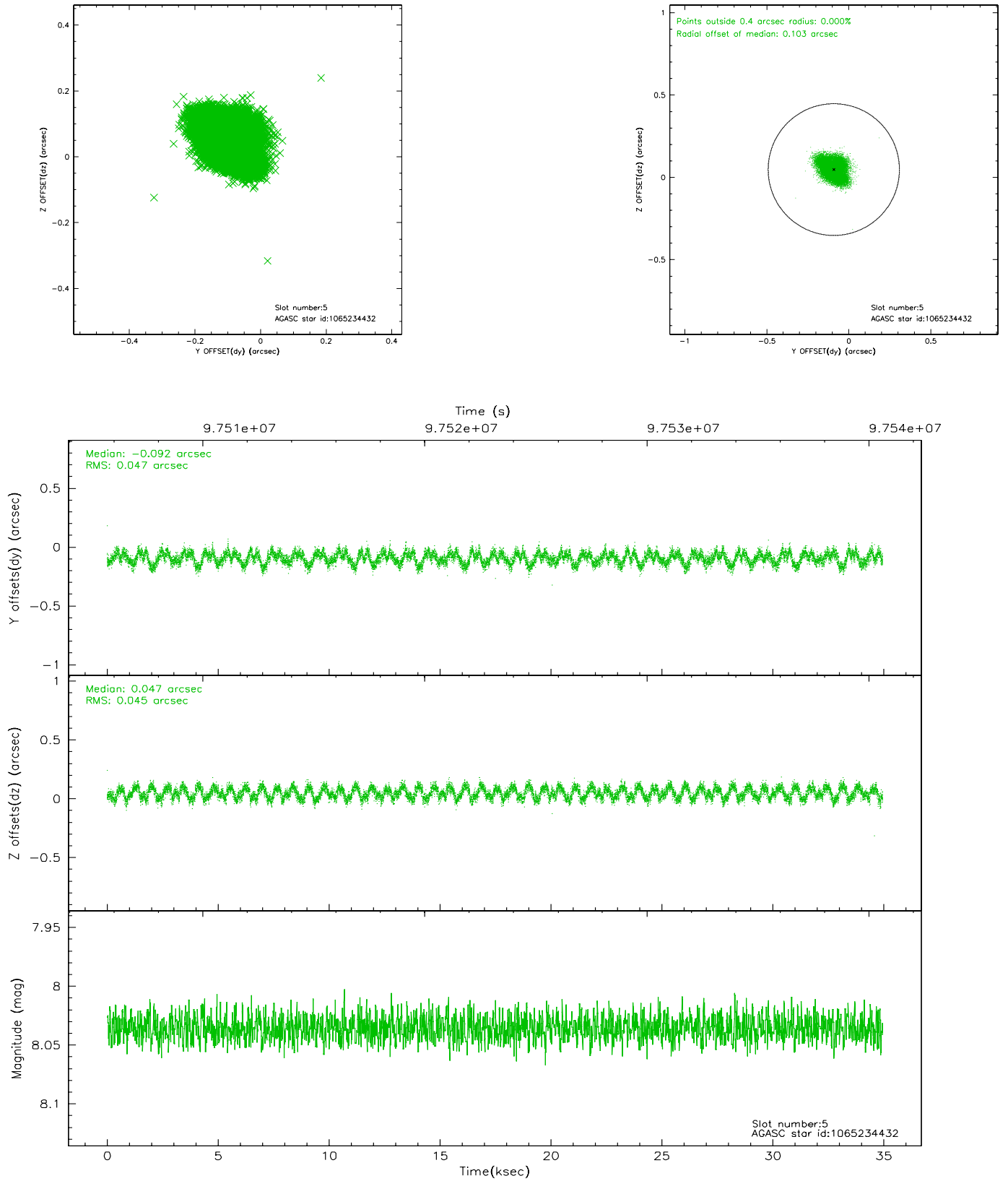
2.4.1 Slot 3



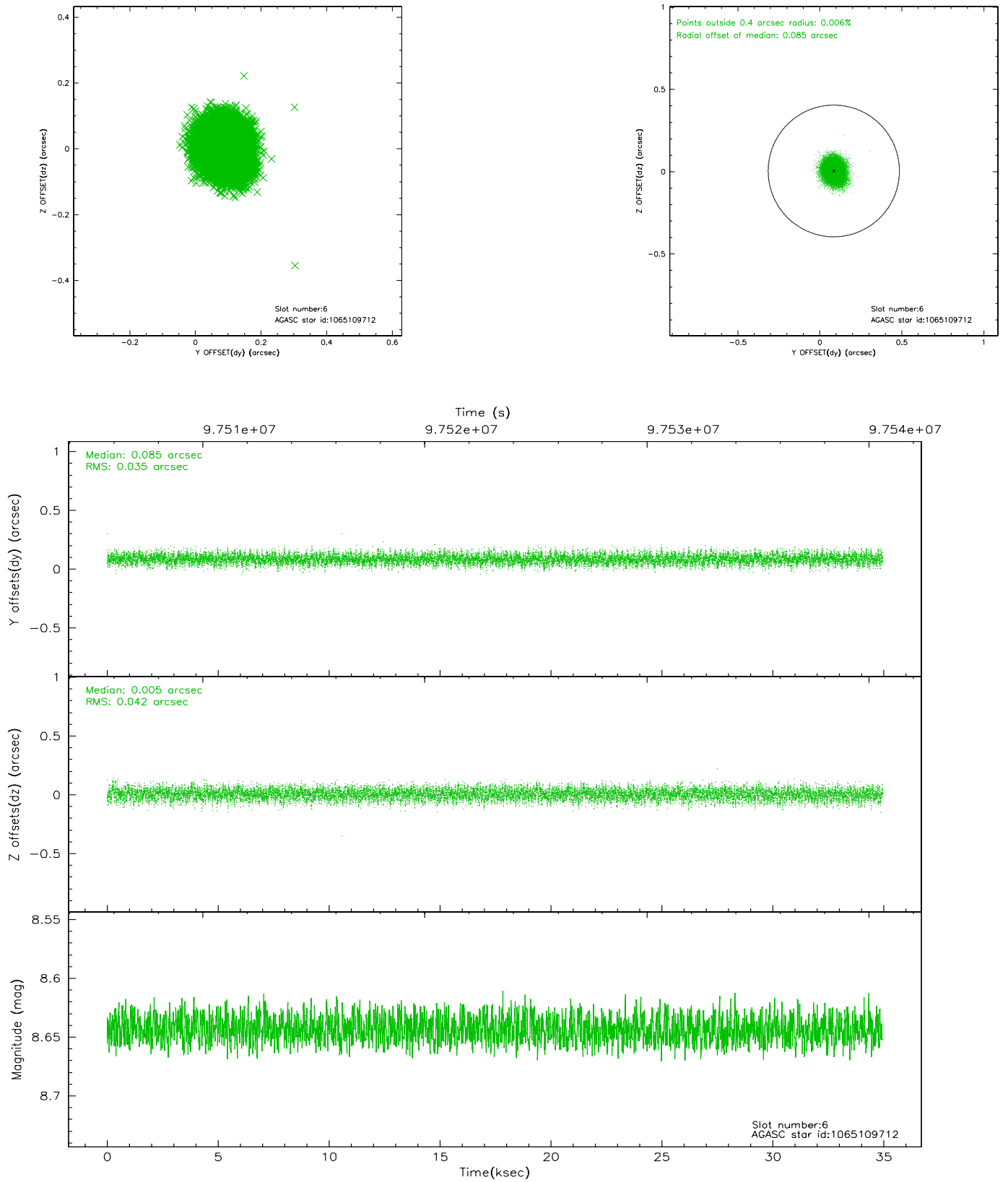
2.4.2 Slot 4



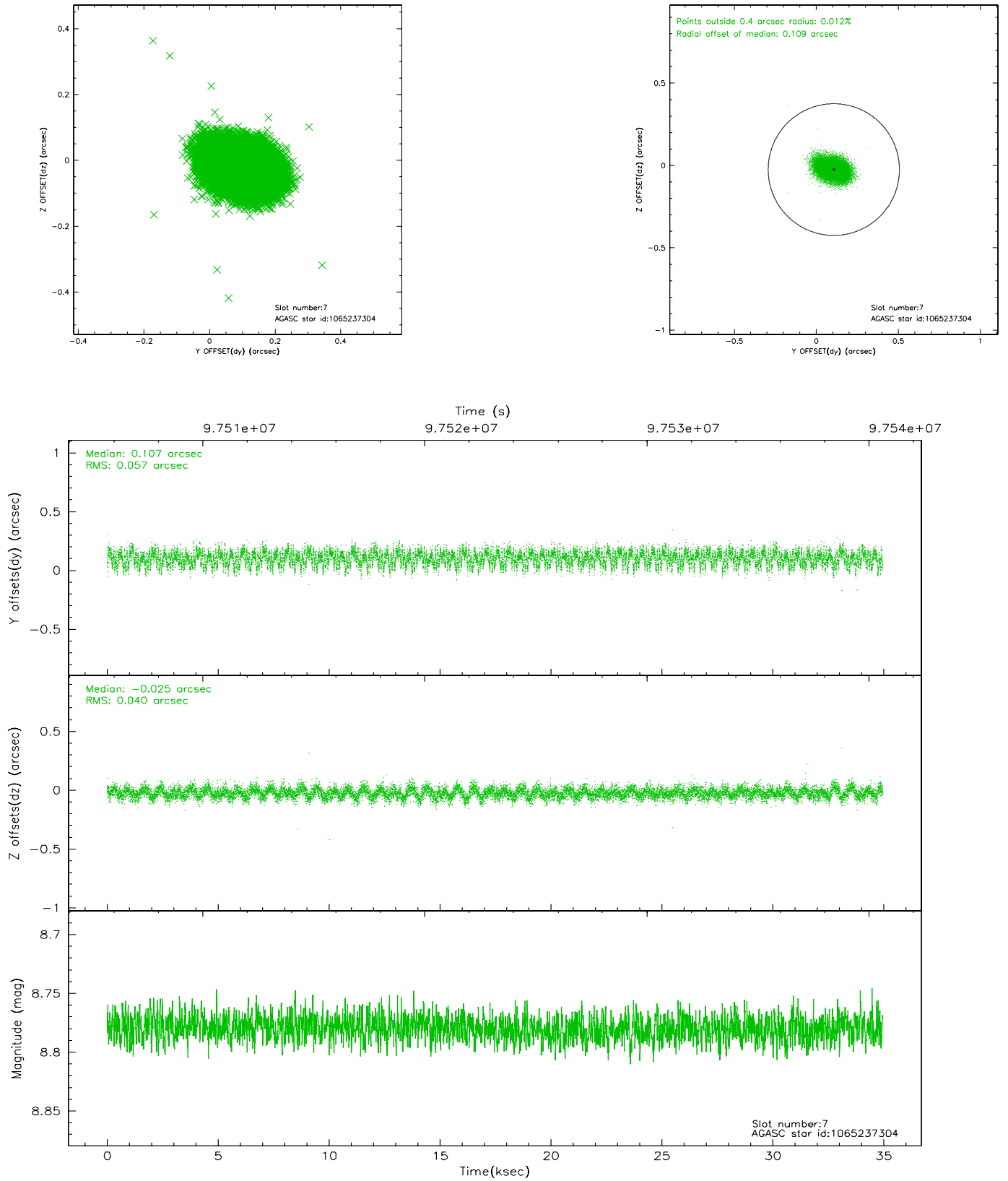
2.4.3 Slot 5



2.4.4 Slot 6

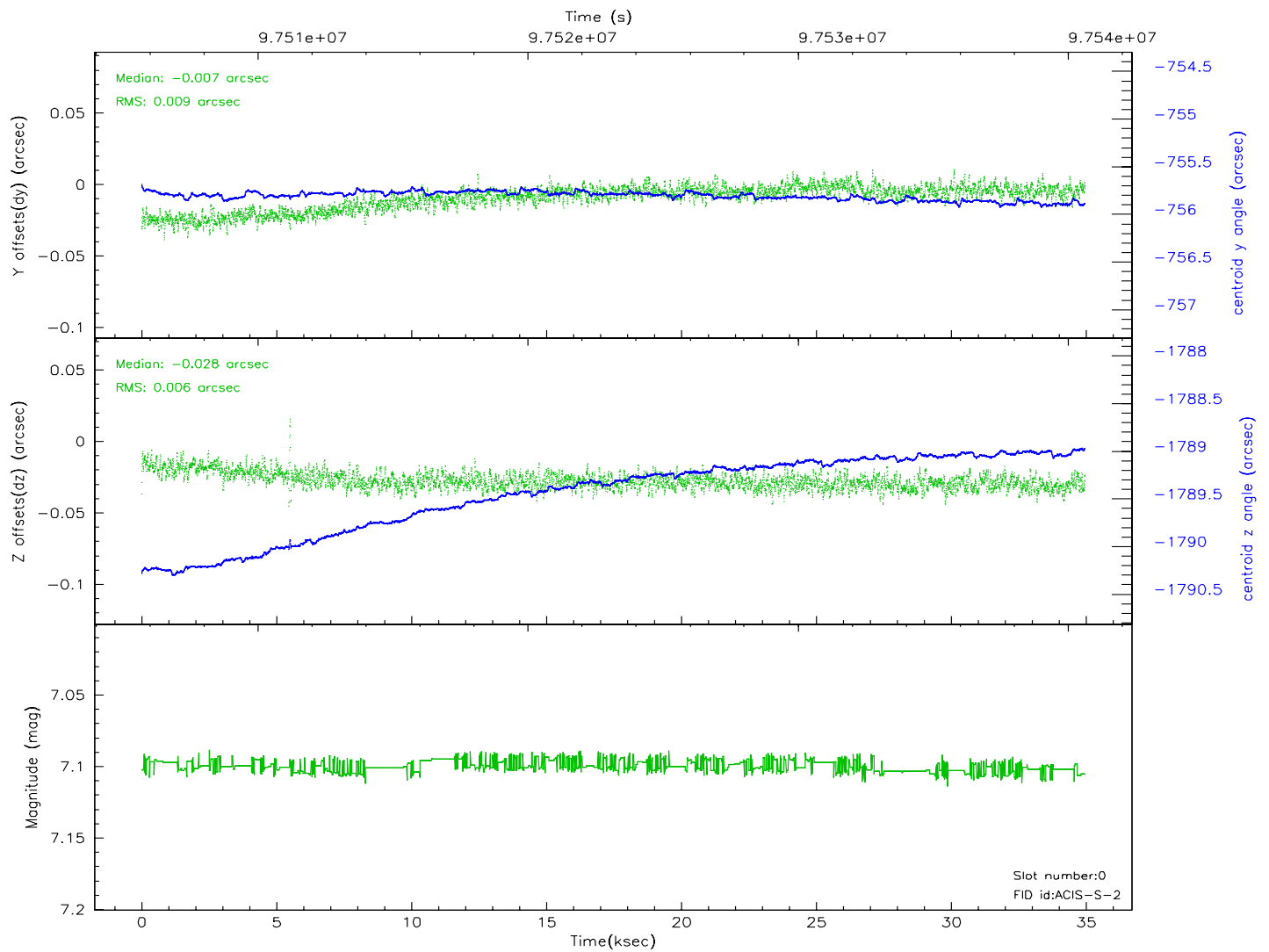
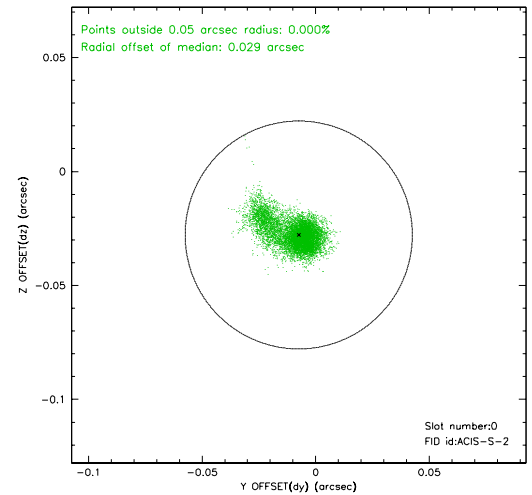
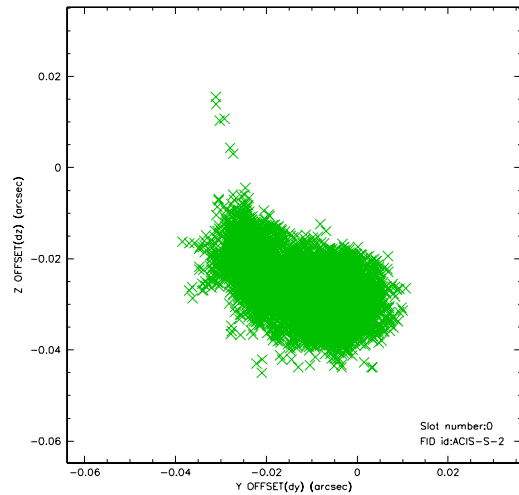


2.4.5 Slot 7

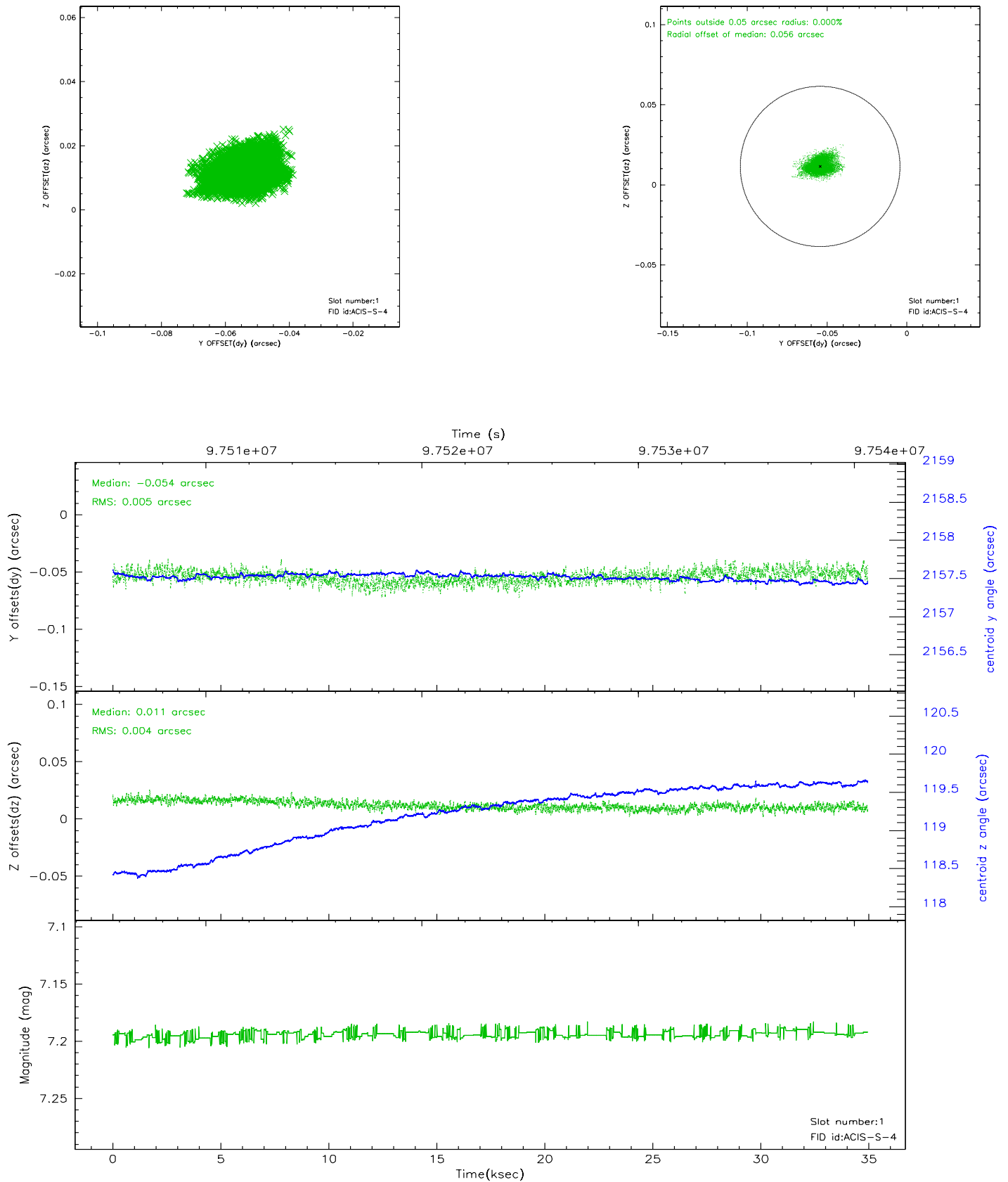


2.5 FID Slots

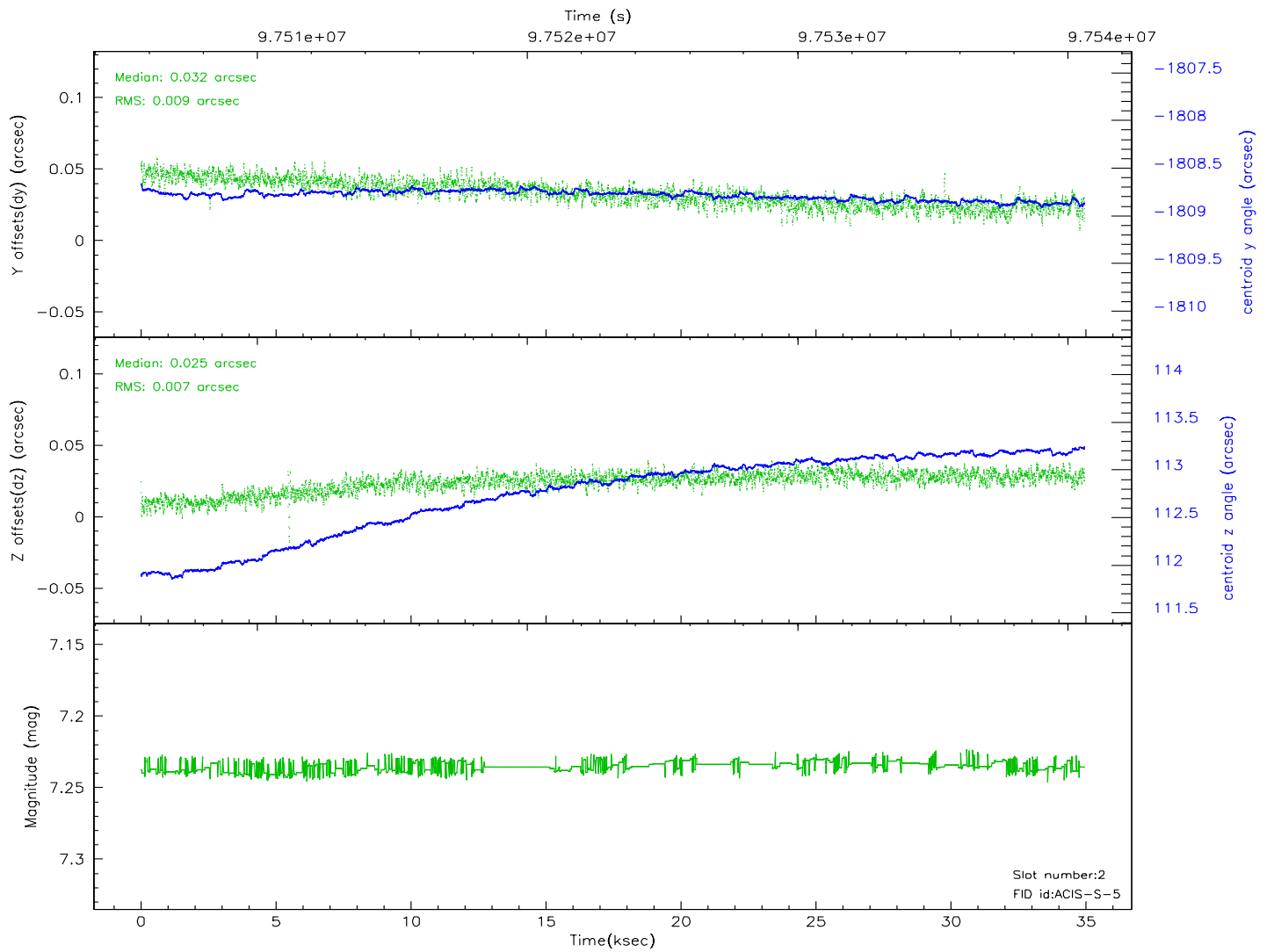
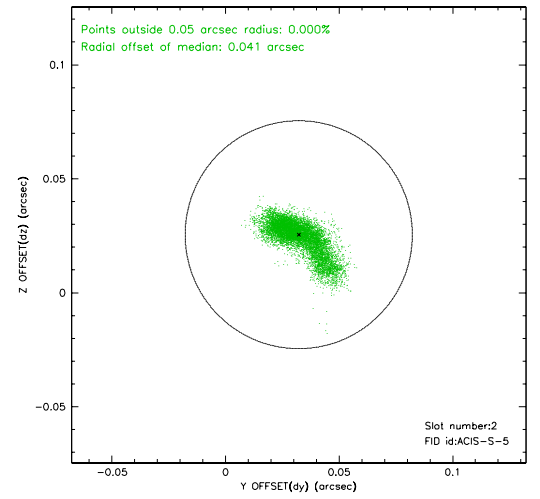
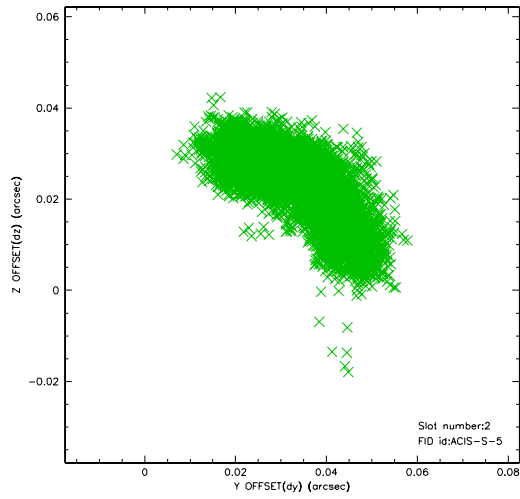
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



3 Gratings

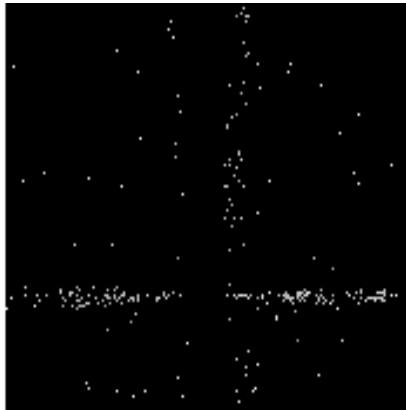
3.1 HEG Arm



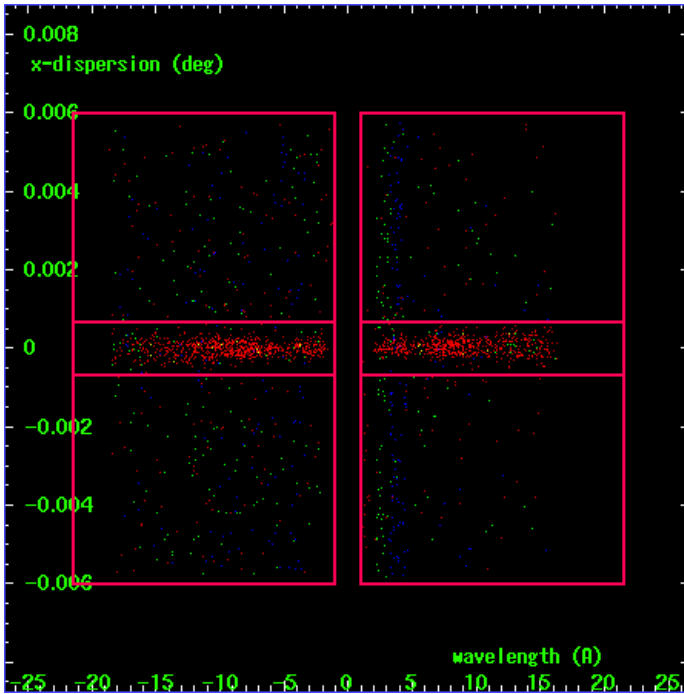
HEG Order Sort 123



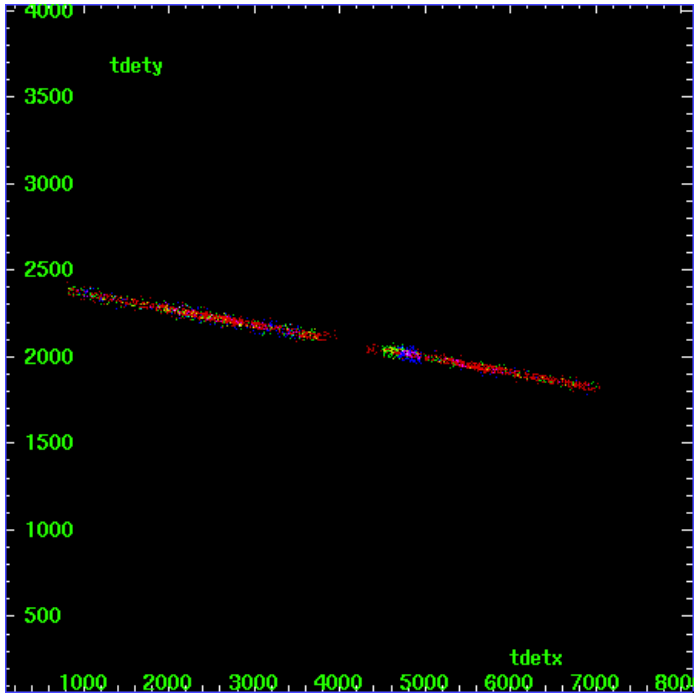
HEG Zero Order



HEG Order Sort ALL

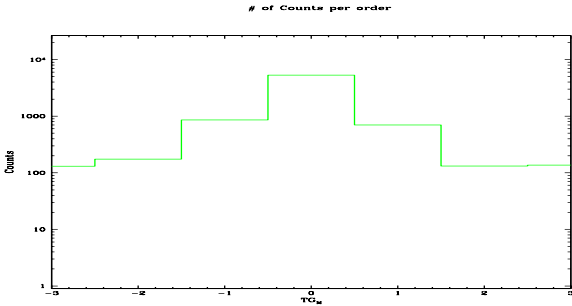


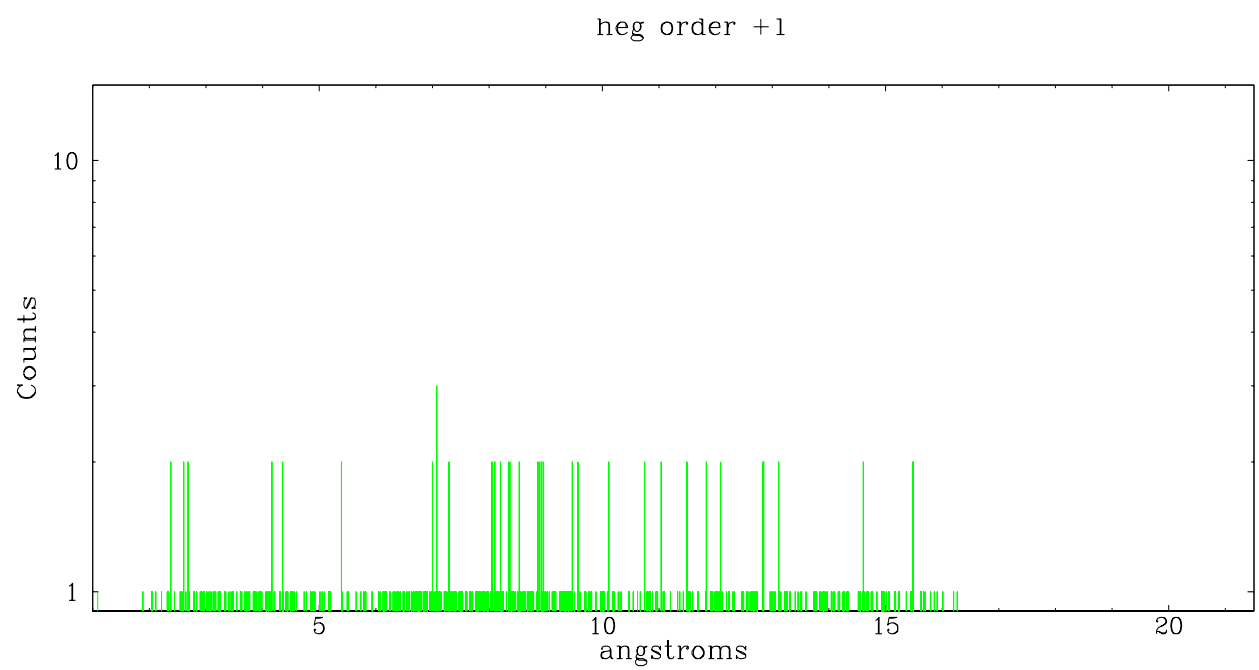
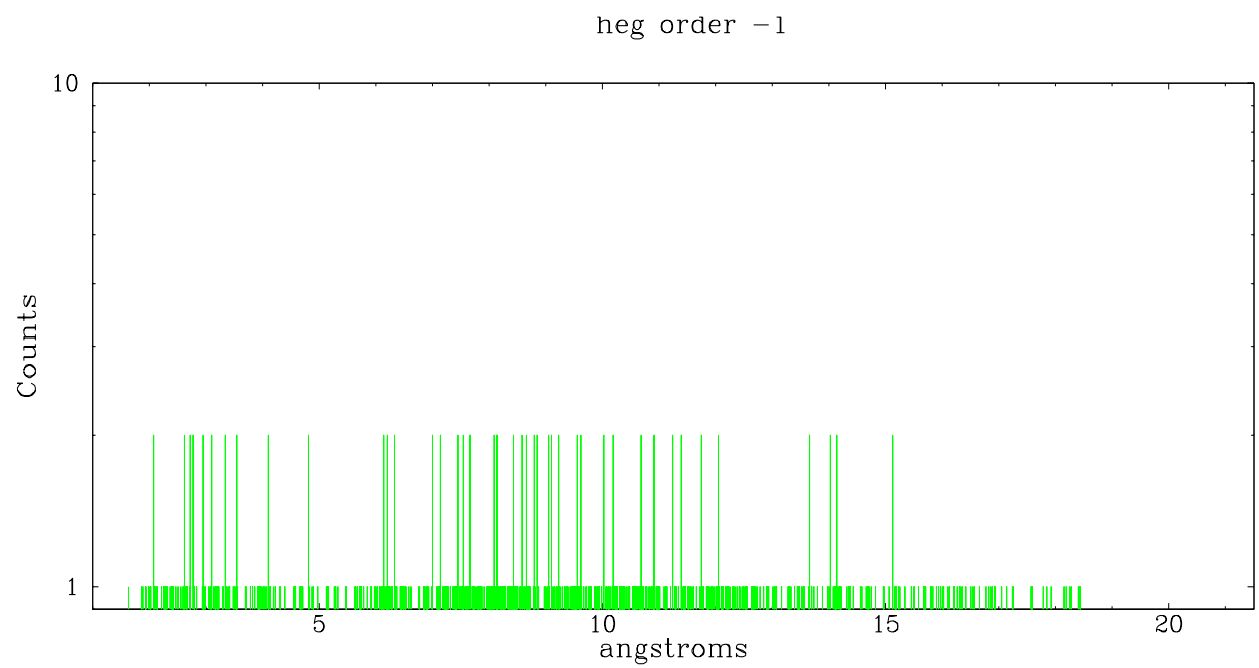
Spot Image HEG



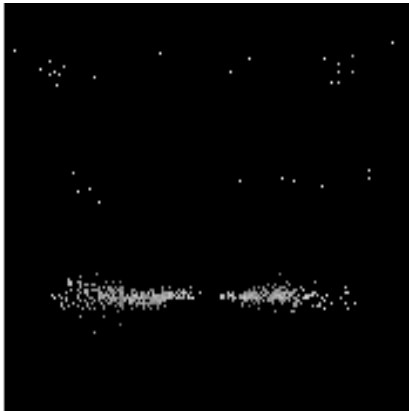
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	131	174	862	5293	698	132	137

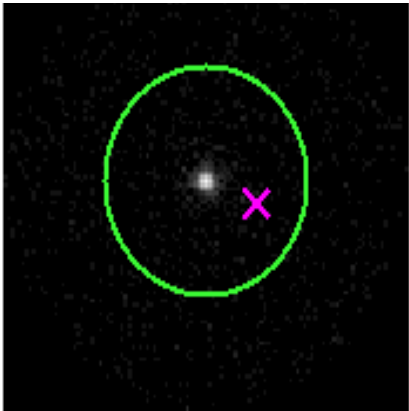




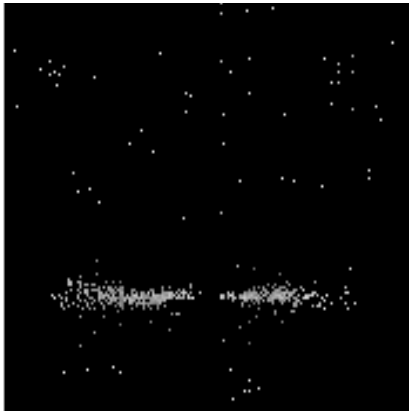
3.2 MEG Arm



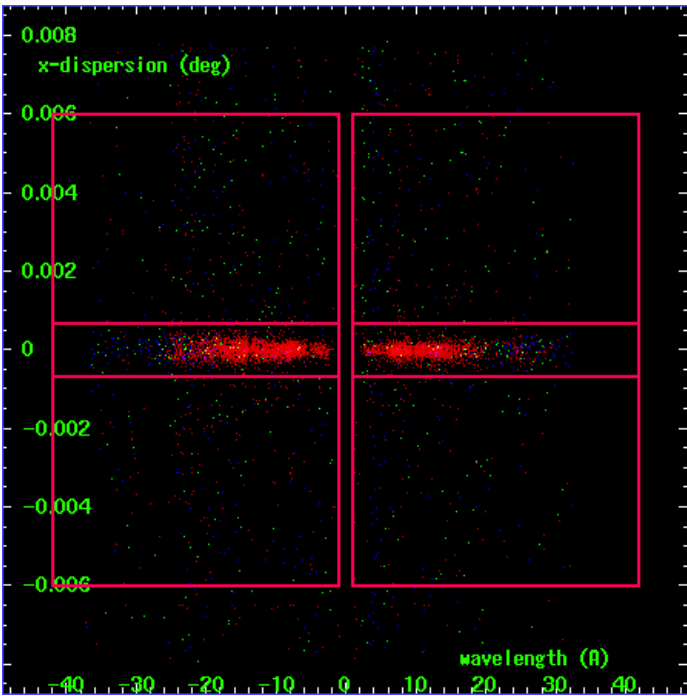
MEG Order Sort 123



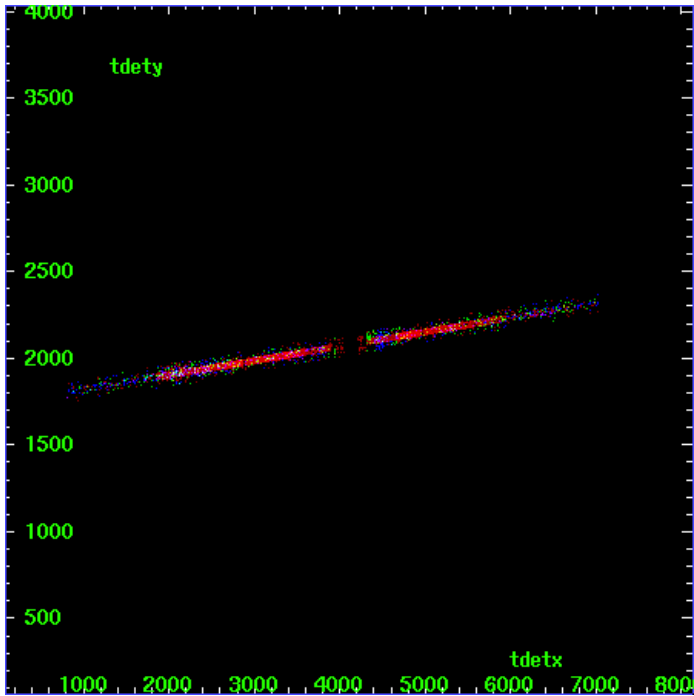
MEG Zero Order



MEG Order Sort ALL

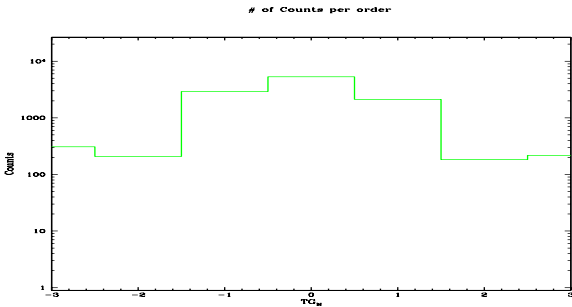


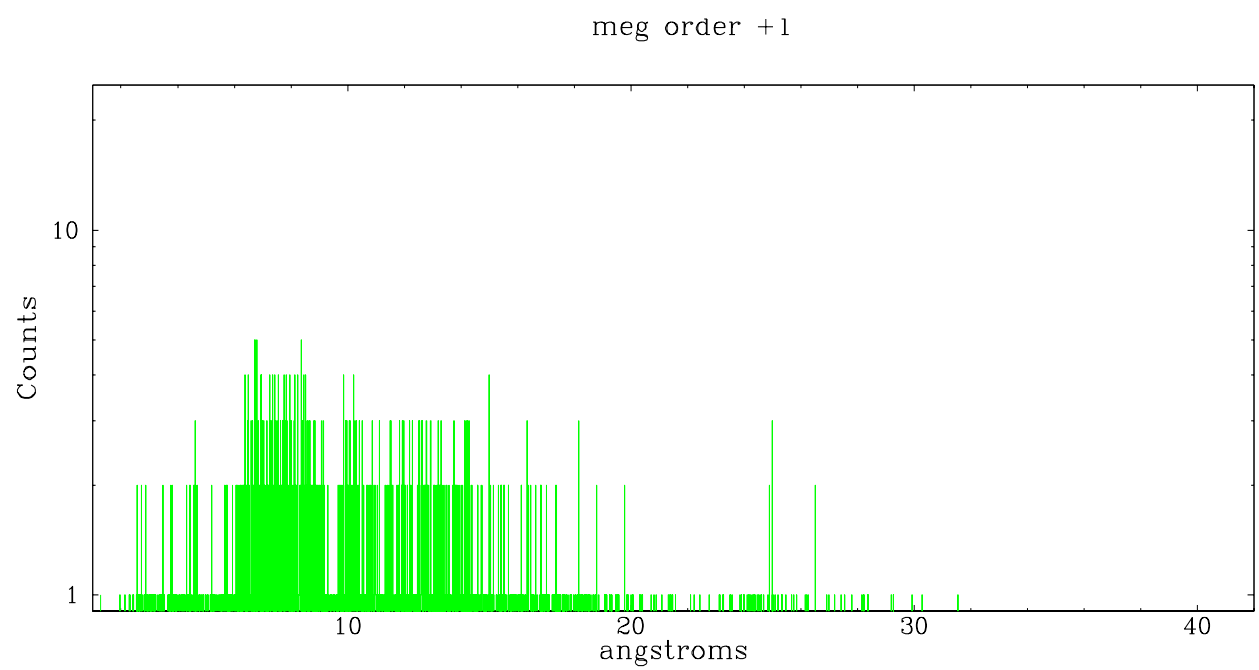
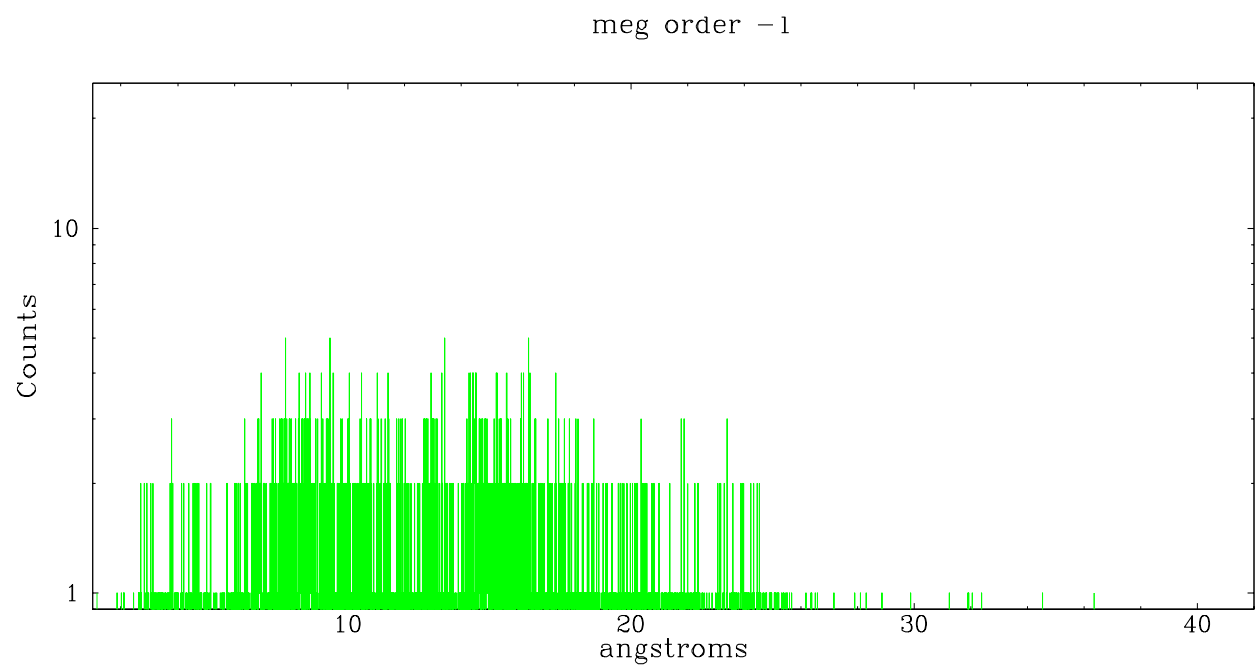
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	308	208	2908	5293	2115	182	217





A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.11.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.675

A.2 Comments