

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 5500 - L2 Version 002  
Chandra X-Ray Center

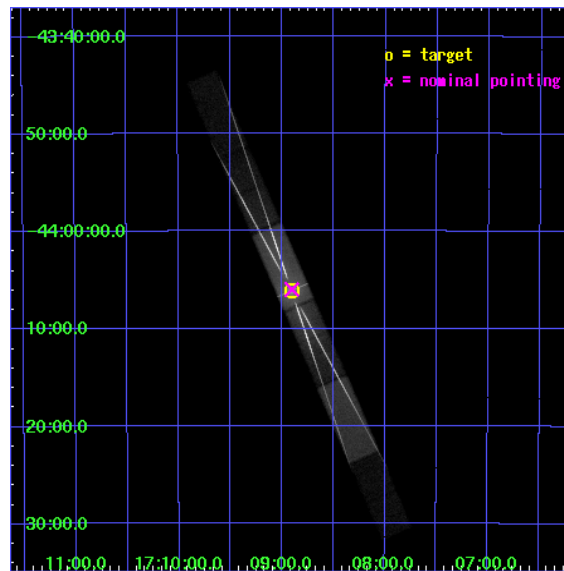
L2 Processing Date : Apr 2 2006

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# 1 Front

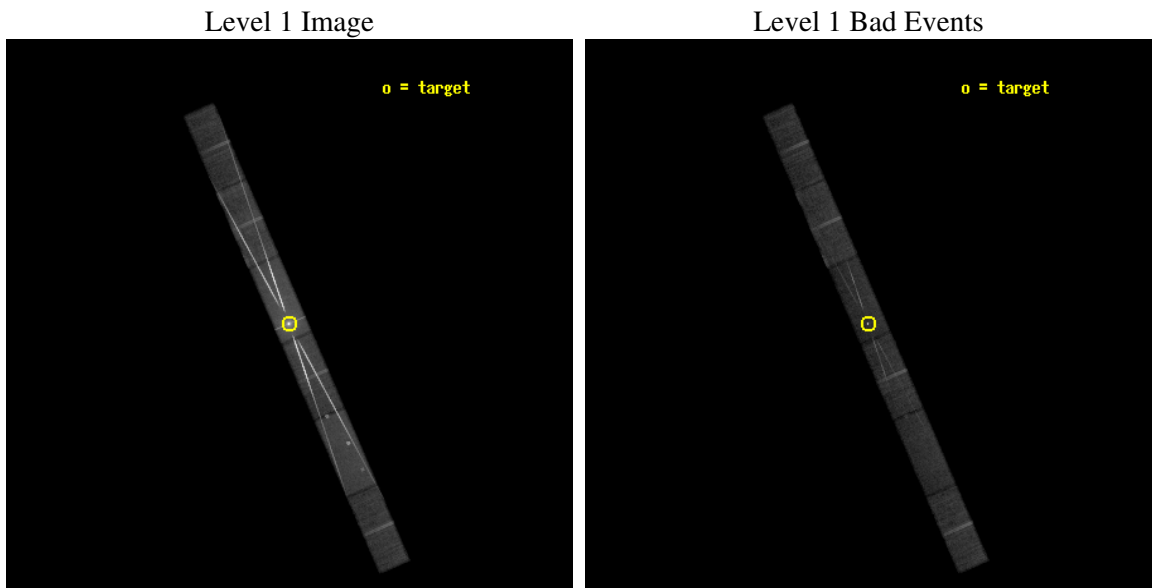
seq_num	400430
obs_id	5500
title	Follow-up Chandra observation of 4U 1705-44
observer	Dr. Tiziana Di Salvo
object	4U 1705-44
dtcycle	0
cycle	P
ra_targ	257.226958
dec_targ	-44.102042
ra_nom	257.22569383095
dec_nom	-44.099993447432
roll_nom	246.45085415033
revision	2
ontime	27249.600116014
livetime	26473.546995517
ontime4	27249.600116014
ontime5	27249.600116014
ontime6	27249.600116014
ontime7	27249.600116014
ontime8	27249.600116014
ontime9	27249.600116014
l2events	990569



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	1
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-04-02T18:49:50
revision	2

sched_exp_time	27066.881000
ontime	28043.757472456
ontime4	28043.757472456
ontime5	28043.757472456
ontime6	28043.757472456
ontime7	28043.757472456
ontime8	28043.757472456
ontime9	28043.757472456
l1events	1569122

### 2.1.3 Events

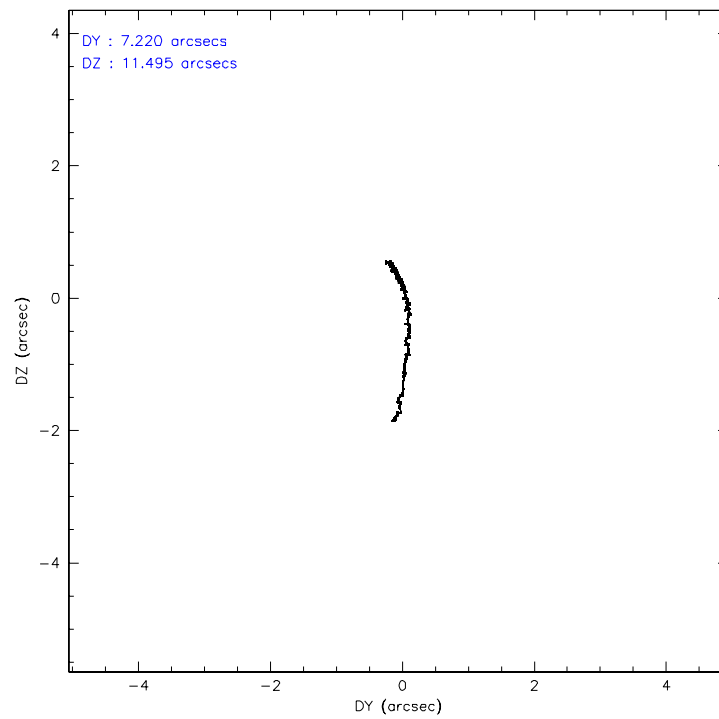
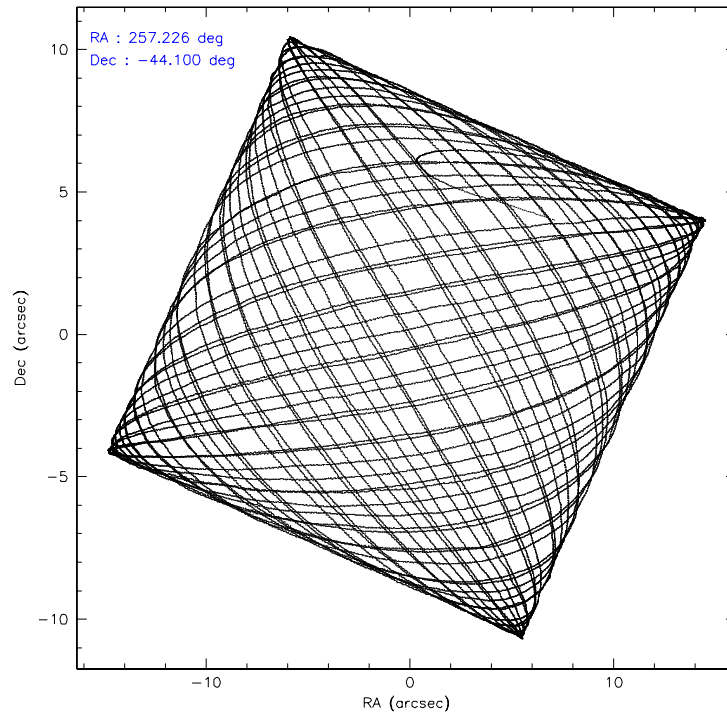
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	104028	188671	426658	540023	211759	97983
rejected events	89902	76434	90216	87992	96769	77158
rejected %	86%	40%	21%	16%	45%	78%

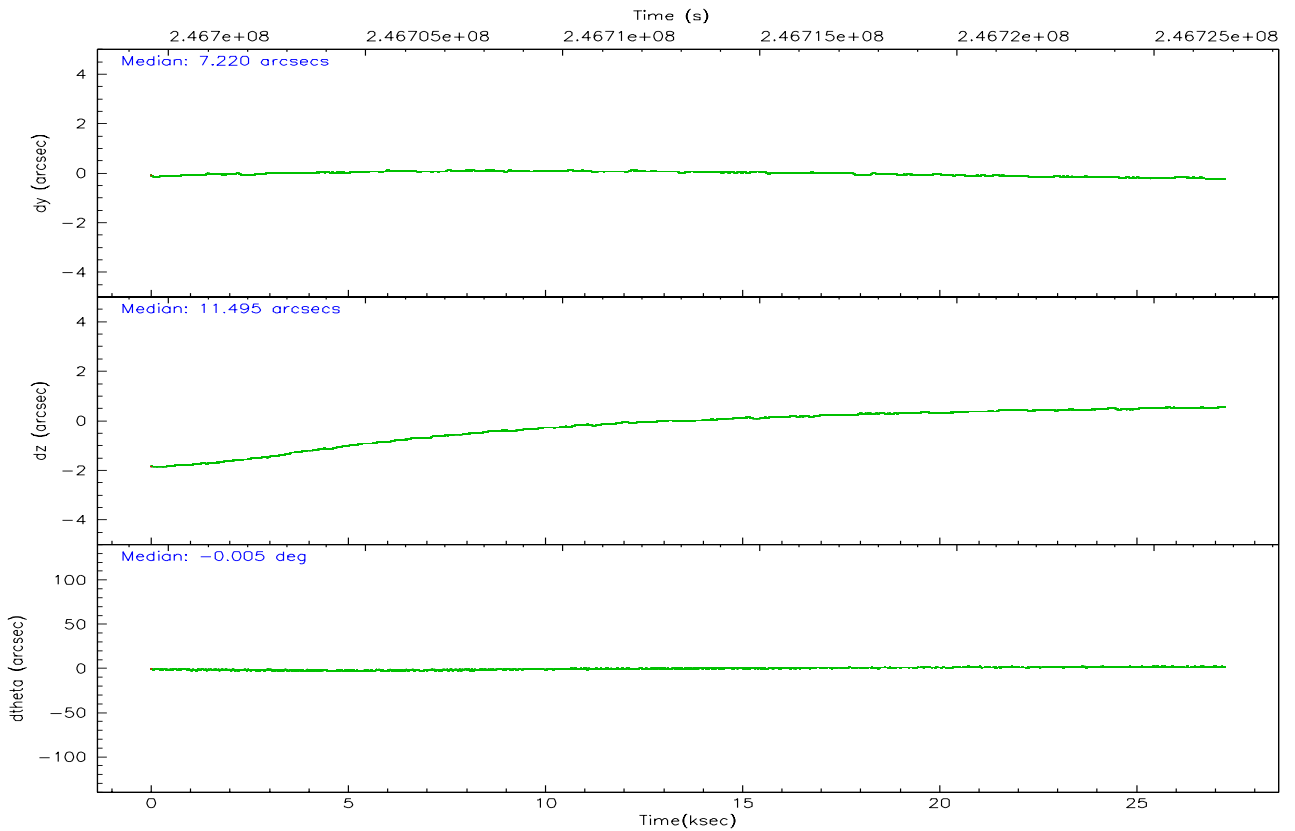
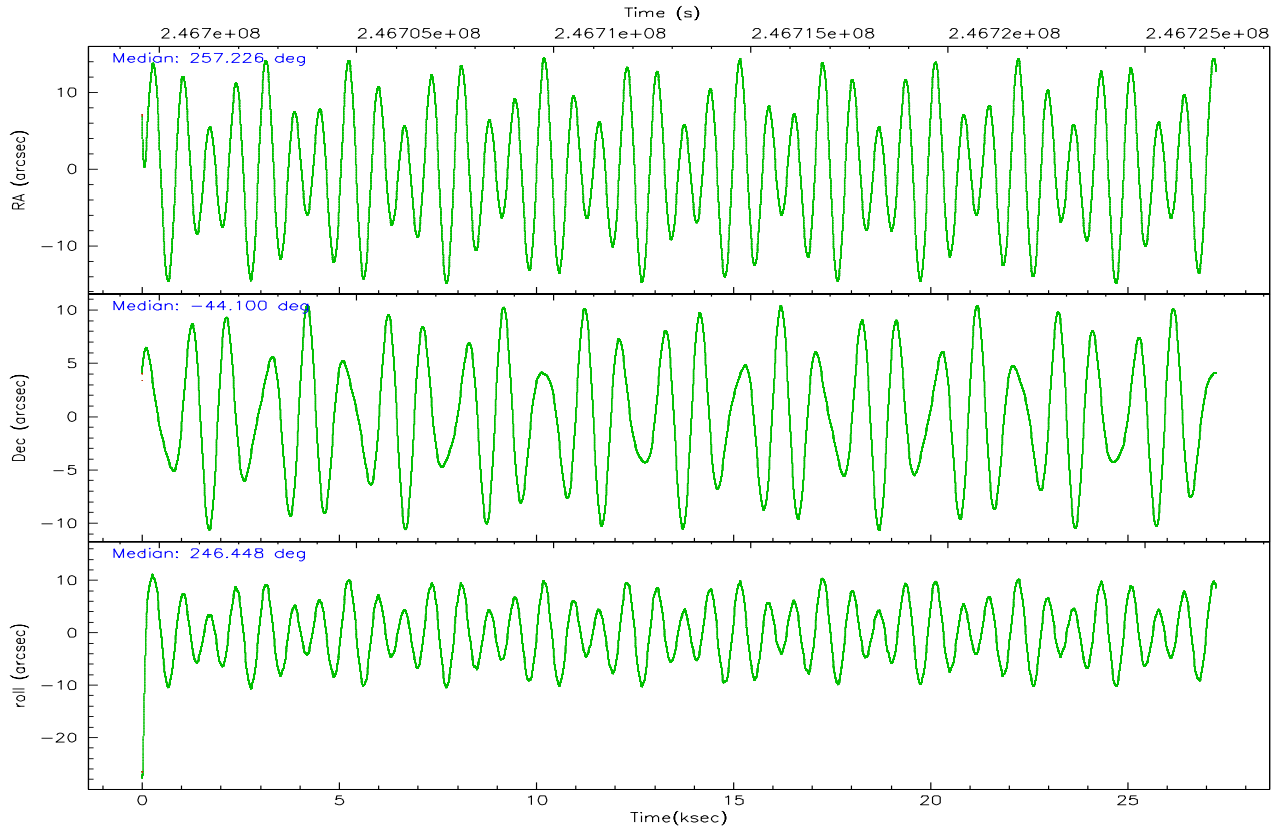
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	5983	24420	244792	76574	77857	11715
	5%	12%	57%	14%	36%	11%
grade 1 events	32	344	1935	1050	291	40
	0%	0%	0%	0%	0%	0%
grade 2 events	3523	33822	44689	118084	16116	3563
	3%	17%	10%	21%	7%	3%
grade 3 events	1421	6917	15331	44645	6135	1698
	1%	3%	3%	8%	2%	1%
grade 4 events	1283	6966	14908	44782	6048	1655
	1%	3%	3%	8%	2%	1%
grade 5 events	3136	8148	5304	14985	4887	3745
	3%	4%	1%	2%	2%	3%
grade 6 events	2284	42604	18428	171094	10053	2567
	2%	22%	4%	31%	4%	2%
grade 7 events	86366	65450	81271	68809	90372	73000
	83%	34%	19%	12%	42%	74%

## 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	GRADED	GRADED	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	CUSTOM
Pointing RA	257.220881	257.2256938309517	Subarray start row	1	1
Pointing Dec	-44.073004	-44.09999344743206	Subarray row count	400	400
Pointing Roll	246.290890	246.4508541503299	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	1.4
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-182.642523	-182.6398635053184			
SIM translation stage offset (mm)	-7.49	-7.49265907768941			
Observation start time	246699731.184000	246698477.01218			
Observation start date	2005-10-26T07:41:07	2005-10-26T07:21:17			
Observation end time	246726798.184000	246727009.93849			
Observation end date	2005-10-26T15:12:14	2005-10-26T15:16:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect



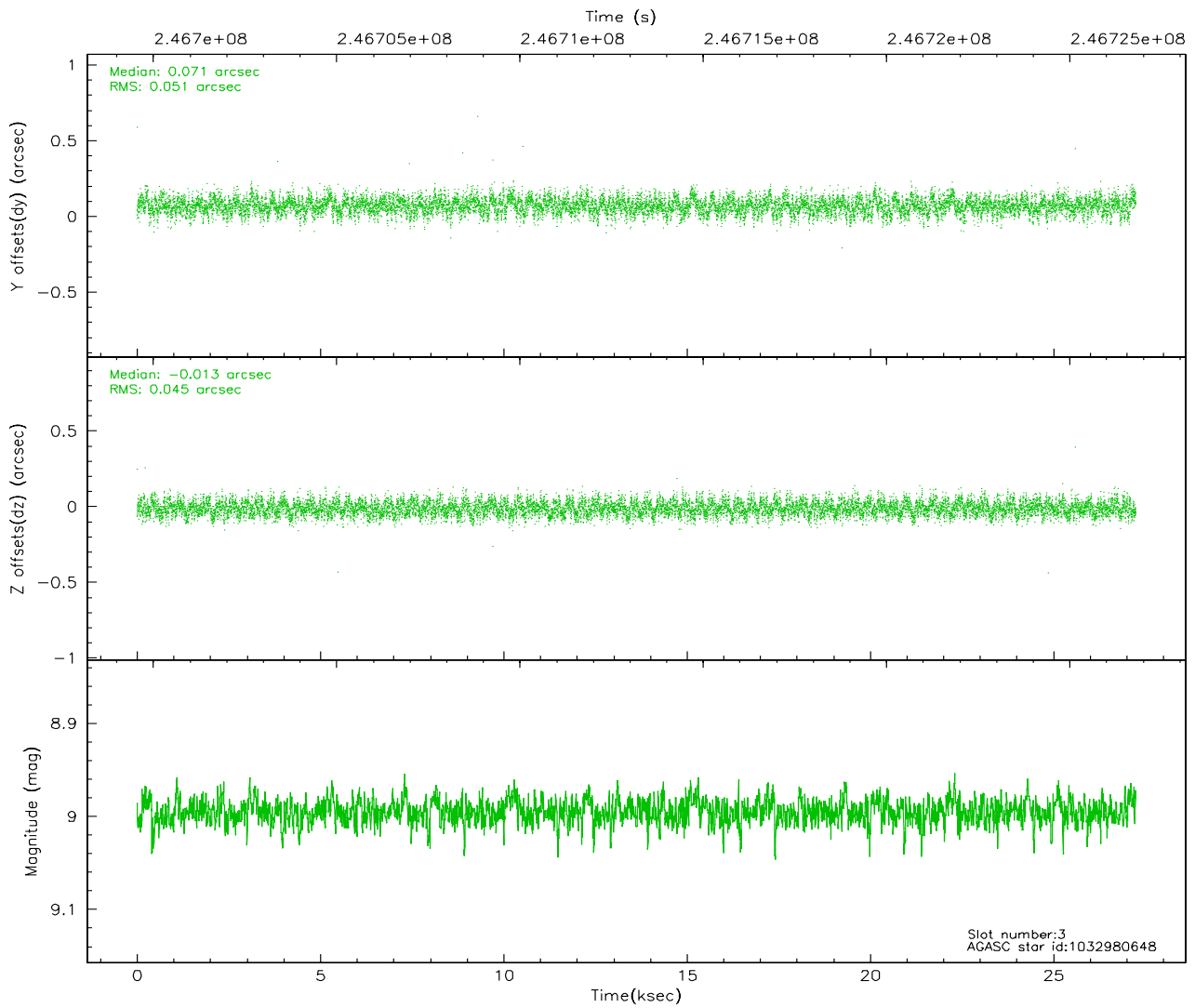
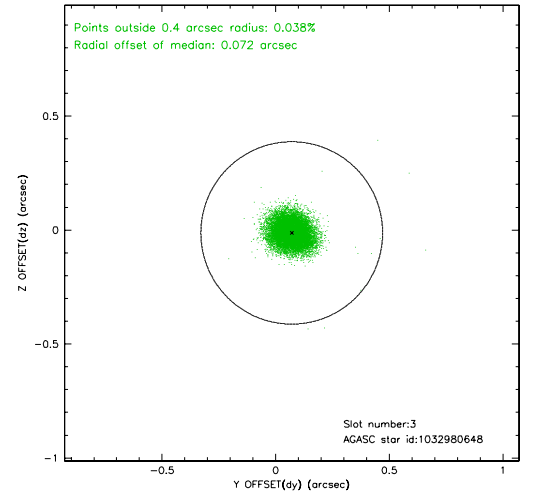
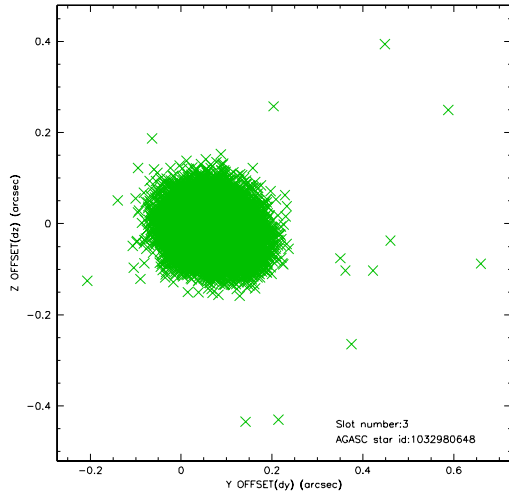


### Slot Statistics

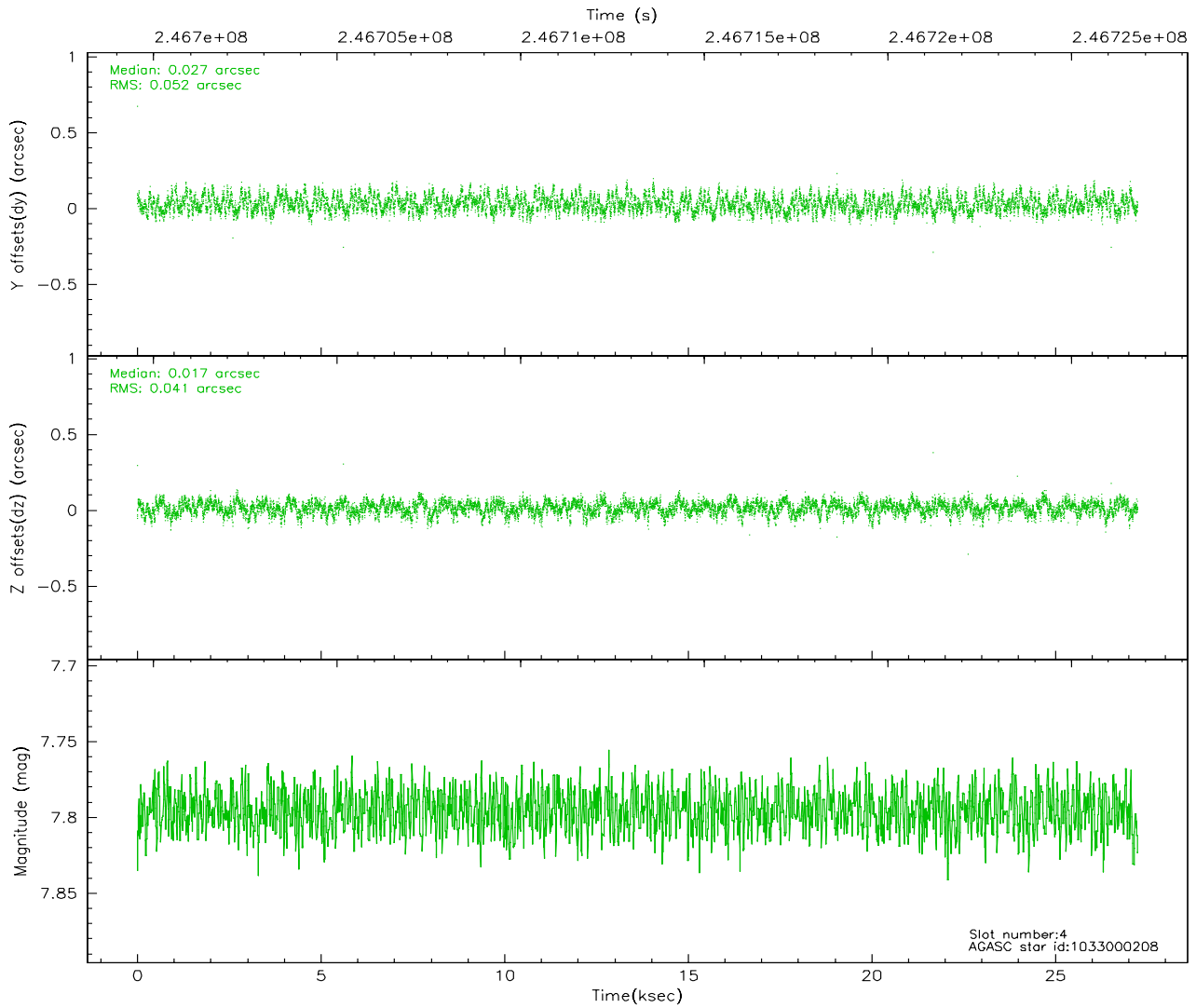
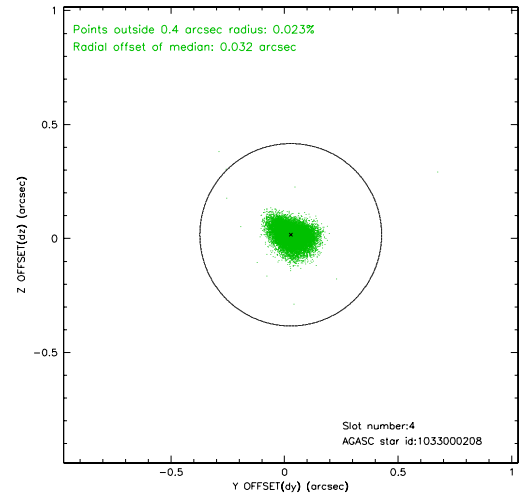
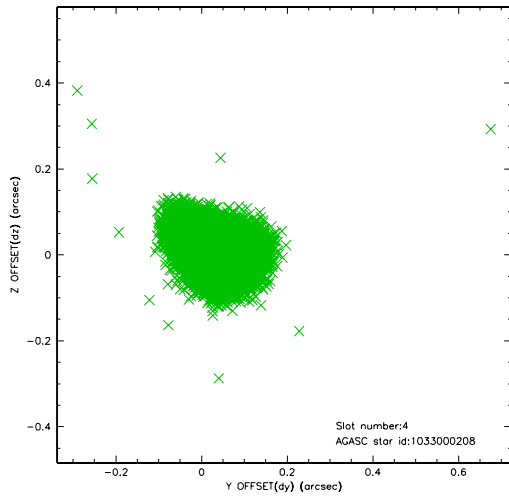
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	6648	-0.002	0.096	0.019	0.027	0.000000	0.000000	936.59	-1882.46
1	FID	ACIS-S-4	7.18	6647	0.042	-0.061	0.019	0.026	0.000000	0.000000	2154.11	21.40
2	FID	ACIS-S-5	7.22	6647	-0.066	-0.023	0.007	0.015	0.000000	0.000000	-1812.20	15.18
3	GUIDE	1032980648	8.99	13279	0.071	-0.013	0.072	0.115	256.588109	-44.440758	1872.38	-954.14
4	GUIDE	1033000208	7.80	13292	0.027	0.017	0.071	0.110	256.502750	-44.372681	1738.85	-1254.85
5	GUIDE	1033110048	8.17	13290	-0.147	0.107	0.059	0.095	258.190525	-43.756216	-2044.20	1855.92
6	GUIDE	1032983104	8.94	13283	0.140	-0.086	0.072	0.117	256.914293	-44.699956	2383.82	190.10
7	GUIDE	1033109664	7.88	13293	-0.095	-0.025	0.059	0.096	257.645718	-43.523560	-2253.66	221.11

## 2.4 Star Slots

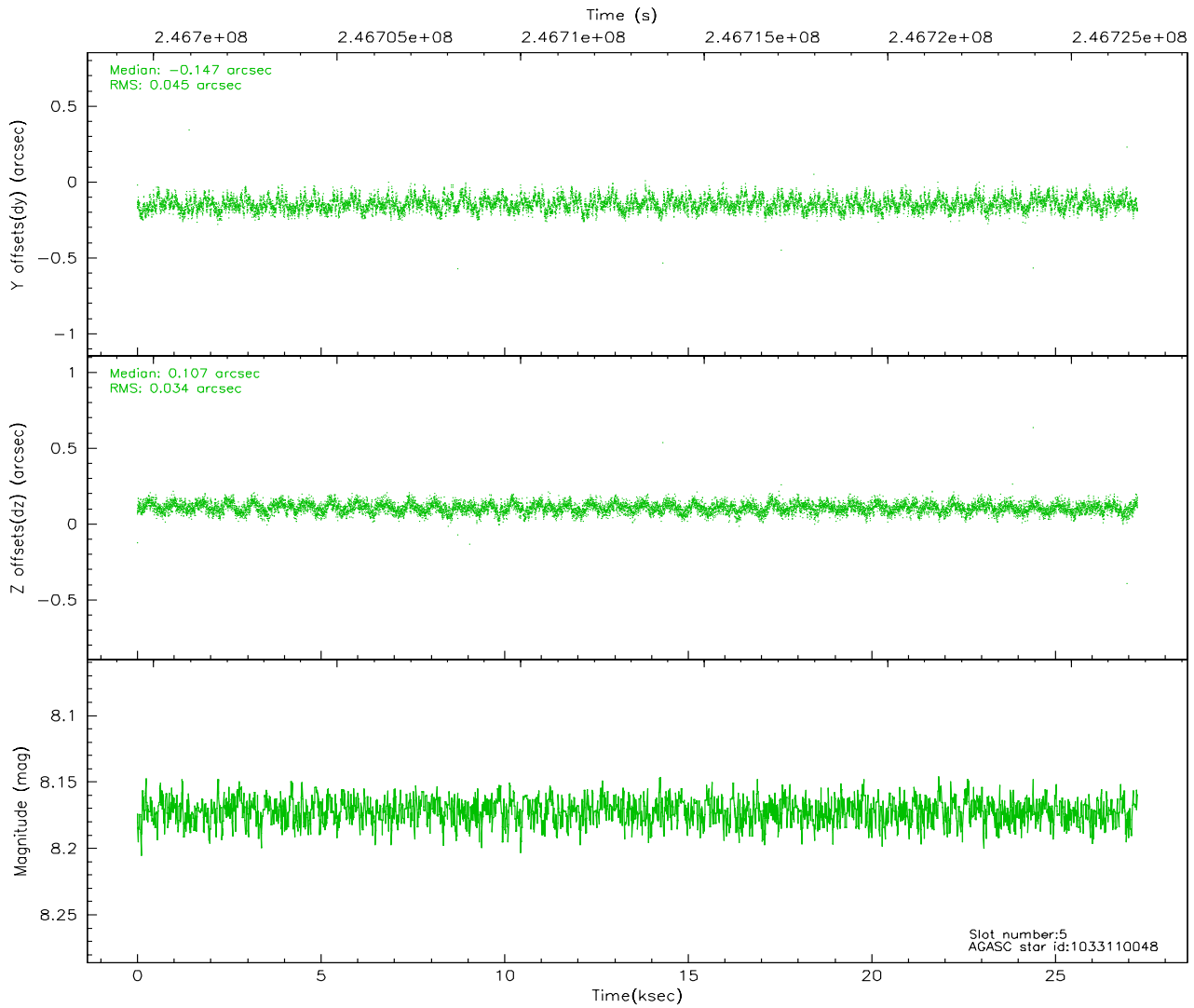
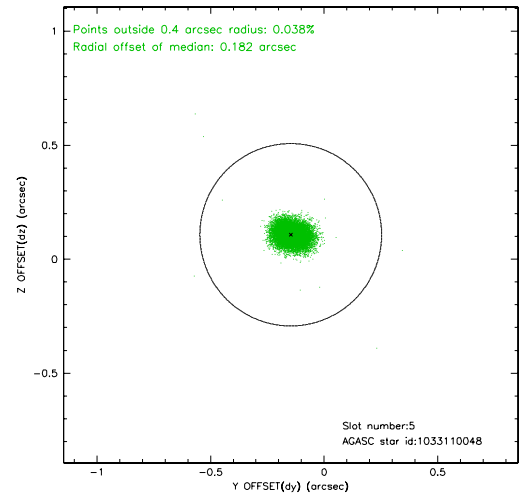
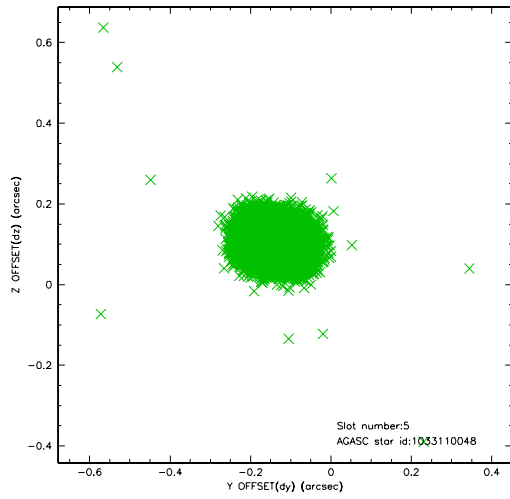
### 2.4.1 Slot 3



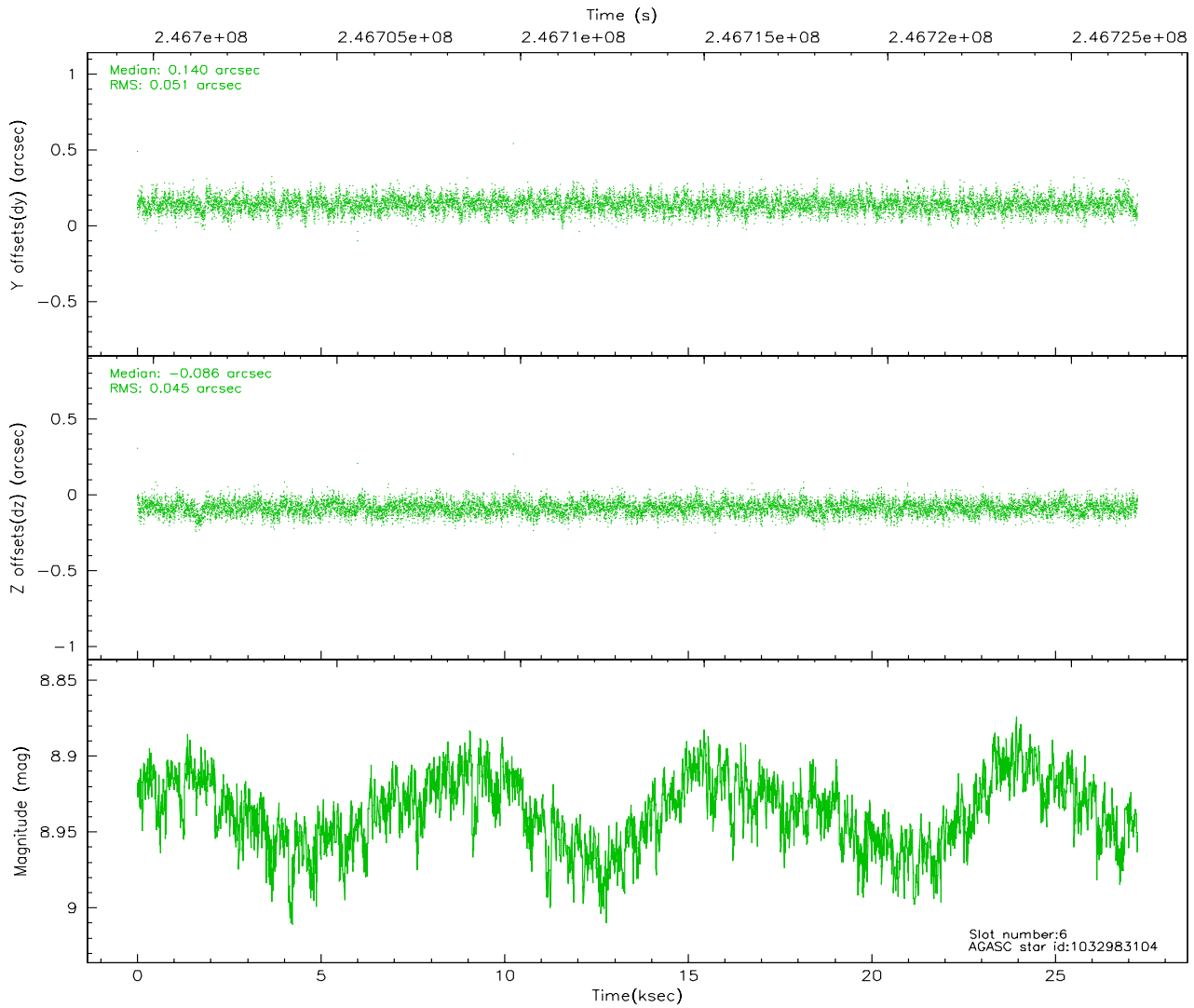
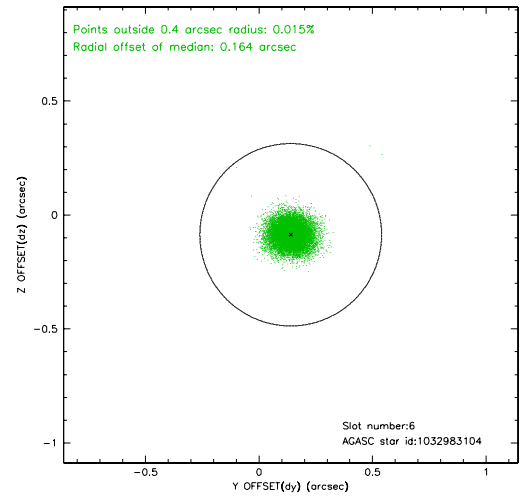
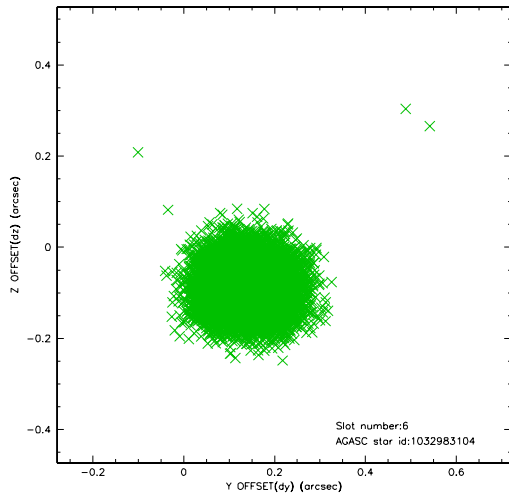
## 2.4.2 Slot 4



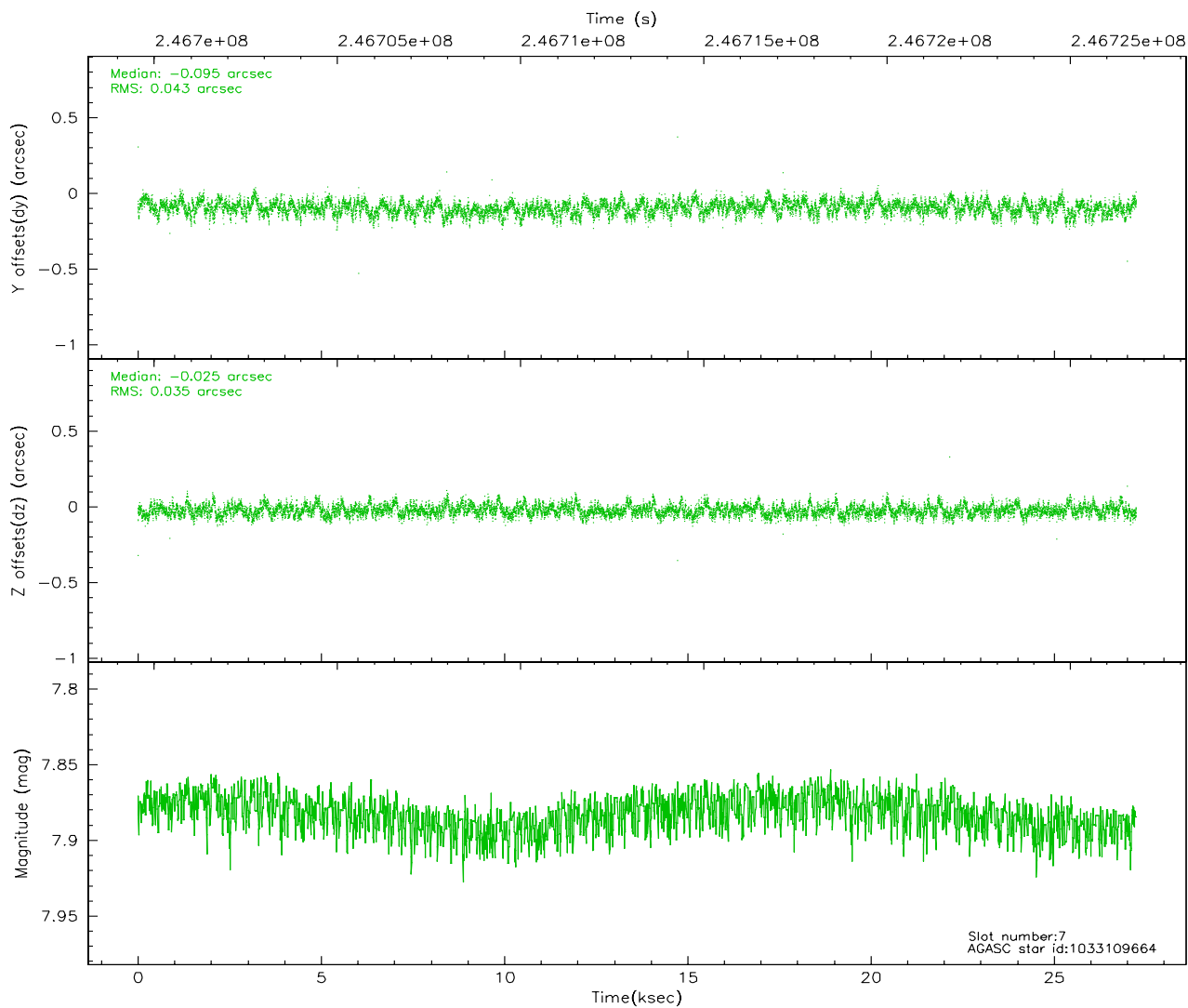
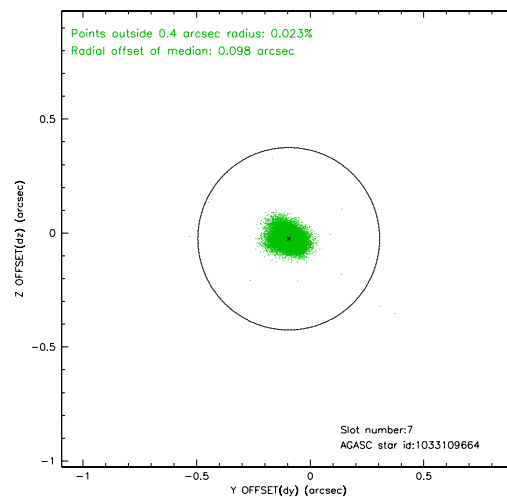
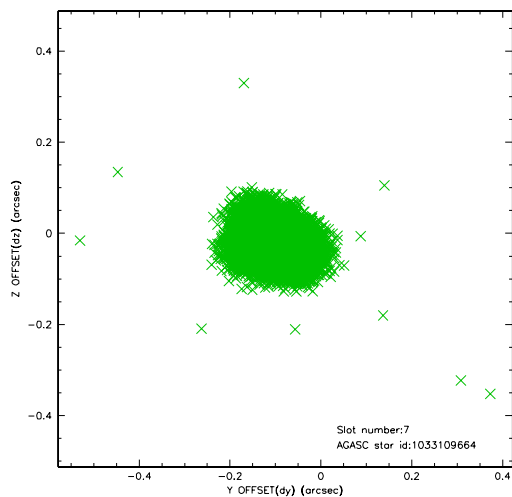
### 2.4.3 Slot 5



### 2.4.4 Slot 6

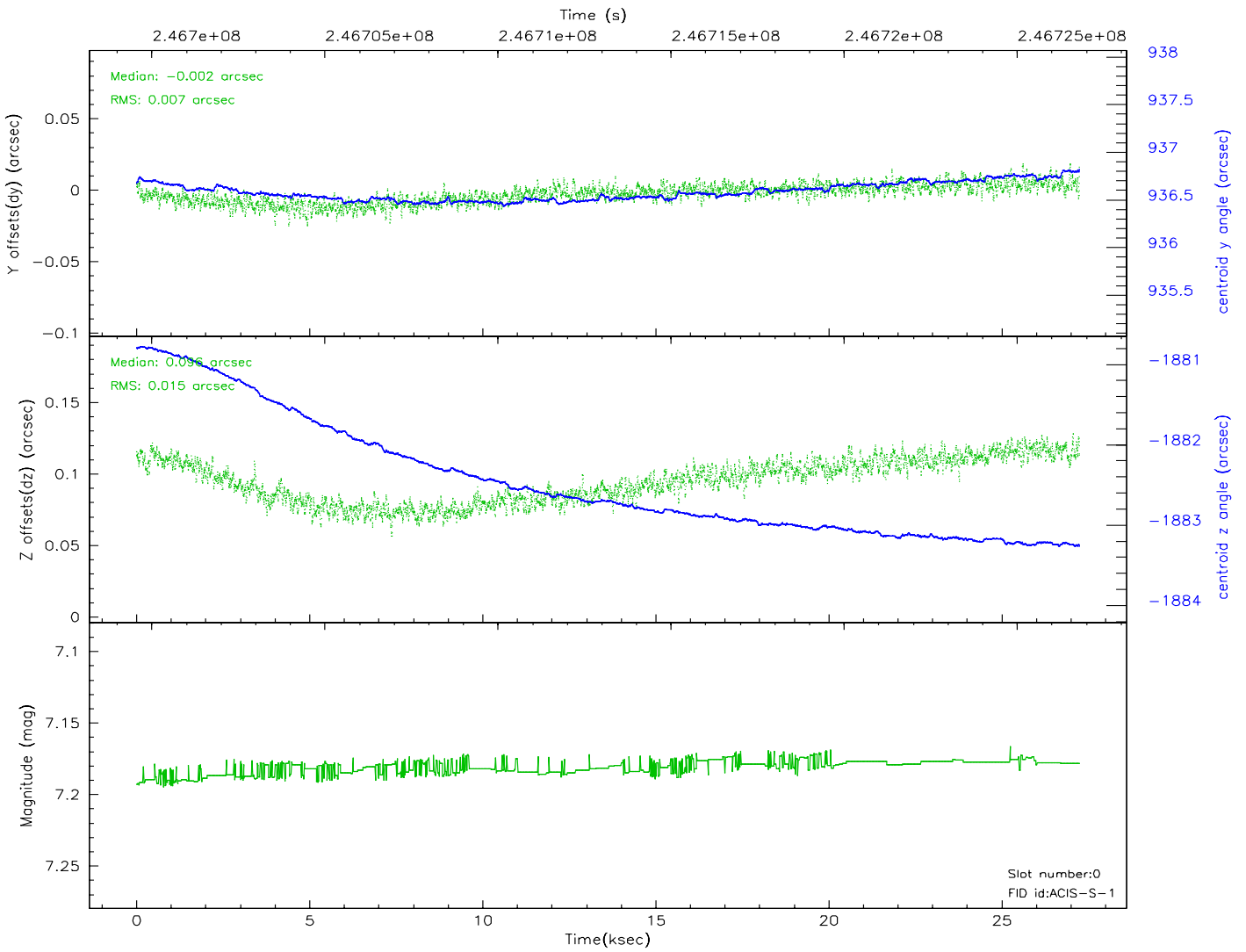
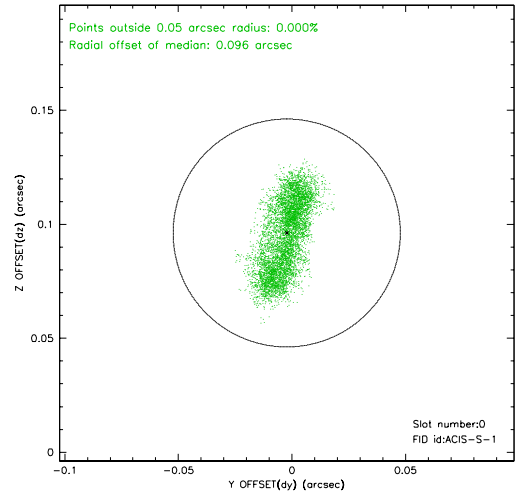
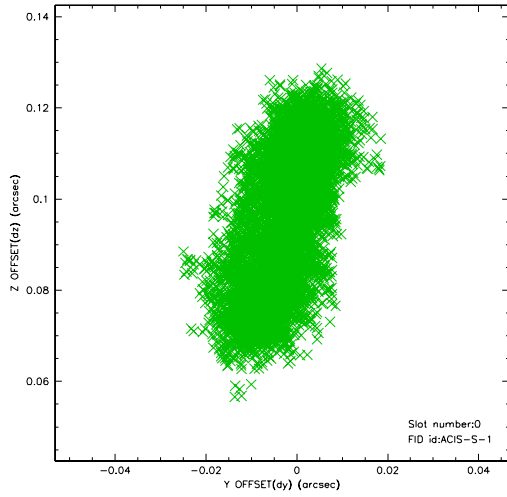


## 2.4.5 Slot 7

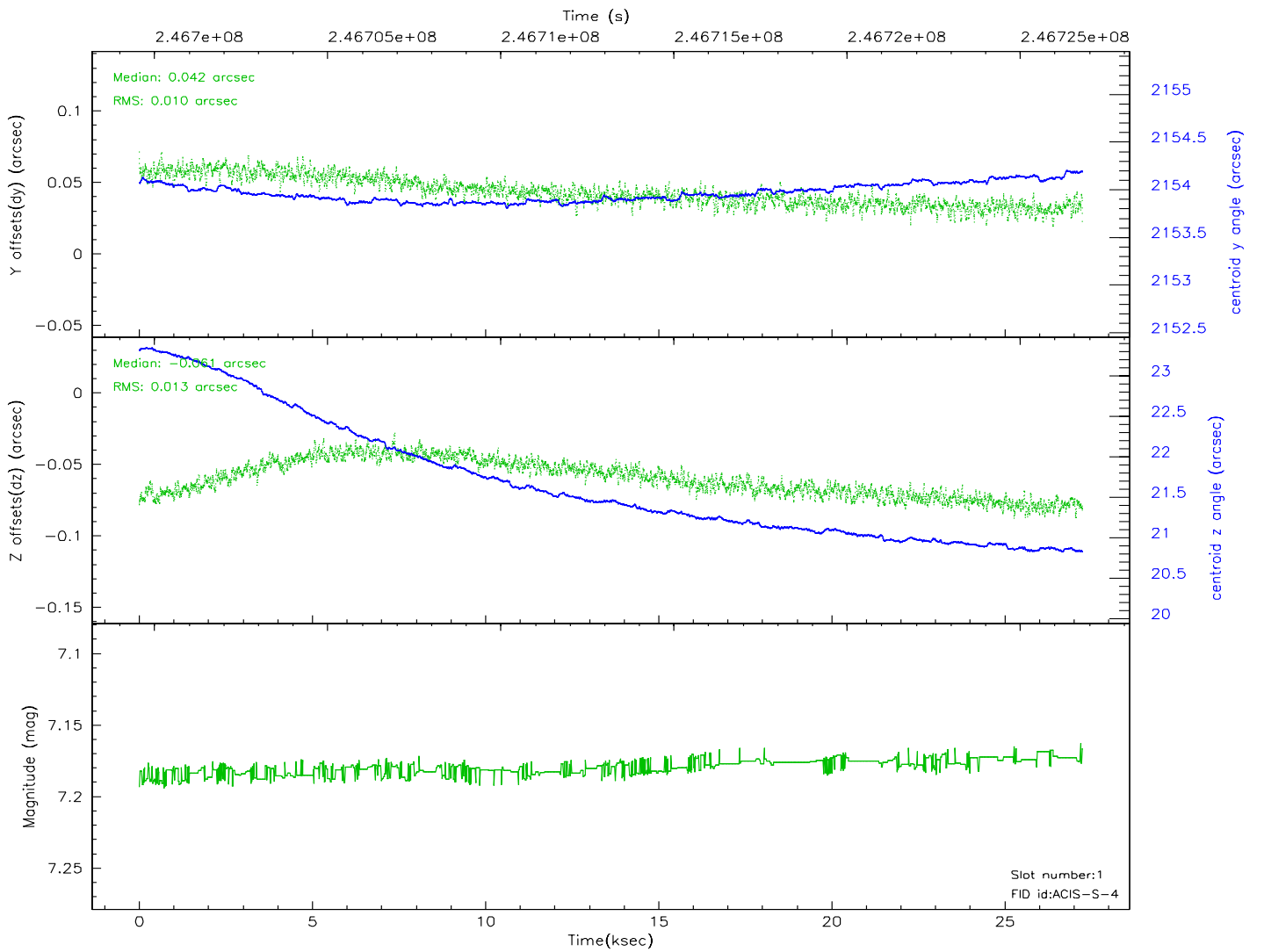
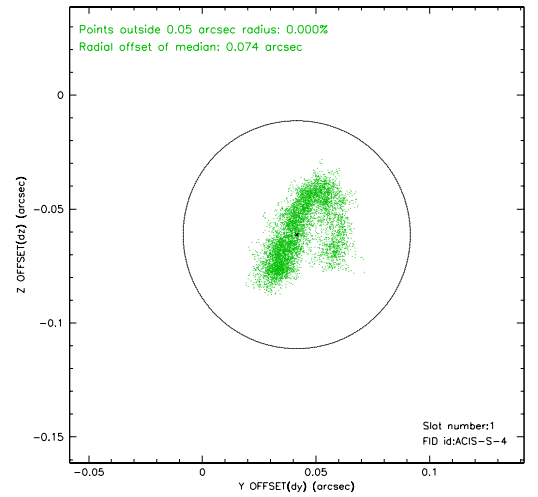
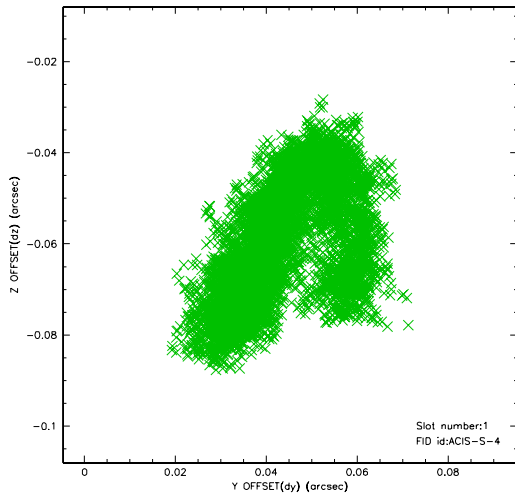


## 2.5 FID Slots

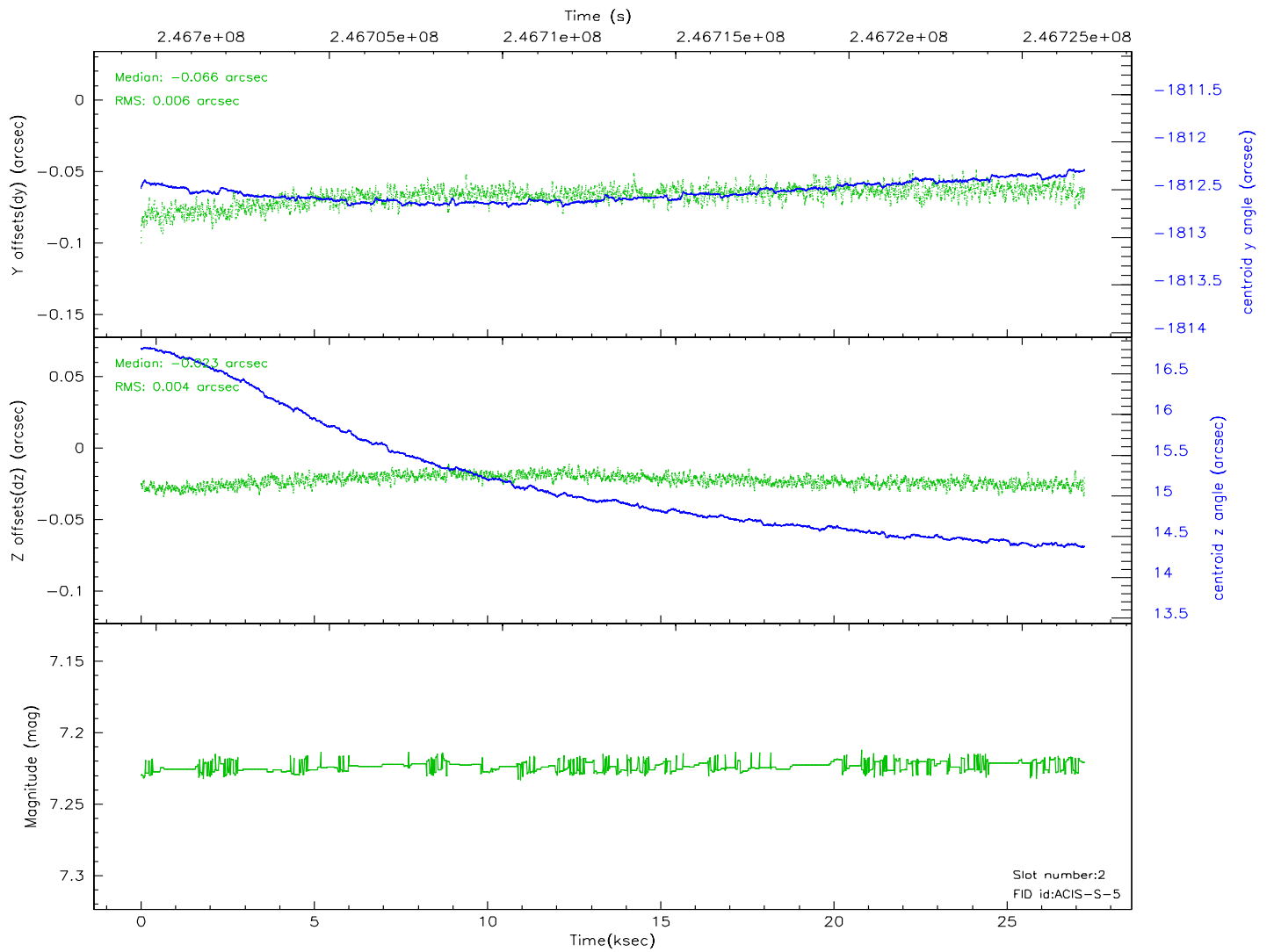
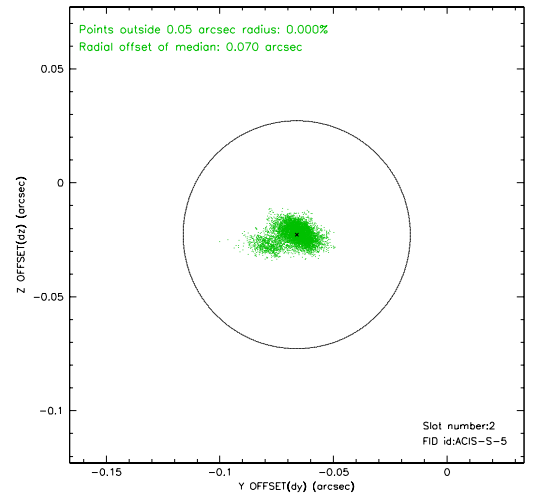
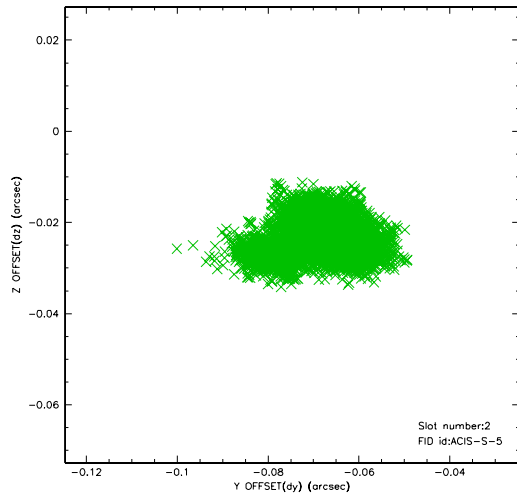
### 2.5.1 Slot 0



## 2.5.2 Slot 1

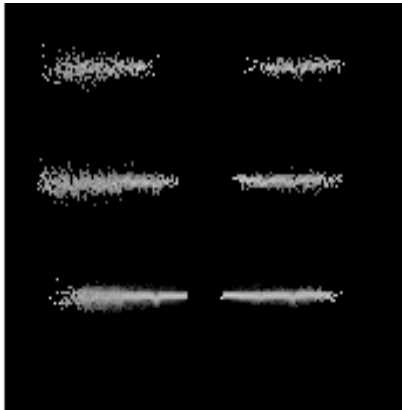


### 2.5.3 Slot 2

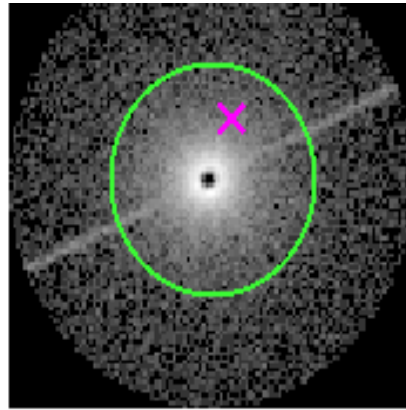


# 3 Gratings

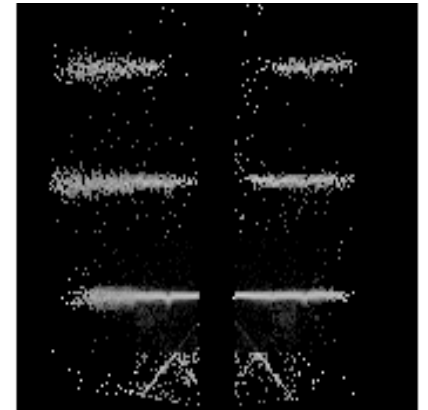
## 3.1 HEG Arm



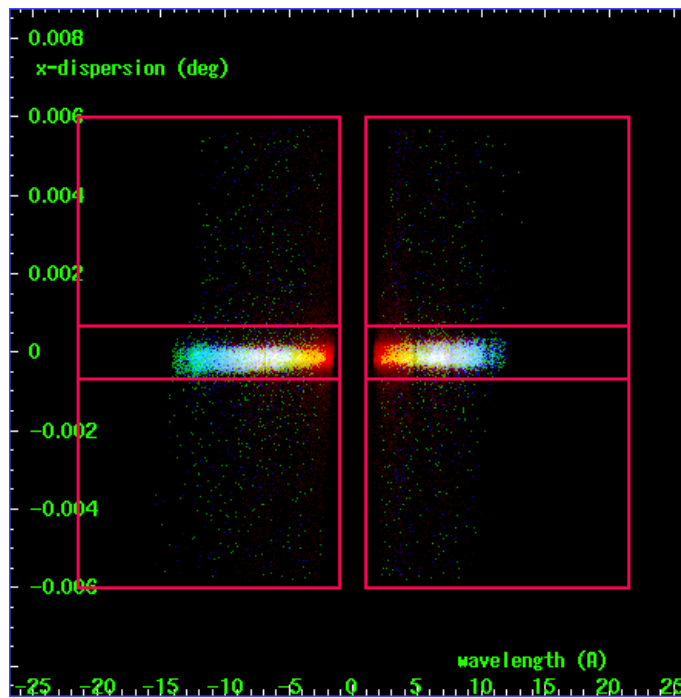
HEG Order Sort 123



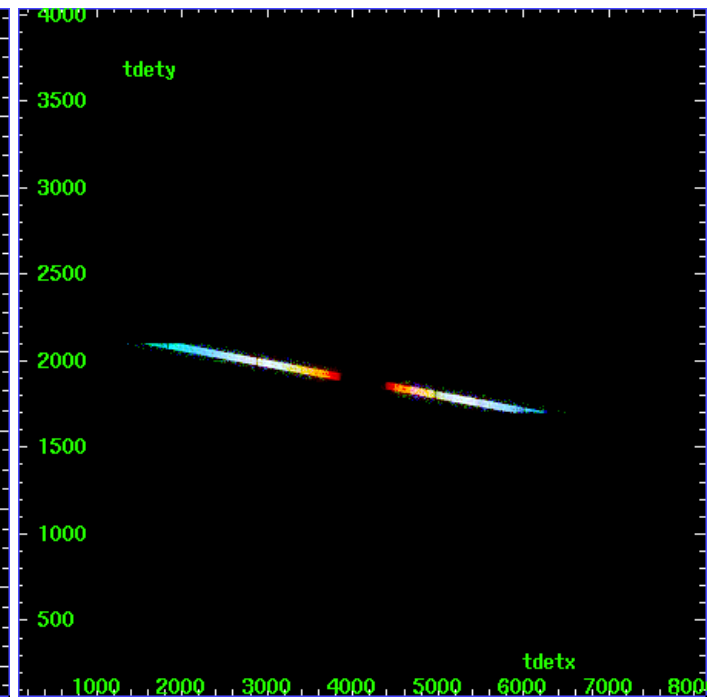
HEG Zero Order



HEG Order Sort ALL

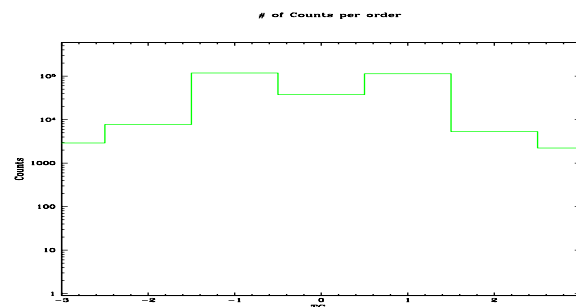


Spot Image HEG

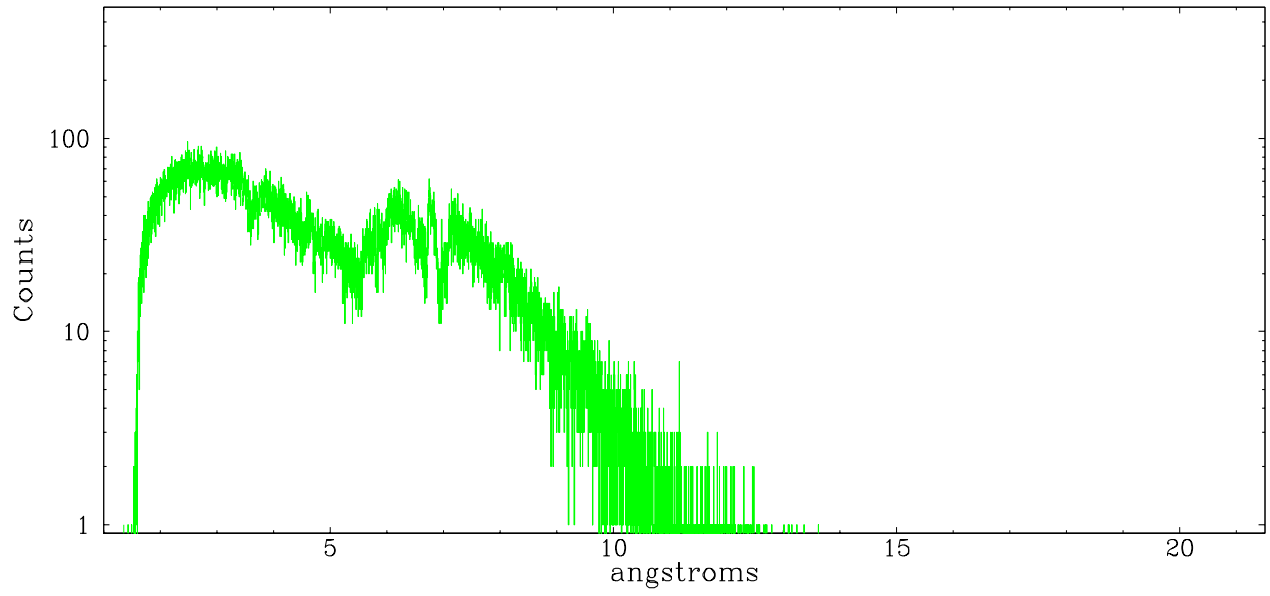


Full Detector HEG

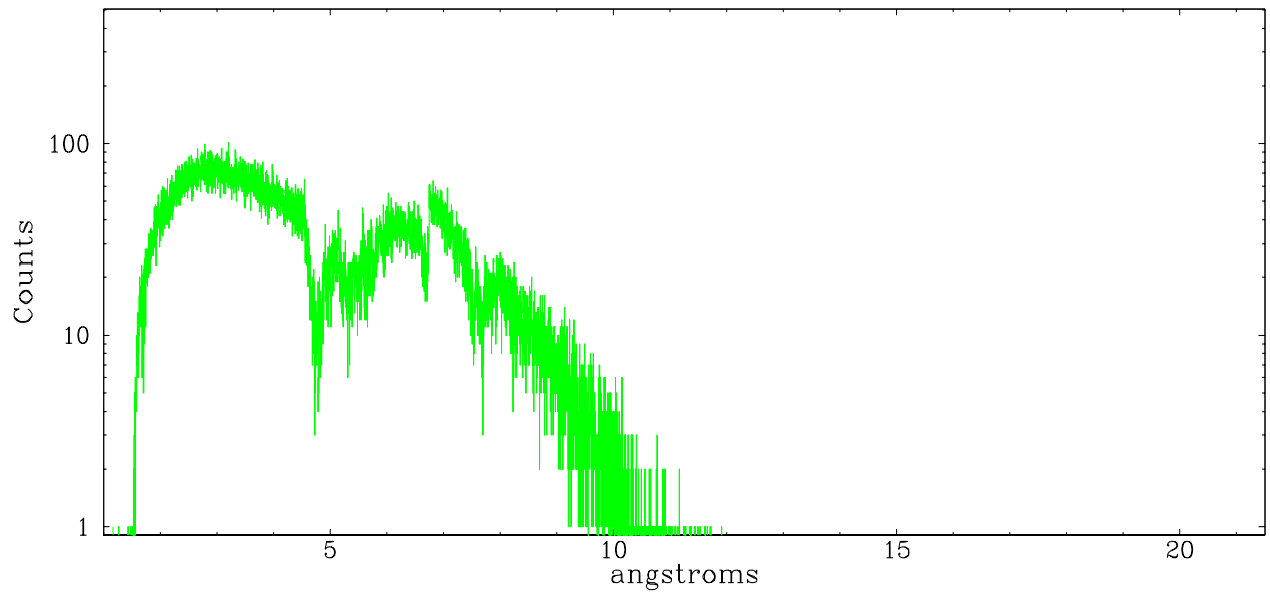
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2892	7693	117627	37436	113996	5282	2226



heg order -1



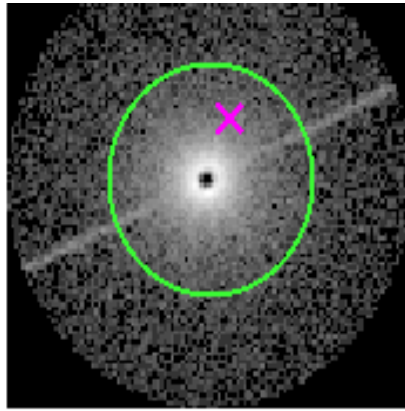
heg order +1



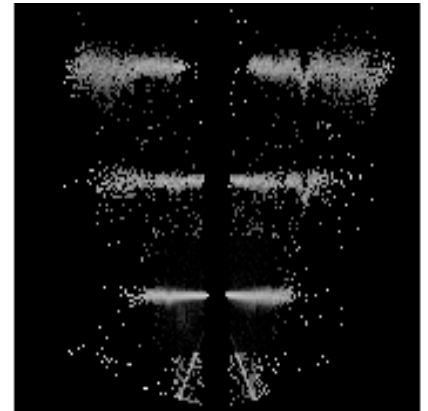
### 3.2 MEG Arm



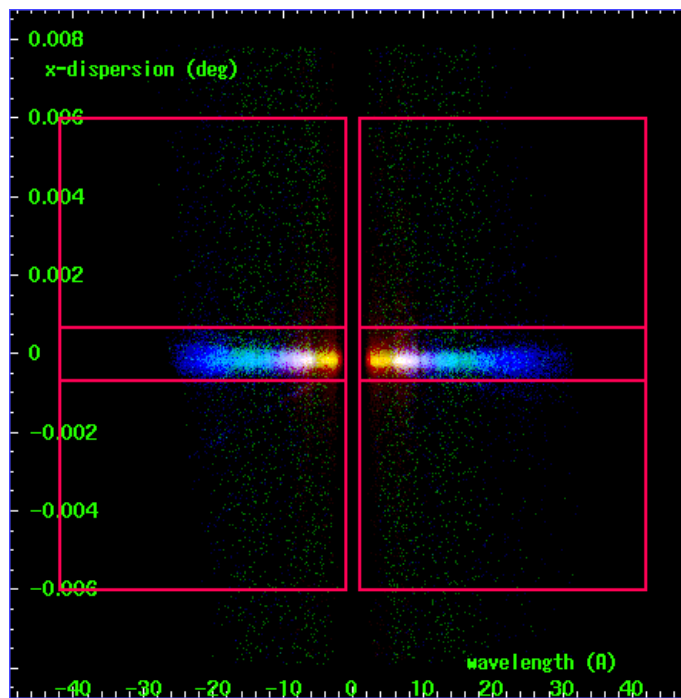
MEG Order Sort 123



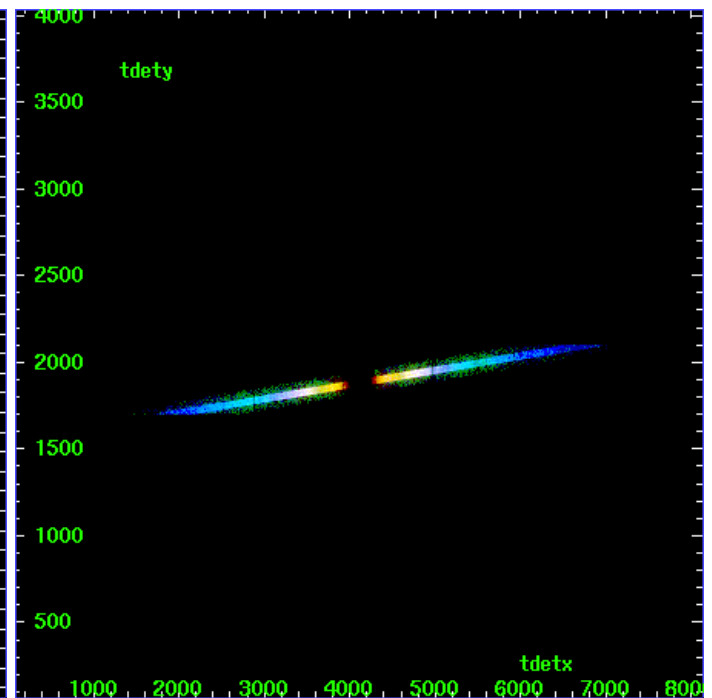
MEG Zero Order



MEG Order Sort ALL

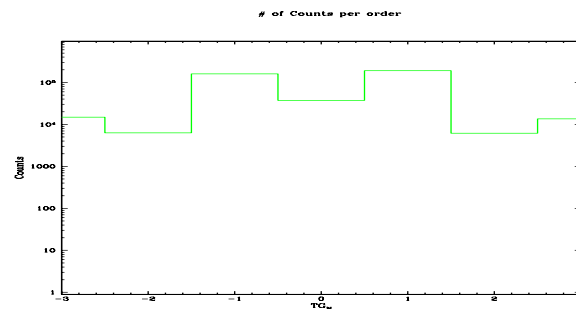


Spot Image MEG

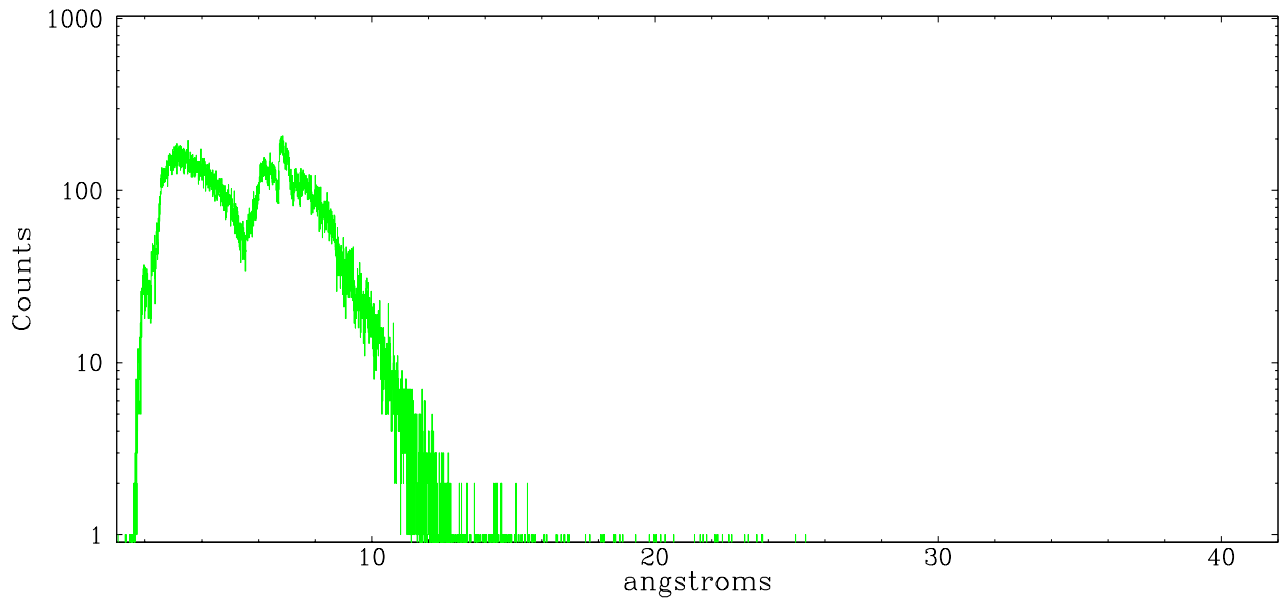


Full Detector MEG

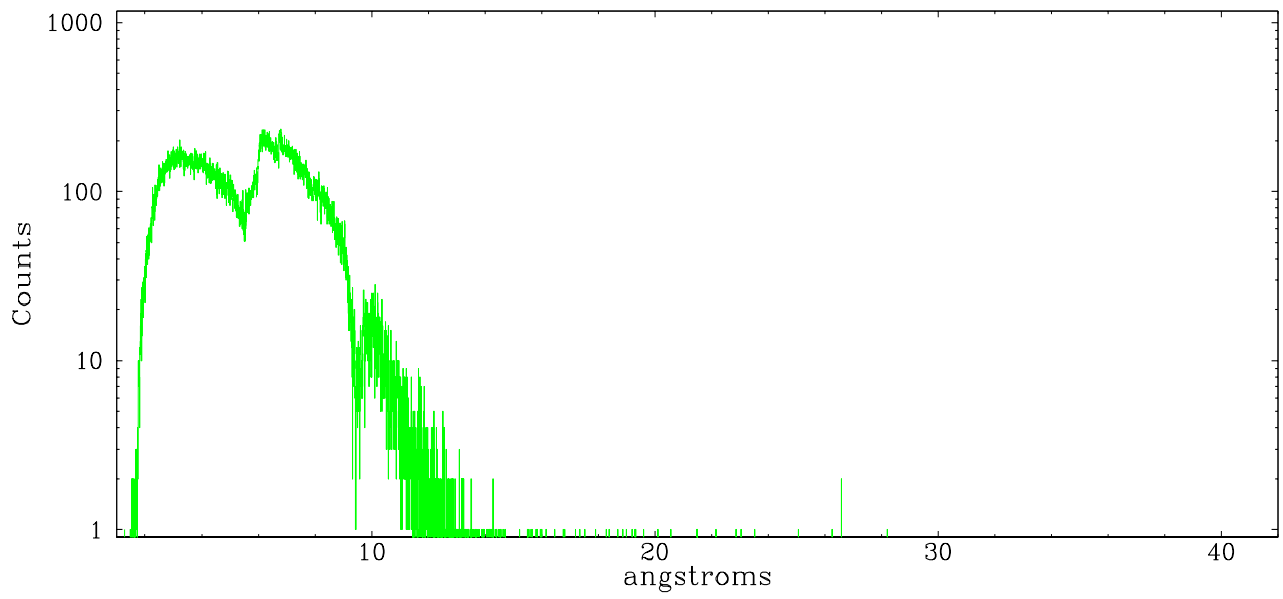
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	14892	6280	159534	37436	190876	6144	13536



meg order -1



meg order +1



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.04.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.2496

## A.2 Comments