

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 1892 - L2 Version 001  
Chandra X-Ray Center

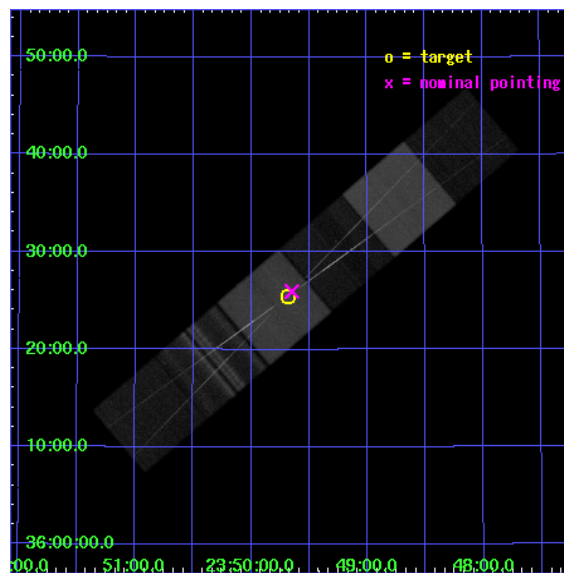
L2 Processing Date : Dec 19 2006

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
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
<b>3</b>	<b>Gratings</b>	<b>17</b>
3.1	HEG Arm . . . . .	17
3.2	MEG Arm . . . . .	19
<b>A</b>	<b>Summary</b>	<b>21</b>
A.1	Status . . . . .	21
A.2	Comments . . . . .	21

# 1 Front

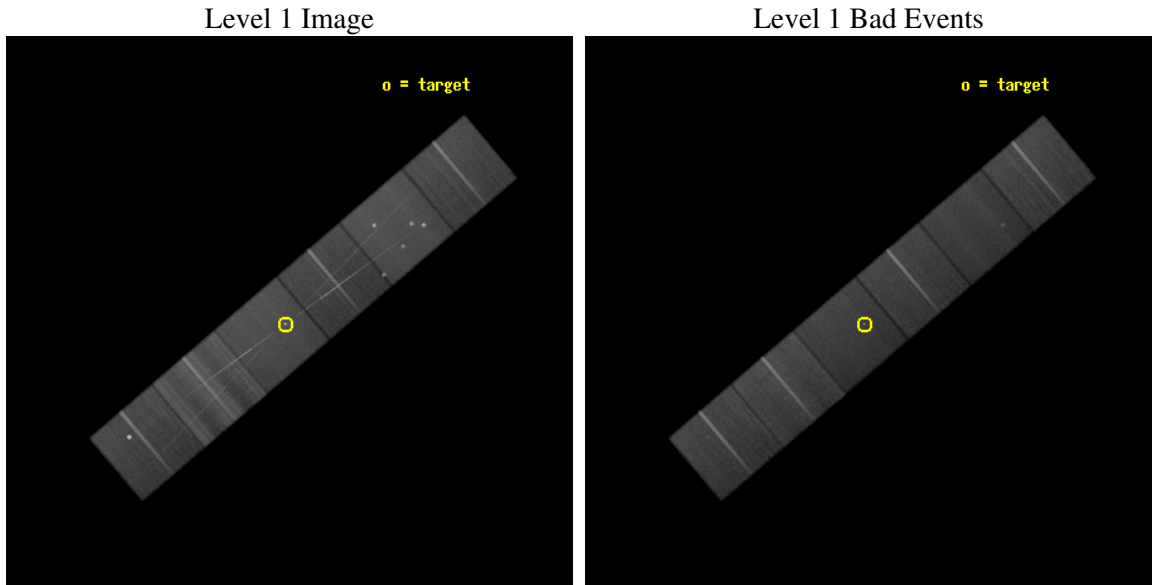
seq_num	200120
obs_id	1892
title	TORTURED CORONAE IN THE RAPID BRAKING ZONE
observer	Dr. Thomas Ayres
object	HD 223460
dtcycle	0
cycle	P
ra_targ	357.42
dec_targ	36.425278
ra_nom	357.41231389651
dec_nom	36.432824519621
roll_nom	139.56641632158
revision	2
ontime	96889.600090235
livetime	95662.72563398
ontime4	96889.600090235
ontime5	96886.359159902
ontime6	96883.118279397
ontime7	96889.600090235
ontime8	96889.600090235
ontime9	96889.600090235
l2events	1147048



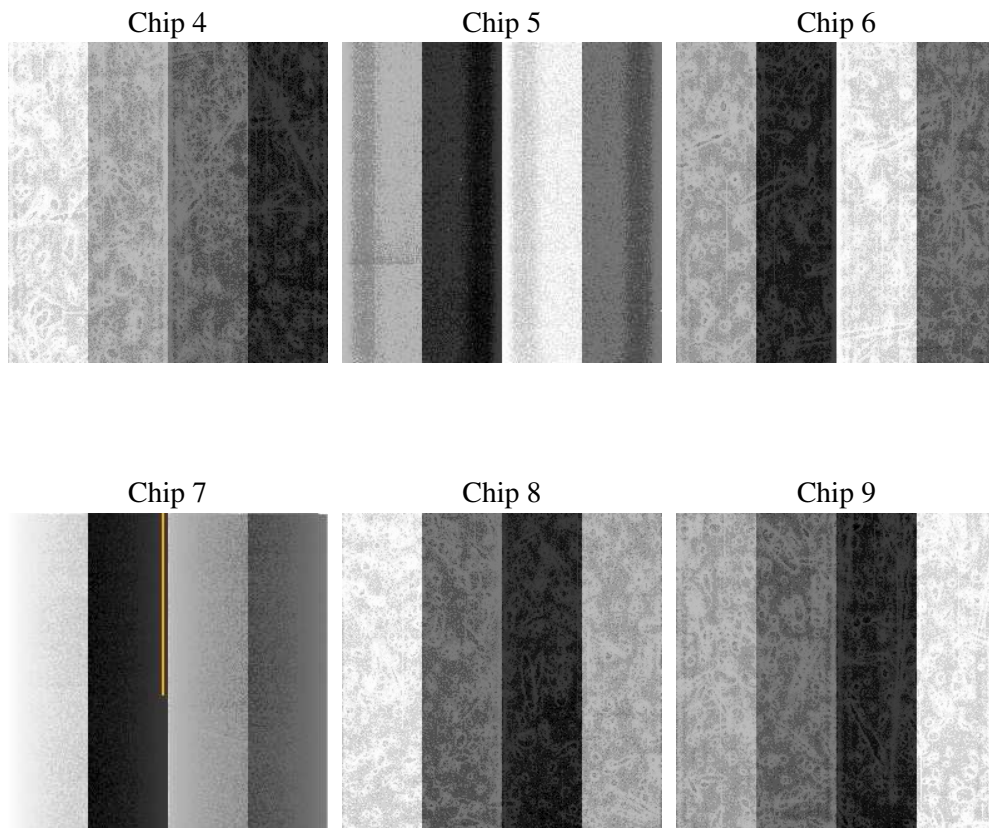
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldbver	3.2.4
date	2006-12-19T16:36:00
revision	2

sched_exp_time	96946.000000
ontime	96896.150506601
ontime4	96896.150506601
ontime5	96892.909576267
ontime6	96889.668695763
ontime7	96896.150506601
ontime8	96896.150506601
ontime9	96896.150506601
l1events	5111785

### 2.1.4 Events

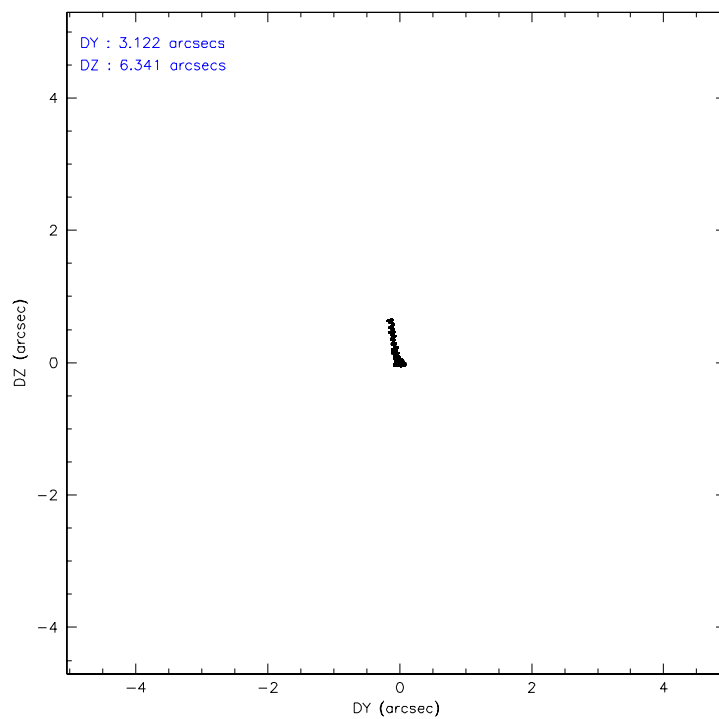
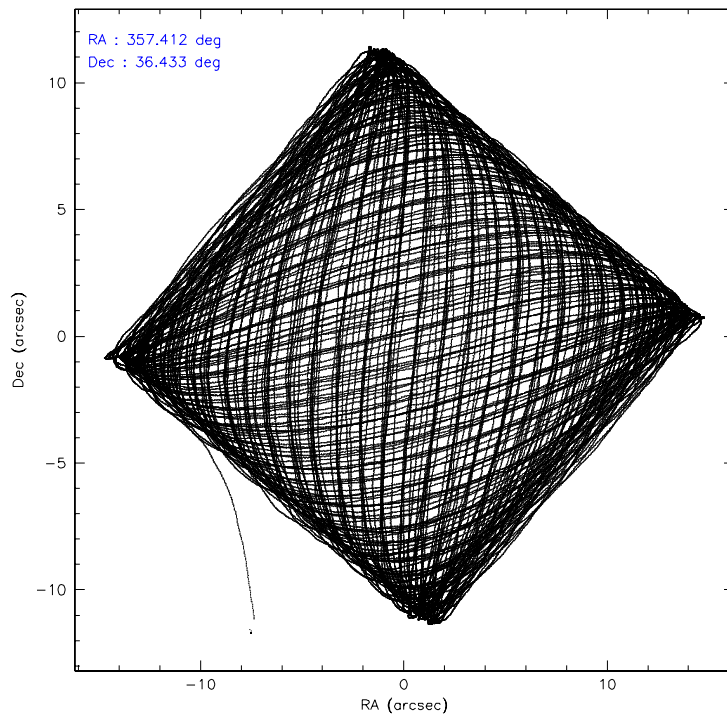
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	766529	958650	721789	884202	1055997	724618
rejected events	669546	516779	605268	525186	692192	606008
rejected %	87%	53%	83%	59%	65%	83%

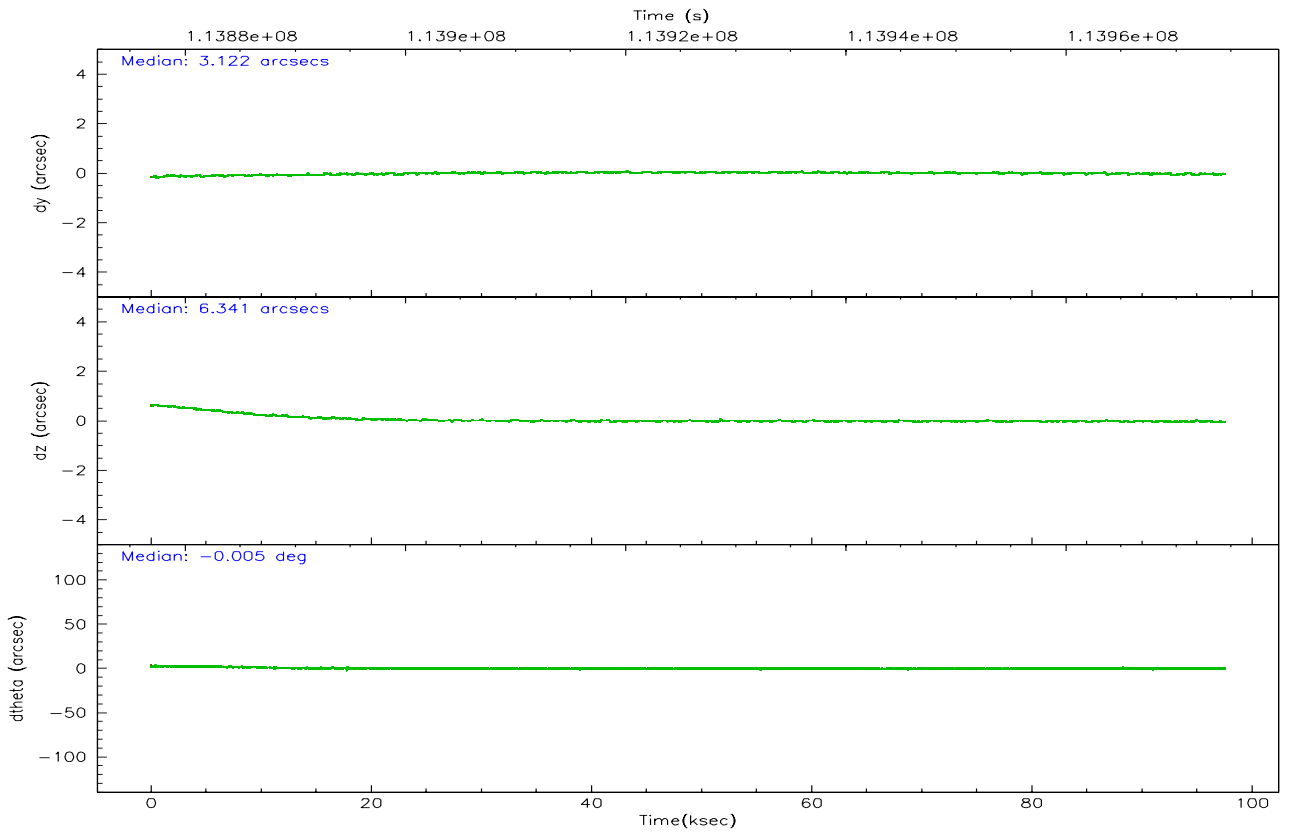
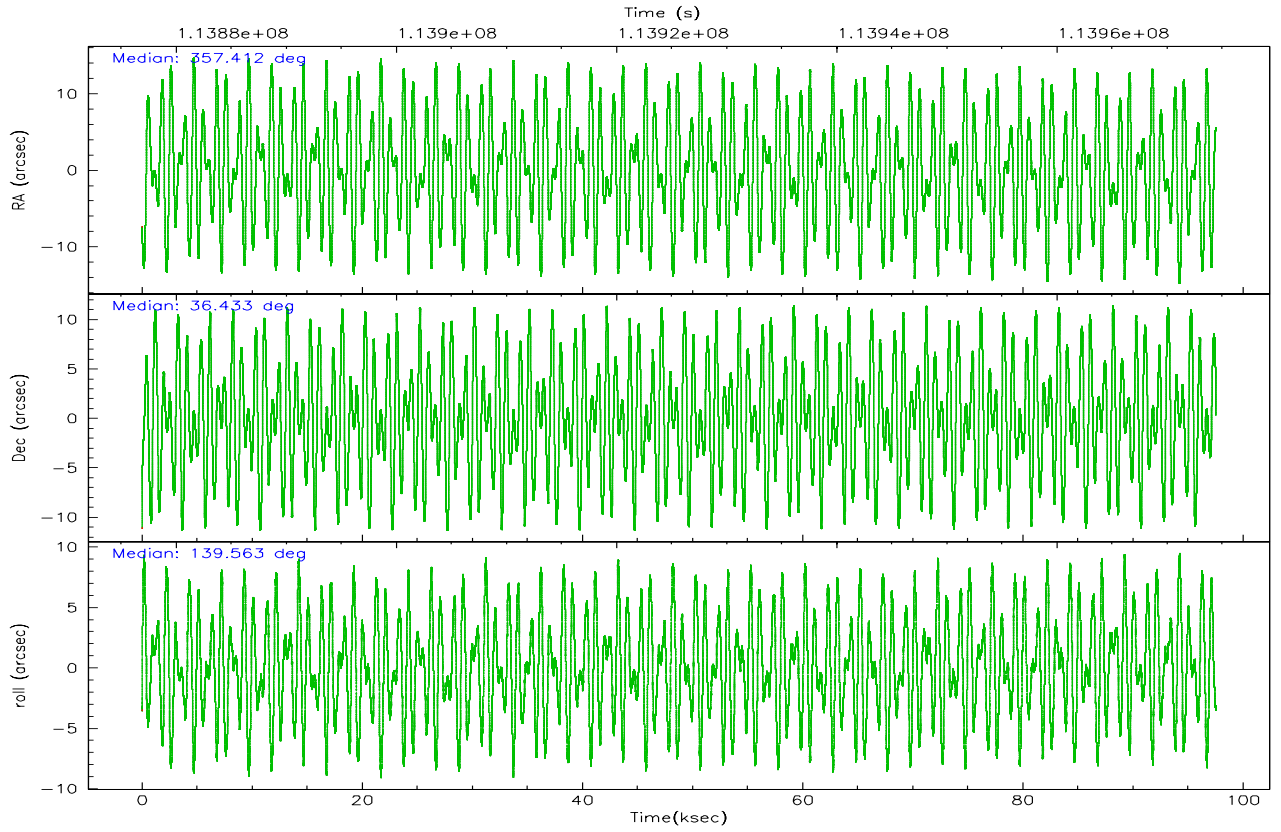
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	39685	61972	59705	25549	132547	64695
	5%	6%	8%	2%	12%	8%
grade 1 events	393	1979	455	958	1068	503
	0%	0%	0%	0%	0%	0%
grade 2 events	25541	129342	22221	88997	54903	20640
	3%	13%	3%	10%	5%	2%
grade 3 events	7482	11317	8341	21195	56759	7928
	0%	1%	1%	2%	5%	1%
grade 4 events	7343	10825	8409	20435	50465	7611
	0%	1%	1%	2%	4%	1%
grade 5 events	23517	45189	27098	58395	36940	28370
	3%	4%	3%	6%	3%	3%
grade 6 events	16935	228439	17850	202868	69196	17745
	2%	23%	2%	22%	6%	2%
grade 7 events	645633	469587	577710	465805	654119	577126
	84%	48%	80%	52%	61%	79%

## 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	357.445726	357.4123138965127	Subarray requested	NONE	NONE
Pointing Dec	36.428170	36.43282451962133	Alternating exposures requested	N	N
Pointing Roll	139.389952	139.5664163215769	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)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	113877517.184000	113876344.23312			
Observation start date	2001-08-11T00:37:33	2001-08-11T00:19:04			
Observation end time	113974463.184000	113974994.33701			
Observation end date	2001-08-12T03:33:19	2001-08-12T03:43:14			
Read mode	TIMED	TIMED			

## 2.3 Aspect



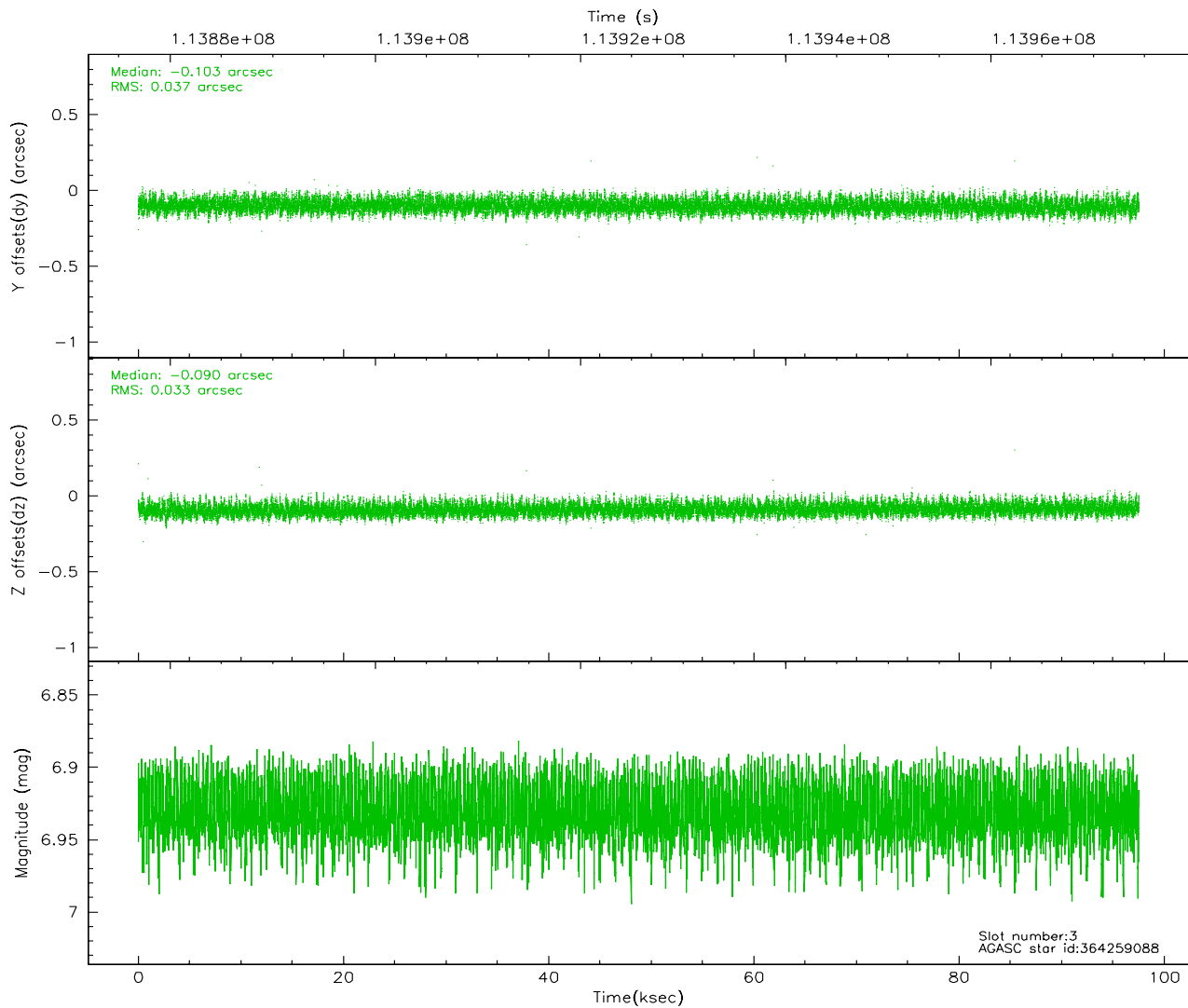
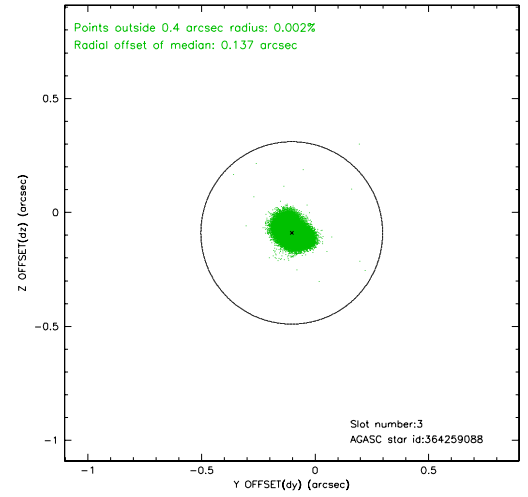
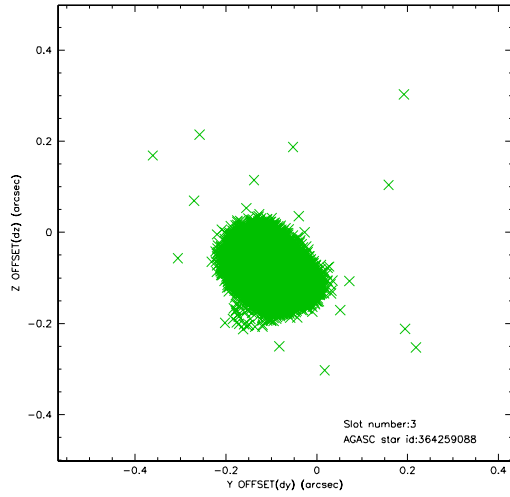


### Slot Statistics

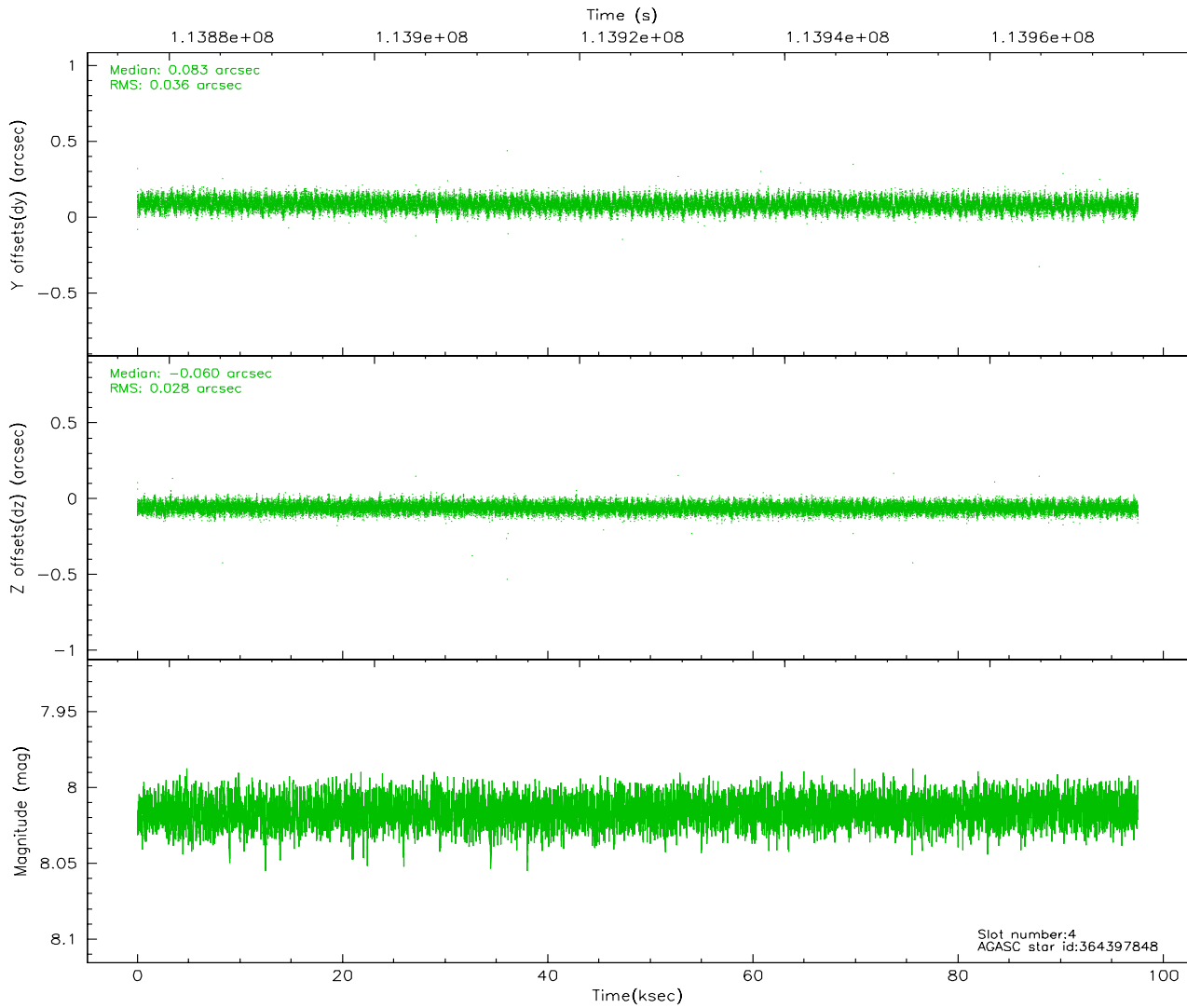
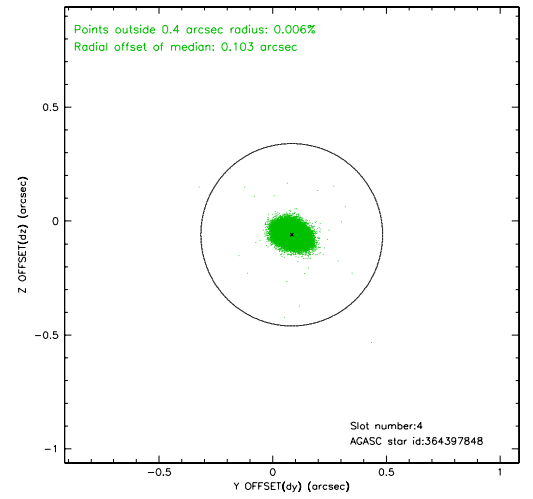
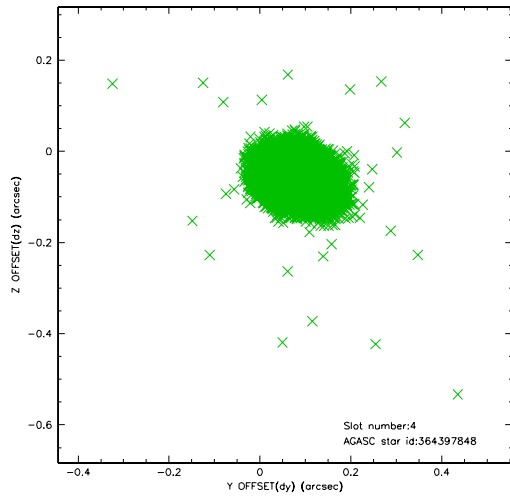
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	23793	-0.008	0.036	0.007	0.013	0.000000	0.000000	-755.74	-1727.52
1	FID	ACIS-S-4	7.20	23792	-0.080	-0.006	0.006	0.015	0.000000	0.000000	2157.48	181.05
2	FID	ACIS-S-5	7.24	23795	0.057	-0.022	0.007	0.012	0.000000	0.000000	-1808.65	174.55
3	GUIDE	364259088	6.93	47584	-0.103	-0.090	0.054	0.087	357.147437	36.274539	297.58	982.81
4	GUIDE	364397848	8.02	47582	0.083	-0.060	0.048	0.079	357.805277	36.000485	-1796.18	486.14
5	GUIDE	364394632	8.21	47507	0.124	0.120	0.065	0.102	358.032180	36.355923	-1456.92	-912.64
6	GUIDE	364398880	8.04	47518	0.017	0.192	0.054	0.087	357.879717	36.601120	-545.38	-1290.59
7	GUIDE	364261280	9.34	47494	-0.120	-0.158	0.088	0.139	356.456264	36.255050	1783.55	2331.67

## 2.4 Star Slots

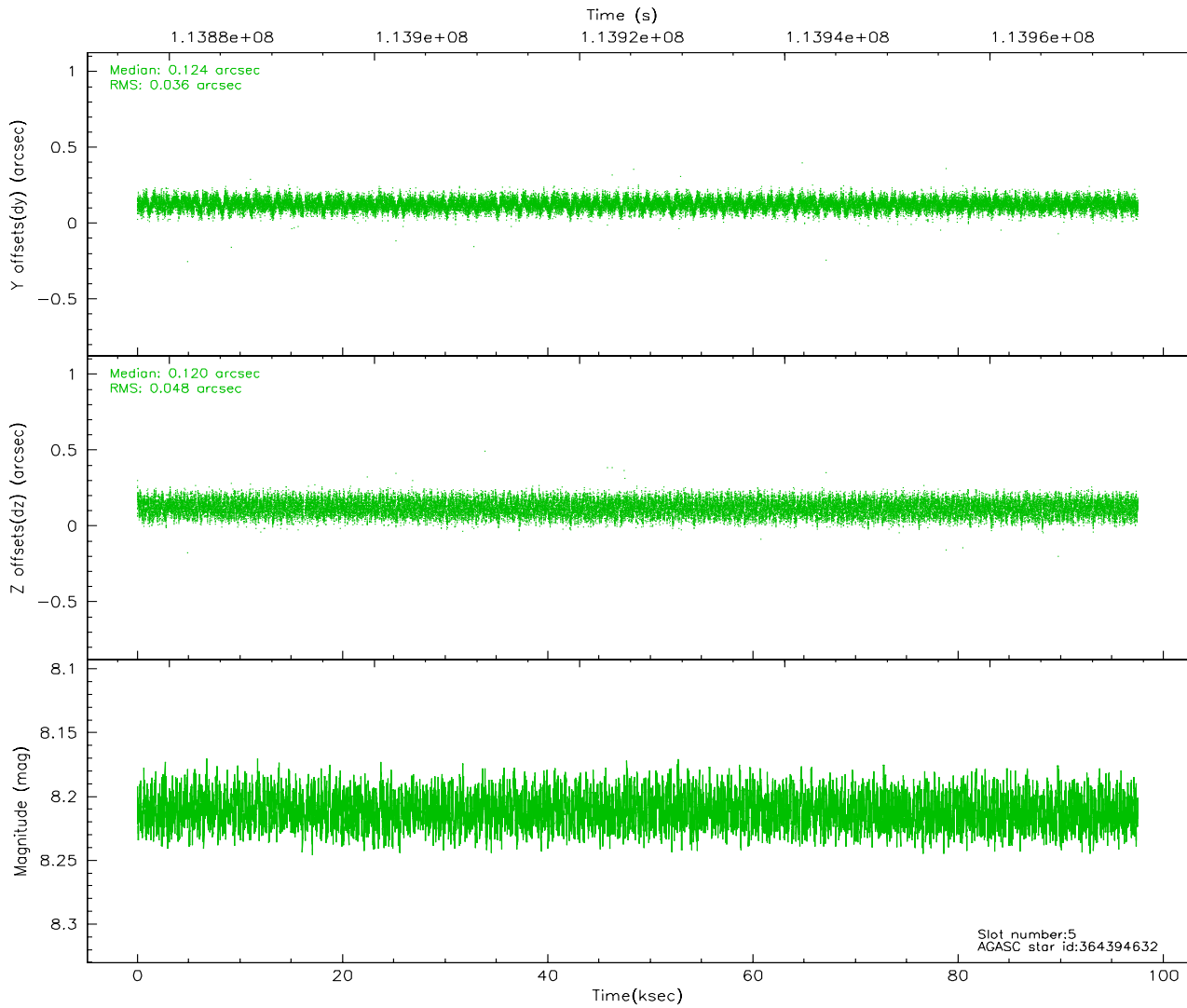
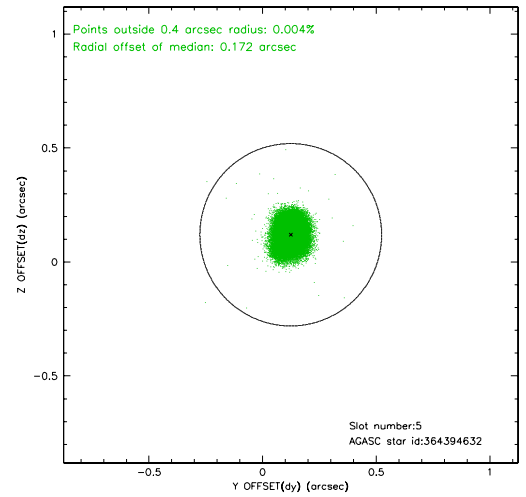
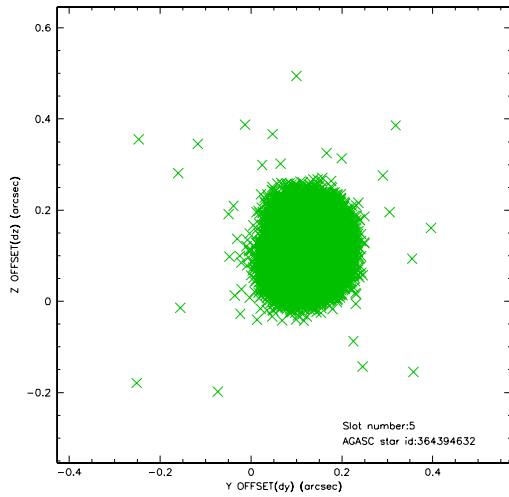
### 2.4.1 Slot 3



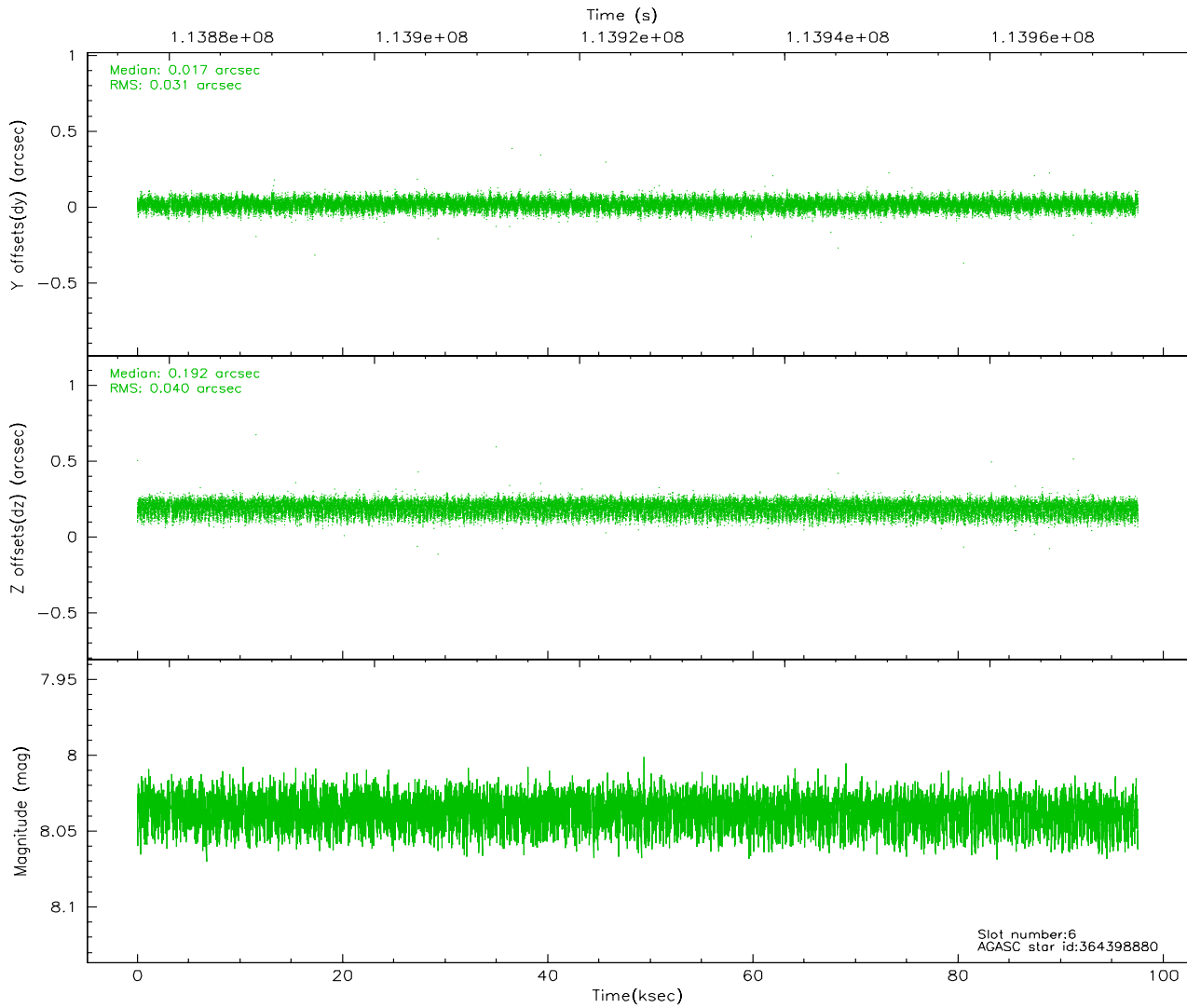
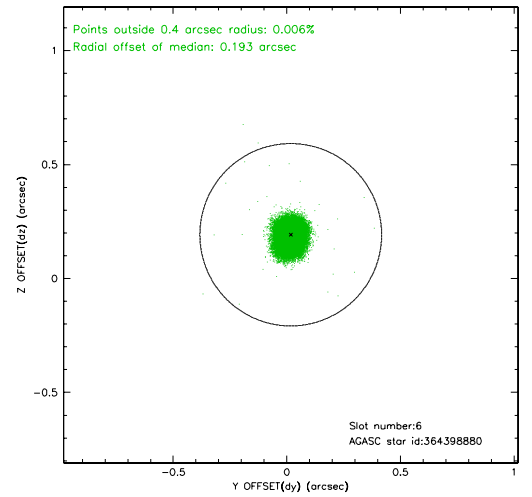
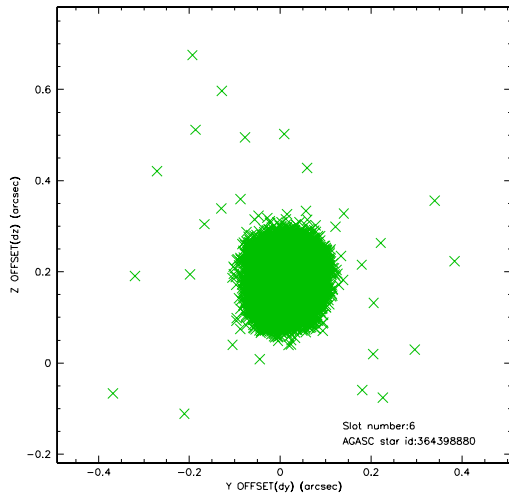
## 2.4.2 Slot 4



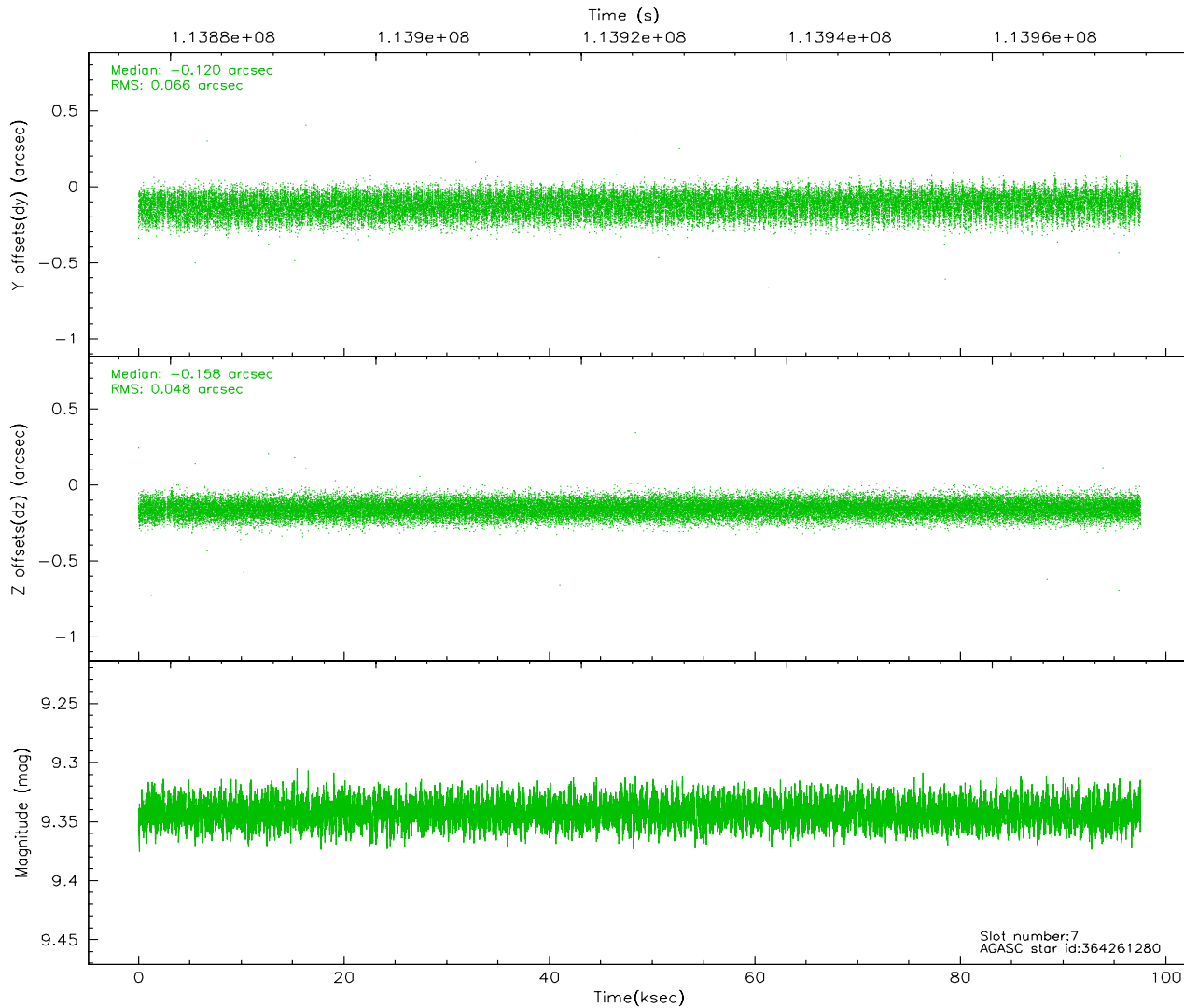
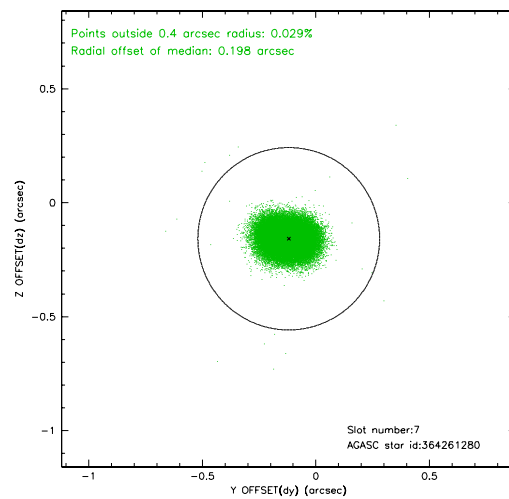
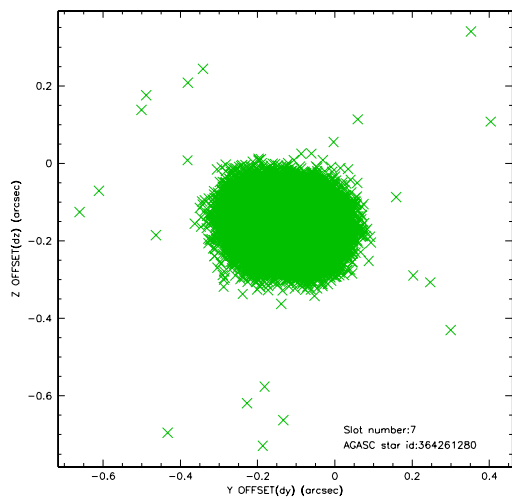
### 2.4.3 Slot 5



### 2.4.4 Slot 6

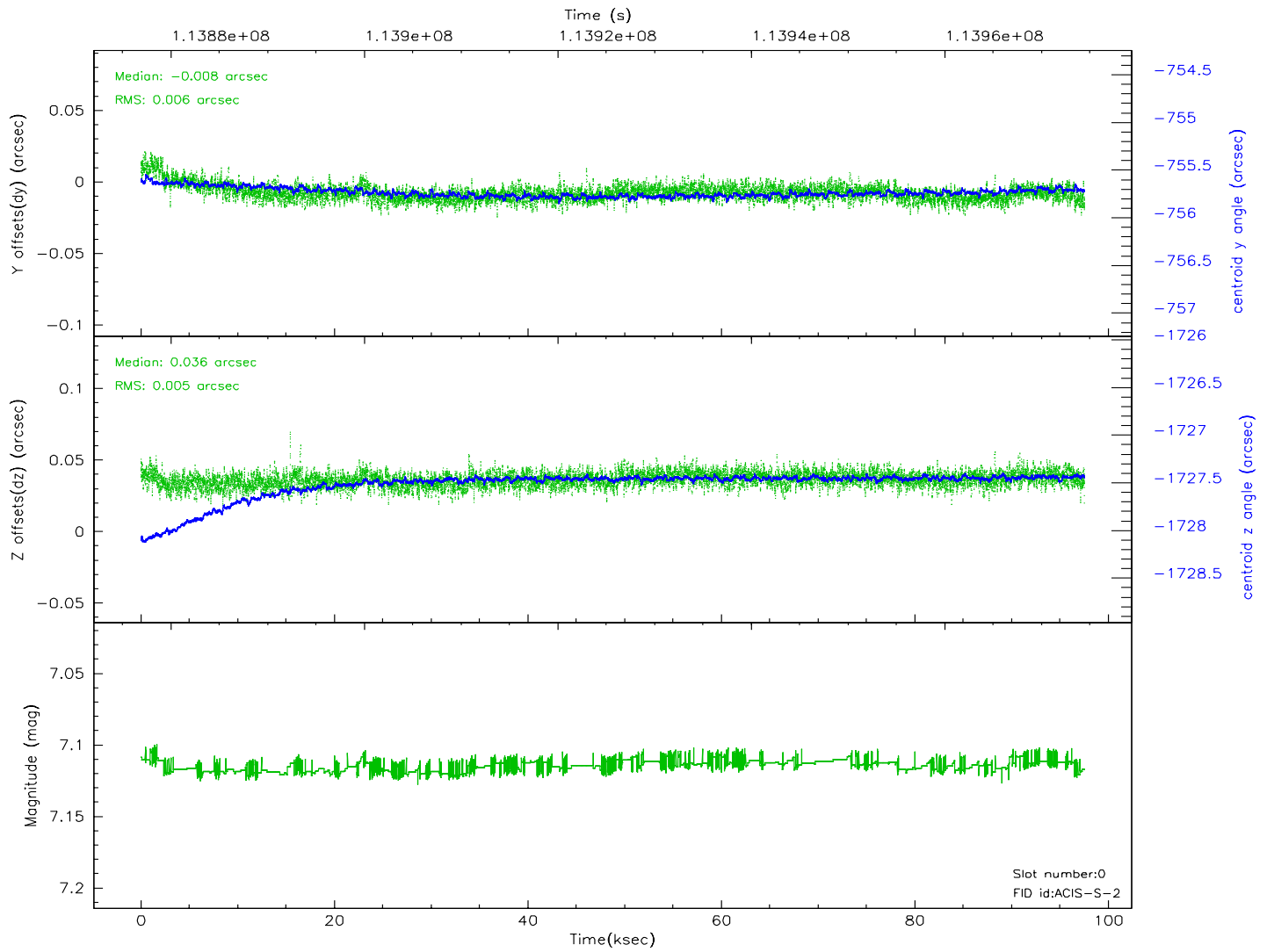
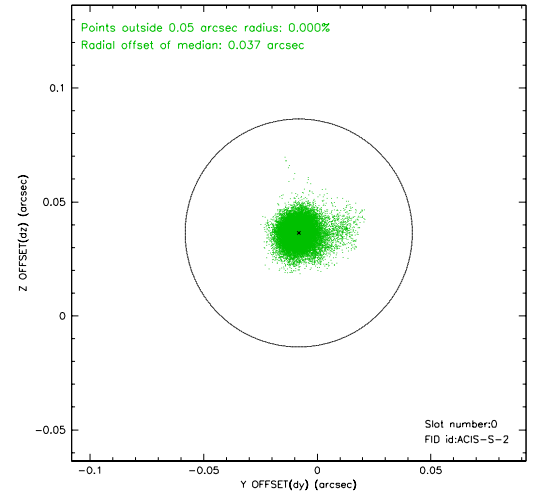
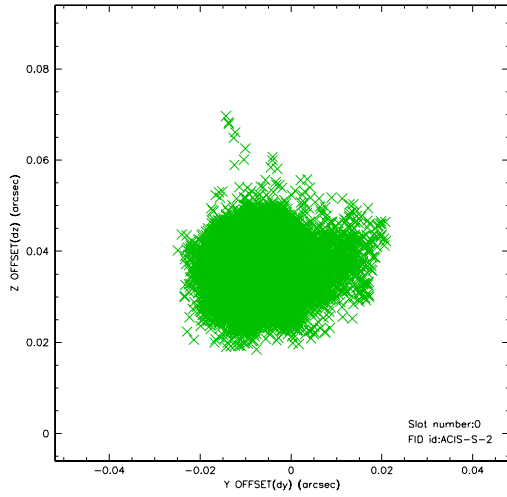


## 2.4.5 Slot 7

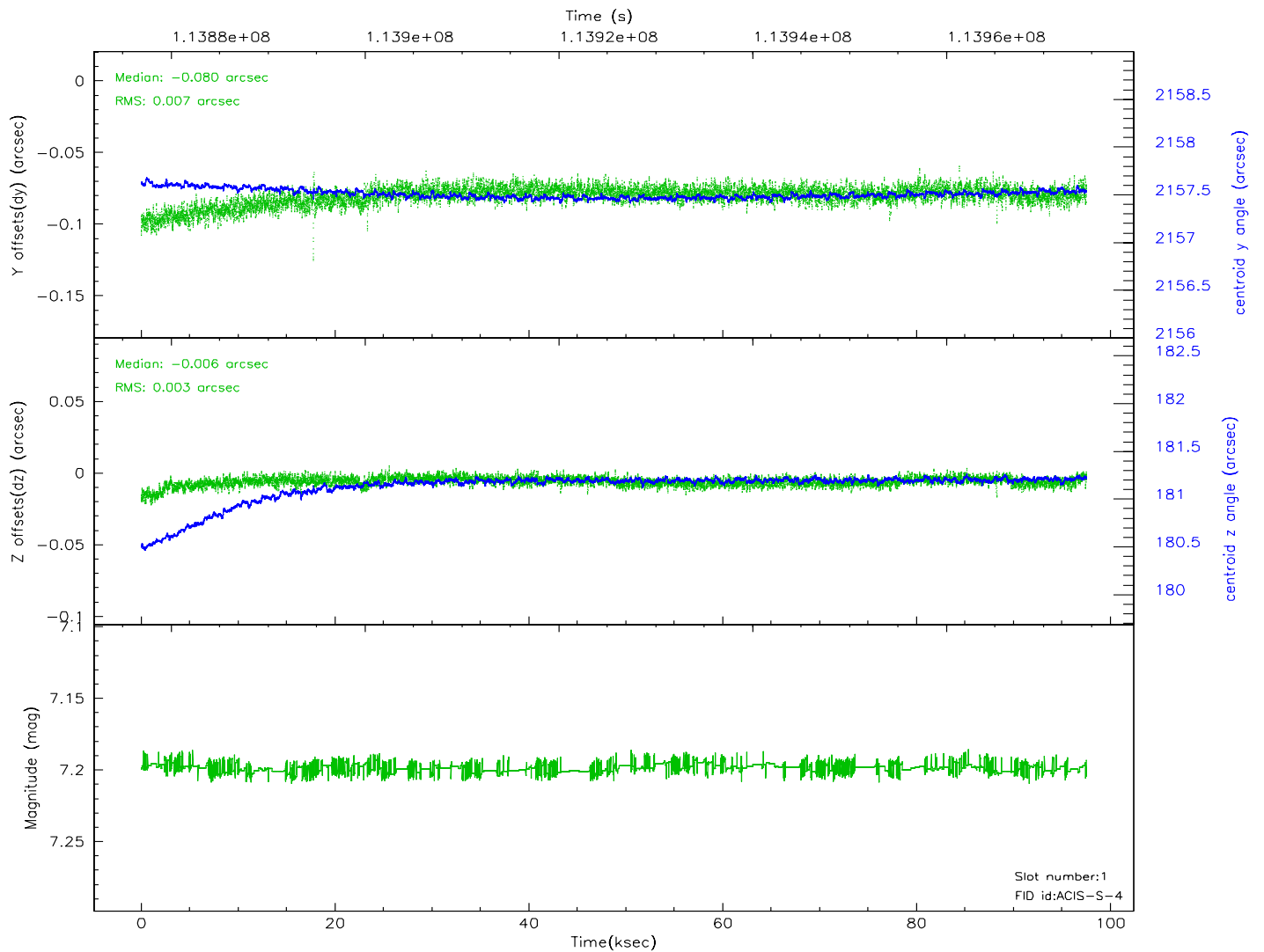
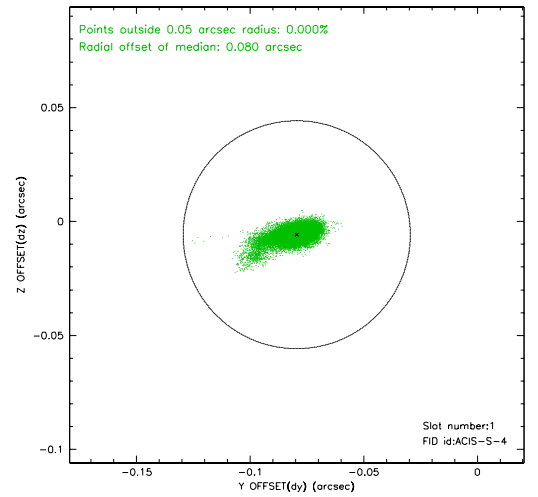
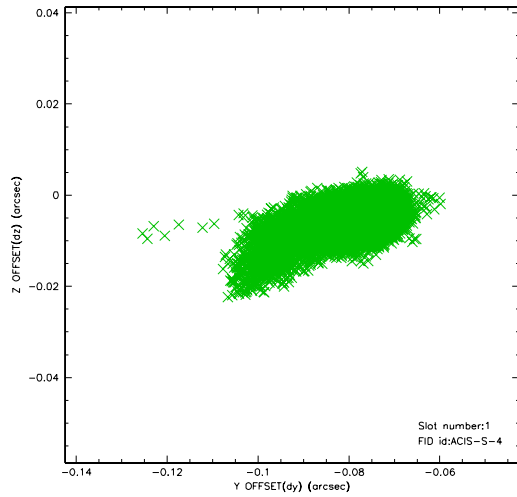


## 2.5 FID Slots

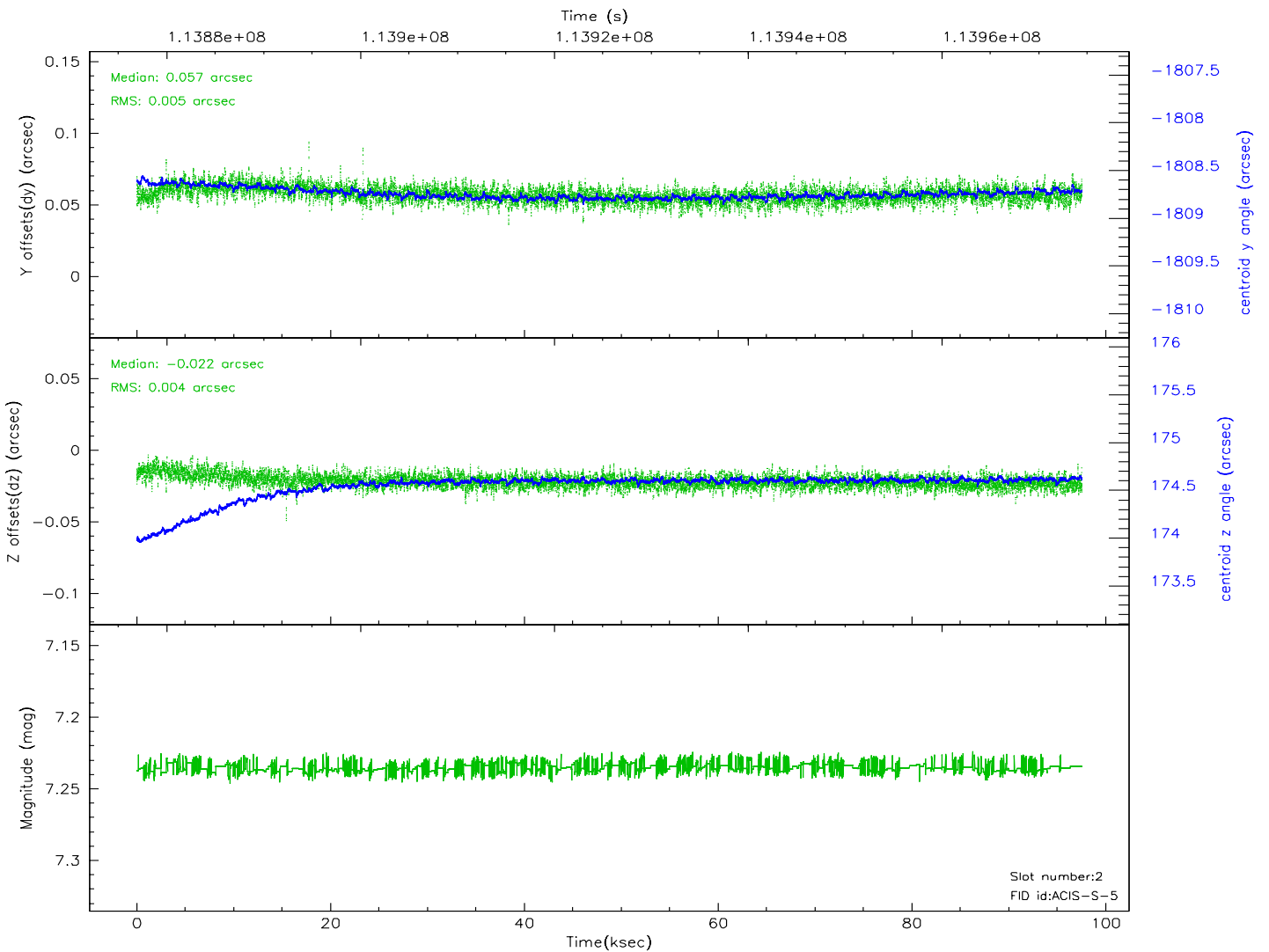
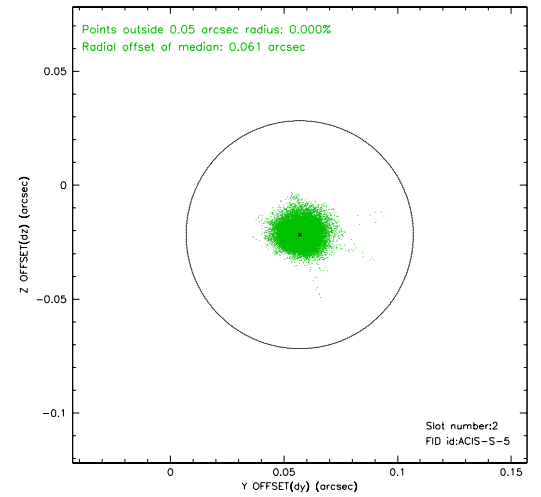
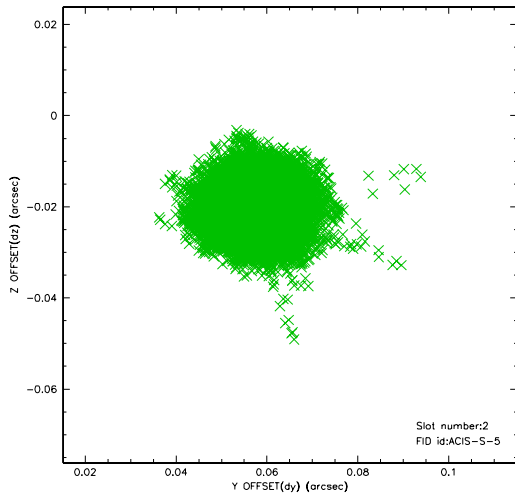
### 2.5.1 Slot 0



## 2.5.2 Slot 1

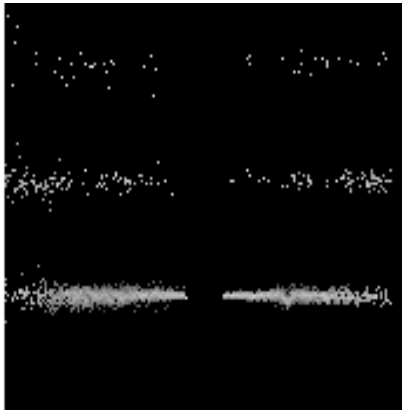


### 2.5.3 Slot 2

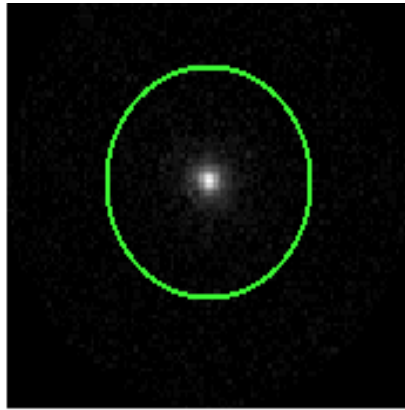


# 3 Gratings

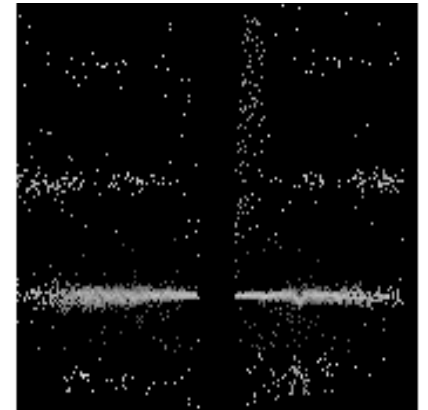
## 3.1 HEG Arm



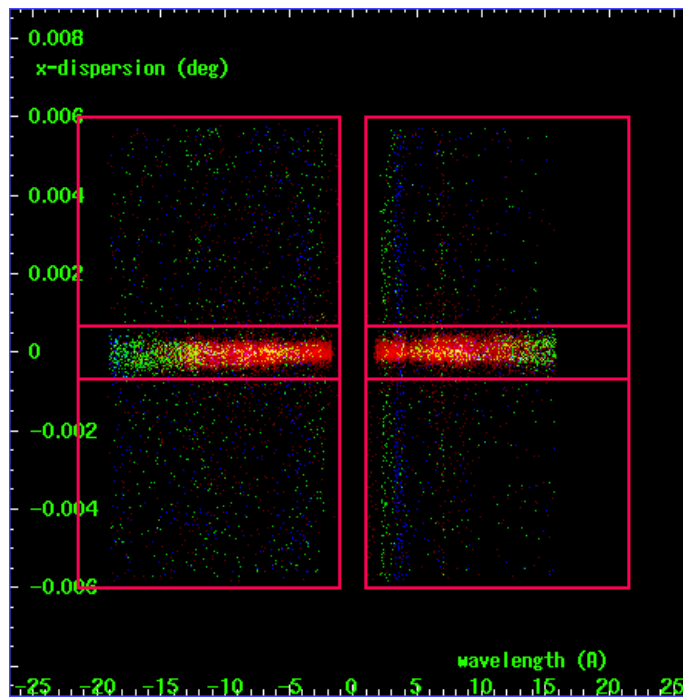
HEG Order Sort 123



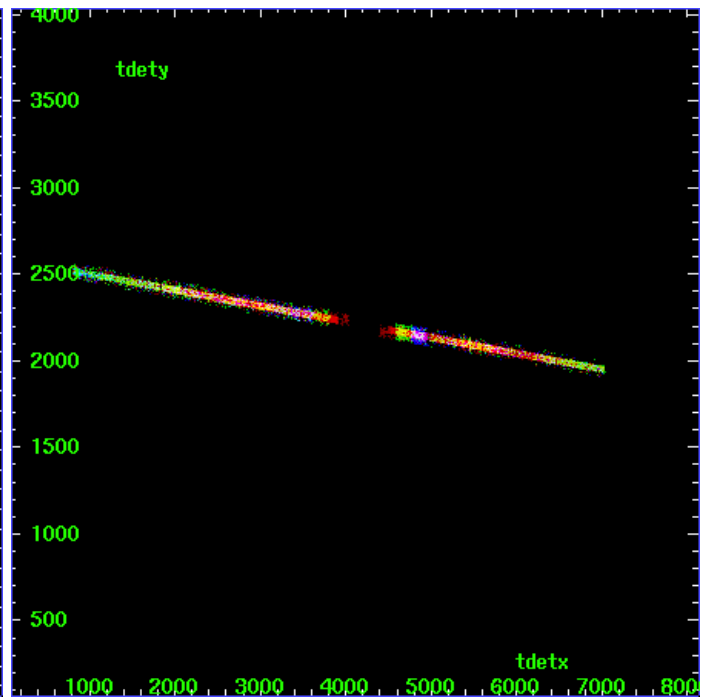
HEG Zero Order



HEG Order Sort ALL

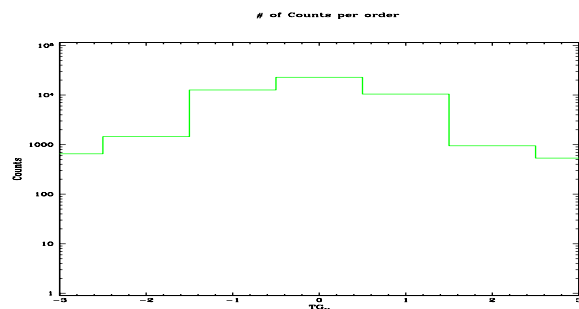


Spot Image HEG

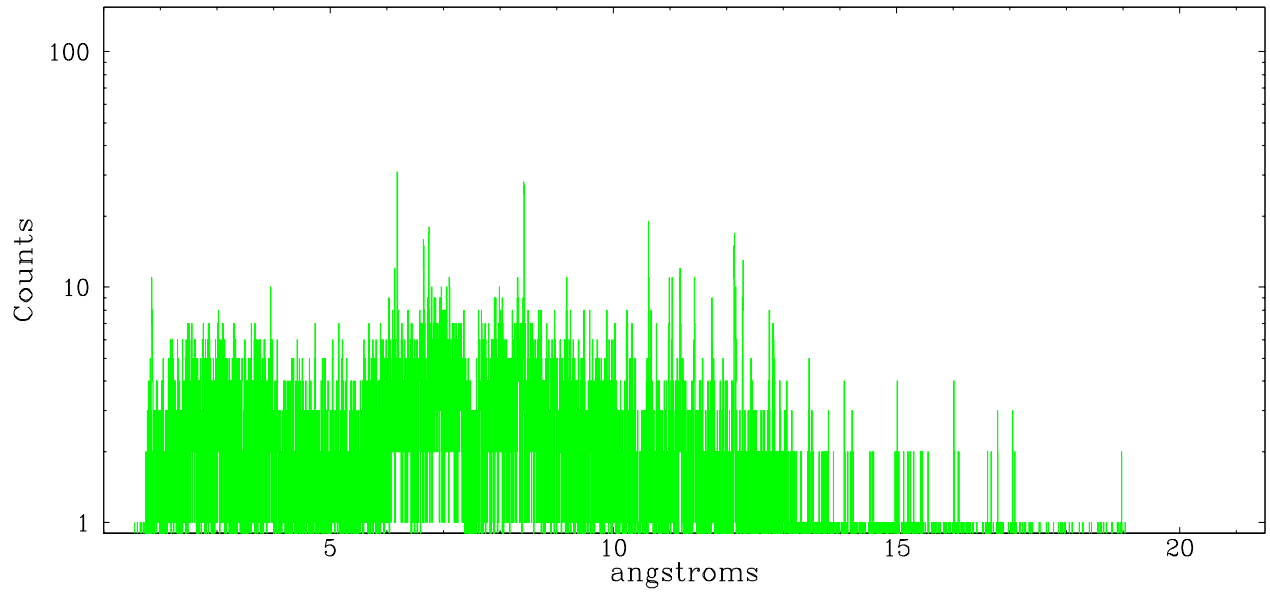


Full Detector HEG

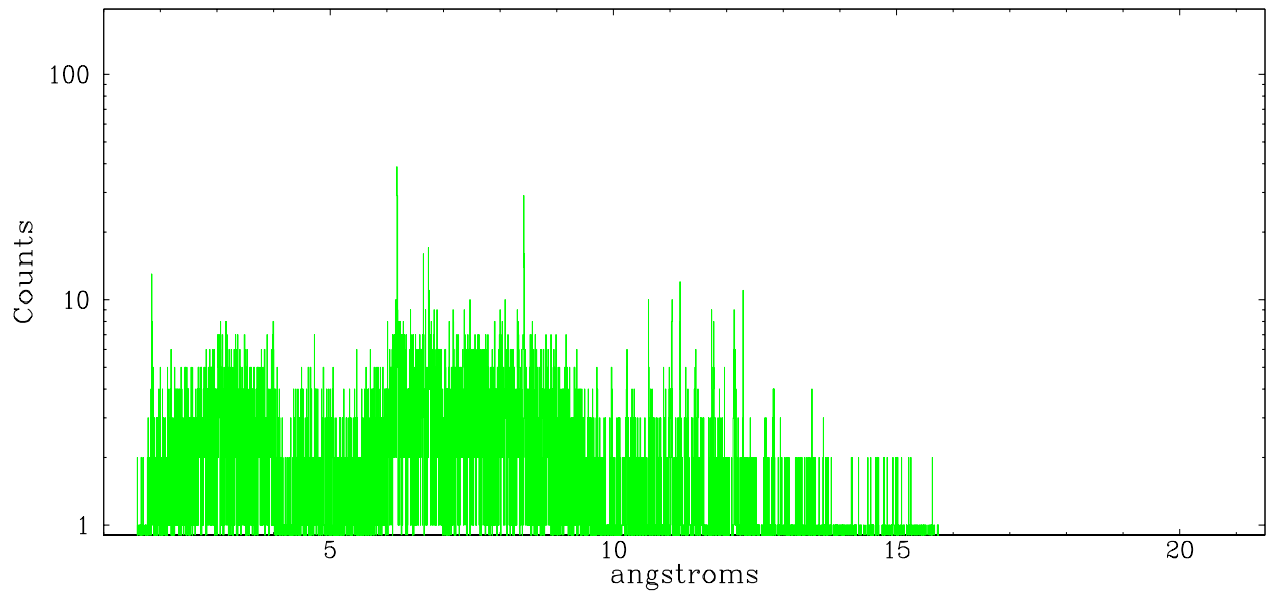
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	652	1451	12674	22809	10469	951	536



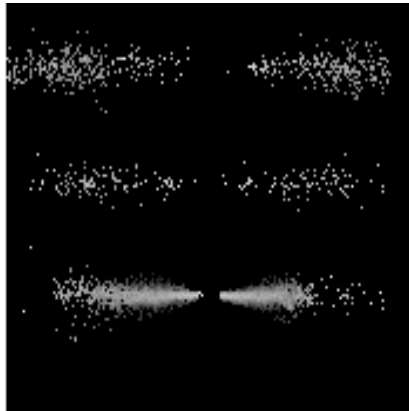
heg order -1



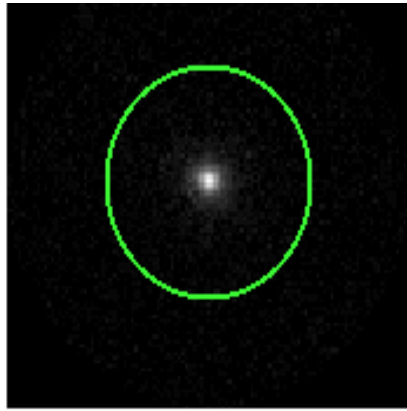
heg order +1



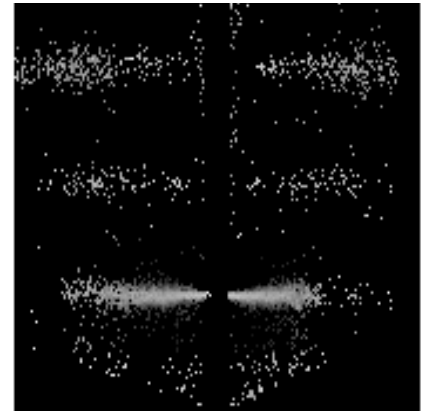
### 3.2 MEG Arm



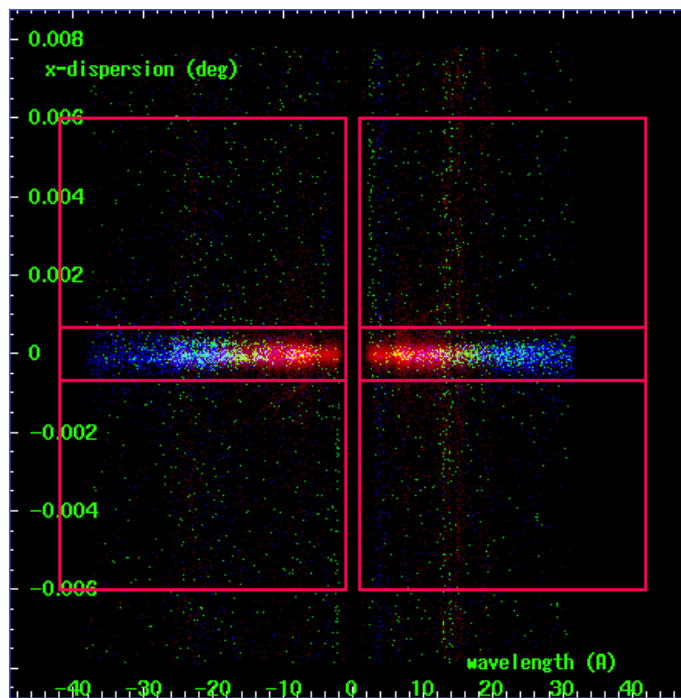
MEG Order Sort 123



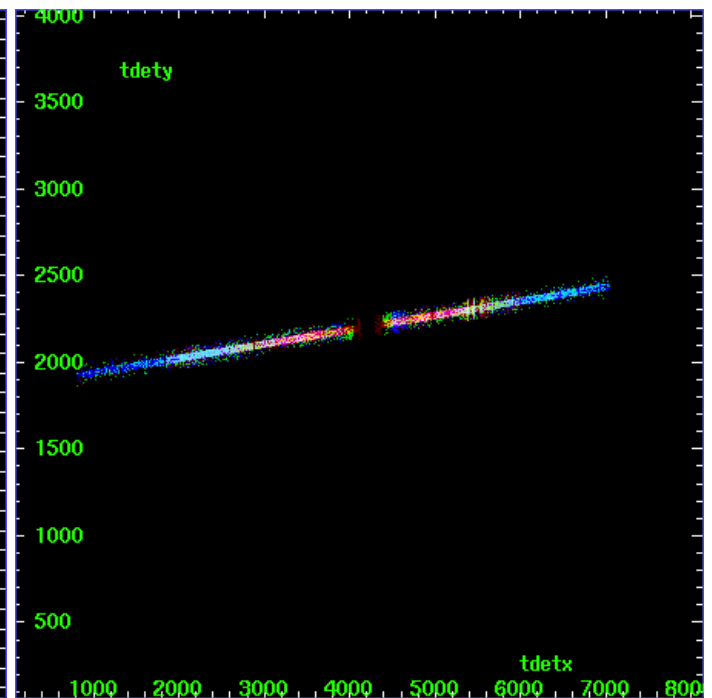
MEG Zero Order



MEG Order Sort ALL

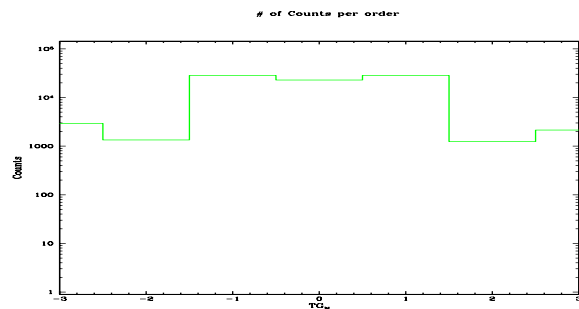


Spot Image MEG

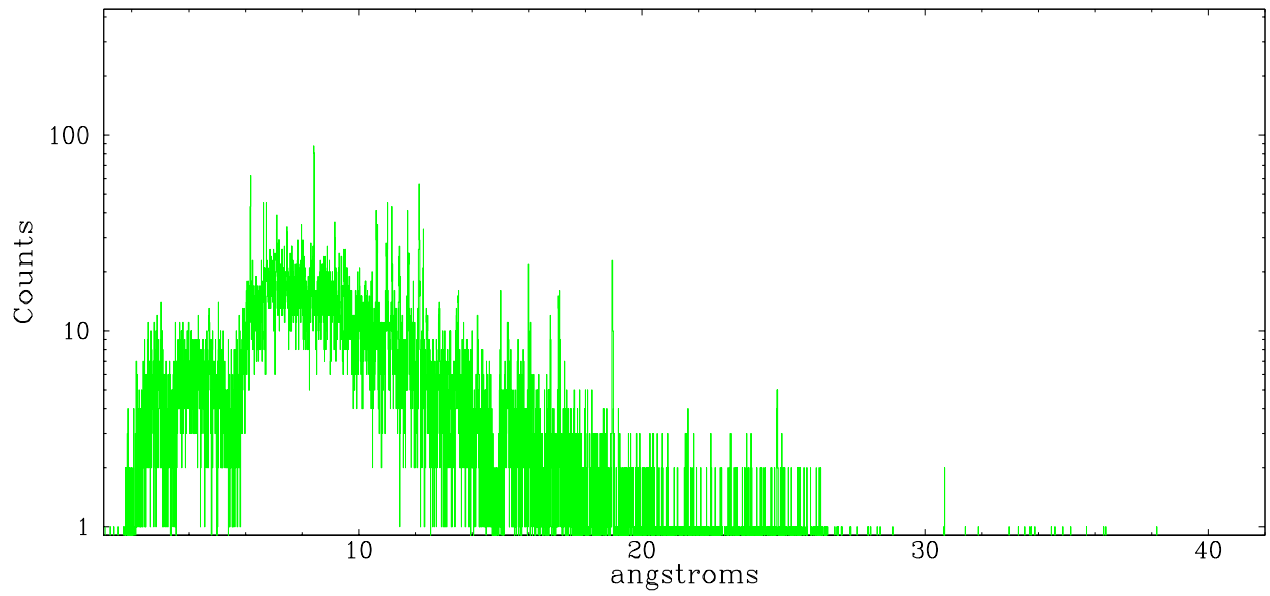


Full Detector MEG

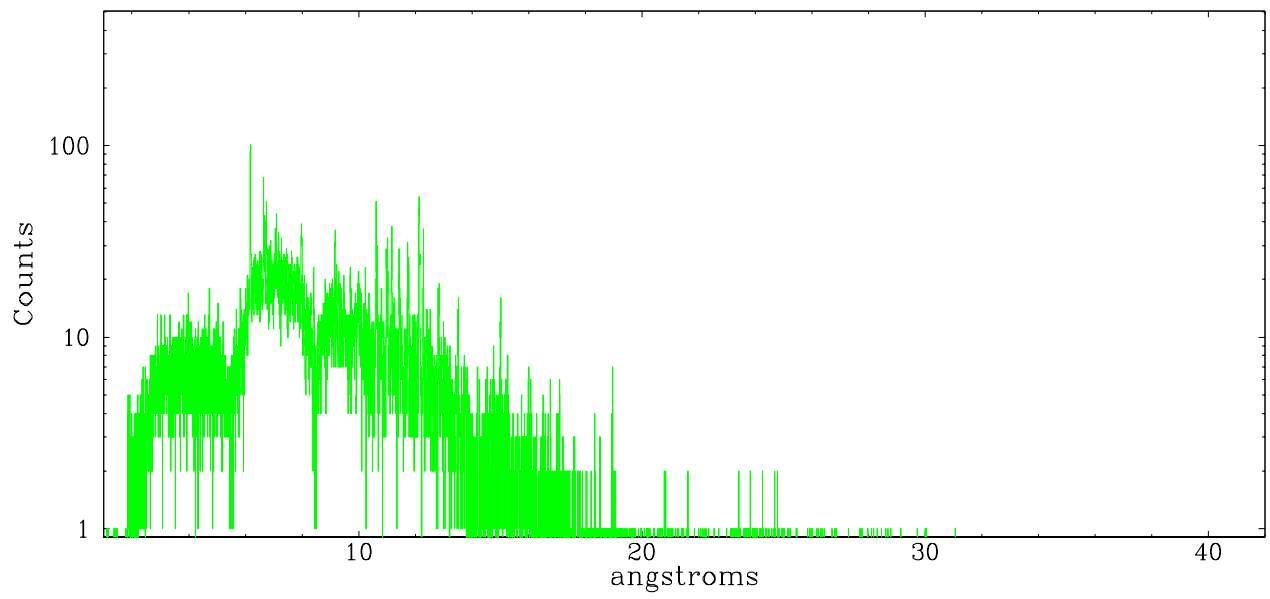
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2950	1344	28491	22809	28650	1236	2147



meg order -1



meg order +1



# A Summary

## A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2006.12.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	96.892

## A.2 Comments