

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2752 - L2 Version 001  
Chandra X-Ray Center

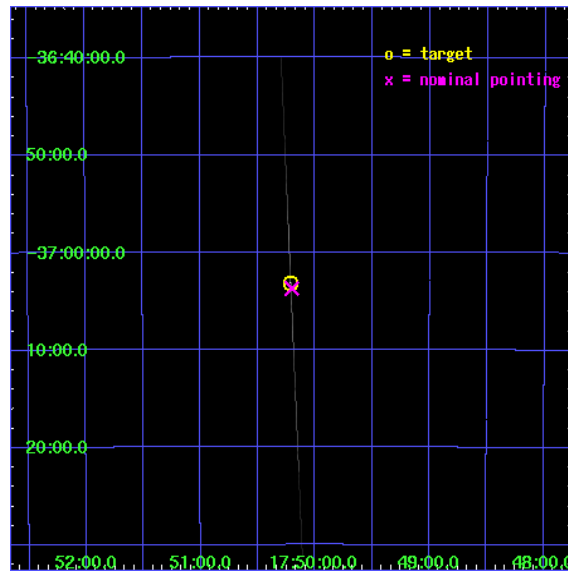
L2 Processing Date : Oct 20 2006

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# 1 Front

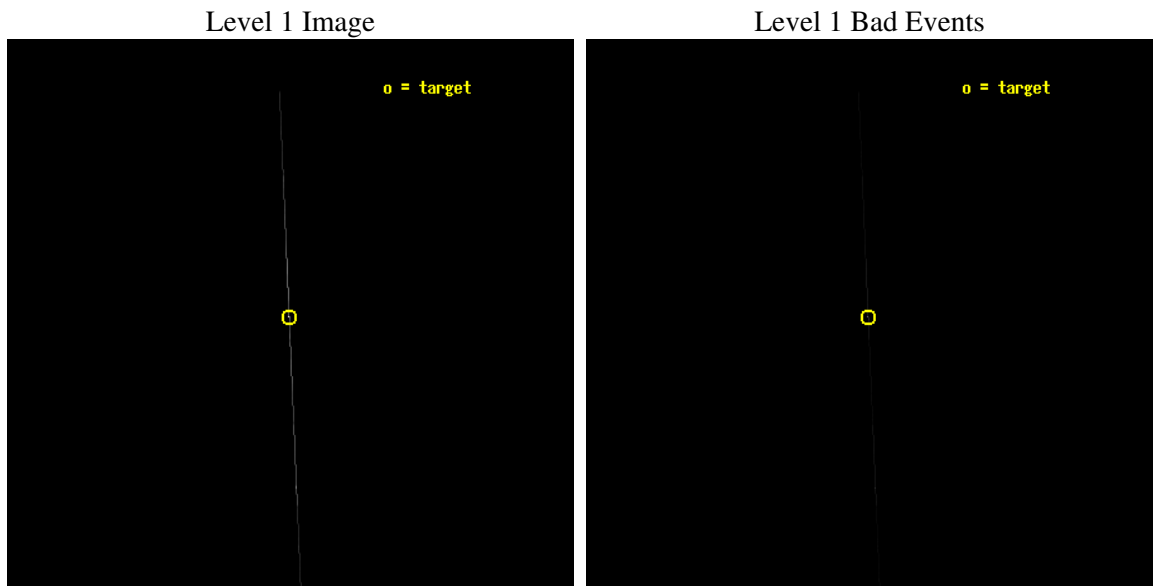
seq_num	400232
obs_id	2752
title	``QPO-FOLDED" SPECTROSCOPIC STUDY OF 3 LOW-MASS X-RAY BINARIES AND DIPPING SOURCES
observer	Dr Mariano Mendez
object	4U 1746-37
ra_targ	267.552917
dec_targ	-37.052222
ra_nom	267.55025616748
dec_nom	-37.061667636446
roll_nom	267.48232857253
revision	3
ontime	40962.0
livetime	40801.9921875
ontime4	40962.0
ontime5	40962.0
ontime6	40962.0
ontime7	40962.0
ontime8	40962.0
ontime9	40962.0
l2events	1693735



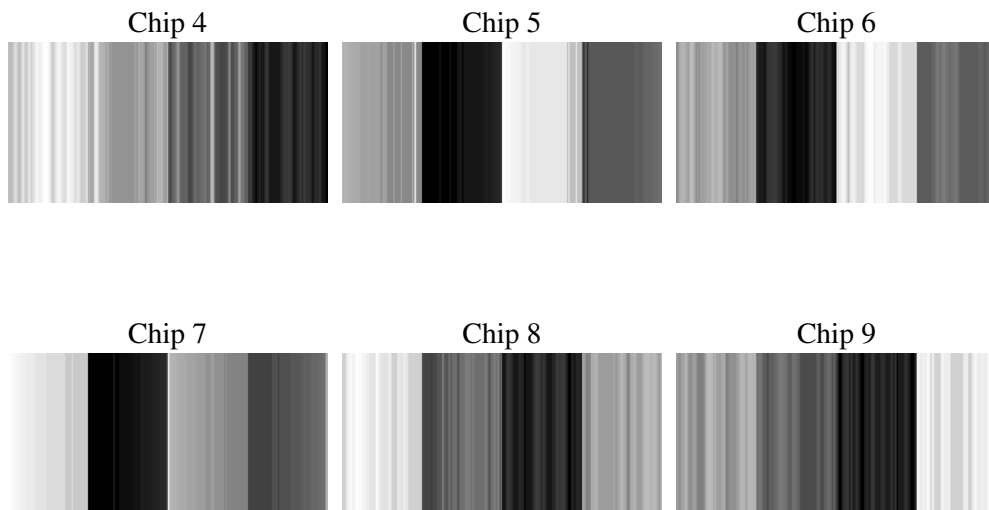
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-10-20T12:46:59
revision	2

sched_exp_time	40807.176000
ontime	41893.144580662
ontime4	41739.929969341
ontime5	41903.357239127
ontime6	41742.846822619
ontime7	41893.144580662
ontime8	41742.845880538
ontime9	41745.763783008
l1events	1977195

### 2.1.4 Events

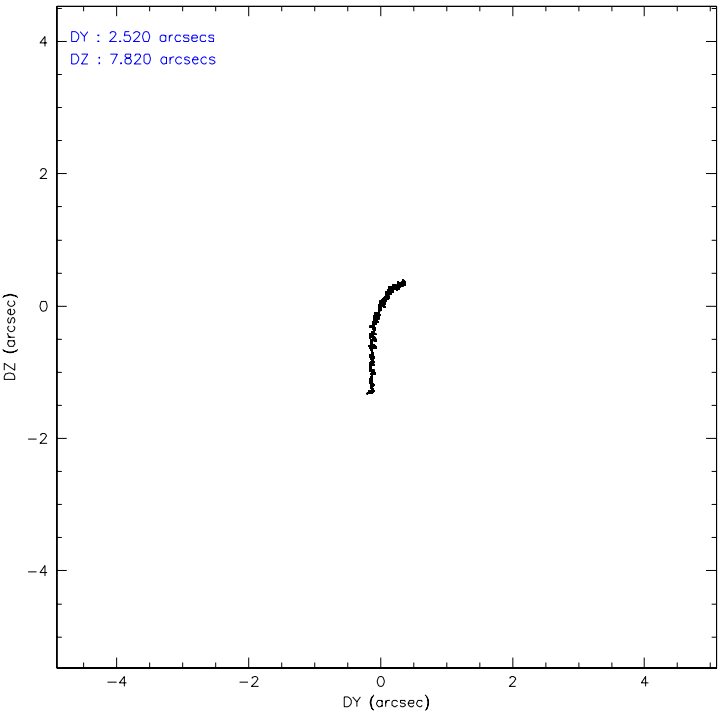
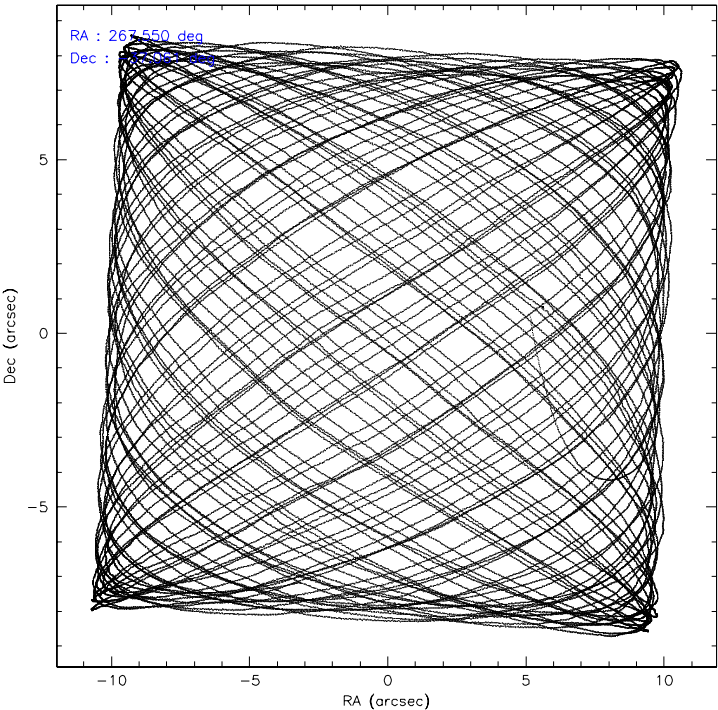
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	69840	284759	313028	1001718	227955	79895
rejected events	10639	26799	13661	46224	17091	12105
rejected %	15%	9%	4%	4%	7%	15%

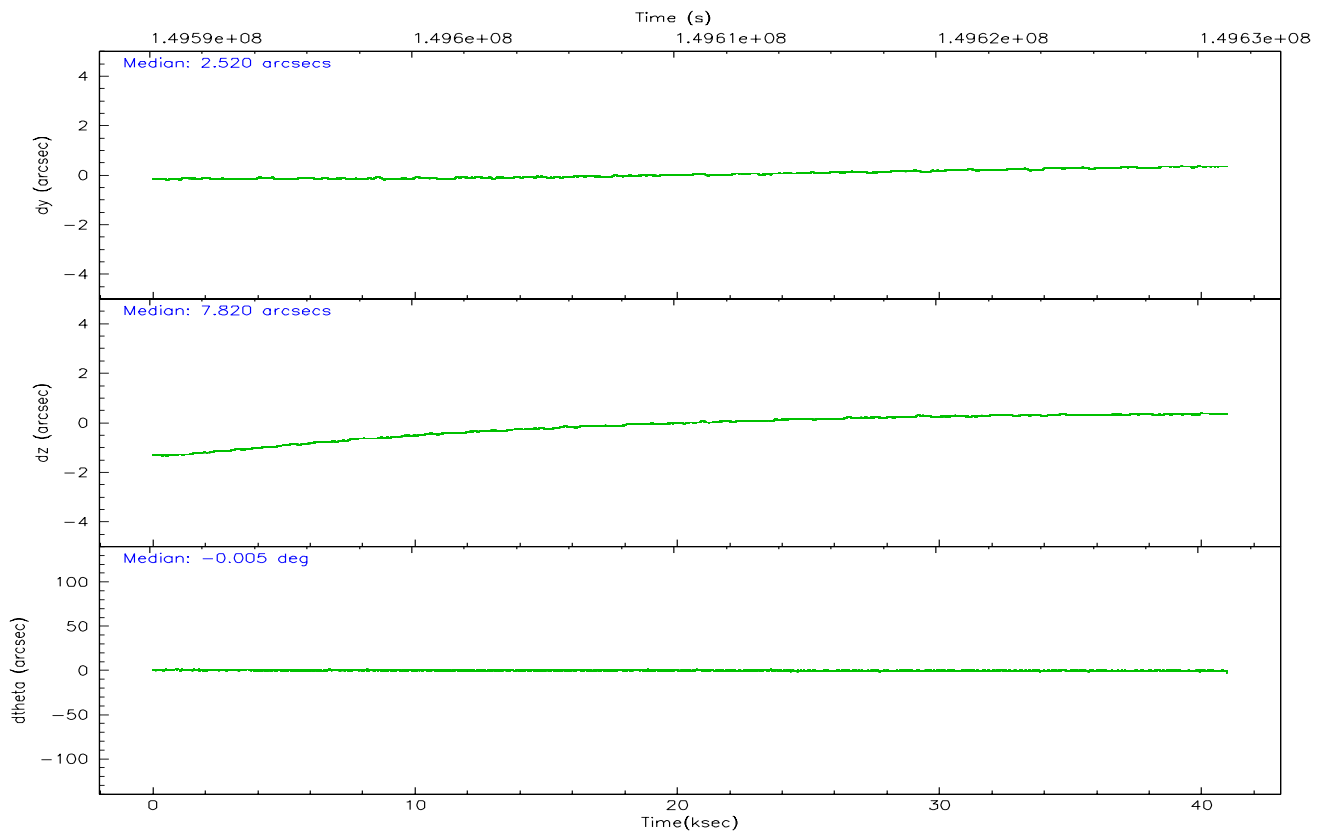
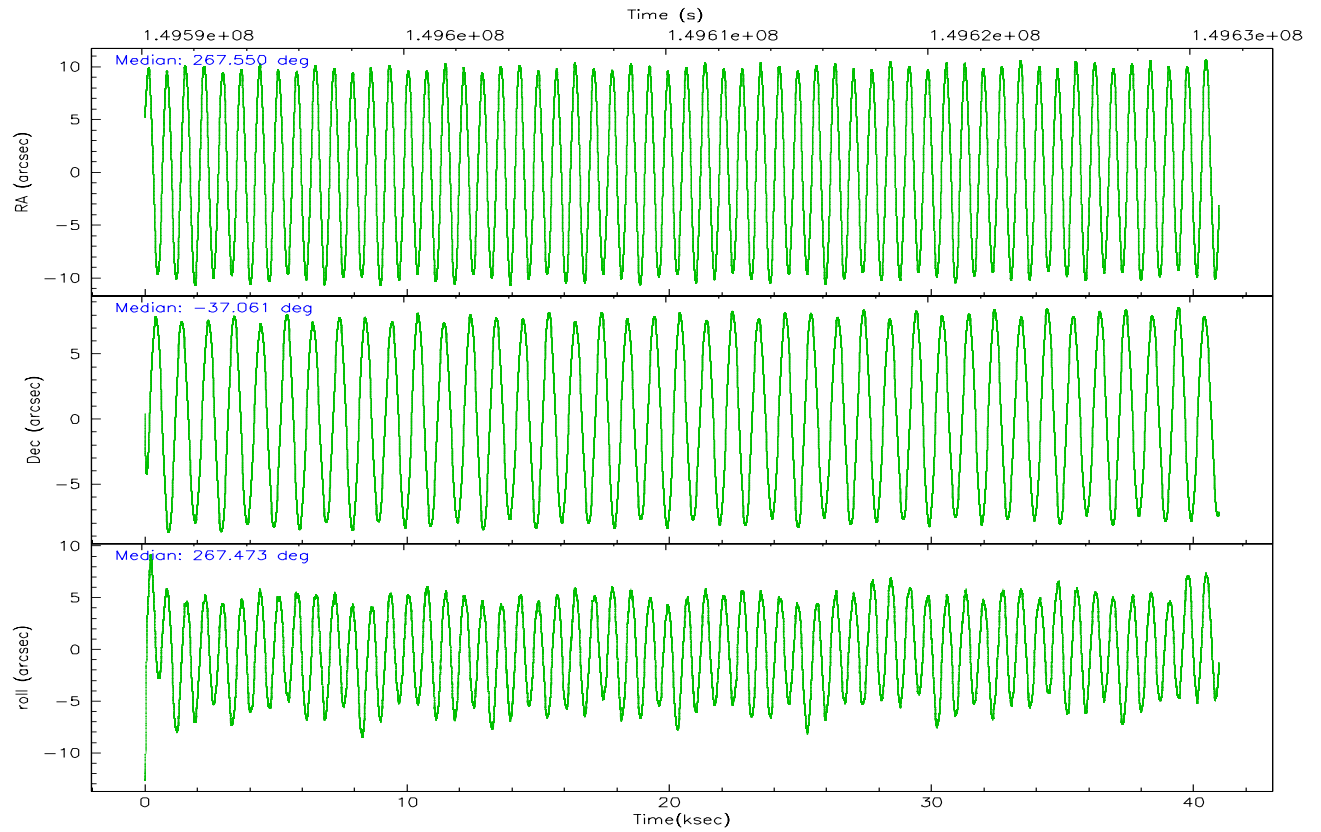
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	11808	48320	31932	169289	72271	14689
	16%	16%	10%	16%	31%	18%
grade 1 events	232	271	219	2341	439	229
	0%	0%	0%	0%	0%	0%
grade 2 events	24370	81933	221151	268737	86550	29256
	34%	28%	70%	26%	37%	36%
grade 3 events	6987	6741	7586	89076	12982	6133
	10%	2%	2%	8%	5%	7%
grade 4 events	7009	6496	7177	84519	12912	6421
	10%	2%	2%	8%	5%	8%
grade 5 events	9501	21084	11805	37902	14724	10875
	13%	7%	3%	3%	6%	13%
grade 6 events	9933	119914	33158	349854	28077	12292
	14%	42%	10%	34%	12%	15%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

## 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	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	267.534117	267.5502561674812	Subarray requested	NONE	NONE
Pointing Dec	-37.037671	-37.06166763644576	Alternating exposures requested	N	N
Pointing Roll	267.315985	267.4823285725271	Primary exposure time	0.000000	0
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-186.132523	-186.1423047203915			
SIM translation stage offset (mm)	-4	-3.990217862616333			
Observation start time	149590295.184000	149589199.38955			
Observation start date	2002-09-28T08:50:31	2002-09-28T08:33:19			
Observation end time	149631102.184000	149631416.5788			
Observation end date	2002-09-28T20:10:38	2002-09-28T20:16:56			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect





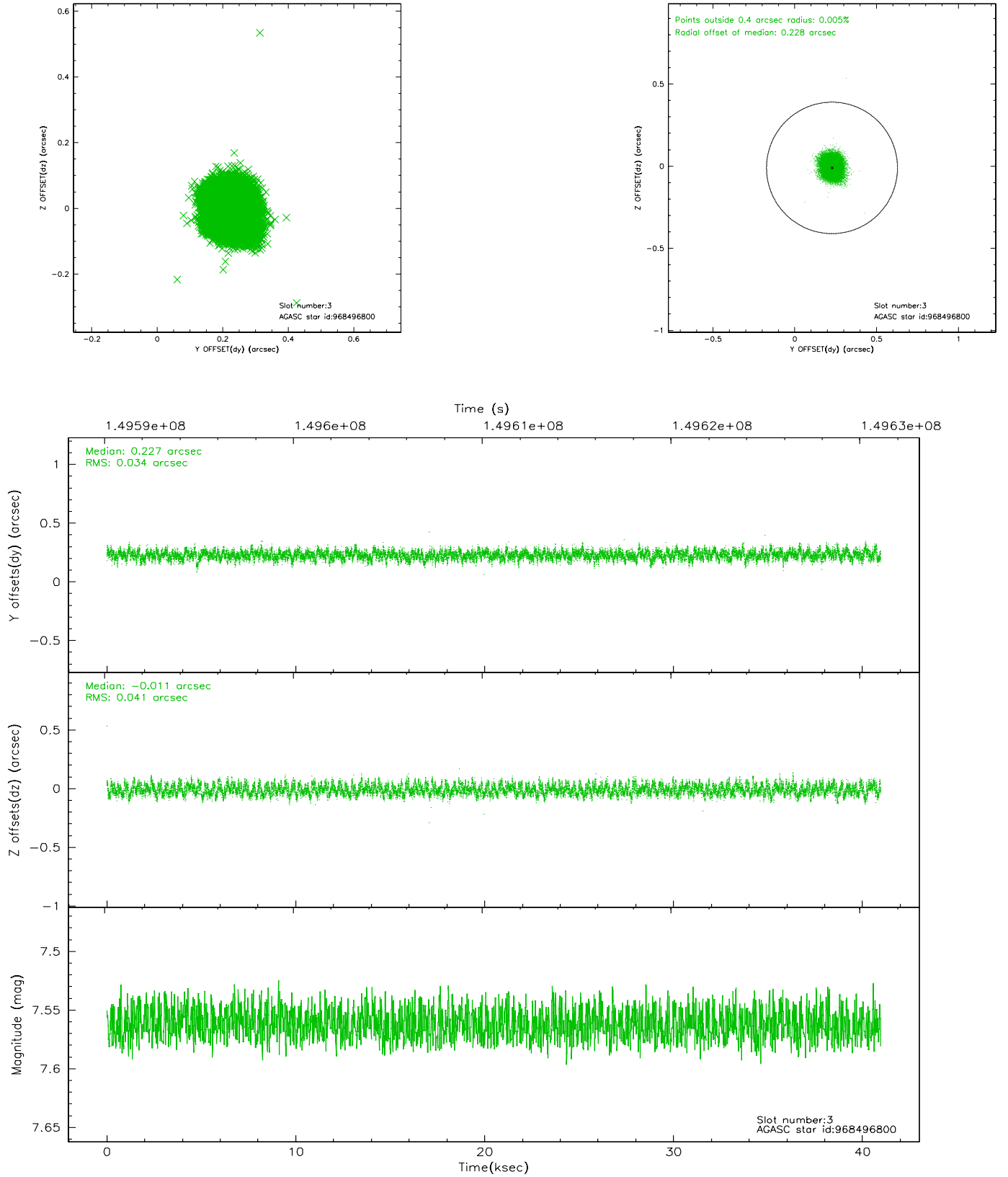
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	9993	-0.008	0.002	0.007	0.012	0.000000	0.000000	-754.89	-1811.17
1	FID	ACIS-S-4	7.19	9991	-0.005	0.003	0.009	0.015	0.000000	0.000000	2158.35	97.34
2	FID	ACIS-S-6	7.38	9991	-0.014	0.001	0.010	0.017	0.000000	0.000000	407.06	734.71
3	GUIDE	968496800	7.56	19979	0.227	-0.011	0.057	0.090	267.208106	-37.412075	1393.32	-867.25
4	GUIDE	968494256	7.72	19982	0.069	-0.101	0.047	0.079	266.804762	-36.985927	-78.02	-2103.02
5	GUIDE	968631248	7.41	19983	-0.058	0.051	0.065	0.103	268.057771	-37.130491	268.55	1517.68
6	GUIDE	968639480	8.41	19977	-0.069	0.236	0.080	0.129	268.374987	-36.508559	-2005.15	2342.36
7	GUIDE	968503504	8.60	19977	-0.165	-0.163	0.086	0.140	266.716766	-36.547676	-1639.82	-2443.23

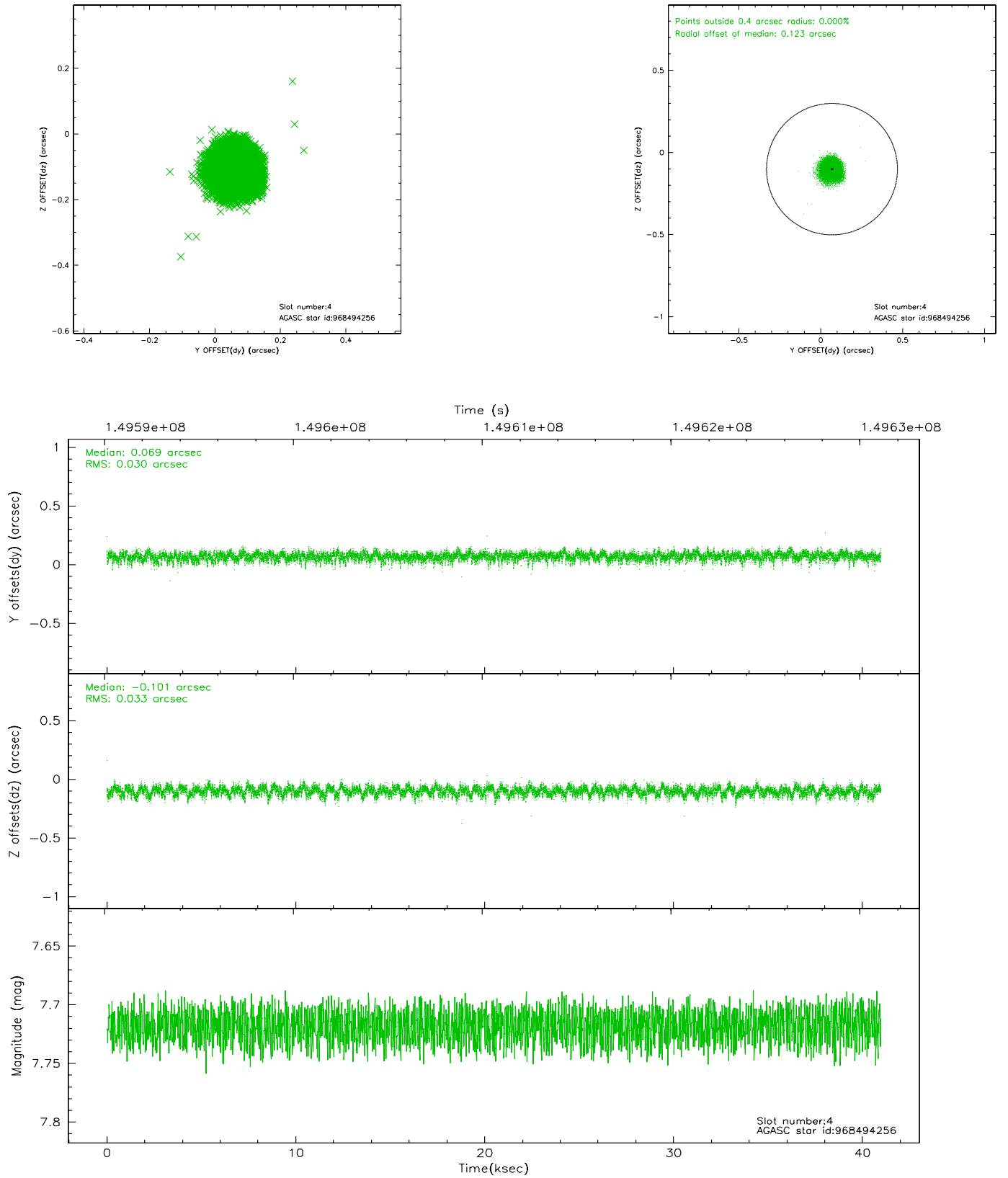


## 2.4 Star Slots

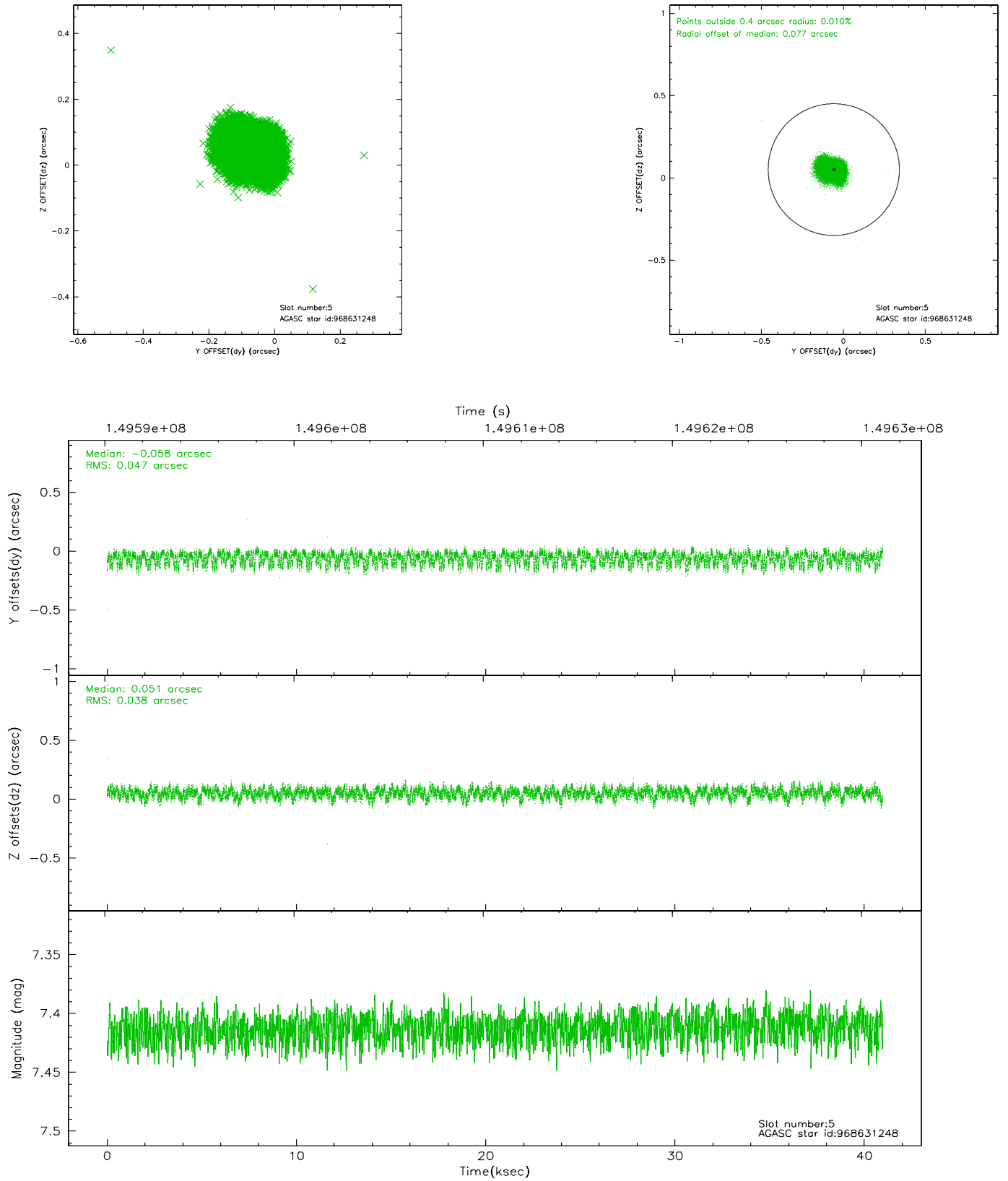
### 2.4.1 Slot 3



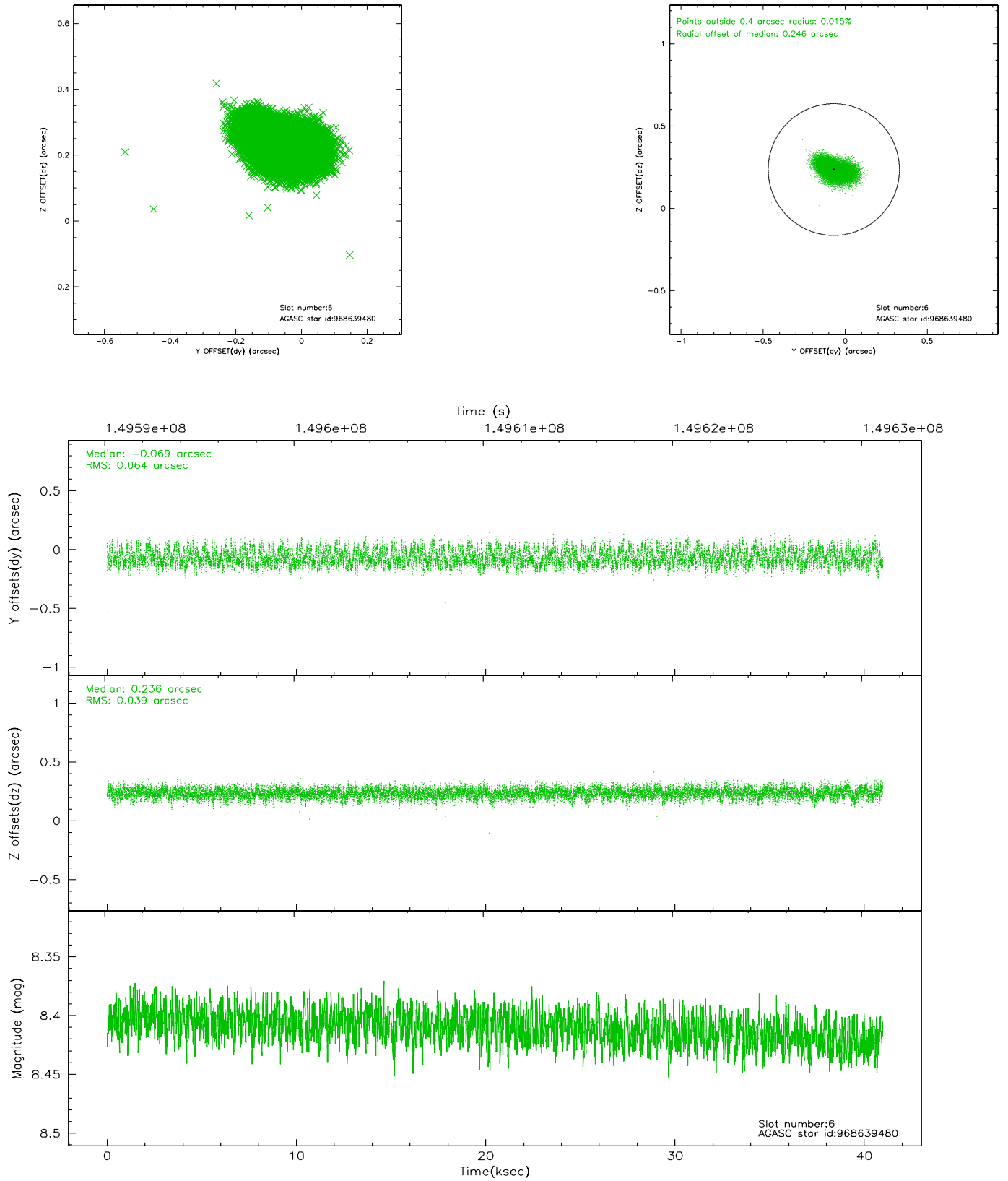
## 2.4.2 Slot 4



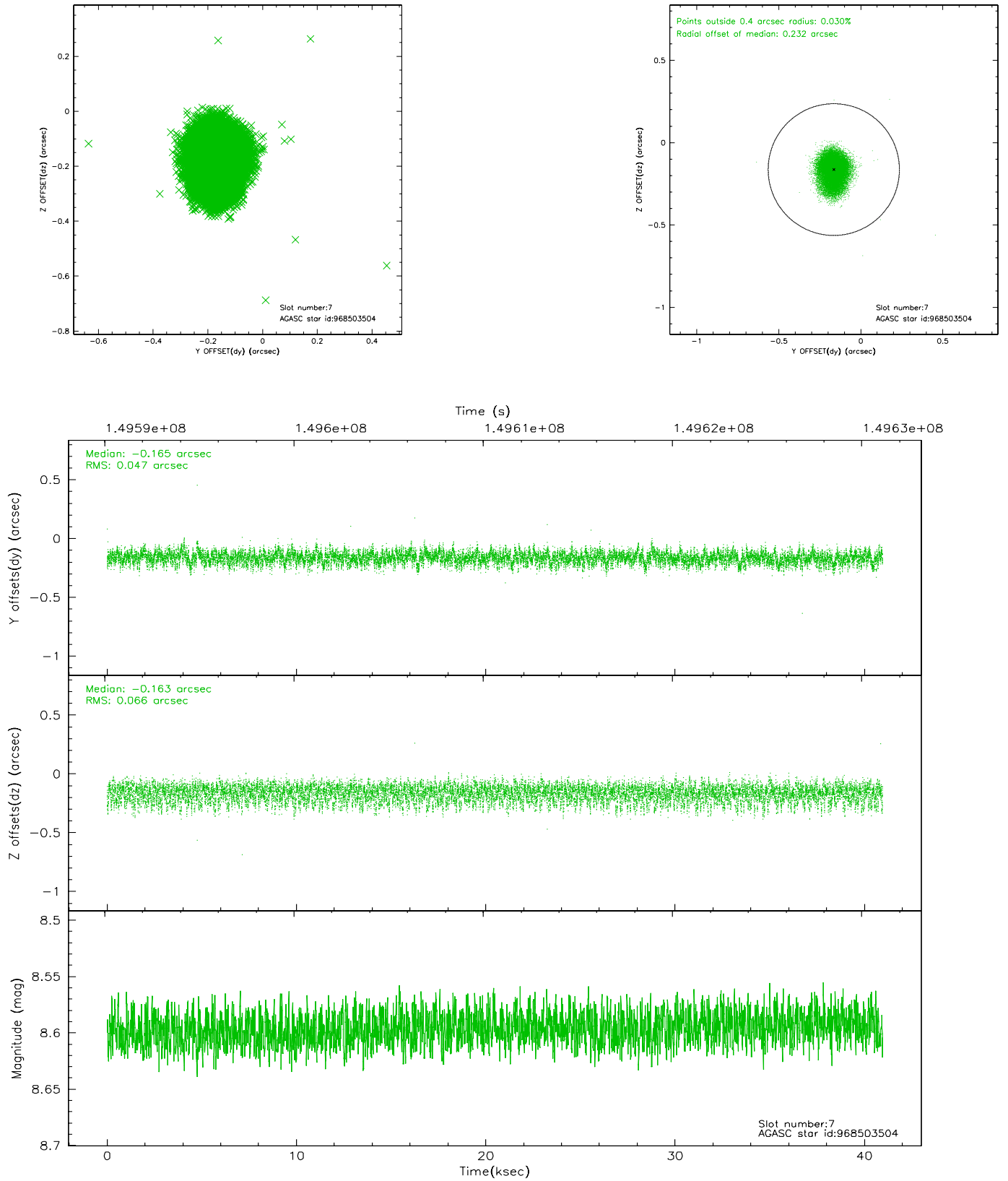
### 2.4.3 Slot 5



## 2.4.4 Slot 6

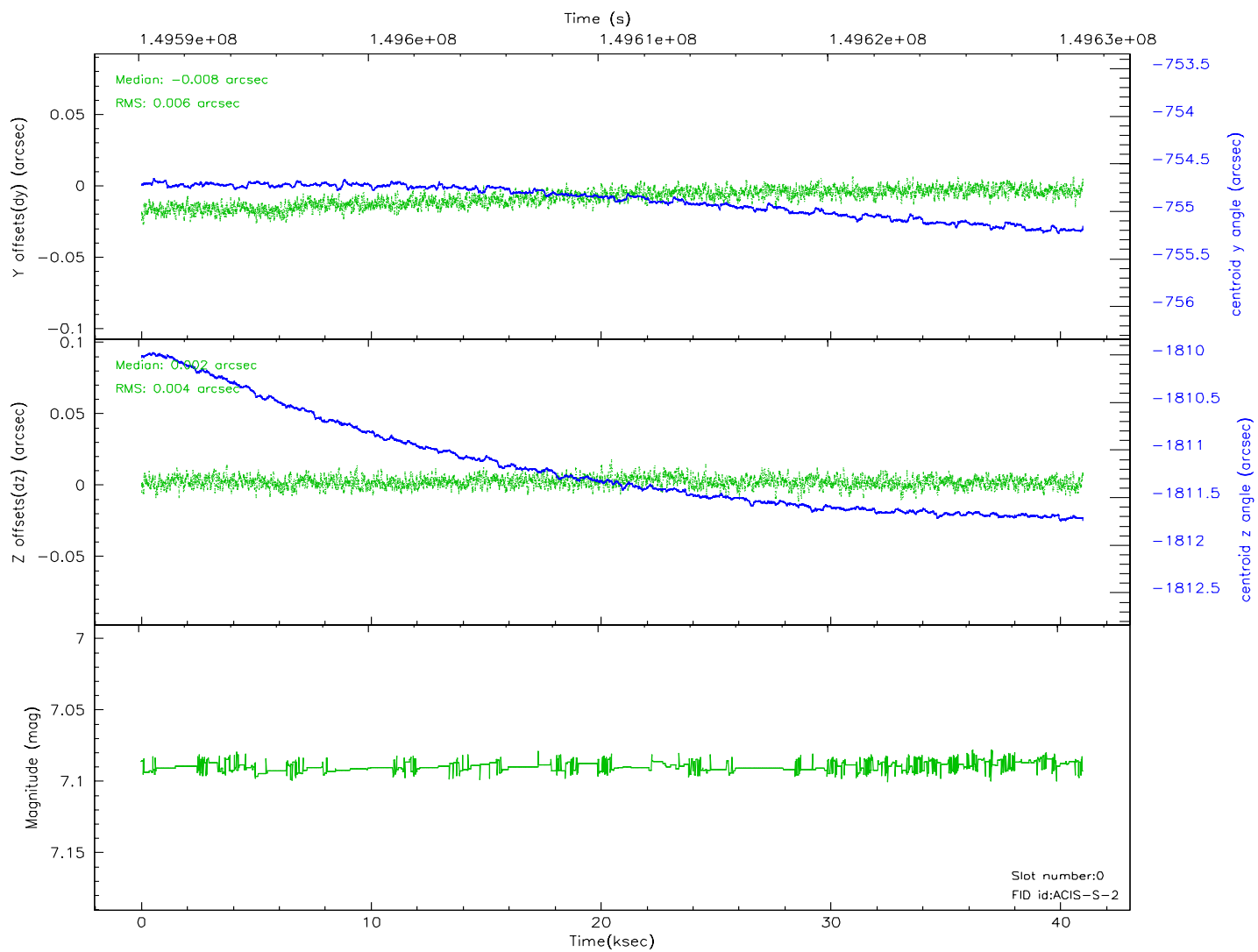
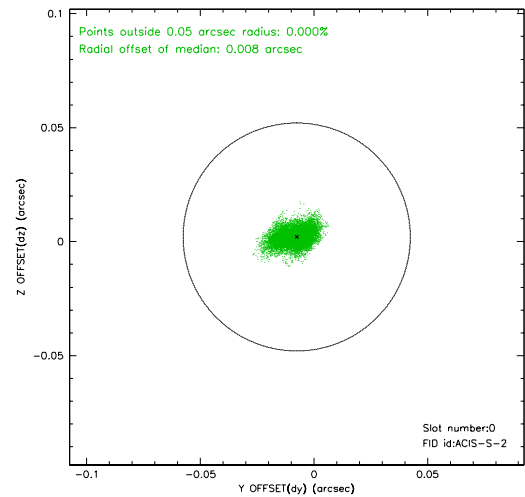
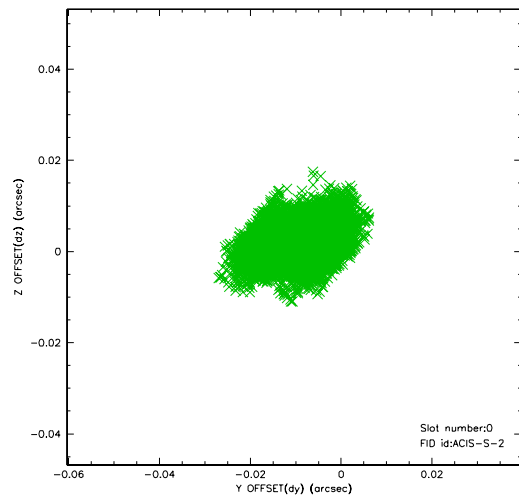


## 2.4.5 Slot 7

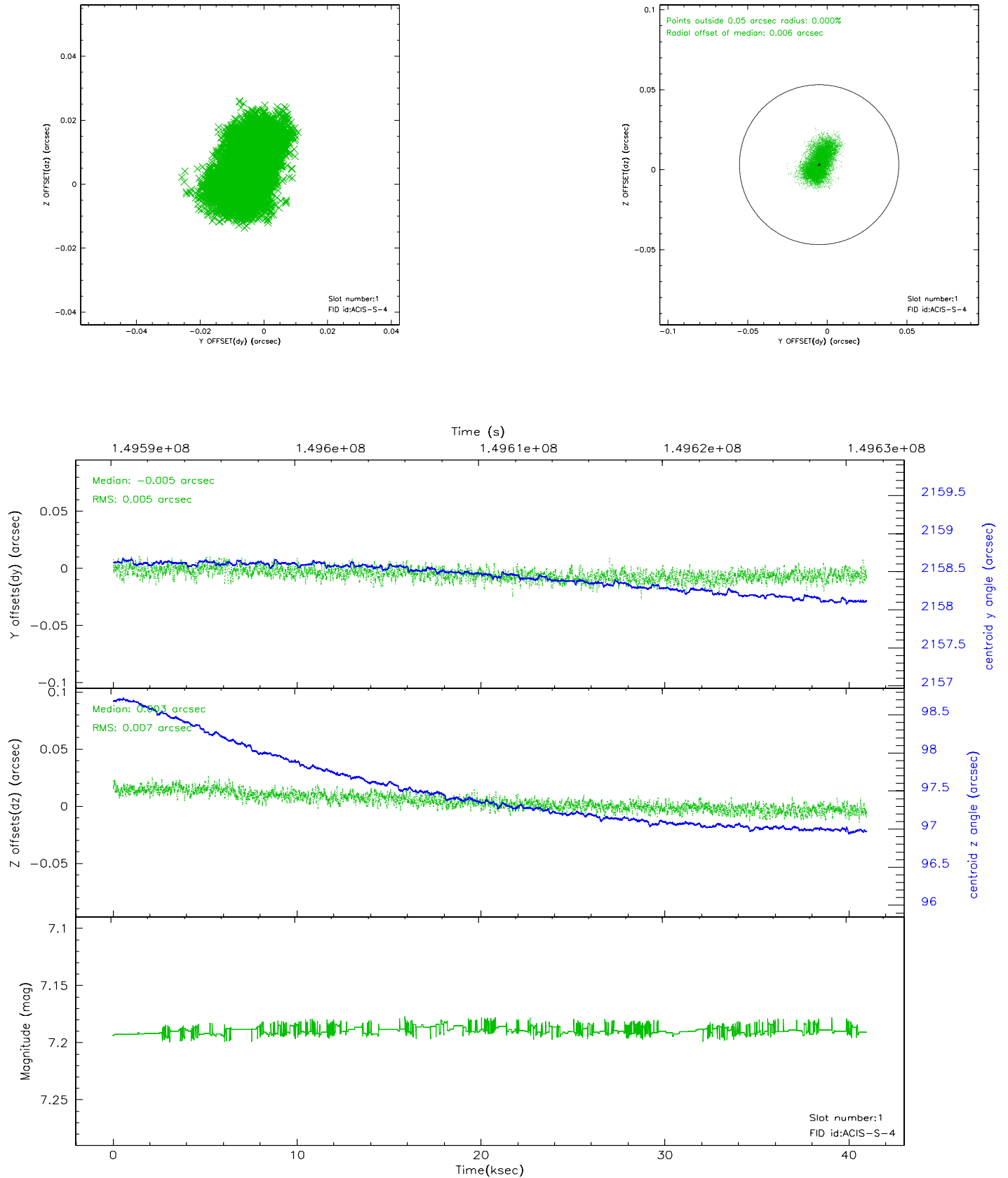


## 2.5 FID Slots

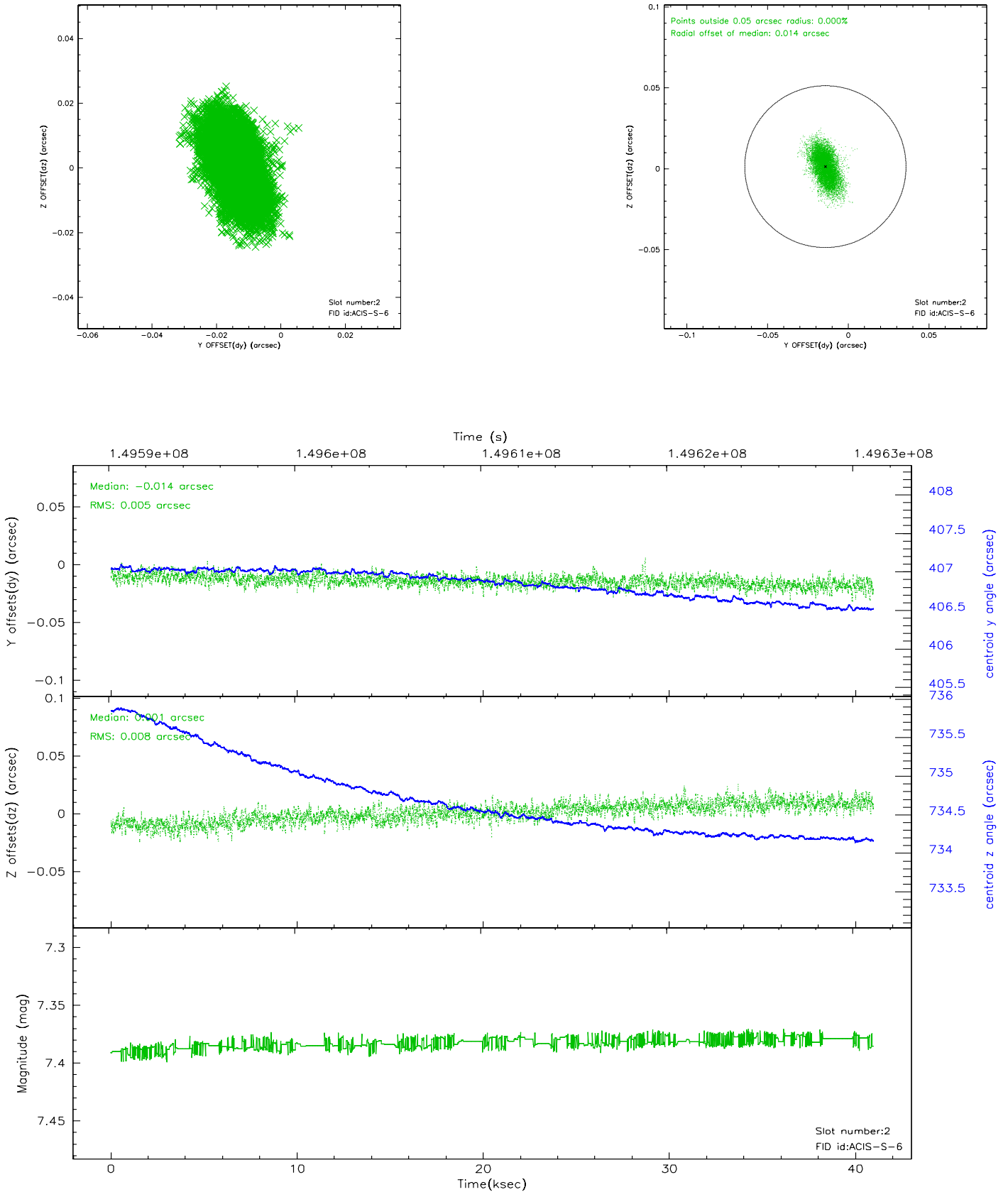
### 2.5.1 Slot 0



## 2.5.2 Slot 1



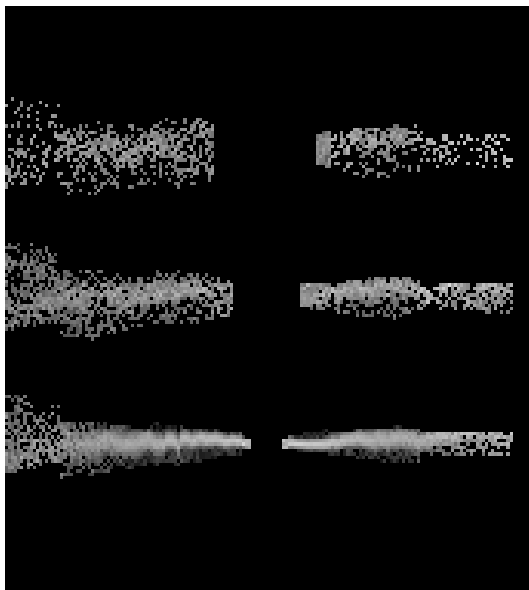
### 2.5.3 Slot 2



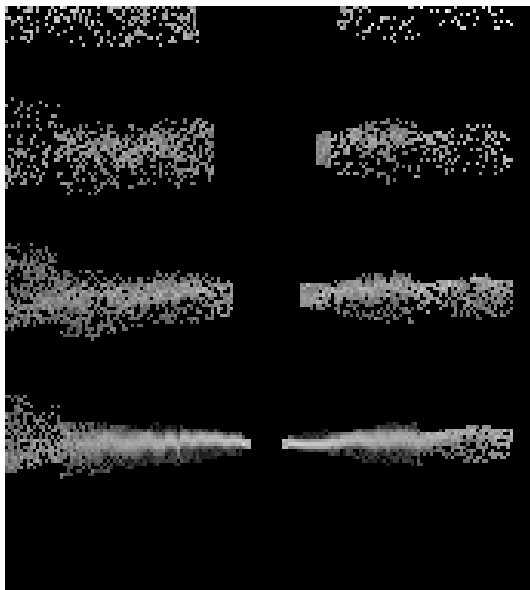


# 3 Gratings

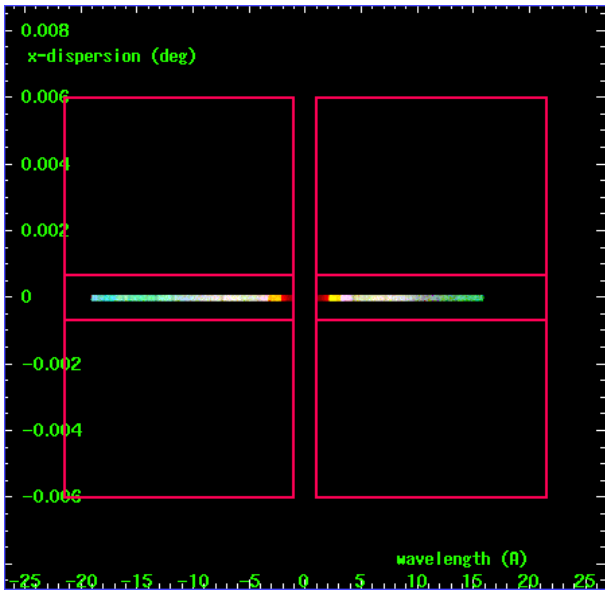
## 3.1 HEG Arm



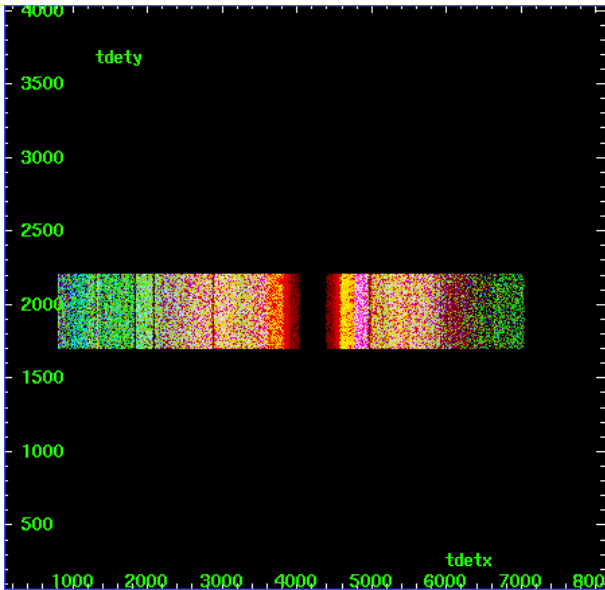
HEG Order Sort 123



HEG Order Sort ALL

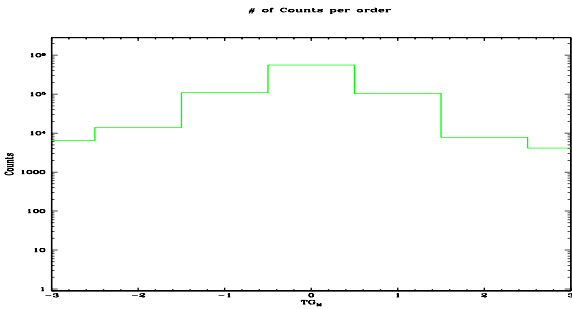


Spot Image HEG

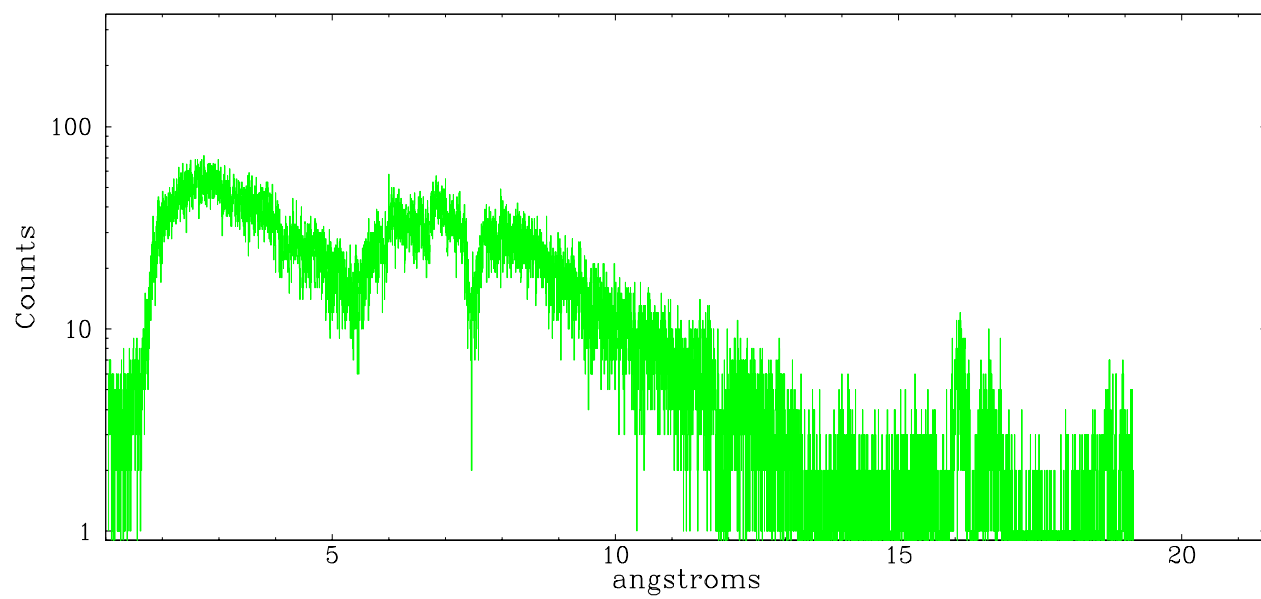


Full Detector HEG

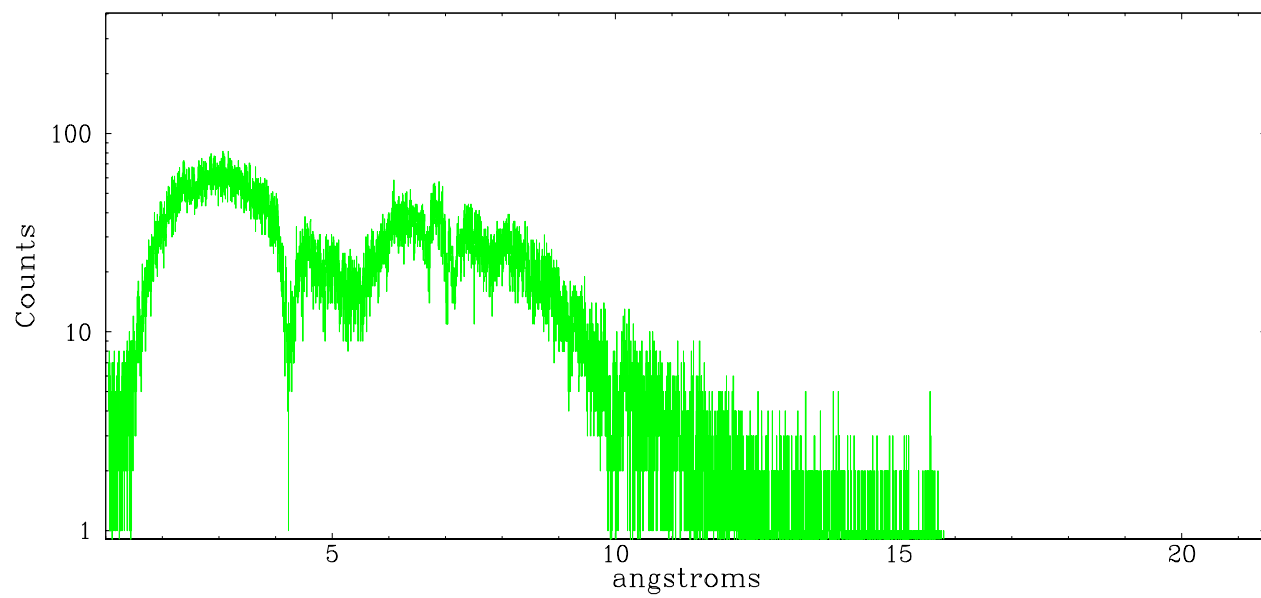
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	6458	13940	109315	555465	103359	7754	4122



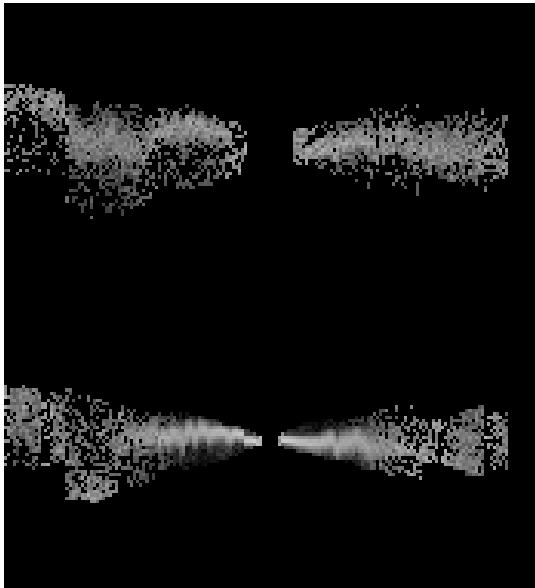
heg order -1



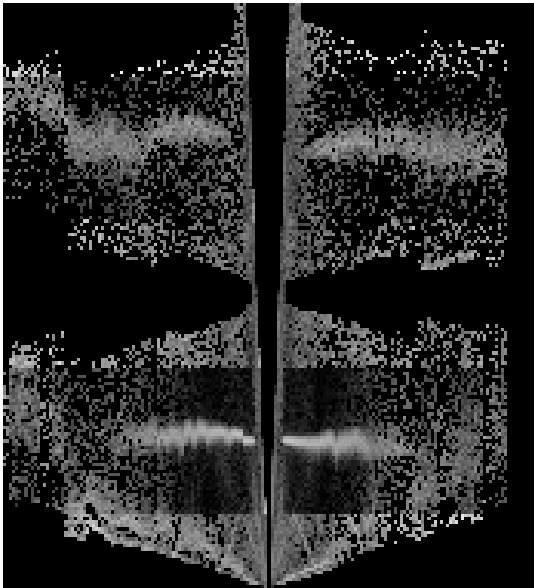
heg order +1



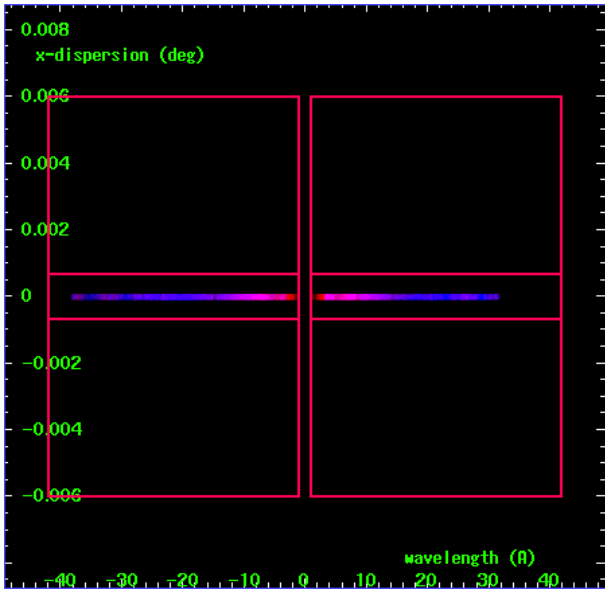
3.2 MEG Arm



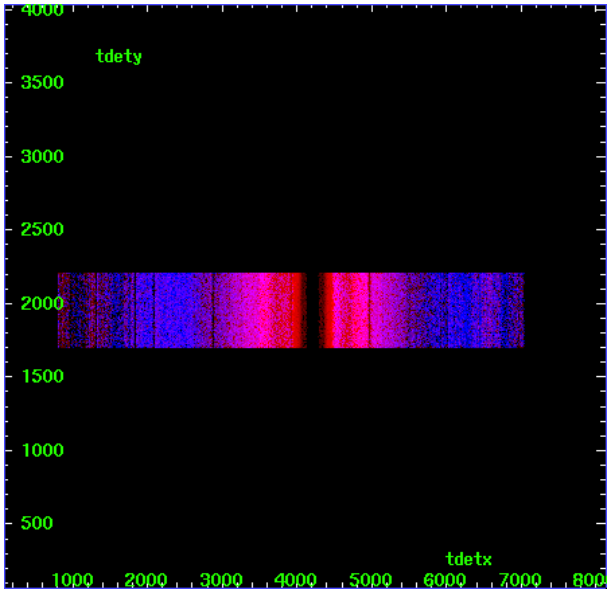
MEG Order Sort 123



MEG Order Sort ALL

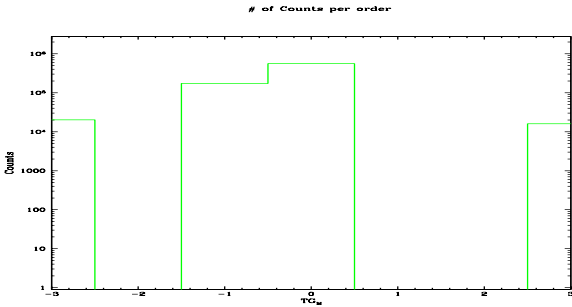


Spot Image MEG

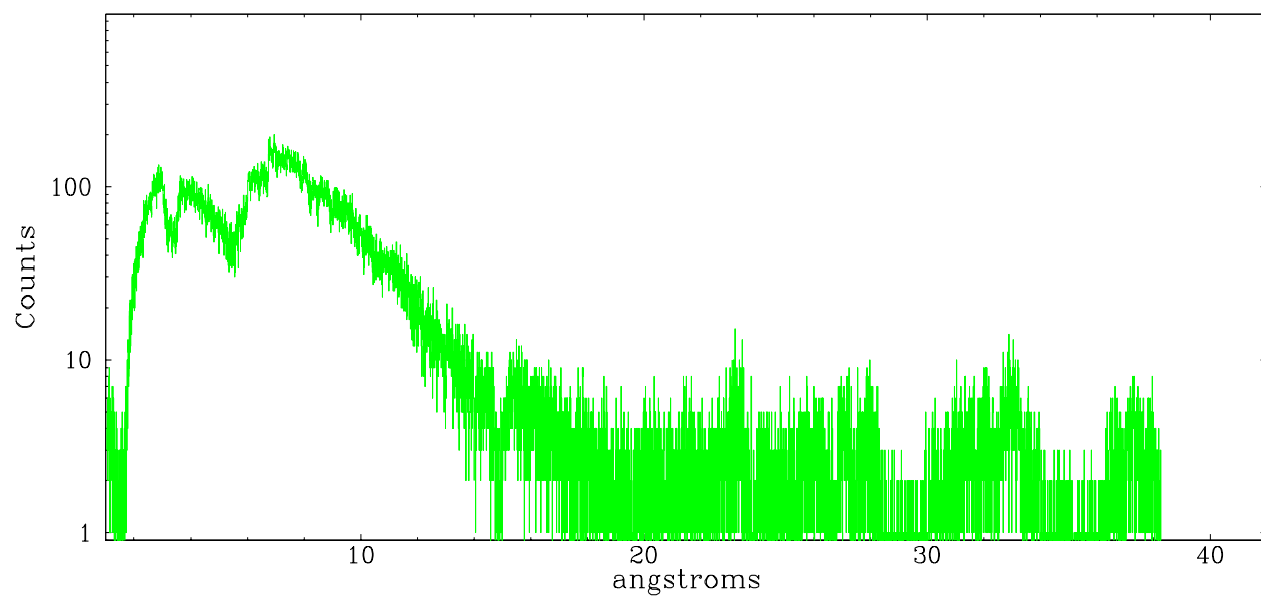


Full Detector MEG

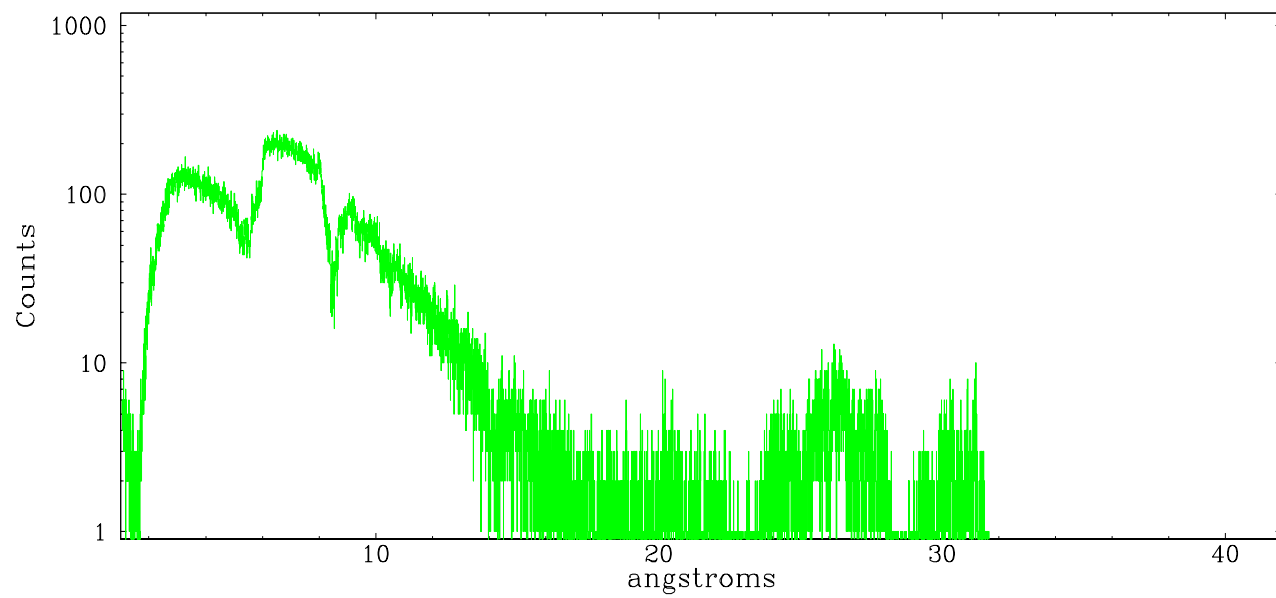
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	20152	0	173221	555465	197631	0	15965



meg order -1



meg order +1



## A Summary

### A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2006.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.965

### A.2 Comments