

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 6297 - L2 Version 003  
Chandra X-Ray Center

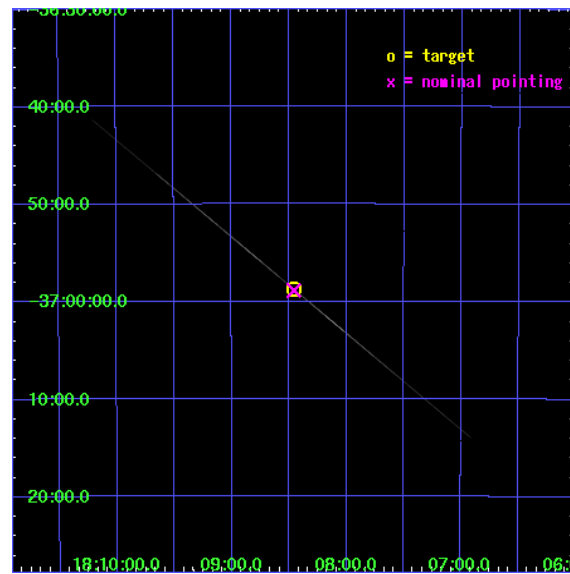
L2 Processing Date : Sep 25 2006

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# 1 Front

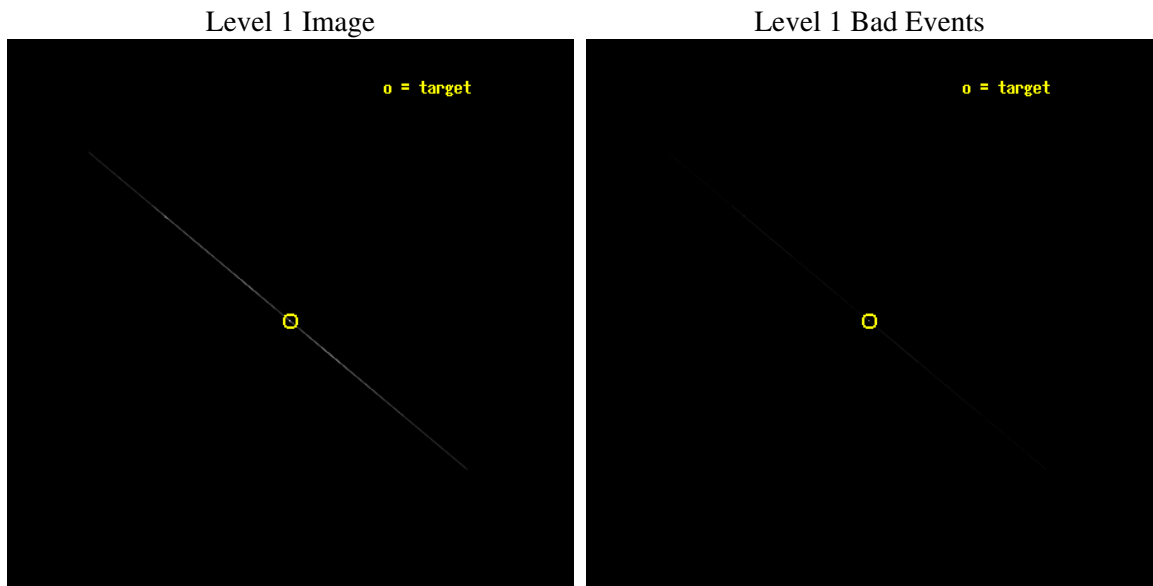
seq_num	400469
obs_id	6297
title	Outburst spectroscopy of the closest accretion-powered millisecond pulsar
observer	Dr. Duncan Galloway
object	SAX J1808.4-3658
ra_targ	272.114583
dec_targ	-36.978972
ra_nom	272.11440687622
dec_nom	-36.981213323271
roll_nom	39.548248549007
revision	3
ontime	14344.25
livetime	14288.217773438
ontime4	14344.25
ontime5	14344.25
ontime6	14344.25
ontime7	14344.25
ontime8	14344.25
ontime9	14344.25
l2events	1007371



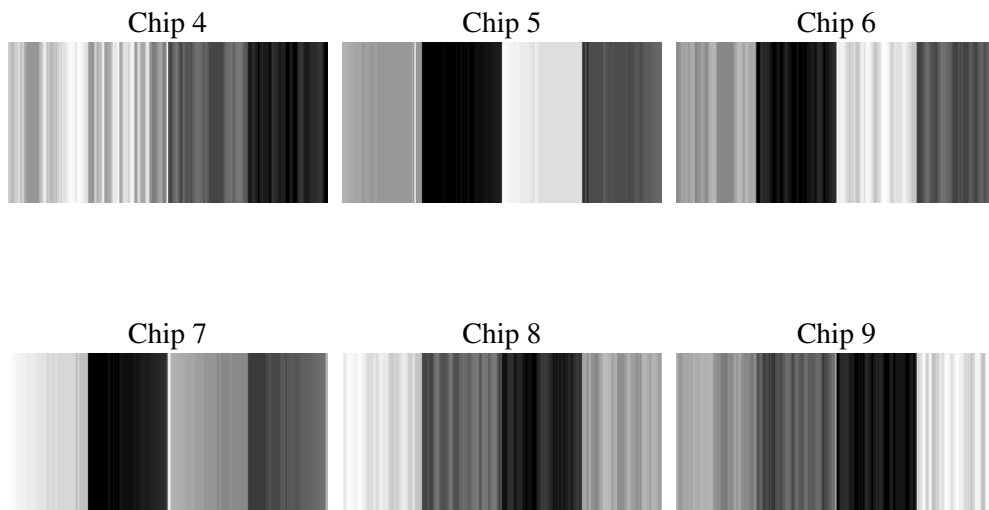
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldbver	3.2.3
date	2006-09-25T14:30:06
revision	3

sched_exp_time	14220.000000
ontime	14494.100464821
ontime4	14494.102178812
ontime5	14494.101609945
ontime6	14494.101038903
ontime7	14494.100464821
ontime8	14494.0998936
ontime9	14494.099321753
l1events	1176189

### 2.1.4 Events

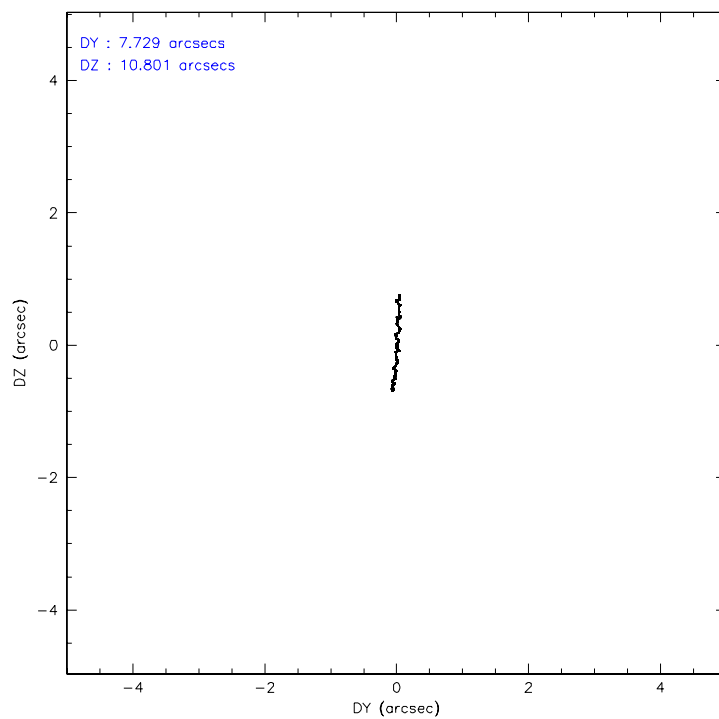
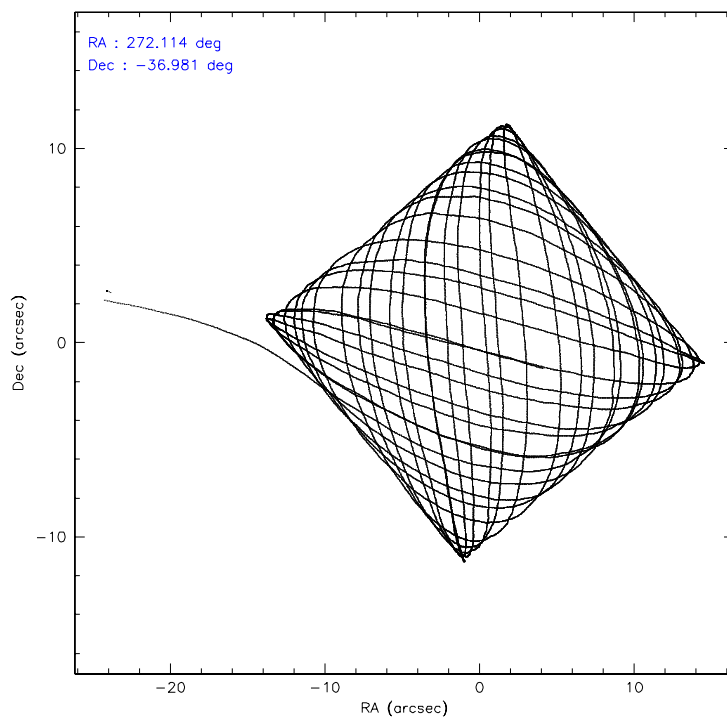
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	38450	190336	203726	554105	143450	46122
rejected events	4683	11658	7966	28795	8367	5607
rejected %	12%	6%	3%	5%	5%	12%

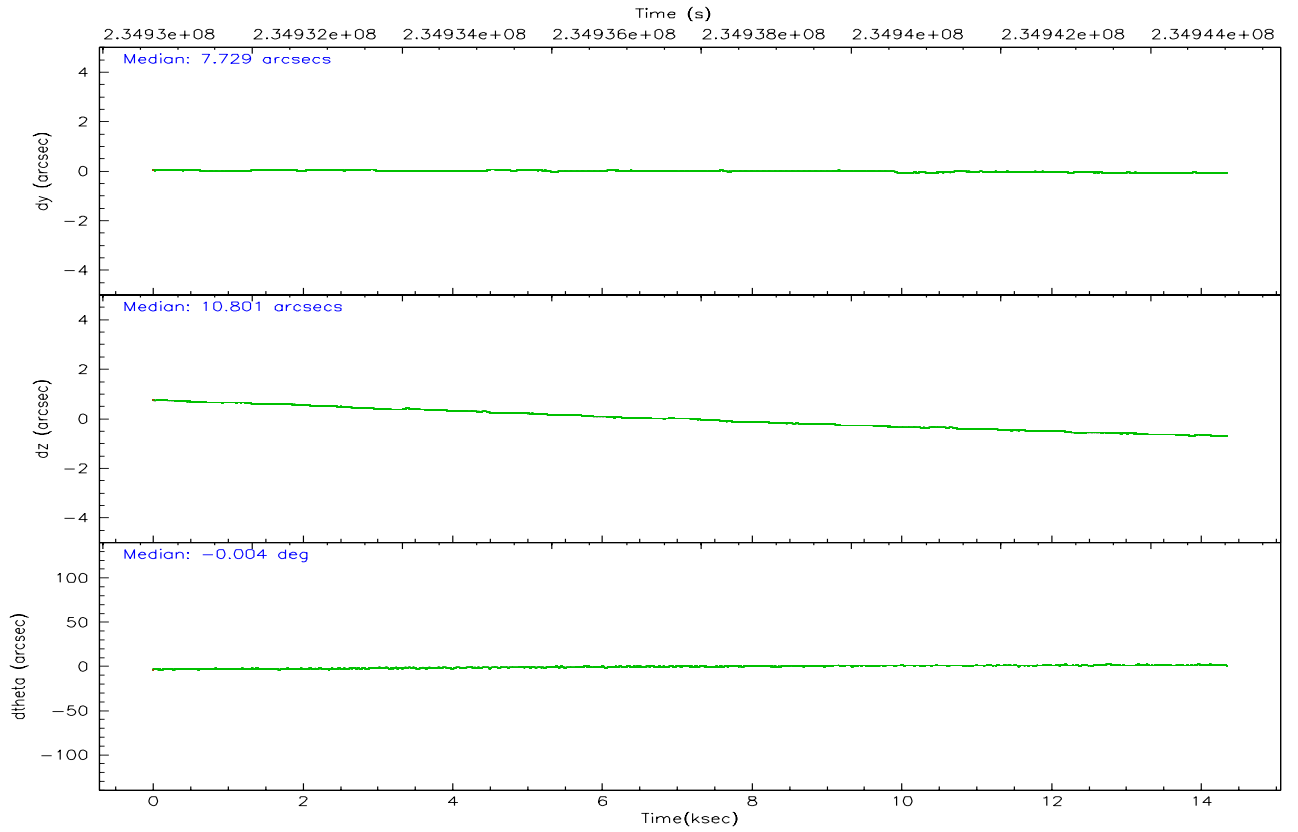
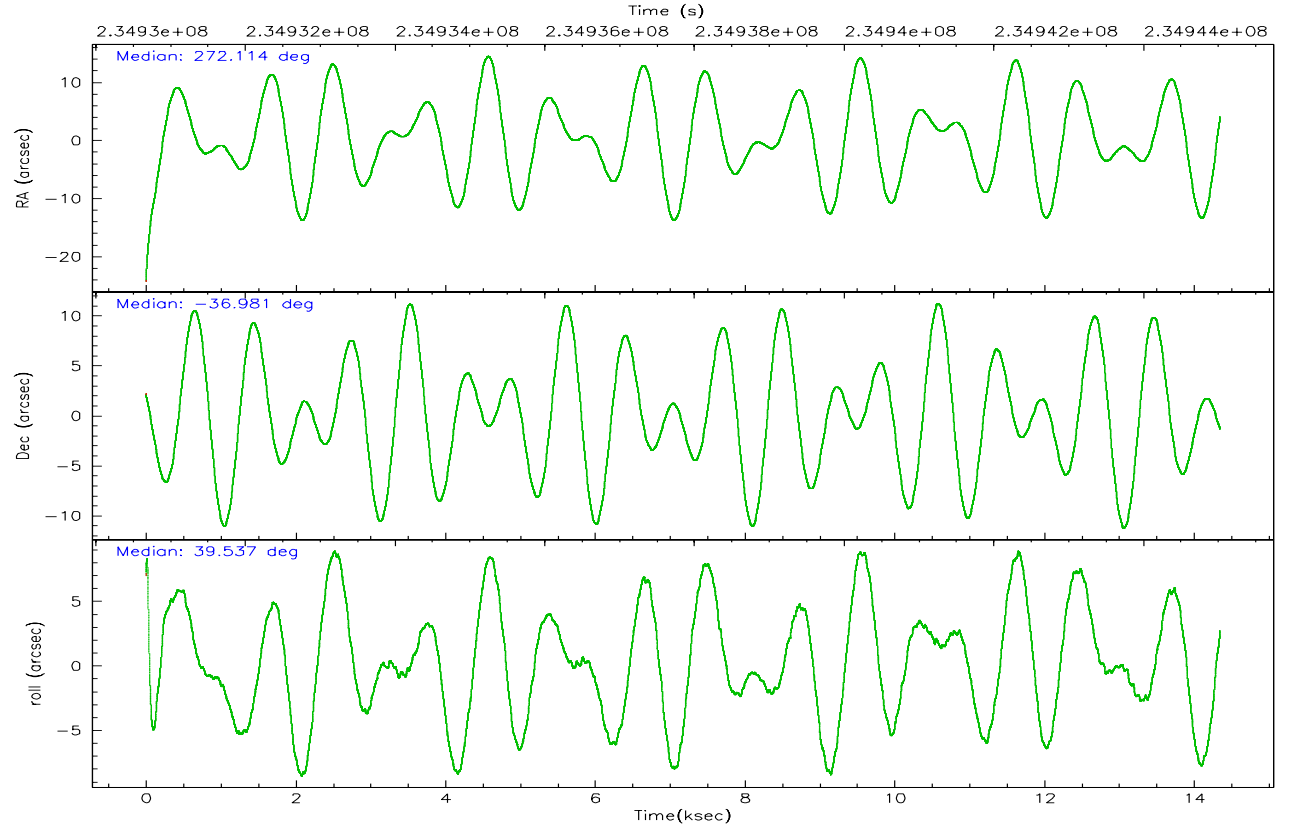
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	8362	47155	35617	101039	60514	11738
	21%	24%	17%	18%	42%	25%
grade 1 events	126	171	125	2109	215	102
	0%	0%	0%	0%	0%	0%
grade 2 events	15704	60858	137660	155453	50620	18024
	40%	31%	67%	28%	35%	39%
grade 3 events	2636	5473	3722	48902	6062	2541
	6%	2%	1%	8%	4%	5%
grade 4 events	2760	5567	3678	48938	6032	2789
	7%	2%	1%	8%	4%	6%
grade 5 events	4201	9649	5742	21052	6877	5121
	10%	5%	2%	3%	4%	11%
grade 6 events	4661	61463	17182	176612	13130	5807
	12%	32%	8%	31%	9%	12%
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	272.102995	272.1144068762237	Subarray requested	NONE	NONE
Pointing Dec	-37.006834	-36.98121332327124	Alternating exposures requested	N	N
Pointing Roll	39.384734	39.54824854900715	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	-186.1397904050899			
SIM translation stage offset (mm)	-4	-3.992732177917873			
Observation start time	234930796.184000	234930523.2224			
Observation start date	2005-06-12T02:32:12	2005-06-12T02:28:43			
Observation end time	234945016.184000	234945541.01059			
Observation end date	2005-06-12T06:29:12	2005-06-12T06:39:01			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect





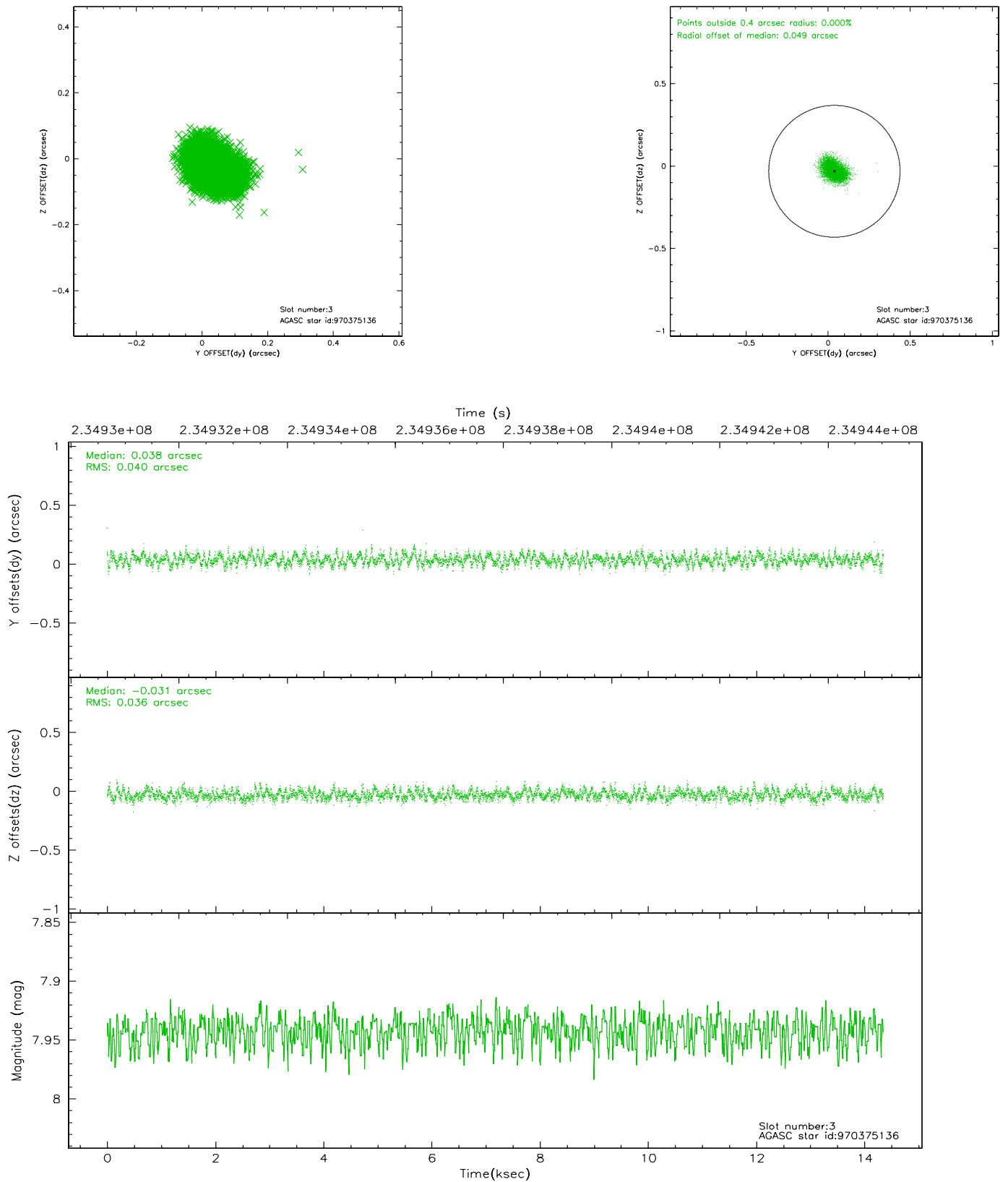
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.08	3501	-0.036	-0.091	0.010	0.023	0.000000	0.000000	-760.26	-1814.52
1	FID	ACIS-S-4	7.18	3501	0.059	0.042	0.005	0.009	0.000000	0.000000	2152.97	93.73
2	FID	ACIS-S-5	7.23	3501	-0.054	0.059	0.010	0.022	0.000000	0.000000	-1812.70	87.78
3	GUIDE	970375136	7.94	7001	0.038	-0.031	0.057	0.092	271.398909	-36.754910	-998.98	1983.37
4	GUIDE	970467856	8.12	7000	-0.015	0.088	0.057	0.092	272.620241	-37.224567	646.46	-1549.50
5	GUIDE	970481256	7.12	7001	-0.079	0.067	0.048	0.075	272.321587	-36.966000	579.34	-285.99
6	GUIDE	970485720	8.97	6999	0.075	0.043	0.091	0.152	273.024642	-37.041963	1959.53	-1787.87
7	GUIDE	970501016	7.03	6999	-0.021	-0.168	0.079	0.126	272.343750	-36.672537	1301.03	488.17

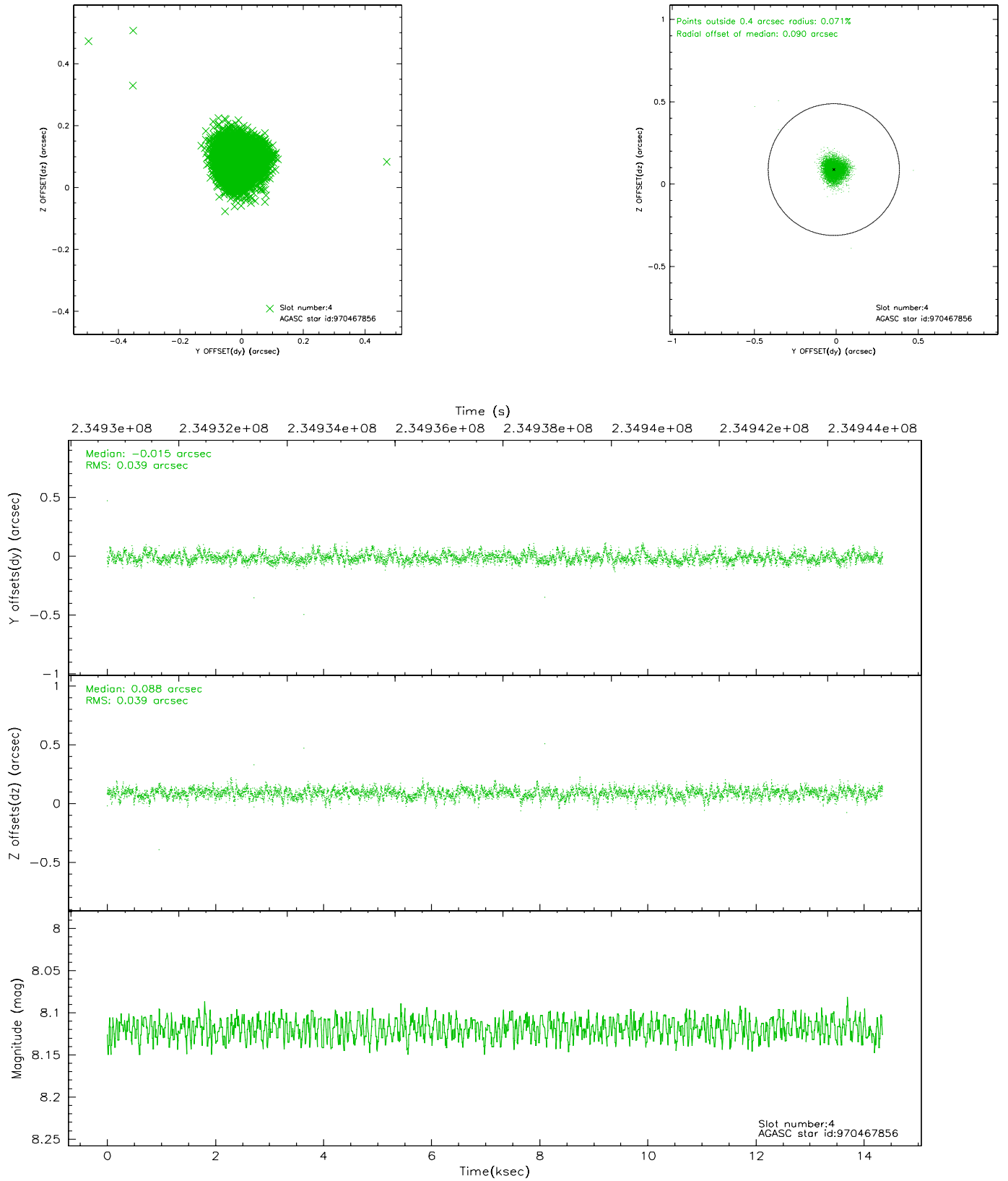


## 2.4 Star Slots

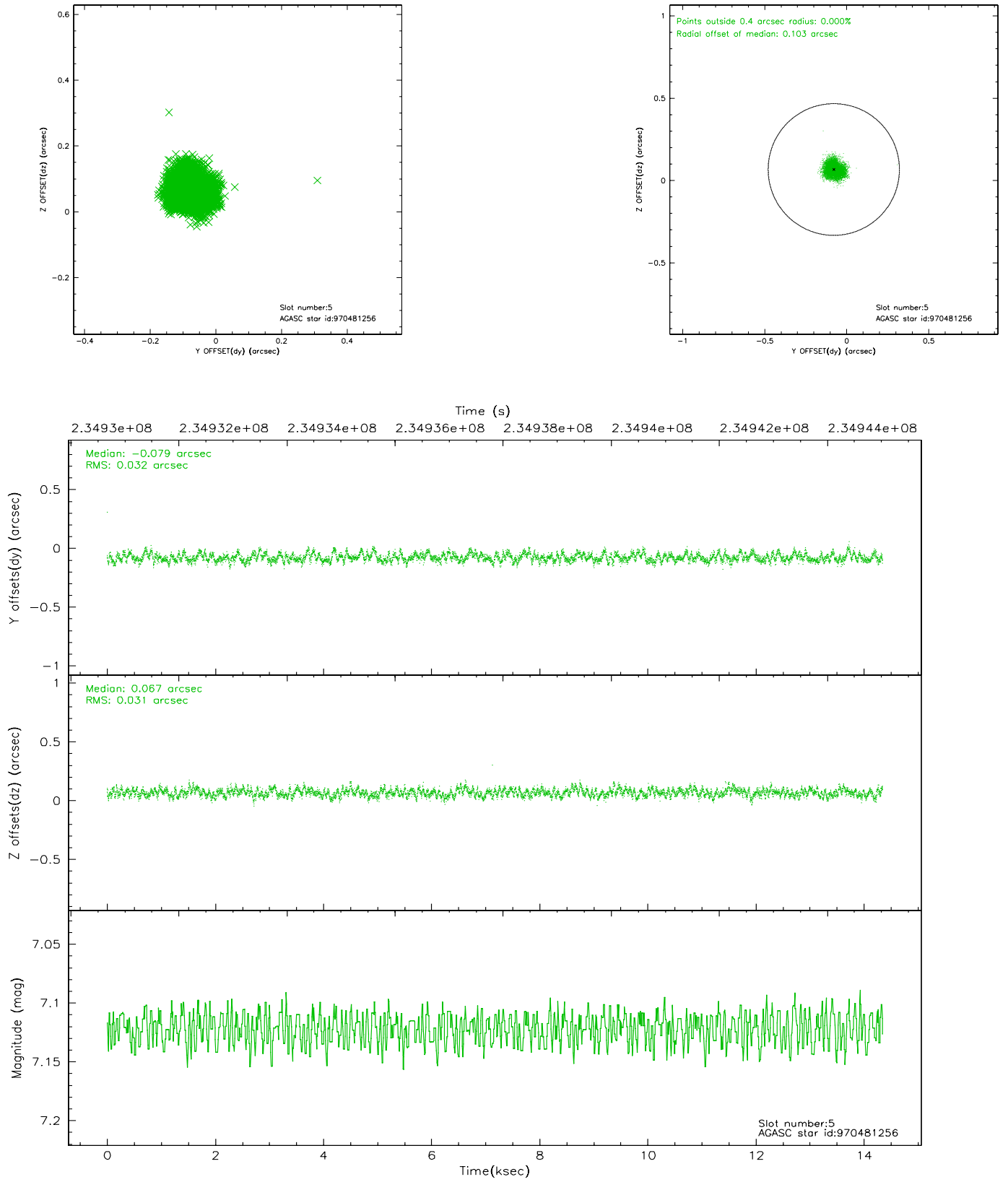
### 2.4.1 Slot 3



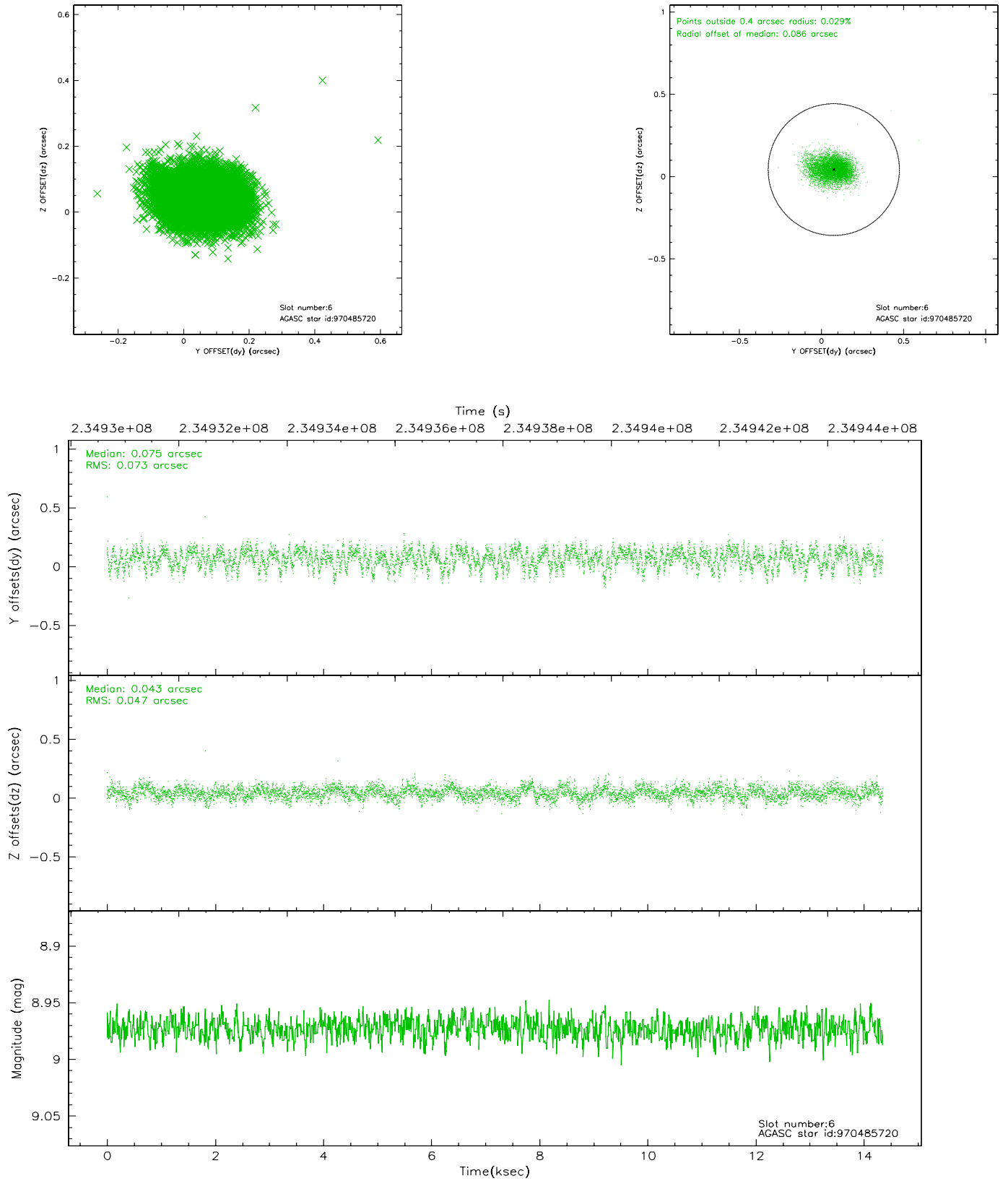
## 2.4.2 Slot 4



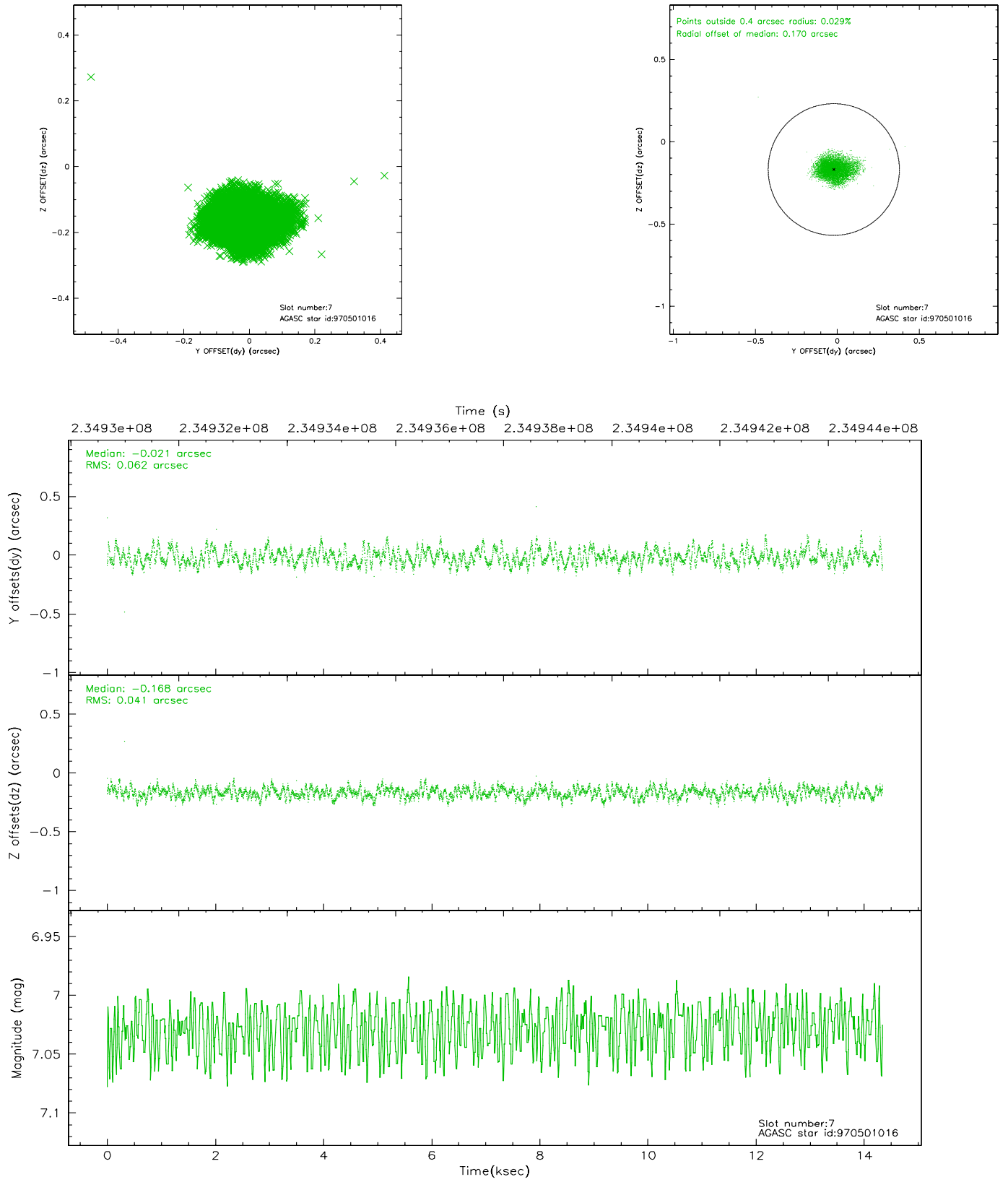
### 2.4.3 Slot 5



## 2.4.4 Slot 6

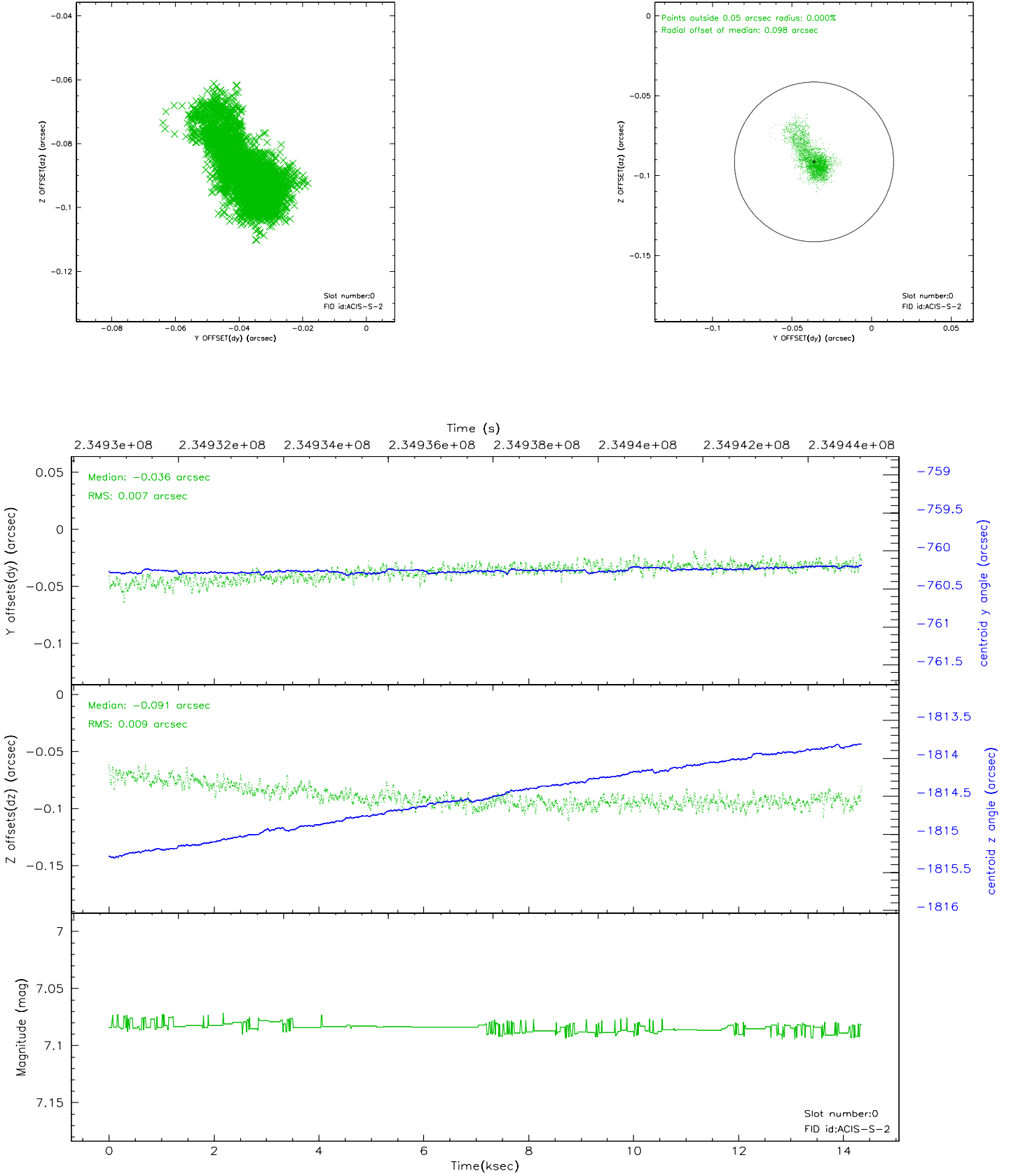


## 2.4.5 Slot 7

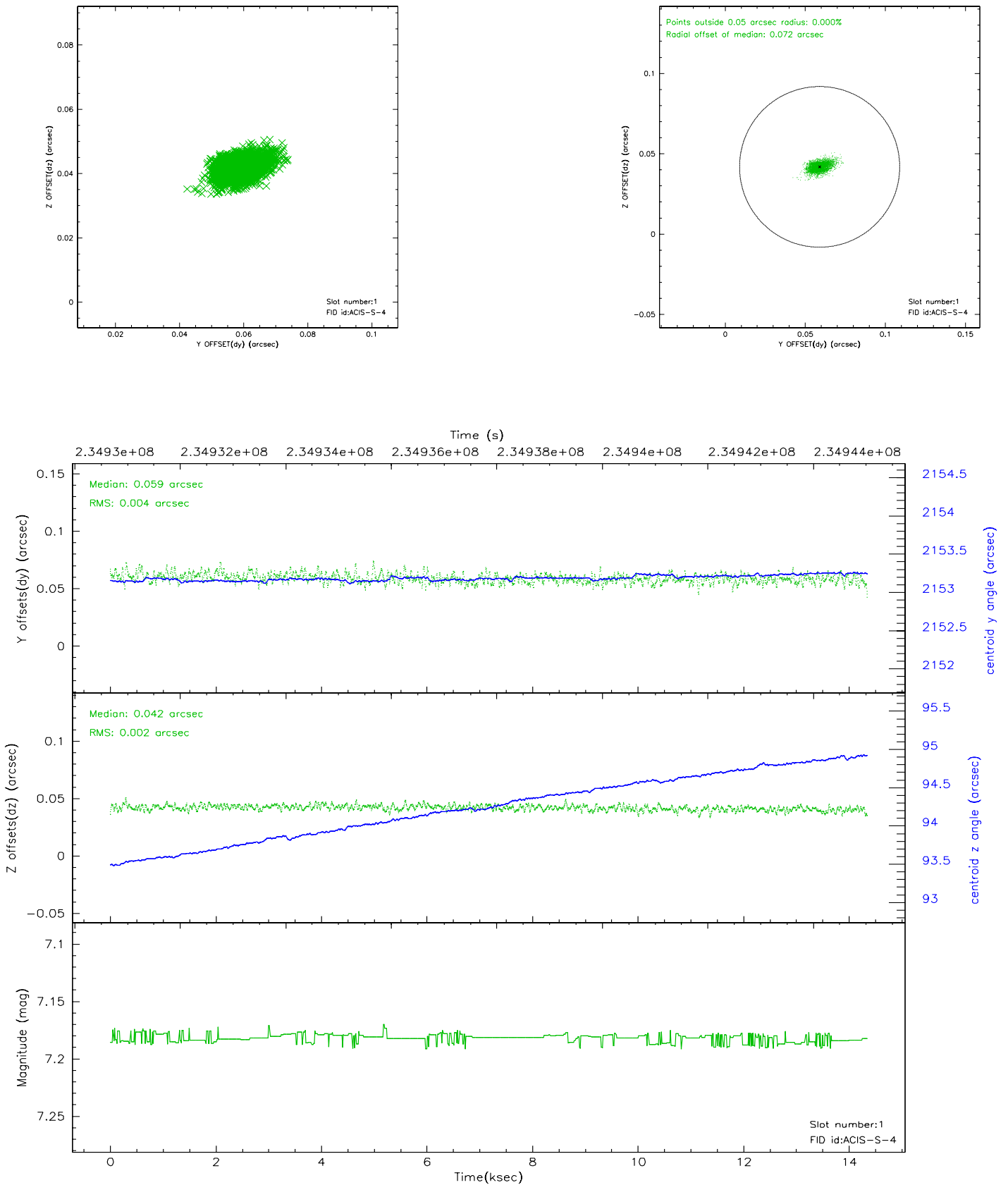


## 2.5 FID Slots

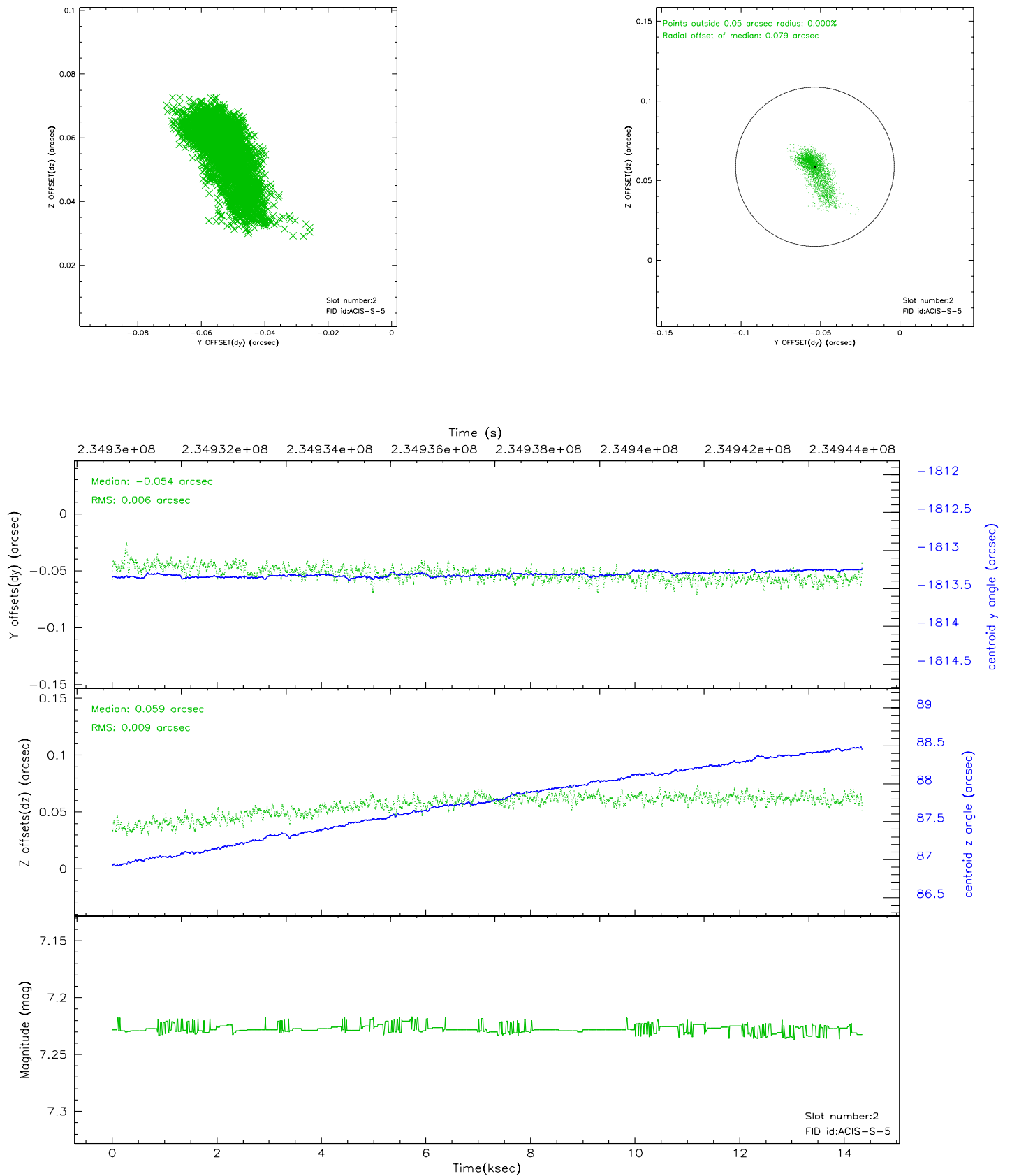
### 2.5.1 Slot 0



## 2.5.2 Slot 1



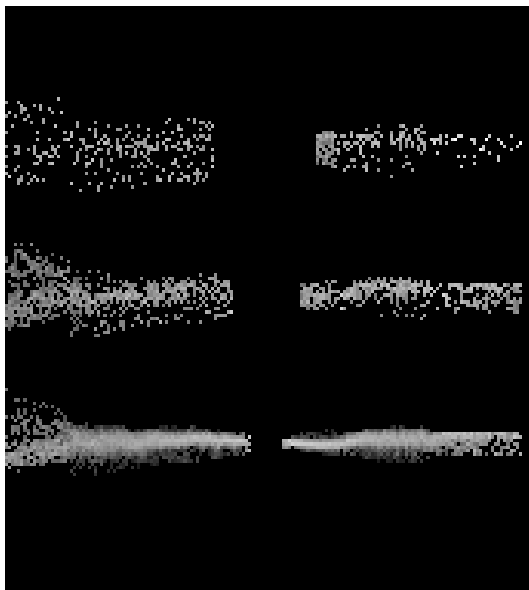
### 2.5.3 Slot 2



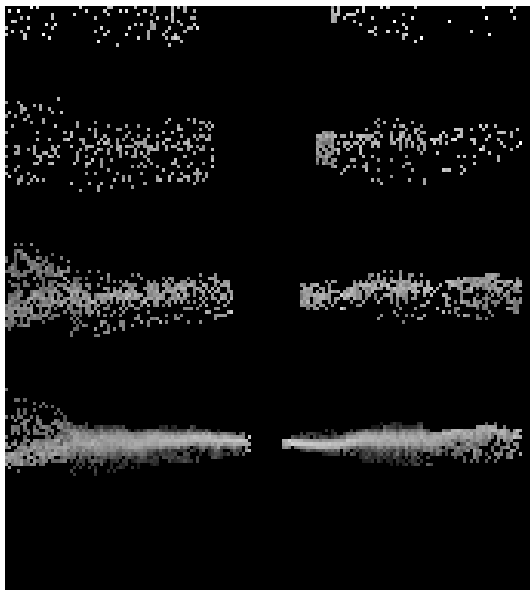


# 3 Gratings

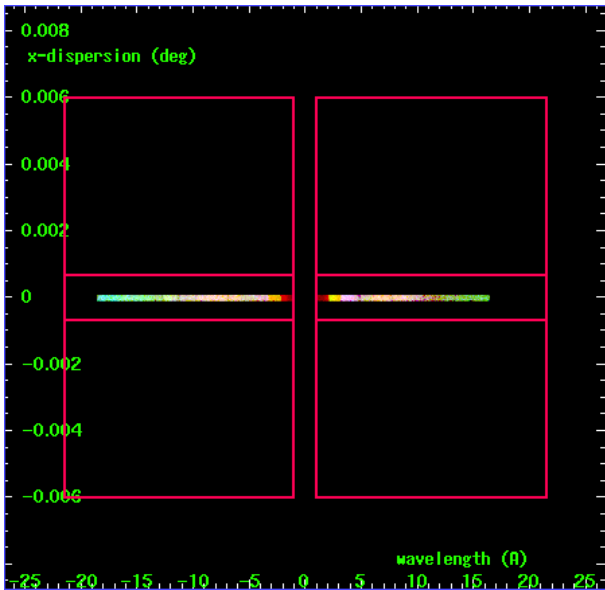
## 3.1 HEG Arm



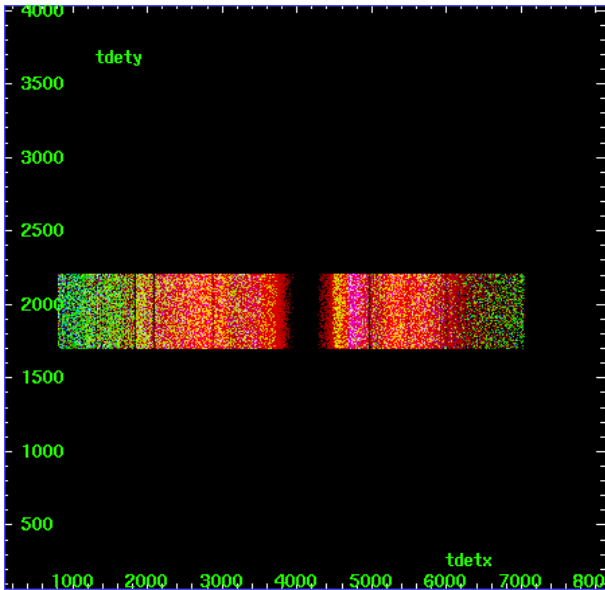
HEG Order Sort 123



HEG Order Sort ALL

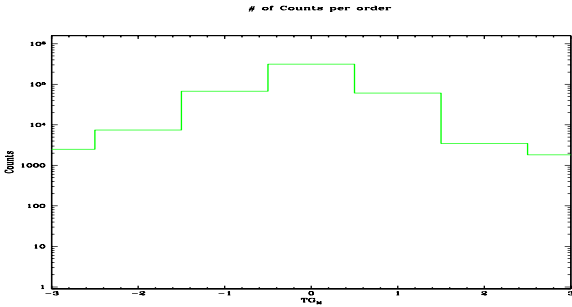


Spot Image HEG

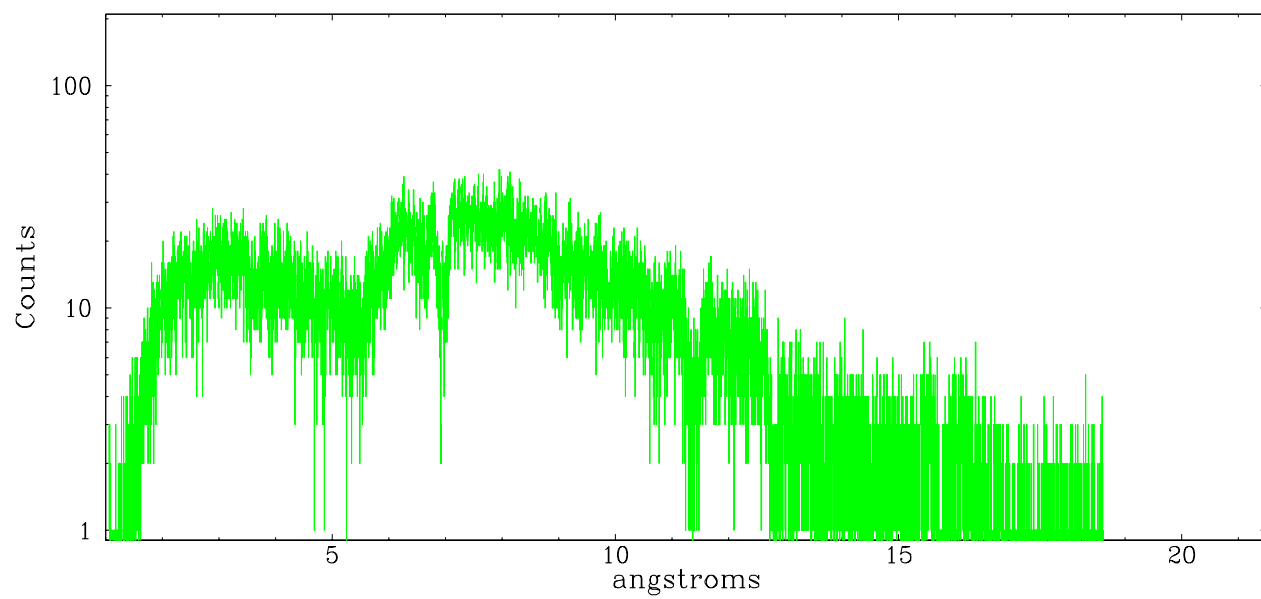


Full Detector HEG

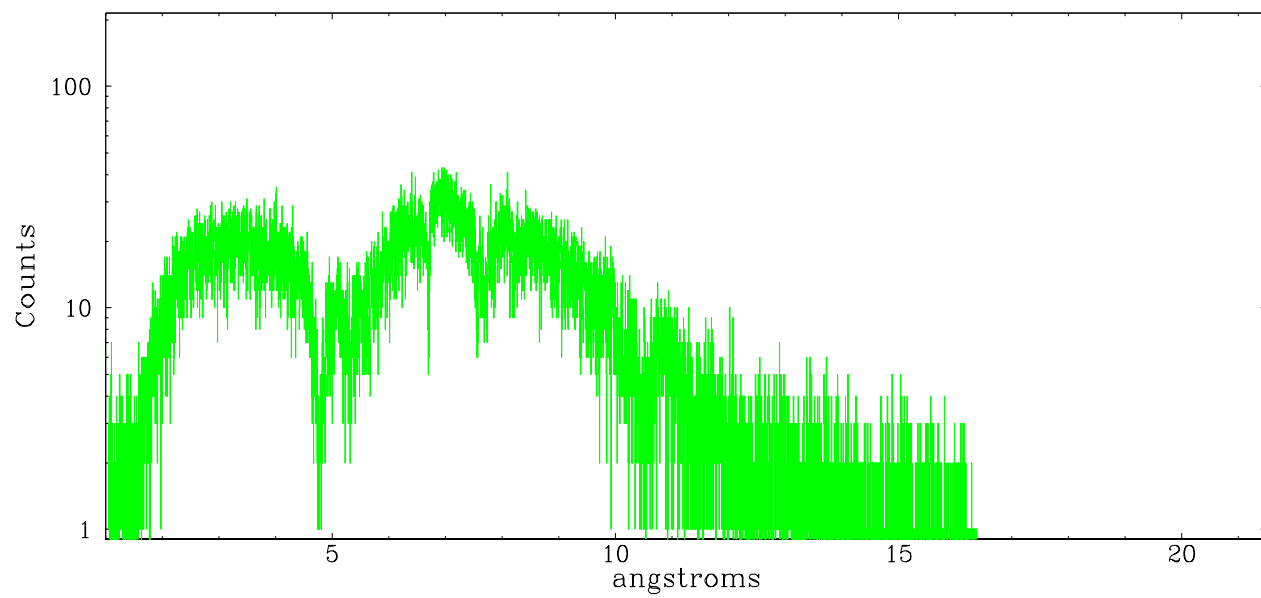
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2495	7418	67869	313406	60610	3468	1817



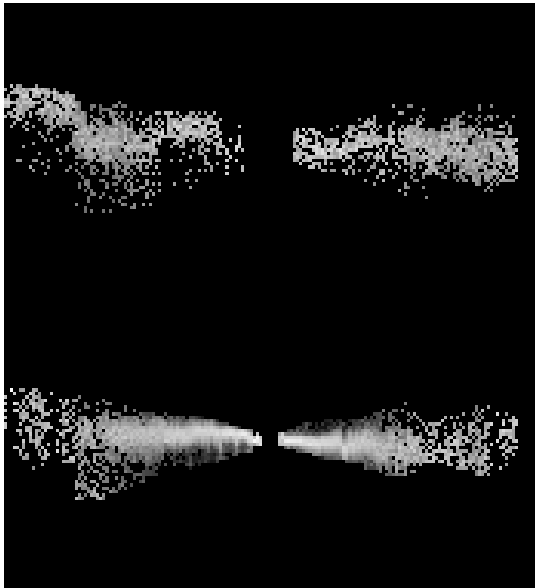
heg order -1



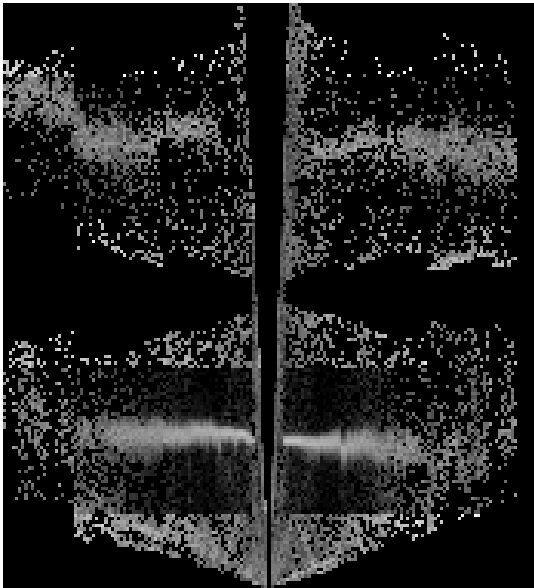
heg order +1



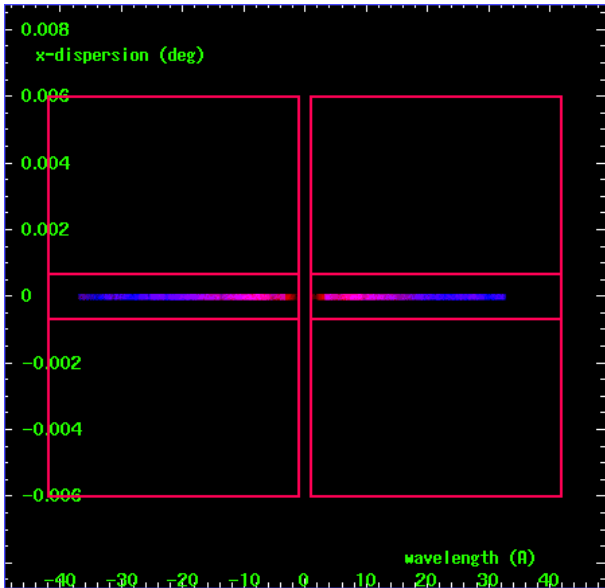
3.2 MEG Arm



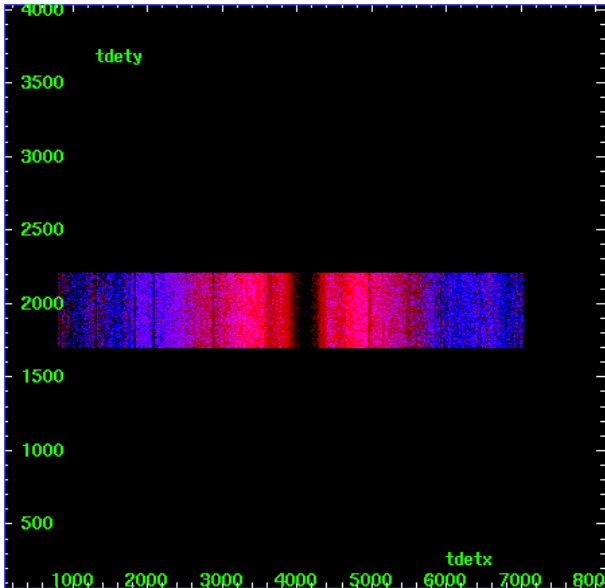
MEG Order Sort 123



MEG Order Sort ALL

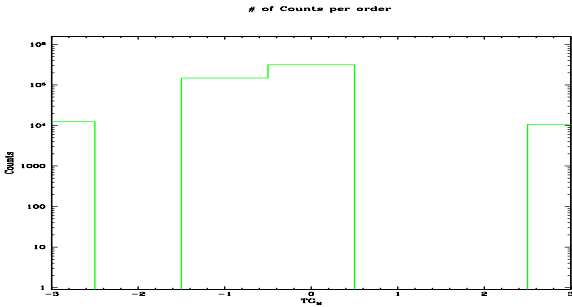


Spot Image MEG

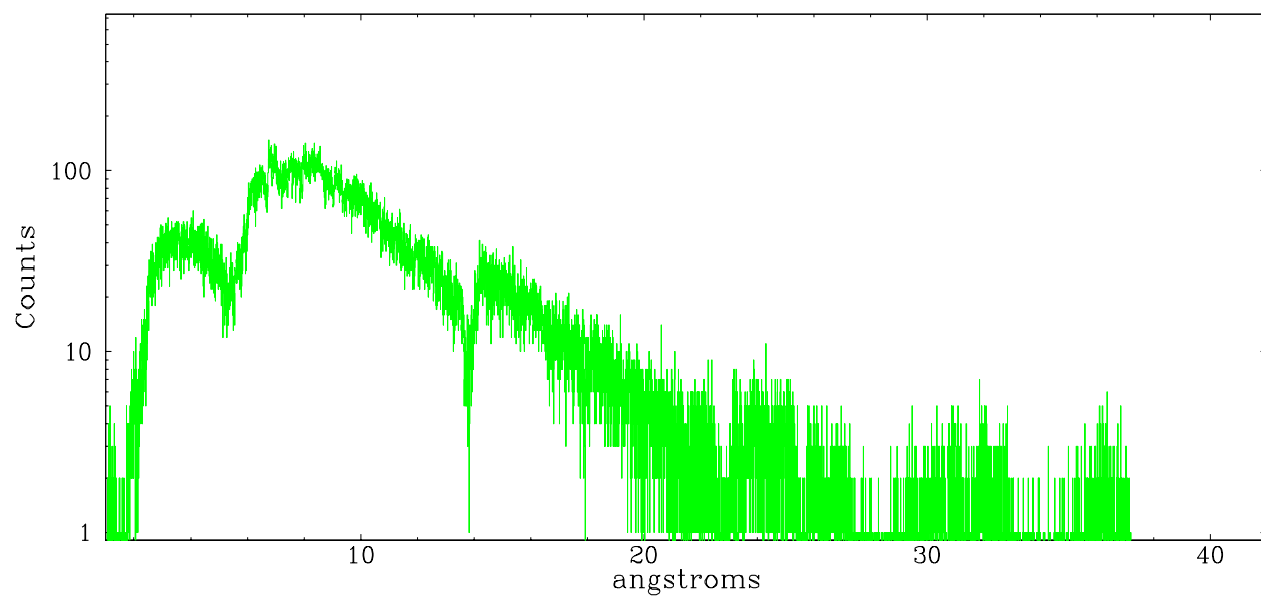


Full Detector MEG

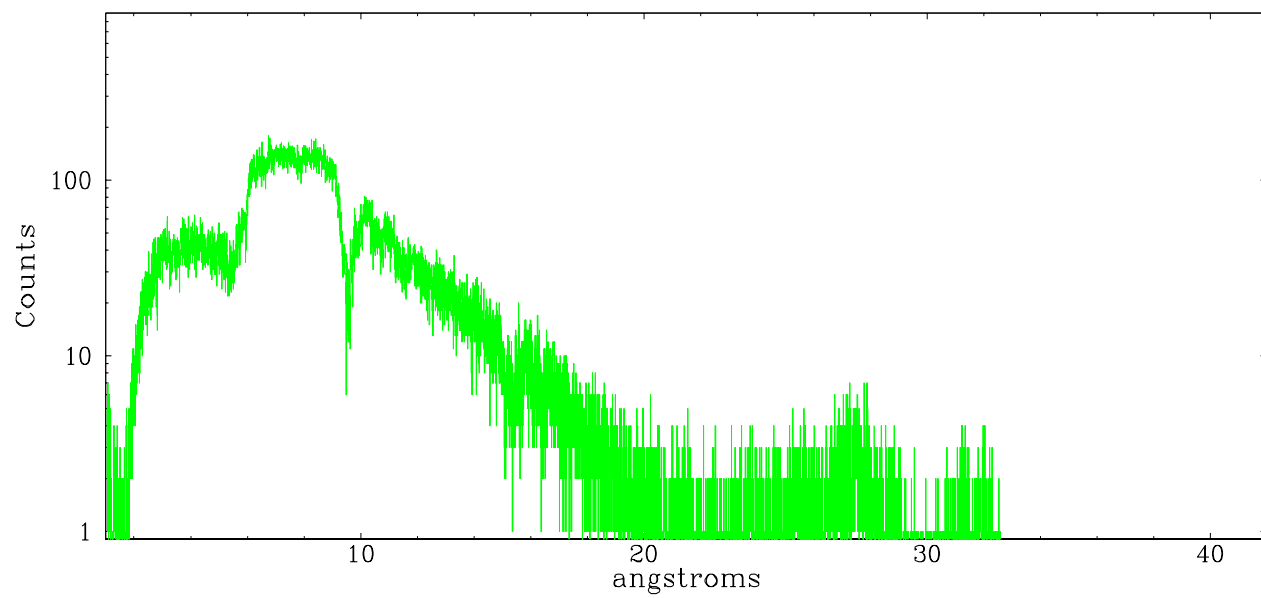
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	12407	0	147751	313406	154955	0	10633



meg order -1



meg order +1



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.09.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.344

### A.2 Comments