

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2689 - L2 Version 001  
Chandra X-Ray Center

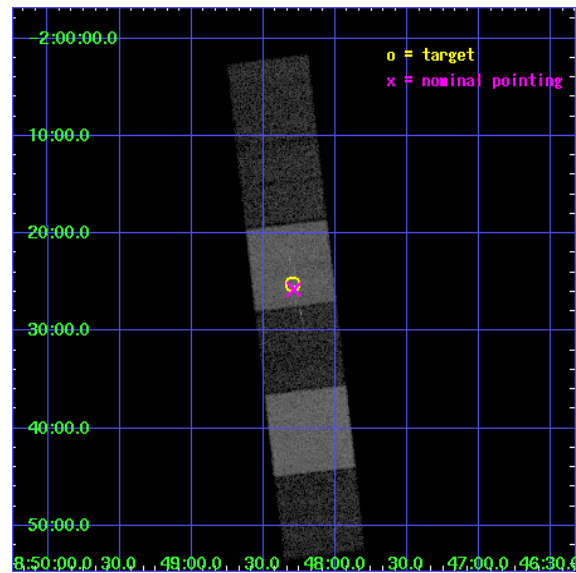
L2 Processing Date : Oct 13 2006

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# 1 Front

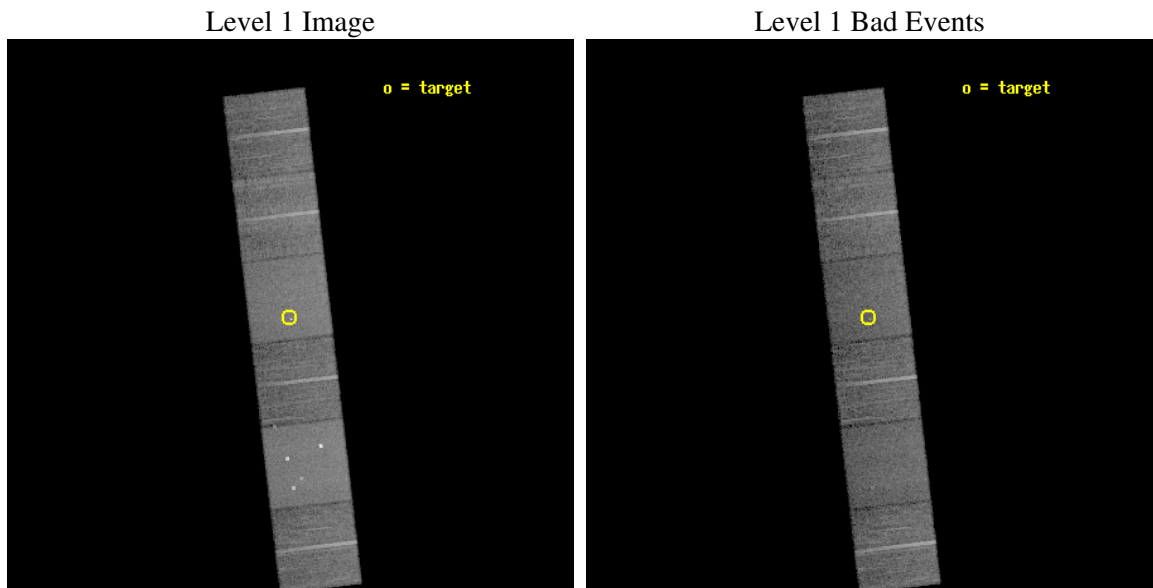
seq_num	400169
obs_id	2689
title	OBSERVATIONS OF THE TRANSIENT X-RAY PULSAR 2S 1845-024
observer	Dr. Mark Finger
object	2S 1845-024
dtcycle	0
cycle	P
ra_targ	282.075
dec_targ	-2.42
ra_nom	282.07220787162
dec_nom	-2.4293077707074
roll_nom	263.30133228958
revision	2
ontime	14803.199944854
livetime	14615.752913735
ontime4	14803.199944854
ontime5	14803.199944854
ontime6	14803.199944854
ontime7	14803.199944854
ontime8	14803.199944854
ontime9	14803.199944854
l2events	137175



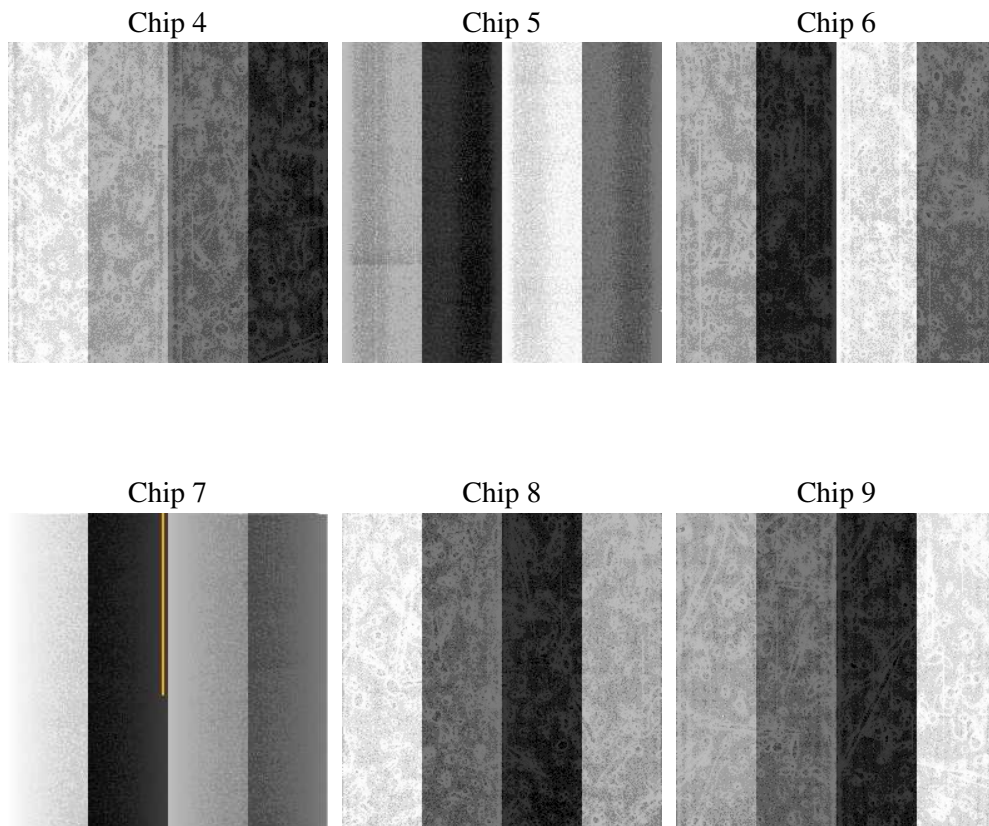
## 2 OBI

### 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	2006-10-02T19:54:45
revision	2

sched_exp_time	15000.000000
ontime	14808.145661443
ontime4	14808.145661443
ontime5	14808.145681381
ontime6	14808.145661443
ontime7	14808.145661443
ontime8	14808.145661443
ontime9	14808.145661443
l1events	649529

### 2.1.4 Events

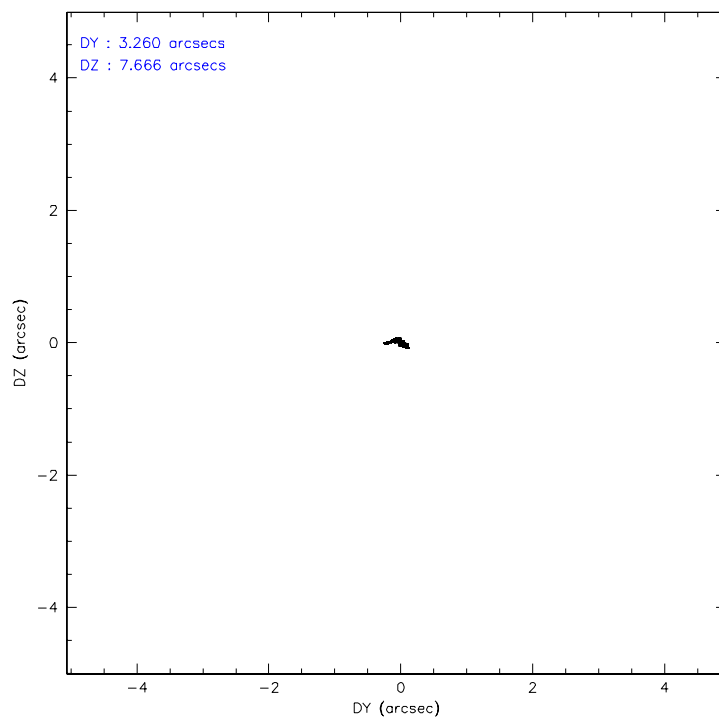
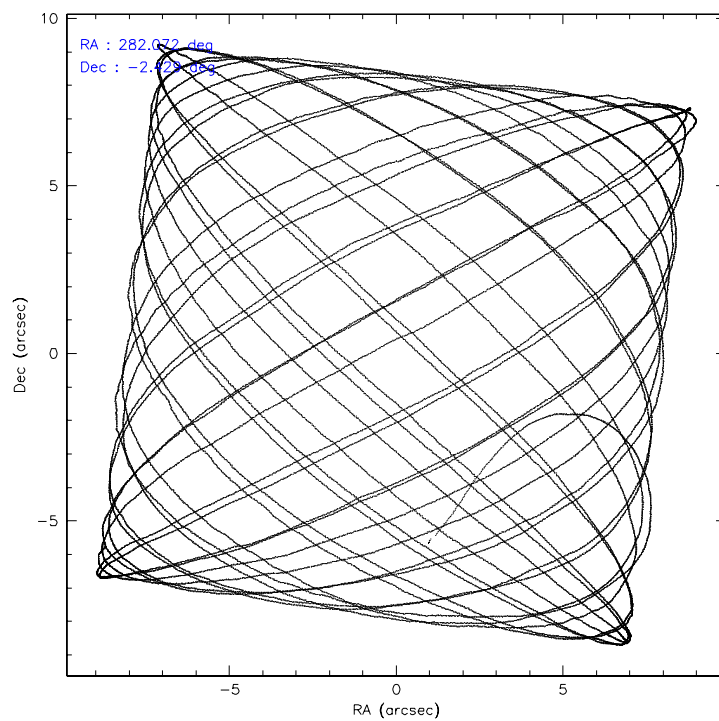
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	98977	135141	89500	120944	113537	91430
rejected events	87861	73238	78820	73957	90332	80470
rejected %	88%	54%	88%	61%	79%	88%

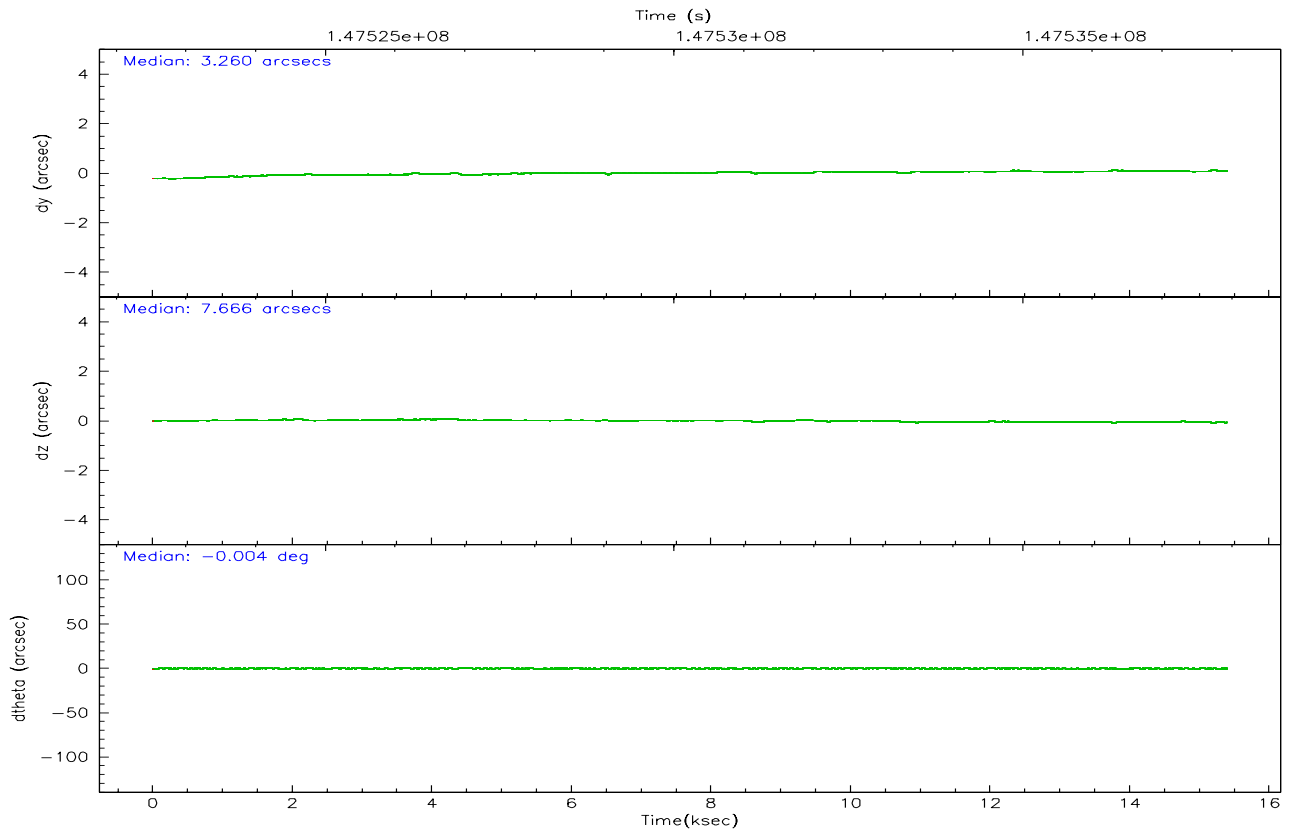
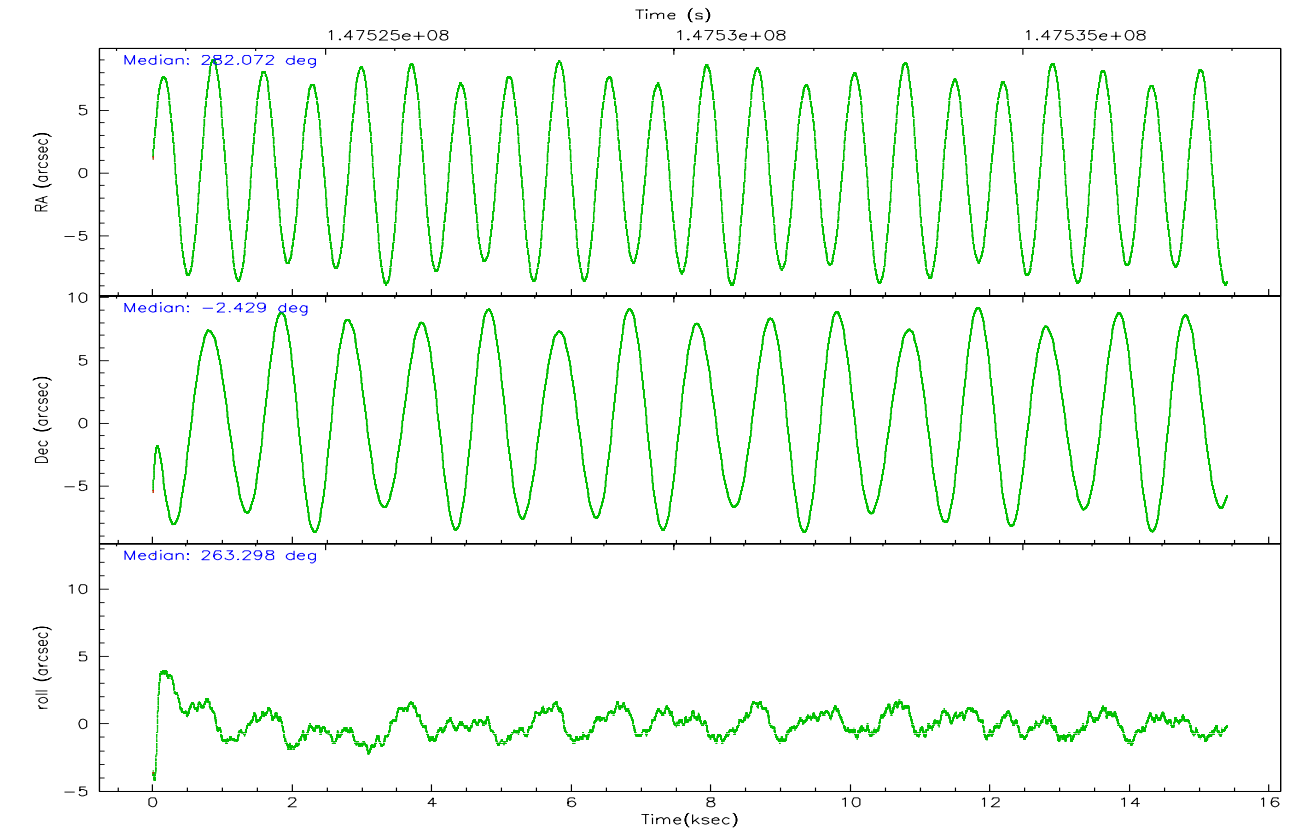
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	5028	9522	4196	2822	7296	4642
	5%	7%	4%	2%	6%	5%
grade 1 events	89	240	44	89	77	52
	0%	0%	0%	0%	0%	0%
grade 2 events	2134	17282	2208	11768	4993	2044
	2%	12%	2%	9%	4%	2%
grade 3 events	1150	1222	1079	2554	2573	1157
	1%	0%	1%	2%	2%	1%
grade 4 events	1053	1187	1033	2414	2439	1112
	1%	0%	1%	1%	2%	1%
grade 5 events	3799	6373	4097	8119	5175	4296
	3%	4%	4%	6%	4%	4%
grade 6 events	1753	32704	2165	27443	5906	2006
	1%	24%	2%	22%	5%	2%
grade 7 events	83971	66611	74678	65735	85078	76121
	84%	49%	83%	54%	74%	83%

## 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	282.061086	282.072207871625	Subarray requested	NONE	NONE
Pointing Dec	-2.404391	-2.429307770707418	Alternating exposures requested	N	N
Pointing Roll	263.144239	263.3013322895783	Primary exposure time	0.000000	3.2
Window start time	147497464.184000	147497464.184000			
Window stop time	147583864.184000	147583864.184000			
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	147522929.184000	147521865.52908			
Observation start date	2002-09-04T10:34:25	2002-09-04T10:17:45			
Observation end time	147537929.184000	147538492.56727			
Observation end date	2002-09-04T14:44:25	2002-09-04T14:54:52			
Read mode	TIMED	TIMED			

## 2.3 Aspect





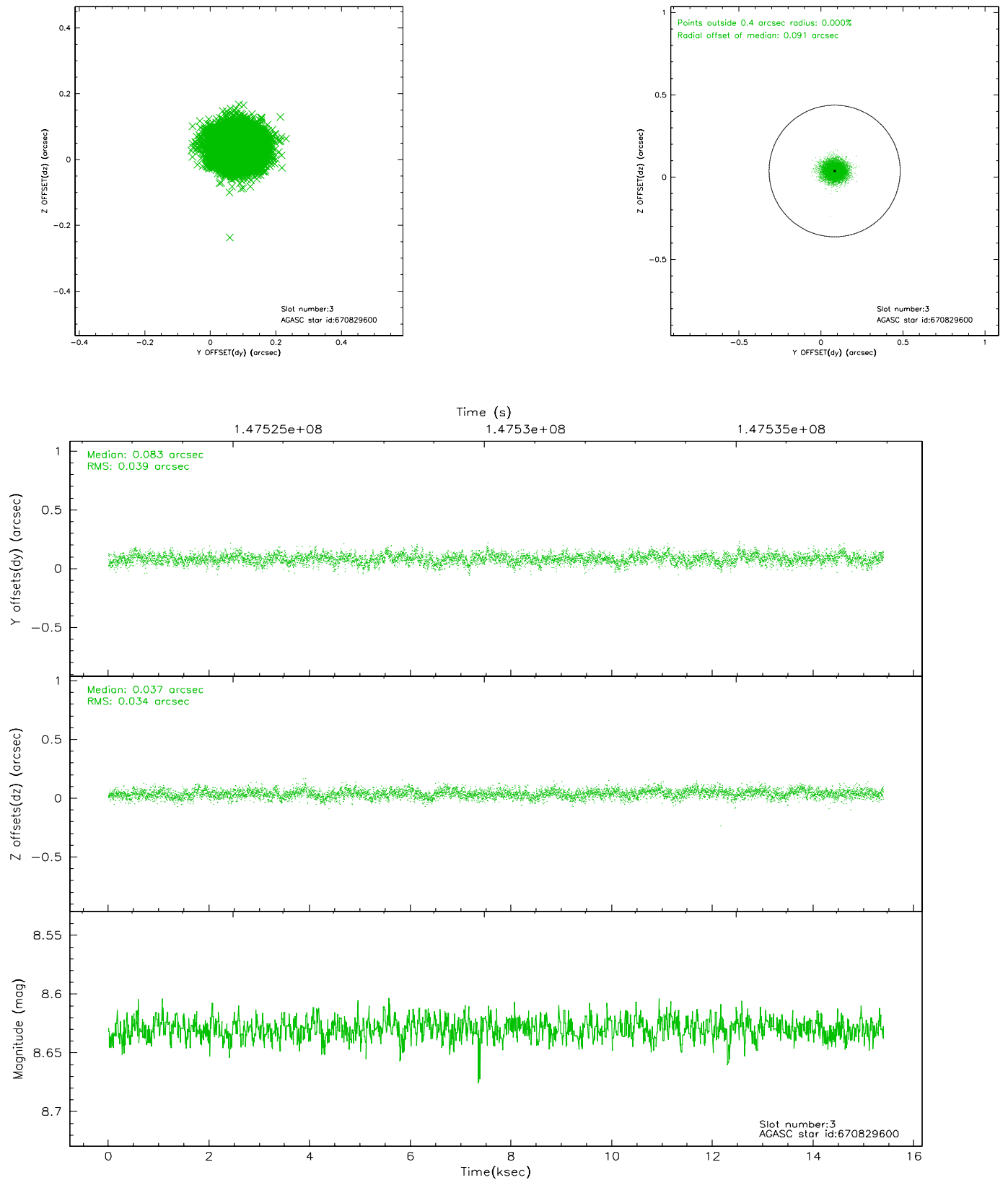
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	3756	0.000	0.017	0.006	0.011	0.000000	0.000000	-755.92	-1728.82
1	FID	ACIS-S-4	7.20	3756	-0.039	-0.005	0.006	0.012	0.000000	0.000000	2157.20	179.32
2	FID	ACIS-S-5	7.24	3755	0.008	-0.004	0.007	0.012	0.000000	0.000000	-1808.36	173.35
3	GUIDE	670829600	8.63	7510	0.083	0.037	0.054	0.089	282.227270	-3.031765	2171.82	863.66
4	GUIDE	670826680	9.24	7506	0.022	0.113	0.090	0.145	282.619566	-2.432067	-139.61	2007.20
5	GUIDE	670829768	7.55	7510	-0.106	0.031	0.052	0.082	281.927934	-2.010470	-1350.21	-644.01
6	GUIDE	670827744	9.52	7505	0.066	-0.108	0.083	0.137	281.699180	-2.020401	-1216.29	-1457.34
7	GUIDE	670827280	9.41	7506	-0.064	-0.075	0.118	0.183	281.434708	-1.976010	-1260.91	-2421.34

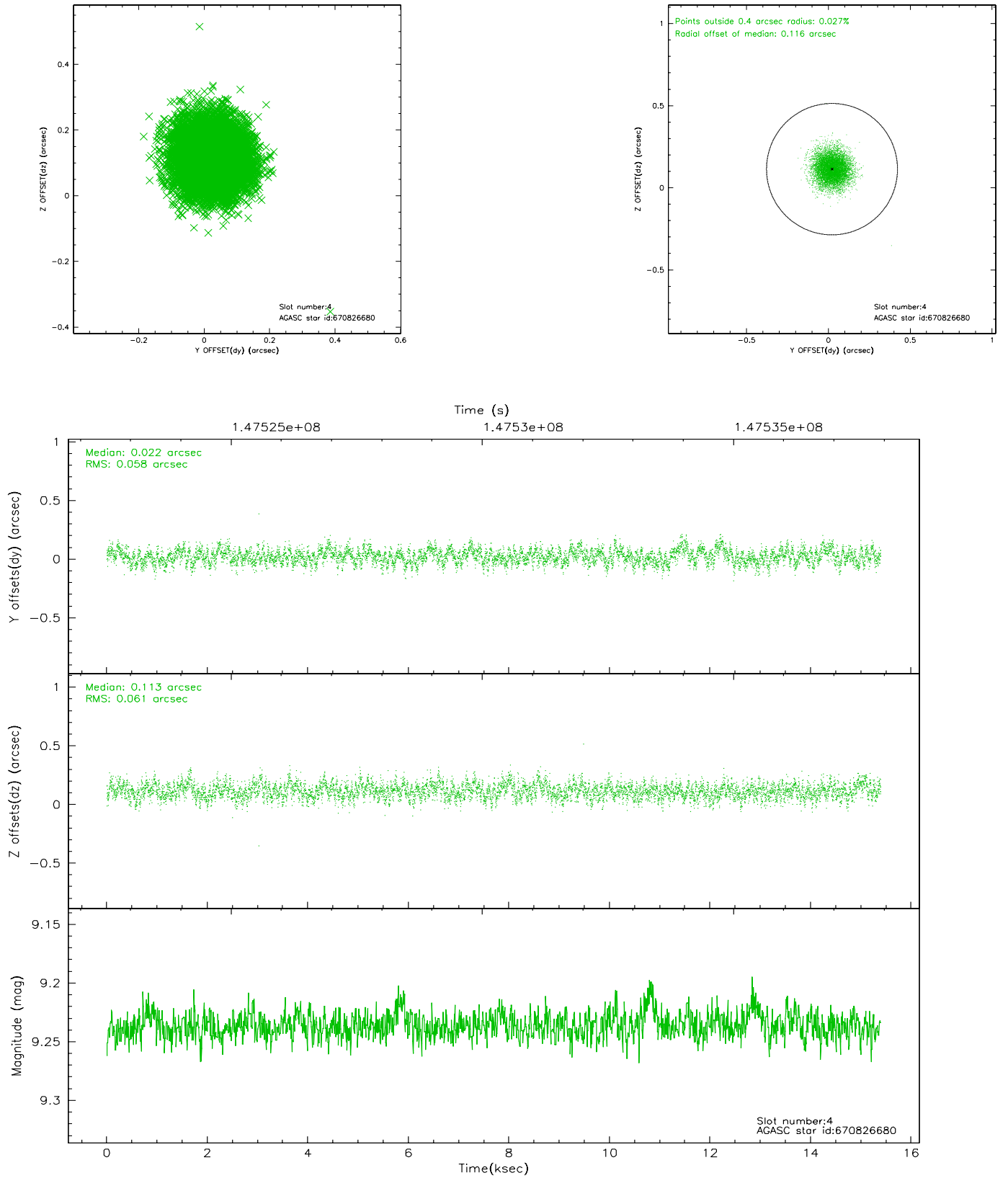


## 2.4 Star Slots

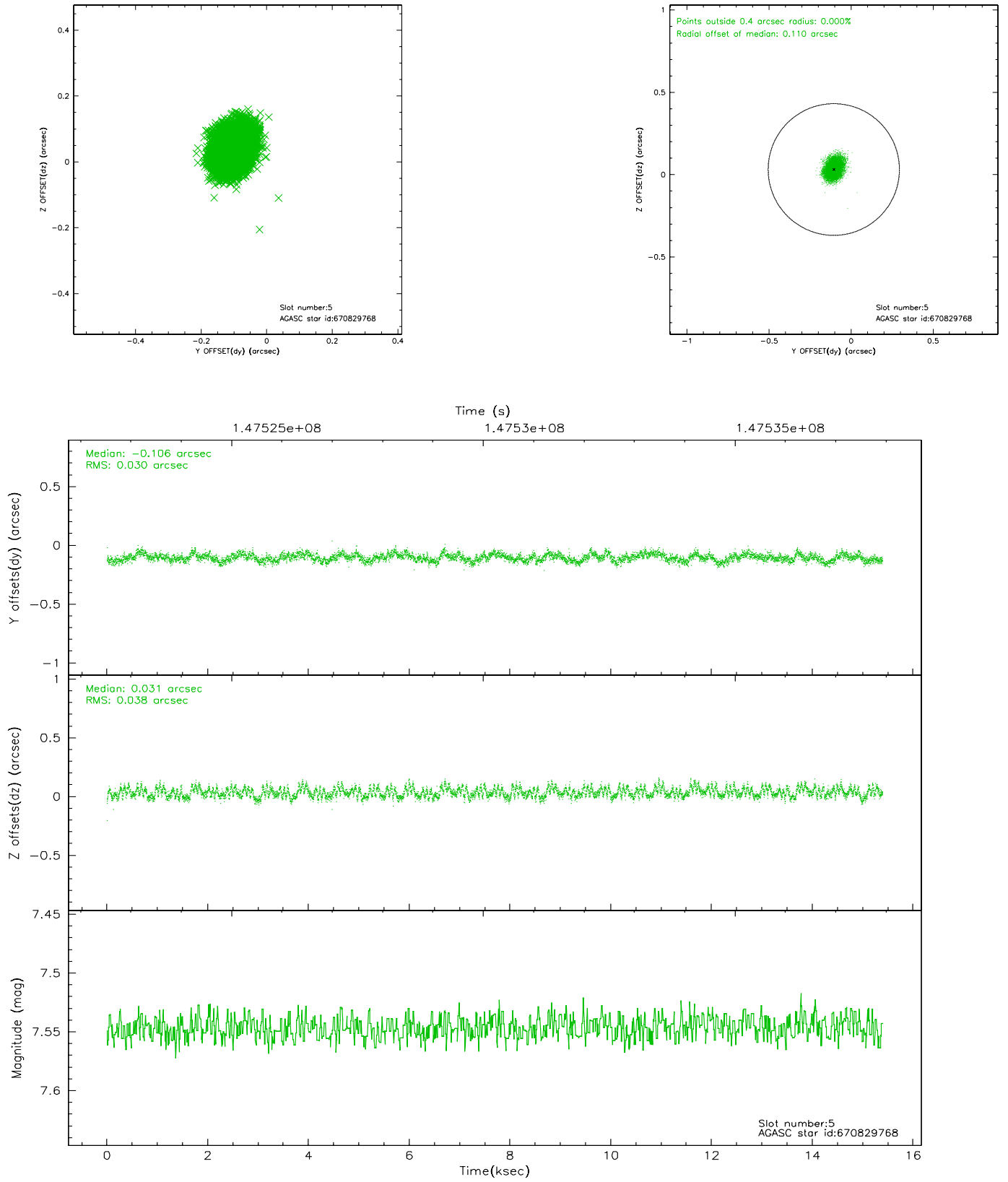
### 2.4.1 Slot 3



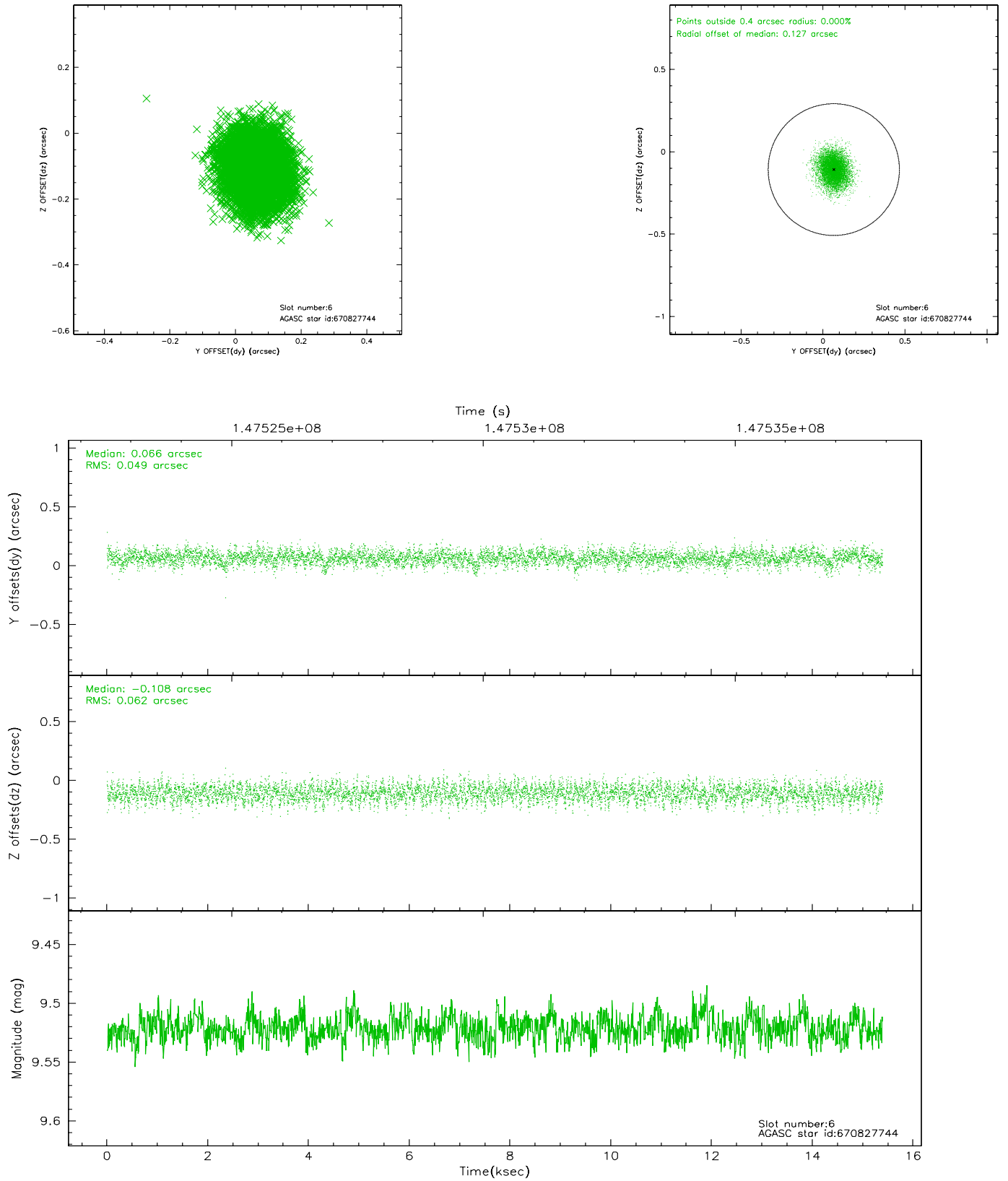
## 2.4.2 Slot 4



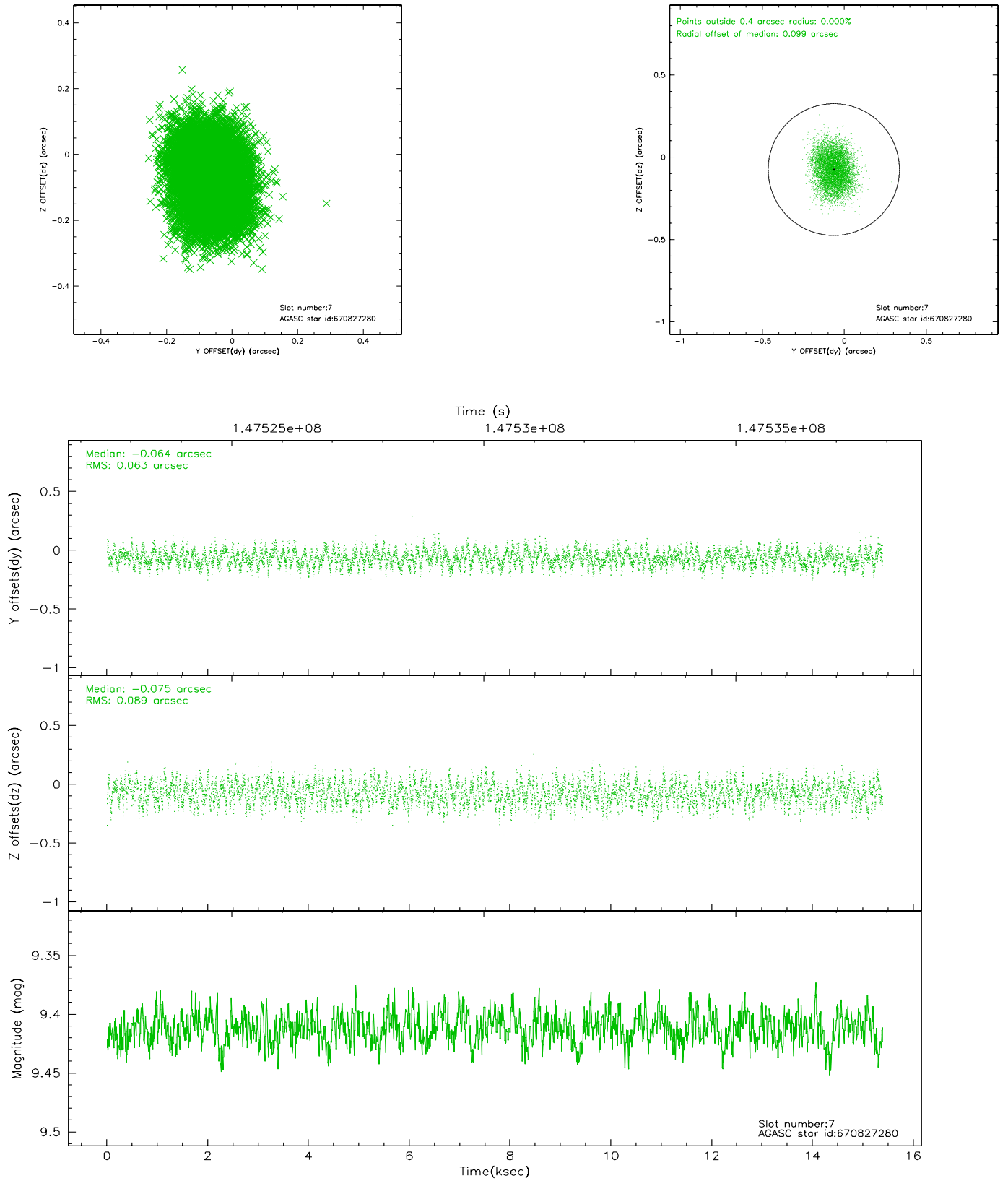
### 2.4.3 Slot 5



## 2.4.4 Slot 6

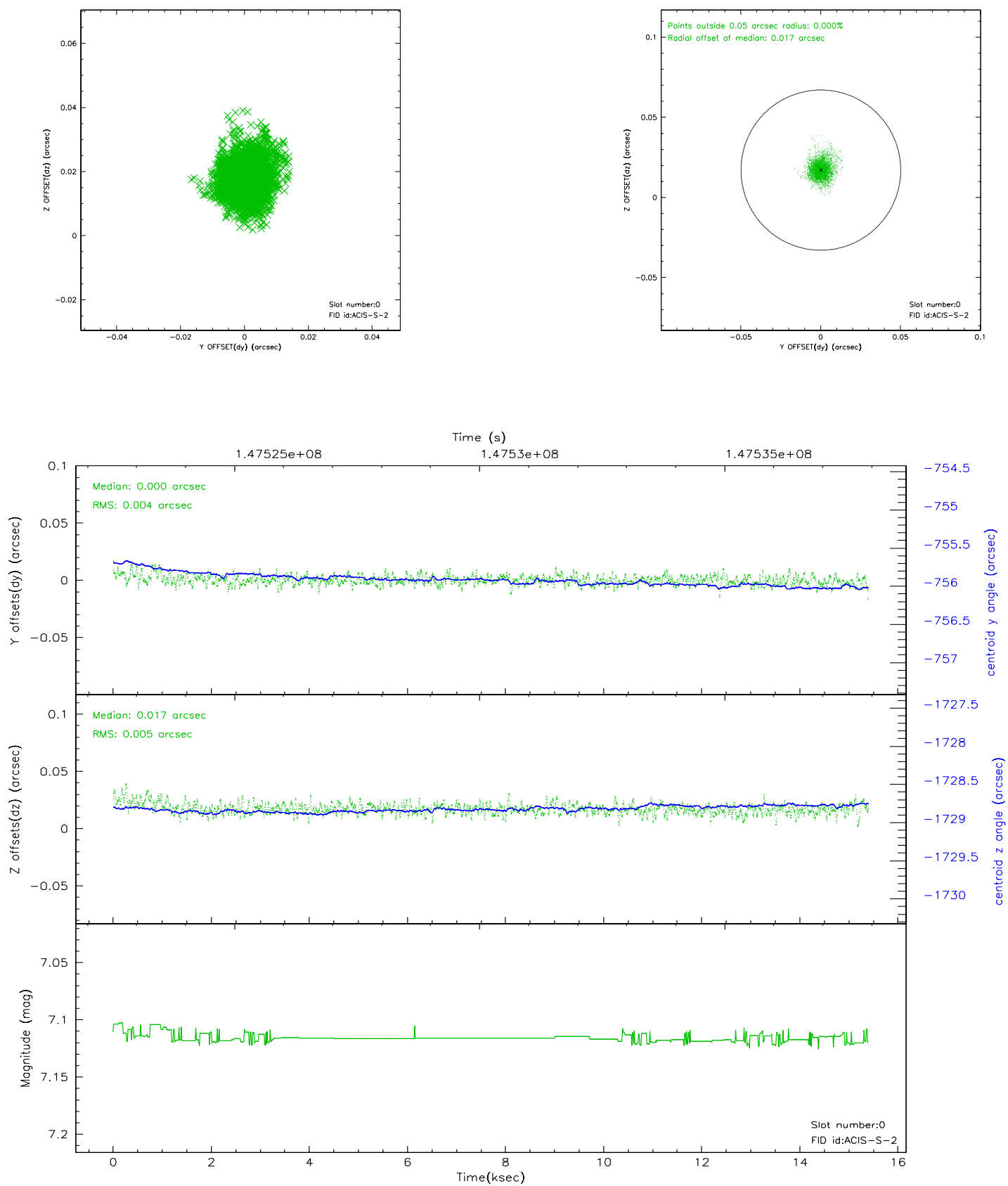


## 2.4.5 Slot 7

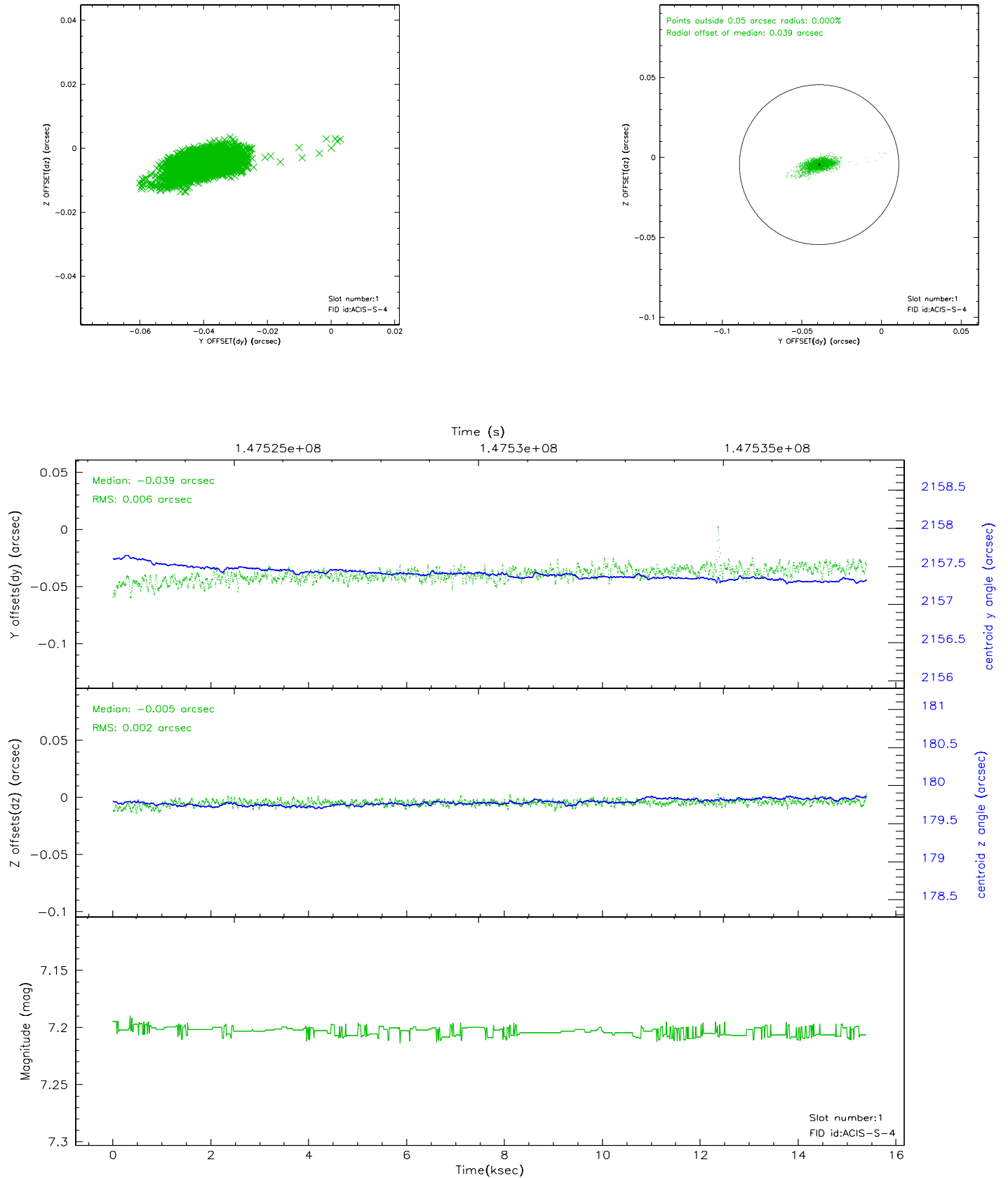


## 2.5 FID Slots

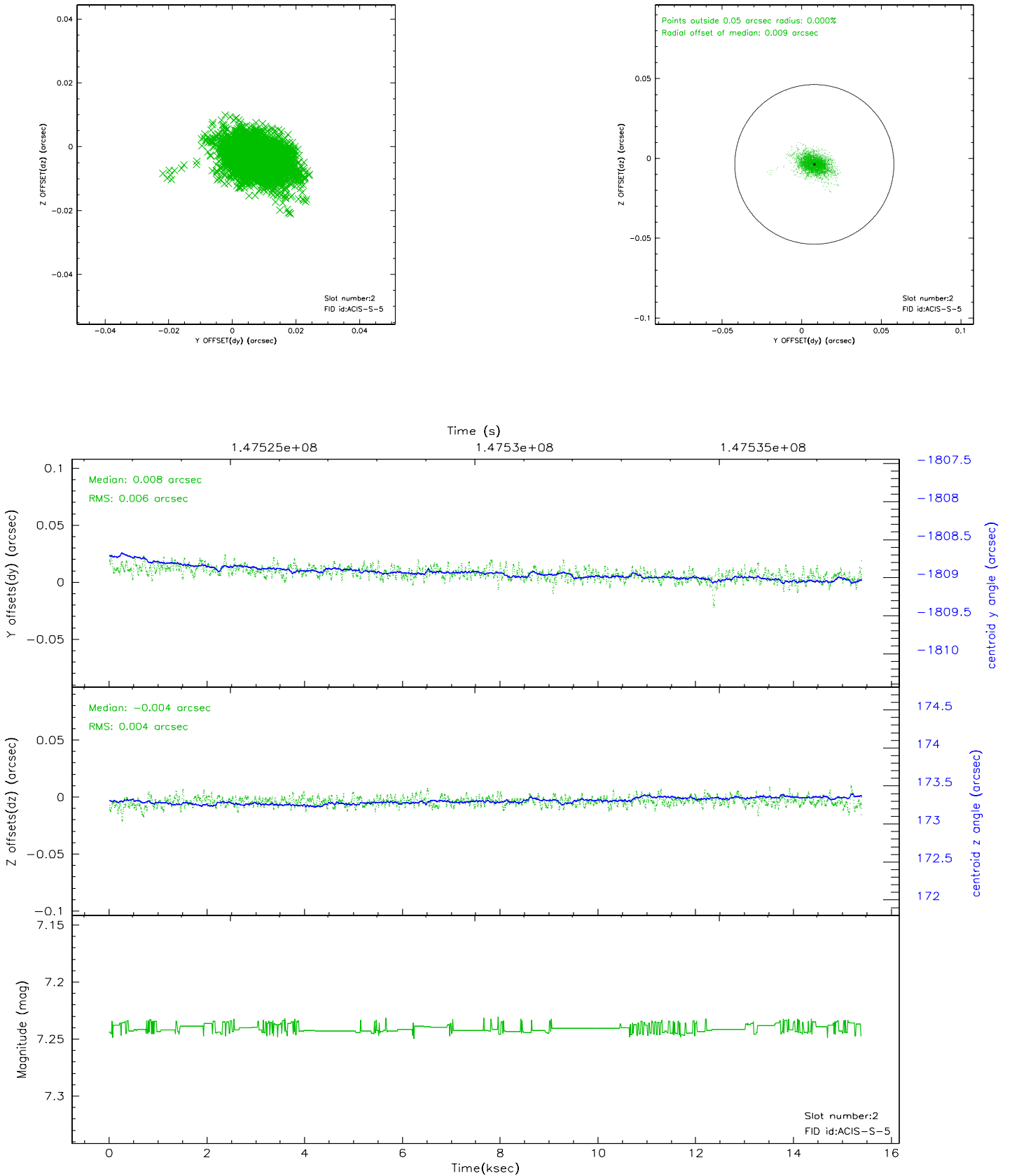
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



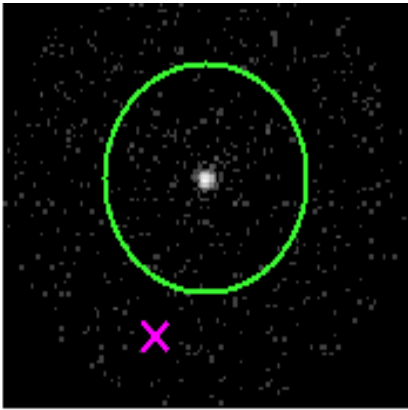


# 3 Gratings

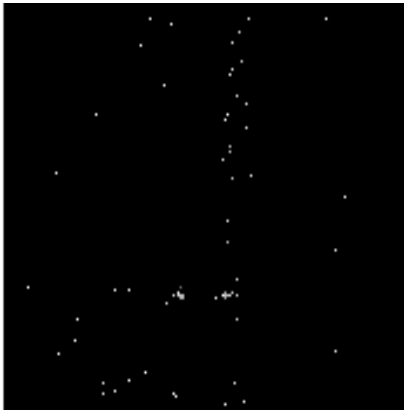
## 3.1 HEG Arm



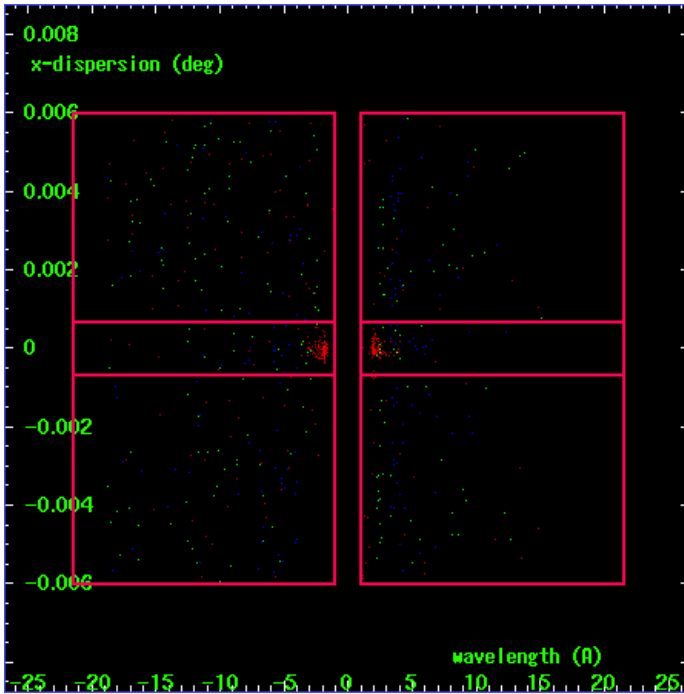
HEG Order Sort 123



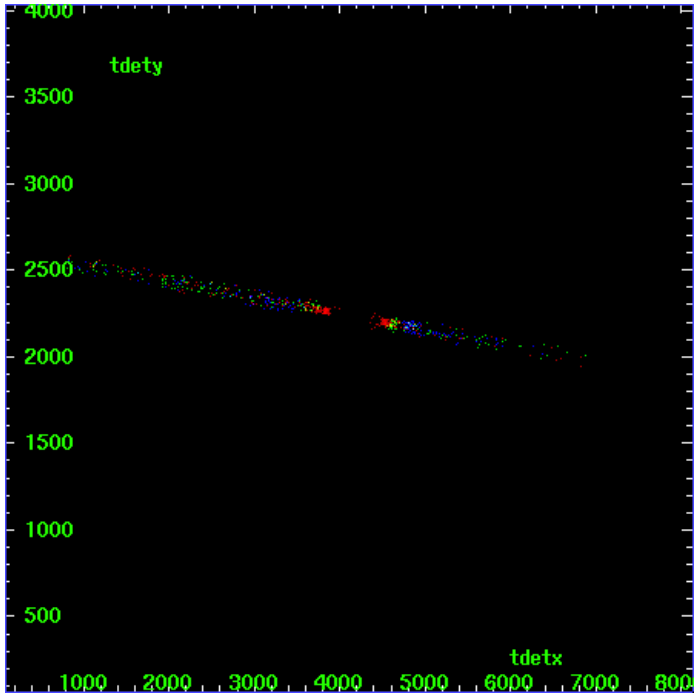
HEG Zero Order



HEG Order Sort ALL

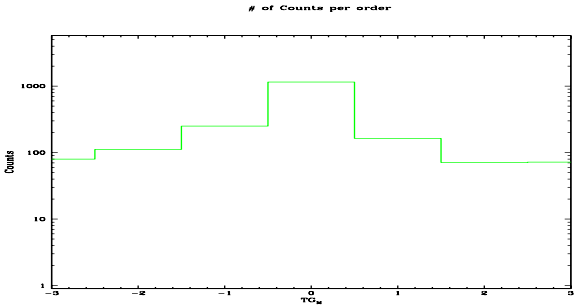


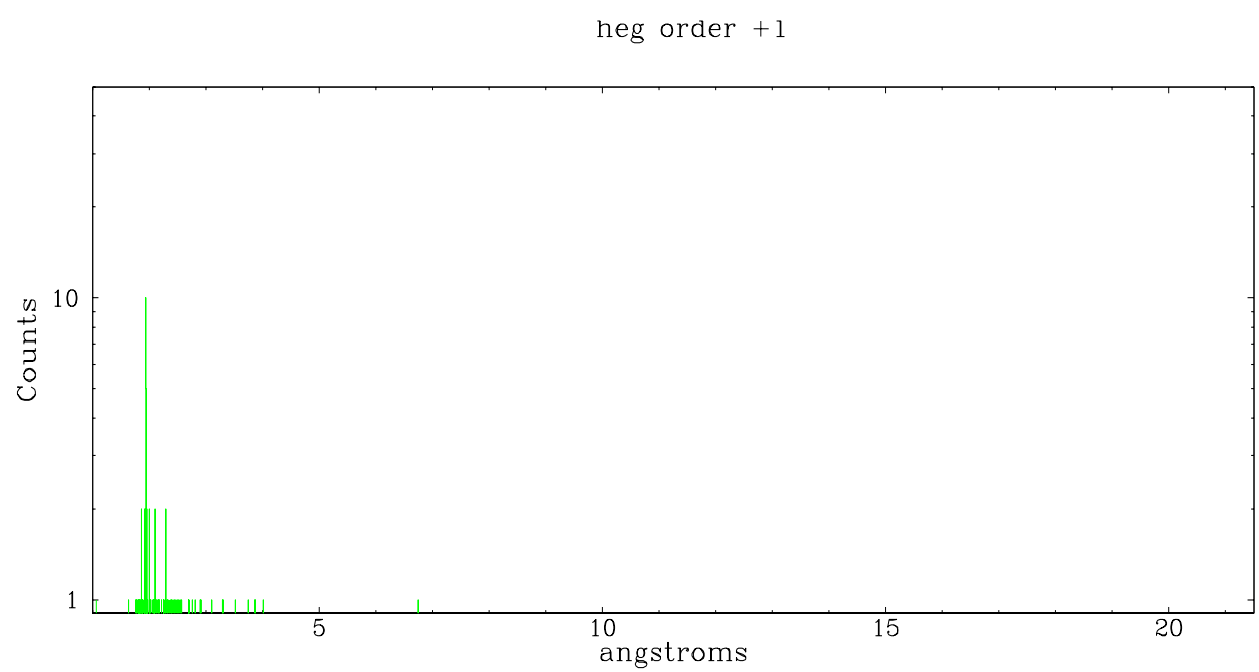
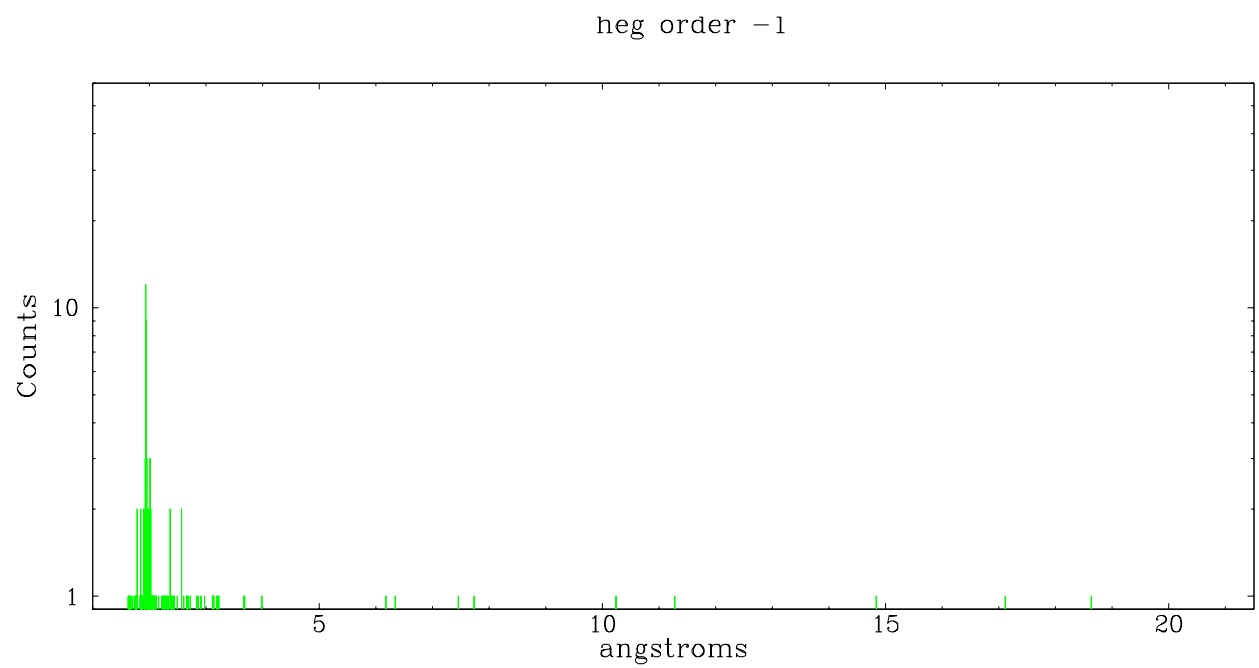
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	80	112	250	1149	163	71	72

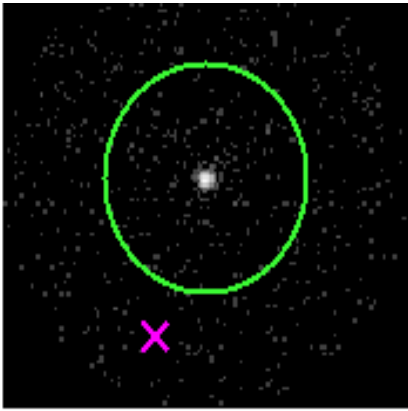




3.2 MEG Arm



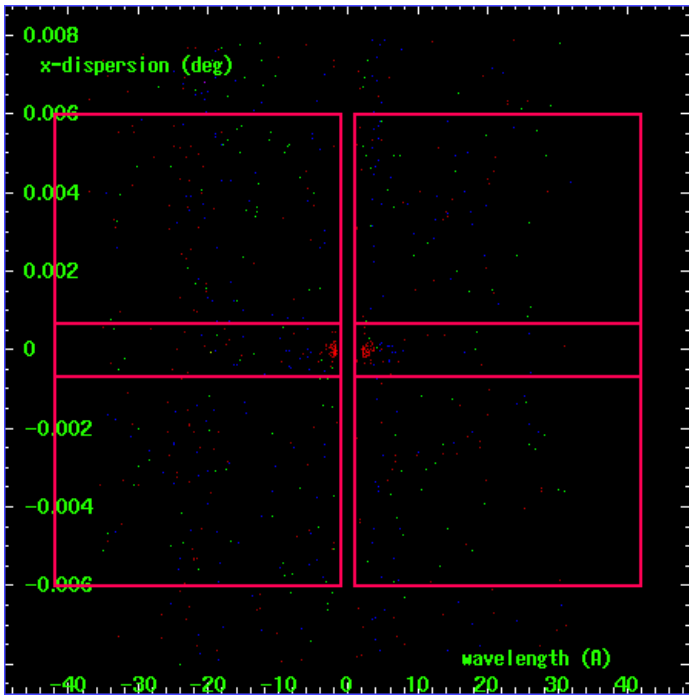
MEG Order Sort 123



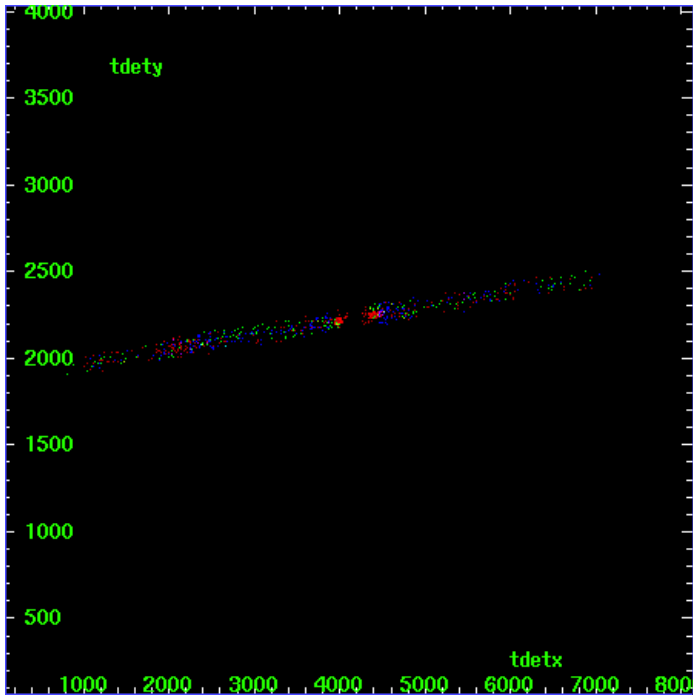
MEG Zero Order



MEG Order Sort ALL

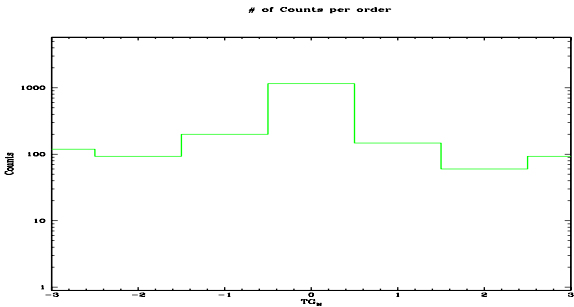


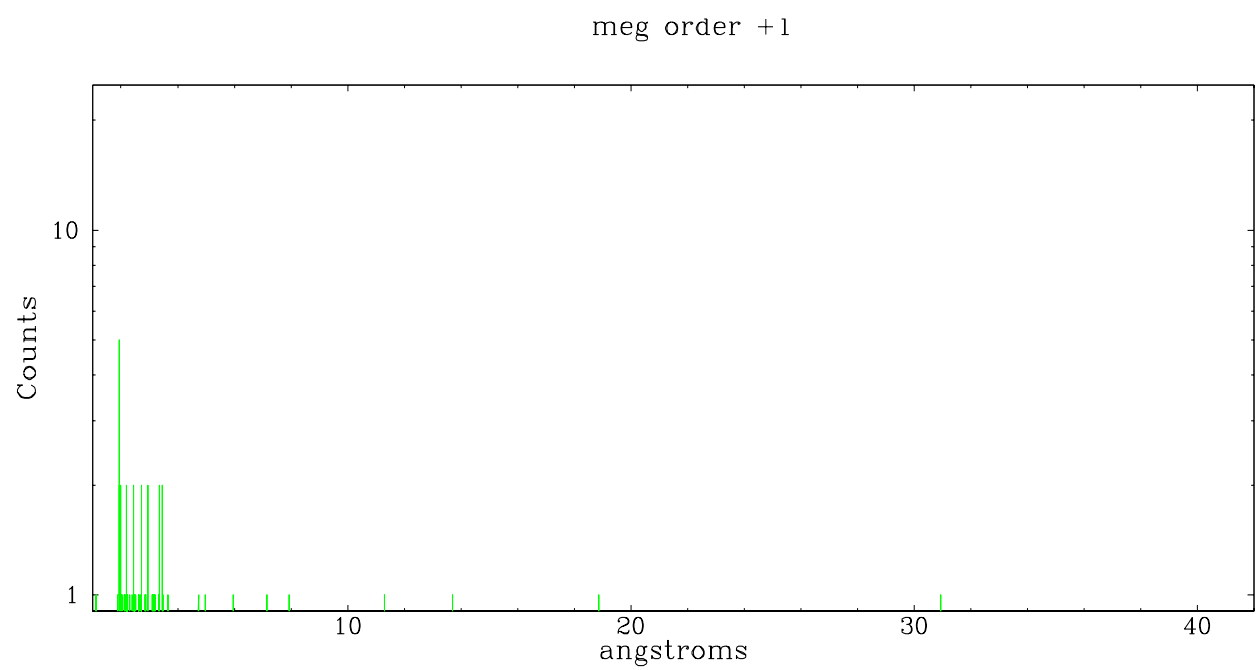
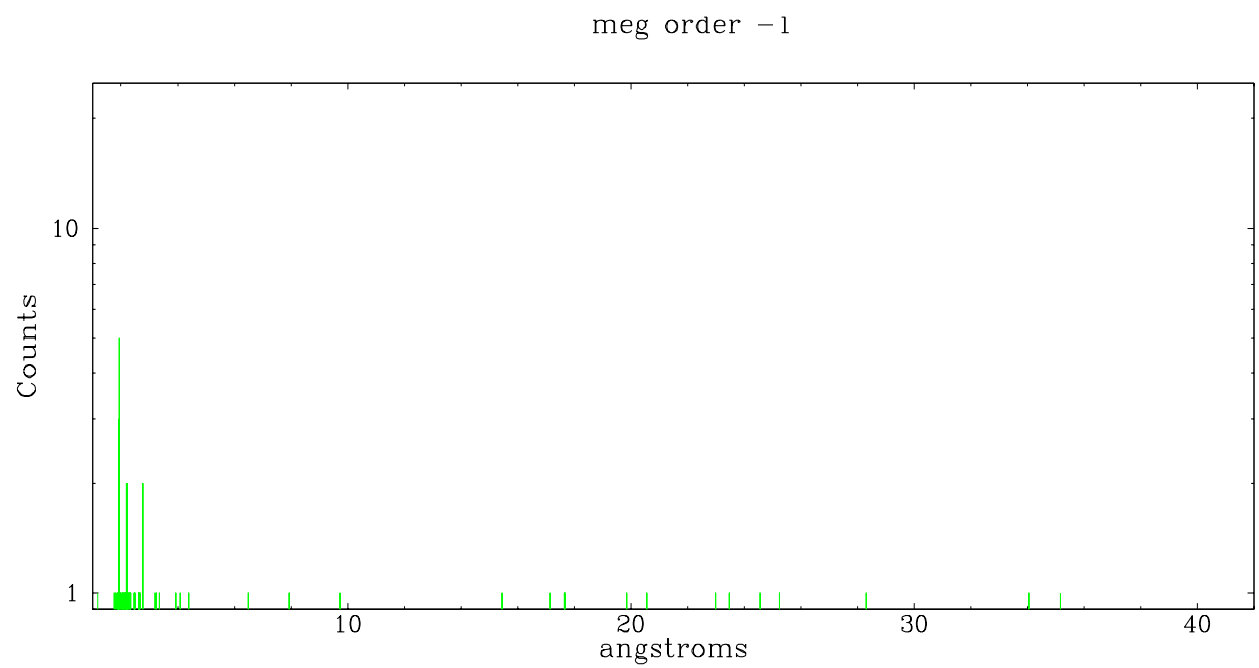
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	119	93	200	1149	147	60	93





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.803

### A.2 Comments

Window constraint OK.